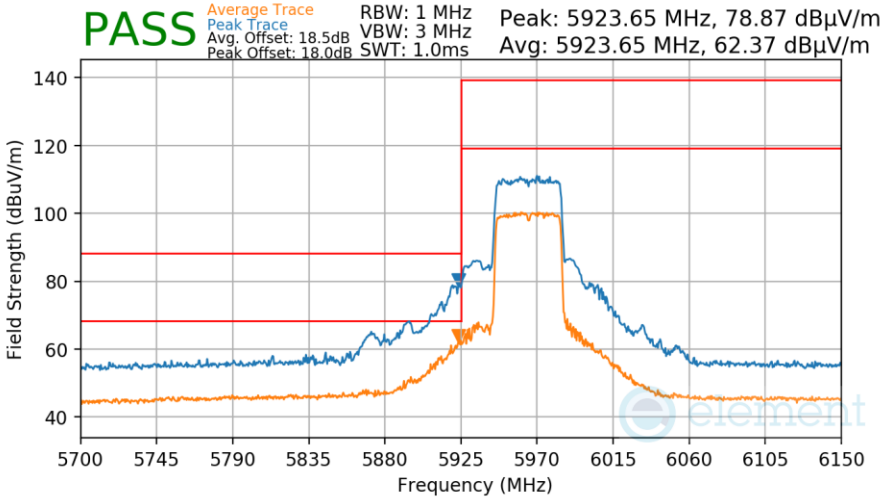
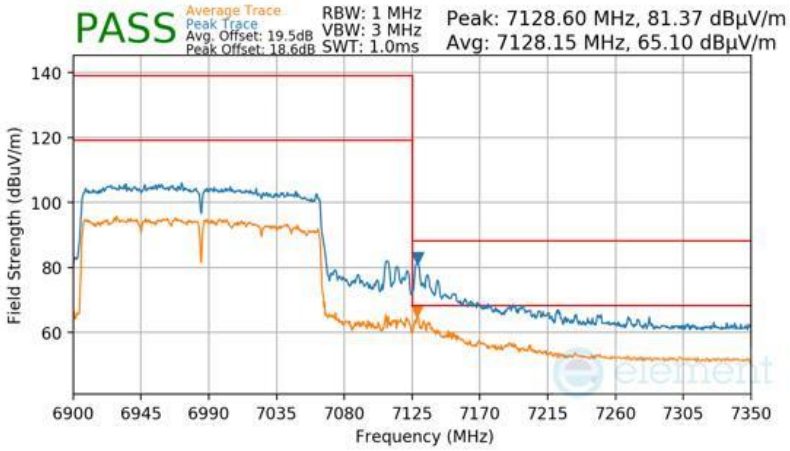
RU996x2

Mode:	802.11ax OFDMA
Transfer Rate:	MCS11
RU Index:	68
Distance of Measurements:	3 Meters
Operating Frequency:	6025MHz
Channel:	15



Plot 7-678 Antenna WF7a Radiated Lower Band Edge (Peak & Average – UNII Band 5)

Mode:	802.11ax OFDMA
Transfer Rate:	MCS11
RU Index:	68
Distance of Measurements:	3 Meters
Operating Frequency:	6985MHz
Channel:	207



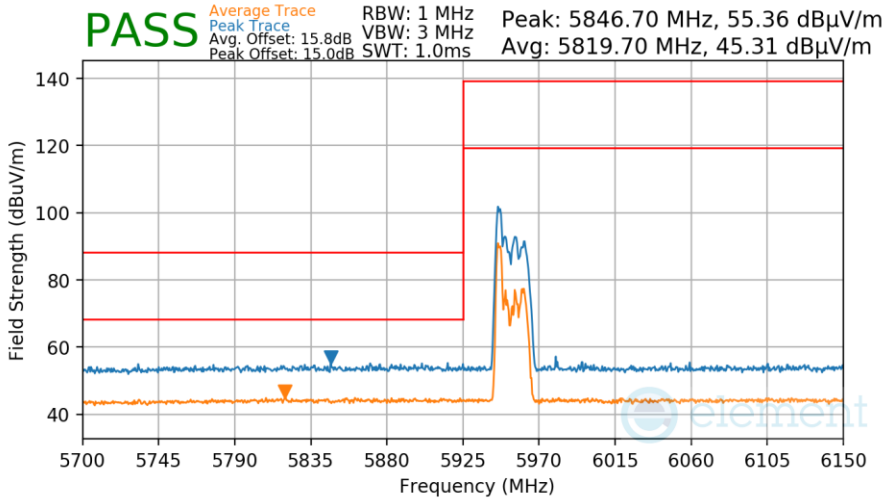
Plot 7-679 Antenna WF7a Radiated Upper Band Edge (Peak & Average – UNII Band 8)

7.7.10 CDD Radiated Band Edge Measurements (20MHz BW)

§15.407(b.1)(b.2) §15.205 §15.209; RSS-Gen [8.9]; RSS-Gen [8.9]

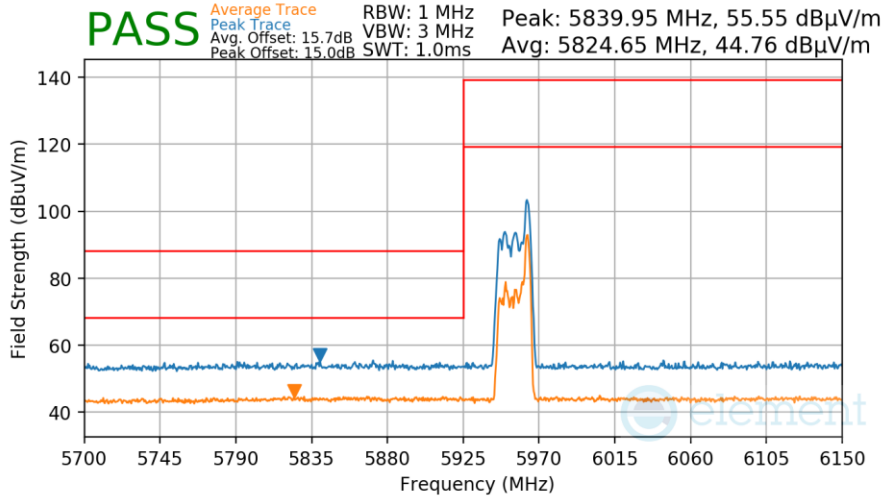
RU26

Mode:	802.11ax OFDMA
Transfer Rate:	MCS11
RU Index:	0
Distance of Measurements:	3 Meters
Operating Frequency:	5955MHz
Channel:	1



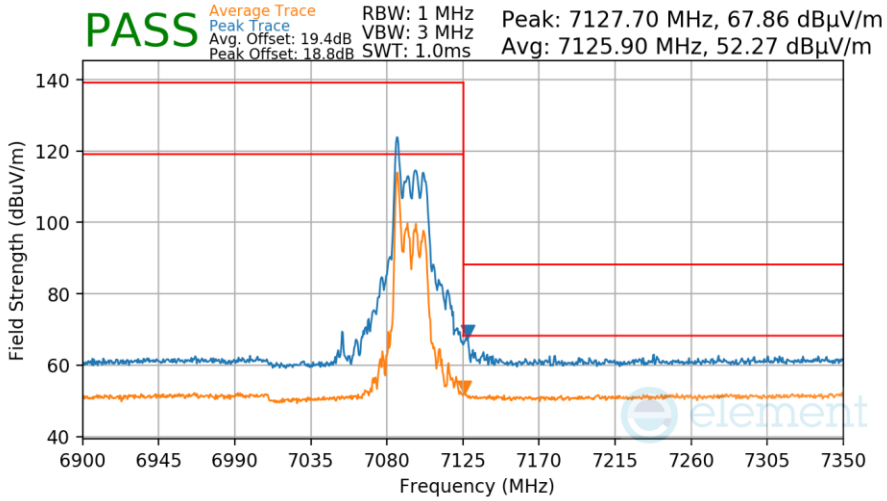
Plot 7-680 CDD Radiated Upper Lower Band Edge (Peak & Average – UNII Band 5)

Mode:	802.11ax OFDMA
Transfer Rate:	MCS11
RU Index:	8
Distance of Measurements:	3 Meters
Operating Frequency:	5955MHz
Channel:	1



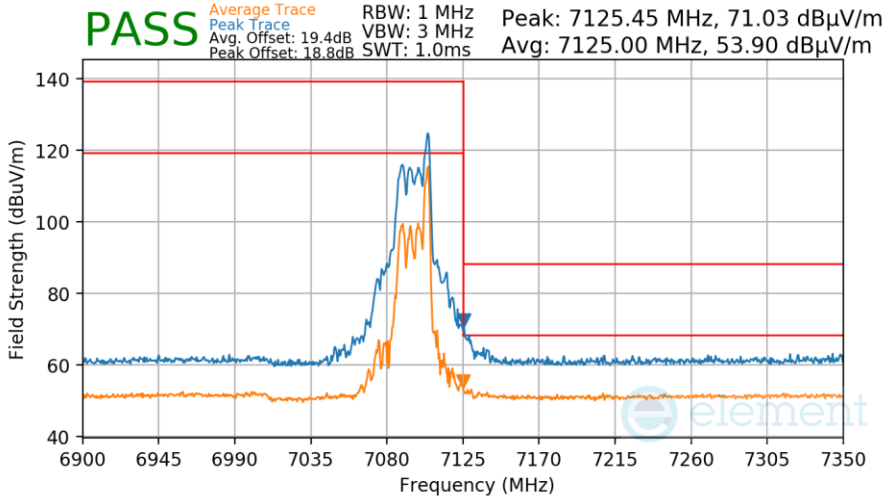
Plot 7-681 CDD Radiated Lower Band Edge (Peak & Average – UNII Band 5)

Mode:	802.11ax OFDMA
Transfer Rate:	MCS11
RU Index:	0
Distance of Measurements:	3 Meters
Operating Frequency:	7095MHz
Channel:	229



Plot 7-682 CDD Radiated Upper Band Edge (Peak & Average – UNII Band 8)

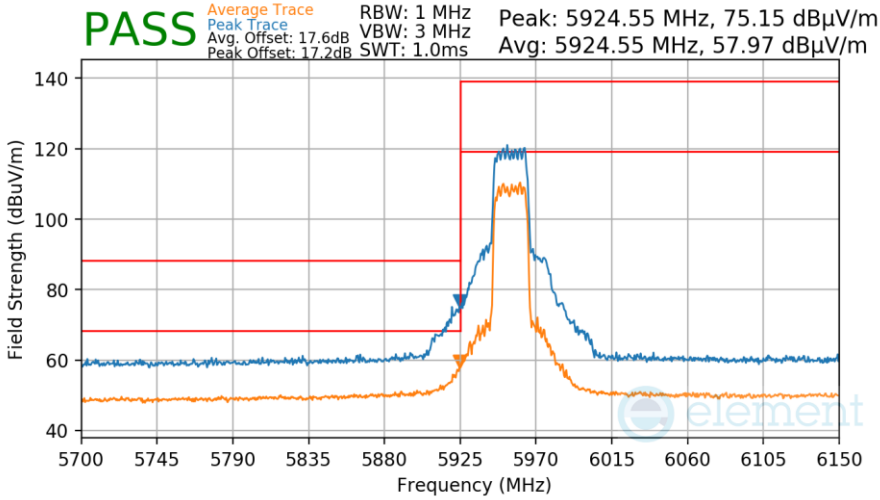
Mode:	802.11ax OFDMA
Transfer Rate:	MCS11
RU Index:	8
Distance of Measurements:	3 Meters
Operating Frequency:	7095MHz
Channel:	229



Plot 7-683 CDD Radiated Upper Band Edge (Peak & Average – UNII Band 8)

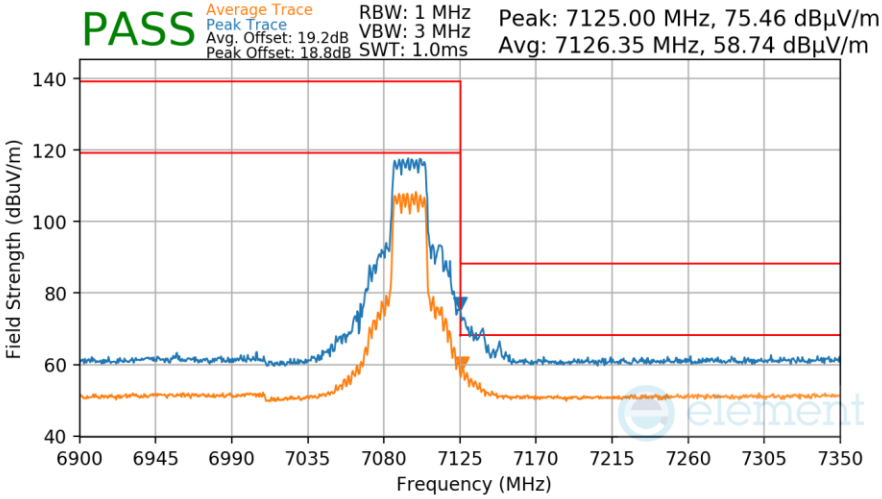
RU242

Mode:	802.11ax OFDMA
Transfer Rate:	MCS11
RU Index:	61
Distance of Measurements:	3 Meters
Operating Frequency:	5955MHz
Channel:	1



Plot 7-684 CDD Radiated Lower Band Edge (Peak & Average – UNII Band 5)

Mode:	802.11ax OFDMA
Transfer Rate:	MCS11
RU Index:	61
Distance of Measurements:	3 Meters
Operating Frequency:	7095MHz
Channel:	229



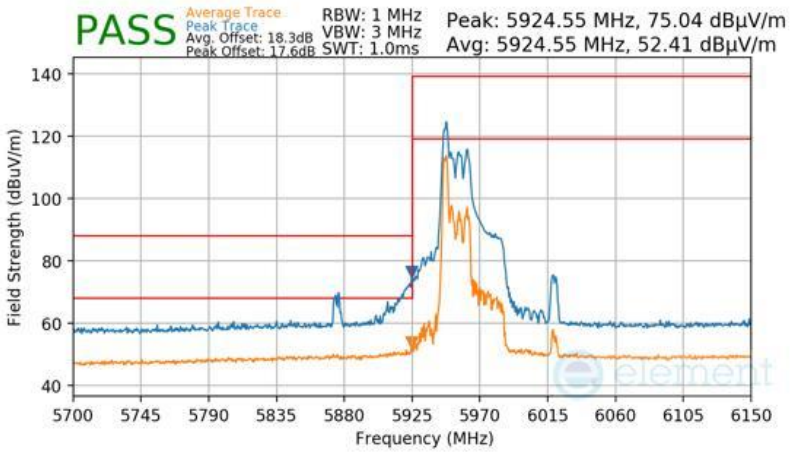
Plot 7-685 CDD Radiated Upper Band Edge (Peak & Average – UNII Band 8)

7.7.11 CDD Radiated Band Edge Measurements (40MHz BW)

§15.407(b.1)(b.2) §15.205 §15.209; RSS-Gen ⁅8.9

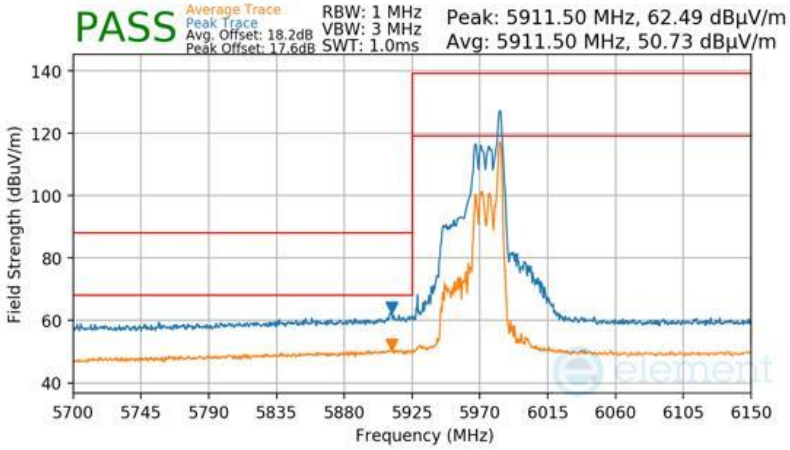
RU26

Mode:	802.11ax OFDMA
Transfer Rate:	MCS11
RU Index:	0
Distance of Measurements:	3 Meters
Operating Frequency:	5965MHz
Channel:	3



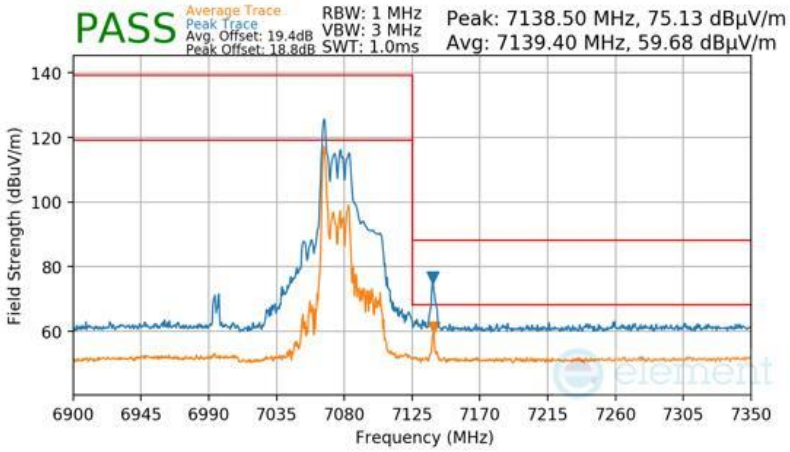
Plot 7-686 CDD Radiated Lower Band Edge (Peak & Average – UNII Band 5)

Mode:	802.11ax OFDMA
Transfer Rate:	MCS11
RU Index:	17
Distance of Measurements:	3 Meters
Operating Frequency:	5965MHz
Channel:	3



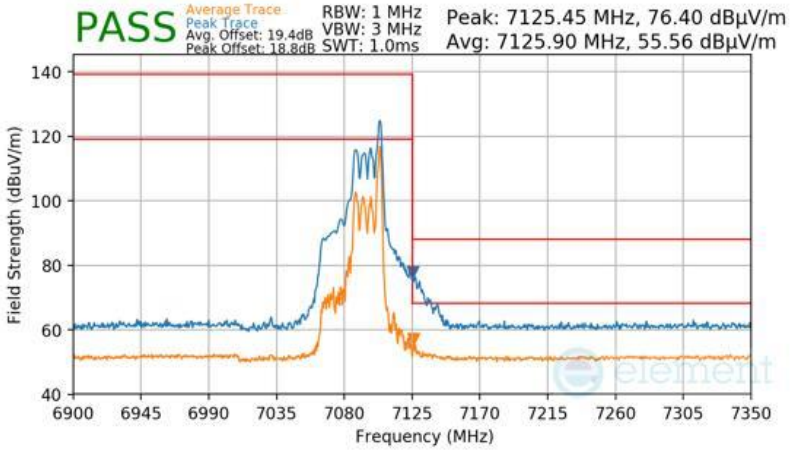
Plot 7-687 CDD Radiated Lower Band Edge (Peak & Average – UNII Band 5)

Mode:	802.11ax OFDMA
Transfer Rate:	MCS11
RU Index:	0
Distance of Measurements:	3 Meters
Operating Frequency:	7085MHz
Channel:	227



Plot 7-688 CDD Radiated Upper Band Edge (Peak & Average – UNII Band 8)

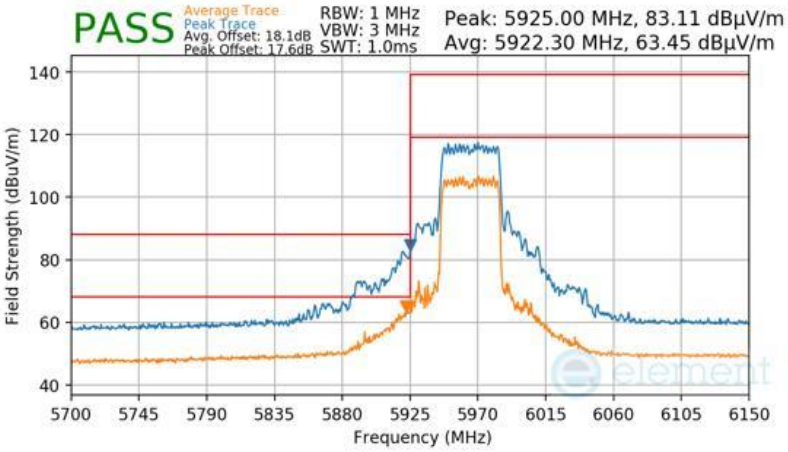
Mode:	802.11ax OFDMA
Transfer Rate:	MCS11
RU Index:	17
Distance of Measurements:	3 Meters
Operating Frequency:	7085MHz
Channel:	227



Plot 7-689 CDD Radiated Upper Band Edge (Peak & Average – UNII Band 8)

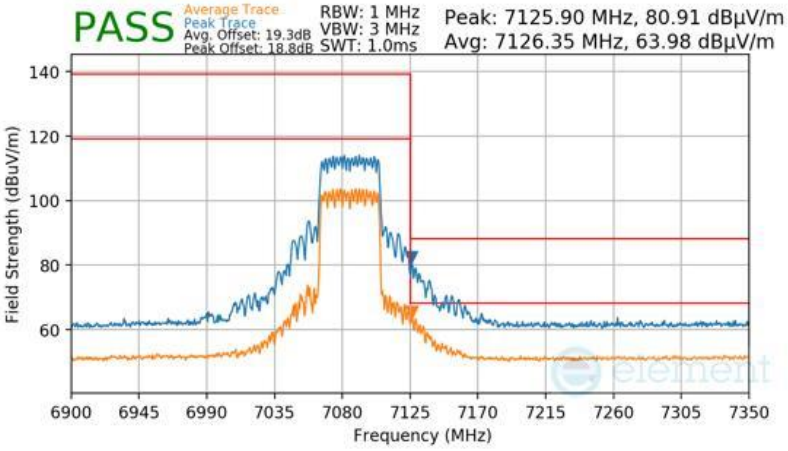
RU484

Mode:	802.11ax OFDMA
Transfer Rate:	MCS11
RU Index:	65
Distance of Measurements:	3 Meters
Operating Frequency:	5965MHz
Channel:	3



Plot 7-690 CDD Radiated Lower Band Edge (Peak & Average – UNII Band 5)

Mode:	802.11ax OFDMA
Transfer Rate:	MCS11
RU Index:	65
Distance of Measurements:	3 Meters
Operating Frequency:	7085MHz
Channel:	227



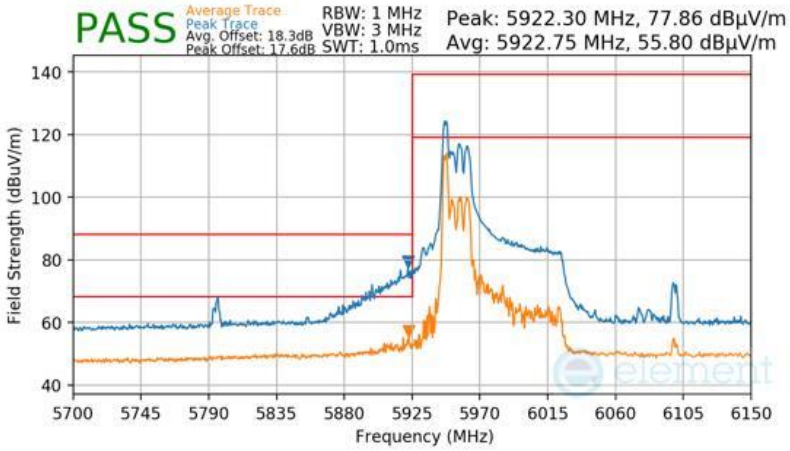
Plot 7-691 CDD Radiated Upper Band Edge (Peak & Average – UNII Band 8)

7.7.12 CDD Radiated Band Edge Measurements (80MHz BW)

§15.407(b.1)(b.2) §15.205 §15.209; RSS-Gen [8.9]

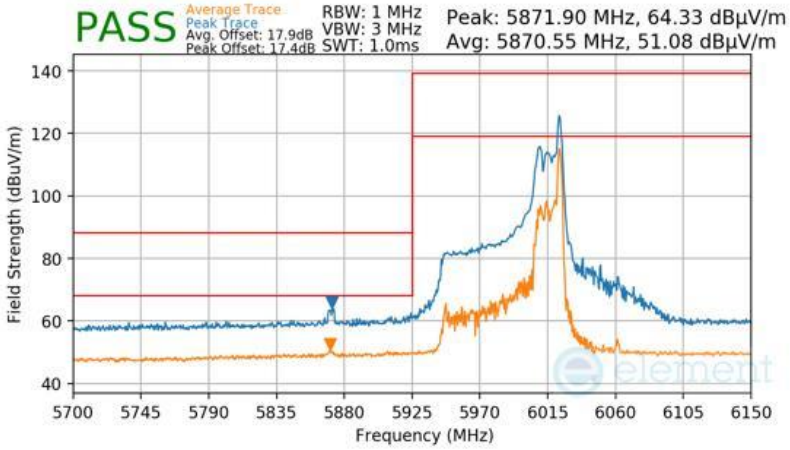
RU26

Mode:	802.11ax OFDMA
Transfer Rate:	MCS11
RU Index:	0
Distance of Measurements:	3 Meters
Operating Frequency:	5985MHz
Channel:	7



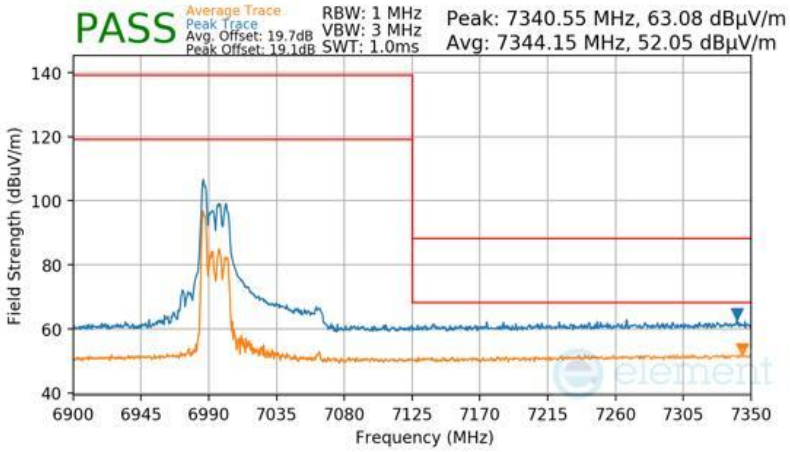
Plot 7-692 CDD Radiated Lower Band Edge (Peak & Average – UNII Band 5)

Mode:	802.11ax OFDMA
Transfer Rate:	MCS11
RU Index:	36
Distance of Measurements:	3 Meters
Operating Frequency:	5985MHz
Channel:	7



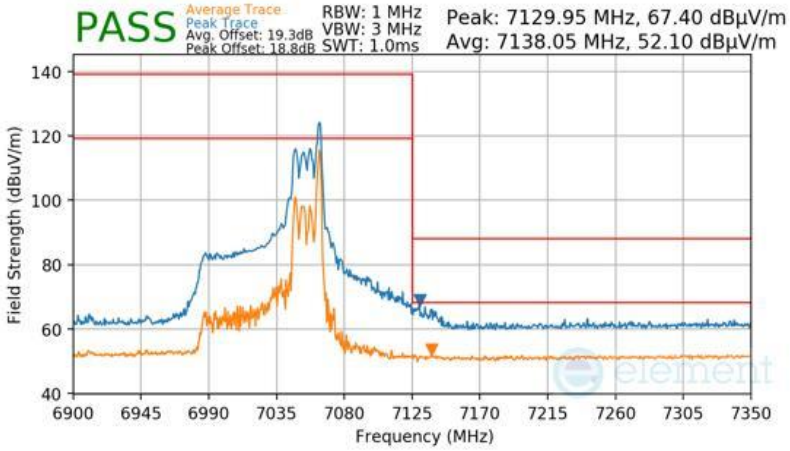
Plot 7-693 CDD Radiated Lower Band Edge (Peak & Average – UNII Band 5)

Mode:	802.11ax OFDMA
Transfer Rate:	MCS11
RU Index:	0
Distance of Measurements:	3 Meters
Operating Frequency:	7025MHz
Channel:	215



Plot 7-694 CDD Radiated Upper Band Edge (Peak & Average – UNII Band 8)

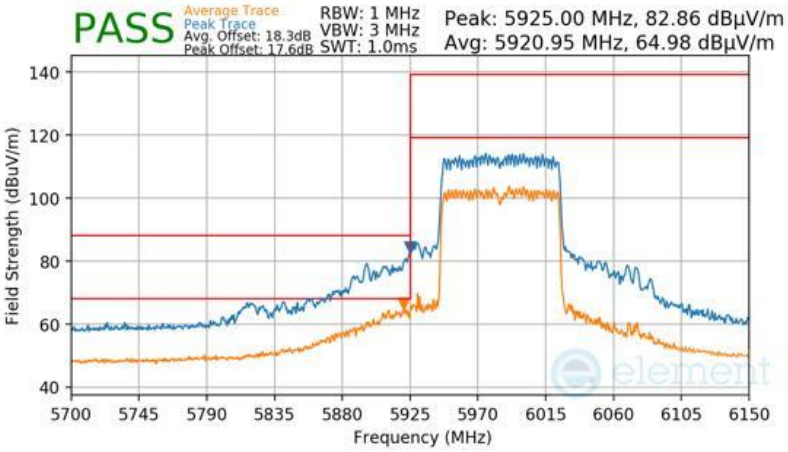
Mode:	802.11ax OFDMA
Transfer Rate:	MCS11
RU Index:	36
Distance of Measurements:	3 Meters
Operating Frequency:	7025MHz
Channel:	215



Plot 7-695 CDD Radiated Upper Band Edge (Peak & Average – UNII Band 8)

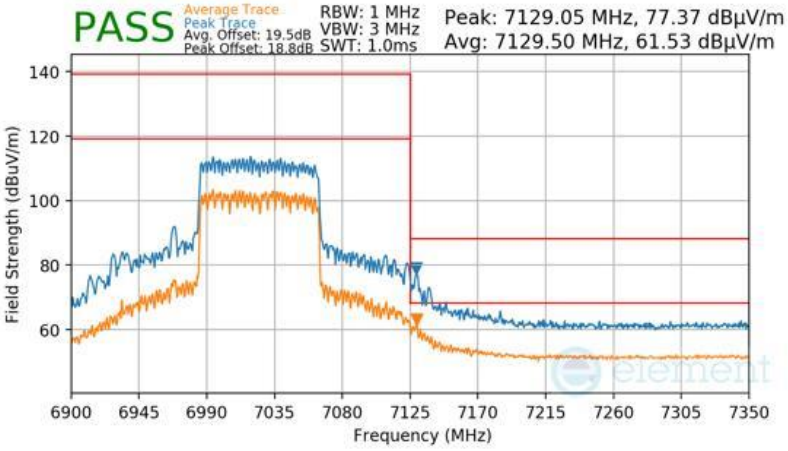
RU996

Mode:	802.11ax OFDMA
Transfer Rate:	MCS11
RU Index:	67
Distance of Measurements:	3 Meters
Operating Frequency:	5985MHz
Channel:	7



Plot 7-696 CDD Radiated Lower Band Edge (Peak & Average – UNII Band 5)

Mode:	802.11ax OFDMA
Transfer Rate:	MCS11
RU Index:	67
Distance of Measurements:	3 Meters
Operating Frequency:	7025MHz
Channel:	215



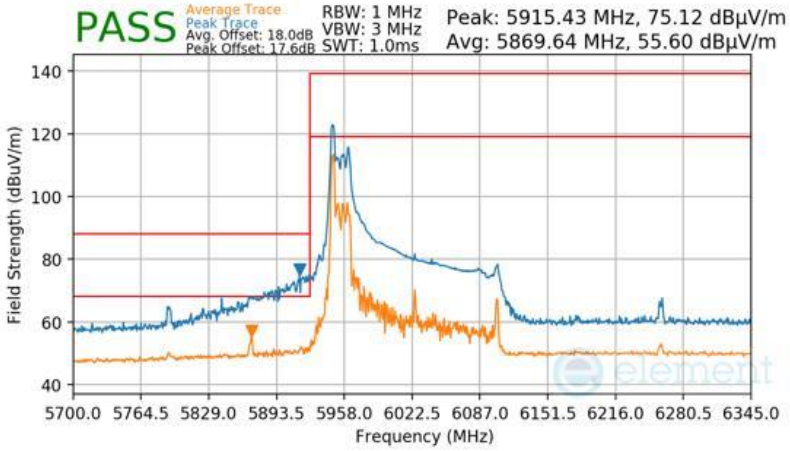
Plot 7-697 CDD Radiated Upper Band Edge (Peak & Average – UNII Band 8)

7.7.13 CDD Radiated Band Edge Measurements (160MHz BW)

§15.407(b.1)(b.2) §15.205 §15.209; RSS-Gen [8.9]

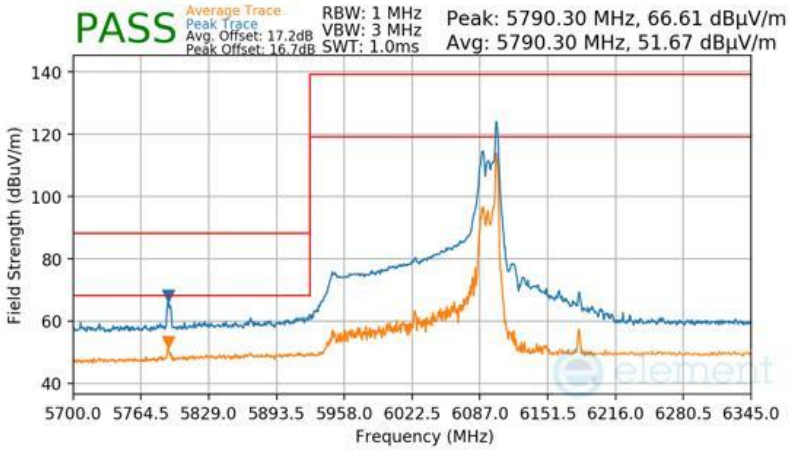
RU26

Mode:	802.11ax OFDMA
Transfer Rate:	MCS11
RU Index:	0
Distance of Measurements:	3 Meters
Operating Frequency:	6025MHz
Channel:	15



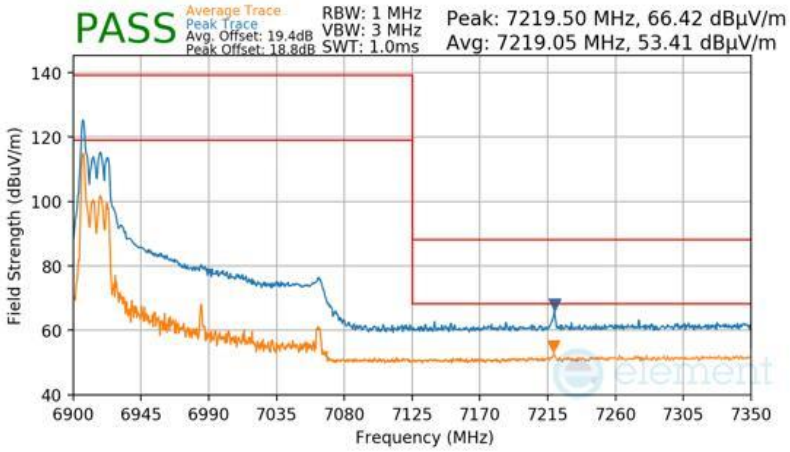
Plot 7-698 CDD Radiated Lower Band Edge (Peak & Average – UNII Band 5)

Mode:	802.11ax OFDMA
Transfer Rate:	MCS11
RU Index:	36
Distance of Measurements:	3 Meters
Operating Frequency:	6025MHz
Channel:	15



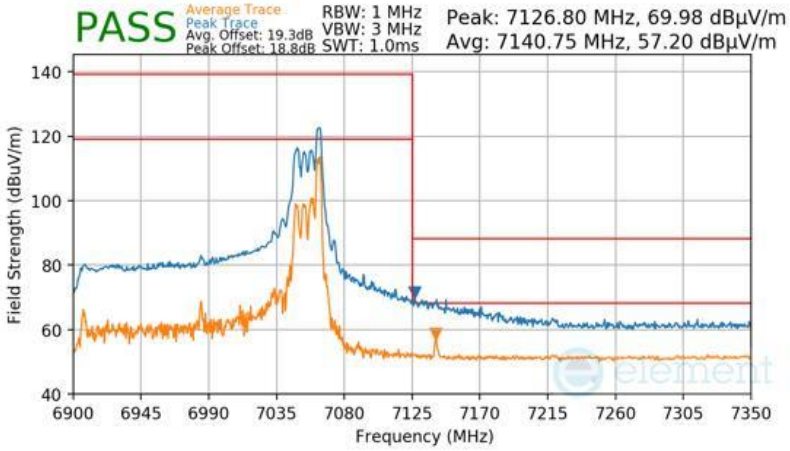
Plot 7-699 CDD Radiated Lower Band Edge (Peak & Average – UNII Band 5)

Mode:	802.11ax OFDMA
Transfer Rate:	MCS11
RU Index:	0
Distance of Measurements:	3 Meters
Operating Frequency:	6985MHz
Channel:	207



Plot 7-700 CDD Radiated Upper Band Edge (Peak & Average – UNII Band 8)

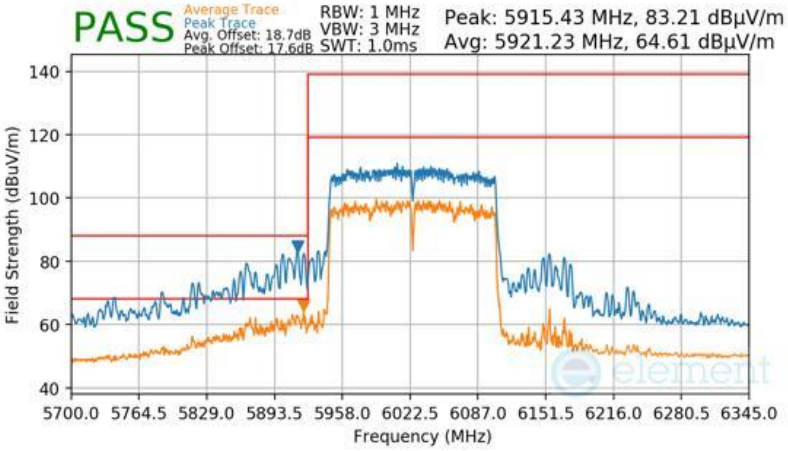
Mode:	802.11ax OFDMA
Transfer Rate:	MCS11
RU Index:	36
Distance of Measurements:	3 Meters
Operating Frequency:	6985MHz
Channel:	207



Plot 7-701 CDD Radiated Upper Band Edge (Peak & Average – UNII Band 8)

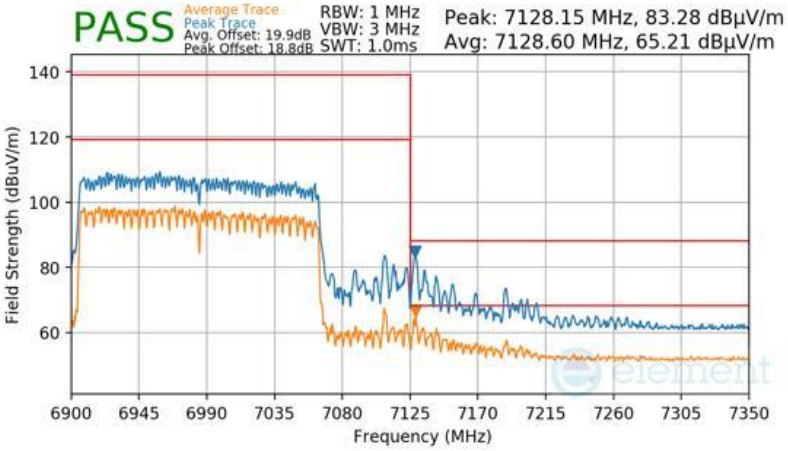
RU996x2

Mode:	802.11ax OFDMA
Transfer Rate:	MCS11
RU Index:	68
Distance of Measurements:	3 Meters
Operating Frequency:	6025MHz
Channel:	15



Plot 7-702 CDD Radiated Lower Band Edge (Peak & Average – UNII Band 5)

Mode:	802.11ax OFDMA
Transfer Rate:	MCS11
RU Index:	68
Distance of Measurements:	3 Meters
Operating Frequency:	6985MHz
Channel:	207



Plot 7-703 CDD Radiated Upper Band Edge (Peak & Average – UNII Band 8)

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 7-141 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 7-141. Radiated Limits

Test Procedures Used

ANSI C63.10-2020

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 = quasi-peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

Test Setup

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

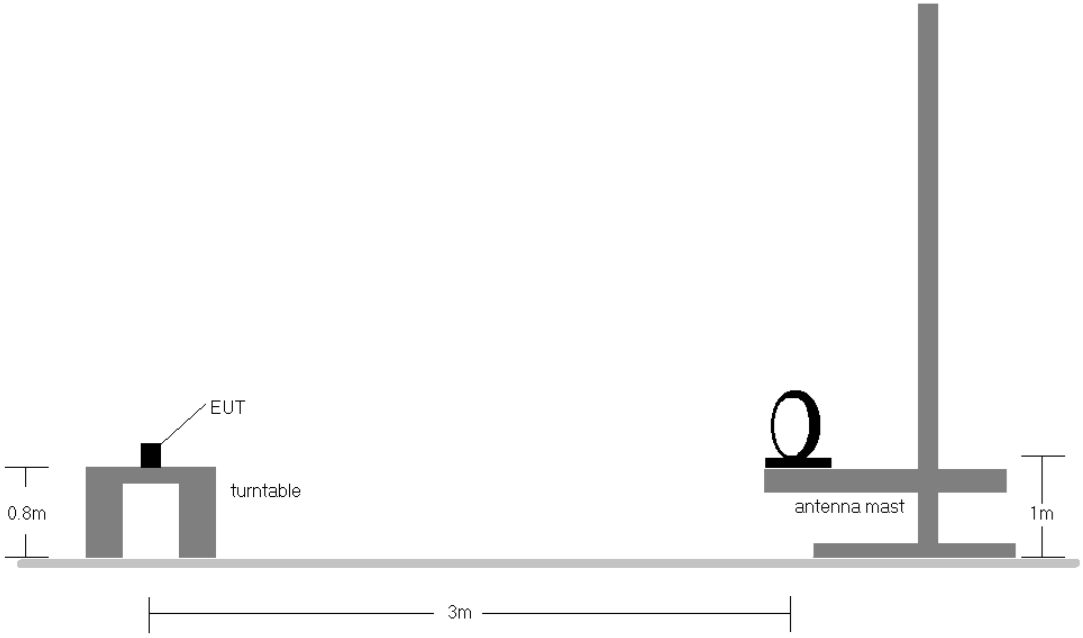


Figure 7-6. Radiated Test Setup < 30MHz

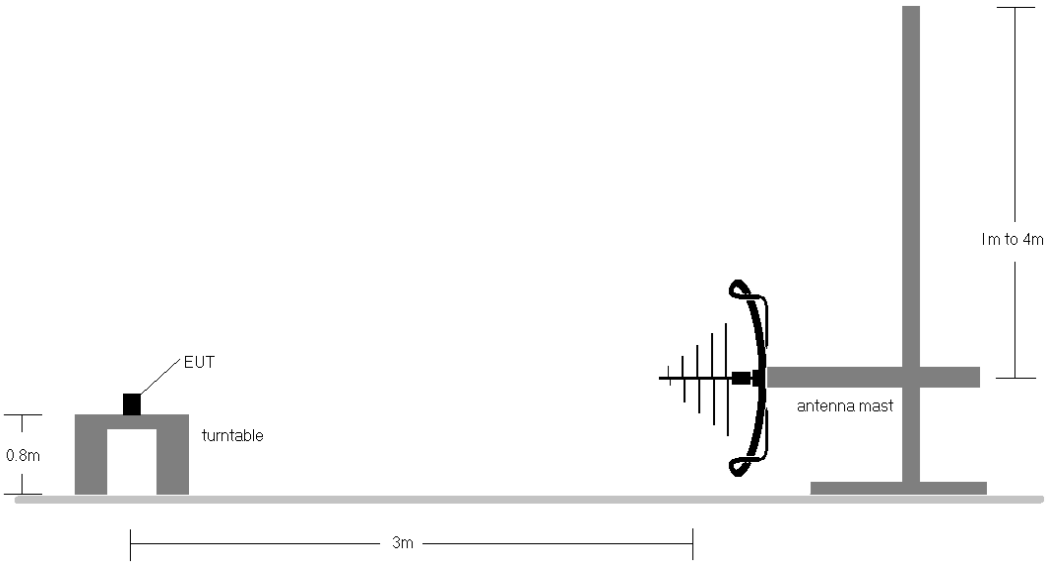


Figure 7-7. Radiated Test Setup < 1GHz

Test Notes

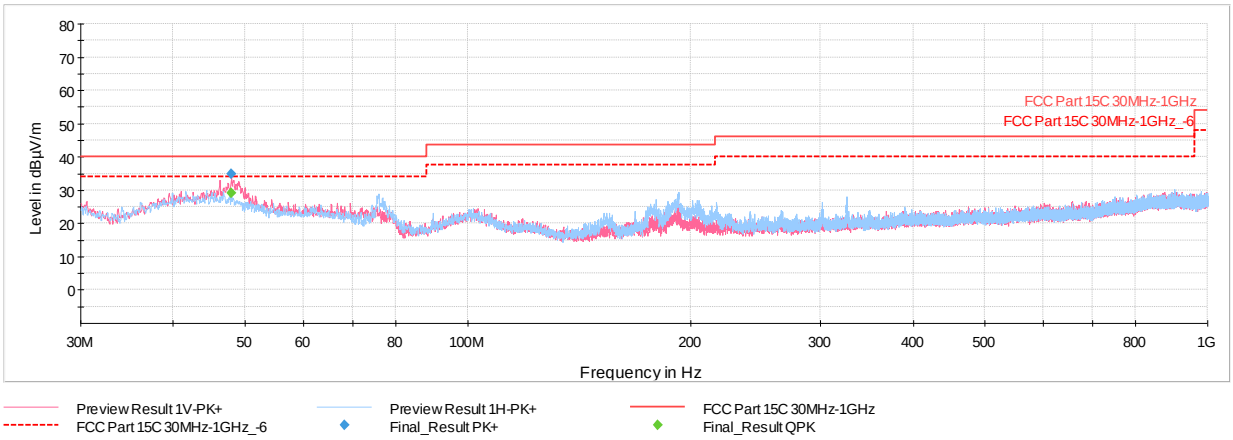
1. All emissions lying in restricted bands specified in §15.205 and RSS-Gen (8.10) are below the limit shown in Table 7-141.
2. The broadband receive antenna is manipulated through vertical and horizontal polarizations during the tests. The EUT is manipulated through three orthogonal planes. For below 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 on emissions that were 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. 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. 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
10. All antenna configurations were investigated and only the worst case is reported.
11. The unit was tested with all possible modes and only the highest emission is reported.

Sample Calculations

Determining Spurious Emissions Levels

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

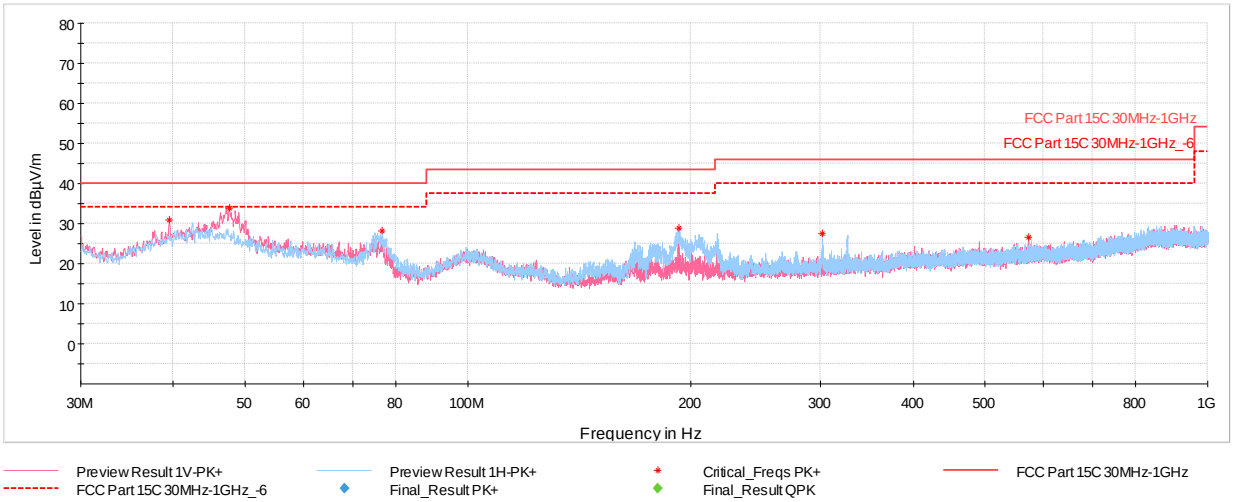
7.8.1 CDD Radiated Spurious Emissions Measurements (Below 1GHz)



Plot 7-704. Radiated Spurious Emissions below 1GHz CDD (802.11ax – Ch.1 – RU26) with AC/DC adaptor via USB-C cable with wire charger

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]
47.95	QuasiPeak	V	100	20	-63.51	-14.36	29.13	40.00	-10.87
75.88	Max Peak	H	200	278	-57.12	-21.14	28.74	40.00	-11.26
154.31	Max Peak	H	200	197	-64.43	-19.35	23.22	43.52	-20.30
192.86	Max Peak	H	100	208	-61.45	-16.17	29.38	43.52	-14.14
325.61	Max Peak	H	100	349	-66.37	-12.48	28.15	46.02	-17.87
875.89	Max Peak	V	300	16	-75.51	-2.13	29.36	46.02	-16.66

Table 7-142. Radiated Spurious Emissions below 1GHz CDD (802.11ax – Ch.1 – RU26) with AC/DC adaptor via USB-C cable with wire charger



Plot 7-705. Radiated Spurious Emissions below 1GHz CDD (802.11ax – Ch.1 – RU242) with AC/DC adaptor via USB-C cable with wire charger

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]
39.56	Max Peak	V	100	25	-60.08	-15.95	30.97	40.00	-9.03
47.65	Max Peak	V	100	15	-58.71	-14.36	33.93	40.00	-6.07
76.66	Max Peak	H	200	274	-57.51	-21.30	28.19	40.00	-11.81
193.06	Max Peak	H	100	15	-61.92	-16.15	28.93	43.52	-14.59
301.70	Max Peak	H	100	102	-66.17	-13.25	27.58	46.02	-18.44
573.10	Max Peak	V	100	179	-73.09	-7.38	26.53	46.02	-19.49

Table 7-143. Radiated Spurious Emissions below 1GHz CDD (802.11ax – Ch.1 – RU242) with AC/DC adaptor via USB-C cable with wire charger

7.9 AC Line-Conducted Emissions Measurement

§15.407; 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 7-144. Conducted Limits

*Decreases with the logarithm of the frequency.

Test Procedures Used

ANSI C63.10-2020, Section 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

Test Setup

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

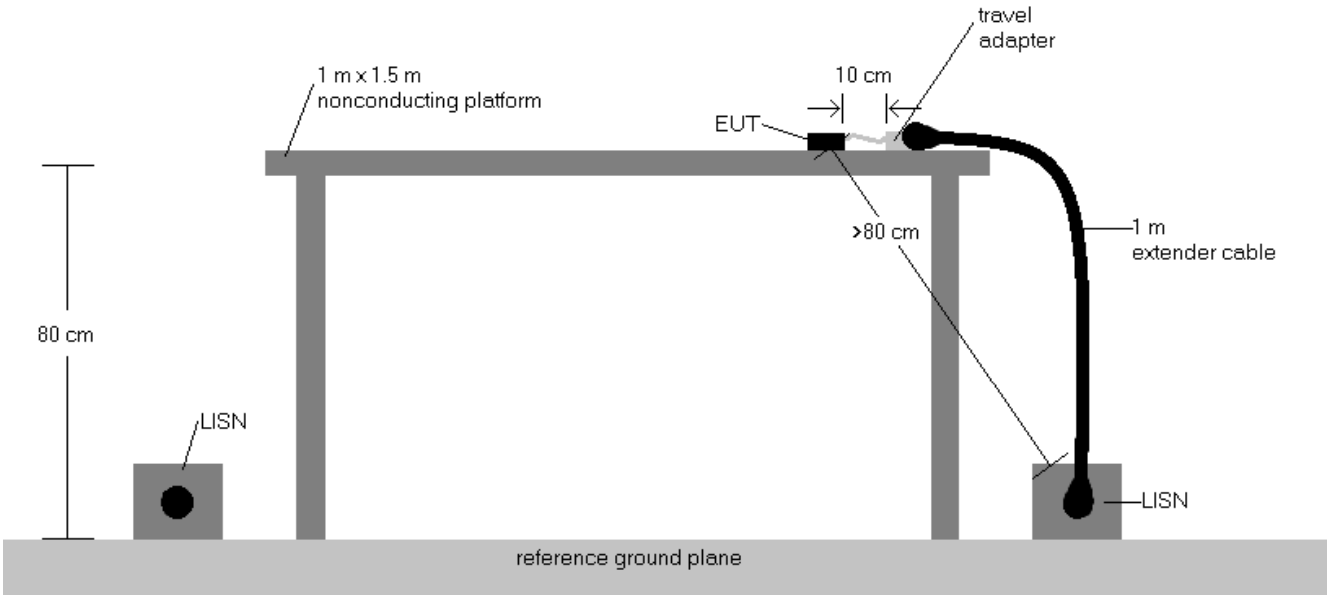
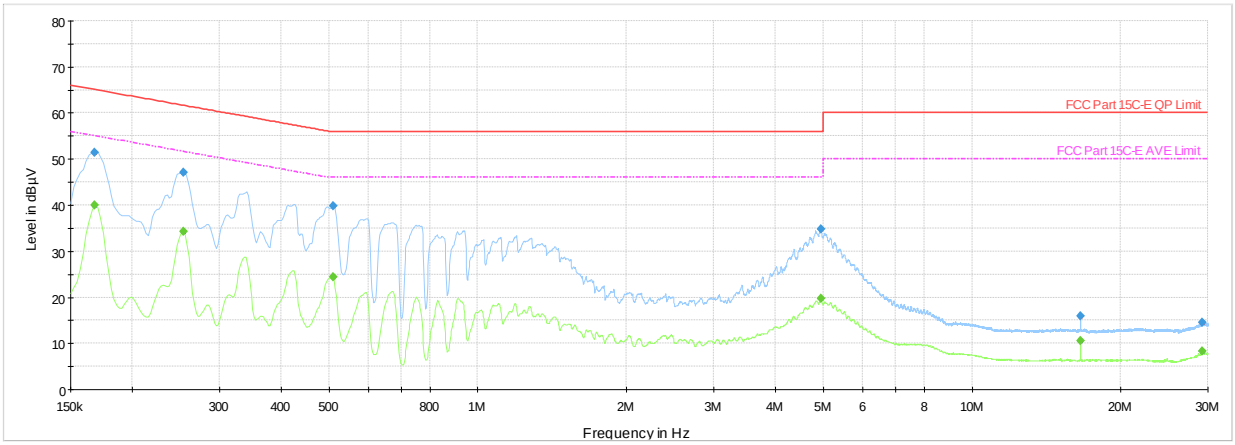


Figure 7-8. Test Instrument & Measurement Setup

Test Notes

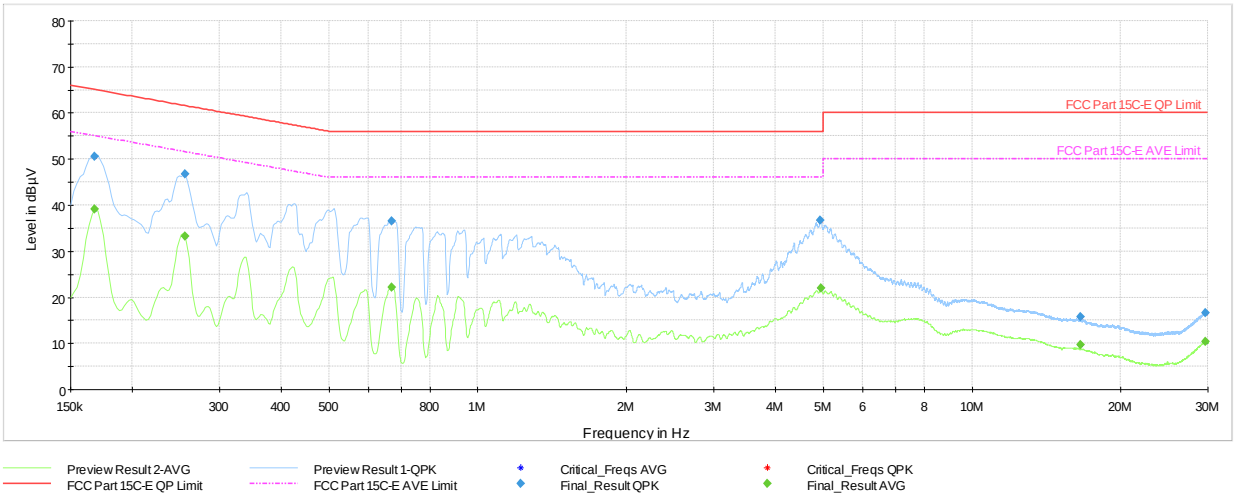
1. All modes of operation were investigated and the worst-case emissions are reported. The emissions found were not affected by the choice of channel used during testing.
2. Both configurations below were investigated, and the worst case has been reported.
    a. EUT powered by AC/DC adaptor via USB-C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



Plot 7-706. AC Line Conducted Plot with 802.11ax CDD UNII Band 5 – RU26 – Ch.1 (L1) with AC/DC adaptor via USB-C cable with wire charger

Frequency [MHz]	Process State	QuasiPeak [dBµV]	Average [dBµV]	Limit [dBµV]	Margin [dB]	Line	PE
0.17	FINAL	---	39.92	55.06	-15.14	L1	GND
0.17	FINAL	51.45	---	65.06	-13.61	L1	GND
0.25	FINAL	---	34.23	51.64	-17.41	L1	GND
0.25	FINAL	47.06	---	61.64	-14.58	L1	GND
0.51	FINAL	---	24.41	46.00	-21.59	L1	GND
0.51	FINAL	39.85	---	56.00	-16.15	L1	GND
4.94	FINAL	---	19.76	46.00	-26.24	L1	GND
4.94	FINAL	34.74	---	56.00	-21.26	L1	GND
16.56	FINAL	15.97	---	60.00	-44.03	L1	GND
16.56	FINAL	---	10.55	50.00	-39.45	L1	GND
29.24	FINAL	---	8.35	50.00	-41.65	L1	GND
29.24	FINAL	14.59	---	60.00	-45.41	L1	GND

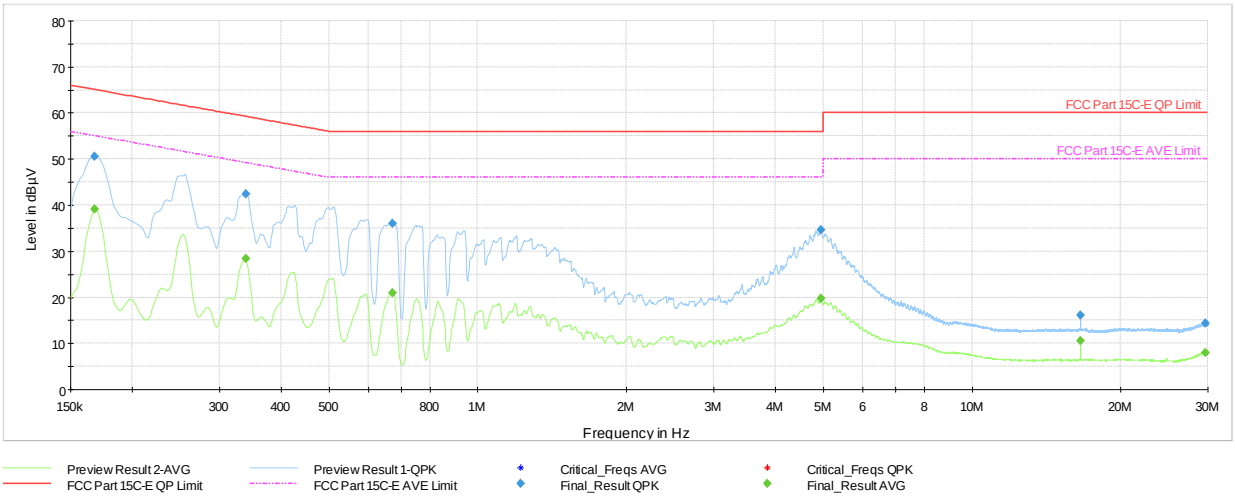
Table 7-145. AC Line Conducted Data with 802.11ax CDD UNII Band 5 – RU26 – Ch.1 (L1) with AC/DC adaptor via USB-C cable with wire charger



Plot 7-707. AC Line Conducted Plot with 802.11ax CDD UNII Band 5 – RU26 – Ch.1 (N) with AC/DC adaptor via USB-C cable with wire charger

Frequency [MHz]	Process State	QuasiPeak [dBµV]	Average [dBµV]	Limit [dBµV]	Margin [dB]	Line	PE
0.17	FINAL	---	39.21	55.06	-15.85	N	GND
0.17	FINAL	50.64	---	65.06	-14.42	N	GND
0.26	FINAL	---	33.25	51.57	-18.32	N	GND
0.26	FINAL	46.71	---	61.57	-14.86	N	GND
0.67	FINAL	---	22.24	46.00	-23.76	N	GND
0.67	FINAL	36.55	---	56.00	-19.45	N	GND
4.94	FINAL	36.67	---	56.00	-19.33	N	GND
4.95	FINAL	---	21.96	46.00	-24.04	N	GND
16.56	FINAL	15.84	---	60.00	-44.16	N	GND
16.56	FINAL	---	9.67	50.00	-40.33	N	GND
29.65	FINAL	---	10.33	50.00	-39.67	N	GND
29.65	FINAL	16.56	---	60.00	-43.44	N	GND

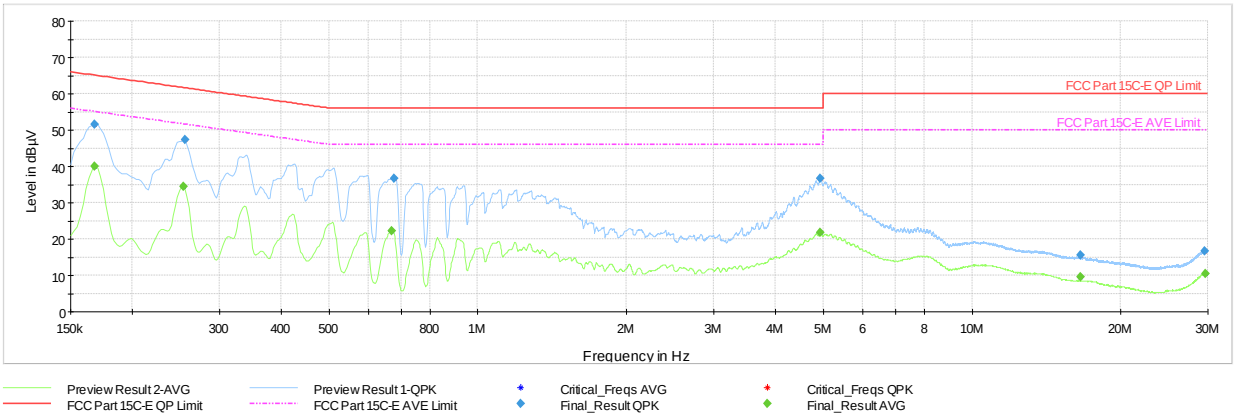
Table 7-146. AC Line Conducted Data with 802.11ax CDD UNII Band 5 – RU26 – Ch.1 (N) with AC/DC adaptor via USB-C cable with wire charger



Plot 7-708. AC Line Conducted Plot with 802.11ax CDD UNII Band 5 – RU242 – Ch.1 (L1) with AC/DC adaptor via USB-C cable with wire charger

Frequency [MHz]	Process State	QuasiPeak [dBµV]	Average [dBµV]	Limit [dBµV]	Margin [dB]	Line	PE
0.17	FINAL	---	39.13	55.06	-15.93	L1	GND
0.17	FINAL	50.65	---	65.06	-14.41	L1	GND
0.34	FINAL	---	28.32	49.23	-20.91	L1	GND
0.34	FINAL	42.37	---	59.23	-16.86	L1	GND
0.67	FINAL	---	21.02	46.00	-24.98	L1	GND
0.67	FINAL	36.06	---	56.00	-19.94	L1	GND
4.94	FINAL	34.71	---	56.00	-21.29	L1	GND
4.95	FINAL	---	19.76	46.00	-26.24	L1	GND
16.55	FINAL	16.02	---	60.00	-43.98	L1	GND
16.55	FINAL	---	10.60	50.00	-39.40	L1	GND
29.65	FINAL	---	7.94	50.00	-42.06	L1	GND
29.66	FINAL	14.35	---	60.00	-45.65	L1	GND

Table 7-147. AC Line Conducted Data with 802.11ax CDD UNII Band 5 – RU242 – Ch.1 (L1) with AC/DC adaptor via USB-C cable with wire charger



Plot 7-709. AC Line Conducted Plot with 802.11ax CDD UNII Band 5 – RU242 – Ch.1 (N) with AC/DC adaptor via USB-C cable with wire charger

Frequency [MHz]	Process State	QuasiPeak [dBµV]	Average [dBµV]	Limit [dBµV]	Margin [dB]	Line	PE
0.17	FINAL	---	40.02	55.06	-15.04	N	GND
0.17	FINAL	51.48	---	65.06	-13.58	N	GND
0.25	FINAL	---	34.40	51.64	-17.24	N	GND
0.26	FINAL	47.23	---	61.57	-14.34	N	GND
0.67	FINAL	---	22.21	46.00	-23.79	N	GND
0.68	FINAL	36.61	---	56.00	-19.39	N	GND
4.92	FINAL	---	21.71	46.00	-24.29	N	GND
4.93	FINAL	36.58	---	56.00	-19.42	N	GND
16.56	FINAL	15.61	---	60.00	-44.39	N	GND
16.56	FINAL	---	9.49	50.00	-40.51	N	GND
29.57	FINAL	16.76	---	60.00	-43.24	N	GND
29.62	FINAL	---	10.55	50.00	-39.45	N	GND

Table 7-148. AC Line Conducted Data with 802.11ax CDD UNII Band 5 – RU242 – Ch.1 (N) with AC/DC adaptor via USB-C cable with wire charger

7.10 Proper Power Adjustment, Client Devices Connected to a Standard Power Access Point

§15.407; RSS-248

Test Overview and Limits

A client device that connects to a Standard Power AP must limit its power to a minimum of 6 dB lower than its associated Standard Power access point's authorized transmit power. The term "authorized" means the AFC-approved power level for the AP to use on a particular channel.

Test Procedure Used

KDB 987594 D03 – Section L
ANSI C63.10-2020 – Section 12.4.3.2 Method PM-G
ANSI C63.10-2020 – Section 14.4 Measure-and-Sum Technique

Test Settings

Average power measurements were performed only when the EUT was transmitting at its maximum power control level using a broadband power meter with a pulse sensor. The power meter implemented triggering and gating capabilities which were set up such that power measurements were recorded only during the ON time of the transmitter. The trace was averaged over 100 traces to obtain the final measured average power.

Test Setup

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

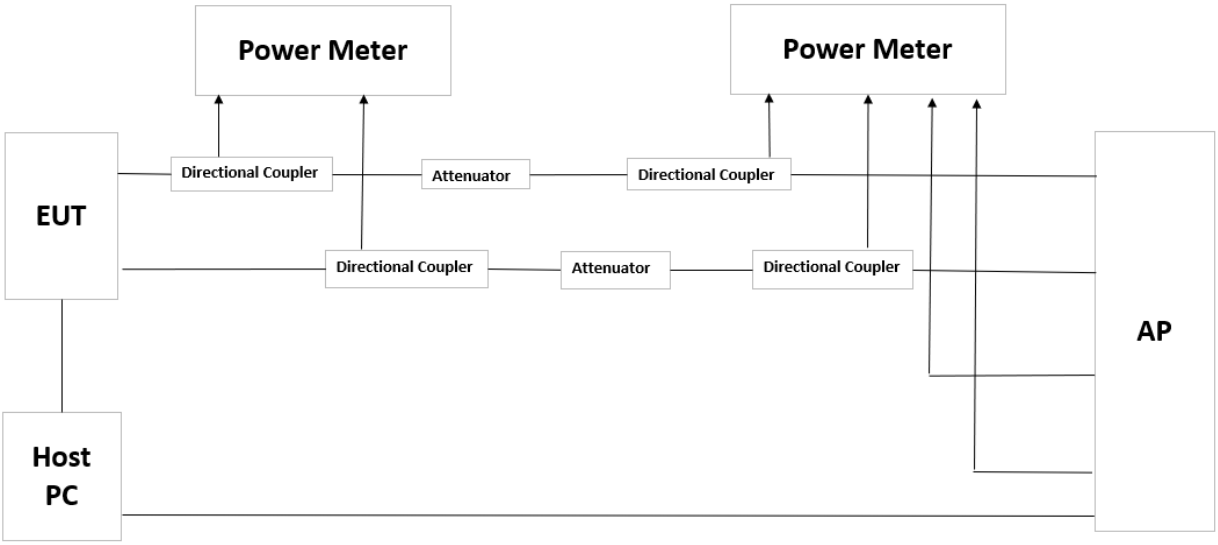


Figure 7-9. Test Instrument & Measurement Setup

Test Notes

1. AFC Limit was set to 36, 28 and 21 dBm EIRP.
2. Standard Power AP which was used in the test setup is not certified and it's a production version.
3. Standard Power AP specification is declared by Apple/manufacturer.

AFC Authorized Power (36dBm EIRP)

```
# wl afc_info
AFC information
Ver: 1, Type: 0x00/0,  Reg_info_type: 0x04/4,  Flags:0x0000/0,
[Req_info:0x00000000 (0u, 0, ""),
Expiry-in:86099sec,  Num-ch:1,  qdBm-offset:17, Num-entries:2 (1+1)
[
           dBm + offset (+4.25 dBm)
              -------------------
  Center-ch   |  EIRPc   |   PSDf   | Example chanspec
  37 / 0x25   |  +36.00  |  +23.00  |  0x5025 : 6g37
```

Figure 7-10. AP AFC EIRP/PSD Authorization by channel – 36dBm

Channel	Frequency (MHz)	Power Measured (dBm)			Correlated Gain (dBi)	Measured e.i.r.p (dBm)	Limit (dBm)	Margin (dB)
		Antenna WF8	Antenna WF7a	Summed				
37	6135	12.98	12.25	15.64	5.00	20.64	30.00	-9.36

Table 7-149: EUT measured e.i.r.p (MIMO)

AFC Authorized Power (28dBm EIRP)

```
# wl afc_info
AFC information
Ver: 1, Type: 0x00/0,  Reg_info_type: 0x04/4,  Flags:0x0000/0,
Req_info:0x00000000 (0u, 0, ""),
[Expiry-in:86316sec,  Num-ch:1,  qdBm-offset:17, Num-entries:2 (1+1)

[           dBm + offset (+4.25 dBm)
              -------------------
   Center-ch  |  EIRPc  |   PSDf  | Example chanspec
   37 / 0x25  |  +28.00 |  +15.00 |  0x5025 : 6g37
```

Figure 7-11: AP AFC EIRP/PSD Authorization by channel – 28dBm

Channel	Frequency (MHz)	Power Measured (dBm)			Correlated Gain (dBi)	Measured e.i.r.p (dBm)	Limit (dBm)	Margin (dB)
		Antenna WF8	Antenna WF7a	Summed				
37	6135	12.75	10.25	14.69	5.00	19.69	22.00	-2.31

Table 7-150: EUT measured e.i.r.p (MIMO)

AFC Authorized Power (21dBm EIRP)

```
[# wl afc_info
AFC information
Ver: 1, Type: 0x00/0,  Reg_info_type: 0x04/4,  Flags:0x0000/0,
Req_info:0x00000000 (0u, 0, ""),
Expiry-in:86395sec,  Num-ch:1,  qdBm-offset:17, Num-entries:2 (1+1)

           dBm + offset (+4.25 dBm)
              -------------------
  Center-ch   |   EIRPc   |    PSDf   | Example chanspec
  37 / 0x25   |   +21.00  |    +8.00  |  0x5025 : 6g37
```

Figure 7-12. AP AFC EIRP/PSD Authorization by channel – 28dBm

Antenna	Channel	Frequency (MHz)	Power Measured (dBm)	Antenna Gain (dBi)	Measured e.i.r.p (dBm)	Limit (dBm)	Margin (dB)
WF8	37	6135	8.35	5.00	13.35	15.00	-1.65
WF7a	37	6135	8.90	3.50	12.40	15.00	-2.60

Table 7-151: EUT measured e.i.r.p (SISO)

7.11 Dual Client Test, Demonstration of Proper Power Adjustment based on Associated AP

§15.407; RSS-248

Test Overview and Limits

A client device may connect to a Standard Power AP with a maximum power level of 30 dBm EIRP. A client may also connect to a Low Power indoor AP, but the power level is limited to a maximum of 24 dBm EIRP. If a client has the flexibility to connect to both APs, verification is needed to show that it can distinguish between the two configurations, and then control the power levels accordingly.

Test Procedure Used

KDB 987594 D02 v03 – Section K
ANSI C63.10-2020 – Section 12.4.3.2 Method PM-G
ANSI C63.10-2020 – Section 14.4 Measure-and-Sum Technique

Test Settings

Average power measurements were performed only when the EUT was transmitting at its maximum power control level using a broadband power meter with a pulse sensor. The power meter implemented triggering and gating capabilities which were set up such that power measurements were recorded only during the ON time of the transmitter. The trace was averaged over 100 traces to obtain the final measured average power.

Test Setup

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

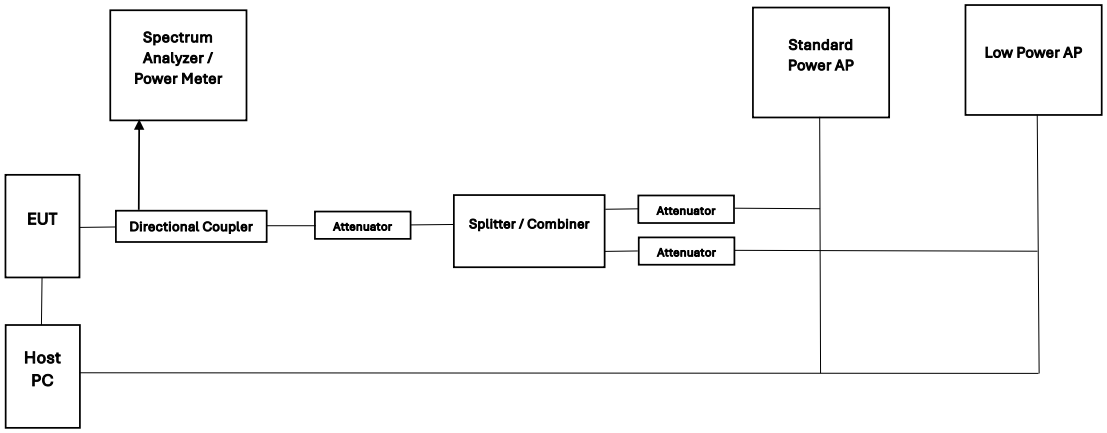
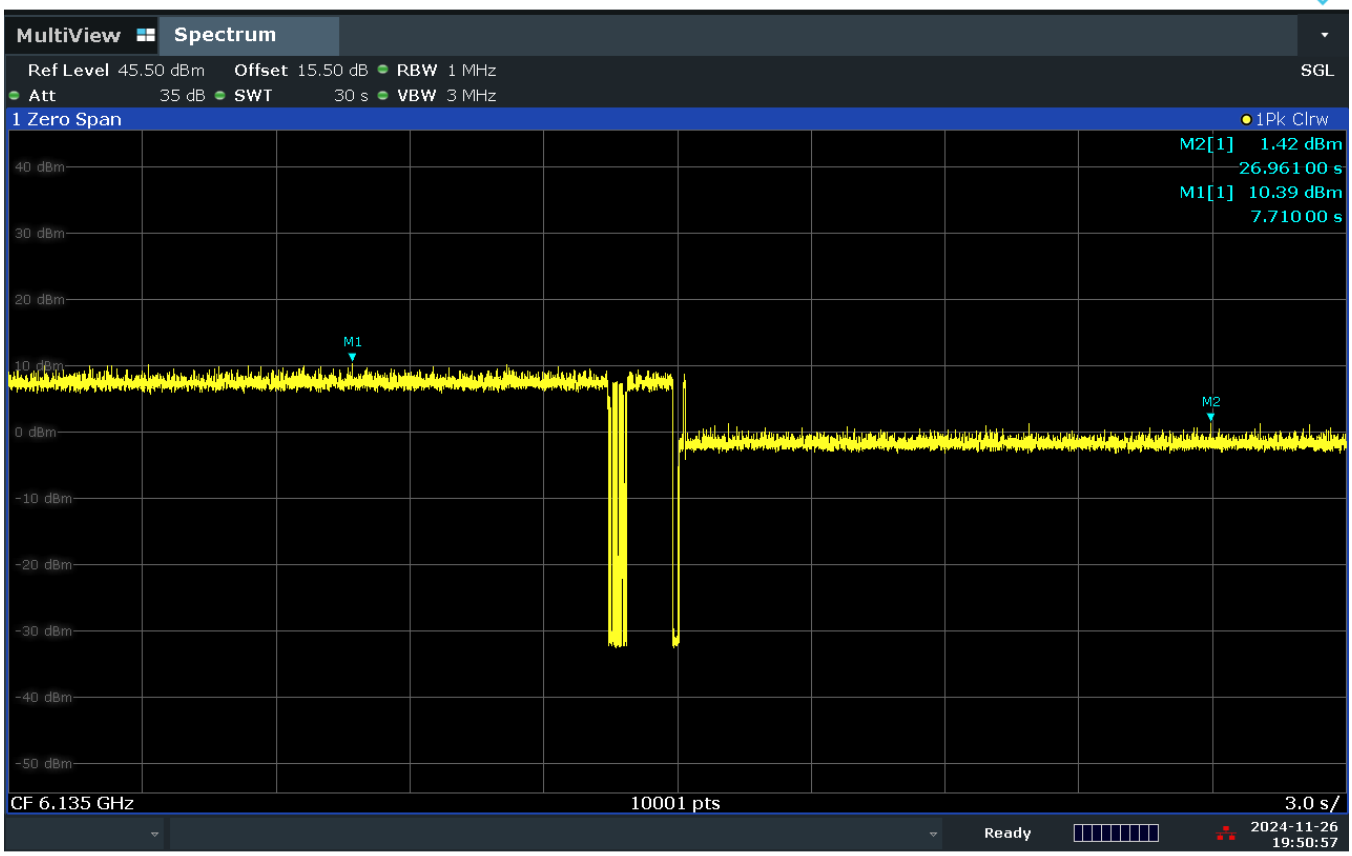


Figure 7-13. Test Instrument & Measurement Setup

Test Notes

1. Standard Power AP was set on highest power setting (36dBm EIRP)
2. Standard Power AP and Low Power Indoor AP were configured to transmit on same channel.
3. DUT was configured for SISO transmission so Antenna WF8 was measured.



07:50:58 PM 11/26/2024

Plot 7-710. Client device observation from Standard Power AP to Low Power Indoor AP

Antenna	Channel	Frequency (MHz)	Power Measured (dBm)	Antenna Gain (dBi)	Measured e.i.r.p (dBm)
WF8	37	6135	12.35	5.0	17.35

Table 7-152: EUT measured e.i.r.p when established with Standard Power AP

Antenna	Channel	Frequency (MHz)	Power Measured (dBm)	Antenna Gain (dBi)	Measured e.i.r.p (dBm)
WF8	37	6135	2.33	5.0	7.33

Table 7-153: EUT measured e.i.r.p when established with Low Power Indoor AP

8.0 CONCLUSION

The data collected relate only the item(s) tested and show that the **Apple Tablet Device FCC ID: BCGA3266** and **IC: 579C-A3266** is in compliance with Part 15 Subpart E (15.407) of the FCC Rules and RSS-248 of the Innovation, Science and Economic Development Canada Rules.