

SECONDARY CONSTANTS OF LOADED CABLE  
26 GAUGE BST  
H88 LOADING

at 68° F. \*

Freq. Hertz	Propagation Constant per Mile			Mid-Section Impedance			
	Attenuation		Phase Shift $\beta$ Radians	R Ohms	X Ohms (neg.)	Z Ohms	Angle Degrees (neg.)
	$\alpha$ Nepers	dB					
1	.01143	.099	.00977	22631	19308	29748	40.5
50	.07278	.632	.07662	3086	2909	4241	43.3
100	.1000	.869	.1114	2242	2004	3007	41.8
200	.1339	1.163	.1664	1676	1343	2148	38.7
300	.1555	1.351	.2150	1445	1042	1781	35.8
500	.1813	1.575	.3073	1245	732	1444	30.5
800	.2000	1.737	.4463	1143	510	1251	24.1
1000	.2062	1.791	.5419	1121	425	1199	20.8
1200	.2098	1.822	.6403	1118	366	1177	18.1
1400	.2119	1.840	.7418	1128	323	1173	16.0
1600	.2130	1.850	.8467	1148	292	1185	14.3
1800	.2135	1.854	.9557	1179	270	1210	12.9
2000	.2137	1.856	1.0693	1221	255	1247	11.8
2200	.2139	1.857	1.1886	1277	248	1300	11.0
2400	.2144	1.862	1.3150	1350	249	1373	10.4
2500	.2150	1.867	1.3814	1396	254	1418	10.3
2600	.2159	1.875	1.4505	1449	262	1472	10.3
2700	.2172	1.887	1.5225	1511	276	1536	10.3
2750	.2182	1.895	1.5598	1546	285	1572	10.4
2800	.2193	1.905	1.5981	1585	296	1612	10.6
3000	.2268	1.970	1.7628	1782	371	1820	11.8
3200	.2441	2.120	1.9533	2086	555	2159	14.9
3500	.3436	2.984	2.3189	2593	1789	3150	34.6

\* temperature variation per degree F.

Hz	dB	rad.	R	X
300	.0021	.00021	.860	-1.317
1000	.0036	.00026	.174	-.743
3000	.0044	.00058	.340	-1.112

Notes: nominal cutoff frequency = 3550 Hz.  
phase delay =  $86.24 \times 10^{-6}$  seconds/mile at 1000 Hz.  
velocity of propagation =  $11.60 \times 10^3$  miles/second at 1000 Hz.

## END-SECTION IMPEDANCE

Frequency (Hz) End Section	300		500		1000		1600	
	R	X	R	X	R	X	R	X
0 (Full Coil)	1440	- 951	1226	-578	1039	-112	927	+220
.1	1443	- 970	1235	-611	1073	-173	1009	+139
.2	1445	- 989	1241	-643	1098	-237	1076	+ 43
.3	1446	-1007	1244	-674	1114	-301	1124	- 66
.4	1446	-1025	1246	-704	1122	-364	1148	-180
.5 (Mid Section)	1445	-1042	1245	-732	1121	-425	1148	-292
.6	1444	-1058	1243	-760	1114	-483	1127	-397
.7	1441	-1074	1238	-786	1100	-537	1088	-489
.8	1439	-1089	1233	-810	1080	-585	1037	-564
.9	1435	-1103	1226	-834	1057	-628	978	-622
1.0 (Full Section)	1431	-1117	1217	-855	1031	-665	918	-665

Frequency (Hz) End Section	2000		2500		2750		3000	
	R	X	R	X	R	X	R	X
0 (Full Coil)	851	+399	732	+607	657	+710	566	+817
.1	975	+321	919	+562	873	+700	810	-860
.2	1087	+210	1116	+454	1129	+615	1138	+824
.3	1173	+ 69	1290	+270	1381	+413	1517	+618
.4	1220	- 92	1394	+ 19	1545	+ 89	1797	+177
.5 (Mid Section)	1221	-255	1396	-254	1546	-285	1782	-371
.6	1181	-404	1302	-490	1391	-589	1503	-771
.7	1110	-526	1152	-653	1168	-768	1162	-939
.8	1022	-616	990	-742	953	-837	884	-957
.9	929	-674	843	-776	778	-840	688	-909
1.0 (Full Section)	842	-706	722	-774	647	-810	555	-841