

SECONDARY CONSTANTS OF C RURAL WIRE  
AT 68° F.

FREQ. CPS	DRY						
	PROPAGATION CONSTANT-PER MILE			CHARACTERISTIC IMPEDANCE			
	ATTENUATION		PHASE SHIFT	R OHMS	X OHMS (Neg.)	Z OHMS	ANGLE DEGREES (Neg.)
	$\alpha$ NEPERS	DB	$\beta$ RADIANS				
200	.0583	.51	.0592	689	670	961	44.2
500	.0908	.79	.0952	443	417	608	43.3
1,000	.1255	1.09	.1384	322	288	432	41.8
2,000	.1705	1.48	.2068	241	195	310	39.0
2,500	.1877	1.63	.2372	221	171	279	37.7
2,800	.1970	1.71	.2548	212	160	266	37.0
3,000	.2030	1.76	.2664	207	154	258	36.6
3,100	.2059	1.79	.2720	205	151	255	36.4
3,500	.2173	1.89	.2944	196	141	241	35.7
3,800	.2255	1.96	.3107	191	134	233	35.1
4,000	.2309	2.01	.3214	188	131	229	34.9

FREQ. CPS	WET						
	PROPAGATION CONSTANT-PER MILE			CHARACTERISTIC IMPEDANCE			
	ATTENUATION		PHASE SHIFT	R OHMS	X OHMS (Neg.)	Z OHMS	ANGLE DEGREES (Neg.)
	$\alpha$ NEPERS	DB	$\beta$ RADIANS				
200	.0770	.67	.0753	541	507	741	43.1
500	.1188	1.03	.1196	352	319	475	42.2
1,000	.1628	1.41	.1721	259	222	341	40.6
2,000	.2192	1.90	.2538	196	151	247	37.6
2,500	.2406	2.09	.2899	181	133	225	36.3
2,800	.2522	2.19	.3106	174	125	214	35.7
3,000	.2597	2.26	.3241	170	120	208	35.2
3,100	.2633	2.29	.3308	168	118	205	35.1
3,500	.2774	2.41	.3569	162	110	196	34.2
3,800	.2876	2.50	.3759	158	105	190	33.6
4,000	.2944	2.56	.3883	155	102	186	33.3

Based on field measurements made over a two to three month period on new wire.