



Test Number: 431-19 Issue Date: 12/10/2019

## 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  $\leq$  3.0. For a 10-g extremity SAR, the test exclusion result must be  $\leq$  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:

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

P<sub>MAX</sub> mW Maximum power of channel, including tune-up tolerance

 $d_{MIN}$  mm Minimum test separation distance, mm ( $\leq$  50 mm)

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

 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:	$P_{MAX}$	0.584	1.289	2.056	mW
	$d_{\text{MIN}}^2$	5.00	5.00	5.00	mm
	$f_{(GHz)}$	2.402	2.442	2.480	GHz
<b>Test Exclusion:</b>		0.18	0.40	0.65	•
Limit Exemption:		7.5	7.5	7.5	
Measurement Result:		Compliant	Compliant	Compliant	

<sup>&</sup>lt;sup>1</sup> Taken from column 3 of the table in Section 7.3 of this test report.

**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	0.58	10.65	Compliant	
2440	≤ 20	1.29	10.11	Compliant	
2480	≤ 20	2.06	9.86	Compliant	

<sup>&</sup>lt;sup>2</sup> 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.