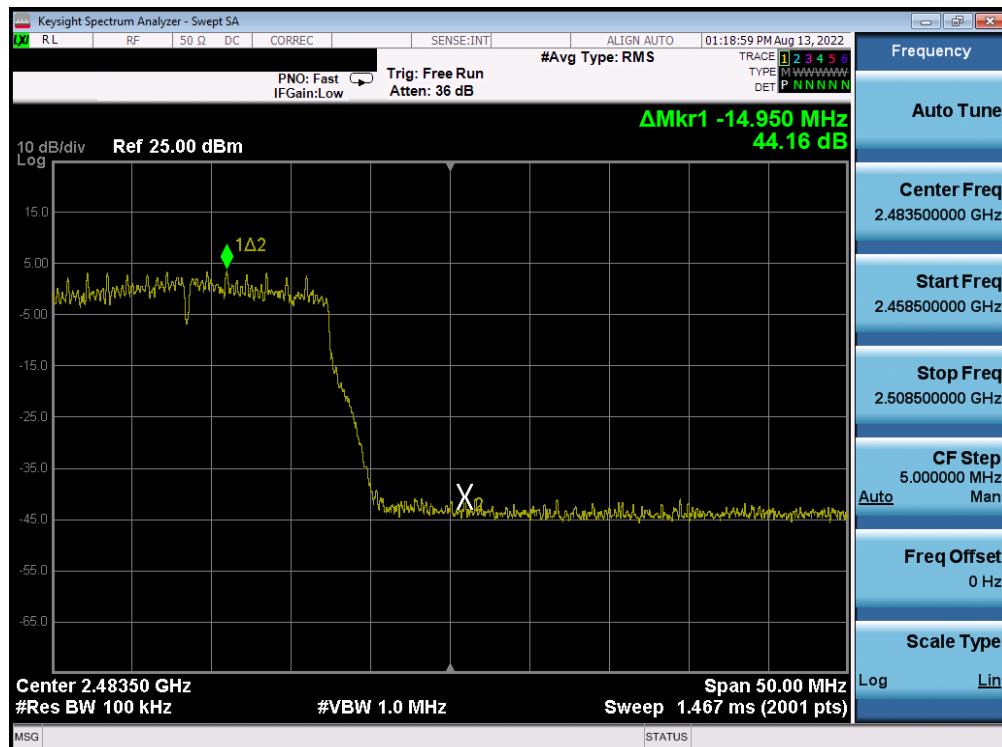
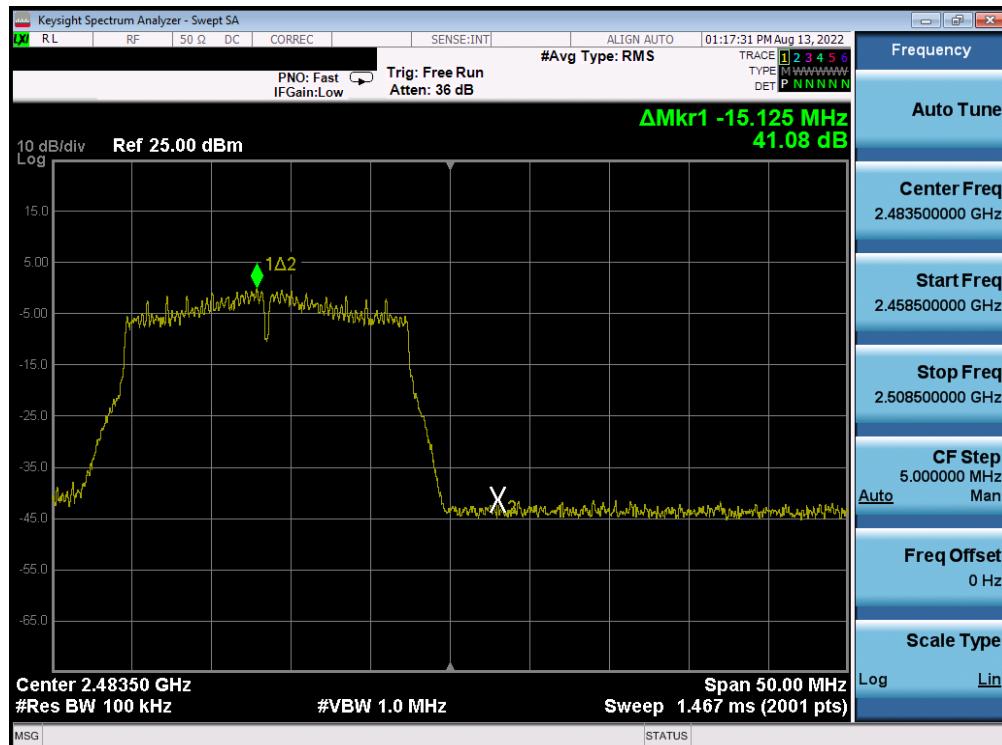


FCC ID: BCGA2696 IC: 579C-A2696	 <b>element</b>	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090022-01.BCG	Test Dates: 05/30/2022 - 09/15/2022	EUT Type: Tablet Device	Page 230 of 430

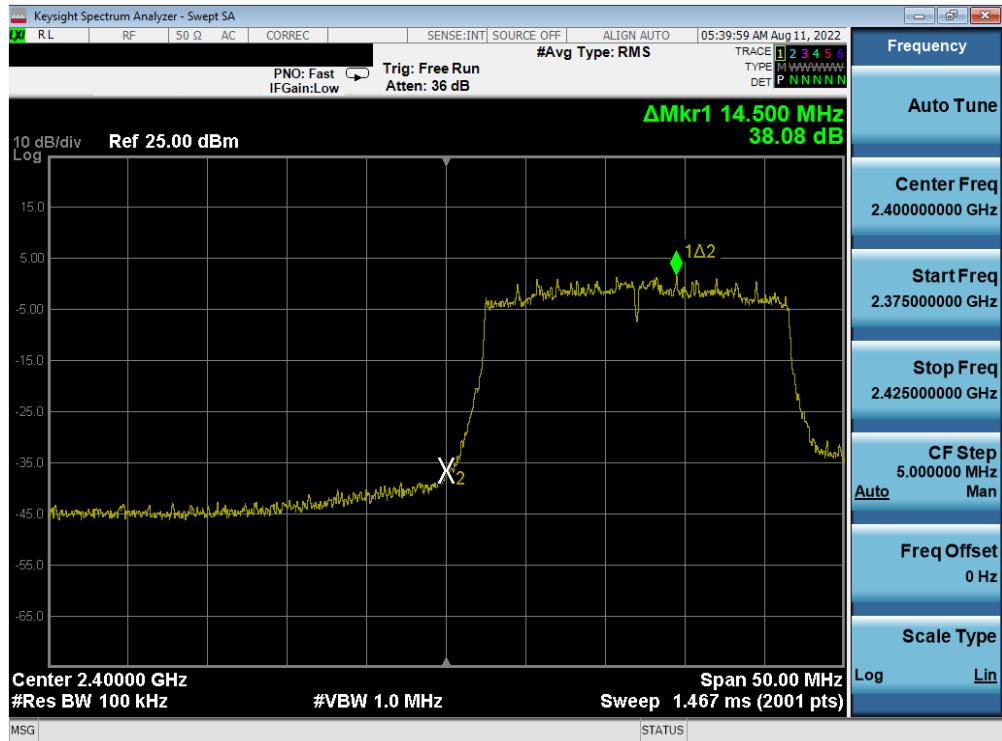


Plot 7-361. Band Edge Plot Antenna WF7b (802.11n (2.4GHz) – Ch. 12) – MCS4

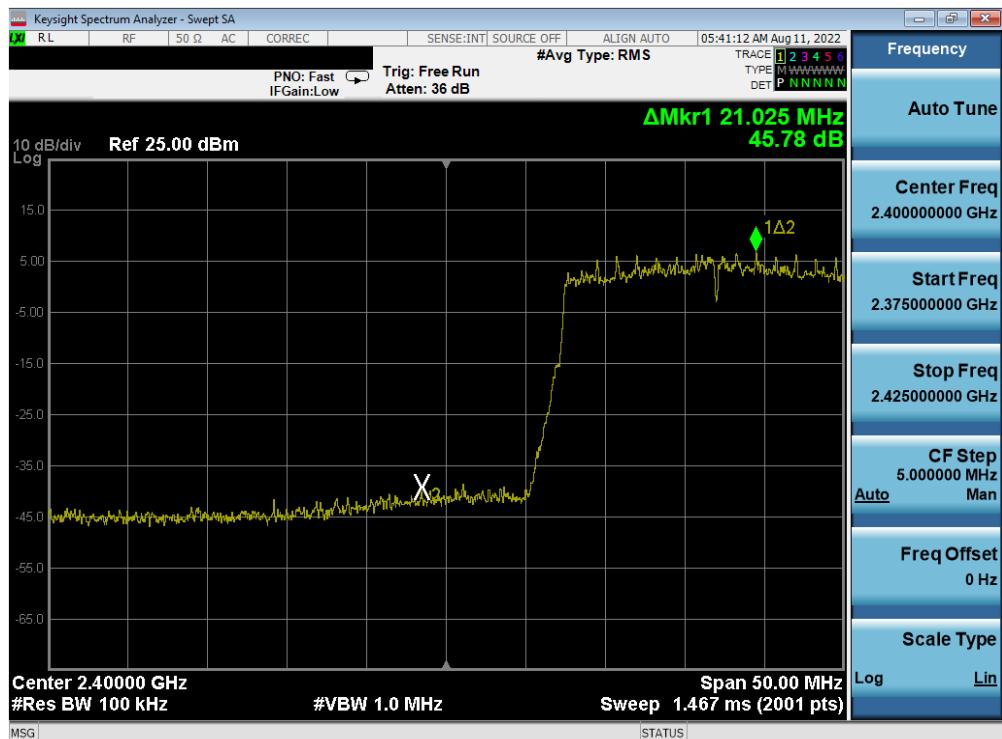


Plot 7-362. Band Edge Plot Antenna WF7b (802.11n (2.4GHz) – Ch. 13) – MCS4

FCC ID: BCGA2696 IC: 579C-A2696	 element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090022-01.BCG	Test Dates: 05/30/2022 - 09/15/2022	EUT Type: Tablet Device	Page 231 of 430

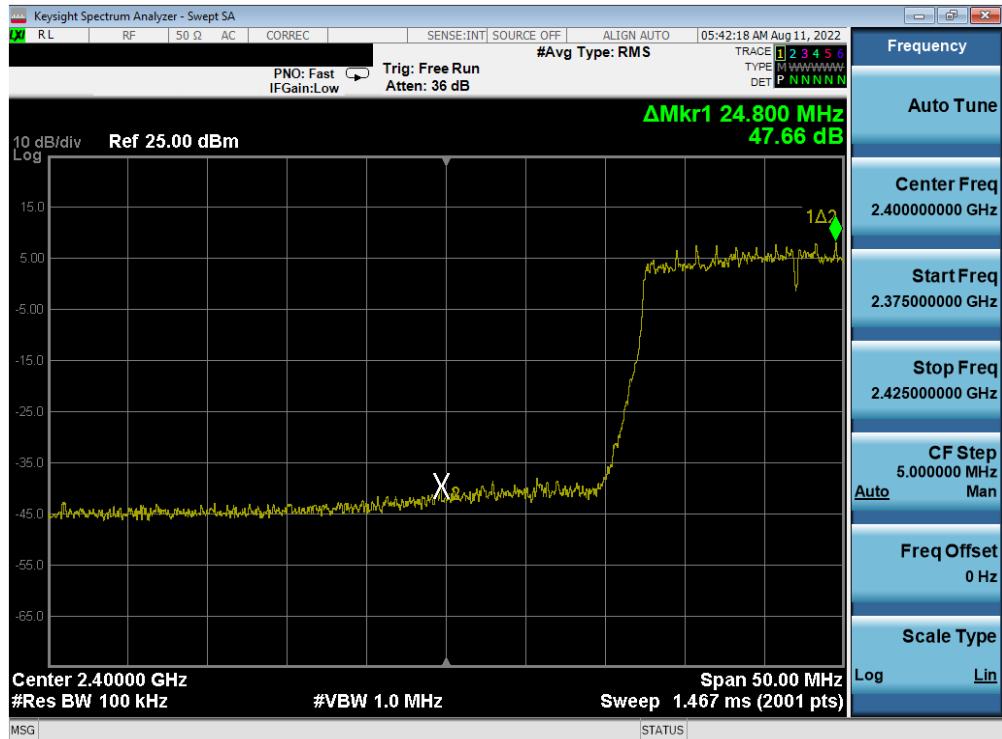


Plot 7-363. Band Edge Plot Antenna WF7b (802.11ax (SU - 2.4GHz) – Ch. 1) – MCS4

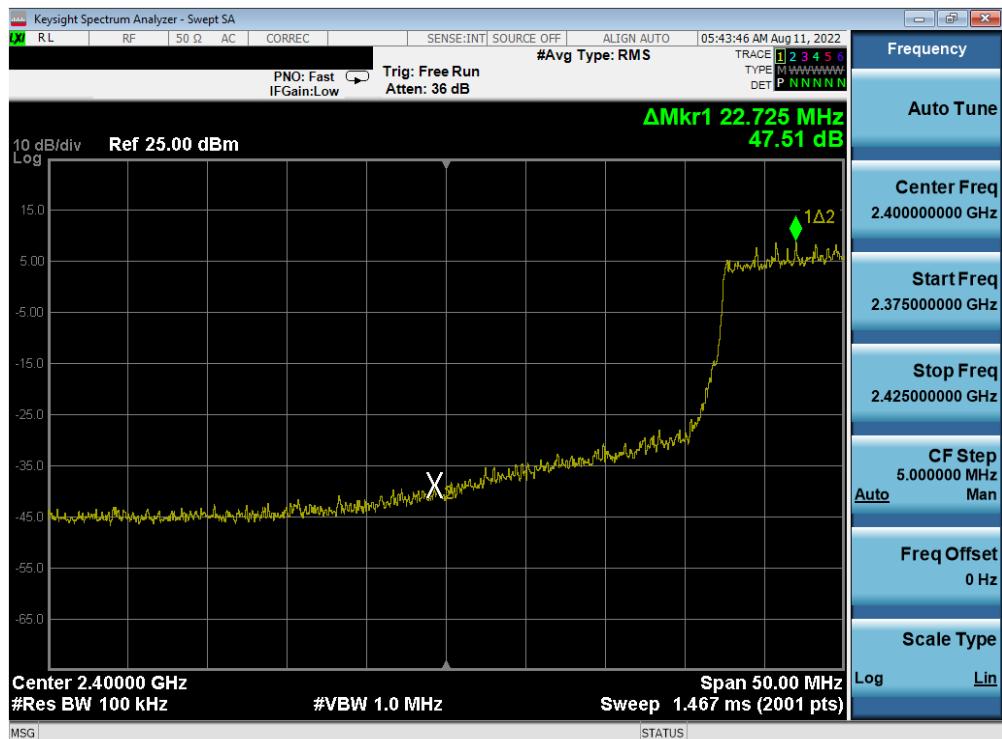


Plot 7-364. Band Edge Plot Antenna WF7b (802.11ax (SU - 2.4GHz) – Ch. 2) – MCS4

FCC ID: BCGA2696 IC: 579C-A2696	 element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090022-01.BCG	Test Dates: 05/30/2022 - 09/15/2022	EUT Type: Tablet Device	Page 232 of 430

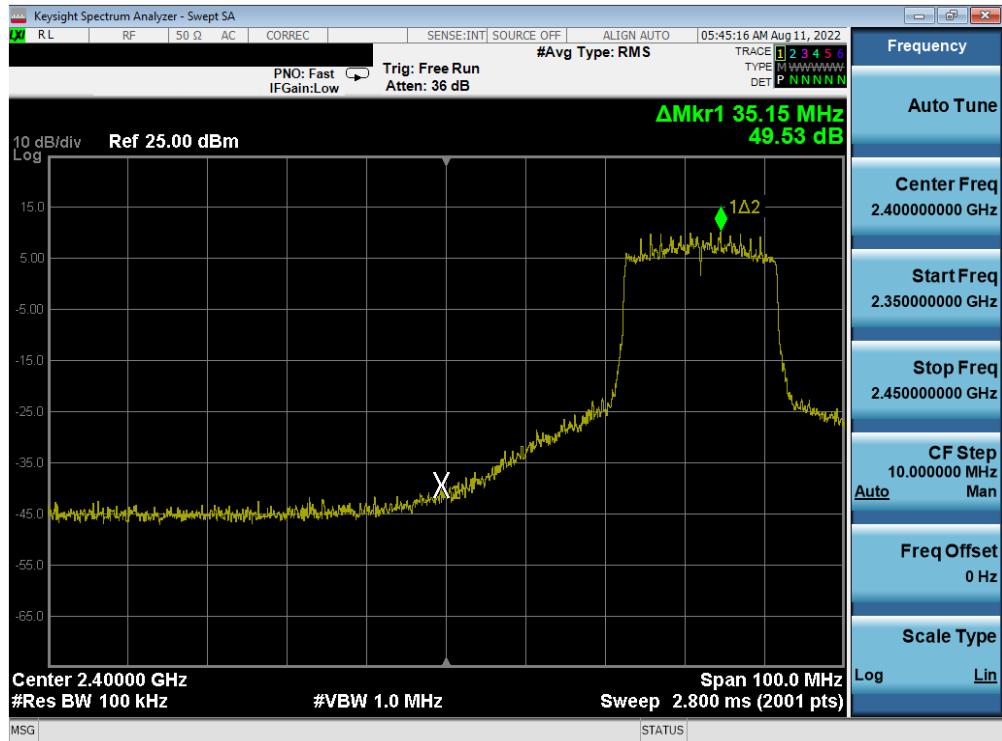


Plot 7-365. Band Edge Plot Antenna WF7b (802.11ax (SU - 2.4GHz) – Ch. 3) – MCS4

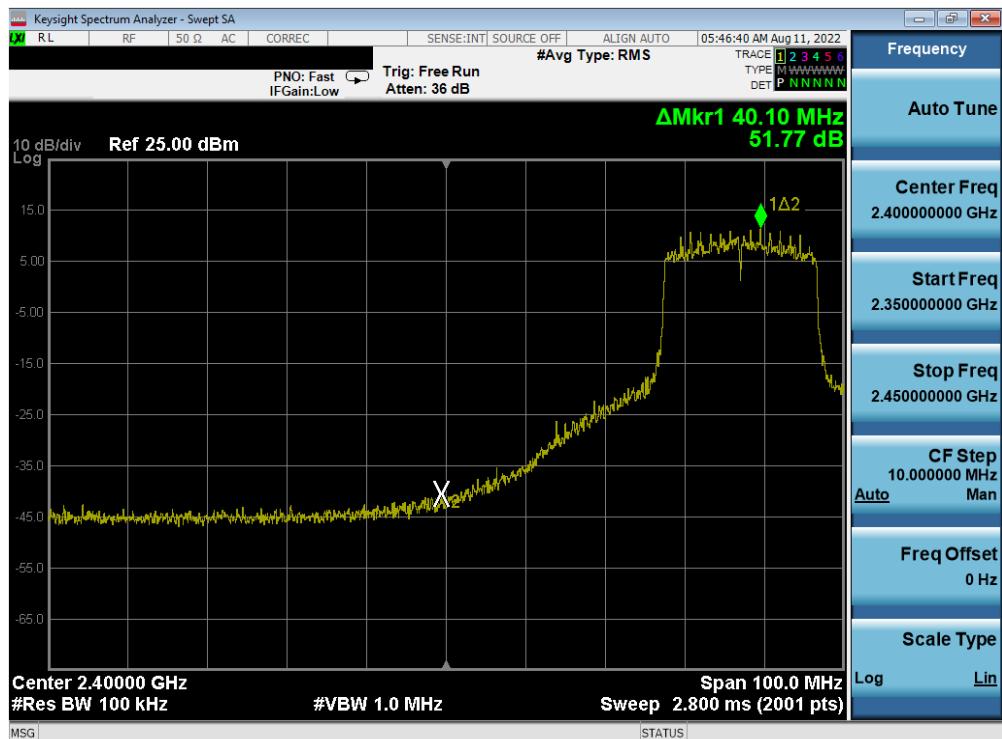


Plot 7-366. Band Edge Plot Antenna WF7b (802.11ax (SU - 2.4GHz) – Ch. 4) – MCS4

FCC ID: BCGA2696 IC: 579C-A2696	 element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090022-01.BCG	Test Dates: 05/30/2022 - 09/15/2022	EUT Type: Tablet Device	Page 233 of 430

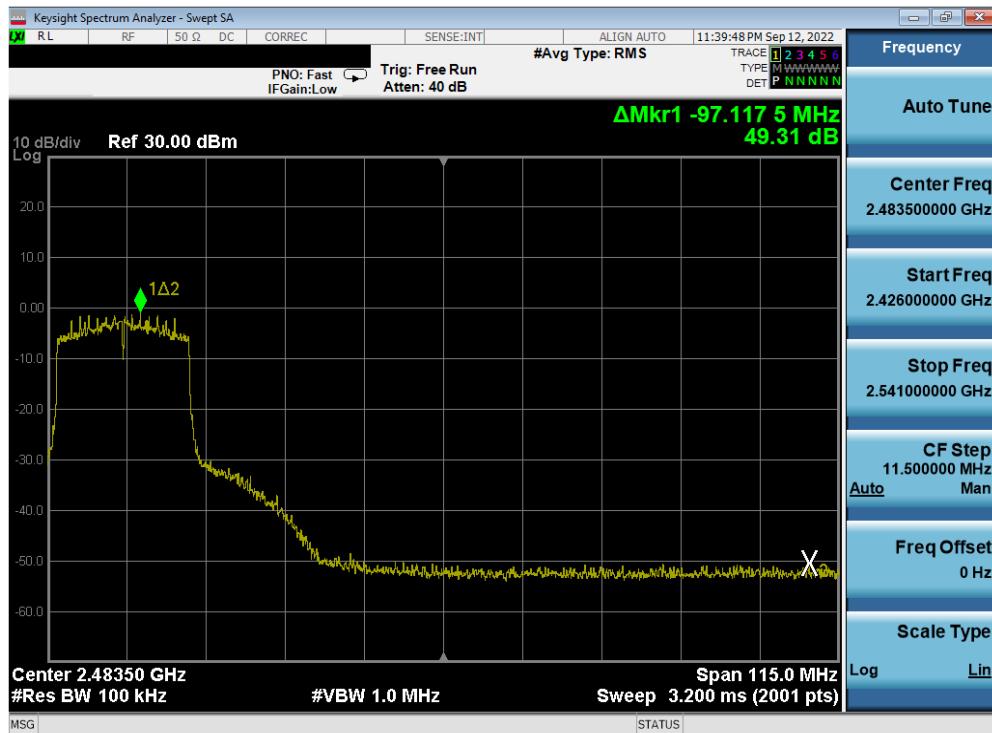


Plot 7-367. Band Edge Plot Antenna WF7b (802.11ax (SU - 2.4GHz) – Ch. 5) – MCS4

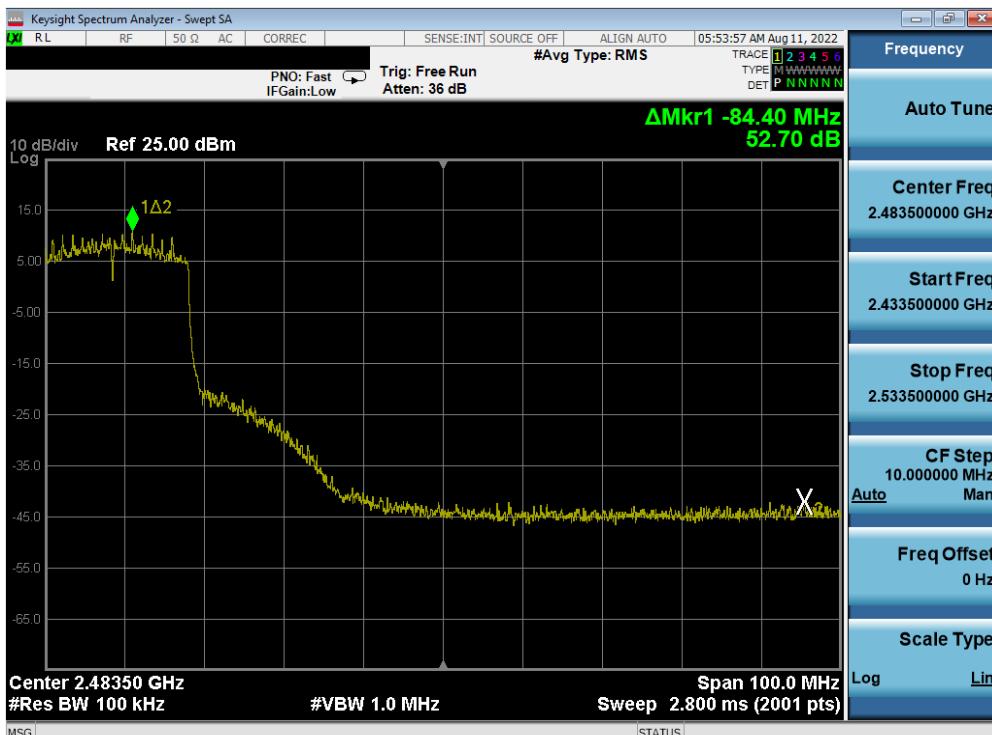


Plot 7-368. Band Edge Plot Antenna WF7b (802.11ax (SU - 2.4GHz) – Ch. 6 (low)) – MCS4

FCC ID: BCGA2696 IC: 579C-A2696	 element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090022-01.BCG	Test Dates: 05/30/2022 - 09/15/2022	EUT Type: Tablet Device	Page 234 of 430

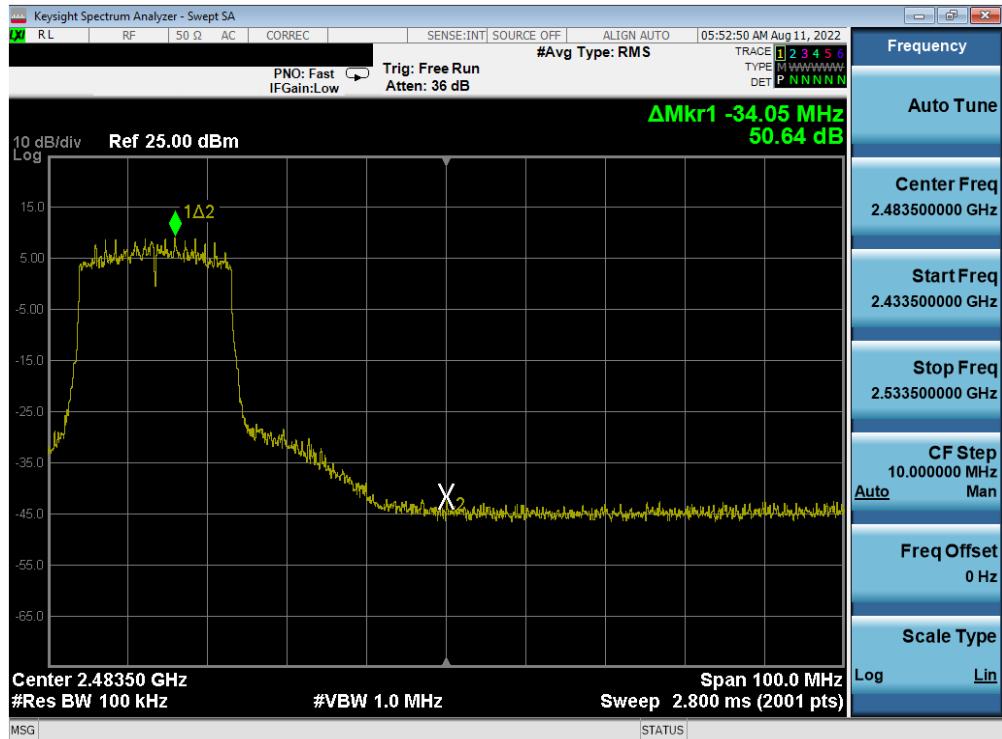


Plot 7-369. Band Edge Plot Antenna WF7b (802.11ax (SU - 2.4GHz) – Ch. 6 (high)) – MCS4

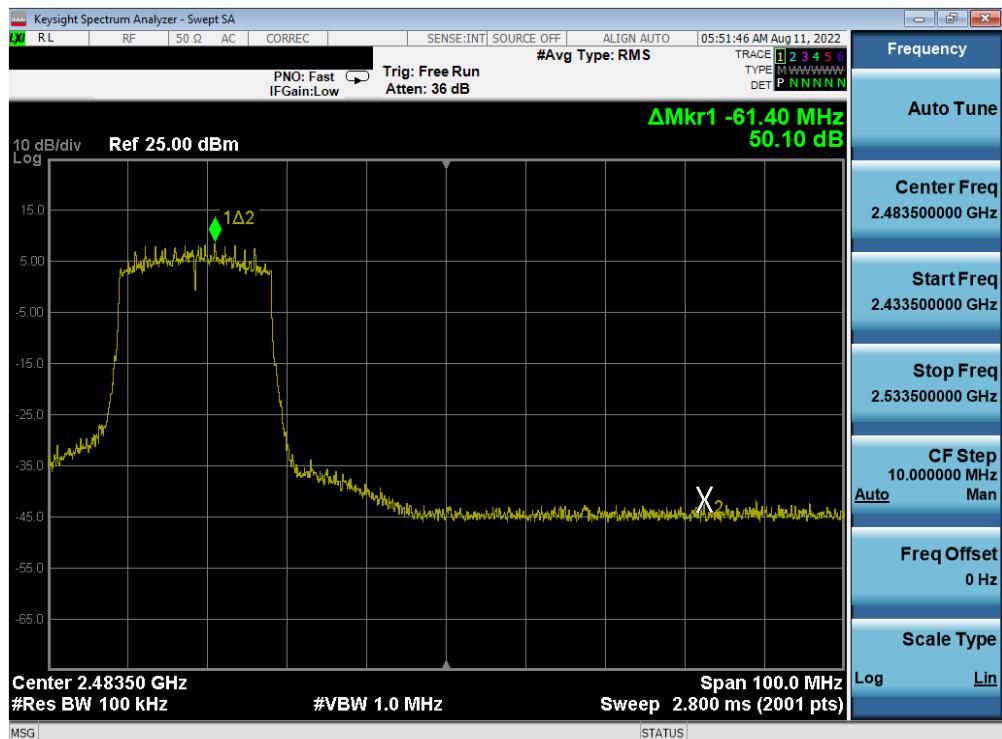


Plot 7-370. Band Edge Plot Antenna WF7b (802.11ax (SU - 2.4GHz) – Ch. 7) – MCS4

FCC ID: BCGA2696 IC: 579C-A2696	 element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090022-01.BCG	Test Dates: 05/30/2022 - 09/15/2022	EUT Type: Tablet Device	Page 235 of 430

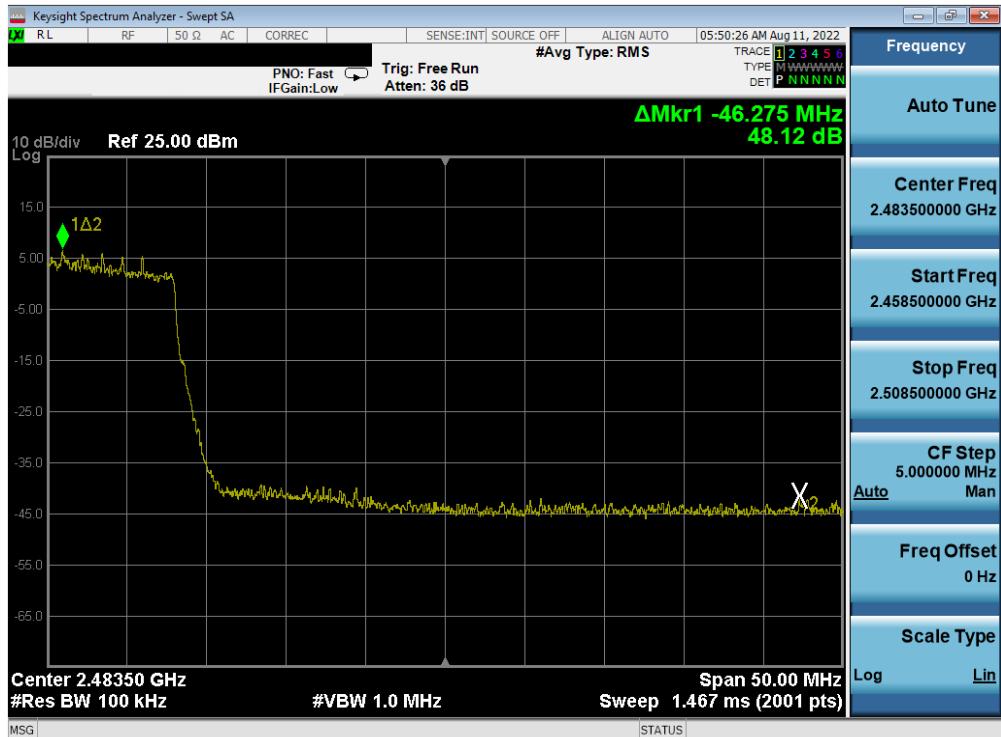


Plot 7-371. Band Edge Plot Antenna WF7b (802.11ax (SU - 2.4GHz) – Ch. 8) – MCS4

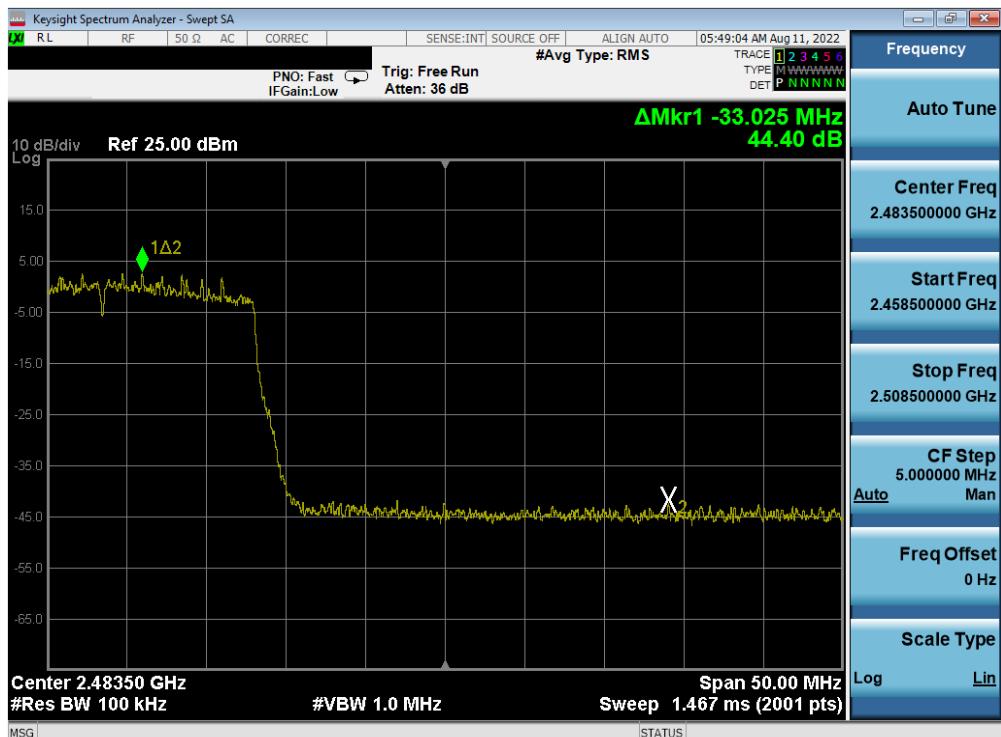


Plot 7-372. Band Edge Plot Antenna WF7b (802.11ax (SU - 2.4GHz) – Ch. 9) – MCS4

FCC ID: BCGA2696 IC: 579C-A2696	 element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090022-01.BCG	Test Dates: 05/30/2022 - 09/15/2022	EUT Type: Tablet Device	Page 236 of 430

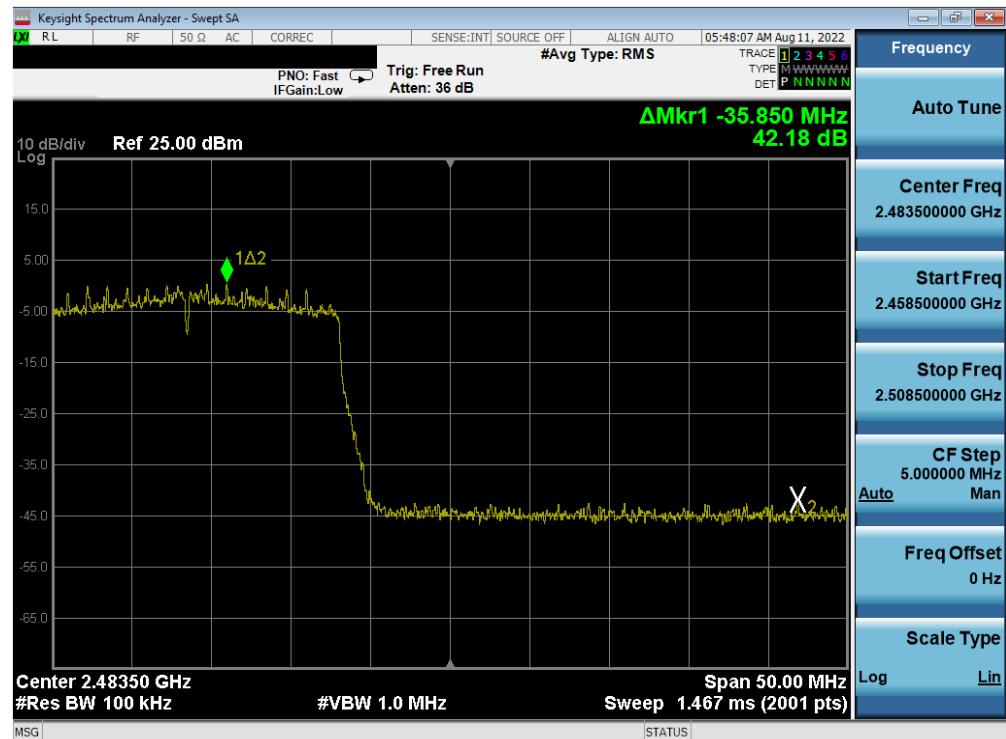


Plot 7-373. Band Edge Plot Antenna WF7b (802.11ax (SU - 2.4GHz) – Ch. 10) – MCS4



Plot 7-374. Band Edge Plot Antenna WF7b (802.11ax (SU - 2.4GHz) – Ch. 11) – MCS4

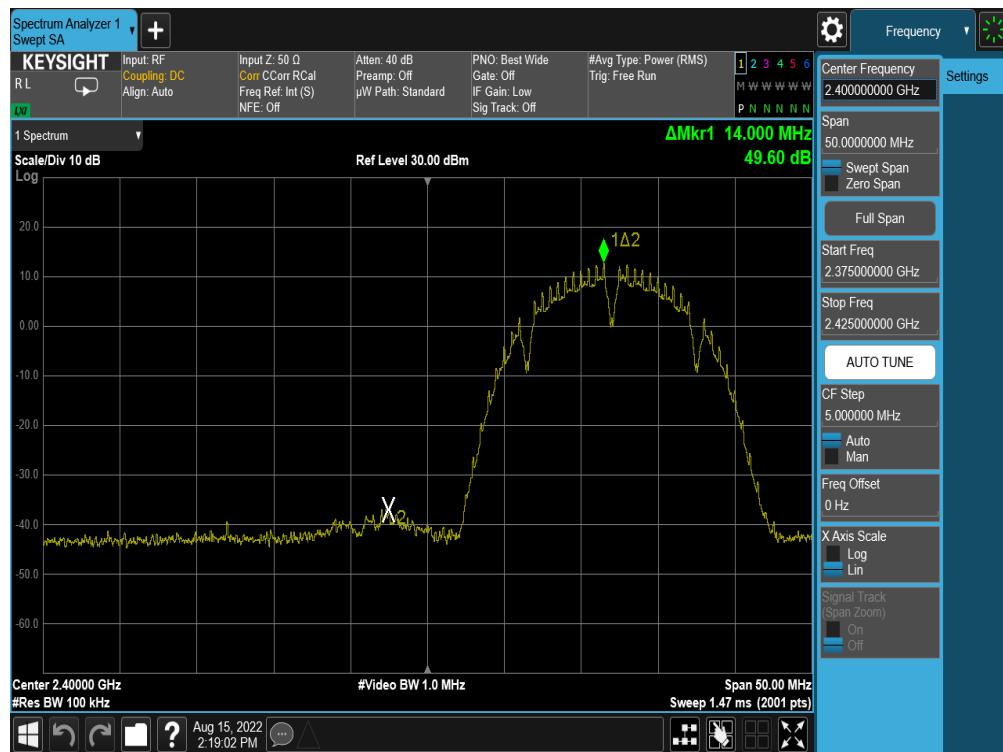
FCC ID: BCGA2696 IC: 579C-A2696	 element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090022-01.BCG	Test Dates: 05/30/2022 - 09/15/2022	EUT Type: Tablet Device	Page 237 of 430



Plot 7-375. Band Edge Plot Antenna WF7b (802.11ax (SU - 2.4GHz) – Ch. 12) – MCS4

FCC ID: BCGA2696 IC: 579C-A2696	 element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090022-01.BCG	Test Dates: 05/30/2022 - 09/15/2022	EUT Type: Tablet Device	Page 238 of 430

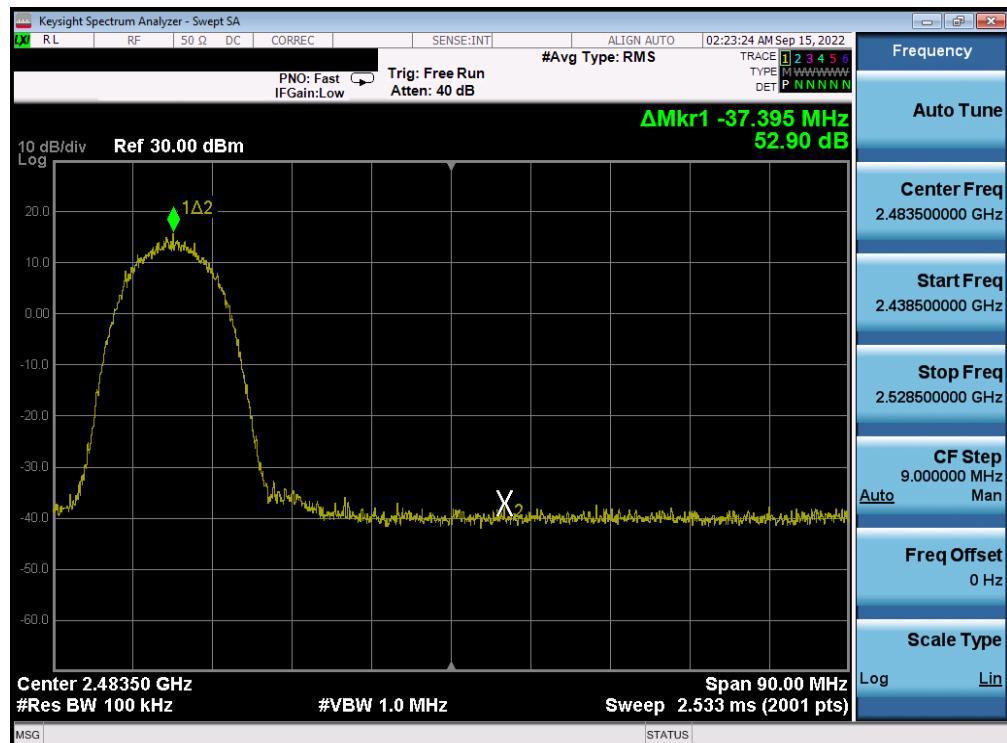
## High Data Rate



FCC ID: BCGA2696 IC: 579C-A2696	 <b>element</b>	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090022-01.BCG	Test Dates: 05/30/2022 - 09/15/2022	EUT Type: Tablet Device	Page 239 of 430

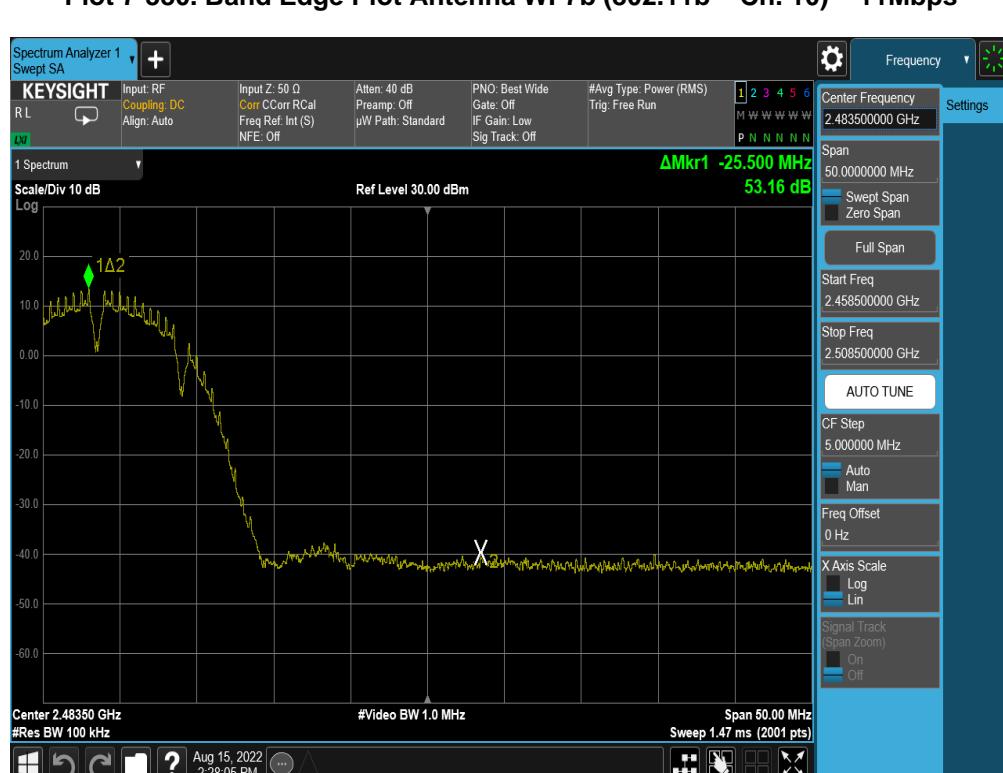
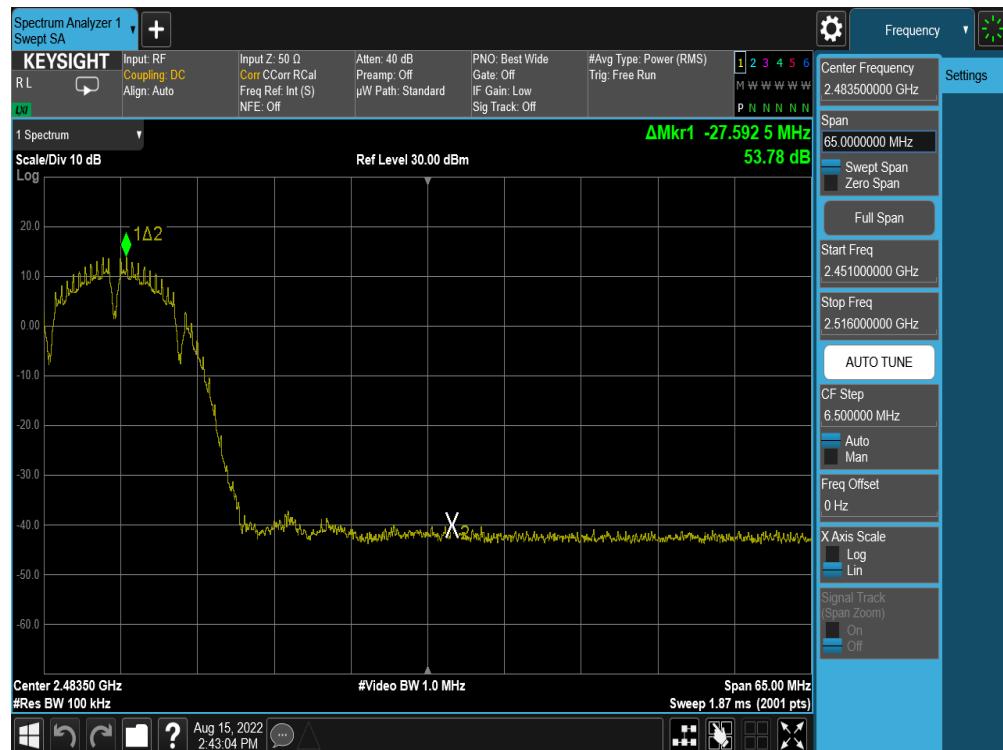


Plot 7-378. Band Edge Plot Antenna WF7b (802.11b – Ch. 3) – 11Mbps



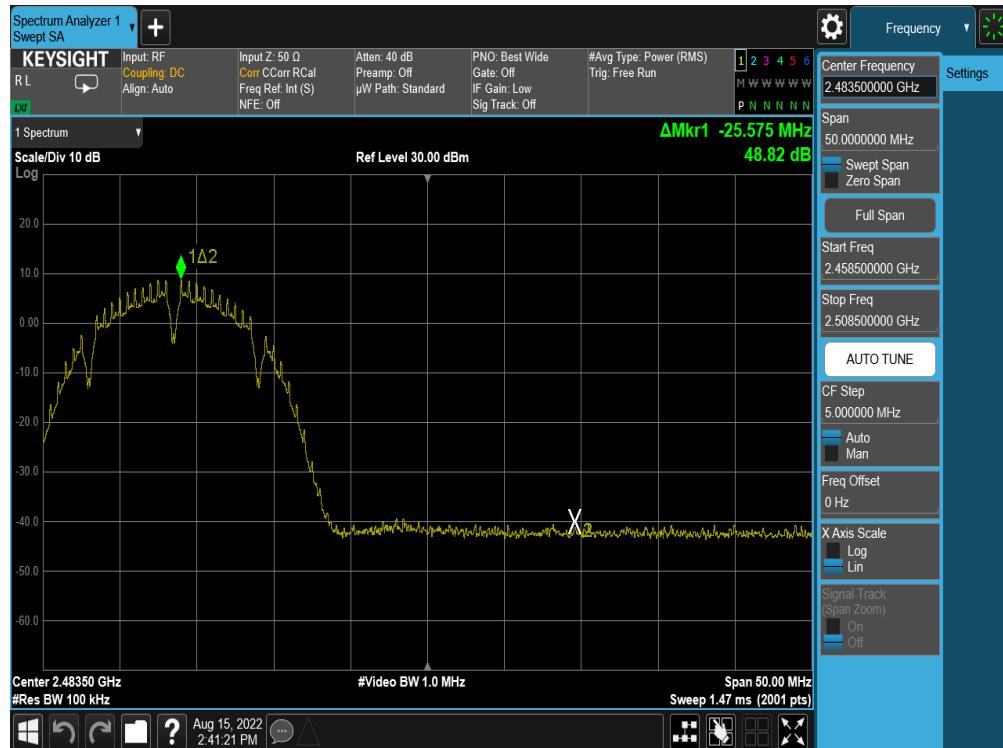
Plot 7-379. Band Edge Plot Antenna WF7b (802.11b – Ch. 9) – 11Mbps

FCC ID: BCGA2696 IC: 579C-A2696	 <b>element</b>	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090022-01.BCG	Test Dates: 05/30/2022 - 09/15/2022	EUT Type: Tablet Device	Page 240 of 430

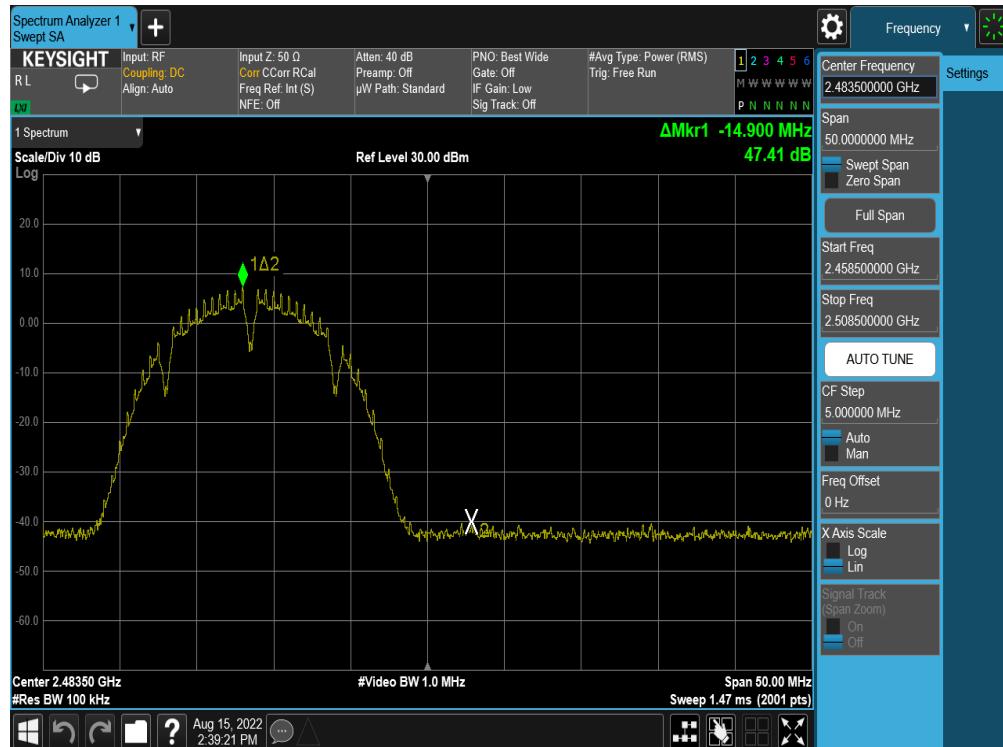


**Plot 7-381. Band Edge Plot Antenna WF7b (802.11b – Ch. 11) – 11Mbps**

FCC ID: BCGA2696 IC: 579C-A2696	 <b>element</b>	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090022-01.BCG	Test Dates: 05/30/2022 - 09/15/2022	EUT Type: Tablet Device	Page 241 of 430

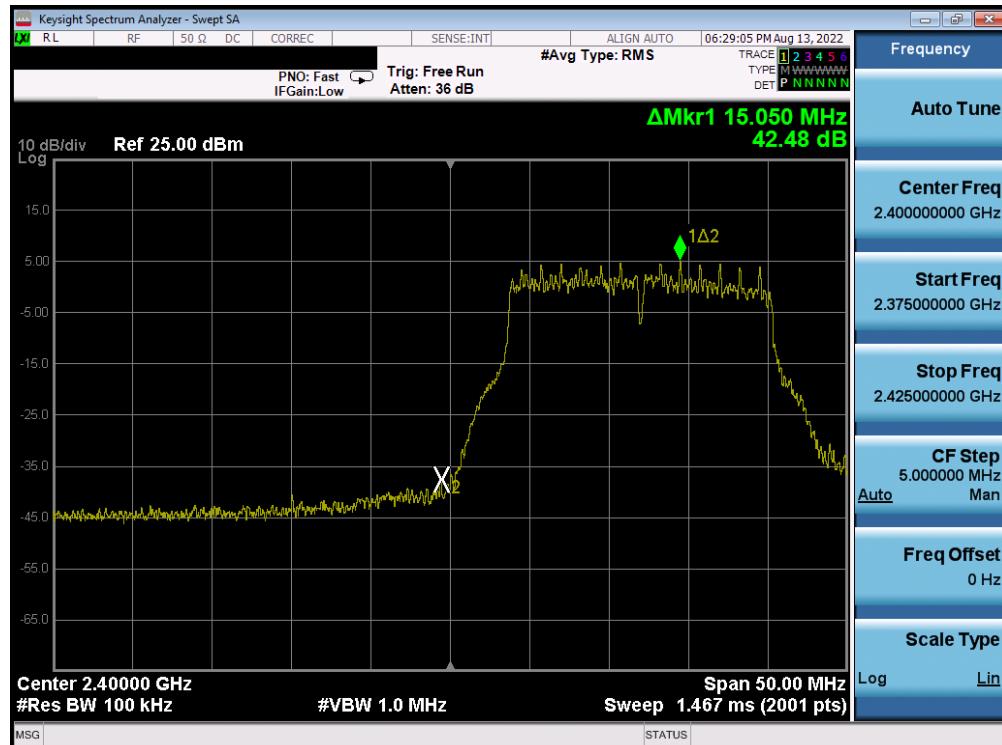


Plot 7-382. Band Edge Plot Antenna WF7b (802.11b – Ch. 12) – 11Mbps

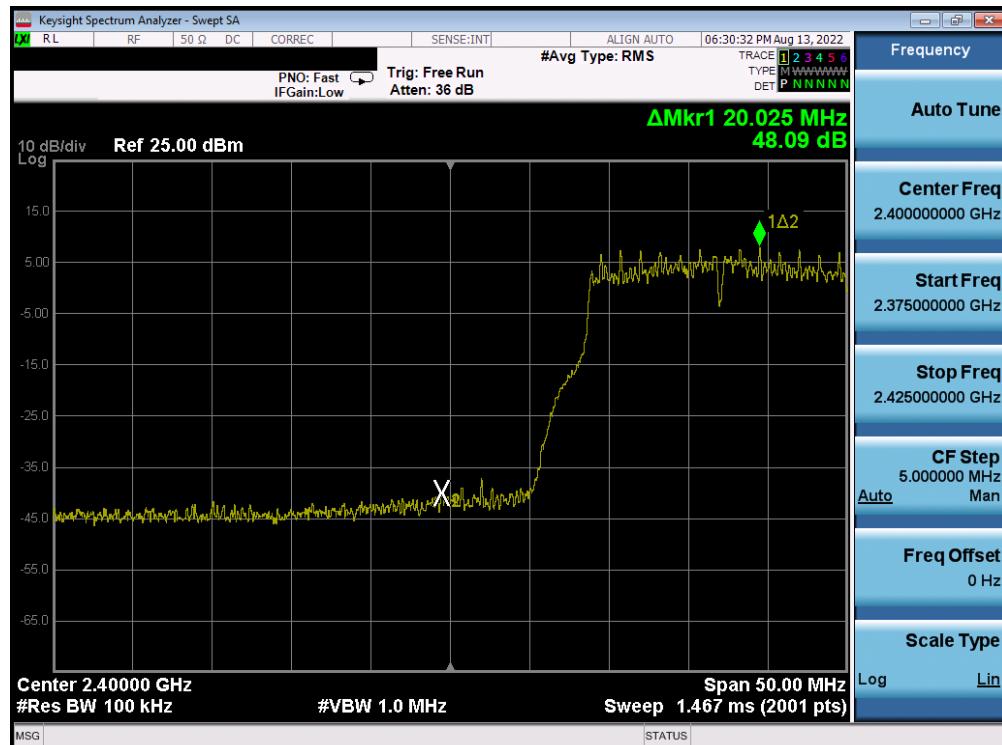


Plot 7-383. Band Edge Plot Antenna WF7b (802.11b – Ch. 13) – 11Mbps

FCC ID: BCGA2696 IC: 579C-A2696	 <b>element</b>	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090022-01.BCG	Test Dates: 05/30/2022 - 09/15/2022	EUT Type: Tablet Device	Page 242 of 430

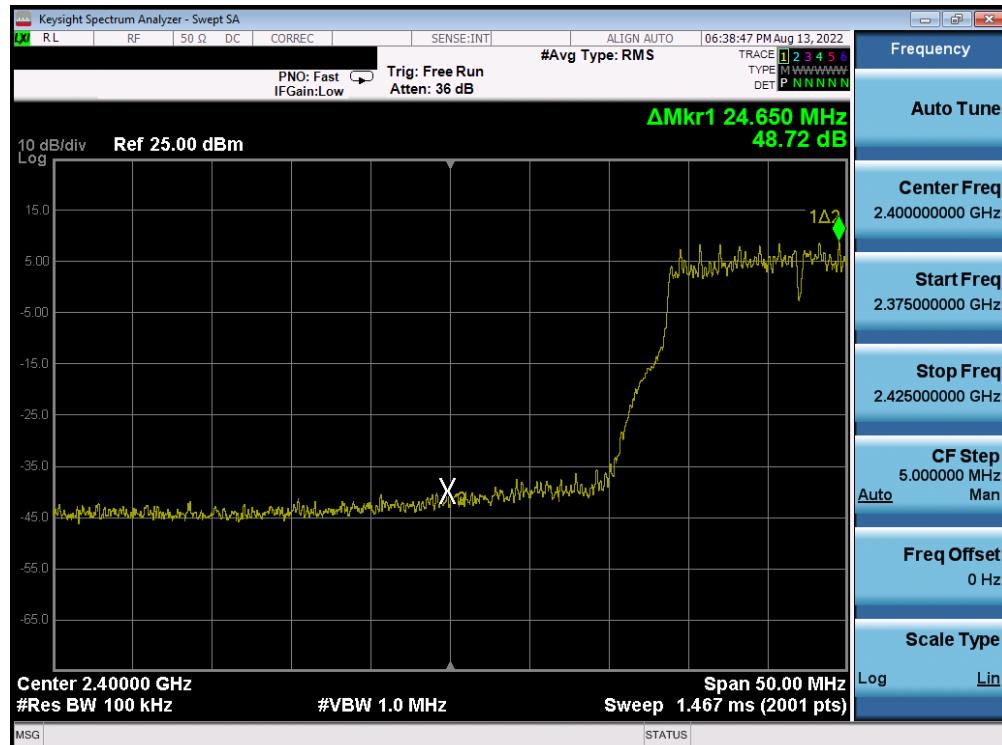


Plot 7-384. Band Edge Plot Antenna WF7b (802.11g- Ch. 1) – 36Mbps

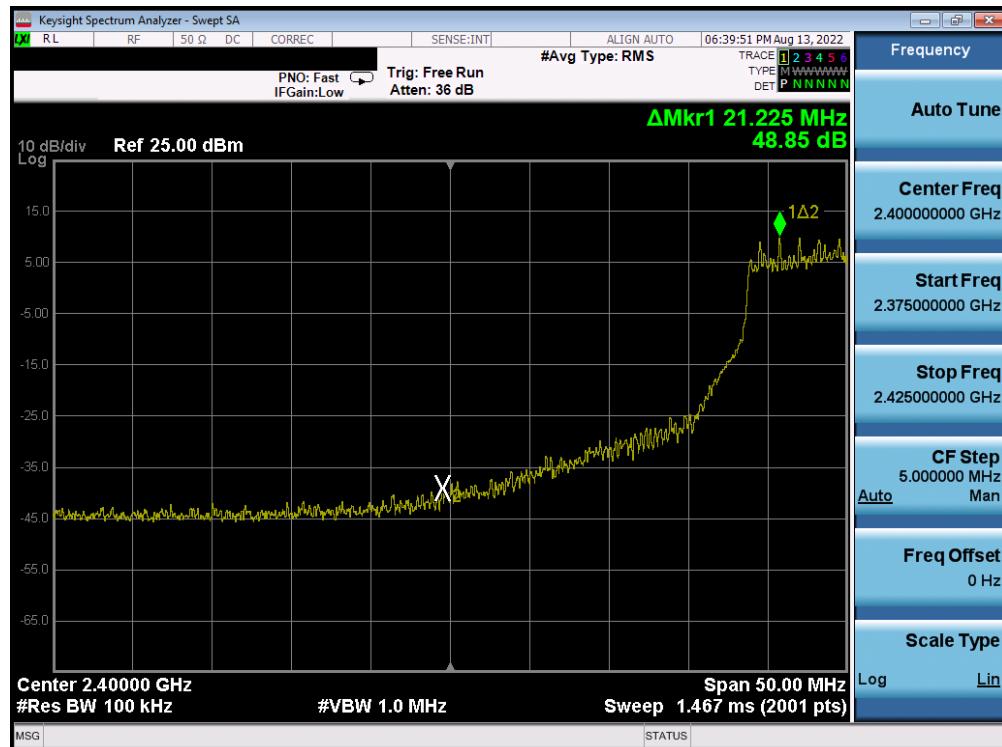


Plot 7-385. Band Edge Plot Antenna WF7b (802.11g- Ch. 2) – 36Mbps

FCC ID: BCGA2696 IC: 579C-A2696	 element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090022-01.BCG	Test Dates: 05/30/2022 - 09/15/2022	EUT Type: Tablet Device	Page 243 of 430

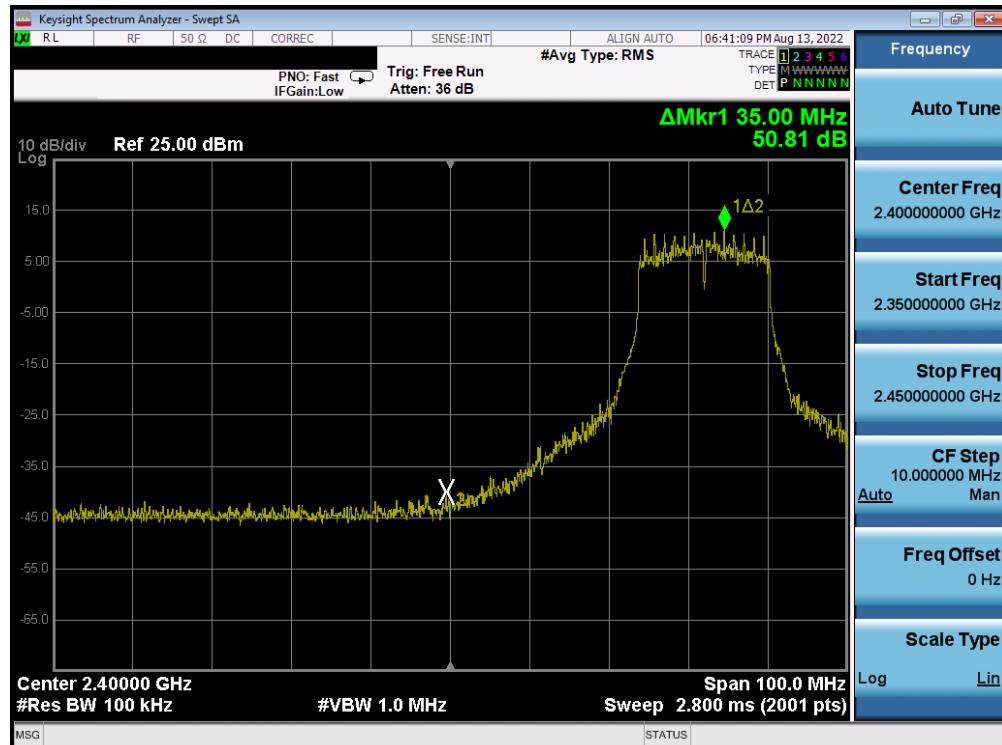


Plot 7-386. Band Edge Plot Antenna WF7b (802.11g- Ch. 3) – 36Mbps

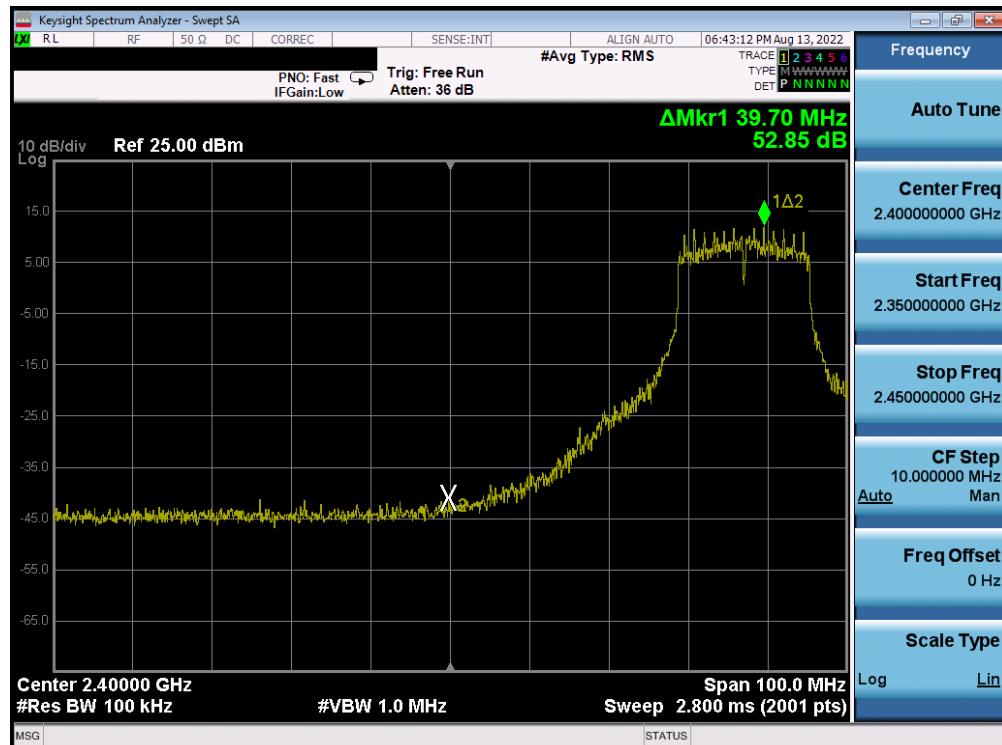


Plot 7-387. Band Edge Plot Antenna WF7b (802.11g- Ch. 4) – 36Mbps

FCC ID: BCGA2696 IC: 579C-A2696	 element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090022-01.BCG	Test Dates: 05/30/2022 - 09/15/2022	EUT Type: Tablet Device	Page 244 of 430

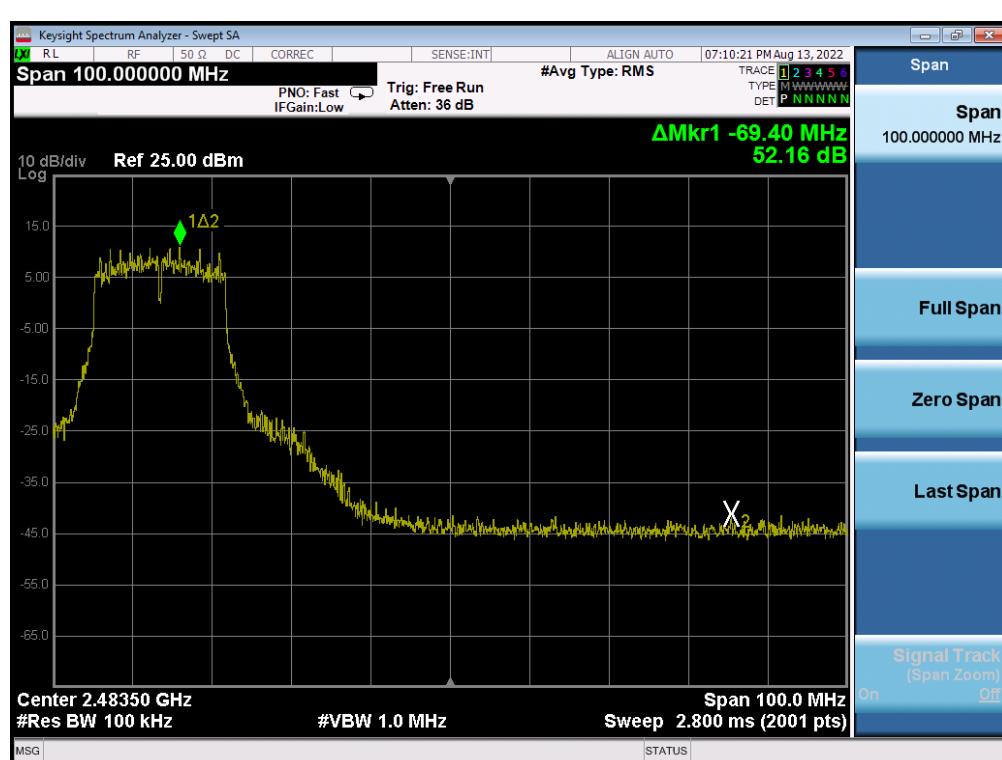
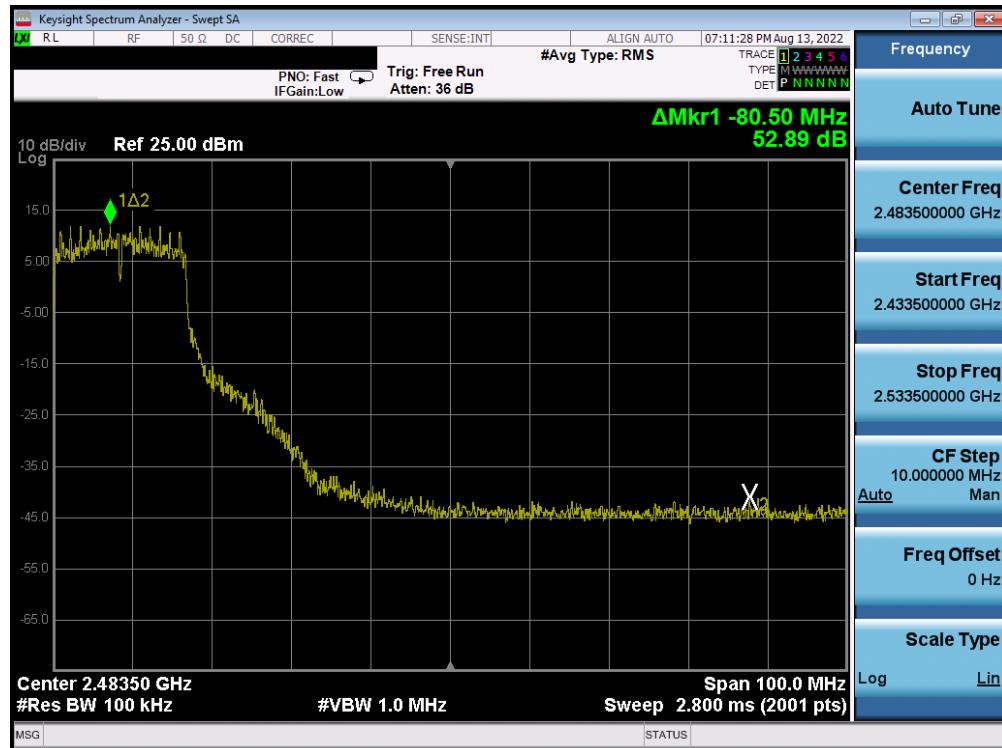


Plot 7-388. Band Edge Plot Antenna WF7b (802.11g- Ch. 5) – 36Mbps



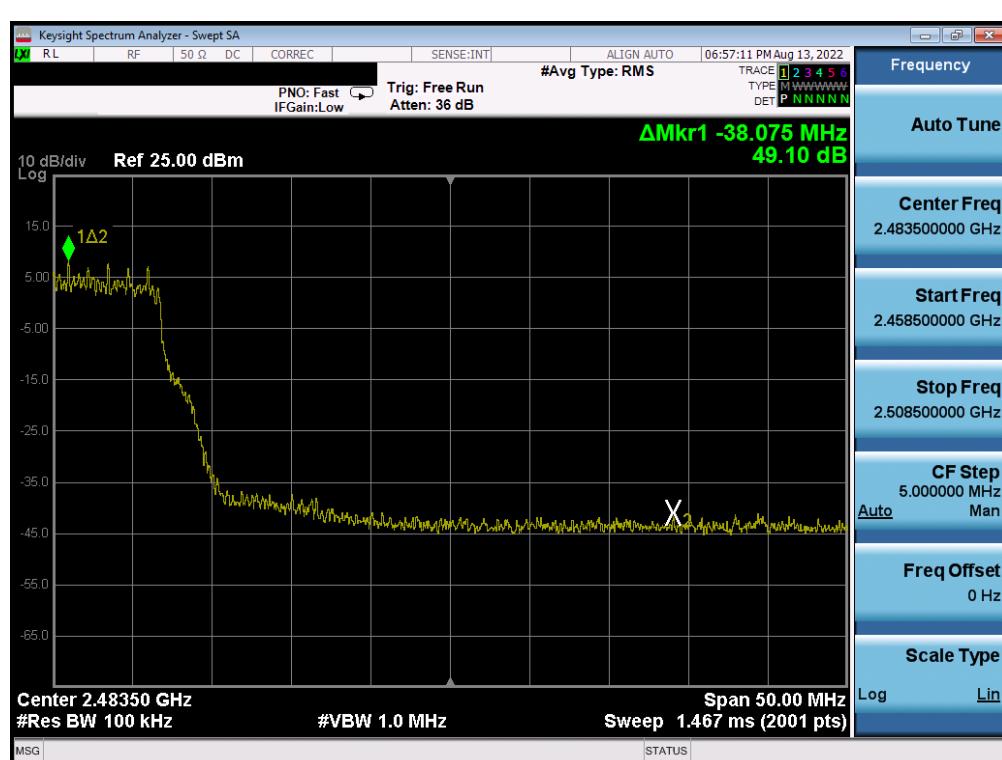
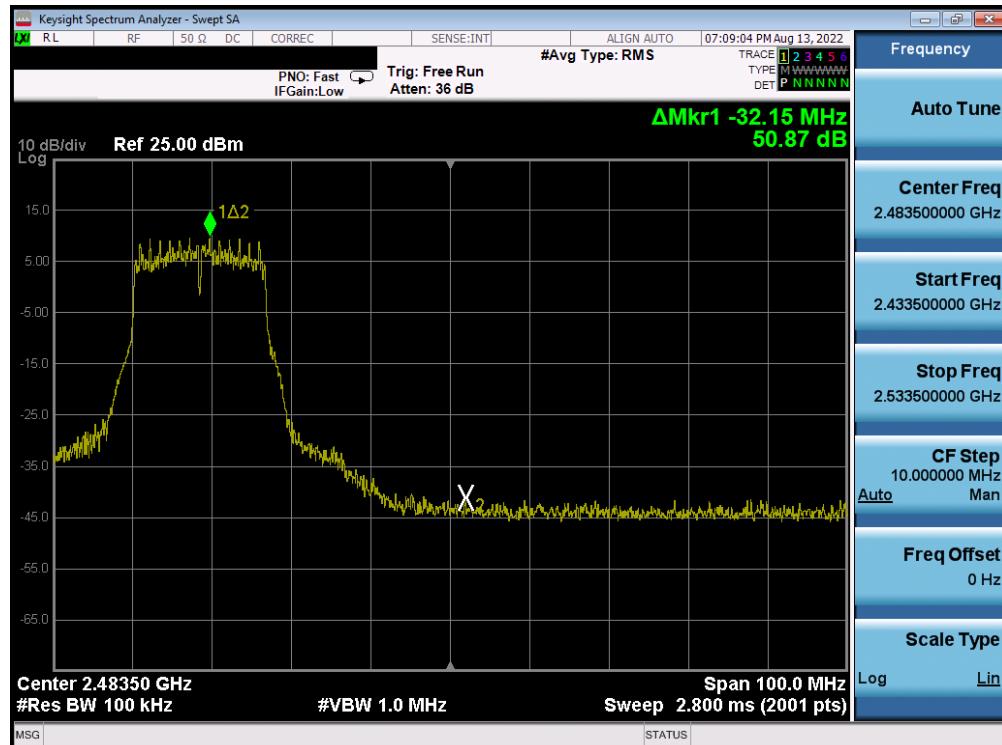
Plot 7-389. Band Edge Plot Antenna WF7b (802.11g- Ch. 6 (low)) – 36Mbps

FCC ID: BCGA2696 IC: 579C-A2696	 element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090022-01.BCG	Test Dates: 05/30/2022 - 09/15/2022	EUT Type: Tablet Device	Page 245 of 430

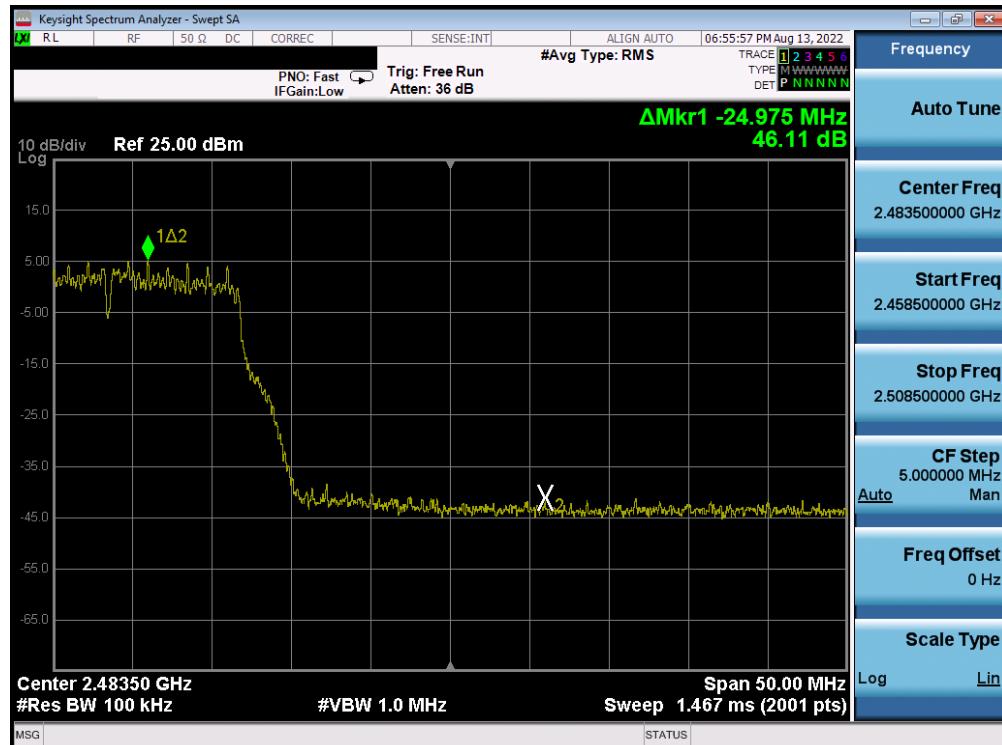


Plot 7-391. Band Edge Plot Antenna WF7b (802.11g – Ch. 8) – 36Mbps

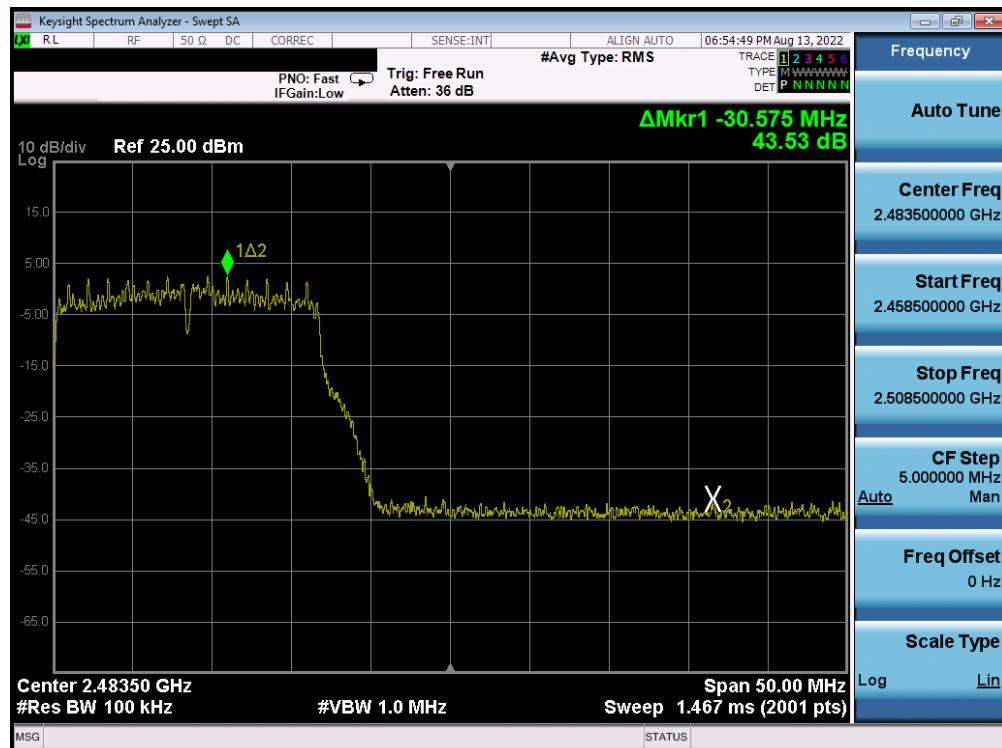
FCC ID: BCGA2696 IC: 579C-A2696		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090022-01.BCG	Test Dates: 05/30/2022 - 09/15/2022	EUT Type: Tablet Device	Page 246 of 430



FCC ID: BCGA2696 IC: 579C-A2696		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090022-01.BCG	Test Dates: 05/30/2022 - 09/15/2022	EUT Type: Tablet Device	Page 247 of 430

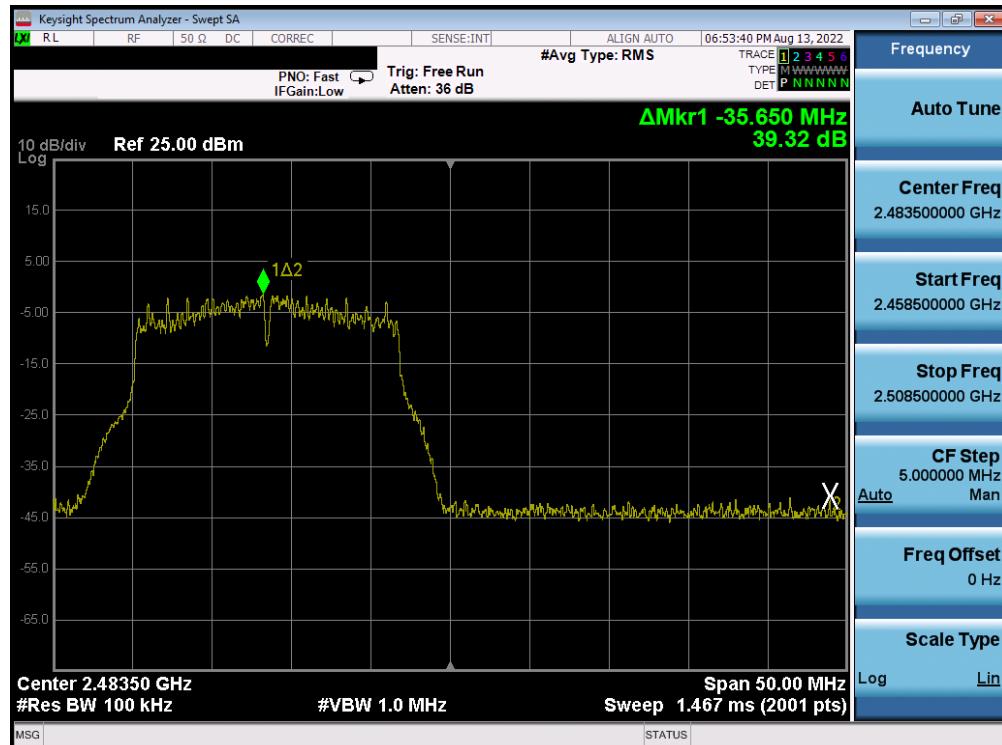


Plot 7-394. Band Edge Plot Antenna WF7b (802.11g – Ch. 11) – 36Mbps

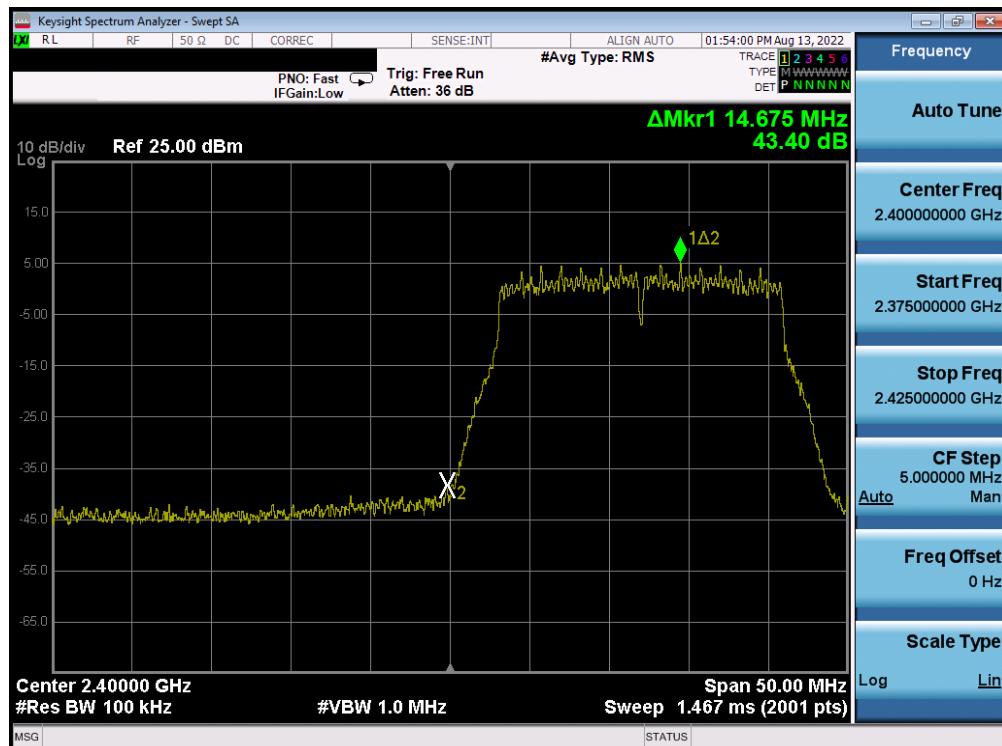


Plot 7-395. Band Edge Plot Antenna WF7b (802.11g – Ch. 12) – 36Mbps

FCC ID: BCGA2696 IC: 579C-A2696	 element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090022-01.BCG	Test Dates: 05/30/2022 - 09/15/2022	EUT Type: Tablet Device	Page 248 of 430

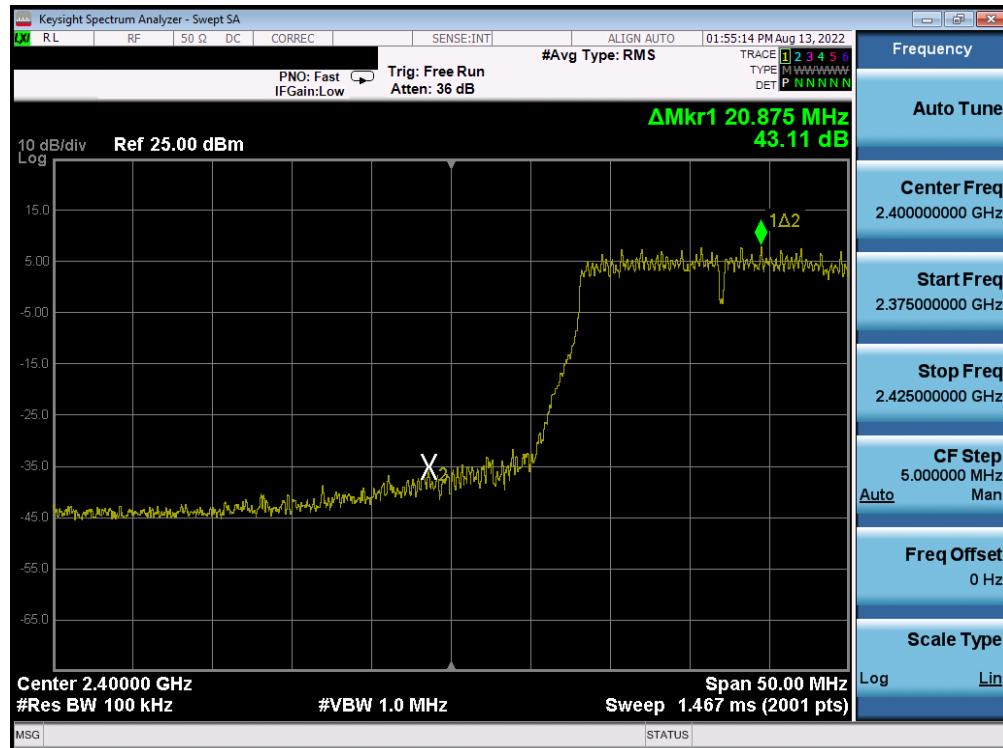


Plot 7-396. Band Edge Plot Antenna WF7b (802.11g – Ch. 13) – 36Mbps

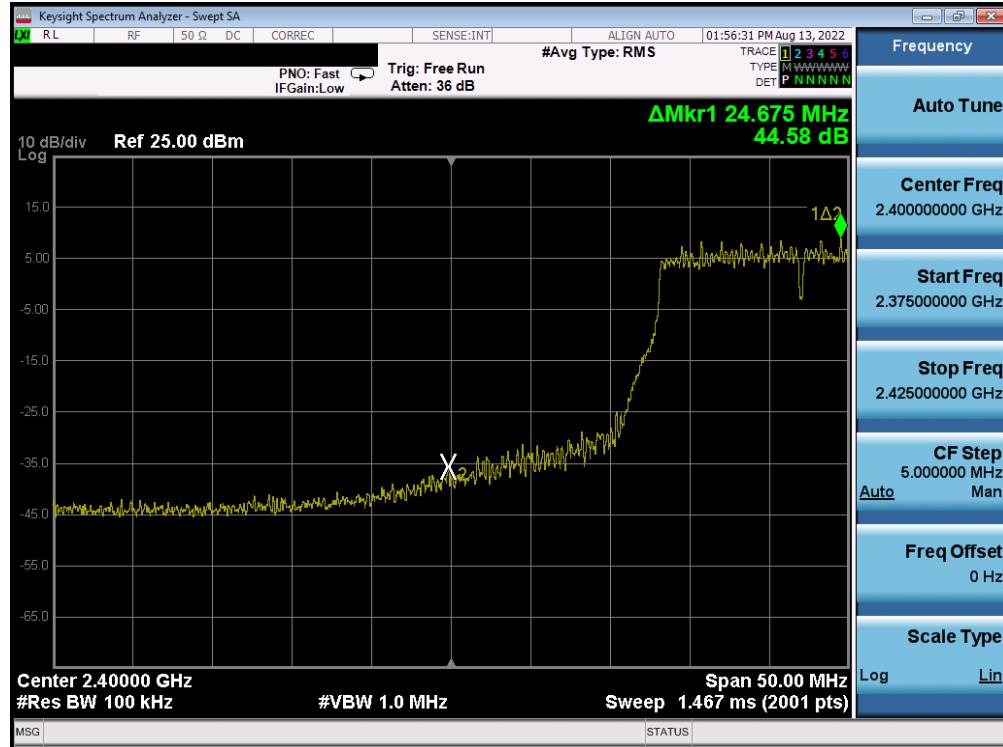


Plot 7-397. Band Edge Plot Antenna WF7b (802.11n (2.4GHz) – Ch. 1) – MCS5

FCC ID: BCGA2696 IC: 579C-A2696	 element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090022-01.BCG	Test Dates: 05/30/2022 - 09/15/2022	EUT Type: Tablet Device	Page 249 of 430

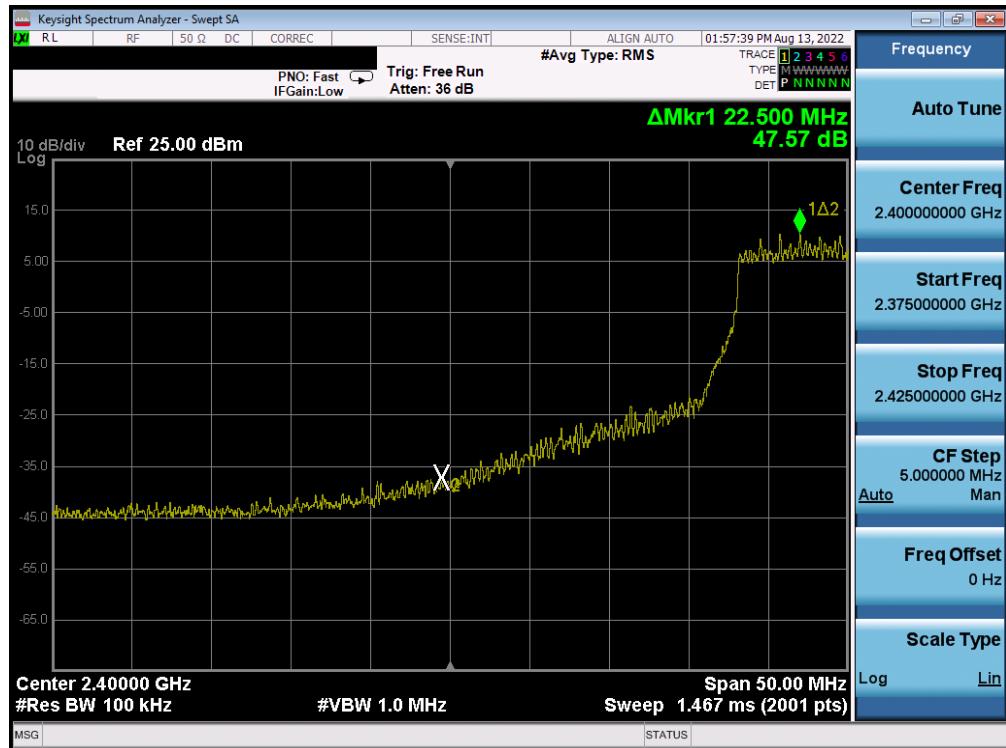


**Plot 7-398. Band Edge Plot Antenna WF7b (802.11n (2.4GHz) – Ch. 2) – MCS5**

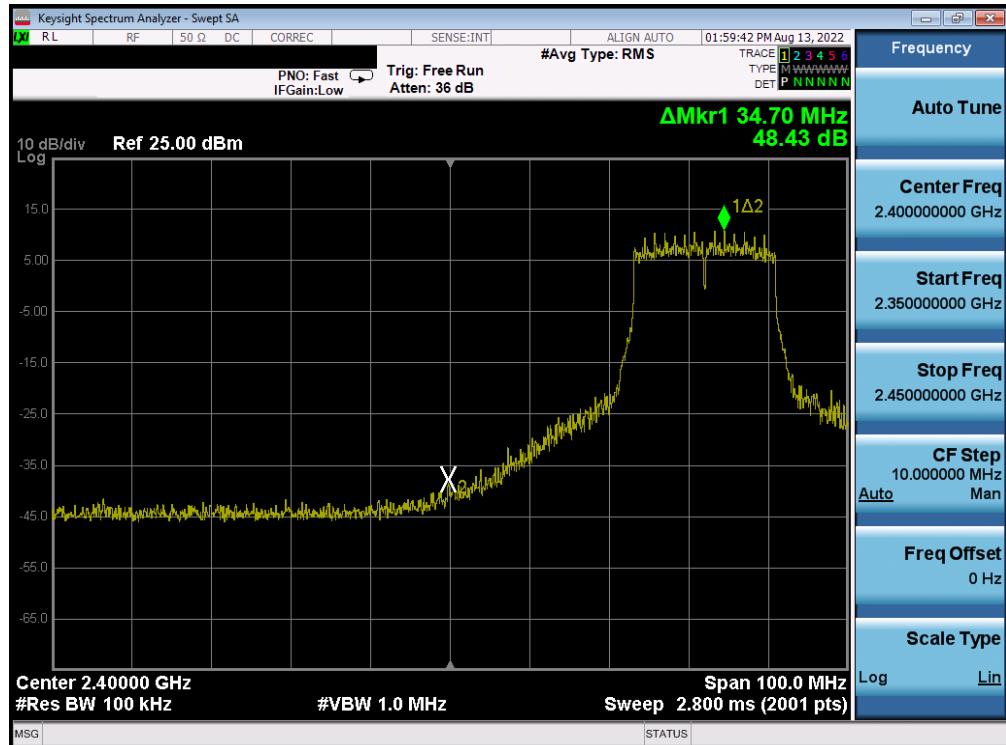


**Plot 7-399. Band Edge Plot Antenna WF7b (802.11n (2.4GHz) – Ch. 3) – MCS5**

FCC ID: BCGA2696 IC: 579C-A2696	 element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090022-01.BCG	Test Dates: 05/30/2022 - 09/15/2022	EUT Type: Tablet Device	Page 250 of 430

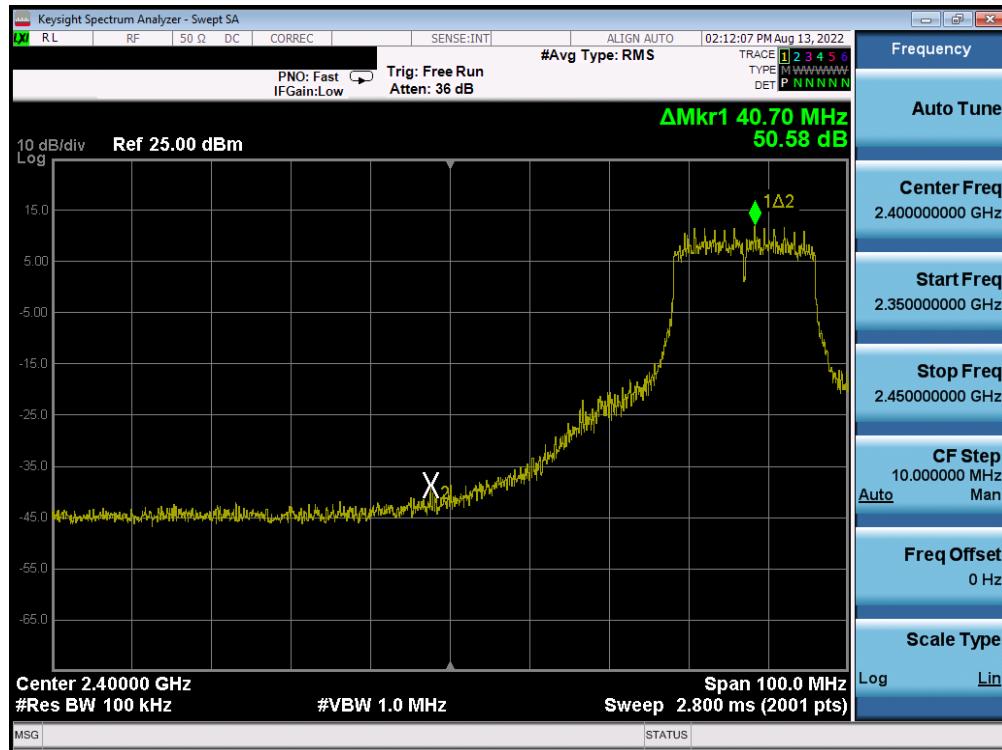


Plot 7-400. Band Edge Plot Antenna WF7b (802.11n (2.4GHz) – Ch. 4) – MCS5

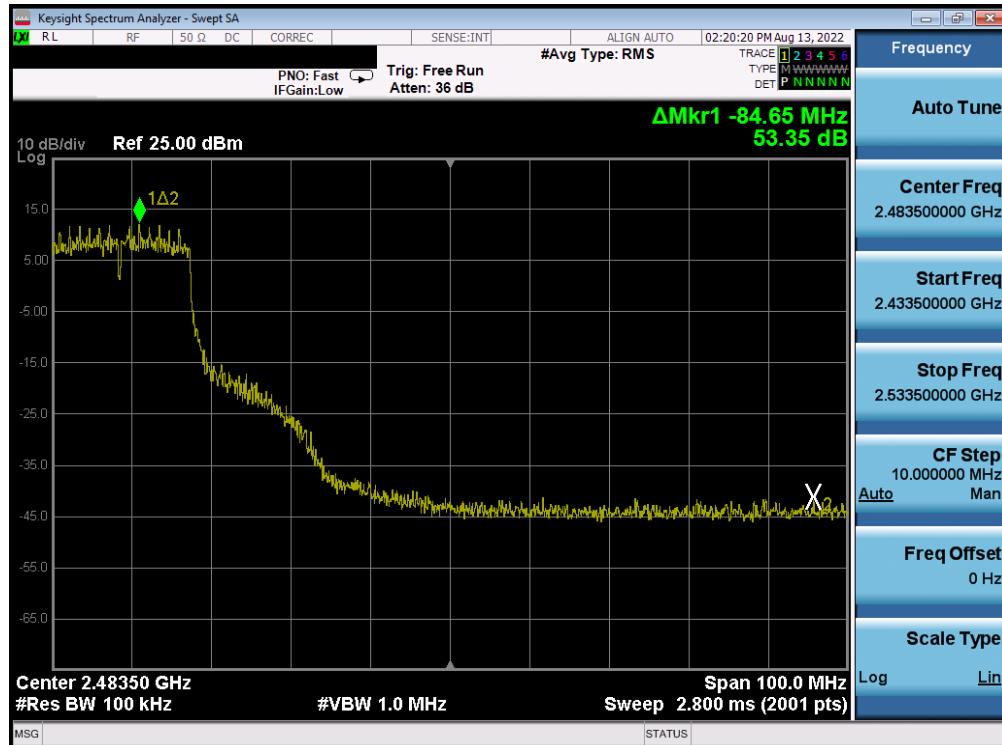


Plot 7-401. Band Edge Plot Antenna WF7b (802.11n (2.4GHz) – Ch. 5) – MCS5

FCC ID: BCGA2696 IC: 579C-A2696	 element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090022-01.BCG	Test Dates: 05/30/2022 - 09/15/2022	EUT Type: Tablet Device	Page 251 of 430



Plot 7-402. Band Edge Plot Antenna WF7b (802.11n (2.4GHz) – Ch. 6 (low)) – MCS5

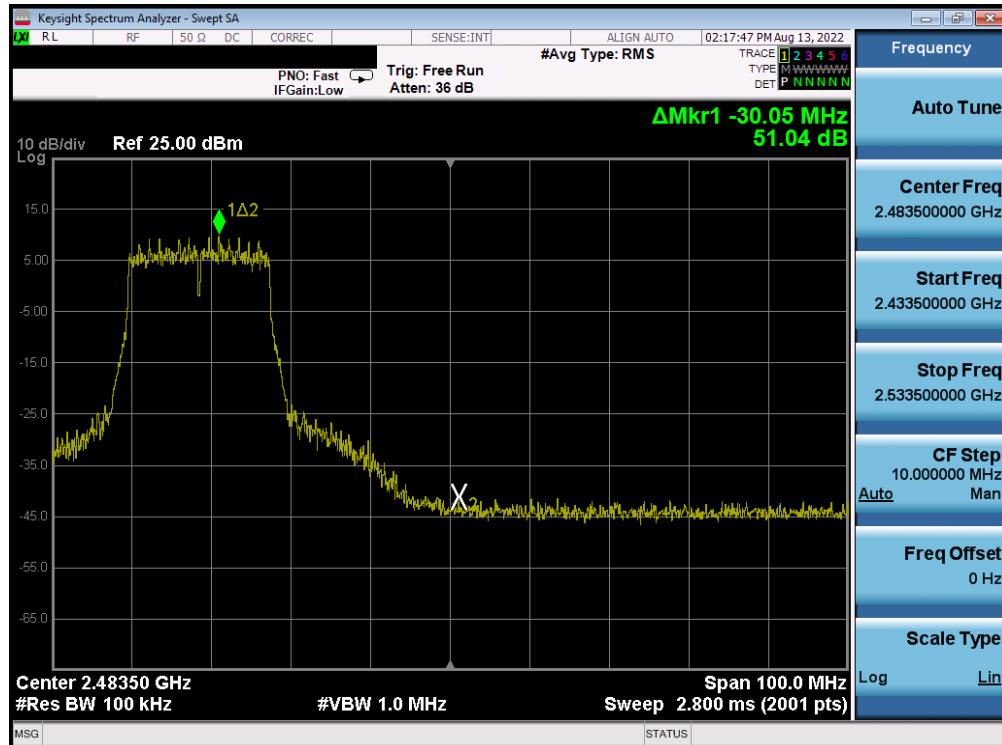


Plot 7-403. Band Edge Plot Antenna WF7b (802.11n (2.4GHz) – Ch. 7) – MCS5

FCC ID: BCGA2696 IC: 579C-A2696	 element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090022-01.BCG	Test Dates: 05/30/2022 - 09/15/2022	EUT Type: Tablet Device	Page 252 of 430

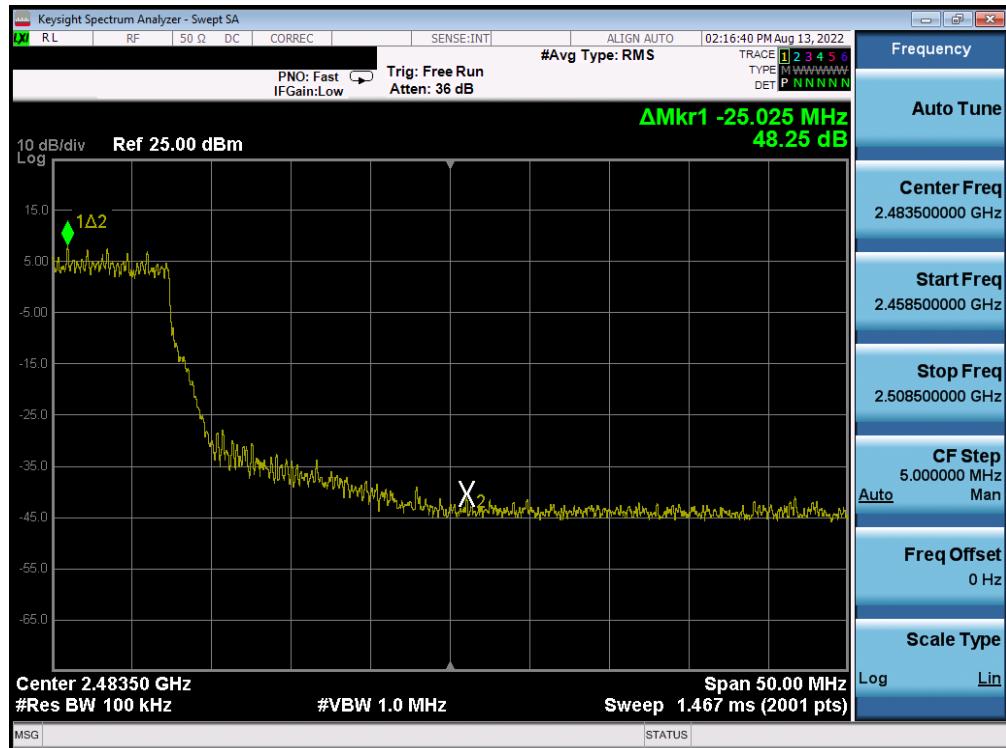


**Plot 7-404. Band Edge Plot Antenna WF7b (802.11n (2.4GHz) – Ch. 8) – MCS5**

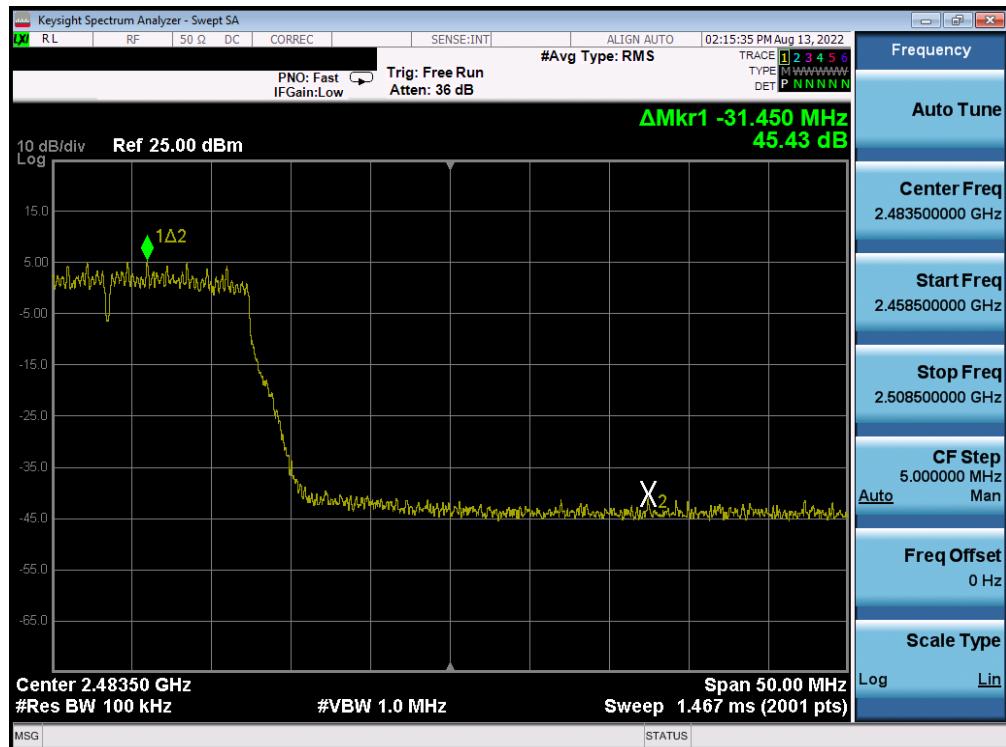


**Plot 7-405. Band Edge Plot Antenna WF7b (802.11n (2.4GHz) – Ch. 9) – MCS5**

FCC ID: BCGA2696 IC: 579C-A2696	 element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090022-01.BCG	Test Dates: 05/30/2022 - 09/15/2022	EUT Type: Tablet Device	Page 253 of 430

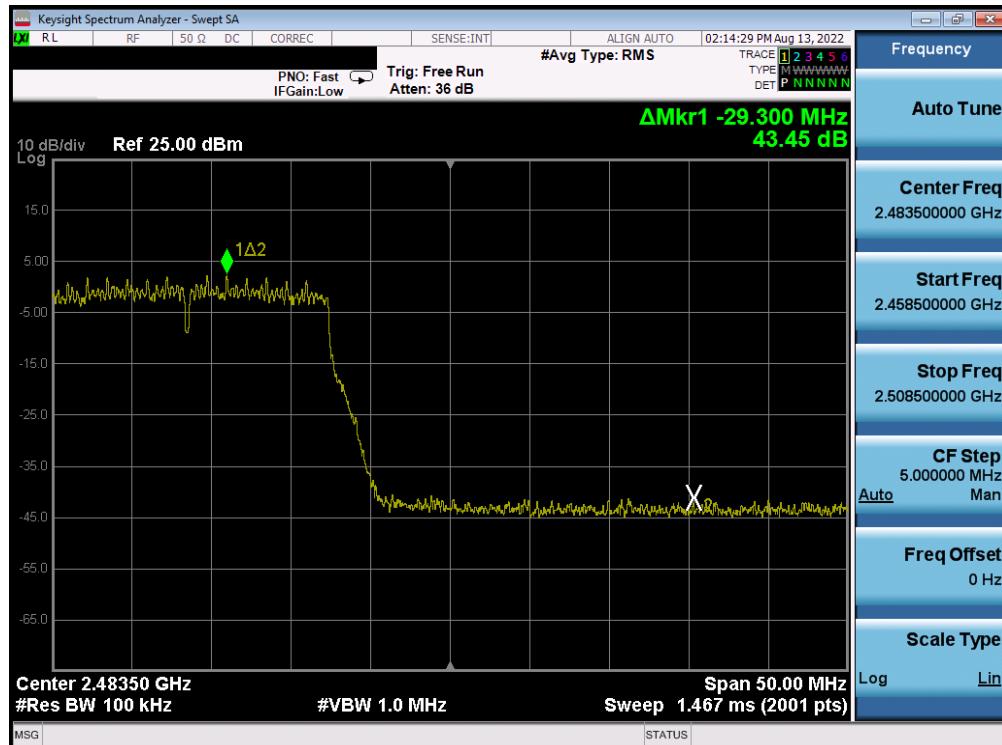


Plot 7-406. Band Edge Plot Antenna WF7b (802.11n (2.4GHz) – Ch. 10) – MCS5

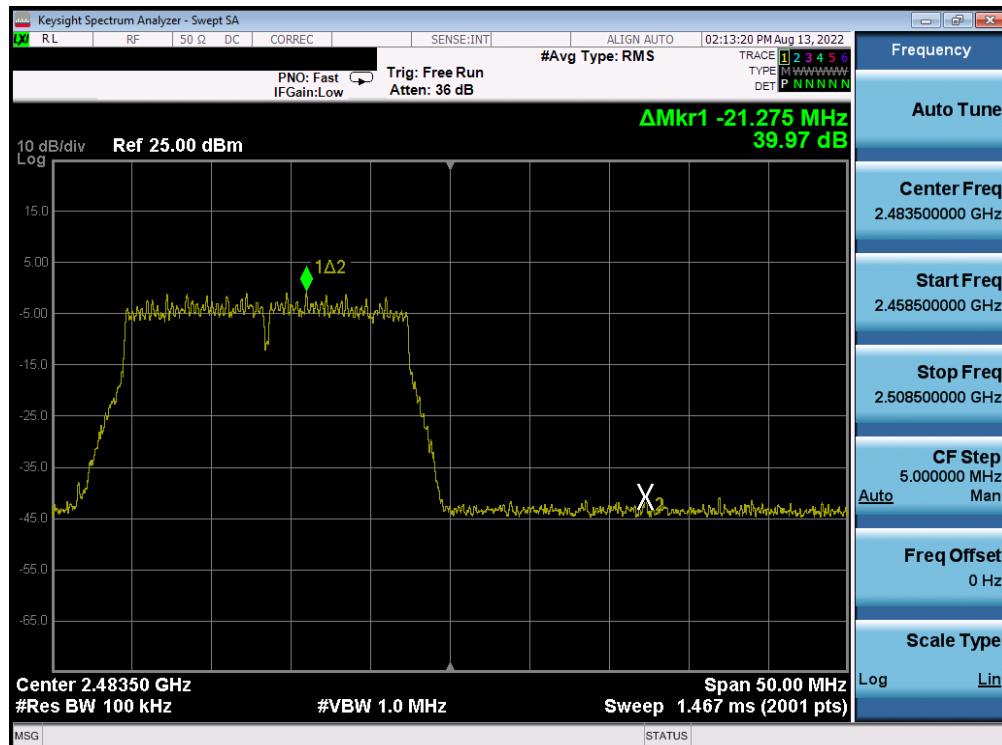


Plot 7-407. Band Edge Plot Antenna WF7b (802.11n (2.4GHz) – Ch. 11) – MCS5

FCC ID: BCGA2696 IC: 579C-A2696	 element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090022-01.BCG	Test Dates: 05/30/2022 - 09/15/2022	EUT Type: Tablet Device	Page 254 of 430

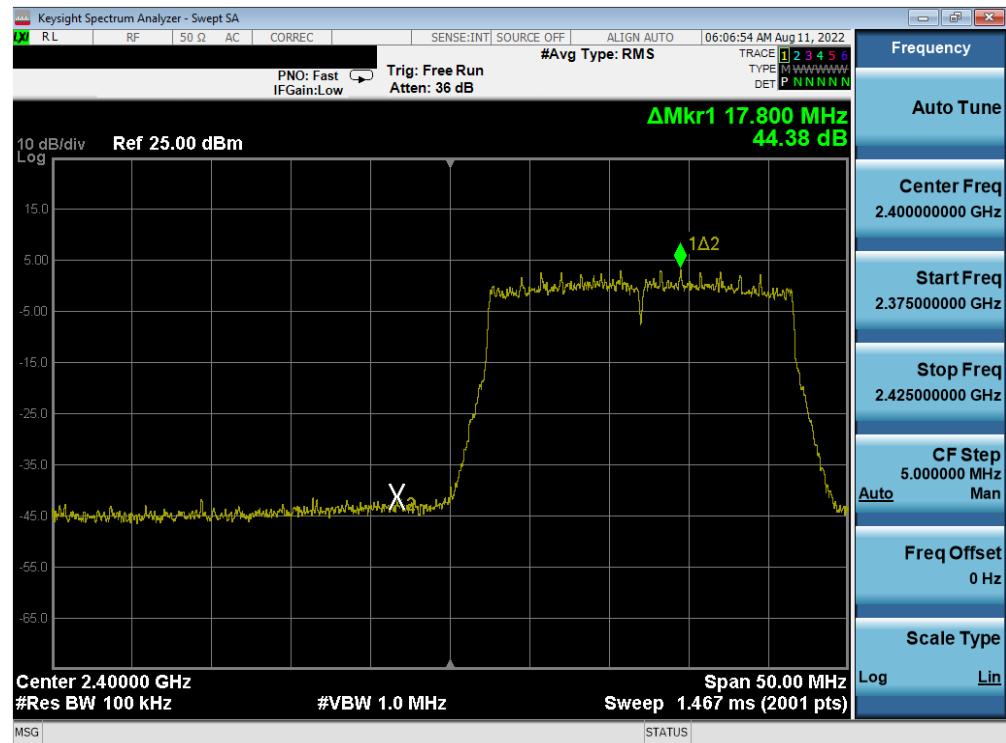


Plot 7-408. Band Edge Plot Antenna WF7b (802.11n (2.4GHz) – Ch. 12) – MCS5

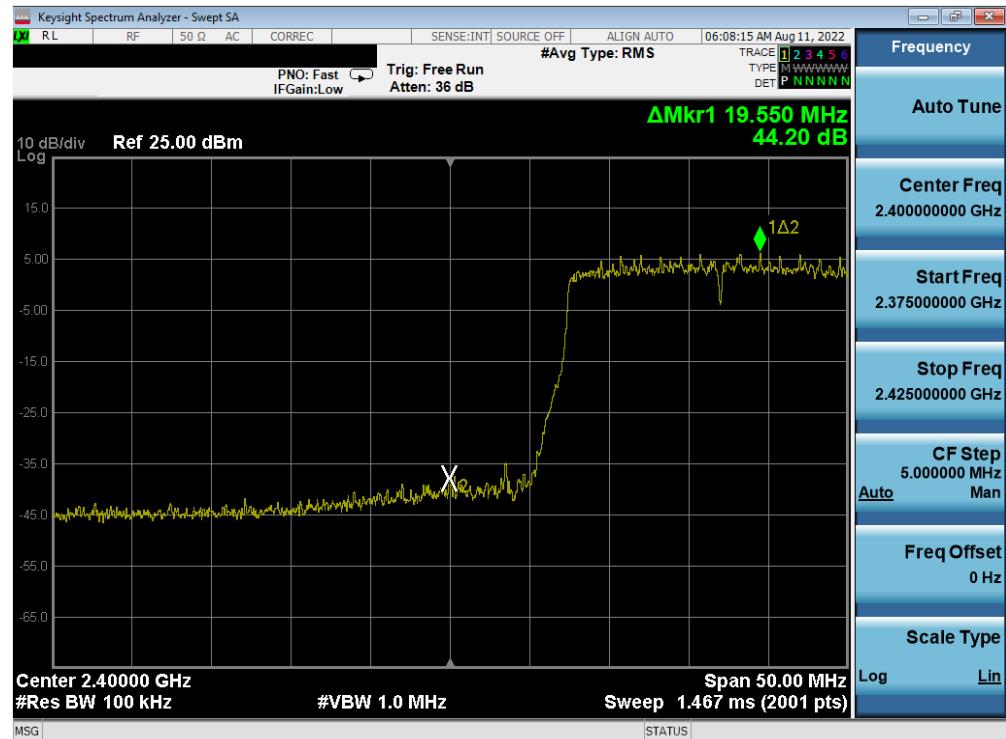


Plot 7-409. Band Edge Plot Antenna WF7b (802.11n (2.4GHz) – Ch. 13) – MCS5

FCC ID: BCGA2696 IC: 579C-A2696	 element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090022-01.BCG	Test Dates: 05/30/2022 - 09/15/2022	EUT Type: Tablet Device	Page 255 of 430

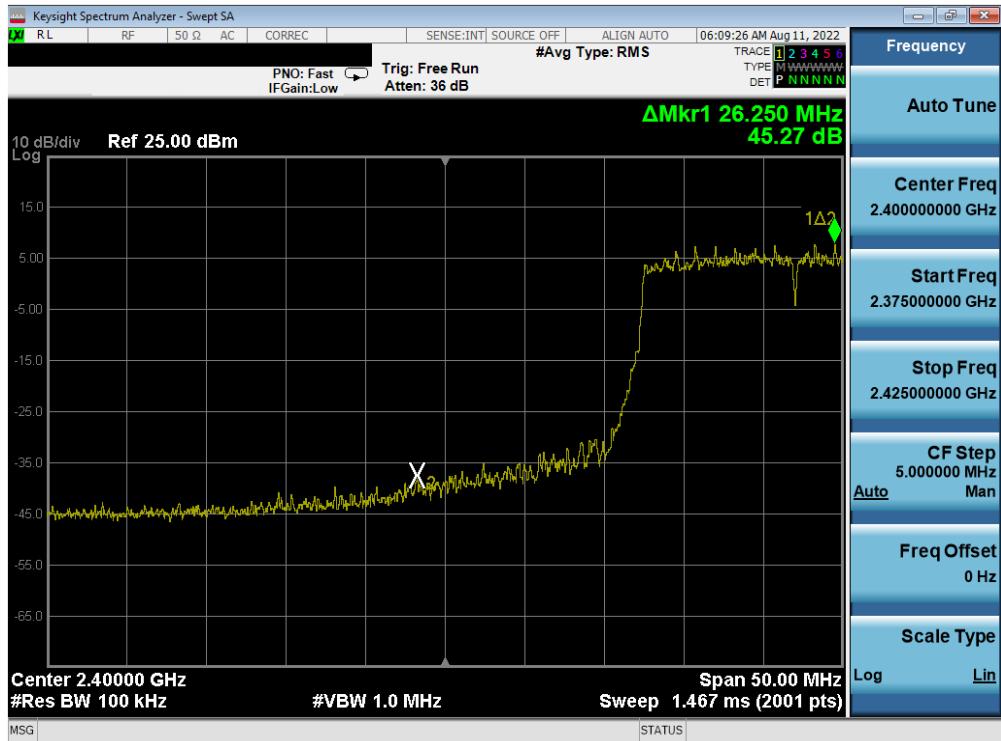


Plot 7-410. Band Edge Plot Antenna WF7b (802.11ax (SU - 2.4GHz) – Ch. 1) – MCS5

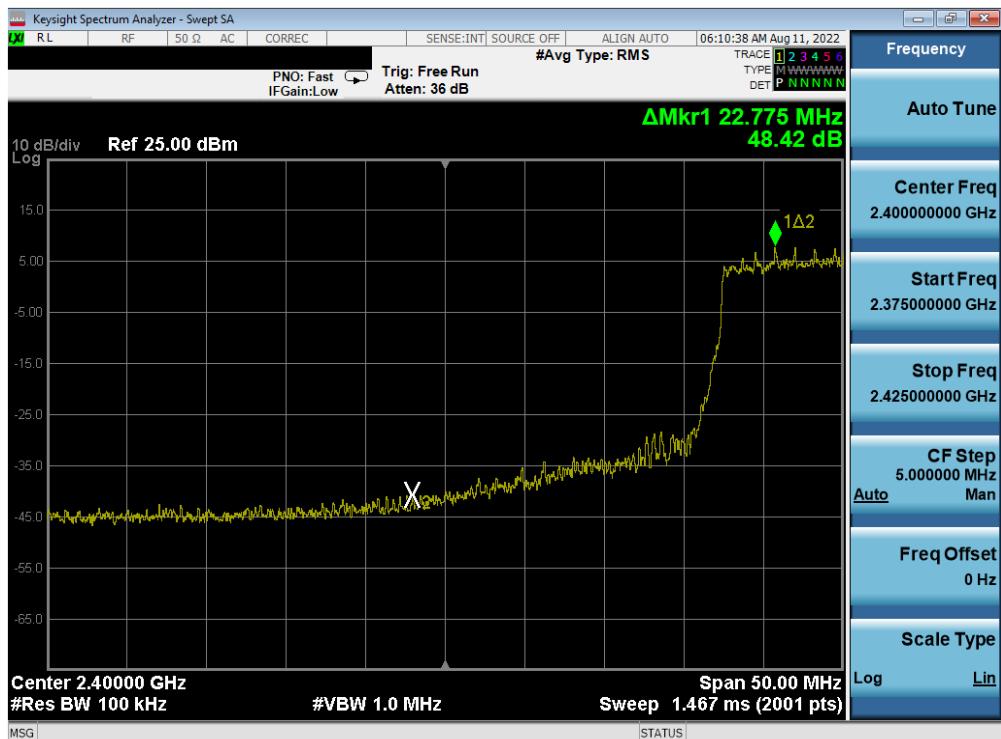


Plot 7-411. Band Edge Plot Antenna WF7b (802.11ax (SU - 2.4GHz) – Ch. 2) – MCS5

FCC ID: BCGA2696 IC: 579C-A2696	 element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090022-01.BCG	Test Dates: 05/30/2022 - 09/15/2022	EUT Type: Tablet Device	Page 256 of 430

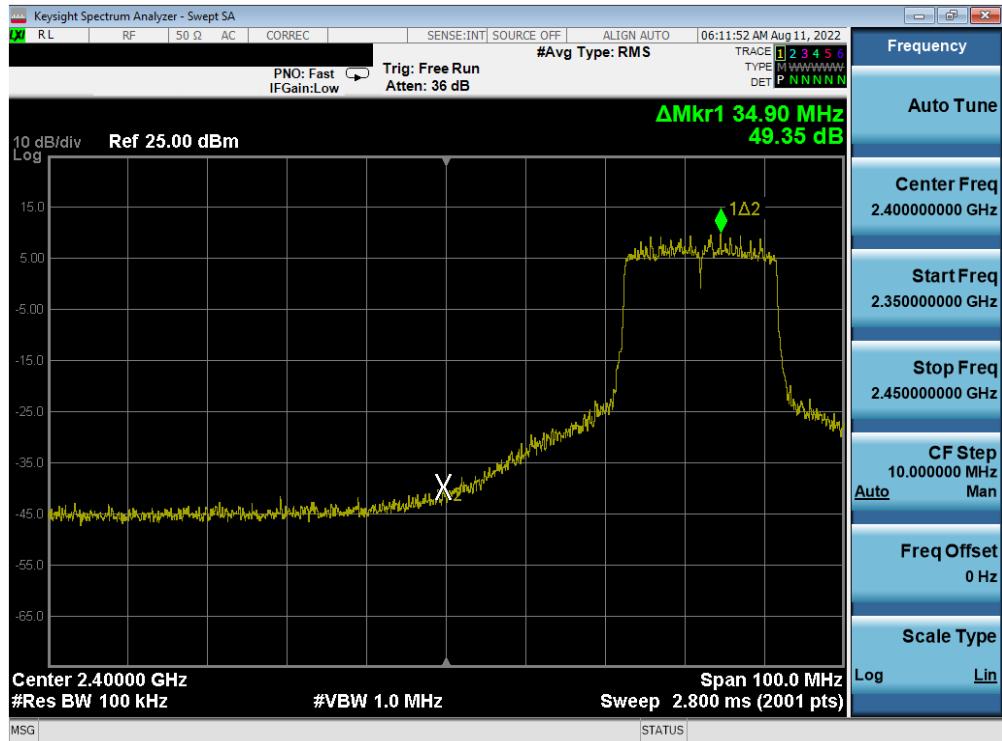


Plot 7-412. Band Edge Plot Antenna WF7b (802.11ax (SU - 2.4GHz) – Ch. 3) – MCS5

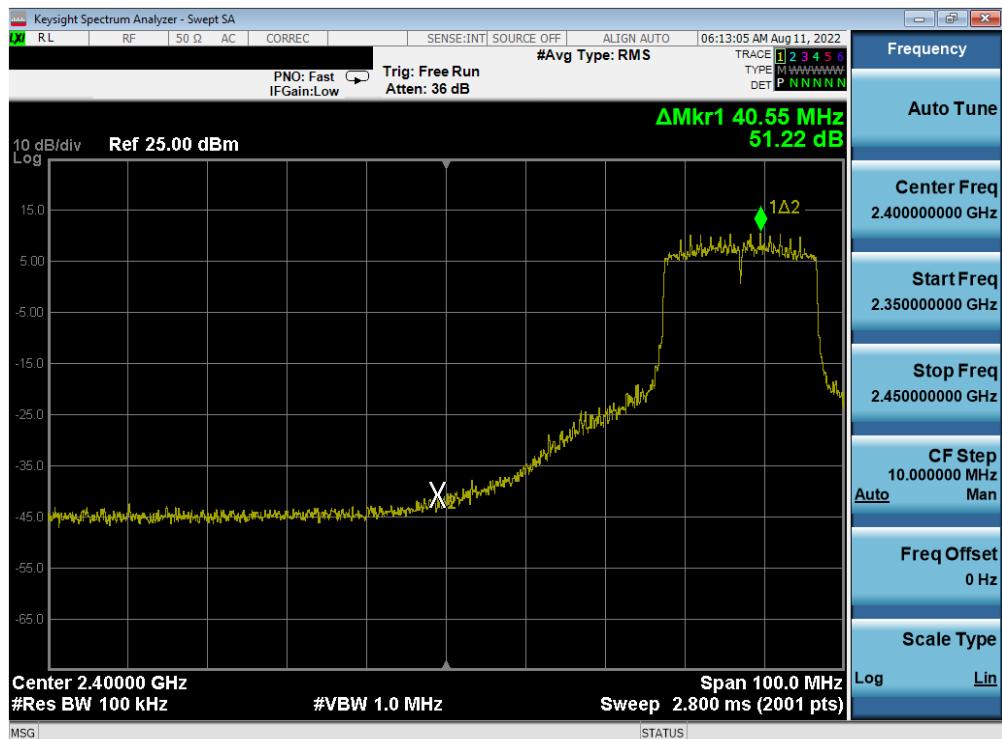


Plot 7-413. Band Edge Plot Antenna WF7b (802.11ax (SU - 2.4GHz) – Ch. 4) – MCS5

FCC ID: BCGA2696 IC: 579C-A2696	 element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090022-01.BCG	Test Dates: 05/30/2022 - 09/15/2022	EUT Type: Tablet Device	Page 257 of 430

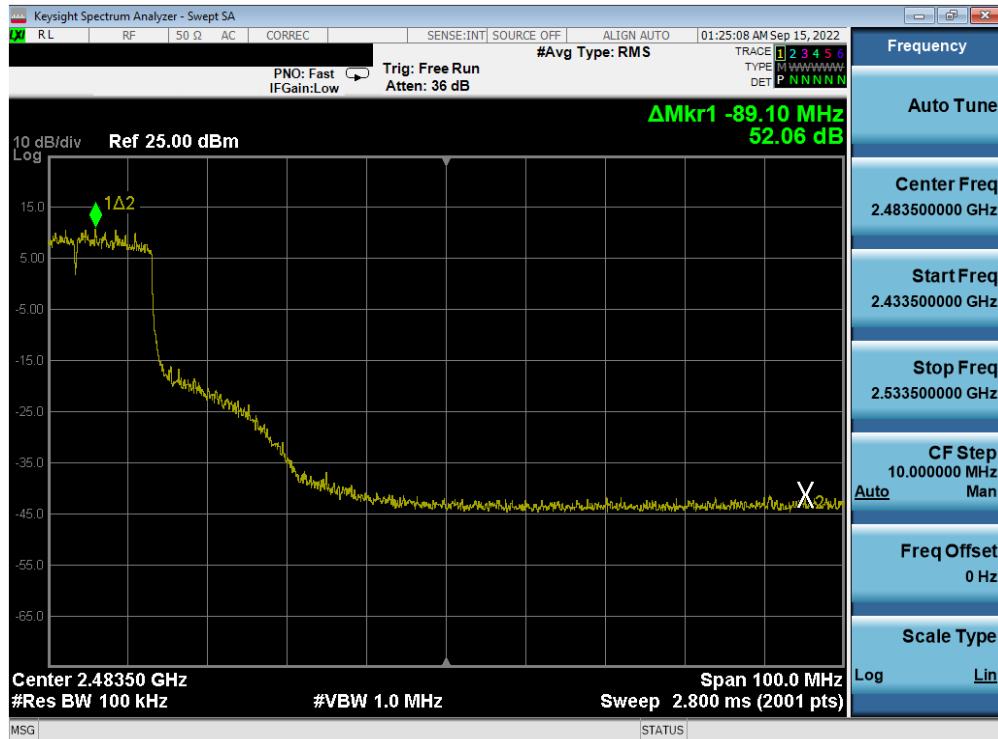


Plot 7-414. Band Edge Plot Antenna WF7b (802.11ax (SU - 2.4GHz) – Ch. 5) – MCS5

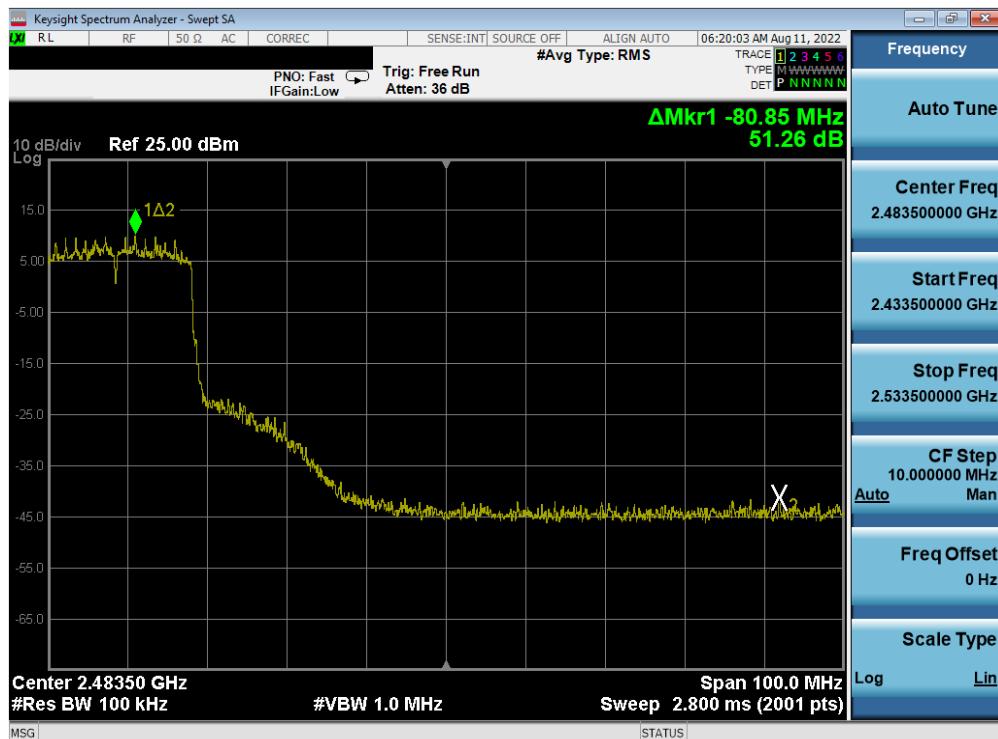


Plot 7-415. Band Edge Plot Antenna WF7b (802.11ax (SU - 2.4GHz) – Ch. 6 (low)) – MCS5

FCC ID: BCGA2696 IC: 579C-A2696	 element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090022-01.BCG	Test Dates: 05/30/2022 - 09/15/2022	EUT Type: Tablet Device	Page 258 of 430

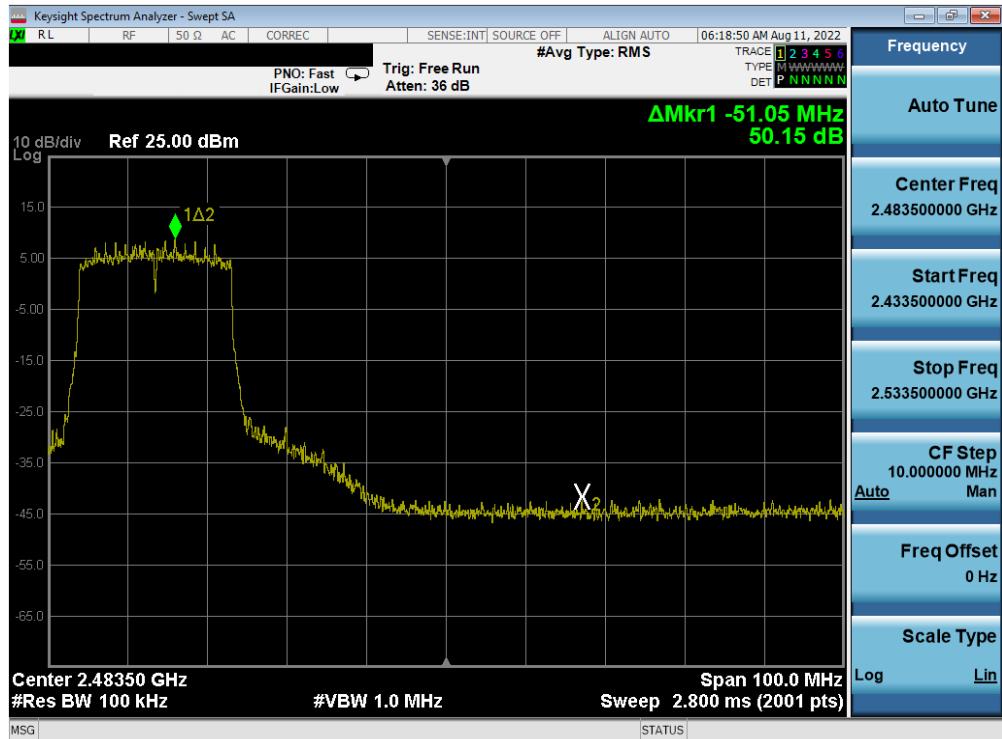


Plot 7-416. Band Edge Plot Antenna WF7b (802.11ax (SU - 2.4GHz) – Ch. 6 (high)) – MCS5

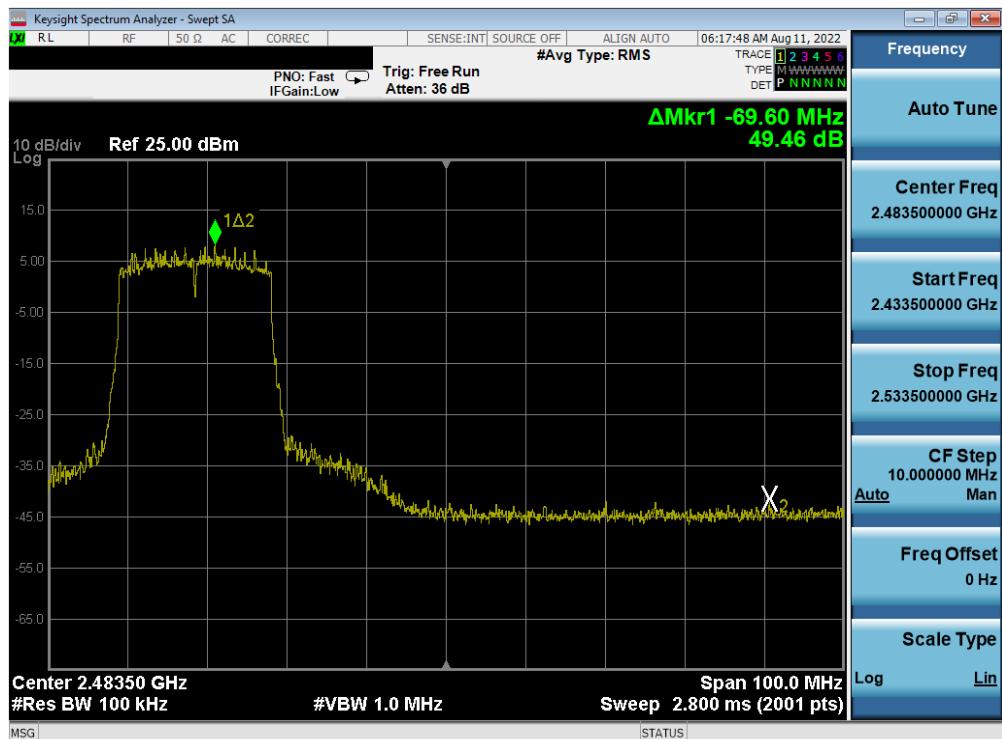


Plot 7-417. Band Edge Plot Antenna WF7b (802.11ax (SU - 2.4GHz) – Ch. 7) – MCS5

FCC ID: BCGA2696 IC: 579C-A2696	 element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090022-01.BCG	Test Dates: 05/30/2022 - 09/15/2022	EUT Type: Tablet Device	Page 259 of 430

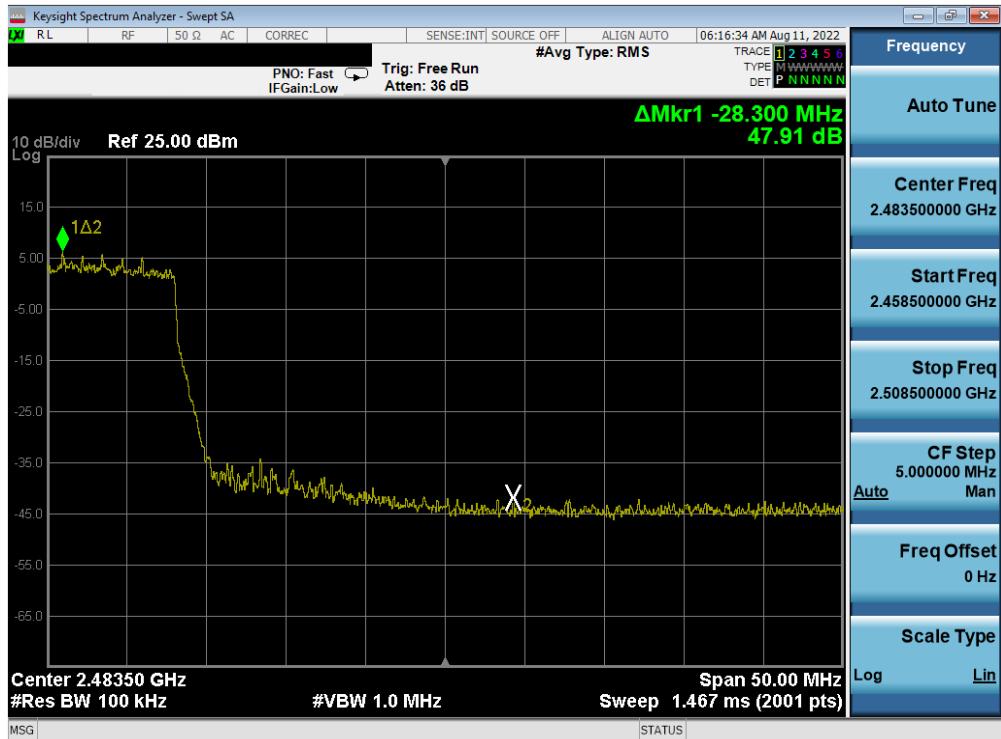


Plot 7-418. Band Edge Plot Antenna WF7b (802.11ax (SU - 2.4GHz) – Ch. 8) – MCS5

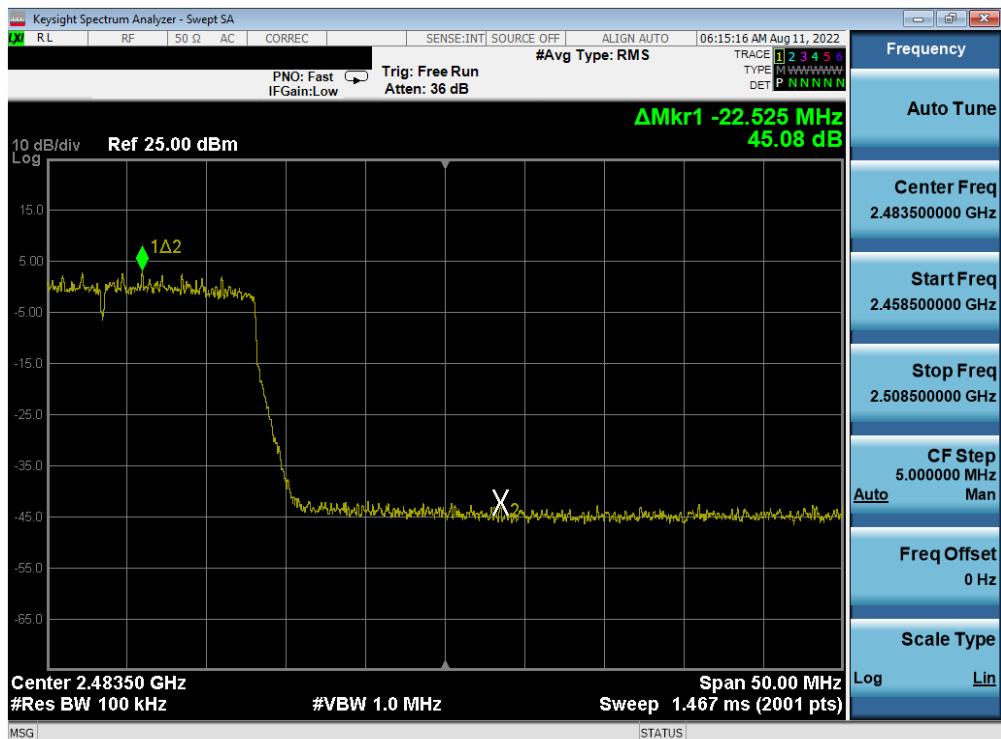


Plot 7-419. Band Edge Plot Antenna WF7b (802.11ax (SU - 2.4GHz) – Ch. 9) – MCS5

FCC ID: BCGA2696 IC: 579C-A2696	 element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090022-01.BCG	Test Dates: 05/30/2022 - 09/15/2022	EUT Type: Tablet Device	Page 260 of 430

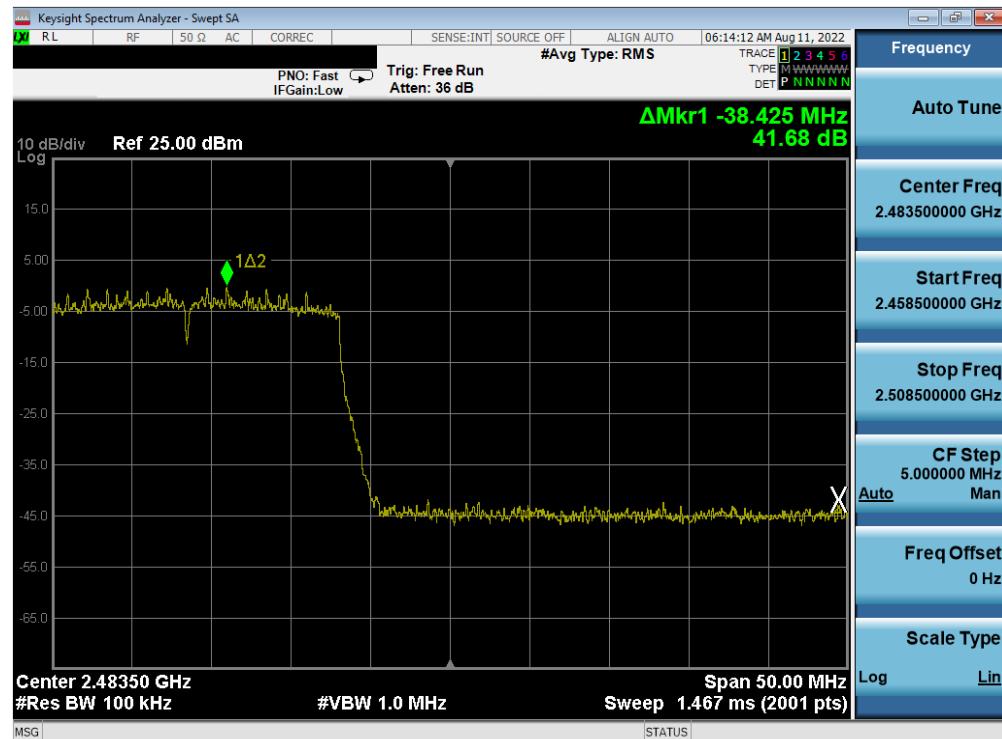


Plot 7-420. Band Edge Plot Antenna WF7b (802.11ax (SU - 2.4GHz) – Ch. 10) – MCS5



Plot 7-421. Band Edge Plot Antenna WF7b (802.11ax (SU - 2.4GHz) – Ch. 11) – MCS5

FCC ID: BCGA2696 IC: 579C-A2696	 element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090022-01.BCG	Test Dates: 05/30/2022 - 09/15/2022	EUT Type: Tablet Device	Page 261 of 430



**Plot 7-422. Band Edge Plot Antenna WF7b (802.11ax (SU - 2.4GHz) – Ch. 12) – MCS5**

FCC ID: BCGA2696 IC: 579C-A2696	 <b>element</b>	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090022-01.BCG	Test Dates: 05/30/2022 - 09/15/2022	EUT Type: Tablet Device	Page 262 of 430

## 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", "n", "ax-SU" modes. The worst case spurious emissions for the 2.4GHz band were found while transmitting in "b" mode at 11 Mbps and are shown in the plots below.

***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 11.11 of ANSI C63.10-2013 and KDB 558074 D01 v05r02.***

### Test Procedure Used

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

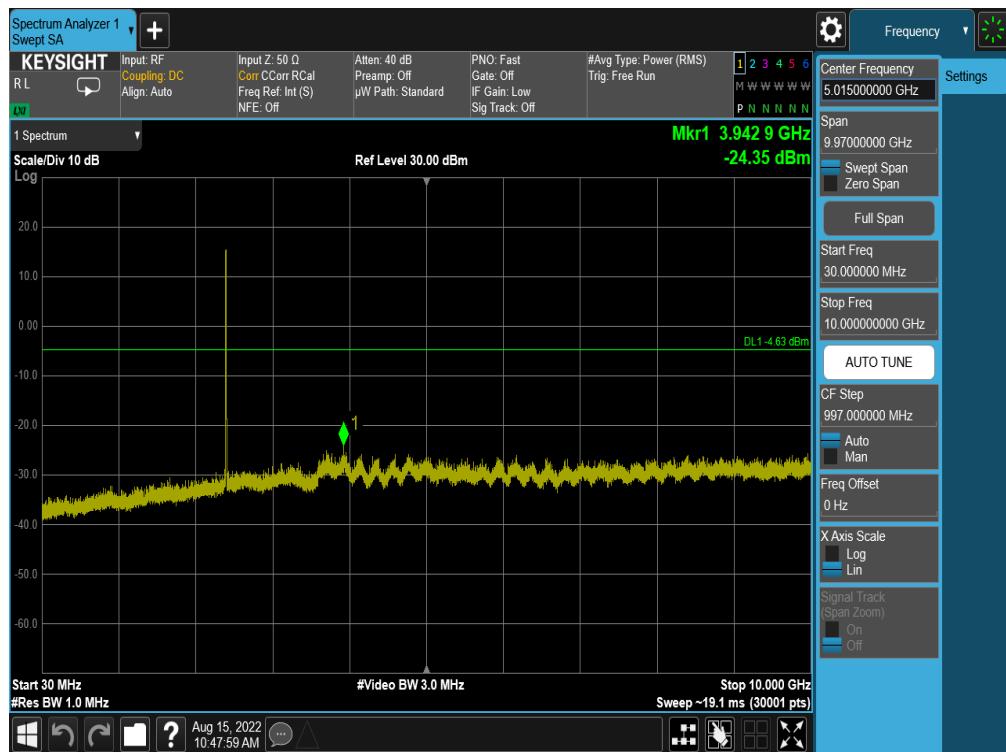
FCC ID: BCGA2696 IC: 579C-A2696	 element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090022-01.BCG	Test Dates: 05/30/2022 - 09/15/2022	EUT Type: Tablet Device	Page 263 of 430

## Test Notes

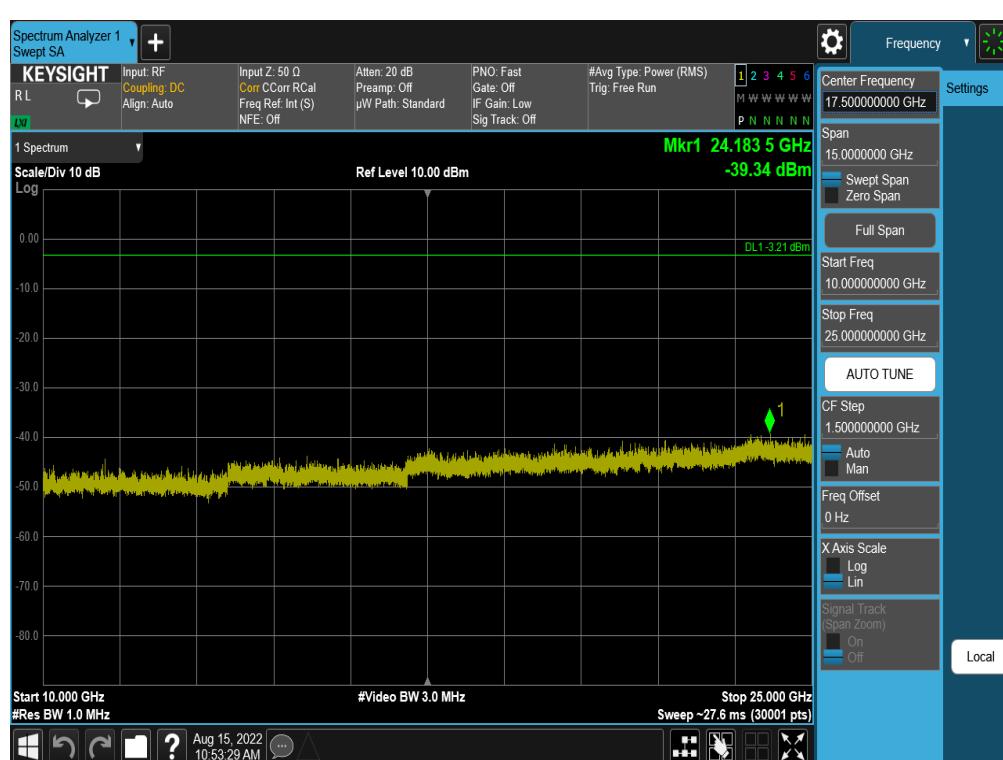
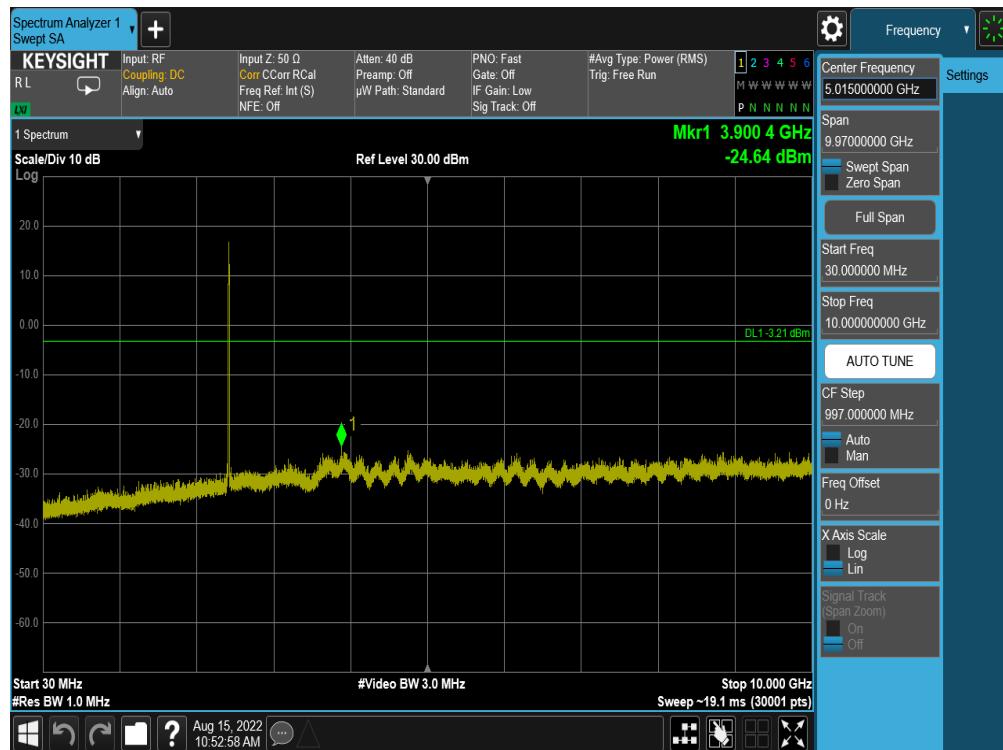
1. RBW was set to 1MHz rather than 100kHz in order to increase the measurement speed.
2. The display line shown in the following plots denotes the limit at 20dB below the fundamental emission level measured in a 100kHz bandwidth. However, since the traces in the following plots are measured with a 1MHz 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.
5. All antenna configurations were investigated and only the worst case is reported.

FCC ID: BCGA2696 IC: 579C-A2696	 element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090022-01.BCG	Test Dates: 05/30/2022 - 09/15/2022	EUT Type: Tablet Device	Page 264 of 430

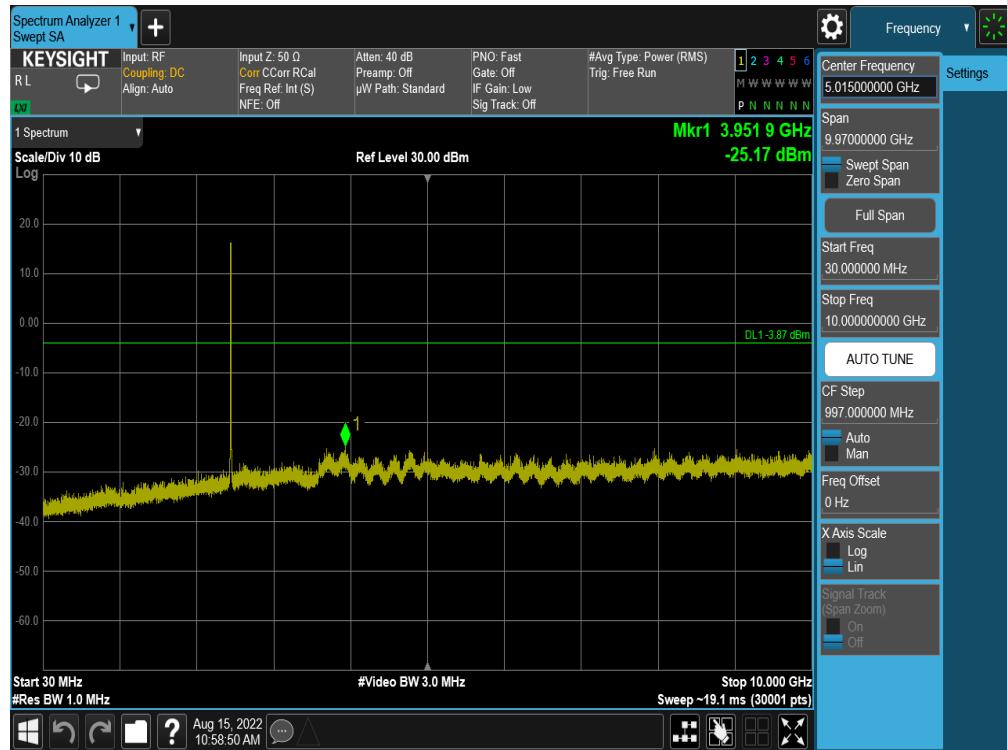
## Antenna WF8 Conducted Spurious Emission



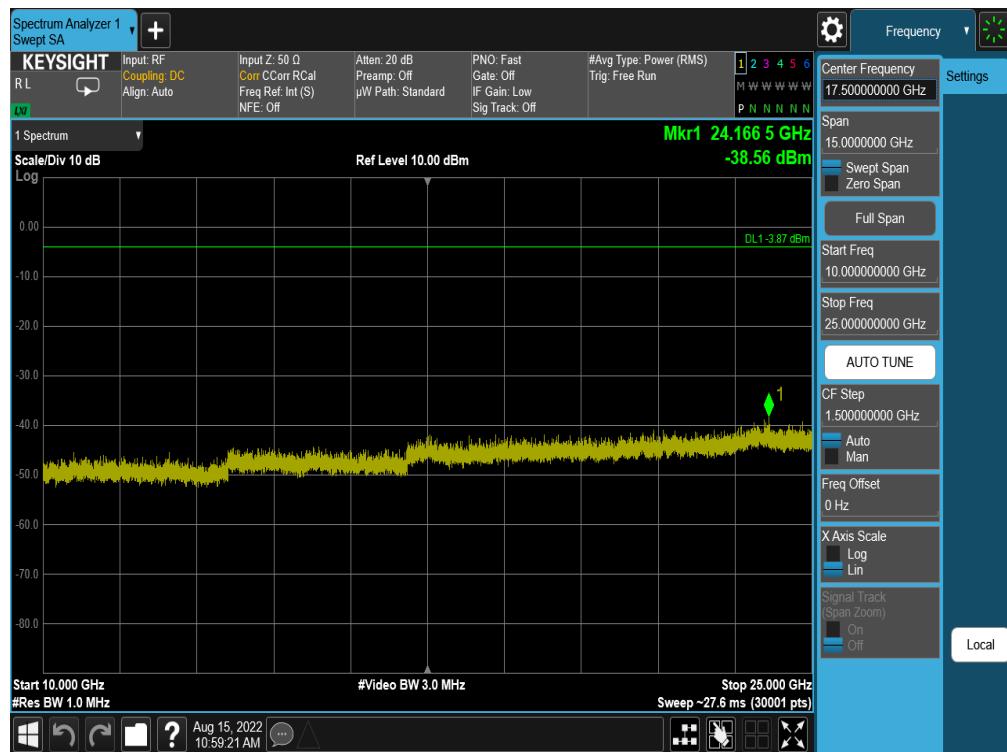
FCC ID: BCGA2696 IC: 579C-A2696		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090022-01.BCG	Test Dates: 05/30/2022 - 09/15/2022	EUT Type: Tablet Device	Page 265 of 430



FCC ID: BCGA2696 IC: 579C-A2696	 <b>element</b>	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090022-01.BCG	Test Dates: 05/30/2022 - 09/15/2022	EUT Type: Tablet Device	Page 266 of 430



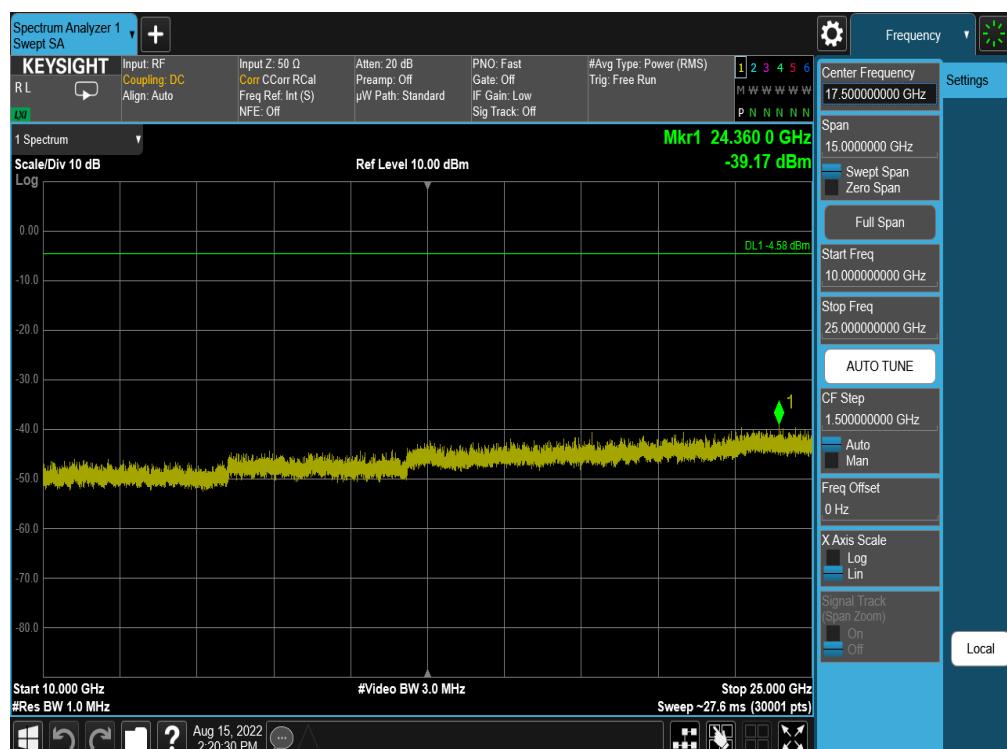
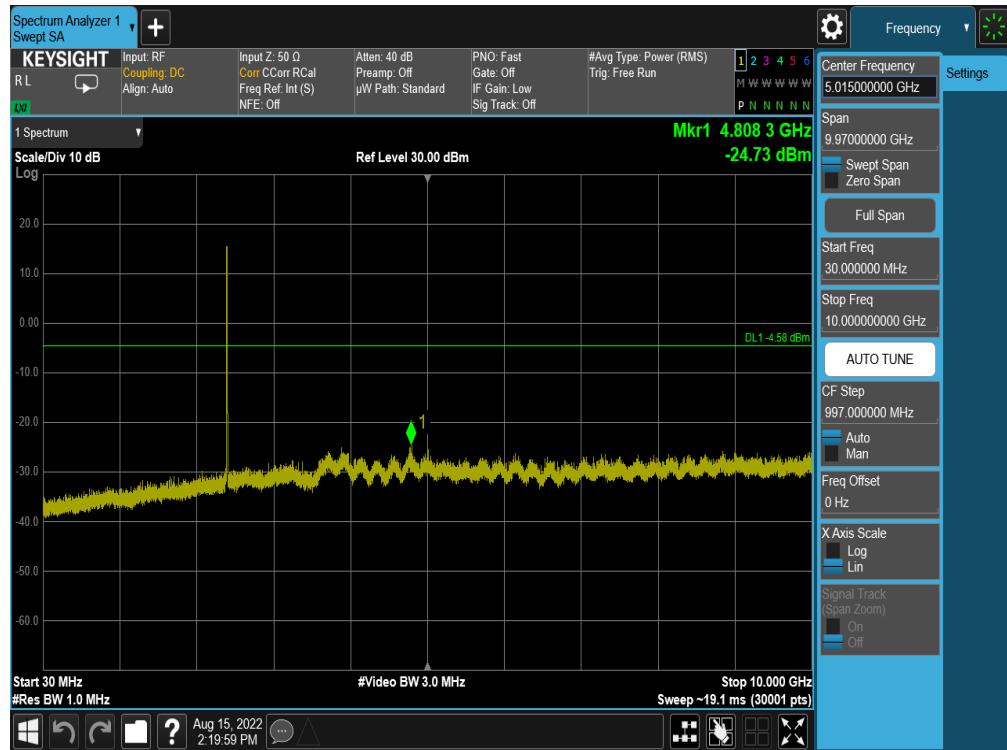
**Plot 7-427. Conducted Spurious Plot Antenna WF8 (802.11b – Ch. 11)**



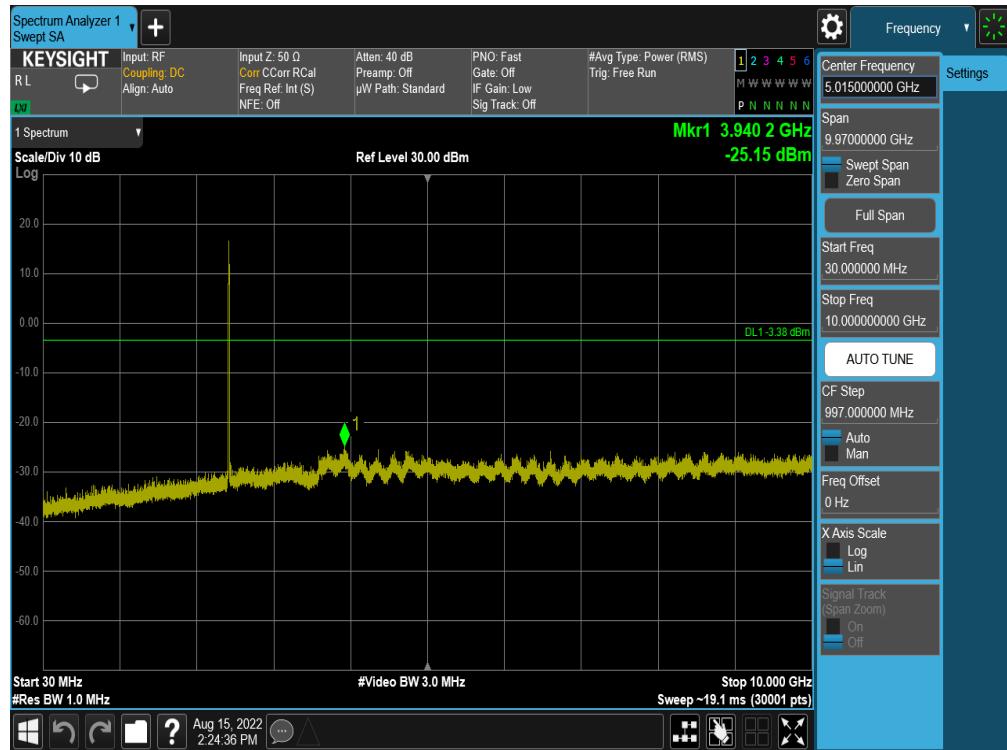
**Plot 7-428. Conducted Spurious Plot Antenna WF8 (802.11b – Ch. 11)**

FCC ID: BCGA2696 IC: 579C-A2696	 element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090022-01.BCG	Test Dates: 05/30/2022 - 09/15/2022	EUT Type: Tablet Device	Page 267 of 430

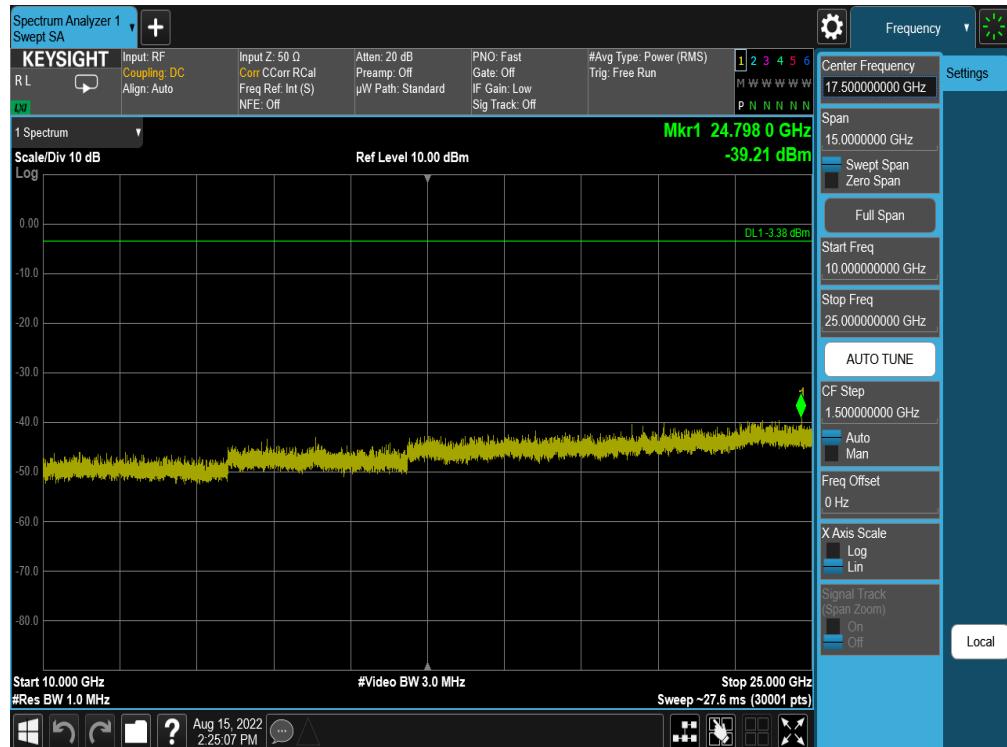
## Antenna WF7b Conducted Spurious Emissions



FCC ID: BCGA2696 IC: 579C-A2696		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090022-01.BCG	Test Dates: 05/30/2022 - 09/15/2022	EUT Type: Tablet Device	Page 268 of 430

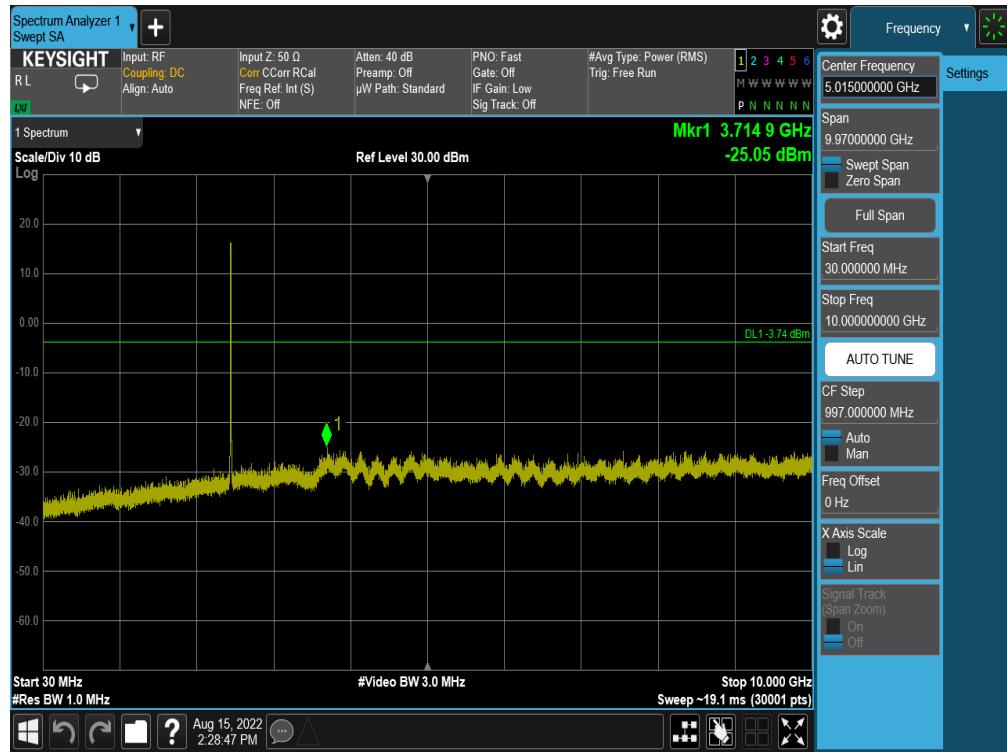


**Plot 7-431. Conducted Spurious Plot Antenna WF7b (802.11b – Ch. 6)**

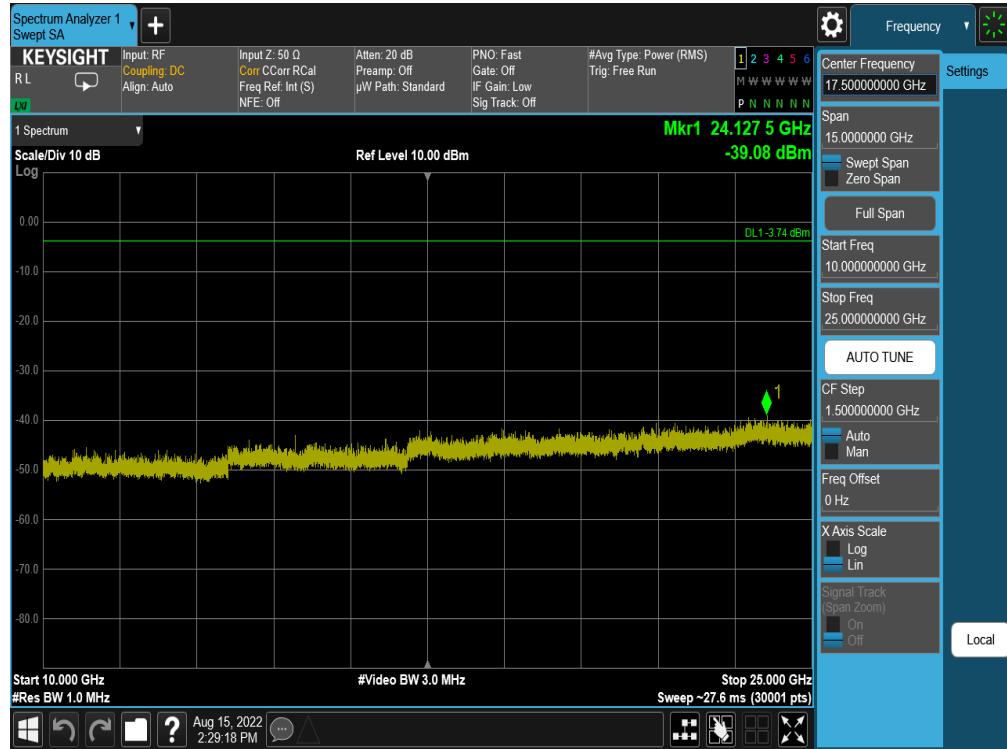


**Plot 7-432. Conducted Spurious Plot Antenna WF7b (802.11b – Ch. 6)**

FCC ID: BCGA2696 IC: 579C-A2696	 <b>element</b>	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090022-01.BCG	Test Dates: 05/30/2022 - 09/15/2022	EUT Type: Tablet Device	Page 269 of 430



**Plot 7-433. Conducted Spurious Plot Antenna WF7b (802.11b – Ch. 11)**



**Plot 7-434. Conducted Spurious Plot Antenna WF7b (802.11b – Ch. 11)**

FCC ID: BCGA2696 IC: 579C-A2696	 <b>element</b>	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090022-01.BCG	Test Dates: 05/30/2022 - 09/15/2022	EUT Type: Tablet Device	Page 270 of 430

## 7.7 Radiated Spurious Emissions – 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 7 of RSS-Gen (8.10) must not exceed the limits shown in Table 7-47 per Section 15.209 and RSS-Gen (8.9).***

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

**Table 7-47. Radiated Limits**

### Test Procedures Used

ANSI C63.10-2013 – Subclause 6.6.4.3  
KDB 558074 D01 v05r02 – 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

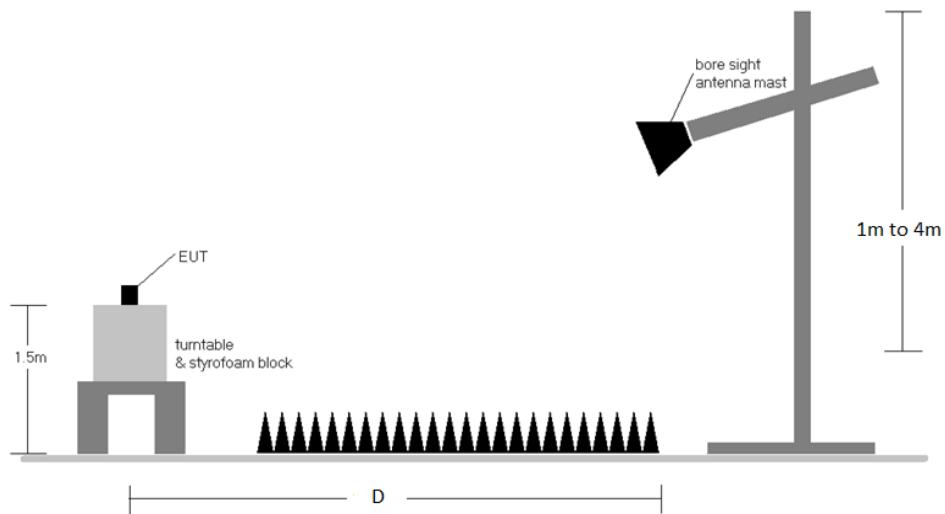
#### Peak Field Strength Measurements

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: BCGA2696 IC: 579C-A2696	 <b>element</b>	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090022-01.BCG	Test Dates: 05/30/2022 - 09/15/2022	EUT Type: Tablet Device	Page 271 of 430

## Test Setup

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



**Figure 7-6. Radiated Measurement Setup**

## 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 Section 15.205 and Section 8.10 of RSS-Gen are below the limit shown in Table 7-47.
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 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.
8. The "-" shown in the following RSE tables are used to denote a noise floor measurement.
9. All antenna configurations were investigated and only the worst case is reported.
10. The unit was tested with all possible modes and only the highest emission is reported.

FCC ID: BCGA2696 IC: 579C-A2696	 <b>element</b>	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090022-01.BCG	Test Dates: 05/30/2022 - 09/15/2022	EUT Type: Tablet Device	Page 272 of 430

## Sample Calculations

### Determining Spurious Emissions Levels

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

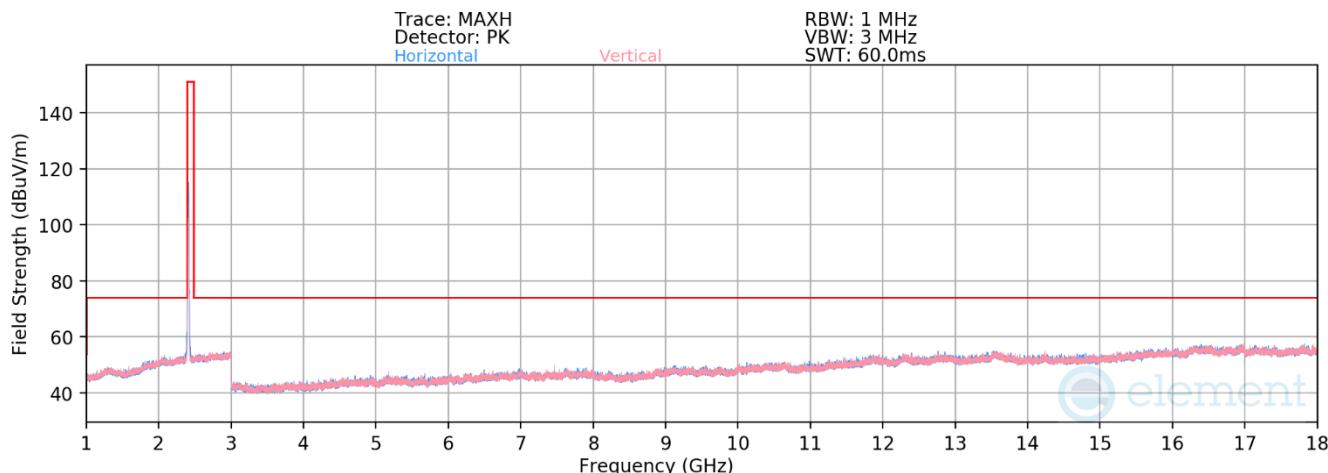
### Radiated Band Edge Measurement Offset

- The amplitude offset shown in the radiated restricted band edge plots in Section 7.7.4, 7.7.5, 7.7.6 was calculated using the formula:  
Offset (dB) = (Antenna Factor + Cable Loss + Attenuator) – Preamplifier Gain

FCC ID: BCGA2696 IC: 579C-A2696	 element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090022-01.BCG	Test Dates: 05/30/2022 - 09/15/2022	EUT Type: Tablet Device	Page 273 of 430

### 7.7.1 Antenna WF8 Radiated Spurious Emission Measurements

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



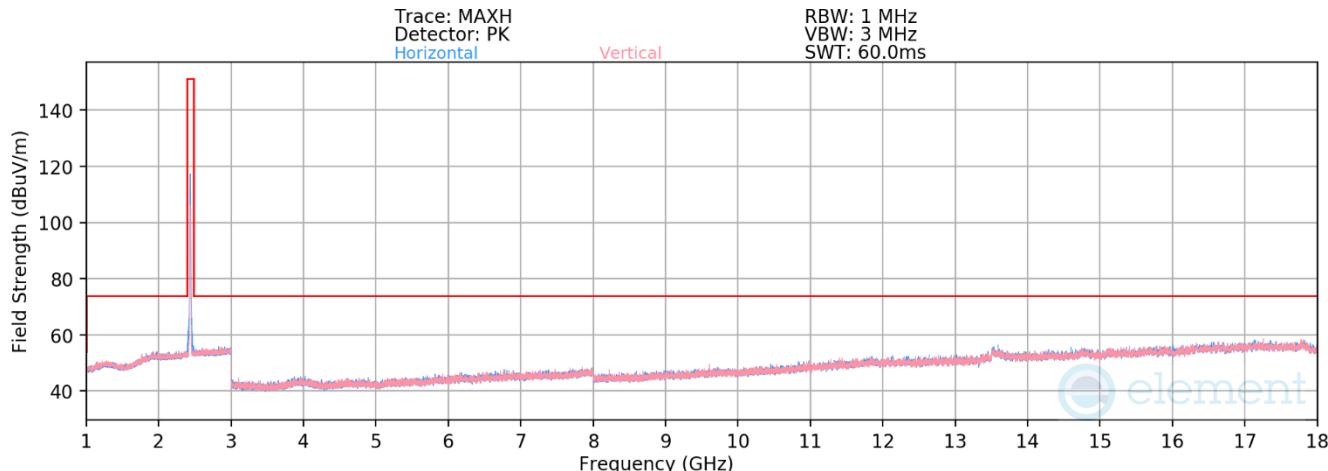
**Plot 7-435. Radiated Spurious Emissions above 1GHz Antenna WF8 (802.11b – Ch. 1)**

Mode: 802.11b  
 Data Rate: 11Mbps  
 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 $\mu$ V/m]	Limit [dB $\mu$ V/m]	Margin [dB]
4824.00	Avg	H	-	-	-81.37	8.18	33.81	53.98	-20.17
4824.00	Peak	H	-	-	-70.24	8.18	44.94	73.98	-29.04
12060.00	Avg	H	-	-	-83.63	17.53	40.90	53.98	-13.08
12060.00	Peak	H	-	-	-72.33	17.53	52.20	73.98	-21.78

**Table 7-48. Radiated Measurements Antenna WF8**

FCC ID: BCGA2696 IC: 579C-A2696	 element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090022-01.BCG	Test Dates: 05/30/2022 - 09/15/2022	EUT Type: Tablet Device	Page 274 of 430



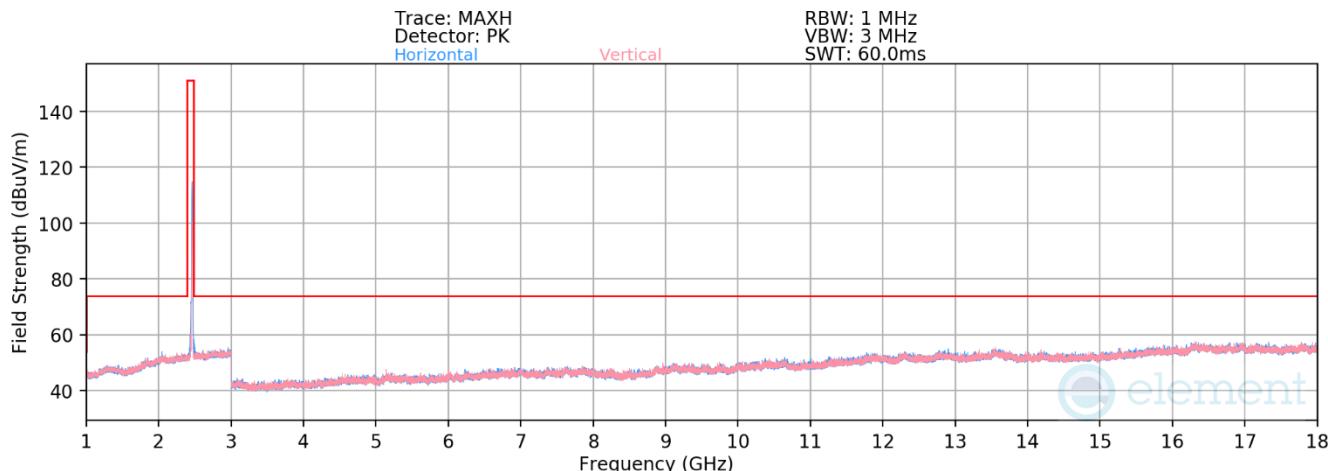
**Plot 7-436. Radiated Spurious Emissions above 1GHz Antenna WF8 (802.11b – Ch. 6)**

Mode: 802.11b  
 Data Rate: 11Mbps  
 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 $\mu$ V/m]	Limit [dB $\mu$ V/m]	Margin [dB]
4874.00	Avg	H	-	-	-78.44	4.51	33.07	53.98	-20.91
4874.00	Peak	H	-	-	-67.16	4.51	44.35	73.98	-29.63
7311.00	Avg	H	-	-	-80.17	8.81	35.64	53.98	-18.34
7311.00	Peak	H	-	-	-69.81	8.81	46.00	73.98	-27.98
12185.00	Avg	H	-	-	-84.18	17.67	40.49	53.98	-13.49
12185.00	Peak	H	-	-	-73.10	17.67	51.57	73.98	-22.41

**Table 7-49. Radiated Measurements Antenna WF8**

FCC ID: BCGA2696 IC: 579C-A2696		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090022-01.BCG	Test Dates: 05/30/2022 - 09/15/2022	EUT Type: Tablet Device	Page 275 of 430



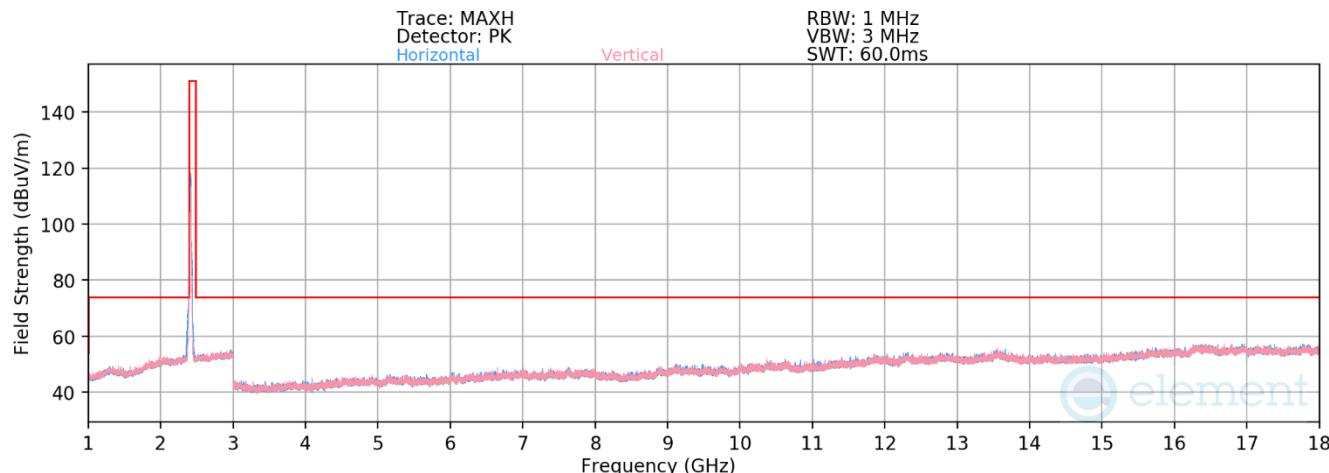
**Plot 7-437. Radiated Spurious Emissions above 1GHz Antenna WF8 (802.11b – Ch. 11)**

Mode: 802.11b  
 Data Rate: 11Mbps  
 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 $\mu$ V/m]	Limit [dB $\mu$ V/m]	Margin [dB]
4924.00	Avg	H	-	-	-81.35	9.23	34.88	53.98	-19.10
4924.00	Peak	H	-	-	-70.77	9.23	45.46	73.98	-28.52
7386.00	Avg	H	-	-	-82.95	12.66	36.71	53.98	-17.27
7386.00	Peak	H	-	-	-71.92	12.66	47.74	73.98	-26.24
12310.00	Avg	H	-	-	-84.29	18.60	41.31	53.98	-12.67
12310.00	Peak	H	-	-	-73.17	18.60	52.43	73.98	-21.55

**Table 7-50. Radiated Measurements Antenna WF8**

FCC ID: BCGA2696 IC: 579C-A2696		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090022-01.BCG	Test Dates: 05/30/2022 - 09/15/2022	EUT Type: Tablet Device	Page 276 of 430



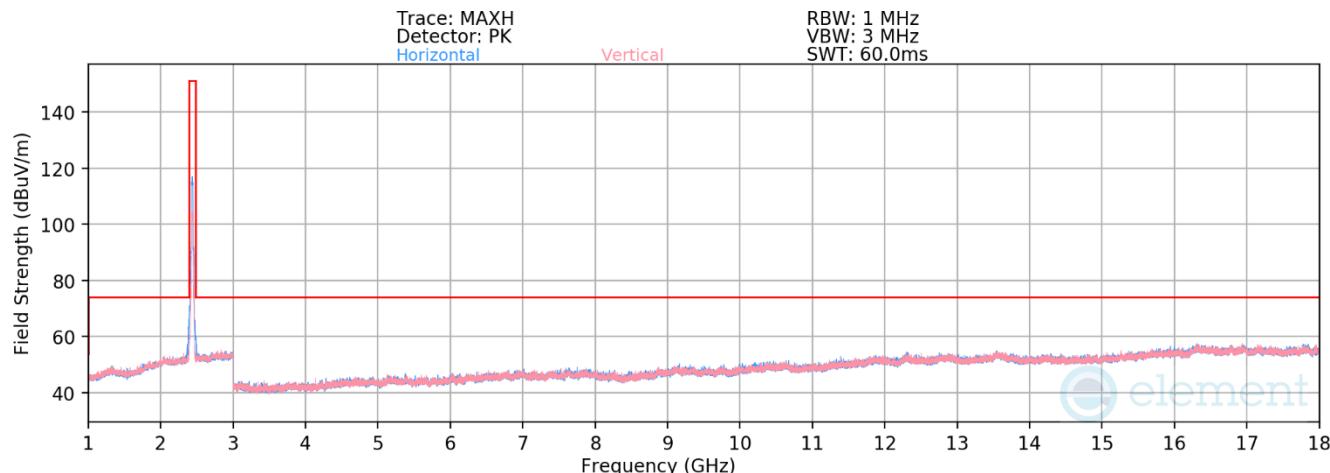
**Plot 7-438. Radiated Spurious Emissions above 1GHz Antenna WF8 (802.11ax(SU) – Ch. 1)**

Mode: 802.11ax(SU)  
 Data 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 $\mu$ V/m]	Limit [dB $\mu$ V/m]	Margin [dB]
4824.00	Avg	H	-	-	-82.33	7.90	32.57	53.98	-21.41
4824.00	Peak	H	-	-	-69.47	7.90	45.43	73.98	-28.55
12060.00	Avg	H	-	-	-84.23	17.28	40.05	53.98	-13.93
12060.00	Peak	H	-	-	-71.73	17.28	52.55	73.98	-21.43

**Table 7-51. Radiated Measurements Antenna WF8**

FCC ID: BCGA2696 IC: 579C-A2696		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090022-01.BCG	Test Dates: 05/30/2022 - 09/15/2022	EUT Type: Tablet Device	Page 277 of 430



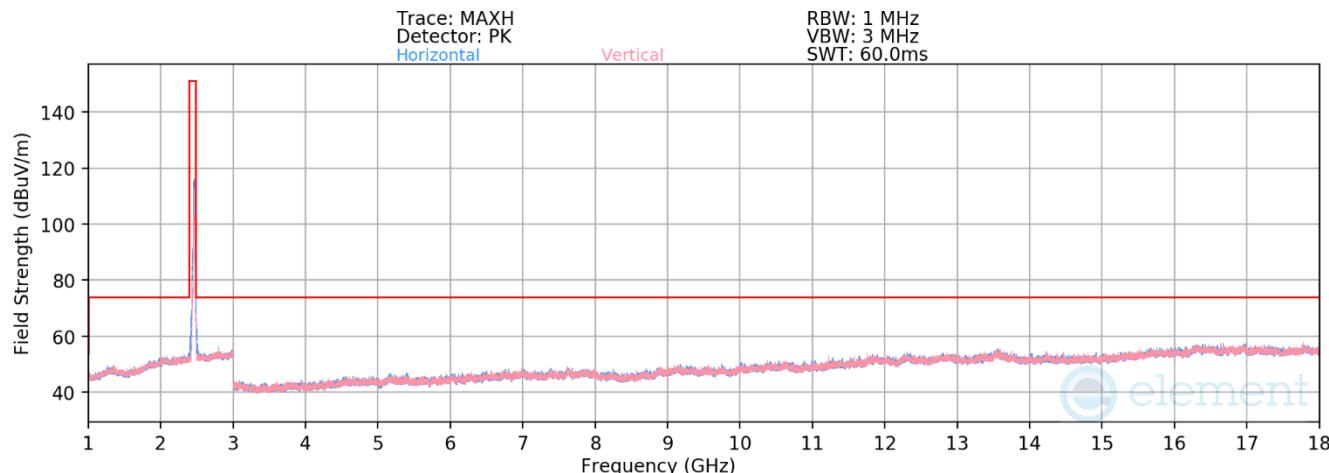
**Plot 7-439. Radiated Spurious Emissions above 1GHz Antenna WF8 (802.11ax(SU) – Ch. 6)**

Mode: 802.11ax(SU)  
 Data 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 $\mu$ V/m]	Limit [dB $\mu$ V/m]	Margin [dB]
4874.00	Avg	H	-	-	-82.29	8.36	33.07	53.98	-20.91
4874.00	Peak	H	-	-	-69.94	8.36	45.42	73.98	-28.56
7311.00	Avg	H	-	-	-83.45	11.21	34.76	53.98	-19.22
7311.00	Peak	H	-	-	-71.86	11.21	46.35	73.98	-27.63
12185.00	Avg	H	-	-	-84.30	16.89	39.59	53.98	-14.39
12185.00	Peak	H	-	-	-71.68	16.89	52.21	73.98	-21.77

**Table 7-52. Radiated Measurements Antenna WF8**

FCC ID: BCGA2696 IC: 579C-A2696	 <b>element</b>	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090022-01.BCG	Test Dates: 05/30/2022 - 09/15/2022	EUT Type: Tablet Device	Page 278 of 430



**Plot 7-440. Radiated Spurious Emissions above 1GHz Antenna WF8 (802.11ax(SU) – Ch. 11)**

Mode: 802.11ax(SU)  
 Data Rate: MCS0  
 Distance of Measurements: 3 Meters  
 Operating Frequency: 2462MHz  
 Channel: 11

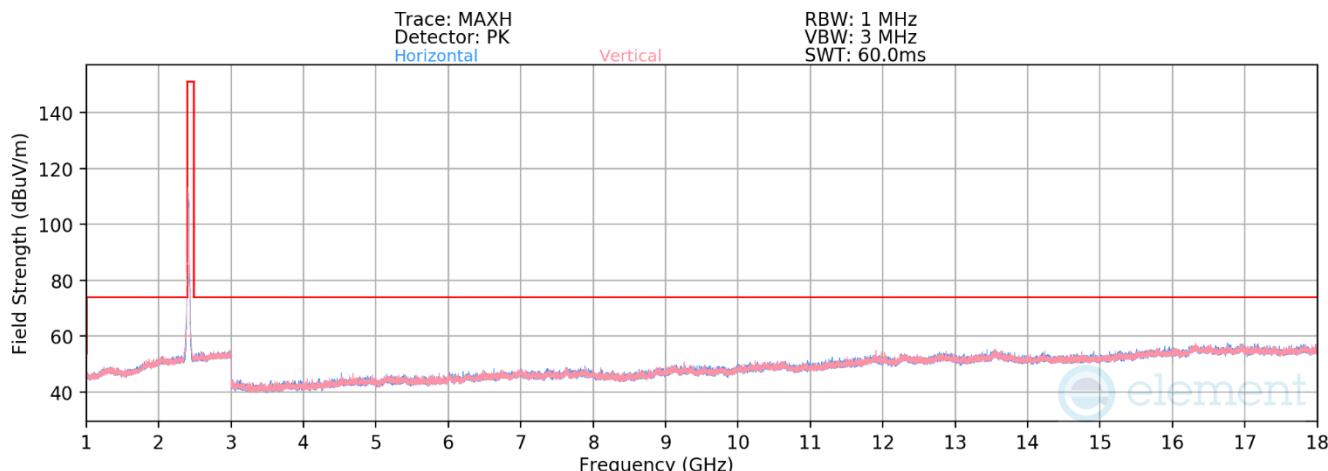
Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dB $\mu$ V/m]	Limit [dB $\mu$ V/m]	Margin [dB]
4924.00	Avg	H	-	-	-82.12	9.01	33.89	53.98	-20.09
4924.00	Peak	H	-	-	-69.68	9.01	46.33	73.98	-27.65
7386.00	Avg	H	-	-	-83.83	12.62	35.79	53.98	-18.19
7386.00	Peak	H	-	-	-71.76	12.62	47.86	73.98	-26.12
12310.00	Avg	H	-	-	-84.94	18.20	40.26	53.98	-13.72
12310.00	Peak	H	-	-	-71.80	18.20	53.40	73.98	-20.58

**Table 7-53. Radiated Measurements Antenna WF8**

FCC ID: BCGA2696 IC: 579C-A2696	 <b>element</b>	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090022-01.BCG	Test Dates: 05/30/2022 - 09/15/2022	EUT Type: Tablet Device	Page 279 of 430

## 7.7.2 Antenna WF7b Radiated Spurious Emission Measurements

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



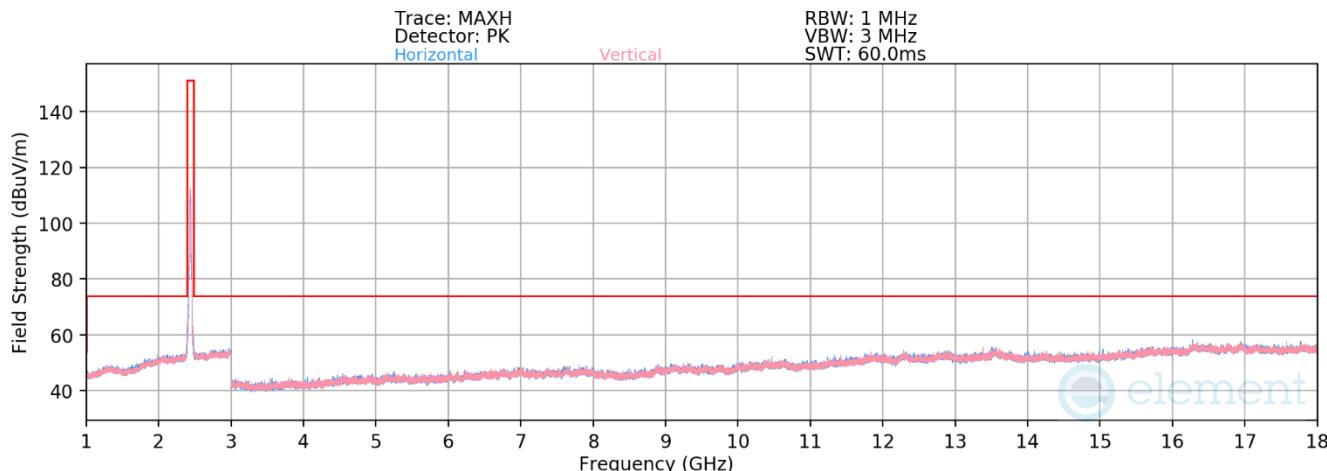
**Plot 7-441. Radiated Spurious Emissions above 1GHz Antenna WF7b (802.11b – Ch. 1)**

Mode:	802.11b
Data Rate:	11Mbps
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 $\mu$ V/m]	Limit [dB $\mu$ V/m]	Margin [dB]
4824.00	Avg	V	-	-	-82.30	8.18	32.88	53.98	-21.10
4824.00	Peak	V	-	-	-69.59	8.18	45.59	73.98	-28.39
12060.00	Avg	V	-	-	-84.17	17.53	40.36	53.98	-13.62
12060.00	Peak	V	-	-	-71.63	17.53	52.90	73.98	-21.08

**Table 7-54. Radiated Measurements Antenna WF7b**

FCC ID: BCGA2696 IC: 579C-A2696	 element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090022-01.BCG	Test Dates: 05/30/2022 - 09/15/2022	EUT Type: Tablet Device	Page 280 of 430



**Plot 7-442. Radiated Spurious Emissions above 1GHz Antenna WF7b (802.11b – Ch. 6)**

Mode: 802.11b  
 Data Rate: 11Mbps  
 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 $\mu$ V/m]	Limit [dB $\mu$ V/m]	Margin [dB]
4874.00	Avg	V	-	-	-82.24	8.63	33.39	53.98	-20.58
4874.00	Peak	V	-	-	-69.86	8.63	45.77	73.98	-28.20
7311.00	Avg	V	-	-	-83.41	11.22	34.81	53.98	-19.17
7311.00	Peak	V	-	-	-70.48	11.22	47.74	73.98	-26.24
12185.00	Avg	V	-	-	-84.24	17.25	40.01	53.98	-13.97
12185.00	Peak	V	-	-	-71.48	17.25	52.77	73.98	-21.21

**Table 7-55. Radiated Measurements Antenna WF7b**

FCC ID: BCGA2696 IC: 579C-A2696		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090022-01.BCG	Test Dates: 05/30/2022 - 09/15/2022	EUT Type: Tablet Device	Page 281 of 430