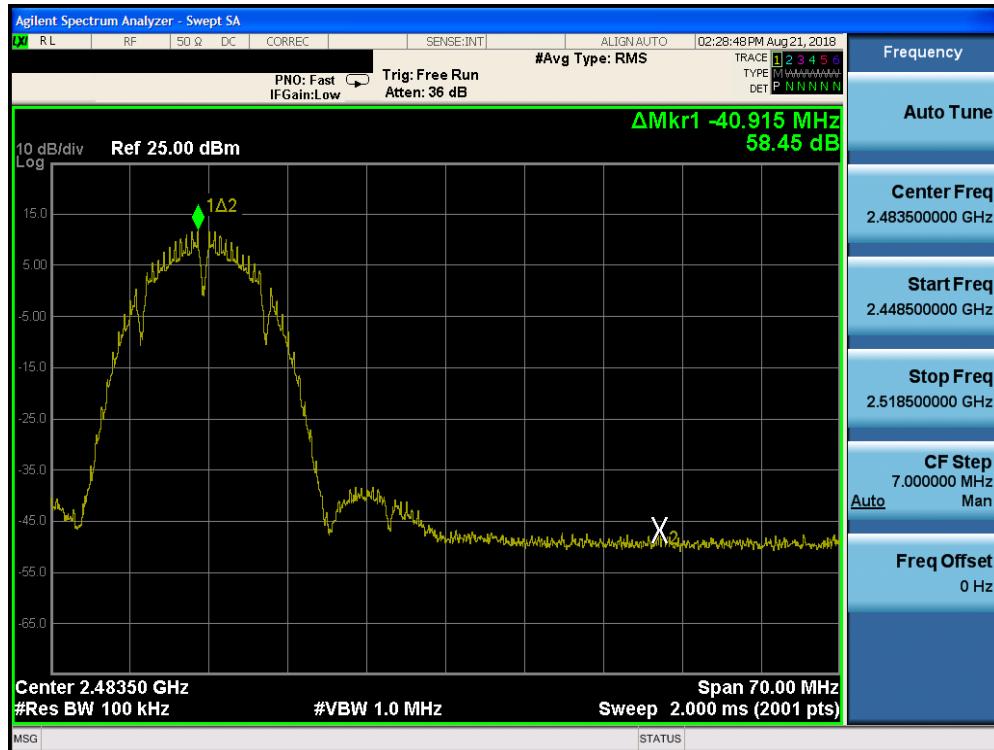


SISO Core 1 Primary Conducted Emissions at the Band Edge

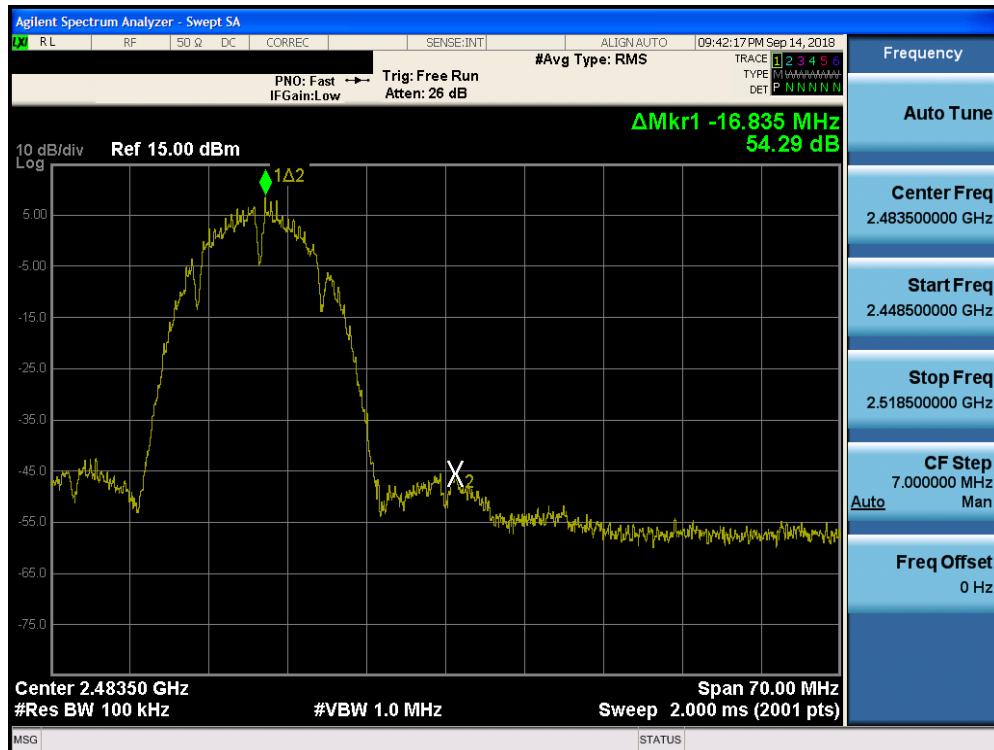


Plot 7-91. Band Edge Plot SISO Core 1 Primary (802.11b – Ch. 1)

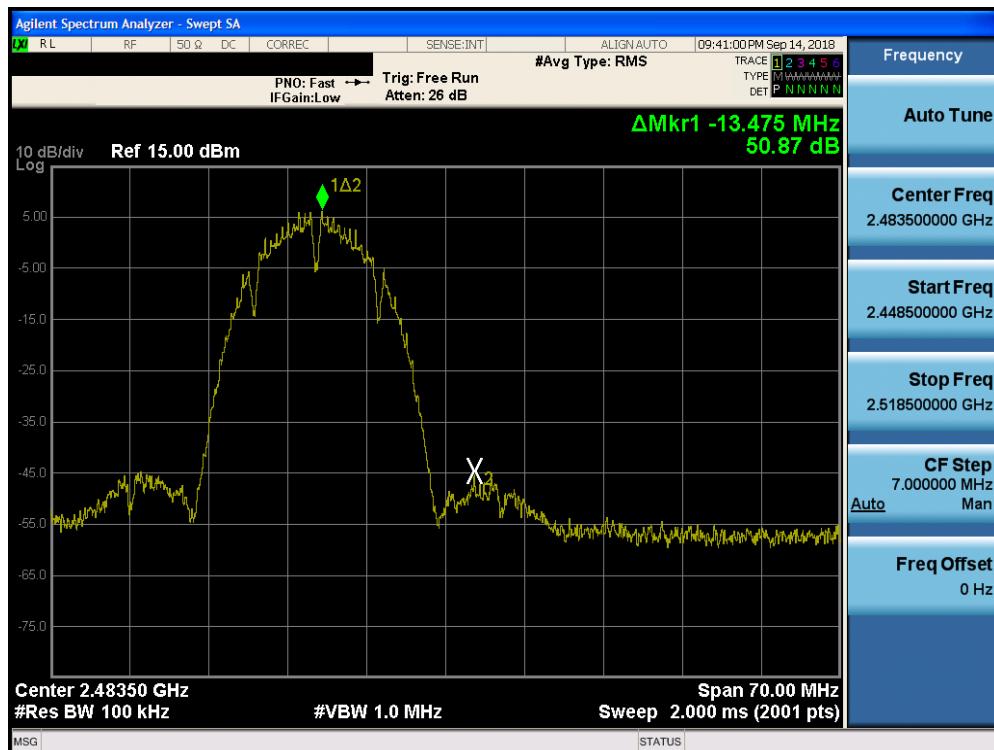


Plot 7-92. Band Edge Plot SISO Core 1 Primary (802.11b – Ch. 11)

FCC ID: BCGA1980	PCTEST® ENGINEERING LABORATORY, INC.		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1806220013-02.BCG	Test Dates: 07/27/2018-09/21/2018	EUT Type: Tablet Device	Page 73 of 145	



Plot 7-93. Band Edge Plot SISO Core 1 Primary (802.11b – Ch. 1)2

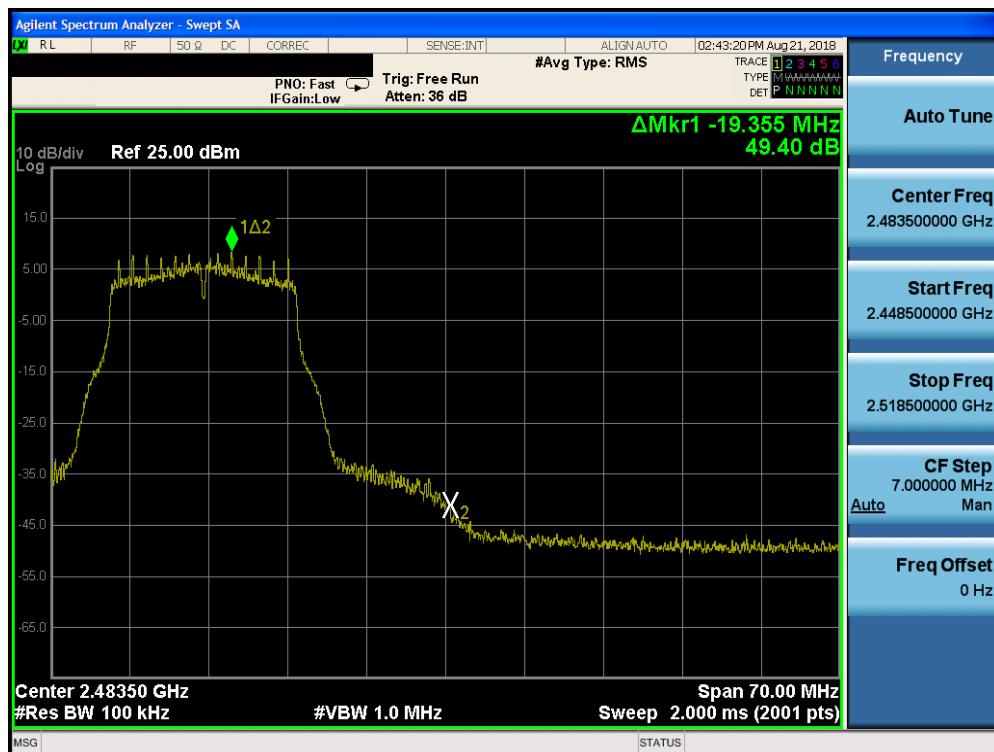


Plot 7-94. Band Edge Plot SISO Core 1 Primary (802.11b – Ch. 13)

FCC ID: BCGA1980	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1806220013-02.BCG	Test Dates: 07/27/2018-09/21/2018	EUT Type: Tablet Device	Page 74 of 145

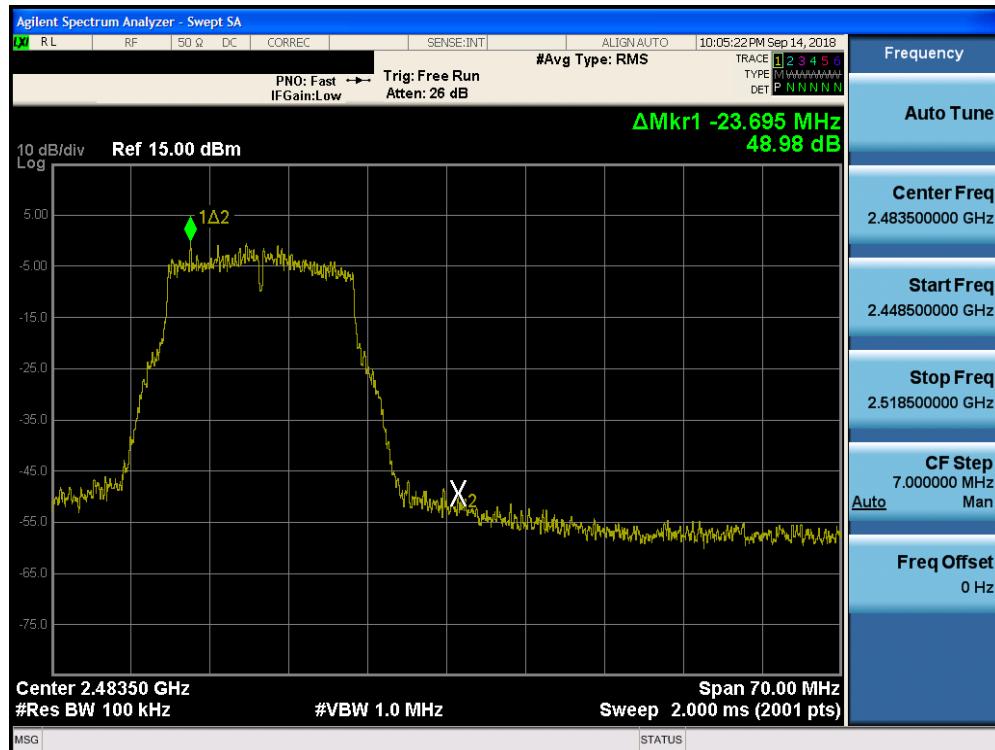


Plot 7-95. Band Edge Plot SISO Core 1 Primary (802.11g– Ch. 1)

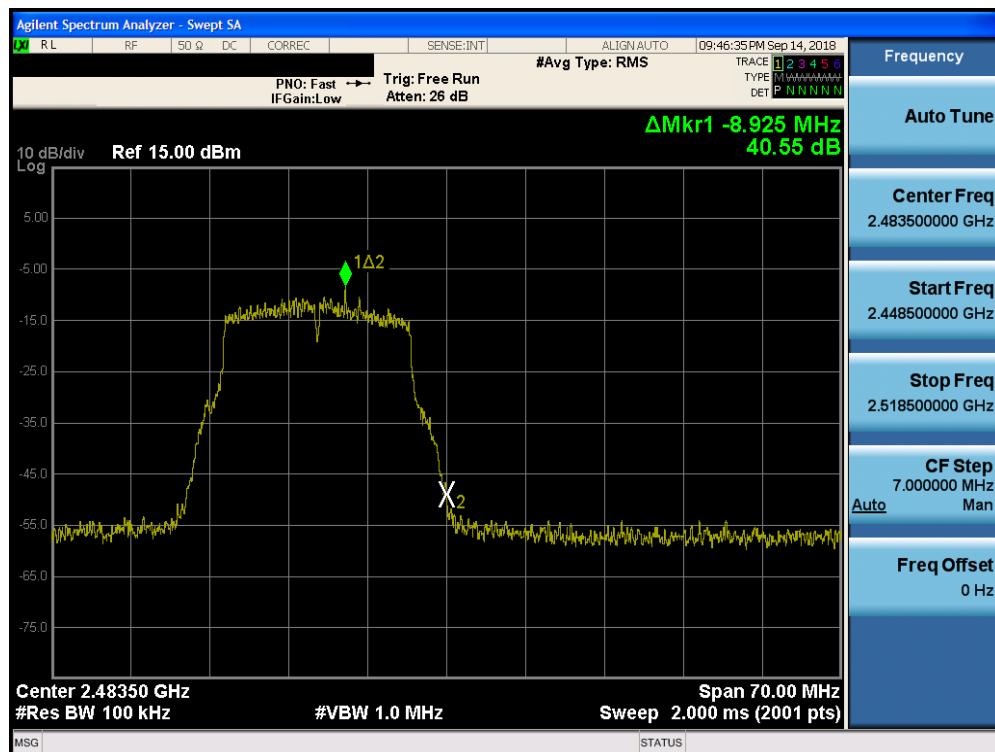


Plot 7-96. Band Edge Plot SISO Core 1 Primary (802.11g – Ch. 11)

FCC ID: BCGA1980	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1806220013-02.BCG	Test Dates: 07/27/2018-09/21/2018	EUT Type: Tablet Device	Page 75 of 145



Plot 7-97. Band Edge Plot SISO Core 1 Primary (802.11g– Ch. 12)



Plot 7-98. Band Edge Plot SISO Core 1 Primary (802.11g – Ch. 13)

FCC ID: BCGA1980	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1806220013-02.BCG	Test Dates: 07/27/2018-09/21/2018	EUT Type: Tablet Device	Page 76 of 145



Plot 7-99. Band Edge Plot SISO Core 1 Primary (802.11n (2.4GHz) – Ch. 1)

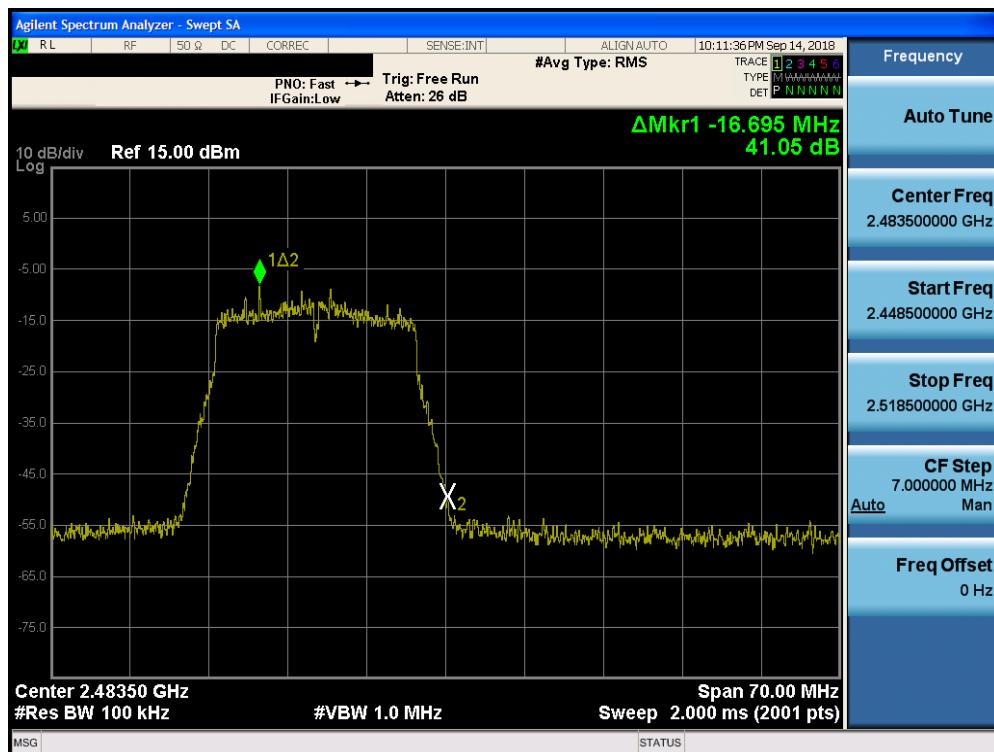


Plot 7-100. Band Edge Plot SISO Core 1 Primary (802.11n (2.4GHz) – Ch. 11)

FCC ID: BCGA1980	PCTEST ENGINEERING LABORATORY, INC.		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1806220013-02.BCG	Test Dates: 07/27/2018-09/21/2018	EUT Type: Tablet Device	Page 77 of 145	



Plot 7-101. Band Edge Plot SISO Core 1 Primary (802.11n (2.4GHz) – Ch. 12)



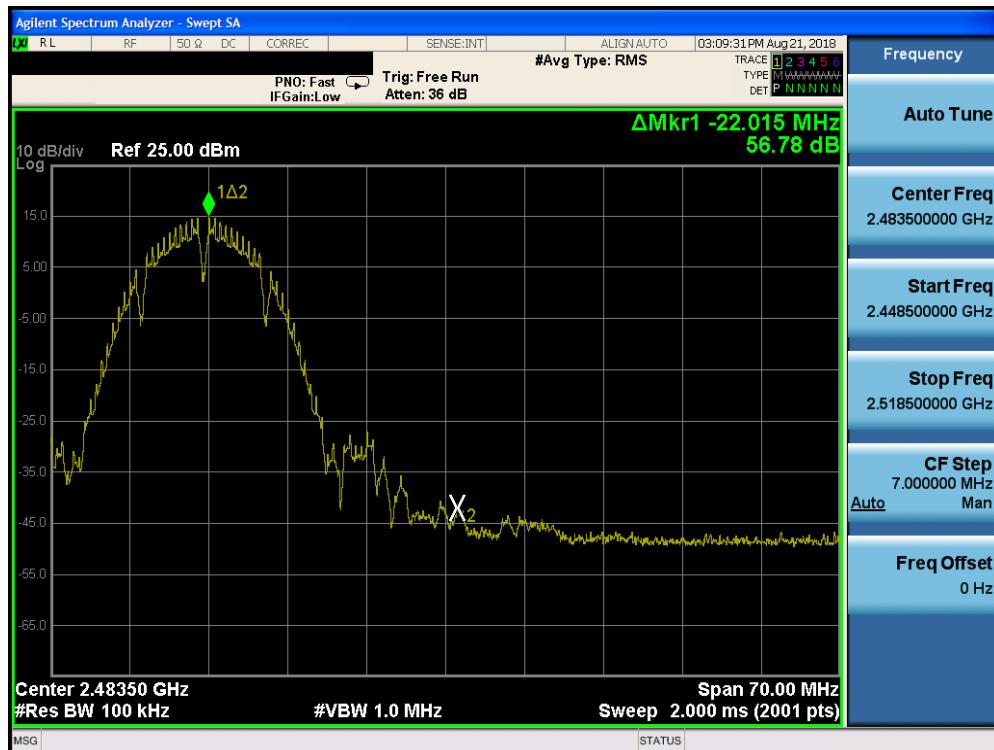
Plot 7-102. Band Edge Plot SISO Core 1 Primary (802.11n (2.4GHz) – Ch. 13)

FCC ID: BCGA1980	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1806220013-02.BCG	Test Dates: 07/27/2018-09/21/2018	EUT Type: Tablet Device	Page 78 of 145

SISO Core 1 Diversity Conducted Emissions at the Band Edge

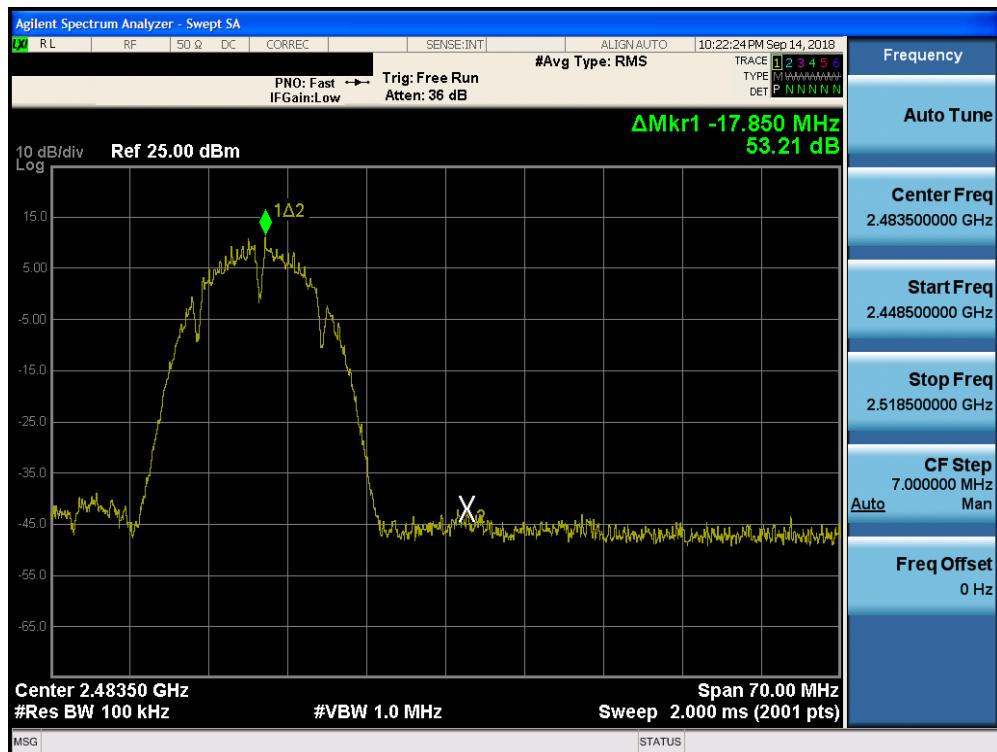


Plot 7-103. Band Edge Plot SISO Core 1 Diversity (802.11b – Ch. 1)

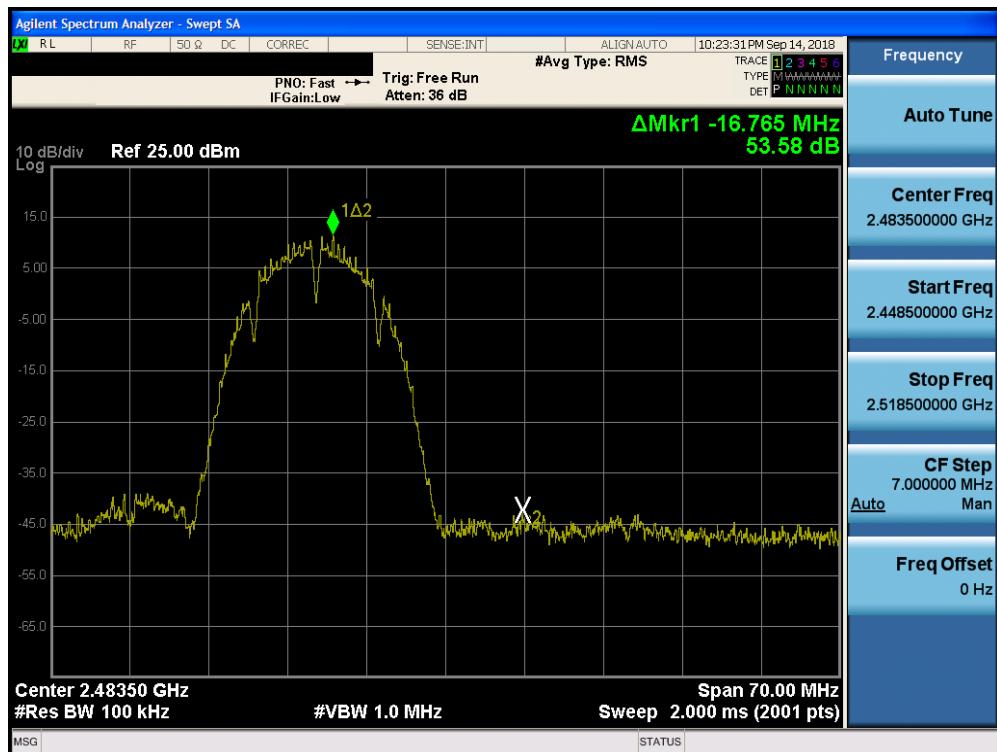


Plot 7-104. Band Edge Plot SISO Core 1 Diversity (802.11b – Ch. 11)

FCC ID: BCGA1980	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1806220013-02.BCG	Test Dates: 07/27/2018-09/21/2018	EUT Type: Tablet Device	Page 79 of 145



Plot 7-105. Band Edge Plot SISO Core 1 Diversity (802.11b – Ch. 12)



Plot 7-106. Band Edge Plot SISO Core 1 Diversity (802.11b – Ch. 13)

FCC ID: BCGA1980	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1806220013-02.BCG	Test Dates: 07/27/2018-09/21/2018	EUT Type: Tablet Device	Page 80 of 145

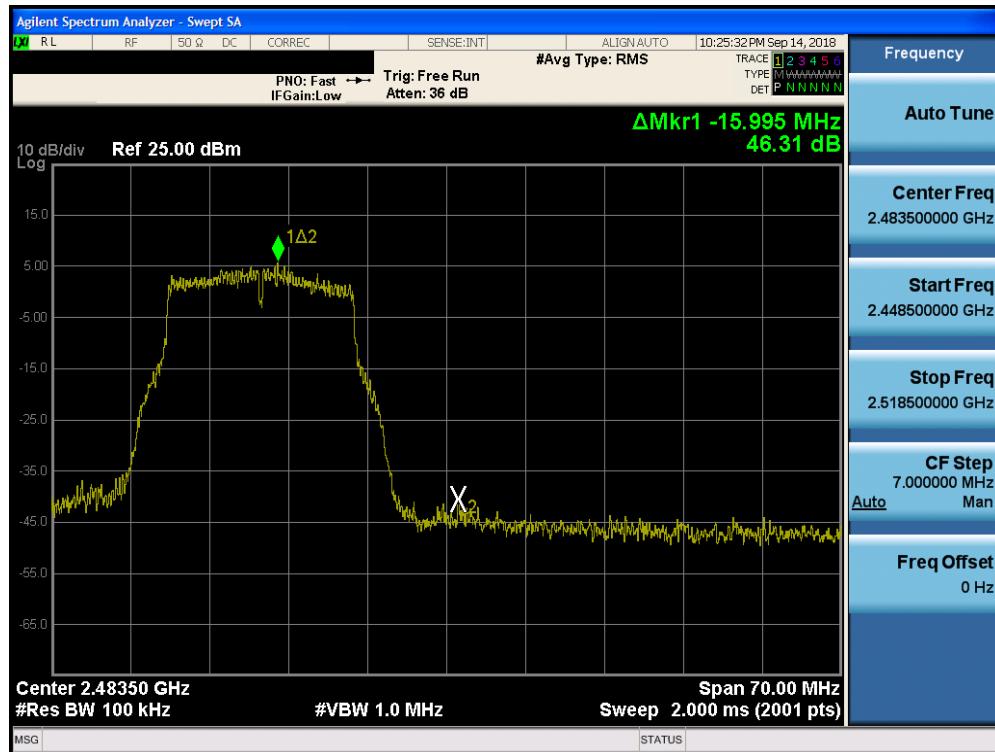


Plot 7-107. Band Edge Plot SISO Core 1 Diversity (802.11g- Ch. 1)

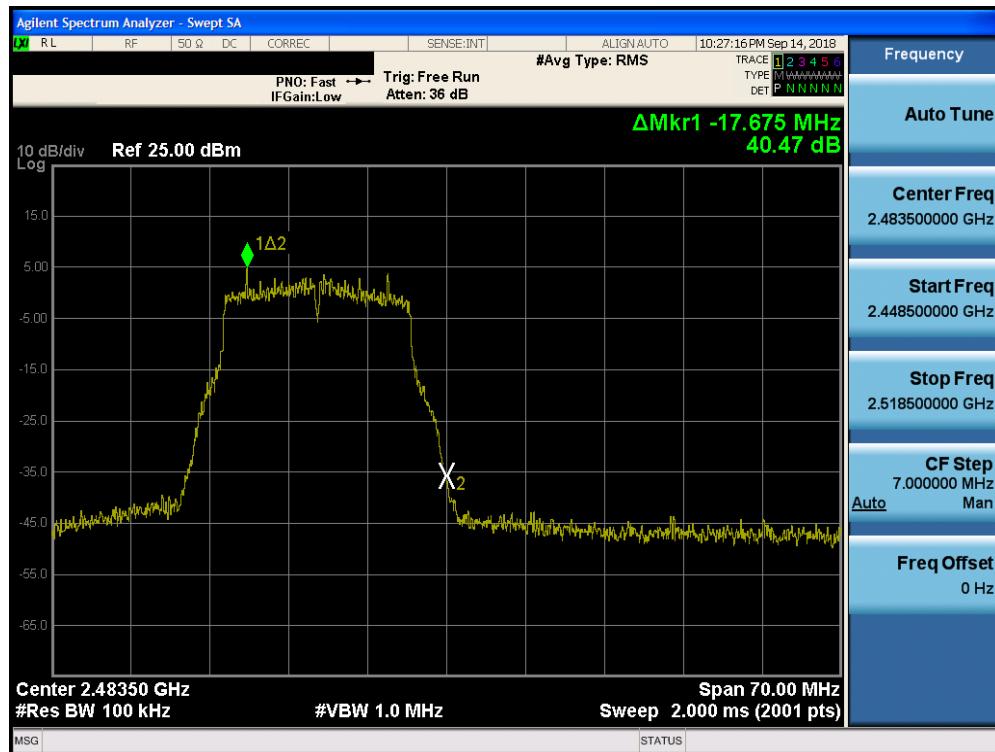


Plot 7-108. Band Edge Plot SISO Core 1 Diversity (802.11g – Ch. 11)

FCC ID: BCGA1980	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1806220013-02.BCG	Test Dates: 07/27/2018-09/21/2018	EUT Type: Tablet Device	Page 81 of 145



Plot 7-109. Band Edge Plot SISO Core 1 Diversity (802.11g– Ch. 12)



Plot 7-110. Band Edge Plot SISO Core 1 Diversity (802.11g – Ch. 13)

FCC ID: BCGA1980	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1806220013-02.BCG	Test Dates: 07/27/2018-09/21/2018	EUT Type: Tablet Device	Page 82 of 145

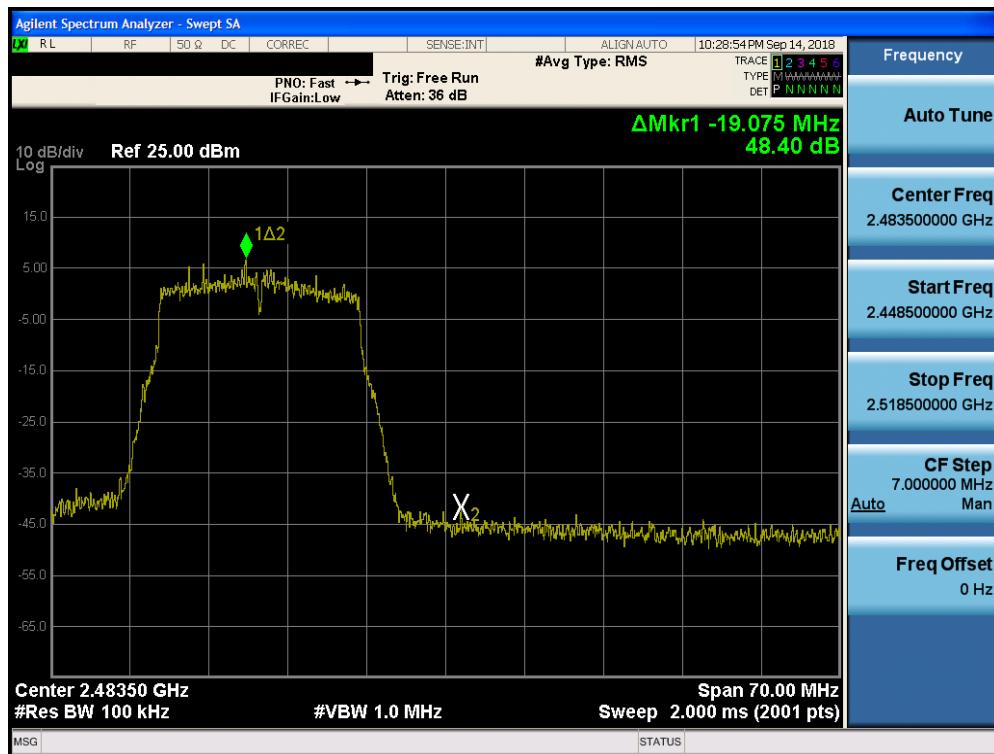


Plot 7-111. Band Edge Plot SISO Core 1 Diversity (802.11n (2.4GHz) – Ch. 1)

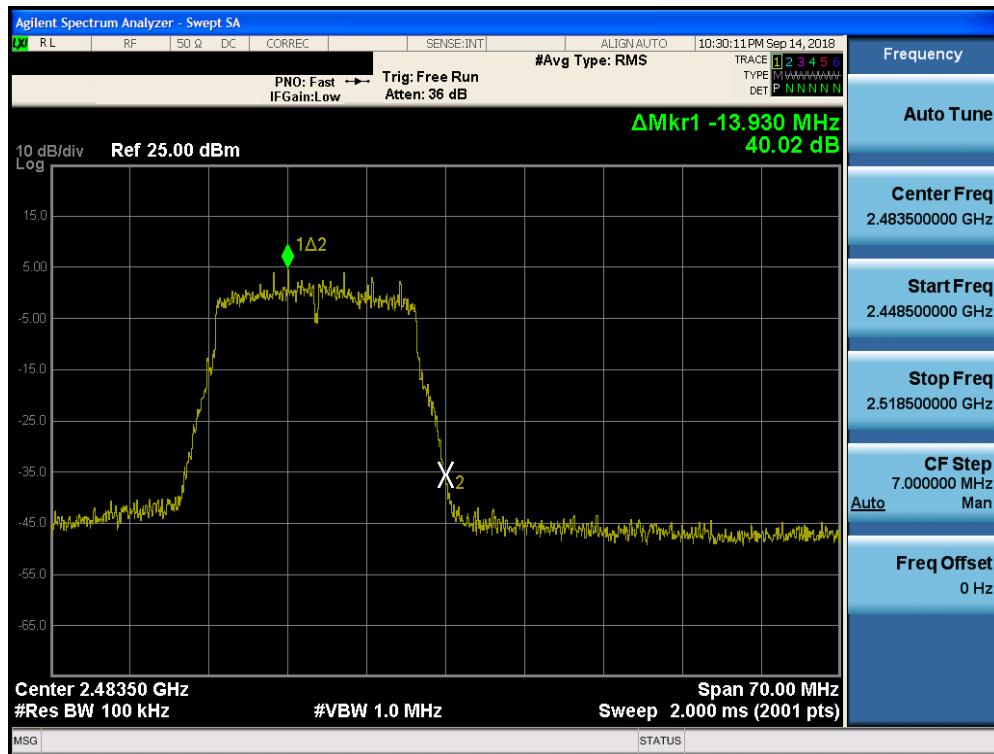


Plot 7-112. Band Edge Plot SISO Core 1 Diversity (802.11n (2.4GHz) – Ch. 11)

FCC ID: BCGA1980	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1806220013-02.BCG	Test Dates: 07/27/2018-09/21/2018	EUT Type: Tablet Device	Page 83 of 145



Plot 7-113. Band Edge Plot SISO Core 1 Diversity (802.11n (2.4GHz) – Ch. 12)



Plot 7-114. Band Edge Plot SISO Core 1 Diversity (802.11n (2.4GHz) – Ch. 13)

FCC ID: BCGA1980	PCTEST ENGINEERING LABORATORY, INC.		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1806220013-02.BCG	Test Dates: 07/27/2018-09/21/2018	EUT Type: Tablet Device		Page 84 of 145

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 "h" modes. For the following out of band conducted spurious emissions plots, the EUT was set at a data rate of 1Mbps for "b" mode as 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 per the procedure in Section 11.1 of ANSI C63.10-2013 and KDB 558074 D01 v05.

Test Procedure Used

ANSI C63.10-2013 – Section 11.11.3
 KDB 558074 D01 v05 – Section 8.5
 ANSI C63.10-2013 – Section 14.3.3
 KDB 662911 D01 v02r01 – Section E(3)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: BCGA1980	 PCTEST <small>Engineering Laboratory, Inc.</small>		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1806220013-02.BCG	Test Dates: 07/27/2018-09/21/2018	EUT Type: Tablet Device		Page 85 of 145

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. 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: BCGA1980	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
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SISO Core 0 Conducted Spurious Emission



Plot 7-115. Conducted Spurious Plot SISO Core 0 (802.11b – Ch. 1)



Plot 7-116. Conducted Spurious Plot SISO Core 0 (802.11b – Ch. 1)

FCC ID: BCGA1980	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1806220013-02.BCG	Test Dates: 07/27/2018-09/21/2018	EUT Type: Tablet Device	Page 87 of 145

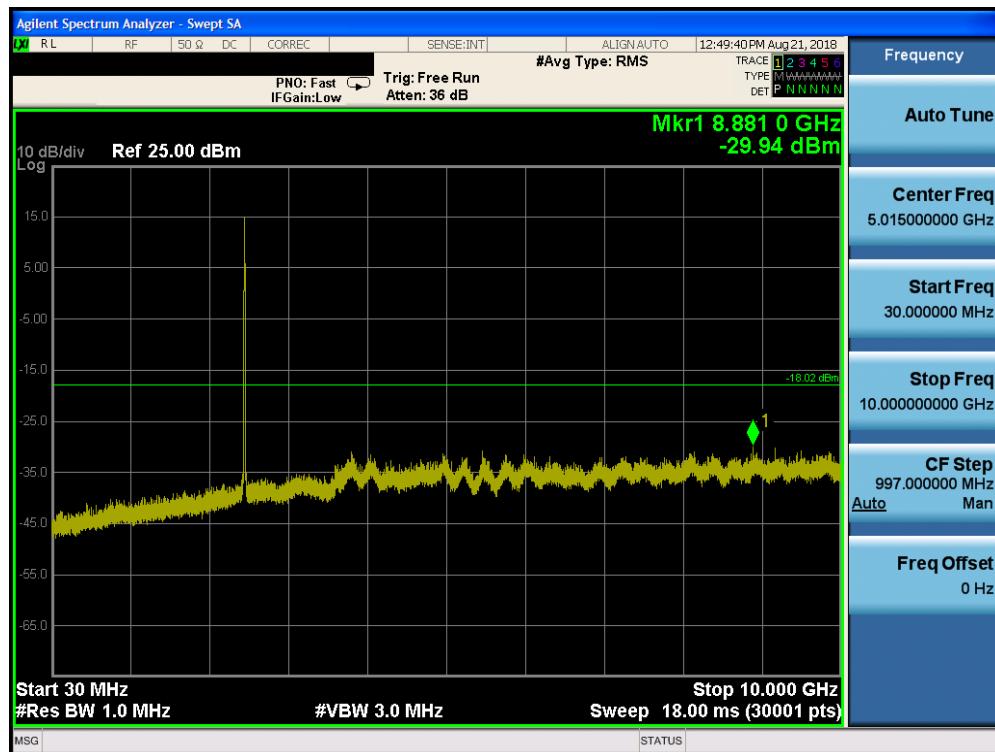


Plot 7-117. Conducted Spurious Plot SISO Core 0 (802.11b – Ch. 6)

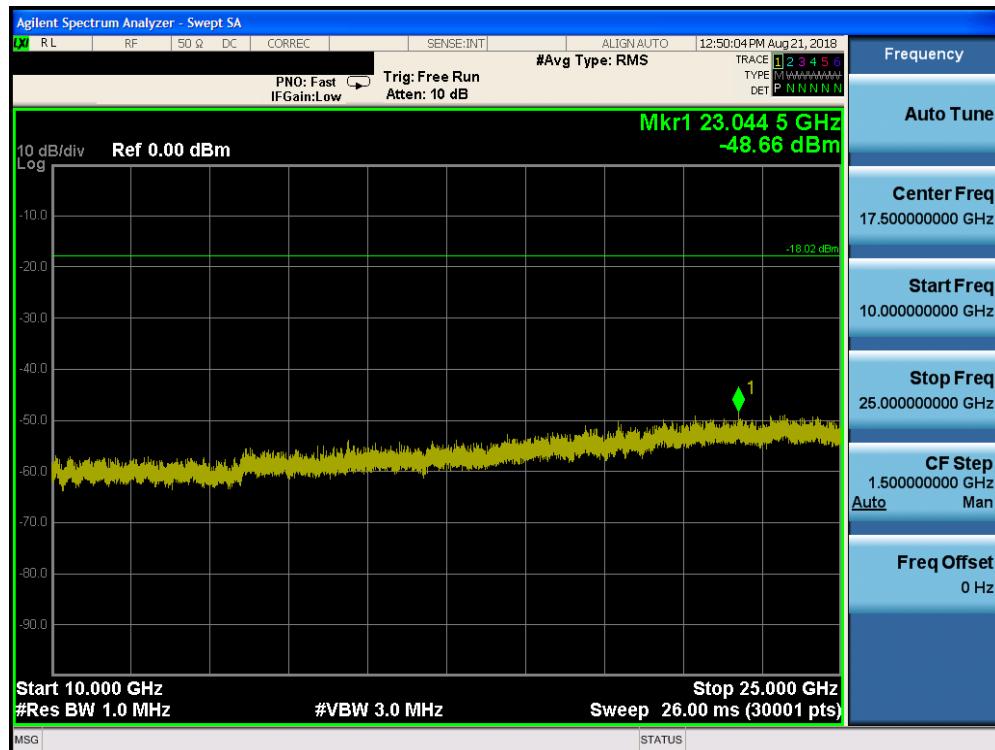


Plot 7-118. Conducted Spurious Plot SISO Core 0 (802.11b – Ch. 6)

FCC ID: BCGA1980	 MEASUREMENT REPORT (CERTIFICATION)			Approved by: Quality Manager
Test Report S/N: 1C1806220013-02.BCG	Test Dates: 07/27/2018-09/21/2018	EUT Type: Tablet Device		Page 88 of 145



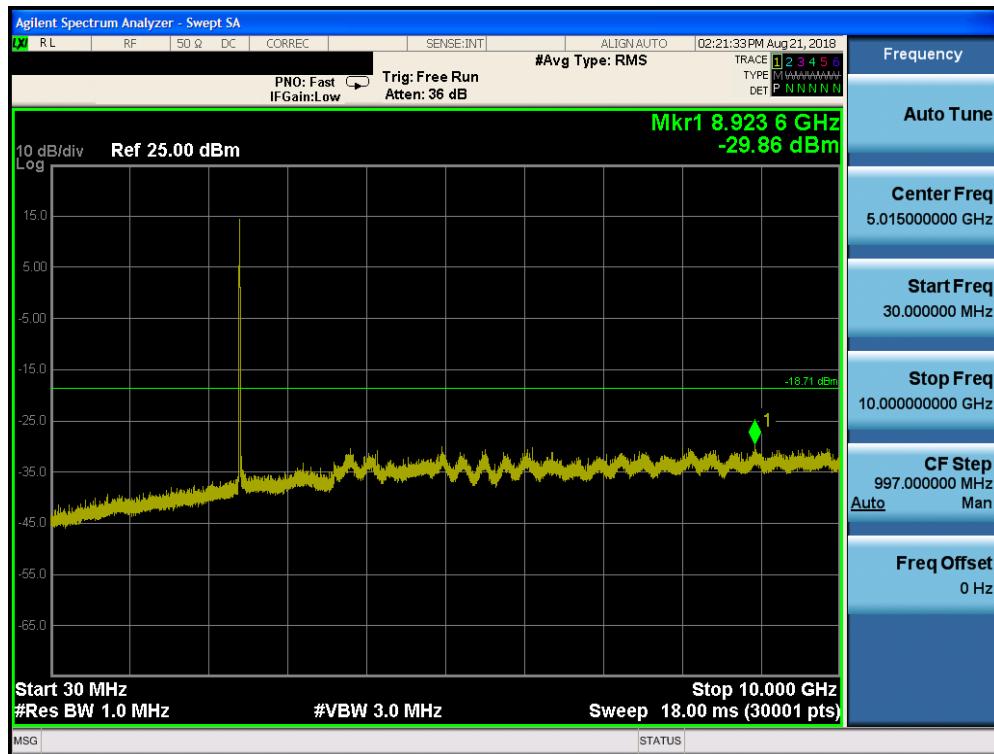
Plot 7-119. Conducted Spurious Plot SISO Core 0 (802.11b – Ch. 11)



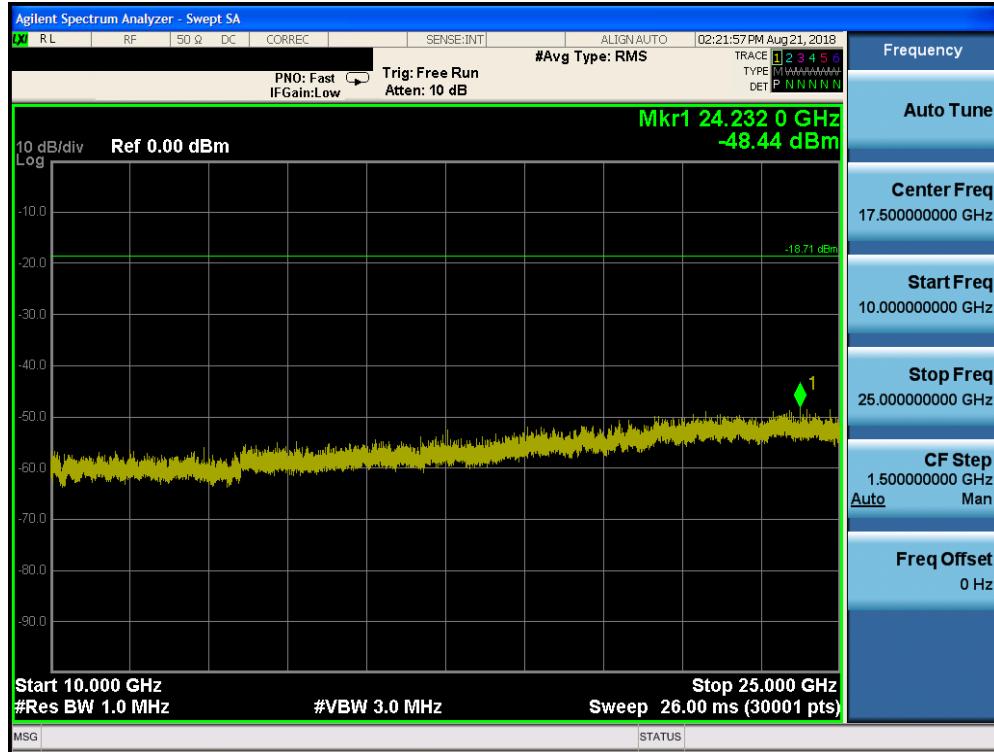
Plot 7-120. Conducted Spurious Plot SISO Core 0 (802.11b – Ch. 11)

FCC ID: BCGA1980	 MEASUREMENT REPORT (CERTIFICATION)			Approved by: Quality Manager
Test Report S/N: 1C1806220013-02.BCG	Test Dates: 07/27/2018-09/21/2018	EUT Type: Tablet Device	Page 89 of 145	

SISO Core 1 Primary Conducted Spurious Emission



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



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

FCC ID: BCGA1980	 MEASUREMENT REPORT (CERTIFICATION)			Approved by: Quality Manager
Test Report S/N: 1C1806220013-02.BCG	Test Dates: 07/27/2018-09/21/2018	EUT Type: Tablet Device		Page 90 of 145



Plot 7-123. Conducted Spurious Plot SISO Core 1 Primary (802.11b – Ch. 6)

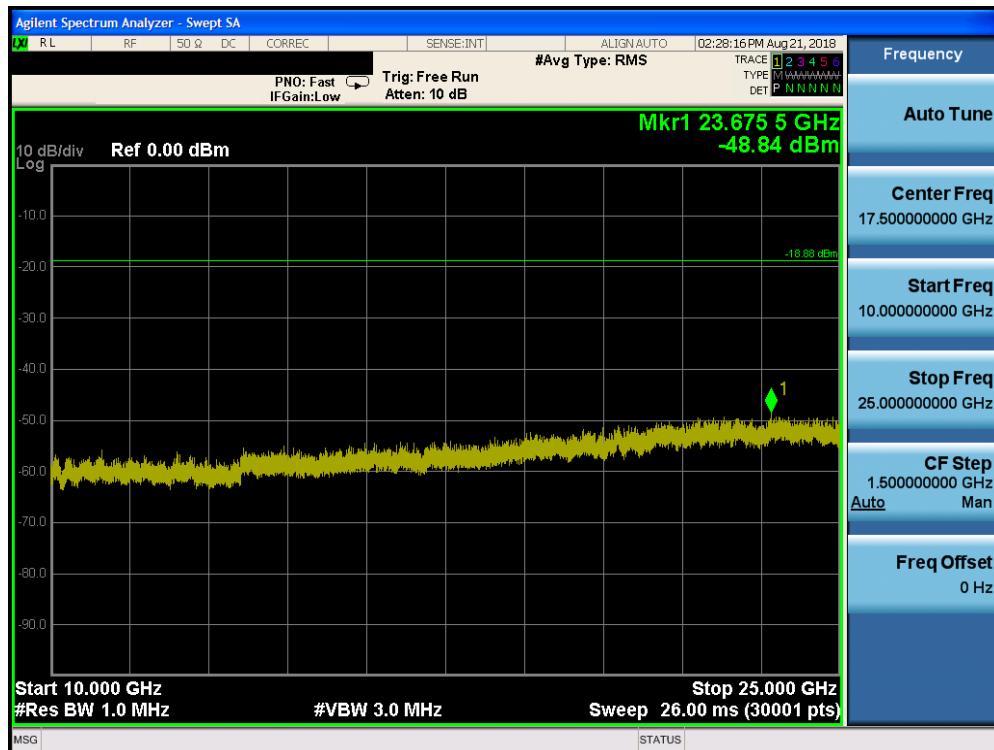


Plot 7-124. Conducted Spurious Plot SISO Core 1 Primary (802.11b – Ch. 6)

FCC ID: BCGA1980	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1806220013-02.BCG	Test Dates: 07/27/2018-09/21/2018	EUT Type: Tablet Device	Page 91 of 145



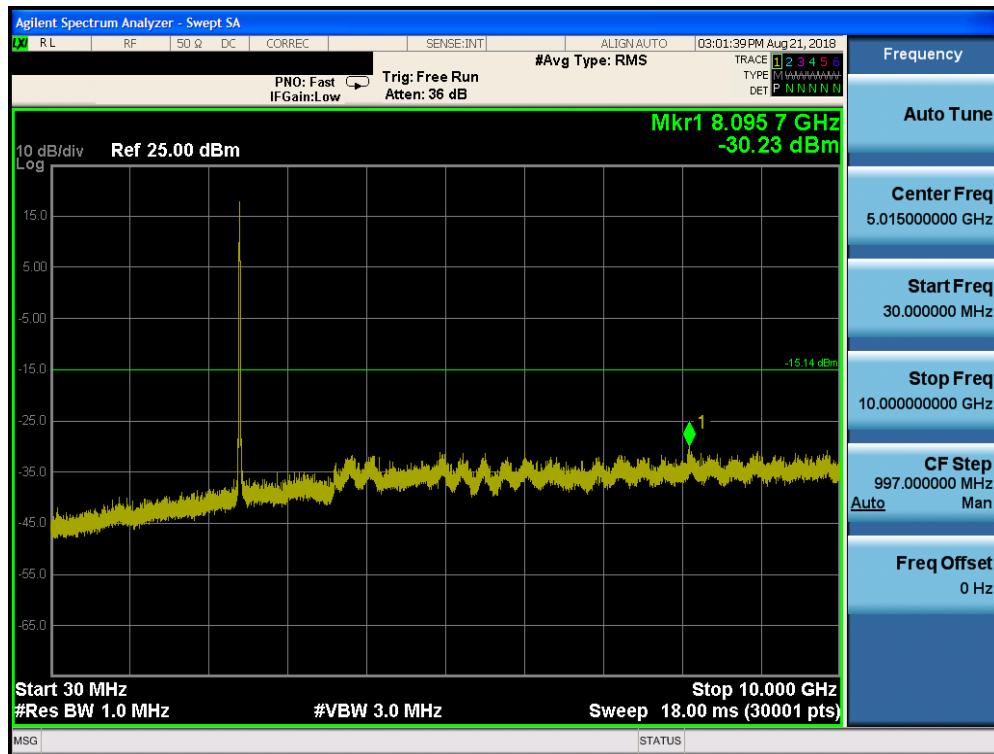
Plot 7-125. Conducted Spurious Plot SISO Core 1 Primary (802.11b – Ch. 11)



Plot 7-126. Conducted Spurious Plot SISO Core 1 Primary (802.11b – Ch. 11)

FCC ID: BCGA1980	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1806220013-02.BCG	Test Dates: 07/27/2018-09/21/2018	EUT Type: Tablet Device	Page 92 of 145

SISO Core 1 Diversity Conducted Spurious Emission



Plot 7-127. Conducted Spurious Plot SISO Core 1 Diversity (802.11b – Ch. 1)

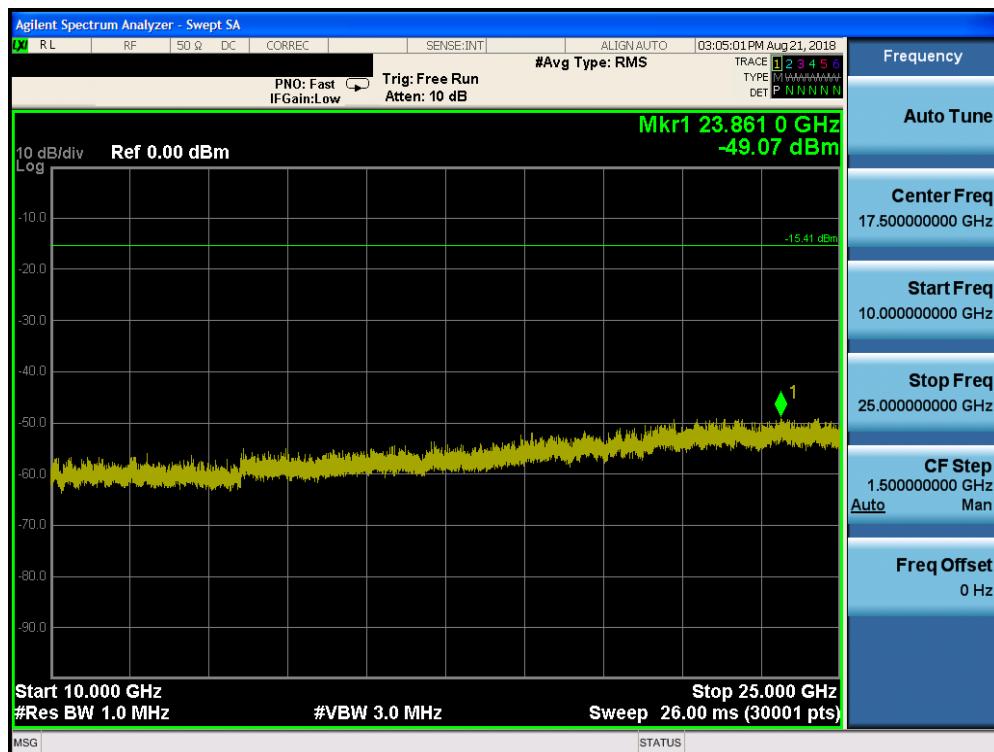


Plot 7-128. Conducted Spurious Plot SISO Core 1 Diversity (802.11b – Ch. 1)

FCC ID: BCGA1980	MEASUREMENT REPORT (CERTIFICATION)			Approved by: Quality Manager
Test Report S/N: 1C1806220013-02.BCG	Test Dates: 07/27/2018-09/21/2018	EUT Type: Tablet Device		Page 93 of 145



Plot 7-129. Conducted Spurious Plot SISO Core 1 Diversity (802.11b – Ch. 6)

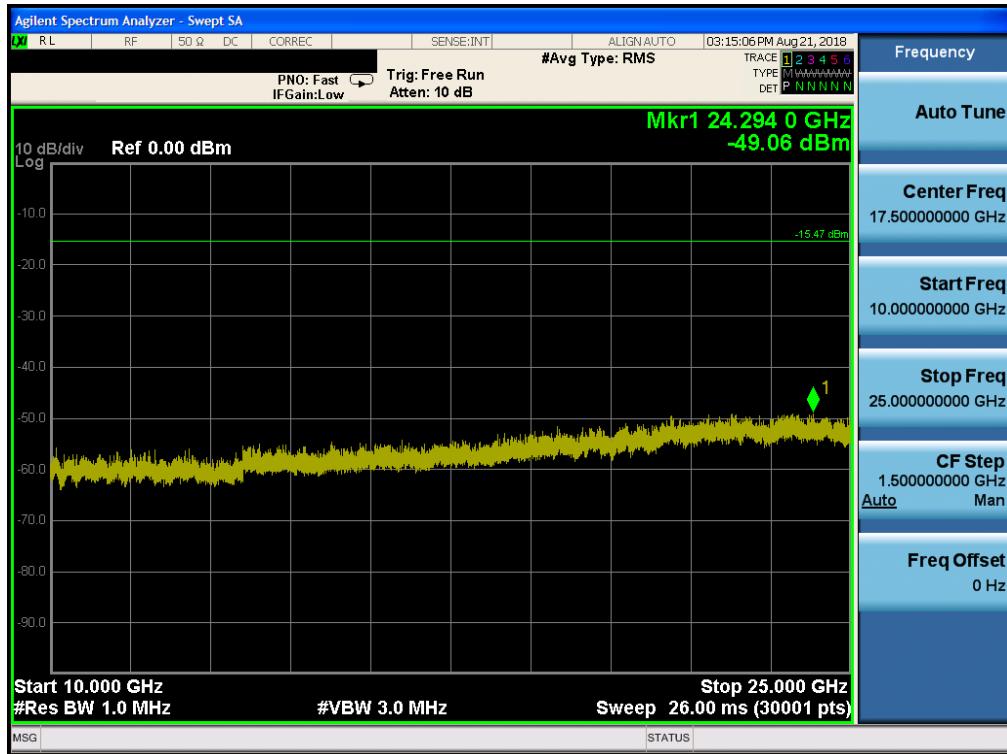


Plot 7-130. Conducted Spurious Plot SISO Core 1 Diversity (802.11b – Ch. 6)

FCC ID: BCGA1980	 MEASUREMENT REPORT (CERTIFICATION)			Approved by: Quality Manager
Test Report S/N: 1C1806220013-02.BCG	Test Dates: 07/27/2018-09/21/2018	EUT Type: Tablet Device		Page 94 of 145



Plot 7-131. Conducted Spurious Plot SISO Core 1 Diversity (802.11b – Ch. 11)



Plot 7-132. Conducted Spurious Plot SISO Core 1 Diversity (802.11b – Ch. 11)

FCC ID: BCGA1980	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1806220013-02.BCG	Test Dates: 07/27/2018-09/21/2018	EUT Type: Tablet Device	Page 95 of 145

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 7-24 per Section 15.209 and RSS-Gen (8.9).

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

Table 7-24. Radiated Limits

Test Procedures Used

ANSI C63.10-2013 – Section 6.6.4.3
 KDB 558074 D01 v05 – Sections 8.6, 8.7

Test Settings

Average Field Strength Measurements

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

Peak Field Strength Measurements

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

FCC ID: BCGA1980	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
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Test Setup

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

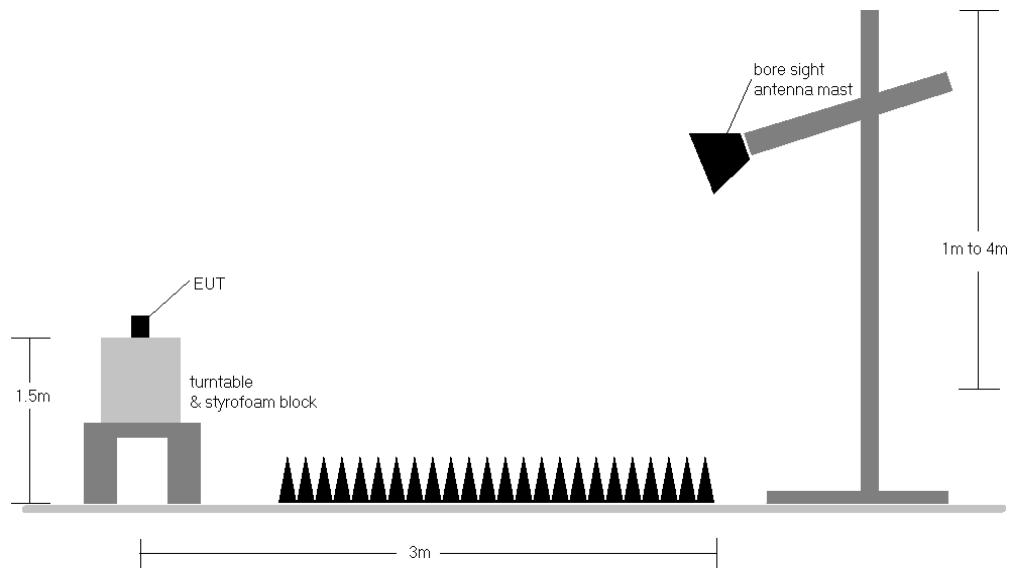


Figure 7-6. Test Instrument & Measurement Setup

Test Notes

1. The optional test procedures for antenna port conducted measurements of unwanted emissions per the guidance of KDB 558074 D01 v05 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 7-24.
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. 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.

FCC ID: BCGA1980	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
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8. The "-" shown in the following RSE tables are used to denote a noise floor measurement.
9. For above 18GHz RSE, only the worst case was reported. The worst case is determined to be MIMO primary (transmitting at max power).

Sample Calculations

Determining Spurious Emissions Levels

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

Radiated Band Edge Measurement Offset

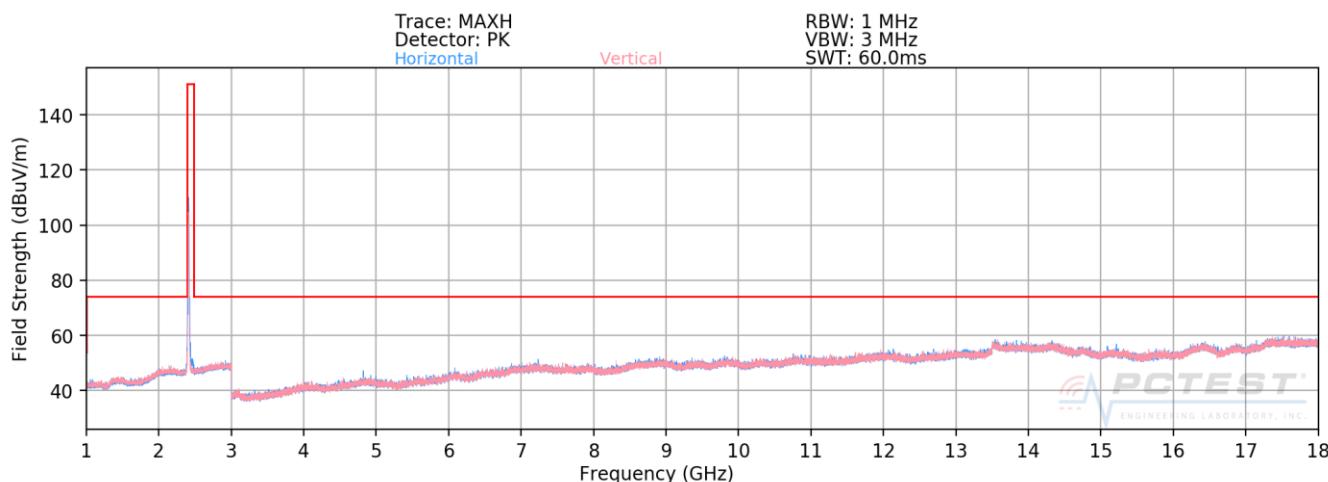
- The amplitude offset shown in the radiated restricted band edge plots in Section 7.7.6, 7.7.7, 7.7.8, 7.7.9, 7.7.10 was calculated using the formula:

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

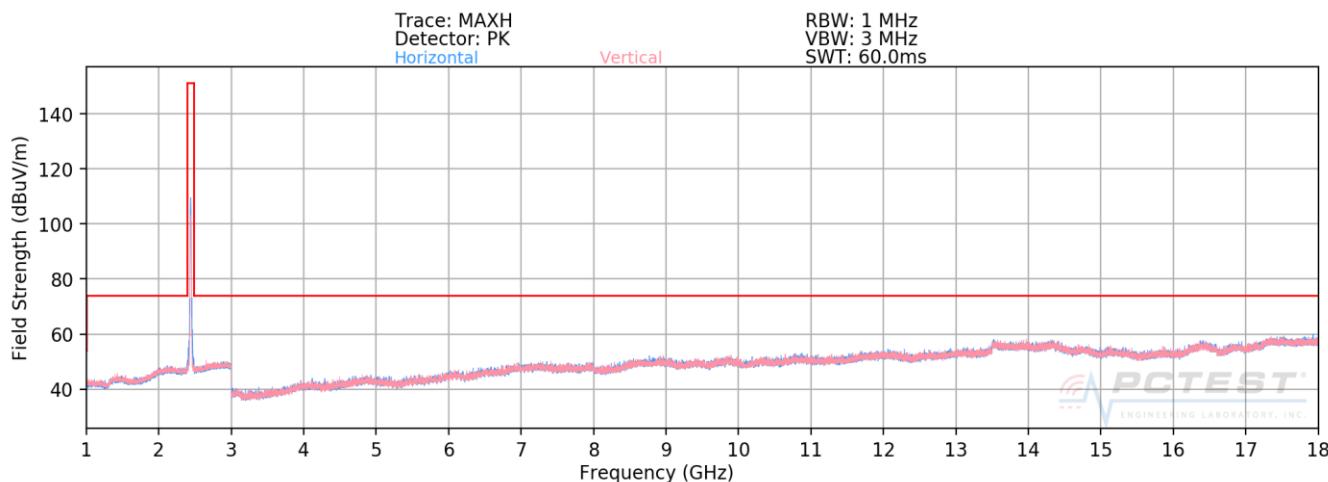
FCC ID: BCGA1980	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1806220013-02.BCG	Test Dates: 07/27/2018-09/21/2018	EUT Type: Tablet Device	Page 98 of 145

7.7.1 SISO Core 0 Radiated Spurious Emission Measurements

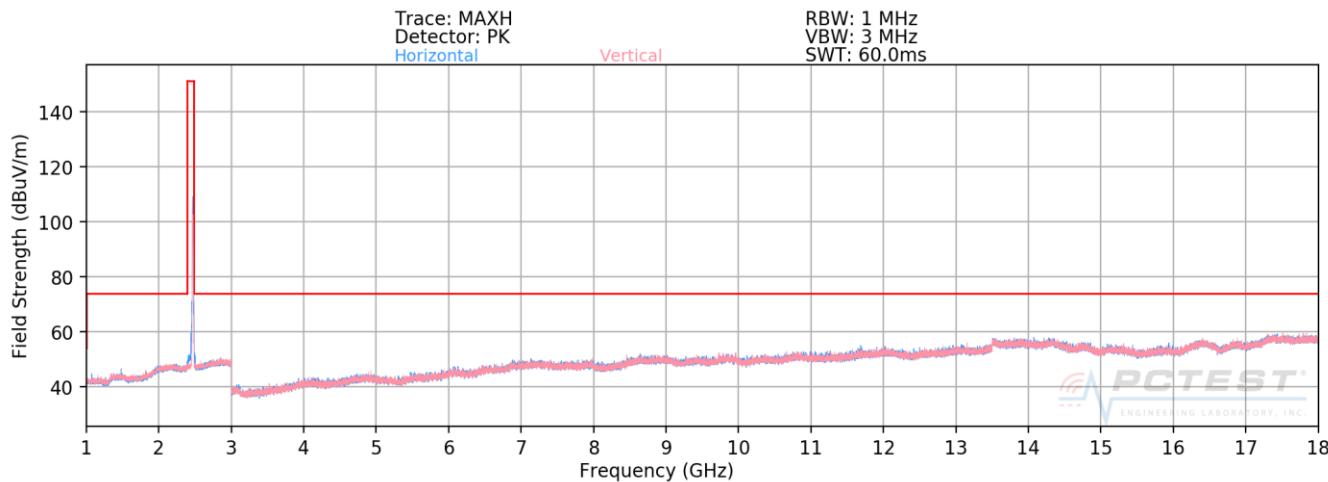
§15.247(d) §15.205 & §15.209; RSS-Gen [8.9]



Plot 7-133. Radiated Spurious Plot above 1GHz SISO Core 0 (802.11b – Ch. 1)



Plot 7-134. Radiated Spurious Plot above 1GHz SISO Core 0 (802.11b – Ch. 6)



Plot 7-135. Radiated Spurious Plot above 1GHz SISO Core 0 (802.11b – Ch. 11)

FCC ID: BCGA1980	PCTEST® ENGINEERING LABORATORY, INC.		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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SISO Core 0 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 [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]
4824.00	Avg	H	233	192	-72.00	5.62	40.62	53.98	-13.36
4824.00	Peak	H	233	192	-65.26	5.62	47.36	73.98	-26.62
12060.00	Avg	H	-	-	-83.84	19.68	42.84	53.98	-11.14
12060.00	Peak	H	-	-	-72.72	19.68	53.96	73.98	-20.02

Table 7-25. Radiated Measurements SISO Core 0

Worst Case Mode: 802.11b
 Worst Case Transfer Rate: 1 Mbps
 Distance of Measurements: 3 Meters
 Operating Frequency: 2437MHz
 Channel: 06

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]
4874.00	Avg	H	278	160	-76.21	5.76	36.55	53.98	-17.43
4874.00	Peak	H	278	160	-66.65	5.76	46.11	73.98	-27.87
7311.00	Avg	H	185	199	-80.19	12.75	39.56	53.98	-14.42
7311.00	Peak	H	185	199	-69.72	12.75	50.03	73.98	-23.95
12185.00	Avg	H	-	-	-84.04	19.41	42.37	53.98	-11.61
12185.00	Peak	H	-	-	-73.06	19.41	53.35	73.98	-20.63

Table 7-26. Radiated Measurements SISO Core 0

FCC ID: BCGA1980	 MEASUREMENT REPORT (CERTIFICATION)				Approved by: Quality Manager
Test Report S/N: 1C1806220013-02.BCG	Test Dates: 07/27/2018-09/21/2018	EUT Type: Tablet Device	Page 100 of 145		

Worst Case Mode: 802.11b
 Worst Case Transfer Rate: 1 Mbps
 Distance of Measurements: 3 Meters
 Operating Frequency: 2462MHz
 Channel: 11

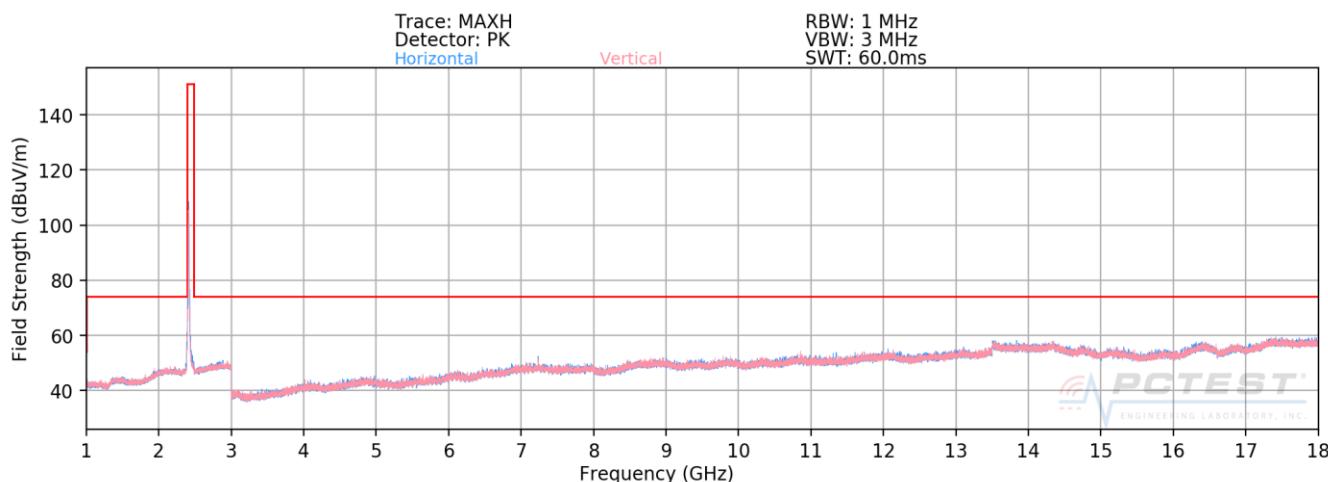
Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]
4924.00	Avg	H	234	251	-66.45	5.52	46.07	53.98	-7.91
4924.00	Peak	H	234	251	-62.15	5.52	50.37	73.98	-23.61
7386.00	Avg	H	178	254	-72.49	12.58	47.09	53.98	-6.89
7386.00	Peak	H	178	254	-65.98	12.58	53.60	73.98	-20.38
12310.00	Avg	H	-	-	-84.96	19.71	41.75	53.98	-12.23
12310.00	Peak	H	-	-	-73.61	19.71	53.10	73.98	-20.88

Table 7-27. Radiated Measurements SISO Core 0

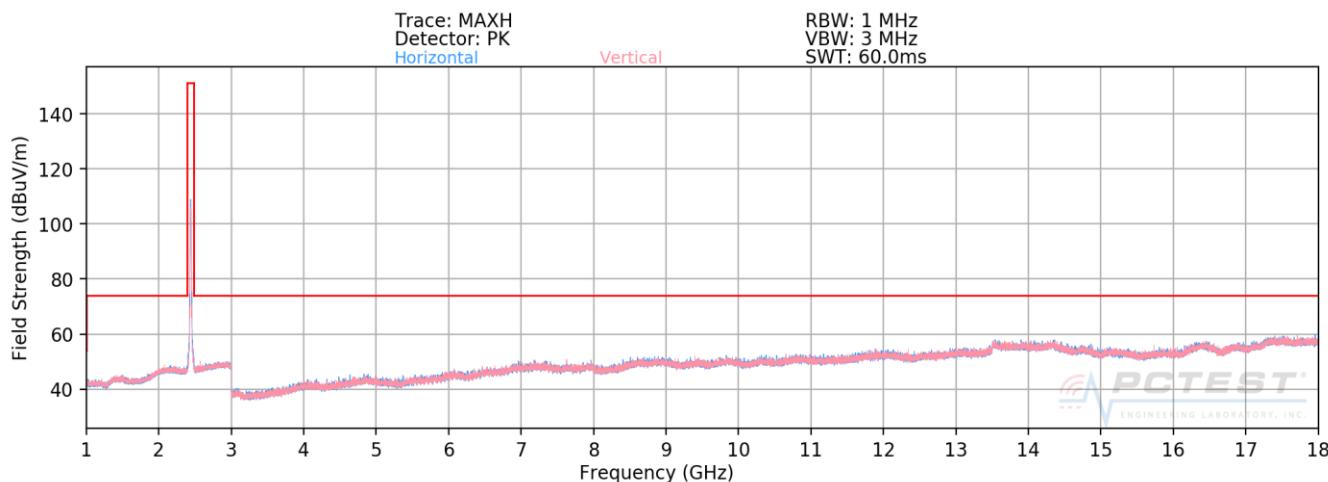
FCC ID: BCGA1980	 MEASUREMENT REPORT (CERTIFICATION)			Approved by: Quality Manager
Test Report S/N: 1C1806220013-02.BCG	Test Dates: 07/27/2018-09/21/2018	EUT Type: Tablet Device	Page 101 of 145	

7.7.2 SISO Core 1 Primary Radiated Spurious Emission Measurements

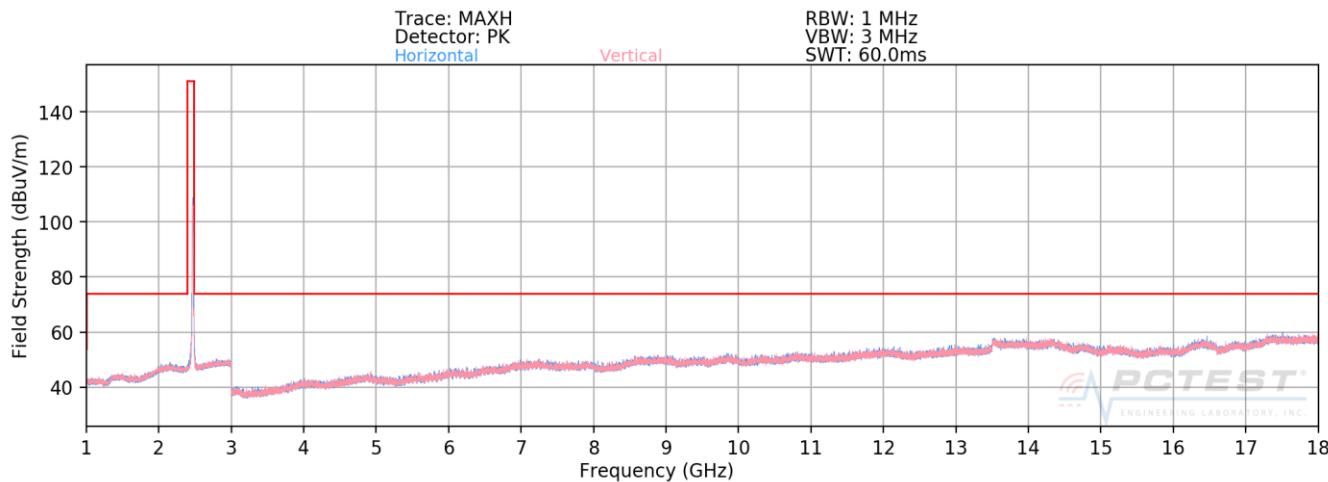
§15.247(d) §15.205 & §15.209; RSS-Gen [8.9]



Plot 7-136. Radiated Spurious Plot above 1GHz SISO Core 1 Primary (802.11b – Ch. 1)



Plot 7-137. Radiated Spurious Plot above 1GHz SISO Core 1 Primary (802.11b – Ch. 6)



Plot 7-138. Radiated Spurious Plot above 1GHz SISO Core 1 Primary (802.11b – Ch. 11)

FCC ID: BCGA1980	PCTEST® ENGINEERING LABORATORY, INC.		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1806220013-02.BCG	Test Dates: 07/27/2018-09/21/2018	EUT Type: Tablet Device		Page 102 of 145

SISO Core 1 Primary 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 [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]
4824.00	Avg	H	248	124	-77.26	5.62	35.36	53.98	-18.62
4824.00	Peak	H	248	124	-66.88	5.62	45.74	73.98	-28.24
12060.00	Avg	H	-	-	-83.78	19.68	42.90	53.98	-11.08
12060.00	Peak	H	-	-	-71.89	19.68	54.79	73.98	-19.19

Table 7-28. Radiated Measurements SISO Core 1 Primary

Worst Case Mode:	802.11b
Worst Case Transfer Rate:	1 Mbps
Distance of Measurements:	3 Meters
Operating Frequency:	2437MHz
Channel:	06

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]
4874.00	Avg	V	172	222	-77.87	5.76	34.89	53.98	-19.09
4874.00	Peak	V	172	222	-66.36	5.76	46.40	73.98	-27.58
7311.00	Avg	H	117	343	-79.70	12.75	40.05	53.98	-13.93
7311.00	Peak	H	117	343	-68.51	12.75	51.24	73.98	-22.74
12185.00	Avg	H	-	-	-84.04	19.41	42.37	53.98	-11.61
12185.00	Peak	H	-	-	-72.72	19.41	53.69	73.98	-20.29

Table 7-29. Radiated Measurements SISO Core 1 Primary

FCC ID: BCGA1980	 MEASUREMENT REPORT (CERTIFICATION)				Approved by: Quality Manager
Test Report S/N: 1C1806220013-02.BCG	Test Dates: 07/27/2018-09/21/2018	EUT Type: Tablet Device	Page 103 of 145		

Worst Case Mode: 802.11b
 Worst Case Transfer Rate: 1 Mbps
 Distance of Measurements: 3 Meters
 Operating Frequency: 2462MHz
 Channel: 11

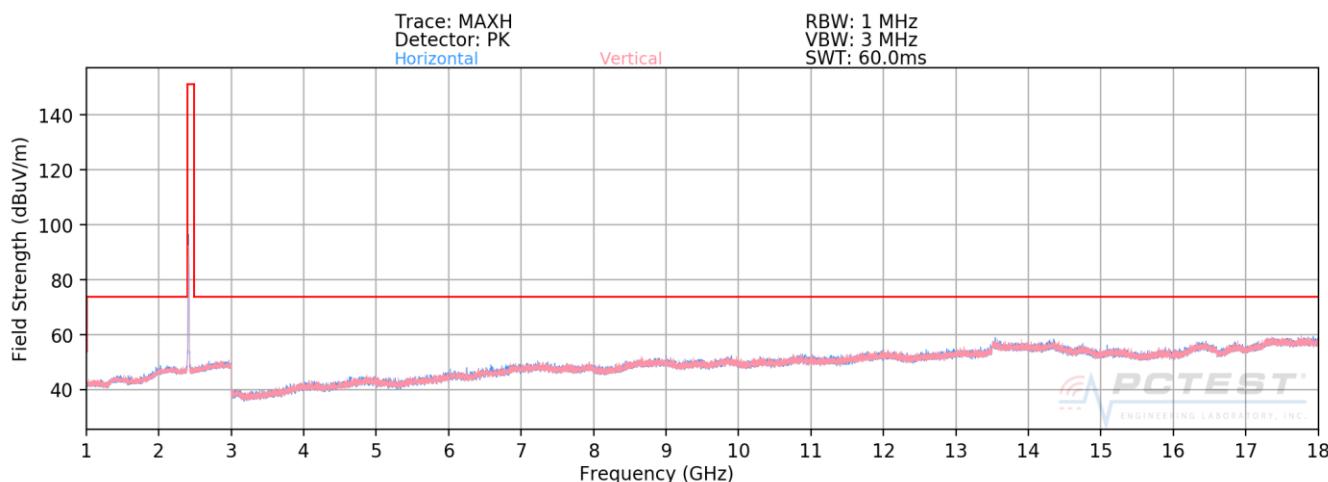
Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]
4924.00	Avg	V	113	176	-78.46	5.52	34.06	53.98	-19.92
4924.00	Peak	V	113	176	-67.12	5.52	45.40	73.98	-28.58
7386.00	Avg	H	111	254	-77.13	12.58	42.45	53.98	-11.53
7386.00	Peak	H	111	254	-67.11	12.58	52.47	73.98	-21.51
12310.00	Avg	H	-	-	-85.01	19.71	41.70	53.98	-12.28
12310.00	Peak	H	-	-	-72.85	19.71	53.86	73.98	-20.12

Table 7-30. Radiated Measurements SISO Core 1 Primary

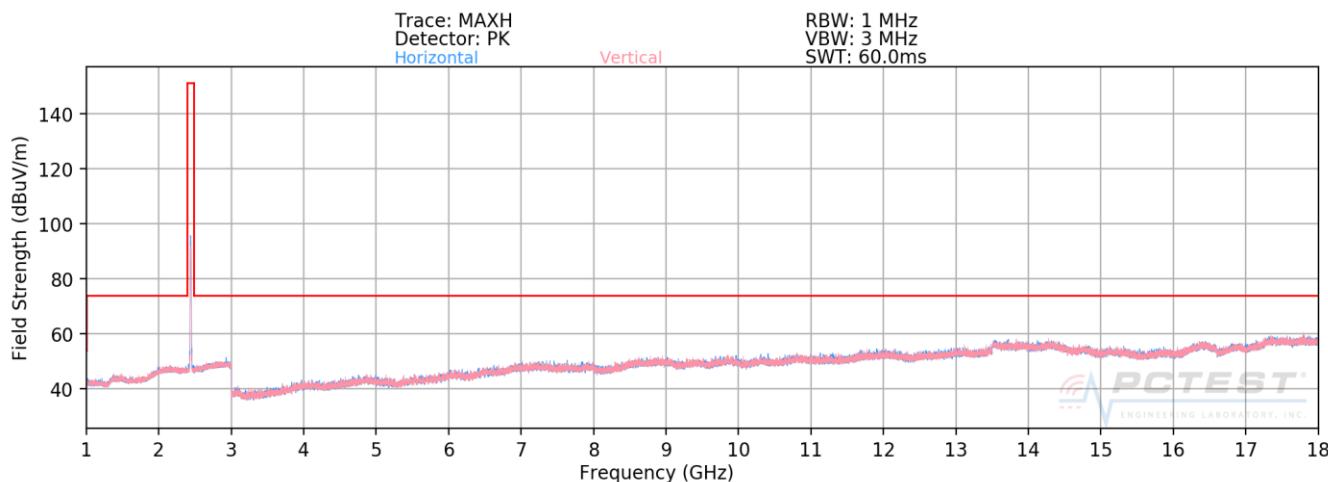
FCC ID: BCGA1980	 MEASUREMENT REPORT (CERTIFICATION)			Approved by: Quality Manager
Test Report S/N: 1C1806220013-02.BCG	Test Dates: 07/27/2018-09/21/2018	EUT Type: Tablet Device	Page 104 of 145	

7.7.3 SISO Core 1 Diversity Radiated Spurious Emission Measurements

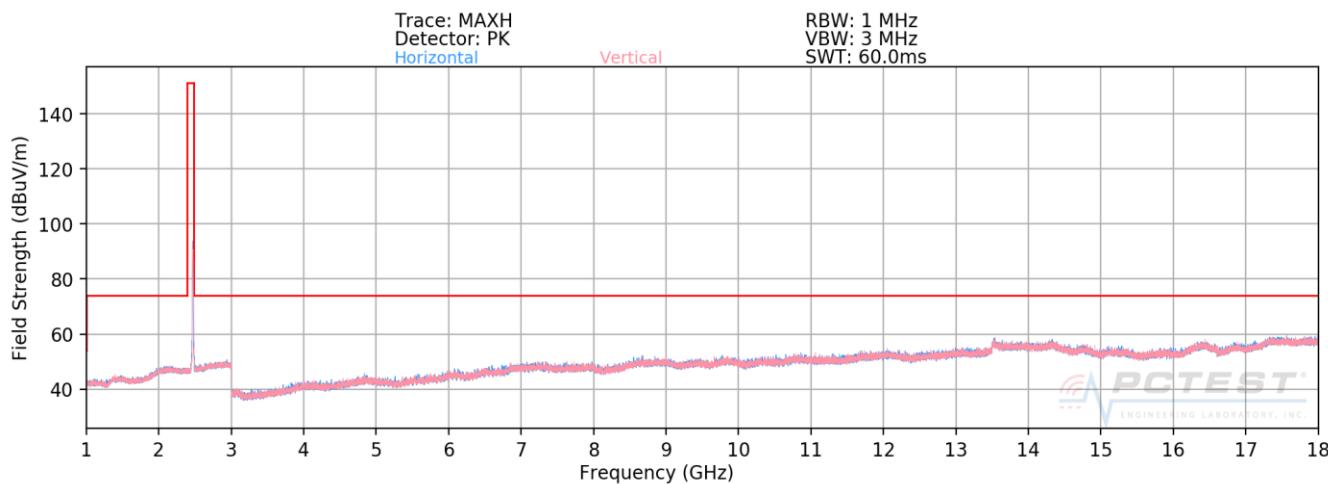
§15.247(d) §15.205 & §15.209; RSS-Gen [8.9]



Plot 7-139. Radiated Spurious Plot above 1GHz SISO Core 1 Diversity (802.11b – Ch. 1)



Plot 7-140. Radiated Spurious Plot above 1GHz SISO Core 1 Diversity (802.11b – Ch. 6)



Plot 7-141. Radiated Spurious Plot above 1GHz SISO Core 1 Diversity (802.11b – Ch. 11)

FCC ID: BCGA1980	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1806220013-02.BCG	Test Dates: 07/27/2018-09/21/2018	EUT Type: Tablet Device	Page 105 of 145

SISO Core 1 Diversity 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 [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]
4824.00	Avg	V	-	-	-78.67	5.62	33.95	53.98	-20.03
4824.00	Peak	V	-	-	-66.78	5.62	45.84	73.98	-28.14
12060.00	Avg	V	-	-	-83.84	19.68	42.84	53.98	-11.14
12060.00	Peak	V	-	-	-72.02	19.68	54.66	73.98	-19.32

Table 7-31. Radiated Measurements SISO Core 1 Diversity

Worst Case Mode:	802.11b
Worst Case Transfer Rate:	1 Mbps
Distance of Measurements:	3 Meters
Operating Frequency:	2437MHz
Channel:	06

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]
4874.00	Avg	V	-	-	-78.45	5.76	34.31	53.98	-19.67
4874.00	Peak	V	-	-	-67.45	5.76	45.31	73.98	-28.67
7311.00	Avg	V	-	-	-81.52	12.75	38.23	53.98	-15.75
7311.00	Peak	V	-	-	-69.80	12.75	49.95	73.98	-24.03
12185.00	Avg	H	-	-	-83.88	19.41	42.53	53.98	-11.45
12185.00	Peak	H	-	-	-71.92	19.41	54.49	73.98	-19.49

Table 7-32. Radiated Measurements SISO Core 1 Diversity

FCC ID: BCGA1980	 MEASUREMENT REPORT (CERTIFICATION)				Approved by: Quality Manager
Test Report S/N: 1C1806220013-02.BCG	Test Dates: 07/27/2018-09/21/2018	EUT Type: Tablet Device			Page 106 of 145

Worst Case Mode: 802.11b
 Worst Case Transfer Rate: 1 Mbps
 Distance of Measurements: 3 Meters
 Operating Frequency: 2462MHz
 Channel: 11

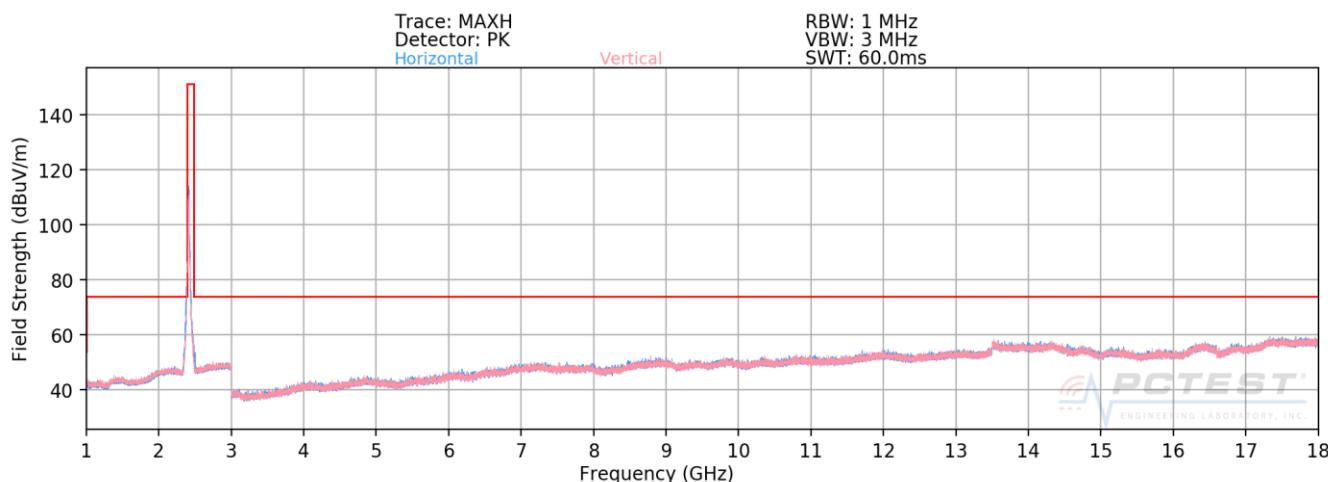
Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]
4924.00	Avg	V	-	-	-78.64	5.52	33.88	53.98	-20.10
4924.00	Peak	V	-	-	-67.03	5.52	45.49	73.98	-28.49
7386.00	Avg	H	-	-	-81.05	12.58	38.53	53.98	-15.45
7386.00	Peak	H	-	-	-69.50	12.58	50.08	73.98	-23.90
12310.00	Avg	H	-	-	-84.98	19.71	41.73	53.98	-12.25
12310.00	Peak	H	-	-	-73.59	19.71	53.12	73.98	-20.86

Table 7-33. Radiated Measurements SISO Core 1 Diversity

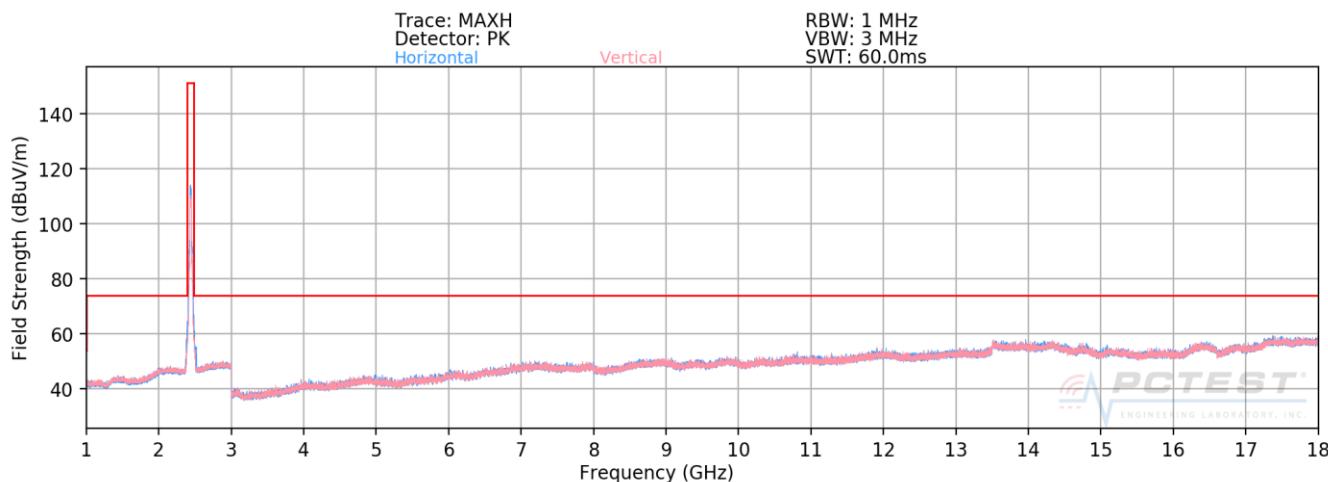
FCC ID: BCGA1980	 MEASUREMENT REPORT (CERTIFICATION)			Approved by: Quality Manager
Test Report S/N: 1C1806220013-02.BCG	Test Dates: 07/27/2018-09/21/2018	EUT Type: Tablet Device	Page 107 of 145	

7.7.4 CDD Primary Radiated Spurious Emission Measurements

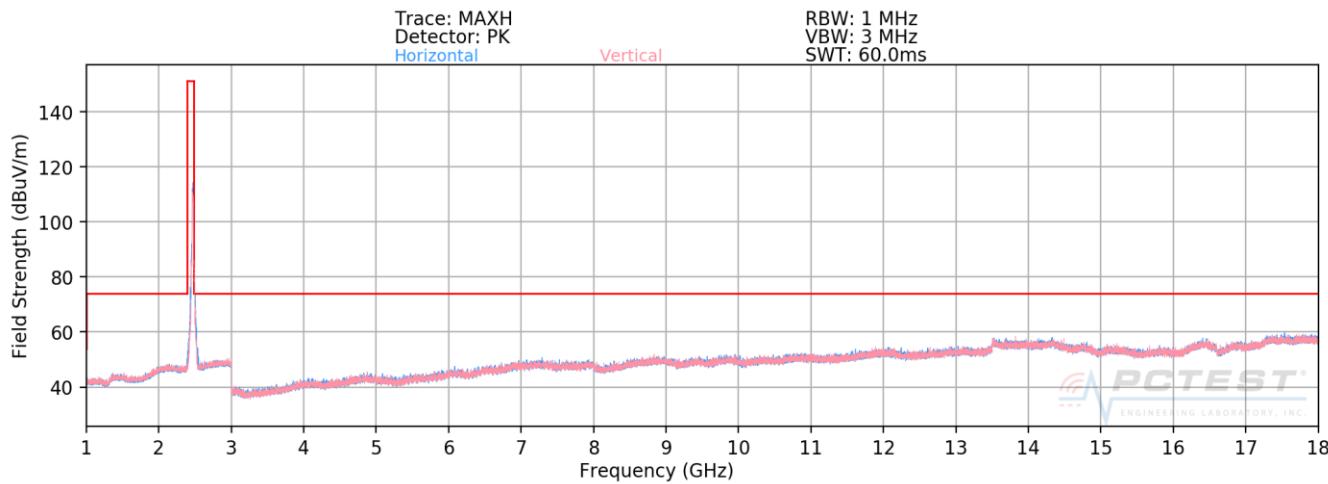
§15.247(d) §15.205 & §15.209; RSS-Gen [8.9]



Plot 7-142. Radiated Spurious Plot above 1GHz CDD Primary (802.11n – Ch. 1)



Plot 7-143. Radiated Spurious Plot above 1GHz CDD Primary (802.11n – Ch. 6)

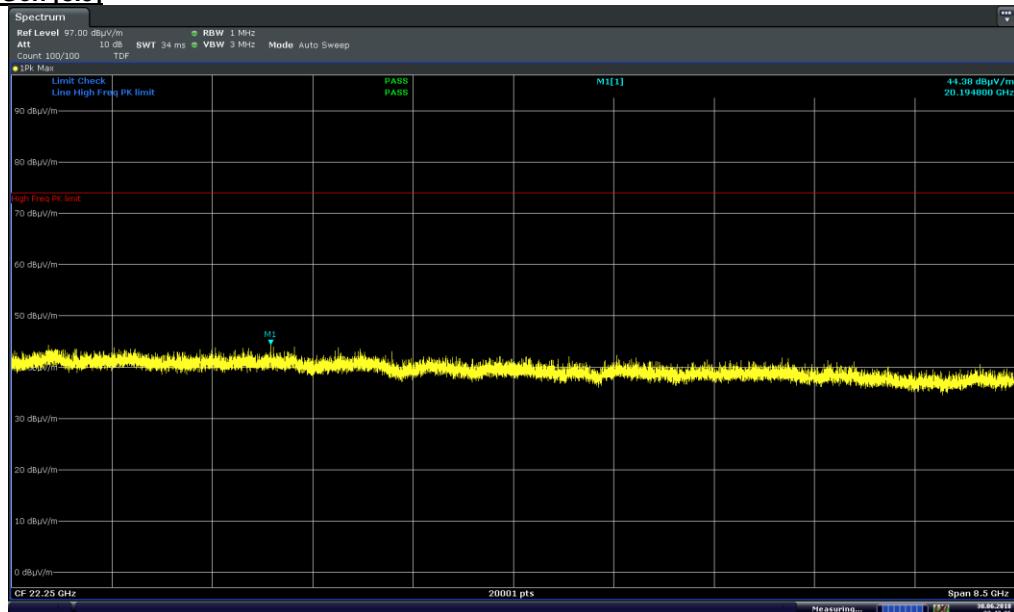


Plot 7-144. Radiated Spurious Plot above 1GHz CDD Primary (802.11n – Ch. 11)

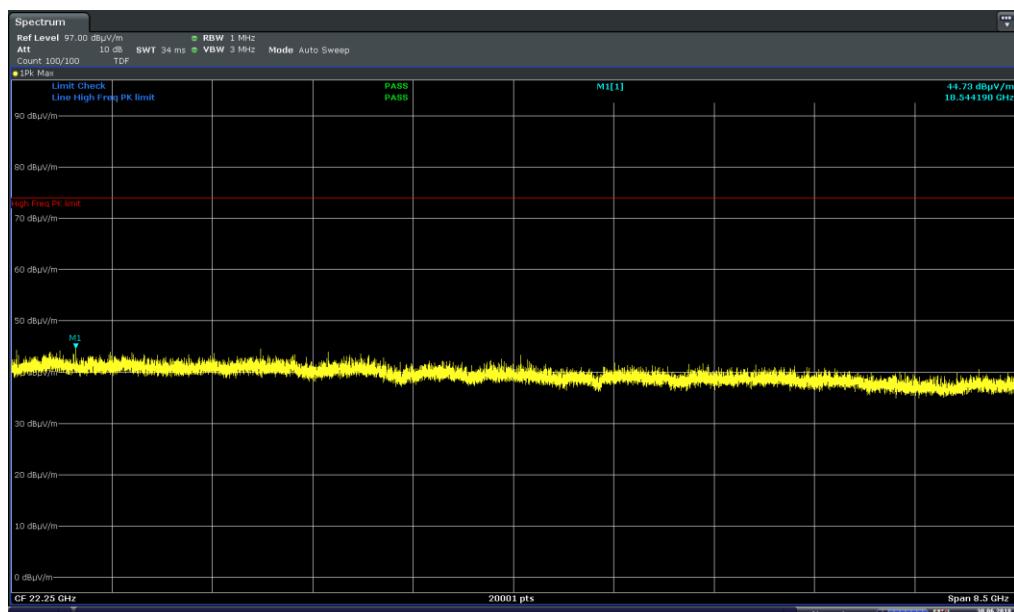
FCC ID: BCGA1980	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1806220013-02.BCG	Test Dates: 07/27/2018-09/21/2018	EUT Type: Tablet Device	Page 108 of 145

CDD Primary Radiated Spurious Emissions Measurements (Above 18GHz)

§15.209; RSS-Gen [8.9]



Plot 7-145. Radiated Spurious Plot above 18GHz CDD Primary Horizontal Polarity



Plot 7-146. Radiated Spurious Plot above 18GHz CDD Primary Vertical Polarity

FCC ID: BCGA1980	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1C1806220013-02.BCG	Test Dates: 07/27/2018-09/21/2018	EUT Type: Tablet Device	Page 109 of 145

CDD Primary Radiated Spurious Emission Measurements
§15.247(d) §15.205 & §15.209; RSS-Gen [8.9]

Worst Case Mode:	802.11n
Worst Case Transfer Rate:	MCS0
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 [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]
4824.00	Avg	H	-	-	-78.54	5.62	34.08	53.98	-19.90
4824.00	Peak	H	-	-	-66.98	5.62	45.64	73.98	-28.34
12060.00	Avg	H	-	-	-83.78	19.68	42.90	53.98	-11.08
12060.00	Peak	H	-	-	-72.98	19.68	53.70	73.98	-20.28

Table 7-34. Radiated Measurements CDD Primary

Worst Case Mode:	802.11n
Worst Case Transfer Rate:	MCS0
Distance of Measurements:	3 Meters
Operating Frequency:	2437MHz
Channel:	06

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]
4874.00	Avg	H	-	-	-78.36	5.76	34.40	53.98	-19.58
4874.00	Peak	H	-	-	-66.67	5.76	46.09	73.98	-27.89
7311.00	Avg	H	-	-	-81.16	12.75	38.59	53.98	-15.39
7311.00	Peak	H	-	-	-69.95	12.75	49.80	73.98	-24.18
12185.00	Avg	H	-	-	-84.05	19.41	42.36	53.98	-11.62
12185.00	Peak	H	-	-	-72.73	19.41	53.68	73.98	-20.30

Table 7-35. Radiated Measurements CDD Primary

FCC ID: BCGA1980	 MEASUREMENT REPORT (CERTIFICATION)				Approved by: Quality Manager
Test Report S/N: 1C1806220013-02.BCG	Test Dates: 07/27/2018-09/21/2018	EUT Type: Tablet Device	Page 110 of 145		

Worst Case Mode: 802.11n
 Worst Case Transfer Rate: MCS0
 Distance of Measurements: 3 Meters
 Operating Frequency: 2462MHz
 Channel: 11

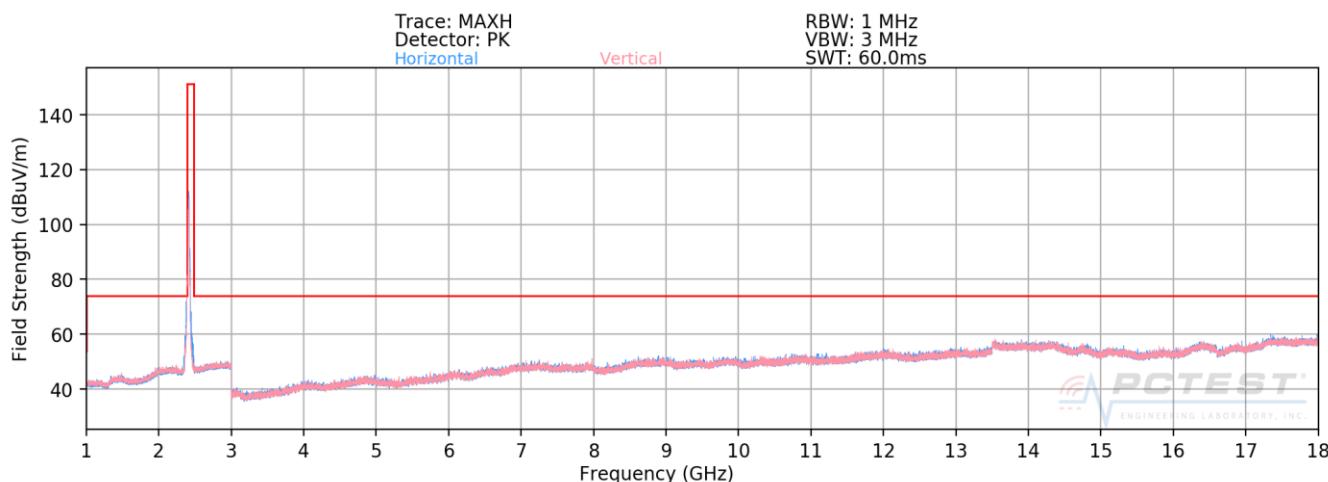
Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]
4924.00	Avg	H	-	-	-78.41	5.52	34.11	53.98	-19.87
4924.00	Peak	H	-	-	-67.51	5.52	45.01	73.98	-28.97
7386.00	Avg	H	233	206	-80.06	12.58	39.52	53.98	-14.46
7386.00	Peak	H	233	206	-68.95	12.58	50.63	73.98	-23.35
12310.00	Avg	H	-	-	-84.91	19.71	41.80	53.98	-12.18
12310.00	Peak	H	-	-	-73.58	19.71	53.13	73.98	-20.85

Table 7-36. Radiated Measurements CDD Primary

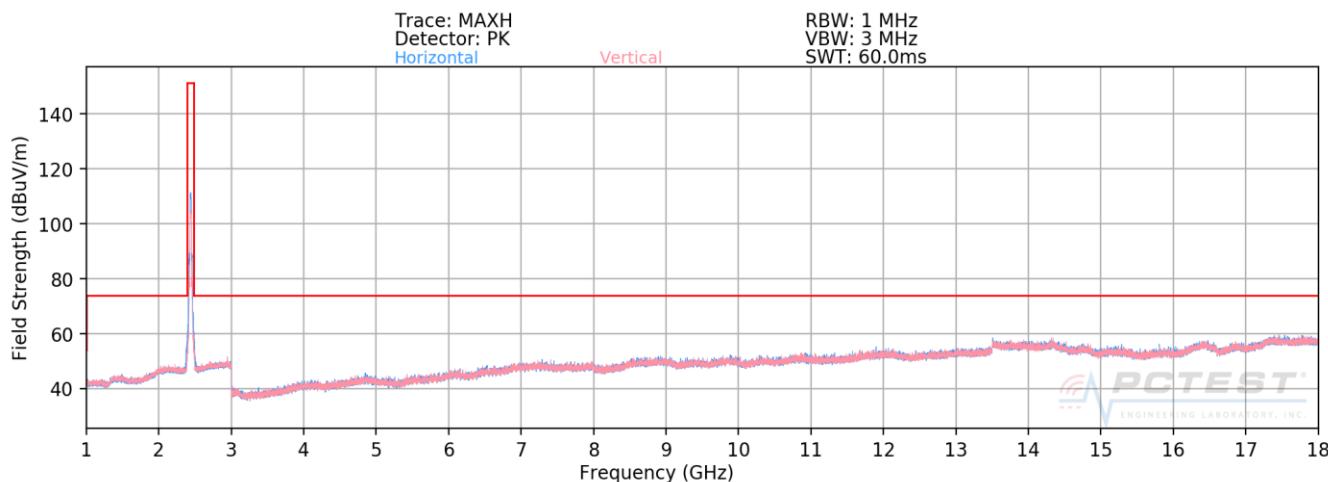
FCC ID: BCGA1980	 MEASUREMENT REPORT (CERTIFICATION)			Approved by: Quality Manager
Test Report S/N: 1C1806220013-02.BCG	Test Dates: 07/27/2018-09/21/2018	EUT Type: Tablet Device	Page 111 of 145	

7.7.5 CDD Diversity Radiated Spurious Emission Measurements

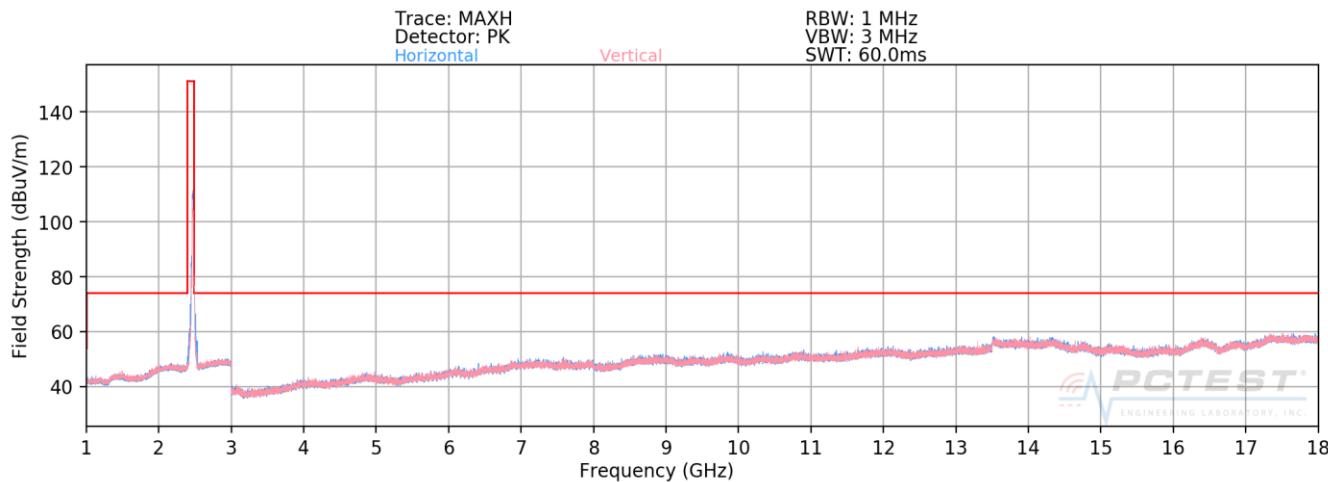
§15.247(d) §15.205 & §15.209; RSS-Gen [8.9]



Plot 7-147. Radiated Spurious Plot above 1GHz CDD Diversity (802.11n – Ch. 1)



Plot 7-148. Radiated Spurious Plot above 1GHz CDD Diversity (802.11n – Ch. 6)



Plot 7-149. Radiated Spurious Plot above 1GHz CDD Diversity (802.11n – Ch. 11)

FCC ID: BCGA1980	PCTEST® ENGINEERING LABORATORY, INC.		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1806220013-02.BCG	Test Dates: 07/27/2018-09/21/2018	EUT Type: Tablet Device	Page 112 of 145	

CDD Diversity Radiated Spurious Emission Measurements
§15.247(d) §15.205 & §15.209; RSS-Gen [8.9]

Worst Case Mode:	802.11n
Worst Case Transfer Rate:	MCS0
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 [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]
4824.00	Avg	H	-	-	-78.55	5.62	34.07	53.98	-19.91
4824.00	Peak	H	-	-	-66.95	5.62	45.67	73.98	-28.31
12060.00	Avg	H	-	-	-83.82	19.68	42.86	53.98	-11.12
12060.00	Peak	H	-	-	-72.45	19.68	54.23	73.98	-19.75

Table 7-37. Radiated Measurements CDD Diversity

Worst Case Mode:	802.11n
Worst Case Transfer Rate:	MCS0
Distance of Measurements:	3 Meters
Operating Frequency:	2437MHz
Channel:	06

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]
4874.00	Avg	H	-	-	-78.58	5.76	34.18	53.98	-19.80
4874.00	Peak	H	-	-	-67.52	5.76	45.24	73.98	-28.74
7311.00	Avg	H	-	-	-80.90	12.75	38.85	53.98	-15.13
7311.00	Peak	H	-	-	-69.83	12.75	49.92	73.98	-24.06
12185.00	Avg	H	-	-	-83.94	19.41	42.47	53.98	-11.51
12185.00	Peak	H	-	-	-71.75	19.41	54.66	73.98	-19.32

Table 7-38. Radiated Measurements CDD Diversity

FCC ID: BCGA1980	 MEASUREMENT REPORT (CERTIFICATION)				Approved by: Quality Manager
Test Report S/N: 1C1806220013-02.BCG	Test Dates: 07/27/2018-09/21/2018	EUT Type: Tablet Device			Page 113 of 145

Worst Case Mode: 802.11n
 Worst Case Transfer Rate: MCS0
 Distance of Measurements: 3 Meters
 Operating Frequency: 2462MHz
 Channel: 11

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]
4924.00	Avg	H	-	-	-78.46	5.52	34.06	53.98	-19.92
4924.00	Peak	H	-	-	-66.88	5.52	45.64	73.98	-28.34
7386.00	Avg	H	-	-	-80.91	12.58	38.67	53.98	-15.31
7386.00	Peak	H	-	-	-69.33	12.58	50.25	73.98	-23.73
12310.00	Avg	H	-	-	-84.61	19.71	42.10	53.98	-11.88
12310.00	Peak	H	-	-	-73.36	19.71	53.35	73.98	-20.63

Table 7-39. Radiated Measurements CDD Diversity

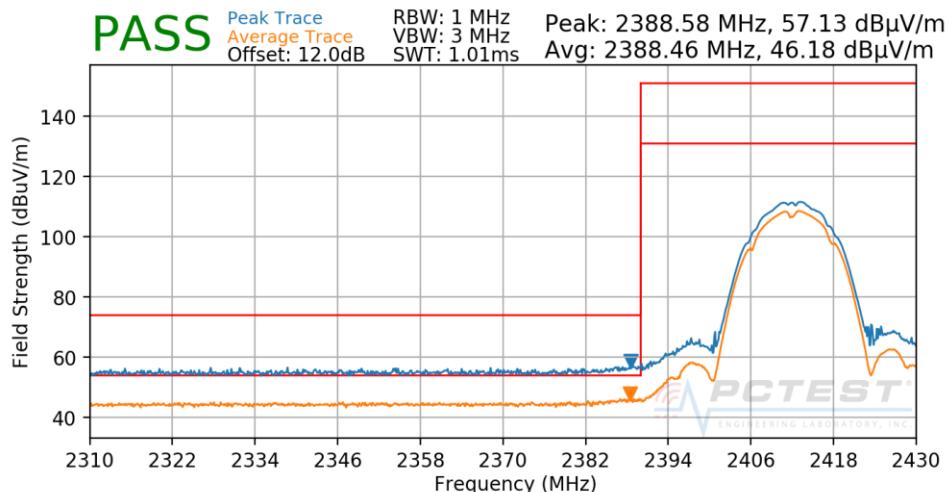
FCC ID: BCGA1980	 MEASUREMENT REPORT (CERTIFICATION)			Approved by: Quality Manager
Test Report S/N: 1C1806220013-02.BCG	Test Dates: 07/27/2018-09/21/2018	EUT Type: Tablet Device	Page 114 of 145	

7.7.6 SISO Core 0 Radiated Restricted Band Edge Measurements

§15.205 §15.209; RSS-Gen [8.9]

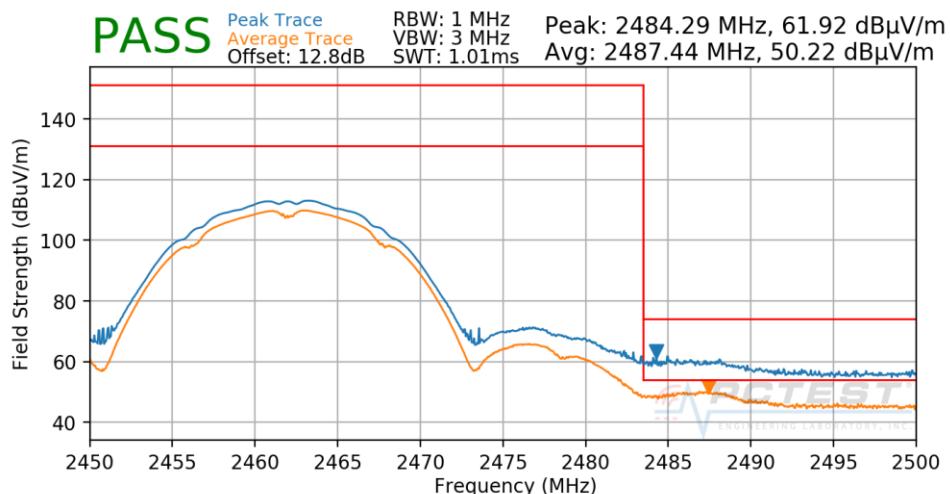
The radiated restricted band edge measurements are measured with an EMI test receiver connected to the receive antenna while the EUT is transmitting.

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



Plot 7-150. Radiated Restricted Lower Band Edge Measurement SISO Core 0 (Average & Peak)

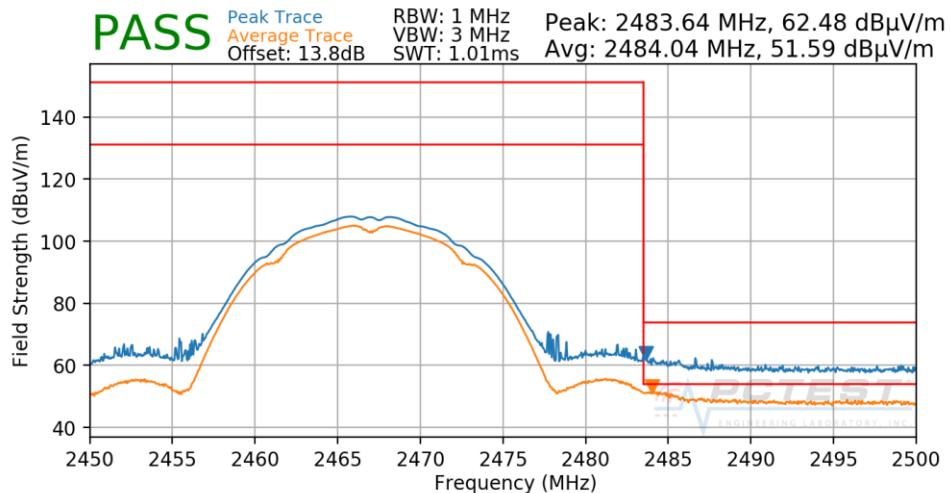
Worst Case Mode: 802.11b
Worst Case Transfer Rate: 1 Mbps
Distance of Measurements: 3 Meters
Operating Frequency: 2462MHz
Channel: 11



Plot 7-151. Radiated Restricted Upper Band Edge Measurement SISO Core 0 (Average & Peak)

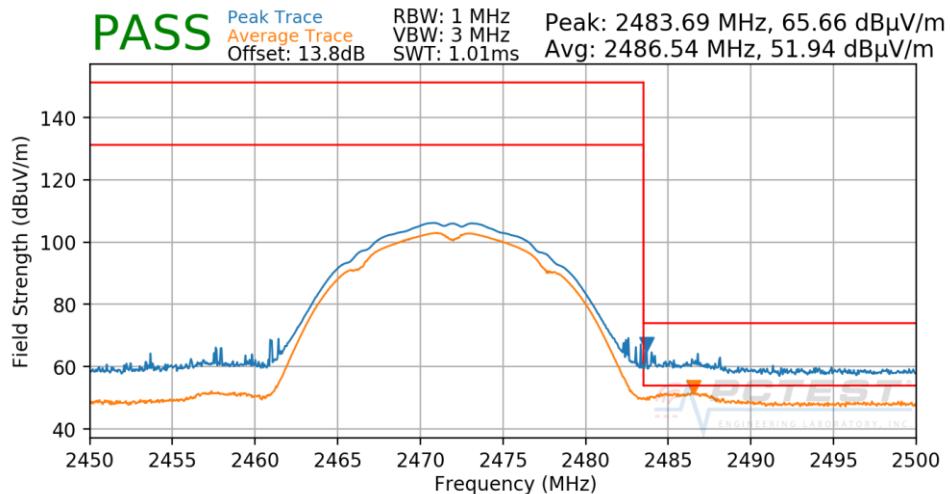
FCC ID: BCGA1980	 PCTEST ENGINEERING LABORATORY, INC.		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1806220013-02.BCG	Test Dates: 07/27/2018-09/21/2018	EUT Type: Tablet Device		Page 115 of 145

Worst Case Mode: 802.11b
 Worst Case Transfer Rate: 1 Mbps
 Distance of Measurements: 3 Meters
 Operating Frequency: 2467MHz
 Channel: 12



Plot 7-152. Radiated Restricted Upper Band Edge Measurement SISO Core 0 (Average & Peak)

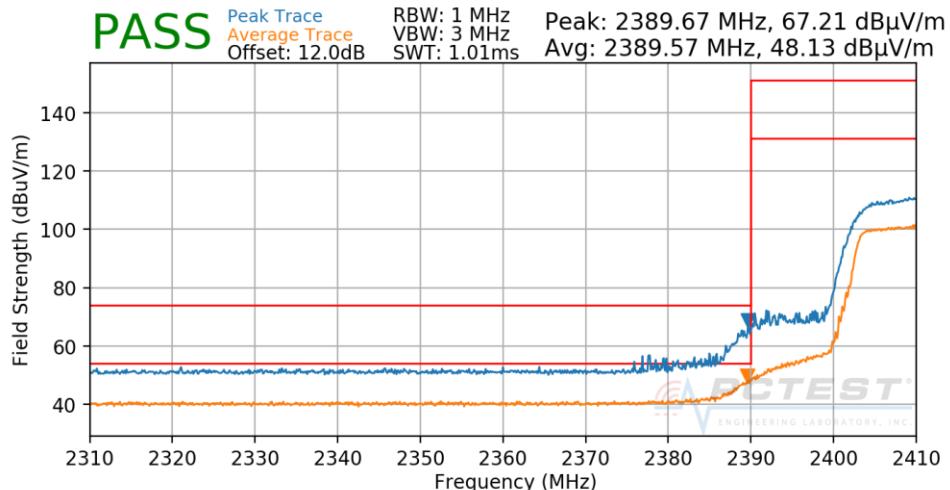
Worst Case Mode: 802.11b
 Worst Case Transfer Rate: 1 Mbps
 Distance of Measurements: 3 Meters
 Operating Frequency: 2472MHz
 Channel: 13



Plot 7-153. Radiated Restricted Upper Band Edge Measurement SISO Core 0 (Average & Peak)

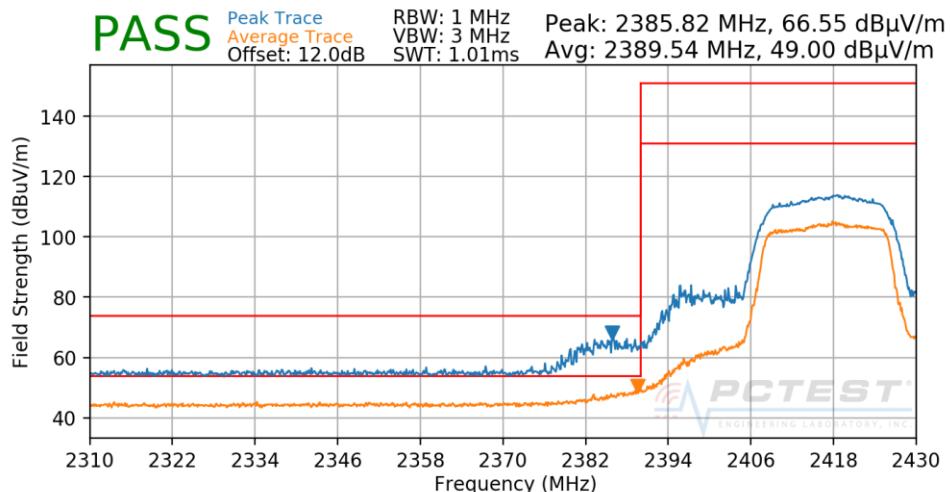
FCC ID: BCGA1980	 MEASUREMENT REPORT (CERTIFICATION)			Approved by: Quality Manager
Test Report S/N: 1C1806220013-02.BCG	Test Dates: 07/27/2018-09/21/2018	EUT Type: Tablet Device		Page 116 of 145

Worst Case Mode: 802.11n
 Worst Case Transfer Rate: MCS0
 Distance of Measurements: 3 Meters
 Operating Frequency: 2412MHz
 Channel: 1



Plot 7-154. Radiated Restricted Lower Band Edge Measurement SISO Core 0 (Average & Peak)

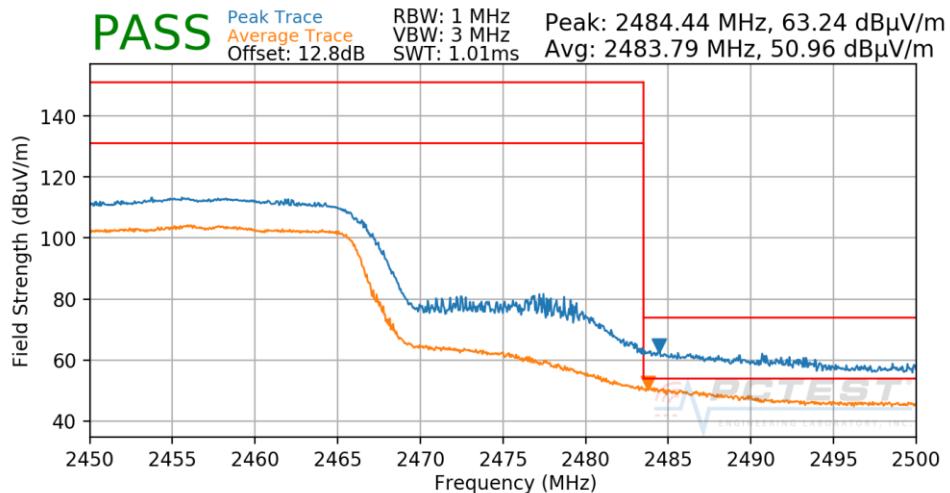
Worst Case Mode: 802.11n
 Worst Case Transfer Rate: MCS0
 Distance of Measurements: 3 Meters
 Operating Frequency: 2417MHz
 Channel: 2



Plot 7-155. Radiated Restricted Lower Band Edge Measurement SISO Core 0 (Average & Peak)

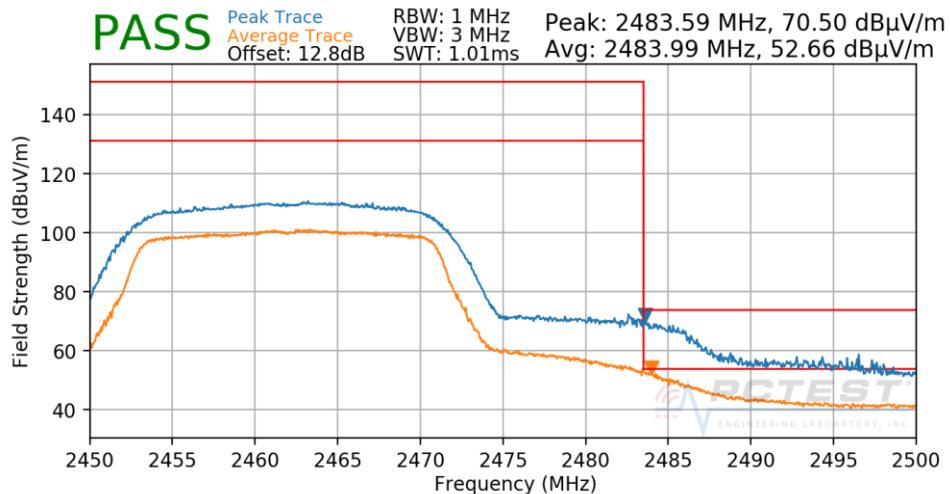
FCC ID: BCGA1980	 MEASUREMENT REPORT (CERTIFICATION)			Approved by: Quality Manager
Test Report S/N: 1C1806220013-02.BCG	Test Dates: 07/27/2018-09/21/2018	EUT Type: Tablet Device		Page 117 of 145

Worst Case Mode: 802.11n
 Worst Case Transfer Rate: MCS0
 Distance of Measurements: 3 Meters
 Operating Frequency: 2457MHz
 Channel: 10



Plot 7-156. Radiated Restricted Upper Band Edge Measurement SISO Core 0 (Average & Peak)

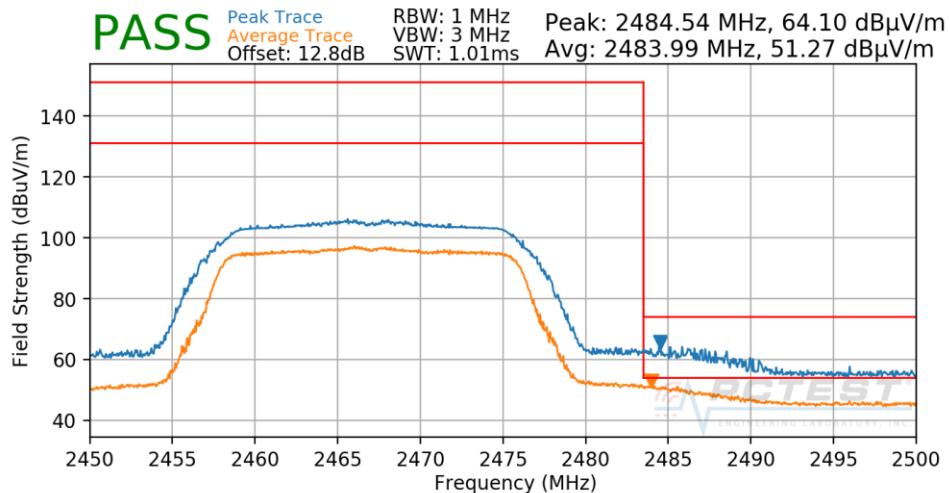
Worst Case Mode: 802.11n
 Worst Case Transfer Rate: MCS0
 Distance of Measurements: 3 Meters
 Operating Frequency: 2462MHz
 Channel: 11



Plot 7-157. Radiated Restricted Upper Band Edge Measurement SISO Core 0 (Average & Peak)

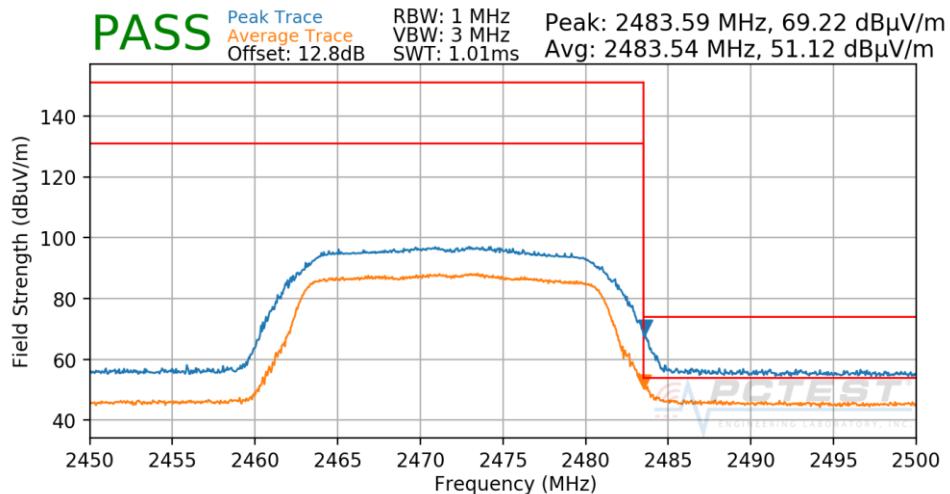
FCC ID: BCGA1980	 MEASUREMENT REPORT (CERTIFICATION)			Approved by: Quality Manager
Test Report S/N: 1C1806220013-02.BCG	Test Dates: 07/27/2018-09/21/2018	EUT Type: Tablet Device		Page 118 of 145

Worst Case Mode: 802.11n
 Worst Case Transfer Rate: MCS0
 Distance of Measurements: 3 Meters
 Operating Frequency: 2467MHz
 Channel: 12



Plot 7-158. Radiated Restricted Upper Band Edge Measurement SISO Core 0 (Average & Peak)

Worst Case Mode: 802.11n
 Worst Case Transfer Rate: MCS0
 Distance of Measurements: 3 Meters
 Operating Frequency: 2472MHz
 Channel: 13



Plot 7-159. Radiated Restricted Upper Band Edge Measurement SISO Core 0 (Average & Peak)

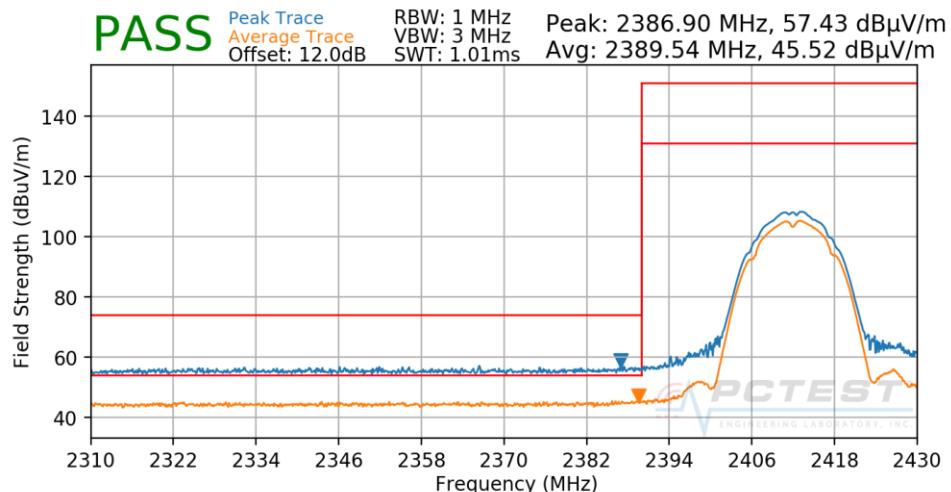
FCC ID: BCGA1980	 MEASUREMENT REPORT (CERTIFICATION)			Approved by: Quality Manager
Test Report S/N: 1C1806220013-02.BCG	Test Dates: 07/27/2018-09/21/2018	EUT Type: Tablet Device		Page 119 of 145

7.7.7 SISO Core 1 Primary Radiated Restricted Band Edge Measurements

§15.205 §15.209; RSS-Gen [8.9]

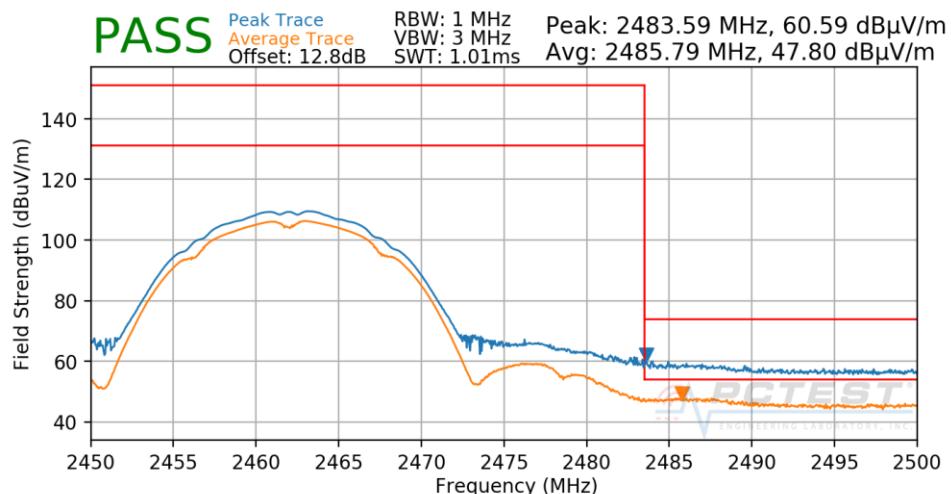
The radiated restricted band edge measurements are measured with an EMI test receiver connected to the receive antenna while the EUT is transmitting.

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



Plot 7-160. Radiated Restricted Lower Band Edge Measurement SISO Core 1 Primary (Average & Peak)

Worst Case Mode: 802.11b
 Worst Case Transfer Rate: 1 Mbps
 Distance of Measurements: 3 Meters
 Operating Frequency: 2462MHz
 Channel: 11



Plot 7-161. Radiated Restricted Upper Band Edge Measurement SISO Core 1 Primary (Average & Peak)

FCC ID: BCGA1980	PCTEST® ENGINEERING LABORATORY, INC.		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
Test Report S/N: 1C1806220013-02.BCG	Test Dates: 07/27/2018-09/21/2018	EUT Type: Tablet Device		Page 120 of 145