SECONDARY CONSTANTS OF B URBAN WIRE

Freq. kc./sec.	DRY (TEMPERATURE 71° F.)							
	PROPAGATION CONSTANT-PER MI.			VELOCITY	CHARACTERISTIC IMPEDANCE			
	ATTENUATION		PHASE SHIFT		r	x	z	angle
	α		β	w	ohms	ohms	ohms	degrees
	nepers	db	radians	mi./sec.		(neg.)		(neg.)
0.5	.2187	1.90	.20	15,650	665	611	903	42.6
1.0	.3039	2.64	.29	21,600	482	434	649	42.0
1.5	.3673	3.19	.35	26,800	401	354	535	41.4
2.0	.4179	3.63	.41	30,400	353	306	467	40.9
2.5	.4617	4.01	.46	34,000	320	272	420	40.4
3.0	.4997	4.34	.51	36,900	296	248	386	40.0

Freq. kc./sec.	IMMERSED (TEMPERATURE 68.8° F.)							
	PROPAGATION CONSTANT-PER MI.			VELOCITY	CHARACTERISTIC IMPEDANCE			
	ATTENUATION		PHASE SHIFT		r	x	z	angle
	α		β	w	ohms	ohms	ohms	degrees
	nepers	db	radians	mi./sec.		(neg.)		(neg.)
0.5	.3189	2.77	.29	10,800	469	419	629	41.8
1.0	.4398	3.82	.41	15,200	343	299	455	41.1
1.5	.5296	4.60	.50	18,900	287	245	377	40.5
2.0	.6021	5.23	.57	22,000	253	212	330	40.0
2.5	.6631	5.76	.64	24,500	229	189	297	39.5
3.0	.7172	6.23	.70	26,700	212	172	273	39.0

Note: $db = \alpha \times 8.686$

$$\text{wave-length } \lambda = \frac{2\pi}{\beta} = \frac{w}{f}$$