



This test demonstrates the ability of the device to increase and decrease power by the required 6dB as the RSSI is decreased and increased.

1. Configure EUT and companion device for peer-to-peer communication as shown in Figure 7-6. (no attenuation for noise free spectral environment, high RSSI simulation)
2. Establish a link and start communication between EUT and companion device
3. Capture PSD spectrum analyzer
4. Add a 20dB attenuator to the setup as shown in Figure 7-7 (noisy spectral environment, low RSSI simulation)
5. Capture PSD spectrum analyzer
6. Compare the highest PSD captured in step 3 to the highest PSD on step 5 and determine the delta.

Implementation Expectation: Tx power Backoff enabled at -20dBm or stronger RSSI, backoff disabled at -40dBm or weaker RSSI (RSSI updated every second)

Test Notes

1. Companion device used was model: A2117 (refer to Table 2-4).
2. Per manufacturer's declaration, after establishing communication between the EUT and the companion device, NB UNII HDR is used to maintain communication and traffic. NB UNII BDR and NB UNII LE are used for establishing the initial connection with the companion device.
3. TPC is triggered when a high RSSI is detected. As RSSI detected signal decreases, the transmitters output power will increase back to maximum allowed power.

| | | | |
|--|---|------------------------------------|--|
| FCC ID: BCG-A3047 |  MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
| Test Report S/N: 1C2407010044-01-R2.BCG | Test Dates: 6/24/2024 - 8/22/2024 | EUT Type: Wireless Right Earbud | Page 56 of 95 |

V 10.5 12/15/2021

| Frequency [MHz] | Measured Power Density [dBm/MHz] | Antenna Gain (dBi) | e.i.r.p. Power Density [dBm/MHz] | e.i.r.p. Power Density Limit [dBm/MHz] | Verdict |
|-----------------|----------------------------------|--------------------|----------------------------------|--|---------|
| 6115 | -10.01 | -0.27 | -10.28 | -5.00 | PASS |
| 6236 | -10.22 | -0.27 | -10.49 | -5.00 | PASS |
| 6377 | -9.72 | -0.27 | -9.99 | -5.00 | PASS |

Table 7-8. PSD Measurements (no TPC)

| Frequency [MHz] | Measured Power Density [dBm/MHz] | Antenna Gain (dBi) | e.i.r.p. Power Density [dBm/MHz] | TPC e.i.r.p. Power Density Limit [dBm/MHz] | Verdict |
|-----------------|----------------------------------|--------------------|----------------------------------|--|---------|
| 6115 | -21.05 | -0.27 | -21.32 | -11.00 | PASS |
| 6236 | -17.39 | -0.27 | -17.66 | -11.00 | PASS |
| 6377 | -17.49 | -0.27 | -17.76 | -11.00 | PASS |

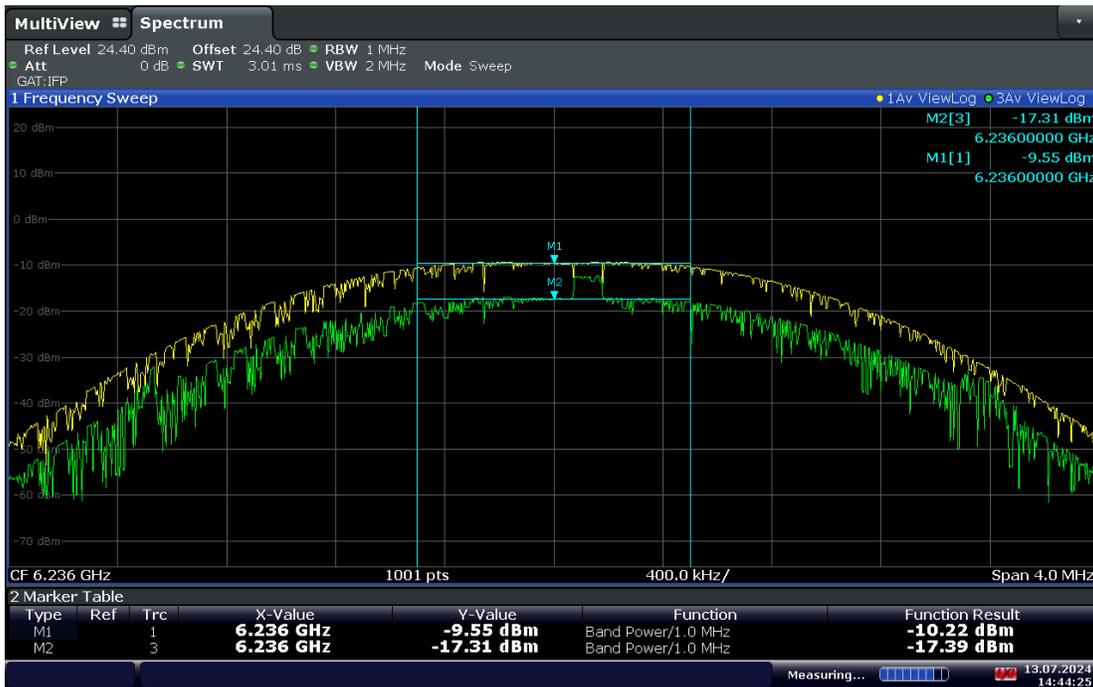
Table 7-9. PSD Measurements (with TPC)

| | | | | |
|---|---|---|--|--|
| FCC ID: BCG-A3047 |  | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
| Test Report S/N: 1C2407010044-01-R2.BCG | Test Dates: 6/24/2024 - 8/22/2024 | EUT Type: Wireless Right Earbud | | Page 57 of 95 |



14:28:29 13.07.2024

Plot 7-59. Power Density Plot (NB UNII, 6115MHz)

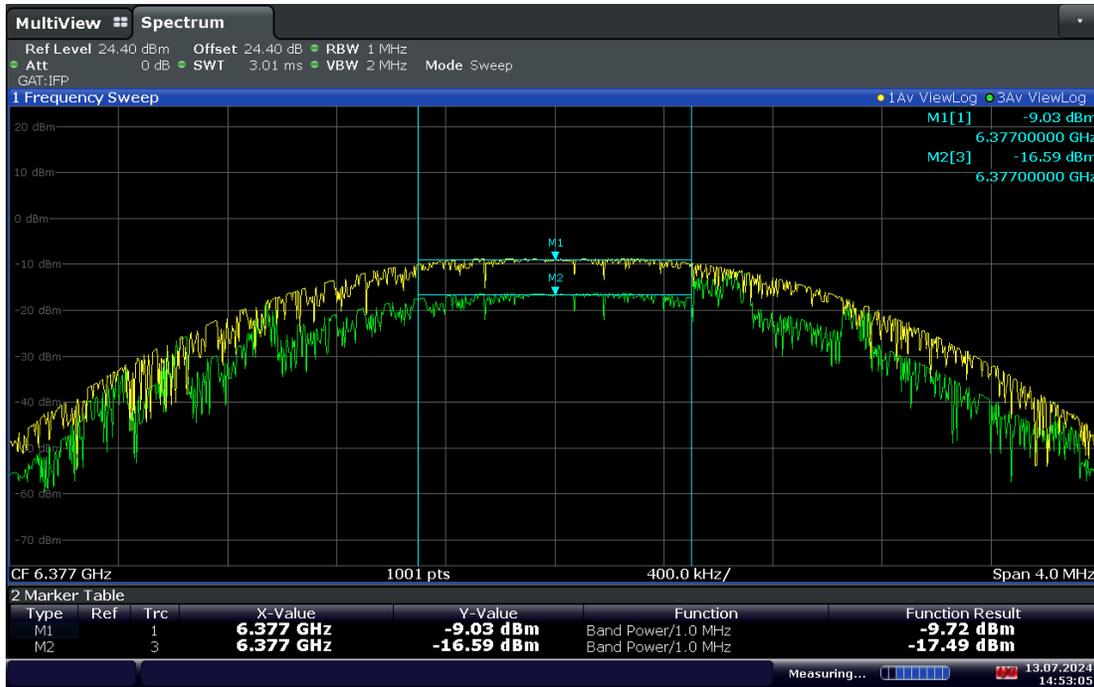


14:44:25 13.07.2024

Plot 7-60. Power Density Plot (NB UNII, 6236MHz)

| | | | |
|--|---|---------------------------------------|-----------------------------------|
| FCC ID: BCG-A3047 |  | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Technical Manager |
| Test Report S/N: 1C2407010044-01-R2.BCG | Test Dates: 6/24/2024 - 8/22/2024 | EUT Type: Wireless Right Earbud | Page 58 of 95 |

V 10.5 12/15/2021



14:53:05 13.07.2024

Plot 7-61. Power Density Plot (NB UNII, 6377MHz)

| | | | | |
|--|---|---------------------------------------|--|-----------------------------------|
| FCC ID: BCG-A3047 |  | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
| Test Report S/N: 1C2407010044-01-R2.BCG | Test Dates: 6/24/2024 - 8/22/2024 | EUT Type: Wireless Right Earbud | | Page 59 of 95 |

V 10.5 12/15/2021



7.8 Radiated Spurious Emission – Above 1GHz
§15.407(b) §15.205 §15.209

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 its maximum power control level, as defined in ANSI C63.10-2020 and KDB 789033 D02 v02r01, 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 must not exceed the limits shown in Table 7-13 per Section 15.209.

| Frequency | Field Strength [$\mu\text{V/m}$] | Measured Distance [Meters] |
|-----------------|---------------------------------------|-------------------------------|
| Above 960.0 MHz | 500 | 3 |

Table 7-10. Radiated Limits

Test Procedures Used

ANSI C63.10-2020 – Sections 12.7.7.2, 12.7.6
 KDB 789033 D02 v02r01 – Section G

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 $\geq 2 \times \text{span/RBW}$)
6. Averaging type = power (RMS)
7. Sweep time = auto couple
8. Trace was averaged over 100 sweeps

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: BCG-A3047 | | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Technical Manager |
| Test Report S/N: 1C2407010044-01-R2.BCG | Test Dates: 6/24/2024 - 8/22/2024 | EUT Type: Wireless Right Earbud | Page 60 of 95 |

V 10.5 12/15/2021

Test Setup

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

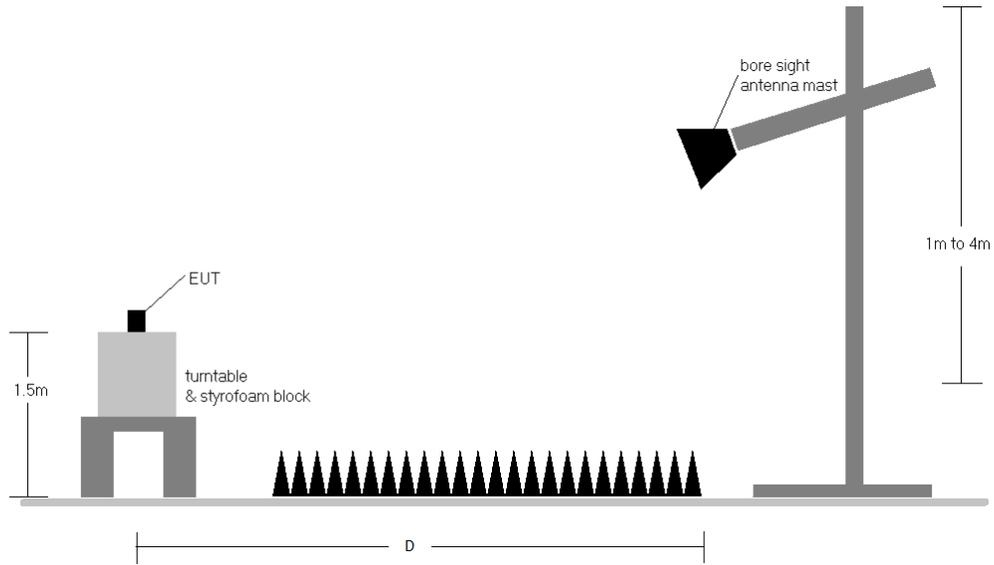


Figure 7-8. Test Instrument & Measurement Setup

| | | | |
|--|---|------------------------------------|--|
| FCC ID: BCG-A3047 |  MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
| Test Report S/N: 1C2407010044-01-R2.BCG | Test Dates: 6/24/2024 - 8/22/2024 | EUT Type: Wireless Right Earbud | Page 61 of 95 |

Test Notes

1. All emissions that lie in the restricted bands (denoted by a * next to the frequency) specified in §15.205 are below the limit shown in Table 7-10.
2. All spurious emissions lying in restricted bands specified in §15.205 are below the limit shown in Table 7-10. All spurious emissions that do not lie in a restricted band are subject to a limit of -27dBm/MHz. At a distance of 3 meters, the field strength limit in dB μ V/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions of 68.2dB μ V/m.
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.

Sample Calculations

Determining Spurious Emissions Levels

- Field Strength Level [dB μ V/m] = Analyzer Level [dBm] + 107 + AFCL [dB/m]
- AFCL [dB/m] = Antenna Factor [dB/m] + Cable Loss [dB] – Preamplifier Gain [dB]
- Margin [dB] = Field Strength Level [dB μ V/m] – Limit [dB μ V/m]

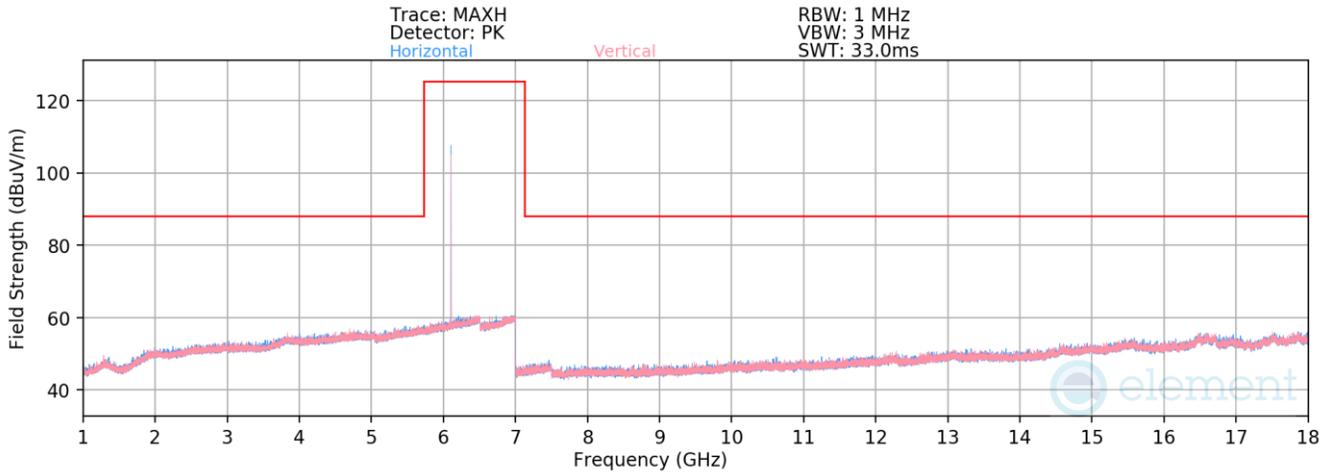
Radiated Band Edge Measurement Offset

- The amplitude offset shown in the radiated restricted band edge plots in Section 7.8.2 was calculated using the formula:
Offset (dB) = (Antenna Factor + Cable Loss + Attenuator) – Preamplifier Gain

| | | | | |
|--|---|------------------------------------|---------------------------------------|-----------------------------------|
| FCC ID: BCG-A3047 |  | | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Technical Manager |
| Test Report S/N: 1C2407010044-01-R2.BCG | Test Dates: 6/24/2024 - 8/22/2024 | EUT Type: Wireless Right Earbud | | Page 62 of 95 |

V 10.5 12/15/2021

7.8.1 Radiated Spurious Emission (Above 1GHz)



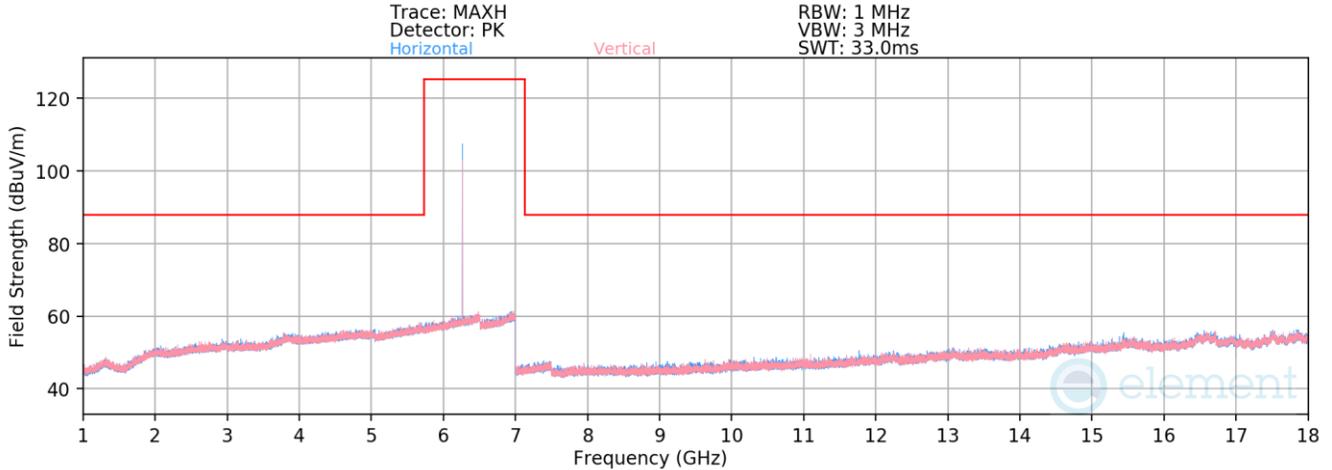
Plot 7-62. Radiated Spurious Emissions 1-18GHz (NB UNII BDR – 6108MHz)

Mode: NB UNII BDR
 Data Rate: 1Mbps
 Distance of Measurements: 3 Meters
 Operating Frequency: 6108MHz

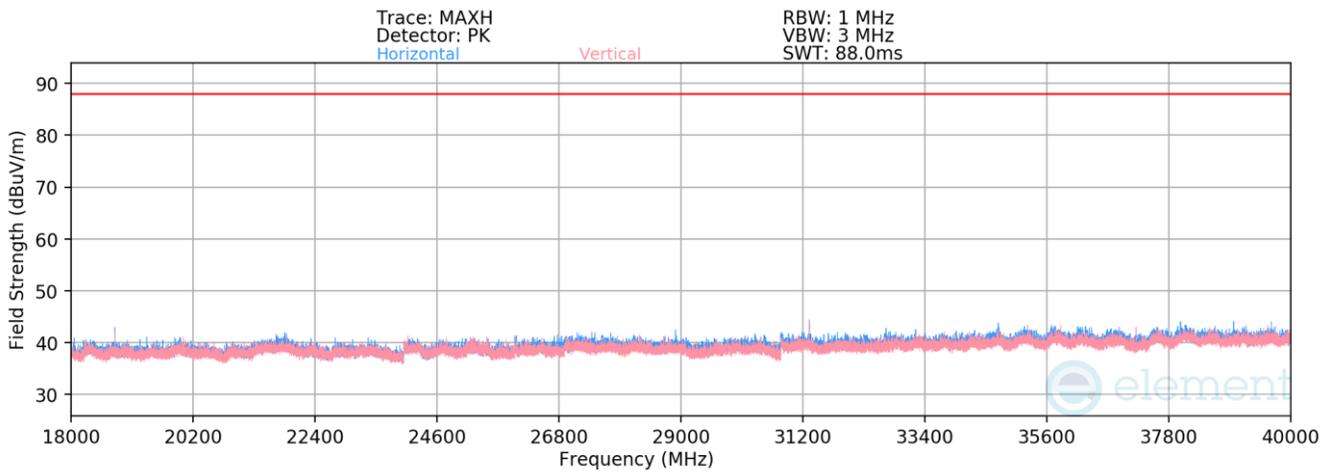
| Frequency [MHz] | Detector | Ant. Pol. [H/V] | Antenna Height [cm] | Turntable Azimuth [degree] | Analyzer Level [dBm] | AFCL [dB/m] | Field Strength [dBμV/m] | Limit [dBμV/m] | Margin [dB] |
|-----------------|----------|-----------------|---------------------|----------------------------|----------------------|-------------|-------------------------|----------------|-------------|
| * 12216.00 | Average | - | - | - | -79.23 | 10.70 | 38.47 | 53.98 | -15.51 |
| * 12216.00 | Peak | - | - | - | -68.15 | 10.70 | 49.55 | 73.98 | -24.43 |

Table 7-11. Radiated Spurious Emissions Measurements

| | | | | |
|--|---|---|--|-----------------------------------|
| FCC ID: BCG-A3047 |  | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
| Test Report S/N: 1C2407010044-01-R2.BCG | Test Dates: 6/24/2024 - 8/22/2024 | EUT Type: Wireless Right Earbud | | Page 63 of 95 |



Plot 7-63. Radiated Spurious Emissions 1-18GHz (NB UNII BDR – 6264MHz)



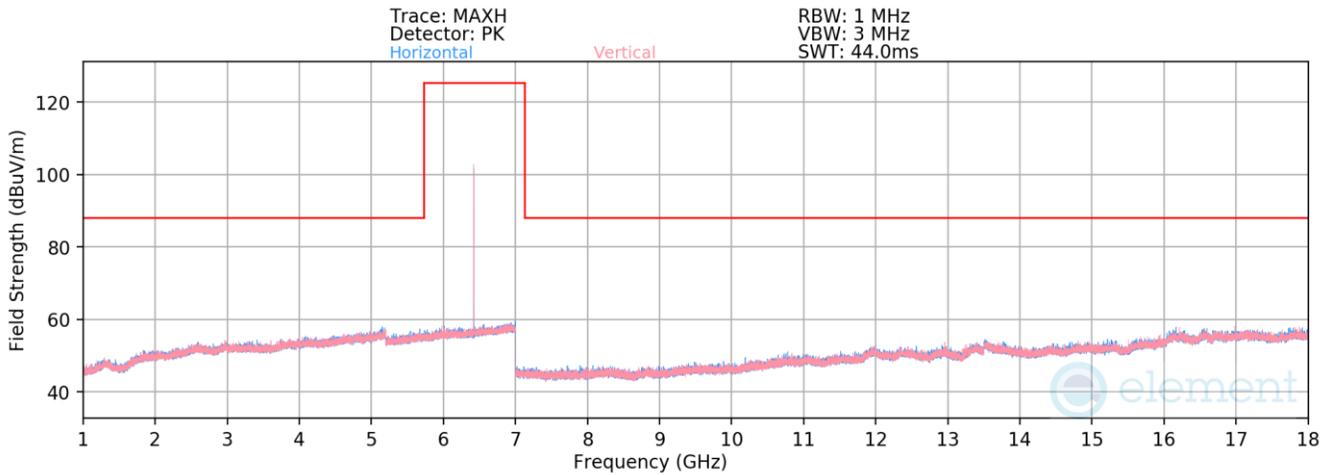
Plot 7-64. Radiated Spurious Emissions 18-40GHz (NB UNII BDR– 6264MHz)

Mode: NB UNII BDR
 Data Rate: 1Mbps
 Distance of Measurements: 3 Meters
 Operating Frequency: 6264MHz

| Frequency [MHz] | Detector | Ant. Pol. [H/V] | Antenna Height [cm] | Turntable Azimuth [degree] | Analyzer Level [dBm] | AFCL [dB/m] | Duty Cycle Correction Factor [dB] | Field Strength [dBμV/m] | Limit [dBμV/m] | Margin [dB] |
|-----------------|----------|-----------------|---------------------|----------------------------|----------------------|-------------|-----------------------------------|-------------------------|----------------|-------------|
| * 12528.00 | Average | H | 374 | 257 | -79.04 | 10.85 | 1.13 | 39.94 | 53.98 | -14.04 |
| * 12528.00 | Peak | H | 374 | 257 | -68.57 | 10.85 | 0.00 | 49.28 | 73.98 | -24.70 |
| * 18792.00 | Peak | V | 59 | 146 | -59.84 | -7.02 | 1.13 | 41.27 | 53.98 | -12.71 |
| * 18792.00 | Average | V | 59 | 146 | -53.25 | -7.02 | 0.00 | 46.73 | 73.98 | -27.25 |
| * 25056.00 | Peak | - | - | - | -72.79 | -4.89 | 0.00 | 29.32 | 68.23 | -38.91 |
| * 25056.00 | Peak | - | - | - | -60.83 | -4.89 | 0.00 | 41.28 | 88.23 | -46.95 |
| * 31320.00 | Peak | H | 63 | 164 | -66.87 | -2.27 | 1.13 | 38.99 | 53.98 | -14.99 |
| * 31320.00 | Average | H | 63 | 164 | -58.68 | -2.27 | 0.00 | 46.05 | 73.98 | -27.93 |
| * 37584.00 | Peak | - | - | - | -70.71 | -5.77 | 0.00 | 30.52 | 68.23 | -37.71 |
| * 37584.00 | Peak | - | - | - | -58.96 | -5.77 | 0.00 | 42.27 | 88.23 | -45.96 |

Table 7-12. Radiated Spurious Emissions Measurements

| | | | | |
|--|--------------------------------------|---|--|-----------------------------------|
| FCC ID: BCG-A3047 | | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
| Test Report S/N: 1C2407010044-01-R2.BCG | Test Dates: 6/24/2024 - 8/22/2024 | EUT Type: Wireless Right Earbud | | Page 64 of 95 |



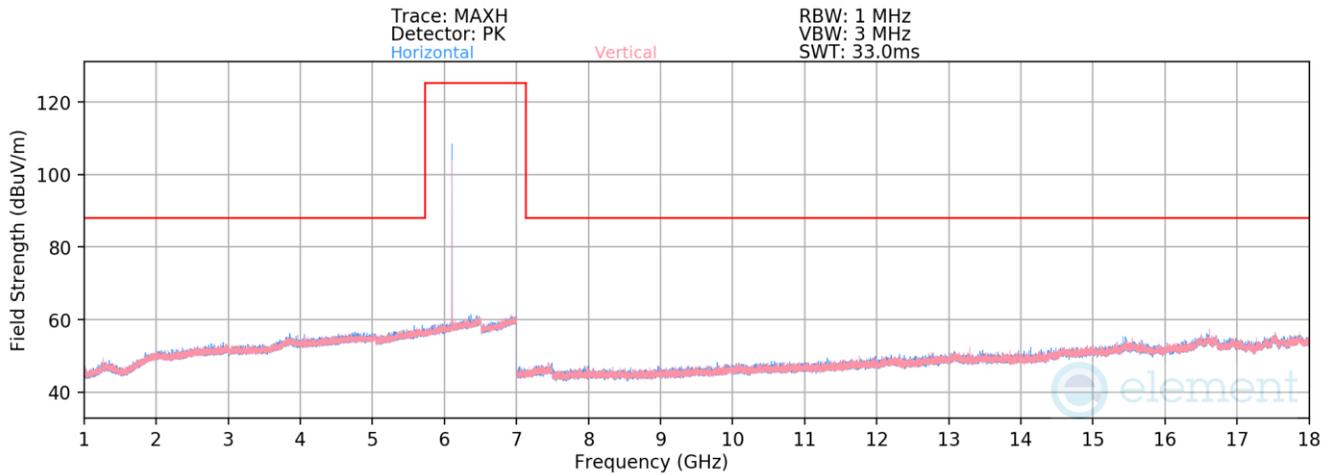
Plot 7-65. Radiated Spurious Emissions 1-18GHz (NB UNII BDR – 6420MHz)

Mode: NB UNII BDR
 Data Rate: 1Mbps
 Distance of Measurements: 3 Meters
 Operating Frequency: 6420MHz

| 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] |
|-----------------|----------|-----------------|---------------------|----------------------------|----------------------|-------------|-------------------------|----------------|-------------|
| 12840.00 | Average | - | - | - | -92.84 | 26.04 | 40.20 | 68.23 | -28.03 |
| 12840.00 | Peak | - | - | - | -81.64 | 26.04 | 51.40 | 88.23 | -36.83 |

Table 7-13. Radiated Spurious Emissions Measurements

| | | | | |
|--|---|---|--|-----------------------------------|
| FCC ID: BCG-A3047 |  | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
| Test Report S/N: 1C2407010044-01-R2.BCG | Test Dates: 6/24/2024 - 8/22/2024 | EUT Type: Wireless Right Earbud | | Page 65 of 95 |



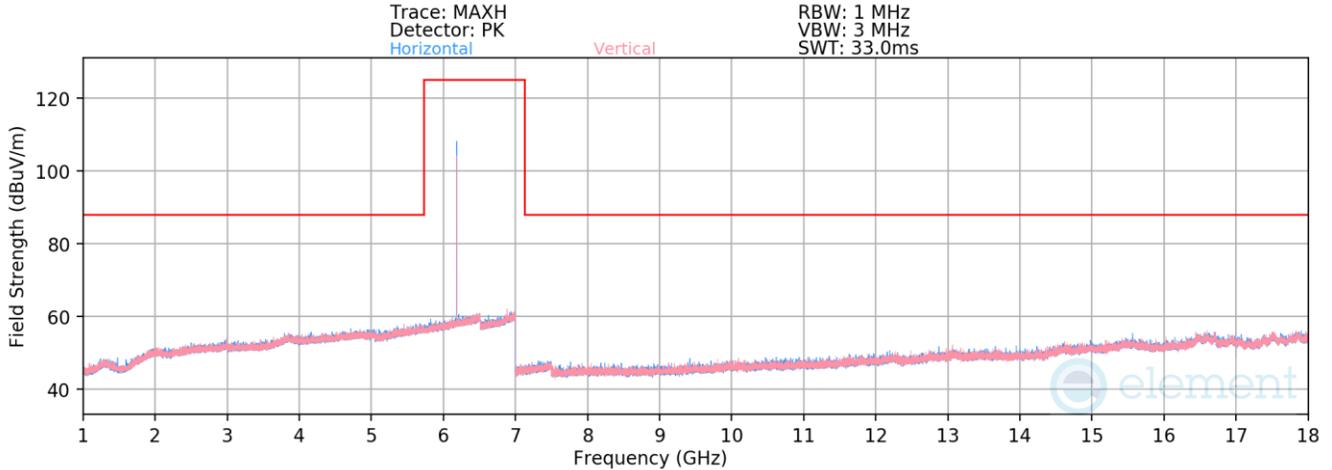
Plot 7-66. Radiated Spurious Emissions 1-18GHz (NB UNII (LE2M) – 6108MHz)

Mode: NB UNII LE
 Data Rate: 2Mbps
 Distance of Measurements: 3 Meters
 Operating Frequency: 6108MHz

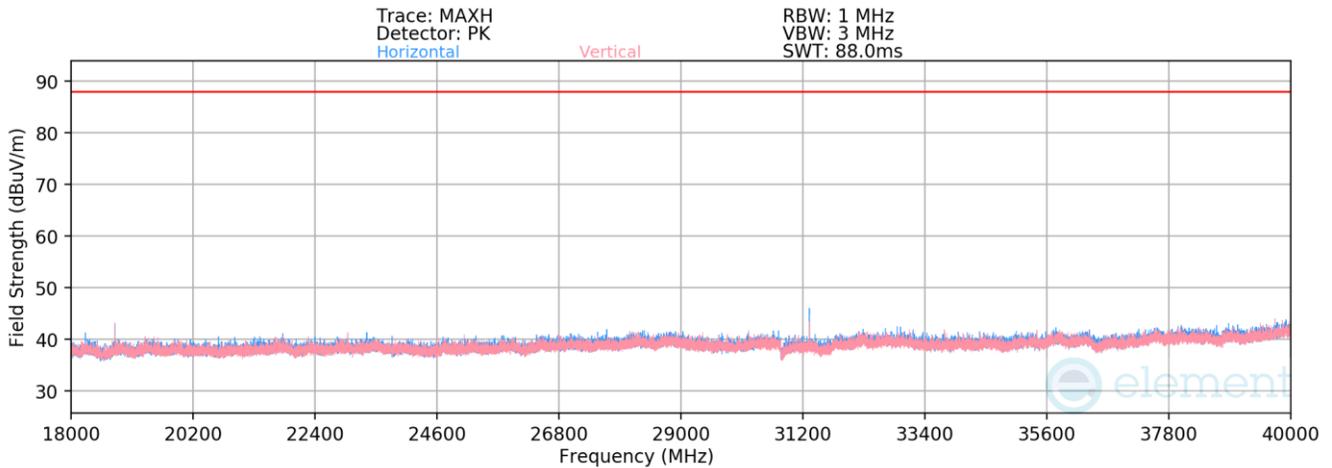
| Frequency [MHz] | Detector | Ant. Pol. [H/V] | Antenna Height [cm] | Turntable Azimuth [degree] | Analyzer Level [dBm] | AFCL [dB/m] | Field Strength [dBμV/m] | Limit [dBμV/m] | Margin [dB] |
|-----------------|----------|-----------------|---------------------|----------------------------|----------------------|-------------|-------------------------|----------------|-------------|
| * 12216.00 | Average | - | - | - | -79.04 | 10.70 | 38.66 | 53.98 | -15.32 |
| * 12216.00 | Peak | - | - | - | -68.48 | 10.70 | 49.22 | 73.98 | -24.76 |

Table 7-14. Radiated Spurious Emissions Measurements

| | | | | |
|--|---|---|--|-----------------------------------|
| FCC ID: BCG-A3047 |  | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
| Test Report S/N: 1C2407010044-01-R2.BCG | Test Dates: 6/24/2024 - 8/22/2024 | EUT Type: Wireless Right Earbud | | Page 66 of 95 |



Plot 7-67. Radiated Spurious Emissions 1-18GHz (NB UNII (LE2M) – 6264MHz)



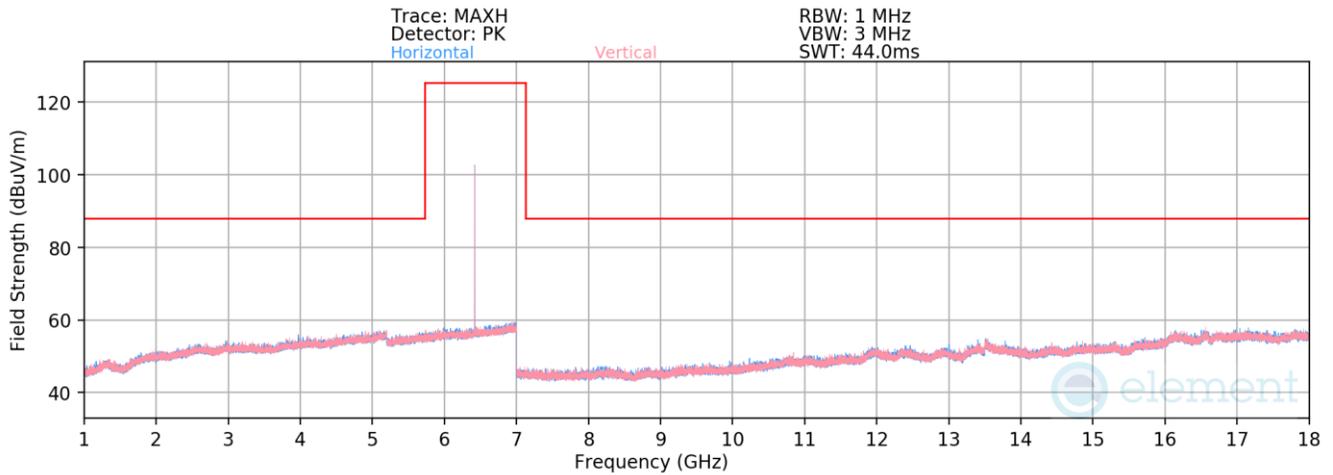
Plot 7-68. Radiated Spurious Emissions 18-40GHz (NB UNII (LE2M) – 6264MHz)

Mode: NB UNII LE
 Data Rate: 2Mbps
 Distance of Measurements: 3 Meters
 Operating Frequency: 6264MHz

| Frequency [MHz] | Detector | Ant. Pol. [H/V] | Antenna Height [cm] | Turntable Azimuth [degree] | Analyzer Level [dBm] | AFCL [dB/m] | Duty Cycle Correction Factor [dB] | Field Strength [dBuV/m] | Limit [dBuV/m] | Margin [dB] |
|-----------------|----------|-----------------|---------------------|----------------------------|----------------------|-------------|-----------------------------------|-------------------------|----------------|-------------|
| * 12528.00 | Average | - | - | - | -78.97 | 10.85 | 0.00 | 38.88 | 53.98 | -15.10 |
| * 12528.00 | Peak | - | - | - | -68.08 | 10.85 | 0.00 | 49.77 | 73.98 | -24.21 |
| * 18792.00 | Peak | H | 337 | 351 | -59.82 | -7.02 | 0.61 | 40.77 | 53.98 | -13.21 |
| * 18792.00 | Average | H | 337 | 351 | -53.05 | -7.02 | 0.00 | 46.94 | 73.98 | -27.04 |
| * 25056.00 | Peak | - | - | - | -71.99 | -4.89 | 0.00 | 30.12 | 68.23 | -38.11 |
| * 25056.00 | Peak | - | - | - | -60.54 | -4.89 | 0.00 | 41.57 | 88.23 | -46.66 |
| * 31320.00 | Peak | H | 288 | 205 | -64.67 | -2.27 | 0.61 | 40.66 | 53.98 | -13.32 |
| * 31320.00 | Average | H | 288 | 205 | -56.98 | -2.27 | 0.00 | 47.75 | 73.98 | -26.23 |
| * 37584.00 | Peak | - | - | - | -70.71 | -5.77 | 0.00 | 30.51 | 68.23 | -37.72 |
| * 37584.00 | Peak | - | - | - | -59.43 | -5.77 | 0.00 | 41.80 | 88.23 | -46.44 |

Table 7-15. Radiated Spurious Emissions Measurements

| | | | | |
|--|--------------------------------------|---|--|-----------------------------------|
| FCC ID: BCG-A3047 | | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
| Test Report S/N: 1C2407010044-01-R2.BCG | Test Dates: 6/24/2024 - 8/22/2024 | EUT Type: Wireless Right Earbud | | Page 67 of 95 |



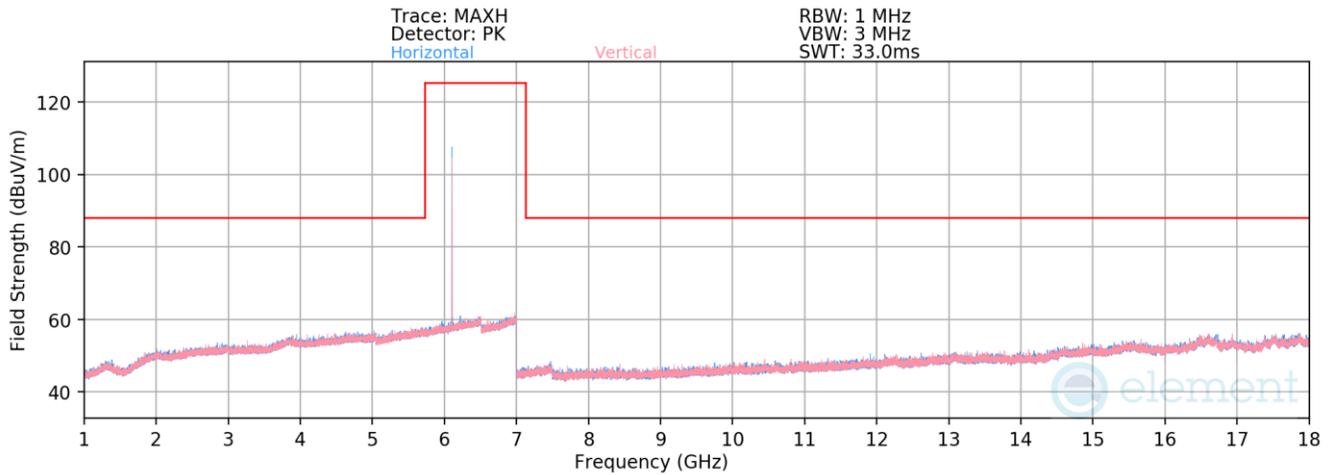
Plot 7-69. Radiated Spurious Emissions 1-18GHz (NB UNII (LE2M) – 6420MHz)

Mode: NB UNII LE
 Data Rate: 2Mbps
 Distance of Measurements: 3 Meters
 Operating Frequency: 6420MHz

| 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] |
|-----------------|----------|-----------------|---------------------|----------------------------|----------------------|-------------|-------------------------|----------------|-------------|
| 12840.00 | Average | - | - | - | -92.90 | 26.04 | 40.14 | 68.23 | -28.09 |
| 12840.00 | Peak | - | - | - | -81.57 | 26.04 | 51.47 | 88.23 | -36.76 |

Table 7-16. Radiated Spurious Emissions Measurements

| | | | | |
|--|---|---|--|-----------------------------------|
| FCC ID: BCG-A3047 |  | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
| Test Report S/N: 1C2407010044-01-R2.BCG | Test Dates: 6/24/2024 - 8/22/2024 | EUT Type: Wireless Right Earbud | | Page 68 of 95 |



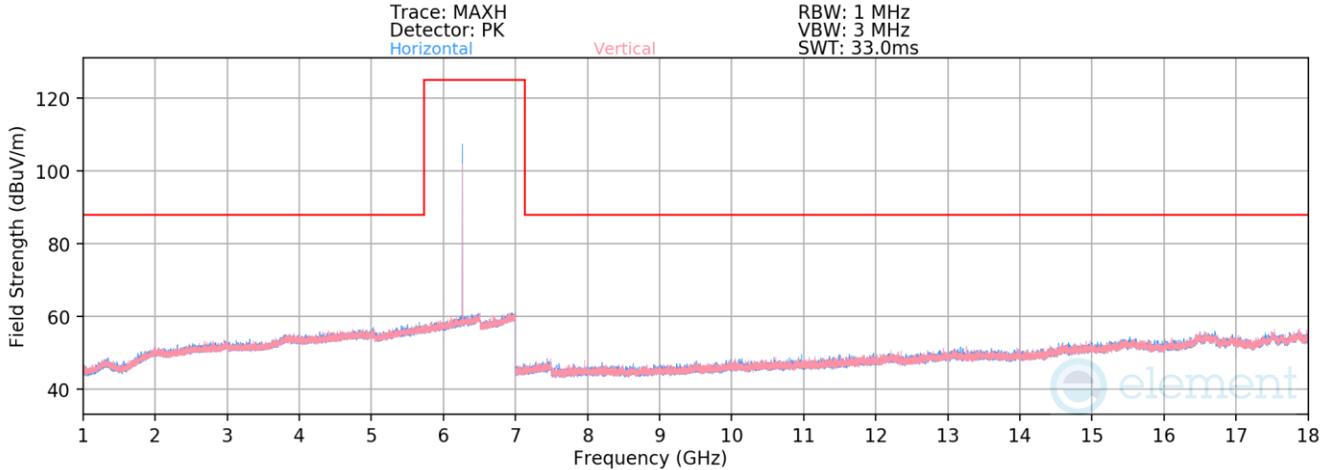
Plot 7-70. Radiated Spurious Emissions 1-18GHz (NB UNII HDR4 – 6108MHz)

Mode: NB UNII HDR4
 Data Rate: 4Mbps
 Distance of Measurements: 3 Meters
 Operating Frequency: 6108MHz

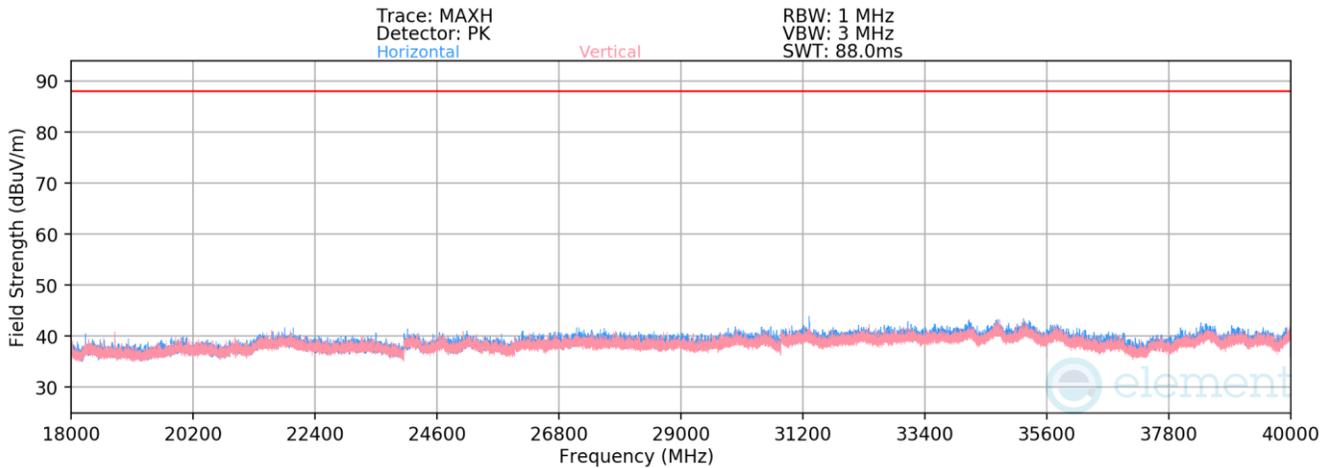
| Frequency [MHz] | Detector | Ant. Pol. [H/V] | Antenna Height [cm] | Turntable Azimuth [degree] | Analyzer Level [dBm] | AFCL [dB/m] | Field Strength [dBμV/m] | Limit [dBμV/m] | Margin [dB] |
|-----------------|----------|-----------------|---------------------|----------------------------|----------------------|-------------|-------------------------|----------------|-------------|
| * 12216.00 | Average | - | - | - | -79.07 | 10.70 | 38.63 | 53.98 | -15.35 |
| * 12216.00 | Peak | - | - | - | -67.79 | 10.70 | 49.91 | 73.98 | -24.07 |

Table 7-17. Radiated Spurious Emissions Measurements

| | | | | |
|--|---|---|--|-----------------------------------|
| FCC ID: BCG-A3047 |  | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
| Test Report S/N: 1C2407010044-01-R2.BCG | Test Dates: 6/24/2024 - 8/22/2024 | EUT Type: Wireless Right Earbud | | Page 69 of 95 |



Plot 7-71. Radiated Spurious Emissions 1-18GHz (NB UNII HDR4 – 6264MHz)



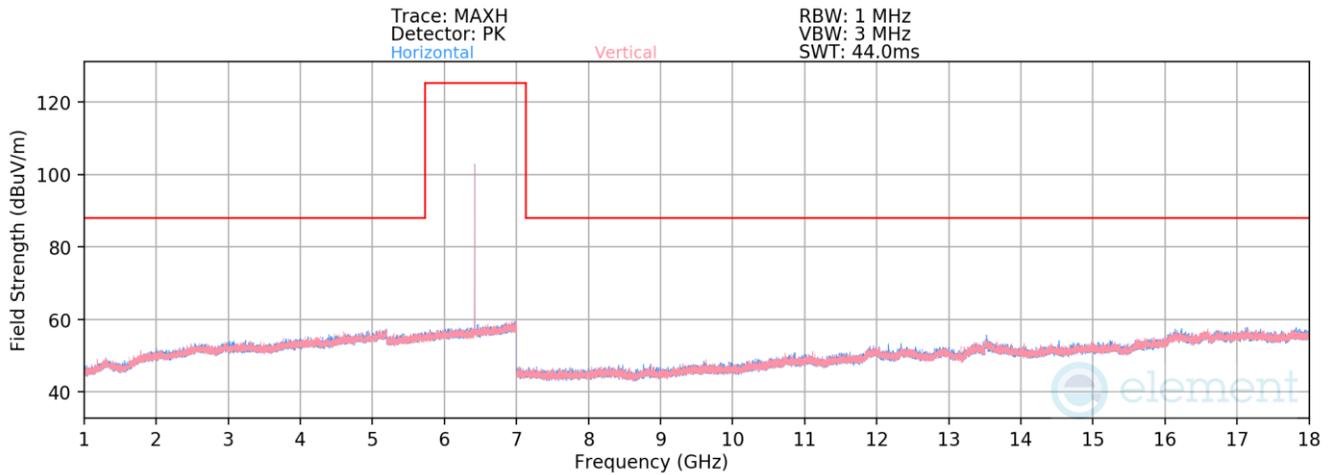
Plot 7-72. Radiated Spurious Emissions Above 18GHz (NB UNII HDR4 – 6264MHz)

Mode: NB UNII HDR4
 Data Rate: 4Mbps
 Distance of Measurements: 3 Meters
 Operating Frequency: 6264MHz

| Frequency [MHz] | Detector | Ant. Pol. [H/V] | Antenna Height [cm] | Turntable Azimuth [degree] | Analyzer Level [dBm] | AFCL [dB/m] | Duty Cycle Correction Factor [dB] | Field Strength [dBuV/m] | Limit [dBuV/m] | Margin [dB] |
|-----------------|----------|-----------------|---------------------|----------------------------|----------------------|-------------|-----------------------------------|-------------------------|----------------|-------------|
| * 12528.00 | Average | - | - | - | -79.11 | 10.85 | 0.00 | 38.74 | 53.98 | -15.24 |
| * 12528.00 | Peak | - | - | - | -68.25 | 10.85 | 0.00 | 49.60 | 73.98 | -24.38 |
| * 18792.00 | Peak | V | 356 | 170 | -70.28 | -7.02 | 1.04 | 30.74 | 53.98 | -23.24 |
| * 18792.00 | Average | V | 356 | 170 | -59.97 | -7.02 | 0.00 | 40.01 | 73.98 | -33.97 |
| 25056.00 | Peak | - | - | - | -72.92 | -4.89 | 0.00 | 29.19 | 68.23 | -39.04 |
| 25056.00 | Peak | - | - | - | -61.65 | -4.89 | 0.00 | 40.46 | 88.23 | -47.77 |
| * 31320.00 | Peak | V | 302 | 206 | -69.94 | -2.27 | 1.04 | 35.83 | 53.98 | -18.15 |
| * 31320.00 | Average | V | 302 | 206 | -58.94 | -2.27 | 0.00 | 45.79 | 73.98 | -28.19 |
| 37584.00 | Peak | - | - | - | -72.75 | -5.77 | 0.00 | 28.48 | 68.23 | -39.75 |
| 37584.00 | Peak | - | - | - | -61.70 | -5.77 | 0.00 | 39.53 | 88.23 | -48.70 |

Table 7-18. Radiated Spurious Emissions Measurements

| | | | | |
|--|--------------------------------------|---|--|-----------------------------------|
| FCC ID: BCG-A3047 | | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
| Test Report S/N: 1C2407010044-01-R2.BCG | Test Dates: 6/24/2024 - 8/22/2024 | EUT Type: Wireless Right Earbud | | Page 70 of 95 |



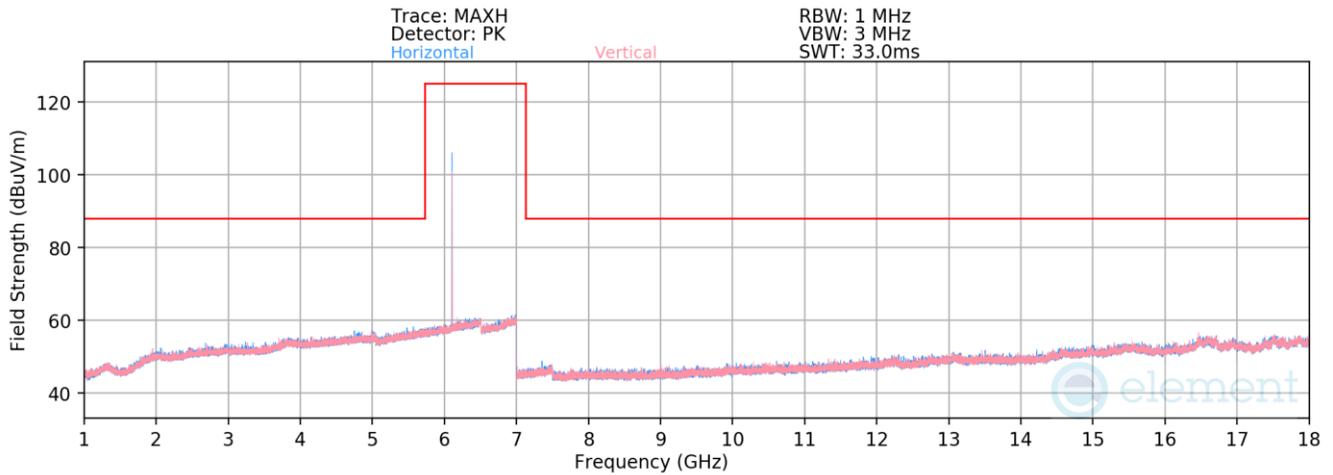
Plot 7-73. Radiated Spurious Emissions 1-18GHz (NB UNII HDR4 – 6420MHz)

Mode: NB UNII HDR4
 Data Rate: 4Mbps
 Distance of Measurements: 3 Meters
 Operating Frequency: 6420MHz

| 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] |
|-----------------|----------|-----------------|---------------------|----------------------------|----------------------|-------------|-------------------------|----------------|-------------|
| 12840.00 | Average | - | - | - | -92.89 | 26.04 | 40.15 | 68.23 | -28.08 |
| 12840.00 | Peak | - | - | - | -81.15 | 26.04 | 51.89 | 88.23 | -36.34 |

Table 7-19. Radiated Spurious Emissions Measurements

| | | | | |
|--|---|---|--|-----------------------------------|
| FCC ID: BCG-A3047 |  | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
| Test Report S/N: 1C2407010044-01-R2.BCG | Test Dates: 6/24/2024 - 8/22/2024 | EUT Type: Wireless Right Earbud | | Page 71 of 95 |



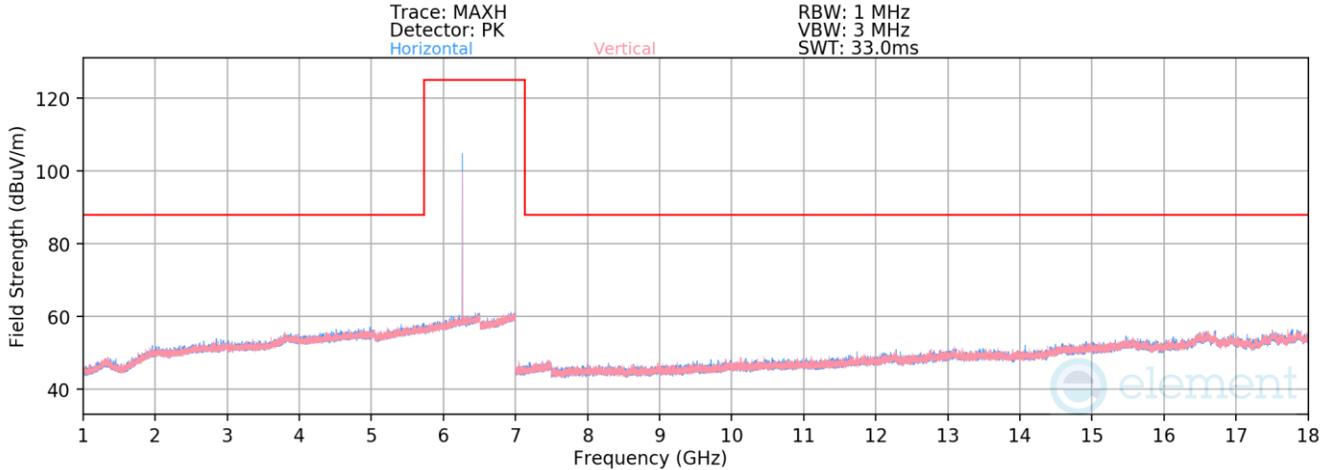
Plot 7-74. Radiated Spurious Emissions 1-18GHz (NB UNII HDRp4 – 6108MHz)

Mode: NB UNII HDRp4
 Data Rate: 4Mbps
 Distance of Measurements: 3 Meters
 Operating Frequency: 6108MHz

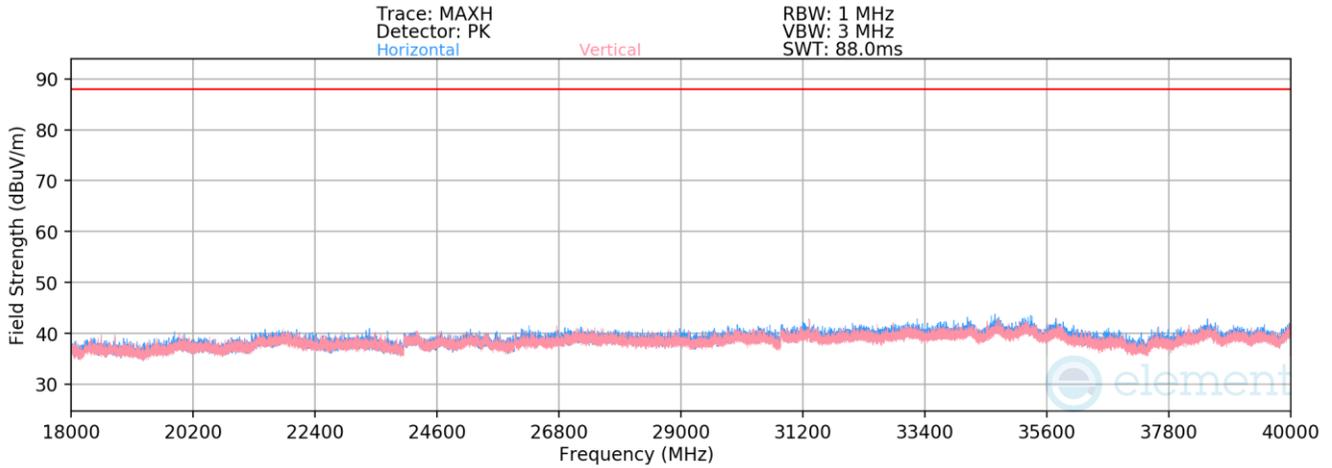
| Frequency [MHz] | Detector | Ant. Pol. [H/V] | Antenna Height [cm] | Turntable Azimuth [degree] | Analyzer Level [dBm] | AFCL [dB/m] | Field Strength [dBμV/m] | Limit [dBμV/m] | Margin [dB] |
|-----------------|----------|-----------------|---------------------|----------------------------|----------------------|-------------|-------------------------|----------------|-------------|
| * 12216.00 | Average | - | - | - | -79.05 | 10.70 | 38.65 | 53.98 | -15.33 |
| * 12216.00 | Peak | - | - | - | -68.14 | 10.70 | 49.56 | 73.98 | -24.42 |

Table 7-20. Radiated Spurious Emissions Measurements

| | | | | |
|--|---|---|--|-----------------------------------|
| FCC ID: BCG-A3047 |  | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
| Test Report S/N: 1C2407010044-01-R2.BCG | Test Dates: 6/24/2024 - 8/22/2024 | EUT Type: Wireless Right Earbud | | Page 72 of 95 |



Plot 7-75. Radiated Spurious Emissions 1-18GHz (NB UNII HDRp4 – 6264MHz)



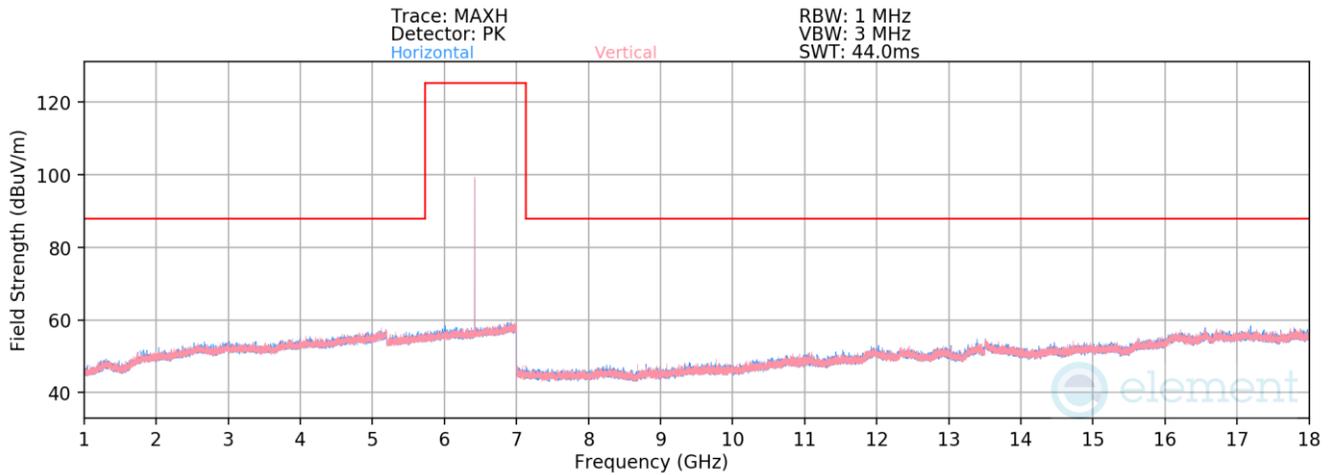
Plot 7-76. Radiated Spurious Emissions Above 18GHz (NB UNII HDRp4 – 6264MHz)

Mode: NB UNII HDRp4
 Data Rate: 4Mbps
 Distance of Measurements: 3 Meters
 Operating Frequency: 6264MHz

| Frequency [MHz] | Detector | Ant. Pol. [H/V] | Antenna Height [cm] | Turntable Azimuth [degree] | Analyzer Level [dBm] | AFCL [dB/m] | Duty Cycle Correction Factor [dB] | Field Strength [dBuV/m] | Limit [dBuV/m] | Margin [dB] |
|-----------------|----------|-----------------|---------------------|----------------------------|----------------------|-------------|-----------------------------------|-------------------------|----------------|-------------|
| * 12528.00 | Average | - | - | - | -79.08 | 10.85 | 0.00 | 38.77 | 53.98 | -15.21 |
| * 12528.00 | Peak | - | - | - | -68.28 | 10.85 | 0.00 | 49.57 | 73.98 | -24.41 |
| * 18792.00 | Peak | V | 266 | 227 | -67.08 | -7.02 | 0.56 | 33.46 | 53.98 | -20.52 |
| * 18792.00 | Average | V | 266 | 227 | -57.85 | -7.02 | 0.00 | 42.13 | 73.98 | -31.85 |
| * 25056.00 | Peak | - | - | - | -72.66 | -4.89 | 0.00 | 29.45 | 68.23 | -38.78 |
| * 25056.00 | Peak | - | - | - | -61.34 | -4.89 | 0.00 | 40.77 | 88.23 | -47.46 |
| * 31320.00 | Peak | V | 330 | 268 | -67.29 | -2.27 | 0.56 | 38.00 | 53.98 | -15.98 |
| * 31320.00 | Average | V | 330 | 268 | -58.19 | -2.27 | 0.00 | 46.54 | 73.98 | -27.44 |
| * 37584.00 | Peak | - | - | - | -72.66 | -5.77 | 0.00 | 28.57 | 68.23 | -39.66 |
| * 37584.00 | Peak | - | - | - | -61.07 | -5.77 | 0.00 | 40.16 | 88.23 | -48.07 |

Table 7-21. Radiated Spurious Emissions Measurements

| | | | | |
|--|--------------------------------------|---|--|-----------------------------------|
| FCC ID: BCG-A3047 | | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
| Test Report S/N: 1C2407010044-01-R2.BCG | Test Dates: 6/24/2024 - 8/22/2024 | EUT Type: Wireless Right Earbud | | Page 73 of 95 |



Plot 7-77. Radiated Spurious Emissions 1-18GHz (NB UNII HDRp4 – 6420MHz)

Mode: NB UNII HDRp4
 Data Rate: 4Mbps
 Distance of Measurements: 3 Meters
 Operating Frequency: 6420MHz

| 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] |
|-----------------|----------|-----------------|---------------------|----------------------------|----------------------|-------------|-------------------------|----------------|-------------|
| 12840.00 | Average | - | - | - | -92.97 | 26.04 | 40.07 | 68.23 | -28.16 |
| 12840.00 | Peak | - | - | - | -81.64 | 26.04 | 51.40 | 88.23 | -36.83 |

Table 7-22. Radiated Spurious Emissions Measurements

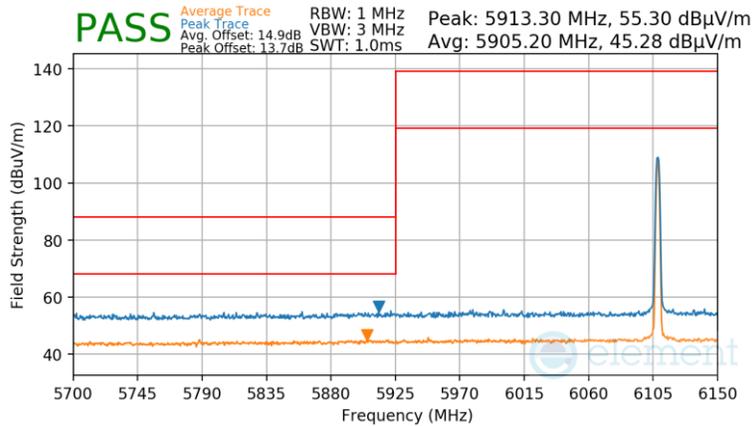
| | | | | |
|--|---|---|--|-----------------------------------|
| FCC ID: BCG-A3047 |  | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
| Test Report S/N: 1C2407010044-01-R2.BCG | Test Dates: 6/24/2024 - 8/22/2024 | EUT Type: Wireless Right Earbud | | Page 74 of 95 |



7.8.2 Radiated Band Edge Measurements

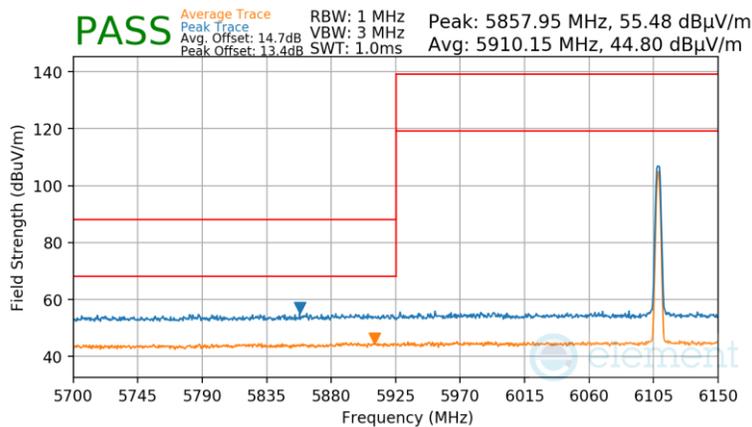
§15.407(b) §15.205 §15.209

Mode: NB UNII BDR
 Measurement Distance: 3 Meters
 Operating Frequency: 6108MHz



Plot 7-78. Radiated Lower Band Edge Measurement

Mode: NB UNII LE
 Data Rate: 2Mbps
 Measurement Distance: 3 Meters
 Operating Frequency: 6108MHz

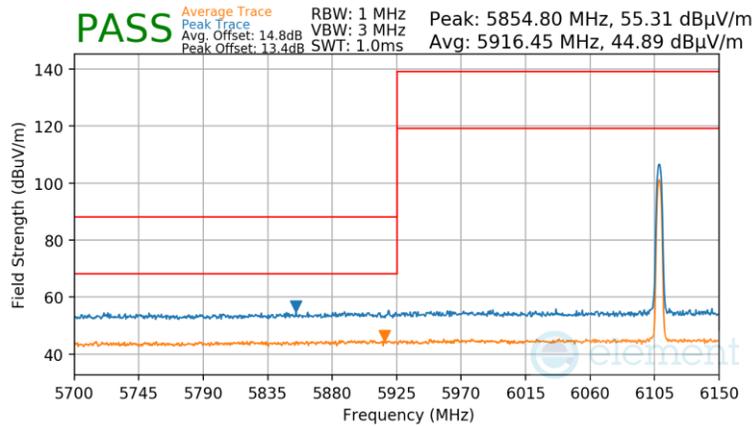


Plot 7-79. Radiated Lower Band Edge Measurement

| | | | |
|--|--------------------------------------|---|--|
| FCC ID: BCG-A3047 | | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Technical Manager |
| Test Report S/N: 1C2407010044-01-R2.BCG | Test Dates: 6/24/2024 - 8/22/2024 | EUT Type: Wireless Right Earbud | Page 75 of 95 |

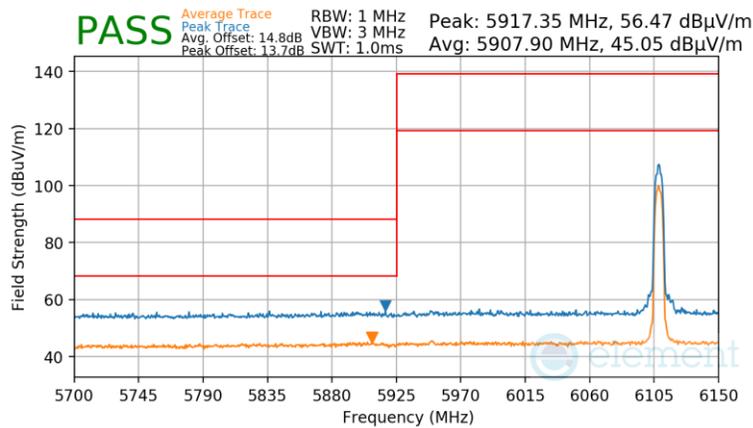
V 10.5 12/15/2021

Mode: NB UNII HDR4
 Measurement Distance: 3 Meters
 Operating Frequency: 6108MHz



Plot 7-80. Radiated Lower Band Edge Measurement

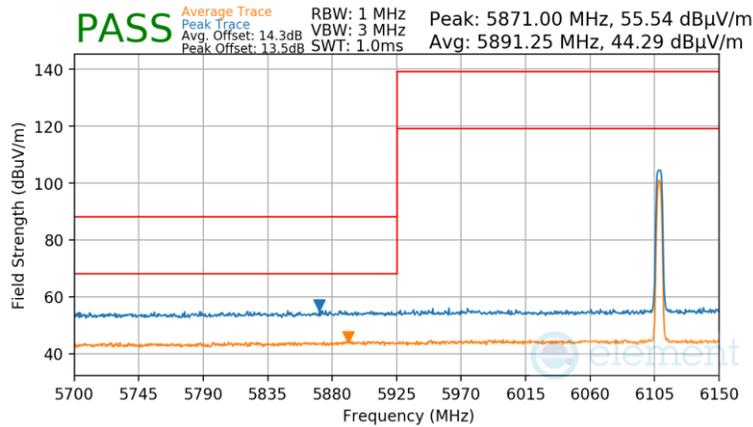
Mode: NB UNII HDR8
 Measurement Distance: 3 Meters
 Operating Frequency: 6108MHz



Plot 7-81. Radiated Lower Band Edge Measurement

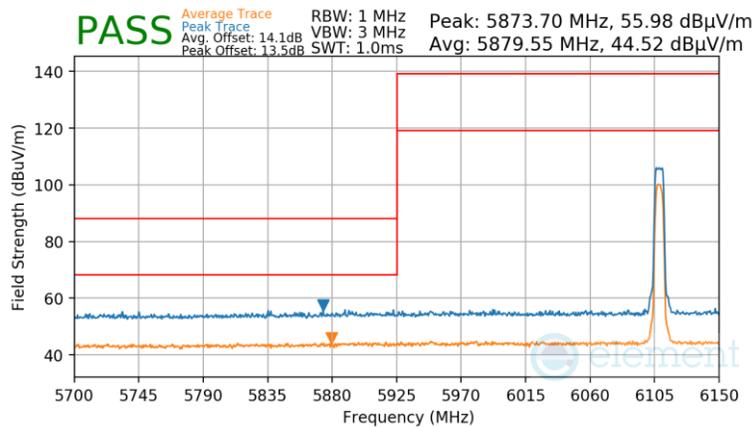
| | | | |
|--|---|---|--|
| FCC ID: BCG-A3047 |  | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Technical Manager |
| Test Report S/N: 1C2407010044-01-R2.BCG | Test Dates: 6/24/2024 - 8/22/2024 | EUT Type: Wireless Right Earbud | Page 76 of 95 |

Mode: NB UNII HDRp4
 Measurement Distance: 3 Meters
 Operating Frequency: 6108MHz



Plot 7-82. Radiated Lower Band Edge Measurement

Mode: NB UNII HDRp8
 Measurement Distance: 3 Meters
 Operating Frequency: 6108MHz



Plot 7-83. Radiated Lower Band Edge Measurement

| | | | |
|---|---|---|--|
| FCC ID: BCG-A3047 |  | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Technical Manager |
| Test Report S/N: 1C2407010044-01-R2.BCG | Test Dates: 6/24/2024 - 8/22/2024 | EUT Type: Wireless Right Earbud | Page 77 of 95 |

7.9 Radiated Spurious Emissions – Below 1GHz

§15.209

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 must not exceed the limits shown in Table 7-23 per Section 15.209.

| Frequency | Field Strength [$\mu\text{V/m}$] | Measured Distance [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 C63.10-2020

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: BCG-A3047 |  | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Technical Manager |
| Test Report S/N: 1C2407010044-01-R2.BCG | Test Dates: 6/24/2024 - 8/22/2024 | EUT Type: Wireless Right Earbud | Page 78 of 95 |

V 10.5 12/15/2021

Test Setup

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

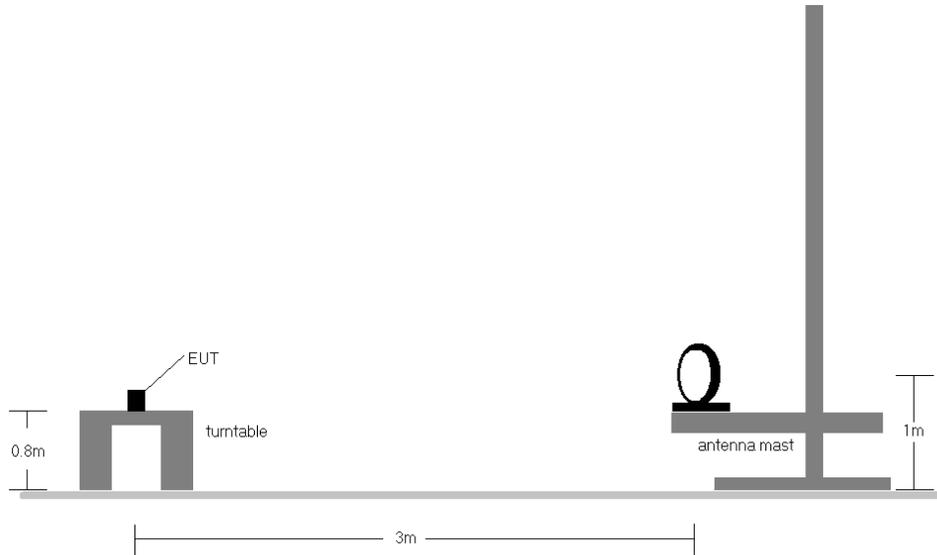


Figure 7-9. Radiated Test Setup < 30MHz

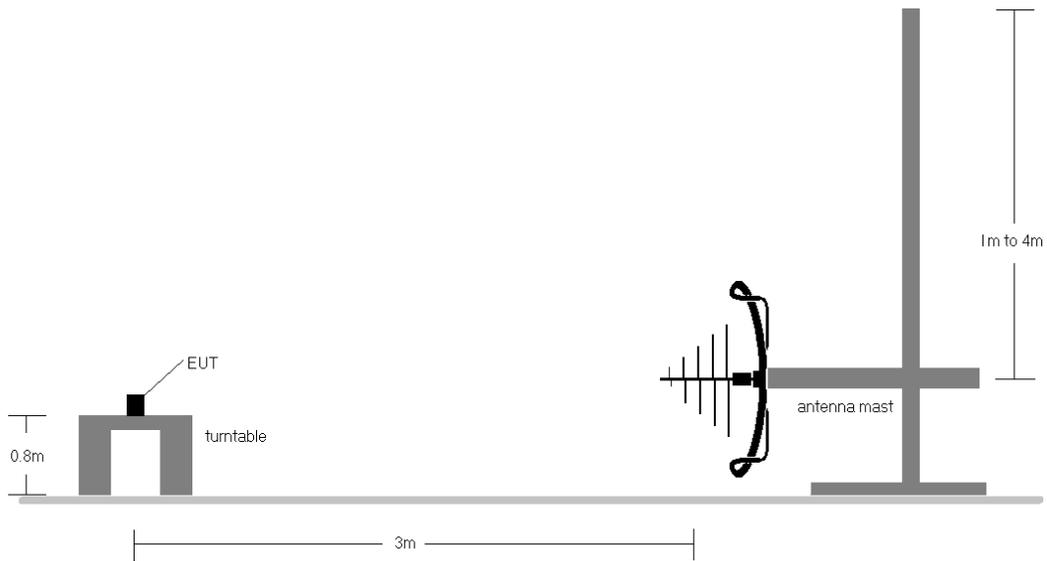


Figure 7-10. Radiated Test Setup < 1GHz

| | | | |
|--|---|---------------------------------------|-----------------------------------|
| FCC ID: BCG-A3047 |  | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Technical Manager |
| Test Report S/N: 1C2407010044-01-R2.BCG | Test Dates: 6/24/2024 - 8/22/2024 | EUT Type: Wireless Right Earbud | Page 79 of 95 |

V 10.5 12/15/2021

Test Notes

1. All emissions lying in restricted bands specified in §15.205 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 for emissions 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. Both configurations below were investigated, and the worst case has been reported.
 - a. EUT charged by charging case and powered by AC/DC adaptor with USB-C cable.
 - b. EUT charged by charging case and powered by host PC with USB-C cable.

Sample Calculations

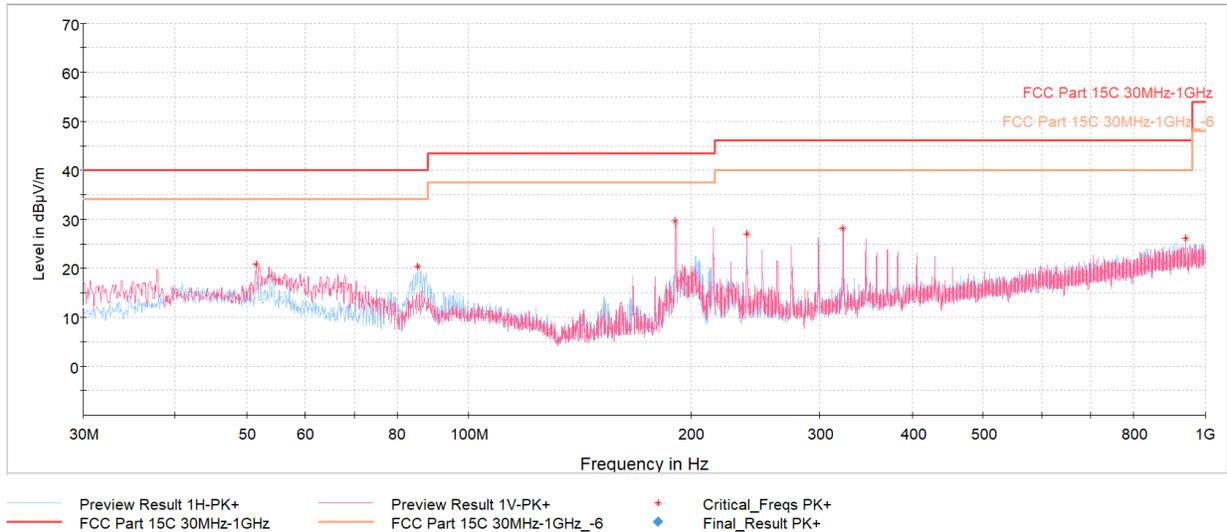
Determining Spurious Emissions Levels

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

| | | | | |
|--|---|------------------------------------|---------------------------------------|-----------------------------------|
| FCC ID: BCG-A3047 |  | | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Technical Manager |
| Test Report S/N: 1C2407010044-01-R2.BCG | Test Dates: 6/24/2024 - 8/22/2024 | EUT Type: Wireless Right Earbud | | Page 80 of 95 |

Radiated Spurious Emissions (Below 1GHz)

§15.209

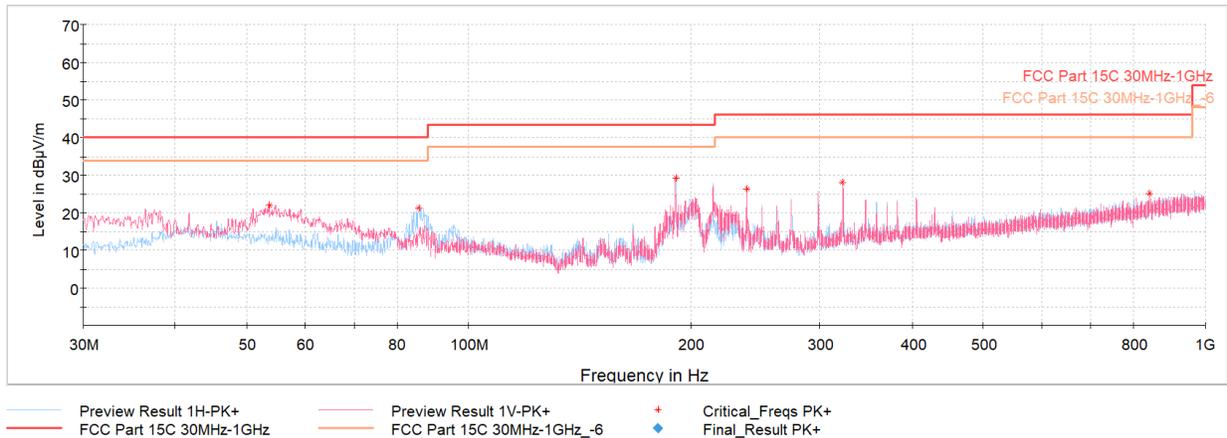


Plot 7-84. Radiated Spurious Emissions Below 1GHz (NB UNII BDR – 6264MHz), with AC/DC adaptor with USB-C cable

| 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] |
|-----------------|----------|-----------------|---------------------|----------------------------|----------------------|-------------|-------------------------|----------------|-------------|
| 51.49 | Max Peak | V | 300 | 44 | -72.42 | -13.84 | 20.74 | 40.00 | -19.26 |
| 85.48 | Max Peak | H | 200 | 357 | -66.29 | -20.26 | 20.45 | 40.00 | -19.55 |
| 190.97 | Max Peak | V | 100 | 324 | -59.45 | -17.99 | 29.56 | 43.52 | -13.96 |
| 238.89 | Max Peak | H | 100 | 318 | -63.56 | -16.37 | 27.07 | 46.02 | -18.95 |
| 322.26 | Max Peak | V | 100 | 358 | -64.54 | -14.38 | 28.08 | 46.02 | -17.94 |
| 942.82 | Max Peak | V | 100 | 3 | -77.45 | -3.48 | 26.07 | 46.02 | -19.95 |

Table 7-24. Radiated Spurious Emissions Below 1GHz (NB UNII BDR – 6264MHz), with AC/DC adaptor with USB-C cable

| | | | | |
|--|---|---------------------------------------|--|-----------------------------------|
| FCC ID: BCG-A3047 |  | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
| Test Report S/N: 1C2407010044-01-R2.BCG | Test Dates: 6/24/2024 - 8/22/2024 | EUT Type: Wireless Right Earbud | | Page 81 of 95 |

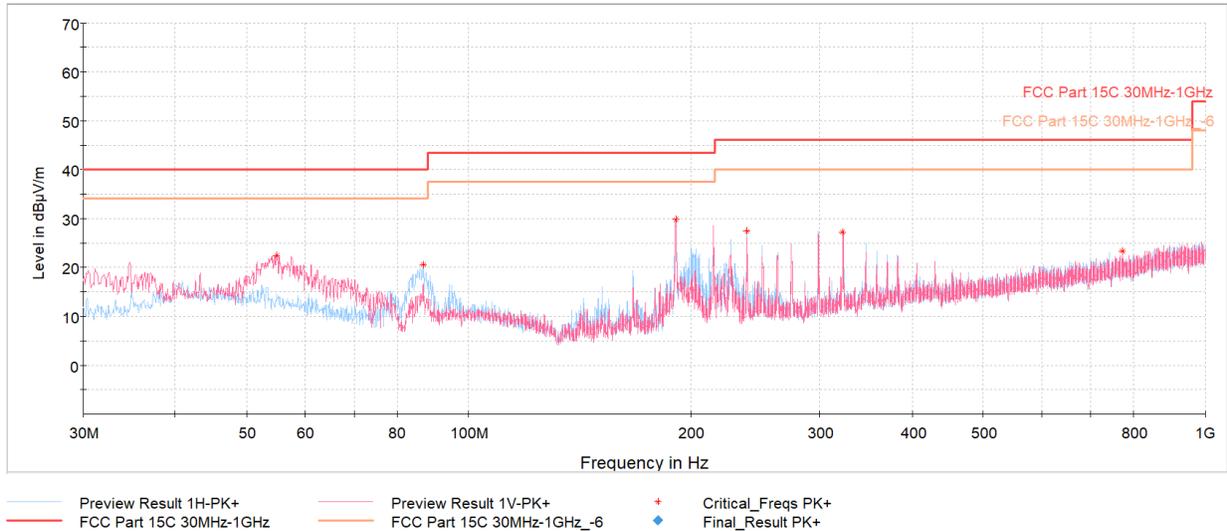


Plot 7-85. Radiated Spurious Emissions Below 1GHz (NB UNII (LE2M) – 6264MHz), with AC/DC adaptor with USB-C cable

| 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] |
|-----------------|----------|-----------------|---------------------|----------------------------|----------------------|-------------|-------------------------|----------------|-------------|
| 53.67 | Max Peak | V | 200 | 129 | -70.92 | -14.24 | 21.84 | 40.00 | -18.16 |
| 85.63 | Max Peak | H | 200 | 0 | -65.62 | -20.22 | 21.16 | 40.00 | -18.84 |
| 191.07 | Max Peak | H | 100 | 319 | -59.73 | -17.98 | 29.29 | 43.52 | -14.23 |
| 238.70 | Max Peak | H | 100 | 330 | -64.37 | -16.37 | 26.26 | 46.02 | -19.76 |
| 322.07 | Max Peak | V | 100 | 47 | -64.63 | -14.38 | 27.99 | 46.02 | -18.03 |
| 840.34 | Max Peak | V | 100 | 259 | -77.33 | -4.49 | 25.18 | 46.02 | -20.84 |

Table 7-25. Radiated Spurious Emissions Below 1GHz (NB UNII (LE2M) – 6264MHz), with AC/DC adaptor with USB-C cable

| | | | | |
|--|---|---|--|-----------------------------------|
| FCC ID: BCG-A3047 |  | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
| Test Report S/N: 1C2407010044-01-R2.BCG | Test Dates: 6/24/2024 - 8/22/2024 | EUT Type: Wireless Right Earbud | | Page 82 of 95 |

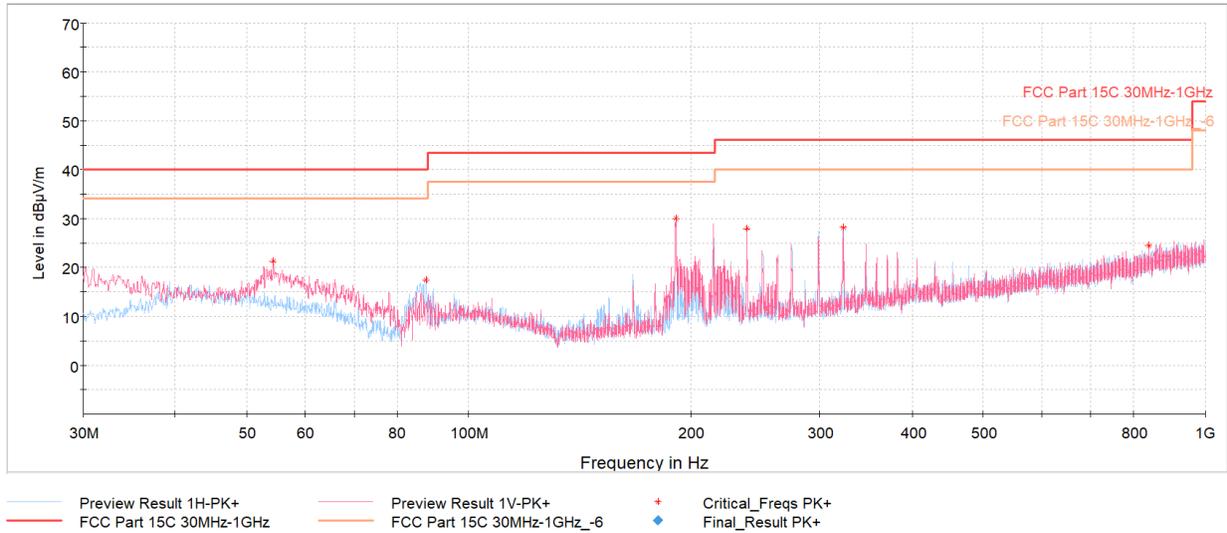


Plot 7-86. Radiated Spurious Emissions Below 1GHz (NB UNII HDR4 – 6264MHz), with AC/DC adaptor with USB-C cable

| 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] |
|-----------------|----------|-----------------|---------------------|----------------------------|----------------------|-------------|-------------------------|----------------|-------------|
| 54.98 | Max Peak | V | 200 | 65 | -70.15 | -14.51 | 22.34 | 40.00 | -17.66 |
| 86.79 | Max Peak | H | 200 | 345 | -66.68 | -19.80 | 20.52 | 40.00 | -19.48 |
| 191.12 | Max Peak | V | 100 | 324 | -59.20 | -17.97 | 29.83 | 43.52 | -13.69 |
| 238.60 | Max Peak | H | 100 | 316 | -63.24 | -16.37 | 27.39 | 46.02 | -18.63 |
| 322.26 | Max Peak | V | 100 | 355 | -65.42 | -14.38 | 27.20 | 46.02 | -18.82 |
| 772.88 | Max Peak | V | 200 | 109 | -77.64 | -6.05 | 23.31 | 46.02 | -22.71 |

Table 7-26. Radiated Spurious Emissions Below 1GHz (NB UNII HDR4 – 6264MHz), with AC/DC adaptor with USB-C cable

| | | | | |
|--|---|------------------------------------|--|-----------------------------------|
| FCC ID: BCG-A3047 |  | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
| Test Report S/N: 1C2407010044-01-R2.BCG | Test Dates: 6/24/2024 - 8/22/2024 | EUT Type: Wireless Right Earbud | | Page 83 of 95 |



Plot 7-87. Radiated Spurious Emissions Below 1GHz (NB UNII HDRp4 – 6264MHz), with AC/DC adaptor with USB-C cable

| 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] |
|-----------------|----------|-----------------|---------------------|----------------------------|----------------------|-------------|-------------------------|----------------|-------------|
| 54.40 | Max Peak | V | 200 | 37 | -71.41 | -14.37 | 21.22 | 40.00 | -18.78 |
| 87.47 | Max Peak | H | 300 | 173 | -70.03 | -19.53 | 17.44 | 40.00 | -22.56 |
| 191.12 | Max Peak | V | 100 | 319 | -59.02 | -17.97 | 30.01 | 43.52 | -13.51 |
| 238.89 | Max Peak | H | 100 | 330 | -62.66 | -16.37 | 27.97 | 46.02 | -18.05 |
| 322.31 | Max Peak | H | 100 | 0 | -64.43 | -14.38 | 28.19 | 46.02 | -17.83 |
| 838.93 | Max Peak | V | 100 | 0 | -78.08 | -4.51 | 24.41 | 46.02 | -21.61 |

Table 7-27. Radiated Spurious Emissions Below 1GHz (NB UNII HDRp4 – 6264MHz), with AC/DC adaptor with USB-C cable

| | | | | |
|--|---|------------------------------------|---------------------------------------|-----------------------------------|
| FCC ID: BCG-A3047 |  | | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Technical Manager |
| Test Report S/N: 1C2407010044-01-R2.BCG | Test Dates: 6/24/2024 - 8/22/2024 | EUT Type: Wireless Right Earbud | | Page 84 of 95 |

7.10 AC Line Conducted Emissions Measurement

§15.207

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. All data rates and modes were investigated for AC Line conducted spurious emissions.

All conducted emissions must not exceed the limits shown in the table below, per Section 15.207.

| Frequency of emission (MHz) | Conducted Limit (dB μ V) | |
|-----------------------------|------------------------------|-----------|
| | Quasi-peak | Average |
| 0.15 – 0.5 | 66 to 56* | 56 to 46* |
| 0.5 – 5 | 56 | 46 |
| 5 – 30 | 60 | 50 |

Table 7-28. Conducted Limits

*Decreases with the logarithm of the frequency.

Test Procedures Used

ANSI C63.10-2020, 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: BCG-A3047 |  | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Technical Manager |
| Test Report S/N: 1C2407010044-01-R2.BCG | Test Dates: 6/24/2024 - 8/22/2024 | EUT Type: Wireless Right Earbud | Page 85 of 95 |

V 10.5 12/15/2021

Test Setup

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

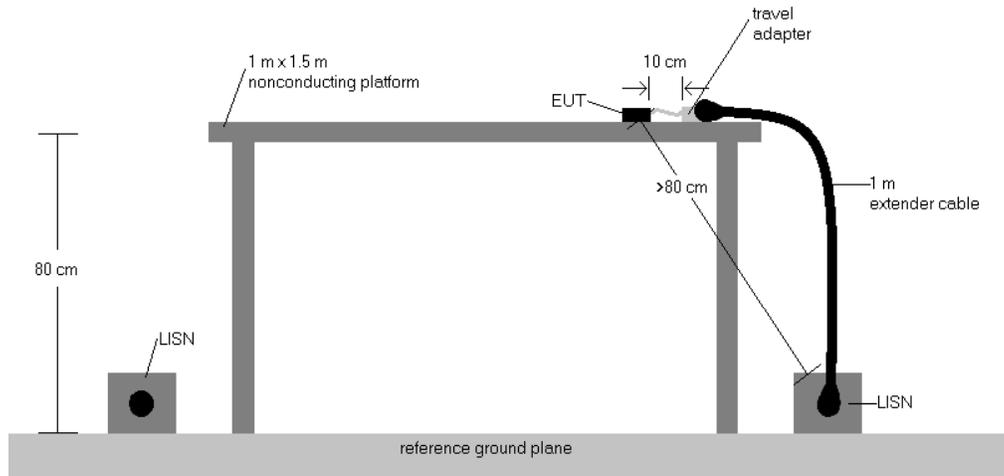


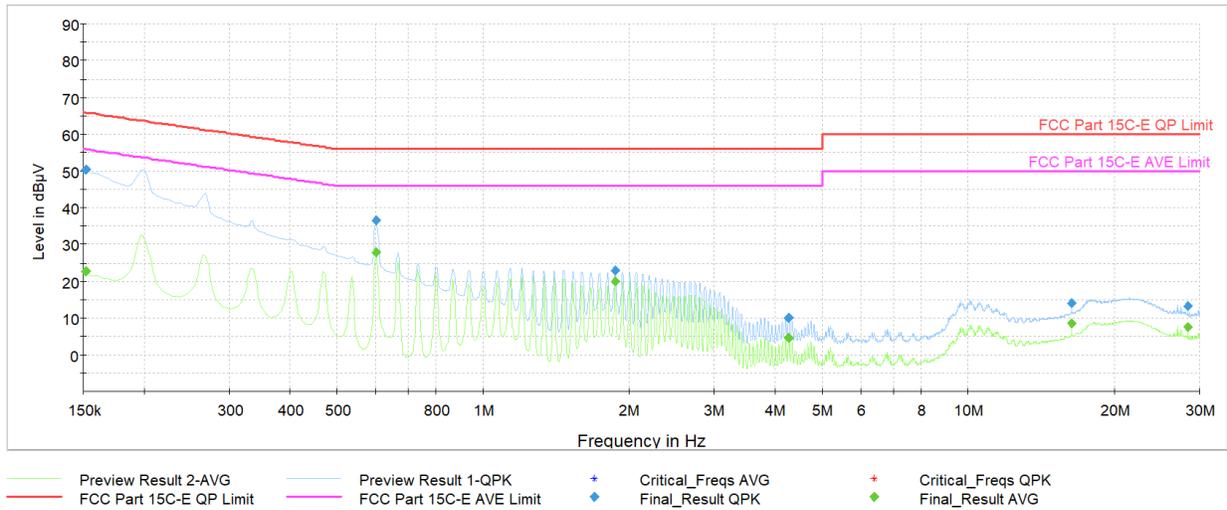
Figure 7-11. Test Instrument & Measurement Setup

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 charged by charging case and powered by AC/DC adaptor with USB-C cable.
 - b. EUT charged by charging case and powered by host PC with USB-C cable.
3. The limit for an intentional radiator from 150kHz to 30MHz are specified in 15.207.
4. $\text{Corr. (dB)} = \text{Cable loss (dB)} + \text{LISN insertion factor (dB)}$
5. $\text{QP/AV Level (dB}\mu\text{V)} = \text{QP/AV Analyzer/Receiver Level (dB}\mu\text{V)} + \text{Correction Factor (dB)}$
6. $\text{Margin (dB)} = \text{QP/AV Level (dB}\mu\text{V)} - \text{QP/AV Limit (dB}\mu\text{V)}$
7. Traces shown in plots are made using quasi-peak and average detectors.
8. Deviations to the Specifications: None.

| | | | |
|--|---|---------------------------------------|-----------------------------------|
| FCC ID: BCG-A3047 |  | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Technical Manager |
| Test Report S/N: 1C2407010044-01-R2.BCG | Test Dates: 6/24/2024 - 8/22/2024 | EUT Type: Wireless Right Earbud | Page 86 of 95 |

V 10.5 12/15/2021

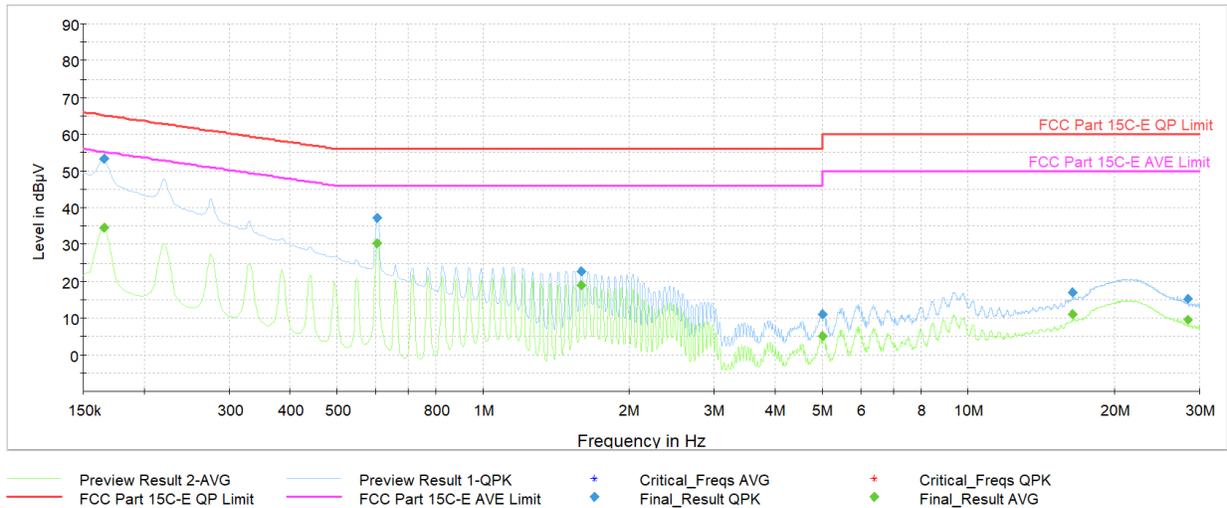


Plot 7-88. AC Line Conducted Plot (NB UNII BDR – 6264MHz) (L1) with host PC with USB-C cable

| Frequency [MHz] | Process State | QuasiPeak [dBµV] | Average [dBµV] | Limit [dBµV] | Margin [dB] | Line | PE |
|-----------------|---------------|------------------|----------------|--------------|-------------|------|-----|
| 0.152 | FINAL | — | 22.55 | 55.88 | -33.33 | L1 | GND |
| 0.152 | FINAL | 50.4 | — | 65.88 | -15.53 | L1 | GND |
| 0.602 | FINAL | — | 27.89 | 46.00 | -18.11 | L1 | GND |
| 0.602 | FINAL | 36.4 | — | 56.00 | -19.57 | L1 | GND |
| 1.871 | FINAL | — | 19.86 | 46.00 | -26.14 | L1 | GND |
| 1.871 | FINAL | 22.8 | — | 56.00 | -33.18 | L1 | GND |
| 4.270 | FINAL | 10.0 | — | 56.00 | -46.04 | L1 | GND |
| 4.270 | FINAL | — | 4.53 | 46.00 | -41.47 | L1 | GND |
| 16.346 | FINAL | 14.1 | — | 60.00 | -45.87 | L1 | GND |
| 16.346 | FINAL | — | 8.49 | 50.00 | -41.51 | L1 | GND |
| 28.347 | FINAL | — | 7.60 | 50.00 | -42.40 | L1 | GND |
| 28.347 | FINAL | 13.4 | — | 60.00 | -46.61 | L1 | GND |

Table 7-29. AC Line Conducted Data (NB UNII BDR – 6264MHz) (L1) with host PC with USB-C cable

| | | | | |
|---|---|---|--|--|
| FCC ID: BCG-A3047 |  | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
| Test Report S/N: 1C2407010044-01-R2.BCG | Test Dates: 6/24/2024 - 8/22/2024 | EUT Type: Wireless Right Earbud | | Page 87 of 95 |

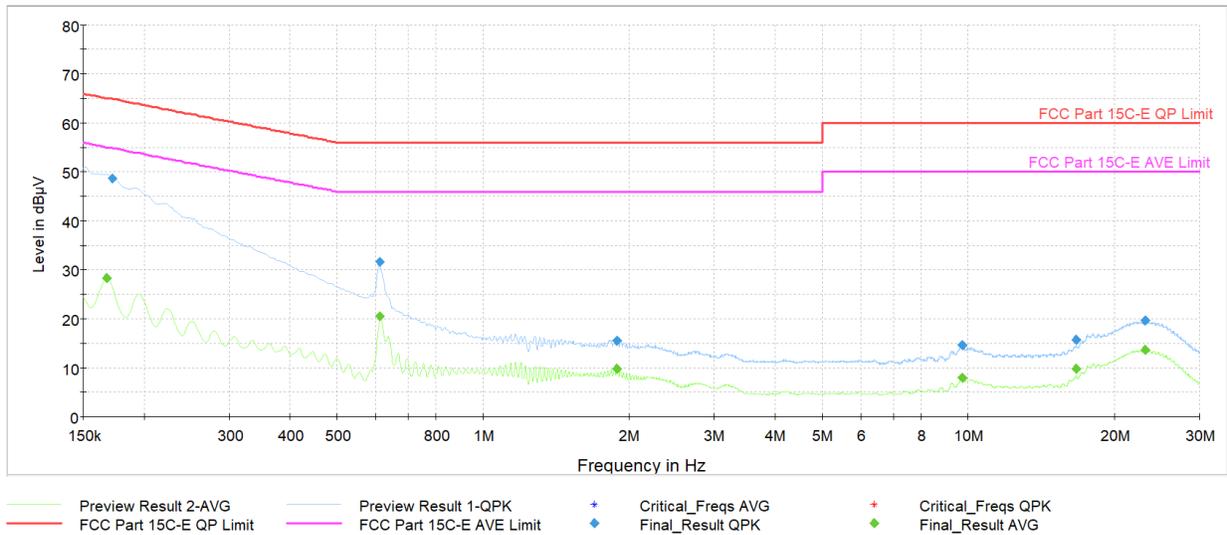


Plot 7-89. AC Line Conducted Plot (NB UNII BDR – 6264MHz) (N) with host PC with USB-C cable

| Frequency [MHz] | Process State | QuasiPeak [dBµV] | Average [dBµV] | Limit [dBµV] | Margin [dB] | Line | PE |
|-----------------|---------------|------------------|----------------|--------------|-------------|------|-----|
| 0.166 | FINAL | — | 34.62 | 55.17 | -20.55 | N | GND |
| 0.166 | FINAL | 53.3 | — | 65.17 | -11.87 | N | GND |
| 0.605 | FINAL | — | 30.36 | 46.00 | -15.64 | N | GND |
| 0.605 | FINAL | 37.2 | — | 56.00 | -18.79 | N | GND |
| 1.592 | FINAL | 22.8 | — | 56.00 | -33.20 | N | GND |
| 1.595 | FINAL | — | 18.96 | 46.00 | -27.04 | N | GND |
| 4.997 | FINAL | — | 5.02 | 46.00 | -40.98 | N | GND |
| 5.001 | FINAL | 11.0 | — | 60.00 | -49.05 | N | GND |
| 16.370 | FINAL | 16.9 | — | 60.00 | -43.13 | N | GND |
| 16.370 | FINAL | — | 11.14 | 50.00 | -38.86 | N | GND |
| 28.347 | FINAL | — | 9.50 | 50.00 | -40.50 | N | GND |
| 28.347 | FINAL | 15.4 | — | 60.00 | -44.63 | N | GND |

Table 7-30. AC Line Conducted Data (NB UNII BDR – 6264MHz) (N) with host PC with USB-C cable

| | | | | |
|--|---|---|--|-----------------------------------|
| FCC ID: BCG-A3047 |  | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
| Test Report S/N: 1C2407010044-01-R2.BCG | Test Dates: 6/24/2024 - 8/22/2024 | EUT Type: Wireless Right Earbud | | Page 88 of 95 |

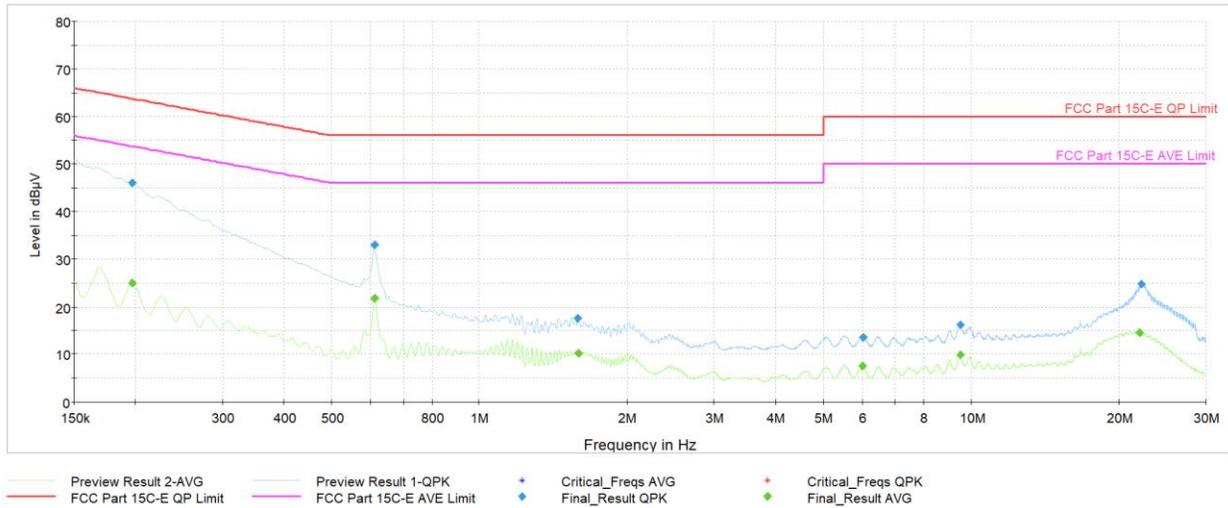


Plot 7-90. AC Line Conducted Plot (NB UNII (LE2M) – 6264MHz) (L1) with host PC with USB-C cable

| Frequency [MHz] | Process State | QuasiPeak [dBµV] | Average [dBµV] | Limit [dBµV] | Margin [dB] | Line | PE |
|-----------------|---------------|------------------|----------------|--------------|-------------|------|-----|
| 0.168 | FINAL | — | 28.39 | 55.06 | -26.67 | L1 | GND |
| 0.173 | FINAL | 48.8 | — | 64.84 | -16.06 | L1 | GND |
| 0.611 | FINAL | 31.6 | — | 56.00 | -24.42 | L1 | GND |
| 0.614 | FINAL | — | 20.63 | 46.00 | -25.37 | L1 | GND |
| 1.889 | FINAL | 15.6 | — | 56.00 | -40.36 | L1 | GND |
| 1.892 | FINAL | — | 9.81 | 46.00 | -36.19 | L1 | GND |
| 9.710 | FINAL | 14.6 | — | 60.00 | -45.43 | L1 | GND |
| 9.713 | FINAL | — | 7.93 | 50.00 | -42.07 | L1 | GND |
| 16.658 | FINAL | 15.8 | — | 60.00 | -44.18 | L1 | GND |
| 16.658 | FINAL | — | 9.77 | 50.00 | -40.23 | L1 | GND |
| 23.129 | FINAL | — | 13.74 | 50.00 | -36.26 | L1 | GND |
| 23.129 | FINAL | 19.6 | — | 60.00 | -40.45 | L1 | GND |

Table 7-31. AC Line Conducted Data (NB UNII (LE2M) – 6264MHz) (L1) with host PC with USB-C cable

| | | | | |
|---|---|---|--|--|
| FCC ID: BCG-A3047 |  | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
| Test Report S/N: 1C2407010044-01-R2.BCG | Test Dates: 6/24/2024 - 8/22/2024 | EUT Type: Wireless Right Earbud | | Page 89 of 95 |

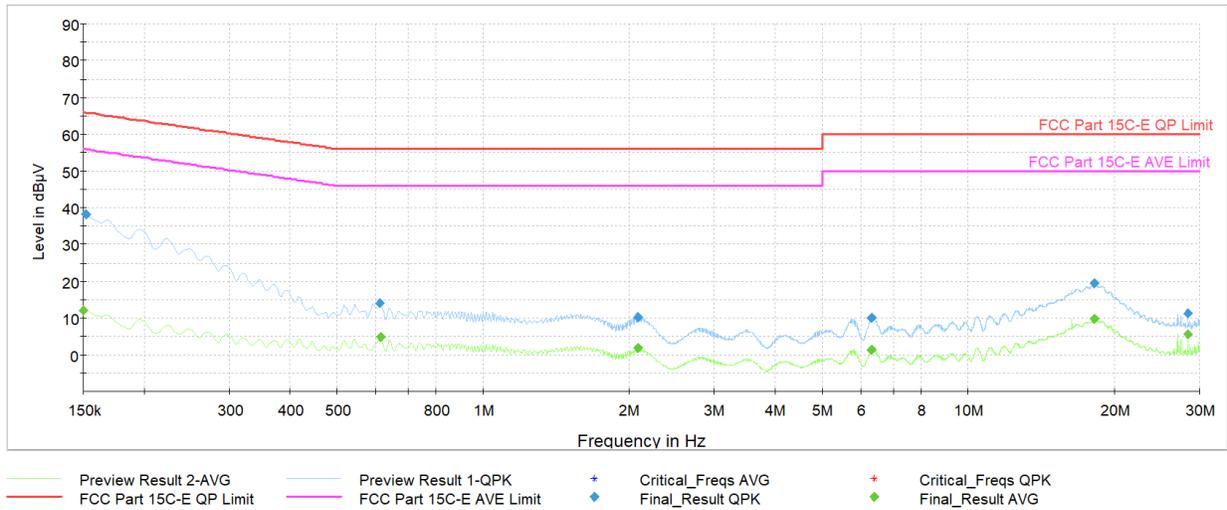


Plot 7-91. AC Line Conducted Data (NB UNII (LE2M) – 6264MHz) (N) with host PC with USB-C cable

| Frequency [MHz] | Process State | QuasiPeak [dBµV] | Average [dBµV] | Limit [dBµV] | Margin [dB] | Line | PE |
|-----------------|---------------|------------------|----------------|--------------|-------------|------|-----|
| 0.197 | FINAL | — | 24.97 | 53.73 | -28.76 | N | GND |
| 0.197 | FINAL | 46.0 | — | 63.73 | -17.74 | N | GND |
| 0.611 | FINAL | — | 21.80 | 46.00 | -24.20 | N | GND |
| 0.611 | FINAL | 33.0 | — | 56.00 | -22.97 | N | GND |
| 1.588 | FINAL | 17.6 | — | 56.00 | -38.45 | N | GND |
| 1.590 | FINAL | — | 10.29 | 46.00 | -35.71 | N | GND |
| 6.016 | FINAL | — | 7.50 | 50.00 | -42.50 | N | GND |
| 6.041 | FINAL | 13.6 | — | 60.00 | -46.38 | N | GND |
| 9.501 | FINAL | — | 9.92 | 50.00 | -40.08 | N | GND |
| 9.506 | FINAL | 16.2 | — | 60.00 | -43.76 | N | GND |
| 22.025 | FINAL | — | 14.54 | 50.00 | -35.46 | N | GND |
| 22.146 | FINAL | 24.7 | — | 60.00 | -35.26 | N | GND |

Table 7-32. AC Line Conducted Data (NB UNII (LE2M) – 6264MHz) (N) with host PC with USB-C cable

| | | | | |
|---|---|---|--|--|
| FCC ID: BCG-A3047 |  | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
| Test Report S/N: 1C2407010044-01-R2.BCG | Test Dates: 6/24/2024 - 8/22/2024 | EUT Type: Wireless Right Earbud | | Page 90 of 95 |

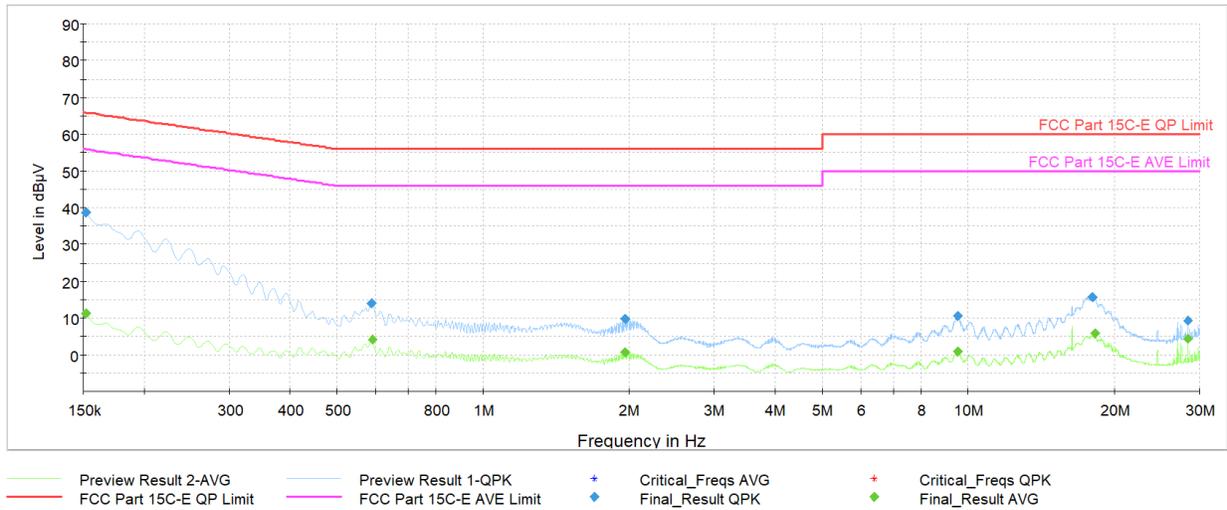


Plot 7-92. AC Line Conducted Plot (NB UNII HDR4 – 6264MHz) (L1) with host PC with USB-C cable

| Frequency [MHz] | Process State | QuasiPeak [dBµV] | Average [dBµV] | Limit [dBµV] | Margin [dB] | Line | PE |
|-----------------|---------------|------------------|----------------|--------------|-------------|------|-----|
| 0.150 | FINAL | — | 12.10 | 56.00 | -43.90 | L1 | GND |
| 0.152 | FINAL | 38.4 | — | 65.88 | -27.49 | L1 | GND |
| 0.611 | FINAL | 13.9 | — | 56.00 | -42.06 | L1 | GND |
| 0.616 | FINAL | — | 4.81 | 46.00 | -41.19 | L1 | GND |
| 2.087 | FINAL | — | 1.78 | 46.00 | -44.22 | L1 | GND |
| 2.090 | FINAL | 10.3 | — | 56.00 | -45.68 | L1 | GND |
| 6.333 | FINAL | 9.9 | — | 60.00 | -50.07 | L1 | GND |
| 6.333 | FINAL | — | 1.47 | 50.00 | -48.53 | L1 | GND |
| 18.197 | FINAL | — | 9.74 | 50.00 | -40.26 | L1 | GND |
| 18.209 | FINAL | 19.5 | — | 60.00 | -40.52 | L1 | GND |
| 28.345 | FINAL | — | 5.67 | 50.00 | -44.33 | L1 | GND |
| 28.345 | FINAL | 11.2 | — | 60.00 | -48.78 | L1 | GND |

Table 7-33. AC Line Conducted Data (NB UNII HDR4 – 6264MHz) (L1) with host PC with USB-C cable

| | | | | |
|--|---|---|--|--|
| FCC ID: BCG-A3047 |  | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
| Test Report S/N: 1C2407010044-01-R2.BCG | Test Dates: 6/24/2024 - 8/22/2024 | EUT Type: Wireless Right Earbud | | Page 91 of 95 |

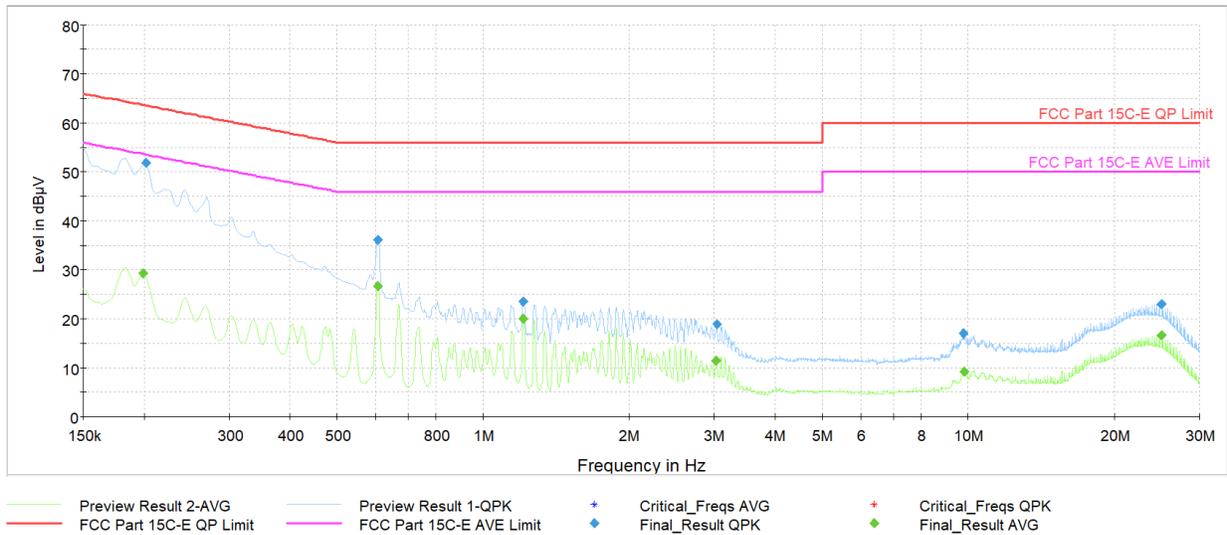


Plot 7-93. AC Line Conducted Plot (NB UNII HDR4 – 6264MHz) (N) with host PC with USB-C cable

| Frequency [MHz] | Process State | QuasiPeak [dBµV] | Average [dBµV] | Limit [dBµV] | Margin [dB] | Line | PE |
|-----------------|---------------|------------------|----------------|--------------|-------------|------|-----|
| 0.152 | FINAL | — | 11.34 | 55.88 | -44.54 | N | GND |
| 0.152 | FINAL | 38.7 | — | 65.88 | -27.16 | N | GND |
| 0.589 | FINAL | 14.0 | — | 56.00 | -41.96 | N | GND |
| 0.591 | FINAL | — | 4.07 | 46.00 | -41.93 | N | GND |
| 1.961 | FINAL | — | 0.76 | 46.00 | -45.24 | N | GND |
| 1.961 | FINAL | 9.7 | — | 56.00 | -46.32 | N | GND |
| 9.526 | FINAL | 10.5 | — | 60.00 | -49.54 | N | GND |
| 9.526 | FINAL | — | 0.77 | 50.00 | -49.23 | N | GND |
| 18.033 | FINAL | 15.7 | — | 60.00 | -44.31 | N | GND |
| 18.245 | FINAL | — | 5.75 | 50.00 | -44.25 | N | GND |
| 28.343 | FINAL | — | 4.29 | 50.00 | -45.71 | N | GND |
| 28.345 | FINAL | 9.4 | — | 60.00 | -50.61 | N | GND |

Table 7-34. AC Line Conducted Data (NB UNII HDR4 – 6264MHz) (N) with host PC with USB-C cable

| | | | | |
|---|---|---|--|--|
| FCC ID: BCG-A3047 |  | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
| Test Report S/N: 1C2407010044-01-R2.BCG | Test Dates: 6/24/2024 - 8/22/2024 | EUT Type: Wireless Right Earbud | | Page 92 of 95 |

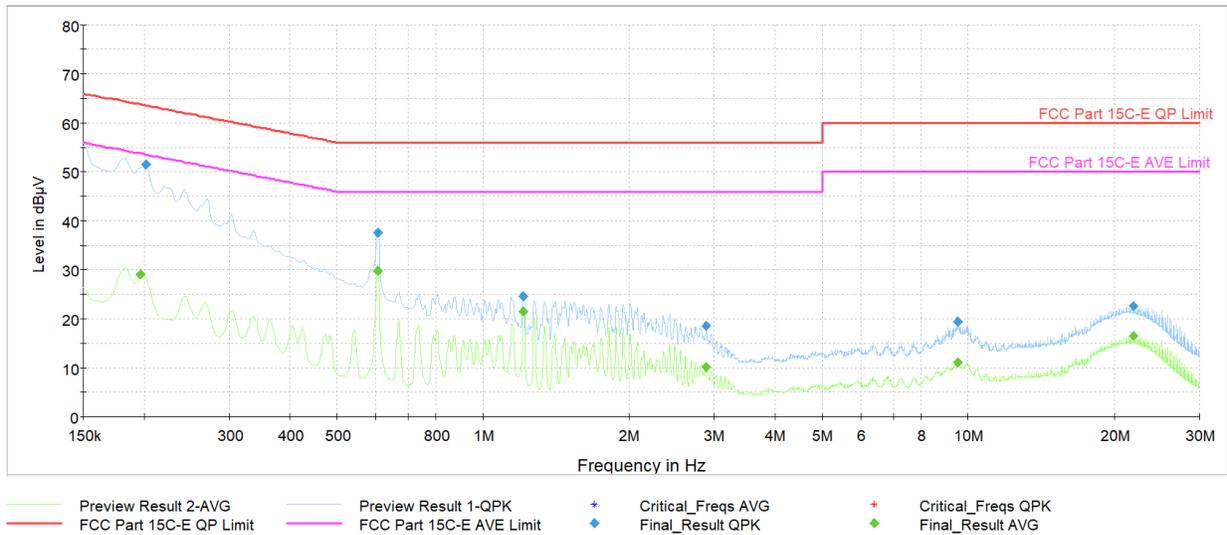


Plot 7-94. AC Line Conducted Plot (NB UNII HDRp4 – 6264MHz) (L1) with host PC with USB-C cable

| Frequency [MHz] | Process State | QuasiPeak [dBµV] | Average [dBµV] | Limit [dBµV] | Margin [dB] | Line | PE |
|-----------------|---------------|------------------|----------------|--------------|-------------|------|-----|
| 0.200 | FINAL | — | 29.18 | 53.63 | -24.45 | L1 | GND |
| 0.202 | FINAL | 51.8 | — | 63.54 | -11.77 | L1 | GND |
| 0.607 | FINAL | — | 26.71 | 46.00 | -19.29 | L1 | GND |
| 0.607 | FINAL | 36.2 | — | 56.00 | -19.82 | L1 | GND |
| 1.212 | FINAL | — | 20.08 | 46.00 | -25.92 | L1 | GND |
| 1.212 | FINAL | 23.5 | — | 56.00 | -32.46 | L1 | GND |
| 3.028 | FINAL | — | 11.46 | 46.00 | -34.54 | L1 | GND |
| 3.030 | FINAL | 18.9 | — | 56.00 | -37.07 | L1 | GND |
| 9.789 | FINAL | 17.0 | — | 60.00 | -42.98 | L1 | GND |
| 9.796 | FINAL | — | 9.22 | 50.00 | -40.78 | L1 | GND |
| 24.988 | FINAL | — | 16.64 | 50.00 | -33.36 | L1 | GND |
| 24.988 | FINAL | 23.0 | — | 60.00 | -36.99 | L1 | GND |

Table 7-35. AC Line Conducted Data (NB UNII HDRp4 – 6264MHz) (L1) with host PC with USB-C cable

| | | | | |
|--|---|---|--|-----------------------------------|
| FCC ID: BCG-A3047 |  | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
| Test Report S/N: 1C2407010044-01-R2.BCG | Test Dates: 6/24/2024 - 8/22/2024 | EUT Type: Wireless Right Earbud | | Page 93 of 95 |



Plot 7-95. AC Line Conducted Plot (NB UNII HDRp4 – 6264MHz) (N) with host PC with USB-C cable

| Frequency [MHz] | Process State | QuasiPeak [dBµV] | Average [dBµV] | Limit [dBµV] | Margin [dB] | Line | PE |
|-----------------|---------------|------------------|----------------|--------------|-------------|------|-----|
| 0.197 | FINAL | — | 29.09 | 53.73 | -24.63 | N | GND |
| 0.202 | FINAL | 51.5 | — | 63.54 | -12.07 | N | GND |
| 0.607 | FINAL | — | 29.89 | 46.00 | -16.11 | N | GND |
| 0.607 | FINAL | 37.5 | — | 56.00 | -18.50 | N | GND |
| 1.212 | FINAL | — | 21.43 | 46.00 | -24.57 | N | GND |
| 1.212 | FINAL | 24.6 | — | 56.00 | -31.39 | N | GND |
| 2.884 | FINAL | — | 10.11 | 46.00 | -35.89 | N | GND |
| 2.886 | FINAL | 18.5 | — | 56.00 | -37.50 | N | GND |
| 9.542 | FINAL | 19.4 | — | 60.00 | -40.57 | N | GND |
| 9.542 | FINAL | — | 11.09 | 50.00 | -38.91 | N | GND |
| 21.926 | FINAL | — | 16.41 | 50.00 | -33.59 | N | GND |
| 21.926 | FINAL | 22.6 | — | 60.00 | -37.39 | N | GND |

Table 7-36. AC Line Conducted Data (NB UNII HDRp4 – 6264MHz) (N) with host PC with USB-C cable

| | | | | |
|--|---|---|--|-----------------------------------|
| FCC ID: BCG-A3047 |  | MEASUREMENT REPORT (CERTIFICATION) | | Approved by: Technical Manager |
| Test Report S/N: 1C2407010044-01-R2.BCG | Test Dates: 6/24/2024 - 8/22/2024 | EUT Type: Wireless Right Earbud | | Page 94 of 95 |

8.0 CONCLUSION

The data collected relate only the item(s) tested and show that the **Apple Wireless Right Earbud FCC ID: BCG-A3047** is in compliance with Part 15 Subpart E (15.407) of the FCC Rules.

| | | | |
|--|---|---------------------------------------|-----------------------------------|
| FCC ID: BCG-A3047 |  | MEASUREMENT REPORT (CERTIFICATION) | Approved by: Technical Manager |
| Test Report S/N: 1C2407010044-01-R2.BCG | Test Dates: 6/24/2024 - 8/22/2024 | EUT Type: Wireless Right Earbud | Page 95 of 95 |

V 10.5 12/15/2021