

RU484

Worst Case Mode:

Worst Case Transfer Rate:

RU Index:

Distance of Measurements:

Operating Frequency:

Channel:

802.11ax

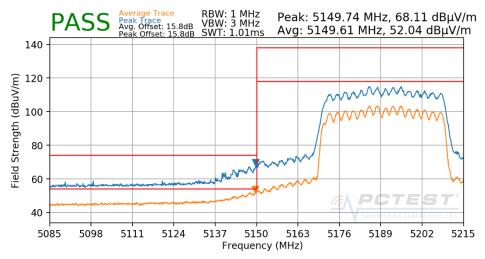
MCS0

65

3 Meters

5190MHz

38



Plot 7-872. Radiated Lower Band Edge Plot CDD (Peak & Average – UNII Band 1 – RU484)

Worst Case Mode:

Worst Case Transfer Rate:

RU Index:

Distance of Measurements:

Operating Frequency:

Channel:

802.11ax

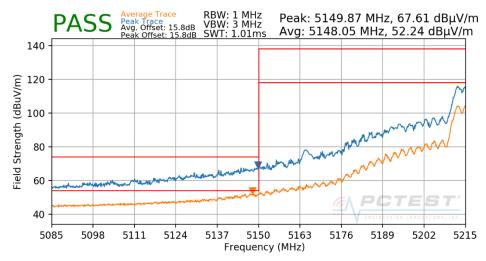
MCS0

65

3 Meters

5230MHz

46



Plot 7-873. Radiated Lower Band Edge Plot CDD (Peak & Average - UNII Band 1 - RU484)

FCC ID: BCGA2228	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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Worst Case Mode:

Worst Case Transfer Rate:

RU Index:

Distance of Measurements:

Operating Frequency:

Channel:

802.11ax

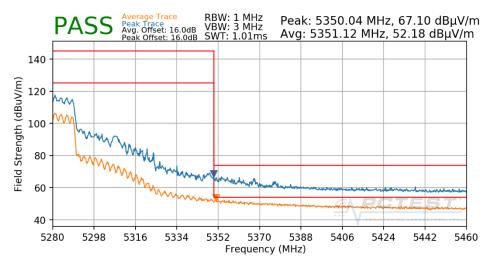
MCS0

65

3 Meters

5270MHz

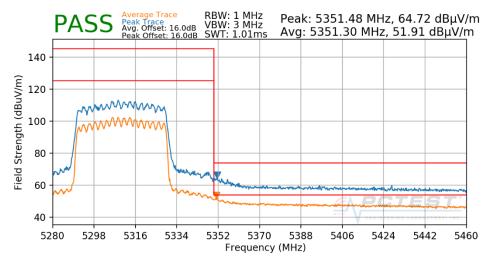
54



Plot 7-874. Radiated Upper Band Edge Plot CDD (Peak & Average – UNII Band 2A – RU484)

Worst Case Mode:
Worst Case Transfer Rate:
RU Index:
Distance of Measurements:
Operating Frequency:
Channel:

802.11ax
MCS0
65
3 Meters
5310MHz
62



Plot 7-875. Radiated Upper Band Edge Plot CDD (Peak & Average – UNII Band 2A – RU484)

FCC ID: BCGA2228	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
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Worst Case Mode:

Worst Case Transfer Rate:

RU Index:

Distance of Measurements:

Operating Frequency:

Channel:

802.11ax

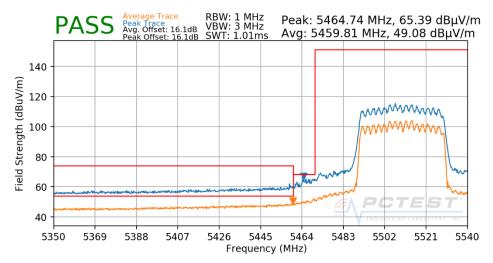
MCS0

65

3 Meters

5510MHz

102



Plot 7-876. Radiated Lower Band Edge Plot CDD (Peak & Average – UNII Band 2C – RU484)

Worst Case Mode:

Worst Case Transfer Rate:

RU Index:

Distance of Measurements:

Operating Frequency:

Channel:

802.11ax

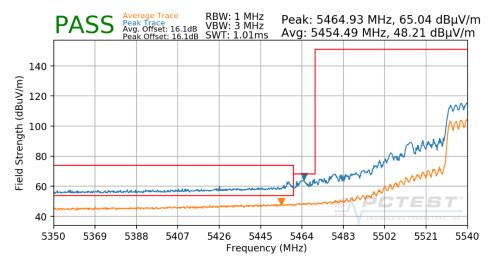
MCS0

65

3 Meters

5550MHz

110



Plot 7-877. Radiated Lower Band Edge Plot CDD (Peak & Average – UNII Band 2C – RU484)

FCC ID: BCGA2228	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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Worst Case Mode:

Worst Case Transfer Rate:

RU Index:

Distance of Measurements:

Operating Frequency:

Channel:

802.11ax

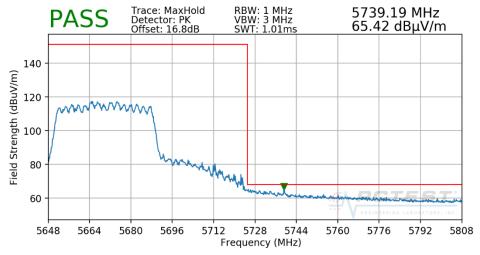
MCS0

65

3 Meters

5670MHz

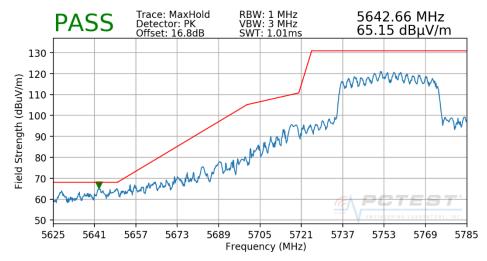
134



Plot 7-878. Radiated Upper Band Edge Plot CDD (Peak - UNII Band 2C - RU484)

Worst Case Mode:
Worst Case Transfer Rate:
RU Index:
Distance of Measurements:
Operating Frequency:
Channel:

802.11ax
MCS0
65
3 Meters
5755MHz
151



Plot 7-879. Radiated Lower Band Edge Plot CDD (Peak – UNII Band 3 – RU484)

FCC ID: BCGA2228	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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Worst Case Mode:

Worst Case Transfer Rate:

RU Index:

Distance of Measurements:

Operating Frequency:

Channel:

802.11ax

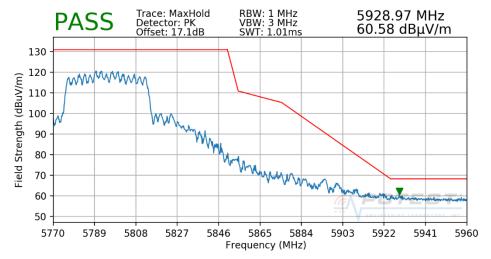
MCS0

65

3 Meters

5795MHz

159



Plot 7-880. Radiated Upper Band Edge Plot CDD (Peak - UNII Band 3 - RU484)

FCC ID: BCGA2228	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
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7.6.12 CDD Radiated Band Edge Measurements (80MHz BW) §15.407(b.1)(b.2) §15.205 §15.209; RSS-Gen [8.9]

RU26

Worst Case Mode:

Worst Case Transfer Rate:

RU Index:

Distance of Measurements:

Operating Frequency:

Channel:

802.11ax

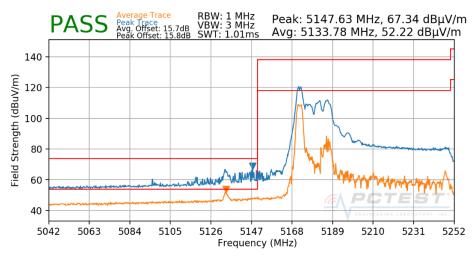
MCS0

67

3 Meters

5210MHz

42



Plot 7-881. Radiated Lower Band Edge Plot CDD (Peak & Average - UNII Band 1 - RU26)

Worst Case Mode:

Worst Case Transfer Rate:

RU Index:

Distance of Measurements:

Operating Frequency:

Channel:

802.11ax

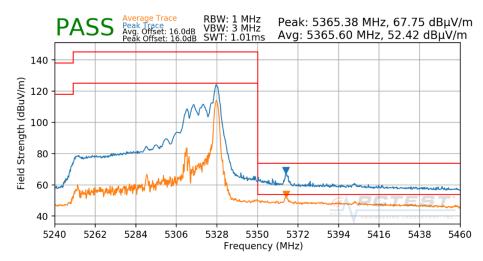
MCS0

67

3 Meters

5290MHz

58



Plot 7-882. Radiated Upper Band Edge Plot CDD (Peak & Average - UNII Band 2A - RU26)

FCC ID: BCGA2228	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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Worst Case Mode:

Worst Case Transfer Rate:

RU Index:

Distance of Measurements:

Operating Frequency:

Channel:

802.11ax

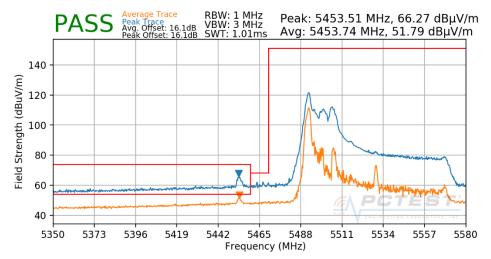
MCS8

67

3 Meters

5530MHz

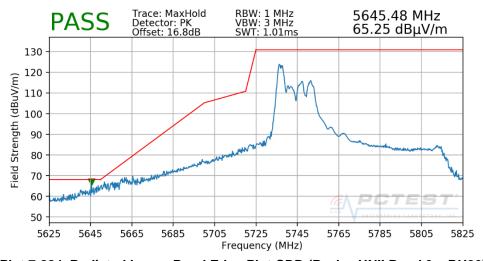
106



Plot 7-883. Radiated Lower Band Edge Plot SDM (Peak & Average – UNII Band 2C – RU26)

Worst Case Mode:
Worst Case Transfer Rate:
RU Index:
Distance of Measurements:
Operating Frequency:
Channel:

802.11ax
MCS0
67
3 Meters
5775MHz
155

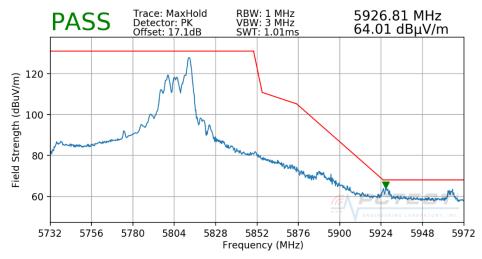


Plot 7-884. Radiated Lower Band Edge Plot CDD (Peak - UNII Band 3 - RU26)

FCC ID: BCGA2228	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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Worst Case Mode: 802.11ax Worst Case Transfer Rate: MCS0 **RU Index:** 67 Distance of Measurements: 3 Meters Operating Frequency: 5775MHz Channel: 155



Plot 7-885. Radiated Upper Band Edge Plot CDD (Peak - UNII Band 3 - RU26)

FCC ID: BCGA2228	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
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RU996

Worst Case Mode:

Worst Case Transfer Rate:

RU Index:

Distance of Measurements:

Operating Frequency:

Channel:

802.11ax

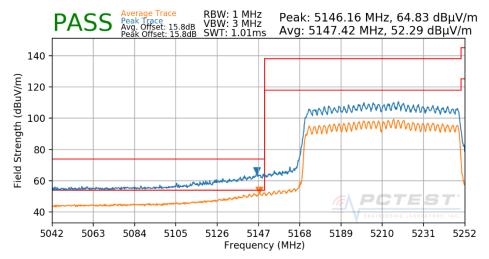
MCS0

67

3 Meters

5210MHz

42



Plot 7-886. Radiated Lower Band Edge Plot CDD (Peak & Average – UNII Band 1 – RU996)

Worst Case Mode:

Worst Case Transfer Rate:

RU Index:

Distance of Measurements:

Operating Frequency:

Channel:

802.11ax

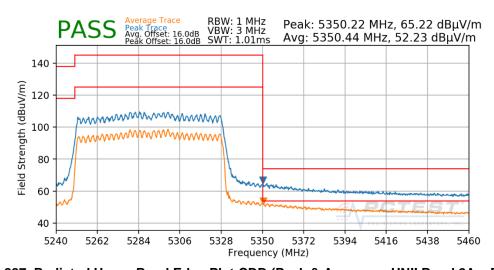
MCS0

67

3 Meters

5290MHz

58



Plot 7-887. Radiated Upper Band Edge Plot CDD (Peak & Average – UNII Band 2A – RU996)

FCC ID: BCGA2228	PCTEST	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Quality Manager
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Worst Case Mode:

Worst Case Transfer Rate:

RU Index:

Distance of Measurements:

Operating Frequency:

Channel:

802.11ax

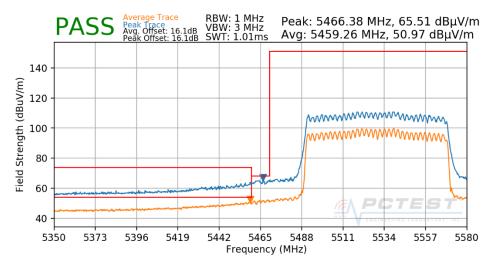
MCS0

67

3 Meters

5530MHz

106



Plot 7-888. Radiated Lower Band Edge Plot CDD (Peak & Average – UNII Band 2C – RU996)

Worst Case Mode:

Worst Case Transfer Rate:

RU Index:

Distance of Measurements:

Operating Frequency:

Channel:

802.11ax

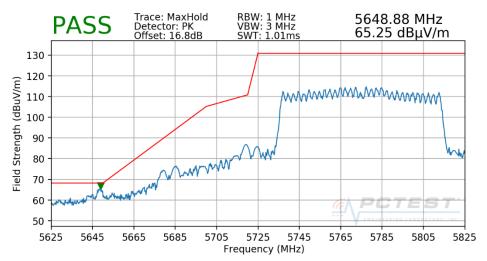
MCS0

67

3 Meters

5775MHz

155

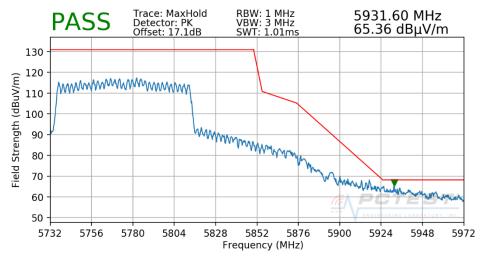


Plot 7-889. Radiated Lower Band Edge Plot CDD (Peak - UNII Band 3 - RU996)

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Worst Case Mode: 802.11ax Worst Case Transfer Rate: MCS0 **RU Index:** 67 Distance of Measurements: 3 Meters Operating Frequency: 5775MHz Channel: 155



Plot 7-890. Radiated Upper Band Edge Plot CDD (Peak - UNII Band 3 - RU996)

FCC ID: BCGA2228	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
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7.7 Radiated Spurious Emissions Measurements – 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 6 of RSS-Gen (8.10) must not exceed the limits shown in Table 7-155 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 7-155, 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
- 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

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

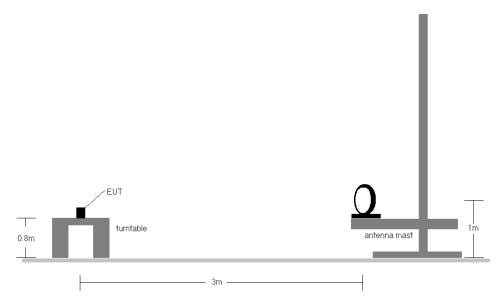


Figure 7-6. Radiated Test Setup < 30MHz

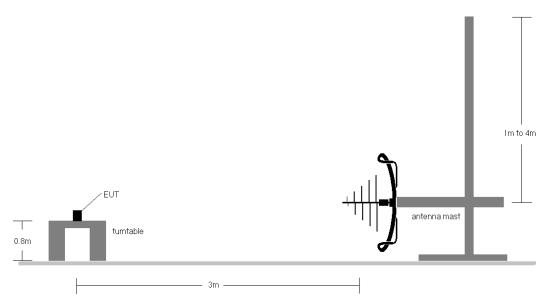


Figure 7-7. Radiated Test Setup < 1GHz

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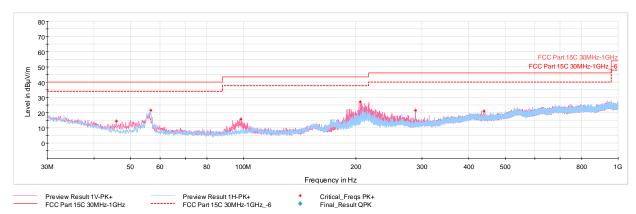
Test Notes

- 1. All emissions lying in restricted bands specified in §15.205 and RSS-Gen (8.10) are below the limit shown in Table 7-155.
- 2. The broadband receive antenna is manipulated through vertical and horizontal polarizations during the tests. The EUT is manipulated through three orthogonal planes.
- 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. The worst-case emissions are reported however emissions whose levels were not within 20dB of the respective limits were not reported.
- 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. 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.
- 9. The wide spectrum spurious emissions plots shown on the following pages are used only for the purpose of emission identification. There were no emissions detected in the 30MHz 1GHz frequency range, as shown in the subsequent plots.

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CDD Radiated Spurious Emissions Measurements (Below 1GHz) §15.209; RSS-Gen [8.9]



Plot 7-891. Radiated Spurious Plot below 1GHz CDD (802.11ax - RU26 - U3 Ch. 157) with Laptop

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]
45.91	Max Peak	V	100	303	-72.08	-20.35	14.57	40.00	-25.43
56.68	Max Peak	Н	250	18	-63.90	-21.49	21.61	40.00	-18.39
98.63	Max Peak	V	100	156	-71.32	-19.86	15.82	43.52	-27.70
205.13	Max Peak	V	250	181	-63.55	-16.42	27.03	43.52	-16.49
287.97	Max Peak	V	100	170	-71.13	-14.25	21.62	46.02	-24.40
438.71	Max Peak	V	100	170	-76.96	-8.99	21.05	46.02	-24.97

Plot 7-892. Radiated Spurious Plot below 1GHz CDD (802.11ax - RU242 - U3 Ch. 157) with Laptop

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CONCLUSION 8.0

The data collected relate only the item(s) tested and show that the Apple Tablet Device FCC ID: BCGA2228 is in compliance with

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