

MPE Evaluation

FCC

Maximum exposure limits from CFR 47, FCC Part 1.1310:

Table 1—Limits for Maximum Permissible Exposure (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposure				
0.3-3.0	614	1.63	*100	6
3.0-30	1842/f	4.89/f	*900/f ²	6
30-300	61.4	0.163	1.0	6
300-1,500			f/300	6
1,500-100,000			5	6
(B) Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*100	30
1.34-30	824/f	2.19/f	*180/f ²	30
30-300	27.5	0.073	0.2	30
300-1,500			f/1500	30
1,500-100,000			1.0	30

Frequency	EIRP	EIRP	EIRP + 10% tolerance	FCC Maximum Exposure limit	Field Density at 20cm
MHz	dBm	dBm	mW	mW/cm ²	mW/cm ²
2402	7.80	6.03	6.63	1.00	0.0013
2440	10.899	12.30	13.53	1.00	0.0027
2480	8.76	7.52	8.27	1.00	0.0016

EIRP = value from test report
Field Density =(EIRP)/(4*Pi*r²)

Controlled exp.	
General pop.	1

1 = yes

r = minimum separation distance

Note: EIRP measurements are made when the antenna is not easily connected directly to a spectrum analyzer and the antenna gain is not published.

References

FCC OET Bulletin 65, Edition 97-01

FCC Supplement C to OET Bulletin 65, edition 01-01

Conclusion: The device is exempt from routine RF exposure evaluations or SAR testing