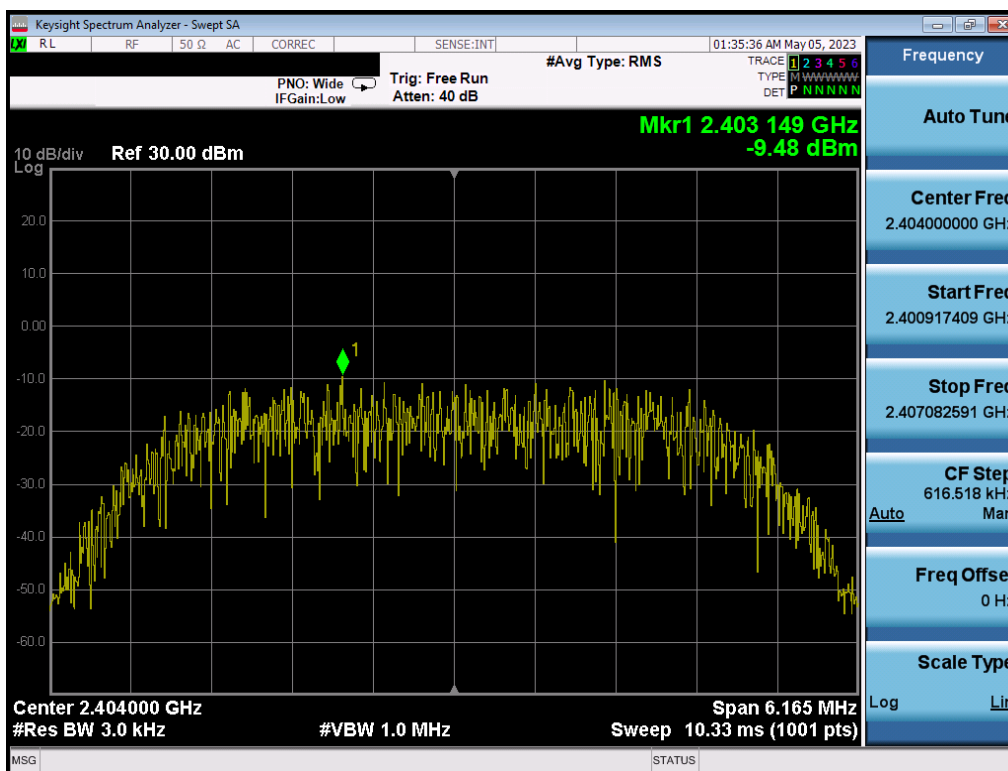
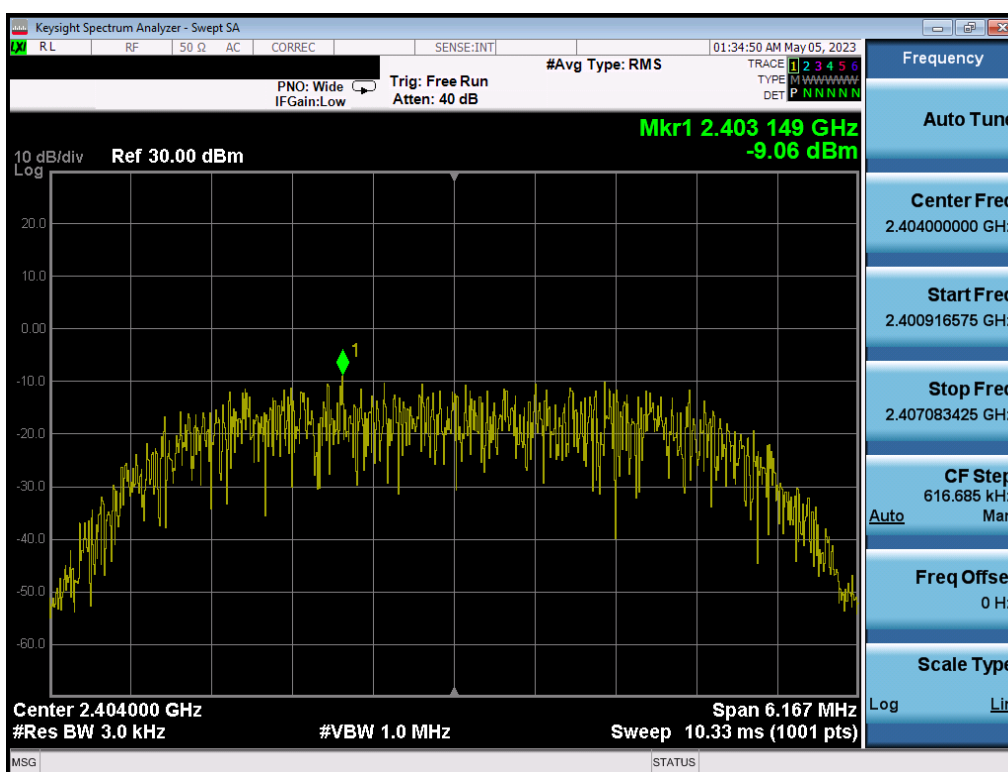


**Plot 7-59. Power Spectral Density Plot TxBF Ant1 (Bluetooth (HDR4), 4Mbps, iPA – Ch. 73)**

**Plot 7-60. Power Spectral Density Plot TxBF Ant2 (Bluetooth (HDR4), 4Mbps, iPA – Ch. 73)**

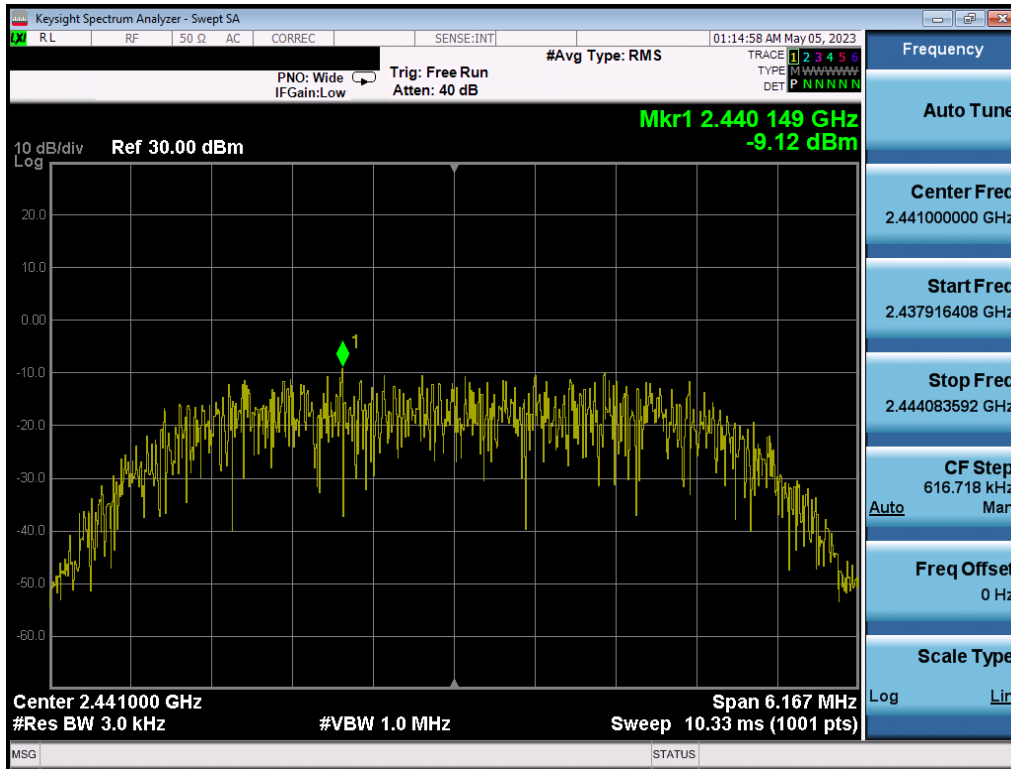


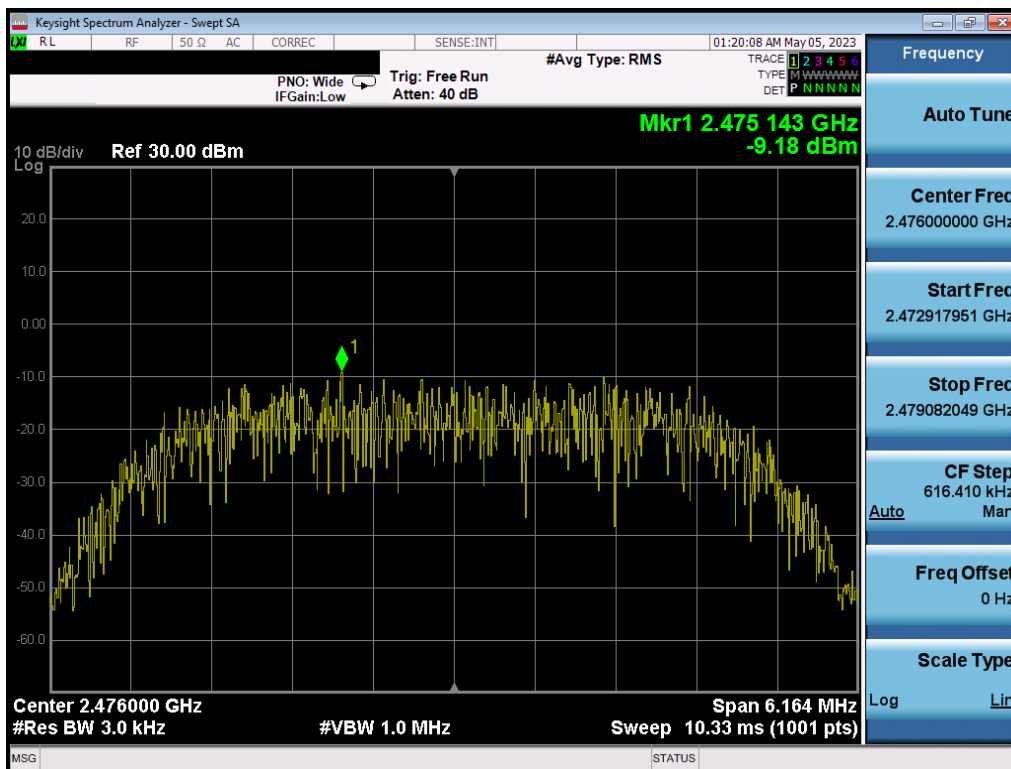
**Plot 7-61. Power Spectral Density Plot TxBF Ant1 (Bluetooth (HDR8), 8Mbps, ePA – Ch. 1)**

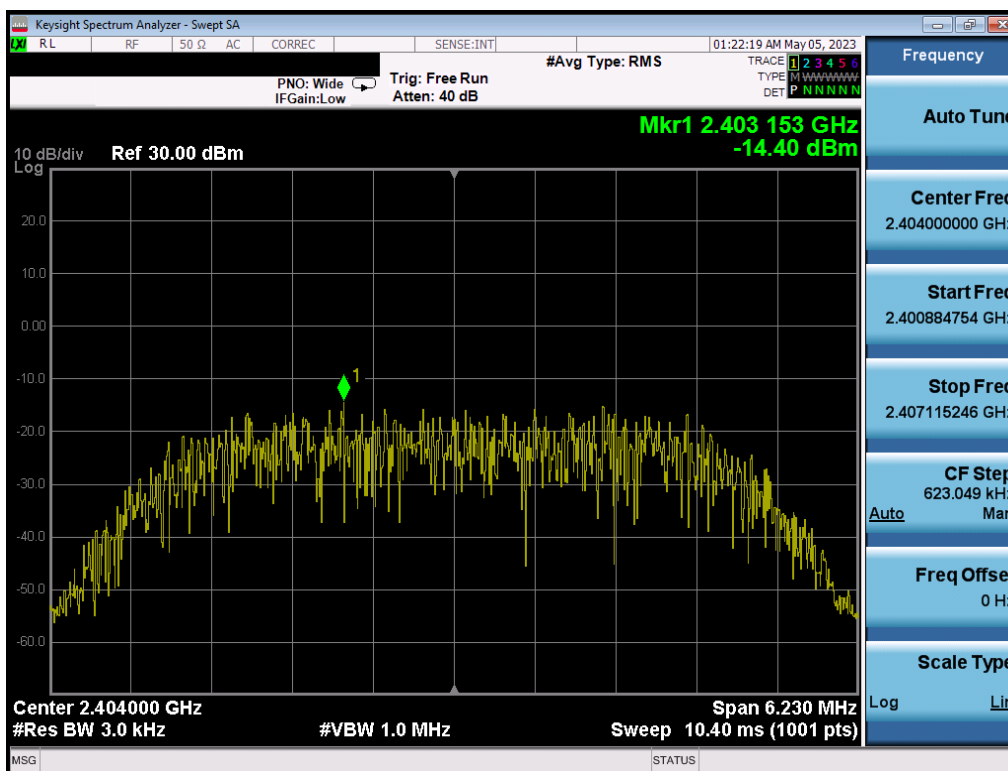


**Plot 7-62. Power Spectral Density Plot TxBF Ant2 (Bluetooth (HDR8), 8Mbps, ePA – Ch. 1)**

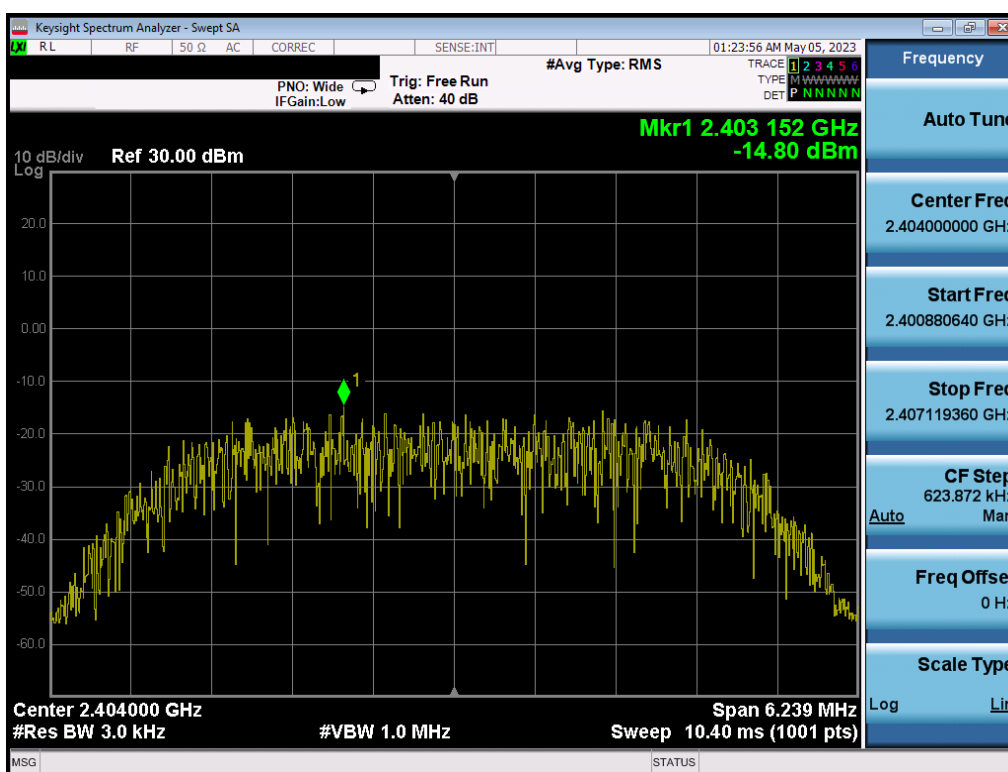
<b>FCC ID:</b> BCGA2117 <b>IC:</b> 579C-A2117	 <b>MEASUREMENT REPORT (CERTIFICATION)</b>		<b>Approved by:</b> Technical Manager
<b>Test Report S/N:</b> 1C2302130007-03.BCG	<b>Test Dates:</b> 2/10/2023 - 5/5/2023	<b>EUT Type:</b> Head Mounted Device	Page 59 of 124





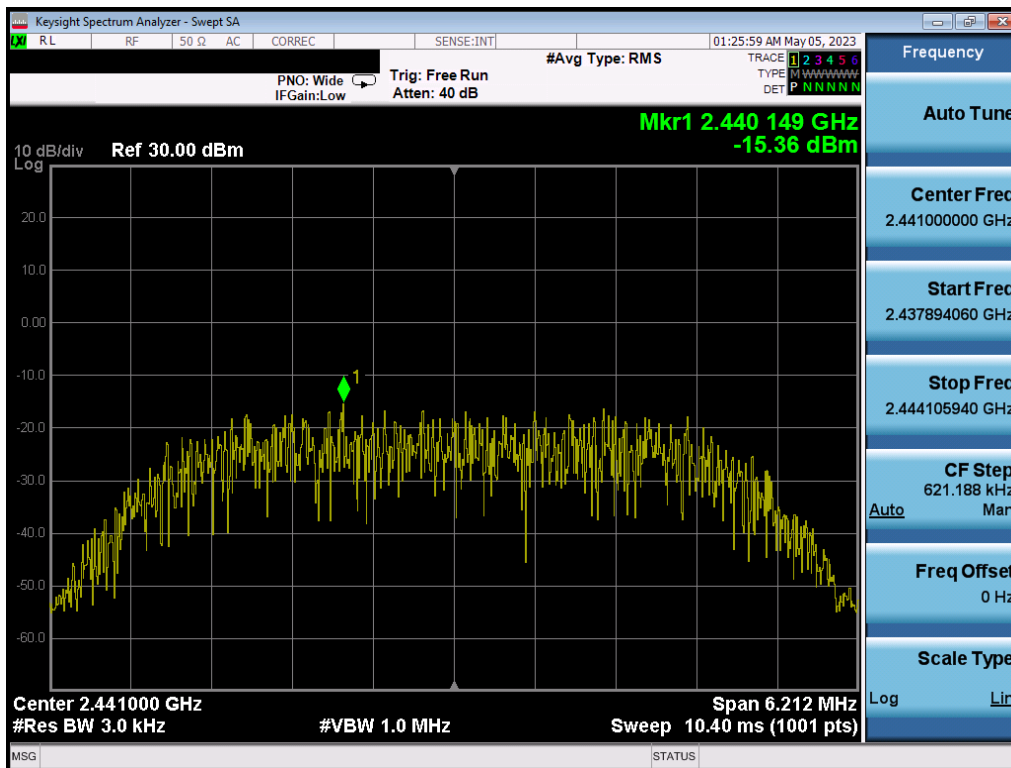
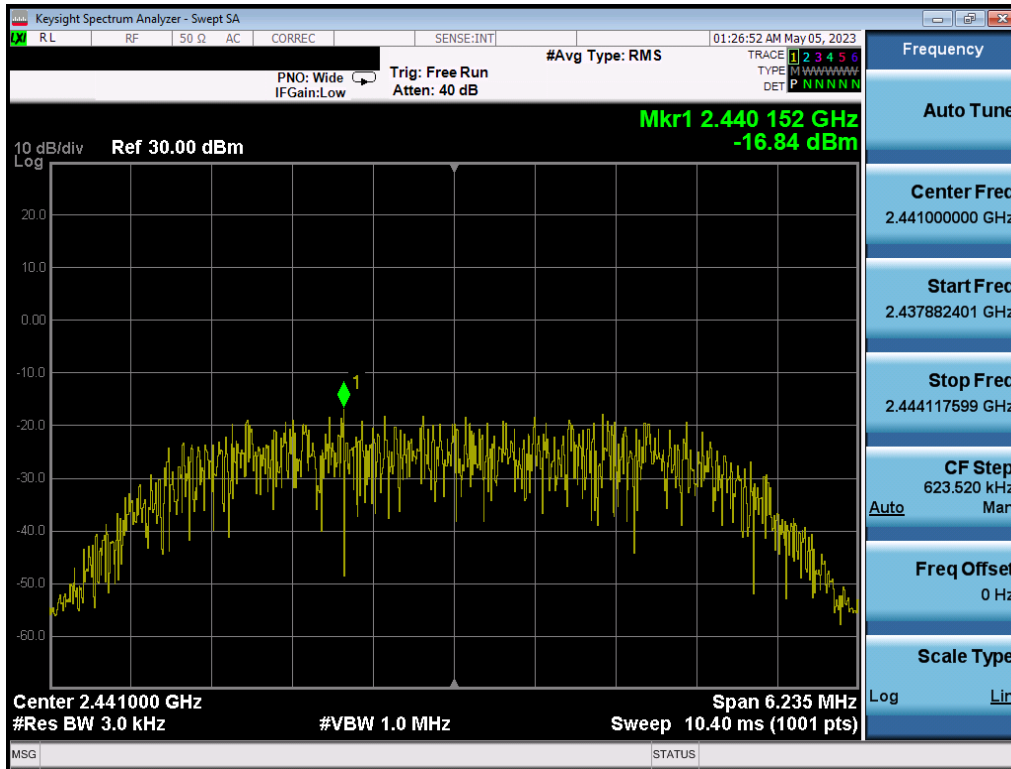


**Plot 7-67. Power Spectral Density Plot TxBF Ant1 (Bluetooth (HDR8), 8Mbps, iPA – Ch. 1)**

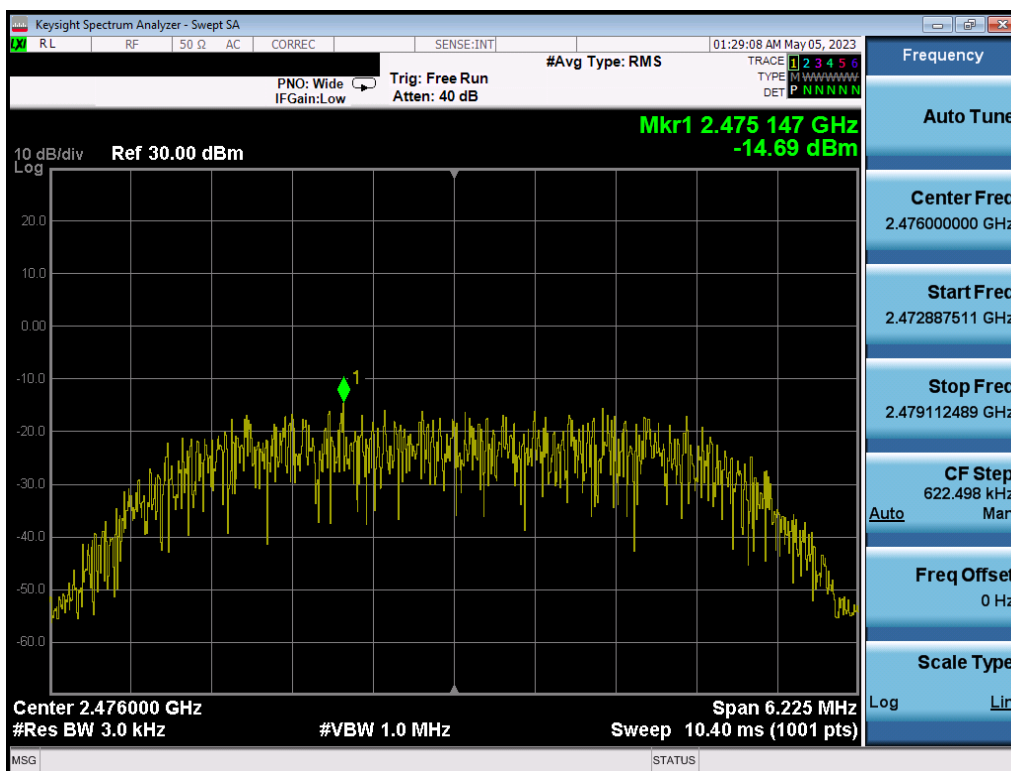


**Plot 7-68. Power Spectral Density Plot TxBF Ant2 (Bluetooth (HDR8), 8Mbps, iPA – Ch. 1)**

<b>FCC ID:</b> BCGA2117 <b>IC:</b> 579C-A2117	 <b>MEASUREMENT REPORT (CERTIFICATION)</b>		<b>Approved by:</b> Technical Manager
<b>Test Report S/N:</b> 1C2302130007-03.BCG	<b>Test Dates:</b> 2/10/2023 - 5/5/2023	<b>EUT Type:</b> Head Mounted Device	Page 62 of 124



<b>FCC ID:</b> BCGA2117 <b>IC:</b> 579C-A2117	 <b>MEASUREMENT REPORT (CERTIFICATION)</b>		<b>Approved by:</b> Technical Manager
<b>Test Report S/N:</b> 1C2302130007-03.BCG	<b>Test Dates:</b> 2/10/2023 - 5/5/2023	<b>EUT Type:</b> Head Mounted Device	Page 63 of 124



**Note:**


Per ANSI C63.10-2013 Subclause 14.3.2.2 and KDB 662911 D01 v02r01 Section E)2), the power spectral density at Antenna 1 and Antenna 2 were first measured separately as shown in the section above. The measured values were then summed in linear power units then converted back to dBm.

**Sample TxBF Calculation:**

At 2404MHz the average conducted power spectral density was measured to be -12.23 dBm for Antenna 1 and -12.37dBm for Antenna 2.

$$\text{Antenna 1} + \text{Antenna 2} = \text{TxBF}$$

$$(-12.23\text{dBm} + -12.37 \text{ dBm}) = (0.060 \text{ mW} + 0.058 \text{ mW}) = 0.118 \text{ mW} = -9.29 \text{ dBm}$$

<b>FCC ID:</b> BCGA2117 <b>IC:</b> 579C-A2117			<b>MEASUREMENT REPORT (CERTIFICATION)</b>	<b>Approved by:</b> Technical Manager
<b>Test Report S/N:</b> 1C2302130007-03.BCG	<b>Test Dates:</b> 2/10/2023 - 5/5/2023	<b>EUT Type:</b> Head Mounted Device		Page 65 of 124

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## 7.5 Conducted Authorized Band Edge

**§15.247(d); RSS-247 [5.5]**

### Test Overview and Limit

For the following out of band conducted spurious emissions plots at the band edge, the EUT was set to transmit at maximum power with the largest packet size available. These settings produced the worst-case emissions.

***The limit for out-of-band spurious emissions at the band edge is 20dB below the fundamental emission level, as determined from the in-band power measurement of the DTS channel performed in a 100kHz bandwidth.***

### Test Procedure Used

ANSI C63.10-2013 – Subclause 11.11.3

KDB 558074 D01 v05r02 – Section 8.7.2

### Test Settings

1. Start and stop frequency were set such that the band edge would be placed in the center of the plot
2. Span was set large enough so as to capture all out of band emissions near the band edge
3. RBW = 100kHz
4. VBW = 300kHz
5. Detector = Peak
6. Number of sweep points  $\geq 2 \times \text{Span/RBW}$
7. Trace mode = max hold
8. Sweep time = auto couple
9. The trace was allowed to stabilize

### Test Setup


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



**Figure 7-4. Test Instrument & Measurement Setup**

### Test Notes

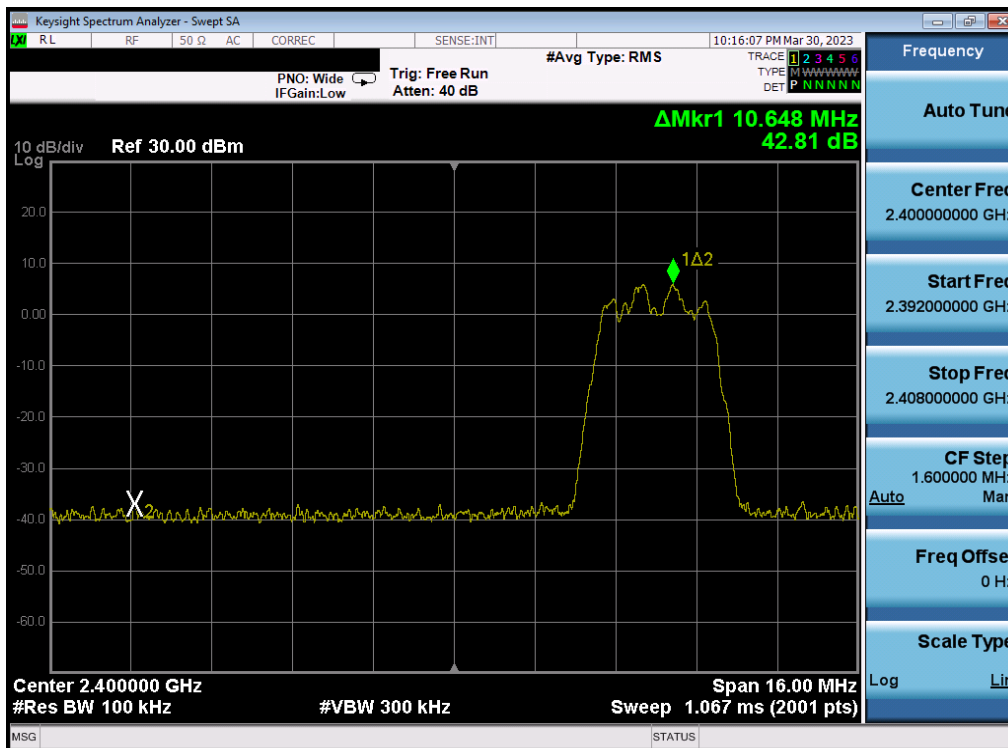
All supported modulation, antenna (including TxBF mode) and power schemes have been tested on the unit and only worst case configuration is reported.

FCC ID: BCGA2117 IC: 579C-A2117		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
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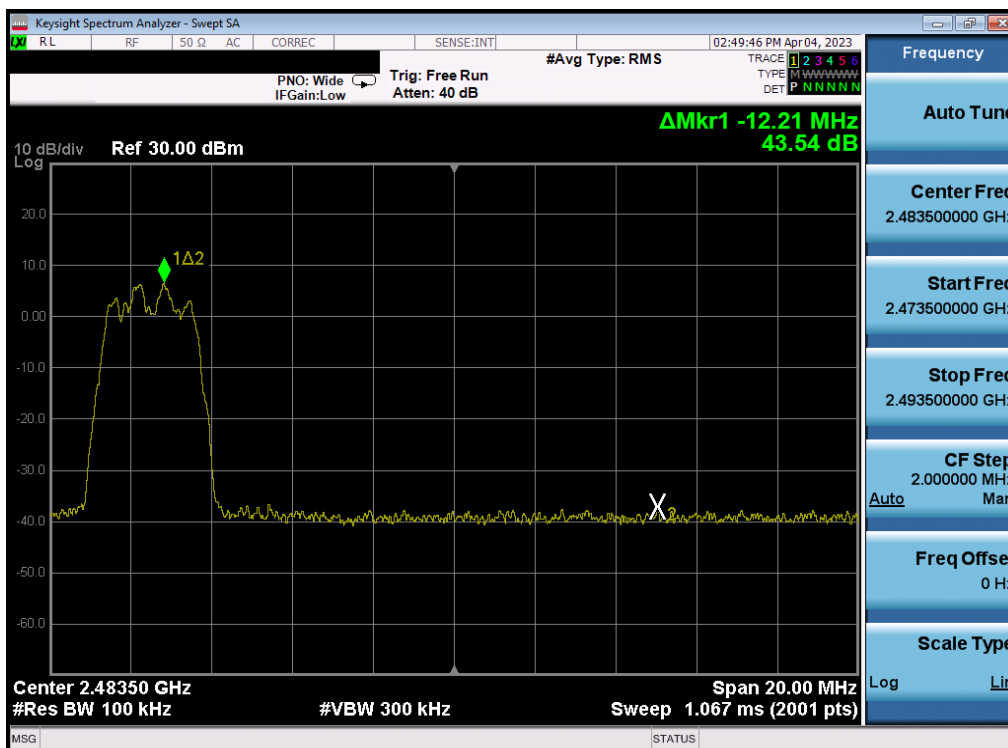
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## Ant1



Plot 7-73. Band Edge Plot Ant1 (Bluetooth (HDR4), ePA – Ch. 1)

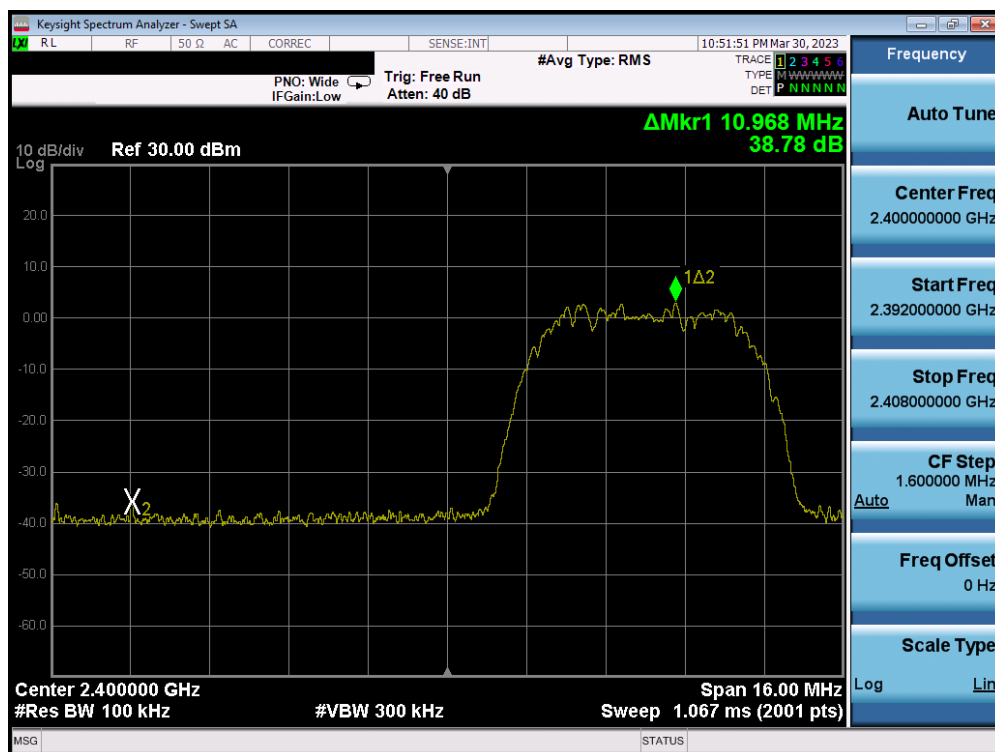


Plot 7-74. Band Edge Plot Ant1 (Bluetooth (HDR4), ePA – Ch. 73)

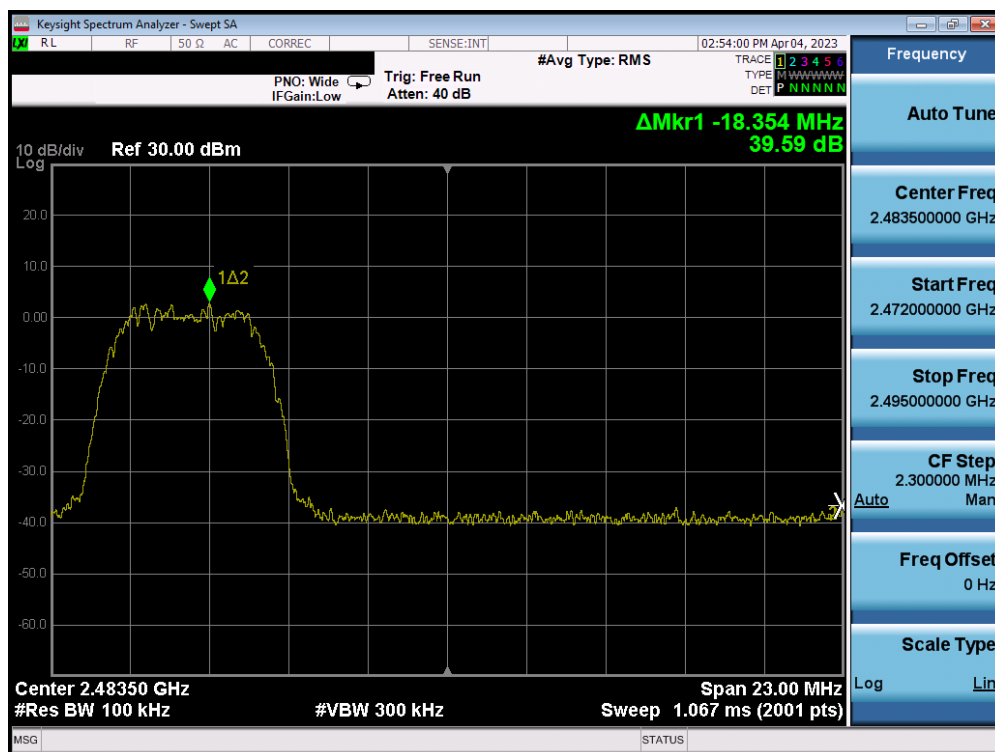
FCC ID: BCGA2117 IC: 579C-A2117		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2302130007-03.BCG	Test Dates: 2/10/2023 - 5/5/2023	EUT Type: Head Mounted Device	Page 67 of 124

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Plot 7-75. Band Edge Plot Ant1 (Bluetooth (HDR8), ePA – Ch. 1)

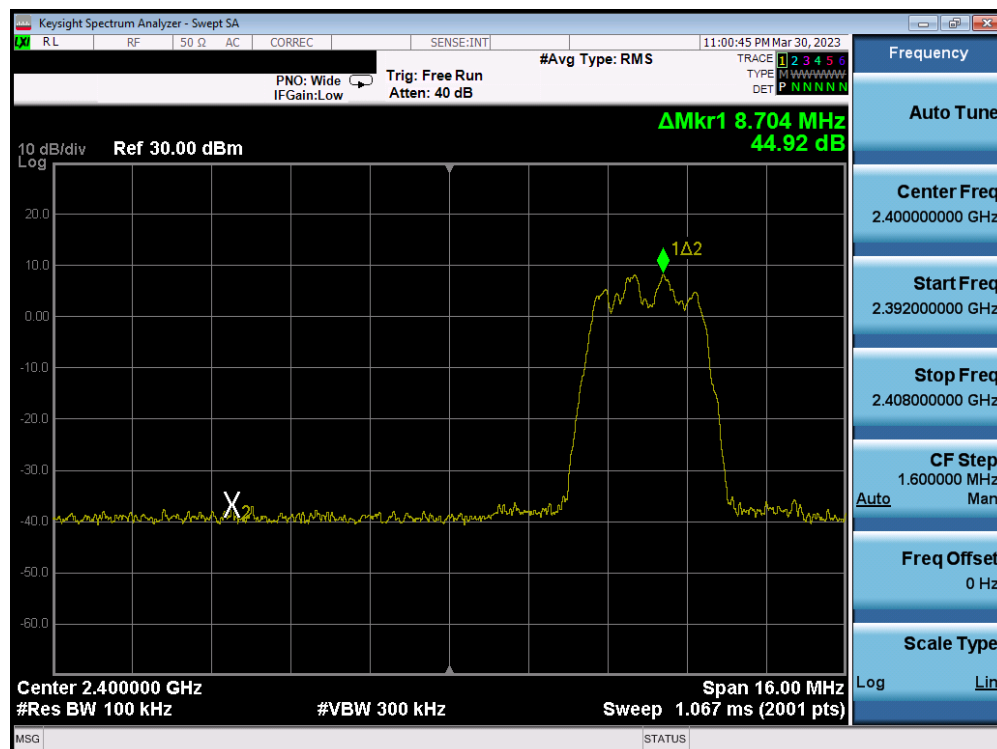


Plot 7-76. Band Edge Plot Ant1 (Bluetooth (HDR8), ePA – Ch. 73)

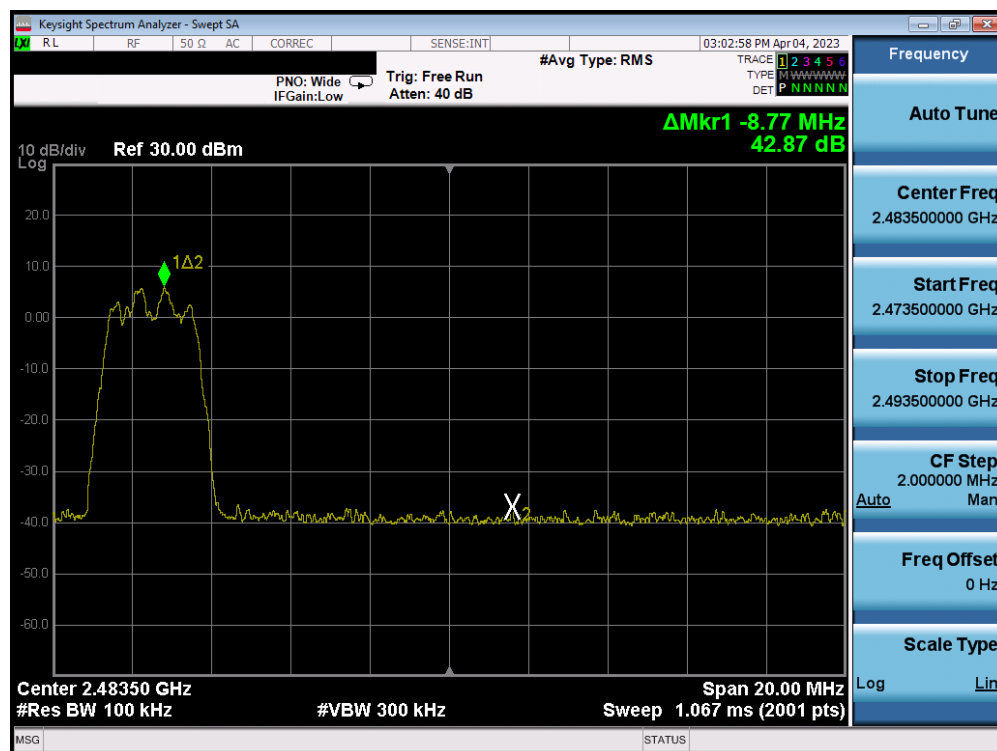
FCC ID: BCGA2117 IC: 579C-A2117		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2302130007-03.BCG	Test Dates: 2/10/2023 - 5/5/2023	EUT Type: Head Mounted Device	Page 68 of 124

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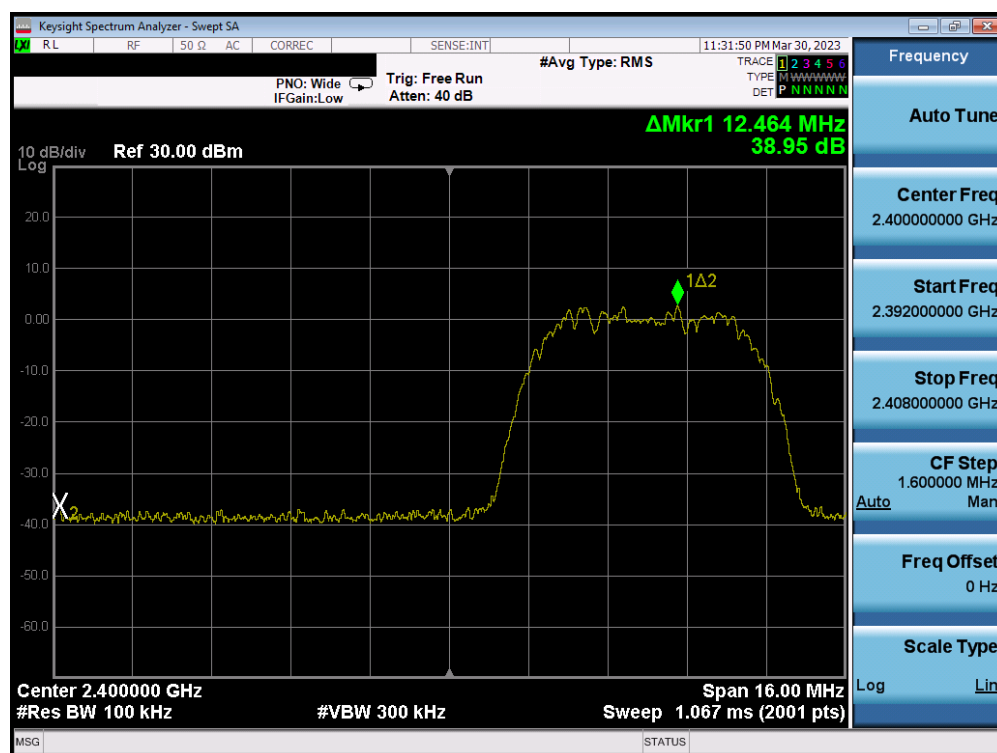


Plot 7-77. Band Edge Plot Ant2 (Bluetooth (HDR4), ePA – Ch. 1)

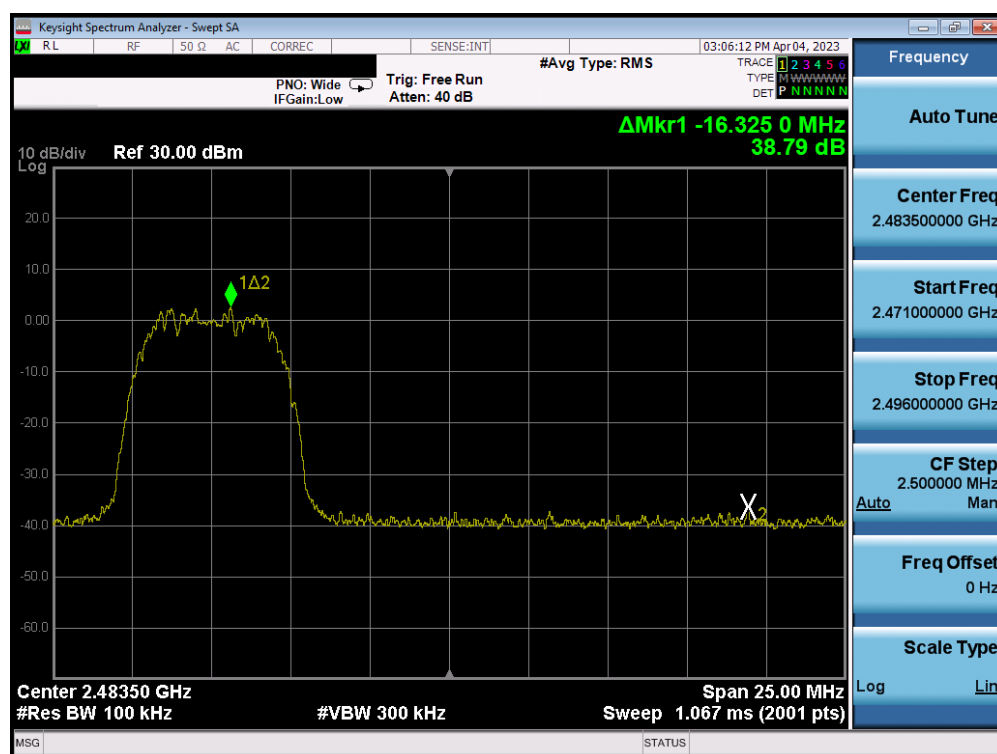


Plot 7-78. Band Edge Plot Ant2 (Bluetooth (HDR4), ePA – Ch. 73)

FCC ID: BCGA2117 IC: 579C-A2117		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
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Plot 7-79. Band Edge Plot Ant2 (Bluetooth (HDR8), ePA – Ch. 1)



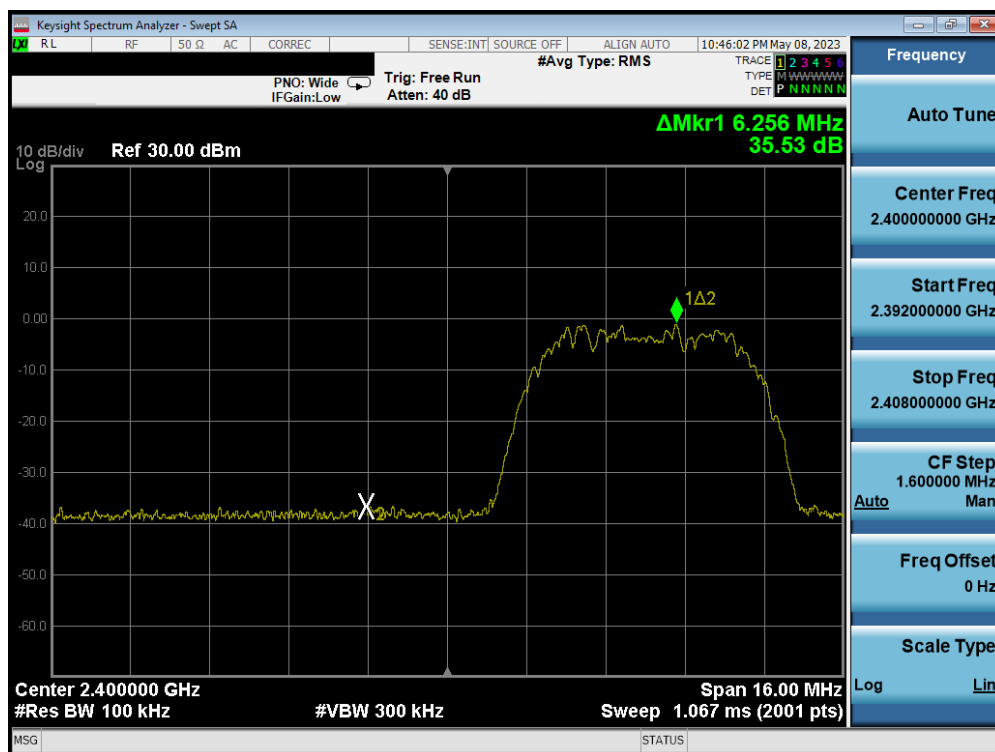
Plot 7-80. Band Edge Plot Ant2 (Bluetooth (HDR8), ePA – Ch. 73)

FCC ID: BCGA2117 IC: 579C-A2117		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
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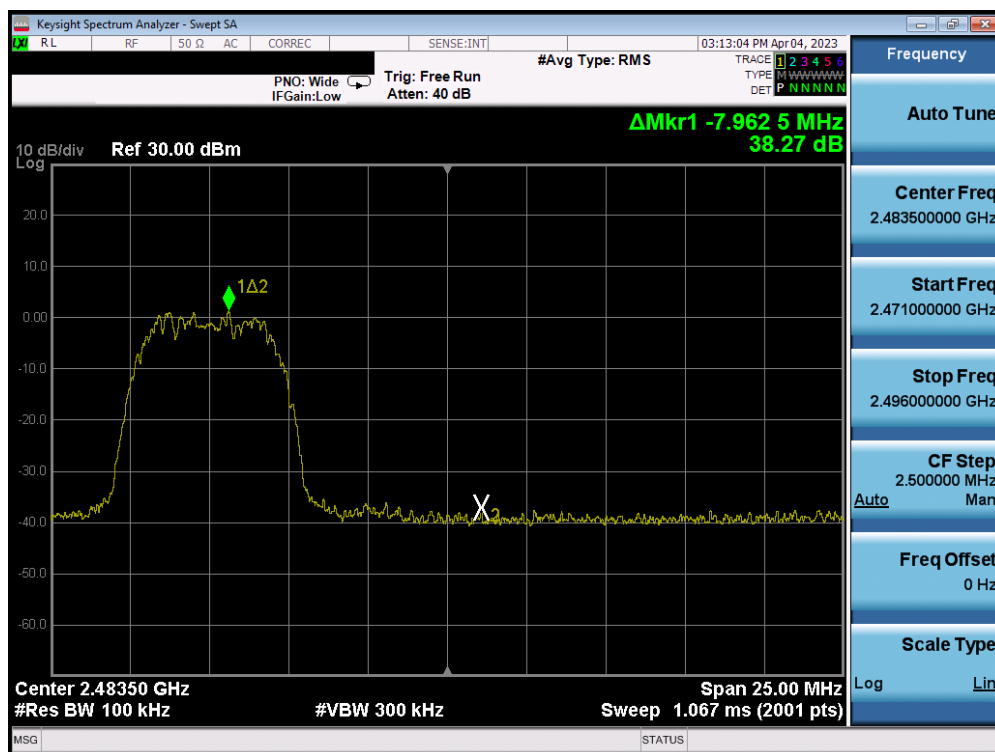
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Plot 7-83. Band Edge Plot NB UNII\_L (Bluetooth (HDR8), iPA – Ch. 1)



Plot 7-84. Band Edge Plot NB UNII\_L (Bluetooth (HDR8), iPA – Ch. 73)

FCC ID: BCGA2117 IC: 579C-A2117		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
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## 7.6 Conducted Spurious Emissions

§15.247(d); RSS-247 [5.5]

### Test Overview and Limit

For the following out of band conducted spurious emissions plots, the EUT was set to transmit at maximum power with the largest packet size available. The worst case spurious emissions were found in this configuration.

***The limit for out-of-band spurious emissions at the band edge is 20dB below the fundamental emission level, as determined from the in-band power measurement of the DTS channel performed in a 100kHz bandwidth per the procedure in Section 8.5 of KDB 558074 D01 v05r02 and Subclause 11.11 of ANSI C63.10-2013.***

### Test Procedure Used

ANSI C63.10-2013 – Subclause 11.11.3  
KDB 558074 D01 v05r02 – Section 8.5

### Test Settings

1. Start frequency was set to 30MHz and stop frequency was set to 25GHz (separated into two plots per channel)
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = Peak
5. Trace mode = max hold
6. Sweep time = auto couple
7. The trace was allowed to stabilize

### Test Setup

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



**Figure 7-5. Test Instrument & Measurement Setup**

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## **Test Notes**

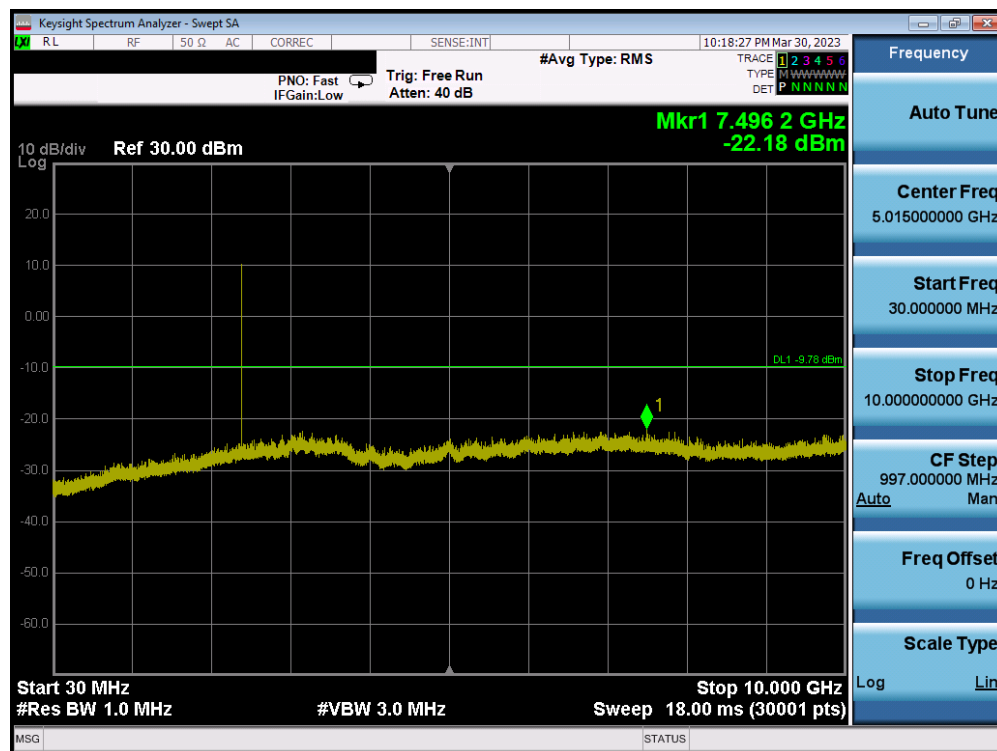
1. RBW was set to 1MHz rather than 100kHz in order to increase the measurement speed.
2. The display line shown in the following plots denotes the limit at 20dB below the fundamental emission level measured in a 100kHz bandwidth. However, since the traces in the following plots are measured with a 1MHz RBW, the display line may not necessarily appear to be 20dB below the level of the fundamental in a 1MHz bandwidth.
3. For plots showing conducted spurious emissions near the limit, the frequencies were investigated with a reduced RBW to ensure that no emissions were present.
4. All supported modulation, antenna (including TxBF mode) and power schemes have been tested on the unit and only worst case configuration is reported.

<b>FCC ID:</b> BCGA2117 <b>IC:</b> 579C-A2117		<b>MEASUREMENT REPORT (CERTIFICATION)</b>	<b>Approved by:</b> Technical Manager
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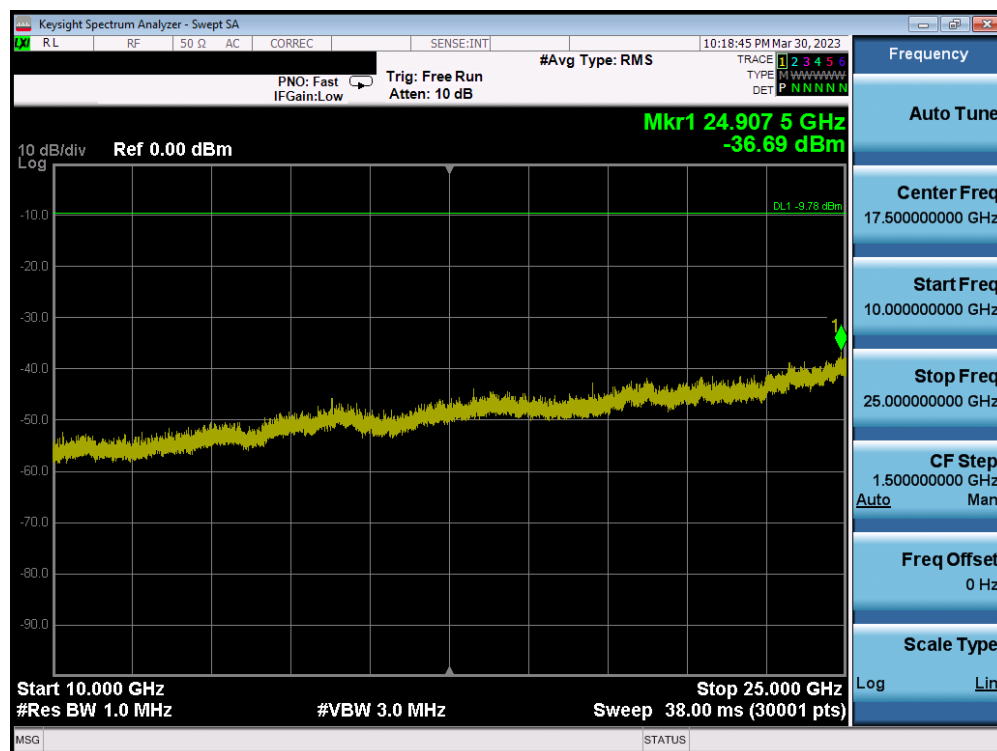
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## Ant1



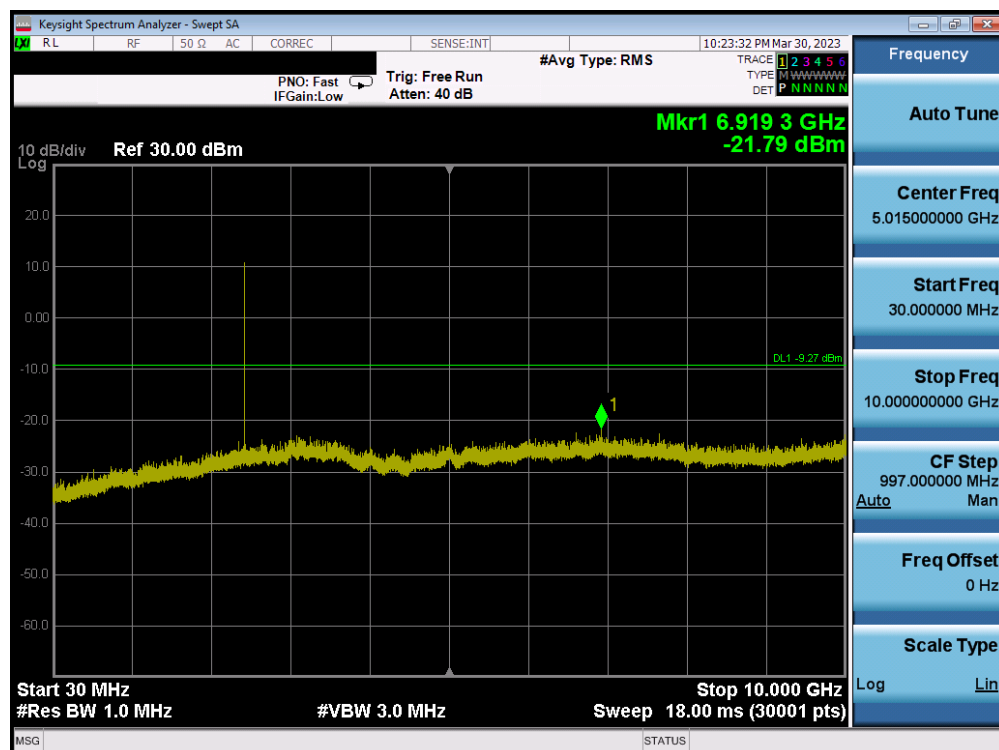
Plot 7-85. Conducted Spurious Plot Ant1 (Bluetooth (HDR4), 4 Mbps, ePA – Ch. 1)



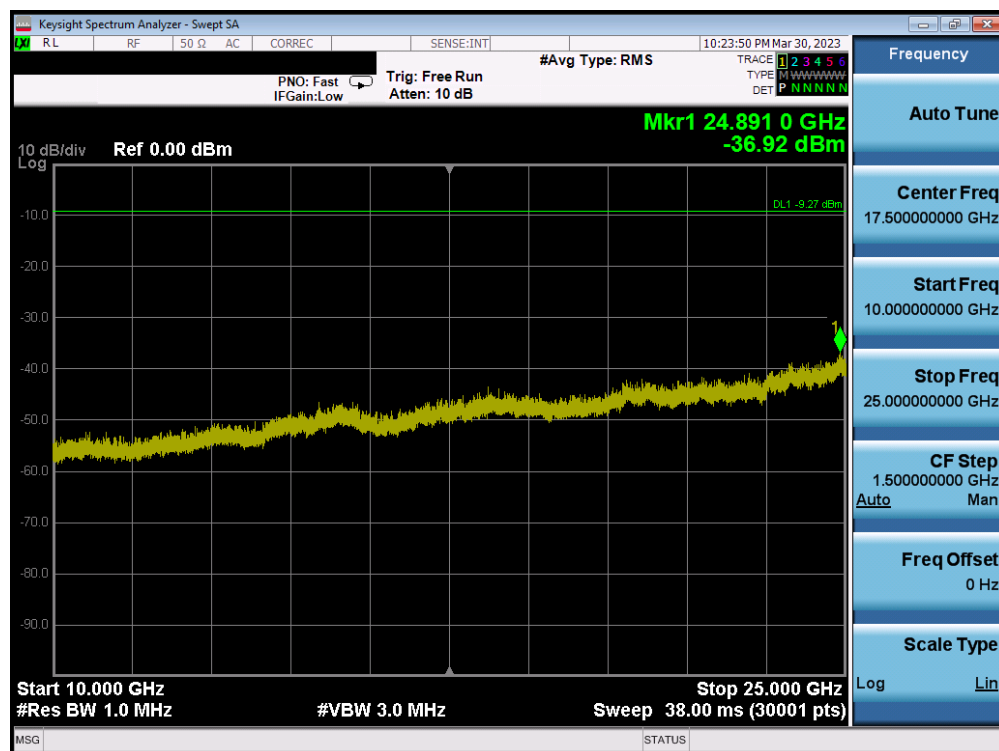
Plot 7-86. Conducted Spurious Plot Ant1 (Bluetooth (HDR4), 4 Mbps, ePA – Ch. 1)

FCC ID: BCGA2117 IC: 579C-A2117		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
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Plot 7-87. Conducted Spurious Plot Ant1 (Bluetooth (HDR4), 4 Mbps, ePA – Ch. 38)

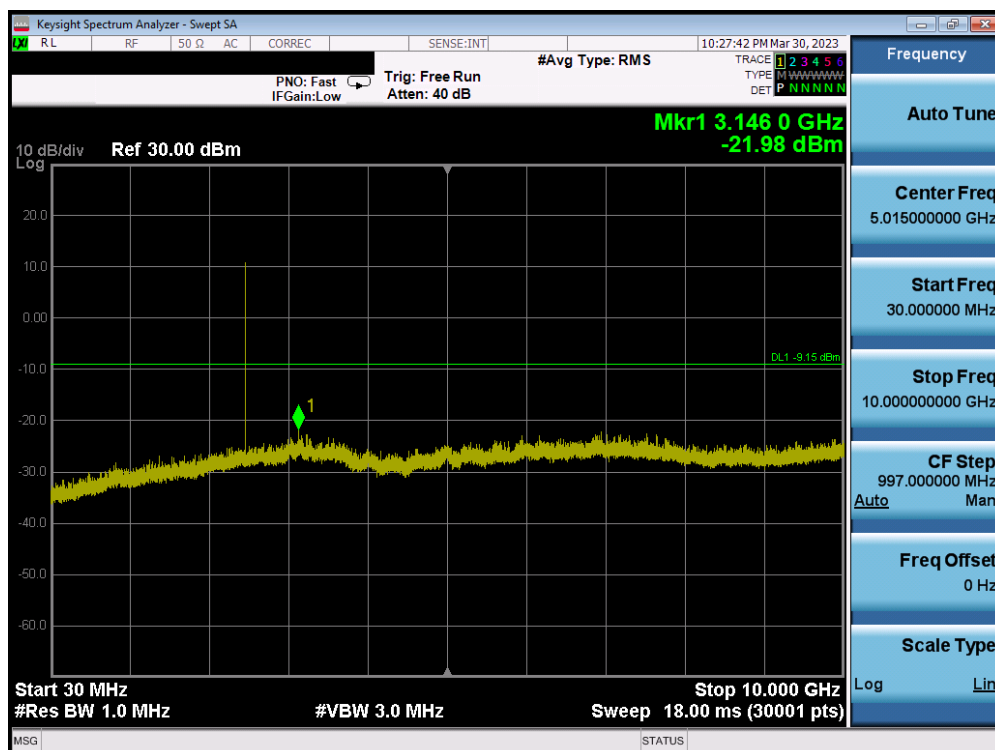


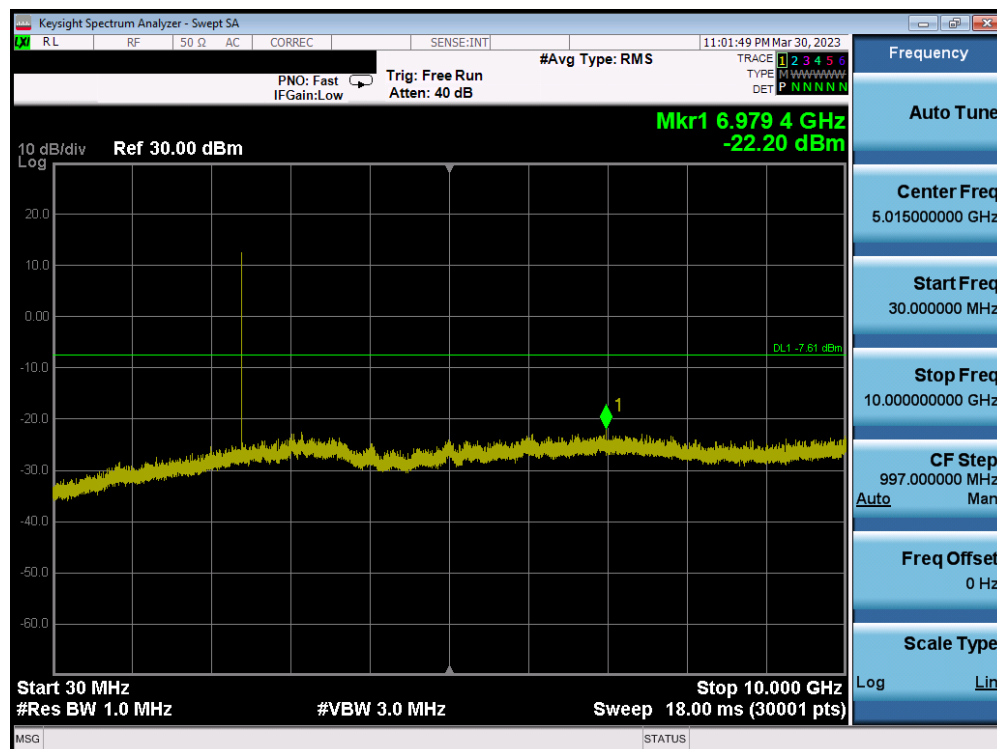
Plot 7-88. Conducted Spurious Plot Ant1 (Bluetooth (HDR4), 4 Mbps, ePA – Ch. 38)

FCC ID: BCGA2117 IC: 579C-A2117		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
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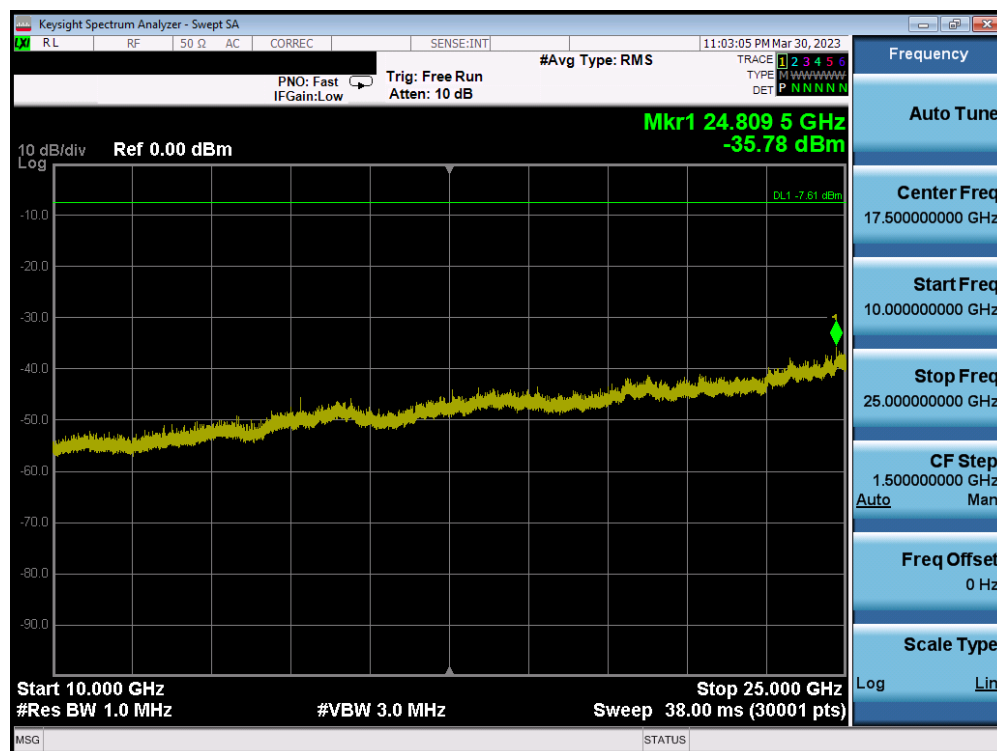
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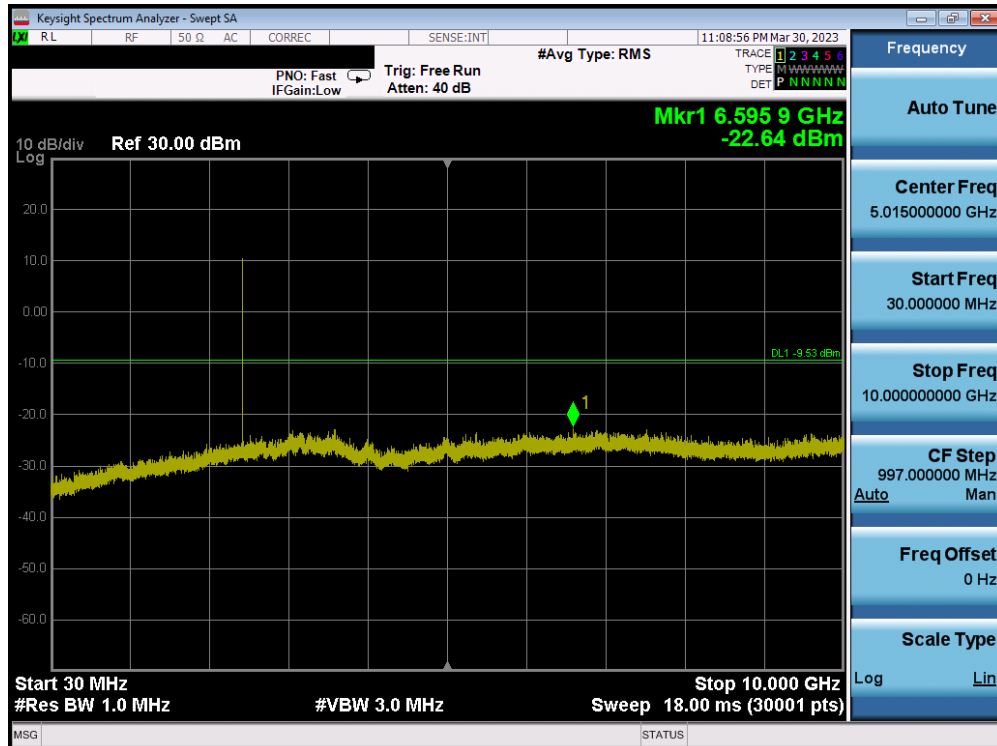


Plot 7-91. Conducted Spurious Plot Ant2 (Bluetooth (HDR4), 4 Mbps, ePA – Ch. 1)

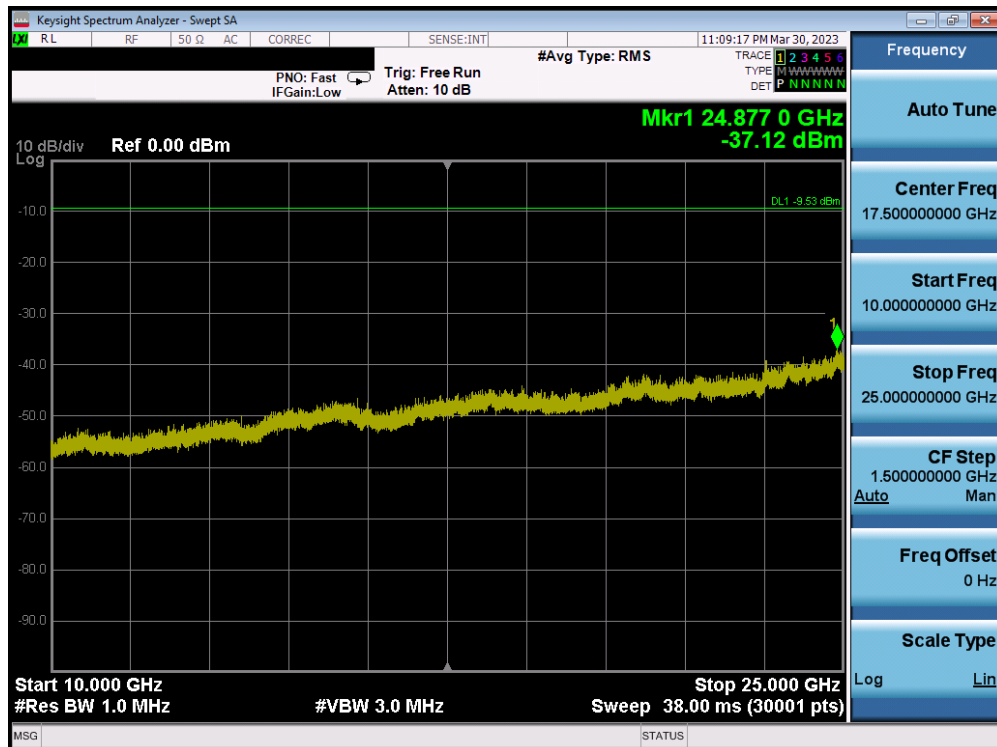


Plot 7-92. Conducted Spurious Plot Ant2 (Bluetooth (HDR4), 4 Mbps, ePA – Ch. 1)

FCC ID: BCGA2117 IC: 579C-A2117		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
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Plot 7-93. Conducted Spurious Plot Ant2 (Bluetooth (HDR4), 4 Mbps, ePA – Ch. 38)

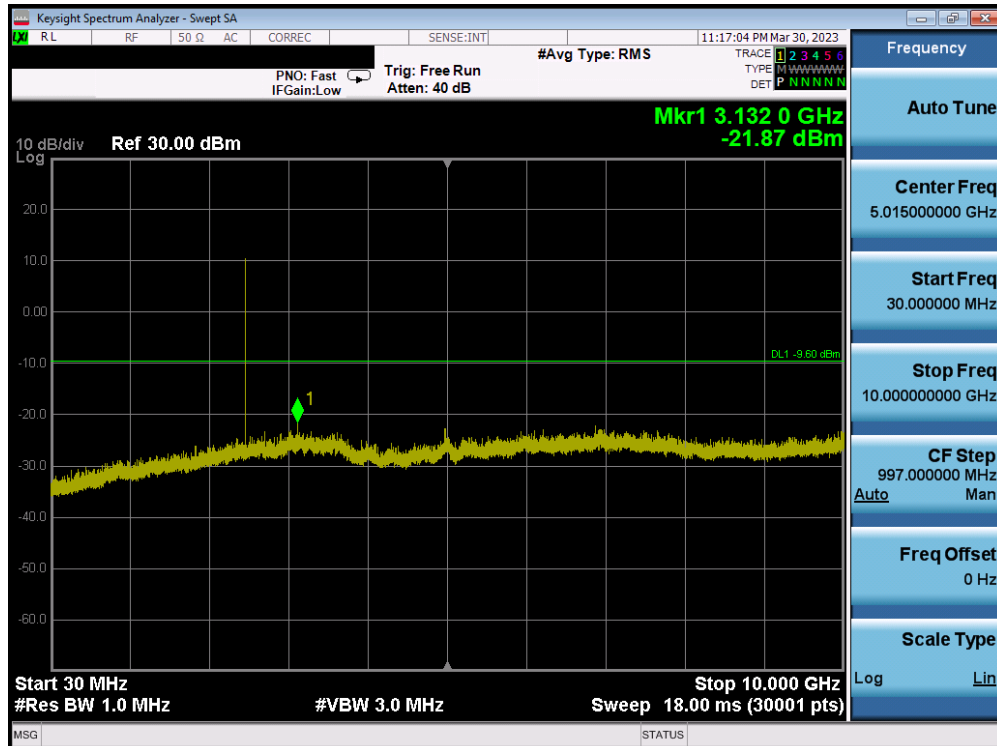


Plot 7-94. Conducted Spurious Plot Ant2 (Bluetooth (HDR4), 4 Mbps, ePA – Ch. 38)

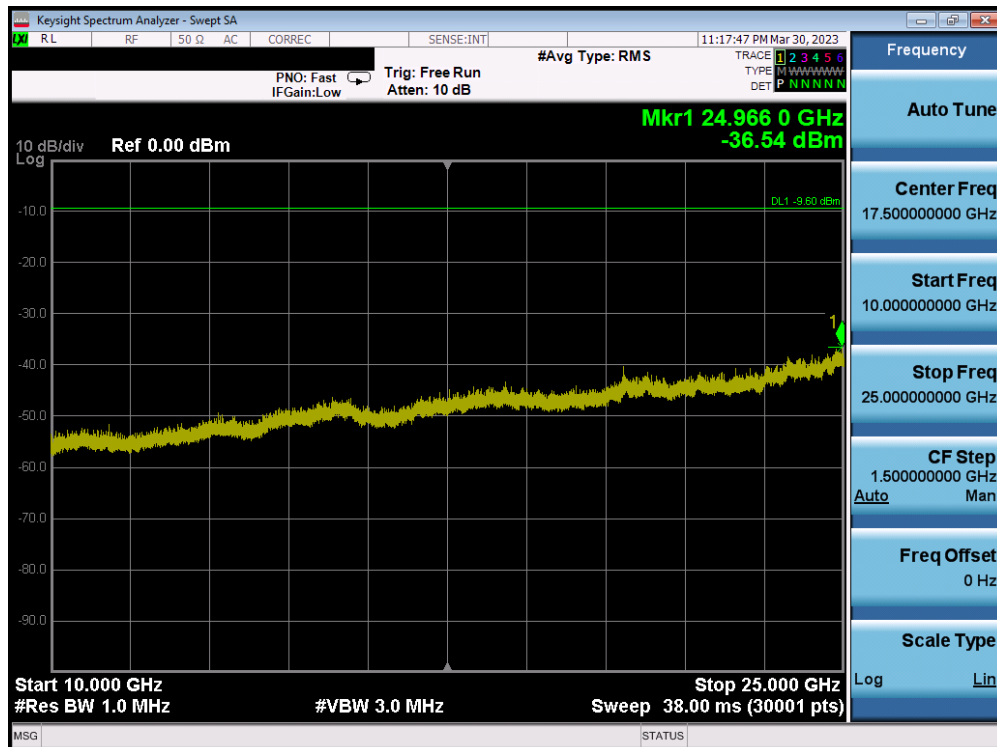
FCC ID: BCGA2117 IC: 579C-A2117		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
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Plot 7-95. Conducted Spurious Plot Ant2 (Bluetooth (HDR4), 4 Mbps, ePA – Ch. 73)

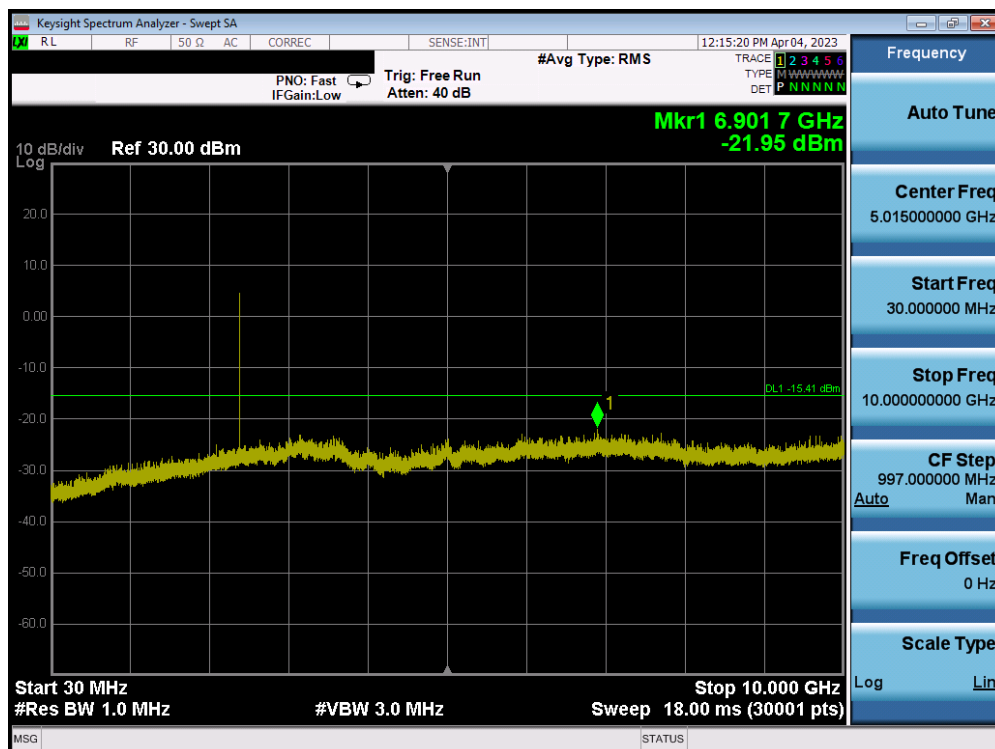


Plot 7-96. Conducted Spurious Plot Ant2 (Bluetooth (HDR4), 4 Mbps, ePA – Ch. 73)

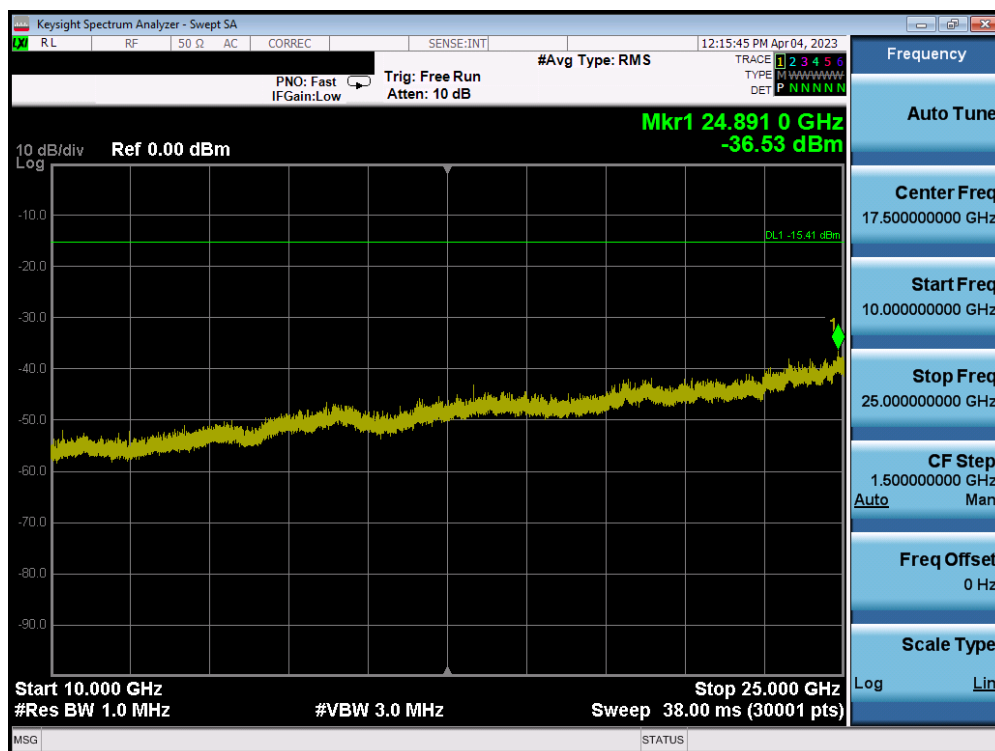
FCC ID: BCGA2117 IC: 579C-A2117		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
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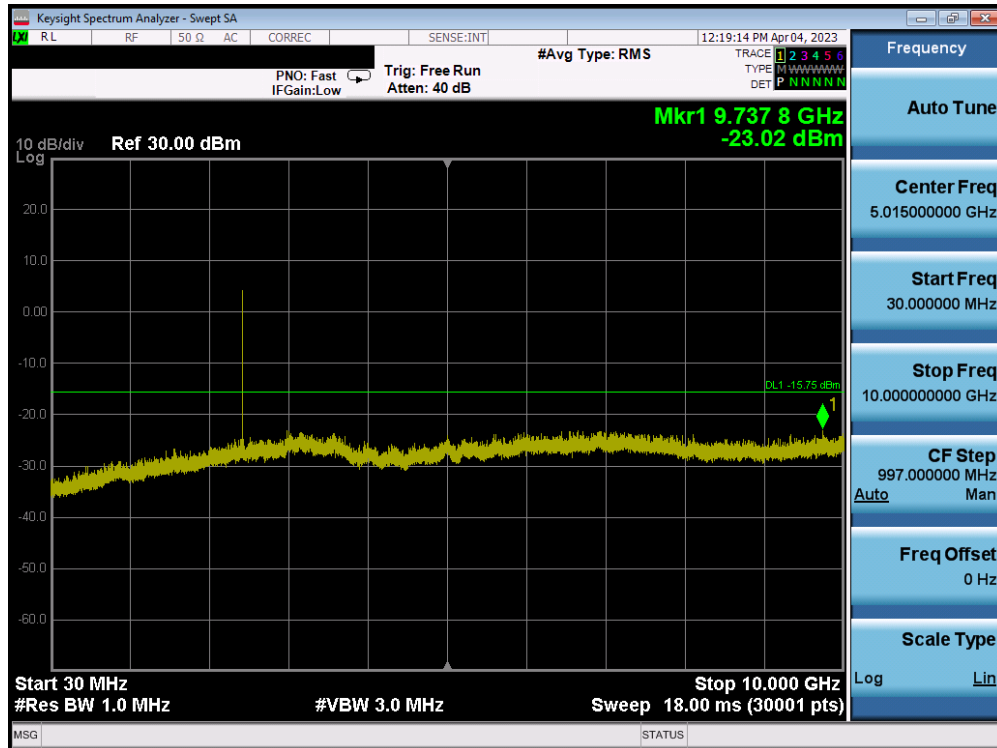
Plot 7-97. Conducted Spurious Plot NB UNII\_L (Bluetooth (HDR4), 4 Mbps, iPA – Ch. 1)



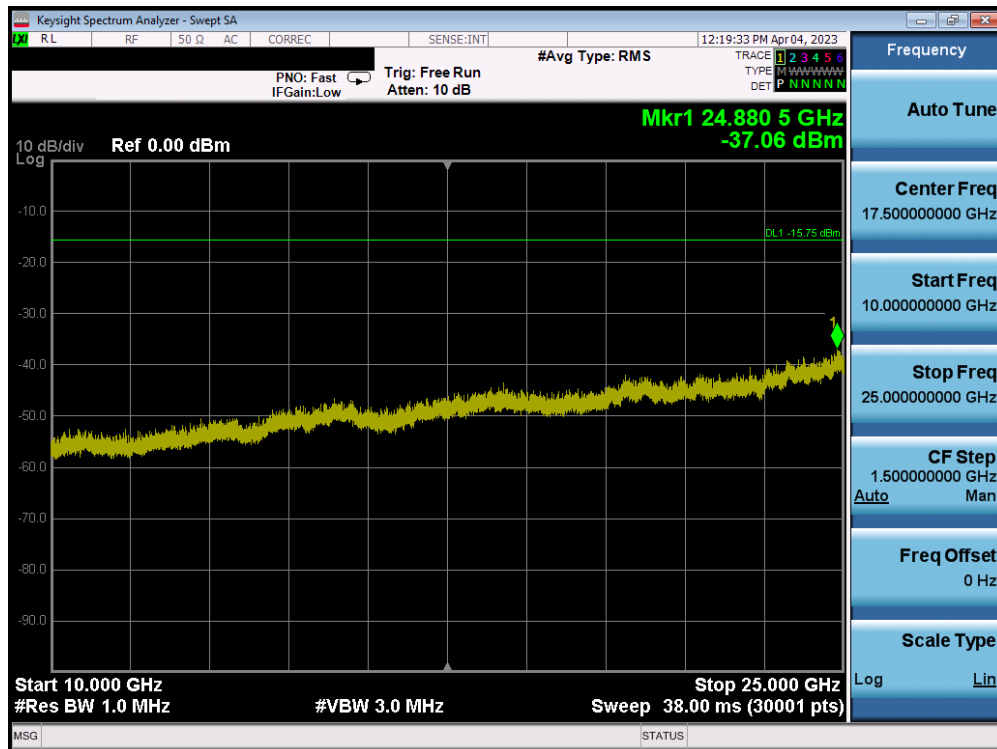
Plot 7-98. Conducted Spurious Plot NB UNII\_L (Bluetooth (HDR4), 4 Mbps, iPA – Ch. 1)

FCC ID: BCGA2117 IC: 579C-A2117		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
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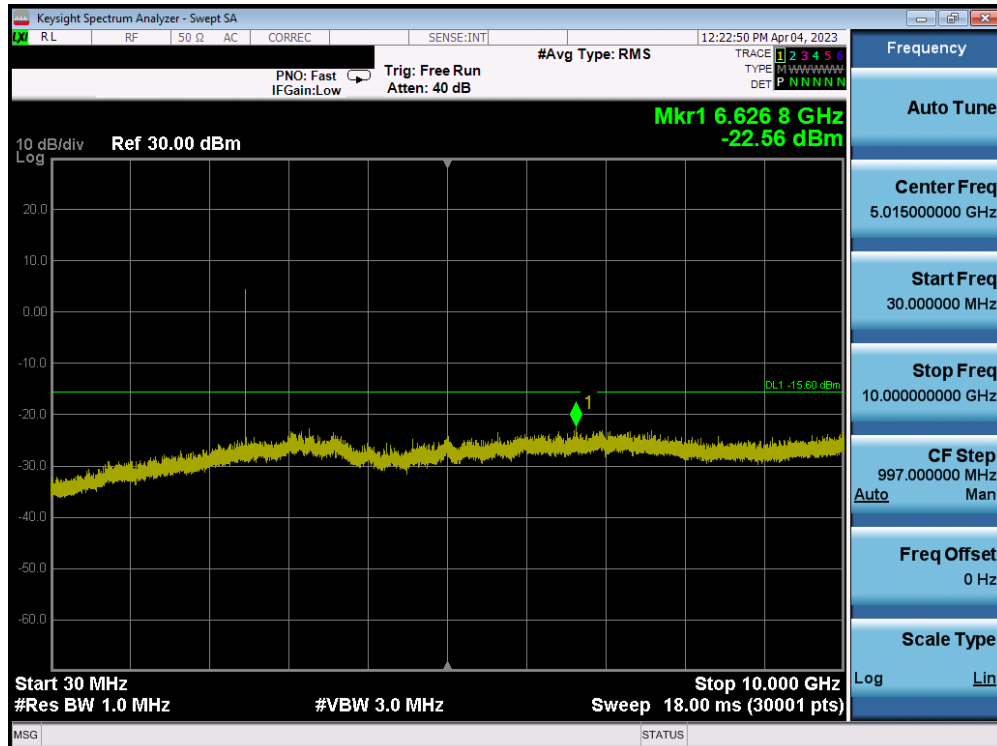


Plot 7-99. Conducted Spurious Plot NB UNII\_L (Bluetooth (HDR4), 4 Mbps, iPA – Ch. 38)

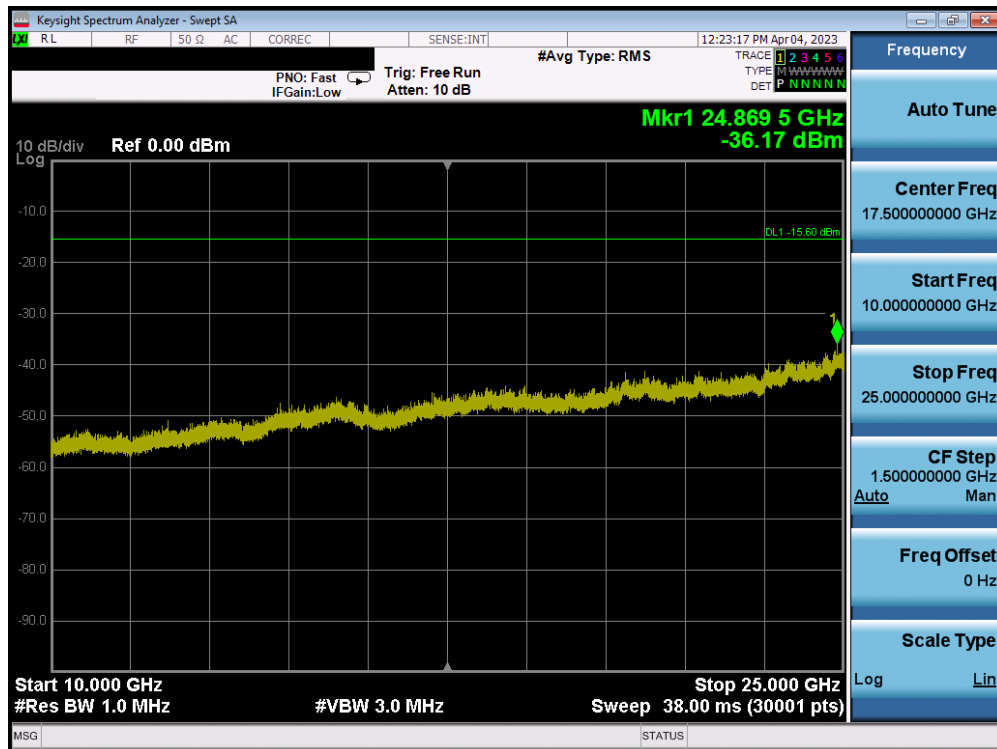


Plot 7-100. Conducted Spurious Plot NB UNII\_L (Bluetooth (HDR4), 4 Mbps, iPA – Ch. 38)

FCC ID: BCGA2117 IC: 579C-A2117		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
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Plot 7-101. Conducted Spurious Plot NB UNII\_L (Bluetooth (HDR4), 4 Mbps, iPA – Ch. 73)



Plot 7-102. Conducted Spurious Plot NB UNII\_L (Bluetooth (HDR4), 4 Mbps, iPA – Ch. 73)

FCC ID: BCGA2117 IC: 579C-A2117		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
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## 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 7-17 per Section 15.209 and RSS-Gen (8.9).***

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

**Table 7-17. Radiated Limits**

### Test Procedures Used

ANSI C63.10-2013 – Subclause 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  $\geq 2 \times \text{span/RBW}$ )
6. Sweep time = auto
7. Trace (RMS) averaging was performed over at least 100 traces

#### Peak Field Strength Measurements

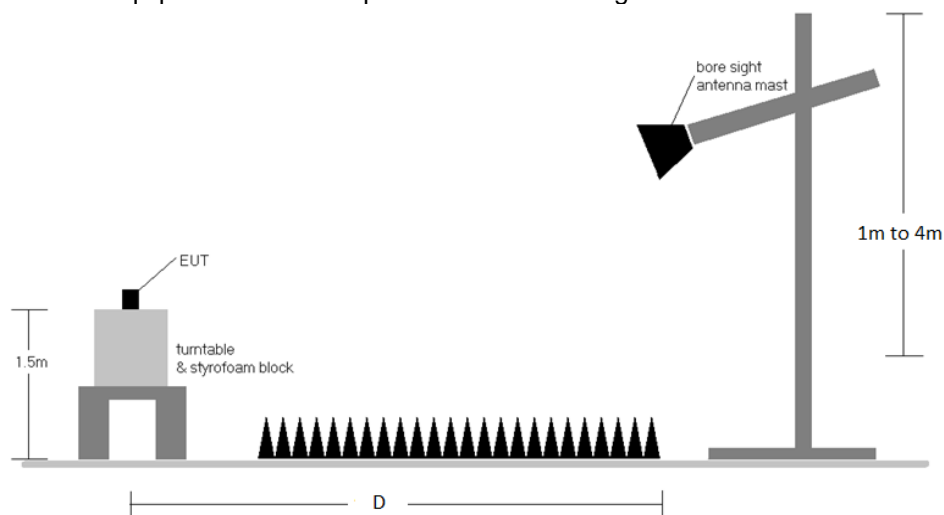
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

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## 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 7-17.
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.

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## Sample Calculations

### Determining Spurious Emissions Levels

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

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

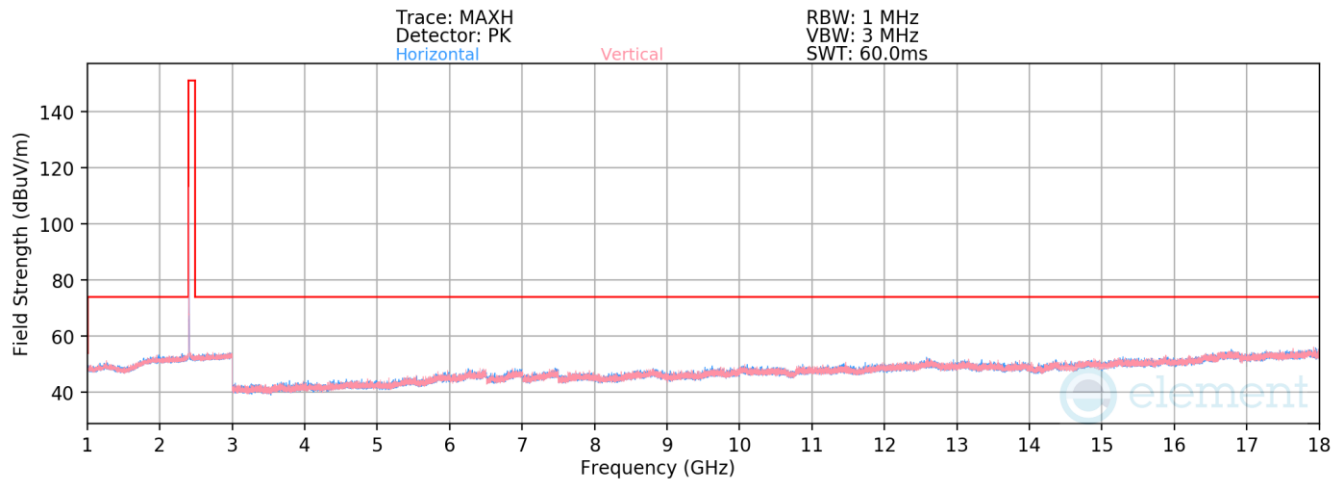
FCC ID: BCGA2117 IC: 579C-A2117	 <b>MEASUREMENT REPORT (CERTIFICATION)</b>		<b>Approved by:</b> Technical Manager
Test Report S/N: 1C2302130007-03.BCG	Test Dates: 2/10/2023 - 5/5/2023	EUT Type: Head Mounted Device	Page 86 of 124

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

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

### Ant1



**Plot 7-103. Radiated Spurious Emissions 1-18GHz Ant1 (4Mbps, HDR4, ePA – Ch. 1)**

Bluetooth Mode: HDR4  
Data Rate: 4Mbps  
Power Scheme: ePA  
Distance of Measurements: 3 Meters  
Operating Frequency: 2404MHz  
Channel: 1

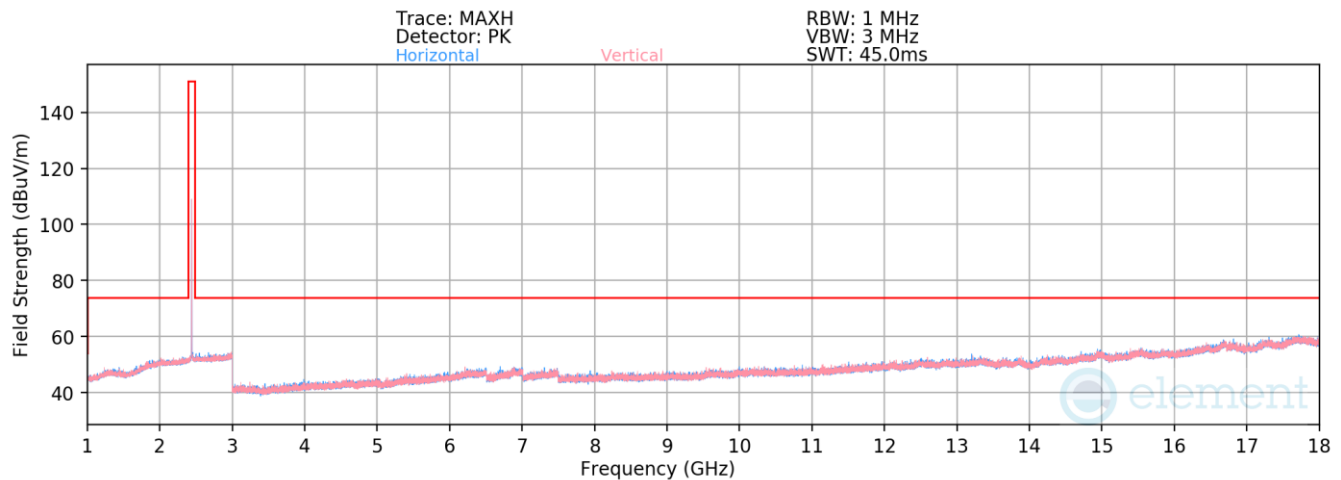
Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBuV/m]	Limit [dBuV/m]	Margin [dB]
4808.00	Avg	-	-	-	-78.38	4.02	32.64	53.98	-21.34
4808.00	Peak	-	-	-	-66.31	4.02	44.71	73.98	-29.27
12020.00	Avg	-	-	-	-81.27	12.72	38.45	53.98	-15.53
12020.00	Peak	-	-	-	-69.48	12.72	50.24	73.98	-23.74

**Table 7-18. Radiated Measurements Ant1**

FCC ID: BCGA2117 IC: 579C-A2117		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
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**Plot 7-104. Radiated Spurious Emissions 1-18GHz Ant1 (4Mbps, HDR4, ePA - Ch. 38)**

Bluetooth Mode: HDR4  
Data Rate: 4Mbps  
Power Scheme: ePA  
Distance of Measurements: 3 Meters  
Operating Frequency: 2441MHz  
Channel: 38

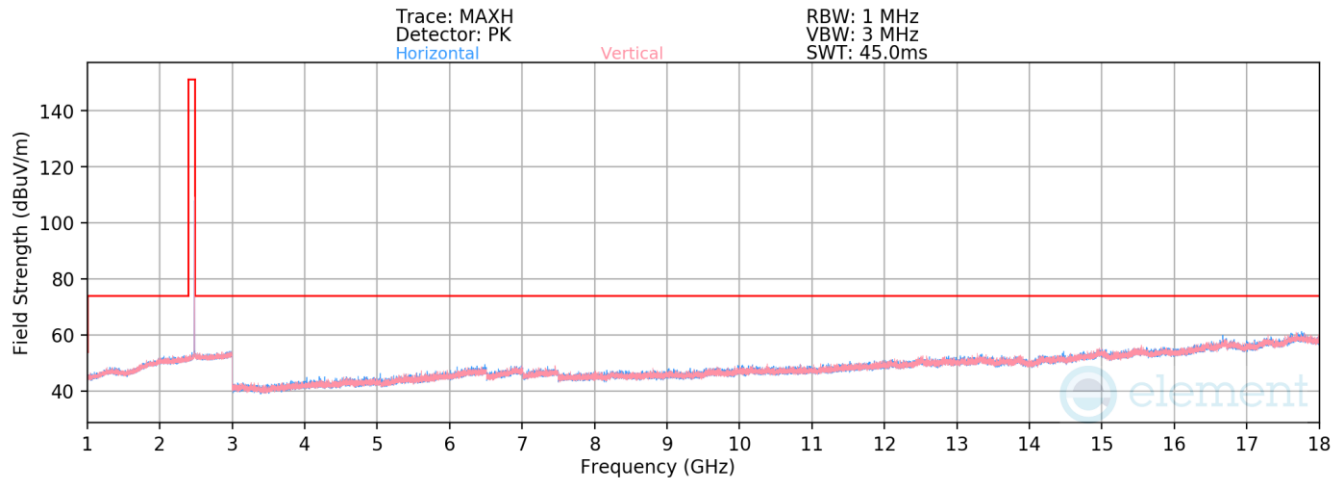
Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBuV/m]	Limit [dBuV/m]	Margin [dB]
4882.00	Avg	-	-	-	-80.58	6.23	32.65	53.98	-21.33
4882.00	Peak	-	-	-	-68.39	6.23	44.84	73.98	-29.14
7323.00	Avg	-	-	-	-82.07	9.95	34.88	53.98	-19.10
7323.00	Peak	-	-	-	-68.94	9.95	48.01	73.98	-25.97
12205.00	Avg	-	-	-	-84.07	14.84	37.77	53.98	-16.21
12205.00	Peak	-	-	-	-71.24	14.84	50.60	73.98	-23.38

**Table 7-19. Radiated Measurements Ant1**

FCC ID: BCGA2117 IC: 579C-A2117		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
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**Plot 7-105. Radiated Spurious Emissions 1-18GHz Ant1 (4Mbps, HDR4, ePA – Ch. 73)**

Bluetooth Mode: HDR4  
Data Rate: 4Mbps  
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 [dBμV/m]	Limit [dBμV/m]	Margin [dB]
4952.00	Avg	-	-	-	-81.11	6.44	32.33	53.98	-21.65
4952.00	Peak	-	-	-	-67.63	6.44	45.81	73.98	-28.17
7428.00	Avg	-	-	-	-81.54	9.97	35.43	53.98	-18.55
7428.00	Peak	-	-	-	-68.53	9.97	48.44	73.98	-25.54
12380.00	Avg	-	-	-	-84.99	15.03	37.04	53.98	-16.94
12380.00	Peak	-	-	-	-73.47	15.03	48.56	73.98	-25.42

**Table 7-20. Radiated Measurements Ant1**

FCC ID: BCGA2117 IC: 579C-A2117		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
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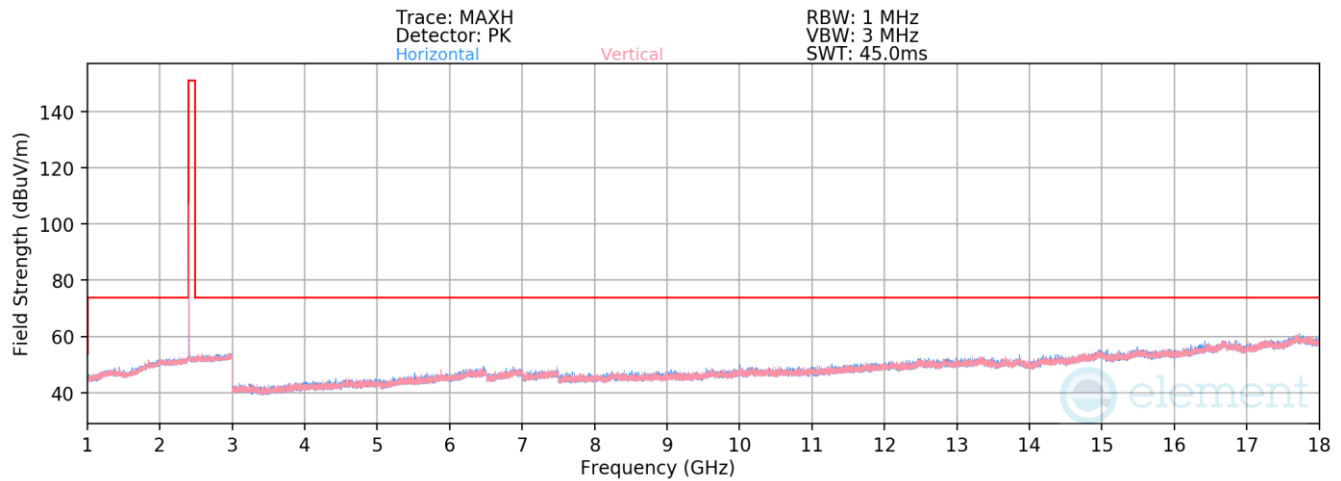
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## Radiated Spurious Emission Measurements (1 – 18GHz)

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

### Ant2



**Plot 7-106. Radiated Spurious Emissions 1-18GHz Ant2 (4Mbps, HDR4, ePA – Ch. 1)**

Bluetooth Mode: HDR4  
Data Rate: 4Mbps  
Power Scheme: ePA  
Distance of Measurements: 3 Meters  
Operating Frequency: 2404MHz  
Channel: 1

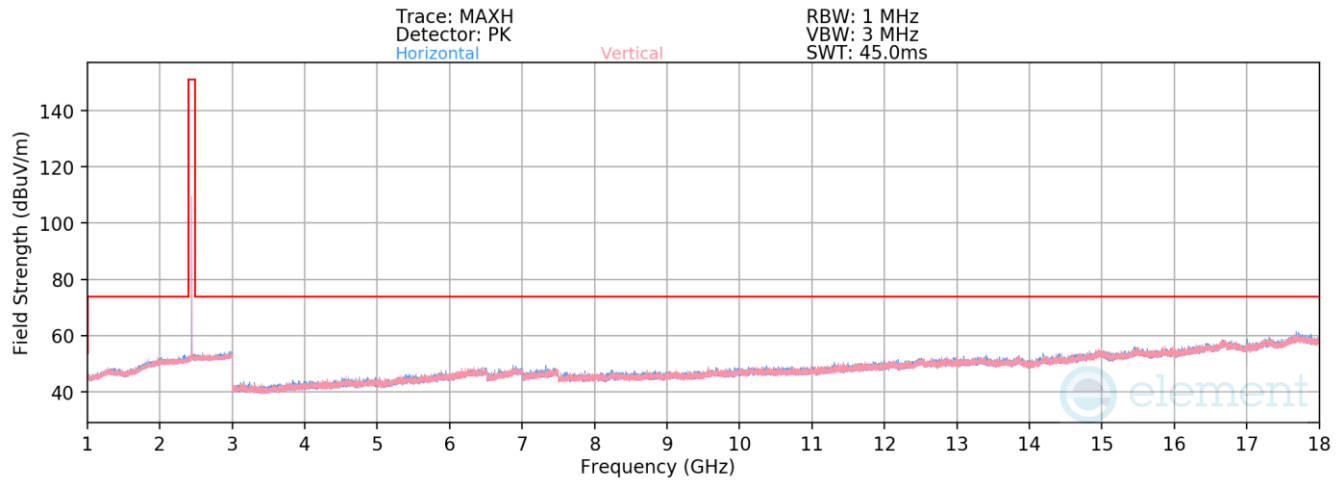
Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBuV/m]	Limit [dBuV/m]	Margin [dB]
4808.00	Avg	-	-	-	-80.77	5.92	32.15	53.98	-21.83
4808.00	Peak	-	-	-	-69.00	5.92	43.92	73.98	-30.06
12020.00	Avg	-	-	-	-84.52	14.65	37.13	53.98	-16.85
12020.00	Peak	-	-	-	-73.14	14.65	48.51	73.98	-25.47

**Table 7-21. Radiated Measurements Ant2**

FCC ID: BCGA2117 IC: 579C-A2117		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
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**Plot 7-107. Radiated Spurious Emissions 1-18GHz Ant2 (4Mbps, HDR4, ePA – Ch. 38)**

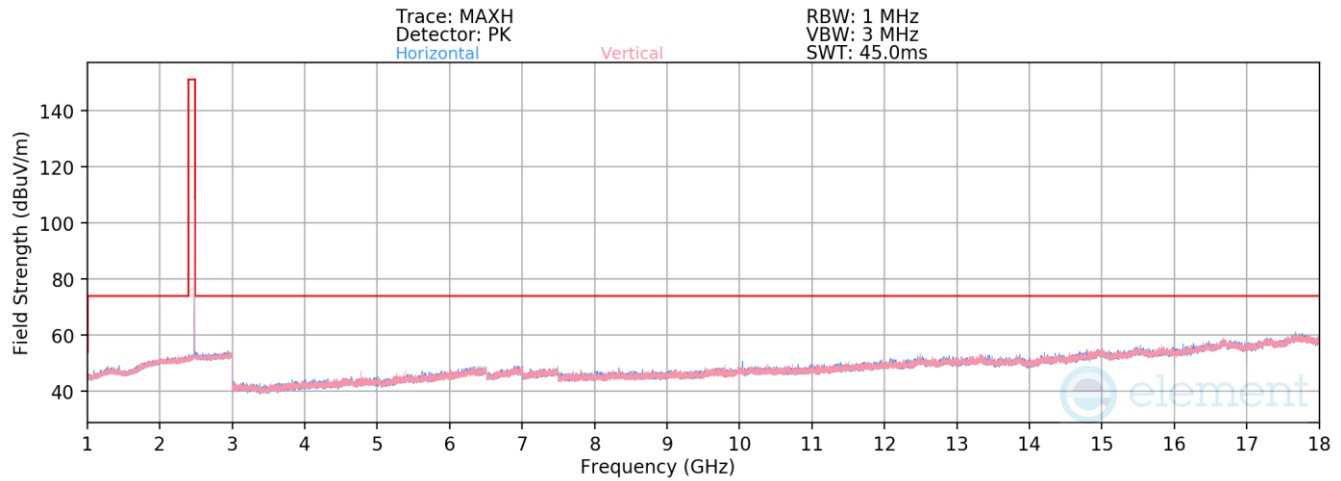
Bluetooth Mode: HDR4  
Data Rate: 4Mbps  
Power Scheme: ePA  
Distance of Measurements: 3 Meters  
Operating Frequency: 2441MHz  
Channel: 38

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
4882.00	Avg	-	-	-	-80.65	6.23	32.58	53.98	-21.40
4882.00	Peak	-	-	-	-68.88	6.23	44.35	73.98	-29.63
7323.00	Avg	-	-	-	-81.98	9.95	34.97	53.98	-19.01
7323.00	Peak	-	-	-	-70.33	9.95	46.62	73.98	-27.36
12205.00	Avg	-	-	-	-84.79	14.84	37.05	53.98	-16.93
12205.00	Peak	-	-	-	-73.14	14.84	48.70	73.98	-25.28

**Table 7-22. Radiated Measurements Ant2**

FCC ID: BCGA2117 IC: 579C-A2117		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
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**Plot 7-108. Radiated Spurious Emissions 1-18GHz Ant2 (4Mbps, HDR4, ePA – Ch. 73)**

Bluetooth Mode: HDR4  
Data Rate: 4Mbps  
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 [dBuV/m]	Limit [dBuV/m]	Margin [dB]
4952.00	Avg	-	-	-	-81.23	6.44	32.21	53.98	-21.77
4952.00	Peak	-	-	-	-69.71	6.44	43.73	73.98	-30.25
7428.00	Avg	-	-	-	-81.65	9.97	35.32	53.98	-18.66
7428.00	Peak	-	-	-	-69.43	9.97	47.54	73.98	-26.44
12380.00	Avg	-	-	-	-85.06	15.03	36.97	53.98	-17.01
12380.00	Peak	-	-	-	-73.70	15.03	48.33	73.98	-25.65

**Table 7-23. Radiated Measurements Ant2**

FCC ID: BCGA2117 IC: 579C-A2117		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
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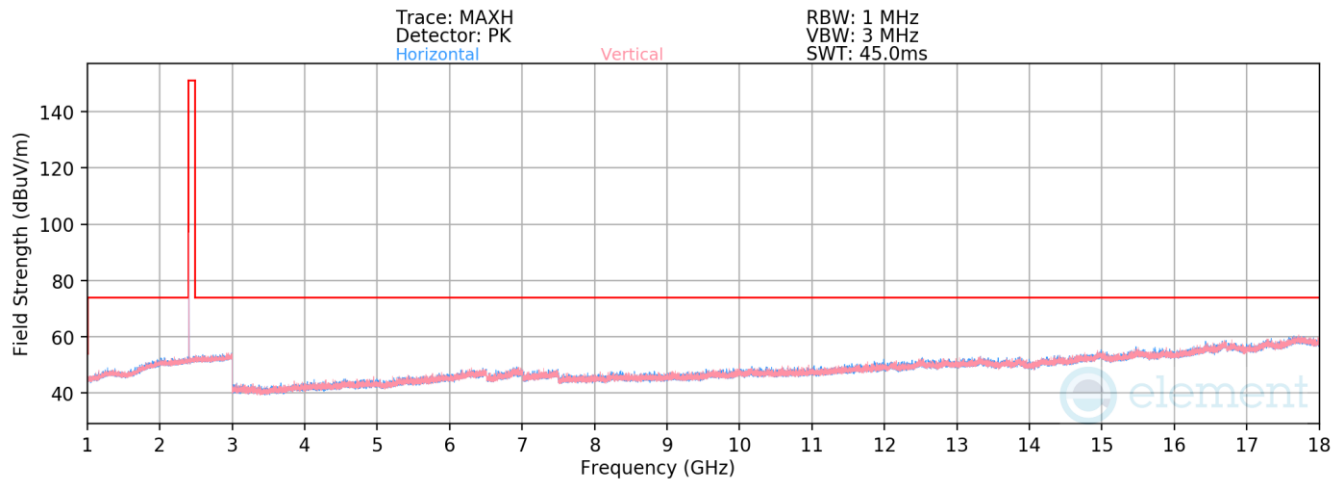
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## Radiated Spurious Emission Measurements (1 – 18GHz)

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

### NB UNII\_L



**Plot 7-109. Radiated Spurious Emissions 1-18GHz NB UNII\_L (4Mbps, HDR4, iPA – Ch. 1)**

Bluetooth Mode: HDR4  
Data Rate: 4Mbps  
Power Scheme iPA  
Distance of Measurements: 3 Meters  
Operating Frequency: 2404MHz  
Channel: 1

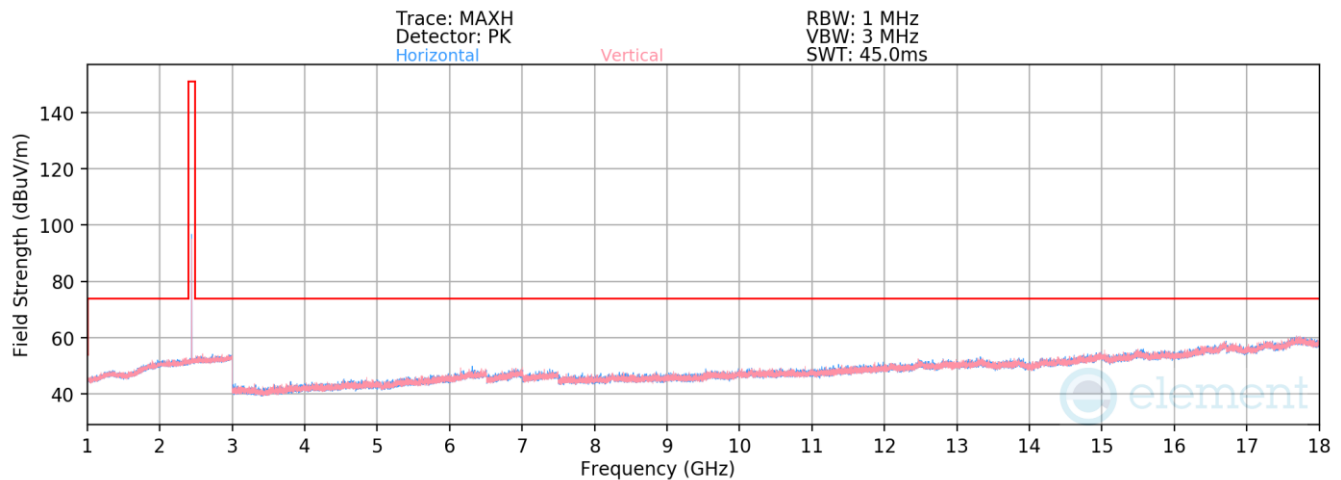
Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBuV/m]	Limit [dBuV/m]	Margin [dB]
4808.00	Avg	-	-	-	-80.58	5.92	32.34	53.98	-21.64
4808.00	Peak	-	-	-	-68.44	5.92	44.48	73.98	-29.50
12020.00	Avg	-	-	-	-84.62	14.65	37.03	53.98	-16.95
12020.00	Peak	-	-	-	-73.17	14.65	48.48	73.98	-25.50

**Table 7-24. Radiated Measurements NB UNII\_L**

FCC ID: BCGA2117 IC: 579C-A2117		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
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**Plot 7-110. Radiated Spurious Emissions 1-18GHz NB UNII\_L (4Mbps, HDR4, iPA - Ch. 38)**

Bluetooth Mode: HDR4  
Data Rate: 4Mbps  
Power Scheme: iPA  
Distance of Measurements: 3 Meters  
Operating Frequency: 2441MHz  
Channel: 38

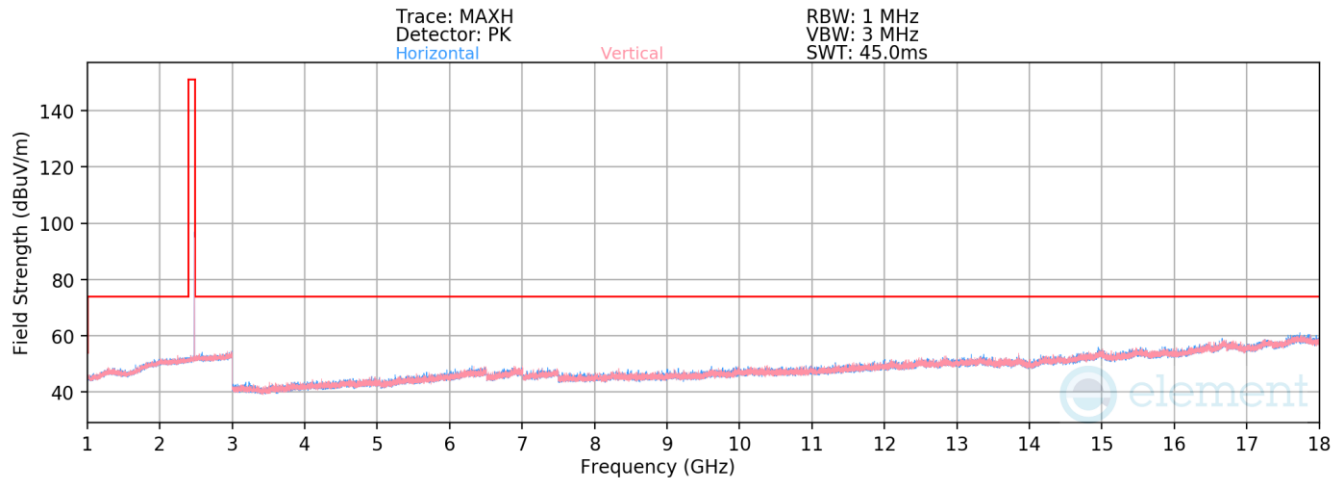
Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBuV/m]	Limit [dBuV/m]	Margin [dB]
4882.00	Avg	-	-	-	-80.88	6.23	32.35	53.98	-21.63
4882.00	Peak	-	-	-	-69.02	6.23	44.21	73.98	-29.77
7323.00	Avg	-	-	-	-81.81	9.95	35.14	53.98	-18.84
7323.00	Peak	-	-	-	-69.78	9.95	47.17	73.98	-26.81
12205.00	Avg	-	-	-	-84.51	14.84	37.33	53.98	-16.65
12205.00	Peak	-	-	-	-73.31	14.84	48.53	73.98	-25.45

**Table 7-25. Radiated Measurements NB UNII\_L**

FCC ID: BCGA2117 IC: 579C-A2117		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
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**Plot 7-111. Radiated Spurious Emissions 1-18GHz NB UNII\_L (4Mbps, HDR4, iPA – Ch. 73)**

Bluetooth Mode: HDR4  
Data Rate: 4Mbps  
Power Scheme iPA  
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 [dBuV/m]	Limit [dBuV/m]	Margin [dB]
4952.00	Avg	-	-	-	-81.22	6.44	32.22	53.98	-21.76
4952.00	Peak	-	-	-	-69.35	6.44	44.09	73.98	-29.89
7428.00	Avg	-	-	-	-81.71	9.97	35.26	53.98	-18.72
7428.00	Peak	-	-	-	-70.03	9.97	46.94	73.98	-27.04
12380.00	Avg	-	-	-	-85.02	15.03	37.01	53.98	-16.97
12380.00	Peak	-	-	-	-74.10	15.03	47.93	73.98	-26.05

**Table 7-26. Radiated Measurements NB UNII\_L**

FCC ID: BCGA2117 IC: 579C-A2117		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
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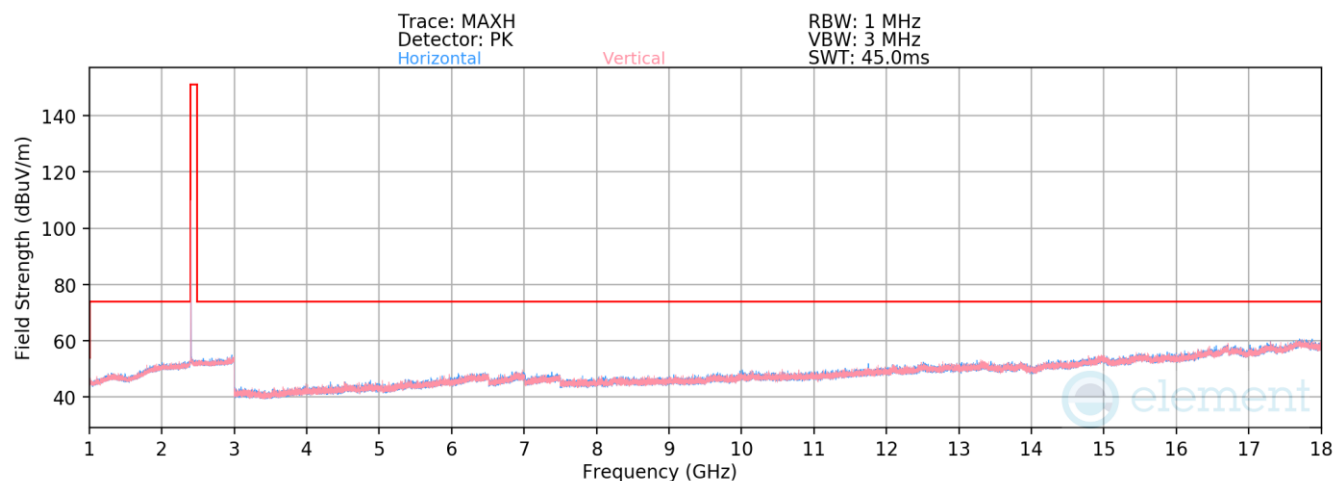
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## Radiated Spurious Emission Measurements (1-18GHz)

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

### TxBF



**Plot 7-112. Radiated Spurious Emissions 1-18GHz TxBF (4Mbps, HDR4, ePA – Ch. 1)**

Bluetooth Mode: HDR4  
Data Rate: 4Mbps  
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 [dBuV/m]	Limit [dBuV/m]	Margin [dB]
4808.00	Avg	-	-	-	-80.40	5.92	32.52	53.98	-21.46
4808.00	Peak	-	-	-	-68.32	5.92	44.60	73.98	-29.38
12020.00	Avg	-	-	-	-84.51	14.65	37.14	53.98	-16.84
12020.00	Peak	-	-	-	-72.85	14.65	48.80	73.98	-25.18

**Table 7-27. Radiated Measurements TxBF**

FCC ID: BCGA2117 IC: 579C-A2117		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
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