

Plot 7-208. Radiated Spurious Emissions 1-18GHz TxBF (NB UNII BDR ePA - 5245MHz)

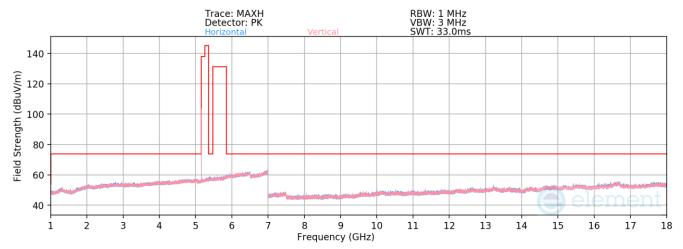
Mode:BDRData Rate:1MbpsPower Scheme:ePADistance of Measurements:3 MetersOperating Frequency:5245MHz

	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]
	10490.00	Peak	Н	1	ı	-65.98	7.99	49.01	68.23	-19.22
*	15735.00	Avg	V	-	-	-80.99	15.98	41.99	53.98	-11.99
*	15735.00	Peak	V	-	-	-69.80	15.98	53.18	73.98	-20.80

Table 7-42. Radiated Spurious Emissions Measurements TxBF

FCC ID: BCGA2993	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Dogo 155 of 101	
1C2405200017-08-R1.BCG	5/20/2024 - 7/26/2024	Tablet Device	Page 155 of 191	





Plot 7-209. Radiated Spurious Emissions 1-18GHz TxBF (NB UNII HDR4 ePA – 5162MHz)

Mode: HDR4

Data Rate: 4Mbps

Power Scheme: ePA

Distance of Measurements: 3 Meters

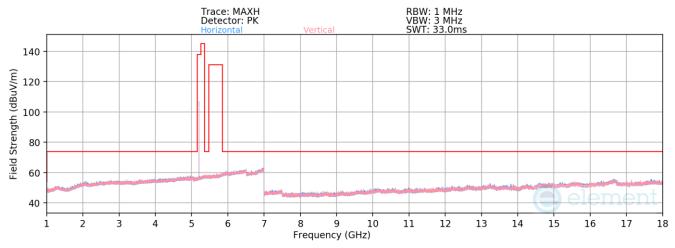
Operating Frequency: 5162MHz

_	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]
	10324.00	Peak	Н	ı	ı	-67.08	8.10	48.02	68.23	-20.21
*	15486.00	Avg	Н	-	-	-80.41	15.54	42.13	53.98	-11.85
*	15486.00	Peak	Н	-	-	-70.07	15.54	52.47	73.98	-21.51

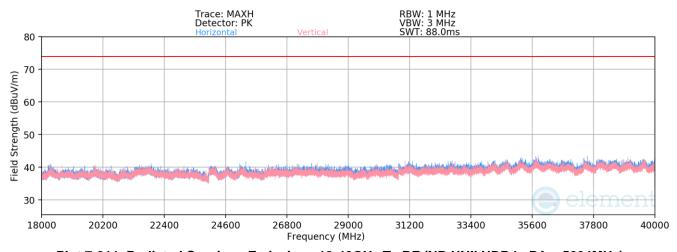
Table 7-43. Radiated Spurious Emissions Measurements TxBF

FCC ID: BCGA2993	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Dogo 156 of 101	
1C2405200017-08-R1.BCG	5/20/2024 - 7/26/2024	Tablet Device	Page 156 of 191	





Plot 7-210. Radiated Spurious Emissions 1-18GHz TxBF (NB UNII HDR4 ePA - 5204MHz)



Plot 7-211. Radiated Spurious Emissions 18-40GHz Tx BF (NB UNII HDR4 ePA – 5204MHz)

Mode: HDR4

Data Rate: 4Mbps

Power Scheme: ePA

Distance of Measurements: 3 Meters

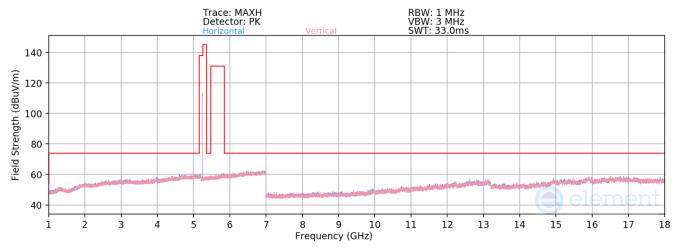
Operating Frequency: 5204MHz

	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]
	10408.00	Peak	Н	-	-	-66.41	7.76	48.35	68.23	-19.88
*	15612.00	Avg	V	-	-	-80.94	15.91	41.97	53.98	-12.01
*	15612.00	Peak	V	-		-69.89	15.91	53.02	73.98	-20.96

Table 7-44. Radiated Spurious Emissions Measurements TxBF

FCC ID: BCGA2993	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Dogo 157 of 101	
1C2405200017-08-R1.BCG	5/20/2024 - 7/26/2024	Tablet Device	Page 157 of 191	





Plot 7-212. Radiated Spurious Emissions 1-18GHz TxBF (NB UNII HDR4 ePA – 5245MHz)

Mode: HDR4

Data Rate: 4Mbps

Power Scheme: ePA

Distance of Measurements: 3 Meters

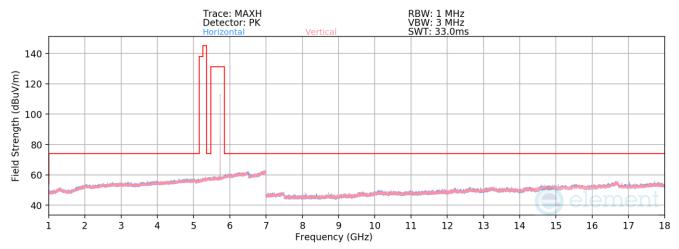
Operating Frequency: 5245MHz

	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]
	10490.00	Peak	Н	-	ı	-71.21	14.94	50.73	68.23	-17.50
*	15735.00	Avg	V	-	-	-84.92	23.90	45.98	53.98	-8.00
*	15735.00	Peak	V	-	-	-73.52	23.90	57.38	73.98	-16.60

Table 7-45. Radiated Spurious Emissions Measurements TxBF

FCC ID: BCGA2993	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Dogo 159 of 101	
1C2405200017-08-R1.BCG	5/20/2024 - 7/26/2024	Tablet Device	Page 158 of 191	





Plot 7-213. Radiated Spurious Emissions 1-18GHz TxBF (NB UNII BDR ePA - 5733MHz)

Mode: BDR

Data Rate: 1Mbps

Power Scheme: ePA

Distance of Measurements: 3 Meters

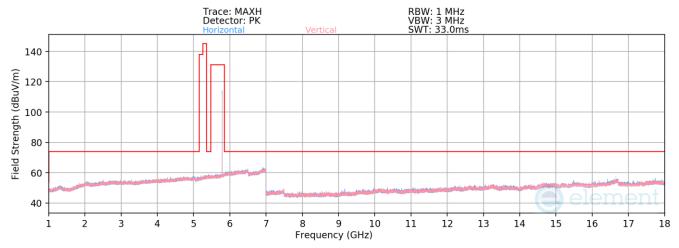
Operating Frequency: 5733MHz

	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]
*	11466.00	Avg	Н	-	ı	-77.81	9.57	38.76	53.98	-15.22
*	11466.00	Peak	Н	-	- 1	-66.75	9.57	49.82	73.98	-24.16
	17199.00	Peak	V	-	-	-70.59	18.10	54.51	68.23	-13.72

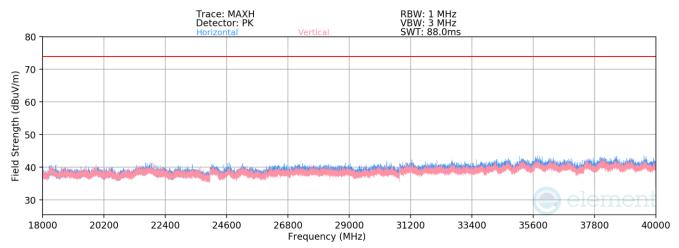
Table 7-46. Radiated Spurious Emissions Measurements TxBF

FCC ID: BCGA2993	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Dogo 150 of 101	
1C2405200017-08-R1.BCG	5/20/2024 - 7/26/2024	Tablet Device	Page 159 of 191	





Plot 7-214. Radiated Spurious Emissions 1-18GHz TxBF (NB UNII BDR ePA - 5789MHz)



Plot 7-215. Radiated Spurious Emissions 18-40GHz TxBF (NB UNII BDR ePA - 5789MHz)

Mode: BDR

Data Rate: 1Mbps

Power Scheme: ePA

Distance of Measurements: 3 Meters

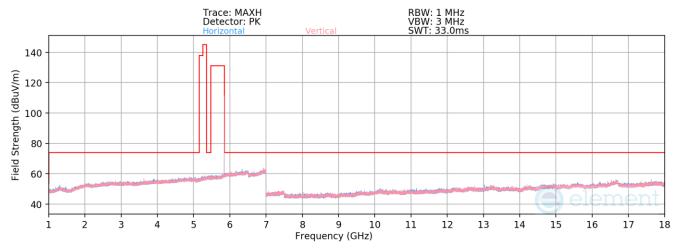
Operating Frequency: 5789MHz

_	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]
*	11578.00	Avg	Н	-	-	-77.95	9.67	38.72	53.98	-15.26
*	11578.00	Peak	Н	-	-	-67.43	9.67	49.24	73.98	-24.74
	17367.00	Peak	V	-	-	-70.20	18.04	54.84	68.23	-13.39

Table 7-47. Radiated Spurious Emissions Measurements TxBF

FCC ID: BCGA2993	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Dogo 160 of 101	
1C2405200017-08-R1.BCG	5/20/2024 - 7/26/2024	Tablet Device	Page 160 of 191	





Plot 7-216. Radiated Spurious Emissions 1-18GHz TxBF (NB UNII BDR ePA - 5844MHz)

Mode: BDR

Data Rate: 1Mbps

Power Scheme: ePA

Distance of Measurements: 3 Meters

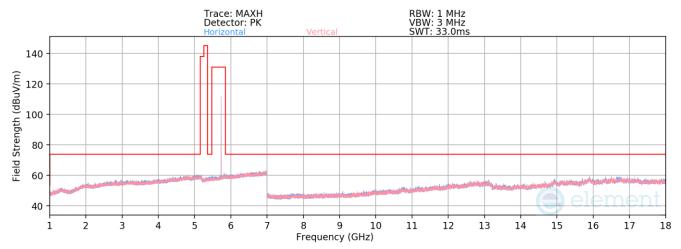
Operating Frequency: 5844MHz

	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]
*	11688.00	Avg	Н	-	ı	-78.83	10.33	38.50	53.98	-15.48
*	11688.00	Peak	Н	-	ı	-67.35	10.33	49.98	73.98	-24.00
	17532.00	Peak	V	-	-	-71.02	17.56	53.54	68.23	-14.69

Table 7-48. Radiated Spurious Emissions Measurements TxBF

FCC ID: BCGA2993	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 161 of 191
1C2405200017-08-R1.BCG	5/20/2024 - 7/26/2024	Tablet Device	rage 101 01 191





Plot 7-217. Radiated Spurious Emissions 1-18GHz TxBF (NB UNII HDR4 ePA – 5733MHz)

Mode: HDR4

Data Rate: 4Mbps

Power Scheme: ePA

Distance of Measurements: 3 Meters

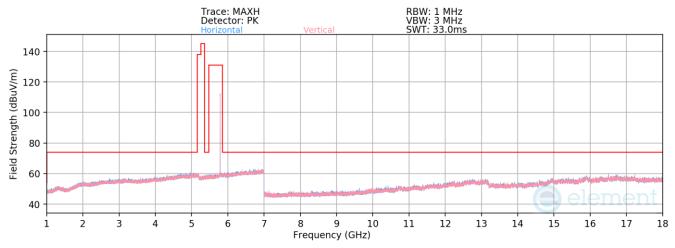
Operating Frequency: 5733MHz

	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]
*	11466.00	Avg	Н	-	ı	-83.27	17.25	40.98	53.98	-13.00
*	11466.00	Peak	Н	-	-	-72.19	17.25	52.06	73.98	-21.92
	17199.00	Peak	Н	-	-	-73.29	24.61	58.32	68.23	-9.91

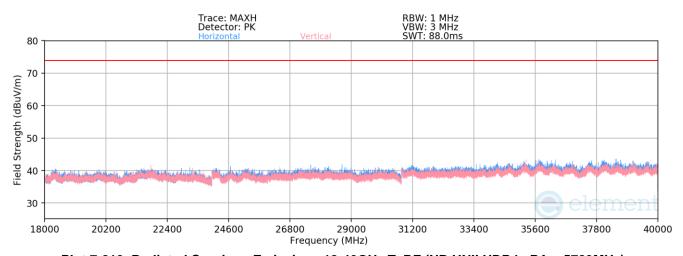
Table 7-49. Radiated Spurious Emissions Measurements TxBF

FCC ID: BCGA2993	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 162 of 191
1C2405200017-08-R1.BCG	5/20/2024 - 7/26/2024	Tablet Device	raye 102 01 191





Plot 7-218. Radiated Spurious Emissions 1-18GHz TxBF (NB UNII HDR4 ePA - 5789MHz)



Plot 7-219. Radiated Spurious Emissions 18-40GHz TxBF (NB UNII HDR4 ePA - 5789MHz)

Mode: HDR4

Data Rate: 4Mbps

Power Scheme: ePA

Distance of Measurements: 3 Meters

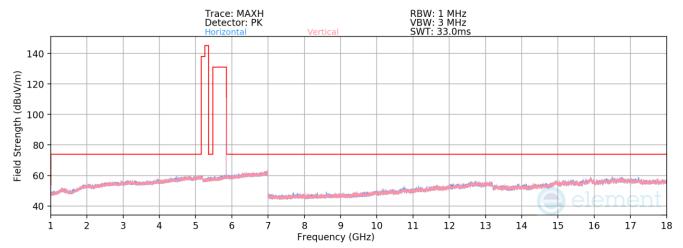
Operating Frequency: 5789MHz

_	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]
*	11578.00	Avg	V	-	-	-83.12	17.13	41.01	53.98	-12.97
*	11578.00	Peak	V	-	1	-71.90	17.13	52.23	73.98	-21.75
	17367.00	Peak	Н	-		-73.64	24.57	57.93	68.23	-10.30

Table 7-50. Radiated Spurious Emissions Measurements TxBF

FCC ID: BCGA2993	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 162 of 101
1C2405200017-08-R1.BCG	5/20/2024 - 7/26/2024	Tablet Device	Page 163 of 191





Plot 7-220. Radiated Spurious Emissions 1-18GHz TxBF (NB UNII HDR4 ePA - 5844MHz)

Mode: HDR4

Data Rate: 4Mbps

Power Scheme: ePA

Distance of Measurements: 3 Meters

Operating Frequency: 5844MHz

	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]
*	11688.00	Avg	V	-	-	-83.71	17.92	41.21	53.98	-12.77
*	11688.00	Peak	V	-	-	-72.07	17.92	52.85	73.98	-21.13
	17532.00	Peak	V	-	-	-72.02	24.88	59.86	68.23	-8.37

Table 7-51. Radiated Spurious Emissions Measurements TxBF

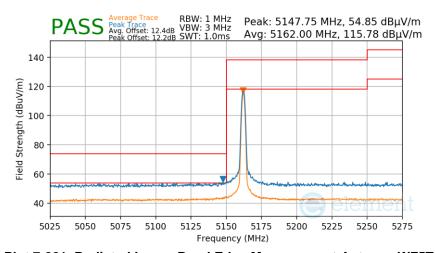
FCC ID: BCGA2993	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 164 of 101
1C2405200017-08-R1.BCG	5/20/2024 - 7/26/2024	Tablet Device	Page 164 of 191



# 7.6.4 Radiated Band Edge Measurements §15.407(b.1) §15.205 §15.209; RSS-Gen [8.9]

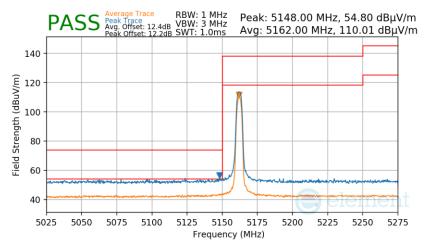
#### **Antenna WF5T**

Mode:BDRPower Scheme:ePAMeasurement Distance:3 MetersOperating Frequency:5162MHz



Plot 7-221. Radiated Lower Band Edge Measurement Antenna WF5T

Mode:HDR4Power Scheme:ePAMeasurement Distance:3 MetersOperating Frequency:5162MHz

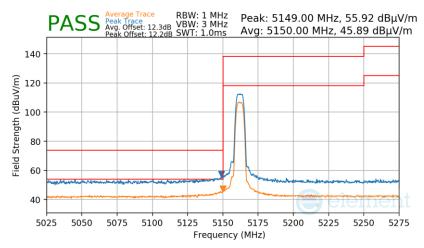


Plot 7-222. Radiated Lower Band Edge Measurement Antenna WF5T

FCC ID: BCGA2993	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 165 of 101
1C2405200017-08-R1.BCG	5/20/2024 - 7/26/2024	Tablet Device	Page 165 of 191

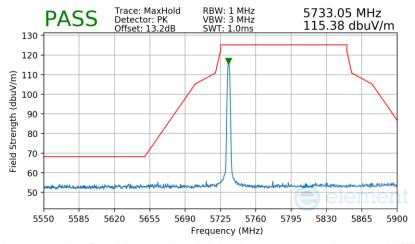


Mode:HDR8Power Scheme:ePAMeasurement Distance:3 MetersOperating Frequency:5162MHz



Plot 7-223. Radiated Lower Band Edge Measurement Antenna WF5T

Mode:BDRPower Scheme:ePAMeasurement Distance:3 MetersOperating Frequency:5733MHz

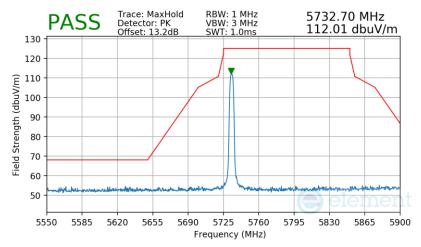


Plot 7-224. Radiated Lower Band Edge Measurement Antenna WF5T

FCC ID: BCGA2993	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Dogo 166 of 101	
1C2405200017-08-R1.BCG	5/20/2024 - 7/26/2024	Tablet Device	Page 166 of 191	

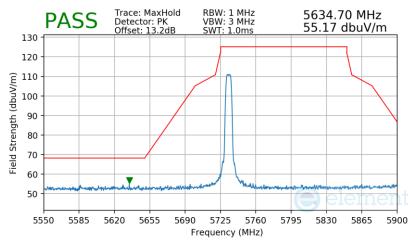


Mode:HDR4Power Scheme:ePAMeasurement Distance:3 MetersOperating Frequency:5733MHz



Plot 7-225. Radiated Lower Band Edge Measurement Antenna WF5T

Mode:HDR8Power Scheme:ePAMeasurement Distance:3 MetersOperating Frequency:5733MHz

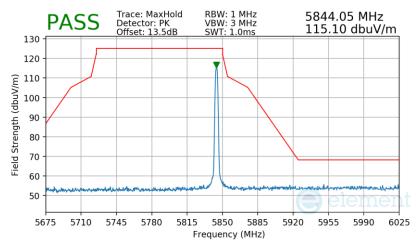


Plot 7-226. Radiated Lower Band Edge Measurement Antenna WF5T

FCC ID: BCGA2993	993		Approved by: Technical Manager
Test Report S/N: Test Dates:		EUT Type:	Dogo 167 of 101
1C2405200017-08-R1.BCG	5/20/2024 - 7/26/2024	Tablet Device	Page 167 of 191

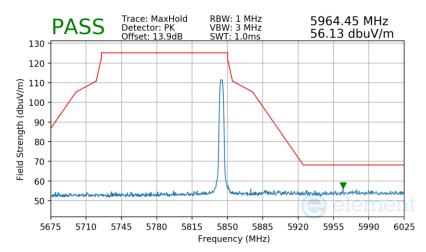


Mode:BDRPower Scheme:ePAMeasurement Distance:3 MetersOperating Frequency:5844MHz



Plot 7-227. Radiated Upper Band Edge Measurement Antenna WF5T

Mode:HDR4Power Scheme:ePAMeasurement Distance:3 MetersOperating Frequency:5844MHz

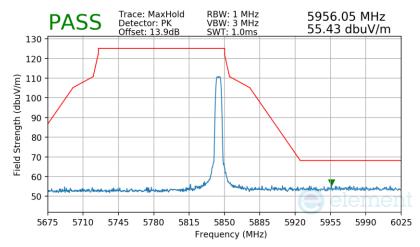


Plot 7-228. Radiated Upper Band Edge Measurement Antenna WF5T

FCC ID: BCGA2993	BCGA2993    MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: Test Dates:		EUT Type:	Dogo 169 of 101
1C2405200017-08-R1.BCG	5/20/2024 - 7/26/2024	Tablet Device	Page 168 of 191



Mode:HDR8Power Scheme:ePAMeasurement Distance:3 MetersOperating Frequency:5844MHz



Plot 7-229. Radiated Upper Band Edge Measurement Antenna WF5T

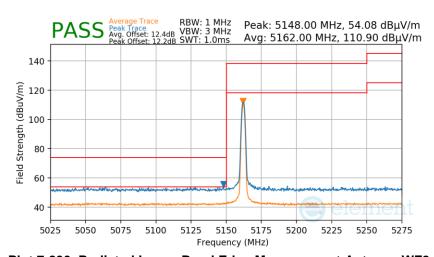
FCC ID: BCGA2993	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 160 of 101
1C2405200017-08-R1.BCG	5/20/2024 - 7/26/2024	Tablet Device	Page 169 of 191



# Radiated Band Edge Measurements §15.407(b.1)(b.2) §15.205 §15.209

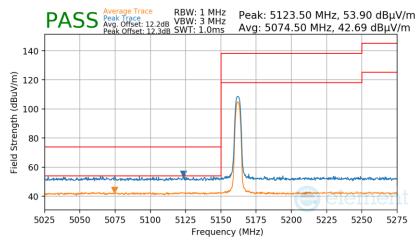
#### **Antenna WF2**

Mode:BDRPower Scheme:ePAMeasurement Distance:3 MetersOperating Frequency:5162MHz



Plot 7-230. Radiated Lower Band Edge Measurement Antenna WF2

Mode:HDR4Power Scheme:ePAMeasurement Distance:3 MetersOperating Frequency:5162MHz

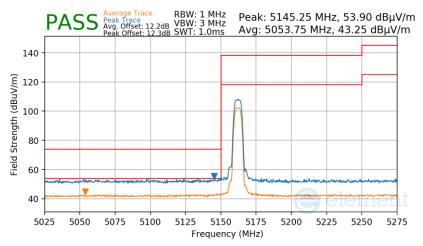


Plot 7-231. Radiated Lower Band Edge Measurement Antenna WF2

FCC ID: BCGA2993	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 170 of 101
1C2405200017-08-R1.BCG	5/20/2024 - 7/26/2024	Tablet Device	Page 170 of 191

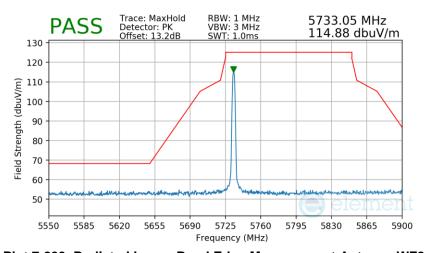


Mode:HDR8Power Scheme:ePAMeasurement Distance:3 MetersOperating Frequency:5162MHz



Plot 7-232. Radiated Lower Band Edge Measurement Antenna WF2

Mode:BDRPower Scheme:ePAMeasurement Distance:3 MetersOperating Frequency:5733MHz

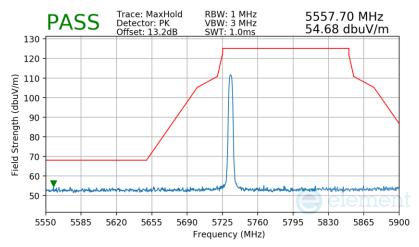


Plot 7-233. Radiated Lower Band Edge Measurement Antenna WF2

FCC ID: BCGA2993	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 171 of 191
1C2405200017-08-R1.BCG	5/20/2024 - 7/26/2024	Tablet Device	rage I/ I UI 191



Mode:HDR4Power Scheme:ePAMeasurement Distance:3 MetersOperating Frequency:5733MHz



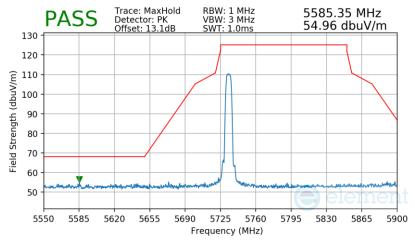
Plot 7-234. Radiated Lower Band Edge Measurement Antenna WF2

Mode: HDR8

Power Scheme: ePA

Measurement Distance: 3 Meters

Operating Frequency: 5733MHz

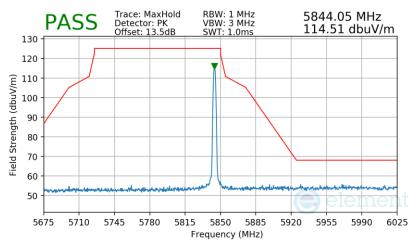


Plot 7-235. Radiated Lower Band Edge Measurement Antenna WF2

FCC ID: BCGA2993	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 172 of 191
1C2405200017-08-R1.BCG	5/20/2024 - 7/26/2024	Tablet Device	Fage 172 01 191

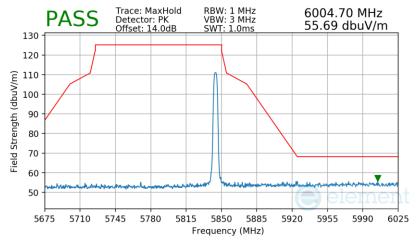


Mode:BDRPower Scheme:ePAMeasurement Distance:3 MetersOperating Frequency:5844MHz



Plot 7-236. Radiated Upper Band Edge Measurement Antenna WF2

Mode:HDR4Power Scheme:ePAMeasurement Distance:3 MetersOperating Frequency:5844MHz

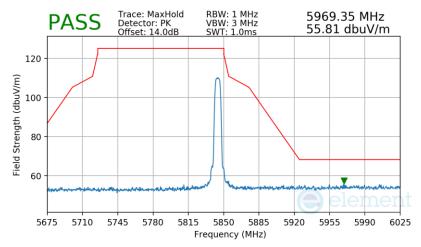


Plot 7-237. Radiated Upper Band Edge Measurement Antenna WF2

FCC ID: BCGA2993	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 172 of 101
1C2405200017-08-R1.BCG	5/20/2024 - 7/26/2024	Tablet Device	Page 173 of 191



Mode:HDR8Power Scheme:ePAMeasurement Distance:3 MetersOperating Frequency:5844MHz



Plot 7-238. Radiated Upper Band Edge Measurement Antenna WF2

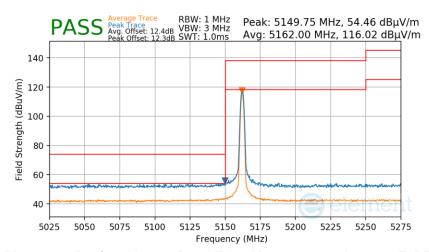
FCC ID: BCGA2993	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 174 of 101
1C2405200017-08-R1.BCG	5/20/2024 - 7/26/2024	Tablet Device	Page 174 of 191



# Radiated Band Edge Measurements §15.407(b.1)(b.2) §15.205 §15.209

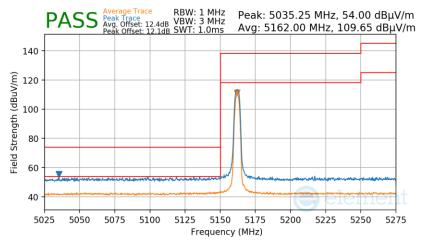
#### **TxBF**

Mode:BDRPower Scheme:ePAMeasurement Distance:3 MetersOperating Frequency:5162MHz



Plot 7-239. Radiated Lower Band Edge Measurement Antenna TxBF

Mode:HDR4Power Scheme:ePAMeasurement Distance:3 MetersOperating Frequency:5162MHz

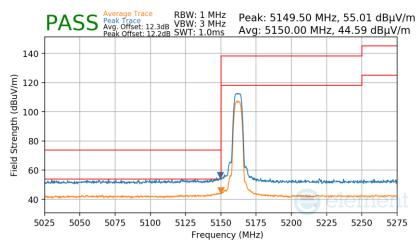


Plot 7-240. Radiated Lower Band Edge Measurement Antenna TxBF

FCC ID: BCGA2993	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 175 of 101
1C2405200017-08-R1.BCG	5/20/2024 - 7/26/2024	Tablet Device	Page 175 of 191

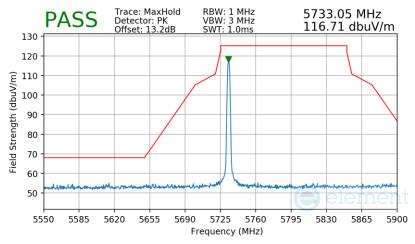


Mode:HDR8Power Scheme:ePAMeasurement Distance:3 MetersOperating Frequency:5162MHz



Plot 7-241. Radiated Lower Band Edge Measurement Antenna TxBF

Mode: BDR
Power Scheme: ePA
Measurement Distance: 3 Meters
Operating Frequency: 5733MHz

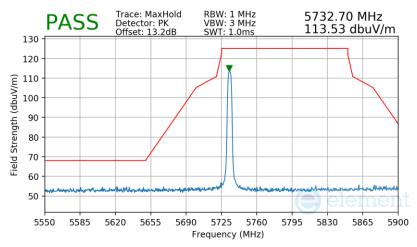


Plot 7-242. Radiated Lower Band Edge Measurement Antenna TxBF

FCC ID: BCGA2993	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 176 of 191
1C2405200017-08-R1.BCG	5/20/2024 - 7/26/2024	Tablet Device	rage 170 01 191

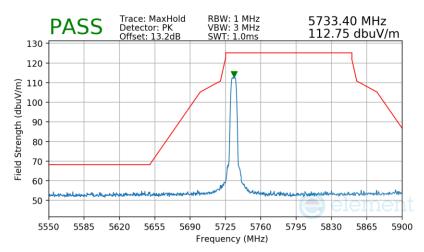


Mode:HDR4Power Scheme:ePAMeasurement Distance:3 MetersOperating Frequency:5733MHz



Plot 7-243. Radiated Lower Band Edge Measurement Antenna TxBF

Mode:HDR8Power Scheme:ePAMeasurement Distance:3 MetersOperating Frequency:5733MHz

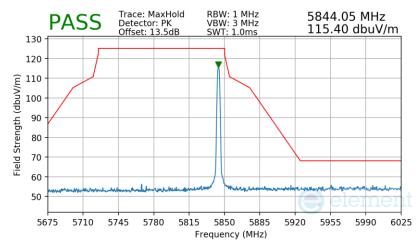


Plot 7-244. Radiated Lower Band Edge Measurement Antenna TxBF

FCC ID: BCGA2993	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 177 of 101
1C2405200017-08-R1.BCG	5/20/2024 - 7/26/2024	Tablet Device	Page 177 of 191

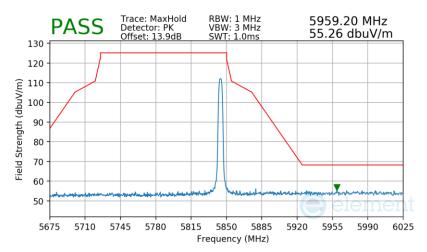


Mode:BDRPower Scheme:ePAMeasurement Distance:3 MetersOperating Frequency:5844MHz



Plot 7-245. Radiated Upper Band Edge Measurement Antenna TxBF

Mode: HDR4
Power Scheme: ePA
Measurement Distance: 3 Meters
Operating Frequency: 5844MHz

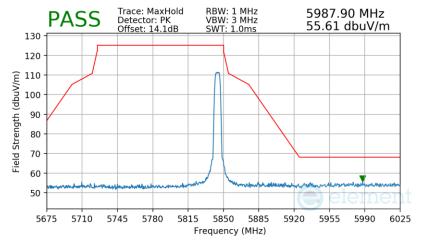


Plot 7-246. Radiated Upper Band Edge Measurement Antenna TxBF

FCC ID: BCGA2993	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogg 170 of 101
1C2405200017-08-R1.BCG	5/20/2024 - 7/26/2024	Tablet Device	Page 178 of 191



Mode: HDR8
Power Scheme: ePA
Measurement Distance: 3 Meters
Operating Frequency: 5844MHz



Plot 7-247. Radiated Upper Band Edge Measurement Antenna TxBF

FCC ID: BCGA2993	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 170 of 101
1C2405200017-08-R1.BCG	5/20/2024 - 7/26/2024	Tablet Device	Page 179 of 191



# 7.6 Radiated Spurious Emissions – Below 1GHz §15.209

### **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 must not exceed the limits shown in Table 7-52 per Section 15.209.

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 7-52. 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 = peak
- 5. Sweep time = auto couple
- 6. Trace mode = max hold
- 7. Trace was allowed to stabilize

FCC ID: BCGA2993	element	element MEASUREMENT REPORT (CERTIFICATION)	
Test Report S/N:	Test Dates:	EUT Type:	Dogg 100 of 101
1C2405200017-08-R1.BCG	5/20/2024 - 7/26/2024	Tablet Device	Page 180 of 191



### **Test Setup**

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

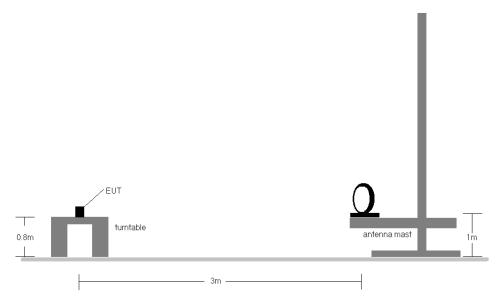


Figure 7-6. Radiated Test Setup < 30MHz

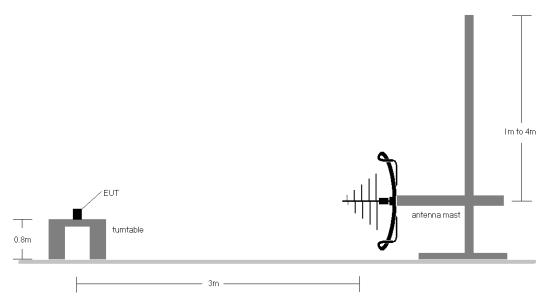


Figure 7-7. Radiated Test Setup < 1GHz

FCC ID: BCGA2993	element	element MEASUREMENT REPORT (CERTIFICATION)	
Test Report S/N:	Test Dates:	EUT Type:	Dogo 191 of 101
1C2405200017-08-R1.BCG	5/20/2024 - 7/26/2024	Tablet Device	Page 181 of 191



#### **Test Notes**

- 1. All emissions lying in restricted bands specified in §15.205 are below the limit shown in Table 7-52.
- 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. 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. All supported modulation and power schemes have been tested on the unit and only worst case configuration is reported.
- 10. Both configurations below were investigated, and the worst case has been reported.
  - a. EUT powered by AC/DC adaptor to USB-C cable with wire charger
  - b. EUT powered by host PC via USB-C cable with wire charger

#### **Sample Calculations**

#### **Determining Spurious Emissions Levels**

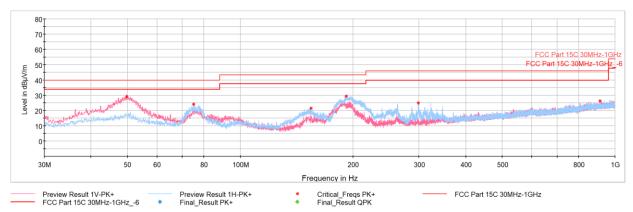
- Field Strength Level [dBμV/m] = Analyzer Level [dBm] + 107 + AFCL [dB/m]
- AFCL [dB/m] = Antenna Factor [dB/m] + Cable Loss [dB] Preamplifier Gain [dB]
- Margin [dB] = Field Strength Level [dBμV/m] Limit [dBμV/m]

FCC ID: BCGA2993	element MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 182 of 191
1C2405200017-08-R1.BCG	5/20/2024 - 7/26/2024	Tablet Device	Fage 102 01 191



# Radiated Spurious Emissions (Below 1GHz) §15.209

### **TxBF**



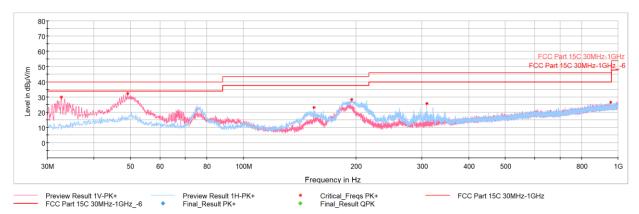
Plot 7-248. Radiated Spurious Emissions Below 1GHz TxBF (NB UNII BDR ePA - 5204MHz), with AC/DC adaptor to USB-C cable with wire charger

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]
49.74	Max Peak	V	100	64	-65.12	-12.80	29.08	40.00	-10.92
75.15	Max Peak	Н	200	101	-62.33	-20.35	24.32	40.00	-15.68
154.26	Max Peak	Н	200	175	-66.11	-19.33	21.56	43.52	-21.96
191.36	Max Peak	Н	200	334	-60.88	-16.74	29.38	43.52	-14.14
298.50	Max Peak	Н	100	264	-68.02	-13.97	25.01	46.02	-21.01
911.05	Max Peak	Н	100	358	-78.75	-1.95	26.30	46.02	-19.72

Table 7-53. Radiated Spurious Emissions Below 1GHz TxBF (NB UNII BDR ePA – 5204MHz), with AC/DC adaptor to USB-C cable with wire charger

FCC ID: BCGA2993	element MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 183 of 191
1C2405200017-08-R1.BCG	5/20/2024 - 7/26/2024	Tablet Device	Fage 165 01 191





Plot 7-249. Radiated Spurious Emissions Below 1GHz TxBF (NB UNII HDR4 ePA - 5204MHz), with AC/DC adaptor to 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]
32.72	Max Peak	V	100	150	-61.24	-15.87	29.89	40.00	-10.11
49.16	Max Peak	V	100	272	-61.68	-12.84	32.48	40.00	-7.52
154.26	Max Peak	Н	200	161	-64.59	-19.33	23.08	43.52	-20.44
194.56	Max Peak	Н	100	175	-62.33	-16.19	28.48	43.52	-15.04
308.58	Max Peak	Н	100	245	-67.51	-13.64	25.85	46.02	-20.17
954.85	Max Peak	Н	100	340	-78.64	-1.74	26.62	46.02	-19.40

Table 7-54. Radiated Spurious Emissions Below 1GHz TxBF (NB UNII HDR4 ePA - 5204MHz), with AC/DC adaptor to USB-C cable with wire charger

FCC ID: BCGA2993	element MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 184 of 191
1C2405200017-08-R1.BCG	5/20/2024 - 7/26/2024	Tablet Device	Fage 184 01 191



# 7.7 AC Line Conducted Emissions Measurement §15.207

#### **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. All data rates and modes were investigated for AC Line conducted spurious emissions.

All conducted emissions must not exceed the limits shown in the table below, per Section 15.207.

Frequency of emission (MHz)	Conducted Limit (dBμV)				
(IVIT12)	Quasi-peak	Average			
0.15 – 0.5	66 to 56*	56 to 46*			
0.5 – 5	56	46			
5 – 30	60	50			

Table 7-55. Conducted Limits

#### **Test Procedures Used**

ANSI C63.10-2020, 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: BCGA2993	element MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 185 of 191
1C2405200017-08-R1.BCG	5/20/2024 - 7/26/2024	Tablet Device	Page 165 01 191

<sup>\*</sup>Decreases with the logarithm of the frequency.



#### **Test Setup**

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

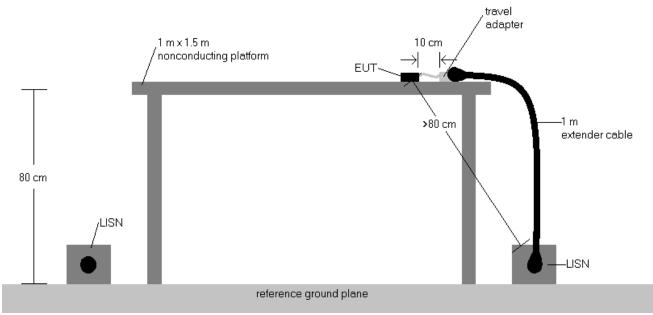


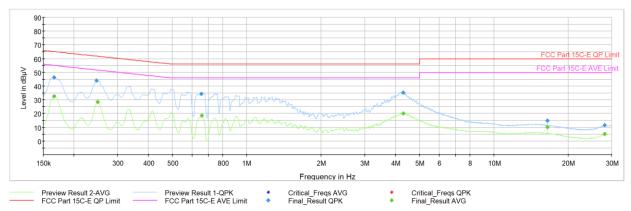
Figure 7-8. Test Instrument & Measurement Setup

### **Test Notes**

- 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 to USB-C cable with wire charger
  - b. 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 15.207.
- 4. Corr. (dB) = Cable loss (dB) + LISN insertion factor (dB)
- QP/AV Level (dBμV) = QP/AV Analyzer/Receiver Level (dBμV) + Correction Factor (dB)
- 6. Margin (dB) = QP/AV Level (dB $\mu$ V) QP/AV Limit (dB $\mu$ V)
- 7. Traces shown in plots are made using quasi-peak and average detectors.
- 8. Deviations to the Specifications: None.

FCC ID: BCGA2993	element	element MEASUREMENT REPORT (CERTIFICATION)	
Test Report S/N:	Test Dates:	EUT Type:	Dogo 196 of 101
1C2405200017-08-R1.BCG	5/20/2024 - 7/26/2024	Tablet Device	Page 186 of 191





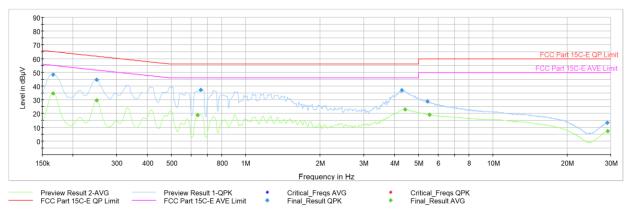
Plot 7-250. AC Line Conducted Plot TxBF (NB UNII BDR ePA – 5204MHz) (L1) with AC/DC adaptor to USB-C cable with wire charger

Frequency [MHz]	Process State	QuasiPeak [dBµV]	Averaqe [dBμV]	Limit [dBµ∀]	Marqin [dB]	Line	PE
0.166	FINAL		32.76	55.17	-22.41	L1	GND
0.166	FINAL	46.3		65.17	-18.86	L1	GND
0.247	FINAL	44.2		61.87	-17.72	L1	GND
0.249	FINAL		28.64	51.79	-23.15	L1	GND
0.654	FINAL	34.3		56.00	-21.67	L1	GND
0.656	FINAL		18.73	46.00	-27.27	L1	GND
4.295	FINAL	35.4		56.00	-20.56	L1	GND
4.297	FINAL		20.02	46.00	-25.98	L1	GND
16.463	FINAL	14.9		60.00	-45.08	L1	GND
16.463	FINAL		10.13	50.00	-39.87	L1	GND
28.032	FINAL		5.28	50.00	-44.72	L1	GND
28.034	FINAL	11.7		60.00	-48.31	L1	GND

Table 7-56. AC Line Conducted Data TxBF (NB UNII BDR ePA – 5204MHz) (L1) with AC/DC adaptor to USB-C cable with wire charger

FCC ID: BCGA2993	element	element MEASUREMENT REPORT (CERTIFICATION)	
Test Report S/N:	Test Dates:	EUT Type:	Page 187 of 191
1C2405200017-08-R1.BCG	5/20/2024 - 7/26/2024	Tablet Device	Fage 107 01 191





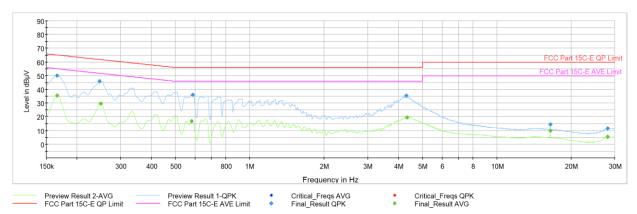
Plot 7-251. AC Line Conducted Plot TxBF (NB UNII BDR ePA – 5204MHz) (N) with AC/DC adaptor to USB-C cable with wire charger

Frequency [MHz]	Process State	QuasiPeak [dBµV]	Average [dBµV]	Limit [dB <b>µ</b> V]	Marqin [dB]	Line	PE
0.166	FINAL		34.88	55.17	-20.29	N	GND
0.166	FINAL	48.6		65.17	-16.62	N	GND
0.249	FINAL		29.75	51.79	-22.04	N	GND
0.249	FINAL	44.7		61.79	-17.06	N	GND
0.638	FINAL		19.01	46.00	-26.99	Ν	GND
0.656	FINAL	37.5		56.00	-18.55	Ν	GND
4.283	FINAL	37.1		56.00	-18.90	Ν	GND
4.405	FINAL		23.08	46.00	-22.92	Ν	GND
5.424	FINAL	29.0		60.00	-31.04	Ν	GND
5.525	FINAL		19.16	50.00	-30.84	N	GND
29.047	FINAL	13.3		60.00	-46.69	N	GND
29.171	FINAL		7.12	50.00	-42.88	Ν	GND

Table 7-57. AC Line Conducted TxBF (NB UNII BDR ePA – 5204MHz) (N) with AC/DC adaptor to USB-C cable with wire charger

FCC ID: BCGA2993	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: Test Dates:		EUT Type:	Dogg 100 of 101
1C2405200017-08-R1.BCG	5/20/2024 - 7/26/2024	Tablet Device	Page 188 of 191





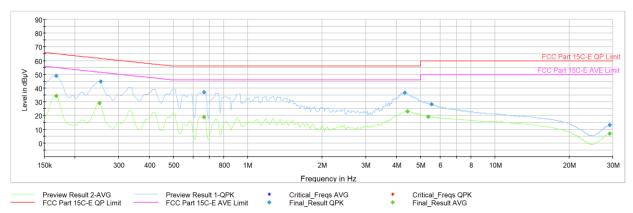
Plot 7-252. AC Line Conducted Plot TxBF (NB UNII HDR4 ePA – 5204MHz) (L1) with AC/DC adaptor to USB-C cable with wire charger

Frequency [MHz]	Process State	QuasiPeak [dBµV]	Averaqe [dΒμV]	Limit [dBµ√]	Marqin [dB]	Line	PE
0.166	FINAL		35.59	55.17	-19.58	L1	GND
0.166	FINAL	50.1		65.17	-15.03	L1	GND
0.247	FINAL	46.1		61.87	-15.81	L1	GND
0.249	FINAL		29.80	51.79	-21.99	L1	GND
0.582	FINAL		16.84	46.00	-29.16	L1	GND
0.589	FINAL	36.1		56.00	-19.90	L1	GND
4.295	FINAL	35.5		56.00	-20.51	L1	GND
4.324	FINAL		19.49	46.00	-26.51	L1	GND
16.427	FINAL	14.5		60.00	-45.53	L1	GND
16.427	FINAL		9.97	50.00	-40.03	L1	GND
28.025	FINAL	11.7		60.00	-48.29	L1	GND
28.028	FINAL		5.56	50.00	-44.44	L1	GND

Table 7-58. AC Line Conducted Data TxBF (NB UNII HDR4 ePA – 5204MHz) (L1) with AC/DC adaptor to USB-C cable with wire charger

FCC ID: BCGA2993	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: Test Dates:		EUT Type:	Page 189 of 191
1C2405200017-08-R1.BCG	5/20/2024 - 7/26/2024	Tablet Device	Page 169 01 191





Plot 7-253. AC Line Conducted Plot TxBF (NB UNII HDR4 ePA – 5204MHz) (N) with AC/DC adaptor to USB-C cable with wire charger

Frequency [MHz]	Process State	QuasiPeak [dBµV]	Average [dBµV]	Limit [dBµV]	Marqin [dB]	Line	PE
0.168	FINAL		34.57	55.06	-20.48	Ν	GND
0.168	FINAL	49.1		65.06	-16.00	Ν	GND
0.251	FINAL		29.28	51.72	-22.44	N	GND
0.254	FINAL	45.0		61.64	-16.63	N	GND
0.665	FINAL		18.90	46.00	-27.10	N	GND
0.665	FINAL	37.1		56.00	-18.86	Ν	GND
4.315	FINAL	36.8		56.00	-19.22	Ν	GND
4.421	FINAL		23.07	46.00	-22.93	Ν	GND
5.377	FINAL		19.23	50.00	-30.77	N	GND
5.537	FINAL	28.3		60.00	-31.69	N	GND
29.171	FINAL		6.90	50.00	-43.10	N	GND
29.171	FINAL	13.2		60.00	-46.85	N	GND

Table 7-59. AC Line Conducted TxBF (NB UNII HDR4 ePA – 5204MHz) (N) with AC/DC adaptor to USB-C cable with wire charger

FCC ID: BCGA2993	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: Test Dates:		EUT Type:	Dogg 100 of 101
1C2405200017-08-R1.BCG	5/20/2024 - 7/26/2024	Tablet Device	Page 190 of 191



### 8.0 CONCLUSION

The data collected relate only the item(s) tested and show that the **Apple Tablet Device FCC ID: BCGA2993** is in compliance with Part 15 Subpart E (15.407) of the FCC Rules.

FCC ID: BCGA2993	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: Test Dates:		EUT Type:	Dogo 101 of 101
1C2405200017-08-R1.BCG	5/20/2024 - 7/26/2024	Tablet Device	Page 191 of 191