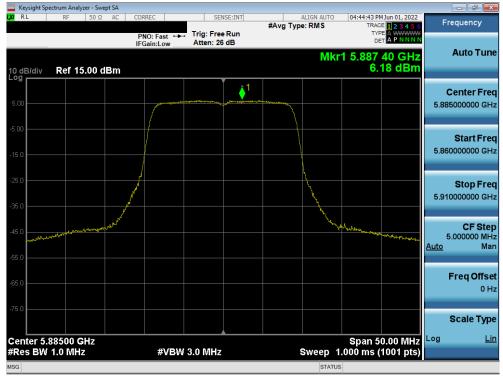


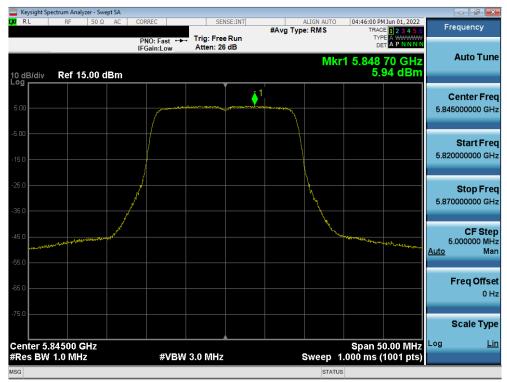
Plot 7-259. Power Spectral Density SISO ANT1 (20MHz BW 802.11n (UNII Band 4) - Ch. 173)



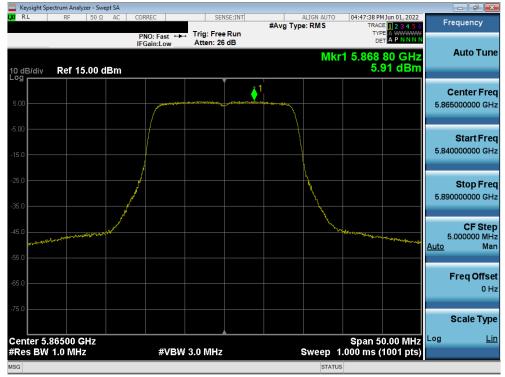
Plot 7-260. Power Spectral Density SISO ANT1 (20MHz BW 802.11n (UNII Band 4) - Ch. 177)

FCC ID: A3LSMF721JPN	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogg 467 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 167 of 305





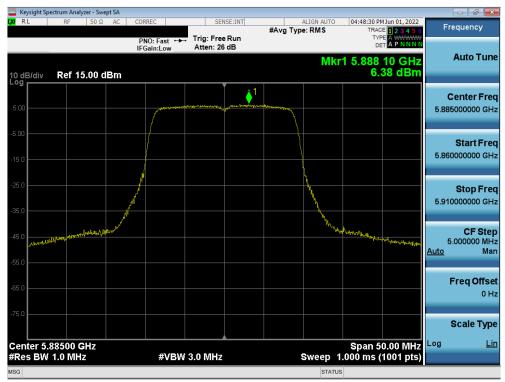
Plot 7-261. Power Spectral Density SISO ANT1 (20MHz BW 802.11ac (UNII Band 3/4) - Ch. 169)



Plot 7-262. Power Spectral Density SISO ANT1 (20MHz BW 802.11ac (UNII Band 4) - Ch. 173)

FCC ID: A3LSMF721JPN	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Do at 160 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 168 of 305





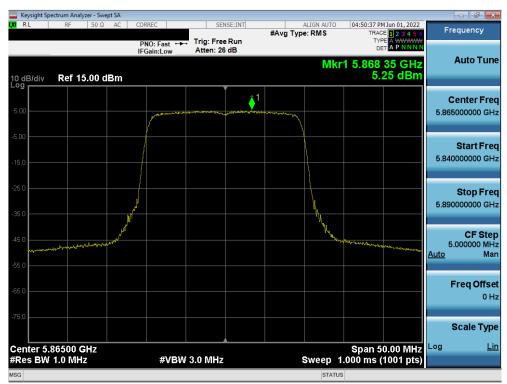
Plot 7-263. Power Spectral Density SISO ANT1 (20MHz BW 802.11ac (UNII Band 4) - Ch. 177)



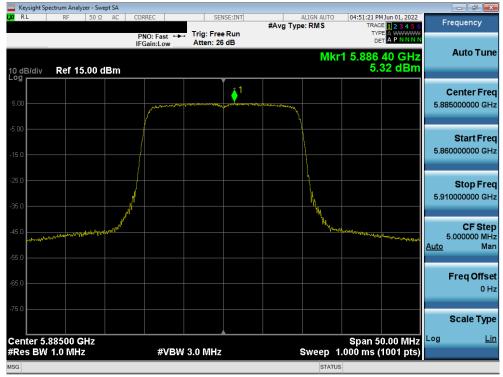
Plot 7-264. Power Spectral Density SISO ANT1 (20MHz BW 802.11ax (UNII Band 3/4) - Ch. 169)

FCC ID: A3LSMF721JPN	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Daga 100 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 169 of 305





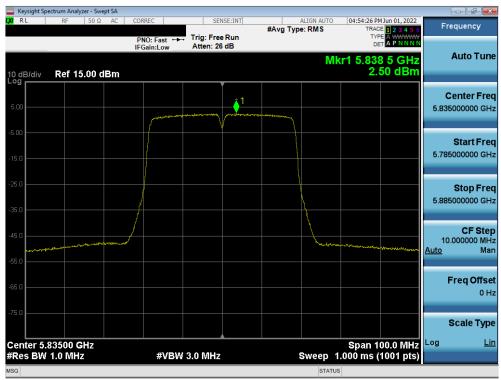
Plot 7-265. Power Spectral Density SISO ANT1 (20MHz BW 802.11ax (UNII Band 4) - Ch. 173)



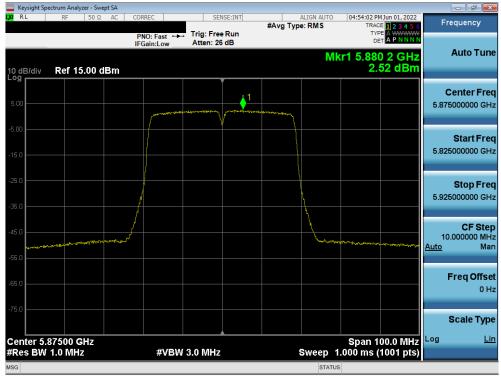
Plot 7-266. Power Spectral Density SISO ANT1 (20MHz BW 802.11ax (UNII Band 4) - Ch. 177)

FCC ID: A3LSMF721JPN	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Daga 170 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 170 of 305





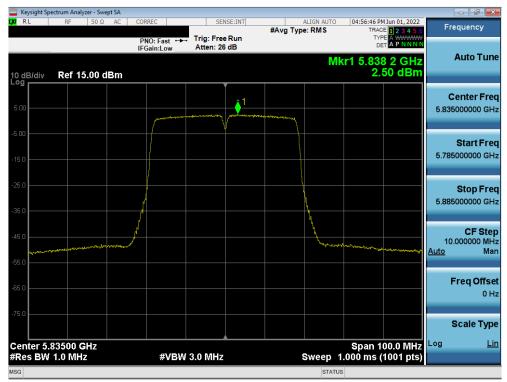
Plot 7-267. Power Spectral Density SISO ANT1 (40MHz BW 802.11n (UNII Band 3/4) - Ch. 167)



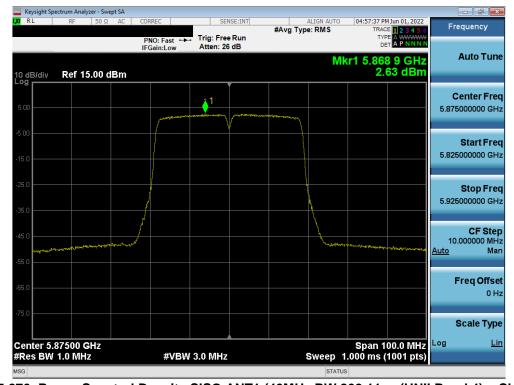
Plot 7-268. Power Spectral Density SISO ANT1 (40MHz BW 802.11n (UNII Band 4) - Ch. 175)

FCC ID: A3LSMF721JPN	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dags 171 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 171 of 305





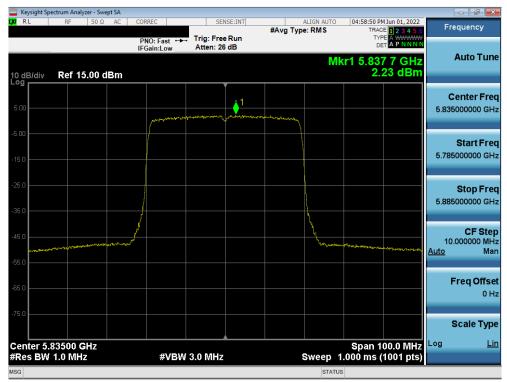
Plot 7-269. Power Spectral Density SISO ANT1 (40MHz BW 802.11ac (UNII Band 3/4) - Ch. 167)



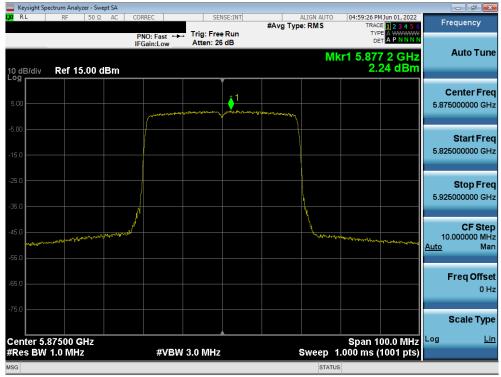
Plot 7-270. Power Spectral Density SISO ANT1 (40MHz BW 802.11ac (UNII Band 4) - Ch. 175)

FCC ID: A3LSMF721JPN	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogg 472 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 172 of 305





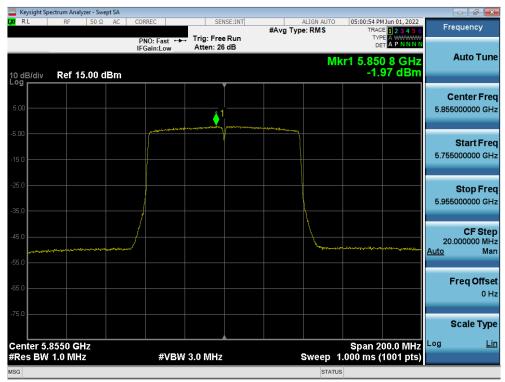
Plot 7-271. Power Spectral Density SISO ANT1 (40MHz BW 802.11ax (UNII Band 3/4) - Ch. 167)



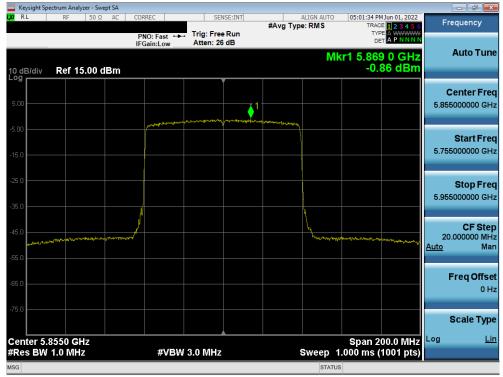
Plot 7-272. Power Spectral Density SISO ANT1 (40MHz BW 802.11ax (UNII Band 4) - Ch. 175)

FCC ID: A3LSMF721JPN	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogg 472 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 173 of 305





Plot 7-273. Power Spectral Density SISO ANT1 (80MHz BW 802.11ac (UNII Band 3/4) - Ch. 171)



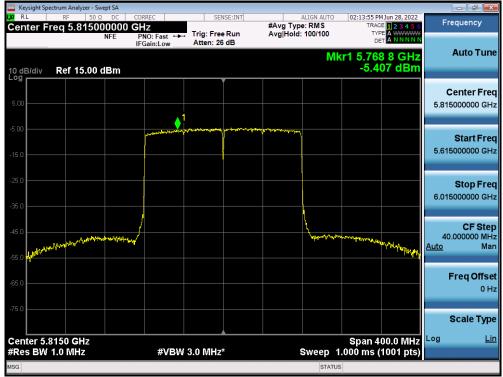
Plot 7-274. Power Spectral Density SISO ANT1 (80MHz BW 802.11ax (UNII Band 3/4) - Ch. 171)

FCC ID: A3LSMF721JPN	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dog 474 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 174 of 305





Plot 7-275. Power Spectral Density SISO ANT1 (160MHz BW 802.11ac (UNII Band 3/4) - Ch. 163)



Plot 7-276. Power Spectral Density SISO ANT1 (160MHz BW 802.11ax (UNII Band 3/4) - Ch. 163)

FCC ID: A3LSMF721JPN	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogg 475 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 175 of 305



FCC ID: A3LSMF721JPN	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogg 476 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 176 of 305



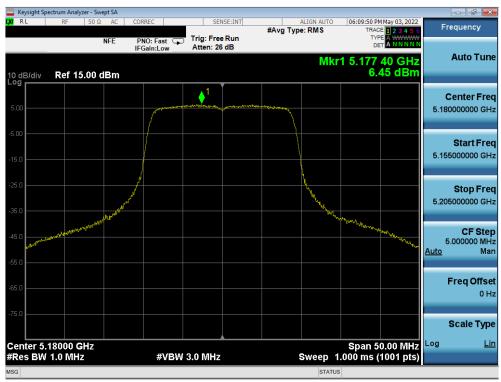
## **Antenna-2 Power Spectral Density Measurements**

	Frequency [MHz]	Channel No.	802.11 Mode	Data Rate [Mbps]	Measured Power Density [dBm]	Max Power Density [dBm/MHz]	Margin [dB]
	5180	36	а	6	6.45	11.0	-4.55
	5200	40	а	6	6.47	11.0	-4.53
	5240	48	а	6	5.89	11.0	-5.11
	5180	36	n (20MHz)	6.5/7.2 (MCS0)	6.35	11.0	-4.65
	5200	40	n (20MHz)	6.5/7.2 (MCS0)	6.46	11.0	-4.54
	5240	48	n (20MHz)	6.5/7.2 (MCS0)	6.07	11.0	-4.93
_	5180	36	ax (20MHz)	6.5/7.2 (MCS0)	4.02	11.0	-6.98
Band 1	5200	40	ax (20MHz)	6.5/7.2 (MCS0)	4.38	11.0	-6.62
Ä	5240	48	ax (20MHz)	6.5/7.2 (MCS0)	3.40	11.0	-7.60
	5190	38	n (40MHz)	13.5/15 (MCS0)	0.91	11.0	-10.09
	5230	46	n (40MHz)	13.5/15 (MCS0)	0.94	11.0	-10.06
	5190	38	ax (40MHz)	13.5/15 (MCS0)	0.88	11.0	-10.12
	5230	46	ax (40MHz)	13.5/15 (MCS0)	0.47	11.0	-10.53
	5210	42	ac (80MHz)	29.3/32.5 (MCS0)	-1.81	11.0	-12.81
	5210	42	ax (80MHz)	29.3/32.5 (MCS0)	-1.52	11.0	-12.52
nd Y	5250	50	ac (160MHz)	58.5/65 (MCS0)	-3.69	11.0	-14.69
Band 1/2A	5250	50	ax (160MHz)	58.5/65 (MCS0)	-3.54	11.0	-14.54
	5260	52	а	6	5.64	11.0	-5.36
	5280	56	а	6	5.31	11.0	-5.69
	5320	64	а	6	5.45	11.0	-5.55
	5260	52	n (20MHz)	6.5/7.2 (MCS0)	6.45	11.0	-4.55
	5280	56	n (20MHz)	6.5/7.2 (MCS0)	5.61	11.0	-5.39
	5320	64	n (20MHz)	6.5/7.2 (MCS0)	6.29	11.0	-4.71
≾	5260	52	ax (20MHz)	6.5/7.2 (MCS0)	3.45	11.0	-7.55
Band 2A	5280	56	ax (20MHz)	6.5/7.2 (MCS0)	3.41	11.0	-7.59
Bar	5320	64	ax (20MHz)	6.5/7.2 (MCS0)	3.05	11.0	-7.95
	5270	54	n (40MHz)	13.5/15 (MCS0)	0.81	11.0	-10.19
	5310	62	n (40MHz)	13.5/15 (MCS0)	0.64	11.0	-10.36
	5270	54	ax (40MHz)	13.5/15 (MCS0)	1.18	11.0	-9.82
	5310	62	ax (40MHz)	13.5/15 (MCS0)	0.74	11.0	-10.26
	5290	58	ac (80MHz)	29.3/32.5 (MCS0)	-1.99	11.0	-12.99
	5290	58	ax (80MHz)	29.3/32.5 (MCS0)	-2.32	11.0	-13.32
	5500	100	a	6	5.64	11.0	-5.36
	5600	120	а	6	5.99	11.0	-5.01
	5700	140	a	6	6.00	11.0	-5.00
	5500	100	n (20MHz)	6.5/7.2 (MCS0)	5.66	11.0	-5.34
	5600	120	n (20MHz)	6.5/7.2 (MCS0)	6.44	11.0	-4.56
	5720	144	n (20MHz)	6.5/7.2 (MCS0)	6.05	11.0	-4.95
	5500	100	ax (20MHz)	6.5/7.2 (MCS0)	2.92	11.0	-8.08
	5600	120	ax (20MHz)	6.5/7.2 (MCS0)	3.84	11.0	-7.16
	5720	144	ax (20MHz)	6.5/7.2 (MCS0)	3.91	11.0	-7.10
	5510	102	n (40MHz)	13.5/15 (MCS0)	1.07	11.0	-9.93
U	5590		, ,	( /			
Band 2C		118	n (40MHz)	13.5/15 (MCS0) 13.5/15 (MCS0)	1.05	11.0	-9.95 0.84
an	5710 5510	142	n (40MHz)	` '	1.16	11.0	-9.84 10.72
Ш	5510	102	ax (40MHz)	13.5/15 (MCS0)	0.28	11.0	-10.72
	5590	118	ax (40MHz)	13.5/15 (MCS0)	0.80	11.0	-10.20
	5710	142	ax (40MHz)	13.5/15 (MCS0)	0.98	11.0	-10.02
	5530	106	ac (80MHz)	29.3/32.5 (MCS0)	-2.22	11.0	-13.22
	5610	122	ac (80MHz)	29.3/32.5 (MCS0)	-1.83	11.0	-12.83
	5690	138	ac (80MHz)	29.3/32.5 (MCS0)	-1.76	11.0	-12.76
	5530	106	ax (80MHz)	29.3/32.5 (MCS0)	-2.58	11.0	-13.58
	5610	122	ax (80MHz)	29.3/32.5 (MCS0)	-2.09	11.0	-13.09
	5690	138	ax (80MHz)	29.3/32.5 (MCS0)	-1.86	11.0	-12.86
	5570	114	ac (160MHz)	29.3/32.5 (MCS0)	-4.20	11.0	-15.20
	5570	114	ax (160MHz)	29.3/32.5 (MCS0)	-3.94	11.0	-14.94

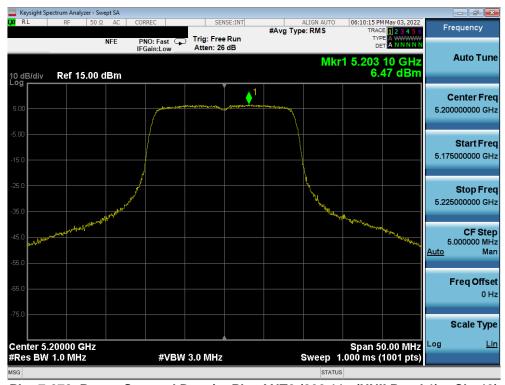
Table 7-26. Conducted Power Spectral Density Measurements ANT2

FCC ID: A3LSMF721JPN	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Do as 177 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 177 of 305





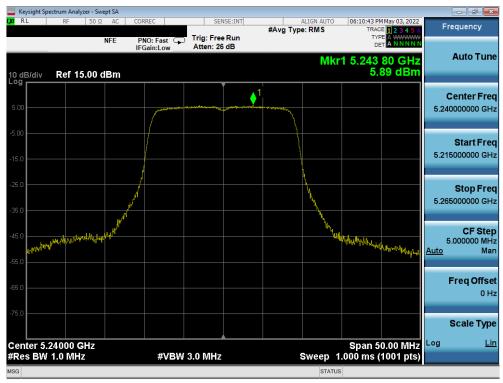
Plot 7-277. Power Spectral Density Plot ANT2 (802.11a (UNII Band 1) - Ch. 36)



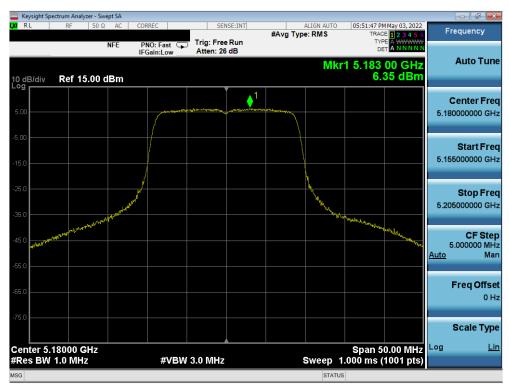
Plot 7-278. Power Spectral Density Plot ANT2 (802.11a (UNII Band 1) - Ch. 40)

FCC ID: A3LSMF721JPN	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 179 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 178 of 305





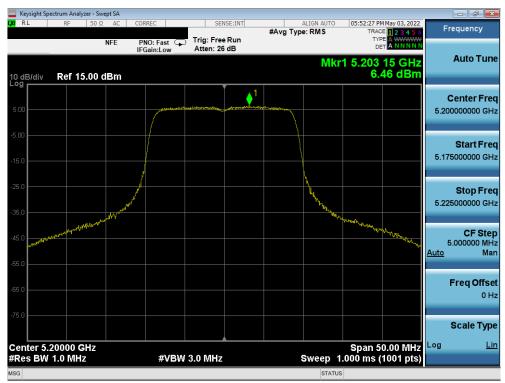
Plot 7-279. Power Spectral Density Plot ANT2 (802.11a (UNII Band 1) - Ch. 48)



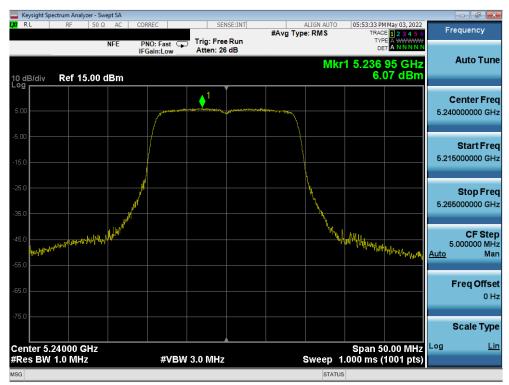
Plot 7-280. Power Spectral Density Plot ANT2 (20MHz BW 802.11n (UNII Band 1) - Ch. 36)

FCC ID: A3LSMF721JPN	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Daga 170 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 179 of 305





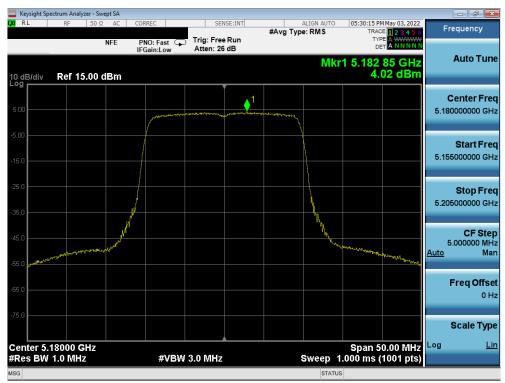
Plot 7-281. Power Spectral Density Plot ANT2 (20MHz BW 802.11n (UNII Band 1) - Ch. 40)



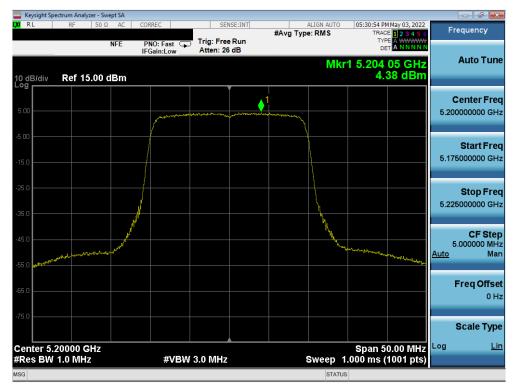
Plot 7-282. Power Spectral Density Plot ANT2 (20MHz BW 802.11n (UNII Band 1) - Ch. 48)

FCC ID: A3LSMF721JPN	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogg 400 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 180 of 305





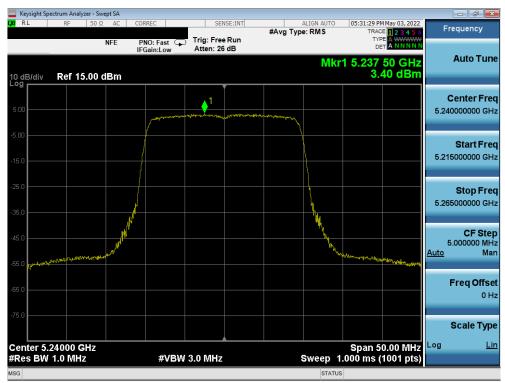
Plot 7-283. Power Spectral Density Plot ANT2 (20MHz BW 802.11ax (UNII Band 1) - Ch. 36)



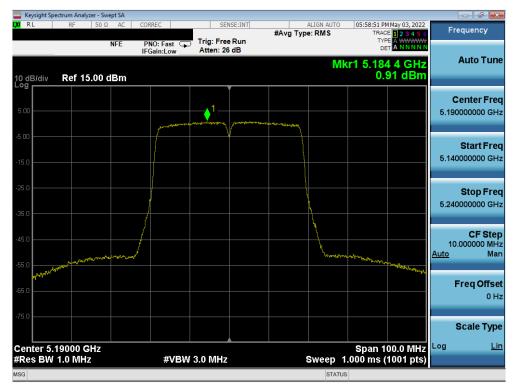
Plot 7-284. Power Spectral Density Plot ANT2 (20MHz BW 802.11ax (UNII Band 1) - Ch. 40)

FCC ID: A3LSMF721JPN	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dags 404 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 181 of 305





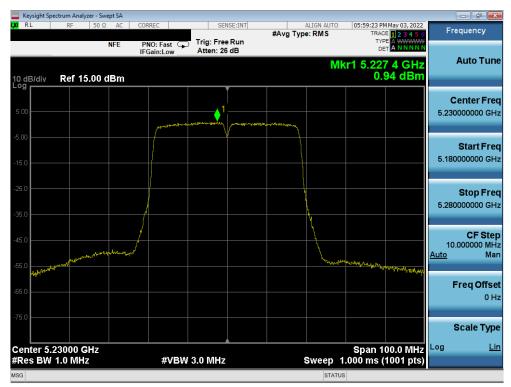
Plot 7-285. Power Spectral Density Plot ANT2 (20MHz BW 802.11ax (UNII Band 1) - Ch. 48)



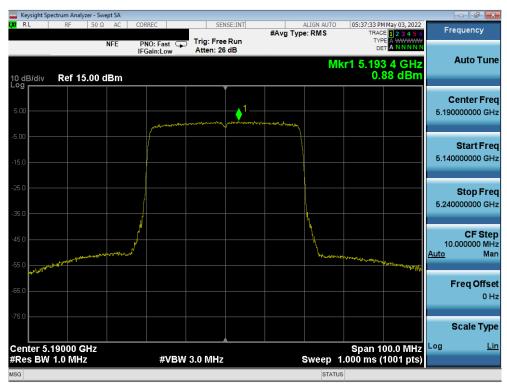
Plot 7-286. Power Spectral Density Plot ANT2 (40MHz BW 802.11n (UNII Band 1) - Ch. 38)

FCC ID: A3LSMF721JPN	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogg 192 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 182 of 305





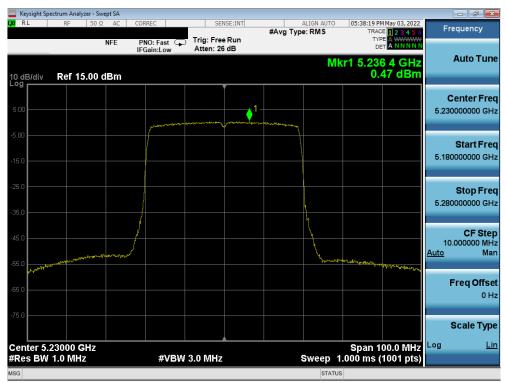
Plot 7-287. Power Spectral Density Plot ANT2 (40MHz BW 802.11n (UNII Band 1) - Ch. 46)



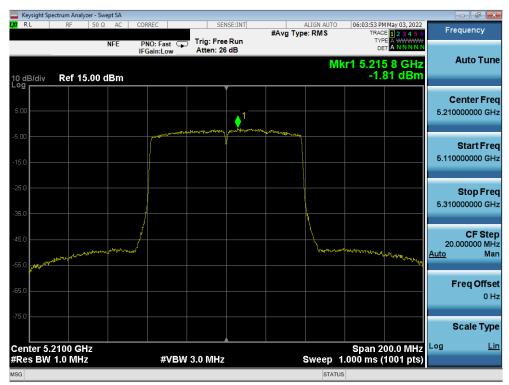
Plot 7-288. Power Spectral Density Plot ANT2 (40MHz BW 802.11ax (UNII Band 1) - Ch. 38)

FCC ID: A3LSMF721JPN	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Daga 402 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 183 of 305





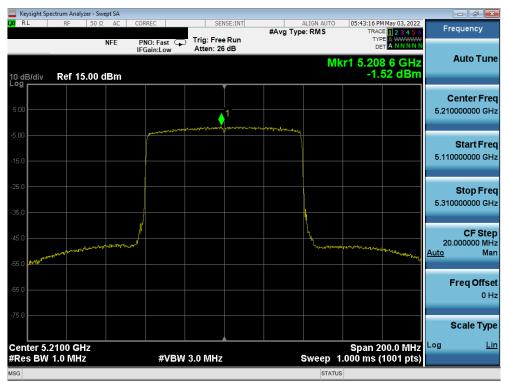
Plot 7-289. Power Spectral Density Plot ANT2 (40MHz BW 802.11ax (UNII Band 1) - Ch. 46)



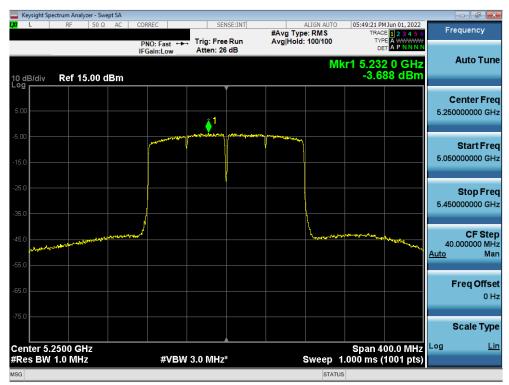
Plot 7-290. Power Spectral Density Plot ANT2 (80MHz BW 802.11ac (UNII Band 1) - Ch. 42)

FCC ID: A3LSMF721JPN	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogg 404 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 184 of 305





Plot 7-291. Power Spectral Density Plot ANT2 (80MHz BW 802.11ax (UNII Band 1) - Ch. 42)



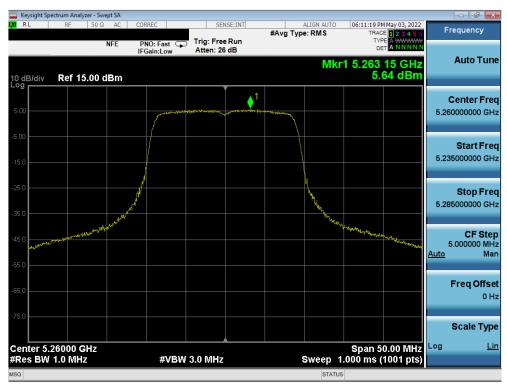
Plot 7-292. Power Spectral Density Plot ANT2 (160MHz BW 802.11ac (UNII Band 1/2A) - Ch. 50)

FCC ID: A3LSMF721JPN	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogg 405 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 185 of 305





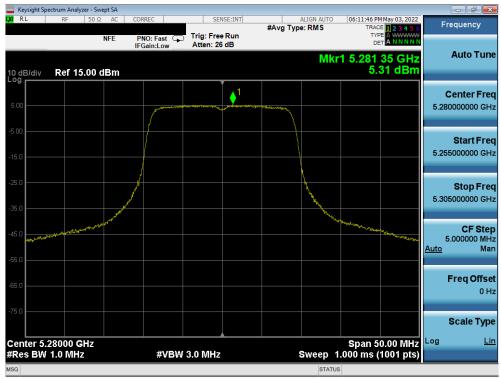
Plot 7-293. Power Spectral Density Plot ANT2 (160MHz BW 802.11ax (UNII Band 1/2A) - Ch. 50)



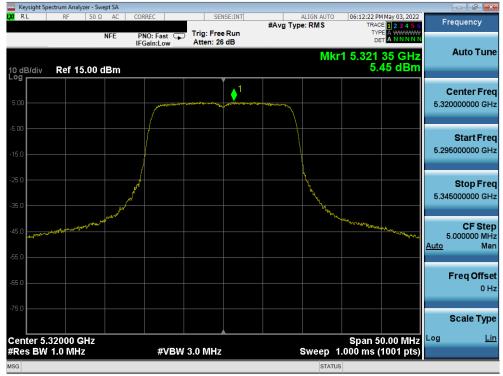
Plot 7-294. Power Spectral Density Plot ANT2 (802.11a (UNII Band 2A) - Ch. 52)

FCC ID: A3LSMF721JPN	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogg 400 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 186 of 305





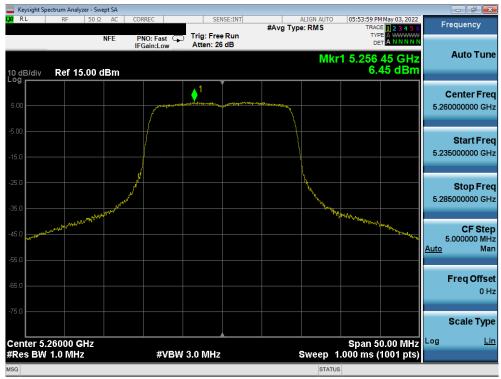
Plot 7-295. Power Spectral Density Plot ANT2 (802.11a (UNII Band 2A) - Ch. 56)



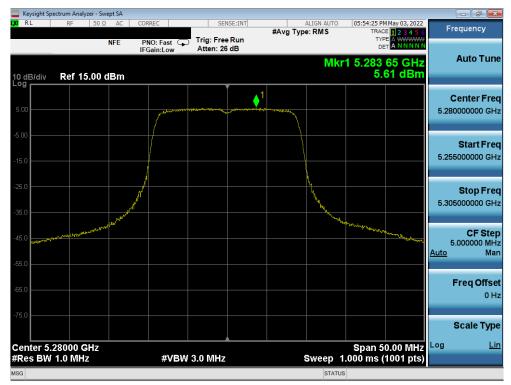
Plot 7-296. Power Spectral Density Plot ANT2 (802.11a (UNII Band 2A) - Ch. 64)

FCC ID: A3LSMF721JPN	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogg 407 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 187 of 305





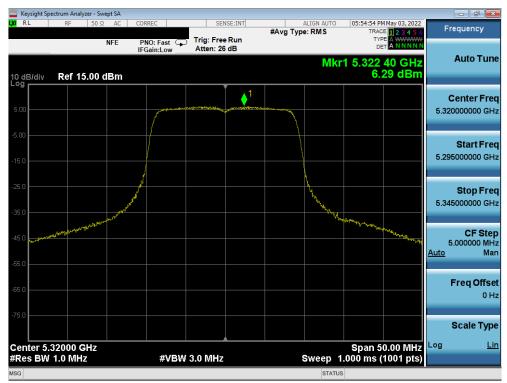
Plot 7-297. Power Spectral Density Plot ANT2 (20MHz BW 802.11n (UNII Band 2A) - Ch. 52)



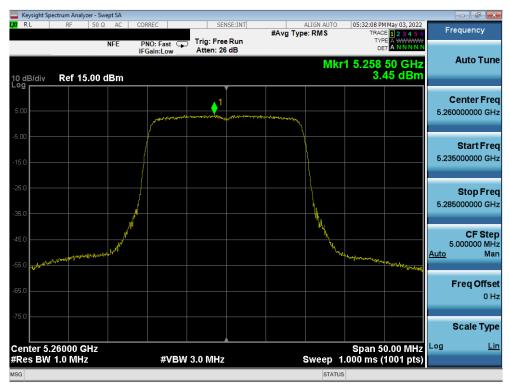
Plot 7-298. Power Spectral Density Plot ANT2 (20MHz BW 802.11n (UNII Band 2A) - Ch. 56)

FCC ID: A3LSMF721JPN	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dags 100 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 188 of 305





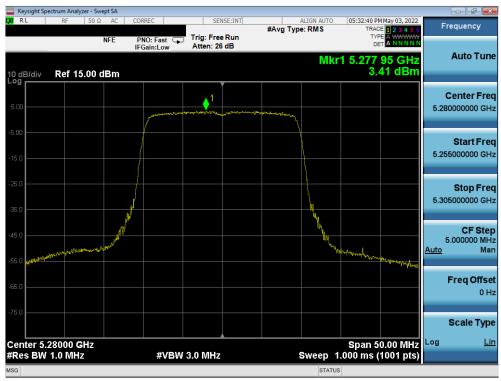
Plot 7-299. Power Spectral Density Plot ANT2 (20MHz BW 802.11n (UNII Band 2A) - Ch. 64)



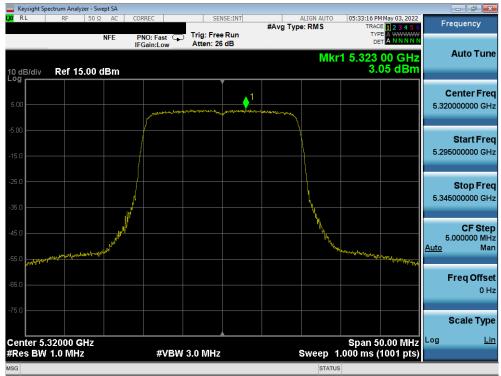
Plot 7-300. Power Spectral Density Plot ANT2 (20MHz BW 802.11ax (UNII Band 2A) - Ch. 52)

FCC ID: A3LSMF721JPN	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Do ac 100 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 189 of 305





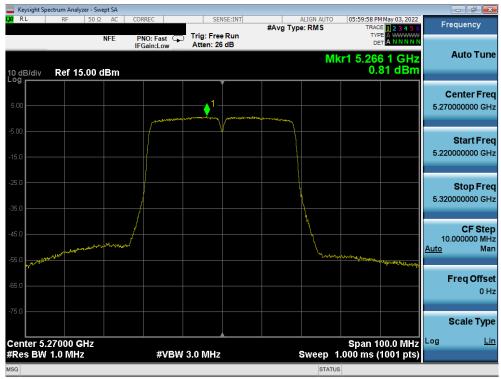
Plot 7-301. Power Spectral Density Plot ANT2 (20MHz BW 802.11ax (UNII Band 2A) - Ch. 56)



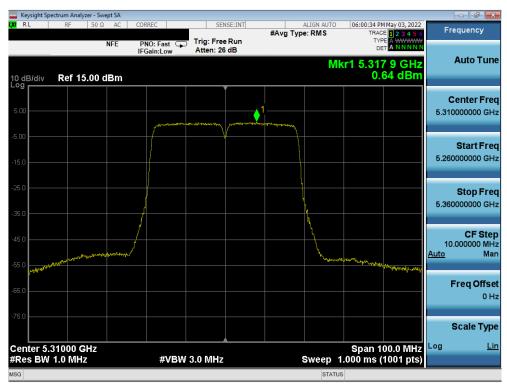
Plot 7-302. Power Spectral Density Plot ANT2 (20MHz BW 802.11ax (UNII Band 2A) - Ch. 64)

FCC ID: A3LSMF721JPN	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Do ac 100 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 190 of 305





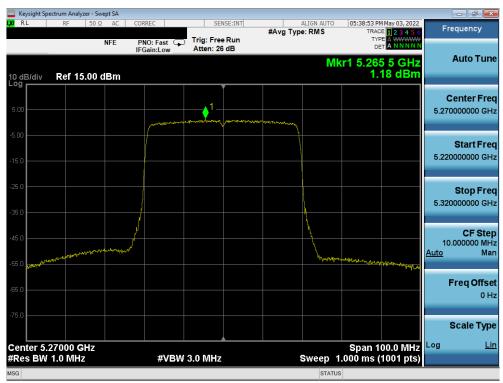
Plot 7-303. Power Spectral Density Plot ANT2 (40MHz BW 802.11n (UNII Band 2A) - Ch. 54)



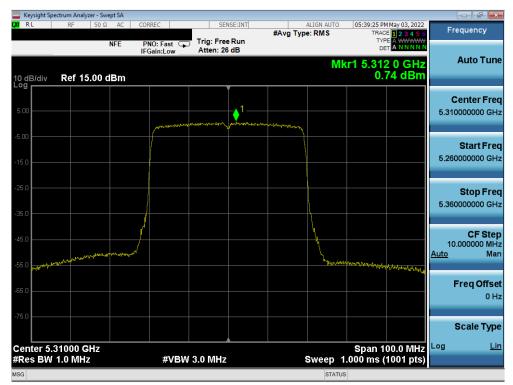
Plot 7-304. Power Spectral Density Plot ANT2 (40MHz BW 802.11n (UNII Band 2A) - Ch. 62)

FCC ID: A3LSMF721JPN	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogg 404 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 191 of 305





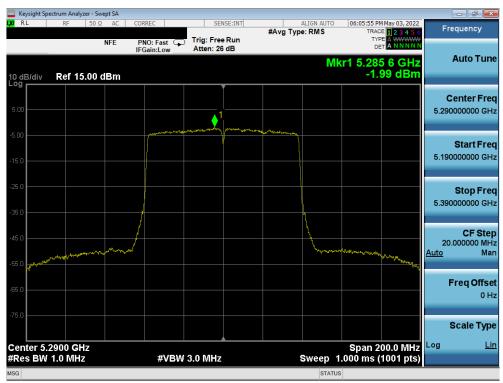
Plot 7-305. Power Spectral Density Plot ANT2 (40MHz BW 802.11ax (UNII Band 2A) - Ch. 54)



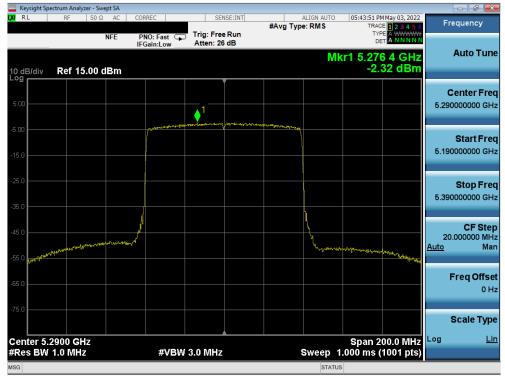
Plot 7-306. Power Spectral Density Plot ANT2 (40MHz BW 802.11ax (UNII Band 2A) - Ch. 62)

FCC ID: A3LSMF721JPN	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Daga 100 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 192 of 305





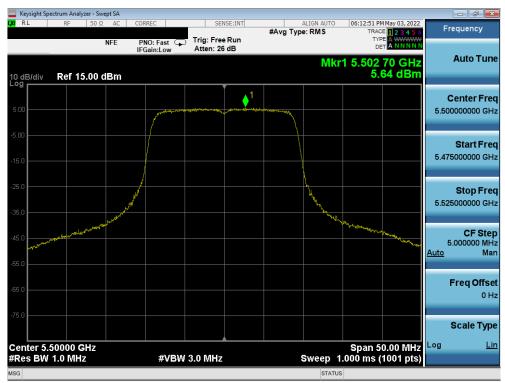
Plot 7-307. Power Spectral Density Plot ANT2 (80MHz BW 802.11ac (UNII Band 2A) - Ch. 58)



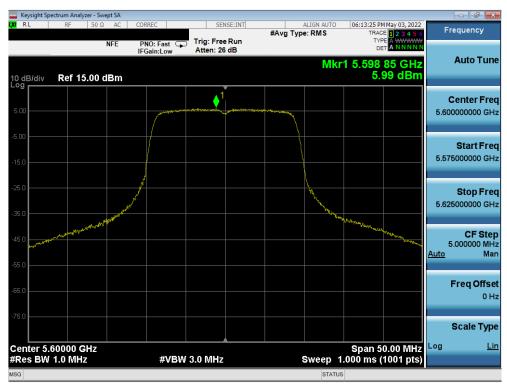
Plot 7-308. Power Spectral Density Plot ANT2 (80MHz BW 802.11ax (UNII Band 2A) - Ch. 58)

FCC ID: A3LSMF721JPN	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Daga 102 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 193 of 305





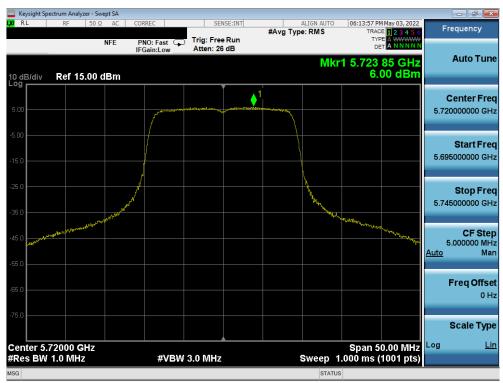
Plot 7-309. Power Spectral Density Plot ANT2 (802.11a (UNII Band 2C) - Ch. 100)



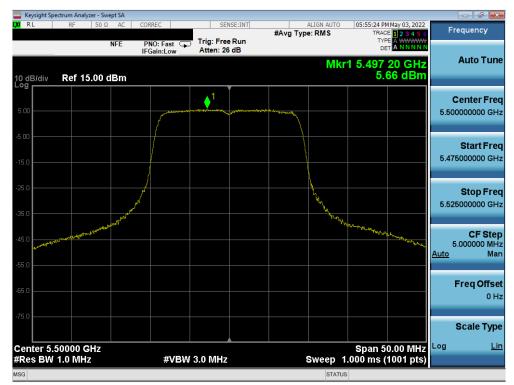
Plot 7-310. Power Spectral Density Plot ANT2 (802.11a (UNII Band 2C) - Ch. 116)

FCC ID: A3LSMF721JPN	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogg 404 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 194 of 305





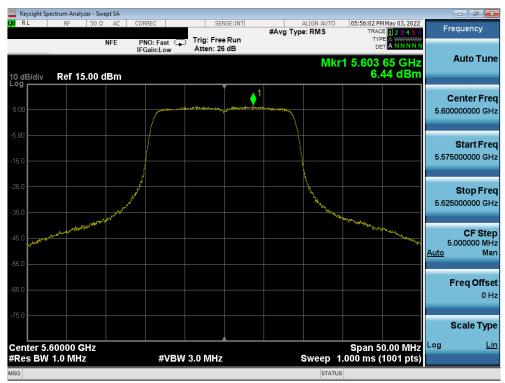
Plot 7-311. Power Spectral Density Plot ANT2 (802.11a (UNII Band 2C) - Ch. 140)



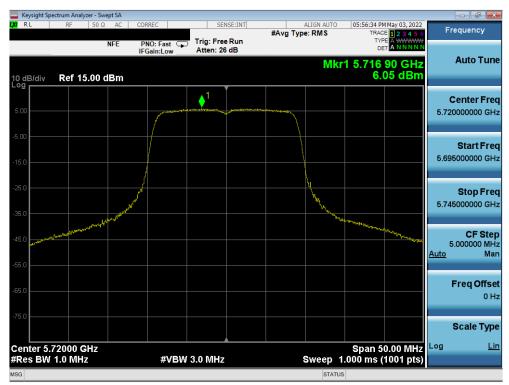
Plot 7-312. Power Spectral Density Plot ANT2 (20MHz BW 802.11n (UNII Band 2C) - Ch. 100)

FCC ID: A3LSMF721JPN	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogg 105 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 195 of 305





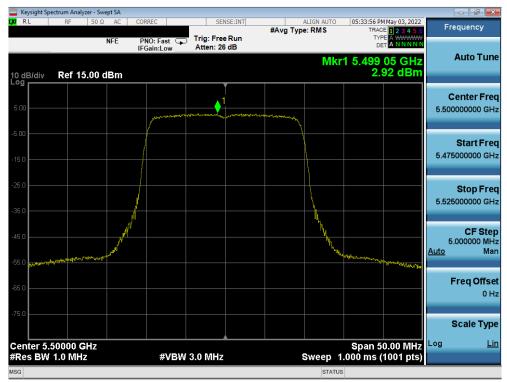
Plot 7-313. Power Spectral Density Plot ANT2 (20MHz BW 802.11n (UNII Band 2C) - Ch. 120)



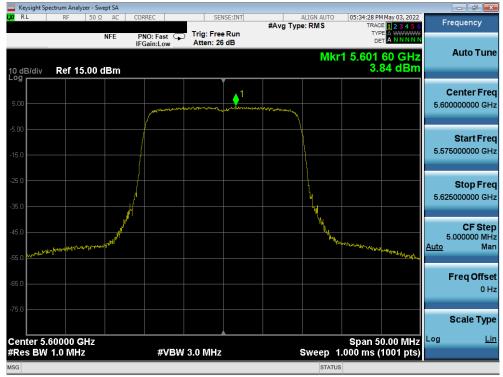
Plot 7-314. Power Spectral Density Plot ANT2 (20MHz BW 802.11n (UNII Band 2C) - Ch. 144)

FCC ID: A3LSMF721JPN	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogg 106 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 196 of 305





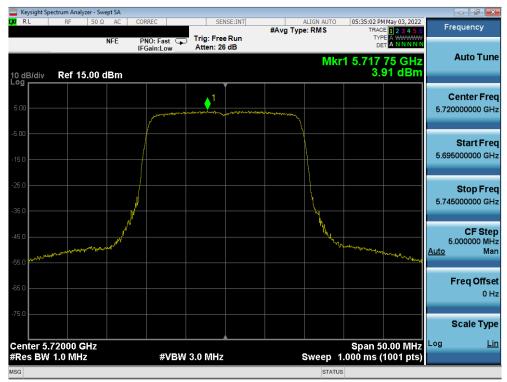
Plot 7-315. Power Spectral Density Plot ANT2 (20MHz BW 802.11ax (UNII Band 2C) - Ch. 100)



Plot 7-316. Power Spectral Density Plot ANT2 (20MHz BW 802.11ax (UNII Band 2C) - Ch. 120)

FCC ID: A3LSMF721JPN	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogg 407 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 197 of 305





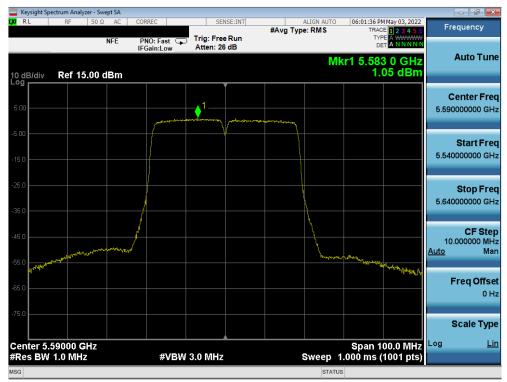
Plot 7-317. Power Spectral Density Plot ANT2 (20MHz BW 802.11ax (UNII Band 2C) - Ch. 144)



Plot 7-318. Power Spectral Density Plot ANT2 (40MHz BW 802.11n (UNII Band 2C) - Ch. 102)

FCC ID: A3LSMF721JPN	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dags 100 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 198 of 305





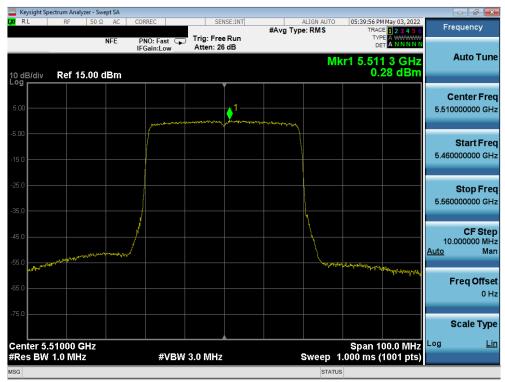
Plot 7-319. Power Spectral Density Plot ANT2 (40MHz BW 802.11n (UNII Band 2C) - Ch. 118)



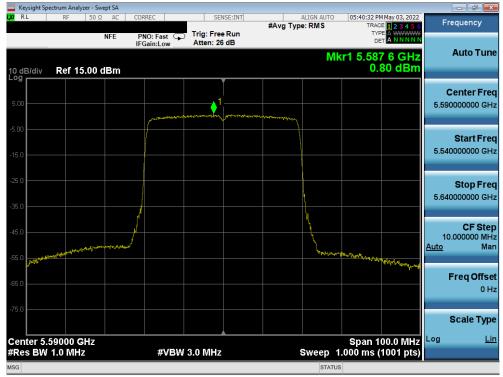
Plot 7-320. Power Spectral Density Plot ANT2 (40MHz BW 802.11n (UNII Band 2C) - Ch. 142)

FCC ID: A3LSMF721JPN	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogg 400 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 199 of 305





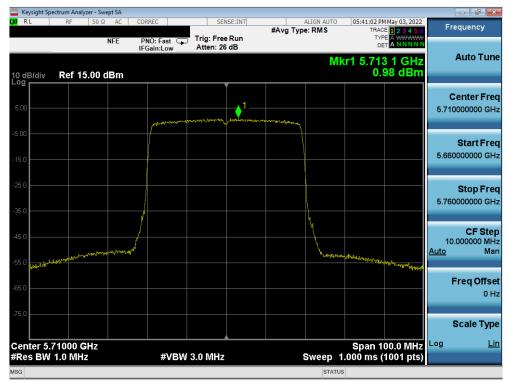
Plot 7-321. Power Spectral Density Plot ANT2 (40MHz BW 802.11ax (UNII Band 2C) - Ch. 102)



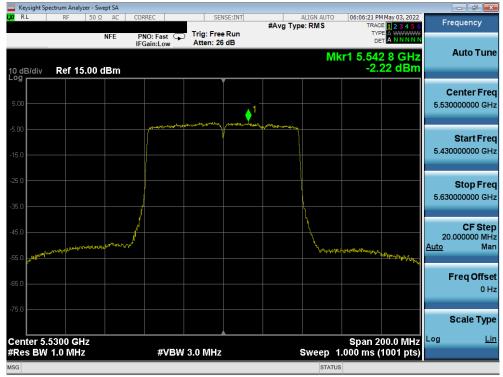
Plot 7-322. Power Spectral Density Plot ANT2 (40MHz BW 802.11ax (UNII Band 2C) - Ch. 118)

FCC ID: A3LSMF721JPN	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Daga 200 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 200 of 305





Plot 7-323. Power Spectral Density Plot ANT2 (40MHz BW 802.11ax (UNII Band 2C) - Ch. 142)



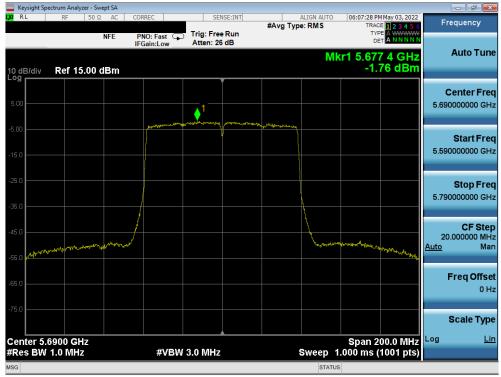
Plot 7-324. Power Spectral Density Plot ANT2 (80MHz BW 802.11ac (UNII Band 2C) - Ch. 106)

FCC ID: A3LSMF721JPN	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogg 204 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 201 of 305





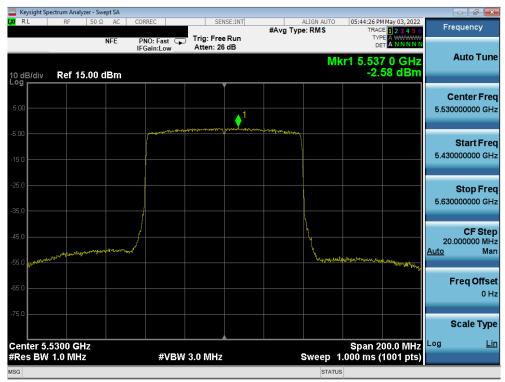
Plot 7-325. Power Spectral Density Plot ANT2 (80MHz BW 802.11ac (UNII Band 2C) - Ch. 122)



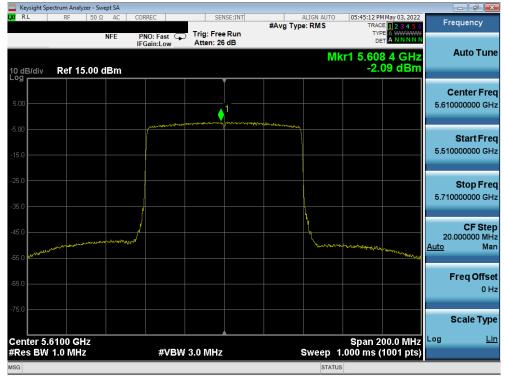
Plot 7-326. Power Spectral Density Plot ANT2 (80MHz BW 802.11ac (UNII Band 2C) - Ch. 138)

FCC ID: A3LSMF721JPN	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 202 of 305
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Fage 202 01 303





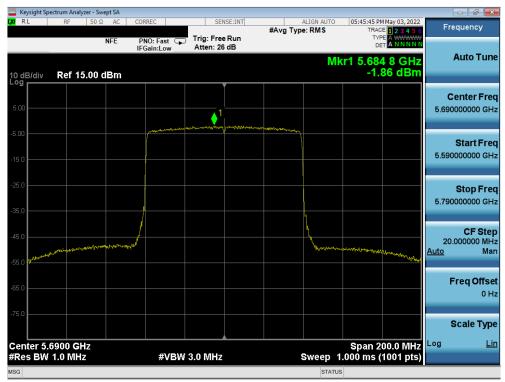
Plot 7-327. Power Spectral Density Plot ANT2 (80MHz BW 802.11ax (UNII Band 2C) - Ch. 106)



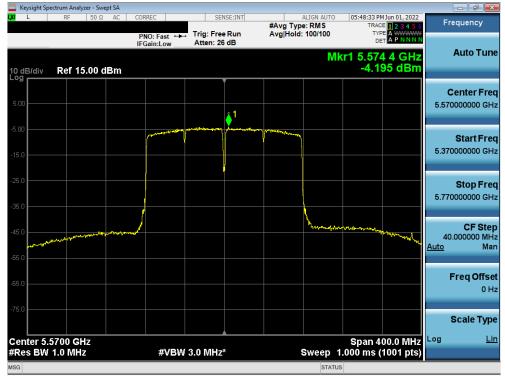
Plot 7-328. Power Spectral Density Plot ANT2 (80MHz BW 802.11ax (UNII Band 2C) - Ch. 122)

FCC ID: A3LSMF721JPN	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 202 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 203 of 305





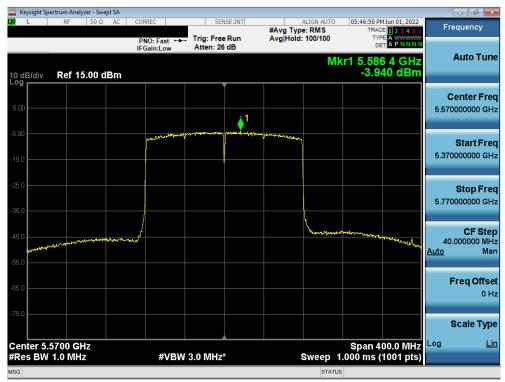
Plot 7-329. Power Spectral Density Plot ANT2 (80MHz BW 802.11ax (UNII Band 2C) - Ch. 138)



Plot 7-330. Power Spectral Density Plot ANT2 (160MHz BW 802.11ac (UNII Band 2C) - Ch. 114)

FCC ID: A3LSMF721JPN	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Do ac 204 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 204 of 305





Plot 7-331. Power Spectral Density Plot ANT2 (160MHz BW 802.11ax (UNII Band 2C) - Ch. 114)

FCC ID: A3LSMF721JPN	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 205 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 205 of 305

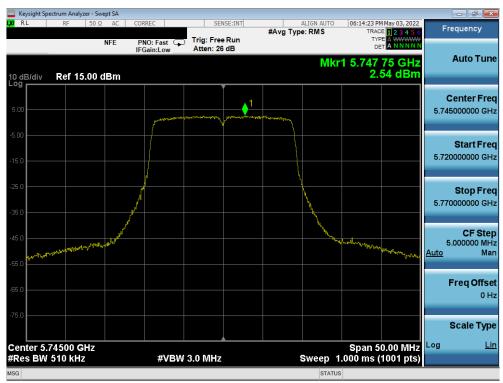


	Frequency [MHz]	Channel No.	802.11 Mode	Data Rate [Mbps]	Measured Power Density [dBm]	Max Permissible Power Density [dBm/500kHz]	Margin [dB]
	5745	149	а	6	2.54	30.0	-27.46
	5785	157	а	6	3.26	30.0	-26.74
	5825	165	а	6	3.07	30.0	-26.93
	5745	149	n (20MHz)	6.5/7.2 (MCS0)	3.40	30.0	-26.60
	5785	157	n (20MHz)	6.5/7.2 (MCS0)	3.58	30.0	-26.42
	5825	165	n (20MHz)	6.5/7.2 (MCS0)	3.14	30.0	-26.86
က	5745	149	ax (20MHz)	6.5/7.2 (MCS0)	1.03	30.0	-28.97
Band	5785	157	ax (20MHz)	6.5/7.2 (MCS0)	1.09	30.0	-28.91
m	5825	165	ax (20MHz)	6.5/7.2 (MCS0)	1.22	30.0	-28.78
	5755	151	n (40MHz)	13.5/15 (MCS0)	-1.86	30.0	-31.86
	5795	159	n (40MHz)	13.5/15 (MCS0)	-1.71	30.0	-31.71
	5755	151	ax (40MHz)	13.5/15 (MCS0)	-2.29	30.0	-32.29
	5795	159	ax (40MHz)	13.5/15 (MCS0)	-1.97	30.0	-31.97
	5775	155	ac (80MHz)	29.3/32.5 (MCS0)	-3.70	30.0	-33.70
	5775	155	ax (80MHz)	29.3/32.5 (MCS0)	-4.79	30.0	-34.79

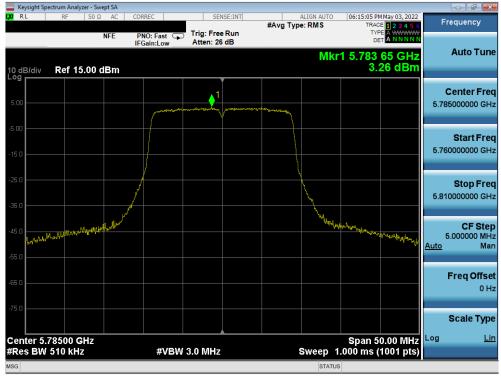
Table 7-27. Band 3 Conducted Power Spectral Density Measurements ANT2

FCC ID: A3LSMF721JPN	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Daga 206 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 206 of 305





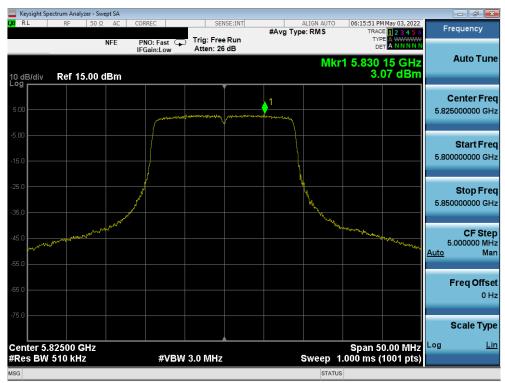
Plot 7-332. Power Spectral Density Plot ANT2 (802.11a (UNII Band 3) - Ch. 149)



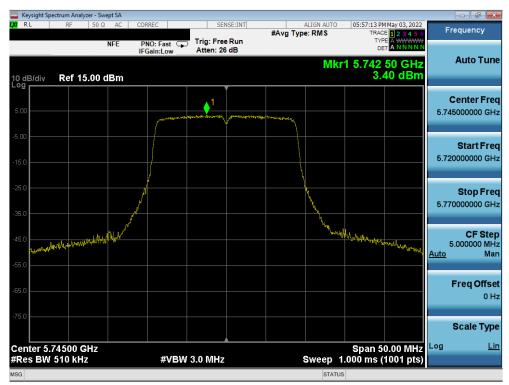
Plot 7-333. Power Spectral Density Plot ANT2 (802.11a (UNII Band 3) - Ch. 157)

FCC ID: A3LSMF721JPN	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 207 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 207 of 305





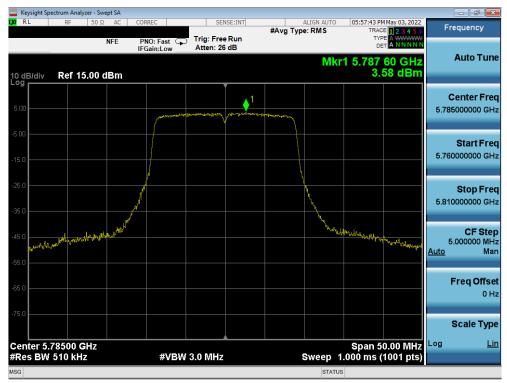
Plot 7-334. Power Spectral Density Plot ANT2 (802.11a (UNII Band 3) - Ch. 165)



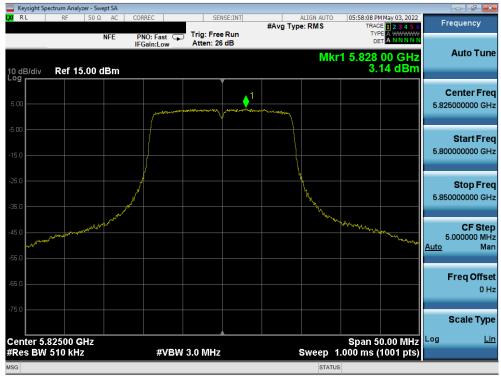
Plot 7-335. Power Spectral Density Plot ANT2 (20MHz BW 802.11n (UNII Band 3) - Ch. 149)

FCC ID: A3LSMF721JPN	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Daga 200 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 208 of 305





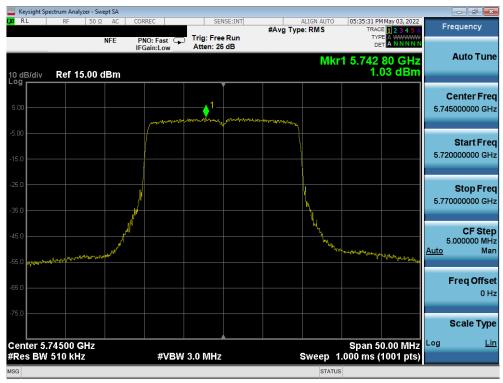
Plot 7-336. Power Spectral Density Plot ANT2 (20MHz BW 802.11n (UNII Band 3) - Ch. 157)



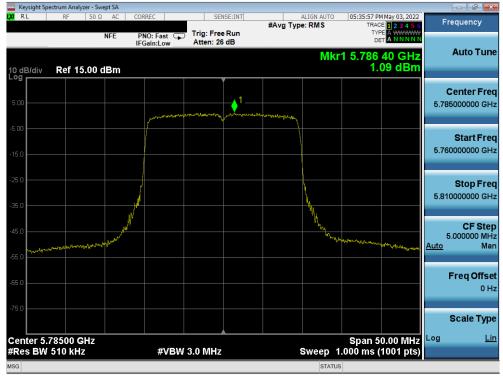
Plot 7-337. Power Spectral Density Plot ANT2 (20MHz BW 802.11n (UNII Band 3) - Ch. 165)

FCC ID: A3LSMF721JPN	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogg 200 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 209 of 305





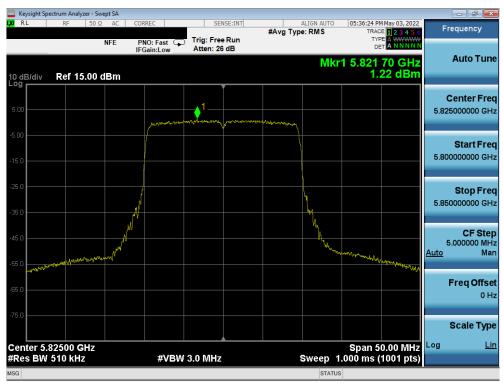
Plot 7-338. Power Spectral Density Plot ANT2 (20MHz BW 802.11ax (UNII Band 3) - Ch. 149)



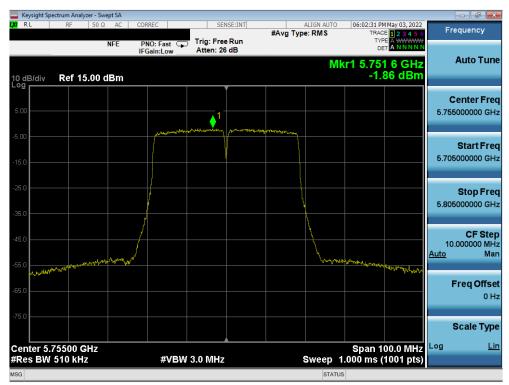
Plot 7-339. Power Spectral Density Plot ANT2 (20MHz BW 802.11ax (UNII Band 3) - Ch. 157)

FCC ID: A3LSMF721JPN	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Daga 240 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 210 of 305





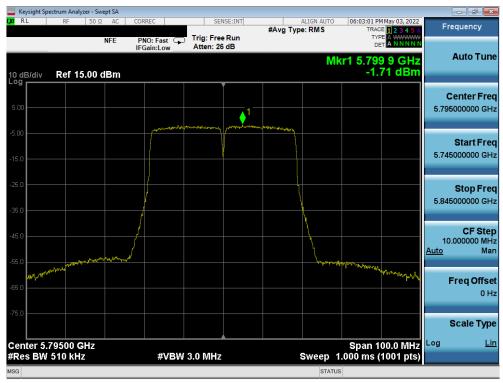
Plot 7-340. Power Spectral Density Plot ANT2 (20MHz BW 802.11ax (UNII Band 3) - Ch. 165)



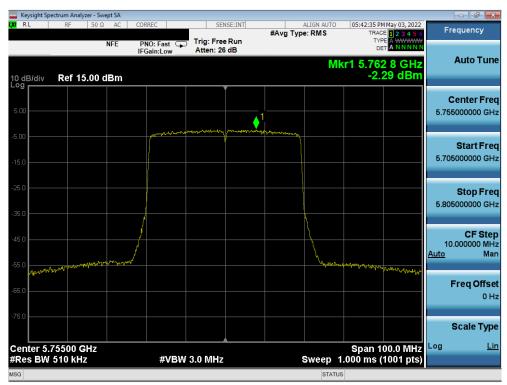
Plot 7-341. Power Spectral Density Plot ANT2 (40MHz BW 802.11n (UNII Band 3) - Ch. 151)

FCC ID: A3LSMF721JPN	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Daga 244 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 211 of 305





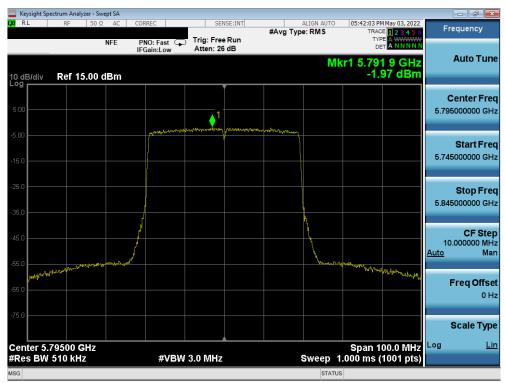
Plot 7-342. Power Spectral Density Plot ANT2 (40MHz BW 802.11n (UNII Band 3) - Ch. 159)



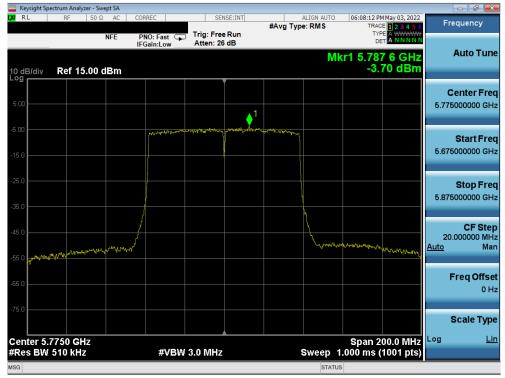
Plot 7-343. Power Spectral Density Plot ANT2 (40MHz BW 802.11ax (UNII Band 3) - Ch. 151)

FCC ID: A3LSMF721JPN	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Daga 242 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 212 of 305





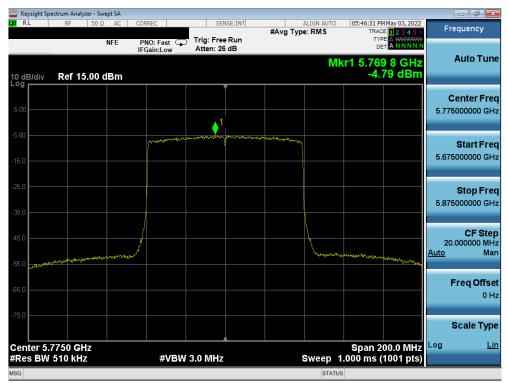
Plot 7-344. Power Spectral Density Plot ANT2 (40MHz BW 802.11ax (UNII Band 3) - Ch. 159)



Plot 7-345. Power Spectral Density Plot ANT2 (80MHz BW 802.11ac (UNII Band 3) - Ch. 155)

FCC ID: A3LSMF721JPN	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Daga 242 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 213 of 305





Plot 7-346. Power Spectral Density Plot ANT2 (80MHz BW 802.11ax (UNII Band 3) - Ch. 155)

FCC ID: A3LSMF721JPN		MEASUREMENT REPORT (CERTIFICATION)	
Test Report S/N:	Test Dates:	EUT Type:	Dogo 214 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 214 of 305

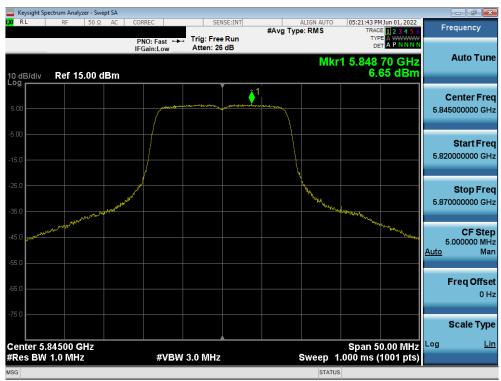


	Frequency [MHz]	Channel No.	802.11 Mode	Data Rate [Mbps]	Measured Power Density [dBm/MHz]	Max Permissible Power Density [dBm/500kHz]	Margin [dB]	Antenna Gain [dBi]	EIRP Power Density [dBm/MHz]	Max EIRP Power Density [dBm/MHz]	Margin [dB]
Band 3/4	5845	169	а	6	6.65	30.00	-23.35	-6.00	0.65	14.00	-13.35
Band 4	5865	173	а	6	6.80			-6.00	0.80	14.00	-13.20
Dallu 4	5885	177	а	6	6.75			-6.00	0.75	14.00	-13.25
Band 3/4	5845	169	n (20MHz)	6.5/7.2 (MCS0)	6.22	30.00	-23.78	-6.00	0.22	14.00	-13.78
Band 4	5865	173	n (20MHz)	6.5/7.2 (MCS0)	6.43			-6.00	0.43	14.00	-13.57
Dallu 4	5885	177	n (20MHz)	6.5/7.2 (MCS0)	6.43			-6.00	0.43	14.00	-13.57
Band 3/4	5845	169	ac (20MHz)	6.5/7.2 (MCS0)	6.40	30.00	-23.60	-6.00	0.40	14.00	-13.60
Band 4	5865	173	ac (20MHz)	6.5/7.2 (MCS0)	6.38			-6.00	0.38	14.00	-13.62
Dallu 4	5885	177	ac (20MHz)	6.5/7.2 (MCS0)	6.41			-6.00	0.41	14.00	-13.59
Band 3/4	5845	169	ax (20MHz)	6.5/7.2 (MCS0)	4.88	30.00	-25.12	-6.00	-1.12	14.00	-15.12
Band 4	5865	173	ax (20MHz)	6.5/7.2 (MCS0)	4.77			-6.00	-1.23	14.00	-15.23
Dallu 4	5885	177	ax (20MHz)	6.5/7.2 (MCS0)	4.85			-6.00	-1.15	14.00	-15.15
Band 3/4	5835	167	n (40MHz)	13.5/15 (MCS0)	2.75	30.00	-27.25	-6.00	-3.25	14.00	-17.25
Band 4	5875	175	n (40MHz)	13.5/15 (MCS0)	2.59			-6.00	-3.41	14.00	-17.41
<b>Band 3/4</b>	5835	167	ac (40MHz)	13.5/15 (MCS0)	2.32	30.00	-27.68	-6.00	-3.68	14.00	-17.68
Band 4	5875	175	ac (40MHz)	13.5/15 (MCS0)	2.50			-6.00	-3.50	14.00	-17.50
Band 3/4	5835	167	ax (40MHz)	13.5/15 (MCS0)	2.31	30.00	-27.69	-6.00	-3.69	14.00	-17.69
Band 4	5875	175	ax (40MHz)	13.5/15 (MCS0)	2.45			-6.00	-3.55	14.00	-17.55
	5855	171	ac (80MHz)	29.3/32.5 (MCS0)	-0.95	30.00	-30.95	-6.00	-6.95	14.00	-20.95
Band 3/4	5855	171	ax (80MHz)	29.3/32.5 (MCS0)	-0.81	30.00	-30.81	-6.00	-6.81	14.00	-20.81
ballu 3/4	5815	163	ac (160MHz)	58.5/65 (MCS0)	-6.16	30.00	-36.16	-6.00	-12.16	14.00	-26.16
	5815	163	ax (160MHz)	58.5/65 (MCS0)	-3.11	30.00	-33.11	-6.00	-9.11	14.00	-23.11

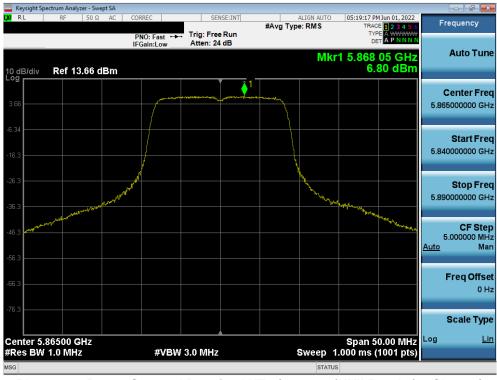
Table 7-28. Band 4 e.i.r.p Power Spectral Density Measurements ANT2

FCC ID: A3LSMF721JPN		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 245 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 215 of 305





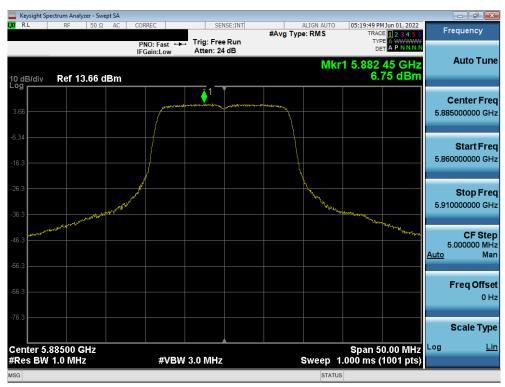
Plot 7-347. Power Spectral Density ANT2 (802.11a (UNII Band 3/4) - Ch. 169)



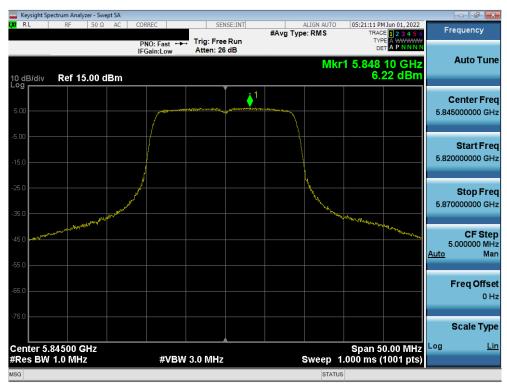
Plot 7-348. Power Spectral Density ANT2 (802.11a (UNII Band 4) - Ch. 173)

FCC ID: A3LSMF721JPN		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogg 246 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 216 of 305





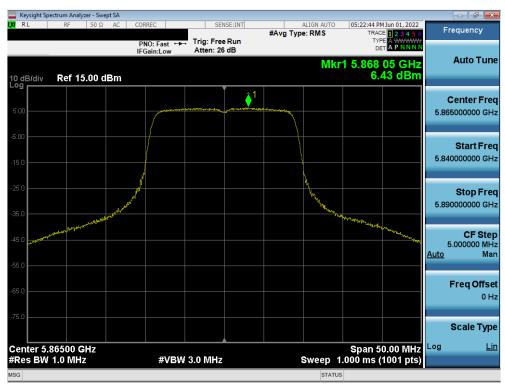
Plot 7-349. Power Spectral Density ANT2 (802.11a (UNII Band 4) – Ch. 177)



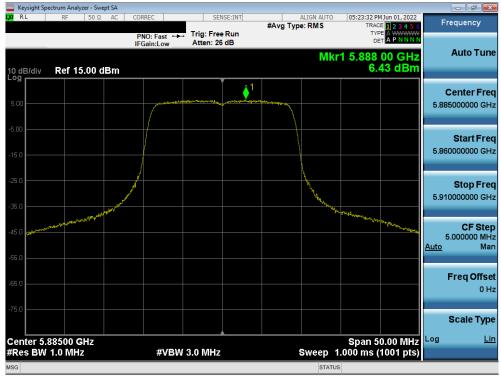
Plot 7-350. Power Spectral Density ANT2 (20MHz BW 802.11n (UNII Band 3/4) - Ch. 169)

FCC ID: A3LSMF721JPN		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Daga 247 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 217 of 305





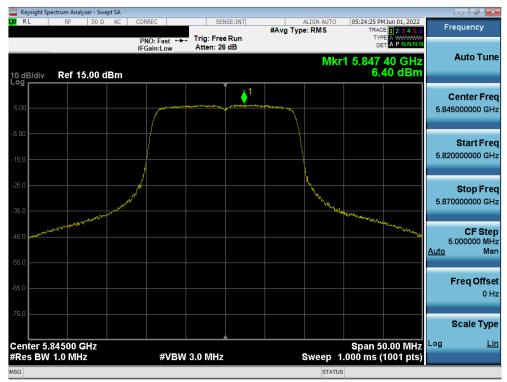
Plot 7-351. Power Spectral Density ANT2 (20MHz BW 802.11n (UNII Band 4) - Ch. 173)



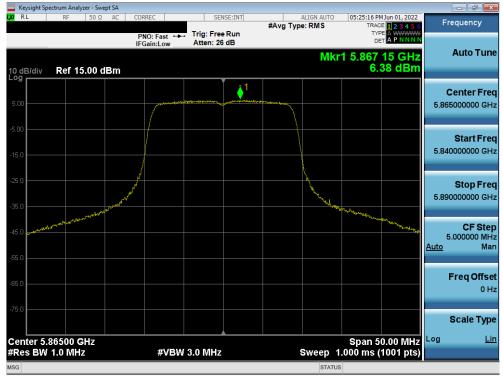
Plot 7-352. Power Spectral Density ANT2 (20MHz BW 802.11n (UNII Band 4) - Ch. 177)

FCC ID: A3LSMF721JPN		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 249 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 218 of 305





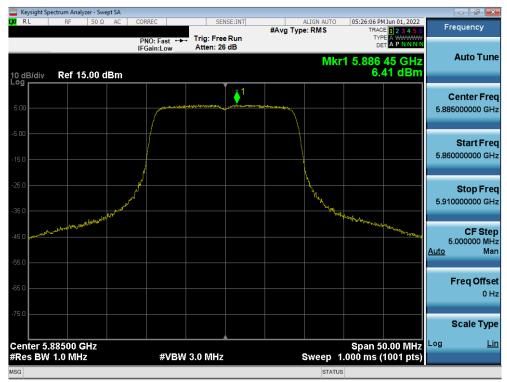
Plot 7-353. Power Spectral Density ANT2 (20MHz BW 802.11ac (UNII Band 3/4) - Ch. 169)



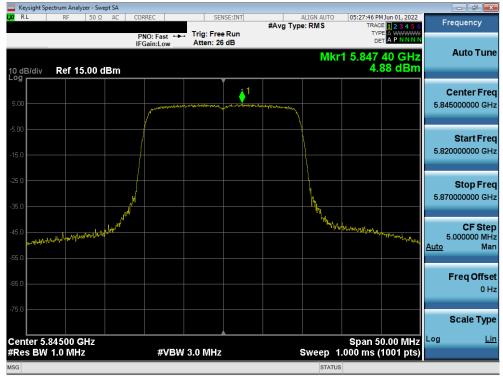
Plot 7-354. Power Spectral Density ANT2 (20MHz BW 802.11ac (UNII Band 4) - Ch. 173)

FCC ID: A3LSMF721JPN		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 210 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 219 of 305





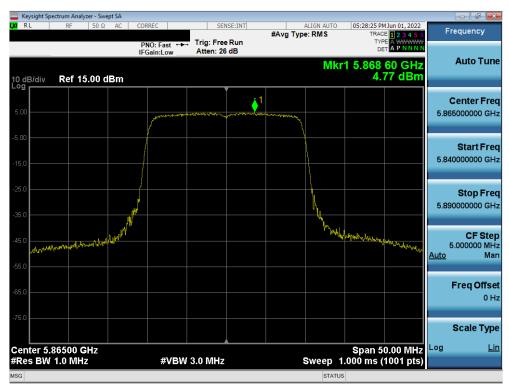
Plot 7-355. Power Spectral Density ANT2 (20MHz BW 802.11ac (UNII Band 4) - Ch. 177)



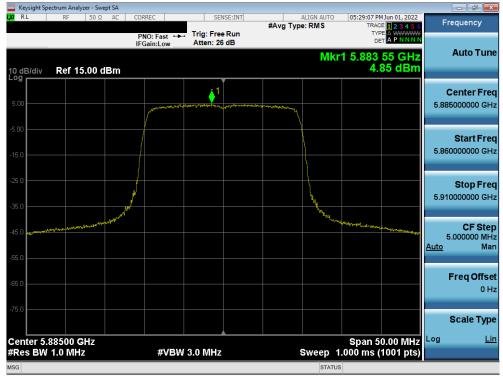
Plot 7-356. Power Spectral Density ANT2 (20MHz BW 802.11ax (UNII Band 3/4) - Ch. 169)

FCC ID: A3LSMF721JPN		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogg 220 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 220 of 305





Plot 7-357. Power Spectral Density ANT2 (20MHz BW 802.11ax (UNII Band 4) - Ch. 173)



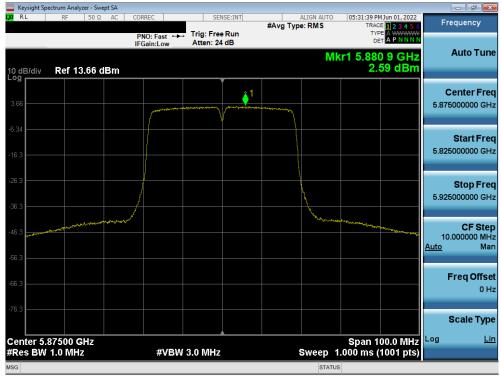
Plot 7-358. Power Spectral Density ANT2 (20MHz BW 802.11ax (UNII Band 4) - Ch. 177)

FCC ID: A3LSMF721JPN		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 224 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 221 of 305





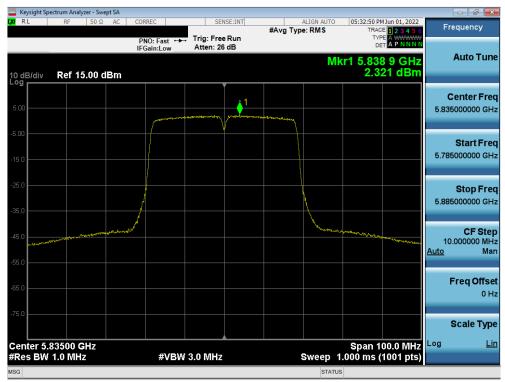
Plot 7-359. Power Spectral Density ANT2 (40MHz BW 802.11n (UNII Band 3/4) - Ch. 167)



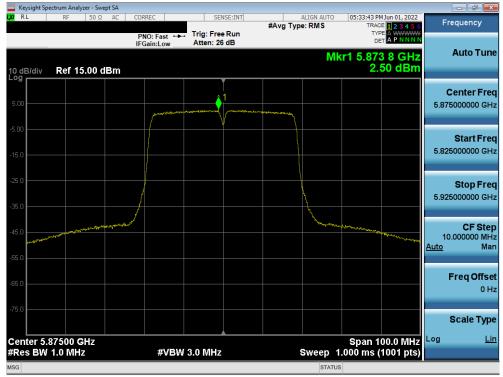
Plot 7-360. Power Spectral Density ANT2 (40MHz BW 802.11n (UNII Band 4) - Ch. 175)

FCC ID: A3LSMF721JPN		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Do ac 222 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 222 of 305





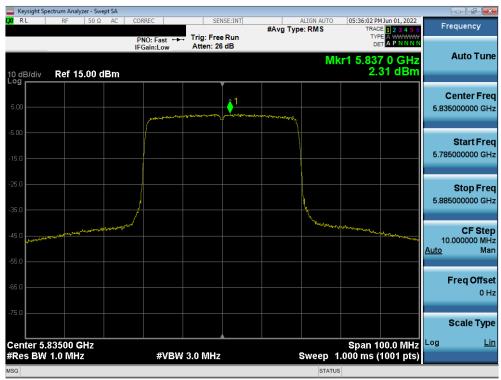
Plot 7-361. Power Spectral Density ANT2 (40MHz BW 802.11ac (UNII Band 3/4) - Ch. 167)



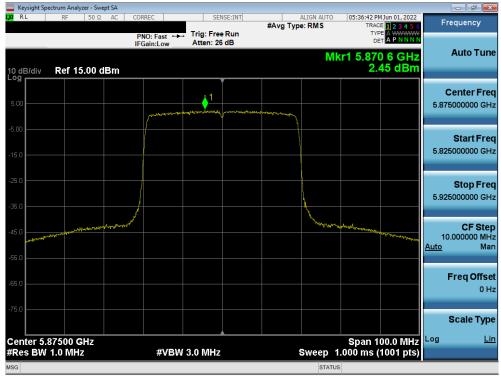
Plot 7-362. Power Spectral Density ANT2 (40MHz BW 802.11ac (UNII Band 4) - Ch. 175)

FCC ID: A3LSMF721JPN		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogg 222 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 223 of 305





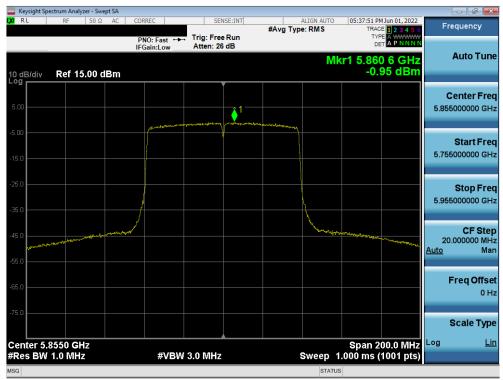
Plot 7-363. Power Spectral Density ANT2 (40MHz BW 802.11ax (UNII Band 3/4) - Ch. 167)



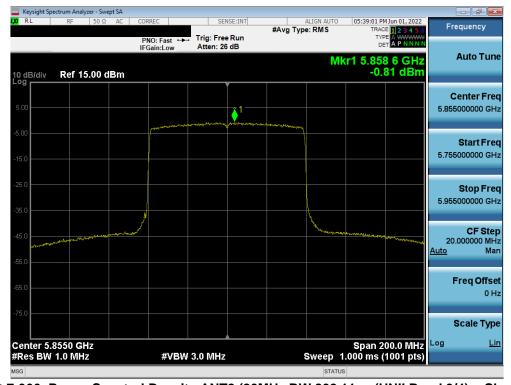
Plot 7-364. Power Spectral Density ANT2 (40MHz BW 802.11ax (UNII Band 4) - Ch. 175)

FCC ID: A3LSMF721JPN		MEASUREMENT REPORT (CERTIFICATION)	
Test Report S/N:	Test Dates:	EUT Type:	Dogo 224 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 224 of 305





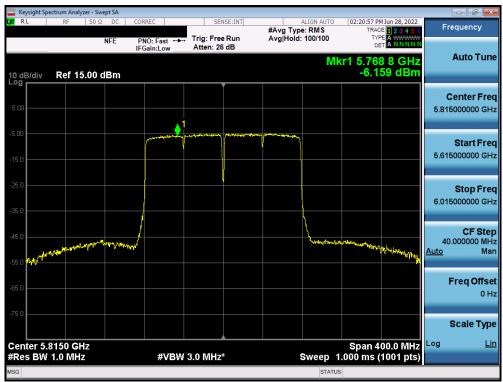
Plot 7-365. Power Spectral Density ANT2 (80MHz BW 802.11ac (UNII Band 3/4) - Ch. 171)



Plot 7-366. Power Spectral Density ANT2 (80MHz BW 802.11ax (UNII Band 3/4) - Ch. 171)

FCC ID: A3LSMF721JPN		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Dogg 225 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 225 of 305





Plot 7-367. Power Spectral Density ANT2 (160MHz BW 802.11ac (UNII Band 3/4) - Ch. 163)



Plot 7-368. Power Spectral Density ANT2 (160MHz BW 802.11ax (UNII Band 3/4) - Ch. 163)

FCC ID: A3LSMF721JPN	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogg 226 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 226 of 305



# **Summed MIMO Power Spectral Density Measurements**

	Frequency [MHz]	Channel No.	802.11 Mode	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	а	6	6.15	6.45	9.31	11.0	-1.69
	5200	40	а	6	5.93	6.47	9.22	11.0	-1.78
	5240	48	а	6	5.66	5.89	8.79	11.0	-2.21
	5180	36	n (20MHz)	6.5/7.2 (MCS0)	6.82	6.35	9.60	11.0	-1.40
	5200	40	n (20MHz)	6.5/7.2 (MCS0)	5.72	6.46	9.12	11.0	-1.88
	5240	48	n (20MHz)	6.5/7.2 (MCS0)	5.82	6.07	8.96	11.0	-2.04
_	5180	36	ax (20MHz)	6.5/7.2 (MCS0)	5.17	4.02	7.64	11.0	-3.36
, E	5200	40	ax (20MHz)	6.5/7.2 (MCS0)	5.03	4.38	7.73	11.0	-3.27
Band	5240	48	ax (20MHz)	6.5/7.2 (MCS0)	4.87	3.40	7.21	11.0	-3.79
	5190	38	n (40MHz)	13.5/15 (MCS0)	2.32	0.91	4.68	11.0	-6.32
	5230	46	n (40MHz)	13.5/15 (MCS0)	2.16	0.94	4.60	11.0	-6.40
	5190	38	ax (40MHz)	` ,	1.96	0.88	4.46	11.0	-6.54
		46	` ,	13.5/15 (MCS0)		0.66	4.46	11.0	-6.88
	5230		ax (40MHz)	13.5/15 (MCS0)	1.66				
	5210	42	ac (80MHz)	29.3/32.5 (MCS0)	-6.28	-1.81	-0.48	11.0	-11.48
T .	5210	42	ax (80MHz)	29.3/32.5 (MCS0)	-0.52	-1.52	2.02	11.0	-8.98
Band 1/2A	5250	50	ac (160MHz)	58.5/65 (MCS0)	-3.62	-3.69	-0.64	11.0	-11.64
B 1	5250	50	ax (160MHz)	58.5/65 (MCS0)	-6.96	-3.54	-1.91	11.0	-12.91
	5260	52	а	6	5.41	5.64	8.54	11.0	-2.46
	5280	56	а	6	5.51	5.31	8.42	11.0	-2.58
	5320	64	а	6	5.31	5.45	8.39	11.0	-2.61
	5260	52	n (20MHz)	6.5/7.2 (MCS0)	5.78	6.45	9.14	11.0	-1.86
	5280	56	n (20MHz)	6.5/7.2 (MCS0)	5.99	5.61	8.81	11.0	-2.19
	5320	64	n (20MHz)	6.5/7.2 (MCS0)	5.23	6.29	8.81	11.0	-2.19
2A	5260	52	ax (20MHz)	6.5/7.2 (MCS0)	4.21	3.45	6.86	11.0	-4.14
Band	5280	56	ax (20MHz)	6.5/7.2 (MCS0)	4.60	3.41	7.06	11.0	-3.94
Ва	5320	64	ax (20MHz)	6.5/7.2 (MCS0)	4.73	3.05	6.98	11.0	-4.02
	5270	54	n (40MHz)	13.5/15 (MCS0)	2.02	0.81	4.47	11.0	-6.53
	5310	62	n (40MHz)	13.5/15 (MCS0)	2.29	0.64	4.55	11.0	-6.45
	5270	54	ax (40MHz)	13.5/15 (MCS0)	2.05	1.18	4.65	11.0	-6.35
	5310	62	ax (40MHz)	13.5/15 (MCS0)	2.04	0.74	4.45	11.0	-6.55
	5290	58	ac (80MHz)	29.3/32.5 (MCS0)	-2.12	-1.99	0.96	11.0	-10.04
	5290	58	ax (80MHz)	29.3/32.5 (MCS0)	-1.09	-2.32	1.35	11.0	-9.65
	5500	100	a a	6	5.90	5.64	8.78	11.0	-2.22
	5600	120	а	6	6.08	5.99	9.05	11.0	-1.95
	5720	144	a	6	5.97	6.00	9.00	11.0	-2.00
	5500	100	n (20MHz)	6.5/7.2 (MCS0)	5.45	5.66	8.57	11.0	-2.43
	5600	120	n (20MHz)	, ,	5.45	6.44	9.21	11.0	-1.79
			, ,	6.5/7.2 (MCS0)					1
	5720	144	n (20MHz)	6.5/7.2 (MCS0)	5.93	6.05	9.00	11.0	-2.00
	5500	100	ax (20MHz)	6.5/7.2 (MCS0)	4.51	2.92	6.80	11.0	-4.20
	5600	120	ax (20MHz)	6.5/7.2 (MCS0)	4.87	3.84	7.40	11.0	-3.60
	5720	144	ax (20MHz)	6.5/7.2 (MCS0)	4.66	3.91	7.31	11.0	-3.69
	5510	102	n (40MHz)	13.5/15 (MCS0)	1.95	1.07	4.54	11.0	-6.46
120	5590	118	n (40MHz)	13.5/15 (MCS0)	2.24	1.05	4.70	11.0	-6.30
Band 3	5710	142	n (40MHz)	13.5/15 (MCS0)	2.07	1.16	4.65	11.0	-6.35
Ö	5510	102	ax (40MHz)	13.5/15 (MCS0)	2.11	0.28	4.30	11.0	-6.70
	5590	118	ax (40MHz)	13.5/15 (MCS0)	2.14	0.80	4.53	11.0	-6.47
	5710	142	ax (40MHz)	13.5/15 (MCS0)	2.37	0.98	4.74	11.0	-6.26
	5530	106	ac (80MHz)	29.3/32.5 (MCS0)	-2.22	-2.22	0.79	11.0	-10.21
	5610	122	ac (80MHz)	29.3/32.5 (MCS0)	-2.18	-1.83	1.01	11.0	-9.99
	5690	138	ac (80MHz)	29.3/32.5 (MCS0)	-2.60	-1.76	0.85	11.0	-10.15
	5530	106	ax (80MHz)	29.3/32.5 (MCS0)	-1.19	-2.58	1.18	11.0	-9.82
	5610	122	ax (80MHz)	29.3/32.5 (MCS0)	-1.29	-2.09	1.34	11.0	-9.66
	5690	138	ax (80MHz)	29.3/32.5 (MCS0)	-1.12	-1.86	1.54	11.0	-9.46
	5570	114	ac (160MHz)	58.5/65 (MCS0)	-3.37	-4.20	-0.75	11.0	-11.75
			. ,	58.5/65 (MCS0)	-6.50	-3.94	-2.02	11.0	-13.02

Table 7-29. Bands 1, 2A, 2C MIMO Conducted Power Spectral Density Measurements

FCC ID: A3LSMF721JPN	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 227 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 227 of 305



	Frequency [MHz]	Channel No.	802.11 Mode	Data Rate [Mbps]	Antenn-1 Power Density [dBm]	Antenn-2 Power Density [dBm]	Summed MIMO Power Density [dBm]	Max Permissible Power Density [dBm/500kHz]	Margin [dB]
	5745	149	а	6	1.72	2.54	5.16	30.0	-24.84
	5785	157	а	6	3.02	3.26	6.15	30.0	-23.85
	5825	165	а	6	2.87	3.07	5.98	30.0	-24.02
	5745	149	n (20MHz)	6.5/7.2 (MCS0)	3.21	3.40	6.32	30.0	-23.68
	5785	157	n (20MHz)	6.5/7.2 (MCS0)	2.99	3.58	6.31	30.0	-23.69
	5825	165	n (20MHz)	6.5/7.2 (MCS0)	2.86	3.14	6.01	30.0	-23.99
က	5745	149	ax (20MHz)	6.5/7.2 (MCS0)	1.81	1.03	4.45	30.0	-25.55
Band	5785	157	ax (20MHz)	6.5/7.2 (MCS0)	1.86	1.09	4.50	30.0	-25.50
ä	5825	165	ax (20MHz)	6.5/7.2 (MCS0)	2.27	1.22	4.79	30.0	-25.21
	5755	151	n (40MHz)	13.5/15 (MCS0)	-0.43	-1.86	1.92	30.0	-28.08
	5795	159	n (40MHz)	13.5/15 (MCS0)	-0.62	-1.71	1.88	30.0	-28.12
	5755	151	ax (40MHz)	13.5/15 (MCS0)	-1.11	-2.29	1.35	30.0	-28.65
	5795	159	ax (40MHz)	13.5/15 (MCS0)	-0.96	-1.97	1.57	30.0	-28.43
	5775	155	ac (80MHz)	29.3/32.5 (MCS0)	-5.78	-3.70	-1.61	30.0	-31.61
	5775	155	ax (80MHz)	29.3/32.5 (MCS0)	-5.73	-4.79	-2.22	30.0	-32.22

Table 7-30. Band 3 MIMO Conducted Power Spectral Density Measurements

	Frequency [MHz]	Channel No.	802.11 Mode	Data Rate [Mbps]	Antenna-1 Power Density [dBm/MHz]	Antenna-2 Power Density [dBm/MHz]	MIMO Summed Power Density [dBm/MHz]	Directional Antenna Gain [dBi]	EIRP Power Density [dBm/MHz]	Max EIRP Power Density [dBm/MHz]	Margin [dB]
Band 3/4	5845	169	а	6	6.38	6.65	9.53	-2.48	7.05	14.00	-6.95
Band 4	5865	173	а	6	6.36	6.80	9.60	-2.48	7.12	14.00	-6.88
Danu 4	5885	177	а	6	6.67	6.75	9.72	-2.48	7.25	14.00	-6.75
Band 3/4	5845	169	n (20MHz)	6.5/7.2 (MCS0)	5.91	6.22	9.08	-2.48	6.60	14.00	-7.40
Band 4	5865	173	n (20MHz)	6.5/7.2 (MCS0)	5.89	6.43	9.18	-2.48	6.70	14.00	-7.30
Danu 4	5885	177	n (20MHz)	6.5/7.2 (MCS0)	6.18	6.43	9.32	-2.48	6.84	14.00	-7.16
Band 3/4	5845	169	ac (20MHz)	6.5/7.2 (MCS0)	5.94	6.40	9.19	-2.48	6.71	14.00	-7.29
Band 4	5865	173	ac (20MHz)	6.5/7.2 (MCS0)	5.91	6.38	9.16	-2.48	6.69	14.00	-7.31
Danu 4	5885	177	ac (20MHz)	6.5/7.2 (MCS0)	6.38	6.41	9.41	-2.48	6.93	14.00	-7.07
Band 3/4	5845	169	ax (20MHz)	6.5/7.2 (MCS0)	4.98	4.88	7.94	-2.48	5.47	14.00	-8.53
Band 4	5865	173	ax (20MHz)	6.5/7.2 (MCS0)	5.25	4.77	8.03	-2.48	5.55	14.00	-8.45
Dallu 4	5885	177	ax (20MHz)	6.5/7.2 (MCS0)	5.32	4.85	8.10	-2.48	5.63	14.00	-8.37
Band 3/4	5835	167	n (40MHz)	13.5/15 (MCS0)	2.50	2.75	5.64	-2.48	3.16	14.00	-10.84
Band 4	5875	175	n (40MHz)	13.5/15 (MCS0)	2.52	2.59	5.57	-2.48	3.09	14.00	-10.91
Band 3/4	5835	167	ac (40MHz)	13.5/15 (MCS0)	2.50	2.32	5.42	-2.48	2.95	14.00	-11.05
Band 4	5875	175	ac (40MHz)	13.5/15 (MCS0)	2.63	2.50	5.58	-2.48	3.10	14.00	-10.90
Band 3/4	5835	167	ax (40MHz)	13.5/15 (MCS0)	2.23	2.31	5.28	-2.48	2.81	14.00	-11.19
Band 4	5875	175	ax (40MHz)	13.5/15 (MCS0)	2.24	2.45	5.36	-2.48	2.88	14.00	-11.12
	5855	171	ac (80MHz)	29.3/32.5 (MCS0)	-1.97	-0.95	1.58	-2.48	-0.90	14.00	-14.90
Band 3/4	5855	171	ax (80MHz)	29.3/32.5 (MCS0)	-0.86	-0.81	2.18	-2.48	-0.30	14.00	-14.30
Dd110 3/4	5815	163	ac (160MHz)	58.5/65 (MCS0)	-6.78	-6.16	-3.45	-2.48	-5.92	14.00	-19.92
	5815	163	ax (160MHz)	58.5/65 (MCS0)	-5.41	-3.11	-1.10	-2.48	-3.58	14.00	-17.58

Table 7-31. Band 4 MIMO e.i.r.p Power Spectral Density Measurements

FCC ID: A3LSMF721JPN	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Do ac 220 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 228 of 305



#### 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 as shown in the section above. The measured values were then summed in linear power units then converted back to dBm.

#### **Sample MIMO Calculation:**

At 5180MHz in 802.11n (20MHz BW) mode, the average conducted power spectral density was measured to be 6.82 dBm for Antenna 1 and 6.35 dBm for Antenna 2.

$$(6.82 \text{ dBm} + 6.35 \text{ dBm}) = (4.81 \text{ mW} + 4.32 \text{ mW}) = 9.13 \text{ mW} = 9.60 \text{ dBm}$$

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

At 5180MHz in 802.11n (20MHz BW) mode, the average MIMO power density was calculated to be 9.60 dBm with directional gain of -2.31 dBi.

$$9.60 \text{ dBm} + -2.31 \text{ dBi} = 7.29 \text{ dBm}$$

FCC ID: A3LSMF721JPN	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogg 220 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 229 of 305



# 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. 802.11a, 802.11n (20MHz BW), 802.11n (40MHz BW), and 802.11ac (80MHz)), 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 7-32 per Section 15.209 and RSS-Gen (8.9).

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

Table 7-32. Radiated Limits

### **Test Procedures Used**

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

#### **Test Settings**

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

- 1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
- 2. RBW = 1MHz
- 3. VBW = 3MHz
- 4. Detector = power average (RMS)
- 5. Number of measurement points = 1001 (Number of points must be  $\geq 2 \times \text{span/RBW}$ )

FCC ID: A3LSMF721JPN	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogg 220 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 230 of 305



- 6. 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.

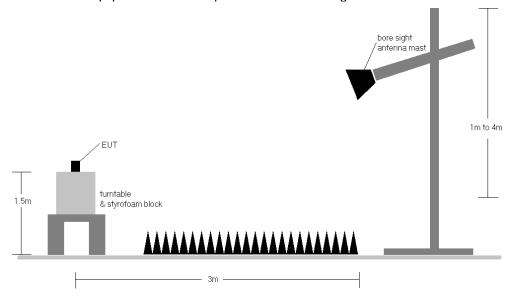


Figure 7-5. Test Instrument & Measurement Setup

FCC ID: A3LSMF721JPN		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Dogo 224 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 231 of 305



#### **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 7-32.
- 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 7-32. 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. Radiated spurious emissions were investigated while operating in MIMO mode, however, it was determined that single antenna operation produced the worst case emissions. Since the emissions produced from MIMO operation were found to be more than 20dB below the limit, the MIMO emissions are not reported.
- 8. 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.
- 9. The "-" shown in the following RSE tables are used to denote a noise floor measurement.

#### **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]
- o Margin [dB] = Field Strength Level [dB $\mu$ V/m] Limit [dB $\mu$ V/m]

#### Radiated Band Edge Measurement Offset

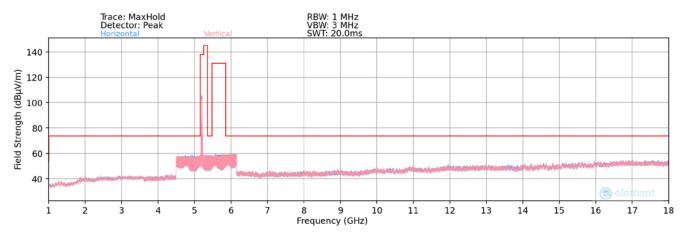
 The amplitude offset shown in the radiated restricted band edge plots was calculated using the formula:

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

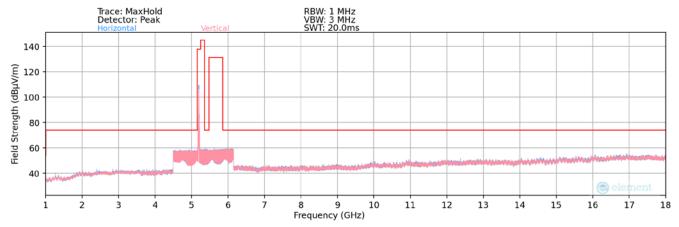
FCC ID: A3LSMF721JPN		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Dags 222 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 232 of 305



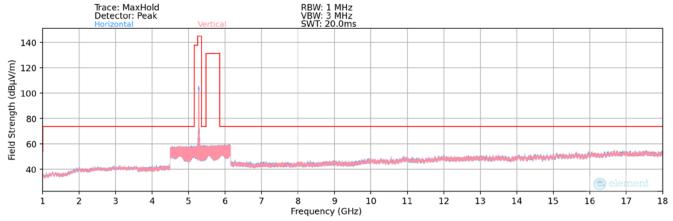
## 7.6.1 SISO Antenna-1 Radiated Spurious Emission Measurements



Plot 7-369. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11a - U1 Ch. 40) - Closed



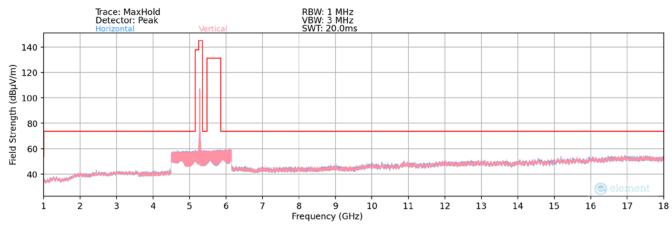
Plot 7-370. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11a - U1 Ch. 40) - Half Open



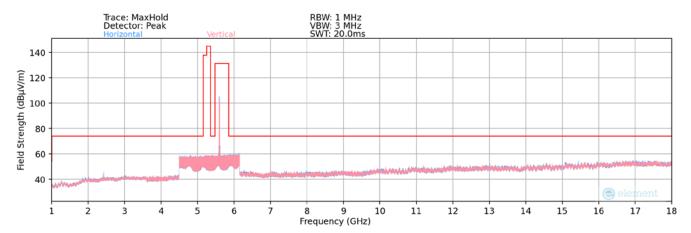
Plot 7-371. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11a - U2A Ch. 56) - Closed

FCC ID: A3LSMF721JPN	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogg 222 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 233 of 305

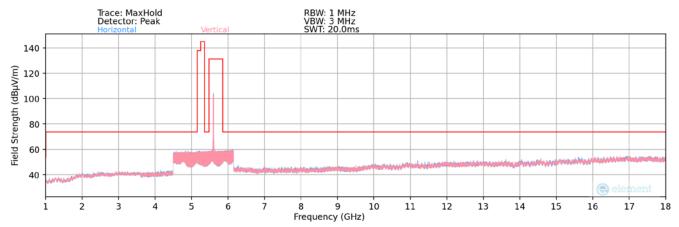




Plot 7-372. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11a – U2A Ch. 56) – Half Open



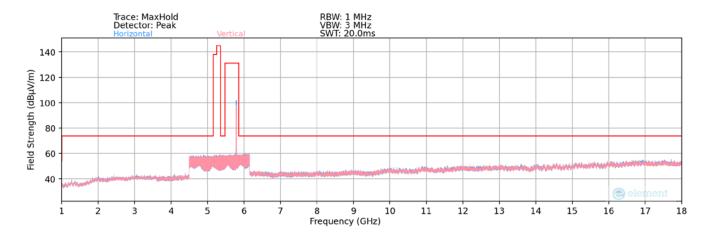
Plot 7-373. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11a - U2C Ch. 120) - Closed



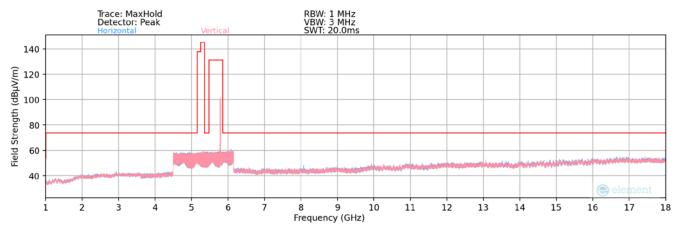
Plot 7-374. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11a - U2C Ch. 120) - Half Open

FCC ID: A3LSMF721JPN	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 224 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 234 of 305

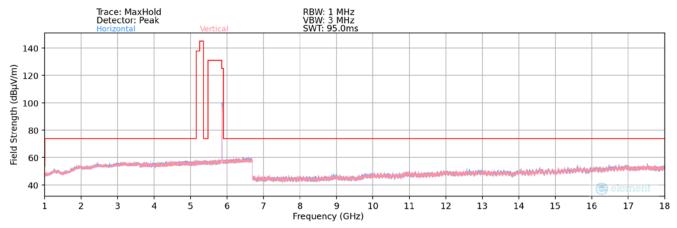




Plot 7-375. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11a - U3 Ch. 157) - Closed



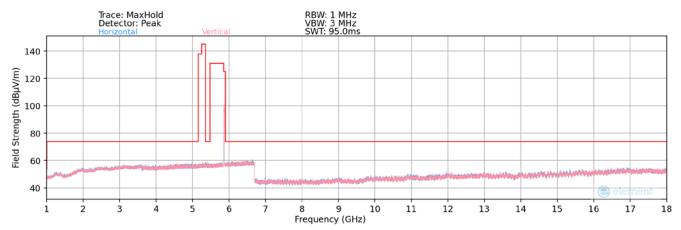
Plot 7-376. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11a - U3 Ch. 157) - Half Open



Plot 7-377. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11a - U4 Ch. 173) - Closed

FCC ID: A3LSMF721JPN	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogg 225 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 235 of 305



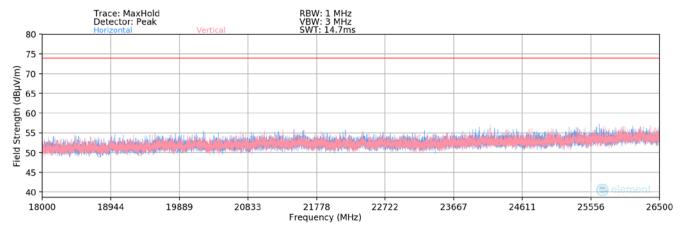


Plot 7-378. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11a - U4 Ch. 173) - Half Open

FCC ID: A3LSMF721JPN	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 226 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 236 of 305



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



Plot 7-379. Radiated Spurious Plot 18GHz - 26.5GHz SISO ANT1 (802.11a) - Closed



Plot 7-380. Radiated Spurious Plot 18GHz - 26.5GHz SISO ANT1 (802.11a) - Half Open

FCC ID: A3LSMF721JPN	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogg 227 of 205
1M2206140073-11-R1.A3L	4/8/2022 - 7/30/2022	Portable Handset	Page 237 of 305