

## 7/8" 50 Ohm Rigid Coaxial Transmission Line, FM Ratings and Efficiency in Percent

| Freq. MHz | ATTEN. in db/100 ft. | Average Power (Kilowatts) | 25 ft | 50 ft | 75 ft | 100 ft | 125 ft | 150 ft | 200 ft | 300 ft |
|-----------|----------------------|---------------------------|-------|-------|-------|--------|--------|--------|--------|--------|
| 88.1      | 0.3466               | 4.705                     | 98.02 | 96.09 | 94.19 | 92.33  | 90.51  | 88.72  | 85.25  | 78.71  |
| 88.3      | 0.3470               | 4.700                     | 98.02 | 96.08 | 94.18 | 92.32  | 90.50  | 88.71  | 85.23  | 78.69  |
| 88.5      | 0.3474               | 4.694                     | 98.02 | 96.08 | 94.18 | 92.31  | 90.49  | 88.69  | 85.22  | 78.67  |
| 88.7      | 0.3477               | 4.689                     | 98.02 | 96.08 | 94.17 | 92.31  | 90.48  | 88.68  | 85.20  | 78.65  |
| 88.9      | 0.3481               | 4.684                     | 98.02 | 96.07 | 94.17 | 92.30  | 90.47  | 88.67  | 85.19  | 78.62  |
| 89.1      | 0.3485               | 4.679                     | 98.01 | 96.07 | 94.16 | 92.29  | 90.46  | 88.66  | 85.17  | 78.60  |
| 89.3      | 0.3489               | 4.673                     | 98.01 | 96.06 | 94.15 | 92.28  | 90.45  | 88.65  | 85.16  | 78.58  |
| 89.5      | 0.3493               | 4.668                     | 98.01 | 96.06 | 94.15 | 92.27  | 90.43  | 88.63  | 85.14  | 78.56  |
| 89.7      | 0.3497               | 4.663                     | 98.01 | 96.05 | 94.14 | 92.26  | 90.42  | 88.62  | 85.13  | 78.54  |
| 89.9      | 0.3501               | 4.658                     | 98.00 | 96.05 | 94.13 | 92.26  | 90.41  | 88.61  | 85.11  | 78.52  |
| 90.1      | 0.3505               | 4.653                     | 98.00 | 96.05 | 94.13 | 92.25  | 90.40  | 88.60  | 85.10  | 78.50  |
| 90.3      | 0.3509               | 4.647                     | 98.00 | 96.04 | 94.12 | 92.24  | 90.39  | 88.59  | 85.08  | 78.48  |
| 90.5      | 0.3513               | 4.642                     | 98.00 | 96.04 | 94.11 | 92.23  | 90.38  | 88.58  | 85.06  | 78.46  |
| 90.7      | 0.3516               | 4.637                     | 98.00 | 96.03 | 94.11 | 92.22  | 90.37  | 88.56  | 85.05  | 78.43  |
| 90.9      | 0.3520               | 4.632                     | 97.99 | 96.03 | 94.10 | 92.21  | 90.36  | 88.55  | 85.03  | 78.41  |
| 91.1      | 0.3524               | 4.627                     | 97.99 | 96.02 | 94.10 | 92.21  | 90.35  | 88.54  | 85.02  | 78.39  |
| 91.3      | 0.3528               | 4.622                     | 97.99 | 96.02 | 94.09 | 92.20  | 90.34  | 88.53  | 85.00  | 78.37  |
| 91.5      | 0.3532               | 4.617                     | 97.99 | 96.02 | 94.08 | 92.19  | 90.33  | 88.52  | 84.99  | 78.35  |
| 91.7      | 0.3536               | 4.612                     | 97.99 | 96.01 | 94.08 | 92.18  | 90.32  | 88.50  | 84.97  | 78.33  |
| 91.9      | 0.3540               | 4.607                     | 97.98 | 96.01 | 94.07 | 92.17  | 90.31  | 88.49  | 84.96  | 78.31  |
| 92.1      | 0.3543               | 4.602                     | 97.98 | 96.00 | 94.06 | 92.16  | 90.30  | 88.48  | 84.94  | 78.29  |
| 92.3      | 0.3547               | 4.597                     | 97.98 | 96.00 | 94.06 | 92.16  | 90.29  | 88.47  | 84.93  | 78.27  |
| 92.5      | 0.3551               | 4.592                     | 97.98 | 95.99 | 94.05 | 92.15  | 90.28  | 88.46  | 84.91  | 78.25  |
| 92.7      | 0.3555               | 4.587                     | 97.97 | 95.99 | 94.05 | 92.14  | 90.27  | 88.45  | 84.90  | 78.23  |
| 92.9      | 0.3559               | 4.582                     | 97.97 | 95.99 | 94.04 | 92.13  | 90.26  | 88.43  | 84.88  | 78.21  |
| 93.1      | 0.3563               | 4.577                     | 97.97 | 95.98 | 94.03 | 92.12  | 90.25  | 88.42  | 84.87  | 78.18  |
| 93.3      | 0.3566               | 4.572                     | 97.97 | 95.98 | 94.03 | 92.12  | 90.24  | 88.41  | 84.85  | 78.16  |
| 93.5      | 0.3570               | 4.567                     | 97.97 | 95.97 | 94.02 | 92.11  | 90.23  | 88.40  | 84.84  | 78.14  |
| 93.7      | 0.3574               | 4.562                     | 97.96 | 95.97 | 94.01 | 92.10  | 90.22  | 88.39  | 84.82  | 78.12  |
| 93.9      | 0.3578               | 4.558                     | 97.96 | 95.96 | 94.01 | 92.09  | 90.21  | 88.38  | 84.81  | 78.10  |
| 94.1      | 0.3582               | 4.553                     | 97.96 | 95.96 | 94.00 | 92.08  | 90.20  | 88.36  | 84.79  | 78.08  |
| 94.3      | 0.3586               | 4.548                     | 97.96 | 95.96 | 94.00 | 92.08  | 90.19  | 88.35  | 84.78  | 78.06  |
| 94.5      | 0.3589               | 4.543                     | 97.96 | 95.95 | 93.99 | 92.07  | 90.18  | 88.34  | 84.76  | 78.04  |
| 94.7      | 0.3593               | 4.538                     | 97.95 | 95.95 | 93.98 | 92.06  | 90.17  | 88.33  | 84.75  | 78.02  |
| 94.9      | 0.3597               | 4.533                     | 97.95 | 95.94 | 93.98 | 92.05  | 90.17  | 88.32  | 84.73  | 78.00  |
| 95.1      | 0.3601               | 4.529                     | 97.95 | 95.94 | 93.97 | 92.04  | 90.16  | 88.31  | 84.72  | 77.98  |
| 95.3      | 0.3605               | 4.524                     | 97.95 | 95.94 | 93.97 | 92.04  | 90.15  | 88.29  | 84.71  | 77.96  |
| 95.5      | 0.3608               | 4.519                     | 97.94 | 95.93 | 93.96 | 92.03  | 90.14  | 88.28  | 84.69  | 77.94  |
| 95.7      | 0.3612               | 4.514                     | 97.94 | 95.93 | 93.95 | 92.02  | 90.13  | 88.27  | 84.68  | 77.92  |
| 95.9      | 0.3616               | 4.510                     | 97.94 | 95.92 | 93.95 | 92.01  | 90.12  | 88.26  | 84.66  | 77.90  |
| 96.1      | 0.3620               | 4.505                     | 97.94 | 95.92 | 93.94 | 92.00  | 90.11  | 88.25  | 84.65  | 77.88  |
| 96.3      | 0.3623               | 4.500                     | 97.94 | 95.91 | 93.93 | 92.00  | 90.10  | 88.24  | 84.63  | 77.86  |
| 96.5      | 0.3627               | 4.496                     | 97.93 | 95.91 | 93.93 | 91.99  | 90.09  | 88.23  | 84.62  | 77.84  |
| 96.7      | 0.3631               | 4.491                     | 97.93 | 95.91 | 93.92 | 91.98  | 90.08  | 88.21  | 84.60  | 77.82  |
| 96.9      | 0.3635               | 4.486                     | 97.93 | 95.90 | 93.92 | 91.97  | 90.07  | 88.20  | 84.59  | 77.80  |
| 97.1      | 0.3638               | 4.482                     | 97.93 | 95.90 | 93.91 | 91.96  | 90.06  | 88.19  | 84.57  | 77.78  |
| 97.3      | 0.3642               | 4.477                     | 97.93 | 95.89 | 93.90 | 91.96  | 90.05  | 88.18  | 84.56  | 77.76  |
| 97.5      | 0.3646               | 4.473                     | 97.92 | 95.89 | 93.90 | 91.95  | 90.04  | 88.17  | 84.54  | 77.74  |
| 97.7      | 0.3650               | 4.468                     | 97.92 | 95.89 | 93.89 | 91.94  | 90.03  | 88.16  | 84.53  | 77.72  |
| 97.9      | 0.3653               | 4.463                     | 97.92 | 95.88 | 93.89 | 91.93  | 90.02  | 88.15  | 84.51  | 77.70  |

| Freq. MHz | ATTEN. in db/100 ft. | Average Power (Kilowatts) | 25 ft | 50 ft | 75 ft | 100 ft | 125 ft | 150 ft | 200 ft | 300 ft |
|-----------|----------------------|---------------------------|-------|-------|-------|--------|--------|--------|--------|--------|
| 98.1      | 0.3657               | 4.459                     | 97.92 | 95.88 | 93.88 | 91.92  | 90.01  | 88.13  | 84.50  | 77.68  |
| 98.3      | 0.3661               | 4.454                     | 97.91 | 95.87 | 93.87 | 91.92  | 90.00  | 88.12  | 84.49  | 77.66  |
| 98.5      | 0.3665               | 4.450                     | 97.91 | 95.87 | 93.87 | 91.91  | 89.99  | 88.11  | 84.47  | 77.64  |
| 98.7      | 0.3668               | 4.445                     | 97.91 | 95.86 | 93.86 | 91.90  | 89.98  | 88.10  | 84.46  | 77.62  |
| 98.9      | 0.3672               | 4.441                     | 97.91 | 95.86 | 93.86 | 91.89  | 89.97  | 88.09  | 84.44  | 77.60  |
| 99.1      | 0.3676               | 4.436                     | 97.91 | 95.86 | 93.85 | 91.88  | 89.96  | 88.08  | 84.43  | 77.58  |
| 99.3      | 0.3679               | 4.432                     | 97.90 | 95.85 | 93.84 | 91.88  | 89.95  | 88.07  | 84.41  | 77.56  |
| 99.5      | 0.3683               | 4.427                     | 97.90 | 95.85 | 93.84 | 91.87  | 89.94  | 88.05  | 84.40  | 77.54  |
| 99.7      | 0.3687               | 4.423                     | 97.90 | 95.84 | 93.83 | 91.86  | 89.93  | 88.04  | 84.38  | 77.52  |
| 99.9      | 0.3690               | 4.419                     | 97.90 | 95.84 | 93.83 | 91.85  | 89.92  | 88.03  | 84.37  | 77.50  |
| 100.1     | 0.3694               | 4.414                     | 97.90 | 95.84 | 93.82 | 91.85  | 89.91  | 88.02  | 84.36  | 77.48  |
| 100.3     | 0.3698               | 4.410                     | 97.89 | 95.83 | 93.81 | 91.84  | 89.90  | 88.01  | 84.34  | 77.46  |
| 100.5     | 0.3702               | 4.405                     | 97.89 | 95.83 | 93.81 | 91.83  | 89.89  | 88.00  | 84.33  | 77.44  |
| 100.7     | 0.3705               | 4.401                     | 97.89 | 95.82 | 93.80 | 91.82  | 89.88  | 87.99  | 84.31  | 77.42  |
| 100.9     | 0.3709               | 4.397                     | 97.89 | 95.82 | 93.80 | 91.81  | 89.87  | 87.98  | 84.30  | 77.40  |
| 101.1     | 0.3713               | 4.392                     | 97.89 | 95.82 | 93.79 | 91.81  | 89.87  | 87.97  | 84.28  | 77.38  |
| 101.3     | 0.3716               | 4.388                     | 97.88 | 95.81 | 93.78 | 91.80  | 89.86  | 87.95  | 84.27  | 77.36  |
| 101.5     | 0.3720               | 4.384                     | 97.88 | 95.81 | 93.78 | 91.79  | 89.85  | 87.94  | 84.26  | 77.34  |
| 101.7     | 0.3724               | 4.379                     | 97.88 | 95.80 | 93.77 | 91.78  | 89.84  | 87.93  | 84.24  | 77.32  |
| 101.9     | 0.3727               | 4.375                     | 97.88 | 95.80 | 93.77 | 91.78  | 89.83  | 87.92  | 84.23  | 77.30  |
| 102.1     | 0.3731               | 4.371                     | 97.88 | 95.80 | 93.76 | 91.77  | 89.82  | 87.91  | 84.21  | 77.28  |
| 102.3     | 0.3735               | 4.366                     | 97.87 | 95.79 | 93.75 | 91.76  | 89.81  | 87.90  | 84.20  | 77.26  |
| 102.5     | 0.3738               | 4.362                     | 97.87 | 95.79 | 93.75 | 91.75  | 89.80  | 87.89  | 84.19  | 77.24  |
| 102.7     | 0.3742               | 4.358                     | 97.87 | 95.78 | 93.74 | 91.74  | 89.79  | 87.88  | 84.17  | 77.22  |
| 102.9     | 0.3745               | 4.354                     | 97.87 | 95.78 | 93.74 | 91.74  | 89.78  | 87.87  | 84.16  | 77.20  |
| 103.1     | 0.3749               | 4.349                     | 97.86 | 95.78 | 93.73 | 91.73  | 89.77  | 87.85  | 84.14  | 77.18  |
| 103.3     | 0.3753               | 4.345                     | 97.86 | 95.77 | 93.72 | 91.72  | 89.76  | 87.84  | 84.13  | 77.16  |
| 103.5     | 0.3756               | 4.341                     | 97.86 | 95.77 | 93.72 | 91.71  | 89.75  | 87.83  | 84.11  | 77.15  |
| 103.7     | 0.3760               | 4.337                     | 97.86 | 95.76 | 93.71 | 91.71  | 89.74  | 87.82  | 84.10  | 77.13  |
| 103.9     | 0.3764               | 4.333                     | 97.86 | 95.76 | 93.71 | 91.70  | 89.73  | 87.81  | 84.09  | 77.11  |
| 104.1     | 0.3767               | 4.328                     | 97.85 | 95.76 | 93.70 | 91.69  | 89.72  | 87.80  | 84.07  | 77.09  |
| 104.3     | 0.3771               | 4.324                     | 97.85 | 95.75 | 93.70 | 91.68  | 89.71  | 87.79  | 84.06  | 77.07  |
| 104.5     | 0.3774               | 4.320                     | 97.85 | 95.75 | 93.69 | 91.68  | 89.71  | 87.78  | 84.04  | 77.05  |
| 104.7     | 0.3778               | 4.316                     | 97.85 | 95.74 | 93.68 | 91.67  | 89.70  | 87.77  | 84.03  | 77.03  |
| 104.9     | 0.3782               | 4.312                     | 97.85 | 95.74 | 93.68 | 91.66  | 89.69  | 87.76  | 84.02  | 77.01  |
| 105.1     | 0.3785               | 4.308                     | 97.84 | 95.74 | 93.67 | 91.65  | 89.68  | 87.74  | 84.00  | 76.99  |
| 105.3     | 0.3789               | 4.304                     | 97.84 | 95.73 | 93.67 | 91.65  | 89.67  | 87.73  | 83.99  | 76.97  |
| 105.5     | 0.3793               | 4.300                     | 97.84 | 95.73 | 93.66 | 91.64  | 89.66  | 87.72  | 83.97  | 76.95  |
| 105.7     | 0.3796               | 4.296                     | 97.84 | 95.72 | 93.65 | 91.63  | 89.65  | 87.71  | 83.96  | 76.93  |
| 105.9     | 0.3800               | 4.292                     | 97.84 | 95.72 | 93.65 | 91.62  | 89.64  | 87.70  | 83.95  | 76.91  |
| 106.1     | 0.3803               | 4.287                     | 97.83 | 95.72 | 93.64 | 91.62  | 89.63  | 87.69  | 83.93  | 76.90  |
| 106.3     | 0.3807               | 4.283                     | 97.83 | 95.71 | 93.64 | 91.61  | 89.62  | 87.68  | 83.92  | 76.88  |
| 106.5     | 0.3810               | 4.279                     | 97.83 | 95.71 | 93.63 | 91.60  | 89.61  | 87.67  | 83.91  | 76.86  |
| 106.7     | 0.3814               | 4.275                     | 97.83 | 95.70 | 93.63 | 91.59  | 89.60  | 87.66  | 83.89  | 76.84  |
| 106.9     | 0.3818               | 4.271                     | 97.83 | 95.70 | 93.62 | 91.58  | 89.59  | 87.65  | 83.88  | 76.82  |
| 107.1     | 0.3821               | 4.267                     | 97.82 | 95.70 | 93.61 | 91.58  | 89.59  | 87.64  | 83.86  | 76.80  |
| 107.3     | 0.3825               | 4.263                     | 97.82 | 95.69 | 93.61 | 91.57  | 89.58  | 87.63  | 83.85  | 76.78  |
| 107.5     | 0.3828               | 4.259                     | 97.82 | 95.69 | 93.60 | 91.56  | 89.57  | 87.61  | 83.84  | 76.76  |
| 107.7     | 0.3832               | 4.256                     | 97.82 | 95.68 | 93.60 | 91.55  | 89.56  | 87.60  | 83.82  | 76.74  |
| 107.9     | 0.3835               | 4.252                     | 97.82 | 95.68 | 93.59 | 91.55  | 89.55  | 87.59  | 83.81  | 76.73  |

Standard Conditions:

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

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