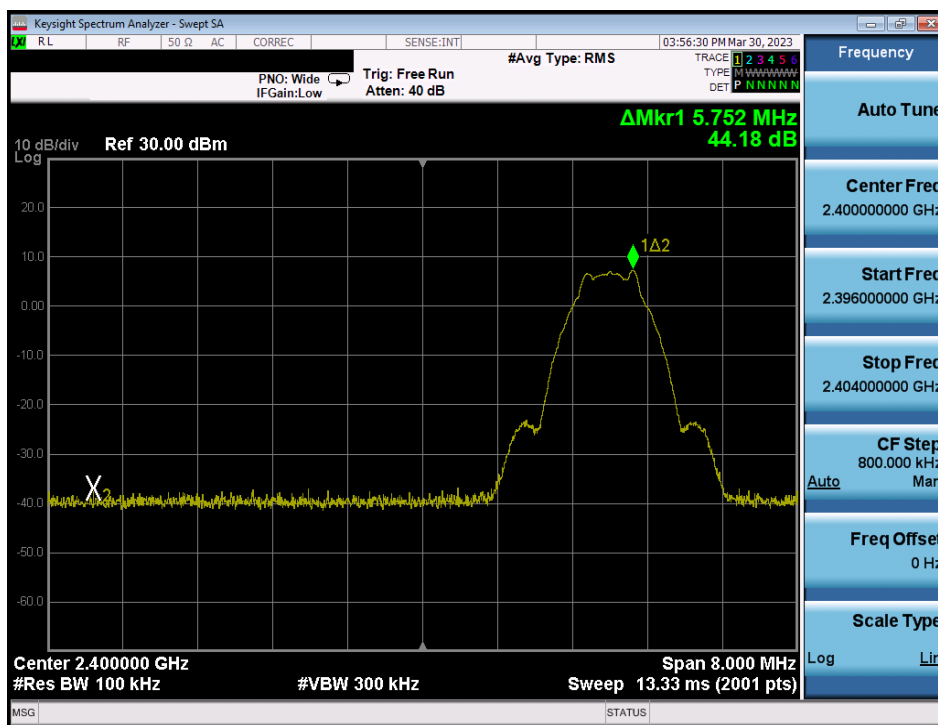
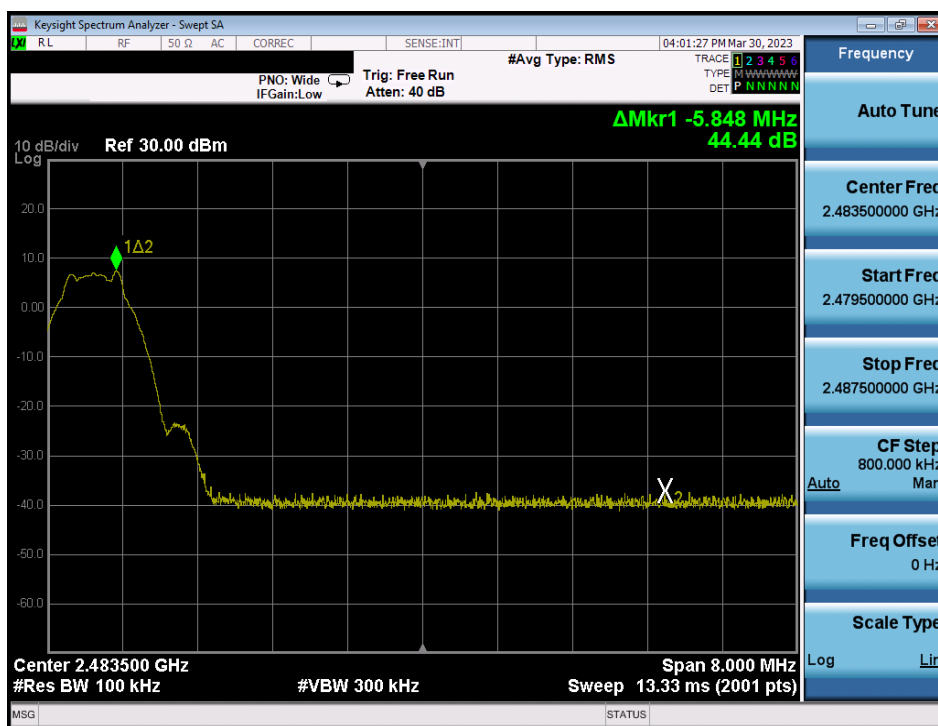


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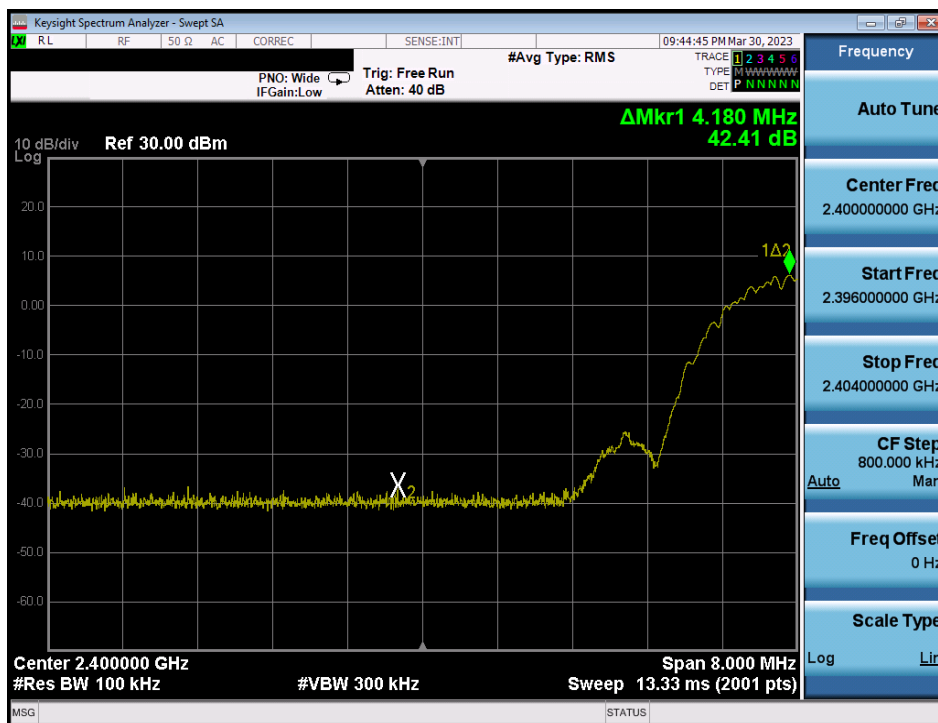


Plot 7-77. Band Edge Plot Ant2 (Bluetooth (LE), 1Mbps, ePA – Ch. 0)

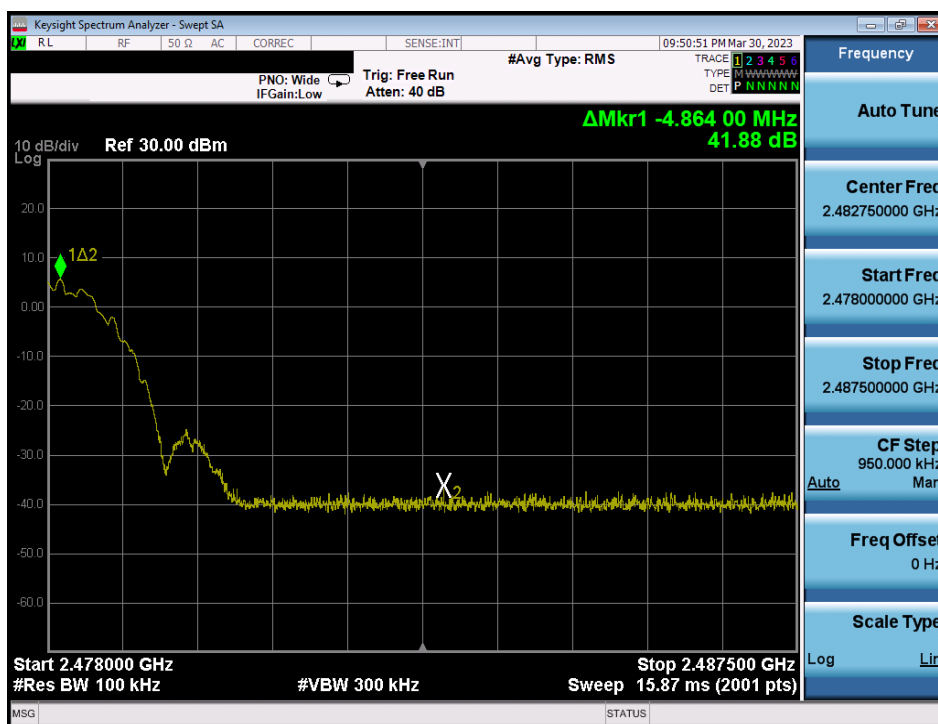


Plot 7-78. Band Edge Plot Ant2 (Bluetooth (LE), 1Mbps, ePA – Ch. 39)

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 (LE), 2Mbps, ePA – Ch. 1)

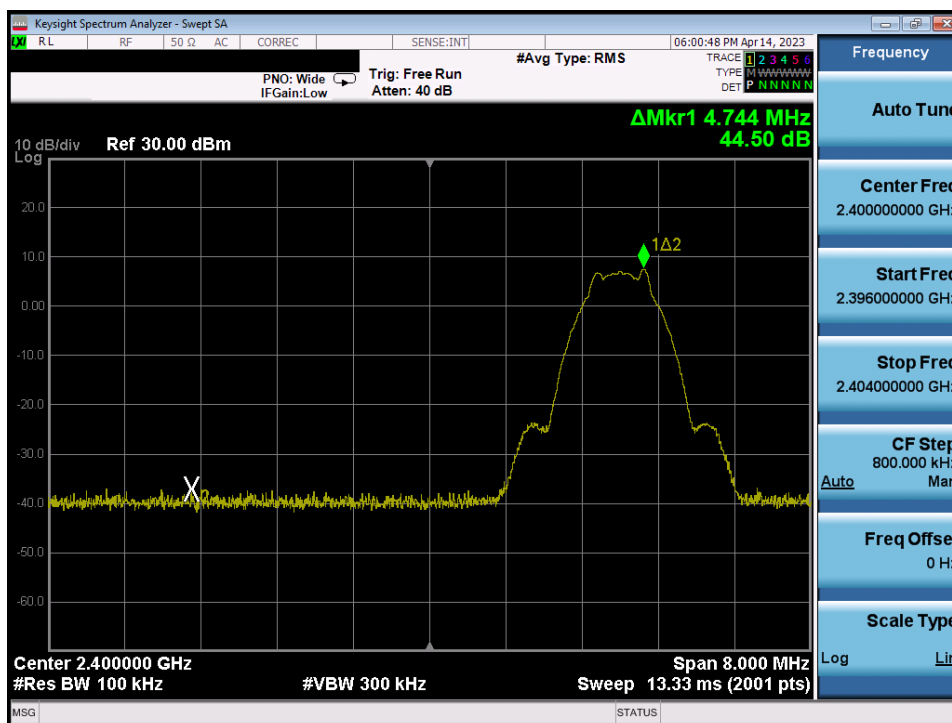


Plot 7-80. Band Edge Plot Ant2 (Bluetooth (LE), 2Mbps, ePA – Ch. 38)

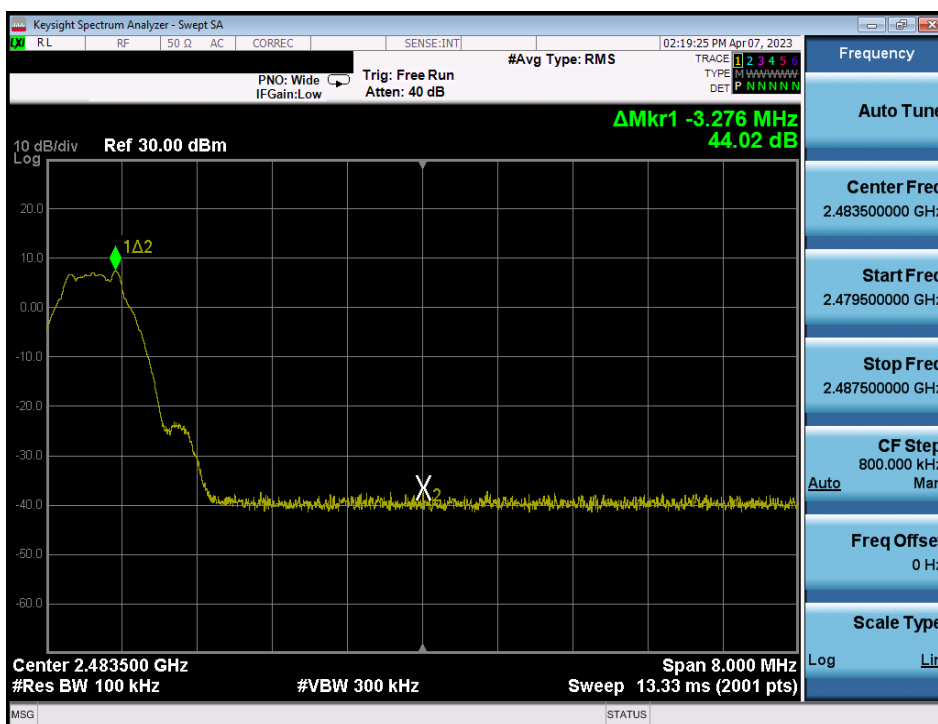
FCC ID: BCGA2117 IC: 579C-A2117		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
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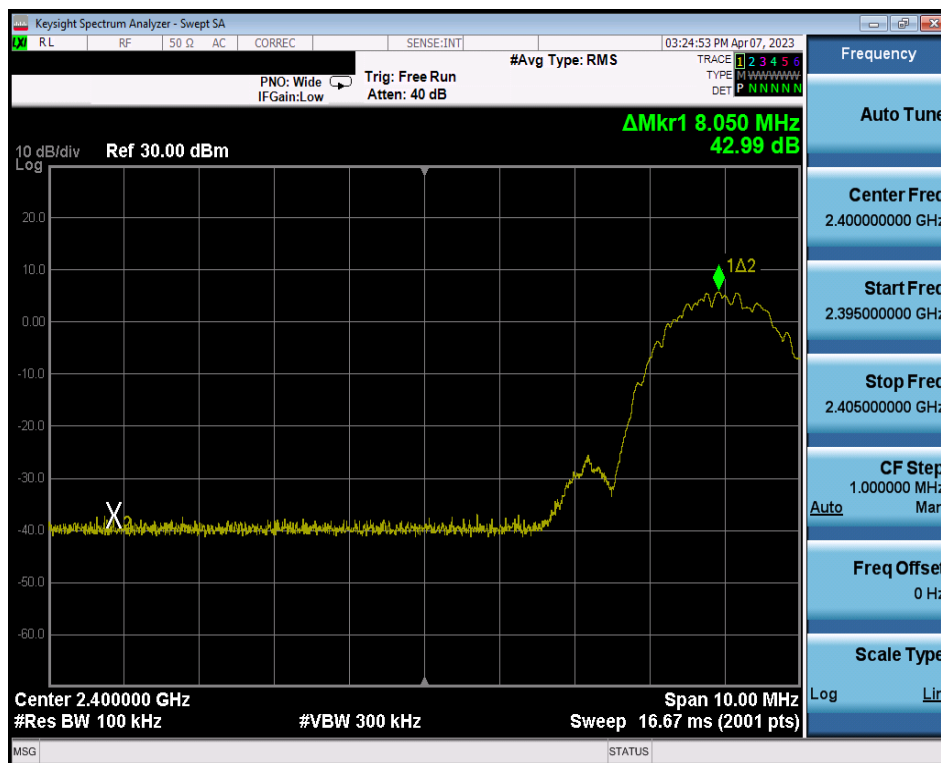


Plot 7-81. Band Edge Plot NB UNII_L (Bluetooth (LE), 1Mbps, ePA – Ch. 0)

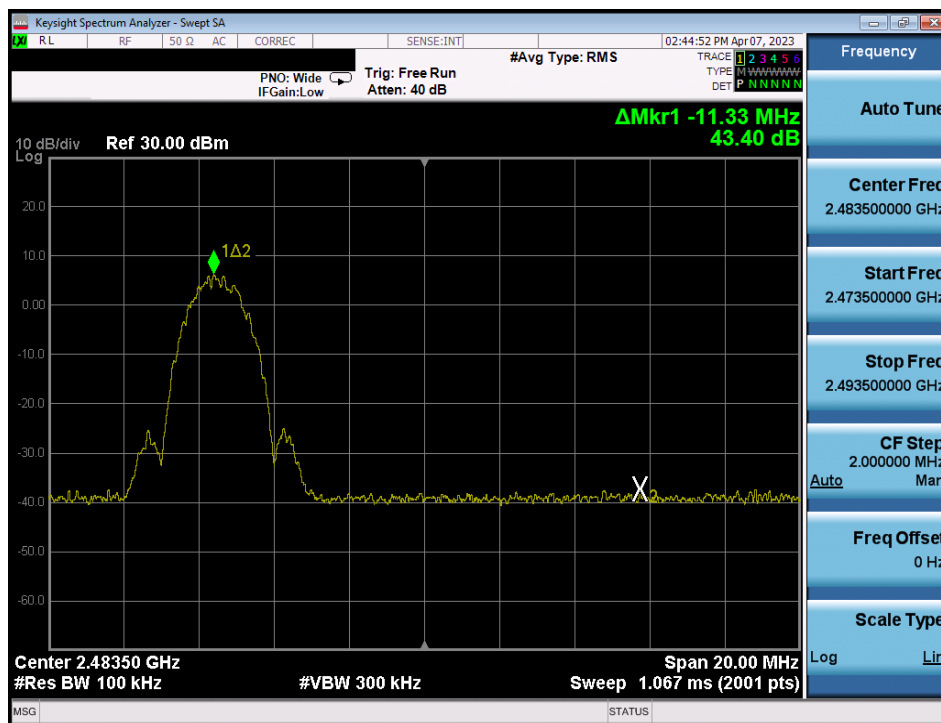


Plot 7-82. Band Edge Plot NB UNII_L (Bluetooth (LE), 1Mbps, ePA – Ch. 39)

FCC ID: BCGA2117 IC: 579C-A2117		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
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Plot 7-83. Band Edge Plot NB UNII_L (Bluetooth (LE), 2Mbps, ePA – Ch. 1)



Plot 7-84. Band Edge Plot NB UNII_L (Bluetooth (LE), 2Mbps, ePA – Ch. 38)

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 Section 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


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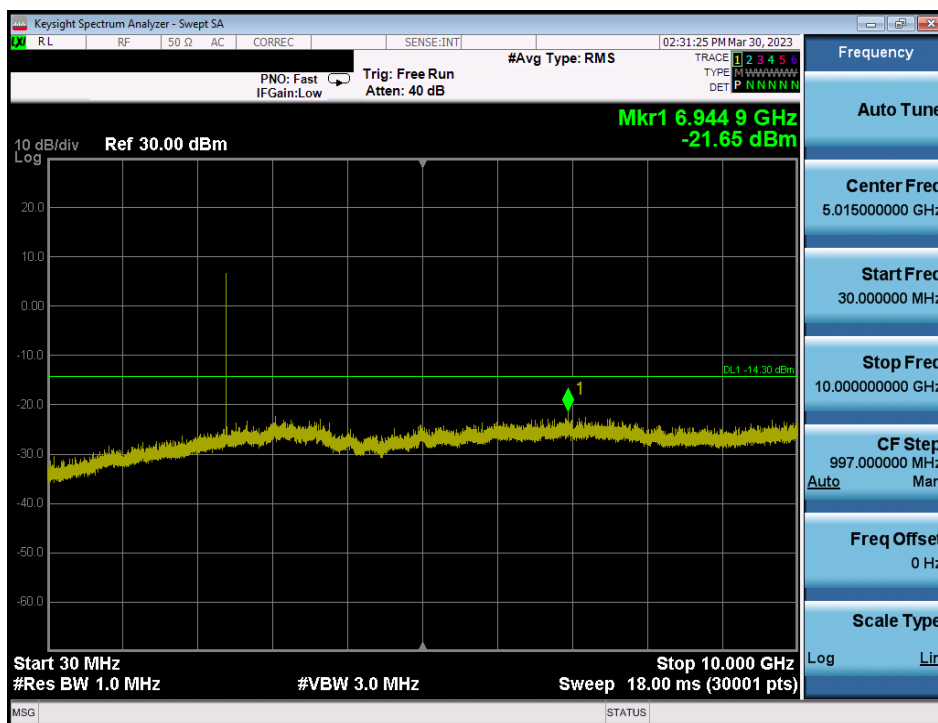
Test Notes

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.

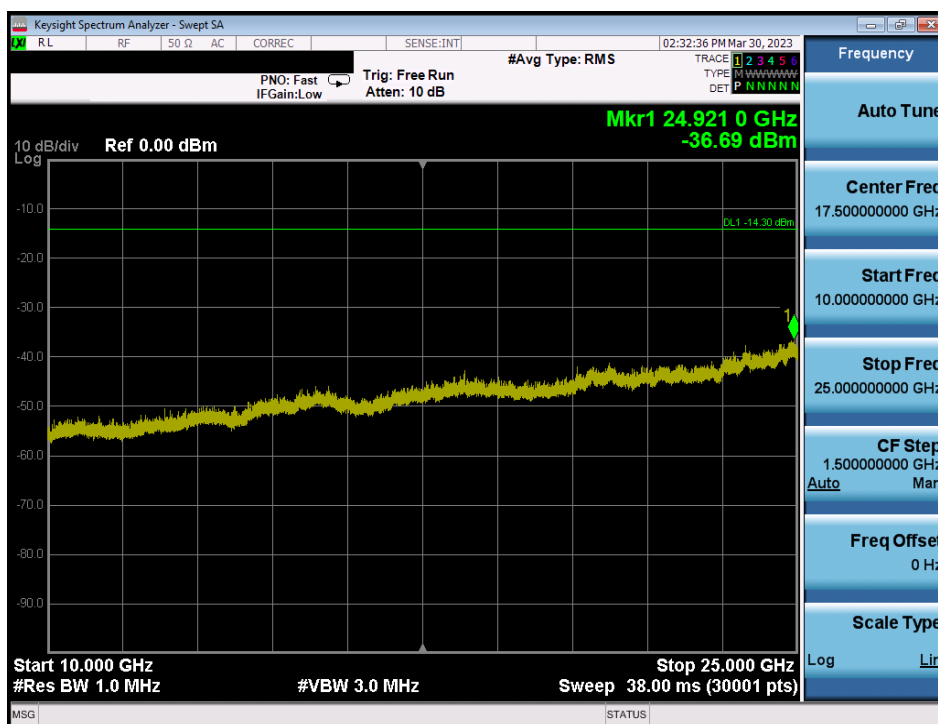
FCC ID: BCGA2117 IC: 579C-A2117		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
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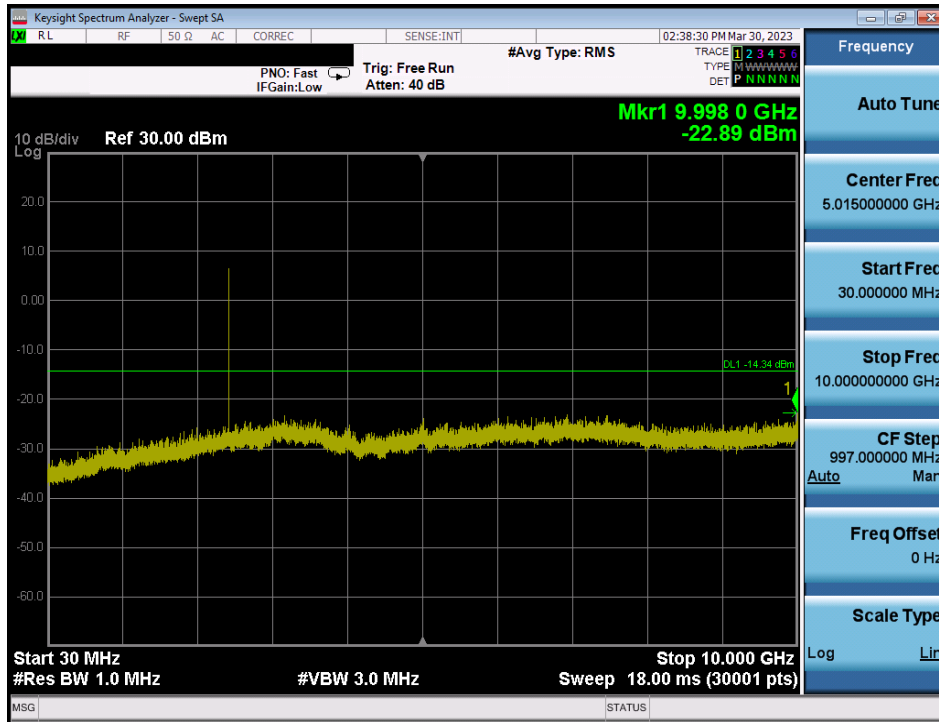


Plot 7-85. Conducted Spurious Plot Ant1 (Bluetooth (LE), 1Mbps, ePA – Ch. 0)

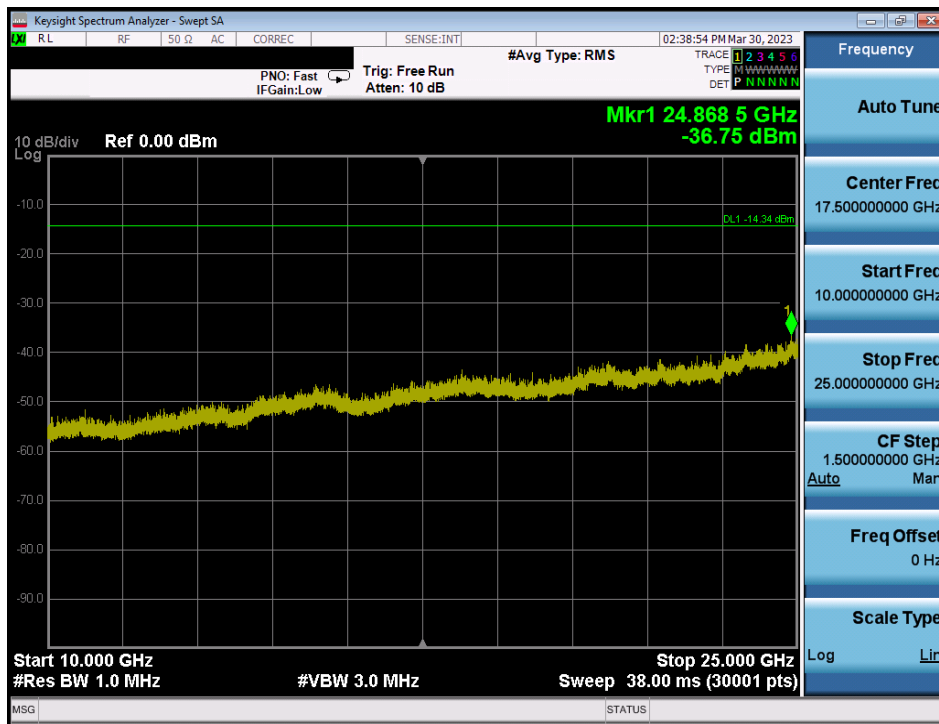


Plot 7-86. Conducted Spurious Plot Ant1 (Bluetooth (LE), 1Mbps, ePA – Ch. 0)

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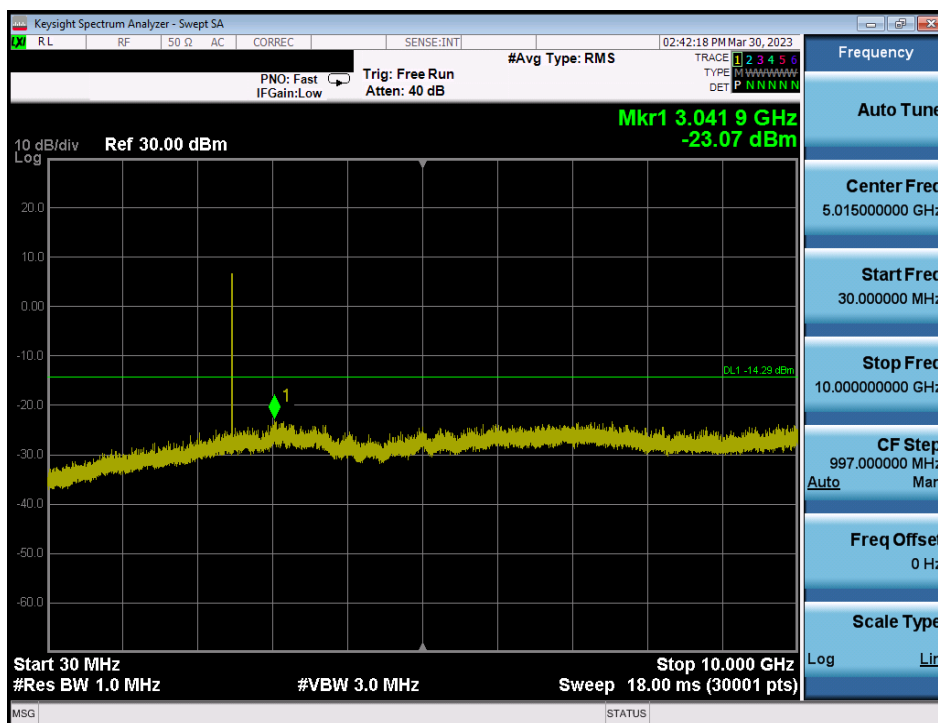


Plot 7-87. Conducted Spurious Plot Ant1 (Bluetooth (LE), 1Mbps, ePA – Ch. 19)

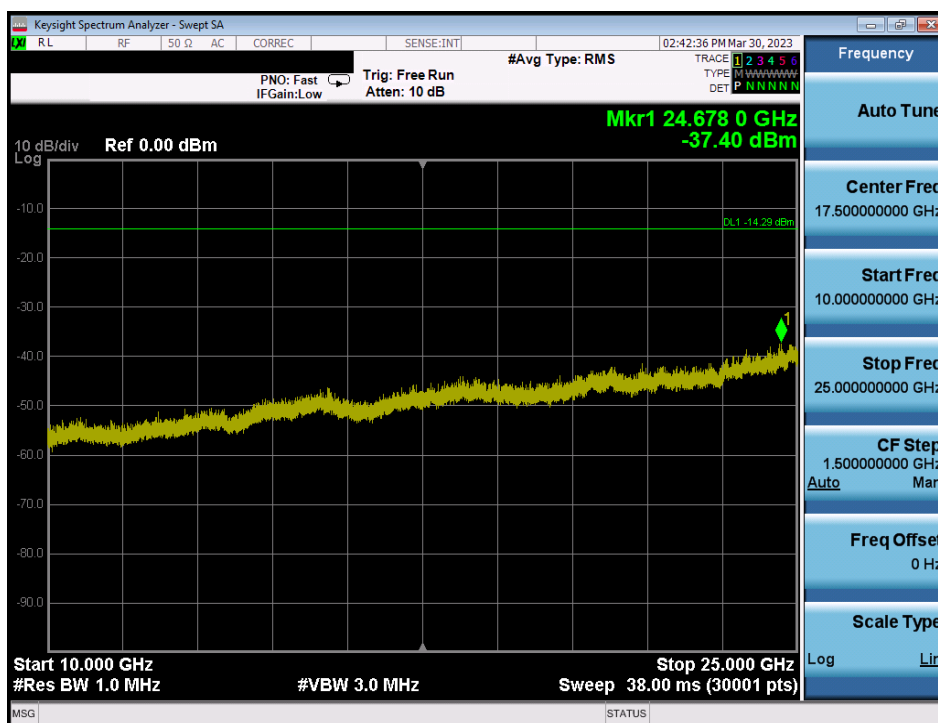


Plot 7-88. Conducted Spurious Plot Ant1 (Bluetooth (LE), 1Mbps, ePA – Ch. 19)

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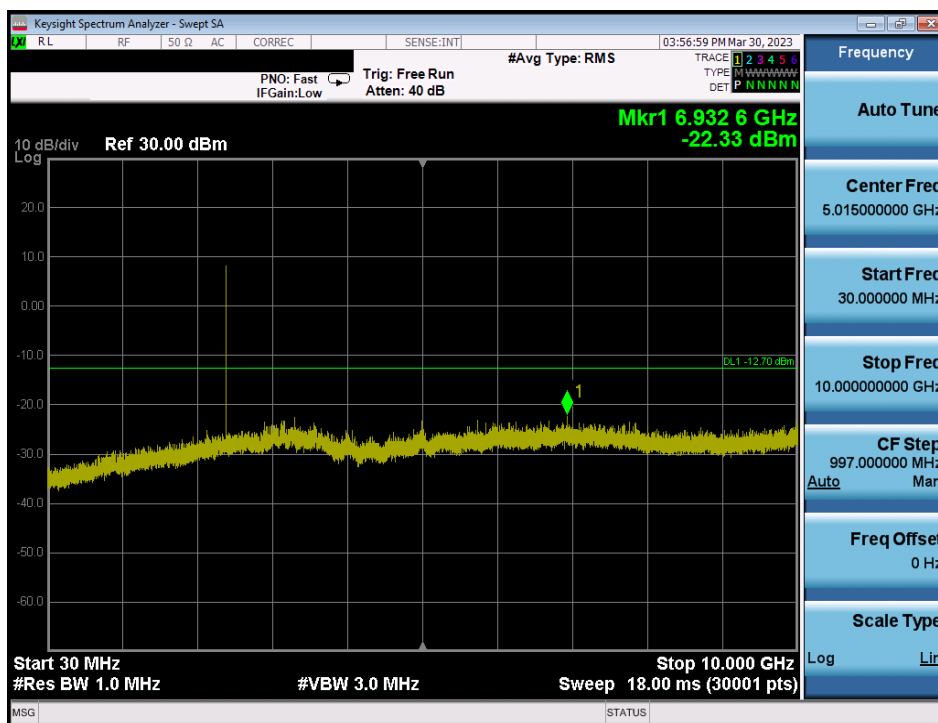


Plot 7-89. Conducted Spurious Plot Ant1 (Bluetooth (LE), 1Mbps, ePA – Ch. 39)

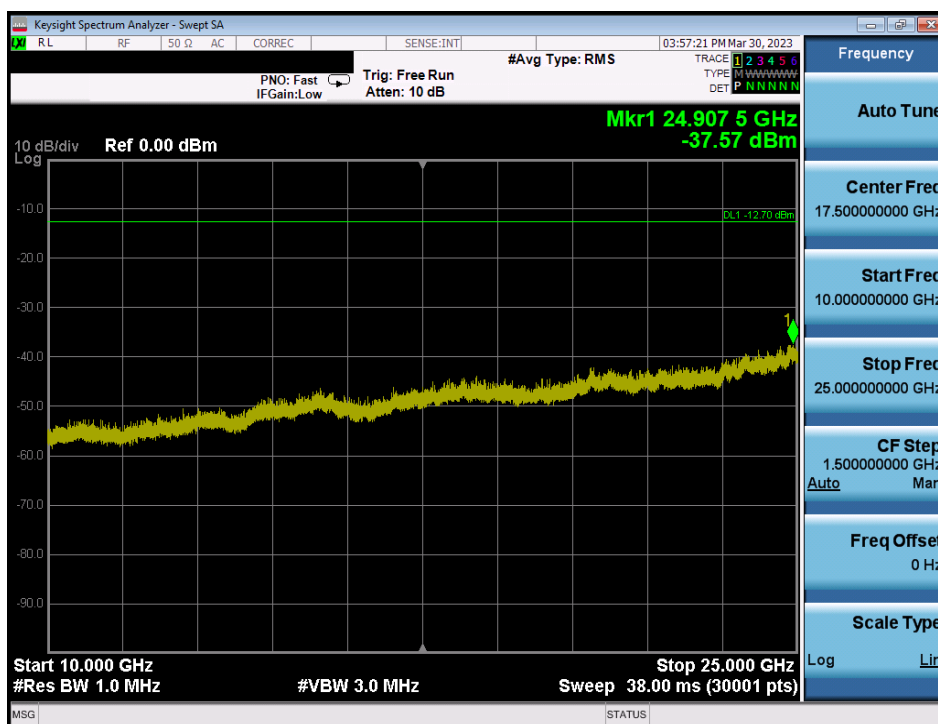


Plot 7-90. Conducted Spurious Plot Ant1 (Bluetooth (LE), 1Mbps, ePA – Ch. 39)

FCC ID: BCGA2117 IC: 579C-A2117		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
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Plot 7-91. Conducted Spurious Plot Ant2 (Bluetooth (LE), 1Mbps, ePA – Ch. 0)

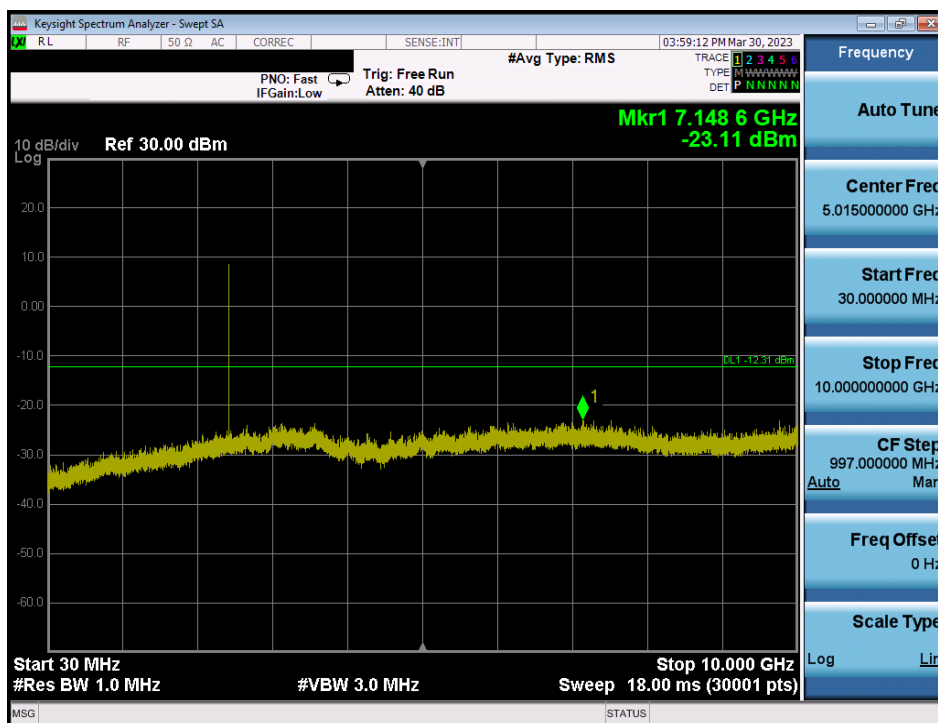


Plot 7-92. Conducted Spurious Plot Ant2 (Bluetooth (LE), 1Mbps, ePA – Ch. 0)

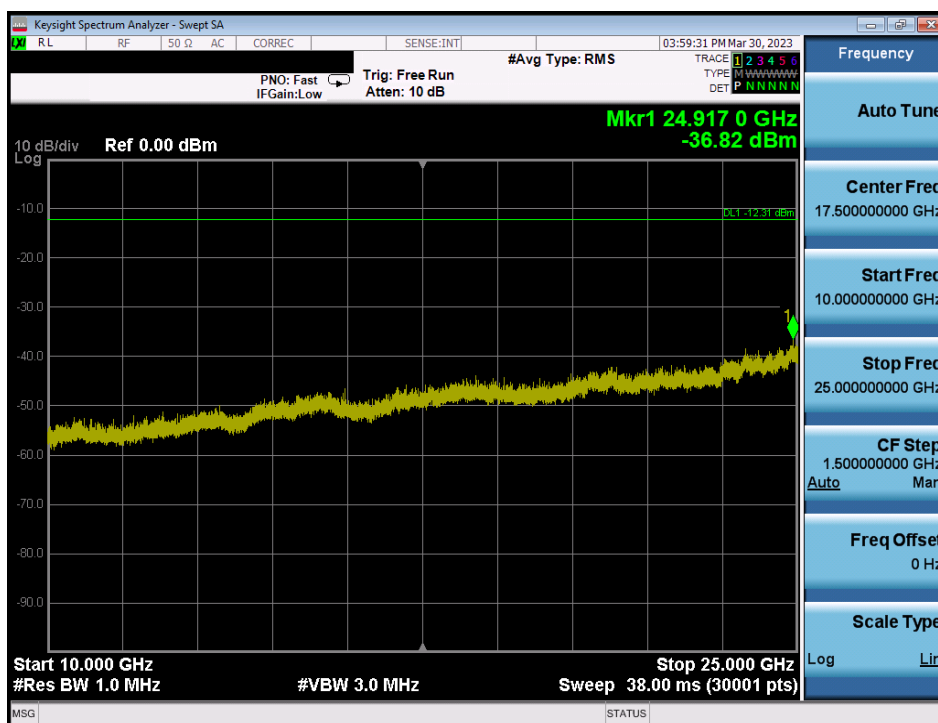
FCC ID: BCGA2117 IC: 579C-A2117		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
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Plot 7-93. Conducted Spurious Plot Ant2 (Bluetooth (LE), 1Mbps, ePA – Ch. 19)

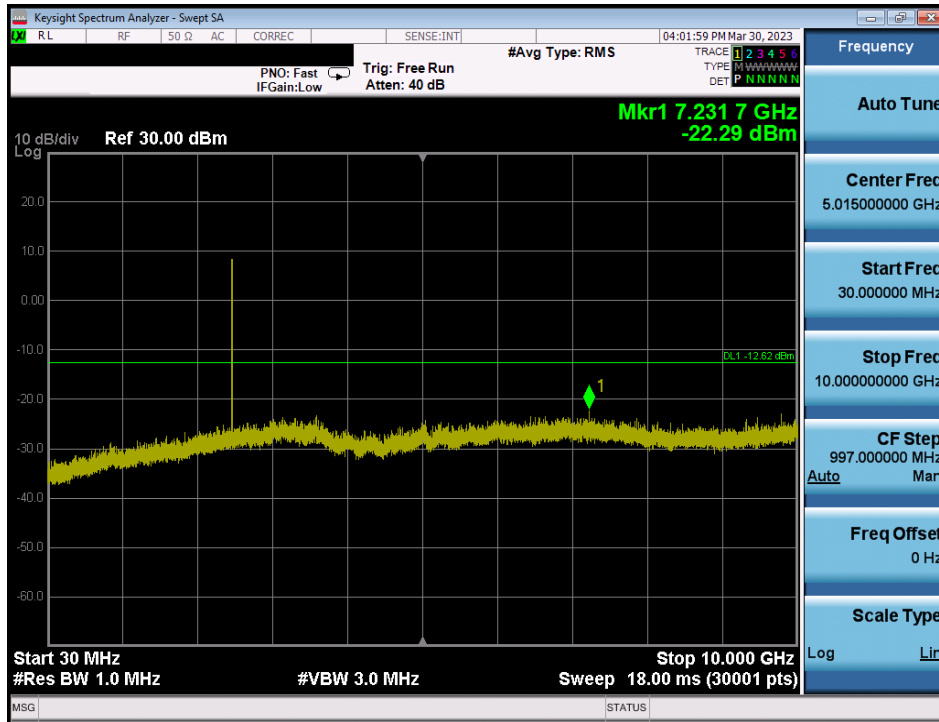


Plot 7-94. Conducted Spurious Plot Ant2 (Bluetooth (LE), 1Mbps, ePA – Ch. 19)

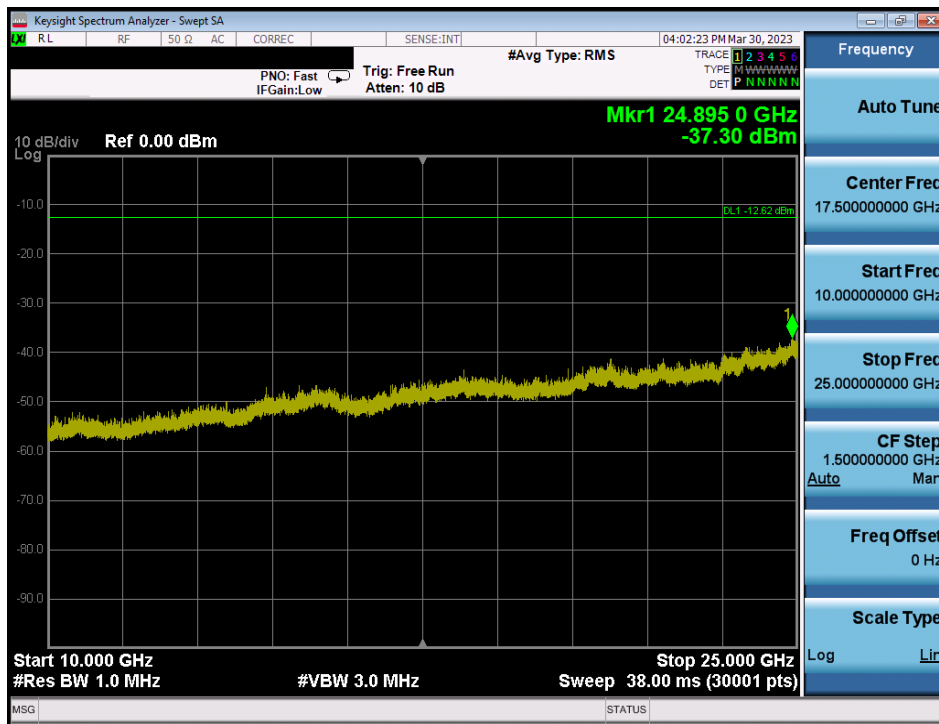
FCC ID: BCGA2117 IC: 579C-A2117		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
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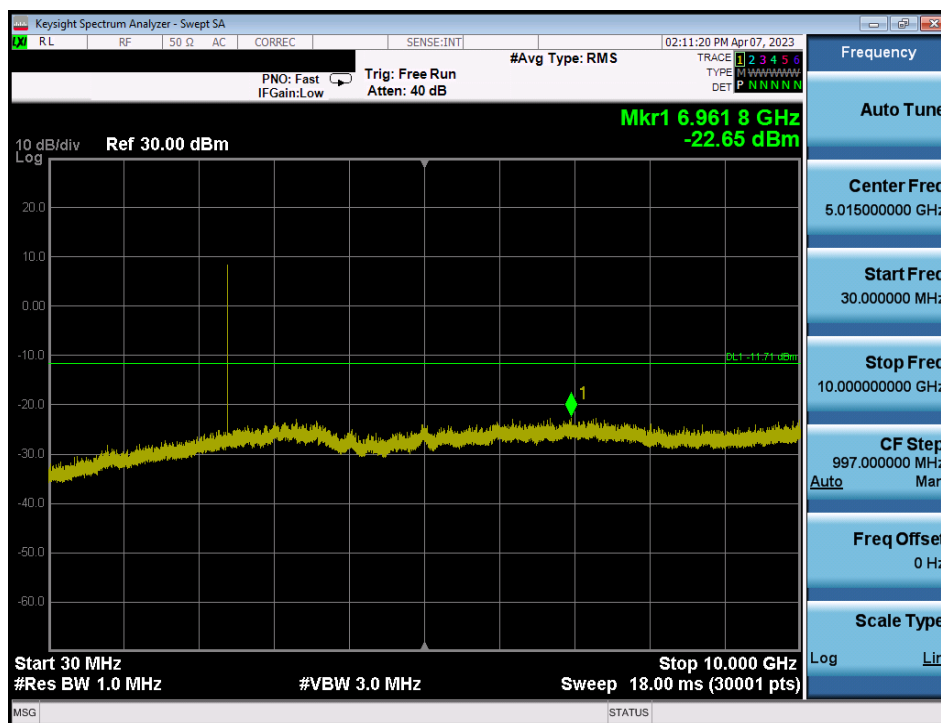


Plot 7-95. Conducted Spurious Plot Ant2 (Bluetooth (LE), 1Mbps, ePA – Ch. 39)

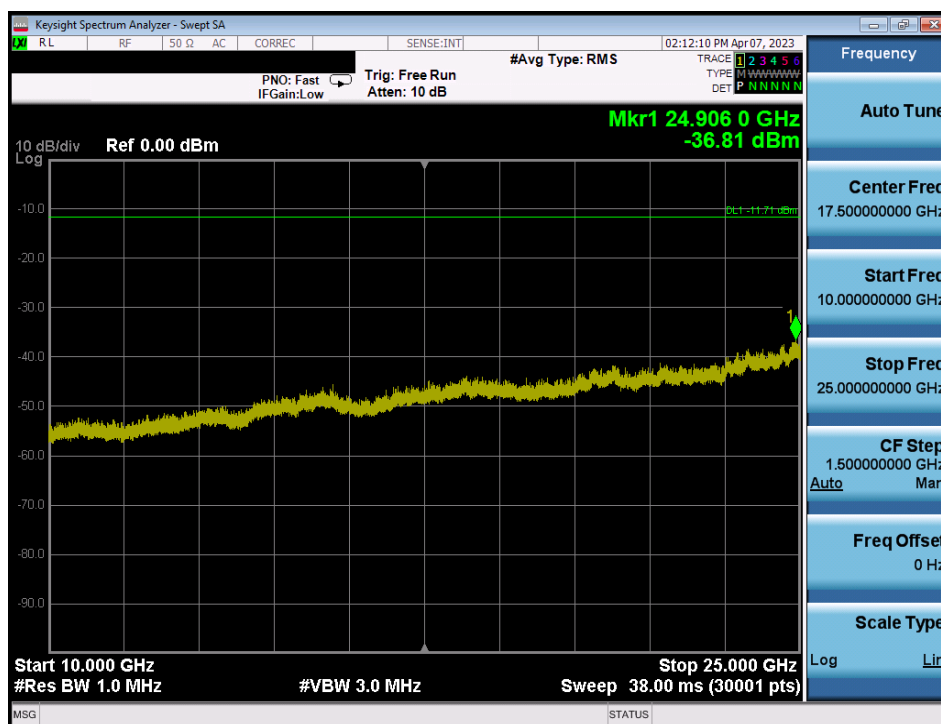


Plot 7-96. Conducted Spurious Plot Ant2 (Bluetooth (LE), 1Mbps, ePA – Ch. 39)

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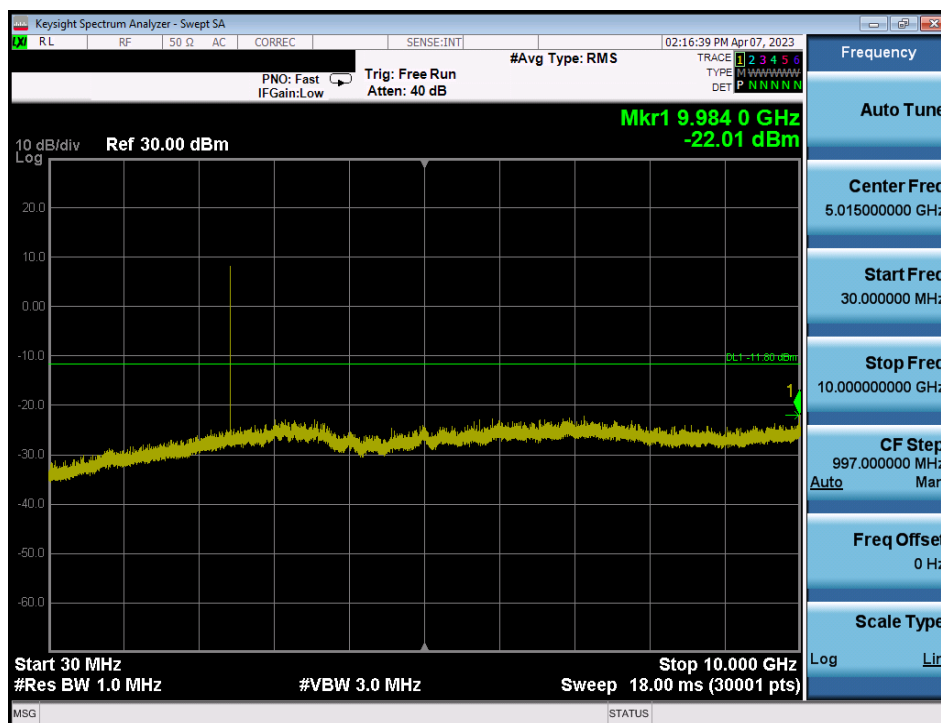


Plot 7-97. Conducted Spurious Plot NB UNII_L (Bluetooth (LE), 1Mbps, iPA – Ch. 0)

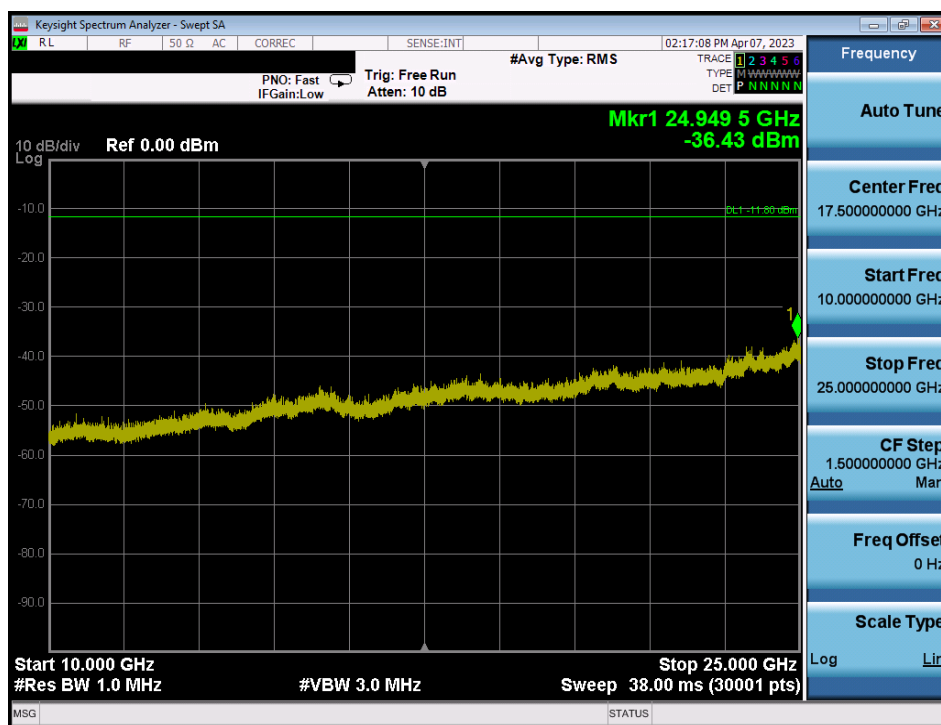


Plot 7-98. Conducted Spurious Plot NB UNII_L (Bluetooth (LE), 1Mbps, iPA – Ch. 0)

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 (LE), 1Mbps, iPA – Ch. 19)

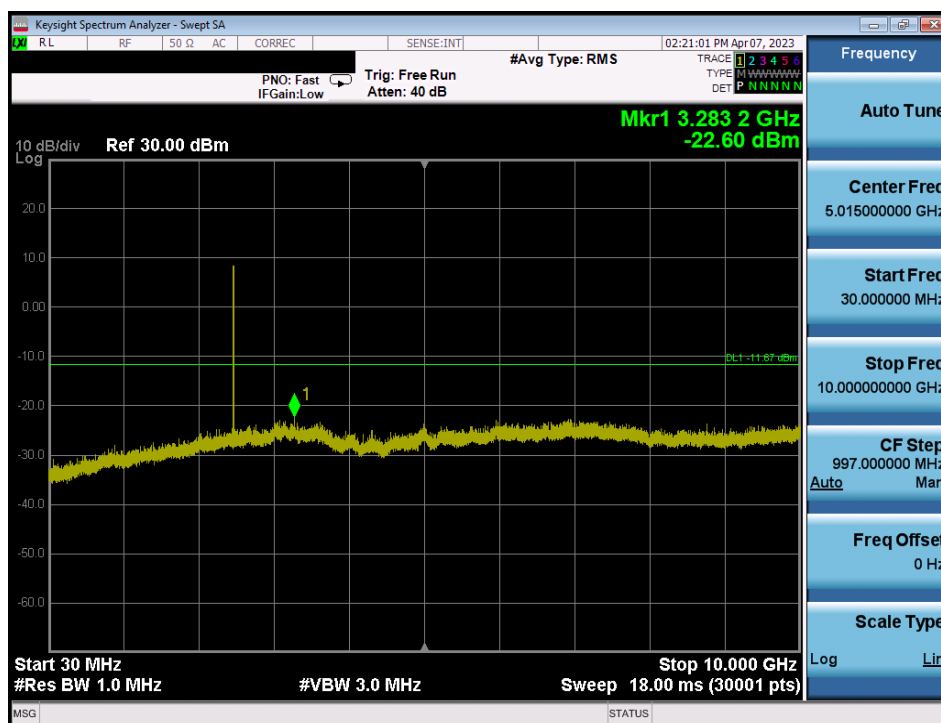


Plot 7-100. Conducted Spurious Plot NB UNII_L (Bluetooth (LE), 1Mbps, iPA – Ch. 19)

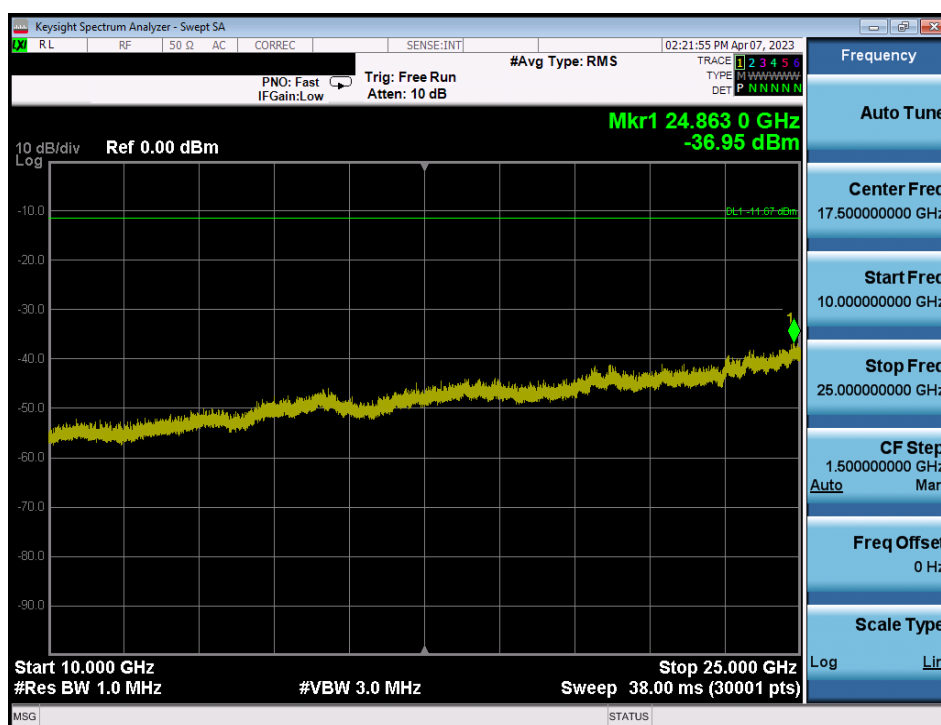
FCC ID: BCGA2117 IC: 579C-A2117		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
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Plot 7-101. Conducted Spurious Plot NB UNII_L (Bluetooth (LE), 1Mbps, iPA – Ch. 39)



Plot 7-102. Conducted Spurious Plot NB UNII_L (Bluetooth (LE), 1Mbps, iPA – Ch. 39)

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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.

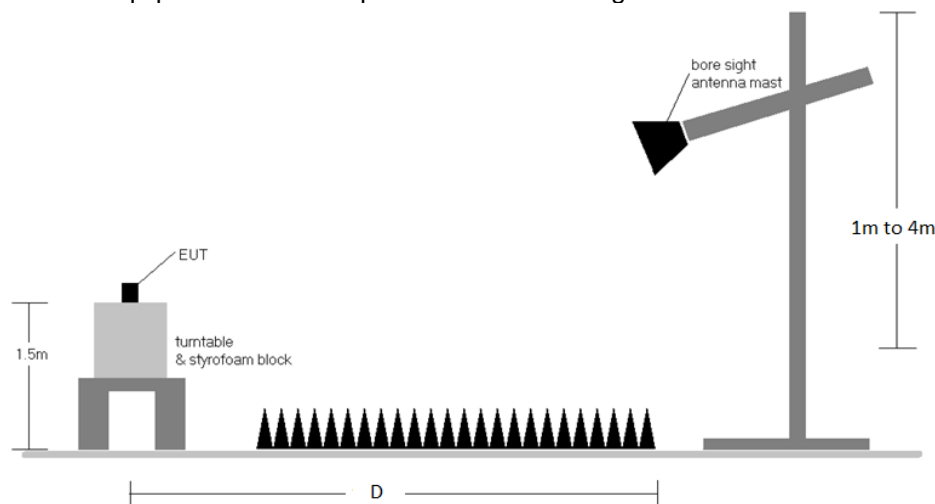


Figure 7-6. Radiated Test Setup >1GHz

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

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

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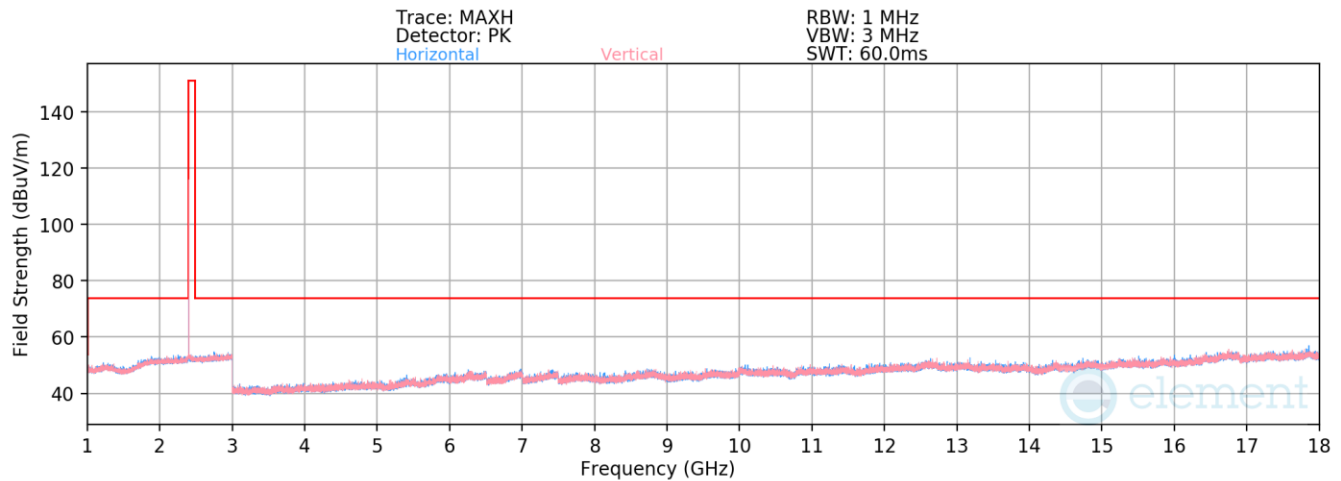
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Radiated Spurious Emission Measurements (1 – 18GHz)

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

Ant1



Plot 7-103. Radiated Spurious Emissions 1-18GHz Ant1 (1Mbps, ePA – Ch. 0)

Bluetooth Mode: LE
Data Rate: 1Mbps
Power Scheme ePA
Distance of Measurements: 3 Meters
Operating Frequency: 2402MHz
Channel: 0

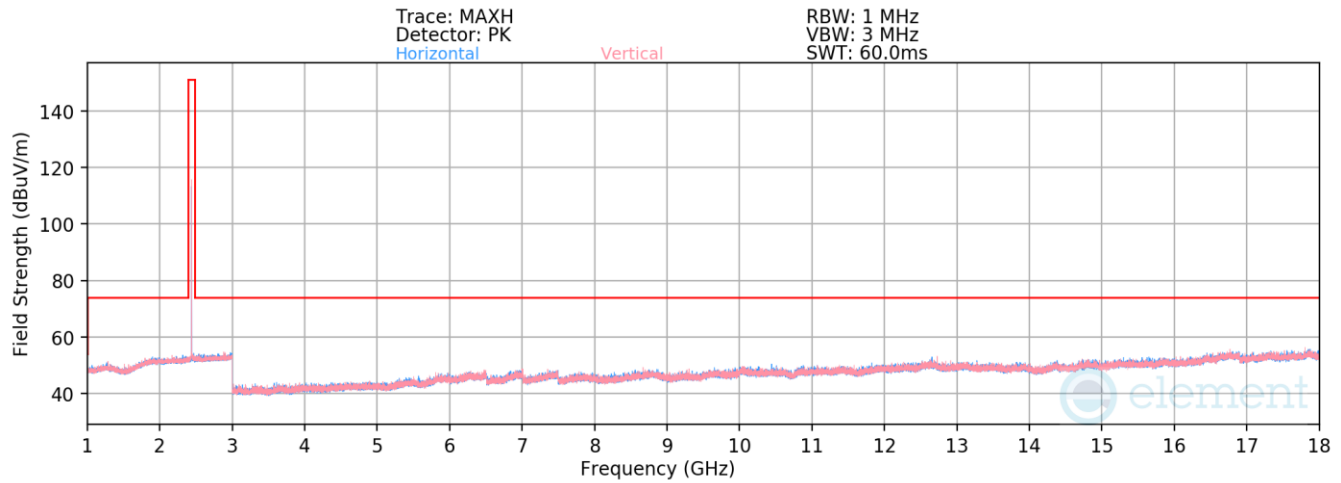
Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
4804.00	Avg	V	400	210	-77.65	4.00	33.35	53.98	-20.63
4804.00	Peak	V	400	210	-66.94	4.00	44.06	73.98	-29.92
12010.00	Avg	V	-	-	-81.28	12.75	38.47	53.98	-15.51
12010.00	Peak	V	-	-	-69.67	12.75	50.08	73.98	-23.90

Table 7-18. Radiated Measurements Ant1

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Plot 7-104. Radiated Spurious Emissions 1-18GHz Ant1 (1Mbps, ePA – Ch. 19)

Bluetooth Mode: LE

Data Rate: 1Mbps

Power Scheme: ePA

Distance of Measurements: 3 Meters

Operating Frequency: 2440MHz

Channel: 19

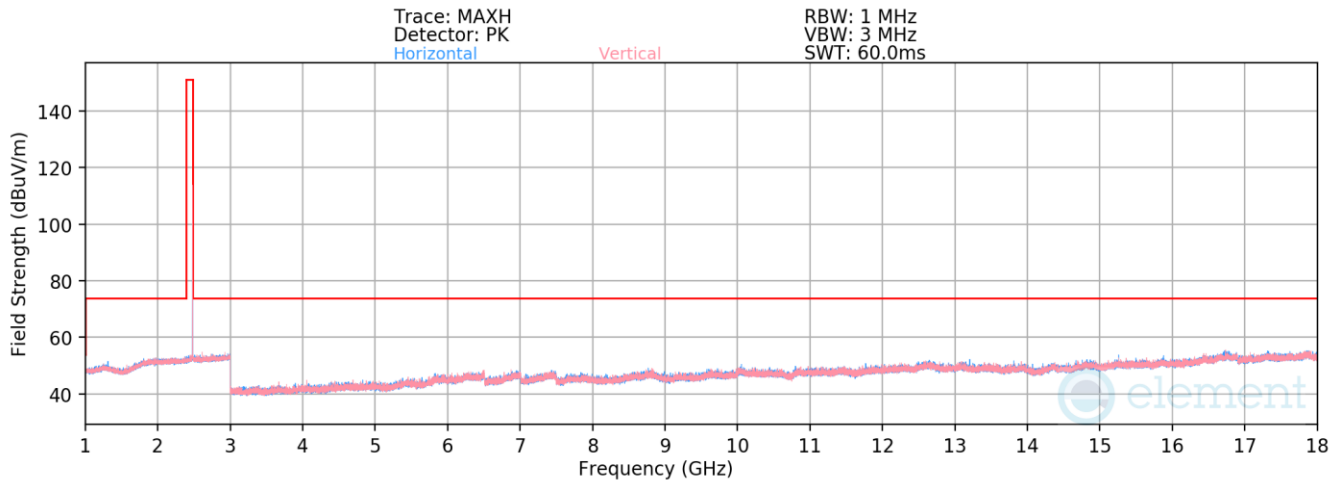
Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
4880.00	Avg	V	253	173	-76.54	4.23	34.69	53.98	-19.29
4880.00	Peak	V	253	173	-66.74	4.23	44.49	73.98	-29.49
7320.00	Avg	V	297	152	-77.57	8.72	38.15	53.98	-15.83
7320.00	Peak	V	297	152	-68.21	8.72	47.51	73.98	-26.47
12200.00	Avg	V	-	-	-81.77	13.63	38.86	53.98	-15.12
12200.00	Peak	V	-	-	-70.96	13.63	49.67	73.98	-24.31

Table 7-19. Radiated Measurements Ant1

FCC ID: BCGA2117 IC: 579C-A2117		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2302130007-02.BCG	Test Dates: 2/10/2023 - 5/4/2023	EUT Type: Head Mounted Device	Page 88 of 127

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Plot 7-105. Radiated Spurious Emissions 1-18GHz Ant1 (1Mbps ePA – Ch. 39)

Bluetooth Mode: LE

Data Rate: 1Mbps

Power Scheme: ePA

Distance of Measurements: 3 Meters

Operating Frequency: 2480MHz

Channel: 39

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]
4960.00	Avg	V	215	182	-76.84	4.42	34.58	53.98	-19.40
4960.00	Peak	V	215	182	-66.99	4.42	44.43	73.98	-29.55
7440.00	Avg	V	-	-	-79.44	8.60	36.16	53.98	-17.82
7440.00	Peak	V	-	-	-68.02	8.60	47.58	73.98	-26.40
12400.00	Avg	V	-	-	-81.68	13.30	38.62	53.98	-15.36
12400.00	Peak	V	-	-	-69.95	13.30	50.35	73.98	-23.63

Table 7-20. Radiated Measurements Ant1

FCC ID: BCGA2117 IC: 579C-A2117		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2302130007-02.BCG	Test Dates: 2/10/2023 - 5/4/2023	EUT Type: Head Mounted Device	Page 89 of 127

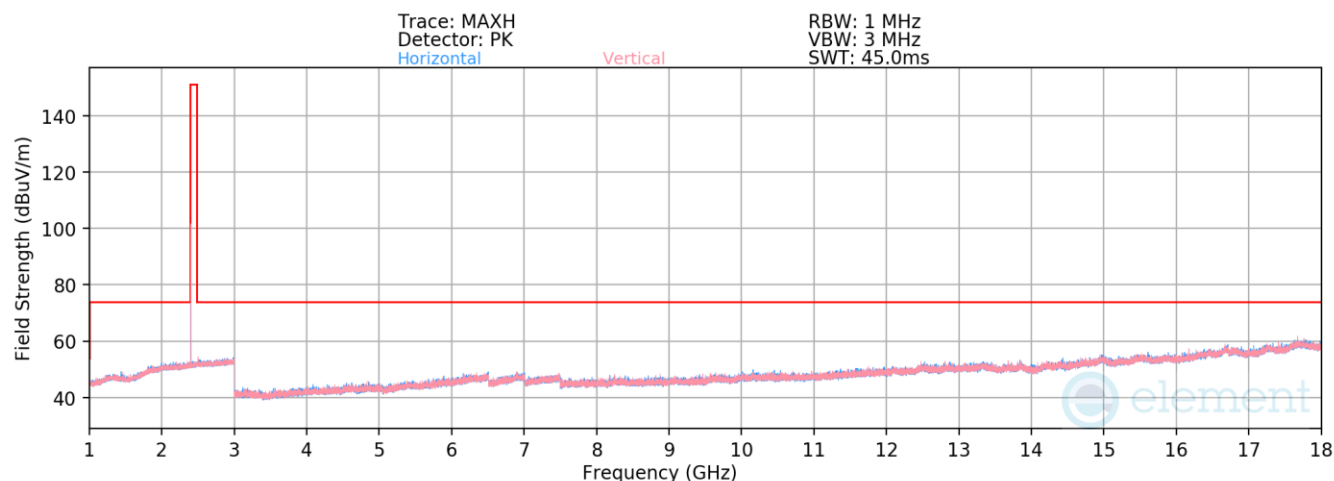
V 10.5 12/15/2021

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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 (1Mbps, ePA – Ch. 0)

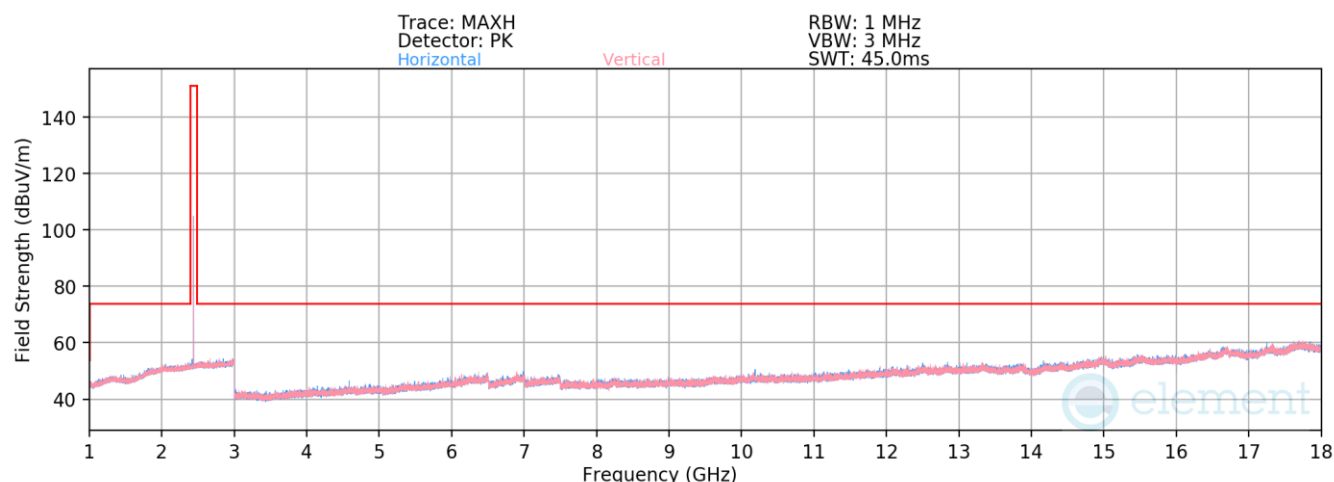
Bluetooth Mode: LE
Data Rate: 1Mbps
Power Scheme: ePA
Distance of Measurements: 3 Meters
Operating Frequency: 2402MHz
Channel: 0

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]
4804.00	Avg	H	-	-	-80.74	5.88	32.14	53.98	-21.84
4804.00	Peak	H	-	-	-69.02	5.88	43.86	73.98	-30.12
12010.00	Avg	H	-	-	-84.62	14.68	37.06	53.98	-16.91
12010.00	Peak	H	-	-	-73.55	14.68	48.13	73.98	-25.84

Table 7-21. Radiated Measurements Ant2

FCC ID: BCGA2117 IC: 579C-A2117		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2302130007-02.BCG	Test Dates: 2/10/2023 - 5/4/2023	EUT Type: Head Mounted Device	Page 90 of 127

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Plot 7-107. Radiated Spurious Emissions 1-18GHz Ant2 (1Mbps, ePA – Ch. 19)

Bluetooth Mode: LE
Data Rate: 1Mbps
Power Scheme: ePA
Distance of Measurements: 3 Meters
Operating Frequency: 2440MHz
Channel: 19

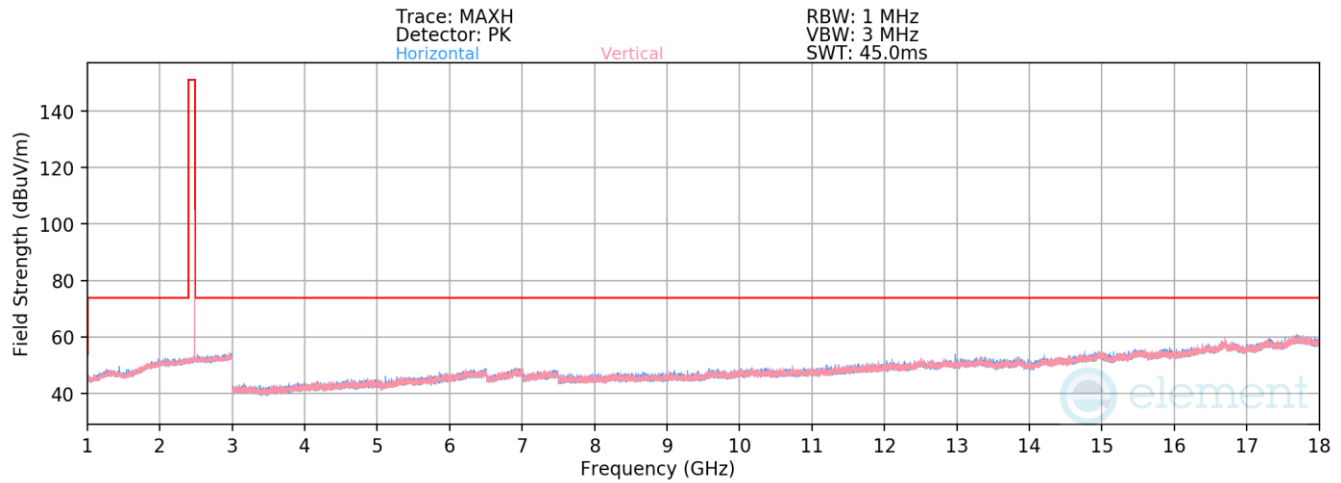
Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBuV/m]	Limit [dBuV/m]	Margin [dB]
4880.00	Avg	H	-	-	-80.90	6.24	32.34	53.98	-21.64
4880.00	Peak	H	-	-	-68.93	6.24	44.31	73.98	-29.67
7320.00	Avg	H	-	-	-81.88	9.97	35.09	53.98	-18.89
7320.00	Peak	H	-	-	-70.21	9.97	46.76	73.98	-27.22
12200.00	Avg	H	-	-	-84.60	14.86	37.26	53.98	-16.72
12200.00	Peak	H	-	-	-73.51	14.86	48.35	73.98	-25.63

Table 7-22. Radiated Measurements Ant2

FCC ID: BCGA2117 IC: 579C-A2117		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2302130007-02.BCG	Test Dates: 2/10/2023 - 5/4/2023	EUT Type: Head Mounted Device	Page 91 of 127

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Plot 7-108. Radiated Spurious Emissions 1-18GHz Ant2 (1Mbps ePA – Ch. 39)

Bluetooth Mode: LE
Data Rate: 1Mbps
Power Scheme: ePA
Distance of Measurements: 3 Meters
Operating Frequency: 2480MHz
Channel: 39

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]
4960.00	Avg	H	-	-	-80.78	6.45	32.67	53.98	-21.31
4960.00	Peak	H	-	-	-69.83	6.45	43.62	73.98	-30.36
7440.00	Avg	H	-	-	-81.67	9.93	35.26	53.98	-18.72
7440.00	Peak	H	-	-	-69.64	9.93	47.29	73.98	-26.69
12400.00	Avg	H	-	-	-85.21	15.14	36.93	53.98	-17.05
12400.00	Peak	H	-	-	-73.76	15.14	48.38	73.98	-25.60

Table 7-23. Radiated Measurements Ant2

FCC ID: BCGA2117 IC: 579C-A2117		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2302130007-02.BCG	Test Dates: 2/10/2023 - 5/4/2023	EUT Type: Head Mounted Device	Page 92 of 127

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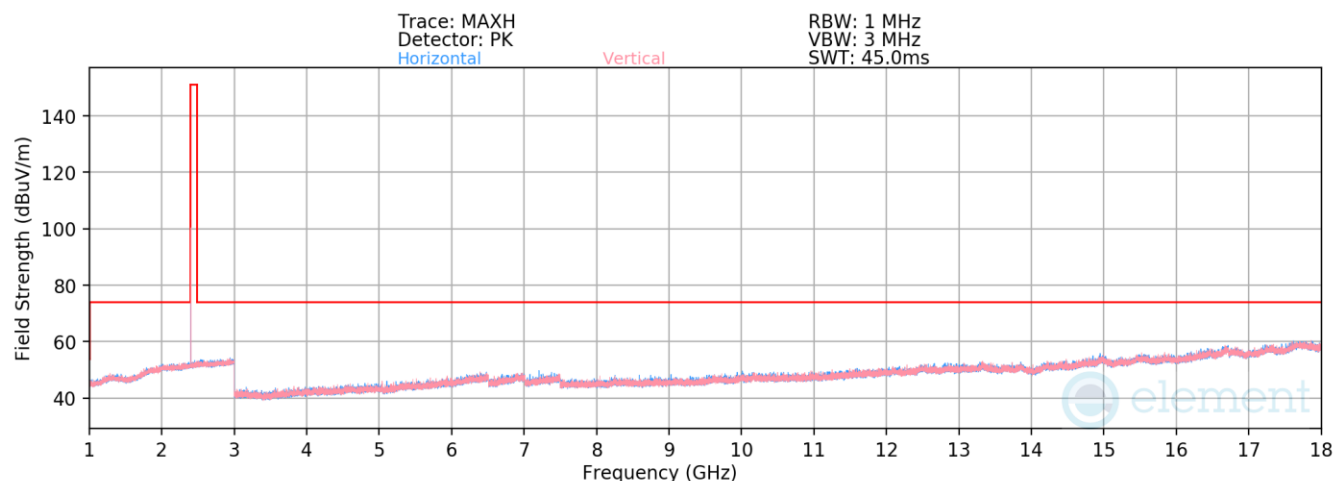
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Radiated Spurious Emission Measurements (1 – 18GHz)

§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 (1Mbps, iPA – Ch. 0)

Bluetooth Mode: LE
Data Rate: 1Mbps
Power Scheme iPA
Distance of Measurements: 3 Meters
Operating Frequency: 2402MHz
Channel: 0

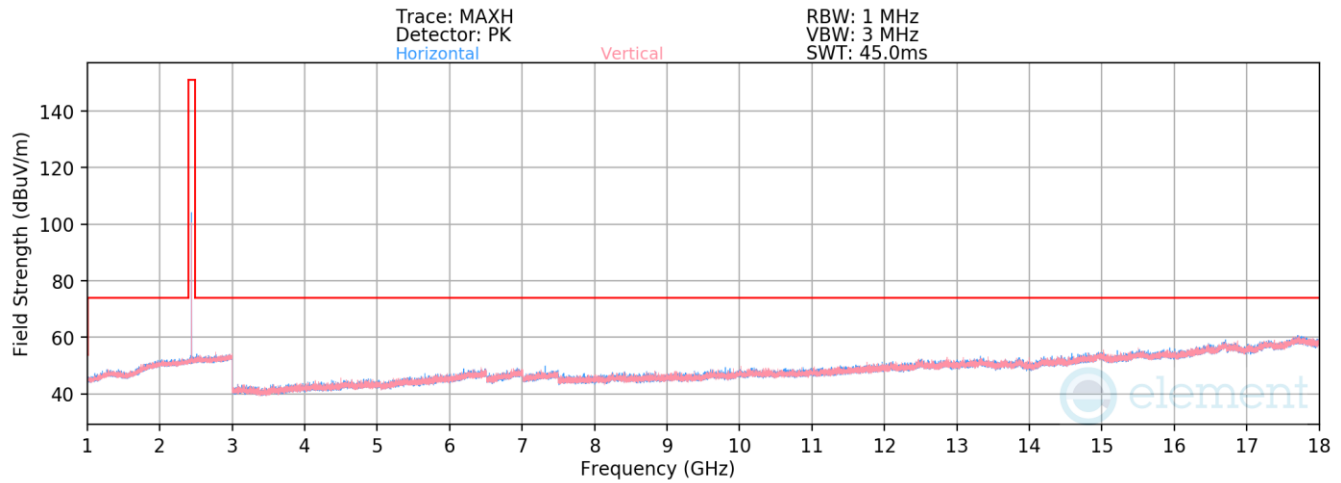
Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBuV/m]	Limit [dBuV/m]	Margin [dB]
4804.00	Avg	H	194	236	-76.90	5.88	35.98	53.98	-18.00
4804.00	Peak	H	194	236	-67.40	5.88	45.48	73.98	-28.50
12010.00	Avg	H	-	-	-84.16	14.68	37.52	53.98	-16.45
12010.00	Peak	H	-	-	-73.25	14.68	48.43	73.98	-25.54

Table 7-24. Radiated Measurements NB UNII_L

FCC ID: BCGA2117 IC: 579C-A2117		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2302130007-02.BCG	Test Dates: 2/10/2023 - 5/4/2023	EUT Type: Head Mounted Device	Page 93 of 127

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Plot 7-110. Radiated Spurious Emissions 1-18GHz NB UNII_L (1Mbps, iPA – Ch. 19)

Bluetooth Mode: LE
Data Rate: 1Mbps
Power Scheme: iPA
Distance of Measurements: 3 Meters
Operating Frequency: 2440MHz
Channel: 19

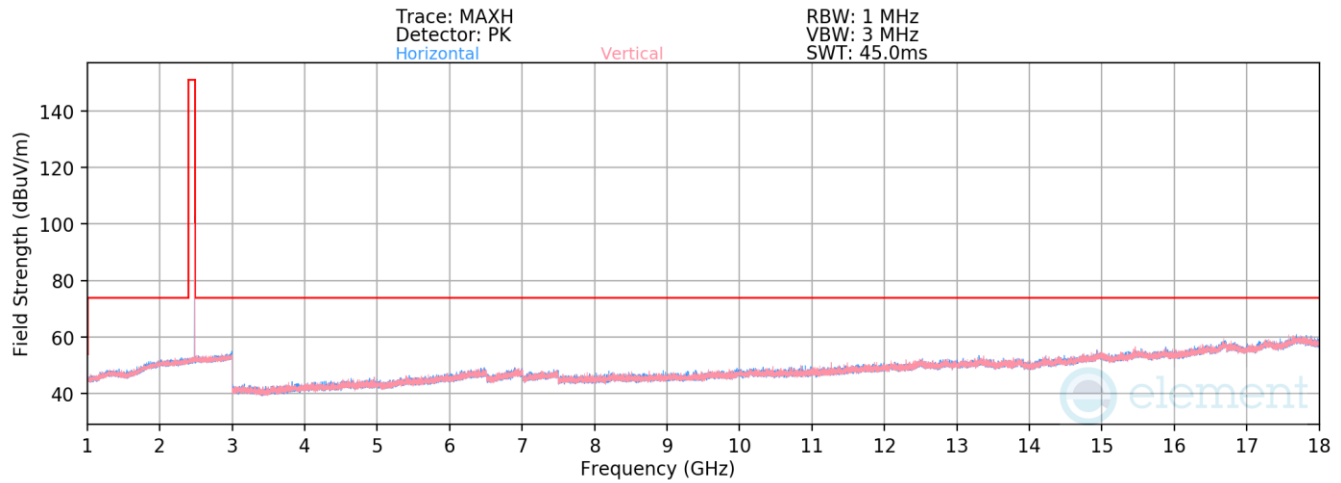
Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
4880.00	Avg	H	305	305	-76.74	6.24	36.50	53.98	-17.48
4880.00	Peak	H	305	305	-66.86	6.24	46.38	73.98	-27.60
7320.00	Avg	H	123	194	-75.84	9.97	41.13	53.98	-12.85
7320.00	Peak	H	123	194	-67.29	9.97	49.68	73.98	-24.30
12200.00	Avg	H	-	-	-84.94	14.86	36.92	53.98	-17.06
12200.00	Peak	H	-	-	-73.85	14.86	48.01	73.98	-25.97

Table 7-25. Radiated Measurements NB UNII_L

FCC ID: BCGA2117 IC: 579C-A2117		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2302130007-02.BCG	Test Dates: 2/10/2023 - 5/4/2023	EUT Type: Head Mounted Device	Page 94 of 127

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Plot 7-111. Radiated Spurious Emissions 1-18GHz NB UNII_L (1Mbps iPA – Ch. 39)

Bluetooth Mode: LE
Data Rate: 1Mbps
Power Scheme: iPA
Distance of Measurements: 3 Meters
Operating Frequency: 2480MHz
Channel: 39

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]
4960.00	Avg	H	250	246	-77.22	6.45	36.23	53.98	-17.75
4960.00	Peak	H	250	246	-67.77	6.45	45.68	73.98	-28.30
7440.00	Avg	H	250	114	-77.50	9.93	39.43	53.98	-14.55
7440.00	Peak	H	250	114	-68.42	9.93	48.51	73.98	-25.47
12400.00	Avg	H	-	-	-85.08	15.14	37.06	53.98	-16.92
12400.00	Peak	H	-	-	-74.30	15.14	47.84	73.98	-26.14

Table 7-26. Radiated Measurements NB UNII_L

FCC ID: BCGA2117 IC: 579C-A2117	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1C2302130007-02.BCG	Test Dates: 2/10/2023 - 5/4/2023	EUT Type: Head Mounted Device	Page 95 of 127

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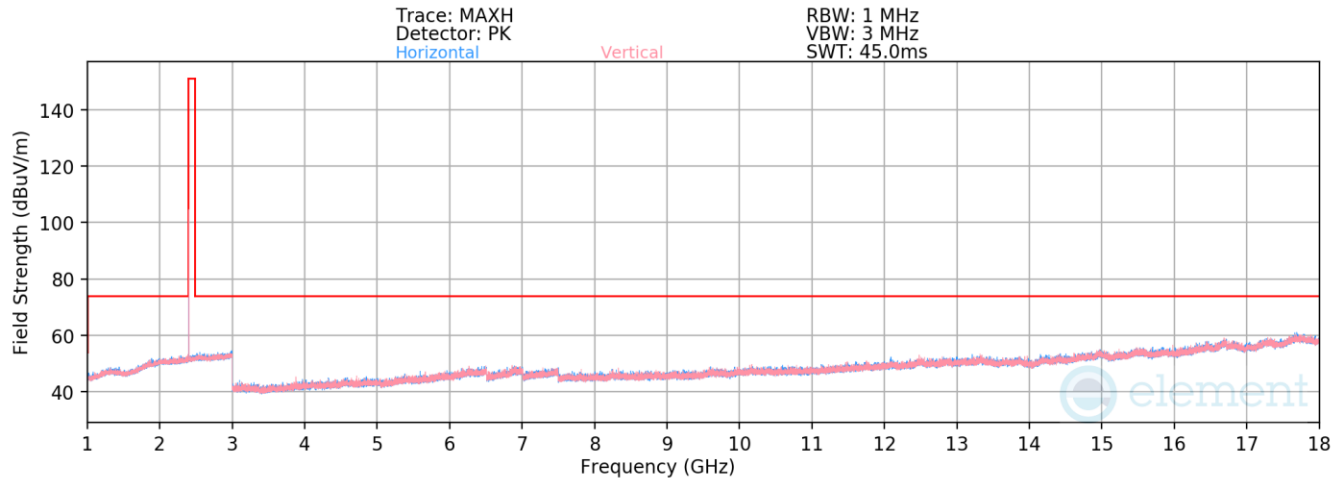
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Radiated Spurious Emission Measurements (1-18GHz)

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

TxBF



Plot 7-112. Radiated Spurious Emissions 1-18GHz TxBF (1Mbps, ePA – Ch. 0)

Bluetooth Mode: LE
Data Rate: 1Mbps
Power Scheme: ePA
Distance of Measurements: 3 Meters
Operating Frequency: 2402MHz
Channel: 0

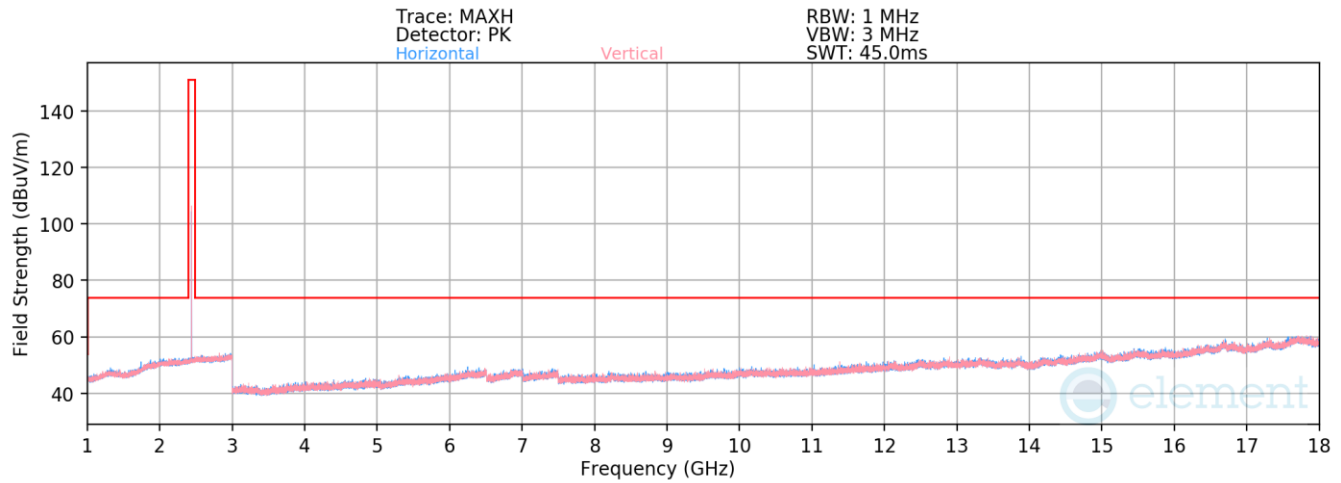
Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
4804.00	Avg	H	-	-	-80.67	5.88	32.21	53.98	-21.77
4804.00	Peak	H	-	-	-68.86	5.88	44.02	73.98	-29.96
12010.00	Avg	H	-	-	-84.51	14.68	37.17	53.98	-16.80
12010.00	Peak	H	-	-	-73.24	14.68	48.44	73.98	-25.53

Table 7-27. Radiated Measurements TxBF

FCC ID: BCGA2117 IC: 579C-A2117		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2302130007-02.BCG	Test Dates: 2/10/2023 - 5/4/2023	EUT Type: Head Mounted Device	Page 96 of 127

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Plot 7-113. Radiated Spurious Emissions 1-18GHz TxBF (1Mbps, ePA – Ch. 19)

Bluetooth Mode: LE
Data Rate: 1Mbps
Power Scheme: ePA
Distance of Measurements: 3 Meters
Operating Frequency: 2440MHz
Channel: 19

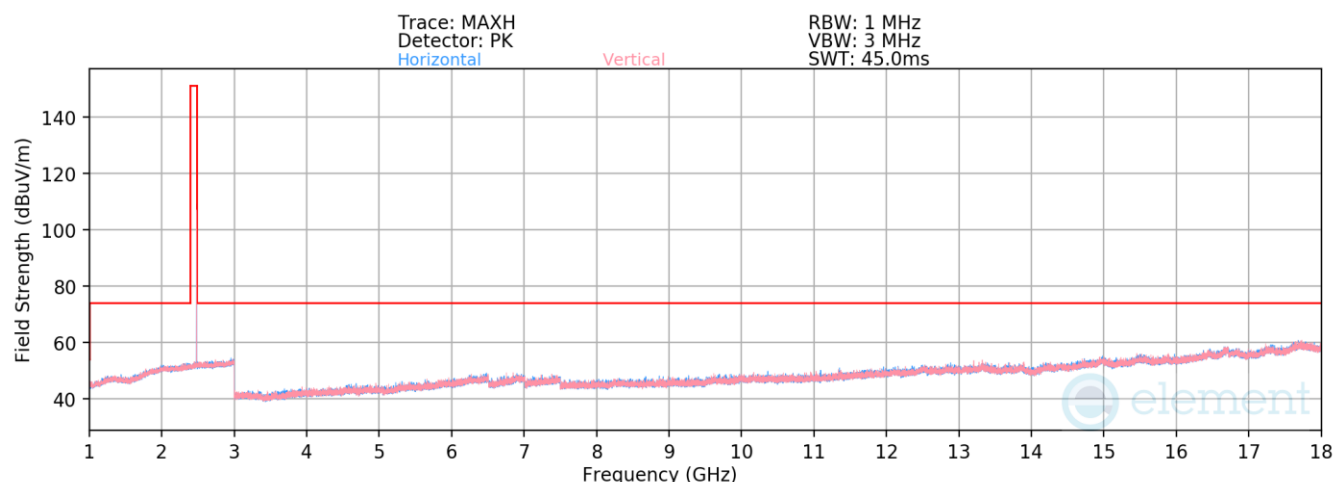
Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
4880.00	Avg	H	-	-	-80.72	6.24	32.52	53.98	-21.46
4880.00	Peak	H	-	-	-69.21	6.24	44.03	73.98	-29.95
7320.00	Avg	H	-	-	-81.66	9.97	35.31	53.98	-18.67
7320.00	Peak	H	-	-	-70.25	9.97	46.72	73.98	-27.26
12200.00	Avg	H	-	-	-85.12	14.86	36.74	53.98	-17.24
12200.00	Peak	H	-	-	-73.19	14.86	48.67	73.98	-25.31

Table 7-28. Radiated Measurements TxBF

FCC ID: BCGA2117 IC: 579C-A2117		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2302130007-02.BCG	Test Dates: 2/10/2023 - 5/4/2023	EUT Type: Head Mounted Device	Page 97 of 127

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Plot 7-114. Radiated Spurious Emissions 1-18GHz TxBF (1Mbps ePA – Ch. 39)

Bluetooth Mode: LE
Data Rate: 1Mbps
Power Scheme: ePA
Distance of Measurements: 3 Meters
Operating Frequency: 2480MHz
Channel: 39

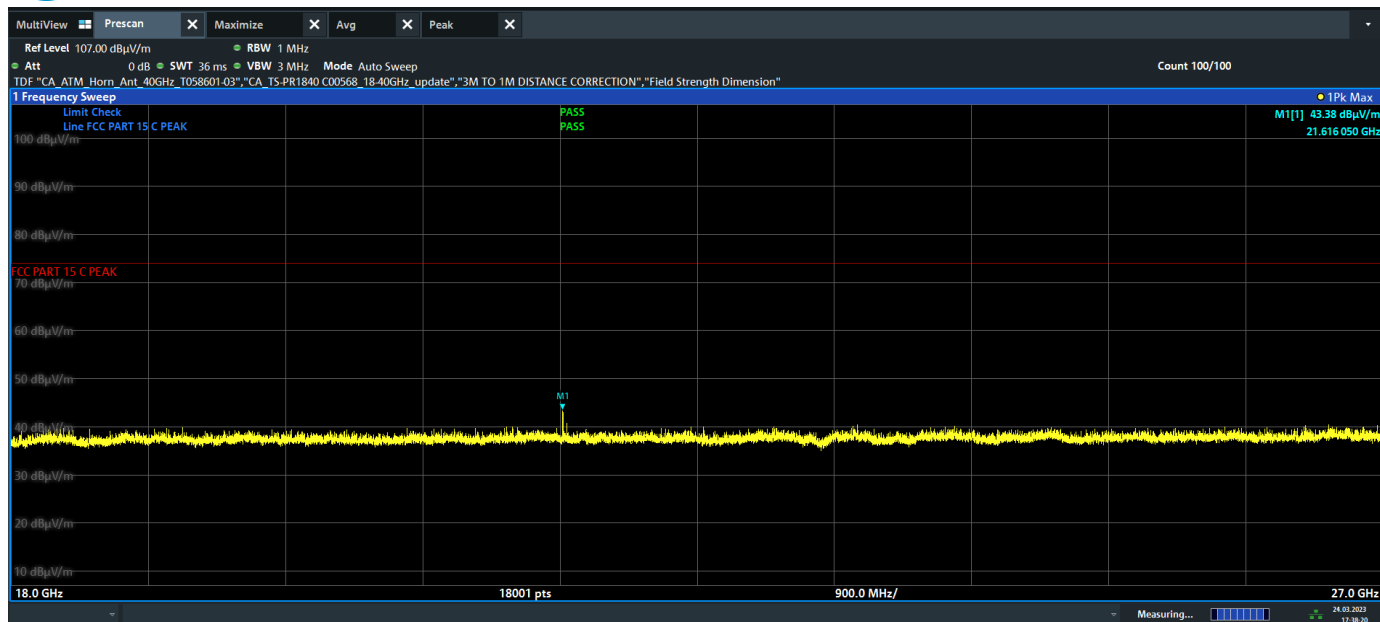
Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
4960.00	Avg	H	-	-	-81.25	6.45	32.20	53.98	-21.78
4960.00	Peak	H	-	-	-68.93	6.45	44.52	73.98	-29.46
7440.00	Avg	H	-	-	-81.77	9.93	35.16	53.98	-18.82
7440.00	Peak	H	-	-	-69.41	9.93	47.52	73.98	-26.46
12400.00	Avg	H	-	-	-85.26	15.14	36.88	53.98	-17.10
12400.00	Peak	H	-	-	-73.94	15.14	48.20	73.98	-25.78

Table 7-29. Radiated Measurements TxBF

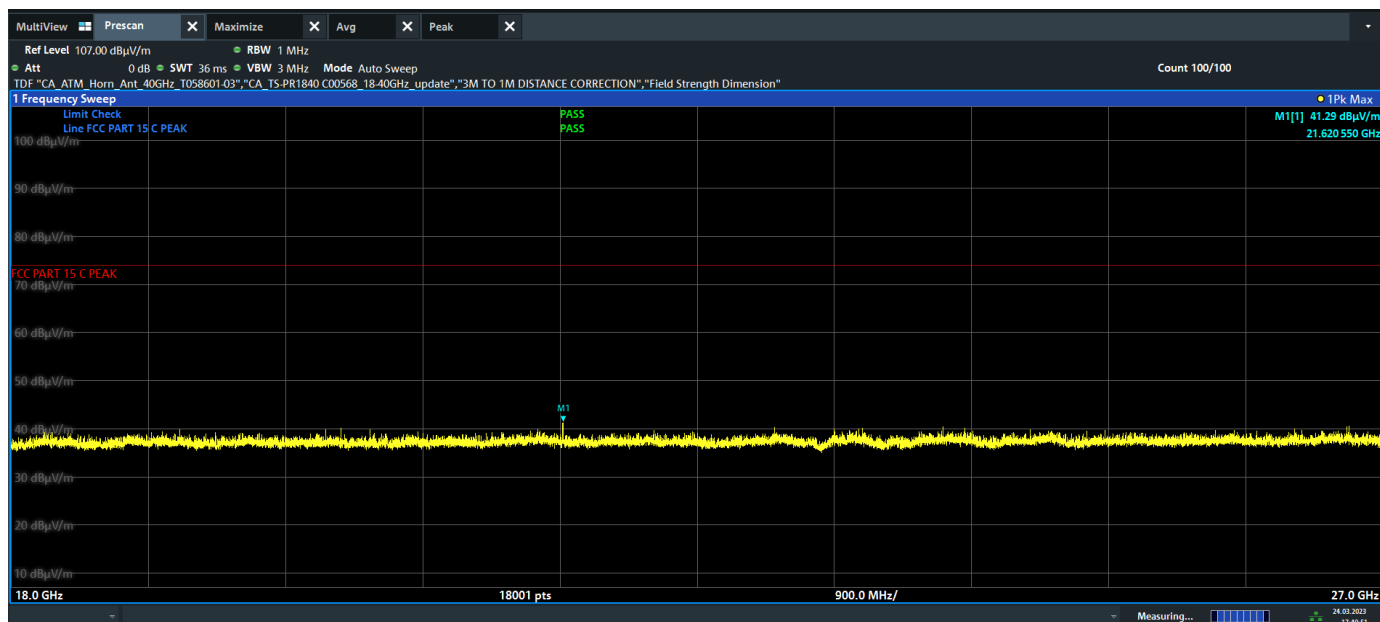
FCC ID: BCGA2117 IC: 579C-A2117		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2302130007-02.BCG	Test Dates: 2/10/2023 - 5/4/2023	EUT Type: Head Mounted Device	Page 98 of 127

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Plot 7-115. Radiated Spurious Emissions Above 18GHz TxBF (1Mbps ePA – Ch. 0 Pol. H)



Plot 7-116. Radiated Spurious Emissions Above 18GHz TxBF (1Mbps ePA – Ch. 0 Pol. V)

FCC ID: BCGA2117 IC: 579C-A2117	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1C2302130007-02.BCG	Test Dates: 2/10/2023 - 5/4/2023	EUT Type: Head Mounted Device	Page 99 of 127

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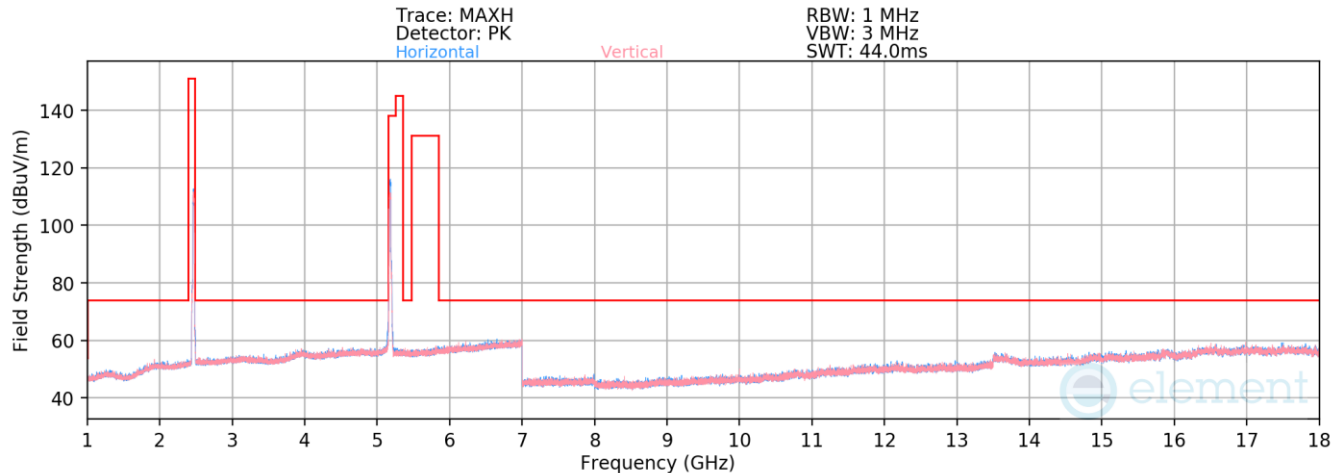
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Co-Tx Radiated Spurious Emission Measurements

§15.515(c) §15.247 §15.205 & §15.209; RSS-220 [5.3.1(d)] & RSS-Gen [8.9]

Description	BT 2.4G	NB UNII 5G	WLAN 2.4G	WiFi 5G
Antenna	NB UNII_L	NB UNII_L + NB_UNII_R	Ant1 + Ant2	Ant1 + Ant2
Channel	39	1	12	36
Operating Frequency (MHz)	2480	5157	2467	5180
Mode/Modulation	BLE1M	BLE1M	WLAN 11ax (SU)	UNII 11ax (SU)

Table 7-30. Worst Case Co-Tx Configuration



Plot 7-117. Radiated Spurious Emissions – Simultaneous Transmission 1-18GHz

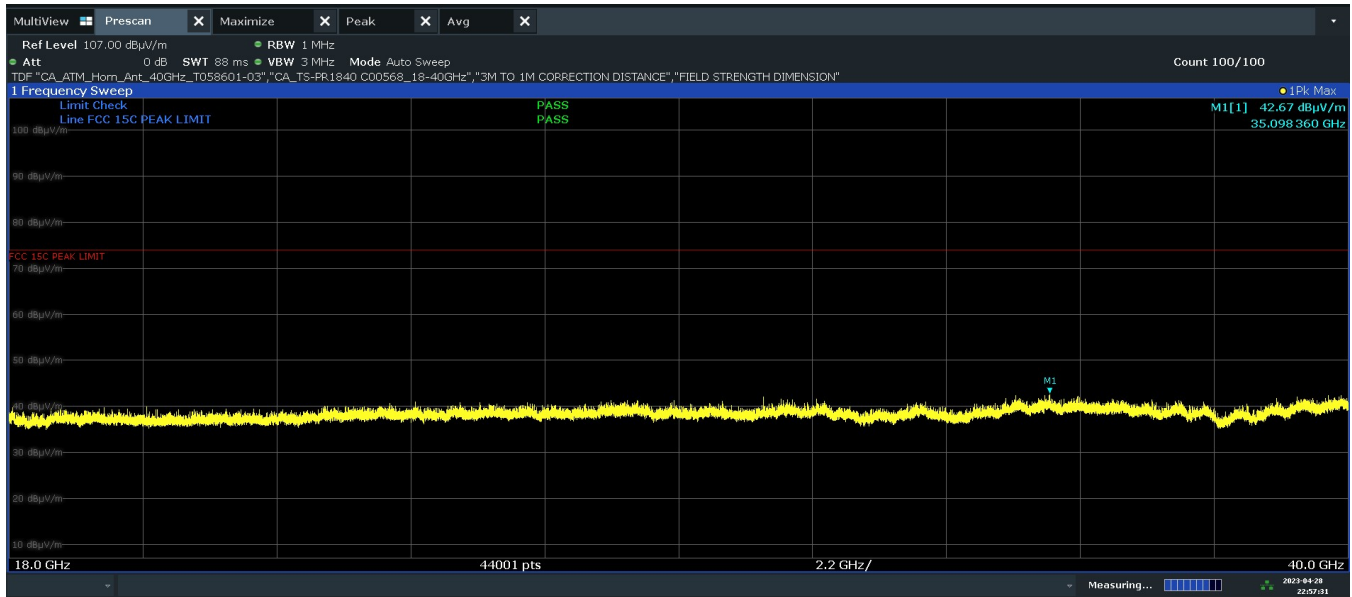
Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBuV/m]	Limit [dBuV/m]	Margin [dB]
4960.00	Avg	-	-	-	-80.44	16.32	42.88	53.98	-11.10
4960.00	Peak	-	-	-	-68.77	16.32	54.55	73.98	-19.43
7440.00	Avg	-	-	-	-81.97	10.93	35.96	53.98	-18.02
7440.00	Peak	-	-	-	-70.38	10.93	47.55	73.98	-26.43
12400.00	Avg	-	-	-	-85.87	18.07	39.20	53.98	-14.78
12400.00	Peak	-	-	-	-73.16	18.07	51.91	73.98	-22.07
10314.00	Peak	-	-	-	-72.16	13.31	48.15	68.20	-20.05
15471.00	Avg	-	-	-	-86.29	23.23	43.94	53.98	-10.04
15471.00	Peak	-	-	-	-74.62	23.23	55.61	73.98	-18.37
4934.00	Avg	-	-	-	-80.19	16.29	43.10	53.98	-10.88
4934.00	Peak	-	-	-	-68.58	16.29	54.71	73.98	-19.27
7401.00	Avg	-	-	-	-81.94	10.98	36.04	53.98	-17.94
7401.00	Peak	-	-	-	-70.04	10.98	47.94	73.98	-26.04
12335.00	Avg	-	-	-	-85.67	17.94	39.27	53.98	-14.71
12335.00	Peak	-	-	-	-74.58	17.94	50.36	73.98	-23.62
10360.00	Peak	H	338	229	-70.72	13.97	50.25	68.20	-17.95
15540.00	Avg	-	-	-	-86.25	22.88	43.63	53.98	-10.35
15540.00	Peak	-	-	-	-74.18	22.88	55.70	73.98	-18.28

Table 7-31. Radiated Spurious Emissions Measurements – Simultaneous Transmission 1-18GHz

FCC ID: BCGA2117 IC: 579C-A2117		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2302130007-02.BCG	Test Dates: 2/10/2023 - 5/4/2023	EUT Type: Head Mounted Device	Page 100 of 127

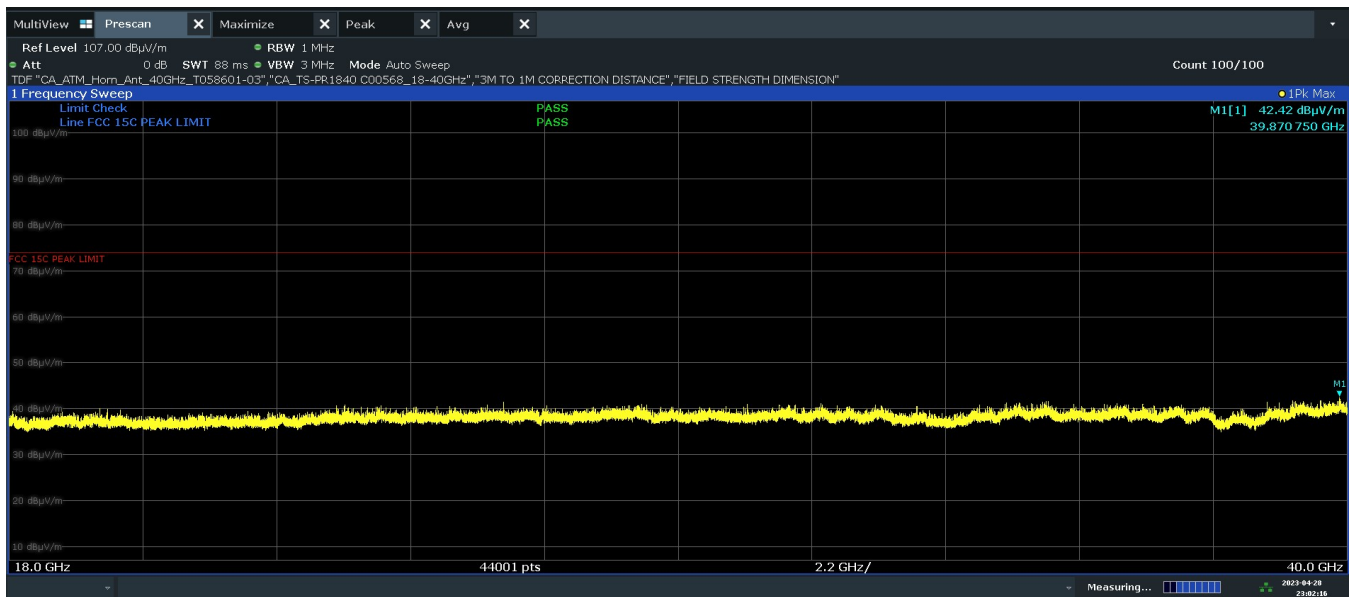
V 10.5 12/15/2021

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10:57:31 PM 04/28/2023

Plot 7-118. Radiated Spurious Emissions – Simultaneous Transmission Above 18GHz (Pol. H)



11:02:16 PM 04/28/2023

Plot 7-119. Radiated Spurious Emissions – Simultaneous Transmission Above 18GHz (Pol. V)

FCC ID: BCGA2117 IC: 579C-A2117		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2302130007-02.BCG	Test Dates: 2/10/2023 - 5/4/2023	EUT Type: Head Mounted Device	Page 101 of 127

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