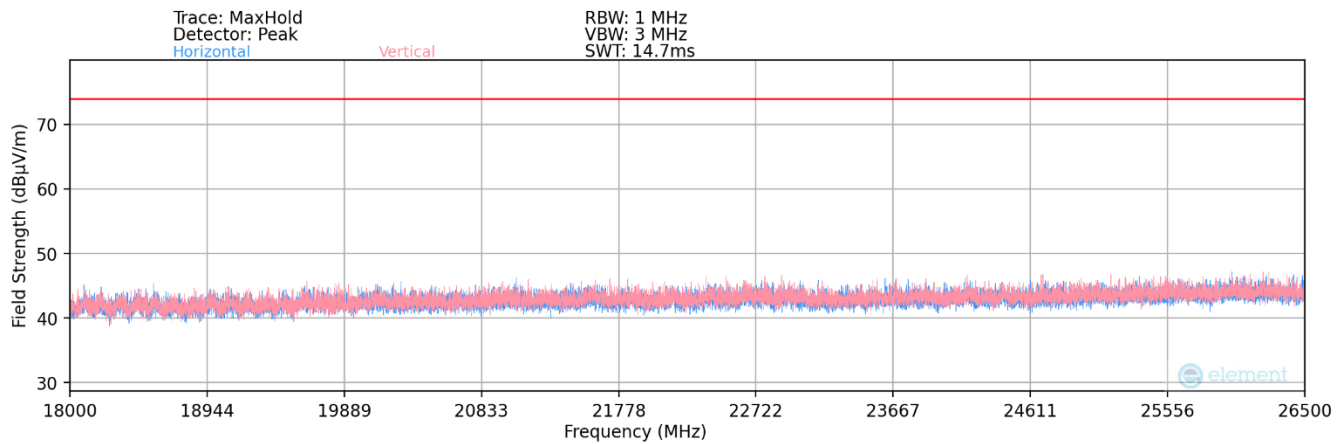
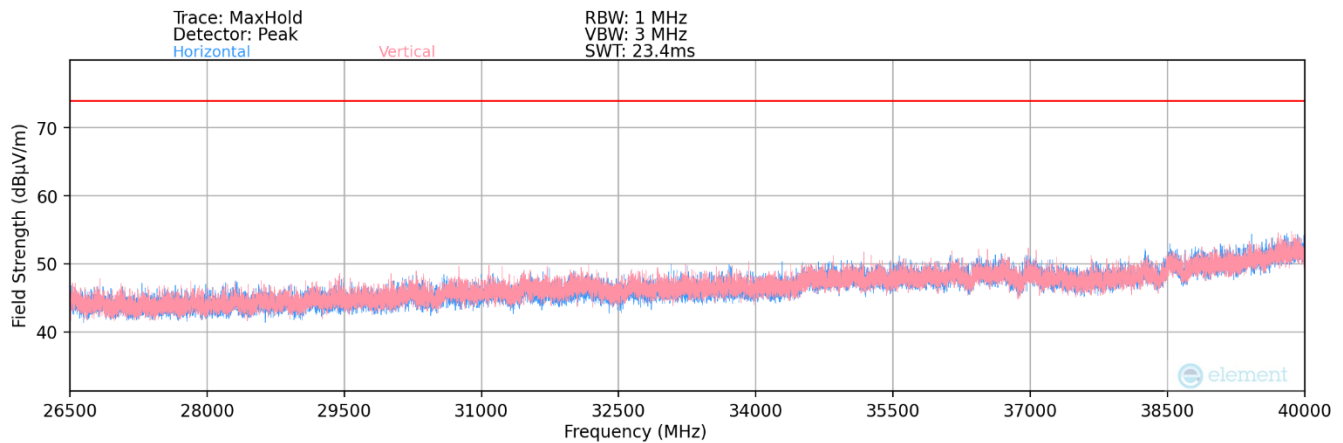


Plot 7-100. Radiated Spurious Plot above 1GHz MIMO (802.11ax – UNII 3 Ch. 157)



Plot 7-101. Radiated Spurious Plot 18GHz - 26.5GHz (802.11ax)



Plot 7-102. Radiated Spurious Plot 26.5GHz - 40GHz (802.11ax)

FCC ID: A3LSMA356E	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2310260110-10.A3L	Test Dates: 11/6/2023 – 1/2/2024	EUT Type: Portable Handset	Page 81 of 108



MIMO Radiated Spurious Emission Measurements (26 Tones) – UNII 1

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 4
 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	340	352	-68.40	12.12	0.00	50.72	68.20	-17.48
* 15540.00	Average	V	242	130	-78.56	14.11	0.00	42.55	53.98	-11.43
* 15540.00	Peak	V	242	130	-60.58	14.11	0.00	60.53	73.98	-13.45
* 20720.00	Average	V	-	-	-65.74	2.12	-9.54	33.83	53.98	-20.15
* 20720.00	Peak	V	-	-	-56.28	2.12	-9.54	43.29	73.98	-30.69
25900.00	Peak	V	-	-	-56.32	4.33	-9.54	45.47	68.20	-22.73

Table 7-17. Radiated Measurements MIMO (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: 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	330	354	-69.37	12.37	0.00	50.00	68.20	-18.20
* 15600.00	Average	V	-	-	-81.43	14.22	0.00	39.79	53.98	-14.19
* 15600.00	Peak	V	-	-	-69.99	14.22	0.00	51.23	73.98	-22.75
* 20800.00	Average	V	-	-	-65.87	2.34	-9.54	33.93	53.98	-20.05
* 20800.00	Peak	V	-	-	-56.14	2.34	-9.54	43.66	73.98	-30.32
26000.00	Peak	V	-	-	-56.44	4.46	-9.54	45.47	68.20	-22.73

Table 7-18. Radiated Measurements MIMO (26 Tones)

FCC ID: A3LSMA356E	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2310260110-10.A3L	Test Dates: 11/6/2023 – 1/2/2024	EUT Type: Portable Handset	Page 82 of 108



Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 4
 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	336	357	-68.70	13.08	0.00	51.38	68.20	-16.82
* 15720.00	Average	V	243	129	-79.16	14.65	0.00	42.49	53.98	-11.49
* 15720.00	Peak	V	243	129	-60.94	14.65	0.00	60.71	73.98	-13.27
* 20960.00	Average	V	-	-	-65.47	2.48	-9.54	34.46	53.98	-19.52
* 20960.00	Peak	V	-	-	-56.22	2.48	-9.54	43.71	73.98	-30.27
26200.00	Peak	V	-	-	-56.07	4.69	-9.54	46.08	68.20	-22.12

Table 7-19. Radiated Measurements MIMO (26 Tones)

FCC ID: A3LSMA356E	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2310260110-10.A3L	Test Dates: 11/6/2023 – 1/2/2024	EUT Type: Portable Handset	Page 83 of 108



MIMO Radiated Spurious Emission Measurements (26 Tones) – UNII 2A

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 4
 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	339	355	-68.29	12.95	0.00	51.66	68.20	-16.54
* 15780.00	Average	V	240	127	-80.86	14.23	0.00	40.37	53.98	-13.61
* 15780.00	Peak	V	240	127	-63.72	14.23	0.00	57.51	73.98	-16.47
* 21040.00	Average	V	-	-	-65.33	2.59	-9.54	34.72	53.98	-19.26
* 21040.00	Peak	V	-	-	-56.17	2.59	-9.54	43.88	73.98	-30.10
26300.00	Peak	V	-	-	-56.22	4.68	-9.54	45.92	68.20	-22.28

Table 7-20. Radiated Measurements MIMO (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: 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	325	348	-69.92	12.97	0.00	50.05	68.20	-18.15
* 15840.00	Average	V	241	131	-80.60	14.09	0.00	40.49	53.98	-13.49
* 15840.00	Peak	V	241	131	-64.35	14.09	0.00	56.74	73.98	-17.24
* 21120.00	Average	V	-	-	-65.42	2.68	-9.54	34.71	53.98	-19.26
* 21120.00	Peak	V	-	-	-56.23	2.68	-9.54	43.90	73.98	-30.07
26400.00	Peak	V	-	-	-56.47	4.70	-9.54	45.69	68.20	-22.51

Table 7-21. Radiated Measurements MIMO (26 Tones)

FCC ID: A3LSMA356E	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2310260110-10.A3L	Test Dates: 11/6/2023 – 1/2/2024	EUT Type: Portable Handset	Page 84 of 108



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	V	330	354	-79.15	12.51	0.00	40.36	53.98	-13.62
* 10640.00	Peak	V	330	354	-68.35	12.51	0.00	51.16	73.98	-22.82
* 15960.00	Average	V	235	126	-81.82	15.27	0.00	40.45	53.98	-13.53
* 15960.00	Peak	V	235	126	-65.97	15.27	0.00	56.30	73.98	-17.68
* 21280.00	Average	V	-	-	-65.25	2.67	-9.54	34.87	53.98	-19.11
* 21280.00	Peak	V	-	-	-56.33	2.67	-9.54	43.79	73.98	-30.19
26600.00	Peak	V	-	-	-56.84	4.59	-9.54	45.21	68.20	-22.99

Table 7-22. Radiated Measurements MIMO (26 Tones)

FCC ID: A3LSMA356E	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2310260110-10.A3L	Test Dates: 11/6/2023 – 1/2/2024	EUT Type: Portable Handset	Page 85 of 108



MIMO Radiated Spurious Emission Measurements (26 Tones) – UNII 2C

Worst Case Mode: 802.11ax (20MHz BW)
 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	V	343	20	-79.41	12.66	0.00	40.25	53.98	-13.73
* 11000.00	Peak	V	343	20	-66.96	12.66	0.00	52.70	73.98	-21.28
16500.00	Peak	V	-	-	-69.25	15.81	0.00	53.56	68.20	-14.64
22000.00	Peak	V	-	-	-56.25	2.95	-9.54	44.16	68.20	-24.04
27500.00	Peak	V	-	-	-56.39	4.79	-9.54	45.86	68.20	-22.34

Table 7-23. Radiated Measurements MIMO (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	V	345	9	-80.02	12.54	0.00	39.52	53.98	-14.46
* 11200.00	Peak	V	345	9	-68.03	12.54	0.00	51.51	73.98	-22.47
16800.00	Peak	V	-	-	-69.52	16.25	0.00	53.73	68.20	-14.47
* 22400.00	Average	V	-	-	-65.58	3.11	-9.54	34.99	53.98	-18.99
* 22400.00	Peak	V	-	-	-56.36	3.11	-9.54	44.21	73.98	-29.77
28000.00	Peak	V	-	-	-56.47	4.95	-9.54	45.94	68.20	-22.26

Table 7-24. Radiated Measurements MIMO (26 Tones)

FCC ID: A3LSMA356E	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2310260110-10.A3L	Test Dates: 11/6/2023 – 1/2/2024	EUT Type: Portable Handset	Page 86 of 108



Worst Case Mode: 802.11ax (20MHz BW)
 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	V	332	24	-80.64	13.54	0.00	39.90	53.98	-14.08
* 11440.00	Peak	V	332	24	-68.92	13.54	0.00	51.62	73.98	-22.36
17160.00	Peak	V	-	-	-68.73	16.79	0.00	55.06	68.20	-13.14
* 22880.00	Average	V	-	-	-65.47	3.05	-9.54	35.04	53.98	-18.94
* 22880.00	Peak	V	-	-	-56.87	3.05	-9.54	43.64	73.98	-30.34
28600.00	Peak	V	-	-	-56.72	4.92	-9.54	45.66	68.20	-22.54

Table 7-25. Radiated Measurements MIMO (26 Tones)

FCC ID: A3LSMA356E	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2310260110-10.A3L	Test Dates: 11/6/2023 – 1/2/2024	EUT Type: Portable Handset	Page 87 of 108



MIMO Radiated Spurious Emission Measurements (26 Tones) – UNII 3

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	V	335	22	-80.01	13.10	0.00	40.09	53.98	-13.89
* 11490.00	Peak	V	335	22	-69.77	13.10	0.00	50.33	73.98	-23.65
17235.00	Peak	V	-	-	-69.38	16.91	0.00	54.53	68.20	-13.67
* 22980.00	Average	V	-	-	-65.47	3.05	-9.54	35.04	53.98	-18.94
* 22980.00	Peak	V	-	-	-56.39	3.05	-9.54	44.12	73.98	-29.86
28725.00	Peak	V	-	-	-56.87	4.97	-9.54	45.56	68.20	-22.64

Table 7-26. Radiated Measurements MIMO (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: 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	346	3	-79.04	12.96	0.00	40.92	53.98	-13.06
* 11570.00	Peak	V	346	3	-67.17	12.96	0.00	52.79	73.98	-21.19
17355.00	Peak	V	-	-	-69.76	17.83	0.00	55.07	68.20	-13.13
23140.00	Peak	V	-	-	-56.42	3.10	-9.54	44.14	68.20	-24.06
28925.00	Peak	V	-	-	-56.71	4.78	-9.54	45.52	68.20	-22.68

Table 7-27. Radiated Measurements MIMO (26 Tones)

FCC ID: A3LSMA356E	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2310260110-10.A3L	Test Dates: 11/6/2023 – 1/2/2024	EUT Type: Portable Handset	Page 88 of 108



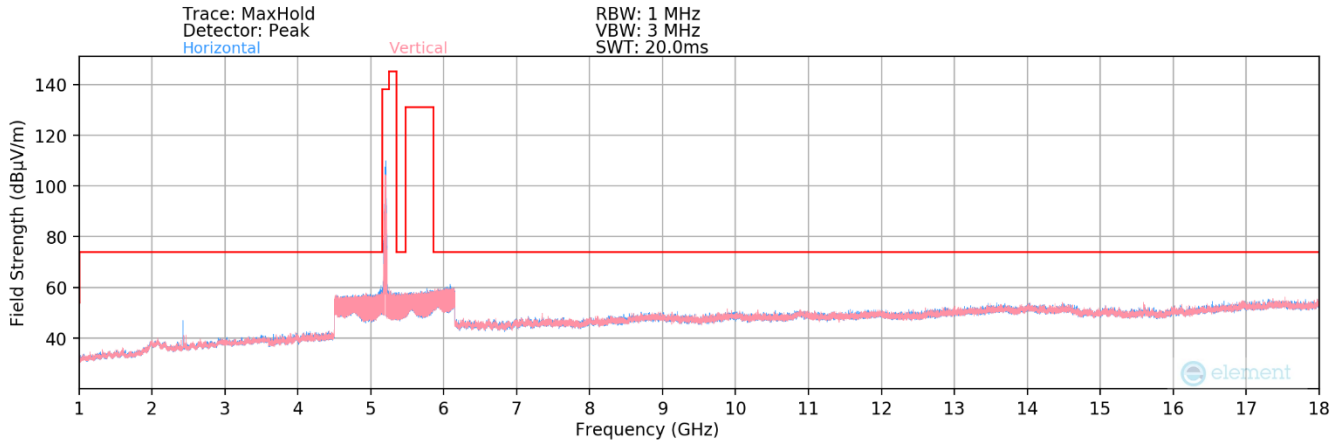
Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 4
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5825MHz
 Channel: 165

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	347	13	-81.00	13.39	0.00	39.39	53.98	-14.59
* 11650.00	Peak	V	347	13	-69.35	13.39	0.00	51.04	73.98	-22.94
17475.00	Peak	V	-	-	-69.51	17.09	0.00	54.58	68.20	-13.62
23300.00	Peak	V	-	-	-56.39	3.28	-9.54	44.35	68.20	-23.85
29125.00	Peak	V	-	-	-56.77	4.84	-9.54	45.53	68.20	-22.67

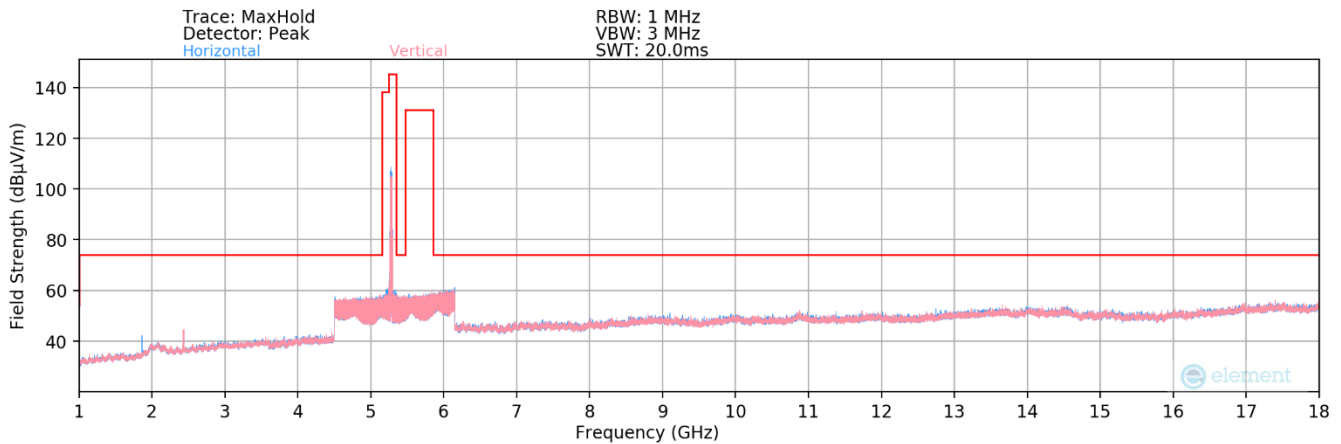
Table 7-28. Radiated Measurements MIMO (26 Tones)

FCC ID: A3LSMA356E	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2310260110-10.A3L	Test Dates: 11/6/2023 – 1/2/2024	EUT Type: Portable Handset	Page 89 of 108

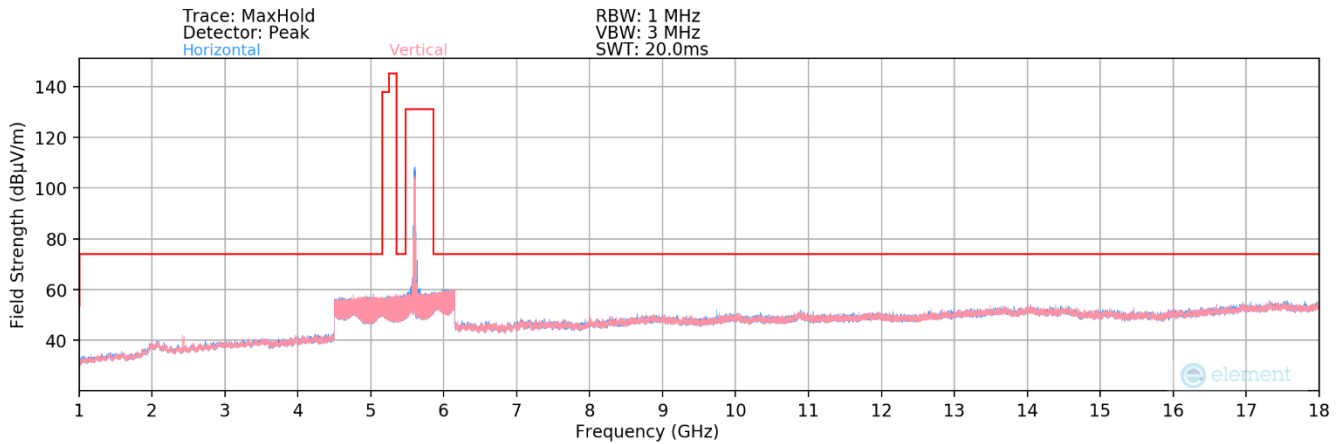
7.6.2 MIMO Radiated Spurious Emission Measurements (242 Tones)



Plot 7-103. Radiated Spurious Plot above 1GHz MIMO (802.11ax – UNII 1 Ch. 40)

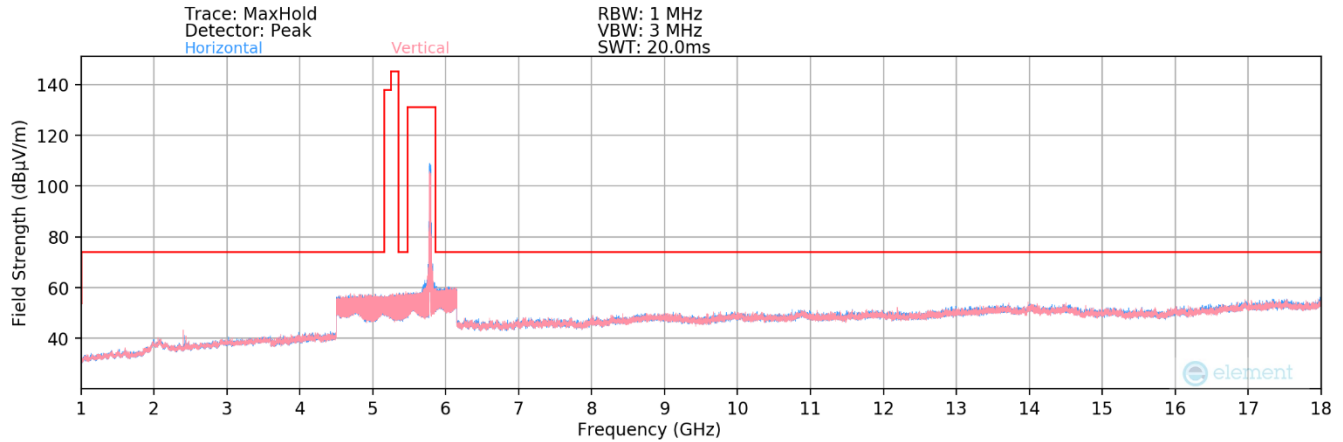


Plot 7-104. Radiated Spurious Plot above 1GHz MIMO (802.11ax – UNII 2A Ch. 56)

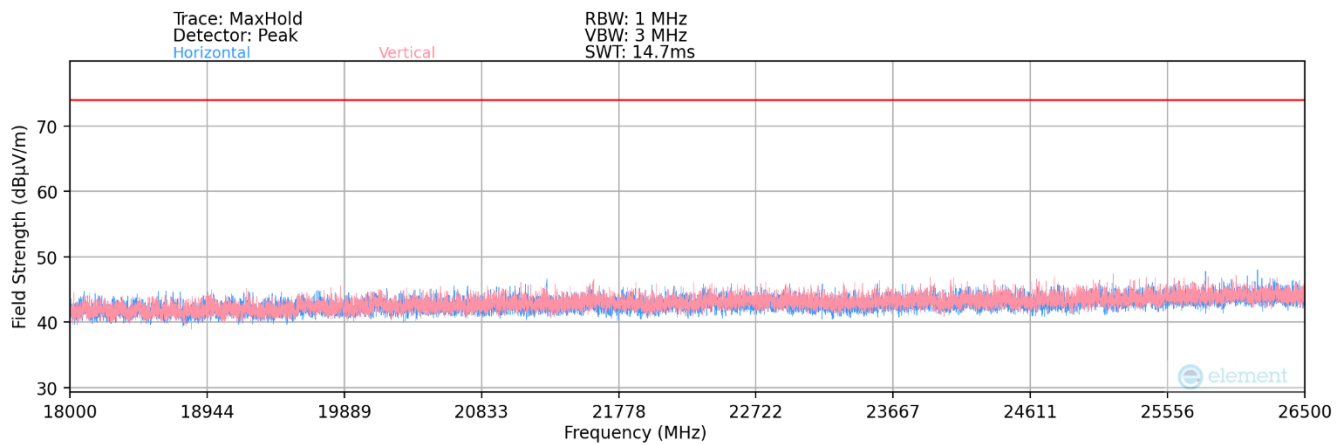


Plot 7-105. Radiated Spurious Plot above 1GHz MIMO (802.11ax – UNII 2C Ch. 120)

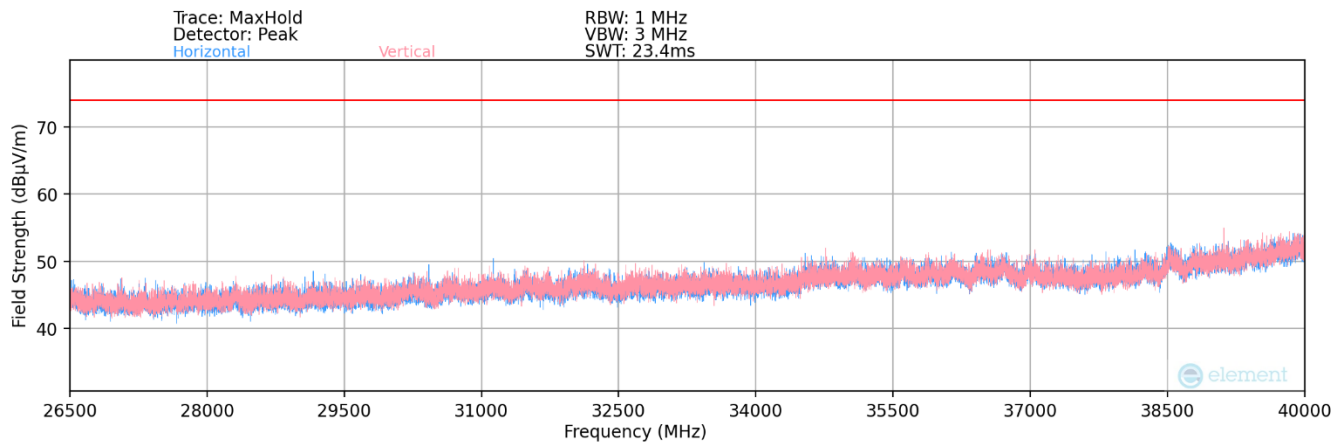
FCC ID: A3LSMA356E	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2310260110-10.A3L	Test Dates: 11/6/2023 – 1/2/2024	EUT Type: Portable Handset	Page 90 of 108



Plot 7-106. Radiated Spurious Plot above 1GHz MIMO (802.11ax – UNII 3 Ch. 157)



Plot 7-107. Radiated Spurious Plot 18GHz - 26.5GHz (802.11ax)



Plot 7-108. Radiated Spurious Plot 26.5GHz - 40GHz (802.11ax)

FCC ID: A3LSMA356E	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2310260110-10.A3L	Test Dates: 11/6/2023 – 1/2/2024	EUT Type: Portable Handset	Page 91 of 108



MIMO Radiated Spurious Emission Measurements (242 Tones) – UNII 1

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	V	326	1	-69.14	12.12	0.00	49.98	68.20	-18.22
* 15540.00	Average	V	110	309	-77.45	14.11	0.00	43.66	53.98	-10.32
* 15540.00	Peak	V	110	309	-62.97	14.11	0.00	58.14	73.98	-15.84
* 20720.00	Average	V	-	-	-66.52	2.12	-9.54	33.05	53.98	-20.93
* 20720.00	Peak	V	-	-	-56.52	2.12	-9.54	43.05	73.98	-30.93
25900.00	Peak	V	-	-	-56.35	4.33	-9.54	45.44	68.20	-22.76

Table 7-29. 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	V	334	1	-80.04	12.37	0.00	39.33	68.20	-28.87
* 15600.00	Average	V	110	307	-78.86	14.22	0.00	42.36	53.98	-11.62
* 15600.00	Peak	V	110	307	-64.03	14.22	0.00	57.19	73.98	-16.79
* 20800.00	Average	V	-	-	-66.39	2.34	-9.54	33.41	53.98	-20.57
* 20800.00	Peak	V	-	-	-56.38	2.34	-9.54	43.42	73.98	-30.56
26000.00	Peak	V	-	-	-56.82	4.46	-9.54	45.09	68.20	-23.11

Table 7-30. Radiated Measurements MIMO (242 Tones)

FCC ID: A3LSMA356E	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2310260110-10.A3L	Test Dates: 11/6/2023 – 1/2/2024	EUT Type: Portable Handset	Page 92 of 108



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	V	-	-	-70.86	13.08	0.00	49.22	68.20	-18.98
* 15720.00	Average	V	245	127	-78.62	14.65	0.00	43.03	53.98	-10.95
* 15720.00	Peak	V	245	127	-62.82	14.65	0.00	58.83	73.98	-15.15
* 20960.00	Average	V	-	-	-66.42	2.48	-9.54	33.51	53.98	-20.47
* 20960.00	Peak	V	-	-	-56.39	2.48	-9.54	43.54	73.98	-30.44
26200.00	Peak	V	-	-	-56.72	4.69	-9.54	45.43	68.20	-22.77

Table 7-31. Radiated Measurements MIMO (242 Tones)

FCC ID: A3LSMA356E	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2310260110-10.A3L	Test Dates: 11/6/2023 – 1/2/2024	EUT Type: Portable Handset	Page 93 of 108



MIMO Radiated Spurious Emission Measurements (242 Tones) – UNII 2A

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	V	110	194	-68.78	12.95	0.00	51.17	68.20	-17.03
* 15780.00	Average	V	242	134	-79.70	14.23	0.00	41.53	53.98	-12.45
* 15780.00	Peak	V	242	134	-64.84	14.23	0.00	56.39	73.98	-17.59
* 21040.00	Average	V	-	-	-65.59	2.59	-9.54	34.46	53.98	-19.52
* 21040.00	Peak	V	-	-	-55.98	2.59	-9.54	44.07	73.98	-29.91
26300.00	Peak	V	-	-	-55.36	4.68	-9.54	46.78	68.20	-21.42

Table 7-32. 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: 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	-	-	-69.89	12.97	0.00	50.08	68.20	-18.12
* 15840.00	Average	V	295	147	-79.50	14.09	0.00	41.59	53.98	-12.39
* 15840.00	Peak	V	295	147	-65.25	14.09	0.00	55.84	73.98	-18.14
* 21120.00	Average	V	-	-	-65.47	2.68	-9.54	34.66	53.98	-19.31
* 21120.00	Peak	V	-	-	-55.97	2.68	-9.54	44.16	73.98	-29.81
26400.00	Peak	V	-	-	-55.36	4.70	-9.54	46.80	68.20	-21.40

Table 7-33. Radiated Measurements MIMO (242 Tones)

FCC ID: A3LSMA356E	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2310260110-10.A3L	Test Dates: 11/6/2023 – 1/2/2024	EUT Type: Portable Handset	Page 94 of 108



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	V	116	189	-79.29	12.51	0.00	40.22	53.98	-13.76
* 10640.00	Peak	V	116	189	-67.77	12.51	0.00	51.74	73.98	-22.24
* 15960.00	Average	V	305	48	-80.62	15.27	0.00	41.65	53.98	-12.33
* 15960.00	Peak	V	305	48	-65.64	15.27	0.00	56.63	73.98	-17.35
* 21280.00	Average	V	-	-	-66.35	2.67	-9.54	33.77	53.98	-20.21
* 21280.00	Peak	V	-	-	-56.01	2.67	-9.54	44.11	73.98	-29.87
26600.00	Peak	V	-	-	-56.24	4.59	-9.54	45.81	68.20	-22.39

Table 7-34. Radiated Measurements MIMO (242 Tones)

FCC ID: A3LSMA356E	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2310260110-10.A3L	Test Dates: 11/6/2023 – 1/2/2024	EUT Type: Portable Handset	Page 95 of 108



MIMO Radiated Spurious Emission Measurements (242 Tones) – UNII 2C

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	V	109	192	-78.34	12.66	0.00	41.32	53.98	-12.66
* 11000.00	Peak	V	109	192	-67.68	12.66	0.00	51.98	73.98	-22.00
16500.00	Peak	V	112	164	-68.15	15.81	0.00	54.66	68.20	-13.54
22000.00	Peak	V	-	-	-56.47	2.95	-9.54	43.94	68.20	-24.26
27500.00	Peak	V	-	-	-56.98	4.79	-9.54	45.27	68.20	-22.93

Table 7-35. 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	V	115	201	-77.86	12.54	0.00	41.68	53.98	-12.30
* 11200.00	Peak	V	115	201	-66.86	12.54	0.00	52.68	73.98	-21.30
16800.00	Peak	V	-	-	-70.11	16.25	0.00	53.14	68.20	-15.06
* 22400.00	Average	V	-	-	-66.52	3.11	-9.54	34.05	53.98	-19.93
* 22400.00	Peak	V	-	-	-56.52	3.11	-9.54	44.05	73.98	-29.93
28000.00	Peak	V	-	-	-56.33	4.95	-9.54	46.08	68.20	-22.12

Table 7-36. Radiated Measurements MIMO (242 Tones)

FCC ID: A3LSMA356E	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2310260110-10.A3L	Test Dates: 11/6/2023 – 1/2/2024	EUT Type: Portable Handset	Page 96 of 108



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	V	284	193	-78.97	13.54	0.00	41.57	53.98	-12.41
* 11440.00	Peak	V	284	193	-69.24	13.54	0.00	51.30	73.98	-22.68
17160.00	Peak	V	-	-	-69.65	16.79	0.00	54.14	68.20	-14.06
* 22880.00	Average	V	-	-	-66.38	3.05	-9.54	34.13	53.98	-19.85
* 22880.00	Peak	V	-	-	-56.44	3.05	-9.54	44.07	73.98	-29.91
28600.00	Peak	V	-	-	-56.39	4.92	-9.54	45.99	68.20	-22.21

Table 7-37. Radiated Measurements MIMO (242 Tones)

FCC ID: A3LSMA356E	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2310260110-10.A3L	Test Dates: 11/6/2023 – 1/2/2024	EUT Type: Portable Handset	Page 97 of 108



MIMO Radiated Spurious Emission Measurements (242 Tones) – UNII 3

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	V	110	199	-77.65	13.10	0.00	42.45	53.98	-11.53
* 11490.00	Peak	V	110	199	-66.79	13.10	0.00	53.31	73.98	-20.67
17235.00	Peak	V	-	-	-69.62	16.91	0.00	54.29	68.20	-13.91
* 22980.00	Average	V	-	-	-66.52	3.05	-9.54	33.99	53.98	-19.99
* 22980.00	Peak	V	-	-	-56.36	3.05	-9.54	44.15	73.98	-29.83
28725.00	Peak	V	-	-	-55.58	4.97	-9.54	46.85	68.20	-21.35

Table 7-38. 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: 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	270	196	-76.04	12.96	0.00	43.92	53.98	-10.06
* 11570.00	Peak	V	270	196	-65.18	12.96	0.00	54.78	73.98	-19.20
17355.00	Peak	V	-	-	-69.94	17.83	0.00	54.89	68.20	-13.31
23140.00	Peak	V	-	-	-56.74	3.10	-9.54	43.82	68.20	-24.38
28925.00	Peak	V	-	-	-56.88	4.78	-9.54	45.35	68.20	-22.85

Table 7-39. Radiated Measurements MIMO (242 Tones)

FCC ID: A3LSMA356E	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2310260110-10.A3L	Test Dates: 11/6/2023 – 1/2/2024	EUT Type: Portable Handset	Page 98 of 108



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	V	269	198	-76.98	13.39	0.00	43.41	53.98	-10.57
* 11650.00	Peak	V	269	198	-66.93	13.39	0.00	53.46	73.98	-20.52
17475.00	Peak	V	-	-	-68.51	17.09	0.00	55.58	68.20	-12.62
23300.00	Peak	V	-	-	-56.33	3.28	-9.54	44.41	68.20	-23.79
29125.00	Peak	V	-	-	-56.98	4.84	-9.54	45.32	68.20	-22.88

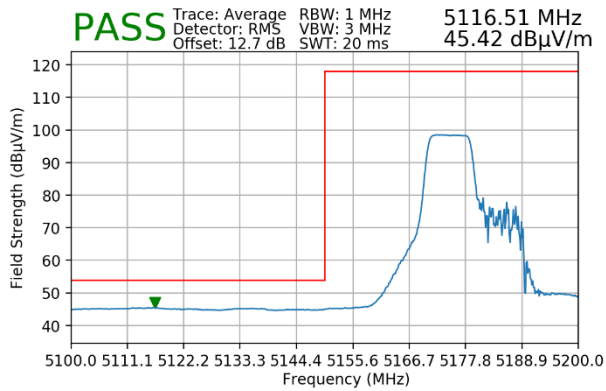
Table 7-40. Radiated Measurements MIMO (242 Tones)

FCC ID: A3LSMA356E	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2310260110-10.A3L	Test Dates: 11/6/2023 – 1/2/2024	EUT Type: Portable Handset	Page 99 of 108

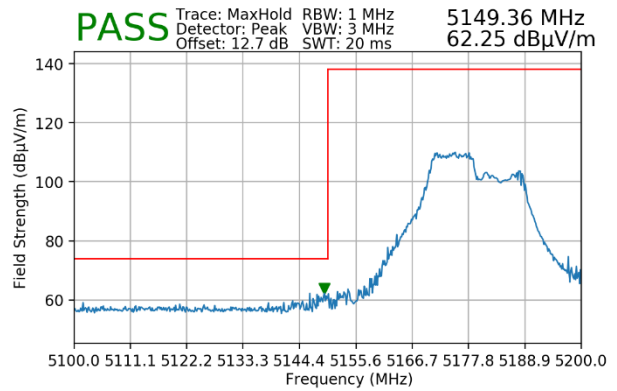


MIMO Radiated Band Edge Measurements (20MHz BW – Partial Tone – 106T)

Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
RU Index:	53
Distance of Measurements:	3 Meters
Operating Frequency:	5180MHz
Channel:	36

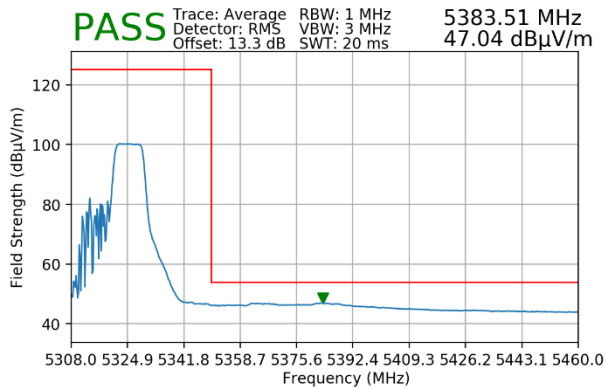


Plot 7-109. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 1 – 106 Tones)

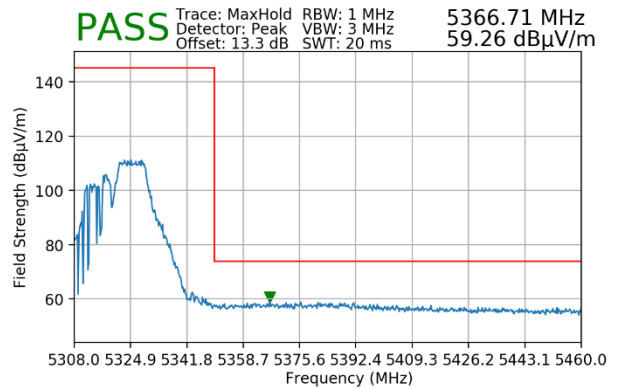


Plot 7-110. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 1 – 106 Tones)

Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
RU Index:	54
Distance of Measurements:	3 Meters
Operating Frequency:	5320MHz
Channel:	64



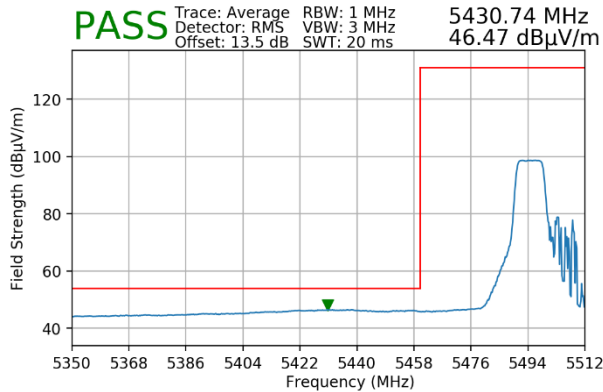
Plot 7-111. Radiated Upper Band Edge Plot MIMO (Average – UNII Band 2A – 106 Tones)



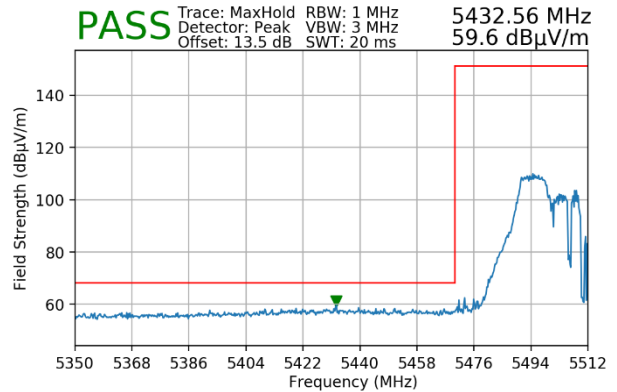
Plot 7-112. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 2A – 106 Tones)

FCC ID: A3LSMA356E	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2310260110-10.A3L	Test Dates: 11/6/2023 – 1/2/2024	EUT Type: Portable Handset	Page 100 of 108

Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
RU Index:	53
Distance of Measurements:	3 Meters
Operating Frequency:	5500MHz
Channel:	100

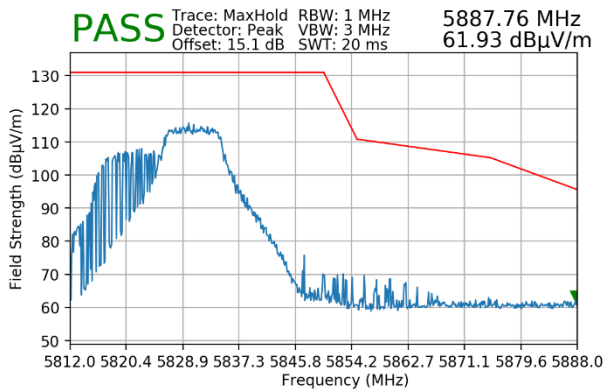


Plot 7-113. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 2C – 106 Tones)



Plot 7-114. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 2C – 106 Tones)

Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
RU Index:	54
Distance of Measurements:	3 Meters
Operating Frequency:	5825MHz
Channel:	165

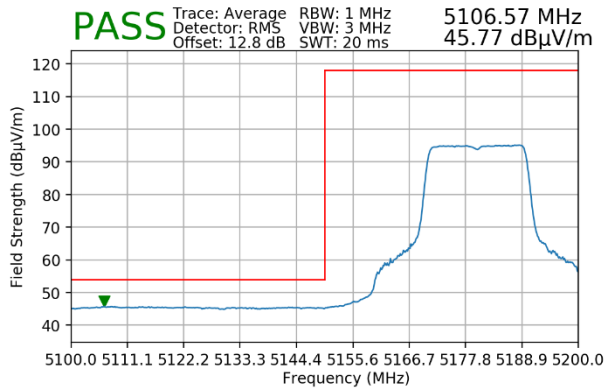


Plot 7-115. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 3 – 106 Tones)

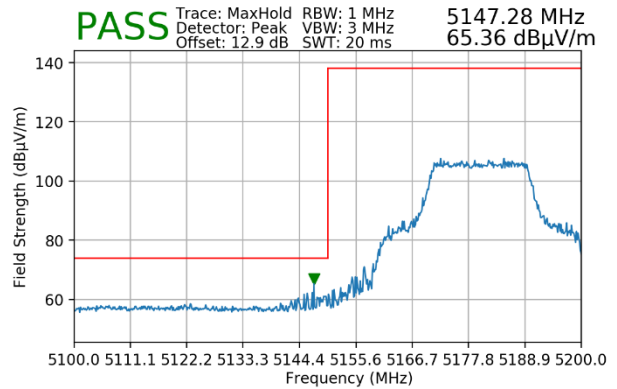
FCC ID: A3LSMA356E	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2310260110-10.A3L	Test Dates: 11/6/2023 – 1/2/2024	EUT Type: Portable Handset	Page 101 of 108

7.6.3 MIMO Radiated Band Edge Measurements (20MHz BW – Full Tone – 242T)

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

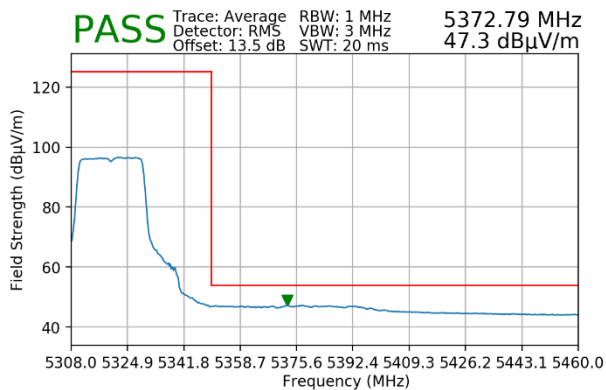


Plot 7-116. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 1 – 242 Tones)

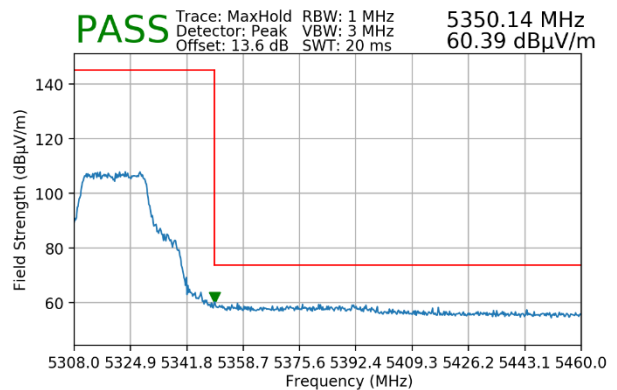


Plot 7-117. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 1 – 242 Tones)

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



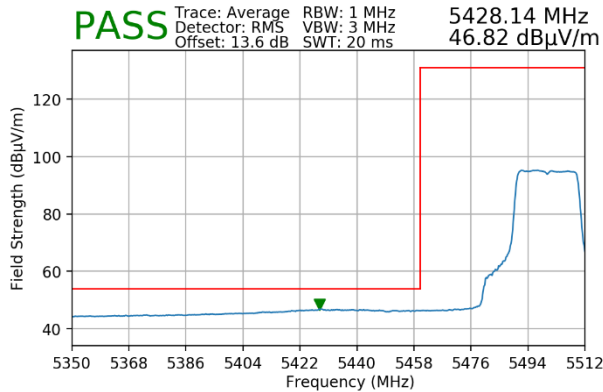
Plot 7-118. Radiated Upper Band Edge Plot MIMO (Average – UNII Band 2A – 242 Tones)



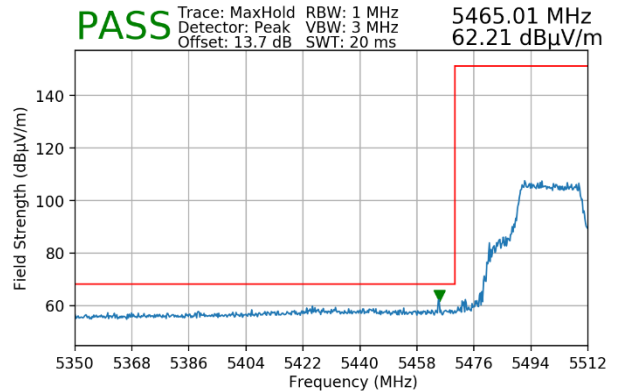
Plot 7-119. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 2A – 242 Tones)

FCC ID: A3LSMA356E	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2310260110-10.A3L	Test Dates: 11/6/2023 – 1/2/2024	EUT Type: Portable Handset	Page 102 of 108

Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
RU Index:	61
Distance of Measurements:	3 Meters
Operating Frequency:	5500MHz
Channel:	100

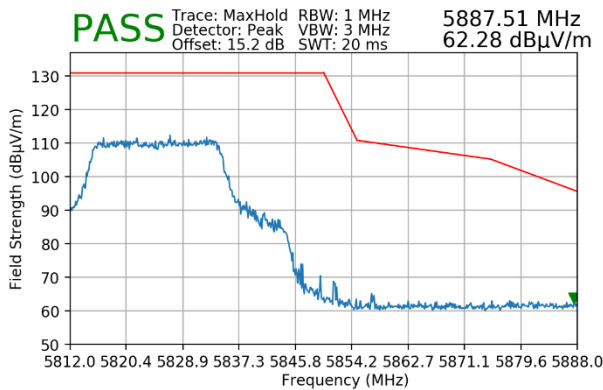


Plot 7-120. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 2C – 242 Tones)



Plot 7-121. 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

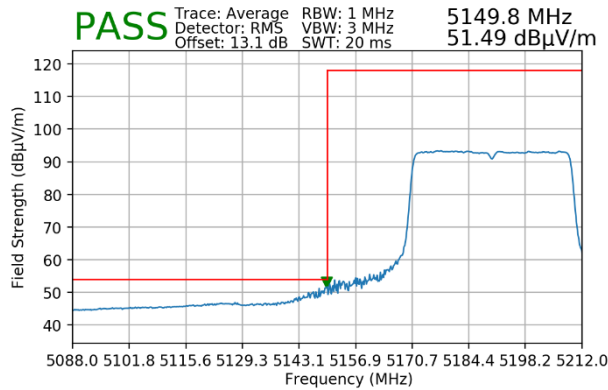


Plot 7-122. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 3 – 242 Tones)

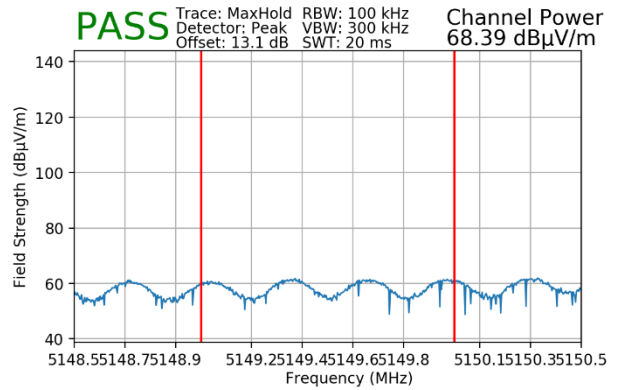
FCC ID: A3LSMA356E	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2310260110-10.A3L	Test Dates: 11/6/2023 – 1/2/2024	EUT Type: Portable Handset	Page 103 of 108

7.6.4 MIMO Radiated Band Edge Measurements (40MHz BW – Full Tone – 484T)

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

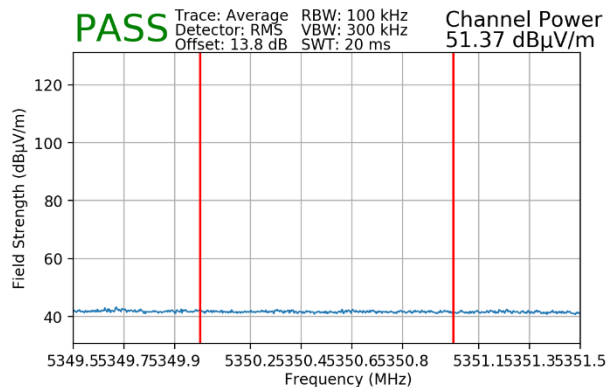


Plot 7-123. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 1 – 484 Tones)

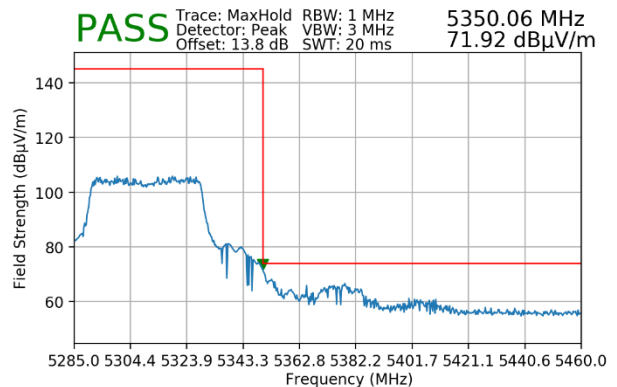


Plot 7-124. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 1 – 484 Tones)

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



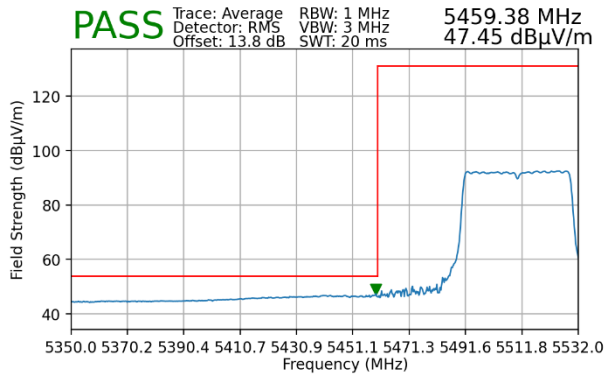
Plot 7-125. Radiated Upper Band Edge Plot MIMO (Average – UNII Band 2A – 484 Tones)



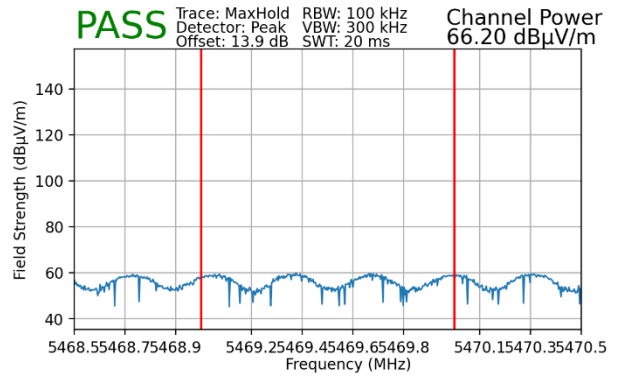
Plot 7-126. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 2A – 484 Tones)

FCC ID: A3LSMA356E	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2310260110-10.A3L	Test Dates: 11/6/2023 – 1/2/2024	EUT Type: Portable Handset	Page 104 of 108

Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 RU Index: 65
 Distance of Measurements: 3 Meters
 Operating Frequency: 5510MHz
 Channel: 102

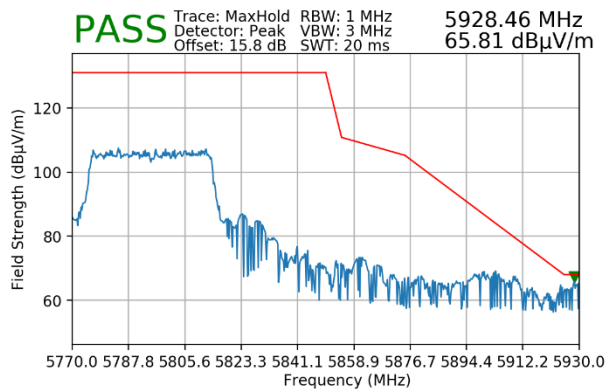


Plot 7-127. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 2C – 484 Tones)



Plot 7-128. 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

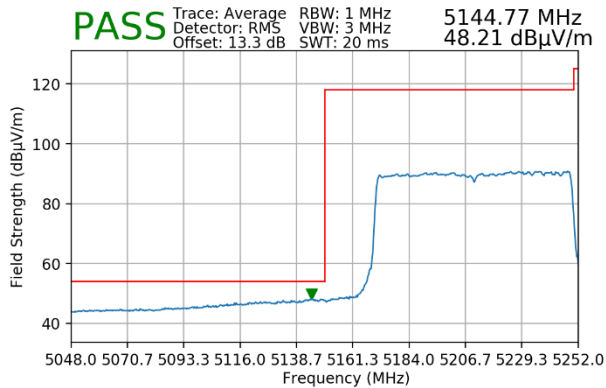


Plot 7-129. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 3 – 484 Tones)

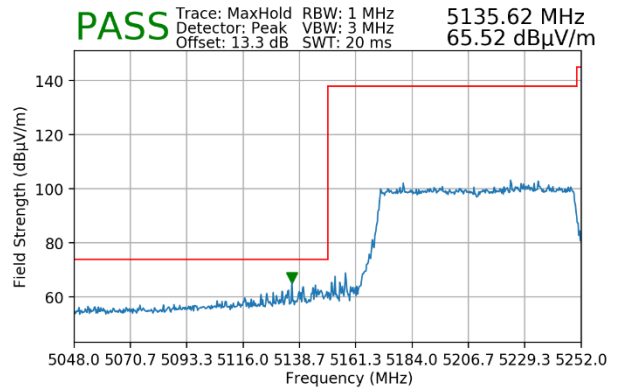
FCC ID: A3LSMA356E	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2310260110-10.A3L	Test Dates: 11/6/2023 – 1/2/2024	EUT Type: Portable Handset	Page 105 of 108

7.6.5 MIMO Radiated Band Edge Measurements (80MHz BW – Full Tone – 996T)

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

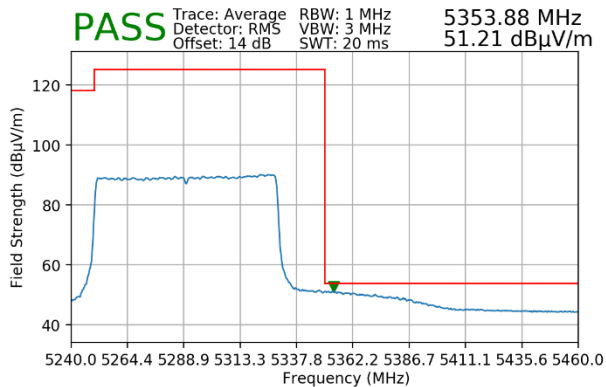


Plot 7-130. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 1 – 996 Tones)

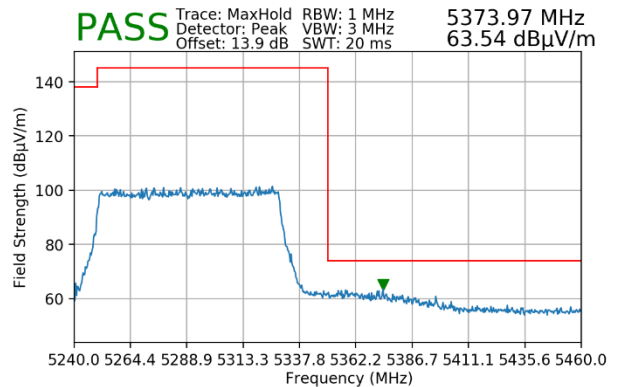


Plot 7-131. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 1 – 996 Tones)

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



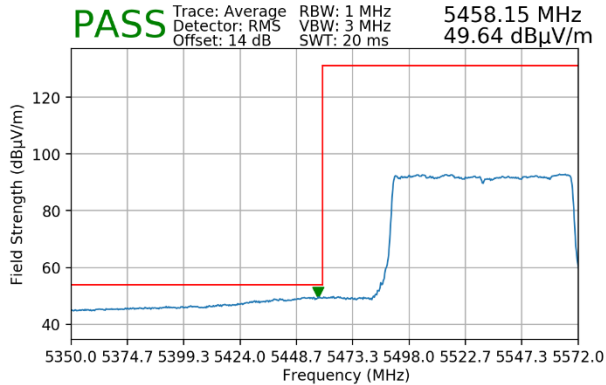
Plot 7-132. Radiated Upper Band Edge Plot MIMO (Average – UNII Band 2A – 996 Tones)



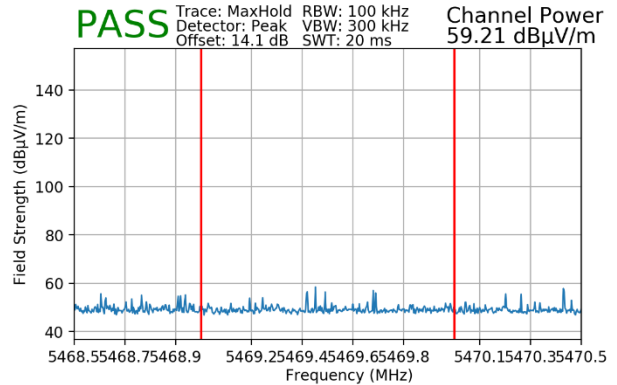
Plot 7-133. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 2A – 996 Tones)

FCC ID: A3LSMA356E	MEASUREMENT REPORT		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

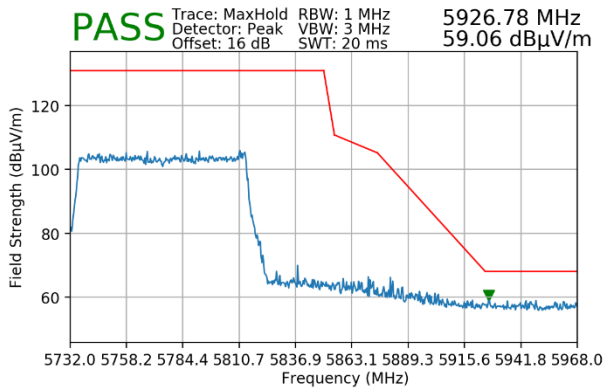


Plot 7-134. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 2C – 996 Tones)



Plot 7-135. 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 7-136. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 3 – 996 Tones)

FCC ID: A3LSMA356E	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2310260110-10.A3L	Test Dates: 11/6/2023 – 1/2/2024	EUT Type: Portable Handset	Page 107 of 108

8.0 CONCLUSION

The data collected relate only the item(s) tested and show that the **Samsung Portable Handset FCC ID: A3LSMA356E** is in compliance with FCC Part Subpart E (15.407) of the FCC rules.

FCC ID: A3LSMA356E	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2310260110-10.A3L	Test Dates: 11/6/2023 – 1/2/2024	EUT Type: Portable Handset	Page 108 of 108