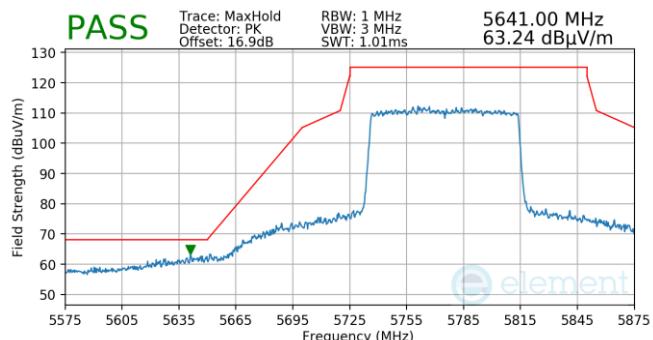
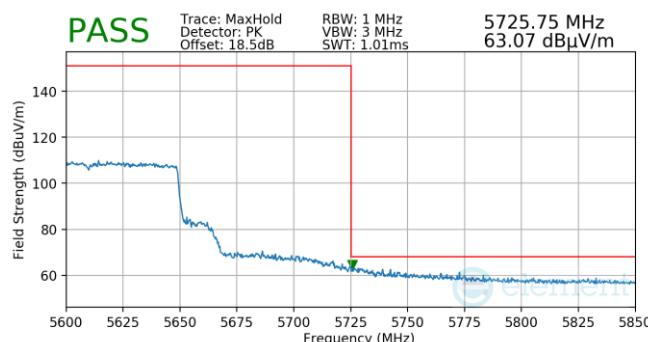


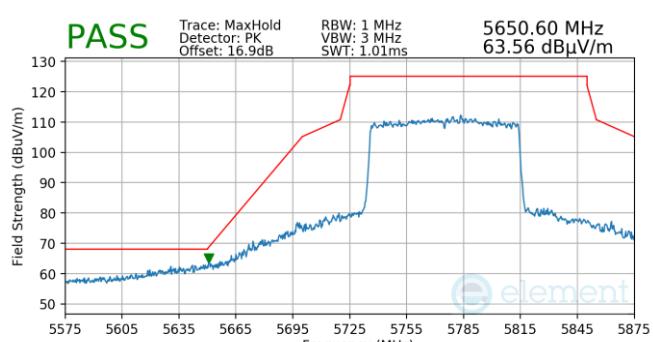
Plot 7-1213. (FCC Only) CDD (Pk, Ch.122, 802.11ax(SU), MCS2)



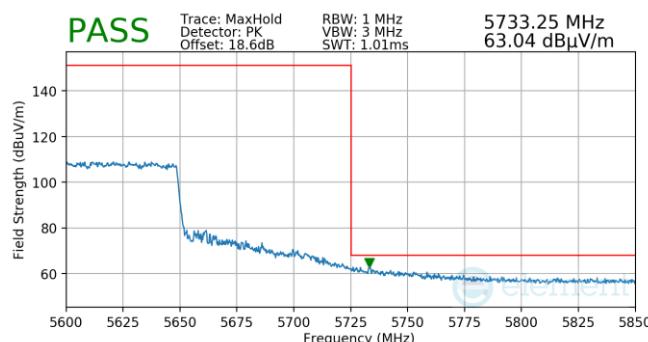
Plot 7-1216. CDD (Pk, Ch.155, 802.11ax(SU), MCS2)



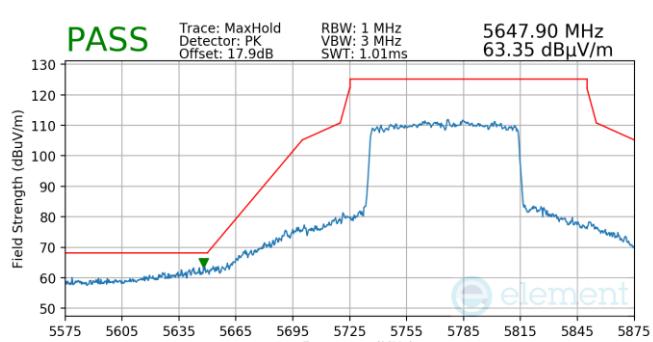
Plot 7-1214. (FCC Only) CDD (Pk, Ch.122, 802.11ax(SU), MCS4)



Plot 7-1217. CDD (Pk, Ch.155, 802.11ax(SU), MCS4)

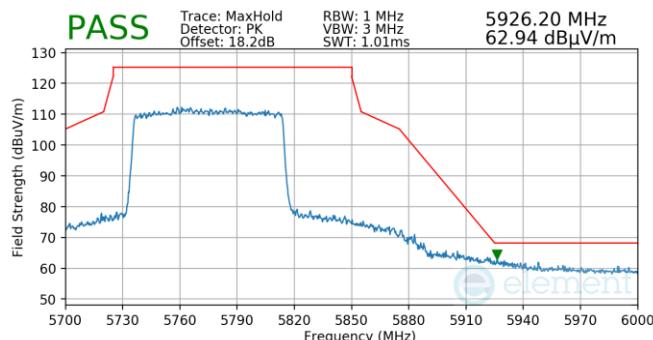


Plot 7-1215. (FCC Only) CDD (Pk, Ch.122, 802.11ax(SU), MCS11)

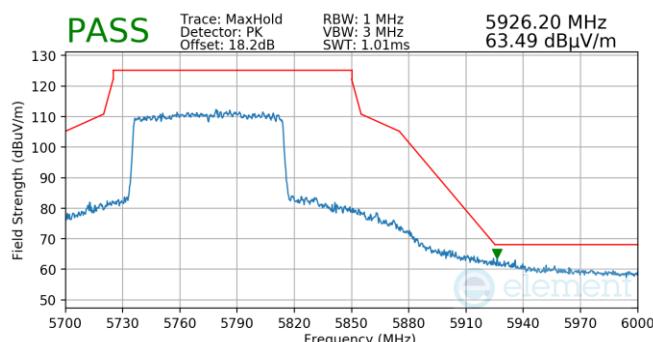


Plot 7-1218. CDD (Pk, Ch.155, 802.11ax(SU), MCS11)

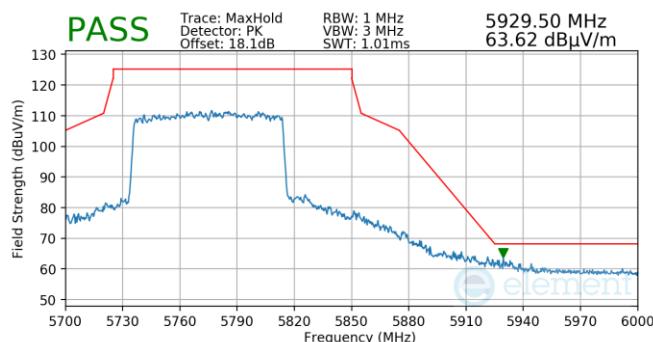
FCC ID: BCGA2435 IC: 579C-A2435	 element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090025-19.BCG	Test Dates: 05/31/2022-09/03/2022	EUT Type: Tablet Device	Page 373 of 389



Plot 7-1219. CDD (Pk, Ch.155, 802.11ax(SU), MCS2)



Plot 7-1220. CDD (Pk, Ch.155, 802.11ax(SU), MCS4)

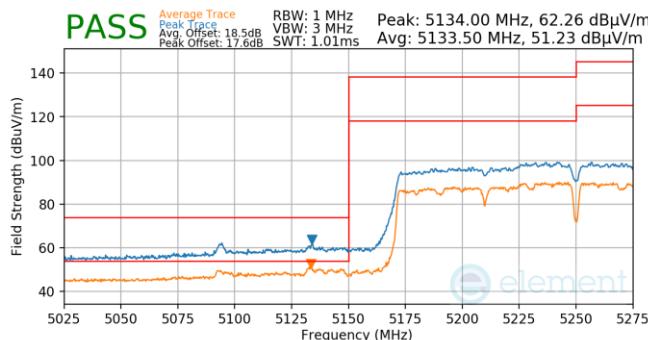


Plot 7-1221. CDD (Pk, Ch.155, 802.11ax(SU), MCS11)

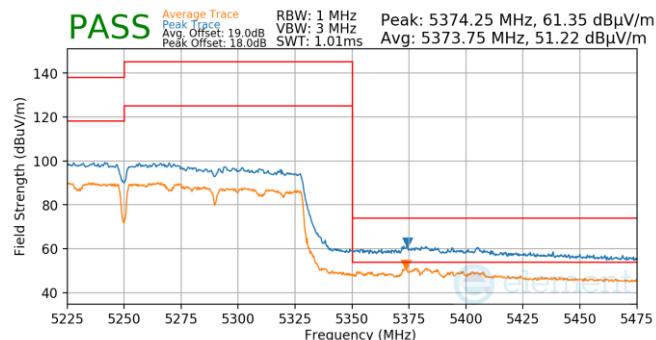
FCC ID: BCGA2435 IC: 579C-A2435	 element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090025-19.BCG	Test Dates: 05/31/2022-09/03/2022	EUT Type: Tablet Device	Page 374 of 389

7.6.15 CDD Radiated Band Edge Measurements (160MHz BW)

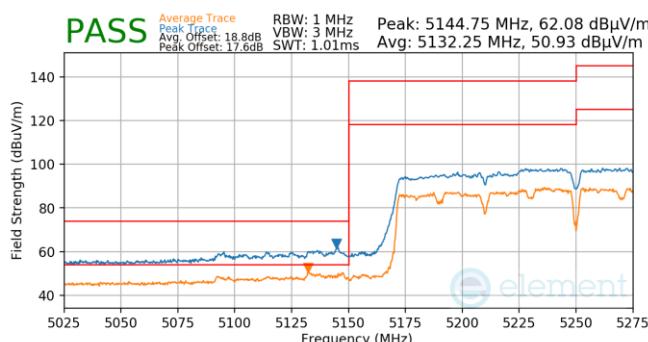
§15.407(b.1)(b.2) §15.205 §15.209; RSS-Gen [8.9]



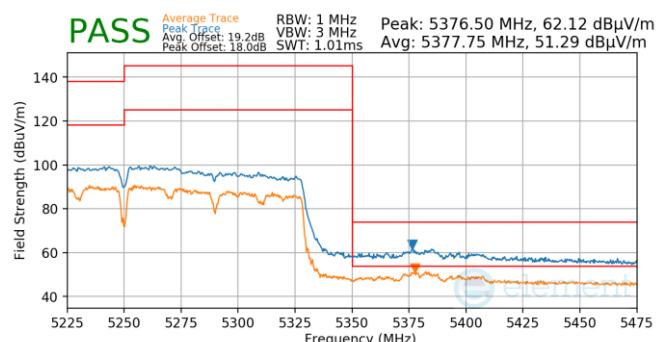
Plot 7-1222. CDD (Pk & Avg, Ch.50, 802.11ac, MCS2)



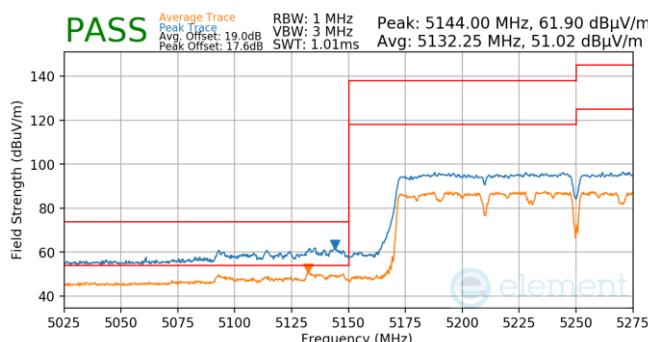
Plot 7-1225. CDD (Pk & Avg, Ch.50, 802.11ac, MCS2)



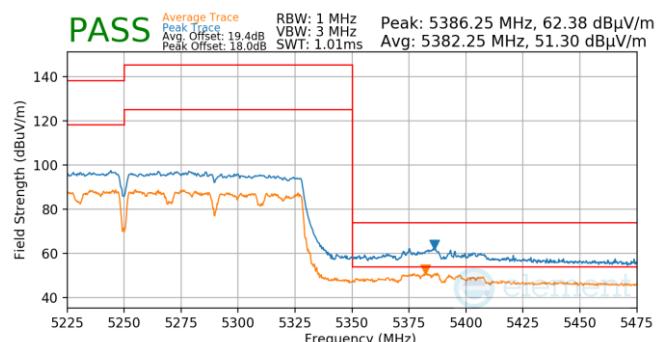
Plot 7-1223. CDD (Pk & Avg, Ch.50, 802.11ac, MCS4)



Plot 7-1226. CDD (Pk & Avg, Ch.50, 802.11ac, MCS4)

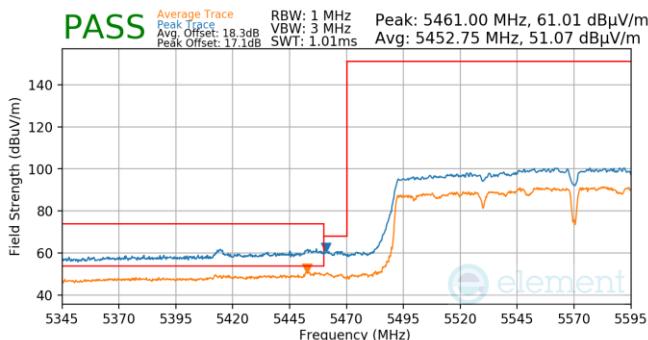


Plot 7-1224. CDD (Pk & Avg, Ch.50, 802.11ac, MCS9)

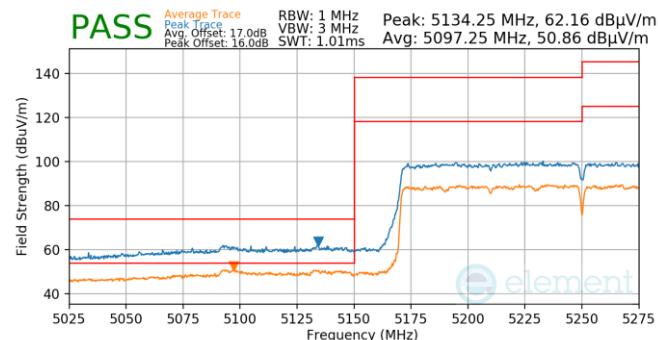


Plot 7-1227. CDD (Pk & Avg, Ch.50, 802.11ac, MCS9)

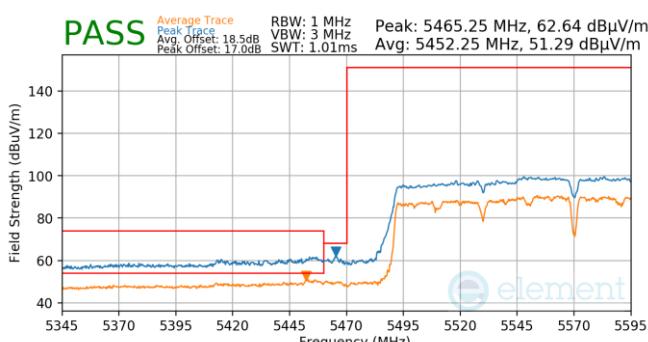
FCC ID: BCGA2435 IC: 579C-A2435	 element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090025-19.BCG	Test Dates: 05/31/2022-09/03/2022	EUT Type: Tablet Device	Page 375 of 389



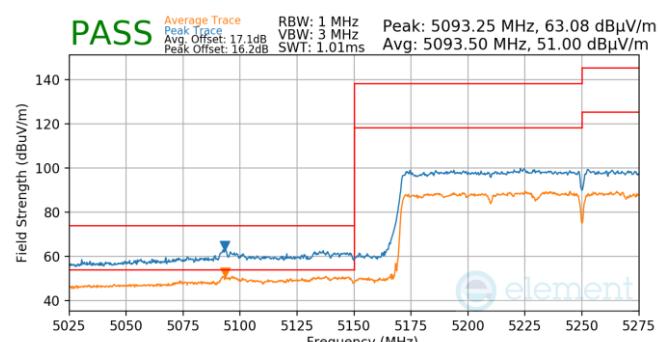
Plot 7-1228. CDD (FCC Only) (Pk & Avg, Ch.114, 802.11ac, MCS2)



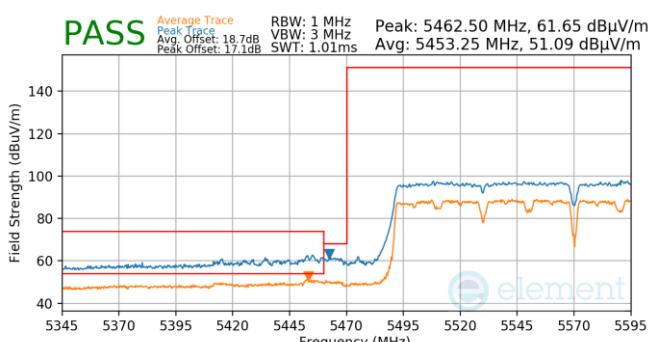
Plot 7-1231. CDD (Pk & Avg, Ch.50, 802.11ax(SU), MCS2)



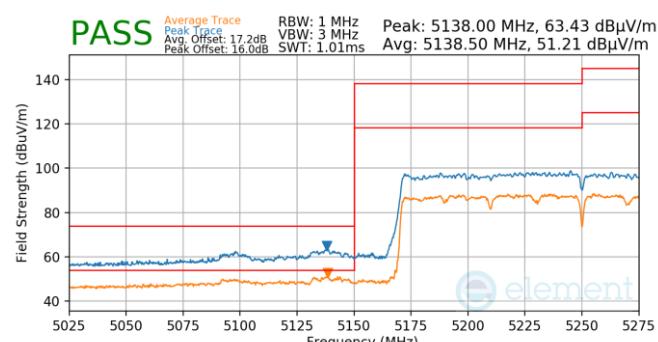
Plot 7-1229. CDD (FCC Only) (Pk & Avg, Ch.114, 802.11ac, MCS4)



Plot 7-1232. CDD (Pk & Avg, Ch.50, 802.11ax(SU), MCS4)

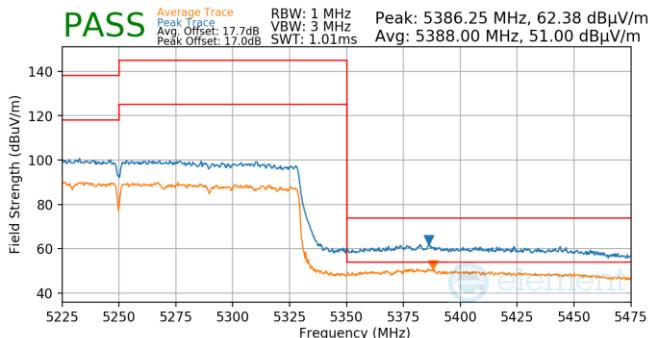


Plot 7-1230. CDD (FCC Only) (Pk & Avg, Ch.114, 802.11ac, MCS9)

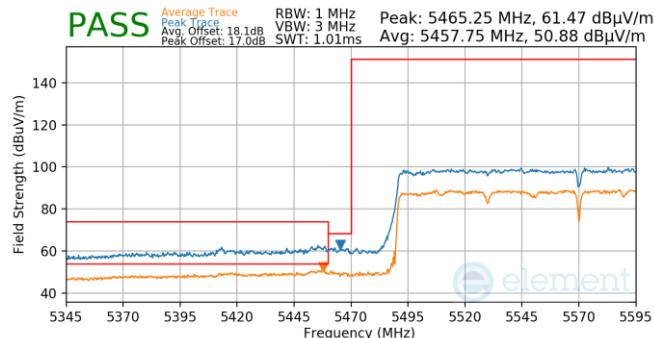


Plot 7-1233. CDD (Pk & Avg, Ch.50, 802.11ax(SU), MCS11)

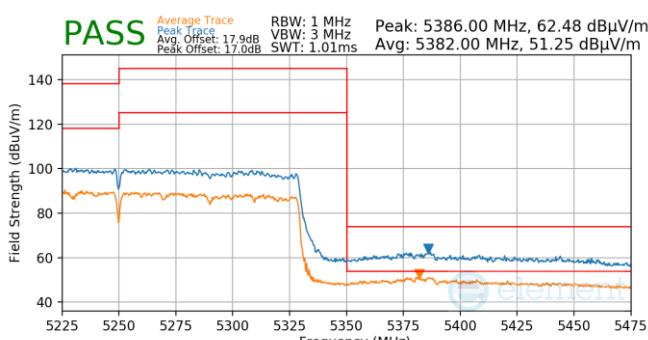
FCC ID: BCGA2435 IC: 579C-A2435		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090025-19.BCG	Test Dates: 05/31/2022-09/03/2022	EUT Type: Tablet Device	Page 376 of 389



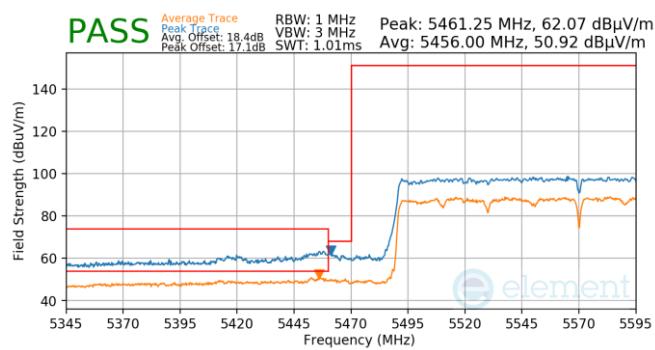
Plot 7-1234. CDD (Pk & Avg, Ch.50, 802.11ax(SU), MCS2)



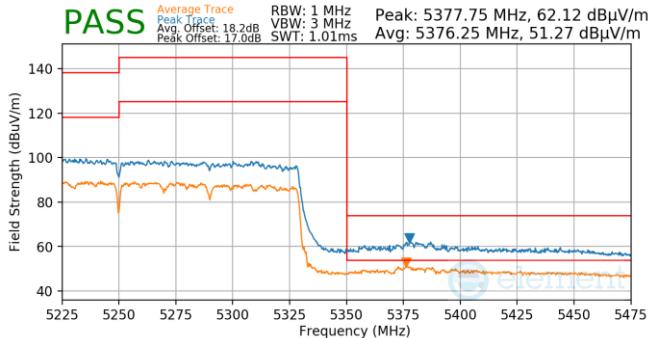
Plot 7-1237. CDD (FCC Only) (Pk & Avg, Ch.114, 802.11ax(SU), MCS12)



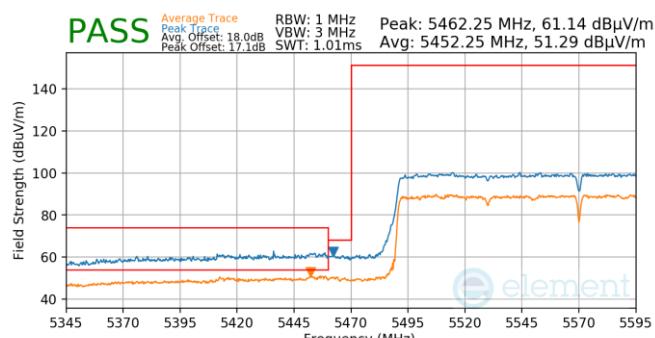
Plot 7-1235. CDD (Pk & Avg, Ch.50, 802.11ax(SU), MCS4)



Plot 7-1238. CDD (FCC Only) (Pk & Avg, Ch.114, 802.11ax(SU), MCS4)



Plot 7-1236. CDD (Pk & Avg, Ch.50, 802.11ax(SU), MCS11)



Plot 7-1239. CDD (FCC Only) (Pk & Avg, Ch.114, 802.11ax(SU), MCS9)

FCC ID: BCGA2435 IC: 579C-A2435	 element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090025-19.BCG	Test Dates: 05/31/2022-09/03/2022	EUT Type: Tablet Device	Page 377 of 389

7.7 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 7-216 per Section 15.209 and RSS-Gen (8.9).

Frequency	Field Strength [μ V/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 7-216. 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

7. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
8. RBW = 120kHz (for emissions from 30MHz – 1GHz)
9. VBW = 300kHz
10. Detector = quasi-peak
11. Sweep time = auto couple
12. Trace mode = max hold

FCC ID: BCGA2435 IC: 579C-A2435	e element		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090025-19.BCG	Test Dates: 05/31/2022-09/03/2022	EUT Type: Tablet Device	Page 378 of 389	

13. Trace was allowed to stabilize

Test Setup

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

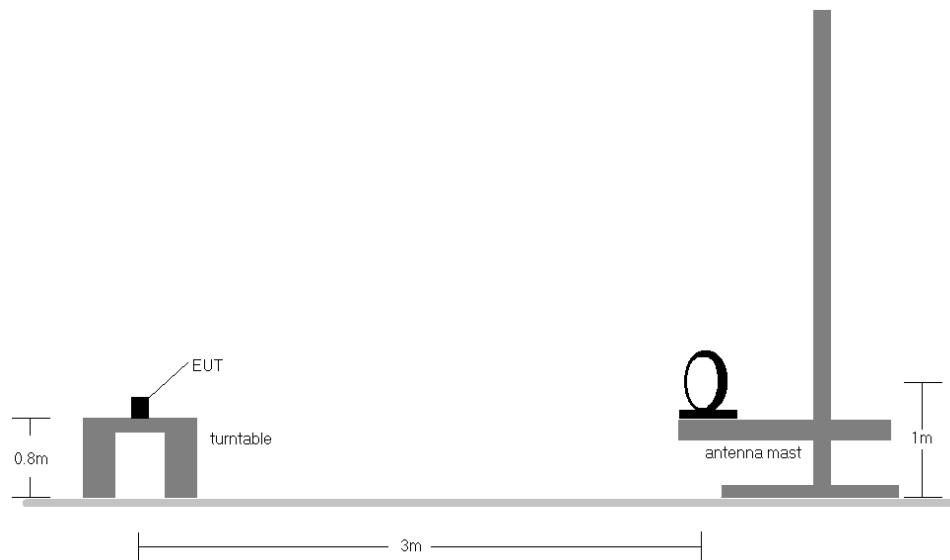


Figure 7-6. Radiated Test Setup < 30MHz

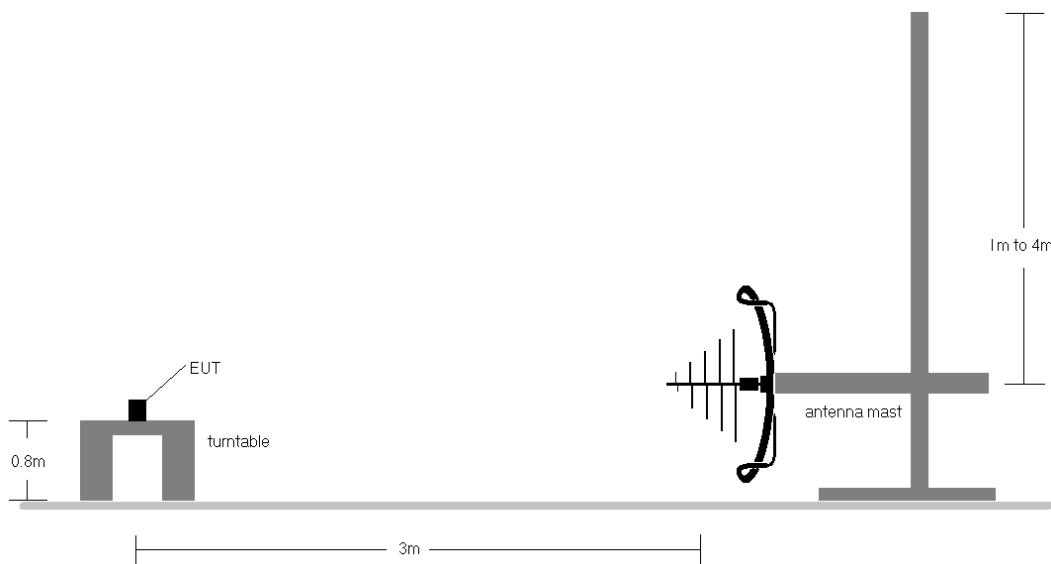


Figure 7-7. Radiated Test Setup < 1GHz

FCC ID: BCGA2435 IC: 579C-A2435		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090025-19.BCG	Test Dates: 05/31/2022-09/03/2022	EUT Type: Tablet Device	Page 379 of 389

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 7-216.
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

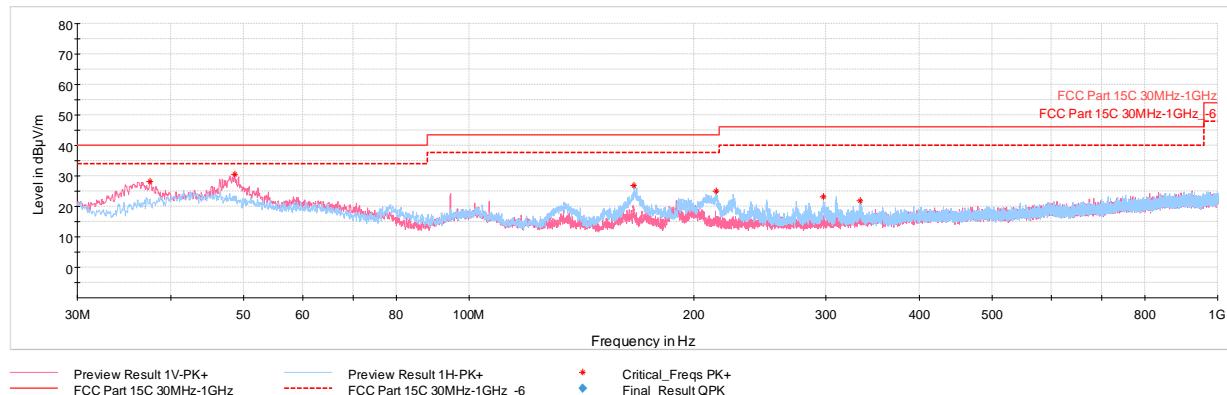
Determining Spurious Emissions Levels

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

FCC ID: BCGA2435 IC: 579C-A2435	 element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090025-19.BCG	Test Dates: 05/31/2022-09/03/2022	EUT Type: Tablet Device	Page 380 of 389

CDD/SDM Radiated Spurious Emissions Measurements (Below 1GHz)

§15.209; RSS-Gen [8.9]

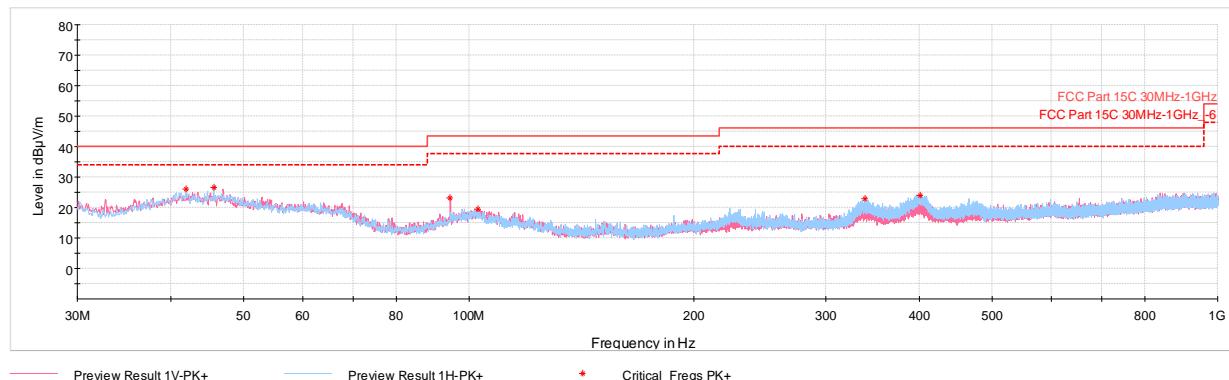


Plot 7-1240. Radiated Spurious Emissions below 1GHz SDM, 802.11n, Ch.36 with AC/DC Adapter

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]
37.52	Max-Peak	V	100	255	-60.69	-18.10	28.21	40.00	-11.79
48.67	Max-Peak	V	100	15	-61.00	-15.49	30.51	40.00	-9.49
166.19	Max-Peak	H	200	20	-59.85	-20.19	26.96	43.52	-16.56
214.06	Max-Peak	H	100	209	-64.04	-17.90	25.06	43.52	-18.46
297.77	Max-Peak	H	100	8	-68.49	-15.39	23.12	46.02	-22.90
333.32	Max-Peak	H	100	15	-70.86	-14.22	21.92	46.02	-24.10

Table 7-217. Radiated Spurious Emissions below 1GHz, 802.11n, Ch.36 with AC/DC Adapter

FCC ID: BCGA2435 IC: 579C-A2435	 element MEASUREMENT REPORT (CERTIFICATION)			Approved by: Technical Manager
Test Report S/N: 1C2205090025-19.BCG	Test Dates: 05/31/2022-09/03/2022	EUT Type: Tablet Device	Page 381 of 389	



Plot 7-1241. Radiated Spurious Emissions below 1GHz SDM, 802.11ax (SU), Ch.36 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]
41.88	Max-Peak	H	100	8	-64.49	-16.38	26.13	40.00	-13.87
45.67	Max-Peak	H	300	111	-64.69	-15.82	26.49	40.00	-13.51
94.46	Max-Peak	V	100	135	-64.68	-19.06	23.26	43.52	-20.26
102.75	Max-Peak	V	300	264	-69.78	-17.71	19.51	43.52	-24.01
338.07	Max-Peak	H	100	15	-70.00	-14.07	22.93	46.02	-23.09
400.15	Max-Peak	H	100	105	-70.55	-12.52	23.93	46.02	-22.09

Table 7-218. Radiated Spurious Emissions below 1GHz, 802.11ax (SU), Ch.36 with AC/DC Adapter

FCC ID: BCGA2435 IC: 579C-A2435	 MEASUREMENT REPORT (CERTIFICATION)			Approved by: Technical Manager
Test Report S/N: 1C2205090025-19.BCG	Test Dates: 05/31/2022-09/03/2022	EUT Type: Tablet Device	Page 382 of 389	

7.8 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 (dB μ V)	
	Quasi-peak	Average
0.15 – 0.5	66 to 56*	56 to 46*
0.5 – 5	56	46
5 – 30	60	50

Table 7-219. Conducted Limits

*Decreases with the logarithm of the frequency.

Test Procedures Used

ANSI C63.10-2013, 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

FCC ID: BCGA2435 IC: 579C-A2435	 element		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090025-19.BCG	Test Dates: 05/31/2022-09/03/2022	EUT Type: Tablet Device		Page 383 of 389

Test Setup

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

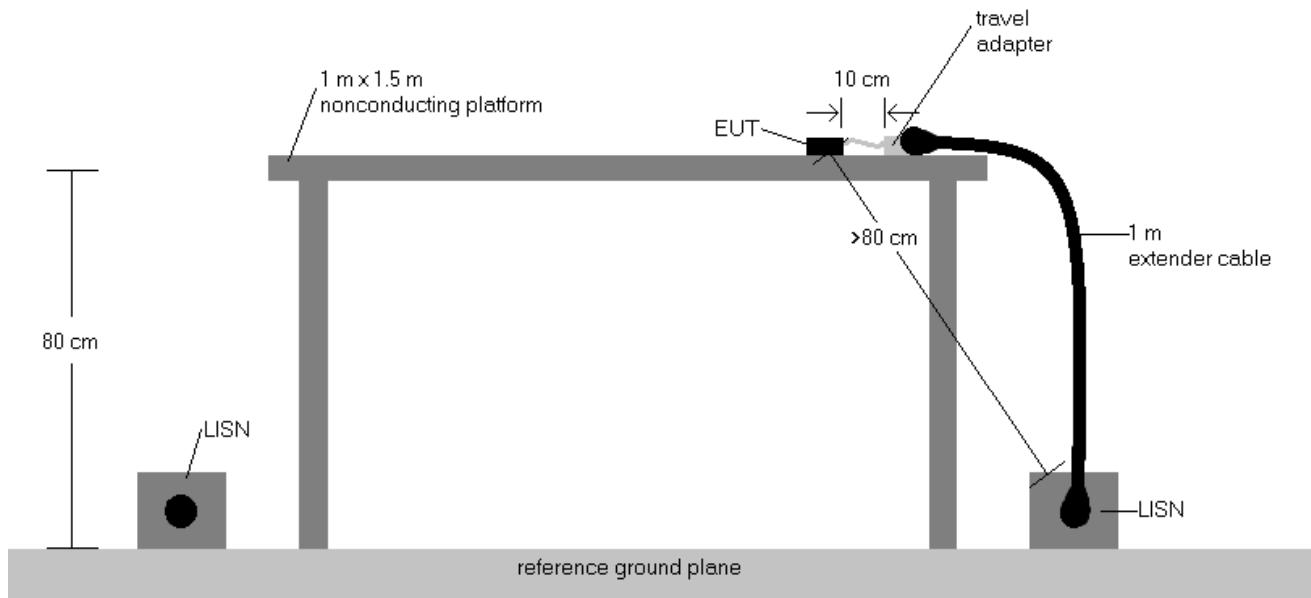
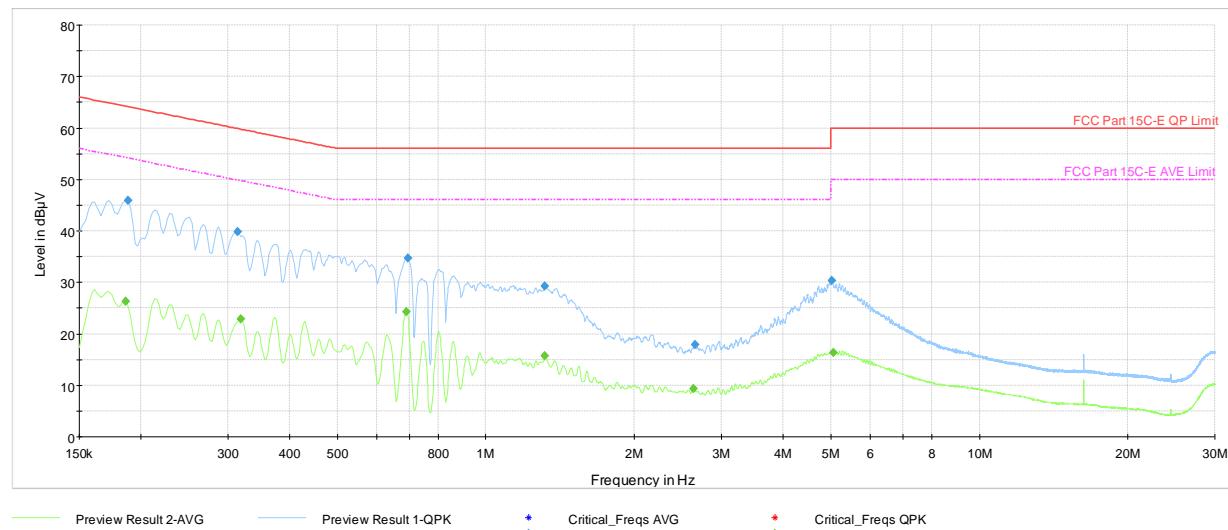


Figure 7-8. Test Instrument & Measurement Setup

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 (dB μ V) = QP/AV Analyzer/Receiver Level (dB μ V) + Correction Factor (dB)
6. Margin (dB) = QP/AV Level (dB μ V) - QP/AV Limit (dB μ V)
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.

FCC ID: BCGA2435 IC: 579C-A2435	 element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090025-19.BCG	Test Dates: 05/31/2022-09/03/2022	EUT Type: Tablet Device	Page 384 of 389

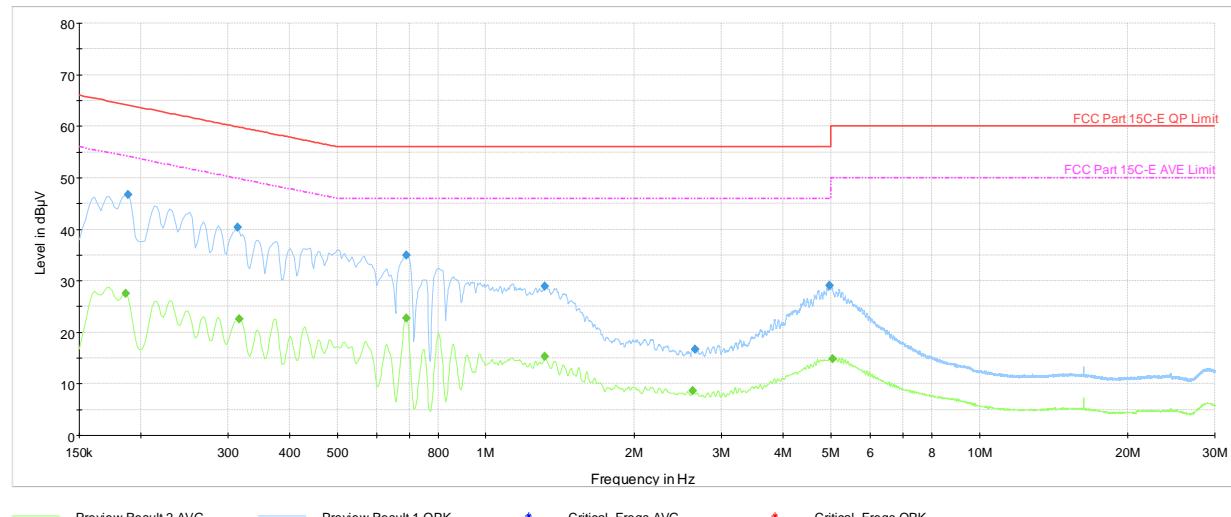


Plot 7-1242. AC Line Conducted Plot with 802.11n SDM – Ch.36 (L1), with AC/DC adapter

Frequency [MHz]	Process State	QuasiPeak [dB μ V]	Average [dB μ V]	Limit [dB μ V]	Margin [dB]	Line	PE
0.186	FINAL	—	26.35	54.21	-27.86	L1	GND
0.188	FINAL	45.9	—	64.11	-18.24	L1	GND
0.314	FINAL	39.9	—	59.86	-19.96	L1	GND
0.319	FINAL	—	22.94	49.74	-26.80	L1	GND
0.690	FINAL	—	24.32	46.00	-21.68	L1	GND
0.695	FINAL	34.6	—	56.00	-21.36	L1	GND
1.318	FINAL	29.2	—	56.00	-26.77	L1	GND
1.318	FINAL	—	15.70	46.00	-30.30	L1	GND
2.639	FINAL	—	9.36	46.00	-36.64	L1	GND
2.657	FINAL	17.9	—	56.00	-38.13	L1	GND
5.015	FINAL	30.4	—	60.00	-29.65	L1	GND
5.064	FINAL	—	16.41	50.00	-33.59	L1	GND

Table 7-220. AC Line Conducted Data with 802.11n – Ch.36 (L1) with AC/DC adapter

FCC ID: BCGA2435 IC: 579C-A2435	 element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090025-19.BCG	Test Dates: 05/31/2022-09/03/2022	EUT Type: Tablet Device	Page 385 of 389

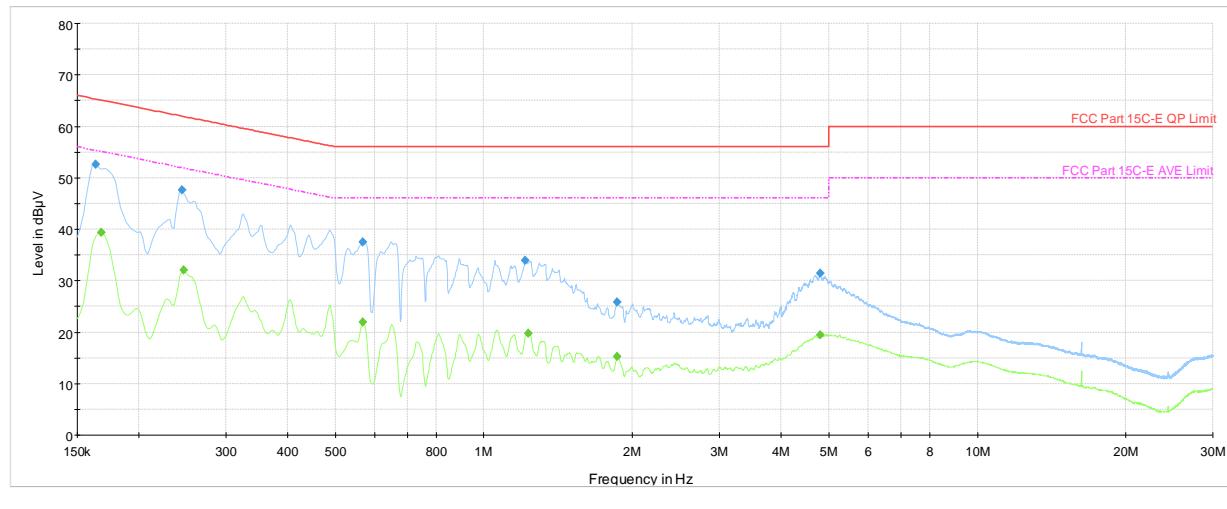


Plot 7-1243. AC Line Conducted Plot with 802.11n SDM – Ch.36 (N), with AC/DC adapter

Frequency [MHz]	Process State	QuasiPeak [dBμV]	Average [dBμV]	Limit [dBμV]	Margin [dB]	Line	PE
0.186	FINAL	—	27.55	54.21	-26.66	N	GND
0.188	FINAL	46.7	—	64.11	-17.40	N	GND
0.314	FINAL	40.4	—	59.86	-19.50	N	GND
0.317	FINAL	—	22.61	49.80	-27.19	N	GND
0.690	FINAL	34.9	—	56.00	-21.08	N	GND
0.690	FINAL	—	22.76	46.00	-23.24	N	GND
1.318	FINAL	29.0	—	56.00	-27.03	N	GND
1.318	FINAL	—	15.34	46.00	-30.66	N	GND
2.625	FINAL	—	8.65	46.00	-37.35	N	GND
2.650	FINAL	16.8	—	56.00	-39.23	N	GND
4.972	FINAL	29.1	—	56.00	-26.87	N	GND
5.039	FINAL	—	14.81	50.00	-35.19	N	GND

Table 7-221. AC Line Conducted Data with 802.11n – Ch.36 (N), with AC/DC adapter

FCC ID: BCGA2435 IC: 579C-A2435		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090025-19.BCG	Test Dates: 05/31/2022-09/03/2022	EUT Type: Tablet Device	Page 386 of 389

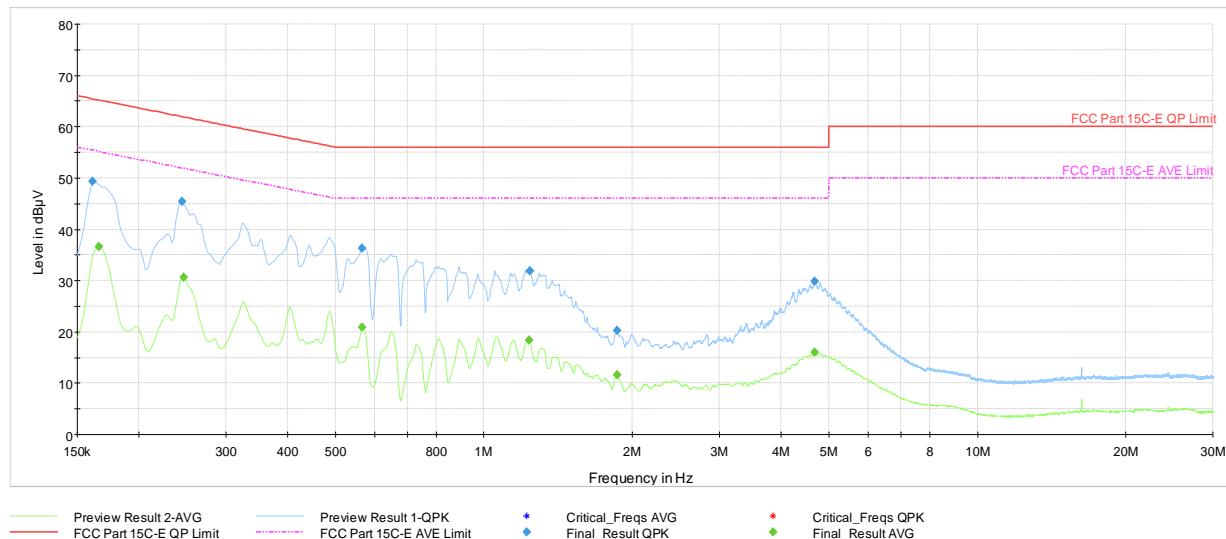


Plot 7-1244. AC Line Conducted Plot with 802.11ax(SU) SDM – Ch.36 (L1), with AC/DC adapter

Frequency [MHz]	Process State	QuasiPeak [dBμV]	Average [dBμV]	Limit [dBμV]	Margin [dB]	Line	PE
0.164	FINAL	52.6	—	65.28	-15.73	L1	GND
0.168	FINAL	—	39.32	55.06	-14.25	L1	GND
0.245	FINAL	47.7	—	61.94	-19.74	L1	GND
0.247	FINAL	—	32.13	51.87	-24.00	L1	GND
0.569	FINAL	—	22.00	46.00	-18.55	L1	GND
0.569	FINAL	37.5	—	56.00	-22.13	L1	GND
1.214	FINAL	33.9	—	56.00	-26.27	L1	GND
1.230	FINAL	—	19.73	46.00	-30.09	L1	GND
1.860	FINAL	25.9	—	56.00	-30.77	L1	GND
1.865	FINAL	—	15.23	46.00	-30.55	L1	GND
4.805	FINAL	—	19.45	46.00	-24.55	L1	GND
4.810	FINAL	31.5	—	56.00	-24.55	L1	GND

Table 7-222. AC Line Conducted Data with 802.11ax(SU) – Ch.36 (L1) with AC/DC adapter

FCC ID: BCGA2435 IC: 579C-A2435	 element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090025-19.BCG	Test Dates: 05/31/2022-09/03/2022	EUT Type: Tablet Device	Page 387 of 389



Plot 7-1245. AC Line Conducted Plot with 802.11ax(SU) SDM – Ch.36 (N), with AC/DC adapter

Frequency [MHz]	Process State	QuasiPeak [dB μ V]	Average [dB μ V]	Limit [dB μ V]	Margin [dB]	Line	PE
0.161	FINAL	49.3	—	65.40	-16.08	N	GND
0.166	FINAL	—	36.59	55.17	-18.58	N	GND
0.245	FINAL	45.4	—	61.94	-16.52	N	GND
0.247	FINAL	—	30.64	51.87	-21.23	N	GND
0.566	FINAL	36.3	—	56.00	-19.66	N	GND
0.566	FINAL	—	20.90	46.00	-25.10	N	GND
1.235	FINAL	—	18.43	46.00	-27.57	N	GND
1.241	FINAL	32.0	—	56.00	-24.05	N	GND
1.860	FINAL	20.3	—	56.00	-35.68	N	GND
1.860	FINAL	—	11.56	46.00	-34.44	N	GND
4.670	FINAL	—	16.00	46.00	-30.00	N	GND
4.673	FINAL	29.9	—	56.00	-26.13	N	GND

Table 7-223. AC Line Conducted Data with 802.11ax(SU) SDM – Ch.36 (N), with AC/DC adapter

FCC ID: BCGA2435 IC: 579C-A2435	 element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090025-19.BCG	Test Dates: 05/31/2022-09/03/2022	EUT Type: Tablet Device	Page 388 of 389

8.0 CONCLUSION

The data collected relate only the item(s) tested and show that the **Apple Tablet Device**

FCC ID: BCGA2435 and IC: 579C-A2435 is in compliance with Part 15 Subpart E (15.407) of the FCC Rules and RSS-247 of the Innovation, Science and Economic Development Canada Rules.

FCC ID: BCGA2435 IC: 579C-A2435	 element		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090025-19.BCG	Test Dates: 05/31/2022-09/03/2022	EUT Type: Tablet Device		Page 389 of 389