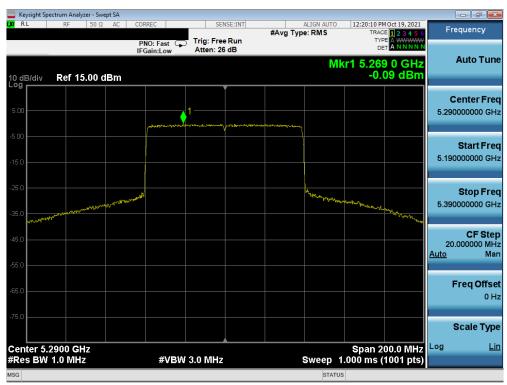


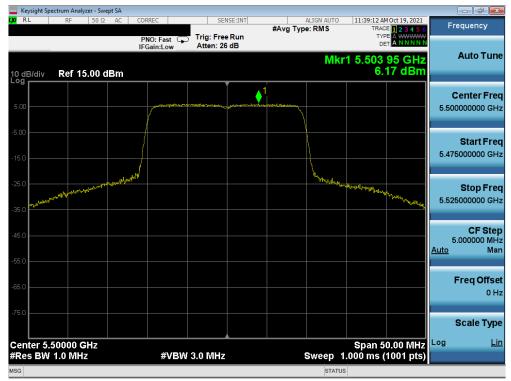
Plot 7-242. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax - Full Tones (UNII Band 2A) - Ch. 62)



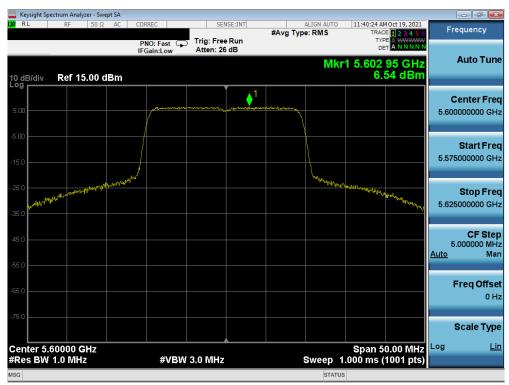
Plot 7-243. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ax - Full Tones (UNII Band 2A) - Ch. 58)

FCC ID: A3LSMS901E	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 186 of 309
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset	rage 100 01 309





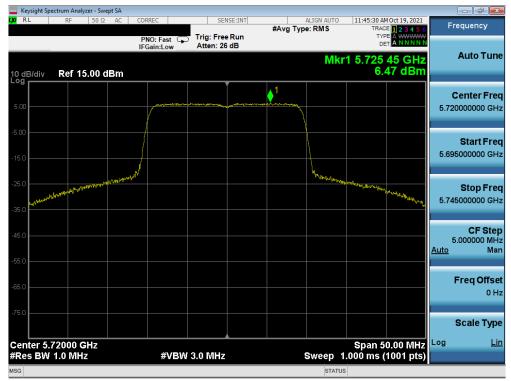
Plot 7-244. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 100)



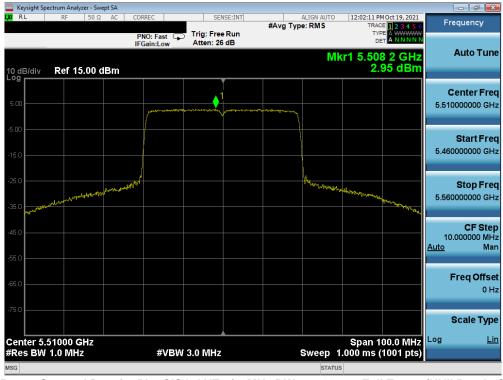
Plot 7-245. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 120)

FCC ID: A3LSMS901E	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 197 of 200
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset	Page 187 of 309





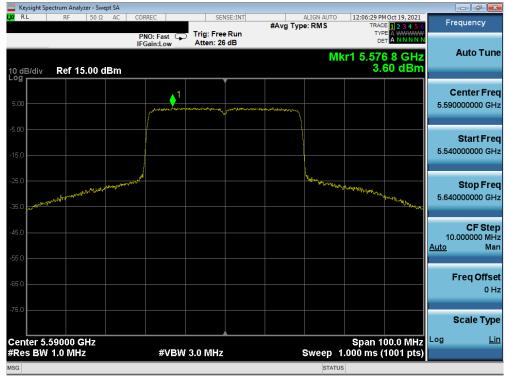
Plot 7-246. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 144)



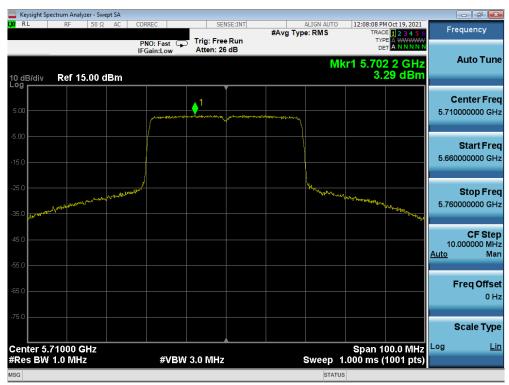
Plot 7-247. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 102)

FCC ID: A3LSMS901E	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogg 199 of 200
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset	Page 188 of 309





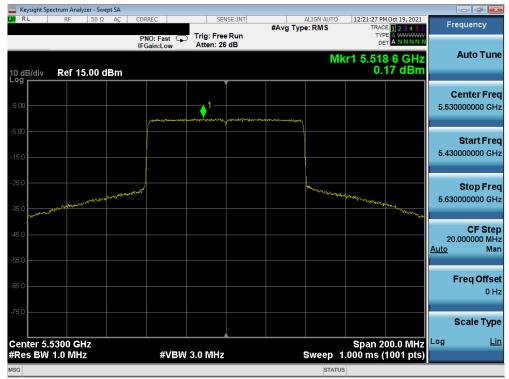
Plot 7-248. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 118)



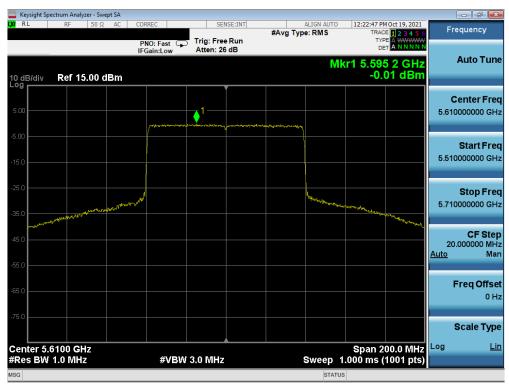
Plot 7-249. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 142)

FCC ID: A3LSMS901E	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogg 190 of 200
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset	Page 189 of 309





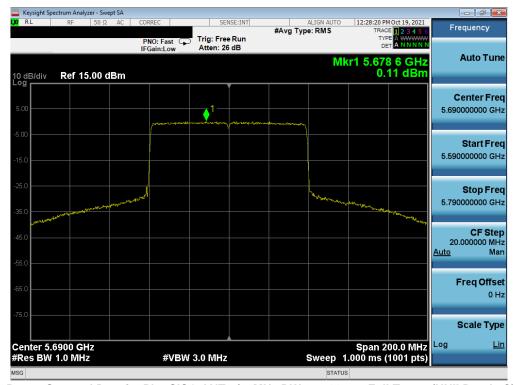
Plot 7-250. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 106)



Plot 7-251. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 122)

FCC ID: A3LSMS901E	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogg 100 of 200
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset	Page 190 of 309





Plot 7-252. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ax - Full Tones (UNII Band 2C) - Ch. 138)

FCC ID: A3LSMS901E	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 101 of 200
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset	Page 191 of 309

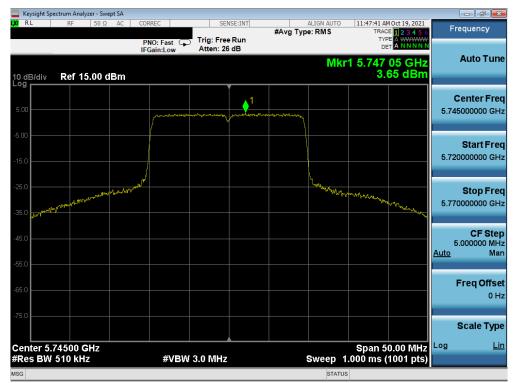


	Frequency [MHz]	Channel No.	802.11 Mode	Tones	Data Rate [Mbps]	Measured Power Density [dBm]	Max Permissible Power Density [dBm/500kHz]	Margin [dB]
	5745	149	ax (20MHz)	242T	MCS0	3.65	30.00	-26.35
	5785	157	ax (20MHz)	242T	MCS0	3.10	30.00	-26.90
5 pc	5825	165	ax (20MHz)	242T	MCS0	3.61	30.00	-26.39
Band	5755	151	ax (40MHz)	484T	MCS0	0.30	30.00	-29.70
	5795	159	ax (40MHz)	484T	MCS0	0.24	30.00	-29.76
	5775	155	ax (80MHz)	996T	MCS0	-3.24	30.00	-33.24

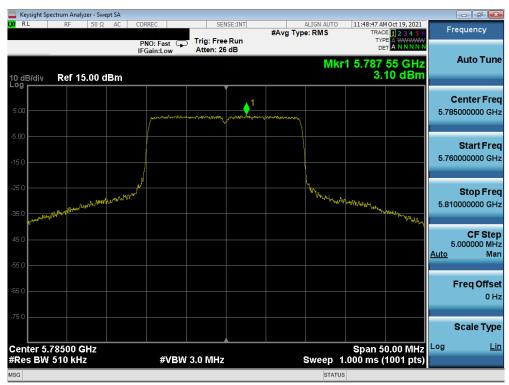
Table 7-72. Band 3 Conducted Power Spectral Density Measurements SISO ANT2 (Full Tones)

FCC ID: A3LSMS901E	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogg 102 of 200
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset	Page 192 of 309





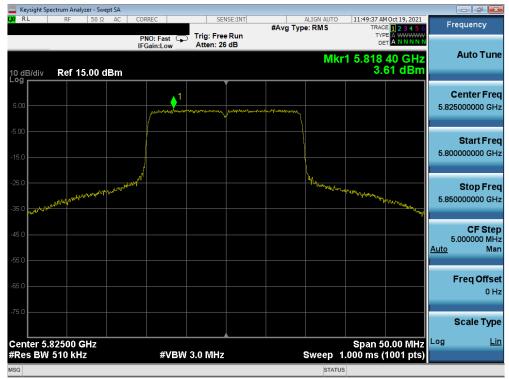
Plot 7-253. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax - Full Tones (UNII Band 3) - Ch. 149)



Plot 7-254. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax - Full Tones (UNII Band 3) - Ch. 157)

FCC ID: A3LSMS901E	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogg 102 of 200
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset	Page 193 of 309





Plot 7-255. Power Spectral Density Plot SISO ANT2 (20 MHz BW 802.11ax - Full Tones (UNII Band 3) - Ch. 165)



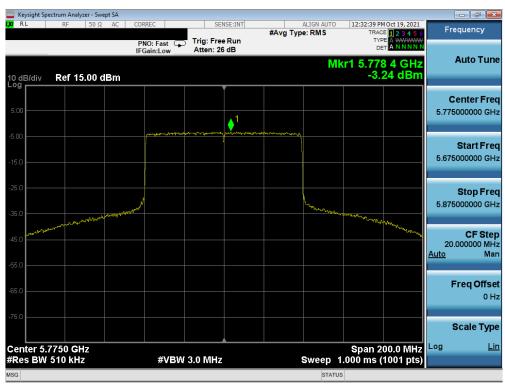
Plot 7-256. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax - Full Tones (UNII Band 3) - Ch. 151)

FCC ID: A3LSMS901E	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 104 of 200
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset	Page 194 of 309





Plot 7-257. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax - Full Tones (UNII Band 3) - Ch. 159)



Plot 7-258. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ax - Full Tones (UNII Band 3) - Ch. 155)

FCC ID: A3LSMS901E	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 105 of 200
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset	Page 195 of 309

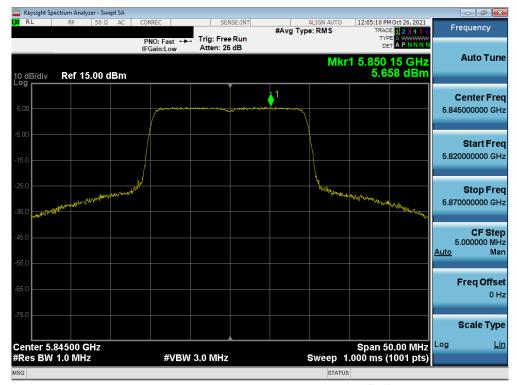


	Frequency [MHz]	Channel No.	802.11 Mode	Tones	Data Rate [Mbps]	Measured Power Density [dBm/MHz]	Max Permissible Power Density [dBm/500kHz]	Margin [dB]	Antenna Gain [dBi]	EIRP Power Density [dBm/MHz]	Max EIRP Power Density [dBm/MHz]	Margin [dB]
Band 3/4	5845	169	ax (20MHz)	242T	MCS0	5.66	30.00	-24.34	-7.80	-2.14	14.00	-16.14
Band 4	5865	173	ax (20MHz)	242T	MCS0	5.83			-7.80	-1.97	14.00	-15.97
Dallu 4	5885	177	ax (20MHz)	242T	MCS0	5.99			-7.80	-1.81	14.00	-15.81
Band 3/4	5835	167	ax (40MHz)	484T	MCS0	2.78	30.00	-27.23	-7.80	-5.03	14.00	-19.03
Band 4	5875	175	ax (40MHz)	484T	MCS0	3.01			-7.80	-4.79	14.00	-18.79
Band 3/4	5855	171	ax (80MHz)	996T	MCS0	-0.36	30.00	-30.36	-7.80	-8.16	14.00	-22.16

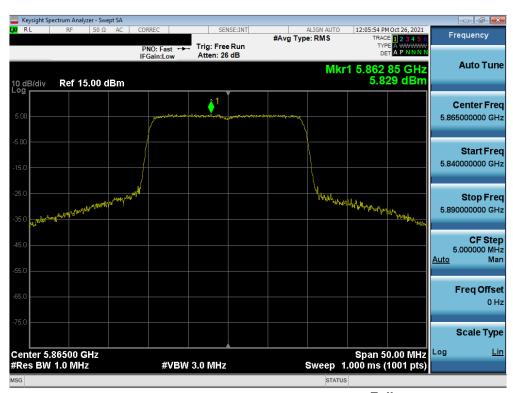
Table 7-73. Band 4 Conducted Power Spectral Density Measurements SISO ANT2 (Full Tones)

FCC ID: A3LSMS901E	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 196 of 309
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset	Fage 190 01 309





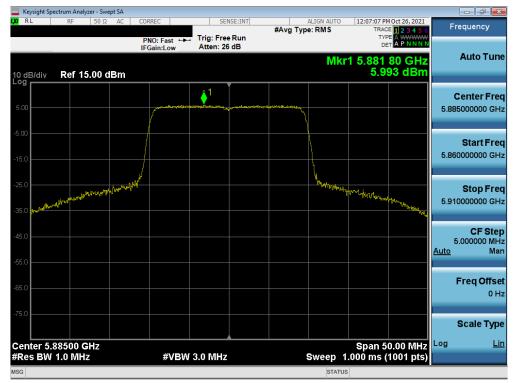
Plot 7-259. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax - Full Tones (UNII Band 3/4) - Ch. 169)



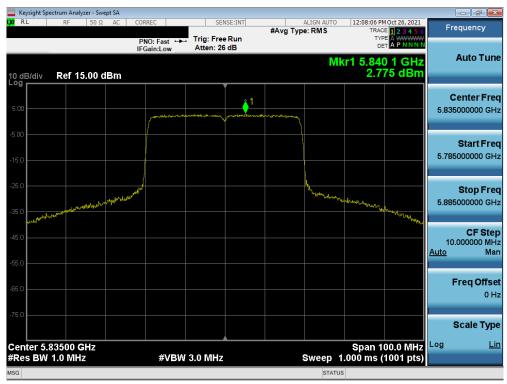
Plot 7-260. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax - Full Tones (UNII Band 4) - Ch. 173)

FCC ID: A3LSMS901E	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 107 of 200
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset	Page 197 of 309





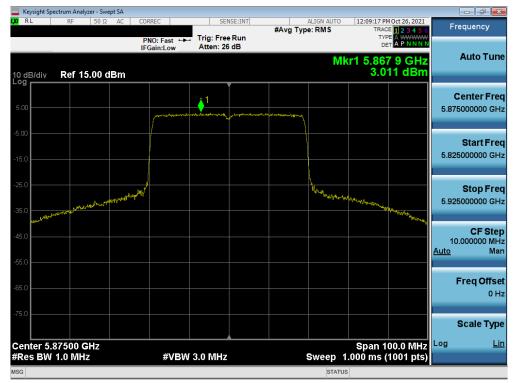
Plot 7-261. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11ax - Full Tones (UNII Band 4) - Ch. 177)



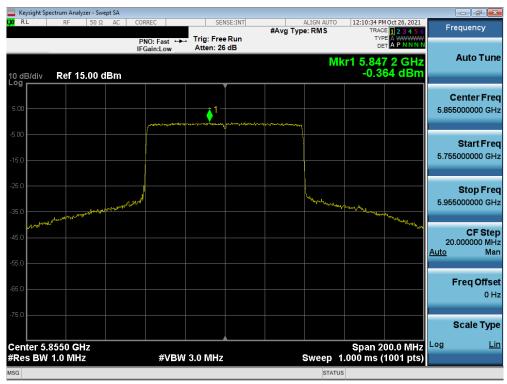
Plot 7-262. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax - Full Tones (UNII Band 3/4) - Ch. 167)

FCC ID: A3LSMS901E	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 109 of 200
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset	Page 198 of 309





Plot 7-263. Power Spectral Density Plot SISO ANT2 (40MHz BW 802.11ax - Full Tones (UNII Band 4) - Ch. 175)



Plot 7-264. Power Spectral Density Plot SISO ANT2 (80MHz BW 802.11ax - Full Tones (UNII Band 3/4) - Ch. 171)

FCC ID: A3LSMS901E	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 199 of 309
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset	Fage 199 01 309



# **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	7.79	7.31	10.57	11.00	-0.43
_	5200	40	ax (20MHz)	26T	MCS0	7.95	7.30	10.64	11.00	-0.36
<u>5</u>	5240	48	ax (20MHz)	26T	MCS0	7.81	7.80	10.81	11.00	-0.19
Band	5190	38	ax (40MHz)	26T	MCS0	7.97	7.44	10.72	11.00	-0.28
	5230	46	ax (40MHz)	26T	MCS0	7.81	7.74	10.79	11.00	-0.21
	5210	42	ax (80MHz)	26T	MCS0	7.94	7.41	10.69	11.00	-0.31
	5260	52	ax (20MHz)	26T	MCS0	8.00	7.91	10.97	11.00	-0.03
a	5280	56	ax (20MHz)	26T	MCS0	7.89	8.02	10.96	11.00	-0.04
d 2A	5320	64	ax (20MHz)	26T	MCS0	7.97	7.82	10.90	11.00	-0.10
Band	5270	54	ax (40MHz)	26T	MCS0	7.84	7.62	10.75	11.00	-0.25
ш	5310	62	ax (40MHz)	26T	MCS0	7.97	7.72	10.86	11.00	-0.14
	5290	58	ax (80MHz)	26T	MCS0	7.85	7.86	10.87	11.00	-0.13
	5500	100	ax (20MHz)	26T	MCS0	7.88	7.86	10.88	11.00	-0.12
	5600	120	ax (20MHz)	26T	MCS0	7.98	7.77	10.89	11.00	-0.11
	5720	144	ax (20MHz)	26T	MCS0	7.81	8.06	10.95	11.00	-0.05
20	5510	102	ax (40MHz)	26T	MCS0	7.84	8.08	10.97	11.00	-0.03
Band	5590	118	ax (40MHz)	26T	MCS0	7.91	7.80	10.87	11.00	-0.13
Ba	5710	142	ax (40MHz)	26T	MCS0	7.86	7.79	10.84	11.00	-0.16
	5530	106	ax (80MHz)	26T	MCS0	7.81	7.83	10.83	11.00	-0.17
	5610	122	ax (80MHz)	26T	MCS0	7.93	7.67	10.81	11.00	-0.19
	5690	138	ax (80MHz)	26T	MCS0	7.93	7.52	10.74	11.00	-0.26

Table 7-74. Bands 1, 2A, 2C 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]	Antenna-2 Power Density [dBm]	Summed MIMO Power Density [dBm]	Max Permissible Power Density	Margin [dB]
	5745	149	ax (20MHz)	26T	MCS0	5.17	7.29	9.37	30.00	-20.63
	5785	157	ax (20MHz)	26T	MCS0	5.05	6.98	9.13	30.00	-20.87
3	5825	165	ax (20MHz)	26T	MCS0	4.82	7.08	9.10	30.00	-20.90
Band	5755	151	ax (40MHz)	26T	MCS0	5.37	7.02	9.28	30.00	-20.72
_	5795	159	ax (40MHz)	26T	MCS0	5.09	6.73	9.00	30.00	-21.00
	5775	155	ax (80MHz)	26T	MCS0	6.61	7.13	9.89	30.00	-20.11

Table 7-75. 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	7.36	8.63	11.05	30.00	-18.95	-3.95	7.10	14.00	-6.90
Band 4	5865	173	ax (20MHz)	26T	MCS0	8.78	7.72	11.29			-3.95	7.34	14.00	-6.66
band 4	5885	177	ax (20MHz)	26T	MCS0	6.08	7.41	9.80			-3.95	5.85	14.00	-8.15
Band 3/4	5835	167	ax (40MHz)	26T	MCS0	8.75	8.52	11.65	30.00	-18.35	-3.95	7.70	14.00	-6.30
Band 4	5875	175	ax (40MHz)	26T	MCS0	8.40	8.39	11.40			-3.95	7.45	14.00	-6.55
Band 3/4	5855	171	ax (80MHz)	26T	MCS0	13.43	8.31	14.59	30.00	-15.41	-3.95	10.64	14.00	-3.36

Table 7-76. Band 4 MIMO Conducted Power Spectral Density Measurements MIMO (26 Tones)

FCC ID: A3LSMS901E	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 200 of 309
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset	Page 200 01 309



	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	4.77	7.01	9.04	11.00	-1.96
	5200	40	ax (20MHz)	242T	MCS0	4.83	7.09	9.12	11.00	-1.88
Band 1	5240	48	ax (20MHz)	242T	MCS0	4.87	7.10	9.14	11.00	-1.86
Ban	5190	38	ax (40MHz)	484T	MCS0	3.91	3.80	6.87	11.00	-4.13
	5230	46	ax (40MHz)	484T	MCS0	4.16	3.76	6.98	11.00	-4.02
	5210	42	ax (80MHz)	996T	MCS0	0.76	0.18	3.49	11.00	-7.51
	5260	52	ax (20MHz)	242T	MCS0	4.98	6.87	9.04	11.00	-1.96
	5280	56	ax (20MHz)	242T	MCS0	4.84	6.77	8.92	11.00	-2.08
Band 2A	5320	64	ax (20MHz)	242T	MCS0	4.76	6.26	8.58	11.00	-2.42
Banc	5270	54	ax (40MHz)	484T	MCS0	3.98	3.49	6.75	11.00	-4.25
	5310	62	ax (40MHz)	484T	MCS0	3.84	3.13	6.51	11.00	-4.49
	5290	58	ax (80MHz)	996T	MCS0	0.57	-0.09	3.26	11.00	-7.74
	5500	100	ax (20MHz)	242T	MCS0	4.27	6.17	8.33	11.00	-2.67
	5600	120	ax (20MHz)	242T	MCS0	5.19	6.54	8.93	11.00	-2.07
	5720	144	ax (20MHz)	242T	MCS0	4.34	6.47	8.54	11.00	-2.46
ပ္က	5510	102	ax (40MHz)	484T	MCS0	3.50	2.95	6.25	11.00	-4.75
Band 2C	5590	118	ax (40MHz)	484T	MCS0	3.41	3.60	6.52	11.00	-4.48
B	5710	142	ax (40MHz)	484T	MCS0	3.14	3.29	6.23	11.00	-4.77
	5530	106	ax (80MHz)	996T	MCS0	0.52	0.17	3.36	11.00	-7.64
	5610	122	ax (80MHz)	996T	MCS0	0.20	-0.01	3.11	11.00	-7.89
	5690	138	ax (80MHz)	996T	MCS0	0.13	0.11	3.13	11.00	-7.87

Table 7-77. 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 [dBm/500kHz]	Margin [dB]
	5745	149	ax (20MHz)	242T	MCS0	2.89	3.65	6.30	30.00	-23.70
	5785	157	ax (20MHz)	242T	MCS0	2.75	3.10	5.94	30.00	-24.06
е В	5825	165	ax (20MHz)	242T	MCS0	2.76	3.61	6.22	30.00	-23.78
Band	5755	151	ax (40MHz)	484T	MCS0	0.56	0.30	3.44	30.00	-26.56
	5795	159	ax (40MHz)	484T	MCS0	0.49	0.24	3.38	30.00	-26.62
	5775	155	ax (80MHz)	996T	MCS0	-2.92	-3.24	-0.06	30.00	-30.06

Table 7-78. 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	6.43	5.66	9.07	30.00	-20.93	-3.95	5.12	14.00	-8.88
Band 4	5865	173	ax (20MHz)	242T	MCS0	6.33	5.83	9.10			-3.95	5.14	14.00	-8.86
Dallu 4	5885	177	ax (20MHz)	242T	MCS0	6.15	5.99	9.08			-3.95	5.13	14.00	-8.87
Band 3/4	5835	167	ax (40MHz)	484T	MCS0	2.53	2.78	5.66	30.00	-24.34	-3.95	1.71	14.00	-12.29
Band 4	5875	175	ax (40MHz)	484T	MCS0	2.79	3.01	5.91			-3.95	1.96	14.00	-12.04
Band 3/4	5855	171	ax (80MHz)	996T	MCS0	0.31	-0.36	3.00	30.00	-27.00	-3.95	-0.95	14.00	-14.95

Table 7-79. Band 4 MIMO Conducted Power Spectral Density Measurements MIMO (Full Tones)

FCC ID: A3LSMS901E	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 201 of 309
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset	Page 201 01 309



#### 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 -6.20 dBi for Antenna-1 and -7.80 dBi for Antenna-2.

Directional gain = 
$$10 \log[(10^{G_1/20} + 10^{G_2/20} + ... + 10^{G_N/20})^2 / N_{ANT}] dBi$$
  
=  $10 \log[(10^{-8.61/20} + 10^{-7.68/20} / 2] dBi$   
=  $(-3.95) dBi$ 

### **Sample MIMO Calculation:**

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

Antenna-1 + Antenna-2 = MIMO 
$$(5.88 \text{ dBm} + 6.27 \text{ dBm}) = (3.87 \text{ mW} + 4.24 \text{ mW}) = 8.11 \text{mW} = 9.09 \text{ dBm}$$

#### 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 -3.95 dBi.

FCC ID: A3LSMS901E	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 202 of 309
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset	Page 202 01 309



# 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 7-80 per Section 15.209 and RSS-Gen (8.9).

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

Table 7-80. 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: A3LSMS901E	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 203 of 309
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset	Fage 203 01 309



- 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

FCC ID: A3LSMS901E	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 204 of 309
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset	Page 204 01 309



## **Test Setup**

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

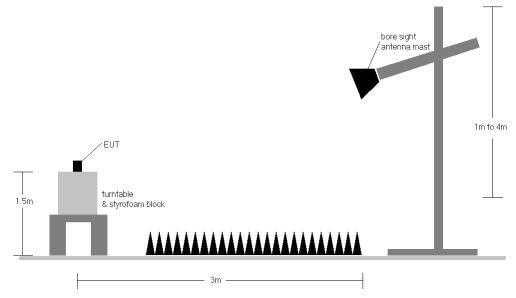


Figure 7-5. Test Instrument & Measurement Setup

FCC ID: A3LSMS901E	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Page 205 of 309	
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset	Page 205 01 509	



#### **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 UNII Band 1 3 that do not lie in a restricted band are subject to a peak limit of -27dBm/MHz. For UNII Band 4, the -27dBm/MHz limit is measured with an RMS detector. 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]
- 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:

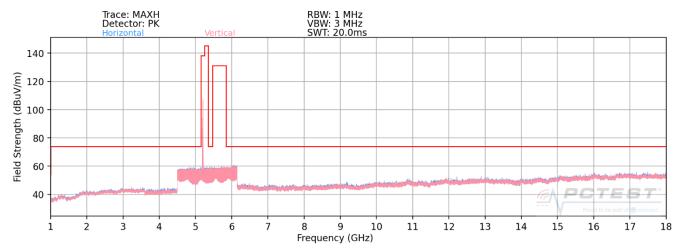
Offset (dB) = (Antenna Factor + Cable Loss + Attenuator) – Preamplifier Gain

FCC ID: A3LSMS901E	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 206 of 309
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset	Fage 200 01 309

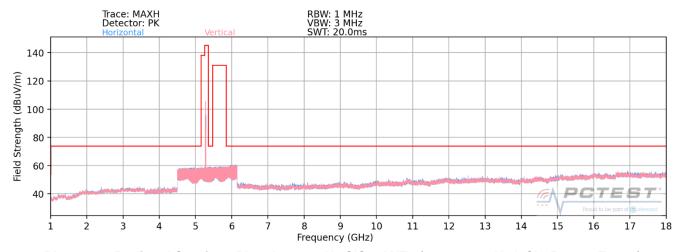


# 7.6.1 SISO Antenna-1 Radiated Spurious Emission Measurements

## 26 Tones



Plot 7-265. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11ax – U1 Ch. 40 – 26 Tones)



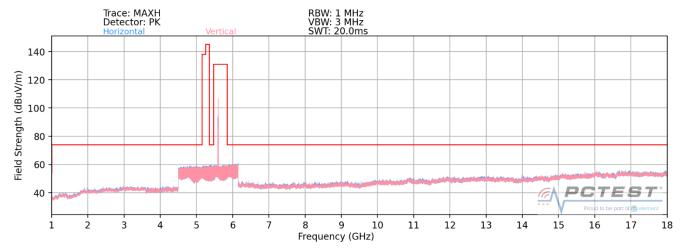
Plot 7-266. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11ax - U2A Ch. 56 - 26 Tones)

FCC ID: A3LSMS901E	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 207 of 309
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset	Page 207 01 309

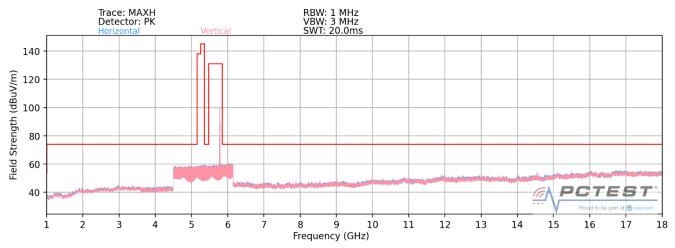
© 2021 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

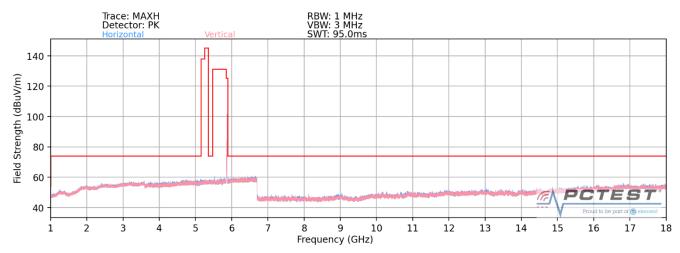




Plot 7-267. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11ax – U2C Ch. 120 – 26 Tones)



Plot 7-268. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11ax - U3 Ch. 157 - 26 Tones)

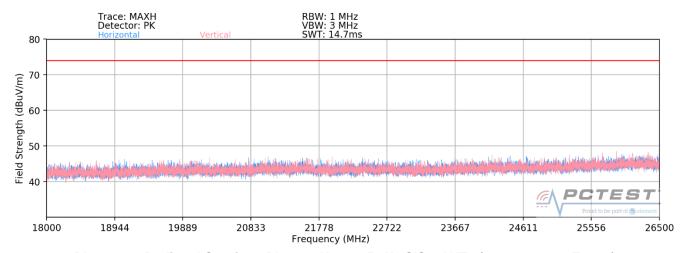


Plot 7-269. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11ax – U4 Ch. 173 – 26 Tones)

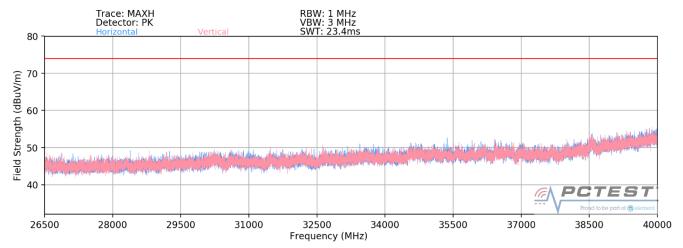
FCC ID: A3LSMS901E	Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:		Dogg 200 of 200	
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset		Page 208 of 309	
© 2021 PCTEST				V 9.0 02/01/2019	



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



Plot 7-270. Radiated Spurious Plot 18GHz - 26.5GHz SISO ANT1 (802.11ax - 26 Tones)



Plot 7-271. Radiated Spurious Plot 26.5GHz - 40GHz SISO ANT1 (802.11ax - 26 Tones)

FCC ID: A3LSMS901E	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 209 of 309
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset	Fage 209 01 309

© 2021 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.



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

Worst Case Mode: 802.11ax (20MHz BW)

Worst Case Transfer Rate: MCS0

RU Index: 0

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5180MHz

Channel: 36

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
	10360.00	Peak	Н	-	-	-68.85	12.16	0.00	50.31	68.20	-17.89
*	15540.00	Average	Н	-	-	-81.96	16.69	0.00	41.73	53.98	-12.25
*	15540.00	Peak	Н	-	-	-70.08	16.69	0.00	53.61	73.98	-20.37
*	20720.00	Average	Н	150	294	-67.44	4.37	-9.54	34.40	53.98	-19.58
*	20720.00	Peak	Н	150	294	-56.73	4.37	-9.54	45.11	73.98	-28.87
	25900.00	Peak	Н	-	-	-56.28	5.87	-9.54	47.04	68.20	-21.16

Table 7-81. Radiated Measurements SISO ANT1 (26 Tones)

Worst Case Mode: 802.11ax (20MHz BW)

Worst Case Transfer Rate: MCS0

RU Index: 8

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5200MHz

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
	10400.00	Peak	Н	115	293	-65.51	11.75	0.00	53.24	68.20	-14.96
*	15600.00	Average	Н	-	-	-82.36	17.47	0.00	42.11	53.98	-11.87
*	15600.00	Peak	Н	-	-	-70.49	17.47	0.00	53.98	73.98	-20.00
*	20800.00	Average	Н	150	311	-65.75	4.47	-9.54	36.18	53.98	-17.80
*	20800.00	Peak	Н	150	311	-56.16	4.47	-9.54	45.76	73.98	-28.22
	26000.00	Peak	Н	-	-	-56.57	6.04	-9.54	46.93	68.20	-21.27

Table 7-82. Radiated Measurements SISO ANT1 (26 Tones)

FCC ID: A3LSMS901E	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Dogo 210 of 200	
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset	Page 210 of 309	



4

Worst Case Transfer Rate: MCS0

RU Index:

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5240MHz

Channel: 48

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
	10480.00	Peak	Н	148	285	-69.27	12.40	0.00	50.13	68.20	-18.07
*	15720.00	Average	Н	-	-	-82.76	17.59	0.00	41.83	53.98	-12.15
*	15720.00	Peak	Н	-	-	-70.17	17.59	0.00	54.42	73.98	-19.56
*	20960.00	Average	Н	150	310	-66.98	4.65	-9.54	35.13	53.98	-18.85
*	20960.00	Peak	Н	150	310	-58.00	4.65	-9.54	44.11	73.98	-29.86
	26200.00	Peak	Н	-	=	-56.71	5.76	-9.54	46.51	68.20	-21.69

Table 7-83. Radiated Measurements SISO ANT1 (26 Tones)

Worst Case Mode: 802.11ax (20MHz BW)

Worst Case Transfer Rate: MCS0

RU Index: 8

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5260MHz

Channel: 52

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
	10520.00	Peak	Н	121	298	-67.88	12.54	0.00	51.66	68.20	-16.54
*	15780.00	Average	Н	-	=	-82.71	17.26	0.00	41.55	53.98	-12.43
*	15780.00	Peak	Н	-	=	-70.45	17.26	0.00	53.81	73.98	-20.17
*	21040.00	Average	Н	150	320	-66.70	4.68	-9.54	35.44	53.98	-18.54
*	21040.00	Peak	Н	150	320	-56.82	4.68	-9.54	45.32	73.98	-28.66
	26300.00	Peak	Н	-	-	-57.83	5.68	-9.54	45.31	68.20	-22.89

Table 7-84. Radiated Measurements SISO ANT1 (26 Tones)

FCC ID: A3LSMS901E	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 211 of 200
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset	Page 211 of 309



Worst Case Transfer Rate: MCS0

RU Index: 4

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5280MHz

Channel: 56

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
	10560.00	Peak	Н	128	295	-67.58	12.54	0.00	51.96	68.20	-16.24
*	15840.00	Average	Н	-	-	-82.83	17.42	0.00	41.59	53.98	-12.38
*	15840.00	Peak	Н	-	-	-70.53	17.42	0.00	53.89	73.98	-20.08
*	21120.00	Average	Н	150	308	-66.43	4.78	-9.54	35.80	53.98	-18.18
*	21120.00	Peak	Н	150	308	-57.06	4.78	-9.54	45.17	73.98	-28.81
	26400.00	Peak	Н	-	-	-57.67	5.75	-9.54	45.54	68.20	-22.66

Table 7-85. Radiated Measurements SISO ANT1 (26 Tones)

Worst Case Mode: 802.11ax (20MHz BW)

Worst Case Transfer Rate: MCS0

RU Index: 4

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5320MHz

Channel: 64

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	10640.00	Average	Н	261	294	-81.26	12.65	0.00	38.39	53.98	-15.59
*	10640.00	Peak	Н	261	294	-69.25	12.65	0.00	50.40	73.98	-23.58
*	15960.00	Average	Н	-	-	-83.18	18.41	0.00	42.23	53.98	-11.75
*	15960.00	Peak	Н	-	-	-71.42	18.41	0.00	53.99	73.98	-19.99
*	21280.00	Average	Н	150	310	-66.96	4.92	-9.54	35.42	53.98	-18.56
*	21280.00	Peak	Н	150	310	-57.76	4.92	-9.54	44.62	73.98	-29.36
	26600.00	Peak	Н	-	=	-58.90	5.78	-9.54	44.34	68.20	-23.86

Table 7-86. Radiated Measurements SISO ANT1 (26 Tones)

FCC ID: A3LSMS901E	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 212 of 200
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset	Page 212 of 309



Worst Case Transfer Rate: MCS0

RU Index: 4

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5500MHz

Channel: 100

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11000.00	Average	Н	131	334	-78.02	12.80	0.00	41.78	53.98	-12.20
*	11000.00	Peak	Н	131	334	-63.87	12.80	0.00	55.93	73.98	-18.05
	16500.00	Peak	Н	-	-	-70.10	18.36	0.00	55.26	68.20	-12.94
	22000.00	Peak	Н	150	334	-57.91	4.80	-9.54	44.34	68.20	-23.86
	27500.00	Peak	Н	-	-	-57.07	5.93	-9.54	46.31	68.20	-21.89

Table 7-87. Radiated Measurements SISO ANT1 (26 Tones)

Worst Case Mode: 802.11ax (20MHz BW)

Worst Case Transfer Rate: MCS0

RU Index: 4

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5600MHz

Channel: 120

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11200.00	Average	Н	157	328	-78.29	12.90	0.00	41.61	53.98	-12.37
*	11200.00	Peak	Н	157	328	-64.13	12.90	0.00	55.77	73.98	-18.21
	16800.00	Peak	Н	-	-	-70.12	18.52	0.00	55.40	68.20	-12.80
*	22400.00	Average	Н	150	335	-65.93	4.84	-9.54	36.36	53.98	-17.62
*	22400.00	Peak	Н	150	335	-56.70	4.84	-9.54	45.59	73.98	-28.39
	28000.00	Peak	Н	-	-	-56.08	6.12	-9.54	47.49	68.20	-20.71

Table 7-88. Radiated Measurements SISO ANT1 (26 Tones)

FCC ID: A3LSMS901E	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 212 of 200
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset	Page 213 of 309



Worst Case Transfer Rate: MCS0

RU Index: 8

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5720MHz

Channel: 144

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11440.00	Average	Н	175	323	-79.27	12.86	0.00	40.59	53.98	-13.39
*	11440.00	Peak	Н	175	323	-65.55	12.86	0.00	54.31	73.98	-19.67
	17160.00	Peak	Н	-	-	-70.04	18.02	0.00	54.98	68.20	-13.22
*	22880.00	Average	Н	150	333	-67.10	4.77	-9.54	35.13	53.98	-18.85
*	22880.00	Peak	Н	150	333	-57.18	4.77	-9.54	45.05	73.98	-28.93
	28600.00	Peak	Н	-		-57.16	6.32	-9.54	46.61	68.20	-21.59

Table 7-89. Radiated Measurements SISO ANT1 (26 Tones)

Worst Case Mode: 802.11ax (20MHz BW)

Worst Case Transfer Rate: MCS0

RU Index: 4

Distance of Measurements: 1 & 3 Meters

**Operating Frequency:** 5745MHz

Channel: 149

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11490.00	Average	Н	117	295	-80.34	13.58	0.00	40.24	53.98	-13.74
*	11490.00	Peak	Н	117	295	-67.50	13.58	0.00	53.08	73.98	-20.90
	17235.00	Peak	Н	-	-	-70.10	17.76	0.00	54.66	68.20	-13.54
*	22980.00	Average	Н	-	-	-68.16	4.67	-9.54	33.97	53.98	-20.01
*	22980.00	Peak	Н	-	=	-57.79	4.67	-9.54	44.34	73.98	-29.64
ı	28725.00	Peak	Н	-	-	-57.92	6.42	-9.54	45.96	68.20	-22.24

Table 7-90. Radiated Measurements SISO ANT1 (26 Tones)

FCC ID: A3LSMS901E	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 214 of 200
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset	Page 214 of 309



Worst Case Transfer Rate: MCS0

RU Index: 4

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5785MHz

Channel: 157

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11570.00	Average	Н	166	323	-80.18	13.03	0.00	39.85	53.98	-14.13
*	11570.00	Peak	Н	166	323	-67.16	13.03	0.00	52.87	73.98	-21.11
	17355.00	Peak	Н	-	-	-70.75	18.72	0.00	54.97	68.20	-13.23
	23140.00	Peak	Н	=	-	-57.55	4.61	-9.54	44.51	68.20	-23.69
	28925.00	Peak	Н	-	-	-58.13	6.50	-9.54	45.83	68.20	-22.37

Table 7-91. Radiated Measurements SISO ANT1 (26 Tones)

Worst Case Mode: 802.11ax (20MHz BW)

Worst Case Transfer Rate: MCS0

RU Index: 4

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5825MHz

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11650.00	Average	Н	249	335	-81.35	13.65	0.00	39.30	53.98	-14.68
*	11650.00	Peak	Н	249	335	-67.73	13.65	0.00	52.92	73.98	-21.06
	17475.00	Peak	Н	-	-	-69.76	17.76	0.00	55.00	68.20	-13.20
	23300.00	Peak	Н	-	-	-57.28	4.72	-9.54	44.91	68.20	-23.29
	29125.00	Peak	Н	-	-	-57.97	6.86	-9.54	46.35	68.20	-21.85

Table 7-92. Radiated Measurements SISO ANT1 (26 Tones)

FCC ID: A3LSMS901E Proud to be part of @ element		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 215 of 309
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset	Fage 215 01 509



Worst Case Transfer Rate: MCS0

4

Distance of Measurements:

1 & 3 Meters

Operating Frequency:

5845MHz

Channel:

RU Index:

169

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11690.00	Average	Н	-	-	-82.71	14.34	0.00	38.63	53.98	-15.34
*	11690.00	Peak	Н	1	-	-70.51	14.34	0.00	50.83	73.98	-23.14
	17535.00	Peak	Н	-	-	-70.15	18.43	0.00	55.28	68.20	-12.92
	23380.00	Peak	Н	-	-	-55.87	4.67	-9.54	46.25	68.20	-21.95
	29225.00	Peak	Н	-	-	-55.81	6.67	-9.54	48.32	68.20	-19.88
	35070.00	Peak	Н	=	-	-55.25	8.56	-9.54	50.76	68.20	-17.44

Table 7-93. Radiated Measurements SISO ANT1 (26 Tones)

Worst Case Mode: 802.11ax (20MHz BW)

Worst Case Transfer Rate: MCS0

RU Index:

8

Distance of Measurements:

1 & 3 Meters

Operating Frequency:

5865MHz

Channel:

173

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11730.00	Average	Н	166	335	-81.45	13.97	0.00	39.52	53.98	-14.46
*	11730.00	Peak	Н	166	335	-68.85	13.97	0.00	52.12	73.98	-21.86
	17595.00	Peak	Н	-	-	-70.44	18.25	0.00	54.81	68.20	-13.39
	23460.00	Peak	Н	-	-	-56.26	4.62	-9.54	45.82	68.20	-22.38
	29325.00	Peak	Н	-	-	-55.31	6.99	-9.54	49.13	68.20	-19.07
	35190.00	Peak	Н	-	-	-54.99	8.73	-9.54	51.20	68.20	-17.00

Table 7-94. Radiated Measurements SISO ANT1 (26 Tones)

FCC ID: A3LSMS901E Proud to be part of @ element		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 216 of 309
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset	Page 216 01 309



Worst Case Transfer Rate: MCS0

RU Index: 4

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5885MHz

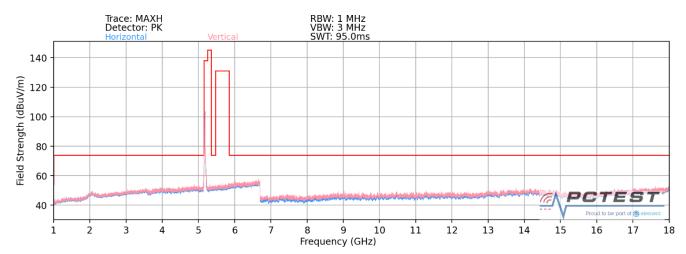
	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11770.00	Average	Н	156	55	-81.34	14.09	0.00	39.75	53.98	-14.23
*	11770.00	Peak	Н	156	55	-69.09	14.09	0.00	52.00	73.98	-21.98
	17655.00	Peak	Н	-	-	-70.50	18.05	0.00	54.55	68.20	-13.65
	23540.00	Peak	Н	-	-	-55.68	4.71	-9.54	46.49	68.20	-21.71
	29425.00	Peak	Н	-	-	-56.14	7.01	-9.54	48.33	68.20	-19.87
	35310.00	Peak	Н	-	-	-54.61	8.79	-9.54	51.64	68.20	-16.56

Table 7-95. Radiated Measurements SISO ANT1 (26 Tones)

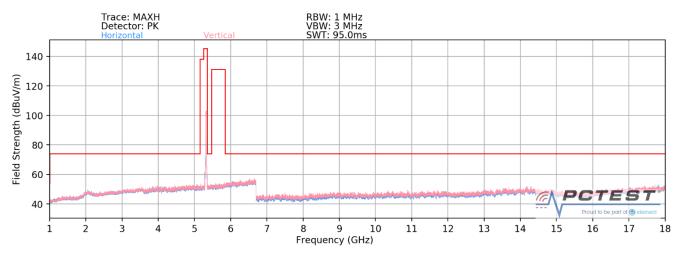
FCC ID: A3LSMS901E	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Dogo 217 of 200	
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset	Page 217 of 309	



## 242 Tones



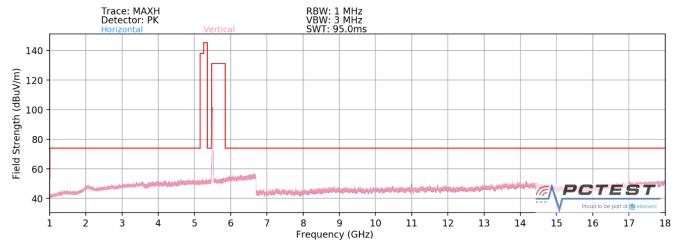
Plot 7-272. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11ax - U1 Ch. 40 - 242 Tones)



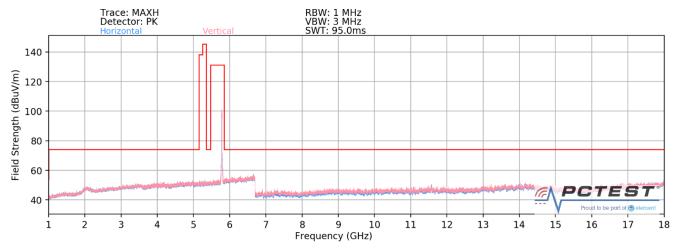
Plot 7-273. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11ax – U2A Ch. 56 – 242 Tones)

FCC ID: A3LSMS901E	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Dogo 219 of 200	
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset	Page 218 of 309	

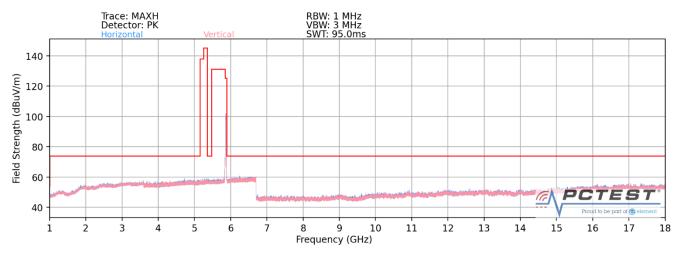




Plot 7-274. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11ax – U2C Ch. 120 – 242 Tones)



Plot 7-275. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11ax - U3 Ch. 157 - 242 Tones)

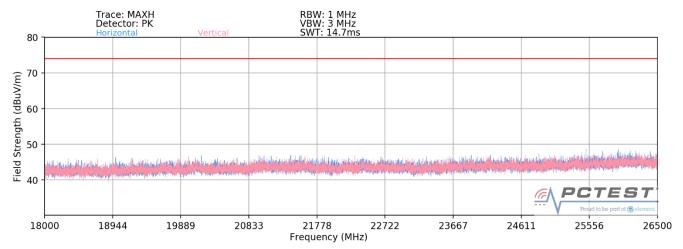


Plot 7-276. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11ax – U4 Ch. 173 – 242 Tones)

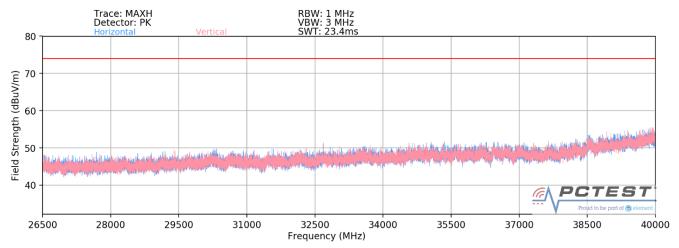
FCC ID: A3LSMS901E	Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Doza 240 of 200
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset		Page 219 of 309
© 2021 PCTEST				V 9.0 02/01/2019



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



Plot 7-277. Radiated Spurious Plot 18GHz - 26.5GHz SISO ANT1 (802.11ax - 242 Tones)



Plot 7-278. Radiated Spurious Plot 26.5GHz - 40GHz SISO ANT1 (802.11ax - 242 Tones)

FCC ID: A3LSMS901E	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 220 of 309
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset	Fage 220 01 309

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.



# SISO Antenna-1 Radiated Spurious Emission Measurements (242 Tones) §15.407(b) §15.205 & §15.209; RSS-Gen [8.9]

Worst Case Mode: 802.11ax (20MHz BW)

Worst Case Transfer Rate: MCS0

RU Index: 61

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5180MHz

Channel: 36

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
	10360.00	Peak	Н	381	321	-62.91	9.41	0.00	53.50	68.20	-14.70
*	15540.00	Average	Н	-	-	-79.60	10.44	0.00	37.84	53.98	-16.14
*	15540.00	Peak	Н	-	-	-67.64	10.44	0.00	49.80	73.98	-24.18
*	20720.00	Average	Н	150	316	-66.98	4.37	-9.54	34.86	53.98	-19.12
*	20720.00	Peak	Н	150	316	-57.37	4.37	-9.54	44.47	73.98	-29.51
	25900.00	Peak	Н	-	-	-57.57	5.87	-9.54	45.75	68.20	-22.45

Table 7-96. Radiated Measurements SISO ANT1 (242 Tones)

Worst Case Mode: 802.11ax (20MHz BW)

Worst Case Transfer Rate: MCS0

RU Index: 61

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5200MHz

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
	10400.00	Peak	Н	370	324	-64.69	9.68	0.00	51.99	68.20	-16.21
*	15600.00	Average	Н	-	-	-80.36	10.26	0.00	36.90	53.98	-17.07
*	15600.00	Peak	Н	-	-	-67.52	10.26	0.00	49.74	73.98	-24.23
*	20800.00	Average	Н	150	309	-66.18	4.47	-9.54	35.75	53.98	-18.23
*	20800.00	Peak	Н	150	309	-56.94	4.47	-9.54	44.99	73.98	-28.99
	26000.00	Peak	Н	-	-	-57.85	6.04	-9.54	45.65	68.20	-22.55

Table 7-97. Radiated Measurements SISO ANT1 (242 Tones)

FCC ID: A3LSMS901E	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Page 221 of 309	
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset	Fage 221 01 309	



Worst Case Transfer Rate: MCS0

RU Index: 61

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5240MHz

Channel: 48

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
	10480.00	Peak	Н	355	346	-63.42	10.32	0.00	53.90	68.20	-14.30
*	15720.00	Average	Н	-	-	-81.11	9.93	0.00	35.82	53.98	-18.16
*	15720.00	Peak	Н	-	-	-69.35	9.93	0.00	47.58	73.98	-26.40
*	20960.00	Average	Н	150	313	-67.28	4.65	-9.54	34.83	53.98	-19.15
*	20960.00	Peak	Н	150	313	-58.03	4.65	-9.54	44.08	73.98	-29.90
	26200.00	Peak	Н	=	-	-57.71	5.76	-9.54	45.51	68.20	-22.69

Table 7-98. Radiated Measurements SISO ANT1 (242 Tones)

Worst Case Mode: 802.11ax (20MHz BW)

Worst Case Transfer Rate: MCS0

RU Index: 61

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5260MHz

Channel: 52

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
	10520.00	Peak	Н	327	316	-65.22	9.45	0.00	51.23	68.20	-16.97
*	15780.00	Average	Н	-	-	-79.44	10.55	0.00	38.11	53.98	-15.86
*	15780.00	Peak	Н	-	-	-67.03	10.55	0.00	50.52	73.98	-23.45
*	21040.00	Average	Н	150	318	-66.89	4.68	-9.54	35.25	53.98	-18.73
*	21040.00	Peak	Н	150	318	-57.98	4.68	-9.54	44.16	73.98	-29.82
l	26300.00	Peak	Н	-	-	-57.29	5.68	-9.54	45.85	68.20	-22.35

Table 7-99. Radiated Measurements SISO ANT1 (242 Tones)

FCC ID: A3LSMS901E	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 222 of 309
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset	Page 222 01 309



Worst Case Transfer Rate: MCS0

RU Index: 61

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5280MHz

Channel: 56

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
	10560.00	Peak	Н	354	68	-64.34	9.74	0.00	52.40	68.20	-15.80
*	15840.00	Average	Н	-	-	-79.82	9.71	0.00	36.89	53.98	-17.09
*	15840.00	Peak	Н	-	-	-66.69	9.71	0.00	50.02	73.98	-23.96
*	21120.00	Average	Н	150	315	-66.58	4.78	-9.54	35.65	53.98	-18.33
*	21120.00	Peak	Н	150	315	-56.08	4.78	-9.54	46.15	73.98	-27.83
l	26400.00	Peak	Н	-	-	-57.39	5.75	-9.54	45.81	68.20	-22.39

Table 7-100. Radiated Measurements SISO ANT1 (242 Tones)

Worst Case Mode: 802.11ax (20MHz BW)

Worst Case Transfer Rate: MCS0

RU Index: 61

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5320MHz

Channel: 64

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	10640.00	Average	Н	342	20	-75.65	9.98	0.00	41.33	53.98	-12.65
*	10640.00	Peak	Н	342	20	-62.42	9.98	0.00	54.56	73.98	-19.42
*	15960.00	Average	Н	-	-	-79.53	9.52	0.00	36.99	53.98	-16.99
*	15960.00	Peak	Н	-	-	-67.77	9.52	0.00	48.75	73.98	-25.23
*	21280.00	Average	Н	150	310	-66.84	4.92	-9.54	35.54	53.98	-18.43
*	21280.00	Peak	Н	150	310	-57.14	4.92	-9.54	45.24	73.98	-28.74
	26600.00	Peak	Н	-	=	-58.40	5.78	-9.54	44.84	68.20	-23.36

Table 7-101. Radiated Measurements SISO ANT1 (242 Tones)

FCC ID: A3LSMS901E	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 223 of 309
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset	Page 223 01 309



Worst Case Transfer Rate: MCS0

RU Index: 61

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5500MHz

Channel: 100

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11000.00	Average	Н	316	19	-72.83	9.56	0.00	43.73	53.98	-10.25
*	11000.00	Peak	Н	316	19	-61.54	9.56	0.00	55.02	73.98	-18.96
	16500.00	Peak	Н	-	-	-67.61	11.37	0.00	50.76	68.20	-17.44
	22000.00	Peak	Н	150	333	-58.08	4.80	-9.54	44.17	68.20	-24.03
	27500.00	Peak	Н	-	=	-57.50	5.93	-9.54	45.88	68.20	-22.32

Table 7-102. Radiated Measurements SISO ANT1 (242 Tones)

Worst Case Mode: 802.11ax (20MHz BW)

Worst Case Transfer Rate: MCS0

RU Index: 61

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5600MHz

Channel: 120

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11200.00	Average	Н	156	356	-75.52	8.96	0.00	40.44	53.98	-13.54
*	11200.00	Peak	Н	156	356	-63.35	8.96	0.00	52.61	73.98	-21.37
	16800.00	Peak	Н	-	-	-67.81	11.21	0.00	50.40	68.20	-17.80
*	22400.00	Average	Н	150	331	-65.94	4.84	-9.54	36.35	53.98	-17.63
*	22400.00	Peak	Н	150	331	-57.13	4.84	-9.54	45.16	73.98	-28.82
	28000.00	Peak	Н	-	=	-57.68	6.12	-9.54	45.89	68.20	-22.31

Table 7-103. Radiated Measurements SISO ANT1 (242 Tones)

FCC ID: A3LSMS901E	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 224 of 309
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset	Fage 224 01 309



Worst Case Transfer Rate: MCS0

RU Index: 61

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5720MHz

Channel: 144

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11440.00	Average	Н	101	327	-75.49	10.30	0.00	41.81	53.98	-12.17
*	11440.00	Peak	Н	101	327	-63.47	10.30	0.00	53.83	73.98	-20.15
	17160.00	Peak	Н	-	-	-67.27	12.28	0.00	52.01	68.20	-16.19
*	22880.00	Average	Н	-	-	-67.35	4.77	-9.54	34.88	53.98	-19.10
*	22880.00	Peak	Н	-	-	-57.39	4.77	-9.54	44.84	73.98	-29.14
	28600.00	Peak	Н	-	-	-57.88	6.32	-9.54	45.89	68.20	-22.31

Table 7-104. Radiated Measurements SISO ANT1 (242 Tones)

Worst Case Mode: 802.11ax (20MHz BW)

Worst Case Transfer Rate: MCS0

RU Index: 61

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5745MHz

Channel: 149

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11490.00	Average	Н	161	2	-74.76	10.51	0.00	42.75	53.98	-11.23
*	11490.00	Peak	Н	161	2	-61.92	10.51	0.00	55.59	73.98	-18.39
	17235.00	Peak	Н	-	-	-68.02	12.59	0.00	51.57	68.20	-16.63
*	22980.00	Average	Н	-	-	-68.03	4.67	-9.54	34.10	53.98	-19.88
*	22980.00	Peak	Н	-	=	-57.79	4.67	-9.54	44.34	73.98	-29.64
ı	28725.00	Peak	Н	-	-	-58.10	6.42	-9.54	45.77	68.20	-22.43

Table 7-105. Radiated Measurements SISO ANT1 (242 Tones)

FCC ID: A3LSMS901E	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 225 of 309
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset	Page 225 01 309



Worst Case Transfer Rate: MCS0

RU Index: 61

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5785MHz

Channel: 157

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11570.00	Average	Ι	148	3	-76.02	9.98	0.00	40.96	53.98	-13.02
*	11570.00	Peak	Η	148	3	-64.17	9.98	0.00	52.81	73.98	-21.17
	17355.00	Peak	H	-		-66.48	12.30	0.00	52.82	68.20	-15.38
	23140.00	Peak	H	-		-56.97	4.61	-9.54	45.10	68.20	-23.10
	28925.00	Peak	Н	-	-	-58.20	6.50	-9.54	45.75	68.20	-22.45

Table 7-106. Radiated Measurements SISO ANT1 (242 Tones)

Worst Case Mode: 802.11ax (20MHz BW)

Worst Case Transfer Rate: MCS0

RU Index: 61

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5825MHz

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11650.00	Average	Н	123	360	-77.08	10.06	0.00	39.98	53.98	-14.00
*	11650.00	Peak	Н	123	360	-65.40	10.06	0.00	51.66	73.98	-22.32
	17475.00	Peak	Ι	-	-	-66.84	12.01	0.00	52.17	68.20	-16.03
	23300.00	Peak	Ι	-	-	-57.84	4.72	-9.54	44.35	68.20	-23.85
	29125.00	Peak	Н	-	-	-57.94	6.86	-9.54	46.38	68.20	-21.82

Table 7-107. Radiated Measurements SISO ANT1 (242 Tones)

FCC ID: A3LSMS901E	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 226 of 309
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset	Page 220 01 309



Worst Case Transfer Rate: MCS0

RU Index: 61

Distance of Measurements: 1 & 3 Meters

5845MHz Operating Frequency:

Channel: 169

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11690.00	Average	Н	238	331	-79.74	14.34	0.00	41.60	53.98	-12.37
*	11690.00	Peak	Н	238	331	-67.57	14.34	0.00	53.77	73.98	-20.20
	17535.00	Peak	Н	-	-	-69.98	18.43	0.00	55.45	68.20	-12.75
	23380.00	Peak	Н	-	-	-55.73	4.67	-9.54	46.39	68.20	-21.81
Ī	29225.00	Peak	Н	-	-	-56.40	6.67	-9.54	47.73	68.20	-20.47
	35070.00	Peak	Н	-	-	-55.59	8.56	-9.54	50.42	68.20	-17.78

Table 7-108. Radiated Measurements SISO ANT1 (242 Tones)

Worst Case Mode: 802.11ax (20MHz BW)

Worst Case Transfer Rate: MCS0

RU Index: 61

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5865MHz

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11730.00	Average	Н	181	331	-79.21	13.97	0.00	41.76	53.98	-12.22
*	11730.00	Peak	Н	181	331	-67.06	13.97	0.00	53.91	73.98	-20.07
	17595.00	Peak	Н	-	-	-70.27	18.25	0.00	54.98	68.20	-13.22
	23460.00	Peak	Н	-	-	-56.96	4.62	-9.54	45.12	68.20	-23.08
	29325.00	Peak	Н	-	-	-55.93	6.99	-9.54	48.52	68.20	-19.68
	35190.00	Peak	Н	=	-	-55.65	8.73	-9.54	50.54	68.20	-17.66

Table 7-109. Radiated Measurements SISO ANT1 (242 Tones)

FCC ID: A3LSMS901E	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 227 of 200
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset	Page 227 of 309



Worst Case Transfer Rate: MCS0

RU Index: 61

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5885MHz

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11770.00	Average	Н	233	42	-79.58	14.09	0.00	41.51	53.98	-12.47
*	11770.00	Peak	Н	233	42	-67.43	14.09	0.00	53.66	73.98	-20.32
	17655.00	Peak	Н	-	-	-70.44	18.05	0.00	54.61	68.20	-13.59
	23540.00	Peak	Н	-	-	-58.40	4.71	-9.54	43.76	68.20	-24.44
	29425.00	Peak	Н	-	-	-57.38	7.01	-9.54	47.09	68.20	-21.11
	35310.00	Peak	Н	=	=	-55.21	8.79	-9.54	51.04	68.20	-17.16

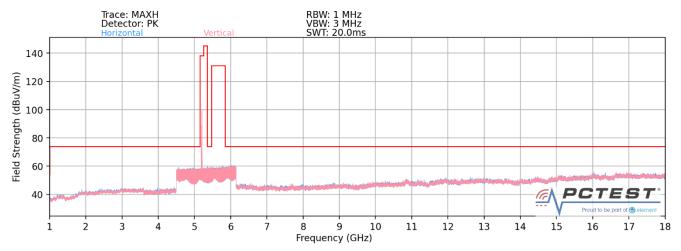
Table 7-110. Radiated Measurements SISO ANT1 (242 Tones)

FCC ID: A3LSMS901E	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 228 of 309
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset	Page 220 01 309

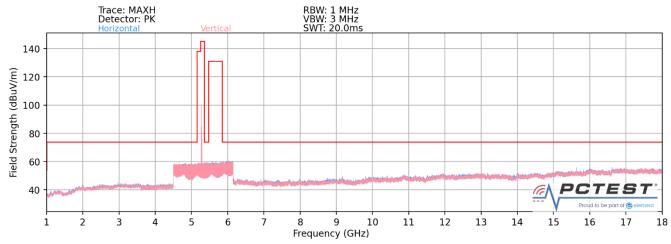


### 7.6.2 SISO Antenna-2 Radiated Spurious Emission Measurements

#### 26 Tones



Plot 7-279. Radiated Spurious Plot above 1GHz SISO ANT2 (802.11ax – U1 Ch. 40 – 26 Tones)



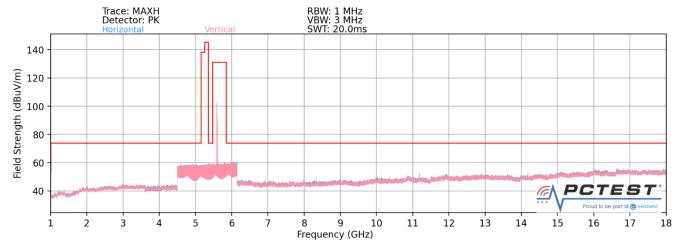
Plot 7-280. Radiated Spurious Plot above 1GHz SISO ANT2 (802.11ax - U2A Ch. 56 - 26 Tones)

FCC ID: A3LSMS901E	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 229 of 309
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset	Fage 229 01 309

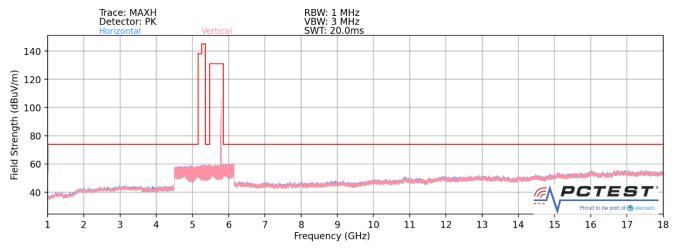
© 2021 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

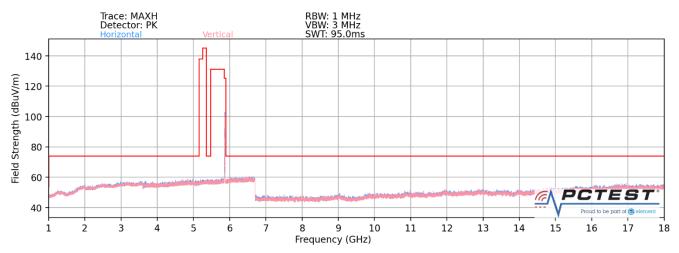




Plot 7-281. Radiated Spurious Plot above 1GHz SISO ANT2 (802.11ax – U2C Ch. 120 – 26 Tones)



Plot 7-282. Radiated Spurious Plot above 1GHz SISO ANT2 (802.11ax - U3 Ch. 157 - 26 Tones)

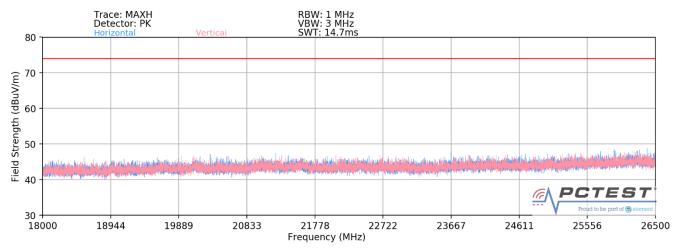


Plot 7-283. Radiated Spurious Plot above 1GHz SISO ANT2 (802.11ax – U4 Ch. 173 – 26 Tones)

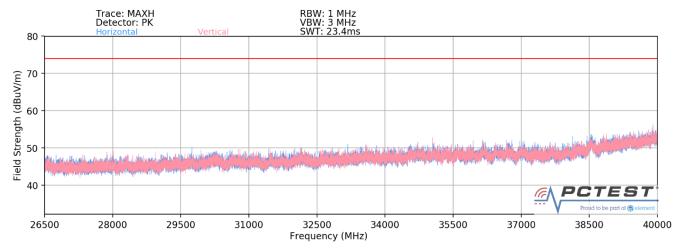
FCC ID: A3LSMS901E	Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Down 220 of 200
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset		Page 230 of 309
© 2021 PCTEST	•			V 9.0 02/01/2019



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



Plot 7-284. Radiated Spurious Plot 18GHz - 26.5GHz SISO ANT2 (802.11ax - 26 Tones)



Plot 7-285. Radiated Spurious Plot 26.5GHz - 40GHz SISO ANT2 (802.11ax - 26 Tones)

FCC ID: A3LSMS901E	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 231 of 309
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset	Fage 231 01 309

© 2021 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.



## SISO Antenna-2 Radiated Spurious Emission Measurements

§15.407(b) §15.205 & §15.209; RSS-Gen [8.9]

Worst Case Mode: 802.11ax (20MHz BW)

Worst Case Transfer Rate: MCS0

RU Index: 8

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5180MHz

Channel: 36

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
	10360.00	Peak	Н	-	-	-69.41	12.16	0.00	49.75	68.20	-18.45
*	15540.00	Average	Н	-	-	-82.23	16.69	0.00	41.46	53.98	-12.52
*	15540.00	Peak	Н	-	-	-70.28	16.69	0.00	53.41	73.98	-20.57
*	20720.00	Average	Н	-	-	-65.90	4.37	-9.54	35.93	53.98	-18.05
*	20720.00	Peak	Н	-	-	-58.37	4.37	-9.54	43.46	73.98	-30.52
	25900.00	Peak	Н	=	-	-58.86	5.87	-9.54	44.46	68.20	-23.74

Table 7-111. Radiated Measurements SISO ANT2 (26 Tones)

Worst Case Mode: 802.11ax (20MHz BW)

Worst Case Transfer Rate: MCS0

RU Index: 8

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5200MHz

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
	10400.00	Peak	Н	300	331	-68.20	11.75	0.00	50.55	68.20	-17.65
*	15600.00	Average	Н	-	-	-82.34	17.47	0.00	42.13	53.98	-11.85
*	15600.00	Peak	Н	-	-	-70.45	17.47	0.00	54.02	73.98	-19.96
*	20800.00	Average	Н	-	-	-66.75	4.47	-9.54	35.17	53.98	-18.81
*	20800.00	Peak	Н	-	=	-59.01	4.47	-9.54	42.92	73.98	-31.06
	26000.00	Peak	Н	-	-	-58.41	6.04	-9.54	45.09	68.20	-23.11

Table 7-112. Radiated Measurements SISO ANT2 (26 Tones)

FCC ID: A3LSMS901E Proud to be part of decement		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Page 232 of 309	
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset	Page 232 01 309	



Worst Case Transfer Rate: MCS0

RU Index: 8

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5240MHz

Channel: 48

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
	10480.00	Peak	Н	391	256	-63.82	12.40	0.00	55.58	68.20	-12.62
*	15720.00	Average	Н	-	-	-82.94	17.59	0.00	41.65	53.98	-12.33
*	15720.00	Peak	Н	-	-	-71.06	17.59	0.00	53.53	73.98	-20.45
*	20960.00	Average	Н	-	-	-66.97	4.65	-9.54	35.14	53.98	-18.84
*	20960.00	Peak	Н	-	=	-57.74	4.65	-9.54	44.37	73.98	-29.61
	26200.00	Peak	Н	-	-	-57.87	5.76	-9.54	45.35	68.20	-22.85

Table 7-113. Radiated Measurements SISO ANT2 (26 Tones)

Worst Case Mode: 802.11ax (20MHz BW)

Worst Case Transfer Rate: MCS0

RU Index: 0

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5260MHz

Channel: 52

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
	10520.00	Peak	Н	-	-	-69.88	12.54	0.00	49.66	68.20	-18.54
*	15780.00	Average	Н	-	-	-82.81	17.26	0.00	41.45	53.98	-12.53
*	15780.00	Peak	Н	-	-	-70.51	17.26	0.00	53.75	73.98	-20.23
*	21040.00	Average	Н	-	-	-66.59	4.68	-9.54	35.55	53.98	-18.43
*	21040.00	Peak	Н	-	=	-59.07	4.68	-9.54	43.07	73.98	-30.91
	26300.00	Peak	Н	-	-	-59.47	5.68	-9.54	43.67	68.20	-24.53

Table 7-114. Radiated Measurements SISO ANT2 (26 Tones)

FCC ID: A3LSMS901E Proud to be part of decement		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 233 of 309
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset	Fage 233 01 309



Worst Case Transfer Rate: MCS0

RU Index: 0

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5280MHz

Channel: 56

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
	10560.00	Peak	Н	383	289	-64.02	12.54	0.00	55.52	68.20	-12.68
*	15840.00	Average	Н	-	-	-82.91	17.42	0.00	41.51	53.98	-12.46
*	15840.00	Peak	Н	-	-	-71.12	17.42	0.00	53.30	73.98	-20.67
*	21120.00	Average	Н	-	-	-66.58	4.78	-9.54	35.65	53.98	-18.32
*	21120.00	Peak	Н	-	=	-58.70	4.78	-9.54	43.53	73.98	-30.45
	26400.00	Peak	Н	-	=	-58.95	5.75	-9.54	44.26	68.20	-23.94

Table 7-115. Radiated Measurements SISO ANT2 (26 Tones)

Worst Case Mode: 802.11ax (20MHz BW)

Worst Case Transfer Rate: MCS0

RU Index: 0

Distance of Measurements:

1 & 3 Meters Operating Frequency: 5320MHz

Channel: 64

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	10640.00	Average	Н	376	289	-76.23	12.65	0.00	43.42	53.98	-10.56
*	10640.00	Peak	Н	376	289	-60.50	12.65	0.00	59.15	73.98	-14.83
*	15960.00	Average	Н	-	-	-83.26	18.41	0.00	42.15	53.98	-11.83
*	15960.00	Peak	Н	-	-	-71.50	18.41	0.00	53.91	73.98	-20.07
*	21280.00	Average	Н	-	-	-66.71	4.92	-9.54	35.67	53.98	-18.30
*	21280.00	Peak	Н	-	-	-59.62	4.92	-9.54	42.77	73.98	-31.21
	26600.00	Peak	Н	-	-	-59.31	5.78	-9.54	43.93	68.20	-24.27

Table 7-116. Radiated Measurements SISO ANT2 (26 Tones)

FCC ID: A3LSMS901E Provid to be part of representation of the part		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Page 234 of 309	
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset	Page 234 01 309	



Worst Case Transfer Rate: MCS0

RU Index: 0

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5500MHz

Channel: 100

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11000.00	Average	Н	272	350	-75.71	12.80	0.00	44.09	53.98	-9.89
*	11000.00	Peak	Н	272	350	-60.96	12.80	0.00	58.84	73.98	-15.14
	16500.00	Peak	Н	-	-	-70.39	18.36	0.00	54.97	68.20	-13.23
	22000.00	Peak	Н	-	-	-59.32	4.80	-9.54	42.94	68.20	-25.26
	27500.00	Peak	Н	-	-	-57.41	5.93	-9.54	45.98	68.20	-22.22

Table 7-117. Radiated Measurements SISO ANT2 (26 Tones)

Worst Case Mode: 802.11ax (20MHz BW)

Worst Case Transfer Rate: MCS0

RU Index: 0

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5600MHz

Channel: 120

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11200.00	Average	Н	397	326	-79.30	12.90	0.00	40.60	53.98	-13.38
*	11200.00	Peak	Н	397	326	-65.47	12.90	0.00	54.43	73.98	-19.55
	16800.00	Peak	Н	-	-	-70.12	18.52	0.00	55.40	68.20	-12.80
*	22400.00	Average	Н	-	-	-66.12	4.84	-9.54	36.18	53.98	-17.80
*	22400.00	Peak	Н	-	-	-56.78	4.84	-9.54	45.51	73.98	-28.47
	28000.00	Peak	Н	-	-	-59.02	6.12	-9.54	44.56	68.20	-23.64

Table 7-118. Radiated Measurements SISO ANT2 (26 Tones)

FCC ID: A3LSMS901E PCTEST* Proud to be part of @ element		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 235 of 309
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset	Page 233 01 309



Worst Case Transfer Rate: MCS0

RU Index: 4

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5720MHz

Channel: 144

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11440.00	Average	Н	392	336	-81.29	12.86	0.00	38.57	53.98	-15.41
*	11440.00	Peak	Н	392	336	-69.26	12.86	0.00	50.60	73.98	-23.38
	17160.00	Peak	Н	-	-	-70.09	18.02	0.00	54.93	68.20	-13.27
*	22880.00	Average	Н	-	-	-66.94	4.77	-9.54	35.29	53.98	-18.69
*	22880.00	Peak	Н	-	-	-57.63	4.77	-9.54	44.60	73.98	-29.38
	28600.00	Peak	Н	-	-	-59.40	6.32	-9.54	44.37	68.20	-23.83

Table 7-119. Radiated Measurements SISO ANT2 (26 Tones)

Worst Case Mode: 802.11ax (20MHz BW)

Worst Case Transfer Rate: MCS0

RU Index: 8

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5745MHz

Channel: 149

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11490.00	Average	Н	-	-	-82.03	13.58	0.00	38.55	53.98	-15.43
*	11490.00	Peak	Н	-	-	-70.34	13.58	0.00	50.24	73.98	-23.74
	17235.00	Peak	Н	-	-	-70.51	17.76	0.00	54.25	68.20	-13.95
*	22980.00	Average	Н	-	-	-67.10	4.67	-9.54	35.03	53.98	-18.95
*	22980.00	Peak	Н	-	-	-58.73	4.67	-9.54	43.40	73.98	-30.58
ı	28725.00	Peak	Н	-	-	-60.31	6.42	-9.54	43.57	68.20	-24.63

Table 7-120. Radiated Measurements SISO ANT2 (26 Tones)

FCC ID: A3LSMS901E	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 236 of 309
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset	Fage 230 01 309



Worst Case Transfer Rate: MCS0

RU Index: 8

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5785MHz

Channel: 157

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11570.00	Average	Н	-	-	-81.60	13.03	0.00	38.43	53.98	-15.55
*	11570.00	Peak	Н	-	-	-70.43	13.03	0.00	49.60	73.98	-24.38
	17355.00	Peak	Н	-	-	-70.35	18.72	0.00	55.37	68.20	-12.83
	23140.00	Peak	H	-	-	-59.35	4.61	-9.54	42.72	68.20	-25.48
	28925.00	Peak	Н	-	-	-57.86	6.50	-9.54	46.09	68.20	-22.11

Table 7-121. Radiated Measurements SISO ANT2 (26 Tones)

Worst Case Mode: 802.11ax (20MHz BW)

Worst Case Transfer Rate: MCS0

RU Index: 8

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5825MHz

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11650.00	Average	Н	-	-	-82.18	13.65	0.00	38.47	53.98	-15.51
*	11650.00	Peak	Н	-	-	-70.42	13.65	0.00	50.23	73.98	-23.75
	17475.00	Peak	Н	=	-	-70.23	17.76	0.00	54.53	68.20	-13.67
	23300.00	Peak	Н	-	-	-59.03	4.72	-9.54	43.15	68.20	-25.05
	29125.00	Peak	Н	-	-	-58.06	6.86	-9.54	46.26	68.20	-21.94

Table 7-122. Radiated Measurements SISO ANT2 (26 Tones)

FCC ID: A3LSMS901E	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 237 of 309
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset	Page 237 01 309



Worst Case Transfer Rate: MCS0

8 RU Index:

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5845MHz

Channel: 169

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11690.00	Average	Н	-	-	-82.67	14.34	0.00	38.67	53.98	-15.30
*	11690.00	Peak	Н	-	-	-71.02	14.34	0.00	50.32	73.98	-23.65
	17535.00	Peak	Н	-	-	-70.32	18.43	0.00	55.11	68.20	-13.09
	23380.00	Peak	Н	-	-	-56.04	4.67	-9.54	46.09	68.20	-22.11
	29225.00	Peak	Н	-	-	-55.60	6.67	-9.54	48.52	68.20	-19.68
	35070.00	Peak	Н	-	-	-54.92	8.56	-9.54	51.10	68.20	-17.10

Table 7-123. Radiated Measurements SISO ANT2 (26 Tones)

Worst Case Mode: 802.11ax (20MHz BW)

Worst Case Transfer Rate: MCS0

RU Index: 4

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5865MHz

Channel: 173

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11730.00	Average	н	-	-	-82.13	13.97	0.00	38.84	53.98	-15.14
*	11730.00	Peak	Н	-	-	-70.18	13.97	0.00	50.79	73.98	-23.19
	17595.00	Peak	Н	-	-	-70.09	18.25	0.00	55.16	68.20	-13.04
	23460.00	Peak	Н	-	-	-55.84	4.62	-9.54	46.24	68.20	-21.96
	29325.00	Peak	Н	-	-	-56.30	6.99	-9.54	48.15	68.20	-20.05
	35190.00	Peak	Н	-	-	-55.42	8.73	-9.54	50.77	68.20	-17.43

Table 7-124. Radiated Measurements SISO ANT2 (26 Tones)

FCC ID: A3LSMS901E	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 238 of 309
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset	Fage 230 01 309



8

Worst Case Transfer Rate: MCS0

RU Index:

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5885MHz

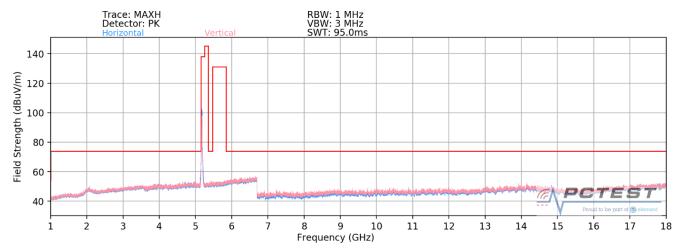
	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11770.00	Average	Н	-	-	-82.21	14.09	0.00	38.88	53.98	-15.10
*	11770.00	Peak	Н	-	-	-70.32	14.09	0.00	50.77	73.98	-23.21
	17655.00	Peak	Н	-	-	-70.10	18.05	0.00	54.95	68.20	-13.25
	23540.00	Peak	Н	-	-	-54.78	4.71	-9.54	47.39	68.20	-20.81
Ī	29425.00	Peak	Н	-	-	-55.59	7.01	-9.54	48.88	68.20	-19.32
	35310.00	Peak	Н	-	-	-55.21	8.79	-9.54	51.04	68.20	-17.16

Table 7-125. Radiated Measurements SISO ANT2 (26 Tones)

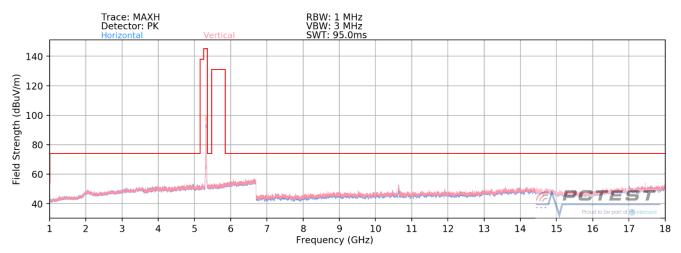
FCC ID: A3LSMS901E	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 239 of 309
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset	Fage 239 01 309



#### 242 Tones



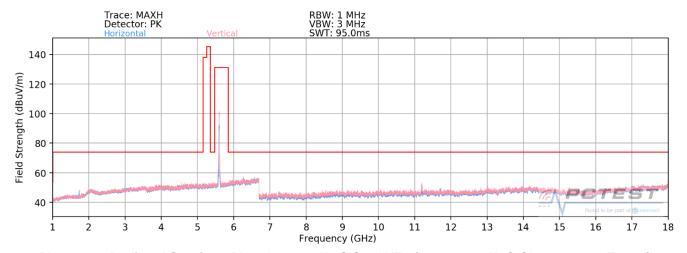
Plot 7-286. Radiated Spurious Plot above 1GHz SISO ANT2 (802.11ax - U1 Ch. 40 - 242 Tones)



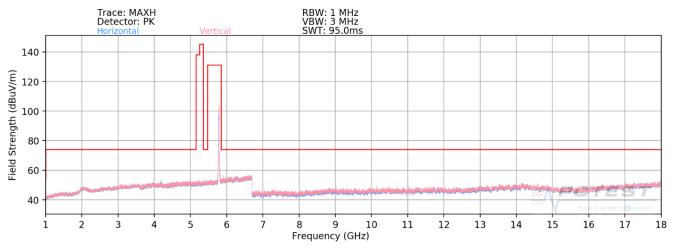
Plot 7-287. Radiated Spurious Plot above 1GHz SISO ANT2 (802.11ax – U2A Ch. 56 – 242 Tones)

FCC ID: A3LSMS901E	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 240 of 309
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset	Fage 240 01 309

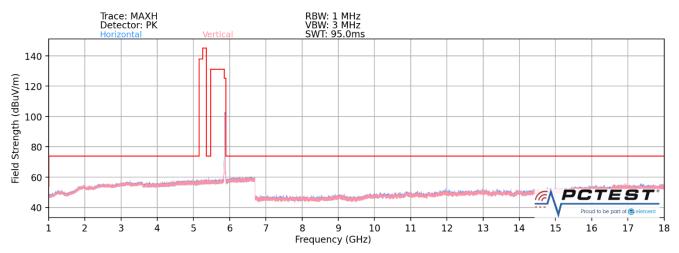




Plot 7-288. Radiated Spurious Plot above 1GHz SISO ANT2 (802.11ax – U2C Ch. 120 – 242 Tones)



Plot 7-289. Radiated Spurious Plot above 1GHz SISO ANT2 (802.11ax - U3 Ch. 157 - 242 Tones)

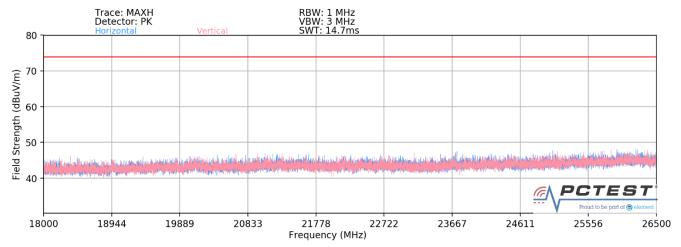


Plot 7-290. Radiated Spurious Plot above 1GHz SISO ANT2 (802.11ax – U4 Ch. 173 – 242 Tones)

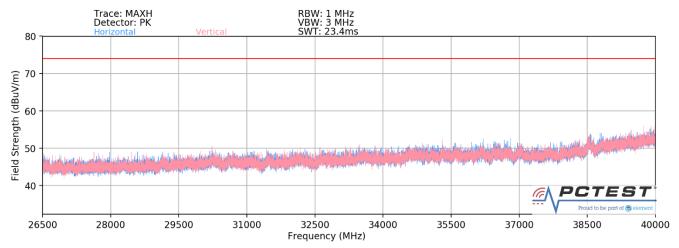
FCC ID: A3LSMS901E	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Dogo 241 of 200	
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset	Page 241 of 309	



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



Plot 7-291. Radiated Spurious Plot 18GHz - 26.5GHz SISO ANT2 (802.11ax - 242 Tones)



Plot 7-292. Radiated Spurious Plot 26.5GHz - 40GHz SISO ANT2 (802.11ax - 242 Tones)

FCC ID: A3LSMS901E	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 242 of 309
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset	Fage 242 01 309

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.



# SISO Antenna-2 Radiated Spurious Emission Measurements

§15.407(b) §15.205 & §15.209; RSS-Gen [8.9]

Worst Case Mode: 802.11ax (20MHz BW)

Worst Case Transfer Rate: MCS0

RU Index: 61

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5180MHz

Channel: 36

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
	10360.00	Peak	Н	343	354	-64.60	9.41	0.00	51.81	68.20	-16.39
*	15540.00	Average	Н	-	-	-79.78	10.44	0.00	37.66	53.98	-16.32
*	15540.00	Peak	Н	-	=	-67.56	10.44	0.00	49.88	73.98	-24.10
*	20720.00	Average	Н	-	-	-67.76	4.37	-9.54	34.07	53.98	-19.91
*	20720.00	Peak	Н	-	-	-57.20	4.37	-9.54	44.63	73.98	-29.35
	25900.00	Peak	Н	-	-	-57.75	5.87	-9.54	45.58	68.20	-22.62

Table 7-126. Radiated Measurements SISO ANT2 (242 Tones)

Worst Case Mode: 802.11ax (20MHz BW)

Worst Case Transfer Rate: MCS0

RU Index: 61

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5200MHz

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
	10400.00	Peak	Н	340	354	-68.15	9.68	0.00	48.53	68.20	-19.67
*	15600.00	Average	Н	-	-	-79.30	10.26	0.00	37.96	53.98	-16.01
*	15600.00	Peak	Н	-	-	-67.01	10.26	0.00	50.25	73.98	-23.72
*	20800.00	Average	Н	-	-	-67.19	4.47	-9.54	34.74	53.98	-19.24
*	20800.00	Peak	Н	-	=	-56.54	4.47	-9.54	45.39	73.98	-28.59
	26000.00	Peak	Н	-	-	-57.61	6.04	-9.54	45.89	68.20	-22.31

Table 7-127. Radiated Measurements SISO ANT2 (242 Tones)

FCC ID: A3LSMS901E	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 242 of 200
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset	Page 243 of 309



Worst Case Transfer Rate: MCS0

RU Index: 61

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5240MHz

Channel: 48

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
	10480.00	Peak	Н	398	129	-62.83	10.66	0.00	54.83	68.20	-13.37
*	15720.00	Average	Н	-	-	-79.97	10.01	0.00	37.04	53.98	-16.94
*	15720.00	Peak	Н	-	-	-68.19	10.01	0.00	48.82	73.98	-25.16
*	20960.00	Average	Н	-	-	-68.21	4.65	-9.54	33.90	53.98	-20.08
*	20960.00	Peak	Н	-	=	-58.22	4.65	-9.54	43.89	73.98	-30.09
	26200.00	Peak	Н	-	-	-57.20	5.76	-9.54	46.02	68.20	-22.18

Table 7-128. Radiated Measurements SISO ANT2 (242 Tones)

Worst Case Mode: 802.11ax (20MHz BW)

Worst Case Transfer Rate: MCS0

RU Index: 61

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5260MHz

Channel: 52

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
	10520.00	Peak	Н	276	347	-63.15	9.45	0.00	53.30	68.20	-14.90
*	15780.00	Average	Н	-	-	-80.03	10.10	0.00	37.07	53.98	-16.91
*	15780.00	Peak	Н	-	-	-67.60	10.10	0.00	49.50	73.98	-24.48
*	21040.00	Average	Н	-	-	-68.02	4.68	-9.54	34.12	53.98	-19.86
*	21040.00	Peak	Н	-	=	-57.03	4.68	-9.54	45.11	73.98	-28.87
	26300.00	Peak	Н	-	-	-57.99	5.68	-9.54	45.15	68.20	-23.05

Table 7-129. Radiated Measurements SISO ANT2 (242 Tones)

FCC ID: A3LSMS901E	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 244 of 200
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset	Page 244 of 309



Worst Case Transfer Rate: MCS0

RU Index: 61

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5280MHz

Channel: 56

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
	10560.00	Peak	Н	350	343	-62.33	9.52	0.00	54.19	68.20	-14.01
*	15840.00	Average	Н	-	-	-79.79	9.45	0.00	36.66	53.98	-17.32
*	15840.00	Peak	Н	-	-	-67.56	9.45	0.00	48.89	73.98	-25.09
*	21120.00	Average	Н	-	-	-67.88	4.78	-9.54	34.35	53.98	-19.63
*	21120.00	Peak	Н	-	-	-57.62	4.78	-9.54	44.62	73.98	-29.36
	26400.00	Peak	Н	-	-	-57.41	5.75	-9.54	45.80	68.20	-22.40

Table 7-130. Radiated Measurements SISO ANT2 (242 Tones)

Worst Case Mode: 802.11ax (20MHz BW)

Worst Case Transfer Rate: MCS0

RU Index: 61

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5320MHz

Channel: 64

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	10640.00	Average	Н	316	8	-76.52	9.65	0.00	40.13	53.98	-13.85
*	10640.00	Peak	Н	316	8	-64.41	9.65	0.00	52.24	73.98	-21.74
*	15960.00	Average	Н	-	-	-79.82	9.91	0.00	37.09	53.98	-16.89
*	15960.00	Peak	Н	-	-	-68.02	9.91	0.00	48.89	73.98	-25.09
*	21280.00	Average	Н	-	-	-68.91	4.92	-9.54	33.47	53.98	-20.51
*	21280.00	Peak	Н	=	-	-57.88	4.92	-9.54	44.50	73.98	-29.48
	26600.00	Peak	Н	-	=	-57.25	5.78	-9.54	45.99	68.20	-22.21

Table 7-131. Radiated Measurements SISO ANT2 (242 Tones)

FCC ID: A3LSMS901E	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 245 of 309
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset	Page 245 01 509



Worst Case Transfer Rate: MCS0

RU Index: 61

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5500MHz

Channel: 100

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11000.00	Average	Η	337	17	-73.46	9.42	0.00	42.96	53.98	-11.01
*	11000.00	Peak	Н	-	-	-61.47	9.42	0.00	54.95	73.98	-19.02
	16500.00	Peak	Н	-	-	-68.49	11.76	0.00	50.27	68.20	-17.93
	22000.00	Peak	Н	=	-	-56.23	4.80	-9.54	46.02	68.20	-22.18
	27500.00	Peak	Н	-	-	-57.04	5.93	-9.54	46.34	68.20	-21.86

Table 7-132. Radiated Measurements SISO ANT2 (242 Tones)

Worst Case Mode: 802.11ax (20MHz BW)

Worst Case Transfer Rate: MCS0

RU Index: 61

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5600MHz

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11200.00	Average	H	395	33	-75.26	9.00	0.00	40.74	53.98	-13.24
*	11200.00	Peak	Н	-	-	-62.90	9.00	0.00	53.10	73.98	-20.88
	16800.00	Peak	Н	-	-	-66.77	11.38	0.00	51.61	68.20	-16.59
*	22400.00	Average	Н	-	-	-66.54	4.84	-9.54	35.75	53.98	-18.23
*	22400.00	Peak	Н	-	-	-58.33	4.84	-9.54	43.97	73.98	-30.01
	28000.00	Peak	Н	-	-	-59.08	6.12	-9.54	44.49	68.20	-23.71

Table 7-133. Radiated Measurements SISO ANT2 (242 Tones)

FCC ID: A3LSMS901E	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 246 of 309
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset	Page 240 01 309



Worst Case Transfer Rate: MCS0

RU Index: 61

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5720MHz

Channel: 144

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11440.00	Average	Н	103	94	-80.55	10.20	0.00	36.65	53.98	-17.33
*	11440.00	Peak	Н	-	-	-68.53	10.20	0.00	48.67	73.98	-25.31
	17160.00	Peak	Н	-	-	-67.27	11.97	0.00	51.70	68.20	-16.50
*	22880.00	Average	Н	-	-	-66.68	4.77	-9.54	35.55	53.98	-18.43
*	22880.00	Peak	Н	-	-	-59.06	4.77	-9.54	43.17	73.98	-30.81
	28600.00	Peak	Н	-		-57.37	6.32	-9.54	46.41	68.20	-21.79

Table 7-134. Radiated Measurements SISO ANT2 (242 Tones)

Worst Case Mode: 802.11ax (20MHz BW)

Worst Case Transfer Rate: MCS0

RU Index: 61

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5745MHz

Channel: 149

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11490.00	Average	Н	400	89	-78.52	10.16	0.00	38.64	53.98	-15.34
*	11490.00	Peak	Н	-	-	-67.06	10.16	0.00	50.10	73.98	-23.88
	17235.00	Peak	Н	-	-	-65.95	12.24	0.00	53.29	68.20	-14.91
*	22980.00	Average	Н	-	-	-66.67	4.67	-9.54	35.46	53.98	-18.52
*	22980.00	Peak	Н	-	=	-59.60	4.67	-9.54	42.53	73.98	-31.45
	28725.00	Peak	Н	-	-	-58.91	6.42	-9.54	44.96	68.20	-23.24

Table 7-135. Radiated Measurements SISO ANT2 (242 Tones)

FCC ID: A3LSMS901E	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 247 of 200
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset	Page 247 of 309



Worst Case Transfer Rate: MCS0

RU Index: 61

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5785MHz

Channel: 157

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11570.00	Average	Н	360	111	-79.91	9.80	0.00	36.89	53.98	-17.09
*	11570.00	Peak	Н	-	-	-68.05	9.80	0.00	48.75	73.98	-25.23
	17355.00	Peak	Н	-	-	-67.26	12.30	0.00	52.04	68.20	-16.16
	23140.00	Peak	H	-	-	-57.93	4.61	-9.54	44.13	68.20	-24.07
	28925.00	Peak	Н	-	-	-58.94	6.50	-9.54	45.01	68.20	-23.19

Table 7-136. Radiated Measurements SISO ANT2 (242 Tones)

Worst Case Mode: 802.11ax (20MHz BW)

61

Worst Case Transfer Rate: MCS0

RU Index:

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5825MHz

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11650.00	Average	Н	361	90	-79.11	9.99	0.00	37.88	53.98	-16.10
*	11650.00	Peak	Н	-	=	-67.38	9.99	0.00	49.61	73.98	-24.37
	17475.00	Peak	Н	-	=	-66.63	12.02	0.00	52.39	68.20	-15.81
	23300.00	Peak	Н	-	=	-57.91	4.72	-9.54	44.27	68.20	-23.93
	29125.00	Peak	Н	-	-	-58.40	6.86	-9.54	45.91	68.20	-22.29

Table 7-137. Radiated Measurements SISO ANT2 (242 Tones)

FCC ID: A3LSMS901E	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 248 of 309
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset	Page 246 01 309



Worst Case Transfer Rate: MCS0

RU Index: 61

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5845MHz

Channel: 169

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11690.00	Average	Н	-	-	-82.80	14.34	0.00	38.54	53.98	-15.43
*	11690.00	Peak	Н	-	-	-70.28	14.34	0.00	51.06	73.98	-22.91
	17535.00	Peak	Н	-	-	-70.31	18.43	0.00	55.12	68.20	-13.08
	23380.00	Peak	Н	-	-	-55.44	4.67	-9.54	46.69	68.20	-21.51
	29225.00	Peak	Н	-	-	-56.09	6.67	-9.54	48.04	68.20	-20.16
	35070.00	Peak	Н	-	-	-54.21	8.56	-9.54	51.80	68.20	-16.40

Table 7-138. Radiated Measurements SISO ANT2 (242 Tones)

Worst Case Mode: 802.11ax (20MHz BW)

Worst Case Transfer Rate: MCS0

RU Index: 61

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5865MHz

Channel: 173

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11730.00	Average	Н	-	-	-81.96	13.97	0.00	39.01	53.98	-14.97
*	11730.00	Peak	Н	-	-	-69.89	13.97	0.00	51.08	73.98	-22.90
	17595.00	Peak	Н	-	-	-70.05	18.25	0.00	55.20	68.20	-13.00
	23460.00	Peak	Н	-	-	-56.02	4.62	-9.54	46.06	68.20	-22.14
	29325.00	Peak	Н	-	-	-56.29	6.99	-9.54	48.16	68.20	-20.04
	35190.00	Peak	Н	-	-	-54.60	8.73	-9.54	51.58	68.20	-16.62

Table 7-139. Radiated Measurements SISO ANT2 (242 Tones)

FCC ID: A3LSMS901E	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 249 of 309
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset	Page 249 01 309



Worst Case Transfer Rate: MCS0

RU Index: 61

Distance of Measurements: 1 & 3 Meters

Operating Frequency: 5885MHz

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11770.00	Average	Н	-	-	-82.06	14.09	0.00	39.03	53.98	-14.95
*	11770.00	Peak	Н	-	-	-69.99	14.09	0.00	51.10	73.98	-22.88
	17655.00	Peak	Н	-	-	-70.27	18.05	0.00	54.78	68.20	-13.42
	23540.00	Peak	Н	-	-	-55.30	4.71	-9.54	46.86	68.20	-21.34
	29425.00	Peak	Н	-	-	-56.22	7.01	-9.54	48.25	68.20	-19.95
	35310.00	Peak	Н	ı	-	-55.42	8.79	-9.54	50.83	68.20	-17.37

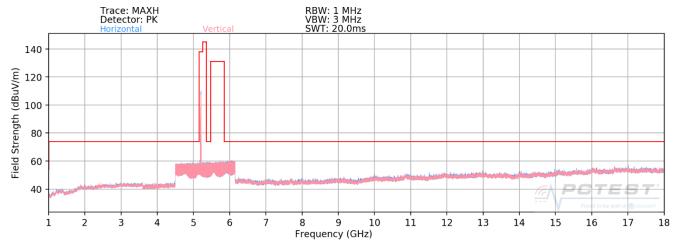
Table 7-140. Radiated Measurements SISO ANT2 (242 Tones)

FCC ID: A3LSMS901E	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 250 of 200
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset	Page 250 of 309

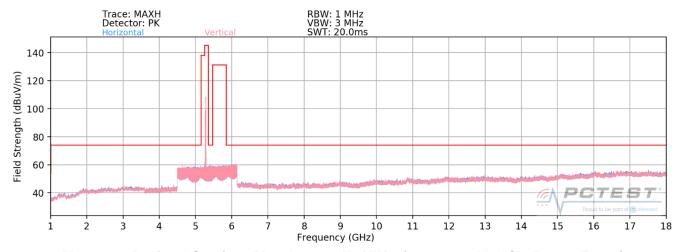


## 7.6.3 MIMO Radiated Spurious Emission Measurements

#### 26 Tones



Plot 7-293. Radiated Spurious Plot above 1GHz MIMO (802.11ax – U1 Ch. 40 – 26 Tones)



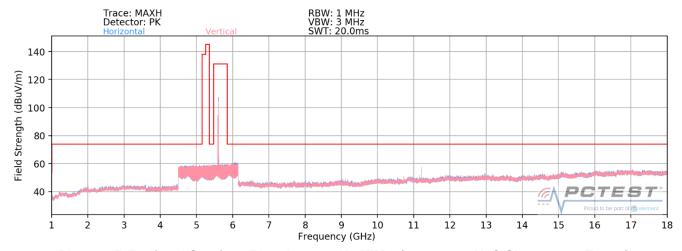
Plot 7-294. Radiated Spurious Plot above 1GHz MIMO (802.11ax - U2A Ch. 56 - 26 Tones)

FCC ID: A3LSMS901E	Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 251 of 200
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset	Page 251 of 309

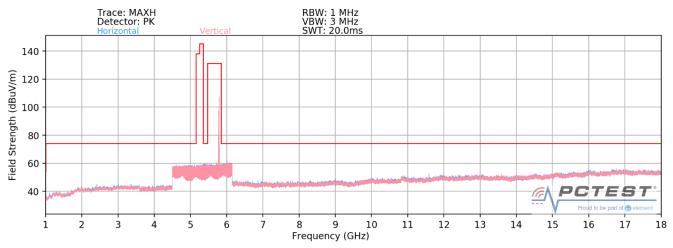
© 2021 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

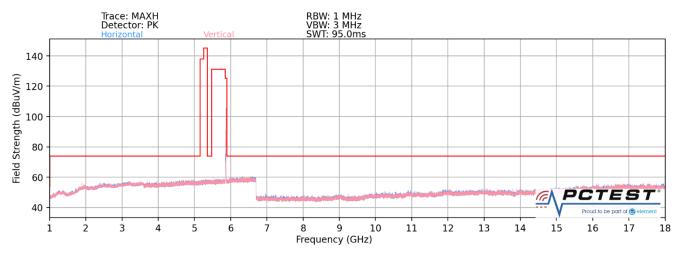




Plot 7-295. Radiated Spurious Plot above 1GHz MIMO (802.11ax – U2C Ch. 120 – 26 Tones)



Plot 7-296. Radiated Spurious Plot above 1GHz MIMO (802.11ax – U3 Ch. 157 – 26 Tones)



Plot 7-297. Radiated Spurious Plot above 1GHz MIMO (802.11ax – U4 Ch. 173 – 26 Tones)

FCC ID: A3LSMS901E	PCTEST° Proud to be part of @ element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:		Dags 252 of 200
1M2109290114-10.A3L	9/22/2021 - 11/9/2021	Portable Handset		Page 252 of 309
© 2021 DCTECT				V 0 0 02/01/2010

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.