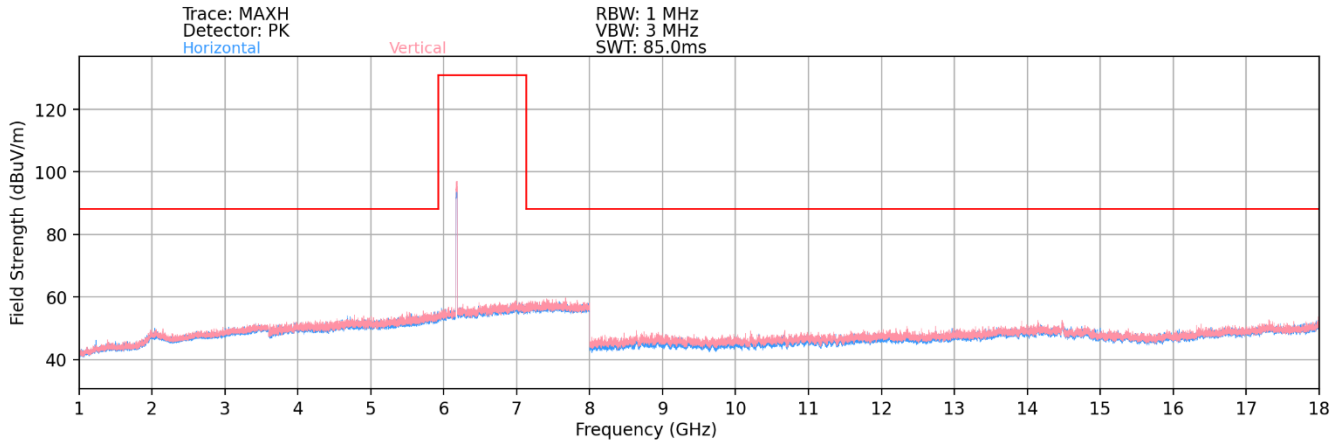
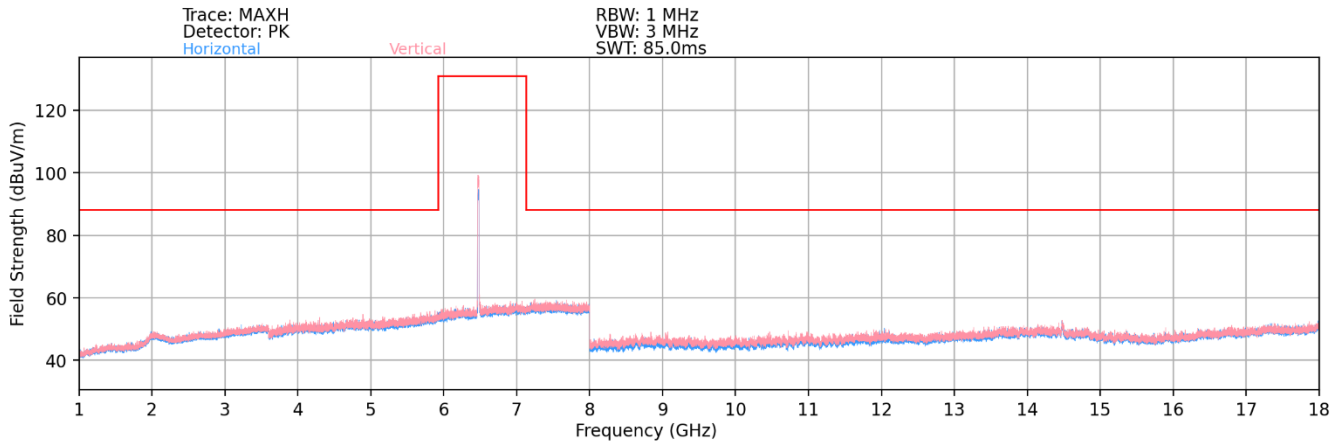


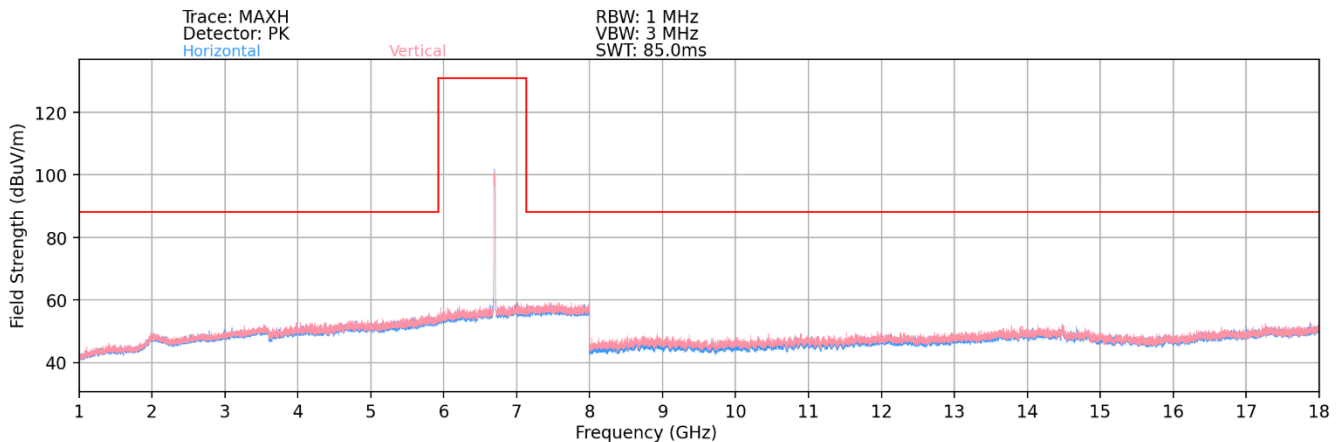
7.6.2 MIMO Radiated Spurious Emission Measurements (242 Tones)



Plot 7-487. Radiated Spurious Plot above 1GHz MIMO (802.11ax) – UNII BAND 5

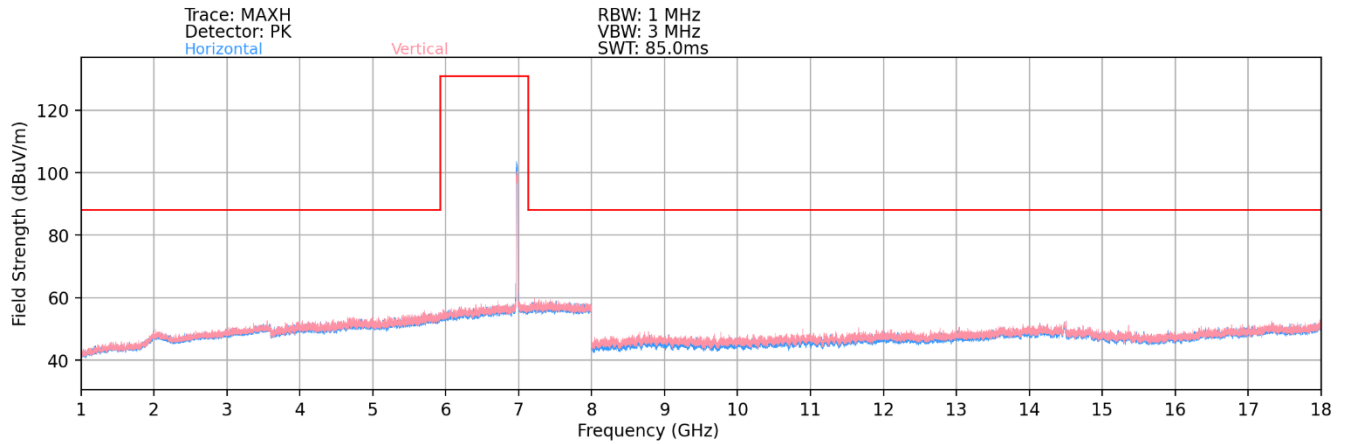


Plot 7-488. Radiated Spurious Plot above 1GHz MIMO (802.11ax) – UNII BAND 6



Plot 7-489. Radiated Spurious Plot above 1GHz MIMO (802.11ax) – UNII BAND 7

FCC ID: A3LSMS908E		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2109220110-12-R1.A3L	Test Dates: 9/9 – 11/18/2021	EUT Type: Portable Handset		Page 292 of 305



Plot 7-490. Radiated Spurious Plot above 1GHz MIMO (802.11ax) – UNII BAND 8

FCC ID: A3LSMS908E	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2109220110-12-R1.A3L	Test Dates: 9/9 – 11/18/2021	EUT Type: Portable Handset	Page 293 of 305	

MIMO (242 Tones) Radiated Spurious Emission Measurements

§15.407(b) §15.205 & §15.209

Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5935MHz
 Channel: 2

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]
* 11870.00	Average	H	-	-	-81.96	20.44	0.00	45.48	53.98	-8.50
* 11870.00	Peak	H	-	-	-70.59	20.44	0.00	56.85	73.98	-17.13
* 17805.00	Average	H	-	-	-83.71	26.31	0.00	49.60	53.98	-4.38
* 17805.00	Peak	H	-	-	-71.99	26.31	0.00	61.32	73.98	-12.66
* 23740.00	Average	H	-	-	-68.40	4.79	-9.54	33.85	53.98	-20.13
* 23740.00	Peak	H	-	-	-58.59	4.79	-9.54	43.66	73.98	-30.32
* 29675.00	Peak	H	-	-	-58.62	7.24	-9.54	46.08	68.20	-22.12

Table 7-46. Radiated Measurements MIMO (242 Tones)

Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 6175MHz
 Channel: 45

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]
* 12350.00	Average	H	133	6	-80.86	21.02	0.00	47.16	53.98	-6.82
* 12350.00	Peak	H	133	6	-69.15	21.02	0.00	58.87	73.98	-15.11
* 18525.00	Average	H	-	-	-67.09	3.17	-9.54	33.54	53.98	-20.44
* 18525.00	Peak	H	-	-	-57.51	3.17	-9.54	43.12	73.98	-30.86
24700.00	Peak	H	-	-	-57.80	5.18	-9.54	44.84	68.20	-23.36
30875.00	Peak	H	-	-	-59.36	7.86	-9.54	45.95	68.20	-22.25

Table 7-47. Radiated Measurements MIMO (242 Tones)

FCC ID: A3LSMS908E		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2109220110-12-R1.A3L	Test Dates: 9/9 – 11/18/2021	EUT Type: Portable Handset	Page 294 of 305	

Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 6415MHz
 Channel: 93

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]
12830.00	Peak	H	-	-	-70.66	21.25	0.00	57.59	68.20	-10.61
* 19245.00	Average	H	-	-	-67.13	3.55	-9.54	33.88	53.98	-20.10
* 19245.00	Peak	H	-	-	-57.43	3.55	-9.54	43.58	73.98	-30.40
25660.00	Peak	H	-	-	-58.46	5.47	-9.54	44.46	68.20	-23.74
32075.00	Peak	H	-	-	-58.80	8.18	-9.54	46.83	68.20	-21.37

Table 7-48. Radiated Measurements MIMO (242 Tones)

Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 6435MHz
 Channel: 97

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]
12870.00	Peak	H	-	-	-70.85	21.23	0.00	57.38	68.20	-10.82
* 19305.00	Average	H	-	-	-67.39	3.78	-9.54	33.85	53.98	-20.13
* 19305.00	Peak	H	-	-	-57.72	3.78	-9.54	43.52	73.98	-30.46
25740.00	Peak	H	-	-	-58.29	5.73	-9.54	44.89	68.20	-23.31
32175.00	Peak	H	-	-	-57.84	8.19	-9.54	47.81	68.20	-20.39

Table 7-49. Radiated Measurements MIMO (242 Tones)

FCC ID: A3LSMS908E		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2109220110-12-R1.A3L	Test Dates: 9/9 – 11/18/2021	EUT Type: Portable Handset		Page 295 of 305

Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 6475MHz
 Channel: 105

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]
12950.00	Peak	H	-	-	-70.65	20.86	0.00	57.21	68.20	-10.99
* 19425.00	Average	H	-	-	-67.45	3.82	-9.54	33.84	53.98	-20.14
* 19425.00	Peak	H	-	-	-57.96	3.82	-9.54	43.32	73.98	-30.66
25900.00	Peak	H	-	-	-58.92	5.87	-9.54	44.41	68.20	-23.79
32375.00	Peak	H	-	-	-58.66	7.89	-9.54	46.68	68.20	-21.52

Table 7-50. Radiated Measurements MIMO (242 Tones)

Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 6515MHz
 Channel: 113

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]
13030.00	Peak	H	-	-	-71.17	21.08	0.00	56.91	68.20	-11.29
* 19545.00	Average	H	-	-	-67.68	3.89	-9.54	33.67	53.98	-20.31
* 19545.00	Peak	H	-	-	-57.68	3.89	-9.54	43.67	73.98	-30.31
26060.00	Peak	H	-	-	-58.26	5.87	-9.54	45.07	68.20	-23.13
32575.00	Peak	H	-	-	-58.65	7.72	-9.54	46.53	68.20	-21.67

Table 7-51. Radiated Measurements MIMO (242 Tones)

FCC ID: A3LSMS908E		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2109220110-12-R1.A3L	Test Dates: 9/9 – 11/18/2021	EUT Type: Portable Handset	Page 296 of 305	

Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 6535MHz
 Channel: 117

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]
13070.00	Peak	H	-	-	-71.93	21.38	0.00	56.45	68.20	-11.75
* 19605.00	Average	H	-	-	-67.59	4.03	-9.54	33.90	53.98	-20.08
* 19605.00	Peak	H	-	-	-57.13	4.03	-9.54	44.36	73.98	-29.62
26140.00	Peak	H	-	-	-58.51	6.01	-9.54	44.96	68.20	-23.24
32675.00	Peak	H	-	-	-58.85	7.97	-9.54	46.58	68.20	-21.62

Table 7-52. Radiated Measurements MIMO (242 Tones)

Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 6695MHz
 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]
* 13390.00	Average	H	-	-	-83.11	21.13	0.00	45.02	53.98	-8.96
* 13390.00	Peak	H	-	-	-71.81	21.13	0.00	56.32	73.98	-17.66
* 20085.00	Average	H	-	-	-67.76	4.30	-9.54	34.00	53.98	-19.98
* 20085.00	Peak	H	-	-	-57.47	4.30	-9.54	44.29	73.98	-29.69
26780.00	Peak	H	-	-	-58.76	5.85	-9.54	44.55	68.20	-23.65
33475.00	Peak	H	-	-	-58.06	8.43	-9.54	47.83	68.20	-20.37

Table 7-53. Radiated Measurements MIMO (242 Tones)

FCC ID: A3LSMS908E		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2109220110-12-R1.A3L	Test Dates: 9/9 – 11/18/2021	EUT Type: Portable Handset	Page 297 of 305	

Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 6875MHz
 Channel: 185

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]
13750.00	Peak	H	-	-	-73.54	21.83	0.00	55.29	68.20	-12.91
* 20625.00	Average	H	-	-	-68.77	4.46	-9.54	33.15	53.98	-20.83
* 20625.00	Peak	H	-	-	-58.64	4.46	-9.54	43.27	73.98	-30.70
27500.00	Peak	H	-	-	-57.32	5.93	-9.54	46.06	68.20	-22.14
34375.00	Peak	H	-	-	-57.95	8.44	-9.54	47.95	68.20	-20.25

Table 7-54. Radiated Measurements MIMO (242 Tones)

Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 6895MHz
 Channel: 189

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]
13790.00	Peak	H	-	-	-71.20	22.57	0.00	58.37	68.20	-9.83
* 20685.00	Average	H	-	-	-68.23	4.36	-9.54	33.59	53.98	-20.39
* 20685.00	Peak	H	-	-	-58.75	4.36	-9.54	43.07	73.98	-30.91
27580.00	Peak	H	-	-	-57.56	5.96	-9.54	45.85	68.20	-22.35
34475.00	Peak	H	-	-	-57.86	8.49	-9.54	48.09	68.20	-20.11

Table 7-55. Radiated Measurements MIMO (242 Tones)

FCC ID: A3LSMS908E		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2109220110-12-R1.A3L	Test Dates: 9/9 – 11/18/2021	EUT Type: Portable Handset	Page 298 of 305	

Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 6995MHz
 Channel: 209

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]
13990.00	Peak	H	-	-	-71.35	22.11	0.00	57.76	68.20	-10.44
* 20985.00	Average	H	-	-	-68.36	4.70	-9.54	33.80	53.98	-20.18
* 20985.00	Peak	H	-	-	-58.76	4.70	-9.54	43.40	73.98	-30.58
27980.00	Peak	H	-	-	-57.78	6.11	-9.54	45.80	68.20	-22.40
34975.00	Peak	H	-	-	-57.47	8.62	-9.54	48.61	68.20	-19.59

Table 7-56. Radiated Measurements MIMO (242 Tones)

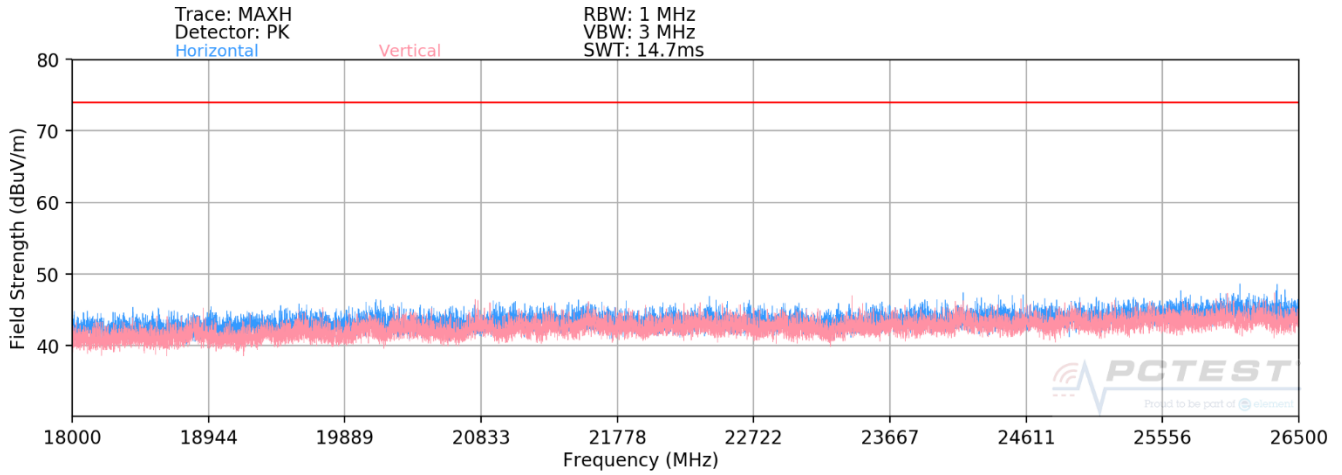
Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 7115MHz
 Channel: 233

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]
14230.00	Peak	H	-	-	-71.21	21.73	0.00	57.52	68.20	-10.68
* 21345.00	Average	H	-	-	-67.88	4.89	-9.54	34.47	53.98	-19.51
* 21345.00	Peak	H	-	-	-57.73	4.89	-9.54	44.62	73.98	-29.36
28460.00	Peak	H	-	-	-57.33	6.26	-9.54	46.39	68.20	-21.81
35575.00	Peak	H	-	-	-57.20	8.54	-9.54	48.80	68.20	-19.40

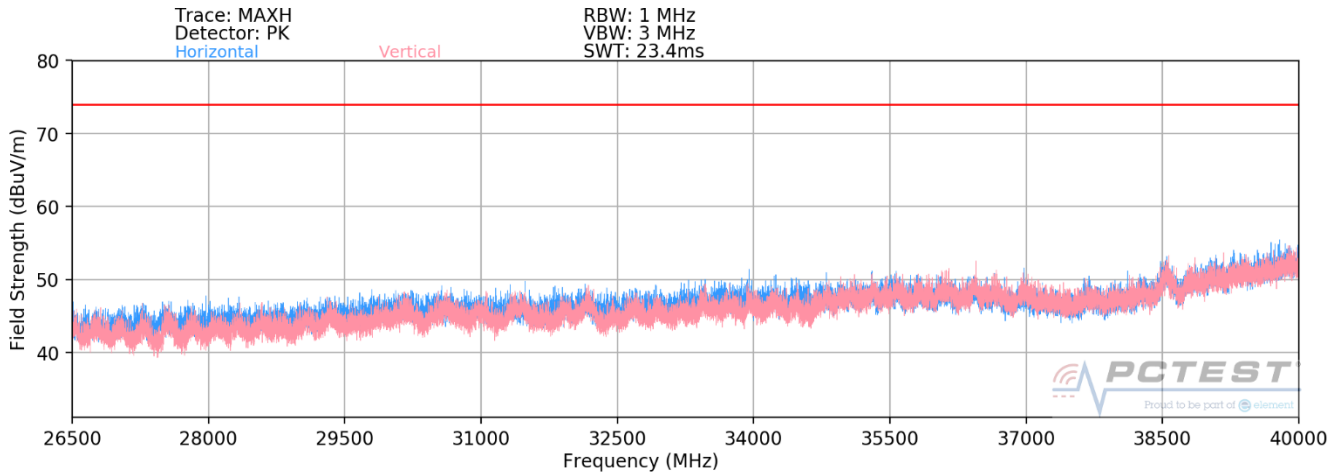
Table 7-57. Radiated Measurements MIMO (242 Tones)

FCC ID: A3LSMS908E		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2109220110-12-R1.A3L	Test Dates: 9/9 – 11/18/2021	EUT Type: Portable Handset		Page 299 of 305

7.6.3 MIMO Radiated Spurious Emissions Measurements (Above 18GHz)



Plot 7-491. Radiated Spurious Plot above 18GHz - 26.5GHz MIMO (802.11ax)



Plot 7-492. Radiated Spurious Plot 26.5GHz - 40GHz MIMO (802.11ax)

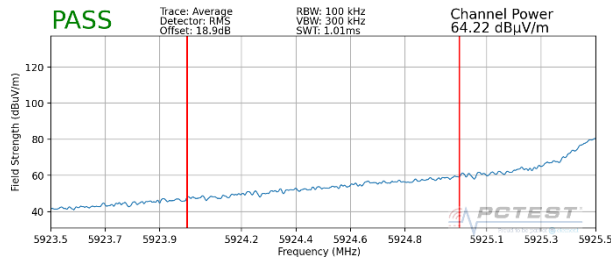
FCC ID: A3LSMS908E	 MEASUREMENT REPORT (CERTIFICATION) 		Approved by: Technical Manager
Test Report S/N: 1M2109220110-12-R1.A3L	Test Dates: 9/9 – 11/18/2021	EUT Type: Portable Handset	Page 300 of 305

7.6.4 MIMO Radiated Band Edge Measurements (20MHz BW)

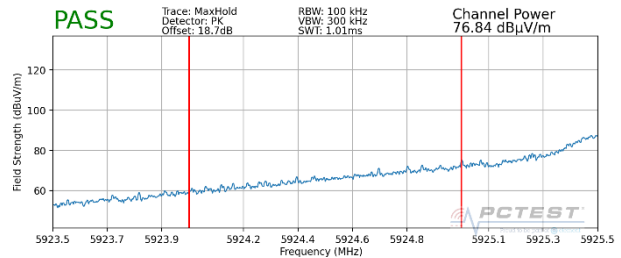
§15.407(b.5) §15.205 §15.209

106 Tones

Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
RU Index	53
Distance of Measurements:	3 Meters
Operating Frequency:	5935MHz
Channel:	2

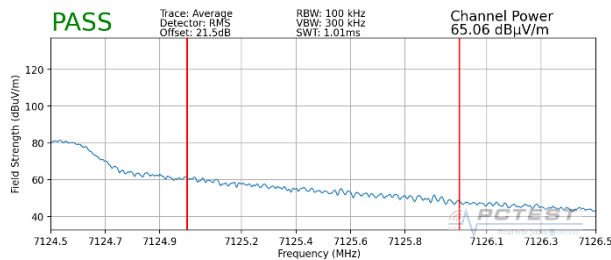


Plot 7-493. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 5)

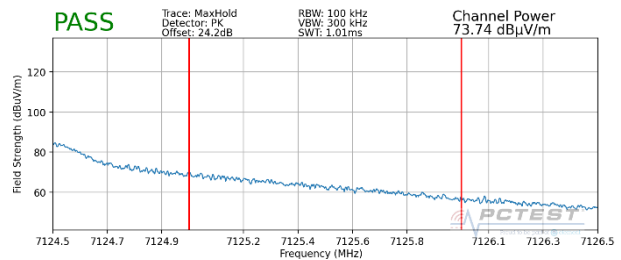


Plot 7-494. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 5)

Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
RU Index	54
Distance of Measurements:	3 Meters
Operating Frequency:	7115MHz
Channel:	233



Plot 7-495. Radiated Upper Band Edge Plot MIMO (Average – UNII Band 8)

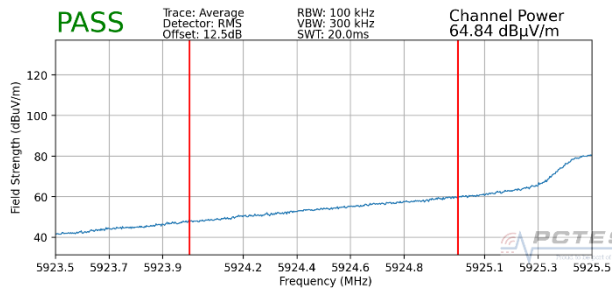


Plot 7-496. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 8)

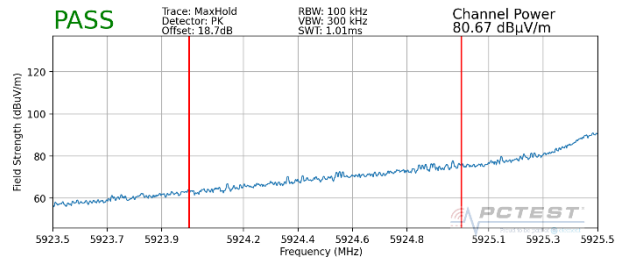
FCC ID: A3LSMS908E		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2109220110-12-R1.A3L	Test Dates: 9/9 – 11/18/2021	EUT Type: Portable Handset		Page 301 of 305

242 Tones

Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
RU Index	61
Distance of Measurements:	3 Meters
Operating Frequency:	5935MHz
Channel:	2

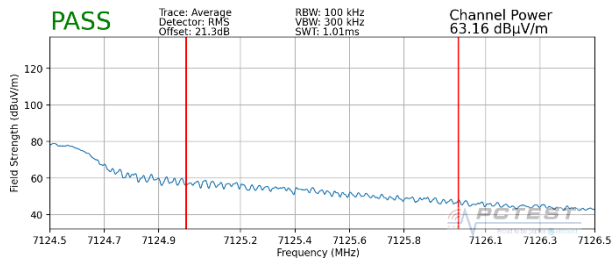


Plot 7-497. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 5)

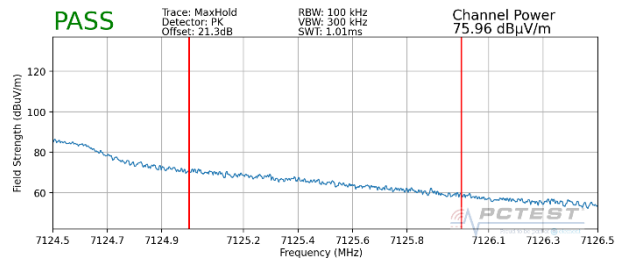


Plot 7-498. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 5)

Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
RU Index	61
Distance of Measurements:	3 Meters
Operating Frequency:	7115MHz
Channel:	233



Plot 7-499. Radiated Upper Band Edge Plot MIMO (Average – UNII Band 8)

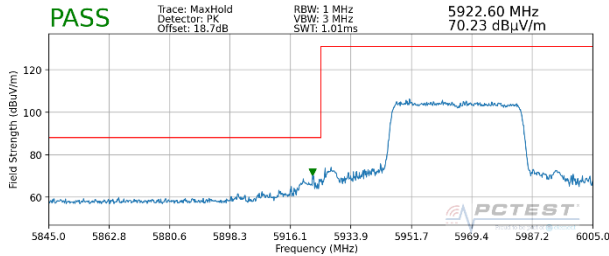


Plot 7-500. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 8)

FCC ID: A3LSMS908E		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2109220110-12-R1.A3L	Test Dates: 9/9 – 11/18/2021	EUT Type: Portable Handset		Page 302 of 305

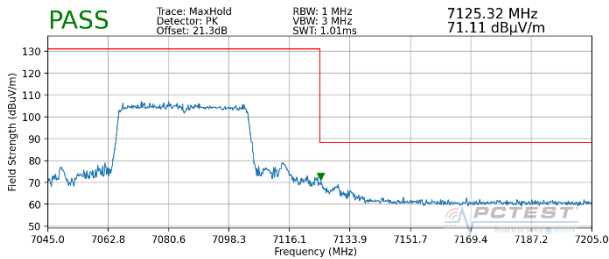
7.6.5 MIMO Radiated Band Edge Measurements (40MHz BW) §15.407(b.5) §15.205 §15.209

Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
RU Index	65
Distance of Measurements:	3 Meters
Operating Frequency:	5965MHz
Channel:	3



**Plot 7-501. Radiated Lower Band Edge Plot MIMO
(Peak – UNII Band 5)**

Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
RU Index	65
Distance of Measurements:	3 Meters
Operating Frequency:	7085MHz
Channel:	227



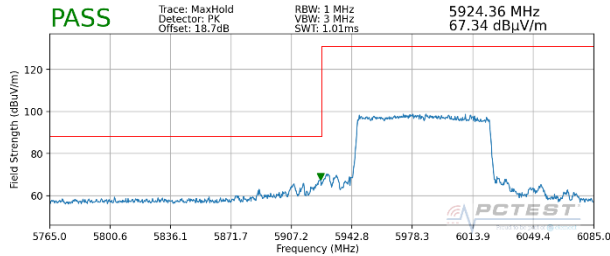
**Plot 7-502. Radiated Upper Band Edge Plot MIMO
(Peak – UNII Band 8)**

FCC ID: A3LSMS908E		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2109220110-12-R1.A3L	Test Dates: 9/9 – 11/18/2021	EUT Type: Portable Handset		Page 303 of 305

7.6.6 MIMO Radiated Band Edge Measurements (80MHz BW)

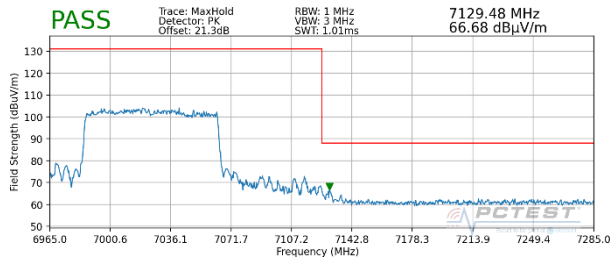
§15.407(b.5) §15.205 §15.209

Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
RU Index	67
Distance of Measurements:	3 Meters
Operating Frequency:	5985MHz
Channel:	7



Plot 7-503. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 5)

Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
RU Index	67
Distance of Measurements:	3 Meters
Operating Frequency:	7025MHz
Channel:	215



Plot 7-504. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 8)

FCC ID: A3LSMS908E		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2109220110-12-R1.A3L	Test Dates: 9/9 – 11/18/2021	EUT Type: Portable Handset		Page 304 of 305

8.0 CONCLUSION

The data collected relate only the item(s) tested and show that the **Samsung Portable Handset FCC ID: A3LSMS908E** is in compliance with Part 15 Subpart E (15.407) of the FCC Rules for operation as a client device.

FCC ID: A3LSMS908E		MEASUREMENT REPORT (CERTIFICATION)	 Approved by: Technical Manager
Test Report S/N: 1M2109220110-12-R1.A3L	Test Dates: 9/9 – 11/18/2021	EUT Type: Portable Handset	Page 305 of 305