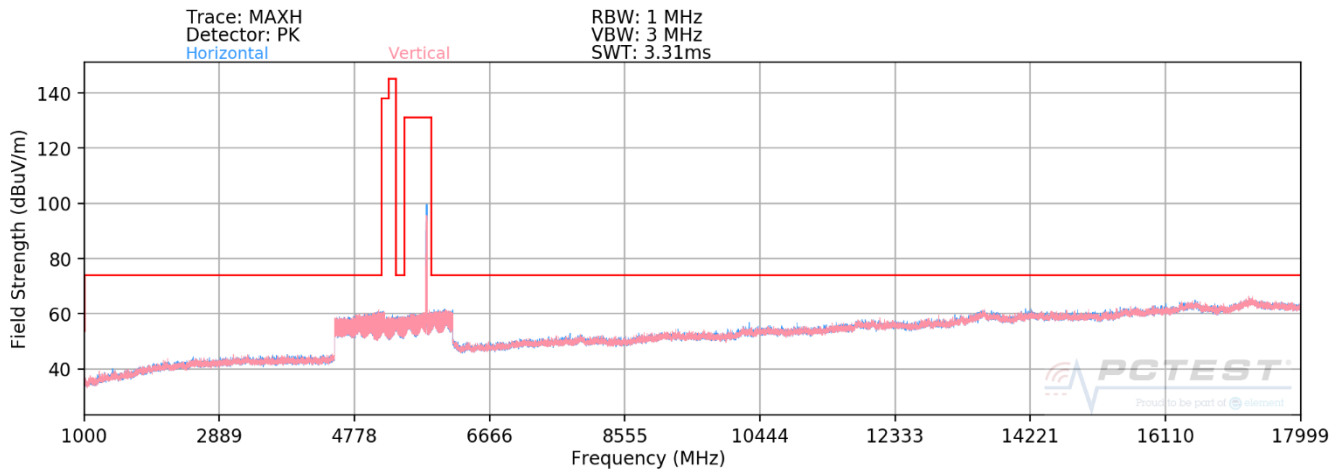
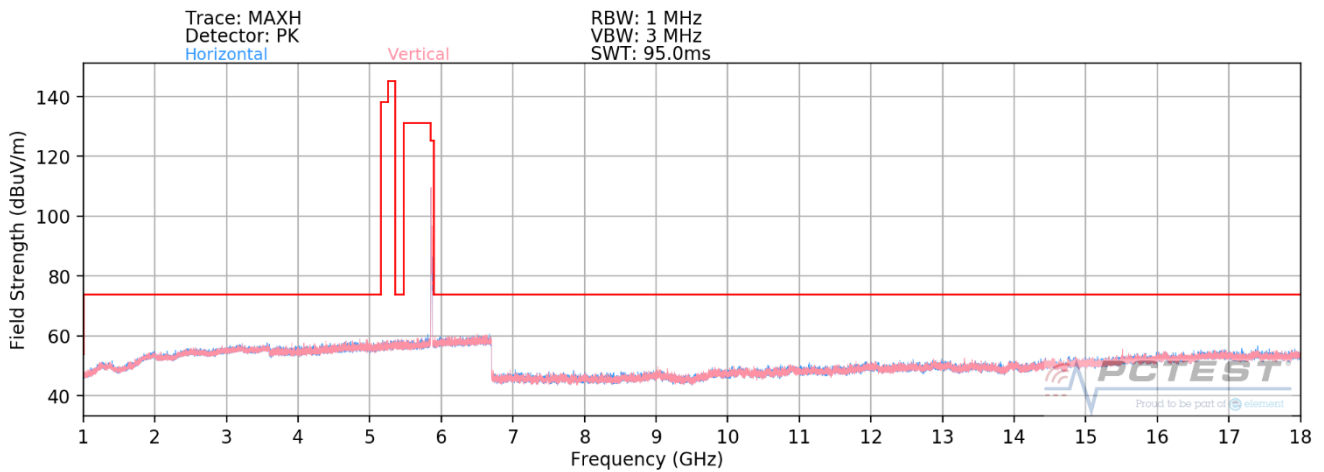


Plot 7-315. Radiated Spurious Plot above 1GHz MIMO (802.11ax – U2C Ch. 120 – 26 Tones)



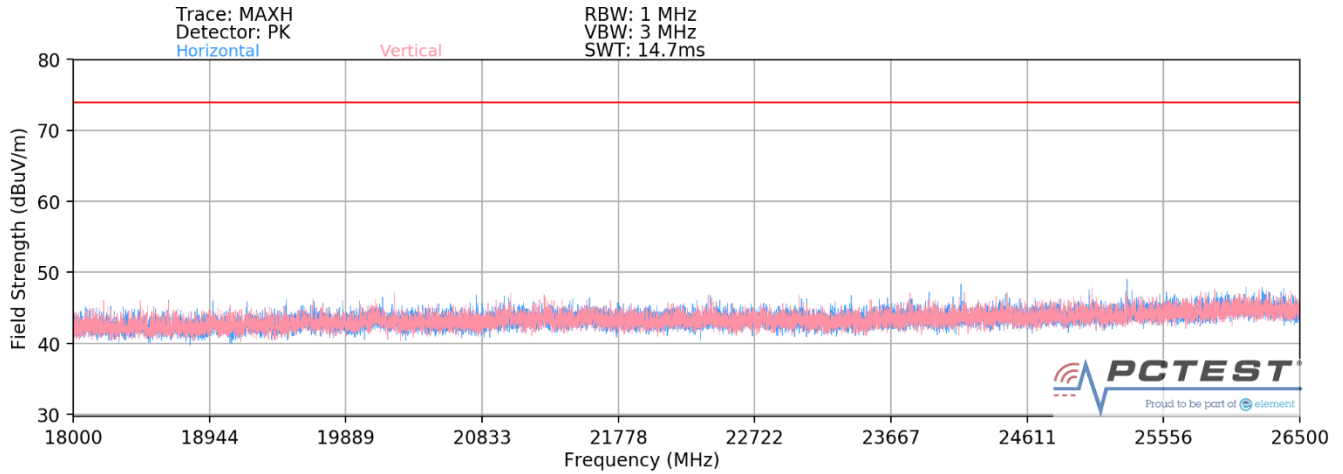
Plot 7-316. Radiated Spurious Plot above 1GHz MIMO (802.11ax – U3 Ch. 157 – 26 Tones)



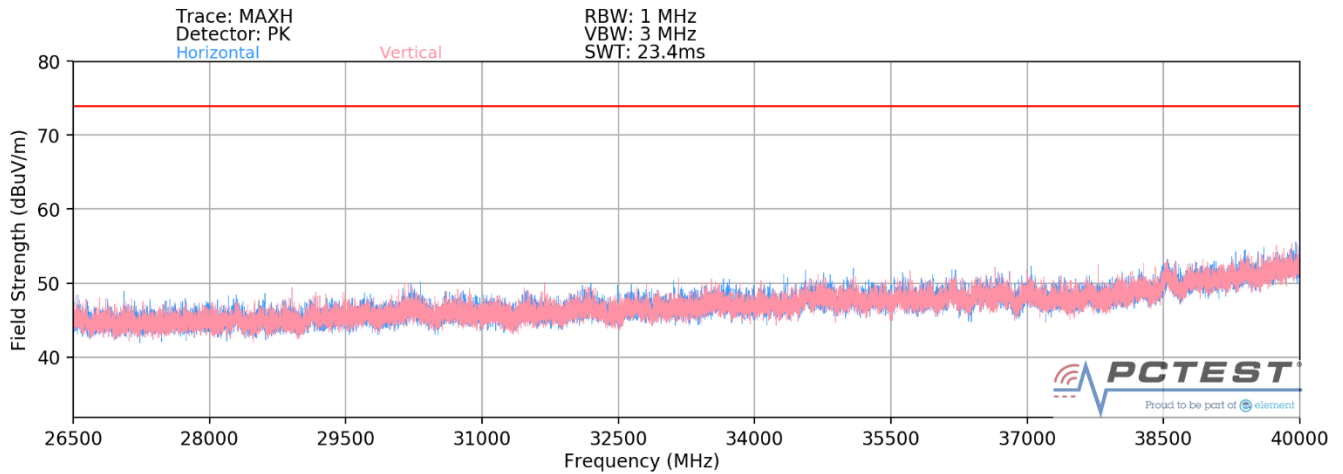
Plot 7-317. Radiated Spurious Plot above 1GHz MIMO (802.11ax – U4 Ch. 173 – 26 Tones)

FCC ID: A3LSMS906E	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
Test Report S/N: 1M2110010116-10.A3L	Test Dates: 09/09 – 12/03/2021	EUT Type: Portable Handset		Page 204 of 237

MIMO Radiated Spurious Emissions Measurements (Above 18GHz)



Plot 7-318. Radiated Spurious Plot 18GHz - 26.5GHz MIMO (802.11ax – 26 Tones)



Plot 7-319. Radiated Spurious Plot 26.5GHz - 40GHz MIMO (802.11ax – 26 Tones)

FCC ID: A3LSMS906E		MEASUREMENT REPORT (CERTIFICATION)	 Approved by: Technical Manager
Test Report S/N: 1M2110010116-10.A3L	Test Dates: 09/09 – 12/03/2021	EUT Type: Portable Handset	Page 205 of 237

MIMO Radiated Spurious Emission Measurements (26 Tones)

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

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 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	V	-	-	-67.95	10.28	0.00	49.33	68.20	-18.87
* 15540.00	Average	V	-	-	-80.59	10.62	0.00	37.03	53.98	-16.95
* 15540.00	Peak	V	-	-	-68.90	10.62	0.00	48.72	73.98	-25.26
* 20720.00	Average	V	-	-	-65.54	4.37	-9.54	36.29	53.98	-17.69
* 20720.00	Peak	V	-	-	-57.35	4.37	-9.54	44.48	73.98	-29.50
25900.00	Peak	V	-	-	-57.40	5.87	-9.54	45.93	68.20	-22.27

Table 7-49. Radiated Measurements MIMO (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: 5200MHz
 Channel: 40

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
10400.00	Peak	V	-	-	-69.44	10.43	0.00	47.99	68.20	-20.21
* 15600.00	Average	V	-	-	-80.17	9.61	0.00	36.44	53.98	-17.54
* 15600.00	Peak	V	-	-	-67.25	9.61	0.00	49.36	73.98	-24.62
* 20800.00	Average	V	-	-	-65.42	4.47	-9.54	36.50	53.98	-17.48
* 20800.00	Peak	V	-	-	-57.15	4.47	-9.54	44.78	73.98	-29.20
26000.00	Peak	V	-	-	-56.28	6.04	-9.54	47.22	68.20	-20.98

Table 7-50. Radiated Measurements MIMO (26 Tones)

FCC ID: A3LSMS906E		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2110010116-10.A3L	Test Dates: 09/09 – 12/03/2021	EUT Type: Portable Handset	Page 206 of 237	

Worst Case Mode: 802.11ax (20MHz BW)
Worst Case Transfer Rate: MCS0
RU Index: 0
Distance of Measurements: 1 & 3 Meters
Operating Frequency: 5240MHz
Channel: 48

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
10480.00	Peak	V	-	-	-67.17	10.66	0.00	50.49	68.20	-17.71
* 15720.00	Average	V	-	-	-79.95	10.01	0.00	37.06	53.98	-16.92
* 15720.00	Peak	V	-	-	-68.58	10.01	0.00	48.43	73.98	-25.55
* 20960.00	Average	V	-	-	-65.62	4.65	-9.54	36.49	53.98	-17.49
* 20960.00	Peak	V	-	-	-57.77	4.65	-9.54	44.34	73.98	-29.64
26200.00	Peak	V	-	-	-54.13	5.76	-9.54	49.08	68.20	-19.12

Table 7-51. Radiated Measurements MIMO (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	V	-	-	-68.25	9.45	0.00	48.20	68.20	-20.00
* 15780.00	Average	V	-	-	-79.72	10.10	0.00	37.38	53.98	-16.60
* 15780.00	Peak	V	-	-	-67.47	10.10	0.00	49.63	73.98	-24.35
* 21040.00	Average	V	-	-	-65.88	4.68	-9.54	36.26	53.98	-17.72
* 21040.00	Peak	V	-	-	-55.26	4.68	-9.54	46.88	73.98	-27.10
26300.00	Peak	V	-	-	-55.40	5.68	-9.54	47.73	68.20	-20.47

Table 7-52. Radiated Measurements MIMO (26 Tones)

FCC ID: A3LSMS906E		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2110010116-10.A3L	Test Dates: 09/09 – 12/03/2021	EUT Type: Portable Handset	Page 207 of 237	

Worst Case Mode: 802.11ax (20MHz BW)
 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	V	-	-	-68.73	9.52	0.00	47.79	68.20	-20.41
* 15840.00	Average	V	-	-	-80.27	9.45	0.00	36.18	53.98	-17.80
* 15840.00	Peak	V	-	-	-69.95	9.45	0.00	46.50	73.98	-27.48
* 21120.00	Average	V	-	-	-65.40	4.78	-9.54	36.84	53.98	-17.14
* 21120.00	Peak	V	-	-	-55.91	4.78	-9.54	46.33	73.98	-27.65
* 26400.00	Peak	V	-	-	-55.63	5.75	-9.54	47.58	68.20	-20.62

Table 7-53. Radiated Measurements MIMO (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	V	-	-	-79.88	9.65	0.00	36.77	53.98	-17.21
* 10640.00	Peak	V	-	-	-68.49	9.65	0.00	48.16	73.98	-25.82
* 15960.00	Average	V	-	-	-79.55	9.91	0.00	37.36	53.98	-16.62
* 15960.00	Peak	V	-	-	-67.75	9.91	0.00	49.16	73.98	-24.82
* 21280.00	Average	V	-	-	-65.54	4.92	-9.54	36.84	53.98	-17.14
* 21280.00	Peak	V	-	-	-55.67	4.92	-9.54	46.71	73.98	-27.27
* 26600.00	Peak	V	-	-	-55.16	5.78	-9.54	48.08	68.20	-20.12

Table 7-54. Radiated Measurements MIMO (26 Tones)

FCC ID: A3LSMS906E		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2110010116-10.A3L	Test Dates: 09/09 – 12/03/2021	EUT Type: Portable Handset	Page 208 of 237	

Worst Case Mode: 802.11ax (20MHz BW)
 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	V	-	-	-79.86	9.42	0.00	36.56	53.98	-17.41
* 11000.00	Peak	V	-	-	-66.98	9.42	0.00	49.44	73.98	-24.53
16500.00	Peak	V	-	-	-67.97	11.76	0.00	50.79	68.20	-17.41
22000.00	Peak	V	-	-	-55.59	4.80	-9.54	46.67	68.20	-21.53
27500.00	Peak	V	-	-	-55.48	5.93	-9.54	47.91	68.20	-20.29

Table 7-55. Radiated Measurements MIMO (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	V	-	-	-79.54	9.00	0.00	36.46	53.98	-17.52
* 11200.00	Peak	V	-	-	-67.71	9.00	0.00	48.29	73.98	-25.69
16800.00	Peak	V	-	-	-66.73	11.38	0.00	51.65	68.20	-16.55
* 22400.00	Average	V	-	-	-65.68	4.84	-9.54	36.62	53.98	-17.36
* 22400.00	Peak	V	-	-	-55.04	4.84	-9.54	47.26	73.98	-26.72
28000.00	Peak	V	-	-	-55.39	6.12	-9.54	48.19	68.20	-20.01

Table 7-56. Radiated Measurements MIMO (26 Tones)

FCC ID: A3LSMS906E		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2110010116-10.A3L	Test Dates: 09/09 – 12/03/2021	EUT Type: Portable Handset	Page 209 of 237	

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 0
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5720MHz
 Channel: 144

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
* 11440.00	Average	V	-	-	-79.60	10.20	0.00	37.60	53.98	-16.38
* 11440.00	Peak	V	-	-	-67.49	10.20	0.00	49.71	73.98	-24.27
17160.00	Peak	V	-	-	-67.61	11.97	0.00	51.36	68.20	-16.84
* 22880.00	Average	V	-	-	-65.47	4.77	-9.54	36.76	53.98	-17.22
* 22880.00	Peak	V	-	-	-55.83	4.77	-9.54	46.40	73.98	-27.58
28600.00	Peak	V	-	-	-55.54	6.32	-9.54	48.24	68.20	-19.96

Table 7-57. Radiated Measurements MIMO (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: 5745MHz
 Channel: 149

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
* 11490.00	Average	V	-	-	-79.77	10.16	0.00	37.39	53.98	-16.59
* 11490.00	Peak	V	-	-	-67.93	10.16	0.00	49.23	73.98	-24.75
17235.00	Peak	V	-	-	-66.84	12.24	0.00	52.40	68.20	-15.80
* 22980.00	Average	V	-	-	-65.72	4.67	-9.54	36.41	53.98	-17.57
* 22980.00	Peak	V	-	-	-55.94	4.67	-9.54	46.19	73.98	-27.79
28725.00	Peak	V	-	-	-55.60	6.42	-9.54	48.27	68.20	-19.93

Table 7-58. Radiated Measurements MIMO (26 Tones)

FCC ID: A3LSMS906E		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2110010116-10.A3L	Test Dates: 09/09 – 12/03/2021	EUT Type: Portable Handset	Page 210 of 237	

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 0
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5785MHz
 Channel: 157

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
* 11570.00	Average	V	-	-	-79.25	9.80	0.00	37.55	53.98	-16.43
* 11570.00	Peak	V	-	-	-67.11	9.80	0.00	49.69	73.98	-24.29
17355.00	Peak	V	-	-	-66.27	12.30	0.00	53.03	68.20	-15.17
23140.00	Peak	V	-	-	-55.34	4.61	-9.54	46.72	68.20	-21.48
28925.00	Peak	V	-	-	-55.40	6.50	-9.54	48.55	68.20	-19.65

Table 7-59. Radiated Measurements MIMO (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: 5825MHz
 Channel: 165

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
* 11650.00	Average	V	-	-	-79.88	9.99	0.00	37.11	53.98	-16.87
* 11650.00	Peak	V	-	-	-68.32	9.99	0.00	48.67	73.98	-25.31
17475.00	Peak	V	-	-	-67.10	12.02	0.00	51.92	68.20	-16.28
23300.00	Peak	V	-	-	-55.49	4.72	-9.54	46.69	68.20	-21.51
29125.00	Peak	V	-	-	-55.45	6.86	-9.54	48.87	68.20	-19.33

Table 7-60. Radiated Measurements MIMO (26 Tones)

FCC ID: A3LSMS906E		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2110010116-10.A3L	Test Dates: 09/09 – 12/03/2021	EUT Type: Portable Handset	Page 211 of 237	

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 0
 Distance of Measurements: 1 & 3
 Operating Frequency: 5845 MHz
 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	H	355.00	152.00	-87.42	27.50	0.00	47.08	53.98	-6.90
* 11690.00	Peak	H	355	152	-78.20	27.50	0.00	56.30	73.98	-17.68
17535.00	Peak	H	-	-	-85.03	34.60	0.00	56.57	62.80	-6.23
23380.00	Peak	H	-	-	-64.98	4.67	-9.54	46.69	62.80	-16.11
29225.00	Peak	H	-	-	-65.99	6.67	-9.54	47.68	62.80	-15.12
35070.00	Peak	H	-	-	-66.33	8.57	-9.54	49.24	62.80	-13.56

Table 7-61. Radiated Measurements MIMO (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: 5865 MHz
 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	H	365.00	154.00	-88.44	27.50	0.00	46.06	53.98	-7.92
* 11730.00	Peak	H	368	155	-78.24	27.50	0.00	56.26	73.98	-17.72
17595.00	Peak	H	-	-	-82.80	34.60	0.00	58.80	62.80	-4.00
23460.00	Peak	H	-	-	-66.01	4.63	-9.54	45.62	62.80	-17.18
29325.00	Peak	H	-	-	-67.01	6.99	-9.54	46.98	62.80	-15.82
35190.00	Peak	H	-	-	-68.11	8.73	-9.54	47.62	62.80	-15.18

Table 7-62. Radiated Measurements MIMO (26 Tones)

FCC ID: A3LSMS906E		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2110010116-10.A3L	Test Dates: 09/09 – 12/03/2021	EUT Type: Portable Handset	Page 212 of 237	

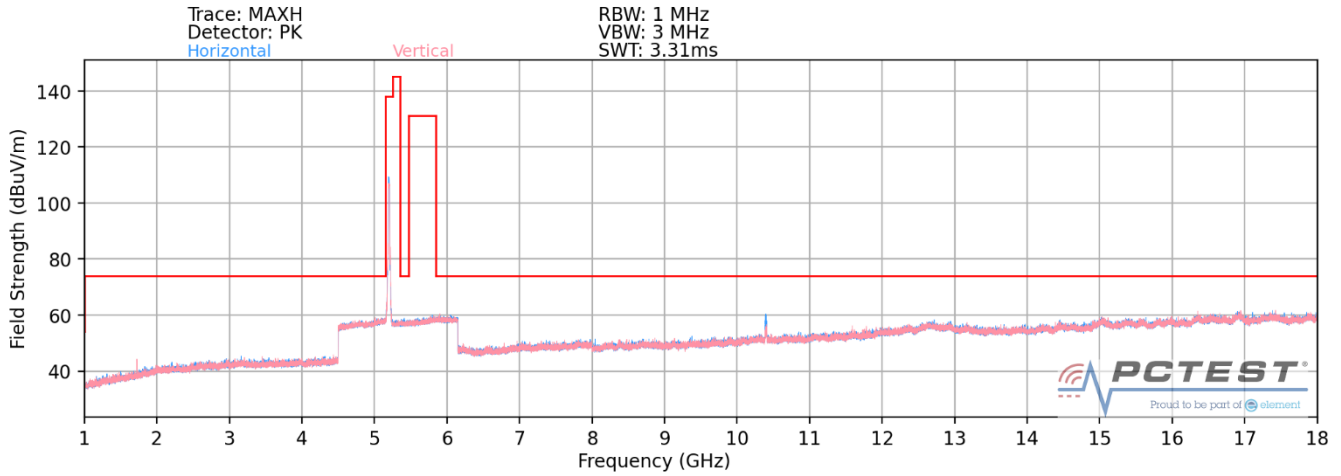
Worst Case Mode: 802.11ax (20MHz BW)
Worst Case Transfer Rate: MCS0
RU Index: 0
Distance of Measurements: 1 & 3 Meters
Operating Frequency: 5885 MHz
Channel: 177

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	H	366.00	152.00	-88.89	27.68	0.00	45.79	53.98	-8.19
* 11770.00	Peak	H	366	152	-79.99	27.68	0.00	54.69	73.98	-19.29
17655.00	Peak	H	-	-	-83.69	35.08	0.00	58.39	62.80	-4.41
23540.00	Peak	H	-	-	-64.99	4.72	-9.54	46.73	62.80	-16.07
29425.00	Peak	H	-	-	-66.21	7.00	-9.54	47.79	62.80	-15.01
35310.00	Peak	H	-	-	-68.93	8.79	-9.54	46.86	62.80	-15.94

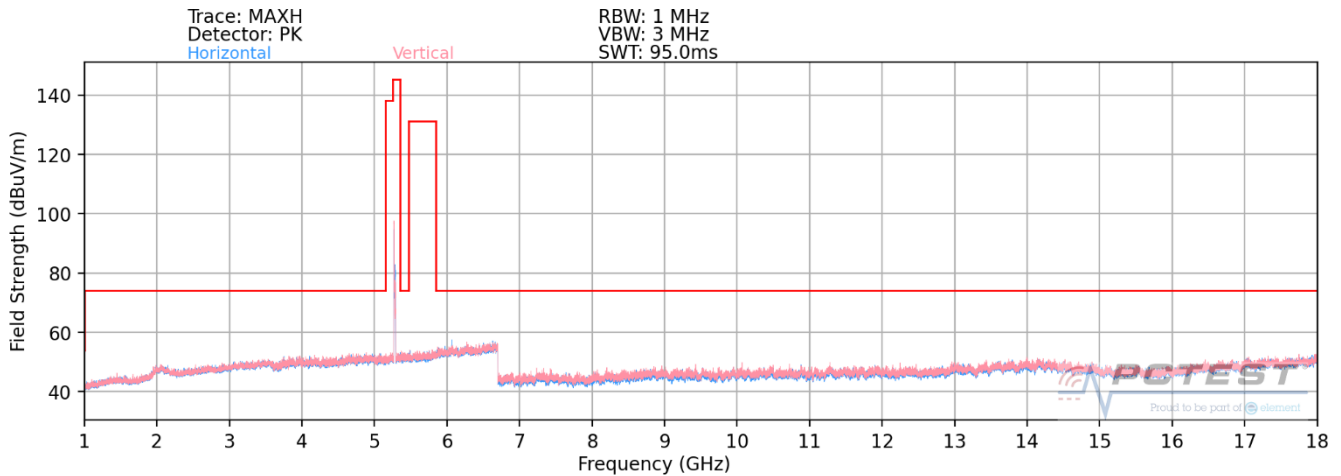
Table 7-63. Radiated Measurements MIMO (26 Tones)

FCC ID: A3LSMS906E		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2110010116-10.A3L	Test Dates: 09/09 – 12/03/2021	EUT Type: Portable Handset		Page 213 of 237

242 Tones

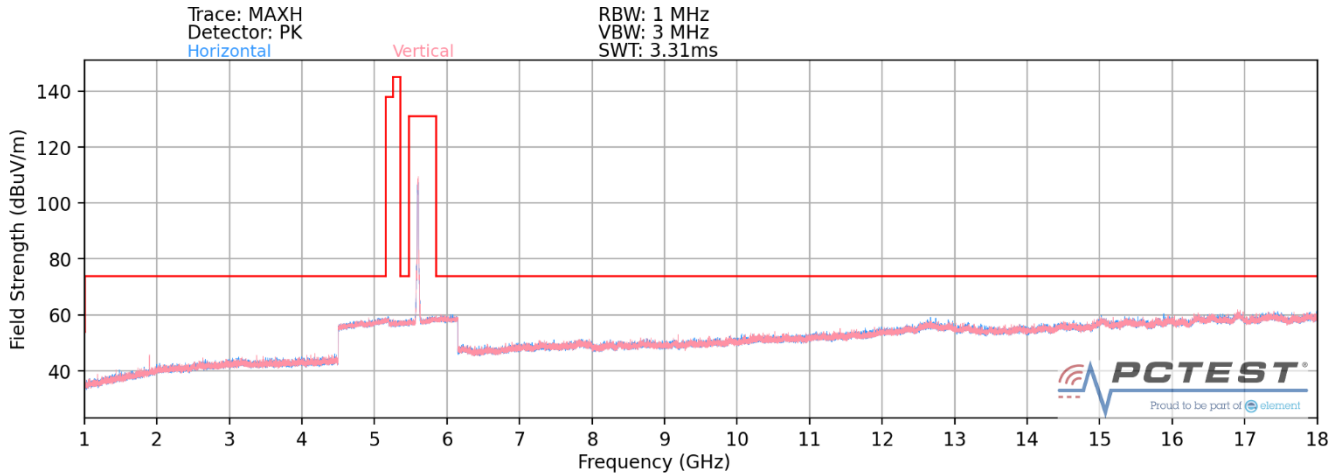


Plot 7-320. Radiated Spurious Plot above 1GHz MIMO (802.11ax – U1 Ch. 40 – 242 Tones)

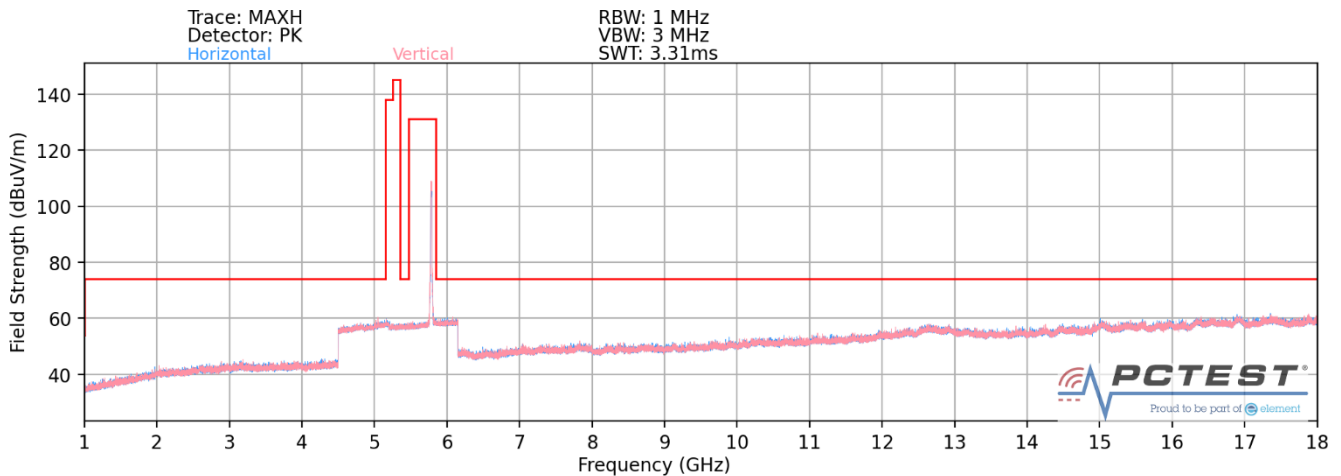


Plot 7-321. Radiated Spurious Plot above 1GHz MIMO (802.11ax – U2A Ch. 56 – 242 Tones)

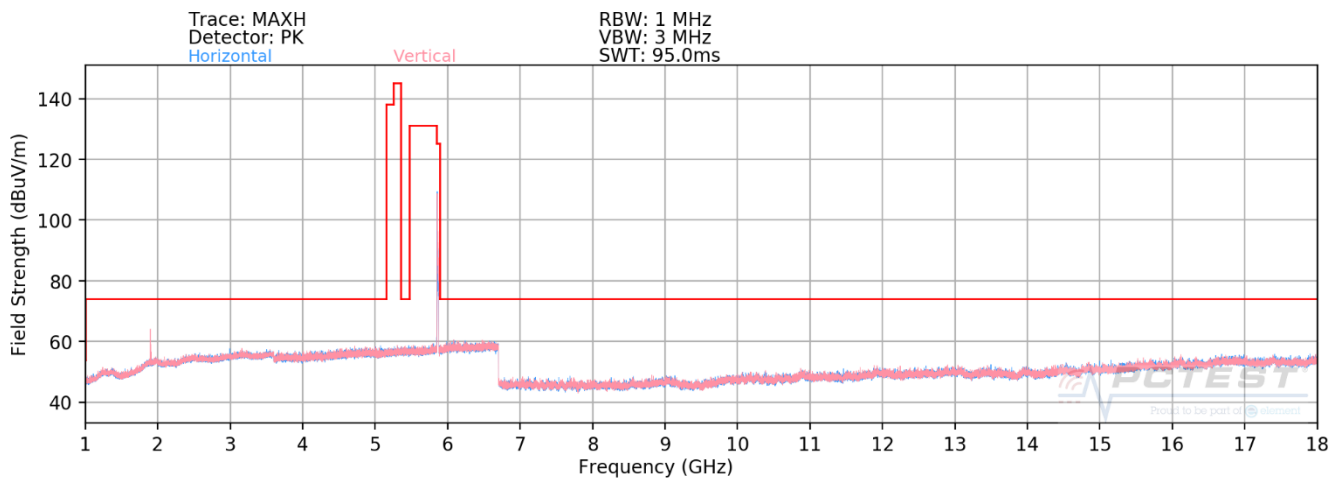
FCC ID: A3LSMS906E	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
Test Report S/N: 1M2110010116-10.A3L	Test Dates: 09/09 – 12/03/2021	EUT Type: Portable Handset		Page 214 of 237



Plot 7-322. Radiated Spurious Plot above 1GHz MIMO (802.11ax – U2C Ch. 120 – 242 Tones)



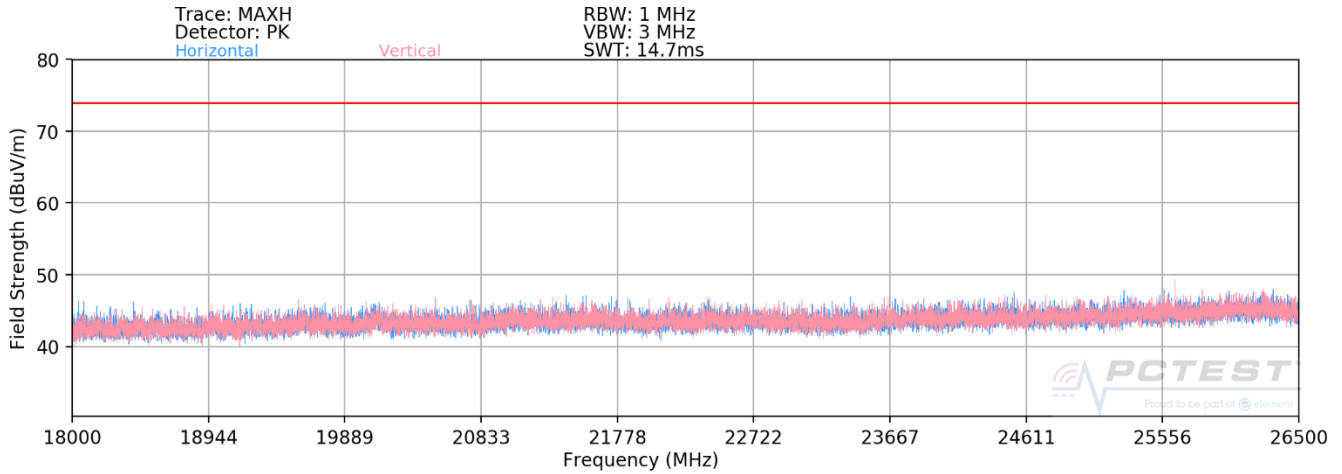
Plot 7-323. Radiated Spurious Plot above 1GHz MIMO (802.11ax – U3 Ch. 157 – 242 Tones)



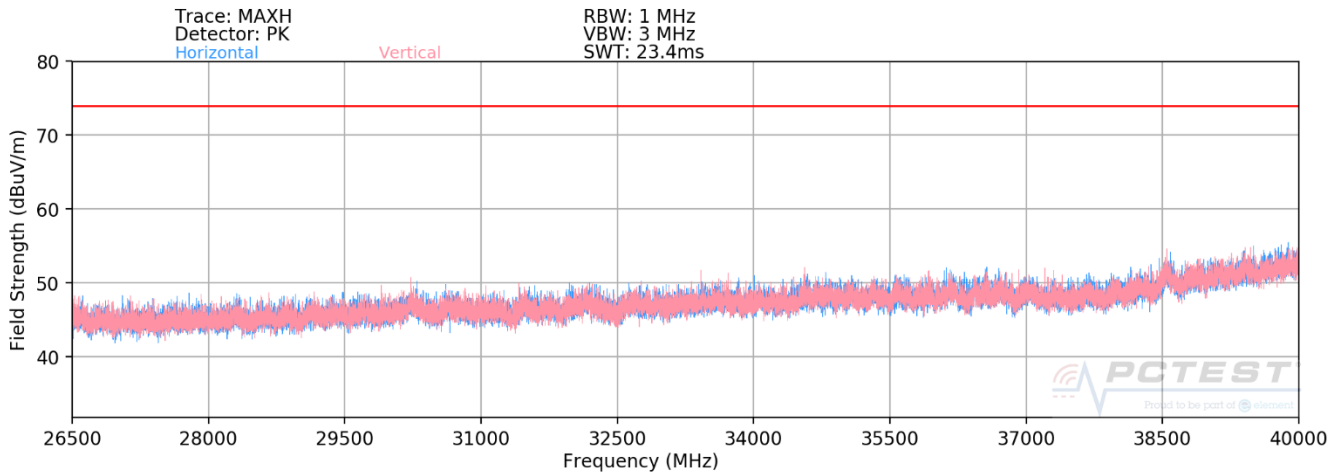
Plot 7-324. Radiated Spurious Plot above 1GHz MIMO (802.11ax – U3 Ch. 173 – 242 Tones)

FCC ID: A3LSMS906E	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
Test Report S/N: 1M2110010116-10.A3L	Test Dates: 09/09 – 12/03/2021	EUT Type: Portable Handset		Page 215 of 237

MIMO Radiated Spurious Emissions Measurements (Above 18GHz)



Plot 7-325. Radiated Spurious Plot 18GHz - 26.5GHz MIMO (802.11ax – 242 Tones)



Plot 7-326. Radiated Spurious Plot 26.5GHz - 40GHz MIMO (802.11ax – 242 Tones)

FCC ID: A3LSMS906E	 PCTEST Proud to be part of 	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2110010116-10.A3L	Test Dates: 09/09 – 12/03/2021	EUT Type: Portable Handset		Page 216 of 237

MIMO 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	H	101	10	-61.42	15.72	0.00	61.30	68.20	-6.90
* 15540.00	Average	H	-	-	-79.02	22.82	0.00	50.80	53.98	-3.18
* 15540.00	Peak	H	-	-	-69.25	22.82	0.00	60.57	73.98	-13.41
* 20720.00	Average	H	-	-	-65.96	4.37	-9.54	35.87	53.98	-18.11
* 20720.00	Peak	H	-	-	-55.84	4.37	-9.54	45.99	73.98	-27.99
25900.00	Peak	H	-	-	-56.05	5.87	-9.54	47.28	68.20	-20.92

Table 7-64. Radiated Measurements MIMO (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
 Channel: 40

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
10400.00	Peak	H	103	12	-62.01	15.93	0.00	60.92	68.20	-7.28
* 15600.00	Average	H	-	-	-80.42	23.56	0.00	50.14	53.98	-3.84
* 15600.00	Peak	H	-	-	-70.01	23.56	0.00	60.55	73.98	-13.43
* 20800.00	Average	H	-	-	-65.61	4.47	-9.54	36.32	53.98	-17.66
* 20800.00	Peak	H	-	-	-54.10	4.47	-9.54	47.82	73.98	-26.16
26000.00	Peak	H	-	-	-55.57	6.04	-9.54	47.93	68.20	-20.27

Table 7-65. Radiated Measurements MIMO (242 Tones)

FCC ID: A3LSMS906E		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
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Worst Case Mode: 802.11ax (20MHz BW)
 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	H	104	13	-63.25	16.78	0.00	60.53	68.20	-7.67
* 15720.00	Average	H	-	-	-80.04	22.83	0.00	49.79	53.98	-4.19
* 15720.00	Peak	H	-	-	-69.99	22.83	0.00	59.84	73.98	-14.14
* 20960.00	Average	H	-	-	-66.18	4.65	-9.54	35.93	53.98	-18.05
* 20960.00	Peak	H	-	-	-56.87	4.65	-9.54	45.24	73.98	-28.74
26200.00	Peak	H	-	-	-55.09	5.76	-9.54	48.13	68.20	-20.07

Table 7-66. Radiated Measurements MIMO (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	H	113	108	-61.80	16.27	0.00	61.47	68.20	-6.73
* 15780.00	Average	H	-	-	-80.89	23.55	0.00	49.66	53.98	-4.32
* 15780.00	Peak	H	-	-	-71.32	23.55	0.00	59.23	73.98	-14.75
* 21040.00	Average	H	-	-	-66.35	4.68	-9.54	35.79	53.98	-18.19
* 21040.00	Peak	H	-	-	-55.98	4.68	-9.54	46.16	73.98	-27.82
26300.00	Peak	H	-	-	-55.99	5.68	-9.54	47.15	68.20	-21.05

Table 7-67. Radiated Measurements MIMO (242 Tones)

FCC ID: A3LSMS906E		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
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Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5280MHz
 Channel: 56

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
10560.00	Peak	H	104	110	-61.81	16.01	0.00	61.20	68.20	-7.00
* 15840.00	Average	H	-	-	-80.11	23.22	0.00	50.11	53.98	-3.87
* 15840.00	Peak	H	-	-	-71.88	23.22	0.00	58.34	73.98	-15.64
* 21120.00	Average	H	-	-	-66.23	4.78	-9.54	36.00	53.98	-17.97
* 21120.00	Peak	H	-	-	-55.75	4.78	-9.54	46.48	73.98	-27.50
* 26400.00	Peak	H	-	-	-55.63	5.75	-9.54	47.58	68.20	-20.62

Table 7-68. Radiated Measurements MIMO (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	H	100	110	-78.89	17.06	0.00	45.17	53.98	-8.81
* 10640.00	Peak	H	100	110	-62.31	17.06	0.00	61.75	73.98	-12.23
* 15960.00	Average	H	-	-	-81.21	24.28	0.00	50.07	53.98	-3.91
* 15960.00	Peak	H	-	-	-69.93	24.28	0.00	61.35	73.98	-12.63
* 21280.00	Average	H	-	-	-66.29	4.92	-9.54	36.09	53.98	-17.89
* 21280.00	Peak	H	-	-	-56.22	4.92	-9.54	46.16	73.98	-27.82
* 26600.00	Peak	H	-	-	-56.14	5.78	-9.54	47.10	68.20	-21.10

Table 7-69. Radiated Measurements MIMO (242 Tones)

FCC ID: A3LSMS906E		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
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Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5500MHz
 Channel: 100

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
* 11000.00	Average	H	105	122	-75.22	17.49	0.00	49.27	53.98	-4.71
* 11000.00	Peak	H	105	122	-63.56	17.49	0.00	60.93	73.98	-13.05
16500.00	Peak	H	-	-	-66.87	24.76	0.00	64.88	68.20	-3.32
22000.00	Peak	H	-	-	-56.05	4.80	-9.54	46.20	68.20	-22.00
27500.00	Peak	H	-	-	-55.04	5.93	-9.54	48.35	68.20	-19.85

Table 7-70. Radiated Measurements MIMO (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	H	104	120	-74.65	17.30	0.00	49.65	53.98	-4.33
* 11200.00	Peak	H	104	120	-62.43	17.30	0.00	61.87	73.98	-12.11
16800.00	Peak	H	-	-	-68.99	24.29	0.00	62.30	68.20	-5.90
* 22400.00	Average	H	-	-	-65.63	4.84	-9.54	36.66	53.98	-17.32
* 22400.00	Peak	H	-	-	-53.88	4.84	-9.54	48.41	73.98	-25.57
28000.00	Peak	H	-	-	-55.51	6.12	-9.54	48.06	68.20	-20.14

Table 7-71. Radiated Measurements MIMO (242 Tones)

FCC ID: A3LSMS906E	 Proud to be part of 	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2110010116-10.A3L	Test Dates: 09/09 – 12/03/2021	EUT Type: Portable Handset		Page 220 of 237

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

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
* 11440.00	Average	H	103	120	-74.25	18.17	0.00	50.92	53.98	-3.06
* 11440.00	Peak	H	103	120	-63.14	18.17	0.00	62.03	73.98	-11.95
17160.00	Peak	H	-	-	-69.24	24.98	0.00	62.74	68.20	-5.46
* 22880.00	Average	H	-	-	-65.62	4.77	-9.54	36.61	53.98	-17.37
* 22880.00	Peak	H	-	-	-55.65	4.77	-9.54	46.58	73.98	-27.40
28600.00	Peak	H	-	-	-55.71	6.32	-9.54	48.06	68.20	-20.14

Table 7-72. Radiated Measurements MIMO (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	H	103	120	-75.11	17.61	0.00	49.50	53.98	-4.48
* 11490.00	Peak	H	103	120	-65.22	17.61	0.00	59.39	73.98	-14.59
17235.00	Peak	H	-	-	-70.01	25.64	0.00	62.63	68.20	-5.57
* 22980.00	Average	H	-	-	-66.37	4.67	-9.54	35.76	53.98	-18.22
* 22980.00	Peak	H	-	-	-55.89	4.67	-9.54	46.24	73.98	-27.74
28725.00	Peak	H	-	-	-56.24	6.42	-9.54	47.63	68.20	-20.57

Table 7-73. Radiated Measurements MIMO (242 Tones)

FCC ID: A3LSMS906E		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
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Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5785MHz
 Channel: 157

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
* 11570.00	Average	H	111	126	-79.22	18.25	0.00	46.03	53.98	-7.95
* 11570.00	Peak	H	111	126	-66.24	18.25	0.00	59.01	73.98	-14.97
17355.00	Peak	H	-	-	-70.12	26.14	0.00	63.02	68.20	-5.18
23140.00	Peak	H	-	-	-56.48	4.61	-9.54	45.58	68.20	-22.62
28925.00	Peak	H	-	-	-56.98	6.50	-9.54	46.97	68.20	-21.23

Table 7-74. Radiated Measurements MIMO (242 Tones)

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

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
* 11650.00	Average	H	107	106	-79.31	17.97	0.00	45.66	53.98	-8.31
* 11650.00	Peak	H	107	106	-67.24	17.97	0.00	57.73	73.98	-16.24
17475.00	Peak	H	-	-	-70.44	26.23	0.00	62.79	68.20	-5.41
23300.00	Peak	H	-	-	-56.51	4.72	-9.54	45.67	68.20	-22.53
29125.00	Peak	H	-	-	-55.64	6.86	-9.54	48.68	68.20	-19.52

Table 7-75. Radiated Measurements MIMO (242 Tones)

FCC ID: A3LSMS906E		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
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Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 1 & 3
 Operating Frequency: 5845 MHz
 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	H	333.00	112.00	-67.24	27.50	0.00	67.26	53.98	13.28
11690.00	Peak	H	333	112	-77.53	27.50	0.00	56.97	73.98	-17.01
17535.00	Peak	H	-	-	-84.59	34.60	0.00	57.01	62.80	-5.79
23380.00	Peak	H	-	-	-65.21	4.67	-9.54	46.46	62.80	-16.34
29225.00	Peak	H	-	-	-66.01	6.67	-9.54	47.66	62.80	-15.14
35070.00	Peak	H	-	-	-67.42	8.57	-9.54	48.15	62.80	-14.65

Table 7-76. Radiated Measurements MIMO (26 Tones)

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 1 & 3 meters
 Operating Frequency: 5865 MHz
 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	H	368.00	152.00	-87.52	27.50	0.00	46.98	53.98	-7.00
* 11730.00	Peak	H	368	153	-76.66	27.50	0.00	57.84	73.98	-16.14
17595.00	Peak	H	-	-	-85.11	34.60	0.00	56.49	62.80	-6.31
23460.00	Peak	H	-	-	-66.01	4.63	-9.54	45.62	62.80	-17.18
29325.00	Peak	H	-	-	-67.09	6.99	-9.54	46.90	62.80	-15.90
35190.00	Peak	H	-	-	-67.83	8.73	-9.54	47.90	62.80	-14.90

Table 7-77. Radiated Measurements MIMO (26 Tones)

FCC ID: A3LSMS906E		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
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Worst Case Mode: 802.11ax (20MHz BW)
Worst Case Transfer Rate: MCS0
RU Index: 61
Distance of Measurements: 1 & 3 Meters
Operating Frequency: 5885 MHz
Channel: 177

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	H	285.00	166.00	-87.66	27.68	0.00	47.02	53.98	-6.96
* 11770.00	Peak	H	285	166	-81.23	27.68	0.00	53.45	73.98	-20.53
17655.00	Peak	H	-	-	-84.21	35.08	0.00	57.87	62.80	-4.93
23540.00	Peak	H	-	-	-65.11	4.72	-9.54	46.61	62.80	-16.19
29425.00	Peak	H	-	-	-65.98	7.00	-9.54	48.02	62.80	-14.78
35310.00	Peak	H	-	-	-69.69	8.79	-9.54	46.10	62.80	-16.70

Table 7-78. Radiated Measurements MIMO (26 Tones)

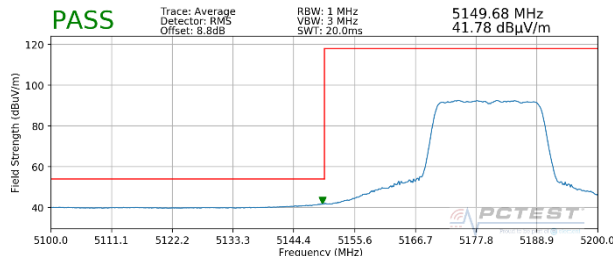
FCC ID: A3LSMS906E		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
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7.6.2 MIMO Radiated Band Edge Measurements (20MHz BW)

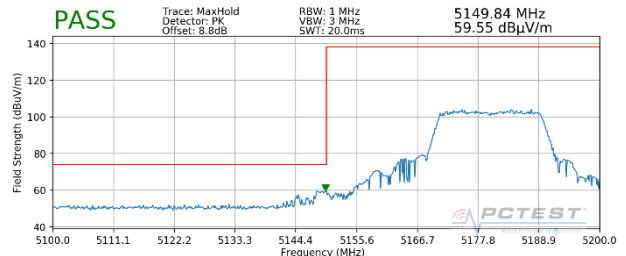
§15.407(b.1)(b.2) §15.205 §15.209; RSS-Gen [8.9]

242 Tones

Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
RU Index:	61
Distance of Measurements:	3 Meters
Operating Frequency:	5180MHz
Channel:	36

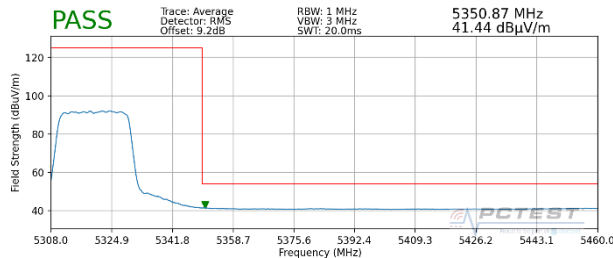


Plot 7-327. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 1 – 242 Tones)

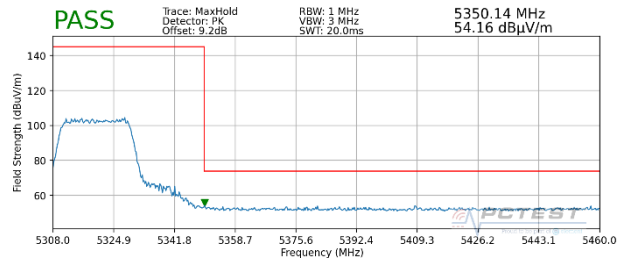


Plot 7-328. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 1 – 242 Tones)

Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
RU Index:	61
Distance of Measurements:	3 Meters
Operating Frequency:	5320MHz
Channel:	64



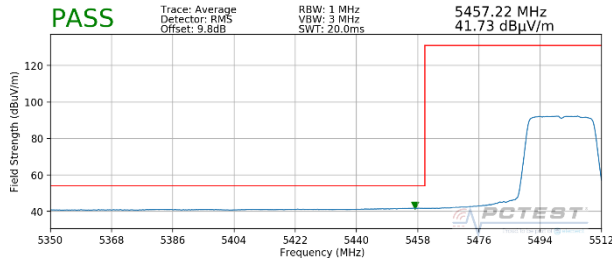
Plot 7-329. Radiated Upper Band Edge Plot MIMO (Average – UNII Band 2A – 242 Tones)



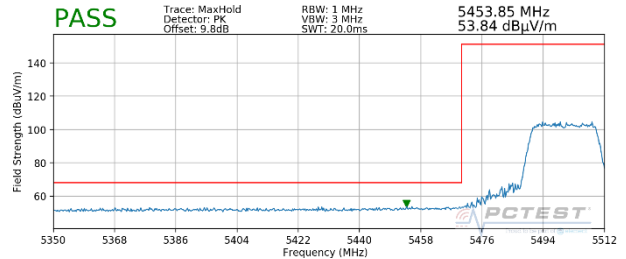
Plot 7-330. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 2A – 242 Tones)

FCC ID: A3LSMS906E		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
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Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 3 Meters
 Operating Frequency: 5500MHz
 Channel: 100

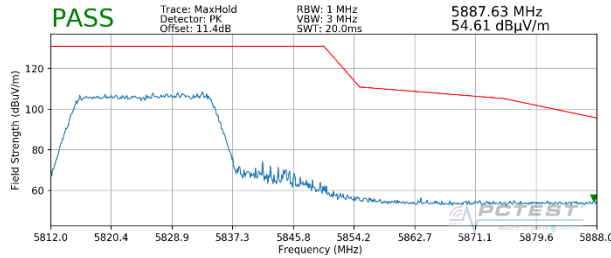


Plot 7-331. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 2C – 242 Tones)



Plot 7-332. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 2C – 242 Tones)

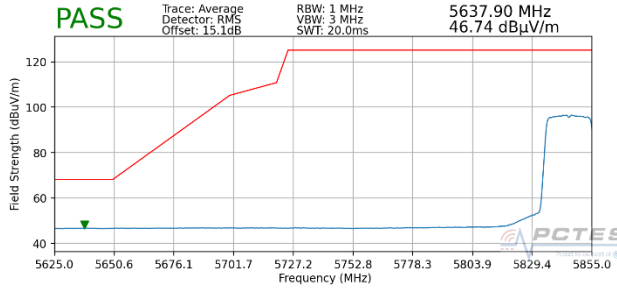
Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 3 Meters
 Operating Frequency: 5825MHz
 Channel: 165



Plot 7-333. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 3 – 242 Tones)

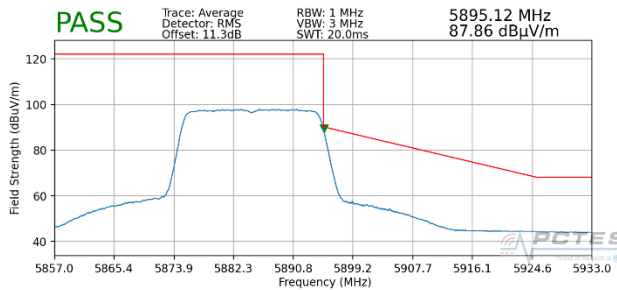
FCC ID: A3LSMS906E		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
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Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 3 Meters
 Operating Frequency: 5845MHz
 Channel: 169



**Plot 7-334. Radiated Lower Band Edge Plot MIMO
(Peak - UNII Band 4 - 242 Tones)**

Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 3 Meters
 Operating Frequency: 5885MHz
 Channel: 177



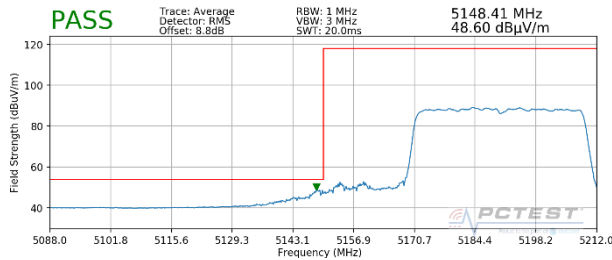
**Plot 7-335. Radiated Lower Band Edge Plot MIMO
(Peak - UNII Band 4 - 242 Tones)**

FCC ID: A3LSMS906E		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
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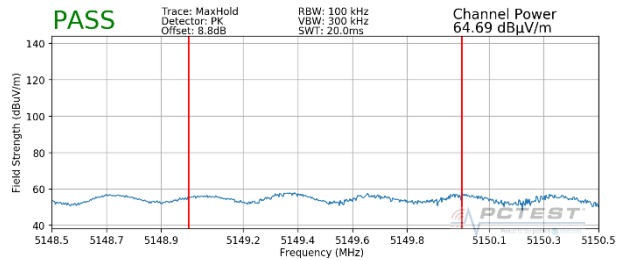
7.6.3 MIMO Radiated Band Edge Measurements (40MHz BW) §15.407(b.1)(b.2) §15.205 §15.209; RSS-Gen [8.9]

484 Tones

Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
RU Index:	65
Distance of Measurements:	3 Meters
Operating Frequency:	5190MHz
Channel:	38

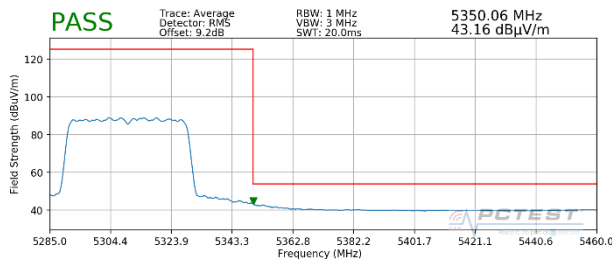


Plot 7-336. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 1 – 484 Tones)

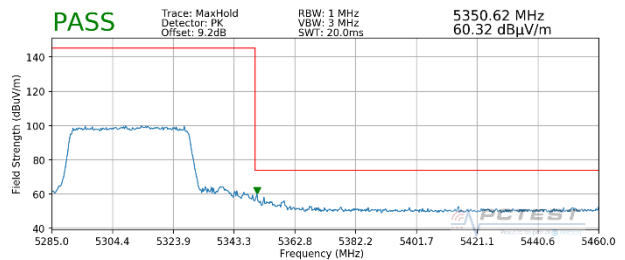


Plot 7-337. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 1 – 484 Tones)

Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
RU Index:	65
Distance of Measurements:	3 Meters
Operating Frequency:	5310MHz
Channel:	62



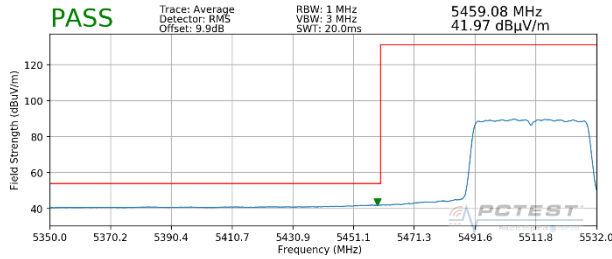
Plot 7-338. Radiated Upper Band Edge Plot MIMO (Average – UNII Band 2A – 484 Tones)



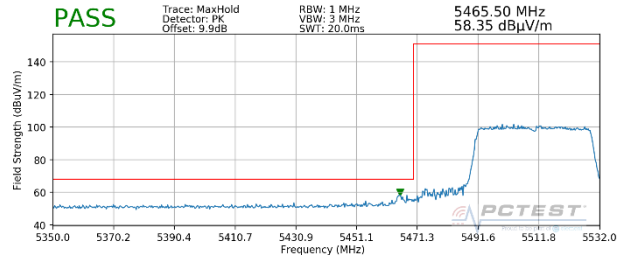
Plot 7-339. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 2A – 484 Tones)

FCC ID: A3LSMS906E		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
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Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 RU Index: 65
 Distance of Measurements: 3 Meters
 Operating Frequency: 5510MHz
 Channel: 102

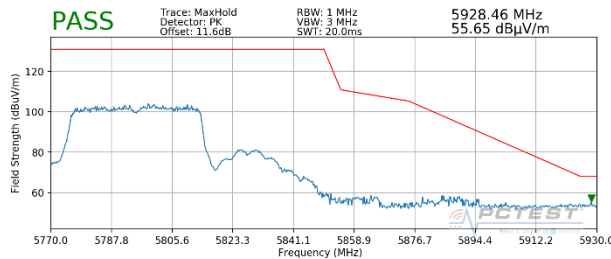


Plot 7-340. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 2C – 484 Tones)



Plot 7-341. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 2C – 484 Tones)

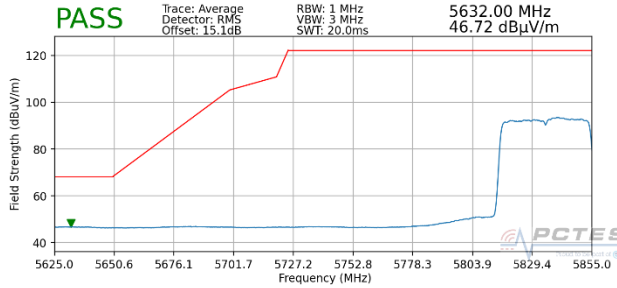
Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 RU Index: 65
 Distance of Measurements: 3 Meters
 Operating Frequency: 5795MHz
 Channel: 159



Plot 7-342. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 3 – 484 Tones)

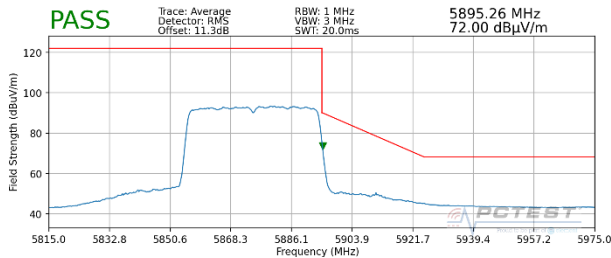
FCC ID: A3LSMS906E		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
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Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 RU Index: 65
 Distance of Measurements: 3 Meters
 Operating Frequency: 5835MHz
 Channel: 167



Plot 7-343. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 4 – 484 Tones)

Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 RU Index: 65
 Distance of Measurements: 3 Meters
 Operating Frequency: 5875MHz
 Channel: 175



Plot 7-344. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 4 – 484 Tones)

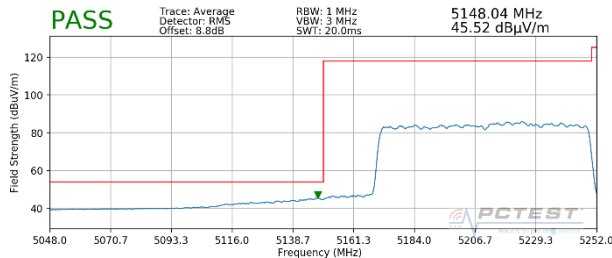
FCC ID: A3LSMS906E		MEASUREMENT REPORT (CERTIFICATION)	 Approved by: Technical Manager
Test Report S/N: 1M2110010116-10.A3L	Test Dates: 09/09 – 12/03/2021	EUT Type: Portable Handset	Page 230 of 237

7.6.4 MIMO Radiated Band Edge Measurements (80MHz BW)

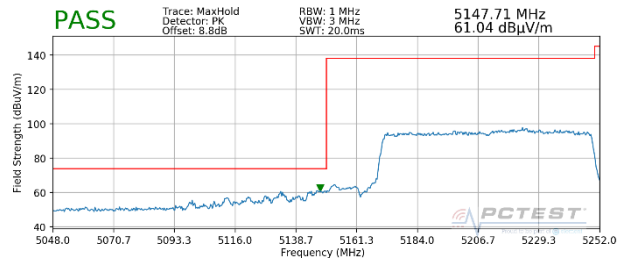
§15.407(b.1)(b.2) §15.205 §15.209; RSS-Gen [8.9]

996 Tones

Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
RU Index:	67
Distance of Measurements:	3 Meters
Operating Frequency:	5210MHz
Channel:	42

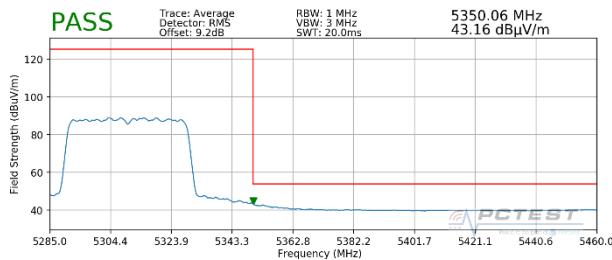


Plot 7-345. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 1 – 996 Tones)

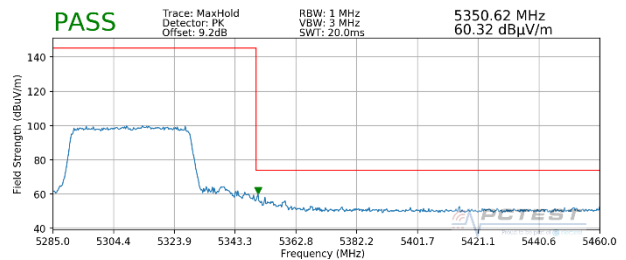


Plot 7-346. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 1 – 996 Tones)

Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
RU Index:	67
Distance of Measurements:	3 Meters
Operating Frequency:	5290MHz
Channel:	58



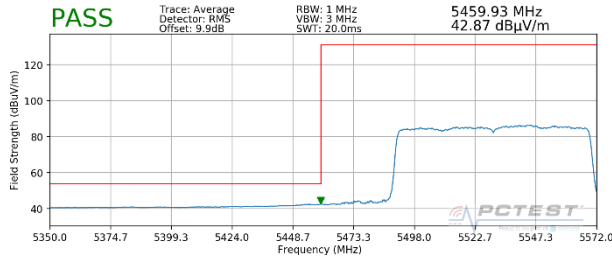
Plot 7-347. Radiated Upper Band Edge Plot MIMO (Average – UNII Band 2A – 996 Tones)



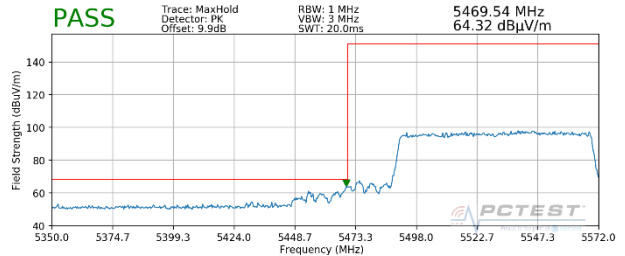
Plot 7-348. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 2A – 996 Tones)

FCC ID: A3LSMS906E		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
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Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 RU Index: 67
 Distance of Measurements: 3 Meters
 Operating Frequency: 5530MHz
 Channel: 106

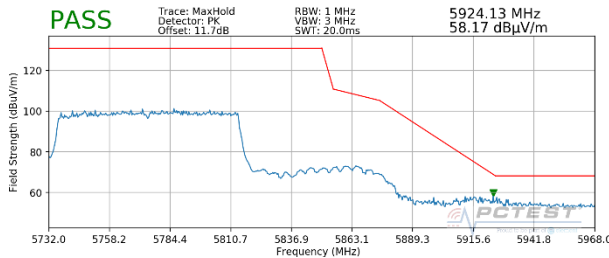


Plot 7-349. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 2C – 996 Tones)



Plot 7-350. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 2C – 996 Tones)

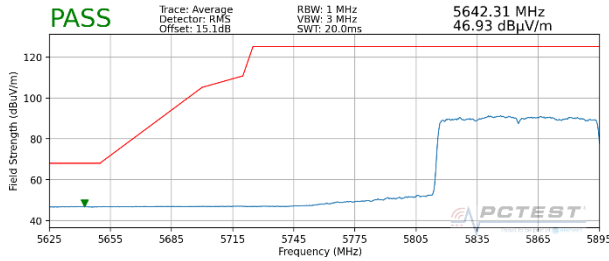
Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 RU Index: 67
 Distance of Measurements: 3 Meters
 Operating Frequency: 5775MHz
 Channel: 155



Plot 7-351. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 3 – 996 Tones)

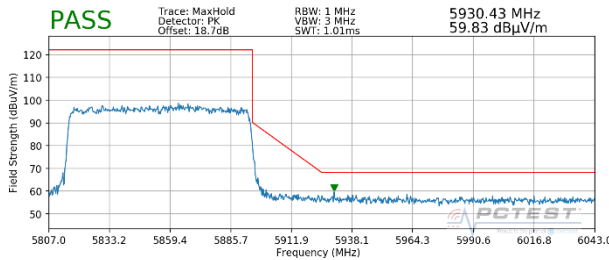
FCC ID: A3LSMS906E	 Proud to be part of 	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
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Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 RU Index: 65
 Distance of Measurements: 3 Meters
 Operating Frequency: 5815MHz
 Channel: 171



**Plot 7-352. Radiated Lower Band Edge Plot MIMO
(Peak – UNII Band 4 – 996 Tones)**

Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 RU Index: 65
 Distance of Measurements: 3 Meters
 Operating Frequency: 5815MHz
 Channel: 171



**Plot 7-353. Radiated Lower Band Edge Plot MIMO
(Peak – UNII Band 4 – 996 Tones)**

FCC ID: A3LSMS906E	 <p>PCTEST® Proud to be part of element</p>	MEASUREMENT REPORT (CERTIFICATION)	 <p>Approved by: Technical Manager</p>
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7.7 Radiated Spurious Emissions Measurements – Below 1GHz

§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 maximum power, and at the appropriate frequencies. All data rates and modes were investigated for radiated spurious emissions. Only the radiated emissions of the configuration that produced the worst case emissions are reported in this section.

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 7-79 per Section 15.209 and RSS-Gen (8.9).

Frequency	Field Strength [μ V/m]	Measured Distance [Meters]
0.009 – 0.490 MHz	2400/F (kHz)	300
0.490 – 1.705 MHz	24000/F (kHz)	30
1.705 – 30.00 MHz	30	30
30.00 – 88.00 MHz	100	3
88.00 – 216.0 MHz	150	3
216.0 – 960.0 MHz	200	3
Above 960.0 MHz	500	3

Table 7-79. Radiated Limits

Test Procedures Used

ANSI C63.10-2013

Test Settings

Quasi-Peak Field Strength Measurements

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 120kHz (for emissions from 30MHz – 1GHz)
3. Detector = quasi-peak
4. Sweep time = auto couple
5. Trace mode = max hold
6. Trace was allowed to stabilize

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Test Setup

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

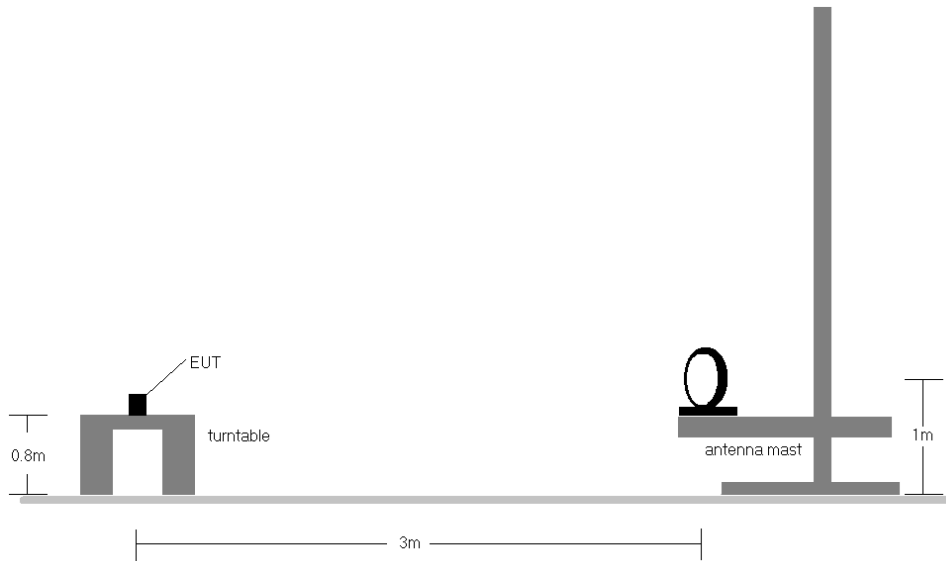


Figure 7-6. Radiated Test Setup < 30MHz

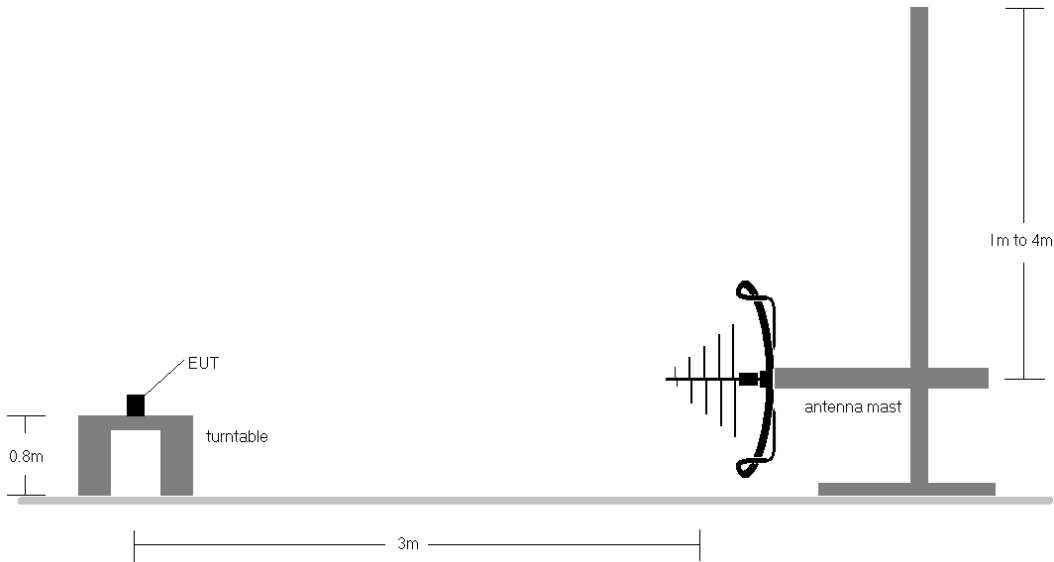


Figure 7-7. Radiated Test Setup < 1GHz

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Test Notes

1. All emissions lying in restricted bands specified in §15.205 and RSS-Gen (8.10) are below the limit shown in Table 7-79.
2. The broadband receive antenna is manipulated through vertical and horizontal polarizations during the tests. The EUT is manipulated through three orthogonal planes.
3. This unit was tested with its standard battery.
4. The spectrum is investigated using a peak detector and final measurements are recorded using CISPR quasi peak detector. The worst-case emissions are reported however emissions whose levels were not within 20dB of the respective limits were not reported.
5. Emissions were measured at a 3 meter test distance.
6. Emissions are investigated while operating on the center channel of the mode, band, and modulation that produced the worst case results during the transmitter spurious emissions testing.
7. No spurious emissions were detected within 20dB of the limit below 30MHz.
8. The results recorded using the broadband antenna is known to correlate with the results obtained by using a tuned dipole with an acceptable degree of accuracy. The VSWR for the measurement antenna was found to be less than 2:1.
9. The wide spectrum spurious emissions plots shown on the following pages are used only for the purpose of emission identification. There were no emissions detected in the 30MHz – 1GHz frequency range, as shown in the subsequent plots.

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8.0 CONCLUSION

The data collected relate only the item(s) tested and show that the **Samsung Portable Handset FCC ID: A3LSMS906E** is in compliance with Part 15 Subpart E (15.407) of the FCC Rules.

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