

Plot 7-188. Radiated Spurious Plot 26.5GHz - 40GHz MIMO (802.11a)

FCC ID: C3K2077		MEASUREMENT REPORT				
Test Report S/N:	Test Dates:	EUT Type:	Page 130 of 155			
1M2312040120-19.C3K	12/14/2023 - 03/18/2024	Portable Computing Device	Page 130 01 133			



MIMO Radiated Spurious Emission Measurements - UNII Band 1

Worst Case Mode: 802.11a Worst Case Transfer Rate: 6Mbps Distance of Measurements: 1 & 3 Meters

Mode	Antenna	UNII Band	Channel	Test Channel Freq. [MHz]	Restricted	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	٧	-	-	-70.90	16.21	0.00	52.31	68.20	-15.89
					*	15540.00	Average	٧	-	-	-82.59	23.20	0.00	47.61	53.98	-6.37
			36	5180	*	15540.00	Peak	٧	-	-	-72.09	23.20	0.00	58.11	73.98	-15.87
			30	3160	*	20720.00	Average	٧	-	-	-62.38	3.27	-9.54	38.35	53.98	-15.63
					*	20720.00	Peak	٧	-	-	-57.20	3.27	-9.54	43.53	73.98	-30.45
						25900.00	Peak	٧	-	-	-56.51	4.35	-9.54	45.30	68.20	-22.90
						10400.00	Peak	٧	-	-	-71.82	16.41	0.00	51.59	68.20	-16.61
					*	15600.00	Average	٧	-	-	-82.50	23.68	0.00	48.18	53.98	-5.80
802.11a	MIMO	1	40	5200	*	15600.00	Peak	٧	-	-	-72.65	23.68	0.00	58.03	73.98	-15.95
			40	5200	*	20800.00	Average	٧	-	-	-62.81	3.40	-9.54	38.05	53.98	-15.93
					*	20800.00	Peak	٧	-	-	-57.39	3.40	-9.54	43.47	73.98	-30.51
						26000.00	Peak	٧	-	-	-58.54	4.39	-9.54	43.31	68.20	-24.89
						10480.00	Peak	٧	-	-	-71.72	16.39	0.00	51.67	68.20	-16.53
					*	15720.00	Average	٧	-	-	-82.30	23.50	0.00	48.20	53.98	-5.78
			48	5240	*	15720.00	Peak	٧	-	-	-72.23	23.50	0.00	58.27	73.98	-15.71
				3240		20960.00	Peak	٧	-	-	-62.76	3.41	-9.54	38.11	68.20	-30.09
						26200.00	Peak	٧	-	-	-59.42	3.41	-9.54	41.45	68.20	-26.75

Table 7-31. Radiated Measurements MIMO

FCC ID: C3K2077		MEASUREMENT REPORT				
Test Report S/N:	Test Dates:	EUT Type:	Dags 121 of 155			
1M2312040120-19.C3K	12/14/2023 - 03/18/2024	Portable Computing Device	Page 131 of 155			



MIMO Radiated Spurious Emission Measurements - UNII Band 2A

Worst Case Mode: 802.11a
Worst Case Transfer Rate: 6Mbps
Distance of Measurements: 1 & 3 Meters

Mode	Antenna	UNII Band	Channel	Test Channel Freq. [MHz]	Restricted	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	٧	-	-	-70.79	16.52	0.00	52.73	68.20	-15.47															
					*	15780.00	Average	٧	-		-82.19	23.86	0.00	48.67	53.98	-5.31															
			52	5260	*	15780.00	Peak	٧	-		-71.39	23.86	0.00	59.47	73.98	-14.51															
			32	3200	*	21040.00	Average	٧	-		-62.31	3.53	-9.54	38.68	53.98	-15.30															
					*	21040.00	Peak	٧	-	-	-54.42	3.53	-9.54	46.57	73.98	-27.41															
						26300.00	Peak	٧	-	-	-54.02	4.27	-9.54	47.71	68.20	-20.49															
					10560.00	Peak	٧	-		-71.84	16.73	0.00	51.89	68.20	-16.31																
				56 5280	56 5280 -	56 5280	56 5280	56 5280	56 5280	5280	5280	5280	5280	5280	5280	5280	5280	*	15840.00	Average	٧	-	-	-82.37	23.84	0.00	48.47	53.98	-5.51		
			56															5280	5280	*	15840.00	Peak	٧	-	-	-71.48	23.84	0.00	59.36	73.98	-14.62
802.11a	MIMO	2A	56 5280																	5280	5280	*	21120.00	Average	٧	-	-	-61.57	3.66	-9.54	39.55
						*	21120.00	Peak	٧	-	-	-54.27	3.66	-9.54	46.85	73.98	-27.13														
						26400.00	Peak	٧	-	-	-52.84	4.21	-9.54	48.83	68.20	-19.37															
					*	10640.00	Average	٧	-	-	-82.11	16.93	0.00	41.82	53.98	-12.16															
										, ,	Ţ							*	10640.00	Peak	٧	-	-	-71.15	16.93	0.00	52.78	73.98	-21.20		
					*	15960.00	Average	٧	-	-	-82.73	24.56	0.00	48.83	53.98	-5.15															
			64	5320	*	15960.00	Peak	٧	-	-	-72.65	24.56	0.00	58.91	73.98	-15.07															
				*	21280.00	Average	٧	-	-	-63.76	3.75	-9.54	37.45	53.98	-16.53																
					*	21280.00	Peak	٧	-	-	-54.15	3.75	-9.54	47.06	73.98	-26.92															
						26600.00	Peak	٧	-	-	-53.74	4.20	-9.54	47.92	68.20	-20.28															

Table 7-32. Radiated Measurements MIMO

FCC ID: C3K2077		MEASUREMENT REPORT			
Test Report S/N:	Test Dates:	EUT Type:	Dogo 122 of 155		
1M2312040120-19.C3K	12/14/2023 - 03/18/2024	Portable Computing Device	Page 132 of 155		



MIMO Radiated Spurious Emission Measurements – UNII Band 2C

Worst Case Mode: 802.11a Worst Case Transfer Rate: 6Mbps Distance of Measurements: 1 & 3 Meters

Mode	Antenna	UNII Band	Channel	Test Channel Freq. [MHz]	Restricted	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	٧	-	-	-82.20	17.68	0.00	42.48	53.98	-11.50							
				*	11000.00	Peak	٧	-	-	-71.77	17.68	0.00	52.91	73.98	-21.07							
			100	5500		16500.00	Peak	٧	-	-	-72.05	25.22	0.00	60.17	68.20	-8.03						
						22000.00	Peak	٧	-	-	-53.68	3.75	-9.54	47.54	68.20	-20.66						
						27500.00	Peak	٧	-	-	-54.76	4.29	-9.54	46.98	68.20	-21.22						
					*	11200.00	Average	٧	-	-	-81.67	17.72	0.00	43.05	53.98	-10.93						
					*	11200.00	Peak	٧	-	-	-71.53	17.72	0.00	53.19	73.98	-20.79						
			120 5	120 50	120 5	120 5600	120 5600	5600	5600	5600		16800.00	Peak	٧	-	-	-72.09	25.63	0.00	60.54	68.20	-7.66
802.11a	MIMO	2C	120	3000	*	22400.00	Average	٧	-	-	-63.20	3.68	-9.54	37.94	53.98	-16.04						
					*	22400.00	Peak	٧	-	-	-54.55	3.68	-9.54	46.59	73.98	-27.39						
						28000.00	Peak	٧	-	-	-54.09	4.45	-9.54	47.83	68.20	-20.37						
					*	11440.00	Average	٧	-	-	-82.16	18.37	0.00	43.21	53.98	-10.77						
					*	11440.00	Peak	٧	-	-	-70.99	18.37	0.00	54.38	73.98	-19.60						
			144	5720		17160.00	Peak	٧	-	-	-71.11	25.51	0.00	61.40	68.20	-6.80						
			144	5/20	*	22880.00	Average	٧	-	-	-63.48	3.87	-9.54	37.85	53.98	-16.13						
					*	22880.00	Peak	٧	-	-	-53.41	3.87	-9.54	47.92	73.98	-26.06						
						28600.00	Peak	٧	-	-	-53.81	5.03	-9.54	48.68	68.20	-19.52						

Table 7-33. Radiated Measurements MIMO

FCC ID: C3K2077		MEASUREMENT REPORT			
Test Report S/N:	Test Dates:	EUT Type:	Dogo 122 of 155		
1M2312040120-19.C3K	12/14/2023 - 03/18/2024	Portable Computing Device	Page 133 of 155		



MIMO Radiated Spurious Emission Measurements - UNII Band 3

Worst Case Mode: 802.11a
Worst Case Transfer Rate: 6Mbps
Distance of Measurements: 1 & 3 Meters

Mode	Antenna	UNII Band	Channel	Test Channel Freq. [MHz]	Restricted	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	٧	-	-	-82.41	18.41	0.00	43.00	53.98	-10.98
				*	11490.00	Peak	٧		-	-71.08	18.41	0.00	54.33	73.98	-19.65	
			149	5745		17235.00	Peak	٧	-	-	-71.44	25.96	0.00	61.52	68.20	-6.68
			149	3743	*	22980.00	Average	٧	-	-	-62.33	3.75	-9.54	38.88	53.98	-15.10
					*	22980.00	Peak	٧	-	-	-53.52	3.75	-9.54	47.69	73.98	-26.29
						28725.00	Peak	٧	-	-	-53.67	5.10	-9.54	48.89	68.20	-19.31
					*	11570.00	Average	٧	-	-	-81.37	18.29	0.00	43.92	53.98	-10.06
802.11a	MIMO	3			*	11570.00	Peak	٧	-	-	-71.96	18.29	0.00	53.33	73.98	-20.65
002.11d	IVIIVIO	3	157	5785		17355.00	Peak	٧	-	-	-73.23	27.41	0.00	61.18	68.20	-7.02
						23140.00	Peak	٧	-	-	-54.49	3.70	-9.54	46.66	68.20	-21.54
						28925.00	Peak	٧	-	-	-53.89	5.00	-9.54	48.57	68.20	-19.63
					*	11650.00	Average	٧	-	-	-82.26	18.47	0.00	43.21	53.98	-10.77
					*	11650.00	Peak	٧	-	-	-72.26	18.47	0.00	53.21	73.98	-20.77
			165	5825		17475.00	Peak	٧	-	-	-72.67	26.78	0.00	61.11	68.20	-7.09
						23300.00	Peak	٧	-	-	-54.13	3.73	-9.54	47.06	68.20	-21.14
						29125.00	Peak	٧	-	-	-54.55	5.04	-9.54	47.96	68.20	-20.24

Table 7-34. Radiated Measurements MIMO

FCC ID: C3K2077		MEASUREMENT REPORT	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 134 of 155
1M2312040120-19.C3K	12/14/2023 - 03/18/2024	Portable Computing Device	Fage 134 01 155



MIMO Radiated Spurious Emission Measurements – UNII Band 4

Worst Case Mode: 802.11a
Worst Case Transfer Rate: 6Mbps
Distance of Measurements: 1 & 3 Meters

Mode	Antenna	UNII Band	Channel	Test Channel Freq. [MHz]	Restricted	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]
					*	11690.00	Average	٧	-	-	-82.25	18.57	0.00	43.32	53.98	-10.66
					*	11690.00	Peak	٧	-	-	-71.95	18.57	0.00	53.62	73.98	-20.36
			169	5845		17535.00	Peak	٧	-	-	-72.17	26.80	0.00	61.63	68.20	-6.57
			109	3043		23380.00	Peak	٧	-	-	-54.06	3.63	-9.54	47.03	68.20	-21.17
						29225.00	Peak	٧	-	-	-54.63	5.18	-9.54	48.01	68.20	-20.19
						35070.00	Peak	٧	-	-	-53.33	7.59	-9.54	51.73	68.20	-16.47
					*	11730.00	Average	٧	-	-	-81.89	18.47	0.00	43.58	53.98	-10.40
					*	11730.00	Peak	V	-	-	-71.55	18.47	0.00	53.92	73.98	-20.06
802.11a	мімо	4	173	5865		17595.00	Peak	V	-	-	-72.17	26.61	0.00	61.44	68.20	-6.76
002.11d	IVIIIVIO	4	1/3		5865		23460.00	Peak	V	-	-	-55.19	3.73	-9.54	46.00	68.20
						29325.00	Peak	V	-	-	-53.69	5.43	-9.54	49.21	68.20	-18.99
						35190.00	Peak	٧	-	-	-52.76	7.73	-9.54	52.43	68.20	-15.77
					*	11770.00	Average	٧	-	-	-81.82	18.45	0.00	43.63	53.98	-10.35
					*	11770.00	Peak	٧	-	-	-71.92	18.45	0.00	53.53	73.98	-20.45
			177	E00E		17655.00	Peak	٧	-	-	-72.18	26.38	0.00	61.20	68.20	-7.00
			177 5885	77 5885		23540.00	Peak	٧	-	-	-54.49	3.78	-9.54	46.75	68.20	-21.45
						29425.00	Peak	٧	-	-	-54.58	5.46	-9.54	48.34	68.20	-19.86
						35310.00	Peak	٧	-	-	-53.59	7.92	-9.54	51.79	68.20	-16.41

Table 7-35. Radiated Measurements MIMO

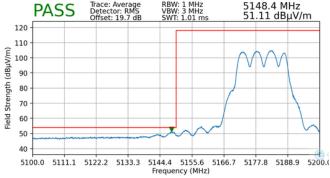
FCC ID: C3K2077		MEASUREMENT REPORT			
Test Report S/N:	Test Dates:	EUT Type:	Page 135 of 155		
1M2312040120-19.C3K	12/14/2023 - 03/18/2024	Portable Computing Device	Fage 133 01 133		



7.6.2 MIMO Radiated Band Edge Measurements (20MHz BW)

Worst Case Mode:
Worst Case Transfer Rate:
Distance of Measurements:
Operating Frequency:
Channel:

802.11a
6Mbps
3 Meters
5180MHz
36



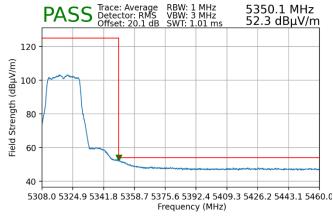
Plot 7-189. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 1)



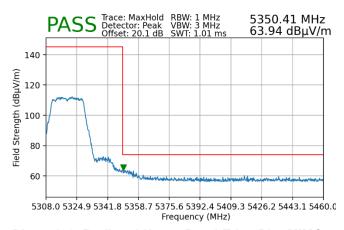
Plot 7-190. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 1)

Worst Case Mode:
Worst Case Transfer Rate:
Distance of Measurements:
Operating Frequency:
Channel:

802.11ac
MCS0
3 Meters
5320MHz
64



Plot 7-191. Radiated Upper Band Edge Plot MIMO (Average – UNII Band 2A)



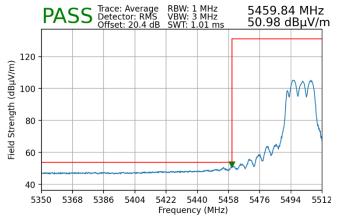
Plot 7-192. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 2A)

FCC ID: C3K2077		MEASUREMENT REPORT				
Test Report S/N:	Test Dates:	EUT Type:	Page 136 of 155			
1M2312040120-19.C3K	12/14/2023 - 03/18/2024	Portable Computing Device	Page 130 of 133			

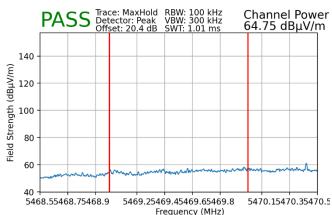


Worst Case Mode:
Worst Case Transfer Rate:
Distance of Measurements:
Operating Frequency:
Channel:

802.11a
6Mbps
3 Meters
5500MHz
100

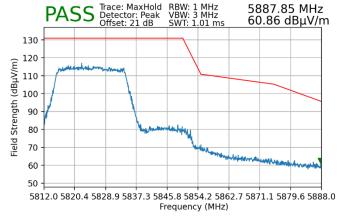


Plot 7-193. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 2C)



Plot 7-194. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 2C)

Worst Case Mode: 802.11be
Worst Case Transfer Rate: MCS0
Distance of Measurements: 3 Meters
Operating Frequency: 5825MHz
Channel: 165



Plot 7-195. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 3)

FCC ID: C3K2077		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Page 137 of 155
1M2312040120-19.C3K	12/14/2023 - 03/18/2024	Portable Computing Device	Page 137 of 133

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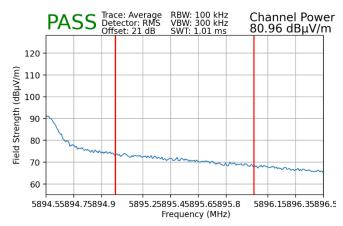


802.11n Worst Case Mode: Worst Case Transfer Rate: MCS8 Distance of Measurements: 3 Meters Operating Frequency: 5845MHz Channel: 169

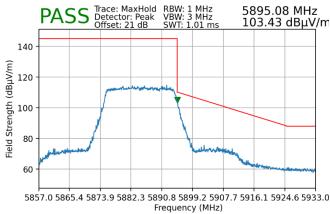
		PAS	SS	Trace: Ma Detector Offset: 2	axHold : Peak 1 dB	RBW: 1 VBW: 3 SWT: 1	MHz		7 MHz BμV/m
14	40 -								
Field Strength (dBµV/m)	20 -								Manhan
angth (00 -								
eld Stre	80 -							. 14	
	60 -	white mark to	Alexandra (principale)	patro directority deposit	-y-Bur-y-Wan	W	Mary W	A Part of Parties	
	562	5.0 565	0.6 5	676.1 570		 27.2 575 requenc		3.9 582	9.4 5855.0

Plot 7-196. Radiated Lower Band Edge Plot MIMO (Peak - UNII Band 4)

Worst Case Mode: 802.11ax Worst Case Transfer Rate: MCS0 Distance of Measurements: 3 Meters Operating Frequency: 5885MHz Channel: 177



Plot 7-197. Radiated Upper Band Edge Plot MIMO (Average - UNII Band 4)



Plot 7-198. Radiated Upper Band Edge Plot MIMO (Peak - UNII Band 4)

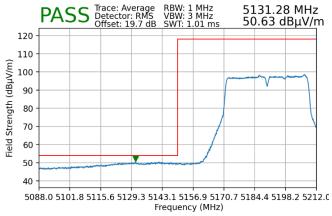
FCC ID: C3K2077		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Page 138 of 155
1M2312040120-19.C3K	12/14/2023 - 03/18/2024	Portable Computing Device	Page 136 01 133



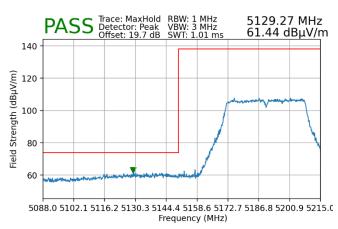
7.6.3 MIMO Radiated Band Edge Measurements (40MHz BW)

Worst Case Mode:
Worst Case Transfer Rate:
Distance of Measurements:
Operating Frequency:
Channel:

802.11ac
MCS0
3 Meters
5190MHz
38



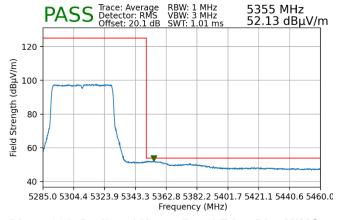
Plot 7-199. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 1)



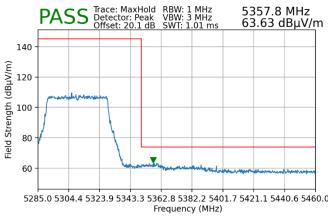
Plot 7-200. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 1)

Worst Case Mode:
Worst Case Transfer Rate:
Distance of Measurements:
Operating Frequency:
Channel:

802.11ax
MCS0
3 Meters
5310MHz
62



Plot 7-201. Radiated Upper Band Edge Plot MIMO (Average – UNII Band 2A)



Plot 7-202. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 2A)

FCC ID: C3K2077		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Page 139 of 155
1M2312040120-19.C3K	12/14/2023 - 03/18/2024	Portable Computing Device	rage 139 01 133



Worst Case Mode:

Worst Case Transfer Rate:

Distance of Measurements:

Operating Frequency:

Channel:

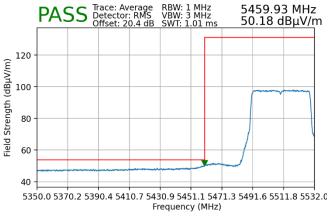
802.11ax

MCS0

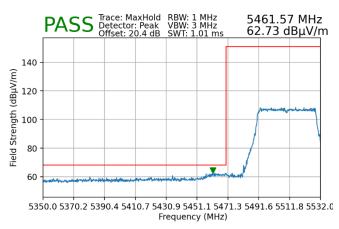
3 Meters

5510MHz

102



Plot 7-203. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 2C)



Plot 7-204. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 2C)

Worst Case Mode:

Worst Case Transfer Rate:

Distance of Measurements:
Operating Frequency:

Channel:

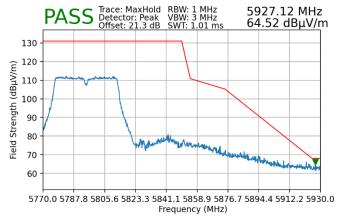
802.11n

MCS8

3 Meters

5795MHz

159



Plot 7-205. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 3)

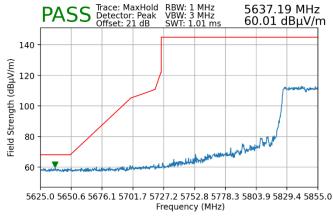
FCC ID: C3K2077		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Dogo 140 of 155
1M2312040120-19.C3K	12/14/2023 - 03/18/2024	Portable Computing Device	Page 140 of 155

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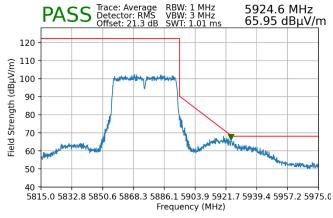
Worst Case Mode: Worst Case Transfer Rate: Distance of Measurements: Operating Frequency: Channel:

802.11be	
MCS0	_
3 Meters	_
5835MHz	
167	

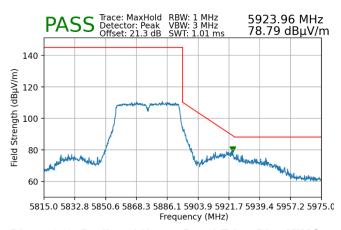


Plot 7-206. Radiated Lower Band Edge Plot MIMO (Peak -**UNII Band 4)**

Worst Case Mode: 802.11n Worst Case Transfer Rate: MCS8 Distance of Measurements: 3 Meters Operating Frequency: 5875MHz Channel: 175



Plot 7-207. Radiated Upper Band Edge Plot MIMO (Average - UNII Band 4)



Plot 7-208. Radiated Upper Band Edge Plot MIMO (Peak - UNII Band 4)

FCC ID: C3K2077		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Dogo 141 of 155
1M2312040120-19.C3K	12/14/2023 - 03/18/2024	Portable Computing Device	Page 141 of 155

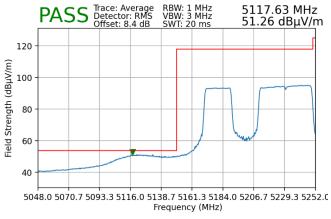
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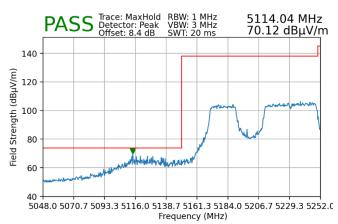
7.6.4 MIMO Radiated Band Edge Measurements (80MHz BW)

Worst Case Mode:
Worst Case Transfer Rate:
Distance of Measurements:
Operating Frequency:
Channel:

802.11be
MCS0
3 Meters
5210MHz
42



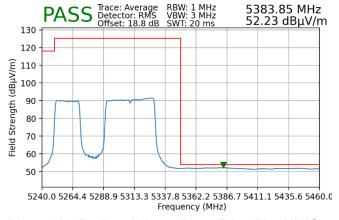
Plot 7-209. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 1)



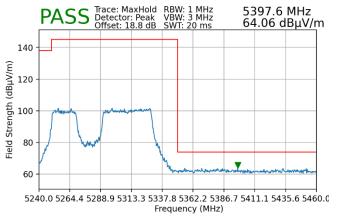
Plot 7-210. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 1)

Worst Case Mode:
Worst Case Transfer Rate:
Distance of Measurements:
Operating Frequency:
Channel:

802.11be
MCS0
3 Meters
5290MHz
58



Plot 7-211. Radiated Upper Band Edge Plot MIMO (Average – UNII Band 2A)



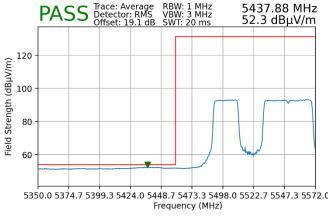
Plot 7-212. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 2A)

FCC ID: C3K2077		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Page 142 of 155
1M2312040120-19.C3K	12/14/2023 - 03/18/2024	Portable Computing Device	Page 142 01 155

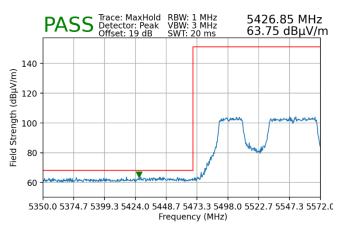


Worst Case Mode:
Worst Case Transfer Rate:
Distance of Measurements:
Operating Frequency:
Channel:

802.11be
MCS0
3 Meters
5530MHz
106



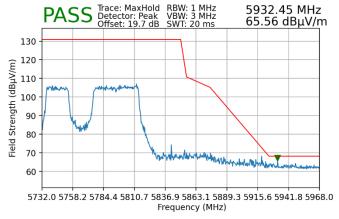
Plot 7-213. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 2C)



Plot 7-214. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 2C)

Worst Case Mode:
Worst Case Transfer Rate:
Distance of Measurements:
Operating Frequency:
Channel:

802.11be
MCS0
3 Meters
5775MHz
155



Plot 7-215. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 3)

FCC ID: C3K2077		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Dogo 142 of 155
1M2312040120-19.C3K	12/14/2023 - 03/18/2024	Portable Computing Device	Page 143 of 155

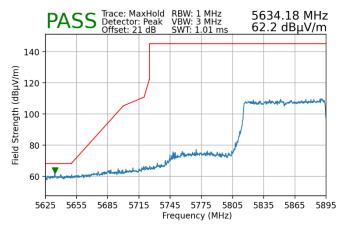
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V11.1 08/28/2023

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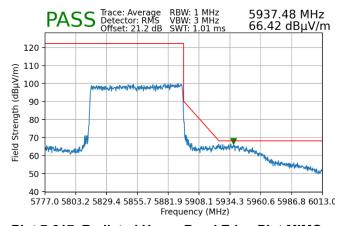


Worst Case Mode: 802.11be MCS₀ Worst Case Transfer Rate: Distance of Measurements: 3 Meters Operating Frequency: 5855MHz Channel: 171

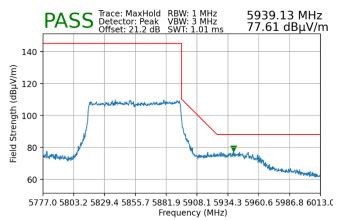


Plot 7-216. Radiated Lower Band Edge Plot MIMO (Peak - UNII Band 4)

Worst Case Mode: 802.11ax Worst Case Transfer Rate: MCS0 Distance of Measurements: 3 Meters Operating Frequency: 5855MHz Channel: 171



Plot 7-217. Radiated Upper Band Edge Plot MIMO (Average - UNII Band 4)



Plot 7-218. Radiated Upper Band Edge Plot MIMO (Peak - UNII Band 4)

FCC ID: C3K2077		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Page 144 of 155
1M2312040120-19.C3K	12/14/2023 - 03/18/2024	Portable Computing Device	Page 144 01 155

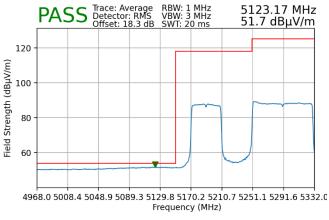
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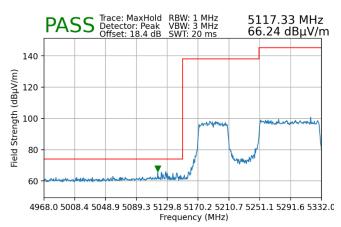
7.6.5 MIMO Radiated Band Edge Measurements (160MHz BW)

Worst Case Mode:
Worst Case Transfer Rate:
Distance of Measurements:
Operating Frequency:
Channel:

802.11be
MCS0
3 Meters
5250MHz
50



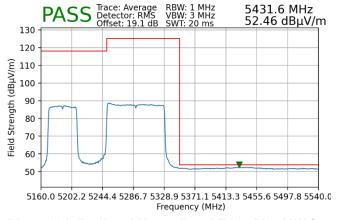
Plot 7-219. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 1)



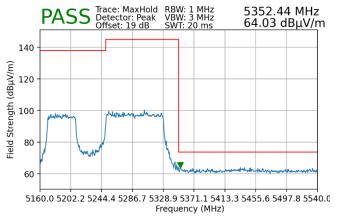
Plot 7-220. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 1)

Worst Case Mode:
Worst Case Transfer Rate:
Distance of Measurements:
Operating Frequency:
Channel:

802.11be
MCS0
3 Meters
5250MHz
50



Plot 7-221. Radiated Upper Band Edge Plot MIMO (Average – UNII Band 2A)



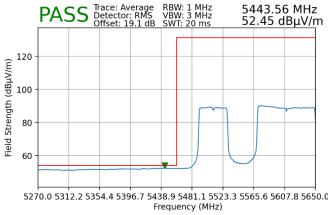
Plot 7-222. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 2A)

FCC ID: C3K2077		Approved by: Technical Manager		
Test Report S/N:	Test Dates:	EUT Type:	Dogo 145 of 155	
1M2312040120-19.C3K	12/14/2023 - 03/18/2024	Portable Computing Device	Page 145 of 155	

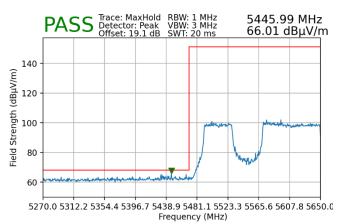


Worst Case Mode:
Worst Case Transfer Rate:
Distance of Measurements:
Operating Frequency:
Channel:

802.11be	
MCS0	
3 Meters	
5570MHz	
114	



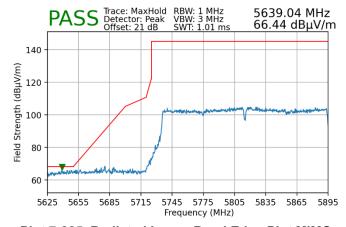
Plot 7-223. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 2C)



Plot 7-224. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 2C)

Worst Case Mode:
Worst Case Transfer Rate:
Distance of Measurements:
Operating Frequency:
Channel:

802.11ax
MCS0
3 Meters
5815MHz
163



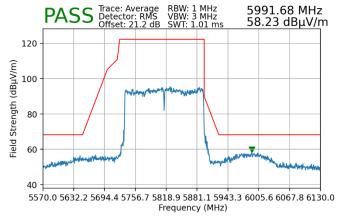
Plot 7-225. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 4)

FCC ID: C3K2077	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 146 of 155
1M2312040120-19.C3K	12/14/2023 - 03/18/2024	Portable Computing Device	Page 140 01 155

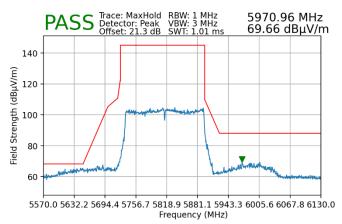
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Worst Case Mode: 802.11ax Worst Case Transfer Rate: MCS0 Distance of Measurements: 3 Meters 5815MHz Operating Frequency: Channel: 163



Plot 7-226. Radiated Lower Band Edge Plot MIMO (Average - UNII Band 4)



Plot 7-227. Radiated Lower Band Edge Plot MIMO (Peak - UNII Band 4)

FCC ID: C3K2077	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 147 of 155
1M2312040120-19.C3K	12/14/2023 - 03/18/2024	Portable Computing Device	Page 147 01 155



7.7 Line-Conducted Test Data

Test Overview and Limit

All AC line conducted spurious emissions are measured with a receiver connected to a grounded LISN while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies. All data rates and modes were investigated for conducted spurious emissions. Only the conducted emissions of the configuration that produced the worst-case emissions are reported in this section.

All conducted emissions must not exceed the limits shown in the table below per FCC §15.207 and RSS-Gen (8.8).

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

Table 7-36. Conducted Limits

Test Procedures Used

ANSI C63.10-2013, Section 6.2

Test Settings

Quasi-Peak Field Strength Measurements

- 1. Analyzer center frequency was set to the frequency of the spurious emission of interest
- 2. RBW = 9kHz (for emissions from 150kHz 30MHz)
- 3. Detector = quasi-peak
- 4. Sweep time = auto couple
- 5. Trace mode = max hold
- 6. Trace was allowed to stabilize

Average Field Strength Measurements

- 1. Analyzer center frequency was set to the frequency of the spurious emission of interest
- 2. RBW = 9kHz (for emissions from 150kHz 30MHz)
- 3. Detector = RMS
- 4. Sweep time = auto couple
- 5. Trace mode = max hold
- 6. Trace was allowed to stabilize

FCC ID: C3K2077	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 149 of 155
1M2312040120-19.C3K	12/14/2023 - 03/18/2024	Portable Computing Device	Page 148 of 155

^{*}Decreases with the logarithm of the frequency.



Test Setup

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

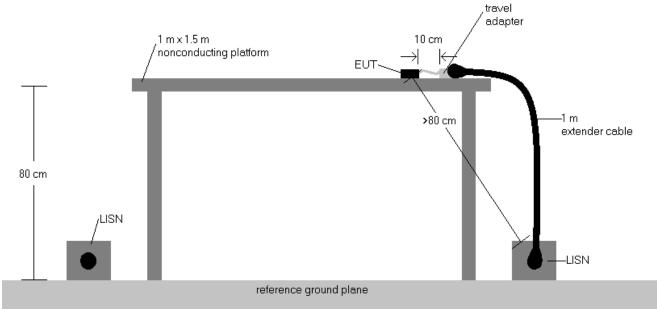


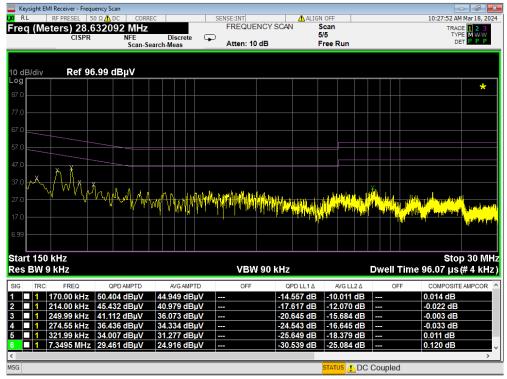
Figure 7-8. Test Instrument & Measurement Setup

Test Notes

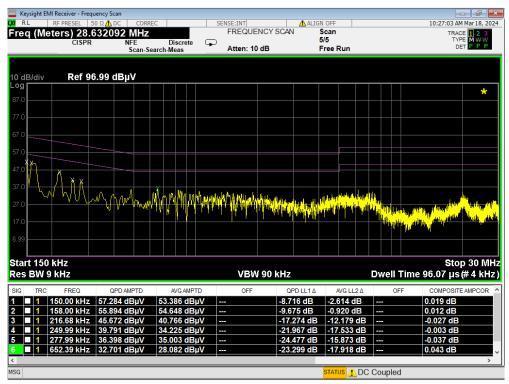
- 1. All modes of operation were investigated, and the worst-case emissions are reported using mid channel. The emissions found were not affected by the choice of channel used during testing.
- 2. The limit for an intentional radiator from 150kHz to 30MHz is specified in §15.207 and RSS-Gen (8.8).
- 3. Corr. (dB) = Cable loss (dB) + LISN insertion factor (dB)
- 4. QP/AV Level (dB μ V) = QP/AV Analyzer/Receiver Level (dB μ V) + Corr. (dB)
- 5. Margin (dB) = QP/AV Limit (dB μ V) QP/AV Level (dB μ V)
- 6. Traces shown in plot are made using a peak detector.
- 7. Deviations to the Specifications: None.

FCC ID: C3K2077	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 149 of 155
1M2312040120-19.C3K	12/14/2023 - 03/18/2024	Portable Computing Device	raye 149 01 155





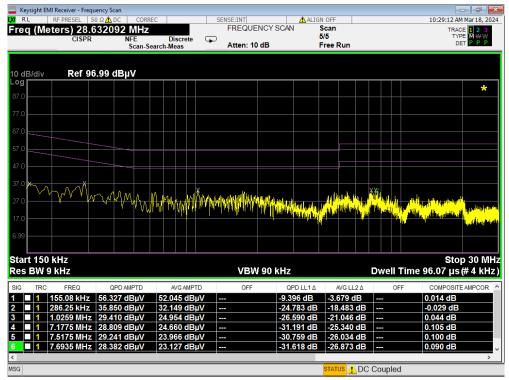
Plot 7-228. Line Conducted Plot with 802.11a UNII Band 1 (L1)



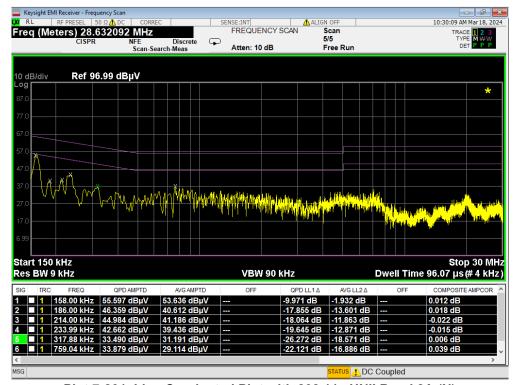
Plot 7-229. Line Conducted Plot with 802.11a UNII Band 1 (N)

FCC ID: C3K2077	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 150 of 155
1M2312040120-19.C3K	12/14/2023 - 03/18/2024	Portable Computing Device	Page 150 of 155





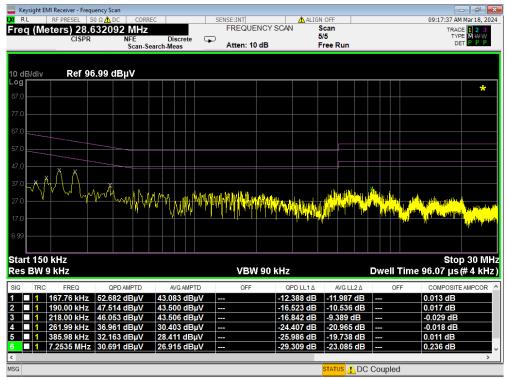
Plot 7-230. Line Conducted Plot with 802.11a UNII Band 2A (L1)



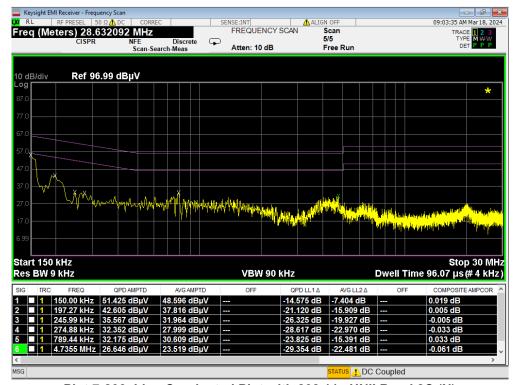
Plot 7-231. Line Conducted Plot with 802.11a UNII Band 2A (N)

FCC ID: C3K2077	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 151 of 155
1M2312040120-19.C3K	12/14/2023 - 03/18/2024	Portable Computing Device	Page 131 01 133





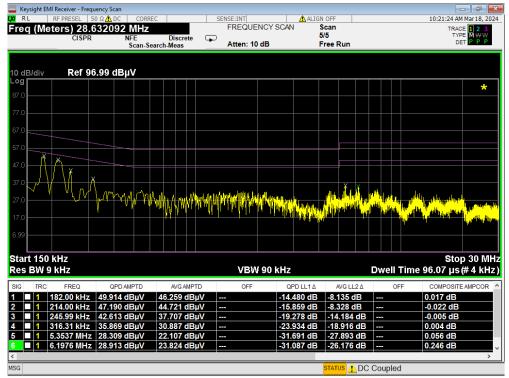
Plot 7-232. Line Conducted Plot with 802.11a UNII Band 2C (L1)



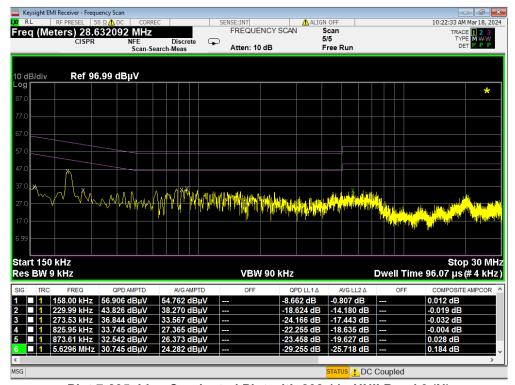
Plot 7-233. Line Conducted Plot with 802.11a UNII Band 2C (N)

FCC ID: C3K2077	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 152 of 155
1M2312040120-19.C3K	12/14/2023 - 03/18/2024	Portable Computing Device	Page 152 01 155





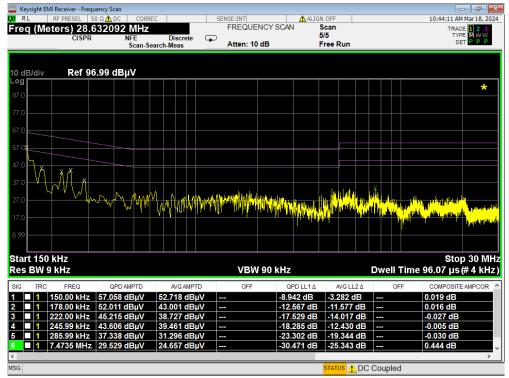
Plot 7-234. Line Conducted Plot with 802.11a UNII Band 3 (L1)



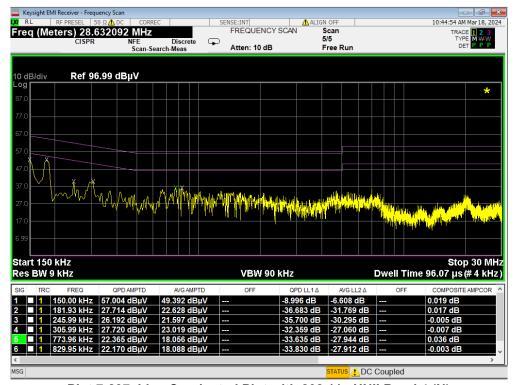
Plot 7-235. Line Conducted Plot with 802.11a UNII Band 3 (N)

FCC ID: C3K2077	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 153 of 155
1M2312040120-19.C3K	12/14/2023 - 03/18/2024	Portable Computing Device	Page 155 of 155





Plot 7-236. Line Conducted Plot with 802.11a UNII Band 4 (L1)



Plot 7-237. Line Conducted Plot with 802.11a UNII Band 4 (N)

FCC ID: C3K2077	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 154 of 155
1M2312040120-19.C3K	12/14/2023 - 03/18/2024	Portable Computing Device	Page 154 01 155



8.0 CONCLUSION

The data collected relate only the item(s) tested and show that the **Microsoft Corporation Portable Computing Device FCC ID: C3K2077** is in compliance with Part 15 Subpart E (15.407) of the FCC Rules.

FCC ID: C3K2077	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 155 of 155
1M2312040120-19.C3K	12/14/2023 - 03/18/2024	Portable Computing Device	Page 155 of 155