

## 8. Measurement Data – ANT+ Mode (continued)

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

#### 8.10.1. 15.247(i) (1.1307 (b)(1)) Requirements

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

For a 1-g SAR, the test exclusion result must be  $\leq 3.0$ .

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

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

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

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

Conclusion: The device under test meets the exclusion requirement detailed in FCC OET 447498.

|                  |                         |       |       |       |
|------------------|-------------------------|-------|-------|-------|
| Input:           | $P_{\text{MAX}}^1$ (mW) | 2.42  | 2.41  | 2.35  |
|                  | $d_{\text{MIN}}$ (mm)   | 5.00  | 5.00  | 5.00  |
|                  | $f_{(\text{GHz})}$      | 2.402 | 2.441 | 2.480 |
| Test Exclusion:  |                         | 0.75  | 0.75  | 0.74  |
| Limit Exemption: |                         | 3.00  | 3.00  | 3.00  |

<sup>1</sup> Taken from column 5 of the table in Section 7.4 of this test report.

#### 8.10.2. RSS-102 Issue 5 Requirements

Requirement: SAR evaluation is required if the separation distance between the user and/or bystander and the antenna and/or radiating element of the device is less than or equal to 20 cm, except when the device operates at or below the applicable output power level (adjusted for tune-up tolerance) for the specified separation distance defined in Table 1. Portable devices are subject to radio frequency radiation exposure requirements.

Test Notes: The limit was taken from Table 1 of RSS-102 Issue 5.

| Frequency<br>(MHz) | Separation<br>Distance<br>(mm) | Maximum<br>Power<br>(mW) | RSS-102<br>Limit<br>(mW) | Result    |
|--------------------|--------------------------------|--------------------------|--------------------------|-----------|
| 2402.00            | $\leq 5$                       | 2.42                     | 4.26                     | Compliant |
| 2441.00            | $\leq 5$                       | 2.41                     | 4.05                     | Compliant |
| 2480.00            | $\leq 5$                       | 2.35                     | 3.94                     | Compliant |