

7. Measurement Data (continued)

7.8. Public Exposure to Radio Frequency Energy Levels ((FCC KDB 447498 D01 v06, 1.1307 (b)(1), 2.1091(b)) RSS-GEN, RSS 102, Issue 5

Frequency	Measured Field Strength at 10M	Converted Field Strength to Power	Converted Field Strength to Power	ISED Exemption Limit (6)
(MHz)	(dBμV/m)	(dBm)	(mW)	(mW)
13.56	55.23	-29.54	0.0011	1000

Note: EIRP (dBm) = Field Strength – 84.77

Frequency (MHz)	MPE Distance (cm)	DUT Output Power (mW)	Power Density		FCC Limit (mW/cm ²)	ISED Limit (W/m ²)	Result
			(mW/cm ²)	(W/m ²)			
(1)	(2)	(3)	(4)		(5)	(6)	
13.56	20.0	0.0011	0.00000022	0.0000022	0.979	2	

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

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

1. Reference CFR 2.1091(b): For purposes of this section, a mobile device is defined as a transmitting device designed to be used so that the radiating structure(s) of the device is at least 20 centimeters of distance from the body of the user or nearby persons.
2. Section 7.2 of this test report.
3. Measured power is radiated, therefore Antenna gain is 0.0 dBi.
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. Limit from 1.34 to 30 MHz is $180 / f^2$ where f is in MHz.
6. Reference RSS-102, Issue 5 Section 2.5.2 Exemption Limits for Routine Evaluation - RF Exposure Evaluation, is below 20 MHz and the source-based, time averaged maximum e.i.r.p. of the device is equal to or less than 1 Watt. Also, Table 4: RF Field Strength Limits for Devices Used by the General Public (Uncontrolled Environment) has a limit of 2 W/m² from 10 to 20 MHz.