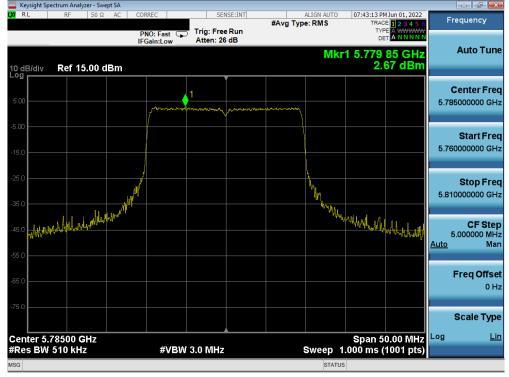


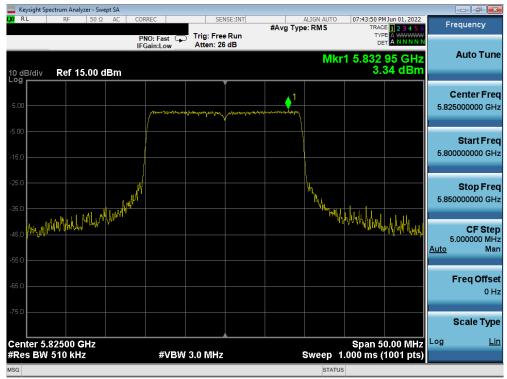
Plot 7-221. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax - Full Tones (UNII Band 3) - Ch. 149)



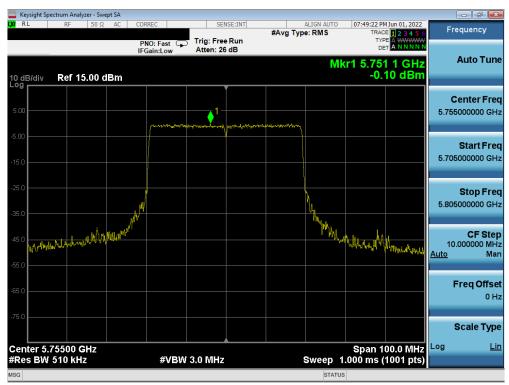
Plot 7-222. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax - Full Tones (UNII Band 3) - Ch. 157)

FCC ID: A3LSMF721U	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 170 of 212
1M2204080051-15-R1.A3L	4/8/2022 - 7/12/2022	Portable Handset	Page 170 of 313





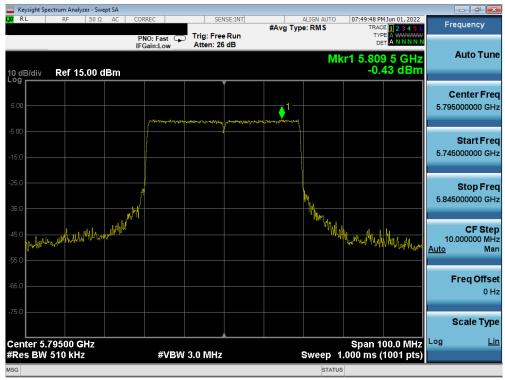
Plot 7-223. Power Spectral Density Plot SISO ANT1 (20 MHz BW 802.11ax - Full Tones (UNII Band 3) - Ch. 165)



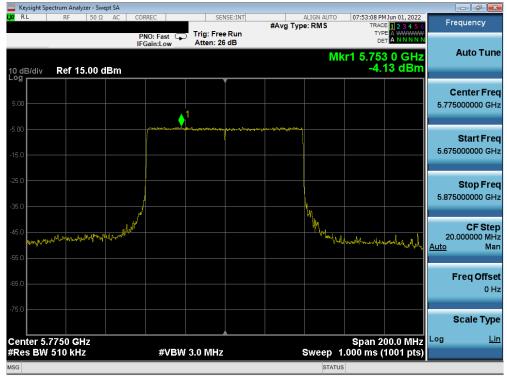
Plot 7-224. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax - Full Tones (UNII Band 3) - Ch. 151)

FCC ID: A3LSMF721U	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 171 of 212
1M2204080051-15-R1.A3L	4/8/2022 - 7/12/2022	Portable Handset	Page 171 of 313





Plot 7-225. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax - Full Tones (UNII Band 3) - Ch. 159)



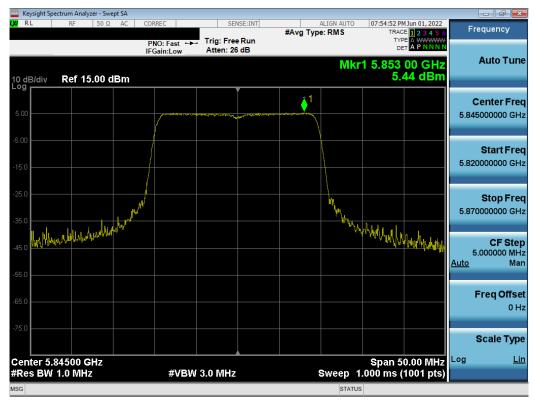
Plot 7-226. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax - Full Tones (UNII Band 3) - Ch. 155)

FCC ID: A3LSMF721U	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 172 of 212
1M2204080051-15-R1.A3L	4/8/2022 - 7/12/2022	Portable Handset	Page 172 of 313



	Frequency [MHz]	Channel No.	802.11 Mode	Tones	Data Rate [Mbps]	Measured Power Density [dBm/MHz]	Max Permissible Power Density [dBm/500kHz]	Margin [dB]	Antenna Gain [dBi]	EIRP Power Density [dBm/MHz]	Max EIRP Power Density [dBm/MHz]	Margin [dB]
Band 3/4	5845	169	ax (20MHz)	242T	MCS0	5.44	30.00	-24.56	-5.00	0.44	14.00	-13.56
Band 4	5865	173	ax (20MHz)	242T	MCS0	5.29			-5.00	0.29	14.00	-13.71
Dallu 4	5885	177	ax (20MHz)	242T	MCS0	5.39			-5.00	0.39	14.00	-13.61
Band 3/4	5835	167	ax (40MHz)	484T	MCS0	1.77	30.00	-28.23	-5.00	-3.23	14.00	-17.23
Band 4	5875	175	ax (40MHz)	484T	MCS0	1.94			-5.00	-3.06	14.00	-17.06
	5855	171	ax (80MHz)	996T	MCS0	-0.87	30.00	-30.87	-5.00	-5.87	14.00	-19.87
Band 3/4	5815	163	ax (160MHz L)	996T	MCS0	0.13	30.00	-29.87	-5.00	-4.87	14.00	-18.87
	5815	163	ax (160MHz U)	996T	MCS0	0.32	30.00	-29.68	-5.00	-4.68	14.00	-18.68

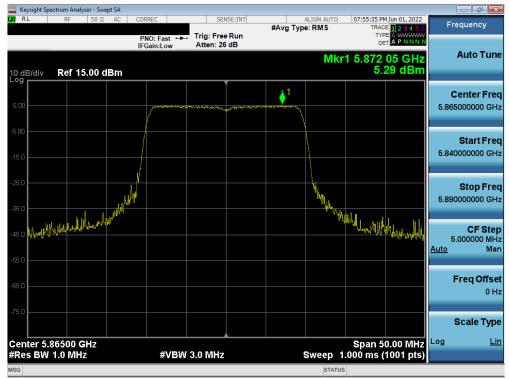
Table 7-85. Band 4 Conducted Power Spectral Density Measurements SISO ANT1 (Full Tones)



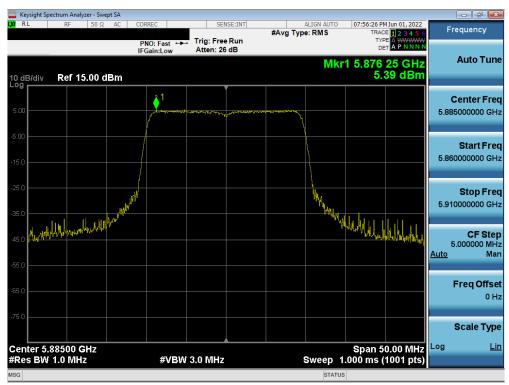
Plot 7-227. Power Spectral Density Plot SISO ANT1(20MHz BW 802.11ax - Full Tones (UNII Band 3/4) - Ch. 169)

FCC ID: A3LSMF721U	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 173 of 313
1M2204080051-15-R1.A3L	4/8/2022 - 7/12/2022	Portable Handset	Page 173 01313





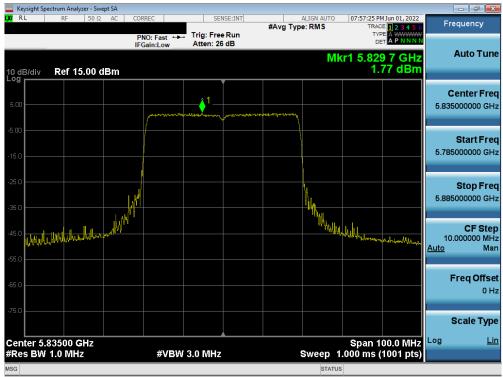
Plot 7-228. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax - Full Tones (UNII Band 4) - Ch. 173)



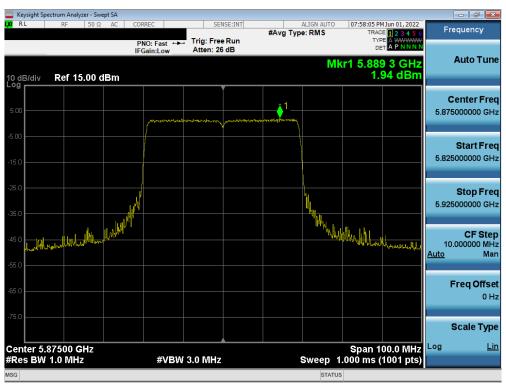
Plot 7-229. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax - Full Tones (UNII Band 4) - Ch. 177)

FCC ID: A3LSMF721U	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 174 of 313
1M2204080051-15-R1.A3L	4/8/2022 - 7/12/2022	Portable Handset	Fage 174 01313





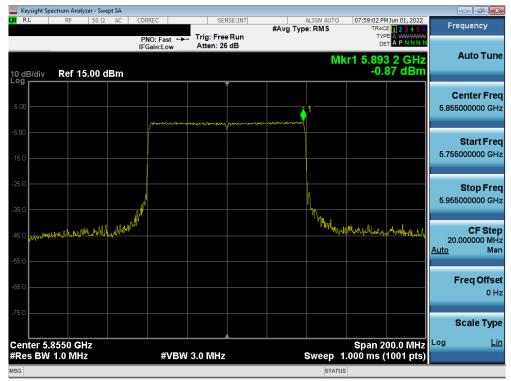
Plot 7-230. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax - Full Tones (UNII Band 3/4) - Ch. 167)



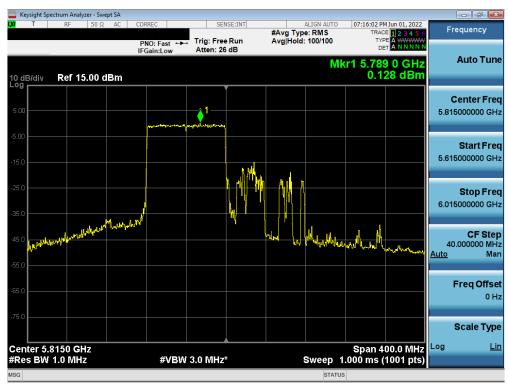
Plot 7-231. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax - Full Tones (UNII Band 4) - Ch. 175)

FCC ID: A3LSMF721U	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 175 of 212
1M2204080051-15-R1.A3L	4/8/2022 - 7/12/2022	Portable Handset	Page 175 of 313





Plot 7-232. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax - Full Tones (UNII Band 3/4) - Ch. 171)



Plot 7-233. Power Spectral Density Plot SISO ANT1 (160MHz BW (L) 802.11ax - Full Tones (UNII Band 3/4) - Ch. 163)

FCC ID: A3LSMF721U	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 176 of 212
1M2204080051-15-R1.A3L	4/8/2022 - 7/12/2022	Portable Handset	Page 176 of 313





Plot 7-234. Power Spectral Density Plot SISO ANT1 (160MHz BW (U) 802.11ax - Full Tones (UNII Band 3/4) - Ch. 163)

FCC ID: A3LSMF721U	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 177 of 212
1M2204080051-15-R1.A3L	4/8/2022 - 7/12/2022	Portable Handset	Page 177 of 313



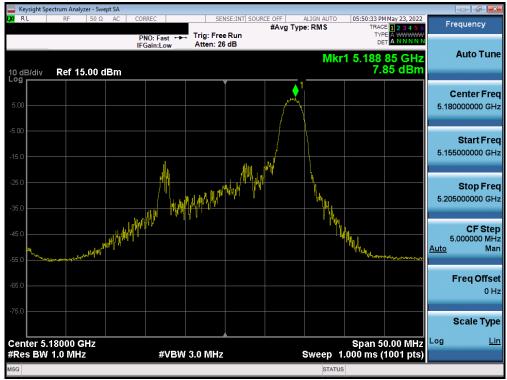
## **Antenna-2 Power Spectral Density Measurements (26 Tones)**

	Frequency [MHz]	Channel No.	802.11 Mode	Tones	Data Rate [Mbps]	Measured Power Density [dBm]	Max Power Density [dBm/MHz]	Margin [dB]
	5180	36	ax (20MHz)	26T	MCS0	7.85	11.0	-3.15
_	5200	40	ax (20MHz)	26T	MCS0	7.22	11.0	-3.78
Band 1	5240	48	ax (20MHz)	26T	MCS0	7.54	11.0	-3.46
Bar	5190	38	ax (40MHz)	26T	MCS0	7.87	11.0	-3.13
_	5230	46	ax (40MHz)	26T	MCS0	7.49	11.0	-3.51
	5210	42	ax (80MHz)	26T	MCS0	7.25	11.0	-3.75
Band 1/2A	5250	50	ax (160MHz L)	26T	MCS0	6.50	11.0	-4.50
Ba 1//	5250	50	ax (160MHz U)	26T	MCS0	7.70	11.0	-3.30
	5260	52	ax (20MHz)	26T	MCS0	7.32	11.0	-3.68
d	5280	56	ax (20MHz)	26T	MCS0	7.86	11.0	-3.14
d 22	5320	64	ax (20MHz)	26T	MCS0	7.54	11.0	-3.46
Band 2A	5270	54	ax (40MHz)	26T	MCS0	7.86	11.0	-3.15
ш	5310	62	ax (40MHz)	26T	MCS0	7.93	11.0	-3.07
	5290	58	ax (80MHz)	26T	MCS0	6.70	11.0	-4.30
	5500	100	ax (20MHz)	26T	MCS0	7.76	11.0	-3.24
	5600	120	ax (20MHz)	26T	MCS0	7.89	11.0	-3.12
	5720	144	ax (20MHz)	26T	MCS0	7.88	11.0	-3.13
	5510	102	ax (40MHz)	26T	MCS0	7.71	11.0	-3.29
, C	5590	118	ax (40MHz)	26T	MCS0	7.96	11.0	-3.04
Band 2C	5710	142	ax (40MHz)	26T	MCS0	7.97	11.0	-3.03
Ba	5530	106	ax (80MHz)	26T	MCS0	6.98	11.0	-4.02
	5610	122	ax (80MHz)	26T	MCS0	7.16	11.0	-3.84
	5690	138	ax (80MHz)	26T	MCS0	7.74	11.0	-3.26
	5570	114	ax (160MHz L)	26T	MCS0	7.94	11.0	-3.06
	5570	114	ax (160MHz U)	26T	MCS0	7.43	11.0	-3.57

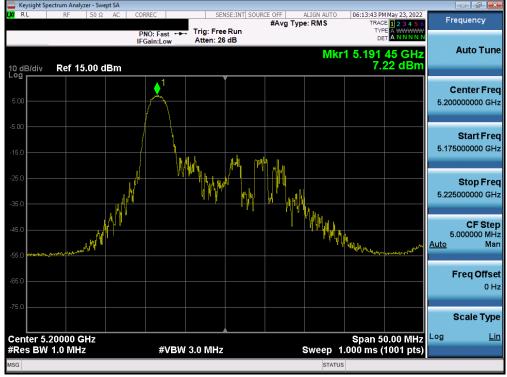
Table 7-86. Conducted Power Spectral Density Measurements ANT2 (26 Tones)

FCC ID: A3LSMF721U	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 179 of 212
1M2204080051-15-R1.A3L	4/8/2022 - 7/12/2022	Portable Handset	Page 178 of 313





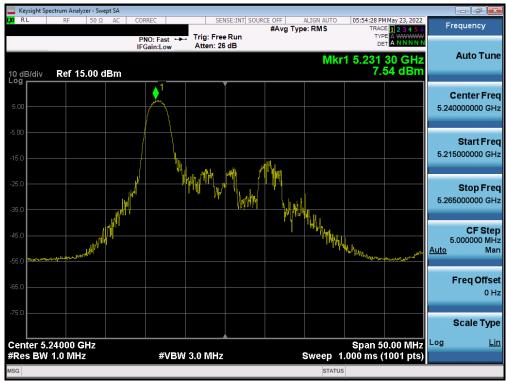
Plot 7-235. Power Spectral Density Plot ANT2 (20MHz BW 802.11ax - 26 Tones (UNII Band 1) - Ch. 36)



Plot 7-236. Power Spectral Density Plot ANT2 (20MHz BW 802.11ax - 26 Tones (UNII Band 1) - Ch. 40)

FCC ID: A3LSMF721U	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 179 of 313
1M2204080051-15-R1.A3L	4/8/2022 - 7/12/2022	Portable Handset	rage 179 01 313





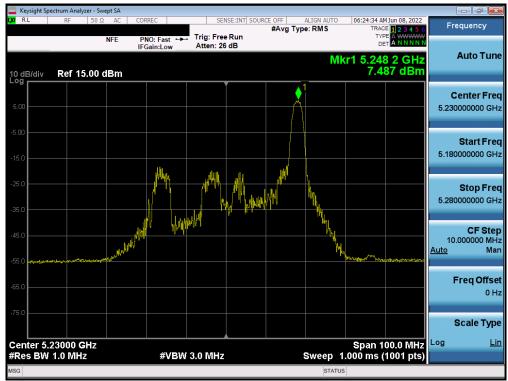
Plot 7-237. Power Spectral Density Plot ANT2 (20MHz BW 802.11ax - 26 Tones (UNII Band 1) - Ch. 48)



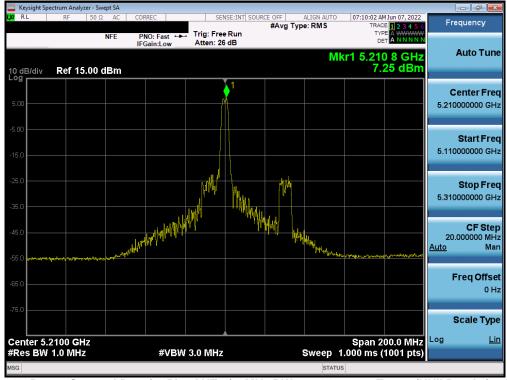
Plot 7-238. Power Spectral Density Plot ANT2 (40MHz BW 802.11ax - 26 Tones (UNII Band 1) - Ch. 38)

FCC ID: A3LSMF721U	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 180 of 313
1M2204080051-15-R1.A3L	4/8/2022 - 7/12/2022	Portable Handset	rage 100 01313





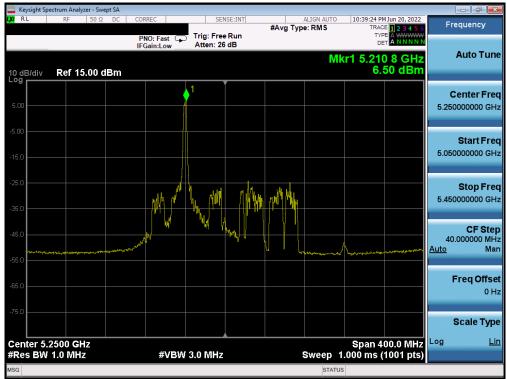
Plot 7-239. Power Spectral Density Plot ANT2 (40MHz BW 802.11ax - 26 Tones (UNII Band 1) - Ch. 46)



Plot 7-240. Power Spectral Density Plot ANT2 (80MHz BW 802.11ax - 26 Tones (UNII Band 1) - Ch. 42)

FCC ID: A3LSMF721U	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 191 of 212
1M2204080051-15-R1.A3L	4/8/2022 - 7/12/2022	Portable Handset	Page 181 of 313





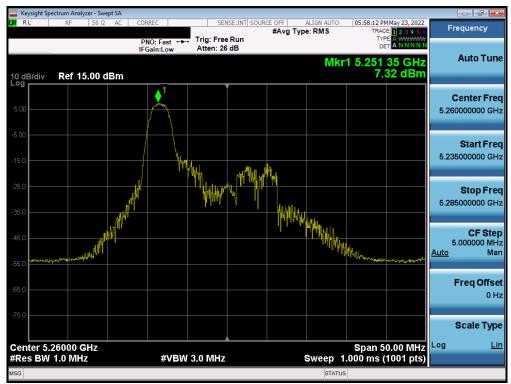
Plot 7-241. Power Spectral Density Plot ANT2 (160MHz L BW 802.11ax - 26 Tones (UNII Band 1/2A) - Ch. 50)



Plot 7-242. Power Spectral Density Plot ANT2 (160MHz U BW 802.11ax - 26 Tones (UNII Band 1/2A) - Ch. 50)

FCC ID: A3LSMF721U	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 192 of 212
1M2204080051-15-R1.A3L	4/8/2022 - 7/12/2022	Portable Handset	Page 182 of 313





Plot 7-243. Power Spectral Density Plot ANT2 (20MHz BW 802.11ax - 26 Tones (UNII Band 2A) - Ch. 52)



Plot 7-244. Power Spectral Density Plot ANT2 (20MHz BW 802.11ax - 26 Tones (UNII Band 2A) - Ch. 56)

FCC ID: A3LSMF721U	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 192 of 212
1M2204080051-15-R1.A3L	4/8/2022 - 7/12/2022	Portable Handset	Page 183 of 313





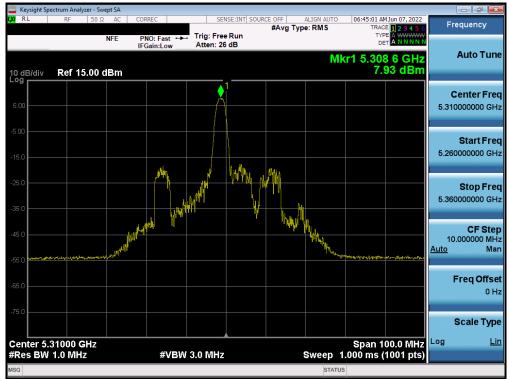
Plot 7-245. Power Spectral Density Plot ANT2 (20MHz BW 802.11ax - 26 Tones (UNII Band 2A) - Ch. 64)



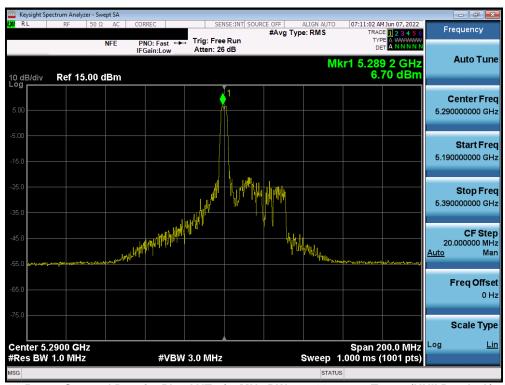
Plot 7-246. Power Spectral Density Plot ANT2 (40MHz BW 802.11ax - 26 Tones (UNII Band 2A) - Ch. 54)

FCC ID: A3LSMF721U	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 184 of 313
1M2204080051-15-R1.A3L	4/8/2022 - 7/12/2022	Portable Handset	Page 104 01 313





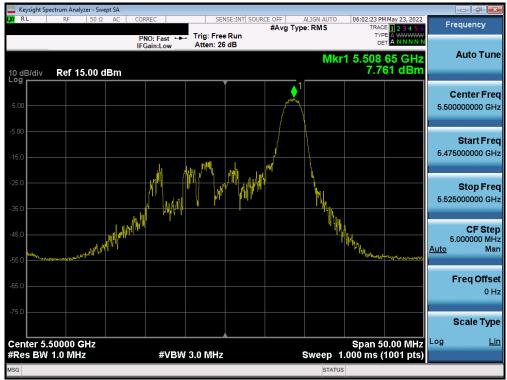
Plot 7-247. Power Spectral Density Plot ANT2 (40MHz BW 802.11ax - 26 Tones (UNII Band 2A) - Ch. 62)



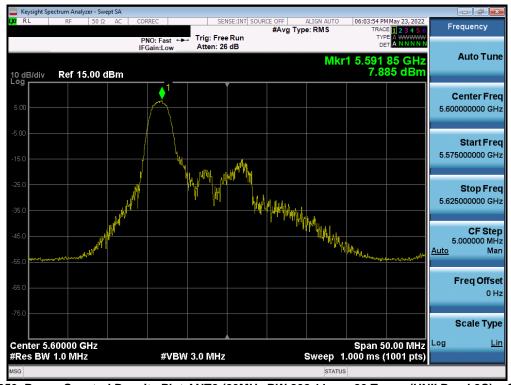
Plot 7-248. Power Spectral Density Plot ANT2 (80MHz BW 802.11ax - 26 Tones (UNII Band 2A) - Ch. 58)

FCC ID: A3LSMF721U	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 195 of 212
1M2204080051-15-R1.A3L	4/8/2022 - 7/12/2022	Portable Handset	Page 185 of 313





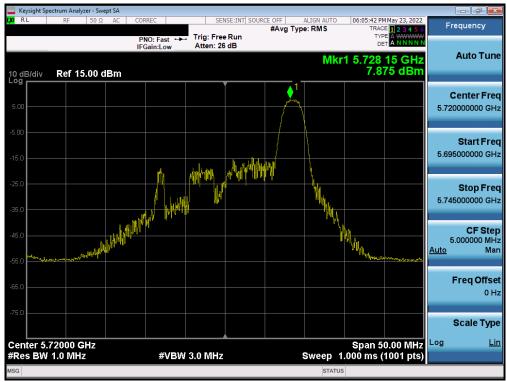
Plot 7-249. Power Spectral Density Plot ANT2 (20MHz BW 802.11ax - 26 Tones (UNII Band 2C) - Ch. 100)



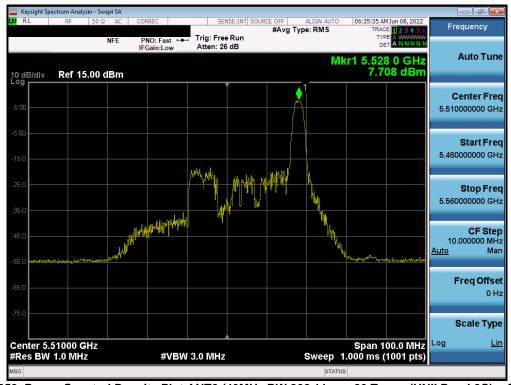
Plot 7-250. Power Spectral Density Plot ANT2 (20MHz BW 802.11ax - 26 Tones (UNII Band 2C) - Ch. 120)

FCC ID: A3LSMF721U	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 186 of 313
1M2204080051-15-R1.A3L	4/8/2022 - 7/12/2022	Portable Handset	rage 100 01 313





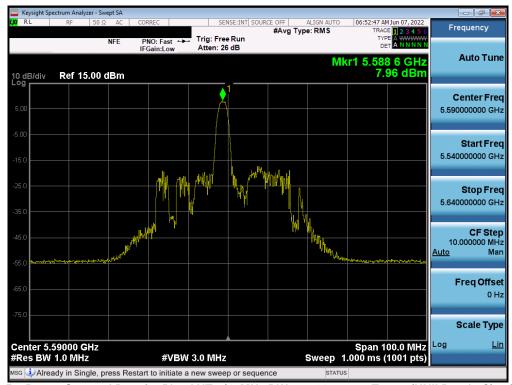
Plot 7-251. Power Spectral Density Plot ANT2 (20MHz BW 802.11ax - 26 Tones (UNII Band 2C) - Ch. 144)



Plot 7-252. Power Spectral Density Plot ANT2 (40MHz BW 802.11ax - 26 Tones (UNII Band 2C) - Ch. 102)

FCC ID: A3LSMF721U	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 197 of 212
1M2204080051-15-R1.A3L	4/8/2022 - 7/12/2022	Portable Handset	Page 187 of 313





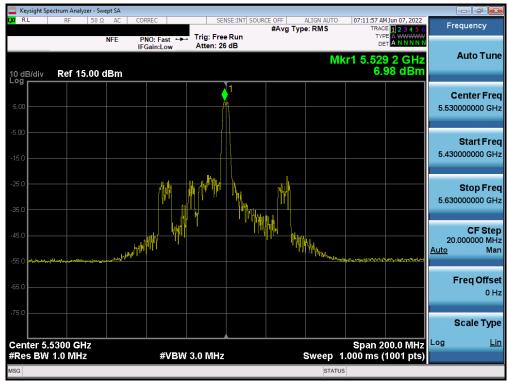
Plot 7-253. Power Spectral Density Plot ANT2 (40MHz BW 802.11ax - 26 Tones (UNII Band 2C) - Ch. 118)



Plot 7-254. Power Spectral Density Plot ANT2 (40MHz BW 802.11ax - 26 Tones (UNII Band 2C) - Ch. 142)

FCC ID: A3LSMF721U	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 100 of 212
1M2204080051-15-R1.A3L	4/8/2022 - 7/12/2022	Portable Handset	Page 188 of 313





Plot 7-255. Power Spectral Density Plot ANT2 (80MHz BW 802.11ax - 26 Tones (UNII Band 2C) - Ch. 106)



Plot 7-256. Power Spectral Density Plot ANT2 (80MHz BW 802.11ax - 26 Tones (UNII Band 2C) - Ch. 122)

FCC ID: A3LSMF721U	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 190 of 212
1M2204080051-15-R1.A3L	4/8/2022 - 7/12/2022	Portable Handset	Page 189 of 313





Plot 7-257. Power Spectral Density Plot ANT2 (80MHz BW 802.11ax - 26 Tones (UNII Band 2C) - Ch. 138)



Plot 7-258. Power Spectral Density Plot ANT2 (160MHz L BW 802.11ax - 26 Tones (UNII Band 2C) - Ch. 114)

FCC ID: A3LSMF721U	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 100 of 212
1M2204080051-15-R1.A3L	4/8/2022 - 7/12/2022	Portable Handset	Page 190 of 313





Plot 7-259. Power Spectral Density Plot ANT2 (160MHz U BW 802.11ax - 26 Tones (UNII Band 2C) - Ch. 114)

FCC ID: A3LSMF721U	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 191 of 313
1M2204080051-15-R1.A3L	4/8/2022 - 7/12/2022	Portable Handset	rage 19101313

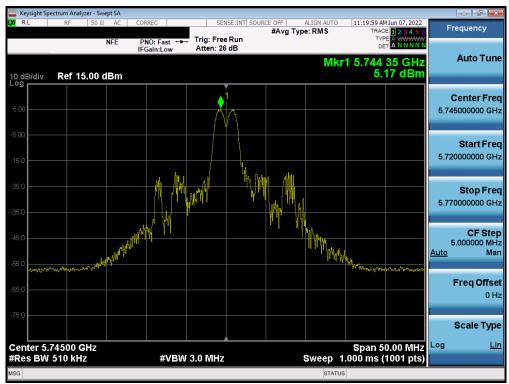


	Frequency [MHz]	Channel No.	802.11 Mode	Tones	Data Rate [Mbps]	Measured Power Density [dBm]	Max Permissible Power Density	Margin [dB]
	5745	149	ax (20MHz)	26T	MCS0	5.17	30.00	-24.83
က	5785	157	ax (20MHz)	26T	MCS0	5.26	30.00	-24.74
	5825	165	ax (20MHz)	26T	MCS0	5.19	30.00	-24.81
Band	5755	151	ax (40MHz)	26T	MCS0	5.41	30.00	-24.59
	5795	159	ax (40MHz)	26T	MCS0	5.35	30.00	-24.65
	5775	155	ax (80MHz)	26T	MCS0	5.39	30.00	-24.61

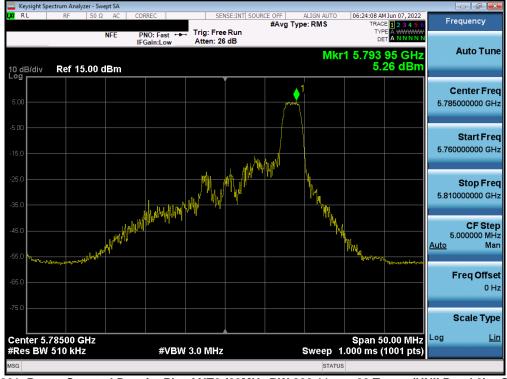
Table 7-87. Band 3 Conducted Power Spectral Density Measurements ANT2 (26 Tones)

FCC ID: A3LSMF721U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Dogg 402 of 242	
1M2204080051-15-R1.A3L 4/8/2022 - 7/12/2022		Portable Handset	Page 192 of 313	





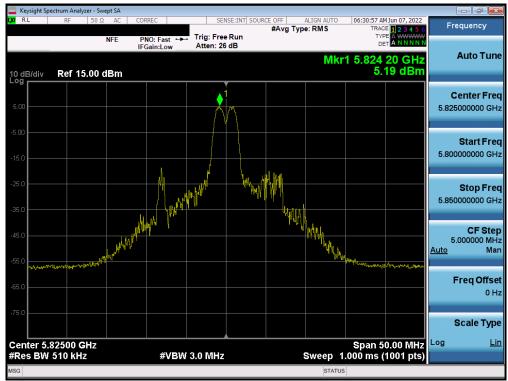
Plot 7-260. Power Spectral Density Plot ANT2 (20MHz BW 802.11ax - 26 Tones (UNII Band 3) - Ch. 149)



Plot 7-261. Power Spectral Density Plot ANT2 (20MHz BW 802.11ax - 26 Tones (UNII Band 3) - Ch. 157)

FCC ID: A3LSMF721U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Dogo 102 of 212	
1M2204080051-15-R1.A3L	4/8/2022 - 7/12/2022	Portable Handset	Page 193 of 313	





Plot 7-262. Power Spectral Density Plot ANT2 (20 MHz BW 802.11ax - 26 Tones (UNII Band 3) - Ch. 165)



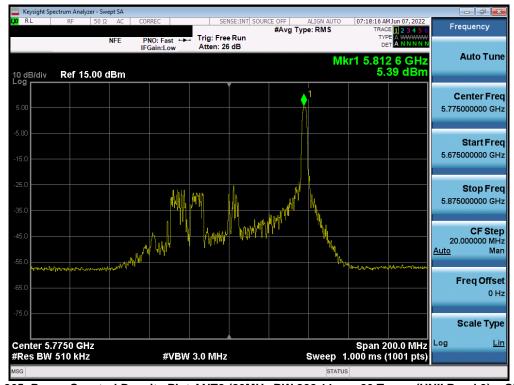
Plot 7-263. Power Spectral Density Plot ANT2 (40MHz BW 802.11ax - 26 Tones (UNII Band 3) - Ch. 151)

FCC ID: A3LSMF721U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dags 404 of 242
1M2204080051-15-R1.A3L	4/8/2022 - 7/12/2022	Portable Handset	Page 194 of 313





Plot 7-264. Power Spectral Density Plot ANT2 (40MHz BW 802.11ax - 26 Tones (UNII Band 3) - Ch. 159)



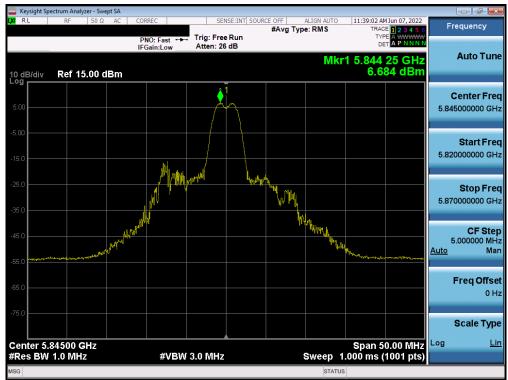
Plot 7-265. Power Spectral Density Plot ANT2 (80MHz BW 802.11ax - 26 Tones (UNII Band 3) - Ch. 155)

FCC ID: A3LSMF721U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Page 195 of 313	
1M2204080051-15-R1.A3L	4/8/2022 - 7/12/2022	Portable Handset	rage 190 01313	



	Frequency [MHz]	Channel No.	802.11 Mode	Tones	Data Rate [Mbps]	Measured Power Density [dBm/MHz]	Max Permissible Power Density [dBm/500kHz]	Margin [dB]	Antenna Gain [dBi]	EIRP Power Density [dBm/MHz]	Max EIRP Power Density [dBm/MHz]	Margin [dB]
Band 3/4	5845	169	ax (20MHz)	26T	MCS0	6.68	30.00	-23.32	-6.00	0.68	14.00	-13.32
Band 4	5865	173	ax (20MHz)	26T	MCS0	7.25			-6.00	1.25	14.00	-12.75
Dallu 4	5885	177	ax (20MHz)	26T	MCS0	6.29			-6.00	0.29	14.00	-13.71
Band 3/4	5835	167	ax (40MHz)	26T	MCS0	7.12	30.00	-22.89	-6.00	1.12	14.00	-12.89
Band 4	5875	175	ax (40MHz)	26T	MCS0	6.92			-6.00	0.92	14.00	-13.08
	5855	171	ax (80MHz)	26T	MCS0	7.08	30.00	-22.92	-6.00	1.08	14.00	-12.92
Band 3/4	5815	163	ax (160MHz L)	26T	MCS0	7.82	30.00	-22.18	-6.00	1.78	14.00	-12.22
	5815	163	ax (160MHz U)	26T	MCS0	7.82	30.00	-22.18	-6.00	1.82	14.00	-12.18

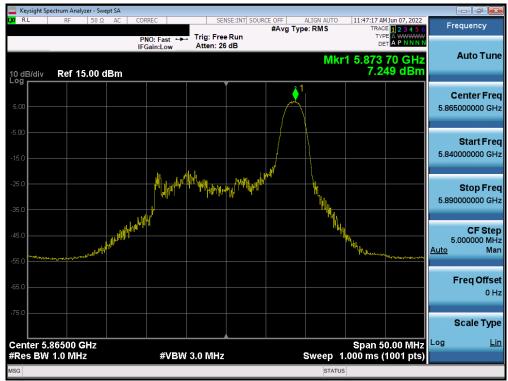
Table 7-88. Band 4 Conducted Power Spectral Density Measurements ANT2 (26 Tones)



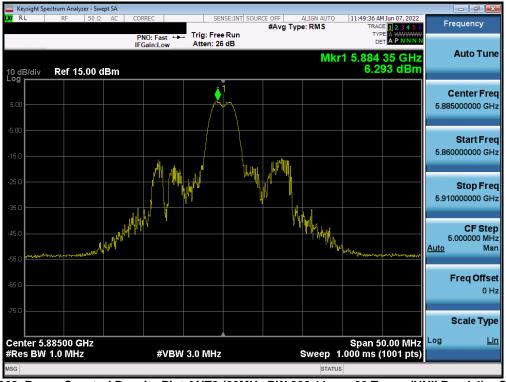
Plot 7-266. Power Spectral Density Plot ANT2 (20MHz BW 802.11ax - 26 Tones (UNII Band 3/4) - Ch. 169)

FCC ID: A3LSMF721U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Dogo 106 of 212	
1M2204080051-15-R1.A3L	4/8/2022 - 7/12/2022	Portable Handset	Page 196 of 313	





Plot 7-267. Power Spectral Density Plot ANT2 (20MHz BW 802.11ax - 26 Tones (UNII Band 4) - Ch. 173)



Plot 7-268. Power Spectral Density Plot ANT2 (20MHz BW 802.11ax - 26 Tones (UNII Band 4) - Ch. 177)

FCC ID: A3LSMF721U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Page 197 of 313	
1M2204080051-15-R1.A3L	4/8/2022 - 7/12/2022	Portable Handset	rage 197 01 313	





Plot 7-269. Power Spectral Density Plot ANT2 (40MHz BW 802.11ax - 26 Tones (UNII Band 3/4) - Ch. 167)



Plot 7-270. Power Spectral Density Plot ANT2 (40MHz BW 802.11ax - 26 Tones (UNII Band 4) - Ch. 175)

FCC ID: A3LSMF721U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Dogo 109 of 212	
1M2204080051-15-R1.A3L	4/8/2022 - 7/12/2022	Portable Handset	Page 198 of 313	





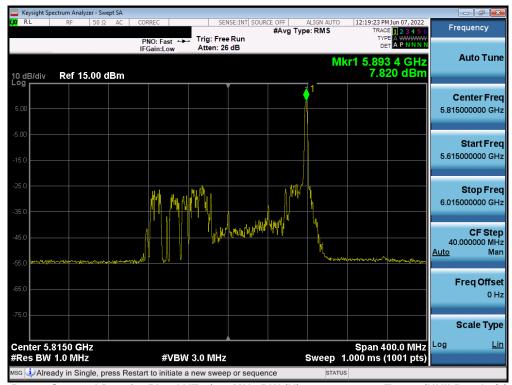
Plot 7-271. Power Spectral Density Plot ANT2 (80MHz BW 802.11ax - 26 Tones (UNII Band 3/4) - Ch. 171)



Plot 7-272. Power Spectral Density Plot ANT2 (160MHz BW (L) 802.11ax - 26 Tones (UNII Band 3/4) - Ch. 163)

FCC ID: A3LSMF721U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Dogo 100 of 212	
1M2204080051-15-R1.A3L	4/8/2022 - 7/12/2022	Portable Handset	Page 199 of 313	





Plot 7-273. Power Spectral Density Plot ANT2 (160MHz BW (U) 802.11ax - 26 Tones (UNII Band 3/4) - Ch. 163)

FCC ID: A3LSMF721U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 200 of 212
1M2204080051-15-R1.A3L	4/8/2022 - 7/12/2022	Portable Handset	Page 200 of 313



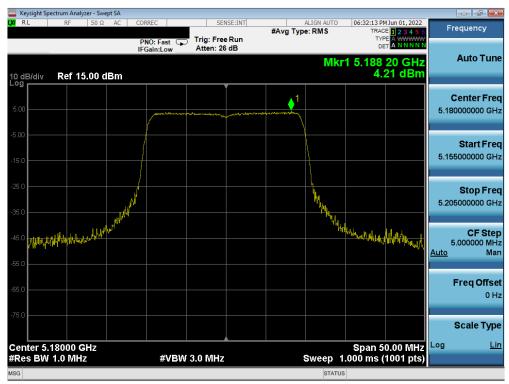
## **Antenna-2 Power Spectral Density Measurements (Full Tones)**

	Frequency [MHz]	Channel No.	802.11 Mode	Tones	Data Rate [Mbps]	Measured Power Density [dBm]	Max Power Density [dBm/MHz]	Margin [dB]
	5180	36	ax (20MHz)	242T	MCS0	4.21	11.0	-6.79
	5200	40	ax (20MHz)	242T	MCS0	5.11	11.0	-5.89
Band 1	5240	48	ax (20MHz)	242T	MCS0	4.73	11.0	-6.27
Bar	5190	38	ax (40MHz)	484T	MCS0	1.71	11.0	-9.29
	5230	46	ax (40MHz)	484T	MCS0	1.90	11.0	-9.10
	5210	42	ax (80MHz)	996T	MCS0	-0.54	11.0	-11.54
Band 1/2A	5250	50	ax (160MHz L)	996T	MCS0	-1.29	11.0	-12.29
Ba 1/;	5250	50	ax (160MHz U)	996T	MCS0	-0.79	11.0	-11.79
	5260	52	ax (20MHz)	242T	MCS0	4.71	11.0	-6.29
	5280	56	ax (20MHz)	242T	MCS0	4.41	11.0	-6.59
Band 2A	5320	64	ax (20MHz)	242T	MCS0	4.54	11.0	-6.46
Banc	5270	54	ax (40MHz)	484T	MCS0	1.66	11.0	-9.34
_	5310	62	ax (40MHz)	484T	MCS0	1.40	11.0	-9.60
	5290	58	ax (80MHz)	996T	MCS0	-0.91	11.0	-11.91
	5500	100	ax (20MHz)	242T	MCS0	4.79	11.0	-6.21
	5600	120	ax (20MHz)	242T	MCS0	4.58	11.0	-6.42
	5720	144	ax (20MHz)	242T	MCS0	4.66	11.0	-6.34
	5510	102	ax (40MHz)	484T	MCS0	1.50	11.0	-9.50
ပ္သ	5590	118	ax (40MHz)	484T	MCS0	2.71	11.0	-8.29
Band 2C	5710	142	ax (40MHz)	484T	MCS0	2.59	11.0	-8.41
Ba	5530	106	ax (80MHz)	996T	MCS0	-1.40	11.0	-12.40
	5610	122	ax (80MHz)	996T	MCS0	0.07	11.0	-10.93
	5690	138	ax (80MHz)	996T	MCS0	-0.05	11.0	-11.05
	5570	114	ax (160MHz L)	996T	MCS0	-1.79	11.0	-12.79
	5570	114	ax (160MHz U)	996T	MCS0	-1.58	11.0	-12.58

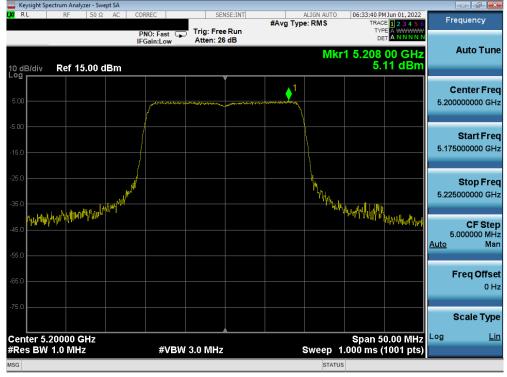
Table 7-89. Conducted Power Spectral Density Measurements ANT2 (Full Tones)

FCC ID: A3LSMF721U	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 201 of 313
1M2204080051-15-R1.A3L	4/8/2022 - 7/12/2022	Portable Handset	raye 201 01313





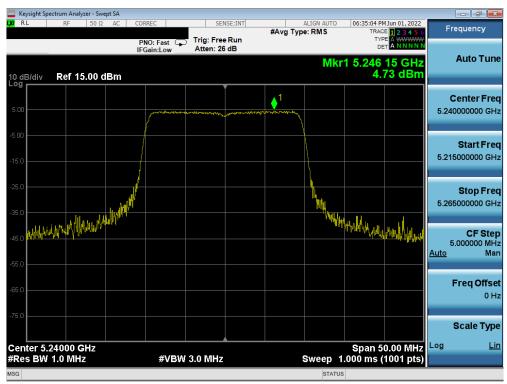
Plot 7-274. Power Spectral Density Plot ANT2 (20MHz BW 802.11ax - Full Tones (UNII Band 1) - Ch. 36)



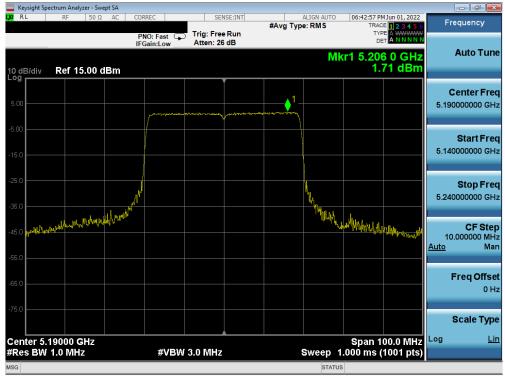
Plot 7-275. Power Spectral Density Plot ANT2 (20MHz BW 802.11ax - Full Tones (UNII Band 1) - Ch. 40)

FCC ID: A3LSMF721U	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 202 of 212
1M2204080051-15-R1.A3L	4/8/2022 - 7/12/2022	Portable Handset	Page 202 of 313





Plot 7-276. Power Spectral Density Plot ANT2 (20MHz BW 802.11ax - Full Tones (UNII Band 1) - Ch. 48)



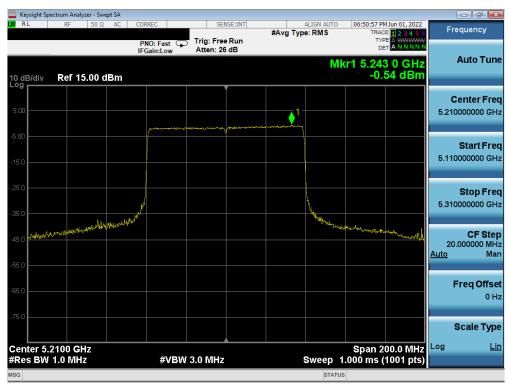
Plot 7-277. Power Spectral Density Plot ANT2 (40MHz BW 802.11ax - Full Tones (UNII Band 1) - Ch. 38)

FCC ID: A3LSMF721U	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 202 of 212
1M2204080051-15-R1.A3L	4/8/2022 - 7/12/2022	Portable Handset	Page 203 of 313





Plot 7-278. Power Spectral Density Plot ANT2 (40MHz BW 802.11ax - Full Tones (UNII Band 1) - Ch. 46)



Plot 7-279. Power Spectral Density Plot ANT2 (80MHz BW 802.11ax - Full Tones (UNII Band 1) - Ch. 42)

FCC ID: A3LSMF721U	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 204 of 212
1M2204080051-15-R1.A3L	4/8/2022 - 7/12/2022	Portable Handset	Page 204 of 313





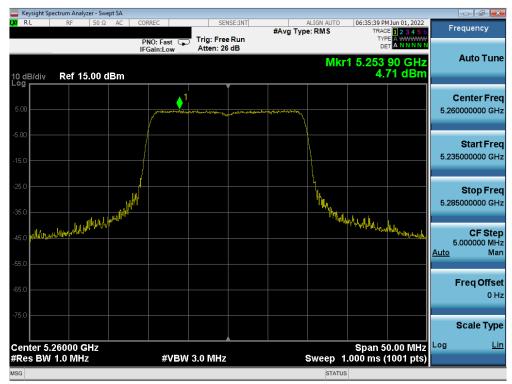
Plot 7-280. Power Spectral Density Plot ANT2 (160MHz L BW 802.11ax - Full Tones (UNII Band 1/2A) - Ch. 50)



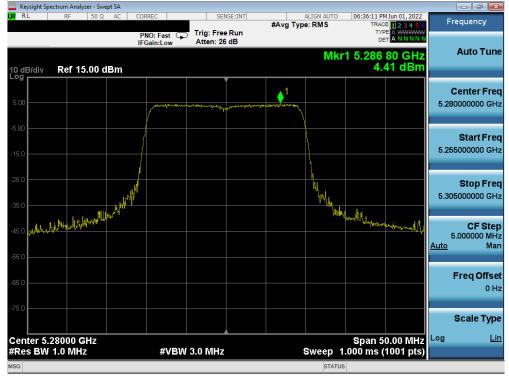
Plot 7-281. Power Spectral Density Plot ANT2 (160MHz U BW 802.11ax - Full Tones (UNII Band 1/2A) - Ch. 50)

FCC ID: A3LSMF721U	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 205 of 212
1M2204080051-15-R1.A3L	4/8/2022 - 7/12/2022	Portable Handset	Page 205 of 313





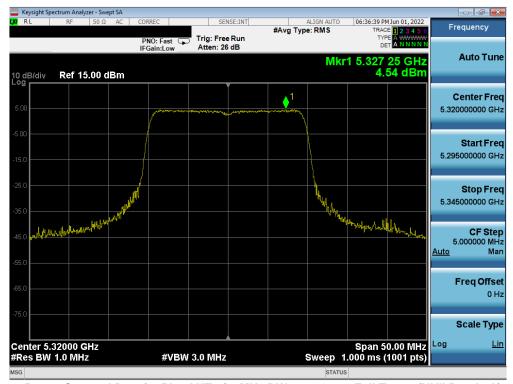
Plot 7-282. Power Spectral Density Plot ANT2 (20MHz BW 802.11ax - Full Tones (UNII Band 2A) - Ch. 52)



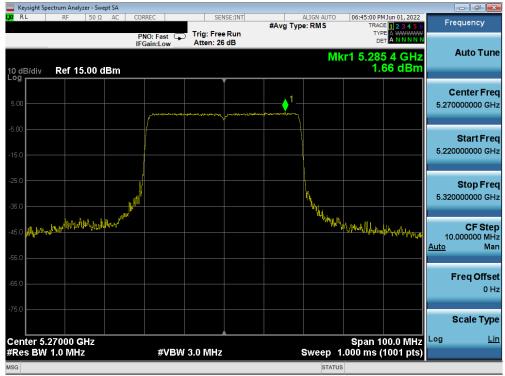
Plot 7-283. Power Spectral Density Plot ANT2 (20MHz BW 802.11ax - Full Tones (UNII Band 2A) - Ch. 56)

FCC ID: A3LSMF721U	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 206 of 313
1M2204080051-15-R1.A3L	4/8/2022 - 7/12/2022	Portable Handset	Fage 200 01 313





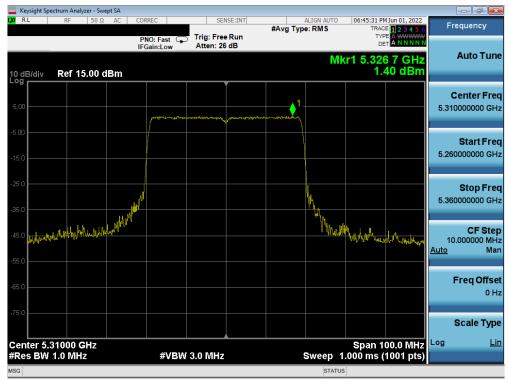
Plot 7-284. Power Spectral Density Plot ANT2 (20MHz BW 802.11ax - Full Tones (UNII Band 2A) - Ch. 64)



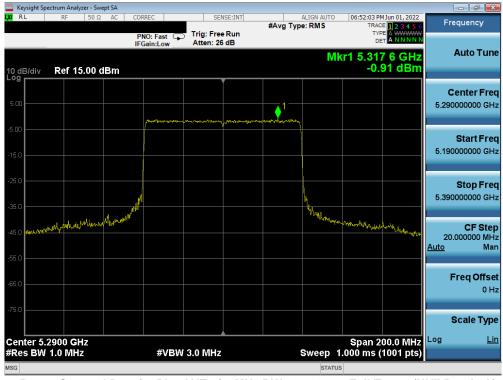
Plot 7-285. Power Spectral Density Plot ANT2 (40MHz BW 802.11ax - Full Tones (UNII Band 2A) - Ch. 54)

FCC ID: A3LSMF721U	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 207 of 212
1M2204080051-15-R1.A3L	4/8/2022 - 7/12/2022	Portable Handset	Page 207 of 313





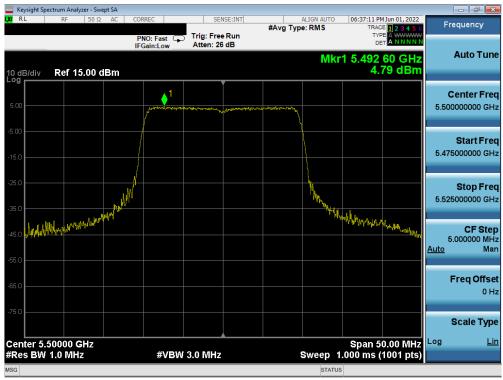
Plot 7-286. Power Spectral Density Plot ANT2 (40MHz BW 802.11ax - Full Tones (UNII Band 2A) - Ch. 62)



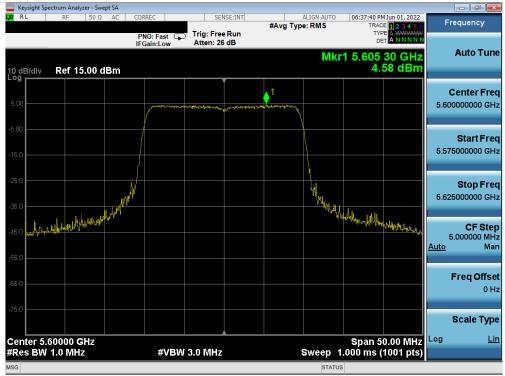
Plot 7-287. Power Spectral Density Plot ANT2 (80MHz BW 802.11ax - Full Tones (UNII Band 2A) - Ch. 58)

FCC ID: A3LSMF721U	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 200 of 212
1M2204080051-15-R1.A3L	4/8/2022 - 7/12/2022	Portable Handset	Page 208 of 313





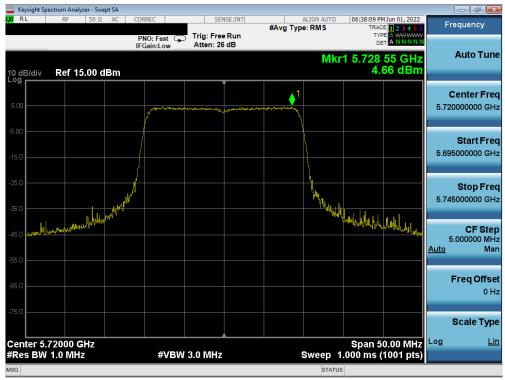
Plot 7-288. Power Spectral Density Plot ANT2 (20MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 100)



Plot 7-289. Power Spectral Density Plot ANT2 (20MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 120)

FCC ID: A3LSMF721U	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 200 of 212
1M2204080051-15-R1.A3L	4/8/2022 - 7/12/2022	Portable Handset	Page 209 of 313





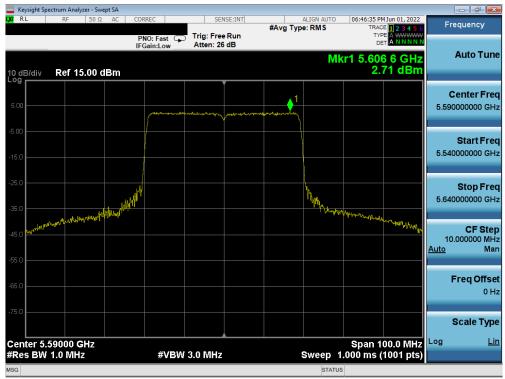
Plot 7-290. Power Spectral Density Plot ANT2 (20MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 144)



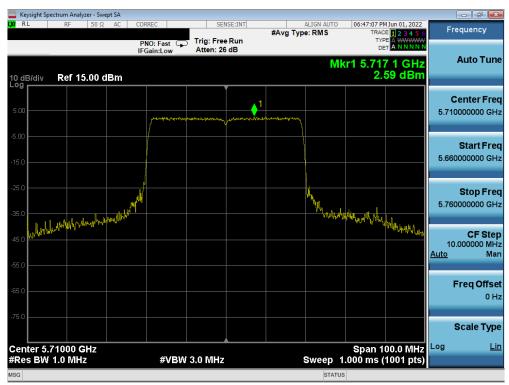
Plot 7-291. Power Spectral Density Plot ANT2 (40MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 102)

FCC ID: A3LSMF721U	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 210 of 313
1M2204080051-15-R1.A3L	4/8/2022 - 7/12/2022	Portable Handset	Page 210 01 313





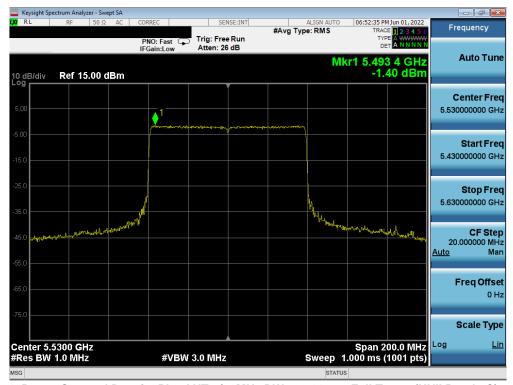
Plot 7-292. Power Spectral Density Plot ANT2 (40MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 118)



Plot 7-293. Power Spectral Density Plot ANT2 (40MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 142)

FCC ID: A3LSMF721U	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 211 of 212
1M2204080051-15-R1.A3L	4/8/2022 - 7/12/2022	Portable Handset	Page 211 of 313





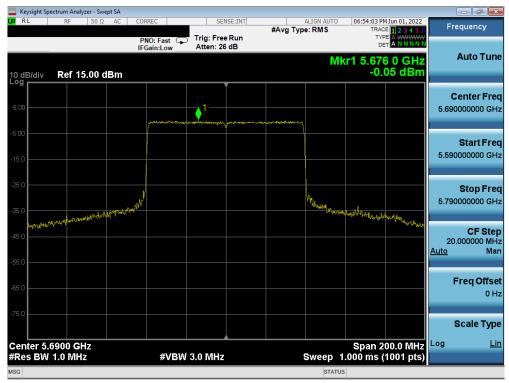
Plot 7-294. Power Spectral Density Plot ANT2 (80MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 106)



Plot 7-295. Power Spectral Density Plot ANT2 (80MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 122)

FCC ID: A3LSMF721U	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 212 of 212
1M2204080051-15-R1.A3L	4/8/2022 - 7/12/2022	Portable Handset	Page 212 of 313





Plot 7-296. Power Spectral Density Plot ANT2 (80MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 138)



Plot 7-297. Power Spectral Density Plot ANT2 (160MHz L BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 114)

FCC ID: A3LSMF721U	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 213 of 313
1M2204080051-15-R1.A3L	4/8/2022 - 7/12/2022	Portable Handset	Page 213 01313





Plot 7-298. Power Spectral Density Plot ANT2 (160MHz U BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 114)

FCC ID: A3LSMF721U	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 214 of 212
1M2204080051-15-R1.A3L	4/8/2022 - 7/12/2022	Portable Handset	Page 214 of 313

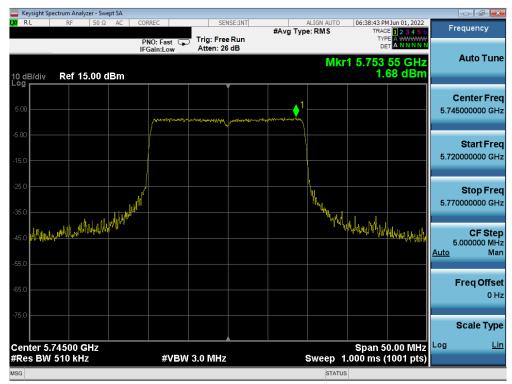


	Frequency [MHz]	Channel No.	802.11 Mode	Tones	Data Rate [Mbps]	Measured Power Density [dBm]	Max Permissible Power Density	Margin [dB]
	5745	149	ax (20MHz)	242T	MCS0	1.68	30.00	-28.32
	5785	157	ax (20MHz)	242T	MCS0	1.94	30.00	-28.06
pg 3	5825	165	ax (20MHz)	242T	MCS0	1.65	30.00	-28.35
Band	5755	151	ax (40MHz)	484T	MCS0	-0.49	30.00	-30.49
	5795	159	ax (40MHz)	484T	MCS0	0.03	30.00	-29.97
	5775	155	ax (80MHz)	996T	MCS0	-2.79	30.00	-32.79

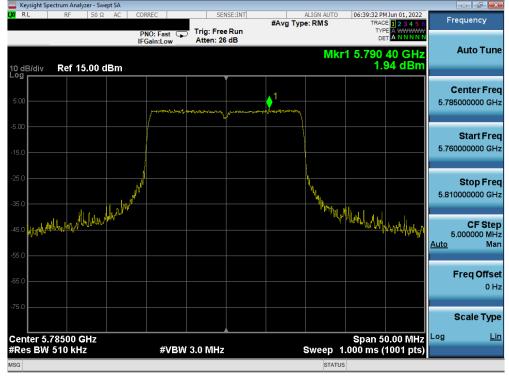
Table 7-90. Band 3 Conducted Power Spectral Density Measurements ANT2 (Full Tones)

FCC ID: A3LSMF721U	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 215 of 313
1M2204080051-15-R1.A3L	4/8/2022 - 7/12/2022	Portable Handset	Page 215 01 313





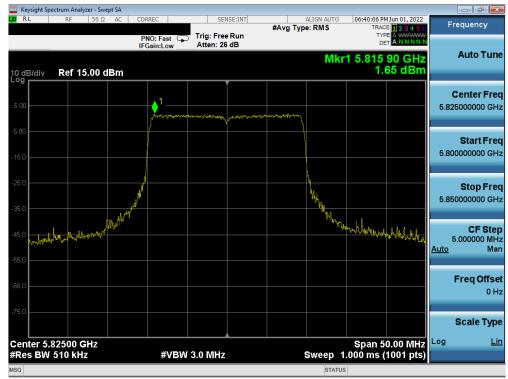
Plot 7-299. Power Spectral Density Plot ANT2 (20MHz BW 802.11ax - Full Tones (UNII Band 3) - Ch. 149)



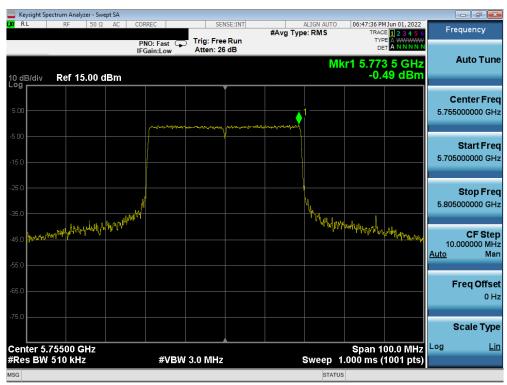
Plot 7-300. Power Spectral Density Plot ANT2 (20MHz BW 802.11ax - Full Tones (UNII Band 3) - Ch. 157)

FCC ID: A3LSMF721U	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 216 of 212
1M2204080051-15-R1.A3L	4/8/2022 - 7/12/2022	Portable Handset	Page 216 of 313





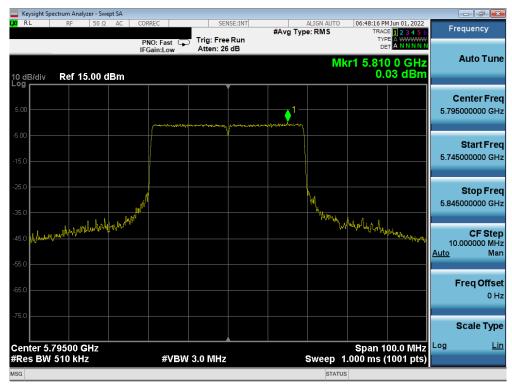
Plot 7-301. Power Spectral Density Plot ANT2 (20 MHz BW 802.11ax - Full Tones (UNII Band 3) - Ch. 165)



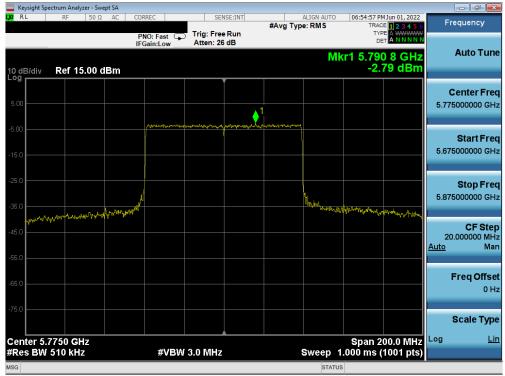
Plot 7-302. Power Spectral Density Plot ANT2 (40MHz BW 802.11ax - Full Tones (UNII Band 3) - Ch. 151)

FCC ID: A3LSMF721U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Dogo 217 of 212	
1M2204080051-15-R1.A3L	4/8/2022 - 7/12/2022	Portable Handset	Page 217 of 313	





Plot 7-303. Power Spectral Density Plot ANT2 (40MHz BW 802.11ax - Full Tones (UNII Band 3) - Ch. 159)



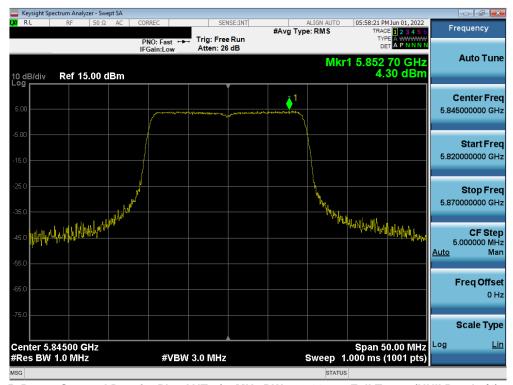
Plot 7-304. Power Spectral Density Plot ANT2 (80MHz BW 802.11ax - Full Tones (UNII Band 3) - Ch. 155)

FCC ID: A3LSMF721U		MEASUREMENT REPORT (CERTIFICATION)			
Test Report S/N:	Test Dates:	EUT Type:	Dogo 219 of 212		
1M2204080051-15-R1.A3L	4/8/2022 - 7/12/2022	Portable Handset	Page 218 of 313		



	Frequency [MHz]	Channel No.	802.11 Mode	Tones	Data Rate [Mbps]	Measured Power Density [dBm/MHz]	Max Permissible Power Density [dBm/500kHz]	Margin [dB]	Antenna Gain [dBi]	EIRP Power Density [dBm/MHz]	Max EIRP Power Density [dBm/MHz]	Margin [dB]
Band 3/4	5845	169	ax (20MHz)	242T	MCS0	4.30	30.00	-25.70	-6.00	-1.70	14.00	-15.70
Band 4	5865	173	ax (20MHz)	242T	MCS0	4.21			-6.00	-1.79	14.00	-15.79
Dallu 4	5885	177	ax (20MHz)	242T	MCS0	4.32			-6.00	-1.68	14.00	-15.68
Band 3/4	5835	167	ax (40MHz)	484T	MCS0	1.51	30.00	-28.49	-6.00	-4.49	14.00	-18.49
Band 4	5875	175	ax (40MHz)	484T	MCS0	1.61			-6.00	-4.39	14.00	-18.39
	5855	171	ax (80MHz)	996T	MCS0	-1.43	30.00	-31.43	-6.00	-7.43	14.00	-21.43
Band 3/4	5815	163	ax (160MHz L)	996T	MCS0	-1.46	30.00	-31.46	-6.00	-7.46	14.00	-21.46
	5815	163	ax (160MHz U)	996T	MCS0	-0.75	30.00	-30.75	-6.00	-6.75	14.00	-20.75

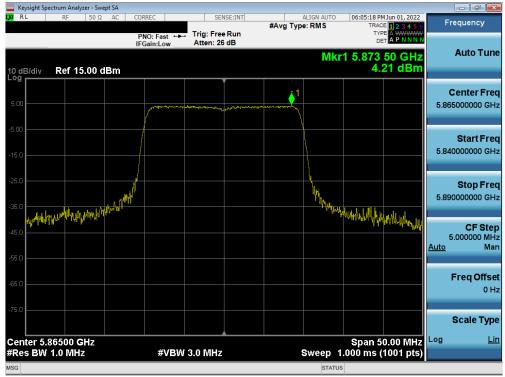
Table 7-91. Band 4 Conducted Power Spectral Density Measurements ANT2 (Full Tones)



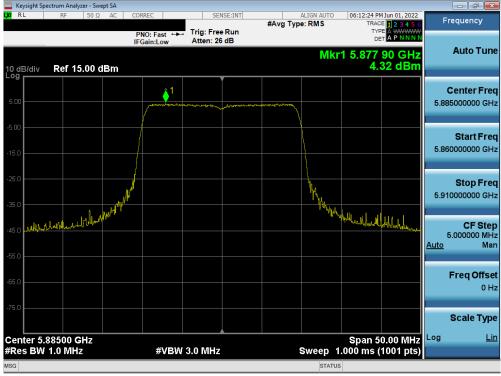
Plot 7-305. Power Spectral Density Plot ANT2 (20MHz BW 802.11ax - Full Tones (UNII Band 3/4) - Ch. 169)

FCC ID: A3LSMF721U		MEASUREMENT REPORT (CERTIFICATION)			
Test Report S/N:	Test Dates:	EUT Type:	Dogo 210 of 212		
1M2204080051-15-R1.A3L	4/8/2022 - 7/12/2022	Portable Handset	Page 219 of 313		





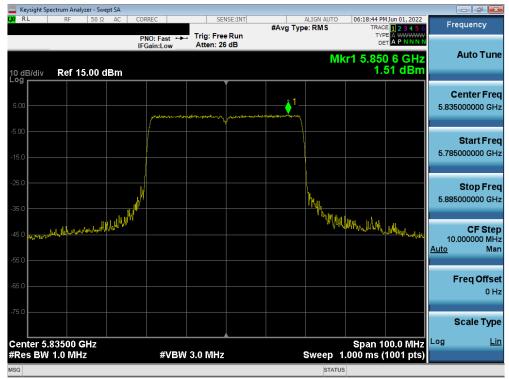
Plot 7-306. Power Spectral Density Plot ANT2 (20MHz BW 802.11ax - Full Tones (UNII Band 4) - Ch. 173)



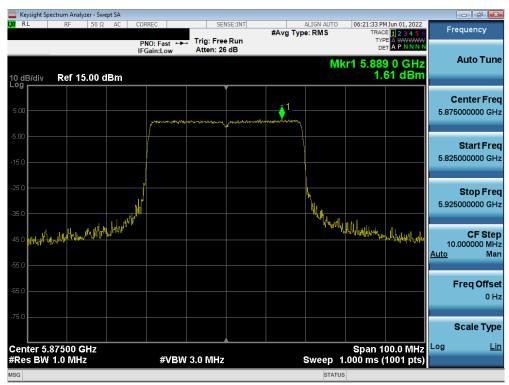
Plot 7-307. Power Spectral Density Plot ANT2 (20MHz BW 802.11ax - Full Tones (UNII Band 4) - Ch. 177)

FCC ID: A3LSMF721U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Dogo 220 of 212	
1M2204080051-15-R1.A3L	4/8/2022 - 7/12/2022	Portable Handset	Page 220 of 313	





Plot 7-308. Power Spectral Density Plot ANT2 (40MHz BW 802.11ax - Full Tones (UNII Band 3/4) - Ch. 167)



Plot 7-309. Power Spectral Density Plot ANT2 (40MHz BW 802.11ax - Full Tones (UNII Band 4) - Ch. 175)

FCC ID: A3LSMF721U		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Dogo 221 of 212	
1M2204080051-15-R1.A3L	4/8/2022 - 7/12/2022	Portable Handset	Page 221 of 313	





Plot 7-310. Power Spectral Density Plot ANT2 (80MHz BW 802.11ax - Full Tones (UNII Band 3/4) - Ch. 171)



Plot 7-311. Power Spectral Density Plot ANT2 (160MHz BW (L) 802.11ax - Full Tones (UNII Band 3/4) - Ch. 163)

FCC ID: A3LSMF721U		MEASUREMENT REPORT (CERTIFICATION)			
Test Report S/N:	Test Dates:	EUT Type:	Dogo 222 of 242		
1M2204080051-15-R1.A3L	4/8/2022 - 7/12/2022	Portable Handset	Page 222 of 313		





Plot 7-312. Power Spectral Density Plot ANT2 (160MHz BW (U) 802.11ax - Full Tones (UNII Band 3/4) - Ch. 163)

FCC ID: A3LSMF721U		MEASUREMENT REPORT (CERTIFICATION)			
Test Report S/N:	Test Dates:	EUT Type:	Dogo 222 of 242		
1M2204080051-15-R1.A3L	4/8/2022 - 7/12/2022	Portable Handset	Page 223 of 313		



# **Summed MIMO Power Spectral Density Measurements (26 Tones)**

	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)	26T	MCS0	7.65	7.85	10.76	11.00	-0.24
_	5200	40	ax (20MHz)	26T	MCS0	7.84	7.22	10.55	11.00	-0.45
<u> 5</u>	5240	48	ax (20MHz)	26T	MCS0	7.97	7.54	10.77	11.00	-0.23
Band 1	5190	38	ax (40MHz)	26T	MCS0	7.54	7.87	10.72	11.00	-0.28
_	5230	46	ax (40MHz)	26T	MCS0	5.65	7.49	9.68	11.00	-1.32
	5210	42	ax (80MHz)	26T	MCS0	7.75	7.25	10.52	11.00	-0.48
Band 1/2A	5250	50	ax (160MHz L)	26T	MCS0	8.45	6.50	10.59	11.00	-0.41
Ba 1//	5250	50	ax (160MHz U)	26T	MCS0	7.96	7.70	10.84	11.00	-0.16
	5260	52	ax (20MHz)	26T	MCS0	7.73	7.32	10.54	11.00	-0.46
a	5280	56	ax (20MHz)	26T	MCS0	7.45	7.86	10.67	11.00	-0.33
d 2A	5320	64	ax (20MHz)	26T	MCS0	7.86	7.54	10.71	11.00	-0.29
Band	5270	54	ax (40MHz)	26T	MCS0	8.08	7.86	10.98	11.00	-0.02
ш	5310	62	ax (40MHz)	26T	MCS0	7.92	7.93	10.93	11.00	-0.07
	5290	58	ax (80MHz)	26T	MCS0	8.48	6.70	10.69	11.00	-0.31
	5500	100	ax (20MHz)	26T	MCS0	7.48	7.76	10.63	11.00	-0.37
	5600	120	ax (20MHz)	26T	MCS0	7.41	7.89	10.66	11.00	-0.34
	5720	144	ax (20MHz)	26T	MCS0	7.73	7.88	10.81	11.00	-0.19
	5510	102	ax (40MHz)	26T	MCS0	7.81	7.71	10.77	11.00	-0.23
20	5590	118	ax (40MHz)	26T	MCS0	7.95	7.96	10.97	11.00	-0.03
Band	5710	142	ax (40MHz)	26T	MCS0	7.95	7.97	10.97	11.00	-0.03
Ba	5530	106	ax (80MHz)	26T	MCS0	7.87	6.98	10.46	11.00	-0.54
	5610	122	ax (80MHz)	26T	MCS0	7.92	7.16	10.57	11.00	-0.43
	5690	138	ax (80MHz)	26T	MCS0	7.99	7.74	10.88	11.00	-0.12
	5570	114	ax (160MHz L)	26T	MCS0	7.88	7.94	10.92	11.00	-0.08
	5570	114	ax (160MHz U)	26T	MCS0	7.61	7.43	10.53	11.00	-0.47

Table 7-92. Bands 1, 2A, 2C MIMO Conducted Power Spectral Density Measurements MIMO (26 Tones)

	Frequency [MHz]	Channel No.	802.11 Mode	[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	5.84	5.17	8.53	30.00	-21.47
	5785	157	ax (20MHz)	26T	MCS0	5.20	5.26	8.24	30.00	-21.76
5 pu	5825	165	ax (20MHz)	26T	MCS0	5.94	5.19	8.59	30.00	-21.41
Band	5755	151	ax (40MHz)	26T	MCS0	6.42	5.41	8.95	30.00	-21.05
	5795	159	ax (40MHz)	26T	MCS0	6.28	5.35	8.85	30.00	-21.15
	5775	155	ax (80MHz)	26T	MCS0	6.56	5.39	9.02	30.00	-20.98

Table 7-93. Band 3 MIMO Conducted Power Spectral Density Measurements MIMO (26 Tones)

	Frequency [MHz]	Channel No.	802.11 Mode	Tones	Data Rate [Mbps]	Antenna-1 Power Density [dBm/MHz]	Antenna-2 Power Density [dBm/MHz]	MIMO Summed Power Density [dBm/MHz]	Max Permissible Power Density [dBm/500kHz]	Margin [dB]	Directional Antenna Gain [dBi]	EIRP Power Density [dBm/MHz]	Max EIRP Power Density [dBm/MHz]	Margin [dB]
Band 3/4	5845	169	ax (20MHz)	26T	MCS0	7.37	6.68	10.05	30.00	-19.95	-2.48	7.57	14.00	-6.43
Band 4	5865	173	ax (20MHz)	26T	MCS0	8.22	7.25	10.77			-2.48	8.30	14.00	-5.70
ballu 4	5885	177	ax (20MHz)	26T	MCS0	8.15	6.29	10.33			-2.48	7.85	14.00	-6.15
Band 3/4	5835	167	ax (40MHz)	26T	MCS0	8.67	7.12	10.97	30.00	-19.03	-2.48	8.50	14.00	-5.50
Band 4	5875	175	ax (40MHz)	26T	MCS0	8.92	6.92	11.04			-2.48	8.56	14.00	-5.44
	5855	171	ax (80MHz)	26T	MCS0	7.40	7.08	10.25	30.00	-19.75	-2.48	7.78	14.00	-6.22
Band 3/4	5815	163	ax (160MHz L)	26T	MCS0	7.78	7.82	10.81	30.00	-19.19	-2.48	8.33	14.00	-5.67
	5815	163	ax (160MHz U)	26T	MCS0	9.57	7.82	11.79	30.00	-18.21	-2.48	9.32	14.00	-4.68

Table 7-94. Band 4 MIMO Conducted Power Spectral Density Measurements MIMO (26 Tones)

FCC ID: A3LSMF721U		MEASUREMENT REPORT (CERTIFICATION)			
Test Report S/N:	Test Dates:	EUT Type:	Dogo 224 of 242		
1M2204080051-15-R1.A3L	4/8/2022 - 7/12/2022	Portable Handset	Page 224 of 313		



	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	6.42	4.21	8.47	11.00	-2.53
	5200	40	ax (20MHz)	242T	MCS0	5.81	5.11	8.49	11.00	-2.51
Band 1	5240	48	ax (20MHz)	242T	MCS0	5.52	4.73	8.15	11.00	-2.85
Bar	5190	38	ax (40MHz)	484T	MCS0	3.35	1.71	5.62	11.00	-5.38
	5230	46	ax (40MHz)	484T	MCS0	3.38	1.90	5.71	11.00	-5.29
	5210	42	ax (80MHz)	996T	MCS0	-0.81	-0.54	2.34	11.00	-8.66
Band 1/2A	5250	50	ax (160MHz L)	996T	MCS0	-0.06	-1.29	2.38	11.00	-8.62
Ba 1//	5250	50	ax (160MHz U)	996T	MCS0	0.35	-0.79	2.83	11.00	-8.17
	5260	52	ax (20MHz)	242T	MCS0	5.63	4.71	8.20	11.00	-2.80
	5280	56	ax (20MHz)	242T	MCS0	5.69	4.41	8.11	11.00	-2.89
Band 2A	5320	64	ax (20MHz)	242T	MCS0	6.12	4.54	8.41	11.00	-2.59
Banc	5270	54	ax (40MHz)	484T	MCS0	2.67	1.66	5.21	11.00	-5.79
	5310	62	ax (40MHz)	484T	MCS0	2.97	1.40	5.27	11.00	-5.73
	5290	58	ax (80MHz)	996T	MCS0	-0.54	-0.91	2.29	11.00	-8.71
	5500	100	ax (20MHz)	242T	MCS0	6.82	4.79	8.94	11.00	-2.06
	5600	120	ax (20MHz)	242T	MCS0	5.84	4.58	8.26	11.00	-2.74
	5720	144	ax (20MHz)	242T	MCS0	5.47	4.66	8.09	11.00	-2.91
	5510	102	ax (40MHz)	484T	MCS0	3.68	1.50	5.73	11.00	-5.27
ပ္သ	5590	118	ax (40MHz)	484T	MCS0	3.13	2.71	5.93	11.00	-5.07
Band 2C	5710	142	ax (40MHz)	484T	MCS0	2.86	2.59	5.74	11.00	-5.26
ä	5530	106	ax (80MHz)	996T	MCS0	-0.37	-1.40	2.16	11.00	-8.84
	5610	122	ax (80MHz)	996T	MCS0	-0.56	0.07	2.78	11.00	-8.22
	5690	138	ax (80MHz)	996T	MCS0	-0.87	-0.05	2.57	11.00	-8.43
	5570	114	ax (160MHz L)	996T	MCS0	0.55	-1.79	2.55	11.00	-8.45
	5570	114	ax (160MHz U)	996T	MCS0	0.46	-1.58	2.57	11.00	-8.43

# Table 7-95. Bands 1, 2A, 2C MIMO Conducted Power Spectral Density Measurements MIMO (Full Tones)

	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	3.04	1.68	5.43	30.00	-24.57
	5785	157	ax (20MHz)	242T	MCS0	2.67	1.94	5.33	30.00	-24.67
е Б	5825	165	ax (20MHz)	242T	MCS0	3.34	1.65	5.59	30.00	-24.41
Band	5755	151	ax (40MHz)	484T	MCS0	-0.10	-0.49	2.72	30.00	-27.28
	5795	159	ax (40MHz)	484T	MCS0	-0.43	0.03	2.81	30.00	-27.19
	5775	155	ax (80MHz)	996T	MCS0	-4.13	-2.79	-0.40	30.00	-30.40

# Table 7-96. Band 3 MIMO Conducted Power Spectral Density Measurements MIMO (Full Tones)

	Frequency [MHz]	Channel No.	802.11 Mode	Tones	Data Rate [Mbps]	Antenna-1 Power Density [dBm/MHz]	Antenna-2 Power Density [dBm/MHz]	MIMO Summed Power Density [dBm/MHz]	Max Permissible Power Density [dBm/500kHz]	Margin [dB]	Directional Antenna Gain [dBi]	EIRP Power Density [dBm/MHz]	Max EIRP Power Density [dBm/MHz]	Margin [dB]
Band 3/4	5845	169	ax (20MHz)	242T	MCS0	5.44	4.30	7.92	30.00	-22.08	-2.48	5.44	14.00	-8.56
Band 4	5865	173	ax (20MHz)	242T	MCS0	5.29	4.21	7.79			-2.48	5.32	14.00	-8.68
Dallu 4	5885	177	ax (20MHz)	242T	MCS0	5.39	4.32	7.90			-2.48	5.42	14.00	-8.58
Band 3/4	5835	167	ax (40MHz)	484T	MCS0	1.77	1.51	4.65	30.00	-25.35	-2.48	2.18	14.00	-11.82
Band 4	5875	175	ax (40MHz)	484T	MCS0	1.94	1.61	4.79			-2.48	2.31	14.00	-11.69
	5855	171	ax (80MHz)	996T	MCS0	-0.87	-1.43	1.87	30.00	-28.13	-2.48	-0.61	14.00	-14.61
Band 3/4	5815	163	ax (160MHz L)	996T	MCS0	0.13	-1.46	2.42	30.00	-27.58	-2.48	-0.06	14.00	-14.06
	5815	163	ax (160MHz U)	996T	MCS0	0.32	-0.75	2.83	30.00	-27.17	-2.48	0.35	14.00	-13.65

# Table 7-97. Band 4 MIMO Conducted Power Spectral Density Measurements MIMO (Full Tones)

FCC ID: A3LSMF721U		Approved by: Technical Manager		
Test Report S/N:	Test Dates:	EUT Type:	Dogo 225 of 242	
1M2204080051-15-R1.A3L	4/8/2022 - 7/12/2022	Portable Handset	Page 225 of 313	



#### 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.

#### Sample e.i.r.p Power Spectral Density Calculation:

Assuming the average MIMO power density was calculated to be 9.09 dBm with directional gain of -5.12 dBi.

FCC ID: A3LSMF721U		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Dogo 226 of 212
1M2204080051-15-R1.A3L	4/8/2022 - 7/12/2022	Portable Handset	Page 226 of 313



# 7.6 Radiated Spurious Emission Measurements – Above 1GHz §15.407(b) §15.205 §15.209; RSS-Gen [8.9]

#### **Test Overview and Limit**

All out of band radiated spurious emissions are measured with a spectrum analyzer connected to a receive antenna while the EUT is operating at its maximum duty cycle, at 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.

For transmitters operating in the 5.850 – 5.895 GHz band: all emissions at or above 5.895GHz shall not exceed an e.i.r.p. of -5dBm/MHz and shall decrease linearly up to an e.i.r.p. of -27dBm/MHz at or above 5.925GHz, and all emissions below 5.725 GHz shall not exceed an e.i.r.p. of -27dBm/MHz at 5.65 GHz increasing linearly to 10dBm/MHz at 5.7GHz and from 5.7GHz increasing linearly to a level of 15.6dMb/MHz at 5.72GHz, and from 5.72GHz increasing linearly to a level of 27dBm/MHz at 5.725GHz.

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 7-47 per Section 15.209 and RSS-Gen (8.9).

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

Table 7-98. 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)

FCC ID: A3LSMF721U		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Dogo 227 of 242
1M2204080051-15-R1.A3L	4/8/2022 - 7/12/2022	Portable Handset	Page 227 of 313



- 5. Number of measurement points = 1001 (Number of points must be > 2 x span/RBW)
- Averaging type = power (RMS)
- 7. Sweep time = auto couple
- 8. Trace was averaged over 100 sweeps

#### **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.

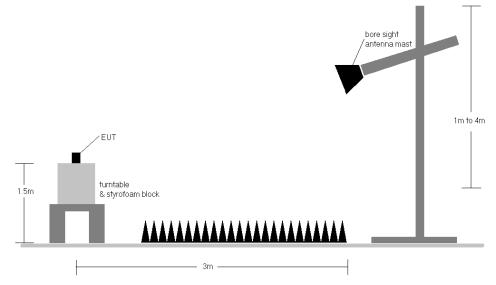


Figure 7-5. Test Instrument & Measurement Setup

FCC ID: A3LSMF721U		Approved by: Technical Manager		
Test Report S/N:	Test Dates:	EUT Type:	Dogo 220 of 212	
1M2204080051-15-R1.A3L	4/8/2022 - 7/12/2022	Portable Handset	Page 228 of 313	



#### **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 7-73.
- 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 7-73. 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**

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

#### **Radiated Band Edge Measurement Offset**

The amplitude offset shown in the radiated restricted band edge plots in Section Radiated Spurious
 Emission Measurements – Above 1GHz was calculated using the formula:

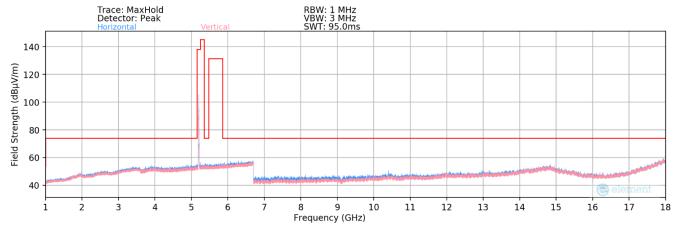
Offset (dB) = (Antenna Factor + Cable Loss + Attenuator) - Preamplifier Gain

FCC ID: A3LSMF721U		Approved by: Technical Manager		
Test Report S/N:	Test Dates:	EUT Type:	Dogo 220 of 212	
1M2204080051-15-R1.A3L	4/8/2022 - 7/12/2022	Portable Handset	Page 229 of 313	

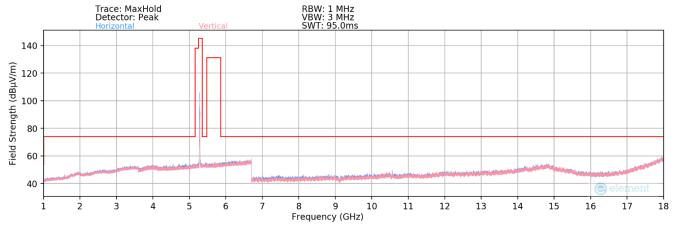


# 7.6.1 SISO Antenna-1 Radiated Spurious Emission Measurements

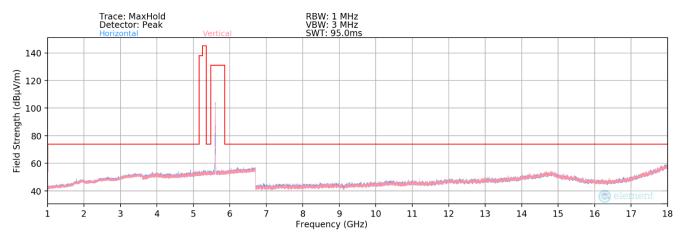
# 26 Tones



Plot 7-313. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11ax - U1 Ch. 40 - 26 Tones) - Closed



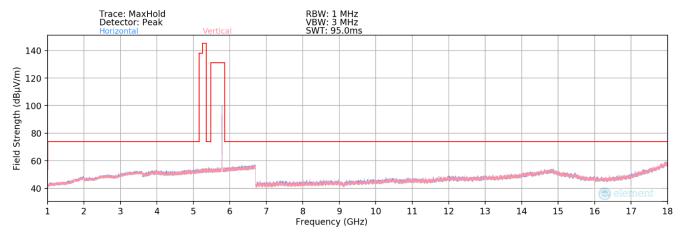
Plot 7-314. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11ax - U2A Ch. 56 - 26 Tones) - Closed



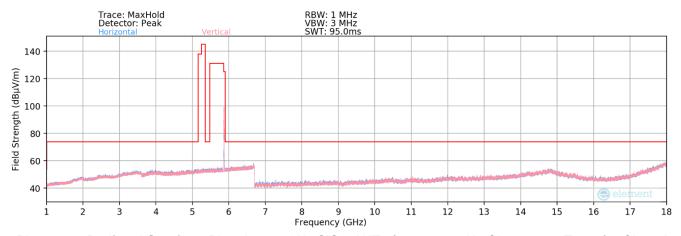
Plot 7-315. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11ax - U2C Ch. 120 - 26 Tones) - Closed

FCC ID: A3LSMF721U		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Page 230 of 313
1M2204080051-15-R1.A3L	4/8/2022 - 7/12/2022	Portable Handset	Fage 230 01313





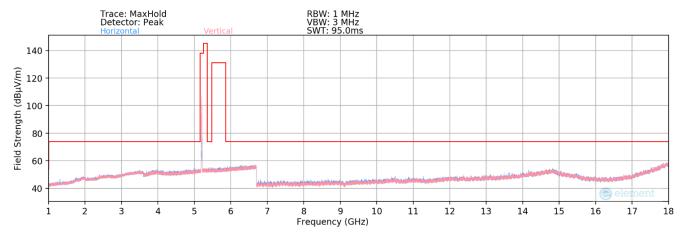
Plot 7-316. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11ax - U3 Ch. 157 - 26 Tones) - Closed



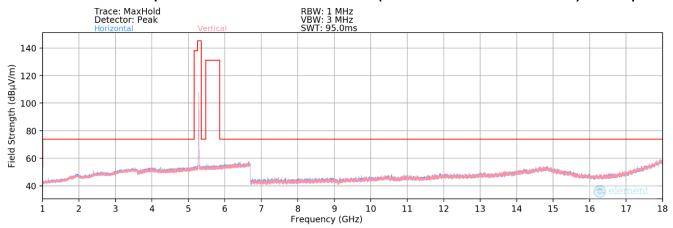
Plot 7-317. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11ax - U4 Ch.173 - 26 Tones) - Closed

FCC ID: A3LSMF721U		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Dogo 221 of 212
1M2204080051-15-R1.A3L	4/8/2022 - 7/12/2022	Portable Handset	Page 231 of 313

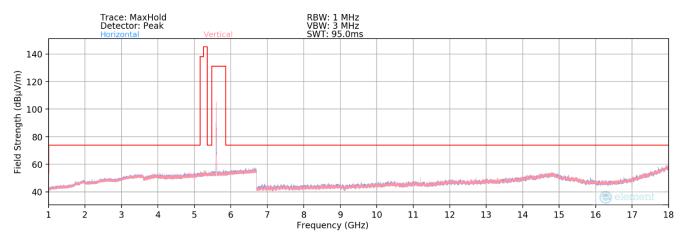




Plot 7-318. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11ax - U1 Ch. 40 - 26 Tones) - Half Open



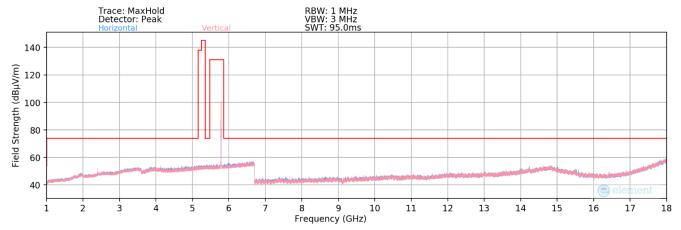
Plot 7-319. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11ax – U2A Ch. 56 – 26 Tones) – Half Open



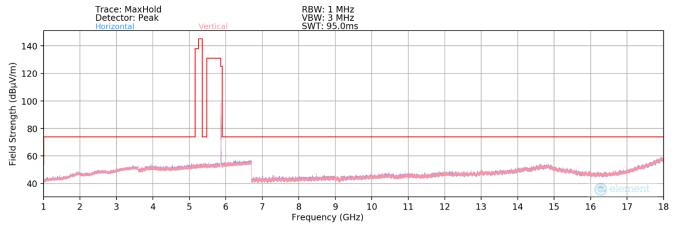
Plot 7-320. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11ax - U2C Ch. 120 - 26 Tones) - Half Open

FCC ID: A3LSMF721U		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Page 232 of 313
1M2204080051-15-R1.A3L	4/8/2022 - 7/12/2022	Portable Handset	Page 232 01 313





Plot 7-321. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11ax - U3 Ch. 157 - 26 Tones) - Half Open

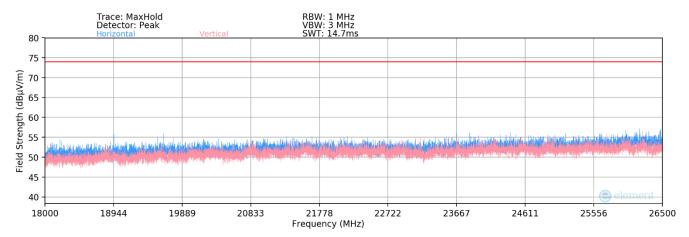


Plot 7-322. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11ax - U4 Ch.173 - 26 Tones) - Half Open

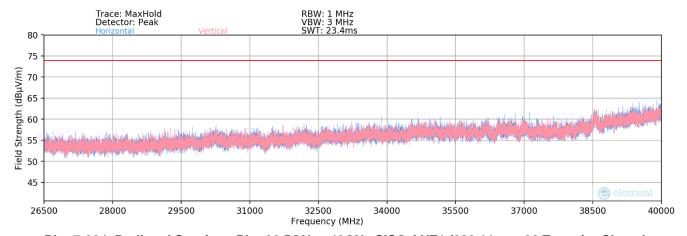
FCC ID: A3LSMF721U	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 222 of 242
1M2204080051-15-R1.A3L	4/8/2022 - 7/12/2022	Portable Handset	Page 233 of 313



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



Plot 7-323. Radiated Spurious Plot 18GHz - 26.5GHz SISO ANT1 (802.11ax - 26 Tones) - Closed



Plot 7-324. Radiated Spurious Plot 26.5GHz - 40GHz SISO ANT1 (802.11ax - 26 Tones) - Closed

FCC ID: A3LSMF721U	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 224 of 242
1M2204080051-15-R1.A3L	4/8/2022 - 7/12/2022	Portable Handset	Page 234 of 313