

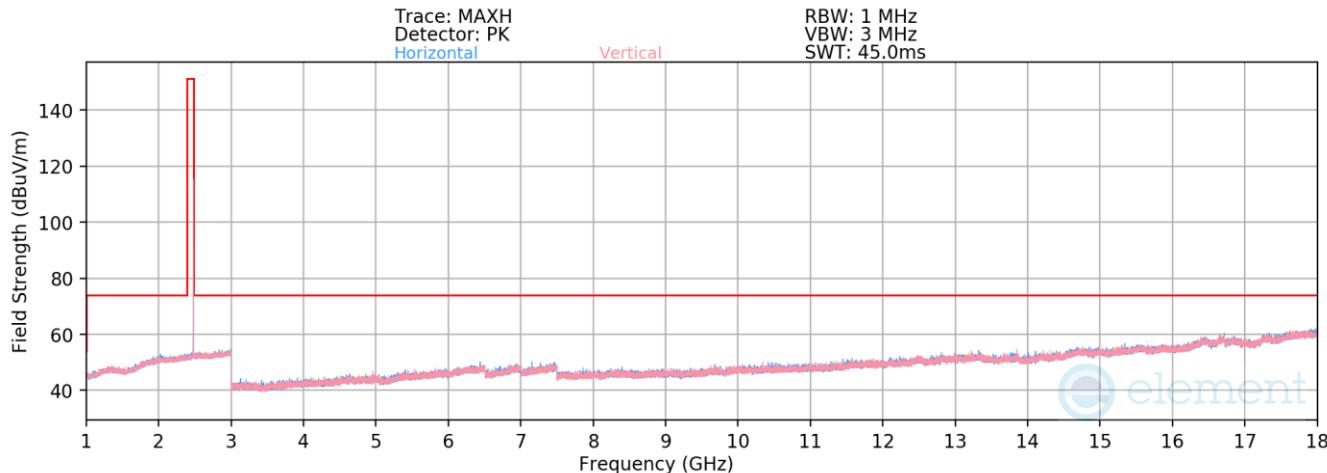
Plot 7-58. Radiated Spurious Emissions 1-18GHz Antenna 4a (BT GFSK ePA – 2441 MHz)

Bluetooth Mode: GFSK
 Data Rate: 1Mbps
 Power Scheme ePA
 Distance of Measurements: 3 Meters
 Operating Frequency: 2441MHz

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]
4882.00	Peak	V	-	-	-68.13	6.23	45.10	73.98	-28.88
7323.00	Peak	V	388	256	-67.12	9.95	49.83	73.98	-24.15
12205.00	Peak	V	-	-	-73.28	14.84	48.56	73.98	-25.42

Table 7-14. Radiated Measurements Antenna 4a

FCC ID: BCGA2764 IC: 579C-A2764	 element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090028-15.BCG	Test Dates: 5/30/2022 - 9/28/2022	EUT Type: Tablet Device	Page 64 of 90



Plot 7-59. Radiated Spurious Emissions 1-18GHz Antenna 4a (BT GFSK ePA – 2480 MHz)

Bluetooth Mode:	GFSK
Data Rate:	1Mbps
Power Scheme	ePA
Distance of Measurements:	3 Meters
Operating Frequency:	2480MHz

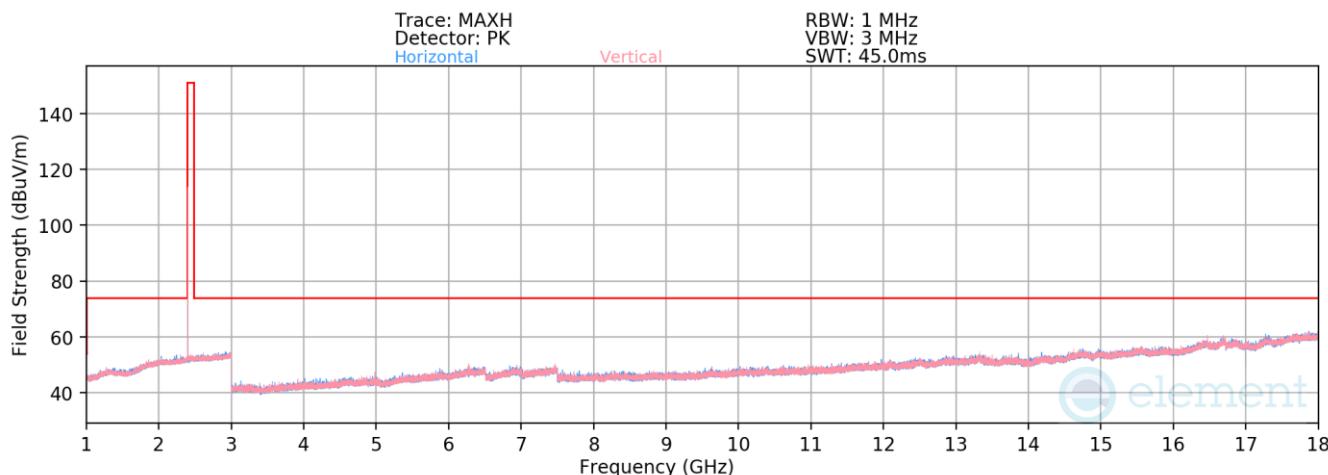
Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]
4960.00	Peak	V	102	163	-66.45	6.45	47.00	73.98	-26.98
7440.00	Peak	V	-	-	-68.10	9.93	48.83	73.98	-25.15
12400.00	Peak	V	-	-	-72.95	15.14	49.19	73.98	-24.79

Table 7-15. Radiated Measurements Antenna 4a

FCC ID: BCGA2764 IC: 579C-A2764	 element MEASUREMENT REPORT (CERTIFICATION)			Approved by: Technical Manager
Test Report S/N: 1C2205090028-15.BCG	Test Dates: 5/30/2022 - 9/28/2022	EUT Type: Tablet Device	Page 65 of 90	

7.9.2 Radiated Spurious Emission Measurements Antenna 2a (Above 1GHz)

§15.205 §15.209 §15.247 (d); RSS-Gen [8.9]



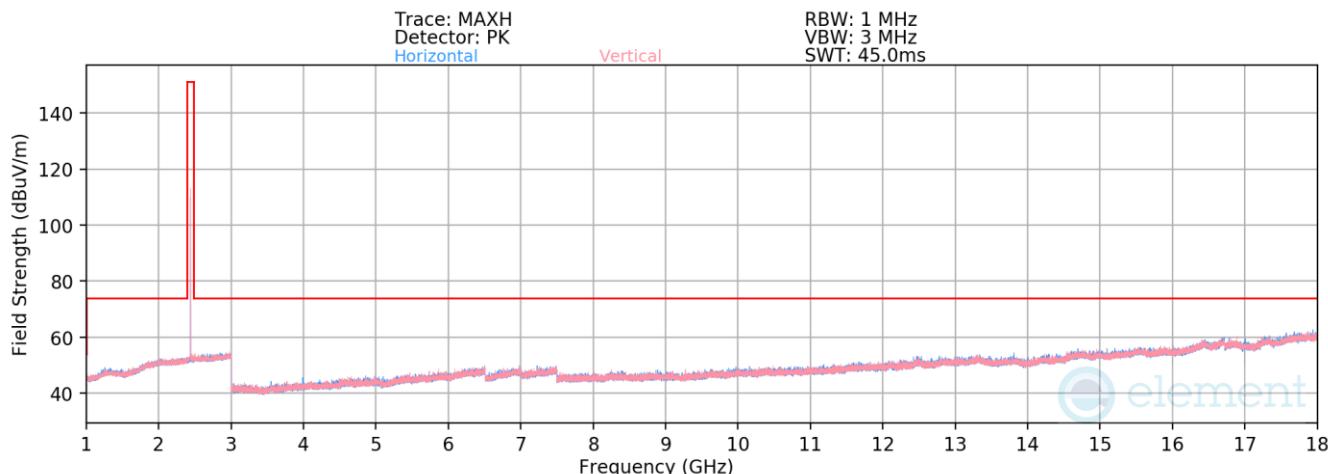
Plot 7-60. Radiated Spurious Emissions 1-18GHz Antenna 2a (BT GFSK ePA – 2402 MHz)

Bluetooth Mode: GFSK
 Data Rate: 1Mbps
 Power Scheme ePA
 Distance of Measurements: 3 Meters
 Operating Frequency: 2402MHz

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]
4804.00	Peak	V	215	223	-67.92	5.88	44.96	73.98	-29.02
12010.00	Peak	V	-	-	-69.68	14.68	52.00	73.98	-21.97

Table 7-16. Radiated Measurements Antenna 2a

FCC ID: BCGA2764 IC: 579C-A2764	 element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090028-15.BCG	Test Dates: 5/30/2022 - 9/28/2022	EUT Type: Tablet Device	Page 66 of 90



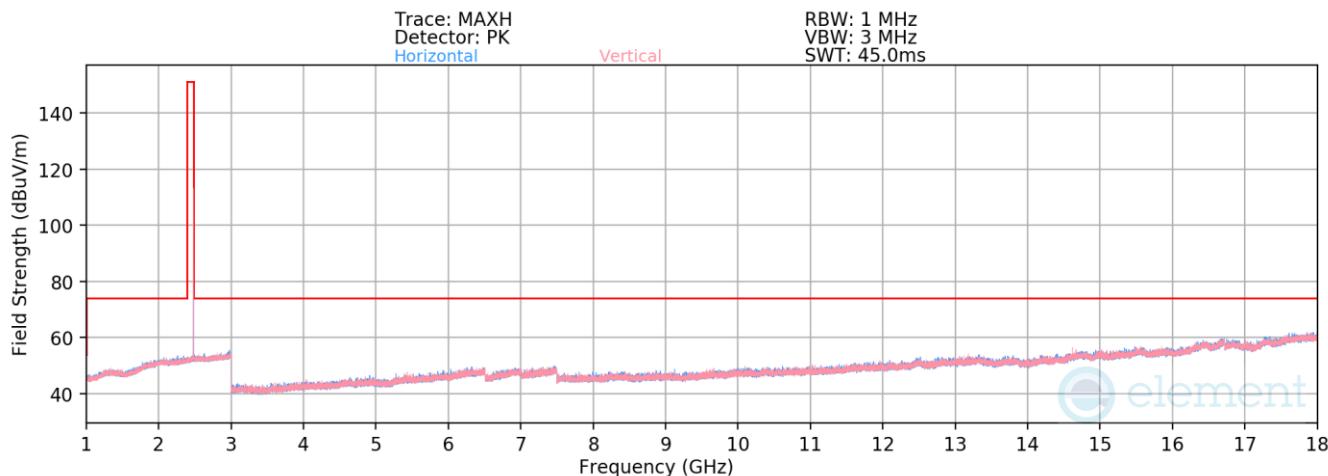
Plot 7-61. Radiated Spurious Emissions 1-18GHz Antenna 2a (BT GFSK ePA – 2441 MHz)

Bluetooth Mode: GFSK
 Data Rate: 1Mbps
 Power Scheme ePA
 Distance of Measurements: 3 Meters
 Operating Frequency: 2441MHz

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]
4882.00	Peak	V	222	243	-66.54	6.23	46.69	73.98	-27.29
7323.00	Peak	V	347	103	-68.80	9.95	48.15	73.98	-25.83
12205.00	Peak	V	-	-	-69.52	14.84	52.32	73.98	-21.66

Table 7-17. Radiated Measurements Antenna 2a

FCC ID: BCGA2764 IC: 579C-A2764	 element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090028-15.BCG	Test Dates: 5/30/2022 - 9/28/2022	EUT Type: Tablet Device	Page 67 of 90



Plot 7-62. Radiated Spurious Emissions 1-18GHz Antenna 2a (BT GFSK ePA – 2480 MHz)

Bluetooth Mode: GFSK
 Data Rate: 1Mbps
 Power Scheme ePA
 Distance of Measurements: 3 Meters
 Operating Frequency: 2480MHz

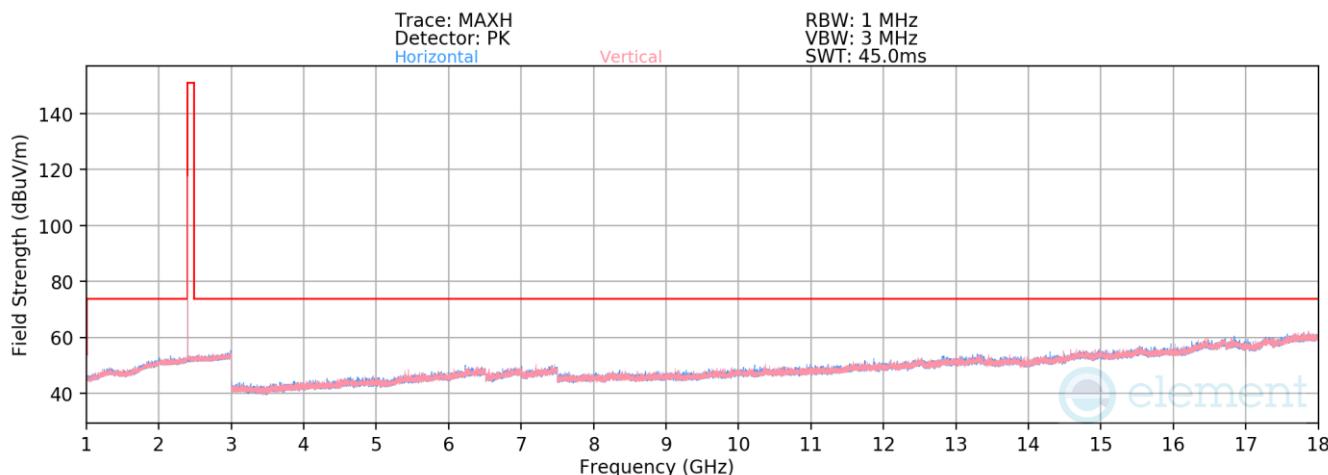
Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]
4960.00	Peak	V	146	217	-68.17	6.45	45.28	73.98	-28.70
7440.00	Peak	V	138	167	-68.34	9.93	48.59	73.98	-25.39
12400.00	Peak	V	-	-	-73.11	15.14	49.03	73.98	-24.95

Table 7-18. Radiated Measurements Antenna 2a

FCC ID: BCGA2764 IC: 579C-A2764	 MEASUREMENT REPORT (CERTIFICATION)				Approved by: Technical Manager
Test Report S/N: 1C2205090028-15.BCG	Test Dates: 5/30/2022 - 9/28/2022	EUT Type: Tablet Device			

7.9.3 Radiated Spurious Emission Measurements Tx BF (Above 1GHz)

§15.205 §15.209 §15.247 (d); RSS-Gen [8.9]



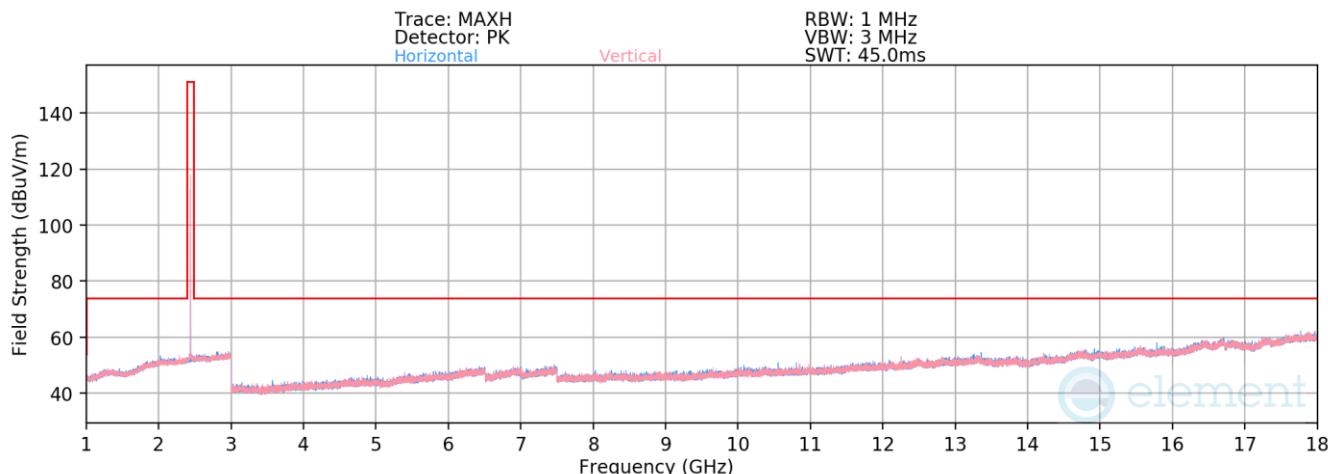
Plot 7-63. Radiated Spurious Emissions 1-18GHz TxBF, 2.4GHz (BT GFSK ePA – 2402 MHz)

Bluetooth Mode: GFSK
 Data Rate: 1Mbps
 Power Scheme ePA
 Distance of Measurements: 3 Meters
 Operating Frequency: 2402MHz

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]
4804.00	Peak	V	264	182	-67.40	5.88	45.48	73.98	-28.50
12010.00	Peak	V	-	-	-72.50	14.68	49.18	73.98	-24.79

Table 7-19. Radiated Measurements TxBF, 2.4GHz

FCC ID: BCGA2764 IC: 579C-A2764	 element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090028-15.BCG	Test Dates: 5/30/2022 - 9/28/2022	EUT Type: Tablet Device	Page 69 of 90



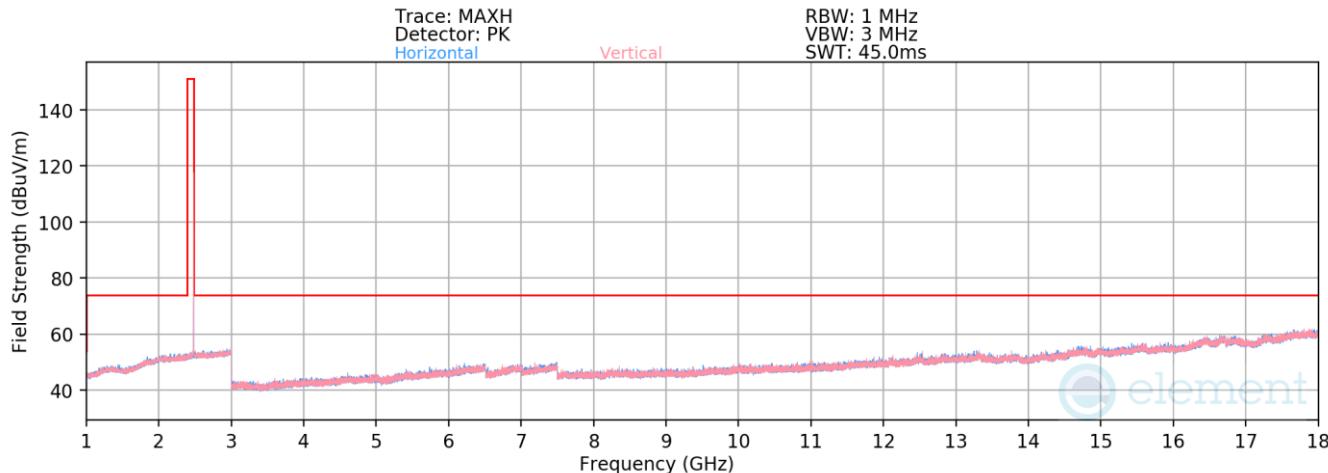
Plot 7-64. Radiated Spurious Emissions 1-18GHz TxBF, 2.4GHz (BT GFSK ePA – 2441 MHz)

Bluetooth Mode: GFSK
 Data Rate: 1Mbps
 Power Scheme ePA
 Distance of Measurements: 3 Meters
 Operating Frequency: 2441MHz

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]
4882.00	Peak	V	174	179	-68.69	6.23	44.54	73.98	-29.44
7323.00	Peak	V	118	155	-68.20	9.95	48.75	73.98	-25.23
12205.00	Peak	V	-	-	-73.24	14.84	48.60	73.98	-25.38

Table 7-20. Radiated Measurements TxBF, 2.4GHz

FCC ID: BCGA2764 IC: 579C-A2764	 element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090028-15.BCG	Test Dates: 5/30/2022 - 9/28/2022	EUT Type: Tablet Device	Page 70 of 90



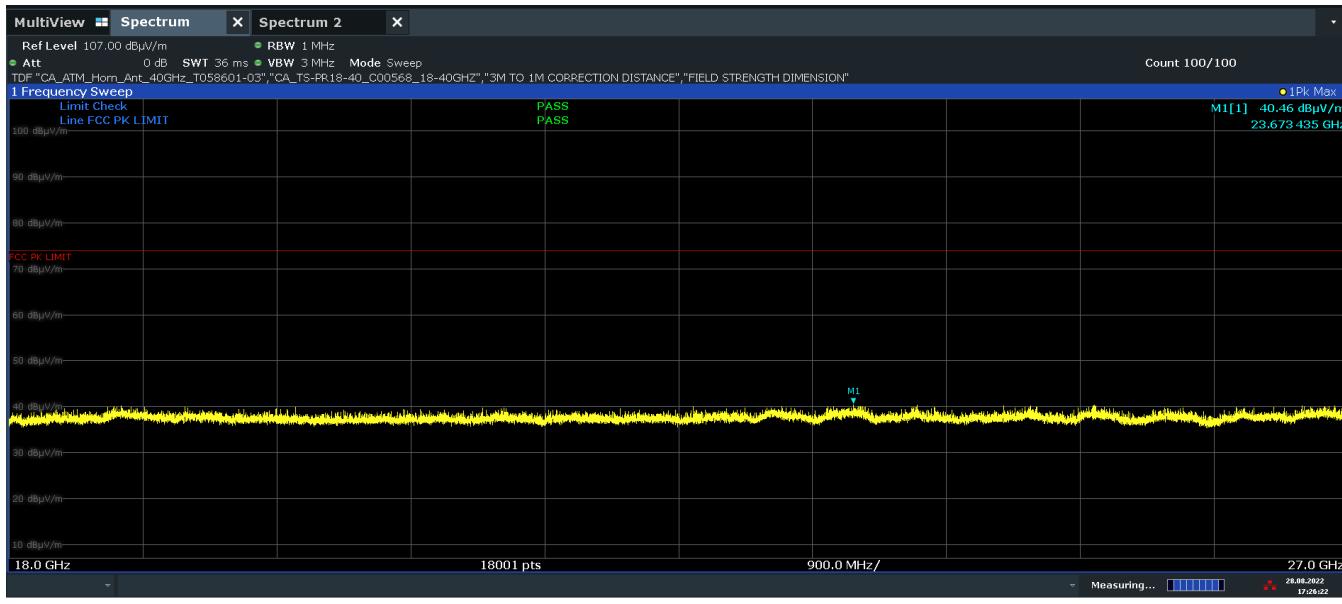
Plot 7-65. Radiated Spurious Emissions 1-18GHz TxBF (BT GFSK ePA – 2480 MHz)

Bluetooth Mode: GFSK
 Data Rate: 1Mbps
 Power Scheme ePA
 Distance of Measurements: 3 Meters
 Operating Frequency: 2480MHz

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]
4960.00	Peak	V	138	157	-66.43	6.45	47.02	73.98	-26.96
7440.00	Peak	V	271	167	-65.25	9.93	51.68	73.98	-22.30
12400.00	Peak	V	-	-	-71.94	15.14	50.20	73.98	-23.78

Table 7-21. Radiated Measurements TxBF, 2.4GHz

FCC ID: BCGA2764 IC: 579C-A2764	 element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090028-15.BCG	Test Dates: 5/30/2022 - 9/28/2022	EUT Type: Tablet Device	Page 71 of 90

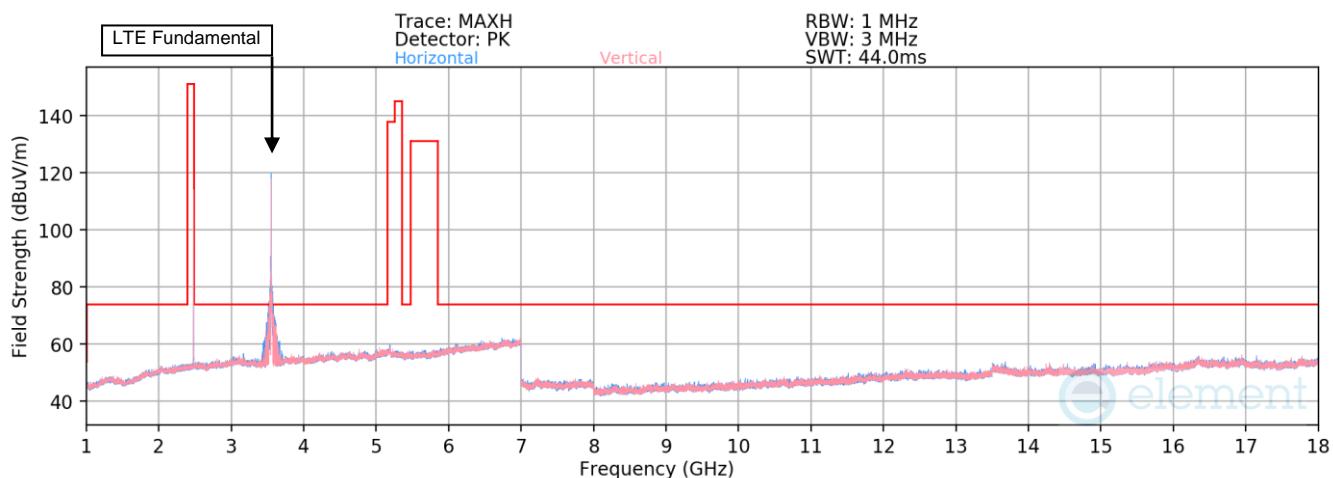


FCC ID: BCGA2764 IC: 579C-A2764	 element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090028-15.BCG	Test Dates: 5/30/2022 - 9/28/2022	EUT Type: Tablet Device	Page 72 of 90

7.9.4 Simultaneous Tx Radiated Spurious Emission Measurements

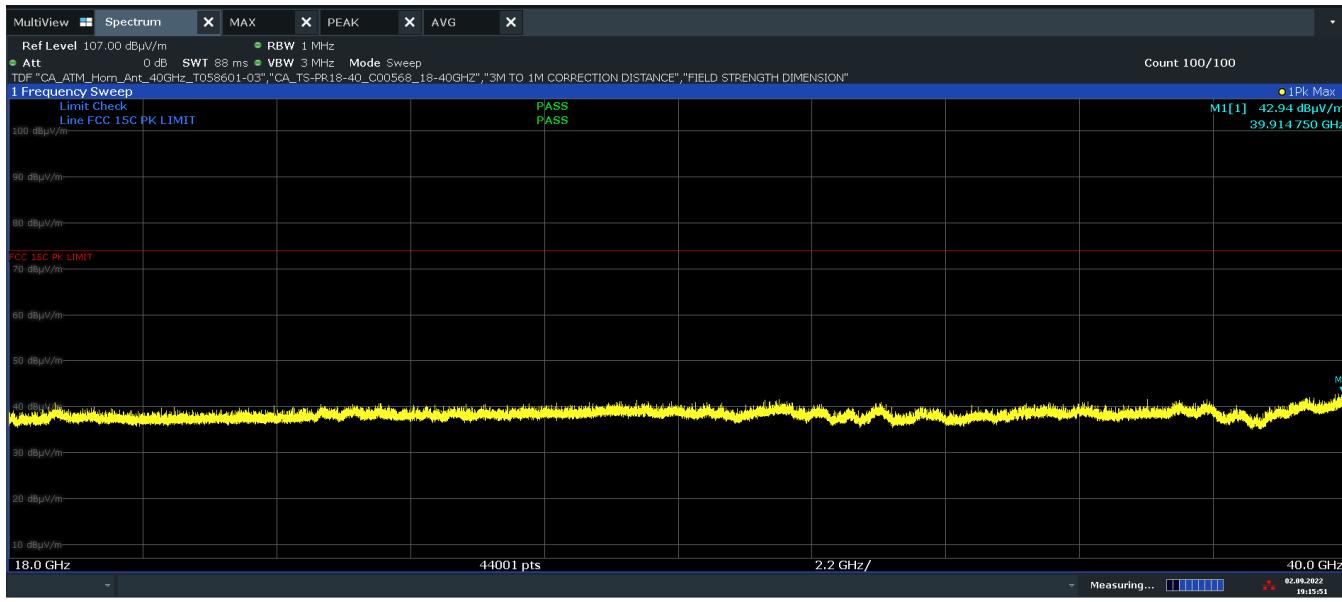
§15.205 §15.209 §15.247 (d); RSS-Gen [8.9]

Description	Bluetooth	LTE
Antenna	2a	2a
Channel	79	55340
Operating Frequency (MHz)	2480	3560
Mode/Modulation	GFSK ePA	QPSK/1RB/20MHz

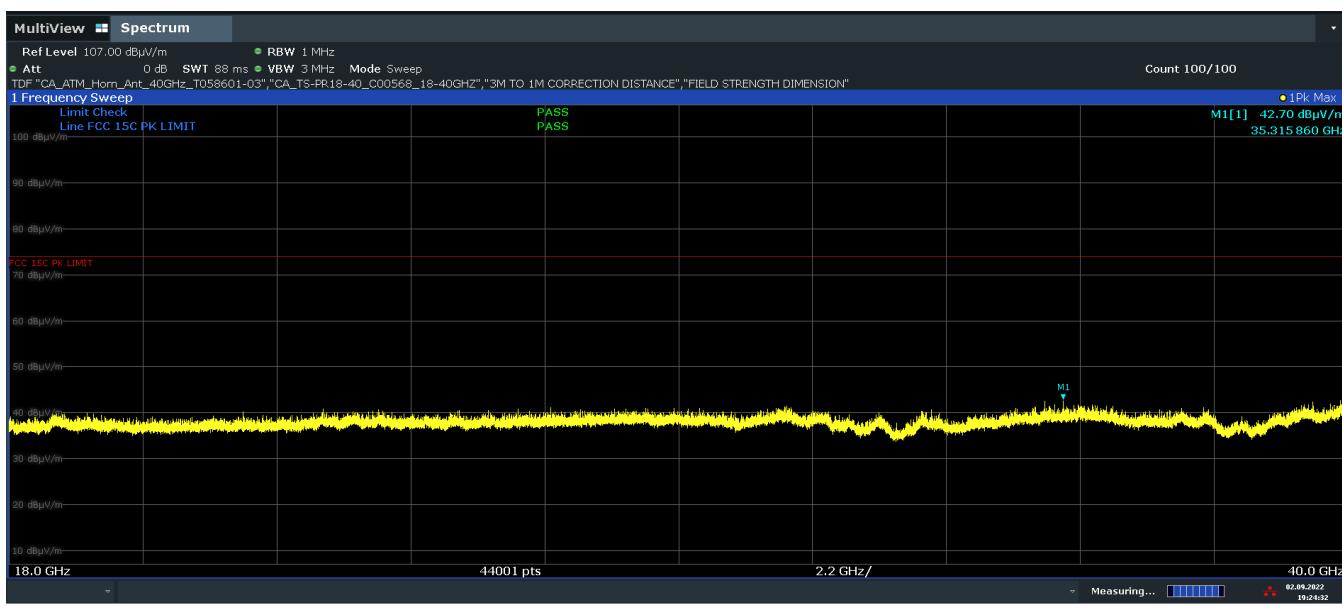


Plot 7-68. Radiated Spurious Emissions - Simultaneous Transmission 1-18GHz

FCC ID: BCGA2764 IC: 579C-A2764	 element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090028-15.BCG	Test Dates: 5/30/2022 - 9/28/2022	EUT Type: Tablet Device	Page 73 of 90



Plot 7-69. Radiated Spurious Emissions - Simultaneous Transmission 18GHz - 40GHz Pol H



Plot 7-70. Radiated Spurious Emissions - Simultaneous Transmission 18GHz - 40GHz Pol V

FCC ID: BCGA2764 IC: 579C-A2764	 element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090028-15.BCG	Test Dates: 5/30/2022 - 9/28/2022	EUT Type: Tablet Device	Page 74 of 90

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dBm]	Field Strength [dB μ V/m]	EIRP Spurious Emission Level [dBm/MHz]	Limit [dBm/MHz]	Margin [dB]
7102.00	H	-	-	-82.51	11.21	35.7	-59.52	-40.00	-19.52
10653.00	H	-	-	-85.53	15.66	37.1	-58.10	-40.00	-18.10
14204.00	H	258	171	-82.00	18.22	43.2	-52.01	-40.00	-12.01
17755.00	H	-	-	-86.19	22.22	43.0	-52.20	-40.00	-12.20
1409.00*	H	-	-	-78.86	7.55	35.7	-59.54	-40.00	-19.54
4622.00*	H	-	-	-82.10	19.17	44.1	-51.16	-40.00	-11.16

Table 7-22. LTE Harmonics and Intermodulations (*) Emissions Measurements in Simultaneous Transmission Mode

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]
4960.00	Peak	H	-	-	-71.92	18.35	53.43	73.98	-20.55
7440.00	Peak	H	-	-	-72.03	12.07	47.04	73.98	-26.94
12400.00	Peak	H	-	-	-75.22	18.11	49.89	73.98	-24.09

Table 7-23. Bluetooth Harmonics Emissions Measurements in Simultaneous Transmission Mode

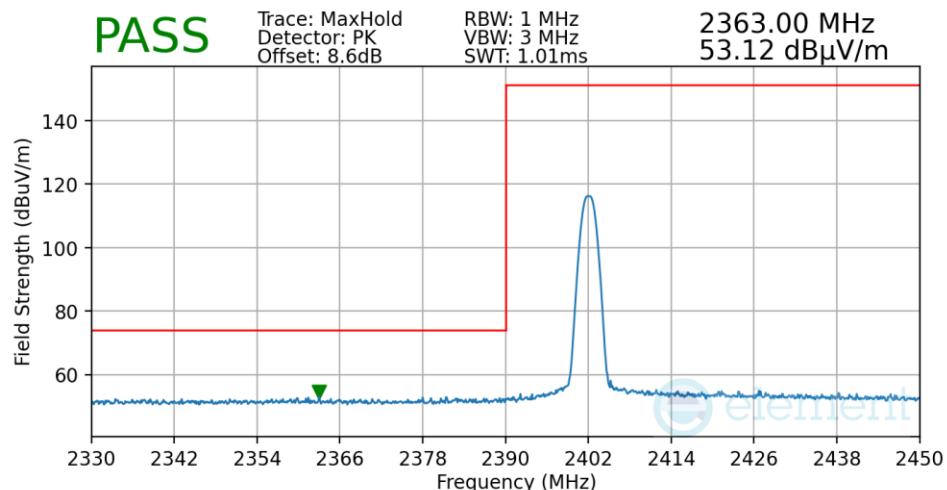
FCC ID: BCGA2764 IC: 579C-A2764	 element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090028-15.BCG	Test Dates: 5/30/2022 - 9/28/2022	EUT Type: Tablet Device	Page 75 of 90

7.9.5 Radiated Restricted Band Edge Measurements

§15.205 §15.209 §15.247 (d); RSS-Gen [8.9]

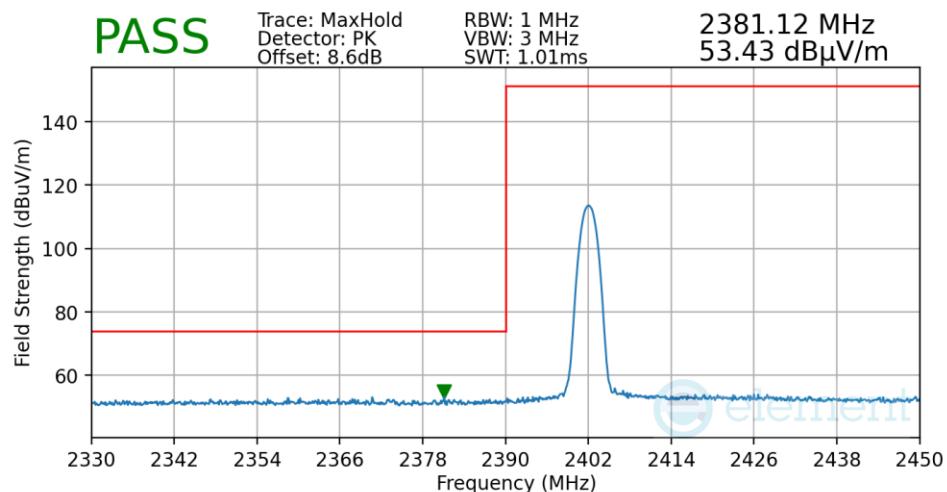
Antenna 4a

Bluetooth Mode:	GFSK
Power Scheme:	ePA
Measurement Distance:	3 Meters
Operating Frequency:	2402MHz



Plot 7-71. Radiated Restricted Lower Band Edge Measurement Antenna 4a

Bluetooth Mode:	8DPSK
Power Scheme:	ePA
Measurement Distance:	3 Meters
Operating Frequency:	2402MHz

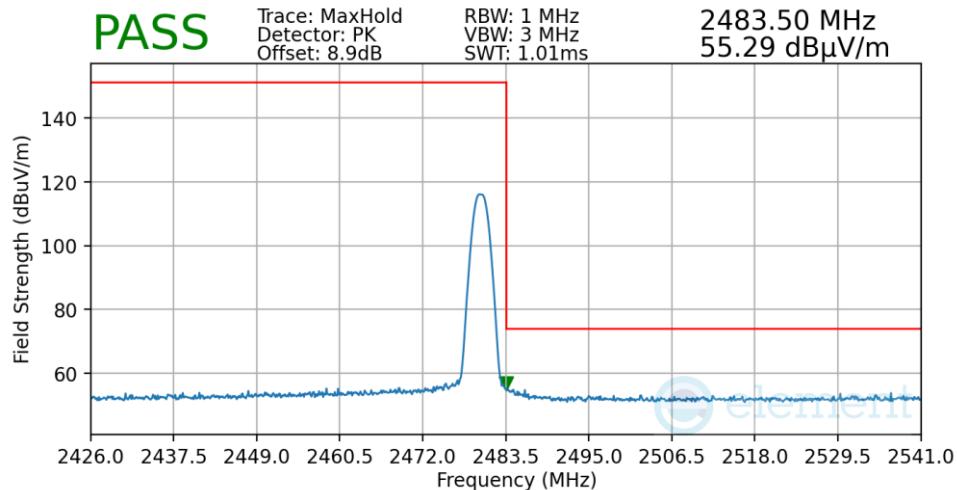


Plot 7-72. Radiated Restricted Lower Band Edge Measurement Antenna 4a

FCC ID: BCGA2764 IC: 579C-A2764	 element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090028-15.BCG	Test Dates: 5/30/2022 - 9/28/2022	EUT Type: Tablet Device	Page 76 of 90

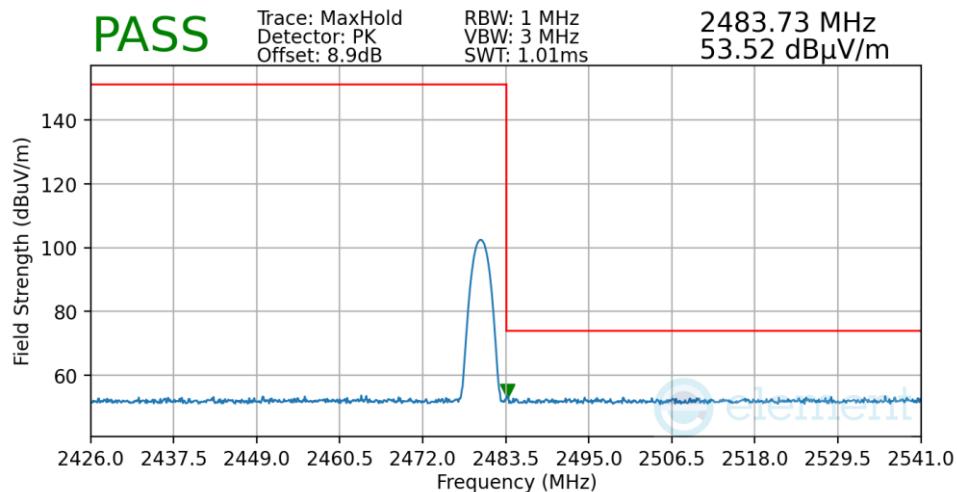


Bluetooth Mode: GFSK
Power Scheme: ePA
Measurement Distance: 3 Meters
Operating Frequency: 2480MHz



Plot 7-73. Radiated Restricted Upper Band Edge Measurement Antenna 4a

Bluetooth Mode: 8DPSK
Power Scheme: ePA
Measurement Distance: 3 Meters
Operating Frequency: 2480MHz



Plot 7-74. Radiated Restricted Upper Band Edge Measurement Antenna 4a

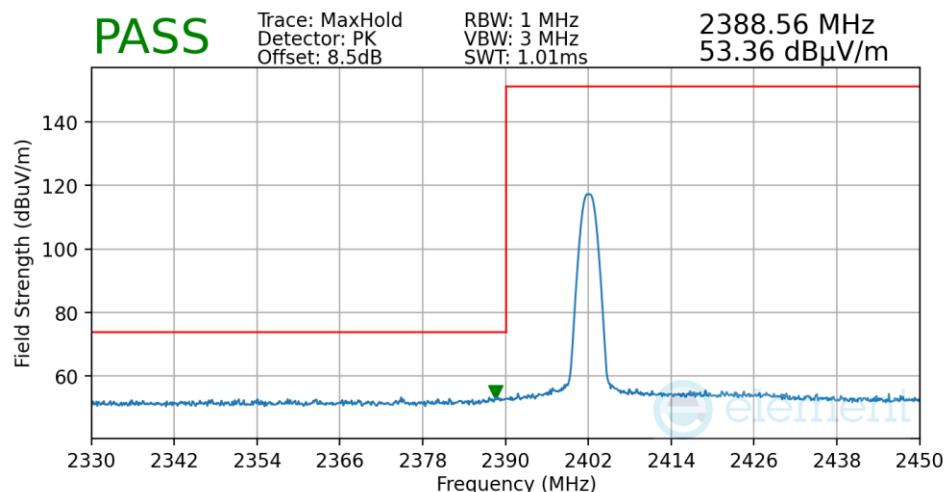
FCC ID: BCGA2764 IC: 579C-A2764	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090028-15.BCG	Test Dates: 5/30/2022 - 9/28/2022	EUT Type: Tablet Device	Page 77 of 90

Radiated Restricted Band Edge Measurements

§15.205 §15.209 §15.247 (d); RSS-Gen [8.9]

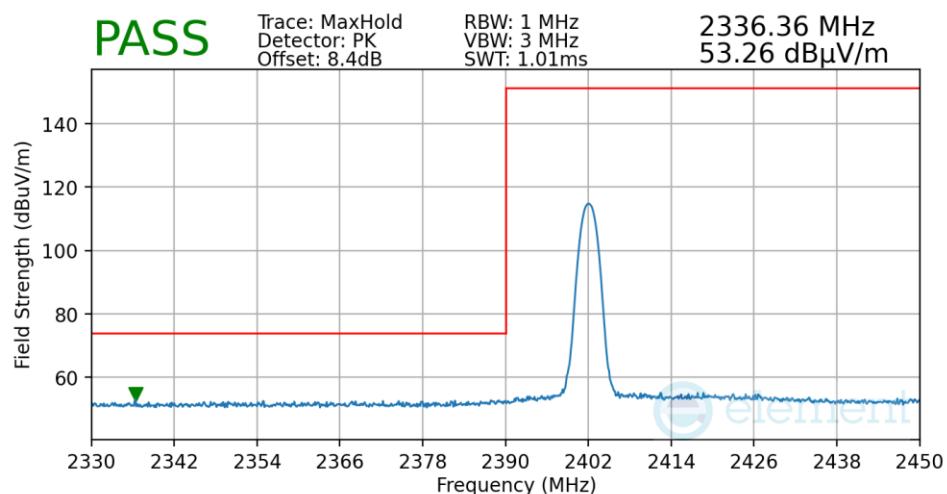
Antenna 2a

Bluetooth Mode:	GFSK
Power Scheme:	ePA
Measurement Distance:	3 Meters
Operating Frequency:	2402MHz



Plot 7-75. Radiated Restricted Lower Band Edge Measurement Antenna 2a

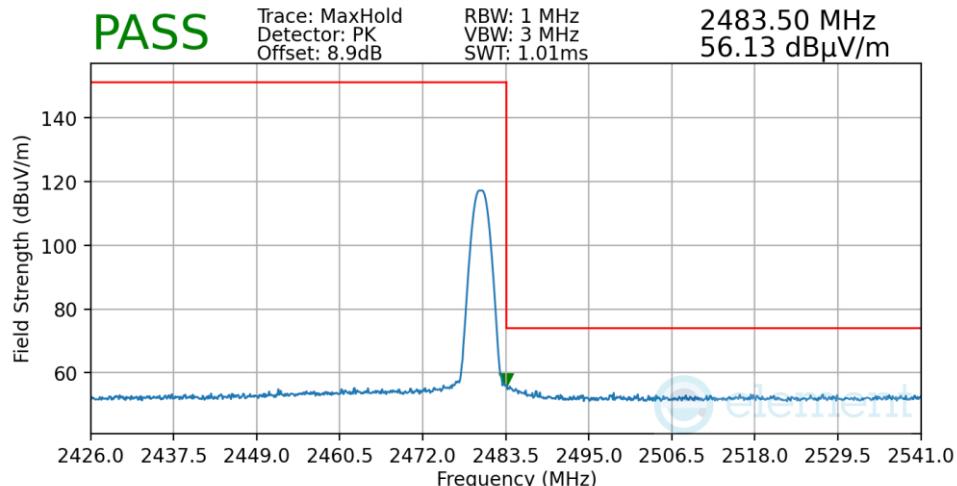
Bluetooth Mode:	8DPSK
Power Scheme:	ePA
Measurement Distance:	3 Meters
Operating Frequency:	2402MHz



Plot 7-76. Radiated Restricted Lower Band Edge Measurement Antenna 2a

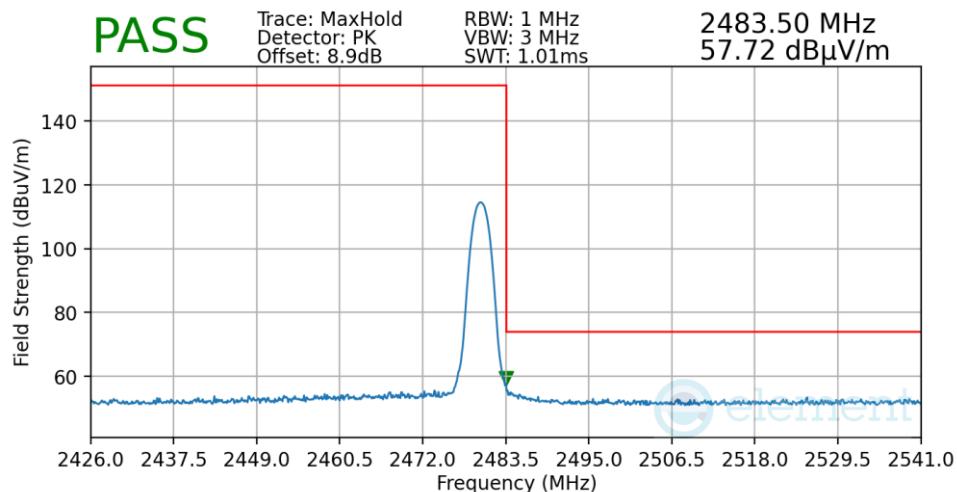
FCC ID: BCGA2764 IC: 579C-A2764		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090028-15.BCG	Test Dates: 5/30/2022 - 9/28/2022	EUT Type: Tablet Device	Page 78 of 90

Bluetooth Mode: GFSK
 Power Scheme: ePA
 Measurement Distance: 3 Meters
 Operating Frequency: 2480MHz



Plot 7-77. Radiated Restricted Upper Band Edge Measurement Antenna 2a

Bluetooth Mode: 8DPSK
 Power Scheme: ePA
 Measurement Distance: 3 Meters
 Operating Frequency: 2480MHz



Plot 7-78. Radiated Restricted Upper Band Edge Measurement Antenna 2a

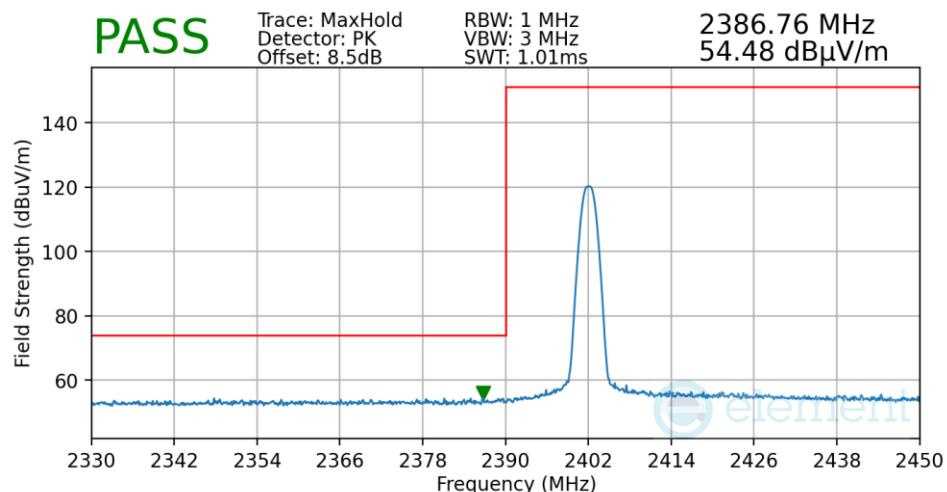
FCC ID: BCGA2764 IC: 579C-A2764		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090028-15.BCG	Test Dates: 5/30/2022 - 9/28/2022	EUT Type: Tablet Device	Page 79 of 90

Radiated Restricted Band Edge Measurements

§15.205 §15.209 §15.247 (d); RSS-Gen [8.9]

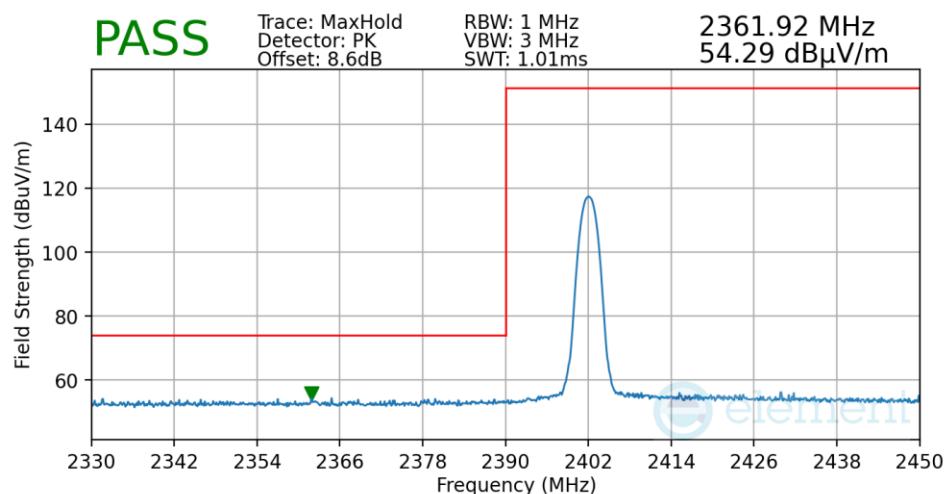
TxBF

Bluetooth Mode:	GFSK
Power Scheme:	ePA
Measurement Distance:	3 Meters
Operating Frequency:	2402MHz



Plot 7-79. Radiated Restricted Lower Band Edge Measurement TxBF, 2.4GHz

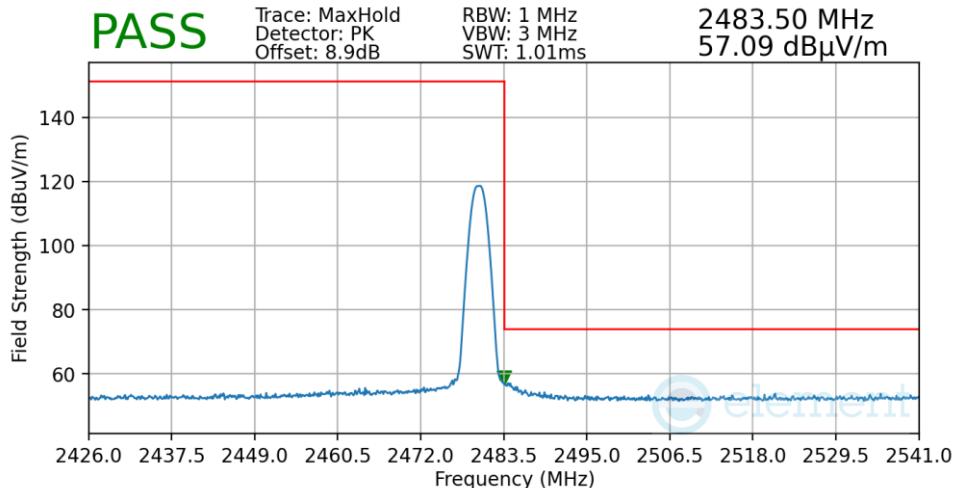
Bluetooth Mode:	8DPSK
Power Scheme:	ePA
Measurement Distance:	3 Meters
Operating Frequency:	2402MHz



Plot 7-80. Radiated Restricted Lower Band Edge Measurement TxBF, 2.4GHz

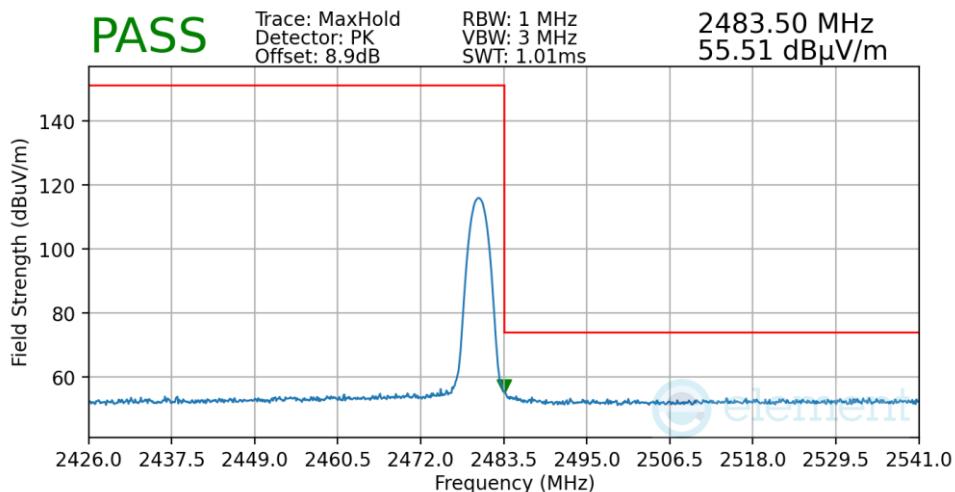
FCC ID: BCGA2764 IC: 579C-A2764	 element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090028-15.BCG	Test Dates: 5/30/2022 - 9/28/2022	EUT Type: Tablet Device	Page 80 of 90

Bluetooth Mode: GFSK
 Power Scheme: ePA
 Measurement Distance: 3 Meters
 Operating Frequency: 2480MHz



Plot 7-81. Radiated Restricted Upper Band Edge Measurement TxBF, 2.4GHz

Bluetooth Mode: 8DPSK
 Power Scheme: ePA
 Measurement Distance: 3 Meters
 Operating Frequency: 2480MHz



Plot 7-82. Radiated Restricted Upper Band Edge Measurement TxBF, 2.4GHz

FCC ID: BCGA2764 IC: 579C-A2764	 element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090028-15.BCG	Test Dates: 5/30/2022 - 9/28/2022	EUT Type: Tablet Device	Page 81 of 90

7.10 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 7-24 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 7-24. 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

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: BCGA2764 IC: 579C-A2764	 element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090028-15.BCG	Test Dates: 5/30/2022 - 9/28/2022	EUT Type: Tablet Device	Page 82 of 90

Test Setup

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

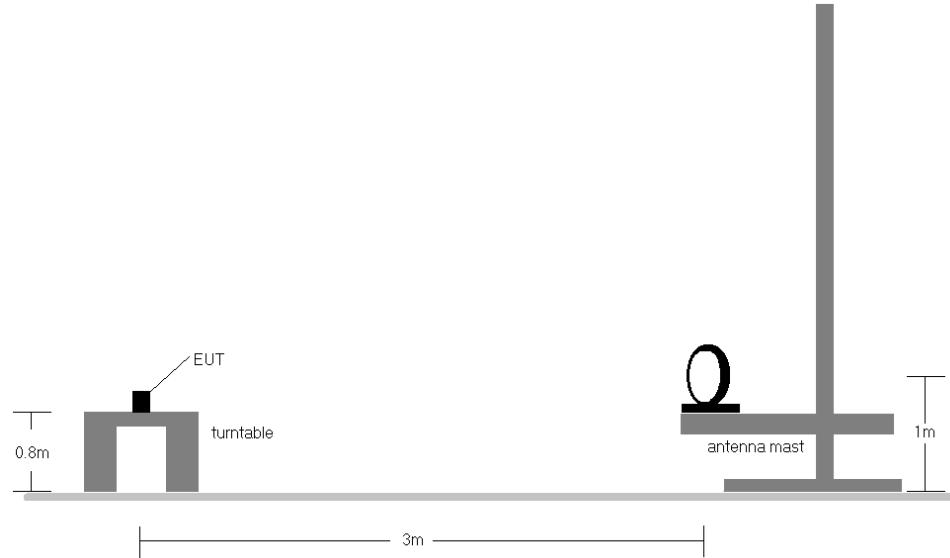


Figure 7-9. Radiated Test Setup < 30MHz

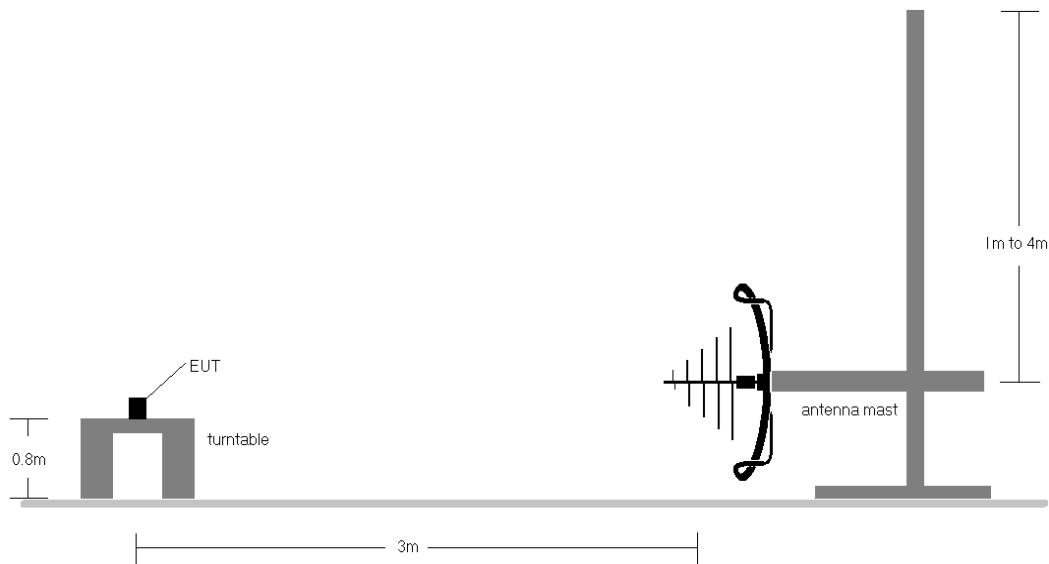


Figure 7-10. Radiated Test Setup < 1GHz

FCC ID: BCGA2764 IC: 579C-A2764	 element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090028-15.BCG	Test Dates: 5/30/2022 - 9/28/2022	EUT Type: Tablet Device	Page 83 of 90

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 7-24.
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. All supported modulation, antenna (including TxBF mode) 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 via 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

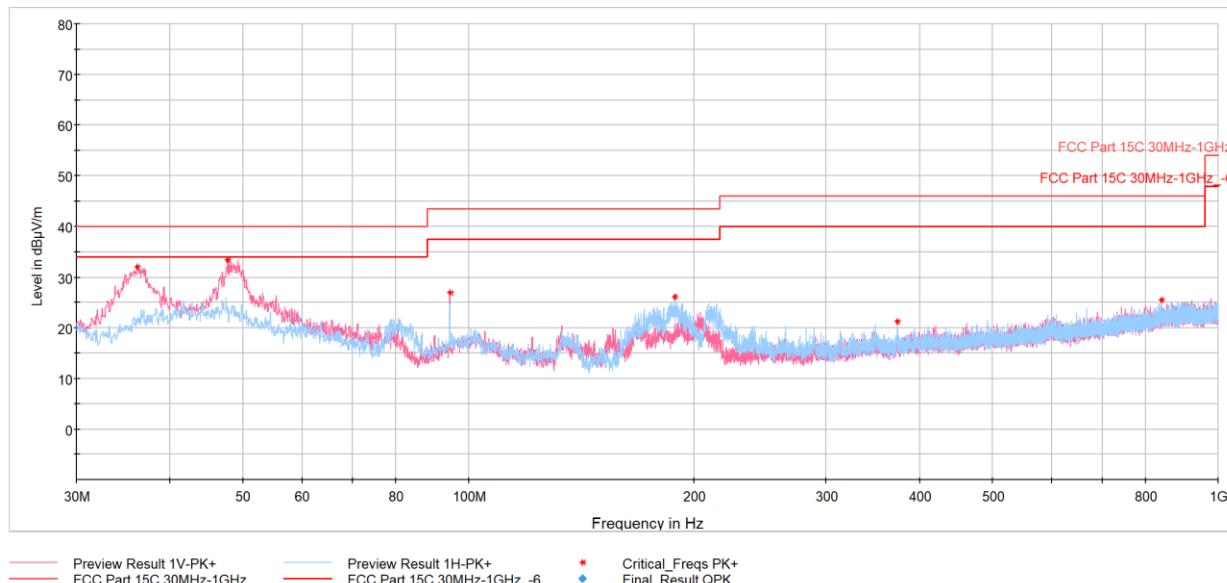
- Field Strength Level $[\text{dB}_{\mu\text{V/m}}]$ = Analyzer Level $[\text{dBm}]$ + 107 + AFCL $[\text{dB/m}]$
- AFCL $[\text{dB/m}]$ = Antenna Factor $[\text{dB/m}]$ + Cable Loss $[\text{dB}]$ – Preamplifier Gain $[\text{dB}]$
- Margin $[\text{dB}]$ = Field Strength Level $[\text{dB}_{\mu\text{V/m}}]$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

FCC ID: BCGA2764 IC: 579C-A2764	 element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090028-15.BCG	Test Dates: 5/30/2022 - 9/28/2022	EUT Type: Tablet Device	Page 84 of 90

Radiated Spurious Emissions Measurements (Below 1GHz)

§15.209; RSS-Gen [8.9]

TxBF



Plot 7-83. Radiated Spurious Emissions Below 1GHz TxBF, 2.4GHz (GFSK ePA – 2480 MHz, 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]
36.21	Max Peak	V	100	45	-56.58	-18.40	32.02	40.00	-7.98
47.80	Max Peak	V	100	25	-58.20	-15.44	33.36	40.00	-6.64
94.51	Max Peak	V	100	204	-61.07	-19.05	26.88	43.52	-16.64
188.45	Max Peak	H	100	247	-62.23	-18.70	26.07	43.52	-17.45
373.33	Max Peak	H	300	209	-72.32	-13.53	21.15	46.02	-24.87
840.68	Max Peak	H	300	287	-76.40	-5.04	25.56	46.02	-20.46

Table 7-25. Radiated Spurious Emissions Below 1GHz TxBF, 2.4GHz (GFSK ePA – 2480 MHz with AC/DC Adapter)

FCC ID: BCGA2764 IC: 579C-A2764	 element	MEASUREMENT REPORT (CERTIFICATION)			Approved by: Technical Manager
Test Report S/N: 1C2205090028-15.BCG	Test Dates: 5/30/2022 - 9/28/2022	EUT Type: Tablet Device			

V 10.5 12/15/2021

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 Washington DC LLC. 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.

7.11 AC Line-Conducted Emissions Measurement

§15.207; 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 7-26. 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: BCGA2764 IC: 579C-A2764	 element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090028-15.BCG	Test Dates: 5/30/2022 - 9/28/2022	EUT Type: Tablet Device	Page 86 of 90

Test Setup

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

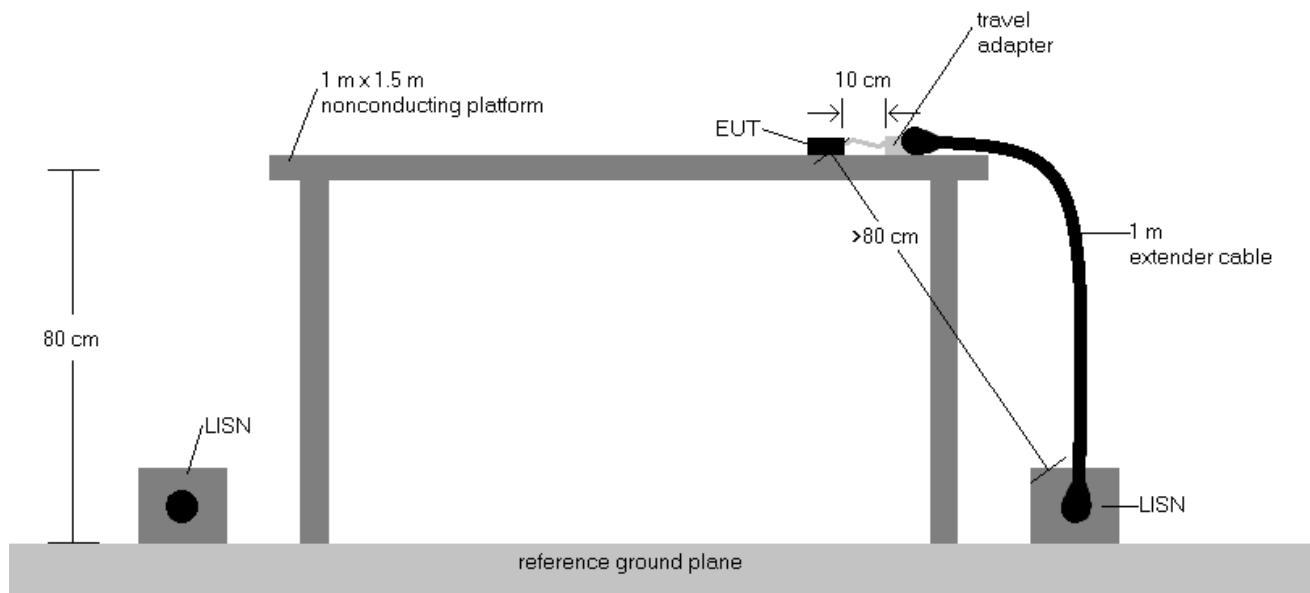
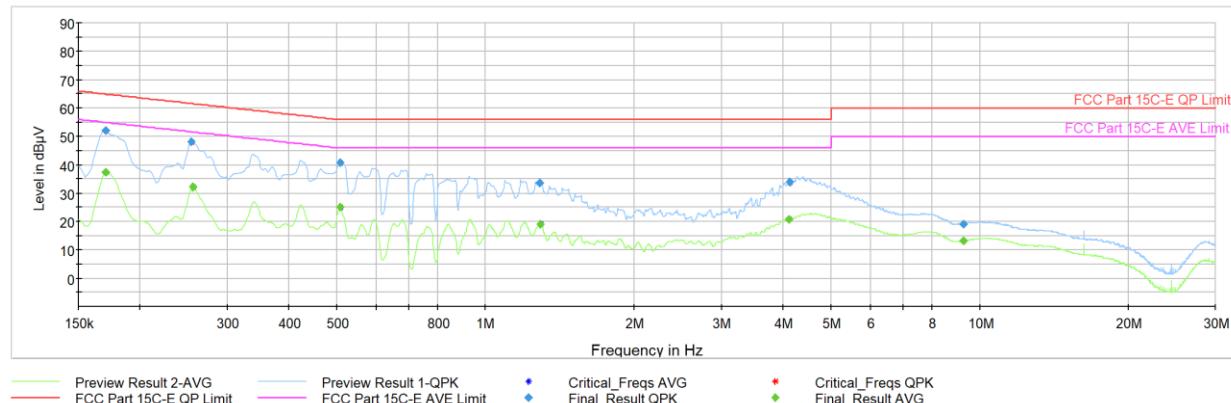


Figure 7-11. Test Instrument & Measurement Setup

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 Part 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 plot are made using a quasi peak and average detectors.
8. Deviations to the Specifications: None.

FCC ID: BCGA2764 IC: 579C-A2764	 element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090028-15.BCG	Test Dates: 5/30/2022 - 9/28/2022	EUT Type: Tablet Device	Page 87 of 90

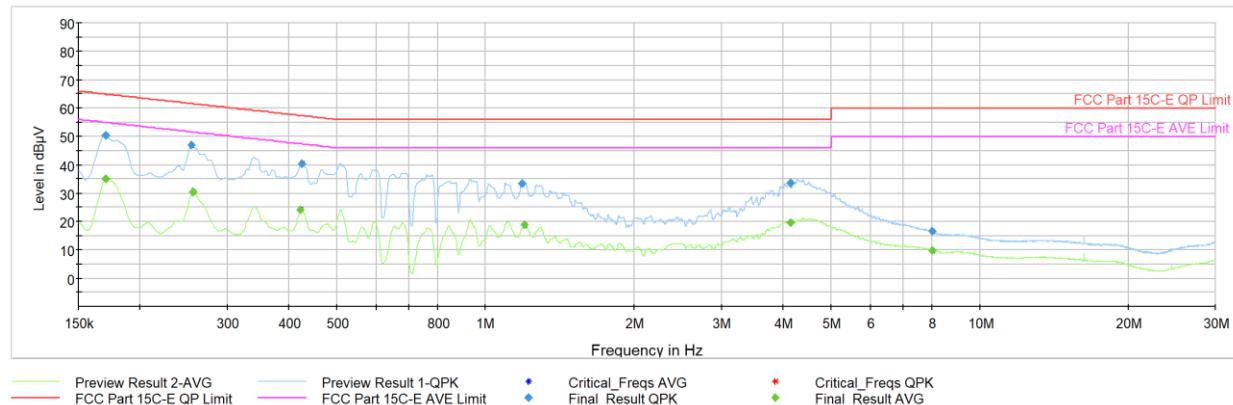


Plot 7-84. AC Line-Conducted Test Plot TxBF, 2.4GHz (L1, GFSK ePA – 2480 MHz, with AC/DC Adapter)

Frequency [MHz]	Process State	QuasiPeak [dBμV]	Average [dBμV]	Limit [dBμV]	Margin [dB]	Line	PE
0.170	FINAL	—	37.37	54.95	-17.58	L1	GND
0.170	FINAL	52.1	—	64.95	-12.87	L1	GND
0.254	FINAL	48.2	—	61.64	-13.49	L1	GND
0.256	FINAL	—	32.18	51.57	-19.39	L1	GND
0.508	FINAL	—	25.08	46.00	-20.92	L1	GND
0.508	FINAL	40.8	—	56.00	-15.22	L1	GND
1.289	FINAL	33.6	—	56.00	-22.39	L1	GND
1.291	FINAL	—	19.24	46.00	-26.76	L1	GND
4.112	FINAL	—	20.94	46.00	-25.06	L1	GND
4.126	FINAL	33.9	—	56.00	-22.10	L1	GND
9.267	FINAL	19.1	—	60.00	-40.93	L1	GND
9.276	FINAL	—	13.11	50.00	-36.89	L1	GND

Table 7-27. AC Line-Conducted Test Data TxBF, 2.4GHz (L1, GFSK ePA – 2480 MHz, with AC/DC Adapter)

FCC ID: BCGA2764 IC: 579C-A2764	 element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090028-15.BCG	Test Dates: 5/30/2022 - 9/28/2022	EUT Type: Tablet Device	Page 88 of 90



Plot 7-85. AC Line-Conducted Test Plot TxBF, 2.4GHz (N, GFSK ePA – 2480 MHz, with AC/DC Adapter)

Frequency [MHz]	Process State	QuasiPeak [dBμV]	Average [dBμV]	Limit [dBμV]	Margin [dB]	Line	PE
0.170	FINAL	—	35.09	54.95	-19.86	N	GND
0.170	FINAL	50.2	—	64.95	-14.72	N	GND
0.254	FINAL	46.9	—	61.64	-14.76	N	GND
0.256	FINAL	—	30.43	51.57	-21.13	N	GND
0.422	FINAL	—	24.37	47.40	-23.03	N	GND
0.425	FINAL	40.4	—	57.36	-17.01	N	GND
1.185	FINAL	33.3	—	56.00	-22.66	N	GND
1.201	FINAL	—	18.88	46.00	-27.12	N	GND
4.130	FINAL	33.6	—	56.00	-22.37	N	GND
4.130	FINAL	—	19.86	46.00	-26.14	N	GND
8.016	FINAL	—	9.91	50.00	-40.10	N	GND
8.016	FINAL	16.5	—	60.00	-43.50	N	GND

Table 7-28. AC Line-Conducted Test Data TxBF, 2.4GHz (N, GFSK ePA – 2480 MHz, with AC/DC Adapter)

FCC ID: BCGA2764 IC: 579C-A2764	 element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090028-15.BCG	Test Dates: 5/30/2022 - 9/28/2022	EUT Type: Tablet Device	Page 89 of 90

8.0 CONCLUSION

The data collected relate only to the item(s) tested and show that the **Apple Tablet Device** **FCC ID: BCGA2764 and IC: 579C-A2764** is in compliance with Part 15 Subpart C (15.247) of the FCC Rules and RSS-247 of the Innovation, Science and Economic Development Canada Rules.

FCC ID: BCGA2764 IC: 579C-A2764	 element		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2205090028-15.BCG	Test Dates: 5/30/2022 - 9/28/2022	EUT Type: Tablet Device		Page 90 of 90

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 Washington DC LLC. 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.

V 10.5 12/15/2021