



6. Measurement Data (continued)

6.11. Public Exposure to Radio Frequency Energy Levels (15.247(i) (1.1307 (b)(1)) RSS-GEN 5.5, RSS 102

Channel Frequency	MPE Distance (cm)	DUT Output Power (dBm)	DUT Antenna Gain (dBi)	Power Density		Limit (mW/cm2)	Result
				(mW/cm2)	(W/m2)		
	(1)	(2)	(3)	(4)		(5)	
2401.060	20.0	0.04498	3.2	0.0004200	0.0041998	1	Compliant
2442.320	20.0	0.04677	3.2	0.0004202	0.0042015	1	Compliant
2482.252	20.0	0.04721	3.2	0.0004202	0.0042019	1	Compliant

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

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

Reference CFR 2.1093(b): For purposes of this section, a portable device is defined as a transmitting 1. 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 6.2 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 field strength measurement and antenna gain.
- 5. Reference CFR 1.1310, Table 1: Limits for Maximum Permissible Exposure (MPE), Section (B): Limits for General Population/Uncontrolled Exposure.

RSS-102 Section 2.5, 2.5.1 & 2.5.2 Requirements:

- 2.5 All transmitters are exempt from routine SAR and RF exposure evaluations provided that output power complies with the power levels of sections 2.5.1 or 2.5.2. If the equipment under test (EUT) meets the requirements of sections 2.5.1 or 2.5.2, applicants are only required to submit a properly signed declaration of compliance (see Annex C).
- 2.5.1 SAR evaluation is required if the separation distance between the user and the radiating element of the device is less than or equal to 20 cm, except when the device operates as follows:
- above 2.2 GHz and up to 3 GHz inclusively, and with output power (i.e. the higher of the conducted or radiated (e.i.r.p.) source-based, time-averaged output power) that is less than or equal to 20 mW for general public use and 100 mW for controlled use
- 2.5.2 RF exposure evaluation is required if the separation distance between the user and the device's radiating element is greater than 20 cm, except when the device operates as follows:
 - at or above 1.5 GHz and the maximum e.i.r.p. of the device is equal to or less than 5 W.