

7. Measurement Data (continued)

7.12. Public Exposure to Radio Frequency Energy Levels (15.247(i) (1.1307 (b)(1)) RSS-GEN, ISSUE 4 5.5, RSS-102)

7.12.1. 15.247(i) (1.1307 (b)(1)) Requirements

Requirement: Portable devices are subject to radio frequency radiation exposure requirements.

For a 1-g head or body SAR, the test exclusion result must be ≤ 3.0 .

For a 10-g extremity SAR, the test exclusion result must be ≤ 7.5 .

Test Notes: The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by the following formula:

$$\text{SAR Test Exclusion} = \frac{P_{\text{MAX}}}{d_{\text{MIN}}} \times \sqrt{f_{(\text{GHz})}} \quad (1)$$

P_{MAX} mW Maximum power of channel, including tune-up tolerance

d_{MIN} mm Minimum test separation distance, mm (≤ 50 mm)

$f_{(\text{GHz})}$ GHz $f_{(\text{GHz})}$ is the RF channel transmit frequency in GHz (>100 MHz and <6 GHz)

(1) FCC OET 447498 - Mobile and Portable Devices RF Exposure Procedures and Equipment Authorization Policies.

Results: Passed - The device under test meets the exclusion requirement detailed in FCC OET 447498.

Channel:		37	17	39	
Input¹:	P_{MAX}	0.740	1.436	3.856	mW
	d_{MIN}^2	5.00	5.00	5.00	mm
	$f_{(\text{GHz})}$	2.400	2.442	2.480	GHz
Test Exclusion:		0.23	0.45	1.21	
Limit Exemption:		7.5	7.5	7.5	
Measurement Result:		Compliant	Compliant	Compliant	

¹ Taken from column 3 of the table in Section 7.3 of this test report.

² When the minimum test separation distance is < 5 mm, a distance of 5 mm according to KDB 447498, 4.1 f) is applied to determine SAR test exclusion.

Note: BLE, BT, and WiFi Radios do not transmit simultaneously.

7.12.2. IC RSS-102 Issue 5 SAR Evaluation (Reference RSS-102, Table 1)

Frequency	Separation Distance	Maximum Power	RSS-102 Limit	Result
MHz	mm	mW	mW	
2402	≤ 20	0.74	10.65	Compliant
2440	≤ 20	1.44	10.11	Compliant
2480	≤ 20	3.86	9.86	Compliant