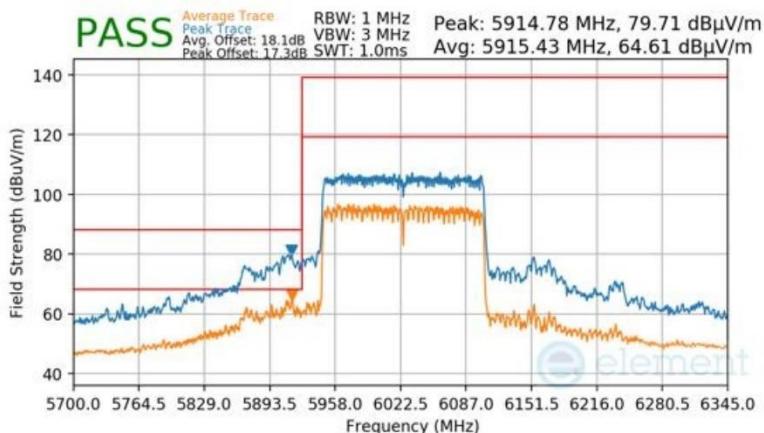


7.7.22 CDD Diversity Radiated Band Edge Measurements (160MHz BW)

Mode 802.11ax-SU
Data Rate MCS11
Distance of Measurement 3 Meters
Operating Frequency 6025MHz
Channel 15

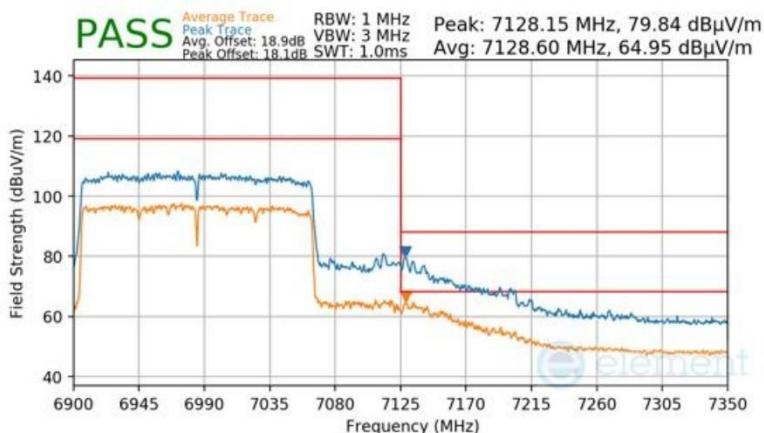
Mode 802.11ax-SU
Data Rate MCS11
Distance of Measurement 3 Meters
Operating Frequency 6025MHz
Channel 15



Plot 7-626 CDD Diversity Radiated Lower Band Edge (Peak & Average – UNII Band 5)

Mode 802.11ax-SU
Data Rate MCS11
Distance of Measurement 3 Meters
Operating Frequency 6985MHz
Channel 207

Mode 802.11ax-SU
Data Rate MCS11
Distance of Measurement 3 Meters
Operating Frequency 6985MHz
Channel 207



Plot 7-627 CDD Diversity Radiated Upper Band Edge (Peak & Average – UNII Band 8)

FCC ID: BCGA3267 IC: 579C-A3267	 element MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1C2410210073-23.BCG	Test Dates: 10/25/2024 - 1/6/2025	EUT Type: Tablet Device	Page 250 of 262

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 7-96 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 7-96. 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

FCC ID: BCGA3267 IC: 579C-A3267	 element		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2410210073-23.BCG	Test Dates: 10/25/2024 - 1/6/2025	EUT Type: Tablet Device		Page 251 of 262

Test Setup

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

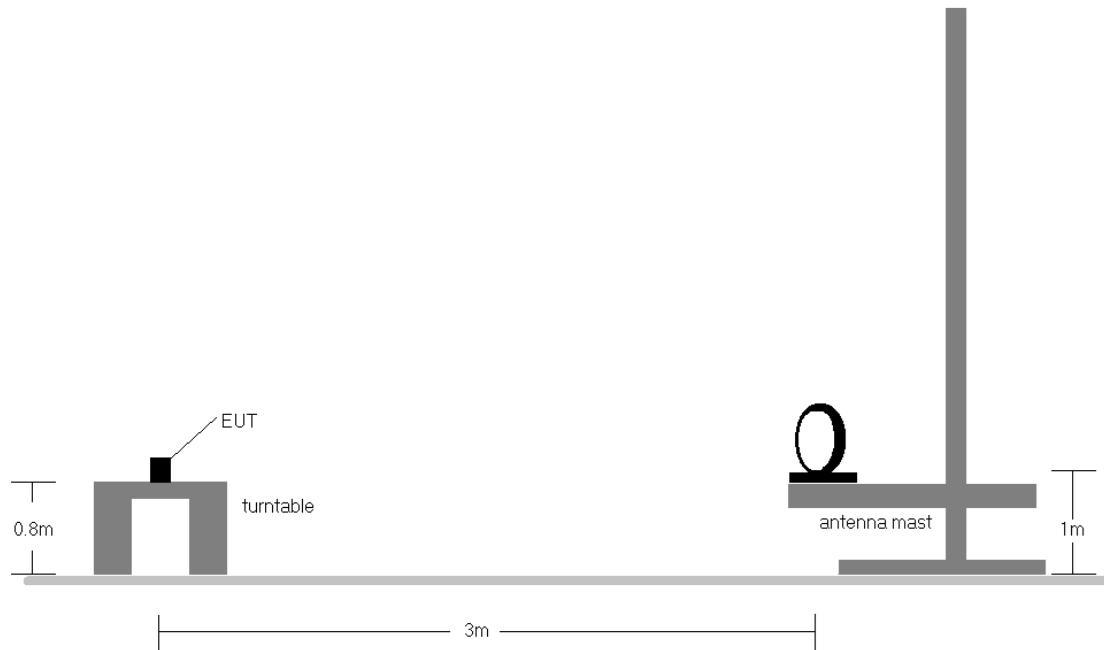


Figure 7-7. Radiated Test Setup < 30MHz

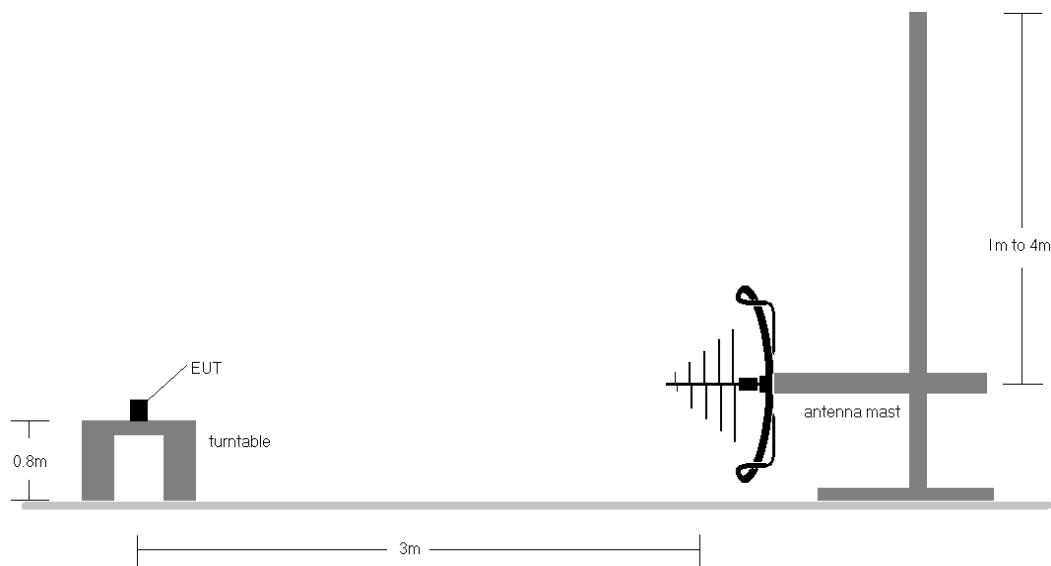


Figure 7-8. Radiated Test Setup < 1GHz

FCC ID: BCGA3267 IC: 579C-A3267	 element		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2410210073-23.BCG	Test Dates: 10/25/2024 - 1/6/2025	EUT Type: Tablet Device		Page 252 of 262

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 7-96.
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. The wide spectrum spurious emissions plots shown on the following pages are used only for the purpose of emission identification.
10. 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
11. All antenna configurations were investigated and only the worst case is reported.
12. The unit was tested with all possible modes and only the highest emission is reported.

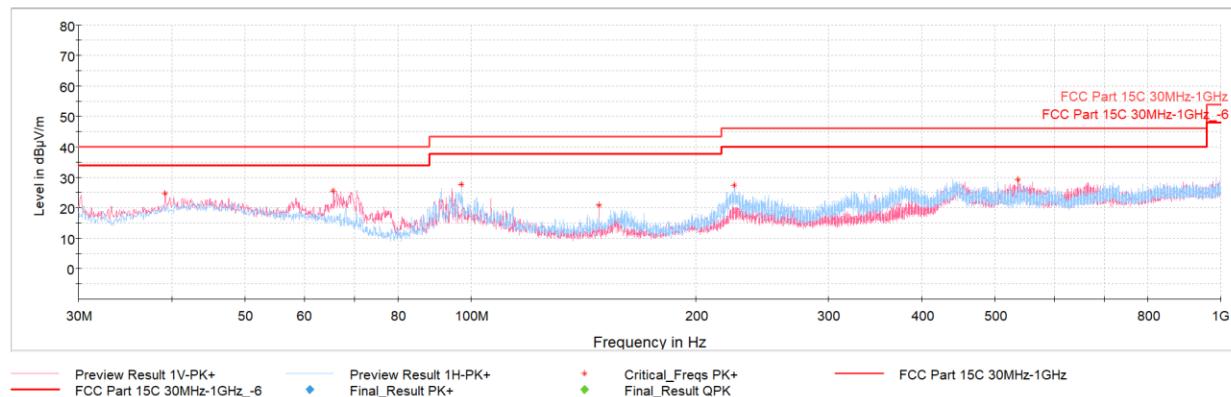
Sample Calculations

Determining Spurious Emissions Levels

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

FCC ID: BCGA3267 IC: 579C-A3267	 element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2410210073-23.BCG	Test Dates: 10/25/2024 - 1/6/2025	EUT Type: Tablet Device	Page 253 of 262

7.8.1 CDD Primary Radiated Spurious Emissions Measurements (Below 1GHz)



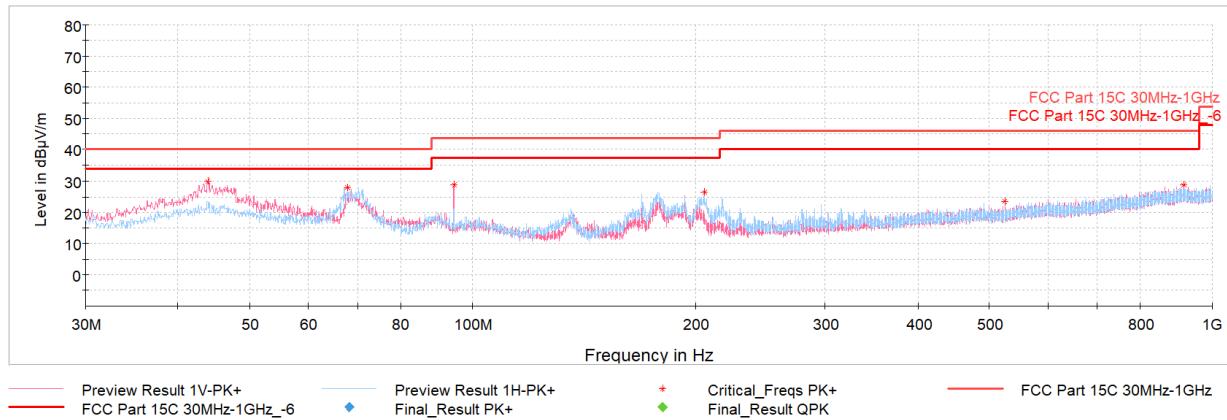
Plot 7-628. Radiated Spurious Emissions below 1GHz CDD Primary, 802.11ax, Ch.1 with AC/DC adapter via USB-C cable with wire charger

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]
39.17	Max-Peak	V	100	234	-75.67	-16.10	15.23	40.00	-24.77
65.65	Max-Peak	V	100	265	-75.09	-17.52	14.39	40.00	-25.61
97.17	Max-Peak	H	200	267	-74.17	-16.88	15.95	43.52	-27.57
148.29	Max-Peak	V	100	121	-64.45	-19.78	22.77	43.52	-20.75
225.02	Max-Peak	H	100	234	-72.82	-15.45	18.73	46.02	-27.29
536.39	Max-Peak	V	100	217	-82.03	-8.16	16.81	46.02	-29.21

Table 7-97. Radiated Spurious Emissions Measurement below 1GHz CDD Primary, 802.11ax, Ch.1 with AC/DC adapter via USB-C cable with wire charger

FCC ID: BCGA3267 IC: 579C-A3267	 element	MEASUREMENT REPORT (CERTIFICATION)			Approved by: Technical Manager
Test Report S/N: 1C2410210073-23.BCG	Test Dates: 10/25/2024 - 1/6/2025	EUT Type: Tablet Device			

7.8.2 CDD Diversity Radiated Spurious Emissions Measurements (Below 1GHz)



Plot 7-629. Radiated Spurious Emissions below 1GHz CDD Diversity, 802.11ax, Ch.1 with host PC 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]
43.92	Max-Peak	V	100	261	-62.38	-14.75	29.87	40.00	-10.13
67.78	Max-Peak	H	300	292	-60.80	-18.33	27.87	40.00	-12.13
94.51	Max-Peak	V	100	202	-60.92	-17.47	28.61	43.52	-14.91
205.96	Max-Peak	H	100	325	-64.30	-16.47	26.23	43.52	-17.29
524.70	Max-Peak	V	300	114	-75.06	-8.50	23.44	46.02	-22.58
915.56	Max-Peak	V	300	184	-76.94	-1.42	28.64	46.02	-17.38

Table 7-98. Radiated Spurious Emissions Measurement below 1GHz CDD Diversity, 802.11ax, Ch.1 with host PC via USB-C cable with wire charger

FCC ID: BCGA3267 IC: 579C-A3267	 element MEASUREMENT REPORT (CERTIFICATION)			Approved by: Technical Manager
Test Report S/N: 1C2410210073-23.BCG	Test Dates: 10/25/2024 - 1/6/2025	EUT Type: Tablet Device	Page 255 of 262	

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 (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 7-99. 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

FCC ID: BCGA3267 IC: 579C-A3267	element		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2410210073-23.BCG	Test Dates: 10/25/2024 - 1/6/2025	EUT Type: Tablet Device	Page 256 of 262	

Test Setup

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

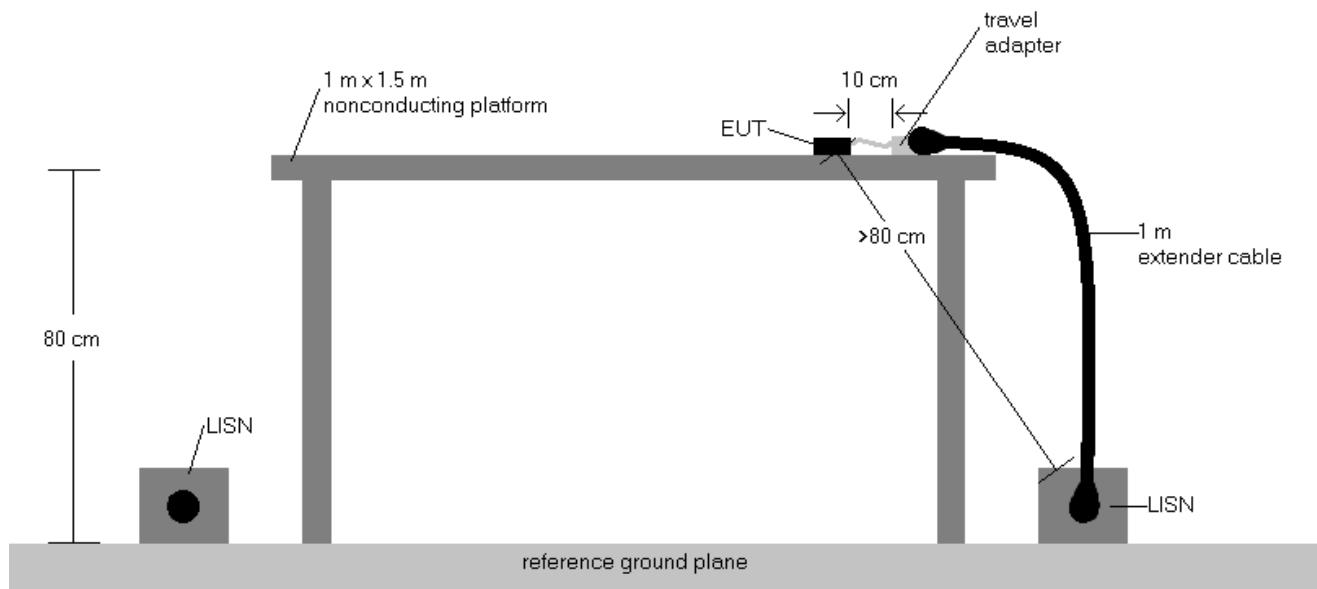
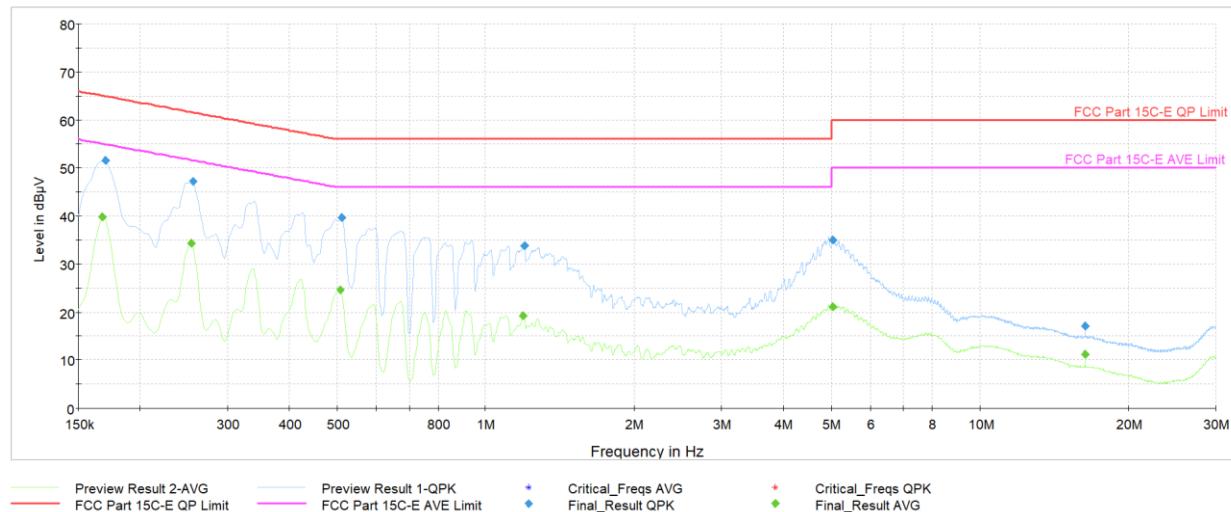


Figure 7-9. Test Instrument & Measurement Setup

Test Notes

1. 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: BCGA3267 IC: 579C-A3267	 element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2410210073-23.BCG	Test Dates: 10/25/2024 - 1/6/2025	EUT Type: Tablet Device	Page 257 of 262

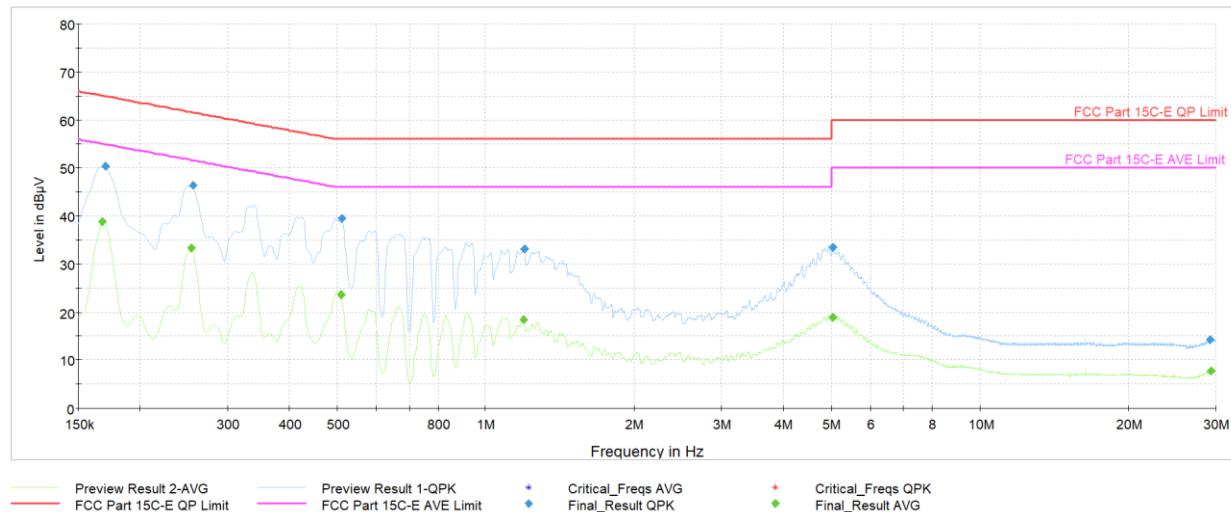


Plot 7-630. AC Line Conducted Plot with 802.11ax CDD Primary – Ch.1 (L1), with AC/DC adaptor via USB-C cable with wire charger

Frequency [MHz]	Process State	QuasiPeak [dBμV]	Average [dBμV]	Limit [dBμV]	Margin [dB]	Line	PE
0.168	FINAL	—	39.80	55.06	-15.26	L1	GND
0.170	FINAL	51.5	—	64.95	-13.45	L1	GND
0.254	FINAL	—	34.29	51.64	-17.35	L1	GND
0.256	FINAL	47.2	—	61.57	-14.35	L1	GND
0.508	FINAL	—	24.62	46.00	-21.38	L1	GND
0.512	FINAL	39.6	—	56.00	-16.40	L1	GND
1.192	FINAL	—	19.19	46.00	-26.81	L1	GND
1.199	FINAL	33.8	—	56.00	-22.19	L1	GND
5.033	FINAL	35.0	—	60.00	-25.01	L1	GND
5.037	FINAL	—	21.10	50.00	-28.90	L1	GND
16.346	FINAL	—	11.25	50.00	-38.75	L1	GND
16.348	FINAL	17.0	—	60.00	-43.00	L1	GND

Table 7-100. AC Line Conducted Data with 802.11ax CDD Primary – Ch. 1 (L1) with AC/DC adaptor via USB-C cable with wire charger

FCC ID: BCGA3267 IC: 579C-A3267	 element	MEASUREMENT REPORT (CERTIFICATION)			Approved by: Technical Manager
Test Report S/N: 1C2410210073-23.BCG	Test Dates: 10/25/2024 - 1/6/2025	EUT Type: Tablet Device			

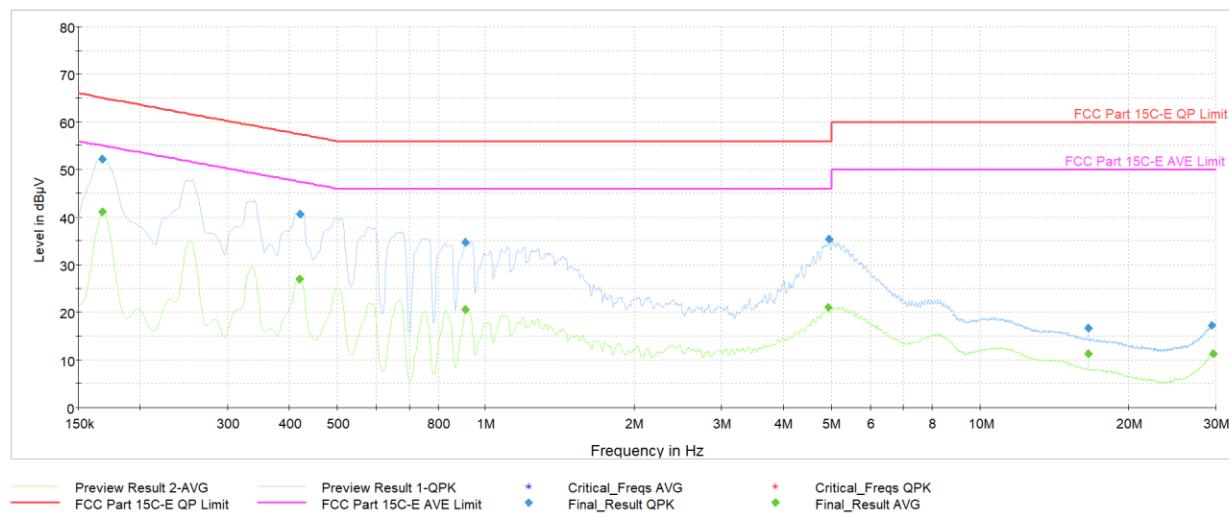


Plot 7-631. AC Line Conducted Plot with 802.11ax CDD Primary – Ch. 1 (N), with AC/DC adaptor via USB-C cable with wire charger

Frequency [MHz]	Process State	QuasiPeak [dBμV]	Average [dBμV]	Limit [dBμV]	Margin [dB]	Line	PE
0.168	FINAL	—	38.82	55.06	-16.24	N	GND
0.170	FINAL	50.3	—	64.95	-14.62	N	GND
0.254	FINAL	—	33.38	51.64	-18.26	N	GND
0.256	FINAL	46.4	—	61.57	-15.20	N	GND
0.510	FINAL	—	23.56	46.00	-22.44	N	GND
0.512	FINAL	39.5	—	56.00	-16.48	N	GND
1.194	FINAL	—	18.44	46.00	-27.56	N	GND
1.199	FINAL	33.2	—	56.00	-22.80	N	GND
5.039	FINAL	33.4	—	60.00	-26.61	N	GND
5.039	FINAL	—	18.98	50.00	-31.02	N	GND
29.236	FINAL	14.2	—	60.00	-45.83	N	GND
29.308	FINAL	—	7.64	50.00	-42.36	N	GND

Table 7-101. AC Line Conducted Data with 802.11ax CDD Primary – Ch. 1 (N), with AC/DC adaptor via USB-C cable with wire charger

FCC ID: BCGA3267 IC: 579C-A3267	 element	MEASUREMENT REPORT (CERTIFICATION)			Approved by: Technical Manager
Test Report S/N: 1C2410210073-23.BCG	Test Dates: 10/25/2024 - 1/6/2025	EUT Type: Tablet Device			

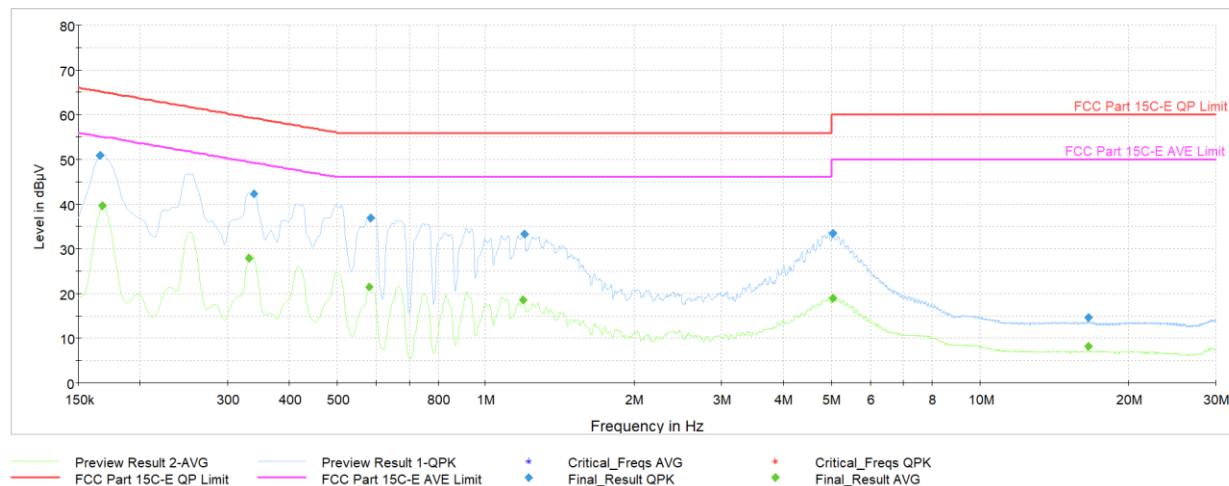


Plot 7-632. AC Line Conducted Plot with 802.11ax CDD Diversity – Ch.1 (L1), with AC/DC adaptor via USB-C cable with wire charger

Frequency [MHz]	Process State	QuasiPeak [dBμV]	Average [dBμV]	Limit [dBμV]	Margin [dB]	Line	PE
0.168	FINAL	—	41.02	55.06	-14.04	L1	GND
0.168	FINAL	52.3	—	65.06	-12.78	L1	GND
0.420	FINAL	—	26.98	47.45	-20.47	L1	GND
0.422	FINAL	40.6	—	57.40	-16.78	L1	GND
0.911	FINAL	—	20.55	46.00	-25.45	L1	GND
0.911	FINAL	34.7	—	56.00	-21.26	L1	GND
4.934	FINAL	—	21.00	46.00	-25.00	L1	GND
4.943	FINAL	35.4	—	56.00	-20.63	L1	GND
16.562	FINAL	16.7	—	60.00	-43.26	L1	GND
16.562	FINAL	—	11.23	50.00	-38.77	L1	GND
29.443	FINAL	17.3	—	60.00	-42.74	L1	GND
29.663	FINAL	—	11.29	50.00	-38.71	L1	GND

Table 7-102. AC Line Conducted Data with 802.11ax CDD Diversity – Ch. 1 (L1) with AC/DC adaptor via USB-C cable with wire charger

FCC ID: BCGA3267 IC: 579C-A3267	 element	MEASUREMENT REPORT (CERTIFICATION)			Approved by: Technical Manager
Test Report S/N: 1C2410210073-23.BCG	Test Dates: 10/25/2024 - 1/6/2025	EUT Type: Tablet Device			



Plot 7-633. AC Line Conducted Plot with 802.11ax CDD Diversity – Ch. 1 (N), with AC/DC adaptor via USB-C cable with wire charger

Frequency [MHz]	Process State	QuasiPeak [dB μ V]	Average [dB μ V]	Limit [dB μ V]	Margin [dB]	Line	PE
0.166	FINAL	50.9	—	65.17	-14.30	N	GND
0.168	FINAL	—	39.53	55.06	-15.53	N	GND
0.332	FINAL	—	27.89	49.40	-21.51	N	GND
0.339	FINAL	42.3	—	59.23	-16.95	N	GND
0.582	FINAL	—	21.41	46.00	-24.59	N	GND
0.587	FINAL	36.9	—	56.00	-19.11	N	GND
1.192	FINAL	—	18.52	46.00	-27.48	N	GND
1.199	FINAL	33.2	—	56.00	-22.81	N	GND
5.046	FINAL	33.5	—	60.00	-26.51	N	GND
5.048	FINAL	—	18.96	50.00	-31.04	N	GND
16.568	FINAL	—	8.12	50.00	-41.88	N	GND
16.571	FINAL	14.6	—	60.00	-45.44	N	GND

Table 7-103. AC Line Conducted Data with 802.11ax CDD Diversity – Ch. 1 (N), with AC/DC adaptor via USB-C cable with wire charger

FCC ID: BCGA3267 IC: 579C-A3267	 element	MEASUREMENT REPORT (CERTIFICATION)			Approved by: Technical Manager
Test Report S/N: 1C2410210073-23.BCG	Test Dates: 10/25/2024 - 1/6/2025	EUT Type: Tablet Device			

V 10.6 10/27/2023

Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from Element Material Technology. If you have any questions about this or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact ct.info@element.com.

8.0 CONCLUSION

The data collected relate only the item(s) tested and show that the **Apple Tablet Device FCC ID: BCGA3267** and **IC: 579C-A3267** 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.

FCC ID: BCGA3267 IC: 579C-A3267	 element		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2410210073-23.BCG	Test Dates: 10/25/2024 - 1/6/2025	EUT Type: Tablet Device		Page 262 of 262