

Assessment Tables

Table 1a HF Bands

Estimated distances (in metres) from transmitting antennas necessary to meet [ACA-EMR] power density limits for general public exposure.

Frequency (MHz/Band)	Antenna Gain (dBi)	Power 10 watts	Power 25	Power 50 watts	Power 120 watts	Power 200 watts	Power 500 watts
2(160m)	0	0.2	0.3	0.4	0.7	0.8	1.3
2(160m)	3	0.3	0.4	0.6	0.9	1.2	1.9
4(80m)	0	0.3	0.5	0.7	1.1	1.4	2.2
4(80m)	3	0.4	0.7	1.0	1.6	2.0	3.2
7(40m)	0	0.5	0.8	1.1	1.7	2.2	3.5
7(40m)	3	0.7	1.1	1.5	2.4	3.0	4.7
7(40m)	6	1.0	1.5	2.2	3.3	4.3	7.0
10(30m)	0	0.6	1.0	1.4	2.2	2.8	4.4
10(30m)	3	0.9	1.4	2.0	3.1	4.0	6.3
10(30m)	6	1.3	2.0	2.8	4.4	5.6	8.9
14(20m)	0	0.6	1.0	1.4	2.2	2.8	4.4
14(20m)	3	0.9	1.4	2.0	3.1	4.0	6.3
14(20m)	6	1.3	2.0	2.8	4.4	5.6	8.9
14(20m)	9	1.8	2.8	4.0	6.2	8.0	12.6
18(17m)	0	0.6	1.0	1.4	2.2	2.8	4.4
18(17m)	3	0.9	1.4	2.0	3.1	4.0	6.3
18(17m)	6	1.3	2.0	2.8	4.4	5.6	8.9
18(17m)	9	1.8	2.8	4.0	6.2	8.0	12.6
21(15m)	0	0.6	1.0	1.4	2.2	2.8	4.4
21(15m)	3	0.9	1.4	2.0	3.1	4.0	6.3
21(15m)	6	1.3	2.0	2.8	4.4	5.6	8.9
21(15m)	9	1.8	2.8	4.0	6.2	8.0	12.6
25(12m)	0	0.6	1.0	1.4	2.2	2.8	4.4
25(12m)	3	0.9	1.4	2.0	3.1	4.0	6.3
25(12m)	6	1.3	2.0	2.8	4.4	5.6	8.9
25(12m)	9	1.8	2.8	4.0	6.2	8.0	12.6
30(10m)	0	0.6	1.0	1.4	2.2	2.8	4.4
30(10m)	3	0.9	1.4	2.0	3.1	4.0	6.3
30(10m)	6	1.3	2.0	2.8	4.4	5.6	8.9
30(10m)	9	1.8	2.8	4.0	6.2	8.0	12.6

NOTE: These separation distances apply only in the direction of the main beam/lobe of the antenna. The figures for 0 dBi gain can be applied outside the main lobe, which can be taken as being ± 45 degrees off boresight/antenna boom axis for the purpose of compliance. If the actual radiation pattern is known (manufacturer's specification or calculation) then this should be used instead. For Yagi antennas, the appropriate angle from table **Error! Reference source not found.** should be used to determine the boundary of the main lobe rather than 45° ; see also example 2 on page **Error! Bookmark not defined.**