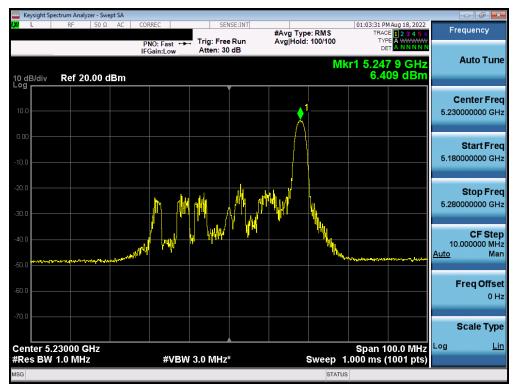




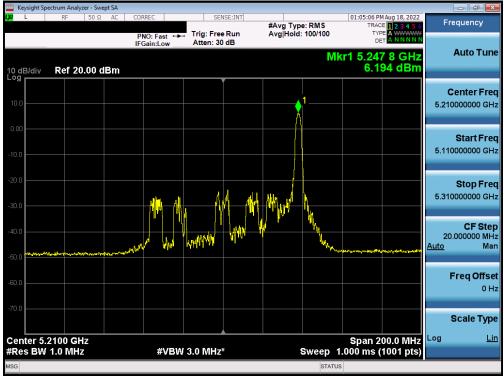
Plot 7-265. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax - 26 Tones (UNII Band 1) - Ch. 38)



Plot 7-266. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – 26 Tones (UNII Band 1) – Ch. 46)

FCC ID: C3K1997		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Dega 200 of 200
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	Portable Computing Device	Page 200 of 309
	÷		V 9.0 02/01/2019





Plot 7-267. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax - 26 Tones (UNII Band 1) - Ch. 42)



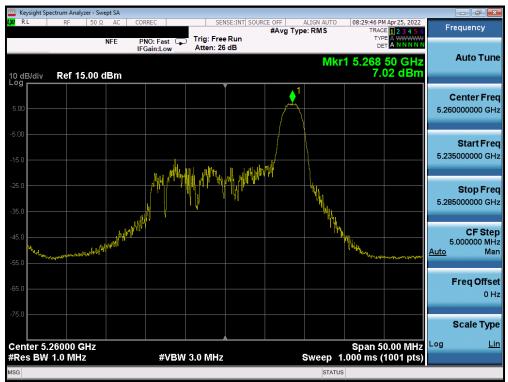
Plot 7-268. Power Spectral Density Plot MIMO ANT2 (160MHz [L] BW 802.11ax - 26 Tones (UNII Band 1/2A) - Ch. 50)

FCC ID: C3K1997		Approved by: Technical Manager	
Test Report S/N:	Test Dates: EUT Type:		Dage 201 of 200
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	Portable Computing Device	Page 201 of 309
	·		V 9.0 02/01/2019





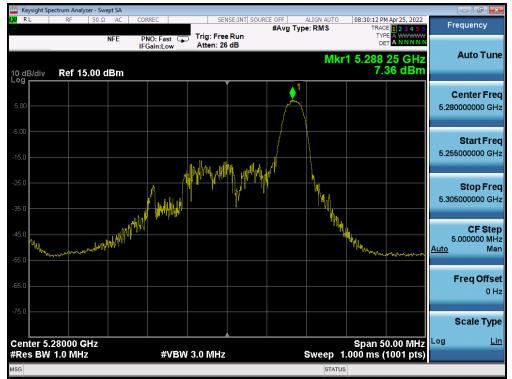
Plot 7-269. Power Spectral Density Plot MIMO ANT2 (160MHz [U] BW 802.11ax - 26 Tones (UNII Band 1/2A) - Ch. 50)



Plot 7-270. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - 26 Tones (UNII Band 2A) - Ch. 52)

FCC ID: C3K1997		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Dage 202 of 200
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	Portable Computing Device	Page 202 of 309
	•		V 9.0 02/01/2019





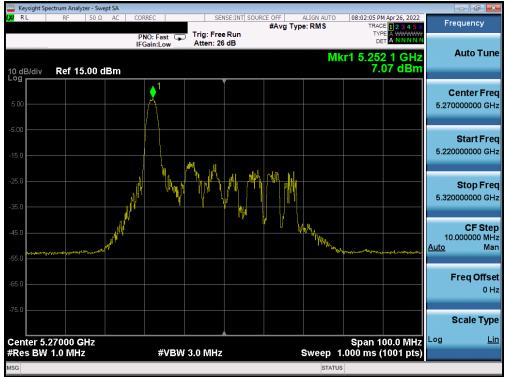
Plot 7-271. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - 26 Tones (UNII Band 2A) - Ch. 56)



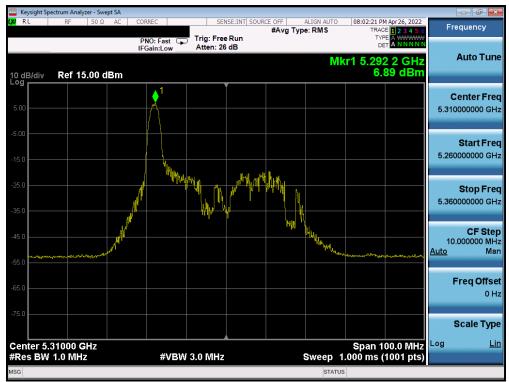
Plot 7-272. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - 26 Tones (UNII Band 2A) - Ch. 64)

FCC ID: C3K1997		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Dage 202 of 200
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	Portable Computing Device	Page 203 of 309
	•	·	V 9.0 02/01/2019





Plot 7-273. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax - 26 Tones (UNII Band 2A) - Ch. 54)



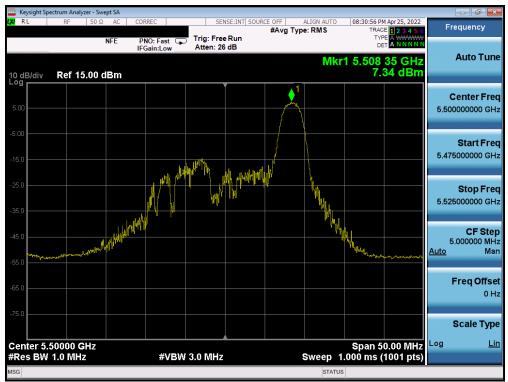
Plot 7-274. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax - 26 Tones (UNII Band 2A) - Ch. 62)

FCC ID: C3K1997		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Daga 204 of 200
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	Portable Computing Device	Page 204 of 309
	<u>.</u>		V 9.0 02/01/2019





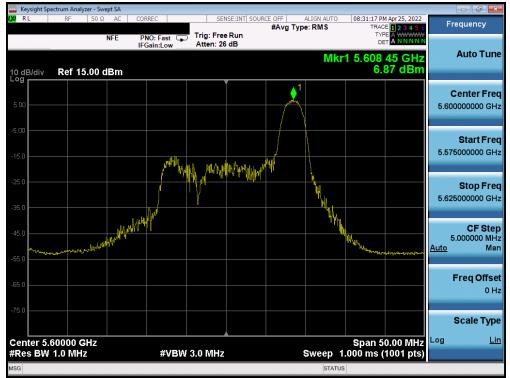
Plot 7-275. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax - 26 Tones (UNII Band 2A) - Ch. 58)



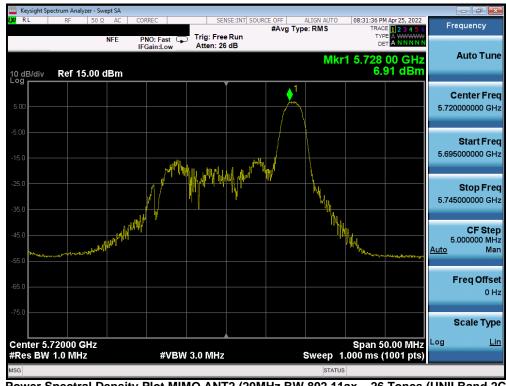
Plot 7-276. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - 26 Tones (UNII Band 2C) - Ch. 100)

FCC ID: C3K1997		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Dage 205 of 200
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	Portable Computing Device	Page 205 of 309
	•		V 9.0 02/01/2019





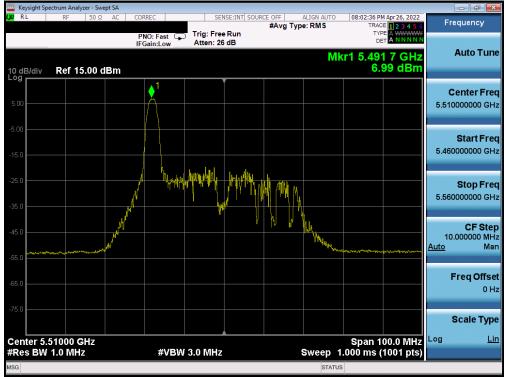
Plot 7-277. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - 26 Tones (UNII Band 2C) - Ch. 120)



Plot 7-278. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - 26 Tones (UNII Band 2C) - Ch. 144)

FCC ID: C3K1997		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Dage 200 of 200
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	Portable Computing Device	Page 206 of 309
	•		V 9.0 02/01/2019





Plot 7-279. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax - 26 Tones (UNII Band 2C) - Ch. 102)



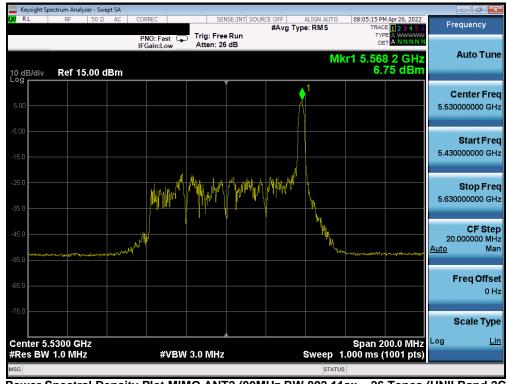
Plot 7-280. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 118)

FCC ID: C3K1997		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Dege 207 of 200
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	Portable Computing Device	Page 207 of 309
	÷		V 9.0 02/01/2019





Plot 7-281. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax - 26 Tones (UNII Band 2C) - Ch. 142)



Plot 7-282. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax - 26 Tones (UNII Band 2C) - Ch. 106)

FCC ID: C3K1997		Approved by: Technical Manager	
Test Report S/N:	Test Dates: EUT Type:		Daga 208 of 200
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	Portable Computing Device	Page 208 of 309
		-	V 9 0 02/01/2019





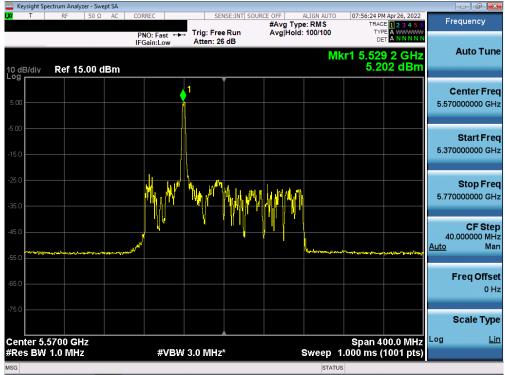
Plot 7-283. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax - 26 Tones (UNII Band 2C) - Ch. 122)



Plot 7-284. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax - 26 Tones (UNII Band 2C) - Ch. 138)

FCC ID: C3K1997		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Dege 200 of 200
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	Portable Computing Device	Page 209 of 309
			V 9.0 02/01/2019





Plot 7-285. Power Spectral Density Plot MIMO ANT2 (160MHz [L] BW 802.11ax - 26 Tones (UNII Band 2C) - Ch. 114)



Plot 7-286. Power Spectral Density Plot MIMO ANT2 (160MHz [U] BW 802.11ax - 26 Tones (UNII Band 2C) - Ch. 114)

FCC ID: C3K1997		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	Test Dates: EUT Type:	
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	Portable Computing Device	Page 210 of 309
	·		V 9.0 02/01/2019



	Frequency [MHz]	Channel No.	802.11 Mode	Tones	Data Rate [Mbps]	Antenna-1 Power Density [dBm]	Antenna-2 Power Density [dBm]	Summed MIMO Power Density [dBm]	Max Permissible Power Density	Margin [dB]
	5745	149	ax (20MHz)	26T	MCS0	15.18	14.87	18.04	30.00	-11.96
	5785	157	ax (20MHz)	26T	MCS0	15.08	14.85	17.97	30.00	-12.03
	5825	165	ax (20MHz)	26T	MCS0	14.70	14.67	17.70	30.00	-12.30
Band	5755	151	ax (40MHz)	26T	MCS0	14.79	14.37	17.60	30.00	-12.40
	5795	159	ax (40MHz)	26T	MCS0	14.81	14.18	17.52	30.00	-12.48
	5775	155	ax (80MHz)	26T	MCS0	14.61	14.48	17.56	30.00	-12.44

 Table 7-103. Band 3 Summed MIMO Conducted Power Spectral Density Measurements MIMO (26 Tones)

FCC ID: C3K1997	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager	
Test Report S/N:	Test Dates: EUT Type:		Dogo 211 of 200	
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	Portable Computing Device	Page 211 of 309	
			V 9 0 02/01/2019	



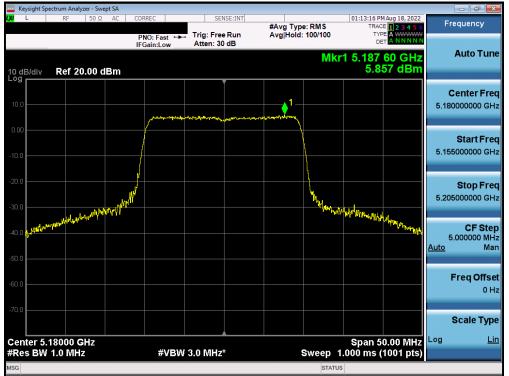
	Frequency [MHz]	Channel No.	802.11 Mode	Tones	Data Rate [Mbps]	Antenna-1 Power Density [dBm]	Antenna-2 Power Density [dBm]	Summed MIMO Power Density [dBm]	Max Power Density [dBm/MHz]	Margin [dB]
	5180	36	ax (20MHz)	242T	MCS0	5.86	5.49	8.69	11.00	-2.31
	5200	40	ax (20MHz)	242T	MCS0	5.61	5.43	8.53	11.00	-2.47
Band 1	5240	48	ax (20MHz)	242T	MCS0	5.66	5.36	8.52	11.00	-2.48
Ban	5190	38	ax (40MHz)	484T	MCS0	2.49	2.58	5.55	11.00	-5.45
	5230	46	ax (40MHz)	484T	MCS0	2.77	2.53	5.66	11.00	-5.34
	5210	42	ax (80MHz)	996T	MCS0	-0.63	-1.32	2.05	11.00	-8.95
Band 1/2A	5250	50	ax (160MHz)	2x996T	MCS0	-7.15	-7.18	-4.15	11.00	-15.15
	5260	52	ax (20MHz)	242T	MCS0	5.50	5.49	8.51	11.00	-2.49
	5280	56	ax (20MHz)	242T	MCS0	5.48	5.57	8.54	11.00	-2.46
Band 2A	5320	64	ax (20MHz)	242T	MCS0	5.72	5.22	8.49	11.00	-2.51
Banc	5270	54	ax (40MHz)	484T	MCS0	5.38	5.71	8.56	11.00	-2.44
	5310	62	ax (40MHz)	484T	MCS0	3.73	3.51	6.63	11.00	-4.37
	5290	58	ax (80MHz)	996T	MCS0	0.11	0.12	3.13	11.00	-7.87
	5500	100	ax (20MHz)	242T	MCS0	6.17	5.38	8.80	11.00	-2.20
	5600	120	ax (20MHz)	242T	MCS0	5.68	4.75	8.25	11.00	-2.75
	5720	144	ax (20MHz)	242T	MCS0	5.53	5.23	8.39	11.00	-2.61
	5510	102	ax (40MHz)	484T	MCS0	3.88	3.11	6.52	11.00	-4.48
4 2C	5590	118	ax (40MHz)	484T	MCS0	5.34	5.24	8.30	11.00	-2.70
Band 2C	5710	142	ax (40MHz)	484T	MCS0	5.30	4.94	8.13	11.00	-2.87
	5530	106	ax (80MHz)	996T	MCS0	-1.03	-0.85	2.07	11.00	-8.93
	5610	122	ax (80MHz)	996T	MCS0	2.06	1.39	4.75	11.00	-6.25
	5690	138	ax (80MHz)	996T	MCS0	1.63	1.37	4.51	11.00	-6.49
	5570	114	ax (160MHz)	2x996T	MCS0	-7.28	-7.79	-4.52	11.00	-15.52

Table 7-104. Bands 1, 2A, 2C MIMO Conducted Power Spectral Density Measurements MIMO (Full Tones)

FCC ID: C3K1997	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	Test Dates: EUT Type:	
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	Portable Computing Device	Page 212 of 309
			V 9 0 02/01/2019



# MIMO Antenna-1 Power Spectral Density Measurements (Full Tones)



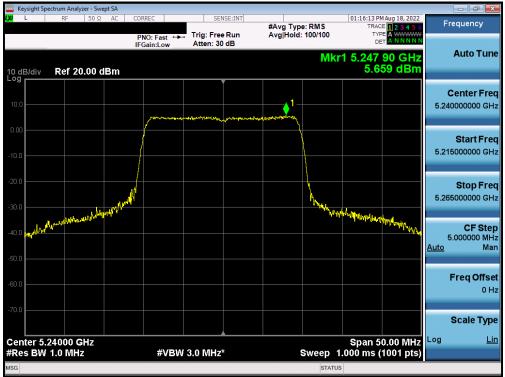
Plot 7-287. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax – Full Tones (UNII Band 1) – Ch. 36)



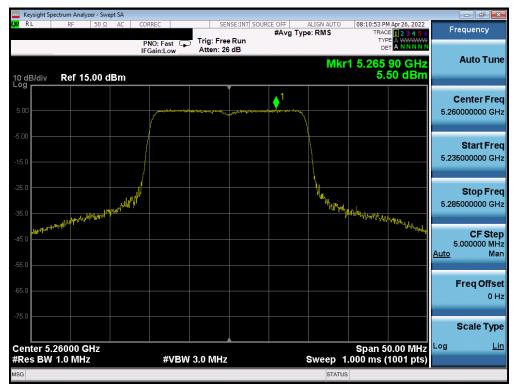
Plot 7-288. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax - Full Tones (UNII Band 1) - Ch. 40)

FCC ID: C3K1997	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	D 010 (000	
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	Portable Computing Device	Page 213 of 309	
		·	V 9.0 02/01/2019	





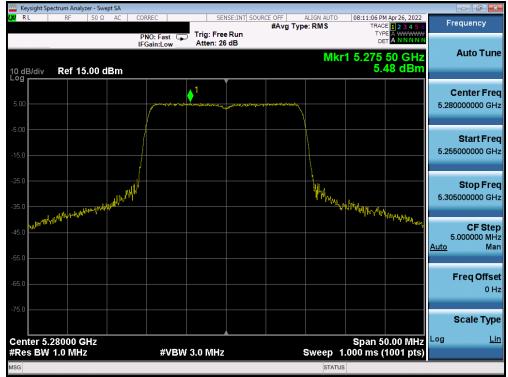
Plot 7-289. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax - Full Tones (UNII Band 1) - Ch. 48)



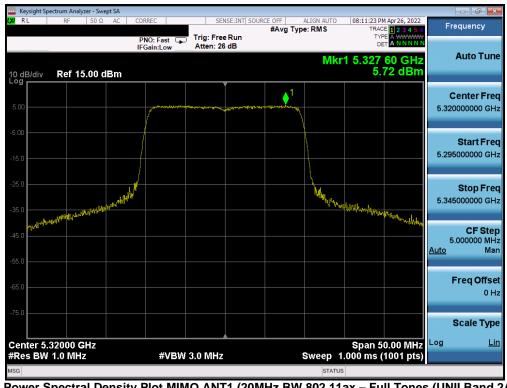
Plot 7-290. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax - Full Tones (UNII Band 2A) - Ch. 52)

FCC ID: C3K1997	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	D 014 (000	
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	Portable Computing Device	Page 214 of 309	
	•		V 9.0 02/01/2019	





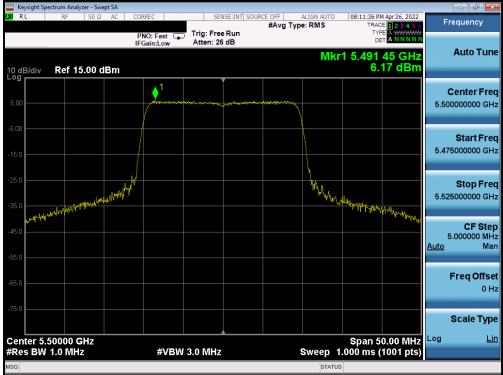
Plot 7-291. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax - Full Tones (UNII Band 2A) - Ch. 56)



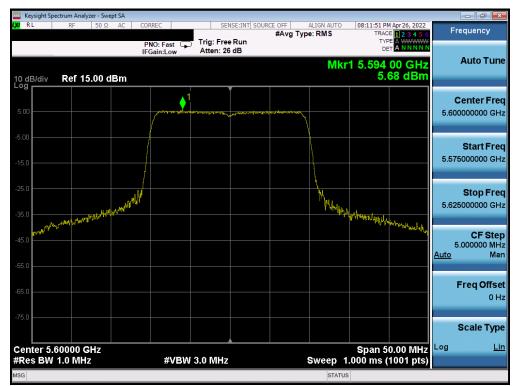
Plot 7-292. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax - Full Tones (UNII Band 2A) - Ch. 64)

FCC ID: C3K1997	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	D 045 (000	
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	Portable Computing Device	Page 215 of 309	
			V 9 0 02/01/2019	





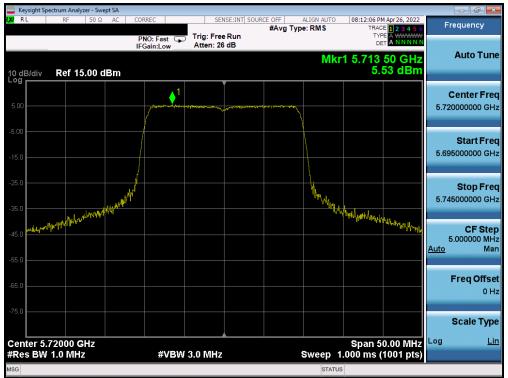
Plot 7-293. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 100)



Plot 7-294. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 120)

FCC ID: C3K1997	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	D 040 (000	
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	Portable Computing Device	Page 216 of 309	
	•		V 9.0 02/01/2019	



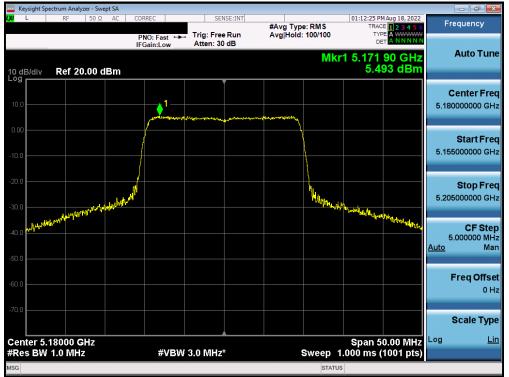


Plot 7-295. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 144)

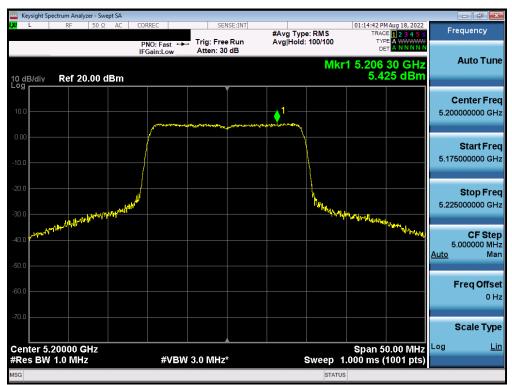
FCC ID: C3K1997		MEASUREMENT REPORT (CERTIFICATION)		
Test Report S/N:	Test Dates:	EUT Type:	D 017 (000	
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	Portable Computing Device	Page 217 of 309	
			V 9.0 02/01/2019	



# MIMO Antenna-2 Power Spectral Density Measurements (Full Tones)



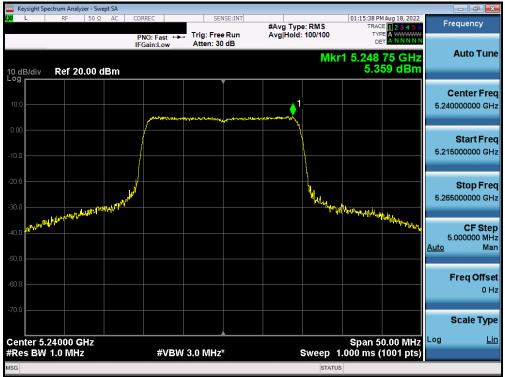
Plot 7-296. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax – Full Tones (UNII Band 1) – Ch. 36)



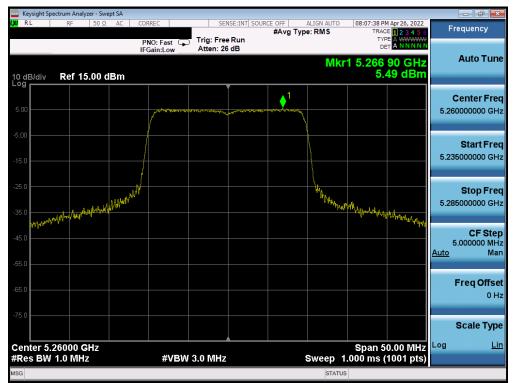
Plot 7-297. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - Full Tones (UNII Band 1) - Ch. 40)

FCC ID: C3K1997	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Dama 040 at 000	
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	Portable Computing Device	Page 218 of 309	
			V 9.0 02/01/2019	





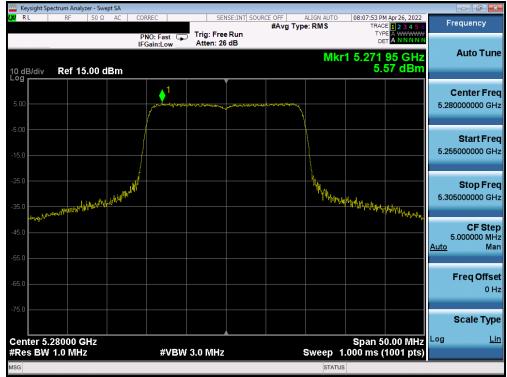
Plot 7-298. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - Full Tones (UNII Band 1) - Ch. 48)



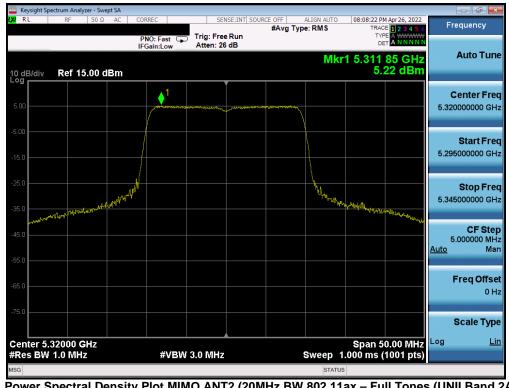
Plot 7-299. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - Full Tones (UNII Band 2A) - Ch. 52)

FCC ID: C3K1997	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	D 040 (000	
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	Portable Computing Device	Page 219 of 309	
	<u>.</u>		V 9.0 02/01/2019	





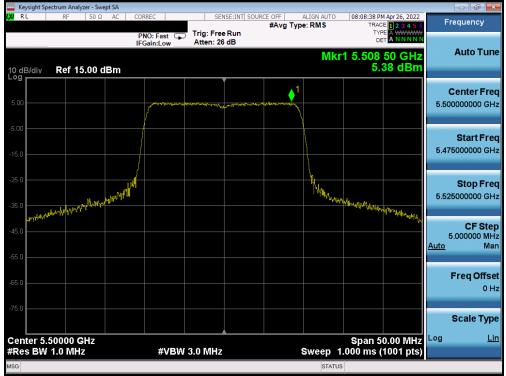
Plot 7-300. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - Full Tones (UNII Band 2A) - Ch. 56)



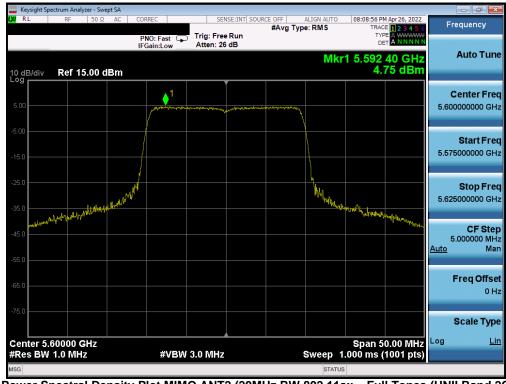
Plot 7-301. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - Full Tones (UNII Band 2A) - Ch. 64)

FCC ID: C3K1997	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 220 of 200
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	Portable Computing Device	Page 220 of 309
		·	V 9 0 02/01/2019





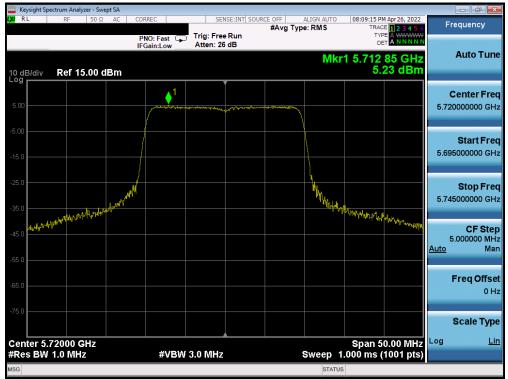
Plot 7-302. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 100)



Plot 7-303. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 120)

FCC ID: C3K1997	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 221 of 200
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	Portable Computing Device	Page 221 of 309
L	•		V 9.0 02/01/2019





Plot 7-304. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 144)

	Frequency [MHz]	Channel No.	802.11 Mode	Tones	Data Rate [Mbps]	Antenna-1 Power Density [dBm]	Antenna-2 Power Density [dBm]	Summed MIMO Power Density [dBm]	Max Permissible Power Density	Margin [dB]
	5745	149	ax (20MHz)	242T	MCS0	6.90	5.12	9.11	30.00	-20.89
	5785	157	ax (20MHz)	242T	MCS0	6.68	6.27	9.49	30.00	-20.51
9 3	5825	165	ax (20MHz)	242T	MCS0	6.49	6.03	9.28	30.00	-20.72
Band	5755	151	ax (40MHz)	484T	MCS0	4.47	3.36	6.96	30.00	-23.04
	5795	159	ax (40MHz)	484T	MCS0	4.24	3.22	6.77	30.00	-23.23
	5775	155	ax (80MHz)	996T	MCS0	-0.76	-1.22	2.03	30.00	-27.97

Table 7-105. Band 3 MIMO Conducted Power Spectral Density Measurements MIMO (Full Tones)

FCC ID: C3K1997		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 222 of 200
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	Portable Computing Device	Page 222 of 309
		•	V 9.0 02/01/2019



#### Note:

Per ANSI C63.10-2013 Section 14.3.2.2 and KDB 662911 v02r01 Section E)2), the power spectral density at Antenna-1 and Antenna-2 were first measured separately with reduced Antenna-1 and Antenna-2 powers per manufacture's tune-up document. The measured values were then summed in linear power units then converted back to dBm.

#### Sample Directional Gain Calculation:

Assuming the antenna gain is -8.61 dBi for Antenna-1 and -7.68 dBi for Antenna-2.

Directional gain = 
$$10 \log[(10^{G_{1/20}} + 10^{G_{2/20}} + ... + 10^{G_{N/20}})^2 / N_{ANT}] dBi$$
  
=  $10 \log[(10^{-8.61/20} + 10^{-7.68/20} / 2] dBi$   
= (-5.12) dBi

#### Sample MIMO Calculation:

Assuming the average conducted power spectral density was measured to be 5.88 dBm for Antenna-1 and 6.27 dBm for Antenna-2.

Antenna-1 + Antenna-2 = MIMO

(5.88 dBm + 6.27 dBm) = (3.87 mW + 4.24 mW) = 8.11mW = 9.09 dBm

FCC ID: C3K1997		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Dage 202 of 200	
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	Portable Computing Device	Page 223 of 309	
			V 9.0 02/01/2019	



# 7.6 Radiated Spurious Emission Measurements – Above 1GHz §15.407(b) §15.205 §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 its maximum power control level, as defined in ANSI C63.10-2013 and KDB 789033 D02 v02r01, and at the appropriate frequencies. All channels, modes (e.g. 26 Tones, 52 Tones, 106 Tones, 242 Tones, 484 Tones and 996 Tones), and modulations/data rates were investigated among all UNII bands. Only the radiated emissions of the configuration that produced the worst case emissions are reported in this section.

For transmitters operating in the 5.15-5.25 GHz and 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an EIRP of −27 dBm/MHz.

For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an EIRP of −27 dBm/MHz.

For transmitters operating in the 5.725-5.85 GHz band: All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47 CFR and Table 6 of RSS-Gen (8.10) must not exceed the limits shown in Table 7-106 per Section 15.209 and RSS-Gen (8.9).

Frequency	Field Strength [μV/m]	Measured Distance [Meters]		
Above 960.0 MHz	500	3		

Table 7-106. Radiated Limits

#### **Test Procedures Used**

ANSI C63.10-2013 – Sections 12.7.7.2, 12.7.6, 12.7.5 KDB 789033 D02 v02r01 – Section G

#### **Test Settings**

#### Average Measurements above 1GHz (Method AD)

- 1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
- 2. RBW = 1MHz
- 3. VBW = 3MHz
- 4. Detector = power average (RMS)
- 5. Number of measurement points = 1001 (Number of points must be  $\geq 2 \times \text{span/RBW}$ )
- 6. Averaging type = power (RMS)
- 7. Sweep time = auto couple
- 8. Trace was averaged over 100 sweeps

FCC ID: C3K1997		MEASUREMENT REPORT (CERTIFICATION)		
Test Report S/N:	Test Dates:	EUT Type:	Page 224 of 309	
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	22 Portable Computing Device		
	•		V 9.0 02/01/2019	



#### Peak Measurements above 1GHz

- 1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
- 2. RBW = 1MHz
- 3. VBW = 3MHz
- 4. Detector = peak
- 5. Sweep time = auto couple
- 6. Trace mode = max hold
- 7. Trace was allowed to stabilize

#### Peak Measurements below 1GHz

- 1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
- 2. Span was set greater than 1MHz
- 3. RBW = 120kHz
- 4. Detector = CISPR quasi-peak
- 5. Sweep time = auto couple
- 6. Trace was allowed to stabilize

#### Test Setup

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

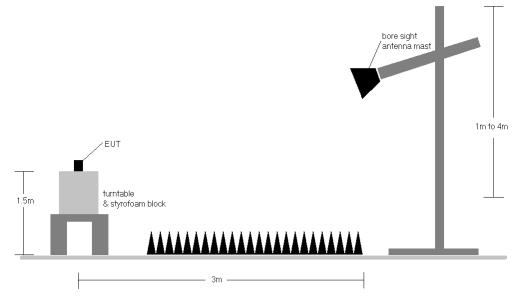


Figure 7-5. Test Instrument & Measurement Setup

FCC ID: C3K1997		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 225 of 200
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	Portable Computing Device	Page 225 of 309
	•		V 9.0 02/01/2019



#### Test Notes

- 1. All emissions that lie in the restricted bands (denoted by a \* next to the frequency) specified in §15.205 and Section 8.10 of RSS-Gen are below the limit shown in Table 7-106.
- 2. All spurious emissions lying in restricted bands specified in §15.205 and Section 8.10 of RSS-Gen are below the limit shown in Table 7-106. All spurious emissions that do not lie in a restricted band are subject to a peak limit of -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions of 68.2dBµV/m.
- 3. The antenna is manipulated through typical positions, polarity and length during the tests. The EUT is manipulated through three orthogonal planes.
- 4. This unit was tested with its standard battery.
- 5. The spectrum is measured from 9kHz to the 10th harmonic of the fundamental frequency of the transmitter using CISPR quasi peak detector below 1GHz. Above 1 GHz, average and peak measurements were taken using linearly polarized horn antennas. The worst-case emissions are reported however emissions whose levels were not within 20dB of the respective limits were not reported.
- 6. Emissions below 18GHz were measured at a 3 meter test distance while emissions above 18GHz were measured at a 1 meter test distance with the application of a distance correction factor.
- 7. The wide spectrum spurious emissions plots shown on the following pages are used only for the purpose of emission identification. Any emissions found to be within 20dB of the limit are fully investigated and the results are shown in this section.
- 8. The "-" shown in the following RSE tables are used to denote a noise floor measurement.
- 9. For radiated measurements, emissions were investigated for the fully-loaded RU configuration and for all of the partially-loaded RU configurations. Among all of the available partially-loaded RU configurations, only the configuration with the worst case emissions is reported.

## Sample Calculations

## **Determining Spurious Emissions Levels**

- ο Field Strength Level [dB<sub>μ</sub>V/m] = Analyzer Level [dBm] + 107 + AFCL [dB/m]
- AFCL [dB/m] = Antenna Factor [dB/m] + Cable Loss [dB]
- Margin [dB] = Field Strength Level  $[dB_{\mu}V/m]$  Limit  $[dB_{\mu}V/m]$

## Radiated Band Edge Measurement Offset

• The amplitude offset shown in the radiated restricted band edge plots in Section 7.6 was calculated using the formula:

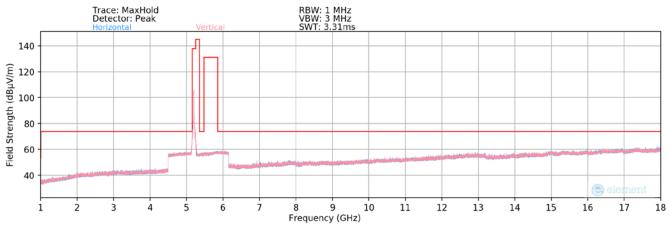
Offset (dB) = (Antenna Factor + Cable Loss + Attenuator) – Preamplifier Gain

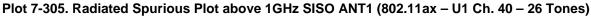
FCC ID: C3K1997		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 226 of 200
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	Portable Computing Device	Page 226 of 309
	·		V 9.0 02/01/2019

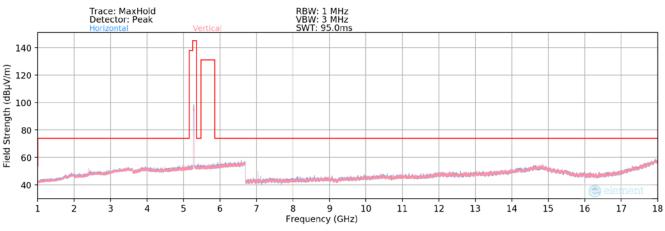


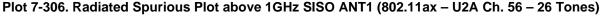
# 7.6.1 SISO Antenna-1 Radiated Spurious Emission Measurements

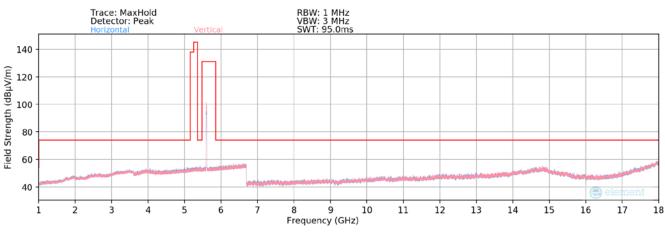
# 26 Tones







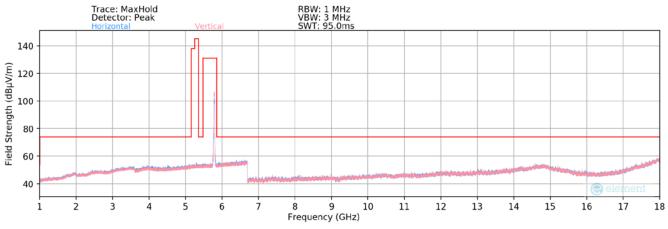




## Plot 7-307. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11ax – U2C Ch. 120 – 26 Tones)

FCC ID: C3K1997		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Dage 227 of 200	
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	Portable Computing Device	Page 227 of 309	
	-	·	V 9.0 02/01/2019	





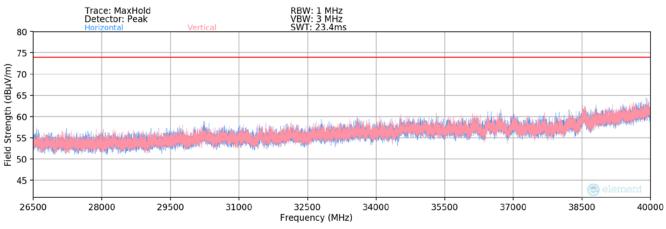
Plot 7-308. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11ax - U3 Ch. 157 - 26 Tones)

FCC ID: C3K1997		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Page 228 of 309	
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	Portable Computing Device		
			V 9 0 02/01/2019	



# SISO Antenna-1 Radiated Spurious Emissions Measurements (Above 18GHz)





Plot 7-310. Radiated Spurious Plot 26.5GHz - 40GHz SISO ANT1 (802.11ax - 26 Tones)

FCC ID: C3K1997		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Page 229 of 309
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	022-8/18/2022 Portable Computing Device	
			V 9 0 02/01/2019



# SISO Antenna-1 Radiated Spurious Emission Measurements (26 Tones) §15.407(b) §15.205 & §15.209; RSS-Gen [8.9]

Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	8
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5180MHz
Channel:	36

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
	10360.00	Peak	V	-	-	-69.36	16.24	0.00	53.88	68.20	-14.32
*	15540.00	Average	V	-	-	-81.39	23.23	0.00	48.84	53.98	-5.14
*	15540.00	Peak	V	-	-	-68.70	23.23	0.00	61.53	73.98	-12.45
*	20720.00	Average	V	-	-	-65.37	3.16	-9.54	35.24	53.98	-18.74
*	20720.00	Peak	V	-	-	-56.22	3.16	-9.54	44.39	73.98	-29.59
	25900.00	Peak	V	-	-	-56.07	4.77	-9.54	46.16	68.20	-22.04

Table 7-107. Radiated Measurements SISO ANT1 (26 Tones)

Worst Case Mode: Worst Case Transfer Rate: RU Index: Distance of Measurements: Operating Frequency: Channel: 802.11ax (20MHz BW) MCS0 8 1 & 3 Meters 5200MHz 40

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
	10400.00	Peak	V	150	118	-68.34	16.36	0.00	55.02	68.20	-13.18
*	15600.00	Average	V	-	-	-81.54	23.44	0.00	48.90	53.98	-5.08
*	15600.00	Peak	V	-	-	-68.71	23.44	0.00	61.73	73.98	-12.25
*	20800.00	Average	V	-	-	-65.25	3.48	-9.54	35.69	53.98	-18.29
*	20800.00	Peak	V	-	-	-56.06	3.48	-9.54	44.88	73.98	-29.10
	26000.00	Peak	V	-	-	-56.23	5.16	-9.54	46.39	68.20	-21.81

Table 7-108. Radiated Measurements SISO ANT1 (26 Tones)

FCC ID: C3K1997		MEASUREMENT REPORT (CERTIFICATION)			
Test Report S/N:	Test Dates:	EUT Type:	Dage 220 of 200		
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	Portable Computing Device	Page 230 of 309		
	·		V 9.0 02/01/2019		



Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	8
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5240MHz
Channel:	48

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
	10480.00	Peak	V	151	208	-68.01	16.30	0.00	55.29	68.20	-12.91
*	15720.00	Average	V	-	-	-82.03	23.38	0.00	48.35	53.98	-5.63
*	15720.00	Peak	V	-	-	-68.92	23.38	0.00	61.46	73.98	-12.52
*	20960.00	Average	V	-	-	-65.28	3.47	-9.54	35.65	53.98	-18.33
*	20960.00	Peak	V	-	-	-56.98	3.47	-9.54	43.95	73.98	-30.03
	26200.00	Peak	V	-	-	-55.61	4.78	-9.54	46.63	68.20	-21.57

Table 7-109. Radiated Measurements SISO ANT1 (26 Tones)

Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	8
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5260MHz
Channel:	52

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
	10520.00	Peak	V	-	-	-68.99	16.30	0.00	54.31	68.20	-13.89
*	15780.00	Average	V	-	-	-81.26	23.72	0.00	49.46	53.98	-4.52
*	15780.00	Peak	V	-	-	-68.01	23.72	0.00	62.71	73.98	-11.27
*	21040.00	Average	V	-	-	-66.09	3.53	-9.54	34.90	53.98	-19.08
*	21040.00	Peak	V	-	-	-57.10	3.53	-9.54	43.89	73.98	-30.09
	26300.00	Peak	V	-	-	-55.85	4.64	-9.54	46.25	68.20	-21.95

Table 7-110. Radiated Measurements SISO ANT1 (26 Tones)

FCC ID: C3K1997		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1M2204040049-16-R2.C3K	Test Dates: 3/14/2022-8/18/2022	EUT Type: Portable Computing Device	Page 231 of 309
1102204040049-10-R2.C3R	3/14/2022-8/16/2022	Fortable Computing Device	N/ 0. 0. 02/04/2010



Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	8
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5280MHz
Channel:	56

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
	10560.00	Peak	V	-	-	-69.61	16.64	0.00	54.03	68.20	-14.17
*	15840.00	Average	V	-	-	-84.72	23.70	0.00	45.98	53.98	-8.00
*	15840.00	Peak	V	-	-	-68.31	23.70	0.00	62.39	73.98	-11.59
*	21120.00	Average	V	-	-	-65.85	3.68	-9.54	35.29	53.98	-18.69
*	21120.00	Peak	V	-	-	-56.23	3.68	-9.54	44.91	73.98	-29.07
	26400.00	Peak	V	-	-	-57.08	4.78	-9.54	45.16	68.20	-23.04

Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	8
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5320MHz
Channel:	64

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	10640.00	Average	V	-	-	-81.97	16.76	0.00	41.79	53.98	-12.19
*	10640.00	Peak	V	-	-	-68.38	16.76	0.00	55.38	73.98	-18.60
*	15960.00	Average	V	-	-	-81.40	24.33	0.00	49.93	53.98	-4.05
*	15960.00	Peak	V	-	-	-68.52	24.33	0.00	62.81	73.98	-11.17
*	21280.00	Average	V	-	-	-66.23	3.72	-9.54	34.95	53.98	-19.03
*	21280.00	Peak	V	-	-	-56.47	3.72	-9.54	44.71	73.98	-29.27
	26600.00	Peak	V	-	-	-56.86	4.72	-9.54	45.31	68.20	-22.89

Table 7-112. Radiated Measurements SISO ANT1 (26 Tones)

FCC ID: C3K1997		MEASUREMENT REPORT (CERTIFICATION)	
Test Report S/N: 1M2204040049-16-R2.C3K	Test Dates: 3/14/2022-8/18/2022	EUT Type: Portable Computing Device	Page 232 of 309
	•	•	V 0 0 00/01/2010



Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	8
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5500MHz
Channel:	100

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11000.00	Average	V	-	-	-82.50	17.47	0.00	41.97	53.98	-12.01
*	11000.00	Peak	V	-	-	-69.53	17.47	0.00	54.94	73.98	-19.04
	16500.00	Peak	V	-	-	-69.20	25.25	0.00	63.05	68.20	-5.15
	22000.00	Peak	V	-	-	-56.41	3.83	-9.54	44.88	68.20	-23.32
	27500.00	Peak	V	-	-	-56.03	4.97	-9.54	46.39	68.20	-21.81

# Table 7-113. Radiated Measurements SISO ANT1 (26 Tones)

Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	8
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5600MHz
Channel:	120

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11200.00	Average	V	-	-	-82.31	17.38	0.00	42.07	53.98	-11.91
*	11200.00	Peak	V	-	-	-69.40	17.38	0.00	54.98	73.98	-19.00
	16800.00	Peak	V	-	-	-69.28	24.94	0.00	62.66	68.20	-5.54
*	22400.00	Average	V	-	-	-65.57	3.79	-9.54	35.68	53.98	-18.30
*	22400.00	Peak	V	-	-	-55.42	3.79	-9.54	45.83	73.98	-28.15
	28000.00	Peak	V	-	-	-55.18	4.94	-9.54	47.21	68.20	-20.99

Table 7-114. Radiated Measurements SISO ANT1 (26 Tones)

FCC ID: C3K1997	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 222 of 200
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	Portable Computing Device	Page 233 of 309
			V 0 0 02/01/2010



Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	8
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5720MHz
Channel:	144

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11440.00	Average	V	-	-	-82.43	17.81	0.00	42.38	53.98	-11.59
*	11440.00	Peak	V	-	-	-70.09	17.81	0.00	54.72	73.98	-19.25
	17160.00	Peak	V	-	-	-69.28	25.10	0.00	62.82	68.20	-5.38
*	22880.00	Average	V	-	-	-65.58	3.79	-9.54	35.67	53.98	-18.31
*	22880.00	Peak	V	-	-	-55.88	3.79	-9.54	45.37	73.98	-28.61
	28600.00	Peak	V	-	-	-55.99	5.28	-9.54	46.75	68.20	-21.45

# Table 7-115. Radiated Measurements SISO ANT1 (26 Tones)

Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	8
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5745MHz
Channel:	149

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11490.00	Average	V	-	-	-81.95	18.15	0.00	43.20	53.98	-10.78
*	11490.00	Peak	V	-	-	-70.54	18.15	0.00	54.61	73.98	-19.37
	17235.00	Peak	V	-	-	-71.18	25.47	0.00	61.29	68.20	-6.91
*	22980.00	Average	V	-	-	-66.15	3.79	-9.54	35.09	53.98	-18.88
*	22980.00	Peak	V	-	-	-56.61	3.79	-9.54	44.63	73.98	-29.34
	28725.00	Peak	V	-	-	-56.31	5.41	-9.54	46.56	68.20	-21.64

Table 7-116. Radiated Measurements SISO ANT1 (26 Tones)

FCC ID: C3K1997	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 234 of 309
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	Portable Computing Device	1 age 234 01 303
			V/ 0 0 00/04/0040



Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	8
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5785MHz
Channel:	157

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11570.00	Average	V	-	-	-81.92	17.88	0.00	42.96	53.98	-11.02
*	11570.00	Peak	V	-	-	-71.02	17.88	0.00	53.86	73.98	-20.12
	17355.00	Peak	V	-	-	-72.36	26.69	0.00	61.33	68.20	-6.87
	23140.00	Peak	V	-	-	-55.21	3.75	-9.54	46.00	68.20	-22.20
	28925.00	Peak	V	-	-	-56.78	5.46	-9.54	46.14	68.20	-22.06

# Table 7-117. Radiated Measurements SISO ANT1 (26 Tones)

Worst Case Mode:	802.11ax (20MHz BW)				
Worst Case Transfer Rate:	MCS0				
RU Index:	8				
Distance of Measurements:	1 & 3 Meters				
Operating Frequency:	5825MHz				
Channel:	165				

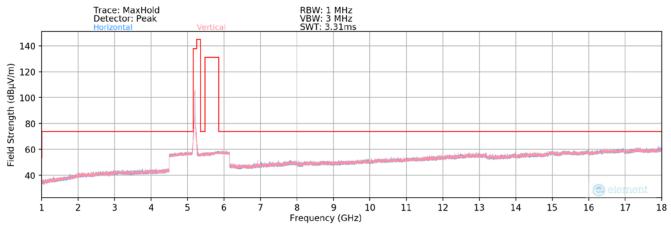
	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11650.00	Average	V	-	-	-81.96	18.01	0.00	43.05	53.98	-10.93
*	11650.00	Peak	V	-	-	-70.71	18.01	0.00	54.30	73.98	-19.68
	17475.00	Peak	V	-	-	-71.60	26.08	0.00	61.48	68.20	-6.72
	23300.00	Peak	V	-	-	-56.12	3.76	-9.54	45.10	68.20	-23.10
	29125.00	Peak	V	-	-	-55.54	5.54	-9.54	47.46	68.20	-20.74

Table 7-118. Radiated Measurements SISO ANT1 (26 Tones)

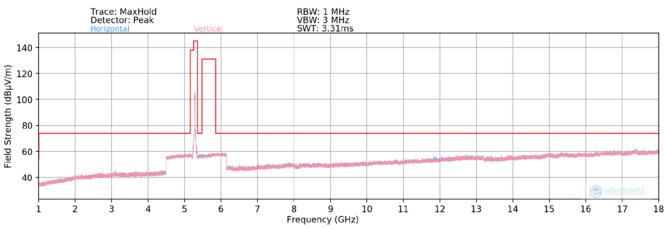
FCC ID: C3K1997		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Dogo 225 of 200
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	Portable Computing Device	Page 235 of 309
			V/ Q 0 02/01/201Q



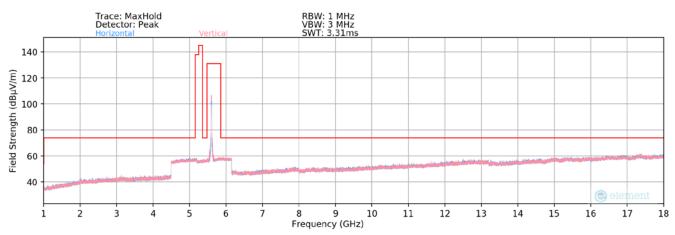
# 242 Tones



Plot 7-311. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11ax - U1 Ch. 40 - 242 Tones)



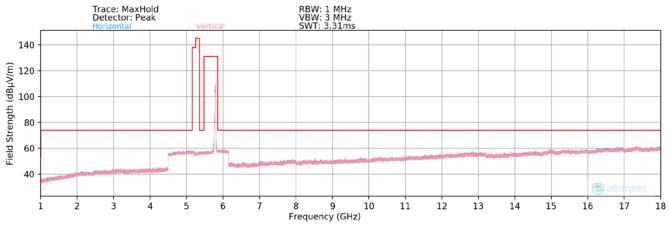
Plot 7-312. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11ax - U2A Ch. 56 - 242 Tones)



Plot 7-313. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11ax - U2C Ch. 120 - 242 Tones)

FCC ID: C3K1997		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Dage 226 of 200
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	Portable Computing Device	Page 236 of 309
	•		V 9.0 02/01/2019





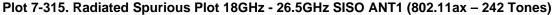
Plot 7-314. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11ax - U3 Ch. 157 - 242 Tones)

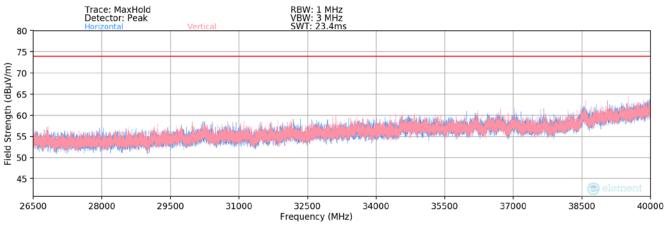
FCC ID: C3K1997		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Dago 227 of 200
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	Portable Computing Device	Page 237 of 309
	•	-	V 0 0 02/01/2010



# SISO Antenna-1 Radiated Spurious Emissions Measurements (Above 18GHz)







Plot 7-316. Radiated Spurious Plot 26.5GHz - 40GHz SISO ANT1 (802.11ax - 242 Tones)

FCC ID: C3K1997		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Dega 228 of 200
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	Portable Computing Device	Page 238 of 309
		·	V 9 0 02/01/2019



## SISO Antenna-1 Radiated Spurious Emission Measurements (242 Tones) §15.407(b) §15.205 & §15.209

2.11ax (20MHz BW)
CS0
& 3 Meters
80MHz

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
	10360.00	Peak	V	-	-	-70.55	16.24	0.00	52.69	68.20	-15.51
*	15540.00	Average	V	-	-	-82.40	23.23	0.00	47.83	53.98	-6.15
*	15540.00	Peak	V	-	-	-71.57	23.23	0.00	58.66	73.98	-15.32
*	20720.00	Average	V	-	-	-65.91	3.16	-9.54	34.70	53.98	-19.28
*	20720.00	Peak	V	-	-	-55.36	3.16	-9.54	45.26	73.98	-28.72
	25900.00	Peak	V	-	-	-56.04	4.77	-9.54	46.19	68.20	-22.01

Table 7-119. Radiated Measurements SISO ANT1 (242 Tones)

Worst Case Mode: Worst Case Transfer Rate: RU Index: Distance of Measurements: Operating Frequency: Channel: 802.11ax (20MHz BW) MCS0 61 1 & 3 Meters 5200MHz 40

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
	10400.00	Peak	V	-	-	-70.61	16.36	0.00	52.75	68.20	-15.45
*	15600.00	Average	V	-	-	-82.31	23.44	0.00	48.13	53.98	-5.85
*	15600.00	Peak	V	-	-	-71.05	23.44	0.00	59.39	73.98	-14.59
*	20800.00	Average	V	-	-	-65.31	3.48	-9.54	35.63	53.98	-18.35
*	20800.00	Peak	V	-	-	-55.51	3.48	-9.54	45.42	73.98	-28.55
[	26000.00	Peak	V	-	-	-56.62	5.16	-9.54	46.00	68.20	-22.20

Table 7-120. Radiated Measurements SISO ANT1 (242 Tones)

FCC ID: C3K1997		Approved by: Technical Manager	
Test Report S/N:	Test Dates: EUT Type:		Dage 220 of 200
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	Portable Computing Device	Page 239 of 309
		-	V 9 0 02/01/2019



802.11ax (20MHz BW)
MCS0
61
1 & 3 Meters
5240MHz
48

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
	10480.00	Peak	V	-	-	-70.95	16.30	0.00	52.35	68.20	-15.85
*	15720.00	Average	V	-	-	-82.57	23.38	0.00	47.81	53.98	-6.17
*	15720.00	Peak	V	-	-	-71.55	23.38	0.00	58.83	73.98	-15.15
*	20960.00	Average	V	-	-	-66.36	3.47	-9.54	34.58	53.98	-19.40
*	20960.00	Peak	V	-	-	-56.83	3.47	-9.54	44.10	73.98	-29.88
	26200.00	Peak	V	-	-	-55.72	4.78	-9.54	46.52	68.20	-21.68

#### Table 7-121. Radiated Measurements SISO ANT1 (242 Tones)

Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	61
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5260MHz
Channel:	52

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
	10520.00	Peak	V	-	-	-70.13	16.30	0.00	53.17	68.20	-15.03
*	15780.00	Average	V	-	-	-81.77	23.72	0.00	48.95	53.98	-5.03
*	15780.00	Peak	V	-	-	-70.66	23.72	0.00	60.06	73.98	-13.92
*	21040.00	Average	V	-	-	-65.65	3.53	-9.54	35.34	53.98	-18.64
*	21040.00	Peak	V	-	-	-56.18	3.53	-9.54	44.81	73.98	-29.17
	26300.00	Peak	V	-	-	-56.24	4.64	-9.54	45.86	68.20	-22.34

Table 7-122. Radiated Measurements SISO ANT1 (242 Tones)

FCC ID: C3K1997		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 240 of 309
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	Portable Computing Device	N 0 0 02/01/2010



Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	61
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5280MHz
Channel:	56

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
	10560.00	Peak	V	-	-	-70.39	16.64	0.00	53.25	68.20	-14.95
*	15840.00	Average	V	-	-	-81.90	23.70	0.00	48.80	53.98	-5.18
*	15840.00	Peak	V	-	-	-71.13	23.70	0.00	59.57	73.98	-14.41
*	21120.00	Average	V	-	-	-65.55	3.68	-9.54	35.58	53.98	-18.40
*	21120.00	Peak	V	-	-	-56.03	3.68	-9.54	45.11	73.98	-28.87
	26400.00	Peak	V	-	-	-56.27	4.78	-9.54	45.97	68.20	-22.23

#### Table 7-123. Radiated Measurements SISO ANT1 (242 Tones)

Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	61
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5320MHz
Channel:	64

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	10640.00	Average	V	-	-	-81.86	16.76	0.00	41.90	53.98	-12.08
*	10640.00	Peak	V	-	-	-70.40	16.76	0.00	53.36	73.98	-20.62
*	15960.00	Average	V	-	-	-81.86	24.33	0.00	49.47	53.98	-4.51
*	15960.00	Peak	V	-	-	-70.87	24.33	0.00	60.46	73.98	-13.52
*	21280.00	Average	V	-	-	-65.91	3.72	-9.54	35.27	53.98	-18.71
*	21280.00	Peak	V	-	-	-56.44	3.72	-9.54	44.74	73.98	-29.24
	26600.00	Peak	V	-	-	-56.44	4.72	-9.54	45.73	68.20	-22.47

Table 7-124. Radiated Measurements SISO ANT1 (242 Tones)

FCC ID: C3K1997		MEASUREMENT REPORT A (CERTIFICATION) T				
Test Report S/N:	Test Dates:	EUT Type:	Page 241 of 309			
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	Portable Computing Device	V 0 0 02/01/2010			



Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	61
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5500MHz
Channel:	100

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11000.00	Average	V	-	-	-81.89	17.47	0.00	42.58	53.98	-11.40
*	11000.00	Peak	V	-	-	-70.08	17.47	0.00	54.39	73.98	-19.59
	16500.00	Peak	V	-	-	-71.45	25.25	0.00	60.80	68.20	-7.40
	22000.00	Peak	V	-	-	-56.80	3.83	-9.54	44.49	68.20	-23.71
	27500.00	Peak	V	-	-	-55.96	4.97	-9.54	46.46	68.20	-21.74

## Table 7-125. Radiated Measurements SISO ANT1 (242 Tones)

802.11ax (20MHz BW)
MCS0
61
1 & 3 Meters
5600MHz
120

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11200.00	Average	V	-	-	-81.53	17.38	0.00	42.85	53.98	-11.13
*	11200.00	Peak	V	-	-	-71.05	17.38	0.00	53.33	73.98	-20.65
	16800.00	Peak	V	-	-	-71.54	24.94	0.00	60.40	68.20	-7.80
*	22400.00	Average	V	-	-	-65.40	3.79	-9.54	35.85	53.98	-18.13
*	22400.00	Peak	V	-	-	-55.35	3.79	-9.54	45.90	73.98	-28.08
	28000.00	Peak	V	-	-	-55.67	4.94	-9.54	46.73	68.20	-21.47

Table 7-126. Radiated Measurements SISO ANT1 (242 Tones)

FCC ID: C3K1997		MEASUREMENT REPORT (CERTIFICATION)					
Test Report S/N:	Test Dates:	EUT Type:	Dage 242 of 200				
1M2204040049-16-R2.C3K	Portable Computing Device	Page 242 of 309					
			V 9 0 02/01/2019				



Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	61
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5720MHz
Channel:	144

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11440.00	Average	V	-	-	-82.04	17.81	0.00	42.77	53.98	-11.20
*	11440.00	Peak	V	-	-	-71.11	17.81	0.00	53.70	73.98	-20.27
	17160.00	Peak	V	-	-	-70.69	25.10	0.00	61.41	68.20	-6.79
*	22880.00	Average	V	-	-	-65.57	3.79	-9.54	35.68	53.98	-18.30
*	22880.00	Peak	V	-	-	-55.95	3.79	-9.54	45.30	73.98	-28.68
	28600.00	Peak	V	-	-	-56.93	5.28	-9.54	45.81	68.20	-22.39

#### Table 7-127. Radiated Measurements SISO ANT1 (242 Tones)

Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	61
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5745MHz
Channel:	149

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11490.00	Average	V	-	-	-82.43	18.15	0.00	42.72	53.98	-11.26
*	11490.00	Peak	V	-	-	-70.50	18.15	0.00	54.65	73.98	-19.33
	17235.00	Peak	V	-	-	-71.82	25.47	0.00	60.65	68.20	-7.55
*	22980.00	Average	V	-	-	-65.58	3.79	-9.54	35.66	53.98	-18.32
*	22980.00	Peak	V	-	-	-57.09	3.79	-9.54	44.16	73.98	-29.82
	28725.00	Peak	V	-	-	-56.69	5.41	-9.54	46.18	68.20	-22.02

Table 7-128. Radiated Measurements SISO ANT1 (242 Tones)

FCC ID: C3K1997	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 243 of 309
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	Portable Computing Device	Fage 243 01 309
			V/00000/04/2040



Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	61
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5785MHz
Channel:	157

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11570.00	Average	V	-	-	-81.94	17.88	0.00	42.94	53.98	-11.04
*	11570.00	Peak	V	-	-	-70.74	17.88	0.00	54.14	73.98	-19.84
	17355.00	Peak	V	-	-	-71.54	26.69	0.00	62.15	68.20	-6.05
	23140.00	Peak	V	-	-	-56.90	3.75	-9.54	44.31	68.20	-23.89
	28925.00	Peak	V	-	-	-56.43	5.46	-9.54	46.49	68.20	-21.71

# Table 7-129. Radiated Measurements SISO ANT1 (242 Tones)

Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	61
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5825MHz
Channel:	165

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11650.00	Average	V	-	-	-82.17	18.01	0.00	42.84	53.98	-11.14
*	11650.00	Peak	V	-	-	-70.51	18.01	0.00	54.50	73.98	-19.48
	17475.00	Peak	V	-	-	-71.62	26.08	0.00	61.46	68.20	-6.74
	23300.00	Peak	V	-	-	-56.98	3.76	-9.54	44.24	68.20	-23.96
	29125.00	Peak	V	-	-	-56.50	5.54	-9.54	46.50	68.20	-21.70

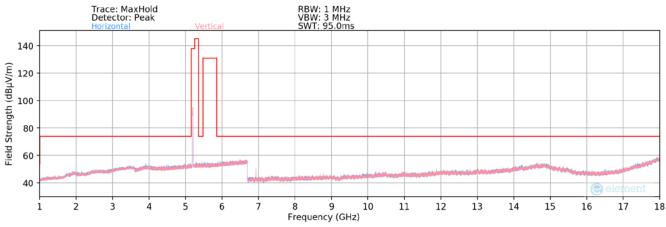
Table 7-130. Radiated Measurements SISO ANT1 (242 Tones)

FCC ID: C3K1997	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 244 of 200
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	Portable Computing Device	Page 244 of 309
		-	V 9 0 02/01/2019

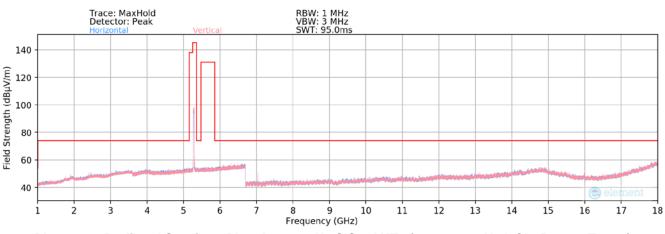


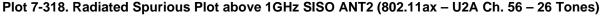
# 7.6.2 SISO Antenna-2 Radiated Spurious Emission Measurements

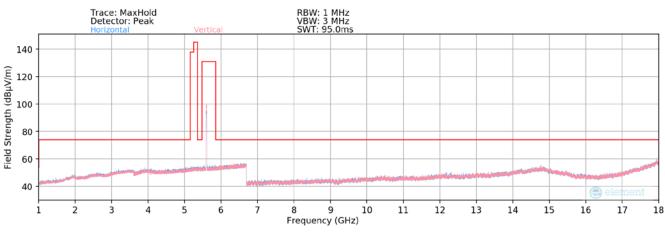
#### 26 Tones



Plot 7-317. Radiated Spurious Plot above 1GHz SISO ANT2 (802.11ax - U1 Ch. 40 - 26 Tones)



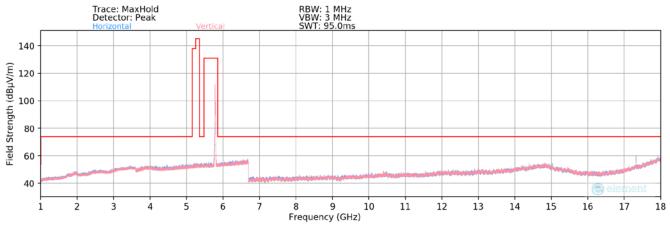




Plot 7-319. Radiated Spurious Plot above 1GHz SISO ANT2 (802.11ax – U2C Ch. 120 – 26 Tones)

FCC ID: C3K1997	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Dage 245 of 200	
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	Portable Computing Device	Page 245 of 309	
		•	V 9.0 02/01/2019	



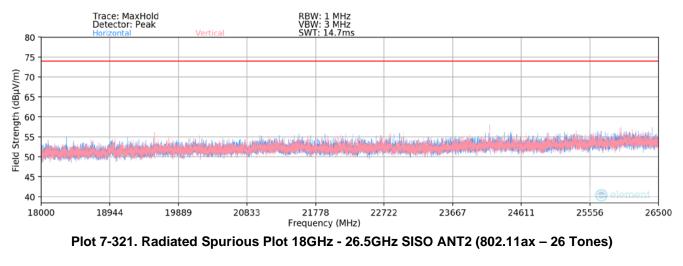


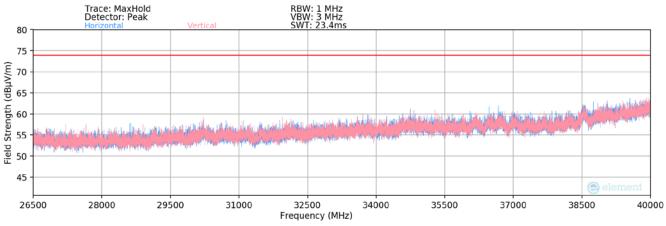
Plot 7-320. Radiated Spurious Plot above 1GHz SISO ANT2 (802.11ax - U3 Ch. 157 - 26 Tones)

FCC ID: C3K1997	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Daga 246 at 200	
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	Portable Computing Device	Page 246 of 309	
			V 9 0 02/01/2019	



# SISO Antenna-2 Radiated Spurious Emissions Measurements (Above 18GHz)





Plot 7-322. Radiated Spurious Plot 26.5GHz - 40GHz SISO ANT2 (802.11ax - 26 Tones)

FCC ID: C3K1997	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 247 of 200
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	Portable Computing Device	Page 247 of 309
			V 0 0 02/01/2010



#### SISO Antenna-2 Radiated Spurious Emission Measurements §15.407(b) §15.205 & §15.209; RSS-Gen [8.9]

Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	8
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5180MHz
Channel:	36

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
	10360.00	Peak	V	-	-	-69.49	16.24	0.00	53.75	68.20	-14.45
*	15540.00	Average	V	-	-	-82.47	23.23	0.00	47.76	53.98	-6.22
*	15540.00	Peak	V	-	-	-70.84	23.23	0.00	59.39	73.98	-14.59
*	20720.00	Average	V	-	-	-65.32	3.16	-9.54	35.29	53.98	-18.69
*	20720.00	Peak	V	-	-	-56.32	3.16	-9.54	44.29	73.98	-29.69
	25900.00	Peak	V	-	-	-56.17	4.77	-9.54	46.06	68.20	-22.14

Table 7-131. Radiated Measurements SISO ANT2 (26 Tones)

Worst Case Mode: Worst Case Transfer Rate: RU Index: Distance of Measurements: Operating Frequency: Channel: 802.11ax (20MHz BW) MCS0 8 1 & 3 Meters 5200MHz 40

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
	10400.00	Peak	V	-	-	-70.41	16.36	0.00	52.95	68.20	-15.25
*	15600.00	Average	V	-	-	-82.07	23.44	0.00	48.37	53.98	-5.61
*	15600.00	Peak	V	-	-	-70.78	23.44	0.00	59.66	73.98	-14.32
*	20800.00	Average	V	-	-	-65.27	3.48	-9.54	35.67	53.98	-18.31
*	20800.00	Peak	V	-	-	-55.96	3.48	-9.54	44.98	73.98	-29.00
	26000.00	Peak	V	-	-	-56.17	5.16	-9.54	46.45	68.20	-21.75

Table 7-132. Radiated Measurements SISO ANT2 (26 Tones)

FCC ID: C3K1997		MEASUREMENT REPORT (CERTIFICATION)		
Test Report S/N:	Test Dates:	EUT Type:	Dage 248 of 200	
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022 Portable Computing Device		Page 248 of 309	
		•	V 9.0 02/01/2019	



Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	8
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5240MHz
Channel:	48

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
	10480.00	Peak	V	-	-	-70.37	16.30	0.00	52.93	68.20	-15.27
*	15720.00	Average	V	-	-	-82.40	23.38	0.00	47.98	53.98	-6.00
*	15720.00	Peak	V	-	-	-71.28	23.38	0.00	59.10	73.98	-14.88
*	20960.00	Average	V	-	-	-65.38	3.47	-9.54	35.55	53.98	-18.43
*	20960.00	Peak	V	-	-	-56.92	3.47	-9.54	44.01	73.98	-29.97
	26200.00	Peak	V	-	-	-55.71	4.78	-9.54	46.53	68.20	-21.67

Table 7-133. Radiated Measurements SISO ANT2 (26 Tones)

Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	8
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5260MHz
Channel:	52

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
	10520.00	Peak	V	-	-	-70.68	16.30	0.00	52.62	68.20	-15.58
*	15780.00	Average	V	-	-	-82.60	23.72	0.00	48.12	53.98	-5.86
*	15780.00	Peak	V	-	-	-72.03	23.72	0.00	58.69	73.98	-15.29
*	21040.00	Average	V	-	-	-66.06	3.53	-9.54	34.93	53.98	-19.05
*	21040.00	Peak	V	-	-	-57.07	3.53	-9.54	43.92	73.98	-30.06
	26300.00	Peak	V	-	-	-55.95	4.64	-9.54	46.14	68.20	-22.06

Table 7-134. Radiated Measurements SISO ANT2 (26 Tones)

FCC ID: C3K1997		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type: Portable Computing Device	Page 249 of 309
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	-	



Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	8
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5280MHz
Channel:	56

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
	10560.00	Peak	V	-	-	-70.73	16.64	0.00	52.91	68.20	-15.29
*	15840.00	Average	V	-	-	-82.69	23.70	0.00	48.01	53.98	-5.97
*	15840.00	Peak	V	-	-	-72.13	23.70	0.00	58.57	73.98	-15.41
*	21120.00	Average	V	-	-	-65.92	3.68	-9.54	35.22	53.98	-18.76
*	21120.00	Peak	V	-	-	-56.13	3.68	-9.54	45.01	73.98	-28.97
	26400.00	Peak	V	-	-	-57.01	4.78	-9.54	45.22	68.20	-22.98

Table 7-135.	Radiated	<b>Measurements S</b>	SISO AN	Γ2 (26 Tones)
--------------	----------	-----------------------	---------	---------------

Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	8
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5320MHz
Channel:	64

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	10640.00	Average	V	-	-	-81.62	16.76	0.00	42.14	53.98	-11.84
*	10640.00	Peak	V	-	-	-70.63	16.76	0.00	53.13	73.98	-20.85
*	15960.00	Average	V	-	-	-81.85	24.33	0.00	49.48	53.98	-4.50
*	15960.00	Peak	V	-	-	-71.38	24.33	0.00	59.95	73.98	-14.03
*	21280.00	Average	V	-	-	-66.32	3.72	-9.54	34.86	53.98	-19.12
*	21280.00	Peak	V	-	-	-56.51	3.72	-9.54	44.67	73.98	-29.31
	26600.00	Peak	V	-	-	-56.92	4.72	-9.54	45.25	68.20	-22.95

Table 7-136. Radiated Measurements SISO ANT2 (26 Tones)

FCC ID: C3K1997		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1M2204040049-16-R2.C3K	Test Dates: 3/14/2022-8/18/2022	EUT Type: Portable Computing Device	Page 250 of 309
			V 0 0 02/01/2010



Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	8
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5500MHz
Channel:	100

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11000.00	Average	V	-	-	-82.04	17.47	0.00	42.43	53.98	-11.55
*	11000.00	Peak	V	-	-	-70.11	17.47	0.00	54.36	73.98	-19.62
	16500.00	Peak	V	-	-	-71.86	25.25	0.00	60.39	68.20	-7.81
	22000.00	Peak	V	-	-	-56.53	3.83	-9.54	44.76	68.20	-23.44
	27500.00	Peak	V	-	-	-56.00	4.97	-9.54	46.42	68.20	-21.78

## Table 7-137. Radiated Measurements SISO ANT2 (26 Tones)

802.11ax (20MHz BW)			
MCS0			
8			
1 & 3 Meters			
5600MHz			
120			

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11200.00	Average	V	-	-	-81.52	17.38	0.00	42.86	53.98	-11.12
*	11200.00	Peak	V	-	-	-70.03	17.38	0.00	54.35	73.98	-19.63
	16800.00	Peak	V	-	-	-71.17	24.94	0.00	60.77	68.20	-7.43
*	22400.00	Average	V	-	-	-65.53	3.79	-9.54	35.72	53.98	-18.26
*	22400.00	Peak	V	-	-	-55.57	3.79	-9.54	45.68	73.98	-28.30
	28000.00	Peak	V	-	-	-55.24	4.94	-9.54	47.16	68.20	-21.04

Table 7-138. Radiated Measurements SISO ANT2 (26 Tones)

FCC ID: C3K1997		MEASUREMENT REPORT (CERTIFICATION)			
Test Report S/N:	Test Dates:	EUT Type:	Page 251 of 309		
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	3/14/2022-8/18/2022 Portable Computing Device			
			V 9 0 02/01/2019		



Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	8
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5720MHz
Channel:	144

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11440.00	Average	V	-	-	-82.26	17.81	0.00	42.55	53.98	-11.42
*	11440.00	Peak	V	-	-	-70.98	17.81	0.00	53.83	73.98	-20.14
	17160.00	Peak	V	-	-	-71.59	25.10	0.00	60.51	68.20	-7.69
*	22880.00	Average	V	-	-	-65.68	3.79	-9.54	35.57	53.98	-18.41
*	22880.00	Peak	V	-	-	-55.93	3.79	-9.54	45.32	73.98	-28.66
	28600.00	Peak	V	-	-	-55.93	5.28	-9.54	46.81	68.20	-21.39

Table 7-139. Radiated Measurements SISO ANT2 (26 Tones)

Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	8
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5745MHz
Channel:	149

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11490.00	Average	V	-	-	-82.12	18.15	0.00	43.03	53.98	-10.95
*	11490.00	Peak	V	-	-	-70.58	18.15	0.00	54.57	73.98	-19.41
	17235.00	Peak	V	-	-	-71.39	25.47	0.00	61.08	68.20	-7.12
*	22980.00	Average	V	-	-	-66.12	3.79	-9.54	35.13	53.98	-18.85
*	22980.00	Peak	V	-	-	-56.59	3.79	-9.54	44.66	73.98	-29.32
	28725.00	Peak	V	-	-	-56.40	5.41	-9.54	46.46	68.20	-21.74

Table 7-140. Radiated Measurements SISO ANT2 (26 Tones)

FCC ID: C3K1997		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 252 of 309
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	Portable Computing Device	N 0 0 00/04/0040



Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	8
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5785MHz
Channel:	157

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11570.00	Average	V	-	-	-81.90	17.88	0.00	42.98	53.98	-11.00
*	11570.00	Peak	V	-	-	-70.36	17.88	0.00	54.52	73.98	-19.46
	17355.00	Peak	V	323	337	-71.64	26.69	0.00	62.05	68.20	-6.15
	23140.00	Peak	V	-	-	-55.16	3.75	-9.54	46.05	68.20	-22.15
	28925.00	Peak	V	-	-	-56.86	5.46	-9.54	46.06	68.20	-22.14

# Table 7-141. Radiated Measurements SISO ANT2 (26 Tones)

Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	8
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5825MHz
Channel:	165

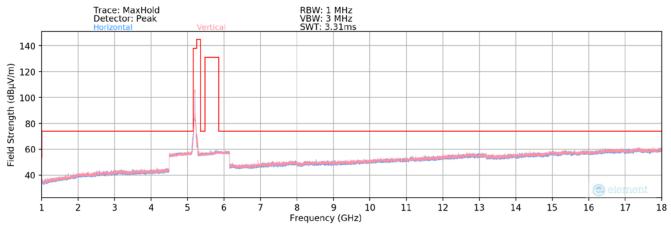
	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11650.00	Average	V	-	-	-81.87	18.01	0.00	43.14	53.98	-10.84
*	11650.00	Peak	V	-	-	-70.69	18.01	0.00	54.32	73.98	-19.66
	17475.00	Peak	V	-	-	-72.44	26.08	0.00	60.64	68.20	-7.56
	23300.00	Peak	V	-	-	-56.19	3.76	-9.54	45.03	68.20	-23.17
	29125.00	Peak	V	-	-	-55.44	5.54	-9.54	47.57	68.20	-20.63

Table 7-142. Radiated Measurements SISO ANT2 (26 Tones)

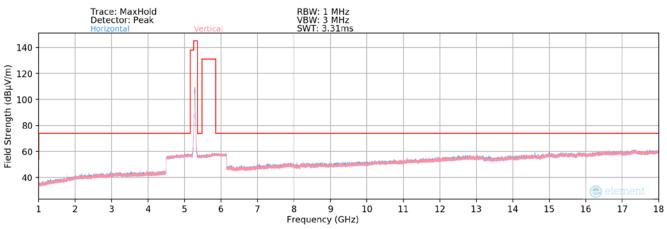
FCC ID: C3K1997		MEASUREMENT REPORT (CERTIFICATION)			
Test Report S/N:	Test Dates:	EUT Type:	Dage 252 of 200		
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	Portable Computing Device	Page 253 of 309		
			V 9 0 02/01/2019		



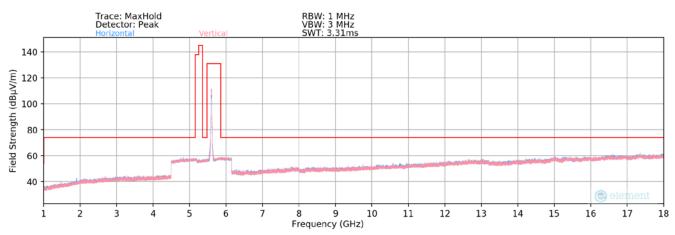
# 242 Tones



Plot 7-323. Radiated Spurious Plot above 1GHz SISO ANT2 (802.11ax - U1 Ch. 40 - 242 Tones)



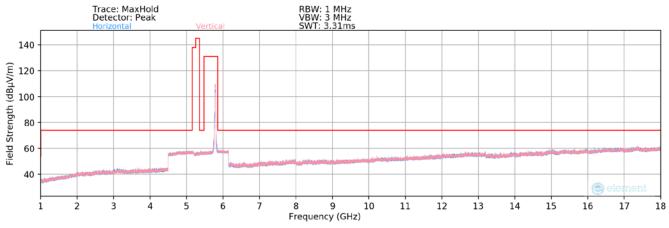
Plot 7-324. Radiated Spurious Plot above 1GHz SISO ANT2 (802.11ax - U2A Ch. 56 - 242 Tones)



Plot 7-325. Radiated Spurious Plot above 1GHz SISO ANT2 (802.11ax - U2C Ch. 120 - 242 Tones)

FCC ID: C3K1997		MEASUREMENT REPORT (CERTIFICATION)			
Test Report S/N:	Test Dates:	EUT Type:	Dage 254 of 200		
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	Portable Computing Device	Page 254 of 309		
	•		V 9.0 02/01/2019		



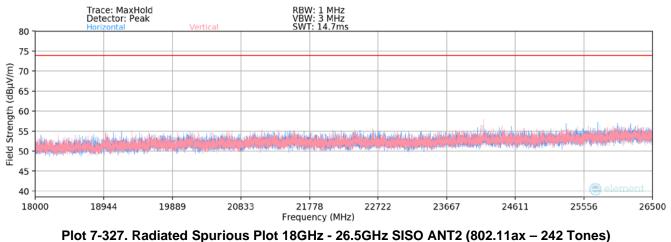


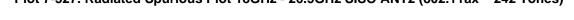
Plot 7-326. Radiated Spurious Plot above 1GHz SISO ANT2 (802.11ax - U3 Ch. 157 - 242 Tones)

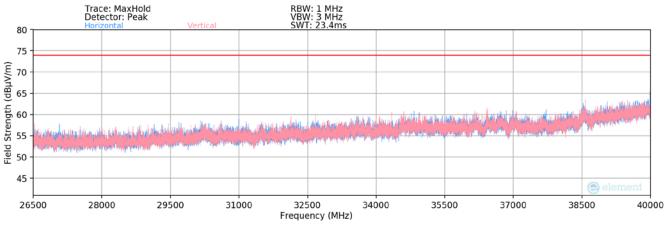
FCC ID: C3K1997		MEASUREMENT REPORT (CERTIFICATION)			
Test Report S/N:	Test Dates:	EUT Type:	Page 255 of 309		
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	/14/2022-8/18/2022 Portable Computing Device			
			V 0 0 02/01/2010		



# SISO Antenna-2 Radiated Spurious Emissions Measurements (Above 18GHz)







Plot 7-328. Radiated Spurious Plot 26.5GHz - 40GHz SISO ANT2 (802.11ax - 242 Tones)

FCC ID: C3K1997		MEASUREMENT REPORT (CERTIFICATION)			
Test Report S/N:	Test Dates:	EUT Type:	Page 256 of 309		
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	2-8/18/2022 Portable Computing Device			
			V 0 0 02/01/2010		



# SISO Antenna-2 Radiated Spurious Emission Measurements §15.407(b) §15.205 & §15.209

802.11ax (20MHz BW)
MCS0
61
1 & 3 Meters
5180MHz
36

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
	10360.00	Peak	V	-	-	-69.93	16.24	0.00	53.31	68.20	-14.89
*	15540.00	Average	V	-	-	-81.51	23.23	0.00	48.72	53.98	-5.26
*	15540.00	Peak	V	-	-	-71.04	23.23	0.00	59.19	73.98	-14.79
*	20720.00	Average	V	-	-	-65.65	3.16	-9.54	34.96	53.98	-19.01
*	20720.00	Peak	V	-	-	-56.33	3.16	-9.54	44.28	73.98	-29.70
	25900.00	Peak	V	-	-	-55.44	4.77	-9.54	46.79	68.20	-21.41

Table 7-143. Radiated Measurements SISO ANT2 (242 Tones)

Worst Case Mode: Worst Case Transfer Rate: RU Index: Distance of Measurements: Operating Frequency: Channel: 802.11ax (20MHz BW) MCS0 61 1 & 3 Meters 5200MHz 40

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
	10400.00	Peak	V	-	-	-70.46	16.36	0.00	52.90	68.20	-15.30
*	15600.00	Average	V	-	-	-81.42	23.44	0.00	49.02	53.98	-4.96
*	15600.00	Peak	V	-	-	-70.83	23.44	0.00	59.61	73.98	-14.37
*	20800.00	Average	V	-	-	-65.48	3.48	-9.54	35.46	53.98	-18.52
*	20800.00	Peak	V	-	-	-55.30	3.48	-9.54	45.64	73.98	-28.34
	26000.00	Peak	V	-	-	-56.13	5.16	-9.54	46.48	68.20	-21.72

Table 7-144. Radiated Measurements SISO ANT2 (242 Tones)

FCC ID: C3K1997		MEASUREMENT REPORT (CERTIFICATION)			
Test Report S/N:	Test Dates:	EUT Type:	Dage 257 of 200		
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	Portable Computing Device	Page 257 of 309		
	•	·	V 9.0 02/01/2019		



802.11ax (20MHz BW)
MCS0
61
1 & 3 Meters
5240MHz
48

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
	10480.00	Peak	V	-	-	-70.36	16.30	0.00	52.94	68.20	-15.26
*	15720.00	Average	V	-	-	-82.42	23.38	0.00	47.96	53.98	-6.02
*	15720.00	Peak	V	-	-	-71.55	23.38	0.00	58.83	73.98	-15.15
*	20960.00	Average	V	-	-	-65.89	3.47	-9.54	35.05	53.98	-18.93
*	20960.00	Peak	V	-	-	-56.15	3.47	-9.54	44.79	73.98	-29.19
	26200.00	Peak	V	-	-	-55.60	4.78	-9.54	46.64	68.20	-21.56

#### Table 7-145. Radiated Measurements SISO ANT2 (242 Tones)

Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	61
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5260MHz
Channel:	52

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
	10520.00	Peak	V	-	-	-70.28	16.30	0.00	53.02	68.20	-15.18
*	15780.00	Average	V	-	-	-81.24	23.72	0.00	49.48	53.98	-4.50
*	15780.00	Peak	V	-	-	-70.18	23.72	0.00	60.54	73.98	-13.44
*	21040.00	Average	V	-	-	-65.85	3.53	-9.54	35.14	53.98	-18.84
*	21040.00	Peak	V	-	-	-56.70	3.53	-9.54	44.29	73.98	-29.69
	26300.00	Peak	V	-	-	-55.89	4.64	-9.54	46.21	68.20	-21.99

Table 7-146. Radiated Measurements SISO ANT2 (242 Tones)

FCC ID: C3K1997		MEASUREMENT REPORT (CERTIFICATION)			
Test Report S/N:	Test Dates:	EUT Type:	Page 258 of 309		
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	Portable Computing Device	Page 258 01 309		
			1/00000000000		



Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	61
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5280MHz
Channel:	56

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
	10560.00	Peak	V	-	-	-69.98	16.64	0.00	53.66	68.20	-14.54
*	15840.00	Average	V	-	-	-82.64	23.70	0.00	48.06	53.98	-5.92
*	15840.00	Peak	V	-	-	-70.63	23.70	0.00	60.07	73.98	-13.91
*	21120.00	Average	V	-	-	-65.90	3.68	-9.54	35.23	53.98	-18.75
*	21120.00	Peak	V	-	-	-56.07	3.68	-9.54	45.06	73.98	-28.92
	26400.00	Peak	V	-	-	-56.50	4.78	-9.54	45.73	68.20	-22.47

Table 7-147.	. Radiated	Measurements	SISO	ANT2	(242	Tones)
--------------	------------	--------------	------	------	------	--------

Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	61
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5320MHz
Channel:	64

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	10640.00	Average	V	-	-	-81.73	16.76	0.00	42.03	53.98	-11.95
*	10640.00	Peak	V	-	-	-70.35	16.76	0.00	53.41	73.98	-20.57
*	15960.00	Average	V	-	-	-83.71	24.33	0.00	47.62	53.98	-6.36
*	15960.00	Peak	V	-	-	-70.11	24.33	0.00	61.22	73.98	-12.76
*	21280.00	Average	V	-	-	-65.86	3.72	-9.54	35.32	53.98	-18.66
*	21280.00	Peak	V	-	-	-56.54	3.72	-9.54	44.64	73.98	-29.34
	26600.00	Peak	V	-	-	-56.18	4.72	-9.54	46.00	68.20	-22.20

Table 7-148. Radiated Measurements SISO ANT2 (242 Tones)

FCC ID: C3K1997		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 259 of 309
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	Portable Computing Device	1 age 200 01 009
			V 0 0 02/01/2010



Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	61
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5500MHz
Channel:	100

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11000.00	Average	V	-	-	-81.95	17.47	0.00	42.52	53.98	-11.46
*	11000.00	Peak	V	-	-	-70.31	17.47	0.00	54.16	73.98	-19.82
	16500.00	Peak	V	-	-	-71.50	25.25	0.00	60.75	68.20	-7.45
	22000.00	Peak	V	-	-	-55.82	3.83	-9.54	45.47	68.20	-22.73
	27500.00	Peak	V	-	-	-55.73	4.97	-9.54	46.69	68.20	-21.51

## Table 7-149. Radiated Measurements SISO ANT2 (242 Tones)

Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	61
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5600MHz
Channel:	120

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11200.00	Average	V	-	-	-82.54	17.38	0.00	41.84	53.98	-12.14
*	11200.00	Peak	V	-	-	-70.23	17.38	0.00	54.15	73.98	-19.83
	16800.00	Peak	V	-	-	-71.34	24.94	0.00	60.60	68.20	-7.60
*	22400.00	Average	V	-	-	-65.55	3.79	-9.54	35.69	53.98	-18.29
*	22400.00	Peak	V	-	-	-55.33	3.79	-9.54	45.92	73.98	-28.06
	28000.00	Peak	V	-	-	-55.59	4.94	-9.54	46.80	68.20	-21.40

Table 7-150. Radiated Measurements SISO ANT2 (242 Tones)

FCC ID: C3K1997		MEASUREMENT REPORT (CERTIFICATION)		
Test Report S/N:	Test Dates:	EUT Type:	Dage 200 of 200	
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	Portable Computing Device	Page 260 of 309	
			V 9 0 02/01/2019	



Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	61
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5720MHz
Channel:	144

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11440.00	Average	V	-	-	-81.92	17.81	0.00	42.89	53.98	-11.08
*	11440.00	Peak	V	-	-	-70.09	17.81	0.00	54.72	73.98	-19.25
	17160.00	Peak	V	-	-	-72.95	25.10	0.00	59.15	68.20	-9.05
*	22880.00	Average	V	-	-	-65.56	3.79	-9.54	35.69	53.98	-18.29
*	22880.00	Peak	V	-	-	-55.42	3.79	-9.54	45.83	73.98	-28.15
	28600.00	Peak	V	-	-	-56.31	5.28	-9.54	46.42	68.20	-21.78

#### Table 7-151. Radiated Measurements SISO ANT2 (242 Tones)

Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	61
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5745MHz
Channel:	149

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11490.00	Average	V	-	-	-81.92	18.15	0.00	43.23	53.98	-10.75
*	11490.00	Peak	V	-	-	-71.12	18.15	0.00	54.03	73.98	-19.95
	17235.00	Peak	V	-	-	-72.04	25.47	0.00	60.43	68.20	-7.77
*	22980.00	Average	V	-	-	-66.11	3.79	-9.54	35.14	53.98	-18.84
*	22980.00	Peak	V	-	-	-56.35	3.79	-9.54	44.89	73.98	-29.09
	28725.00	Peak	V	-	-	-54.48	5.41	-9.54	48.39	68.20	-19.81

Table 7-152. Radiated Measurements SISO ANT2 (242 Tones)

FCC ID: C3K1997		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 261 of 309
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	Fage 201 01 309	
			1/000000000000



Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	61
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5785MHz
Channel:	157

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11570.00	Average	V	-	-	-81.87	17.88	0.00	43.01	53.98	-10.97
*	11570.00	Peak	V	-	-	-70.52	17.88	0.00	54.36	73.98	-19.62
	17355.00	Peak	V	-	-	-71.95	26.69	0.00	61.74	68.20	-6.46
	23140.00	Peak	V	-	-	-55.77	3.75	-9.54	45.44	68.20	-22.76
	28925.00	Peak	V	-	-	-56.61	5.46	-9.54	46.31	68.20	-21.89

## Table 7-153. Radiated Measurements SISO ANT2 (242 Tones)

802.11ax (20MHz BW)
MCS0
61
1 & 3 Meters
5825MHz
165

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11650.00	Average	V	-	-	-82.03	18.01	0.00	42.98	53.98	-11.00
*	11650.00	Peak	V	-	-	-71.50	18.01	0.00	53.51	73.98	-20.47
	17475.00	Peak	V	-	-	-72.40	26.08	0.00	60.68	68.20	-7.52
	23300.00	Peak	V	-	-	-55.47	3.76	-9.54	45.75	68.20	-22.45
	29125.00	Peak	V	-	-	-56.55	5.54	-9.54	46.45	68.20	-21.75

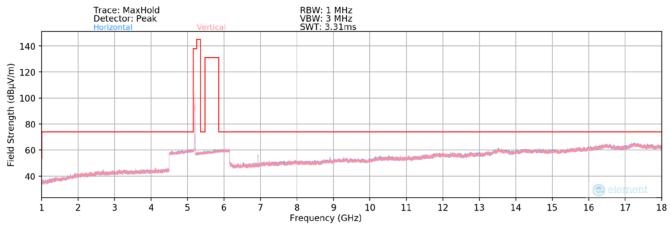
Table 7-154. Radiated Measurements SISO ANT2 (242 Tones)

FCC ID: C3K1997		MEASUREMENT REPORT (CERTIFICATION)			
Test Report S/N:	Test Dates:	EUT Type:	Dogo 262 of 200		
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	Portable Computing Device	Page 262 of 309		
			\/ 9 0 02/01/2019		

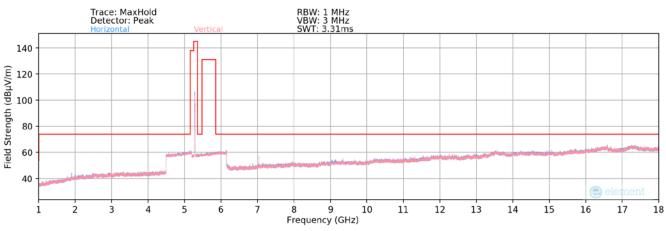


# 7.6.3 MIMO Radiated Spurious Emission Measurements

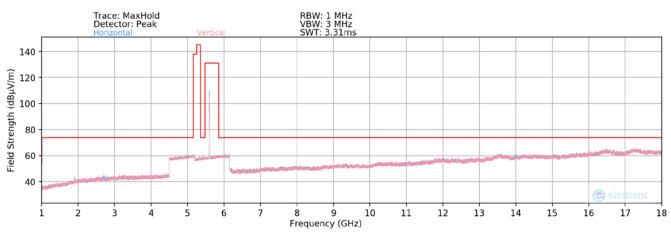
#### 26 Tones







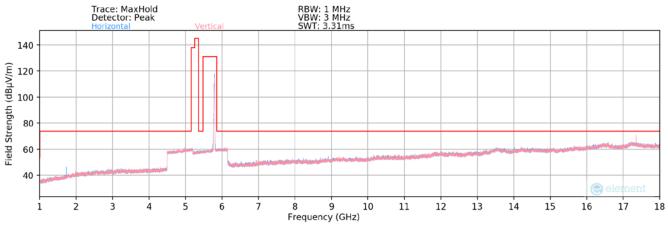




#### Plot 7-331. Radiated Spurious Plot above 1GHz MIMO (802.11ax – U2C Ch. 120 – 26 Tones)

FCC ID: C3K1997		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dage 262 of 200
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	Portable Computing Device	Page 263 of 309
		·	V 9.0 02/01/2019



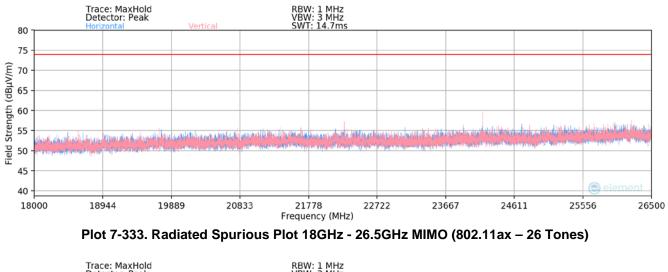


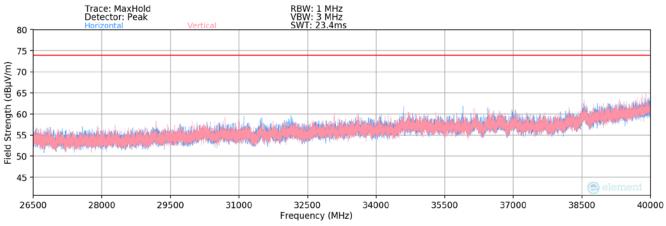
Plot 7-332. Radiated Spurious Plot above 1GHz MIMO (802.11ax - U3 Ch. 157 - 26 Tones)

FCC ID: C3K1997		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 264 of 309
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	Portable Computing Device	Page 264 01 309
			V 9 0 02/01/2019



# MIMO Radiated Spurious Emissions Measurements (Above 18GHz)





Plot 7-334. Radiated Spurious Plot 26.5GHz - 40GHz MIMO (802.11ax – 26 Tones)

FCC ID: C3K1997		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Daga 265 of 200
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	Portable Computing Device	Page 265 of 309
			V 9 0 02/01/2019



#### MIMO Radiated Spurious Emission Measurements (26 Tones) §15.407(b) §15.205 & §15.209; RSS-Gen [8.9]

Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	8
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5180MHz
Channel:	36

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
	10360.00	Peak	V	-	-	-71.23	16.24	0.00	52.01	68.20	-16.19
*	15540.00	Average	V	-	-	-81.34	23.23	0.00	48.89	53.98	-5.09
*	15540.00	Peak	V	-	-	-71.35	23.23	0.00	58.88	73.98	-15.10
*	20720.00	Average	V	-	-	-65.86	3.16	-9.54	34.75	53.98	-19.23
*	20720.00	Peak	V	-	-	-56.06	3.16	-9.54	44.55	73.98	-29.42
	25900.00	Peak	V	-	-	-56.22	4.77	-9.54	46.01	68.20	-22.19

Table 7-155. Radiated Measurements MIMO (26 Tones)

Worst Case Mode: Worst Case Transfer Rate: RU Index: Distance of Measurements: Operating Frequency: Channel: 802.11ax (20MHz BW) MCS0 8 1 & 3 Meters 5200MHz 40

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
	10400.00	Peak	V	-	-	-70.56	16.36	0.00	52.80	68.20	-15.40
*	15600.00	Average	V	-	-	-82.83	23.44	0.00	47.61	53.98	-6.37
*	15600.00	Peak	V	-	-	-71.67	23.44	0.00	58.77	73.98	-15.21
*	20800.00	Average	V	-	-	-65.32	3.48	-9.54	35.62	53.98	-18.36
*	20800.00	Peak	V	-	-	-55.75	3.48	-9.54	45.19	73.98	-28.79
	26000.00	Peak	V	-	-	-55.92	5.16	-9.54	46.69	68.20	-21.51

Table 7-156. Radiated Measurements MIMO (26 Tones)

FCC ID: C3K1997		MEASUREMENT REPORT (CERTIFICATION)		
Test Report S/N:	Test Dates:	EUT Type:	Dage 266 of 200	
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	Portable Computing Device	Page 266 of 309	
	•		V 9.0 02/01/2019	



Worst Case Mode:	802.11ax (20MHz BW)				
Worst Case Transfer Rate:	MCS0				
RU Index:	8				
Distance of Measurements:	1 & 3 Meters				
Operating Frequency:	5240MHz				
Channel:	48				

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
	10480.00	Peak	V	-	-	-71.06	16.30	0.00	52.24	68.20	-15.96
*	15720.00	Average	V	-	-	-82.55	23.38	0.00	47.83	53.98	-6.15
*	15720.00	Peak	V	-	-	-71.59	23.38	0.00	58.79	73.98	-15.19
*	20960.00	Average	V	-	-	-65.73	3.47	-9.54	35.21	53.98	-18.77
*	20960.00	Peak	V	-	-	-56.92	3.47	-9.54	44.01	73.98	-29.97
	26200.00	Peak	V	-	-	-55.67	4.78	-9.54	46.57	68.20	-21.63

Worst Case Mode:	
Worst Case Transfer Rate:	MCS0
RU Index:	8
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5260MHz
Channel:	52

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
	10520.00	Peak	V	-	-	-70.59	16.30	0.00	52.71	68.20	-15.49
*	15780.00	Average	V	-	-	-82.73	23.72	0.00	47.99	53.98	-5.99
*	15780.00	Peak	V	-	-	-71.86	23.72	0.00	58.86	73.98	-15.12
*	21040.00	Average	V	-	-	-65.58	3.53	-9.54	35.41	53.98	-18.57
*	21040.00	Peak	V	-	-	-55.77	3.53	-9.54	45.22	73.98	-28.76
	26300.00	Peak	V	-	-	-55.46	4.64	-9.54	46.64	68.20	-21.56

Table 7-158. Radiated Measurements MIMO (26 Tones)

FCC ID: C3K1997		MEASUREMENT REPORT (CERTIFICATION)			
Test Report S/N:	Test Dates:	EUT Type:	Page 267 of 309		
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	Portable Computing Device	Page 267 01 309		
			V 0 0 02/01/2010		



Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	8
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5280MHz
Channel:	56

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
	10560.00	Peak	V	-	-	-70.78	16.64	0.00	52.86	68.20	-15.34
*	15840.00	Average	V	-	-	-82.57	23.70	0.00	48.13	53.98	-5.85
*	15840.00	Peak	V	-	-	-71.01	23.70	0.00	59.69	73.98	-14.29
*	21120.00	Average	V	-	-	-65.70	3.68	-9.54	35.44	53.98	-18.54
*	21120.00	Peak	V	-	-	-55.60	3.68	-9.54	45.53	73.98	-28.45
	26400.00	Peak	V	-	-	-55.29	4.78	-9.54	46.95	68.20	-21.25

Table 7-159. Radiated Measurements MIMO	(26 Tones)
---	------------

Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	8
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5320MHz
Channel:	64

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	10640.00	Average	V	-	-	-81.79	16.76	0.00	41.97	53.98	-12.01
*	10640.00	Peak	V	-	-	-70.57	16.76	0.00	53.19	73.98	-20.79
*	15960.00	Average	V	-	-	-82.48	24.33	0.00	48.85	53.98	-5.13
*	15960.00	Peak	V	-	-	-71.33	24.33	0.00	60.00	73.98	-13.98
*	21280.00	Average	V	-	-	-65.80	3.72	-9.54	35.38	53.98	-18.60
*	21280.00	Peak	V	-	-	-55.62	3.72	-9.54	45.56	73.98	-28.42
	26600.00	Peak	V	-	-	-56.48	4.72	-9.54	45.70	68.20	-22.50

Table 7-160. Radiated Measurements MIMO (26 Tones)

FCC ID: C3K1997		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 268 of 309
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	Portable Computing Device	1 age 200 01 509
			V/ 0 0 02/01/2010



Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	8
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5500MHz
Channel:	100

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11000.00	Average	V	-	-	-82.23	17.47	0.00	42.24	53.98	-11.74
*	11000.00	Peak	V	-	-	-70.91	17.47	0.00	53.56	73.98	-20.42
	16500.00	Peak	V	-	-	-71.89	25.25	0.00	60.36	68.20	-7.84
	22000.00	Peak	V	-	-	-55.34	3.83	-9.54	45.95	68.20	-22.25
	27500.00	Peak	V	-	-	-55.58	4.97	-9.54	46.84	68.20	-21.36

## Table 7-161. Radiated Measurements MIMO (26 Tones)

Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	8
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5600MHz
Channel:	120

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11200.00	Average	V	-	-	-81.40	17.38	0.00	42.98	53.98	-11.00
*	11200.00	Peak	V	-	-	-70.55	17.38	0.00	53.83	73.98	-20.15
	16800.00	Peak	V	-	-	-71.47	24.94	0.00	60.47	68.20	-7.73
*	22400.00	Average	V	-	-	-65.81	3.79	-9.54	35.43	53.98	-18.55
*	22400.00	Peak	V	-	-	-56.14	3.79	-9.54	45.11	73.98	-28.87
	28000.00	Peak	V	-	-	-56.34	4.94	-9.54	46.06	68.20	-22.14

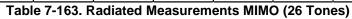
Table 7-162. Radiated Measurements MIMO (26 Tones)

FCC ID: C3K1997		MEASUREMENT REPORT (CERTIFICATION)		
Test Report S/N:	Test Dates:	EUT Type:	Dage 260 of 200	
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	Portable Computing Device	Page 269 of 309	
			V 0 0 02/01/2010	



Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	8
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5720MHz
Channel:	144

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11440.00	Average	V	-	-	-82.09	17.81	0.00	42.72	53.98	-11.25
*	11440.00	Peak	V	-	-	-71.36	17.81	0.00	53.45	73.98	-20.52
	17160.00	Peak	V	-	-	-71.45	25.10	0.00	60.65	68.20	-7.55
*	22880.00	Average	V	-	-	-64.93	3.79	-9.54	36.32	53.98	-17.66
*	22880.00	Peak	V	-	-	-56.44	3.79	-9.54	44.82	73.98	-29.16
	28600.00	Peak	V	-	-	-56.00	5.28	-9.54	46.73	68.20	-21.47



Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	8
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5745MHz
Channel:	149

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11490.00	Average	V	-	-	-82.06	18.15	0.00	43.09	53.98	-10.89
*	11490.00	Peak	V	-	-	-70.18	18.15	0.00	54.97	73.98	-19.01
	17235.00	Peak	V	-	-	-71.84	25.47	0.00	60.63	68.20	-7.57
*	22980.00	Average	V	-	-	-65.20	3.79	-9.54	36.04	53.98	-17.94
*	22980.00	Peak	V	-	-	-56.38	3.79	-9.54	44.86	73.98	-29.12
	28725.00	Peak	V	-	-	-55.45	5.41	-9.54	47.41	68.20	-20.79

Table 7-164. Radiated Measurements MIMO (26 Tones)

FCC ID: C3K1997		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Page 270 of 309	
1M2204040049-16-R2.C3K 3/14/2022-8/18/2022		Portable Computing Device	1 age 270 01 000	
			V/ 0 0 00/04/0040	



Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	8
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5785MHz
Channel:	157

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11570.00	Average	V	-	-	-81.61	17.88	0.00	43.27	53.98	-10.71
*	11570.00	Peak	V	-	-	-70.23	17.88	0.00	54.65	73.98	-19.33
	17355.00	Peak	V	-	-	-72.34	26.69	0.00	61.35	68.20	-6.85
	23140.00	Peak	V	-	-	-56.39	3.75	-9.54	44.82	68.20	-23.38
	28925.00	Peak	V	-	-	-56.86	5.46	-9.54	46.06	68.20	-22.14

#### Table 7-165. Radiated Measurements MIMO (26 Tones)

Worst Case Mode:802.11ax (20MHz BW)Worst Case Transfer Rate:MCS0RU Index:8Distance of Measurements:1 & 3 MetersOperating Frequency:5825MHzChannel:165

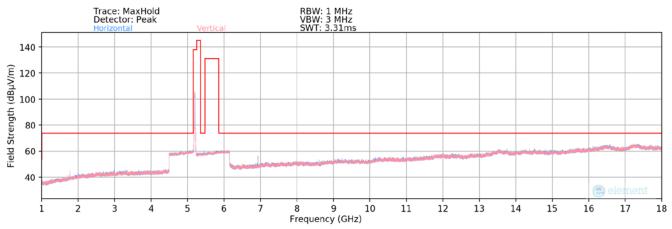
	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11650.00	Average	V	-	-	-81.54	18.01	0.00	43.47	53.98	-10.51
*	11650.00	Peak	V	-	-	-70.26	18.01	0.00	54.75	73.98	-19.23
	17475.00	Peak	V	-	-	-70.16	26.08	0.00	62.92	68.20	-5.28
	23300.00	Peak	V	-	-	-56.05	3.76	-9.54	45.17	68.20	-23.03
	29125.00	Peak	V	-	-	-56.29	5.54	-9.54	46.71	68.20	-21.49

Table 7-166. Radiated Measurements MIMO (26 Tones)

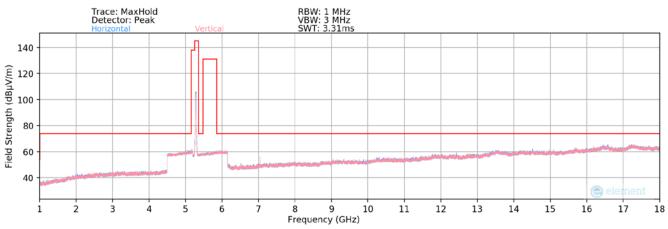
FCC ID: C3K1997		MEASUREMENT REPORT (CERTIFICATION)			
Test Report S/N:	Test Dates:	EUT Type:	Dogo 271 of 200		
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	Portable Computing Device	Page 271 of 309		
			V 0 0 02/01/2010		



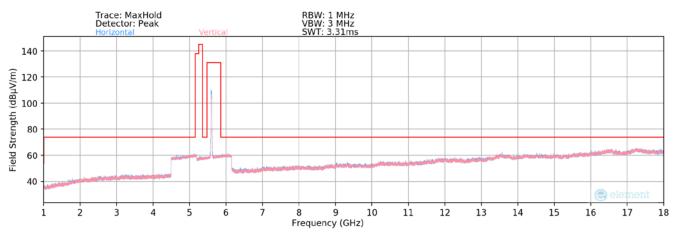
# 242 Tones



Plot 7-335. Radiated Spurious Plot above 1GHz MIMO (802.11ax - U1 Ch. 40 - 242 Tones)



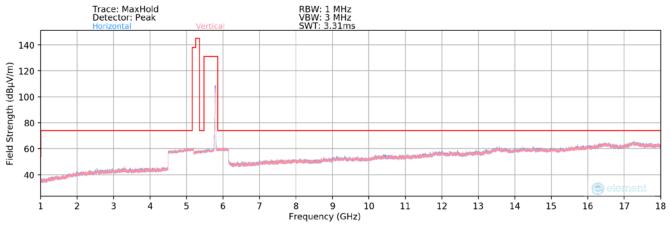
Plot 7-336. Radiated Spurious Plot above 1GHz MIMO (802.11ax – U2A Ch. 56 – 242 Tones)



Plot 7-337. Radiated Spurious Plot above 1GHz MIMO (802.11ax - U2C Ch. 120 - 242 Tones)

FCC ID: C3K1997	CC ID: C3K1997 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 272 of 200
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	Portable Computing Device	Page 272 of 309
			V 9.0 02/01/2019





Plot 7-338. Radiated Spurious Plot above 1GHz MIMO (802.11ax - U3 Ch. 157 - 242 Tones)

FCC ID: C3K1997	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 273 of 309
1M2204040049-16-R2.C3K	3/14/2022-8/18/2022	Portable Computing Device	
		-	V 9 0 02/01/2019