



Test Number: 213-19 Issue Date: 5/21/2019

## 7. Measurement Data (continued)

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

7.11.1. 15.247(i) (1.1307 (b)(1) Requirements

 $P_{MAX}$ 

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)

mW Maximum power of channel, including tune-up tolerance

d<sub>MIN</sub> mm Minimum test separation distance, mm (≤ 50 mm)

 $f_{(GHz)} \hspace{0.5cm} \text{GHz} \hspace{0.5cm} f_{(GHz)} \text{ is the RF channel transmit frequency in GHz (>100 MHz and <6 GHz)}$ 

(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    | 38    | 39    |     |
|----------------------|-------------|-------|-------|-------|-----|
| Input <sup>1</sup> : | $P_{MAX}$   | 0.265 | 0.312 | 0.415 | mW  |
|                      | $d_{MIN}^2$ | 5.00  | 5.00  | 5.00  | mm  |
|                      | $f_{(GHz)}$ | 2.402 | 2.626 | 2.480 | GHz |
| Test Exclusion:      |             | 80.0  | 0.10  | 0.13  | _   |
| Limit Exemption:     |             | 3.0   | 3.0   | 3.0   |     |

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

Measurement Result: Compliant Compliant Compliant

**Note:** BLE and UWB Radios do not transmit simultaneously.

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

| Frequency | Separation<br>Distance | Maximum<br>Power | RSS-102<br>Limit | Result    |  |
|-----------|------------------------|------------------|------------------|-----------|--|
| MHz       | mm                     | mW               | mW               |           |  |
| 2402      | ≤5                     | 0.26             | 10.65            | Compliant |  |
| 2626      | ≤5                     | 0.31             | 7.60             | Compliant |  |
| 2480      | ≤5                     | 0.41             | 9.86             | Compliant |  |

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.