7. Measurement Data (continued)

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

RFID Door Antenna 1

Frequency (MHz)	MPE Distance (cm)	DUT Output Power (dBm)	DUT Antenna Gain (dBi)	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)	
902.75	20.0	21.51	1.80	0.0426315	0.4263145	0.60	1.37	Compliant
915.25	20.0	21.77	1.30	0.0403395	0.4033947	0.61	1.38	Compliant
927.25	20.0	21.57	-6.10	0.0070102	0.0701020	0.62	1.40	Compliant

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

- **PD = Power Density (mW/cm^2)**
- **OP = DUT Output Power (dBm)**
- **AG = DUT Antenna Gain (dBi)**
- **d = MPE Distance (cm)**

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 calculated conducted power vs. radiated field strength. 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. Limit from 300 to 1500 MHz is F/1500 where F is in MHz.
6. Reference RSS-102, Issue 5 Section 2.5.2 Exemption Limits for Routine Evaluation - RF Exposure Evaluation, at or above 300 MHz and below 6 GHz and the source-based, time averaged maximum e.i.r.p. of the device is equal to or less than $1.31 \times 10^{-2} * f^{0.6834}$ W where f is in MHz.