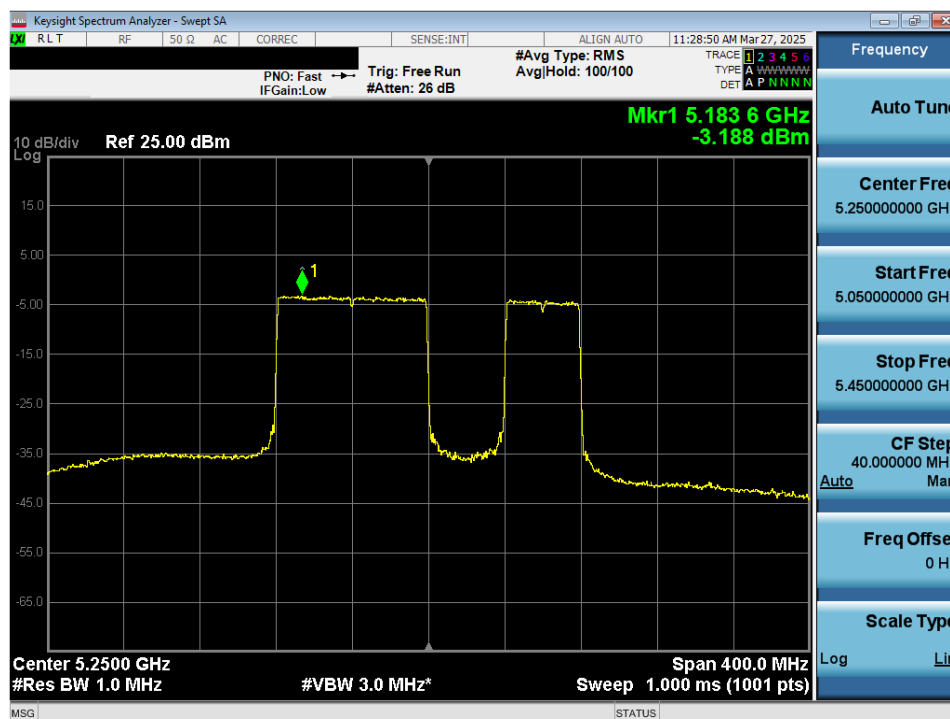
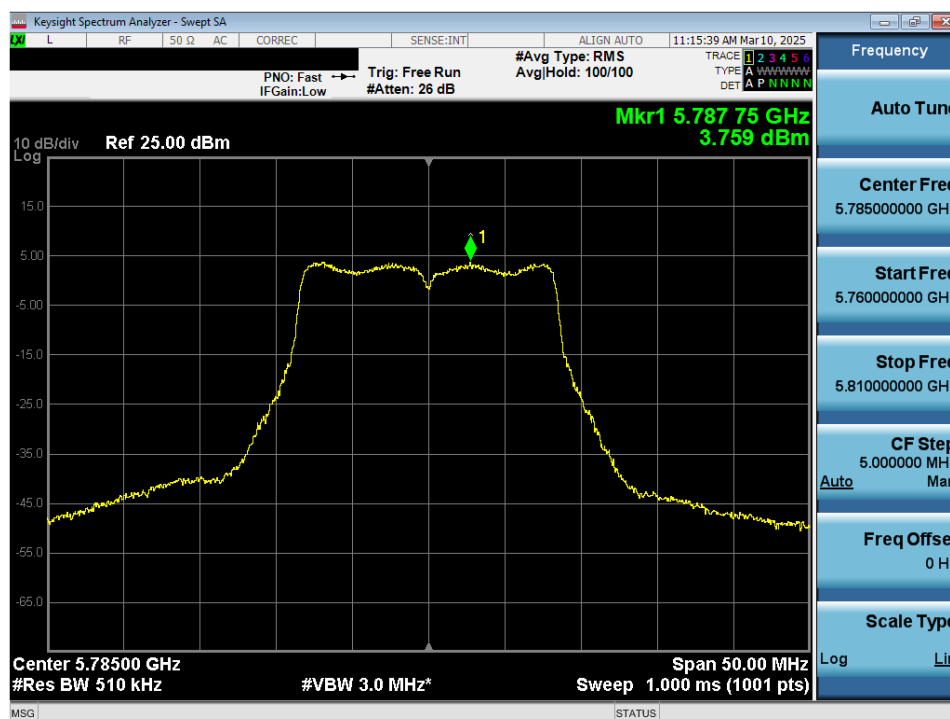


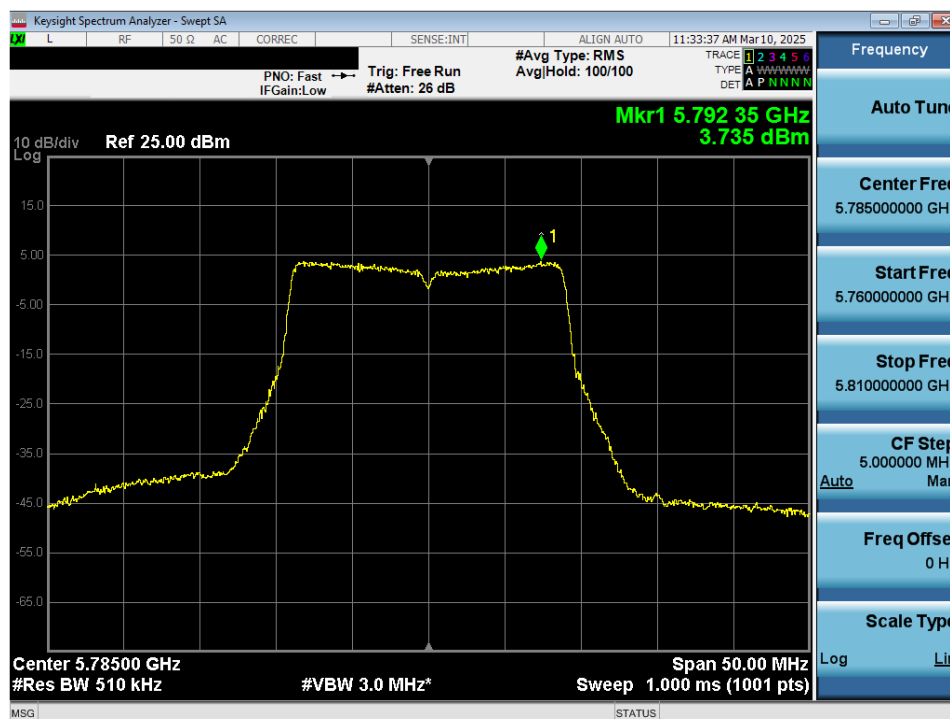


Plot 7-105. Power Spectral Density Plot MIMO ANT2 (160MHz 802.11be (40MHz Puncture) (UNII Band 1/2A) – Ch. 50)

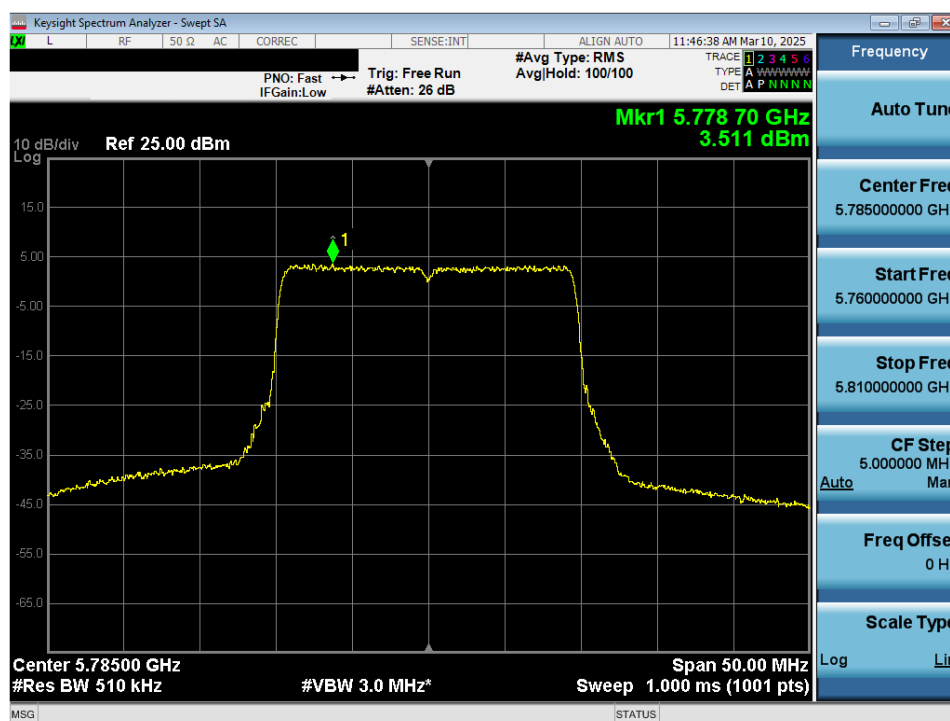


Plot 7-106. Power Spectral Density Plot MIMO ANT2 (20MHz 802.11a (UNII Band 3) – Ch.157)

FCC ID: A3LSMF966U IC: 649E-SMF966W	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2502210015-20-R3.A3L	Test Dates: 02/24/2025 - 04/11/2025	EUT Type: Portable Handset	Page 100 of 157

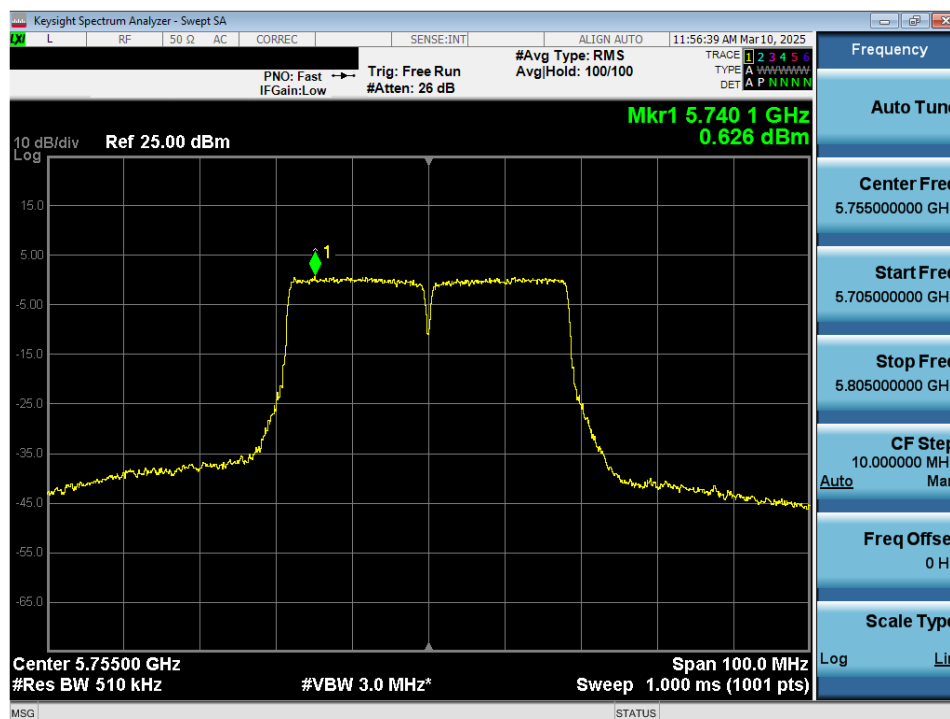


Plot 7-107. Power Spectral Density Plot MIMO ANT2 (20MHz 802.11n (UNII Band 3) – Ch.157)

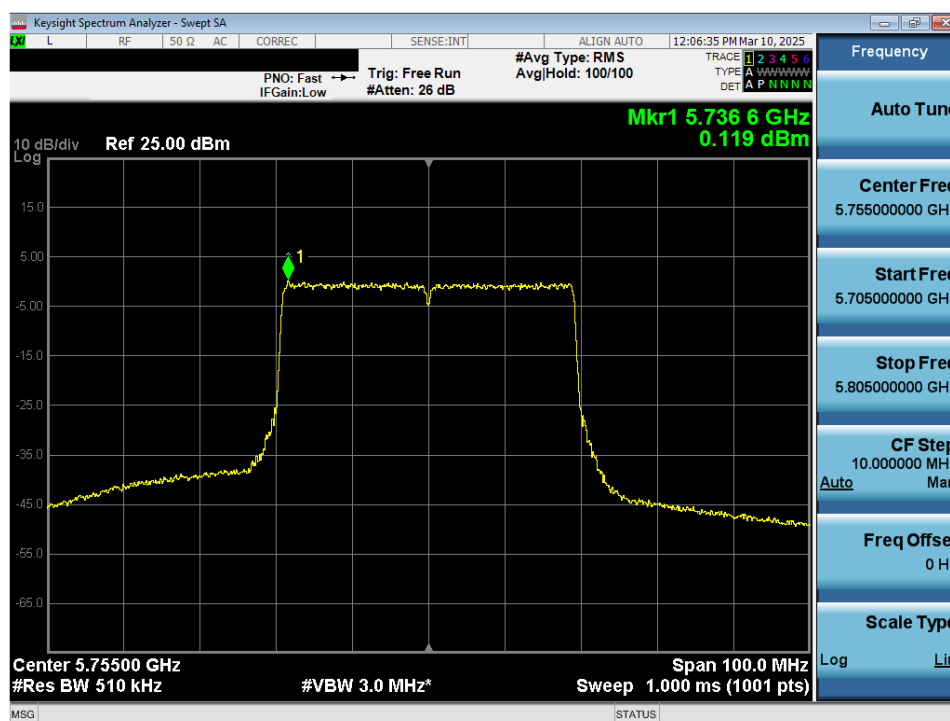


Plot 7-108. Power Spectral Density Plot MIMO ANT2 (20MHz 802.11ax/be (UNII Band 3) – Ch.157)

FCC ID: A3LSMF966U IC: 649E-SMF966W	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2502210015-20-R3.A3L	Test Dates: 02/24/2025 - 04/11/2025	EUT Type: Portable Handset	Page 101 of 157

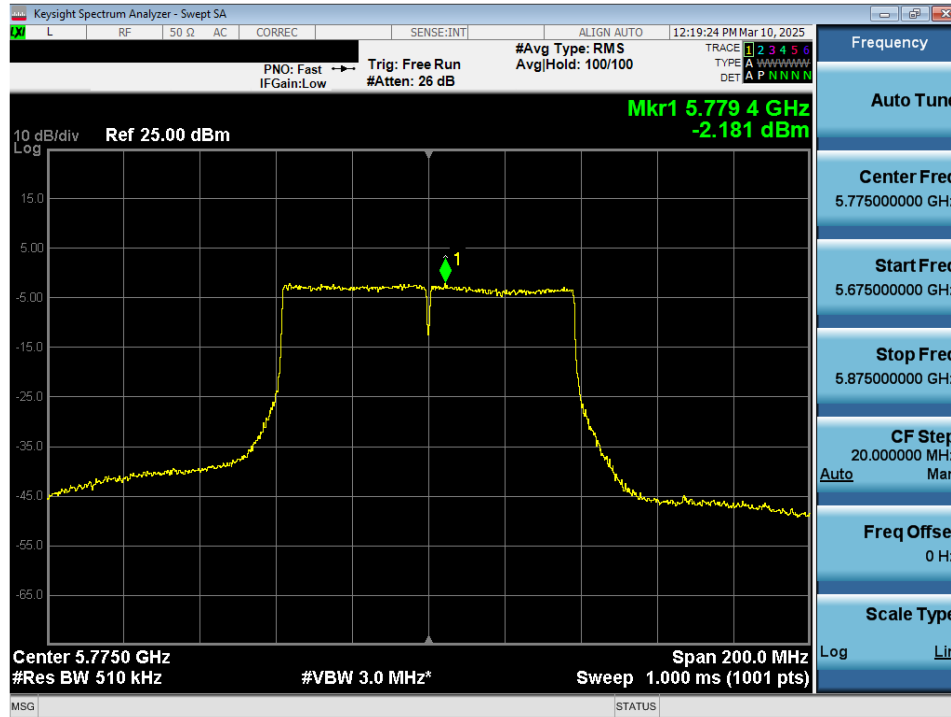


Plot 7-109. Power Spectral Density Plot MIMO ANT2 (40MHz 802.11n (UNII Band 3) – Ch. 151)

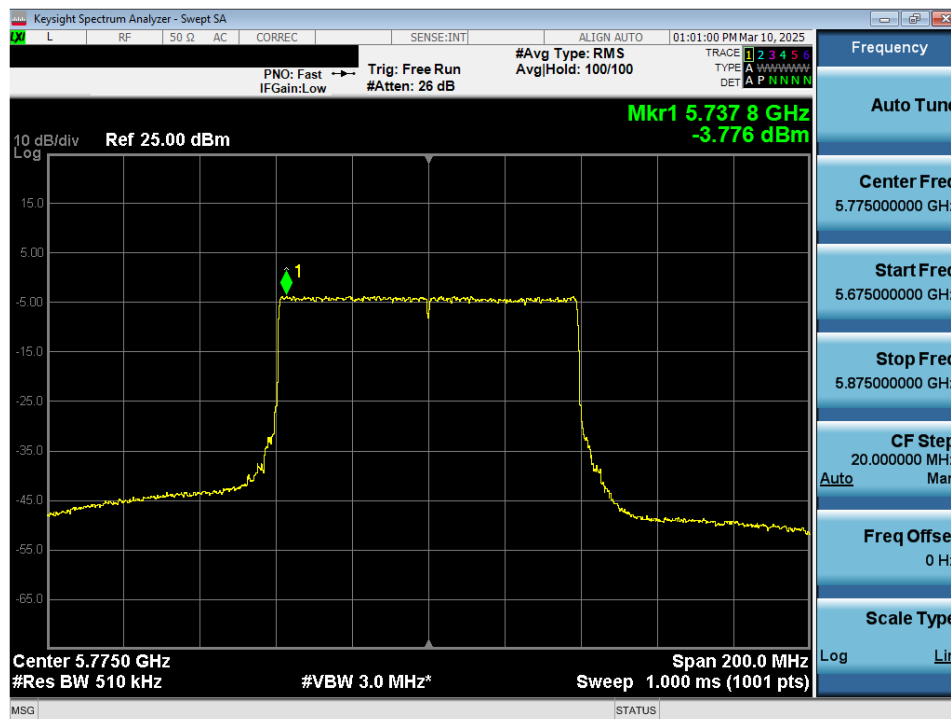


Plot 7-110. Power Spectral Density Plot MIMO ANT2 (40MHz 802.11ax/be (UNII Band 3) – Ch. 151)

FCC ID: A3LSMF966U IC: 649E-SMF966W	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2502210015-20-R3.A3L	Test Dates: 02/24/2025 - 04/11/2025	EUT Type: Portable Handset	Page 102 of 157

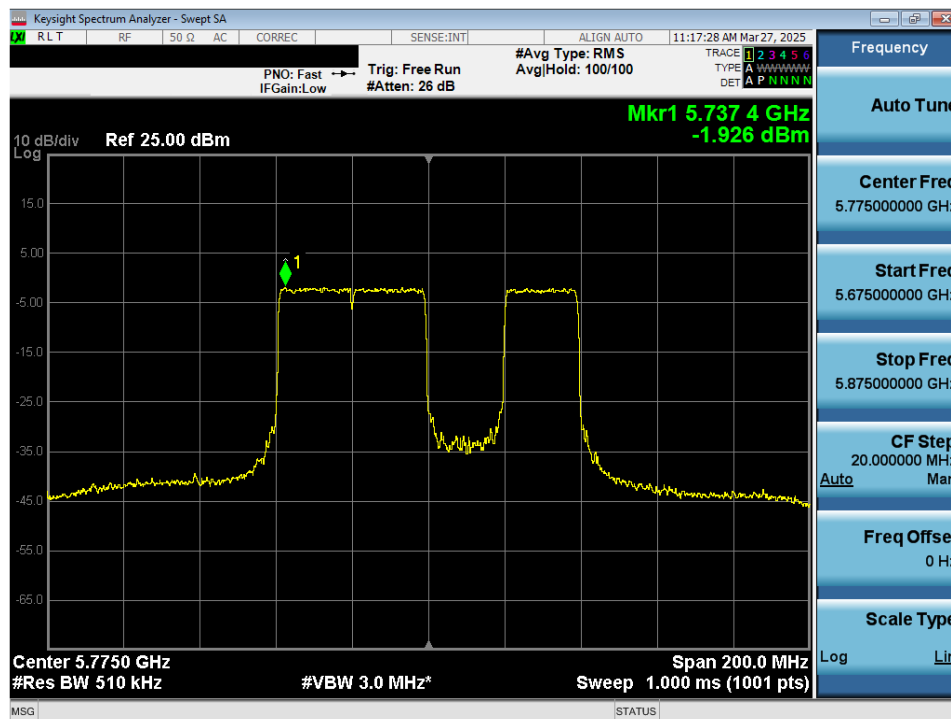


Plot 7-111. Power Spectral Density Plot MIMO ANT2 (80MHz 802.11ac (UNII Band 3) – Ch. 155)



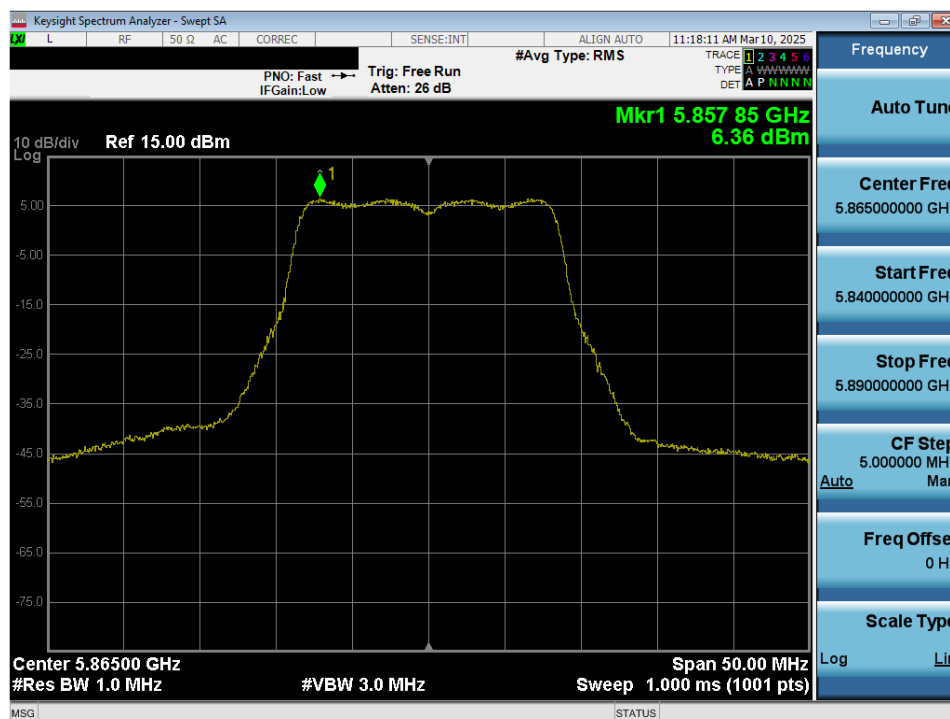
Plot 7-112. Power Spectral Density Plot MIMO ANT2 (80MHz 802.11ax/be (UNII Band 3) – Ch. 155)

FCC ID: A3LSMF966U IC: 649E-SMF966W	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2502210015-20-R3.A3L	Test Dates: 02/24/2025 - 04/11/2025	EUT Type: Portable Handset	Page 103 of 157

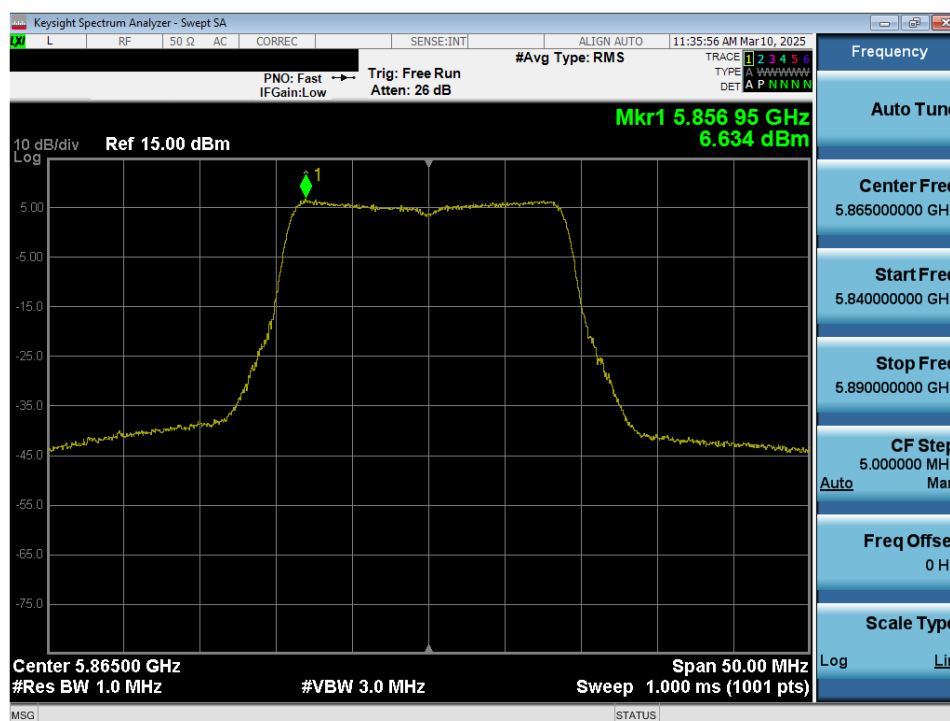


Plot 7-113. Power Spectral Density Plot MIMO ANT2 (80MHz 802.11be (20MHz Puncture) (UNII Band 3) – Ch. 155)

FCC ID: A3LSMF966U IC: 649E-SMF966W	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2502210015-20-R3.A3L	Test Dates: 02/24/2025 - 04/11/2025	EUT Type: Portable Handset	Page 104 of 157

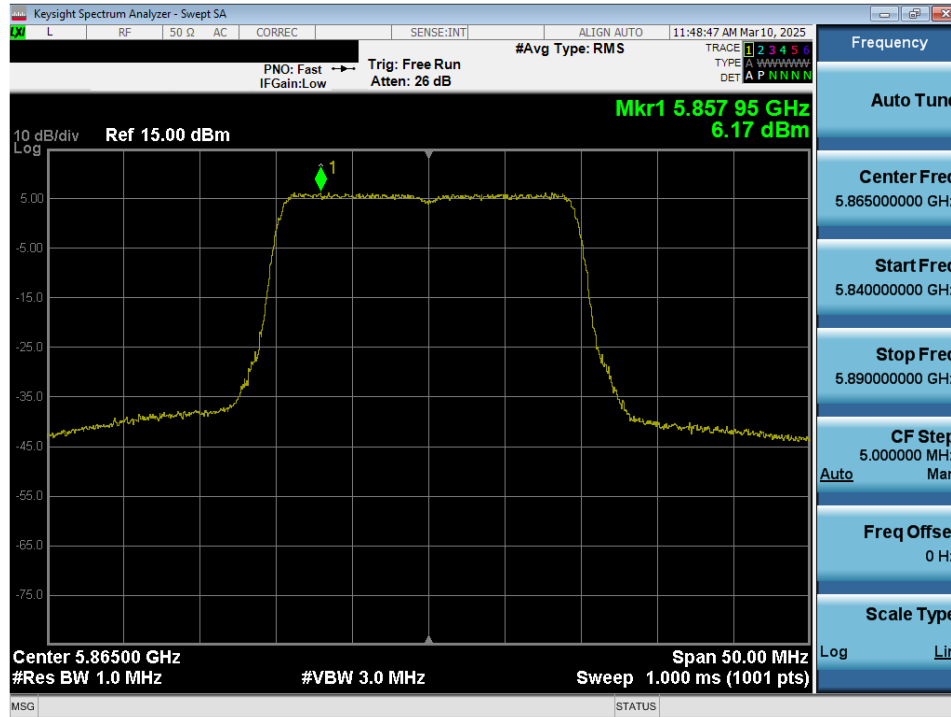


Plot 7-114. Power Spectral Density Plot MIMO ANT2 (20MHz 802.11a (UNII Band 4) – Ch.173)

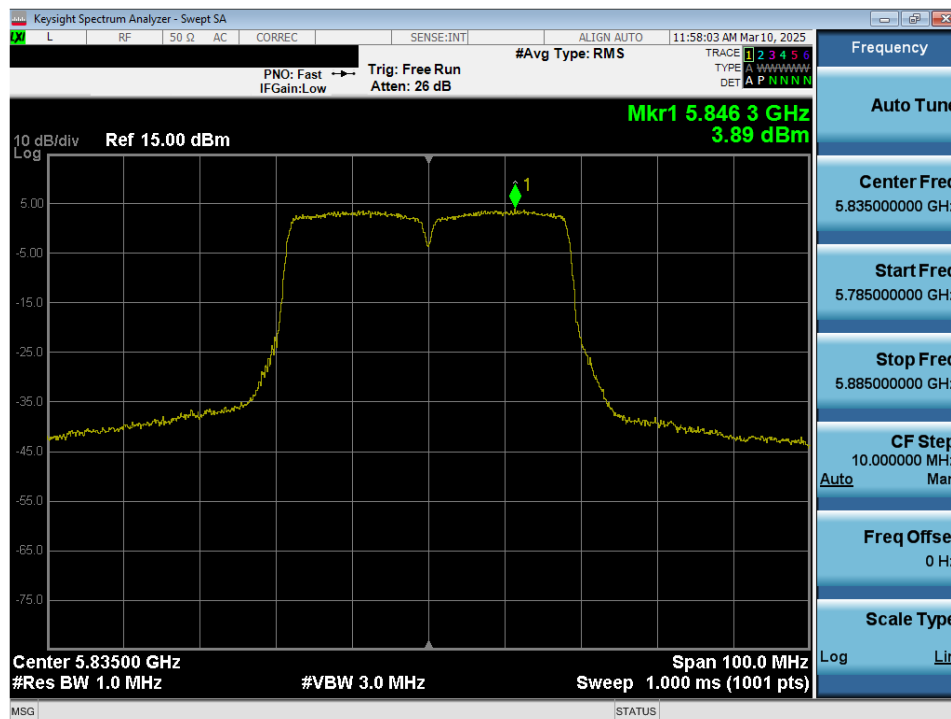


Plot 7-115. Power Spectral Density Plot MIMO ANT2 (20MHz 802.11n (UNII Band 4) – Ch.173)

FCC ID: A3LSMF966U IC: 649E-SMF966W	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2502210015-20-R3.A3L	Test Dates: 02/24/2025 - 04/11/2025	EUT Type: Portable Handset	Page 105 of 157

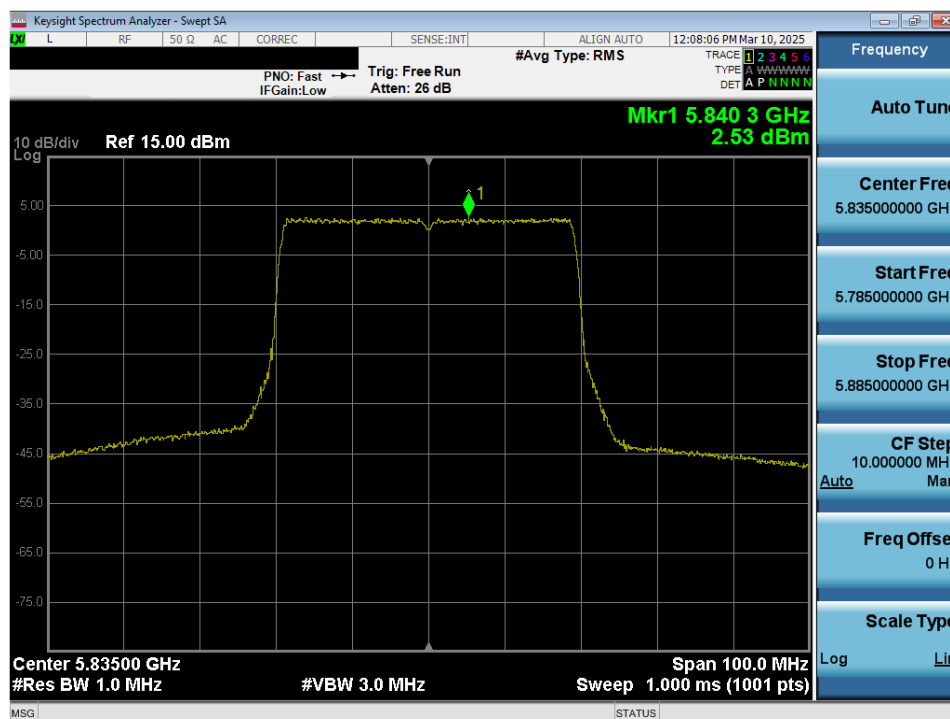


Plot 7-116. Power Spectral Density Plot MIMO ANT2 (20MHz 802.11ax/be (UNII Band 4) – Ch.173)

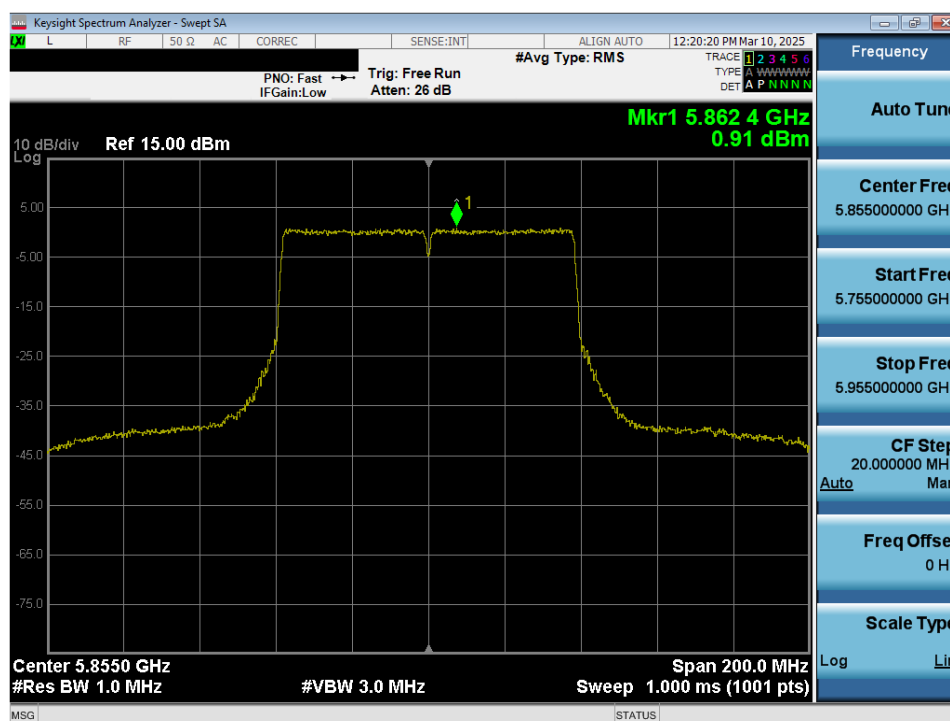


Plot 7-117. Power Spectral Density Plot MIMO ANT2 (40MHz 802.11n (UNII Band 3/4) – Ch. 167)

FCC ID: A3LSMF966U IC: 649E-SMF966W	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2502210015-20-R3.A3L	Test Dates: 02/24/2025 - 04/11/2025	EUT Type: Portable Handset	Page 106 of 157

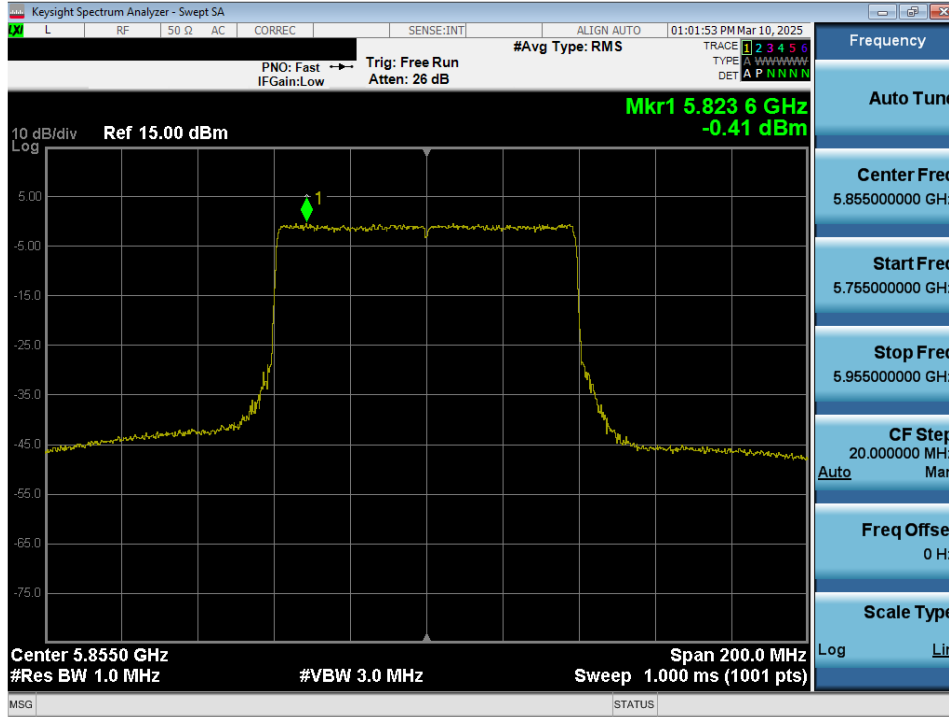


Plot 7-118. Power Spectral Density Plot MIMO ANT2 (40MHz 802.11ax/be (UNII Band 3/4) – Ch. 167)

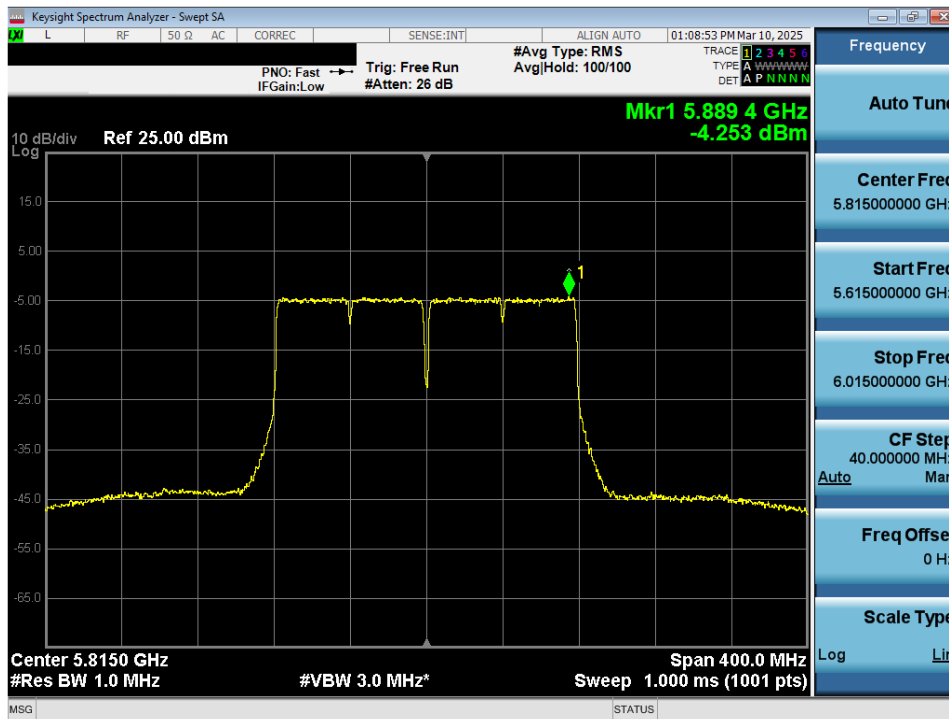


Plot 7-119. Power Spectral Density Plot MIMO ANT2 (80MHz 802.11ac (UNII Band 3/4) – Ch. 171)

FCC ID: A3LSMF966U IC: 649E-SMF966W	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2502210015-20-R3.A3L	Test Dates: 02/24/2025 - 04/11/2025	EUT Type: Portable Handset	Page 107 of 157

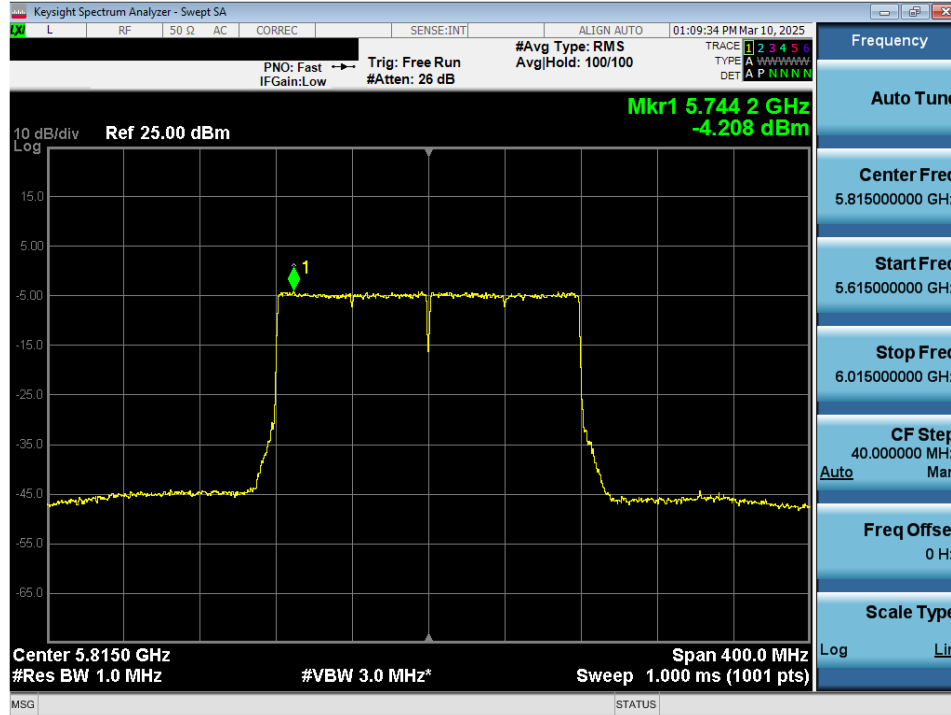


Plot 7-120. Power Spectral Density Plot MIMO ANT2 (80MHz 802.11ax/be (UNII Band 3/4) – Ch. 171)

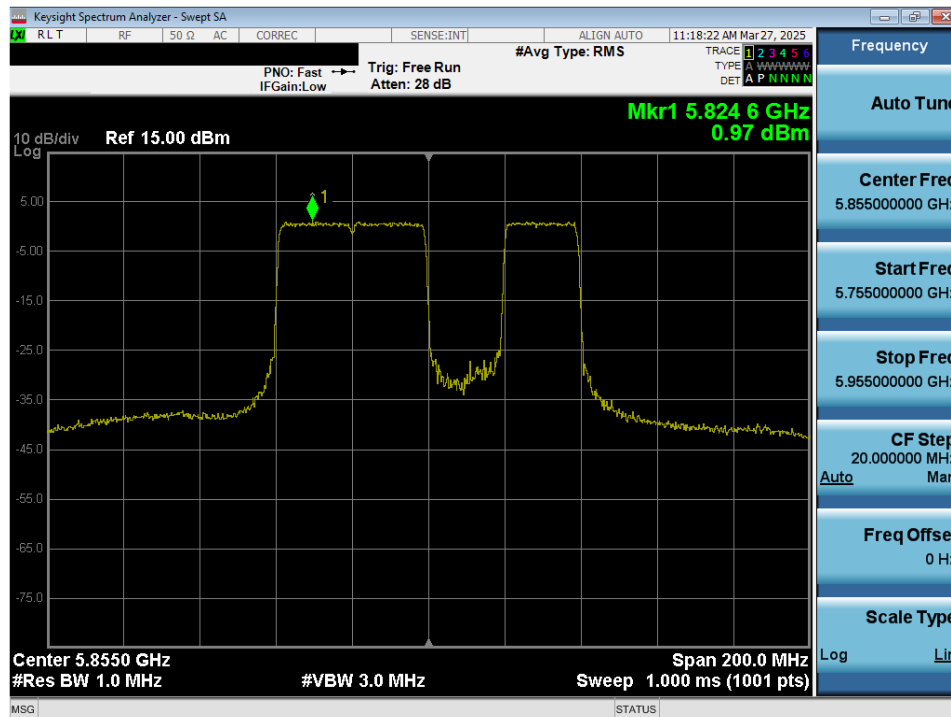


Plot 7-121. Power Spectral Density Plot MIMO ANT2 (160MHz 802.11ac (UNII Band 3/4) – Ch. 163)

FCC ID: A3LSMF966U IC: 649E-SMF966W	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2502210015-20-R3.A3L	Test Dates: 02/24/2025 - 04/11/2025	EUT Type: Portable Handset	Page 108 of 157

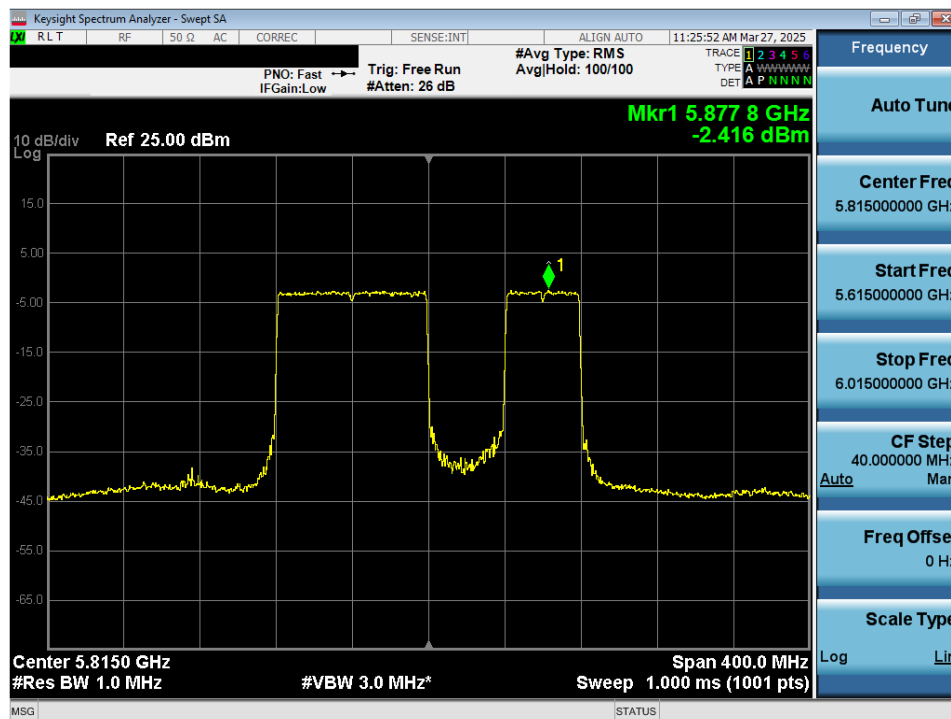


Plot 7-122. Power Spectral Density Plot MIMO ANT2 (160MHz 802.11ax/be (UNII Band 3/4) – Ch. 163)



Plot 7-123. Power Spectral Density Plot MIMO ANT2 (80MHz 802.11be (20MHz Puncture) (UNII Band 3/4) – Ch. 171)

FCC ID: A3LSMF966U IC: 649E-SMF966W	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2502210015-20-R3.A3L	Test Dates: 02/24/2025 - 04/11/2025	EUT Type: Portable Handset	Page 109 of 157



Plot 7-124. Power Spectral Density Plot MIMO ANT2 (160MHz 802.11be (40MHz Puncture) (UNII Band 3/4) – Ch. 163)

FCC ID: A3LSMF966U IC: 649E-SMF966W	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2502210015-20-R3.A3L	Test Dates: 02/24/2025 - 04/11/2025	EUT Type: Portable Handset	Page 110 of 157

Note:

Per ANSI C63.10-2013 Section 14.3.2.2 and KDB 662911 v02r01 Section E)2), the power spectral density at Antenna-1 and Antenna-2 were first measured separately as shown in the section above. The measured values were then summed in linear power units then converted back to dBm.

Sample MIMO Calculation:

At 5180MHz in 802.11n (20MHz BW) mode, the average conducted power spectral density was measured to be 7.10 dBm for Antenna 1 and 7.14 dBm for Antenna 2.

Antenna 1 + Antenna 2 = MIMO

$$(7.10 \text{ dBm} + 7.14 \text{ dBm}) = (5.129 \text{ mW} + 5.176 \text{ mW}) = 10.305 \text{ mW} = 10.13 \text{ dBm}$$

FCC ID: A3LSMF966U IC: 649E-SMF966W	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2502210015-20-R3.A3L	Test Dates: 02/24/2025 - 04/11/2025	EUT Type: Portable Handset	Page 111 of 157

7.6 Radiated Emission Measurements

Test Overview and Limit

All out of band radiated spurious emissions are measured with a spectrum analyzer connected to a receive antenna while the EUT is operating at its maximum duty cycle, at its maximum power control level, as defined in ANSI C63.10-2013, and at the appropriate frequencies. All channels, modes, and modulations/data rates were investigated among all UNII bands. Only the radiated emissions of the configuration that produced the worst-case emissions are reported in this section.

For transmitters operating in the 5.15-5.25 GHz and 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an EIRP of -27 dBm/MHz.

For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an EIRP of -27 dBm/MHz.

For transmitters operating in the 5.725-5.85 GHz band: All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

For transmitters operating in the 5.850 – 5.895 GHz band: all emissions at or above 5.895GHz shall not exceed an e.i.r.p. of -5dBm/MHz and shall decrease linearly up to an e.i.r.p. of -27dBm/MHz at or above 5.925GHz, and all emissions below 5.725 GHz shall not exceed an e.i.r.p. of -27dBm/MHz at 5.65 GHz increasing linearly to 10dBm/MHz at 5.7GHz and from 5.7GHz increasing linearly to a level of 15.6dBm/MHz at 5.72GHz, and from 5.72GHz increasing linearly to a level of 27dBm/MHz at 5.725GHz.

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47 CFR and Table 6 of RSS-Gen (8.10) must not exceed the limits shown in the table below per FCC §15.209 and RSS-Gen (8.9).

Frequency	Field Strength [μV/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 7-69. Radiated Limits

Test Procedures Used

ANSI C63.10-2013 – Sections 12.7.7.2, 12.7.6, 12.7.5 (Radiated Spurious Emissions)

ANSI C63.10-2013 – Section 12.7.4.4 (Band Edge Measurements)

FCC ID: A3LSMF966U IC: 649E-SMF966W	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2502210015-20-R3.A3L	Test Dates: 02/24/2025 - 04/11/2025	EUT Type: Portable Handset	Page 112 of 157

Test Settings – Above 1GHz

Average Field Strength Measurements (Method AD – Average Detection)

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest.
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = power average (RMS)
5. Number of measurement points = 1001 (Number of points must be $\geq 2 \times \text{span} \backslash \text{RBW}$)
6. Sweep time = auto
7. Trace (RMS) averaging was performed over at least 100 traces.

Peak Field Strength Measurements

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest.
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize.

Test Settings – Below 1GHz

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.

Test Setup

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

FCC ID: A3LSMF966U IC: 649E-SMF966W	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2502210015-20-R3.A3L	Test Dates: 02/24/2025 - 04/11/2025	EUT Type: Portable Handset	Page 113 of 157

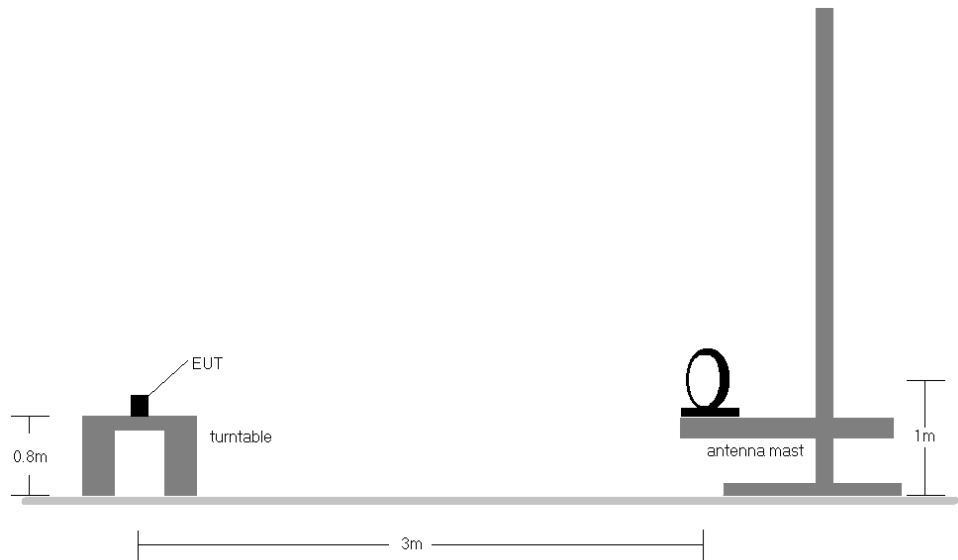


Figure 7-5. Radiated Test Setup < 30MHz

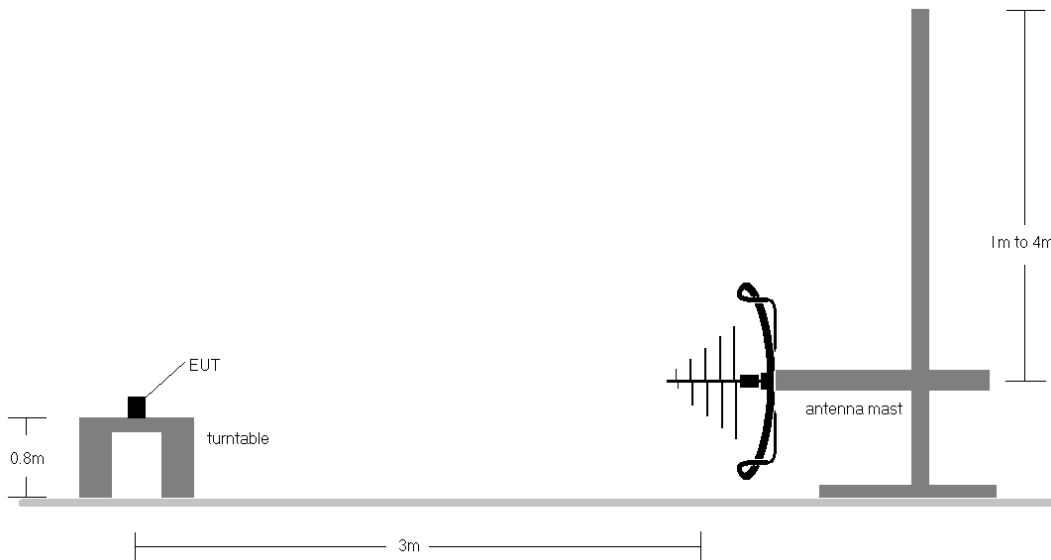


Figure 7-6. Radiated Test Setup < 1GHz

FCC ID: A3LSMF966U IC: 649E-SMF966W	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2502210015-20-R3.A3L	Test Dates: 02/24/2025 - 04/11/2025	EUT Type: Portable Handset	Page 114 of 157

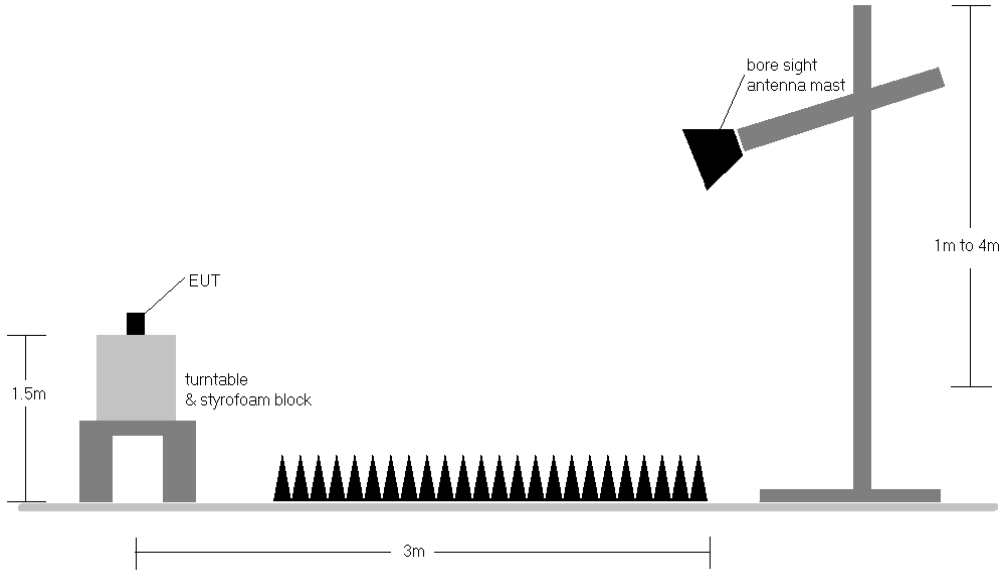


Figure 7-7. Radiated Test Setup > 1GHz

FCC ID: A3LSMF966U IC: 649E-SMF966W	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2502210015-20-R3.A3L	Test Dates: 02/24/2025 - 04/11/2025	EUT Type: Portable Handset	Page 115 of 157

Test Notes

1. All spurious emissions lying in restricted bands specified in §15.205 are below the limits shown in §15.209. All spurious emissions that do not lie in a restricted band are subject to an average limit of -27dBm/MHz. At 3 meters, the field strength limit in dB μ V/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions of 68.2dB μ V/m.
2. All spurious emissions that do not lie in a restricted band are subject to a peak limit not to exceed 20dB of the average limit [68.2dB μ V/m]. If a peak measurement passes the average limit, it was determined no further investigation is necessary.
3. The antenna is manipulated through typical positions, polarity, and length during the tests. The EUT is manipulated through three orthogonal planes.
4. This unit was tested with its standard battery.
5. The spectrum is measured from 9kHz to the 10th harmonic of the fundamental frequency of the transmitter using CISPR quasi peak detector below 1GHz. Above 1 GHz, average and peak measurements were taken using linearly polarized horn antennas. The worst-case emissions are reported, however emissions whose levels were not within 20dB of the respective limits were not reported.
6. Emissions below 18GHz were measured at a 3-meter test distance while emissions above 18GHz were measured at a 1-meter test distance with the application of a distance correction factor.
7. The wide spectrum spurious emissions plots shown on the following pages are used only for the purpose of emission identification. Any emissions found to be within 20dB of the limit are fully investigated and the results are shown in this section.
8. The “-” shown in the following RSE tables are used to denote a noise floor measurement.
9. In the case where a peak-detector measurement passed the given RMS limit it was determined sufficient to demonstrate compliance.
10. The results recorded using the broadband antenna are 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.

Sample Calculations

Determining Spurious Emissions Levels

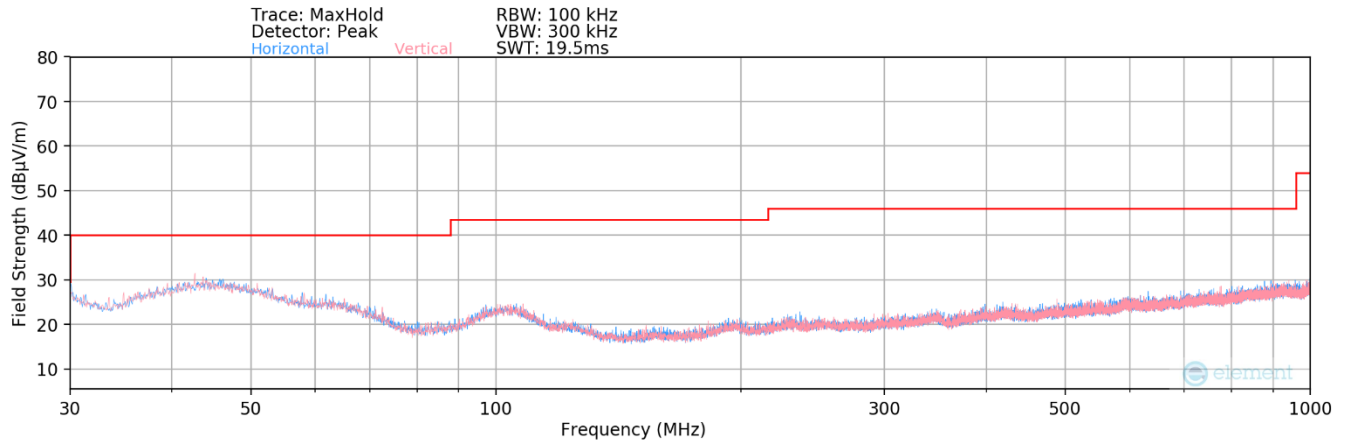
- Field Strength Level [dB μ V/m] = Analyzer Level [dBm] + 107 + AFCL [dB/m] + Distance Correction [dB]
- AFCL [dB/m] = Antenna Factor [dB/m] + Cable Loss [dB]
- Margin [dB] = Field Strength Level [dB μ V/m] – Limit [dB μ V/m]

Radiated Band Edge Measurement Offset

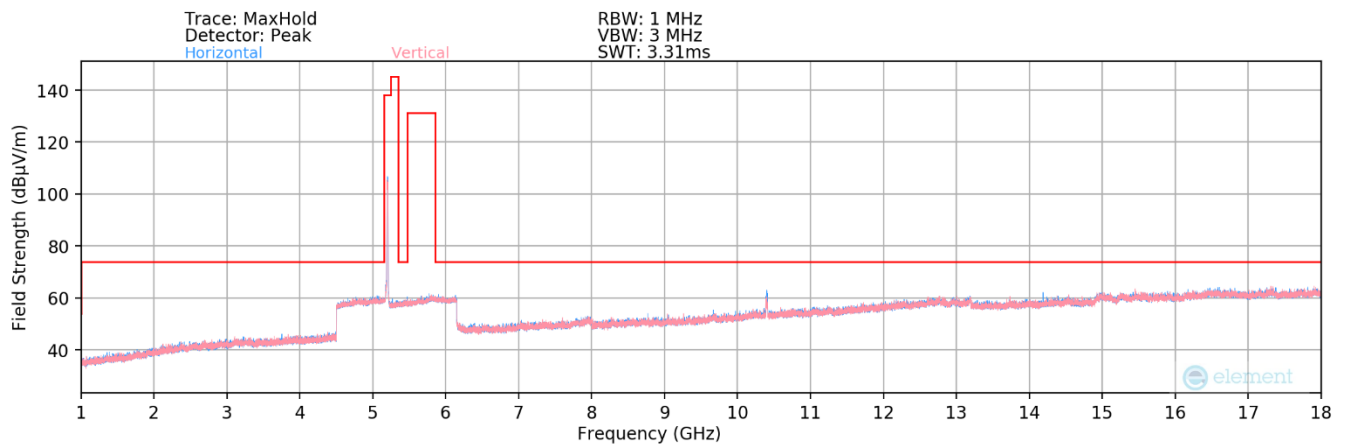
- The amplitude offset shown in the radiated restricted band edge plots was calculated using the formula:
Offset (dB) = (Antenna Factor + Cable Loss + Attenuator) – Preamplifier Gain

FCC ID: A3LSMF966U IC: 649E-SMF966W	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2502210015-20-R3-A3L	Test Dates: 02/24/2025 - 04/11/2025	EUT Type: Portable Handset	Page 116 of 157

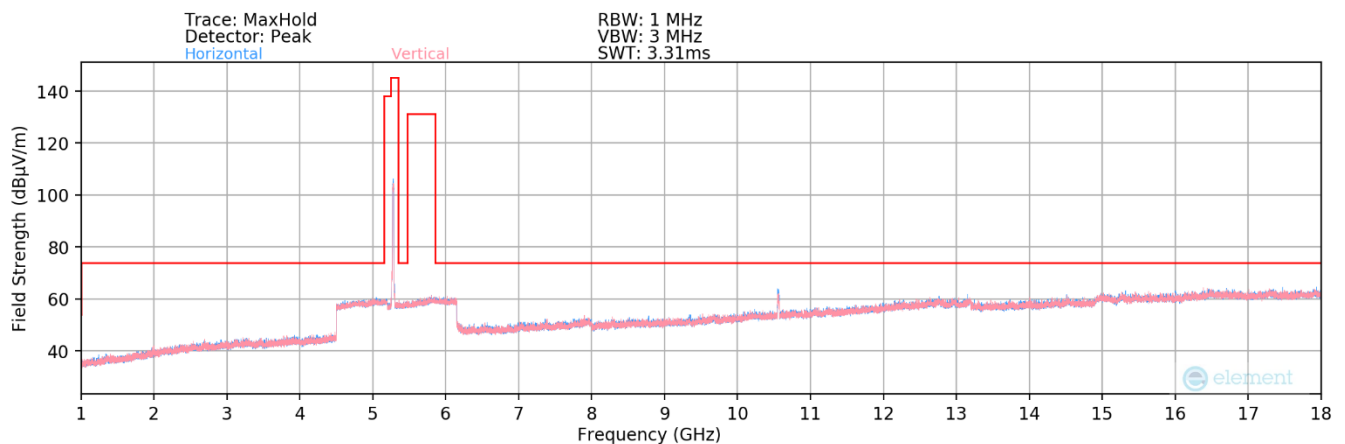
7.6.1 MIMO Radiated Spurious Emission Measurements



Plot 7-125. Radiated Spurious Plot below 1GHz MIMO (802.11a)

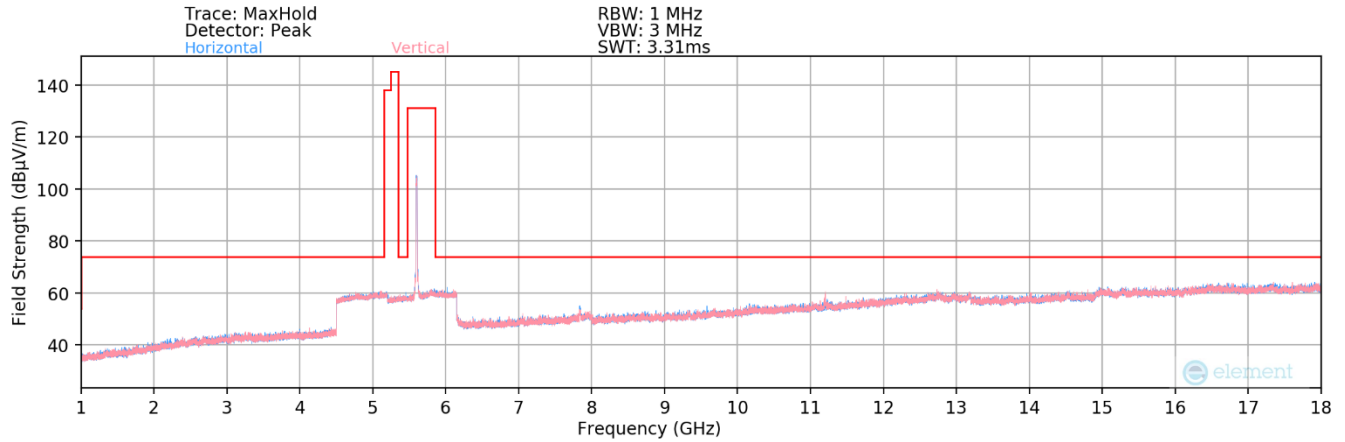


Plot 7-126. Radiated Spurious Plot above 1GHz MIMO (802.11a – UNII Band 1 Ch. 40)

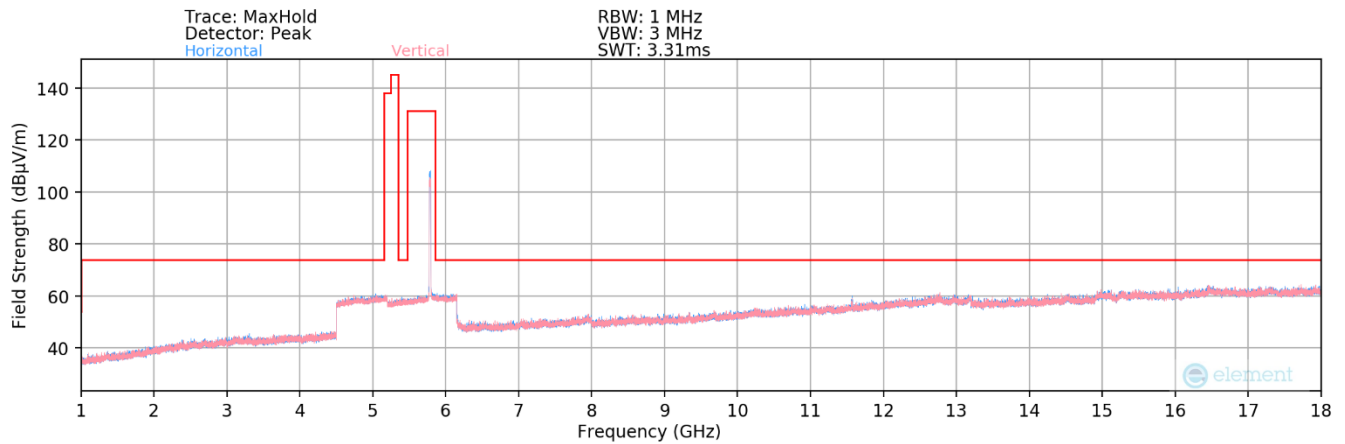


Plot 7-127. Radiated Spurious Plot above 1GHz MIMO (802.11a – UNII Band 2A Ch. 56)

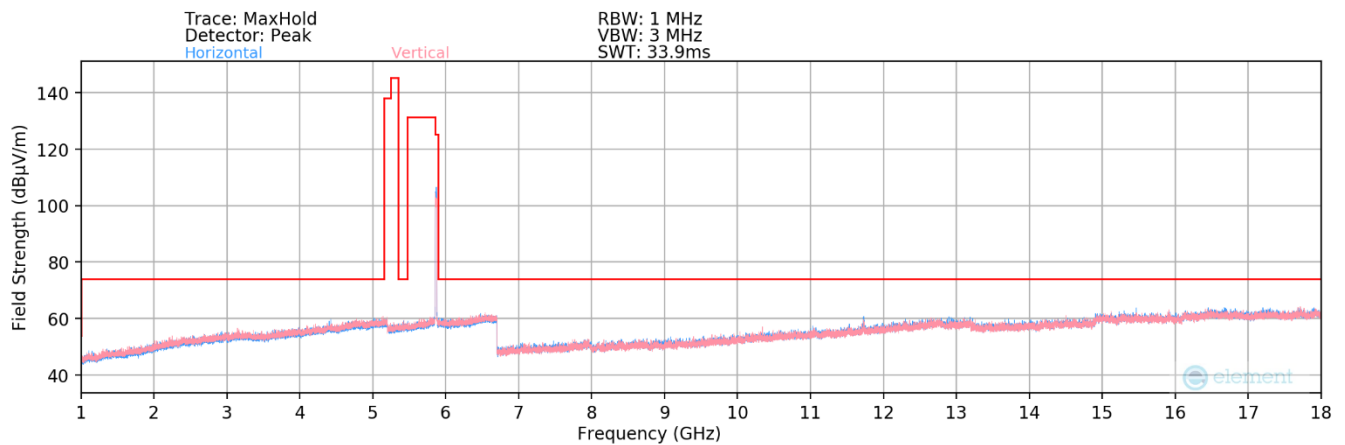
FCC ID: A3LSMF966U IC: 649E-SMF966W	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2502210015-20-R3.A3L	Test Dates: 02/24/2025 - 04/11/2025	EUT Type: Portable Handset	Page 117 of 157



Plot 7-128. Radiated Spurious Plot above 1GHz MIMO (802.11a – UNII Band 2C Ch. 120)

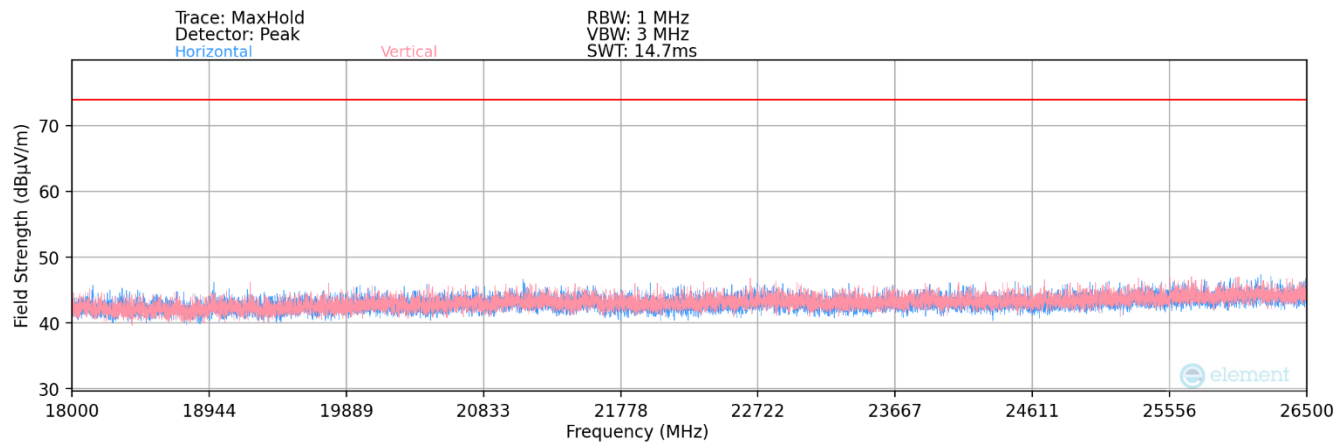


Plot 7-129. Radiated Spurious Plot above 1GHz MIMO (802.11a – UNII Band 3 Ch. 157)

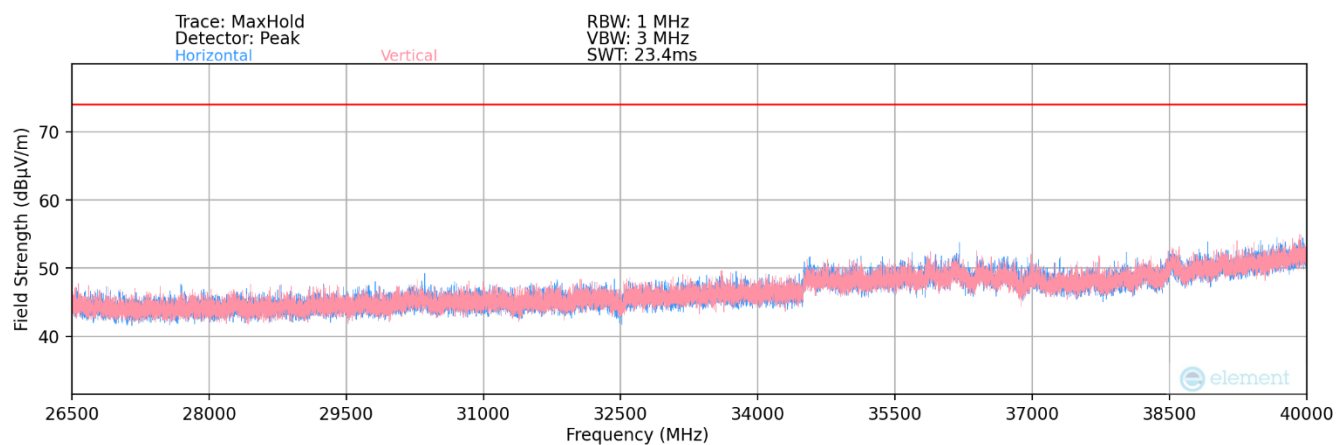


Plot 7-130. Radiated Spurious Plot above 1GHz MIMO (802.11a – UNII Band 4 Ch. 173)

FCC ID: A3LSMF966U IC: 649E-SMF966W	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2502210015-20-R3.A3L	Test Dates: 02/24/2025 - 04/11/2025	EUT Type: Portable Handset	Page 118 of 157



Plot 7-131. Radiated Spurious Plot 18GHz – 26.5GHz MIMO (802.11a)



Plot 7-132. Radiated Spurious Plot 26.5GHz – 40GHz MIMO (802.11a)

FCC ID: A3LSMF966U IC: 649E-SMF966W	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2502210015-20-R3.A3L	Test Dates: 02/24/2025 - 04/11/2025	EUT Type: Portable Handset	Page 119 of 157

MIMO Radiated Spurious Emission Measurements – UNII Band 1

Mode	Antenna	UNII Band	Channel	Test Channel Freq. [MHz]	Restricted	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]
802.11a	MIMO	1	36	5180		10360.00	Peak	H	117	337	-68.22	16.03	0.00	54.81	68.20	-13.39
					*	15540.00	Average	H	-	-	-82.45	23.04	0.00	47.59	53.98	-6.39
					*	15540.00	Peak	H	-	-	-70.65	23.04	0.00	59.39	73.98	-14.59
					*	20720.00	Average	H	-	-	-66.51	3.16	-9.54	34.11	53.98	-19.87
					*	20720.00	Peak	H	-	-	-55.78	3.16	-9.54	44.84	73.98	-29.14
						25900.00	Peak	H	-	-	-55.52	4.24	-9.54	46.18	68.20	-22.02
					*	7252.00	Average	H	127	64	-77.92	0.00	0.00	29.08	53.98	-24.90
					*	7252.00	Peak	H	127	64	-66.45	0.00	0.00	40.55	73.98	-33.43
			40	5200		10400.00	Peak	H	123	338	-69.09	16.25	0.00	54.16	68.20	-14.04
					*	15600.00	Average	H	-	-	-82.31	23.40	0.00	48.09	53.98	-5.89
					*	15600.00	Peak	H	-	-	-71.00	23.40	0.00	59.40	73.98	-14.58
					*	20800.00	Average	H	-	-	-66.16	3.15	-9.54	34.45	53.98	-19.53
					*	20800.00	Peak	H	-	-	-55.48	3.15	-9.54	45.13	73.98	-28.85
						26000.00	Peak	H	-	-	-54.89	4.16	-9.54	46.73	68.20	-21.47
					*	7279.00	Average	H	137	66	-77.66	12.64	0.00	41.98	53.98	-12.00
					*	7279.00	Peak	H	137	66	-66.99	12.64	0.00	52.65	73.98	-21.33
			48	5240		10480.00	Peak	H	132	332	-68.88	16.26	0.00	54.38	68.20	-13.82
					*	15720.00	Average	H	-	-	-82.82	23.33	0.00	47.51	53.98	-6.47
					*	15720.00	Peak	H	-	-	-71.13	23.33	0.00	59.20	73.98	-14.78
						20960.00	Peak	H	-	-	-56.10	3.27	-9.54	44.63	68.20	-23.57
						26200.00	Peak	H	-	-	-54.92	3.96	-9.54	46.50	68.20	-21.70
					*	7335.00	Average	H	124	64	-78.14	12.97	0.00	41.83	53.98	-12.15
					*	7335.00	Peak	H	124	64	-67.83	12.97	0.00	52.14	73.98	-21.84

Table 7-70. Radiated Measurements MIMO

FCC ID: A3LSMF966U IC: 649E-SMF966W	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2502210015-20-R3.A3L	Test Dates: 02/24/2025 - 04/11/2025	EUT Type: Portable Handset	Page 120 of 157

MIMO Radiated Spurious Emission Measurements – UNII Band 2A

Mode	Antenna	UNII Band	Channel	Test Channel Freq. [MHz]	Restricted	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]
802.11a	MIMO	2A	52	5260		10520.00	Peak	H	123	338	-68.53	16.33	0.00	54.80	68.20	-13.40
					*	15780.00	Average	H	-	-	-82.88	23.33	0.00	47.45	53.98	-6.53
					*	15780.00	Peak	H	-	-	-71.46	23.33	0.00	58.87	73.98	-15.11
					*	21040.00	Average	H	-	-	-66.55	3.35	-9.54	34.25	53.98	-19.73
					*	21040.00	Peak	H	-	-	-54.76	3.35	-9.54	46.04	73.98	-27.94
						26300.00	Peak	H	-	-	-56.71	3.91	-9.54	44.66	68.20	-23.54
					*	7364.00	Average	H	130	66	-75.30	13.21	0.00	44.91	53.98	-9.07
					*	7364.00	Peak	H	130	66	-65.30	13.21	0.00	54.91	73.98	-19.07
			56	5280		10560.00	Peak	H	126	335	-68.96	16.58	0.00	54.62	68.20	-13.58
					*	15840.00	Average	H	-	-	-82.81	23.62	0.00	47.81	53.98	-6.17
					*	15840.00	Peak	H	-	-	-71.25	23.62	0.00	59.37	73.98	-14.61
					*	21120.00	Average	H	-	-	-66.55	3.46	-9.54	34.38	53.98	-19.60
					*	21120.00	Peak	H	-	-	-54.69	3.46	-9.54	46.23	73.98	-27.75
						26400.00	Peak	H	-	-	-56.31	3.71	-9.54	44.86	68.20	-23.34
					*	7390.00	Average	H	130	66	-77.36	13.26	0.00	42.90	53.98	-11.08
					*	7390.00	Peak	H	130	66	-66.70	13.26	0.00	53.56	73.98	-20.42
			64	5320	*	10640.00	Average	H	120	324	-80.12	16.85	0.00	43.73	53.98	-10.24
					*	10640.00	Peak	H	120	324	-68.66	16.85	0.00	55.19	73.98	-18.79
					*	15960.00	Average	H	-	-	-82.14	24.02	0.00	48.88	53.98	-5.10
					*	15960.00	Peak	H	-	-	-70.79	24.02	0.00	60.23	73.98	-13.75
					*	21280.00	Average	H	-	-	-66.42	3.58	-9.54	34.62	53.98	-19.36
					*	21280.00	Peak	H	-	-	-56.47	3.58	-9.54	44.57	73.98	-29.41
						26600.00	Peak	H	-	-	-55.73	3.91	-9.54	45.65	68.20	-22.55
					*	7448.00	Average	H	159	57	-76.88	12.64	0.00	42.76	53.98	-11.22
					*	7448.00	Peak	H	159	57	-66.01	12.64	0.00	53.63	73.98	-20.35

Table 7-71. Radiated Measurements MIMO

FCC ID: A3LSMF966U IC: 649E-SMF966W	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2502210015-20-R3.A3L	Test Dates: 02/24/2025 - 04/11/2025	EUT Type: Portable Handset	Page 121 of 157

MIMO Radiated Spurious Emission Measurements – UNII Band 2C

Mode	Antenna	UNII Band	Channel	Test Channel Freq. [MHz]	Restricted	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]
802.11a	MIMO	2C	100	5500	*	11000.00	Average	H	126	335	-79.90	17.49	0.00	44.59	53.98	-9.39
					*	11000.00	Peak	H	126	335	-67.67	17.49	0.00	56.82	73.98	-17.16
						16500.00	Peak	H	-	-	-70.88	25.00	-9.54	51.58	68.20	-16.62
						22000.00	Peak	H	-	-	-55.62	3.53	-9.54	45.36	68.20	-22.84
						27500.00	Peak	H	-	-	-55.29	3.97	-9.54	46.15	68.20	-22.05
					*	7700.00	Average	H	146	62	-75.33	13.15	0.00	44.82	53.98	-9.16
			120	5600	*	7700.00	Peak	H	146	62	-65.73	13.15	0.00	54.42	73.98	-19.56
					*	11200.00	Average	H	140	249	-76.74	17.61	0.00	47.87	53.98	-6.11
					*	11200.00	Peak	H	140	249	-65.20	17.61	0.00	59.41	73.98	-14.57
						16800.00	Peak	H	-	-	-71.42	24.98	0.00	60.56	68.20	-7.64
					*	22400.00	Average	H	-	-	-66.53	3.58	-9.54	34.50	53.98	-19.48
					*	22400.00	Peak	H	-	-	-55.28	3.58	-9.54	45.75	73.98	-28.23
			144	5720		28000.00	Peak	H	-	-	-55.73	4.52	-9.54	46.24	68.20	-21.96
						7840.00	Peak	H	150	59	-61.87	13.56	0.00	58.69	68.20	-9.51
					*	11440.00	Average	H	136	243	-79.98	18.15	0.00	45.17	53.98	-8.81
					*	11440.00	Peak	H	136	243	-68.84	18.15	0.00	56.31	73.98	-17.67
						17160.00	Peak	H	-	-	-71.11	25.10	0.00	60.99	68.20	-7.21
					*	22880.00	Average	H	-	-	-66.54	3.76	-9.54	34.67	53.98	-19.31
					*	22880.00	Peak	H	-	-	-55.75	3.76	-9.54	45.47	73.98	-28.51
						28600.00	Peak	H	-	-	-56.35	4.96	-9.54	46.08	68.20	-22.12
					*	8008.00	Average	H	159	57	-78.43	12.76	0.00	41.33	53.98	-12.65
					*	8008.00	Peak	H	159	57	-67.74	12.76	0.00	52.02	73.98	-21.96

Table 7-72. Radiated Measurements MIMO

FCC ID: A3LSMF966U IC: 649E-SMF966W	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2502210015-20-R3.A3L	Test Dates: 02/24/2025 - 04/11/2025	EUT Type: Portable Handset	Page 122 of 157

MIMO Radiated Spurious Emission Measurements – UNII Band 3

Mode	Antenna	UNII Band	Channel	Test Channel Freq. [MHz]	Restricted	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]
802.11a	MIMO	3	149	5745	*	11490.00	Average	H	133	253	-81.01	18.28	0.00	44.27	53.98	-9.71
					*	11490.00	Peak	H	133	253	-69.18	18.28	0.00	56.10	73.98	-17.88
						17235.00	Peak	H	-	-	-70.99	25.51	0.00	61.52	68.20	-6.68
					*	22980.00	Average	H	-	-	-66.91	3.66	-9.54	34.22	53.98	-19.76
					*	22980.00	Peak	H	-	-	-54.96	3.66	-9.54	46.16	73.98	-27.82
						28725.00	Peak	H	-	-	-56.40	5.05	-9.54	46.12	68.20	-22.08
					*	8044.00	Average	H	166	59	-79.50	12.61	0.00	40.11	53.98	-13.87
					*	8044.00	Peak	H	166	59	-68.31	12.61	0.00	51.30	73.98	-22.68
			157	5785	*	11570.00	Average	H	148	243	-79.97	18.16	0.00	45.19	53.98	-8.79
					*	11570.00	Peak	H	148	243	-68.44	18.16	0.00	56.72	73.98	-17.26
						17355.00	Peak	H	-	-	-70.83	26.74	0.00	62.91	68.20	-5.29
						23140.00	Peak	H	-	-	-55.01	3.65	-9.54	46.10	68.20	-22.10
						28925.00	Peak	H	-	-	-56.24	4.92	-9.54	46.14	68.20	-22.06
			165	5825	*	11650.00	Average	H	113	241	-80.12	18.25	0.00	45.13	53.98	-8.85
					*	11650.00	Peak	H	113	241	-68.67	18.25	0.00	56.58	73.98	-17.40
						17475.00	Peak	H	-	-	-71.84	26.50	0.00	61.66	68.20	-6.54
						23300.00	Peak	H	-	-	-55.93	3.55	-9.54	45.08	68.20	-23.12
						29125.00	Peak	H	-	-	-55.79	5.01	-9.54	46.68	68.20	-21.52

Table 7-73. Radiated Measurements MIMO

FCC ID: A3LSMF966U IC: 649E-SMF966W	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2502210015-20-R3.A3L	Test Dates: 02/24/2025 - 04/11/2025	EUT Type: Portable Handset	Page 123 of 157

MIMO Radiated Spurious Emission Measurements – UNII Band 4

Mode	Antenna	UNII Band	Channel	Test Channel Freq. [MHz]	Restricted	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]
802.11a	MIMO	4	169	5845	*	11690.00	Average	H	172	21	-77.71	18.65	0.00	47.94	53.98	-6.04
					*	11690.00	Peak	H	172	21	-66.06	18.65	0.00	59.59	73.98	-14.39
						17535.00	Peak	H	-	-	-71.70	26.34	0.00	61.64	68.20	-6.56
						23380.00	Peak	H	-	-	-55.82	3.90	-9.54	45.53	68.20	-22.67
						29225.00	Peak	H	-	-	-55.99	5.41	-9.54	46.88	68.20	-21.32
						35070.00	Peak	H	-	-	-56.78	8.00	-9.54	48.68	68.20	-19.52
			173	5865	*	11730.00	Average	H	159	25	-76.12	18.20	0.00	49.08	53.98	-4.90
					*	11730.00	Peak	H	159	25	-65.51	18.20	0.00	59.69	73.98	-14.29
						17595.00	Peak	H	-	-	-71.53	26.29	0.00	61.76	68.20	-6.44
						23460.00	Peak	H	-	-	-55.98	3.89	-9.54	45.37	68.20	-22.83
						29325.00	Peak	H	-	-	-56.42	5.46	-9.54	46.49	68.20	-21.71
						35190.00	Peak	H	-	-	-56.76	8.12	-9.54	48.82	68.20	-19.38
			177	5885	*	11770.00	Average	H	137	23	-75.75	18.48	0.00	49.73	53.98	-4.25
					*	11770.00	Peak	H	137	23	-64.24	18.48	0.00	61.24	73.98	-12.74
						17655.00	Peak	H	-	-	-72.29	26.16	0.00	60.87	68.20	-7.33
						23540.00	Peak	H	-	-	-55.51	3.96	-9.54	45.91	68.20	-22.29
						29425.00	Peak	H	-	-	-56.32	5.51	-9.54	46.65	68.20	-21.55
						35310.00	Peak	H	-	-	-57.22	8.28	-9.54	48.53	68.20	-19.67

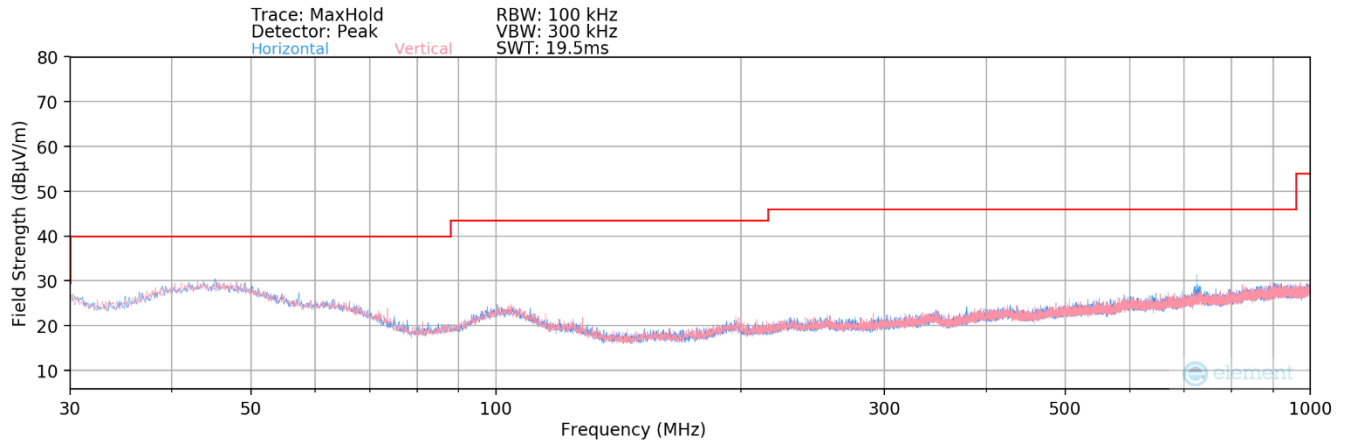
Table 7-74. Radiated Measurements MIMO

Mode	Antenna	UNII Band	Channel	Test Channel Freq. [MHz]	Restricted	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]
802.11a	MIMO	4	177	5885	*	11770.00	Average	H	246	263	-79.21	18.48	0.00	46.27	53.98	-7.71
					*	11770.00	Peak	H	-	-	-66.28	18.48	0.00	59.20	73.98	-14.78
						17655.00	Peak	H	-	-	-72.11	26.16	0.00	61.05	68.20	-7.15
						23540.00	Peak	H	-	-	-55.81	3.96	-9.54	45.61	68.20	-22.59
						29425.00	Peak	H	-	-	-56.46	5.51	-9.54	46.51	68.20	-21.69
						35310.00	Peak	H	-	-	-57.24	8.28	-9.54	48.50	68.20	-19.70

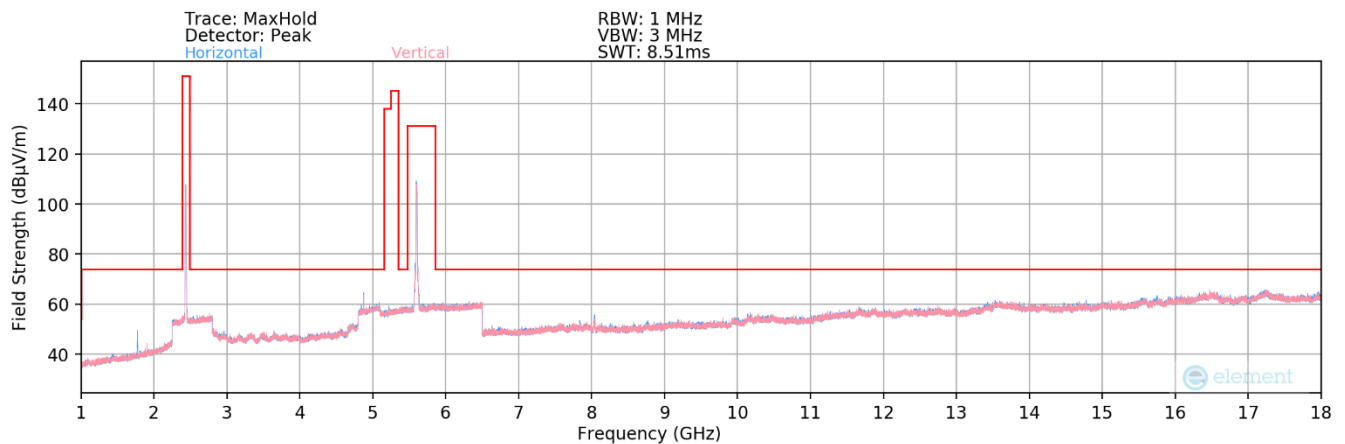
Table 7-75. Radiated Measurements MIMO with WCP

FCC ID: A3LSMF966U IC: 649E-SMF966W	MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1M2502210015-20-R3.A3L	Test Dates: 02/24/2025 - 04/11/2025	EUT Type: Portable Handset		Page 124 of 157

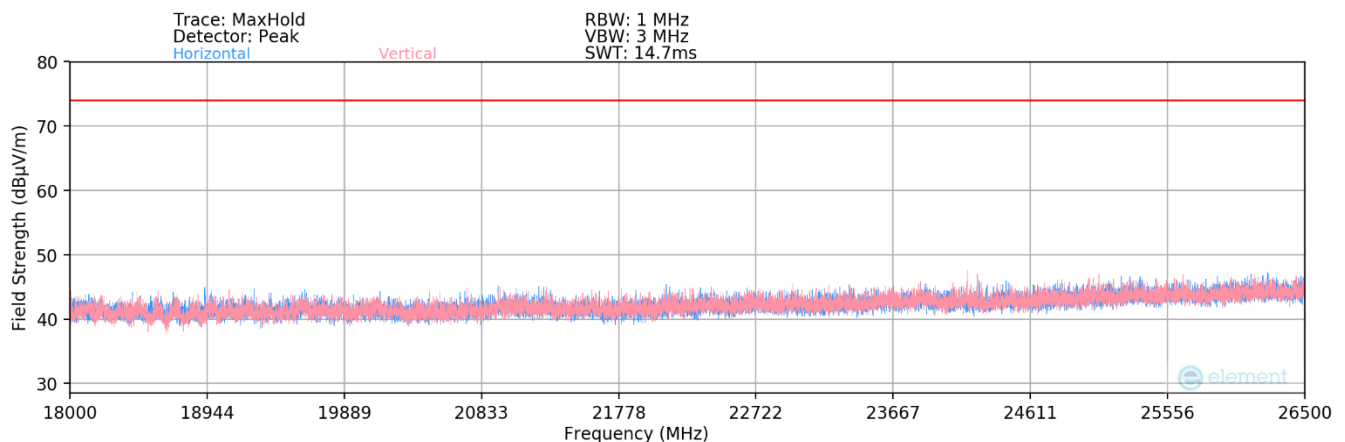
7.6.2 MIMO Radiated Spurious Emission Measurements – Simultaneous Transmission



Plot 7-133. Radiated Spurious Plot below 1GHz MIMO 802.11b (2.4GHz – Ch.6) + MIMO 802.11a (5GHz – Ch.120)

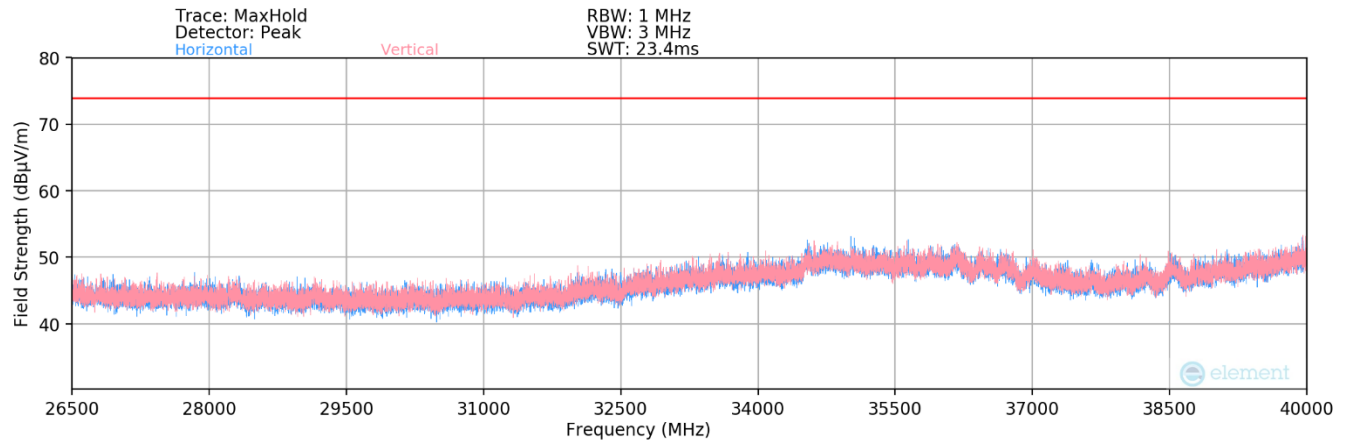


Plot 7-134. Radiated Spurious Plot above 1GHz MIMO 802.11b (2.4GHz – Ch.6) + MIMO 802.11a (5GHz – Ch.120)



Plot 7-135. Radiated Spurious Plot 18GHz – 26.5GHz MIMO 802.11b (2.4GHz – Ch.6) + MIMO 802.11a (5GHz – Ch.120)

FCC ID: A3LSMF966U IC: 649E-SMF966W	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2502210015-20-R3.A3L	Test Dates: 02/24/2025 - 04/11/2025	EUT Type: Portable Handset	Page 125 of 157



Plot 7-136. Radiated Spurious Plot 26.5GHz – 40GHz MIMO 802.11b (2.4GHz – Ch.6) + MIMO 802.11a (5GHz – Ch.120)

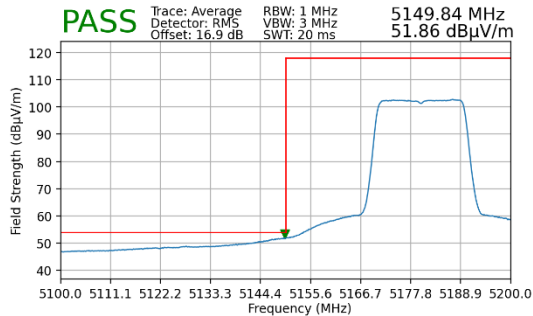
Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
726.00	Peak	H	126	325	-68.70	-3.11	0.00	35.19	46.02	-10.83
1711.00	Peak	H	-	-	-67.19	0.81	0.00	40.62	68.20	-27.58
3163.00	Peak	H	281	22	-68.18	7.39	0.00	46.21	68.20	-21.99
6326.00	Peak	H	-	-	-70.44	13.48	0.00	50.04	68.20	-18.16
* 8037.00	Average	H	185	239	-75.47	16.03	0.00	47.56	53.98	-6.42
* 8037.00	Peak	H	185	239	-64.37	16.03	0.00	58.66	73.98	-15.32
8763.00	Peak	H	189	257	-66.11	17.57	0.00	58.46	68.20	-9.74
10474.00	Peak	H	400	234	-72.47	21.21	0.00	55.74	68.20	-12.46
* 13637.00	Average	H	-	-	-83.55	25.53	0.00	48.98	53.98	-5.00
* 13637.00	Peak	H	-	-	-72.03	25.53	0.00	60.50	73.98	-13.48
* 19237.00	Average	H	-	-	-61.57	1.74	-9.54	37.62	53.98	-16.36
* 19237.00	Peak	H	-	-	-51.32	1.74	-9.54	47.88	73.98	-26.10

Table 7-76. Radiated Measurements MIMO 2.4GHz + 5GHz

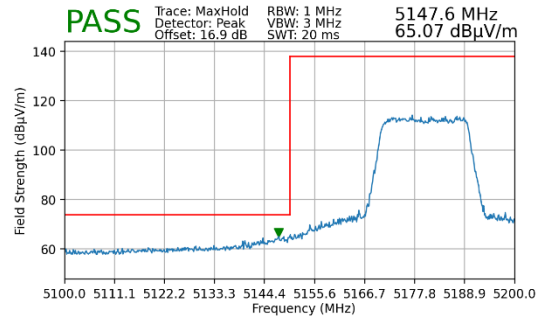
FCC ID: A3LSMF966U IC: 649E-SMF966W	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2502210015-20-R3.A3L	Test Dates: 02/24/2025 - 04/11/2025	EUT Type: Portable Handset	Page 126 of 157

7.6.3 MIMO Radiated Band Edge Measurements (20MHz BW)

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

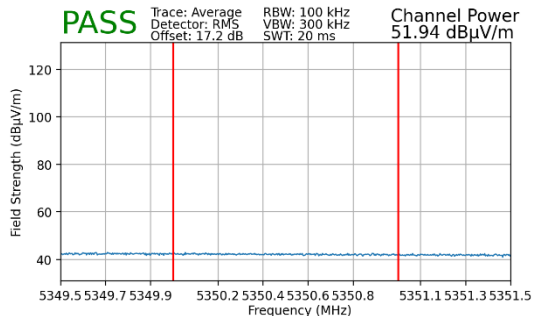


Plot 7-137. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 1)

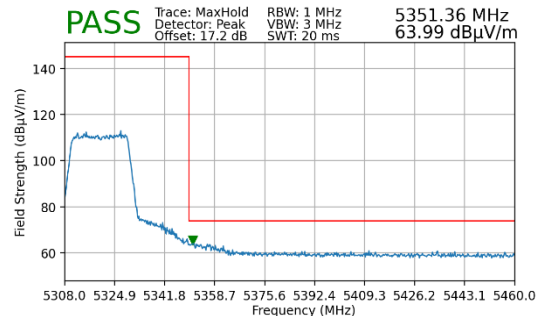


Plot 7-138. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 1)

Worst Case Mode:	802.11be
Worst Case Transfer Rate:	MCS0
Distance of Measurements:	3 Meters
Operating Frequency:	5320MHz
Channel:	64



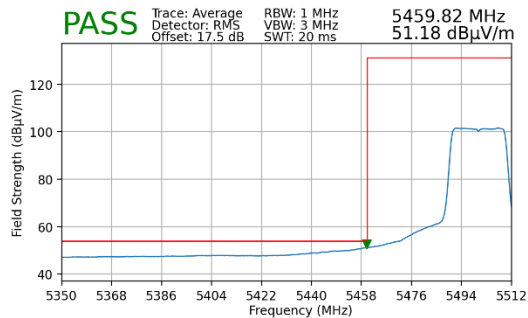
Plot 7-139. Radiated Upper Band Edge Plot MIMO (Average – UNII Band 2A)



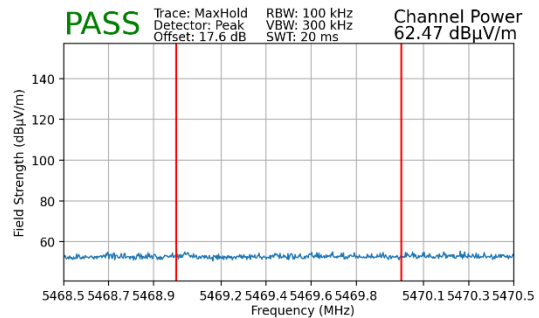
Plot 7-140. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 2A)

FCC ID: A3LSMF966U IC: 649E-SMF966W	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2502210015-20-R3.A3L	Test Dates: 02/24/2025 - 04/11/2025	EUT Type: Portable Handset	Page 127 of 157

Worst Case Mode: 802.11be
 Worst Case Transfer Rate: MCS0
 Distance of Measurements: 3 Meters
 Operating Frequency: 5500MHz
 Channel: 100

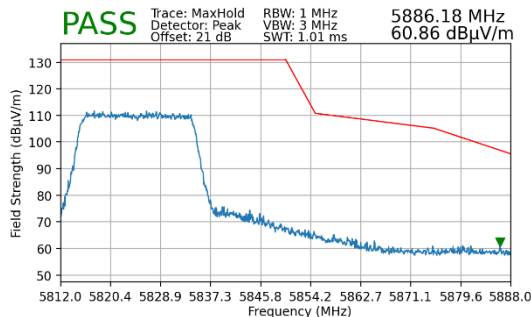


Plot 7-141. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 2C)



Plot 7-142. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 2C)

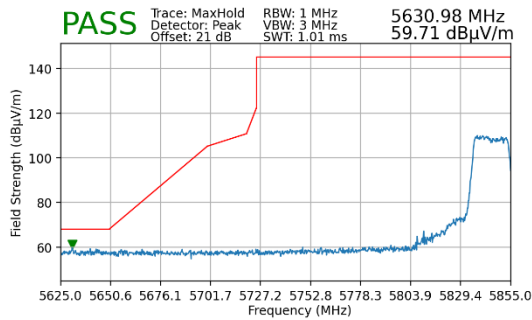
Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 Distance of Measurements: 3 Meters
 Operating Frequency: 5825MHz
 Channel: 165



Plot 7-143. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 3)

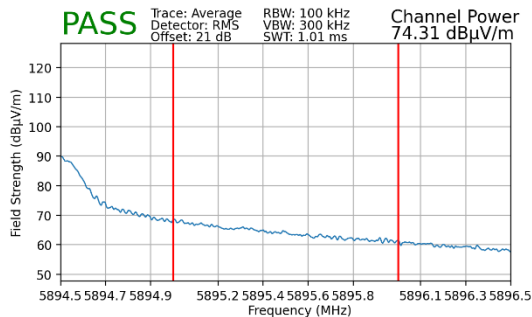
FCC ID: A3LSMF966U IC: 649E-SMF966W	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2502210015-20-R3.A3L	Test Dates: 02/24/2025 - 04/11/2025	EUT Type: Portable Handset	Page 128 of 157

Worst Case Mode: 802.11ac
Worst Case Transfer Rate: MCS0
Distance of Measurements: 3 Meters
Operating Frequency: 5845MHz
Channel: 169

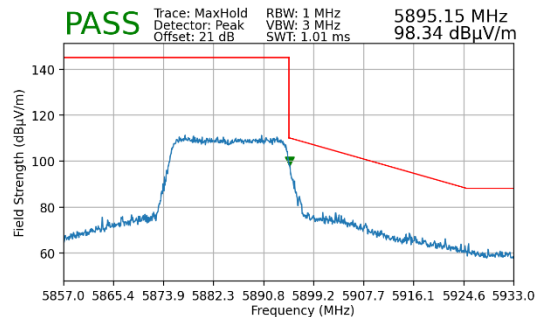


**Plot 7-144. Radiated Lower Band Edge Plot MIMO
(Peak – UNII Band 4)**

Worst Case Mode: 802.11be
Worst Case Transfer Rate: MCS0
Distance of Measurements: 3 Meters
Operating Frequency: 5885MHz
Channel: 177



**Plot 7-145. Radiated Upper Band Edge Plot MIMO
(Average – UNII Band 4)**

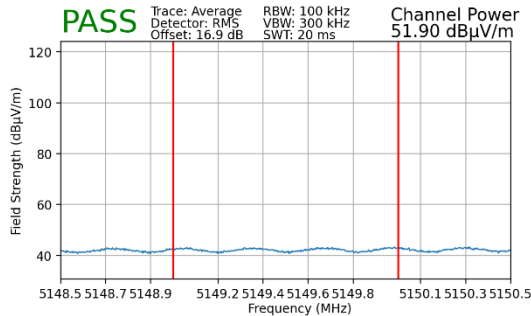


**Plot 7-146. Radiated Upper Band Edge Plot MIMO
(Peak – UNII Band 4)**

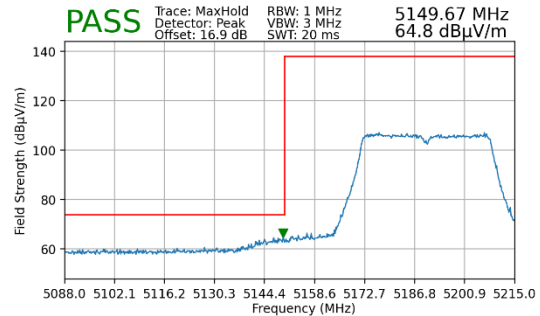
FCC ID: A3LSMF966U IC: 649E-SMF966W	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2502210015-20-R3.A3L	Test Dates: 02/24/2025 - 04/11/2025	EUT Type: Portable Handset	Page 129 of 157

7.6.4 MIMO Radiated Band Edge Measurements (40MHz BW)

Worst Case Mode:	802.11n
Worst Case Transfer Rate:	MCS8
Distance of Measurements:	3 Meters
Operating Frequency:	5190MHz
Channel:	38

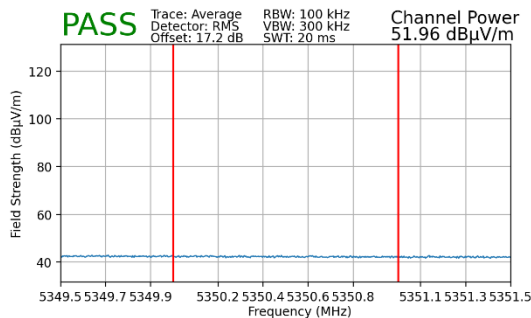


Plot 7-147. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 1)

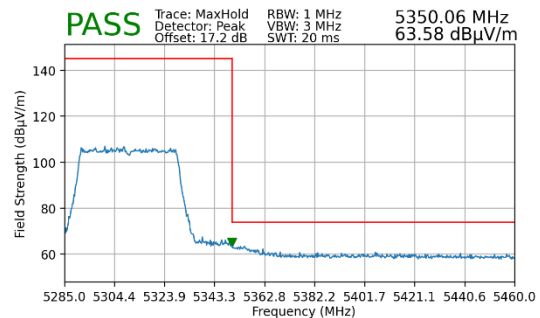


Plot 7-148. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 1)

Worst Case Mode:	802.11be
Worst Case Transfer Rate:	MCS0
Distance of Measurements:	3 Meters
Operating Frequency:	5310MHz
Channel:	62



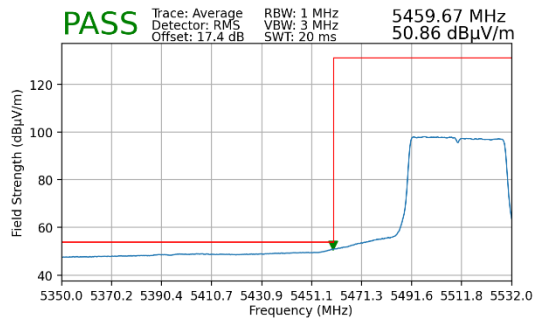
Plot 7-149. Radiated Upper Band Edge Plot MIMO (Average – UNII Band 2A)



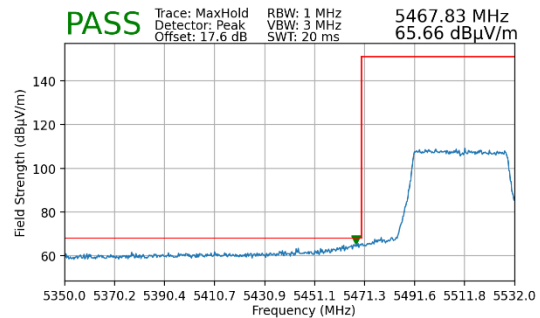
Plot 7-150. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 2A)

FCC ID: A3LSMF966U IC: 649E-SMF966W	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2502210015-20-R3.A3L	Test Dates: 02/24/2025 - 04/11/2025	EUT Type: Portable Handset	Page 130 of 157

Worst Case Mode: 802.11be
 Worst Case Transfer Rate: MCS0
 Distance of Measurements: 3 Meters
 Operating Frequency: 5510MHz
 Channel: 102

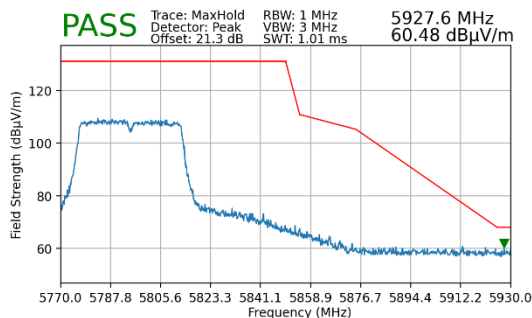


Plot 7-151. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 2C)



Plot 7-152. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 2C)

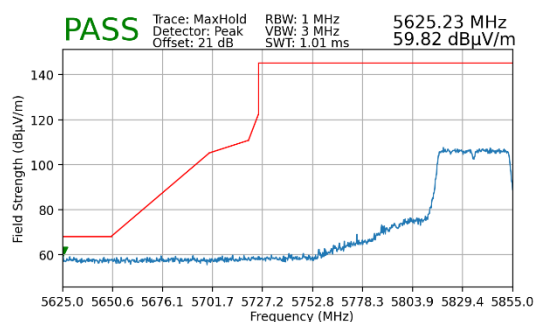
Worst Case Mode: 802.11n
 Worst Case Transfer Rate: MCS8
 Distance of Measurements: 3 Meters
 Operating Frequency: 5795MHz
 Channel: 159



Plot 7-153. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 3)

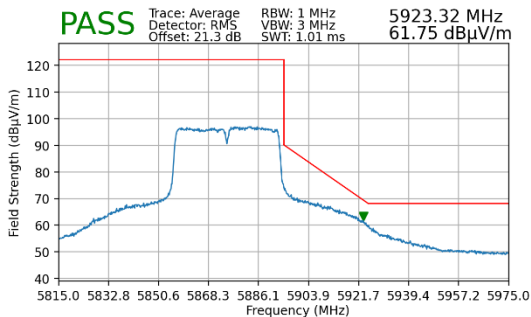
FCC ID: A3LSMF966U IC: 649E-SMF966W	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2502210015-20-R3.A3L	Test Dates: 02/24/2025 - 04/11/2025	EUT Type: Portable Handset	Page 131 of 157

Worst Case Mode: 802.11n
 Worst Case Transfer Rate: MCS8
 Distance of Measurements: 3 Meters
 Operating Frequency: 5835MHz
 Channel: 167

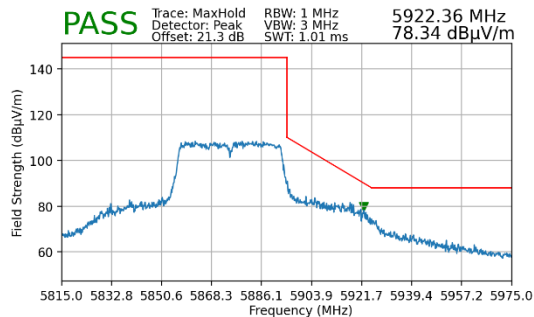


Plot 7-154. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 4)

Worst Case Mode: 802.11ac
 Worst Case Transfer Rate: MCS0
 Distance of Measurements: 3 Meters
 Operating Frequency: 5875MHz
 Channel: 175



Plot 7-155. Radiated Upper Band Edge Plot MIMO (Average – UNII Band 4)

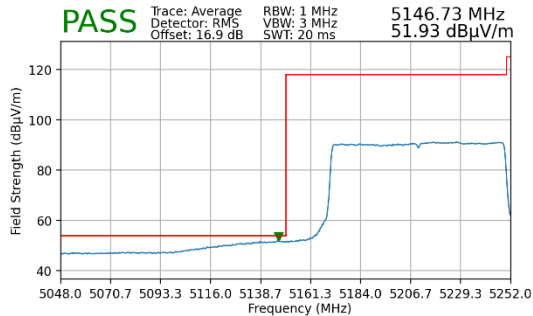


Plot 7-156. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 4)

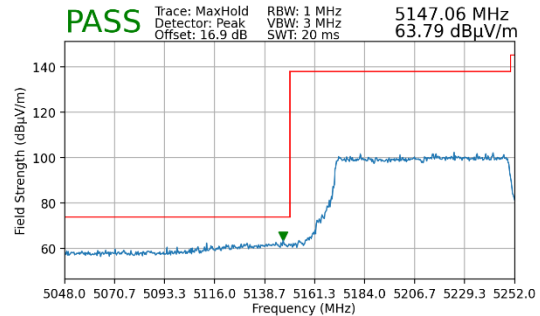
FCC ID: A3LSMF966U IC: 649E-SMF966W	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2502210015-20-R3.A3L	Test Dates: 02/24/2025 - 04/11/2025	EUT Type: Portable Handset	Page 132 of 157

7.6.5 MIMO Radiated Band Edge Measurements (80MHz BW)

Worst Case Mode:	802.11be
Worst Case Transfer Rate:	MCS0
Distance of Measurements:	3 Meters
Operating Frequency:	5210MHz
Channel:	42

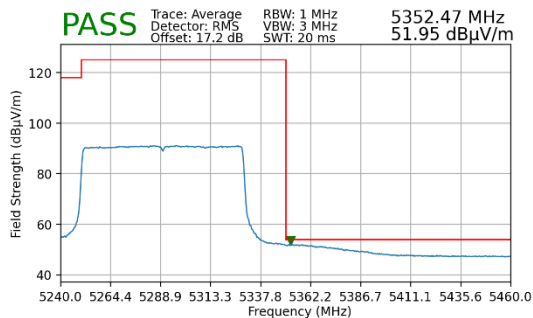


Plot 7-157. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 1)

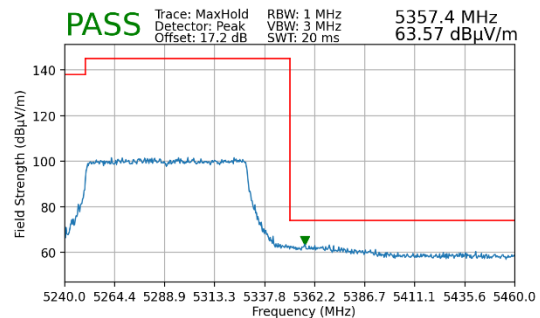


Plot 7-158. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 1)

Worst Case Mode:	802.11be
Worst Case Transfer Rate:	MCS0
Distance of Measurements:	3 Meters
Operating Frequency:	5290MHz
Channel:	58



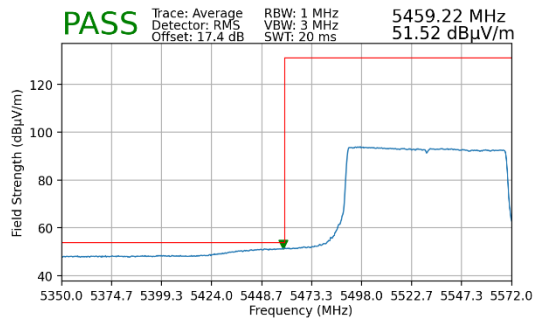
Plot 7-159. Radiated Upper Band Edge Plot MIMO (Average – UNII Band 2A)



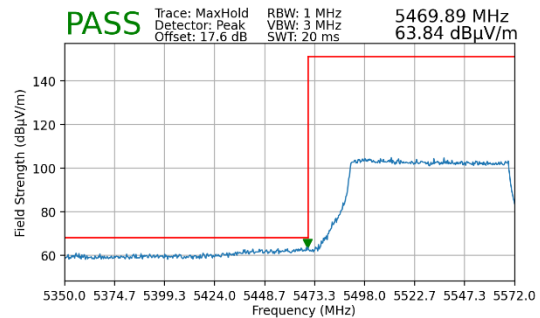
Plot 7-160. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 2A)

FCC ID: A3LSMF966U IC: 649E-SMF966W	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2502210015-20-R3.A3L	Test Dates: 02/24/2025 - 04/11/2025	EUT Type: Portable Handset	Page 133 of 157

Worst Case Mode: 802.11ax
Worst Case Transfer Rate: MCS0
Distance of Measurements: 3 Meters
Operating Frequency: 5530MHz
Channel: 106

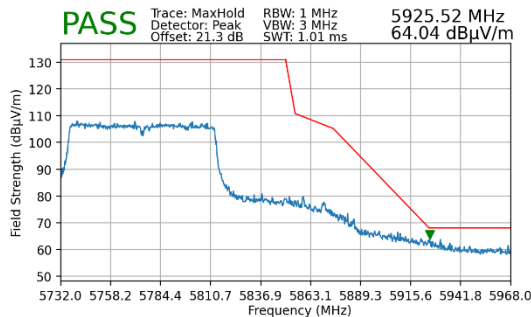


**Plot 7-161. Radiated Lower Band Edge Plot MIMO
(Average – UNII Band 2C)**



**Plot 7-162. Radiated Lower Band Edge Plot MIMO
(Peak – UNII Band 2C)**

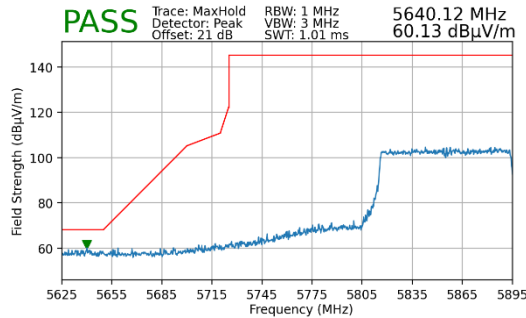
Worst Case Mode: 802.11ac
Worst Case Transfer Rate: MCS0
Distance of Measurements: 3 Meters
Operating Frequency: 5775MHz
Channel: 155



**Plot 7-163. Radiated Upper Band Edge Plot MIMO
(Peak – UNII Band 3)**

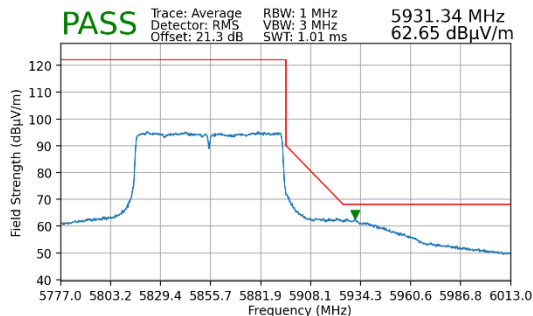
FCC ID: A3LSMF966U IC: 649E-SMF966W	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2502210015-20-R3.A3L	Test Dates: 02/24/2025 - 04/11/2025	EUT Type: Portable Handset	Page 134 of 157

Worst Case Mode: 802.11be
Worst Case Transfer Rate: MCS0
Distance of Measurements: 3 Meters
Operating Frequency: 5855MHz
Channel: 171

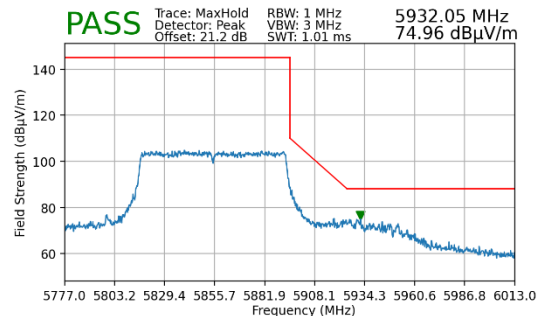


**Plot 7-164. Radiated Lower Band Edge Plot MIMO
(Peak – UNII Band 4)**

Worst Case Mode: 802.11ac
Worst Case Transfer Rate: MCS0
Distance of Measurements: 3 Meters
Operating Frequency: 5855MHz
Channel: 171



**Plot 7-165. Radiated Upper Band Edge Plot MIMO
(Average – UNII Band 4)**

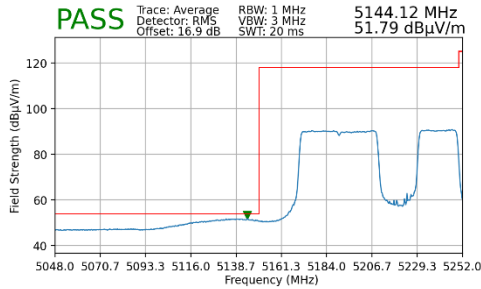


**Plot 7-166. Radiated Upper Band Edge Plot MIMO
(Peak – UNII Band 4)**

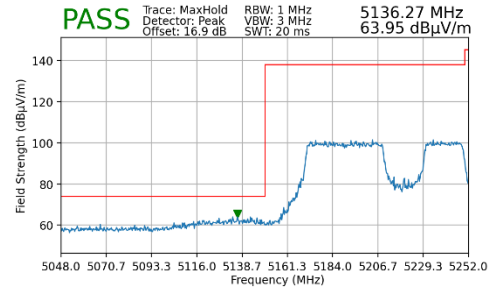
FCC ID: A3LSMF966U IC: 649E-SMF966W	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2502210015-20-R3.A3L	Test Dates: 02/24/2025 - 04/11/2025	EUT Type: Portable Handset	Page 135 of 157

7.6.6 MIMO Radiated Band Edge Measurements (80MHz BW - Punctured)

Worst Case Mode:	802.11be
Worst Case Transfer Rate:	MCS0
Distance of Measurements:	3 Meters
Operating Frequency:	5210MHz
Channel:	42

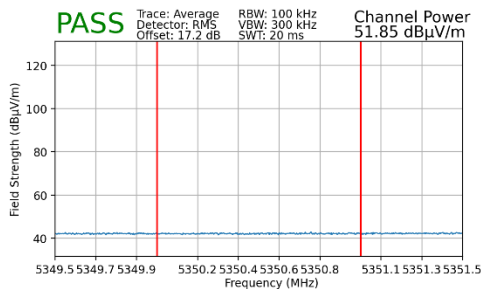


Plot 7-167. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 1)

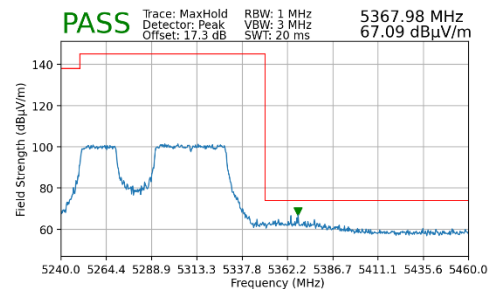


Plot 7-168. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 1)

Worst Case Mode:	802.11be
Worst Case Transfer Rate:	MCS0
Distance of Measurements:	3 Meters
Operating Frequency:	5290MHz
Channel:	58



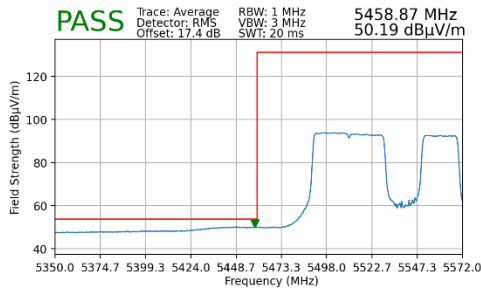
Plot 7-169. Radiated Upper Band Edge Plot MIMO (Average – UNII Band 2A)



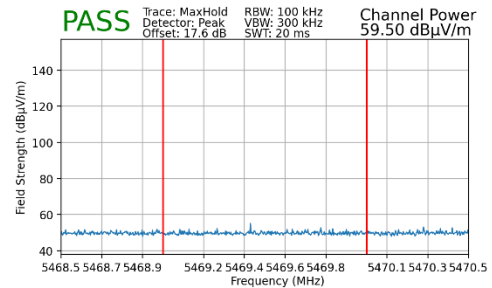
Plot 7-170. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 2A)

FCC ID: A3LSMF966U IC: 649E-SMF966W	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2502210015-20-R3.A3L	Test Dates: 02/24/2025 - 04/11/2025	EUT Type: Portable Handset	Page 136 of 157

Worst Case Mode: 802.11be
 Worst Case Transfer Rate: MCS0
 Distance of Measurements: 3 Meters
 Operating Frequency: 5530MHz
 Channel: 106

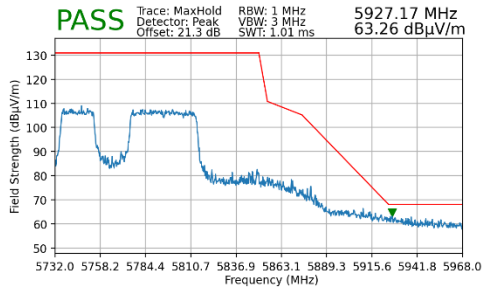


Plot 7-171. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 2C)



Plot 7-172. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 2C)

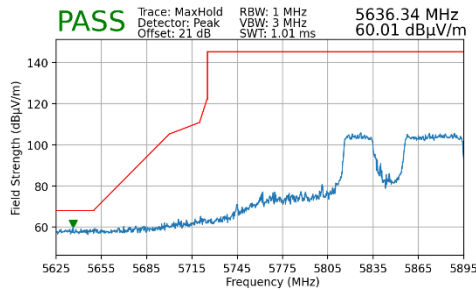
Worst Case Mode: 802.11be
 Worst Case Transfer Rate: MCS0
 Distance of Measurements: 3 Meters
 Operating Frequency: 5775MHz
 Channel: 155



Plot 7-173. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 3)

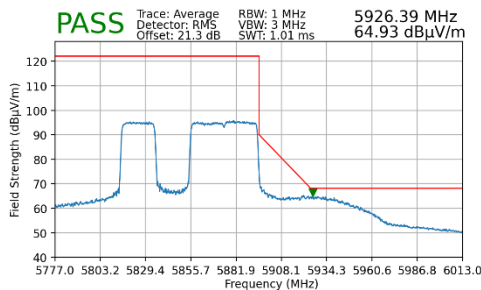
FCC ID: A3LSMF966U IC: 649E-SMF966W	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2502210015-20-R3.A3L	Test Dates: 02/24/2025 - 04/11/2025	EUT Type: Portable Handset	Page 137 of 157

Worst Case Mode: 802.11be
Worst Case Transfer Rate: MCS0
Distance of Measurements: 3 Meters
Operating Frequency: 5855MHz
Channel: 171

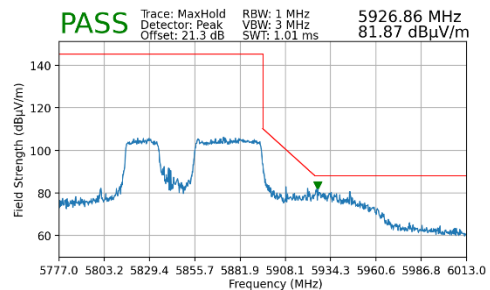


**Plot 7-174. Radiated Lower Band Edge Plot MIMO
(Peak – UNII Band 4)**

Worst Case Mode: 802.11ac
Worst Case Transfer Rate: MCS0
Distance of Measurements: 3 Meters
Operating Frequency: 5855MHz
Channel: 171



**Plot 7-175. Radiated Upper Band Edge Plot MIMO
(Average – UNII Band 4)**

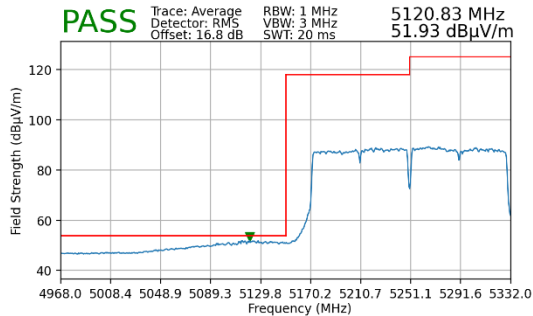


**Plot 7-176. Radiated Upper Band Edge Plot MIMO
(Peak – UNII Band 4)**

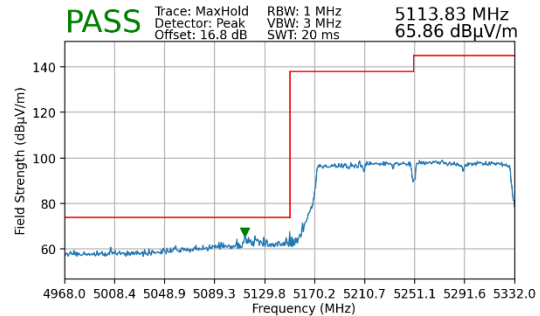
FCC ID: A3LSMF966U IC: 649E-SMF966W	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2502210015-20-R3.A3L	Test Dates: 02/24/2025 - 04/11/2025	EUT Type: Portable Handset	Page 138 of 157

7.6.7 MIMO Radiated Band Edge Measurements (160MHz BW)

Worst Case Mode:	802.11ac
Worst Case Transfer Rate:	MCS0
Distance of Measurements:	3 Meters
Operating Frequency:	5250MHz
Channel:	50

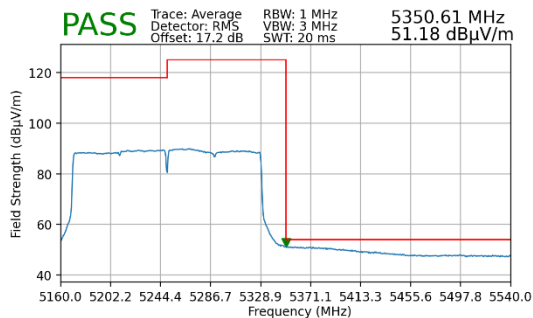


Plot 7-177. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 1)

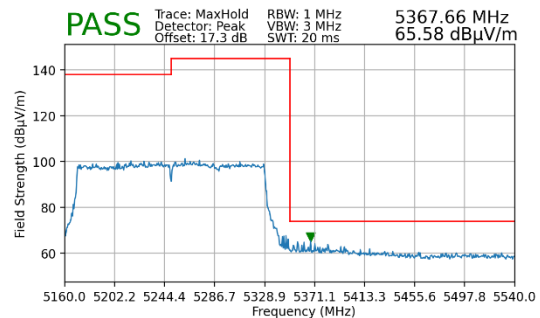


Plot 7-178. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 1)

Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
Distance of Measurements:	3 Meters
Operating Frequency:	5250MHz
Channel:	50



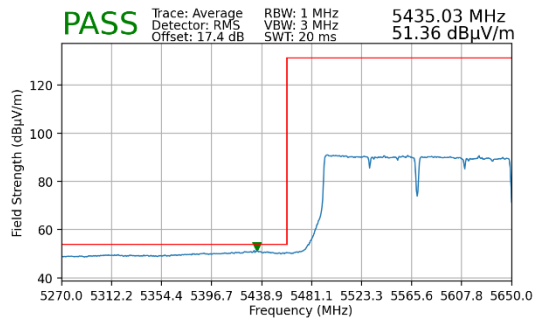
Plot 7-179. Radiated Upper Band Edge Plot MIMO (Average – UNII Band 2A)



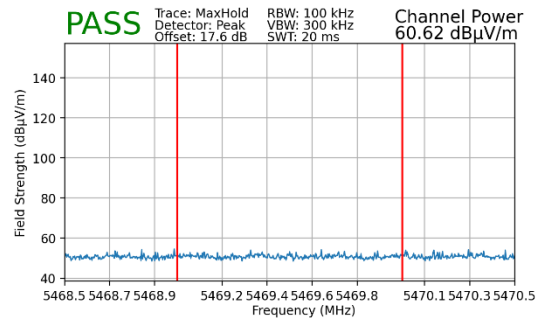
Plot 7-180. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 2A)

FCC ID: A3LSMF966U IC: 649E-SMF966W	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2502210015-20-R3.A3L	Test Dates: 02/24/2025 - 04/11/2025	EUT Type: Portable Handset	Page 139 of 157

Worst Case Mode: 802.11ac
 Worst Case Transfer Rate: MCS0
 Distance of Measurements: 3 Meters
 Operating Frequency: 5570MHz
 Channel: 114

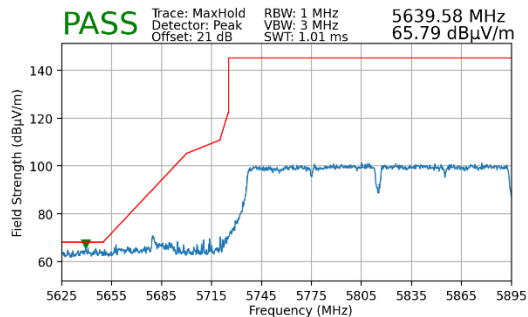


Plot 7-181. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 2C)



Plot 7-182. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 2C)

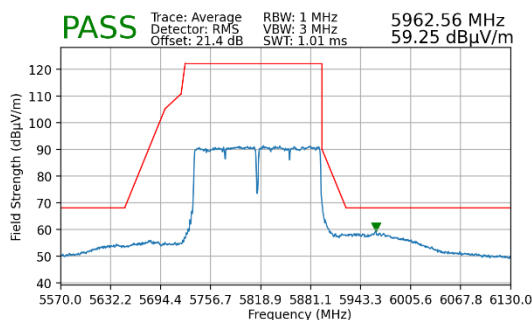
Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 Distance of Measurements: 3 Meters
 Operating Frequency: 5815MHz
 Channel: 163



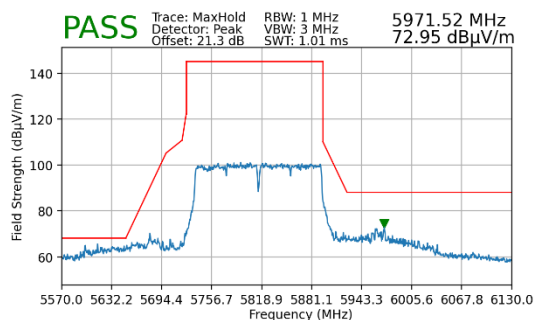
Plot 7-183. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 4)

FCC ID: A3LSMF966U IC: 649E-SMF966W	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2502210015-20-R3.A3L	Test Dates: 02/24/2025 - 04/11/2025	EUT Type: Portable Handset	Page 140 of 157

Worst Case Mode: 802.11ac
Worst Case Transfer Rate: MCS0
Distance of Measurements: 3 Meters
Operating Frequency: 5815MHz
Channel: 163



**Plot 7-184. Radiated Lower Band Edge Plot MIMO
(Average – UNII Band 4)**

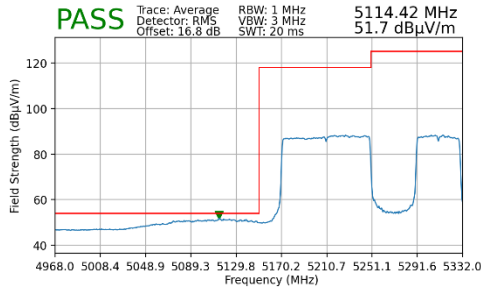


**Plot 7-185. Radiated Lower Band Edge Plot MIMO
(Peak – UNII Band 4)**

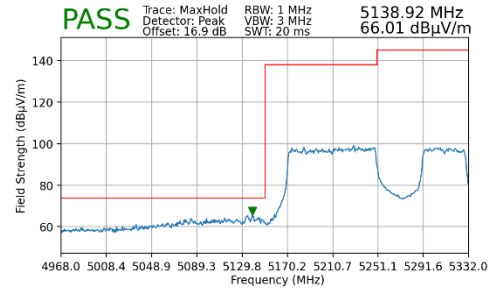
FCC ID: A3LSMF966U IC: 649E-SMF966W	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2502210015-20-R3.A3L	Test Dates: 02/24/2025 - 04/11/2025	EUT Type: Portable Handset	Page 141 of 157

7.6.8 MIMO Radiated Band Edge Measurements (160MHz BW - Punctured)

Worst Case Mode:	802.11be
Worst Case Transfer Rate:	MCS0
Distance of Measurements:	3 Meters
Operating Frequency:	5250MHz
Channel:	50

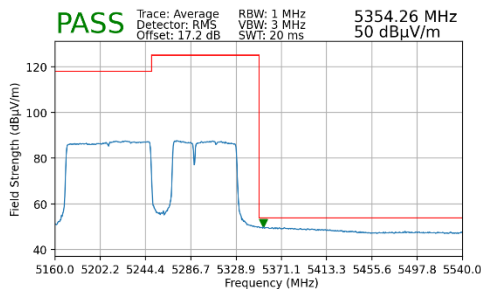


Plot 7-186. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 1)

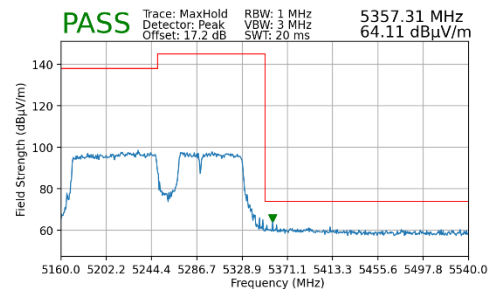


Plot 7-187. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 1)

Worst Case Mode:	802.11be
Worst Case Transfer Rate:	MCS0
Distance of Measurements:	3 Meters
Operating Frequency:	5250MHz
Channel:	50



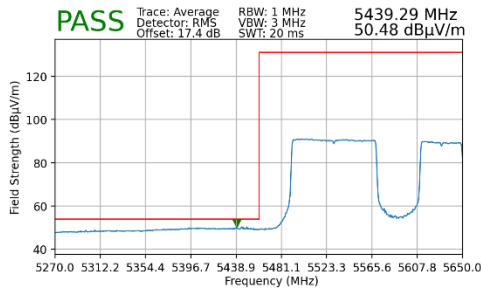
Plot 7-188. Radiated Upper Band Edge Plot MIMO (Average – UNII Band 2A)



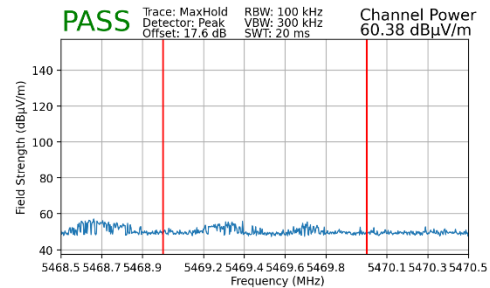
Plot 7-189. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 2A)

FCC ID: A3LSMF966U IC: 649E-SMF966W	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2502210015-20-R3.A3L	Test Dates: 02/24/2025 - 04/11/2025	EUT Type: Portable Handset	Page 142 of 157

Worst Case Mode: 802.11be
 Worst Case Transfer Rate: MCS0
 Distance of Measurements: 3 Meters
 Operating Frequency: 5570MHz
 Channel: 114

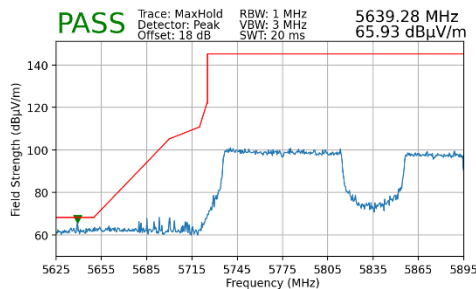


Plot 7-190. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 2C)



Plot 7-191. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 2C)

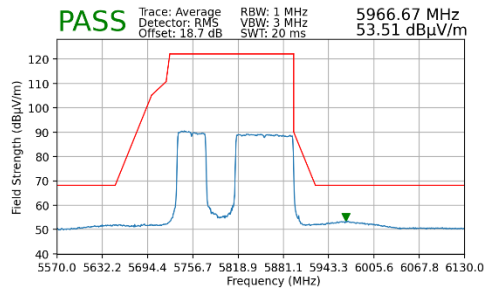
Worst Case Mode: 802.11be
 Worst Case Transfer Rate: MCS0
 Distance of Measurements: 3 Meters
 Operating Frequency: 5815MHz
 Channel: 163



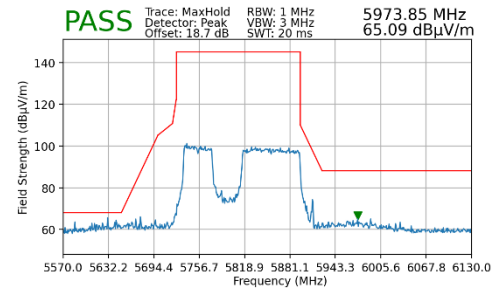
Plot 7-192. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 4)

FCC ID: A3LSMF966U IC: 649E-SMF966W	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2502210015-20-R3-A3L	Test Dates: 02/24/2025 - 04/11/2025	EUT Type: Portable Handset	Page 143 of 157

Worst Case Mode: 802.11ac
Worst Case Transfer Rate: MCS0
Distance of Measurements: 3 Meters
Operating Frequency: 5815MHz
Channel: 163

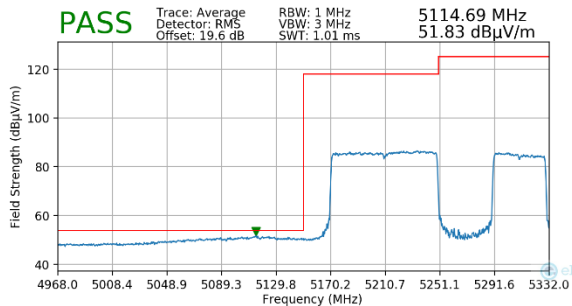


Plot 7-193. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 4)

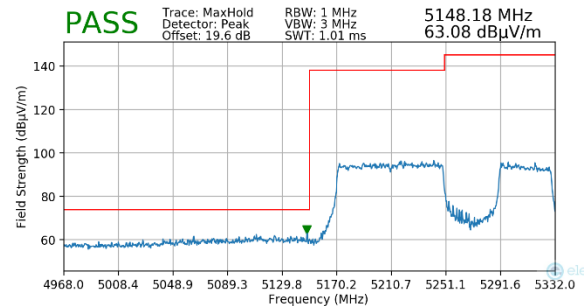


Plot 7-194. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 4)

Worst Case Mode: 802.11be
Worst Case Transfer Rate: MCS0
Distance of Measurements: 3 Meters
Operating Frequency: 5250MHz
Channel: 50



Plot 7-195. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 1) with WCP



Plot 7-196. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 1) with WCP

FCC ID: A3LSMF966U IC: 649E-SMF966W	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2502210015-20-R3.A3L	Test Dates: 02/24/2025 - 04/11/2025	EUT Type: Portable Handset	Page 144 of 157

7.7 Line-Conducted Test Data

Test Overview and Limit

All AC line conducted spurious emissions are measured with a receiver connected to a grounded LISN 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 conducted spurious emissions. Only the conducted emissions of the configuration that produced the worst-case emissions are reported in this section.

All conducted emissions must not exceed the limits shown in the table below per FCC §15.207 and RSS-Gen (8.8).

Frequency of emission (MHz)	Conducted Limit (dBμV)	
	Quasi-peak	Average
0.15 – 0.5	66 to 56*	56 to 46*
0.5 – 5	56	46
5 – 30	60	50

Table 7-77. Conducted Limits

*Decreases with the logarithm of the frequency.

Test Procedures Used

ANSI C63.10-2013, Section 6.2

Test Settings

Quasi-Peak Field Strength Measurements

1. Analyzer center frequency was set to the frequency of the spurious emission of interest
2. RBW = 9kHz (for emissions from 150kHz – 30MHz)
3. Detector = quasi-peak
4. Sweep time = auto couple
5. Trace mode = max hold
6. Trace was allowed to stabilize

Average Field Strength Measurements

1. Analyzer center frequency was set to the frequency of the spurious emission of interest
2. RBW = 9kHz (for emissions from 150kHz – 30MHz)
3. Detector = RMS
4. Sweep time = auto couple
5. Trace mode = max hold
6. Trace was allowed to stabilize

FCC ID: A3LSMF966U IC: 649E-SMF966W	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2502210015-20-R3.A3L	Test Dates: 02/24/2025 - 04/11/2025	EUT Type: Portable Handset	Page 145 of 157

Test Setup

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

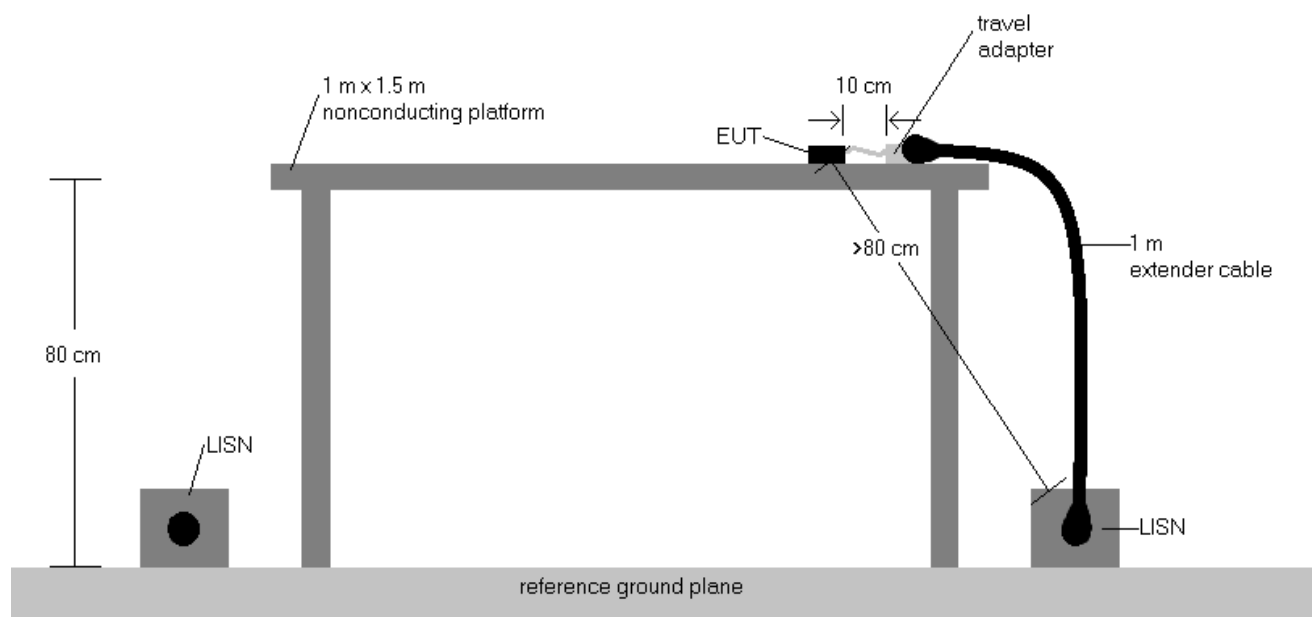
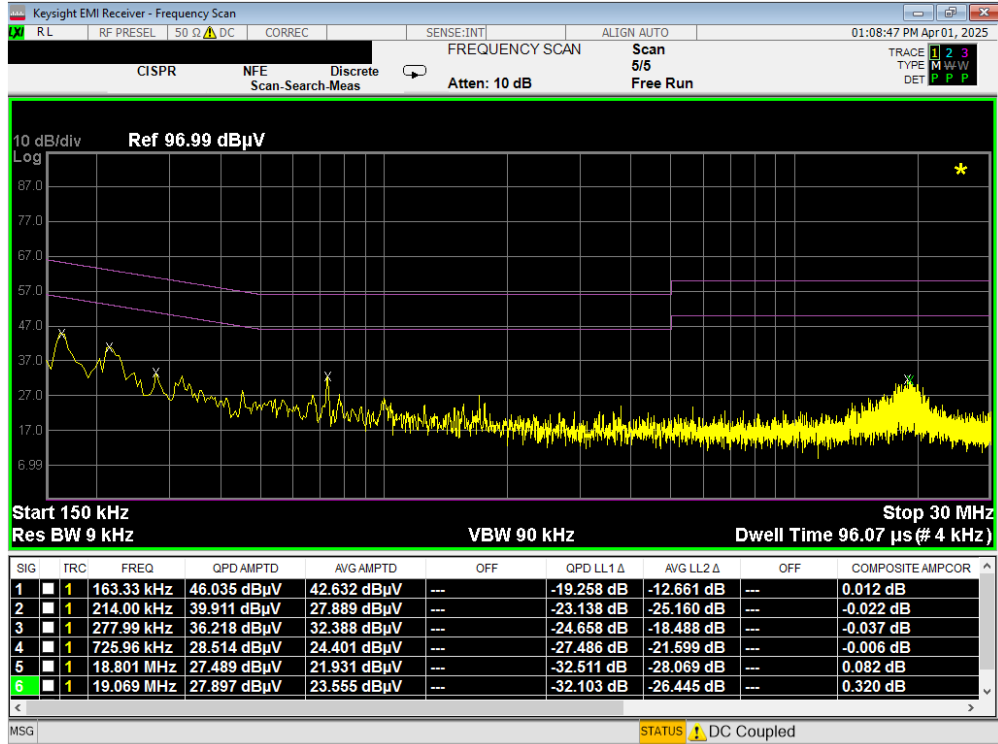


Figure 7-8. Test Instrument & Measurement Setup

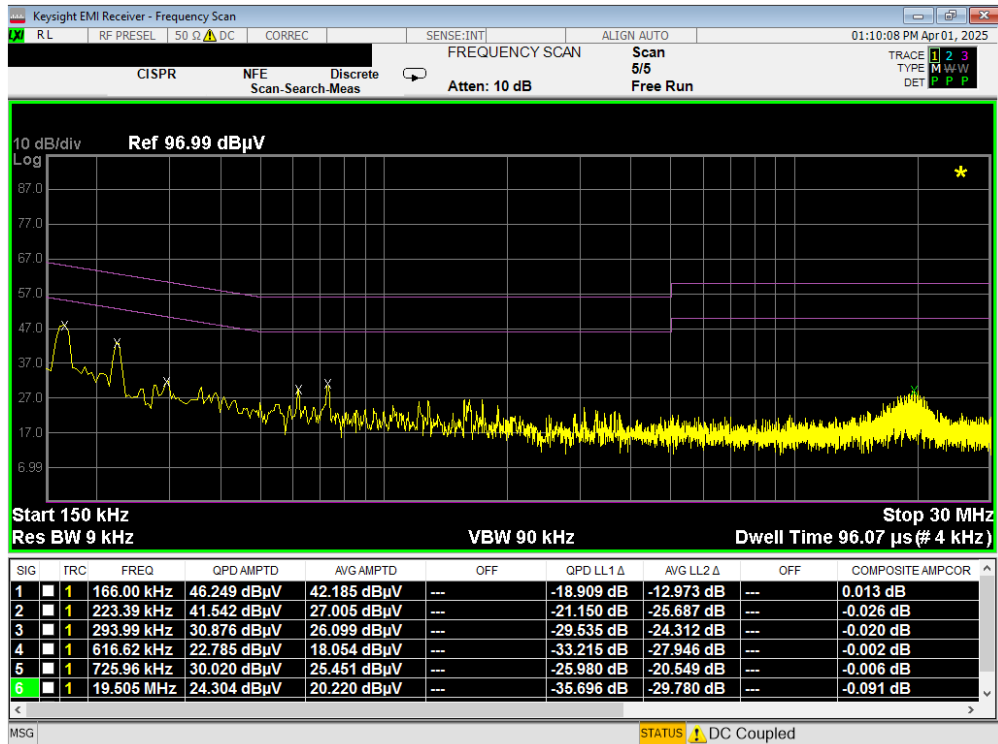
Test Notes

1. All modes of operation were investigated, and the worst-case emissions are reported using mid channel. The emissions found were not affected by the choice of channel used during testing.
2. The limit for an intentional radiator from 150kHz to 30MHz is specified in §15.207 and RSS-Gen (8.8).
3. $\text{Corr. (dB)} = \text{Cable loss (dB)} + \text{LISN insertion factor (dB)}$
4. $\text{QP/AV Level (dB}\mu\text{V)} = \text{QP/AV Analyzer/Receiver Level (dB}\mu\text{V)} + \text{Corr. (dB)}$
5. $\text{Margin (dB)} = \text{QP/AV Limit (dB}\mu\text{V)} - \text{QP/AV Level (dB}\mu\text{V)}$
6. Traces shown in plot are made using a peak detector.
7. Deviations to the Specifications: None.

FCC ID: A3LSMF966U IC: 649E-SMF966W	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2502210015-20-R3.A3L	Test Dates: 02/24/2025 - 04/11/2025	EUT Type: Portable Handset	Page 146 of 157

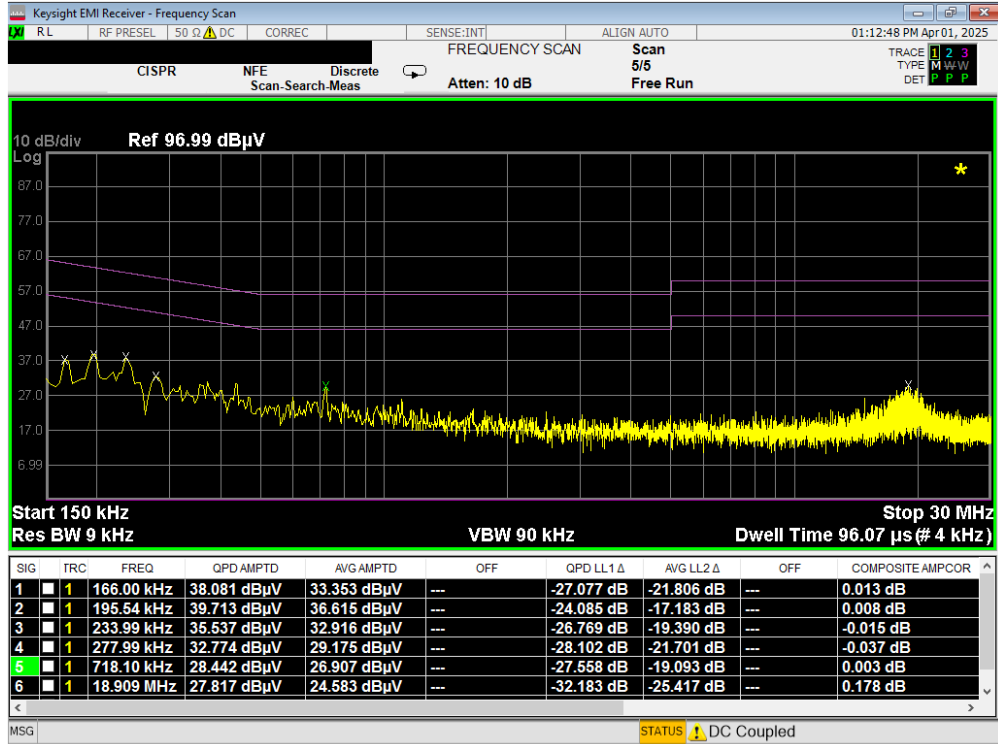


Plot 7-197. Line Conducted Plot with 802.11a UNII Band 1 (L1)

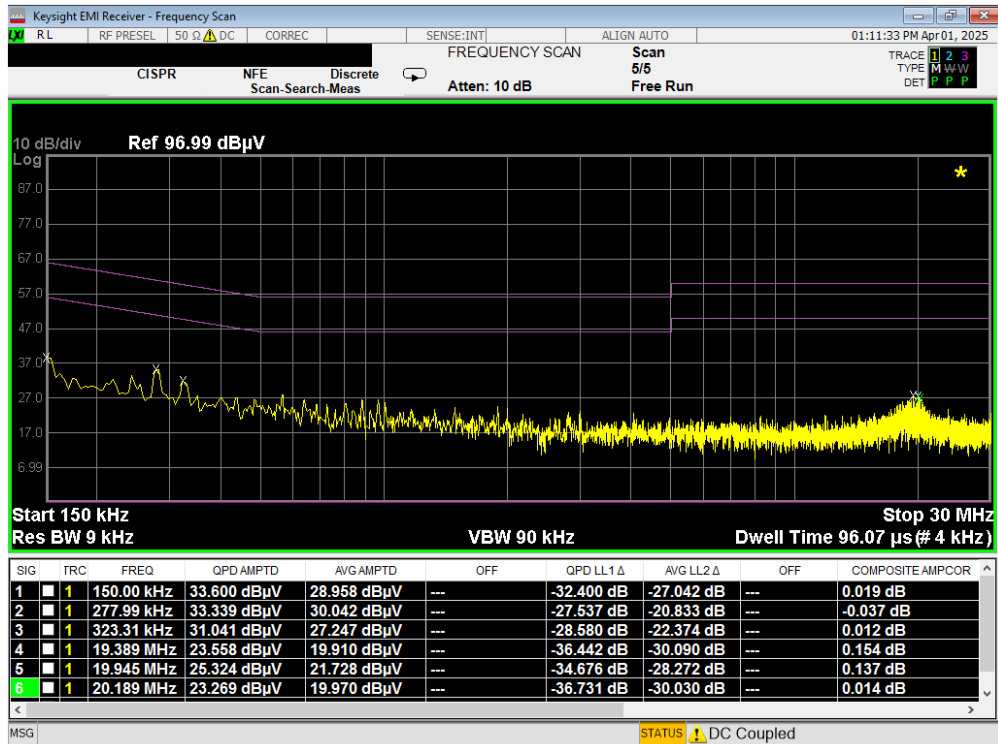


Plot 7-198. Line Conducted Plot with 802.11a UNII Band 1 (N)

FCC ID: A3LSMF966U IC: 649E-SMF966W	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2502210015-20-R3.A3L	Test Dates: 02/24/2025 - 04/11/2025	EUT Type: Portable Handset	Page 147 of 157

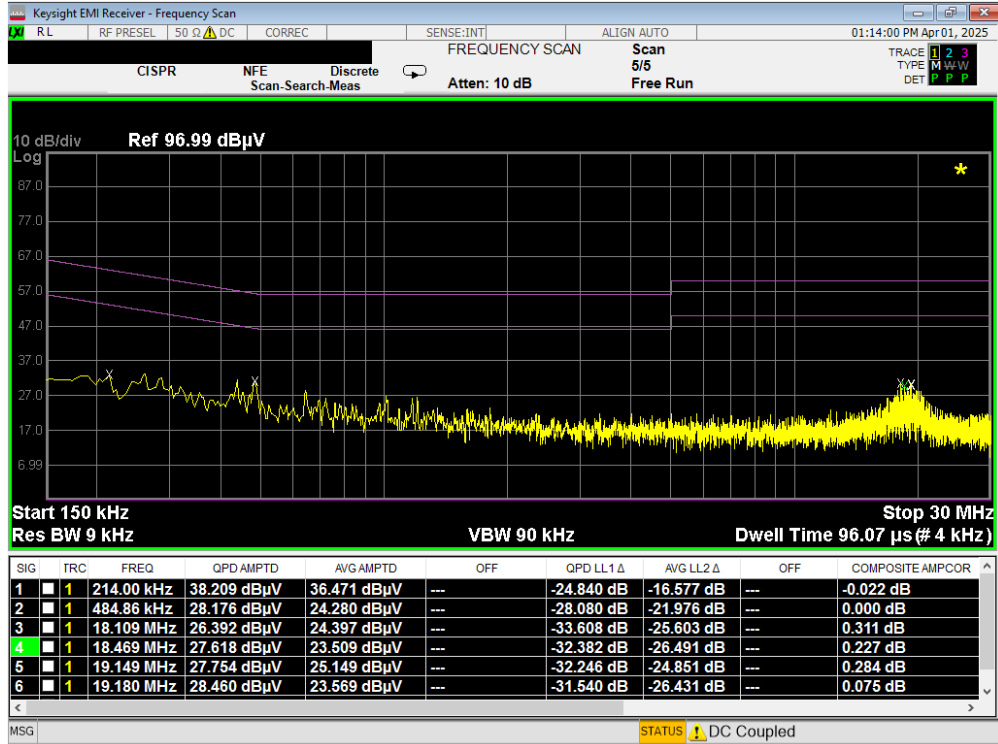


Plot 7-199. Line Conducted Plot with 802.11a UNII Band 2A (L1)

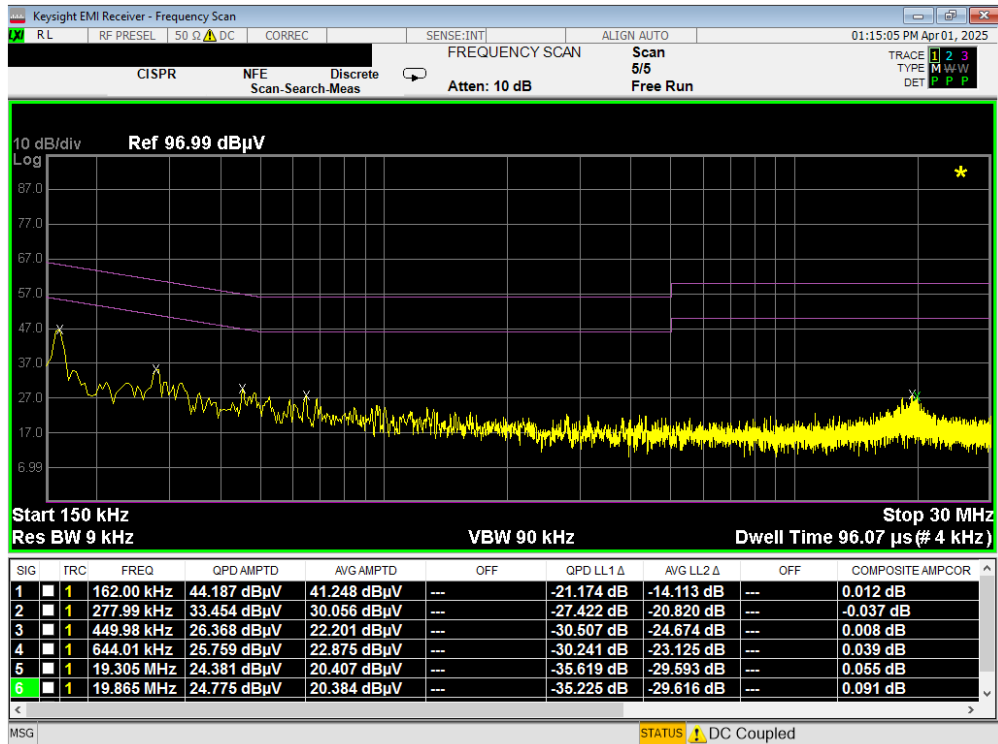


Plot 7-200. Line Conducted Plot with 802.11a UNII Band 2A (N)

FCC ID: A3LSMF966U IC: 649E-SMF966W	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2502210015-20-R3.A3L	Test Dates: 02/24/2025 - 04/11/2025	EUT Type: Portable Handset	Page 148 of 157

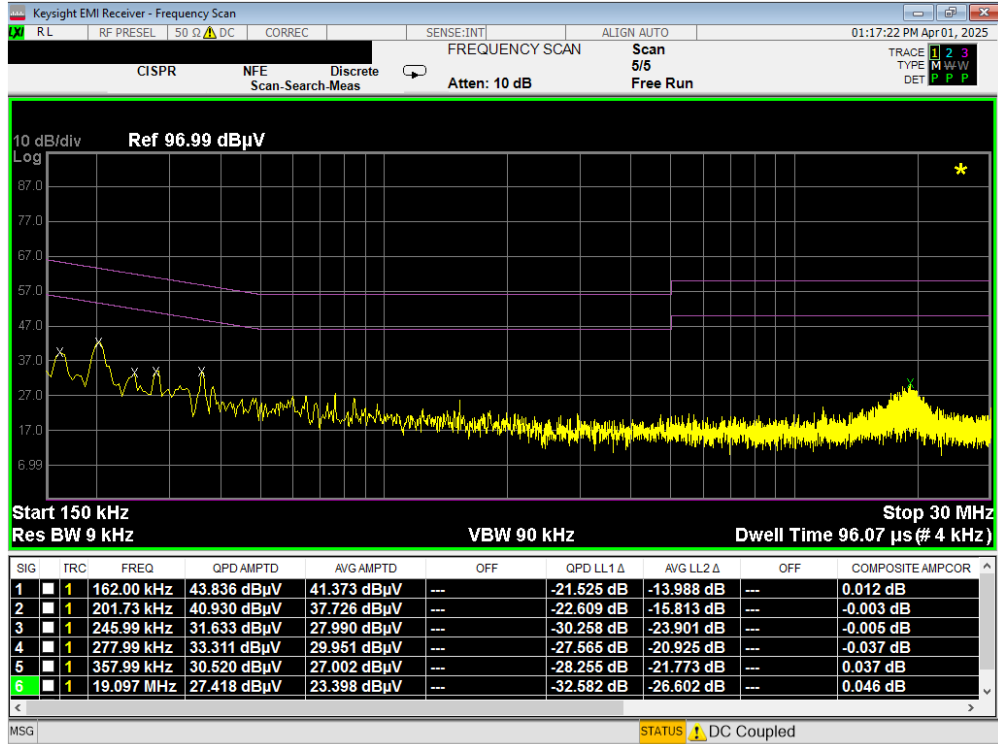


Plot 7-201. Line Conducted Plot with 802.11a UNII Band 2C (L1)

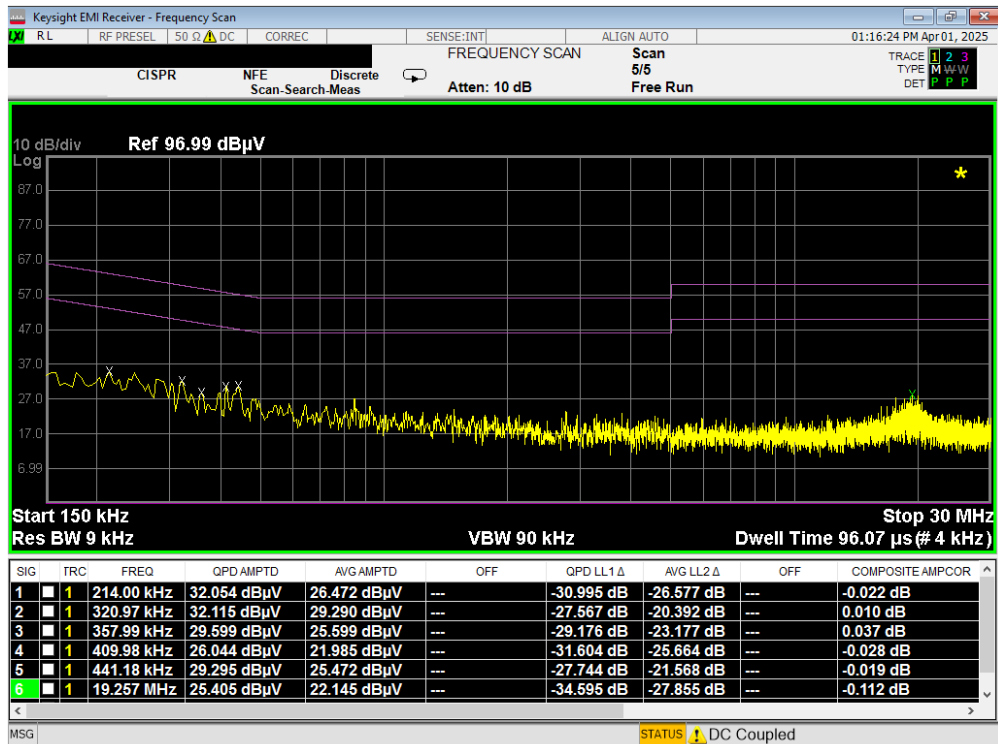


Plot 7-202. Line Conducted Plot with 802.11a UNII Band 2C (N)

FCC ID: A3LSMF966U IC: 649E-SMF966W	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2502210015-20-R3.A3L	Test Dates: 02/24/2025 - 04/11/2025	EUT Type: Portable Handset	Page 149 of 157

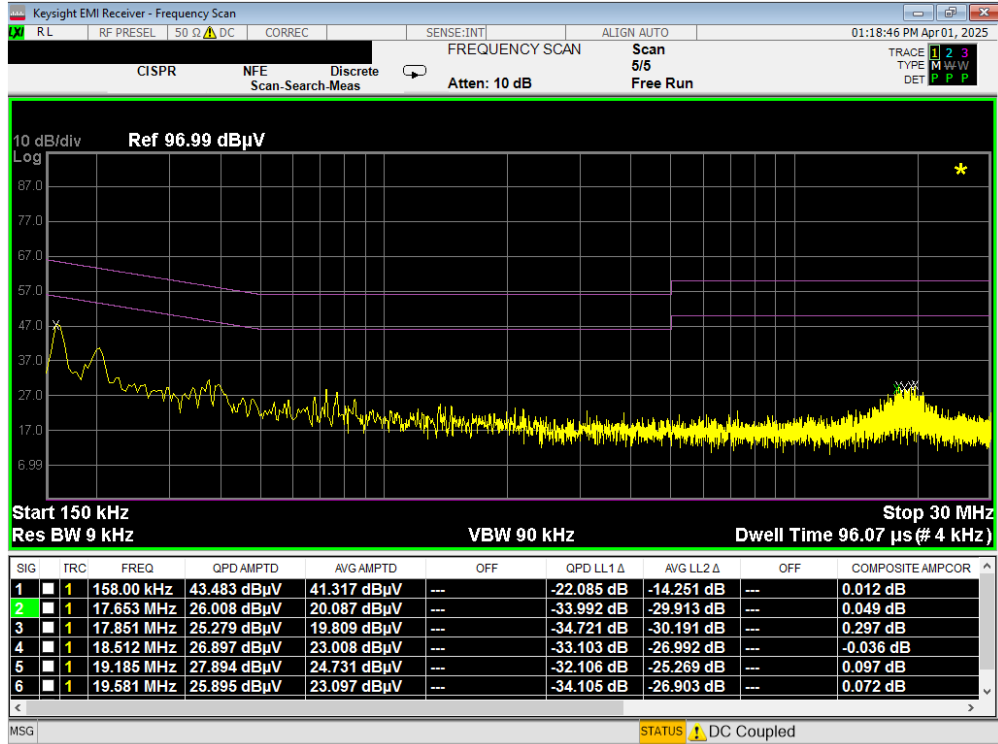


Plot 7-203. Line Conducted Plot with 802.11a UNII Band 3 (L1)

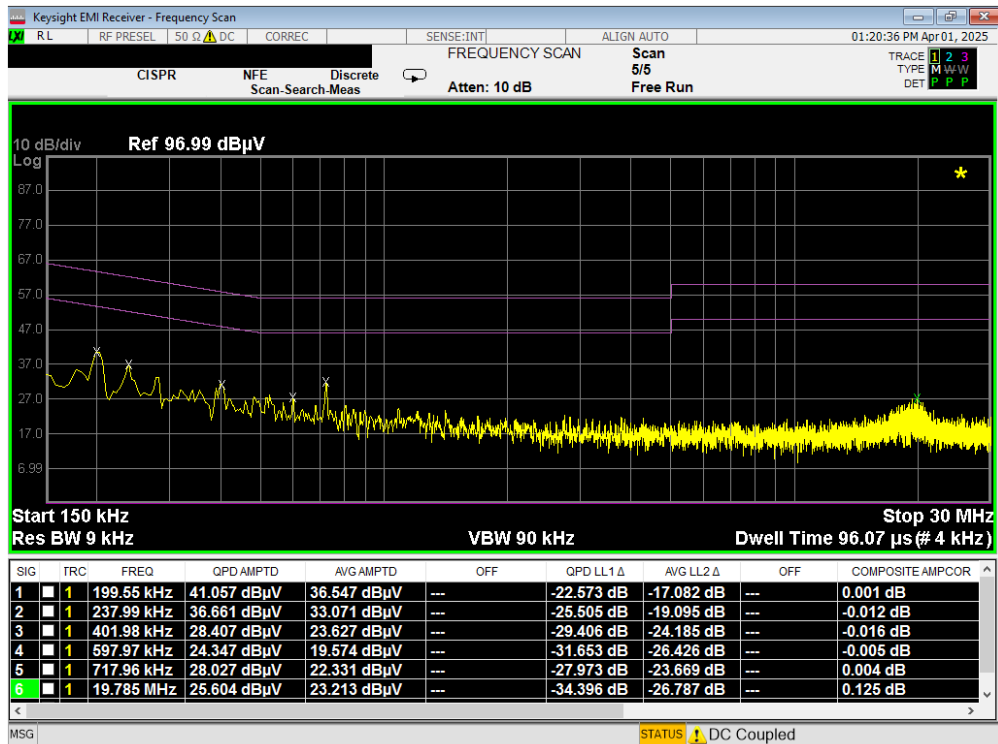


Plot 7-204. Line Conducted Plot with 802.11a UNII Band 3 (N)

FCC ID: A3LSMF966U IC: 649E-SMF966W	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2502210015-20-R3.A3L	Test Dates: 02/24/2025 - 04/11/2025	EUT Type: Portable Handset	Page 150 of 157

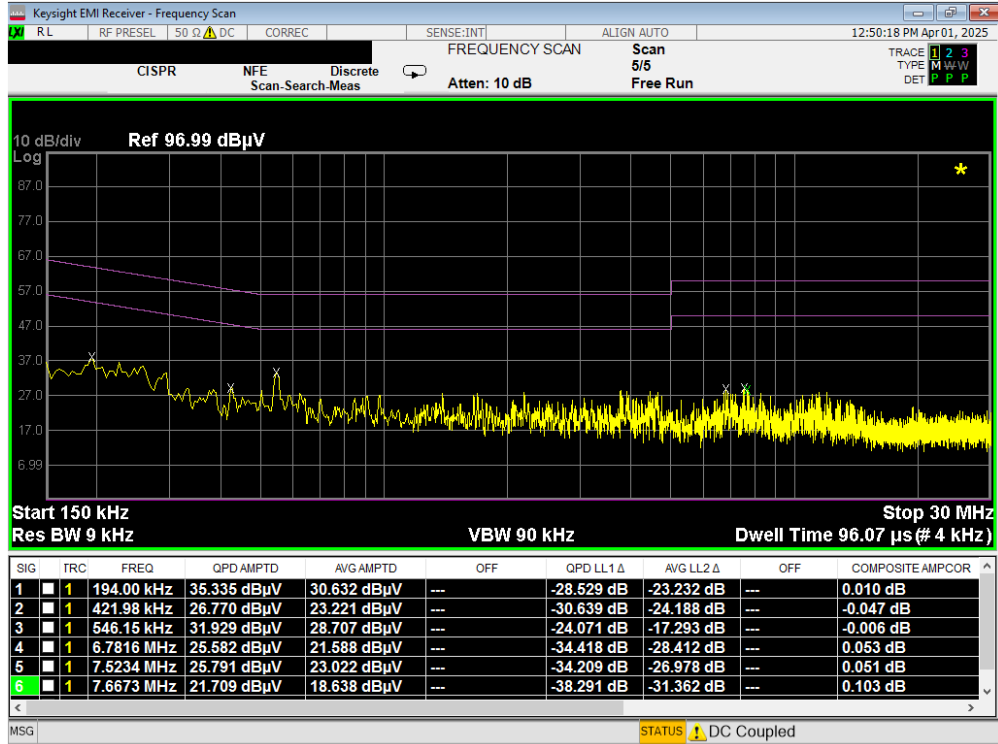


Plot 7-205. Line Conducted Plot with 802.11a UNII Band 4 (L1)

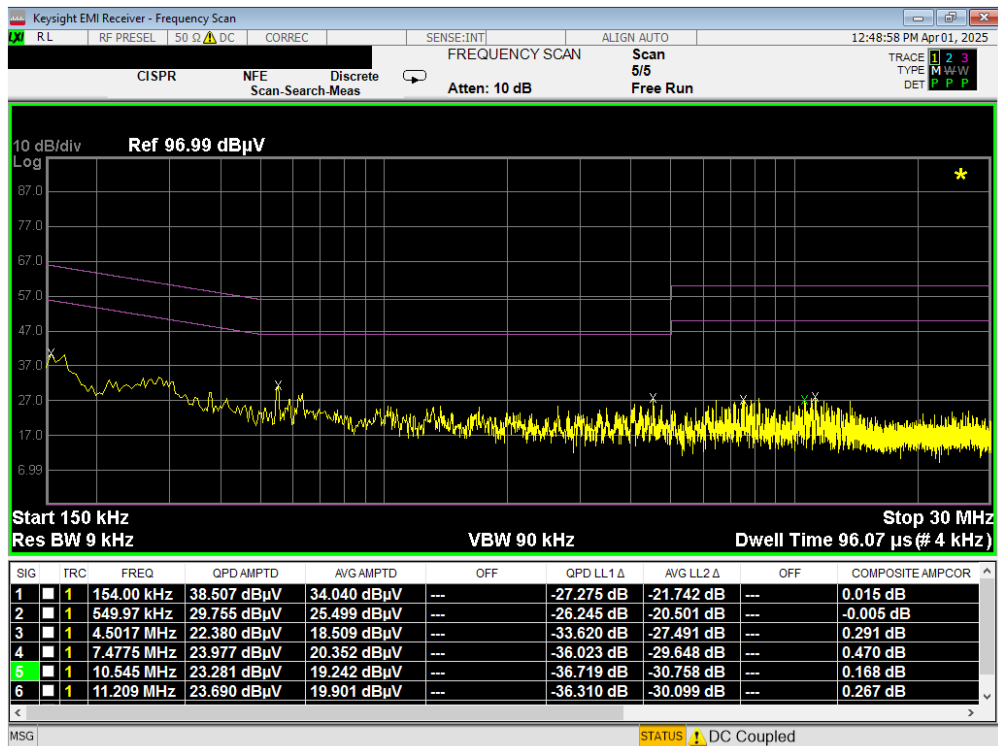


Plot 7-206. Line Conducted Plot with 802.11a UNII Band 4 (N)

FCC ID: A3LSMF966U IC: 649E-SMF966W	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2502210015-20-R3.A3L	Test Dates: 02/24/2025 - 04/11/2025	EUT Type: Portable Handset	Page 151 of 157

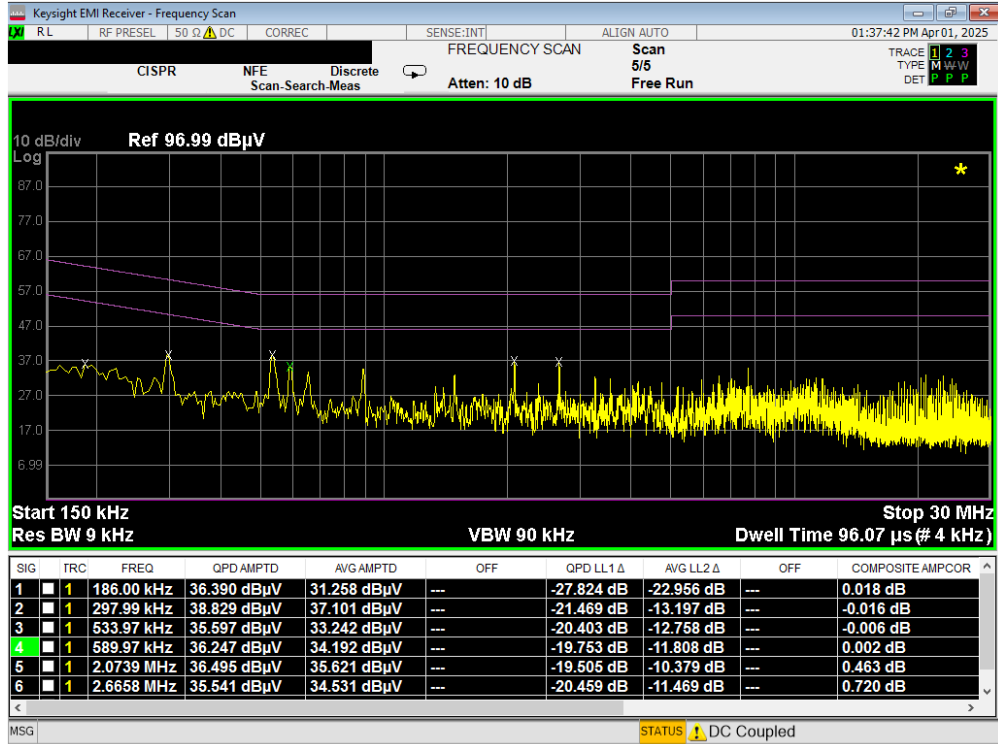


Plot 7-207. Line Conducted Plot with 802.11a UNII Band 1 (L1) – WCP

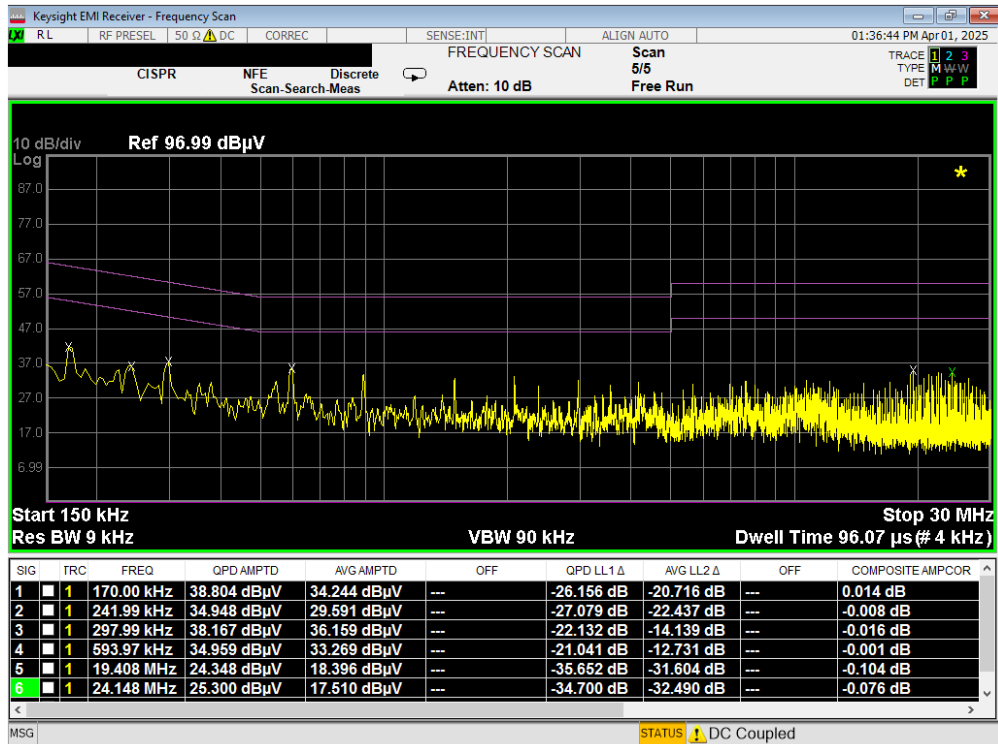


Plot 7-208. Line Conducted Plot with 802.11a UNII Band 1 (N) – WCP

FCC ID: A3LSMF966U IC: 649E-SMF966W	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2502210015-20-R3.A3L	Test Dates: 02/24/2025 - 04/11/2025	EUT Type: Portable Handset	Page 152 of 157

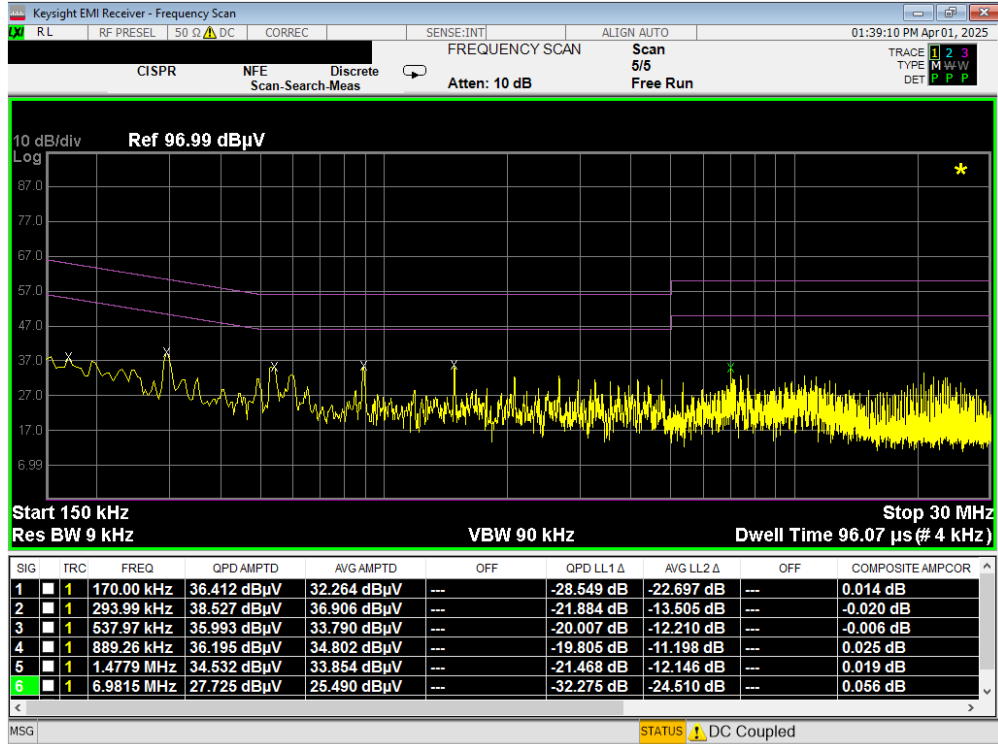


Plot 7-209. Line Conducted Plot with 802.11a UNII Band 2A (L1) – WCP

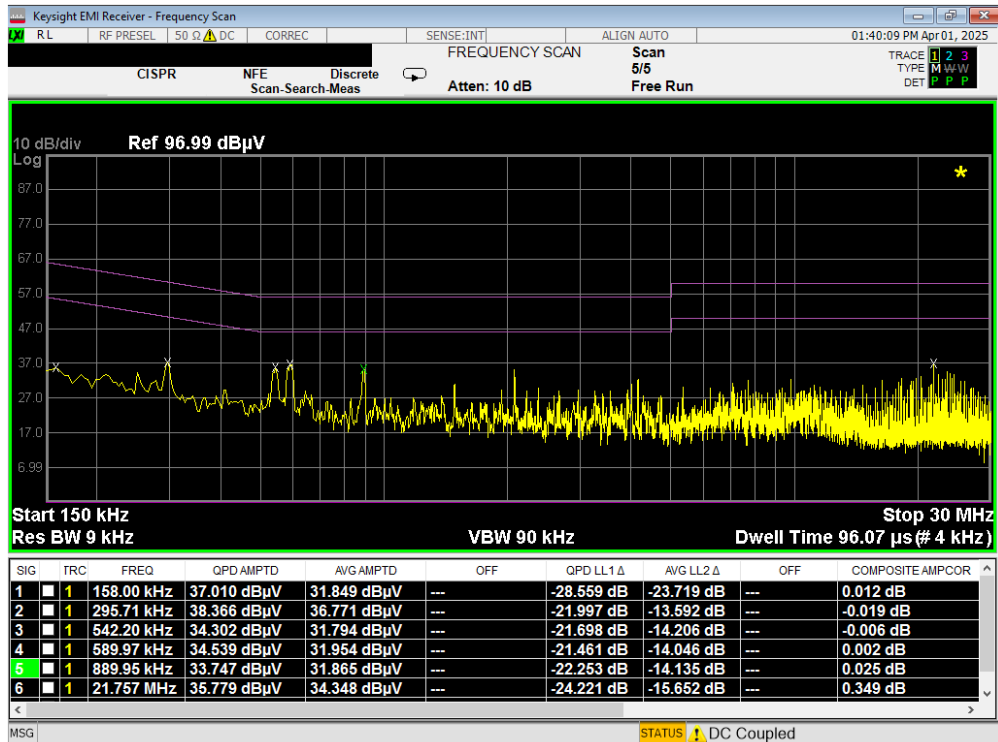


Plot 7-210. Line Conducted Plot with 802.11a UNII Band 2A (N) – WCP

FCC ID: A3LSMF966U IC: 649E-SMF966W	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2502210015-20-R3.A3L	Test Dates: 02/24/2025 - 04/11/2025	EUT Type: Portable Handset	Page 153 of 157



Plot 7-211. Line Conducted Plot with 802.11a UNII Band 2C (L1) – WCP



Plot 7-212. Line Conducted Plot with 802.11a UNII Band 2C (N) – WCP

FCC ID: A3LSMF966U IC: 649E-SMF966W	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2502210015-20-R3.A3L	Test Dates: 02/24/2025 - 04/11/2025	EUT Type: Portable Handset	Page 154 of 157