# 6. Measurement Data (continued)

## 6.7. Public Exposure to Radio Frequency Energy Levels (1.1307 (b)(1))

### 6.7.1. SAR Test Exclusion Calculation

Requirement: Portable devices as defined in § 2.1093 of this chapter operating under Part 15 are subject to radio frequency radiation exposure requirements as specified in §§ 1.1307(b) and 2.1093 of this chapter.

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

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:

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

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

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

$f_{(GHz)}$  GHz  $f_{(GHz)}$ 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.

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

|  |  | Channel 2 | 434 MHz |  |
|---|---|---|---|---|
| **Input:** | $P_{MAX}$ | 0.2224 | 0.019 | mW |
|  | $d_{MIN}$ | 5.00 | 5.000 | mm |
|  | $f_{(GHz)}$ | 3.993 | 0.434 | GHz |
| **Test Exclusion:** |  | **0.089** | **0.066** |  |
| **Limit Exemption:** |  | **3.000** | **3.000** |  |

[1] Taken from the peak data in Section 6.5 of this test report (converted to mW).

**Note:** The EUT does not support simultaneous transmission in order to conserve battery life.

The device does not exceed the test limit exemption and therefore a routine SAR Evaluation is not required