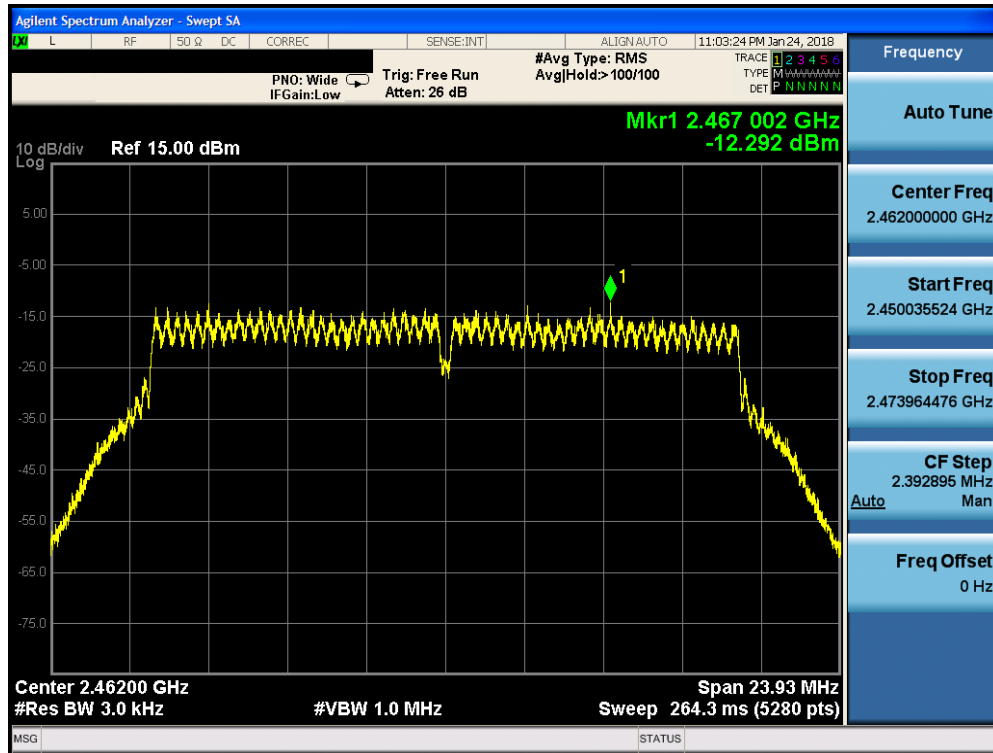
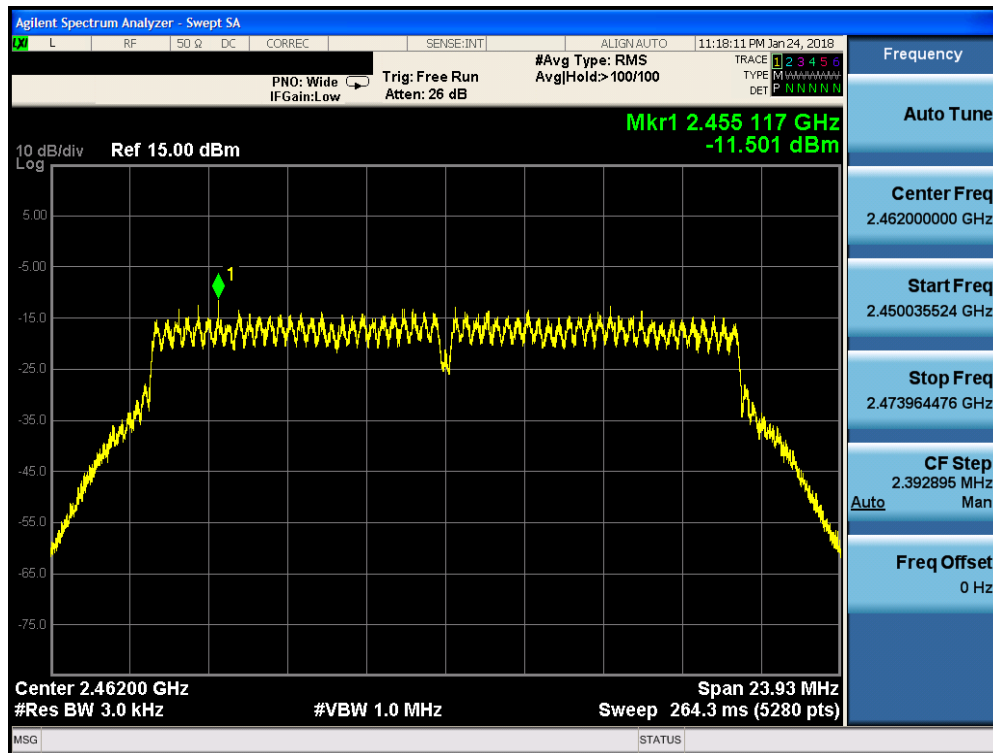


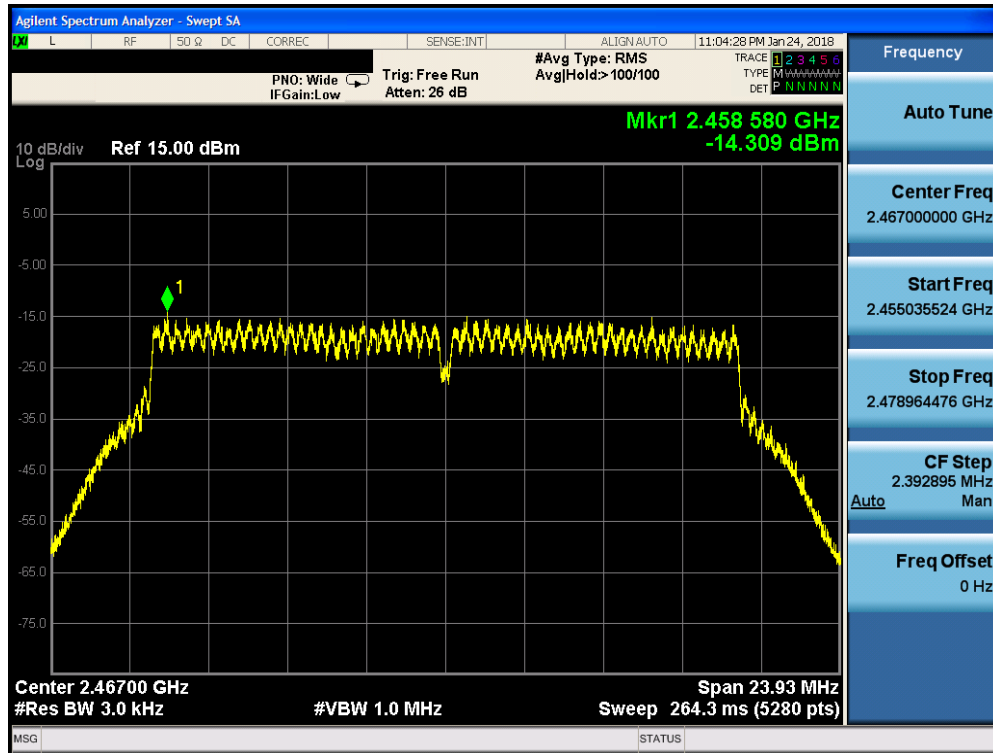


Plot 7-79. Power Spectral Density Plot MIMO ANT1 (802.11n (2.4GHz) – Ch. 11)

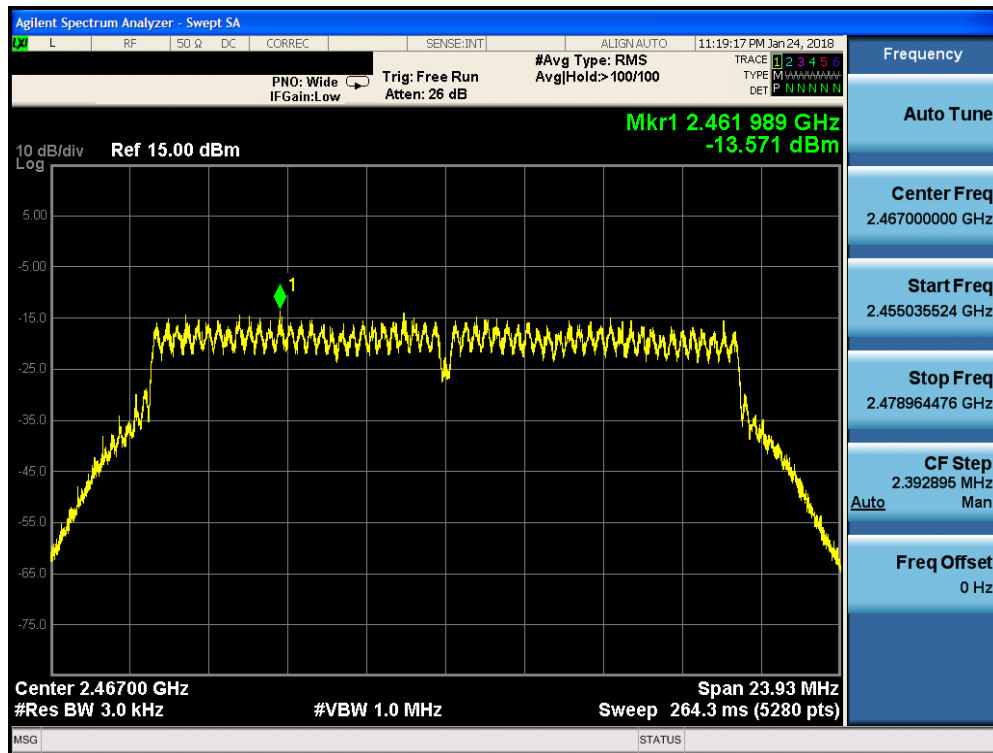


Plot 7-80. Power Spectral Density Plot MIMO ANT2 (802.11n (2.4GHz) – Ch. 11)

FCC ID: BCGA1954	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1710060006-05.BCG	Test Dates: 10/31-2/17/2018	EUT Type: Tablet Device	Page 65 of 157

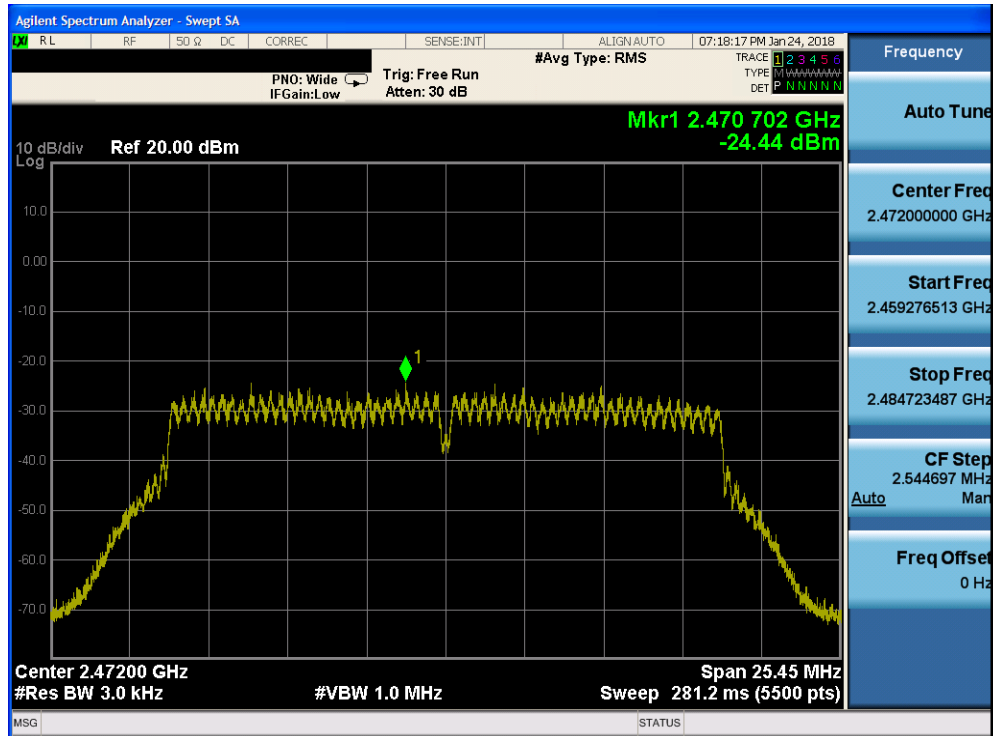


Plot 7-81. Power Spectral Density Plot MIMO ANT1 (802.11n (2.4GHz) – Ch. 12)

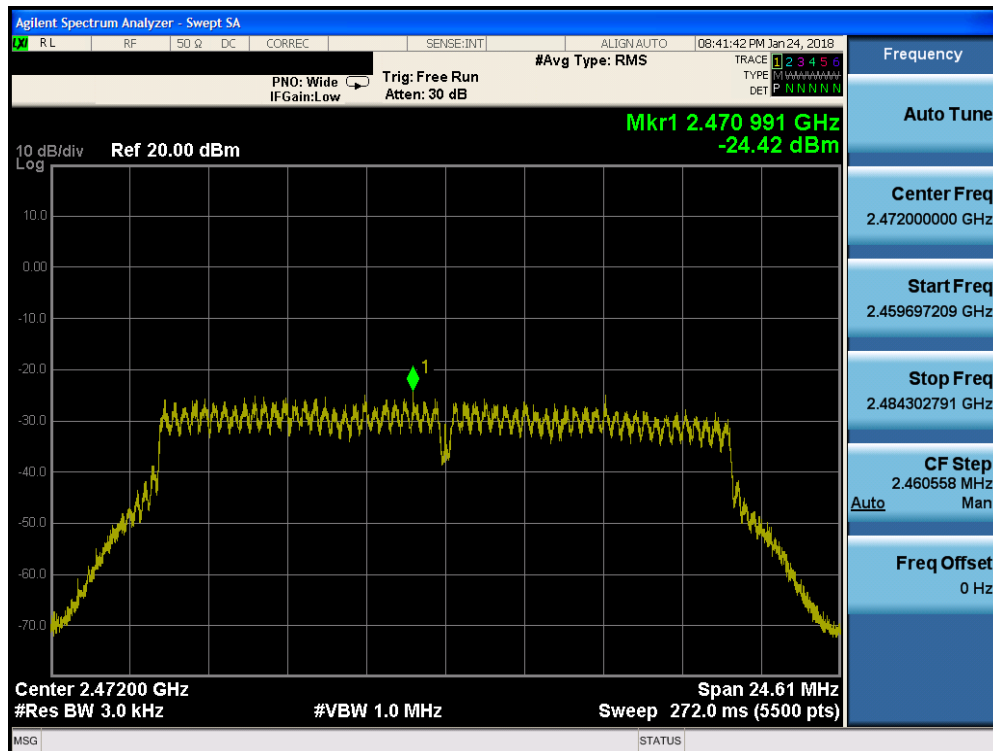


Plot 7-82. Power Spectral Density Plot MIMO ANT2 (802.11n (2.4GHz) – Ch. 12)

FCC ID: BCGA1954	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1710060006-05.BCG	Test Dates: 10/31-2/17/2018	EUT Type: Tablet Device	Page 66 of 157



Plot 7-83. Power Spectral Density Plot MIMO ANT1 (802.11n (2.4GHz) – Ch. 13)



Plot 7-84. Power Spectral Density Plot MIMO ANT2 (802.11n (2.4GHz) – Ch. 13)

FCC ID: BCGA1954	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1710060006-05.BCG	Test Dates: 10/31-2/17/2018	EUT Type: Tablet Device	Page 67 of 157

7.5 Conducted Emissions at the Band Edge

§15.247(d); RSS-247 [5.5]

Test Overview and Limit

All out of band emissions are measured with a spectrum analyzer connected to the antenna terminal of the EUT while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies. All data rates were investigated to determine the worst case configuration. For the following out of band conducted spurious emissions plots at the band edge, the EUT was set at a data rate of 1Mbps for “b” mode, 6 Mbps for “g” mode, and 6.5/7.2Mbps for “n” mode as these settings produced the worst-case emissions.

The limit for out-of-band spurious emissions at the band edge is 30dB below the fundamental emission level, as determined from the in-band power measurement of the DTS channel performed in a 100kHz bandwidth per the PSD procedure (Section 7.4).

Test Procedure Used

ANSI C63.10-2013 – Section 11.11.3

KDB 558074 D01 v04 – Section 11.3

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 = 1MHz
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.



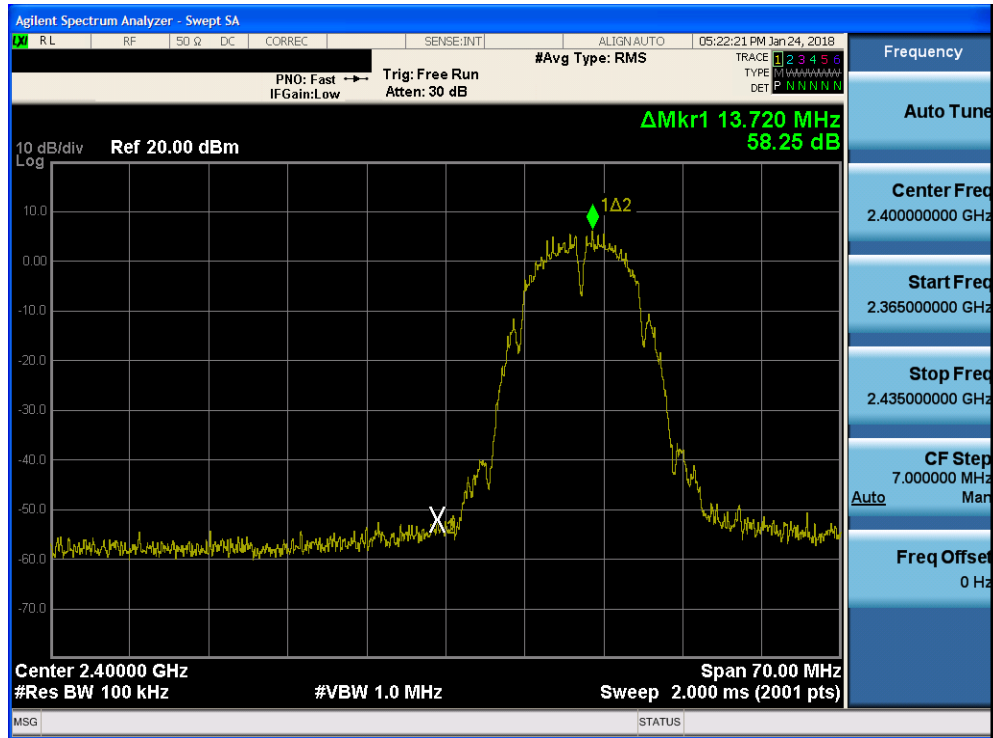
Figure 7-4. Test Instrument & Measurement Setup

Test Notes

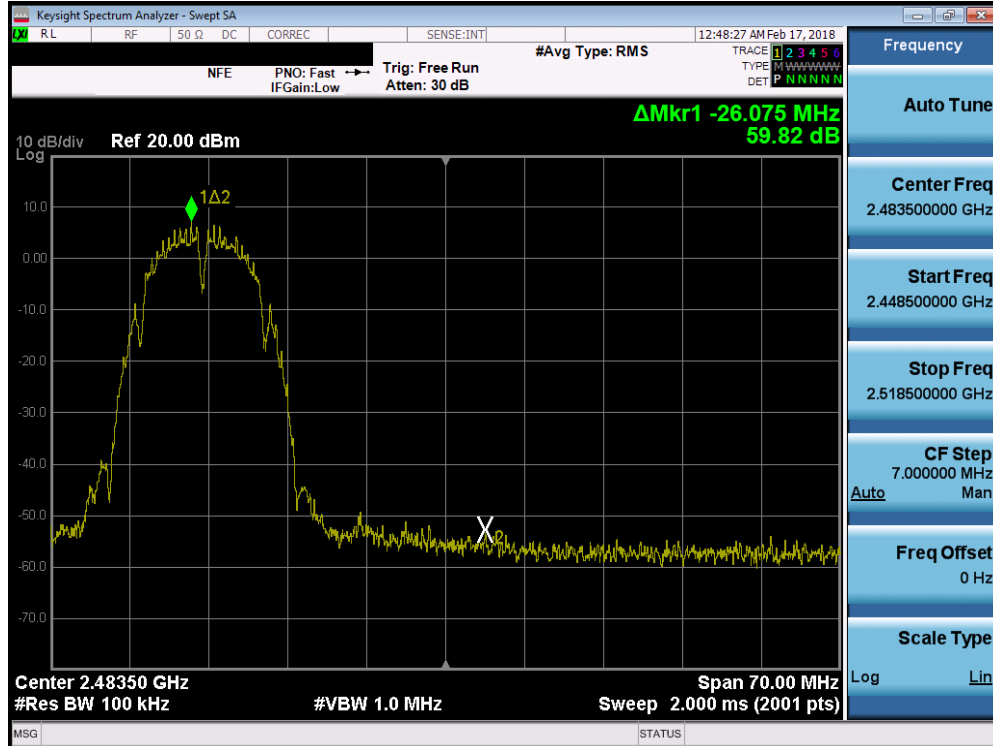
None

FCC ID: BCGA1954	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1710060006-05.BCG	Test Dates: 10/31-2/17/2018	EUT Type: Tablet Device	Page 68 of 157

SISO Antenna-1 Conducted Emissions at the Band Edge

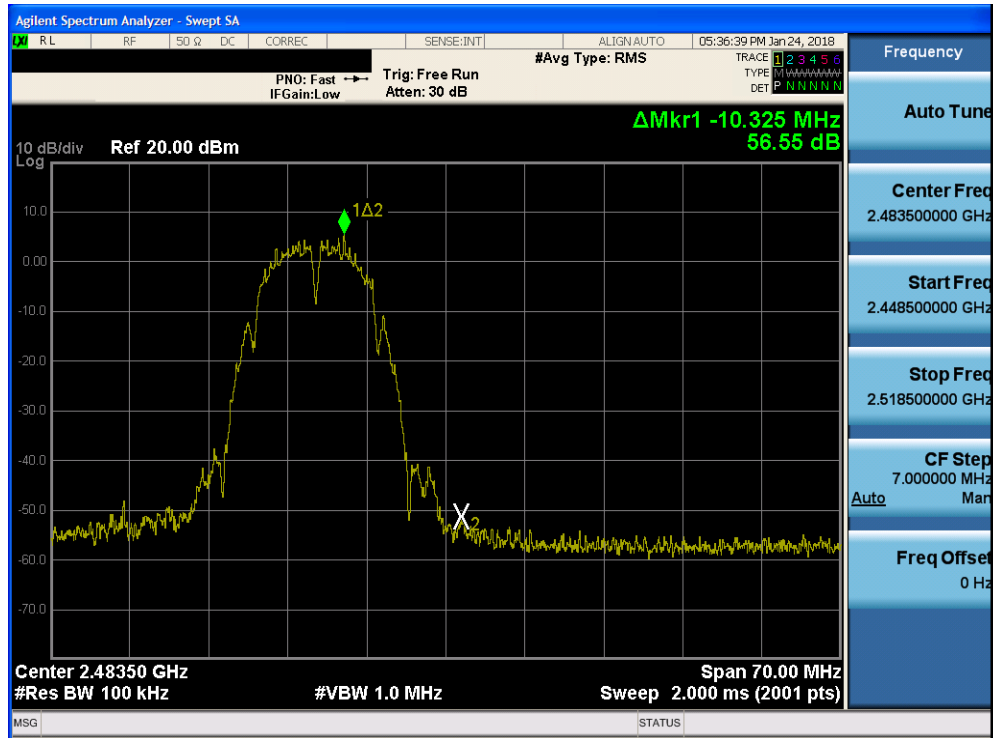


Plot 7-85. Band Edge Plot SISO ANT1 (802.11b – Ch. 1)

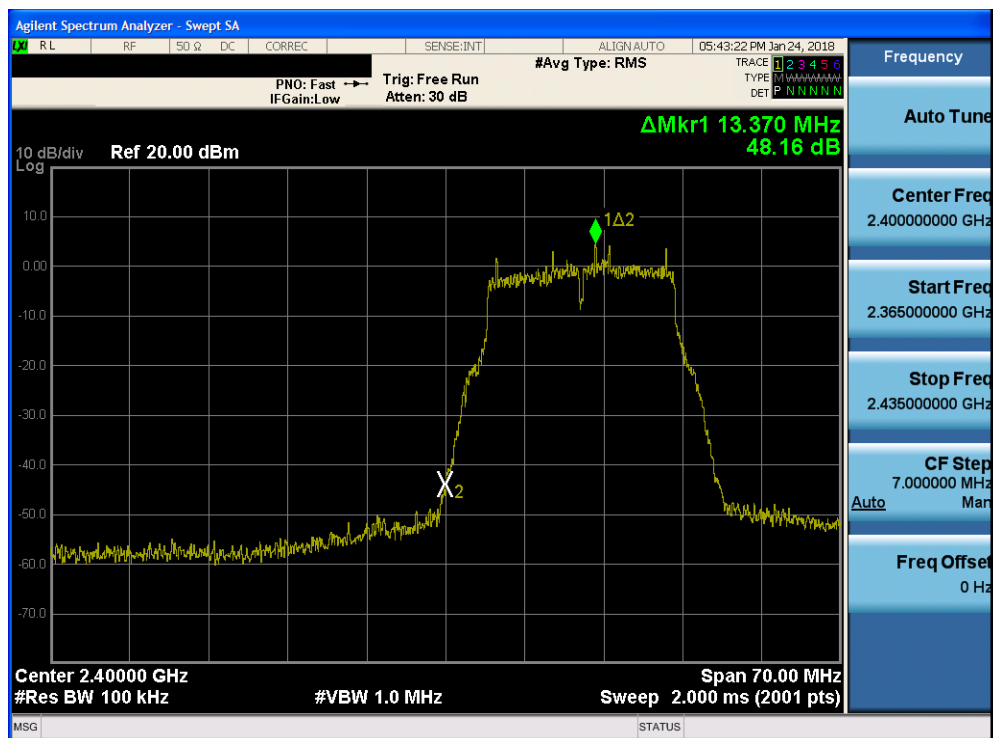


Plot 7-86. Band Edge Plot SISO ANT1 (802.11b – Ch. 11)

FCC ID: BCGA1954	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1710060006-05.BCG	Test Dates: 10/31-2/17/2018	EUT Type: Tablet Device	Page 69 of 157

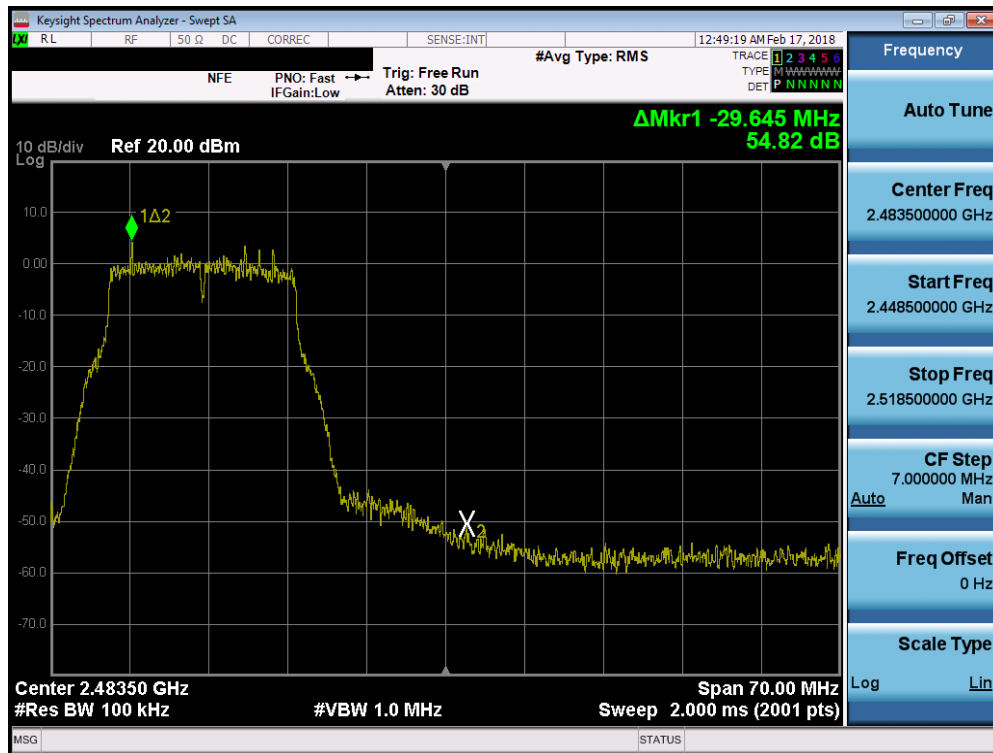


Plot 7-87. Band Edge Plot SISO ANT1 (802.11b – Ch. 13)

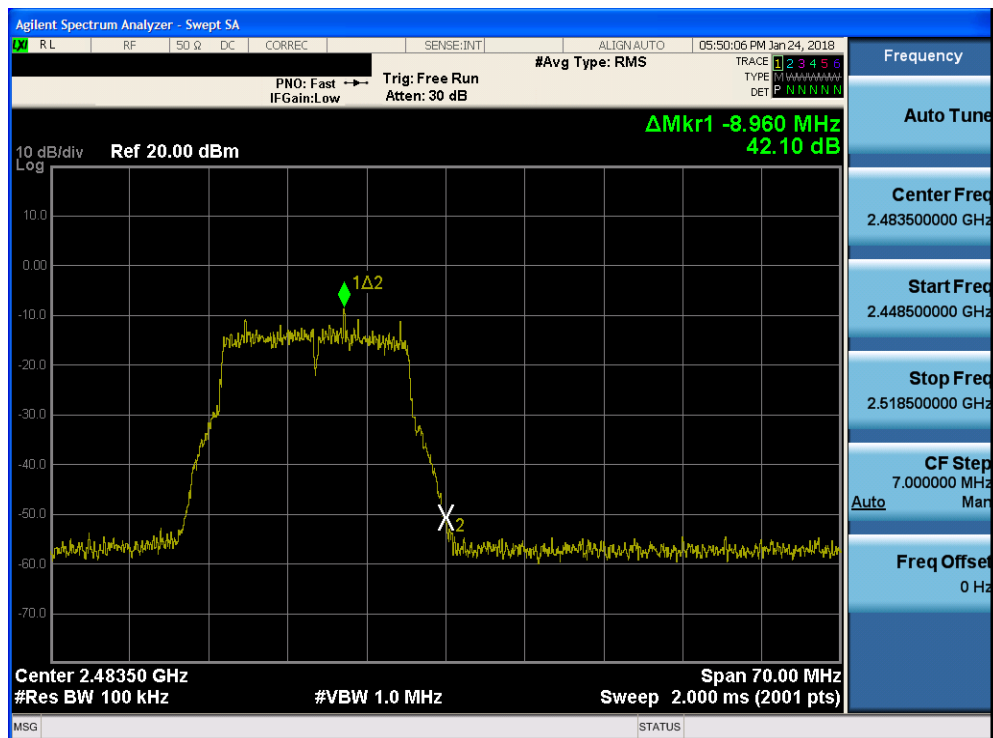


Plot 7-88. Band Edge Plot SISO ANT1 (802.11g– Ch. 1)

FCC ID: BCGA1954	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1710060006-05.BCG	Test Dates: 10/31-2/17/2018	EUT Type: Tablet Device	Page 70 of 157

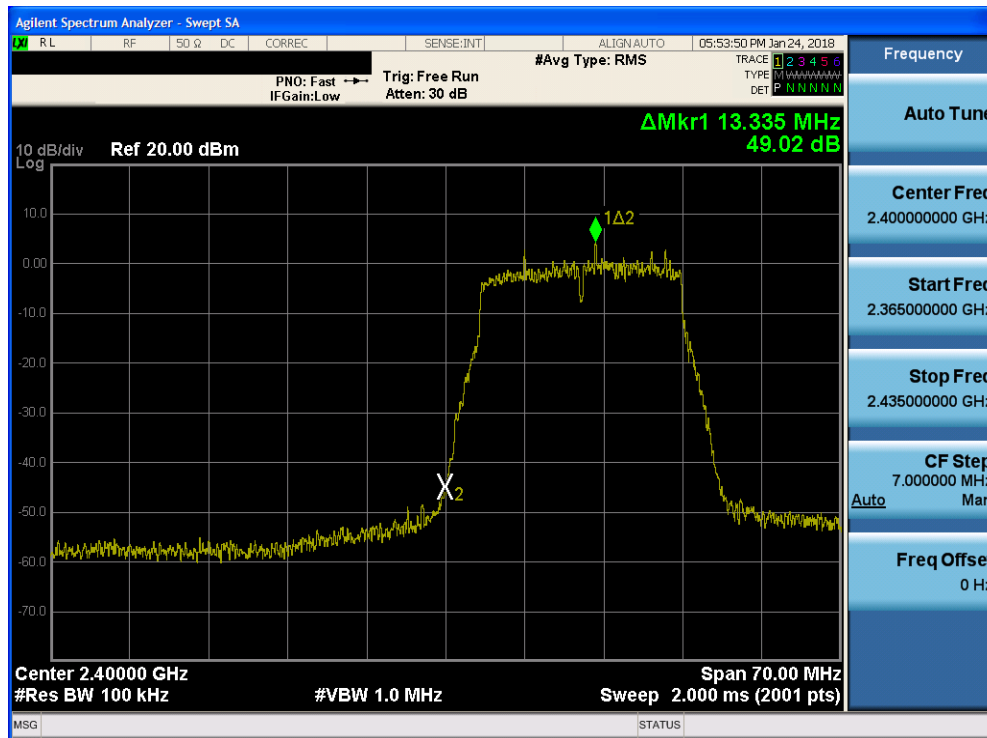


Plot 7-89. Band Edge Plot SISO ANT1 (802.11g - Ch. 11)

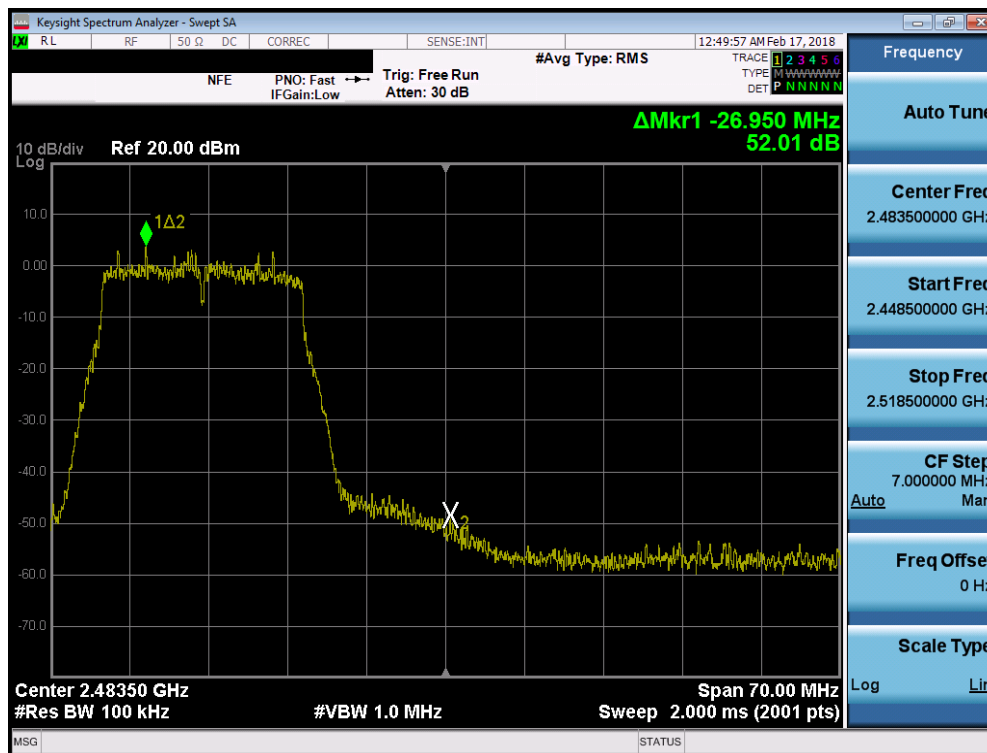


Plot 7-90. Band Edge Plot SISO ANT1 (802.11g - Ch. 13)

FCC ID: BCGA1954	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1710060006-05.BCG	Test Dates: 10/31-2/17/2018	EUT Type: Tablet Device	Page 71 of 157

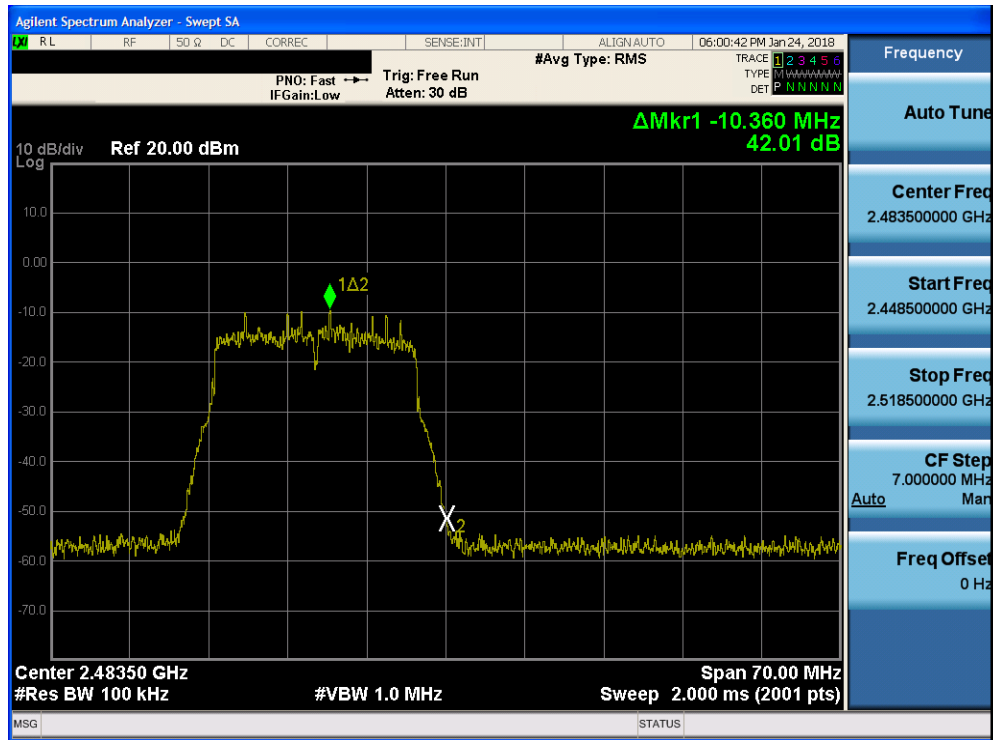


Plot 7-91. Band Edge Plot SISO ANT1 (802.11n (2.4GHz) – Ch. 1)



Plot 7-92. Band Edge Plot SISO ANT1 (802.11n (2.4GHz) – Ch. 11)

FCC ID: BCGA1954	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1710060006-05.BCG	Test Dates: 10/31-2/17/2018	EUT Type: Tablet Device	Page 72 of 157

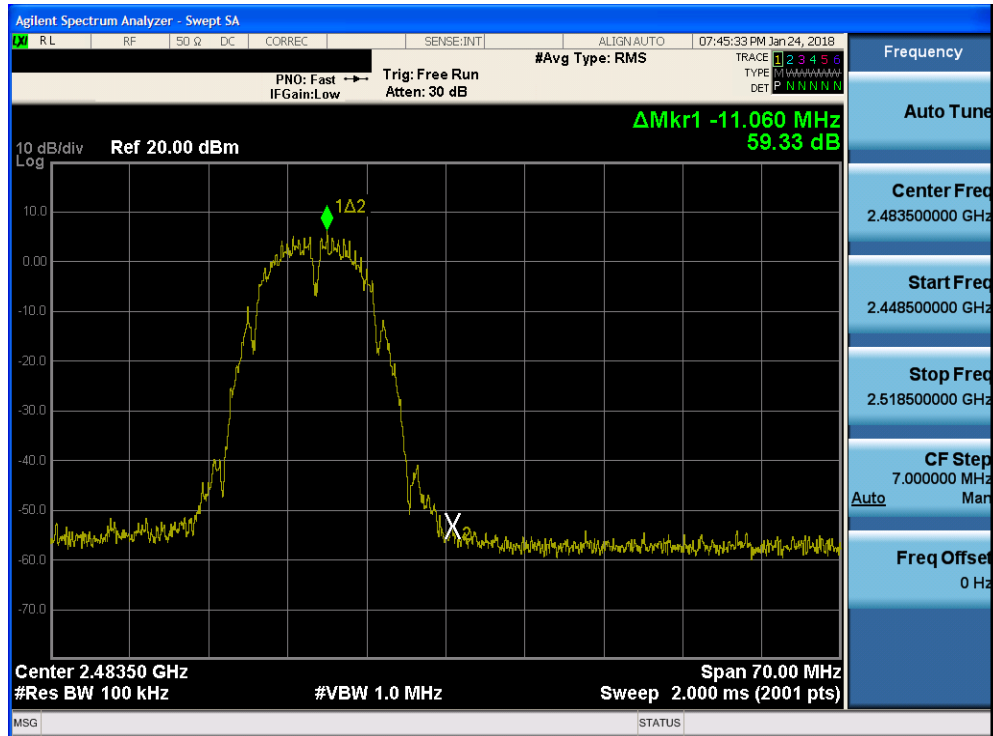


Plot 7-93. Band Edge Plot SISO ANT1 (802.11n (2.4GHz) – Ch. 13)

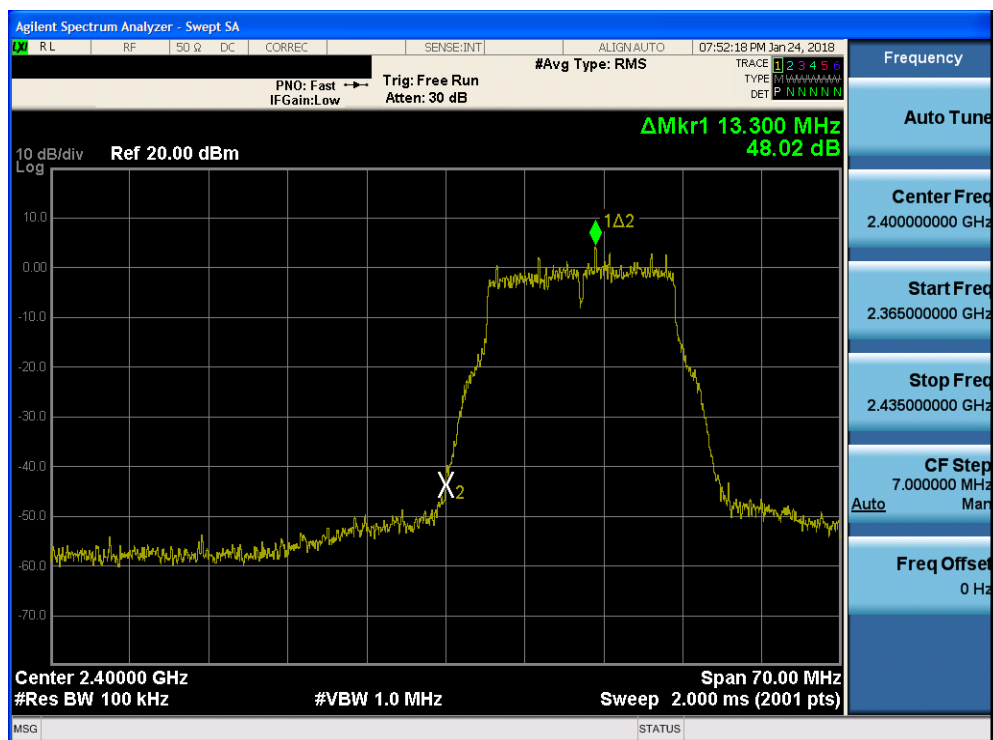
FCC ID: BCGA1954	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1710060006-05.BCG	Test Dates: 10/31-2/17/2018	EUT Type: Tablet Device	Page 73 of 157



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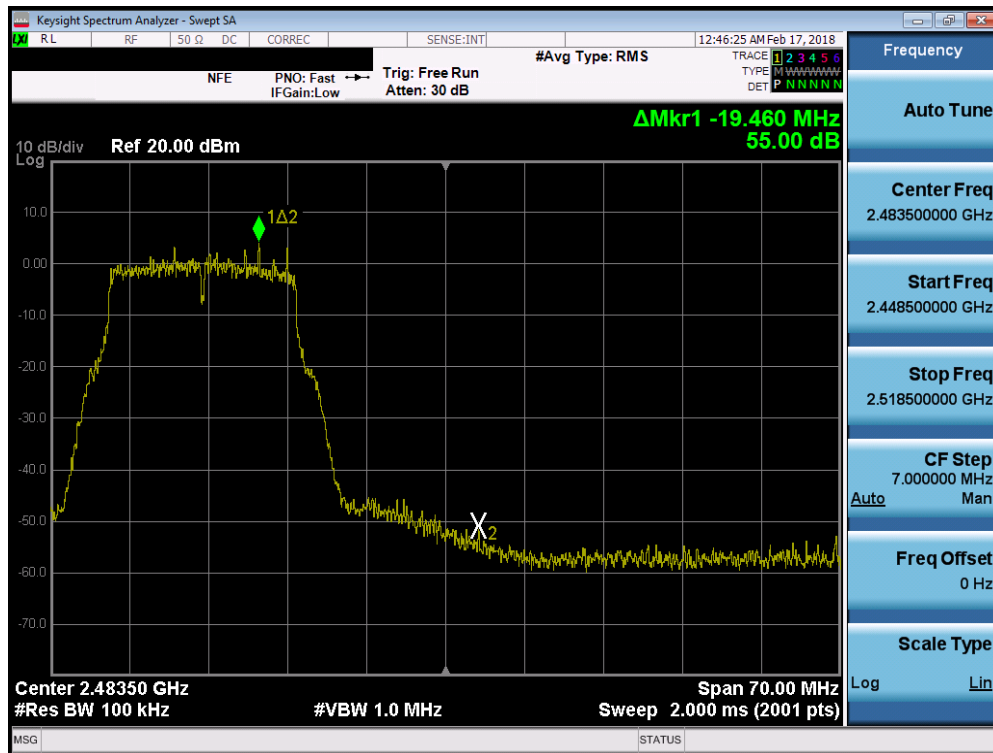


Plot 7-96. Band Edge Plot SISO ANT2 (802.11b – Ch. 13)

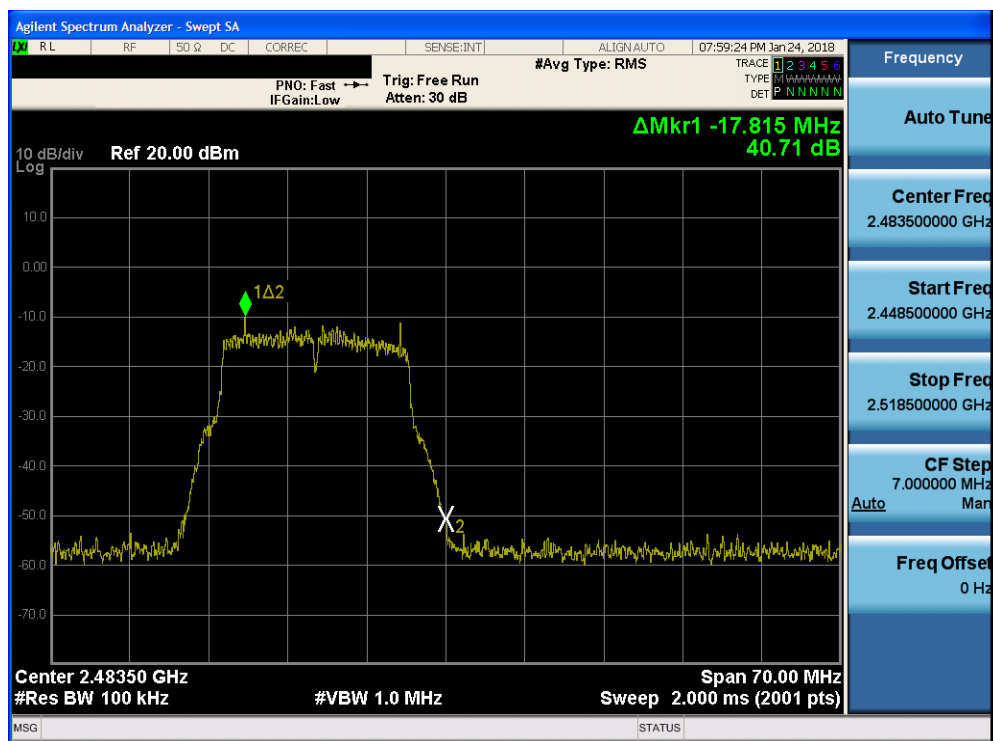


Plot 7-97. Band Edge Plot SISO ANT2 (802.11g– Ch. 1)

FCC ID: BCGA1954	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1710060006-05.BCG	Test Dates: 10/31-2/17/2018	EUT Type: Tablet Device	Page 75 of 157

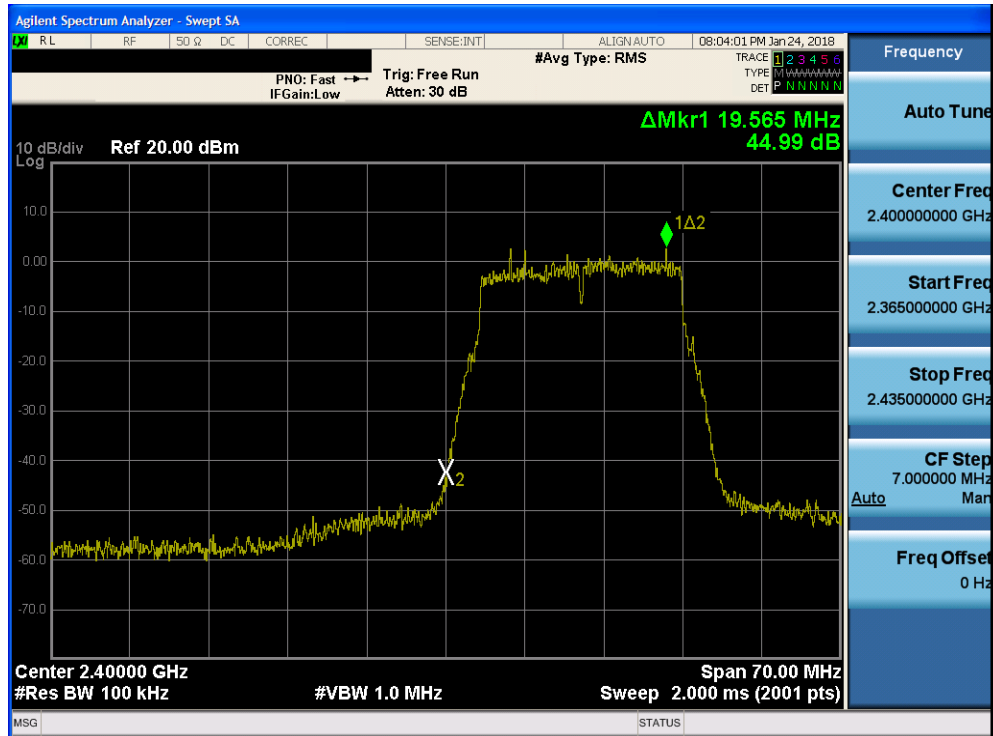


Plot 7-98. Band Edge Plot SISO ANT2 (802.11g - Ch. 11)

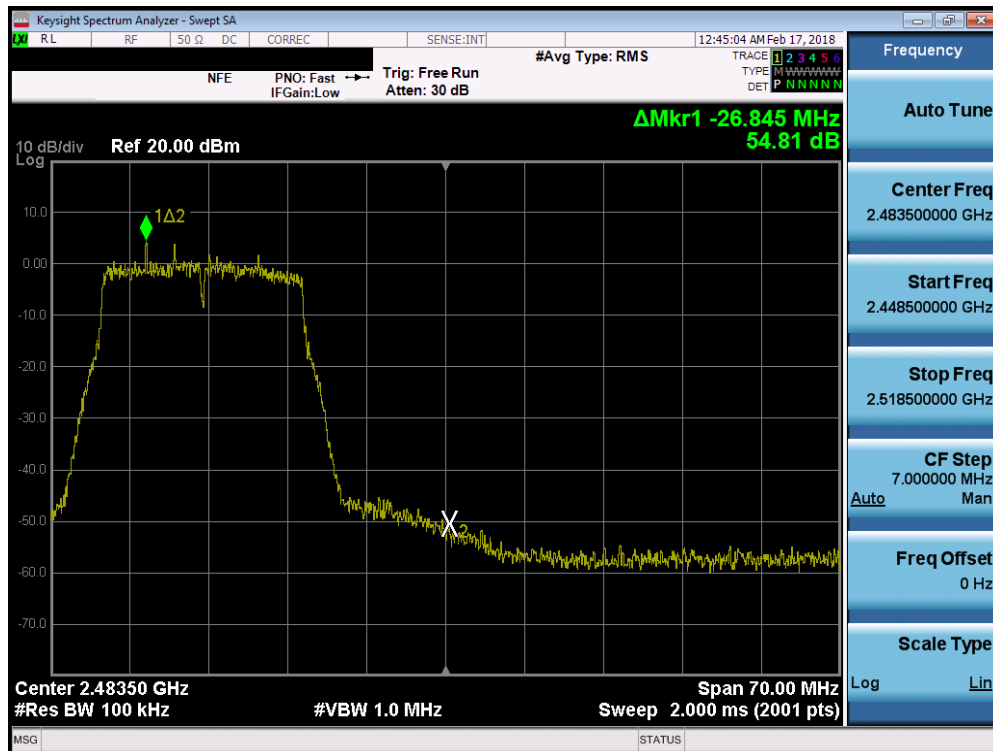


Plot 7-99. Band Edge Plot SISO ANT2 (802.11g - Ch. 13)

FCC ID: BCGA1954	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1710060006-05.BCG	Test Dates: 10/31-2/17/2018	EUT Type: Tablet Device	Page 76 of 157

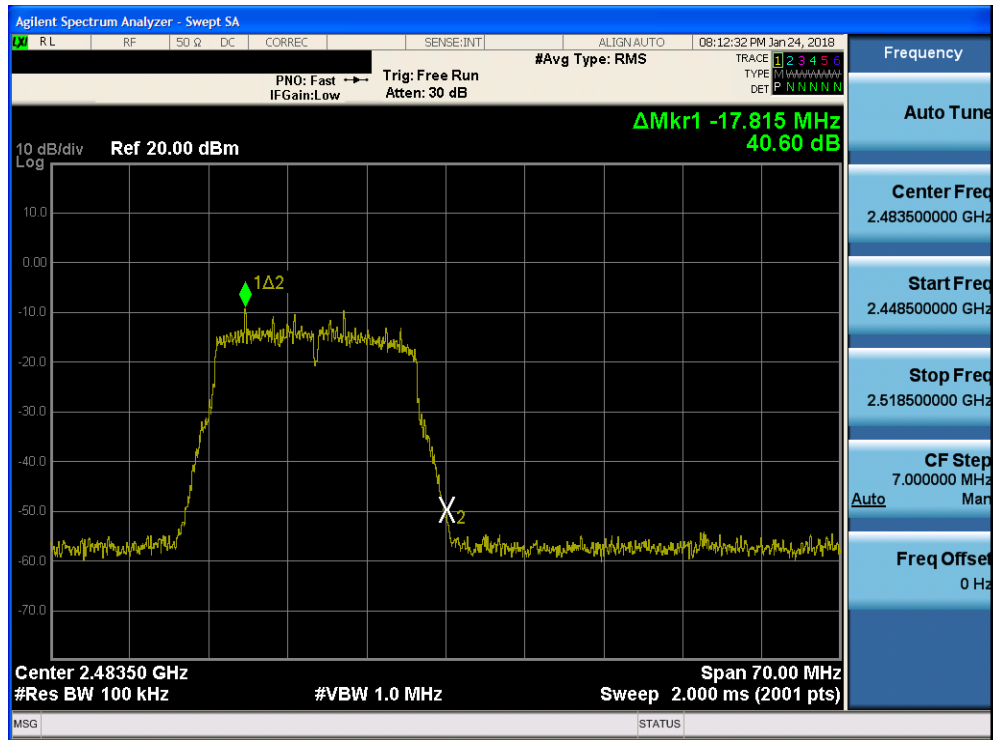


Plot 7-100. Band Edge Plot SISO ANT2 (802.11n (2.4GHz) – Ch. 1)



Plot 7-101. Band Edge Plot SISO ANT2 (802.11n (2.4GHz) – Ch. 11)

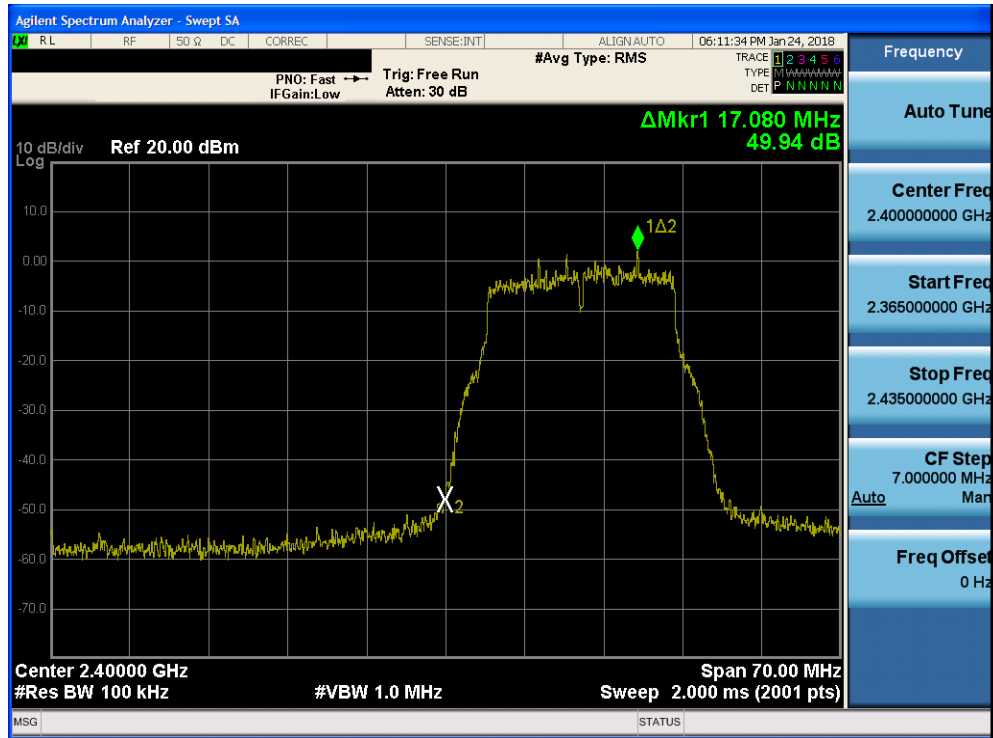
FCC ID: BCGA1954	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1710060006-05.BCG	Test Dates: 10/31-2/17/2018	EUT Type: Tablet Device	Page 77 of 157



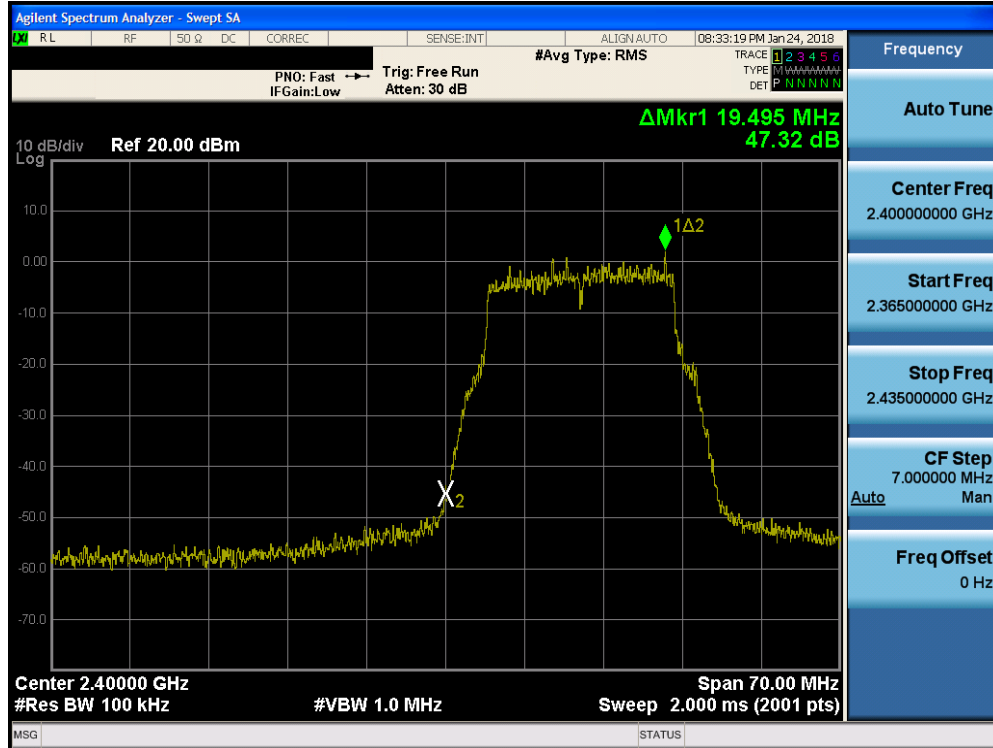
Plot 7-102. Band Edge Plot SISO ANT2 (802.11n (2.4GHz) – Ch. 13)

FCC ID: BCGA1954	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1710060006-05.BCG	Test Dates: 10/31-2/17/2018	EUT Type: Tablet Device	Page 78 of 157

MIMO Conducted Emissions at the Band Edge

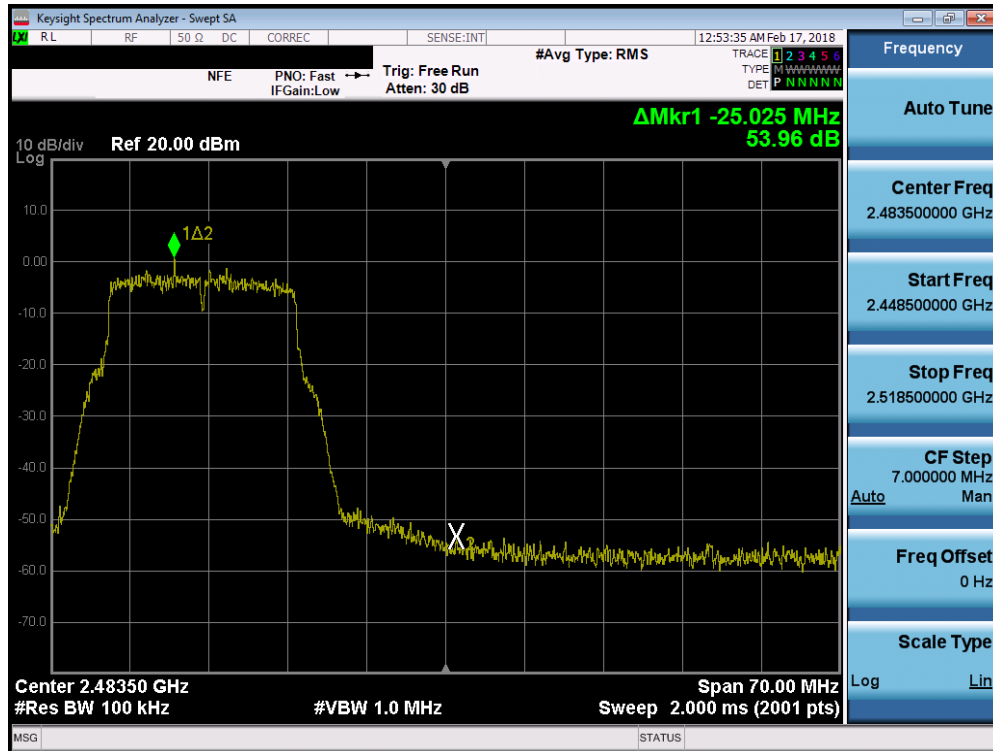


Plot 7-103. Band Edge Plot MIMO ANT1 (802.11g- Ch. 1)

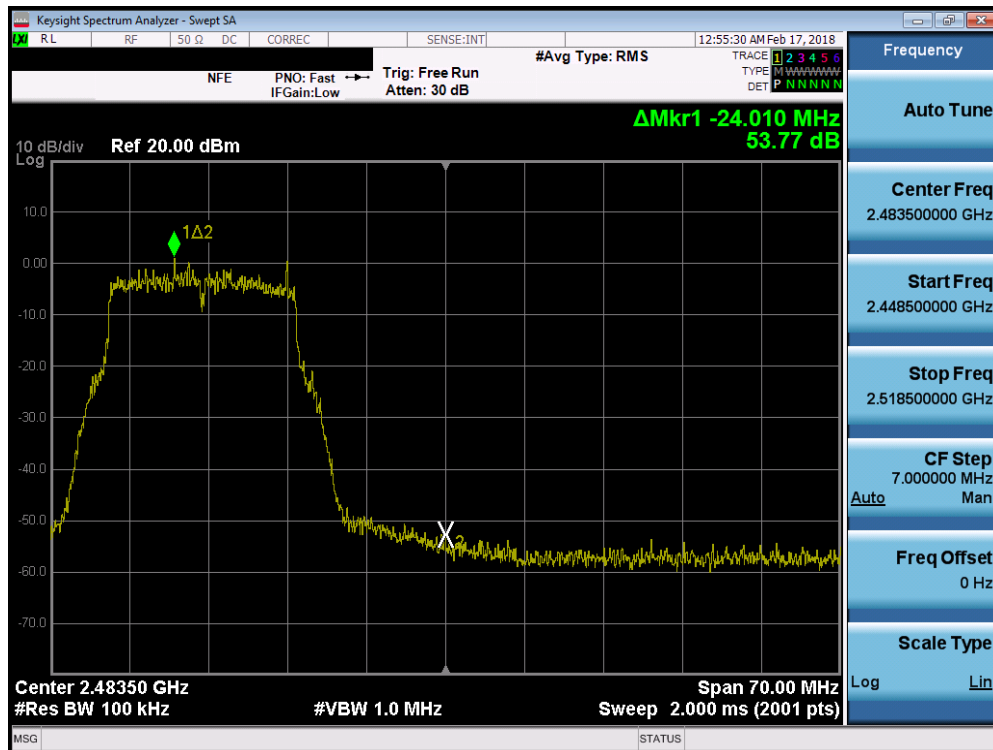


Plot 7-104. Band Edge Plot MIMO ANT2 (802.11g- Ch. 1)

FCC ID: BCGA1954	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1710060006-05.BCG	Test Dates: 10/31-2/17/2018	EUT Type: Tablet Device	Page 79 of 157

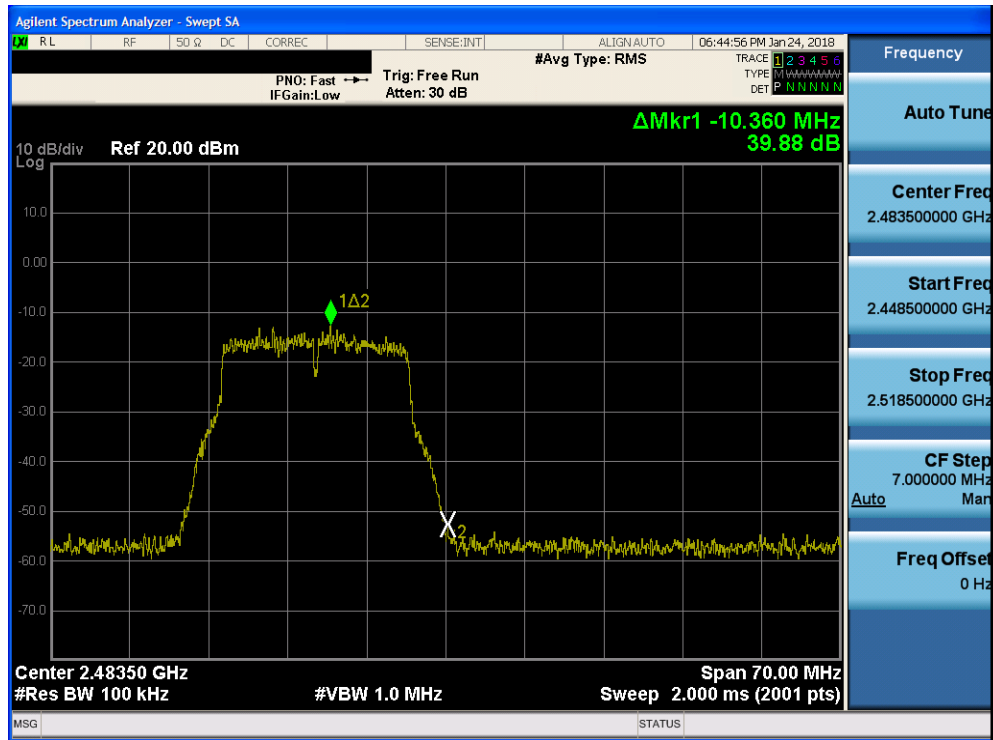


Plot 7-105. Band Edge Plot MIMO ANT1 (802.11g – Ch. 11)

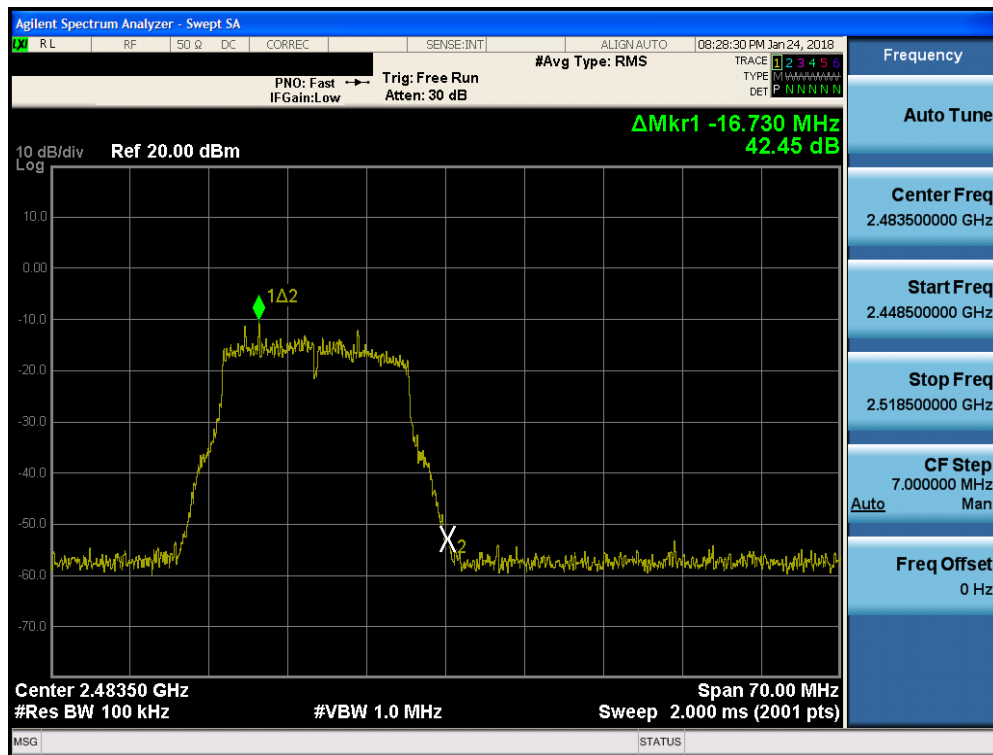


Plot 7-106. Band Edge Plot MIMO ANT1 (802.11g – Ch. 11)

FCC ID: BCGA1954	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1710060006-05.BCG	Test Dates: 10/31-2/17/2018	EUT Type: Tablet Device	Page 80 of 157

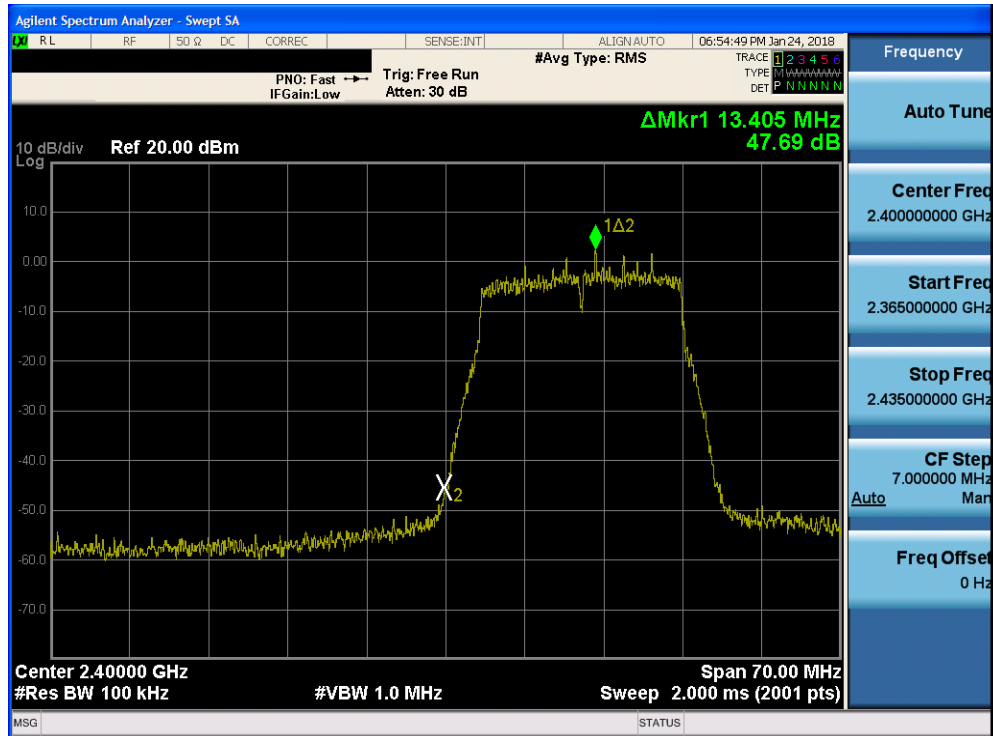


Plot 7-107. Band Edge Plot MIMO ANT1 (802.11g – Ch. 13)

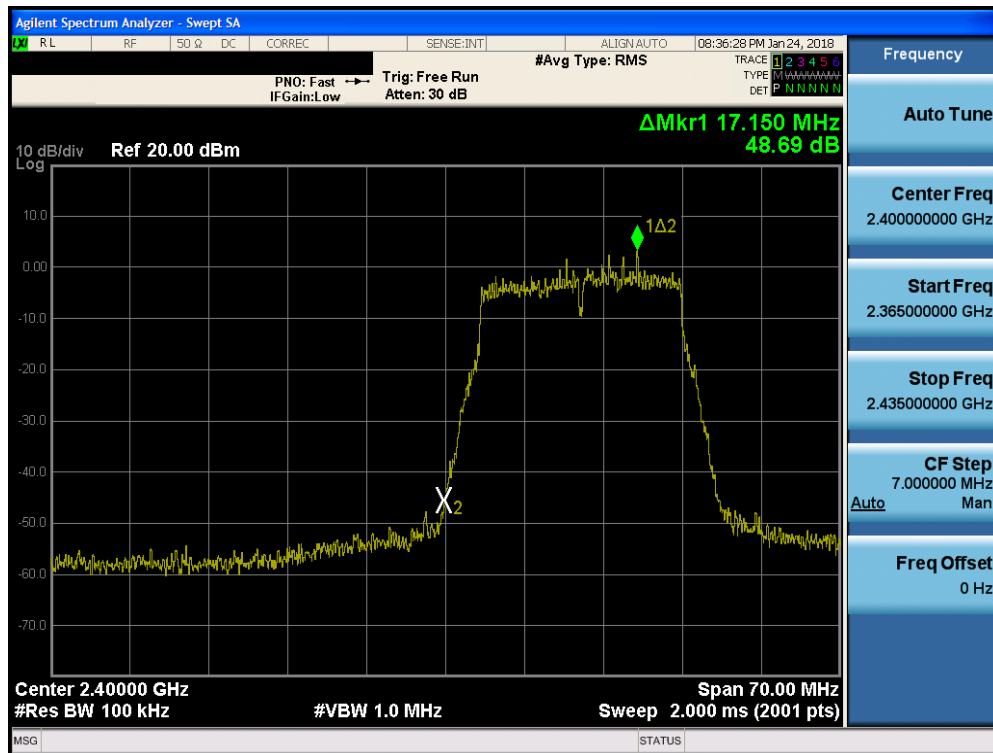


Plot 7-108. Band Edge Plot MIMO ANT2 (802.11g – Ch. 13)

FCC ID: BCGA1954	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1710060006-05.BCG	Test Dates: 10/31-2/17/2018	EUT Type: Tablet Device	Page 81 of 157

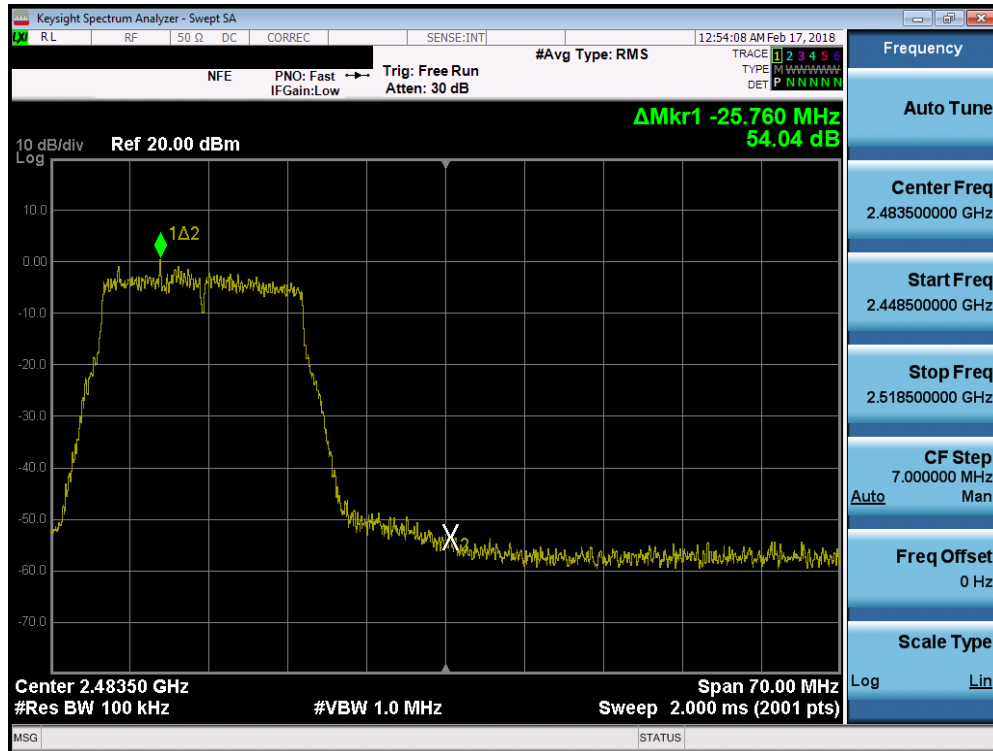


Plot 7-109. Band Edge Plot MIMO ANT1 (802.11n (2.4GHz) – Ch. 1)

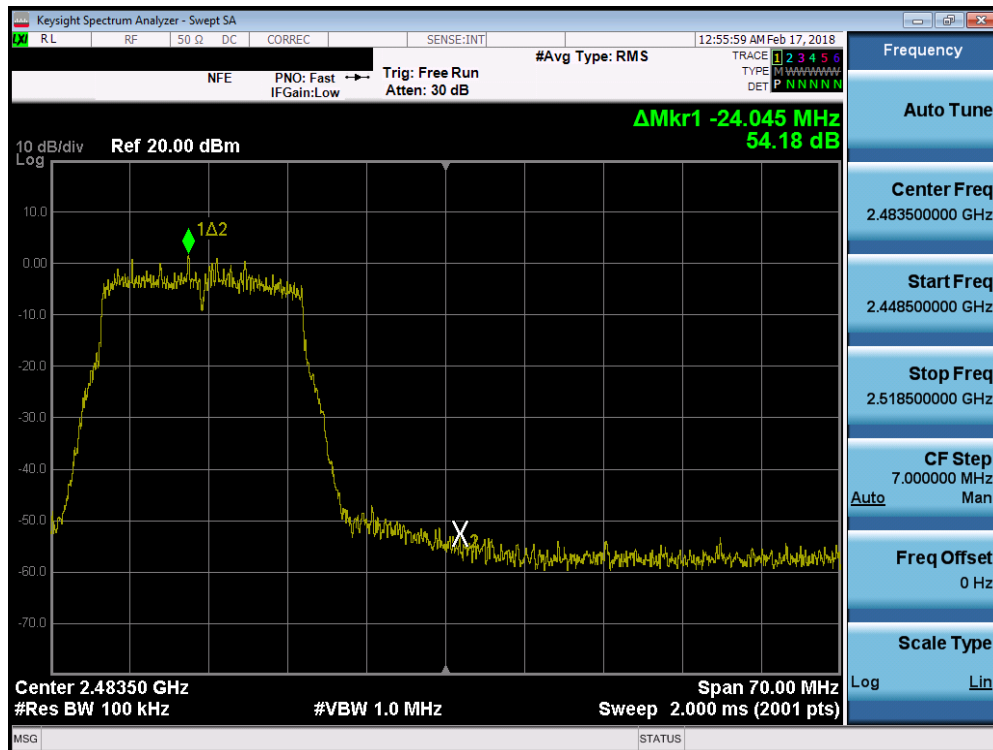


Plot 7-110. Band Edge Plot MIMO ANT2 (802.11n (2.4GHz) – Ch. 1)

FCC ID: BCGA1954	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1710060006-05.BCG	Test Dates: 10/31-2/17/2018	EUT Type: Tablet Device	Page 82 of 157

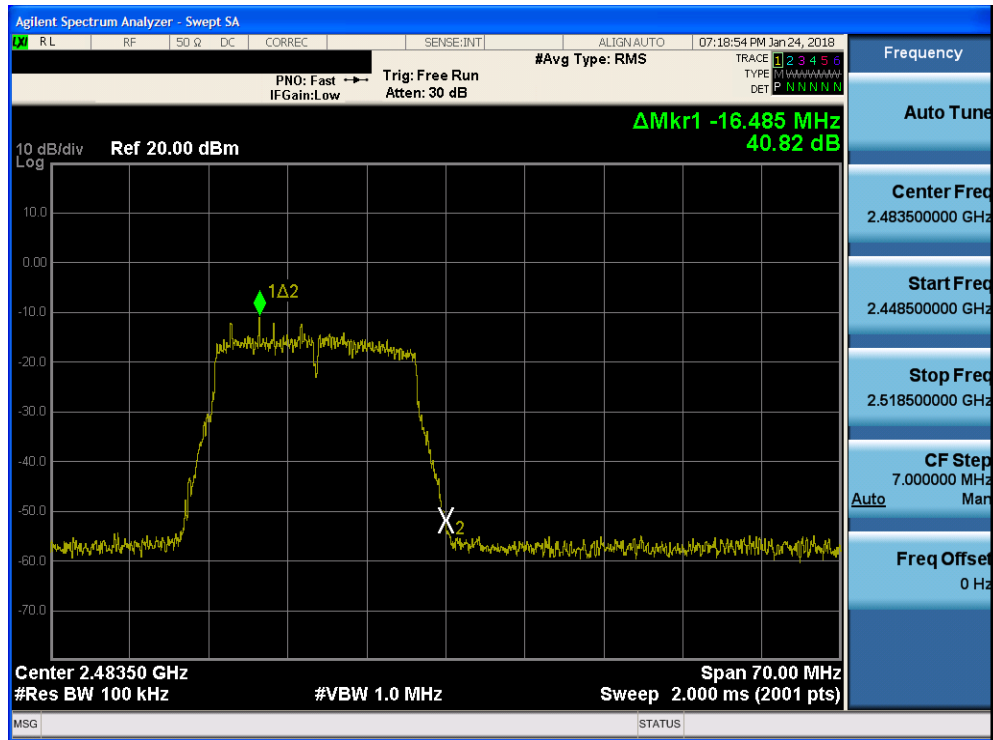


Plot 7-111. Band Edge Plot MIMO ANT1 (802.11n (2.4GHz) – Ch. 11)

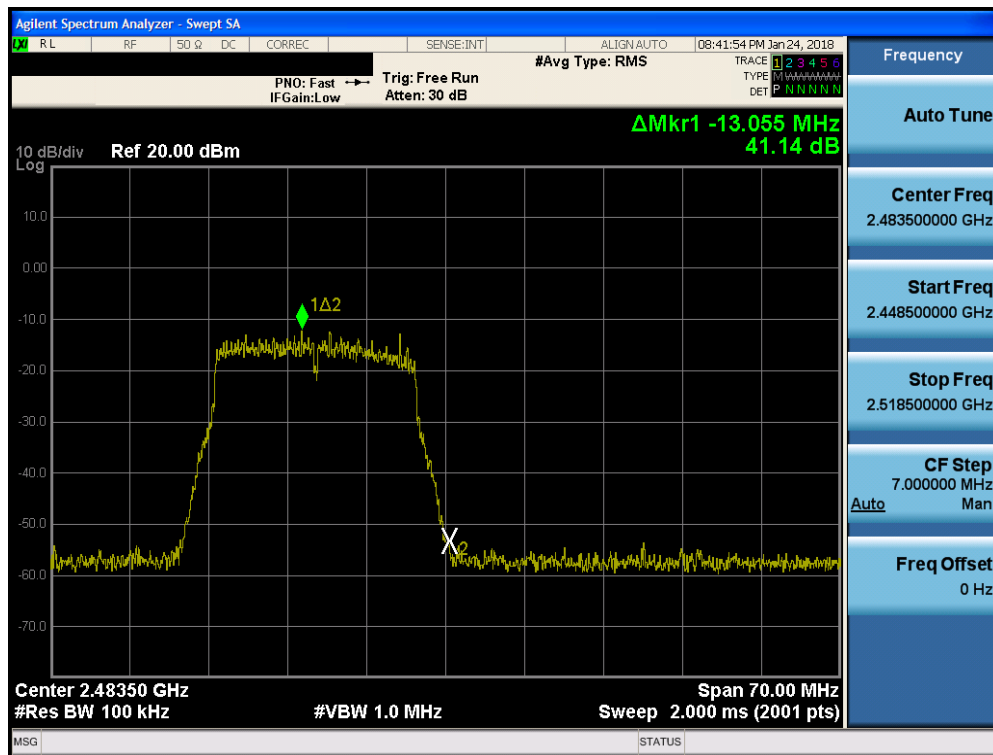


Plot 7-112. Band Edge Plot MIMO ANT2 (802.11n (2.4GHz) – Ch. 11)

FCC ID: BCGA1954	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1710060006-05.BCG	Test Dates: 10/31-2/17/2018	EUT Type: Tablet Device	Page 83 of 157



Plot 7-113. Band Edge Plot MIMO ANT1 (802.11n (2.4GHz) – Ch. 13)



Plot 7-114. Band Edge Plot MIMO ANT2 (802.11n (2.4GHz) – Ch. 13)

FCC ID: BCGA1954	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1710060006-05.BCG	Test Dates: 10/31-2/17/2018	EUT Type: Tablet Device	Page 84 of 157

7.6 Conducted Spurious Emissions

§15.247(d); RSS-247 [5.5]

Test Overview and Limit

All out of band emissions are measured with a spectrum analyzer connected to the antenna terminal of the EUT while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies. All data rates were investigated to determine the worst case configuration. For the following out of band conducted spurious emissions plots, the EUT was investigated in all available data rates for “b”, “g”, and “n” modes. The worst case spurious emissions for the 2.4GHz band were found while transmitting in “b” mode at 1 Mbps and are shown in the plots below.

The limit for out-of-band spurious emissions at the band edge is 30dB 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 11.1 of ANSI C63.10-2013 and KDB 558074 D01 v04.

Test Procedure Used

ANSI C63.10-2013 – Section 11.11.3
KDB 558074 D01 v04 – Section 11.3
ANSI C63.10-2013 – Section 14.3.3
KDB 662911 D01 v02r01 – Section E3)b)

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

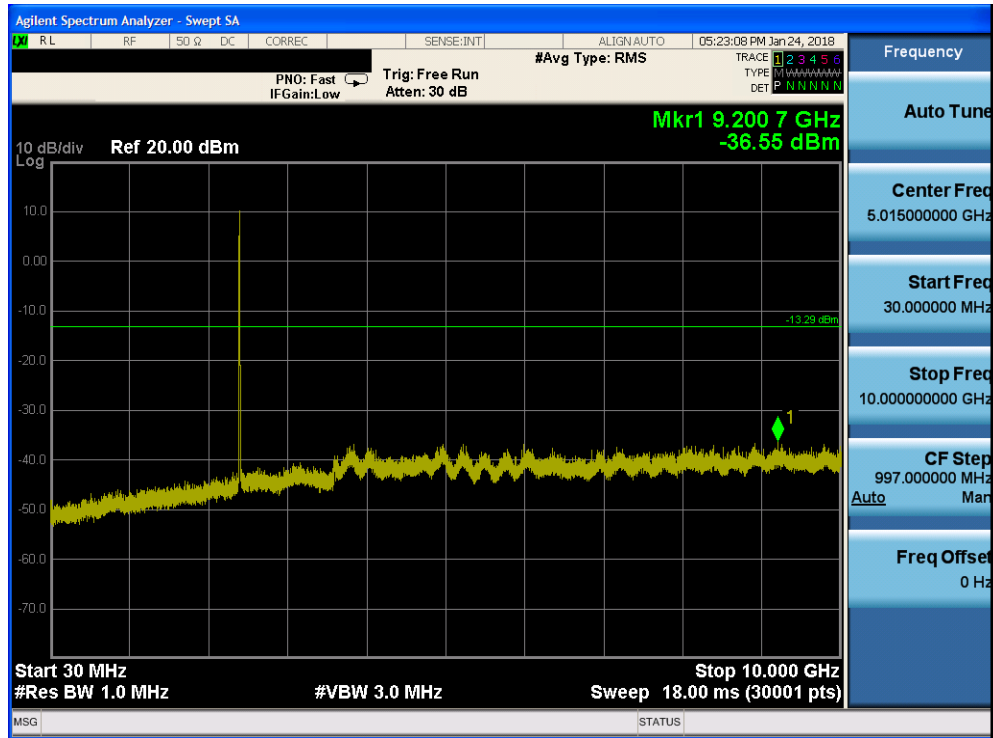
FCC ID: BCGA1954	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1710060006-05.BCG	Test Dates: 10/31-2/17/2018	EUT Type: Tablet Device	Page 85 of 157

Test Notes

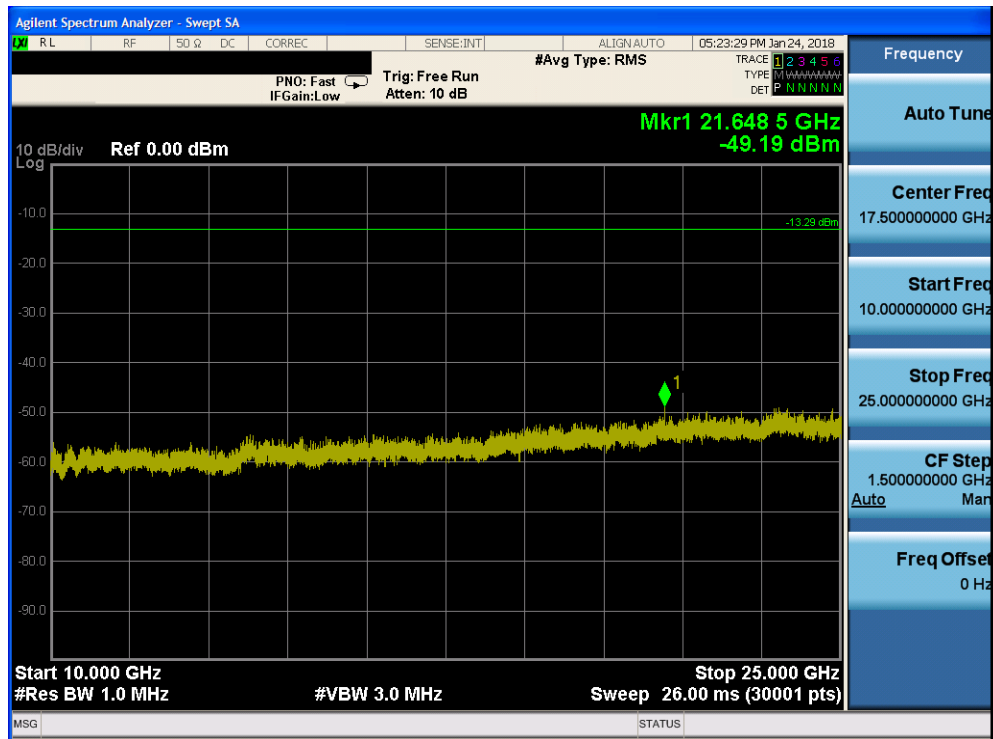
1. RBW was set to 1MHz rather than 100kHz in order to increase the measurement speed.
2. The display line shown in the following plots denotes the limit at 30dB below the fundamental emission level measured in a 100kHz bandwidth. However, since the traces in the following plots are measured with a 1MHz RBW, the display line may not necessarily appear to be 30dB 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. The conducted spurious emissions were measured to relative limits. Therefore, in accordance with ANSI C63.10-2013 and KDB 662911 D01 v02r01 Section E)3)b), it was unnecessary to show compliance through the summation of test results of the individual outputs.

FCC ID: BCGA1954	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
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SISO Antenna-1 Conducted Spurious Emission

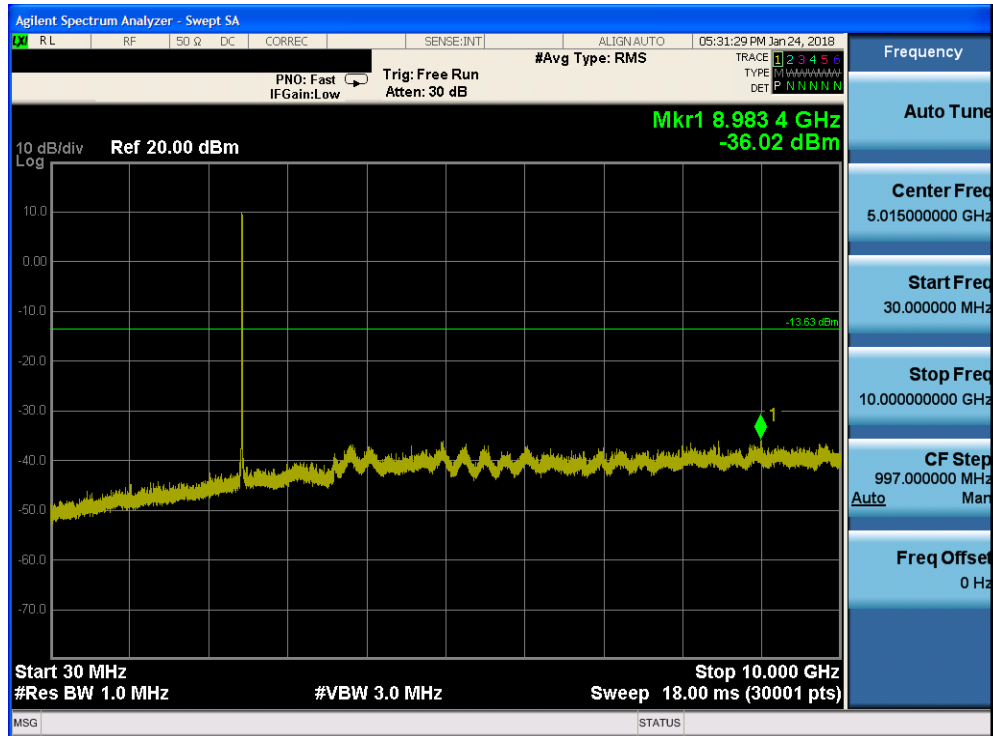


Plot 7-115. Conducted Spurious Plot SISO ANT1 (802.11b – Ch. 1)

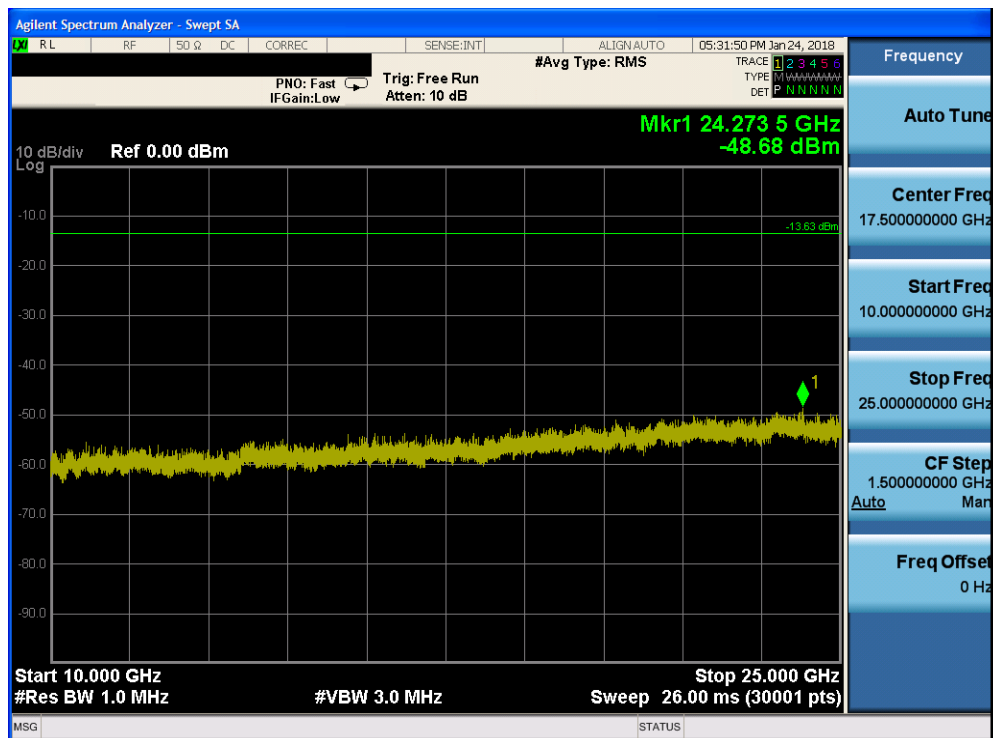


Plot 7-116. Conducted Spurious Plot SISO ANT1 (802.11b – Ch. 1)

FCC ID: BCGA1954	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1710060006-05.BCG	Test Dates: 10/31-2/17/2018	EUT Type: Tablet Device	Page 87 of 157

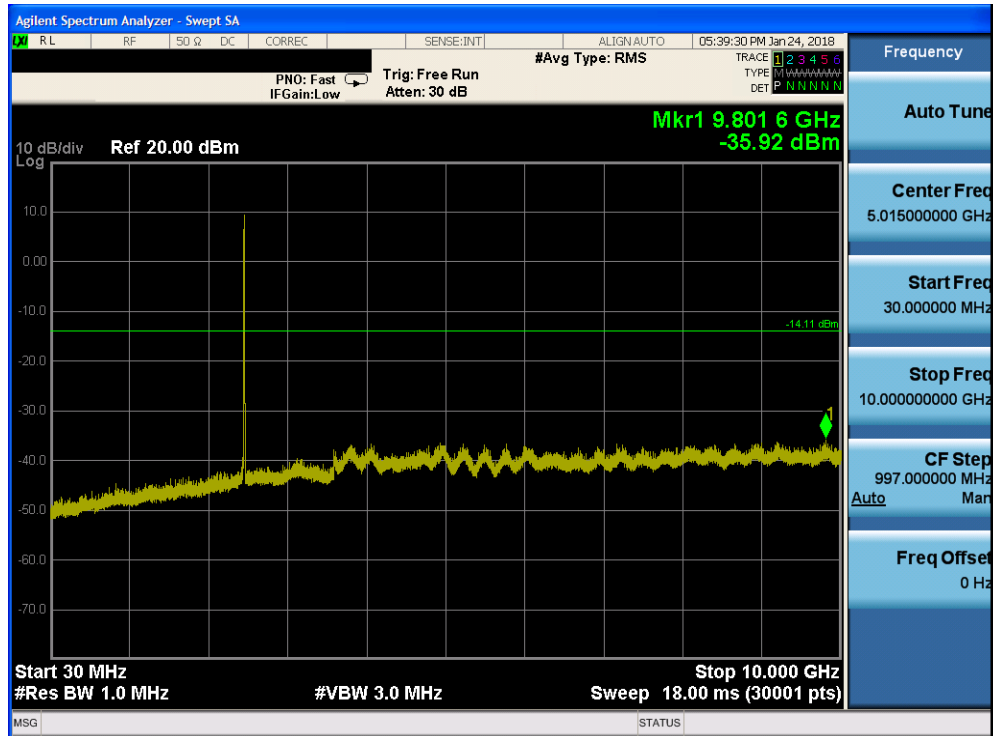


Plot 7-117. Conducted Spurious Plot SISO ANT1 (802.11b – Ch. 7)

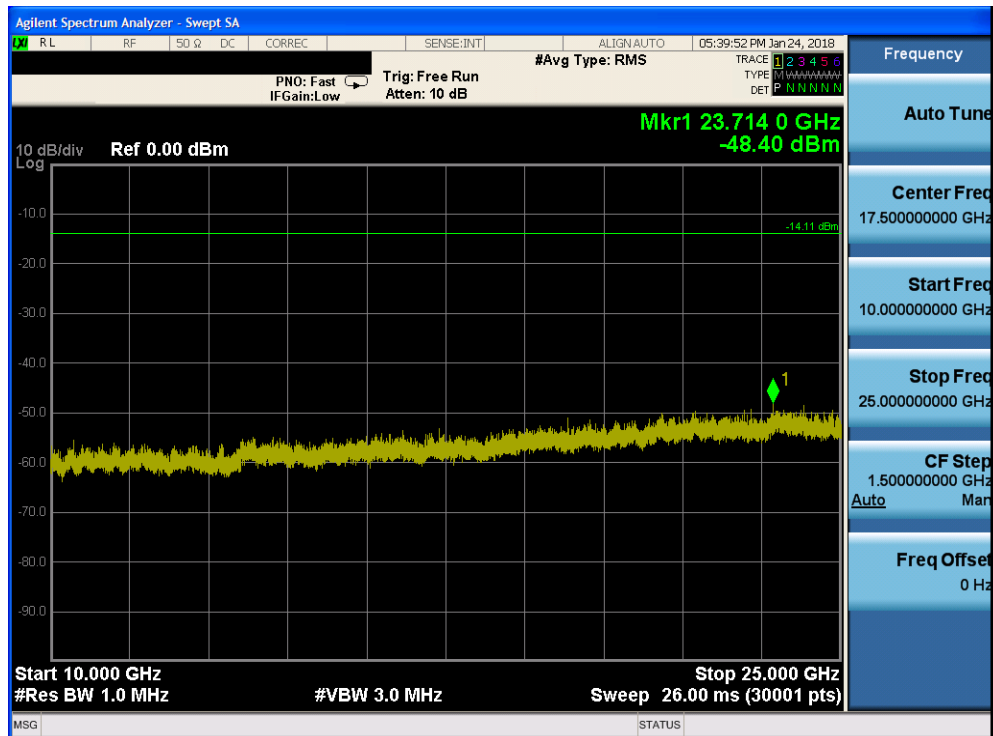


Plot 7-118. Conducted Spurious Plot SISO ANT1 (802.11b – Ch. 7)

FCC ID: BCGA1954	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1710060006-05.BCG	Test Dates: 10/31-2/17/2018	EUT Type: Tablet Device	Page 88 of 157



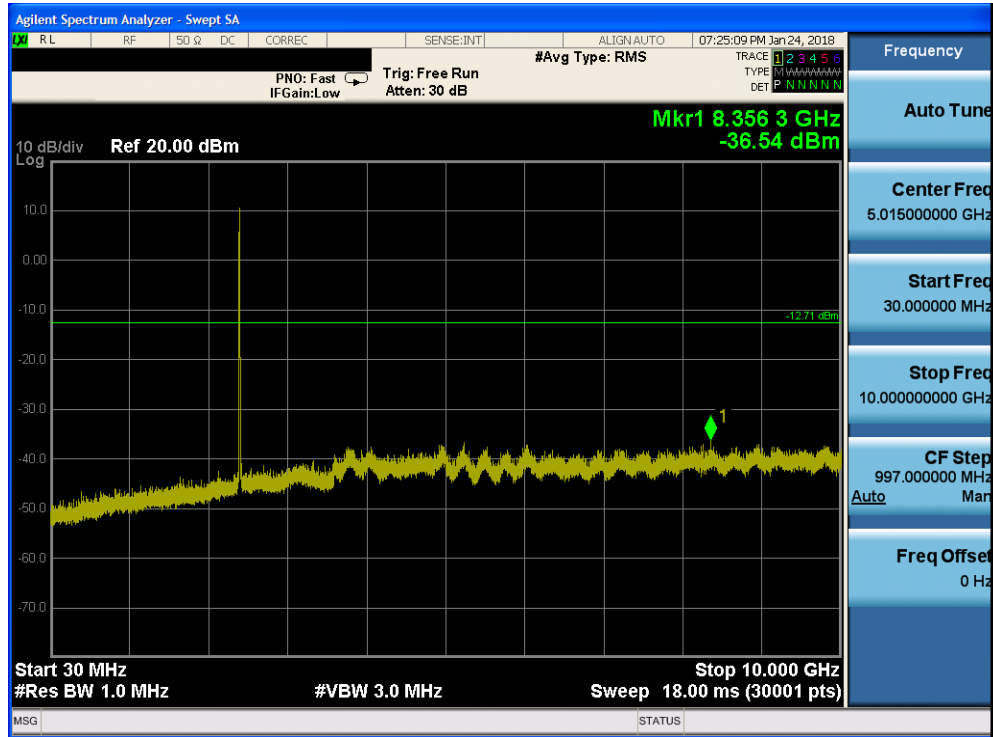
Plot 7-119. Conducted Spurious Plot SISO ANT1 (802.11b – Ch. 13)



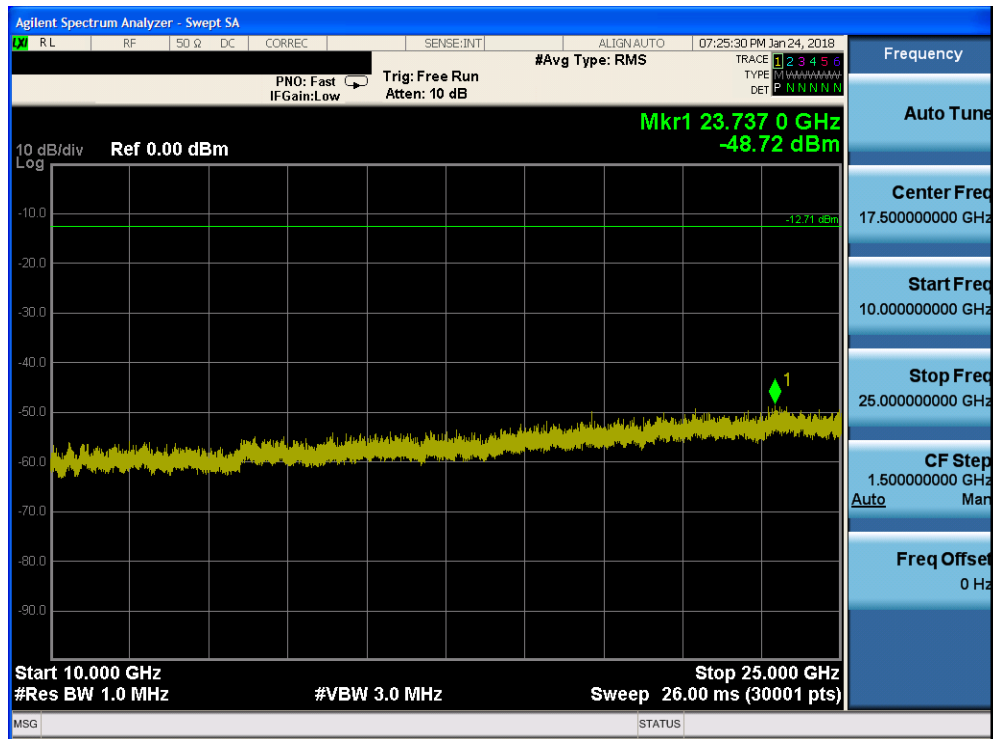
Plot 7-120. Conducted Spurious Plot SISO ANT1 (802.11b – Ch. 13)

FCC ID: BCGA1954	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1710060006-05.BCG	Test Dates: 10/31-2/17/2018	EUT Type: Tablet Device	Page 89 of 157

SISO Antenna-2 Conducted Spurious Emissions

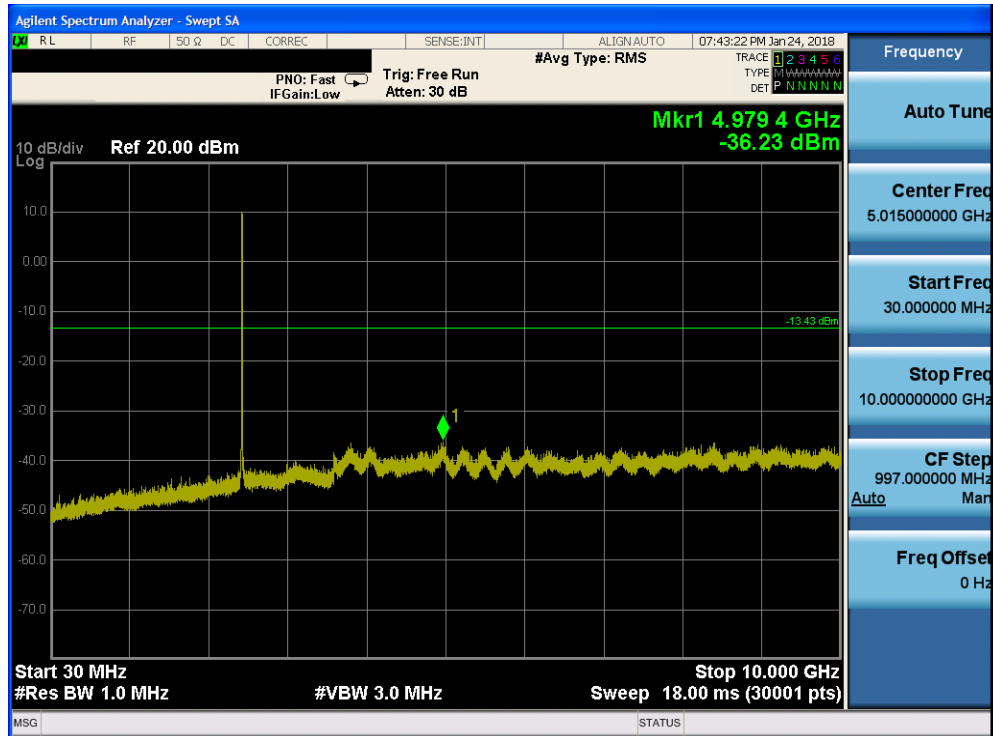


Plot 7-121. Conducted Spurious Plot SISO ANT2 (802.11b – Ch. 1)

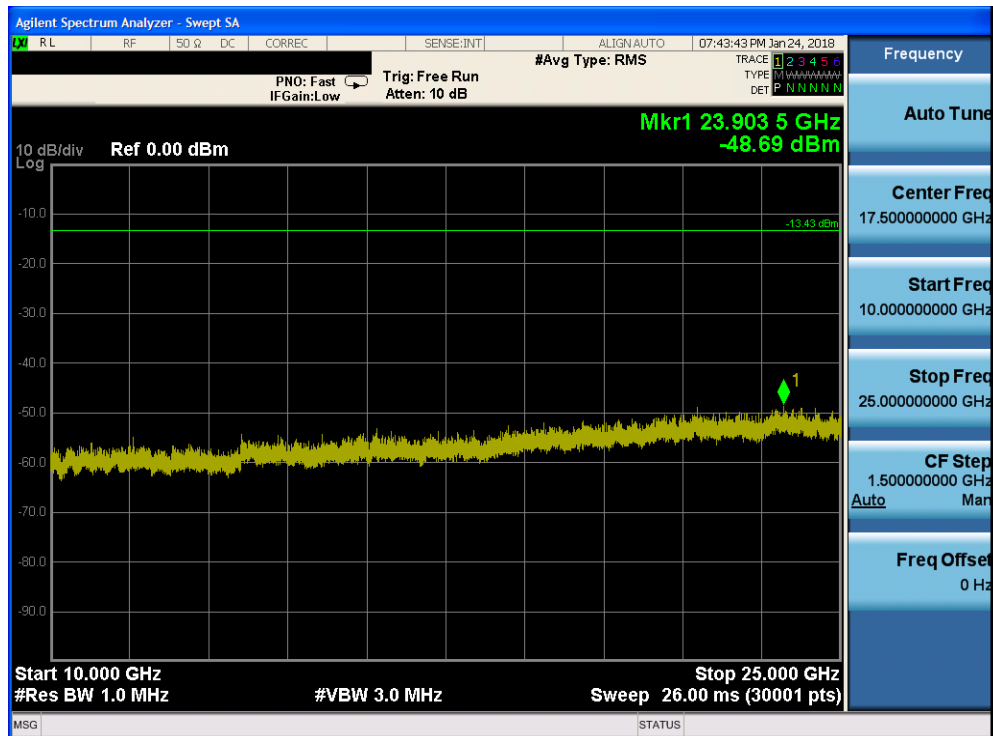


Plot 7-122. Conducted Spurious Plot SISO ANT2 (802.11b – Ch. 1)

FCC ID: BCGA1954	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1710060006-05.BCG	Test Dates: 10/31-2/17/2018	EUT Type: Tablet Device	Page 90 of 157

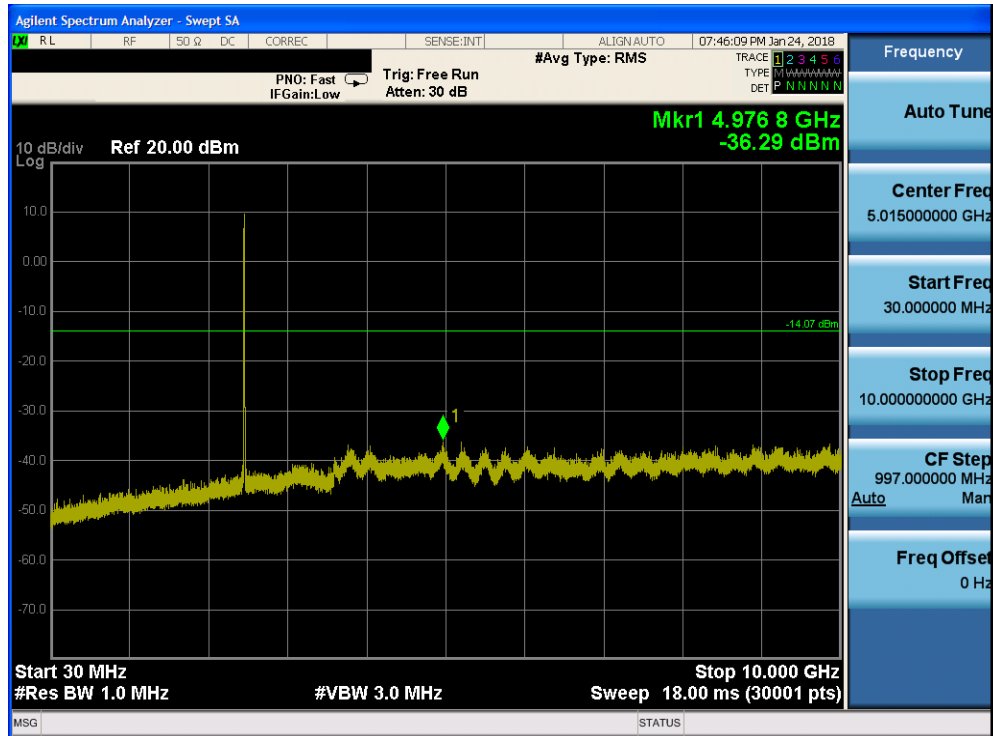


Plot 7-123. Conducted Spurious Plot SISO ANT2 (802.11b – Ch. 7)

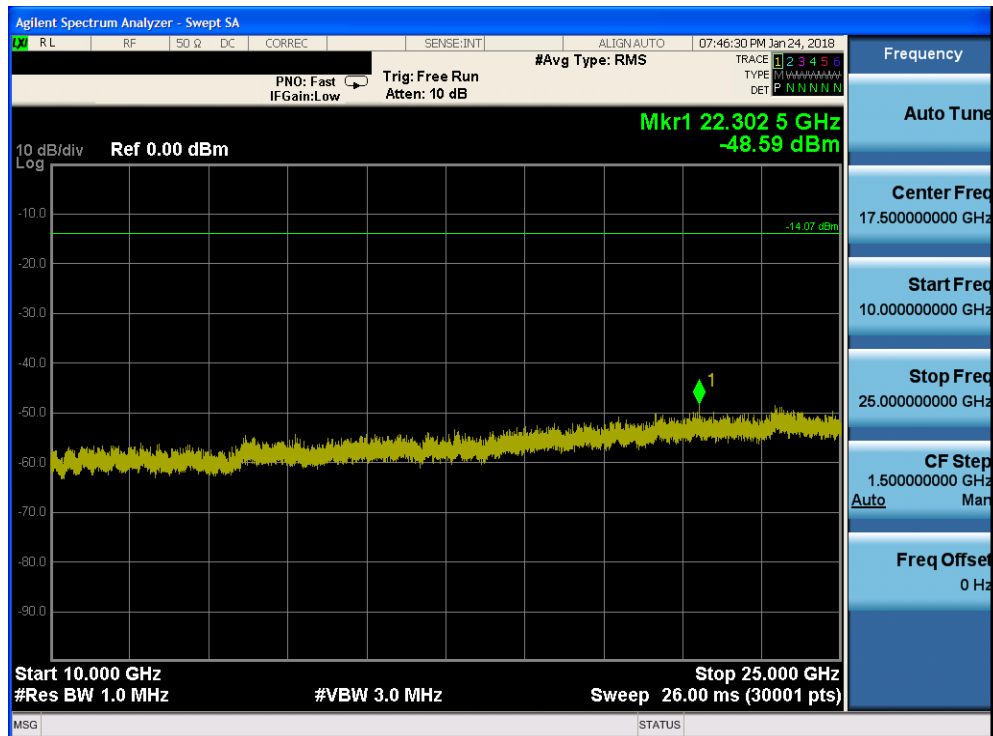


Plot 7-124. Conducted Spurious Plot SISO ANT2 (802.11b – Ch. 7)

FCC ID: BCGA1954	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1710060006-05.BCG	Test Dates: 10/31-2/17/2018	EUT Type: Tablet Device	Page 91 of 157



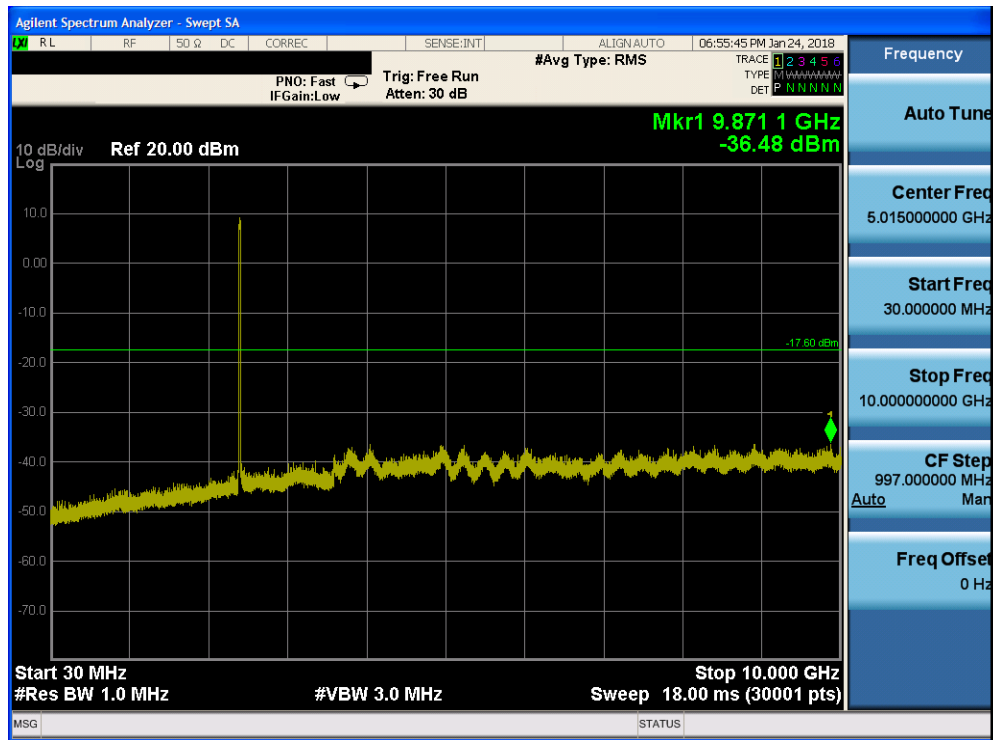
Plot 7-125. Conducted Spurious Plot SISO ANT2 (802.11b – Ch. 13)



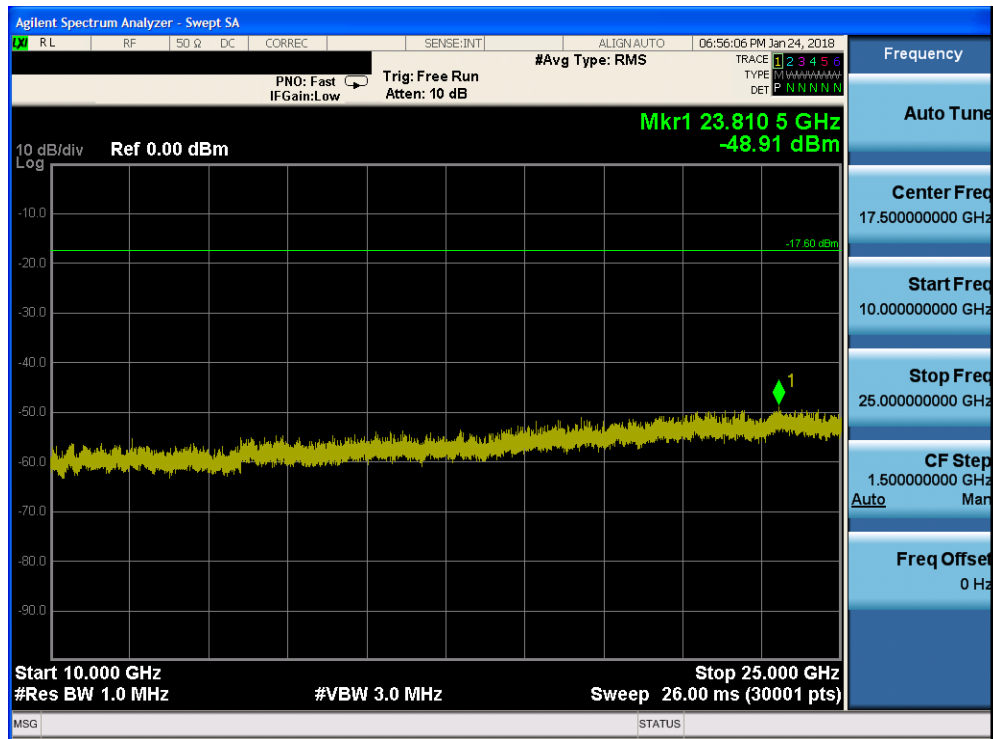
Plot 7-126. Conducted Spurious Plot SISO ANT2 (802.11b – Ch. 13)

FCC ID: BCGA1954	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1710060006-05.BCG	Test Dates: 10/31-2/17/2018	EUT Type: Tablet Device	Page 92 of 157

MIMO Conducted Spurious Emissions

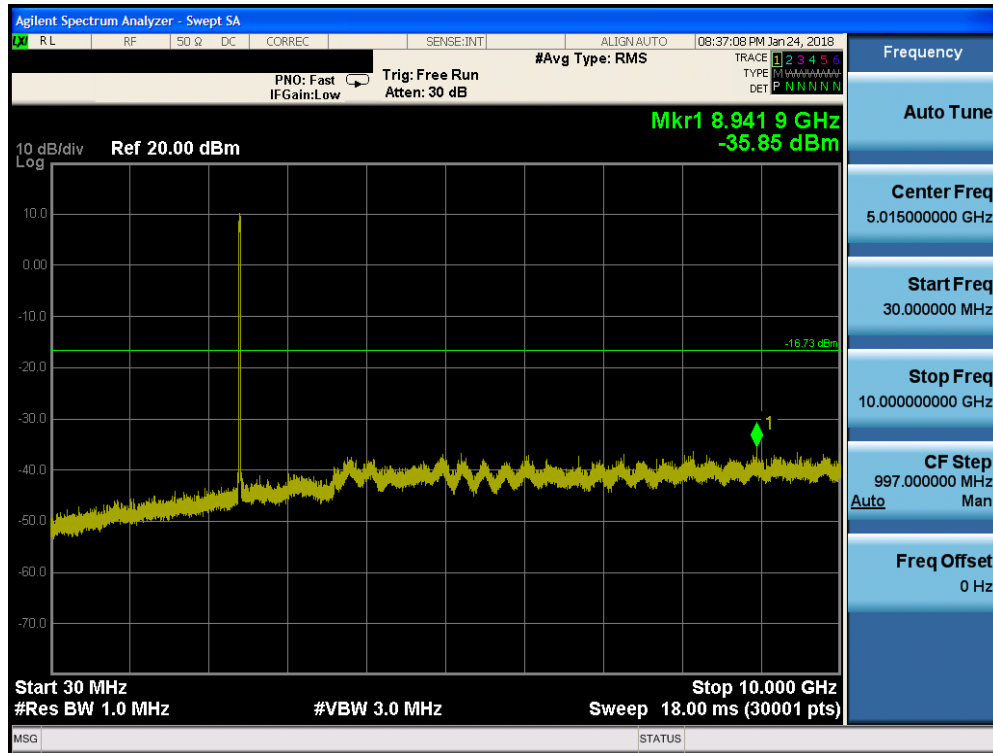


Plot 7-127. Conducted Spurious Plot MIMO ANT1 (802.11n – Ch. 1)

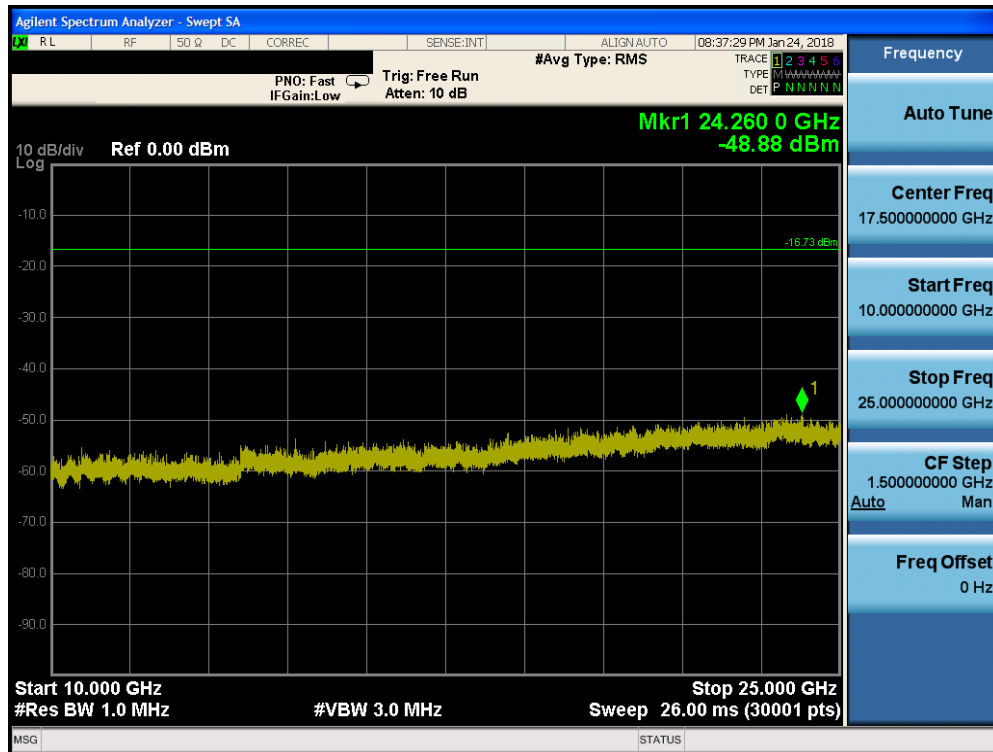


Plot 7-128. Conducted Spurious Plot MIMO ANT1 (802.11n – Ch. 1)

FCC ID: BCGA1954	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1710060006-05.BCG	Test Dates: 10/31-2/17/2018	EUT Type: Tablet Device	Page 93 of 157

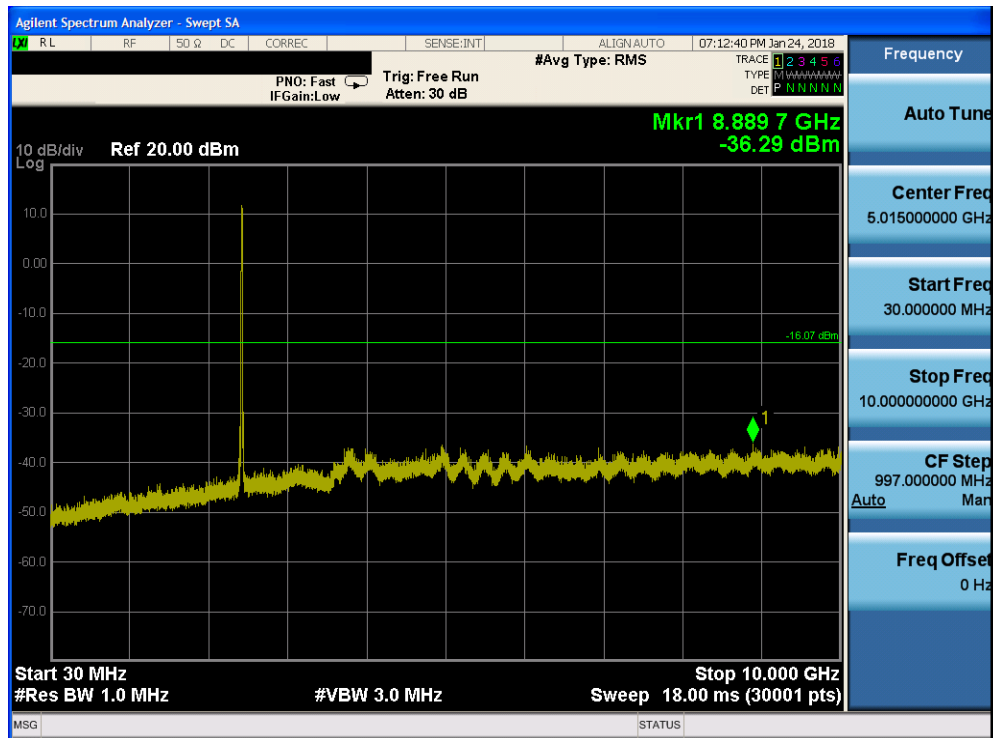


Plot 7-129. Conducted Spurious Plot MIMO ANT2 (802.11n – Ch. 1)

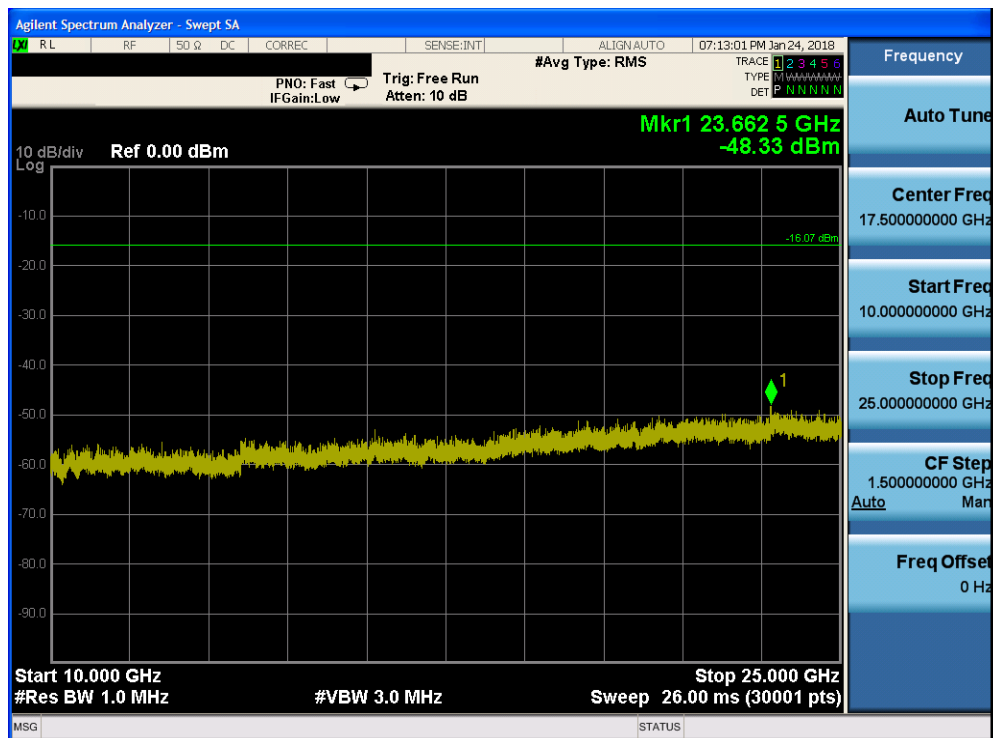


Plot 7-130. Conducted Spurious Plot MIMO ANT2 (802.11n – Ch. 1)

FCC ID: BCGA1954	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1710060006-05.BCG	Test Dates: 10/31-2/17/2018	EUT Type: Tablet Device	Page 94 of 157

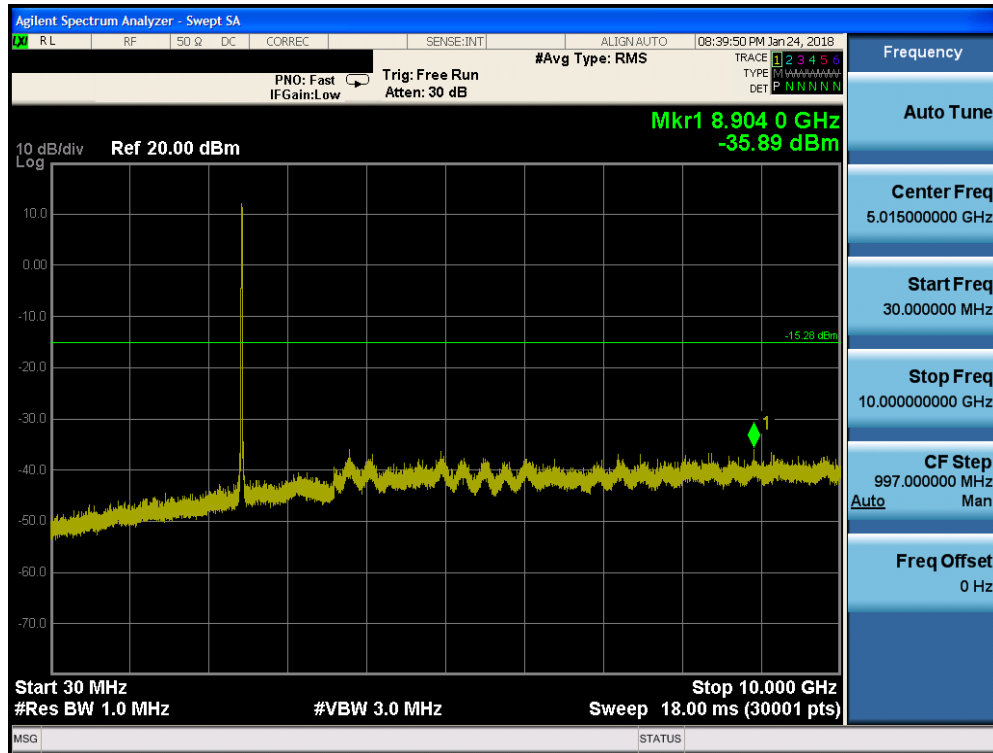


Plot 7-131. Conducted Spurious Plot MIMO ANT1 (802.11n – Ch. 7)

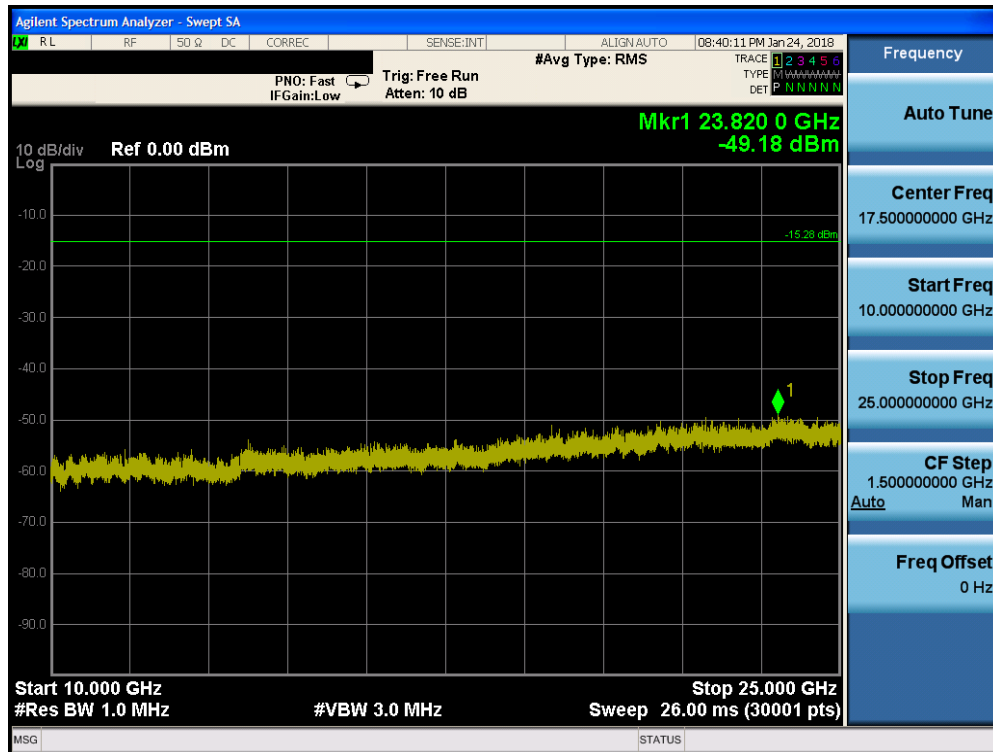


Plot 7-132. Conducted Spurious Plot MIMO ANT1 (802.11n – Ch. 7)

FCC ID: BCGA1954	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1710060006-05.BCG	Test Dates: 10/31-2/17/2018	EUT Type: Tablet Device	Page 95 of 157

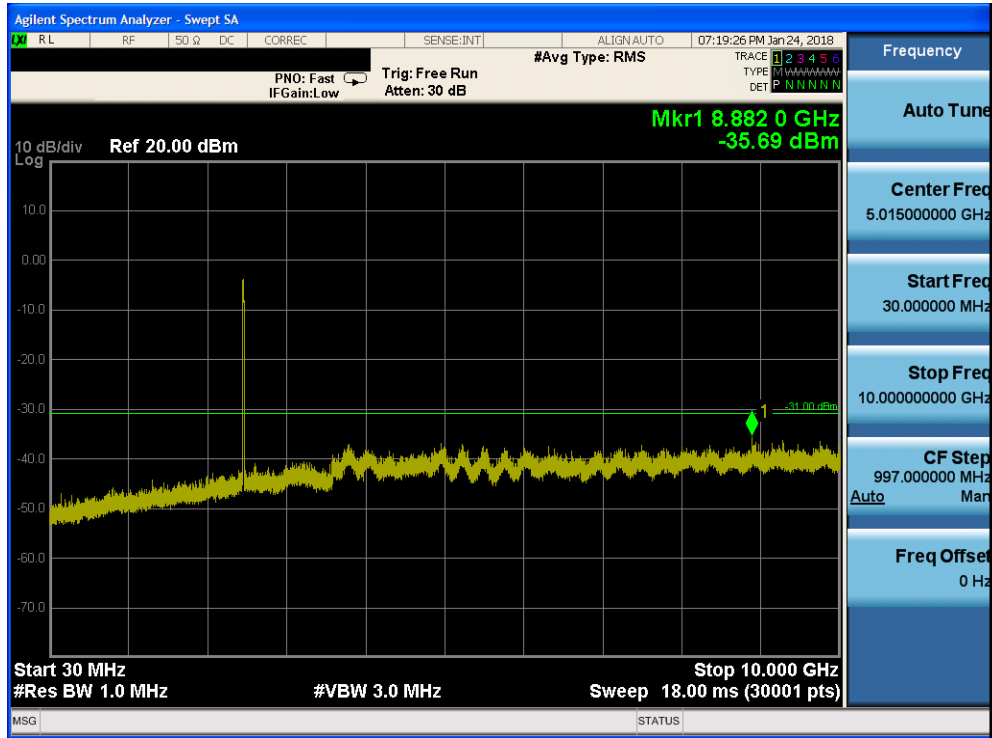


Plot 7-133. Conducted Spurious Plot MIMO ANT2 (802.11n – Ch. 7)

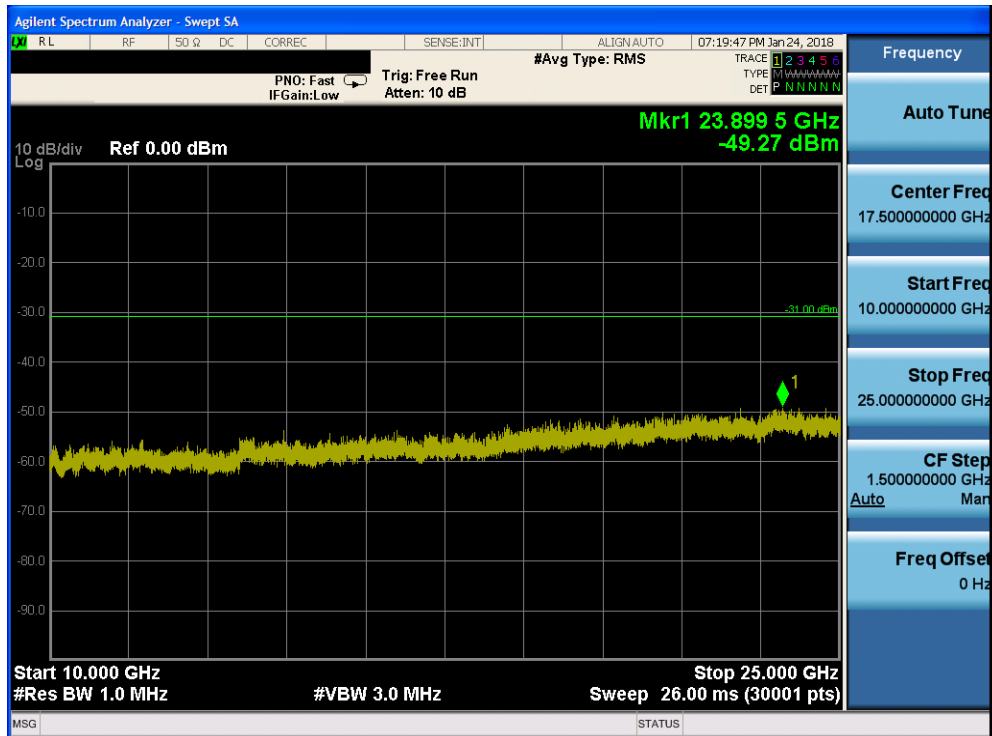


Plot 7-134. Conducted Spurious Plot MIMO ANT2 (802.11n – Ch. 7)

FCC ID: BCGA1954	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1710060006-05.BCG	Test Dates: 10/31-2/17/2018	EUT Type: Tablet Device	Page 96 of 157

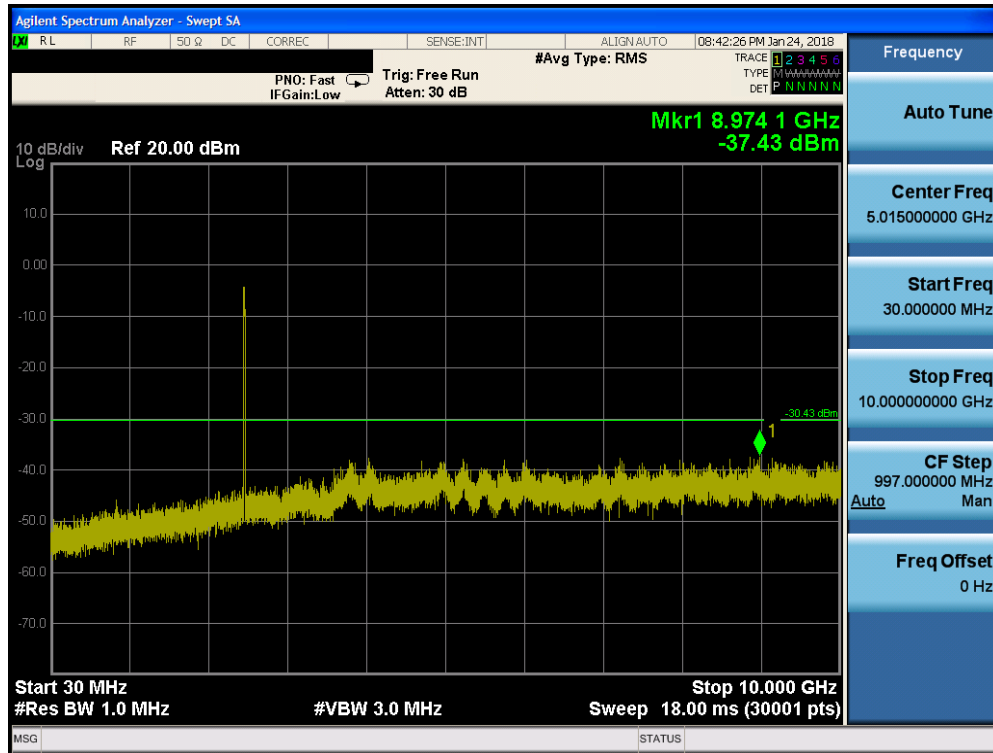


Plot 7-135. Conducted Spurious Plot MIMO ANT1 (802.11n – Ch. 13)

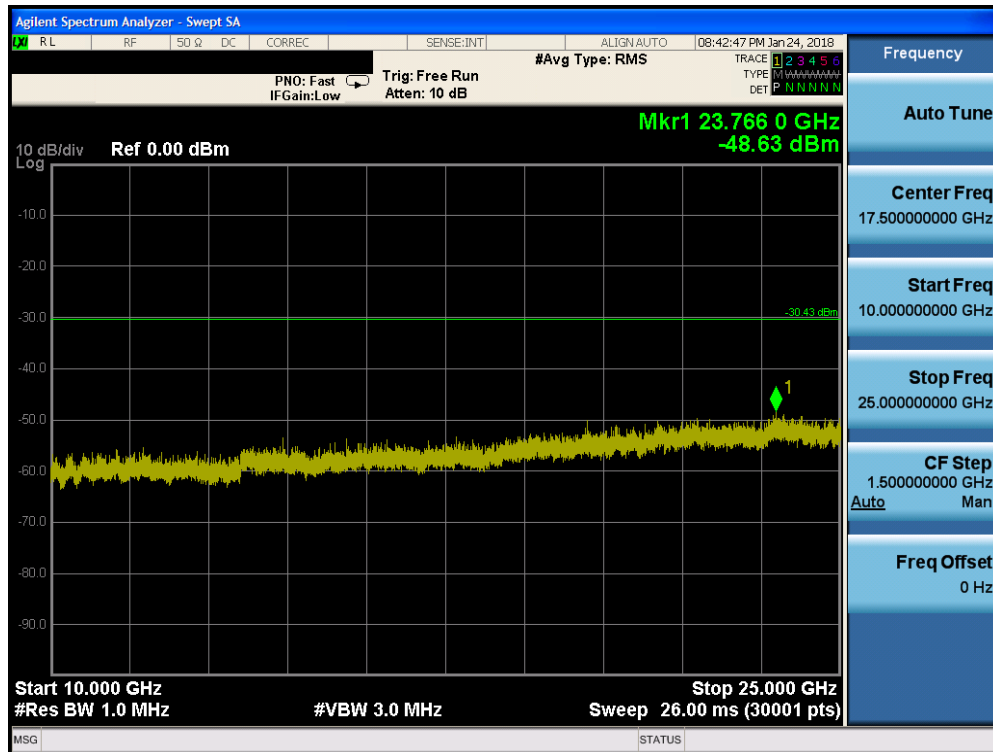


Plot 7-136. Conducted Spurious Plot MIMO ANT1 (802.11n – Ch. 13)

FCC ID: BCGA1954	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1710060006-05.BCG	Test Dates: 10/31-2/17/2018	EUT Type: Tablet Device	Page 97 of 157



Plot 7-137. Conducted Spurious Plot MIMO ANT2 (802.11n – Ch. 13)



Plot 7-138. Conducted Spurious Plot MIMO ANT2 (802.11n – Ch. 13)

FCC ID: BCGA1954	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1710060006-05.BCG	Test Dates: 10/31-2/17/2018	EUT Type: Tablet Device	Page 98 of 157

7.7 Radiated Spurious Emission Measurements – Above 1 GHz

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

Test Overview and Limit

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

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47 CFR and Table 6 of RSS-Gen (8.10) must not exceed the limits shown in Table 7-16 per Section 15.209 and RSS-Gen (8.9).

Frequency	Field Strength [μV/m]	Measured Distance [Meters]
Above 960.0 MHz	500	3

Table 7-16. Radiated Limits

Test Procedures Used

ANSI C63.10-2013 – Section 6.6.4.3

KDB 558074 D01 v04 – Section 12.1, 12.2.7

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.

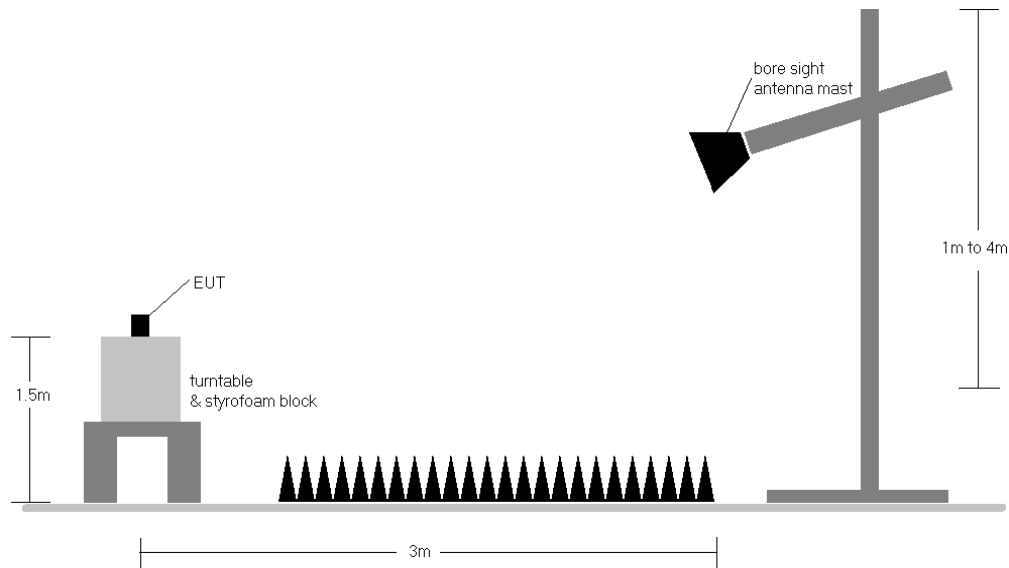


Figure 7-6. Test Instrument & Measurement Setup

Test Notes

1. The optional test procedures for antenna port conducted measurements of unwanted emissions per the guidance of KDB 558074 D01 v04 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 Section 15.205 and Section 8.10 of RSS-Gen are below the limit shown in Table 7-16.
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. The worst-case emissions are reported however emissions whose levels were not within 20dB of the respective limits were not reported.
6. Emissions below 18GHz were measured at a 3 meter test distance while emissions above 18GHz were measured at a 1 meter test distance with the application of a distance correction factor.
7. Radiated spurious emissions were investigated while operating in MIMO mode, however, it was determined that single antenna operation produced the worst case emissions. Since the emissions

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produced from MIMO operation were found to be more than 20dB below the limit, the MIMO emissions are not reported.

8. The wide spectrum spurious emissions plots shown on the following pages are used only for the purpose of emission identification. Any emissions found to be within 20dB of the limit are fully investigated and the results are shown in this section.
9. The "-" shown in the following RSE tables are used to denote a noise floor measurement.

Sample Calculations

Determining Spurious Emissions Levels

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

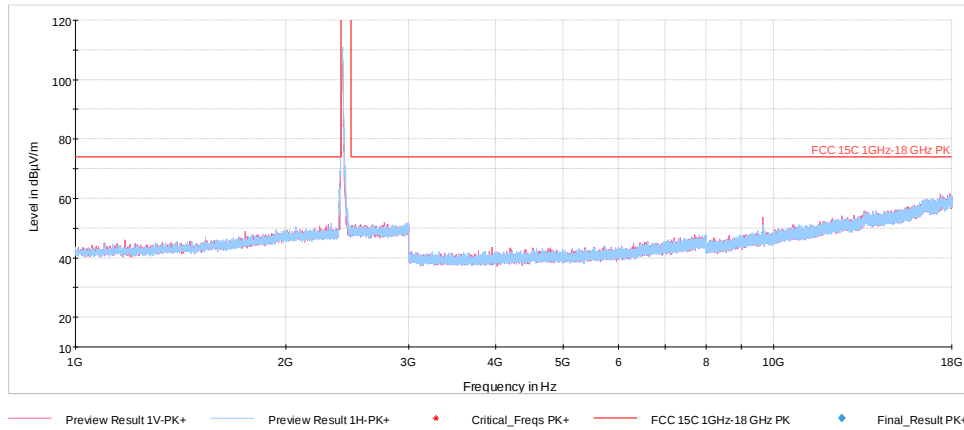
Radiated Band Edge Measurement Offset

- The amplitude offset shown in the radiated restricted band edge plots in Section 7.7 was calculated using the formula:
Offset (dB) = (Antenna Factor + Cable Loss + Attenuator) – Preamplifier Gain

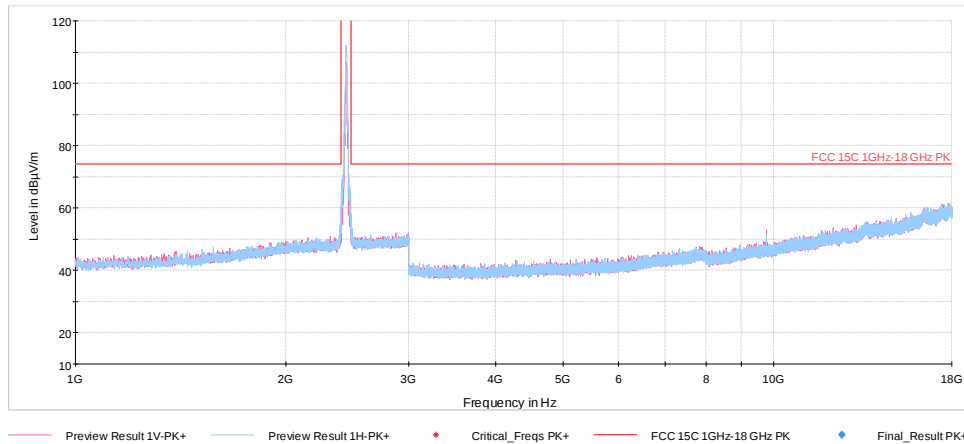
FCC ID: BCGA1954	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1710060006-05.BCG	Test Dates: 10/31-2/17/2018	EUT Type: Tablet Device	Page 101 of 157

7.7.1 SISO Antenna-1 Radiated Spurious Emission Measurements

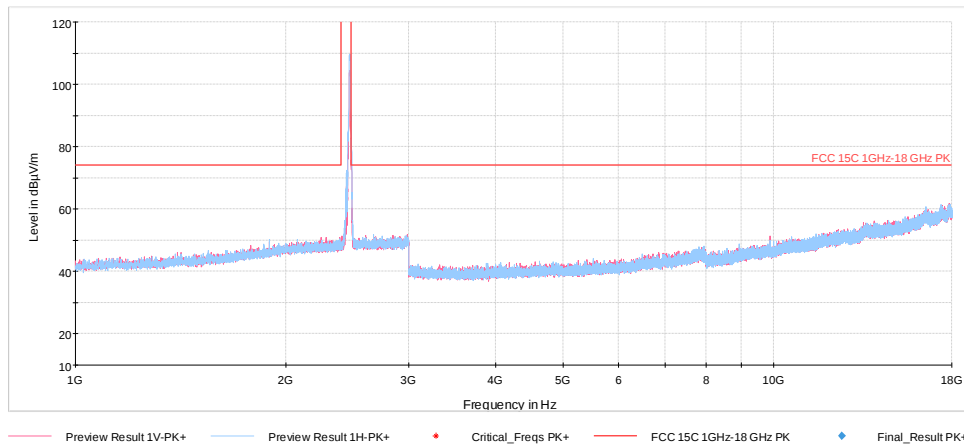
§15.247(d) §15.205 & §15.209; RSS-Gen [8.9]



Plot 7-139. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11b – Ch. 1, Ant. Pol. H & V)



Plot 7-140. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11b – Ch. 7, Ant. Pol. H & V)

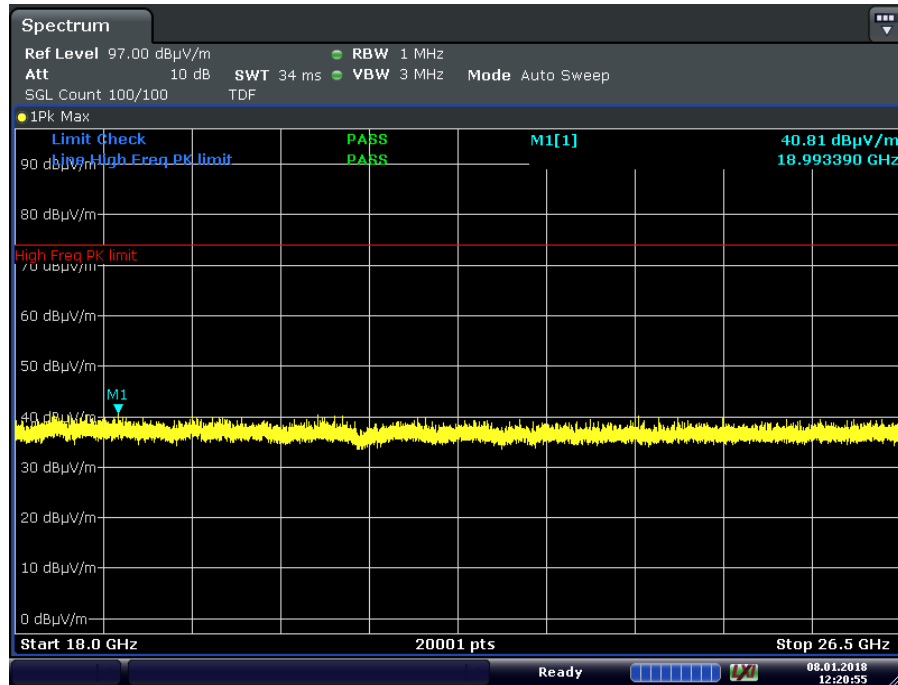


Plot 7-141. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11b – Ch. 13, Ant. Pol. H & V)

FCC ID: BCGA1954	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
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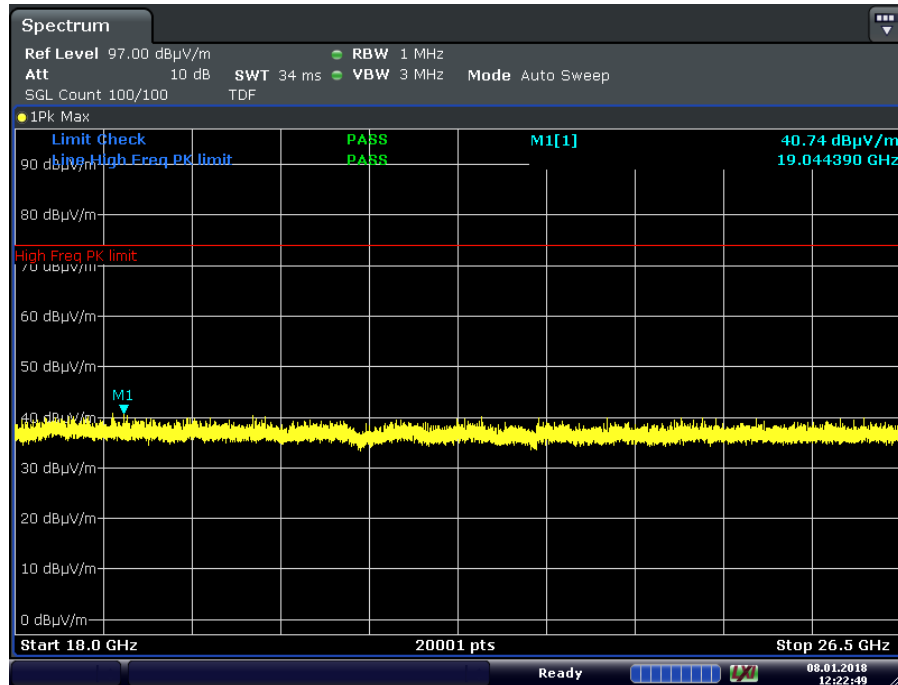
SISO Antenna-1 Radiated Spurious Emissions Measurements (Above 18GHz)

§15.209; RSS-Gen [8.9]



Date: 8 JAN 2018 12:20:56

Plot 7-142. Radiated Spurious Plot above 18GHz SISO ANT1 (802.11b – Ch. 7, Ant. Pol. H)



Date: 8 JAN 2018 12:22:49

Plot 7-143. Radiated Spurious Plot above 18GHz SISO ANT1 (802.11b – Ch. 7, Ant. Pol. V)

FCC ID: BCGA1954	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1710060006-05.BCG	Test Dates: 10/31-2/17/2018	EUT Type: Tablet Device	Page 103 of 157

SISO Antenna-1 Radiated Spurious Emission Measurements

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

Worst Case Mode: 802.11b
Worst Case Transfer Rate: 1 Mbps
Distance of Measurements: 3 Meters
Operating Frequency: 2412MHz
Channel: 01

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]
4824.00	Avg	H	255	32	-78.51	6.93	35.42	53.98	-18.56
4824.00	Peak	H	255	32	-66.87	6.93	47.06	73.98	-26.92
12060.00	Avg	H	-	-	-79.96	18.23	45.27	53.98	-8.70
12060.00	Peak	H	-	-	-68.61	18.23	56.62	73.98	-17.35

Table 7-17. Radiated Measurements SISO ANT1

Worst Case Mode: 802.11b
Worst Case Transfer Rate: 1 Mbps
Distance of Measurements: 3 Meters
Operating Frequency: 2442MHz
Channel: 07

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]
4884.00	Avg	H	124	18	-77.69	7.02	36.33	53.98	-17.64
4884.00	Peak	H	124	18	-67.73	7.02	46.29	73.98	-27.68
7326.00	Avg	H	-	-	-78.78	11.28	39.50	53.98	-14.48
7326.00	Peak	H	-	-	-67.55	11.28	50.73	73.98	-23.25
12210.00	Avg	H	-	-	-82.68	18.58	42.90	53.98	-11.08
12210.00	Peak	H	-	-	-71.28	18.58	54.30	73.98	-19.68

Table 7-18. Radiated Measurements SISO ANT1

FCC ID: BCGA1954	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1710060006-05.BCG	Test Dates: 10/31-2/17/2018	EUT Type: Tablet Device	Page 104 of 157

Worst Case Mode: 802.11b
 Worst Case Transfer Rate: 1 Mbps
 Distance of Measurements: 3 Meters
 Operating Frequency: 2472MHz
 Channel: 13

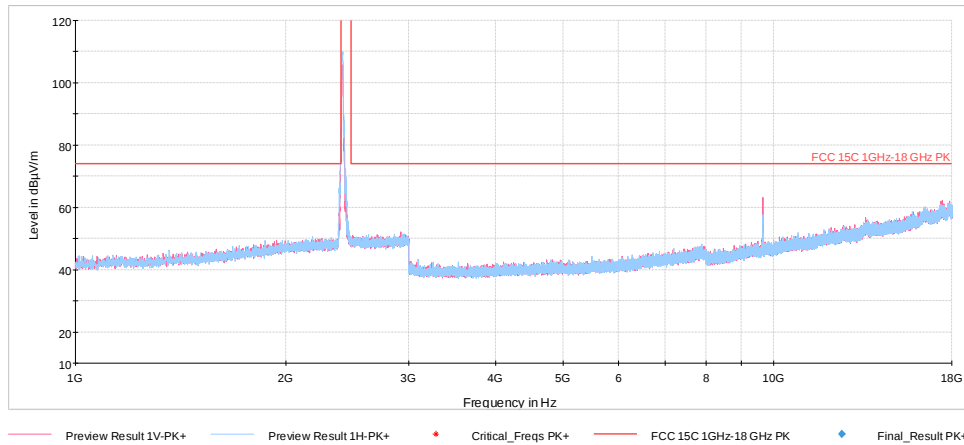
Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
4944.00	Avg	H	221	148	-79.93	7.52	34.59	53.98	-19.39
4944.00	Peak	H	221	148	-67.59	7.52	46.93	73.98	-27.05
7416.00	Avg	H	244	168	-80.02	11.71	38.69	53.98	-15.29
7416.00	Peak	H	244	168	-68.96	11.71	49.75	73.98	-24.23
12360.00	Avg	H	-	-	-80.21	18.74	45.53	53.98	-8.45
12360.00	Peak	H	-	-	-69.40	18.74	56.34	73.98	-17.64

Table 7-19. Radiated Measurements SISO ANT1

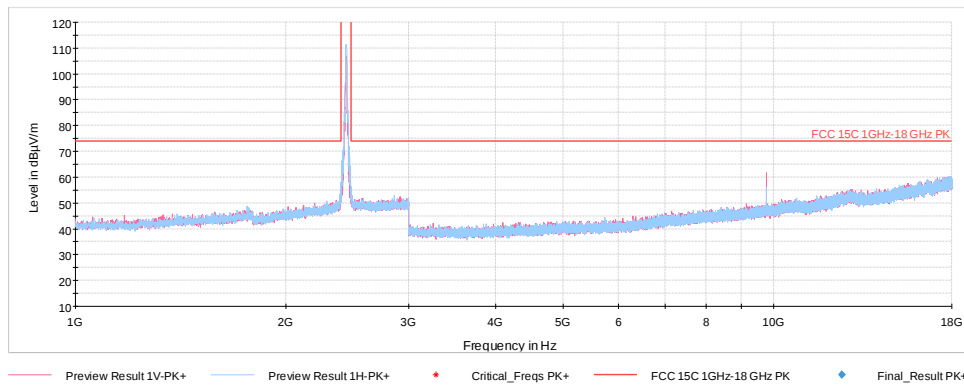
FCC ID: BCGA1954	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1710060006-05.BCG	Test Dates: 10/31-2/17/2018	EUT Type: Tablet Device	Page 105 of 157

7.7.2 SISO Antenna-2 Radiated Spurious Emission Measurements

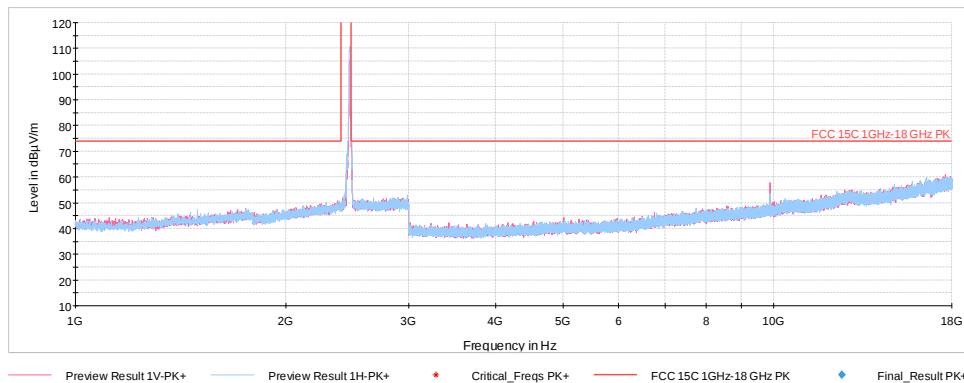
§15.247(d) §15.205 & §15.209; RSS-Gen [8.9]



Plot 7-144. Radiated Spurious Plot above 1GHz SISO ANT2 (802.11b – Ch. 1, Ant. Pol. H & V)



Plot 7-145. Radiated Spurious Plot above 1GHz SISO ANT2 (802.11b – Ch. 7, Ant. Pol. H & V)

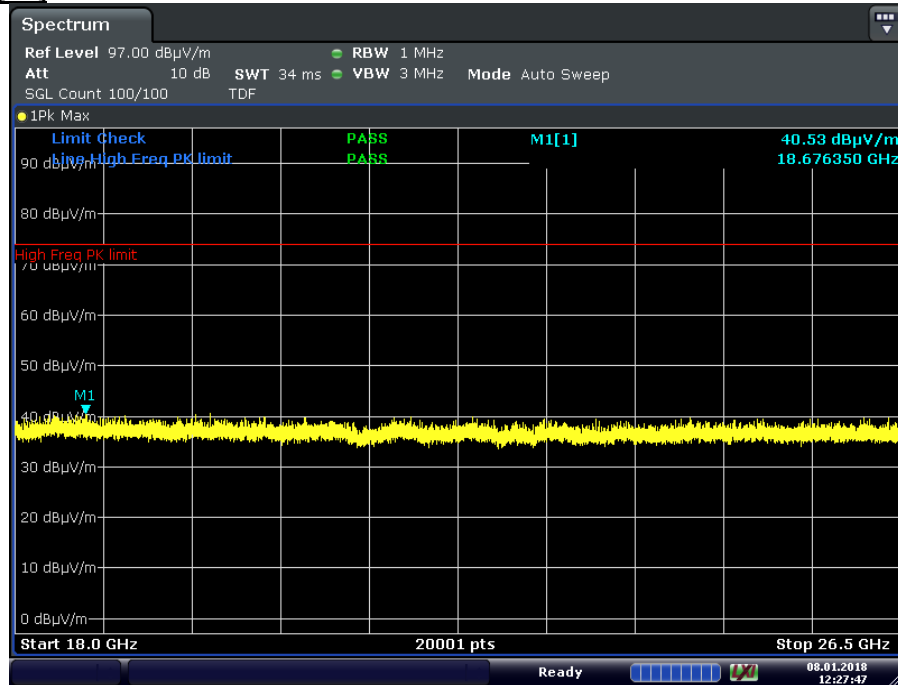


Plot 7-146. Radiated Spurious Plot above 1GHz SISO ANT2 (802.11b – Ch. 13, Ant. Pol. H & V)

FCC ID: BCGA1954	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1710060006-05.BCG	Test Dates: 10/31-2/17/2018	EUT Type: Tablet Device	Page 106 of 157

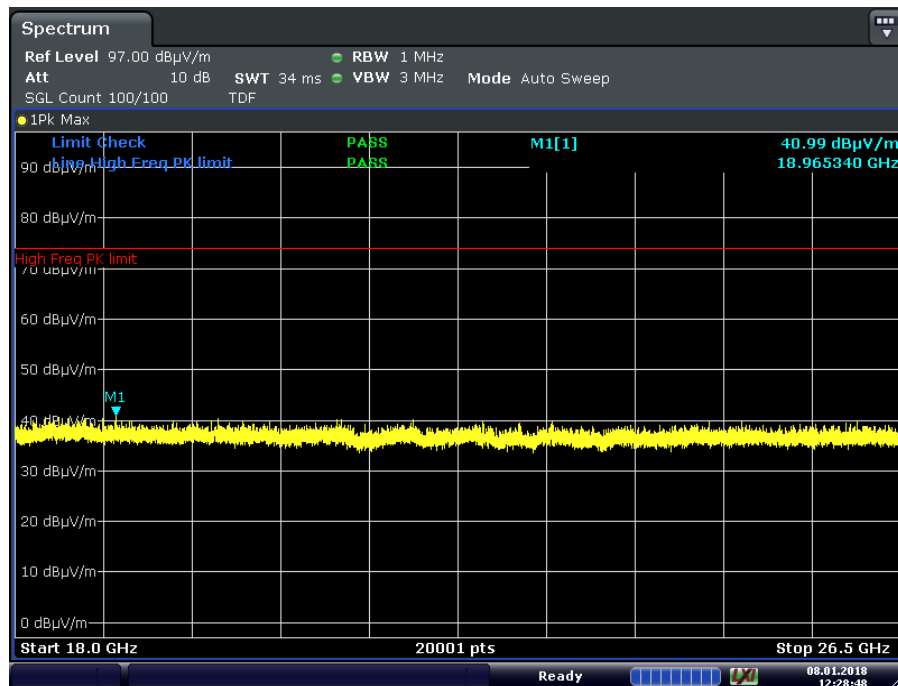
SISO Antenna-2 Radiated Spurious Emissions Measurements (Above 18GHz)

§15.209; RSS-Gen [8.9]



Date: 8 JAN 2018 12:27:48

Plot 7-147. Radiated Spurious Plot above 18GHz SISO ANT2 (802.11b – Ch. 7, Ant. Pol. H)



Date: 8 JAN 2018 12:28:48

Plot 7-148. Radiated Spurious Plot above 18GHz SISO ANT2 (802.11b – Ch. 7, Ant. Pol. V)

FCC ID: BCGA1954	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
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SISO Antenna-2 Radiated Spurious Emission Measurements

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

Worst Case Mode: 802.11b
Worst Case Transfer Rate: 1 Mbps
Distance of Measurements: 3 Meters
Operating Frequency: 2412MHz
Channel: 01

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]
4824.00	Avg	H	255	32	-78.50	6.93	35.43	53.98	-18.55
4824.00	Peak	H	255	32	-67.66	6.93	46.27	73.98	-27.71
12060.00	Avg	H	-	-	-79.78	18.23	45.45	53.98	-8.52
12060.00	Peak	H	-	-	-68.48	18.23	56.75	73.98	-17.22

Table 7-20. Radiated Measurements SISO ANT2

Worst Case Mode: 802.11b
Worst Case Transfer Rate: 1 Mbps
Distance of Measurements: 3 Meters
Operating Frequency: 2442MHz
Channel: 07

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]
4884.00	Avg	H	253	170	-77.69	7.02	36.33	53.98	-17.64
4884.00	Peak	H	253	170	-67.73	7.02	46.29	73.98	-27.68
7326.00	Avg	H	-	-	-78.78	11.28	39.50	53.98	-14.48
7326.00	Peak	H	-	-	-67.55	11.28	50.73	73.98	-23.25
12210.00	Avg	H	-	-	-82.68	18.58	42.90	53.98	-11.08
12210.00	Peak	H	-	-	-71.28	18.58	54.30	73.98	-19.68

Table 7-21. Radiated Measurements SISO ANT2

FCC ID: BCGA1954	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1710060006-05.BCG	Test Dates: 10/31-2/17/2018	EUT Type: Tablet Device	Page 108 of 157

Worst Case Mode: 802.11b
 Worst Case Transfer Rate: 1 Mbps
 Distance of Measurements: 3 Meters
 Operating Frequency: 2472MHz
 Channel: 13

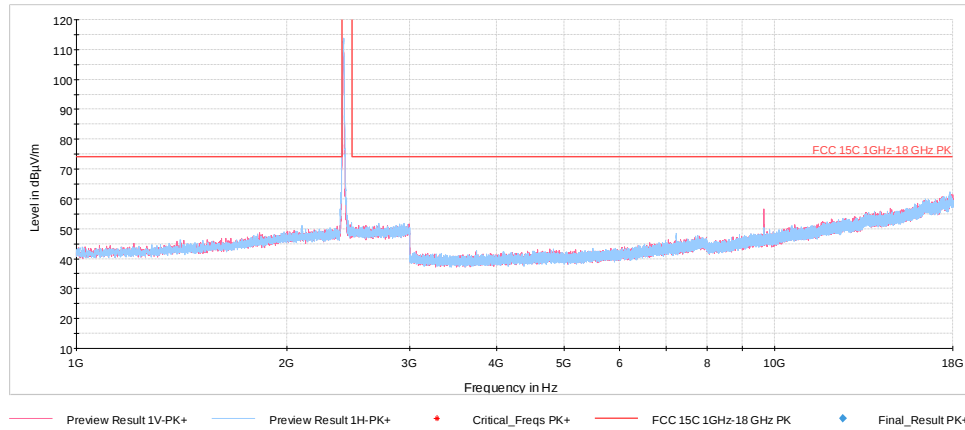
Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
4944.00	Avg	H	162	78	-78.95	7.52	35.57	53.98	-18.41
4944.00	Peak	H	162	78	-67.61	7.52	46.91	73.98	-27.07
7416.00	Avg	H	246	102	-74.82	11.71	43.89	53.98	-10.09
7416.00	Peak	H	246	102	-65.92	11.71	52.79	73.98	-21.19
12360.00	Avg	H	-	-	-82.05	18.74	43.69	53.98	-10.29
12360.00	Peak	H	-	-	-70.92	18.74	54.82	73.98	-19.16

Table 7-22. Radiated Measurements SISO ANT2

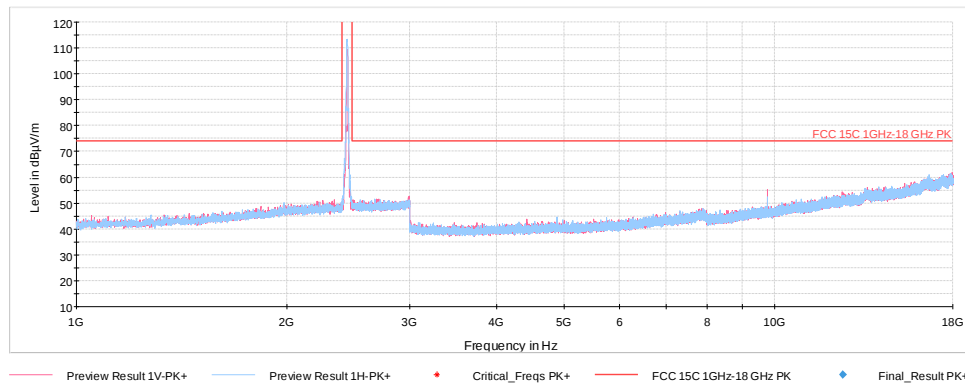
FCC ID: BCGA1954	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
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7.7.3 MIMO Radiated Spurious Emission Measurements

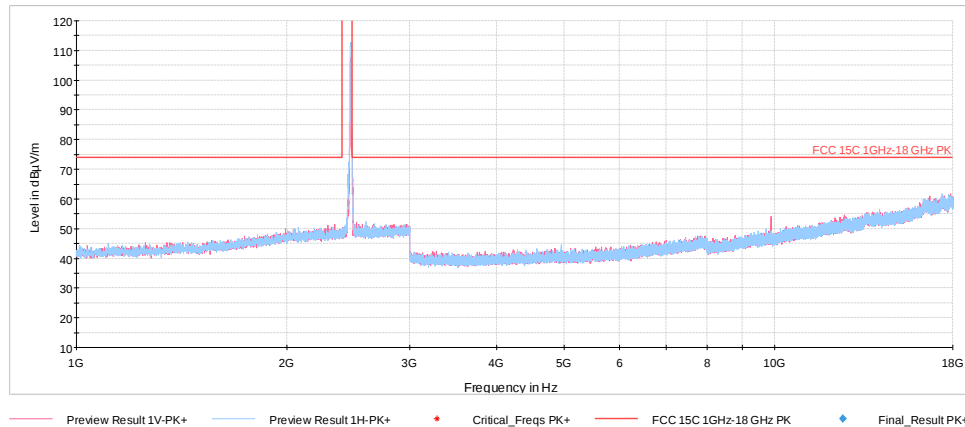
§15.247(d) §15.205 & §15.209; RSS-Gen [8.9]



Plot 7-149. Radiated Spurious Plot above 1GHz MIMO (802.11b – Ch. 1, Ant. Pol. H & V)



Plot 7-150. Radiated Spurious Plot above 1GHz MIMO (802.11b – Ch. 7, Ant. Pol. H & V)



Plot 7-151. Radiated Spurious Plot above 1GHz MIMO (802.11b – Ch. 13, Ant. Pol. H & V)

FCC ID: BCGA1954	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
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