3 1/8” 50 Ohm Rigid Coaxial Transmission Line, TV Ratings and Efficiency in Percent

CH #	Freq. MHz	ATTEN. in dB/100 ft	Average Power (Kilowatts)	250 ft	500 ft	750 ft	1000 ft	1250 ft	1500 ft	1750 ft	2000 ft
2	54	0.068	71.210	96.14	92.44	88.87	85.45	82.15	78.98	75.94	73.01
3	60	0.072	67.556	95.94	92.04	88.31	84.72	81.28	77.98	74.82	71.78
4	66	0.076	64.412	95.75	91.67	87.77	84.04	80.46	77.04	73.76	70.63
5	76	0.081	60.025	95.44	91.09	86.94	82.98	79.20	75.59	72.14	68.85
6	82	0.084	57.787	95.27	90.76	86.47	82.38	78.48	74.77	71.24	67.87
7	174	0.123	39.670	93.19	86.83	80.92	75.40	70.26	65.48	61.01	56.86
8	180	0.125	39.003	93.07	86.63	80.62	75.04	69.84	65.00	60.50	56.31
9	186	0.127	38.369	92.96	86.42	80.34	74.68	69.43	64.54	60.00	55.78
10	192	0.129	37.765	92.85	86.22	80.06	74.34	69.02	64.09	59.51	55.26
11	198	0.131	37.188	92.75	86.02	79.78	74.00	68.63	63.65	59.03	54.75
12	204	0.133	36.637	92.64	85.83	79.51	73.66	68.24	63.22	58.57	54.26
13	210	0.135	36.110	92.54	85.63	79.25	73.33	67.86	62.80	58.11	53.78
14	470	0.202	24.137	89.05	79.29	70.61	62.88	55.99	49.86	44.40	39.53
15	476	0.203	23.985	88.98	79.18	70.45	62.69	55.78	49.64	44.17	39.30
16	482	0.204	23.835	88.92	79.06	70.30	62.51	55.58	49.42	43.94	39.07
17	488	0.205	23.688	88.85	78.95	70.14	62.32	55.38	49.20	43.72	38.84
18	494	0.207	23.544	88.79	78.83	69.99	62.14	55.18	48.99	43.50	38.62
19	500	0.208	23.402	88.72	78.72	69.84	61.97	54.98	48.78	43.28	38.40
20	506	0.209	23.263	88.66	78.61	69.69	61.79	54.78	48.57	43.06	38.18
21	512	0.210	23.126	88.60	78.49	69.54	61.61	54.59	48.36	42.85	37.96
22	518	0.212	22.992	88.53	78.38	69.40	61.44	54.39	48.16	42.64	37.75
23	524	0.213	22.860	88.47	78.27	69.25	61.27	54.20	47.95	42.43	37.54
24	530	0.214	22.730	88.41	78.16	69.10	61.10	54.01	47.75	42.22	37.33
25	536	0.215	22.602	88.35	78.05	68.96	60.93	53.83	47.56	42.01	37.12
26	542	0.216	22.477	88.29	77.95	68.82	60.76	53.64	47.36	41.81	36.91
27	548	0.218	22.354	88.23	77.84	68.68	60.59	53.46	47.16	41.61	36.71
28	554	0.219	22.232	88.17	77.73	68.53	60.42	53.27	46.97	41.41	36.51
29	560	0.220	22.113	88.11	77.63	68.40	60.26	53.09	46.78	41.22	36.31
30	566	0.221	21.995	88.05	77.52	68.26	60.10	52.91	46.59	41.02	36.12
31	572	0.222	21.880	87.99	77.42	68.12	59.94	52.74	46.40	40.83	35.92
32	578	0.223	21.766	87.93	77.31	67.98	59.78	52.56	46.22	40.64	35.73
33	584	0.225	21.654	87.87	77.21	67.85	59.62	52.39	46.03	40.45	35.54
34	590	0.226	21.543	87.81	77.11	67.71	59.46	52.21	45.85	40.26	35.35
35	596	0.227	21.435	87.75	77.01	67.58	59.30	52.04	45.67	40.08	35.17
36	602	0.228	21.327	87.70	76.91	67.45	59.15	51.87	45.49	39.89	34.98
37	608	0.229	21.222	87.64	76.81	67.31	58.99	51.70	45.31	39.71	34.80
38	614	0.230	21.118	87.58	76.71	67.18	58.84	51.53	45.13	39.53	34.62
39	620	0.231	21.016	87.53	76.61	67.05	58.69	51.37	44.96	39.35	34.44
40	626	0.233	20.915	87.47	76.51	66.92	58.54	51.20	44.79	39.17	34.27
41	632	0.234	20.815	87.41	76.41	66.79	58.39	51.04	44.61	39.00	34.09
42	638	0.235	20.717	87.36	76.31	66.67	58.24	50.88	44.44	38.83	33.92
43	644	0.236	20.620	87.30	76.22	66.54	58.09	50.72	44.28	38.65	33.75
44	650	0.237	20.525	87.25	76.12	66.41	57.94	50.56	44.11	38.48	33.58
45	656	0.238	20.431	87.19	76.03	66.29	57.80	50.40	43.94	38.31	33.41
46	662	0.239	20.338	87.14	75.93	66.17	57.66	50.24	43.78	38.15	33.24
47	668	0.240	20.246	87.08	75.84	66.04	57.51	50.08	43.61	37.98	33.08
48	674	0.241	20.156	87.03	75.74	65.92	57.37	49.93	43.45	37.82	32.91
49	680	0.242	20.067	86.98	75.65	65.80	57.23	49.77	43.29	37.65	32.75
50	686	0.243	19.979	86.92	75.56	65.68	57.09	49.62	43.13	37.49	32.59
51	692	0.245	19.892	86.87	75.46	65.56	56.95	49.47	42.98	37.33	32.43
52	698	0.246	19.807	86.82	75.37	65.44	56.81	49.32	42.82	37.17	32.27
53	704	0.247	19.722	86.76	75.28	65.32	56.67	49.17	42.66	37.02	32.12
54	710	0.248	19.638	86.71	75.19	65.20	56.54	49.02	42.51	36.86	31.96
55	716	0.249	19.556	86.66	75.10	65.08	56.40	48.88	42.36	36.71	31.81
56	722	0.250	19.475	86.61	75.01	64.96	56.26	48.73	42.20	36.55	31.66
57	728	0.251	19.394	86.56	74.92	64.85	56.13	48.58	42.05	36.40	31.51
58	734	0.252	19.315	86.51	74.83	64.73	56.00	48.44	41.90	36.25	31.36
59	740	0.253	19.236	86.45	74.74	64.62	55.87	48.30	41.76	36.10	31.21
60	746	0.254	19.159	86.40	74.65	64.50	55.73	48.16	41.61	35.95	31.06
61	752	0.255	19.082	86.35	74.57	64.39	55.60	48.01	41.46	35.80	30.92
62	758	0.256	19.007	86.30	74.48	64.28	55.47	47.87	41.32	35.66	30.77
63	764	0.257	18.932	86.25	74.39	64.17	55.34	47.74	41.17	35.51	30.63
64	770	0.258	18.858	86.20	74.31	64.05	55.22	47.60	41.03	35.37	30.49
65	776	0.259	18.785	86.15	74.22	63.94	55.09	47.46	40.89	35.23	30.35
66	782	0.260	18.713	86.10	74.14	63.83	54.96	47.32	40.75	35.08	30.21
67	788	0.261	18.641	86.05	74.05	63.72	54.84	47.19	40.61	34.94	30.07
68	794	0.262	18.571	86.00	73.97	63.61	54.71	47.05	40.47	34.80	29.93
69	800	0.263	18.501	85.96	73.88	63.51	54.59	46.92	40.33	34.67	29.80

Standard Conditions:

Attenuation: Ambient Temperature 20°C (68°F), Dry Air, Sea Level Atmospheric Pressure, VSWR 1.0, 0KW

Average Power: Ambient Temperature 40°C (104°F), Inner Conductor Temperature 100°C (212°F), Dry Air, Sea Level Atmospheric Pressure, VSWR 1.0