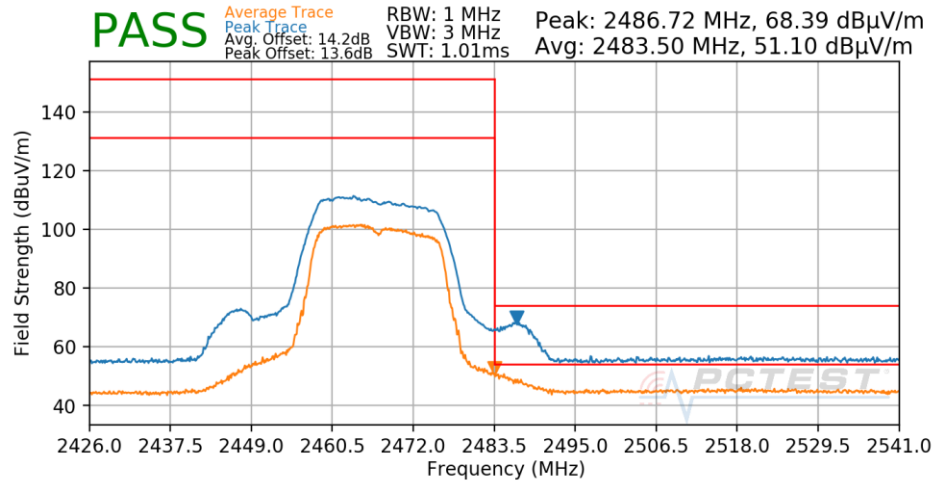
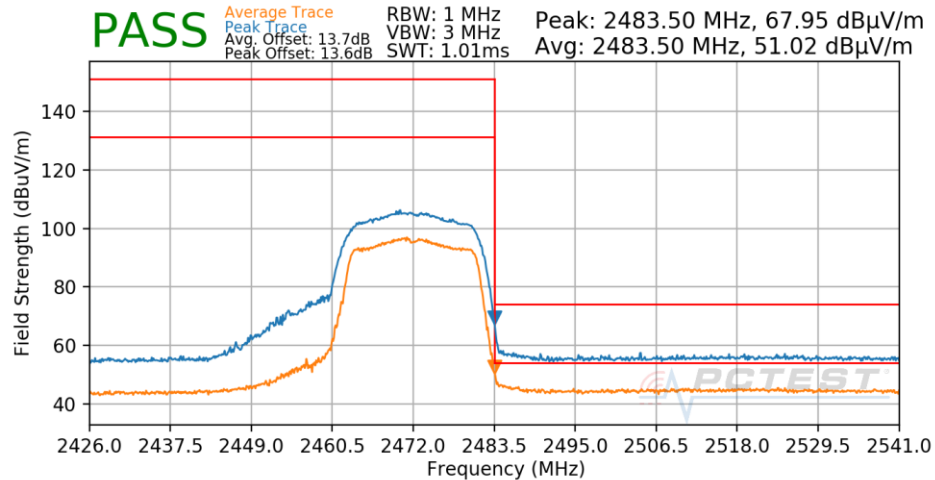


Mode: 802.11n  
Data Rate: MCS13  
Distance of Measurements: 3 Meters  
Operating Frequency: 2467MHz  
Channel: 12



**Plot 7-639. Radiated Restricted Upper Band Edge Measurement CDD**

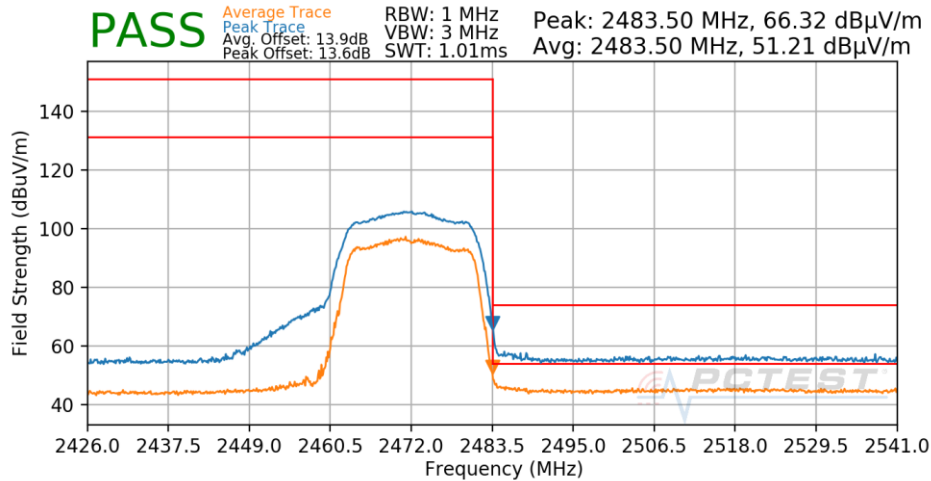
Mode: 802.11n  
Data Rate: MCS8  
Distance of Measurements: 3 Meters  
Operating Frequency: 2472MHz  
Channel: 13



**Plot 7-640. Radiated Restricted Upper Band Edge Measurement CDD**

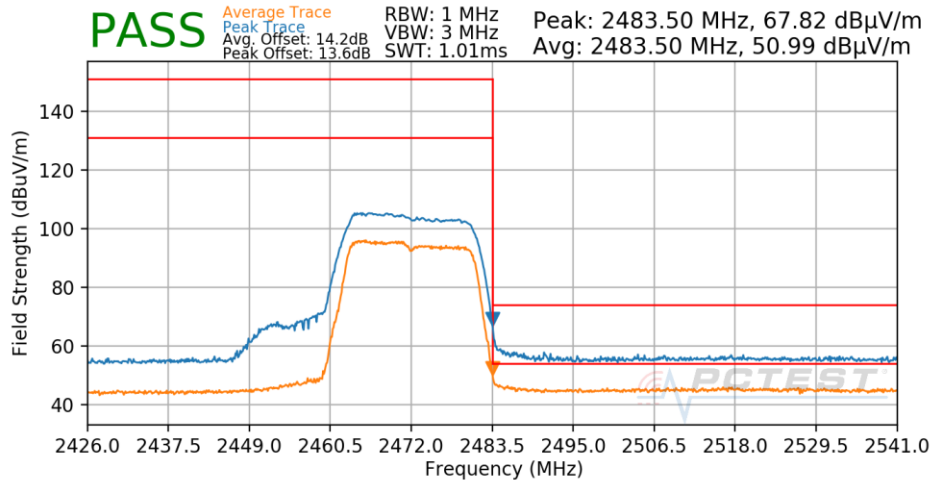
FCC ID: BCGA2589 IC: 579C-A2589	<b>PCTEST</b> Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
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Mode: 802.11n  
Data Rate: MCS11  
Distance of Measurements: 3 Meters  
Operating Frequency: 2472MHz  
Channel: 13



**Plot 7-641. Radiated Restricted Upper Band Edge Measurement CDD**

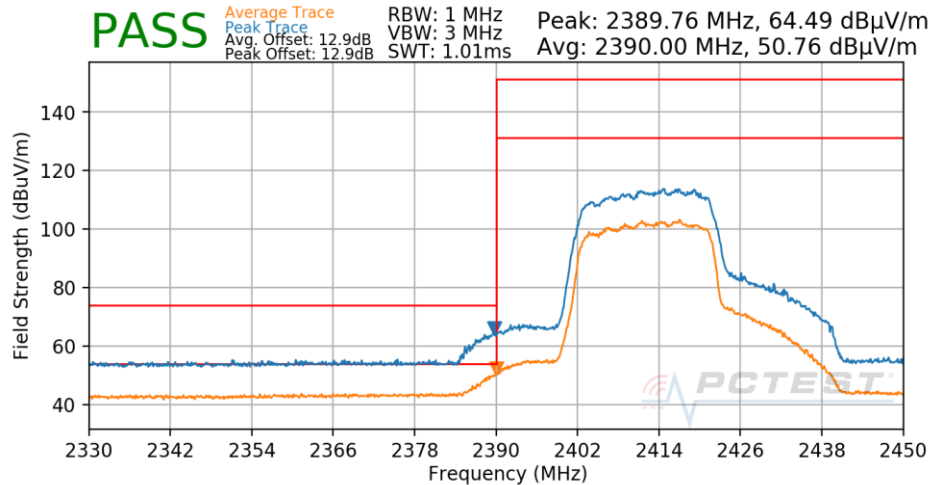
Mode: 802.11n  
Data Rate: MCS13  
Distance of Measurements: 3 Meters  
Operating Frequency: 2472MHz  
Channel: 13



**Plot 7-642. Radiated Restricted Upper Band Edge Measurement CDD**

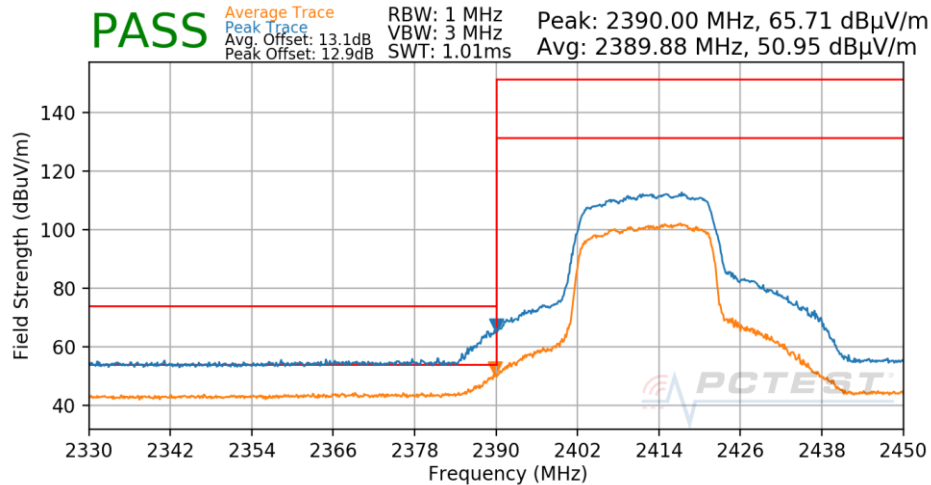
FCC ID: BCGA2589 IC: 579C-A2589	<b>PCTEST</b> Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2111150079-08.BCG	Test Dates: 12/02/2021 - 02/02/2022	EUT Type: Tablet Device	Page 387 of 419

Mode: 802.11ax - SU  
Data Rate: MCS0  
Distance of Measurements: 3 Meters  
Operating Frequency: 2412MHz  
Channel: 1



**Plot 7-643. Radiated Restricted Lower Band Edge Measurement CDD**

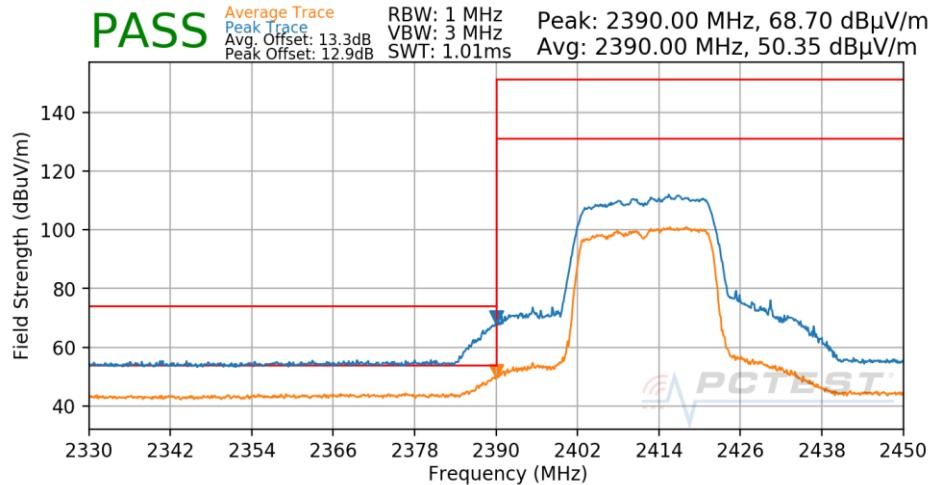
Mode: 802.11ax - SU  
Data Rate: MCS3  
Distance of Measurements: 3 Meters  
Operating Frequency: 2412MHz  
Channel: 1



**Plot 7-644. Radiated Restricted Lower Band Edge Measurement CDD**

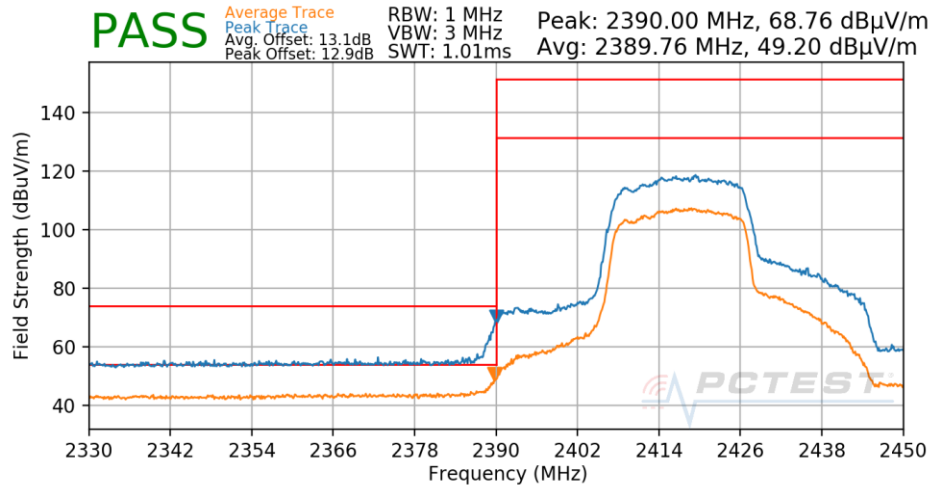
FCC ID: BCGA2589 IC: 579C-A2589	<b>PCTEST</b> Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2111150079-08.BCG	Test Dates: 12/02/2021 - 02/02/2022	EUT Type: Tablet Device	Page 388 of 419

Mode: 802.11ax - SU  
Data Rate: MCS5  
Distance of Measurements: 3 Meters  
Operating Frequency: 2412MHz  
Channel: 1



**Plot 7-645. Radiated Restricted Lower Band Edge Measurement CDD**

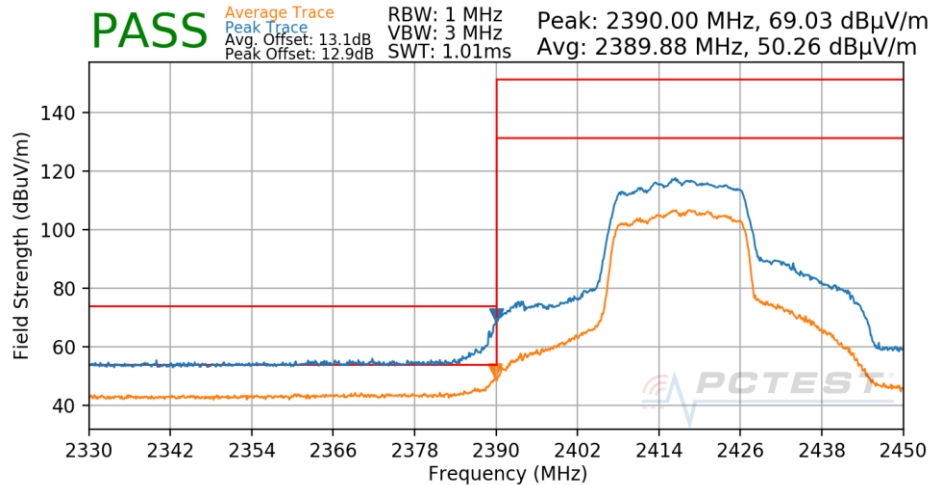
Mode: 802.11ax - SU  
Data Rate: MCS0  
Distance of Measurements: 3 Meters  
Operating Frequency: 2417MHz  
Channel: 2



**Plot 7-646. Radiated Restricted Lower Band Edge Measurement CDD**

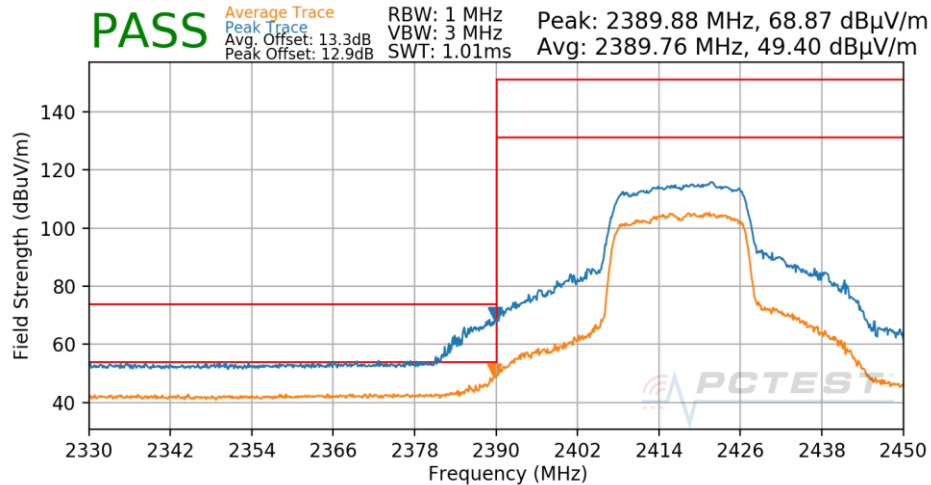
FCC ID: BCGA2589 IC: 579C-A2589	<b>PCTEST</b> Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2111150079-08.BCG	Test Dates: 12/02/2021 - 02/02/2022	EUT Type: Tablet Device	Page 389 of 419

Mode: 802.11ax - SU  
Data Rate: MCS3  
Distance of Measurements: 3 Meters  
Operating Frequency: 2417MHz  
Channel: 2



**Plot 7-647. Radiated Restricted Lower Band Edge Measurement CDD**

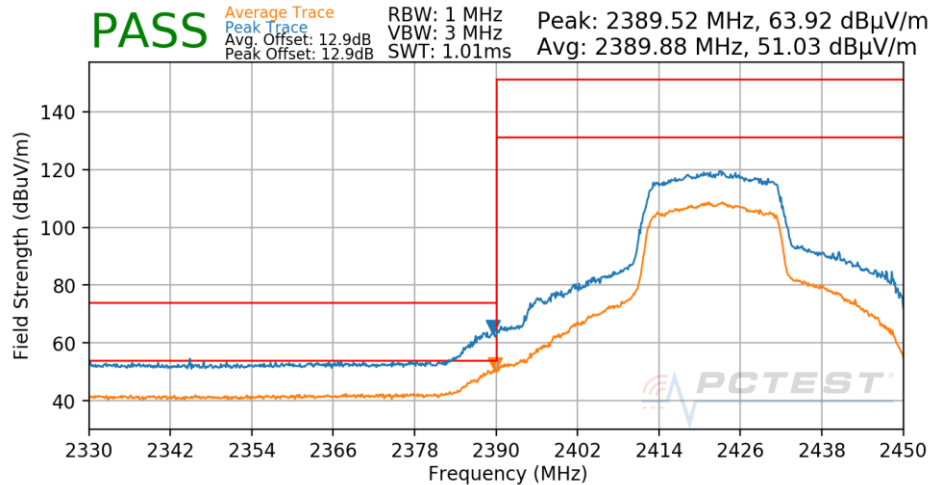
Mode: 802.11ax - SU  
Data Rate: MCS5  
Distance of Measurements: 3 Meters  
Operating Frequency: 2417MHz  
Channel: 2



**Plot 7-648. Radiated Restricted Lower Band Edge Measurement CDD**

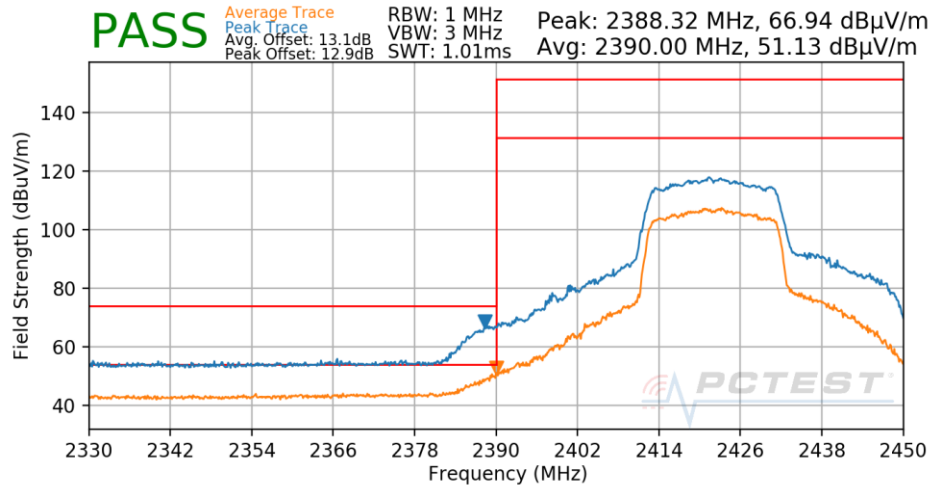
FCC ID: BCGA2589 IC: 579C-A2589	<b>PCTEST</b> Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2111150079-08.BCG	Test Dates: 12/02/2021 - 02/02/2022	EUT Type: Tablet Device	Page 390 of 419

Mode: 802.11ax - SU  
Data Rate: MCS0  
Distance of Measurements: 3 Meters  
Operating Frequency: 2422MHz  
Channel: 3



**Plot 7-649. Radiated Restricted Lower Band Edge Measurement CDD**

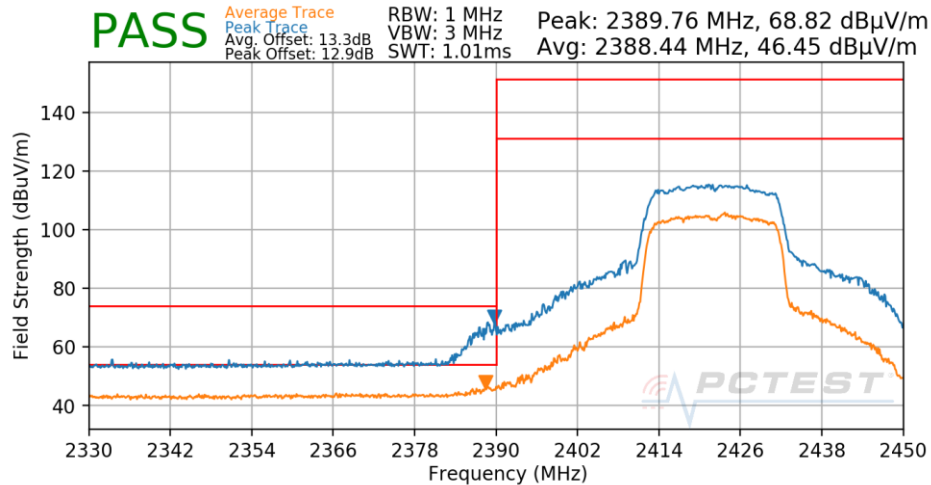
Mode: 802.11ax - SU  
Data Rate: MCS3  
Distance of Measurements: 3 Meters  
Operating Frequency: 2422MHz  
Channel: 3



**Plot 7-650. Radiated Restricted Lower Band Edge Measurement CDD**

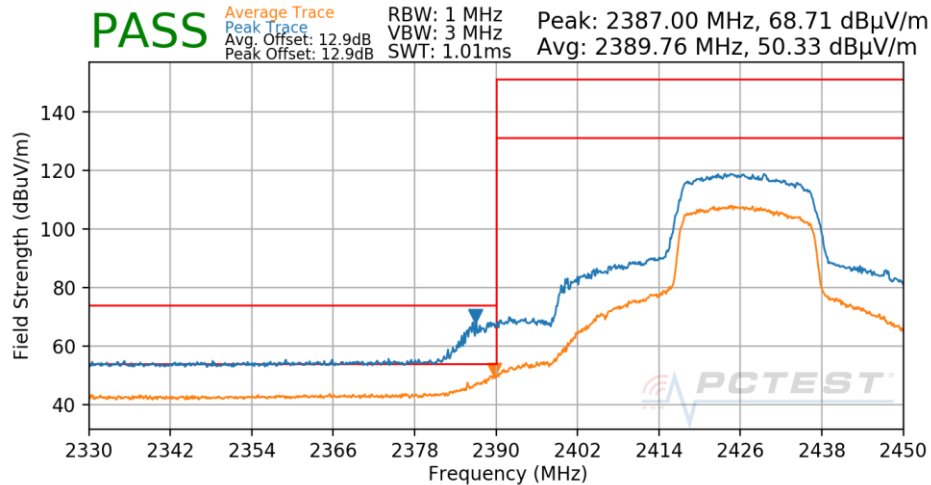
FCC ID: BCGA2589 IC: 579C-A2589	<b>PCTEST</b> Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2111150079-08.BCG	Test Dates: 12/02/2021 - 02/02/2022	EUT Type: Tablet Device	Page 391 of 419

Mode: 802.11ax - SU  
Data Rate: MCS5  
Distance of Measurements: 3 Meters  
Operating Frequency: 2422MHz  
Channel: 3



**Plot 7-651. Radiated Restricted Lower Band Edge Measurement CDD**

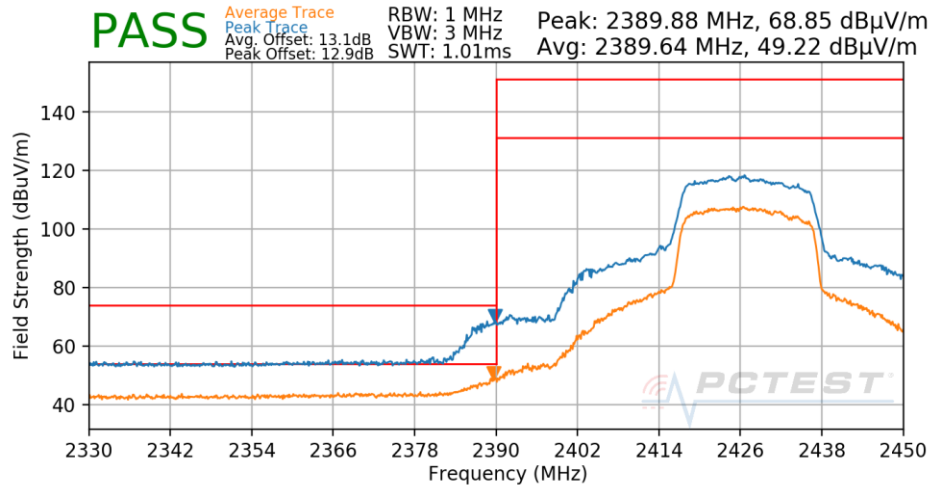
Mode: 802.11ax - SU  
Data Rate: MCS0  
Distance of Measurements: 3 Meters  
Operating Frequency: 2427MHz  
Channel: 4



**Plot 7-652. Radiated Restricted Lower Band Edge Measurement CDD**

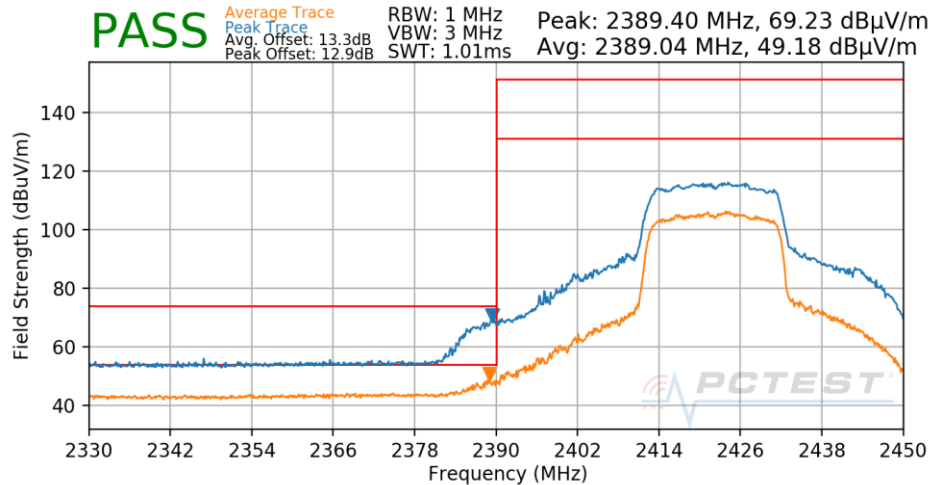
FCC ID: BCGA2589 IC: 579C-A2589	<b>PCTEST</b> Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2111150079-08.BCG	Test Dates: 12/02/2021 - 02/02/2022	EUT Type: Tablet Device	Page 392 of 419

Mode: 802.11ax - SU  
Data Rate: MCS3  
Distance of Measurements: 3 Meters  
Operating Frequency: 2427MHz  
Channel: 4



**Plot 7-653. Radiated Restricted Lower Band Edge Measurement CDD**

Mode: 802.11ax - SU  
Data Rate: MCS5  
Distance of Measurements: 3 Meters  
Operating Frequency: 2427MHz  
Channel: 4

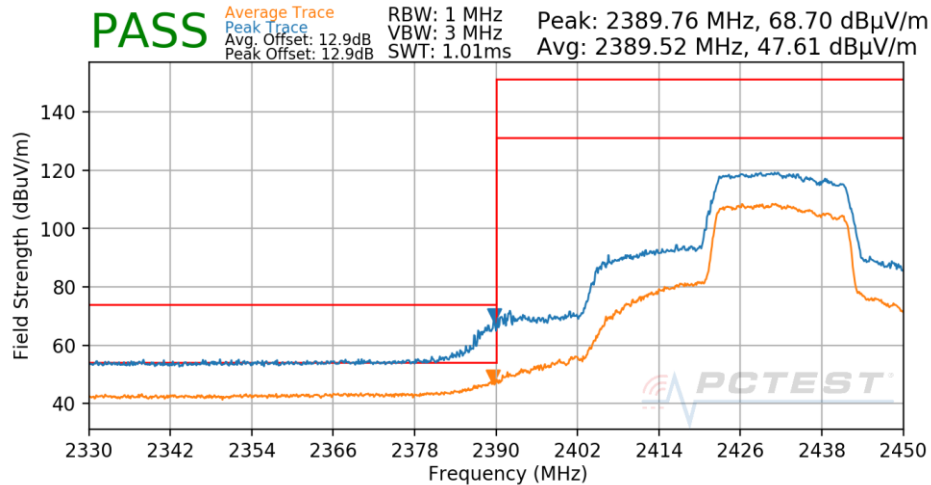


**Plot 7-654. Radiated Restricted Lower Band Edge Measurement CDD**

FCC ID: BCGA2589 IC: 579C-A2589	<b>PCTEST</b> Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2111150079-08.BCG	Test Dates: 12/02/2021 - 02/02/2022	EUT Type: Tablet Device	Page 393 of 419

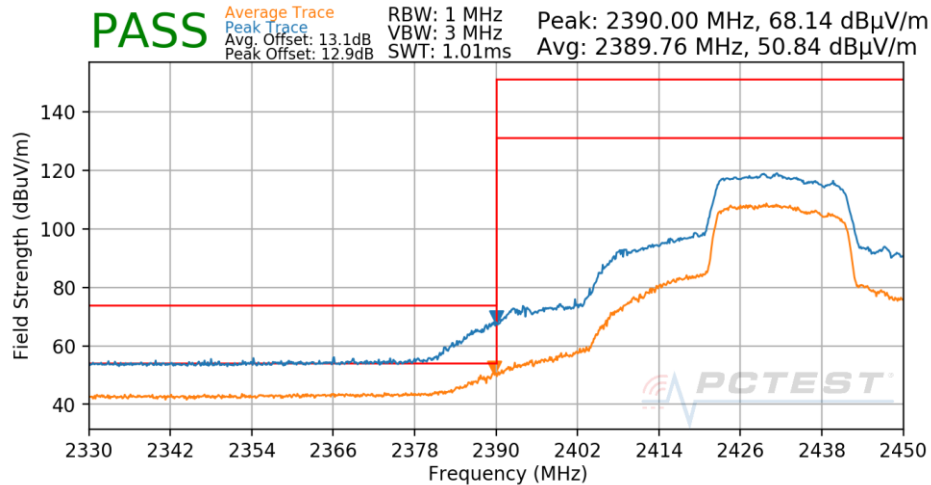


Mode: 802.11ax - SU  
Data Rate: MCS0  
Distance of Measurements: 3 Meters  
Operating Frequency: 2432MHz  
Channel: 5



**Plot 7-655. Radiated Restricted Lower Band Edge Measurement CDD**

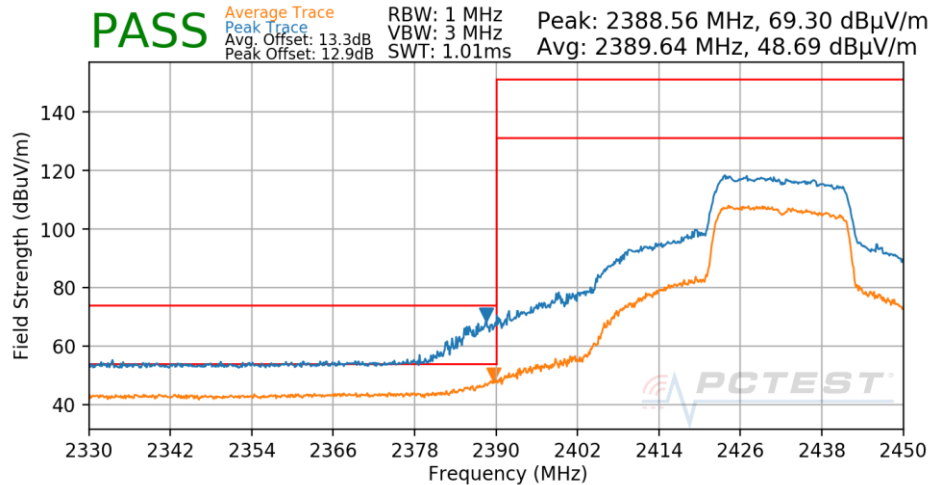
Mode: 802.11ax - SU  
Data Rate: MCS3  
Distance of Measurements: 3 Meters  
Operating Frequency: 2432MHz  
Channel: 5



**Plot 7-656. Radiated Restricted Lower Band Edge Measurement CDD**

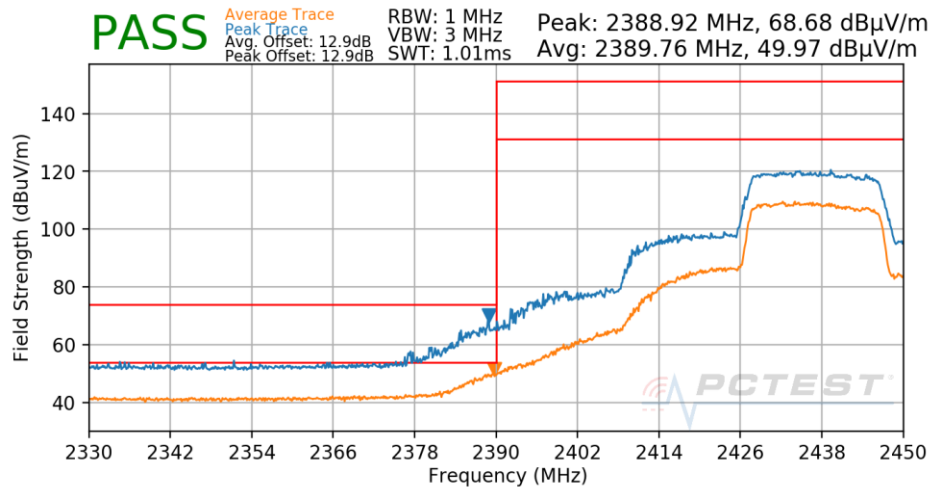
FCC ID: BCGA2589 IC: 579C-A2589	<b>PCTEST</b> Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2111150079-08.BCG	Test Dates: 12/02/2021 - 02/02/2022	EUT Type: Tablet Device	Page 394 of 419

Mode: 802.11ax - SU  
Data Rate: MCS5  
Distance of Measurements: 3 Meters  
Operating Frequency: 2432MHz  
Channel: 5



**Plot 7-657. Radiated Restricted Lower Band Edge Measurement CDD**

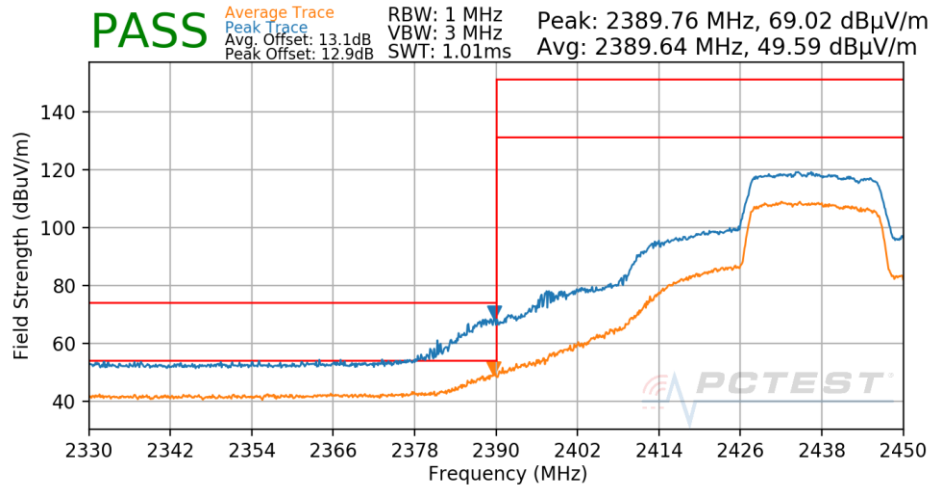
Mode: 802.11ax - SU  
Data Rate: MCS0  
Distance of Measurements: 3 Meters  
Operating Frequency: 2437MHz  
Channel: 6



**Plot 7-658. Radiated Restricted Lower Band Edge Measurement CDD**

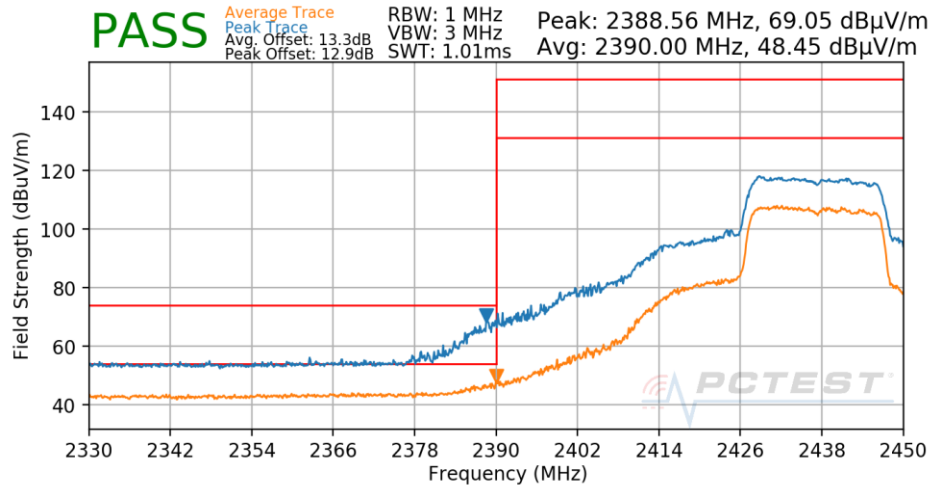
FCC ID: BCGA2589 IC: 579C-A2589	<b>PCTEST</b> Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2111150079-08.BCG	Test Dates: 12/02/2021 - 02/02/2022	EUT Type: Tablet Device	Page 395 of 419

Mode: 802.11ax - SU  
Data Rate: MCS3  
Distance of Measurements: 3 Meters  
Operating Frequency: 2437MHz  
Channel: 6



**Plot 7-659. Radiated Restricted Lower Band Edge Measurement CDD**

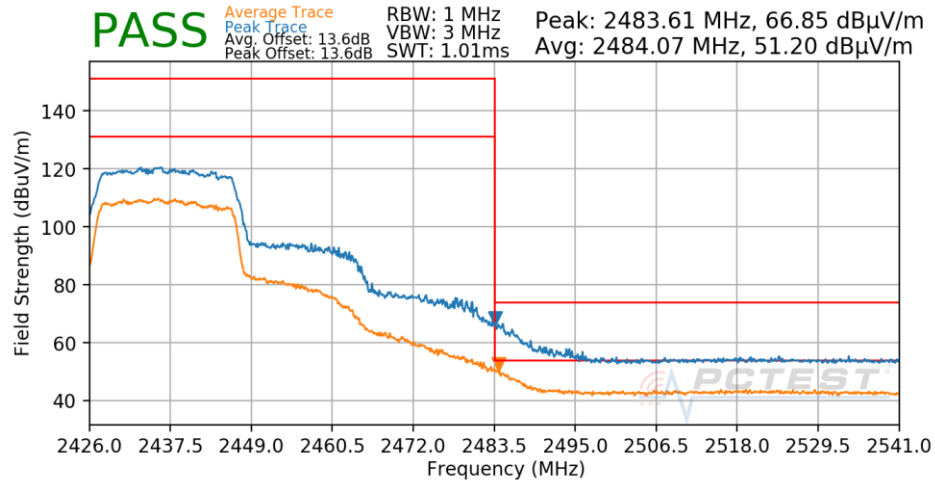
Mode: 802.11ax - SU  
Data Rate: MCS5  
Distance of Measurements: 3 Meters  
Operating Frequency: 2437MHz  
Channel: 6



**Plot 7-660. Radiated Restricted Lower Band Edge Measurement CDD**

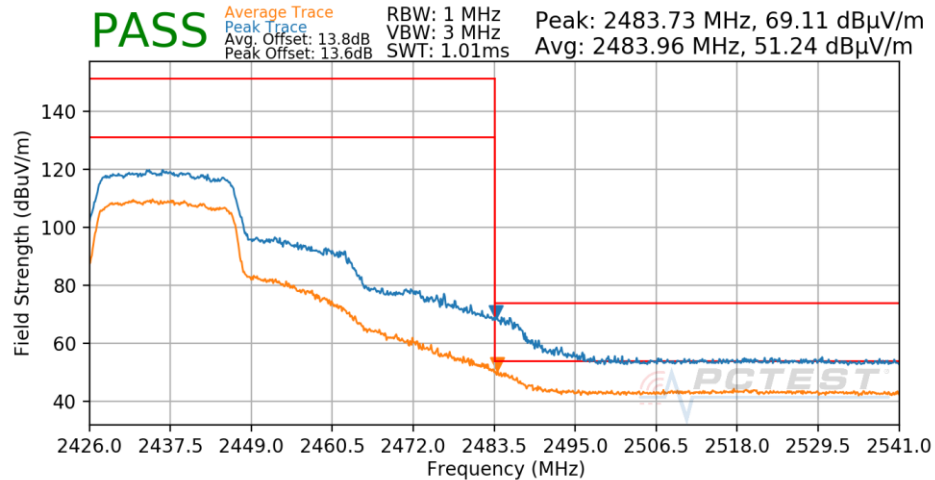
FCC ID: BCGA2589 IC: 579C-A2589	<b>PCTEST</b> Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2111150079-08.BCG	Test Dates: 12/02/2021 - 02/02/2022	EUT Type: Tablet Device	Page 396 of 419

Mode: 802.11ax - SU  
Data Rate: MCS0  
Distance of Measurements: 3 Meters  
Operating Frequency: 2437MHz  
Channel: 6



**Plot 7-661. Radiated Restricted Upper Band Edge Measurement CDD**

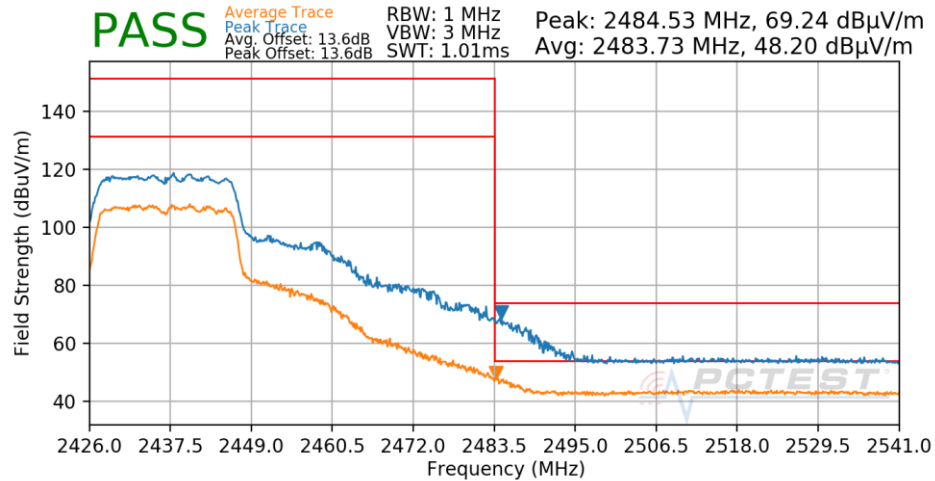
Mode: 802.11ax - SU  
Data Rate: MCS3  
Distance of Measurements: 3 Meters  
Operating Frequency: 2437MHz  
Channel: 6



**Plot 7-662. Radiated Restricted Upper Band Edge Measurement CDD**

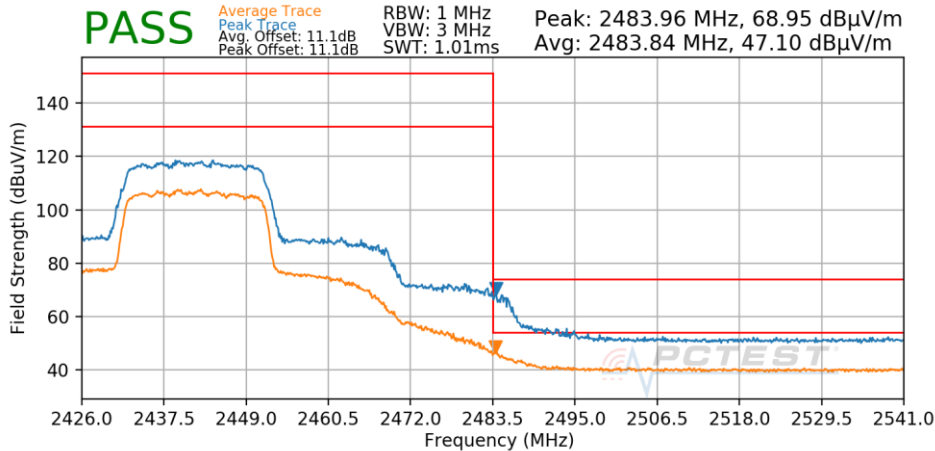
FCC ID: BCGA2589 IC: 579C-A2589	<b>PCTEST</b> Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2111150079-08.BCG	Test Dates: 12/02/2021 - 02/02/2022	EUT Type: Tablet Device	Page 397 of 419

Mode: 802.11ax - SU  
Data Rate: MCS5  
Distance of Measurements: 3 Meters  
Operating Frequency: 2437MHz  
Channel: 6



**Plot 7-663. Radiated Restricted Upper Band Edge Measurement CDD**

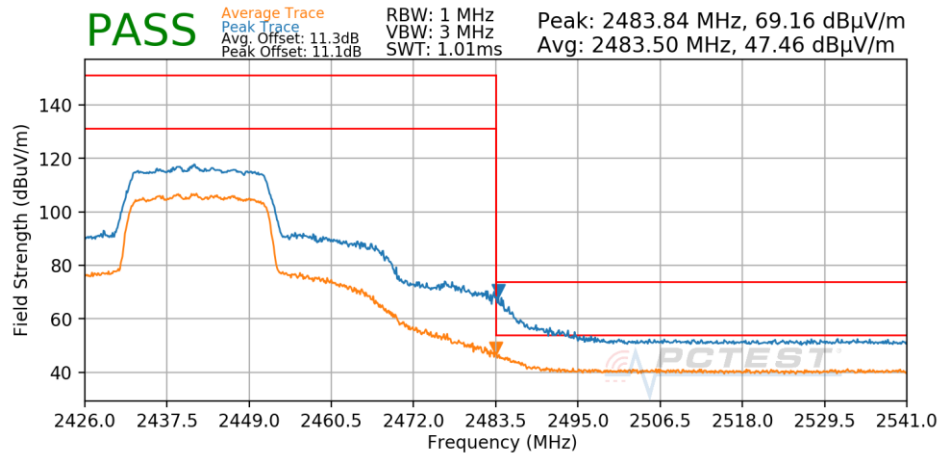
Mode: 802.11ax - SU  
Data Rate: MCS0  
Distance of Measurements: 3 Meters  
Operating Frequency: 2442MHz  
Channel: 7



**Plot 7-664. Radiated Restricted Upper Band Edge Measurement CDD**

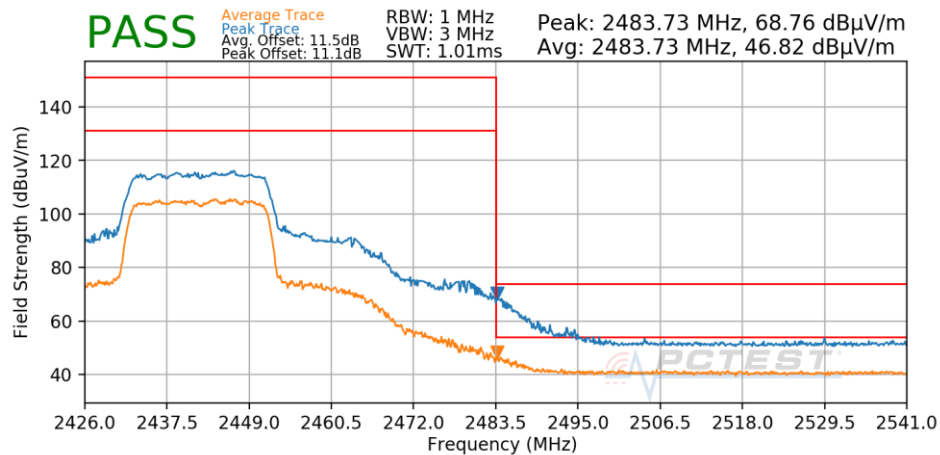
FCC ID: BCGA2589 IC: 579C-A2589	<b>PCTEST</b> Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2111150079-08.BCG	Test Dates: 12/02/2021 - 02/02/2022	EUT Type: Tablet Device	Page 398 of 419

Mode: 802.11ax - SU  
Data Rate: MCS3  
Distance of Measurements: 3 Meters  
Operating Frequency: 2442MHz  
Channel: 7



**Plot 7-665. Radiated Restricted Upper Band Edge Measurement CDD**

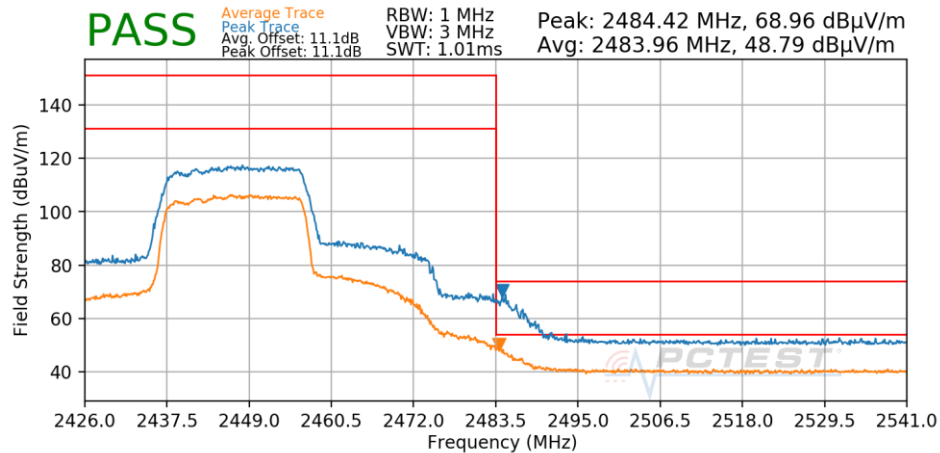
Mode: 802.11ax - SU  
Data Rate: MCS5  
Distance of Measurements: 3 Meters  
Operating Frequency: 2442MHz  
Channel: 7



**Plot 7-666. Radiated Restricted Upper Band Edge Measurement CDD**

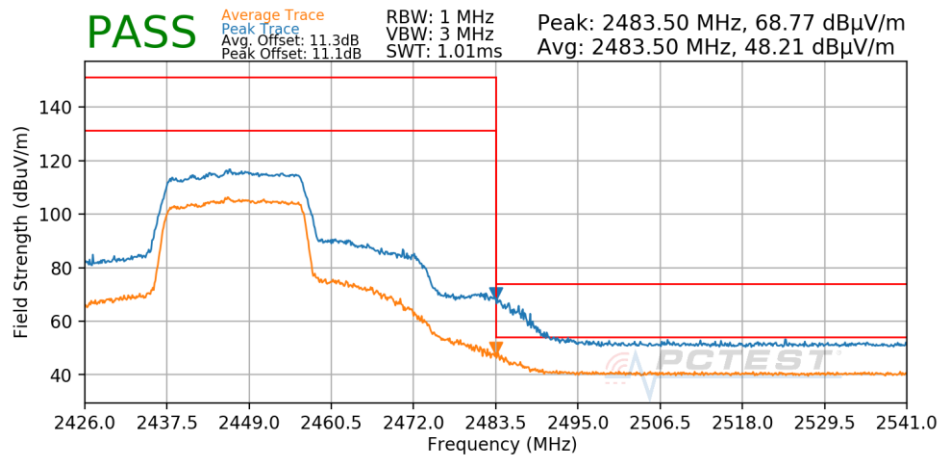
FCC ID: BCGA2589 IC: 579C-A2589		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2111150079-08.BCG	Test Dates: 12/02/2021 - 02/02/2022	EUT Type: Tablet Device	Page 399 of 419

Mode: 802.11ax - SU  
Data Rate: MCS0  
Distance of Measurements: 3 Meters  
Operating Frequency: 2447MHz  
Channel: 8



**Plot 7-667. Radiated Restricted Upper Band Edge Measurement CDD**

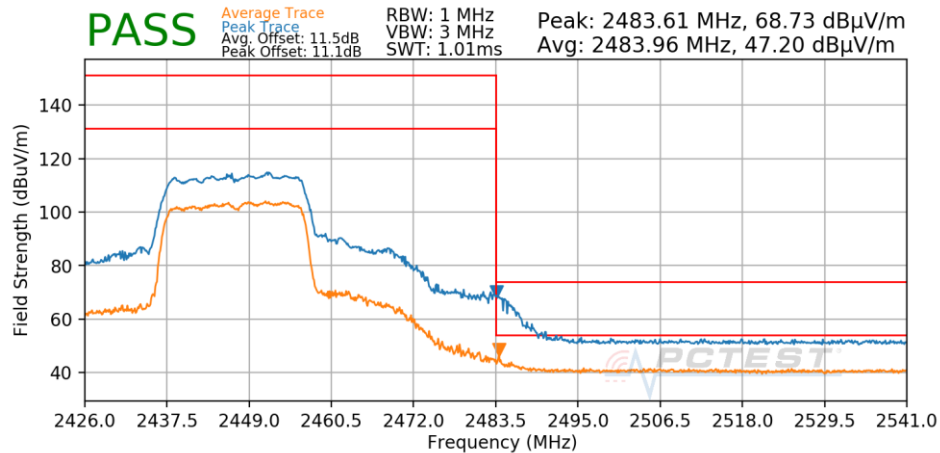
Mode: 802.11ax - SU  
Data Rate: MCS3  
Distance of Measurements: 3 Meters  
Operating Frequency: 2447MHz  
Channel: 8



**Plot 7-668. Radiated Restricted Upper Band Edge Measurement CDD**

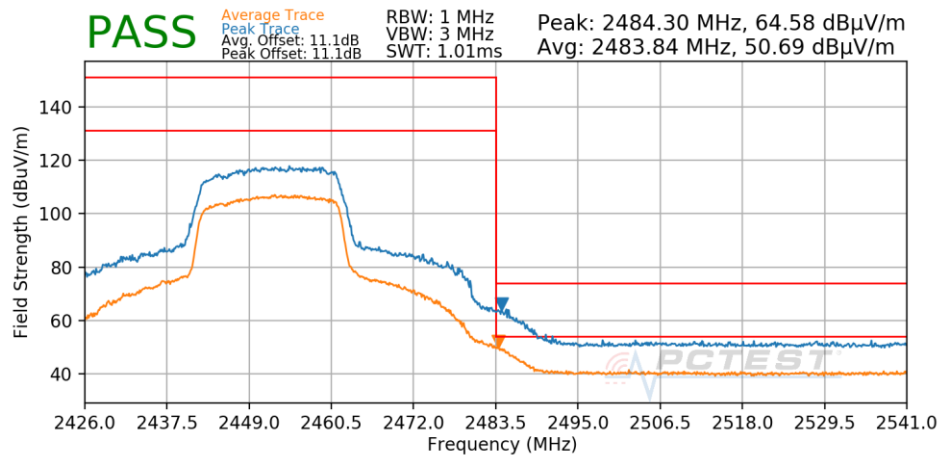
FCC ID: BCGA2589 IC: 579C-A2589	<b>PCTEST</b> Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2111150079-08.BCG	Test Dates: 12/02/2021 - 02/02/2022	EUT Type: Tablet Device	Page 400 of 419

Mode: 802.11ax - SU  
Data Rate: MCS5  
Distance of Measurements: 3 Meters  
Operating Frequency: 2447MHz  
Channel: 8



**Plot 7-669. Radiated Restricted Upper Band Edge Measurement CDD**

Mode: 802.11ax - SU  
Data Rate: MCS0  
Distance of Measurements: 3 Meters  
Operating Frequency: 2452MHz  
Channel: 9

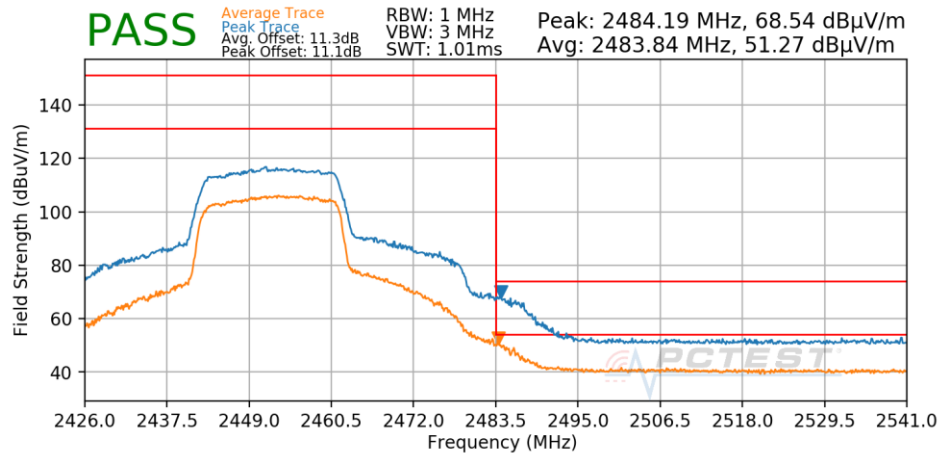


**Plot 7-670. Radiated Restricted Upper Band Edge Measurement CDD**

FCC ID: BCGA2589 IC: 579C-A2589	<b>PCTEST</b> Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2111150079-08.BCG	Test Dates: 12/02/2021 - 02/02/2022	EUT Type: Tablet Device	Page 401 of 419

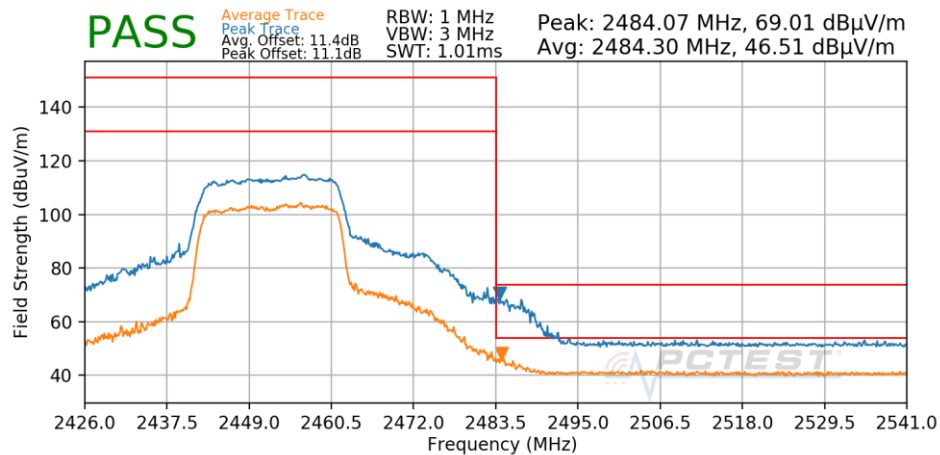


Mode: 802.11ax - SU  
Data Rate: MCS3  
Distance of Measurements: 3 Meters  
Operating Frequency: 2452MHz  
Channel: 9



**Plot 7-671. Radiated Restricted Upper Band Edge Measurement CDD**

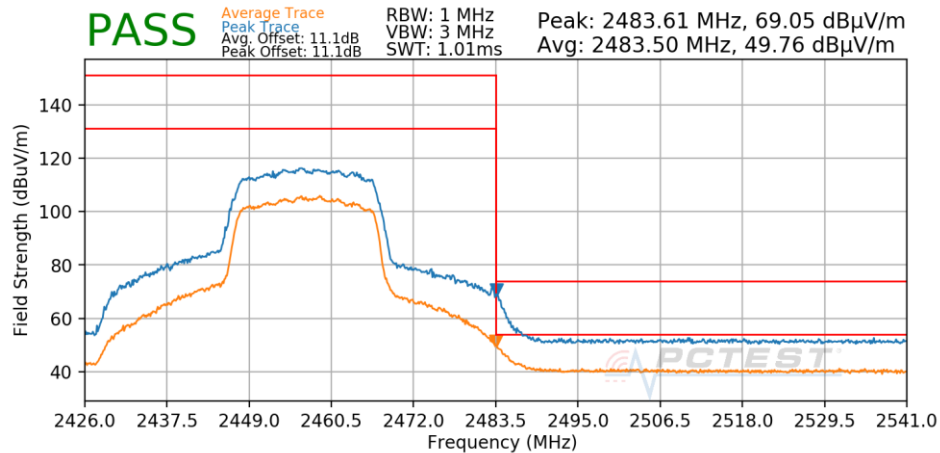
Mode: 802.11ax - SU  
Data Rate: MCS5  
Distance of Measurements: 3 Meters  
Operating Frequency: 2452MHz  
Channel: 9



**Plot 7-672. Radiated Restricted Upper Band Edge Measurement CDD**

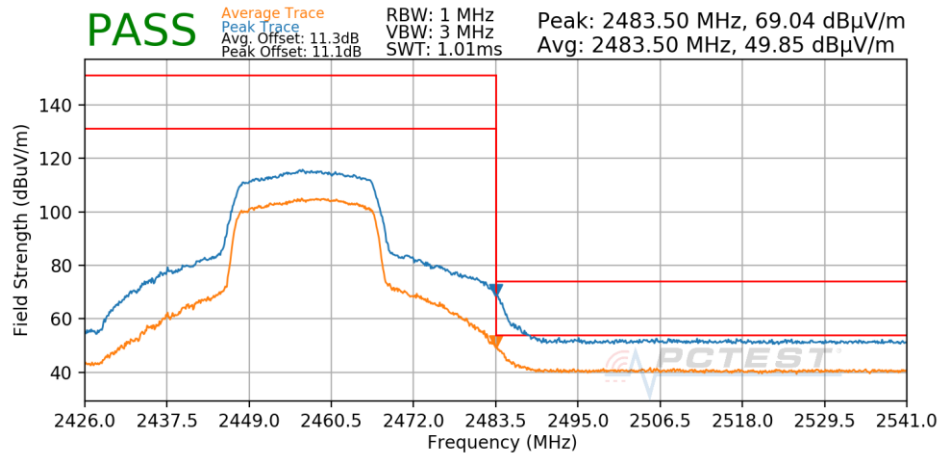
FCC ID: BCGA2589 IC: 579C-A2589		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2111150079-08.BCG	Test Dates: 12/02/2021 - 02/02/2022	EUT Type: Tablet Device	Page 402 of 419

Mode: 802.11ax - SU  
Data Rate: MCS0  
Distance of Measurements: 3 Meters  
Operating Frequency: 2457MHz  
Channel: 10



**Plot 7-673. Radiated Restricted Upper Band Edge Measurement CDD**

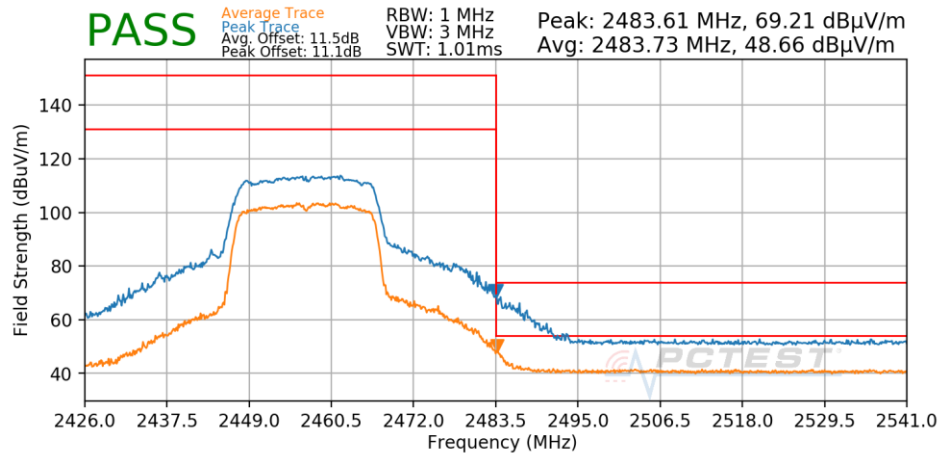
Mode: 802.11ax - SU  
Data Rate: MCS3  
Distance of Measurements: 3 Meters  
Operating Frequency: 2457MHz  
Channel: 10



**Plot 7-674. Radiated Restricted Upper Band Edge Measurement CDD**

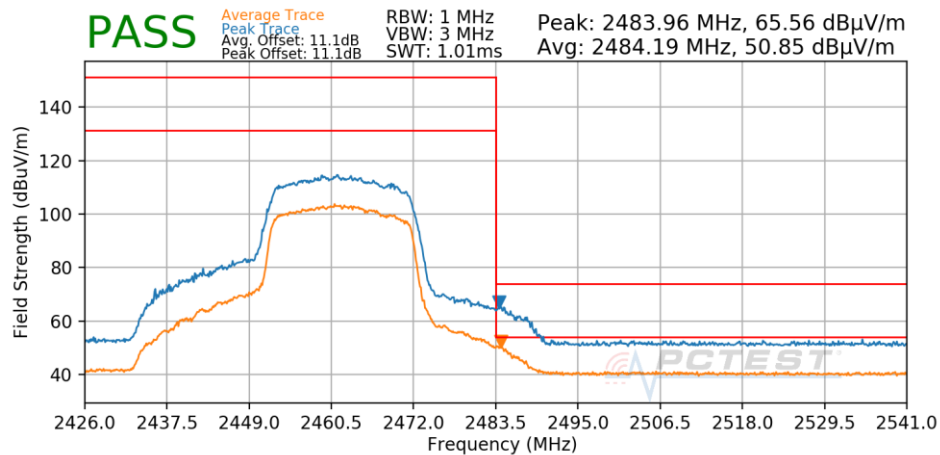
FCC ID: BCGA2589 IC: 579C-A2589	<b>PCTEST</b> Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2111150079-08.BCG	Test Dates: 12/02/2021 - 02/02/2022	EUT Type: Tablet Device	Page 403 of 419

Mode: 802.11ax - SU  
Data Rate: MCS5  
Distance of Measurements: 3 Meters  
Operating Frequency: 2457MHz  
Channel: 10



**Plot 7-675. Radiated Restricted Upper Band Edge Measurement CDD**

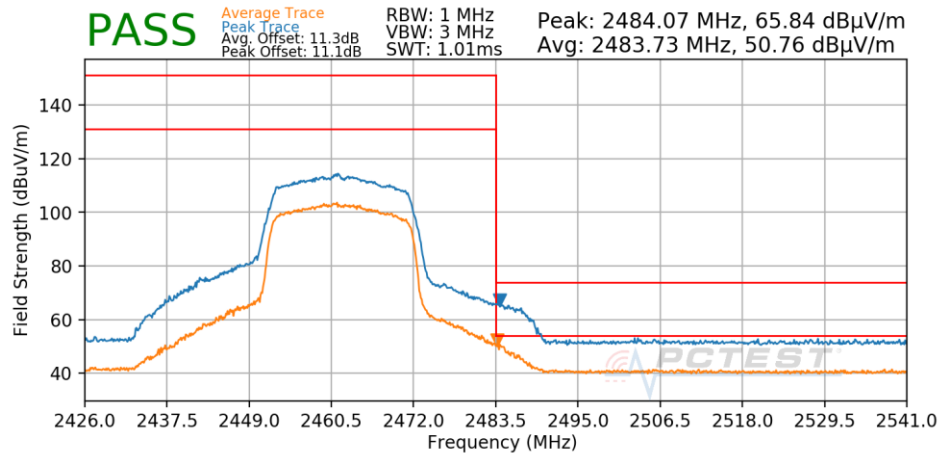
Mode: 802.11ax - SU  
Data Rate: MCS0  
Distance of Measurements: 3 Meters  
Operating Frequency: 2462MHz  
Channel: 11



**Plot 7-676. Radiated Restricted Upper Band Edge Measurement CDD**

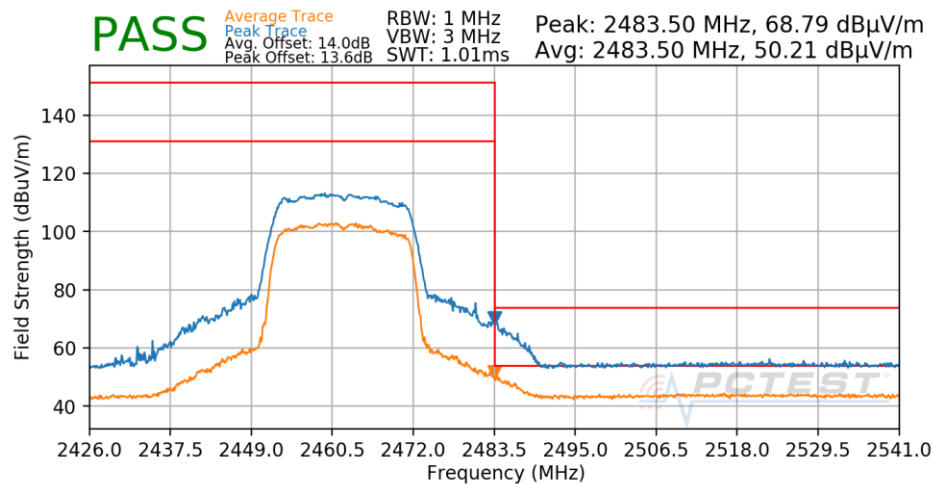
FCC ID: BCGA2589 IC: 579C-A2589	<b>PCTEST</b> Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2111150079-08.BCG	Test Dates: 12/02/2021 - 02/02/2022	EUT Type: Tablet Device	Page 404 of 419

Mode: 802.11ax - SU  
Data Rate: MCS3  
Distance of Measurements: 3 Meters  
Operating Frequency: 2462MHz  
Channel: 11



**Plot 7-677. Radiated Restricted Upper Band Edge Measurement CDD**

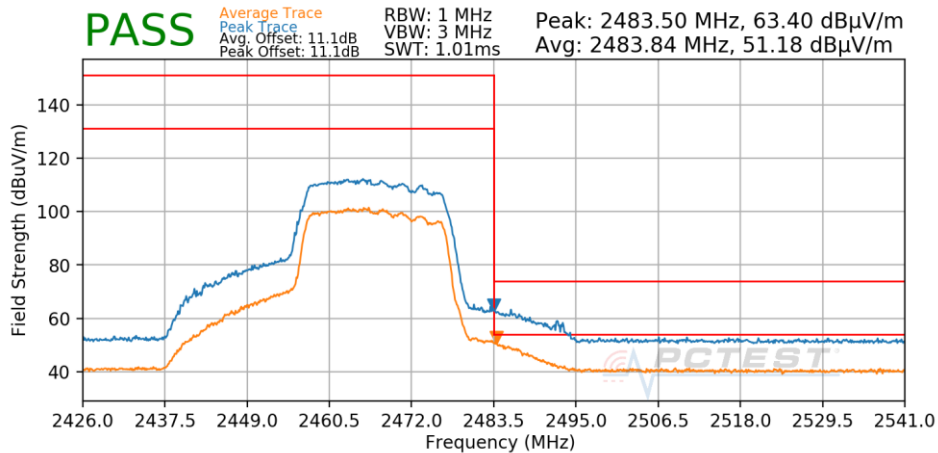
Mode: 802.11ax - SU  
Data Rate: MCS5  
Distance of Measurements: 3 Meters  
Operating Frequency: 2462MHz  
Channel: 11



**Plot 7-678. Radiated Restricted Upper Band Edge Measurement CDD**

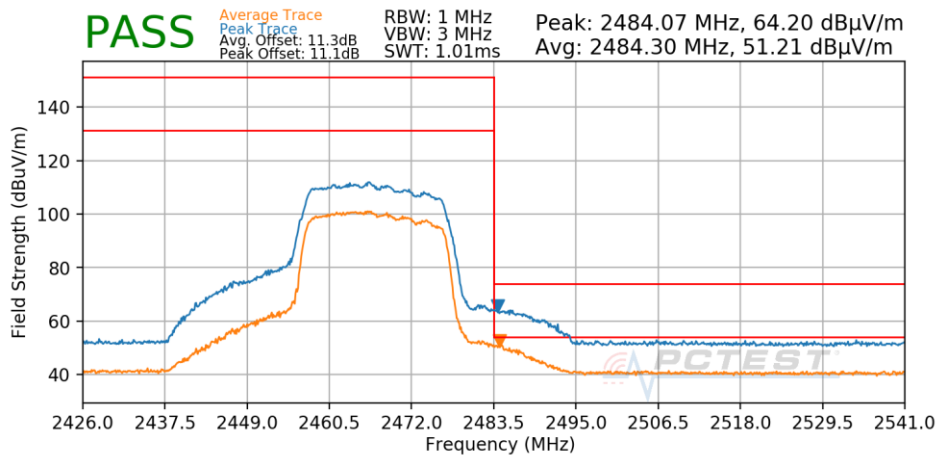
FCC ID: BCGA2589 IC: 579C-A2589	<b>PCTEST</b> Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2111150079-08.BCG	Test Dates: 12/02/2021 - 02/02/2022	EUT Type: Tablet Device	Page 405 of 419

Mode: 802.11ax - SU  
Data Rate: MCS0  
Distance of Measurements: 3 Meters  
Operating Frequency: 2467MHz  
Channel: 12



**Plot 7-679. Radiated Restricted Upper Band Edge Measurement CDD**

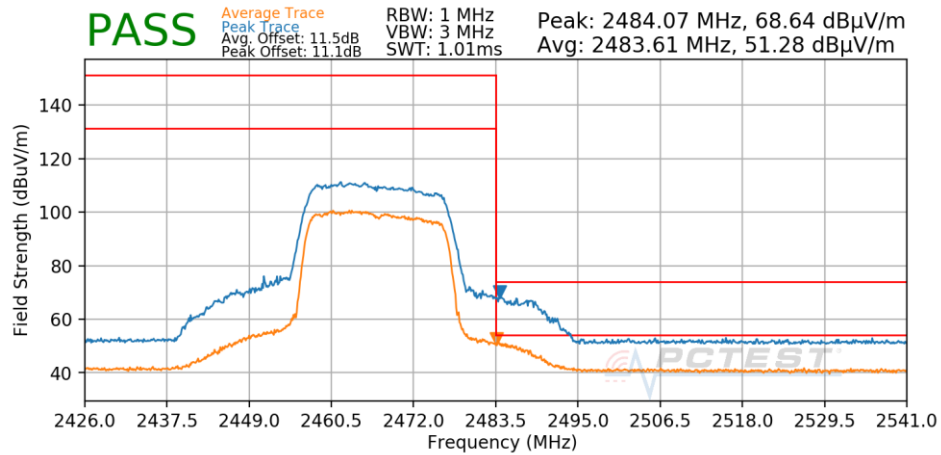
Mode: 802.11ax - SU  
Data Rate: MCS3  
Distance of Measurements: 3 Meters  
Operating Frequency: 2467MHz  
Channel: 12



**Plot 7-680. Radiated Restricted Upper Band Edge Measurement CDD**

FCC ID: BCGA2589 IC: 579C-A2589		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2111150079-08.BCG	Test Dates: 12/02/2021 - 02/02/2022	EUT Type: Tablet Device	Page 406 of 419

Mode: 802.11ax - SU  
Data Rate: MCS5  
Distance of Measurements: 3 Meters  
Operating Frequency: 2467MHz  
Channel: 12



**Plot 7-681. Radiated Restricted Upper Band Edge Measurement CDD**

FCC ID: BCGA2589 IC: 579C-A2589		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1C2111150079-08.BCG	Test Dates: 12/02/2021 - 02/02/2022	EUT Type: Tablet Device		Page 407 of 419

## 7.8 Radiated Spurious Emissions – Below 1GHz

### §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 7-66 per Section 15.209 and RSS-Gen (8.9).***

Frequency	Field Strength [μV/m]	Measured Distance [Meters]
0.009 – 0.490 MHz	2400/F (kHz)	300
0.490 – 1.705 MHz	24000/F (kHz)	30
1.705 – 30.00 MHz	30	30
30.00 – 88.00 MHz	100	3
88.00 – 216.0 MHz	150	3
216.0 – 960.0 MHz	200	3
Above 960.0 MHz	500	3

**Table 7-66. Radiated Limits**

#### Test Procedures Used

ANSI C63.10-2013

#### Test Settings

##### Quasi-Peak Field Strength Measurements

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 120kHz (for emissions from 30MHz – 1GHz)
3. Detector = quasi-peak
4. Sweep time = auto couple
5. Trace mode = max hold
6. Trace was allowed to stabilize

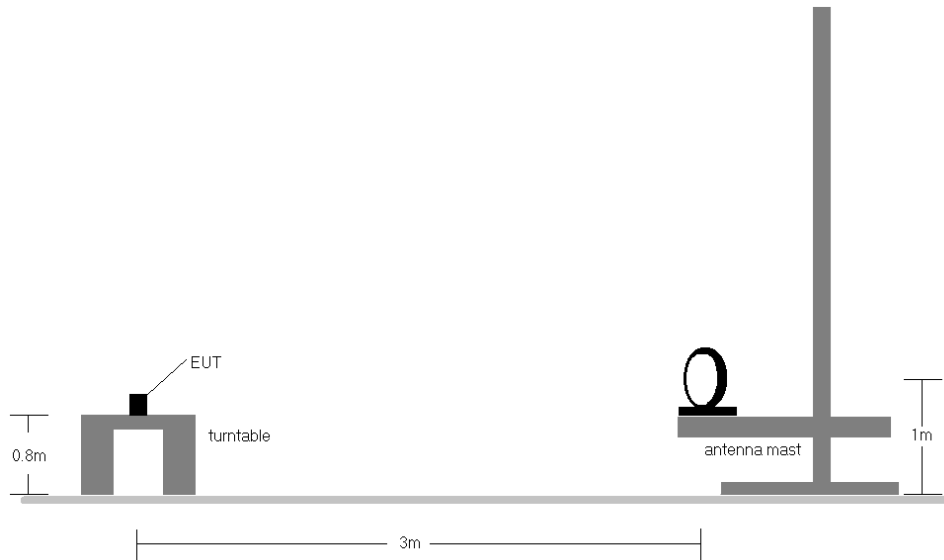
##### Peak Field Strength Measurements

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 120kHz (for emissions from 30MHz – 1GHz)
3. VBW = 300kHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold

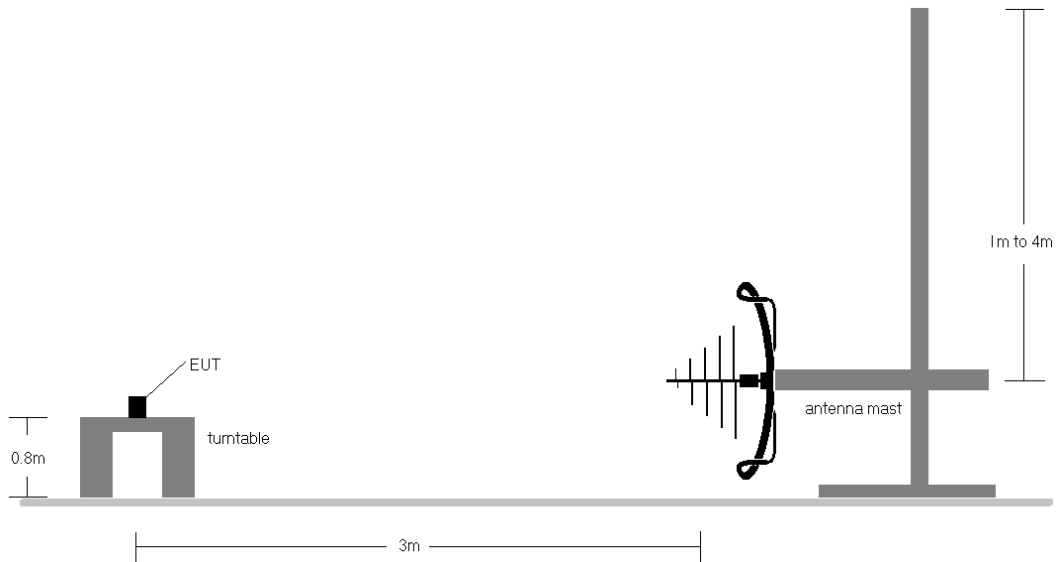
FCC ID: BCGA2589 IC: 579C-A2589	 <b>PCTEST</b> Proud to be part of  element	<b>MEASUREMENT REPORT (CERTIFICATION)</b>	<b>Approved by:</b> Technical Manager
<b>Test Report S/N:</b> 1C2111150079-08.BCG	<b>Test Dates:</b> 12/02/2021 - 02/02/2022	<b>EUT Type:</b> Tablet Device	Page 408 of 419

## Test Setup

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



**Figure 7-7. Radiated Test Setup < 30Mhz**



**Figure 7-8. Radiated Test Setup < 1GHz**

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<b>Test Report S/N:</b> 1C2111150079-08.BCG	<b>Test Dates:</b> 12/02/2021 - 02/02/2022	<b>EUT Type:</b> Tablet Device	Page 409 of 419



## Test Notes

1. All emissions lying in restricted bands specified in §15.205 and RSS-Gen(8.10) are below the limit shown in Table 7-66.
2. The broadband receive antenna is manipulated through vertical and horizontal polarizations during the tests. The EUT is manipulated through three orthogonal planes. For below 30MHz the loop antenna was positioned in 3 orthogonal planes (X front, Y side, Z top) to determine the orientation resulting in the worst case emissions.
3. This unit was tested with its standard battery.
4. The spectrum is investigated using a peak detector and final measurements are recorded using CISPR quasi peak detector for emissions within 6dB of the limit.
5. Emissions were measured at a 3 meter test distance.
6. Emissions are investigated while operating on the center channel of the mode, band, and modulation that produced the worst case results during the transmitter spurious emissions testing.
7. No spurious emissions were detected within 20dB of the limit below 30MHz.
8. Both configurations below were investigated, and the worst case has been reported.
  - a. EUT powered by AC/DC adaptor via USB-C cable with wire charger
  - b. EUT powered by host PC via USB-C cable with wire charger
9. The results recorded using the broadband antenna is known to correlate with the results obtained by using a tuned dipole with an acceptable degree of accuracy. The VSWR for the measurement antenna was found to be less than 2:1.
10. The unit was tested with all possible modes and only the highest emission is reported.
11. All antenna configurations were investigated and only the worst case is reported.

## Sample Calculations

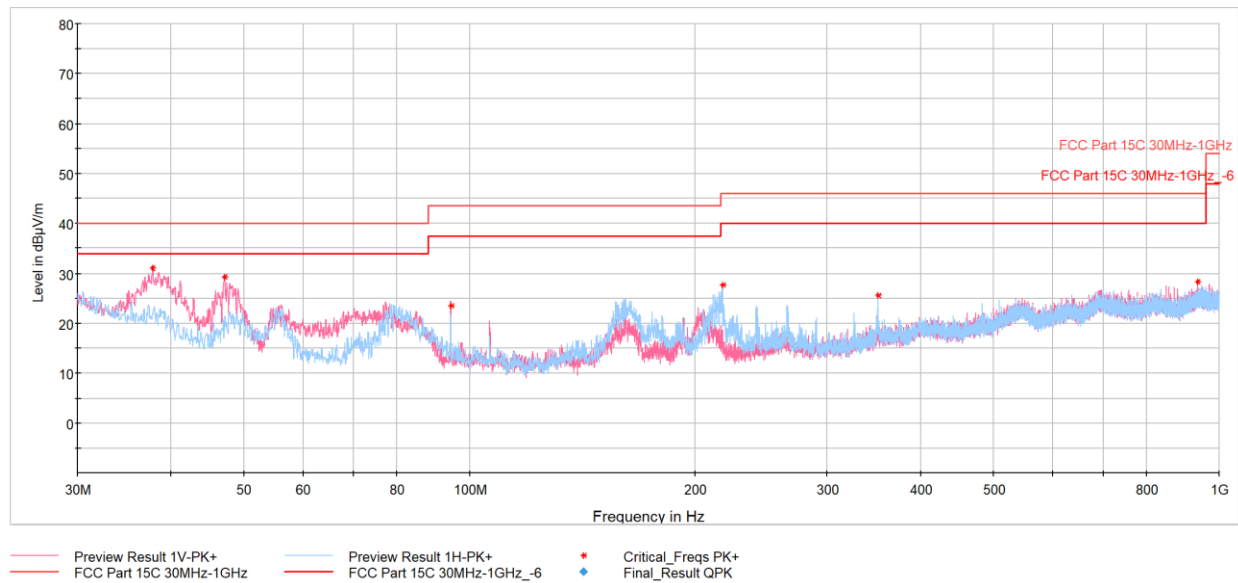
### Determining Spurious Emissions Levels

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

<b>FCC ID:</b> BCGA2589 <b>IC:</b> 579C-A2589	 <b>MEASUREMENT REPORT (CERTIFICATION)</b>		<b>Approved by:</b> Technical Manager
<b>Test Report S/N:</b> 1C211150079-08.BCG	<b>Test Dates:</b> 12/02/2021 - 02/02/2022	<b>EUT Type:</b> Tablet Device	Page 410 of 419

## CDD Radiated Spurious Emissions Measurements (Below 1GHz)

§15.209; RSS-Gen [8.9]

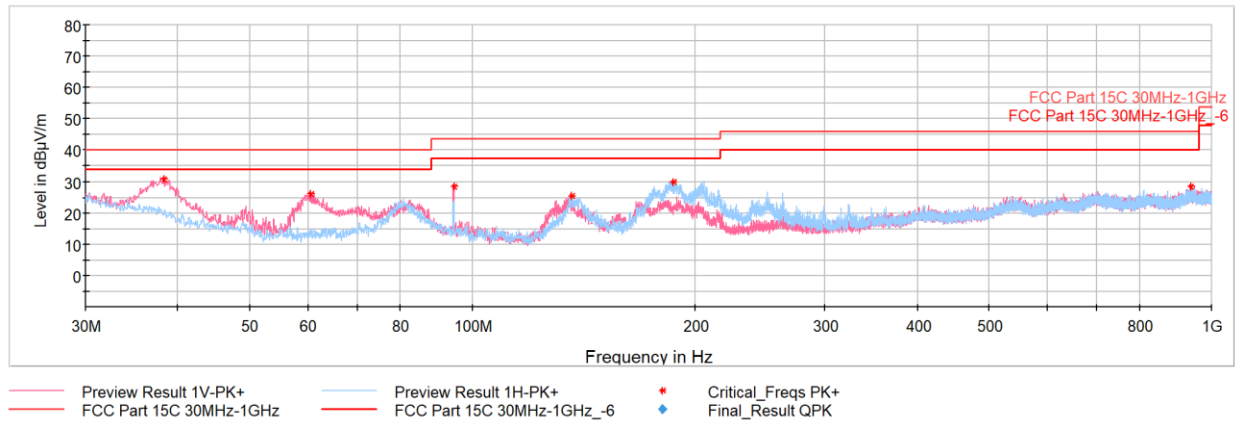


**Plot 7-682. Radiated Spurious Emissions below 1GHz CDD 11n Ch.6, with AC/DC Adapter**

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
37.81	Max Peak	V	100	20	-60.39	-15.51	31.10	40.00	-8.90
47.12	Max Peak	V	100	174	-57.67	-20.09	29.24	40.00	-10.76
94.55	Max Peak	V	100	194	-63.08	-20.40	23.52	43.52	-20.00
217.50	Max Peak	H	100	240	-63.85	-15.40	27.75	46.02	-18.27
350.78	Max Peak	H	100	318	-70.98	-10.41	25.61	46.02	-20.41
935.01	Max Peak	V	100	194	-78.86	0.18	28.32	46.02	-17.70

**Table 7-67. Radiated Spurious Emissions below 1GHz CDD 11n Ch.6, with AC/DC Adapter**

FCC ID: BCGA2589 IC: 579C-A2589		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2111150079-08.BCG	Test Dates: 12/02/2021 - 02/02/2022	EUT Type: Tablet Device	Page 411 of 419



**Plot 7-683. Radiated Spurious Emissions below 1GHz CDD 11ax - SU Ch.6, with AC/DC Adapter**

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
38.29	Max Peak	V	100	20	-60.29	-15.93	30.78	40.00	-9.22
60.60	Max Peak	V	200	311	-59.72	-21.17	26.11	40.00	-13.89
94.46	Max Peak	V	100	282	-58.29	-20.44	28.27	43.52	-15.25
136.51	Max Peak	H	200	99	-63.60	-18.03	25.37	43.52	-18.15
187.09	Max Peak	H	200	66	-60.92	-16.35	29.73	43.52	-13.79
938.02	Max Peak	V	200	15	-78.83	0.14	28.31	46.02	-17.72

**Table 7-68. Radiated Spurious Emissions below 1GHz CDD 11ax - SU Ch.6, with AC/DC Adapter**

FCC ID: BCGA2589 IC: 579C-A2589	<b>PCTEST</b> Proud to be part of element	<b>MEASUREMENT REPORT (CERTIFICATION)</b>	<b>Approved by:</b> Technical Manager
<b>Test Report S/N:</b> 1C2111150079-08.BCG	<b>Test Dates:</b> 12/02/2021 - 02/02/2022	<b>EUT Type:</b> Tablet Device	Page 412 of 419

## 7.9 AC Line-Conducted Emissions Measurement

### §15.207; RSS-Gen [8.8]

#### Test Overview and Limit

All AC line conducted spurious emissions are measured with a receiver connected to a grounded LISN 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 AC Line conducted spurious emissions. Only the conducted emissions of the configuration that produced the worst case emissions are reported in this section.

***All conducted emissions must not exceed the limits shown in the table below, per Section 15.207 and RSS-Gen (8.8).***

Frequency of emission (MHz)	Conducted Limit (dBμV)	
	Quasi-peak	Average
0.15 – 0.5	66 to 56*	56 to 46*
0.5 – 5	56	46
5 – 30	60	50

**Table 7-69. Conducted Limits**

\*Decreases with the logarithm of the frequency.

#### Test Procedures Used

ANSI C63.10-2013, Subclause 6.2

#### Test Settings

##### Quasi-Peak Measurements

1. Analyzer center frequency was set to the frequency of the spurious emission of interest
2. RBW = 9kHz (for emissions from 150kHz – 30MHz)
3. Detector = quasi-peak
4. Sweep time = auto couple
5. Trace mode = max hold
6. Trace was allowed to stabilize

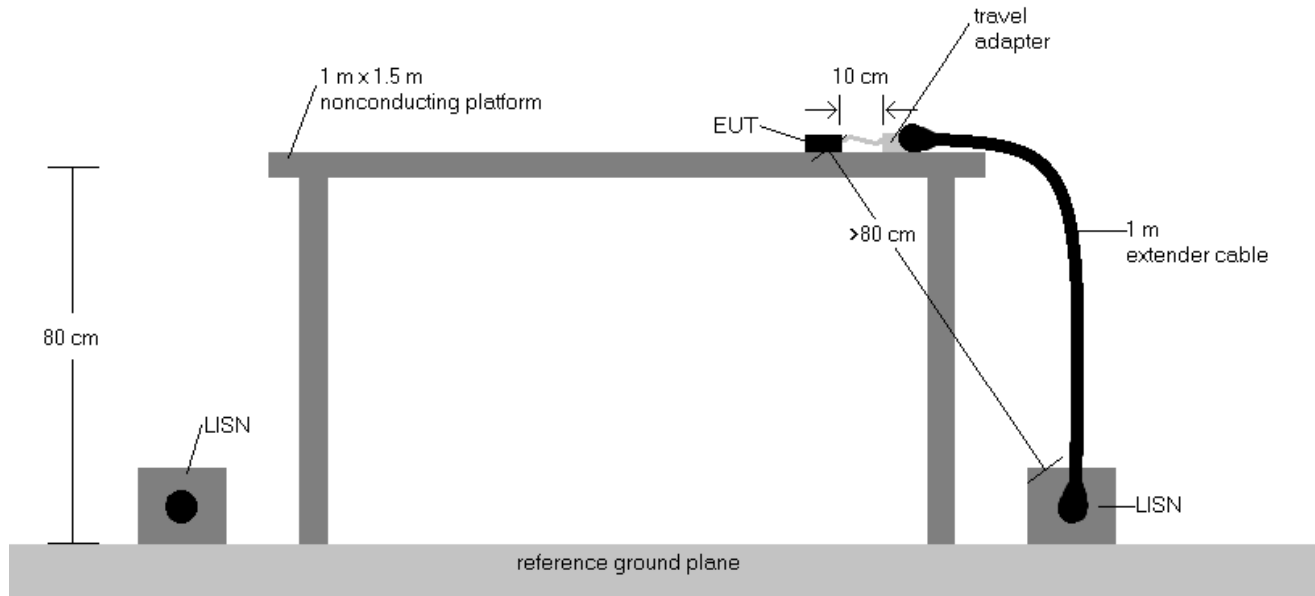
##### Average Measurements

1. Analyzer center frequency was set to the frequency of the spurious emission of interest
2. RBW = 9kHz (for emissions from 150kHz – 30MHz)
3. Detector = RMS
4. Sweep time = auto couple
5. Trace mode = max hold
6. Trace was allowed to stabilize

FCC ID: BCGA2589 IC: 579C-A2589	 <b>MEASUREMENT REPORT</b> (CERTIFICATION)	Approved by: Technical Manager
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## Test Setup

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

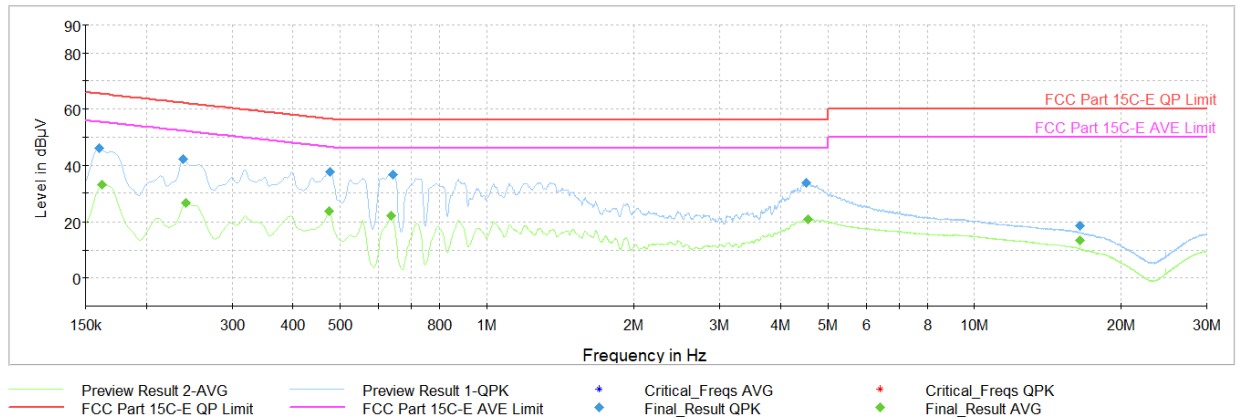


**Figure 7-9. Test Instrument & Measurement Setup**

## Test Notes

- All modes of operation were investigated and the worst-case emissions are reported. The emissions found were not affected by the choice of channel used during testing.
- Both configurations below were investigated, and the worst case has been reported.
  - EUT powered by AC/DC adaptor via USB-C cable with wire charger
  - EUT powered by host PC via USB-C cable with wire charger
- The limit for an intentional radiator from 150kHz to 30MHz are specified in Part 15.207 and RSS-Gen(8.8).
- $\text{Corr. (dB)} = \text{Cable loss (dB)} + \text{LISN insertion factor (dB)}$
- $\text{QP/AV Level (dB}\mu\text{V)} = \text{QP/AV Analyzer/Receiver Level (dB}\mu\text{V)} + \text{Corr. (dB)}$
- $\text{Margin (dB)} = \text{QP/AV Level (dB}\mu\text{V)} - \text{QP/AV Limit (dB}\mu\text{V)}$
- Traces shown in plot are made using quasi peak and average detectors.
- Deviations to the Specifications: None.
- The unit was tested with all possible modes and only the highest emission is reported.

FCC ID: BCGA2589 IC: 579C-A2589	<b>PCTEST</b> Proud to be part of element	<b>MEASUREMENT REPORT (CERTIFICATION)</b>	<b>Approved by:</b> Technical Manager
<b>Test Report S/N:</b> 1C2111150079-08.BCG	<b>Test Dates:</b> 12/02/2021 - 02/02/2022	<b>EUT Type:</b> Tablet Device	Page 414 of 419

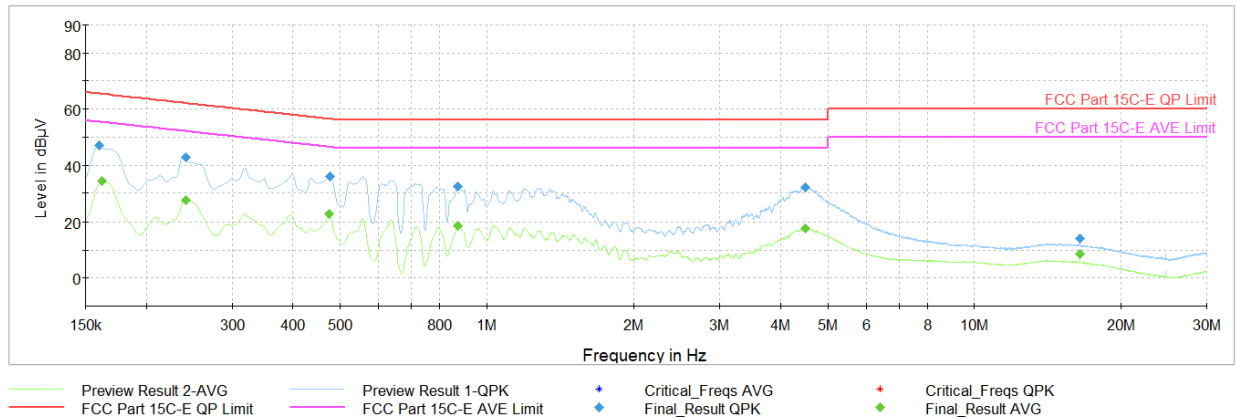


**Plot 7-684. AC Line Conducted Plot with CDD 11n Ch.6 (L1, with AC/DC Adapter)**

Frequency [MHz]	Process State	QuasiPeak [dBμV]	Average [dBμV]	Limit [dBμV]	Margin [dB]	Line	PE
0.160	FINAL	45.9	---	65.48	-19.61	L1	GND
0.162	FINAL	---	32.88	55.36	-22.48	L1	GND
0.239	FINAL	42.2	---	62.15	-20.00	L1	GND
0.241	FINAL	---	26.78	52.07	-25.29	L1	GND
0.475	FINAL	---	23.80	46.43	-22.63	L1	GND
0.477	FINAL	37.6	---	56.39	-18.85	L1	GND
0.637	FINAL	---	22.24	46.00	-23.76	L1	GND
0.641	FINAL	36.5	---	56.00	-19.47	L1	GND
4.505	FINAL	33.6	---	56.00	-22.39	L1	GND
4.550	FINAL	---	20.79	46.00	-25.22	L1	GND
16.470	FINAL	---	13.33	50.00	-36.67	L1	GND
16.470	FINAL	18.7	---	60.00	-41.34	L1	GND

**Table 7-70. AC Line Conducted Data with CDD 11n Ch.6 (L1, with AC/DC Adapter)**

FCC ID: BCGA2589 IC: 579C-A2589	<b>PCTEST</b> Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
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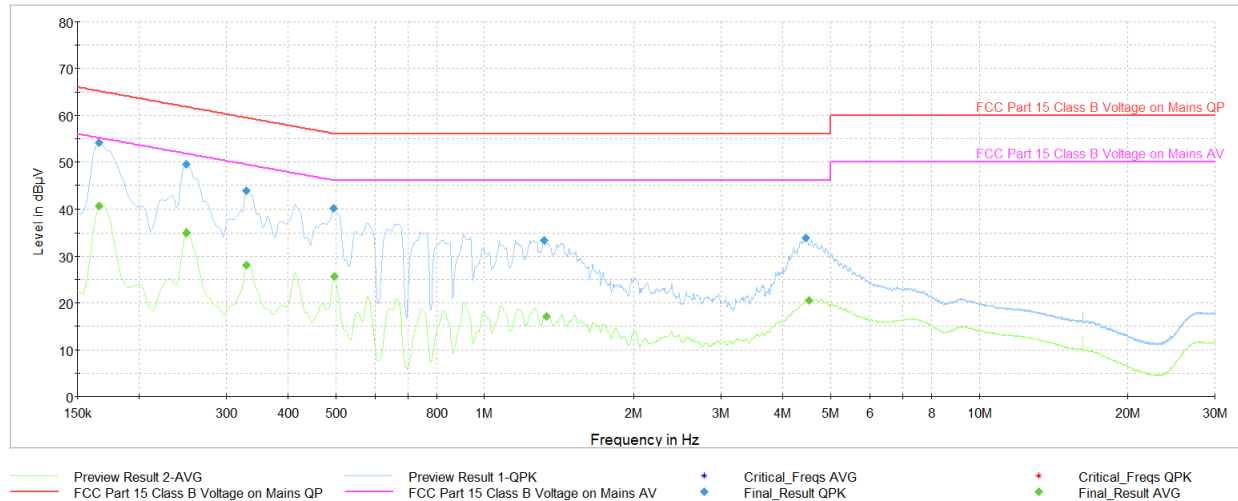


**Plot 7-685. AC Line Conducted Plot with CDD 11n Ch.6 (N, with AC/DC Adapter)**

Frequency [MHz]	Process State	QuasiPeak [dBμV]	Average [dBμV]	Limit [dBμV]	Margin [dB]	Line	PE
0.160	FINAL	46.9	---	65.48	-18.57	N	GND
0.162	FINAL	---	34.22	55.36	-21.14	N	GND
0.241	FINAL	---	27.86	52.07	-24.21	N	GND
0.241	FINAL	42.7	---	62.07	-19.43	N	GND
0.475	FINAL	---	22.83	46.43	-23.60	N	GND
0.477	FINAL	36.1	---	56.39	-20.34	N	GND
0.873	FINAL	32.2	---	56.00	-23.80	N	GND
0.873	FINAL	---	18.83	46.00	-27.17	N	GND
4.493	FINAL	32.2	---	56.00	-23.82	N	GND
4.493	FINAL	---	17.62	46.00	-28.38	N	GND
16.481	FINAL	---	8.55	50.00	-41.45	N	GND
16.484	FINAL	14.0	---	60.00	-46.00	N	GND

**Table 7-71. AC Line Conducted Data with CDD 11n Ch.6 (N, with AC/DC Adapter)**

FCC ID: BCGA2589 IC: 579C-A2589	<b>PCTEST</b> Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
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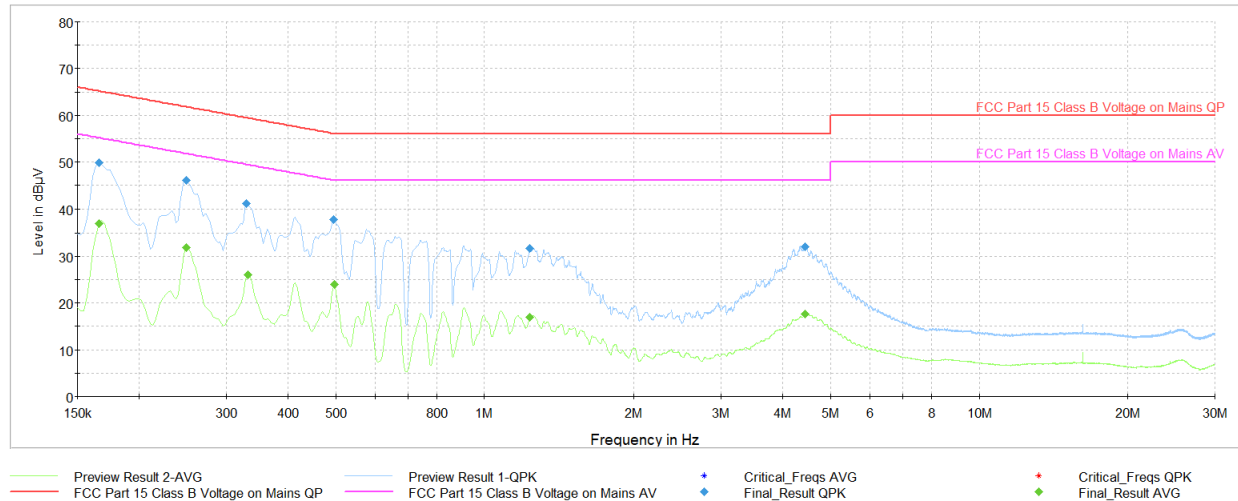


Frequency [MHz]	Process State	QuasiPeak [dBμV]	Average [dBμV]	Limit [dBμV]	Margin [dB]	Line	PE
0.166	FINAL	---	40.61	55.17	-14.56	L1	GND
0.166	FINAL	54.1	---	65.17	-11.04	L1	GND
0.249	FINAL	---	34.98	51.79	-16.81	L1	GND
0.249	FINAL	49.5	---	61.79	-12.29	L1	GND
0.330	FINAL	---	28.17	49.45	-21.28	L1	GND
0.330	FINAL	43.8	---	59.45	-15.68	L1	GND
0.494	FINAL	40.1	---	56.10	-16.04	L1	GND
0.497	FINAL	---	25.65	46.06	-20.41	L1	GND
1.320	FINAL	33.4	---	56.00	-22.57	L1	GND
1.336	FINAL	---	17.20	46.00	-28.80	L1	GND
4.461	FINAL	33.9	---	56.00	-22.07	L1	GND
4.531	FINAL	---	20.56	46.00	-25.44	L1	GND

Table 7-72. AC Line Conducted Data with CDD 11ax - SU Ch.6 (L1, with AC/DC Adapter)

FCC ID: BCGA2589 IC: 579C-A2589	<b>PCTEST</b> Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2111150079-08.BCG	Test Dates: 12/02/2021 - 02/02/2022	EUT Type: Tablet Device	Page 417 of 419





**Plot 7-687. AC Line Conducted Plot with CDD 11ax - SU Ch.6 (N, with AC/DC Adapter)**

Frequency [MHz]	Process State	QuasiPeak [dBμV]	Average [dBμV]	Limit [dBμV]	Margin [dB]	Line	PE
0.166	FINAL	---	36.75	55.17	-18.42	N	GND
0.166	FINAL	49.9	---	65.17	-15.27	N	GND
0.249	FINAL	---	31.85	51.79	-19.94	N	GND
0.249	FINAL	46.1	---	61.79	-15.65	N	GND
0.330	FINAL	41.0	---	59.45	-18.42	N	GND
0.332	FINAL	---	26.09	49.40	-23.30	N	GND
0.494	FINAL	37.6	---	56.10	-18.47	N	GND
0.497	FINAL	---	23.90	46.06	-22.15	N	GND
1.237	FINAL	31.7	---	56.00	-24.33	N	GND
1.237	FINAL	---	16.92	46.00	-29.08	N	GND
4.434	FINAL	---	17.63	46.00	-28.37	N	GND
4.436	FINAL	32.0	---	56.00	-23.96	N	GND

**Table 7-73. AC Line Conducted Data with CDD 11ax - SU Ch.6 (N, with AC/DC Adapter)**

FCC ID: BCGA2589 IC: 579C-A2589		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2111150079-08.BCG	Test Dates: 12/02/2021 - 02/02/2022	EUT Type: Tablet Device	Page 418 of 419

## 8.0 CONCLUSION

The data collected relate only the item(s) tested and show that the **Apple Tablet Device FCC ID: BCGA2589, IC: 579C-A2589** is in compliance with Part 15 Subpart C (15.247) of the FCC Rules and RSS-247 of the Innovation, Science and Economic Development Canada Rules.

<b>FCC ID:</b> BCGA2589 <b>IC:</b> 579C-A2589		<b>MEASUREMENT REPORT (CERTIFICATION)</b>	<b>Approved by:</b> Technical Manager
<b>Test Report S/N:</b> 1C2111150079-08.BCG	<b>Test Dates:</b> 12/02/2021 - 02/02/2022	<b>EUT Type:</b> Tablet Device	Page 419 of 419