

Test Number: 470-13

Issue Date: 10/18/2013

7. Measurement Data (continued)

7.13. Public Exposure to Radio Frequency Energy Levels (15.247(i) (1.1307 (b)(1))

RSS-GEN 5.5, RSS 102

Requirement: (15.247(i))

Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess of the Commission's guidelines. Devices are subject to the radio frequency radiation exposure requirements specified in 47CFR 1.1307(b), FCC 47 CFR 2.1091 and 47 CFR 2.1093, as appropriate. All equipment shall be considered to operate in a "general population/uncontrolled" environment.

Procedure: The power density is calculated from the maximum peak output power of the device under test using the following formula:

$$PD = \frac{OP + AG}{(4 \times \pi \times d^2)}$$

- **PD** = Power Density (mW/cm²)
- **OP** = DUT Output Power (dBm)
- **AG** = DUT Antenna Gain (dBi)
- **d** = MPE Distance (cm)

Conclusion: The device under test is meets radio frequency radiation exposure requirements specified in 47CFR 1.1307(b), § 2.1091 and § 2.1093.

Channel Frequency	MPE Distance (cm)	DUT Output Power (dBm)	DUT Antenna Gain (dBi)	Power Density		Limit (mW/cm ²)	Result
				(mW/cm ²)	(W/m ²)		
				(1)	(2)	(3)	(4)
2405	2.5	-12.28	1.0	0.000000005	0.000000048	1	Compliant
2440	2.5	-13.92	1.0	0.000000003	0.000000033	1	Compliant
2480	2.5	-13.10	1.0	0.000000004	0.000000040	1	Compliant

1. Reference CFR 2.1093(b): For purposes of this section, a portable device is defined as a transmitting device designed to be used so that the radiating structure(s) of the device is/are within 20 centimeters of the body of the user.
2. Section 7.4 of this test report.
3. Data supplied by the client. Antenna specification data of worst case antenna used by the DUT.
4. Power density is calculated from the maximum peak output power of the device under test.
5. Reference CFR 1.1310, Table 1: Limits for Maximum Permissible Exposure (MPE), Section (B): Limits for General Population/Uncontrolled Exposure.