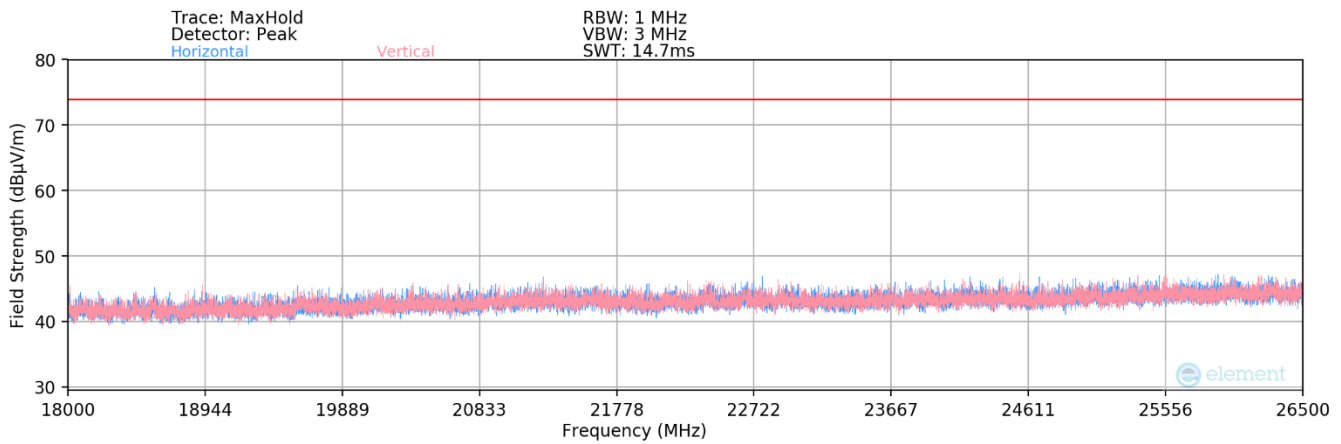


Plot 7-91. Radiated Spurious Plot above 1GHz SISO ANT2 (802.11ax OFDMA – 242 Tones – Ch. 11)



Plot 7-92. Radiated Spurious Plot above 18GHz SISO ANT2 (802.11ax OFDMA – 242 Tones)

FCC ID: A3LSMS711U	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2304260060-16.A3L	Test Dates: 5/24-7/31/2023	EUT Type: Portable Handset	Page 73 of 87

SISO Antenna-2 Radiated Spurious Emission Measurements

Worst Case Mode: 802.11ax OFDMA
 Worst Case Transfer Rate: MCS0
 RU Index: 4
 Distance of Measurements: 3 Meters
 Operating Frequency: 2412MHz
 Channel: 1

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
4824.00	Avg	H	-	-	-78.12	2.68	31.56	53.98	-22.42
4824.00	Peak	H	-	-	-66.19	2.68	43.49	73.98	-30.49
12060.00	Avg	H	-	-	-80.10	12.71	39.61	53.98	-14.36
12060.00	Peak	H	-	-	-68.35	12.71	51.36	73.98	-22.61

Table 7-15. Radiated Measurements SISO ANT2 (26 Tones)

Worst Case Mode: 802.11ax OFDMA
 Worst Case Transfer Rate: MCS0
 RU Index: 4
 Distance of Measurements: 3 Meters
 Operating Frequency: 2437MHz
 Channel: 6

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
4874.00	Avg	H	190	359	-77.97	2.89	31.92	53.98	-22.06
4874.00	Peak	H	190	359	-65.54	2.89	44.35	73.98	-29.63
7311.00	Avg	H	-	-	-78.65	8.87	37.22	53.98	-16.76
7311.00	Peak	H	-	-	-66.70	8.87	49.17	73.98	-24.81
12185.00	Avg	H	-	-	-80.28	12.99	39.71	53.98	-14.26
12185.00	Peak	H	-	-	-68.49	12.99	51.50	73.98	-22.47

Table 7-16. Radiated Measurements SISO ANT2 (26 Tones)

FCC ID: A3LSMS711U	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2304260060-16.A3L	Test Dates: 5/24-7/31/2023	EUT Type: Portable Handset	Page 74 of 87

Worst Case Mode: 802.11ax OFDMA
 Worst Case Transfer Rate: MCS0
 RU Index: 4
 Distance of Measurements: 3 Meters
 Operating Frequency: 2462MHz
 Channel: 11

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
4924.00	Avg	H	-	-	-78.33	2.87	31.54	53.98	-22.44
4924.00	Peak	H	-	-	-66.15	2.87	43.72	73.98	-30.26
7386.00	Avg	H	-	-	-78.61	8.86	37.25	53.98	-16.73
7386.00	Peak	H	-	-	-66.66	8.86	49.20	73.98	-24.78
12310.00	Avg	H	-	-	-80.45	13.13	39.68	53.98	-14.30
12310.00	Peak	H	-	-	-68.91	13.13	51.22	73.98	-22.76

Table 7-17. Radiated Measurements SISO ANT2 (26 Tones)

Worst Case Mode: 802.11ax OFDMA
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 3 Meters
 Operating Frequency: 2412MHz
 Channel: 1

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
4824.00	Avg	H	-	-	-78.01	2.68	31.67	53.98	-22.31
4824.00	Peak	H	-	-	-66.08	2.68	43.60	73.98	-30.38
12060.00	Avg	H	-	-	-80.12	12.71	39.59	53.98	-14.38
12060.00	Peak	H	-	-	-68.43	12.71	51.28	73.98	-22.69

Table 7-18. Radiated Measurements SISO ANT2 (242 Tones)

FCC ID: A3LSMS711U	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2304260060-16.A3L	Test Dates: 5/24-7/31/2023	EUT Type: Portable Handset	Page 75 of 87

Worst Case Mode: 802.11ax OFDMA
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 3 Meters
 Operating Frequency: 2437MHz
 Channel: 6

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
4874.00	Avg	H	-	-	-78.14	2.89	31.75	53.98	-22.23
4874.00	Peak	H	-	-	-66.48	2.89	43.41	73.98	-30.57
7311.00	Avg	H	-	-	-78.66	8.87	37.21	53.98	-16.77
7311.00	Peak	H	-	-	-66.78	8.87	49.09	73.98	-24.89
12185.00	Avg	H	-	-	-80.22	12.99	39.77	53.98	-14.20
12185.00	Peak	H	-	-	-68.35	12.99	51.64	73.98	-22.33

Table 7-19. Radiated Measurements SISO ANT2 (242 Tones)

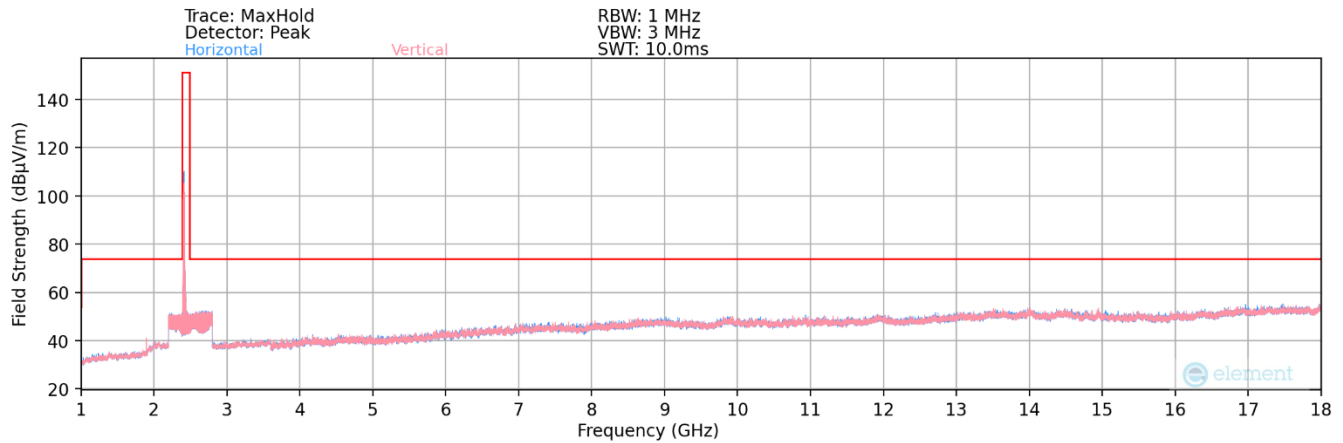
Worst Case Mode: 802.11ax OFDMA
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 3 Meters
 Operating Frequency: 2462MHz
 Channel: 11

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
4924.00	Avg	H	-	-	-78.34	2.87	31.53	53.98	-22.45
4924.00	Peak	H	-	-	-66.67	2.87	43.20	73.98	-30.78
7386.00	Avg	H	-	-	-78.53	8.86	37.33	53.98	-16.65
7386.00	Peak	H	-	-	-66.57	8.86	49.29	73.98	-24.69
12310.00	Avg	H	-	-	-80.45	13.13	39.68	53.98	-14.30
12310.00	Peak	H	-	-	-68.71	13.13	51.42	73.98	-22.56

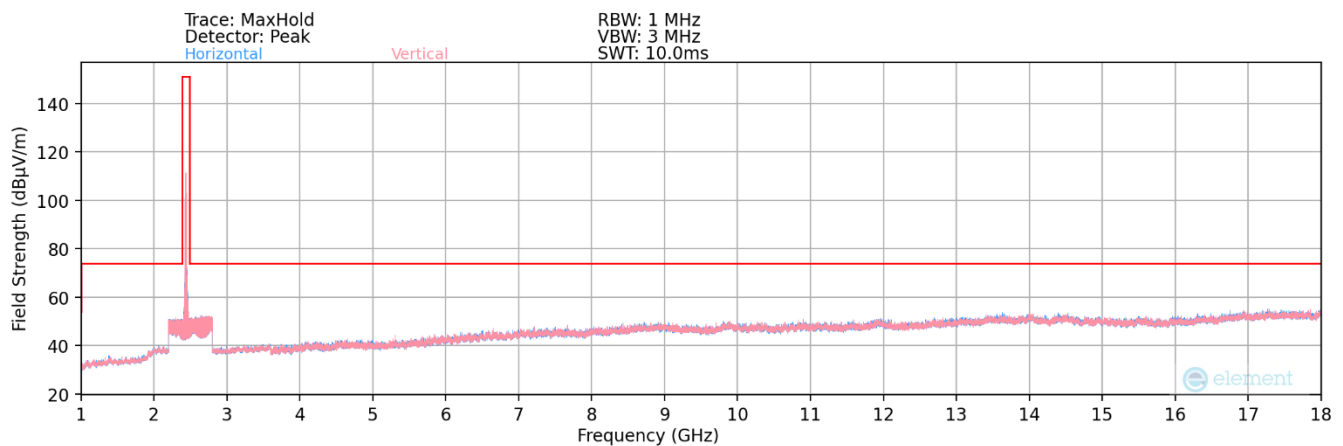
Table 7-20. Radiated Measurements SISO ANT2 (242 Tones)

FCC ID: A3LSMS711U	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2304260060-16.A3L	Test Dates: 5/24-7/31/2023	EUT Type: Portable Handset	Page 76 of 87

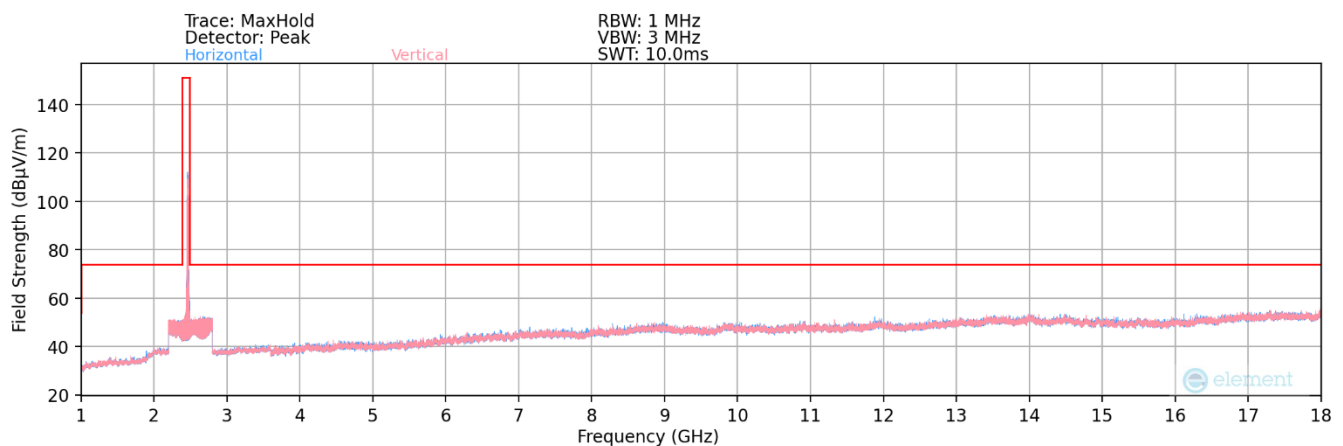
7.7.2 MIMO Radiated Spurious Emission Measurements



Plot 7-93. Radiated Spurious Plot above 1GHz MIMO (802.11ax OFDMA – 26 Tones – Ch. 1)

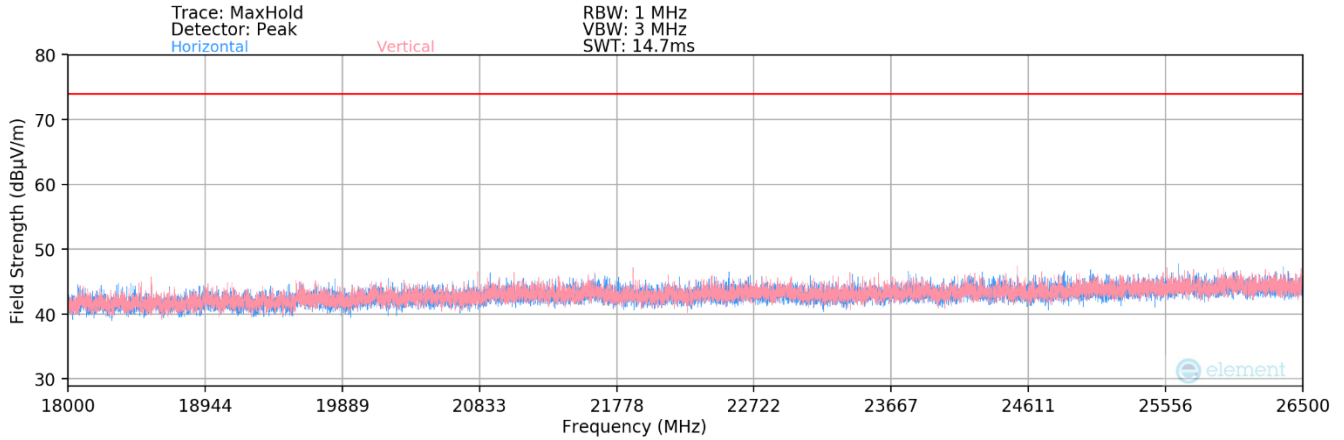


Plot 7-94. Radiated Spurious Plot above 1GHz MIMO (802.11ax OFDMA – 26 Tones – Ch. 6)

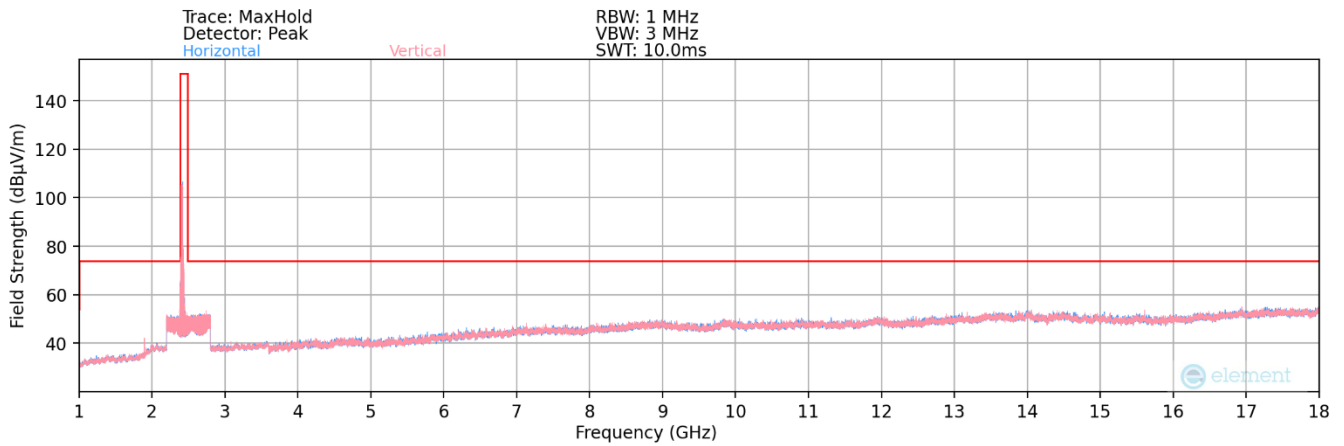


Plot 7-95. Radiated Spurious Plot above 1GHz MIMO (802.11ax OFDMA – 26 Tones – Ch. 11)

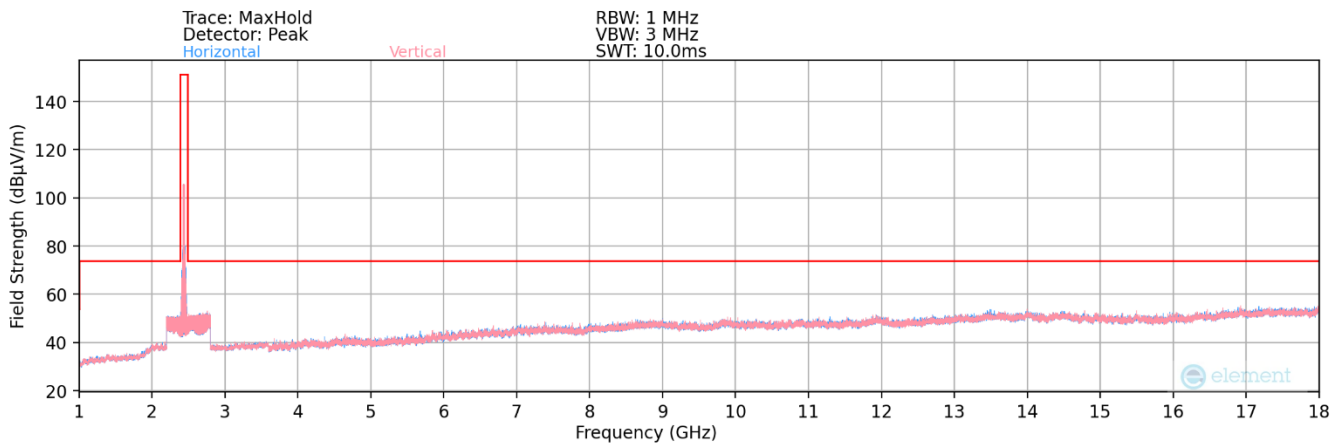
FCC ID: A3LSMS711U	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2304260060-16.A3L	Test Dates: 5/24-7/31/2023	EUT Type: Portable Handset	Page 77 of 87



Plot 7-96. Radiated Spurious Plot above 18GHz MIMO (802.11ax OFDMA – 26 Tones)

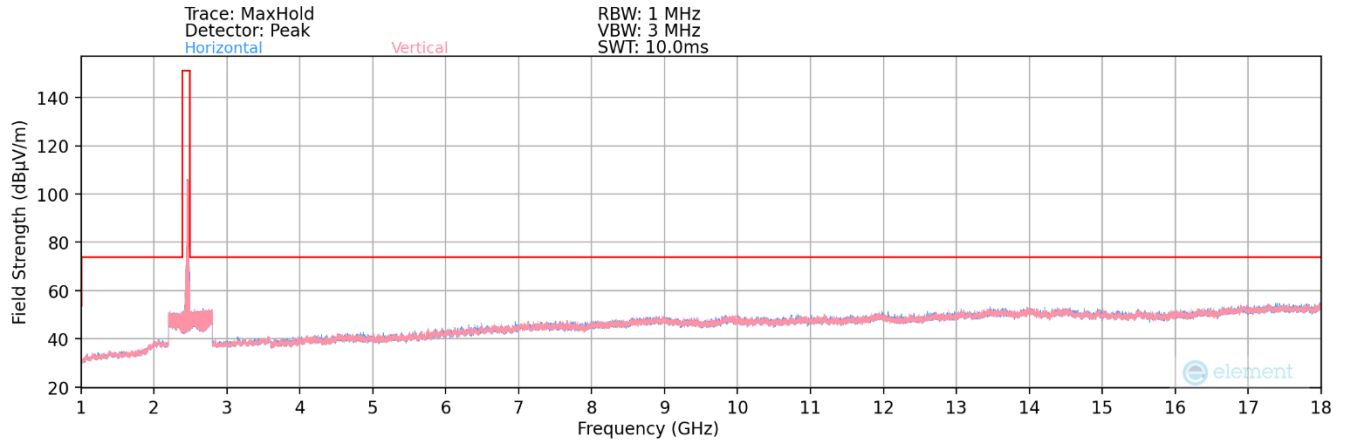


Plot 7-97. Radiated Spurious Plot above 1GHz MIMO (802.11ax OFDMA – 242 Tones – Ch. 1)

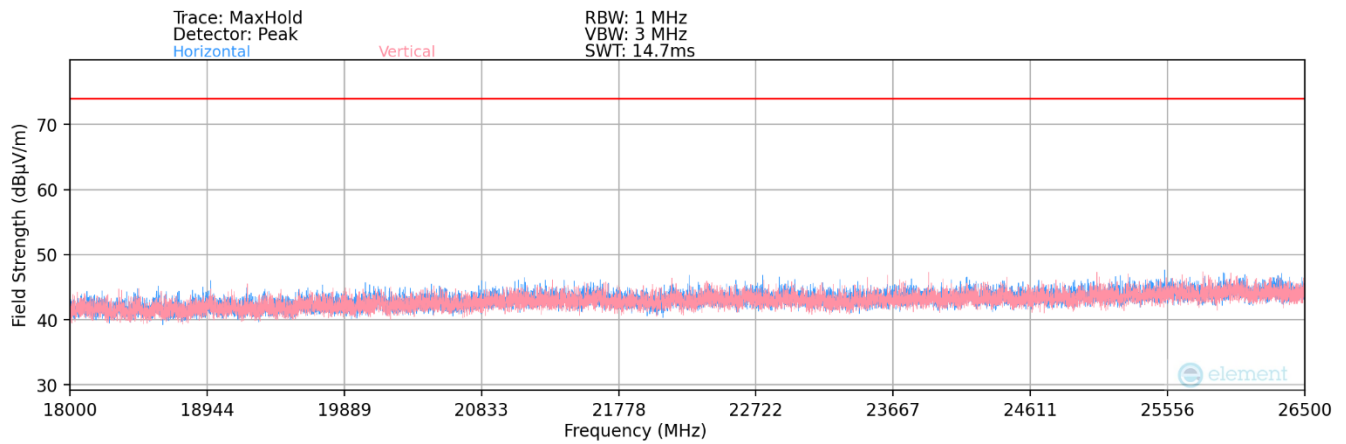


Plot 7-98. Radiated Spurious Plot above 1GHz MIMO (802.11ax OFDMA – 242 Tones – Ch. 6)

FCC ID: A3LSMS711U	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2304260060-16.A3L	Test Dates: 5/24-7/31/2023	EUT Type: Portable Handset	Page 78 of 87



Plot 7-99. Radiated Spurious Plot above 1GHz MIMO (802.11ax OFDMA – 242 Tones – Ch. 11)



Plot 7-100. Radiated Spurious Plot above 18GHz MIMO (802.11ax OFDMA – 242 Tones)

FCC ID: A3LSMS711U	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2304260060-16.A3L	Test Dates: 5/24-7/31/2023	EUT Type: Portable Handset	Page 79 of 87

MIMO Radiated Spurious Emission Measurements

Worst Case Mode: 802.11ax OFDMA
 Worst Case Transfer Rate: MCS0
 RU Index: 4
 Distance of Measurements: 3 Meters
 Operating Frequency: 2412MHz
 Channel: 1

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
4824.00	Avg	H	143	3	-77.71	2.68	31.97	53.98	-22.01
4824.00	Peak	H	143	3	-65.90	2.68	43.78	73.98	-30.20
12060.00	Avg	H	-	-	-80.08	12.71	39.63	53.98	-14.34
12060.00	Peak	H	-	-	-68.57	12.71	51.14	73.98	-22.83

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

Worst Case Mode: 802.11ax OFDMA
 Worst Case Transfer Rate: MCS0
 RU Index: 4
 Distance of Measurements: 3 Meters
 Operating Frequency: 2437MHz
 Channel: 6

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
4874.00	Avg	H	138	355	-77.85	2.89	32.04	53.98	-21.94
4874.00	Peak	H	138	355	-65.75	2.89	44.14	73.98	-29.84
7311.00	Avg	H	-	-	-78.62	8.87	37.25	53.98	-16.73
7311.00	Peak	H	-	-	-67.18	8.87	48.69	73.98	-25.29
12185.00	Avg	H	-	-	-80.16	12.99	39.83	53.98	-14.14
12185.00	Peak	H	-	-	-68.68	12.99	51.31	73.98	-22.66

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

FCC ID: A3LSMS711U	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2304260060-16.A3L	Test Dates: 5/24-7/31/2023	EUT Type: Portable Handset	Page 80 of 87

Worst Case Mode: 802.11ax OFDMA
 Worst Case Transfer Rate: MCS0
 RU Index: 4
 Distance of Measurements: 3 Meters
 Operating Frequency: 2462MHz
 Channel: 11

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
4924.00	Avg	H	129	354	-78.01	2.87	31.86	53.98	-22.12
4924.00	Peak	H	129	354	-66.01	2.87	43.86	73.98	-30.12
7386.00	Avg	H	-	-	-78.58	8.86	37.28	53.98	-16.70
7386.00	Peak	H	-	-	-66.80	8.86	49.06	73.98	-24.92
12310.00	Avg	H	-	-	-80.42	13.13	39.71	53.98	-14.27
12310.00	Peak	H	-	-	-68.59	13.13	51.54	73.98	-22.44

Table 7-23. Radiated Measurements MIMO (26 Tones)

Worst Case Mode: 802.11ax OFDMA
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 3 Meters
 Operating Frequency: 2412MHz
 Channel: 1

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
4824.00	Avg	H	-	-	-78.13	2.68	31.55	53.98	-22.43
4824.00	Peak	H	-	-	-66.26	2.68	43.42	73.98	-30.56
12060.00	Avg	H	-	-	-79.98	12.71	39.73	53.98	-14.24
12060.00	Peak	H	-	-	-68.44	12.71	51.27	73.98	-22.70

Table 7-24. Radiated Measurements MIMO (242 Tones)

FCC ID: A3LSMS711U	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2304260060-16.A3L	Test Dates: 5/24-7/31/2023	EUT Type: Portable Handset	Page 81 of 87

Worst Case Mode: 802.11ax OFDMA
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 3 Meters
 Operating Frequency: 2437MHz
 Channel: 6

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
4874.00	Avg	H	-	-	-78.21	2.89	31.68	53.98	-22.30
4874.00	Peak	H	-	-	-66.24	2.89	43.65	73.98	-30.33
7311.00	Avg	H	-	-	-78.64	8.87	37.23	53.98	-16.75
7311.00	Peak	H	-	-	-67.03	8.87	48.84	73.98	-25.14
12185.00	Avg	H	-	-	-80.26	12.99	39.73	53.98	-14.24
12185.00	Peak	H	-	-	-68.04	12.99	51.95	73.98	-22.02

Table 7-25. Radiated Measurements MIMO (242 Tones)

Worst Case Mode: 802.11ax OFDMA
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 3 Meters
 Operating Frequency: 2462MHz
 Channel: 11

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
4924.00	Avg	H	-	-	-78.19	2.87	31.68	53.98	-22.30
4924.00	Peak	H	-	-	-66.18	2.87	43.69	73.98	-30.29
7386.00	Avg	H	-	-	-78.59	8.86	37.27	53.98	-16.71
7386.00	Peak	H	-	-	-66.93	8.86	48.93	73.98	-25.05
12310.00	Avg	H	-	-	-80.44	13.13	39.69	53.98	-14.29
12310.00	Peak	H	-	-	-68.68	13.13	51.45	73.98	-22.53

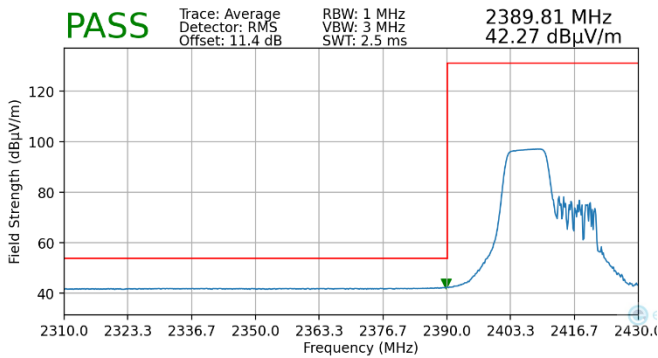
Table 7-26. Radiated Measurements MIMO (242 Tones)

FCC ID: A3LSMS711U	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2304260060-16.A3L	Test Dates: 5/24-7/31/2023	EUT Type: Portable Handset	Page 82 of 87

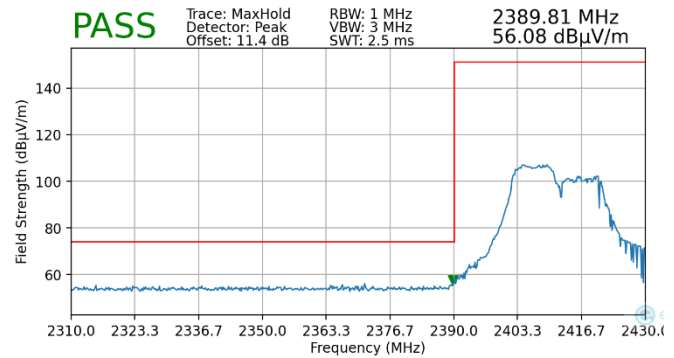
7.7.3 SISO Antenna-2 Radiated Restricted Band Edge Measurements

The radiated restricted band edge measurements are measured with an EMI test receiver connected to the receive antenna while the EUT is transmitting.

Worst Case Mode:	802.11ax OFDMA
Worst Case Transfer Rate:	MCS0
RU Index:	53
Distance of Measurements:	3 Meters
Operating Frequency:	2412MHz
Channel:	1

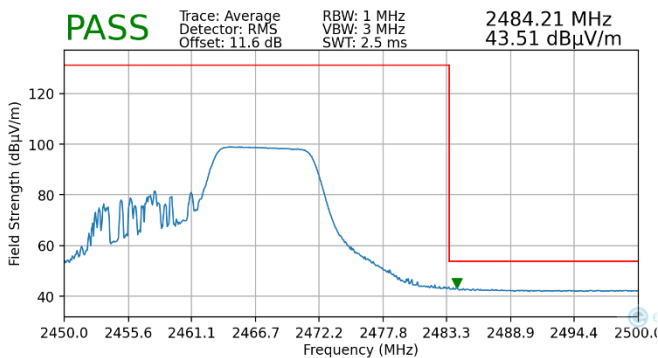


Plot 7-101. Radiated Restricted Lower Band Edge Measurement SISO ANT2 (Average – 106 Tones)

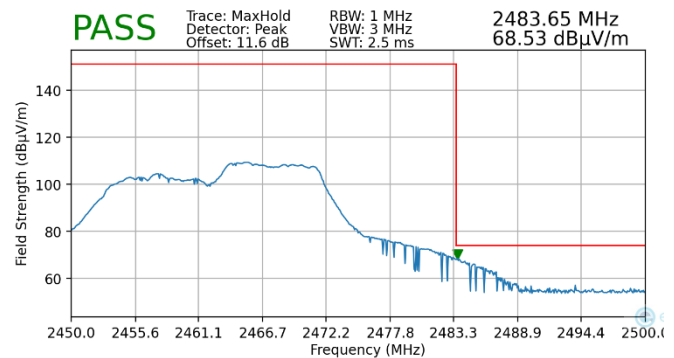


Plot 7-102. Radiated Restricted Lower Band Edge Measurement SISO ANT2 (Peak – 106 Tones)

Worst Case Mode:	802.11ax OFDMA
Worst Case Transfer Rate:	MCS0
RU Index:	54
Distance of Measurements:	3 Meters
Operating Frequency:	2462MHz
Channel:	11



Plot 7-103. Radiated Restricted Upper Band Edge Measurement SISO ANT2 (Average – 106 Tones)

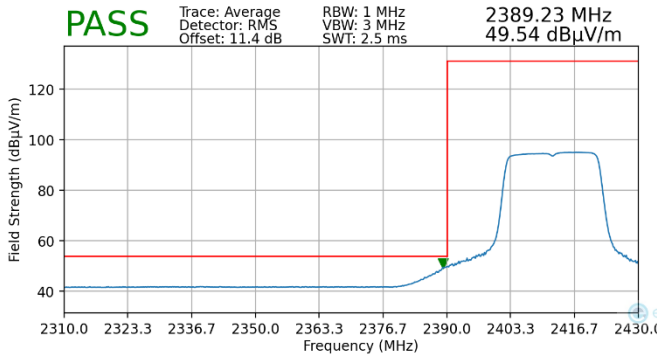


Plot 7-104. Radiated Restricted Upper Band Edge Measurement SISO ANT2 (Peak – 106 Tones)

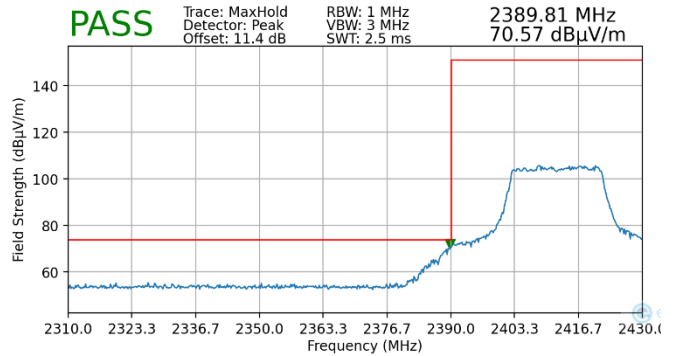
FCC ID: A3LSMS711U	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2304260060-16.A3L	Test Dates: 5/24-7/31/2023	EUT Type: Portable Handset	Page 83 of 87



Worst Case Mode: 802.11ax OFDMA
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 3 Meters
 Operating Frequency: 2412MHz
 Channel: 1

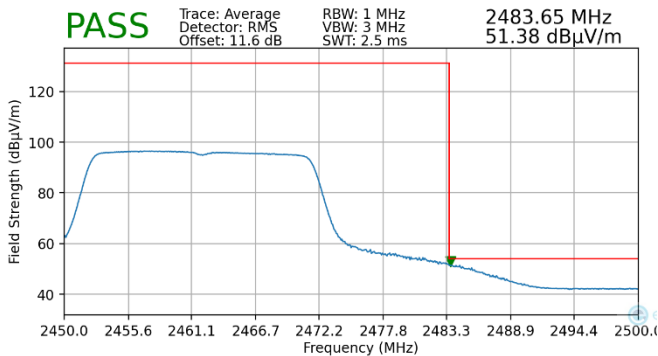


Plot 7-105. Radiated Restricted Lower Band Edge Measurement SISO ANT2 (Average – 242 Tones)

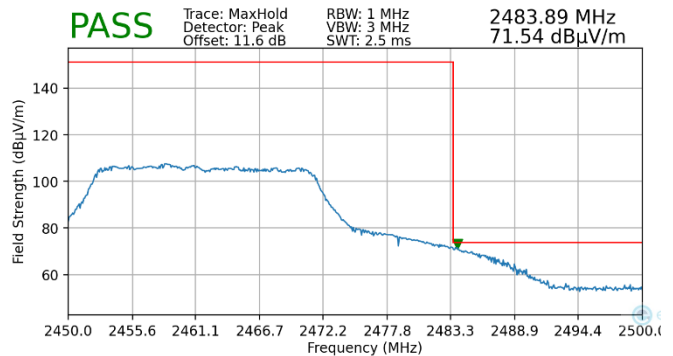


Plot 7-106. Radiated Restricted Lower Band Edge Measurement SISO ANT2 (Peak – 242 Tones)

Worst Case Mode: 802.11ax OFDMA
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 3 Meters
 Operating Frequency: 2462MHz
 Channel: 11



Plot 7-107. Radiated Restricted Upper Band Edge Measurement SISO ANT2 (Average – 242 Tones)



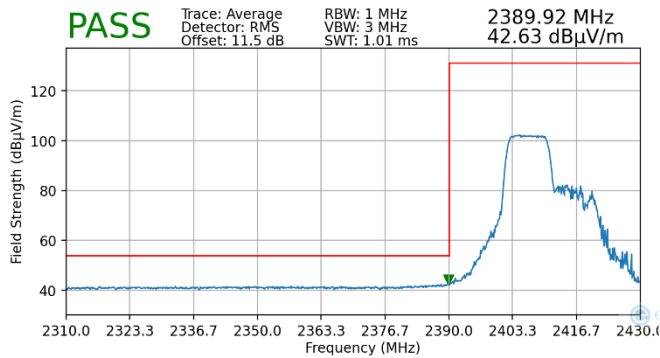
Plot 7-108. Radiated Restricted Upper Band Edge Measurement SISO ANT2 (Peak – 242 Tones)

FCC ID: A3LSMS711U	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2304260060-16.A3L	Test Dates: 5/24-7/31/2023	EUT Type: Portable Handset	Page 84 of 87

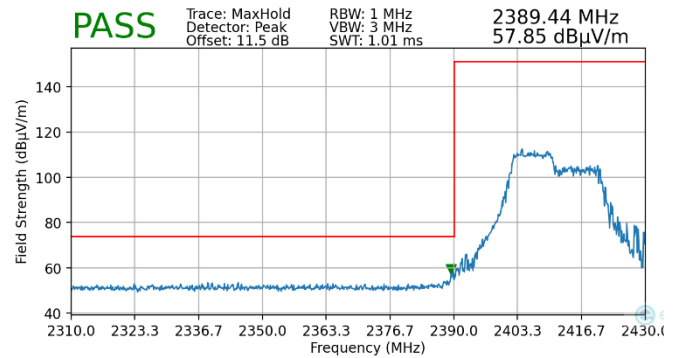
7.7.4 MIMO Radiated Restricted Band Edge Measurements

The radiated restricted band edge measurements are measured with an EMI test receiver connected to the receive antenna while the EUT is transmitting.

Worst Case Mode:	802.11ax OFDMA
Worst Case Transfer Rate:	MCS0
RU Index:	53
Distance of Measurements:	3 Meters
Operating Frequency:	2412MHz
Channel:	1

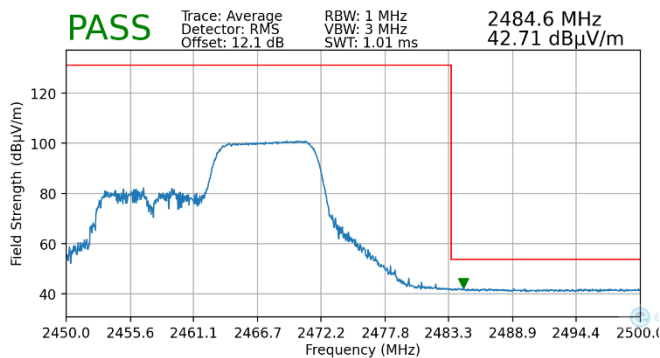


Plot 7-109. Radiated Restricted Lower Band Edge Measurement MIMO (Average – 106 Tones)

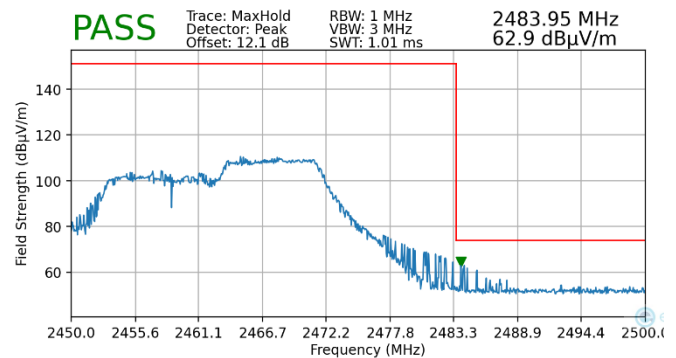


Plot 7-110. Radiated Restricted Lower Band Edge Measurement MIMO (Peak – 106 Tones)

Worst Case Mode:	802.11ax OFDMA
Worst Case Transfer Rate:	MCS0
RU Index:	54
Distance of Measurements:	3 Meters
Operating Frequency:	2462MHz
Channel:	11



Plot 7-111. Radiated Restricted Upper Band Edge Measurement MIMO (Average – 106 Tones)

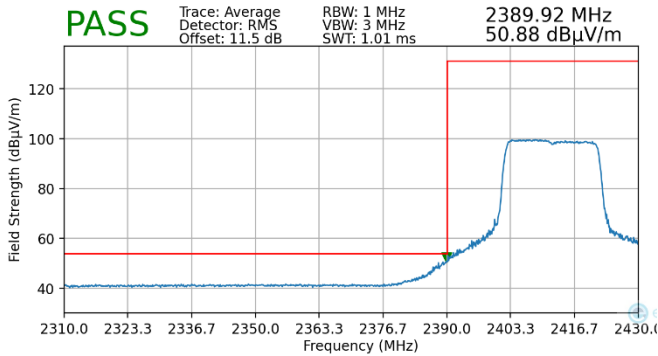


Plot 7-112. Radiated Restricted Upper Band Edge Measurement MIMO (Peak – 106 Tones)

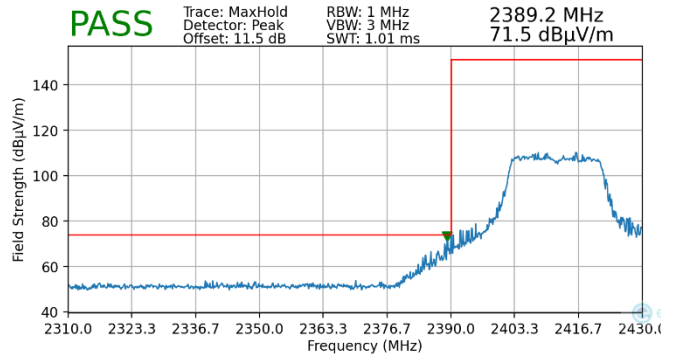
FCC ID: A3LSMS711U	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2304260060-16.A3L	Test Dates: 5/24-7/31/2023	EUT Type: Portable Handset	Page 85 of 87



Worst Case Mode: 802.11ax OFDMA
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 3 Meters
 Operating Frequency: 2412MHz
 Channel: 1

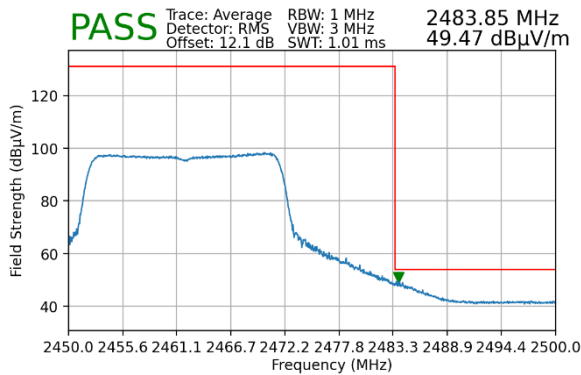


Plot 7-113. Radiated Restricted Lower Band Edge Measurement MIMO (Average – 242 Tones)

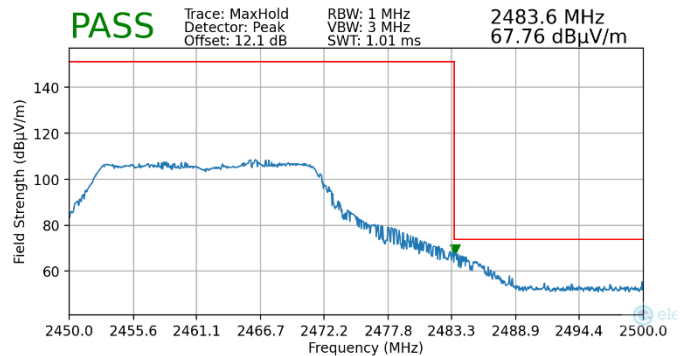


Plot 7-114. Radiated Restricted Lower Band Edge Measurement MIMO (Peak – 242 Tones)

Worst Case Mode: 802.11ax OFDMA
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 3 Meters
 Operating Frequency: 2462MHz
 Channel: 11



Plot 7-115. Radiated Restricted Upper Band Edge Measurement MIMO (Average – 242 Tones)



Plot 7-116. Radiated Restricted Upper Band Edge Measurement MIMO (Peak – 242 Tones)

FCC ID: A3LSMS711U	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2304260060-16.A3L	Test Dates: 5/24-7/31/2023	EUT Type: Portable Handset	Page 86 of 87

8.0 CONCLUSION

The data collected relate only the item(s) tested and show that the **Samsung Portable Handset FCC ID: A3LSMS711U** is in compliance with Part 15 Subpart C (15.247) of the FCC Rules.

FCC ID: A3LSMS711U	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2304260060-16.A3L	Test Dates: 5/24-7/31/2023	EUT Type: Portable Handset	Page 87 of 87