

TABLE OF HYPERBOLIC FUNCTIONS OF PROPAGATION CONSTANTS
NON-LOADED 24 GAUGE ASM, GSM CABLE AT 1000 CPS
(Propagation Constant, $\gamma = .2466 + j .2513$ Per Mile)

Miles (l)	Sinh γl	Cosh γl	Tanh γl	Coth γl
0	0 + j 0	1 + j 0	0 + j 0	$\infty - j \infty$
1	.2413 + j .2563 .3520 / <u>46.7°</u>	.9982 + j .0619 1.0001 / <u>3.5°</u>	.2567 + j .2408 .3520 / <u>43.2°</u>	2.0723 - j 1.9437 2.8412 / <u>43.2°</u>
2	.4499 + j .5415 .7040 / <u>50.3°</u>	.9851 + j .2473 1.0157 / <u>14.1°</u>	.5594 + j .4092 .6931 / <u>36.2°</u>	1.1645 - j .8518 1.4428 / <u>36.2°</u>
3	.5899 + j .8805 1.0598 / <u>56.2°</u>	.9378 + j .5539 1.0891 / <u>30.6°</u>	.8775 + j .4207 .9731 / <u>25.6°</u>	.9266 - j .4443 1.0276 / <u>25.6°</u>
4	.6186 + j 1.2894 1.4301 / <u>64.4°</u>	.8185 + j .9746 1.2727 / <u>50.0°</u>	1.0884 + j .2791 1.1237 / <u>14.4°</u>	.8620 - j .2211 .8899 / <u>14.4°</u>
5	.4854 + j 1.7703 1.8356 / <u>74.7°</u>	.5755 + j 1.4932 1.6002 / <u>68.9°</u>	1.1413 + j .1149 1.1471 / <u>5.8°</u>	.8672 - j .0873 .8716 / <u>5.8°</u>
6	.1311 + j 2.3049 2.3086 / <u>86.7°</u>	.1454 + j 2.0776 2.0827 / <u>86.0°</u>	1.1084 + j .0145 1.1085 / <u>0.7°</u>	.9020 - j .0118 .9021 / <u>0.7°</u>
7	- .5093 + j 2.8474 2.8925 / <u>100.1°</u>	- .5426 + j 2.6726 2.7271 / <u>101.5°</u>	1.0604 - j .0250 1.0607 / <u>1.4°</u>	.9425 + j .0222 .9428 / <u>1.4°</u>
8	-1.5005 + j 3.3165 3.6401 / <u>114.4°</u>	-1.5597 + j 3.1906 3.5514 / <u>116.1°</u>	1.0245 - j .0304 1.0250 / <u>1.7°</u>	.9752 + j .0289 .9756 / <u>1.7°</u>
9	-2.8972 + j 3.5877 4.6114 / <u>128.9°</u>	-2.9665 + j 3.5039 4.5910 / <u>130.2°</u>	1.0041 - j .0234 1.0044 / <u>1.3°</u>	.9953 + j .0232 .9956 / <u>1.3°</u>
10	-4.7279 + j 3.4870 5.8747 / <u>143.6°</u>	-4.7966 + j 3.4371 5.9009 / <u>144.4°</u>	.9955 - j .0139 .9956 / <u>0.8°</u>	1.0043 + j .0140 1.0044 / <u>0.8°</u>

Note: The data in this table are furnished for use with formulae such as those on Page 35 of Section AB92.075, "Introduction to Telephone Transmission Theory."