

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.

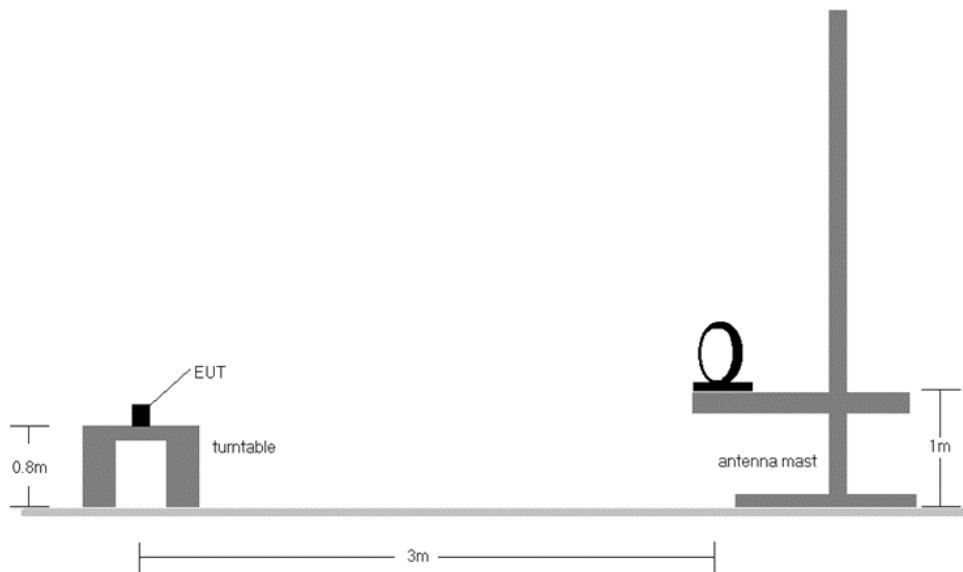


Figure 7-6. Radiated Test Setup < 30Mhz

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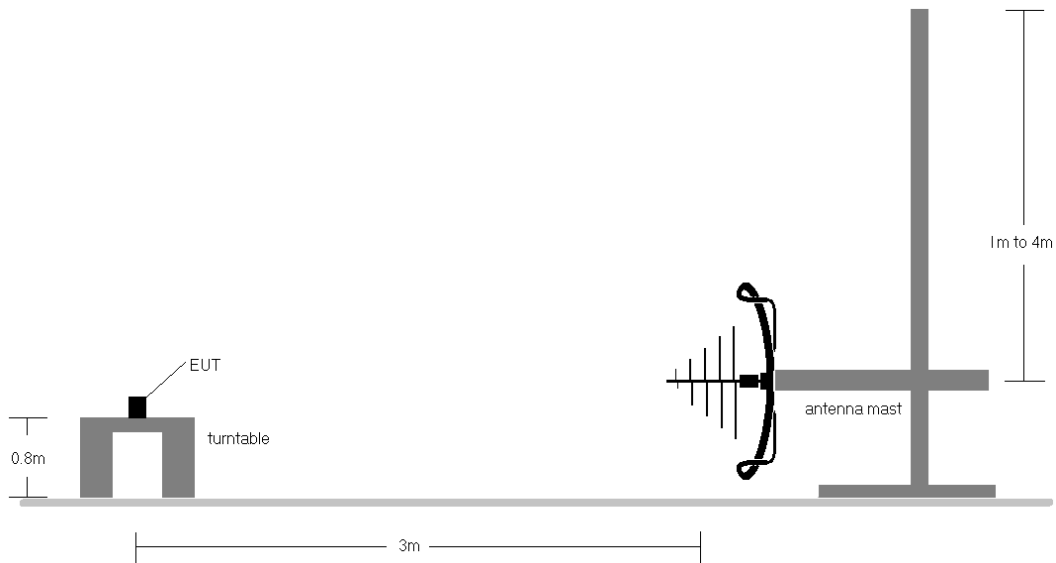


Figure 7-7. Radiated Test Setup < 1GHz

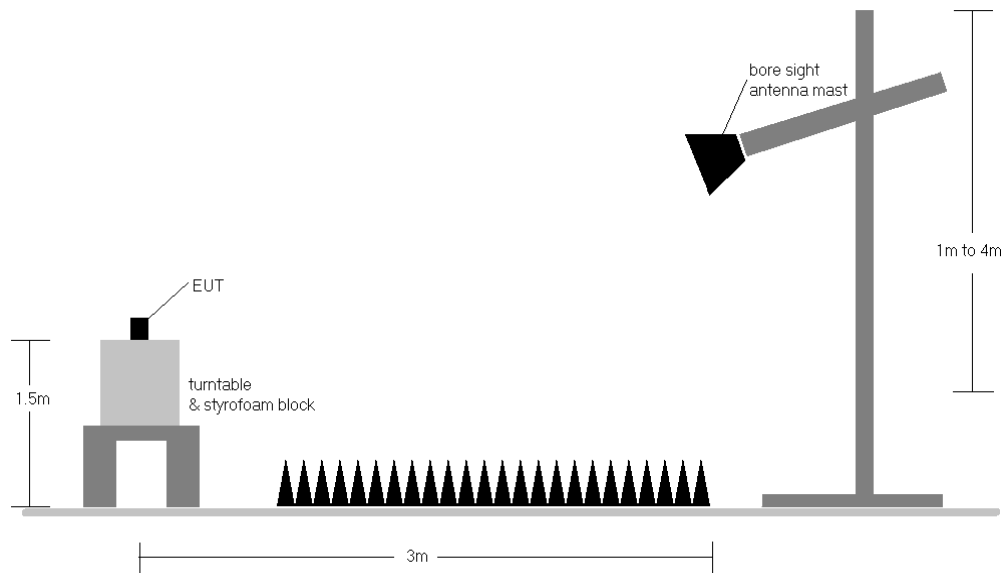


Figure 7-8. Radiated Test Setup > 1GHz

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Test Notes

1. All spurious emissions lying in restricted bands specified in §15.205 are below the limit 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. For radiated measurements, emissions were investigated for the fully-loaded RU configuration and for all of the partially-loaded RU configurations. Among all of the available partially-loaded RU configurations, only the configuration with the worst case emissions is reported.

Sample Calculations

Determining Spurious Emissions Levels

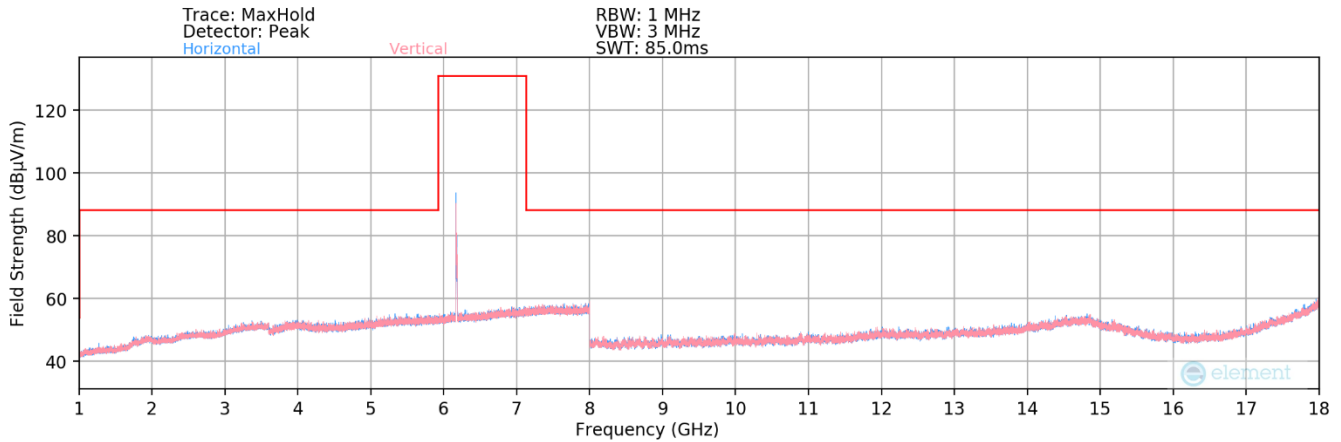
- Field Strength Level [dB μ V/m] = Analyzer Level [dBm] + 107 + AFCL [dB/m]
- AFCL [dB/m] = Antenna Factor [dB/m] + Cable Loss [dB]
- Margin [dB] = Field Strength Level [dB μ V/m] – Limit [dB μ V/m]

Radiated Band Edge Measurement Offset

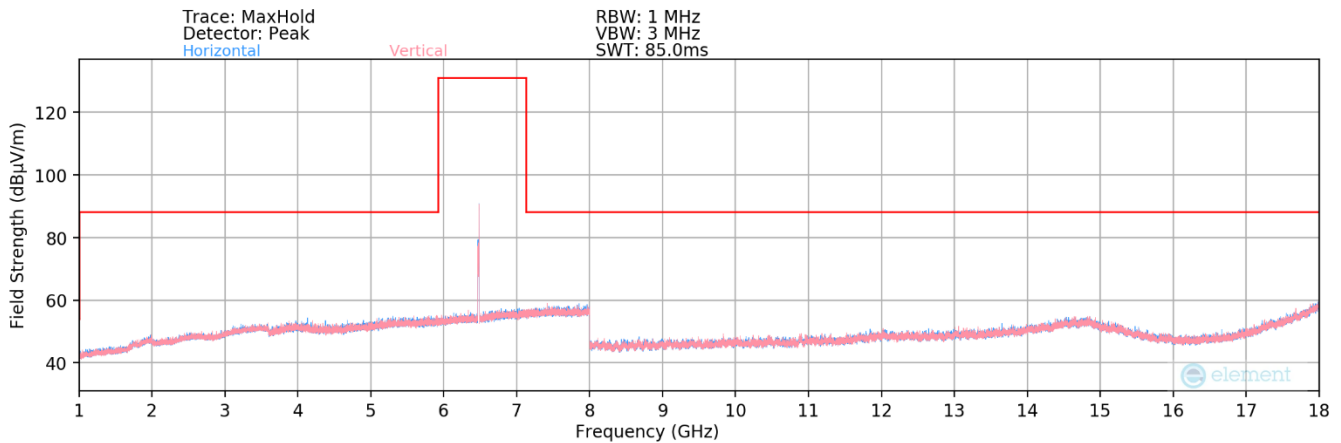
- The amplitude offset shown in the radiated restricted band edge plots was calculated using the formula:
Offset (dB) = (Antenna Factor + Cable Loss + Attenuator) – Preamplifier Gain

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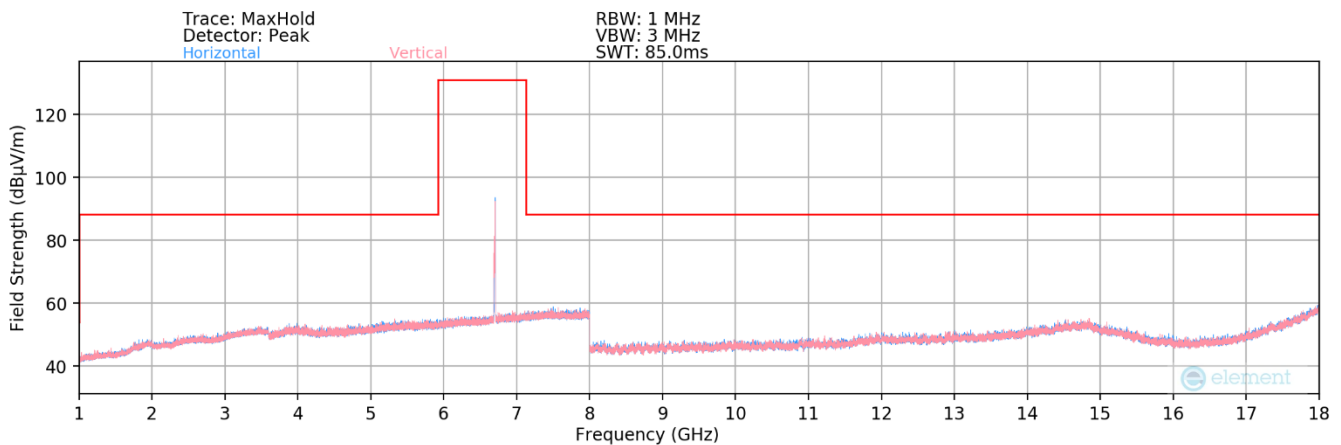
7.7.1 MIMO Radiated Spurious Emission Measurements (26 Tones)



Plot 7-513. Radiated Spurious Plot 1GHz – 18GHz MIMO (802.11ax – UNII Band 5 Ch. 45)

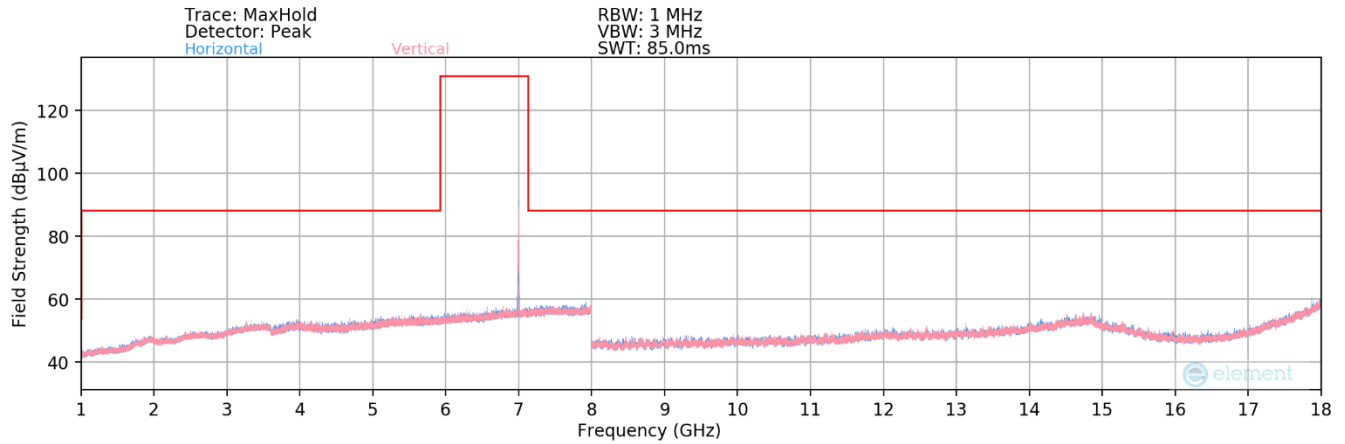


Plot 7-514. Radiated Spurious Plot 1GHz – 18GHz MIMO (802.11ax – UNII Band 6 Ch. 105)

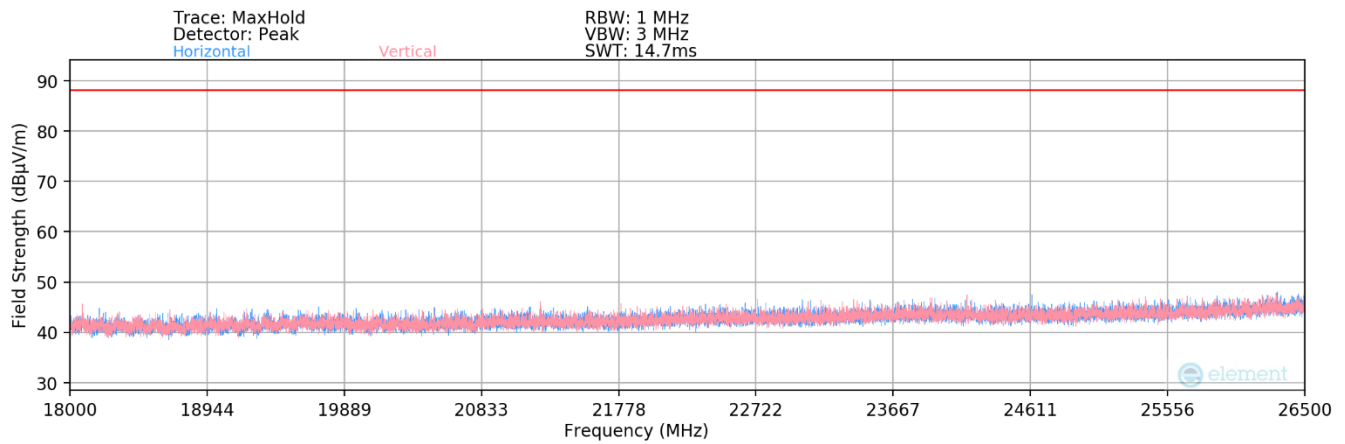


Plot 7-515. Radiated Spurious Plot 1GHz – 18GHz MIMO (802.11ax – UNII Band 7 Ch. 149)

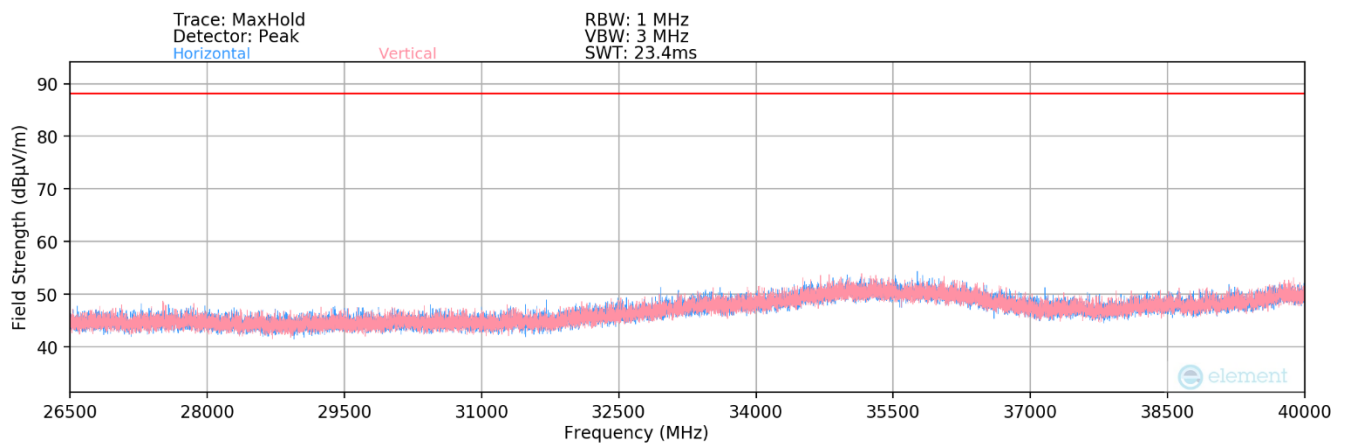
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Plot 7-516. Radiated Spurious Plot 1GHz – 18GHz MIMO (802.11ax – U Band 8 Ch. 209)



Plot 7-517. Radiated Spurious Plot 18GHz - 26.5GHz (802.11ax)



Plot 7-518. Radiated Spurious Plot 26.5GHz - 40GHz (802.11ax)

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7.7.1.1 MIMO Radiated Spurious Emission Measurements (26 Tones) – UNII Band 5

Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 RU Index: 4
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5955MHz
 Channel: 1

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]
* 11910.00	Average	V	-	-	-78.17	9.35	0.00	38.18	53.98	-15.80
* 11910.00	Peak	V	-	-	-65.92	9.35	0.00	50.43	73.98	-23.55
* 17865.00	Average	V	-	-	-77.09	16.41	0.00	46.32	53.98	-7.66
* 17865.00	Peak	V	-	-	-64.60	16.41	0.00	58.81	73.98	-15.17
* 23820.00	Average	V	-	-	-65.65	3.97	-9.54	35.78	53.98	-18.20
* 23820.00	Peak	V	-	-	-54.00	3.97	-9.54	47.43	73.98	-26.54
29775.00	Peak	V	-	-	-55.05	5.22	-9.54	47.63	68.20	-20.57

Table 7-15. Radiated Measurements MIMO (26 Tones)

Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 RU Index: 4
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 6175MHz
 Channel: 45

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
* 12350.00	Average	V	-	-	-77.94	9.61	0.00	38.67	53.98	-15.31
* 12350.00	Peak	V	-	-	-65.49	9.61	0.00	51.12	73.98	-22.86
* 18525.00	Average	V	-	-	-64.71	0.80	-9.54	33.55	53.98	-20.43
* 18525.00	Peak	V	-	-	-55.54	0.80	-9.54	42.72	73.98	-31.26
24700.00	Peak	V	-	-	-55.12	3.95	-9.54	46.29	68.20	-21.91
30875.00	Peak	V	-	-	-54.57	5.55	-9.54	48.44	68.20	-19.76

Table 7-16. Radiated Measurements MIMO (26 Tones)

FCC ID: PY7-84558E	MEASUREMENT REPORT		Approved by: Technical Manager
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Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 RU Index: 4
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 6415MHz
 Channel: 93

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
12830.00	Peak	V	-	-	-66.07	9.64	0.00	50.57	68.20	-17.63
* 19245.00	Average	V	-	-	-65.21	1.75	-9.54	34.00	53.98	-19.98
* 19245.00	Peak	V	-	-	-53.81	1.75	-9.54	45.40	73.98	-28.58
25660.00	Peak	V	-	-	-54.78	4.50	-9.54	47.18	68.20	-21.02
32075.00	Peak	V	-	-	-54.80	6.67	-9.54	49.34	68.20	-18.86

Table 7-17. Radiated Measurements MIMO (26 Tones)

FCC ID: PY7-84558E	MEASUREMENT REPORT		Approved by: Technical Manager
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7.7.1.2 MIMO Radiated Spurious Emission Measurements (26 Tones) – UNII Band 6

Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 RU Index: 4
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 6435MHz
 Channel: 97

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
12870.00	Peak	V	-	-	-66.21	10.05	0.00	50.84	68.20	-17.36
* 19305.00	Average	V	-	-	-65.66	1.55	-9.54	33.35	53.98	-20.63
* 19305.00	Peak	V	-	-	-53.91	1.55	-9.54	45.11	73.98	-28.87
25740.00	Peak	V	-	-	-54.09	4.58	-9.54	47.95	68.20	-20.25
32175.00	Peak	V	-	-	-54.76	7.04	-9.54	49.74	68.20	-18.46

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

Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 RU Index: 4
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 6475MHz
 Channel: 105

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
12950.00	Peak	V	-	-	-65.89	10.12	0.00	51.23	68.20	-16.97
* 19425.00	Average	V	-	-	-65.67	1.62	-9.54	33.41	53.98	-20.57
* 19425.00	Peak	V	-	-	-54.30	1.62	-9.54	44.78	73.98	-29.20
25900.00	Peak	V	-	-	-54.14	4.55	-9.54	47.88	68.20	-20.32
32375.00	Peak	V	-	-	-54.80	6.99	-9.54	49.65	68.20	-18.55

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

FCC ID: PY7-84558E	MEASUREMENT REPORT		Approved by: Technical Manager
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Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 RU Index: 4
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 6515MHz
 Channel: 113

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
13030.00	Peak	V	-	-	-65.73	10.12	0.00	51.39	68.20	-16.81
* 19545.00	Average	V	-	-	-65.43	1.76	-9.54	33.79	53.98	-20.19
* 19545.00	Peak	V	-	-	-54.70	1.76	-9.54	44.52	73.98	-29.46
26060.00	Peak	V	-	-	-53.91	4.93	-9.54	48.48	68.20	-19.72
32575.00	Peak	V	-	-	-54.80	6.78	-9.54	49.44	68.20	-18.76

Table 7-20. Radiated Measurements MIMO (26 Tones)

FCC ID: PY7-84558E	MEASUREMENT REPORT		Approved by: Technical Manager
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7.7.1.3 MIMO Radiated Spurious Emission Measurements (26 Tones) – UNII Band 7

Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 RU Index: 4
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 6535MHz
 Channel: 117

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
13070.00	Peak	V	-	-	-66.03	10.15	0.00	51.12	68.20	-17.08
* 19605.00	Average	V	-	-	-64.65	1.95	-9.54	34.76	53.98	-19.22
* 19605.00	Peak	V	-	-	-53.67	1.95	-9.54	45.74	73.98	-28.24
26140.00	Peak	V	-	-	-54.21	4.80	-9.54	48.05	68.20	-20.15
32675.00	Peak	V	-	-	-54.37	7.06	-9.54	50.15	68.20	-18.05

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

Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 RU Index: 4
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 6695MHz
 Channel: 149

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
* 13390.00	Average	V	-	-	-78.12	10.35	0.00	39.23	53.98	-14.75
* 13390.00	Peak	V	-	-	-65.45	10.35	0.00	51.90	73.98	-22.08
* 20085.00	Average	V	-	-	-65.76	1.98	-9.54	33.68	53.98	-20.30
* 20085.00	Peak	V	-	-	-54.71	1.98	-9.54	44.73	73.98	-29.25
26780.00	Peak	V	-	-	-54.56	4.98	-9.54	47.88	68.20	-20.32
33475.00	Peak	V	-	-	-55.63	8.58	-9.54	50.41	68.20	-17.79

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

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Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 RU Index: 4
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 6875MHz
 Channel: 185

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
13750.00	Peak	V	-	-	-65.54	11.07	0.00	52.53	68.20	-15.67
* 20625.00	Average	V	-	-	-65.80	2.17	-9.54	33.83	53.98	-20.15
* 20625.00	Peak	V	-	-	-55.11	2.17	-9.54	44.51	73.98	-29.47
27500.00	Average	V	-	-	-65.62	5.04	-9.54	36.88	68.20	-31.32
34375.00	Peak	V	-	-	-54.61	10.14	-9.54	52.99	68.20	-15.21

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

FCC ID: PY7-84558E	MEASUREMENT REPORT		Approved by: Technical Manager
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7.7.1.4 MIMO Radiated Spurious Emission Measurements (26 Tones) – UNII Band 8

Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 RU Index: 4
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 6895MHz
 Channel: 189

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
13790.00	Peak	V	-	-	-65.80	11.00	0.00	52.20	68.20	-16.00
* 20685.00	Average	V	-	-	-66.53	2.48	-9.54	33.41	53.98	-20.57
* 20685.00	Peak	V	-	-	-54.94	2.48	-9.54	45.00	73.98	-28.98
27580.00	Peak	V	-	-	-54.79	5.28	-9.54	47.95	68.20	-20.25
34475.00	Peak	V	-	-	-55.04	9.94	-9.54	52.35	68.20	-15.85

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

Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 RU Index: 4
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 6995MHz
 Channel: 209

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
13990.00	Peak	V	-	-	-65.89	11.26	0.00	52.37	68.20	-15.83
* 20985.00	Average	V	-	-	-65.98	2.67	-9.54	34.15	53.98	-19.83
* 20985.00	Peak	V	-	-	-54.82	2.67	-9.54	45.31	73.98	-28.67
27980.00	Peak	V	-	-	-56.20	5.48	-9.54	46.74	68.20	-21.46
34975.00	Peak	V	-	-	-54.69	10.57	-9.54	53.34	68.20	-14.86

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

FCC ID: PY7-84558E	MEASUREMENT REPORT		Approved by: Technical Manager
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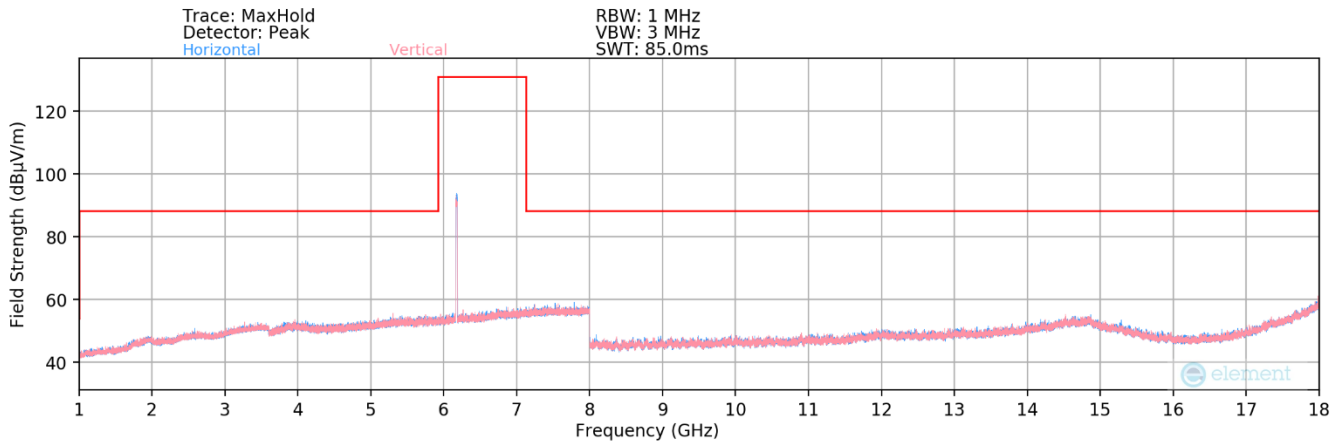
Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 RU Index: 4
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 7115MHz
 Channel: 233

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
14230.00	Peak	V	-	-	-66.10	12.13	0.00	53.03	68.20	-15.17
* 21345.00	Average	V	-	-	-65.05	2.96	-9.54	35.36	53.98	-18.62
* 21345.00	Peak	V	-	-	-55.69	2.96	-9.54	44.72	73.98	-29.26
28460.00	Peak	V	-	-	-54.61	5.24	-9.54	48.09	68.20	-20.11
35575.00	Peak	V	-	-	-53.66	10.30	-9.54	54.10	68.20	-14.10

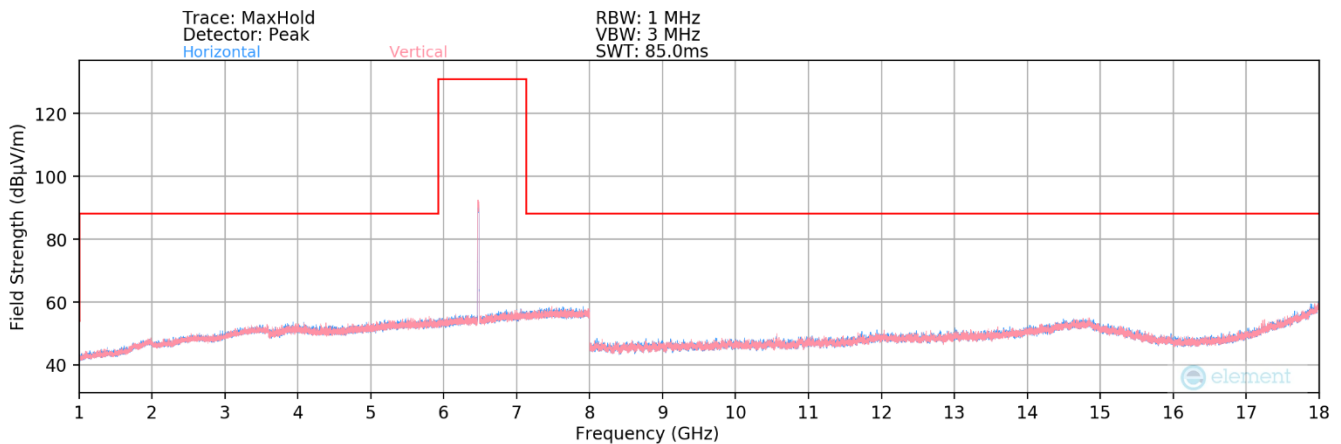
Table 7-26. Radiated Measurements MIMO (26 Tones)

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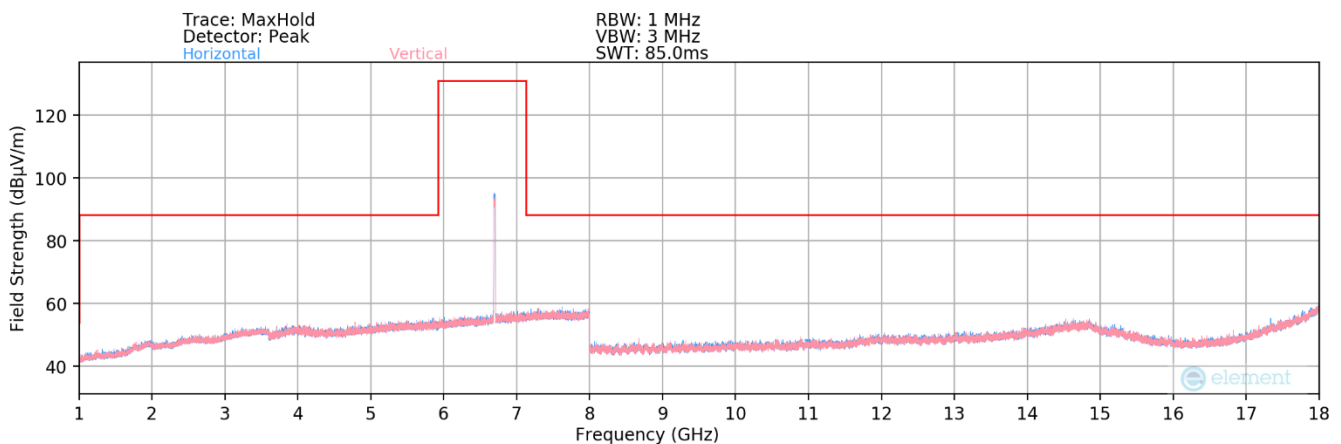
7.7.2 MIMO Radiated Spurious Emission Measurements (242 Tones)



Plot 7-519. Radiated Spurious Plot 1GHz – 18GHz MIMO (802.11ax – UNII Band 5 Ch. 45)

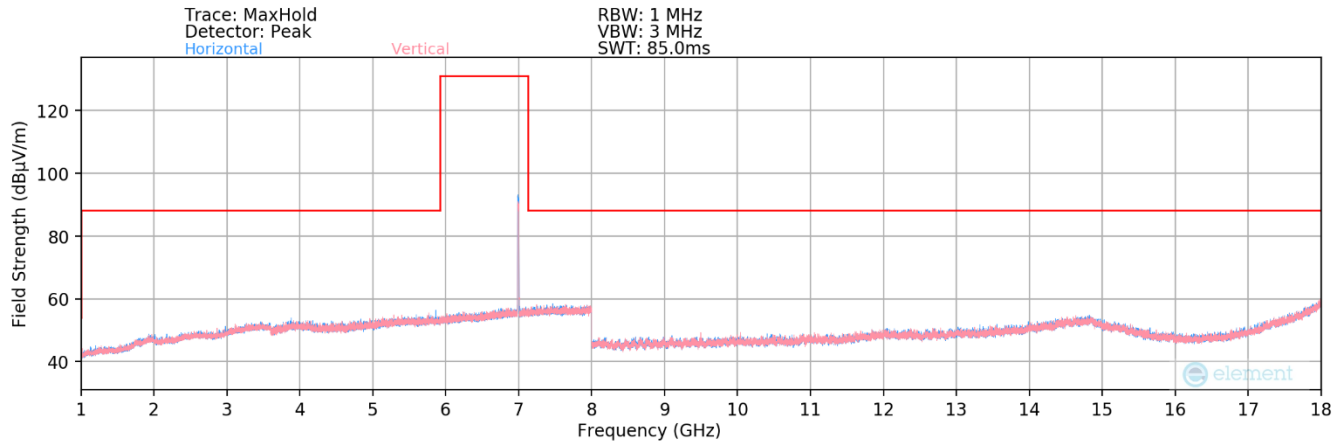


Plot 7-520. Radiated Spurious Plot 1GHz – 18GHz MIMO (802.11ax – UNII Band 6 Ch. 105)

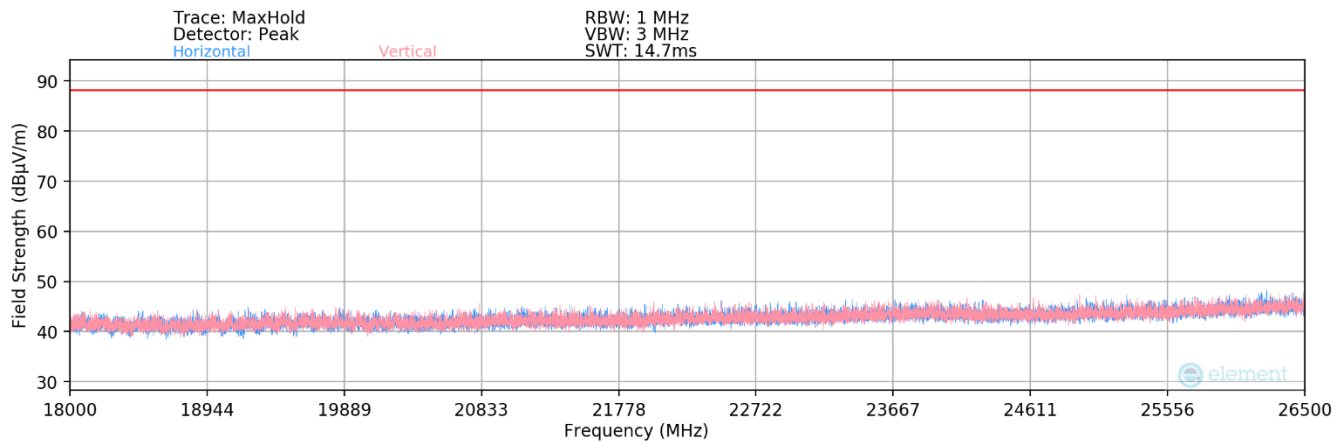


Plot 7-521. Radiated Spurious Plot 1GHz – 18GHz MIMO (802.11ax – UNII Band 7 Ch. 149)

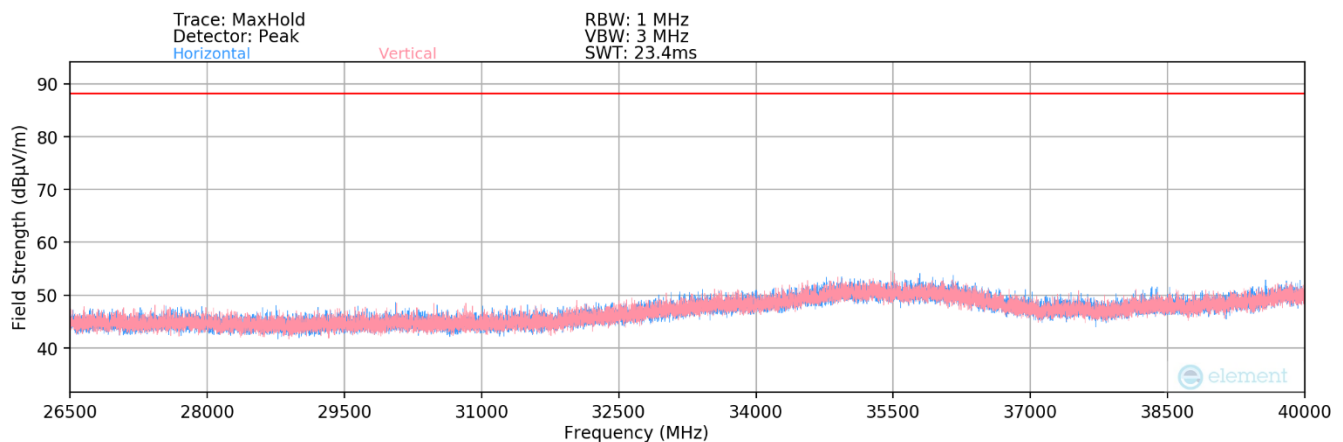
FCC ID: PY7-84558E	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2302060006-09-R3.PY7	Test Dates: 01/30/2023 – 04/17/2023	EUT Type: Portable Handset	Page 315 of 330



Plot 7-522. Radiated Spurious Plot 1GHz – 18GHz MIMO (802.11ax – U Band 8 Ch. 209)



Plot 7-523. Radiated Spurious Plot 18GHz - 26.5GHz (802.11ax)



Plot 7-524. Radiated Spurious Plot 26.5GHz - 40GHz (802.11ax)

FCC ID: PY7-84558E	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2302060006-09-R3.PY7	Test Dates: 01/30/2023 – 04/17/2023	EUT Type: Portable Handset	Page 316 of 330

7.7.2.1 MIMO Radiated Spurious Emission Measurements (242 Tones) – UNII Band 5

Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5955MHz
 Channel: 1

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]
* 11910.00	Average	V	-	-	-78.21	9.35	0.00	38.14	53.98	-15.84
* 11910.00	Peak	V	-	-	-65.80	9.35	0.00	50.55	73.98	-23.43
* 17865.00	Average	V	-	-	-77.32	16.41	0.00	46.09	53.98	-7.89
* 17865.00	Peak	V	-	-	-65.16	16.41	0.00	58.25	73.98	-15.73
* 23820.00	Average	V	-	-	-66.39	3.97	-9.54	35.04	53.98	-18.94
* 23820.00	Peak	V	-	-	-53.08	3.97	-9.54	48.35	73.98	-25.63
29775.00	Peak	V	-	-	-54.39	5.22	-9.54	48.29	68.20	-19.91

Table 7-27. Radiated Measurements MIMO (242 Tones)

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

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
* 12350.00	Average	V	-	-	-78.28	9.61	0.00	38.33	53.98	-15.65
* 12350.00	Peak	V	-	-	-66.31	9.61	0.00	50.30	73.98	-23.68
* 18525.00	Average	V	-	-	-65.74	0.80	-9.54	32.52	53.98	-21.46
* 18525.00	Peak	V	-	-	-56.29	0.80	-9.54	41.97	73.98	-32.01
24700.00	Peak	V	-	-	-56.25	3.95	-9.54	45.16	68.20	-23.04
30875.00	Peak	V	-	-	-55.71	5.55	-9.54	47.30	68.20	-20.90

Table 7-28. Radiated Measurements MIMO (242 Tones)

FCC ID: PY7-84558E	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2302060006-09-R3.PY7	Test Dates: 01/30/2023 – 04/17/2023	EUT Type: Portable Handset	Page 317 of 330

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

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
12830.00	Peak	V	-	-	-65.66	9.64	0.00	50.98	68.20	-17.22
* 19245.00	Average	V	-	-	-66.34	1.75	-9.54	32.87	53.98	-21.11
* 19245.00	Peak	V	-	-	-53.59	1.75	-9.54	45.63	73.98	-28.35
25660.00	Peak	V	-	-	-55.28	4.50	-9.54	46.68	68.20	-21.52
32075.00	Peak	V	-	-	-55.08	6.67	-9.54	49.06	68.20	-19.14

Table 7-29. Radiated Measurements MIMO (242 Tones)

FCC ID: PY7-84558E	MEASUREMENT REPORT		Approved by: Technical Manager
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7.7.2.2 MIMO Radiated Spurious Emission Measurements (242 Tones) – UNII Band 6

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

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
12870.00	Peak	V	-	-	-65.73	10.05	0.00	51.32	68.20	-16.88
* 19305.00	Average	V	-	-	-66.86	1.55	-9.54	32.15	53.98	-21.83
* 19305.00	Peak	V	-	-	-55.07	1.55	-9.54	43.95	73.98	-30.03
25740.00	Peak	V	-	-	-55.62	4.58	-9.54	46.42	68.20	-21.78
32175.00	Peak	V	-	-	-55.39	7.04	-9.54	49.11	68.20	-19.09

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

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

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
12950.00	Peak	V	-	-	-65.99	10.12	0.00	51.13	68.20	-17.07
* 19425.00	Average	V	-	-	-65.76	1.62	-9.54	33.33	53.98	-20.65
* 19425.00	Peak	V	-	-	-54.15	1.62	-9.54	44.93	73.98	-29.05
25900.00	Peak	V	-	-	-54.96	4.55	-9.54	47.05	68.20	-21.15
32375.00	Peak	V	-	-	-55.02	6.99	-9.54	49.43	68.20	-18.77

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

FCC ID: PY7-84558E	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2302060006-09-R3.PY7	Test Dates: 01/30/2023 – 04/17/2023	EUT Type: Portable Handset	Page 319 of 330

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

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
13030.00	Peak	V	-	-	-66.17	10.12	0.00	50.95	68.20	-17.25
* 19545.00	Average	V	-	-	-66.39	1.76	-9.54	32.83	53.98	-21.15
* 19545.00	Peak	V	-	-	-54.95	1.76	-9.54	44.27	73.98	-29.71
26060.00	Peak	V	-	-	-55.86	4.93	-9.54	46.53	68.20	-21.67
32575.00	Peak	V	-	-	-54.89	6.78	-9.54	49.35	68.20	-18.85

Table 7-32. Radiated Measurements MIMO (242 Tones)

FCC ID: PY7-84558E	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2302060006-09-R3.PY7	Test Dates: 01/30/2023 – 04/17/2023	EUT Type: Portable Handset	Page 320 of 330

7.7.2.3 MIMO Radiated Spurious Emission Measurements (242 Tones) – UNII Band 7

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

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
13070.00	Peak	V	-	-	-66.16	10.15	0.00	50.99	68.20	-17.21
* 19605.00	Average	V	-	-	-65.56	1.95	-9.54	33.85	53.98	-20.13
* 19605.00	Peak	V	-	-	-54.74	1.95	-9.54	44.67	73.98	-29.31
26140.00	Peak	V	-	-	-53.36	4.80	-9.54	48.89	68.20	-19.31
32675.00	Peak	V	-	-	-54.46	7.06	-9.54	50.06	68.20	-18.14

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

Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 6695MHz
 Channel: 149

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
* 13390.00	Average	V	-	-	-78.22	10.35	0.00	39.13	53.98	-14.85
* 13390.00	Peak	V	-	-	-66.05	10.35	0.00	51.30	73.98	-22.68
* 20085.00	Average	V	-	-	-66.35	1.98	-9.54	33.09	53.98	-20.89
* 20085.00	Peak	V	-	-	-55.25	1.98	-9.54	44.19	73.98	-29.79
26780.00	Peak	V	-	-	-55.85	4.98	-9.54	46.59	68.20	-21.61
33475.00	Peak	V	-	-	-55.15	8.58	-9.54	50.89	68.20	-17.31

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

FCC ID: PY7-84558E	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2302060006-09-R3.PY7	Test Dates: 01/30/2023 – 04/17/2023	EUT Type: Portable Handset	Page 321 of 330

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

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
13750.00	Peak	V	-	-	-65.98	11.07	0.00	52.09	68.20	-16.11
* 20625.00	Average	V	-	-	-66.38	2.17	-9.54	33.25	53.98	-20.73
* 20625.00	Peak	V	-	-	-55.39	2.17	-9.54	44.24	73.98	-29.74
27500.00	Peak	V	-	-	-55.48	5.04	-9.54	47.02	68.20	-21.18
34375.00	Peak	V	-	-	-55.85	10.14	-9.54	51.74	68.20	-16.46

Table 7-35. Radiated Measurements MIMO (242 Tones)

FCC ID: PY7-84558E	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2302060006-09-R3.PY7	Test Dates: 01/30/2023 – 04/17/2023	EUT Type: Portable Handset	Page 322 of 330

7.7.2.4 MIMO Radiated Spurious Emission Measurements (242 Tones) – UNII Band 8

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

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
13790.00	Peak	V	-	-	-65.77	11.00	0.00	52.23	68.20	-15.97
* 20685.00	Average	V	-	-	-66.85	2.48	-9.54	33.09	53.98	-20.89
* 20685.00	Peak	V	-	-	-55.48	2.48	-9.54	44.46	73.98	-29.52
27580.00	Peak	V	-	-	-55.86	5.28	-9.54	46.88	68.20	-21.32
34475.00	Peak	V	-	-	-55.63	9.94	-9.54	51.77	68.20	-16.43

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

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

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
13990.00	Peak	V	-	-	-66.01	11.26	0.00	52.25	68.20	-15.95
* 20985.00	Average	V	-	-	-66.87	2.67	-9.54	33.26	53.98	-20.72
* 20985.00	Peak	V	-	-	-55.66	2.67	-9.54	44.47	73.98	-29.51
27980.00	Peak	V	-	-	-54.98	5.48	-9.54	47.96	68.20	-20.24
34975.00	Peak	V	-	-	-54.65	10.57	-9.54	53.37	68.20	-14.83

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

FCC ID: PY7-84558E	MEASUREMENT REPORT		Approved by: Technical Manager
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Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 7115MHz
 Channel: 233

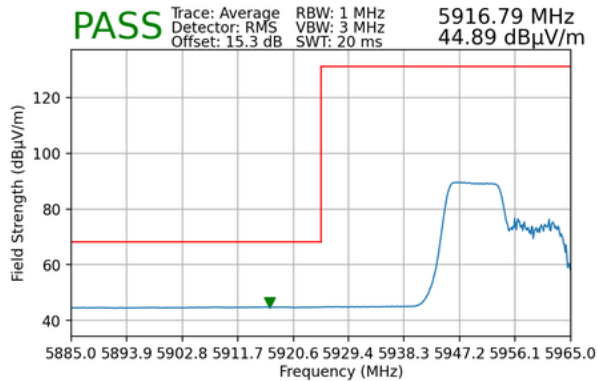
Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]
14230.00	Peak	V	-	-	-65.42	12.13	0.00	53.71	68.20	-14.49
* 21345.00	Average	V	-	-	-66.57	2.96	-9.54	33.84	53.98	-20.14
* 21345.00	Peak	V	-	-	-55.26	2.96	-9.54	45.16	73.98	-28.82
28460.00	Peak	V	-	-	-55.42	5.24	-9.54	47.29	68.20	-20.91
35575.00	Peak	V	-	-	-56.45	10.30	-9.54	51.31	68.20	-16.89

Table 7-38. Radiated Measurements MIMO (242 Tones)

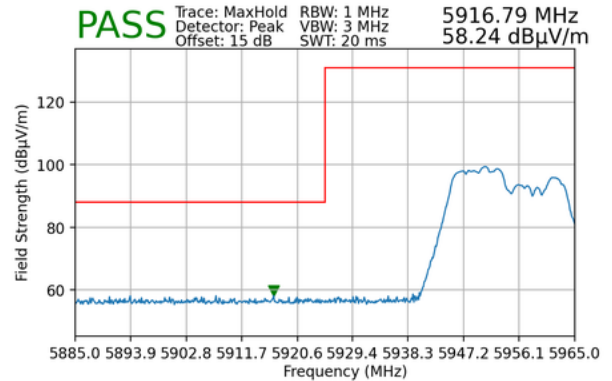
FCC ID: PY7-84558E	MEASUREMENT REPORT		Approved by: Technical Manager
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7.7.3 MIMO Radiated Band Edge Measurements (20MHz BW – Partial Tone – 106T)

Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
RU Index	53
Distance of Measurements:	3 Meters
Operating Frequency:	5955MHz
Channel:	1

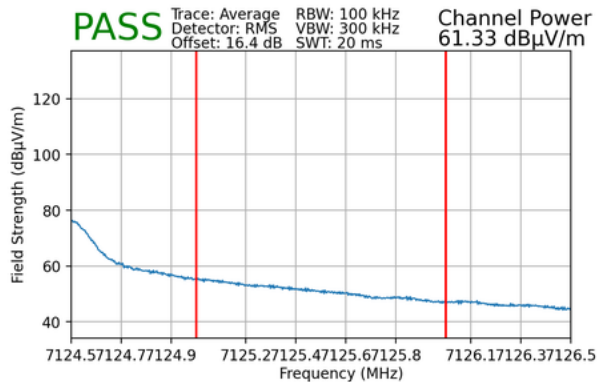


Plot 7-525. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 5 – 106T)

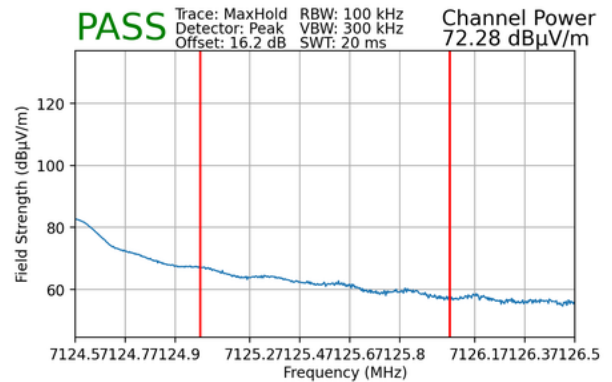


Plot 7-526. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 5 – 106T)

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



Plot 7-527. Radiated Upper Band Edge Plot MIMO (Average – UNII Band 8 – 106T)

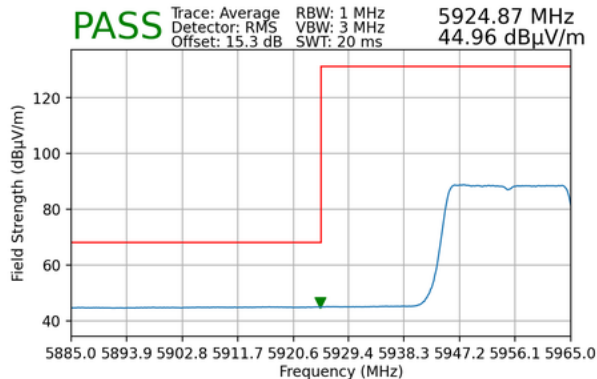


Plot 7-528. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 8 – 106T)

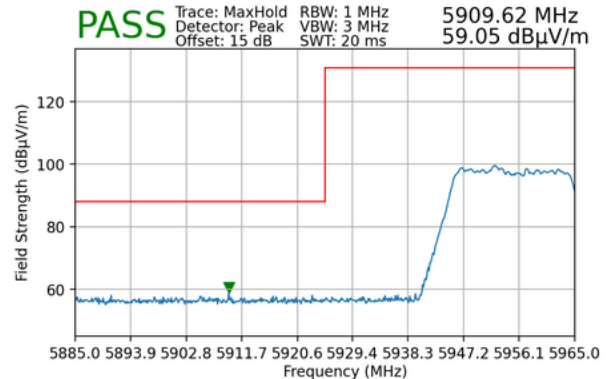
FCC ID: PY7-84558E	MEASUREMENT REPORT		Approved by: Technical Manager
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7.7.4 MIMO Radiated Band Edge Measurements (20MHz BW – Full Tone – 242T)

Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
RU Index	61
Distance of Measurements:	3 Meters
Operating Frequency:	5955MHz
Channel:	1

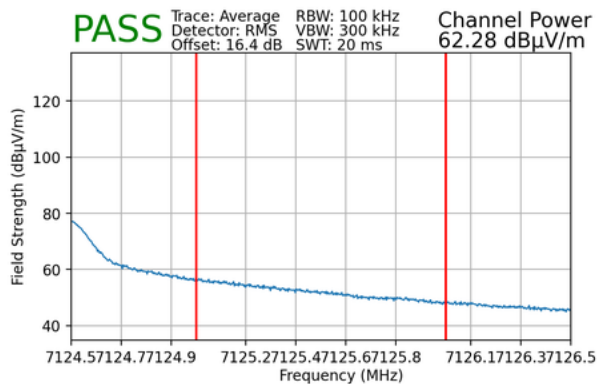


Plot 7-529. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 5 – 242T)

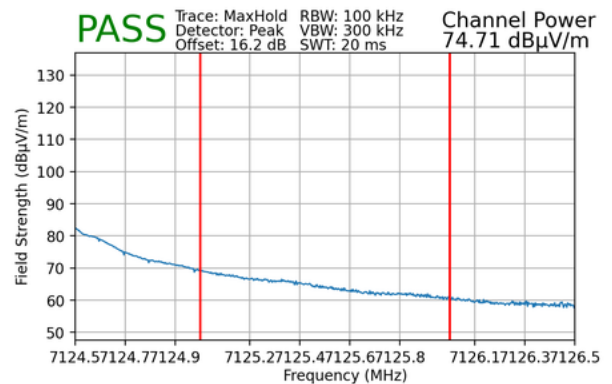


Plot 7-530. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 5 – 242T)

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



Plot 7-531. Radiated Upper Band Edge Plot MIMO (Average – UNII Band 8 – 242T)

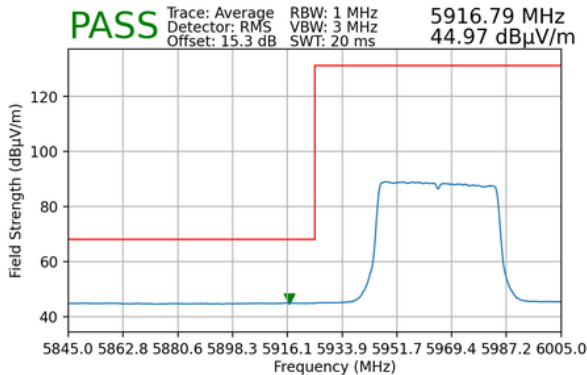


Plot 7-532. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 8 – 242T)

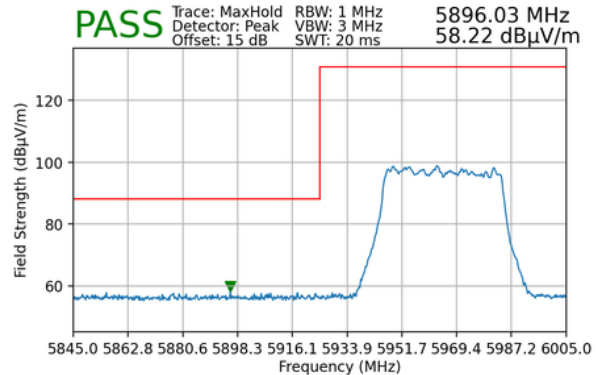
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7.7.5 MIMO Radiated Band Edge Measurements (40MHz BW – Full Tone – 484T)

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

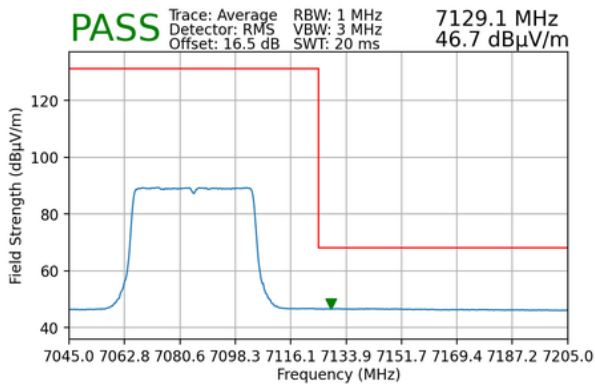


Plot 7-533. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 5 – 484T)

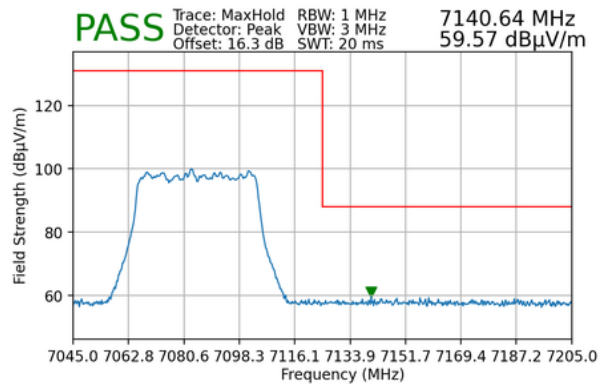


Plot 7-534. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 5 – 484T)

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



Plot 7-535. Radiated Upper Band Edge Plot MIMO (Average – UNII Band 8 – 484T)

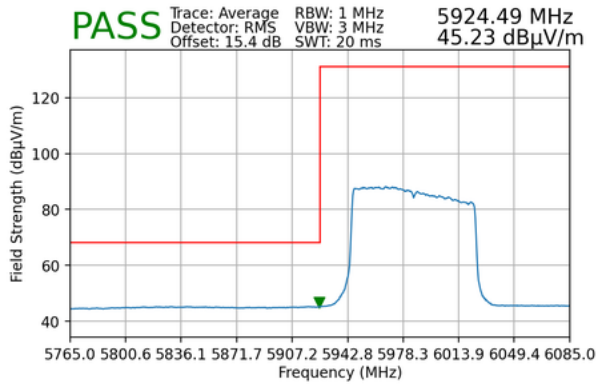


Plot 7-536. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 8 – 484T)

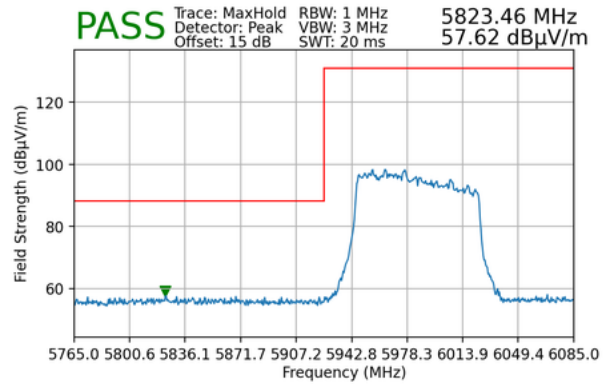
FCC ID: PY7-84558E	MEASUREMENT REPORT		Approved by: Technical Manager
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7.7.6 MIMO Radiated Band Edge Measurements (80MHz BW – Full Tone – 996T)

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

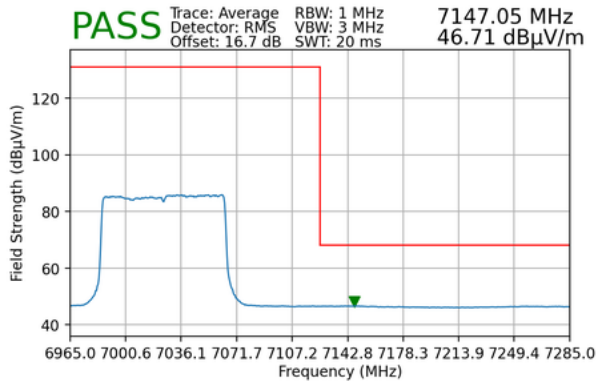


Plot 7-537. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 5 – 996T)

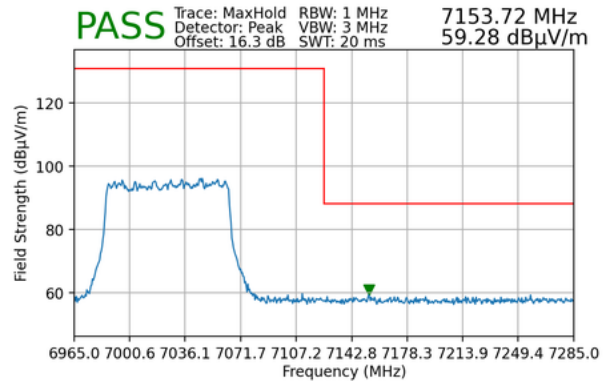


Plot 7-538. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 5 – 996T)

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



Plot 7-539. Radiated Upper Band Edge Plot MIMO (Average – UNII Band 8 – 996T)

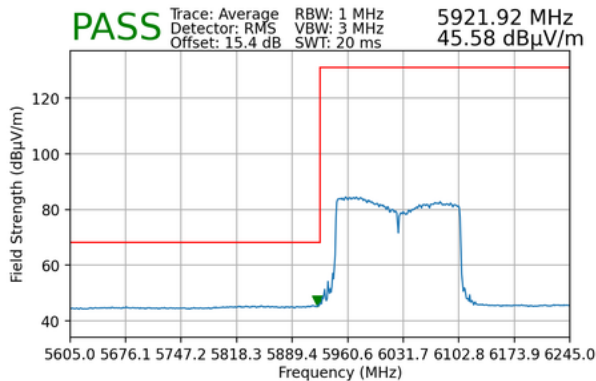


Plot 7-540. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 8 – 996T)

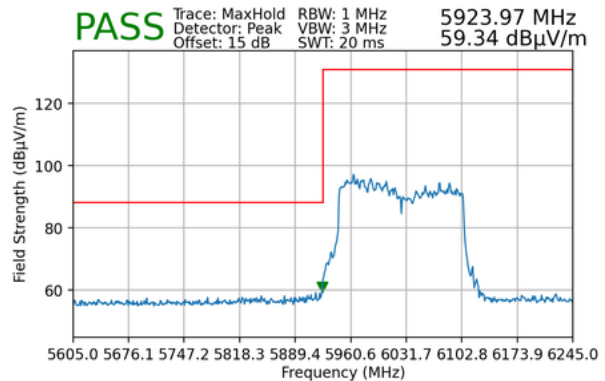
FCC ID: PY7-84558E	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2302060006-09-R3.PY7	Test Dates: 01/30/2023 – 04/17/2023	EUT Type: Portable Handset	Page 328 of 330

7.7.7 MIMO Radiated Band Edge Measurements (160MHz BW – Full Tone – 2x996T)

Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
RU Index	67
Distance of Measurements:	3 Meters
Operating Frequency:	6025MHz
Channel:	15

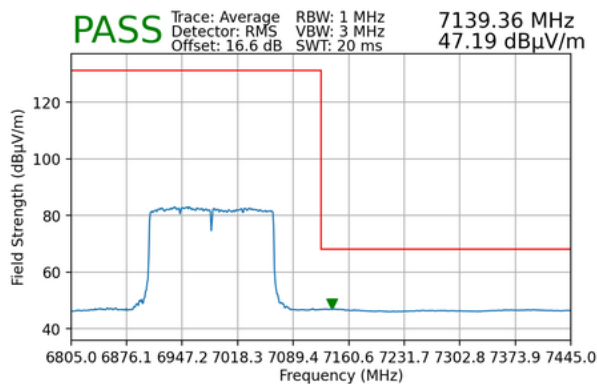


Plot 7-541. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 5 – 2x996T)

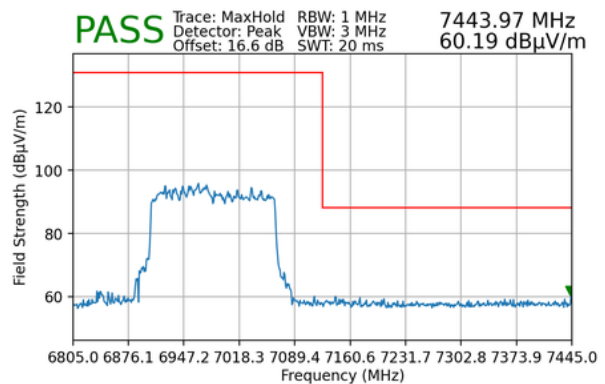


Plot 7-542. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 5 – 2x996T)

Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
RU Index	67
Distance of Measurements:	3 Meters
Operating Frequency:	6985MHz
Channel:	207



Plot 7-543. Radiated Upper Band Edge Plot MIMO (Average – UNII Band 8 – 2x996T)



Plot 7-544. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 8 – 2x996T)

FCC ID: PY7-84558E	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2302060006-09-R3.PY7	Test Dates: 01/30/2023 – 04/17/2023	EUT Type: Portable Handset	Page 329 of 330

8 CONCLUSION

The data collected relate only the item(s) tested and show that the **Sony Portable Handset FCC: PY7-84558E** is in compliance with FCC Part Subpart E (15.407) of the FCC rules for operation as a client device.

FCC ID: PY7-84558E	MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2302060006-09-R3.PY7	Test Dates: 01/30/2023 – 04/17/2023	EUT Type: Portable Handset	Page 330 of 330