# APPENDIX B: dBm to Voltage conversion (50 Ω).

Note: Peak to Peak voltage = RMS voltage multiplied by 2.828

| dBm | mV rms |
|---|---|
| 0 | 224 |
| -1 | 200 |
| -2 | 178 |
| -3 | 159 |
| -4 | 141 |
| -5 | 126 |
| -6 | 112 |
| -7 | 100 |
| -8 | 89.1 |
| -9 | 79.5 |
| -10 | 70.9 |
| -11 | 63.3 |
| -12 | 56.3 |
| -13 | 50.1 |
| -14 | 44.7 |
| -15 | 39.9 |
| -16 | 35.5 |
| -17 | 31.7 |
| -18 | 28.2 |
| -19 | 25.2 |
| -20 | 22.4 |
| -21 | 20 |
| -22 | 17.8 |
| -23 | 15.9 |
| -24 | 14.1 |
| -25 | 12.6 |
| -26 | 11.2 |
| -27 | 10 |
| -28 | 8.9 |
| -29 | 7.95 |
| -30 | 7.09 |
| -31 | 6.33 |
| -32 | 5.63 |
| -33 | 5.01 |
| -34 | 4.47 |
| -35 | 3.99 |
| -36 | 3.55 |
| -37 | 3.17 |
| -38 | 2.82 |
| -39 | 2.52 |
| -40 | 2.24 |

| dBm | mV rms |
|---|---|
| -41 | 2 |
| -42 | 1.78 |
| -43 | 1.59 |
| -44 | 1.41 |
| -45 | 1.26 |
| -46 | 1.12 |
| -47 | 1 |

| dBm | µV rms | dBm | µV rms | dBm | µV rms |
|---|---|---|---|---|---|
| -48 | 891 | -81 | 20.0 | -111 | 0.633 |
| -49 | 795 | -82 | 17.8 | -112 | 0.563 |
| -50 | 709 | -83 | 15.9 | -113 | 0.501 |
| -51 | 633 | -84 | 14.1 | -114 | 0.447 |
| -52 | 563 | -85 | 12.6 | -115 | 0.399 |
| -53 | 501 | -86 | 11.2 | -116 | 0.355 |
| -54 | 447 | -87 | 10.0 | -117 | 0.317 |
| -55 | 399 | -88 | 8.91 | -118 | 0.282 |
| -56 | 355 | -89 | 7.95 | -119 | 0.252 |
| -57 | 317 | -90 | 7.09 | -120 | 0.224 |
| -58 | 282 | -91 | 6.33 | -121 | 0.200 |
| -59 | 252 | -92 | 5.63 | -122 | 0.178 |
| -60 | 224 | -93 | 5.01 | -123 | 0.159 |
| -61 | 200 | -94 | 4.47 | -124 | 0.141 |
| -62 | 178 | -95 | 3.99 | -125 | 0.126 |
| -63 | 159 | -96 | 3.55 | -126 | 0.112 |
| -64 | 141 | -97 | 3.17 | -127 | 0.100 |
| -65 | 126 | -98 | 2.82 | -128 | 0.0891 |
| -66 | 112 | -99 | 2.52 | -129 | 0.0795 |
| -67 | 100 | -100 | 2.24 | -130 | 0.0709 |
| -68 | 89.1 | -101 | 2.00 | -131 | 0.0633 |
| -69 | 79.5 | -102 | 1.78 | -132 | 0.0563 |
| -70 | 70.9 | -103 | 1.59 | -133 | 0.0501 |
| -71 | 63.3 | -104 | 1.41 | -134 | 0.0447 |
| -72 | 56.3 | -105 | 1.26 | -135 | 0.0399 |
| -73 | 50.1 | -106 | 1.12 | -136 | 0.0355 |
| -74 | 44.7 | -107 | 1.00 | -137 | 0.0317 |
| -75 | 39.9 | -108 | 0.891 | -138 | 0.0282 |
| -76 | 35.5 | -109 | 0.795 | -139 | 0.0252 |
| -77 | 31.7 | -110 | 0.709 | -140 | 0:0224 |
| -78 | 28.2 | | | | |
| -79 | 25.2 | | | | |
| -80 | 22.4 | | | | |