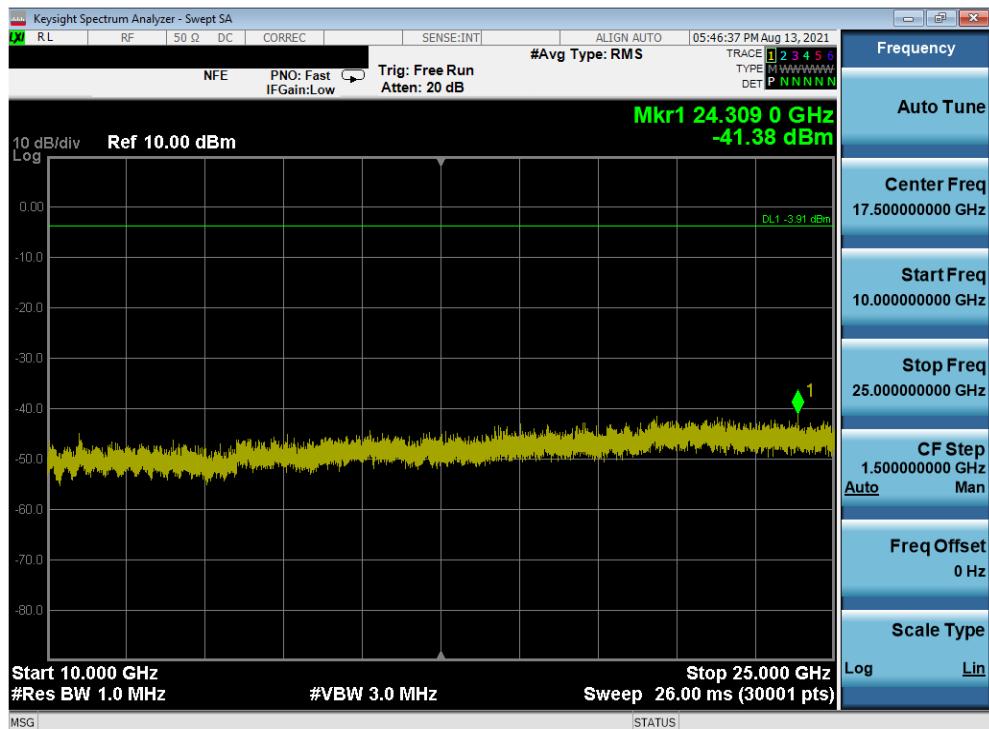
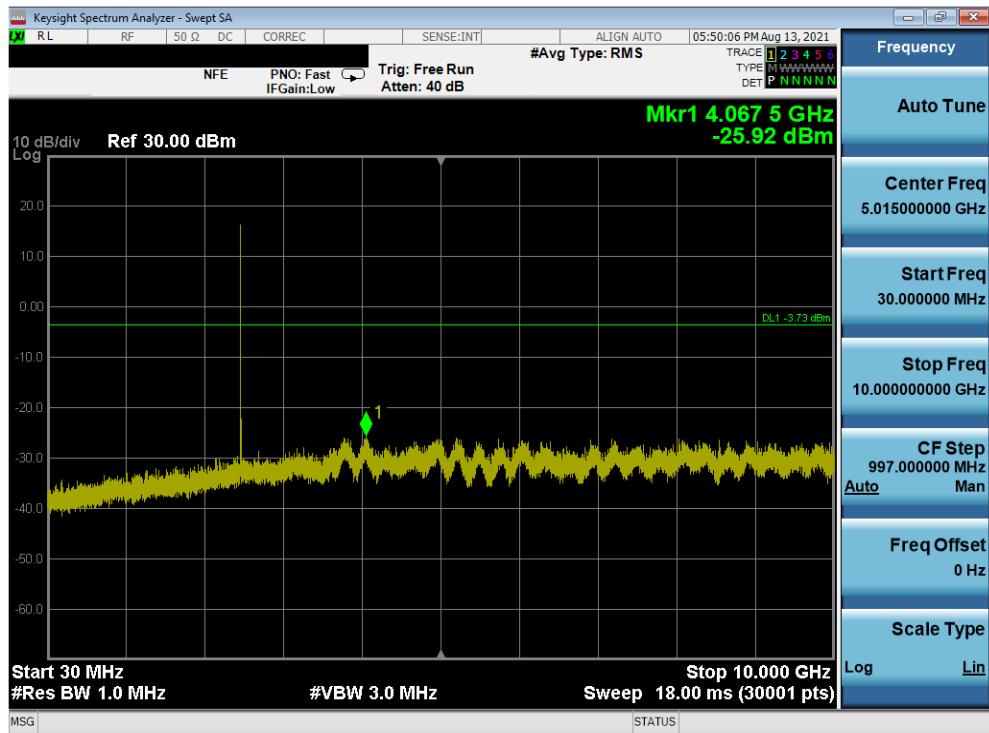


Plot 7-71. Conducted Spurious Plot Antenna 3a (Bluetooth (HDR4), 4 Mbps, ePA – Ch. 38)

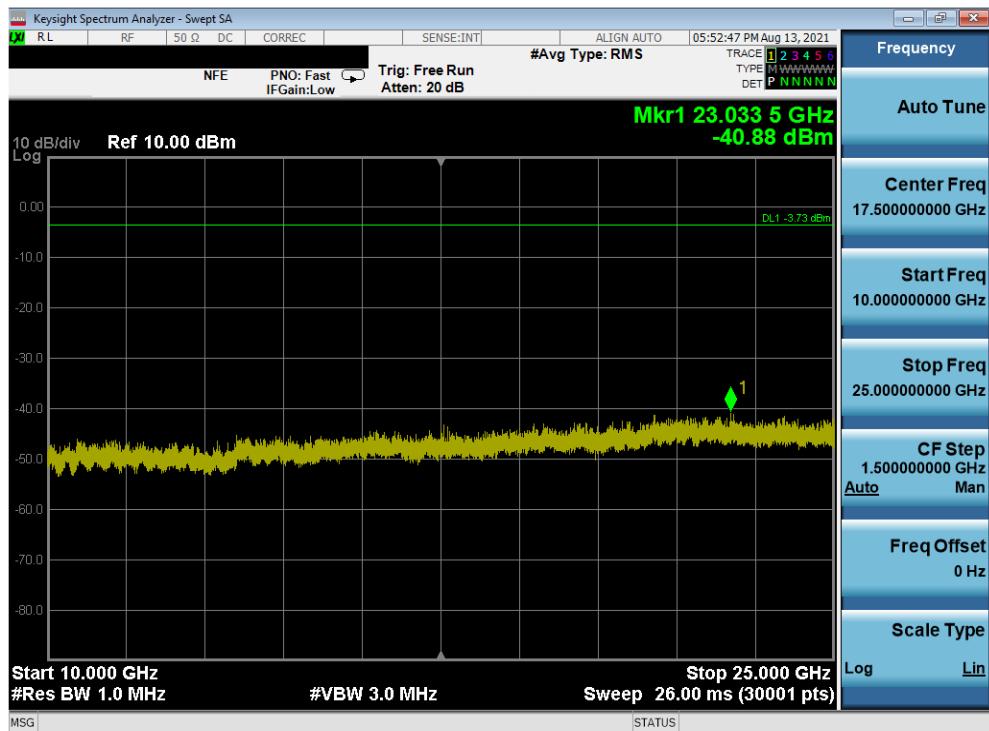


Plot 7-72. Conducted Spurious Plot Antenna 3a (Bluetooth (HDR4), 4 Mbps, ePA – Ch. 38)

|   |   |                            |                                       |                                 |
|---|---|----------------------------|---------------------------------------|---------------------------------|
| FCC ID: BCGA2568<br>IC: 579C-A2568      | <b>PCTEST®</b><br>Proud to be part of  |                            | MEASUREMENT REPORT<br>(CERTIFICATION) | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1C2106080049-10.BCG | Test Dates:<br>6/2/2021 - 8/19/2021   | EUT Type:<br>Tablet Device | Page 66 of 104                        |                                 |



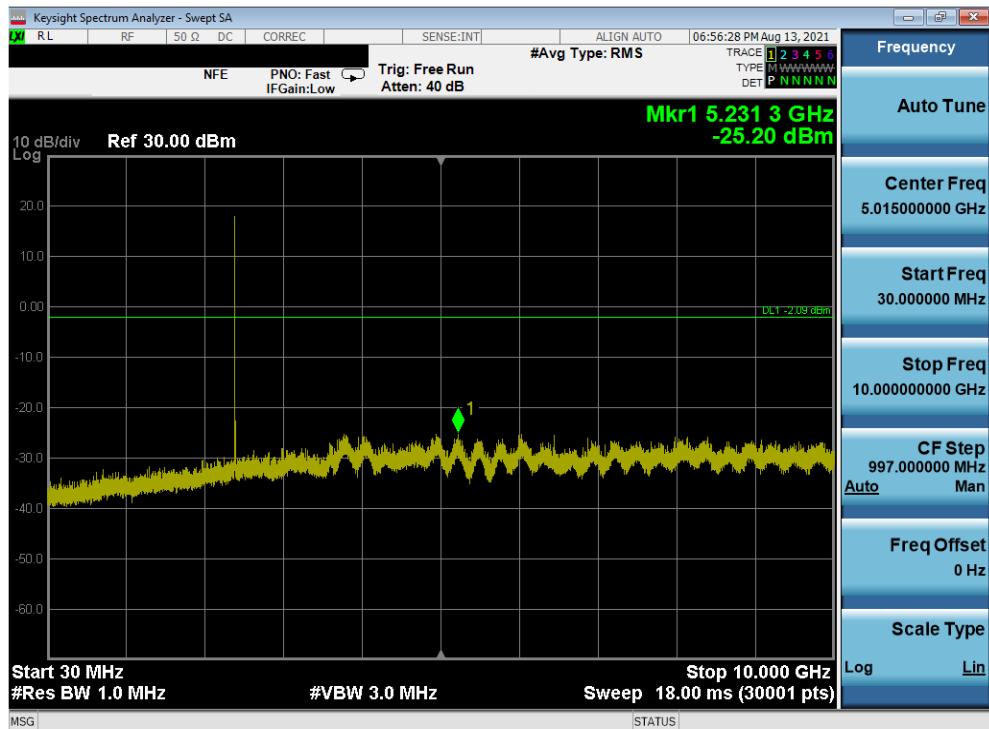
Plot 7-73. Conducted Spurious Plot Antenna 3a (Bluetooth (HDR4), 4 Mbps, ePA – Ch. 73)



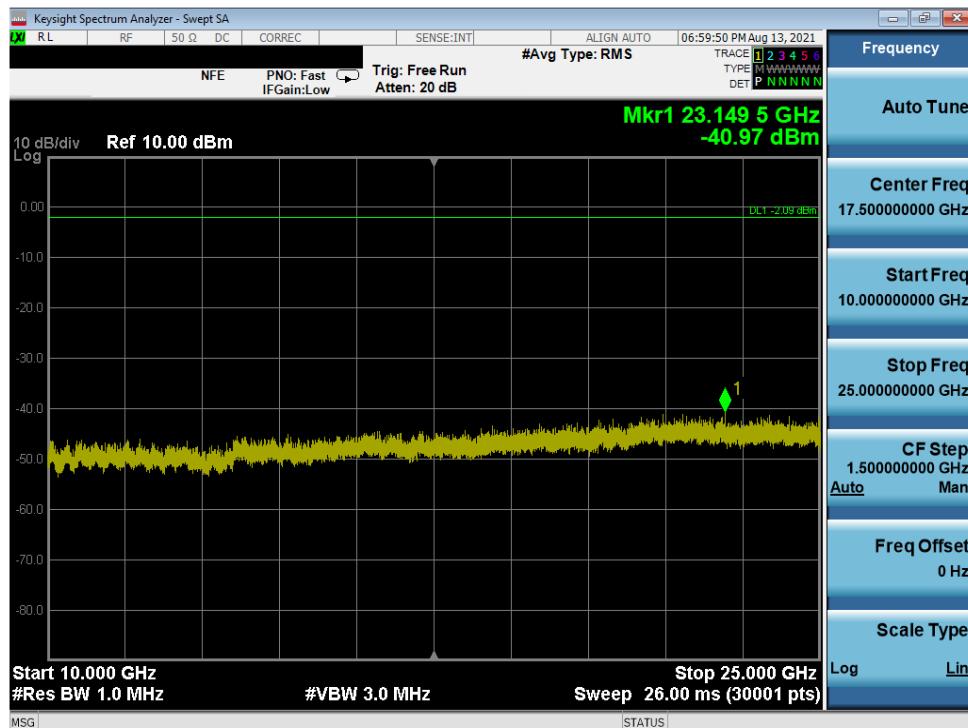
Plot 7-74. Conducted Spurious Plot Antenna 3a (Bluetooth (HDR4), 4 Mbps, ePA – Ch. 73)

|   |   |                            |                                       |                                 |
|---|---|----------------------------|---------------------------------------|---------------------------------|
| FCC ID: BCGA2568<br>IC: 579C-A2568      | <b>PCTEST®</b><br>Proud to be part of  |                            | MEASUREMENT REPORT<br>(CERTIFICATION) | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1C2106080049-10.BCG | Test Dates:<br>6/2/2021 - 8/19/2021   | EUT Type:<br>Tablet Device | Page 67 of 104                        |                                 |

## Antenna 1a

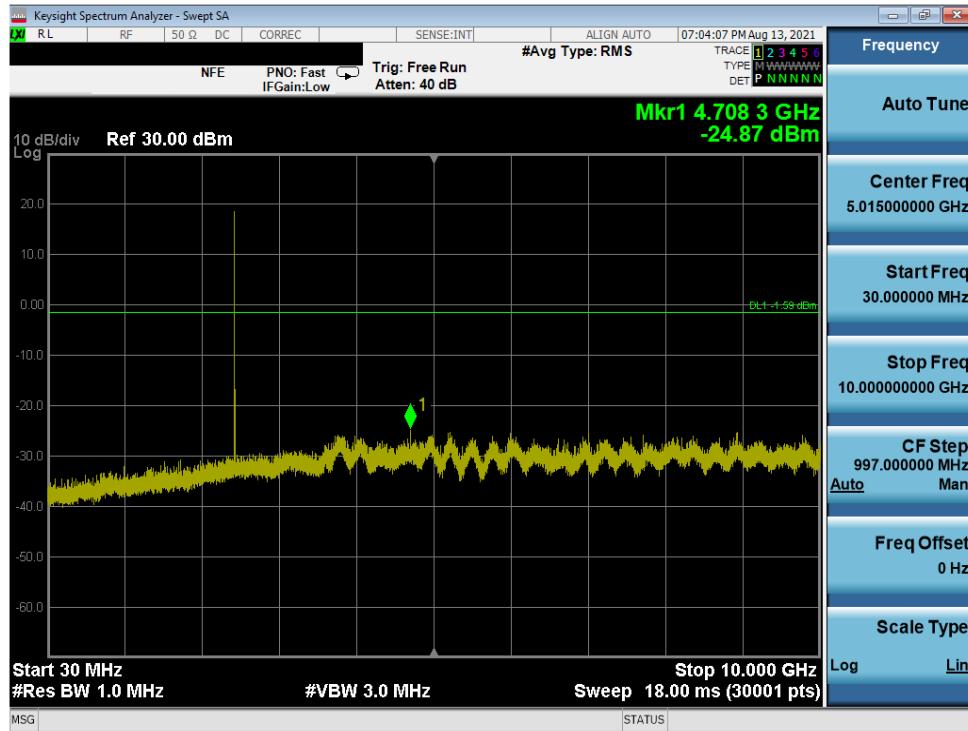


Plot 7-75. Conducted Spurious Plot Antenna 1a (Bluetooth (HDR4), 4 Mbps, ePA – Ch. 1)

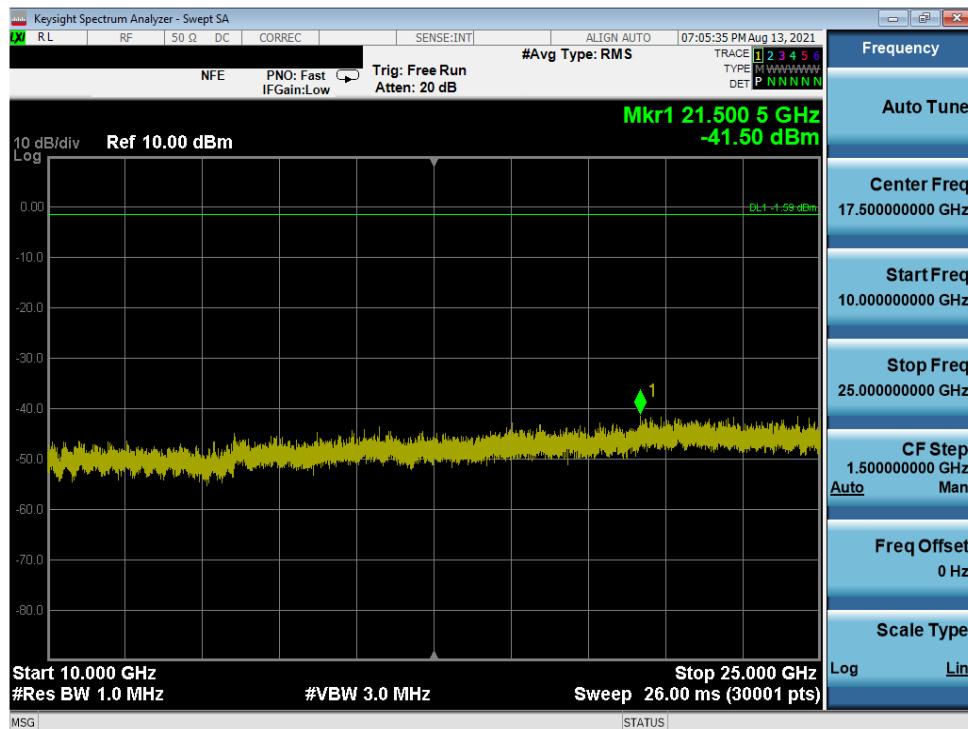


Plot 7-76. Conducted Spurious Plot Antenna 1a (Bluetooth (HDR4), 4 Mbps, ePA – Ch. 1)

|   |   |                                       |                                 |
|---|---|---------------------------------------|---------------------------------|
| FCC ID: BCGA2568<br>IC: 579C-A2568      | <b>PCTEST®</b><br>Proud to be part of  | MEASUREMENT REPORT<br>(CERTIFICATION) | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1C2106080049-10.BCG | Test Dates:<br>6/2/2021 - 8/19/2021   | EUT Type:<br>Tablet Device            | Page 68 of 104                  |

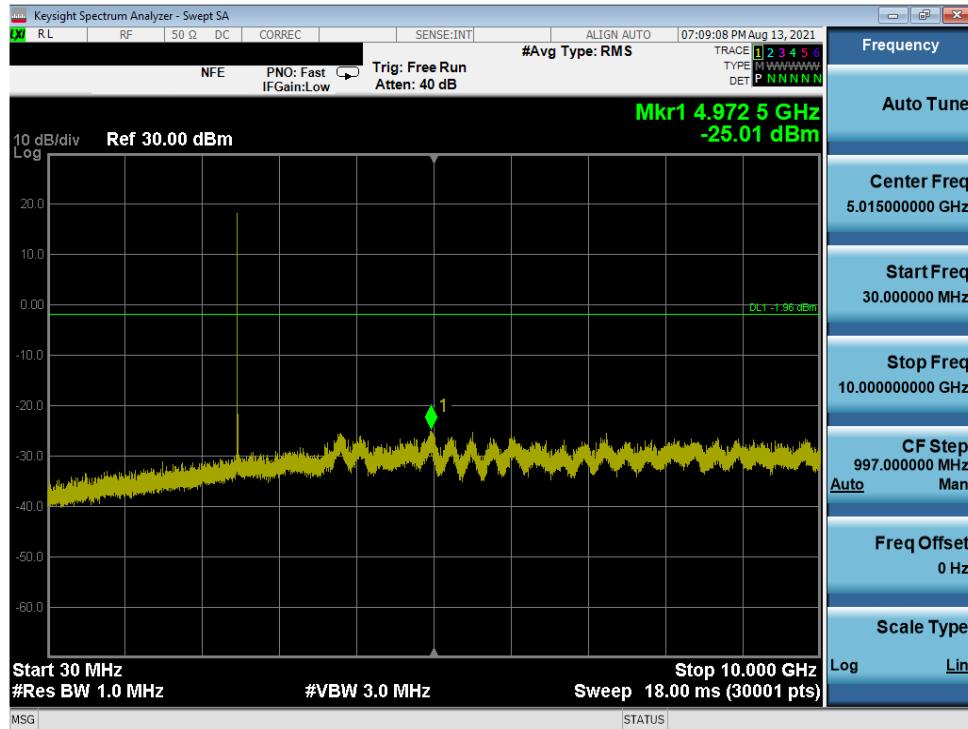


Plot 7-77. Conducted Spurious Plot Antenna 1a (Bluetooth (HDR4), 4 Mbps, ePA – Ch. 38)

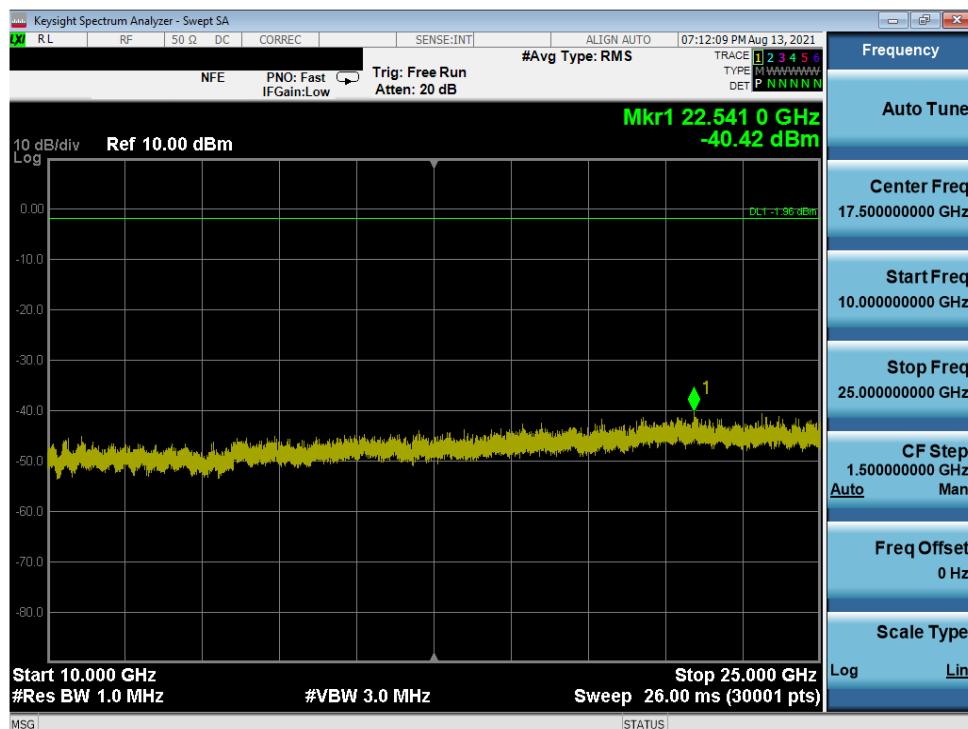


Plot 7-78. Conducted Spurious Plot Antenna 1a (Bluetooth (HDR4), 4 Mbps, ePA – Ch. 38)

|   |  |                                       |                                 |
|---|--|---------------------------------------|---------------------------------|
| FCC ID: BCGA2568<br>IC: 579C-A2568      | <b>PCTEST</b><br>Proud to be part of  element | MEASUREMENT REPORT<br>(CERTIFICATION) | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1C2106080049-10.BCG | Test Dates:<br>6/2/2021 - 8/19/2021  | EUT Type:<br>Tablet Device            | Page 69 of 104                  |



Plot 7-79. Conducted Spurious Plot Antenna 1a (Bluetooth (HDR4), 4 Mbps, ePA – Ch. 73)



Plot 7-80. Conducted Spurious Plot Antenna 1a (Bluetooth (HDR4), 4 Mbps, ePA – Ch. 73)

|   |  |                                       |                                 |
|---|--|---------------------------------------|---------------------------------|
| FCC ID: BCGA2568<br>IC: 579C-A2568      | <b>PCTEST</b><br>Proud to be part of  element | MEASUREMENT REPORT<br>(CERTIFICATION) | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1C2106080049-10.BCG | Test Dates:<br>6/2/2021 - 8/19/2021  | EUT Type:<br>Tablet Device            | Page 70 of 104                  |

## 7.7 Radiated Spurious Emissions – Above 1GHz

§15.205 §15.209 §15.247(d); RSS-Gen [8.9]

### Test Overview and Limit

All out of band radiated spurious emissions are measured with a spectrum analyzer connected to a receive antenna while the EUT is operating at maximum power and at the appropriate frequencies. Only the radiated emissions of the configuration that produced the worst case emissions are reported in this section.

***All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47 CFR and Table 7 of RSS-Gen (8.10) must not exceed the limits shown in Table 7-13 per Section 15.209 and RSS-Gen (8.9).***

| Frequency       | Field Strength<br>[ $\mu$ V/m] | Measured Distance<br>[Meters] |
|-----------------|--------------------------------|-------------------------------|
| Above 960.0 MHz | 500                            | 3                             |

Table 7-13. Radiated Limits

### Test Procedures Used

ANSI C63.10-2013 – Section 6.6.4.3

KDB 558074 D01 v05r02 – Section 8.6, 8.7

### Test Settings

#### Average Field Strength Measurements

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = power average (RMS)
5. Number of measurement points = 1001 (Number of points must be  $\geq 2 \times$  span/RBW)
6. Sweep time = auto
7. Trace (RMS) averaging was performed over at least 100 traces

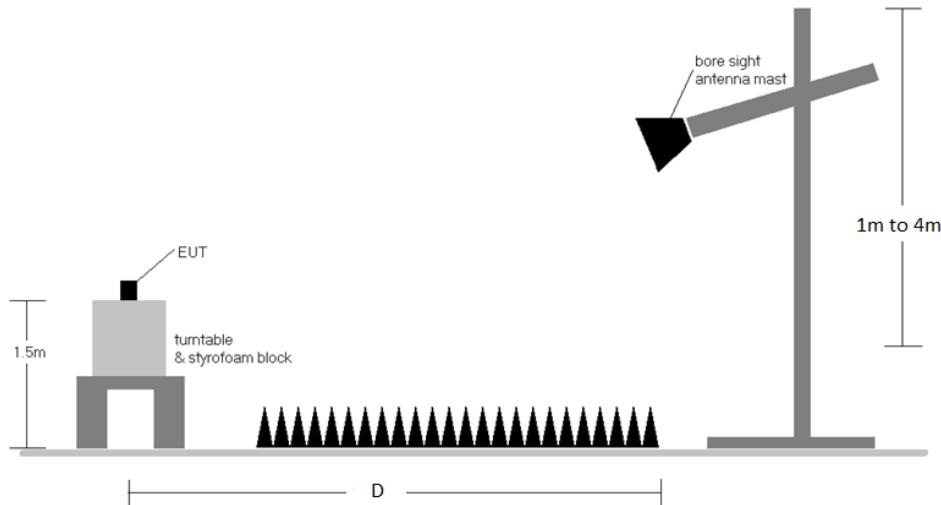
#### Peak Field Strength Measurements

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

|   |   |                                       |                                 |
|---|---|---------------------------------------|---------------------------------|
| FCC ID: BCGA2568<br>IC: 579C-A2568      | <br>PCTEST <sup>®</sup><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1C2106080049-10.BCG | Test Dates:<br>6/2/2021 - 8/19/2021   | EUT Type:<br>Tablet Device            | Page 71 of 104                  |

## Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.



**Figure 7-6. Radiated Test Setup >1GHz**

## Test Notes

1. The optional test procedures for antenna port conducted measurements of unwanted emissions per the guidance of KDB 558074 D01 v05r02 were not used to evaluate this device for compliance to radiated limits. All radiated spurious emissions levels were measured in a radiated test setup.
2. All emissions lying in restricted bands specified in §15.205 and Section 8.10 of RSS-Gen are below the limit shown in Table 7-13.
3. The antenna is manipulated through typical positions, polarity and length during the tests. The EUT is manipulated through three orthogonal planes.
4. This unit was tested with its standard battery.
5. The spectrum is measured from 9kHz to the 10th harmonic of the fundamental frequency of the transmitter using CISPR quasi peak detector below 1GHz. Above 1 GHz, average and peak measurements were taken using linearly polarized horn antennas.
6. D is the measurement test distance and emissions 1-18GHz were measured at a 3 meters test distance while emissions above 18GHz were measured at a 1 meter test distance with the application of a distance correction factor.
7. The "-" shown in the following RSE tables are used to denote a noise floor measurement.
8. All supported modulation, antenna (including TxBF mode) and power schemes have been tested on the unit and only worst case configuration is reported.

|   |  |                            |                                       |                                 |
|---|--|----------------------------|---------------------------------------|---------------------------------|
| FCC ID: BCGA2568<br>IC: 579C-A2568      |  <b>PCTEST</b><br>Proud to be part of element |                            | MEASUREMENT REPORT<br>(CERTIFICATION) | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1C2106080049-10.BCG | Test Dates:<br>6/2/2021 - 8/19/2021  | EUT Type:<br>Tablet Device | Page 72 of 104                        |                                 |

## Sample Calculations

### Determining Spurious Emissions Levels

- Field Strength Level [ $\text{dB}_{\mu\text{V/m}}$ ] = Analyzer Level [ $\text{dBm}$ ] + 107 + AFCL [ $\text{dB/m}$ ]
- AFCL [ $\text{dB/m}$ ] = Antenna Factor [ $\text{dB/m}$ ] + Cable Loss [ $\text{dB}$ ] – Preamplifier Gain [ $\text{dB}$ ]
- Margin [ $\text{dB}$ ] = Field Strength Level [ $\text{dB}_{\mu\text{V/m}}$ ] – Limit [ $\text{dB}_{\mu\text{V/m}}$ ]

### Radiated Band Edge Measurement Offset

- The amplitude offset shown in the radiated restricted band edge plots in Section 7.7.1 was calculated using the formula:

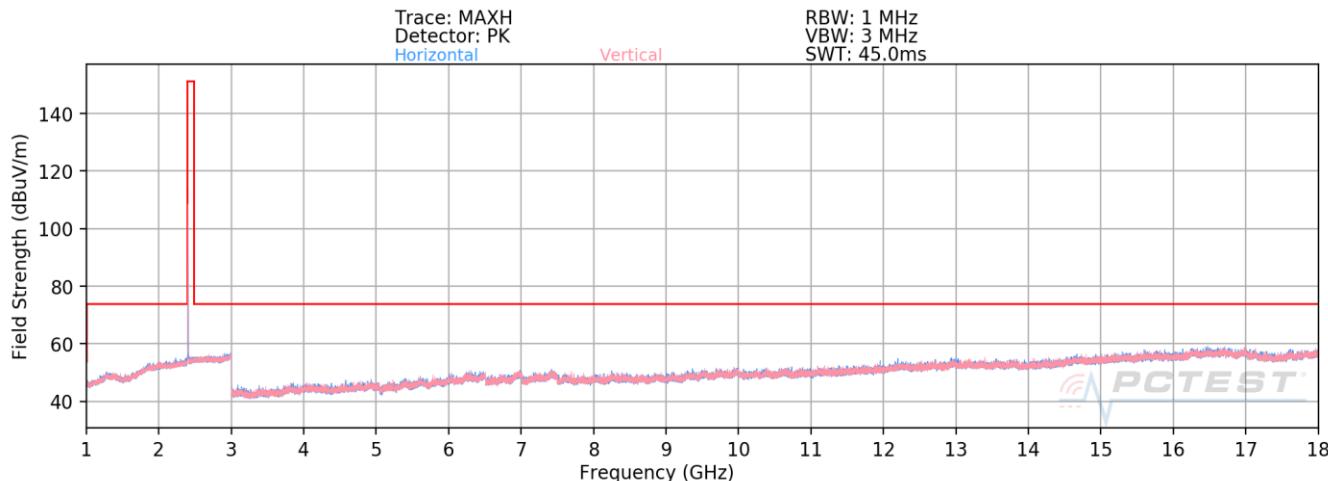
$$\text{Offset (dB)} = (\text{Antenna Factor} + \text{Cable Loss} + \text{Attenuator}) - \text{Preamplifier Gain}$$

|   |  |                                       |                                 |
|---|--|---------------------------------------|---------------------------------|
| FCC ID: BCGA2568<br>IC: 579C-A2568      | <br>Proud to be part of  | MEASUREMENT REPORT<br>(CERTIFICATION) | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1C2106080049-10.BCG | Test Dates:<br>6/2/2021 - 8/19/2021  | EUT Type:<br>Tablet Device            | Page 73 of 104                  |

## Radiated Spurious Emission Measurements (1 – 18GHz)

§15.205 §15.209 §15.247(d); RSS-Gen [8.9]

### Antenna 3a



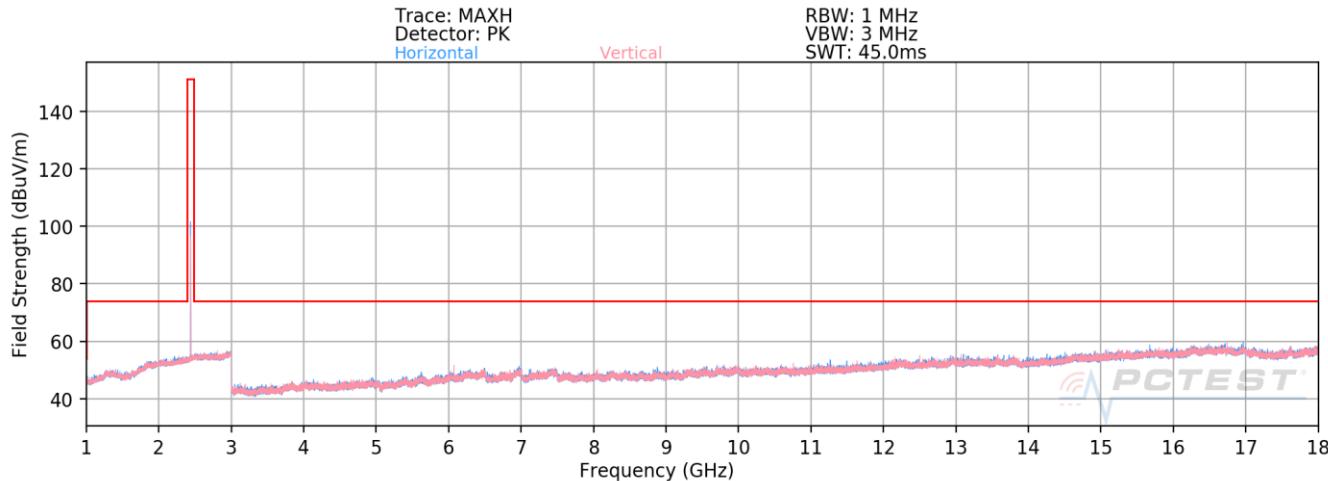
Plot 7-81. Radiated Spurious Emissions Above 1GHz Antenna 3a (4Mbps, HDR4, ePA – Ch. 1)

Bluetooth Mode: HDR4  
 Power Scheme ePA  
 Distance of Measurements: 3 Meters  
 Operating Frequency: 2404MHz  
 Channel: 1

| Frequency [MHz] | Detector | Ant. Pol. [H/V] | Antenna Height [cm] | Turntable Azimuth [degree] | Analyzer Level [dBm] | AFCL [dB/m] | Field Strength [dB $\mu$ V/m] | Limit [dB $\mu$ V/m] | Margin [dB] |
|-----------------|----------|-----------------|---------------------|----------------------------|----------------------|-------------|-------------------------------|----------------------|-------------|
| 4808.00         | Avg      | H               | -                   | -                          | -81.46               | 8.28        | 33.82                         | 53.98                | -20.16      |
| 4808.00         | Peak     | H               | -                   | -                          | -70.09               | 8.28        | 45.19                         | 73.98                | -28.79      |
| 12020.00        | Avg      | H               | -                   | -                          | -84.45               | 17.26       | 39.81                         | 53.98                | -14.17      |
| 12020.00        | Peak     | H               | -                   | -                          | -72.22               | 17.26       | 52.04                         | 73.98                | -21.94      |

Table 7-14. Radiated Measurements Antenna 3a

|   |   |                            |                |                                 |
|---|---|----------------------------|----------------|---------------------------------|
| FCC ID: BCGA2568<br>IC: 579C-A2568      |  <b>MEASUREMENT REPORT (CERTIFICATION)</b> |                            |                | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1C2106080049-10.BCG | Test Dates:<br>6/2/2021 - 8/19/2021   | EUT Type:<br>Tablet Device | Page 74 of 104 |                                 |



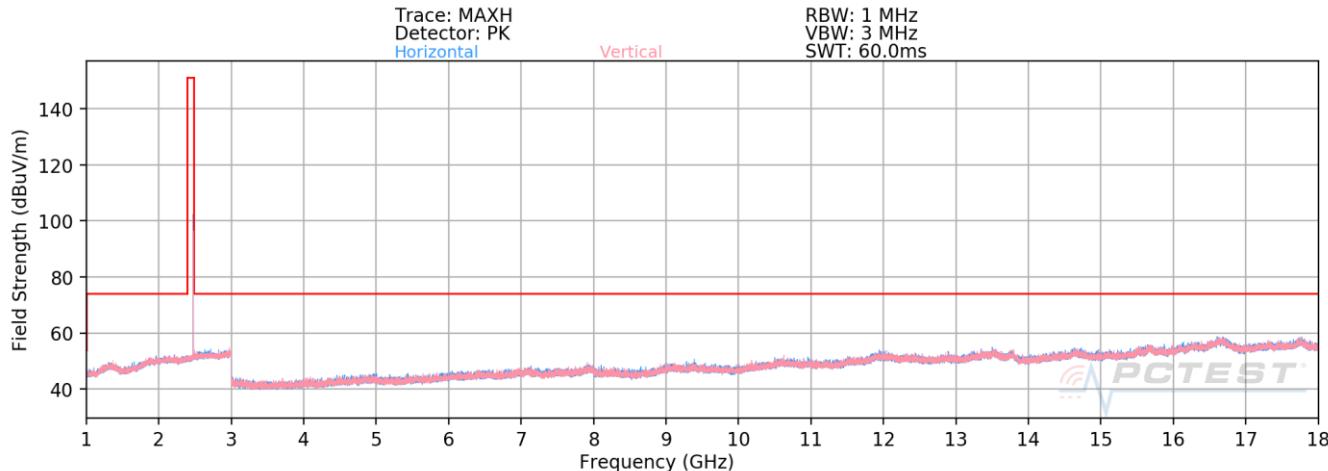
**Plot 7-82. Radiated Spurious Emissions Above 1GHz Antenna 3a (4Mbps, HDR4, ePA – Ch. 38)**

|                           |                 |
|---------------------------|-----------------|
| Bluetooth Mode:           | <u>HDR4</u>     |
| Power Scheme              | <u>ePA</u>      |
| Distance of Measurements: | <u>3 Meters</u> |
| Operating Frequency:      | <u>2441MHz</u>  |
| Channel:                  | <u>38</u>       |

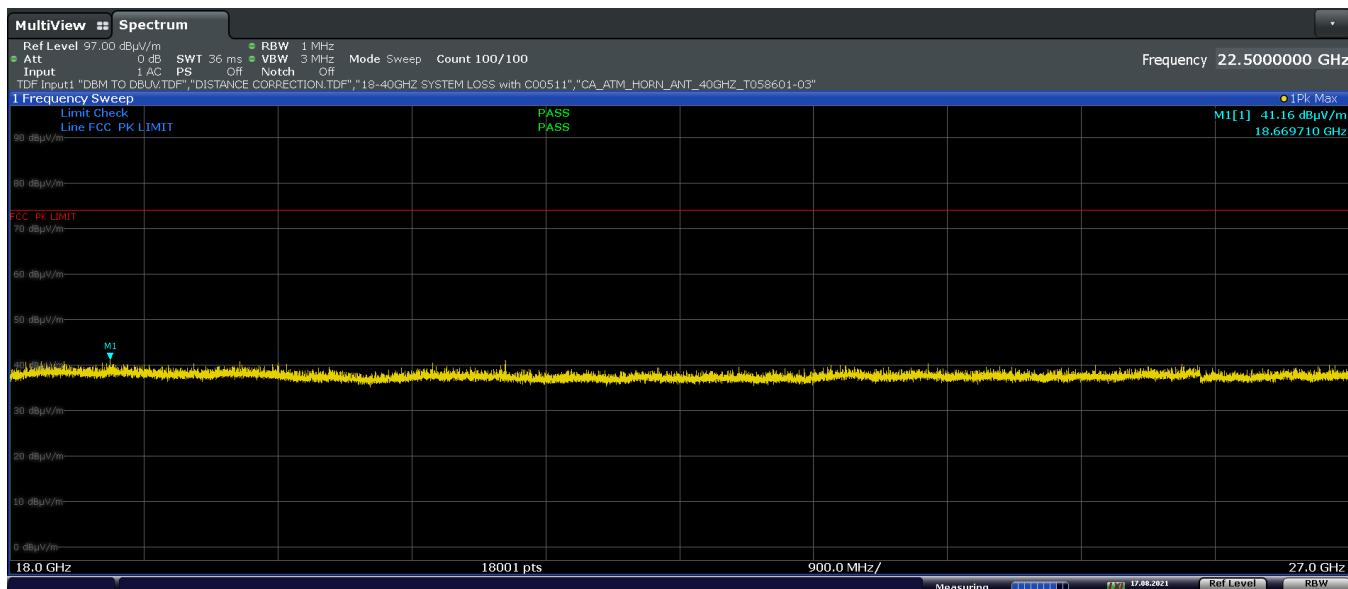
| Frequency [MHz] | Detector | Ant. Pol. [H/V] | Antenna Height [cm] | Turntable Azimuth [degree] | Analyzer Level [dBm] | AFCL [dB/m] | Field Strength [dB $\mu$ V/m] | Limit [dB $\mu$ V/m] | Margin [dB] |
|-----------------|----------|-----------------|---------------------|----------------------------|----------------------|-------------|-------------------------------|----------------------|-------------|
| 4882.00         | Avg      | H               | -                   | -                          | -81.53               | 8.51        | 33.98                         | 53.98                | -20.00      |
| 4882.00         | Peak     | H               | -                   | -                          | -70.60               | 8.51        | 44.91                         | 73.98                | -29.07      |
| 7323.00         | Avg      | H               | -                   | -                          | -81.40               | 11.19       | 36.79                         | 53.98                | -17.19      |
| 7323.00         | Peak     | H               | -                   | -                          | -70.14               | 11.19       | 48.05                         | 73.98                | -25.93      |
| 12205.00        | Avg      | H               | -                   | -                          | -84.44               | 17.49       | 40.05                         | 53.98                | -13.93      |
| 12205.00        | Peak     | H               | -                   | -                          | -73.13               | 17.49       | 51.36                         | 73.98                | -22.62      |

**Table 7-15. Radiated Measurements Antenna 3a**

|   |   |                                       |                                 |
|---|---|---------------------------------------|---------------------------------|
| FCC ID: BCGA2568<br>IC: 579C-A2568      |  PCTEST<br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1C2106080049-10.BCG | Test Dates:<br>6/2/2021 - 8/19/2021   | EUT Type:<br>Tablet Device            | Page 75 of 104                  |

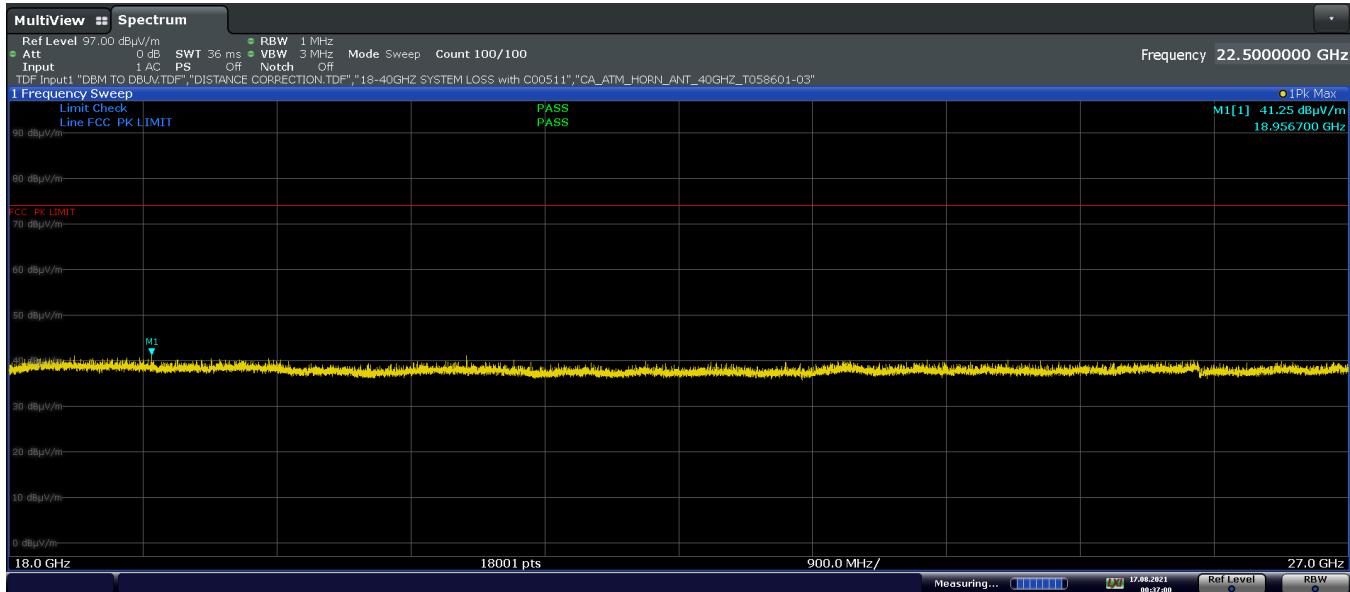


Plot 7-83. Radiated Spurious Emissions Above 1GHz Antenna 3a (4Mbps, HDR4, ePA – Ch. 73)



Plot 7-84. Radiated Spurious Emissions Above 18GHz Antenna 3a (4Mbps – Ch. 73, ePA, Ant. Pol. H)

|   |   |                                       |                                 |
|---|---|---------------------------------------|---------------------------------|
| FCC ID: BCGA2568<br>IC: 579C-A2568      | <b>PCTEST®</b><br>Proud to be part of  | MEASUREMENT REPORT<br>(CERTIFICATION) | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1C2106080049-10.BCG | Test Dates:<br>6/2/2021 - 8/19/2021   | EUT Type:<br>Tablet Device            | Page 76 of 104                  |



Plot 7-85. Radiated Spurious Emissions Above 18GHz Antenna 3a (4Mbps – Ch. 73, ePA, Ant. Pol. V)

|                           |                 |
|---------------------------|-----------------|
| Bluetooth Mode:           | <u>HDR4</u>     |
| Power Scheme              | <u>ePA</u>      |
| Distance of Measurements: | <u>3 Meters</u> |
| Operating Frequency:      | <u>2476MHz</u>  |
| Channel:                  | <u>73</u>       |

| Frequency [MHz] | Detector | Ant. Pol. [H/V] | Antenna Height [cm] | Turntable Azimuth [degree] | Analyzer Level [dBm] | AFCL [dB/m] | Field Strength [dBμV/m] | Limit [dBμV/m] | Margin [dB] |
|-----------------|----------|-----------------|---------------------|----------------------------|----------------------|-------------|-------------------------|----------------|-------------|
| 4952.00         | Avg      | H               | -                   | -                          | -81.14               | 6.94        | 32.80                   | 53.98          | -21.18      |
| 4952.00         | Peak     | H               | -                   | -                          | -69.91               | 6.94        | 44.03                   | 73.98          | -29.95      |
| 7428.00         | Avg      | H               | -                   | -                          | -83.49               | 10.13       | 33.64                   | 53.98          | -20.34      |
| 7428.00         | Peak     | H               | -                   | -                          | -71.75               | 10.13       | 45.38                   | 73.98          | -28.60      |
| 12380.00        | Avg      | H               | -                   | -                          | -84.47               | 15.58       | 38.11                   | 53.98          | -15.87      |
| 12380.00        | Peak     | H               | -                   | -                          | -73.08               | 15.58       | 49.50                   | 73.98          | -24.48      |

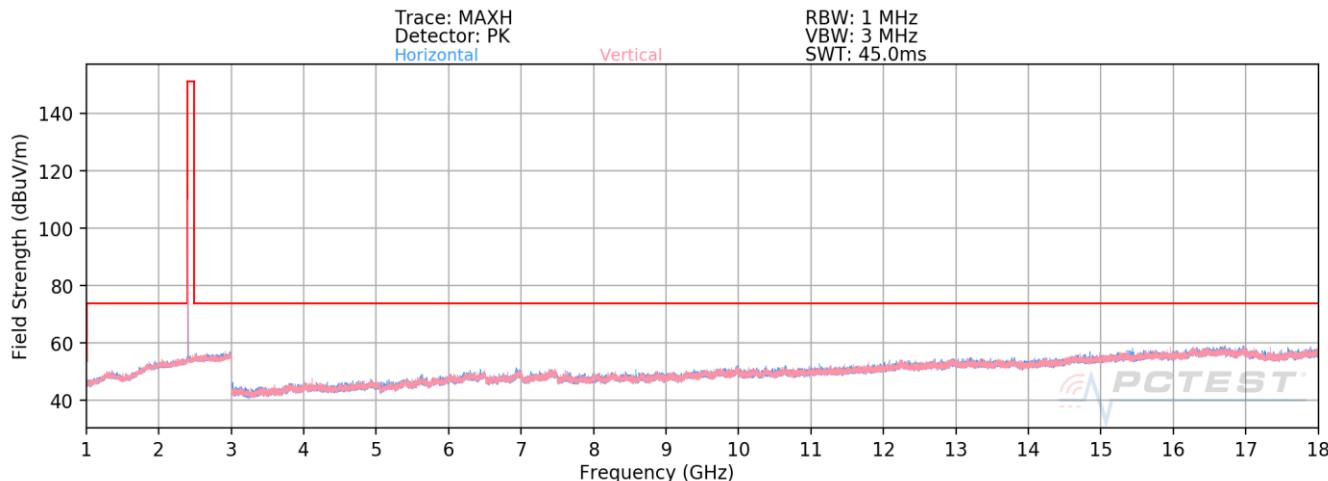
Table 7-16. Radiated Measurements Antenna 3a

|   |   |                                       |                                 |
|---|---|---------------------------------------|---------------------------------|
| FCC ID: BCGA2568<br>IC: 579C-A2568      | <br>PCTEST <sup>®</sup><br>Proud to be part of  | MEASUREMENT REPORT<br>(CERTIFICATION) | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1C2106080049-10.BCG | Test Dates:<br>6/2/2021 - 8/19/2021   | EUT Type:<br>Tablet Device            | Page 77 of 104                  |

## Radiated Spurious Emission Measurements (1 – 18GHz)

§15.205 §15.209 §15.247(d); RSS-Gen [8.9]

### Antenna 1a



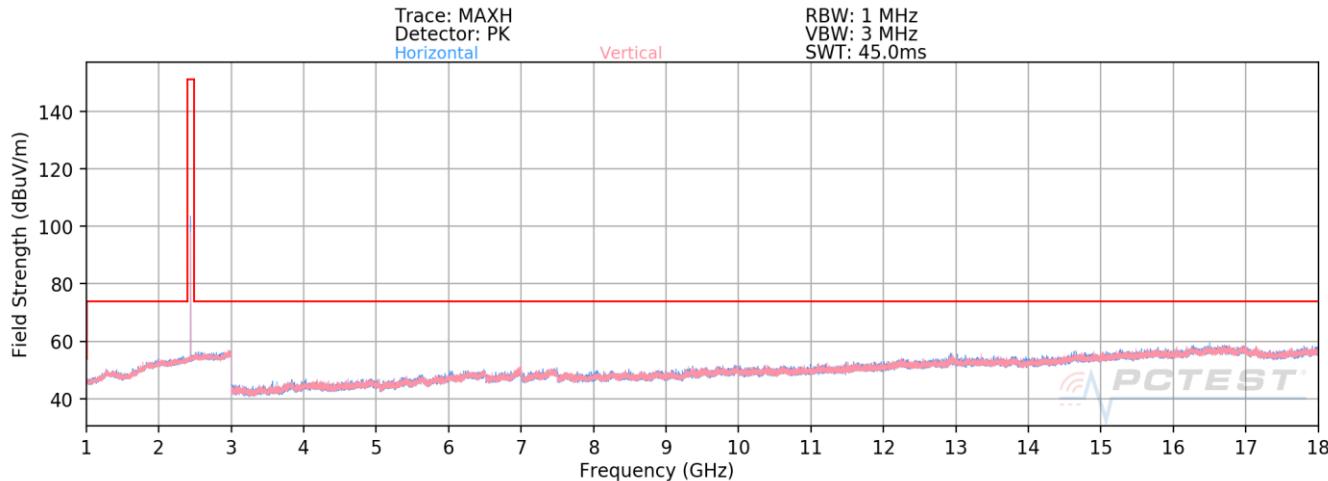
Plot 7-86. Radiated Spurious Emissions Above 1GHz Antenna 1a (4Mbps, HDR4, ePA – Ch. 1)

Bluetooth Mode: HDR4  
 Power Scheme ePA  
 Distance of Measurements: 3 Meters  
 Operating Frequency: 2404MHz  
 Channel: 1

| Frequency [MHz] | Detector | Ant. Pol. [H/V] | Antenna Height [cm] | Turntable Azimuth [degree] | Analyzer Level [dBm] | AFCL [dB/m] | Field Strength [dB $\mu$ V/m] | Limit [dB $\mu$ V/m] | Margin [dB] |
|-----------------|----------|-----------------|---------------------|----------------------------|----------------------|-------------|-------------------------------|----------------------|-------------|
| 4808.00         | Avg      | H               | -                   | -                          | -81.53               | 8.28        | 33.75                         | 53.98                | -20.23      |
| 4808.00         | Peak     | H               | -                   | -                          | -70.48               | 8.28        | 44.80                         | 73.98                | -29.18      |
| 12020.00        | Avg      | H               | -                   | -                          | -84.56               | 17.26       | 39.70                         | 53.98                | -14.28      |
| 12020.00        | Peak     | H               | -                   | -                          | -72.98               | 17.26       | 51.28                         | 73.98                | -22.70      |

Table 7-17. Radiated Measurements Antenna 1a

|   |   |                            |                |                                 |
|---|---|----------------------------|----------------|---------------------------------|
| FCC ID: BCGA2568<br>IC: 579C-A2568      |  <b>MEASUREMENT REPORT (CERTIFICATION)</b> |                            |                | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1C2106080049-10.BCG | Test Dates:<br>6/2/2021 - 8/19/2021   | EUT Type:<br>Tablet Device | Page 78 of 104 |                                 |



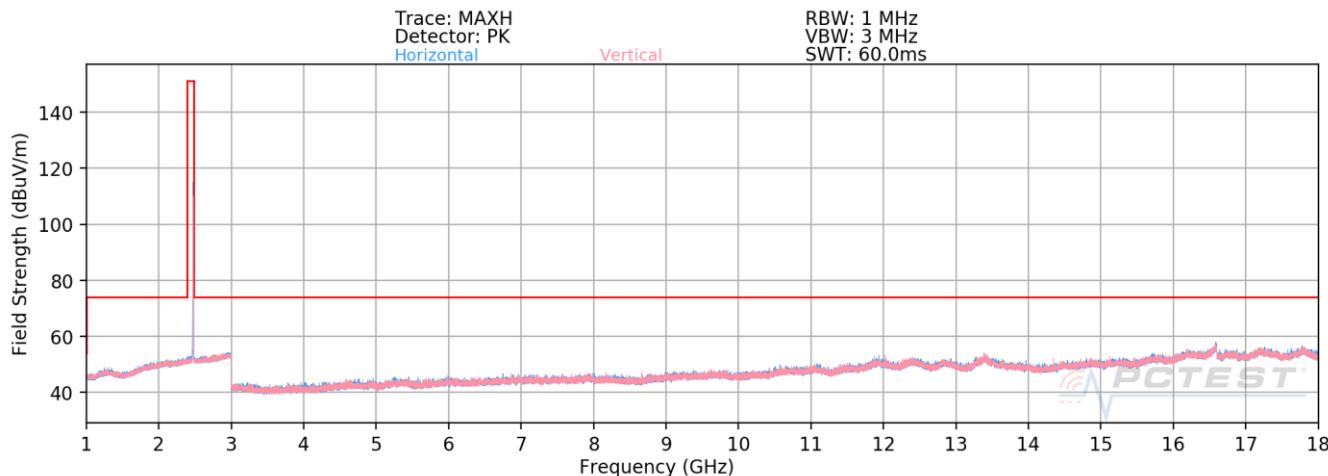
Plot 7-87. Radiated Spurious Emissions Above 1GHz Antenna 1a (4Mbps, HDR4, ePA – Ch. 38)

|                           |          |
|---------------------------|----------|
| Bluetooth Mode:           | HDR4     |
| Power Scheme              | ePA      |
| Distance of Measurements: | 3 Meters |
| Operating Frequency:      | 2441MHz  |
| Channel:                  | 38       |

| Frequency [MHz] | Detector | Ant. Pol. [H/V] | Antenna Height [cm] | Turntable Azimuth [degree] | Analyzer Level [dBm] | AFCL [dB/m] | Field Strength [dB $\mu$ V/m] | Limit [dB $\mu$ V/m] | Margin [dB] |
|-----------------|----------|-----------------|---------------------|----------------------------|----------------------|-------------|-------------------------------|----------------------|-------------|
| 4882.00         | Avg      | H               | -                   | -                          | -81.19               | 8.51        | 34.32                         | 53.98                | -19.66      |
| 4882.00         | Peak     | H               | -                   | -                          | -70.27               | 8.51        | 45.24                         | 73.98                | -28.74      |
| 7323.00         | Avg      | H               | -                   | -                          | -81.27               | 11.19       | 36.92                         | 53.98                | -17.06      |
| 7323.00         | Peak     | H               | -                   | -                          | -69.73               | 11.19       | 48.46                         | 73.98                | -25.52      |
| 12205.00        | Avg      | H               | -                   | -                          | -84.14               | 17.49       | 40.35                         | 53.98                | -13.63      |
| 12205.00        | Peak     | H               | -                   | -                          | -72.91               | 17.49       | 51.58                         | 73.98                | -22.40      |

Table 7-18. Radiated Measurements Antenna 1a

|   |   |                                       |                                 |
|---|---|---------------------------------------|---------------------------------|
| FCC ID: BCGA2568<br>IC: 579C-A2568      | <br>PCTEST <sup>®</sup><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1C2106080049-10.BCG | Test Dates:<br>6/2/2021 - 8/19/2021   | EUT Type:<br>Tablet Device            | Page 79 of 104                  |



Plot 7-88. Radiated Spurious Emissions Above 1GHz Antenna 1a (4Mbps, HDR4, ePA – Ch. 73)

|                           |                 |
|---------------------------|-----------------|
| Bluetooth Mode:           | <u>HDR4</u>     |
| Power Scheme              | <u>ePA</u>      |
| Distance of Measurements: | <u>3 Meters</u> |
| Operating Frequency:      | <u>2476MHz</u>  |
| Channel:                  | <u>73</u>       |

| Frequency [MHz] | Detector | Ant. Pol. [H/V] | Antenna Height [cm] | Turntable Azimuth [degree] | Analyzer Level [dBm] | AFCL [dB/m] | Field Strength [dB $\mu$ V/m] | Limit [dB $\mu$ V/m] | Margin [dB] |
|-----------------|----------|-----------------|---------------------|----------------------------|----------------------|-------------|-------------------------------|----------------------|-------------|
| 4952.00         | Avg      | H               | -                   | -                          | -80.30               | 6.94        | 33.64                         | 53.98                | -20.34      |
| 4952.00         | Peak     | H               | -                   | -                          | -68.87               | 6.94        | 45.07                         | 73.98                | -28.91      |
| 7428.00         | Avg      | H               | -                   | -                          | -81.75               | 10.13       | 35.38                         | 53.98                | -18.60      |
| 7428.00         | Peak     | H               | -                   | -                          | -70.76               | 10.13       | 46.37                         | 73.98                | -27.61      |
| 12380.00        | Avg      | H               | -                   | -                          | -82.38               | 15.58       | 40.20                         | 53.98                | -13.78      |
| 12380.00        | Peak     | H               | -                   | -                          | -70.93               | 15.58       | 51.65                         | 73.98                | -22.33      |

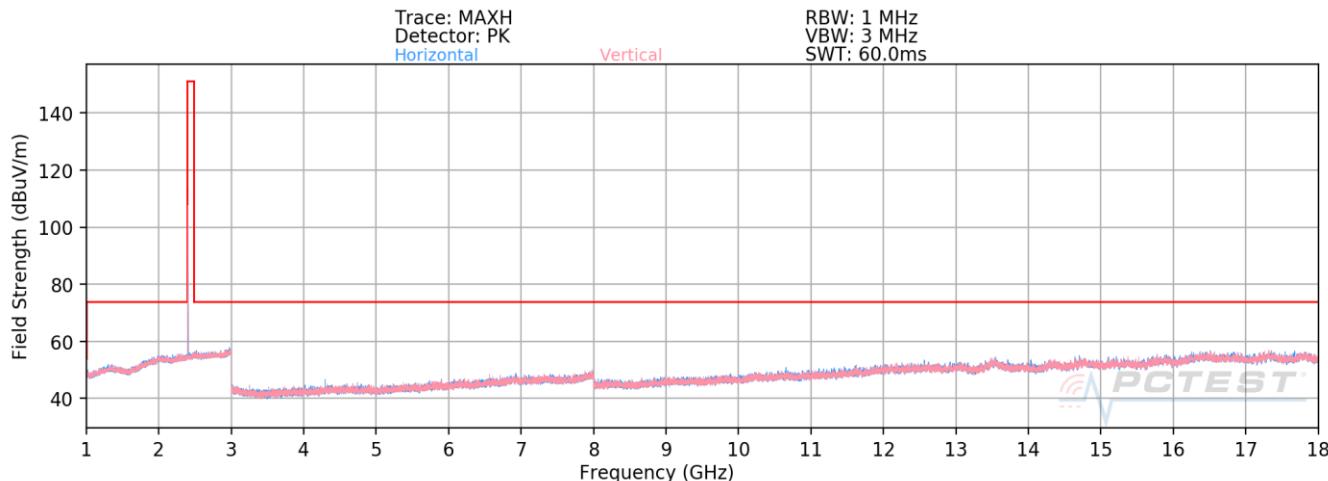
Table 7-19. Radiated Measurements Antenna 1a

|   |   |                                       |                                 |
|---|---|---------------------------------------|---------------------------------|
| FCC ID: BCGA2568<br>IC: 579C-A2568      | <br>PCTEST <sup>®</sup><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1C2106080049-10.BCG | Test Dates:<br>6/2/2021 - 8/19/2021   | EUT Type:<br>Tablet Device            | Page 80 of 104                  |

## Radiated Spurious Emission Measurements (Above 1GHz)

§15.205 §15.209 §15.247(d); RSS-Gen [8.9]

### TxBF



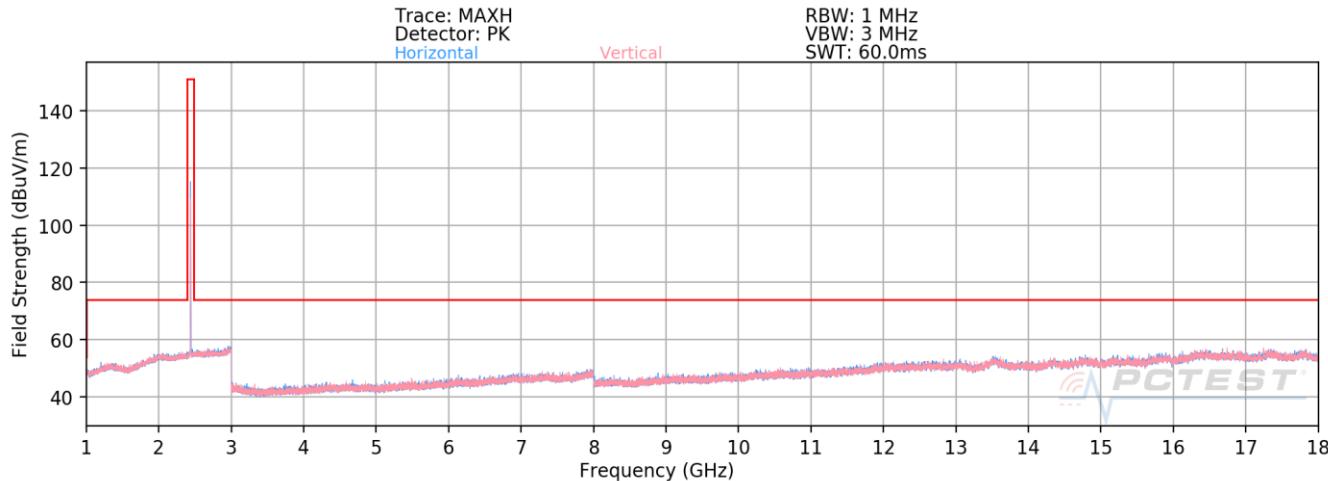
Plot 7-89. Radiated Spurious Emissions Above 1GHz TxBF (4Mbps, HDR4, ePA – Ch. 1)

Bluetooth Mode: HDR4  
 Power Scheme ePA  
 Distance of Measurements: 3 Meters  
 Operating Frequency: 2404MHz  
 Channel: 1

| Frequency [MHz] | Detector | Ant. Pol. [H/V] | Antenna Height [cm] | Turntable Azimuth [degree] | Analyzer Level [dBm] | AFCL [dB/m] | Field Strength [dB $\mu$ V/m] | Limit [dB $\mu$ V/m] | Margin [dB] |
|-----------------|----------|-----------------|---------------------|----------------------------|----------------------|-------------|-------------------------------|----------------------|-------------|
| 4808.00         | Avg      | H               | -                   | -                          | -78.22               | 5.02        | 33.80                         | 53.98                | -20.17      |
| 4808.00         | Peak     | H               | -                   | -                          | -66.26               | 5.02        | 45.76                         | 73.98                | -28.21      |
| 12020.00        | Avg      | H               | -                   | -                          | -84.78               | 17.32       | 39.54                         | 53.98                | -14.44      |
| 12020.00        | Peak     | H               | -                   | -                          | -72.90               | 17.32       | 51.42                         | 73.98                | -22.56      |

Table 7-20. Radiated Measurements TxBF

|   |   |                                       |                                 |
|---|---|---------------------------------------|---------------------------------|
| FCC ID: BCGA2568<br>IC: 579C-A2568      |  PCTEST<br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1C2106080049-10.BCG | Test Dates:<br>6/2/2021 - 8/19/2021   | EUT Type:<br>Tablet Device            | Page 81 of 104                  |



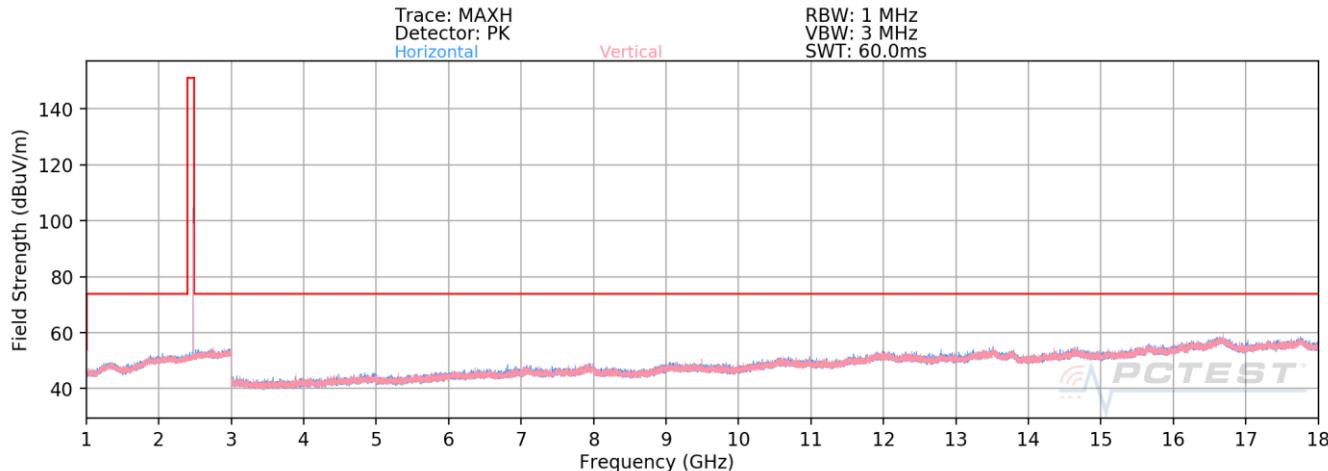
Plot 7-90. Radiated Spurious Emissions Above 1GHz TxBF (4Mbps, HDR4, ePA – Ch. 38)

|                           |          |
|---------------------------|----------|
| Bluetooth Mode:           | HDR4     |
| Power Scheme              | ePA      |
| Distance of Measurements: | 3 Meters |
| Operating Frequency:      | 2441MHz  |
| Channel:                  | 38       |

| Frequency [MHz] | Detector | Ant. Pol. [H/V] | Antenna Height [cm] | Turntable Azimuth [degree] | Analyzer Level [dBm] | AFCL [dB/m] | Field Strength [dB $\mu$ V/m] | Limit [dB $\mu$ V/m] | Margin [dB] |
|-----------------|----------|-----------------|---------------------|----------------------------|----------------------|-------------|-------------------------------|----------------------|-------------|
| 4882.00         | Avg      | H               | -                   | -                          | -78.68               | 5.27        | 33.59                         | 53.98                | -20.39      |
| 4882.00         | Peak     | H               | -                   | -                          | -66.60               | 5.27        | 45.67                         | 73.98                | -28.31      |
| 7323.00         | Avg      | H               | -                   | -                          | -79.65               | 9.04        | 36.39                         | 53.98                | -17.59      |
| 7323.00         | Peak     | H               | -                   | -                          | -67.85               | 9.04        | 48.19                         | 73.98                | -25.79      |
| 12205.00        | Avg      | H               | -                   | -                          | -84.62               | 17.83       | 40.21                         | 53.98                | -13.77      |
| 12205.00        | Peak     | H               | -                   | -                          | -72.66               | 17.83       | 52.17                         | 73.98                | -21.81      |

Table 7-21. Radiated Measurements TxBF

|   |   |                                       |                                 |
|---|---|---------------------------------------|---------------------------------|
| FCC ID: BCGA2568<br>IC: 579C-A2568      | <br>PCTEST <sup>®</sup><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1C2106080049-10.BCG | Test Dates:<br>6/2/2021 - 8/19/2021   | EUT Type:<br>Tablet Device            | Page 82 of 104                  |



Plot 7-91. Radiated Spurious Emissions Above 1GHz TxBF (4Mbps, HDR4, ePA – Ch. 73)

|                           |          |
|---------------------------|----------|
| Bluetooth Mode:           | HDR4     |
| Power Scheme              | ePA      |
| Distance of Measurements: | 3 Meters |
| Operating Frequency:      | 2476MHz  |
| Channel:                  | 73       |

| Frequency [MHz] | Detector | Ant. Pol. [H/V] | Antenna Height [cm] | Turntable Azimuth [degree] | Analyzer Level [dBm] | AFCL [dB/m] | Field Strength [dB $\mu$ V/m] | Limit [dB $\mu$ V/m] | Margin [dB] |
|-----------------|----------|-----------------|---------------------|----------------------------|----------------------|-------------|-------------------------------|----------------------|-------------|
| 4952.00         | Avg      | H               | -                   | -                          | -81.27               | 6.94        | 32.67                         | 53.98                | -21.31      |
| 4952.00         | Peak     | H               | -                   | -                          | -70.37               | 6.94        | 43.57                         | 73.98                | -30.41      |
| 7428.00         | Avg      | H               | -                   | -                          | -83.47               | 10.13       | 33.66                         | 53.98                | -20.32      |
| 7428.00         | Peak     | H               | -                   | -                          | -71.49               | 10.13       | 45.64                         | 73.98                | -28.34      |
| 12380.00        | Avg      | H               | -                   | -                          | -84.41               | 15.58       | 38.17                         | 53.98                | -15.81      |
| 12380.00        | Peak     | H               | -                   | -                          | -72.84               | 15.58       | 49.74                         | 73.98                | -24.24      |

Table 7-22. Radiated Measurements TxBF

|   |   |                                       |                                 |
|---|---|---------------------------------------|---------------------------------|
| FCC ID: BCGA2568<br>IC: 579C-A2568      |  PCTEST<br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1C2106080049-10.BCG | Test Dates:<br>6/2/2021 - 8/19/2021   | EUT Type:<br>Tablet Device            | Page 83 of 104                  |

## 7.7.1 Radiated Restricted Band Edge Measurements

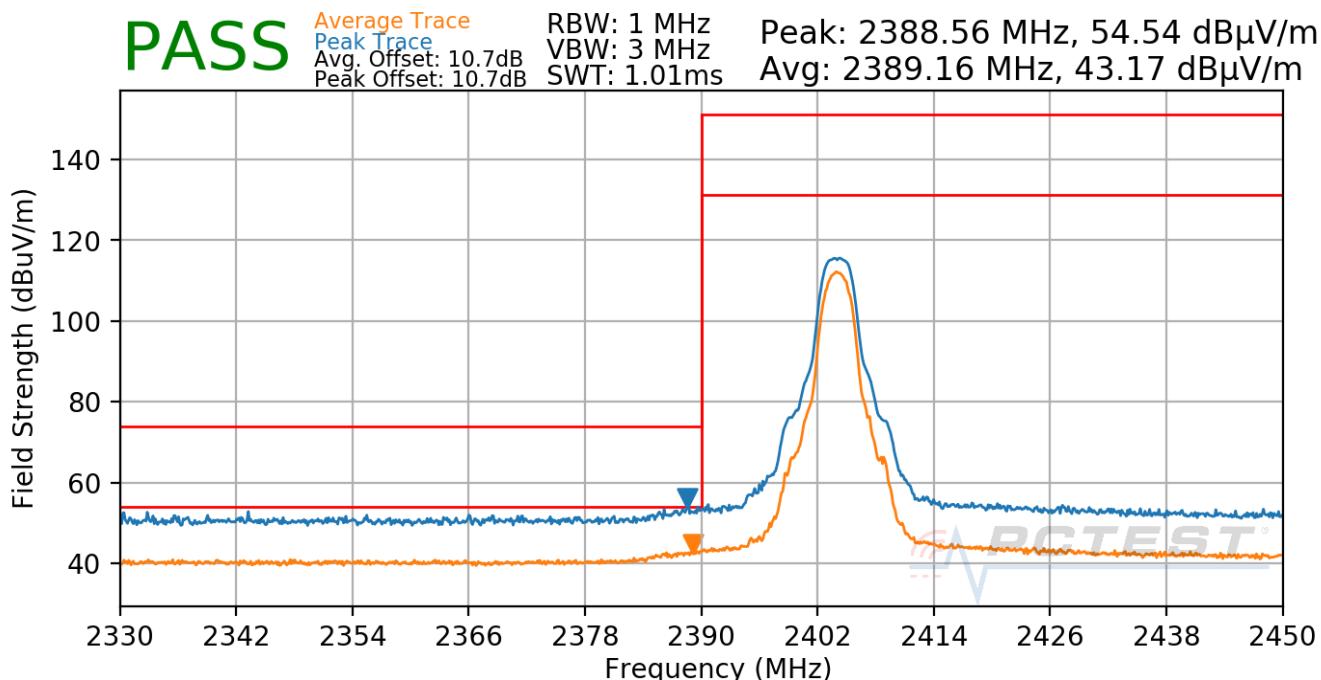
§15.205 §15.209; RSS-Gen [8.9]

### Antenna 3a

The amplitude offset shown in the following plots for average measurements was calculated using the formula:

Offset (dB) = (Antenna Factor + Cable Loss + Attenuator) – Preamplifier Gain

|                       |                 |
|-----------------------|-----------------|
| Bluetooth Mode:       | HDR4-Antenna 3a |
| Power Scheme:         | ePA             |
| Measurement Distance: | 3 Meters        |
| Operating Frequency:  | 2404MHz         |
| Channel:              | 1               |



Plot 7-92. Radiated Restricted Lower Band Edge Measurement Antenna 3a (Average & Peak)

|   |   |                                       |                                 |
|---|---|---------------------------------------|---------------------------------|
| FCC ID: BCGA2568<br>IC: 579C-A2568      |  PCTEST<br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1C2106080049-10.BCG | Test Dates:<br>6/2/2021 - 8/19/2021   | EUT Type:<br>Tablet Device            | Page 84 of 104                  |

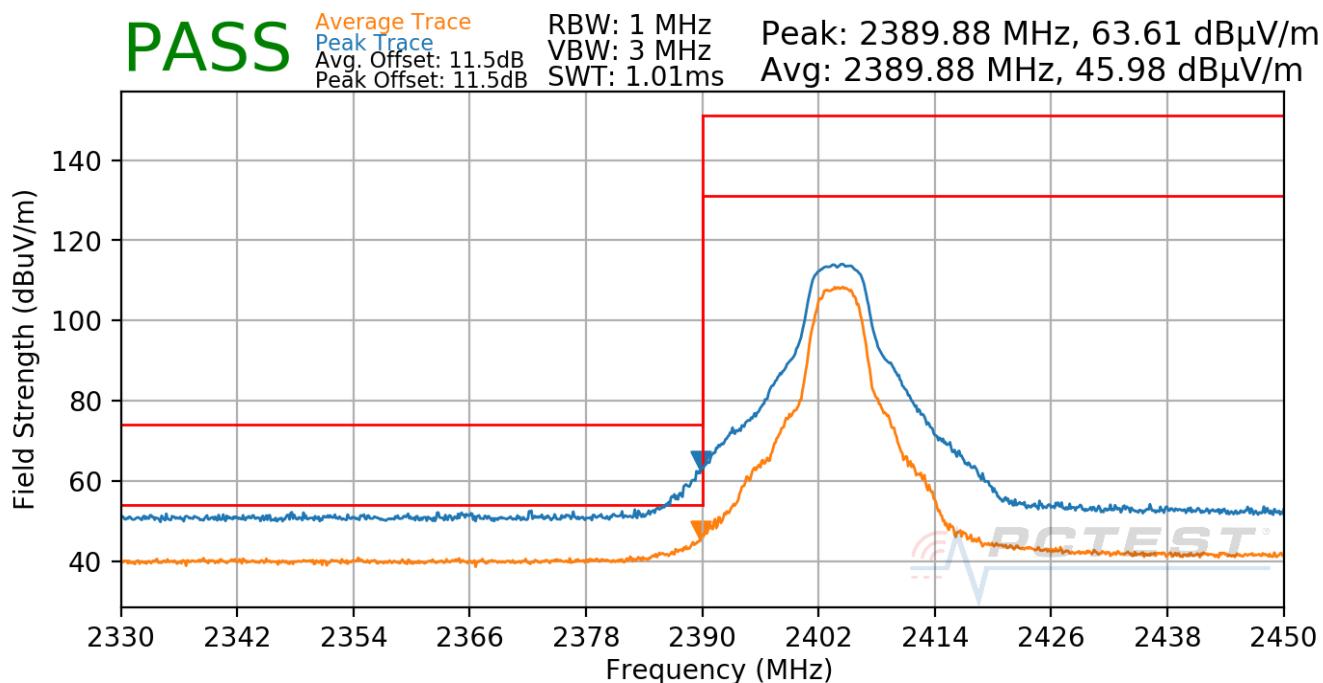
## Radiated Restricted Band Edge Measurements

§15.205 §15.209; RSS-Gen [8.9]

The amplitude offset shown in the following plots for average measurements was calculated using the formula:

Offset (dB) = (Antenna Factor + Cable Loss + Attenuator) – Preamplifier Gain

|                       |                 |
|-----------------------|-----------------|
| Bluetooth Mode:       | HDR8-Antenna 3a |
| Power Scheme:         | ePA             |
| Measurement Distance: | 3 Meters        |
| Operating Frequency:  | 2404MHz         |
| Channel:              | 1               |



**Plot 7-93. Radiated Restricted Lower Band Edge Measurement Antenna 3a (Average & Peak)**

|   |   |                                       |                                 |
|---|---|---------------------------------------|---------------------------------|
| FCC ID: BCGA2568<br>IC: 579C-A2568      |  PCTEST<br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1C2106080049-10.BCG | Test Dates:<br>6/2/2021 - 8/19/2021   | EUT Type:<br>Tablet Device            | Page 85 of 104                  |

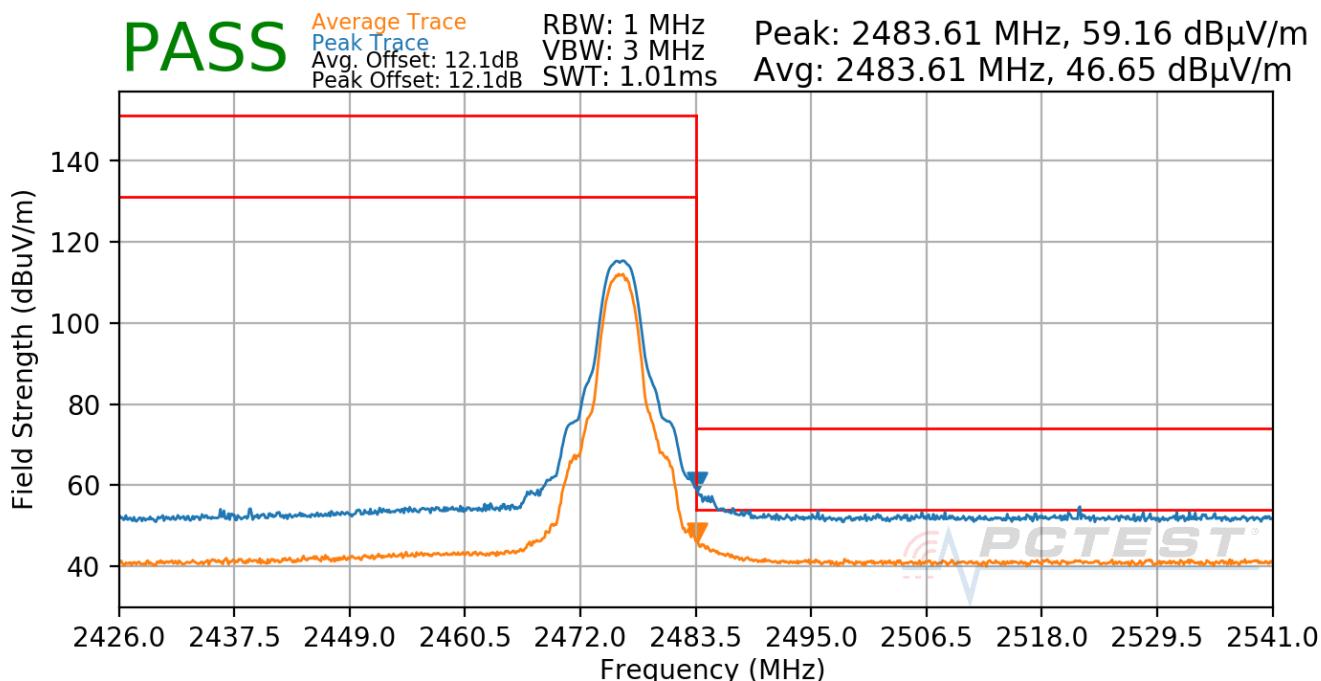
## Radiated Restricted Band Edge Measurements

§15.205 §15.209; RSS-Gen [8.9]

The amplitude offset shown in the following plots for average measurements was calculated using the formula:

Offset (dB) = (Antenna Factor + Cable Loss + Attenuator) – Preamplifier Gain

|                       |                 |
|-----------------------|-----------------|
| Bluetooth Mode:       | HDR4-Antenna 3a |
| Power Scheme:         | ePA             |
| Measurement Distance: | 3 Meters        |
| Operating Frequency:  | 2476MHz         |
| Channel:              | 73              |



Plot 7-94. Radiated Restricted Upper Band Edge Measurement Antenna 3a (Average & Peak)

|   |  |                            |                                       |                                 |
|---|--|----------------------------|---------------------------------------|---------------------------------|
| FCC ID: BCGA2568<br>IC: 579C-A2568      | <br><b>PCTEST</b><br><small>Proud to be part of element</small> |                            | MEASUREMENT REPORT<br>(CERTIFICATION) | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1C2106080049-10.BCG | Test Dates:<br>6/2/2021 - 8/19/2021  | EUT Type:<br>Tablet Device | Page 86 of 104                        |                                 |

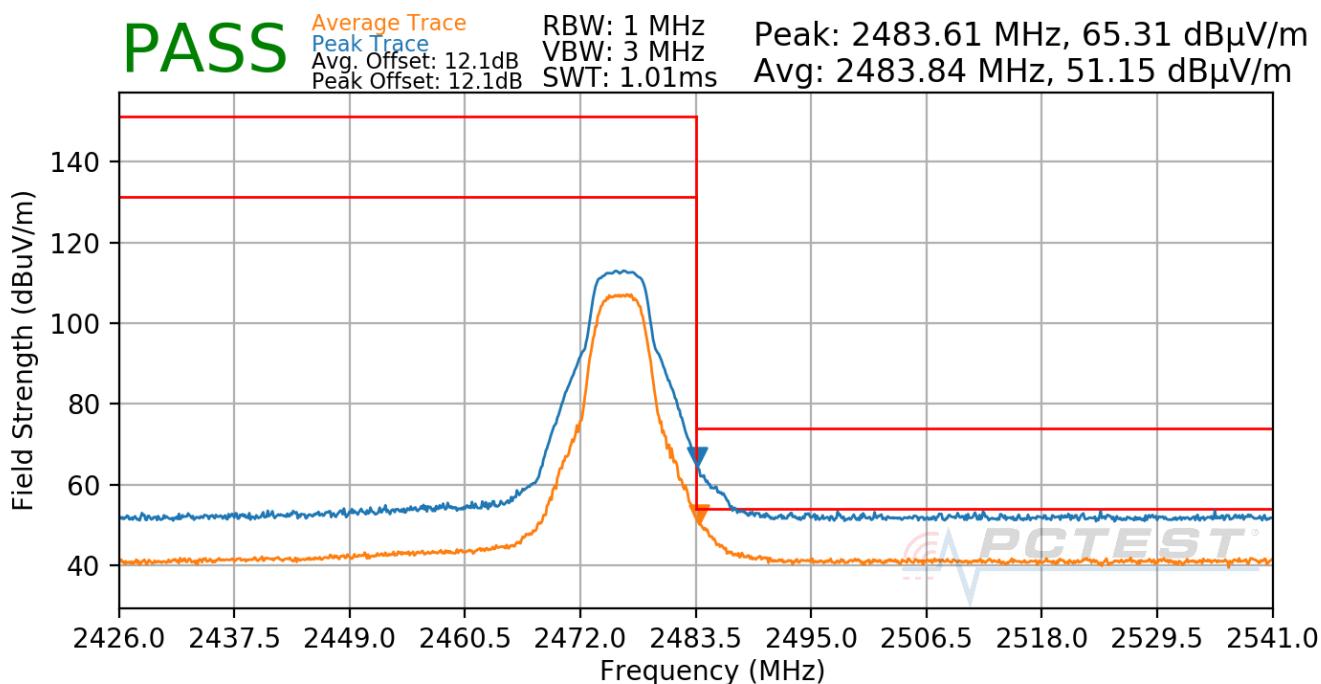
## Radiated Restricted Band Edge Measurements

§15.205 §15.209; RSS-Gen [8.9]

The amplitude offset shown in the following plots for average measurements was calculated using the formula:

Offset (dB) = (Antenna Factor + Cable Loss + Attenuator) – Preamplifier Gain

|                       |                 |
|-----------------------|-----------------|
| Bluetooth Mode:       | HDR8-Antenna 3a |
| Power Scheme:         | ePA             |
| Measurement Distance: | 3 Meters        |
| Operating Frequency:  | 2476MHz         |
| Channel:              | 73              |



**Plot 7-95. Radiated Restricted Upper Band Edge Measurement Antenna 3a (Average & Peak)**

|   |   |                            |                                       |                                 |
|---|---|----------------------------|---------------------------------------|---------------------------------|
| FCC ID: BCGA2568<br>IC: 579C-A2568      |  <b>PCTEST</b><br><small>Proud to be part of element</small> |                            | MEASUREMENT REPORT<br>(CERTIFICATION) | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1C2106080049-10.BCG | Test Dates:<br>6/2/2021 - 8/19/2021   | EUT Type:<br>Tablet Device | Page 87 of 104                        |                                 |

## Radiated Restricted Band Edge Measurements

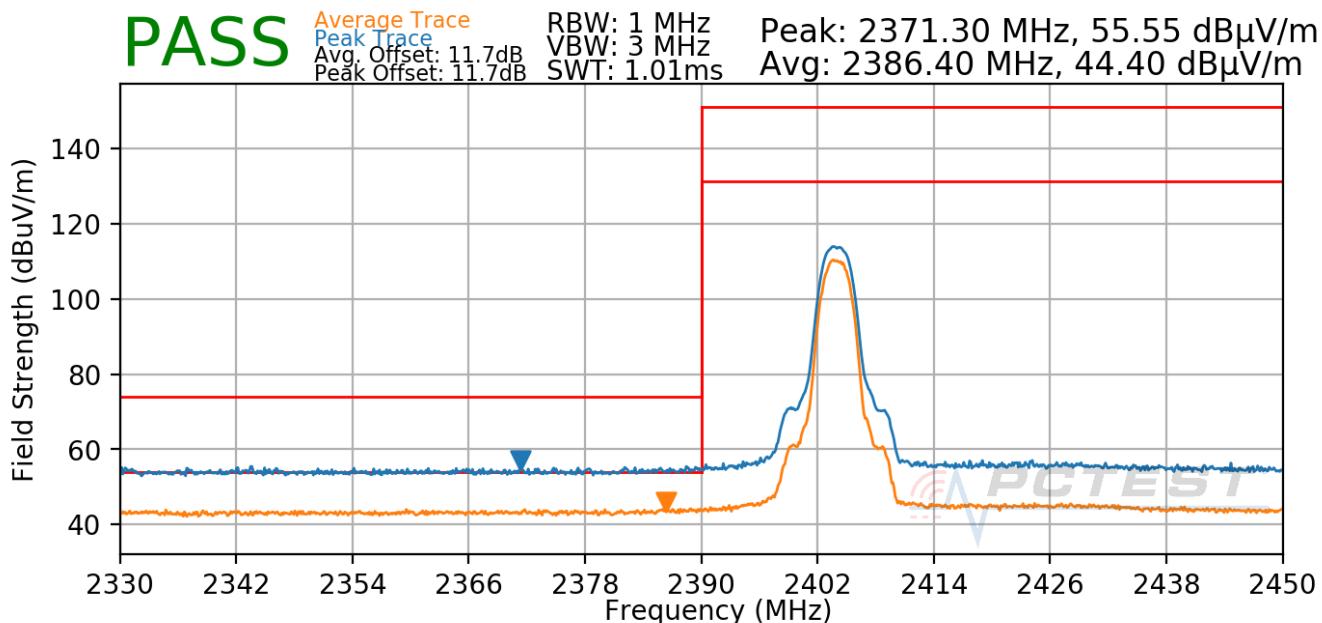
§15.205 §15.209; RSS-Gen [8.9]

### Antenna 1a

The amplitude offset shown in the following plots for average measurements was calculated using the formula:

Offset (dB) = (Antenna Factor + Cable Loss + Attenuator) – Preamplifier Gain

|                       |                 |
|-----------------------|-----------------|
| Bluetooth Mode:       | HDR4-Antenna 1a |
| Power Scheme:         | ePA             |
| Measurement Distance: | 3 Meters        |
| Operating Frequency:  | 2404MHz         |
| Channel:              | 1               |



Plot 7-96. Radiated Restricted Lower Band Edge Measurement Antenna 1a (Average & Peak)

|   |   |                            |                                       |                                 |
|---|---|----------------------------|---------------------------------------|---------------------------------|
| FCC ID: BCGA2568<br>IC: 579C-A2568      |  <b>PCTEST</b><br><small>Proud to be part of element</small> |                            | MEASUREMENT REPORT<br>(CERTIFICATION) | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1C2106080049-10.BCG | Test Dates:<br>6/2/2021 - 8/19/2021   | EUT Type:<br>Tablet Device | Page 88 of 104                        |                                 |

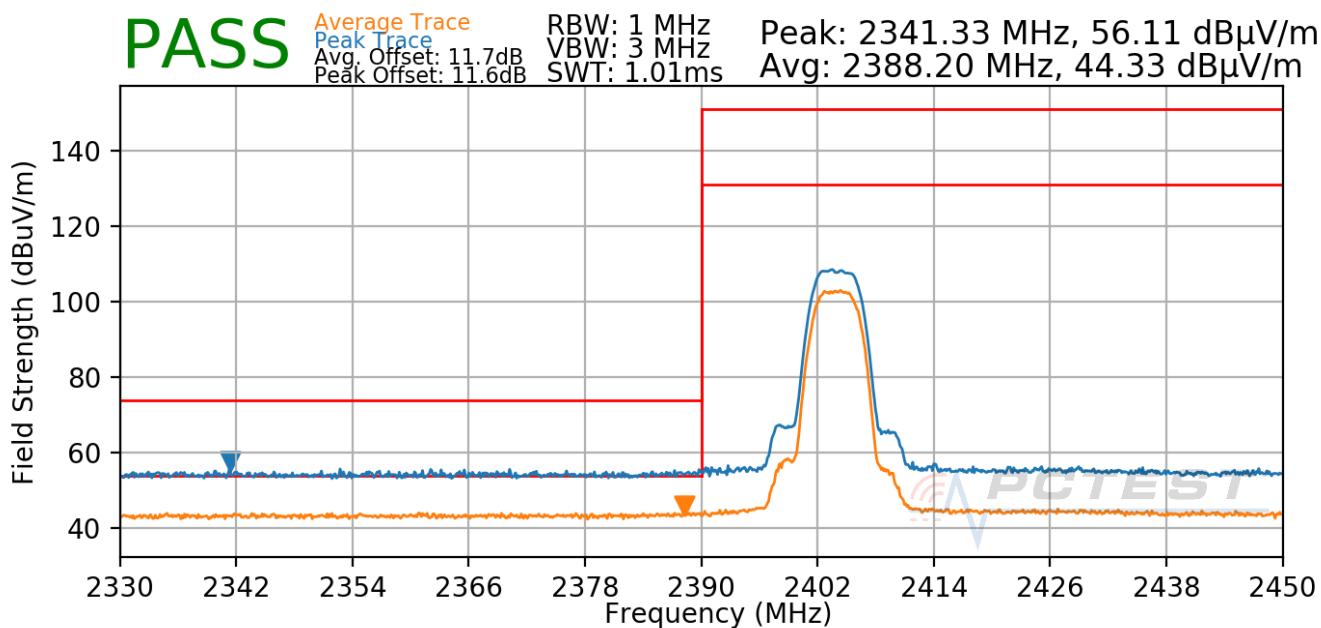
## Radiated Restricted Band Edge Measurements

§15.205 §15.209; RSS-Gen [8.9]

The amplitude offset shown in the following plots for average measurements was calculated using the formula:

Offset (dB) = (Antenna Factor + Cable Loss + Attenuator) – Preamplifier Gain

|                       |                 |
|-----------------------|-----------------|
| Bluetooth Mode:       | HDR8-Antenna 1a |
| Power Scheme:         | ePA             |
| Measurement Distance: | 3 Meters        |
| Operating Frequency:  | 2404MHz         |
| Channel:              | 1               |



Plot 7-97. Radiated Restricted Lower Band Edge Measurement Antenna 1a (Average & Peak)

|   |  |                            |                                       |                                 |
|---|--|----------------------------|---------------------------------------|---------------------------------|
| FCC ID: BCGA2568<br>IC: 579C-A2568      |  <b>PCTEST</b><br>Proud to be part of element |                            | MEASUREMENT REPORT<br>(CERTIFICATION) | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1C2106080049-10.BCG | Test Dates:<br>6/2/2021 - 8/19/2021  | EUT Type:<br>Tablet Device | Page 89 of 104                        |                                 |

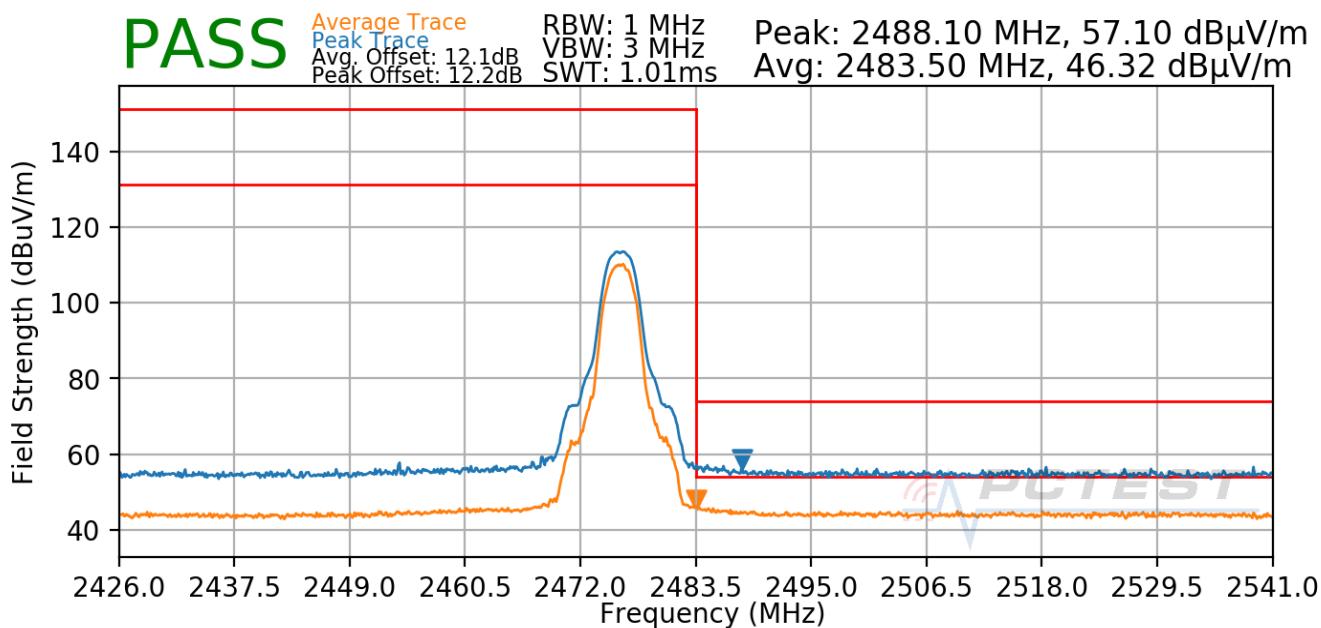
## Radiated Restricted Band Edge Measurements

§15.205 §15.209; RSS-Gen [8.9]

The amplitude offset shown in the following plots for average measurements was calculated using the formula:

Offset (dB) = (Antenna Factor + Cable Loss + Attenuator) – Preamplifier Gain

|                       |                 |
|-----------------------|-----------------|
| Bluetooth Mode:       | HDR4-Antenna 1a |
| Power Scheme:         | ePA             |
| Measurement Distance: | 3 Meters        |
| Operating Frequency:  | 2476MHz         |
| Channel:              | 73              |



Plot 7-98. Radiated Restricted Upper Band Edge Measurement Antenna 1a (Average & Peak)

|   |  |                            |                                       |                                 |
|---|--|----------------------------|---------------------------------------|---------------------------------|
| FCC ID: BCGA2568<br>IC: 579C-A2568      |  <b>PCTEST<sup>®</sup></b><br>Proud to be part of element |                            | MEASUREMENT REPORT<br>(CERTIFICATION) | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1C2106080049-10.BCG | Test Dates:<br>6/2/2021 - 8/19/2021  | EUT Type:<br>Tablet Device | Page 90 of 104                        |                                 |

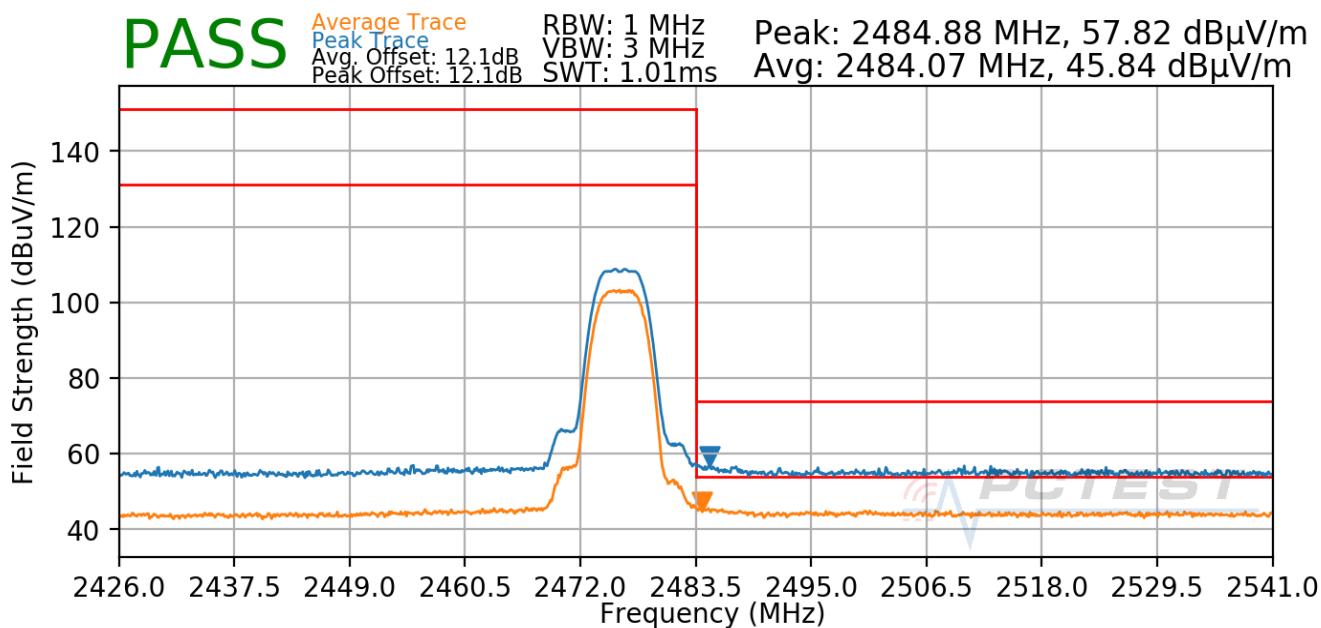
## Radiated Restricted Band Edge Measurements

§15.205 §15.209; RSS-Gen [8.9]

The amplitude offset shown in the following plots for average measurements was calculated using the formula:

Offset (dB) = (Antenna Factor + Cable Loss + Attenuator) – Preamplifier Gain

|                       |                 |
|-----------------------|-----------------|
| Bluetooth Mode:       | HDR8-Antenna 1a |
| Power Scheme:         | ePA             |
| Measurement Distance: | 3 Meters        |
| Operating Frequency:  | 2476MHz         |
| Channel:              | 73              |



Plot 7-99. Radiated Restricted Upper Band Edge Measurement Antenna 1a (Average & Peak)

|   |  |                            |                                       |                                 |
|---|--|----------------------------|---------------------------------------|---------------------------------|
| FCC ID: BCGA2568<br>IC: 579C-A2568      |  <b>PCTEST<sup>®</sup></b><br>Proud to be part of element |                            | MEASUREMENT REPORT<br>(CERTIFICATION) | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1C2106080049-10.BCG | Test Dates:<br>6/2/2021 - 8/19/2021  | EUT Type:<br>Tablet Device | Page 91 of 104                        |                                 |

## Radiated Restricted Band Edge Measurements

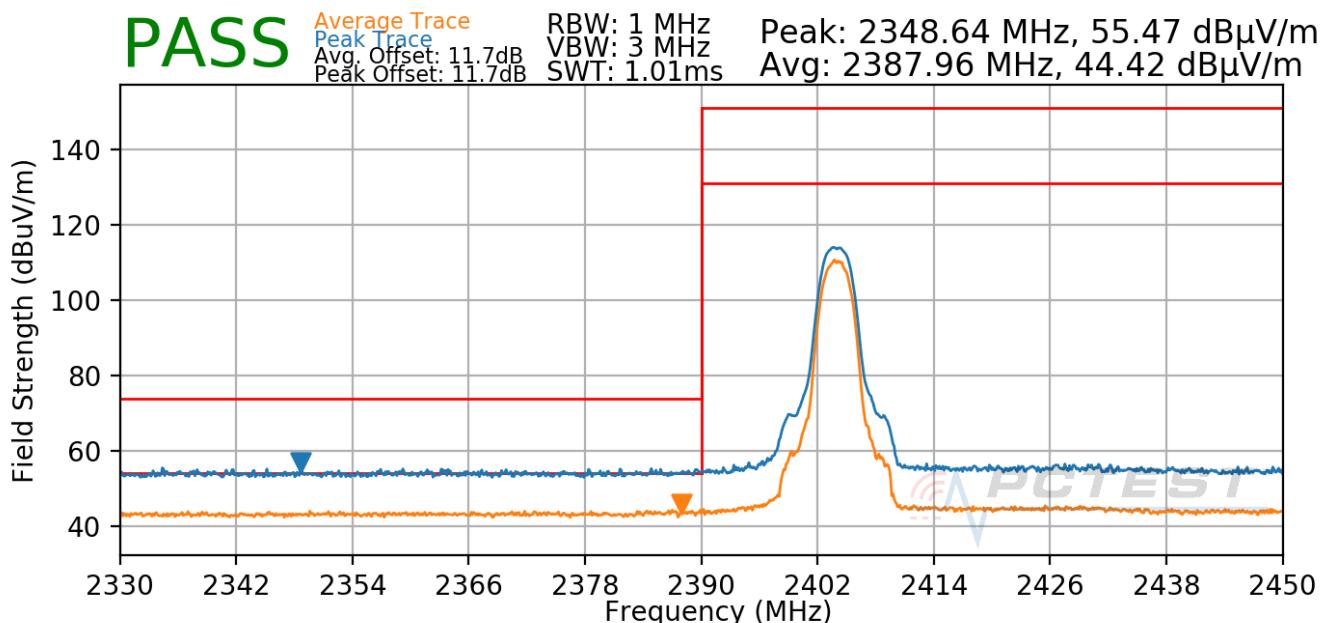
§15.205 §15.209; RSS-Gen [8.9]

### TxBF

The amplitude offset shown in the following plots for average measurements was calculated using the formula:

Offset (dB) = (Antenna Factor + Cable Loss + Attenuator) – Preamplifier Gain

|                       |           |
|-----------------------|-----------|
| Bluetooth Mode:       | HDR4-TxBF |
| Power Scheme:         | ePA       |
| Measurement Distance: | 3 Meters  |
| Operating Frequency:  | 2404MHz   |
| Channel:              | 1         |



Plot 7-100. Radiated Restricted Lower Band Edge Measurement TxBF (Average & Peak)

|   |   |                            |                                       |                                 |
|---|---|----------------------------|---------------------------------------|---------------------------------|
| FCC ID: BCGA2568<br>IC: 579C-A2568      |  <b>PCTEST</b><br><small>Proud to be part of element</small> |                            | MEASUREMENT REPORT<br>(CERTIFICATION) | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1C2106080049-10.BCG | Test Dates:<br>6/2/2021 - 8/19/2021   | EUT Type:<br>Tablet Device | Page 92 of 104                        |                                 |

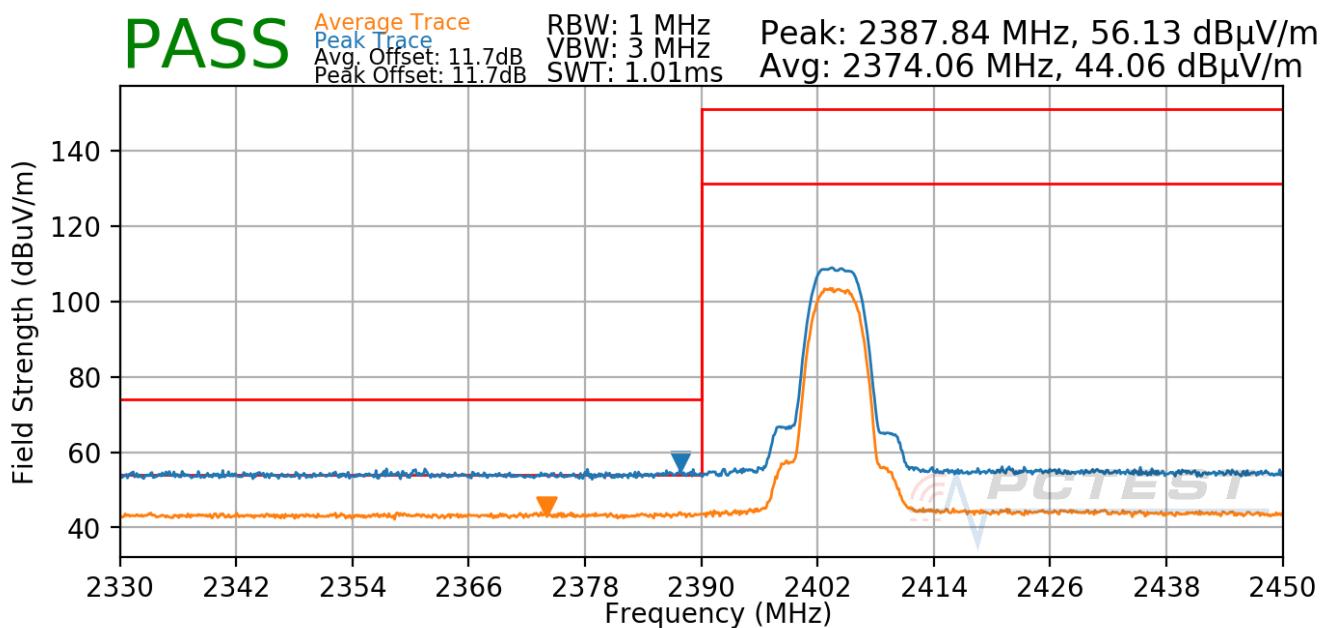
## Radiated Restricted Band Edge Measurements

§15.205 §15.209; RSS-Gen [8.9]

The amplitude offset shown in the following plots for average measurements was calculated using the formula:

Offset (dB) = (Antenna Factor + Cable Loss + Attenuator) – Preamplifier Gain

|                       |           |
|-----------------------|-----------|
| Bluetooth Mode:       | HDR8-TxBF |
| Power Scheme:         | ePA       |
| Measurement Distance: | 3 Meters  |
| Operating Frequency:  | 2404MHz   |
| Channel:              | 1         |



Plot 7-101. Radiated Restricted Lower Band Edge Measurement TxBF (Average & Peak)

|   |  |                            |                                       |                                 |
|---|--|----------------------------|---------------------------------------|---------------------------------|
| FCC ID: BCGA2568<br>IC: 579C-A2568      |  <b>PCTEST</b><br>Proud to be part of element |                            | MEASUREMENT REPORT<br>(CERTIFICATION) | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1C2106080049-10.BCG | Test Dates:<br>6/2/2021 - 8/19/2021  | EUT Type:<br>Tablet Device | Page 93 of 104                        |                                 |

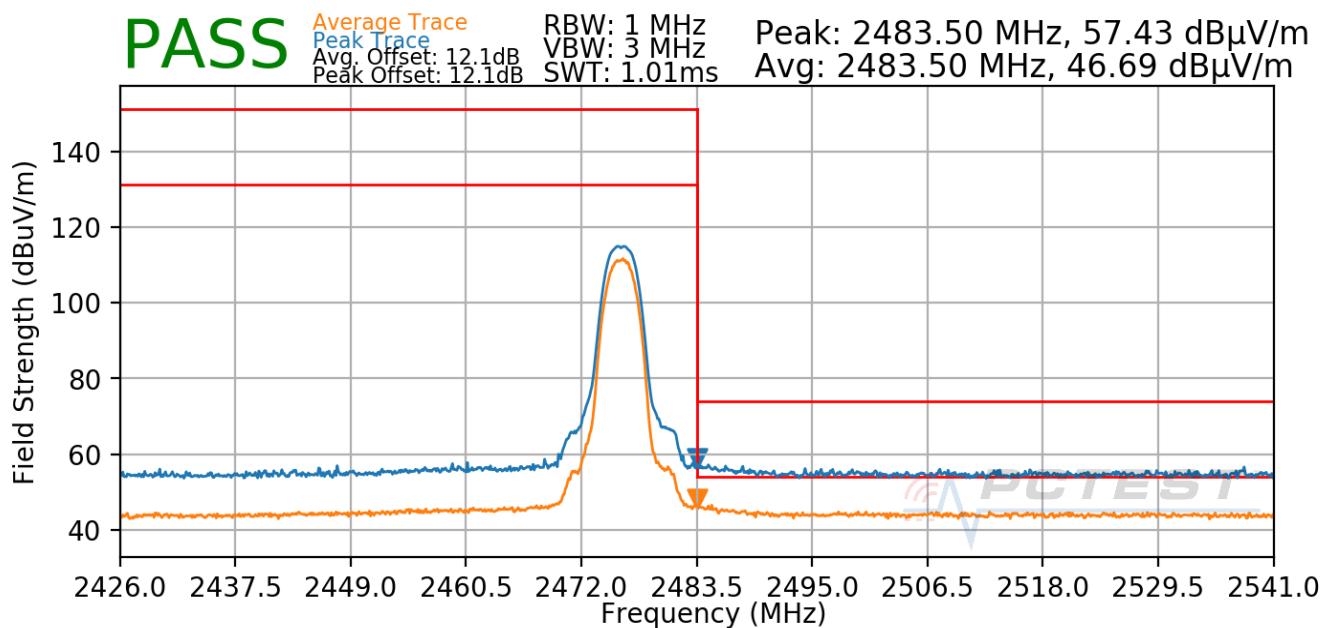
## Radiated Restricted Band Edge Measurements

§15.205 §15.209; RSS-Gen [8.9]

The amplitude offset shown in the following plots for average measurements was calculated using the formula:

Offset (dB) = (Antenna Factor + Cable Loss + Attenuator) – Preamplifier Gain

|                       |           |
|-----------------------|-----------|
| Bluetooth Mode:       | HDR4-TxBF |
| Power Scheme:         | ePA       |
| Measurement Distance: | 3 Meters  |
| Operating Frequency:  | 2476MHz   |
| Channel:              | 73        |



Plot 7-102. Radiated Restricted Upper Band Edge Measurement TxBF (Average & Peak)

|   |   |                                       |                                 |
|---|---|---------------------------------------|---------------------------------|
| FCC ID: BCGA2568<br>IC: 579C-A2568      |  PCTEST<br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1C2106080049-10.BCG | Test Dates:<br>6/2/2021 - 8/19/2021   | EUT Type:<br>Tablet Device            | Page 94 of 104                  |

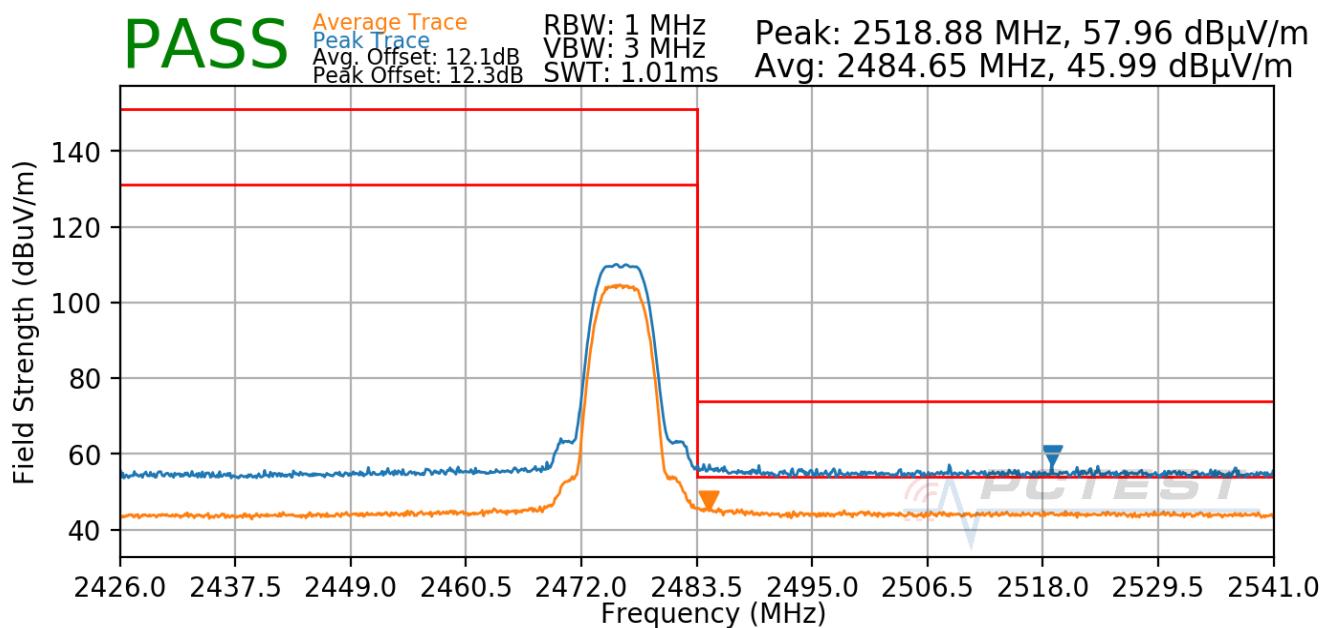
## Radiated Restricted Band Edge Measurements

§15.205 §15.209; RSS-Gen [8.9]

The amplitude offset shown in the following plots for average measurements was calculated using the formula:

Offset (dB) = (Antenna Factor + Cable Loss + Attenuator) – Preamplifier Gain

|                       |           |
|-----------------------|-----------|
| Bluetooth Mode:       | HDR8-TxBF |
| Power Scheme:         | ePA       |
| Measurement Distance: | 3 Meters  |
| Operating Frequency:  | 2476MHz   |
| Channel:              | 73        |



Plot 7-103. Radiated Restricted Upper Band Edge Measurement TxBF (Average & Peak)

|   |  |                            |                                       |                                 |
|---|--|----------------------------|---------------------------------------|---------------------------------|
| FCC ID: BCGA2568<br>IC: 579C-A2568      |  <b>PCTEST<sup>®</sup></b><br>Proud to be part of element |                            | MEASUREMENT REPORT<br>(CERTIFICATION) | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1C2106080049-10.BCG | Test Dates:<br>6/2/2021 - 8/19/2021  | EUT Type:<br>Tablet Device | Page 95 of 104                        |                                 |

## 7.8 Radiated Spurious Emissions – Below 1GHz

§15.209; RSS-Gen [8.9]

### Test Overview and Limit

All out of band radiated spurious emissions are measured with a spectrum analyzer connected to a receive antenna while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies. All data rates and modes were investigated for radiated spurious emissions. Only the radiated emissions of the configuration that produced the worst case emissions are reported in this section.

***All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47 CFR and Table 7 of RSS-Gen (8.10) must not exceed the limits shown in Table 7-23 per Section 15.209 and RSS-Gen (8.9).***

| Frequency         | Field Strength<br>[ $\mu$ V/m] | Measured Distance<br>[Meters] |
|-------------------|--------------------------------|-------------------------------|
| 0.009 – 0.490 MHz | 2400/F (kHz)                   | 300                           |
| 0.490 – 1.705 MHz | 24000/F (kHz)                  | 30                            |
| 1.705 – 30.00 MHz | 30                             | 30                            |
| 30.00 – 88.00 MHz | 100                            | 3                             |
| 88.00 – 216.0 MHz | 150                            | 3                             |
| 216.0 – 960.0 MHz | 200                            | 3                             |
| Above 960.0 MHz   | 500                            | 3                             |

Table 7-23. Radiated Limits

### Test Procedures Used

ANSI C63.10-2013

### Test Settings

#### Quasi-Peak Field Strength Measurements

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 120kHz (for emissions from 30MHz – 1GHz)
3. Detector = quasi-peak
4. Sweep time = auto couple
5. Trace mode = max hold
6. Trace was allowed to stabilize

#### Peak Field Strength Measurements

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 120kHz (for emissions from 30MHz – 1GHz)
3. VBW = 300kHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

|   |   |                                       |                                 |
|---|---|---------------------------------------|---------------------------------|
| FCC ID: BCGA2568<br>IC: 579C-A2568      | <br>PCTEST <sup>®</sup><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1C2106080049-10.BCG | Test Dates:<br>6/2/2021 - 8/19/2021   | EUT Type:<br>Tablet Device            | Page 96 of 104                  |

## Test Setup

The EUT and measurement equipment were set up as shown in the diagrams below.

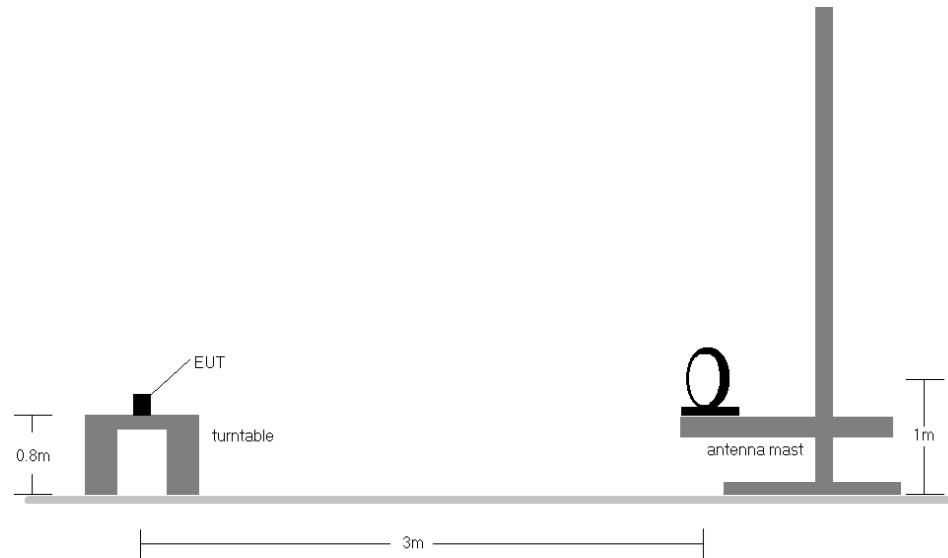


Figure 7-7. Radiated Test Setup < 30MHz

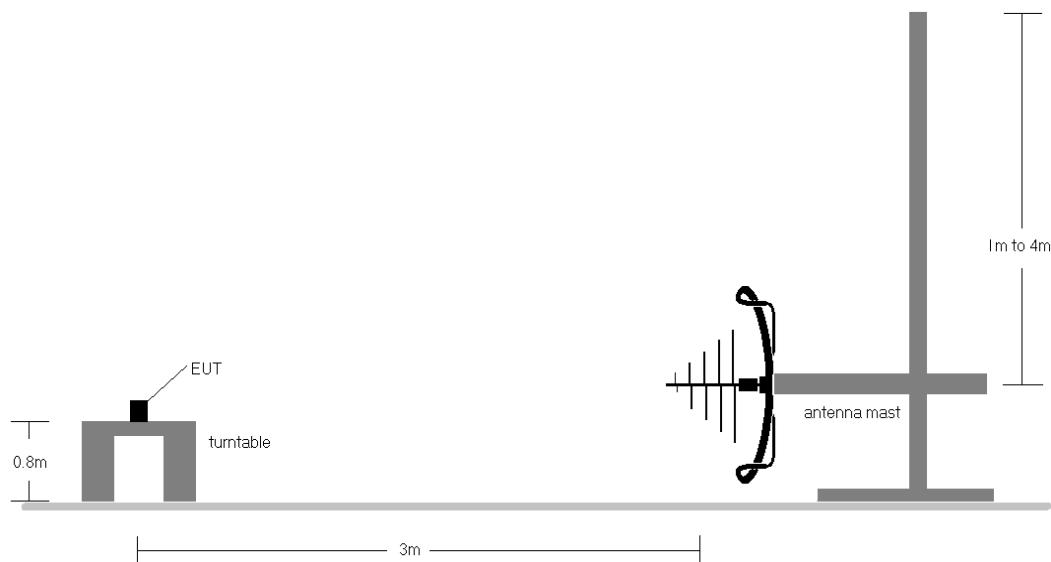


Figure 7-8. Radiated Test Setup < 1GHz

|   |  |                            |                                       |                                 |
|---|--|----------------------------|---------------------------------------|---------------------------------|
| FCC ID: BCGA2568<br>IC: 579C-A2568      |  <b>PCTEST<sup>®</sup></b><br>Proud to be part of element |                            | MEASUREMENT REPORT<br>(CERTIFICATION) | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1C2106080049-10.BCG | Test Dates:<br>6/2/2021 - 8/19/2021  | EUT Type:<br>Tablet Device |                                       | Page 97 of 104                  |

## Test Notes

1. All emissions lying in restricted bands specified in §15.205 and RSS-Gen(8.10) are below the limit shown in Table 7-23.
2. The broadband receive antenna is manipulated through vertical and horizontal polarizations during the tests. The EUT is manipulated through three orthogonal planes. For below 30MHz the loop antenna was positioned in 3 orthogonal planes (X front, Y side, Z top) to determine the orientation resulting in the worst case emissions.
3. This unit was tested with its standard battery.
4. The spectrum is investigated using a peak detector and final measurements are recorded using CISPR quasi peak detector on emissions that were within 6dB of the limit.
5. Emissions were measured at a 3 meter test distance.
6. Emissions are investigated while operating on the center channel of the mode, band, and modulation that produced the worst case results during the transmitter spurious emissions testing.
7. No spurious emissions were detected within 20dB of the limit below 30MHz.
8. The results recorded using the broadband antenna is known to correlate with the results obtained by using a tuned dipole with an acceptable degree of accuracy. The VSWR for the measurement antenna was found to be less than 2:1.
9. The wide spectrum spurious emissions plots shown on the following pages are used only for the purpose of emission identification. There were no emissions detected in the 30MHz – 1GHz frequency range, as shown in the subsequent plots.
10. All supported modulation, antenna (including TxBF mode) and power schemes have been tested on the unit and only worst case configuration is reported.
11. Both configurations below were investigated, and the worst case has been reported.
  - a. EUT powered by AC/DC adaptor via USB-C cable with wire charger
  - b. EUT powered by host PC via USB-C cable with wire charger

## Sample Calculations

### Determining Spurious Emissions Levels

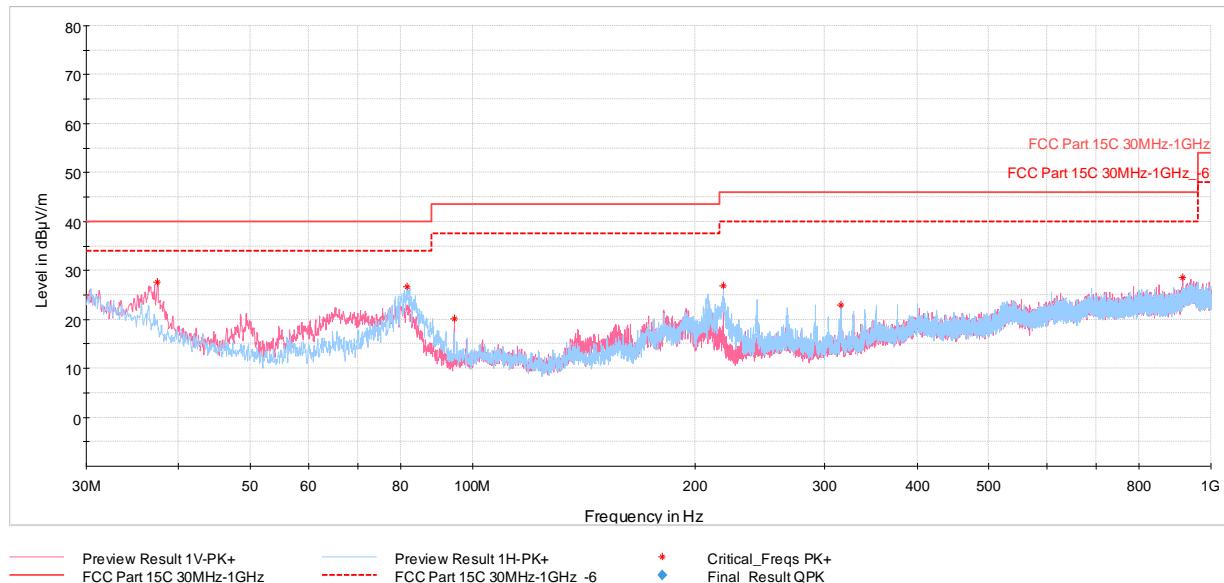
- Field Strength Level [ $\text{dB}_{\mu\text{V/m}}$ ] = Analyzer Level [ $\text{dBm}$ ] + 107 + AFCL [ $\text{dB/m}$ ]
- AFCL [ $\text{dB/m}$ ] = Antenna Factor [ $\text{dB/m}$ ] + Cable Loss [ $\text{dB}$ ] – Preamplifier Gain [ $\text{dB}$ ]
- Margin [ $\text{dB}$ ] = Field Strength Level [ $\text{dB}_{\mu\text{V/m}}$ ] – Limit [ $\text{dB}_{\mu\text{V/m}}$ ]

|   |  |                                       |                                 |
|---|--|---------------------------------------|---------------------------------|
| FCC ID: BCGA2568<br>IC: 579C-A2568      | <br>PCTEST<br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | Approved by:<br>Quality Manager |
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## Radiated Spurious Emissions Measurements (Below 1GHz)

§15.209; RSS-Gen [8.9]

### Antenna 3a



**Plot 7-104. Radiated Spurious Emissions below 1GHz Antenna 3a (4Mbps, ePA – Ch.73 with AC/DC Adapter)**

| Frequency [MHz] | Detector | Ant. Pol. [H/V] | Antenna Height [cm] | Turntable Azimuth [degree] | Analyzer Level [dBm] | AFCL [dB/m] | Field Strength [dBμV/m] | Limit [dBμV/m] | Margin [dB] |
|-----------------|----------|-----------------|---------------------|----------------------------|----------------------|-------------|-------------------------|----------------|-------------|
| 37.47           | Max-Peak | V               | 100                 | 92                         | -63.69               | -15.79      | 27.52                   | 40.00          | -12.48      |
| 81.51           | Max-Peak | H               | 250                 | 134                        | -59.34               | -20.98      | 26.68                   | 40.00          | -13.32      |
| 94.55           | Max-Peak | V               | 100                 | 127                        | -66.56               | -20.36      | 20.08                   | 43.52          | -23.44      |
| 218.57          | Max-Peak | H               | 100                 | 185                        | -64.00               | -16.17      | 26.83                   | 46.02          | -19.19      |
| 315.62          | Max-Peak | H               | 100                 | 31                         | -71.20               | -12.93      | 22.87                   | 46.02          | -23.15      |
| 916.00          | Max-Peak | V               | 100                 | 15                         | -78.25               | -0.23       | 28.52                   | 46.02          | -17.50      |

**Table 7-24. Radiated Spurious Emissions below 1GHz Antenna 3A (4Mbps, ePA – Ch.73 with AC/DC Adapter)**

|   |  |                            |                                    |                                 |
|---|--|----------------------------|------------------------------------|---------------------------------|
| FCC ID: BCGA2568<br>IC: 579C-A2568      |  <b>PCTEST</b><br>Proud to be part of element |                            | MEASUREMENT REPORT (CERTIFICATION) | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1C2106080049-10.BCG | Test Dates:<br>6/2/2021 - 8/19/2021  | EUT Type:<br>Tablet Device |                                    |                                 |

## 7.9 AC Line-Conducted Emissions Measurement

§15.207; RSS-Gen [8.8]

### Test Overview and Limit

All AC line conducted spurious emissions are measured with a receiver connected to a grounded LISN while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies. All data rates and modes were investigated for AC Line conducted spurious emissions. Only the conducted emissions of the configuration that produced the worst case emissions are reported in this section.

***All conducted emissions must not exceed the limits shown in the table below, per Section 15.207 and RSS-Gen (8.8).***

| Frequency of emission<br>(MHz) | Conducted Limit (dB $\mu$ V) |           |
|--------------------------------|------------------------------|-----------|
|                                | Quasi-peak                   | Average   |
| 0.15 – 0.5                     | 66 to 56*                    | 56 to 46* |
| 0.5 – 5                        | 56                           | 46        |
| 5 – 30                         | 60                           | 50        |

Table 7-25. Conducted Limits

\*Decreases with the logarithm of the frequency.

### Test Procedures Used

ANSI C63.10-2013, Section 6.2

### Test Settings

#### Quasi-Peak Measurements

1. Analyzer center frequency was set to the frequency of the spurious emission of interest
2. RBW = 9kHz (for emissions from 150kHz – 30MHz)
3. Detector = quasi-peak
4. Sweep time = auto couple
5. Trace mode = max hold
6. Trace was allowed to stabilize

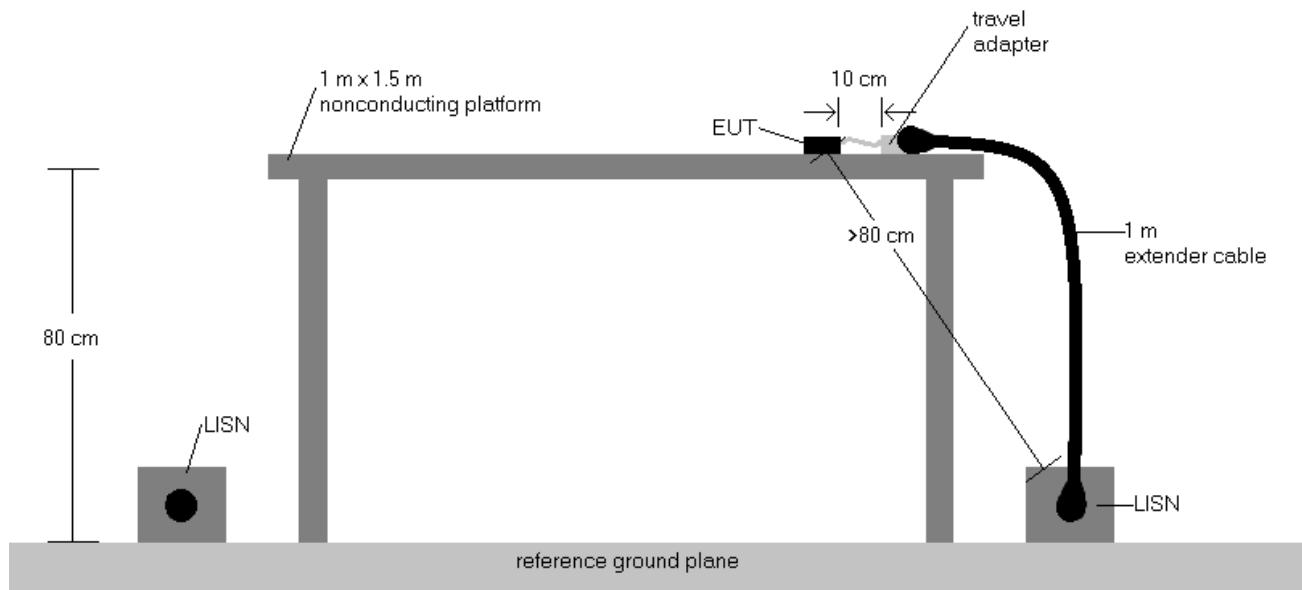
#### Average Measurements

1. Analyzer center frequency was set to the frequency of the spurious emission of interest
2. RBW = 9kHz (for emissions from 150kHz – 30MHz)
3. Detector = RMS
4. Sweep time = auto couple
5. Trace mode = max hold
6. Trace was allowed to stabilize

|   |   |                                       |                                 |
|---|---|---------------------------------------|---------------------------------|
| FCC ID: BCGA2568<br>IC: 579C-A2568      | <br>PCTEST <sup>®</sup><br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1C2106080049-10.BCG | Test Dates:<br>6/2/2021 - 8/19/2021   | EUT Type:<br>Tablet Device            | Page 100 of 104                 |

## Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.

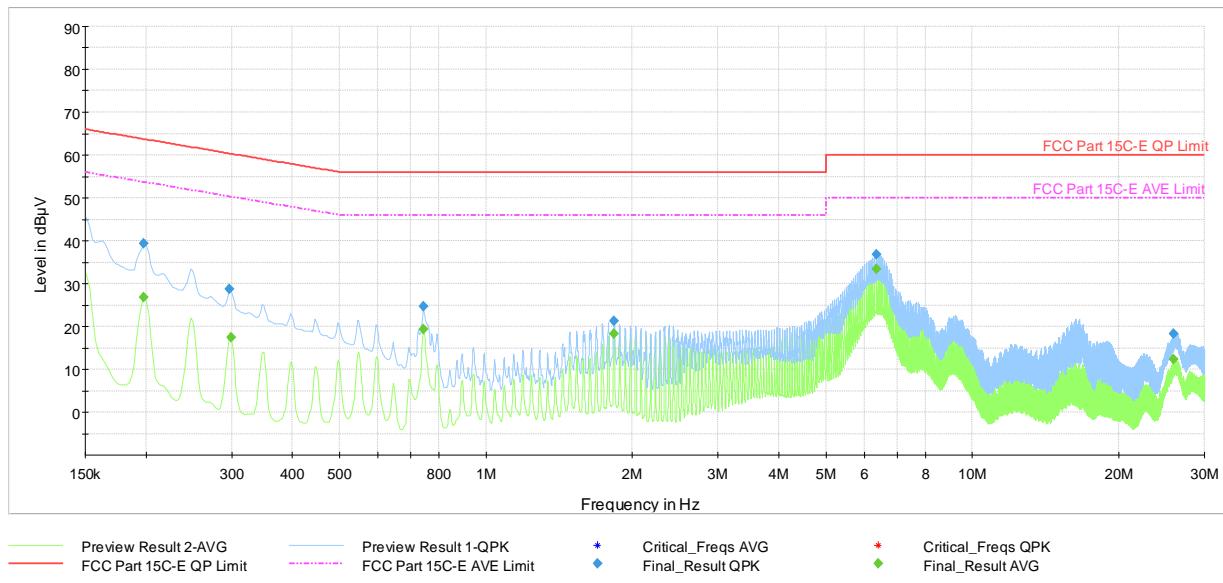


**Figure 7-9. Test Instrument & Measurement Setup**

## Test Notes

1. All modes of operation were investigated and the worst-case emissions are reported. The emissions found were not affected by the choice of channel used during testing.
2. Both configurations below were investigated, and the worst case has been reported.
  - a. EUT powered by AC/DC adaptor via USB-C cable with wire charger
  - b. EUT powered by host PC via USB-C cable with wire charger
3. The limit for an intentional radiator from 150kHz to 30MHz are specified in Part 15.207 and RSS-Gen(8.8).
4. Corr. (dB) = Cable loss (dB) + LISN insertion factor (dB)
5. QP/AV Level (dB $\mu$ V) = QP/AV Analyzer/Receiver Level (dB $\mu$ V) + Correction Factor (dB)
6. Margin (dB) = QP/AV Level (dB $\mu$ V) - QP/AV Limit (dB $\mu$ V)
7. Traces shown in plot are made using quasi peak and average detectors.
8. Deviations to the Specifications: None.

|   |  |                                       |                                 |
|---|--|---------------------------------------|---------------------------------|
| FCC ID: BCGA2568<br>IC: 579C-A2568      | <br>PCTEST<br>Proud to be part of element | MEASUREMENT REPORT<br>(CERTIFICATION) | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1C2106080049-10.BCG | Test Dates:<br>6/2/2021 - 8/19/2021  | EUT Type:<br>Tablet Device            | Page 101 of 104                 |

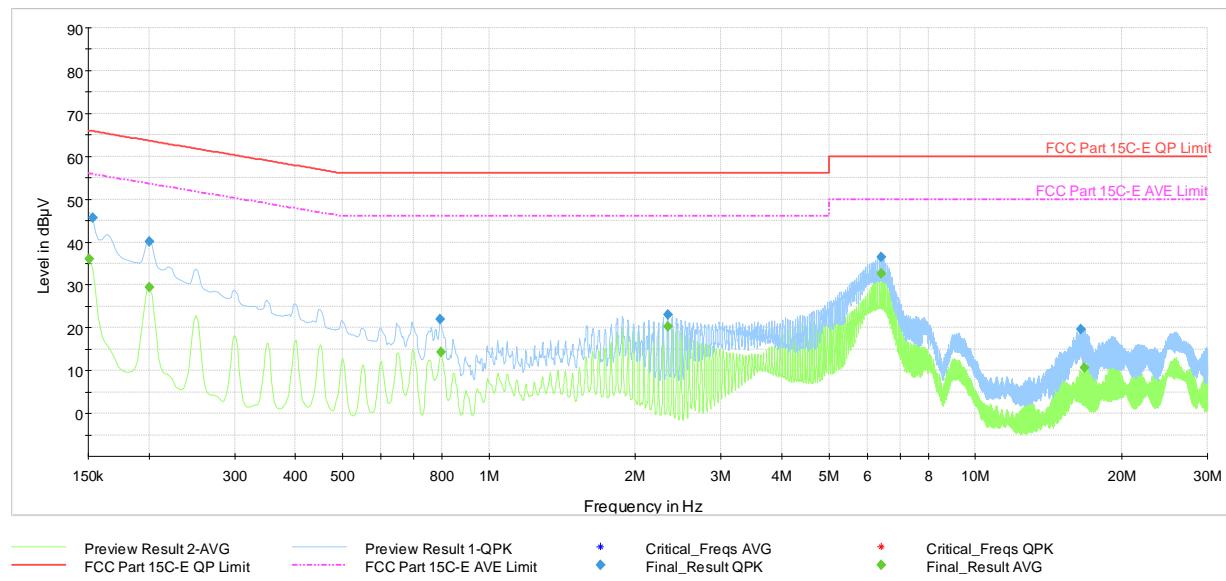


**Plot 7-105. AC Line Conducted Plot with Bluetooth HDR Antenna 3a (L1, 4Mbps ePA - Ch.73 with Laptop)**

| Frequency [MHz] | Process State | QuasiPeak [dBμV] | Average [dBμV] | Limit [dBμV] | Margin [dB] | Line | PE  |
|-----------------|---------------|------------------|----------------|--------------|-------------|------|-----|
| 0.198           | FINAL         | —                | 26.91          | 53.69        | -26.78      | L1   | GND |
| 0.198           | FINAL         | 39.4             | —              | 63.69        | -24.26      | L1   | GND |
| 0.297           | FINAL         | 28.7             | —              | 60.33        | -31.61      | L1   | GND |
| 0.299           | FINAL         | —                | 17.48          | 50.26        | -32.79      | L1   | GND |
| 0.745           | FINAL         | —                | 19.35          | 46.00        | -26.65      | L1   | GND |
| 0.745           | FINAL         | 24.7             | —              | 56.00        | -31.26      | L1   | GND |
| 1.834           | FINAL         | 21.2             | —              | 56.00        | -34.82      | L1   | GND |
| 1.834           | FINAL         | —                | 18.39          | 46.00        | -27.61      | L1   | GND |
| 6.345           | FINAL         | 36.7             | —              | 60.00        | -23.28      | L1   | GND |
| 6.345           | FINAL         | —                | 33.51          | 50.00        | -16.49      | L1   | GND |
| 25.877          | FINAL         | —                | 12.31          | 50.00        | -37.69      | L1   | GND |
| 25.877          | FINAL         | 18.4             | —              | 60.00        | -41.60      | L1   | GND |

**Table 7-26. AC Line Conducted Data with Bluetooth HDR Antenna 3a (L1, 4Mbps ePA - Ch.73 with Laptop)**

|   |   |                                       |                                 |
|---|---|---------------------------------------|---------------------------------|
| FCC ID: BCGA2568<br>IC: 579C-A2568      | <b>PCTEST®</b><br>Proud to be part of  | MEASUREMENT REPORT<br>(CERTIFICATION) | Approved by:<br>Quality Manager |
| Test Report S/N:<br>1C2106080049-10.BCG | Test Dates:<br>6/2/2021 - 8/19/2021   | EUT Type:<br>Tablet Device            | Page 102 of 104                 |



**Plot 7-106. AC Line Conducted Plot with Bluetooth HDR Antenna 3a (N, 4Mbps ePA - Ch.73 with Laptop)**

| Frequency [MHz] | Process State | QuasiPeak [dBμV] | Average [dBμV] | Limit [dBμV] | Margin [dB] | Line | PE  |
|-----------------|---------------|------------------|----------------|--------------|-------------|------|-----|
| 0.151           | FINAL         | —                | 35.95          | 55.96        | -20.01      | N    | GND |
| 0.153           | FINAL         | 45.6             | —              | 65.84        | -20.24      | N    | GND |
| 0.200           | FINAL         | —                | 29.36          | 53.60        | -24.24      | N    | GND |
| 0.200           | FINAL         | 40.1             | —              | 63.60        | -23.54      | N    | GND |
| 0.794           | FINAL         | 22.0             | —              | 56.00        | -34.01      | N    | GND |
| 0.797           | FINAL         | —                | 14.32          | 46.00        | -31.68      | N    | GND |
| 2.331           | FINAL         | 23.0             | —              | 56.00        | -32.99      | N    | GND |
| 2.331           | FINAL         | —                | 20.21          | 46.00        | -25.79      | N    | GND |
| 6.395           | FINAL         | 36.4             | —              | 60.00        | -23.57      | N    | GND |
| 6.395           | FINAL         | —                | 32.67          | 50.00        | -17.33      | N    | GND |
| 16.504          | FINAL         | 19.6             | —              | 60.00        | -40.41      | N    | GND |
| 16.751          | FINAL         | —                | 10.73          | 50.00        | -39.27      | N    | GND |

**Table 7-27. AC Line Conducted Data with Bluetooth HDR Antenna 3a (N, 4Mbps ePA - Ch.73 with Laptop)**

|  |   |   |                                 |
|--|---|---|---------------------------------|
| FCC ID: BCGA2568<br>IC: 579C-A2568             |  <b>PCTEST®</b><br>Proud to be part of element | <b>MEASUREMENT REPORT (CERTIFICATION)</b> | Approved by:<br>Quality Manager |
| <b>Test Report S/N:</b><br>1C2106080049-10.BCG | <b>Test Dates:</b><br>6/2/2021 - 8/19/2021  | <b>EUT Type:</b><br>Tablet Device         | Page 103 of 104                 |

## 8.0 CONCLUSION

The data collected relate only the item(s) tested and show that the **Apple Tablet Device** **FCC ID: BCGA2568 and IC: 579C-A2568** is in compliance with Part 15 Subpart C (15.247) of the FCC Rules and RSS-247 of the Innovation, Science and Economic Development Canada Rules.

|  |  |                                   |   |  |
|--|--|-----------------------------------|---|--|
| FCC ID: BCGA2568<br>IC: 579C-A2568             | <br><b>PCTEST</b> <sup>®</sup><br>Proud to be part of  |                                   | <b>MEASUREMENT REPORT<br/>(CERTIFICATION)</b> | <b>Approved by:</b><br>Quality Manager |
| <b>Test Report S/N:</b><br>1C2106080049-10.BCG | <b>Test Dates:</b><br>6/2/2021 - 8/19/2021   | <b>EUT Type:</b><br>Tablet Device |   | Page 104 of 104                        |