

Hopkins
MPE Calculator

Model: BB003
MPE uses EIRP for calculation. EIRP is based on TX power added to the antenna gain in dBi.
dBi = dB gain compared to an isotropic radiator.
S = power density in mW/cm²

Output Power Average (Watts) **0.0140** dBi + 2.17 = dBi
 Tx Frequency (MHz) **915** Antenna Gain (dBi) **0**
 Antenna Gain (dBi) **-2.17** dBi to dBd **2.2**
 Cable Loss (dB) **0.0** (dBm) **11.46** Antenna minus cable (dBi) **0.00**
 Calculated ERP (mw) **8.494** EIRP = Po(dBm) + Gain (dB)
 Calculated EIRP (mw) **14.000** Radiated (EIRP) dBm **11.461**
 ERP = EIRP - 2.17 dB
 Radiated (ERP) dBm **9.291**

Occupational Limit
3.05000 mW/cm²
General Public Limit
0.61000 mW/cm²

Power density (S)
EIRP
----- = mW/cm²
4 π r²
r (cm) EIRP (mW)

FCC radio frequency radiation exposure limits per 1.1310		
Frequency (MHz)	Occupational Limit	Public Limit
300-1,500	3.05	1.83
1,500-10,000	N/A	N/A

FCC radio frequency radiation exposure limits per 1.1310		
Frequency (MHz)	Occupational Limit @ Tx Freq (mW/cm ²)	Public Limit @ Tx Freq (mW/cm ²)
300-1,500	3.05	0.61
1,500-10,000	5	1

EIRP milliwatts	Distance cm	Distance inches	S mW/cm ²	Distance Feet
14.000	350.00	137.80	0.00001	11.48293963
14.000	300.00	118.11	0.00001	9.842519685
14.000	275.00	108.27	0.00001	9.022309711
14.000	250.00	98.43	0.00002	8.202099738
14.000	200.00	78.74	0.00003	6.56167979
14.000	150.00	59.06	0.00005	4.921259843
14.000	100.00	39.37	0.00011	3.280839895
14.000	75.00	29.53	0.00020	2.460629921
14.000	60.00	23.62	0.00031	1.968503937
14.000	55.00	21.65	0.00037	1.804461942
14.000	50.00	19.69	0.00045	1.640419948
14.000	45.00	17.72	0.00055	1.476377953
14.000	40.00	15.75	0.00070	1.312335958
14.000	35.00	13.78	0.00091	1.148293963
14.000	30.00	11.81	0.00124	0.984251969
14.000	25.00	9.84	0.00178	0.820209974
14.000	20.00	7.87	0.00279	0.656167979
14.000	15.00	5.91	0.00495	0.492125984
14.000	10.00	3.94	0.01114	0.32808399
14.000	9.00	3.54	0.01375	0.295275591
14.000	8.00	3.15	0.01741	0.262467192
14.000	7.00	2.76	0.02274	0.229658793
14.000	6.00	2.36	0.03095	0.196850394
14.000	5.00	1.97	0.04456	0.164041995
14.000	4.00	1.57	0.06963	0.131233596
14.000	3.00	1.18	0.12379	0.098425197
14.000	2.00	0.79	0.27852	0.065616798
14.000	1.40	0.55	0.56841	0.045931759
14.000	0.90	0.35	1.37541	0.029527559
14.000	0.80	0.31	1.74076	0.026246719
14.000	0.60	0.24	3.09468	0.019685039

Frequency (MHz)	Occupational Limit minimum Distance (cm / inches)	Public Limit minimum distance (cm / inches)
300-1,500	0.6 / 0.25	1.4 / 0.6
1,500-10,000	N/A	N/A

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Hopkins Manufacturing Corp.
MODEL: BB003
Test #: 070822
Test to: FCC Parts 2 and 15.247, RSS-210

FCC ID: TJJ-BB003
IC: 6047A-BB003