METALLIC FACILITY TERMINAL

2-2 REPEATERS (J99343PA, PB, PC, PD, PE, PF, PG, PH, PJ, PK)

SD-1C359-01

PRESCRIPTION SETTINGS

CONTENTS PAGE

1. GENERAL

1.01 This section gives prescription settings, based on cable makeup data, for the precision balancing networks (PBNs) and the 309D equalizer of the Metallic Facility Terminal (MFT) 2-2 repeater units.

1.02 This section is reissued to include simplified procedures for prescription settings for precision balancing networks (PBNs) used on H88 loaded cable (4240A and 4240C); prescription setting information for PBNs and 309D equalizers used on Metropolitan Area Trunk (MAT) cable, and simplified procedures for determining 309D equalizer settings. Arrows normally used to indicate changes are not used due to the extensive revision.

1.03 Prescription setting procedures in Part 2 of this section are for use with 4240A or 4240C type PBNs on both high-capacitance and low-capacitance MAT cable. Chart 1 is a simplified procedure for determining average PBN settings based on cable gauge and end section length. The settings obtained from the chart will satisfy most circuit requirements. For more optimum settings, the tables may be used. The tables require knowledge of the complete facility make-up and type of termination at the distant end. These tables should only be used for circuits which do not have terminal balance requirements.

1.04 Prescription setting tables for the 4240B PBN used on nonloaded cable are given in Part 3 of this section. The tables require knowledge of the facility make-up and type of termination at the distant end. These tables should be used only on circuits which do not have terminal balance requirements.

1.05 For circuits requiring terminal balance (837- or J99380-type impedance compensators at the location with the balance requirement), the procedures in Part 4 should be used. The tables referenced by Part 4 include the PBN settings, 309D equalizer settings for nonloaded cable, the impedance compensator network settings, and the 1 kHz loss for nonloaded 22-, 24-, and 26-gauge or 22-, 24-, 25-, and 26-gauge H88 loaded facilities.

1.06 Prescription settings for the 309D equalizer are covered in Part 5 of this section.

1.07 To obtain the correct settings, the proper circuit design rules must be used. Transmission levels allowed for 2-wire circuits are limited by two constraints; crosstalk and stability. For stability purposes, the maximum gain for terminal repeaters (J99343PA, PB, or PG) is 6 dB. Maximum gain for intermediate repeaters (J99343PC, PD, PE, PF, PH, PJ and PK) is 12 dB. Note that these gain limits are not the maximum gain the 2-2 repeaters are capable of producing. There is one exception to the 12 dB limit for intermediate repeaters. This is when the J99343PD, PE, PF, PJ, or PK repeater is specified and when the cable facilities appear in the tables and equivalence procedures are not required. In this case, the maximum allowable gain is 15 dB (see Section 332-912-211).

1.08 Crosstalk objectives determine the maximum output and minimum input levels with respect to the transmission level point (TLP) as follows:

- Maximum output level: +6 dB (TLP)
- Minimum input level: -9 dB (TLP).

1.09 The requirements in 1.07 and 1.08 assume the repeater is located in the central office. The 2-2 repeaters are not recommended for installation at a customer location for the following reasons:

(1) The repeater presents a 900 ohm + 2.15 μF impedance to its inputs while a PBX generally resembles 600 + 2.15 μF.

(2) Cable plant at the customer end of a loop is generally controlled less than the central office end (load coil spacing, etc.) and this makes precision balancing more difficult.

1.10 The maximum 1 kHz cable loss for terminal repeaters is 9 dB. Intermediate repeaters are restricted to a maximum cable loss of 15 dB with no more than 9 dB on one side. The 15 dB maximum loss is allowed only when the facilities connected to the repeater match the table entries very closely.

1.11 Roll-off limits for a circuit engineered to meet trunk objectives should be:

Frequency	*Greater than*	*and*	*Less than*
400 Hz	−1.0 dB		+3.0 dB
2800 Hz	−1.0 dB		+4.5 dB

Where negative values indicate more gain than the 1 kHz level and positive values indicate more loss.

1.12 Roll-off limits for circuits designed to meet line objectives should not exceed:

Frequency	*Greater than*	*and*	*Less than*
400 Hz	−1.0 dB		+5.0 dB
2800 Hz	−1.0 dB		+7.5 dB

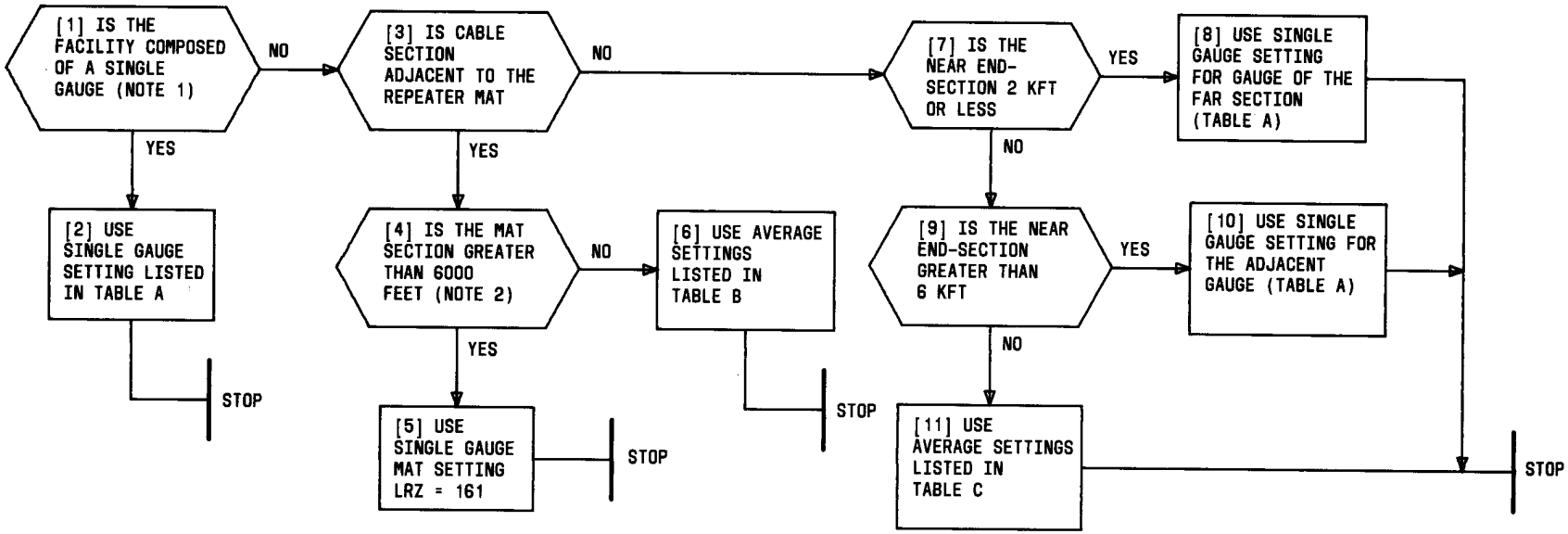
1.13 It is recommended but not required that rolloff at both 400 and 2800 Hz be greater than the 1 kHz loss.

2. PRESCRIPTION SETTINGS FOR THE 4240A AND 4240C PRECISION BALANCING NETWORKS

2.01 Two methods of obtaining prescription settings for the 4240A and 4240C PBNs are described in this part. The first method uses a flowchart (Chart 1) to supply average PBN settings based on cable gauge. The second method involves the use of tables with PBN settings based on facility gauge, length, and distant termination.

2.02 The settings obtained from Chart 1 should meet balance requirements for most circuits. If improved balance is desired after completion of the procedure in Chart 1, the return loss of the circuit may be optimized using the manual procedures described in Section 332-912-211. Use of the Chart is self explanatory.

2.03 The tables for PBN prescription settings require knowledge of facility gauge and length. The tables are separated into two groups; the first group addresses facilities composed of a single gauge, the second group supplies settings for two-gauge facilities. For facilities composed of more than two gauges, or consisting of a mixture of loaded and nonloaded cable or with bridged taps, Chart 1 or the manual procedures in Section 332-912-211 must be used. However, the table entry which most closely resembles the facility may be used as an initial setting to minimize the time required for optimizing.



NOTES:
1. FOR FACILITIES COMPOSED OF TWO OR MORE GAUGES, THE NEAR GAUGE IS ADJACENT TO THE REPEATER AND FAR SECTION IS THE NEXT GAUGE. ALL OTHER GAUGES ARE IGNORED
2. IT IS ASSUMED THAT MAT WILL BE BUILT OUT TO MULTIPLES OF 6 KFT

TABLE A

GAUGE	L	R	Z
19	0	0	2
22	0	2	2
24	0	4	3
25	1	6	1
26	0	7	4

TABLE B

GAUGES	L	R	Z
25 AND 19	1	3	0
25 AND 22	1	3	0
25 AND 24	1	6	1
25 AND 26	1	6	1

TABLE C

GAUGES	L	R	Z
19 AND 22	0	1	2
19 AND 24	0	2	2
19 AND 25	0	2	3
19 AND 26	0	3	3
22 AND 24	0	3	2
22 AND 25	0	4	5
22 AND 26	0	4	3
24 AND 25	0	4	4
24 AND 26	0	5	3
26 AND 25	0	5	5

Chart 1—Prescription Setting Chart for 4240A or 4240C Precision Balancing Networks

2.04 To properly match loaded facilities, the end section adjacent to the repeater must be the electrical equivalent of 6000 feet. The line buildout capacitors (LBOCs) are available for this purpose. Screw switches labeled A through F (and G through L on the J99343PC or PH) are tightened for the value of capacitance required. Table A summarizes the value of capacitance required based on end section length for both Hi-Cap and MAT cable. The screw switches which must be turned down are also given. The table was developed using the formulas:

$$\text{Hi Cap } C = .008 + .016\ (6\text{-}N)$$

$$\text{MAT } C = .008 + .0122\ (6\text{-}N)$$

Where C is the value of capacitance and N is the end section length in kilofeet.

2.05 For single-gauge facilities, Tables B, C, D, E, and F for 26-, 25-, 24-, 22-, and 19-gauge cable respectively, locate the facility length and then using the appropriate termination column, locate the correct PBN setting.

2.06 Two-gauge tables (Table G for 26- and 24-gauge; Table H for 24- and 26- gauge; Table I for 26- and 22-gauge; Table J for 22- and 26-gauge; Table K for 24- and 22-gauge and Table L for 22- and 24-gauge) must be selected according to the gauge of cable adjacent to the repeater. The adjacent gauge is listed first in the tables. The working length (WL) parameter (total length of the facility from repeater to termination) is used to allow better grouping of the settings. The WL is subdivided into the lengths of the individual gauges which compose the facility.

2.07 Tables for combinations of MAT and Hi-Cap cable are not supplied. For facilities of this type, Chart 1 or the manual procedures in Section 332-912-211 must be used.

2.08 To use the two-gauge tables:

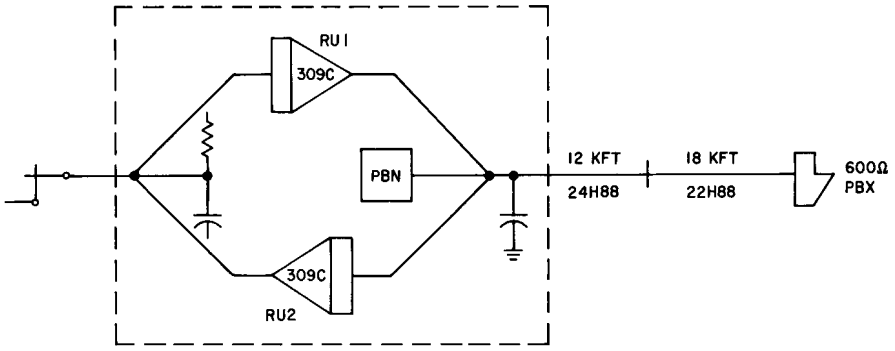
(1) Determine the proper table by the gauges of the facility. Be sure the gauge adjacent to the repeater is listed first in the table title.

(2) Locate the WL of the facility and then the combination of gauge lengths.

(3) Locate the PBN settings under the appropriate termination heading.

(4) The 1 kHz cable loss and dc resistance is also given.

Example 1:



2-2 TERMINAL (L) REPEATER
J99343PA

Given: The above circuit with the near end section 3200 feet

(1) Calculate the LBOC setting or use Table A.

LBOC setting from Table A = .052 μF or screws BDE down

(2) Using the two-gauge tables determine the PBN setting from Table K, 24H88 adjacent to the repeater combined with 22-gauge.

WL = 12 + 18 or 30 kft

Under WL = 30, the entry marked 12 and 18 is used.

Since the circuit terminates in a 600Ω PBX the 600 + 2.16 termination is used.

The PBN settings are

R = 5
Z = 3

TABLE A

LBOC SETTINGS

END-SECTION LENGTH (FEET)	CAPACITANCE VALUE HI-CAP.	SCREWS DOWN 1st	SCREWS DOWN 2nd	CAPACITANCE VALUE MAT	SCREWS DOWN 1st	SCREWS DOWN 2nd
1450 — 1549	.080	DF	JL	.064	F	L
1550 — 1649	.078	ABCF	GHIL	.062	ABCDE	GHIJK
1650 — 1749	.076	BCF	HIL	.060	BCDE	HIJK
1750 — 1849	.076	BCF	HIL	.060	BCDE	HIJK
1850 — 1949	.074	ACF	GIL	.058	ACDE	GIJK
1950 — 2049	.072	CF	IL	.058	ACDE	GIJK
2050 — 2149	.070	ABF	GHL	.056	CDE	IJK
2150 — 2249	.068	BF	HL	.054	ABDE	GHJK
2250 — 2349	.068	BF	HL	.054	ABDE	GHJK
2350 — 2449	.066	AF	GL	.052	BDE	HJK
2450 — 2549	.064	F	L	.052	BDE	HJK
2550 — 2649	.062	ABCDE	GHIJK	.050	ADE	GJK
2650 — 2749	.060	BCDE	HIJK	.048	DE	JK
2750 — 2849	.060	BCDE	HIJK	.048	DE	JK
2850 — 2949	.058	ACDE	GIJK	.046	ABCE	GHIK
2950 — 3049	.056	CDE	IJK	.046	ABCE	GHIK
3050 — 3149	.054	ABDF	GHJK	.044	BCE	HIK
3150 — 3249	.052	BDE	HJK	.042	ACE	GIK
3250 — 3349	.052	BDE	HJK	.042	ACE	GIK
3350 — 3449	.050	ADE	GJK	.040	CE	IK
3450 — 3549	.048	DE	JK	.040	CE	IK
3550 — 3649	.046	ABCE	GHIK	.038	ABE	GHK
3650 — 3749	.044	BCE	HIK	.036	BE	HK
3750 — 3849	.044	BCE	HIK	.036	BE	HK
3850 — 3949	.042	ACE	GIK	.034	AE	GK
3950 — 4049	.040	CE	IK	.032	E	K
4050 — 4149	.038	ABE	GHK	.032	E	K
4150 — 4249	.038	ABE	GHK	.030	ABCD	GHIJ
4250 — 4349	.036	BE	HK	.030	ABCD	GHIJ
4350 — 4449	.034	AE	GK	.028	BCD	HIJ
4450 — 4549	.032	E	K	.026	ACD	GIJ

TABLE B

4240A AND 4240C* PRECISION BALANCING
NETWORK SETTINGS FOR 26- GAUGE H88 LOADED
CABLE WITHOUT BRIDGED TAP AT 68° F

END SECTION = 3.0 KFT

LENGTH (KFT)	4240A BALANCE NETWORK SETTINGS BY TERMINATION						1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RESISTANCE (OHMS)
	900 + 2.16		600 + 2.16		TELSET (35MA)			
	R	Z	R	Z	R	Z		
6.0	5	2	1	0	1	0	2.2	508.4
12.0	7	3	7	3	7	2	4.1	1016.8
18.0	7	4	7	3	7	3	6.0	1525.2
24.0	7	4	7	4	7	4	8.2	2033.6
30.0	7	4	7	4	7	4	10.3	2542.0
36.0	7	4	7	4	7	4	12.4	3050.4
42.0	7	4	7	4	7	4	14.5	3558.8
48.0	7	4	7	4	7	4	16.5	4067.2

* ALL 4240C L SWITCH SETTNGS = O (OFF)

TABLE C

4240C PRECISION BALANCING NETWORK SETTINGS FOR
25-GAUGE H88 LOADED MAT CABLE WITHOUT BRIDGED TAP AT 68°F

END SECTION = 3.0 kft

LENGTH (kft)	4240C BALANCE NETWORK SETTINGS BY TERMINATION									1 KHZ CABLE LOSS (dB) (900 OHMS)	DC CABLE RES (OHMS)
	900 + 2.16			600 + 2.16			TEL SET (35 mA)				
	L	R	Z	L	R	Z	L	R	Z		
12.0	1	6	0	1	4	0	1	7	0	3.2	802.5
18.0	1	7	1	1	7	1	1	7	0	4.3	1203.7
24.0	1	7	1	1	7	1	1	7	0	5.9	1605.0
30.0	1	6	1	1	7	1	1	7	1	7.4	2006.2
36.0	1	6	1	1	6	1	1	7	1	9.0	2407.4
42.0	1	6	1	1	6	1	1	6	1	10.5	2808.7
48.0	1	6	1	1	6	1	1	6	1	12.0	3209.9
54.0	1	6	1	1	6	1	1	6	1	13.4	3611.2
60.0	1	6	1	1	6	1	1	6	1	14.9	4012.4

TABLE D

4240A AND 4240C* PRECISION BALANCING
NETWORK SETTINGS FOR 24- GAUGE H88 LOADED
CABLE WITHOUT BRIDGED TAP AT 68° F

END SECTION = 3.0 KFT

LENGTH (KFT)	4240A BALANCE NETWORK SETTINGS BY TERMINATION						1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RESISTANCE (OHMS)
	900 + 2.16		600 + 2.16		TELSET (35MA)			
	R	Z	R	Z	R	Z		
6.0	2	1	0	0	0	0	1.5	319.8
12.0	4	2	3	2	5	1	2.7	639.5
18.0	5	3	5	3	6	3	4.0	959.3
24.0	4	3	5	3	6	3	5.4	1279.1
30.0	4	3	4	3	5	3	6.8	1598.8
36.0	4	3	4	3	4	3	8.2	1918.6
42.0	4	3	4	3	4	3	9.6	2238.3
48.0	4	3	4	3	4	3	11.0	2558.1
54.0	4	3	4	3	4	3	12.3	2877.9
60.0	4	3	4	3	4	3	13.7	3197.6
66.0	4	3	4	3	4	3	15.1	3517.4

* ALL 4240C L SWITCH SETTINGS = O (OFF)

TABLE E

4240A AND 4240C* PRECISION BALANCING
NETWORK SETTINGS FOR 22- GAUGE H88 LOADED
CABLE WITHOUT BRIDGED TAP AT 68° F

END SECTION = 3.0 KFT

LENGTH (KFT)	4240A BALANCE NETWORK SETTINGS BY TERMINATION						1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RESISTANCE (OHMS)
	900 + 2.16		600 + 2.16		TELSET (35MA)			
	R	Z	R	Z	R	Z		
12.0	2	2	0	1	2	0	1.8	410.0
18.0	2	2	2	2	4	2	2.6	615.0
24.0	2	2	3	2	5	3	3.5	820.0
30.0	2	2	3	3	4	3	4.5	1025.0
36.0	2	2	3	3	3	3	5.4	1229.9
42.0	2	2	2	2	3	3	6.3	1434.9
48.0	2	2	2	2	2	3	7.2	1639.9
54.0	2	2	2	2	2	3	8.0	1844.9
60.0	2	2	2	2	2	3	8.9	2049.9
66.0	2	2	2	2	2	3	9.9	2254.9
72.0	2	2	2	2	2	3	10.8	2459.9
78.0	2	2	2	2	2	3	11.6	2664.9
84.0	2	2	2	2	2	2	12.5	2869.9
90.0	2	2	2	2	2	2	13.4	3074.9
96.0	2	2	2	2	2	2	14.3	3279.9
102.0	2	2	2	2	2	2	15.2	3484.9

* ALL 4240C L SWITCH SETTINGS = O (OFF)

TABLE F

4240A AND 4240C* PRECISION BALANCING
NETWORK SETTINGS FOR 19-GAUGE H88 LOADED
CABLE WITHOUT BRIDGED TAP AT 68° F

END SECTION = 3.0 KFT

LENGTH (KFT)	4240A BALANCE NETWORK SETTINGS BY TERMINATION						1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RESISTANCE (OHMS)
	900 + 2.16		600 + 2.16		TELSET (35MA)			
	R	Z	R	Z	R	Z		
24.0	0	2	0	1	3	2	1.9	424.5
30.0	0	2	1	2	2	2	2.4	530.6
36.0	0	2	1	2	2	2	2.9	636.8
42.0	0	2	1	2	1	2	3.4	742.9
48.0	0	2	1	2	1	2	3.9	849.0
54.0	0	2	0	2	0	2	4.3	955.1
60.0	0	2	0	2	0	2	4.8	1061.3
66.0	0	2	0	2	0	2	5.3	1167.4
72.0	0	2	0	2	0	2	5.8	1273.5
78.0	0	2	0	2	0	2	6.3	1379.7
84.0	0	2	0	2	0	2	6.7	1485.8
90.0	0	2	0	2	0	2	7.2	1591.9
96.0	0	2	0	2	0	2	7.7	1698.0
102.0	0	2	0	2	0	2	8.2	1804.2
108.0	0	2	0	2	0	2	8.7	1910.3
114.0	0	2	0	2	0	2	9.1	2016.4
120.0	0	2	0	2	0	2	9.6	2122.5
126.0	0	2	0	2	0	2	10.1	2228.7
132.0	0	2	0	2	0	2	10.6	2334.8
138.0	0	2	0	2	0	2	11.1	2440.9
144.0	0	2	0	2	0	2	11.6	2547.1
150.0	0	2	0	2	0	2	12.0	2653.2
156.0	0	2	0	2	0	2	12.5	2759.3
162.0	0	2	0	2	0	2	13.0	2865.4
168.0	0	2	0	2	0	2	13.5	2971.6
174.0	0	2	0	2	0	2	14.0	3077.7
180.0	0	2	0	2	0	2	14.4	3183.8
186.0	0	2	0	2	0	2	14.9	3289.9
192.0	0	2	0	2	0	2	15.4	3396.1

* ALL 4240 C L SWITCH SETTINGS = O (OFF)

TABLE G

4240A AND 4240C* PRECISION BALANCING NETWORK
SETTINGS FOR MIXED 26- AND 24- GAUGE H88
LOADED CABLE WITHOUT BRIDGED TAP AT 68° F

26- GAUGE ADJACENT TO REPEATER
END SECTION = 3.0 KFT

LENGTH(KFT) 26-GA 24-GA	4240A BALANCE NETWORK SETTINGS BY TERMINATION						1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RESISTANCE (OHMS)
	900 + 2.16		600 + 2.16		TELSET (35MA)			
	R	Z	R	Z	R	Z		
WL = 12.0								
6.0 6.0	7	3	6	2	7	2	3.4	828.2
WL = 18.0								
6.0 12.0	7	3	7	3	7	3	4.7	1147.9
12.0 6.0	7	3	7	3	7	3	5.3	1336.6
WL = 24.0								
6.0 18.0	7	3	7	3	7	3	6.2	1467.7
12.0 12.0	7	4	7	3	7	3	6.8	1656.3
18.0 6.0	7	4	7	4	7	3	7.4	1845.0
WL = 30.0								
6.0 24.0	6	3	7	3	7	3	7.6	1787.5
12.0 18.0	7	4	7	4	7	4	8.3	1976.1
18.0 12.0	7	4	7	4	7	4	8.9	2164.7
24.0 6.0	7	4	7	4	7	4	9.5	2353.4
WL = 36.0								
6.0 30.0	6	3	6	3	7	4	9.0	2107.2
12.0 24.0	7	4	7	4	7	4	9.7	2295.9
18.0 18.0	7	4	7	4	7	4	10.3	2484.5
24.0 12.0	7	4	7	4	7	4	11.0	2673.1
30.0 6.0	7	4	7	4	7	4	11.7	2861.8
WL = 42.0								
6.0 36.0	6	3	6	3	6	3	10.3	2427.0
12.0 30.0	7	4	7	4	7	4	11.0	2615.6
18.0 24.0	7	4	7	4	7	4	11.7	2804.3
24.0 18.0	7	4	7	4	7	4	12.4	2992.9
30.0 12.0	7	4	7	4	7	4	13.1	3181.5
36.0 6.0	7	4	7	4	7	4	13.7	3370.2
WL = 48.0								
6.0 42.0	6	3	6	3	6	3	11.7	2746.7
12.0 36.0	7	4	7	4	7	4	12.3	2935.4
18.0 30.0	7	4	7	4	7	4	13.0	3124.0
24.0 24.0	7	4	7	4	7	4	13.8	3312.7
30.0 18.0	7	4	7	4	7	4	14.5	3501.3
36.0 12.0	7	4	7	4	7	4	15.1	3689.9
42.0 6.0	7	4	7	4	7	4	15.8	3878.6
WL = 54.0								
6.0 48.0	6	3	6	3	6	3	13.1	3066.5
12.0 42.0	7	4	7	4	7	4	13.7	3255.1
18.0 36.0	7	4	7	4	7	4	14.4	3443.8
24.0 30.0	7	4	7	4	7	4	15.1	3632.4
30.0 24.0	7	4	7	4	7	4	15.9	3821.1
WL = 60.0								
6.0 54.0	6	3	6	3	6	3	14.5	3386.3

* ALL 4240C L SWITCH SETTINGS = O (OFF)

TABLE G (CONT)

4240A AND 4240C* PRECISION BALANCING NETWORK
SETTINGS FOR MIXED 26- AND 24- GAUGE H88
LOADED CABLE WITHOUT BRIDGED TAP AT 68° F

26- GAUGE ADJACENT TO REPEATER
END SECTION = 3.0 KFT

LENGTH(KFT) 26-GA 24-GA	4240A BALANCE NETWORK SETTINGS BY TERMINATION						1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RESISTANCE (OHMS)
	900 + 2.16		600 + 2.16		TELSET (35MA)			
	R	Z	R	Z	R	Z		
WL = 60.0								
12.0 48.0	7	4	7	4	7	4	15.1	3574.9
18.0 42.0	7	4	7	4	7	4	15.8	3763.5
WL = 66.0								
6.0 60.0	6	3	6	3	6	3	15.9	3706.0

*All 4240C L SWITCH SETTINGS=0(OFF)

TABLE H

4240A AND 4240C* PRECISION BALANCING NETWORK
SETTINGS FOR MIXED 24- AND 26- GAUGE H88
LOADED CABLE WITHOUT BRIDGED TAP AT 68° F

24- GAUGE ADJACENT TO REPEATER
END SECTION = 3.0 KFT

LENGTH(KFT) 24-GA	26-GA	4240A BALANCE NETWORK SETTINGS BY TERMINATION						1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RESISTANCE (OHMS)
		900 + 2.16		600 + 2.16		TELSET (35MA)			
		R	Z	R	Z	R	Z		
WL = 12.0									
6.0	6.0	5	3	4	2	6	2	3.4	828.2
WL = 18.0									
6.0	12.0	6	4	6	4	7	4	5.3	1336.6
12.0	6.0	5	3	5	3	6	3	4.7	1147.9
WL = 24.0									
6.0	18.0	6	4	6	4	6	4	7.4	1845.0
12.0	12.0	4	3	5	3	5	3	6.8	1656.3
18.0	6.0	4	3	5	3	5	3	6.2	1467.7
WL = 30.0									
6.0	24.0	5	4	5	4	6	4	9.5	2353.4
12.0	18.0	4	3	4	3	5	4	8.9	2164.7
18.0	12.0	4	3	4	3	5	3	8.3	1976.1
24.0	6.0	4	3	4	3	5	3	7.6	1787.5
WL = 36.0									
6.0	30.0	5	4	5	4	5	4	11.7	2861.8
12.0	24.0	4	3	4	3	4	3	11.0	2673.1
18.0	18.0	4	3	4	3	4	3	10.3	2484.5
24.0	12.0	4	3	4	3	4	3	9.7	2295.9
30.0	6.0	4	3	4	3	4	3	9.0	2107.2
WL = 42.0									
6.0	36.0	5	4	5	4	5	4	13.7	3370.2
12.0	30.0	4	3	4	3	4	3	13.1	3181.5
18.0	24.0	4	3	4	3	4	3	12.4	2992.9
24.0	18.0	4	3	4	3	4	3	11.7	2804.3
30.0	12.0	4	3	4	3	4	3	11.0	2615.6
36.0	6.0	4	3	4	3	4	3	10.3	2427.0
WL = 48.0									
6.0	42.0	5	4	5	4	5	4	15.8	3878.6
12.0	36.0	4	3	4	3	4	3	15.1	3689.9
18.0	30.0	4	3	4	3	4	3	14.5	3501.3
24.0	24.0	4	3	4	3	4	3	13.8	3312.7
30.0	18.0	4	3	4	3	4	3	13.0	3124.0
36.0	12.0	4	3	4	3	4	3	12.3	2935.4
42.0	6.0	4	3	4	3	4	3	11.7	2746.7
WL = 54.0									
24.0	30.0	4	3	4	3	3	3	15.9	3821.1
30.0	24.0	4	3	4	3	4	3	15.1	3632.4
36.0	18.0	4	3	4	3	4	3	14.4	3443.8
42.0	12.0	4	3	4	3	4	3	13.7	3255.1
48.0	6.0	4	3	4	3	4	3	13.1	3066.5
WL = 60.0									
42.0	18.0	4	3	4	3	4	3	15.8	3763.5

* ALL 4240C L SWITCH SETTINGS = O (OFF)

TABLE H (CONT)

4240A AND 4240C* PRECISION BALANCING NETWORK
SETTINGS FOR MIXED 24- AND 26- GAUGE H88
LOADED CABLE WITHOUT BRIDGED TAP AT 68° F

24- GAUGE ADJACENT TO REPEATER
END SECTION = 3.0 KFT

LENGTH(KFT) 24-GA	26-GA	4240A BALANCE NETWORK SETTINGS BY TERMINATION						1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RESISTANCE (OHMS)
		900 + 2.16		600 + 2.16		TELSET (35MA)			
		R	Z	R	Z	R	Z		
WL = 60.0									
48.0	12.0	4	3	4	3	4	3	15.1	3574.9
54.0	6.0	4	3	4	3	4	3	14.5	3386.3
WL = 66.0									
60.0	6.0	4	3	4	3	4	3	15.9	3706.0

*All 4240C L SWITCH SETTINGS=0(OFF)

TABLE I

4240A AND 4240C* PRECISION BALANCING NETWORK
SETTINGS FOR MIXED 26- AND 22- GAUGE H88
LOADED CABLE WITHOUT BRIDGED TAP AT 68° F

26- GAUGE ADJACENT TO REPEATER
END SECTION = 3.0 KFT

LENGTH(KFT) 26-GA 22-GA	4240A BALANCE NETWORK SETTINGS BY TERMINATION						1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RESISTANCE (OHMS)
	900 + 2.16		600 + 2.16		TELSET (35MA)			
	R	Z	R	Z	R	Z		
WL = 12.0								
6.0 6.0	6	2	5	2	7	2	3.0	713.4
WL = 18.0								
6.0 12.0	7	3	7	3	7	2	3.8	918.4
12.0 6.0	7	3	7	3	7	3	4.8	1221.8
WL = 24.0								
6.0 18.0	6	3	7	3	7	3	4.8	1123.4
12.0 12.0	7	3	7	3	7	3	5.8	1426.8
18.0 6.0	7	4	7	4	7	3	6.9	1730.2
WL = 30.0								
6.0 24.0	6	3	7	3	7	3	5.7	1328.4
12.0 18.0	7	3	7	3	7	3	6.8	1631.8
18.0 12.0	7	4	7	4	7	4	7.9	1935.2
24.0 6.0	7	4	7	4	7	4	9.0	2238.6
WL = 36.0								
6.0 30.0	6	3	6	3	7	3	6.6	1533.4
12.0 24.0	7	4	7	3	7	3	7.8	1836.8
18.0 18.0	7	4	7	4	7	4	8.9	2140.2
24.0 12.0	7	4	7	4	7	4	10.0	2443.6
30.0 6.0	7	4	7	4	7	4	11.2	2747.0
WL = 42.0								
6.0 36.0	6	3	6	3	6	3	7.5	1738.3
12.0 30.0	7	4	7	4	7	4	8.6	2041.8
18.0 24.0	7	4	7	4	7	4	9.8	2345.2
24.0 18.0	7	4	7	4	7	4	11.0	2648.6
30.0 12.0	7	4	7	4	7	4	12.1	2952.0
36.0 6.0	7	4	7	4	7	4	13.2	3255.4
WL = 48.0								
6.0 42.0	6	3	6	3	6	3	8.4	1943.3
12.0 36.0	7	4	7	4	7	4	9.4	2246.7
18.0 30.0	7	4	7	4	7	4	10.6	2550.2
24.0 24.0	7	4	7	4	7	4	11.8	2853.6
30.0 18.0	7	4	7	4	7	4	13.1	3157.0
36.0 12.0	7	4	7	4	7	4	14.2	3460.4
42.0 6.0	7	4	7	4	7	4	15.3	3763.8
WL = 54.0								
6.0 48.0	6	3	6	3	6	3	9.3	2148.3
12.0 42.0	7	4	7	4	7	4	10.3	2451.7
18.0 36.0	7	4	7	4	7	4	11.4	2755.1
24.0 30.0	7	4	7	4	7	4	12.7	3058.6
30.0 24.0	7	4	7	4	7	4	14.0	3362.0
36.0 18.0	7	4	7	4	7	4	15.1	3665.4
WL = 60.0								

* ALL 4240C L SWITCH SETTINGS = O (OFF)

TABLE I (CONT)

4240A AND 4240C* PRECISION BALANCING NETWORK
SETTINGS FOR MIXED 26- AND 22- GAUGE H88
LOADED CABLE WITHOUT BRIDGED TAP AT 68° F

26- GAUGE ADJACENT TO REPEATER
END SECTION = 3.0 KFT

LENGTH(KFT) 26-GA	22-GA	4240A BALANCE NETWORK SETTINGS BY TERMINATION						1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RESISTANCE (OHMS)
		900 + 2.16		600 + 2.16		TELSET (35MA)			
		R	Z	R	Z	R	Z		
WL = 60.0									
6.0	54.0	6	3	6	3	6	3	10.2	2353.3
12.0	48.0	7	4	7	4	7	4	11.3	2656.7
18.0	42.0	7	4	7	4	7	4	12.4	2960.1
24.0	36.0	7	4	7	4	7	4	13.6	3263.5
30.0	30.0	7	4	7	4	7	4	14.8	3567.0
WL = 66.0									
6.0	60.0	6	3	6	3	6	3	11.1	2558.3
12.0	54.0	7	4	7	4	7	4	12.2	2861.7
18.0	48.0	7	4	7	4	7	4	13.3	3165.1
24.0	42.0	7	4	7	4	7	4	14.5	3468.5
30.0	36.0	7	4	7	4	7	4	15.7	3771.9
WL = 72.0									
6.0	66.0	6	3	6	3	6	3	12.0	2763.3
12.0	60.0	7	4	7	4	7	4	13.1	3066.7
18.0	54.0	7	4	7	4	7	4	14.2	3370.1
24.0	48.0	7	4	7	4	7	4	15.4	3673.5
WL = 78.0									
6.0	72.0	6	3	6	3	6	3	12.9	2968.3
12.0	66.0	7	4	7	4	7	4	13.9	3271.7
18.0	60.0	7	4	7	4	7	4	15.1	3575.1
WL = 84.0									
6.0	78.0	6	3	6	3	6	3	13.8	3173.3
12.0	72.0	7	4	7	4	7	4	14.8	3476.7
WL = 90.0									
6.0	84.0	6	3	6	3	6	3	14.7	3378.3
12.0	78.0	7	4	7	4	7	4	15.7	3681.7
WL = 96.0									
6.0	90.0	6	3	6	3	6	3	15.6	3583.3

*All 4240C L SWITCH SETTINGS=0(OFF)

TABLE J

4240A AND 4240C* PRECISION BALANCING NETWORK
SETTINGS FOR MIXED 22- AND 26- GAUGE H88
LOADED CABLE WITHOUT BRIDGED TAP AT 68° F

22- GAUGE ADJACENT TO REPEATER
END SECTION = 3.0 KFT

LENGTH(KFT) 22-GA	26-GA	4240A BALANCE NETWORK SETTINGS BY TERMINATION 900 + 2.16 R	Z	600 + 2.16 R	Z	TELSET (35MA) R	Z	1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RESISTANCE (OHMS)
WL = 12.0									
6.0	6.0	4	3	3	2	5	2	3.0	713.4
WL = 18.0									
6.0	12.0	4	3	4	3	5	3	4.8	1221.8
12.0	6.0	3	3	3	3	4	2	3.8	918.4
WL = 24.0									
6.0	18.0	4	4	5	4	5	4	6.9	1730.2
12.0	12.0	3	3	3	3	4	3	5.8	1426.8
18.0	6.0	3	3	3	3	4	3	4.8	1123.4
WL = 30.0									
6.0	24.0	4	4	4	4	5	4	9.0	2238.6
12.0	18.0	2	3	3	3	3	3	7.9	1935.2
18.0	12.0	2	3	2	3	3	3	6.8	1631.8
24.0	6.0	2	3	3	3	3	3	5.7	1328.4
WL = 36.0									
6.0	30.0	4	4	4	4	4	4	11.2	2747.0
12.0	24.0	2	3	2	3	3	3	10.0	2443.6
18.0	18.0	2	3	2	3	2	3	8.9	2140.2
24.0	12.0	2	3	2	3	2	3	7.8	1836.8
30.0	6.0	2	2	2	2	3	3	6.6	1533.4
WL = 42.0									
6.0	36.0	4	4	4	4	4	4	13.2	3255.4
12.0	30.0	2	3	2	3	2	3	12.1	2952.0
18.0	24.0	2	3	2	3	2	3	11.0	2648.6
24.0	18.0	2	3	2	3	2	3	9.8	2345.2
30.0	12.0	2	3	2	3	2	3	8.6	2041.8
36.0	6.0	2	2	2	2	2	3	7.5	1738.3
WL = 48.0									
6.0	42.0	4	4	4	4	4	4	15.3	3763.8
12.0	36.0	2	3	2	3	2	3	14.2	3460.4
18.0	30.0	2	3	2	3	2	3	13.1	3157.0
24.0	24.0	2	3	2	3	2	3	11.8	2853.6
30.0	18.0	2	3	2	3	2	3	10.6	2550.2
36.0	12.0	2	3	2	3	2	3	9.4	2246.7
42.0	6.0	2	2	2	2	2	3	8.4	1943.3
WL = 54.0									
18.0	36.0	2	3	2	3	2	3	15.1	3665.4
24.0	30.0	1	2	1	2	1	2	14.0	3362.0
30.0	24.0	1	2	1	2	1	2	12.7	3058.6
36.0	18.0	2	3	2	3	2	3	11.4	2755.1
42.0	12.0	2	3	2	3	2	3	10.3	2451.7
48.0	6.0	2	2	2	2	2	3	9.3	2148.3
WL = 60.0									

* ALL 4240C L SWITCH SETTINGS = O (OFF)

TABLE J (CONT)

4240A AND 4240C* PRECISION BALANCING NETWORK
SETTINGS FOR MIXED 22- AND 26- GAUGE H88
LOADED CABLE WITHOUT BRIDGED TAP AT 68° F

22- GAUGE ADJACENT TO REPEATER
END SECTION = 3.0 KFT

LENGTH(KFT) 22-GA	26-GA	4240A BALANCE NETWORK SETTINGS BY TERMINATION 900 + 2.16 R	Z	600 + 2.16 R	Z	TELSET (35MA) R	Z	1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RESISTANCE (OHMS)
WL = 60.0									
30.0	30.0	1	2	1	2	1	2	14.8	3567.0
36.0	24.0	1	2	2	3	1	2	13.6	3263.5
42.0	18.0	2	3	2	3	2	3	12.4	2960.1
48.0	12.0	2	2	2	2	2	3	11.3	2656.7
54.0	6.0	2	2	2	2	2	3	10.2	2353.3
WL = 66.0									
36.0	30.0	1	2	1	2	1	2	15.7	3771.9
42.0	24.0	2	2	2	3	2	3	14.5	3468.5
48.0	18.0	2	2	2	2	2	3	13.3	3165.1
54.0	12.0	2	2	2	2	2	3	12.2	2861.7
60.0	6.0	2	2	2	2	2	3	11.1	2558.3
WL = 72.0									
48.0	24.0	2	2	2	2	2	2	15.4	3673.5
54.0	18.0	2	2	2	2	2	2	14.2	3370.1
60.0	12.0	2	2	2	2	2	2	13.1	3066.7
66.0	6.0	2	2	2	2	2	3	12.0	2763.3
WL = 78.0									
60.0	18.0	2	2	2	2	2	2	15.1	3575.1
66.0	12.0	2	2	2	2	2	2	13.9	3271.7
72.0	6.0	2	2	2	2	2	2	12.9	2968.3
WL = 84.0									
66.0	18.0	2	2	2	2	2	2	16.0	3780.1
72.0	12.0	2	2	2	2	2	2	14.8	3476.7
78.0	6.0	2	2	2	2	2	2	13.8	3173.3
WL = 90.0									
78.0	12.0	2	2	2	2	2	2	15.7	3681.7
84.0	6.0	2	2	2	2	2	2	14.7	3378.3
WL = 96.0									
90.0	6.0	2	2	2	2	2	2	15.6	3583.3

*All 4240C L SWITCH SETTINGS=0(OFF)

TABLE K

4240A AND 4240C* PRECISION BALANCING NETWORK
SETTINGS FOR MIXED 24- AND 22- GAUGE H88
LOADED CABLE WITHOUT BRIDGED TAP AT 68° F

24- GAUGE ADJACENT TO REPEATER
END SECTION = 3.0 KFT

LENGTH(KFT) 24-GA	22-GA	4240A BALANCE NETWORK SETTINGS BY TERMINATION						1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RESISTANCE (OHMS)
		900 + 2.16		600 + 2.16		TELSET (35MA)			
		R	Z	R	Z	R	Z		
WL = 12.0									
6.0	6.0	3	2	2	1	4	1	2.3	524.8
WL = 18.0									
6.0	12.0	4	3	4	2	6	2	3.1	729.7
12.0	6.0	5	3	5	3	7	3	3.5	844.5
WL = 24.0									
6.0	18.0	4	3	5	3	6	3	4.0	934.7
12.0	12.0	5	3	5	3	6	3	4.4	1049.5
18.0	6.0	5	3	5	3	6	3	4.9	1164.3
WL = 30.0									
6.0	24.0	4	3	4	3	5	3	5.0	1139.7
12.0	18.0	4	3	5	3	5	3	5.4	1254.5
18.0	12.0	4	3	5	3	5	3	5.9	1369.3
24.0	6.0	4	3	5	3	5	3	6.3	1484.0
WL = 36.0									
6.0	30.0	4	3	4	3	5	3	5.9	1344.7
12.0	24.0	4	3	5	3	5	3	6.4	1459.5
18.0	18.0	4	3	5	3	5	3	6.8	1574.3
24.0	12.0	4	3	4	3	5	3	7.3	1689.0
30.0	6.0	4	3	4	3	5	3	7.7	1803.8
WL = 42.0									
6.0	36.0	4	3	4	3	4	3	6.8	1549.7
12.0	30.0	4	3	4	3	4	3	7.2	1664.5
18.0	24.0	4	3	4	3	4	3	7.7	1779.3
24.0	18.0	4	3	4	3	4	3	8.2	1894.0
30.0	12.0	4	3	4	3	4	3	8.7	2008.8
36.0	6.0	4	3	4	3	4	3	9.1	2123.6
WL = 48.0									
6.0	42.0	4	3	4	3	4	3	7.6	1754.7
12.0	36.0	4	3	4	3	4	3	8.1	1869.5
18.0	30.0	4	3	4	3	4	3	8.5	1984.2
24.0	24.0	4	3	4	3	4	3	9.1	2099.0
30.0	18.0	4	3	4	3	4	3	9.6	2213.8
36.0	12.0	4	3	4	3	4	3	10.0	2328.6
42.0	6.0	4	3	4	3	4	3	10.5	2443.3
WL = 54.0									
6.0	48.0	4	3	4	3	4	3	8.5	1959.7
12.0	42.0	4	3	4	3	4	3	9.0	2074.5
18.0	36.0	4	3	4	3	4	3	9.4	2189.2
24.0	30.0	4	3	4	3	4	3	9.9	2304.0
30.0	24.0	4	3	4	3	4	3	10.5	2418.8
36.0	18.0	4	3	4	3	4	3	10.9	2533.6
42.0	12.0	4	3	4	3	4	3	11.4	2648.3
48.0	6.0	4	3	4	3	4	3	11.8	2763.1

* ALL 4240C L SWITCH SETTINGS = O (OFF)

TABLE K (CONT)

4240A AND 4240C* PRECISION BALANCING NETWORK
SETTINGS FOR MIXED 24- AND 22- GAUGE H88
LOADED CABLE WITHOUT BRIDGED TAP AT 68° F

24- GAUGE ADJACENT TO REPEATER
END SECTION = 3.0 KFT

LENGTH(KFT) 24-GA	22-GA	4240A BALANCE NETWORK SETTINGS BY TERMINATION 900 + 2.16 R	900 + 2.16 Z	600 + 2.16 R	600 + 2.16 Z	TELSET (35MA) R	TELSET (35MA) Z	1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RESISTANCE (OHMS)
WL = 60.0									
6.0	54.0	4	3	4	3	3	3	9.4	2164.7
12.0	48.0	4	3	4	3	4	3	9.9	2279.5
18.0	42.0	4	3	4	3	4	3	10.3	2394.2
24.0	36.0	4	3	4	3	4	3	10.8	2509.0
30.0	30.0	4	3	4	3	4	3	11.3	2623.8
36.0	24.0	4	3	4	3	4	3	11.8	2738.5
42.0	18.0	4	3	4	3	4	3	12.3	2853.3
48.0	12.0	4	3	4	3	4	3	12.8	2968.1
54.0	6.0	4	3	4	3	4	3	13.2	3082.9
WL = 66.0									
6.0	60.0	4	3	4	3	3	3	10.4	2369.7
12.0	54.0	4	3	4	3	4	3	10.8	2484.4
18.0	48.0	4	3	4	3	4	3	11.3	2599.2
24.0	42.0	4	3	4	3	4	3	11.7	2714.0
30.0	36.0	4	3	4	3	4	3	12.2	2828.8
36.0	30.0	4	3	4	3	4	3	12.7	2943.5
42.0	24.0	4	3	4	3	4	3	13.2	3058.3
48.0	18.0	4	3	4	3	4	3	13.7	3173.1
54.0	12.0	4	3	4	3	4	3	14.2	3287.9
60.0	6.0	4	3	4	3	4	3	14.6	3402.6
WL = 72.0									
6.0	66.0	4	3	4	3	3	3	11.2	2574.7
12.0	60.0	4	3	4	3	4	3	11.7	2689.4
18.0	54.0	4	3	4	3	4	3	12.2	2804.2
24.0	48.0	4	3	4	3	4	3	12.6	2919.0
30.0	42.0	4	3	4	3	4	3	13.1	3033.8
36.0	36.0	4	3	4	3	4	3	13.6	3148.5
42.0	30.0	4	3	4	3	4	3	14.1	3263.3
48.0	24.0	4	3	4	3	4	3	14.6	3378.1
54.0	18.0	4	3	4	3	4	3	15.1	3492.8
60.0	12.0	4	3	4	3	4	3	15.5	3607.6
WL = 78.0									
6.0	72.0	4	3	4	3	3	3	12.1	2779.7
12.0	66.0	4	3	4	3	4	3	12.6	2894.4
18.0	60.0	4	3	4	3	4	3	13.0	3009.2
24.0	54.0	4	3	4	3	4	3	13.5	3124.0
30.0	48.0	4	3	4	3	4	3	14.0	3238.7
36.0	42.0	4	3	4	3	4	3	14.5	3353.5
42.0	36.0	4	3	4	3	4	3	15.0	3468.3
48.0	30.0	4	3	4	3	4	3	15.5	3583.1
WL = 84.0									
6.0	78.0	4	3	4	3	4	3	13.0	2984.6
12.0	72.0	4	3	4	3	4	3	13.5	3099.4
18.0	66.0	4	3	4	3	4	3	13.9	3214.2
24.0	60.0	4	3	4	3	4	3	14.4	3329.0
30.0	54.0	4	3	4	3	4	3	14.9	3443.7

*All 4240C L SWITCH SETTINGS=0(OFF)

TABLE K (CONT)

4240A AND 4240C* PRECISION BALANCING NETWORK
SETTINGS FOR MIXED 24- AND 22- GAUGE H88
LOADED CABLE WITHOUT BRIDGED TAP AT 68° F

24- GAUGE ADJACENT TO REPEATER
END SECTION = 3.0 KFT

LENGTH(KFT) 24-GA	22-GA	4240A BALANCE NETWORK SETTINGS BY TERMINATION 900 + 2.16 R	Z	600 + 2.16 R	Z	TELSET (35MA) R	Z	1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RESISTANCE (OHMS)
WL = 84.0									
36.0	48.0	4	3	4	3	4	3	15.4	3558.5
42.0	42.0	4	3	4	3	4	3	15.9	3673.3
WL = 90.0									
6.0	84.0	4	3	4	3	4	3	13.9	3189.6
12.0	78.0	4	3	4	3	4	3	14.4	3304.4
18.0	72.0	4	3	4	3	4	3	14.8	3419.2
24.0	66.0	4	3	4	3	4	3	15.3	3534.0
30.0	60.0	4	3	4	3	4	3	15.8	3648.7
WL = 96.0									
6.0	90.0	4	3	4	3	4	3	14.8	3394.6
12.0	84.0	4	3	4	3	4	3	15.3	3509.4
18.0	78.0	4	3	4	3	4	3	15.7	3624.2
WL = 102.0									
6.0	96.0	4	3	4	3	4	3	15.7	3599.6

*All 4240C L SWITCH SETTINGS=0(OFF)

TABLE L

4240A AND 4240C* PRECISION BALANCING NETWORK
SETTINGS FOR MIXED 22- AND 24- GAUGE H88
LOADED CABLE WITHOUT BRIDGED TAP AT 68° F

22- GAUGE ADJACENT TO REPEATER
END SECTION = 3.0 KFT

LENGTH(KFT) 22-GA	24-GA	4240A BALANCE NETWORK SETTINGS BY TERMINATION 900 + 2.16 R	900 + 2.16 Z	600 + 2.16 R	600 + 2.16 Z	TELSET (35MA) R	TELSET (35MA) Z	1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RESISTANCE (OHMS)
WL = 12.0									
6.0	6.0	2	2	1	1	3	1	2.3	524.8
WL = 18.0									
6.0	12.0	3	3	3	2	5	3	3.5	844.5
12.0	6.0	2	2	2	2	4	2	3.1	729.7
WL = 24.0									
6.0	18.0	3	3	3	3	5	3	4.9	1164.3
12.0	12.0	3	3	3	3	4	3	4.4	1049.5
18.0	6.0	3	3	3	3	4	3	4.0	934.7
WL = 30.0									
6.0	24.0	3	3	3	3	4	3	6.3	1484.0
12.0	18.0	3	3	3	3	3	3	5.9	1369.3
18.0	12.0	2	3	3	3	4	3	5.4	1254.5
24.0	6.0	2	2	3	3	4	3	5.0	1139.7
WL = 36.0									
6.0	30.0	3	3	3	3	3	3	7.7	1803.8
12.0	24.0	2	3	3	3	3	3	7.3	1689.0
18.0	18.0	2	3	2	2	3	3	6.8	1574.3
24.0	12.0	2	2	2	2	3	3	6.4	1459.5
30.0	6.0	2	2	2	2	3	3	5.9	1344.7
WL = 42.0									
6.0	36.0	3	3	3	3	3	3	9.1	2123.6
12.0	30.0	2	3	2	3	2	3	8.7	2008.8
18.0	24.0	2	3	2	3	2	3	8.2	1894.0
24.0	18.0	2	3	2	2	2	3	7.7	1779.3
30.0	12.0	2	2	2	2	3	3	7.2	1664.5
36.0	6.0	2	2	2	2	3	3	6.8	1549.7
WL = 48.0									
6.0	42.0	3	3	3	3	3	3	10.5	2443.3
12.0	36.0	2	3	2	3	2	3	10.0	2328.6
18.0	30.0	2	3	2	3	2	3	9.6	2213.8
24.0	24.0	2	3	2	3	2	3	9.1	2099.0
30.0	18.0	2	3	2	3	2	3	8.5	1984.2
36.0	12.0	2	2	2	2	2	3	8.1	1869.5
42.0	6.0	2	2	2	2	2	3	7.6	1754.7
WL = 54.0									
6.0	48.0	3	3	3	3	2	3	11.8	2763.1
12.0	42.0	2	3	2	3	2	3	11.4	2648.3
18.0	36.0	2	3	2	3	2	3	10.9	2533.6
24.0	30.0	2	3	2	3	2	3	10.5	2418.8
30.0	24.0	2	3	2	3	2	3	9.9	2304.0
36.0	18.0	2	3	2	3	2	3	9.4	2189.2
42.0	12.0	2	2	2	2	2	3	9.0	2074.5
48.0	6.0	2	2	2	2	2	3	8.5	1959.7

* ALL 4240C L SWITCH SETTINGS = O (OFF)

TABLE L (CONT)

4240A AND 4240C* PRECISION BALANCING NETWORK
SETTINGS FOR MIXED 22- AND 24- GAUGE H88
LOADED CABLE WITHOUT BRIDGED TAP AT 68° F

22- GAUGE ADJACENT TO REPEATER
END SECTION = 3.0 KFT

LENGTH(KFT) 22-GA	24-GA	4240A BALANCE NETWORK SETTINGS BY TERMINATION 900 + 2.16 R	Z	600 + 2.16 R	Z	TELSET (35MA) R	Z	1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RESISTANCE (OHMS)
WL = 60.0									
6.0	54.0	3	3	3	3	2	3	13.2	3082.9
12.0	48.0	2	3	2	3	2	3	12.8	2968.1
18.0	42.0	2	3	2	3	2	3	12.3	2853.3
24.0	36.0	2	3	2	3	2	3	11.8	2738.5
30.0	30.0	2	3	2	3	2	3	11.3	2623.8
36.0	24.0	2	3	2	3	2	3	10.8	2509.0
42.0	18.0	2	2	2	3	2	3	10.3	2394.2
48.0	12.0	2	2	2	2	2	3	9.9	2279.5
54.0	6.0	2	2	2	2	2	3	9.4	2164.7
WL = 66.0									
6.0	60.0	3	3	3	3	2	3	14.6	3402.6
12.0	54.0	2	3	2	3	2	3	14.2	3287.9
18.0	48.0	2	3	2	3	2	3	13.7	3173.1
24.0	42.0	2	3	2	3	2	3	13.2	3058.3
30.0	36.0	2	3	2	3	2	3	12.7	2943.5
36.0	30.0	2	2	2	3	2	3	12.2	2828.8
42.0	24.0	2	2	2	2	2	3	11.7	2714.0
48.0	18.0	2	2	2	2	2	3	11.3	2599.2
54.0	12.0	2	2	2	2	2	3	10.8	2484.4
60.0	6.0	2	2	2	2	2	3	10.4	2369.7
WL = 72.0									
12.0	60.0	2	3	2	3	2	3	15.5	3607.6
18.0	54.0	2	3	2	3	2	3	15.1	3492.8
24.0	48.0	2	3	2	3	2	3	14.6	3378.1
30.0	42.0	2	3	2	3	2	3	14.1	3263.3
36.0	36.0	2	2	2	3	2	3	13.6	3148.5
42.0	30.0	2	2	2	2	2	3	13.1	3033.8
48.0	24.0	2	2	2	2	2	3	12.6	2919.0
54.0	18.0	2	2	2	2	2	3	12.2	2804.2
60.0	12.0	2	2	2	2	2	3	11.7	2689.4
66.0	6.0	2	2	2	2	2	3	11.2	2574.7
WL = 78.0									
24.0	54.0	2	3	2	3	2	3	16.0	3697.8
30.0	48.0	2	3	2	3	2	3	15.5	3583.1
36.0	42.0	2	2	2	2	2	3	15.0	3468.3
42.0	36.0	2	2	2	2	2	2	14.5	3353.5
48.0	30.0	2	2	2	2	2	2	14.0	3238.7
54.0	24.0	2	2	2	2	2	2	13.5	3124.0
60.0	18.0	2	2	2	2	2	2	13.0	3009.2
66.0	12.0	2	2	2	2	2	2	12.6	2894.4
72.0	6.0	2	2	2	2	2	2	12.1	2779.7
WL = 84.0									
42.0	42.0	2	2	2	2	2	2	15.9	3673.3
48.0	36.0	2	2	2	2	2	2	15.4	3558.5
54.0	30.0	2	2	2	2	2	2	14.9	3443.7
60.0	24.0	2	2	2	2	2	2	14.4	3329.0

*All 4240C L SWITCH SETTINGS=0(OFF)

TABLE L (CONT)

4240A AND 4240C* PRECISION BALANCING NETWORK
SETTINGS FOR MIXED 22- AND 24- GAUGE H88
LOADED CABLE WITHOUT BRIDGED TAP AT 68° F

22- GAUGE ADJACENT TO REPEATER
END SECTION = 3.0 KFT

LENGTH(KFT) 22-GA	24-GA	4240A BALANCE NETWORK SETTINGS BY TERMINATION 900 + 2.16 R	Z	600 + 2.16 R	Z	TELSET (35MA) R	Z	1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RESISTANCE (OHMS)
WL = 84.0									
66.0	18.0	2	2	2	2	2	2	13.9	3214.2
72.0	12.0	2	2	2	2	2	2	13.5	3099.4
78.0	6.0	2	2	2	2	2	2	13.0	2984.6
WL = 90.0									
60.0	30.0	2	2	2	2	2	2	15.8	3648.7
66.0	24.0	2	2	2	2	2	2	15.3	3534.0
72.0	18.0	2	2	2	2	2	2	14.8	3419.2
78.0	12.0	2	2	2	2	2	2	14.4	3304.4
84.0	6.0	2	2	2	2	2	2	13.9	3189.6
WL = 96.0									
78.0	18.0	2	2	2	2	2	2	15.7	3624.2
84.0	12.0	2	2	2	2	2	2	15.3	3509.4
90.0	6.0	2	2	2	2	2	2	14.8	3394.6
WL = 102.0									
96.0	6.0	2	2	2	2	2	2	15.7	3599.6

*All 4240C L SWITCH SETTINGS=0(OFF)

3. PRESCRIPTION SETTINGS FOR THE 4240B PRECISION BALANCING NETWORK

3.01 The tables for the 4240B PBN used on nonloaded cable are very similar to the tables for loaded cable. The major difference in the two networks is the 4240B does not require the LBOC.

3.02 The same procedures for using the tables apply and if the cable facility does not match the table entry point very closely, the manual adjustment procedures described in Section 332-912-211 should be used.

3.03 Tables M, N, O, P, and Q are for single-gauge facilities and settings for two-gauge Hi-Cap facilities are given in Tables R, S, T, U, V, and W. Facilities composed of mixtures of nonloaded MAT and Hi-Cap cable must be adjusted using the manual procedures described in Section 332-912-211.

TABLE M

4240B PRECISION BALANCE NETWORK SETTINGS FOR
26–GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68 F

LENGTH (KFT)	4240B BALANCE NETWORK SETTINGS BY TERMINATION									1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
	900 + 2.16			600 + 2.16			TELSET (35MA)				
	R1	R2	Z	R1	R2	Z	R1	R2	Z		
4.0	7	12	0	7	8	0	7	11	0	1.6	333.3
4.5	7	13	2	7	9	0	7	12	0	1.8	375.0
5.0	7	14	5	7	9	0	7	12	0	2.1	416.7
5.5	7	15	10	7	10	1	7	12	0	2.3	458.3
6.0	7	15	10	7	12	5	7	12	0	2.5	500.0
6.5	7	15	10	7	13	7	7	13	2	2.7	541.7
7.0	6	8	0	7	14	10	7	14	5	2.9	583.3
7.5	6	9	2	7	15	13	7	15	10	3.2	625.0
8.0	6	9	2	7	15	13	7	15	10	3.4	666.7
8.5	6	10	5	6	6	0	7	15	10	3.6	708.3
9.0	6	10	5	6	6	0	7	15	11	3.9	750.0
9.5	6	10	5	6	6	0	7	15	11	4.1	791.7
10.0	6	10	6	6	7	1	6	9	2	4.3	833.3
10.5	6	10	6	6	8	3	6	9	2	4.6	875.0
11.0	5	6	1	6	8	3	6	10	5	4.8	916.7
11.5	5	6	1	6	8	4	6	10	5	5.1	958.3
12.0	5	6	2	6	9	5	6	10	5	5.3	1000.0
12.5	5	6	2	6	9	5	6	10	6	5.6	1041.7
13.0	5	6	2	5	4	0	6	10	6	5.8	1083.3
13.5	5	6	2	5	4	0	6	10	6	6.1	1125.0
14.0	5	6	3	5	4	0	6	10	6	6.4	1166.7
14.5	4	3	0	5	4	0	5	6	1	6.6	1208.3
15.0	4	3	0	5	4	0	5	6	1	6.9	1250.0
15.5	4	3	0	5	4	0	5	6	2	7.2	1291.7
16.0	4	3	0	5	4	0	5	6	2	7.4	1333.3
16.5	4	3	0	5	5	2	5	6	2	7.7	1375.0
17.0	4	3	0	5	5	2	5	6	2	8.0	1416.7
17.5	4	3	0	5	5	2	5	6	2	8.3	1458.3
18.0	4	3	0	4	3	0	4	4	0	8.5	1500.0
18.5	4	3	0	4	3	0	4	4	0	8.8	1541.7
19.0	4	3	0	4	3	0	4	3	0	9.1	1583.3
19.5	4	2	0	4	3	0	4	3	0	9.4	1625.0
20.0	4	2	0	4	2	0	4	3	0	9.6	1666.7
20.5	3	2	0	4	2	0	4	3	0	9.9	1708.3
21.0	3	2	0	4	2	0	4	3	0	10.2	1750.0
21.5	3	1	0	4	2	0	4	3	0	10.5	1791.7
22.0	3	1	0	4	2	0	4	3	0	10.8	1833.3
22.5	3	1	0	4	2	0	4	3	0	11.0	1875.0
23.0	3	1	0	4	2	0	4	3	0	11.3	1916.7
23.5	3	1	0	4	2	0	3	2	0	11.6	1958.3
24.0	3	1	0	4	2	0	3	2	0	11.9	2000.0

TABLE N

4240B PRECISION BALANCING NETWORK SETTINGS FOR
25-GAUGE NONLOADED MAT CABLE WITHOUT BRIDGED TAP AT 68°F

LENGTH (kft)	4240B BALANCE NETWORK SETTINGS BY TERMINATION									1 KHZ CABLE LOSS (dB) (900 OHMS)	DC CABLE RES (OHMS)
	900 + 2.16			600 + 2.16			TEL SET (35 mA)				
	R1	R2	Z	R1	R2	Z	R1	R2	Z		
1.0	7	8	0	7	0	0	7	0	0	.3	65.5
1.5	7	10	0	7	0	0	7	0	0	.5	98.2
2.0	7	10	0	7	0	0	7	0	0	.6	130.9
2.5	7	11	0	7	1	0	7	2	0	.8	163.7
3.0	7	12	0	7	3	0	7	5	0	.9	196.4
3.5	7	12	0	7	3	0	7	5	0	1.1	229.4
4.0	7	12	0	7	6	0	7	9	0	1.3	261.9
4.5	7	12	0	7	7	0	7	10	0	1.4	294.6
5.0	7	12	0	7	8	0	7	11	0	1.6	327.4
5.5	7	13	1	7	9	0	7	11	0	1.8	360.1
6.0	7	13	2	7	9	0	7	12	0	1.9	392.8
6.5	7	14	5	7	10	1	7	12	0	2.1	425.6
7.0	7	15	9	7	10	0	7	12	0	2.3	458.3
7.5	7	15	10	7	11	2	7	12	0	2.4	491.1
8.0	7	15	10	7	12	4	7	13	1	2.6	523.8
8.5	7	15	10	7	13	7	7	13	2	2.8	556.5
9.0	6	8	0	7	14	10	7	14	5	2.9	589.3
9.5	6	9	1	7	14	10	7	15	9	3.1	622.0
10.0	6	9	2	7	15	13	7	15	10	3.3	654.7
10.5	6	9	2	7	15	13	7	15	10	3.5	687.5
11.0	6	10	4	6	6	0	7	15	10	3.7	720.2
11.5	6	10	5	6	6	0	7	15	10	3.8	752.9
12.0	6	10	5	6	6	0	7	15	11	4.0	785.7
12.5	6	10	5	6	7	1	6	9	1	4.2	818.4
13.0	6	10	6	6	7	1	6	9	2	4.4	851.2
13.5	6	10	6	6	8	3	6	9	2	4.6	883.9
14.0	5	6	1	6	8	3	6	10	4	4.8	916.6
14.5	5	6	1	6	8	3	6	10	5	5.0	949.4
15.0	5	6	1	6	8	3	6	10	5	5.2	982.1
15.5	5	6	2	6	9	5	6	10	5	5.4	1014.8
16.0	5	6	2	6	9	5	6	10	5	5.6	1047.6
16.5	5	6	2	6	9	5	6	10	6	5.8	1080.3
17.0	5	6	2	5	4	0	6	10	6	6.0	1113.0
17.5	5	6	2	5	4	0	6	10	6	6.2	1145.8
18.0	5	6	2	5	4	0	6	10	6	6.4	1178.5
18.5	4	3	0	5	4	0	5	6	1	6.6	1211.3
19.0	4	3	0	5	4	0	5	6	1	6.8	1244.0
19.5	4	3	0	5	4	0	5	6	1	7.0	1276.7
20.0	4	3	0	5	4	0	5	6	1	7.2	1309.5
20.5	4	3	0	5	4	0	5	6	2	7.4	1342.2
21.0	4	3	0	5	4	0	5	6	2	7.6	1374.9
21.5	4	3	0	5	4	0	5	6	2	7.8	1407.7
22.0	4	3	0	5	4	0	5	6	2	8.0	1440.4
22.5	4	3	0	5	4	0	5	6	2	8.3	1473.2
23.0	4	3	0	4	3	0	4	4	0	8.5	1505.9
23.5	4	3	0	4	3	0	4	4	0	8.7	1538.6
24.0	4	3	0	4	3	0	4	4	0	8.9	1571.4

TABLE N (Cont)

4240B PRECISION BALANCING NETWORK SETTINGS FOR
25-GAUGE NONLOADED MAT CABLE WITHOUT BRIDGED TAP AT 68°F

LENGTH (kft)	4240B PRECISION BALANCING NETWORK SETTINGS FOR									1 KHZ CABLE LOSS (dB) (900 OHMS)	DC CABLE RES (OHMS)
	900 + 2.16			600 + 2.16			TEL SET (35 mA)				
	R1	R2	Z	R1	R2	Z	R1	R2	Z		
21.0	4	3	0	5	4	0	5	6	2	7.6	1374.9
21.5	4	3	0	5	4	0	5	6	2	7.8	1407.7
22.0	4	3	0	5	4	0	5	6	2	8.0	1440.4
22.5	4	3	0	5	4	0	5	6	2	8.3	1473.2
23.0	4	3	0	4	3	0	4	4	0	8.5	1505.9
23.5	4	3	0	4	3	0	4	4	0	8.7	1538.6
24.0	4	3	0	4	3	0	4	4	0	8.9	1571.4

TABLE O

4240B PRECISION BALANCE NETWORK SETTINGS FOR
24–GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68 F

LENGTH (KFT)	4240B BALANCE NETWORK SETTINGS BY TERMINATION									1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
	900 + 2.16			600 + 2.16			TELSET (35MA)				
	R1	R2	Z	R1	R2	Z	R1	R2	Z		
4.0	7	11	0	7	4	0	7	8	0	1.1	207.6
4.5	7	13	6	7	6	1	7	9	0	1.2	233.5
5.0	7	15	13	7	9	5	7	10	0	1.4	259.5
5.5	7	15	13	7	11	8	7	10	0	1.6	285.4
6.0	7	15	14	7	12	10	7	10	0	1.7	311.4
6.5	7	15	14	7	13	12	7	12	4	1.9	337.3
7.0	6	9	6	7	14	15	7	13	7	2.1	363.3
7.5	6	10	9	7	15	18	7	15	14	2.2	389.2
8.0	6	10	9	7	15	18	7	15	14	2.4	415.2
8.5	6	11	12	7	15	18	7	15	15	2.6	441.1
9.0	6	11	12	6	6	7	7	15	15	2.8	467.0
9.5	6	11	13	6	7	8	7	15	15	3.0	493.0
10.0	6	12	15	6	8	10	7	15	16	3.1	518.9
10.5	6	12	15	6	8	10	7	15	16	3.3	544.9
11.0	6	12	16	6	8	10	6	10	10	3.5	570.8
11.5	5	8	11	6	9	12	6	10	11	3.7	596.8
12.0	5	8	11	6	9	12	6	11	13	3.9	622.7
12.5	5	8	12	6	9	12	6	11	13	4.1	648.7
13.0	5	8	12	6	10	14	6	11	14	4.3	674.6
13.5	5	8	12	6	10	14	6	11	14	4.5	700.6
14.0	5	8	12	6	10	14	6	11	14	4.8	726.5
14.5	5	7	11	5	5	9	6	11	14	5.0	752.5
15.0	5	8	13	5	5	9	6	11	15	5.2	778.4
15.5	4	5	10	5	5	9	6	11	15	5.4	804.4
16.0	4	5	10	5	5	10	6	11	15	5.6	830.3
16.5	4	4	9	5	5	10	5	7	11	5.8	856.2
17.0	4	4	9	5	5	10	5	7	11	6.0	882.2
17.5	4	4	9	5	5	10	5	7	11	6.3	908.1
18.0	4	4	10	5	5	10	5	7	11	6.5	934.1
18.5	4	4	10	5	5	10	5	7	11	6.7	960.0
19.0	4	4	10	5	5	10	5	7	11	6.9	986.0
19.5	3	2	8	4	2	8	5	7	11	7.1	1011.9
20.0	3	2	8	4	2	8	5	6	10	7.4	1037.9
20.5	3	1	7	4	2	8	4	4	9	7.6	1063.8
21.0	3	1	8	4	2	8	4	4	9	7.8	1089.8
21.5	3	1	8	4	2	8	4	4	9	8.0	1115.7
22.0	3	1	8	4	2	8	4	4	9	8.3	1141.7
22.5	3	1	8	4	2	8	4	3	8	8.5	1167.6
23.0	3	0	7	4	2	8	4	3	8	8.7	1193.6
23.5	3	0	7	4	2	8	4	3	8	8.9	1219.5
24.0	3	0	7	4	2	8	4	3	8	9.2	1245.5

TABLE P

4240B PRECISION BALANCE NETWORK SETTINGS FOR
22–GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68 F

LENGTH (KFT)	4240B BALANCE NETWORK SETTINGS BY TERMINATION									1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
	900 + 2.16			600 + 2.16			TELSET (35MA)				
	R1	R2	Z	R1	R2	Z	R1	R2	Z		
4.0	7	11	2	7	2	1	7	6	0	.7	131.1
4.5	7	13	8	7	6	5	7	7	0	.9	147.4
5.0	7	15	14	7	8	7	7	8	0	1.0	163.8
5.5	7	15	15	7	10	10	7	8	0	1.1	180.2
6.0	7	15	16	7	12	13	7	8	0	1.2	196.6
6.5	7	15	16	7	13	16	7	10	3	1.3	213.0
7.0	6	9	9	7	14	18	7	12	8	1.5	229.4
7.5	6	10	11	7	15	20	7	14	13	1.6	245.7
8.0	6	11	14	7	15	21	7	15	17	1.7	262.1
8.5	6	12	16	7	15	21	7	15	17	1.9	278.5
9.0	6	12	17	7	15	21	7	15	17	2.0	294.9
9.5	6	12	17	6	7	13	7	15	18	2.2	311.3
10.0	6	12	18	6	8	14	7	15	18	2.3	327.7
10.5	6	13	20	6	8	14	7	15	19	2.5	344.0
11.0	6	13	20	6	9	16	7	15	19	2.6	360.4
11.5	6	13	21	6	9	16	7	15	19	2.8	376.8
12.0	6	13	21	6	9	16	6	11	16	2.9	393.2
12.5	5	9	16	6	10	18	6	11	16	3.1	409.6
13.0	5	10	18	6	10	18	6	12	18	3.2	425.9
13.5	5	9	17	6	10	18	6	12	19	3.4	442.3
14.0	5	9	17	6	10	18	6	12	19	3.6	458.7
14.5	5	10	19	6	11	20	6	12	19	3.7	475.1
15.0	5	9	18	6	11	20	6	12	19	3.9	491.5
15.5	5	9	18	6	11	20	6	12	20	4.1	507.9
16.0	5	9	18	5	6	16	6	12	20	4.2	524.2
16.5	4	7	17	5	6	16	6	12	20	4.4	540.6
17.0	4	7	17	5	6	16	6	12	20	4.6	557.0
17.5	4	6	16	5	6	16	6	12	21	4.8	573.4
18.0	4	6	16	5	6	16	6	12	21	4.9	589.8
18.5	4	6	17	5	6	16	6	12	21	5.1	606.2
19.0	4	6	17	5	6	16	5	8	17	5.3	622.5
19.5	4	6	17	5	6	16	5	8	17	5.5	638.9
20.0	4	6	17	5	6	17	5	8	17	5.7	655.3
20.5	4	5	16	5	6	17	5	8	17	5.8	671.7
21.0	3	3	15	5	6	17	5	8	17	6.0	688.1
21.5	3	3	15	5	6	17	5	8	18	6.2	704.5
22.0	3	3	15	4	3	15	5	8	18	6.4	720.8
22.5	3	3	15	4	3	15	5	8	18	6.6	737.2
23.0	3	3	15	4	3	15	5	7	17	6.7	753.6
23.5	3	3	15	4	3	15	5	7	17	6.9	770.0
24.0	3	2	15	4	3	15	4	5	16	7.1	786.4

TABLE Q

4240B PRECISION BALANCE NETWORK SETTINGS FOR
19–GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68 F

LENGTH (KFT)	4240B BALANCE NETWORK SETTINGS BY TERMINATION									1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
	900 + 2.16			600 + 2.16			TELSET (35MA)				
	R1	R2	Z	R1	R2	Z	R1	R2	Z		
4.0	7	12	7	7	4	6	7	3	0	.5	65.2
4.5	7	14	13	7	7	9	7	4	0	.5	73.3
5.0	7	15	16	7	10	13	7	5	0	.6	81.4
5.5	7	15	17	7	12	16	7	5	0	.7	89.6
6.0	7	15	18	7	13	18	7	5	0	.8	97.7
6.5	6	10	13	7	14	20	7	9	5	.9	105.9
7.0	6	11	15	7	15	23	7	12	11	1.0	114.0
7.5	6	11	16	7	15	23	7	14	16	1.1	122.2
8.0	6	12	18	7	15	23	7	15	19	1.2	130.3
8.5	6	13	21	7	15	24	7	15	20	1.3	138.4
9.0	6	13	21	7	15	24	7	15	20	1.4	146.6
9.5	6	14	23	6	9	19	7	15	21	1.5	154.7
10.0	6	14	24	6	9	19	7	15	21	1.6	162.9
10.5	6	14	24	6	10	21	7	15	21	1.7	171.0
11.0	6	14	25	6	10	21	7	15	22	1.8	179.2
11.5	6	15	27	6	11	22	7	15	22	1.9	187.3
12.0	6	15	27	6	11	23	6	12	21	2.1	195.5
12.5	6	15	27	6	11	23	6	12	21	2.2	203.6
13.0	5	12	24	6	12	24	6	13	23	2.3	211.7
13.5	5	12	24	6	12	25	6	13	23	2.4	219.9
14.0	5	12	25	6	12	25	6	13	24	2.6	228.0
14.5	5	12	25	6	12	25	6	13	24	2.7	236.2
15.0	5	12	25	6	12	25	6	14	26	2.8	244.3
15.5	5	12	25	6	12	25	6	14	26	3.0	252.5
16.0	5	12	26	6	13	27	6	14	26	3.1	260.6
16.5	5	12	26	6	13	27	6	14	26	3.2	268.7
17.0	5	12	26	6	13	27	6	14	27	3.4	276.9
17.5	5	12	26	5	9	24	6	14	27	3.5	285.0
18.0	4	10	25	5	9	24	6	14	27	3.7	293.2
18.5	4	10	25	5	9	24	6	14	27	3.8	301.3
19.0	4	10	25	5	9	24	6	14	27	3.9	309.5
19.5	4	10	25	5	9	24	6	14	28	4.1	317.6
20.0	4	9	25	5	8	24	6	14	28	4.2	325.8
20.5	4	9	25	5	8	24	6	14	28	4.4	333.9
21.0	4	9	25	5	8	24	5	11	25	4.5	342.0
21.5	4	9	25	5	8	24	5	11	25	4.6	350.2
22.0	3	7	24	5	8	24	5	10	25	4.8	358.3
22.5	3	7	24	5	8	24	5	10	25	4.9	366.5
23.0	3	7	24	4	6	23	5	10	25	5.1	374.6
23.5	3	7	24	4	5	23	5	10	25	5.2	382.8
24.0	3	7	24	4	5	23	5	10	25	5.4	390.9

TABLE R

4240B PRECISION BALANCE NETWORK SETTINGS FOR MIXED 26– AND 24–GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68 F

26–GAUGE ADJACENT TO REPEATER

LENGTH(KFT) 26-GA	24-GA	4240B BALANCE NETWORK SETTINGS BY TERMINATION 900 + 2.16 R1	R2	Z	600 + 2.16 R1	R2	Z	TELSET (35MA) R1	R2	Z	1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
WL = 7.0												
4.0	3.0	6	7	0	7	13	9	7	12	1	2.6	489.0
5.0	2.0	6	8	0	7	13	8	7	13	3	2.7	520.5
6.0	1.0	6	8	0	7	13	8	7	13	3	2.8	551.9
WL = 8.0												
1.0	7.0	6	9	7	7	15	17	7	15	13	2.5	446.6
2.0	6.0	6	8	4	7	14	13	7	14	9	2.7	478.0
3.0	5.0	6	8	3	7	14	13	7	14	9	2.8	509.5
4.0	4.0	6	8	2	7	14	12	7	14	8	2.9	540.9
5.0	3.0	6	8	1	7	14	11	7	15	11	3.0	572.3
6.0	2.0	6	8	1	7	14	11	7	15	10	3.1	603.8
7.0	1.0	6	9	2	7	15	13	7	15	10	3.3	635.2
WL = 9.0												
1.0	8.0	6	10	10	6	5	5	7	15	14	2.9	498.5
2.0	7.0	6	9	7	6	3	1	7	15	13	3.0	529.9
3.0	6.0	6	9	6	6	3	0	7	15	13	3.2	561.4
4.0	5.0	6	9	5	6	4	0	7	15	12	3.3	592.8
5.0	4.0	6	9	4	6	4	0	7	15	12	3.4	624.2
6.0	3.0	6	9	4	6	5	0	7	15	11	3.5	655.7
7.0	2.0	6	9	4	6	5	0	7	15	11	3.6	687.1
8.0	1.0	6	10	5	6	6	0	7	15	11	3.7	718.6
WL = 10.0												
1.0	9.0	6	11	12	6	6	6	7	15	15	3.3	550.4
2.0	8.0	6	10	10	6	5	4	7	15	14	3.4	581.8
3.0	7.0	6	9	7	6	5	3	7	15	14	3.5	613.3
4.0	6.0	6	9	6	6	4	1	7	15	13	3.6	644.7
5.0	5.0	6	9	6	6	5	1	7	15	12	3.8	676.1
6.0	4.0	6	9	5	6	5	0	7	15	12	3.9	707.6
7.0	3.0	6	10	6	6	6	1	7	15	12	4.0	739.0
8.0	2.0	6	10	6	6	6	0	7	15	12	4.1	770.5
9.0	1.0	6	10	6	6	6	0	6	8	0	4.2	801.9
WL = 11.0												
1.0	10.0	6	11	13	6	7	8	6	9	8	3.7	602.3
2.0	9.0	6	10	10	6	6	6	6	8	5	3.8	633.7
3.0	8.0	6	9	8	6	5	3	6	8	4	3.9	665.2
4.0	7.0	6	9	7	6	5	2	6	8	3	4.0	696.6
5.0	6.0	6	9	6	6	5	1	6	8	2	4.1	728.0
6.0	5.0	6	9	6	6	6	2	6	8	2	4.3	759.5
7.0	4.0	6	10	7	6	6	1	6	8	1	4.4	790.9
8.0	3.0	6	10	7	6	7	2	6	9	3	4.5	822.3
9.0	2.0	5	5	0	6	7	2	6	9	3	4.6	853.8
10.0	1.0	5	6	1	6	7	2	6	9	3	4.7	885.2
WL = 12.0												
1.0	11.0	5	6	8	6	8	10	6	10	10	4.1	654.2
2.0	10.0	5	5	5	6	7	7	6	9	7	4.2	685.6
3.0	9.0	5	5	4	6	6	5	6	8	5	4.3	717.0
4.0	8.0	5	4	2	6	6	4	6	8	4	4.4	748.5

TABLE R (CONT)

4240B PRECISION BALANCE NETWORK SETTINGS FOR MIXED 26– AND 24–GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68 F

26–GAUGE ADJACENT TO REPEATER

LENGTH(KFT)		4240B BALANCE NETWORK SETTINGS BY TERMINATION									1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
		900 + 2.16			600 + 2.16			TELSET (35MA)				
26-GA	24-GA	R1	R2	Z	R1	R2	Z	R1	R2	Z		
WL = 12.0												
5.0	7.0	5	4	1	6	6	3	6	8	3	4.5	779.9
6.0	6.0	5	4	1	6	6	2	6	8	3	4.7	811.4
7.0	5.0	5	5	1	6	7	3	6	9	4	4.8	842.8
8.0	4.0	5	5	1	6	7	3	6	9	4	4.9	874.2
9.0	3.0	5	5	1	6	8	4	6	9	3	5.0	905.7
10.0	2.0	5	6	2	6	8	4	6	10	5	5.1	937.1
11.0	1.0	5	6	2	6	8	4	6	10	5	5.2	968.6
WL = 13.0												
1.0	12.0	5	6	8	6	8	10	6	10	11	4.5	706.1
2.0	11.0	5	5	6	6	7	8	6	9	8	4.6	737.5
3.0	10.0	5	5	5	6	6	5	6	9	7	4.7	768.9
4.0	9.0	5	4	3	6	6	4	6	8	5	4.8	800.4
5.0	8.0	5	4	2	6	6	4	6	8	4	5.0	831.8
6.0	7.0	5	4	1	6	6	3	6	9	5	5.1	863.3
7.0	6.0	5	4	1	6	7	4	6	9	5	5.2	894.7
8.0	5.0	5	5	2	6	7	3	6	9	4	5.3	926.1
9.0	4.0	5	5	1	6	8	4	6	9	4	5.4	957.6
10.0	3.0	5	5	1	6	8	4	6	10	6	5.5	989.0
11.0	2.0	5	6	2	6	8	4	6	10	6	5.6	1020.5
12.0	1.0	5	6	2	6	9	6	6	10	6	5.7	1051.9
WL = 14.0												
1.0	13.0	5	6	9	6	8	10	6	10	11	4.9	758.0
2.0	12.0	5	5	7	6	7	8	6	9	9	5.0	789.4
3.0	11.0	5	4	4	6	7	7	6	9	8	5.2	820.8
4.0	10.0	5	4	3	6	7	6	6	9	7	5.3	852.3
5.0	9.0	5	4	3	6	6	4	6	8	5	5.4	883.7
6.0	8.0	5	4	2	6	6	3	6	9	6	5.5	915.2
7.0	7.0	5	4	1	6	7	4	6	9	5	5.6	946.6
8.0	6.0	5	4	1	6	7	3	6	9	5	5.7	978.0
9.0	5.0	5	5	2	6	8	5	6	9	5	5.8	1009.5
10.0	4.0	5	5	2	6	8	4	6	10	6	5.9	1040.9
11.0	3.0	5	5	1	5	4	0	6	10	6	6.0	1072.3
12.0	2.0	5	6	3	5	4	0	6	10	6	6.1	1103.8
13.0	1.0	5	6	3	5	4	0	6	10	6	6.2	1135.2
WL = 15.0												
1.0	14.0	5	6	9	5	3	6	6	10	12	5.3	809.8
2.0	13.0	4	2	4	5	2	4	6	9	9	5.5	841.3
3.0	12.0	4	1	2	5	1	2	6	9	8	5.6	872.7
4.0	11.0	4	1	1	5	1	1	6	8	6	5.7	904.2
5.0	10.0	5	4	3	5	1	0	6	8	5	5.8	935.6
6.0	9.0	5	4	2	5	2	0	6	9	6	5.9	967.0
7.0	8.0	5	4	2	5	2	0	6	9	6	6.0	998.5
8.0	7.0	5	4	1	5	3	0	6	9	5	6.1	1029.9
9.0	6.0	5	4	1	5	3	0	6	9	5	6.2	1061.4
10.0	5.0	5	5	2	5	3	0	6	10	7	6.3	1092.8
11.0	4.0	5	5	2	5	4	0	6	10	7	6.4	1124.2
12.0	3.0	4	3	0	5	4	0	5	6	1	6.5	1155.7
13.0	2.0	4	3	0	5	4	0	5	6	1	6.6	1187.1

TABLE R (CONT)

4240B PRECISION BALANCE NETWORK SETTINGS FOR MIXED 26– AND 24–GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68 F

26–GAUGE ADJACENT TO REPEATER

LENGTH(KFT) 26-GA	24-GA	4240B BALANCE NETWORK SETTINGS BY TERMINATION									1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
		900 + 2.16			600 + 2.16			TELSET (35MA)				
		R1	R2	Z	R1	R2	Z	R1	R2	Z		
WL = 15.0												
14.0	1.0	4	3	0	5	4	0	5	6	1	6.8	1218.6
WL = 16.0												
1.0	15.0	4	3	7	5	4	7	5	6	8	5.8	861.7
2.0	14.0	4	2	5	5	2	4	5	5	6	5.9	893.2
3.0	13.0	4	1	3	5	1	2	5	4	3	6.0	924.6
4.0	12.0	4	0	1	5	1	1	5	3	1	6.1	956.1
5.0	11.0	4	0	0	5	1	0	5	3	0	6.2	987.5
6.0	10.0	4	1	0	5	2	0	5	4	1	6.3	1018.9
7.0	9.0	4	1	0	5	2	0	5	4	0	6.4	1050.4
8.0	8.0	4	2	0	5	3	0	5	4	0	6.5	1081.8
9.0	7.0	4	2	0	5	3	0	5	5	1	6.6	1113.3
10.0	6.0	4	2	0	5	3	0	5	5	0	6.7	1144.7
11.0	5.0	4	3	0	5	3	0	5	5	0	6.8	1176.1
12.0	4.0	4	3	0	5	4	0	5	5	0	7.0	1207.6
13.0	3.0	4	3	0	5	4	0	5	6	2	7.1	1239.0
14.0	2.0	4	3	0	5	4	0	5	6	2	7.2	1270.5
15.0	1.0	4	3	0	5	4	0	5	6	2	7.3	1301.9
WL = 17.0												
1.0	16.0	4	3	7	5	3	7	5	6	8	6.2	913.6
2.0	15.0	4	1	4	5	2	5	5	5	6	6.3	945.1
3.0	14.0	4	0	2	5	2	3	5	4	4	6.5	976.5
4.0	13.0	4	0	1	5	1	1	5	3	2	6.6	1008.0
5.0	12.0	4	0	0	5	1	0	5	3	1	6.7	1039.4
6.0	11.0	4	0	0	5	1	0	5	3	0	6.8	1070.8
7.0	10.0	4	1	0	5	2	0	5	4	1	6.9	1102.3
8.0	9.0	4	1	0	5	2	0	5	4	0	7.0	1133.7
9.0	8.0	4	2	0	5	3	0	5	4	0	7.1	1165.2
10.0	7.0	4	2	0	5	3	0	5	5	1	7.2	1196.6
11.0	6.0	4	2	0	5	3	0	5	5	1	7.3	1228.0
12.0	5.0	4	2	0	5	4	1	5	5	1	7.4	1259.5
13.0	4.0	4	3	0	5	4	0	5	6	2	7.5	1290.9
14.0	3.0	4	3	0	5	4	0	5	6	2	7.6	1322.3
15.0	2.0	4	3	0	5	4	0	5	6	2	7.7	1353.8
16.0	1.0	4	3	0	5	5	2	5	6	2	7.8	1385.2
WL = 18.0												
1.0	17.0	4	2	7	5	3	7	5	6	9	6.6	965.5
2.0	16.0	4	1	4	5	2	5	5	4	5	6.8	997.0
3.0	15.0	4	0	2	5	1	3	5	4	4	6.9	1028.4
4.0	14.0	4	0	1	5	1	2	5	3	2	7.0	1059.8
5.0	13.0	4	0	0	5	1	1	5	3	1	7.1	1091.3
6.0	12.0	4	0	0	5	1	0	5	3	0	7.2	1122.7
7.0	11.0	4	1	0	5	2	0	5	3	0	7.3	1154.2
8.0	10.0	4	1	0	5	2	0	5	4	0	7.4	1185.6
9.0	9.0	4	1	0	5	3	0	5	4	0	7.5	1217.0
10.0	8.0	4	2	0	5	3	0	5	4	0	7.6	1248.5
11.0	7.0	4	2	0	5	3	0	5	5	1	7.7	1279.9
12.0	6.0	4	2	0	5	4	1	5	5	1	7.8	1311.4
13.0	5.0	4	2	0	5	4	1	5	5	1	7.9	1342.8

TABLE R (CONT)

4240B PRECISION BALANCE NETWORK SETTINGS FOR MIXED 26– AND 24–GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68 F

26–GAUGE ADJACENT TO REPEATER

LENGTH(KFT) 26-GA	24-GA	4240B BALANCE NETWORK SETTINGS BY TERMINATION 900 + 2.16 R1	R2	Z	600 + 2.16 R1	R2	Z	TELSET (35MA) R1	R2	Z	1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
WL = 18.0												
14.0	4.0	4	3	0	5	4	1	5	5	1	8.0	1374.2
15.0	3.0	4	3	0	5	4	1	5	6	2	8.1	1405.7
16.0	2.0	4	3	0	5	4	1	5	6	2	8.3	1437.1
17.0	1.0	4	3	0	5	5	2	5	6	2	8.4	1468.6
WL = 19.0												
1.0	18.0	3	0	5	4	0	5	5	5	8	7.1	1017.4
2.0	17.0	4	0	4	5	2	5	5	4	6	7.2	1048.9
3.0	16.0	4	0	3	5	1	3	5	3	3	7.3	1080.3
4.0	15.0	4	0	1	5	1	2	5	3	2	7.5	1111.7
5.0	14.0	4	0	0	5	1	1	5	3	1	7.6	1143.2
6.0	13.0	4	0	0	5	1	0	5	3	1	7.7	1174.6
7.0	12.0	4	0	0	5	2	0	5	3	0	7.8	1206.1
8.0	11.0	4	1	0	5	2	0	5	4	1	7.9	1237.5
9.0	10.0	4	1	0	5	3	0	5	4	0	8.0	1268.9
10.0	9.0	4	2	0	5	3	0	5	4	0	8.1	1300.4
11.0	8.0	4	2	0	5	3	0	5	4	0	8.2	1331.8
12.0	7.0	4	2	0	5	3	0	5	5	1	8.3	1363.3
13.0	6.0	4	2	0	5	4	1	5	5	1	8.4	1394.7
14.0	5.0	4	2	0	5	4	1	5	5	1	8.5	1426.1
15.0	4.0	4	2	0	5	4	1	5	5	1	8.6	1457.6
16.0	3.0	4	2	0	4	2	0	4	4	0	8.7	1489.0
17.0	2.0	4	3	0	4	3	0	4	4	0	8.8	1520.5
18.0	1.0	4	3	0	4	3	0	4	4	0	8.9	1551.9
WL = 20.0												
1.0	19.0	3	0	5	4	0	5	5	5	8	7.5	1069.3
2.0	18.0	4	0	4	4	0	4	5	4	6	7.7	1100.8
3.0	17.0	4	0	3	4	0	2	5	3	4	7.8	1132.2
4.0	16.0	4	0	1	5	1	2	5	3	3	7.9	1163.6
5.0	15.0	4	0	0	5	1	1	5	3	2	8.0	1195.1
6.0	14.0	4	0	0	5	1	0	5	3	1	8.1	1226.5
7.0	13.0	4	0	0	5	2	0	5	3	0	8.2	1258.0
8.0	12.0	4	1	0	5	2	0	5	3	0	8.3	1289.4
9.0	11.0	4	1	0	5	2	0	5	4	0	8.4	1320.8
10.0	10.0	4	1	0	5	3	0	5	4	0	8.5	1352.3
11.0	9.0	4	2	0	5	3	0	5	4	0	8.6	1383.7
12.0	8.0	4	2	0	5	3	0	5	5	1	8.7	1415.2
13.0	7.0	4	2	0	5	4	1	5	5	1	8.8	1446.6
14.0	6.0	4	2	0	5	4	1	4	3	0	8.9	1478.0
15.0	5.0	4	2	0	4	2	0	4	3	0	9.0	1509.5
16.0	4.0	4	2	0	4	2	0	4	3	0	9.1	1540.9
17.0	3.0	4	2	0	4	2	0	4	3	0	9.2	1572.3
18.0	2.0	4	2	0	4	2	0	4	3	0	9.4	1603.8
19.0	1.0	4	2	0	4	2	0	4	3	0	9.5	1635.2
WL = 21.0												
1.0	20.0	3	0	5	4	0	5	4	2	6	8.0	1121.2
2.0	19.0	4	0	4	4	0	4	4	1	3	8.1	1152.7
3.0	18.0	4	0	3	4	0	2	4	0	1	8.2	1184.1
4.0	17.0	4	0	2	4	0	1	4	0	0	8.4	1215.5

TABLE R (CONT)

4240B PRECISION BALANCE NETWORK SETTINGS FOR MIXED 26– AND 24–GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68 F

26–GAUGE ADJACENT TO REPEATER

LENGTH(KFT) 26-GA	24-GA	4240B BALANCE NETWORK SETTINGS BY TERMINATION 900 + 2.16 R1	R2	Z	600 + 2.16 R1	R2	Z	TELSET (35MA) R1	R2	Z	1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
WL = 21.0												
5.0	16.0	4	0	1	5	1	1	4	0	0	8.5	1247.0
6.0	15.0	4	0	0	5	1	0	5	2	0	8.6	1278.4
7.0	14.0	4	0	0	5	1	0	5	3	0	8.7	1309.8
8.0	13.0	4	0	0	5	2	0	5	3	0	8.8	1341.3
9.0	12.0	4	1	0	5	2	0	5	3	0	8.9	1372.7
10.0	11.0	4	1	0	5	3	0	5	4	0	9.0	1404.2
11.0	10.0	4	2	0	5	3	0	5	4	0	9.1	1435.6
12.0	9.0	4	2	0	5	3	0	4	3	0	9.2	1467.0
13.0	8.0	4	2	0	5	3	0	4	3	0	9.3	1498.5
14.0	7.0	4	2	0	4	2	0	4	3	0	9.4	1529.9
15.0	6.0	4	2	0	4	2	0	4	3	0	9.5	1561.4
16.0	5.0	4	2	0	4	2	0	4	3	0	9.6	1592.8
17.0	4.0	4	2	0	4	2	0	4	3	0	9.7	1624.2
18.0	3.0	4	2	0	4	2	0	4	3	0	9.8	1655.7
19.0	2.0	4	2	0	4	2	0	4	3	0	9.9	1687.1
20.0	1.0	4	2	0	4	2	0	4	3	0	10.1	1718.6
WL = 22.0												
1.0	21.0	3	0	5	4	0	5	4	2	6	8.4	1173.1
2.0	20.0	3	0	4	4	0	4	4	0	3	8.6	1204.5
3.0	19.0	4	0	3	4	0	3	4	0	2	8.7	1236.0
4.0	18.0	4	0	2	4	0	1	4	0	0	8.8	1267.4
5.0	17.0	4	0	1	4	0	0	4	0	0	8.9	1298.9
6.0	16.0	4	0	0	4	0	0	4	1	0	9.1	1330.3
7.0	15.0	4	0	0	5	1	0	4	1	0	9.2	1361.7
8.0	14.0	4	0	0	5	2	0	5	3	0	9.3	1393.2
9.0	13.0	4	1	0	5	2	0	4	2	0	9.4	1424.6
10.0	12.0	4	1	0	5	3	0	4	2	0	9.4	1456.1
11.0	11.0	4	1	0	5	3	0	4	3	0	9.5	1487.5
12.0	10.0	4	2	0	5	3	0	4	3	0	9.6	1518.9
13.0	9.0	4	2	0	4	2	0	4	3	0	9.7	1550.4
14.0	8.0	4	2	0	4	2	0	4	3	0	9.8	1581.8
15.0	7.0	4	2	0	4	2	0	4	3	0	9.9	1613.3
16.0	6.0	4	2	0	4	2	0	4	3	0	10.0	1644.7
17.0	5.0	4	2	0	4	2	0	4	3	0	10.1	1676.1
18.0	4.0	4	2	0	4	2	0	4	3	0	10.2	1707.6
19.0	3.0	4	2	0	4	2	0	4	3	0	10.4	1739.0
20.0	2.0	4	2	0	4	2	0	4	3	0	10.5	1770.5
21.0	1.0	3	1	0	4	2	0	4	3	0	10.6	1801.9
WL = 23.0												
1.0	22.0	3	0	6	4	0	5	4	2	6	8.9	1225.0
2.0	21.0	3	0	4	4	0	4	4	0	3	9.0	1256.4
3.0	20.0	4	0	3	4	0	3	4	0	2	9.2	1287.9
4.0	19.0	4	0	2	4	0	1	4	0	1	9.3	1319.3
5.0	18.0	4	0	1	4	0	0	4	0	0	9.4	1350.8
6.0	17.0	4	0	0	4	0	0	4	0	0	9.5	1382.2
7.0	16.0	4	0	0	4	0	0	4	1	0	9.6	1413.6
8.0	15.0	4	0	0	5	2	0	4	1	0	9.7	1445.1
9.0	14.0	4	1	0	5	2	0	4	2	0	9.8	1476.5
10.0	13.0	4	1	0	5	3	0	4	2	0	9.9	1508.0

TABLE R (CONT)

4240B PRECISION BALANCE NETWORK SETTINGS FOR MIXED 26– AND 24–GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68 F

26–GAUGE ADJACENT TO REPEATER

LENGTH(KFT) 26-GA	24-GA	4240B BALANCE NETWORK SETTINGS BY TERMINATION									1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
		900 + 2.16			600 + 2.16			TELSET (35MA)				
		R1	R2	Z	R1	R2	Z	R1	R2	Z		
WL = 23.0												
11.0	12.0	4	1	0	5	3	0	4	2	0	10.0	1539.4
12.0	11.0	4	2	0	4	2	0	4	3	0	10.1	1570.8
13.0	10.0	4	2	0	4	2	0	4	3	0	10.2	1602.3
14.0	9.0	4	2	0	4	2	0	4	3	0	10.3	1633.7
15.0	8.0	4	2	0	4	2	0	4	3	0	10.4	1665.2
16.0	7.0	4	2	0	4	2	0	4	3	0	10.5	1696.6
17.0	6.0	4	2	0	4	2	0	4	3	0	10.6	1728.0
18.0	5.0	4	2	0	4	2	0	4	3	0	10.7	1759.5
19.0	4.0	4	2	0	4	2	0	4	3	0	10.8	1790.9
20.0	3.0	3	1	0	4	2	0	4	3	0	10.9	1822.3
21.0	2.0	3	1	0	4	2	0	4	3	0	11.0	1853.8
22.0	1.0	3	1	0	4	2	0	4	3	0	11.2	1885.2
WL = 24.0												
1.0	23.0	3	0	6	4	0	5	4	1	5	9.3	1276.9
2.0	22.0	3	0	4	4	0	4	4	0	3	9.5	1308.3
3.0	21.0	4	0	3	4	0	3	4	0	2	9.6	1339.8
4.0	20.0	4	0	2	4	0	1	4	0	1	9.7	1371.2
5.0	19.0	4	0	1	4	0	0	4	0	0	9.9	1402.7
6.0	18.0	4	0	0	4	0	0	4	0	0	10.0	1434.1
7.0	17.0	4	0	0	4	0	0	4	1	0	10.1	1465.5
8.0	16.0	4	0	0	4	0	0	4	1	0	10.2	1497.0
9.0	15.0	4	1	0	5	2	0	4	2	0	10.3	1528.4
10.0	14.0	4	1	0	4	1	0	4	2	0	10.4	1559.8
11.0	13.0	4	1	0	4	1	0	4	2	0	10.5	1591.3
12.0	12.0	4	1	0	4	2	0	4	2	0	10.6	1622.7
13.0	11.0	4	2	0	4	2	0	4	3	0	10.6	1654.2
14.0	10.0	4	2	0	4	2	0	4	3	0	10.7	1685.6
15.0	9.0	4	2	0	4	2	0	4	3	0	10.8	1717.0
16.0	8.0	4	2	0	4	2	0	4	3	0	10.9	1748.5
17.0	7.0	4	2	0	4	2	0	4	3	0	11.0	1779.9
18.0	6.0	4	2	0	4	2	0	4	3	0	11.1	1811.4
19.0	5.0	4	2	0	4	2	0	4	3	0	11.2	1842.8
20.0	4.0	3	1	0	4	2	0	4	3	0	11.4	1874.2

TABLE S

4240B PRECISION BALANCE NETWORK SETTINGS FOR MIXED 24– AND 26–GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68 F

24–GAUGE ADJACENT TO REPEATER

LENGTH(KFT) 24-GA	26-GA	4240B BALANCE NETWORK SETTINGS BY TERMINATION 900 + 2.16 R1	R2	Z	600 + 2.16 R1	R2	Z	TELSET (35MA) R1	R2	Z	1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
WL = 7.0												
1.0	6.0	6	9	2	7	15	14	7	15	10	2.8	551.9
2.0	5.0	6	10	5	7	15	15	7	15	11	2.7	520.5
3.0	4.0	6	10	6	7	15	15	7	15	12	2.6	489.0
WL = 8.0												
1.0	7.0	6	10	5	7	15	14	7	15	11	3.3	635.2
2.0	6.0	6	11	8	7	15	15	7	15	11	3.1	603.8
3.0	5.0	6	11	9	7	15	16	7	15	12	3.0	572.3
4.0	4.0	6	11	10	7	15	16	7	15	13	2.9	540.9
5.0	3.0	6	11	10	7	15	17	7	15	13	2.8	509.5
6.0	2.0	6	11	11	7	15	17	7	15	14	2.7	478.0
7.0	1.0	6	11	11	7	15	18	7	15	14	2.5	446.6
WL = 9.0												
1.0	8.0	6	11	8	6	7	2	7	15	11	3.7	718.6
2.0	7.0	6	12	11	6	8	5	7	15	12	3.6	687.1
3.0	6.0	6	12	12	6	8	6	7	15	13	3.5	655.7
4.0	5.0	6	12	12	6	8	7	7	15	13	3.4	624.2
5.0	4.0	6	12	13	6	8	8	7	15	14	3.3	592.8
6.0	3.0	6	12	13	6	8	8	7	15	14	3.2	561.4
7.0	2.0	6	12	14	6	7	7	7	15	15	3.0	529.9
8.0	1.0	6	11	12	6	7	8	7	15	15	2.9	498.5
WL = 10.0												
1.0	9.0	6	11	9	6	8	4	6	10	5	4.2	801.9
2.0	8.0	6	12	12	6	9	7	6	11	8	4.1	770.5
3.0	7.0	6	12	13	6	9	8	6	11	9	4.0	739.0
4.0	6.0	6	12	13	6	10	10	6	11	9	3.9	707.6
5.0	5.0	6	13	16	6	10	11	6	11	10	3.8	676.1
6.0	4.0	6	12	14	6	9	10	6	11	10	3.6	644.7
7.0	3.0	6	12	14	6	9	10	6	10	9	3.5	613.3
8.0	2.0	6	12	15	6	9	11	6	10	9	3.4	581.8
9.0	1.0	6	12	15	6	8	10	7	15	16	3.3	550.4
WL = 11.0												
1.0	10.0	5	7	4	6	9	6	6	11	8	4.7	885.2
2.0	9.0	5	8	6	6	10	9	6	11	9	4.6	853.8
3.0	8.0	5	9	9	6	10	10	6	12	11	4.5	822.3
4.0	7.0	5	9	10	6	11	12	6	12	12	4.4	790.9
5.0	6.0	5	9	10	6	10	11	6	12	13	4.3	759.5
6.0	5.0	5	9	11	6	10	12	6	12	13	4.1	728.0
7.0	4.0	5	9	11	6	10	12	6	11	11	4.0	696.6
8.0	3.0	5	9	11	6	10	13	6	11	12	3.9	665.2
9.0	2.0	5	8	10	6	9	11	6	11	12	3.8	633.7
10.0	1.0	6	12	16	6	9	12	6	10	10	3.7	602.3
WL = 12.0												
1.0	11.0	5	7	4	6	10	8	6	11	8	5.2	968.6
2.0	10.0	5	8	7	6	10	9	6	12	11	5.1	937.1
3.0	9.0	5	9	9	6	11	12	6	12	12	5.0	905.7
4.0	8.0	5	9	10	6	11	13	6	12	13	4.9	874.2

TABLE S (CONT)

4240B PRECISION BALANCE NETWORK SETTINGS FOR MIXED 24– AND 26–GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68 F

24–GAUGE ADJACENT TO REPEATER

LENGTH(KFT)		4240B BALANCE NETWORK SETTINGS BY TERMINATION									1KHZ CABLE	DC CABLE
		900 + 2.16			600 + 2.16			TELSET (35MA)			LOSS (DB)	RES (OHMS)
24-GA	26-GA	R1	R2	Z	R1	R2	Z	R1	R2	Z	(900 OHMS)	
WL = 12.0												
5.0	7.0	5	9	11	6	11	13	6	12	13	4.8	842.8
6.0	6.0	5	9	11	6	11	14	6	12	14	4.7	811.4
7.0	5.0	5	9	12	6	11	14	6	12	14	4.5	779.9
8.0	4.0	5	9	12	6	10	13	6	12	14	4.4	748.5
9.0	3.0	5	9	12	6	10	13	6	12	15	4.3	717.0
10.0	2.0	5	8	11	6	10	13	6	11	13	4.2	685.6
11.0	1.0	5	8	11	6	9	12	6	11	13	4.1	654.2
WL = 13.0												
1.0	12.0	5	7	5	6	10	8	6	11	9	5.7	1051.9
2.0	11.0	5	8	7	6	11	11	6	12	12	5.6	1020.5
3.0	10.0	5	9	10	6	11	12	6	12	13	5.5	989.0
4.0	9.0	5	9	11	6	11	13	6	13	15	5.4	957.6
5.0	8.0	5	9	11	6	11	13	6	13	16	5.3	926.1
6.0	7.0	5	9	12	6	11	14	6	13	16	5.2	894.7
7.0	6.0	5	9	12	6	11	14	6	13	17	5.1	863.3
8.0	5.0	5	9	12	6	11	15	6	12	15	5.0	831.8
9.0	4.0	5	9	13	6	11	15	6	12	15	4.8	800.4
10.0	3.0	5	9	13	6	11	15	6	12	15	4.7	768.9
11.0	2.0	5	8	12	6	10	14	6	12	15	4.6	737.5
12.0	1.0	5	8	12	6	10	14	6	11	14	4.5	706.1
WL = 14.0												
1.0	13.0	5	7	5	5	6	4	6	11	9	6.2	1135.2
2.0	12.0	5	8	8	5	7	6	6	12	12	6.1	1103.8
3.0	11.0	5	9	10	5	7	7	6	12	13	6.0	1072.3
4.0	10.0	5	9	11	5	7	8	6	13	16	5.9	1040.9
5.0	9.0	5	9	12	5	8	10	6	13	16	5.8	1009.5
6.0	8.0	5	9	12	5	7	9	6	13	17	5.7	978.0
7.0	7.0	5	9	12	5	7	10	6	13	17	5.6	946.6
8.0	6.0	5	9	13	5	7	10	6	13	17	5.5	915.2
9.0	5.0	5	9	13	5	7	11	6	12	16	5.4	883.7
10.0	4.0	5	8	12	5	7	11	6	12	16	5.3	852.3
11.0	3.0	5	8	12	5	6	10	6	12	16	5.2	820.8
12.0	2.0	5	8	12	5	6	10	6	12	16	5.0	789.4
13.0	1.0	5	8	12	6	10	14	6	11	14	4.9	758.0
WL = 15.0												
1.0	14.0	4	4	2	5	6	4	5	7	4	6.8	1218.6
2.0	13.0	4	5	4	5	7	6	5	8	7	6.6	1187.1
3.0	12.0	4	6	7	5	7	7	5	9	9	6.5	1155.7
4.0	11.0	4	6	7	5	7	8	5	9	10	6.4	1124.2
5.0	10.0	4	7	9	5	8	10	5	9	10	6.3	1092.8
6.0	9.0	4	7	10	5	8	11	5	9	11	6.2	1061.4
7.0	8.0	4	7	10	5	8	11	5	9	11	6.1	1029.9
8.0	7.0	4	7	11	5	7	10	5	9	12	6.0	998.5
9.0	6.0	4	6	10	5	7	11	5	9	12	5.9	967.0
10.0	5.0	4	6	10	5	7	11	5	8	11	5.8	935.6
11.0	4.0	4	6	10	5	6	10	5	8	11	5.7	904.2
12.0	3.0	4	6	11	5	6	10	6	12	16	5.6	872.7
13.0	2.0	4	5	10	5	6	10	6	12	16	5.5	841.3

TABLE S (CONT)

4240B PRECISION BALANCE NETWORK SETTINGS FOR MIXED 24– AND 26–GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68 F

24–GAUGE ADJACENT TO REPEATER

LENGTH(KFT) 24-GA	26-GA	4240B BALANCE NETWORK SETTINGS BY TERMINATION									1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
		900 + 2.16			600 + 2.16			TELSET (35MA)				
		R1	R2	Z	R1	R2	Z	R1	R2	Z		
WL = 15.0												
14.0	1.0	4	5	10	5	5	9	6	12	16	5.3	809.8
WL = 16.0												
1.0	15.0	4	4	2	5	6	4	5	7	4	7.3	1301.9
2.0	14.0	4	5	5	5	7	6	5	8	7	7.2	1270.5
3.0	13.0	4	6	7	5	8	9	5	9	9	7.1	1239.0
4.0	12.0	4	6	8	5	8	10	5	9	10	7.0	1207.6
5.0	11.0	4	6	8	5	8	10	5	9	11	6.8	1176.1
6.0	10.0	4	7	10	5	8	11	5	9	11	6.7	1144.7
7.0	9.0	4	7	11	5	8	11	5	9	12	6.6	1113.3
8.0	8.0	4	6	10	5	8	12	5	9	12	6.5	1081.8
9.0	7.0	4	6	10	5	7	11	5	9	12	6.4	1050.4
10.0	6.0	4	6	11	5	7	11	5	9	13	6.3	1018.9
11.0	5.0	4	6	11	5	7	11	5	8	11	6.2	987.5
12.0	4.0	4	6	11	5	6	10	5	8	12	6.1	956.1
13.0	3.0	4	5	10	5	6	11	5	8	12	6.0	924.6
14.0	2.0	4	5	10	5	6	11	5	8	12	5.9	893.2
15.0	1.0	4	5	10	5	6	11	5	7	10	5.8	861.7
WL = 17.0												
1.0	16.0	4	4	2	5	6	4	5	7	5	7.8	1385.2
2.0	15.0	4	5	5	5	7	7	5	8	7	7.7	1353.8
3.0	14.0	4	6	7	5	8	9	5	8	8	7.6	1322.3
4.0	13.0	4	6	8	5	8	10	5	9	10	7.5	1290.9
5.0	12.0	4	6	9	5	8	11	5	9	11	7.4	1259.5
6.0	11.0	4	6	9	5	8	11	5	9	12	7.3	1228.0
7.0	10.0	4	6	10	5	8	12	5	9	12	7.2	1196.6
8.0	9.0	4	6	10	5	8	12	5	9	12	7.1	1165.2
9.0	8.0	4	6	10	5	7	11	5	9	13	7.0	1133.7
10.0	7.0	4	6	11	5	7	11	5	9	13	6.9	1102.3
11.0	6.0	4	6	11	5	7	12	5	8	12	6.8	1070.8
12.0	5.0	4	5	10	5	7	12	5	8	12	6.7	1039.4
13.0	4.0	4	5	10	5	6	11	5	8	12	6.6	1008.0
14.0	3.0	4	5	10	5	6	11	5	8	12	6.5	976.5
15.0	2.0	4	5	10	5	6	11	5	8	12	6.3	945.1
16.0	1.0	4	4	9	5	6	11	5	7	11	6.2	913.6
WL = 18.0												
1.0	17.0	4	4	2	4	3	1	4	4	1	8.4	1468.6
2.0	16.0	4	5	5	4	4	3	4	6	5	8.3	1437.1
3.0	15.0	4	5	6	4	5	6	4	6	6	8.1	1405.7
4.0	14.0	4	6	8	4	5	6	4	6	7	8.0	1374.2
5.0	13.0	4	6	9	4	5	7	4	7	9	7.9	1342.8
6.0	12.0	3	5	8	4	6	9	4	7	9	7.8	1311.4
7.0	11.0	3	5	9	4	5	8	4	7	10	7.7	1279.9
8.0	10.0	3	4	8	4	5	9	4	6	9	7.6	1248.5
9.0	9.0	3	4	9	4	5	9	5	9	13	7.5	1217.0
10.0	8.0	3	4	9	4	5	10	5	8	12	7.4	1185.6
11.0	7.0	3	4	9	4	4	9	5	8	12	7.3	1154.2
12.0	6.0	3	4	9	4	4	9	5	8	12	7.2	1122.7
13.0	5.0	3	3	9	4	4	9	5	8	12	7.1	1091.3

TABLE S (CONT)

4240B PRECISION BALANCE NETWORK SETTINGS FOR MIXED 24– AND 26–GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68 F

24–GAUGE ADJACENT TO REPEATER

LENGTH(KFT) 24-GA	LENGTH(KFT) 26-GA	4240B BALANCE NETWORK SETTINGS BY TERMINATION 900 + 2.16 R1	900 + 2.16 R2	900 + 2.16 Z	600 + 2.16 R1	600 + 2.16 R2	600 + 2.16 Z	TELSET (35MA) R1	TELSET (35MA) R2	TELSET (35MA) Z	1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
WL = 18.0												
14.0	4.0	3	3	9	4	4	9	5	8	12	7.0	1059.8
15.0	3.0	3	3	9	5	6	11	5	7	11	6.9	1028.4
16.0	2.0	4	4	10	5	6	11	5	7	11	6.8	997.0
17.0	1.0	4	4	10	5	5	10	5	7	11	6.6	965.5
WL = 19.0												
1.0	18.0	3	2	0	4	3	1	4	4	1	8.9	1551.9
2.0	17.0	3	3	3	4	4	3	4	5	4	8.8	1520.5
3.0	16.0	3	4	5	4	5	6	4	6	6	8.7	1489.0
4.0	15.0	3	4	6	4	5	7	4	6	7	8.6	1457.6
5.0	14.0	3	4	7	4	5	7	4	7	9	8.5	1426.1
6.0	13.0	3	4	7	4	5	8	4	7	10	8.4	1394.7
7.0	12.0	3	4	8	4	5	9	4	7	10	8.3	1363.3
8.0	11.0	3	4	8	4	5	9	4	6	9	8.2	1331.8
9.0	10.0	3	4	9	4	5	9	4	6	10	8.1	1300.4
10.0	9.0	3	4	9	4	5	10	4	6	10	8.0	1268.9
11.0	8.0	3	4	9	4	4	9	4	6	10	7.9	1237.5
12.0	7.0	3	3	9	4	4	9	4	6	10	7.8	1206.1
13.0	6.0	3	3	9	4	4	9	4	5	9	7.7	1174.6
14.0	5.0	3	3	9	4	4	9	4	5	9	7.6	1143.2
15.0	4.0	3	3	9	4	3	9	4	5	9	7.5	1111.7
16.0	3.0	3	2	8	4	3	9	5	7	11	7.3	1080.3
17.0	2.0	3	2	8	4	3	9	5	7	11	7.2	1048.9
18.0	1.0	3	2	8	4	2	8	5	7	11	7.1	1017.4
WL = 20.0												
1.0	19.0	3	2	1	4	3	1	4	4	2	9.5	1635.2
2.0	18.0	3	3	3	4	4	4	4	5	4	9.4	1603.8
3.0	17.0	3	3	4	4	5	6	4	6	6	9.2	1572.3
4.0	16.0	3	4	6	4	5	7	4	6	7	9.1	1540.9
5.0	15.0	3	4	7	4	5	7	4	6	8	9.0	1509.5
6.0	14.0	3	4	7	4	5	8	4	7	10	8.9	1478.0
7.0	13.0	3	4	8	4	5	9	4	6	9	8.8	1446.6
8.0	12.0	3	4	8	4	5	9	4	6	10	8.7	1415.2
9.0	11.0	3	4	9	4	5	10	4	6	10	8.6	1383.7
10.0	10.0	3	4	9	4	5	10	4	6	10	8.5	1352.3
11.0	9.0	3	3	9	4	4	9	4	6	10	8.4	1320.8
12.0	8.0	3	3	9	4	4	9	4	5	10	8.3	1289.4
13.0	7.0	3	3	9	4	4	9	4	5	10	8.2	1258.0
14.0	6.0	3	3	9	4	3	9	4	5	10	8.1	1226.5
15.0	5.0	3	2	8	4	3	9	4	5	10	8.0	1195.1
16.0	4.0	3	2	8	4	3	9	4	5	10	7.9	1163.6
17.0	3.0	3	2	8	4	3	9	4	4	9	7.8	1132.2
18.0	2.0	3	2	8	4	3	9	4	4	9	7.7	1100.8
19.0	1.0	3	2	8	4	2	8	4	4	9	7.5	1069.3
WL = 21.0												
1.0	20.0	3	1	0	4	3	1	4	4	2	10.1	1718.6
2.0	19.0	3	2	2	4	4	4	4	5	4	9.9	1687.1
3.0	18.0	3	3	4	4	5	6	4	6	6	9.8	1655.7
4.0	17.0	3	4	6	4	5	7	4	6	7	9.7	1624.2

TABLE S (CONT)

4240B PRECISION BALANCE NETWORK SETTINGS FOR MIXED 24– AND 26–GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68 F

24–GAUGE ADJACENT TO REPEATER

LENGTH(KFT) 24-GA	26-GA	4240B BALANCE NETWORK SETTINGS BY TERMINATION 900 + 2.16 R1	R2	Z	600 + 2.16 R1	R2	Z	TELSET (35MA) R1	R2	Z	1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
WL = 21.0												
5.0	16.0	3	4	7	4	5	8	4	6	8	9.6	1592.8
6.0	15.0	3	4	7	4	5	8	4	6	9	9.5	1561.4
7.0	14.0	3	4	8	4	5	9	4	6	9	9.4	1529.9
8.0	13.0	3	4	9	4	5	9	4	6	10	9.3	1498.5
9.0	12.0	3	4	9	3	3	8	4	6	10	9.2	1467.0
10.0	11.0	3	3	8	3	3	8	4	6	10	9.1	1435.6
11.0	10.0	2	2	8	3	3	8	4	6	11	9.0	1404.2
12.0	9.0	2	2	8	3	2	8	4	5	10	8.9	1372.7
13.0	8.0	3	3	9	3	2	8	4	5	10	8.8	1341.3
14.0	7.0	3	2	8	4	4	10	4	5	10	8.7	1309.8
15.0	6.0	3	2	8	4	3	9	4	5	10	8.6	1278.4
16.0	5.0	3	2	8	4	3	9	4	4	9	8.5	1247.0
17.0	4.0	3	2	8	4	3	9	4	4	9	8.4	1215.5
18.0	3.0	3	2	8	4	3	9	4	4	9	8.2	1184.1
19.0	2.0	3	1	8	4	2	8	4	4	9	8.1	1152.7
20.0	1.0	3	1	8	4	2	8	4	4	9	8.0	1121.2
WL = 22.0												
1.0	21.0	3	1	0	4	3	1	3	2	0	10.6	1801.9
2.0	20.0	3	2	2	4	4	4	3	3	2	10.5	1770.5
3.0	19.0	3	3	4	4	5	6	3	4	4	10.4	1739.0
4.0	18.0	3	4	6	4	5	7	3	4	5	10.2	1707.6
5.0	17.0	3	4	7	3	4	7	3	5	7	10.1	1676.1
6.0	16.0	3	4	8	3	4	7	3	5	8	10.0	1644.7
7.0	15.0	2	3	7	3	4	8	3	5	8	9.9	1613.3
8.0	14.0	2	2	7	3	4	8	3	4	8	9.8	1581.8
9.0	13.0	2	2	7	3	3	8	3	4	8	9.7	1550.4
10.0	12.0	2	2	7	3	3	8	3	4	8	9.6	1518.9
11.0	11.0	2	2	8	3	3	8	3	4	9	9.5	1487.5
12.0	10.0	2	2	8	3	2	8	3	4	9	9.4	1456.1
13.0	9.0	2	1	7	3	2	8	3	3	8	9.4	1424.6
14.0	8.0	2	1	7	3	2	8	3	3	8	9.3	1393.2
15.0	7.0	2	0	7	3	2	8	3	3	8	9.2	1361.7
16.0	6.0	2	0	7	3	1	7	4	4	9	9.1	1330.3
17.0	5.0	2	0	7	4	3	9	4	4	9	8.9	1298.9
18.0	4.0	2	0	7	4	3	9	4	4	9	8.8	1267.4
19.0	3.0	3	1	8	4	2	8	4	4	9	8.7	1236.0
20.0	2.0	3	1	8	4	2	8	4	4	9	8.6	1204.5
21.0	1.0	3	1	8	4	2	8	4	4	9	8.4	1173.1
WL = 23.0												
1.0	22.0	3	1	0	3	1	0	3	2	0	11.2	1885.2
2.0	21.0	3	2	2	3	2	2	3	3	2	11.0	1853.8
3.0	20.0	3	3	4	3	3	4	3	4	4	10.9	1822.3
4.0	19.0	3	3	5	3	3	5	3	4	5	10.8	1790.9
5.0	18.0	3	4	7	3	4	7	3	4	6	10.7	1759.5
6.0	17.0	2	3	7	3	4	7	3	4	7	10.6	1728.0
7.0	16.0	2	3	7	3	4	8	3	4	7	10.5	1696.6
8.0	15.0	2	2	7	3	3	7	3	4	8	10.4	1665.2
9.0	14.0	2	2	7	3	3	8	3	4	8	10.3	1633.7
10.0	13.0	2	2	8	3	3	8	3	4	9	10.2	1602.3

TABLE S (CONT)

4240B PRECISION BALANCE NETWORK SETTINGS FOR MIXED 24– AND 26–GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68 F

24–GAUGE ADJACENT TO REPEATER

LENGTH(KFT) 24-GA	26-GA	4240B BALANCE NETWORK SETTINGS BY TERMINATION 900 + 2.16 R1	R2	Z	600 + 2.16 R1	R2	Z	TELSET (35MA) R1	R2	Z	1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
WL = 23.0												
11.0	12.0	2	2	8	3	3	8	3	4	9	10.1	1570.8
12.0	11.0	2	1	7	3	2	8	3	3	8	10.0	1539.4
13.0	10.0	2	1	7	3	2	8	3	3	8	9.9	1508.0
14.0	9.0	2	1	7	3	2	8	3	3	8	9.8	1476.5
15.0	8.0	2	0	7	3	2	8	3	3	8	9.7	1445.1
16.0	7.0	2	0	7	3	1	7	3	2	8	9.6	1413.6
17.0	6.0	2	0	7	3	1	7	3	2	8	9.5	1382.2
18.0	5.0	2	0	7	3	1	7	3	2	8	9.4	1350.8
19.0	4.0	2	0	7	3	0	7	4	4	9	9.3	1319.3
20.0	3.0	2	0	7	4	2	8	4	4	9	9.2	1287.9
21.0	2.0	3	1	8	4	2	8	4	3	8	9.0	1256.4
22.0	1.0	3	0	7	4	2	8	4	3	8	8.9	1225.0
WL = 24.0												
3.0	21.0	3	3	4	3	3	4	3	4	4	11.5	1905.7
4.0	20.0	2	2	4	3	3	5	3	4	5	11.4	1874.2
5.0	19.0	2	2	5	3	4	7	3	4	6	11.2	1842.8
6.0	18.0	2	2	6	3	4	7	3	4	7	11.1	1811.4
7.0	17.0	2	2	6	3	4	8	3	4	7	11.0	1779.9
8.0	16.0	2	2	7	3	3	8	3	4	8	10.9	1748.5
9.0	15.0	2	2	7	3	3	8	3	4	8	10.8	1717.0
10.0	14.0	2	2	8	3	3	8	3	4	9	10.7	1685.6
11.0	13.0	2	1	7	3	2	8	3	3	8	10.6	1654.2
12.0	12.0	2	1	7	3	2	8	3	3	8	10.6	1622.7
13.0	11.0	2	1	7	3	2	8	3	3	8	10.5	1591.3
14.0	10.0	2	0	7	3	2	8	3	3	8	10.4	1559.8
15.0	9.0	2	0	7	3	2	8	3	2	8	10.3	1528.4
16.0	8.0	2	0	7	3	1	7	3	2	8	10.2	1497.0
17.0	7.0	2	0	7	3	1	8	3	2	8	10.1	1465.5
18.0	6.0	2	0	7	3	0	7	3	2	8	10.0	1434.1
19.0	5.0	2	0	7	3	0	7	3	2	8	9.9	1402.7
20.0	4.0	2	0	7	3	0	7	3	2	8	9.7	1371.2
21.0	3.0	2	0	7	3	0	7	3	1	7	9.6	1339.8
22.0	2.0	3	0	7	3	0	7	3	1	7	9.5	1308.3
23.0	1.0	3	0	7	4	2	8	4	3	8	9.3	1276.9

TABLE T

4240B PRECISION BALANCE NETWORK SETTINGS FOR MIXED 24– AND 22–GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68 F

24–GAUGE ADJACENT TO REPEATER

LENGTH(KFT) 24-GA	22-GA	4240B BALANCE NETWORK SETTINGS BY TERMINATION 900 + 2.16 R1	R2	Z	600 + 2.16 R1	R2	Z	TELSET (35MA) R1	R2	Z	1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
WL = 9.0												
6.0	3.0	6	11	13	7	15	19	7	15	15	2.5	409.7
7.0	2.0	6	11	13	7	15	19	7	15	15	2.6	428.8
8.0	1.0	6	11	12	7	15	18	7	15	15	2.7	447.9
WL = 10.0												
3.0	7.0	6	11	15	6	6	10	7	15	17	2.6	385.0
4.0	6.0	6	11	14	6	6	9	7	15	17	2.6	404.2
5.0	5.0	6	11	14	6	6	9	7	15	16	2.7	423.3
6.0	4.0	6	11	14	6	6	8	7	15	16	2.8	442.4
7.0	3.0	6	11	14	6	6	8	7	15	16	2.9	461.6
8.0	2.0	6	11	13	6	7	9	7	15	16	3.0	480.7
9.0	1.0	6	11	13	6	7	9	7	15	16	3.1	499.8
WL = 11.0												
1.0	10.0	6	12	18	6	8	14	7	15	19	2.7	379.5
2.0	9.0	6	12	18	6	7	12	7	15	18	2.8	398.7
3.0	8.0	6	11	16	6	7	12	7	15	18	2.9	417.8
4.0	7.0	6	11	15	6	7	11	7	15	18	3.0	436.9
5.0	6.0	6	11	15	6	7	11	7	15	17	3.0	456.1
6.0	5.0	6	11	15	6	7	10	7	15	17	3.1	475.2
7.0	4.0	6	11	14	6	7	10	7	15	17	3.2	494.3
8.0	3.0	6	11	14	6	8	11	7	15	17	3.3	513.4
9.0	2.0	6	12	16	6	8	11	6	9	9	3.4	532.6
10.0	1.0	6	12	16	6	8	10	6	10	10	3.4	551.7
WL = 12.0												
1.0	11.0	6	12	19	6	9	16	6	10	14	3.0	412.3
2.0	10.0	6	12	18	6	8	14	6	10	13	3.1	431.4
3.0	9.0	6	12	18	6	7	12	6	10	13	3.2	450.6
4.0	8.0	6	11	16	6	7	12	6	9	11	3.3	469.7
5.0	7.0	5	7	11	6	7	11	6	9	11	3.4	488.8
6.0	6.0	5	7	11	6	7	11	6	9	10	3.4	508.0
7.0	5.0	5	7	11	6	8	12	6	9	10	3.5	527.1
8.0	4.0	5	7	10	6	8	11	6	10	11	3.6	546.2
9.0	3.0	5	7	10	6	8	11	6	10	11	3.7	565.3
10.0	2.0	5	7	10	6	8	11	6	10	11	3.8	584.5
11.0	1.0	5	8	11	6	9	12	6	10	11	3.8	603.6
WL = 13.0												
1.0	12.0	5	9	16	6	9	16	6	11	16	3.3	445.1
2.0	11.0	5	8	14	6	8	14	6	10	14	3.4	464.2
3.0	10.0	5	7	13	6	8	14	6	10	14	3.5	483.3
4.0	9.0	5	7	12	6	8	13	6	10	13	3.6	502.5
5.0	8.0	5	7	12	6	8	13	6	10	13	3.7	521.6
6.0	7.0	5	7	12	6	8	12	6	10	13	3.8	540.7
7.0	6.0	5	7	11	6	8	12	6	10	12	3.8	559.8
8.0	5.0	5	7	11	6	8	12	6	10	12	3.9	579.0
9.0	4.0	5	7	11	6	9	13	6	10	12	4.0	598.1
10.0	3.0	5	7	11	6	9	13	6	10	12	4.1	617.2
11.0	2.0	5	8	12	6	9	13	6	11	14	4.2	636.4
12.0	1.0	5	8	12	6	9	13	6	11	13	4.2	655.5

TABLE T (CONT)

4240B PRECISION BALANCE NETWORK SETTINGS FOR MIXED 24– AND 22–GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68 F

24–GAUGE ADJACENT TO REPEATER

LENGTH(KFT)		4240B BALANCE NETWORK SETTINGS BY TERMINATION								1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
24-GA	22-GA	900 + 2.16			600 + 2.16			TELSET (35MA)			
		R1	R2	Z	R1	R2	Z	R1	R2	Z	
WL = 14.0											
1.0	13.0	5	9	17	6	10	18	6	11	17	3.7	477.8
2.0	12.0	5	8	15	6	9	16	6	11	16	3.8	497.0
3.0	11.0	5	7	13	6	8	14	6	10	14	3.8	516.1
4.0	10.0	5	7	13	6	8	14	6	10	14	3.9	535.2
5.0	9.0	5	7	13	6	8	13	6	10	14	4.0	554.4
6.0	8.0	5	7	12	6	8	13	6	10	13	4.1	573.5
7.0	7.0	5	7	12	6	8	12	6	10	13	4.2	592.6
8.0	6.0	5	7	12	6	8	12	6	10	13	4.2	611.7
9.0	5.0	5	7	11	6	8	12	6	11	14	4.3	630.9
10.0	4.0	5	7	11	6	9	13	6	11	14	4.4	650.0
11.0	3.0	5	7	11	6	9	13	6	11	14	4.5	669.1
12.0	2.0	5	7	11	6	9	13	6	11	14	4.6	688.3
13.0	1.0	5	7	11	6	9	13	6	11	14	4.7	707.4
WL = 15.0												
1.0	14.0	5	8	16	6	10	18	6	12	19	4.0	510.6
2.0	13.0	5	8	16	6	9	16	6	11	17	4.1	529.7
3.0	12.0	5	7	14	6	9	16	6	10	15	4.2	548.9
4.0	11.0	5	7	14	6	8	14	6	10	15	4.3	568.0
5.0	10.0	5	6	12	6	8	14	6	10	14	4.4	587.1
6.0	9.0	5	6	12	6	8	13	6	10	14	4.4	606.2
7.0	8.0	5	6	11	6	8	13	6	10	14	4.5	625.4
8.0	7.0	5	6	11	6	9	14	6	10	13	4.6	644.5
9.0	6.0	5	7	12	6	8	12	6	10	13	4.7	663.6
10.0	5.0	5	7	12	6	9	13	6	11	15	4.7	682.8
11.0	4.0	5	7	12	6	9	13	6	11	15	4.8	701.9
12.0	3.0	5	7	12	6	9	13	6	11	15	4.9	721.0
13.0	2.0	5	7	12	5	5	9	6	11	15	5.0	740.2
14.0	1.0	5	7	12	5	5	9	6	11	15	5.1	759.3
WL = 16.0												
1.0	15.0	5	8	17	5	5	14	6	11	18	4.3	543.4
2.0	14.0	5	7	15	5	4	13	6	11	17	4.4	562.5
3.0	13.0	5	7	15	5	4	12	6	11	17	4.5	581.6
4.0	12.0	5	6	13	5	3	10	6	10	15	4.6	600.8
5.0	11.0	5	6	13	5	3	10	6	10	15	4.7	619.9
6.0	10.0	5	6	12	5	3	9	6	10	14	4.8	639.0
7.0	9.0	5	6	12	5	3	9	6	10	14	4.9	658.1
8.0	8.0	5	6	11	5	3	9	6	10	14	4.9	677.3
9.0	7.0	5	6	11	5	4	9	6	10	14	5.0	696.4
10.0	6.0	5	6	11	5	4	9	6	11	15	5.1	715.5
11.0	5.0	5	7	12	5	4	9	6	11	15	5.2	734.7
12.0	4.0	4	4	9	5	4	9	6	11	15	5.2	753.8
13.0	3.0	4	4	9	5	5	10	6	11	15	5.3	772.9
14.0	2.0	4	4	9	5	5	10	6	11	15	5.4	792.0
15.0	1.0	4	5	10	5	5	10	6	11	15	5.5	811.2
WL = 17.0												
1.0	16.0	4	6	15	5	5	14	6	12	20	4.7	576.1
2.0	15.0	4	5	14	5	4	13	6	11	18	4.8	595.3
3.0	14.0	4	4	12	5	4	12	6	10	16	4.9	614.4

TABLE T (CONT)

4240B PRECISION BALANCE NETWORK SETTINGS FOR MIXED 24– AND 22–GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68 F

24–GAUGE ADJACENT TO REPEATER

LENGTH(KFT) 24-GA	22-GA	4240B BALANCE NETWORK SETTINGS BY TERMINATION 900 + 2.16 R1	R2	Z	600 + 2.16 R1	R2	Z	TELSET (35MA) R1	R2	Z	1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
WL = 17.0												
4.0	13.0	4	3	11	5	3	11	6	10	16	5.0	633.5
5.0	12.0	4	3	10	5	3	10	6	10	15	5.1	652.7
6.0	11.0	4	3	10	5	3	10	6	10	15	5.1	671.8
7.0	10.0	4	3	10	5	3	9	6	10	14	5.2	690.9
8.0	9.0	4	3	9	5	3	9	6	10	14	5.3	710.0
9.0	8.0	4	3	9	5	3	9	6	10	14	5.4	729.2
10.0	7.0	4	3	9	5	4	9	6	10	14	5.4	748.3
11.0	6.0	4	3	9	5	4	9	6	10	14	5.5	767.4
12.0	5.0	4	4	9	5	4	9	6	11	15	5.6	786.6
13.0	4.0	4	4	9	5	4	9	6	11	15	5.7	805.7
14.0	3.0	4	4	9	5	5	10	5	7	11	5.8	824.8
15.0	2.0	4	4	9	5	5	10	5	7	11	5.8	843.9
16.0	1.0	4	4	9	5	5	10	5	7	11	5.9	863.1
WL = 18.0												
1.0	17.0	4	5	15	5	5	15	6	11	19	5.1	608.9
2.0	16.0	4	4	13	5	4	13	6	11	18	5.1	628.0
3.0	15.0	4	3	12	5	3	12	6	10	16	5.2	647.2
4.0	14.0	4	3	11	5	3	11	6	10	16	5.3	666.3
5.0	13.0	4	3	11	5	3	11	6	10	16	5.4	685.4
6.0	12.0	4	3	10	5	3	10	6	10	15	5.5	704.5
7.0	11.0	4	3	10	5	3	10	6	10	15	5.6	723.7
8.0	10.0	4	2	9	5	3	9	5	6	11	5.6	742.8
9.0	9.0	4	3	9	5	3	9	5	6	10	5.7	761.9
10.0	8.0	4	3	9	5	3	9	5	6	10	5.8	781.1
11.0	7.0	4	3	9	5	4	9	5	6	10	5.9	800.2
12.0	6.0	4	3	9	5	4	9	5	6	10	6.0	819.3
13.0	5.0	4	3	9	5	4	9	5	6	10	6.0	838.4
14.0	4.0	4	3	9	5	5	10	5	7	11	6.1	857.6
15.0	3.0	4	4	10	5	5	10	5	7	11	6.2	876.7
16.0	2.0	4	4	10	5	5	10	5	7	11	6.3	895.8
17.0	1.0	4	4	10	5	5	10	5	7	11	6.4	915.0
WL = 19.0												
1.0	18.0	4	5	15	5	5	15	5	7	15	5.4	641.7
2.0	17.0	4	4	14	5	4	13	5	7	15	5.5	660.8
3.0	16.0	4	3	12	5	3	12	5	6	13	5.6	679.9
4.0	15.0	4	2	11	5	3	11	5	6	13	5.7	699.1
5.0	14.0	4	2	10	5	3	11	5	5	11	5.8	718.2
6.0	13.0	4	2	10	5	3	10	5	5	11	5.9	737.3
7.0	12.0	4	2	9	5	3	10	5	5	10	5.9	756.4
8.0	11.0	4	2	9	5	3	9	5	5	10	6.0	775.6
9.0	10.0	4	2	9	5	3	9	5	5	10	6.1	794.7
10.0	9.0	4	2	9	5	3	9	5	6	10	6.2	813.8
11.0	8.0	4	3	9	5	4	10	5	6	10	6.2	833.0
12.0	7.0	4	3	9	5	4	9	5	6	10	6.3	852.1
13.0	6.0	4	3	9	5	4	9	5	6	10	6.4	871.2
14.0	5.0	4	3	9	5	4	9	5	6	10	6.5	890.3
15.0	4.0	4	3	9	5	5	10	5	6	10	6.6	909.5
16.0	3.0	4	3	9	5	5	10	5	7	11	6.6	928.6
17.0	2.0	4	3	9	5	5	10	5	7	11	6.7	947.7

TABLE T (CONT)

4240B PRECISION BALANCE NETWORK SETTINGS FOR MIXED 24– AND 22–GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68 F

24–GAUGE ADJACENT TO REPEATER

LENGTH(KFT) 24-GA	22-GA	4240B BALANCE NETWORK SETTINGS BY TERMINATION 900 + 2.16 R1	R2	Z	600 + 2.16 R1	R2	Z	TELSET (35MA) R1	R2	Z	1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
WL = 19.0												
18.0	1.0	4	4	10	5	5	10	5	7	11	6.8	966.9
WL = 20.0												
1.0	19.0	4	4	15	5	5	15	5	7	16	5.8	674.4
2.0	18.0	4	3	13	5	4	14	5	6	14	5.9	693.6
3.0	17.0	4	2	12	5	3	12	5	6	13	6.0	712.7
4.0	16.0	4	2	11	5	3	12	5	5	12	6.1	731.8
5.0	15.0	4	2	11	5	3	11	5	5	11	6.1	750.9
6.0	14.0	4	2	10	5	2	10	5	5	11	6.2	770.1
7.0	13.0	4	1	9	5	3	10	5	5	10	6.3	789.2
8.0	12.0	4	2	9	5	3	10	5	5	10	6.4	808.3
9.0	11.0	4	2	9	5	3	9	5	5	10	6.4	827.5
10.0	10.0	4	2	9	5	3	9	5	5	10	6.5	846.6
11.0	9.0	4	2	9	5	3	9	5	6	11	6.6	865.7
12.0	8.0	4	2	8	5	4	10	5	6	10	6.7	884.8
13.0	7.0	4	3	9	5	4	9	5	6	10	6.8	904.0
14.0	6.0	4	3	9	5	4	9	5	6	10	6.8	923.1
15.0	5.0	4	3	9	5	4	9	5	6	10	6.9	942.2
16.0	4.0	4	3	9	5	5	10	5	6	10	7.0	961.4
17.0	3.0	4	3	9	5	5	10	5	6	10	7.1	980.5
18.0	2.0	4	3	9	4	2	8	5	6	10	7.2	999.6
19.0	1.0	3	2	8	4	2	8	5	6	10	7.3	1018.7
WL = 21.0												
1.0	20.0	3	2	13	5	5	15	5	7	16	6.1	707.2
2.0	19.0	3	1	12	4	1	12	5	6	14	6.2	726.3
3.0	18.0	3	0	11	5	3	12	5	5	13	6.3	745.5
4.0	17.0	3	0	10	4	0	10	5	5	12	6.4	764.6
5.0	16.0	3	0	9	5	3	11	5	5	12	6.5	783.7
6.0	15.0	3	0	9	5	2	10	5	5	11	6.6	802.8
7.0	14.0	4	1	9	5	3	10	5	5	11	6.7	822.0
8.0	13.0	4	1	9	5	3	10	5	5	10	6.7	841.1
9.0	12.0	4	1	8	5	3	9	5	5	10	6.8	860.2
10.0	11.0	4	1	8	5	3	9	5	5	10	6.9	879.4
11.0	10.0	4	2	9	5	3	9	5	5	10	7.0	898.5
12.0	9.0	3	0	7	5	4	10	5	5	10	7.0	917.6
13.0	8.0	3	0	7	5	4	10	5	6	11	7.1	936.7
14.0	7.0	3	0	7	5	4	10	5	6	10	7.2	955.9
15.0	6.0	3	0	7	4	1	7	5	6	10	7.3	975.0
16.0	5.0	3	0	7	4	2	8	5	6	10	7.4	994.1
17.0	4.0	3	1	7	4	2	8	5	6	10	7.4	1013.3
18.0	3.0	3	1	7	4	2	8	5	6	10	7.5	1032.4
19.0	2.0	3	1	7	4	2	8	4	4	9	7.6	1051.5
20.0	1.0	3	1	7	4	2	8	4	4	9	7.7	1070.6
WL = 22.0												
1.0	21.0	3	2	14	4	2	13	5	7	16	6.5	740.0
2.0	20.0	3	1	12	4	1	12	5	6	15	6.6	759.1
3.0	19.0	3	0	11	4	0	11	5	5	13	6.7	778.2
4.0	18.0	3	0	10	4	0	10	5	5	12	6.8	797.3
5.0	17.0	3	0	10	4	0	9	5	4	11	6.9	816.5

TABLE T (CONT)

4240B PRECISION BALANCE NETWORK SETTINGS FOR MIXED 24– AND 22–GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68 F

24–GAUGE ADJACENT TO REPEATER

LENGTH(KFT) 24-GA	22-GA	4240B BALANCE NETWORK SETTINGS BY TERMINATION 900 + 2.16 R1	R2	Z	600 + 2.16 R1	R2	Z	TELSET (35MA) R1	R2	Z	1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
WL = 22.0												
6.0	16.0	3	0	9	4	0	9	5	4	10	7.0	835.6
7.0	15.0	3	0	9	4	0	8	5	4	10	7.0	854.7
8.0	14.0	3	0	8	4	0	8	5	4	10	7.1	873.9
9.0	13.0	3	0	8	4	0	8	5	5	10	7.2	893.0
10.0	12.0	3	0	8	4	0	7	5	5	10	7.3	912.1
11.0	11.0	3	0	7	4	0	7	5	5	10	7.3	931.2
12.0	10.0	3	0	7	4	0	7	5	5	10	7.4	950.4
13.0	9.0	3	0	7	4	0	7	5	5	10	7.5	969.5
14.0	8.0	3	0	7	4	1	7	5	6	11	7.6	988.6
15.0	7.0	3	0	7	4	1	7	5	6	11	7.6	1007.8
16.0	6.0	3	0	7	4	1	7	4	3	8	7.7	1026.9
17.0	5.0	3	0	7	4	2	8	4	3	8	7.8	1046.0
18.0	4.0	3	0	7	4	2	8	4	3	8	7.9	1065.2
19.0	3.0	3	0	7	4	2	8	4	3	8	8.0	1084.3
20.0	2.0	3	1	8	4	2	8	4	4	9	8.1	1103.4
21.0	1.0	3	1	8	4	2	8	4	4	9	8.2	1122.5
WL = 23.0												
1.0	22.0	3	1	13	4	1	13	5	6	15	6.9	772.7
2.0	21.0	3	0	12	4	1	12	5	5	14	7.0	791.9
3.0	20.0	3	0	11	4	0	11	5	5	13	7.1	811.0
4.0	19.0	3	0	10	4	0	10	5	4	12	7.1	830.1
5.0	18.0	3	0	10	4	0	9	5	4	11	7.2	849.2
6.0	17.0	3	0	9	4	0	9	5	4	11	7.3	868.4
7.0	16.0	3	0	9	4	0	8	5	4	10	7.4	887.5
8.0	15.0	3	0	8	4	0	8	5	4	10	7.5	906.6
9.0	14.0	3	0	8	4	0	8	5	4	10	7.6	925.8
10.0	13.0	3	0	8	4	0	7	5	5	10	7.6	944.9
11.0	12.0	3	0	7	4	0	7	5	5	10	7.7	964.0
12.0	11.0	3	0	7	4	0	7	5	5	10	7.8	983.1
13.0	10.0	3	0	7	4	0	7	4	2	7	7.9	1002.3
14.0	9.0	3	0	7	4	1	7	4	3	8	7.9	1021.4
15.0	8.0	3	0	7	4	1	7	4	3	8	8.0	1040.5
16.0	7.0	3	0	7	4	1	7	4	3	8	8.1	1059.7
17.0	6.0	3	0	7	4	1	7	4	3	8	8.2	1078.8
18.0	5.0	3	0	7	4	2	8	4	3	8	8.2	1097.9
19.0	4.0	3	0	7	4	2	8	4	3	8	8.3	1117.0
20.0	3.0	3	0	7	4	2	8	4	3	8	8.4	1136.2
21.0	2.0	3	0	7	4	2	8	4	3	8	8.5	1155.3
22.0	1.0	3	0	7	4	2	8	4	3	8	8.6	1174.4
WL = 24.0												
1.0	23.0	3	1	13	4	1	13	4	4	14	7.2	805.5
2.0	22.0	3	0	12	4	1	12	4	2	12	7.3	824.6
3.0	21.0	3	0	11	4	0	11	4	2	11	7.4	843.7
4.0	20.0	3	0	10	4	0	10	4	1	10	7.5	862.9
5.0	19.0	3	0	10	4	0	10	4	1	9	7.6	882.0
6.0	18.0	3	0	9	4	0	9	4	1	9	7.7	901.1
7.0	17.0	3	0	9	4	0	8	4	1	8	7.8	920.3
8.0	16.0	3	0	8	4	0	8	4	1	8	7.8	939.4
9.0	15.0	3	0	8	4	0	8	4	1	7	7.9	958.5

TABLE T (CONT)

4240B PRECISION BALANCE NETWORK SETTINGS FOR MIXED 24– AND 22–GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68 F

24–GAUGE ADJACENT TO REPEATER

LENGTH(KFT) 24-GA	22-GA	4240B BALANCE NETWORK SETTINGS BY TERMINATION 900 + 2.16 R1	R2	Z	600 + 2.16 R1	R2	Z	TELSET (35MA) R1	R2	Z	1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
WL = 24.0												
10.0	14.0	3	0	8	4	0	7	4	1	7	8.0	977.7
11.0	13.0	3	0	7	4	0	7	4	2	8	8.1	996.8
12.0	12.0	3	0	7	4	0	7	4	2	8	8.2	1015.9
13.0	11.0	3	0	7	4	0	7	4	2	7	8.2	1035.0
14.0	10.0	3	0	7	4	0	7	4	2	7	8.3	1054.2
15.0	9.0	3	0	7	4	1	7	4	3	8	8.4	1073.3
16.0	8.0	3	0	7	4	1	7	4	3	8	8.5	1092.4
17.0	7.0	3	0	7	4	1	7	4	3	8	8.5	1111.6
18.0	6.0	3	0	7	4	1	7	4	3	8	8.6	1130.7
19.0	5.0	3	0	7	4	2	8	4	3	8	8.7	1149.8
20.0	4.0	3	0	7	4	2	8	4	3	8	8.8	1168.9
21.0	3.0	3	0	7	4	2	8	4	3	8	8.9	1188.1
22.0	2.0	3	0	7	4	2	8	4	3	8	9.0	1207.2
23.0	1.0	3	0	7	4	2	8	4	3	8	9.1	1226.3

TABLE U

4240B PRECISION BALANCE NETWORK SETTINGS FOR MIXED 22– AND 24–GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68 F

22–GAUGE ADJACENT TO REPEATER

LENGTH(KFT) 22-GA	24-GA	4240B BALANCE NETWORK SETTINGS BY TERMINATION 900 + 2.16 R1	R2	Z	600 + 2.16 R1	R2	Z	TELSET (35MA) R1	R2	Z	1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
WL = 9.0												
1.0	8.0	6	12	15	6	7	9	7	15	15	2.7	447.9
2.0	7.0	6	12	15	6	7	9	7	15	16	2.6	428.8
3.0	6.0	6	12	15	6	8	11	7	15	16	2.5	409.7
WL = 10.0												
1.0	9.0	6	12	15	6	8	11	7	15	16	3.1	499.8
2.0	8.0	6	13	18	6	9	12	7	15	17	3.0	480.7
3.0	7.0	6	13	18	6	9	13	7	15	17	2.9	461.6
4.0	6.0	6	13	19	6	9	13	7	15	17	2.8	442.4
5.0	5.0	6	13	19	6	9	14	7	15	17	2.7	423.3
6.0	4.0	6	13	19	6	9	14	7	15	18	2.6	404.2
7.0	3.0	6	13	19	6	9	14	7	15	18	2.6	385.0
WL = 11.0												
1.0	10.0	6	12	16	6	9	12	6	11	13	3.4	551.7
2.0	9.0	6	13	19	6	10	14	6	11	13	3.4	532.6
3.0	8.0	6	13	19	6	10	15	6	11	13	3.3	513.4
4.0	7.0	6	13	19	6	10	15	6	11	14	3.2	494.3
5.0	6.0	6	13	19	6	10	16	6	11	14	3.1	475.2
6.0	5.0	6	14	22	6	10	16	6	11	14	3.0	456.1
7.0	4.0	6	13	20	6	10	16	6	11	15	3.0	436.9
8.0	3.0	6	13	20	6	10	16	6	11	15	2.9	417.8
9.0	2.0	6	13	20	6	10	17	7	15	19	2.8	398.7
10.0	1.0	6	13	20	6	9	16	7	15	19	2.7	379.5
WL = 12.0												
1.0	11.0	5	9	13	6	10	14	6	11	13	3.8	603.6
2.0	10.0	5	9	14	6	10	15	6	12	16	3.8	584.5
3.0	9.0	5	9	14	6	10	15	6	12	16	3.7	565.3
4.0	8.0	5	10	16	6	11	17	6	12	16	3.6	546.2
5.0	7.0	5	10	16	6	11	17	6	12	17	3.5	527.1
6.0	6.0	5	10	16	6	11	18	6	12	17	3.4	508.0
7.0	5.0	5	10	17	6	11	18	6	12	17	3.4	488.8
8.0	4.0	5	10	17	6	11	18	6	12	17	3.3	469.7
9.0	3.0	5	10	17	6	10	17	6	12	17	3.2	450.6
10.0	2.0	6	13	21	6	10	17	6	11	16	3.1	431.4
11.0	1.0	6	13	21	6	10	17	6	11	16	3.0	412.3
WL = 13.0												
1.0	12.0	5	9	14	6	10	14	6	12	16	4.2	655.5
2.0	11.0	5	9	14	6	10	15	6	12	16	4.2	636.4
3.0	10.0	5	10	16	6	11	17	6	12	17	4.1	617.2
4.0	9.0	5	10	16	6	11	17	6	13	19	4.0	598.1
5.0	8.0	5	10	17	6	11	18	6	13	19	3.9	579.0
6.0	7.0	5	10	17	6	11	18	6	13	19	3.8	559.8
7.0	6.0	5	10	17	6	11	18	6	13	20	3.8	540.7
8.0	5.0	5	10	17	6	11	19	6	13	20	3.7	521.6
9.0	4.0	5	10	18	6	11	19	6	12	18	3.6	502.5
10.0	3.0	5	10	18	6	11	19	6	12	18	3.5	483.3
11.0	2.0	5	10	18	6	11	19	6	12	18	3.4	464.2
12.0	1.0	5	10	18	6	10	18	6	12	18	3.3	445.1

TABLE U (CONT)

4240B PRECISION BALANCE NETWORK SETTINGS FOR MIXED 22– AND 24–GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68 F

22–GAUGE ADJACENT TO REPEATER

LENGTH(KFT)		4240B BALANCE NETWORK SETTINGS BY TERMINATION								1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
22-GA	24-GA	900 + 2.16 R1	R2	Z	600 + 2.16 R1	R2	Z	TELSET (35MA) R1	R2	Z		
WL = 14.0												
1.0	13.0	5	8	13	6	10	15	6	12	16	4.7	707.4
2.0	12.0	5	9	15	6	11	17	6	12	17	4.6	688.3
3.0	11.0	5	9	15	6	11	17	6	13	19	4.5	669.1
4.0	10.0	5	10	17	6	12	19	6	13	19	4.4	650.0
5.0	9.0	5	10	17	6	11	18	6	13	20	4.3	630.9
6.0	8.0	5	10	18	6	12	20	6	13	20	4.2	611.7
7.0	7.0	5	10	18	6	12	20	6	13	20	4.2	592.6
8.0	6.0	5	10	18	6	12	20	6	13	20	4.1	573.5
9.0	5.0	5	10	18	6	11	19	6	13	20	4.0	554.4
10.0	4.0	5	10	18	6	11	19	6	13	20	3.9	535.2
11.0	3.0	5	10	18	6	11	19	6	12	19	3.8	516.1
12.0	2.0	5	10	19	6	11	19	6	12	19	3.8	497.0
13.0	1.0	5	10	19	6	10	18	6	12	19	3.7	477.8
WL = 15.0												
1.0	14.0	5	8	13	5	6	11	6	12	17	5.1	759.3
2.0	13.0	5	9	15	5	7	13	6	13	19	5.0	740.2
3.0	12.0	5	10	17	5	7	13	6	13	19	4.9	721.0
4.0	11.0	5	10	17	5	8	15	6	13	20	4.8	701.9
5.0	10.0	5	10	18	5	8	15	6	13	20	4.7	682.8
6.0	9.0	5	10	18	5	8	16	6	13	20	4.7	663.6
7.0	8.0	5	10	18	5	8	16	6	13	21	4.6	644.5
8.0	7.0	5	10	18	5	8	16	6	13	21	4.5	625.4
9.0	6.0	5	10	19	5	8	16	6	13	21	4.4	606.2
10.0	5.0	5	10	19	5	7	16	6	13	21	4.4	587.1
11.0	4.0	5	10	19	5	7	16	6	13	21	4.3	568.0
12.0	3.0	5	10	19	6	11	20	6	13	21	4.2	548.9
13.0	2.0	5	10	19	6	11	20	6	13	21	4.1	529.7
14.0	1.0	5	10	19	6	11	20	6	13	21	4.0	510.6
WL = 16.0												
1.0	15.0	4	6	12	5	6	11	6	12	17	5.5	811.2
2.0	14.0	4	6	12	5	7	13	6	12	18	5.4	792.0
3.0	13.0	4	7	14	5	7	13	6	13	20	5.3	772.9
4.0	12.0	4	7	14	5	8	15	6	13	20	5.2	753.8
5.0	11.0	4	8	16	5	8	16	6	13	20	5.2	734.7
6.0	10.0	4	8	16	5	8	16	6	13	21	5.1	715.5
7.0	9.0	4	8	16	5	8	16	6	13	21	5.0	696.4
8.0	8.0	4	8	17	5	8	16	6	13	21	4.9	677.3
9.0	7.0	4	8	17	5	8	17	6	13	21	4.9	658.1
10.0	6.0	4	8	17	5	8	17	6	13	21	4.8	639.0
11.0	5.0	4	8	17	5	7	16	6	13	21	4.7	619.9
12.0	4.0	4	7	16	5	7	16	6	13	22	4.6	600.8
13.0	3.0	5	9	18	5	7	16	6	13	22	4.5	581.6
14.0	2.0	5	9	18	5	7	16	6	12	20	4.4	562.5
15.0	1.0	5	9	18	5	7	16	6	12	20	4.3	543.4
WL = 17.0												
1.0	16.0	4	5	11	5	6	12	5	8	13	5.9	863.1
2.0	15.0	4	6	13	5	7	13	5	8	13	5.8	843.9
3.0	14.0	4	7	14	5	7	14	5	9	15	5.8	824.8

TABLE U (CONT)

4240B PRECISION BALANCE NETWORK SETTINGS FOR MIXED 22– AND 24–GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68 F

22–GAUGE ADJACENT TO REPEATER

LENGTH(KFT)		4240B BALANCE NETWORK SETTINGS BY TERMINATION									1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
22-GA	24-GA	900 + 2.16			600 + 2.16			TELSET (35MA)				
		R1	R2	Z	R1	R2	Z	R1	R2	Z		
WL = 17.0												
4.0	13.0	4	7	15	5	8	15	5	9	15	5.7	805.7
5.0	12.0	4	7	15	5	8	16	5	10	17	5.6	786.6
6.0	11.0	4	7	15	5	8	16	5	10	17	5.5	767.4
7.0	10.0	4	8	17	5	8	16	5	10	18	5.4	748.3
8.0	9.0	4	8	17	5	8	17	5	10	18	5.4	729.2
9.0	8.0	4	8	17	5	8	17	5	10	18	5.3	710.0
10.0	7.0	4	7	16	5	8	17	5	10	18	5.2	690.9
11.0	6.0	4	7	17	5	8	17	6	13	22	5.1	671.8
12.0	5.0	4	7	17	5	7	16	6	13	22	5.1	652.7
13.0	4.0	4	7	17	5	7	17	6	13	22	5.0	633.5
14.0	3.0	4	7	17	5	7	17	6	13	22	4.9	614.4
15.0	2.0	4	7	17	5	7	17	6	13	22	4.8	595.3
16.0	1.0	4	7	17	5	7	17	6	13	22	4.7	576.1
WL = 18.0												
1.0	17.0	4	5	11	5	6	12	5	8	13	6.4	915.0
2.0	16.0	4	6	13	5	7	13	5	9	15	6.3	895.8
3.0	15.0	4	6	13	5	7	14	5	9	15	6.2	876.7
4.0	14.0	4	7	15	5	8	15	5	9	16	6.1	857.6
5.0	13.0	4	7	15	5	8	16	5	9	16	6.0	838.4
6.0	12.0	4	7	16	5	8	16	5	10	18	6.0	819.3
7.0	11.0	4	7	16	5	8	17	5	10	18	5.9	800.2
8.0	10.0	4	7	16	5	8	17	5	10	18	5.8	781.1
9.0	9.0	4	7	17	5	8	17	5	10	18	5.7	761.9
10.0	8.0	4	7	17	5	8	17	5	9	17	5.6	742.8
11.0	7.0	4	7	17	5	8	18	5	10	19	5.6	723.7
12.0	6.0	4	7	17	5	8	18	5	9	18	5.5	704.5
13.0	5.0	4	7	17	5	7	17	5	9	18	5.4	685.4
14.0	4.0	4	7	17	5	7	17	5	9	18	5.3	666.3
15.0	3.0	4	7	17	5	7	17	5	9	18	5.2	647.2
16.0	2.0	4	7	17	5	7	17	5	9	18	5.1	628.0
17.0	1.0	4	6	16	5	7	17	6	12	21	5.1	608.9
WL = 19.0												
1.0	18.0	4	5	11	5	6	12	5	8	13	6.8	966.9
2.0	17.0	4	5	12	5	7	13	5	8	14	6.7	947.7
3.0	16.0	4	6	13	5	7	14	5	9	15	6.6	928.6
4.0	15.0	4	6	14	5	8	16	5	9	16	6.6	909.5
5.0	14.0	4	7	15	5	8	16	5	9	16	6.5	890.3
6.0	13.0	4	7	16	5	8	16	5	10	18	6.4	871.2
7.0	12.0	4	7	16	5	8	17	5	10	18	6.3	852.1
8.0	11.0	4	7	16	5	8	17	5	9	17	6.2	833.0
9.0	10.0	4	7	17	5	8	17	5	10	19	6.2	813.8
10.0	9.0	4	7	17	5	8	18	5	10	19	6.1	794.7
11.0	8.0	4	7	17	5	8	18	5	9	18	6.0	775.6
12.0	7.0	4	7	17	5	8	18	5	9	18	5.9	756.4
13.0	6.0	4	7	17	5	7	17	5	9	18	5.9	737.3
14.0	5.0	4	7	17	5	7	17	5	9	18	5.8	718.2
15.0	4.0	4	6	17	5	7	17	5	9	18	5.7	699.1
16.0	3.0	4	6	17	5	7	17	5	9	18	5.6	679.9
17.0	2.0	4	6	17	5	7	17	5	9	18	5.5	660.8

TABLE U (CONT)

4240B PRECISION BALANCE NETWORK SETTINGS FOR MIXED 22– AND 24–GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68 F

22–GAUGE ADJACENT TO REPEATER

LENGTH(KFT) 22-GA	24-GA	4240B BALANCE NETWORK SETTINGS BY TERMINATION 900 + 2.16 R1	R2	Z	600 + 2.16 R1	R2	Z	TELSET (35MA) R1	R2	Z	1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
WL = 19.0												
18.0	1.0	4	6	17	5	7	17	5	8	17	5.4	641.7
WL = 20.0												
1.0	19.0	3	3	10	4	3	9	5	7	12	7.3	1018.7
2.0	18.0	3	3	10	4	4	11	5	8	14	7.2	999.6
3.0	17.0	3	4	12	4	5	12	5	9	16	7.1	980.5
4.0	16.0	3	5	13	4	5	13	5	9	16	7.0	961.4
5.0	15.0	3	5	14	4	5	13	5	9	16	6.9	942.2
6.0	14.0	3	5	14	4	6	15	5	9	17	6.8	923.1
7.0	13.0	3	5	15	4	6	15	5	9	17	6.8	904.0
8.0	12.0	3	5	15	4	6	15	5	9	17	6.7	884.8
9.0	11.0	3	5	15	4	5	15	5	9	18	6.6	865.7
10.0	10.0	3	5	15	4	5	15	5	9	18	6.5	846.6
11.0	9.0	3	5	16	4	5	15	5	9	18	6.4	827.5
12.0	8.0	3	5	16	4	5	15	5	9	18	6.4	808.3
13.0	7.0	3	5	16	4	5	16	5	9	18	6.3	789.2
14.0	6.0	3	5	16	4	5	16	5	9	18	6.2	770.1
15.0	5.0	3	5	16	4	4	15	5	9	18	6.1	750.9
16.0	4.0	4	6	17	5	7	17	5	9	18	6.1	731.8
17.0	3.0	4	6	17	5	7	17	5	8	17	6.0	712.7
18.0	2.0	4	6	17	5	7	17	5	8	17	5.9	693.6
19.0	1.0	4	6	17	5	6	17	5	8	17	5.8	674.4
WL = 21.0												
1.0	20.0	3	2	9	4	3	9	4	5	10	7.7	1070.6
2.0	19.0	3	3	10	4	4	11	4	6	12	7.6	1051.5
3.0	18.0	3	4	12	4	4	12	4	6	13	7.5	1032.4
4.0	17.0	3	4	12	4	5	13	4	6	13	7.4	1013.3
5.0	16.0	3	5	14	4	5	14	4	7	15	7.4	994.1
6.0	15.0	3	5	14	4	5	14	4	7	15	7.3	975.0
7.0	14.0	3	5	15	4	6	15	4	7	15	7.2	955.9
8.0	13.0	3	5	15	4	5	15	4	7	16	7.1	936.7
9.0	12.0	3	5	15	4	5	15	4	7	16	7.0	917.6
10.0	11.0	3	5	16	4	5	15	4	7	16	7.0	898.5
11.0	10.0	3	5	16	4	5	15	5	9	18	6.9	879.4
12.0	9.0	3	5	16	4	5	16	5	9	18	6.8	860.2
13.0	8.0	3	5	16	4	5	16	5	9	18	6.7	841.1
14.0	7.0	3	5	16	4	5	16	5	9	19	6.7	822.0
15.0	6.0	3	4	15	4	5	16	5	9	19	6.6	802.8
16.0	5.0	3	4	15	4	4	15	5	9	19	6.5	783.7
17.0	4.0	3	4	16	4	4	15	5	8	18	6.4	764.6
18.0	3.0	3	4	16	4	4	15	5	8	18	6.3	745.5
19.0	2.0	3	3	15	4	4	15	5	8	18	6.2	726.3
20.0	1.0	3	3	15	5	6	17	5	8	18	6.1	707.2
WL = 22.0												
1.0	21.0	3	2	9	4	3	10	4	5	11	8.2	1122.5
2.0	20.0	3	3	11	4	4	11	4	5	11	8.1	1103.4
3.0	19.0	3	3	11	4	4	12	4	6	13	8.0	1084.3
4.0	18.0	3	4	13	4	5	13	4	6	13	7.9	1065.2
5.0	17.0	3	4	13	4	5	14	4	7	15	7.8	1046.0

TABLE U (CONT)

4240B PRECISION BALANCE NETWORK SETTINGS FOR MIXED 22– AND 24–GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68 F

22–GAUGE ADJACENT TO REPEATER

LENGTH(KFT) 22-GA	24-GA	4240B BALANCE NETWORK SETTINGS BY TERMINATION 900 + 2.16 R1	R2	Z	600 + 2.16 R1	R2	Z	TELSET (35MA) R1	R2	Z	1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
WL = 22.0												
6.0	16.0	3	5	14	4	5	14	4	7	15	7.7	1026.9
7.0	15.0	3	5	15	4	6	15	4	7	16	7.6	1007.8
8.0	14.0	3	5	15	4	5	15	4	7	16	7.6	988.6
9.0	13.0	3	5	15	4	5	15	4	7	16	7.5	969.5
10.0	12.0	3	4	15	4	5	15	4	7	16	7.4	950.4
11.0	11.0	3	4	15	4	5	16	4	7	17	7.3	931.2
12.0	10.0	3	4	15	4	5	16	4	7	17	7.3	912.1
13.0	9.0	3	4	15	4	5	16	4	6	16	7.2	893.0
14.0	8.0	3	4	15	4	5	16	4	6	16	7.1	873.9
15.0	7.0	3	4	16	4	5	16	4	6	16	7.0	854.7
16.0	6.0	3	4	16	4	4	15	4	6	16	7.0	835.6
17.0	5.0	3	3	15	4	4	15	4	6	16	6.9	816.5
18.0	4.0	3	3	15	4	4	15	5	8	18	6.8	797.3
19.0	3.0	3	3	15	4	3	15	5	8	18	6.7	778.2
20.0	2.0	3	3	15	4	3	15	5	8	18	6.6	759.1
21.0	1.0	3	3	15	4	3	15	5	8	18	6.5	740.0
WL = 23.0												
1.0	22.0	3	2	9	4	3	10	4	4	10	8.6	1174.4
2.0	21.0	3	2	10	4	4	11	4	5	11	8.5	1155.3
3.0	20.0	3	3	11	4	4	12	4	6	13	8.4	1136.2
4.0	19.0	3	4	13	4	5	13	4	6	13	8.3	1117.0
5.0	18.0	3	4	13	4	5	14	4	6	14	8.2	1097.9
6.0	17.0	3	4	14	4	5	14	4	7	15	8.2	1078.8
7.0	16.0	3	4	14	4	5	15	4	7	16	8.1	1059.7
8.0	15.0	3	4	14	4	5	15	4	7	16	8.0	1040.5
9.0	14.0	3	4	15	4	5	15	4	7	16	7.9	1021.4
10.0	13.0	3	4	15	4	5	15	4	6	16	7.9	1002.3
11.0	12.0	3	4	15	4	5	16	4	6	16	7.8	983.1
12.0	11.0	3	4	15	4	5	16	4	6	16	7.7	964.0
13.0	10.0	2	3	15	4	5	16	4	6	16	7.6	944.9
14.0	9.0	2	3	15	4	5	16	4	6	16	7.6	925.8
15.0	8.0	3	3	15	4	5	16	4	6	16	7.5	906.6
16.0	7.0	3	3	15	4	4	15	4	6	16	7.4	887.5
17.0	6.0	3	3	15	4	4	16	4	6	16	7.3	868.4
18.0	5.0	3	3	15	4	3	15	4	6	16	7.2	849.2
19.0	4.0	3	3	15	4	3	15	4	6	16	7.1	830.1
20.0	3.0	3	3	15	4	3	15	4	5	15	7.1	811.0
21.0	2.0	3	3	15	4	3	15	4	5	15	7.0	791.9
22.0	1.0	3	3	15	4	3	15	5	8	18	6.9	772.7
WL = 24.0												
1.0	23.0	3	2	9	4	3	10	4	4	10	9.1	1226.3
2.0	22.0	3	2	10	4	4	11	4	5	11	9.0	1207.2
3.0	21.0	3	3	11	4	4	12	4	5	12	8.9	1188.1
4.0	20.0	3	3	12	4	5	13	4	6	14	8.8	1168.9
5.0	19.0	3	4	13	4	5	14	4	6	14	8.7	1149.8
6.0	18.0	3	4	14	4	5	14	4	6	14	8.6	1130.7
7.0	17.0	3	4	14	4	5	15	4	6	15	8.5	1111.6
8.0	16.0	2	3	14	4	5	15	4	6	15	8.5	1092.4
9.0	15.0	2	3	14	4	5	15	4	6	15	8.4	1073.3

TABLE U (CONT)

4240B PRECISION BALANCE NETWORK SETTINGS FOR MIXED 22– AND 24–GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68 F

22–GAUGE ADJACENT TO REPEATER

LENGTH(KFT) 22-GA	LENGTH(KFT) 24-GA	4240B BALANCE NETWORK SETTINGS BY TERMINATION						1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
		900 + 2.16			600 + 2.16			TELSET (35MA)				
		R1	R2	Z	R1	R2	Z	R1	R2	Z		
WL = 24.0												
10.0	14.0	2	3	14	3	3	14	4	6	16	8.3	1054.2
11.0	13.0	2	3	14	4	5	16	4	6	16	8.2	1035.0
12.0	12.0	2	2	14	4	5	16	4	6	16	8.2	1015.9
13.0	11.0	2	2	14	4	5	16	4	6	16	8.1	996.8
14.0	10.0	2	2	14	4	5	16	4	6	16	8.0	977.7
15.0	9.0	2	2	14	4	4	15	4	6	16	7.9	958.5
16.0	8.0	2	2	14	4	4	16	4	6	16	7.8	939.4
17.0	7.0	3	3	15	4	4	16	4	5	16	7.8	920.3
18.0	6.0	2	1	14	4	3	15	4	5	16	7.7	901.1
19.0	5.0	2	1	14	4	3	15	4	5	16	7.6	882.0
20.0	4.0	2	1	14	4	3	15	4	5	16	7.5	862.9
21.0	3.0	2	1	14	4	3	15	4	5	16	7.4	843.7
22.0	2.0	3	2	15	4	3	15	4	5	16	7.3	824.6
23.0	1.0	3	2	15	4	3	15	4	5	16	7.2	805.5

TABLE V

4240B PRECISION BALANCE NETWORK SETTINGS FOR MIXED 26– AND 22–GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68 F

26–GAUGE ADJACENT TO REPEATER

LENGTH(KFT)		4240B BALANCE NETWORK SETTINGS BY TERMINATION									1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
26-GA	22-GA	900 + 2.16			600 + 2.16			TELSET (35MA)				
		R1	R2	Z	R1	R2	Z	R1	R2	Z		
WL = 7.0												
5.0	2.0	7	15	12	7	12	6	7	12	1	2.5	482.2
6.0	1.0	6	8	0	7	13	8	7	13	3	2.7	532.8
WL = 8.0												
4.0	4.0	6	7	2	7	13	10	7	13	6	2.6	464.4
5.0	3.0	6	8	2	7	13	9	7	14	8	2.8	515.0
6.0	2.0	6	8	1	7	14	11	7	14	7	3.0	565.5
7.0	1.0	6	8	1	7	15	14	7	15	10	3.2	616.1
WL = 9.0												
3.0	6.0	6	8	6	7	14	15	7	14	11	2.7	446.6
4.0	5.0	6	8	5	7	14	14	7	15	13	2.9	497.2
5.0	4.0	6	8	4	7	14	13	7	15	12	3.1	547.7
6.0	3.0	6	8	3	7	14	12	7	15	12	3.3	598.3
7.0	2.0	6	9	4	7	15	14	7	15	11	3.5	648.9
8.0	1.0	6	9	3	6	6	0	7	15	11	3.6	699.4
WL = 10.0												
1.0	9.0	6	11	15	6	5	9	7	15	17	2.5	378.2
2.0	8.0	6	9	10	6	3	5	7	15	16	2.8	428.8
3.0	7.0	6	8	7	6	2	2	7	15	15	3.0	479.4
4.0	6.0	6	8	6	6	2	1	7	15	14	3.2	529.9
5.0	5.0	6	8	5	6	3	0	7	15	13	3.4	580.5
6.0	4.0	6	8	4	6	4	0	7	15	12	3.5	631.1
7.0	3.0	6	9	5	6	5	0	7	15	12	3.7	681.6
8.0	2.0	6	9	4	6	6	1	7	15	12	3.9	732.2
9.0	1.0	6	10	6	6	6	0	7	15	11	4.1	782.8
WL = 11.0												
1.0	10.0	6	11	16	6	6	11	7	15	18	2.8	411.0
2.0	9.0	6	10	13	6	4	7	7	15	17	3.1	461.6
3.0	8.0	6	9	10	6	3	4	7	15	16	3.3	512.1
4.0	7.0	6	8	7	6	3	2	7	15	15	3.5	562.7
5.0	6.0	6	8	6	6	3	1	7	15	14	3.7	613.3
6.0	5.0	6	8	5	6	4	0	7	15	13	3.9	663.8
7.0	4.0	6	9	6	6	5	1	7	15	13	4.0	714.4
8.0	3.0	6	9	5	6	6	1	6	8	1	4.2	765.0
9.0	2.0	6	10	7	6	7	2	6	9	3	4.4	815.5
10.0	1.0	5	6	1	6	7	2	6	9	3	4.6	866.1
WL = 12.0												
1.0	11.0	5	7	12	6	7	12	6	9	11	3.2	443.7
2.0	10.0	5	5	8	6	5	8	7	15	17	3.4	494.3
3.0	9.0	5	4	5	6	4	6	7	15	16	3.6	544.9
4.0	8.0	5	3	3	6	4	4	7	15	15	3.8	595.5
5.0	7.0	5	3	1	6	4	2	6	6	1	4.0	646.0
6.0	6.0	5	3	0	6	4	1	6	7	2	4.2	696.6
7.0	5.0	5	4	1	6	5	1	6	7	1	4.4	747.2
8.0	4.0	5	4	0	6	6	2	6	8	2	4.5	797.7
9.0	3.0	5	5	1	6	7	3	6	9	3	4.7	848.3
10.0	2.0	5	5	1	6	7	2	6	9	3	4.9	898.9

TABLE V (CONT)

4240B PRECISION BALANCE NETWORK SETTINGS FOR MIXED 26– AND 22–GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68 F

26–GAUGE ADJACENT TO REPEATER

LENGTH(KFT) 26-GA	22-GA	4240B BALANCE NETWORK SETTINGS BY TERMINATION 900 + 2.16 R1	R2	Z	600 + 2.16 R1	R2	Z	TELSET (35MA) R1	R2	Z	1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
WL = 12.0												
11.0	1.0	5	6	2	6	8	4	6	10	5	5.1	949.4
WL = 13.0												
1.0	12.0	5	7	13	6	8	14	6	10	14	3.5	476.5
2.0	11.0	5	5	9	6	6	10	6	8	9	3.7	527.1
3.0	10.0	5	4	6	6	5	7	6	7	6	3.9	577.7
4.0	9.0	5	3	4	6	4	4	6	7	5	4.1	628.2
5.0	8.0	5	3	2	6	4	3	6	7	4	4.3	678.8
6.0	7.0	5	3	1	6	5	3	6	7	3	4.5	729.4
7.0	6.0	5	3	0	6	5	2	6	8	3	4.7	779.9
8.0	5.0	5	4	1	6	6	2	6	8	3	4.9	830.5
9.0	4.0	5	4	0	6	7	3	6	9	4	5.0	881.1
10.0	3.0	5	5	1	6	7	3	6	9	4	5.2	931.6
11.0	2.0	5	5	1	6	8	4	6	10	6	5.4	982.2
12.0	1.0	5	6	2	6	8	4	6	10	6	5.6	1032.8
WL = 14.0												
1.0	13.0	5	7	14	6	8	14	6	10	14	3.8	509.3
2.0	12.0	5	5	10	6	6	10	6	8	10	4.1	559.8
3.0	11.0	5	4	7	6	5	8	6	7	7	4.3	610.4
4.0	10.0	5	3	4	6	4	5	6	7	6	4.5	661.0
5.0	9.0	5	2	2	6	4	3	6	7	4	4.7	711.6
6.0	8.0	5	3	2	6	5	3	6	7	3	4.8	762.1
7.0	7.0	5	3	1	6	5	2	6	8	4	5.0	812.7
8.0	6.0	5	3	0	6	6	3	6	8	3	5.2	863.3
9.0	5.0	5	4	1	6	6	2	6	9	5	5.4	913.8
10.0	4.0	5	5	2	6	7	3	6	9	4	5.6	964.4
11.0	3.0	5	5	1	6	8	4	6	10	6	5.8	1015.0
12.0	2.0	5	5	1	5	4	0	6	10	6	5.9	1065.5
13.0	1.0	5	6	3	5	4	0	6	10	6	6.2	1116.1
WL = 15.0												
1.0	14.0	5	7	14	6	8	15	6	10	15	4.2	542.0
2.0	13.0	5	5	10	6	6	11	6	9	12	4.4	592.6
3.0	12.0	5	3	7	6	5	8	6	7	8	4.6	643.2
4.0	11.0	5	2	4	6	4	5	6	7	6	4.8	693.7
5.0	10.0	5	2	3	6	4	4	6	7	5	5.0	744.3
6.0	9.0	5	2	1	6	5	4	6	7	4	5.2	794.9
7.0	8.0	5	2	0	6	5	3	6	7	3	5.4	845.5
8.0	7.0	5	3	1	6	6	3	6	8	4	5.6	896.0
9.0	6.0	5	3	0	6	7	4	6	9	5	5.7	946.6
10.0	5.0	5	4	1	6	7	3	6	9	5	5.9	997.2
11.0	4.0	5	5	2	5	3	0	6	9	5	6.1	1047.7
12.0	3.0	5	5	2	5	4	0	6	10	7	6.3	1098.3
13.0	2.0	5	5	2	5	4	0	5	6	1	6.5	1148.9
14.0	1.0	4	3	0	5	4	0	5	6	1	6.7	1199.4
WL = 16.0												
1.0	15.0	4	4	12	5	3	11	6	10	16	4.5	574.8
2.0	14.0	4	1	8	5	0	7	6	9	13	4.7	625.4
3.0	13.0	4	0	5	5	0	5	6	8	10	5.0	675.9

TABLE V (CONT)

4240B PRECISION BALANCE NETWORK SETTINGS FOR MIXED 26– AND 22–GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68 F

26–GAUGE ADJACENT TO REPEATER

LENGTH(KFT) 26-GA	22-GA	4240B BALANCE NETWORK SETTINGS BY TERMINATION 900 + 2.16 R1	R2	Z	600 + 2.16 R1	R2	Z	TELSET (35MA) R1	R2	Z	1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
WL = 16.0												
4.0	12.0	5	2	5	5	0	3	6	7	7	5.2	726.5
5.0	11.0	5	2	3	5	0	1	6	7	6	5.4	777.1
6.0	10.0	5	2	2	5	0	0	6	7	4	5.6	827.7
7.0	9.0	5	2	1	6	5	3	6	7	4	5.7	878.2
8.0	8.0	5	2	0	6	6	3	6	8	4	5.9	928.8
9.0	7.0	5	3	0	5	2	0	6	8	4	6.1	979.4
10.0	6.0	5	4	1	5	3	0	6	9	5	6.3	1029.9
11.0	5.0	5	4	1	5	3	0	6	9	5	6.4	1080.5
12.0	4.0	5	5	2	5	3	0	5	5	0	6.6	1131.1
13.0	3.0	4	3	0	5	4	0	5	5	0	6.8	1181.6
14.0	2.0	4	3	0	5	4	0	5	6	2	7.0	1232.2
15.0	1.0	4	3	0	5	4	0	5	6	2	7.2	1282.8
WL = 17.0												
1.0	16.0	4	3	12	5	3	12	6	10	16	4.9	607.6
2.0	15.0	4	1	8	5	1	8	6	8	12	5.1	658.1
3.0	14.0	4	0	5	5	0	5	6	7	9	5.3	708.7
4.0	13.0	4	0	4	5	0	3	6	7	7	5.5	759.3
5.0	12.0	4	0	2	5	0	2	6	7	6	5.7	809.8
6.0	11.0	5	1	1	5	0	0	6	7	5	5.9	860.4
7.0	10.0	5	1	0	5	0	0	6	7	4	6.1	911.0
8.0	9.0	5	2	0	5	1	0	6	8	5	6.3	961.6
9.0	8.0	5	3	1	5	2	0	6	8	4	6.4	1012.1
10.0	7.0	5	3	0	5	2	0	5	4	0	6.6	1062.7
11.0	6.0	5	4	1	5	3	0	5	4	0	6.8	1113.3
12.0	5.0	4	2	0	5	3	0	5	5	0	7.0	1163.8
13.0	4.0	4	2	0	5	4	0	5	5	0	7.2	1214.4
14.0	3.0	4	3	0	5	4	0	5	6	2	7.3	1265.0
15.0	2.0	4	3	0	5	4	0	5	6	2	7.5	1315.5
16.0	1.0	4	3	0	5	4	0	5	6	2	7.8	1366.1
WL = 18.0												
1.0	17.0	4	3	12	5	3	12	6	10	16	5.2	640.3
2.0	16.0	4	0	8	5	1	8	6	8	12	5.5	690.9
3.0	15.0	4	0	6	5	0	6	5	2	5	5.7	741.5
4.0	14.0	4	0	4	5	0	4	5	1	3	5.9	792.0
5.0	13.0	4	0	2	5	0	2	5	1	1	6.1	842.6
6.0	12.0	4	0	1	5	0	1	5	1	0	6.3	893.2
7.0	11.0	4	0	0	5	0	0	5	2	0	6.5	943.7
8.0	10.0	4	0	0	5	1	0	5	3	0	6.6	994.3
9.0	9.0	5	2	0	5	2	0	5	3	0	6.8	1044.9
10.0	8.0	5	3	0	5	2	0	5	4	0	7.0	1095.5
11.0	7.0	4	2	0	5	3	0	5	4	0	7.2	1146.0
12.0	6.0	4	2	0	5	3	0	5	5	1	7.3	1196.6
13.0	5.0	4	2	0	5	3	0	5	5	1	7.5	1247.2
14.0	4.0	4	2	0	5	4	0	5	5	1	7.7	1297.7
15.0	3.0	4	3	0	5	4	0	5	5	1	7.9	1348.3
16.0	2.0	4	3	0	5	4	1	5	6	2	8.1	1398.9
17.0	1.0	4	3	0	5	5	2	5	6	2	8.3	1449.4
WL = 19.0												

TABLE V (CONT)

4240B PRECISION BALANCE NETWORK SETTINGS FOR MIXED 26– AND 22–GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68 F

26–GAUGE ADJACENT TO REPEATER

LENGTH(KFT) 26-GA	22-GA	4240B BALANCE NETWORK SETTINGS BY TERMINATION 900 + 2.16 R1	R2	Z	600 + 2.16 R1	R2	Z	TELSET (35MA) R1	R2	Z	1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
WL = 19.0												
1.0	18.0	4	3	12	5	3	12	5	6	13	5.6	673.1
2.0	17.0	4	0	8	5	0	8	5	3	8	5.8	723.7
3.0	16.0	4	0	6	5	0	6	5	2	6	6.0	774.2
4.0	15.0	4	0	4	5	0	4	5	1	3	6.3	824.8
5.0	14.0	4	0	3	5	0	2	5	1	1	6.5	875.4
6.0	13.0	4	0	1	5	0	1	5	1	0	6.7	925.9
7.0	12.0	4	0	0	5	0	0	5	2	0	6.8	976.5
8.0	11.0	4	0	0	5	1	0	5	3	0	7.0	1027.1
9.0	10.0	4	0	0	5	2	0	5	3	0	7.2	1077.7
10.0	9.0	4	1	0	5	2	0	5	4	0	7.4	1128.2
11.0	8.0	4	1	0	5	3	0	5	4	0	7.5	1178.8
12.0	7.0	4	2	0	5	3	0	5	4	0	7.7	1229.4
13.0	6.0	4	2	0	5	3	0	5	5	1	7.9	1279.9
14.0	5.0	4	2	0	5	4	1	5	5	1	8.0	1330.5
15.0	4.0	4	2	0	5	4	1	5	5	1	8.2	1381.1
16.0	3.0	4	2	0	5	4	1	5	5	1	8.4	1431.6
17.0	2.0	4	3	0	5	4	1	4	4	0	8.6	1482.2
18.0	1.0	4	3	0	4	3	0	4	4	0	8.9	1532.8
WL = 20.0												
1.0	19.0	4	2	12	5	3	12	5	5	13	5.9	705.9
2.0	18.0	4	0	8	5	0	8	5	3	9	6.2	756.4
3.0	17.0	4	0	6	5	0	6	5	2	6	6.4	807.0
4.0	16.0	4	0	5	5	0	4	5	1	3	6.6	857.6
5.0	15.0	4	0	3	5	0	2	5	0	1	6.8	908.1
6.0	14.0	5	0	1	5	0	1	5	1	0	7.0	958.7
7.0	13.0	4	0	0	5	0	0	5	2	0	7.2	1009.3
8.0	12.0	4	0	0	5	1	0	5	2	0	7.4	1059.8
9.0	11.0	4	0	0	5	1	0	5	3	0	7.6	1110.4
10.0	10.0	4	1	0	5	2	0	5	3	0	7.7	1161.0
11.0	9.0	4	1	0	5	3	0	5	4	0	7.9	1211.6
12.0	8.0	4	2	0	5	3	0	5	4	0	8.1	1262.1
13.0	7.0	4	2	0	5	3	0	5	4	0	8.2	1312.7
14.0	6.0	4	2	0	5	3	0	5	5	1	8.4	1363.3
15.0	5.0	4	2	0	5	4	1	5	5	1	8.6	1413.8
16.0	4.0	4	2	0	5	4	1	5	5	1	8.8	1464.4
17.0	3.0	4	2	0	4	2	0	4	3	0	9.0	1515.0
18.0	2.0	4	2	0	4	2	0	4	3	0	9.2	1565.5
19.0	1.0	4	2	0	4	2	0	4	3	0	9.4	1616.1
WL = 21.0												
1.0	20.0	3	0	11	4	0	11	5	5	13	6.3	738.6
2.0	19.0	4	0	9	5	0	8	5	3	9	6.6	789.2
3.0	18.0	4	0	7	5	0	6	5	1	6	6.8	839.8
4.0	17.0	4	0	5	5	0	4	5	0	3	7.0	890.3
5.0	16.0	4	0	3	5	0	3	5	0	1	7.2	940.9
6.0	15.0	5	0	1	5	0	1	5	0	0	7.4	991.5
7.0	14.0	5	0	0	5	0	0	5	1	0	7.6	1042.0
8.0	13.0	4	0	0	5	0	0	5	2	0	7.8	1092.6
9.0	12.0	4	0	0	5	1	0	5	3	0	7.9	1143.2
10.0	11.0	4	0	0	5	2	0	5	3	0	8.1	1193.7

TABLE V (CONT)

4240B PRECISION BALANCE NETWORK SETTINGS FOR MIXED 26– AND 22–GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68 F

26–GAUGE ADJACENT TO REPEATER

LENGTH(KFT) 26-GA	22-GA	4240B BALANCE NETWORK SETTINGS BY TERMINATION 900 + 2.16 R1	R2	Z	600 + 2.16 R1	R2	Z	TELSET (35MA) R1	R2	Z	1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
WL = 21.0												
11.0	10.0	4	1	0	5	2	0	5	4	0	8.3	1244.3
12.0	9.0	4	1	0	5	3	0	5	4	0	8.4	1294.9
13.0	8.0	4	2	0	5	3	0	5	4	0	8.6	1345.5
14.0	7.0	4	2	0	5	3	0	5	4	0	8.8	1396.0
15.0	6.0	4	2	0	5	4	1	5	5	1	9.0	1446.6
16.0	5.0	4	2	0	5	4	1	4	3	0	9.1	1497.2
17.0	4.0	4	2	0	4	2	0	4	3	0	9.3	1547.7
18.0	3.0	4	2	0	4	2	0	4	3	0	9.5	1598.3
19.0	2.0	4	2	0	4	2	0	4	3	0	9.7	1648.9
20.0	1.0	4	2	0	4	2	0	4	3	0	10.0	1699.4
WL = 22.0												
1.0	21.0	3	0	11	4	0	11	5	5	13	6.7	771.4
2.0	20.0	4	0	9	5	0	8	5	3	9	6.9	822.0
3.0	19.0	4	0	7	5	0	6	5	1	6	7.2	872.5
4.0	18.0	4	0	5	5	0	4	5	0	3	7.4	923.1
5.0	17.0	4	0	3	5	0	3	5	0	1	7.6	973.7
6.0	16.0	5	0	2	5	0	1	5	0	0	7.8	1024.2
7.0	15.0	5	0	0	5	0	0	5	1	0	8.0	1074.8
8.0	14.0	4	0	0	5	0	0	5	2	0	8.1	1125.4
9.0	13.0	4	0	0	5	1	0	5	3	0	8.3	1175.9
10.0	12.0	4	0	0	5	2	0	5	3	0	8.5	1226.5
11.0	11.0	4	1	0	5	2	0	5	3	0	8.6	1277.1
12.0	10.0	4	1	0	5	3	0	5	4	0	8.8	1327.7
13.0	9.0	4	2	0	5	3	0	5	4	0	9.0	1378.2
14.0	8.0	4	2	0	5	3	0	5	4	0	9.2	1428.8
15.0	7.0	4	2	0	5	3	0	4	3	0	9.3	1479.4
16.0	6.0	4	2	0	4	2	0	4	3	0	9.5	1529.9
17.0	5.0	4	2	0	4	2	0	4	3	0	9.7	1580.5
18.0	4.0	4	2	0	4	2	0	4	3	0	9.9	1631.1
19.0	3.0	4	2	0	4	2	0	4	3	0	10.1	1681.6
20.0	2.0	4	2	0	4	2	0	4	3	0	10.3	1732.2
21.0	1.0	3	1	0	4	2	0	4	3	0	10.5	1782.8
WL = 23.0												
1.0	22.0	3	0	11	4	0	11	5	5	13	7.0	804.2
2.0	21.0	4	0	9	5	0	9	5	2	9	7.3	854.7
3.0	20.0	4	0	7	5	0	6	5	1	6	7.5	905.3
4.0	19.0	4	0	5	5	0	4	5	0	3	7.7	955.9
5.0	18.0	5	0	3	5	0	3	5	0	2	8.0	1006.4
6.0	17.0	5	0	2	5	0	1	5	0	0	8.1	1057.0
7.0	16.0	5	0	0	5	0	0	5	1	0	8.3	1107.6
8.0	15.0	4	0	0	5	0	0	5	2	0	8.5	1158.1
9.0	14.0	4	0	0	5	1	0	5	2	0	8.7	1208.7
10.0	13.0	4	0	0	5	2	0	5	3	0	8.9	1259.3
11.0	12.0	4	1	0	5	2	0	5	3	0	9.0	1309.8
12.0	11.0	4	1	0	5	3	0	5	4	0	9.2	1360.4
13.0	10.0	4	1	0	5	3	0	5	4	0	9.4	1411.0
14.0	9.0	4	2	0	5	3	0	5	4	0	9.5	1461.6
15.0	8.0	4	2	0	5	3	0	4	3	0	9.7	1512.1
16.0	7.0	4	2	0	4	2	0	4	3	0	9.9	1562.7

TABLE V (CONT)

4240B PRECISION BALANCE NETWORK SETTINGS FOR MIXED 26– AND 22–GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68 F

26–GAUGE ADJACENT TO REPEATER

LENGTH(KFT) 26-GA	22-GA	4240B BALANCE NETWORK SETTINGS BY TERMINATION 900 + 2.16 R1	R2	Z	600 + 2.16 R1	R2	Z	TELSET (35MA) R1	R2	Z	1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
WL = 23.0												
17.0	6.0	4	2	0	4	2	0	4	3	0	10.1	1613.3
18.0	5.0	4	2	0	4	2	0	4	3	0	10.3	1663.8
19.0	4.0	4	2	0	4	2	0	4	3	0	10.4	1714.4
20.0	3.0	4	2	0	4	2	0	4	3	0	10.6	1765.0
21.0	2.0	3	1	0	4	2	0	4	3	0	10.9	1815.5
22.0	1.0	3	1	0	4	2	0	4	3	0	11.1	1866.1
WL = 24.0												
1.0	23.0	3	0	11	4	0	11	4	2	11	7.4	836.9
2.0	22.0	4	0	9	5	0	9	4	0	8	7.7	887.5
3.0	21.0	4	0	7	5	0	7	5	0	5	7.9	938.1
4.0	20.0	4	0	5	5	0	5	5	0	3	8.1	988.6
5.0	19.0	5	0	3	5	0	3	5	0	2	8.3	1039.2
6.0	18.0	5	0	2	5	0	1	5	0	0	8.5	1089.8
7.0	17.0	5	0	0	5	0	0	5	1	0	8.7	1140.3
8.0	16.0	5	0	0	5	0	0	5	1	0	8.9	1190.9
9.0	15.0	4	0	0	5	1	0	5	2	0	9.1	1241.5
10.0	14.0	4	0	0	5	2	0	5	3	0	9.2	1292.0
11.0	13.0	4	1	0	5	2	0	5	3	0	9.4	1342.6
12.0	12.0	4	1	0	5	3	0	5	4	0	9.6	1393.2
13.0	11.0	4	1	0	5	3	0	5	4	0	9.7	1443.7
14.0	10.0	4	2	0	5	3	0	4	3	0	9.9	1494.3
15.0	9.0	4	2	0	5	3	0	4	3	0	10.1	1544.9
16.0	8.0	4	2	0	4	2	0	4	3	0	10.3	1595.5
17.0	7.0	4	2	0	4	2	0	4	3	0	10.4	1646.0
18.0	6.0	4	2	0	4	2	0	4	3	0	10.6	1696.6
19.0	5.0	4	2	0	4	2	0	4	3	0	10.8	1747.2
20.0	4.0	4	2	0	4	2	0	4	3	0	11.0	1797.7
21.0	3.0	4	2	0	4	2	0	4	3	0	11.2	1848.3

TABLE W

4240B PRECISION BALANCE NETWORK SETTINGS FOR MIXED 22– AND 26–GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68 F

22–GAUGE ADJACENT TO REPEATER

LENGTH(KFT) 22-GA	26-GA	4240B BALANCE NETWORK SETTINGS BY TERMINATION 900 + 2.16 R1	R2	Z	600 + 2.16 R1	R2	Z	TELSET (35MA) R1	R2	Z	1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
WL = 7.0												
1.0	6.0	6	9	3	7	15	14	7	15	10	2.7	532.8
2.0	5.0	6	10	6	7	15	16	7	15	12	2.5	482.2
WL = 8.0												
1.0	7.0	6	11	8	7	15	14	7	15	11	3.2	616.1
2.0	6.0	6	12	11	7	15	16	7	15	12	3.0	565.5
3.0	5.0	6	12	12	7	15	17	7	15	13	2.8	515.0
4.0	4.0	6	12	13	7	15	18	7	15	14	2.6	464.4
WL = 9.0												
1.0	8.0	6	12	11	6	8	4	7	15	12	3.6	699.4
2.0	7.0	6	12	12	6	9	8	7	15	13	3.5	648.9
3.0	6.0	6	13	15	6	9	9	7	15	14	3.3	598.3
4.0	5.0	6	13	16	6	10	12	7	15	15	3.1	547.7
5.0	4.0	6	13	17	6	10	13	7	15	16	2.9	497.2
6.0	3.0	6	13	17	6	9	12	7	15	16	2.7	446.6
WL = 10.0												
1.0	9.0	6	12	11	6	9	6	6	10	5	4.1	782.8
2.0	8.0	6	13	15	6	10	10	6	11	9	3.9	732.2
3.0	7.0	6	13	16	6	11	13	6	12	12	3.7	681.6
4.0	6.0	6	14	19	6	11	14	6	12	13	3.5	631.1
5.0	5.0	6	14	20	6	11	15	6	12	14	3.4	580.5
6.0	4.0	6	14	20	6	11	16	6	12	14	3.2	529.9
7.0	3.0	6	14	21	6	10	15	6	11	13	3.0	479.4
8.0	2.0	6	13	19	6	10	15	7	15	18	2.8	428.8
9.0	1.0	6	13	19	6	9	15	7	15	18	2.5	378.2
WL = 11.0												
1.0	10.0	5	8	6	6	10	8	6	11	8	4.6	866.1
2.0	9.0	5	9	9	6	11	12	6	12	12	4.4	815.5
3.0	8.0	6	14	19	6	11	13	6	13	15	4.2	765.0
4.0	7.0	6	14	19	6	12	16	6	13	16	4.0	714.4
5.0	6.0	6	14	20	6	12	17	6	13	16	3.9	663.8
6.0	5.0	6	14	21	6	12	17	6	13	17	3.7	613.3
7.0	4.0	6	14	21	6	12	18	6	13	18	3.5	562.7
8.0	3.0	6	14	21	6	11	17	6	12	16	3.3	512.1
9.0	2.0	6	14	22	6	10	16	6	12	16	3.1	461.6
10.0	1.0	6	13	20	6	10	17	6	11	15	2.8	411.0
WL = 12.0												
1.0	11.0	5	8	6	6	10	9	6	12	11	5.1	949.4
2.0	10.0	5	9	9	6	11	12	6	12	12	4.9	898.9
3.0	9.0	5	10	12	6	12	15	6	13	15	4.7	848.3
4.0	8.0	5	11	15	6	12	16	6	14	19	4.5	797.7
5.0	7.0	5	11	16	6	13	19	6	14	19	4.4	747.2
6.0	6.0	5	11	17	6	13	19	6	14	20	4.2	696.6
7.0	5.0	5	11	17	6	12	18	6	13	18	4.0	646.0
8.0	4.0	5	11	18	6	12	19	6	13	19	3.8	595.5
9.0	3.0	5	11	18	6	12	19	6	13	19	3.6	544.9
10.0	2.0	5	10	17	6	11	18	6	12	17	3.4	494.3

TABLE W (CONT)

4240B PRECISION BALANCE NETWORK SETTINGS FOR MIXED 22– AND 26–GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68 F

26–GAUGE ADJACENT TO REPEATER

LENGTH(KFT) 22-GA	26-GA	4240B BALANCE NETWORK SETTINGS BY TERMINATION 900 + 2.16 R1	R2	Z	600 + 2.16 R1	R2	Z	TELSET (35MA) R1	R2	Z	1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
WL = 12.0												
11.0	1.0	5	10	17	6	10	17	6	11	16	3.2	443.7
WL = 13.0												
1.0	12.0	5	8	7	6	11	11	6	12	11	5.6	1032.8
2.0	11.0	5	9	10	6	12	14	6	13	15	5.4	982.2
3.0	10.0	5	10	13	6	12	15	6	13	16	5.2	931.6
4.0	9.0	5	11	15	6	13	18	6	14	19	5.0	881.1
5.0	8.0	5	11	16	6	13	19	6	14	20	4.9	830.5
6.0	7.0	5	11	17	6	13	20	6	14	20	4.7	779.9
7.0	6.0	5	11	18	6	13	20	6	14	21	4.5	729.4
8.0	5.0	5	11	18	6	13	21	6	14	21	4.3	678.8
9.0	4.0	5	11	18	6	13	21	6	14	21	4.1	628.2
10.0	3.0	5	11	19	6	12	20	6	13	20	3.9	577.7
11.0	2.0	5	11	19	6	11	19	6	13	20	3.7	527.1
12.0	1.0	5	10	18	6	11	19	6	12	18	3.5	476.5
WL = 14.0												
1.0	13.0	5	8	7	5	6	4	6	12	12	6.2	1116.1
2.0	12.0	5	9	10	5	8	9	6	13	15	5.9	1065.5
3.0	11.0	5	10	13	5	9	11	6	14	19	5.8	1015.0
4.0	10.0	5	11	16	5	9	13	6	14	19	5.6	964.4
5.0	9.0	5	11	17	5	10	15	6	14	20	5.4	913.8
6.0	8.0	5	11	17	5	10	16	6	14	21	5.2	863.3
7.0	7.0	5	11	18	5	9	15	6	14	21	5.0	812.7
8.0	6.0	5	12	20	5	9	16	6	14	22	4.8	762.1
9.0	5.0	5	11	19	5	9	16	6	14	22	4.7	711.6
10.0	4.0	5	11	19	5	9	17	6	14	22	4.5	661.0
11.0	3.0	5	10	18	6	12	20	6	13	20	4.3	610.4
12.0	2.0	5	10	18	6	11	19	6	13	21	4.1	559.8
13.0	1.0	5	10	18	6	11	19	6	12	19	3.8	509.3
WL = 15.0												
1.0	14.0	4	5	4	5	7	6	5	8	6	6.7	1199.4
2.0	13.0	4	7	8	5	8	9	5	9	9	6.5	1148.9
3.0	12.0	4	8	11	5	9	12	5	10	12	6.3	1098.3
4.0	11.0	4	8	12	5	9	13	5	11	15	6.1	1047.7
5.0	10.0	4	9	14	5	10	15	5	11	16	5.9	997.2
6.0	9.0	4	9	15	5	10	16	5	11	16	5.7	946.6
7.0	8.0	4	9	16	5	10	17	5	11	17	5.6	896.0
8.0	7.0	4	9	16	5	10	17	6	14	22	5.4	845.5
9.0	6.0	4	9	17	5	10	18	6	14	22	5.2	794.9
10.0	5.0	4	9	17	5	9	17	6	14	23	5.0	744.3
11.0	4.0	5	11	20	5	9	17	6	14	23	4.8	693.7
12.0	3.0	5	10	19	5	8	17	6	13	21	4.6	643.2
13.0	2.0	5	10	19	5	8	17	6	13	21	4.4	592.6
14.0	1.0	5	10	19	6	11	20	6	13	21	4.2	542.0
WL = 16.0												
1.0	15.0	4	5	4	5	7	6	5	8	6	7.2	1282.8
2.0	14.0	4	7	8	5	8	9	5	9	10	7.0	1232.2
3.0	13.0	4	8	11	5	9	12	5	10	12	6.8	1181.6

TABLE W (CONT)

4240B PRECISION BALANCE NETWORK SETTINGS FOR MIXED 22– AND 26–GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68 F

26–GAUGE ADJACENT TO REPEATER

LENGTH(KFT)		4240B BALANCE NETWORK SETTINGS BY TERMINATION									1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
		900 + 2.16			600 + 2.16			TELSET (35MA)				
22-GA	26-GA	R1	R2	Z	R1	R2	Z	R1	R2	Z		
WL = 16.0												
4.0	12.0	4	8	12	5	9	13	5	11	15	6.6	1131.1
5.0	11.0	4	9	14	5	10	15	5	11	16	6.4	1080.5
6.0	10.0	4	9	15	5	10	16	5	11	17	6.3	1029.9
7.0	9.0	4	9	16	5	10	17	5	11	17	6.1	979.4
8.0	8.0	4	9	17	5	10	18	5	11	18	5.9	928.8
9.0	7.0	4	9	17	5	10	18	5	11	18	5.7	878.2
10.0	6.0	4	9	18	5	9	17	5	11	19	5.6	827.7
11.0	5.0	4	9	18	5	9	18	5	11	19	5.4	777.1
12.0	4.0	4	8	17	5	9	18	5	10	18	5.2	726.5
13.0	3.0	4	8	17	5	8	17	6	13	22	5.0	675.9
14.0	2.0	4	8	17	5	8	17	6	13	22	4.7	625.4
15.0	1.0	5	9	18	5	7	16	6	12	20	4.5	574.8
WL = 17.0												
1.0	16.0	4	5	4	5	7	6	5	8	7	7.8	1366.1
2.0	15.0	4	6	7	5	8	9	5	9	10	7.5	1315.5
3.0	14.0	4	7	10	5	9	12	5	10	13	7.3	1265.0
4.0	13.0	4	8	12	5	10	15	5	11	15	7.2	1214.4
5.0	12.0	4	9	15	5	10	16	5	11	16	7.0	1163.8
6.0	11.0	4	9	16	5	10	16	5	11	17	6.8	1113.3
7.0	10.0	4	9	16	5	10	17	5	11	18	6.6	1062.7
8.0	9.0	4	9	17	5	10	18	5	11	18	6.4	1012.1
9.0	8.0	4	9	17	5	10	18	5	11	19	6.3	961.6
10.0	7.0	4	9	18	5	10	19	5	11	19	6.1	911.0
11.0	6.0	4	9	18	5	9	18	5	11	19	5.9	860.4
12.0	5.0	4	8	17	5	9	18	5	10	18	5.7	809.8
13.0	4.0	4	8	18	5	8	17	5	10	18	5.5	759.3
14.0	3.0	4	8	18	5	8	17	5	10	18	5.3	708.7
15.0	2.0	4	7	17	5	7	17	6	13	22	5.1	658.1
16.0	1.0	4	7	17	5	7	17	6	13	22	4.9	607.6
WL = 18.0												
1.0	17.0	4	4	3	4	4	3	4	5	3	8.3	1449.4
2.0	16.0	4	6	7	4	6	7	5	9	10	8.1	1398.9
3.0	15.0	4	7	10	4	7	10	5	10	13	7.9	1348.3
4.0	14.0	4	8	12	4	7	11	5	10	14	7.7	1297.7
5.0	13.0	4	9	15	4	8	13	5	11	17	7.5	1247.2
6.0	12.0	4	9	16	4	8	14	5	11	17	7.3	1196.6
7.0	11.0	3	7	14	4	8	15	5	11	18	7.2	1146.0
8.0	10.0	3	8	16	4	8	16	5	11	18	7.0	1095.5
9.0	9.0	3	7	15	4	8	16	5	11	19	6.8	1044.9
10.0	8.0	3	7	16	4	8	17	5	11	19	6.6	994.3
11.0	7.0	3	7	16	4	7	16	5	11	20	6.5	943.7
12.0	6.0	3	7	17	4	7	16	5	11	20	6.3	893.2
13.0	5.0	4	8	18	4	6	16	5	10	19	6.1	842.6
14.0	4.0	4	8	18	5	8	18	5	10	19	5.9	792.0
15.0	3.0	4	7	17	5	8	18	5	10	19	5.7	741.5
16.0	2.0	4	7	17	5	7	17	5	9	18	5.5	690.9
17.0	1.0	4	7	17	5	7	17	5	9	18	5.2	640.3
WL = 19.0												

TABLE W (CONT)

4240B PRECISION BALANCE NETWORK SETTINGS FOR MIXED 22– AND 26–GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68 F

26–GAUGE ADJACENT TO REPEATER

LENGTH(KFT) 22-GA	26-GA	4240B BALANCE NETWORK SETTINGS BY TERMINATION 900 + 2.16 R1	R2	Z	600 + 2.16 R1	R2	Z	TELSET (35MA) R1	R2	Z	1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
WL = 19.0												
1.0	18.0	3	3	2	4	4	3	4	5	3	8.9	1532.8
2.0	17.0	3	4	5	4	6	7	4	7	8	8.6	1482.2
3.0	16.0	3	6	9	4	7	10	4	8	10	8.4	1431.6
4.0	15.0	3	6	10	4	7	11	4	8	12	8.2	1381.1
5.0	14.0	3	7	12	4	8	13	4	9	14	8.0	1330.5
6.0	13.0	3	7	13	4	8	14	4	9	15	7.9	1279.9
7.0	12.0	3	7	14	4	8	15	4	9	16	7.7	1229.4
8.0	11.0	3	7	15	4	8	16	4	9	16	7.5	1178.8
9.0	10.0	3	7	16	4	8	16	4	9	17	7.4	1128.2
10.0	9.0	3	7	16	4	8	17	4	9	17	7.2	1077.7
11.0	8.0	3	7	16	4	7	16	4	9	18	7.0	1027.1
12.0	7.0	3	7	17	4	7	17	5	10	19	6.8	976.5
13.0	6.0	3	6	16	4	7	17	5	10	19	6.7	925.9
14.0	5.0	3	6	16	4	6	16	5	10	19	6.5	875.4
15.0	4.0	3	6	17	4	6	16	5	9	18	6.3	824.8
16.0	3.0	3	5	16	5	8	18	5	9	18	6.0	774.2
17.0	2.0	4	6	17	5	7	17	5	9	18	5.8	723.7
18.0	1.0	4	6	17	5	7	17	5	9	18	5.6	673.1
WL = 20.0												
1.0	19.0	3	2	1	4	4	3	4	5	3	9.4	1616.1
2.0	18.0	3	4	5	4	6	7	4	6	6	9.2	1565.5
3.0	17.0	3	5	8	4	7	10	4	7	9	9.0	1515.0
4.0	16.0	3	6	10	4	7	11	4	8	12	8.8	1464.4
5.0	15.0	3	7	13	4	8	13	4	9	14	8.6	1413.8
6.0	14.0	3	7	14	4	8	14	4	9	15	8.4	1363.3
7.0	13.0	3	7	14	4	8	15	4	9	16	8.2	1312.7
8.0	12.0	3	7	15	4	8	16	4	9	16	8.1	1262.1
9.0	11.0	3	7	16	4	8	16	4	9	17	7.9	1211.6
10.0	10.0	3	7	16	4	8	17	4	9	17	7.7	1161.0
11.0	9.0	3	7	17	4	7	16	4	9	18	7.6	1110.4
12.0	8.0	3	6	16	4	7	17	4	8	17	7.4	1059.8
13.0	7.0	3	6	16	4	7	17	4	8	17	7.2	1009.3
14.0	6.0	3	6	17	4	6	16	4	8	17	7.0	958.7
15.0	5.0	3	5	16	4	6	16	4	7	16	6.8	908.1
16.0	4.0	3	5	16	4	5	16	5	9	18	6.6	857.6
17.0	3.0	3	5	16	4	5	16	5	9	18	6.4	807.0
18.0	2.0	3	5	16	4	4	15	5	9	18	6.2	756.4
19.0	1.0	4	6	17	5	7	17	5	8	17	5.9	705.9
WL = 21.0												
1.0	20.0	3	2	1	4	4	3	4	5	4	10.0	1699.4
2.0	19.0	3	4	5	4	5	6	4	6	7	9.7	1648.9
3.0	18.0	3	5	8	4	7	10	4	7	9	9.5	1598.3
4.0	17.0	3	6	10	4	7	11	4	8	12	9.3	1547.7
5.0	16.0	3	7	13	4	8	14	4	8	13	9.1	1497.2
6.0	15.0	3	7	14	4	8	14	4	9	15	9.0	1446.6
7.0	14.0	3	7	14	4	8	15	4	9	16	8.8	1396.0
8.0	13.0	3	7	15	4	8	16	4	9	17	8.6	1345.5
9.0	12.0	3	7	16	4	8	17	4	9	17	8.4	1294.9
10.0	11.0	3	7	16	4	8	17	4	9	18	8.3	1244.3

TABLE W (CONT)

4240B PRECISION BALANCE NETWORK SETTINGS FOR MIXED 22– AND 26–GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68 F

26–GAUGE ADJACENT TO REPEATER

LENGTH(KFT)		4240B BALANCE NETWORK SETTINGS BY TERMINATION									1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
22-GA	26-GA	900 + 2.16			600 + 2.16			TELSET (35MA)				
		R1	R2	Z	R1	R2	Z	R1	R2	Z		
WL = 21.0												
11.0	10.0	2	6	16	3	6	16	4	8	17	8.1	1193.7
12.0	9.0	3	6	16	4	7	17	4	8	17	7.9	1143.2
13.0	8.0	2	5	16	4	7	17	4	8	17	7.8	1092.6
14.0	7.0	2	5	16	4	6	16	4	8	18	7.6	1042.0
15.0	6.0	3	5	16	4	6	17	4	7	17	7.4	991.5
16.0	5.0	3	5	16	4	5	16	4	7	17	7.2	940.9
17.0	4.0	3	5	16	4	5	16	4	7	17	7.0	890.3
18.0	3.0	3	4	16	4	5	16	5	9	19	6.8	839.8
19.0	2.0	3	4	16	4	4	15	5	8	18	6.6	789.2
20.0	1.0	3	4	16	4	4	15	5	8	18	6.3	738.6
WL = 22.0												
1.0	21.0	3	2	1	4	4	3	3	3	1	10.5	1782.8
2.0	20.0	3	4	5	4	5	6	4	6	7	10.3	1732.2
3.0	19.0	3	5	8	4	7	10	3	6	8	10.1	1681.6
4.0	18.0	3	6	10	4	7	11	4	8	12	9.9	1631.1
5.0	17.0	3	6	12	4	8	14	3	7	12	9.7	1580.5
6.0	16.0	3	7	14	3	6	12	3	7	13	9.5	1529.9
7.0	15.0	2	6	13	3	7	14	3	8	15	9.3	1479.4
8.0	14.0	2	6	14	3	7	15	3	8	16	9.2	1428.8
9.0	13.0	2	6	15	3	7	16	3	7	15	9.0	1378.2
10.0	12.0	2	6	15	3	6	15	3	7	16	8.8	1327.7
11.0	11.0	2	5	15	3	6	16	3	7	16	8.6	1277.1
12.0	10.0	2	5	15	3	6	16	3	7	16	8.5	1226.5
13.0	9.0	2	5	16	3	5	15	4	8	18	8.3	1175.9
14.0	8.0	2	4	15	3	5	16	4	8	18	8.1	1125.4
15.0	7.0	2	4	15	3	4	15	4	7	17	8.0	1074.8
16.0	6.0	2	3	15	3	4	15	4	7	17	7.8	1024.2
17.0	5.0	2	3	15	4	5	16	4	7	17	7.6	973.7
18.0	4.0	2	3	15	4	5	16	4	6	16	7.4	923.1
19.0	3.0	3	4	16	4	5	16	4	6	16	7.2	872.5
20.0	2.0	3	3	15	4	4	16	4	6	16	6.9	822.0
21.0	1.0	3	3	15	4	3	15	5	8	18	6.7	771.4
WL = 23.0												
1.0	22.0	3	2	1	3	2	1	3	3	2	11.1	1866.1
2.0	21.0	3	4	5	3	4	5	3	4	4	10.9	1815.5
3.0	20.0	3	5	8	3	5	8	3	6	8	10.6	1765.0
4.0	19.0	3	6	10	3	6	10	3	6	10	10.4	1714.4
5.0	18.0	3	6	12	3	6	11	3	7	12	10.3	1663.8
6.0	17.0	2	6	13	3	6	12	3	7	13	10.1	1613.3
7.0	16.0	2	6	13	3	7	14	3	7	14	9.9	1562.7
8.0	15.0	2	6	14	3	7	15	3	7	15	9.7	1512.1
9.0	14.0	2	6	15	3	6	15	3	7	15	9.5	1461.6
10.0	13.0	2	5	15	3	6	15	3	7	16	9.4	1411.0
11.0	12.0	2	5	15	3	6	16	3	7	16	9.2	1360.4
12.0	11.0	2	5	15	3	6	16	3	7	17	9.0	1309.8
13.0	10.0	2	5	16	3	5	16	3	6	16	8.9	1259.3
14.0	9.0	2	4	15	3	5	16	3	6	16	8.7	1208.7
15.0	8.0	2	4	15	3	4	15	3	6	16	8.5	1158.1
16.0	7.0	2	3	15	3	4	15	4	7	17	8.3	1107.6

TABLE W (CONT)

4240B PRECISION BALANCE NETWORK SETTINGS FOR MIXED 22– AND 26–GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68 F

26–GAUGE ADJACENT TO REPEATER

LENGTH(KFT) 22-GA	26-GA	4240B BALANCE NETWORK SETTINGS BY TERMINATION 900 + 2.16 R1	R2	Z	600 + 2.16 R1	R2	Z	TELSET (35MA) R1	R2	Z	1KHZ CABLE LOSS (DB) (900 OHMS)	DC CABLE RES (OHMS)
WL = 23.0												
17.0	6.0	2	3	15	3	3	15	4	7	17	8.1	1057.0
18.0	5.0	2	3	15	3	3	15	4	6	16	8.0	1006.4
19.0	4.0	2	3	15	3	3	15	4	6	16	7.7	955.9
20.0	3.0	3	3	15	4	4	16	4	6	16	7.5	905.3
21.0	2.0	3	3	15	4	3	15	4	6	16	7.3	854.7
22.0	1.0	3	3	15	4	3	15	4	5	15	7.0	804.2
WL = 24.0												
2.0	22.0	3	4	5	3	4	5	3	4	5	11.4	1898.9
3.0	21.0	3	5	8	3	5	8	3	5	7	11.2	1848.3
4.0	20.0	3	6	10	3	6	10	3	6	10	11.0	1797.7
5.0	19.0	2	5	11	3	6	11	3	7	12	10.8	1747.2
6.0	18.0	2	5	12	3	6	12	3	7	13	10.6	1696.6
7.0	17.0	2	6	14	3	7	14	3	7	14	10.4	1646.0
8.0	16.0	2	6	14	3	7	15	3	7	15	10.3	1595.5
9.0	15.0	2	6	15	3	6	15	3	7	15	10.1	1544.9
10.0	14.0	2	5	15	3	6	15	3	7	16	9.9	1494.3
11.0	13.0	2	5	15	3	6	16	3	7	16	9.7	1443.7
12.0	12.0	2	5	15	3	6	16	3	6	16	9.6	1393.2
13.0	11.0	2	4	15	3	5	16	3	6	16	9.4	1342.6
14.0	10.0	2	4	15	3	5	16	3	6	16	9.2	1292.0
15.0	9.0	1	3	15	3	5	16	3	6	16	9.1	1241.5
16.0	8.0	2	3	15	3	4	15	3	5	16	8.9	1190.9
17.0	7.0	2	3	15	3	3	15	3	5	16	8.7	1140.3
18.0	6.0	2	3	15	3	3	15	3	5	16	8.5	1089.8
19.0	5.0	2	2	15	3	3	15	3	4	15	8.3	1039.2
20.0	4.0	2	2	15	3	3	15	4	5	16	8.1	988.6
21.0	3.0	2	1	14	4	4	16	4	5	16	7.9	938.1
22.0	2.0	2	1	14	4	3	15	4	5	16	7.7	887.5
23.0	1.0	2	1	14	4	3	15	4	5	16	7.4	836.9

4. PRESCRIPTION SETTINGS FOR CIRCUITS REQUIRING 837- or J99380-TYPE IMPEDANCE COMPENSATORS

4.01 MFT repeaters may be used in conjunction with impedance compensators on circuits requiring terminal balance. The 837- or J99380-type network is used to improve the circuit performance by permitting a better impedance match at the location with the balance requirement.

4.02 Different procedures must be used when impedance compensators are used with MFT 2-2 repeaters to determine the PBN and equalizer settings. For nonloaded facilities, Table X lists the PBN, 309D equalizer, 837D or J99380AA network settings and the 1 kHz loss for 600-ohm terminations on the drop side of the impedance compensator. Table Y should be used for circuits terminating in 900 ohms on the drop side of the 837D or J99380AA. Only very short lengths of nonloaded cable are included in Tables X and Y because of the 4.5 dB insertion loss of the impedance compensator.

Note: Nonloaded 25-gauge MAT cable is not recommended for use on circuits requiring terminal balance.

4.03 For circuits utilizing H88 loaded facilities, Table Z lists the 4240A and 4240C PBN settings for various 837- and J99380-type networks adjusted for 3.0 kft end sections. The 1 kHz circuit loss is also given.

TABLE X

PRESCRIPTION SETTINGS FOR 2-2 TERMINAL (NL) REPEATER AND 837D OR J99380AA IMPEDANCE COMPENSATOR

837D/J99380AA DROP SIDE IMPEDANCE = 600 OHMS

LENGTH (KFT)	2-2 REPEATER SETTINGS				IMPEDANCE COMPENSATOR 837D/J99380AA (600 OHM SCREWS DOWN)		1 KHZ CKT LOSS (dB)
	4240B PBN			309D EQLR SLOPE	BOR	R POTENTIOMETER	
	R1	R2	Z				
26 GA NL							
8.0	6	7	0	0 0	114	32	8.1
9.0	6	7	0	0 0	114	30	8.6
10.0	6	8	2	0 1	114	28	9.2
24 GA NL							
9.0	6	7	6	0 0	114	22	7.5
10.0	6	9	10	0 0	114	20	7.9
11.0	6	10	12	0 0	114	18	8.3
12.0	6	10	13	0 1	114	18	8.7
13.0	5	6	9	0 1	114	16	9.1
14.0	5	6	10	0 2	114	16	9.5
22 GA NL							
9.0	6	10	13	0 0	228	28	7.2
10.0	6	11	16	0 0	228	26	7.5
11.0	6	12	18	0 1	228	24	7.8
12.0	6	10	16	0 0	114	10	7.6
13.0	6	11	18	0 1	114	10	7.9
14.0	6	11	19	0 1	114	8	8.2
15.0	5	7	15	0 1	114	8	8.5
16.0	5	7	16	0 2	114	6	8.9
17.0	5	7	16	0 2	114	6	9.2
18.0	5	7	17	0 3	114	6	9.5

TABLE Y

PRESCRIPTION SETTINGS FOR 2-2 TERMINAL (NL) REPEATER AND 837D/J99380AA IMPEDANCE COMPENSATOR

837D/J99380AA DROP SIDE IMPEDANCE = 900 OHMS

LENGTH (KFT)	2-2 REPEATER SETTINGS					IMPEDANCE COMPENSATOR 837D/J99380AA (900 OHM SCREWS DOWN)		1 KHZ CKT LOSS (dB)
	4240B PBN			309D EQLR		BOR	R POTENTIOMETER	
	R1	R2	Z	SLOPE				
26 GA NL								
8.0	7	15	12	0	0	114	36	8.2
9.0	6	7	0	0	0	114	34	8.7
10.0	6	8	2	0	0	114	34	9.2
11.0	6	9	4	0	1	114	32	9.7
24 GA NL								
9.0	6	6	5	0	0	114	30	7.5
10.0	6	8	9	0	0	114	28	7.9
11.0	6	9	11	0	0	114	26	8.3
12.0	6	10	13	0	1	114	24	8.7
13.0	6	10	13	0	1	114	24	9.1
14.0	5	6	10	0	2	114	24	9.5
22 GA NL								
9.0	6	9	12	0	0	228	36	7.1
10.0	6	11	16	0	0	228	34	7.4
11.0	6	11	17	0	1	228	34	7.7
12.0	6	10	16	0	0	114	18	7.6
13.0	6	11	18	0	1	114	18	7.9
14.0	6	11	19	0	1	114	16	8.3
15.0	6	11	19	0	1	114	16	8.6
16.0	5	7	16	0	2	114	16	8.9
17.0	5	7	16	0	2	114	14	9.2
18.0	5	7	17	0	2	114	14	9.5

TABLE Z

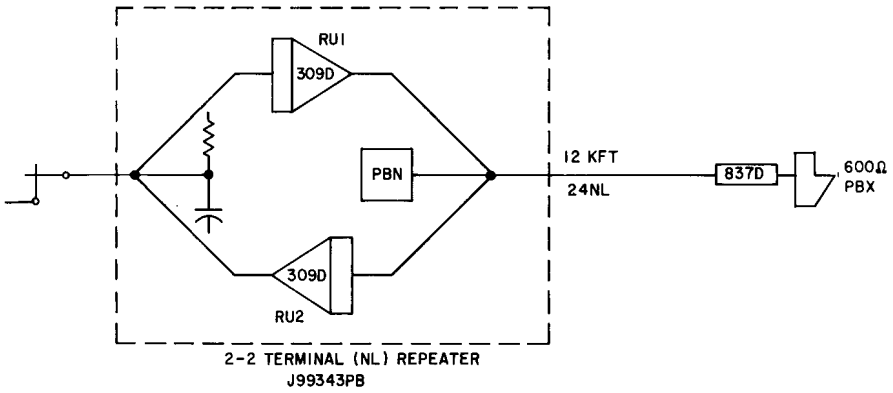
PRESCRIPTION SETTINGS FOR 2-2 TERMINAL (L) REPEATER
PRECISION BALANCING NETWORKS USED WITH 837A, B, E, F, G OR J
AND J99380AB IMPEDANCE COMPENSATORS

END SECTION = 3.0 kft
IMPEDANCE COMPENSATOR ADJUSTED FOR 3.0 kft END SECTION

LENGTH (kft)	22H88								24H88								25H88				26H88			
	837A, B				837E, F/J99380AB				837A, B				837E, F/J99380AB				837J				837G			
	L	R	Z	LOSS	L	R	Z	LOSS	L	R	Z	LOSS	L	R	Z	LOSS	L	R	Z	LOSS	L	R	Z	LOSS
12.0	0	2	2	2.1	0	3	2	2.3	0	4	2	2.9	0	5	3	3.1	1	5	0	5.7	0	7	3	6.4
18.0	0	2	2	2.9	0	3	2	3.1	0	5	3	4.2	0	5	3	4.5	1	7	1	7.0	0	7	4	8.4
24.0	0	3	3	3.8	0	3	3	4.0	0	5	3	5.6	0	5	3	5.9	1	7	1	8.4				
30.0	0	3	3	4.8	0	3	3	5.0	0	4	3	7.1	0	4	3	7.3	1	6	1	9.9				
36.0	0	2	2	5.7	0	2	2	5.9	0	4	3	8.5	0	4	3	8.7								
42.0	0	2	2	6.6	0	2	3	6.8																
48.0	0	2	2	7.5	0	2	3	7.6																
54.0	0	2	2	8.3	0	2	3	8.5																

4.04 When the facility makeup does not match the table entries very closely, the manual adjustment procedures described in Section 332-912-211 should be used.

Example 2:



2-2 TERMINAL (NL) REPEATER
J99343PB

Given: The above circuit: find the prescription settings for the 837D, 4240B PBN, and 309D equalizer.

(1) Use Table X for 600 ohm drop side impedance (PBX).

(2) Under 24 NL, 12 kft gives the following settings:

4240B R1 = 6
4240B R2 = 10
4240B Z = 13

309D 0, 1

837D BOR = 114
837D R Pot = 18
1 KHz loss = 8.7 dB

5. PRESCRIPTION EQUALIZER SETTINGS

A. General

5.01 The prescription settings for 309D equalizers used in MFT 2-2 repeaters may be determined in two ways. The first method is a simplified procedure requiring only total length, distant termination impedance and the dc resistance of the facility. The second procedure requires knowledge of the complete facility makeup, repeater placement, and the distant termination impedance. Both procedures are divided into three categories:

- Terminal repeater on nonloaded cable
- Intermediate repeater with nonloaded cable on both sides
- Intermediate repeater with loaded cable on one side and nonloaded cable on the other side.

5.02 All the procedures in this section are for single repeater circuits with 600 or 900 ohm terminations at the distant end.

B. Prescription Equalizer Setting Charts

5.03 The prescription setting charts described here are graphic representations of the prescription setting tables and will supply "optimum" or "near optimum" equalizer settings which meet trunk rolloff objectives for most facilities.

5.04 The procedures for using the charts are greatly simplified from those required for the prescription setting tables. The only equivalence procedure required is for 25-gauge MAT cable.

5.05 The charts supply prescription 309D equalizer settings for a given MFT 2-2 repeater—termination combination as a function of total length and dc resistance of the nonloaded facility.

5.06 To use the charts:

(1) Determine the total length (L) of the nonloaded facility in kilofeet.

(a) Include the length of all bridged taps.

(b) For 2-2 intermediate (L-NL or NL-L) repeaters, include any portion of the far end section that exceeds 3 kft.

(c) 25-gauge nonloaded MAT cable must be converted to an equivalent length of 26-gauge cable by multiplying the length of 25-gauge cable by .77 before determining the total length.

(2) Determine the dc resistance (R) in ohms of the nonloaded facility found in Step 1. Do not use bridged tap resistance.

(3) Select the applicable chart based on repeater type as follows:

REPEATER TYPE	CABLE TERMINATION	CHART NUMBER
2-2 Terminal (NL)	900 ohms	Chart 2
	600 ohms	Chart 3
2-2 Intermediate (NL-NL)	900 ohms (both ends)	Chart 4
	600 ohms (both ends)	Chart 5
2-2 Intermediate (L-NL or NL-L)	900 ohms (nonloaded end)	Chart 6
	600 ohms (nonloaded end)	Chart 7

(4) Using the length (L) determined in Step 1 and the resistance (R) determined in Step 2, locate the point L, R on the chart selected in Step 3.

(5) The region in which the point (L, R) is located specifies the 309D equalizer setting.

(a) For points located on a boundary line, choose the larger of the two settings.

(b) For the 2-2 intermediate (NL-NL) repeater operating with a 900 to 600 ohm termination, choose the next larger setting.

(c) For 2-2 intermediate (L-NL or NL-L) repeaters used with 25H88 MAT cable, subtract two from the equalizer setting.

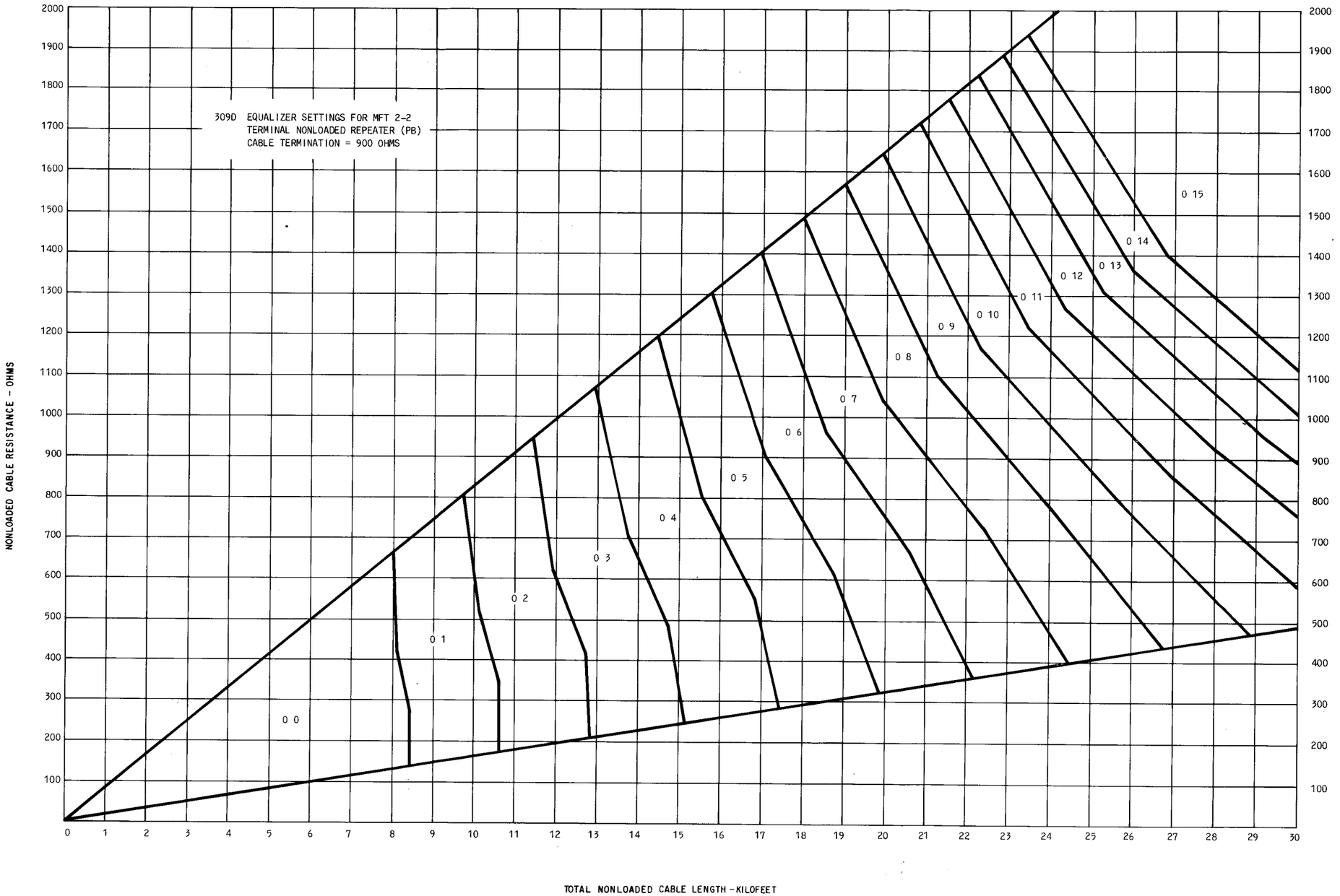


Chart 2—309D Equalizer Settings for MFT 2-2 Terminal (NL) Repeater (PB)—Cable Termination = 900 Ohms

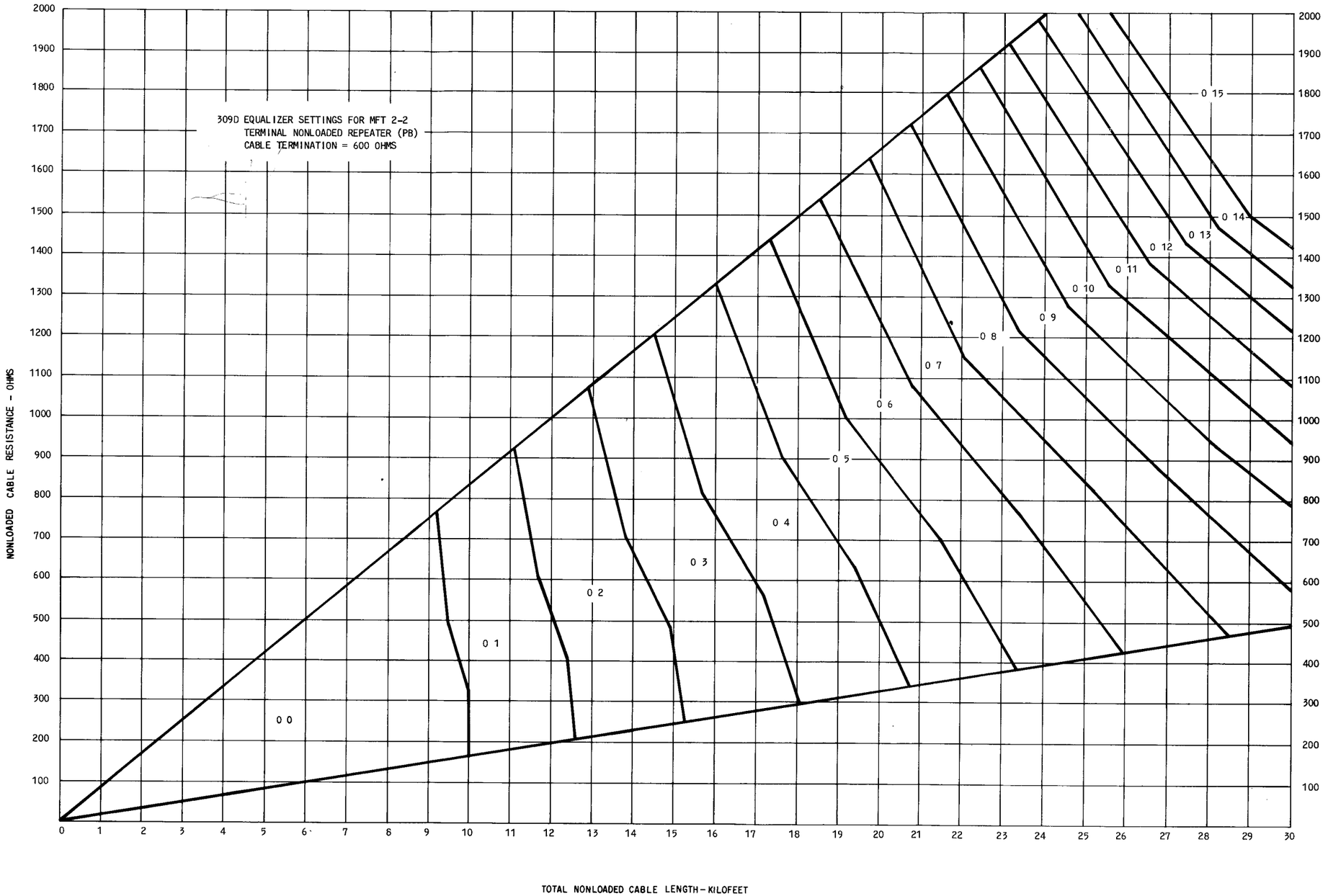


Chart 3—309D Equalizer Settings for MFT 2-2 Terminal (NL) Repeater (PB)—Cable Terminal = 600 Ohms

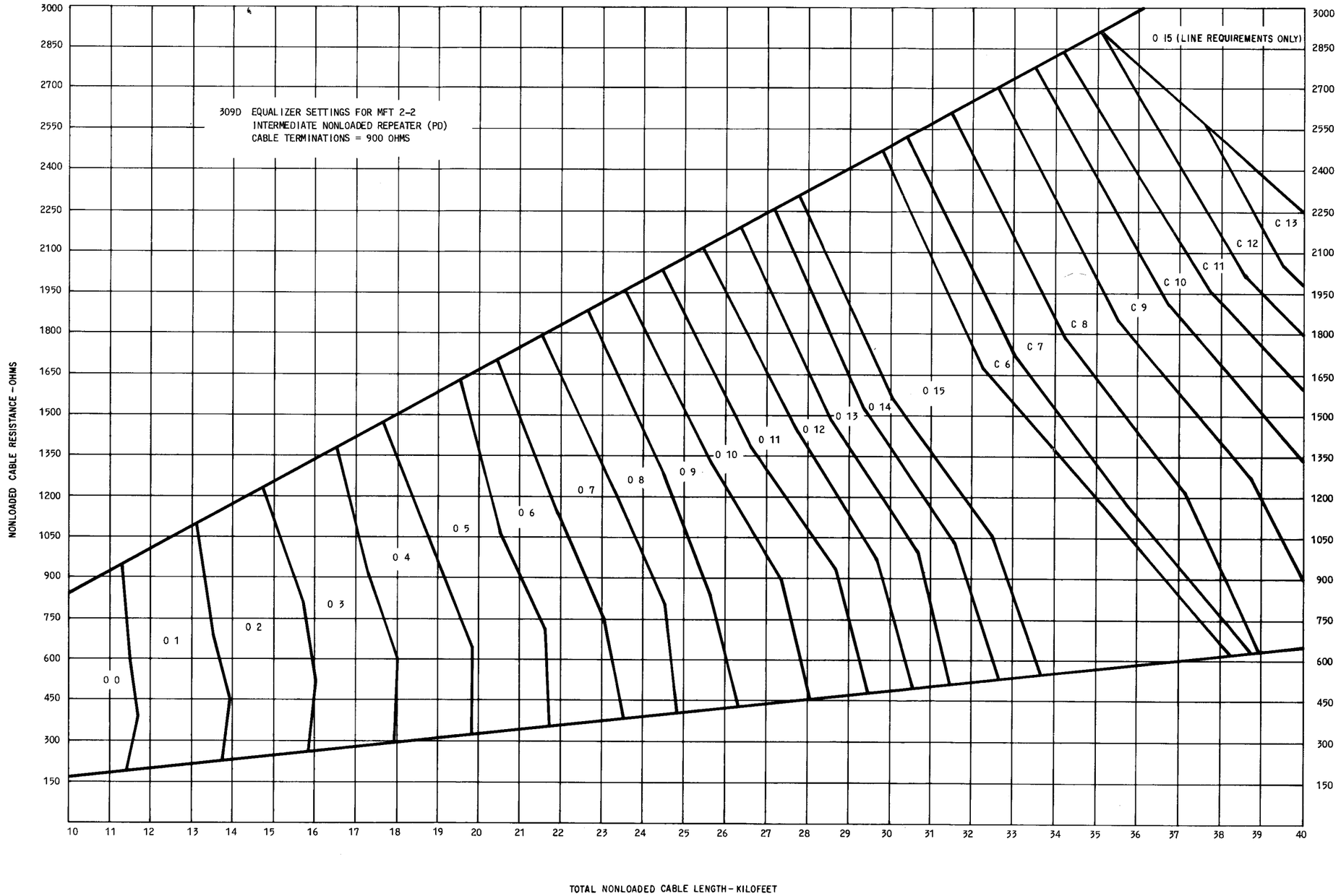


Chart 4—309D Equalizer Settings for MFT 2-2 Intermediate (NL-NL) Repeater (PD)—Cable Terminations = 900 Ohms

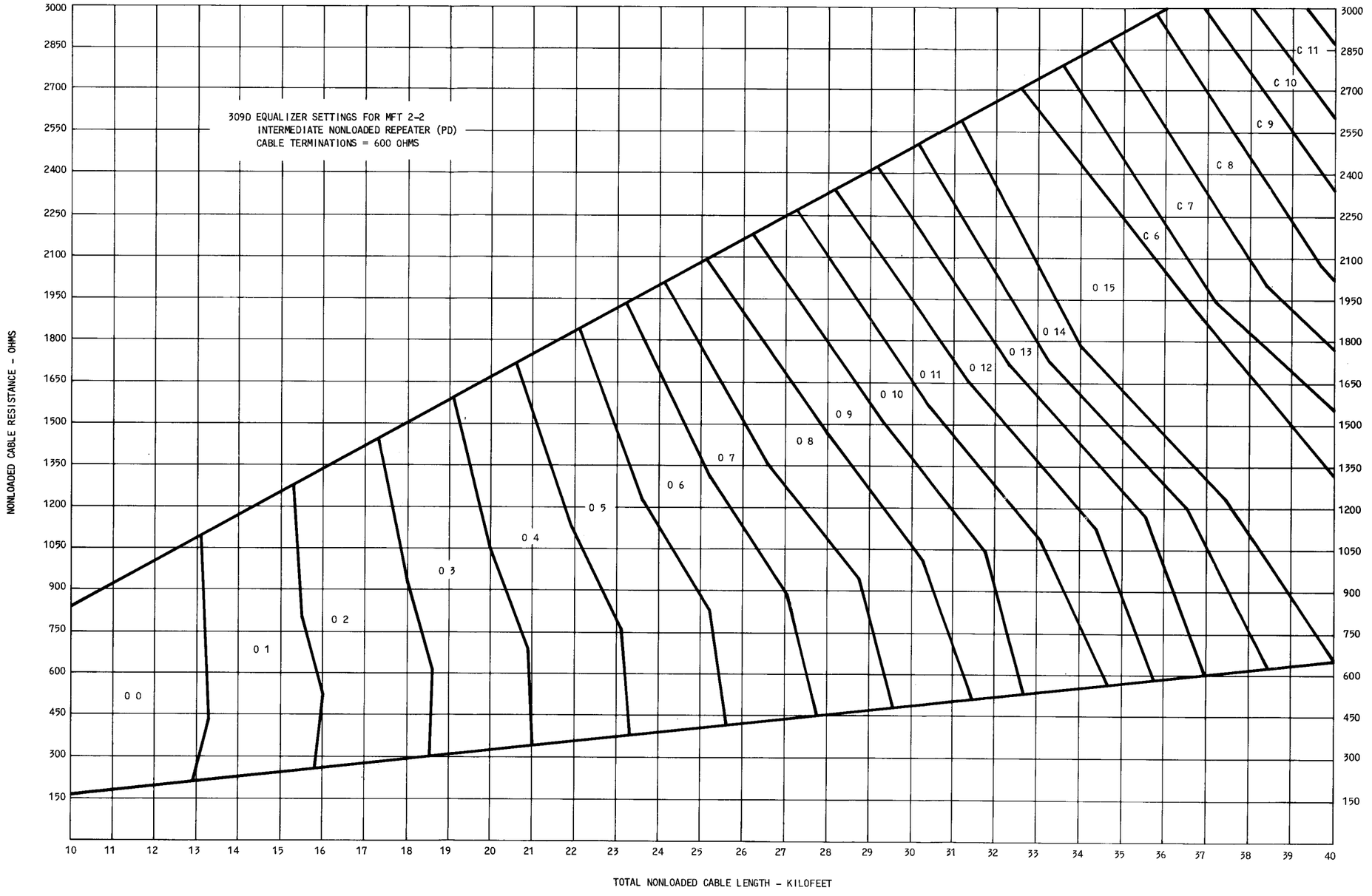


Chart 5—309D Equalizer Settings for MFT 2-2 Intermediate (NL-NL) Repeater (PD)—Cable Terminations = 600 Ohms

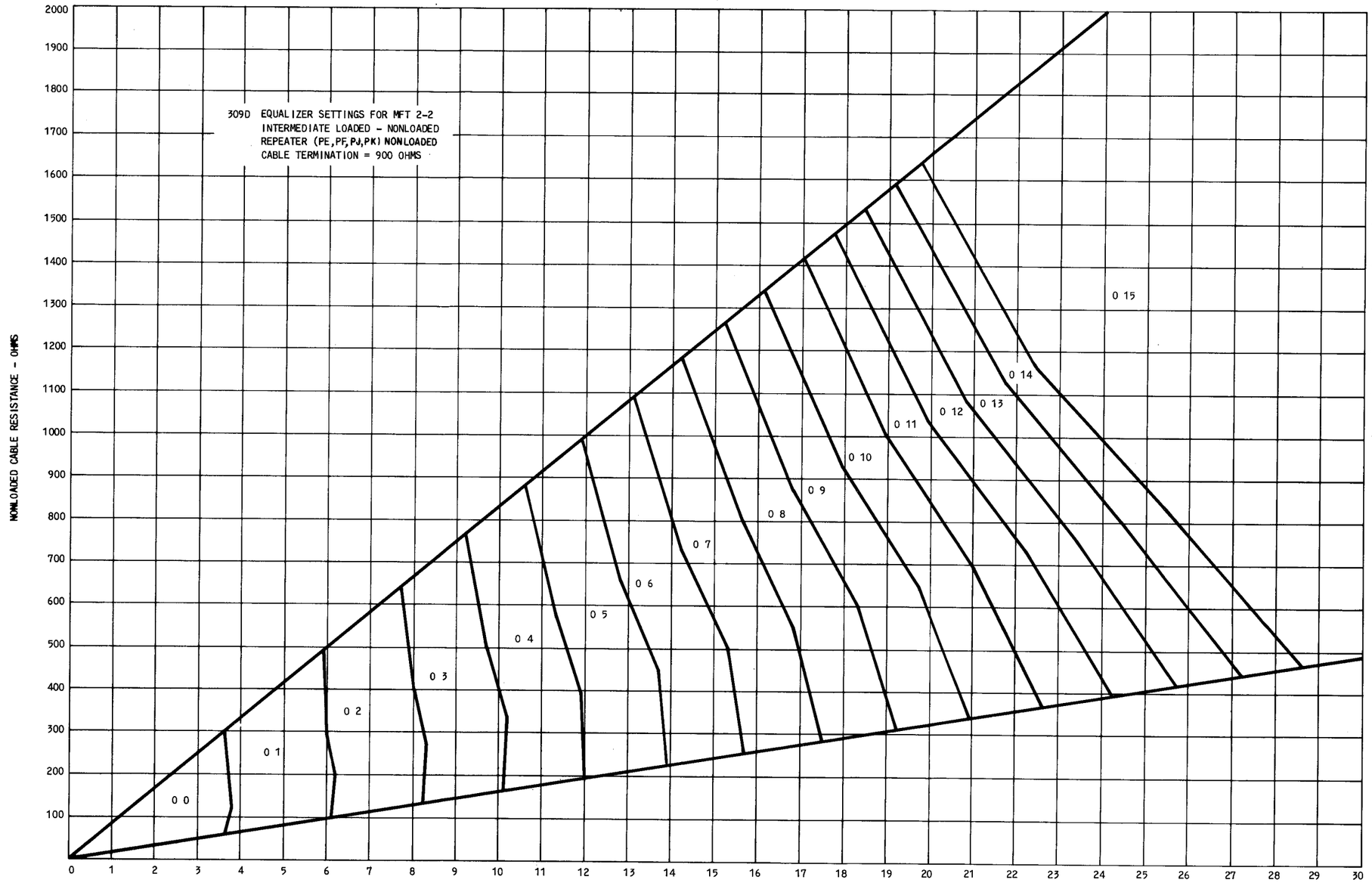


Chart 6—309D Equalizer Settings for MFT 2-2 Intermediate (L-NL or NL-L) Repeaters (PE, PF, PJ, PK)—Nonloaded Cable Termination = 900 Ohms

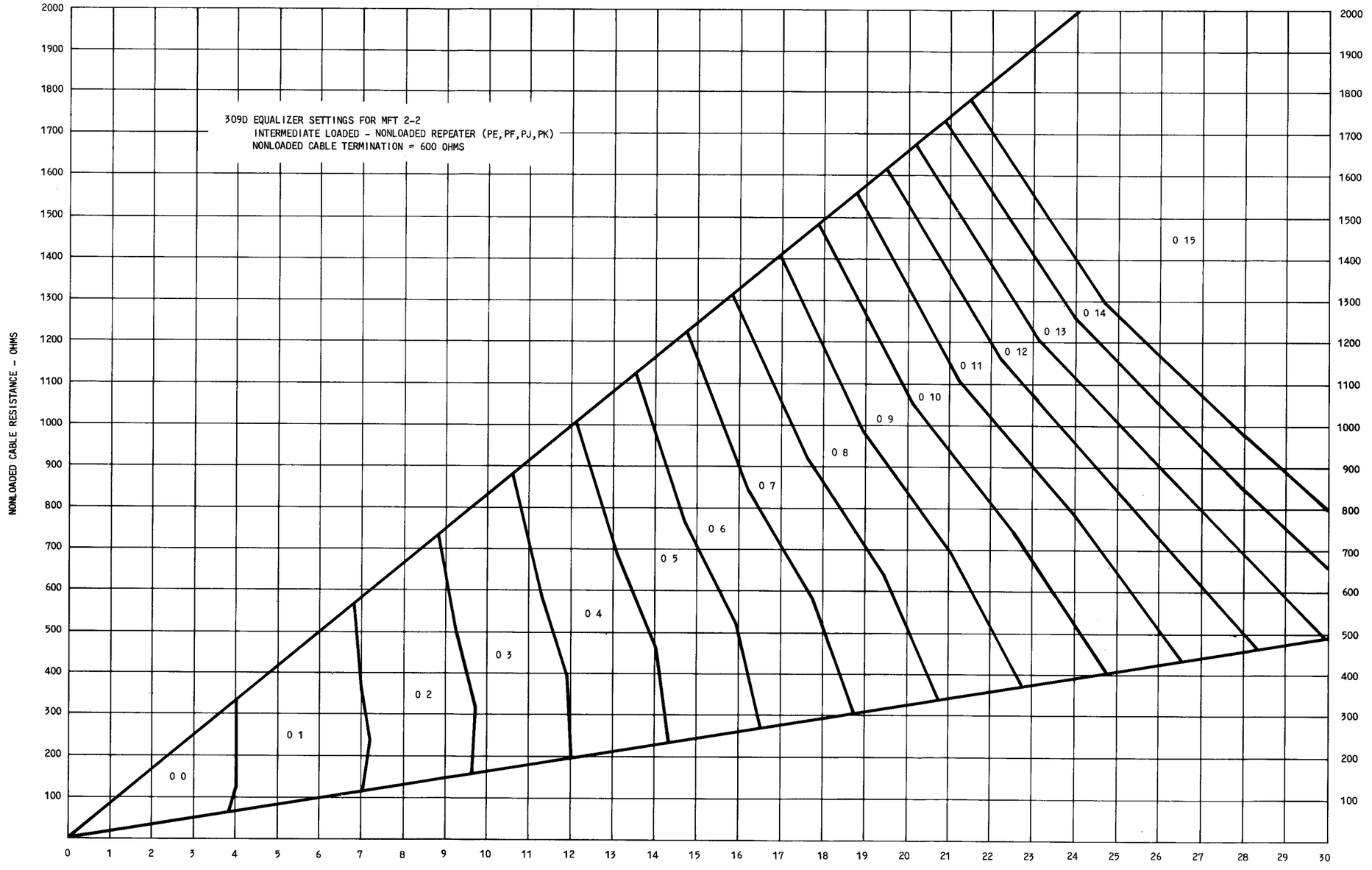


Chart 7—309D Equalizer Settings for MFT 2-2 Intermediate (L-NL or NL-L) Repeaters (PE, PF, PJ, PK)— Nonloaded Cable Termination = 600 Ohms

C. Prescription Equalizer Setting Tables

5.07 The prescription setting tables described here are for single- and two-gauge facilities. The tables are divided into three groups; terminal repeaters, intermediate (NL-NL) repeaters, and intermediate (L-NL or NL-L) repeaters. Proper utilization of the tables requires conversion of some cable sections to equivalent lengths of another gauge. The following paragraphs detail equivalence procedures which should be used to determine table entry points.

Equivalence Procedures

5.08 To convert a segment of a nonloaded facility to an equivalent gauge:

(1) Determine the impedance on the distant end of the cable section (600 or 900 ohms).

(2) Use the appropriate constant (K) from Table AA (900 ohms) or Table BB (600 ohms).

(3) Determine the equivalent length of the minor gauge using the formula:

$EL = L_{minor} \times K$

Where EL is the major gauge equivalent length

L_{minor} is the length of the gauge being converted.

K is the constant from Table AA or BB.

TABLE AA

CONSTANT FOR CONVERSION TO EQUIVALENT GAUGE (900 TO 900 OHM)

		Minor Gauge			
		19	22	24	26
MAJOR GAUGE	19	1.00	1.06	1.17	1.30
	22	.95	1.00	1.10	1.22
	24	.86	.91	1.00	1.11
	26	.79	.83	.91	1.00

TABLE BB

CONSTANT FOR CONVERSION TO EQUIVALENT GAUGE (900 TO 600 OHM)

		Minor Gauge			
		19	22	24	26
MAJOR GAUGE	19	1.00	1.11	1.27	1.48
	22	.91	1.00	1.14	1.32
	24	.80	.88	1.00	1.15
	26	.70	.77	.88	1.00

(4) Add the equivalent length to the length of the major gauge to determine the table entry point.

5.09 The same procedure may be used to convert

(1) A facility of more than one gauge to a single gauge equivalent (for intermediate repeaters). Convert to the gauge with the greatest length.

(2) A facility composed of more than two gauges to an equivalent two-gauge facility for entry in the two-gauge tables. Select the two longer lengths as the major gauges and convert the remaining segments to an equivalent length of one of the major gauges.

5.10 To convert more than one gauge of loaded cable to the equivalent single gauge length, add the segment lengths of the facility and use the gauge of the longest segment in the facility.

5.11 Bridged taps on nonloaded cable can be related to an equivalent length of cable by using Table CC. The bridged tap should be converted to the equivalent length of:

(1) The gauge of cable the bridged tap is connected to.

(2) The gauge of the greater length if the bridged tap is connected between two different gauges.

(3) The gauge which comprises the greatest length of cable when the location of the bridged tap is unknown.

5.12 To find the equivalent cable length in Table CC:

(1) Find the bridged tap length in Table CC that is the nearest to the actual length of the bridged tap

(2) Locate the equivalent length under the gauge selected using the procedure in 5.11.

(3) Insert this equivalent length into the cable facility at the location of the bridged tap and use the single- or two-gauge prescription setting tables as required.

5.13 The two-gauge tables for equalizer settings for the 2-2 intermediate (NL-NL) repeater require one cable section to be terminated in 600 ohms. When neither facility is terminated in 600 ohms, the following equivalence formula may be used to permit use of the tables:

$$L_{eq} = L_{actual} \times CT$$

where L_{eq} is the equivalent length of cable terminated in 600 ohms

L_{actual} is the length of cable terminated in 900 ohms

CT is the conversion factor from Table DD.

5.14 Nonloaded MAT cable may be converted to an equivalent length of 26-gauge cable for entry into the tables for facilities composed of more than one gauge. The 25-gauge facility length is multiplied by .77 to equate to 26-gauge nonloaded cable.

TABLE CC

CABLE EQUIVALENCES FOR BRIDGED TAPS

BRIDGED TAP LENGTH	GAUGE			
	26	24	22	19
.5	0.3	0.4	0.4	0.4
1.0	0.6	0.7	0.8	0.9
1.5	0.9	1.1	1.3	1.4
2.0	1.3	1.5	1.7	1.9
2.5	1.6	1.9	2.1	2.3
3.0	2.0	2.3	2.6	2.8
3.5	2.3	2.7	3.1	3.4
4.0	2.7	3.2	3.6	3.9
4.5	3.1	3.6	4.1	4.4
5.0	3.5	4.1	4.6	5.0
5.5	3.9	4.5	5.1	5.5
6.0	4.4	5.0	5.6	6.1

TABLE DD

CONVERSION FACTORS FOR 900 TO 600 OHM EQUIVALENT LENGTHS

GAUGE	C_T
26	1.23
24	1.20
22	1.16
19	1.14

Terminal Repeaters

5.15 Equalizer settings for the J99343PB repeater on single-gauge facilities are found in Table EE for a 900-ohm termination at the distant end or Table FF for 600-ohm terminations.

5.16 To use the tables:

(1) Determine the distant termination and use the appropriate 600- or 900-ohm table.

(2) Locate the length nearest to the facility length.

(3) Read across to the proper gauge column and find the equalizer settings. The first value is the C switch setting (0 = off, C = operated) and the second value is the sum of the operated switches.

5.17 Two-gauge Tables GG and HH are for 900- and 600-ohm terminations at the distant end. The length column is designated GA1 and GA2 where GA1 is adjacent to the repeater and GA2 is the remaining gauge composing the facility.

5.18 To use the two-gauge tables:

(1) Reduce the facility to two gauges if comprised of more than two gauges (see 5.09). Also, 25-gauge MAT must be converted to an equvalent length of 26-gauge cable.

(2) Verify distant end termination impedance

(a) For 900-ohm, use Table GG.

(b) For 600-ohm, use Table HH.

(3) Find the working length (WL) by adding the lengths of the two gauges.

(4) Enter the table at the WL determined in Step 3.

(5) Select the GA1 and GA2 lengths which most nearly match the facility makeup. GA1 must be the gauge adjacent to the repeater.

(6) Read the equalizer settings under the column heading of the two gauges. The first gauge is that adjacent to the repeater.

TABLE EE

309D EQUALIZER SETTINGS FOR MFT 2-2 TERMINAL (NL) REPEATERS
FOR SINGLE GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP
AT 68°F
CABLE TERMINATION = 900 OHMS

LENGTH (KFT)	309D EQUALIZER SETTINGS BY GAUGE				
	26-GAUGE SLOPE	25-GAUGE SLOPE	24-GAUGE SLOPE	22-GAUGE SLOPE	19-GAUGE SLOPE
7.0	0 0	0 0	0 0	0 0	0 0
8.0	0 1	0 0	0 0	0 0	0 0
9.0	0 1	0 0	0 1	0 1	0 1
10.0	0 2	0 0	0 1	0 1	0 1
11.0	0 2	0 1	0 2	0 2	0 2
12.0	0 3	0 1	0 3	0 2	0 2
13.0	0 4	0 2	0 3	0 3	0 3
14.0	0 4	0 2	0 4	0 3	0 3
15.0	0 5	0 3	0 4	0 4	0 3
16.0	0 6	0 3	0 5	0 4	0 4
17.0	0 7	0 4	0 5	0 5	0 4
18.0	0 8	0 4	0 6	0 5	0 5
19.0	0 9	0 5	0 7	0 6	0 5
20.0	0 10	0 5	0 8	0 6	0 6
21.0	0 11	0 6	0 8	0 7	0 6
22.0	0 12	0 7	0 9	0 7	0 6
23.0	0 14	0 7	0 10	0 8	0 7
24.0	0 15	0 8	0 11	0 9	0 7

TABLE FF

309D EQUALIZER SETTINGS FOR MFT 2-2 TERMINAL (NL) REPEATERS
FOR SINGLE GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP
AT 68°F
CABLE TERMINATION = 600 OHMS

LENGTH (KFT)	309D EQUALIZER SETTINGS BY GAUGE				
	26-GAUGE SLOPE	25-GAUGE SLOPE	24-GAUGE SLOPE	22-GAUGE SLOPE	19-GAUGE SLOPE
7.0	0 0	0 0	0 0	0 0	0 0
8.0	0 0	0 0	0 0	0 0	0 0
9.0	0 0	0 0	0 0	0 0	0 0
10.0	0 1	0 0	0 1	0 1	0 1
11.0	0 1	0 0	0 1	0 1	0 1
12.0	0 2	0 1	0 2	0 1	0 1
13.0	0 3	0 1	0 2	0 2	0 2
14.0	0 3	0 1	0 3	0 2	0 2
15.0	0 4	0 2	0 3	0 3	0 2
16.0	0 5	0 2	0 4	0 3	0 3
17.0	0 5	0 3	0 4	0 3	0 3
18.0	0 6	0 3	0 5	0 4	0 3
19.0	0 7	0 4	0 5	0 4	0 4
20.0	0 8	0 4	0 6	0 5	0 4
21.0	0 9	0 5	0 7	0 5	0 5
22.0	0 10	0 5	0 7	0 6	0 5
23.0	0 11	0 6	0 8	0 6	0 5
24.0	0 13	0 6	0 9	0 7	0 6

TABLE GG

309D EQUALIZER SETTINGS FOR MFT 2-2 TERMINAL (NL) REPEATERS
FOR MIXED GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

GA1 ADJACENT TO REPEATER
CABLE TERMINATION = 900 OHMS

LENGTH (KFT)		309D EQUALIZER SETTINGS BY GAUGE											
GA 1	GA 2	26/24 GA SLOPE		24/26 GA SLOPE		26/22 GA SLOPE		22/26 GA SLOPE		24/22 GA SLOPE		22/24 GA SLOPE	
WL = 7.0													
1.0	6.0	0	0	0	0	0	0	0	0	0	0	0	0
2.0	5.0	0	0	0	0	0	0	0	0	0	0	0	0
3.0	4.0	0	0	0	0	0	0	0	0	0	0	0	0
4.0	3.0	0	0	0	0	0	0	0	0	0	0	0	0
5.0	2.0	0	0	0	0	0	0	0	0	0	0	0	0
6.0	1.0	0	0	0	0	0	0	0	0	0	0	0	0
WL = 8.0													
1.0	7.0	0	1	0	1	0	0	0	0	0	0	0	0
2.0	6.0	0	1	0	1	0	0	0	0	0	0	0	0
3.0	5.0	0	1	0	1	0	0	0	0	0	0	0	0
4.0	4.0	0	1	0	1	0	0	0	0	0	0	0	0
5.0	3.0	0	1	0	1	0	0	0	0	0	0	0	0
6.0	2.0	0	1	0	1	0	0	0	0	0	0	0	0
7.0	1.0	0	1	0	1	0	0	0	0	0	0	0	0
WL = 9.0													
1.0	8.0	0	1	0	1	0	1	0	1	0	1	0	1
2.0	7.0	0	1	0	1	0	1	0	1	0	1	0	1
3.0	6.0	0	1	0	1	0	1	0	1	0	1	0	1
4.0	5.0	0	1	0	1	0	1	0	1	0	1	0	1
5.0	4.0	0	1	0	1	0	1	0	1	0	1	0	1
6.0	3.0	0	1	0	1	0	1	0	1	0	1	0	1
7.0	2.0	0	1	0	1	0	1	0	1	0	1	0	1
8.0	1.0	0	1	0	1	0	1	0	1	0	1	0	1
WL = 10.0													
1.0	9.0	0	2	0	2	0	1	0	2	0	1	0	1
2.0	8.0	0	2	0	2	0	1	0	2	0	1	0	1
3.0	7.0	0	2	0	2	0	1	0	1	0	1	0	1
4.0	6.0	0	2	0	2	0	1	0	1	0	1	0	1
5.0	5.0	0	2	0	2	0	1	0	1	0	1	0	1
6.0	4.0	0	2	0	2	0	1	0	1	0	1	0	1
7.0	3.0	0	2	0	2	0	1	0	1	0	1	0	1
8.0	2.0	0	2	0	2	0	2	0	1	0	1	0	1
9.0	1.0	0	2	0	2	0	2	0	1	0	1	0	1
WL = 11.0													
1.0	10.0	0	2	0	2	0	2	0	2	0	2	0	2
2.0	9.0	0	2	0	2	0	2	0	2	0	2	0	2
3.0	8.0	0	2	0	2	0	2	0	2	0	2	0	2
4.0	7.0	0	2	0	2	0	2	0	2	0	2	0	2
5.0	6.0	0	2	0	2	0	2	0	2	0	2	0	2
6.0	5.0	0	2	0	2	0	2	0	2	0	2	0	2
7.0	4.0	0	2	0	2	0	2	0	2	0	2	0	2
8.0	3.0	0	2	0	2	0	2	0	2	0	2	0	2
9.0	2.0	0	2	0	2	0	2	0	2	0	2	0	2
10.0	1.0	0	2	0	2	0	2	0	2	0	2	0	2
WL = 12.0													

TABLE GG (CONT)

309D EQUALIZER SETTINGS FOR MFT 2-2 TERMINAL (NL) REPEATERS
FOR MIXED GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

GA1 ADJACENT TO REPEATER
CABLE TERMINATION = 900 OHMS

LENGTH (KFT)		309D EQUALIZER SETTINGS BY GAUGE											
GA 1	GA 2	26/24 GA SLOPE		24/26 GA SLOPE		26/22 GA SLOPE		22/26 GA SLOPE		24/22 GA SLOPE		22/24 GA SLOPE	
WL = 12.0													
1.0	11.0	0	3	0	3	0	2	0	3	0	2	0	3
2.0	10.0	0	3	0	3	0	2	0	3	0	2	0	2
3.0	9.0	0	3	0	3	0	2	0	3	0	2	0	2
4.0	8.0	0	3	0	3	0	2	0	3	0	2	0	2
5.0	7.0	0	3	0	3	0	3	0	3	0	2	0	2
6.0	6.0	0	3	0	3	0	3	0	3	0	2	0	2
7.0	5.0	0	3	0	3	0	3	0	2	0	2	0	2
8.0	4.0	0	3	0	3	0	3	0	2	0	2	0	2
9.0	3.0	0	3	0	3	0	3	0	2	0	2	0	2
10.0	2.0	0	3	0	3	0	3	0	2	0	2	0	2
11.0	1.0	0	3	0	3	0	3	0	2	0	3	0	2
WL = 13.0													
1.0	12.0	0	3	0	4	0	3	0	3	0	3	0	3
2.0	11.0	0	3	0	3	0	3	0	3	0	3	0	3
3.0	10.0	0	3	0	3	0	3	0	3	0	3	0	3
4.0	9.0	0	3	0	3	0	3	0	3	0	3	0	3
5.0	8.0	0	3	0	3	0	3	0	3	0	3	0	3
6.0	7.0	0	3	0	3	0	3	0	3	0	3	0	3
7.0	6.0	0	3	0	3	0	3	0	3	0	3	0	3
8.0	5.0	0	3	0	3	0	3	0	3	0	3	0	3
9.0	4.0	0	3	0	3	0	3	0	3	0	3	0	3
10.0	3.0	0	3	0	3	0	3	0	3	0	3	0	3
11.0	2.0	0	3	0	3	0	3	0	3	0	3	0	3
12.0	1.0	0	4	0	3	0	3	0	3	0	3	0	3
WL = 14.0													
1.0	13.0	0	4	0	4	0	3	0	4	0	3	0	4
2.0	12.0	0	4	0	4	0	3	0	4	0	3	0	4
3.0	11.0	0	4	0	4	0	3	0	4	0	3	0	4
4.0	10.0	0	4	0	4	0	4	0	4	0	3	0	3
5.0	9.0	0	4	0	4	0	4	0	4	0	3	0	3
6.0	8.0	0	4	0	4	0	4	0	4	0	3	0	3
7.0	7.0	0	4	0	4	0	4	0	4	0	3	0	3
8.0	6.0	0	4	0	4	0	4	0	4	0	3	0	3
9.0	5.0	0	4	0	4	0	4	0	4	0	3	0	3
10.0	4.0	0	4	0	4	0	4	0	3	0	3	0	3
11.0	3.0	0	4	0	4	0	4	0	3	0	4	0	3
12.0	2.0	0	4	0	4	0	4	0	3	0	4	0	3
13.0	1.0	0	4	0	4	0	4	0	3	0	4	0	3
WL = 15.0													
1.0	14.0	0	4	0	5	0	4	0	5	0	4	0	4
2.0	13.0	0	4	0	5	0	4	0	5	0	4	0	4
3.0	12.0	0	4	0	5	0	4	0	5	0	4	0	4
4.0	11.0	0	5	0	5	0	4	0	5	0	4	0	4
5.0	10.0	0	5	0	5	0	4	0	4	0	4	0	4
6.0	9.0	0	5	0	5	0	4	0	4	0	4	0	4
7.0	8.0	0	5	0	5	0	4	0	4	0	4	0	4
8.0	7.0	0	5	0	5	0	4	0	4	0	4	0	4

TABLE GG (CONT)

309D EQUALIZER SETTINGS FOR MFT 2-2 TERMINAL (NL) REPEATERS
FOR MIXED GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

GA1 ADJACENT TO REPEATER
CABLE TERMINATION = 900 OHMS

LENGTH (KFT)		309D EQUALIZER SETTINGS BY GAUGE											
GA 1	GA 2	26/24 GA SLOPE		24/26 GA SLOPE		26/22 GA SLOPE		22/26 GA SLOPE		24/22 GA SLOPE		22/24 GA SLOPE	
WL = 15.0													
9.0	6.0	0	5	0	5	0	4	0	4	0	4	0	4
10.0	5.0	0	5	0	5	0	4	0	4	0	4	0	4
11.0	4.0	0	5	0	4	0	5	0	4	0	4	0	4
12.0	3.0	0	5	0	4	0	5	0	4	0	4	0	4
13.0	2.0	0	5	0	4	0	5	0	4	0	4	0	4
14.0	1.0	0	5	0	4	0	5	0	4	0	4	0	4
WL = 16.0													
1.0	15.0	0	5	0	6	0	4	0	6	0	4	0	5
2.0	14.0	0	5	0	6	0	4	0	5	0	4	0	5
3.0	13.0	0	5	0	6	0	5	0	5	0	4	0	5
4.0	12.0	0	5	0	5	0	5	0	5	0	4	0	5
5.0	11.0	0	5	0	5	0	5	0	5	0	4	0	5
6.0	10.0	0	5	0	5	0	5	0	5	0	4	0	5
7.0	9.0	0	5	0	5	0	5	0	5	0	4	0	5
8.0	8.0	0	5	0	5	0	5	0	5	0	4	0	4
9.0	7.0	0	5	0	5	0	5	0	5	0	5	0	4
10.0	6.0	0	5	0	5	0	5	0	5	0	5	0	4
11.0	5.0	0	5	0	5	0	5	0	5	0	5	0	4
12.0	4.0	0	6	0	5	0	5	0	5	0	5	0	4
13.0	3.0	0	6	0	5	0	5	0	4	0	5	0	4
14.0	2.0	0	6	0	5	0	5	0	4	0	5	0	4
15.0	1.0	0	6	0	5	0	6	0	4	0	5	0	4
WL = 17.0													
1.0	16.0	0	6	0	7	0	5	0	6	0	5	0	5
2.0	15.0	0	6	0	6	0	5	0	6	0	5	0	5
3.0	14.0	0	6	0	6	0	5	0	6	0	5	0	5
4.0	13.0	0	6	0	6	0	5	0	6	0	5	0	5
5.0	12.0	0	6	0	6	0	5	0	6	0	5	0	5
6.0	11.0	0	6	0	6	0	5	0	6	0	5	0	5
7.0	10.0	0	6	0	6	0	5	0	6	0	5	0	5
8.0	9.0	0	6	0	6	0	6	0	6	0	5	0	5
9.0	8.0	0	6	0	6	0	6	0	5	0	5	0	5
10.0	7.0	0	6	0	6	0	6	0	5	0	5	0	5
11.0	6.0	0	6	0	6	0	6	0	5	0	5	0	5
12.0	5.0	0	6	0	6	0	6	0	5	0	5	0	5
13.0	4.0	0	6	0	6	0	6	0	5	0	5	0	5
14.0	3.0	0	6	0	6	0	6	0	5	0	5	0	5
15.0	2.0	0	6	0	6	0	6	0	5	0	5	0	5
16.0	1.0	0	7	0	6	0	6	0	5	0	5	0	5
WL = 18.0													
1.0	17.0	0	6	0	7	0	5	0	7	0	5	0	6
2.0	16.0	0	6	0	7	0	5	0	7	0	5	0	6
3.0	15.0	0	6	0	7	0	6	0	7	0	5	0	6
4.0	14.0	0	7	0	7	0	6	0	7	0	5	0	6
5.0	13.0	0	7	0	7	0	6	0	7	0	5	0	6
6.0	12.0	0	7	0	7	0	6	0	7	0	6	0	6
7.0	11.0	0	7	0	7	0	6	0	6	0	6	0	6

TABLE GG (CONT)

309D EQUALIZER SETTINGS FOR MFT 2-2 TERMINAL (NL) REPEATERS
FOR MIXED GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

GA1 ADJACENT TO REPEATER
CABLE TERMINATION = 900 OHMS

LENGTH (KFT)		309D EQUALIZER SETTINGS BY GAUGE											
GA 1	GA 2	26/24 GA SLOPE		24/26 GA SLOPE		26/22 GA SLOPE		22/26 GA SLOPE		24/22 GA SLOPE		22/24 GA SLOPE	
WL = 18.0													
8.0	10.0	0	7	0	7	0	6	0	6	0	6	0	6
9.0	9.0	0	7	0	7	0	6	0	6	0	6	0	6
10.0	8.0	0	7	0	7	0	6	0	6	0	6	0	6
11.0	7.0	0	7	0	7	0	7	0	6	0	6	0	6
12.0	6.0	0	7	0	7	0	7	0	6	0	6	0	5
13.0	5.0	0	7	0	7	0	7	0	6	0	6	0	5
14.0	4.0	0	7	0	6	0	7	0	6	0	6	0	5
15.0	3.0	0	7	0	6	0	7	0	6	0	6	0	5
16.0	2.0	0	7	0	6	0	7	0	5	0	6	0	5
17.0	1.0	0	7	0	6	0	7	0	5	0	6	0	5
WL = 19.0													
1.0	18.0	0	7	0	8	0	6	0	8	0	6	0	7
2.0	17.0	0	7	0	8	0	6	0	8	0	6	0	7
3.0	16.0	0	7	0	8	0	6	0	8	0	6	0	7
4.0	15.0	0	7	0	8	0	6	0	8	0	6	0	7
5.0	14.0	0	7	0	8	0	6	0	8	0	6	0	6
6.0	13.0	0	7	0	8	0	7	0	7	0	6	0	6
7.0	12.0	0	7	0	8	0	7	0	7	0	6	0	6
8.0	11.0	0	8	0	8	0	7	0	7	0	6	0	6
9.0	10.0	0	8	0	8	0	7	0	7	0	6	0	6
10.0	9.0	0	8	0	8	0	7	0	7	0	6	0	6
11.0	8.0	0	8	0	8	0	7	0	7	0	6	0	6
12.0	7.0	0	8	0	7	0	7	0	7	0	6	0	6
13.0	6.0	0	8	0	7	0	8	0	6	0	6	0	6
14.0	5.0	0	8	0	7	0	8	0	6	0	7	0	6
15.0	4.0	0	8	0	7	0	8	0	6	0	7	0	6
16.0	3.0	0	8	0	7	0	8	0	6	0	7	0	6
17.0	2.0	0	8	0	7	0	8	0	6	0	7	0	6
18.0	1.0	0	8	0	7	0	8	0	6	0	7	0	6
WL = 20.0													
1.0	19.0	0	8	0	10	0	6	0	9	0	6	0	8
2.0	18.0	0	8	0	9	0	7	0	9	0	6	0	7
3.0	17.0	0	8	0	9	0	7	0	9	0	6	0	7
4.0	16.0	0	8	0	9	0	7	0	9	0	7	0	7
5.0	15.0	0	8	0	9	0	7	0	9	0	7	0	7
6.0	14.0	0	8	0	9	0	7	0	8	0	7	0	7
7.0	13.0	0	8	0	9	0	7	0	8	0	7	0	7
8.0	12.0	0	8	0	9	0	7	0	8	0	7	0	7
9.0	11.0	0	9	0	9	0	8	0	8	0	7	0	7
10.0	10.0	0	9	0	9	0	8	0	8	0	7	0	7
11.0	9.0	0	9	0	8	0	8	0	7	0	7	0	7
12.0	8.0	0	9	0	8	0	8	0	7	0	7	0	7
13.0	7.0	0	9	0	8	0	8	0	7	0	7	0	7
14.0	6.0	0	9	0	8	0	9	0	7	0	7	0	7
15.0	5.0	0	9	0	8	0	9	0	7	0	7	0	7
16.0	4.0	0	9	0	8	0	9	0	7	0	7	0	6
17.0	3.0	0	9	0	8	0	9	0	7	0	7	0	6
18.0	2.0	0	9	0	8	0	9	0	7	0	7	0	6

TABLE GG (CONT)

309D EQUALIZER SETTINGS FOR MFT 2-2 TERMINAL (NL) REPEATERS
FOR MIXED GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

GA1 ADJACENT TO REPEATER
CABLE TERMINATION = 900 OHMS

LENGTH (KFT)		309D EQUALIZER SETTINGS BY GAUGE											
GA 1	GA 2	26/24 GA SLOPE		24/26 GA SLOPE		26/22 GA SLOPE		22/26 GA SLOPE		24/22 GA SLOPE		22/24 GA SLOPE	
WL = 20.0													
19.0	1.0	0	10	0	8	0	9	0	6	0	8	0	6
WL = 21.0													
1.0	20.0	0	9	0	11	0	7	0	11	0	7	0	8
2.0	19.0	0	9	0	11	0	7	0	10	0	7	0	8
3.0	18.0	0	9	0	11	0	7	0	10	0	7	0	8
4.0	17.0	0	9	0	10	0	7	0	10	0	7	0	8
5.0	16.0	0	9	0	10	0	8	0	10	0	7	0	8
6.0	15.0	0	9	0	10	0	8	0	10	0	7	0	8
7.0	14.0	0	9	0	10	0	8	0	9	0	7	0	8
8.0	13.0	0	9	0	10	0	8	0	9	0	7	0	8
9.0	12.0	0	9	0	10	0	8	0	9	0	7	0	8
10.0	11.0	0	10	0	10	0	9	0	9	0	8	0	8
11.0	10.0	0	10	0	9	0	9	0	8	0	8	0	7
12.0	9.0	0	10	0	9	0	9	0	8	0	8	0	7
13.0	8.0	0	10	0	9	0	9	0	8	0	8	0	7
14.0	7.0	0	10	0	9	0	9	0	8	0	8	0	7
15.0	6.0	0	10	0	9	0	10	0	8	0	8	0	7
16.0	5.0	0	10	0	9	0	10	0	8	0	8	0	7
17.0	4.0	0	10	0	9	0	10	0	7	0	8	0	7
18.0	3.0	0	11	0	9	0	10	0	7	0	8	0	7
19.0	2.0	0	11	0	9	0	10	0	7	0	8	0	7
20.0	1.0	0	11	0	9	0	11	0	7	0	8	0	7
WL = 22.0													
1.0	21.0	0	9	0	12	0	8	0	12	0	7	0	9
2.0	20.0	0	10	0	12	0	8	0	12	0	8	0	9
3.0	19.0	0	10	0	12	0	8	0	11	0	8	0	9
4.0	18.0	0	10	0	12	0	8	0	11	0	8	0	9
5.0	17.0	0	10	0	12	0	8	0	11	0	8	0	9
6.0	16.0	0	10	0	11	0	8	0	11	0	3	0	9
7.0	15.0	0	10	0	11	0	9	0	10	0	8	0	9
8.0	14.0	0	10	0	11	0	9	0	10	0	8	0	9
9.0	13.0	0	10	0	11	0	9	0	10	0	8	0	8
10.0	12.0	0	11	0	11	0	9	0	10	0	8	0	8
11.0	11.0	0	11	0	11	0	10	0	9	0	8	0	8
12.0	10.0	0	11	0	10	0	10	0	9	0	8	0	8
13.0	9.0	0	11	0	10	0	10	0	9	0	8	0	8
14.0	8.0	0	11	0	10	0	10	0	9	0	9	0	8
15.0	7.0	0	11	0	10	0	11	0	9	0	9	0	8
16.0	6.0	0	12	0	10	0	11	0	8	0	9	0	8
17.0	5.0	0	12	0	10	0	11	0	8	0	9	0	8
18.0	4.0	0	12	0	10	0	11	0	8	0	9	0	8
19.0	3.0	0	12	0	10	0	12	0	8	0	9	0	8
20.0	2.0	0	12	0	10	0	12	0	8	0	9	0	8
21.0	1.0	0	12	0	9	0	12	0	8	0	9	0	7
WL = 23.0													
1.0	22.0	0	10	0	14	0	8	0	14	0	8	0	10
2.0	21.0	0	11	0	14	0	8	0	13	0	8	0	10

TABLE GG (CONT)

309D EQUALIZER SETTINGS FOR MFT 2-2 TERMINAL (NL) REPEATERS
FOR MIXED GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

GA1 ADJACENT TO REPEATER
CABLE TERMINATION = 900 OHMS

LENGTH (KFT)		309D EQUALIZER SETTINGS BY GAUGE											
GA 1	GA 2	26/24 GA SLOPE		24/26 GA SLOPE		26/22 GA SLOPE		22/26 GA SLOPE		24/22 GA SLOPE		22/24 GA SLOPE	
WL = 23.0													
3.0	20.0	0	11	0	13	0	9	0	13	0	8	0	10
4.0	19.0	0	11	0	13	0	9	0	13	0	8	0	10
5.0	18.0	0	11	0	13	0	9	0	12	0	8	0	10
6.0	17.0	0	11	0	13	0	9	0	12	0	9	0	10
7.0	16.0	0	11	0	13	0	9	0	12	0	9	0	9
8.0	15.0	0	11	0	13	0	10	0	11	0	9	0	9
9.0	14.0	0	12	0	12	0	10	0	11	0	9	0	9
10.0	13.0	0	12	0	12	0	10	0	11	0	9	0	9
11.0	12.0	0	12	0	12	0	10	0	11	0	9	0	9
12.0	11.0	0	12	0	12	0	11	0	10	0	9	0	9
13.0	10.0	0	12	0	12	0	11	0	10	0	9	0	9
14.0	9.0	0	13	0	11	0	11	0	10	0	9	0	9
15.0	8.0	0	13	0	11	0	12	0	9	0	9	0	9
16.0	7.0	0	13	0	11	0	12	0	9	0	10	0	9
17.0	6.0	0	13	0	11	0	12	0	9	0	10	0	8
18.0	5.0	0	13	0	11	0	13	0	9	0	10	0	8
19.0	4.0	0	13	0	11	0	13	0	9	0	10	0	8
20.0	3.0	0	14	0	11	0	13	0	9	0	10	0	8
21.0	2.0	0	14	0	10	0	13	0	8	0	10	0	8
22.0	1.0	0	14	0	10	0	14	0	8	0	10	0	8
WL = 24.0													
1.0	23.0	0	11	0	15	0	9	0	15	0	9	0	11
2.0	22.0	0	12	0	15	0	9	0	15	0	9	0	11
3.0	21.0	0	12	0	15	0	9	0	15	0	9	0	11
4.0	20.0	0	12	0	15	0	10	0	14	0	9	0	11
5.0	19.0	0	12	0	15	0	10	0	14	0	9	0	11
6.0	18.0	0	12	0	15	0	10	0	14	0	9	0	11
7.0	17.0	0	12	0	14	0	10	0	13	0	9	0	10
8.0	16.0	0	12	0	14	0	10	0	13	0	9	0	10
9.0	15.0	0	13	0	14	0	11	0	13	0	9	0	10
10.0	14.0	0	13	0	14	0	11	0	12	0	10	0	10
11.0	13.0	0	13	0	13	0	11	0	12	0	10	0	10
12.0	12.0	0	13	0	13	0	12	0	11	0	10	0	10
13.0	11.0	0	14	0	13	0	12	0	11	0	10	0	10
14.0	10.0	0	14	0	13	0	12	0	11	0	10	0	10
15.0	9.0	0	14	0	13	0	13	0	11	0	10	0	9
16.0	8.0	0	14	0	12	0	13	0	10	0	10	0	9
17.0	7.0	0	15	0	12	0	14	0	10	0	10	0	9
18.0	6.0	0	15	0	12	0	14	0	10	0	11	0	9
19.0	5.0	0	15	0	12	0	14	0	10	0	11	0	9
20.0	4.0	0	15	0	12	0	14	0	9	0	11	0	9
21.0	3.0	0	15	0	12	0	15	0	9	0	11	0	9
22.0	2.0	0	15	0	12	0	15	0	9	0	11	0	9
23.0	1.0	0	15	0	11	0	15	0	9	0	11	0	9

TABLE HH

309D EQUALIZER SETTINGS FOR MFT 2-2 TERMINAL (NL) REPEATERS
FOR MIXED GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

GA1 ADJACENT TO REPEATER
CABLE TERMINATION = 600 OHMS

LENGTH (KFT) GA 1	GA 2	309D EQUALIZER SETTINGS BY GAUGE											
		26/24 GA SLOPE		24/26 GA SLOPE		26/22 GA SLOPE		22/26 GA SLOPE		24/22 GA SLOPE		22/24 GA SLOPE	
WL = 9.0													
1.0	8.0	0	0	0	0	0	0	0	0	0	0	0	0
2.0	7.0	0	0	0	0	0	0	0	0	0	0	0	0
3.0	6.0	0	0	0	0	0	0	0	0	0	0	0	0
4.0	5.0	0	0	0	0	0	0	0	0	0	0	0	0
5.0	4.0	0	0	0	0	0	0	0	0	0	0	0	0
6.0	3.0	0	0	0	0	0	0	0	0	0	0	0	0
7.0	2.0	0	0	0	0	0	0	0	0	0	0	0	0
8.0	1.0	0	0	0	0	0	0	0	0	0	0	0	0
WL = 10.0													
1.0	9.0	0	1	0	1	0	1	0	1	0	1	0	1
2.0	8.0	0	1	0	1	0	1	0	1	0	1	0	1
3.0	7.0	0	1	0	1	0	1	0	1	0	1	0	1
4.0	6.0	0	1	0	1	0	1	0	1	0	1	0	1
5.0	5.0	0	1	0	1	0	1	0	1	0	1	0	1
6.0	4.0	0	1	0	1	0	1	0	1	0	1	0	1
7.0	3.0	0	1	0	1	0	1	0	1	0	1	0	1
8.0	2.0	0	1	0	1	0	1	0	1	0	1	0	1
9.0	1.0	0	1	0	1	0	1	0	1	0	1	0	1
WL = 11.0													
1.0	10.0	0	1	0	1	0	1	0	1	0	1	0	1
2.0	9.0	0	1	0	1	0	1	0	1	0	1	0	1
3.0	8.0	0	1	0	1	0	1	0	1	0	1	0	1
4.0	7.0	0	1	0	1	0	1	0	1	0	1	0	1
5.0	6.0	0	1	0	1	0	1	0	1	0	1	0	1
6.0	5.0	0	1	0	1	0	1	0	1	0	1	0	1
7.0	4.0	0	1	0	1	0	1	0	1	0	1	0	1
8.0	3.0	0	1	0	1	0	1	0	1	0	1	0	1
9.0	2.0	0	1	0	1	0	1	0	1	0	1	0	1
10.0	1.0	0	1	0	1	0	1	0	1	0	1	0	1
WL = 12.0													
1.0	11.0	0	2	0	2	0	1	0	2	0	1	0	2
2.0	10.0	0	2	0	2	0	1	0	2	0	1	0	2
3.0	9.0	0	2	0	2	0	1	0	2	0	1	0	2
4.0	8.0	0	2	0	2	0	1	0	2	0	1	0	2
5.0	7.0	0	2	0	2	0	1	0	2	0	1	0	2
6.0	6.0	0	2	0	2	0	2	0	2	0	1	0	2
7.0	5.0	0	2	0	2	0	2	0	2	0	1	0	2
8.0	4.0	0	2	0	2	0	2	0	2	0	1	0	2
9.0	3.0	0	2	0	2	0	2	0	2	0	2	0	1
10.0	2.0	0	2	0	2	0	2	0	2	0	2	0	1
11.0	1.0	0	2	0	2	0	2	0	1	0	2	0	1
WL = 13.0													
1.0	12.0	0	2	0	3	0	2	0	3	0	2	0	2
2.0	11.0	0	2	0	3	0	2	0	2	0	2	0	2
3.0	10.0	0	2	0	2	0	2	0	2	0	2	0	2
4.0	9.0	0	2	0	2	0	2	0	2	0	2	0	2

TABLE HH (CONT)

309D EQUALIZER SETTINGS FOR MFT 2-2 TERMINAL (NL) REPEATERS
FOR MIXED GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

GA1 ADJACENT TO REPEATER
CABLE TERMINATION = 600 OHMS

LENGTH (KFT)		309D EQUALIZER SETTINGS BY GAUGE											
GA 1	GA 2	26/24 GA SLOPE		24/26 GA SLOPE		26/22 GA SLOPE		22/26 GA SLOPE		24/22 GA SLOPE		22/24 GA SLOPE	
WL = 13.0													
5.0	8.0	0	2	0	2	0	2	0	2	0	2	0	2
6.0	7.0	0	2	0	2	0	2	0	2	0	2	0	2
7.0	6.0	0	2	0	2	0	2	0	2	0	2	0	2
8.0	5.0	0	2	0	2	0	2	0	2	0	2	0	2
9.0	4.0	0	2	0	2	0	2	0	2	0	2	0	2
10.0	3.0	0	2	0	2	0	2	0	2	0	2	0	2
11.0	2.0	0	2	0	2	0	2	0	2	0	2	0	2
12.0	1.0	0	3	0	2	0	2	0	2	0	2	0	2
WL = 14.0													
1.0	13.0	0	3	0	3	0	2	0	3	0	2	0	3
2.0	12.0	0	3	0	3	0	2	0	3	0	2	0	3
3.0	11.0	0	3	0	3	0	2	0	3	0	2	0	3
4.0	10.0	0	3	0	3	0	2	0	3	0	2	0	3
5.0	9.0	0	3	0	3	0	2	0	3	0	2	0	2
6.0	8.0	0	3	0	3	0	2	0	3	0	2	0	2
7.0	7.0	0	3	0	3	0	2	0	3	0	2	0	2
8.0	6.0	0	3	0	3	0	3	0	3	0	2	0	2
9.0	5.0	0	3	0	3	0	3	0	3	0	2	0	2
10.0	4.0	0	3	0	3	0	3	0	3	0	2	0	2
11.0	3.0	0	3	0	3	0	3	0	3	0	2	0	2
12.0	2.0	0	3	0	3	0	3	0	2	0	2	0	2
13.0	1.0	0	3	0	3	0	3	0	2	0	3	0	2
WL = 15.0													
1.0	14.0	0	3	0	4	0	3	0	4	0	3	0	3
2.0	13.0	0	3	0	4	0	3	0	4	0	3	0	3
3.0	12.0	0	3	0	4	0	3	0	4	0	3	0	3
4.0	11.0	0	3	0	4	0	3	0	3	0	3	0	3
5.0	10.0	0	3	0	4	0	3	0	3	0	3	0	3
6.0	9.0	0	3	0	4	0	3	0	3	0	3	0	3
7.0	8.0	0	3	0	4	0	3	0	3	0	3	0	3
8.0	7.0	0	3	0	4	0	3	0	3	0	3	0	3
9.0	6.0	0	3	0	4	0	3	0	3	0	3	0	3
10.0	5.0	0	3	0	3	0	3	0	3	0	3	0	3
11.0	4.0	0	4	0	3	0	3	0	3	0	3	0	3
12.0	3.0	0	4	0	3	0	3	0	3	0	3	0	3
13.0	2.0	0	4	0	3	0	3	0	3	0	3	0	3
14.0	1.0	0	4	0	3	0	4	0	3	0	3	0	3
WL = 16.0													
1.0	15.0	0	4	0	4	0	3	0	4	0	3	0	4
2.0	14.0	0	4	0	4	0	3	0	4	0	3	0	4
3.0	13.0	0	4	0	4	0	3	0	4	0	3	0	4
4.0	12.0	0	4	0	4	0	3	0	4	0	3	0	3
5.0	11.0	0	4	0	4	0	3	0	4	0	3	0	3
6.0	10.0	0	4	0	4	0	3	0	4	0	3	0	3
7.0	9.0	0	4	0	4	0	3	0	4	0	3	0	3
8.0	8.0	0	4	0	4	0	3	0	4	0	3	0	3
9.0	7.0	0	4	0	4	0	4	0	4	0	3	0	3

TABLE HH (CONT)

309D EQUALIZER SETTINGS FOR MFT 2-2 TERMINAL (NL) REPEATERS
FOR MIXED GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

GA1 ADJACENT TO REPEATER
CABLE TERMINATION = 600 OHMS

LENGTH (KFT)		309D EQUALIZER SETTINGS BY GAUGE											
GA 1	GA 2	26/24 GA SLOPE		24/26 GA SLOPE		26/22 GA SLOPE		22/26 GA SLOPE		24/22 GA SLOPE		22/24 GA SLOPE	
WL = 16.0													
10.0	6.0	0	4	0	4	0	4	0	4	0	3	0	3
11.0	5.0	0	4	0	4	0	4	0	4	0	3	0	3
12.0	4.0	0	4	0	4	0	4	0	4	0	3	0	3
13.0	3.0	0	4	0	4	0	4	0	3	0	3	0	3
14.0	2.0	0	4	0	4	0	4	0	3	0	4	0	3
15.0	1.0	0	4	0	4	0	4	0	3	0	4	0	3
WL = 17.0													
1.0	16.0	0	4	0	5	0	4	0	5	0	3	0	4
2.0	15.0	0	4	0	5	0	4	0	5	0	4	0	4
3.0	14.0	0	4	0	5	0	4	0	5	0	4	0	4
4.0	13.0	0	4	0	5	0	4	0	5	0	4	0	4
5.0	12.0	0	4	0	5	0	4	0	5	0	4	0	4
6.0	11.0	0	4	0	5	0	4	0	5	0	4	0	4
7.0	10.0	0	5	0	5	0	4	0	5	0	4	0	4
8.0	9.0	0	5	0	5	0	4	0	4	0	4	0	4
9.0	8.0	0	5	0	5	0	4	0	4	0	4	0	4
10.0	7.0	0	5	0	5	0	4	0	4	0	4	0	4
11.0	6.0	0	5	0	5	0	4	0	4	0	4	0	4
12.0	5.0	0	5	0	5	0	4	0	4	0	4	0	4
13.0	4.0	0	5	0	5	0	5	0	4	0	4	0	4
14.0	3.0	0	5	0	5	0	5	0	4	0	4	0	4
15.0	2.0	0	5	0	4	0	5	0	4	0	4	0	4
16.0	1.0	0	5	0	4	0	5	0	4	0	4	0	4
WL = 18.0													
1.0	17.0	0	5	0	6	0	4	0	6	0	4	0	5
2.0	16.0	0	5	0	6	0	4	0	6	0	4	0	5
3.0	15.0	0	5	0	6	0	4	0	6	0	4	0	5
4.0	14.0	0	5	0	6	0	4	0	6	0	4	0	5
5.0	13.0	0	5	0	6	0	4	0	5	0	4	0	5
6.0	12.0	0	5	0	6	0	4	0	5	0	4	0	5
7.0	11.0	0	5	0	6	0	4	0	5	0	4	0	4
8.0	10.0	0	5	0	6	0	5	0	5	0	4	0	4
9.0	9.0	0	5	0	6	0	5	0	5	0	4	0	4
10.0	8.0	0	5	0	5	0	5	0	5	0	4	0	4
11.0	7.0	0	5	0	5	0	5	0	5	0	4	0	4
12.0	6.0	0	5	0	5	0	5	0	5	0	4	0	4
13.0	5.0	0	6	0	5	0	5	0	5	0	4	0	4
14.0	4.0	0	6	0	5	0	5	0	5	0	4	0	4
15.0	3.0	0	6	0	5	0	5	0	4	0	5	0	4
16.0	2.0	0	6	0	5	0	6	0	4	0	5	0	4
17.0	1.0	0	6	0	5	0	6	0	4	0	5	0	4
WL = 19.0													
1.0	18.0	0	5	0	7	0	4	0	7	0	4	0	5
2.0	17.0	0	6	0	7	0	5	0	7	0	4	0	5
3.0	16.0	0	6	0	7	0	5	0	6	0	4	0	5
4.0	15.0	0	6	0	7	0	5	0	6	0	5	0	5
5.0	14.0	0	6	0	7	0	5	0	6	0	5	0	5

TABLE HH (CONT)

309D EQUALIZER SETTINGS FOR MFT 2-2 TERMINAL (NL) REPEATERS
FOR MIXED GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

GA1 ADJACENT TO REPEATER
CABLE TERMINATION = 600 OHMS

LENGTH (KFT)		309D EQUALIZER SETTINGS BY GAUGE											
GA 1	GA 2	26/24 GA SLOPE		24/26 GA SLOPE		26/22 GA SLOPE		22/26 GA SLOPE		24/22 GA SLOPE		22/24 GA SLOPE	
WL = 19.0													
6.0	13.0	0	6	0	6	0	5	0	6	0	5	0	5
7.0	12.0	0	6	0	6	0	5	0	6	0	5	0	5
8.0	11.0	0	6	0	6	0	5	0	6	0	5	0	5
9.0	10.0	0	6	0	6	0	5	0	6	0	5	0	5
10.0	9.0	0	6	0	6	0	5	0	6	0	5	0	5
11.0	8.0	0	6	0	6	0	5	0	5	0	5	0	5
12.0	7.0	0	6	0	6	0	6	0	5	0	5	0	5
13.0	6.0	0	6	0	6	0	6	0	5	0	5	0	5
14.0	5.0	0	6	0	6	0	6	0	5	0	5	0	5
15.0	4.0	0	6	0	6	0	6	0	5	0	5	0	5
16.0	3.0	0	7	0	6	0	6	0	5	0	5	0	5
17.0	2.0	0	7	0	6	0	6	0	5	0	5	0	5
18.0	1.0	0	7	0	6	0	7	0	5	0	5	0	4
WL = 20.0													
1.0	19.0	0	6	0	8	0	5	0	8	0	5	0	6
2.0	18.0	0	6	0	8	0	5	0	7	0	5	0	6
3.0	17.0	0	6	0	8	0	5	0	7	0	5	0	6
4.0	16.0	0	6	0	7	0	5	0	7	0	5	0	6
5.0	15.0	0	6	0	7	0	5	0	7	0	5	0	6
6.0	14.0	0	6	0	7	0	5	0	7	0	5	0	6
7.0	13.0	0	7	0	7	0	6	0	7	0	5	0	6
8.0	12.0	0	7	0	7	0	6	0	7	0	5	0	6
9.0	11.0	0	7	0	7	0	6	0	6	0	5	0	6
10.0	10.0	0	7	0	7	0	6	0	6	0	5	0	5
11.0	9.0	0	7	0	7	0	6	0	6	0	5	0	5
12.0	8.0	0	7	0	7	0	6	0	6	0	5	0	5
13.0	7.0	0	7	0	7	0	6	0	6	0	5	0	5
14.0	6.0	0	7	0	7	0	7	0	6	0	6	0	5
15.0	5.0	0	7	0	7	0	7	0	6	0	6	0	5
16.0	4.0	0	7	0	7	0	7	0	6	0	6	0	5
17.0	3.0	0	7	0	6	0	7	0	5	0	6	0	5
18.0	2.0	0	8	0	6	0	7	0	5	0	6	0	5
19.0	1.0	0	8	0	6	0	8	0	5	0	6	0	5
WL = 21.0													
1.0	20.0	0	7	0	9	0	5	0	9	0	5	0	7
2.0	19.0	0	7	0	9	0	6	0	8	0	5	0	7
3.0	18.0	0	7	0	9	0	6	0	8	0	5	0	6
4.0	17.0	0	7	0	8	0	6	0	8	0	6	0	6
5.0	16.0	0	7	0	8	0	6	0	8	0	6	0	6
6.0	15.0	0	7	0	8	0	6	0	8	0	6	0	6
7.0	14.0	0	7	0	8	0	6	0	8	0	6	0	6
8.0	13.0	0	7	0	8	0	6	0	7	0	6	0	6
9.0	12.0	0	7	0	8	0	6	0	7	0	6	0	6
10.0	11.0	0	8	0	8	0	7	0	7	0	6	0	6
11.0	10.0	0	8	0	8	0	7	0	7	0	6	0	6
12.0	9.0	0	8	0	8	0	7	0	7	0	6	0	6
13.0	8.0	0	8	0	8	0	7	0	7	0	6	0	6
14.0	7.0	0	8	0	8	0	7	0	7	0	6	0	6

TABLE HH (CONT)

309D EQUALIZER SETTINGS FOR MFT 2-2 TERMINAL (NL) REPEATERS
FOR MIXED GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

GA1 ADJACENT TO REPEATER
CABLE TERMINATION = 600 OHMS

LENGTH (KFT)		309D EQUALIZER SETTINGS BY GAUGE											
GA 1	GA 2	26/24 GA SLOPE		24/26 GA SLOPE		26/22 GA SLOPE		22/26 GA SLOPE		24/22 GA SLOPE		22/24 GA SLOPE	
WL = 21.0													
15.0	6.0	0	8	0	7	0	7	0	6	0	6	0	6
16.0	5.0	0	8	0	7	0	8	0	6	0	6	0	6
17.0	4.0	0	8	0	7	0	8	0	6	0	6	0	6
18.0	3.0	0	8	0	7	0	8	0	6	0	6	0	6
19.0	2.0	0	9	0	7	0	8	0	6	0	6	0	5
20.0	1.0	0	9	0	7	0	9	0	6	0	7	0	5
WL = 22.0													
1.0	21.0	0	8	0	10	0	6	0	10	0	6	0	7
2.0	20.0	0	8	0	10	0	6	0	10	0	6	0	7
3.0	19.0	0	8	0	10	0	6	0	9	0	6	0	7
4.0	18.0	0	8	0	10	0	6	0	9	0	6	0	7
5.0	17.0	0	8	0	9	0	6	0	9	0	6	0	7
6.0	16.0	0	8	0	9	0	7	0	9	0	6	0	7
7.0	15.0	0	8	0	9	0	7	0	9	0	6	0	7
8.0	14.0	0	8	0	9	0	7	0	8	0	6	0	7
9.0	13.0	0	8	0	9	0	7	0	8	0	6	0	7
10.0	12.0	0	8	0	9	0	7	0	8	0	6	0	7
11.0	11.0	0	8	0	9	0	7	0	8	0	6	0	7
12.0	10.0	0	9	0	9	0	8	0	8	0	7	0	7
13.0	9.0	0	9	0	9	0	8	0	7	0	7	0	7
14.0	8.0	0	9	0	8	0	8	0	7	0	7	0	6
15.0	7.0	0	9	0	8	0	8	0	7	0	7	0	6
16.0	6.0	0	9	0	8	0	8	0	7	0	7	0	6
17.0	5.0	0	9	0	8	0	9	0	7	0	7	0	6
18.0	4.0	0	9	0	8	0	9	0	7	0	7	0	6
19.0	3.0	0	10	0	8	0	9	0	6	0	7	0	6
20.0	2.0	0	10	0	8	0	9	0	6	0	7	0	6
21.0	1.0	0	10	0	8	0	10	0	6	0	7	0	6
WL = 23.0													
1.0	22.0	0	8	0	11	0	7	0	11	0	6	0	8
2.0	21.0	0	8	0	11	0	7	0	11	0	6	0	8
3.0	20.0	0	9	0	11	0	7	0	11	0	7	0	8
4.0	19.0	0	9	0	11	0	7	0	10	0	7	0	8
5.0	18.0	0	9	0	11	0	7	0	10	0	7	0	8
6.0	17.0	0	9	0	11	0	7	0	10	0	7	0	8
7.0	16.0	0	9	0	10	0	7	0	10	0	7	0	8
8.0	15.0	0	9	0	10	0	7	0	9	0	7	0	8
9.0	14.0	0	9	0	10	0	8	0	9	0	7	0	7
10.0	13.0	0	9	0	10	0	8	0	9	0	7	0	7
11.0	12.0	0	9	0	10	0	8	0	9	0	7	0	7
12.0	11.0	0	10	0	10	0	8	0	9	0	7	0	7
13.0	10.0	0	10	0	10	0	8	0	8	0	7	0	7
14.0	9.0	0	10	0	9	0	9	0	8	0	7	0	7
15.0	8.0	0	10	0	9	0	9	0	8	0	7	0	7
16.0	7.0	0	10	0	9	0	9	0	8	0	7	0	7
17.0	6.0	0	10	0	9	0	9	0	8	0	8	0	7
18.0	5.0	0	10	0	9	0	10	0	7	0	8	0	7
19.0	4.0	0	11	0	9	0	10	0	7	0	8	0	7

TABLE HH (CONT)

309D EQUALIZER SETTINGS FOR MFT 2-2 TERMINAL (NL) REPEATERS
FOR MIXED GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

GA1 ADJACENT TO REPEATER
CABLE TERMINATION = 600 OHMS

LENGTH (KFT) GA 1	GA 2	309D EQUALIZER SETTINGS BY GAUGE											
		26/24 GA SLOPE		24/26 GA SLOPE		26/22 GA SLOPE		22/26 GA SLOPE		24/22 GA SLOPE		22/24 GA SLOPE	
WL = 23.0													
20.0	3.0	0	11	0	9	0	10	0	7	0	8	0	7
21.0	2.0	0	11	0	9	0	11	0	7	0	8	0	7
22.0	1.0	0	11	0	8	0	11	0	7	0	8	0	6
WL = 24.0													
1.0	23.0	0	9	0	13	0	7	0	12	0	7	0	9
2.0	22.0	0	9	0	12	0	7	0	12	0	7	0	9
3.0	21.0	0	9	0	12	0	7	0	12	0	7	0	9
4.0	20.0	0	9	0	12	0	7	0	12	0	7	0	9
5.0	19.0	0	10	0	12	0	8	0	11	0	7	0	9
6.0	18.0	0	10	0	12	0	8	0	11	0	7	0	9
7.0	17.0	0	10	0	12	0	8	0	11	0	7	0	8
8.0	16.0	0	10	0	12	0	8	0	11	0	7	0	8
9.0	15.0	0	10	0	11	0	8	0	10	0	7	0	8
10.0	14.0	0	10	0	11	0	9	0	10	0	8	0	8
11.0	13.0	0	10	0	11	0	9	0	10	0	8	0	8
12.0	12.0	0	11	0	11	0	9	0	10	0	8	0	8
13.0	11.0	0	11	0	11	0	9	0	9	0	8	0	8
14.0	10.0	0	11	0	11	0	10	0	9	0	8	0	8
15.0	9.0	0	11	0	10	0	10	0	9	0	8	0	8
16.0	8.0	0	11	0	10	0	10	0	9	0	8	0	8
17.0	7.0	0	11	0	10	0	10	0	8	0	8	0	8
18.0	6.0	0	12	0	10	0	11	0	8	0	8	0	7
19.0	5.0	0	12	0	10	0	11	0	8	0	8	0	7
20.0	4.0	0	12	0	10	0	11	0	8	0	9	0	7
21.0	3.0	0	12	0	10	0	12	0	8	0	9	0	7
22.0	2.0	0	12	0	9	0	12	0	7	0	9	0	7
23.0	1.0	0	13	0	9	0	12	0	7	0	9	0	7

Intermediate (NL-NL) Repeaters

5.19 When the J99343PD, 2-2 intermediate (NL-NL) repeater is used on a circuit, it is assumed that one facility will terminate in 600 ohms (station set). When neither facility is terminated in 600 ohms, the equivalence procedure described in 5.13 must be used before using the tables. The 600-ohm termination is associated with the table title and is given as GA1. GA2 may be terminated in either 600 or 900 ohms as noted by the column headings.

5.20 To use the tables:

(1) Each nonloaded facility must be expressed as a single gauge or equivalent.

(2) Identify the facility that is terminated in 600 ohms and its gauge. Choose the table which corresponds to its gauge: Table II for 26-gauge, Table JJ for 24-gauge, and Table KK for 22-gauge.

Note: 19- and 25-gauge tables are not given and 19- or 25-gauge facilities must be converted to an equivalent gauge.

(3) Determine the WL for entry into the tables by adding the lengths of facilities on both sides of the repeater.

(4) Locate the pair of lengths which most closely resemble the 600-ohm facility (Step 2) and GA2.

(5) Read the equalizer settings under the column headed by the gauge of GA2 for the termination being used (600 or 900 ohms).

TABLE II

309D EQUALIZER SETTINGS FOR MFT 2-2 INTERMEDIATE (NL-NL) REPEATERS FOR 26-GAUGE NONLOADED AND 26-, 24-, OR 22-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

26-GA TERMINATION = 600 OHMS
GAUGE 2 TERMINATION = 900 OR 600 OHMS

LENGTH (KFT)		309D EQUALIZER SETTINGS BY GAUGE AND TERMINATION											
		GAUGE 2 = 26 GA NL				GAUGE 2 = 24 GA NL				GAUGE 2 = 22 GA NL			
26-GA	GA 2	900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE	
WL = 11.0													
4.0	7.0	0	0	0	0	0	0	0	0	0	0	0	0
5.0	6.0	0	0	0	0	0	0	0	0	0	0	0	0
6.0	5.0	0	0	0	0	0	0	0	0	0	0	0	0
7.0	4.0	0	0	0	0	0	0	0	0	0	0	0	0
WL = 12.0													
4.0	8.0	0	1	0	0	0	1	0	0	0	1	0	0
5.0	7.0	0	1	0	0	0	1	0	0	0	0	0	0
6.0	6.0	0	0	0	0	0	0	0	0	0	0	0	0
7.0	5.0	0	0	0	0	0	0	0	0	0	0	0	0
8.0	4.0	0	0	0	0	0	0	0	0	0	0	0	0
WL = 13.0													
4.0	9.0	0	1	0	1	0	1	0	1	0	1	0	0
5.0	8.0	0	1	0	1	0	1	0	0	0	1	0	0
6.0	7.0	0	1	0	0	0	1	0	0	0	1	0	0
7.0	6.0	0	1	0	0	0	1	0	0	0	1	0	0
8.0	5.0	0	1	0	1	0	1	0	1	0	1	0	1
9.0	4.0	0	1	0	1	0	1	0	1	0	1	0	1
WL = 14.0													
4.0	10.0	0	2	0	1	0	2	0	1	0	2	0	1
5.0	9.0	0	2	0	1	0	2	0	1	0	1	0	1
6.0	8.0	0	1	0	1	0	1	0	1	0	1	0	1
7.0	7.0	0	1	0	1	0	1	0	1	0	1	0	1
8.0	6.0	0	1	0	1	0	1	0	1	0	1	0	1
9.0	5.0	0	1	0	1	0	1	0	1	0	1	0	1
10.0	4.0	0	1	0	1	0	1	0	1	0	1	0	1
WL = 15.0													
4.0	11.0	0	3	0	2	0	2	0	1	0	2	0	1
5.0	10.0	0	2	0	1	0	2	0	1	0	2	0	1
6.0	9.0	0	2	0	1	0	2	0	1	0	2	0	1
7.0	8.0	0	2	0	1	0	2	0	1	0	2	0	1
8.0	7.0	0	2	0	1	0	2	0	1	0	2	0	1
9.0	6.0	0	2	0	1	0	2	0	1	0	2	0	1
10.0	5.0	0	2	0	1	0	2	0	2	0	2	0	2
11.0	4.0	0	2	0	2	0	2	0	2	0	2	0	2
WL = 16.0													
4.0	12.0	0	3	0	2	0	3	0	2	0	2	0	2
5.0	11.0	0	3	0	2	0	3	0	2	0	2	0	2
6.0	10.0	0	3	0	2	0	2	0	2	0	2	0	1
7.0	9.0	0	2	0	2	0	2	0	2	0	2	0	2
8.0	8.0	0	2	0	2	0	2	0	2	0	2	0	2
9.0	7.0	0	2	0	2	0	2	0	2	0	2	0	2
10.0	6.0	0	2	0	2	0	2	0	2	0	2	0	2
11.0	5.0	0	2	0	2	0	2	0	2	0	2	0	2

TABLE II (CONT)

309D EQUALIZER SETTINGS FOR MFT 2-2 INTERMEDIATE (NL-NL) REPEATERS FOR 26-GAUGE NONLOADED AND 26-, 24-, OR 22-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

26-GA TERMINATION = 600 OHMS
GAUGE 2 TERMINATION = 900 OR 600 OHMS

LENGTH (KFT)		309D EQUALIZER SETTINGS BY GAUGE AND TERMINATION											
		GAUGE 2 = 26 GA NL				GAUGE 2 = 24 GA NL				GAUGE 2 = 22 GA NL			
26-GA	GA 2	900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE	
WL = 16.0													
12.0	4.0	0	2	0	2	0	2	0	2	0	2	0	2
WL = 17.0													
4.0	13.0	0	4	0	3	0	3	0	2	0	3	0	2
5.0	12.0	0	3	0	3	0	3	0	2	0	3	0	2
6.0	11.0	0	3	0	2	0	3	0	2	0	3	0	2
7.0	10.0	0	3	0	2	0	3	0	2	0	3	0	2
8.0	9.0	0	3	0	2	0	3	0	2	0	3	0	2
9.0	8.0	0	3	0	2	0	3	0	2	0	3	0	2
10.0	7.0	0	3	0	2	0	3	0	2	0	3	0	2
11.0	6.0	0	3	0	2	0	3	0	2	0	3	0	2
12.0	5.0	0	3	0	3	0	3	0	3	0	3	0	3
13.0	4.0	0	3	0	3	0	3	0	3	0	3	0	3
WL = 18.0													
4.0	14.0	0	5	0	3	0	4	0	3	0	3	0	2
5.0	13.0	0	4	0	3	0	4	0	3	0	3	0	2
6.0	12.0	0	4	0	3	0	4	0	3	0	3	0	2
7.0	11.0	0	4	0	3	0	3	0	3	0	3	0	2
8.0	10.0	0	4	0	3	0	3	0	3	0	3	0	2
9.0	9.0	0	3	0	3	0	3	0	3	0	3	0	2
10.0	8.0	0	3	0	3	0	3	0	3	0	3	0	3
11.0	7.0	0	3	0	3	0	3	0	3	0	3	0	3
12.0	6.0	0	3	0	3	0	3	0	3	0	3	0	3
13.0	5.0	0	3	0	3	0	3	0	3	0	3	0	3
14.0	4.0	0	4	0	3	0	4	0	4	0	4	0	4
WL = 19.0													
4.0	15.0	0	5	0	4	0	5	0	3	0	4	0	3
5.0	14.0	0	5	0	4	0	4	0	3	0	4	0	3
6.0	13.0	0	5	0	4	0	4	0	3	0	4	0	3
7.0	12.0	0	4	0	3	0	4	0	3	0	4	0	3
8.0	11.0	0	4	0	3	0	4	0	3	0	4	0	3
9.0	10.0	0	4	0	3	0	4	0	3	0	4	0	3
10.0	9.0	0	4	0	3	0	4	0	3	0	4	0	3
11.0	8.0	0	4	0	3	0	4	0	3	0	4	0	3
12.0	7.0	0	4	0	3	0	4	0	3	0	4	0	3
13.0	6.0	0	4	0	4	0	4	0	4	0	4	0	4
14.0	5.0	0	4	0	4	0	4	0	4	0	4	0	4
15.0	4.0	0	4	0	4	0	4	0	4	0	4	0	4
WL = 20.0													
4.0	16.0	0	6	0	5	0	5	0	4	0	4	0	3
5.0	15.0	0	6	0	4	0	5	0	4	0	4	0	3
6.0	14.0	0	5	0	4	0	5	0	4	0	4	0	3
7.0	13.0	0	5	0	4	0	5	0	4	0	4	0	3
8.0	12.0	0	5	0	4	0	5	0	4	0	4	0	3
9.0	11.0	0	5	0	4	0	5	0	4	0	4	0	3

TABLE II (CONT)

309D EQUALIZER SETTINGS FOR MFT 2-2 INTERMEDIATE (NL-NL) REPEATERS FOR 26-GAUGE NONLOADED AND 26-, 24-, OR 22-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

26-GA TERMINATION = 600 OHMS
GAUGE 2 TERMINATION = 900 OR 600 OHMS

LENGTH (KFT)		309D EQUALIZER SETTINGS BY GAUGE AND TERMINATION											
		GAUGE 2 = 26 GA NL				GAUGE 2 = 24 GA NL				GAUGE 2 = 22 GA NL			
26-GA	GA 2	900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE	
WL = 20.0													
10.0	10.0	0	5	0	4	0	5	0	4	0	4	0	3
11.0	9.0	0	5	0	4	0	5	0	4	0	4	0	4
12.0	8.0	0	5	0	4	0	5	0	4	0	4	0	4
13.0	7.0	0	5	0	4	0	5	0	4	0	4	0	4
14.0	6.0	0	5	0	4	0	5	0	4	0	5	0	4
15.0	5.0	0	5	0	4	0	5	0	5	0	5	0	5
16.0	4.0	0	5	0	5	0	5	0	5	0	5	0	5
WL = 21.0													
4.0	17.0	0	7	0	6	0	6	0	5	0	5	0	4
5.0	16.0	0	6	0	5	0	6	0	4	0	5	0	4
6.0	15.0	0	6	0	5	0	5	0	4	0	5	0	4
7.0	14.0	0	6	0	5	0	5	0	4	0	5	0	4
8.0	13.0	0	6	0	5	0	5	0	4	0	5	0	4
9.0	12.0	0	6	0	5	0	5	0	4	0	5	0	4
10.0	11.0	0	5	0	4	0	5	0	4	0	5	0	4
11.0	10.0	0	5	0	4	0	5	0	4	0	5	0	4
12.0	9.0	0	5	0	5	0	5	0	4	0	5	0	4
13.0	8.0	0	5	0	5	0	5	0	5	0	5	0	4
14.0	7.0	0	5	0	5	0	5	0	5	0	5	0	5
15.0	6.0	0	5	0	5	0	5	0	5	0	5	0	5
16.0	5.0	0	5	0	5	0	6	0	5	0	5	0	5
17.0	4.0	0	6	0	6	0	6	0	6	0	6	0	6
WL = 22.0													
4.0	18.0	0	8	0	6	0	6	0	5	0	6	0	4
5.0	17.0	0	7	0	6	0	6	0	5	0	5	0	4
6.0	16.0	0	7	0	6	0	6	0	5	0	5	0	4
7.0	15.0	0	7	0	5	0	6	0	5	0	5	0	4
8.0	14.0	0	7	0	5	0	6	0	5	0	5	0	4
9.0	13.0	0	6	0	5	0	6	0	5	0	5	0	4
10.0	12.0	0	6	0	5	0	6	0	5	0	5	0	4
11.0	11.0	0	6	0	5	0	6	0	5	0	5	0	5
12.0	10.0	0	6	0	5	0	6	0	5	0	6	0	5
13.0	9.0	0	6	0	5	0	6	0	5	0	6	0	5
14.0	8.0	0	6	0	5	0	6	0	5	0	6	0	5
15.0	7.0	0	6	0	5	0	6	0	5	0	6	0	5
16.0	6.0	0	6	0	6	0	6	0	6	0	6	0	6
17.0	5.0	0	6	0	6	0	6	0	6	0	6	0	6
18.0	4.0	0	6	0	6	0	7	0	6	0	7	0	6
WL = 23.0													
4.0	19.0	0	9	0	7	0	7	0	6	0	6	0	5
5.0	18.0	0	8	0	7	0	7	0	5	0	6	0	5
6.0	17.0	0	8	0	6	0	7	0	5	0	6	0	5
7.0	16.0	0	8	0	6	0	7	0	5	0	6	0	5
8.0	15.0	0	7	0	6	0	7	0	5	0	6	0	5
9.0	14.0	0	7	0	6	0	7	0	5	0	6	0	5

TABLE II (CONT)

309D EQUALIZER SETTINGS FOR MFT 2-2 INTERMEDIATE (NL-NL) REPEATERS FOR 26-GAUGE NONLOADED AND 26-, 24-, OR 22-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

26-GA TERMINATION = 600 OHMS
GAUGE 2 TERMINATION = 900 OR 600 OHMS

LENGTH (KFT)		309D EQUALIZER SETTINGS BY GAUGE AND TERMINATION									
		GAUGE 2 = 26 GA NL				GAUGE 2 = 24 GA NL				GAUGE 2 = 22 GA NL			
26-GA	GA 2	900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE	
WL = 23.0													
10.0	13.0	0	7	0	6	0	7	0	5	0	6	0	5
11.0	12.0	0	7	0	6	0	7	0	5	0	6	0	5
12.0	11.0	0	7	0	6	0	7	0	6	0	6	0	5
13.0	10.0	0	7	0	6	0	7	0	6	0	6	0	5
14.0	9.0	0	7	0	6	0	7	0	6	0	6	0	6
15.0	8.0	0	7	0	6	0	7	0	6	0	7	0	6
16.0	7.0	0	7	0	6	0	7	0	6	0	7	0	6
17.0	6.0	0	7	0	6	0	7	0	6	0	7	0	6
18.0	5.0	0	7	0	7	0	7	0	7	0	7	0	7
19.0	4.0	0	7	0	7	0	7	0	7	0	7	0	7
WL = 24.0													
4.0	20.0	0	10	0	8	0	8	0	6	0	7	0	5
5.0	19.0	0	9	0	8	0	8	0	6	0	6	0	5
6.0	18.0	0	9	0	7	0	7	0	6	0	6	0	5
7.0	17.0	0	9	0	7	0	7	0	6	0	6	0	5
8.0	16.0	0	8	0	7	0	7	0	6	0	6	0	5
9.0	15.0	0	8	0	7	0	7	0	6	0	7	0	5
10.0	14.0	0	8	0	7	0	7	0	6	0	7	0	5
11.0	13.0	0	8	0	7	0	7	0	6	0	7	0	6
12.0	12.0	0	8	0	7	0	7	0	6	0	7	0	6
13.0	11.0	0	8	0	7	0	7	0	6	0	7	0	6
14.0	10.0	0	8	0	7	0	7	0	6	0	7	0	6
15.0	9.0	0	8	0	7	0	8	0	7	0	7	0	6
16.0	8.0	0	8	0	7	0	8	0	7	0	7	0	7
17.0	7.0	0	8	0	7	0	8	0	7	0	8	0	7
18.0	6.0	0	8	0	7	0	8	0	7	0	8	0	7
19.0	5.0	0	8	0	8	0	8	0	8	0	8	0	8
20.0	4.0	0	8	0	8	0	8	0	8	0	8	0	8
WL = 25.0													
4.0	21.0	0	11	0	9	0	9	0	7	0	7	0	6
5.0	20.0	0	10	0	9	0	8	0	7	0	7	0	6
6.0	19.0	0	10	0	8	0	8	0	7	0	7	0	6
7.0	18.0	0	10	0	8	0	8	0	7	0	7	0	6
8.0	17.0	0	9	0	8	0	8	0	7	0	7	0	6
9.0	16.0	0	9	0	8	0	8	0	7	0	7	0	6
10.0	15.0	0	9	0	7	0	8	0	7	0	7	0	6
11.0	14.0	0	9	0	7	0	8	0	7	0	7	0	6
12.0	13.0	0	9	0	7	0	8	0	7	0	8	0	6
13.0	12.0	0	9	0	7	0	8	0	7	0	8	0	6
14.0	11.0	0	9	0	7	0	8	0	7	0	8	0	7
15.0	10.0	0	9	0	7	0	8	0	7	0	8	0	7
16.0	9.0	0	9	0	8	0	8	0	7	0	8	0	7
17.0	8.0	0	9	0	8	0	9	0	8	0	8	0	7
18.0	7.0	0	9	0	8	0	9	0	8	0	8	0	8
19.0	6.0	0	9	0	8	0	9	0	8	0	9	0	8
20.0	5.0	0	9	0	9	0	9	0	9	0	9	0	9

TABLE II (CONT)

309D EQUALIZER SETTINGS FOR MFT 2-2 INTERMEDIATE (NL-NL) REPEATERS FOR 26-GAUGE NONLOADED AND 26-, 24-, OR 22-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

26-GA TERMINATION = 600 OHMS
GAUGE 2 TERMINATION = 900 OR 600 OHMS

LENGTH (KFT)		309D EQUALIZER SETTINGS BY GAUGE AND TERMINATION									
		GAUGE 2 = 26 GA NL				GAUGE 2 = 24 GA NL				GAUGE 2 = 22 GA NL			
26-GA	GA 2	900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE	
WL = 25.0													
21.0	4.0	0	9	0	9	0	9	0	9	0	9	0	9
WL = 26.0													
4.0	22.0	0	12	0	10	0	10	0	8	0	8	0	6
5.0	21.0	0	12	0	10	0	9	0	7	0	8	0	6
6.0	20.0	0	11	0	9	0	9	0	7	0	8	0	6
7.0	19.0	0	11	0	9	0	9	0	7	0	8	0	6
8.0	18.0	0	11	0	9	0	9	0	7	0	8	0	6
9.0	17.0	0	10	0	9	0	9	0	7	0	8	0	6
10.0	16.0	0	10	0	8	0	9	0	7	0	8	0	6
11.0	15.0	0	10	0	8	0	9	0	7	0	8	0	7
12.0	14.0	0	10	0	8	0	9	0	8	0	8	0	7
13.0	13.0	0	10	0	8	0	9	0	8	0	8	0	7
14.0	12.0	0	10	0	8	0	9	0	8	0	9	0	7
15.0	11.0	0	10	0	8	0	9	0	8	0	9	0	8
16.0	10.0	0	10	0	8	0	9	0	8	0	9	0	8
17.0	9.0	0	10	0	9	0	9	0	8	0	9	0	8
18.0	8.0	0	10	0	9	0	10	0	9	0	9	0	8
19.0	7.0	0	10	0	9	0	10	0	9	0	10	0	9
20.0	6.0	0	10	0	9	0	10	0	9	0	10	0	9
21.0	5 0	0	10	0	10	0	10	0	10	0	10	0	10
22.0	4.0	0	10	0	10	0	10	0	10	0	10	0	10
WL = 27.0													
4.0	23.0	0	14	0	11	0	10	0	8	0	8	0	7
5.0	22.0	0	13	0	11	0	10	0	8	0	8	0	7
6.0	21.0	0	13	0	10	0	10	0	8	0	8	0	7
7.0	20.0	0	12	0	10	0	10	0	8	0	8	0	7
8.0	19.0	0	12	0	10	0	10	0	8	0	8	0	7
9.0	18.0	0	12	0	10	0	10	0	8	0	9	0	7
10.0	17.0	0	11	0	9	0	10	0	8	0	9	0	7
11.0	16.0	0	11	0	9	0	10	0	8	0	9	0	7
12.0	15.0	0	11	0	9	0	10	0	8	0	9	0	7
13.0	14.0	0	11	0	9	0	10	0	8	0	9	0	8
14.0	13.0	0	11	0	9	0	10	0	9	0	9	0	8
15.0	12.0	0	11	0	9	0	10	0	9	0	10	0	8
16.0	11.0	0	11	0	9	0	10	0	9	0	10	0	8
17.0	10.0	0	11	0	9	0	10	0	9	0	10	0	9
18.0	9.0	0	11	0	10	0	11	0	9	0	10	0	9
19.0	8.0	0	11	0	10	0	11	0	10	0	10	0	9
20.0	7.0	0	11	0	10	0	11	0	10	0	11	0	10
21.0	6.0	0	11	0	10	0	11	0	10	0	11	0	10
22.0	5.0	0	11	0	11	0	11	0	11	0	11	0	11
23.0	4.0	0	12	0	11	0	12	0	11	0	12	0	12
WL = 28.0													
4.0	24.0	0	15	0	13	0	11	0	9	0	9	0	7
5.0	23.0	0	15	0	12	0	11	0	9	0	9	0	7

TABLE II (CONT)

309D EQUALIZER SETTINGS FOR MFT 2-2 INTERMEDIATE (NL-NL) REPEATERS FOR 26-GAUGE NONLOADED AND 26-, 24-, OR 22-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

26-GA TERMINATION = 600 OHMS
GAUGE 2 TERMINATION = 900 OR 600 OHMS

LENGTH (KFT)		309D EQUALIZER SETTINGS BY GAUGE AND TERMINATION											
		GAUGE 2 = 26 GA NL				GAUGE 2 = 24 GA NL				GAUGE 2 = 22 GA NL			
26-GA	GA 2	900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE	
WL = 28.0													
6.0	22.0	0	14	0	11	0	11	0	9	0	9	0	7
7.0	21.0	0	14	0	11	0	11	0	9	0	9	0	7
8.0	20.0	0	13	0	11	0	11	0	9	0	9	0	7
9.0	19.0	0	13	0	11	0	11	0	9	0	9	0	7
10.0	18.0	0	13	0	11	0	11	0	9	0	9	0	8
11.0	17.0	0	13	0	10	0	11	0	9	0	10	0	8
12.0	16.0	0	12	0	10	0	11	0	9	0	10	0	8
13.0	15.0	0	12	0	10	0	11	0	9	0	10	0	8
14.0	14.0	0	12	0	10	0	11	0	9	0	10	0	9
15.0	13.0	0	12	0	10	0	11	0	10	0	11	0	9
16.0	12.0	0	12	0	10	0	11	0	10	0	11	0	9
17.0	11.0	0	12	0	10	0	12	0	10	0	11	0	9
18.0	10.0	0	12	0	11	0	12	0	10	0	11	0	10
19.0	9.0	0	12	0	11	0	12	0	10	0	11	0	10
20.0	8.0	0	12	0	11	0	12	0	11	0	12	0	11
21.0	7.0	0	12	0	11	0	12	0	11	0	12	0	11
22.0	6.0	0	12	0	11	0	12	0	12	0	12	0	11
23.0	5.0	0	13	0	12	0	13	0	12	0	13	0	12
24.0	4.0	0	13	0	13	0	13	0	13	0	13	0	13
WL = 29.0													
5.0	24.0	0	15	0	13	0	12	0	10	0	10	0	8
6.0	23.0	0	15	0	13	0	12	0	10	0	10	0	8
7.0	22.0	0	15	0	12	0	12	0	10	0	10	0	8
8.0	21.0	0	15	0	12	0	12	0	10	0	10	0	8
9.0	20.0	0	14	0	12	0	12	0	10	0	10	0	8
10.0	19.0	0	14	0	12	0	12	0	10	0	10	0	8
11.0	18.0	0	14	0	12	0	12	0	10	0	10	0	9
12.0	17.0	0	14	0	12	0	12	0	10	0	11	0	9
13.0	16.0	0	14	0	11	0	12	0	10	0	11	0	9
14.0	15.0	0	14	0	11	0	12	0	10	0	11	0	9
15.0	14.0	0	14	0	11	0	12	0	10	0	11	0	10
16.0	13.0	0	14	0	11	0	13	0	11	0	12	0	10
17.0	12.0	0	14	0	12	0	13	0	11	0	12	0	10
18.0	11.0	0	13	0	12	0	13	0	11	0	12	0	11
19.0	10.0	0	13	0	12	0	13	0	11	0	12	0	11
20.0	9.0	0	13	0	12	0	13	0	12	0	13	0	11
21.0	8.0	0	13	0	12	0	13	0	12	0	13	0	12
22.0	7.0	0	14	0	12	0	14	0	12	0	13	0	12
23.0	6.0	0	14	0	13	0	14	0	13	0	14	0	13
24.0	5.0	0	14	0	13	0	14	0	14	0	14	0	14
WL = 30.0													
6.0	24.0	0	15	0	14	0	13	0	11	0	10	0	8
7.0	23.0	0	15	0	14	0	13	0	10	0	10	0	8
8.0	22.0	0	15	0	14	0	13	0	10	0	10	0	9
9.0	21.0	0	15	0	13	0	13	0	10	0	11	0	9
10.0	20.0	0	15	0	13	0	13	0	11	0	11	0	9

TABLE II (CONT)

309D EQUALIZER SETTINGS FOR MFT 2-2 INTERMEDIATE (NL-NL) REPEATERS FOR 26-GAUGE NONLOADED AND 26-, 24-, OR 22-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

26-GA TERMINATION = 600 OHMS
GAUGE 2 TERMINATION = 900 OR 600 OHMS

LENGTH (KFT)		309D EQUALIZER SETTINGS BY GAUGE AND TERMINATION									
		GAUGE 2 = 26 GA NL				GAUGE 2 = 24 GA NL				GAUGE 2 = 22 GA NL			
26-GA	GA 2	900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE	
WL = 30.0													
11.0	19.0	0	15	0	13	0	13	0	11	0	11	0	9
12.0	18.0	0	15	0	13	0	13	0	11	0	12	0	9
13.0	17.0	0	15	0	13	0	13	0	11	0	12	0	10
14.0	16.0	0	15	0	13	0	13	0	11	0	12	0	10
15.0	15.0	0	15	0	13	0	14	0	11	0	12	0	10
16.0	14.0	0	15	0	13	0	14	0	12	0	13	0	11
17.0	13.0	0	15	0	13	0	14	0	12	0	13	0	11
18.0	12.0	0	15	0	13	0	14	0	12	0	13	0	11
19.0	11.0	0	15	0	13	0	14	0	12	0	14	0	12
20.0	10.0	0	15	0	13	0	15	0	13	0	14	0	12
21.0	9.0	0	15	0	13	0	15	0	13	0	14	0	13
22.0	8.0	0	15	0	14	0	15	0	13	0	15	0	13
23.0	7.0	0	15	0	14	0	15	0	14	0	15	0	14
24.0	6.0	0	15	0	14	0	15	0	14	0	15	0	14
WL = 31.0													
7.0	24.0	0	15	0	15	0	14	0	11	0	11	0	9
8.0	23.0	0	15	0	15	0	14	0	11	0	11	0	9
9.0	22.0	0	15	0	15	0	14	0	11	0	12	0	9
10.0	21.0	0	15	0	15	0	14	0	12	0	12	0	10
11.0	20.0	0	15	0	14	0	14	0	12	0	12	0	10
12.0	19.0	0	15	0	14	0	14	0	12	0	12	0	10
13.0	18.0	0	15	0	14	0	15	0	12	0	13	0	11
14.0	17.0	C	6	0	14	0	15	0	12	0	13	0	11
15.0	16.0	C	6	0	14	0	15	0	12	0	13	0	11
16.0	15.0	C	6	0	14	0	15	0	13	0	14	0	12
17.0	14.0	C	6	0	14	0	15	0	13	0	14	0	12
18.0	13.0	C	6	0	14	0	15	0	13	0	15	0	12
19.0	12.0	0	15	0	14	0	15	0	13	0	15	0	13
20.0	11.0	0	15	0	14	0	15	0	14	0	15	0	13
21.0	10.0	0	15	0	15	0	15	0	14	0	15	0	14
22.0	9.0	0	15	0	15	0	15	0	15	0	15	0	14
23.0	8.0	0	15	0	15	0	15	0	15	0	15	0	15
24.0	7.0	0	15	0	15	0	15	0	15	0	15	0	15
WL = 32.0													
8.0	24.0	0	15	0	15	0	15	0	12	0	12	0	10
9.0	23.0	0	15	0	15	0	15	0	12	0	12	0	10
10.0	22.0	C	7	0	15	0	15	0	13	0	13	0	10
11.0	21.0	C	7	0	15	0	15	0	13	0	13	0	11
12.0	20.0	C	7	0	15	0	15	0	13	0	13	0	11
13.0	19.0	C	7	0	15	0	15	0	13	0	14	0	11
14.0	18.0	C	7	0	15	0	15	0	13	0	14	0	12
15.0	17.0	C	7	0	15	0	15	0	14	0	15	0	12
16.0	16.0	C	7	0	15	0	15	0	14	0	15	0	12
17.0	15.0	C	7	0	15	0	15	0	14	0	15	0	13
18.0	14.0	C	7	0	15	C	6	0	14	0	15	0	13
19.0	13.0	C	7	0	15	C	6	0	15	0	15	0	14

TABLE II (CONT)

309D EQUALIZER SETTINGS FOR MFT 2-2 INTERMEDIATE (NL-NL) REPEATERS FOR 26-GAUGE NONLOADED AND 26-, 24-, OR 22-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

26-GA TERMINATION = 600 OHMS
GAUGE 2 TERMINATION = 900 OR 600 OHMS

LENGTH (KFT)		309D EQUALIZER SETTINGS BY GAUGE AND TERMINATION											
		GAUGE 2 = 26 GA NL				GAUGE 2 = 24 GA NL				GAUGE 2 = 22 GA NL			
26-GA	GA 2	900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE	
WL = 32.0													
20.0	12.0	C	7	0	15	C	6	0	15	0	15	0	14
21.0	11.0	C	7	0	15	0	15	0	15	0	15	0	15
22.0	10.0	C	7	0	15	0	15	0	15	0	15	0	15
23.0	9.0	C	7	0	15	0	15	0	15	0	15	0	15
24.0	8.0	0	15	0	15	0	15	0	15	0	15	0	15
WL = 33.0													
9.0	24.0	C	8	0	15	0	15	0	14	0	13	0	11
10.0	23.0	C	8	0	15	0	15	0	14	0	14	0	11
11.0	22.0	C	8	0	15	0	15	0	14	0	14	0	11
12.0	21.0	C	8	C	6	0	15	0	14	0	14	0	12
13.0	20.0	C	8	C	6	0	15	0	14	0	15	0	12
14.0	19.0	C	8	C	6	0	15	0	15	0	15	0	13
15.0	18.0	C	8	C	6	C	6	0	15	0	15	0	13
16.0	17.0	C	7	C	6	C	6	0	15	0	15	0	13
17.0	16.0	C	7	C	6	C	6	0	15	0	15	0	14
18.0	15.0	C	7	C	6	C	7	0	15	0	15	0	14
19.0	14.0	C	7	C	6	C	7	0	15	C	6	0	15
20.0	13.0	C	7	C	6	C	7	0	15	C	6	0	15
21.0	12.0	C	7	C	6	C	7	0	15	C	6	0	15
22.0	11.0	C	7	0	15	C	7	0	15	C	7	0	15
23.0	10.0	C	7	0	15	C	7	0	15	C	7	0	15
24.0	9.0	C	7	0	15	C	7	0	15	0	15	0	15
WL = 34.0													
10.0	24.0	C	9	C	7	0	15	0	15	0	15	0	12
11.0	23.0	C	9	C	7	0	15	0	15	0	15	0	12
12.0	22.0	C	9	C	7	0	15	0	15	0	15	0	13
13.0	21.0	C	9	C	7	C	7	0	15	0	15	0	13
14.0	20.0	C	9	C	7	C	7	0	15	0	15	0	14
15.0	19.0	C	8	C	7	C	7	0	15	0	15	0	14
16.0	18.0	C	8	C	7	C	7	0	15	0	15	0	14
17.0	17.0	C	8	C	7	C	7	0	15	C	6	0	15
18.0	16.0	C	8	C	7	C	7	0	15	C	6	0	15
19.0	15.0	C	8	C	7	C	7	C	6	C	7	0	15
20.0	14.0	C	8	C	7	C	8	C	6	C	7	0	15
21.0	13.0	C	8	C	7	C	8	C	6	C	7	0	15
22.0	12.0	C	8	C	7	C	8	C	7	C	7	0	15
23.0	11.0	C	8	C	7	C	8	0	15	C	7	0	15
24.0	10.0	C	8	C	7	C	8	0	15	C	8	0	15
WL = 35.0													
11.0	24.0	C	10	C	8	0	15	0	15	0	15	0	13
12.0	23.0	C	10	C	8	C	7	0	15	0	15	0	14
13.0	22.0	C	10	C	8	C	7	0	15	0	15	0	14
14.0	21.0	C	10	C	8	C	7	0	15	0	15	0	15
15.0	20.0	C	10	C	8	C	8	C	6	C	6	0	15
16.0	19.0	C	9	C	8	C	8	C	6	C	7	0	15

TABLE II (CONT)

309D EQUALIZER SETTINGS FOR MFT 2-2 INTERMEDIATE (NL-NL)
REPEATERS FOR 26-GAUGE NONLOADED AND 26-, 24-, OR 22-GAUGE
NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

26-GA TERMINATION = 600 OHMS
GAUGE 2 TERMINATION = 900 OR 600 OHMS

LENGTH (KFT)		309D EQUALIZER SETTINGS BY GAUGE AND TERMINATION									
		GAUGE 2 = 26 GA NL				GAUGE 2 = 24 GA NL				GAUGE 2 = 22 GA NL			
26-GA	GA 2	900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE	
WL = 35.0													
17.0	18.0	C	9	C	8	C	8	C	6	C	7	0	15
18.0	17.0	C	10	C	8	C	8	C	7	C	7	0	15
19.0	16.0	C	10	C	8	C	8	C	7	C	7	0	15
20.0	15.0	C	9	C	8	C	8	C	7	C	8	0	15
21.0	14.0	C	9	C	8	C	9	C	7	C	8	0	15
22.0	13.0	C	9	C	8	C	9	C	7	C	8	C	7
23.0	12.0	C	9	C	8	C	9	C	7	C	8	C	7
24.0	11.0	C	9	C	8	C	9	C	8	C	8	C	7
WL = 36.0													
12.0	24.0	C	11	C	9	C	8	0	15	0	15	0	15
13.0	23.0	C	11	C	9	C	8	C	6	0	15	0	15
14.0	22.0	C	11	C	9	C	8	C	7	C	7	0	15
15.0	21.0	C	11	C	9	C	8	C	7	C	7	0	15
16.0	20.0	C	11	C	9	C	9	C	7	C	7	0	15
17.0	19.0	C	11	C	9	C	9	C	7	C	7	0	15
18.0	18.0	C	11	C	9	C	9	C	7	C	8	C	6
19.0	17.0	C	11	C	9	C	9	C	7	C	8	C	6
20.0	16.0	C	11	C	9	C	9	C	8	C	8	C	7
21.0	15.0	C	11	C	9	C	9	C	8	C	9	C	7
22.0	14.0	C	11	C	9	C	10	C	8	C	9	C	7
23.0	13.0	C	11	C	9	C	10	C	8	C	9	C	8
24.0	12.0	C	10	C	9	C	10	C	8	C	9	C	8
WL = 37.0													
13.0	24.0	C	12	C	10	C	9	C	7	0	15	0	15
14.0	23.0	C	12	C	10	C	9	C	7	C	7	0	15
15.0	22.0	C	12	C	10	C	9	C	7	C	7	0	15
16.0	21.0	0	15	C	10	C	9	C	8	C	8	0	15
17.0	20.0	0	15	C	10	C	10	C	8	C	8	C	6
18.0	19.0	0	15	C	10	C	10	C	8	C	8	C	7
19.0	18.0	0	15	C	10	C	10	C	8	C	9	C	7
20.0	17.0	0	15	C	10	C	10	C	8	C	9	C	7
21.0	16.0	0	15	C	10	C	10	C	9	C	9	C	8
22.0	15.0	0	15	C	10	C	11	C	9	C	10	C	8
23.0	14.0	0	15	C	10	C	11	C	9	C	10	C	8
24.0	13.0	C	12	C	10	C	11	C	9	C	10	C	9
WL = 38.0													
14.0	24.0	C	14	C	11	C	10	C	8	C	8	0	15
15.0	23.0	0	15	C	11	C	10	C	8	C	8	C	6
16.0	22.0	0	15	0	15	C	10	C	8	C	8	C	7
17.0	21.0	0	15	0	15	C	10	C	9	C	9	C	7
18.0	20.0	0	15	0	15	C	11	C	9	C	9	C	7
19.0	19.0	0	15	0	15	C	11	C	9	C	9	C	8
20.0	18.0	0	15	0	15	C	11	C	9	C	10	C	8
21.0	17.0	0	15	0	15	C	12	C	9	C	10	C	8
22.0	16.0	0	15	0	15	C	12	C	10	C	10	C	9

TABLE II (CONT)

309D EQUALIZER SETTINGS FOR MFT 2-2 INTERMEDIATE (NL-NL) REPEATERS FOR 26-GAUGE NONLOADED AND 26-, 24-, OR 22-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

26-GA TERMINATION = 600 OHMS
GAUGE 2 TERMINATION = 900 OR 600 OHMS

LENGTH (KFT)		309D EQUALIZER SETTINGS BY GAUGE AND TERMINATION									
		GAUGE 2 = 26 GA NL				GAUGE 2 = 24 GA NL				GAUGE 2 = 22 GA NL			
26-GA	GA 2	900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE	
WL = 38.0													
23.0	15.0	0	15	C	11	C	12	C	10	C	11	C	9
24.0	14.0	0	15	C	11	C	12	C	10	C	11	C	9
WL = 39.0													
15.0	24.0	0	15	0	15	C	11	C	9	C	9	C	7
16.0	23.0	0	15	0	15	C	11	C	9	C	9	C	7
17.0	22.0	C	15	0	15	C	11	C	9	C	9	C	8
18.0	21.0	C	15	0	15	C	12	C	10	C	10	C	8
19.0	20.0	C	15	0	15	C	12	C	10	C	10	C	8
20.0	19.0	C	15	0	15	0	15	C	10	C	10	C	9
21.0	18.0	C	15	0	15	0	15	C	10	C	11	C	9
22.0	17.0	C	15	0	15	0	15	C	10	C	11	C	9
23.0	16.0	C	15	0	15	0	15	C	11	C	12	C	10
24.0	15.0	C	15	0	15	0	15	C	11	C	12	C	10
WL = 40.0													
16.0	24.0	C	15	0	15	C	12	C	10	C	10	C	8
17.0	23.0	C	15	0	15	C	13	C	10	C	10	C	8
18.0	22.0	C	15	0	15	C	13	C	10	C	11	C	9
19.0	21.0	C	15	0	15	0	15	C	11	C	11	C	9
20.0	20.0	C	15	0	15	0	15	C	11	C	11	C	9
21.0	19.0	C	15	0	15	0	15	C	11	C	12	C	10
22.0	18.0	C	15	0	15	0	15	C	12	C	12	C	10
23.0	17.0	C	15	0	15	0	15	C	12	C	13	C	10
24.0	16.0	C	15	0	15	0	15	C	12	0	15	C	11
WL = 41.0													
17.0	24.0	C	15	C	15	C	14	C	11	C	11	C	9
18.0	23.0	C	15	C	15	0	15	C	12	C	11	C	9
19.0	22.0	C	15	C	15	0	15	C	12	C	12	C	10
20.0	21.0	C	15	C	15	0	15	0	15	C	12	C	10
21.0	20.0	C	15	C	15	0	15	0	15	C	13	C	10
22.0	19.0	C	15	C	15	C	15	0	15	0	15	C	11
23.0	18.0	C	15	C	15	C	15	0	15	0	15	C	11
24.0	17.0	C	15	C	15	C	15	0	15	0	15	C	12
WL = 42.0													
18.0	24.0	C	15	C	15	0	15	0	15	C	12	C	10
19.0	23.0	C	15	C	15	C	15	0	15	C	13	C	10
20.0	22.0	C	15	C	15	C	15	0	15	C	13	C	11
21.0	21.0	C	15	C	15	C	15	0	15	C	14	C	11
22.0	20.0	C	15	C	15	C	15	0	15	0	15	C	12
23.0	19.0	C	15	C	15	C	15	0	15	0	15	C	12
24.0	18.0	C	15	C	15	C	15	0	15	0	15	C	12
WL = 43.0													
19.0	24.0	C	15	C	15	C	15	0	15	C	14	C	11
20.0	23.0	C	15	C	15	C	15	0	15	0	15	C	11

TABLE II (CONT)

309D EQUALIZER SETTINGS FOR MFT 2-2 INTERMEDIATE (NL-NL) REPEATERS FOR 26-GAUGE NONLOADED AND 26-, 24-, OR 22-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

26-GA TERMINATION = 600 OHMS
GAUGE 2 TERMINATION = 900 OR 600 OHMS

LENGTH (KFT)		309D EQUALIZER SETTINGS BY GAUGE AND TERMINATION					
		GAUGE 2 = 26 GA NL		GAUGE 2 = 24 GA NL		GAUGE 2 = 22 GA NL	
26-GA	GA 2	900 OHM SLOPE	600 OHM SLOPE	900 OHM SLOPE	600 OHM SLOPE	900 OHM SLOPE	600 OHM SLOPE
WL = 43.0							
21.0	22.0	C 15	C 15	C 15	0 15	0 15	C 12
22.0	21.0	C 15	C 15	C 15	C 15	0 15	C 13
23.0	20.0	C 15	C 15	C 15	C 15	C 15	C 13
24.0	19.0	C 15	C 15	C 15	C 15	C 15	C 14
WL = 44.0							
20.0	24.0	C 15	C 15	C 15	C 15	0 15	C 12
21.0	23.0	C 15	C 15	C 15	C 15	0 15	C 13
22.0	22.0	C 15	C 15	C 15	C 15	C 15	0 15
23.0	21.0	C 15	C 15	C 15	C 15	C 15	0 15
24.0	20.0	C 15	C 15	C 15	C 15	C 15	0 15

TABLE JJ

309D EQUALIZER SETTINGS FOR MFT 2-2 INTERMEDIATE (NL-NL) REPEATERS FOR 24-GAUGE NONLOADED AND 26-, 24-, OR 22-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

24-GA TERMINATION = 600 OHMS
GAUGE 2 TERMINATION = 900 OR 600 OHMS

LENGTH (KFT)		309D EQUALIZER SETTINGS BY GAUGE AND TERMINATION											
		GAUGE 2 = 26 GA NL				GAUGE 2 = 24 GA NL				GAUGE 2 = 22 GA NL			
24-GA	GA 2	900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE	
WL = 11.0													
4.0	7.0	0	0	0	0	0	0	0	0	0	0	0	0
5.0	6.0	0	0	0	0	0	0	0	0	0	0	0	0
6.0	5.0	0	0	0	0	0	0	0	0	0	0	0	0
7.0	4.0	0	0	0	0	0	0	0	0	0	0	0	0
WL = 12.0													
4.0	8.0	0	1	0	0	0	1	0	0	0	1	0	0
5.0	7.0	0	1	0	0	0	1	0	0	0	0	0	0
6.0	6.0	0	0	0	0	0	0	0	0	0	0	0	0
7.0	5.0	0	0	0	0	0	0	0	0	0	0	0	0
8.0	4.0	0	0	0	0	0	0	0	0	0	0	0	0
WL = 13.0													
4.0	9.0	0	1	0	1	0	1	0	1	0	1	0	1
5.0	8.0	0	1	0	1	0	1	0	1	0	1	0	0
6.0	7.0	0	1	0	0	0	1	0	0	0	1	0	0
7.0	6.0	0	1	0	0	0	1	0	0	0	1	0	0
8.0	5.0	0	1	0	0	0	1	0	1	0	1	0	1
9.0	4.0	0	1	0	1	0	1	0	1	0	1	0	1
WL = 14.0													
4.0	10.0	0	2	0	1	0	2	0	1	0	2	0	1
5.0	9.0	0	2	0	1	0	2	0	1	0	1	0	1
6.0	8.0	0	1	0	1	0	1	0	1	0	1	0	1
7.0	7.0	0	1	0	1	0	1	0	1	0	1	0	1
8.0	6.0	0	1	0	1	0	1	0	1	0	1	0	1
9.0	5.0	0	1	0	1	0	1	0	1	0	1	0	1
10.0	4.0	0	1	0	1	0	1	0	1	0	1	0	1
WL = 15.0													
4.0	11.0	0	3	0	2	0	2	0	2	0	2	0	1
5.0	10.0	0	2	0	2	0	2	0	1	0	2	0	1
6.0	9.0	0	2	0	1	0	2	0	1	0	2	0	1
7.0	8.0	0	2	0	1	0	2	0	1	0	2	0	1
8.0	7.0	0	2	0	1	0	2	0	1	0	2	0	1
9.0	6.0	0	2	0	1	0	2	0	1	0	2	0	1
10.0	5.0	0	2	0	1	0	2	0	1	0	2	0	1
11.0	4.0	0	2	0	1	0	2	0	2	0	2	0	2
WL = 16.0													
4.0	12.0	0	3	0	2	0	3	0	2	0	3	0	2
5.0	11.0	0	3	0	2	0	3	0	2	0	2	0	2
6.0	10.0	0	3	0	2	0	2	0	2	0	2	0	2
7.0	9.0	0	2	0	2	0	2	0	2	0	2	0	2
8.0	8.0	0	2	0	2	0	2	0	2	0	2	0	2
9.0	7.0	0	2	0	2	0	2	0	2	0	2	0	2
10.0	6.0	0	2	0	2	0	2	0	2	0	2	0	2
11.0	5.0	0	2	0	2	0	2	0	2	0	2	0	2

TABLE JJ (CONT)

309D EQUALIZER SETTINGS FOR MFT 2-2 INTERMEDIATE (NL-NL) REPEATERS FOR 24-GAUGE NONLOADED AND 26-, 24-, OR 22-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

24-GA TERMINATION = 600 OHMS
GAUGE 2 TERMINATION = 900 OR 600 OHMS

LENGTH (KFT)		309D EQUALIZER SETTINGS BY GAUGE AND TERMINATION											
		GAUGE 2 = 26 GA NL				GAUGE 2 = 24 GA NL				GAUGE 2 = 22 GA NL			
24-GA	GA 2	900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE	
WL = 16.0													
12.0	4.0	0	2	0	2	0	2	0	2	0	2	0	2
WL = 17.0													
4.0	13.0	0	4	0	3	0	3	0	3	0	3	0	2
5.0	12.0	0	4	0	3	0	3	0	2	0	3	0	2
6.0	11.0	0	3	0	2	0	3	0	2	0	3	0	2
7.0	10.0	0	3	0	2	0	3	0	2	0	3	0	2
8.0	9.0	0	3	0	2	0	3	0	2	0	3	0	2
9.0	8.0	0	3	0	2	0	3	0	2	0	2	0	2
10.0	7.0	0	3	0	2	0	3	0	2	0	2	0	2
11.0	6.0	0	3	0	2	0	3	0	2	0	2	0	2
12.0	5.0	0	3	0	2	0	3	0	2	0	3	0	2
13.0	4.0	0	3	0	2	0	3	0	3	0	3	0	3
WL = 18.0													
4.0	14.0	0	5	0	4	0	4	0	3	0	4	0	3
5.0	13.0	0	4	0	3	0	4	0	3	0	3	0	2
6.0	12.0	0	4	0	3	0	4	0	3	0	3	0	2
7.0	11.0	0	4	0	3	0	3	0	3	0	3	0	2
8.0	10.0	0	3	0	3	0	3	0	3	0	3	0	2
9.0	9.0	0	3	0	3	0	3	0	3	0	3	0	2
10.0	8.0	0	3	0	3	0	3	0	3	0	3	0	2
11.0	7.0	0	3	0	3	0	3	0	3	0	3	0	3
12.0	6.0	0	3	0	3	0	3	0	3	0	3	0	3
13.0	5.0	0	3	0	3	0	3	0	3	0	3	0	3
14.0	4.0	0	3	0	3	0	3	0	3	0	3	0	3
WL = 19.0													
4.0	15.0	0	5	0	4	0	5	0	4	0	4	0	3
5.0	14.0	0	5	0	4	0	4	0	3	0	4	0	3
6.0	13.0	0	5	0	4	0	4	0	3	0	4	0	3
7.0	12.0	0	4	0	3	0	4	0	3	0	4	0	3
8.0	11.0	0	4	0	3	0	4	0	3	0	4	0	3
9.0	10.0	0	4	0	3	0	4	0	3	0	4	0	3
10.0	9.0	0	4	0	3	0	4	0	3	0	3	0	3
11.0	8.0	0	4	0	3	0	4	0	3	0	3	0	3
12.0	7.0	0	4	0	3	0	4	0	3	0	3	0	3
13.0	6.0	0	4	0	3	0	4	0	3	0	3	0	3
14.0	5.0	0	4	0	3	0	4	0	3	0	4	0	3
15.0	4.0	0	4	0	3	0	4	0	4	0	4	0	4
WL = 20.0													
4.0	16.0	0	6	0	5	0	5	0	4	0	5	0	3
5.0	15.0	0	6	0	5	0	5	0	4	0	4	0	3
6.0	14.0	0	5	0	4	0	5	0	4	0	4	0	3
7.0	13.0	0	5	0	4	0	5	0	4	0	4	0	3
8.0	12.0	0	5	0	4	0	5	0	4	0	4	0	3
9.0	11.0	0	5	0	4	0	4	0	3	0	4	0	3

TABLE JJ (CONT)

309D EQUALIZER SETTINGS FOR MFT 2-2 INTERMEDIATE (NL-NL) REPEATERS FOR 24-GAUGE NONLOADED AND 26-, 24-, OR 22-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

24-GA TERMINATION = 600 OHMS
GAUGE 2 TERMINATION = 900 OR 600 OHMS

LENGTH (KFT)		309D EQUALIZER SETTINGS BY GAUGE AND TERMINATION											
		GAUGE 2 = 26 GA NL				GAUGE 2 = 24 GA NL				GAUGE 2 = 22 GA NL			
24-GA	GA 2	900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE	
WL = 20.0													
10.0	10.0	0	5	0	4	0	4	0	3	0	4	0	3
11.0	9.0	0	4	0	4	0	4	0	3	0	4	0	3
12.0	8.0	0	4	0	4	0	4	0	4	0	4	0	3
13.0	7.0	0	4	0	4	0	4	0	4	0	4	0	4
14.0	6.0	0	4	0	4	0	4	0	4	0	4	0	4
15.0	5.0	0	4	0	4	0	4	0	4	0	4	0	4
16.0	4.0	0	4	0	4	0	4	0	4	0	4	0	4
WL = 21.0													
4.0	17.0	0	7	0	6	0	6	0	5	0	5	0	4
5.0	16.0	0	7	0	5	0	6	0	4	0	5	0	4
6.0	15.0	0	6	0	5	0	5	0	4	0	5	0	4
7.0	14.0	0	6	0	5	0	5	0	4	0	5	0	4
8.0	13.0	0	6	0	5	0	5	0	4	0	5	0	4
9.0	12.0	0	5	0	4	0	5	0	4	0	5	0	4
10.0	11.0	0	5	0	4	0	5	0	4	0	5	0	4
11.0	10.0	0	5	0	4	0	5	0	4	0	5	0	4
12.0	9.0	0	5	0	4	0	5	0	4	0	5	0	4
13.0	8.0	0	5	0	4	0	5	0	4	0	5	0	4
14.0	7.0	0	5	0	4	0	5	0	4	0	5	0	4
15.0	6.0	0	5	0	4	0	5	0	4	0	5	0	4
16.0	5.0	0	5	0	4	0	5	0	4	0	5	0	4
17.0	4.0	0	5	0	5	0	5	0	5	0	5	0	5
WL = 22.0													
4.0	18.0	0	8	0	6	0	7	0	5	0	6	0	4
5.0	17.0	0	7	0	6	0	6	0	5	0	5	0	4
6.0	16.0	0	7	0	6	0	6	0	5	0	5	0	4
7.0	15.0	0	7	0	5	0	6	0	5	0	5	0	4
8.0	14.0	0	6	0	5	0	6	0	5	0	5	0	4
9.0	13.0	0	6	0	5	0	6	0	5	0	5	0	4
10.0	12.0	0	6	0	5	0	6	0	5	0	5	0	4
11.0	11.0	0	6	0	5	0	6	0	5	0	5	0	4
12.0	10.0	0	6	0	5	0	5	0	5	0	5	0	4
13.0	9.0	0	6	0	5	0	5	0	5	0	5	0	4
14.0	8.0	0	5	0	5	0	5	0	5	0	5	0	4
15.0	7.0	0	5	0	5	0	5	0	5	0	5	0	5
16.0	6.0	0	5	0	5	0	5	0	5	0	5	0	5
17.0	5.0	0	5	0	5	0	5	0	5	0	5	0	5
18.0	4.0	0	5	0	5	0	5	0	5	0	5	0	5
WL = 23.0													
4.0	19.0	0	9	0	7	0	7	0	6	0	6	0	5
5.0	18.0	0	8	0	7	0	7	0	6	0	6	0	5
6.0	17.0	0	8	0	6	0	7	0	5	0	6	0	5
7.0	16.0	0	8	0	6	0	7	0	5	0	6	0	5
8.0	15.0	0	7	0	6	0	6	0	5	0	6	0	5
9.0	14.0	0	7	0	6	0	6	0	5	0	6	0	5

TABLE JJ (CONT)

309D EQUALIZER SETTINGS FOR MFT 2-2 INTERMEDIATE (NL-NL)
REPEATERS FOR 24-GAUGE NONLOADED AND 26-, 24-, OR 22-GAUGE
NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

24-GA TERMINATION = 600 OHMS
GAUGE 2 TERMINATION = 900 OR 600 OHMS

LENGTH (KFT)		309D EQUALIZER SETTINGS BY GAUGE AND TERMINATION											
		GAUGE 2 = 26 GA NL				GAUGE 2 = 24 GA NL				GAUGE 2 = 22 GA NL			
24-GA	GA 2	900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE	
WL = 23.0													
10.0	13.0	0	7	0	6	0	6	0	5	0	6	0	5
11.0	12.0	0	7	0	6	0	6	0	5	0	6	0	5
12.0	11.0	0	6	0	5	0	6	0	5	0	6	0	5
13.0	10.0	0	6	0	5	0	6	0	5	0	6	0	5
14.0	9.0	0	6	0	5	0	6	0	5	0	6	0	5
15.0	8.0	0	6	0	5	0	6	0	5	0	6	0	5
16.0	7.0	0	6	0	5	0	6	0	5	0	6	0	5
17.0	6.0	0	6	0	5	0	6	0	5	0	6	0	5
18.0	5.0	0	6	0	5	0	6	0	6	0	6	0	6
19.0	4.0	0	6	0	6	0	6	0	6	0	6	0	6
WL = 24.0													
4.0	20.0	0	10	0	8	0	8	0	6	0	7	0	5
5.0	19.0	0	9	0	8	0	8	0	6	0	7	0	5
6.0	18.0	0	9	0	7	0	8	0	6	0	6	0	5
7.0	17.0	0	9	0	7	0	7	0	6	0	6	0	5
8.0	16.0	0	8	0	7	0	7	0	6	0	6	0	5
9.0	15.0	0	8	0	7	0	7	0	6	0	6	0	5
10.0	14.0	0	8	0	6	0	7	0	6	0	6	0	5
11.0	13.0	0	8	0	6	0	7	0	6	0	6	0	5
12.0	12.0	0	7	0	6	0	7	0	6	0	6	0	5
13.0	11.0	0	7	0	6	0	7	0	6	0	6	0	5
14.0	10.0	0	7	0	6	0	7	0	6	0	6	0	5
15.0	9.0	0	7	0	6	0	7	0	6	0	6	0	6
16.0	8.0	0	7	0	6	0	7	0	6	0	6	0	6
17.0	7.0	0	7	0	6	0	7	0	6	0	6	0	6
18.0	6.0	0	6	0	6	0	6	0	6	0	6	0	6
19.0	5.0	0	6	0	6	0	6	0	6	0	6	0	6
20.0	4.0	0	6	0	6	0	7	0	6	0	7	0	6
WL = 25.0													
4.0	21.0	0	11	0	9	0	9	0	7	0	7	0	6
5.0	20.0	0	11	0	9	0	9	0	7	0	7	0	6
6.0	19.0	0	10	0	8	0	8	0	7	0	7	0	6
7.0	18.0	0	10	0	8	0	8	0	7	0	7	0	6
8.0	17.0	0	9	0	8	0	8	0	6	0	7	0	6
9.0	16.0	0	9	0	7	0	8	0	6	0	7	0	6
10.0	15.0	0	9	0	7	0	8	0	6	0	7	0	6
11.0	14.0	0	9	0	7	0	8	0	6	0	7	0	6
12.0	13.0	0	8	0	7	0	8	0	6	0	7	0	6
13.0	12.0	0	8	0	7	0	8	0	6	0	7	0	6
14.0	11.0	0	8	0	7	0	8	0	6	0	7	0	6
15.0	10.0	0	8	0	7	0	7	0	6	0	7	0	6
16.0	9.0	0	8	0	7	0	7	0	6	0	7	0	6
17.0	8.0	0	7	0	7	0	7	0	6	0	7	0	6
18.0	7.0	0	7	0	7	0	7	0	7	0	7	0	6
19.0	6.0	0	7	0	7	0	7	0	7	0	7	0	7
20.0	5.0	0	7	0	7	0	7	0	7	0	7	0	7

TABLE JJ (CONT)

309D EQUALIZER SETTINGS FOR MFT 2-2 INTERMEDIATE (NL-NL) REPEATERS FOR 24-GAUGE NONLOADED AND 26-, 24-, OR 22-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

24-GA TERMINATION = 600 OHMS
GAUGE 2 TERMINATION = 900 OR 600 OHMS

LENGTH (KFT)		309D EQUALIZER SETTINGS BY GAUGE AND TERMINATION									
		GAUGE 2 = 26 GA NL				GAUGE 2 = 24 GA NL				GAUGE 2 = 22 GA NL	
24-GA	GA 2	900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE	600 OHM SLOPE
WL = 25.0											
21.0	4.0	0	7	0	7	0	7	0	7	0 7	0 7
WL = 26.0											
4.0	22.0	0	13	0	10	0	10	0	8	0 8	0 6
5.0	21.0	0	12	0	10	0	9	0	8	0 8	0 6
6.0	20.0	0	11	0	9	0	9	0	7	0 8	0 6
7.0	19.0	0	11	0	9	0	9	0	7	0 8	0 6
8.0	18.0	0	10	0	9	0	9	0	7	0 8	0 6
9.0	17.0	0	10	0	8	0	9	0	7	0 8	0 6
10.0	16.0	0	10	0	8	0	9	0	7	0 8	0 6
11.0	15.0	0	10	0	8	0	9	0	7	0 8	0 6
12.0	14.0	0	9	0	8	0	8	0	7	0 8	0 6
13.0	13.0	0	9	0	8	0	8	0	7	0 8	0 6
14.0	12.0	0	9	0	8	0	8	0	7	0 8	0 7
15.0	11.0	0	9	0	7	0	8	0	7	0 8	0 7
16.0	10.0	0	8	0	7	0	8	0	7	0 8	0 7
17.0	9.0	0	8	0	7	0	8	0	7	0 8	0 7
18.0	8.0	0	8	0	7	0	8	0	7	0 8	0 7
19.0	7.0	0	8	0	7	0	8	0	7	0 8	0 7
20.0	6.0	0	8	0	7	0	8	0	7	0 8	0 7
21.0	5.0	0	8	0	7	0	8	0	8	0 8	0 8
22.0	4.0	0	8	0	8	0	8	0	8	0 8	0 8
WL = 27.0											
4.0	23.0	0	14	0	11	0	11	0	9	0 9	0 7
5.0	22.0	0	13	0	11	0	10	0	8	0 8	0 7
6.0	21.0	0	13	0	10	0	10	0	8	0 8	0 7
7.0	20.0	0	12	0	10	0	10	0	8	0 8	0 7
8.0	19.0	0	12	0	10	0	10	0	8	0 8	0 7
9.0	18.0	0	11	0	9	0	10	0	8	0 8	0 7
10.0	17.0	0	11	0	9	0	9	0	8	0 8	0 7
11.0	16.0	0	11	0	9	0	9	0	8	0 8	0 7
12.0	15.0	0	10	0	9	0	9	0	8	0 8	0 7
13.0	14.0	0	10	0	9	0	9	0	8	0 9	0 7
14.0	13.0	0	10	0	8	0	9	0	8	0 9	0 7
15.0	12.0	0	10	0	8	0	9	0	8	0 9	0 7
16.0	11.0	0	10	0	8	0	9	0	8	0 9	0 7
17.0	10.0	0	9	0	8	0	9	0	8	0 9	0 7
18.0	9.0	0	9	0	8	0	9	0	8	0 9	0 8
19.0	8.0	0	9	0	8	0	9	0	8	0 9	0 8
20.0	7.0	0	9	0	8	0	9	0	8	0 9	0 8
21.0	6.0	0	9	0	8	0	9	0	8	0 9	0 8
22.0	5.0	0	9	0	8	0	9	0	8	0 9	0 8
23.0	4.0	0	9	0	8	0	9	0	9	0 9	0 9
WL = 28.0											
4.0	24.0	0	15	0	13	0	12	0	9	0 9	0 7
5.0	23.0	0	15	0	12	0	11	0	9	0 9	0 7

TABLE JJ (CONT)

309D EQUALIZER SETTINGS FOR MFT 2-2 INTERMEDIATE (NL-NL) REPEATERS FOR 24-GAUGE NONLOADED AND 26-, 24-, OR 22-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

24-GA TERMINATION = 600 OHMS
GAUGE 2 TERMINATION = 900 OR 600 OHMS

LENGTH (KFT)		309D EQUALIZER SETTINGS BY GAUGE AND TERMINATION											
		GAUGE 2 = 26 GA NL				GAUGE 2 = 24 GA NL				GAUGE 2 = 22 GA NL			
24-GA	GA 2	900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE	
WL = 28.0													
6.0	22.0	0	14	0	12	0	11	0	9	0	9	0	7
7.0	21.0	0	14	0	11	0	11	0	9	0	9	0	7
8.0	20.0	0	13	0	11	0	11	0	9	0	9	0	7
9.0	19.0	0	13	0	10	0	10	0	9	0	9	0	7
10.0	18.0	0	12	0	10	0	10	0	9	0	9	0	7
11.0	17.0	0	12	0	10	0	10	0	9	0	9	0	7
12.0	16.0	0	12	0	10	0	10	0	9	0	9	0	8
13.0	15.0	0	11	0	10	0	10	0	8	0	9	0	8
14.0	14.0	0	11	0	9	0	10	0	8	0	9	0	8
15.0	13.0	0	11	0	9	0	10	0	8	0	9	0	8
16.0	12.0	0	11	0	9	0	10	0	9	0	9	0	8
17.0	11.0	0	10	0	9	0	10	0	9	0	9	0	8
18.0	10.0	0	10	0	9	0	10	0	9	0	9	0	8
19.0	9.0	0	10	0	9	0	10	0	9	0	9	0	8
20.0	8.0	0	10	0	9	0	10	0	9	0	9	0	8
21.0	7.0	0	10	0	9	0	10	0	9	0	9	0	9
22.0	6.0	0	9	0	9	0	9	0	9	0	9	0	9
23.0	5.0	0	9	0	9	0	9	0	9	0	9	0	9
24.0	4.0	0	9	0	9	0	10	0	9	0	10	0	9
WL = 29.0													
5.0	24.0	0	15	0	14	0	12	0	10	0	10	0	8
6.0	23.0	0	15	0	13	0	12	0	10	0	10	0	8
7.0	22.0	0	15	0	12	0	12	0	10	0	10	0	8
8.0	21.0	0	15	0	12	0	12	0	9	0	10	0	8
9.0	20.0	0	14	0	12	0	11	0	9	0	10	0	8
10.0	19.0	0	14	0	11	0	11	0	9	0	10	0	8
11.0	18.0	0	13	0	11	0	11	0	9	0	10	0	8
12.0	17.0	0	13	0	11	0	11	0	9	0	10	0	8
13.0	16.0	0	13	0	11	0	11	0	9	0	10	0	8
14.0	15.0	0	12	0	10	0	11	0	9	0	10	0	8
15.0	14.0	0	12	0	10	0	11	0	9	0	10	0	9
16.0	13.0	0	12	0	10	0	11	0	9	0	10	0	9
17.0	12.0	0	12	0	10	0	11	0	9	0	10	0	9
18.0	11.0	0	11	0	10	0	11	0	9	0	10	0	9
19.0	10.0	0	11	0	10	0	11	0	9	0	10	0	9
20.0	9.0	0	11	0	10	0	11	0	9	0	10	0	9
21.0	8.0	0	11	0	10	0	11	0	9	0	10	0	9
22.0	7.0	0	10	0	10	0	10	0	10	0	10	0	9
23.0	6.0	0	10	0	10	0	10	0	10	0	10	0	10
24.0	5.0	0	10	0	10	0	10	0	10	0	10	0	10
WL = 30.0													
6.0	24.0	0	15	0	14	0	13	0	11	0	10	0	8
7.0	23.0	0	15	0	14	0	13	0	10	0	10	0	8
8.0	22.0	0	15	0	13	0	13	0	10	0	10	0	8
9.0	21.0	0	15	0	13	0	13	0	10	0	10	0	9
10.0	20.0	0	15	0	13	0	12	0	10	0	11	0	9

TABLE JJ (CONT)

309D EQUALIZER SETTINGS FOR MFT 2-2 INTERMEDIATE (NL-NL) REPEATERS FOR 24-GAUGE NONLOADED AND 26-, 24-, OR 22-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

24-GA TERMINATION = 600 OHMS
GAUGE 2 TERMINATION = 900 OR 600 OHMS

LENGTH (KFT)		309D EQUALIZER SETTINGS BY GAUGE AND TERMINATION									
		GAUGE 2 = 26 GA NL				GAUGE 2 = 24 GA NL				GAUGE 2 = 22 GA NL			
24-GA	GA 2	900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE	
WL = 30.0													
11.0	19.0	0	15	0	12	0	12	0	10	0	11	0	9
12.0	18.0	0	15	0	12	0	12	0	10	0	11	0	9
13.0	17.0	0	14	0	12	0	12	0	10	0	11	0	9
14.0	16.0	0	14	0	12	0	12	0	10	0	11	0	9
15.0	15.0	0	14	0	11	0	12	0	10	0	11	0	9
16.0	14.0	0	13	0	11	0	12	0	10	0	11	0	9
17.0	13.0	0	13	0	11	0	12	0	10	0	11	0	10
18.0	12.0	0	13	0	11	0	12	0	10	0	11	0	10
19.0	11.0	0	12	0	11	0	12	0	10	0	11	0	10
20.0	10.0	0	12	0	11	0	12	0	10	0	11	0	10
21.0	9.0	0	12	0	10	0	12	0	10	0	11	0	10
22.0	8.0	0	12	0	10	0	11	0	10	0	11	0	10
23.0	7.0	0	11	0	10	0	11	0	10	0	11	0	10
24.0	6.0	0	11	0	11	0	11	0	11	0	11	0	11
WL = 31.0													
7.0	24.0	0	15	0	15	0	14	0	11	0	11	0	9
8.0	23.0	0	15	0	15	0	14	0	11	0	11	0	9
9.0	22.0	0	15	0	15	0	14	0	11	0	11	0	9
10.0	21.0	0	15	0	14	0	14	0	11	0	11	0	9
11.0	20.0	0	15	0	14	0	14	0	11	0	12	0	9
12.0	19.0	0	15	0	13	0	14	0	11	0	12	0	10
13.0	18.0	0	15	0	13	0	14	0	11	0	12	0	10
14.0	17.0	0	15	0	13	0	13	0	11	0	12	0	10
15.0	16.0	0	15	0	13	0	13	0	11	0	12	0	10
16.0	15.0	0	15	0	12	0	13	0	11	0	12	0	10
17.0	14.0	0	15	0	12	0	13	0	11	0	12	0	10
18.0	13.0	0	14	0	12	0	13	0	11	0	12	0	10
19.0	12.0	0	14	0	12	0	13	0	11	0	12	0	11
20.0	11.0	0	14	0	12	0	13	0	11	0	12	0	11
21.0	10.0	0	13	0	12	0	13	0	11	0	12	0	11
22.0	9.0	0	13	0	11	0	13	0	11	0	12	0	11
23.0	8.0	0	13	0	11	0	13	0	11	0	12	0	11
24.0	7.0	0	12	0	11	0	12	0	11	0	12	0	11
WL = 32.0													
8.0	24.0	0	15	0	15	0	15	0	12	0	12	0	10
9.0	23.0	0	15	0	15	0	15	0	12	0	12	0	10
10.0	22.0	0	15	0	15	0	15	0	12	0	12	0	10
11.0	21.0	0	15	0	15	0	15	0	12	0	12	0	10
12.0	20.0	0	15	0	15	0	15	0	12	0	13	0	10
13.0	19.0	0	15	0	15	0	15	0	12	0	13	0	10
14.0	18.0	0	15	0	14	0	15	0	12	0	13	0	11
15.0	17.0	0	15	0	14	0	15	0	12	0	13	0	11
16.0	16.0	0	15	0	14	0	15	0	12	0	13	0	11
17.0	15.0	0	15	0	14	0	15	0	12	0	13	0	11
18.0	14.0	0	15	0	13	0	14	0	12	0	13	0	11
19.0	13.0	0	15	0	13	0	14	0	12	0	13	0	11

TABLE JJ (CONT)

309D EQUALIZER SETTINGS FOR MFT 2-2 INTERMEDIATE (NL-NL) REPEATERS FOR 24-GAUGE NONLOADED AND 26-, 24-, OR 22-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

24-GA TERMINATION = 600 OHMS
GAUGE 2 TERMINATION = 900 OR 600 OHMS

LENGTH (KFT)		309D EQUALIZER SETTINGS BY GAUGE AND TERMINATION									
		GAUGE 2 = 26 GA NL				GAUGE 2 = 24 GA NL				GAUGE 2 = 22 GA NL			
24-GA	GA 2	900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE	
WL = 32.0													
20.0	12.0	0	15	0	13	0	14	0	12	0	13	0	11
21.0	11.0	0	15	0	13	0	14	0	12	0	13	0	12
22.0	10.0	0	14	0	13	0	14	0	12	0	13	0	12
23.0	9.0	0	14	0	12	0	14	0	12	0	13	0	12
24.0	8.0	0	14	0	12	0	14	0	12	0	13	0	12
WL = 33.0													
9.0	24.0	C	8	0	15	0	15	0	13	0	13	0	11
10.0	23.0	C	8	0	15	0	15	0	13	0	13	0	11
11.0	22.0	C	7	0	15	0	15	0	13	0	13	0	11
12.0	21.0	C	7	0	15	0	15	0	13	0	14	0	11
13.0	20.0	C	7	0	15	0	15	0	13	0	14	0	11
14.0	19.0	C	7	0	15	0	15	0	13	0	14	0	11
15.0	18.0	C	7	0	15	0	15	0	13	0	14	0	12
16.0	17.0	C	6	0	15	0	15	0	13	0	14	0	12
17.0	16.0	C	6	0	15	0	15	0	13	0	14	0	12
18.0	15.0	C	6	0	15	0	15	0	13	0	15	0	12
19.0	14.0	0	15	0	15	0	15	0	13	0	15	0	12
20.0	13.0	0	15	0	14	0	15	0	13	0	15	0	12
21.0	12.0	0	15	0	14	0	15	0	13	0	15	0	13
22.0	11.0	0	15	0	14	0	15	0	13	0	15	0	13
23.0	10.0	0	15	0	14	0	15	0	13	0	15	0	13
24.0	9.0	0	15	0	14	0	15	0	13	0	15	0	13
WL = 34.0													
10.0	24.0	C	9	0	15	0	15	0	14	0	14	0	12
11.0	23.0	C	8	0	15	0	15	0	14	0	14	0	12
12.0	22.0	C	8	C	7	0	15	0	14	0	15	0	12
13.0	21.0	C	8	C	6	0	15	0	14	0	15	0	12
14.0	20.0	C	8	C	6	0	15	0	14	0	15	0	12
15.0	19.0	C	8	C	6	0	15	0	15	0	15	0	13
16.0	18.0	C	7	0	15	0	15	0	15	0	15	0	13
17.0	17.0	C	7	0	15	0	15	0	15	0	15	0	13
18.0	16.0	C	7	0	15	0	15	0	15	0	15	0	13
19.0	15.0	C	7	0	15	0	15	0	15	0	15	0	13
20.0	14.0	C	7	0	15	0	15	0	14	0	15	0	13
21.0	13.0	C	6	0	15	0	15	0	14	0	15	0	14
22.0	12.0	C	6	0	15	0	15	0	14	0	15	0	14
23.0	11.0	0	15	0	15	0	15	0	14	0	15	0	14
24.0	10.0	0	15	0	15	0	15	0	14	0	15	0	14
WL = 35.0													
11.0	24.0	C	9	C	8	0	15	0	15	0	15	0	13
12.0	23.0	C	9	C	7	0	15	0	15	0	15	0	13
13.0	22.0	C	9	C	7	0	15	0	15	0	15	0	13
14.0	21.0	C	9	C	7	C	7	0	15	0	15	0	13
15.0	20.0	C	8	C	7	C	7	0	15	0	15	0	13
16.0	19.0	C	8	C	7	C	7	0	15	0	15	0	14

TABLE JJ (CONT)

309D EQUALIZER SETTINGS FOR MFT 2-2 INTERMEDIATE (NL-NL) REPEATERS FOR 24-GAUGE NONLOADED AND 26-, 24-, OR 22-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

24-GA TERMINATION = 600 OHMS
GAUGE 2 TERMINATION = 900 OR 600 OHMS

LENGTH (KFT)		309D EQUALIZER SETTINGS BY GAUGE AND TERMINATION									
		GAUGE 2 = 26 GA NL				GAUGE 2 = 24 GA NL				GAUGE 2 = 22 GA NL			
24-GA	GA 2	900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE	
WL = 35.0													
17.0	18.0	C	8	C	7	C	7	0	15	0	15	0	14
18.0	17.0	C	8	C	6	C	7	0	15	0	15	0	14
19.0	16.0	C	8	C	6	C	7	0	15	0	15	0	14
20.0	15.0	C	7	C	6	C	7	0	15	0	15	0	14
21.0	14.0	C	7	0	15	C	7	0	15	0	15	0	15
22.0	13.0	C	7	0	15	C	6	0	15	0	15	0	15
23.0	12.0	C	7	0	15	0	15	0	15	0	15	0	15
24.0	11.0	C	7	0	15	0	15	0	15	0	15	0	15
WL = 36.0													
12.0	24.0	C	10	C	8	C	7	0	15	0	15	0	14
13.0	23.0	C	10	C	8	C	7	0	15	0	15	0	14
14.0	22.0	C	10	C	8	C	7	0	15	0	15	0	14
15.0	21.0	C	10	C	8	C	7	0	15	0	15	0	14
16.0	20.0	C	9	C	8	C	7	0	15	0	15	0	15
17.0	19.0	C	9	C	7	C	7	0	15	0	15	0	15
18.0	18.0	C	9	C	7	C	7	0	15	0	15	0	15
19.0	17.0	C	9	C	7	C	7	0	15	C	6	0	15
20.0	16.0	C	8	C	7	C	7	0	15	C	7	0	15
21.0	15.0	C	8	C	7	C	7	0	15	C	7	0	15
22.0	14.0	C	8	C	7	C	7	0	15	C	7	0	15
23.0	13.0	C	8	C	6	C	7	0	15	C	7	0	15
24.0	12.0	C	8	0	15	C	7	0	15	0	15	0	15
WL = 37.0													
13.0	24.0	C	11	C	9	C	8	0	15	0	15	0	15
14.0	23.0	C	11	C	9	C	8	0	15	0	15	0	15
15.0	22.0	C	11	C	9	C	8	C	7	0	15	0	15
16.0	21.0	C	10	C	9	C	8	C	7	C	7	0	15
17.0	20.0	C	10	C	8	C	8	C	7	C	7	0	15
18.0	19.0	C	10	C	8	C	8	C	7	C	7	0	15
19.0	18.0	C	10	C	8	C	8	C	7	C	7	0	15
20.0	17.0	C	9	C	8	C	8	C	7	C	7	0	15
21.0	16.0	C	9	C	8	C	8	C	7	C	7	0	15
22.0	15.0	C	9	C	7	C	8	C	7	C	7	0	15
23.0	14.0	C	9	C	7	C	8	0	15	C	7	0	15
24.0	13.0	C	9	C	7	C	8	0	15	C	7	0	15
WL = 38.0													
14.0	24.0	C	12	C	10	C	9	C	7	0	15	0	15
15.0	23.0	C	12	C	10	C	9	C	7	C	7	0	15
16.0	22.0	C	12	C	10	C	9	C	7	C	7	0	15
17.0	21.0	C	11	C	9	C	9	C	7	C	7	0	15
18.0	20.0	C	11	C	9	C	9	C	7	C	8	0	15
19.0	19.0	C	11	C	9	C	9	C	7	C	8	0	15
20.0	18.0	C	11	C	9	C	9	C	7	C	8	0	15
21.0	17.0	C	10	C	9	C	9	C	7	C	8	0	15
22.0	16.0	C	10	C	8	C	9	C	7	C	8	0	15

TABLE JJ (CONT)

309D EQUALIZER SETTINGS FOR MFT 2-2 INTERMEDIATE (NL-NL) REPEATERS FOR 24-GAUGE NONLOADED AND 26-, 24-, OR 22-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

24-GA TERMINATION = 600 OHMS
GAUGE 2 TERMINATION = 900 OR 600 OHMS

LENGTH (KFT)		309D EQUALIZER SETTINGS BY GAUGE AND TERMINATION									
		GAUGE 2 = 26 GA NL				GAUGE 2 = 24 GA NL				GAUGE 2 = 22 GA NL			
24-GA	GA 2	900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE	
WL = 38.0													
23.0	15.0	C	10	C	8	C	9	C	7	C	8	0	15
24.0	14.0	C	10	C	8	C	9	C	7	C	8	0	15
WL = 39.0													
15.0	24.0	C	13	C	11	C	10	C	8	C	8	0	15
16.0	23.0	C	13	C	11	C	10	C	8	C	8	0	15
17.0	22.0	C	13	C	10	C	10	C	8	C	8	0	15
18.0	21.0	C	13	C	10	C	10	C	8	C	8	C	7
19.0	20.0	0	15	C	10	C	10	C	8	C	8	C	7
20.0	19.0	C	12	C	10	C	10	C	8	C	8	C	7
21.0	18.0	C	12	C	10	C	10	C	8	C	9	C	7
22.0	17.0	C	11	C	9	C	10	C	8	C	9	C	7
23.0	16.0	C	11	C	9	C	10	C	8	C	9	C	7
24.0	15.0	C	11	C	9	C	10	C	8	C	9	C	7
WL = 40.0													
16.0	24.0	0	15	C	12	C	11	C	9	C	9	C	7
17.0	23.0	0	15	C	12	C	11	C	9	C	9	C	7
18.0	22.0	0	15	C	12	C	11	C	9	C	9	C	7
19.0	21.0	0	15	C	11	C	11	C	9	C	9	C	7
20.0	20.0	0	15	C	11	C	11	C	9	C	9	C	7
21.0	19.0	0	15	C	11	C	11	C	9	C	9	C	7
22.0	18.0	0	15	C	10	C	11	C	9	C	9	C	8
23.0	17.0	0	15	C	10	C	11	C	9	C	9	C	8
24.0	16.0	C	12	C	10	C	11	C	9	C	9	C	8
WL = 41.0													
17.0	24.0	C	15	0	15	C	12	C	10	C	9	C	8
18.0	23.0	C	15	0	15	C	12	C	10	C	10	C	8
19.0	22.0	0	15	0	15	C	12	C	10	C	10	C	8
20.0	21.0	0	15	0	15	C	12	C	10	C	10	C	8
21.0	20.0	0	15	0	15	C	12	C	10	C	10	C	8
22.0	19.0	0	15	C	12	C	12	C	10	C	10	C	8
23.0	18.0	0	15	C	12	C	12	C	10	C	10	C	8
24.0	17.0	0	15	C	11	C	12	C	10	C	10	C	8
WL = 42.0													
18.0	24.0	C	15	0	15	C	13	C	10	C	10	C	8
19.0	23.0	C	15	0	15	C	13	C	10	C	10	C	8
20.0	22.0	C	15	0	15	C	13	C	10	C	11	C	9
21.0	21.0	C	15	0	15	C	13	C	10	C	11	C	9
22.0	20.0	C	15	0	15	C	13	C	10	C	11	C	9
23.0	19.0	C	15	0	15	C	13	C	10	C	11	C	9
24.0	18.0	0	15	0	15	C	13	C	10	C	11	C	9
WL = 43.0													
19.0	24.0	C	15	C	15	C	14	C	11	C	11	C	9
20.0	23.0	C	15	C	15	C	14	C	11	C	11	C	9

TABLE JJ (CONT)

309D EQUALIZER SETTINGS FOR MFT 2-2 INTERMEDIATE (NL-NL) REPEATERS FOR 24-GAUGE NONLOADED AND 26-, 24-, OR 22-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

24-GA TERMINATION = 600 OHMS
GAUGE 2 TERMINATION = 900 OR 600 OHMS

LENGTH (KFT)		309D EQUALIZER SETTINGS BY GAUGE AND TERMINATION											
		GAUGE 2 = 26 GA NL				GAUGE 2 = 24 GA NL				GAUGE 2 = 22 GA NL			
24-GA	GA 2	900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE	
WL = 43.0													
21.0	22.0	C	15	C	15	C	14	C	11	C	12	C	9
22.0	21.0	C	15	0	15	C	14	C	11	C	12	C	10
23.0	20.0	C	15	0	15	0	15	C	11	C	12	C	10
24.0	19.0	C	15	0	15	0	15	C	11	C	12	C	10
WL = 44.0													
20.0	24.0	C	15	C	15	0	15	C	12	C	12	C	10
21.0	23.0	C	15	C	15	0	15	C	12	C	12	C	10
22.0	22.0	C	15	C	15	0	15	C	12	C	13	C	10
23.0	21.0	C	15	C	15	0	15	C	12	C	13	C	10
24.0	20.0	C	15	C	15	0	15	C	12	C	13	C	11

TABLE KK

309D EQUALIZER SETTINGS FOR MFT 2-2 INTERMEDIATE (NL-NL) REPEATERS FOR 22-GAUGE NONLOADED AND 26-, 24-, OR 22-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

22-GA TERMINATION = 600 OHMS
GAUGE 2 TERMINATION = 900 OR 600 OHMS

LENGTH (KFT)		309D EQUALIZER SETTINGS BY GAUGE AND TERMINATION											
		GAUGE 2 = 26 GA NL				GAUGE 2 = 24 GA NL				GAUGE 2 = 22 GA NL			
22-GA	GA 2	900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE	
WL = 11.0													
4.0	7.0	0	0	0	0	0	0	0	0	0	0	0	0
5.0	6.0	0	0	0	0	0	0	0	0	0	0	0	0
6.0	5.0	0	0	0	0	0	0	0	0	0	0	0	0
7.0	4.0	0	0	0	0	0	0	0	0	0	0	0	0
WL = 12.0													
4.0	8.0	0	1	0	0	0	1	0	0	0	1	0	0
5.0	7.0	0	1	0	0	0	1	0	0	0	0	0	0
6.0	6.0	0	0	0	0	0	0	0	0	0	0	0	0
7.0	5.0	0	0	0	0	0	0	0	0	0	0	0	0
8.0	4.0	0	0	0	0	0	0	0	0	0	0	0	0
WL = 13.0													
4.0	9.0	0	1	0	1	0	1	0	1	0	1	0	1
5.0	8.0	0	1	0	1	0	1	0	1	0	1	0	0
6.0	7.0	0	1	0	0	0	1	0	0	0	1	0	0
7.0	6.0	0	1	0	0	0	1	0	0	0	1	0	0
8.0	5.0	0	1	0	0	0	1	0	0	0	1	0	0
9.0	4.0	0	1	0	0	0	1	0	1	0	1	0	1
WL = 14.0													
4.0	10.0	0	2	0	1	0	2	0	1	0	2	0	1
5.0	9.0	0	2	0	1	0	2	0	1	0	1	0	1
6.0	8.0	0	1	0	1	0	1	0	1	0	1	0	1
7.0	7.0	0	1	0	1	0	1	0	1	0	1	0	1
8.0	6.0	0	1	0	1	0	1	0	1	0	1	0	1
9.0	5.0	0	1	0	1	0	1	0	1	0	1	0	1
10.0	4.0	0	1	0	1	0	1	0	1	0	1	0	1
WL = 15.0													
4.0	11.0	0	3	0	2	0	2	0	2	0	2	0	1
5.0	10.0	0	2	0	2	0	2	0	1	0	2	0	1
6.0	9.0	0	2	0	1	0	2	0	1	0	2	0	1
7.0	8.0	0	2	0	1	0	2	0	1	0	2	0	1
8.0	7.0	0	2	0	1	0	2	0	1	0	1	0	1
9.0	6.0	0	1	0	1	0	1	0	1	0	1	0	1
10.0	5.0	0	1	0	1	0	1	0	1	0	1	0	1
11.0	4.0	0	1	0	1	0	1	0	1	0	1	0	1
WL = 16.0													
4.0	12.0	0	3	0	2	0	3	0	2	0	3	0	2
5.0	11.0	0	3	0	2	0	3	0	2	0	2	0	2
6.0	10.0	0	3	0	2	0	2	0	2	0	2	0	2
7.0	9.0	0	2	0	2	0	2	0	2	0	2	0	1
8.0	8.0	0	2	0	2	0	2	0	2	0	2	0	1
9.0	7.0	0	2	0	2	0	2	0	2	0	2	0	1
10.0	6.0	0	2	0	1	0	2	0	2	0	2	0	2
11.0	5.0	0	2	0	2	0	2	0	2	0	2	0	2

TABLE KK (CONT)

309D EQUALIZER SETTINGS FOR MFT 2-2 INTERMEDIATE (NL-NL) REPEATERS FOR 22-GAUGE NONLOADED AND 26-, 24-, OR 22-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

22-GA TERMINATION = 600 OHMS
GAUGE 2 TERMINATION = 900 OR 600 OHMS

LENGTH (KFT)		309D EQUALIZER SETTINGS BY GAUGE AND TERMINATION											
		GAUGE 2 = 26 GA NL				GAUGE 2 = 24 GA NL				GAUGE 2 = 22 GA NL			
22-GA	GA 2	900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE	
WL = 16.0													
12.0	4.0	0	2	0	2	0	2	0	2	0	2	0	2
WL = 17.0													
4.0	13.0	0	4	0	3	0	3	0	3	0	3	0	2
5.0	12.0	0	4	0	3	0	3	0	2	0	3	0	2
6.0	11.0	0	3	0	2	0	3	0	2	0	3	0	2
7.0	10.0	0	3	0	2	0	3	0	2	0	3	0	2
8.0	9.0	0	3	0	2	0	3	0	2	0	2	0	2
9.0	8.0	0	3	0	2	0	2	0	2	0	2	0	2
10.0	7.0	0	2	0	2	0	2	0	2	0	2	0	2
11.0	6.0	0	2	0	2	0	2	0	2	0	2	0	2
12.0	5.0	0	2	0	2	0	2	0	2	0	2	0	2
13.0	4.0	0	2	0	2	0	2	0	2	0	2	0	2
WL = 18.0													
4.0	14.0	0	5	0	4	0	4	0	3	0	4	0	3
5.0	13.0	0	4	0	3	0	4	0	3	0	3	0	2
6.0	12.0	0	4	0	3	0	4	0	3	0	3	0	2
7.0	11.0	0	4	0	3	0	3	0	3	0	3	0	2
8.0	10.0	0	3	0	3	0	3	0	2	0	3	0	2
9.0	9.0	0	3	0	2	0	3	0	2	0	3	0	2
10.0	8.0	0	3	0	2	0	3	0	2	0	3	0	2
11.0	7.0	0	3	0	2	0	3	0	2	0	3	0	2
12.0	6.0	0	3	0	2	0	3	0	2	0	3	0	2
13.0	5.0	0	3	0	2	0	3	0	2	0	3	0	2
14.0	4.0	0	3	0	2	0	3	0	3	0	3	0	3
WL = 19.0													
4.0	15.0	0	5	0	4	0	5	0	4	0	4	0	3
5.0	14.0	0	5	0	4	0	4	0	3	0	4	0	3
6.0	13.0	0	5	0	4	0	4	0	3	0	4	0	3
7.0	12.0	0	4	0	3	0	4	0	3	0	4	0	3
8.0	11.0	0	4	0	3	0	4	0	3	0	3	0	3
9.0	10.0	0	4	0	3	0	4	0	3	0	3	0	3
10.0	9.0	0	4	0	3	0	3	0	3	0	3	0	3
11.0	8.0	0	3	0	3	0	3	0	3	0	3	0	3
12.0	7.0	0	3	0	3	0	3	0	3	0	3	0	3
13.0	6.0	0	3	0	3	0	3	0	3	0	3	0	3
14.0	5.0	0	3	0	3	0	3	0	3	0	3	0	3
15.0	4.0	0	3	0	3	0	3	0	3	0	3	0	3
WL = 20.0													
4.0	16.0	0	6	0	5	0	5	0	4	0	5	0	3
5.0	15.0	0	6	0	5	0	5	0	4	0	4	0	3
6.0	14.0	0	5	0	4	0	5	0	4	0	4	0	3
7.0	13.0	0	5	0	4	0	5	0	4	0	4	0	3
8.0	12.0	0	5	0	4	0	4	0	3	0	4	0	3
9.0	11.0	0	5	0	4	0	4	0	3	0	4	0	3

TABLE KK (CONT)

309D EQUALIZER SETTINGS FOR MFT 2-2 INTERMEDIATE (NL-NL)
REPEATERS FOR 22-GAUGE NONLOADED AND 26-, 24-, OR 22-GAUGE
NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

22-GA TERMINATION = 600 OHMS
GAUGE 2 TERMINATION = 900 OR 600 OHMS

LENGTH (KFT)		309D EQUALIZER SETTINGS BY GAUGE AND TERMINATION											
		GAUGE 2 = 26 GA NL				GAUGE 2 = 24 GA NL				GAUGE 2 = 22 GA NL			
22-GA	GA 2	900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE	
WL = 20.0													
10.0	10.0	0	4	0	3	0	4	0	3	0	4	0	3
11.0	9.0	0	4	0	3	0	4	0	3	0	4	0	3
12.0	8.0	0	4	0	3	0	4	0	3	0	4	0	3
13.0	7.0	0	4	0	3	0	4	0	3	0	4	0	3
14.0	6.0	0	4	0	3	0	4	0	3	0	4	0	3
15.0	5.0	0	3	0	3	0	4	0	3	0	3	0	3
16.0	4.0	0	3	0	3	0	4	0	3	0	3	0	3
WL = 21.0													
4.0	17.0	0	7	0	6	0	6	0	5	0	5	0	4
5.0	16.0	0	7	0	5	0	6	0	4	0	5	0	4
6.0	15.0	0	6	0	5	0	5	0	4	0	5	0	4
7.0	14.0	0	6	0	5	0	5	0	4	0	5	0	4
8.0	13.0	0	6	0	4	0	5	0	4	0	5	0	4
9.0	12.0	0	5	0	4	0	5	0	4	0	4	0	3
10.0	11.0	0	5	0	4	0	5	0	4	0	4	0	3
11.0	10.0	0	5	0	4	0	5	0	4	0	4	0	3
12.0	9.0	0	5	0	4	0	4	0	4	0	4	0	3
13.0	8.0	0	4	0	4	0	4	0	4	0	4	0	4
14.0	7.0	0	4	0	4	0	4	0	4	0	4	0	4
15.0	6.0	0	4	0	4	0	4	0	4	0	4	0	4
16.0	5.0	0	4	0	4	0	4	0	4	0	4	0	4
17.0	4.0	0	4	0	4	0	4	0	4	0	4	0	4
WL = 22.0													
4.0	18.0	0	8	0	6	0	7	0	5	0	6	0	4
5.0	17.0	0	7	0	6	0	6	0	5	0	5	0	4
6.0	16.0	0	7	0	6	0	6	0	5	0	5	0	4
7.0	15.0	0	7	0	5	0	6	0	5	0	5	0	4
8.0	14.0	0	6	0	5	0	6	0	4	0	5	0	4
9.0	13.0	0	6	0	5	0	6	0	4	0	5	0	4
10.0	12.0	0	6	0	5	0	5	0	4	0	5	0	4
11.0	11.0	0	6	0	5	0	5	0	4	0	5	0	4
12.0	10.0	0	5	0	4	0	5	0	4	0	5	0	4
13.0	9.0	0	5	0	4	0	5	0	4	0	5	0	4
14.0	8.0	0	5	0	4	0	5	0	4	0	5	0	4
15.0	7.0	0	5	0	4	0	5	0	4	0	5	0	4
16.0	6.0	0	5	0	4	0	5	0	4	0	4	0	4
17.0	5.0	0	4	0	4	0	4	0	4	0	4	0	4
18.0	4.0	0	4	0	4	0	4	0	4	0	4	0	4
WL = 23.0													
4.0	19.0	0	9	0	7	0	7	0	6	0	6	0	5
5.0	18.0	0	8	0	7	0	7	0	6	0	6	0	5
6.0	17.0	0	8	0	6	0	7	0	5	0	6	0	5
7.0	16.0	0	8	0	6	0	7	0	5	0	6	0	4
8.0	15.0	0	7	0	6	0	6	0	5	0	6	0	4
9.0	14.0	0	7	0	6	0	6	0	5	0	6	0	4

TABLE KK (CONT)

309D EQUALIZER SETTINGS FOR MFT 2-2 INTERMEDIATE (NL-NL)
REPEATERS FOR 22-GAUGE NONLOADED AND 26-, 24-, OR 22-GAUGE
NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

22-GA TERMINATION = 600 OHMS
GAUGE 2 TERMINATION = 900 OR 600 OHMS

LENGTH (KFT)		309D EQUALIZER SETTINGS BY GAUGE AND TERMINATION											
		GAUGE 2 = 26 GA NL				GAUGE 2 = 24 GA NL				GAUGE 2 = 22 GA NL			
22-GA	GA 2	900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE	
WL = 23.0													
10.0	13.0	0	7	0	5	0	6	0	5	0	6	0	4
11.0	12.0	0	6	0	5	0	6	0	5	0	5	0	4
12.0	11.0	0	6	0	5	0	6	0	5	0	5	0	4
13.0	10.0	0	6	0	5	0	6	0	5	0	5	0	4
14.0	9.0	0	6	0	5	0	5	0	5	0	5	0	4
15.0	8.0	0	5	0	5	0	5	0	5	0	5	0	4
16.0	7.0	0	5	0	5	0	5	0	5	0	5	0	4
17.0	6.0	0	5	0	5	0	5	0	5	0	5	0	5
18.0	5.0	0	5	0	5	0	5	0	5	0	5	0	5
19.0	4.0	0	5	0	5	0	5	0	5	0	5	0	5
WL = 24.0													
4.0	20.0	0	10	0	8	0	8	0	6	0	7	0	5
5.0	19.0	0	9	0	8	0	8	0	6	0	7	0	5
6.0	18.0	0	9	0	7	0	7	0	6	0	6	0	5
7.0	17.0	0	8	0	7	0	7	0	6	0	6	0	5
8.0	16.0	0	8	0	7	0	7	0	6	0	6	0	5
9.0	15.0	0	8	0	6	0	7	0	6	0	6	0	5
10.0	14.0	0	7	0	6	0	7	0	5	0	6	0	5
11.0	13.0	0	7	0	6	0	7	0	5	0	6	0	5
12.0	12.0	0	7	0	6	0	6	0	5	0	6	0	5
13.0	11.0	0	7	0	6	0	6	0	5	0	6	0	5
14.0	10.0	0	6	0	5	0	6	0	5	0	6	0	5
15.0	9.0	0	6	0	5	0	6	0	5	0	6	0	5
16.0	8.0	0	6	0	5	0	6	0	5	0	6	0	5
17.0	7.0	0	6	0	5	0	6	0	5	0	6	0	5
18.0	6.0	0	5	0	5	0	6	0	5	0	5	0	5
19.0	5.0	0	5	0	5	0	5	0	5	0	5	0	5
20.0	4.0	0	5	0	5	0	5	0	5	0	5	0	5
WL = 25.0													
4.0	21.0	0	11	0	9	0	9	0	7	0	7	0	6
5.0	20.0	0	11	0	9	0	9	0	7	0	7	0	6
6.0	19.0	0	10	0	8	0	8	0	7	0	7	0	6
7.0	18.0	0	10	0	8	0	8	0	6	0	7	0	5
8.0	17.0	0	9	0	7	0	8	0	6	0	7	0	5
9.0	16.0	0	9	0	7	0	8	0	6	0	7	0	5
10.0	15.0	0	8	0	7	0	8	0	6	0	7	0	5
11.0	14.0	0	8	0	7	0	7	0	6	0	7	0	5
12.0	13.0	0	8	0	6	0	7	0	6	0	7	0	5
13.0	12.0	0	8	0	6	0	7	0	6	0	7	0	5
14.0	11.0	0	7	0	6	0	7	0	6	0	6	0	5
15.0	10.0	0	7	0	6	0	7	0	6	0	6	0	5
16.0	9.0	0	7	0	6	0	7	0	6	0	6	0	5
17.0	8.0	0	6	0	6	0	6	0	6	0	6	0	5
18.0	7.0	0	6	0	6	0	6	0	6	0	6	0	5
19.0	6.0	0	6	0	6	0	6	0	6	0	6	0	6
20.0	5.0	0	6	0	6	0	6	0	6	0	6	0	6

TABLE KK (CONT)

309D EQUALIZER SETTINGS FOR MFT 2-2 INTERMEDIATE (NL-NL)
REPEATERS FOR 22-GAUGE NONLOADED AND 26-, 24-, OR 22-GAUGE
NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

22-GA TERMINATION = 600 OHMS
GAUGE 2 TERMINATION = 900 OR 600 OHMS

LENGTH (KFT)		309D EQUALIZER SETTINGS BY GAUGE AND TERMINATION									
		GAUGE 2 = 26 GA NL				GAUGE 2 = 24 GA NL				GAUGE 2 = 22 GA NL			
22-GA	GA 2	900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE	
WL = 25.0													
21.0	4.0	0	6	0	6	0	6	0	6	0	6	0	6
WL = 26.0													
4.0	22.0	0	13	0	10	0	10	0	8	0	8	0	6
5.0	21.0	0	12	0	10	0	9	0	8	0	8	0	6
6.0	20.0	0	11	0	9	0	9	0	7	0	8	0	6
7.0	19.0	0	11	0	9	0	9	0	7	0	8	0	6
8.0	18.0	0	10	0	8	0	9	0	7	0	7	0	6
9.0	17.0	0	10	0	8	0	8	0	7	0	7	0	6
10.0	16.0	0	9	0	8	0	8	0	7	0	7	0	6
11.0	15.0	0	9	0	8	0	8	0	7	0	7	0	6
12.0	14.0	0	9	0	7	0	8	0	7	0	7	0	6
13.0	13.0	0	8	0	7	0	8	0	6	0	7	0	6
14.0	12.0	0	8	0	7	0	8	0	6	0	7	0	6
15.0	11.0	0	8	0	7	0	7	0	6	0	7	0	6
16.0	10.0	0	8	0	6	0	7	0	6	0	7	0	6
17.0	9.0	0	7	0	6	0	7	0	6	0	7	0	6
18.0	8.0	0	7	0	6	0	7	0	6	0	7	0	6
19.0	7.0	0	7	0	6	0	7	0	6	0	7	0	6
20.0	6.0	0	7	0	6	0	7	0	6	0	6	0	6
21.0	5.0	0	6	0	6	0	6	0	6	0	6	0	6
22.0	4.0	0	6	0	6	0	6	0	6	0	6	0	6
WL = 27.0													
4.0	23.0	0	14	0	12	0	11	0	9	0	9	0	7
5.0	22.0	0	13	0	11	0	10	0	8	0	8	0	7
6.0	21.0	0	13	0	10	0	10	0	8	0	8	0	7
7.0	20.0	0	12	0	10	0	10	0	8	0	8	0	7
8.0	19.0	0	11	0	9	0	9	0	8	0	8	0	7
9.0	18.0	0	11	0	9	0	9	0	8	0	8	0	7
10.0	17.0	0	11	0	9	0	9	0	7	0	8	0	7
11.0	16.0	0	10	0	8	0	9	0	7	0	8	0	7
12.0	15.0	0	10	0	8	0	9	0	7	0	8	0	7
13.0	14.0	0	10	0	8	0	9	0	7	0	8	0	7
14.0	13.0	0	9	0	8	0	8	0	7	0	8	0	7
15.0	12.0	0	9	0	7	0	8	0	7	0	8	0	7
16.0	11.0	0	9	0	7	0	8	0	7	0	8	0	7
17.0	10.0	0	8	0	7	0	8	0	7	0	8	0	7
18.0	9.0	0	8	0	7	0	8	0	7	0	7	0	7
19.0	8.0	0	8	0	7	0	7	0	7	0	7	0	7
20.0	7.0	0	7	0	7	0	7	0	7	0	7	0	7
21.0	6.0	0	7	0	7	0	7	0	7	0	7	0	7
22.0	5.0	0	7	0	7	0	7	0	7	0	7	0	7
23.0	4.0	0	7	0	7	0	7	0	7	0	7	0	7
WL = 28.0													
4.0	24.0	0	15	0	13	0	12	0	9	0	9	0	7
5.0	23.0	0	15	0	12	0	11	0	9	0	9	0	7

TABLE KK (CONT)

309D EQUALIZER SETTINGS FOR MFT 2-2 INTERMEDIATE (NL-NL)
REPEATERS FOR 22-GAUGE NONLOADED AND 26-, 24-, OR 22-GAUGE
NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

22-GA TERMINATION = 600 OHMS
GAUGE 2 TERMINATION = 900 OR 600 OHMS

LENGTH (KFT)		309D EQUALIZER SETTINGS BY GAUGE AND TERMINATION									
		GAUGE 2 = 26 GA NL				GAUGE 2 = 24 GA NL				GAUGE 2 = 22 GA NL	
22-GA	GA 2	900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE	600 OHM SLOPE
WL = 28.0											
6.0	22.0	0	14	0	11	0	11	0	9	0 9	0 7
7.0	21.0	0	13	0	11	0	11	0	9	0 9	0 7
8.0	20.0	0	13	0	11	0	10	0	8	0 9	0 7
9.0	19.0	0	12	0	10	0	10	0	8	0 9	0 7
10.0	18.0	0	12	0	10	0	10	0	8	0 9	0 7
11.0	17.0	0	11	0	9	0	10	0	8	0 9	0 7
12.0	16.0	0	11	0	9	0	10	0	8	0 9	0 7
13.0	15.0	0	11	0	9	0	10	0	8	0 9	0 7
14.0	14.0	0	10	0	9	0	9	0	8	0 9	0 7
15.0	13.0	0	10	0	8	0	9	0	8	0 9	0 7
16.0	12.0	0	10	0	8	0	9	0	8	0 8	0 7
17.0	11.0	0	9	0	8	0	9	0	7	0 8	0 7
18.0	10.0	0	9	0	8	0	9	0	7	0 8	0 7
19.0	9.0	0	9	0	7	0	8	0	7	0 8	0 7
20.0	8.0	0	8	0	7	0	8	0	7	0 8	0 7
21.0	7.0	0	8	0	7	0	8	0	7	0 8	0 7
22.0	6.0	0	8	0	7	0	8	0	7	0 8	0 7
23.0	5.0	0	8	0	7	0	8	0	7	0 8	0 7
24.0	4.0	0	7	0	7	0	7	0	7	0 7	0 7
WL = 29.0											
5.0	24.0	0	15	0	14	0	12	0	10	0 10	0 8
6.0	23.0	0	15	0	13	0	12	0	10	0 10	0 8
7.0	22.0	0	15	0	12	0	12	0	9	0 10	0 8
8.0	21.0	0	14	0	12	0	11	0	9	0 9	0 8
9.0	20.0	0	14	0	11	0	11	0	9	0 9	0 8
10.0	19.0	0	13	0	11	0	11	0	9	0 9	0 8
11.0	18.0	0	13	0	11	0	11	0	9	0 9	0 8
12.0	17.0	0	12	0	10	0	11	0	9	0 9	0 8
13.0	16.0	0	12	0	10	0	11	0	9	0 9	0 8
14.0	15.0	0	12	0	10	0	10	0	9	0 9	0 8
15.0	14.0	0	11	0	9	0	10	0	8	0 9	0 8
16.0	13.0	0	11	0	9	0	10	0	8	0 9	0 8
17.0	12.0	0	10	0	9	0	10	0	8	0 9	0 8
18.0	11.0	0	10	0	9	0	9	0	8	0 9	0 8
19.0	10.0	0	10	0	8	0	9	0	8	0 9	0 8
20.0	9.0	0	9	0	8	0	9	0	8	0 9	0 8
21.0	8.0	0	9	0	8	0	9	0	8	0 9	0 8
22.0	7.0	0	9	0	8	0	9	0	8	0 8	0 8
23.0	6.0	0	8	0	8	0	8	0	8	0 8	0 8
24.0	5.0	0	8	0	8	0	8	0	8	0 8	0 8
WL = 30.0											
6.0	24.0	0	15	0	14	0	13	0	11	0 10	0 8
7.0	23.0	0	15	0	14	0	13	0	10	0 10	0 8
8.0	22.0	0	15	0	13	0	12	0	10	0 10	0 8
9.0	21.0	0	15	0	13	0	12	0	10	0 10	0 8
10.0	20.0	0	15	0	12	0	12	0	10	0 10	0 8

TABLE KK (CONT)

309D EQUALIZER SETTINGS FOR MFT 2-2 INTERMEDIATE (NL-NL)
REPEATERS FOR 22-GAUGE NONLOADED AND 26-, 24-, OR 22-GAUGE
NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

22-GA TERMINATION = 600 OHMS
GAUGE 2 TERMINATION = 900 OR 600 OHMS

LENGTH (KFT)		309D EQUALIZER SETTINGS BY GAUGE AND TERMINATION											
		GAUGE 2 = 26 GA NL				GAUGE 2 = 24 GA NL				GAUGE 2 = 22 GA NL			
22-GA	GA 2	900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE	
WL = 30.0													
11.0	19.0	0	14	0	12	0	12	0	10	0	10	0	8
12.0	18.0	0	14	0	11	0	12	0	10	0	10	0	8
13.0	17.0	0	13	0	11	0	12	0	10	0	10	0	8
14.0	16.0	0	13	0	11	0	11	0	9	0	10	0	8
15.0	15.0	0	12	0	10	0	11	0	9	0	10	0	8
16.0	14.0	0	12	0	10	0	11	0	9	0	10	0	8
17.0	13.0	0	12	0	10	0	11	0	9	0	10	0	8
18.0	12.0	0	11	0	9	0	10	0	9	0	10	0	8
19.0	11.0	0	11	0	9	0	10	0	9	0	10	0	8
20.0	10.0	0	10	0	9	0	10	0	9	0	10	0	8
21.0	9.0	0	10	0	9	0	10	0	9	0	9	0	8
22.0	8.0	0	10	0	9	0	9	0	8	0	9	0	8
23.0	7.0	0	9	0	8	0	9	0	8	0	9	0	8
24.0	6.0	0	9	0	8	0	9	0	8	0	9	0	8
WL = 31.0													
7.0	24.0	0	15	0	15	0	14	0	11	0	11	0	9
8.0	23.0	0	15	0	15	0	14	0	11	0	11	0	9
9.0	22.0	0	15	0	14	0	13	0	11	0	11	0	9
10.0	21.0	0	15	0	14	0	13	0	11	0	11	0	9
11.0	20.0	0	15	0	13	0	13	0	11	0	11	0	9
12.0	19.0	0	15	0	13	0	13	0	11	0	11	0	9
13.0	18.0	0	15	0	12	0	13	0	10	0	11	0	9
14.0	17.0	0	14	0	12	0	12	0	10	0	11	0	9
15.0	16.0	0	14	0	12	0	12	0	10	0	11	0	9
16.0	15.0	0	13	0	11	0	12	0	10	0	11	0	9
17.0	14.0	0	13	0	11	0	12	0	10	0	11	0	9
18.0	13.0	0	12	0	11	0	12	0	10	0	11	0	9
19.0	12.0	0	12	0	10	0	11	0	10	0	11	0	9
20.0	11.0	0	11	0	10	0	11	0	9	0	10	0	9
21.0	10.0	0	11	0	10	0	11	0	9	0	10	0	9
22.0	9.0	0	11	0	9	0	10	0	9	0	10	0	9
23.0	8.0	0	10	0	9	0	10	0	9	0	10	0	9
24.0	7.0	0	10	0	9	0	10	0	9	0	10	0	9
WL = 32.0													
8.0	24.0	0	15	0	15	0	15	0	12	0	12	0	10
9.0	23.0	0	15	0	15	0	15	0	12	0	12	0	10
10.0	22.0	0	15	0	15	0	14	0	12	0	12	0	10
11.0	21.0	0	15	0	15	0	14	0	12	0	12	0	10
12.0	20.0	0	15	0	14	0	14	0	11	0	12	0	10
13.0	19.0	0	15	0	14	0	14	0	11	0	12	0	10
14.0	18.0	0	15	0	13	0	14	0	11	0	12	0	10
15.0	17.0	0	15	0	13	0	13	0	11	0	12	0	10
16.0	16.0	0	15	0	12	0	13	0	11	0	12	0	10
17.0	15.0	0	14	0	12	0	13	0	11	0	12	0	10
18.0	14.0	0	14	0	12	0	13	0	11	0	12	0	10
19.0	13.0	0	13	0	11	0	12	0	10	0	12	0	10

TABLE KK (CONT)

309D EQUALIZER SETTINGS FOR MFT 2-2 INTERMEDIATE (NL-NL)
REPEATERS FOR 22-GAUGE NONLOADED AND 26-, 24-, OR 22-GAUGE
NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

22-GA TERMINATION = 600 OHMS
GAUGE 2 TERMINATION = 900 OR 600 OHMS

LENGTH (KFT)		309D EQUALIZER SETTINGS BY GAUGE AND TERMINATION									
		GAUGE 2 = 26 GA NL				GAUGE 2 = 24 GA NL				GAUGE 2 = 22 GA NL			
22-GA	GA 2	900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE	
WL = 32.0													
20.0	12.0	0	13	0	11	0	12	0	10	0	11	0	10
21.0	11.0	0	12	0	11	0	12	0	10	0	11	0	10
22.0	10.0	0	12	0	10	0	11	0	10	0	11	0	10
23.0	9.0	0	11	0	10	0	11	0	10	0	11	0	10
24.0	8.0	0	11	0	10	0	11	0	10	0	11	0	10
WL = 33.0													
9.0	24.0	0	15	0	15	0	15	0	13	0	13	0	10
10.0	23.0	0	15	0	15	0	15	0	13	0	13	0	10
11.0	22.0	0	15	0	15	0	15	0	13	0	13	0	10
12.0	21.0	0	15	0	15	0	15	0	13	0	13	0	10
13.0	20.0	0	15	0	15	0	15	0	12	0	13	0	11
14.0	19.0	0	15	0	15	0	15	0	12	0	13	0	11
15.0	18.0	0	15	0	14	0	15	0	12	0	13	0	11
16.0	17.0	0	15	0	14	0	14	0	12	0	13	0	11
17.0	16.0	0	15	0	13	0	14	0	12	0	13	0	11
18.0	15.0	0	15	0	13	0	14	0	12	0	13	0	11
19.0	14.0	0	15	0	13	0	14	0	11	0	13	0	11
20.0	13.0	0	14	0	12	0	13	0	11	0	12	0	11
21.0	12.0	0	14	0	12	0	13	0	11	0	12	0	10
22.0	11.0	0	13	0	11	0	13	0	11	0	12	0	10
23.0	10.0	0	13	0	11	0	12	0	11	0	12	0	10
24.0	9.0	0	12	0	11	0	12	0	11	0	12	0	10
WL = 34.0													
10.0	24.0	C	8	0	15	0	15	0	14	0	14	0	11
11.0	23.0	C	8	0	15	0	15	0	14	0	14	0	11
12.0	22.0	C	8	0	15	0	15	0	14	0	14	0	11
13.0	21.0	C	7	0	15	0	15	0	14	0	14	0	11
14.0	20.0	C	7	0	15	0	15	0	13	0	14	0	11
15.0	19.0	C	7	0	15	0	15	0	13	0	14	0	11
16.0	18.0	C	7	0	15	0	15	0	13	0	14	0	11
17.0	17.0	0	15	0	15	0	15	0	13	0	14	0	11
18.0	16.0	0	15	0	14	0	15	0	13	0	14	0	11
19.0	15.0	0	15	0	14	0	15	0	13	0	14	0	11
20.0	14.0	0	15	0	14	0	15	0	12	0	14	0	11
21.0	13.0	0	15	0	13	0	14	0	12	0	13	0	11
22.0	12.0	0	15	0	13	0	14	0	12	0	13	0	11
23.0	11.0	0	14	0	12	0	14	0	12	0	13	0	11
24.0	10.0	0	14	0	12	0	13	0	12	0	13	0	11
WL = 35.0													
11.0	24.0	C	9	C	7	0	15	0	15	0	15	0	12
12.0	23.0	C	9	C	7	0	15	0	15	0	15	0	12
13.0	22.0	C	8	C	7	0	15	0	15	0	15	0	12
14.0	21.0	C	8	0	15	0	15	0	15	0	15	0	12
15.0	20.0	C	8	0	15	0	15	0	14	0	15	0	12
16.0	19.0	C	7	0	15	0	15	0	14	0	15	0	12

TABLE KK (CONT)

309D EQUALIZER SETTINGS FOR MFT 2-2 INTERMEDIATE (NL-NL)
REPEATERS FOR 22-GAUGE NONLOADED AND 26-, 24-, OR 22-GAUGE
NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

22-GA TERMINATION = 600 OHMS
GAUGE 2 TERMINATION = 900 OR 600 OHMS

LENGTH (KFT)		309D EQUALIZER SETTINGS BY GAUGE AND TERMINATION											
		GAUGE 2 = 26 GA NL				GAUGE 2 = 24 GA NL				GAUGE 2 = 22 GA NL			
22-GA	GA 2	900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE	
WL = 35.0													
17.0	18.0	C	7	0	15	0	15	0	14	0	15	0	12
18.0	17.0	C	7	0	15	0	15	0	14	0	15	0	12
19.0	16.0	C	6	0	15	0	15	0	14	0	15	0	12
20.0	15.0	0	15	0	15	0	15	0	13	0	15	0	12
21.0	14.0	0	15	0	15	0	15	0	13	0	15	0	12
22.0	13.0	0	15	0	14	0	15	0	13	0	14	0	12
23.0	12.0	0	15	0	14	0	15	0	13	0	14	0	12
24.0	11.0	0	15	0	13	0	15	0	13	0	14	0	12
WL = 36.0													
12.0	24.0	C	10	C	8	0	15	0	15	0	15	0	13
13.0	23.0	C	9	C	8	0	15	0	15	0	15	0	13
14.0	22.0	C	9	C	7	0	15	0	15	0	15	0	13
15.0	21.0	C	9	C	7	0	15	0	15	0	15	0	13
16.0	20.0	C	8	C	7	0	15	0	15	0	15	0	13
17.0	19.0	C	8	C	6	0	15	0	15	0	15	0	13
18.0	18.0	C	8	C	6	0	15	0	15	0	15	0	13
19.0	17.0	C	7	0	15	0	15	0	15	0	15	0	13
20.0	16.0	C	7	0	15	0	15	0	15	0	15	0	13
21.0	15.0	C	7	0	15	0	15	0	14	0	15	0	13
22.0	14.0	C	6	0	15	0	15	0	14	0	15	0	13
23.0	13.0	0	15	0	15	0	15	0	14	0	15	0	13
24.0	12.0	0	15	0	15	0	15	0	14	0	15	0	13
WL = 37.0													
13.0	24.0	C	10	C	9	C	8	0	15	0	15	0	14
14.0	23.0	C	10	C	8	C	8	0	15	0	15	0	14
15.0	22.0	C	10	C	8	C	7	0	15	0	15	0	14
16.0	21.0	C	9	C	8	C	7	0	15	0	15	0	14
17.0	20.0	C	9	C	7	C	7	0	15	0	15	0	14
18.0	19.0	C	9	C	7	C	7	0	15	0	15	0	14
19.0	18.0	C	8	C	7	C	7	0	15	0	15	0	14
20.0	17.0	C	8	C	6	C	7	0	15	0	15	0	14
21.0	16.0	C	8	0	15	C	7	0	15	0	15	0	14
22.0	15.0	C	7	0	15	0	15	0	15	0	15	0	14
23.0	14.0	C	7	0	15	0	15	0	15	0	15	0	14
24.0	13.0	C	7	0	15	0	15	0	15	0	15	0	14
WL = 38.0													
14.0	24.0	C	11	C	9	C	8	0	15	0	15	0	15
15.0	23.0	C	11	C	9	C	8	0	15	0	15	0	15
16.0	22.0	C	11	C	9	C	8	0	15	0	15	0	15
17.0	21.0	C	10	C	8	C	8	0	15	0	15	0	15
18.0	20.0	C	10	C	8	C	8	0	15	0	15	0	15
19.0	19.0	C	9	C	8	C	8	0	15	0	15	0	15
20.0	18.0	C	9	C	7	C	8	0	15	0	15	0	15
21.0	17.0	C	9	C	7	C	7	0	15	0	15	0	15
22.0	16.0	C	8	C	7	C	7	0	15	0	15	0	15

TABLE KK (CONT)

309D EQUALIZER SETTINGS FOR MFT 2-2 INTERMEDIATE (NL-NL) REPEATERS FOR 22-GAUGE NONLOADED AND 26-, 24-, OR 22-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

22-GA TERMINATION = 600 OHMS
GAUGE 2 TERMINATION = 900 OR 600 OHMS

LENGTH (KFT)		309D EQUALIZER SETTINGS BY GAUGE AND TERMINATION											
		GAUGE 2 = 26 GA NL				GAUGE 2 = 24 GA NL				GAUGE 2 = 22 GA NL			
22-GA	GA 2	900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE	
WL = 38.0													
23.0	15.0	C	8	C	6	C	7	0	15	0	15	0	15
24.0	14.0	C	8	0	15	C	7	0	15	0	15	0	15
WL = 39.0													
15.0	24.0	C	12	C	10	C	9	C	7	0	15	0	15
16.0	23.0	C	12	C	10	C	9	C	7	0	15	0	15
17.0	22.0	C	11	C	9	C	9	C	7	0	15	0	15
18.0	21.0	C	11	C	9	C	9	C	7	C	7	0	15
19.0	20.0	C	10	C	9	C	8	C	7	C	7	0	15
20.0	19.0	C	10	C	8	C	8	C	7	C	7	0	15
21.0	18.0	C	10	C	8	C	8	C	7	C	7	0	15
22.0	17.0	C	9	C	8	C	8	0	15	C	7	0	15
23.0	16.0	C	9	C	7	C	8	0	15	C	7	0	15
24.0	15.0	C	8	C	7	C	8	0	15	0	15	0	15
WL = 40.0													
16.0	24.0	C	13	C	11	C	10	C	8	C	8	0	15
17.0	23.0	C	13	C	10	C	10	C	8	C	8	0	15
18.0	22.0	C	12	C	10	C	9	C	8	C	8	0	15
19.0	21.0	C	12	C	10	C	9	C	7	C	8	0	15
20.0	20.0	C	11	C	9	C	9	C	7	C	8	0	15
21.0	19.0	C	11	C	9	C	9	C	7	C	8	0	15
22.0	18.0	C	10	C	9	C	9	C	7	C	8	0	15
23.0	17.0	C	10	C	8	C	9	C	7	C	8	0	15
24.0	16.0	C	10	C	8	C	8	C	7	C	7	0	15
WL = 41.0													
17.0	24.0	C	14	C	12	C	10	C	8	C	8	0	15
18.0	23.0	C	14	C	11	C	10	C	8	C	8	0	15
19.0	22.0	C	13	C	11	C	10	C	8	C	8	0	15
20.0	21.0	C	13	C	10	C	10	C	8	C	8	0	15
21.0	20.0	C	12	C	10	C	10	C	8	C	8	0	15
22.0	19.0	C	12	C	10	C	10	C	8	C	8	0	15
23.0	18.0	C	11	C	9	C	9	C	8	C	8	0	15
24.0	17.0	C	11	C	9	C	9	C	8	C	8	0	15
WL = 42.0													
18.0	24.0	0	15	C	12	C	11	C	9	C	9	C	7
19.0	23.0	0	15	C	12	C	11	C	9	C	9	C	7
20.0	22.0	0	15	C	12	C	11	C	9	C	9	C	7
21.0	21.0	C	14	C	11	C	11	C	9	C	9	C	7
22.0	20.0	C	13	C	11	C	11	C	9	C	9	C	7
23.0	19.0	C	12	C	10	C	10	C	8	C	9	C	7
24.0	18.0	C	12	C	10	C	10	C	8	C	9	C	7
WL = 43.0													
19.0	24.0	C	15	C	14	C	12	C	10	C	10	C	8
20.0	23.0	C	15	C	13	C	12	C	10	C	10	C	8

TABLE KK (CONT)

309D EQUALIZER SETTINGS FOR MFT 2-2 INTERMEDIATE (NL-NL) REPEATERS FOR 22-GAUGE NONLOADED AND 26-, 24-, OR 22-GAUGE NONLOADED CABLE WITHOUT BRIDGED TAP AT 68°F

22-GA TERMINATION = 600 OHMS
GAUGE 2 TERMINATION = 900 OR 600 OHMS

LENGTH (KFT)		309D EQUALIZER SETTINGS BY GAUGE AND TERMINATION									
		GAUGE 2 = 26 GA NL				GAUGE 2 = 24 GA NL				GAUGE 2 = 22 GA NL			
22-GA	GA 2	900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE	
WL = 43.0													
21.0	22.0	0	15	C	13	C	12	C	10	C	10	C	8
22.0	21.0	0	15	C	12	C	11	C	9	C	10	C	8
23.0	20.0	0	15	C	11	C	11	C	9	C	10	C	8
24.0	19.0	C	14	C	11	C	11	C	9	C	10	C	8
WL = 44.0													
20.0	24.0	C	15	0	15	C	13	C	11	C	10	C	8
21.0	23.0	C	15	0	15	C	13	C	10	C	10	C	8
22.0	22.0	C	15	0	15	C	13	C	10	C	10	C	8
23.0	21.0	0	15	C	13	C	12	C	10	C	10	C	8
24.0	20.0	0	15	C	12	C	12	C	10	C	10	C	8

Intermediate (L-NL or NL-L) Repeater

5.21 For circuits utilizing the J99343PE, PF, PJ or PK intermediate repeaters, use Tables LL, MM, NN, and OO. The tables are arranged by the gauge of the loaded facility. Table LL for 26H88, Table MM for 25H88 MAT, Table NN for 24H88, and Table OO for 22H88.

5.22 The tables were computed for single gauge facilities on each side of the repeater. Conversion to single gauges as outlined previously will be required before using the tables. The loaded facility is assumed to have 6.0 kft load coil spacing and 3.0 kft end sections.

5.23 To use the NL-L tables:

(1) Convert both facilities to single gauge equivalents.

(2) Use the table corresponding to the loaded gauge. (Table LL for 26H88, Table MM for 25H88 MAT, Table NN for 24H88, and Table OO for 22H88).

(3) Divide the total loaded facility length by six to obtain the number of load coils in the facility.

(4) Enter the table at the number of load coils determined in Step 3.

(5) Find the length of the nonloaded facility under GA2.

(6) Read the equalizer settings under the column for GA2 for the GA2 termination (600 or 900 ohms).

TABLE LL

309D EQUALIZER SETTINGS FOR MFT 2-2 INTERMEDIATE (L-NL OR NL-L) REPEATERS FOR 26-GAUGE H88 LOADED CABLE SECTION AND 26-, 24-, OR 22 GAUGE NONLOADED CABLE SECTION WITHOUT BRIDGED TAP AT 68°F

END SECTION = 3.0 KFT
LOADED CABLE TERMINATION = 900 OHMS
NONLOADED CABLE TERMINATION = 900 OR 600 OHMS

LENGTH (KFT)		309D EQUALIZER SETTINGS BY GAUGE AND TERMINATION											
		GAUGE 2 = 26 GA NL				GAUGE 2 = 24 GA NL				GAUGE 2 = 22 GA NL			
26-GA	GA 2	900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE	
LOAD COILS= 2													
12.0	4.0	0	0	0	0	0	0	0	0	0	0	0	0
12.0	5.0	0	1	0	0	0	1	0	0	0	1	0	0
12.0	6.0	0	1	0	1	0	1	0	1	0	1	0	1
12.0	7.0	0	2	0	1	0	2	0	1	0	2	0	1
12.0	8.0	0	2	0	2	0	2	0	2	0	2	0	2
12.0	9.0	0	3	0	2	0	3	0	2	0	3	0	2
12.0	10.0	0	4	0	3	0	3	0	3	0	3	0	2
12.0	11.0	0	4	0	3	0	4	0	3	0	4	0	3
12.0	12.0	0	5	0	4	0	5	0	4	0	4	0	3
12.0	13.0	0	6	0	5	0	5	0	4	0	5	0	4
12.0	14.0	0	7	0	6	0	6	0	5	0	5	0	4
12.0	15.0	0	8	0	6	0	7	0	5	0	6	0	5
12.0	16.0	0	9	0	7	0	8	0	6	0	7	0	5
12.0	17.0	0	10	0	8	0	8	0	7	0	7	0	6
12.0	18.0	0	11	0	9	0	9	0	8	0	8	0	6
12.0	19.0	0	13	0	10	0	10	0	8	0	9	0	7
12.0	20.0	0	15	0	12	0	11	0	9	0	9	0	8
12.0	21.0	0	15	0	13	0	13	0	10	0	10	0	8
12.0	22.0	0	15	0	15	0	14	0	11	0	11	0	9
12.0	23.0	0	15	0	15	0	15	0	12	0	12	0	10
12.0	24.0	0	15	0	15	0	15	0	14	0	13	0	10
LOAD COILS= 3													
18.0	4.0	0	1	0	1	0	1	0	1	0	1	0	1
18.0	5.0	0	1	0	1	0	1	0	1	0	1	0	1
18.0	6.0	0	2	0	1	0	2	0	1	0	2	0	1
18.0	7.0	0	2	0	2	0	2	0	2	0	2	0	2
18.0	8.0	0	3	0	2	0	3	0	2	0	3	0	2
18.0	9.0	0	4	0	3	0	4	0	3	0	3	0	3
18.0	10.0	0	4	0	4	0	4	0	3	0	4	0	3
18.0	11.0	0	5	0	4	0	5	0	4	0	5	0	4
18.0	12.0	0	6	0	5	0	6	0	4	0	5	0	4
18.0	13.0	0	7	0	6	0	6	0	5	0	6	0	5
18.0	14.0	0	8	0	6	0	7	0	6	0	6	0	5
18.0	15.0	0	9	0	7	0	8	0	6	0	7	0	6
18.0	16.0	0	10	0	8	0	9	0	7	0	8	0	6
18.0	17.0	0	12	0	9	0	10	0	8	0	9	0	7
18.0	18.0	0	13	0	11	0	11	0	9	0	9	0	7
18.0	19.0	0	15	0	12	0	12	0	10	0	10	0	8
18.0	20.0	0	15	0	14	0	13	0	11	0	11	0	9
18.0	21.0	0	15	0	15	0	15	0	12	0	12	0	9
18.0	22.0	0	15	0	15	0	15	0	13	0	13	0	10
18.0	23.0	0	15	0	15	0	15	0	14	0	14	0	11
18.0	24.0	0	15	0	15	0	15	0	15	0	15	0	12
LOAD COILS= 4													
24.0	4.0	0	2	0	1	0	2	0	1	0	2	0	1

TABLE LL (CONT)

309D EQUALIZER SETTINGS FOR MFT 2-2 INTERMEDIATE (L-NL OR NL-L) REPEATERS FOR 26-GAUGE H88 LOADED CABLE SECTION AND 26-, 24-, OR 22-GAUGE NONLOADED CABLE SECTION WITHOUT BRIDGED TAP AT 68°F

END SECTION = 3.0 KFT
LOADED CABLE TERMINATION = 900 OHMS
NONLOADED CABLE TERMINATION = 900 OR 600 OHMS

LENGTH (KFT)		309D EQUALIZER SETTINGS BY GAUGE AND TERMINATION									
		GAUGE 2 = 26 GA NL				GAUGE 2 = 24 GA NL				GAUGE 2 = 22 GA NL			
26-GA	GA 2	900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE	
LOAD COILS= 4													
24.0	5.0	0	2	0	2	0	2	0	2	0	2	0	2
24.0	6.0	0	3	0	2	0	3	0	2	0	3	0	2
24.0	7.0	0	3	0	3	0	3	0	3	0	3	0	3
24.0	8.0	0	4	0	3	0	4	0	3	0	4	0	3
24.0	9.0	0	5	0	4	0	4	0	4	0	4	0	3
24.0	10.0	0	5	0	4	0	5	0	4	0	5	0	4
24.0	11.0	0	6	0	5	0	6	0	5	0	5	0	4
24.0	12.0	0	7	0	6	0	7	0	5	0	6	0	5
24.0	13.0	0	8	0	7	0	7	0	6	0	7	0	5
24.0	14.0	0	9	0	8	0	8	0	7	0	8	0	6
24.0	15.0	0	11	0	9	0	9	0	8	0	8	0	7
24.0	16.0	0	12	0	10	0	10	0	8	0	9	0	7
24.0	17.0	0	14	0	11	0	11	0	9	0	10	0	8
24.0	18.0	0	15	0	12	0	13	0	10	0	11	0	9
24.0	19.0	0	15	0	14	0	14	0	11	0	12	0	9
24.0	20.0	0	15	0	15	0	15	0	12	0	13	0	10
24.0	21.0	0	15	0	15	0	15	0	14	0	14	0	11
24.0	22.0	0	15	0	15	0	15	0	15	0	15	0	12
24.0	23.0	0	15	0	15	0	15	0	15	0	15	0	13
24.0	24.0	C	11	0	15	0	15	0	15	0	15	0	14
LOAD COILS= 5													
30.0	4.0	0	2	0	2	0	2	0	2	0	2	0	2
30.0	5.0	0	2	0	2	0	3	0	2	0	2	0	2
30.0	6.0	0	3	0	3	0	3	0	3	0	3	0	3
30.0	7.0	0	4	0	3	0	4	0	3	0	3	0	3
30.0	8.0	0	4	0	4	0	4	0	4	0	4	0	3
30.0	9.0	0	5	0	4	0	5	0	4	0	5	0	4
30.0	10.0	0	6	0	5	0	6	0	5	0	5	0	4
30.0	11.0	0	7	0	6	0	6	0	5	0	6	0	5
30.0	12.0	0	8	0	6	0	7	0	6	0	7	0	5
30.0	13.0	0	9	0	7	0	8	0	7	0	8	0	6
30.0	14.0	0	10	0	8	0	9	0	7	0	8	0	7
30.0	15.0	0	12	0	9	0	10	0	8	0	9	0	7
30.0	16.0	0	13	0	11	0	11	0	9	0	10	0	8
30.0	17.0	0	15	0	12	0	12	0	10	0	11	0	9
30.0	18.0	0	15	0	14	0	14	0	11	0	12	0	10
30.0	19.0	0	15	0	15	0	15	0	12	0	13	0	10
30.0	20.0	0	15	0	15	0	15	0	14	0	14	0	11
30.0	21.0	0	15	0	15	0	15	0	15	0	15	0	12
30.0	22.0	0	15	0	15	0	15	0	15	0	15	0	13
30.0	23.0	0	15	0	15	0	15	0	15	0	15	0	14
30.0	24.0	C	12	0	15	0	15	0	15	0	15	0	15
LOAD COILS= 6													
36.0	5.0	0	4	C	0	0	4	C	0	C	0	C	0
36.0	6.0	0	4	0	4	0	4	0	4	0	4	C	0

TABLE LL (CONT)

309D EQUALIZER SETTINGS FOR MFT 2-2 INTERMEDIATE (L-NL OR NL-L) REPEATERS FOR 26-GAUGE H88 LOADED CABLE SECTION AND 26-, 24-, OR 22-GAUGE NONLOADED CABLE SECTION WITHOUT BRIDGED TAP AT 68°F

END SECTION = 3.0 KFT
LOADED CABLE TERMINATION = 900 OHMS
NONLOADED CABLE TERMINATION = 900 OR 600 OHMS

LENGTH (KFT)		309D EQUALIZER SETTINGS BY GAUGE AND TERMINATION											
		GAUGE 2 = 26 GA NL				GAUGE 2 = 24 GA NL				GAUGE 2 = 22 GA NL			
26-GA	GA 2	900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE	
LOAD COILS= 6													
36.0	7.0	0	5	0	4	0	5	0	4	0	4	0	4
36.0	8.0	0	5	0	5	0	5	0	4	0	5	0	5
36.0	9.0	0	6	0	5	0	6	0	5	0	6	0	5
36.0	10.0	0	7	0	6	0	7	0	6	0	6	0	5
36.0	11.0	0	8	0	7	0	8	0	6	0	7	0	6
36.0	12.0	0	9	0	8	0	9	0	7	0	8	0	7
36.0	13.0	0	11	0	9	0	10	0	8	0	9	0	7
36.0	14.0	0	12	0	10	0	11	0	9	0	10	0	8
36.0	15.0	0	14	0	11	0	12	0	10	0	11	0	9
36.0	16.0	0	15	0	13	0	13	0	11	0	12	0	9
36.0	17.0	0	15	0	14	0	15	0	12	0	13	0	10
36.0	18.0	0	15	0	15	0	15	0	13	0	14	0	11
36.0	19.0	0	15	0	15	0	15	0	14	0	15	0	12
36.0	20.0	0	15	0	15	0	15	0	15	0	15	0	13
36.0	21.0	0	15	0	15	0	15	0	15	0	15	0	14
36.0	22.0	0	15	0	15	0	15	0	15	0	15	0	15
36.0	23.0	C	12	0	15	0	15	0	15	0	15	0	15
36.0	24.0	C	14	0	15	0	15	0	15	0	15	0	15
LOAD COILS= 7													
42.0	5.0	C	0	C	0	C	0	C	0	C	0	C	0
42.0	6.0	0	5	C	0	0	5	C	0	C	0	C	0
42.0	7.0	0	5	0	5	0	6	C	0	C	0	C	0
42.0	8.0	0	6	0	6	0	6	C	0	0	6	C	0
42.0	9.0	0	7	0	6	0	7	0	6	0	6	0	6
42.0	10.0	0	8	0	7	0	8	0	6	0	7	0	6
42.0	11.0	0	9	0	8	0	9	0	7	0	8	0	7
42.0	12.0	0	10	0	9	0	10	0	8	0	9	0	7
42.0	13.0	0	12	0	10	0	11	0	9	0	10	0	8
42.0	14.0	0	13	0	11	0	12	0	10	0	11	0	9
42.0	15.0	0	15	0	12	0	13	0	11	0	12	0	10
42.0	16.0	0	15	0	14	0	15	0	12	0	13	0	10
42.0	17.0	0	15	0	15	0	15	0	13	0	14	0	11
42.0	18.0	0	15	0	15	0	15	0	15	0	15	0	12
42.0	19.0	0	15	0	15	0	15	0	15	0	15	0	13
42.0	20.0	0	15	0	15	0	15	0	15	0	15	0	15
42.0	21.0	0	15	0	15	0	15	0	15	0	15	0	15
42.0	22.0	C	12	0	15	0	15	0	15	0	15	0	15
42.0	23.0	C	14	0	15	0	15	0	15	0	15	0	15
42.0	24.0	C	15	0	15	C	11	0	15	0	15	0	15
LOAD COILS= 8													
48.0	4.0	C	0	C	0	C	0	C	0	C	0	C	0
48.0	5.0	C	0	C	0	C	0	C	0	C	0	C	0
48.0	6.0	C	0	C	0	C	0	C	0	C	0	C	0
48.0	7.0	C	0	C	0	C	0	C	0	C	0	C	0
48.0	8.0	0	7	C	0	0	7	C	0	0	7	C	0

TABLE LL (CONT)

309D EQUALIZER SETTINGS FOR MFT 2-2 INTERMEDIATE (L-NL OR NL-L) REPEATERS FOR 26-GAUGE H88 LOADED CABLE SECTION AND 26-, 24-, OR 22 GAUGE NONLOADED CABLE SECTION WITHOUT BRIDGED TAP AT 68°F

END SECTION = 3.0 KFT
LOADED CABLE TERMINATION = 900 OHMS
NONLOADED CABLE TERMINATION = 900 OR 600 OHMS

LENGTH (KFT) 26-GA	GA 2	309D EQUALIZER SETTINGS BY GAUGE AND TERMINATION									
		GAUGE 2 = 26 GA NL				GAUGE 2 = 24 GA NL				GAUGE 2 = 22 GA NL	
		900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE	600 OHM SLOPE
LOAD COILS= 8											
48.0	9.0	0	8	0	7	0	8	0	7	0 7	C 1
48.0	10.0	0	9	0	8	0	9	0	7	0 8	C 1
48.0	11.0	0	10	0	9	0	10	0	8	0 9	0 8
48.0	12.0	0	12	0	10	0	11	0	9	0 10	0 8
48.0	13.0	0	13	0	11	0	12	0	10	0 11	0 9
48.0	14.0	0	15	0	12	0	13	0	11	0 12	0 10
48.0	15.0	0	15	0	14	0	15	0	12	0 13	0 11
48.0	16.0	0	15	0	15	0	15	0	13	0 15	0 12
48.0	17.0	0	15	0	15	0	15	0	15	0 15	0 13
48.0	18.0	0	15	0	15	0	15	0	15	0 15	0 14
48.0	19.0	0	15	0	15	0	15	0	15	0 15	0 15
48.0	20.0	0	15	0	15	0	15	0	15	0 15	0 15
48.0	21.0	C	12	0	15	0	15	0	15	0 15	0 15
48.0	22.0	C	14	0	15	C	10	0	15	0 15	0 15
48.0	23.0	C	15	C	12	C	11	0	15	0 15	0 15
48.0	24.0	C	15	C	14	C	12	0	15	C 9	0 15

TABLE MM

309D EQUALIZER SETTINGS FOR MFT 2-2 INTERMEDIATE (L-NL OR NL-L) REPEATERS FOR 25-GAUGE H88 LOADED MAT CABLE SECTION AND 26-, 25-, 24-, OR 22-GAUGE NONLOADED CABLE SECTION WITHOUT BRIDGED TAP AT 68°F

END SECTION = 3.0 KFT
LOADED CABLE TERMINATION = 900 OHMS
NONLOADED CABLE TERMINATION = 900 OR 600 OHMS

LENGTH (KFT)		309D EQUALIZER SETTINGS BY GAUGE AND TERMINATION							
25-GA	GA2	GA2 = 26-GA NL		GA2 = 25-GA NL		GA2 = 24-GA NL		GA2 = 22-GA NL	
		900 OHM SLOPE	600 OHM SLOPE	900 OHM SLOPE	600 OHM SLOPE	900 OHM SLOPE	600 OHM SLOPE	900 OHM SLOPE	600 OHM SLOPE
LOAD COILS = 2									
12.0	4.0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
12.0	5.0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
12.0	6.0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
12.0	7.0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
12.0	8.0	0 1	0 0	0 0	0 0	0 1	0 0	0 1	0 0
12.0	9.0	0 2	0 1	0 0	0 0	0 1	0 1	0 1	0 1
12.0	10.0	0 2	0 1	0 1	0 0	0 2	0 1	0 2	0 1
12.0	11.0	0 3	0 2	0 1	0 1	0 3	0 2	0 2	0 1
12.0	12.0	0 3	0 3	0 2	0 1	0 3	0 2	0 3	0 2
12.0	13.0	0 4	0 3	0 2	0 1	0 4	0 3	0 3	0 2
12.0	14.0	0 5	0 4	0 3	0 2	0 4	0 3	0 4	0 3
12.0	15.0	0 6	0 4	0 3	0 2	0 5	0 4	0 4	0 3
12.0	16.0	0 7	0 5	0 4	0 3	0 6	0 4	0 5	0 4
12.0	17.0	0 7	0 6	0 4	0 3	0 6	0 5	0 5	0 4
12.0	18.0	0 8	0 7	0 5	0 4	0 7	0 5	0 6	0 4
12.0	19.0	0 10	0 8	0 5	0 4	0 8	0 6	0 6	0 5
12.0	20.0	0 11	0 9	0 6	0 5	0 8	0 7	0 7	0 5
12.0	21.0	0 12	0 10	0 7	0 5	0 9	0 7	0 8	0 6
12.0	22.0	0 14	0 11	0 7	0 6	0 10	0 8	0 8	0 7
12.0	23.0	0 15	0 13	0 8	0 7	0 11	0 9	0 9	0 7
12.0	24.0	0 15	0 14	0 9	0 7	0 12	0 10	0 10	0 8
LOAD COILS = 3									
18.0	4.0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
18.0	5.0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
18.0	6.0	0 1	0 0	0 0	0 0	0 1	0 0	0 1	0 0
18.0	7.0	0 1	0 1	0 1	0 0	0 1	0 1	0 1	0 1
18.0	8.0	0 2	0 1	0 1	0 0	0 2	0 1	0 2	0 1
18.0	9.0	0 3	0 2	0 1	0 1	0 2	0 2	0 2	0 2
18.0	10.0	0 3	0 2	0 2	0 1	0 3	0 2	0 3	0 2
18.0	11.0	0 4	0 3	0 2	0 2	0 4	0 3	0 3	0 2
18.0	12.0	0 5	0 4	0 3	0 2	0 4	0 3	0 4	0 3
18.0	13.0	0 5	0 4	0 3	0 2	0 5	0 4	0 4	0 3
18.0	14.0	0 6	0 5	0 4	0 3	0 6	0 4	0 5	0 4
18.0	15.0	0 7	0 6	0 4	0 3	0 6	0 5	0 5	0 4
18.0	16.0	0 8	0 7	0 5	0 4	0 7	0 6	0 6	0 5
18.0	17.0	0 9	0 7	0 5	0 4	0 8	0 6	0 7	0 5
18.0	18.0	0 10	0 8	0 6	0 5	0 9	0 7	0 7	0 6
18.0	19.0	0 12	0 10	0 7	0 5	0 9	0 8	0 8	0 6
18.0	20.0	0 13	0 11	0 8	0 6	0 10	0 8	0 9	0 7
18.0	21.0	0 15	0 12	0 8	0 7	0 12	0 9	0 9	0 7
18.0	22.0	0 15	0 14	0 9	0 7	0 13	0 10	0 10	0 8
18.0	23.0	0 15	0 15	0 10	0 8	0 14	0 11	0 11	0 9
18.0	24.0	0 15	0 15	0 11	0 9	0 15	0 12	0 12	0 9

TABLE MM (CONT)

309D EQUALIZER SETTINGS FOR MFT 2-2 INTERMEDIATE (L-NL OR NL-L) REPEATERS FOR 25-GAUGE H88 LOADED MAT CABLE SECTION AND 26-, 25-, 24-, OR 22-GAUGE NONLOADED CABLE SECTION WITHOUT BRIDGED TAP AT 68°F

END SECTION = 3.0 KFT
LOADED CABLE TERMINATION = 900 OHMS
NONLOADED CABLE TERMINATION = 900 OR 600 OHMS

LENGTH (KFT) 25-GA	GA2	309D EQUALIZER SETTINGS BY GAUGE AND TERMINATION							
		GA2 = 26-GA NL		GA2 = 25-GA NL		GA2 = 24-GA NL		GA2 = 22-GA NL	
		900 OHM SLOPE	600 OHM SLOPE	900 OHM SLOPE	600 OHM SLOPE	900 OHM SLOPE	600 OHM SLOPE	900 OHM SLOPE	600 OHM SLOPE
LOAD COILS = 4									
24.0	4.0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
24.0	5.0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
24.0	6.0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
24.0	7.0	0 1	0 0	0 0	0 0	0 1	0 0	0 1	0 0
24.0	8.0	0 2	0 1	0 1	0 0	0 1	0 1	0 1	0 1
24.0	9.0	0 2	0 1	0 1	0 0	0 2	0 1	0 2	0 1
24.0	10.0	0 3	0 2	0 1	0 1	0 3	0 2	0 2	0 2
24.0	11.0	0 3	0 3	0 2	0 1	0 3	0 2	0 3	0 2
24.0	12.0	0 4	0 3	0 2	0 2	0 4	0 3	0 3	0 2
24.0	13.0	0 5	0 4	0 3	0 2	0 4	0 3	0 4	0 3
24.0	14.0	0 6	0 4	0 3	0 2	0 5	0 4	0 4	0 3
24.0	15.0	0 6	0 5	0 4	0 3	0 6	0 4	0 5	0 4
24.0	16.0	0 7	0 6	0 4	0 3	0 6	0 5	0 5	0 4
24.0	17.0	0 8	0 7	0 5	0 4	0 7	0 6	0 6	0 5
24.0	18.0	0 10	0 8	0 6	0 4	0 8	0 6	0 7	0 5
24.0	19.0	0 11	0 9	0 6	0 5	0 9	0 7	0 7	0 6
24.0	20.0	0 12	0 10	0 7	0 5	0 10	0 8	0 8	0 6
24.0	21.0	0 14	0 11	0 8	0 6	0 10	0 8	0 9	0 7
24.0	22.0	0 15	0 13	0 8	0 7	0 12	0 9	0 9	0 7
24.0	23.0	0 15	0 14	0 9	0 7	0 13	0 10	0 10	0 8
24.0	24.0	0 15	0 15	0 10	0 8	0 14	0 11	0 11	0 9
LOAD COILS = 5									
30.0	4.0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
30.0	5.0	0 1	0 0	0 0	0 0	0 1	0 0	0 1	0 0
30.0	6.0	0 1	0 1	0 0	0 0	0 1	0 1	0 1	0 1
30.0	7.0	0 2	0 1	0 1	0 1	0 2	0 1	0 2	0 1
30.0	8.0	0 2	0 2	0 1	0 1	0 2	0 2	0 2	0 1
30.0	9.0	0 3	0 2	0 2	0 1	0 3	0 2	0 3	0 2
30.0	10.0	0 4	0 3	0 2	0 1	0 3	0 3	0 3	0 2
30.0	11.0	0 4	0 3	0 3	0 2	0 4	0 3	0 4	0 3
30.0	12.0	0 5	0 4	0 3	0 2	0 5	0 4	0 4	0 3
30.0	13.0	0 6	0 5	0 4	0 3	0 5	0 4	0 5	0 4
30.0	14.0	0 7	0 5	0 4	0 3	0 6	0 5	0 5	0 4
30.0	15.0	0 8	0 6	0 5	0 4	0 7	0 5	0 6	0 5
30.0	16.0	0 9	0 7	0 5	0 4	0 7	0 6	0 7	0 5
30.0	17.0	0 10	0 8	0 6	0 5	0 8	0 7	0 7	0 6
30.0	18.0	0 11	0 9	0 7	0 5	0 9	0 7	0 8	0 6
30.0	19.0	0 13	0 10	0 7	0 6	0 10	0 8	0 9	0 7
30.0	20.0	0 14	0 12	0 8	0 7	0 11	0 9	0 9	0 7
30.0	21.0	0 15	0 13	0 9	0 7	0 12	0 10	0 10	0 8
30.0	22.0	0 15	0 15	0 10	0 8	0 14	0 11	0 11	0 9
30.0	23.0	0 15	0 15	0 11	0 9	0 15	0 12	0 12	0 9
30.0	24.0	0 15	0 15	0 12	0 10	0 15	0 13	0 13	0 10

TABLE MM (CONT)

309D EQUALIZER SETTINGS FOR MFT 2-2 INTERMEDIATE (L-NL OR NL-L) REPEATERS FOR 25-GAUGE H88 LOADED MAT CABLE SECTION AND 26-, 25-, 24-, OR 22-GAUGE NONLOADED CABLE SECTION WITHOUT BRIDGED TAP AT 68°F

END SECTION = 3.0 KFT
LOADED CABLE TERMINATION = 900 OHMS
NONLOADED CABLE TERMINATION = 900 OR 600 OHMS

LENGTH (KFT) 25-GA	GA2	309D EQUALIZER SETTINGS BY GAUGE AND TERMINATION							
		GA2 = 26-GA NL		GA2 = 25-GA NL		GA2 = 24-GA NL		GA2 = 22-GA NL	
		900 OHM SLOPE	600 OHM SLOPE	900 OHM SLOPE	600 OHM SLOPE	900 OHM SLOPE	600 OHM SLOPE	900 OHM SLOPE	600 OHM SLOPE
LOAD COILS = 6									
36.0	4.0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
36.0	5.0	0 1	0 0	0 0	0 0	0 1	0 0	0 1	0 0
36.0	6.0	0 1	0 1	0 0	0 0	0 1	0 1	0 1	0 1
36.0	7.0	0 2	0 1	0 1	0 1	0 2	0 1	0 2	0 1
36.0	8.0	0 2	0 2	0 1	0 1	0 2	0 2	0 2	0 1
36.0	9.0	0 3	0 2	0 2	0 1	0 3	0 2	0 3	0 2
36.0	10.0	0 4	0 3	0 2	0 2	0 3	0 3	0 3	0 2
36.0	11.0	0 4	0 3	0 3	0 2	0 4	0 3	0 4	0 3
36.0	12.0	0 5	0 4	0 3	0 2	0 5	0 4	0 4	0 3
36.0	13.0	0 6	0 5	0 4	0 3	0 5	0 4	0 5	0 4
36.0	14.0	0 7	0 5	0 4	0 3	0 6	0 5	0 5	0 4
36.0	15.0	0 8	0 6	0 5	0 4	0 7	0 5	0 6	0 5
36.0	16.0	0 9	0 7	0 5	0 4	0 8	0 6	0 7	0 5
36.0	17.0	0 10	0 8	0 6	0 5	0 8	0 7	0 7	0 6
36.0	18.0	0 11	0 9	0 7	0 5	0 9	0 7	0 8	0 6
36.0	19.0	0 13	0 10	0 7	0 6	0 10	0 8	0 9	0 7
36.0	20.0	0 14	0 12	0 8	0 7	0 11	0 9	0 9	0 7
36.0	21.0	0 15	0 13	0 9	0 7	0 12	0 10	0 10	0 8
36.0	22.0	0 15	0 15	0 10	0 8	0 14	0 11	0 11	0 9
36.0	23.0	0 15	0 15	0 11	0 9	0 15	0 12	0 12	0 9
36.0	24.0	0 15	0 15	0 12	0 10	0 15	0 13	0 13	0 10
LOAD COILS = 7									
42.0	4.0	0 1	0 1	0 0	0 0	0 1	0 1	0 1	0 1
42.0	5.0	0 1	0 1	0 1	0 1	0 1	0 1	0 1	0 1
42.0	6.0	0 2	0 1	0 1	0 1	0 2	0 1	0 2	0 1
42.0	7.0	0 2	0 2	0 1	0 1	0 2	0 2	0 2	0 2
42.0	8.0	0 3	0 2	0 2	0 1	0 3	0 2	0 3	0 2
42.0	9.0	0 4	0 3	0 2	0 2	0 3	0 3	0 3	0 2
42.0	10.0	0 4	0 3	0 3	0 2	0 4	0 3	0 4	0 3
42.0	11.0	0 5	0 4	0 3	0 2	0 5	0 4	0 4	0 3
42.0	12.0	0 6	0 5	0 4	0 3	0 5	0 4	0 5	0 4
42.0	13.0	0 7	0 5	0 4	0 3	0 6	0 5	0 6	0 4
42.0	14.0	0 8	0 6	0 5	0 4	0 7	0 5	0 6	0 5
42.0	15.0	0 9	0 7	0 5	0 4	0 8	0 6	0 7	0 5
42.0	16.0	0 10	0 8	0 6	0 5	0 9	0 7	0 8	0 6
42.0	17.0	0 11	0 9	0 7	0 5	0 9	0 8	0 8	0 7
42.0	18.0	0 13	0 10	0 8	0 6	0 10	0 8	0 9	0 7
42.0	19.0	0 14	0 12	0 8	0 7	0 12	0 9	0 10	0 8
42.0	20.0	0 15	0 13	0 9	0 7	0 13	0 10	0 11	0 8
42.0	21.0	0 15	0 15	0 10	0 8	0 14	0 11	0 11	0 9
42.0	22.0	0 15	0 15	0 11	0 9	0 15	0 12	0 12	0 10
42.0	23.0	0 15	0 15	0 12	0 10	0 15	0 14	0 13	0 11
42.0	24.0	0 15	0 15	0 13	0 11	0 15	0 15	0 14	0 12

TABLE MM (CONT)

309D EQUALIZER SETTINGS FOR MFT 2-2 INTERMEDIATE (L-NL OR NL-L) REPEATERS FOR 25-GAUGE H88 LOADED MAT CABLE SECTION AND 26-, 25-, 24-, OR 22-GAUGE NONLOADED CABLE SECTION WITHOUT BRIDGED TAP AT 68°F

END SECTION = 3.0 KFT
LOADED CABLE TERMINATION = 900 OHMS
NONLOADED CABLE TERMINATION = 900 OR 600 OHMS

LENGTH (KFT)		309D EQUALIZER SETTINGS BY GAUGE AND TERMINATION							
		GA2 = 26-GA NL		GA2 = 25-GA NL		GA2 = 24-GA NL		GA2 = 22-GA NL	
25-GA	GA2	900 OHM SLOPE	600 OHM SLOPE	900 OHM SLOPE	600 OHM SLOPE	900 OHM SLOPE	600 OHM SLOPE	900 OHM SLOPE	600 OHM SLOPE
48.0	9.0	0 4	0 3	0 2	0 2	0 4	0 3	0 3	0 3
48.0	10.0	0 4	0 4	0 3	0 2	0 4	0 3	0 4	0 3
48.0	11.0	0 5	0 4	0 3	0 3	0 5	0 4	0 4	0 3
48.0	12.0	0 6	0 5	0 4	0 3	0 6	0 4	0 5	0 4
48.0	13.0	0 7	0 6	0 4	0 4	0 6	0 5	0 6	0 4
48.0	14.0	0 8	0 6	0 5	0 4	0 7	0 6	0 6	0 5
48.0	15.0	0 9	0 7	0 6	0 5	0 8	0 6	0 7	0 6
48.0	16.0	0 10	0 8	0 6	0 5	0 9	0 7	0 8	0 6
48.0	17.0	0 12	0 9	0 7	0 6	0 10	0 8	0 8	0 7
48.0	18.0	0 13	0 11	0 8	0 6	0 11	0 9	0 9	0 7
48.0	19.0	0 15	0 12	0 9	0 7	0 12	0 10	0 10	0 8
48.0	20.0	0 15	0 14	0 9	0 8	0 13	0 11	0 11	0 9
48.0	21.0	0 15	0 15	0 10	0 9	0 14	0 12	0 12	0 9
48.0	22.0	0 15	0 15	0 11	0 9	0 15	0 13	0 13	0 10
48.0	23.0	0 15	0 15	0 13	0 10	0 15	0 14	0 14	0 11
48.0	24.0	0 15	0 15	0 14	0 11	0 15	0 15	0 15	0 12
LOAD COILS = 9									
54.0	10.0	0 5	0 4	0 3	0 3	0 5	0 4	0 4	0 4
54.0	11.0	0 6	0 5	0 4	0 3	0 5	0 4	0 5	0 4
54.0	12.0	0 7	0 5	0 4	0 4	0 6	0 5	0 6	0 5
54.0	13.0	0 8	0 6	0 5	0 4	0 7	0 6	0 6	0 5
54.0	14.0	0 9	0 7	0 6	0 4	0 8	0 6	0 7	0 6
54.0	15.0	0 10	0 8	0 6	0 5	0 9	0 7	0 8	0 6
54.0	16.0	0 11	0 9	0 7	0 6	0 10	0 8	0 8	0 7
54.0	17.0	0 13	0 10	0 8	0 6	0 11	0 9	0 9	0 7
54.0	18.0	0 14	0 12	0 9	0 7	0 12	0 9	0 10	0 8
54.0	19.0	0 15	0 13	0 9	0 8	0 13	0 10	0 11	0 9
54.0	20.0	0 15	0 15	0 10	0 8	0 14	0 11	0 12	0 9
54.0	21.0	0 15	0 15	0 11	0 9	0 15	0 13	0 13	0 10
54.0	22.0	0 15	0 15	0 12	0 10	0 15	0 14	0 14	0 11
54.0	23.0	0 15	0 15	0 14	0 11	0 15	0 15	0 15	0 12
54.0	24.0	0 15	0 15	0 15	0 12	0 15	0 15	0 15	0 13
LOAD COILS = 10									
60.0	10.0	0 5	0 4	0 4	0 3	0 5	0 4	0 5	0 4
60.0	11.0	0 6	0 5	0 4	0 3	0 6	0 5	0 5	0 4
60.0	12.0	0 7	0 6	0 5	0 4	0 6	0 5	0 6	0 5
60.0	13.0	0 8	0 6	0 5	0 4	0 7	0 6	0 7	0 6
60.0	14.0	0 9	0 7	0 6	0 5	0 8	0 6	0 7	0 6
60.0	15.0	0 10	0 8	0 6	0 5	0 9	0 7	0 8	0 6
60.0	16.0	0 11	0 9	0 7	0 6	0 10	0 8	0 9	0 7
60.0	17.0	0 13	0 11	0 8	0 6	0 11	0 9	0 10	0 8
60.0	18.0	0 15	0 12	0 9	0 7	0 12	0 10	0 10	0 8
60.0	19.0	0 15	0 13	0 10	0 8	0 13	0 11	0 11	0 9

TABLE MM (CONT)

309D EQUALIZER SETTINGS FOR MFT 2-2 INTERMEDIATE (L-NL OR NL-L)
REPEATERS FOR 25-GAUGE H88 LOADED MAT CABLE SECTION AND 26-, 25-, 24-, OR
22-GAUGE NONLOADED CABLE SECTION WITHOUT BRIDGED TAP AT 68°F

END SECTION = 3.0 KFT
LOADED CABLE TERMINATION = 900 OHMS
NONLOADED CABLE TERMINATION = 900 OR 600 OHMS

LENGTH (KFT)		309D EQUALIZER SETTINGS BY GAUGE AND TERMINATION							
25-GA	GA2	GA2 = 26-GA NL		GA2 = 25-GA NL		GA2 = 24-GA NL		GA2 = 22-GA NL	
		900 OHM SLOPE	600 OHM SLOPE	900 OHM SLOPE	600 OHM SLOPE	900 OHM SLOPE	600 OHM SLOPE	900 OHM SLOPE	600 OHM SLOPE
LOAD COILS = 10									
60.0	20.0	0 15	0 15	0 11	0 9	0 15	0 12	0 12	0 10
60.0	21.0	0 15	0 15	0 12	0 10	0 15	0 13	0 13	0 11
60.0	22.0	0 15	0 15	0 13	0 11	0 15	0 14	0 14	0 11
60.0	23.0	0 15	0 15	0 14	0 12	0 15	0 15	0 15	0 12
60.0	24.0	0 15	0 15	0 15	0 13	0 15	0 15	0 15	0 13

TABLE NN

309D EQUALIZER SETTINGS FOR MFT 2-2 INTERMEDIATE (L-NL OR NL-L) REPEATERS FOR 24-GAUGE H88 LOADED CABLE SECTION AND 26-, 24-, OR 22-GAUGE NONLOADED CABLE SECTION WITHOUT BRIDGED TAP AT 68°F

END SECTION = 3.0 KFT
LOADED CABLE TERMINATION = 900 OHMS
NONLOADED CABLE TERMINATION = 900 OR 600 OHMS

LENGTH (KFT)		309D EQUALIZER SETTINGS BY GAUGE AND TERMINATION											
		GAUGE 2 = 26 GA NL				GAUGE 2 = 24 GA NL				GAUGE 2 = 22 GA NL			
24-GA	GA 2	900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE	
LOAD COILS= 2													
12.0	4.0	0	0	0	0	0	0	0	0	0	0	0	0
12.0	5.0	0	0	0	0	0	0	0	0	0	0	0	0
12.0	6.0	0	1	0	1	0	1	0	1	0	1	0	0
12.0	7.0	0	1	0	1	0	1	0	1	0	1	0	1
12.0	8.0	0	2	0	1	0	2	0	1	0	2	0	1
12.0	9.0	0	3	0	2	0	3	0	2	0	2	0	2
12.0	10.0	0	3	0	2	0	3	0	2	0	3	0	2
12.0	11.0	0	4	0	3	0	4	0	3	0	3	0	2
12.0	12.0	0	5	0	4	0	4	0	3	0	4	0	3
12.0	13.0	0	6	0	4	0	5	0	4	0	4	0	3
12.0	14.0	0	6	0	5	0	6	0	4	0	5	0	4
12.0	15.0	0	7	0	6	0	6	0	5	0	6	0	4
12.0	16.0	0	8	0	7	0	7	0	6	0	6	0	5
12.0	17.0	0	9	0	8	0	8	0	6	0	7	0	5
12.0	18.0	0	11	0	9	0	9	0	7	0	7	0	6
12.0	19.0	0	12	0	10	0	10	0	8	0	8	0	6
12.0	20.0	0	14	0	11	0	11	0	9	0	9	0	7
12.0	21.0	0	15	0	12	0	12	0	9	0	10	0	8
12.0	22.0	0	15	0	14	0	13	0	10	0	10	0	8
12.0	23.0	0	15	0	15	0	14	0	11	0	11	0	9
12.0	24.0	0	15	0	15	0	15	0	13	0	12	0	10
LOAD COILS= 3													
18.0	4.0	0	1	0	0	0	1	0	0	0	1	0	0
18.0	5.0	0	1	0	1	0	1	0	1	0	1	0	1
18.0	6.0	0	1	0	1	0	1	0	1	0	1	0	1
18.0	7.0	0	2	0	1	0	2	0	1	0	2	0	1
18.0	8.0	0	3	0	2	0	3	0	2	0	2	0	2
18.0	9.0	0	3	0	2	0	3	0	2	0	3	0	2
18.0	10.0	0	4	0	3	0	4	0	3	0	3	0	3
18.0	11.0	0	5	0	4	0	4	0	3	0	4	0	3
18.0	12.0	0	5	0	4	0	5	0	4	0	5	0	4
18.0	13.0	0	6	0	5	0	6	0	4	0	5	0	4
18.0	14.0	0	7	0	6	0	6	0	5	0	6	0	5
18.0	15.0	0	8	0	7	0	7	0	6	0	6	0	5
18.0	16.0	0	9	0	8	0	8	0	6	0	7	0	6
18.0	17.0	0	11	0	9	0	9	0	7	0	8	0	6
18.0	18.0	0	12	0	10	0	10	0	8	0	8	0	7
18.0	19.0	0	14	0	11	0	11	0	9	0	9	0	7
18.0	20.0	0	15	0	12	0	12	0	10	0	10	0	8
18.0	21.0	0	15	0	14	0	13	0	11	0	11	0	9
18.0	22.0	0	15	0	15	0	15	0	12	0	12	0	9
18.0	23.0	0	15	0	15	0	15	0	13	0	13	0	10
18.0	24.0	0	15	0	15	0	15	0	14	0	14	0	11
LOAD COILS= 4													
24.0	4.0	0	1	0	1	0	1	0	1	0	1	0	1

TABLE NN (CONT)

309D EQUALIZER SETTINGS FOR MFT 2-2 INTERMEDIATE (L-NL OR NL-L) REPEATERS FOR 24-GAUGE H88 LOADED CABLE SECTION AND 26-, 24-, OR 22-GAUGE NONLOADED CABLE SECTION WITHOUT BRIDGED TAP AT 68°F

END SECTION = 3.0 KFT
LOADED CABLE TERMINATION = 900 OHMS
NONLOADED CABLE TERMINATION = 900 OR 600 OHMS

LENGTH (KFT)		309D EQUALIZER SETTINGS BY GAUGE AND TERMINATION									
		GAUGE 2 = 26 GA NL				GAUGE 2 = 24 GA NL				GAUGE 2 = 22 GA NL			
24-GA	GA 2	900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE	
LOAD COILS= 4													
24.0	5.0	0	1	0	1	0	1	0	1	0	1	0	1
24.0	6.0	0	2	0	1	0	2	0	1	0	2	0	1
24.0	7.0	0	2	0	2	0	2	0	2	0	2	0	2
24.0	8.0	0	3	0	2	0	3	0	2	0	3	0	2
24.0	9.0	0	4	0	3	0	4	0	3	0	3	0	3
24.0	10.0	0	4	0	4	0	4	0	3	0	4	0	3
24.0	11.0	0	5	0	4	0	5	0	4	0	5	0	4
24.0	12.0	0	6	0	5	0	6	0	4	0	5	0	4
24.0	13.0	0	7	0	6	0	6	0	5	0	6	0	5
24.0	14.0	0	8	0	6	0	7	0	6	0	6	0	5
24.0	15.0	0	9	0	7	0	8	0	6	0	7	0	6
24.0	16.0	0	10	0	8	0	9	0	7	0	8	0	6
24.0	17.0	0	12	0	9	0	10	0	8	0	9	0	7
24.0	18.0	0	13	0	11	0	11	0	9	0	9	0	7
24.0	19.0	0	15	0	12	0	12	0	10	0	10	0	8
24.0	20.0	0	15	0	14	0	13	0	11	0	11	0	9
24.0	21.0	0	15	0	15	0	15	0	12	0	12	0	10
24.0	22.0	0	15	0	15	0	15	0	13	0	13	0	10
24.0	23.0	0	15	0	15	0	15	0	14	0	14	0	11
24.0	24.0	C	9	0	15	0	15	0	15	0	15	0	12
LOAD COILS= 5													
30.0	4.0	0	1	0	1	0	1	0	1	0	1	0	1
30.0	5.0	0	1	0	1	0	1	0	1	0	1	0	1
30.0	6.0	0	2	0	1	0	2	0	1	0	2	0	1
30.0	7.0	0	2	0	2	0	2	0	2	0	2	0	2
30.0	8.0	0	3	0	2	0	3	0	2	0	3	0	2
30.0	9.0	0	4	0	3	0	3	0	3	0	3	0	2
30.0	10.0	0	4	0	3	0	4	0	3	0	4	0	3
30.0	11.0	0	5	0	4	0	5	0	4	0	4	0	3
30.0	12.0	0	6	0	5	0	5	0	4	0	5	0	4
30.0	13.0	0	7	0	5	0	6	0	5	0	6	0	4
30.0	14.0	0	8	0	6	0	7	0	5	0	6	0	5
30.0	15.0	0	9	0	7	0	8	0	6	0	7	0	5
30.0	16.0	0	10	0	8	0	9	0	7	0	8	0	6
30.0	17.0	0	11	0	9	0	9	0	8	0	8	0	7
30.0	18.0	0	13	0	10	0	10	0	8	0	9	0	7
30.0	19.0	0	14	0	12	0	12	0	9	0	10	0	8
30.0	20.0	0	15	0	13	0	13	0	10	0	11	0	8
30.0	21.0	0	15	0	15	0	14	0	11	0	11	0	9
30.0	22.0	0	15	0	15	0	15	0	12	0	12	0	10
30.0	23.0	0	15	0	15	0	15	0	14	0	13	0	11
30.0	24.0	0	15	0	15	0	15	0	15	0	14	0	12
LOAD COILS= 6													
36.0	4.0	0	1	0	1	0	2	0	1	0	1	0	1
36.0	5.0	0	2	0	2	0	2	0	2	0	2	0	2

TABLE NN (CONT)

309D EQUALIZER SETTINGS FOR MFT 2-2 INTERMEDIATE (L-NL OR NL-L) REPEATERS FOR 24-GAUGE H88 LOADED CABLE SECTION AND 26-, 24-, OR 22-GAUGE NONLOADED CABLE SECTION WITHOUT BRIDGED TAP AT 68°F

END SECTION = 3.0 KFT
LOADED CABLE TERMINATION = 900 OHMS
NONLOADED CABLE TERMINATION = 900 OR 600 OHMS

LENGTH (KFT)		309D EQUALIZER SETTINGS BY GAUGE AND TERMINATION											
		GAUGE 2 = 26 GA NL				GAUGE 2 = 24 GA NL				GAUGE 2 = 22 GA NL			
24-GA	GA 2	900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE	
LOAD COILS= 6													
36.0	6.0	0	2	0	2	0	2	0	2	0	2	0	2
36.0	7.0	0	3	0	2	0	3	0	2	0	3	0	2
36.0	8.0	0	4	0	3	0	4	0	3	0	3	0	3
36.0	9.0	0	4	0	4	0	4	0	3	0	4	0	3
36.0	10.0	0	5	0	4	0	5	0	4	0	5	0	4
36.0	11.0	0	6	0	5	0	6	0	5	0	5	0	4
36.0	12.0	0	7	0	6	0	6	0	5	0	6	0	5
36.0	13.0	0	8	0	7	0	7	0	6	0	7	0	5
36.0	14.0	0	9	0	7	0	8	0	7	0	7	0	6
36.0	15.0	0	10	0	8	0	9	0	7	0	8	0	6
36.0	16.0	0	12	0	10	0	10	0	8	0	9	0	7
36.0	17.0	0	13	0	11	0	11	0	9	0	10	0	8
36.0	18.0	0	15	0	12	0	12	0	10	0	11	0	8
36.0	19.0	0	15	0	14	0	14	0	11	0	11	0	9
36.0	20.0	0	15	0	15	0	15	0	12	0	12	0	10
36.0	21.0	0	15	0	15	0	15	0	13	0	13	0	11
36.0	22.0	0	15	0	15	0	15	0	15	0	15	0	12
36.0	23.0	0	15	0	15	0	15	0	15	0	15	0	13
36.0	24.0	C	11	0	15	0	15	0	15	0	15	0	14
LOAD COILS= 7													
42.0	4.0	0	2	0	1	0	2	0	1	0	2	0	1
42.0	5.0	0	2	0	2	0	2	0	2	0	2	0	2
42.0	6.0	0	3	0	2	0	3	0	2	0	2	0	2
42.0	7.0	0	3	0	3	0	3	0	3	0	3	0	2
42.0	8.0	0	4	0	3	0	4	0	3	0	3	0	3
42.0	9.0	0	5	0	4	0	4	0	3	0	4	0	3
42.0	10.0	0	5	0	4	0	5	0	4	0	5	0	4
42.0	11.0	0	6	0	5	0	6	0	5	0	5	0	4
42.0	12.0	0	7	0	6	0	7	0	5	0	6	0	5
42.0	13.0	0	8	0	7	0	7	0	6	0	7	0	5
42.0	14.0	0	9	0	7	0	8	0	7	0	7	0	6
42.0	15.0	0	10	0	8	0	9	0	7	0	8	0	7
42.0	16.0	0	12	0	10	0	10	0	8	0	9	0	7
42.0	17.0	0	13	0	11	0	11	0	9	0	10	0	8
42.0	18.0	0	15	0	12	0	12	0	10	0	11	0	9
42.0	19.0	0	15	0	14	0	14	0	11	0	12	0	9
42.0	20.0	0	15	0	15	0	15	0	12	0	13	0	10
42.0	21.0	0	15	0	15	0	15	0	13	0	14	0	11
42.0	22.0	0	15	0	15	0	15	0	15	0	15	0	12
42.0	23.0	0	15	0	15	0	15	0	15	0	15	0	13
42.0	24.0	0	15	0	15	0	15	0	15	0	15	0	14
LOAD COILS= 8													
48.0	4.0	0	2	0	2	0	2	0	2	0	2	0	2
48.0	5.0	0	2	0	2	0	2	0	2	0	2	0	2
48.0	6.0	0	3	0	2	0	3	0	2	0	3	0	2

TABLE NN (CONT)

309D EQUALIZER SETTINGS FOR MFT 2-2 INTERMEDIATE (L-NL OR NL-L) REPEATERS FOR 24-GAUGE H88 LOADED CABLE SECTION AND 26-, 24-, OR 22-GAUGE NONLOADED CABLE SECTION WITHOUT BRIDGED TAP AT 68°F

END SECTION = 3.0 KFT
LOADED CABLE TERMINATION = 900 OHMS
NONLOADED CABLE TERMINATION = 900 OR 600 OHMS

LENGTH (KFT)		309D EQUALIZER SETTINGS BY GAUGE AND TERMINATION									
		GAUGE 2 = 26 GA NL				GAUGE 2 = 24 GA NL				GAUGE 2 = 22 GA NL			
24-GA	GA 2	900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE	
LOAD COILS= 8													
48.0	7.0	0	3	0	3	0	3	0	3	0	3	0	3
48.0	8.0	0	4	0	3	0	4	0	3	0	4	0	3
48.0	9.0	0	5	0	4	0	5	0	4	0	4	0	4
48.0	10.0	0	6	0	5	0	5	0	4	0	5	0	4
48.0	11.0	0	7	0	5	0	6	0	5	0	6	0	5
48.0	12.0	0	8	0	6	0	7	0	6	0	6	0	5
48.0	13.0	0	9	0	7	0	8	0	6	0	7	0	6
48.0	14.0	0	10	0	8	0	9	0	7	0	8	0	6
48.0	15.0	0	11	0	9	0	10	0	8	0	9	0	7
48.0	16.0	0	13	0	10	0	11	0	9	0	10	0	8
48.0	17.0	0	14	0	12	0	12	0	10	0	10	0	8
48.0	18.0	0	15	0	13	0	13	0	11	0	11	0	9
48.0	19.0	0	15	0	15	0	15	0	12	0	12	0	10
48.0	20.0	0	15	0	15	0	15	0	13	0	13	0	11
48.0	21.0	0	15	0	15	0	15	0	14	0	15	0	12
48.0	22.0	0	15	0	15	0	15	0	15	0	15	0	13
48.0	23.0	0	15	0	15	0	15	0	15	0	15	0	14
48.0	24.0	C	11	0	15	0	15	0	15	0	15	0	15
LOAD COILS= 9													
54.0	4.0	0	2	0	2	0	2	0	2	0	2	0	2
54.0	5.0	0	3	0	2	0	3	0	2	0	3	0	3
54.0	6.0	0	3	0	3	0	3	0	3	0	3	0	3
54.0	7.0	0	4	0	3	0	4	0	3	0	4	0	3
54.0	8.0	0	5	0	4	0	4	0	4	0	4	0	3
54.0	9.0	0	5	0	4	0	5	0	4	0	5	0	4
54.0	10.0	0	6	0	5	0	6	0	5	0	6	0	4
54.0	11.0	0	7	0	6	0	7	0	5	0	6	0	5
54.0	12.0	0	8	0	7	0	7	0	6	0	7	0	6
54.0	13.0	0	9	0	8	0	8	0	7	0	8	0	6
54.0	14.0	0	10	0	9	0	9	0	8	0	8	0	7
54.0	15.0	0	12	0	10	0	10	0	8	0	9	0	8
54.0	16.0	0	13	0	11	0	12	0	9	0	10	0	8
54.0	17.0	0	15	0	12	0	13	0	10	0	11	0	9
54.0	18.0	0	15	0	14	0	14	0	11	0	12	0	10
54.0	19.0	0	15	0	15	0	15	0	13	0	13	0	11
54.0	20.0	0	15	0	15	0	15	0	14	0	14	0	11
54.0	21.0	0	15	0	15	0	15	0	15	0	15	0	12
54.0	22.0	0	15	0	15	0	15	0	15	0	15	0	13
54.0	23.0	0	15	0	15	0	15	0	15	0	15	0	14
54.0	24.0	C	12	0	15	0	15	0	15	0	15	0	15
LOAD COILS=10													
60.0	5.0	0	3	0	3	0	3	0	3	0	3	0	3
60.0	6.0	0	3	0	3	0	3	0	3	0	3	0	3
60.0	7.0	0	4	0	3	0	4	0	3	0	4	0	3
60.0	8.0	0	5	0	4	0	5	0	4	0	4	0	4

TABLE NN (CONT)

309D EQUALIZER SETTINGS FOR MFT 2-2 INTERMEDIATE (L-NL OR NL-L) REPEATERS FOR 24-GAUGE H88 LOADED CABLE SECTION AND 26-, 24-, OR 22-GAUGE NONLOADED CABLE SECTION WITHOUT BRIDGED TAP AT 68°F

END SECTION = 3.0 KFT
LOADED CABLE TERMINATION = 900 OHMS
NONLOADED CABLE TERMINATION = 900 OR 600 OHMS

LENGTH (KFT)		309D EQUALIZER SETTINGS BY GAUGE AND TERMINATION									
		GAUGE 2 = 26 GA NL				GAUGE 2 = 24 GA NL				GAUGE 2 = 22 GA NL			
24-GA	GA 2	900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE	
LOAD COILS=10													
60.0	9.0	0	5	0	5	0	5	0	4	0	5	0	4
60.0	10.0	0	6	0	5	0	6	0	5	0	6	0	5
60.0	11.0	0	7	0	6	0	7	0	6	0	6	0	5
60.0	12.0	0	8	0	7	0	8	0	6	0	7	0	6
60.0	13.0	0	9	0	8	0	9	0	7	0	8	0	6
60.0	14.0	0	11	0	9	0	10	0	8	0	9	0	7
60.0	15.0	0	12	0	10	0	11	0	9	0	10	0	8
60.0	16.0	0	14	0	11	0	12	0	10	0	10	0	8
60.0	17.0	0	15	0	13	0	13	0	11	0	11	0	9
60.0	18.0	0	15	0	14	0	15	0	12	0	12	0	10
60.0	19.0	0	15	0	15	0	15	0	13	0	14	0	11
60.0	20.0	0	15	0	15	0	15	0	14	0	15	0	12
60.0	21.0	0	15	0	15	0	15	0	15	0	15	0	13
60.0	22.0	0	15	0	15	0	15	0	15	0	15	0	14
60.0	23.0	0	15	0	15	0	15	0	15	0	15	0	15
60.0	24.0	C	12	0	15	0	15	0	15	0	15	0	15
LOAD COILS=11													
66.0	5.0	0	3	0	3	0	3	0	3	0	3	C	0
66.0	6.0	0	4	0	3	0	4	C	0	0	4	C	0
66.0	7.0	0	4	0	4	0	4	0	4	0	4	0	4
66.0	8.0	0	5	0	4	0	5	0	4	0	5	0	4
66.0	9.0	0	6	0	5	0	6	0	5	0	5	0	4
66.0	10.0	0	7	0	6	0	6	0	5	0	6	0	5
66.0	11.0	0	8	0	6	0	7	0	6	0	7	0	6
66.0	12.0	0	9	0	7	0	8	0	7	0	8	0	6
66.0	13.0	0	10	0	8	0	9	0	7	0	8	0	7
66.0	14.0	0	11	0	9	0	10	0	8	0	9	0	8
66.0	15.0	0	13	0	11	0	11	0	9	0	10	0	8
66.0	16.0	0	15	0	12	0	13	0	10	0	11	0	9
66.0	17.0	0	15	0	14	0	14	0	11	0	12	0	10
66.0	18.0	0	15	0	15	0	15	0	12	0	13	0	11
66.0	19.0	0	15	0	15	0	15	0	14	0	14	0	12
66.0	20.0	0	15	0	15	0	15	0	15	0	15	0	13
66.0	21.0	0	15	0	15	0	15	0	15	0	15	0	14
66.0	22.0	0	15	0	15	0	15	0	15	0	15	0	15
66.0	23.0	0	15	0	15	0	15	0	15	0	15	0	15
66.0	24.0	C	13	0	15	0	15	0	15	0	15	0	15

TABLE OO

309D EQUALIZER SETTINGS FOR MFT 2-2 INTERMEDIATE (L-NL OR NL-L) REPEATERS FOR 22-GAUGE H88 LOADED CABLE SECTION AND 26-, 24-, OR 22-GAUGE NONLOADED CABLE SECTION WITHOUT BRIDGED TAP AT 68°F

END SECTION = 3.0 KFT
LOADED CABLE TERMINATION = 900 OHMS
NONLOADED CABLE TERMINATION = 900 OR 600 OHMS

LENGTH (KFT)		309D EQUALIZER SETTINGS BY GAUGE AND TERMINATION											
		GAUGE 2 = 26 GA NL				GAUGE 2 = 24 GA NL				GAUGE 2 = 22 GA NL			
22-GA	GA 2	900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE	
LOAD COILS= 2													
12.0	4.0	0	0	0	0	0	0	0	0	0	0	0	0
12.0	5.0	0	0	0	0	0	0	0	0	0	0	0	0
12.0	6.0	0	1	0	0	0	1	0	0	0	1	0	0
12.0	7.0	0	1	0	1	0	1	0	1	0	1	0	1
12.0	8.0	0	2	0	1	0	2	0	1	0	1	0	1
12.0	9.0	0	2	0	2	0	2	0	1	0	2	0	1
12.0	10.0	0	3	0	2	0	3	0	2	0	2	0	2
12.0	11.0	0	4	0	3	0	3	0	2	0	3	0	2
12.0	12.0	0	4	0	3	0	4	0	3	0	3	0	3
12.0	13.0	0	5	0	4	0	5	0	3	0	4	0	3
12.0	14.0	0	6	0	5	0	5	0	4	0	5	0	3
12.0	15.0	0	7	0	5	0	6	0	5	0	5	0	4
12.0	16.0	0	8	0	6	0	7	0	5	0	6	0	4
12.0	17.0	0	9	0	7	0	7	0	6	0	6	0	5
12.0	18.0	0	10	0	8	0	8	0	6	0	7	0	5
12.0	19.0	0	11	0	9	0	9	0	7	0	8	0	6
12.0	20.0	0	13	0	10	0	10	0	8	0	8	0	7
12.0	21.0	0	14	0	12	0	11	0	9	0	9	0	7
12.0	22.0	0	15	0	13	0	12	0	10	0	10	0	8
12.0	23.0	0	15	0	15	0	13	0	11	0	10	0	8
12.0	24.0	0	15	0	15	0	15	0	12	0	11	0	9
LOAD COILS= 3													
18.0	4.0	0	1	0	0	0	1	0	0	0	1	0	0
18.0	5.0	0	1	0	1	0	1	0	1	0	1	0	1
18.0	6.0	0	1	0	1	0	1	0	1	0	1	0	1
18.0	7.0	0	2	0	1	0	2	0	1	0	2	0	1
18.0	8.0	0	3	0	2	0	3	0	2	0	2	0	2
18.0	9.0	0	3	0	2	0	3	0	2	0	3	0	2
18.0	10.0	0	4	0	3	0	4	0	3	0	3	0	3
18.0	11.0	0	5	0	4	0	4	0	3	0	4	0	3
18.0	12.0	0	5	0	4	0	5	0	4	0	5	0	4
18.0	13.0	0	6	0	5	0	6	0	4	0	5	0	4
18.0	14.0	0	7	0	6	0	6	0	5	0	6	0	5
18.0	15.0	0	8	0	7	0	7	0	6	0	6	0	5
18.0	16.0	0	9	0	8	0	8	0	6	0	7	0	6
18.0	17.0	0	11	0	9	0	9	0	7	0	8	0	6
18.0	18.0	0	12	0	10	0	10	0	8	0	8	0	7
18.0	19.0	0	14	0	11	0	11	0	9	0	9	0	7
18.0	20.0	0	15	0	12	0	12	0	10	0	10	0	8
18.0	21.0	0	15	0	14	0	13	0	11	0	11	0	9
18.0	22.0	0	15	0	15	0	15	0	12	0	12	0	9
18.0	23.0	0	15	0	15	0	15	0	13	0	13	0	10
18.0	24.0	0	15	0	15	0	15	0	14	0	14	0	11
LOAD COILS= 4													
24.0	4.0	0	1	0	0	0	1	0	0	0	1	0	0

TABLE OO (CONT)

309D EQUALIZER SETTINGS FOR MFT 2-2 INTERMEDIATE (L-NL OR NL-L) REPEATERS FOR 22-GAUGE H88 LOADED CABLE SECTION AND 26-, 24-, OR 22-GAUGE NONLOADED CABLE SECTION WITHOUT BRIDGED TAP AT 68°F

END SECTION = 3.0 KFT
LOADED CABLE TERMINATION = 900 OHMS
NONLOADED CABLE TERMINATION = 900 OR 600 OHMS

LENGTH (KFT)		309D EQUALIZER SETTINGS BY GAUGE AND TERMINATION											
		GAUGE 2 = 26 GA NL				GAUGE 2 = 24 GA NL				GAUGE 2 = 22 GA NL			
22-GA	GA 2	900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE	
LOAD COILS= 4													
24.0	5.0	0	1	0	1	0	1	0	1	0	1	0	1
24.0	6.0	0	1	0	1	0	1	0	1	0	1	0	1
24.0	7.0	0	2	0	1	0	2	0	1	0	2	0	1
24.0	8.0	0	3	0	2	0	3	0	2	0	2	0	2
24.0	9.0	0	3	0	2	0	3	0	2	0	3	0	2
24.0	10.0	0	4	0	3	0	4	0	3	0	3	0	3
24.0	11.0	0	5	0	4	0	4	0	3	0	4	0	3
24.0	12.0	0	5	0	4	0	5	0	4	0	5	0	4
24.0	13.0	0	6	0	5	0	6	0	4	0	5	0	4
24.0	14.0	0	7	0	6	0	6	0	5	0	6	0	5
24.0	15.0	0	8	0	7	0	7	0	6	0	6	0	5
24.0	16.0	0	9	0	8	0	8	0	6	0	7	0	6
24.0	17.0	0	11	0	9	0	9	0	7	0	8	0	6
24.0	18.0	0	12	0	10	0	10	0	8	0	8	0	7
24.0	19.0	0	14	0	11	0	11	0	9	0	9	0	7
24.0	20.0	0	15	0	12	0	12	0	10	0	10	0	8
24.0	21.0	0	15	0	14	0	13	0	11	0	11	0	9
24.0	22.0	0	15	0	15	0	15	0	12	0	12	0	9
24.0	23.0	0	15	0	15	0	15	0	13	0	13	0	10
24.0	24.0	0	15	0	15	0	15	0	14	0	14	0	11
LOAD COILS= 5													
30.0	4.0	0	0	0	0	0	0	0	0	0	0	0	0
30.0	5.0	0	1	0	0	0	1	0	0	0	1	0	0
30.0	6.0	0	1	0	1	0	1	0	1	0	1	0	1
30.0	7.0	0	2	0	1	0	2	0	1	0	2	0	1
30.0	8.0	0	2	0	2	0	2	0	2	0	2	0	1
30.0	9.0	0	3	0	2	0	3	0	2	0	3	0	2
30.0	10.0	0	4	0	3	0	3	0	2	0	3	0	2
30.0	11.0	0	4	0	3	0	4	0	3	0	4	0	3
30.0	12.0	0	5	0	4	0	5	0	4	0	4	0	3
30.0	13.0	0	6	0	5	0	5	0	4	0	5	0	4
30.0	14.0	0	7	0	5	0	6	0	5	0	5	0	4
30.0	15.0	0	8	0	6	0	7	0	5	0	6	0	5
30.0	16.0	0	9	0	7	0	7	0	6	0	7	0	5
30.0	17.0	0	10	0	8	0	8	0	7	0	7	0	6
30.0	18.0	0	11	0	9	0	9	0	7	0	8	0	6
30.0	19.0	0	13	0	10	0	10	0	8	0	9	0	7
30.0	20.0	0	14	0	12	0	11	0	9	0	9	0	7
30.0	21.0	0	15	0	13	0	12	0	10	0	10	0	8
30.0	22.0	0	15	0	15	0	14	0	11	0	11	0	9
30.0	23.0	0	15	0	15	0	15	0	12	0	12	0	9
30.0	24.0	0	15	0	15	0	15	0	13	0	13	0	10
LOAD COILS= 6													
36.0	4.0	0	1	0	1	0	1	0	1	0	1	0	1
36.0	5.0	0	1	0	1	0	1	0	1	0	1	0	1

TABLE OO (CONT)

309D EQUALIZER SETTINGS FOR MFT 2-2 INTERMEDIATE (L-NL OR NL-L) REPEATERS FOR 22-GAUGE H88 LOADED CABLE SECTION AND 26-, 24-, OR 22-GAUGE NONLOADED CABLE SECTION WITHOUT BRIDGED TAP AT 68°F

END SECTION = 3.0 KFT
LOADED CABLE TERMINATION = 900 OHMS
NONLOADED CABLE TERMINATION = 900 OR 600 OHMS

LENGTH (KFT)		309D EQUALIZER SETTINGS BY GAUGE AND TERMINATION									
		GAUGE 2 = 26 GA NL				GAUGE 2 = 24 GA NL				GAUGE 2 = 22 GA NL			
22-GA	GA 2	900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE	
LOAD COILS= 6													
36.0	6.0	0	2	0	2	0	2	0	2	0	2	0	1
36.0	7.0	0	3	0	2	0	2	0	2	0	2	0	2
36.0	8.0	0	3	0	2	0	3	0	2	0	3	0	2
36.0	9.0	0	4	0	3	0	4	0	3	0	3	0	3
36.0	10.0	0	5	0	4	0	4	0	3	0	4	0	3
36.0	11.0	0	5	0	4	0	5	0	4	0	5	0	4
36.0	12.0	0	6	0	5	0	6	0	5	0	5	0	4
36.0	13.0	0	7	0	6	0	6	0	5	0	6	0	5
36.0	14.0	0	8	0	7	0	7	0	6	0	7	0	5
36.0	15.0	0	9	0	7	0	8	0	6	0	7	0	6
36.0	16.0	0	10	0	8	0	9	0	7	0	8	0	6
36.0	17.0	0	12	0	10	0	10	0	8	0	9	0	7
36.0	18.0	0	13	0	11	0	11	0	9	0	9	0	8
36.0	19.0	0	15	0	12	0	12	0	10	0	10	0	8
36.0	20.0	0	15	0	14	0	13	0	11	0	11	0	9
36.0	21.0	0	15	0	15	0	15	0	12	0	12	0	10
36.0	22.0	0	15	0	15	0	15	0	13	0	13	0	10
36.0	23.0	0	15	0	15	0	15	0	14	0	14	0	11
36.0	24.0	C	9	0	15	0	15	0	15	0	15	0	12
LOAD COILS= 7													
42.0	4.0	0	1	0	0	0	1	0	0	0	1	0	0
42.0	5.0	0	1	0	1	0	1	0	1	0	1	0	1
42.0	6.0	0	2	0	1	0	1	0	1	0	1	0	1
42.0	7.0	0	2	0	2	0	2	0	1	0	2	0	1
42.0	8.0	0	3	0	2	0	3	0	2	0	2	0	2
42.0	9.0	0	3	0	3	0	3	0	2	0	3	0	2
42.0	10.0	0	4	0	3	0	4	0	3	0	3	0	3
42.0	11.0	0	5	0	4	0	4	0	3	0	4	0	3
42.0	12.0	0	6	0	4	0	5	0	4	0	5	0	4
42.0	13.0	0	6	0	5	0	6	0	5	0	5	0	4
42.0	14.0	0	7	0	6	0	7	0	5	0	6	0	5
42.0	15.0	0	8	0	7	0	7	0	6	0	6	0	5
42.0	16.0	0	9	0	8	0	8	0	7	0	7	0	6
42.0	17.0	0	11	0	9	0	9	0	7	0	8	0	6
42.0	18.0	0	12	0	10	0	10	0	8	0	9	0	7
42.0	19.0	0	14	0	11	0	11	0	9	0	9	0	7
42.0	20.0	0	15	0	13	0	12	0	10	0	10	0	8
42.0	21.0	0	15	0	14	0	13	0	11	0	11	0	9
42.0	22.0	0	15	0	15	0	15	0	12	0	12	0	9
42.0	23.0	0	15	0	15	0	15	0	13	0	13	0	10
42.0	24.0	0	15	0	15	0	15	0	14	0	14	0	11
LOAD COILS= 8													
48.0	4.0	0	1	0	1	0	1	0	1	0	1	0	1
48.0	5.0	0	2	0	1	0	2	0	1	0	2	0	1
48.0	6.0	0	2	0	2	0	2	0	2	0	2	0	2

TABLE OO (CONT)

309D EQUALIZER SETTINGS FOR MFT 2-2 INTERMEDIATE (L-NL OR NL-L) REPEATERS FOR 22-GAUGE H88 LOADED CABLE SECTION AND 26-, 24-, OR 22-GAUGE NONLOADED CABLE SECTION WITHOUT BRIDGED TAP AT 68°F

END SECTION = 3.0 KFT
LOADED CABLE TERMINATION = 900 OHMS
NONLOADED CABLE TERMINATION = 900 OR 600 OHMS

LENGTH (KFT)		309D EQUALIZER SETTINGS BY GAUGE AND TERMINATION									
		GAUGE 2 = 26 GA NL				GAUGE 2 = 24 GA NL				GAUGE 2 = 22 GA NL			
22-GA	GA 2	900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE	
LOAD COILS= 8													
48.0	7.0	0	3	0	2	0	3	0	2	0	2	0	2
48.0	8.0	0	3	0	3	0	3	0	3	0	3	0	2
48.0	9.0	0	4	0	3	0	4	0	3	0	4	0	3
48.0	10.0	0	5	0	4	0	4	0	4	0	4	0	3
48.0	11.0	0	6	0	4	0	5	0	4	0	5	0	4
48.0	12.0	0	6	0	5	0	6	0	5	0	5	0	4
48.0	13.0	0	7	0	6	0	7	0	5	0	6	0	5
48.0	14.0	0	8	0	7	0	7	0	6	0	7	0	5
48.0	15.0	0	9	0	8	0	8	0	7	0	7	0	6
48.0	16.0	0	11	0	9	0	9	0	7	0	8	0	6
48.0	17.0	0	12	0	10	0	10	0	8	0	9	0	7
48.0	18.0	0	14	0	11	0	11	0	9	0	10	0	8
48.0	19.0	0	15	0	13	0	12	0	10	0	11	0	8
48.0	20.0	0	15	0	14	0	14	0	11	0	11	0	9
48.0	21.0	0	15	0	15	0	15	0	12	0	12	0	10
48.0	22.0	0	15	0	15	0	15	0	13	0	13	0	11
48.0	23.0	0	15	0	15	0	15	0	15	0	14	0	12
48.0	24.0	0	15	0	15	0	15	0	15	0	15	0	12
LOAD COILS= 9													
54.0	4.0	0	1	0	1	0	1	0	1	0	1	0	1
54.0	5.0	0	2	0	1	0	2	0	1	0	2	0	1
54.0	6.0	0	2	0	2	0	2	0	2	0	2	0	2
54.0	7.0	0	3	0	2	0	3	0	2	0	2	0	2
54.0	8.0	0	3	0	3	0	3	0	3	0	3	0	2
54.0	9.0	0	4	0	3	0	4	0	3	0	4	0	3
54.0	10.0	0	5	0	4	0	4	0	4	0	4	0	3
54.0	11.0	0	6	0	4	0	5	0	4	0	5	0	4
54.0	12.0	0	6	0	5	0	6	0	5	0	5	0	4
54.0	13.0	0	7	0	6	0	7	0	5	0	6	0	5
54.0	14.0	0	8	0	7	0	7	0	6	0	7	0	5
54.0	15.0	0	9	0	8	0	8	0	7	0	7	0	6
54.0	16.0	0	11	0	9	0	9	0	7	0	8	0	6
54.0	17.0	0	12	0	10	0	10	0	8	0	9	0	7
54.0	18.0	0	14	0	11	0	11	0	9	0	10	0	8
54.0	19.0	0	15	0	13	0	12	0	10	0	10	0	8
54.0	20.0	0	15	0	14	0	14	0	11	0	11	0	9
54.0	21.0	0	15	0	15	0	15	0	12	0	12	0	10
54.0	22.0	0	15	0	15	0	15	0	13	0	13	0	11
54.0	23.0	0	15	0	15	0	15	0	15	0	14	0	12
54.0	24.0	0	15	0	15	0	15	0	15	0	15	0	12
LOAD COILS=10													
60.0	4.0	0	1	0	1	0	1	0	1	0	1	0	1
60.0	5.0	0	2	0	1	0	2	0	1	0	2	0	1
60.0	6.0	0	2	0	2	0	2	0	2	0	2	0	2
60.0	7.0	0	3	0	2	0	3	0	2	0	3	0	2

TABLE OO (CONT)

309D EQUALIZER SETTINGS FOR MFT 2-2 INTERMEDIATE (L-NL OR NL-L) REPEATERS FOR 22-GAUGE H88 LOADED CABLE SECTION AND 26-, 24-, OR 22-GAUGE NONLOADED CABLE SECTION WITHOUT BRIDGED TAP AT 68°F

END SECTION = 3.0 KFT
LOADED CABLE TERMINATION = 900 OHMS
NONLOADED CABLE TERMINATION = 900 OR 600 OHMS

LENGTH (KFT)		309D EQUALIZER SETTINGS BY GAUGE AND TERMINATION									
		GAUGE 2 = 26 GA NL				GAUGE 2 = 24 GA NL				GAUGE 2 = 22 GA NL			
22-GA	GA 2	900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE	
LOAD COILS=10													
60.0	8.0	0	3	0	3	0	3	0	3	0	3	0	2
60.0	9.0	0	4	0	3	0	4	0	3	0	4	0	3
60.0	10.0	0	5	0	4	0	5	0	4	0	4	0	3
60.0	11.0	0	6	0	5	0	5	0	4	0	5	0	4
60.0	12.0	0	6	0	5	0	6	0	5	0	5	0	4
60.0	13.0	0	7	0	6	0	7	0	5	0	6	0	5
60.0	14.0	0	8	0	7	0	8	0	6	0	7	0	5
60.0	15.0	0	10	0	8	0	8	0	7	0	8	0	6
60.0	16.0	0	11	0	9	0	9	0	8	0	8	0	7
60.0	17.0	0	12	0	10	0	10	0	8	0	9	0	7
60.0	18.0	0	14	0	11	0	11	0	9	0	10	0	8
60.0	19.0	0	15	0	13	0	13	0	10	0	11	0	9
60.0	20.0	0	15	0	14	0	14	0	11	0	12	0	9
60.0	21.0	0	15	0	15	0	15	0	12	0	12	0	10
60.0	22.0	0	15	0	15	0	15	0	14	0	14	0	11
60.0	23.0	0	15	0	15	0	15	0	15	0	15	0	12
60.0	24.0	0	15	0	15	0	15	0	15	0	15	0	13
LOAD COILS=11													
66.0	4.0	0	1	0	1	0	1	0	1	0	1	0	1
66.0	5.0	0	2	0	2	0	2	0	2	0	2	0	2
66.0	6.0	0	2	0	2	0	2	0	2	0	2	0	2
66.0	7.0	0	3	0	2	0	3	0	2	0	3	0	2
66.0	8.0	0	4	0	3	0	4	0	3	0	3	0	3
66.0	9.0	0	4	0	4	0	4	0	3	0	4	0	3
66.0	10.0	0	5	0	4	0	5	0	4	0	5	0	4
66.0	11.0	0	6	0	5	0	6	0	4	0	5	0	4
66.0	12.0	0	7	0	6	0	6	0	5	0	6	0	5
66.0	13.0	0	8	0	6	0	7	0	6	0	7	0	5
66.0	14.0	0	9	0	7	0	8	0	6	0	7	0	6
66.0	15.0	0	10	0	8	0	9	0	7	0	8	0	6
66.0	16.0	0	12	0	9	0	10	0	8	0	9	0	7
66.0	17.0	0	13	0	11	0	11	0	9	0	10	0	8
66.0	18.0	0	15	0	12	0	12	0	10	0	10	0	8
66.0	19.0	0	15	0	14	0	13	0	11	0	11	0	9
66.0	20.0	0	15	0	15	0	15	0	12	0	12	0	10
66.0	21.0	0	15	0	15	0	15	0	13	0	13	0	11
66.0	22.0	0	15	0	15	0	15	0	14	0	14	0	11
66.0	23.0	0	15	0	15	0	15	0	15	0	15	0	12
66.0	24.0	C	10	0	15	0	15	0	15	0	15	0	13
LOAD COILS=12													
72.0	4.0	0	1	0	1	0	1	0	1	0	1	0	1
72.0	5.0	0	2	0	1	0	2	0	2	0	2	0	1
72.0	6.0	0	2	0	2	0	2	0	2	0	2	0	2
72.0	7.0	0	3	0	2	0	3	0	2	0	3	0	2
72.0	8.0	0	4	0	3	0	3	0	3	0	3	0	3

TABLE OO (CONT)

309D EQUALIZER SETTINGS FOR MFT 2-2 INTERMEDIATE (L-NL OR NL-L) REPEATERS FOR 22-GAUGE H88 LOADED CABLE SECTION AND 26-, 24-, OR 22-GAUGE NONLOADED CABLE SECTION WITHOUT BRIDGED TAP AT 68°F

END SECTION = 3.0 KFT
LOADED CABLE TERMINATION = 900 OHMS
NONLOADED CABLE TERMINATION = 900 OR 600 OHMS

LENGTH (KFT)		309D EQUALIZER SETTINGS BY GAUGE AND TERMINATION									
		GAUGE 2 = 26 GA NL				GAUGE 2 = 24 GA NL				GAUGE 2 = 22 GA NL			
22-GA	GA 2	900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE	
LOAD COILS=12													
72.0	9.0	0	4	0	3	0	4	0	3	0	4	0	3
72.0	10.0	0	5	0	4	0	5	0	4	0	4	0	4
72.0	11.0	0	6	0	5	0	5	0	4	0	5	0	4
72.0	12.0	0	7	0	5	0	6	0	5	0	6	0	5
72.0	13.0	0	8	0	6	0	7	0	6	0	6	0	5
72.0	14.0	0	9	0	7	0	8	0	6	0	7	0	6
72.0	15.0	0	10	0	8	0	9	0	7	0	8	0	6
72.0	16.0	0	11	0	9	0	10	0	8	0	9	0	7
72.0	17.0	0	13	0	10	0	11	0	9	0	9	0	7
72.0	18.0	0	14	0	12	0	12	0	10	0	10	0	8
72.0	19.0	0	15	0	13	0	13	0	11	0	11	0	9
72.0	20.0	0	15	0	15	0	14	0	12	0	12	0	10
72.0	21.0	0	15	0	15	0	15	0	13	0	13	0	10
72.0	22.0	0	15	0	15	0	15	0	14	0	14	0	11
72.0	23.0	0	15	0	15	0	15	0	15	0	15	0	12
72.0	24.0	0	15	0	15	0	15	0	15	0	15	0	13
LOAD COILS=13													
78.0	4.0	0	2	0	1	0	2	0	1	0	2	0	1
78.0	5.0	0	2	0	2	0	2	0	2	0	2	0	2
78.0	6.0	0	3	0	2	0	3	0	2	0	2	0	2
78.0	7.0	0	3	0	3	0	3	0	3	0	3	0	2
78.0	8.0	0	4	0	3	0	4	0	3	0	4	0	3
78.0	9.0	0	5	0	4	0	4	0	4	0	4	0	3
78.0	10.0	0	5	0	4	0	5	0	4	0	5	0	4
78.0	11.0	0	6	0	5	0	6	0	5	0	5	0	4
78.0	12.0	0	7	0	6	0	7	0	5	0	6	0	5
78.0	13.0	0	8	0	7	0	7	0	6	0	7	0	5
78.0	14.0	0	9	0	8	0	8	0	7	0	7	0	6
78.0	15.0	0	10	0	9	0	9	0	7	0	8	0	7
78.0	16.0	0	12	0	10	0	10	0	8	0	9	0	7
78.0	17.0	0	13	0	11	0	11	0	9	0	10	0	8
78.0	18.0	0	15	0	12	0	12	0	10	0	11	0	9
78.0	19.0	0	15	0	14	0	14	0	11	0	12	0	9
78.0	20.0	0	15	0	15	0	15	0	12	0	13	0	10
78.0	21.0	0	15	0	15	0	15	0	13	0	14	0	11
78.0	22.0	0	15	0	15	0	15	0	15	0	15	0	12
78.0	23.0	0	15	0	15	0	15	0	15	0	15	0	13
78.0	24.0	C	11	0	15	0	15	0	15	0	15	0	14
LOAD COILS=14													
84.0	4.0	0	2	0	1	0	2	0	1	0	2	0	1
84.0	5.0	0	2	0	2	0	2	0	2	0	2	0	2
84.0	6.0	0	3	0	2	0	3	0	2	0	2	0	2
84.0	7.0	0	3	0	3	0	3	0	3	0	3	0	2
84.0	8.0	0	4	0	3	0	4	0	3	0	4	0	3
84.0	9.0	0	5	0	4	0	4	0	4	0	4	0	3

TABLE OO (CONT)

309D EQUALIZER SETTINGS FOR MFT 2-2 INTERMEDIATE (L-NL OR NL-L) REPEATERS FOR 22-GAUGE H88 LOADED CABLE SECTION AND 26-, 24-, OR 22-GAUGE NONLOADED CABLE SECTION WITHOUT BRIDGED TAP AT 68°F

END SECTION = 3.0 KFT
LOADED CABLE TERMINATION = 900 OHMS
NONLOADED CABLE TERMINATION = 900 OR 600 OHMS

LENGTH (KFT)		309D EQUALIZER SETTINGS BY GAUGE AND TERMINATION									
		GAUGE 2 = 26 GA NL				GAUGE 2 = 24 GA NL				GAUGE 2 = 22 GA NL			
22-GA	GA 2	900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE	
LOAD COILS=14													
84.0	10.0	0	5	0	4	0	5	0	4	0	5	0	4
84.0	11.0	0	6	0	5	0	6	0	5	0	5	0	4
84.0	12.0	0	7	0	6	0	7	0	5	0	6	0	5
84.0	13.0	0	8	0	7	0	7	0	6	0	7	0	5
84.0	14.0	0	9	0	8	0	8	0	7	0	7	0	6
84.0	15.0	0	10	0	9	0	9	0	7	0	8	0	7
84.0	16.0	0	12	0	10	0	10	0	8	0	9	0	7
84.0	17.0	0	13	0	11	0	11	0	9	0	10	0	8
84.0	18.0	0	15	0	12	0	12	0	10	0	11	0	9
84.0	19.0	0	15	0	14	0	14	0	11	0	12	0	9
84.0	20.0	0	15	0	15	0	15	0	12	0	13	0	10
84.0	21.0	0	15	0	15	0	15	0	13	0	14	0	11
84.0	22.0	0	15	0	15	0	15	0	15	0	15	0	12
84.0	23.0	0	15	0	15	0	15	0	15	0	15	0	13
84.0	24.0	C	11	0	15	0	15	0	15	0	15	0	14
LOAD COILS=15													
90.0	4.0	0	2	0	1	0	2	0	2	0	2	0	2
90.0	5.0	0	2	0	2	0	2	0	2	0	2	0	2
90.0	6.0	0	3	0	2	0	3	0	2	0	3	0	2
90.0	7.0	0	3	0	3	0	3	0	3	0	3	0	3
90.0	8.0	0	4	0	3	0	4	0	3	0	4	0	3
90.0	9.0	0	5	0	4	0	5	0	4	0	4	0	3
90.0	10.0	0	5	0	4	0	5	0	4	0	5	0	4
90.0	11.0	0	6	0	5	0	6	0	5	0	6	0	4
90.0	12.0	0	7	0	6	0	7	0	5	0	6	0	5
90.0	13.0	0	8	0	7	0	8	0	6	0	7	0	6
90.0	14.0	0	9	0	8	0	8	0	7	0	8	0	6
90.0	15.0	0	11	0	9	0	9	0	8	0	8	0	7
90.0	16.0	0	12	0	10	0	10	0	8	0	9	0	7
90.0	17.0	0	14	0	11	0	12	0	9	0	10	0	8
90.0	18.0	0	15	0	13	0	13	0	10	0	11	0	9
90.0	19.0	0	15	0	14	0	14	0	11	0	12	0	10
90.0	20.0	0	15	0	15	0	15	0	13	0	13	0	10
90.0	21.0	0	15	0	15	0	15	0	14	0	14	0	11
90.0	22.0	0	15	0	15	0	15	0	15	0	15	0	12
90.0	23.0	0	15	0	15	0	15	0	15	0	15	0	13
90.0	24.0	C	11	0	15	0	15	0	15	0	15	0	14
LOAD COILS=16													
96.0	4.0	0	2	0	2	0	2	0	2	0	2	0	2
96.0	5.0	0	2	0	2	0	2	0	2	0	2	0	2
96.0	6.0	0	3	0	2	0	3	0	2	0	3	0	2
96.0	7.0	0	3	0	3	0	3	0	3	0	3	0	3
96.0	8.0	0	4	0	3	0	4	0	3	0	4	0	3
96.0	9.0	0	5	0	4	0	5	0	4	0	4	0	4
96.0	10.0	0	6	0	5	0	5	0	4	0	5	0	4

TABLE OO (CONT)

309D EQUALIZER SETTINGS FOR MFT 2-2 INTERMEDIATE (L-NL OR NL-L) REPEATERS FOR 22-GAUGE H88 LOADED CABLE SECTION AND 26-, 24-, OR 22-GAUGE NONLOADED CABLE SECTION WITHOUT BRIDGED TAP AT 68°F

END SECTION = 3.0 KFT
LOADED CABLE TERMINATION = 900 OHMS
NONLOADED CABLE TERMINATION = 900 OR 600 OHMS

LENGTH (KFT)		309D EQUALIZER SETTINGS BY GAUGE AND TERMINATION									
		GAUGE 2 = 26 GA NL				GAUGE 2 = 24 GA NL				GAUGE 2 = 22 GA NL			
22-GA	GA 2	900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE		900 OHM SLOPE		600 OHM SLOPE	
LOAD COILS=16													
96.0	11.0	0	7	0	5	0	6	0	5	0	6	0	5
96.0	12.0	0	8	0	6	0	7	0	6	0	6	0	5
96.0	13.0	0	9	0	7	0	8	0	6	0	7	0	6
96.0	14.0	0	10	0	8	0	9	0	7	0	8	0	6
96.0	15.0	0	11	0	9	0	10	0	8	0	9	0	7
96.0	16.0	0	12	0	10	0	11	0	9	0	10	0	8
96.0	17.0	0	14	0	12	0	12	0	10	0	10	0	8
96.0	18.0	0	15	0	13	0	13	0	11	0	11	0	9
96.0	19.0	0	15	0	15	0	15	0	12	0	12	0	10
96.0	20.0	0	15	0	15	0	15	0	13	0	13	0	11
96.0	21.0	0	15	0	15	0	15	0	14	0	14	0	12
96.0	22.0	0	15	0	15	0	15	0	15	0	15	0	12
96.0	23.0	0	15	0	15	0	15	0	15	0	15	0	13
96.0	24.0	C	11	0	15	0	15	0	15	0	15	0	15
LOAD COILS=17													
102.0	4.0	0	2	0	2	0	2	0	2	0	2	0	2
102.0	5.0	0	2	0	2	0	2	0	2	0	2	0	2
102.0	6.0	0	3	0	2	0	3	0	2	0	3	0	2
102.0	7.0	0	3	0	3	0	3	0	3	0	3	0	3
102.0	8.0	0	4	0	3	0	4	0	3	0	4	0	3
102.0	9.0	0	5	0	4	0	5	0	4	0	4	0	4
102.0	10.0	0	6	0	5	0	5	0	4	0	5	0	4
102.0	11.0	0	7	0	5	0	6	0	5	0	6	0	5
102.0	12.0	0	8	0	6	0	7	0	6	0	6	0	5
102.0	13.0	0	9	0	7	0	8	0	6	0	7	0	6
102.0	14.0	0	10	0	8	0	9	0	7	0	8	0	6
102.0	15.0	0	11	0	9	0	10	0	8	0	9	0	7
102.0	16.0	0	13	0	10	0	11	0	9	0	10	0	8
102.0	17.0	0	14	0	12	0	12	0	10	0	10	0	8
102.0	18.0	0	15	0	13	0	13	0	11	0	11	0	9
102.0	19.0	0	15	0	15	0	15	0	12	0	12	0	10
102.0	20.0	0	15	0	15	0	15	0	13	0	13	0	11
102.0	21.0	0	15	0	15	0	15	0	14	0	15	0	12
102.0	22.0	0	15	0	15	0	15	0	15	0	15	0	13
102.0	23.0	0	15	0	15	0	15	0	15	0	15	0	14
102.0	24.0	C	11	0	15	0	15	0	15	0	15	0	15

Equalizer Gain

5.24 The active 309D equalizer produces an additional gain (or loss) at 1 kHz. This gain (or loss) must be included in the overall circuit loss calculations. For any equalizer setting the 1 kHz gain or loss may be determined by using Table PP.

TABLE PP

1 kHz GAIN OF 309D EQUALIZER

SLOPE SETTING		EQUALIZER GAIN (dB)	SLOPE SETTING		EQUALIZER GAIN (dB)
0	0	0	C	0	-3.5
0	1	0.2	C	1	-3.3
0	2	0.5	C	2	-3.0
0	3	0.8	C	3	-2.7
0	4	1.2	C	4	-2.4
0	5	1.6	C	5	-2.0
0	6	1.9	C	6	-1.6
0	7	2.3	C	7	-1.2
0	8	2.8	C	8	-0.8
0	9	3.2	C	9	-0.4
0	10	3.6	C	10	0.0
0	11	4.0	C	11	0.4
0	12	4.4	C	12	0.8
0	13	4.7	C	13	1.2
0	14	5.1	C	14	1.6
0	15	5.5	C	15	2.0

(1) Convert both facilities to single gauge equivalents.

(a) Loaded Facility;
Convert the 24-gauge to 22 since the 22 gauge is longer

From 5.05 13.4 kft 22H88
+ 10.7 kft 24H88
24.1 kft 22H88 equivalent.

(b) Nonloaded Facility;
Convert the 4.3 kft bridged tap (BT) to the equivalent length of 24NL. From Table CC 4.3 kft of BT is found under length of 4.5 and is the equivalent of 3.6 kft of 24NL.

The equivalent 24NL facility is:
10.5 kft + 3.6 kft = 14.1 kft

(2) Using Table OO 22H88 loaded facility:

24 kft for 22H88 and 14 kft of 24NL gives the following equalizer settings for a 600-ohm termination (PBX).
SLOPE = 0,5

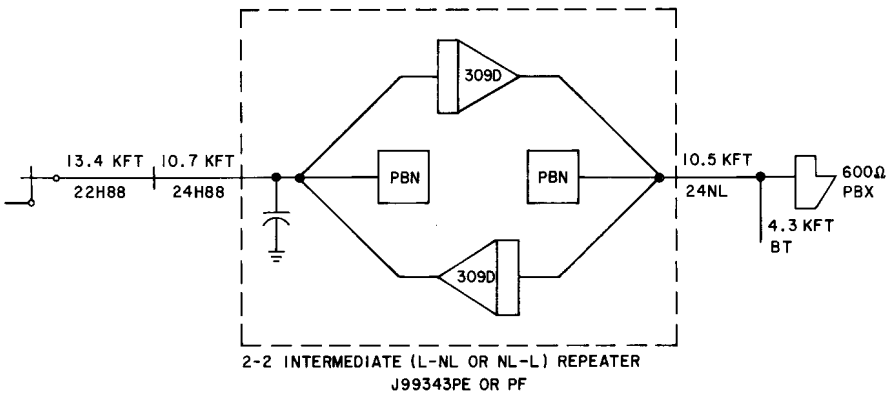
(3) From Table PP the equivalent gain for SLOPE = 0,5 is 1.6 dB.

(4) For the 1 kHz loss of the loaded facility:

13.4 kft 22H88 × .15 dB/kft (Table RR)
+ 10.7 kft 24H88 × .23 dB/kft (Table RR)

= 2.0 dB
2.5 dB
4.5 dB loaded facility loss

Example 3:



(5) For the nonloaded facility loss
length = 14.8 kft
dc resistance = 10.5 kft × 51.9 ohm/kft = 545 ohms

Using Fig. 2 the 1 kHz loss = 4.2 dB

(6) The total circuit loss is 4.5 dB + 4.2 dB or 8.7 dB.

(7) In Summary,
SLOPE = 0,5
EQLR GAIN = 1.6 dB
1 kHz loss = 8.7 dB

6. CABLE LOSS COMPUTATIONS

A. Nonloaded Cable

6.01 The 1 kHz loss of nonloaded cable may be determined by using Fig. 1 or Fig. 2. The facility length and dc resistance must be known. Fig. 1 is used for nonloaded facilities terminated in 900 ohms on each end. Fig. 2 is for a facility terminated in 600 ohms on one end and 900 ohms on the other.

6.02 The figure is used as follows:

(1) Determine the total length of the facility (repeater to termination). Add the length of any bridged taps to the total.

Note: 25-gauge MAT cable should be converted to an equivalent length of 26-gauge before determining total length.

(2) Determine the dc resistance using the constants in Table QQ.

(3) Read across the appropriate figure to the total length value. Read up to the dc resistance value. The 1 kHz loss may be read at the intersecting point.

B. Loaded Cable

6.03 The 1 kHz loss of loaded cable is determined by multiplying the length of each gauge by the loss constants in Table RR and adding for the total.

TABLE QQ

DC RESISTANCE CONSTANTS FOR NL CABLE

GAUGE	OHMS/KFT
19	16.3
22	32.8
24	51.9
25	65.5
26	83.3

TABLE RR

H88 LOADED CABLE LOSS

GAUGE	LOSS/KFT (dB)
26	.34
25	.25
24	.23
22	.15
19	.08

7. REFERENCES

7.01 The following documents contain additional information on the 2-2 repeaters:

REFERENCE	TITLE
332-910-100	General Description of MFT
332-910-180	General Application Information for MFT
332-912-111	2-2 Repeater Description
332-912-211	Installation and Testing 2-2 Repeaters
SD-1C359-01	Metallic Facility Terminal Circuit
CD-1C359-01	Common Systems—MFT Circuit

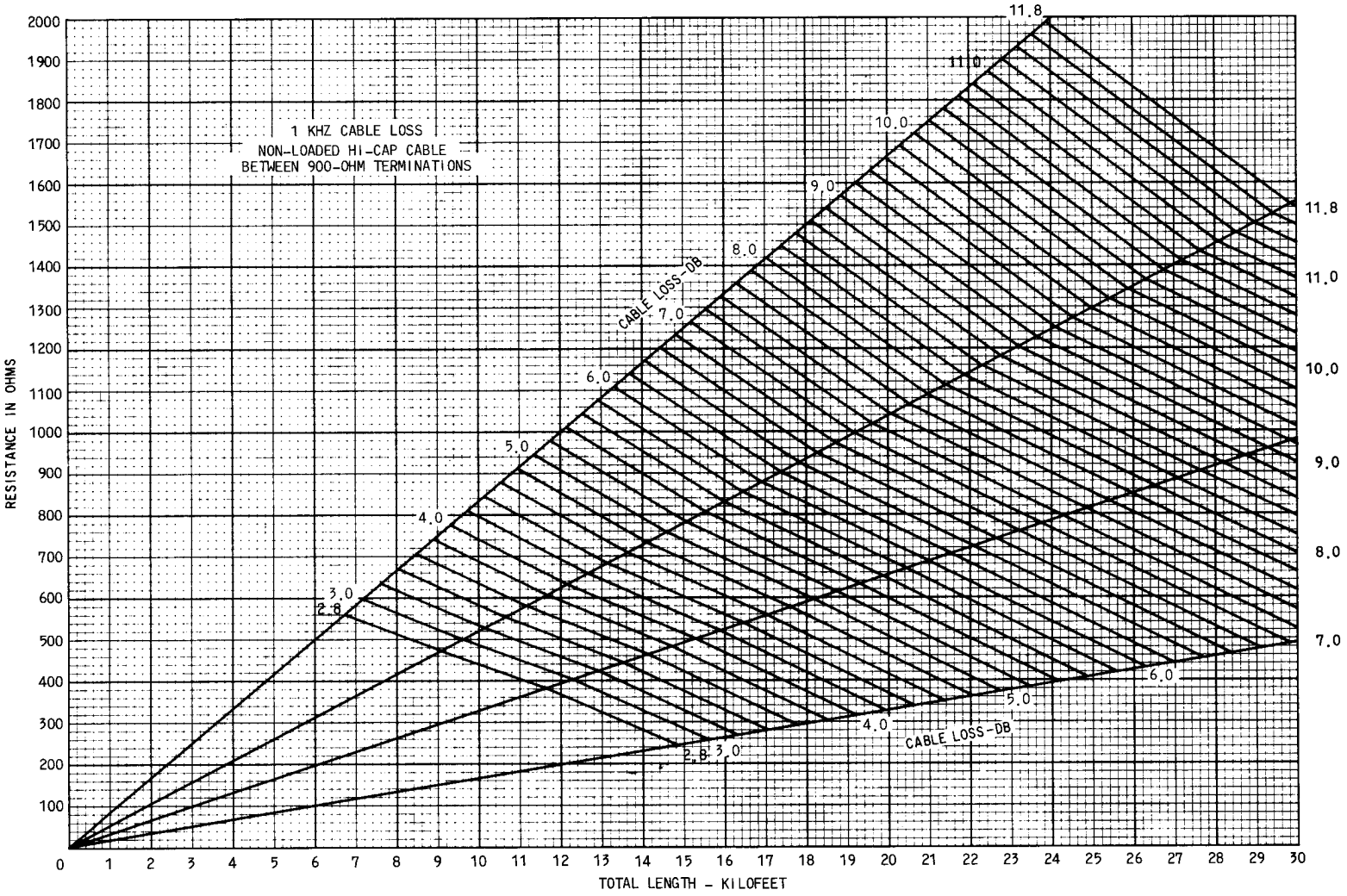


Fig. 1—1 KHz Cable Loss Nonloaded Hi-Cap. Cable Between 900-Ohm Terminations

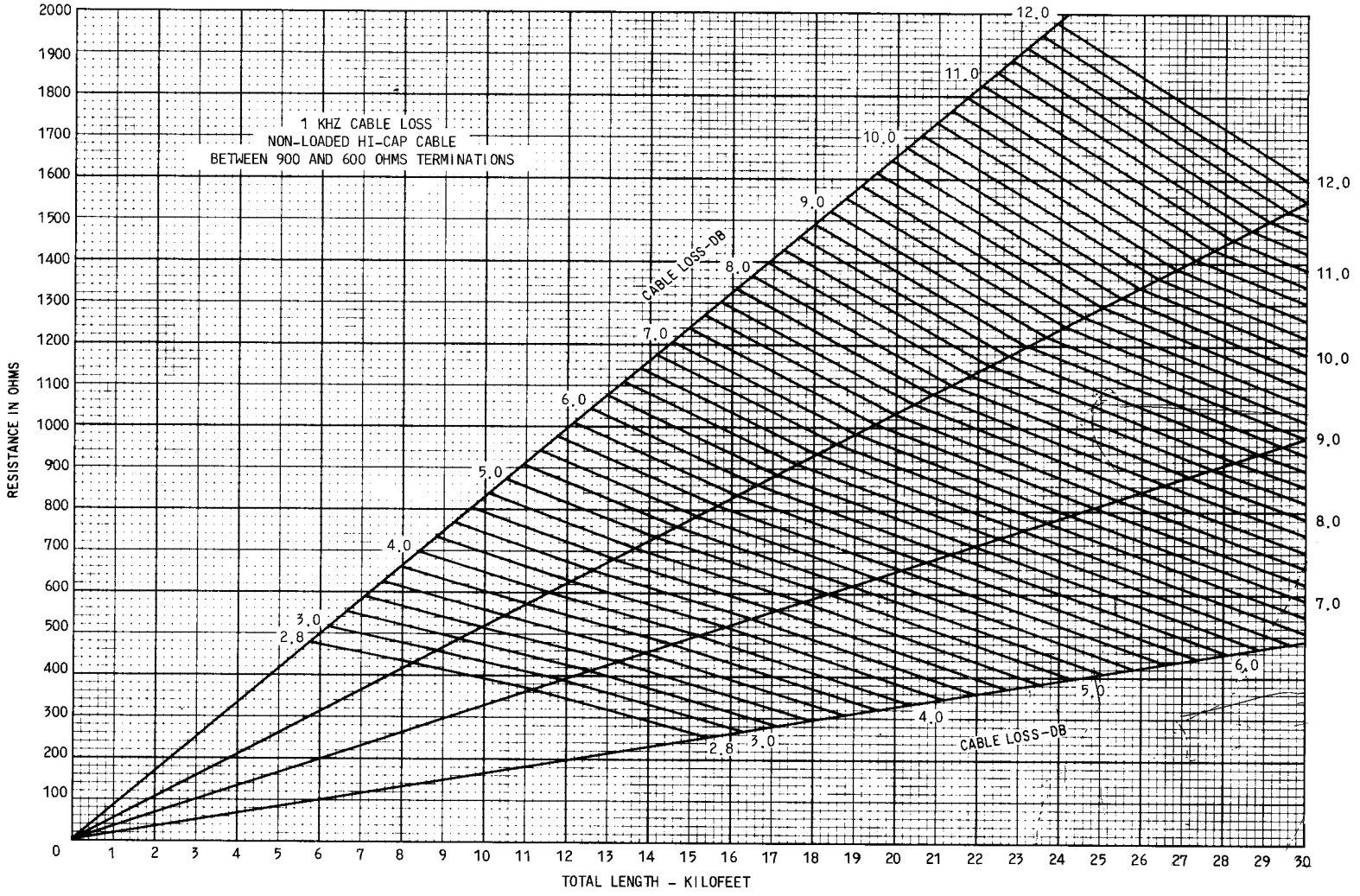


Fig. 2—1 KHz Cable Loss Nonloaded Hi-Cap. Cable Between 900- and 600-Ohm Terminations