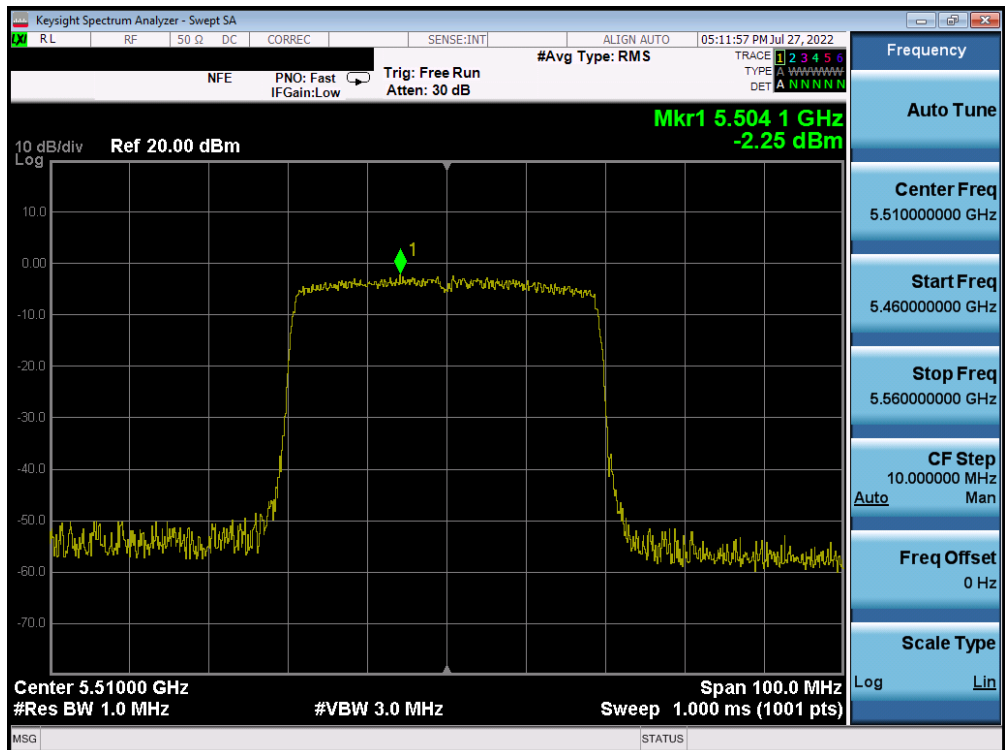
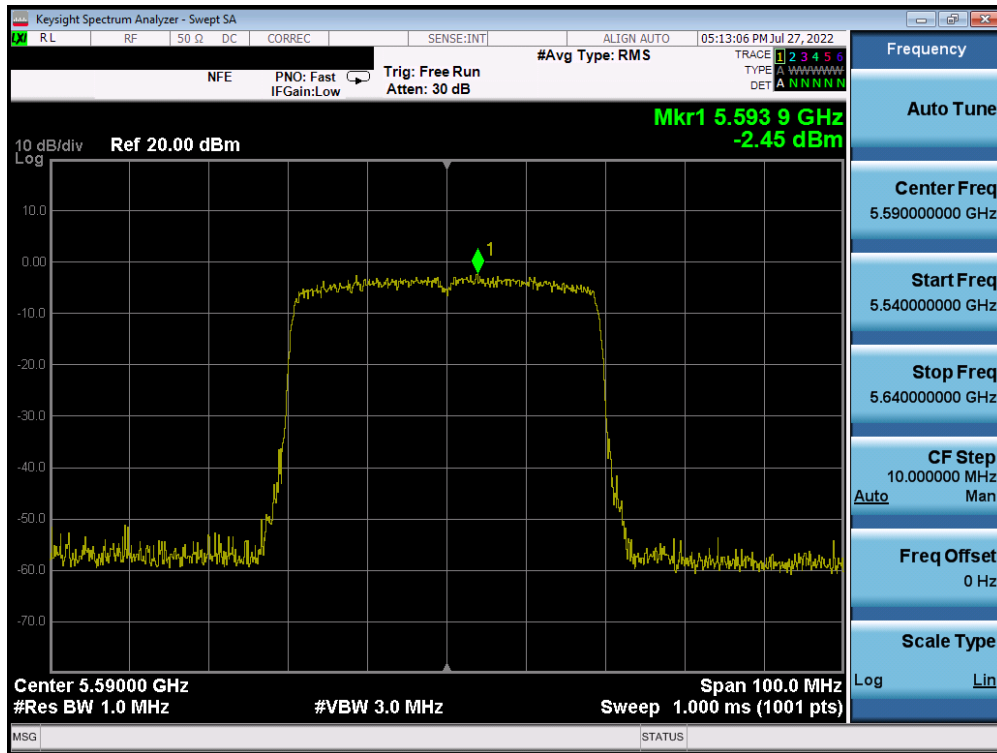


Plot 7-239. Power Spectral Density Plot MIMO ANT2 (802.11n – 40MHz BW (UNII Band 2C) – Ch. 142)

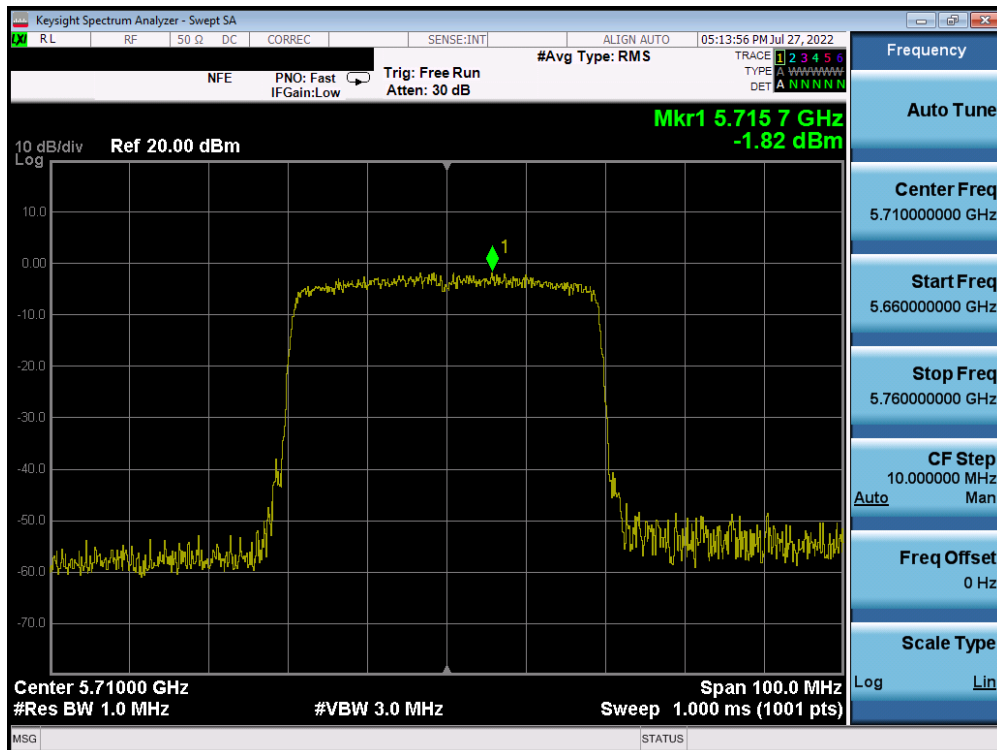


Plot 7-240. Power Spectral Density Plot MIMO ANT2 (802.11ax – 40MHz BW (UNII Band 2C) – Ch. 102)

FCC ID: PY7-76056F	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2205240663-15.PY7	Test Dates: 6/3/2022-7/29/2022	EUT Type: Portable Handset	Page 151 of 210

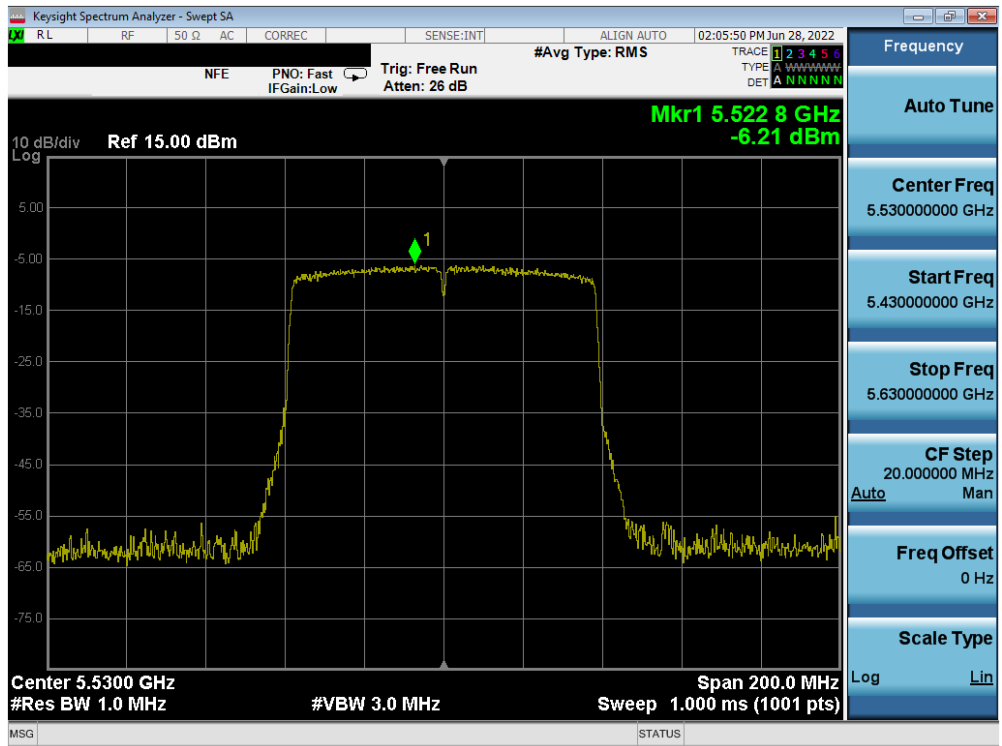


Plot 7-241. Power Spectral Density Plot MIMO ANT2 (802.11ax – 40MHz BW (UNII Band 2C) – Ch. 118)

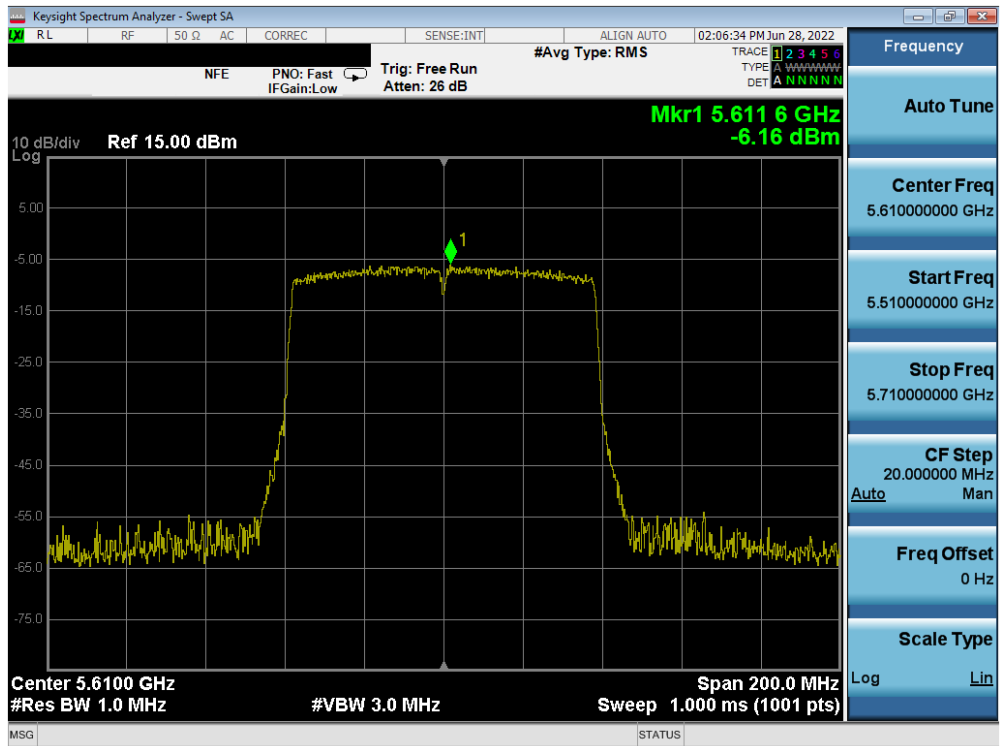


Plot 7-242. Power Spectral Density Plot MIMO ANT2 (802.11ax – 40MHz BW (UNII Band 2C) – Ch. 142)

FCC ID: PY7-76056F	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2205240663-15.PY7	Test Dates: 6/3/2022-7/29/2022	EUT Type: Portable Handset	Page 152 of 210

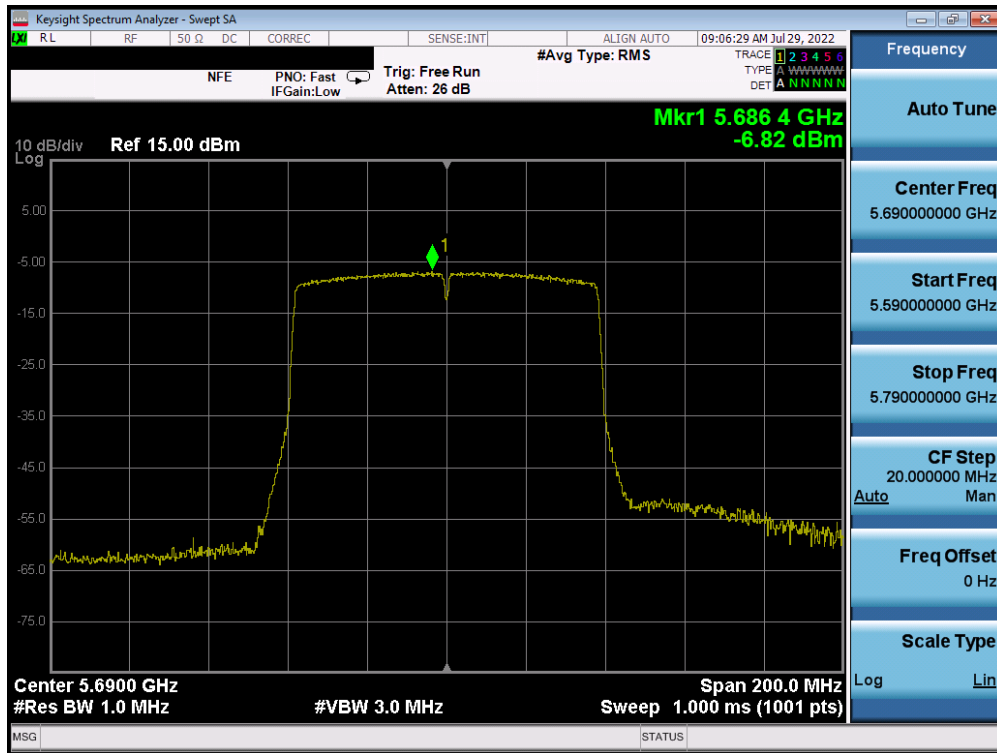


Plot 7-243. Power Spectral Density Plot MIMO ANT2 (802.11ac – 80MHz BW (UNII Band 2C) – Ch. 106)

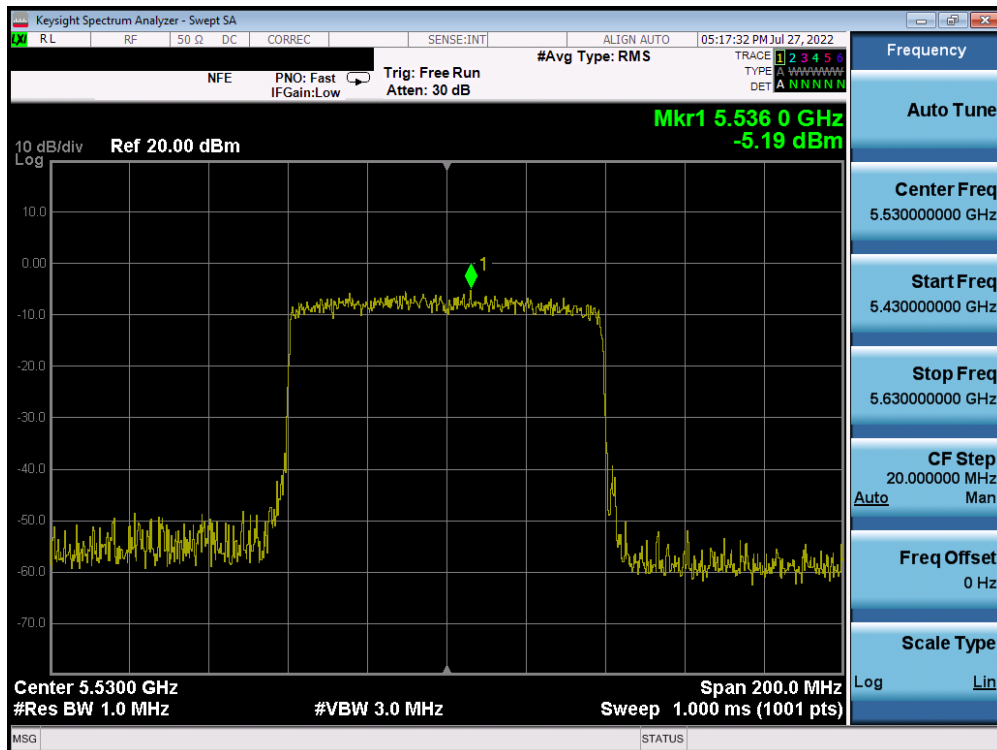


Plot 7-244. Power Spectral Density Plot MIMO ANT2 (802.11ac – 80MHz BW (UNII Band 2C) – Ch. 122)

FCC ID: PY7-76056F	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2205240663-15.PY7	Test Dates: 6/3/2022-7/29/2022	EUT Type: Portable Handset	Page 153 of 210

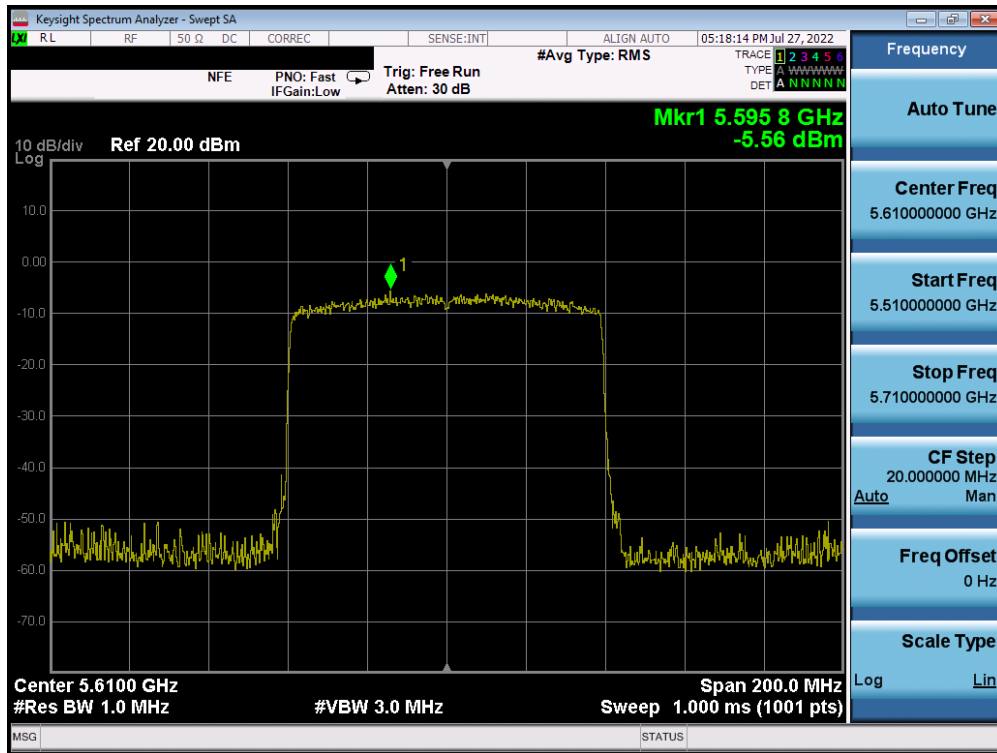


Plot 7-245. Power Spectral Density Plot MIMO ANT2 (802.11ac – 80MHz BW (UNII Band 2C) – Ch. 138)

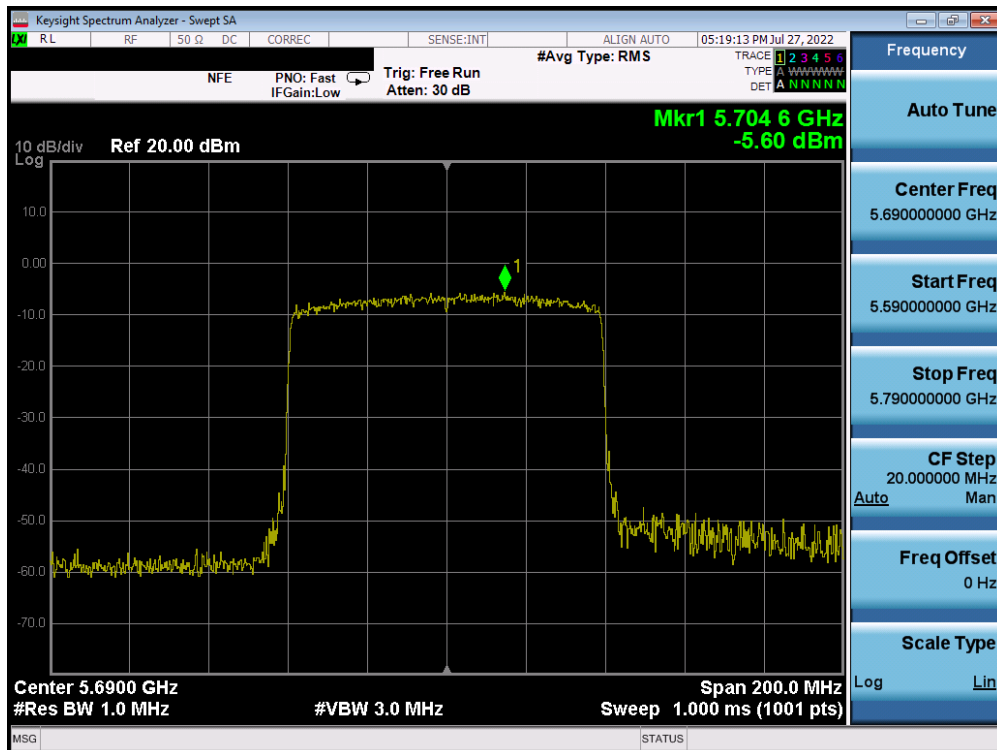


Plot 7-246. Power Spectral Density Plot MIMO ANT2 (802.11ax – 80MHz BW (UNII Band 2C) – Ch. 106)

MEASUREMENT REPORT (CERTIFICATION)			Approved by: Technical Manager
FCC ID: PY7-76056F	Test Report S/N: 1M2205240663-15.PY7	Test Dates: 6/3/2022-7/29/2022	Page 154 of 210
EUT Type: Portable Handset			

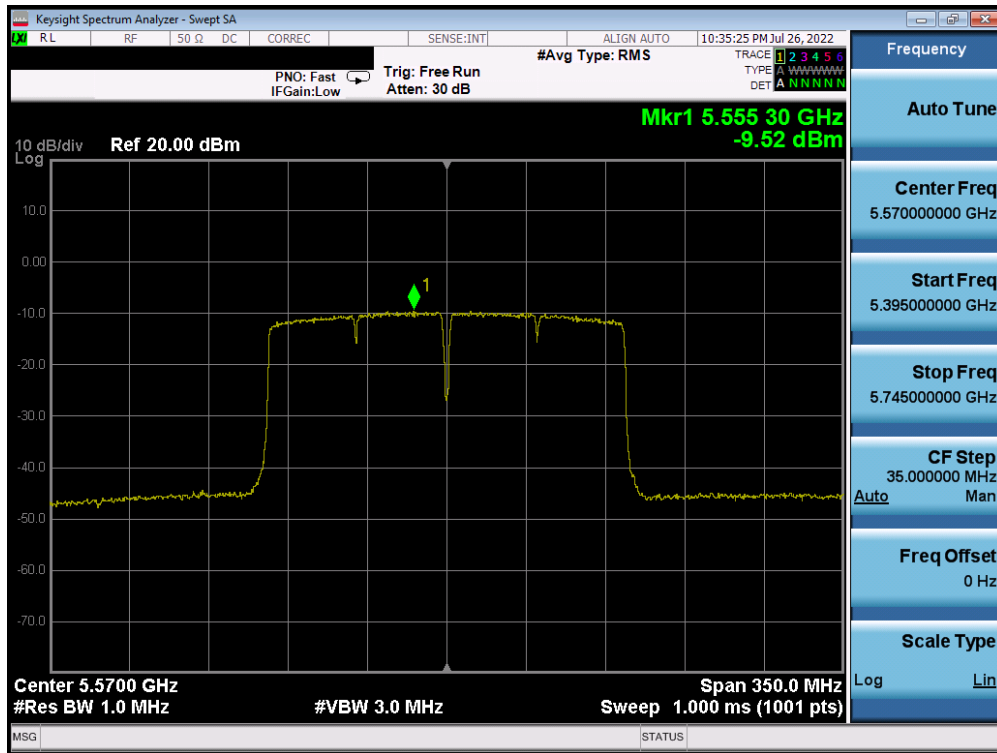


Plot 7-247. Power Spectral Density Plot MIMO ANT2 (802.11ax – 80MHz BW (UNII Band 2C) – Ch. 122)

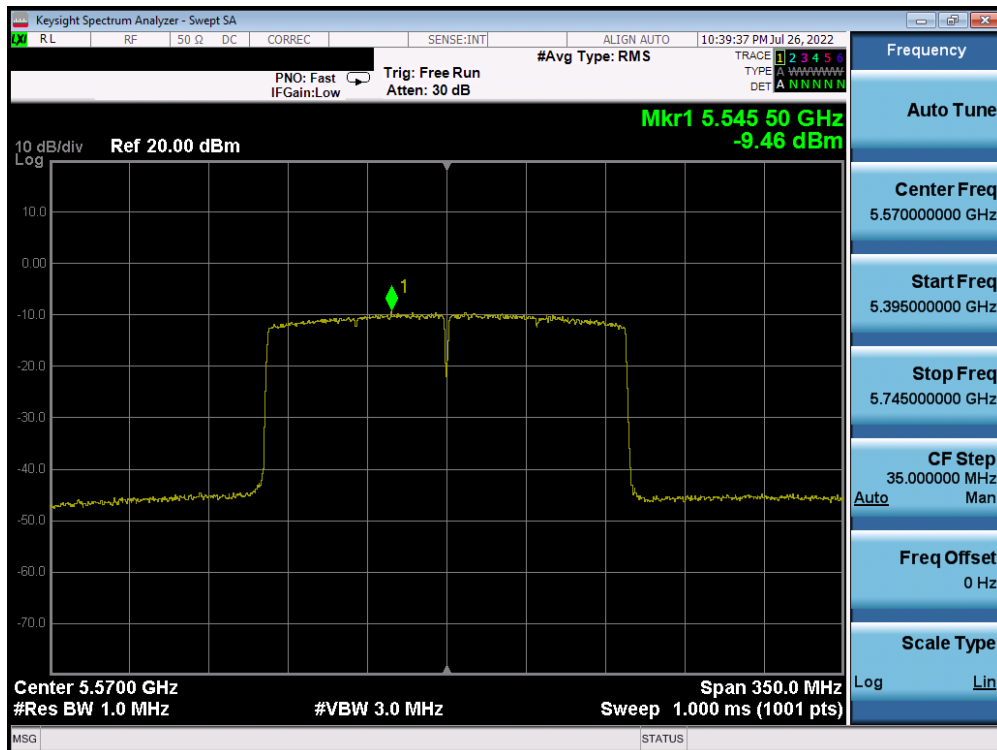


Plot 7-248. Power Spectral Density Plot MIMO ANT2 (802.11ax – 80MHz BW (UNII Band 2C) – Ch. 138)

FCC ID: PY7-76056F		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2205240663-15.PY7	Test Dates: 6/3/2022-7/29/2022	EUT Type: Portable Handset	Page 155 of 210	



Plot 7-249. Power Spectral Density Plot MIMO ANT2 (802.11ac – 160MHz BW (UNII Band 2C) – Ch. 114)



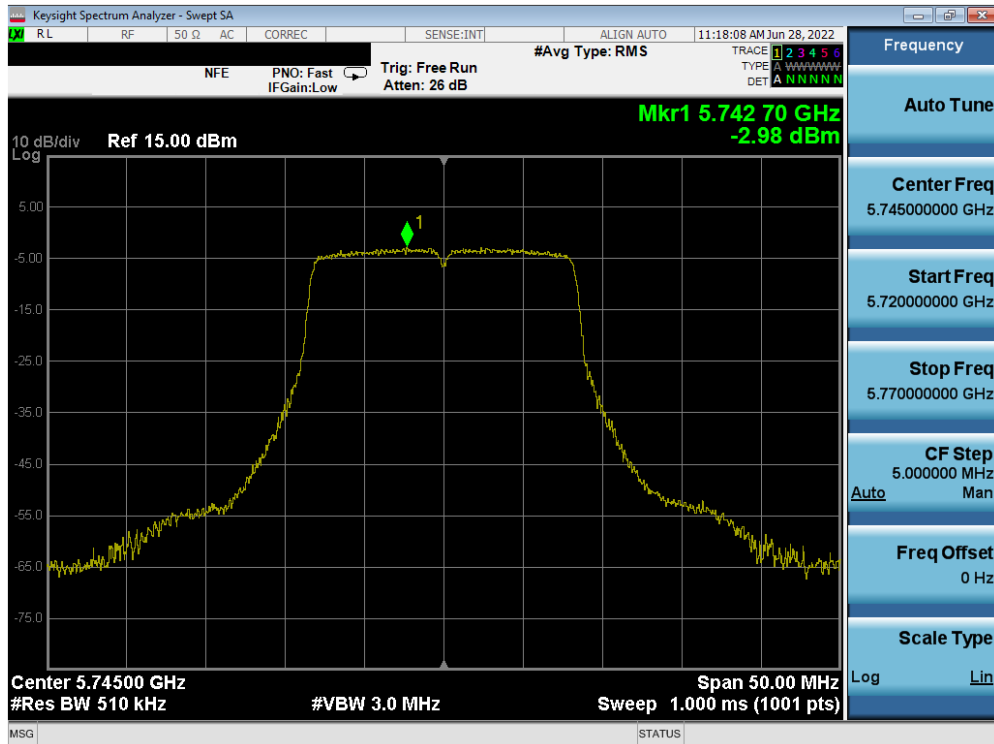
Plot 7-250. Power Spectral Density Plot MIMO ANT2 (802.11ax – 160MHz BW (UNII Band 2C) – Ch. 114)

FCC ID: PY7-76056F	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2205240663-15.PY7	Test Dates: 6/3/2022-7/29/2022	EUT Type: Portable Handset	Page 156 of 210

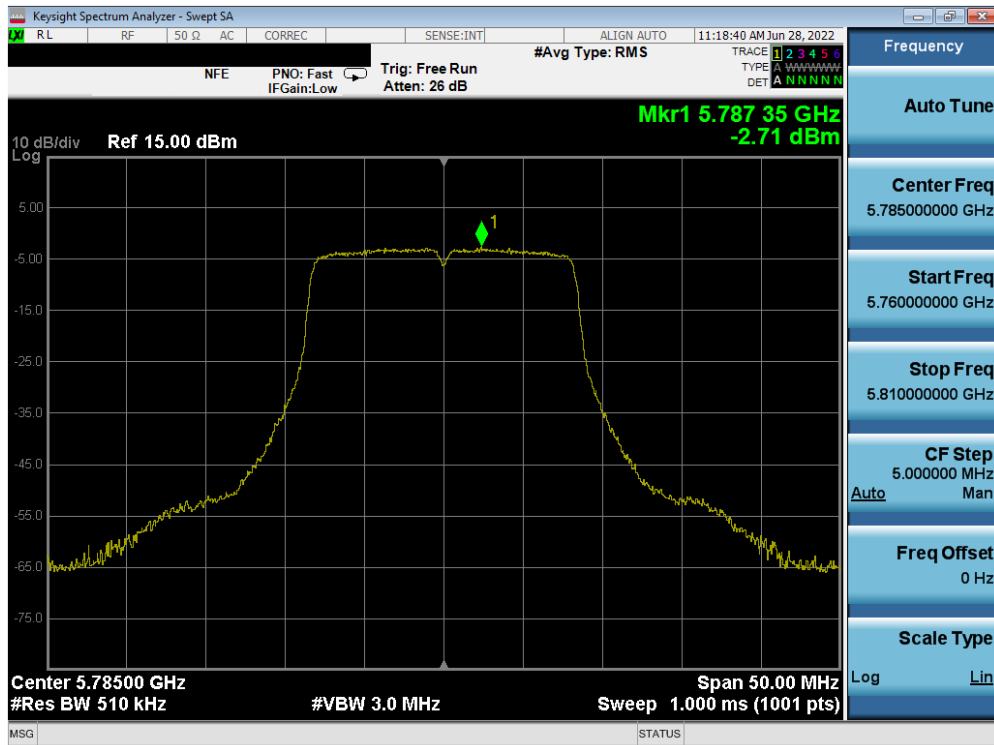
	Frequency [MHz]	Channel No.	802.11 Mode	Data Rate [Mbps]	Antenn-1 Power Density [dBm]	Antenn-2 Power Density [dBm]	Summed MIMO Power Density [dBm]	Max Permissible Power Density [dBm/500kHz]	Margin [dB]
Band 3	5745	149	a	6	-2.98	-2.62	0.21	30.0	-29.79
	5785	157	a	6	-2.71	-2.84	0.24	30.0	-29.76
	5825	165	a	6	-2.76	-2.93	0.17	30.0	-29.83
	5745	149	n (20MHz)	6.5/7.2 (MCS0)	-3.77	-3.63	-0.69	30.0	-30.69
	5785	157	n (20MHz)	6.5/7.2 (MCS0)	-3.25	-3.20	-0.21	30.0	-30.21
	5825	165	n (20MHz)	6.5/7.2 (MCS0)	-3.15	-2.92	-0.02	30.0	-30.02
	5745	149	ax (20MHz)	6.5/7.2 (MCS0)	-1.89	-1.84	1.15	30.0	-28.85
	5785	157	ax (20MHz)	6.5/7.2 (MCS0)	-2.93	-1.86	0.65	30.0	-29.35
	5825	165	ax (20MHz)	6.5/7.2 (MCS0)	-3.04	-1.93	0.56	30.0	-29.44
	5755	151	n (40MHz)	13.5/15 (MCS0)	-6.59	-6.65	-3.61	30.0	-33.61
	5795	159	n (40MHz)	13.5/15 (MCS0)	-6.01	-6.61	-3.29	30.0	-33.29
	5755	151	ax (40MHz)	13.5/15 (MCS0)	-5.49	-4.62	-2.02	30.0	-32.02
	5795	159	ax (40MHz)	13.5/15 (MCS0)	-5.33	-4.98	-2.14	30.0	-32.14
	5775	155	ac (80MHz)	29.3/32.5 (MCS0)	-6.99	-5.99	-3.45	30.0	-33.45
	5775	155	ax (80MHz)	29.3/32.5 (MCS0)	-9.04	-8.20	-5.59	30.0	-35.59

Table 7-18. Band 3 Conducted Power Spectral Density Measurements MIMO

FCC ID: PY7-76056F	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2205240663-15.PY7	Test Dates: 6/3/2022-7/29/2022	EUT Type: Portable Handset	Page 157 of 210

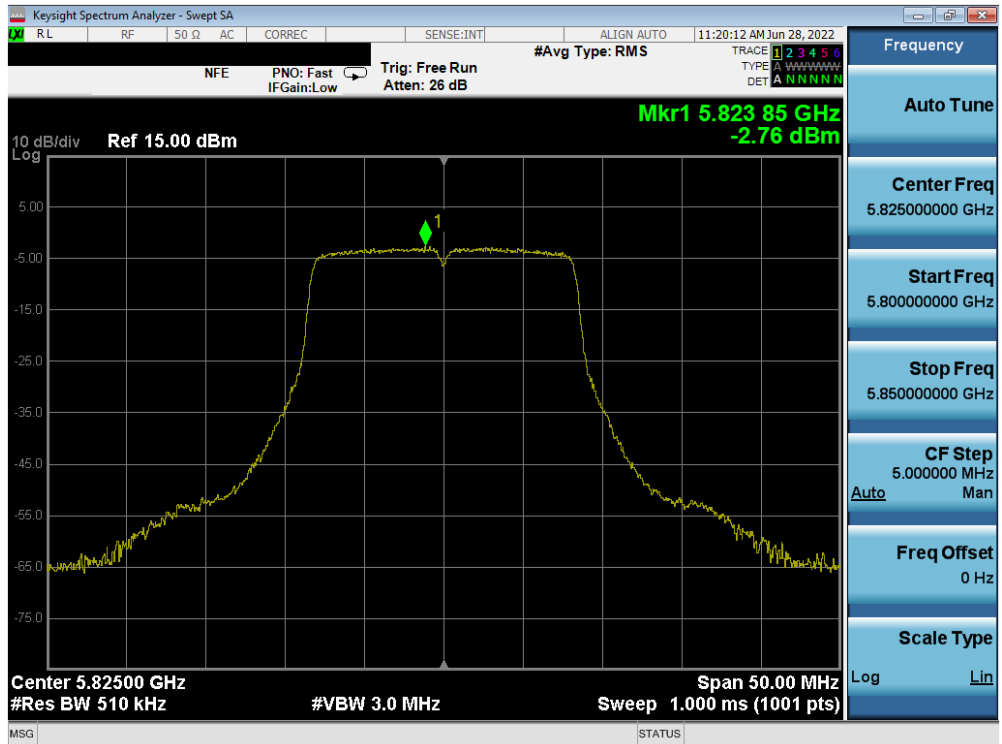


Plot 7-251. Power Spectral Density Plot MIMO ANT1 (802.11a (UNII Band 3) – Ch. 149)

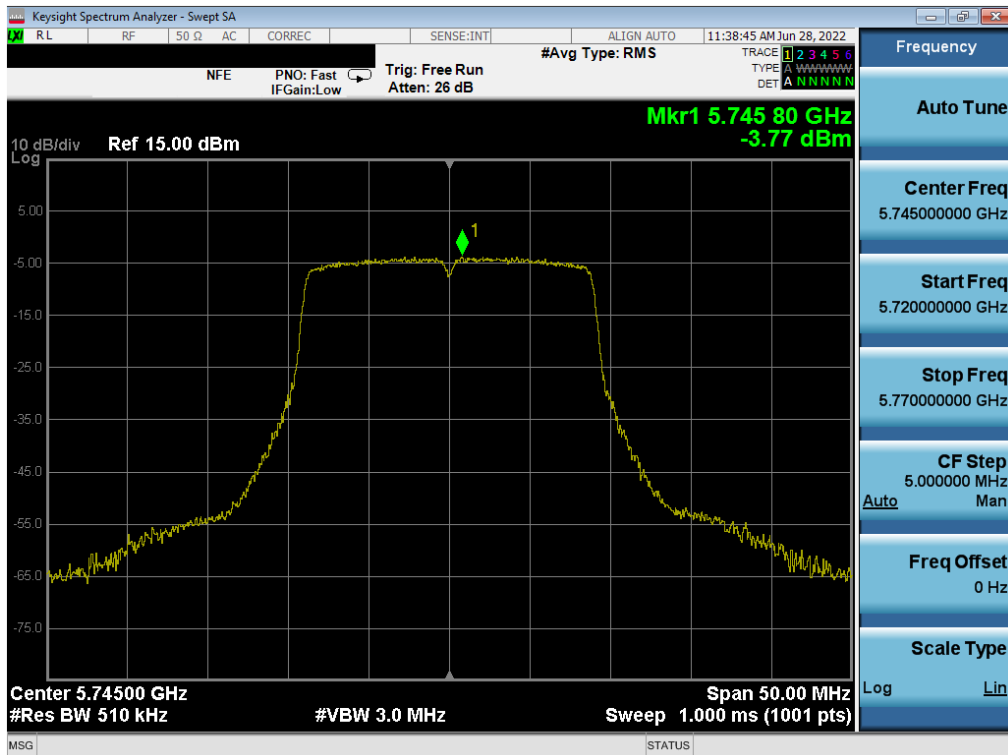


Plot 7-252. Power Spectral Density Plot MIMO ANT1 (802.11a (UNII Band 3) – Ch. 157)

FCC ID: PY7-76056F	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2205240663-15.PY7	Test Dates: 6/3/2022-7/29/2022	EUT Type: Portable Handset	Page 158 of 210

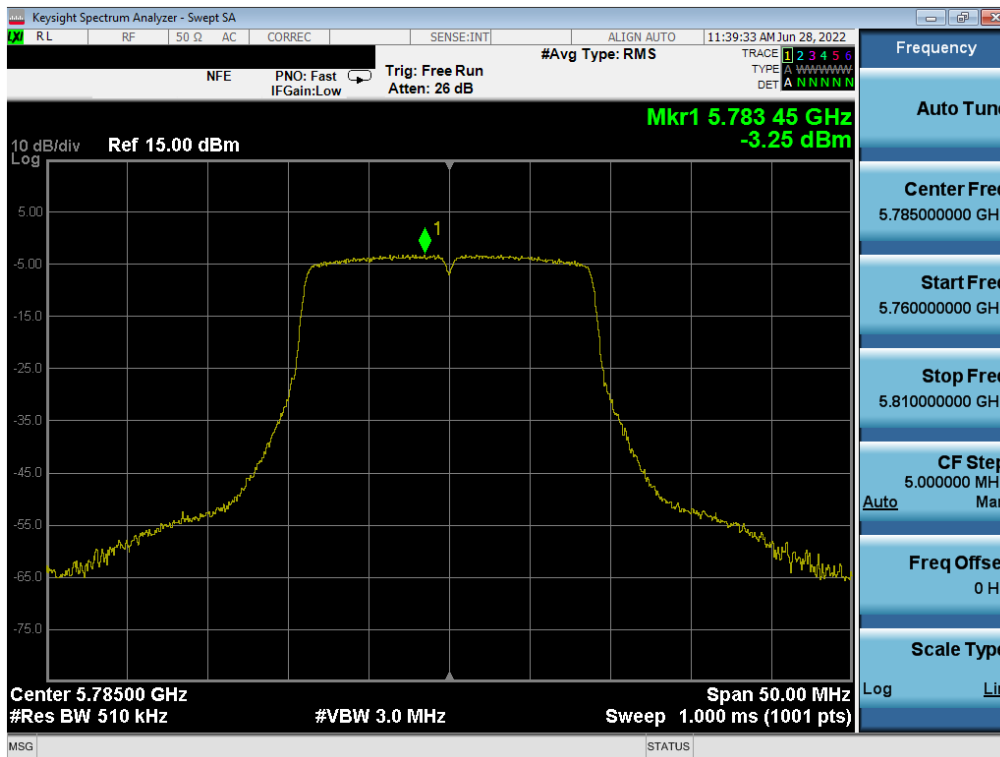


Plot 7-253. Power Spectral Density Plot MIMO ANT1 (802.11a (UNII Band 3) – Ch. 165)

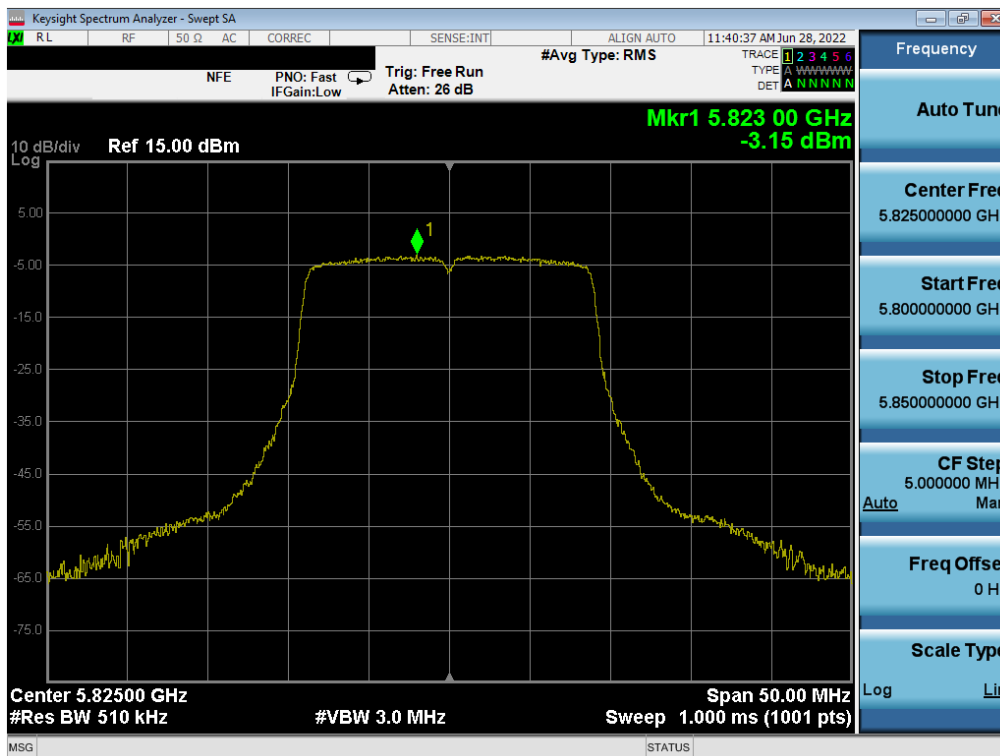


Plot 7-254. Power Spectral Density Plot MIMO ANT1 (802.11n – 20MHz BW (UNII Band 3) – Ch. 149)

FCC ID: PY7-76056F	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2205240663-15.PY7	Test Dates: 6/3/2022-7/29/2022	EUT Type: Portable Handset	Page 159 of 210

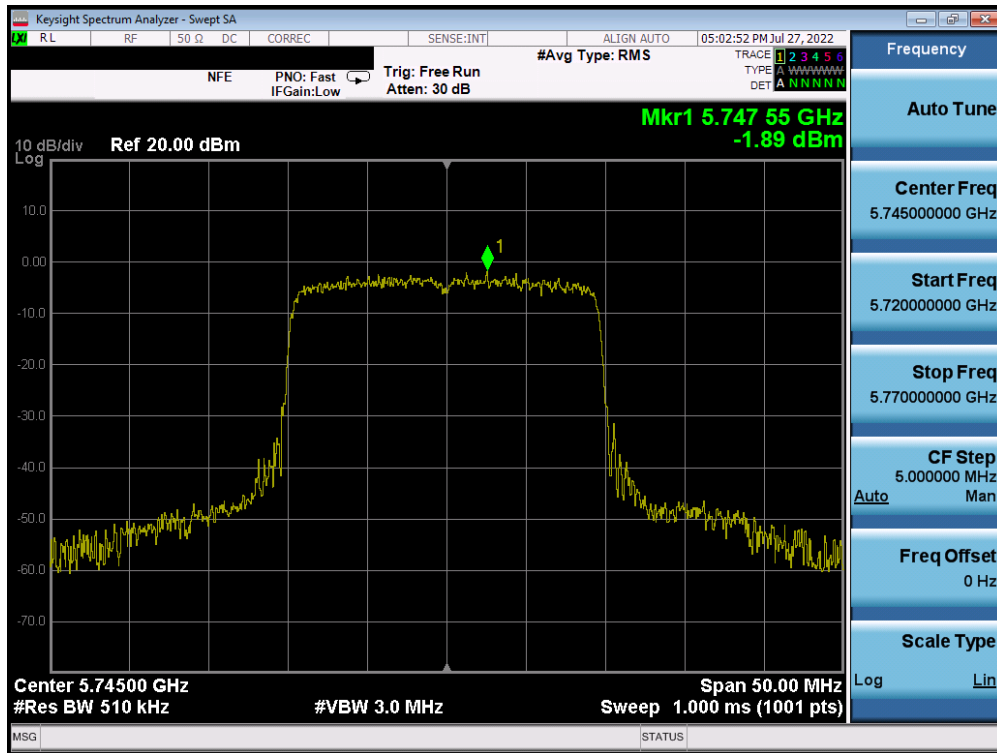


Plot 7-255. Power Spectral Density Plot MIMO ANT1 (802.11n – 20MHz BW (UNII Band 3) – Ch. 157)

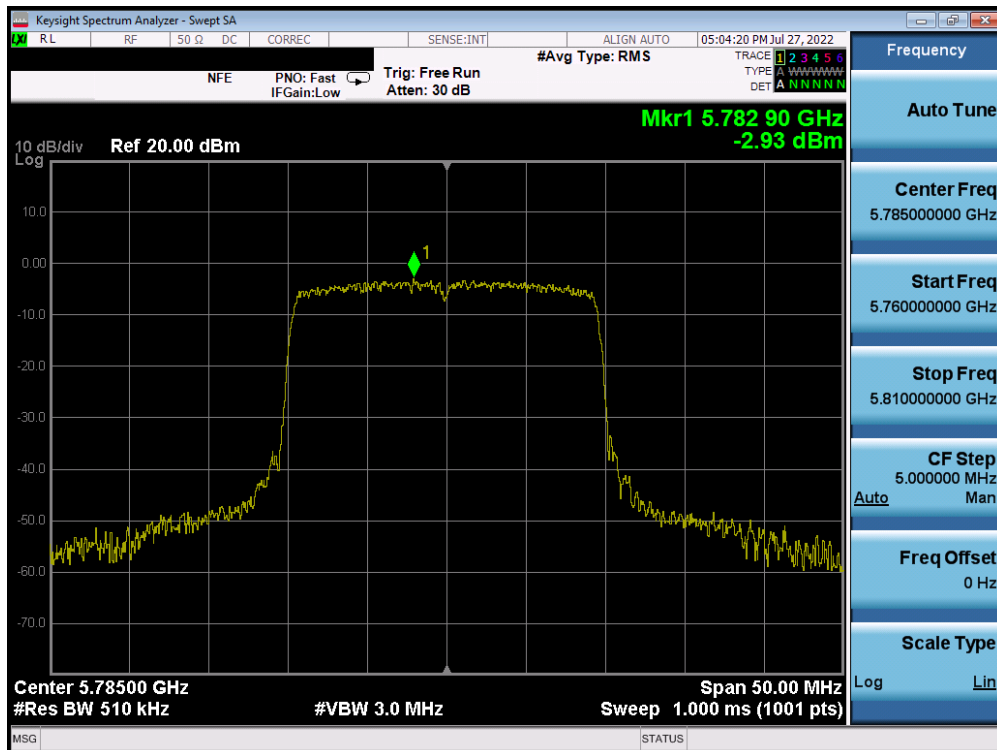


Plot 7-256. Power Spectral Density Plot MIMO ANT1 (802.11n – 20MHz BW (UNII Band 3) – Ch. 165)

FCC ID: PY7-76056F	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2205240663-15.PY7	Test Dates: 6/3/2022-7/29/2022	EUT Type: Portable Handset	Page 160 of 210

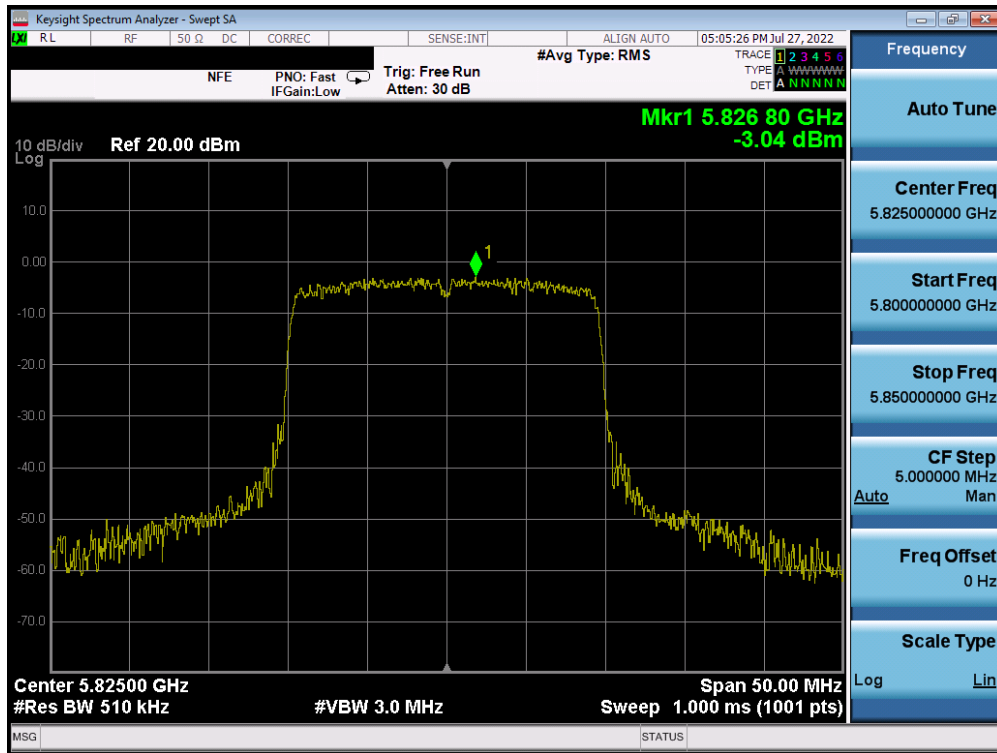


Plot 7-257. Power Spectral Density Plot MIMO ANT1 (802.11ax – 20MHz BW (UNII Band 3) – Ch. 149)

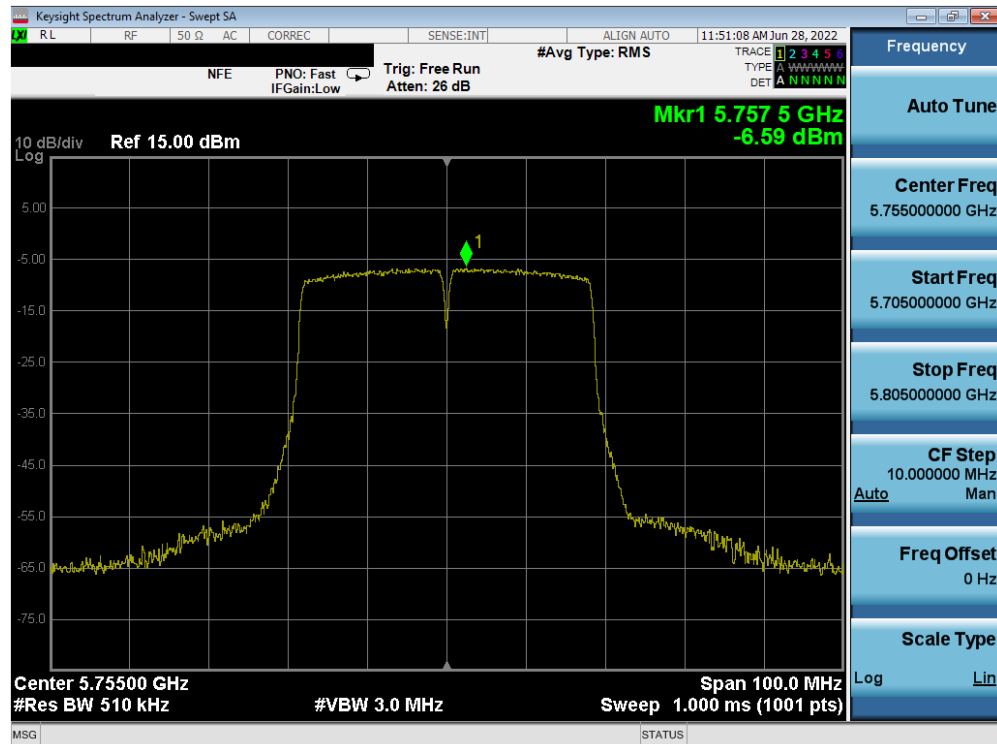


Plot 7-258. Power Spectral Density Plot MIMO ANT1 (802.11ax – 20MHz BW (UNII Band 3) – Ch. 157)

FCC ID: PY7-76056F	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2205240663-15.PY7	Test Dates: 6/3/2022-7/29/2022	EUT Type: Portable Handset	Page 161 of 210

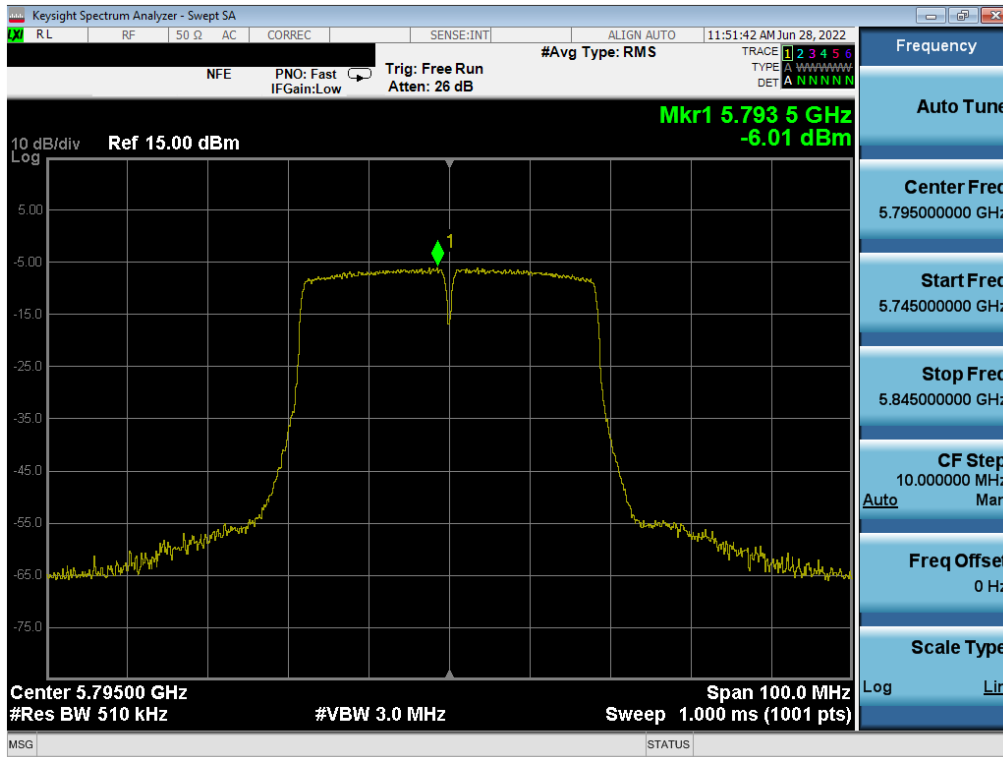


Plot 7-259. Power Spectral Density Plot MIMO ANT1 (802.11ax – 20MHz BW (UNII Band 3) – Ch. 165)

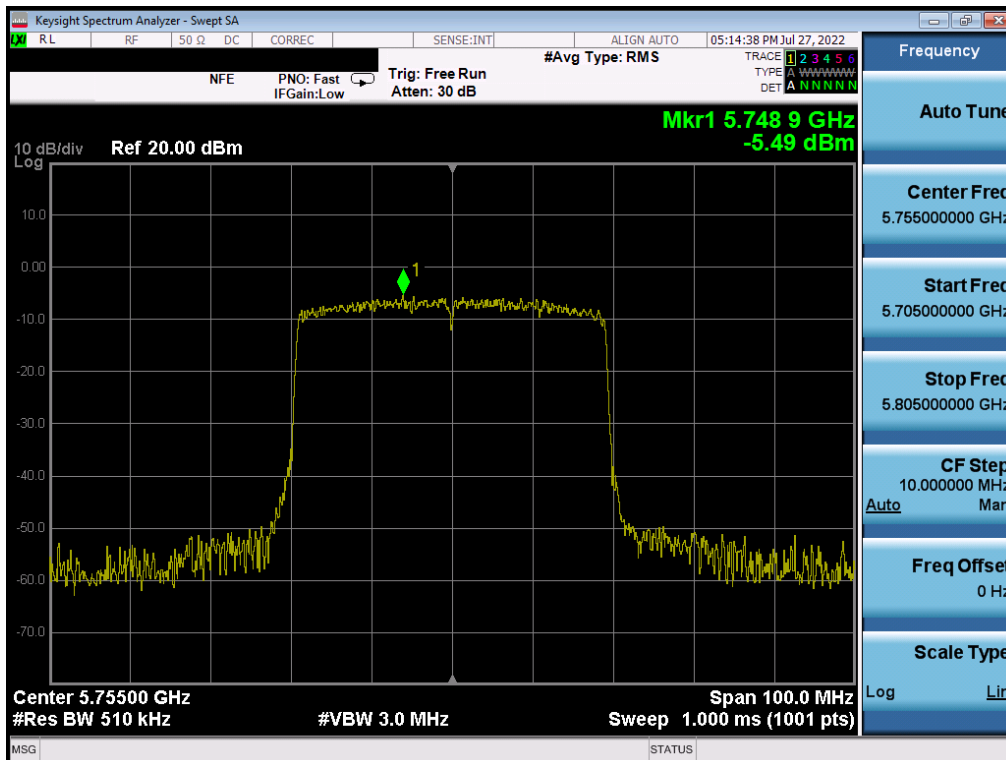


Plot 7-260. Power Spectral Density Plot MIMO ANT1 (802.11n – 40MHz BW (UNII Band 3) – Ch. 151)

FCC ID: PY7-76056F		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2205240663-15.PY7	Test Dates: 6/3/2022-7/29/2022	EUT Type: Portable Handset	Page 162 of 210	

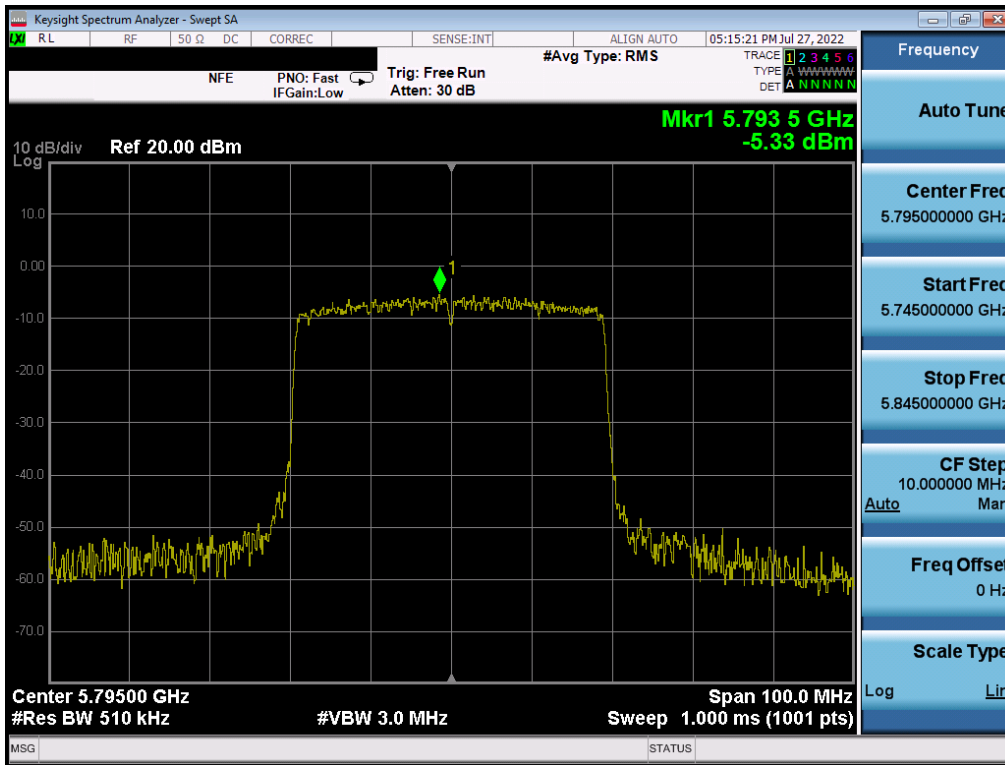


Plot 7-261. Power Spectral Density Plot MIMO ANT1 (802.11n – 40MHz BW (UNII Band 3) – Ch. 159)

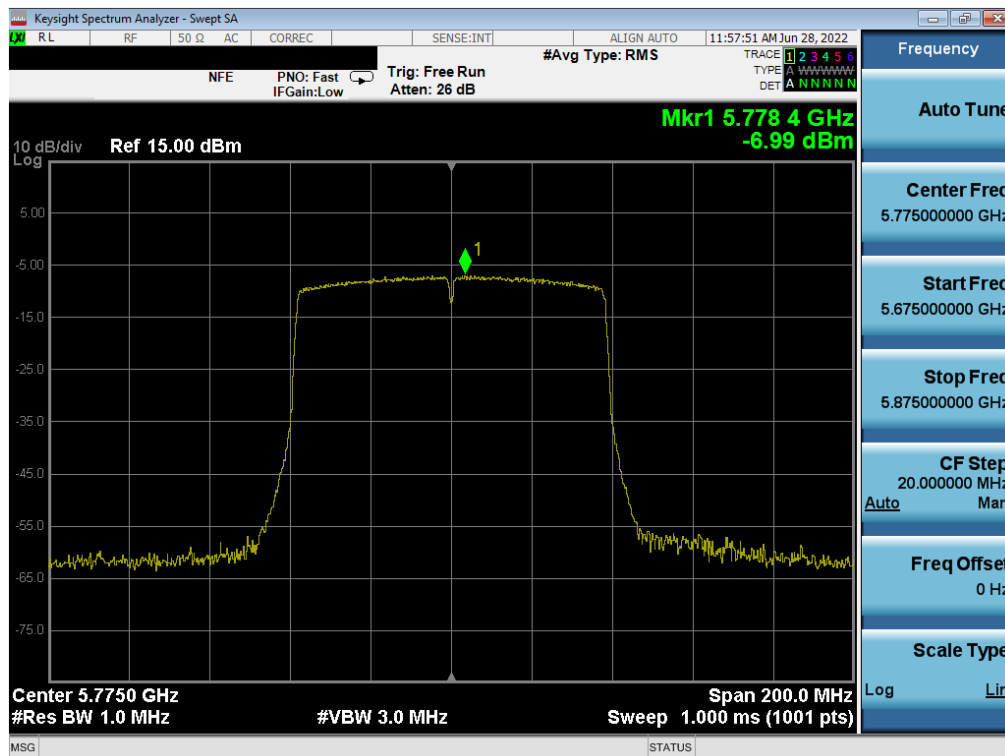


Plot 7-262. Power Spectral Density Plot MIMO ANT1 (802.11ax – 40MHz BW (UNII Band 3) – Ch. 151)

FCC ID: PY7-76056F	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2205240663-15.PY7	Test Dates: 6/3/2022-7/29/2022	EUT Type: Portable Handset	Page 163 of 210

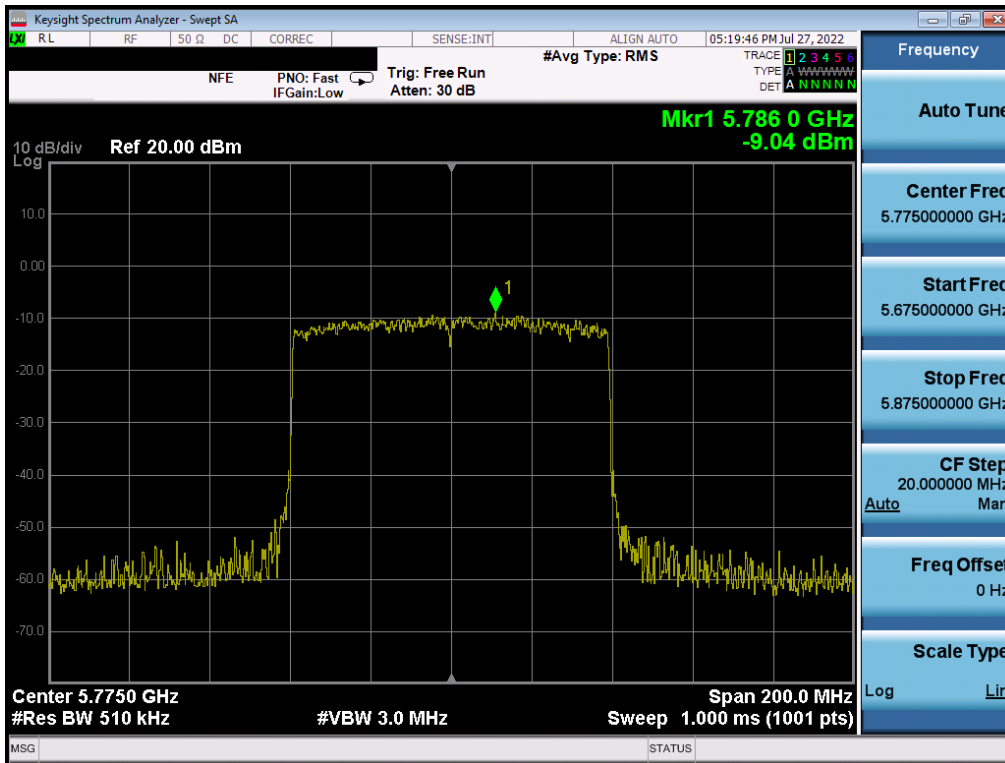


Plot 7-263. Power Spectral Density Plot MIMO ANT1 (802.11ax – 40MHz BW (UNII Band 3) – Ch. 159)

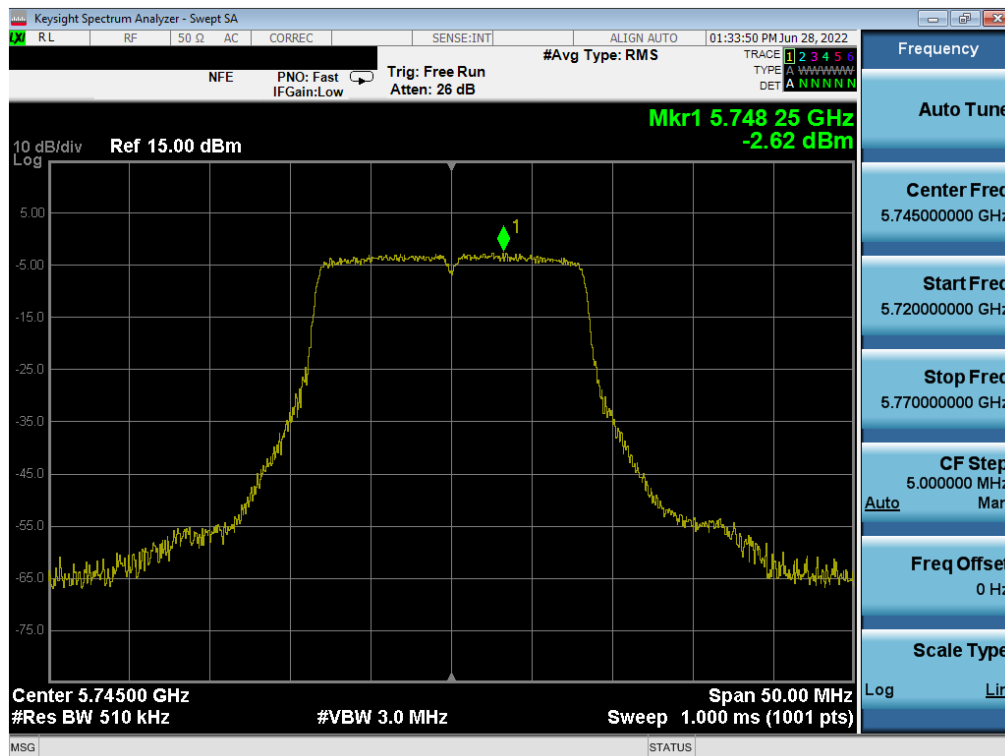


Plot 7-264. Power Spectral Density Plot MIMO ANT1 (802.11ac – 80MHz BW (UNII Band 3) – Ch. 155)

FCC ID: PY7-76056F	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2205240663-15.PY7	Test Dates: 6/3/2022-7/29/2022	EUT Type: Portable Handset	Page 164 of 210

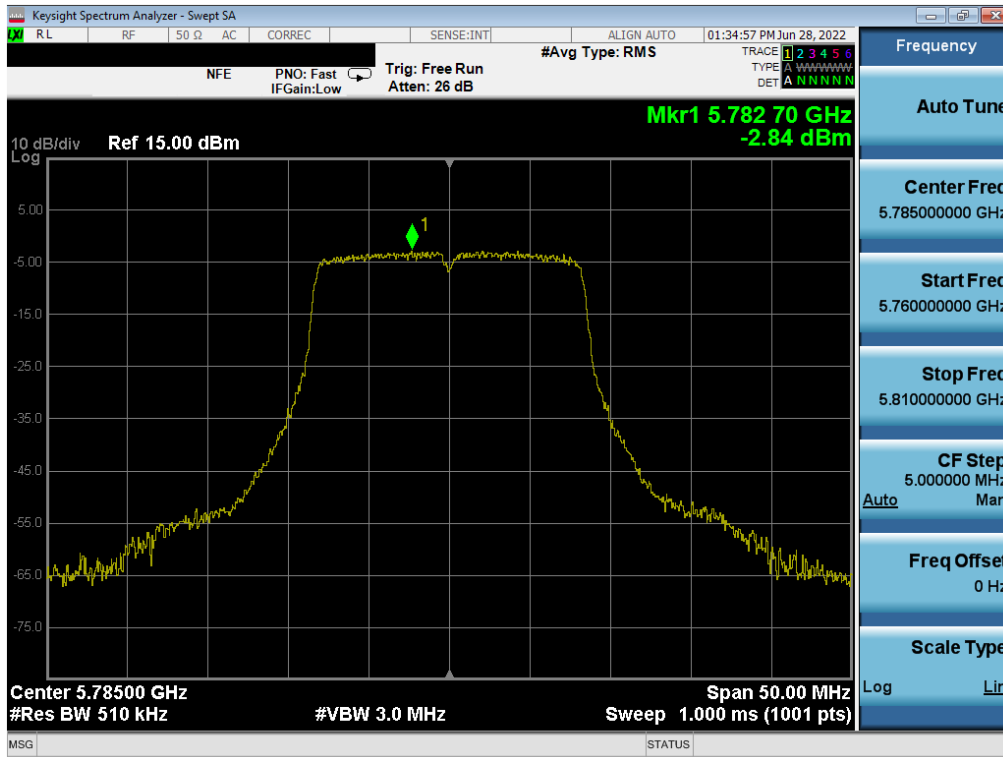


Plot 7-265. Power Spectral Density Plot MIMO ANT1 (802.11ax – 80MHz BW (UNII Band 3) – Ch. 155)

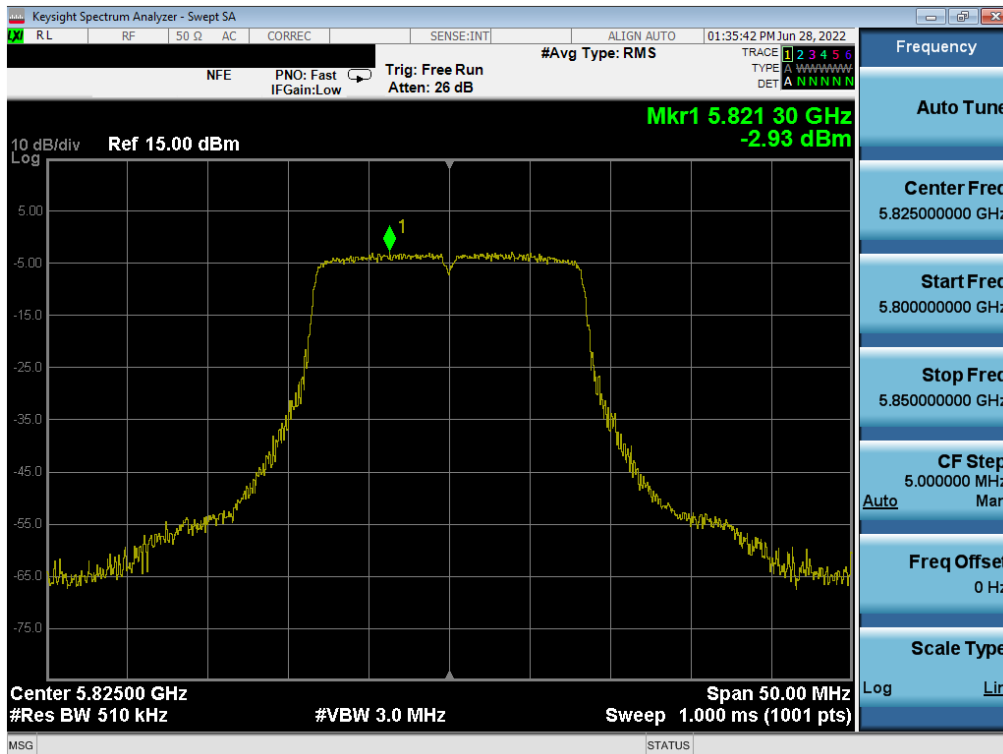


Plot 7-266. Power Spectral Density Plot MIMO ANT2 (802.11a (UNII Band 3) – Ch. 149)

FCC ID: PY7-76056F	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
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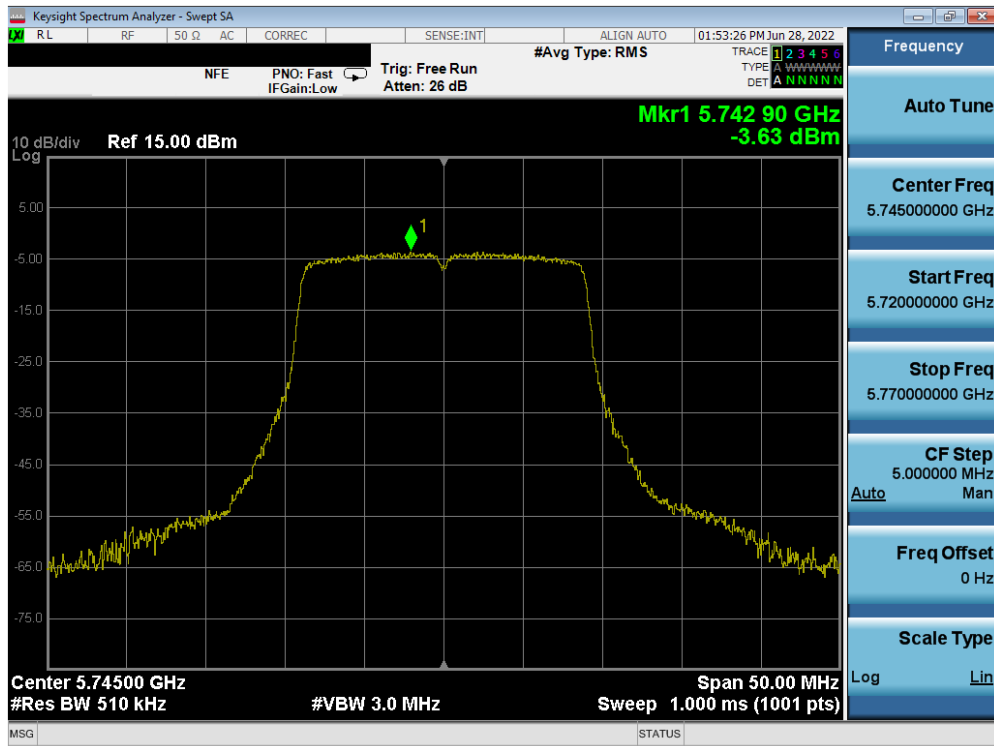


Plot 7-267. Power Spectral Density Plot MIMO ANT2 (802.11a (UNII Band 3) – Ch. 157)

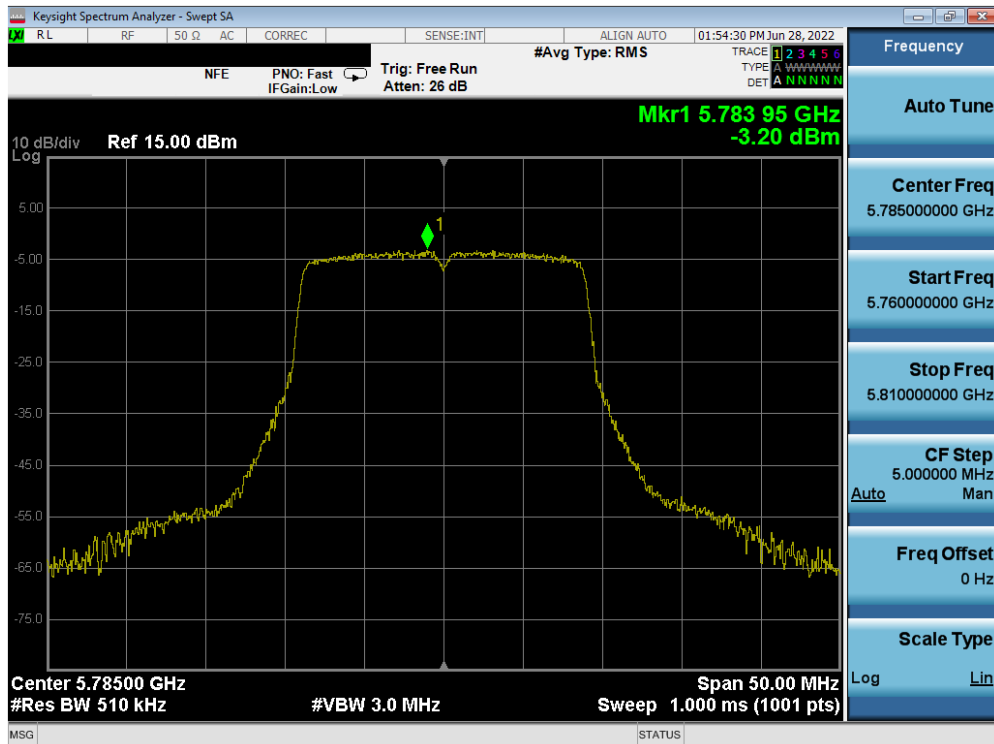


Plot 7-268. Power Spectral Density Plot MIMO ANT2 (802.11a (UNII Band 3) – Ch. 165)

FCC ID: PY7-76056F	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
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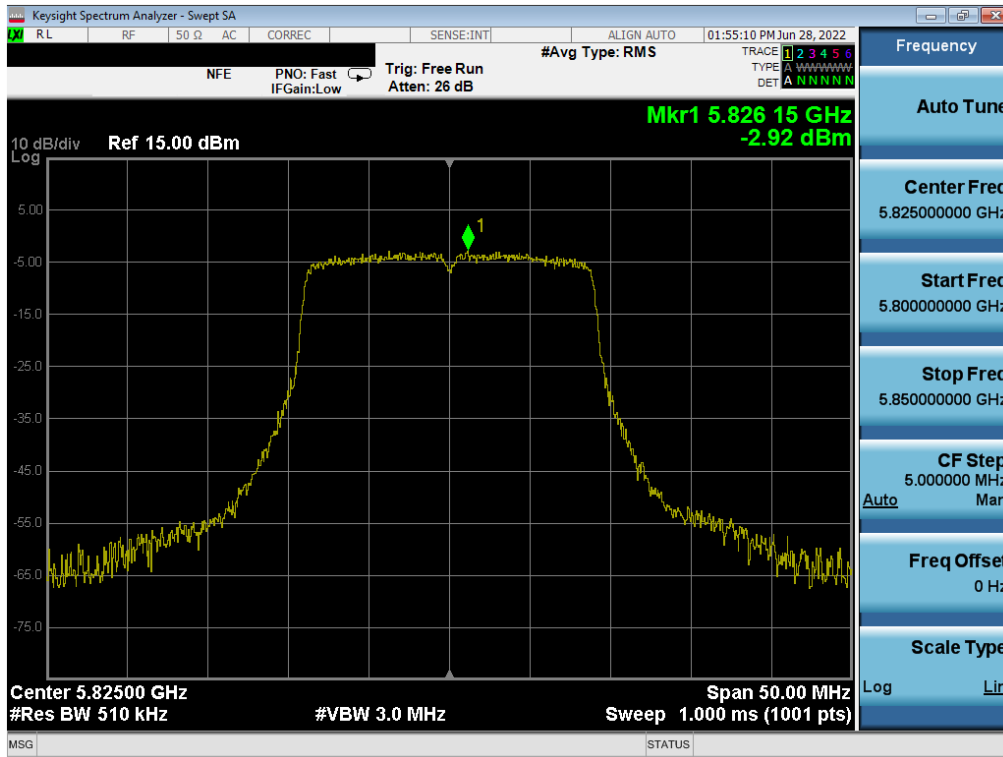


Plot 7-269. Power Spectral Density Plot MIMO ANT2 (802.11n – 20MHz BW (UNII Band 3) – Ch. 149)

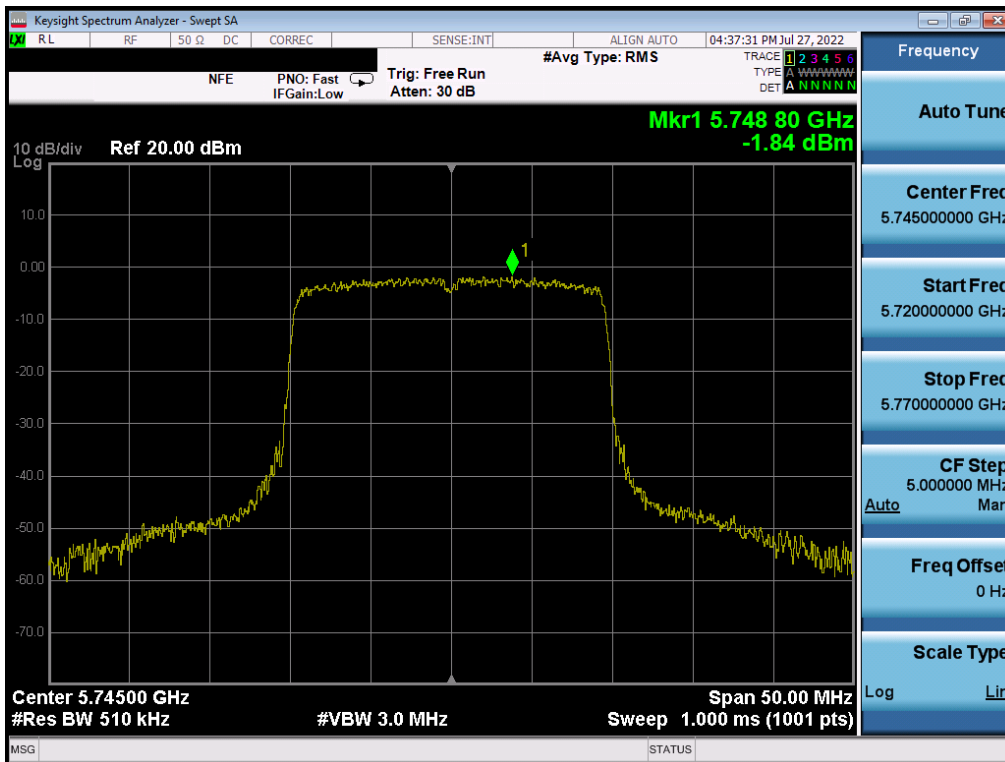


Plot 7-270. Power Spectral Density Plot MIMO ANT2 (802.11n – 20MHz BW (UNII Band 3) – Ch. 157)

FCC ID: PY7-76056F	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
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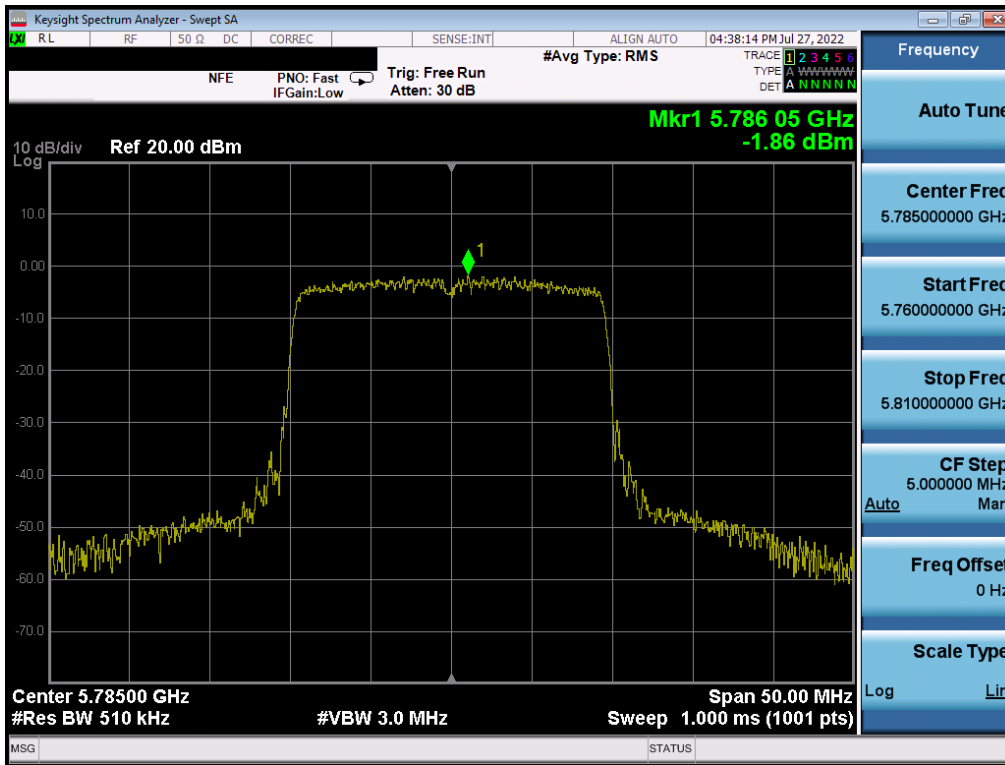


Plot 7-271. Power Spectral Density Plot MIMO ANT2 (802.11n – 20MHz BW (UNII Band 3) – Ch. 165)

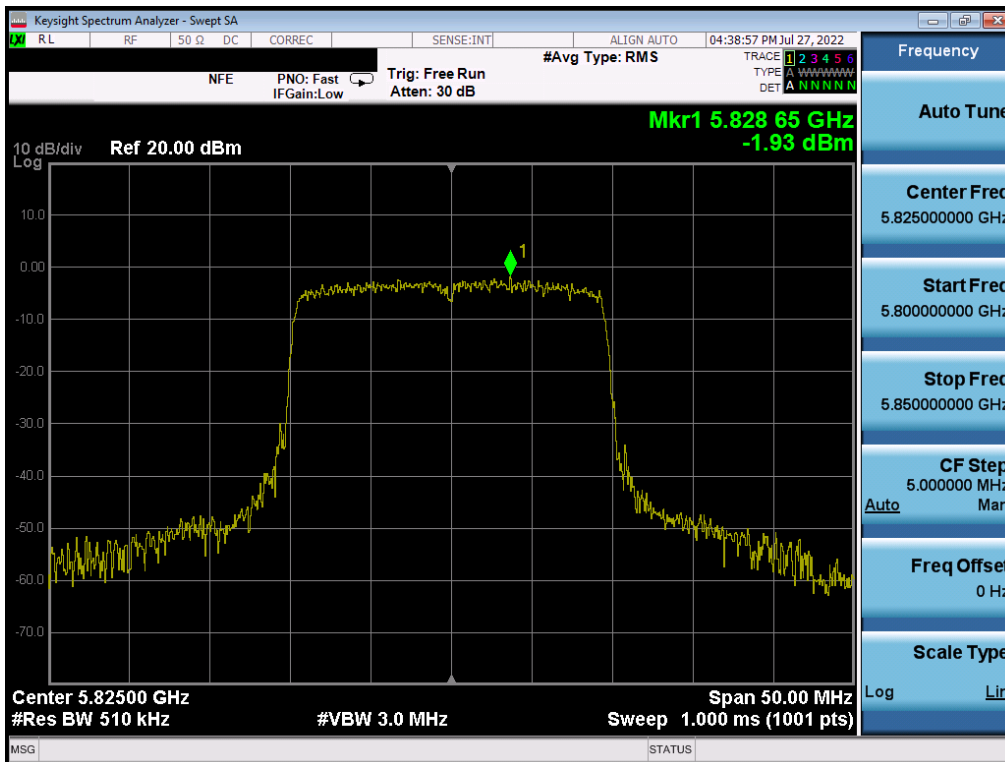


Plot 7-272. Power Spectral Density Plot MIMO ANT2 (802.11ax – 20MHz BW (UNII Band 3) – Ch. 149)

MEASUREMENT REPORT (CERTIFICATION)			Approved by: Technical Manager
FCC ID: PY7-76056F	Test Report S/N: 1M2205240663-15.PY7	Test Dates: 6/3/2022-7/29/2022	Page 168 of 210
EUT Type: Portable Handset			

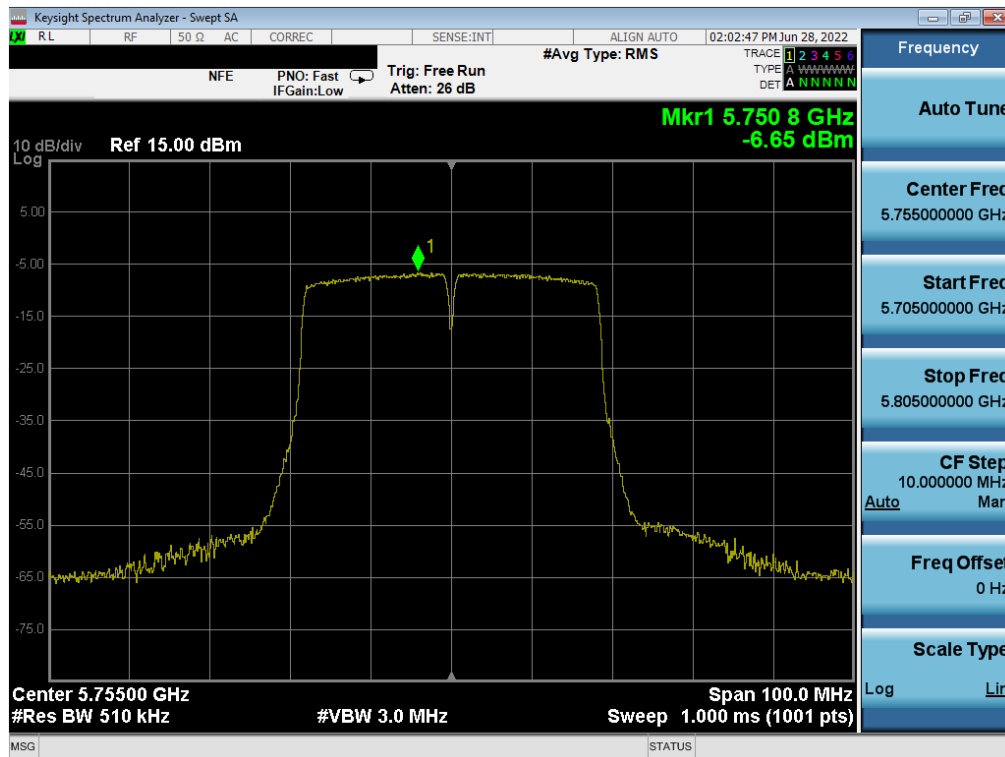


Plot 7-273. Power Spectral Density Plot MIMO ANT2 (802.11ax – 20MHz BW (UNII Band 3) – Ch. 157)

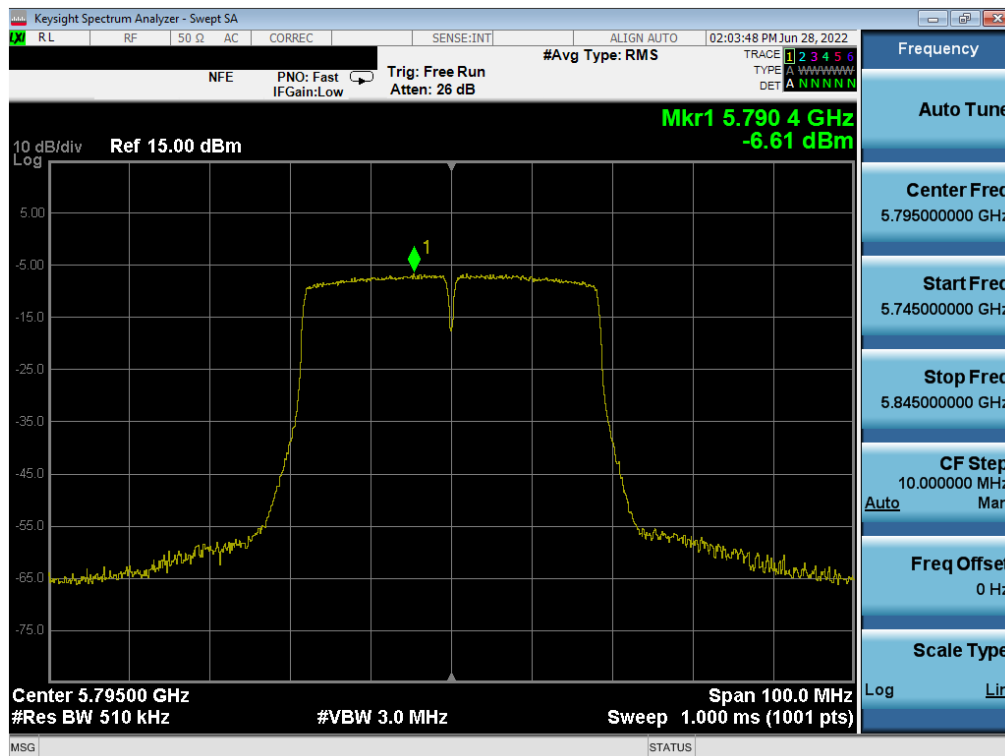


Plot 7-274. Power Spectral Density Plot MIMO ANT2 (802.11ax – 20MHz BW (UNII Band 3) – Ch. 165)

FCC ID: PY7-76056F	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2205240663-15.PY7	Test Dates: 6/3/2022-7/29/2022	EUT Type: Portable Handset	Page 169 of 210

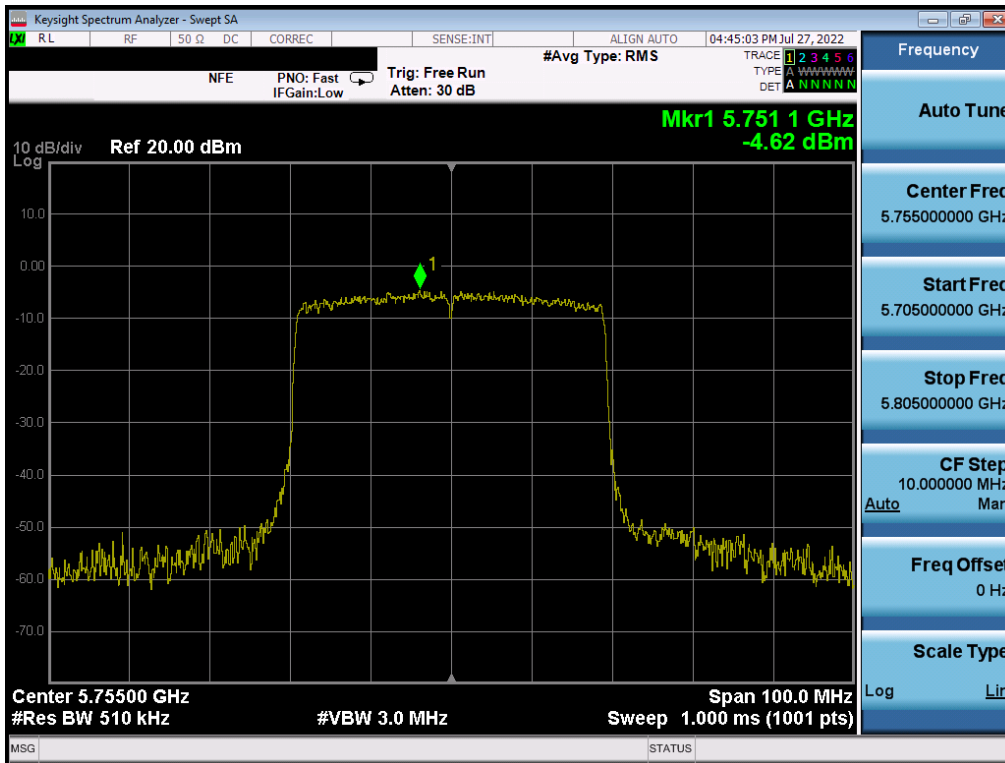


Plot 7-275. Power Spectral Density Plot MIMO ANT2 (802.11n – 40MHz BW (UNII Band 3) – Ch. 151)

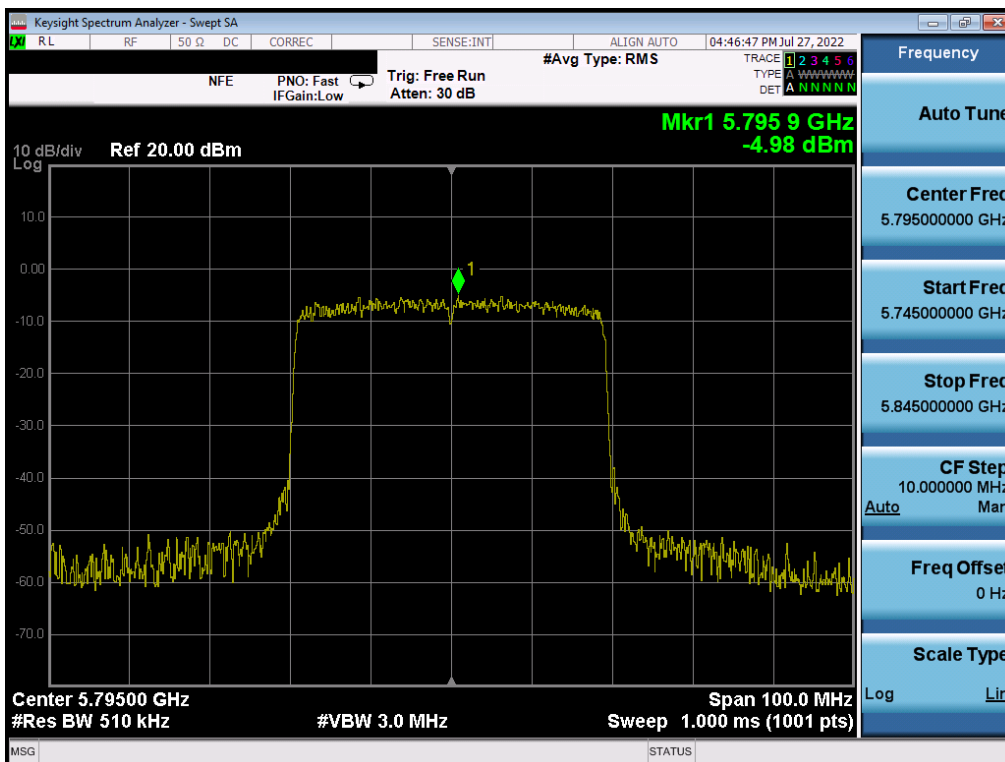


Plot 7-276. Power Spectral Density Plot MIMO ANT2 (802.11n – 40MHz BW (UNII Band 3) – Ch. 159)

FCC ID: PY7-76056F	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
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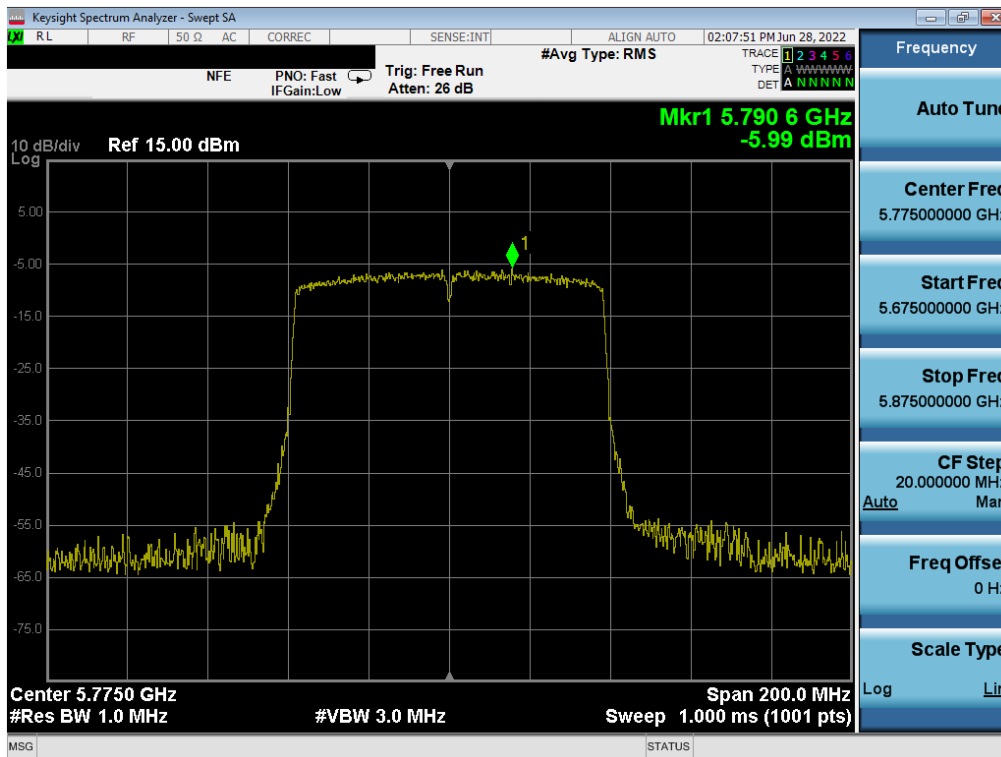


Plot 7-277. Power Spectral Density Plot MIMO ANT2 (802.11ax – 40MHz BW (UNII Band 3) – Ch. 151)

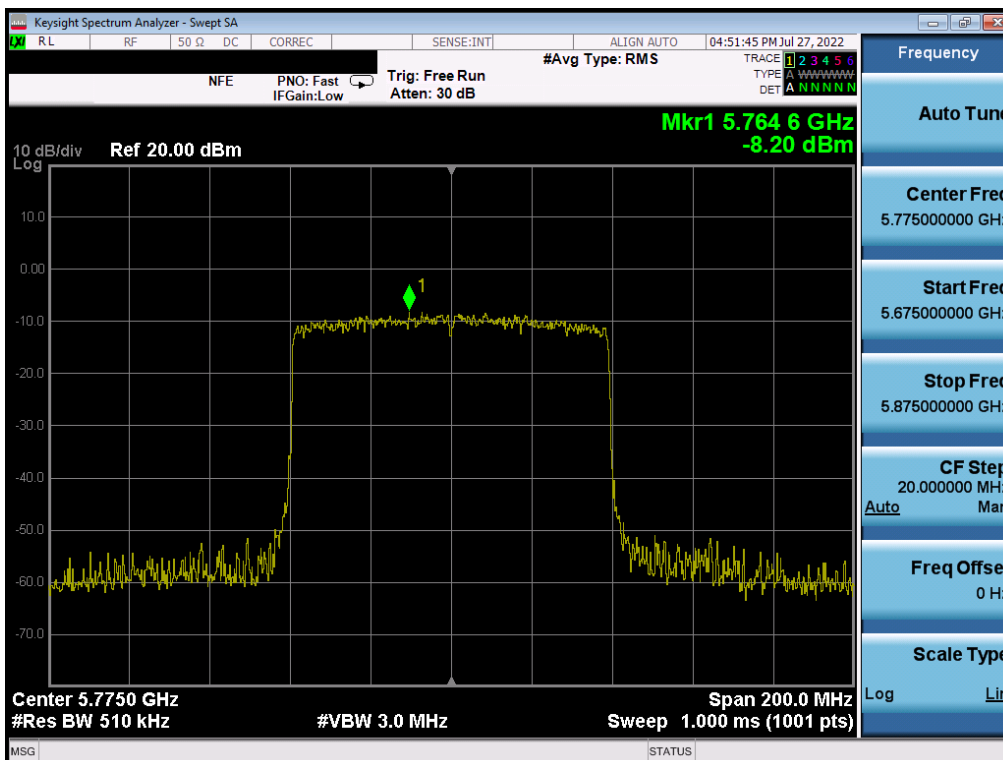


Plot 7-278. Power Spectral Density Plot MIMO ANT2 (802.11ax – 40MHz BW (UNII Band 3) – Ch. 159)

FCC ID: PY7-76056F	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
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Plot 7-279. Power Spectral Density Plot MIMO ANT2 (802.11ac – 80MHz BW (UNII Band 3) – Ch. 155)



Plot 7-280. Power Spectral Density Plot MIMO ANT2 (802.11ax – 80MHz BW (UNII Band 3) – Ch. 155)

FCC ID: PY7-76056F	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2205240663-15.PY7	Test Dates: 6/3/2022-7/29/2022	EUT Type: Portable Handset	Page 172 of 210



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 -0.51 dBm for Antenna 1 and 0.31 dBm for Antenna 2.

$$\text{Antenna 1} + \text{Antenna 2} = \text{MIMO}$$

$$(-0.51 \text{ dBm} + 0.31 \text{ dBm}) = (0.89 \text{ mW} + 1.07 \text{ mW}) = 1.96 \text{ mW} = 2.93 \text{ dBm}$$

Sample e.i.r.p Power Spectral Density Calculation:

At 5180MHz in 802.11n (20MHz BW) mode, the average MIMO power density was calculated to be 2.93 dBm with directional gain of -1.70 dBi.

$$\text{e.i.r.p. Power Spectral Density(dBm)} = \text{Power Spectral Density (dBm)} + \text{Ant gain (dBi)}$$

$$2.93 \text{ dBm} + (-1.70 \text{ dBi}) = 1.23 \text{ dBm}$$

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7.6 Radiated Spurious Emission Measurements – Above 1GHz

§15.407(b) §15.205 §15.209; RSS-Gen [8.9]

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 KDB 789033 D02 v02r01, and at the appropriate frequencies. All channels, modes (e.g. 802.11a, 802.11n (20MHz BW), 802.11n (40MHz BW), and 802.11ac (80MHz)), 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.

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 Table 7-19 per Section 15.209 and RSS-Gen (8.9).

Frequency	Field Strength [$\mu\text{V/m}$]	Measured Distance [Meters]
Above 960.0 MHz	500	3

Table 7-19. Radiated Limits

Test Procedures Used

ANSI C63.10-2013 – Sections 12.7.7.2, 12.7.6, 12.7.5
KDB 789033 D02 v02r01 – Section G

Test Settings

Average Measurements above 1GHz (Method AD)

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 $\geq 2 \times \text{span/RBW}$)
6. Averaging type = power (RMS)
7. Sweep time = auto couple

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8. Trace was averaged over 100 sweeps

Peak Measurements above 1GHz

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

Peak Measurements below 1GHz

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. Span was set greater than 1MHz
3. RBW = 120kHz
4. Detector = CISPR quasi-peak
5. Sweep time = auto couple
6. Trace was allowed to stabilize

Test Setup

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

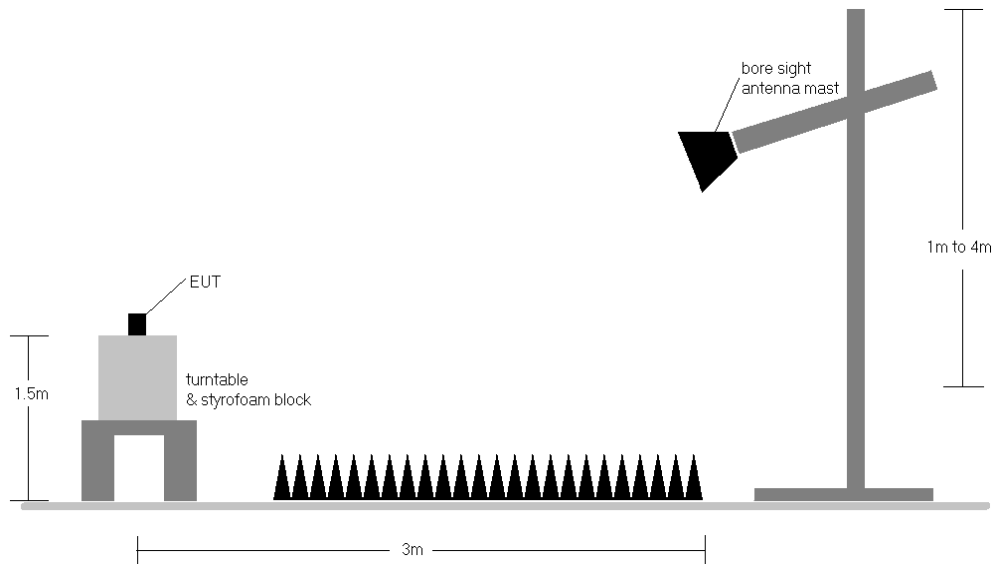


Figure 7-5. Test Instrument & Measurement Setup

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Test Notes

1. All emissions that lie in the restricted bands (denoted by a * next to the frequency) specified in §15.205 and Section 8.10 of RSS-Gen are below the limit shown in Table 7-19.
2. All spurious emissions lying in restricted bands specified in §15.205 and Section 8.10 of RSS-Gen are below the limit shown in Table 7-19. All spurious emissions that do not lie in a restricted band are subject to a peak limit of -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/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 68.2dBμV/m.
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. Radiated spurious emissions were investigated while operating in MIMO mode, however, it was determined that single antenna operation produced the worst case emissions. Since the emissions produced from MIMO operation were found to be more than 20dB below the limit, the MIMO emissions are not reported.
8. 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.
9. The "-" shown in the following RSE tables are used to denote a noise floor measurement.

Sample Calculations

Determining Spurious Emissions Levels

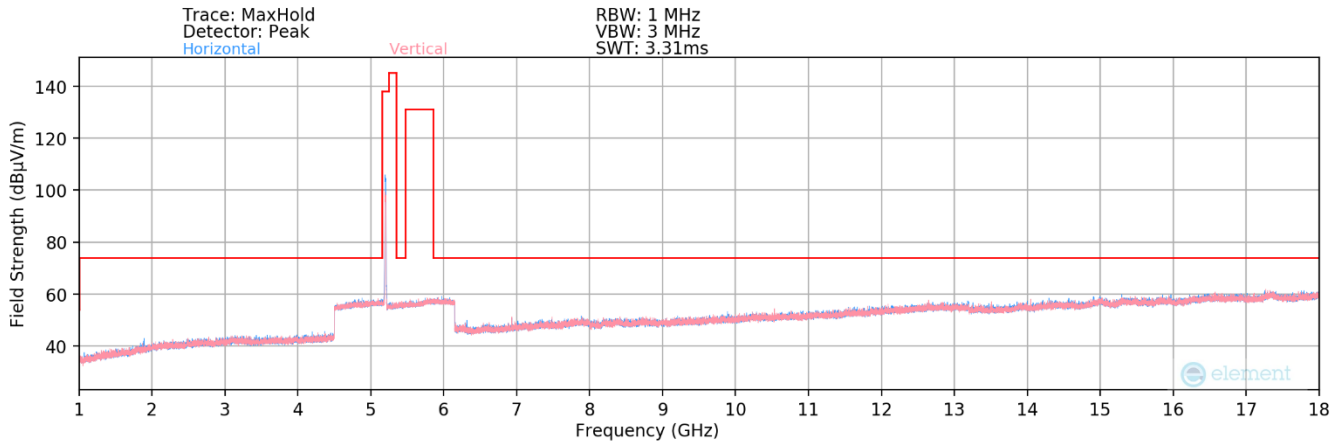
- Field Strength Level [dBμV/m] = Analyzer Level [dBm] + 107 + AFCL [dB/m]
- AFCL [dB/m] = Antenna Factor [dB/m] + Cable Loss [dB]
- Margin [dB] = Field Strength Level [dBμV/m] – Limit [dBμV/m]

Radiated Band Edge Measurement Offset

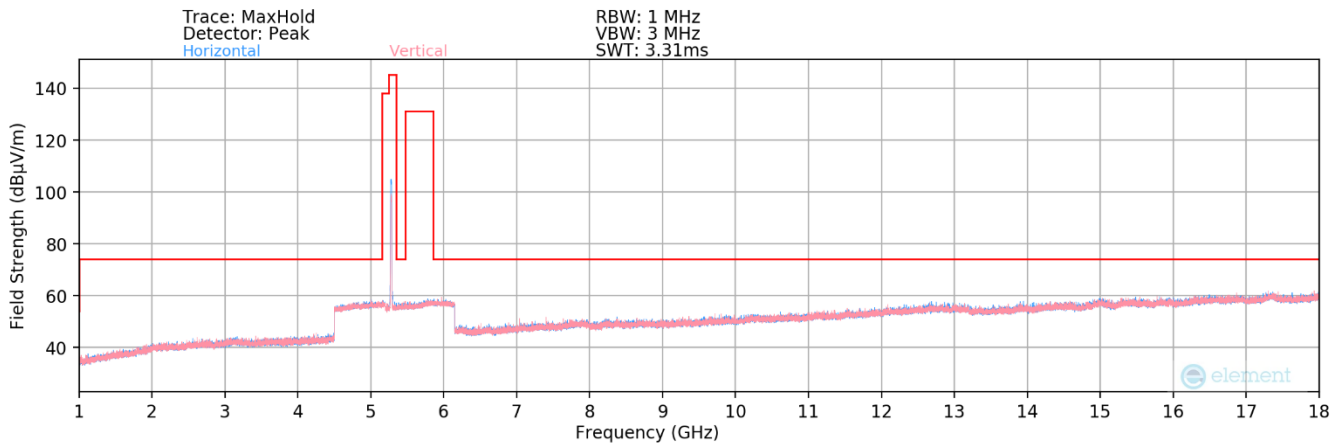
- The amplitude offset shown in the radiated restricted band edge plots was calculated using the formula:
Offset (dB) = (Antenna Factor + Cable Loss + Attenuator) – Preamplifier Gain

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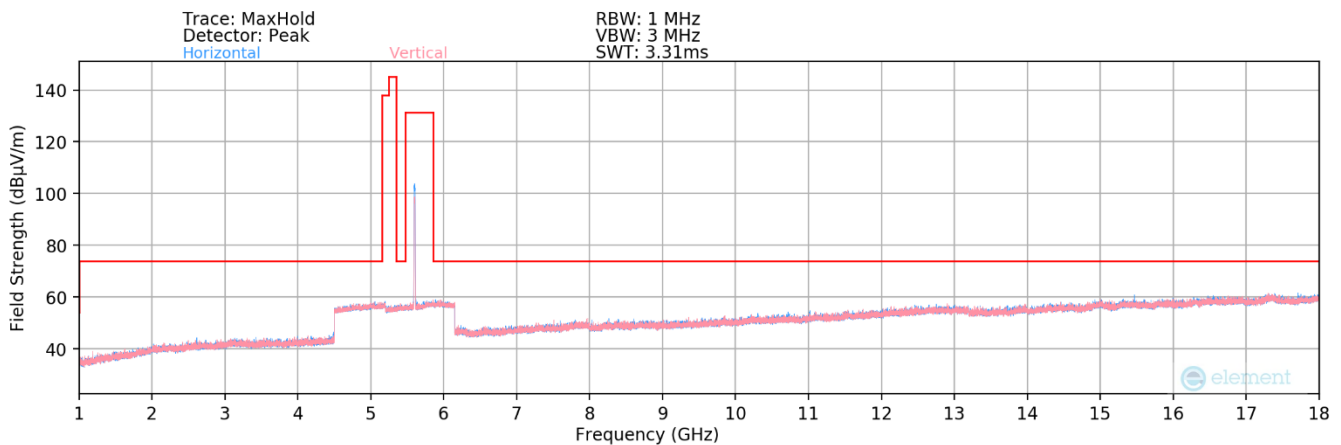
7.6.1 MIMO Radiated Spurious Emission Measurements



Plot 7-281. Radiated Spurious Plot above 1GHz MIMO (802.11a – U1 Ch. 40)

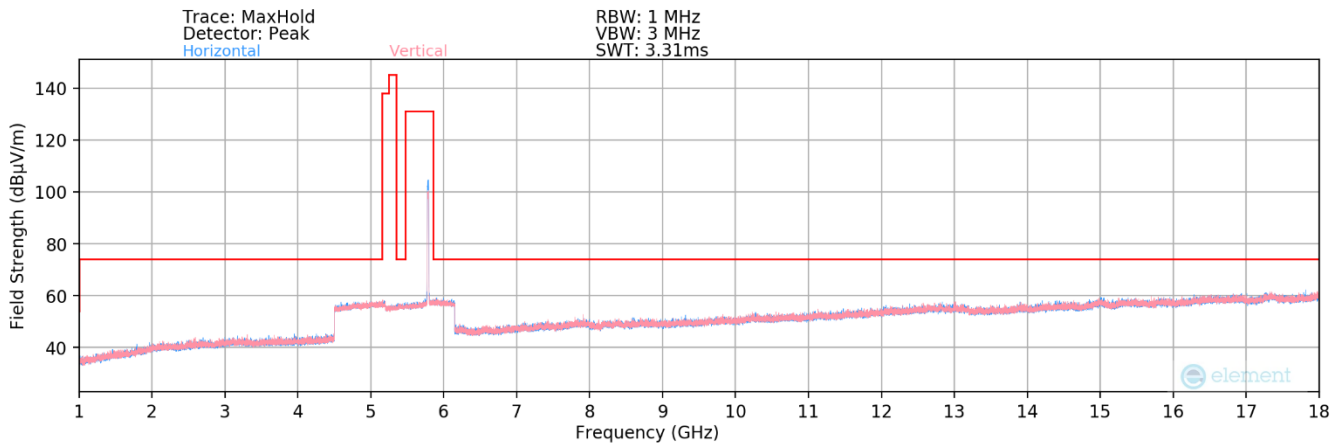


Plot 7-282. Radiated Spurious Plot above 1GHz MIMO (802.11a – U2A Ch. 56)



Plot 7-283. Radiated Spurious Plot above 1GHz MIMO (802.11a – U2C Ch. 120)

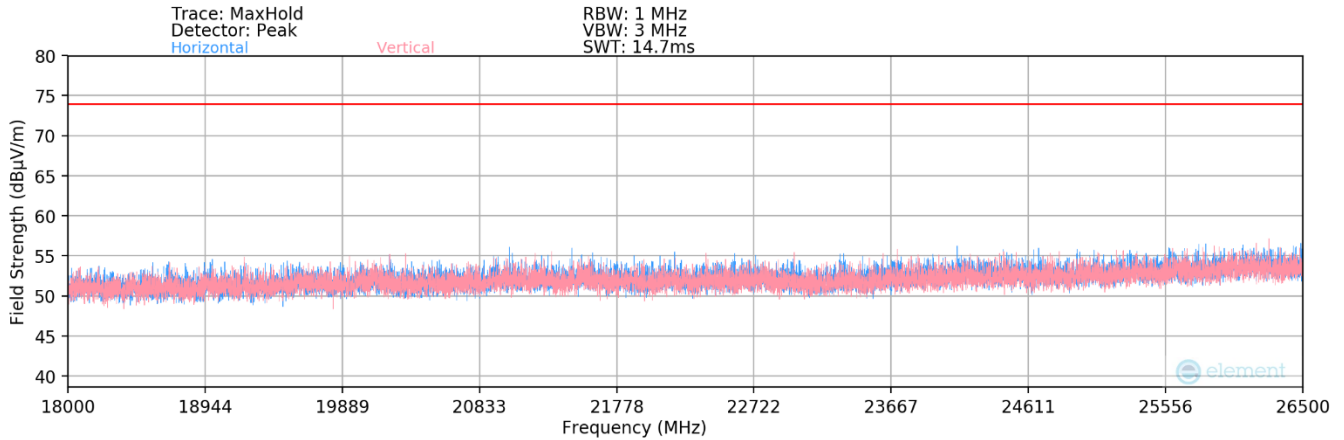
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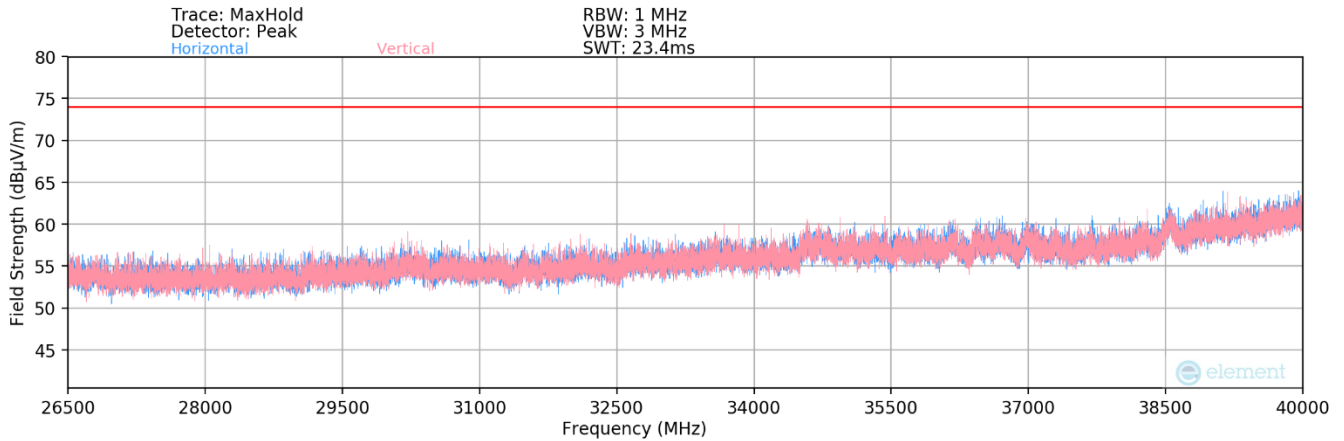
Plot 7-284. Radiated Spurious Plot above 1GHz MIMO (802.11a – U3 Ch. 157)

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MIMO Radiated Spurious Emissions Measurements (Above 18GHz)



Plot 7-285. Radiated Spurious Plot 18GHz - 26.5GHz MIMO (802.11a)



Plot 7-286. Radiated Spurious Plot 26.5GHz - 40GHz MIMO (802.11a)

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MIMO Radiated Spurious Emission Measurements

§15.407(b) §15.205 & §15.209; RSS-Gen [8.9]

Worst Case Mode: 802.11a
 Worst Case Transfer Rate: 6Mbps
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5180MHz
 Channel: 36

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
10360.00	Peak	V	-	-	-70.80	16.24	0.00	52.44	68.20	-15.76
15540.00	Average	V	-	-	-82.24	23.23	0.00	47.99	53.98	-5.99
15540.00	Peak	V	-	-	-72.32	23.23	0.00	57.91	73.98	-16.07
20720.00	Average	V	-	-	-67.73	3.16	-9.54	32.89	53.98	-21.09
20720.00	Peak	V	-	-	-57.75	3.16	-9.54	42.86	73.98	-31.11
25900.00	Peak	V	-	-	-57.36	4.77	-9.54	44.87	68.20	-23.33

Table 7-20. Radiated Measurements MIMO

Worst Case Mode: 802.11a
 Worst Case Transfer Rate: 6Mbps
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5200MHz
 Channel: 40

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
6933.40	Peak	V	108	281	-65.75	11.53	0.00	52.78	68.20	-15.42
10400.00	Peak	V	-	-	-70.99	16.36	0.00	52.37	68.20	-15.83
15600.00	Average	V	-	-	-82.36	23.44	0.00	48.08	53.98	-5.90
15600.00	Peak	V	-	-	-71.78	23.44	0.00	58.66	73.98	-15.32
20800.00	Average	V	-	-	-66.79	3.48	-9.54	34.14	53.98	-19.84
20800.00	Peak	V	-	-	-56.13	3.48	-9.54	44.81	73.98	-29.17
26000.00	Peak	V	-	-	-57.17	5.16	-9.54	45.45	68.20	-22.75

Table 7-21. Radiated Measurements MIMO

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Worst Case Mode: 802.11a
 Worst Case Transfer Rate: 6Mbps
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5240MHz
 Channel: 48

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
6986.90	Peak	V	112	274	-66.97	11.62	0.00	51.65	68.20	-16.55
10480.00	Peak	V	-	-	-71.82	16.30	0.00	51.48	68.20	-16.72
15720.00	Average	V	-	-	-82.05	23.38	0.00	48.33	53.98	-5.65
15720.00	Peak	V	-	-	-72.35	23.38	0.00	58.03	73.98	-15.95
20960.00	Average	V	-	-	-67.95	3.47	-9.54	32.99	53.98	-20.99
20960.00	Peak	V	-	-	-57.66	3.47	-9.54	43.27	73.98	-30.71
26200.00	Peak	V	-	-	-56.57	4.78	-9.54	45.67	68.20	-22.53

Table 7-22. Radiated Measurements MIMO

Worst Case Mode: 802.11a
 Worst Case Transfer Rate: 6Mbps
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5260MHz
 Channel: 52

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
10520.00	Peak	V	-	-	-70.90	16.30	0.00	52.40	68.20	-15.80
15780.00	Average	V	-	-	-82.22	23.72	0.00	48.50	53.98	-5.48
15780.00	Peak	V	-	-	-70.73	23.72	0.00	59.99	73.98	-13.99
21040.00	Average	V	-	-	-67.88	3.53	-9.54	33.11	53.98	-20.87
21040.00	Peak	V	-	-	-58.20	3.53	-9.54	42.79	73.98	-31.19
26300.00	Peak	V	-	-	-57.94	4.64	-9.54	44.16	68.20	-24.04

Table 7-23. Radiated Measurements MIMO

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Worst Case Mode: 802.11a
Worst Case Transfer Rate: 6Mbps
Distance of Measurements: 1 & 3 Meters
Operating Frequency: 5280MHz
Channel: 56

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
10560.00	Peak	V	-	-	-71.53	16.64	0.00	52.11	68.20	-16.09
15840.00	Average	V	-	-	-82.35	23.70	0.00	48.35	53.98	-5.63
15840.00	Peak	V	-	-	-72.58	23.70	0.00	58.12	73.98	-15.86
21120.00	Average	V	-	-	-67.49	3.68	-9.54	33.64	53.98	-20.34
21120.00	Peak	V	-	-	-57.33	3.68	-9.54	43.81	73.98	-30.17
26400.00	Peak	V	-	-	-57.95	4.78	-9.54	44.29	68.20	-23.91

Table 7-24. Radiated Measurements MIMO

Worst Case Mode: 802.11a
Worst Case Transfer Rate: 6Mbps
Distance of Measurements: 1 & 3 Meters
Operating Frequency: 5320MHz
Channel: 64

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
* 10640.00	Average	V	-	-	-81.54	16.76	0.00	42.22	53.98	-11.76
* 10640.00	Peak	V	-	-	-71.02	16.76	0.00	52.74	73.98	-21.24
* 15960.00	Average	V	-	-	-82.53	24.33	0.00	48.80	53.98	-5.18
* 15960.00	Peak	V	-	-	-72.23	24.33	0.00	59.10	73.98	-14.88
* 21280.00	Average	V	-	-	-67.38	3.72	-9.54	33.80	53.98	-20.18
* 21280.00	Peak	V	-	-	-56.81	3.72	-9.54	44.37	73.98	-29.61
26600.00	Peak	V	-	-	-58.37	4.72	-9.54	43.81	68.20	-24.39

Table 7-25. Radiated Measurements MIMO

FCC ID: PY7-76056F	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
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Worst Case Mode: 802.11a
 Worst Case Transfer Rate: 6Mbps
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5500MHz
 Channel: 100

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
* 11000.00	Average	V	-	-	-81.97	17.47	0.00	42.50	53.98	-11.48
* 11000.00	Peak	V	-	-	-71.61	17.47	0.00	52.86	73.98	-21.12
16500.00	Peak	V	-	-	-72.76	25.25	0.00	59.49	68.20	-8.71
22000.00	Peak	V	-	-	-57.54	3.83	-9.54	43.75	68.20	-24.45
27500.00	Peak	V	-	-	-57.64	4.97	-9.54	44.79	68.20	-23.41

Table 7-26. Radiated Measurements MIMO

Worst Case Mode: 802.11a
 Worst Case Transfer Rate: 6Mbps
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5600MHz
 Channel: 120

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
* 11200.00	Average	V	-	-	-81.67	17.38	0.00	42.71	53.98	-11.27
* 11200.00	Peak	V	-	-	-70.82	17.38	0.00	53.56	73.98	-20.42
16800.00	Peak	V	-	-	-72.10	24.94	0.00	59.84	68.20	-8.36
* 22400.00	Average	V	-	-	-67.04	3.79	-9.54	34.21	53.98	-19.77
* 22400.00	Peak	V	-	-	-56.44	3.79	-9.54	44.80	73.98	-29.18
28000.00	Peak	V	-	-	-57.45	4.94	-9.54	44.94	68.20	-23.26

Table 7-27. Radiated Measurements MIMO

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Worst Case Mode: 802.11a
 Worst Case Transfer Rate: 6Mbps
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5720MHz
 Channel: 144

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
* 11440.00	Average	V	-	-	-82.01	17.81	0.00	42.80	53.98	-11.17
* 11440.00	Peak	V	-	-	-71.19	17.81	0.00	53.62	73.98	-20.35
17160.00	Peak	V	-	-	-72.09	25.10	0.00	60.01	68.20	-8.19
* 22880.00	Average	V	-	-	-67.37	3.79	-9.54	33.88	53.98	-20.10
* 22880.00	Peak	V	-	-	-57.00	3.79	-9.54	44.25	73.98	-29.73
28600.00	Peak	V	-	-	-57.60	5.28	-9.54	45.14	68.20	-23.06

Table 7-28. Radiated Measurements MIMO

Worst Case Mode: 802.11a
 Worst Case Transfer Rate: 6Mbps
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5745MHz
 Channel: 149

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
* 11490.00	Average	V	-	-	-82.03	18.15	0.00	43.12	53.98	-10.86
* 11490.00	Peak	V	-	-	-72.31	18.15	0.00	52.84	73.98	-21.14
17235.00	Peak	V	-	-	-72.58	25.47	0.00	59.89	68.20	-8.31
* 22980.00	Average	V	-	-	-67.90	3.79	-9.54	33.35	53.98	-20.63
* 22980.00	Peak	V	-	-	-57.72	3.79	-9.54	43.53	73.98	-30.45
28725.00	Peak	V	-	-	-57.91	5.41	-9.54	44.96	69.20	-24.24

Table 7-29. Radiated Measurements MIMO

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Worst Case Mode: 802.11a
 Worst Case Transfer Rate: 6Mbps
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5785MHz
 Channel: 157

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
* 11570.00	Average	V	-	-	-81.81	17.88	0.00	43.07	53.98	-10.91
* 11570.00	Peak	V	-	-	-70.89	17.88	0.00	53.99	73.98	-19.99
17355.00	Peak	V	-	-	-72.18	26.69	0.00	61.51	68.20	-6.69
23140.00	Peak	V	-	-	-57.72	3.75	-9.54	43.49	68.20	-24.71
28925.00	Peak	V	-	-	-57.89	5.46	-9.54	45.04	68.20	-23.16

Table 7-30. Radiated Measurements MIMO

Worst Case Mode: 802.11a
 Worst Case Transfer Rate: 6Mbps
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5825MHz
 Channel: 165

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
* 11650.00	Average	V	-	-	-81.76	18.01	0.00	43.25	53.98	-10.73
* 11650.00	Peak	V	-	-	-71.62	18.01	0.00	53.39	73.98	-20.59
17475.00	Peak	V	-	-	-73.36	26.08	0.00	59.72	68.20	-8.48
23300.00	Peak	V	-	-	-58.25	3.76	-9.54	42.97	68.20	-25.23
29125.00	Peak	V	-	-	-57.03	5.54	-9.54	45.97	68.20	-22.23

Table 7-31. Radiated Measurements MIMO

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Worst Case Mode: 802.11a
 Worst Case Transfer Rate: 6Mbps
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5200MHz
 Channel: 40

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
6933.40	Peak	V	115	0	-67.15	11.53	0.00	51.38	68.20	-16.82
10400.00	Peak	V	-	-	-70.79	16.36	0.00	52.57	68.20	-15.63
* 15600.00	Average	V	-	-	-82.10	23.44	0.00	48.34	53.98	-5.64
* 15600.00	Peak	V	-	-	-71.57	23.44	0.00	58.87	73.98	-15.11
* 20800.00	Average	V	-	-	-66.67	3.48	-9.54	34.27	53.98	-19.71
* 20800.00	Peak	V	-	-	-57.01	3.48	-9.54	43.93	73.98	-30.05
26000.00	Peak	V	-	-	-57.56	5.16	-9.54	45.06	68.20	-23.14

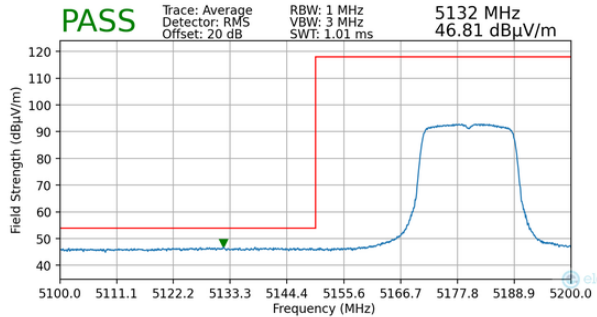
Table 7-32. Radiated Measurements MIMO - WCP

FCC ID: PY7-76056F	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2205240663-15.PY7	Test Dates: 6/3/2022-7/29/2022	EUT Type: Portable Handset	Page 186 of 210

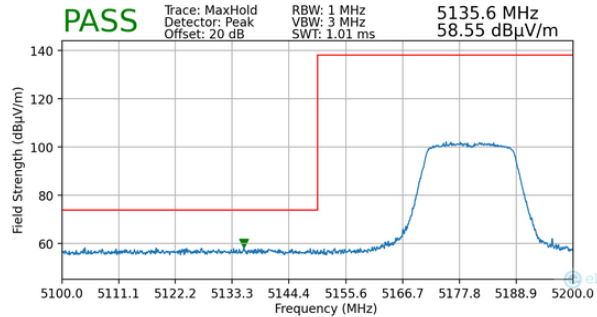
7.6.2 MIMO Radiated Band Edge Measurements (20MHz BW)

§15.407(b.1)(b.2) §15.205 §15.209; RSS-Gen [8.9]

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

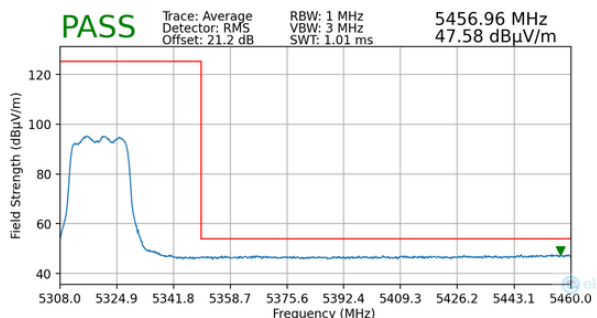


Plot 7-287. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 1)

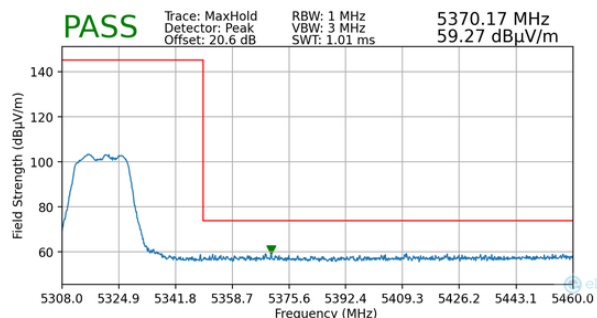


Plot 7-288. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 1)

Worst Case Mode:	802.11a
Worst Case Transfer Rate:	6Mbps
Distance of Measurements:	3 Meters
Operating Frequency:	5320MHz
Channel:	64



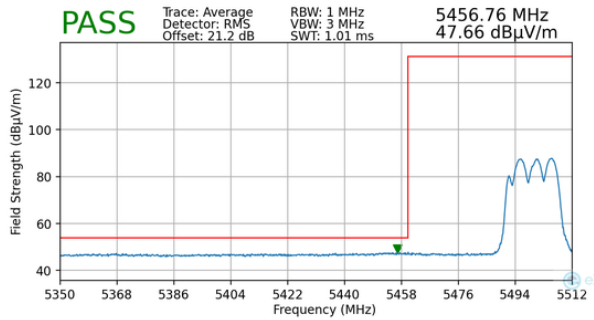
Plot 7-289. Radiated Upper Band Edge Plot MIMO (Average – UNII Band 2A)



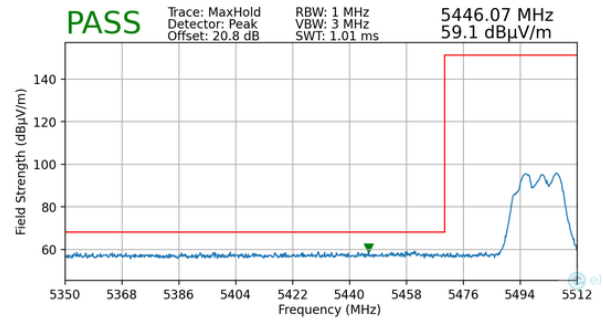
Plot 7-290. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 2A)

FCC ID: PY7-76056F	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2205240663-15.PY7	Test Dates: 6/3/2022-7/29/2022	EUT Type: Portable Handset	Page 187 of 210

Worst Case Mode: 802.11a
 Worst Case Transfer Rate: 6Mbps
 Distance of Measurements: 3 Meters
 Operating Frequency: 5500MHz
 Channel: 100

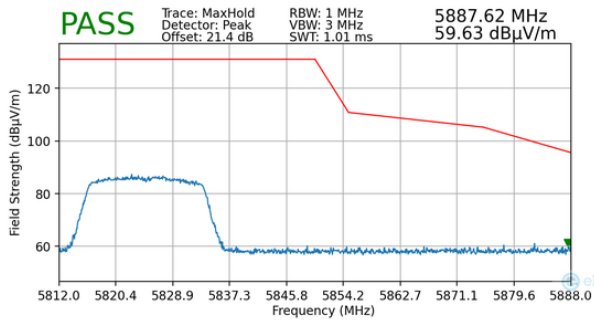


Plot 7-291. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 2C)



Plot 7-292. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 2C)

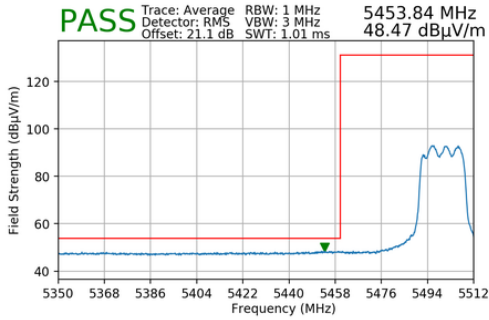
Worst Case Mode: 802.11n
 Worst Case Transfer Rate: MCS0
 Distance of Measurements: 3 Meters
 Operating Frequency: 5825MHz
 Channel: 165



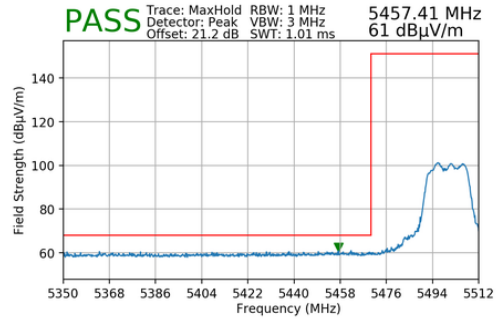
Plot 7-293. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 3)

FCC ID: PY7-76056F	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2205240663-15.PY7	Test Dates: 6/3/2022-7/29/2022	EUT Type: Portable Handset	Page 188 of 210

Worst Case Mode: 802.11a
 Worst Case Transfer Rate: 6Mbps
 Distance of Measurements: 3 Meters
 Operating Frequency: 5500MHz
 Channel: 100



Plot 7-294. Radiated Upper Band Edge Plot MIMO (Average – UNII Band 2C) with WCP

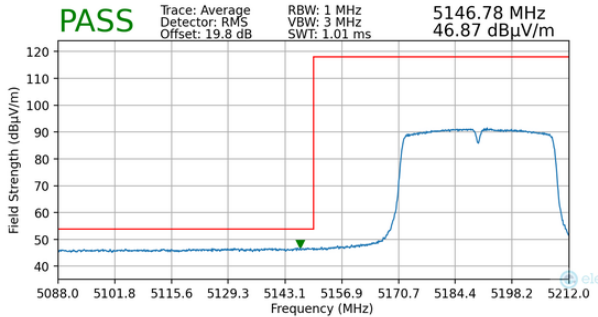


Plot 7-295. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 2C) with WCP

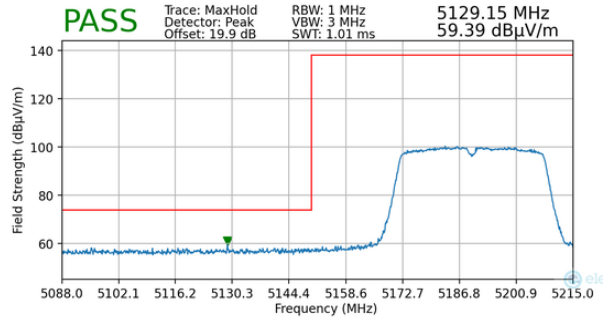
FCC ID: PY7-76056F	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2205240663-15.PY7	Test Dates: 6/3/2022-7/29/2022	EUT Type: Portable Handset	Page 189 of 210

7.6.3 MIMO Radiated Band Edge Measurements (40MHz BW) §15.407(b.1)(b.2) §15.205 §15.209; RSS-Gen [8.9]

Worst Case Mode: 802.11n
 Worst Case Transfer Rate: MCS0
 Distance of Measurements: 3 Meters
 Operating Frequency: 5190MHz
 Channel: 38

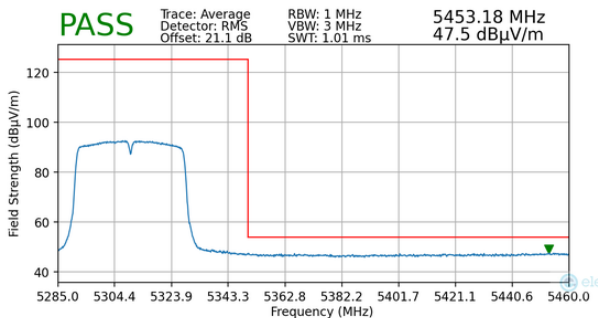


Plot 7-296. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 1)

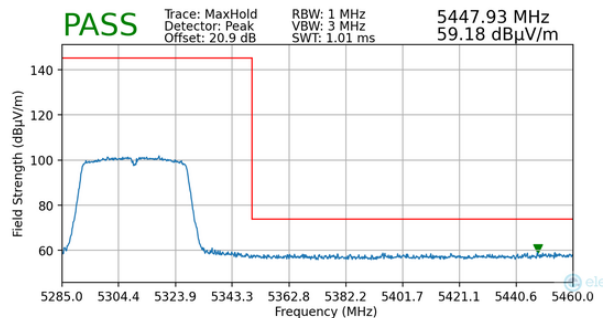


Plot 7-297. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 1)

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



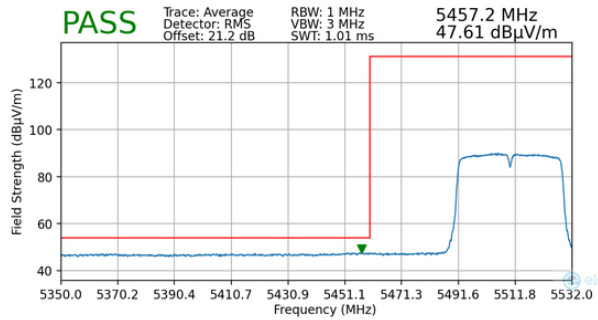
Plot 7-298. Radiated Upper Band Edge Plot MIMO (Average – UNII Band 2A)



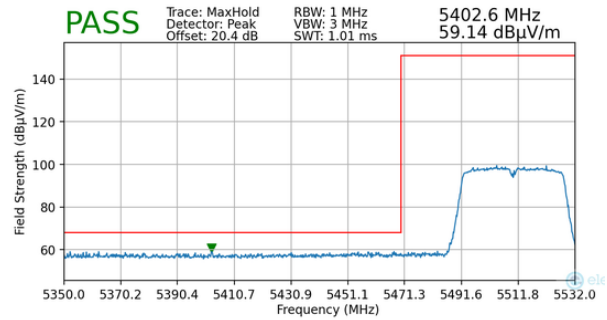
Plot 7-299. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 2A)

FCC ID: PY7-76056F	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
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Worst Case Mode: 802.11n
 Worst Case Transfer Rate: MCS0
 Distance of Measurements: 3 Meters
 Operating Frequency: 5510MHz
 Channel: 102

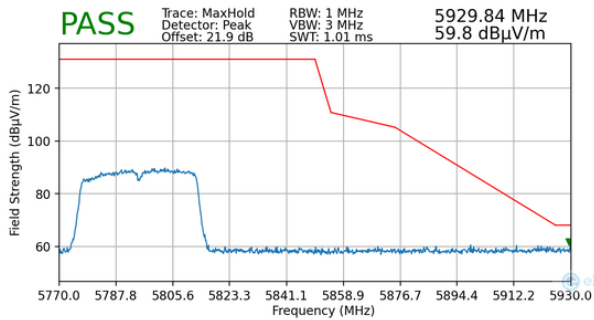


Plot 7-300. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 2C)



Plot 7-301. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 2C)

Worst Case Mode: 802.11n
 Worst Case Transfer Rate: MCS0
 Distance of Measurements: 3 Meters
 Operating Frequency: 5795MHz
 Channel: 159



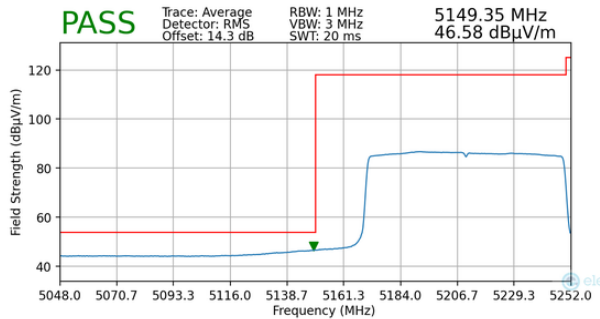
Plot 7-302. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 3)

FCC ID: PY7-76056F	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
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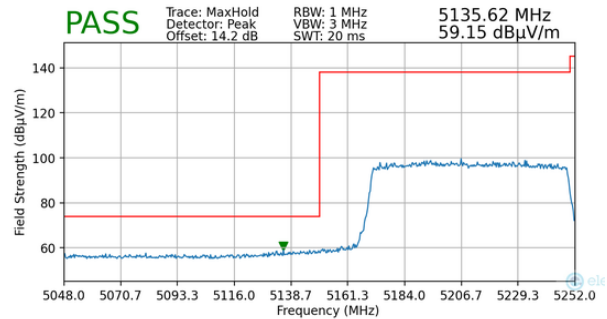
7.6.4 MIMO Radiated Band Edge Measurements (80MHz BW)

§15.407(b.1)(b.2) §15.205 §15.209; RSS-Gen [8.9]

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

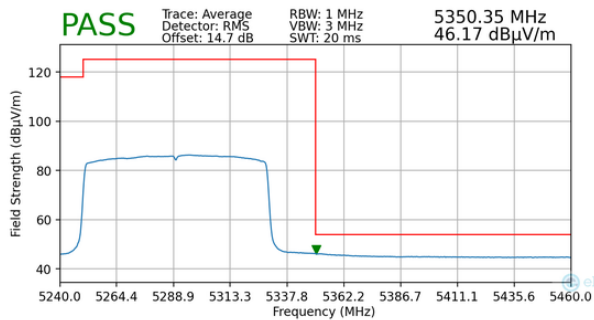


Plot 7-303. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 1)

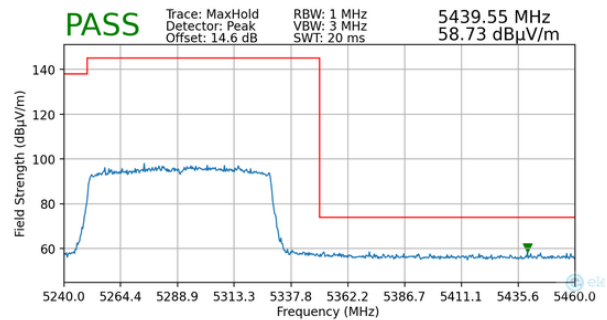


Plot 7-304. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 1)

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



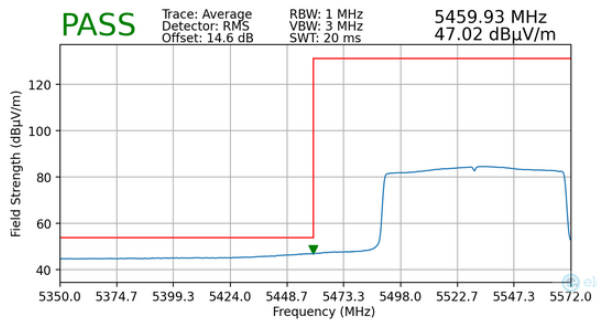
Plot 7-305. Radiated Upper Band Edge Plot MIMO (Average – UNII Band 2A)



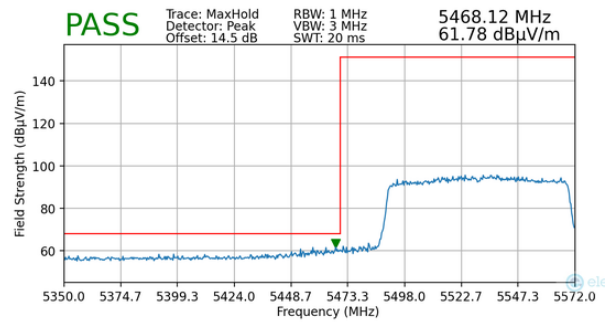
Plot 7-306. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 2A)

FCC ID: PY7-76056F	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
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Worst Case Mode: 802.11ax SU
 Worst Case Transfer Rate: MCS0
 Distance of Measurements: 3 Meters
 Operating Frequency: 5530MHz
 Channel: 106

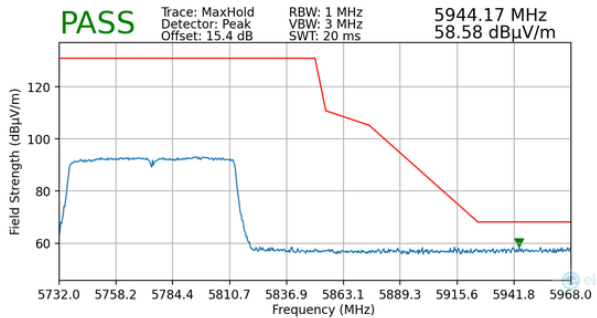


Plot 7-307. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 2C)



Plot 7-308. 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

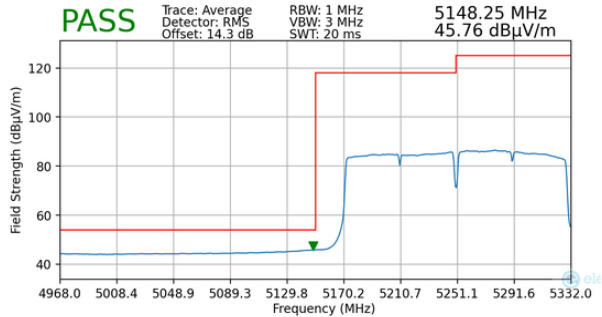


Plot 7-309. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 3)

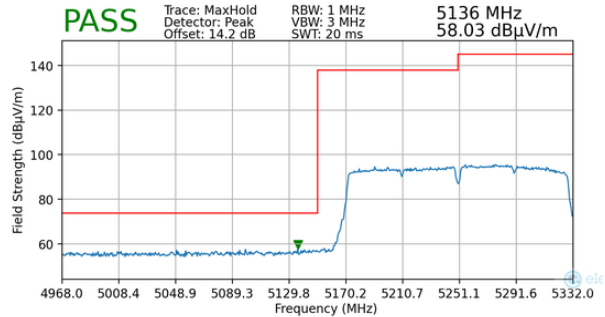
FCC ID: PY7-76056F	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2205240663-15.PY7	Test Dates: 6/3/2022-7/29/2022	EUT Type: Portable Handset	Page 193 of 210

7.6.5 MIMO Radiated Band Edge Measurements (160MHz BW) §15.407(b.1)(b.2) §15.205 §15.209; RSS-Gen [8.9]

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

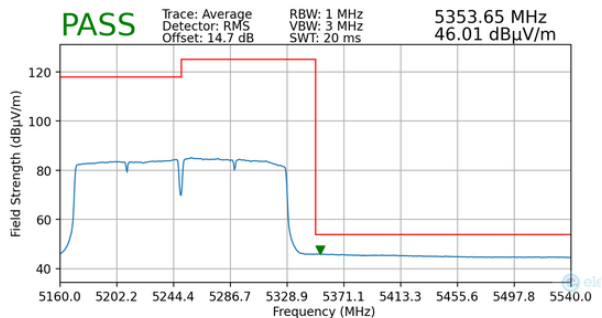


Plot 7-310. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 1)

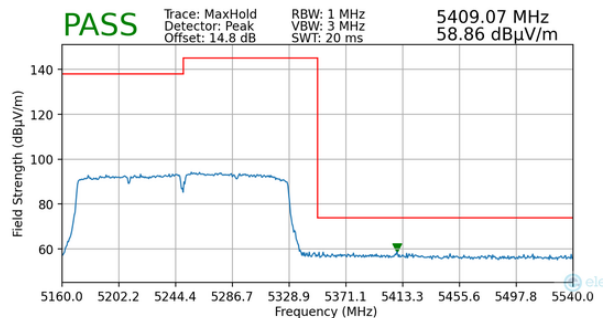


Plot 7-311. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 1)

Worst Case Mode: 802.11ax SU
 Worst Case Transfer Rate: MCS0
 Distance of Measurements: 3 Meters
 Operating Frequency: 5290MHz
 Channel: 50



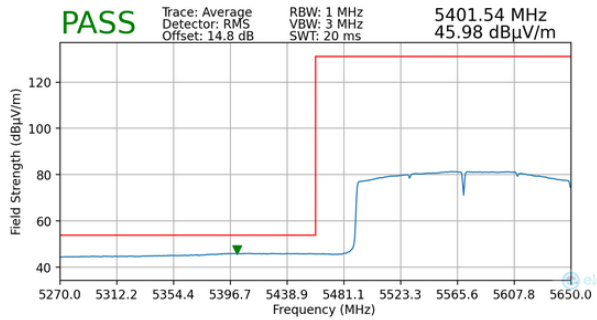
Plot 7-312. Radiated Upper Band Edge Plot MIMO (Average – UNII Band 2A)



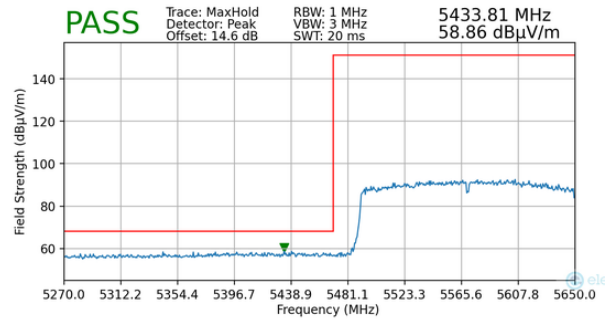
Plot 7-313. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 2A)

FCC ID: PY7-76056F	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
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Worst Case Mode: 802.11ax SU
 Worst Case Transfer Rate: MCS0
 Distance of Measurements: 3 Meters
 Operating Frequency: 5570MHz
 Channel: 114



Plot 7-314. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 2C)



Plot 7-315. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 2C)

FCC ID: PY7-76056F	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
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7.7 Radiated Spurious Emissions Measurements – Below 1GHz

§15.209; RSS-Gen [8.9]

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 maximum power, and at the appropriate frequencies. All data rates and modes were investigated for radiated spurious emissions. Only the radiated emissions of the configuration that produced the worst case emissions are reported in this section.

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 Table 7-33 per Section 15.209 and RSS-Gen (8.9).

Frequency	Field Strength [$\mu\text{V/m}$]	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 7-33. Radiated Limits

Test Procedures Used

ANSI C63.10-2013

Test Settings

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

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Test Setup

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

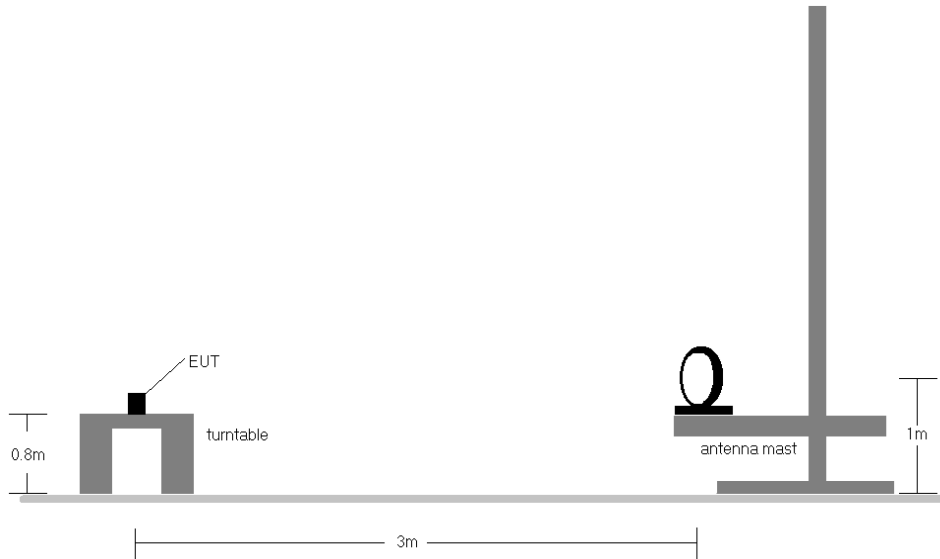


Figure 7-6. Radiated Test Setup < 30MHz

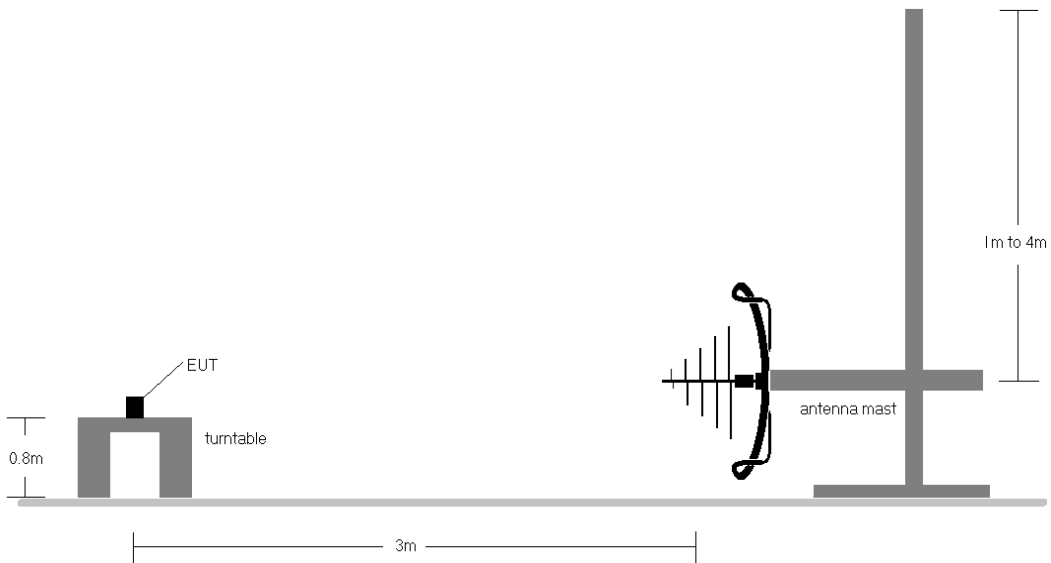


Figure 7-7. Radiated Test Setup < 1GHz

FCC ID: PY7-76056F	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2205240663-15.PY7	Test Dates: 6/3/2022-7/29/2022	EUT Type: Portable Handset	Page 197 of 210

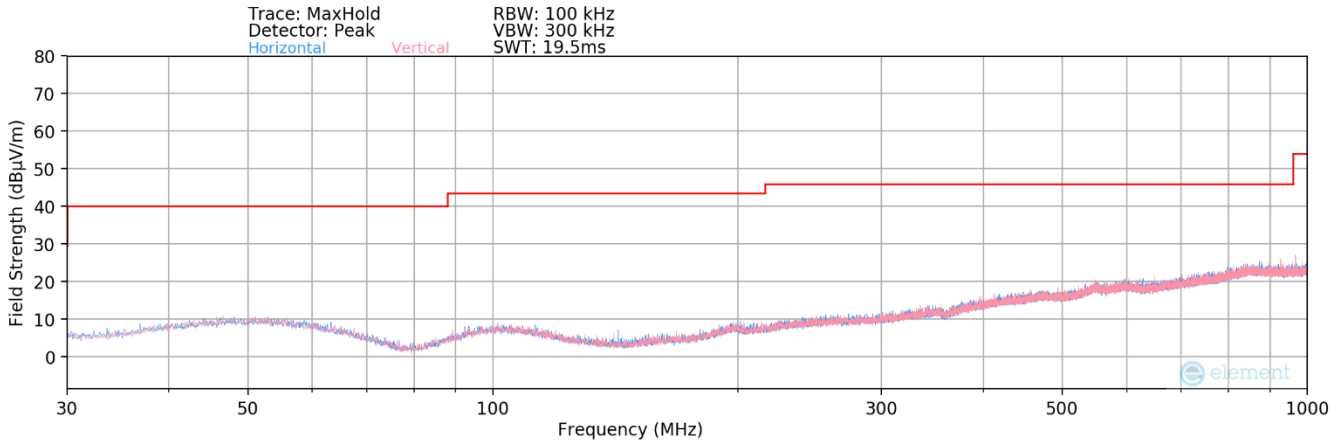


Test Notes

1. All emissions lying in restricted bands specified in §15.205 and RSS-Gen (8.10) are below the limit shown in Table 7-33.
2. The broadband receive antenna is manipulated through vertical and horizontal polarizations during the tests. The EUT is manipulated through three orthogonal planes.
3. This unit was tested with its standard battery.
4. The spectrum is investigated using a peak detector and final measurements are recorded using CISPR quasi peak detector. The worst-case emissions are reported however emissions whose levels were not within 20dB of the respective limits were not reported.
5. Emissions were measured at a 3 meter test distance.
6. Emissions are investigated while operating on the center channel of the mode, band, and modulation that produced the worst case results during the transmitter spurious emissions testing.
7. No spurious emissions were detected within 20dB of the limit below 30MHz.
8. The results recorded using the broadband antenna is 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.
9. The wide spectrum spurious emissions plots shown on the following pages are used only for the purpose of emission identification. There were no emissions detected in the 30MHz – 1GHz frequency range, as shown in the subsequent plots.

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MIMO Radiated Spurious Emissions Measurements (Below 1GHz)
§15.209; RSS-Gen [8.9]



Plot 7-316. Radiated Spurious Plot below 1GHz MIMO (802.11a – U1 CH. 40)

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
150.00	Quasi-Peak	H	-	-	-62.36	-19.85	24.79	43.52	-18.73

Table 7-34. Radiated Spurious Emissions below 1GHz MIMO

FCC ID: PY7-76056F	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2205240663-15.PY7	Test Dates: 6/3/2022-7/29/2022	EUT Type: Portable Handset	Page 199 of 210

7.8 Line-Conducted Test Data

§15.407; RSS-Gen [8.8]

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 Section 15.207 and RSS-Gen (8.8).

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

Table 7-35. 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

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Test Setup

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

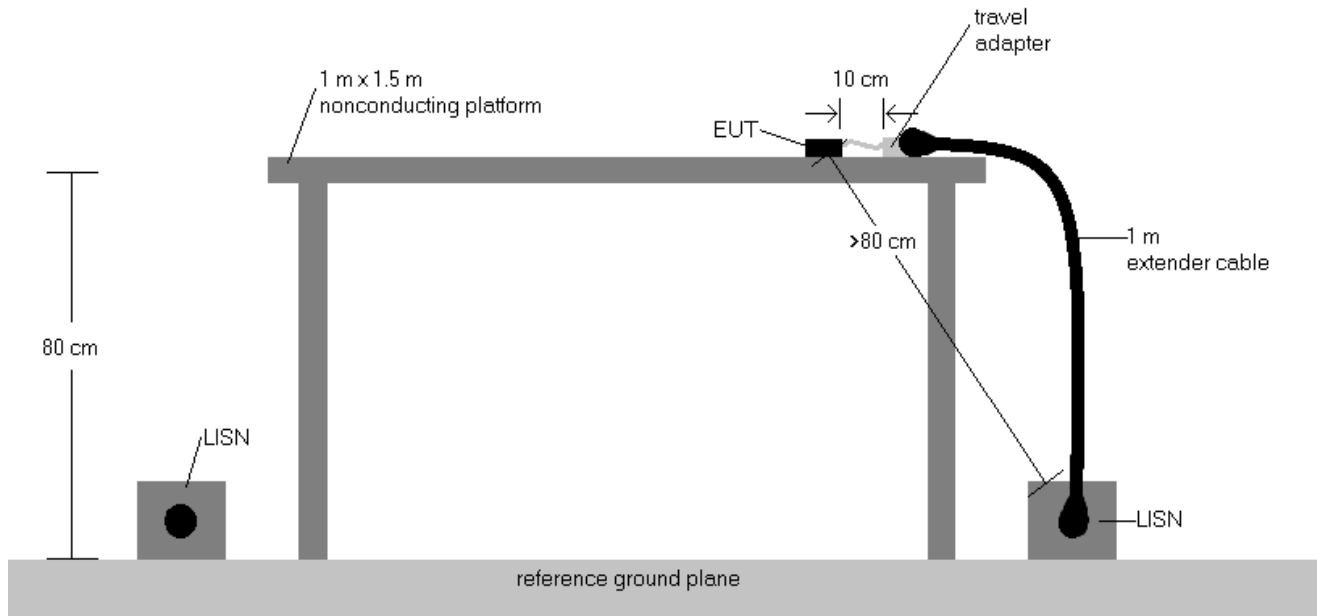
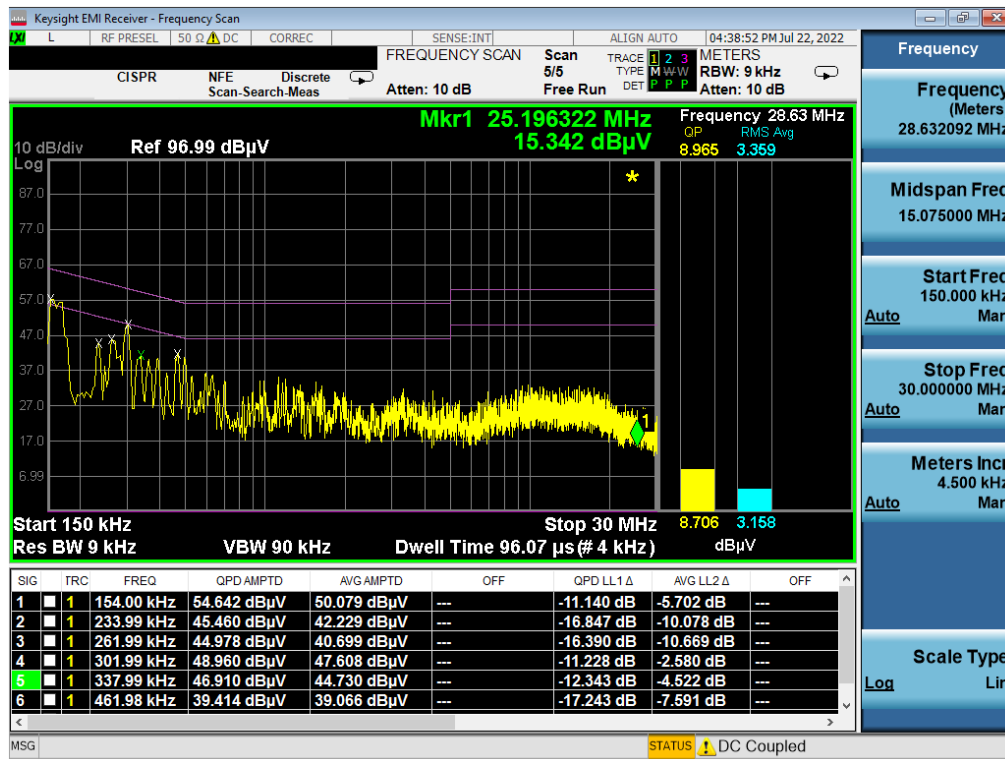


Figure 7-8. Test Instrument & Measurement Setup

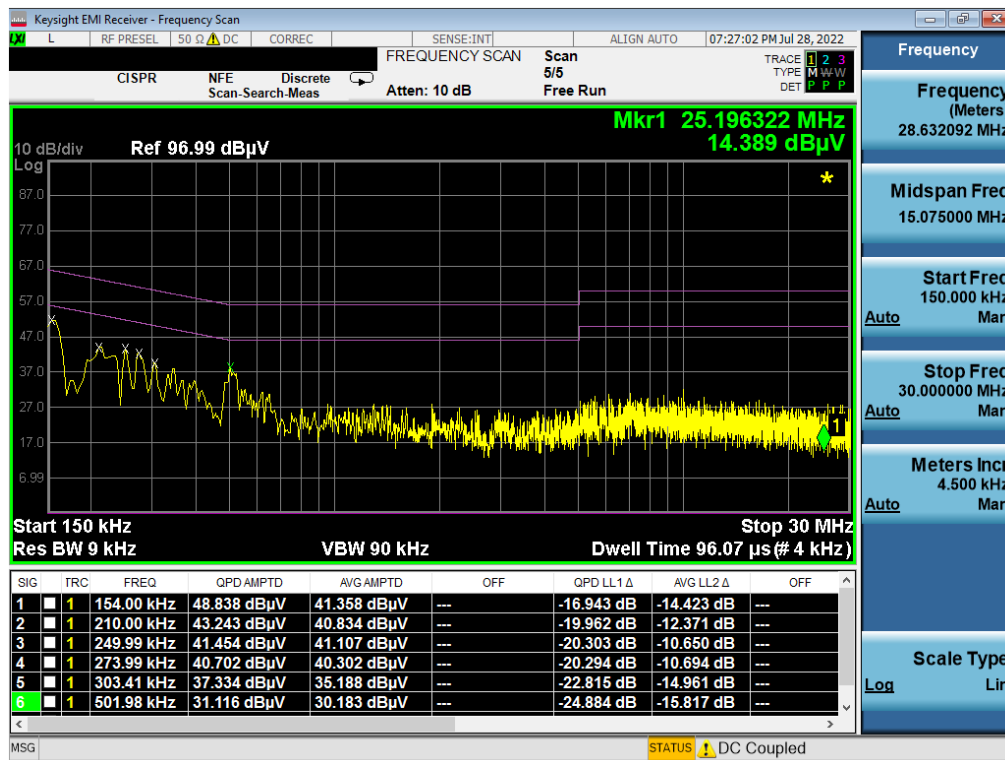
Test Notes

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 are 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: PY7-76056F	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
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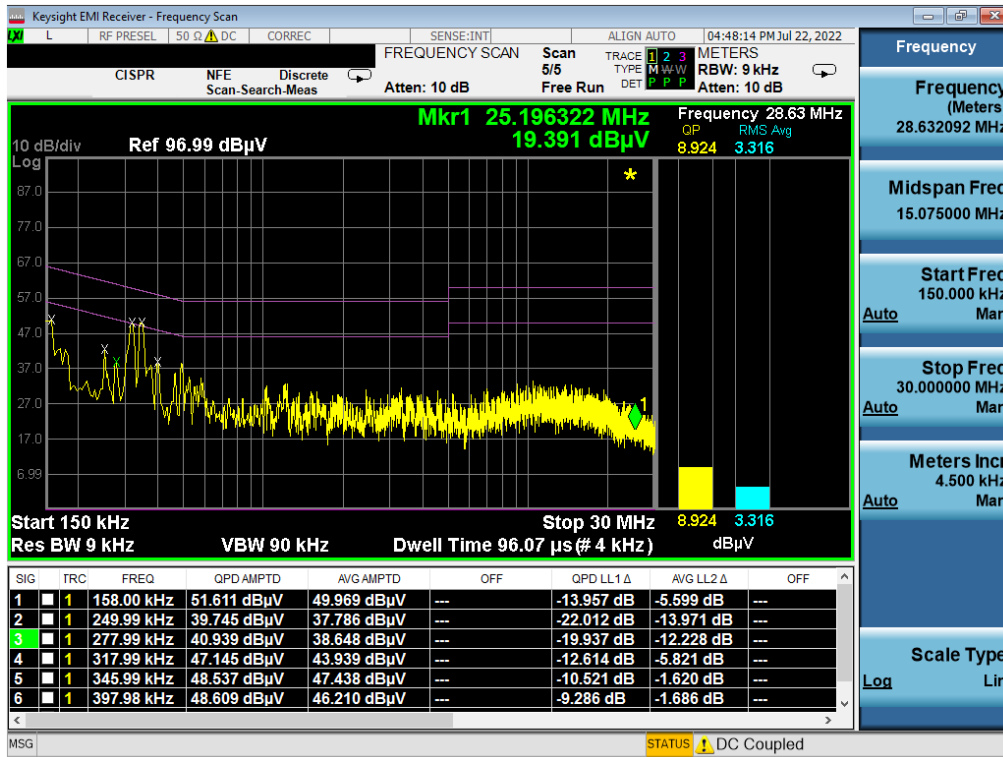


Plot 7-317. Line Conducted Plot with 802.11a UNII Band 1 (L1)

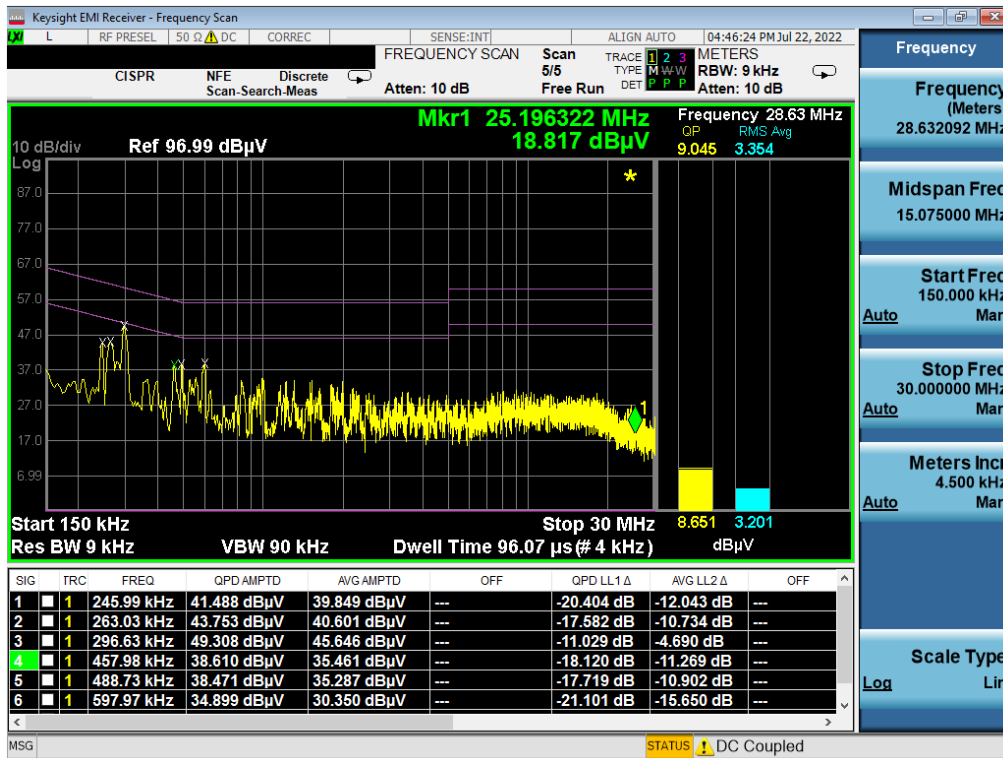


Plot 7-318. Line Conducted Plot with 802.11a UNII Band 1 (N)

FCC ID: PY7-76056F		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2205240663-15.PY7	Test Dates: 6/3/2022-7/29/2022	EUT Type: Portable Handset		Page 202 of 210

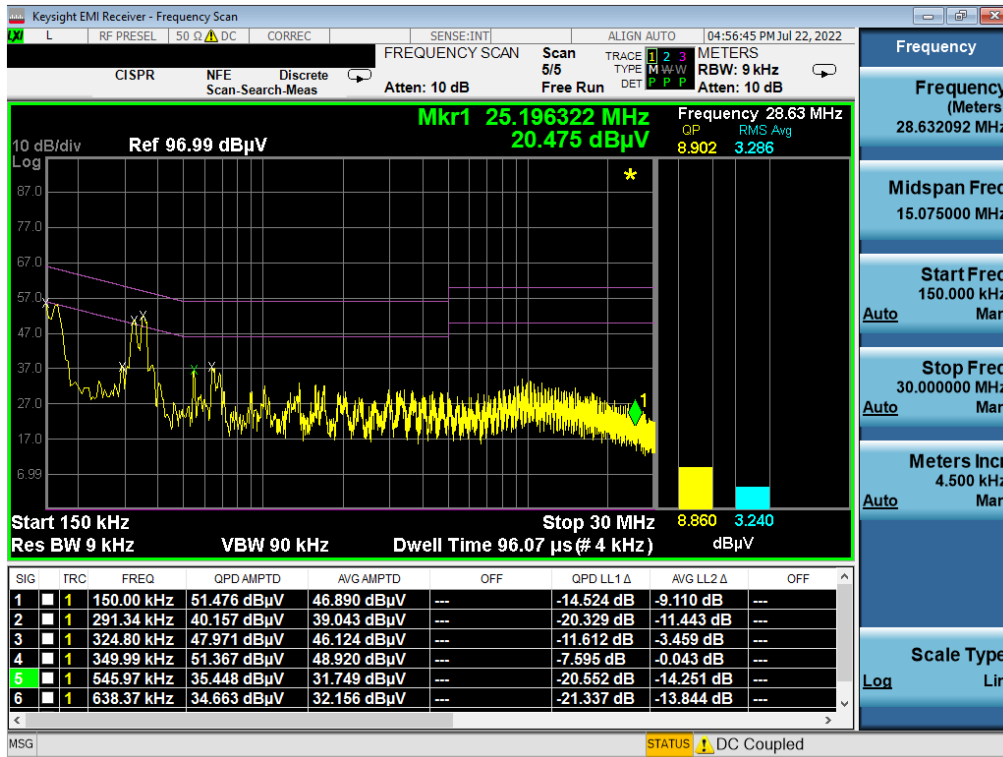


Plot 7-319. Line Conducted Plot with 802.11a UNII Band 2A (L1)

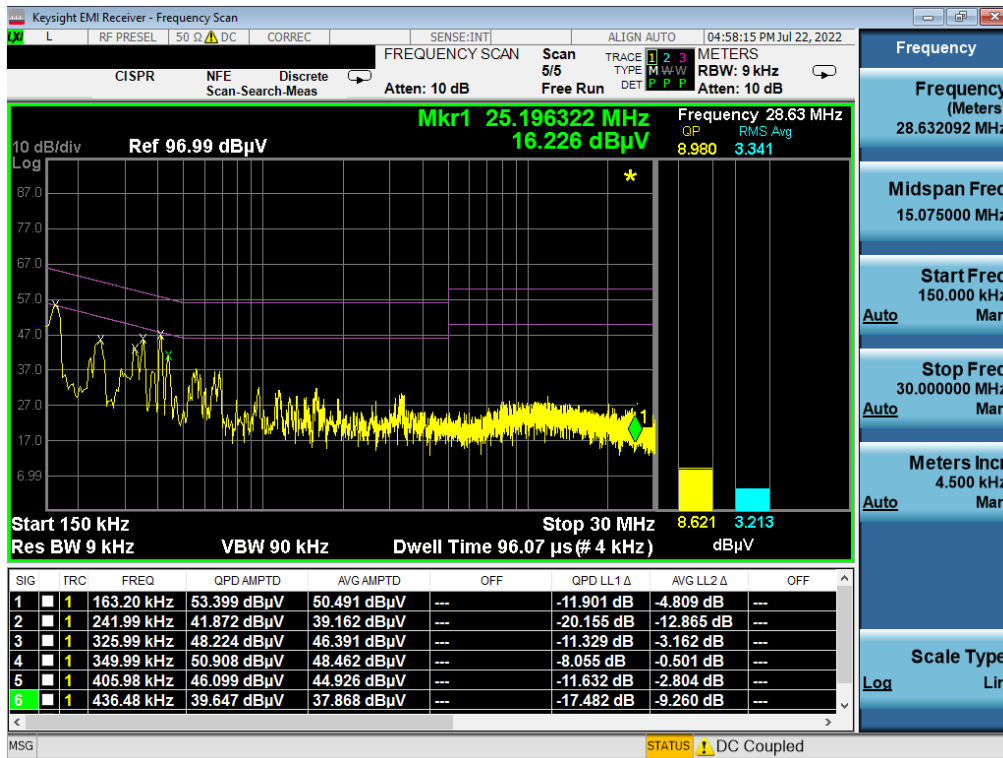


Plot 7-320. Line Conducted Plot with 802.11a UNII Band 2A (N)

MEASUREMENT REPORT (CERTIFICATION)			Approved by: Technical Manager
FCC ID: PY7-76056F	Test Report S/N: 1M2205240663-15.PY7	Test Dates: 6/3/2022-7/29/2022	Page 203 of 210
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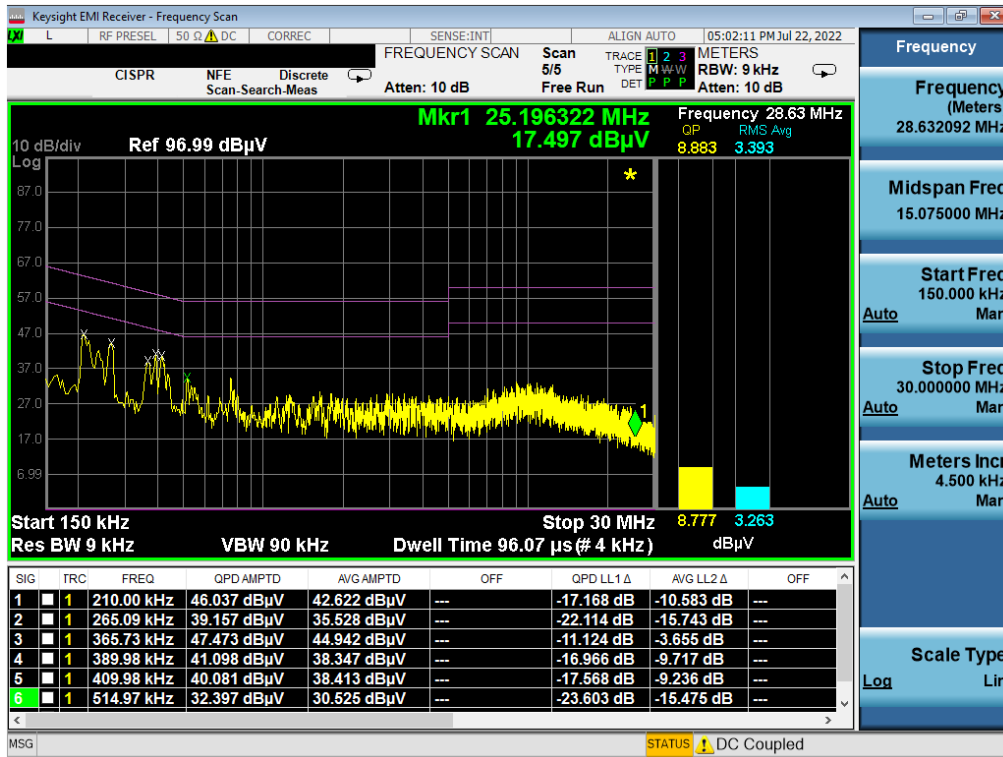


Plot 7-321. Line Conducted Plot with 802.11a UNII Band 2C (L1)

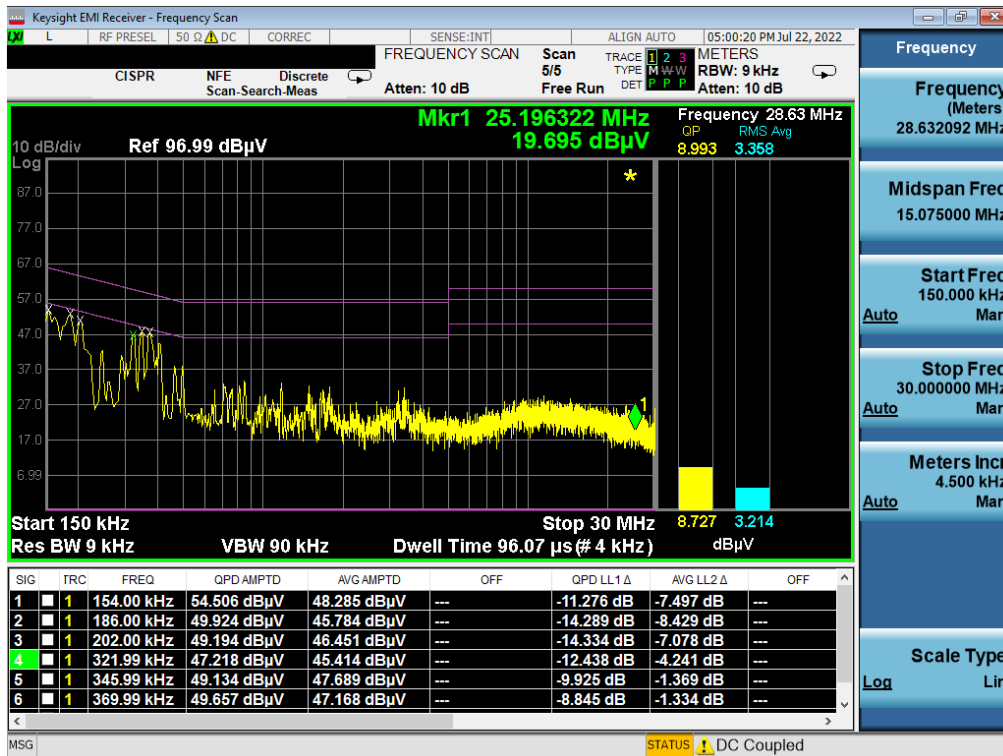


Plot 7-322. Line Conducted Plot with 802.11a UNII Band 2C (N)

MEASUREMENT REPORT (CERTIFICATION)			Approved by: Technical Manager
FCC ID: PY7-76056F	Test Report S/N: 1M2205240663-15.PY7	Test Dates: 6/3/2022-7/29/2022	Page 204 of 210
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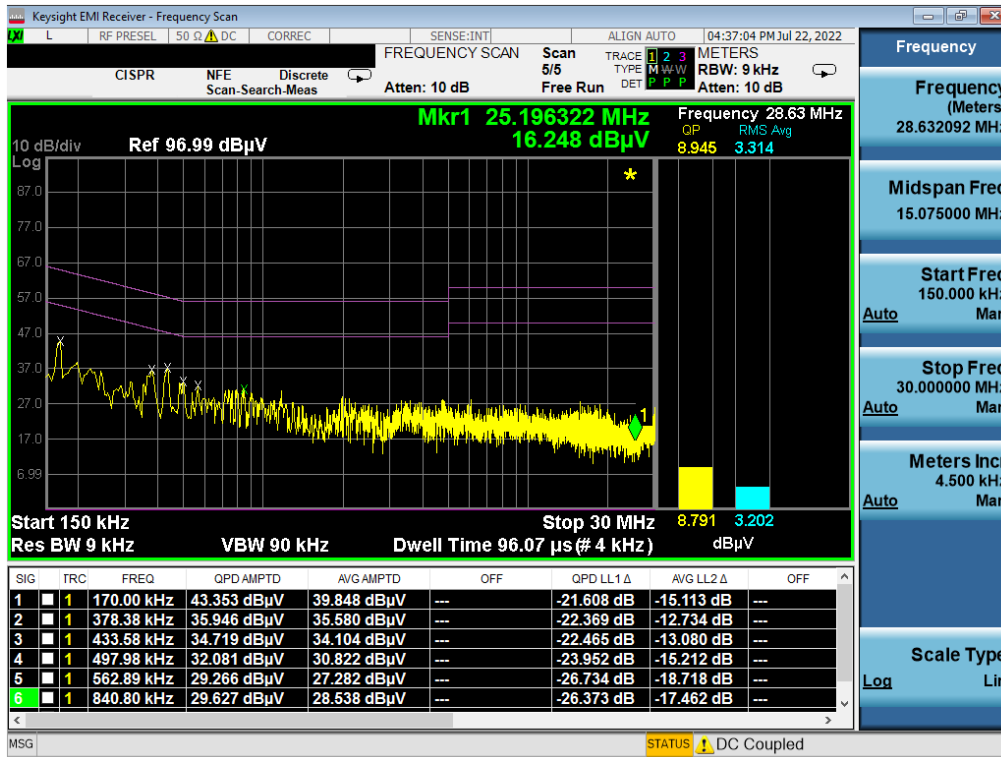


Plot 7-323. Line Conducted Plot with 802.11a UNII Band 3 (L1)

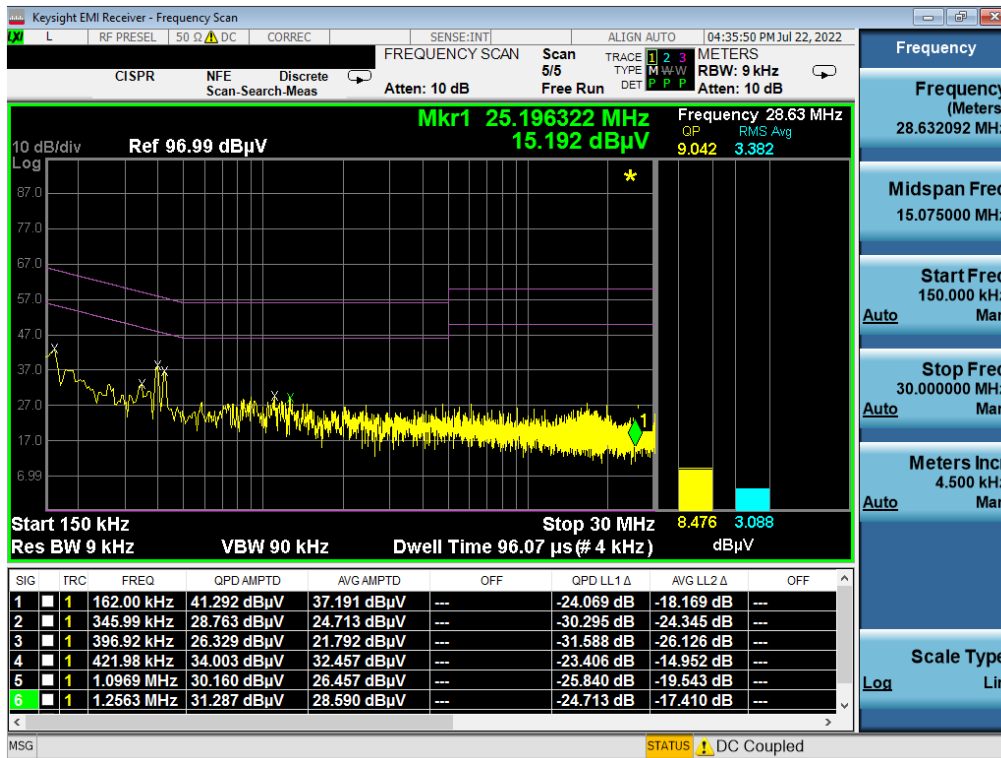


Plot 7-324. Line Conducted Plot with 802.11a UNII Band 3 (N)

MEASUREMENT REPORT (CERTIFICATION)			Approved by: Technical Manager
FCC ID: PY7-76056F	Test Report S/N: 1M2205240663-15.PY7	Test Dates: 6/3/2022-7/29/2022	Page 205 of 210
		EUT Type: Portable Handset	

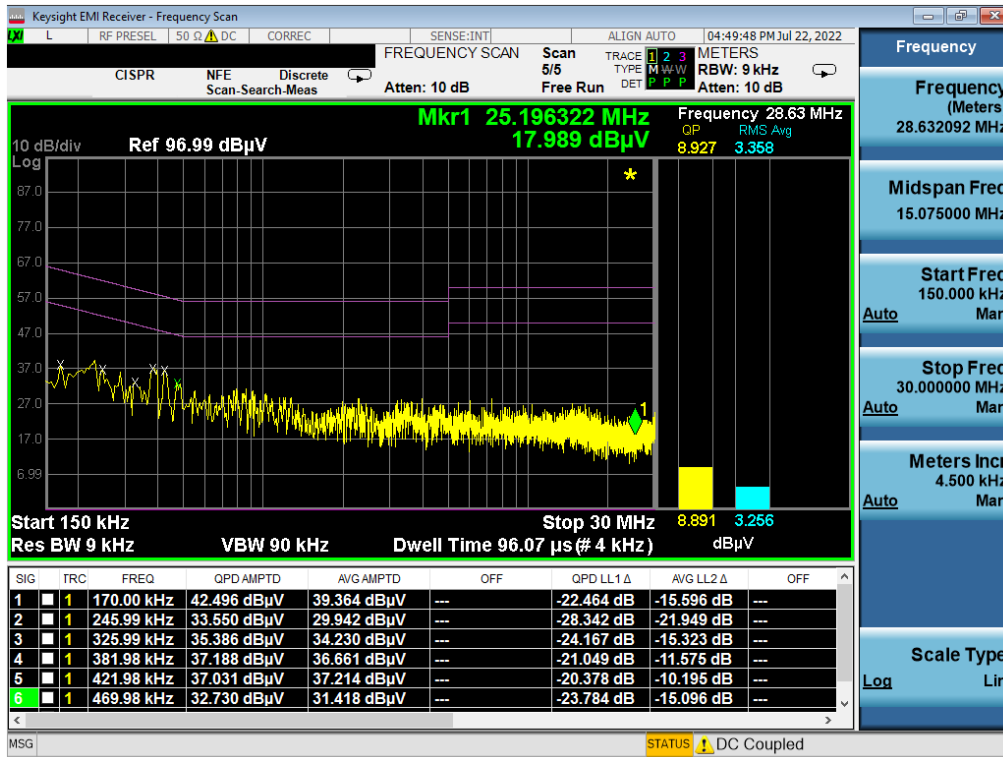


Plot 7-325. Line Conducted Plot with 802.11a UNII Band 1 (L1) - WCP

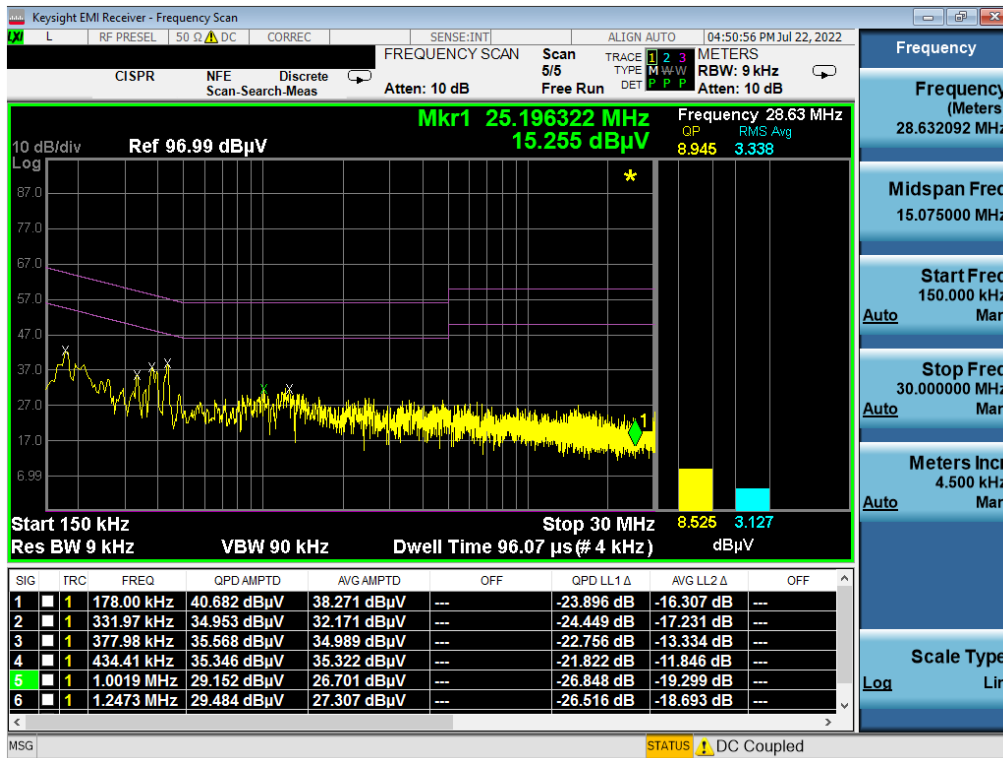


Plot 7-326. Line Conducted Plot with 802.11a UNII Band 1 (N) - WCP

FCC ID: PY7-76056F		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2205240663-15.PY7	Test Dates: 6/3/2022-7/29/2022	EUT Type: Portable Handset		Page 206 of 210

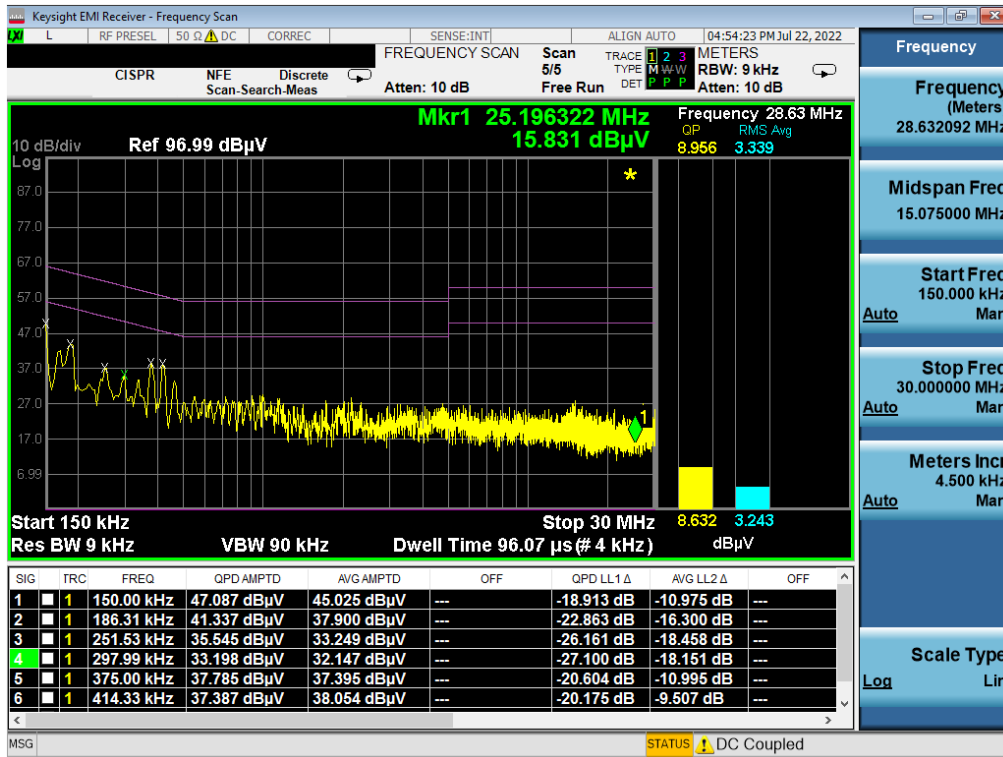


Plot 7-327. Line Conducted Plot with 802.11a UNII Band 2A (L1) - WCP

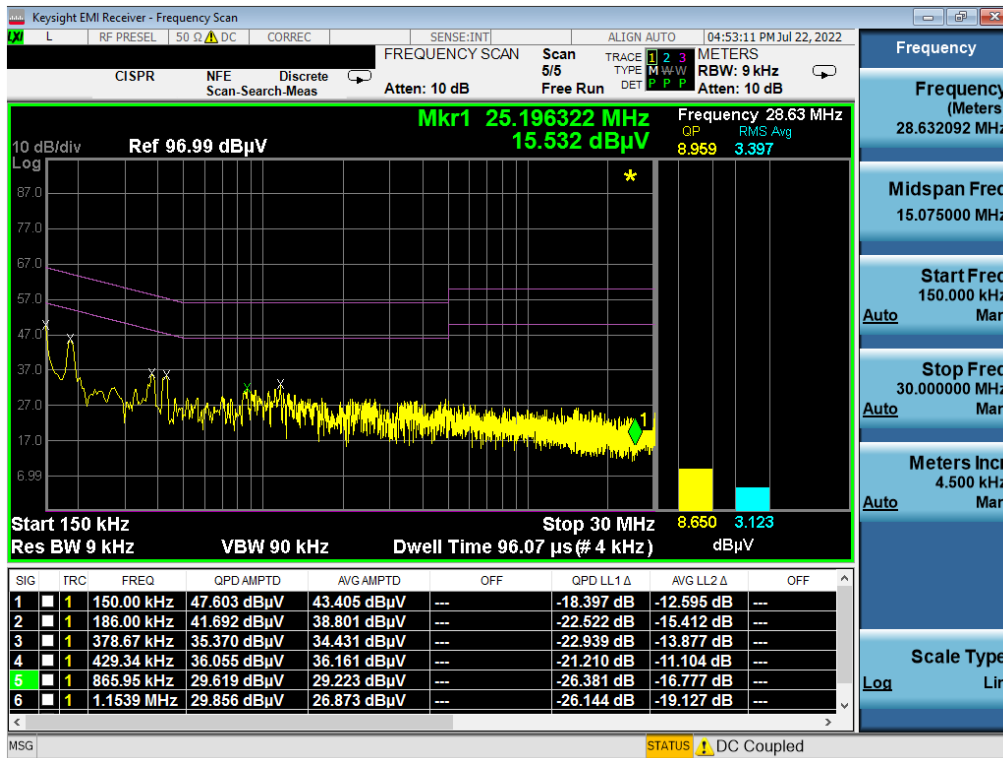


Plot 7-328. Line Conducted Plot with 802.11a UNII Band 2A (N) - WCP

MEASUREMENT REPORT (CERTIFICATION)			Approved by: Technical Manager
FCC ID: PY7-76056F	Test Report S/N: 1M2205240663-15.PY7	Test Dates: 6/3/2022-7/29/2022	Page 207 of 210
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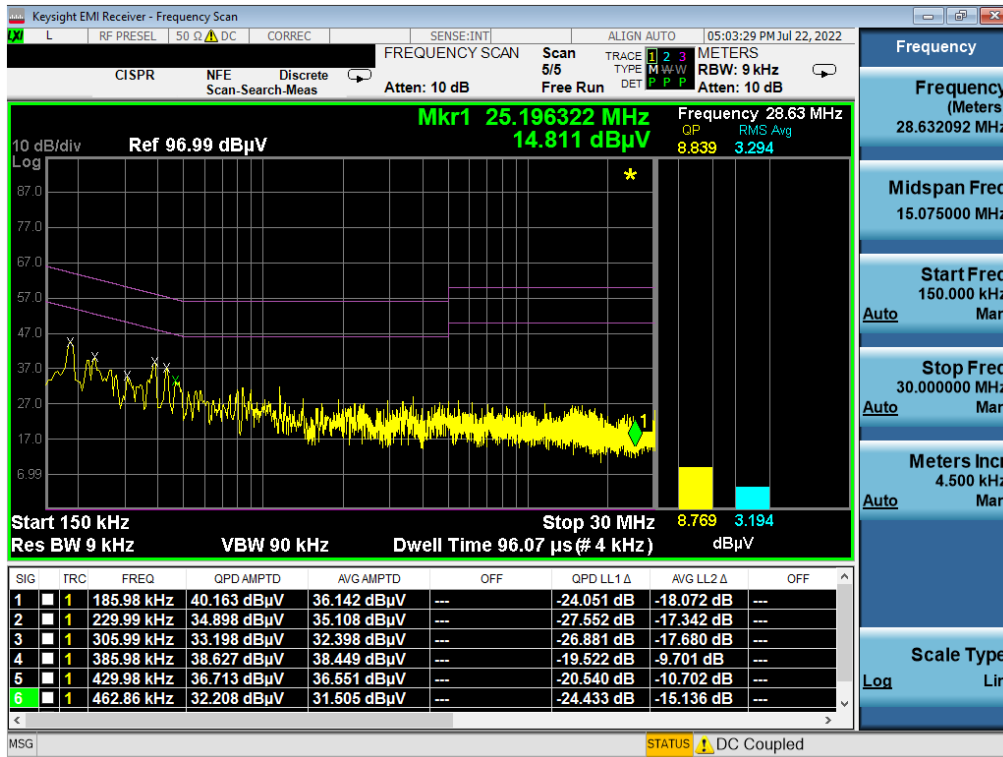


Plot 7-329. Line Conducted Plot with 802.11a UNII Band 2C (L1) - WCP

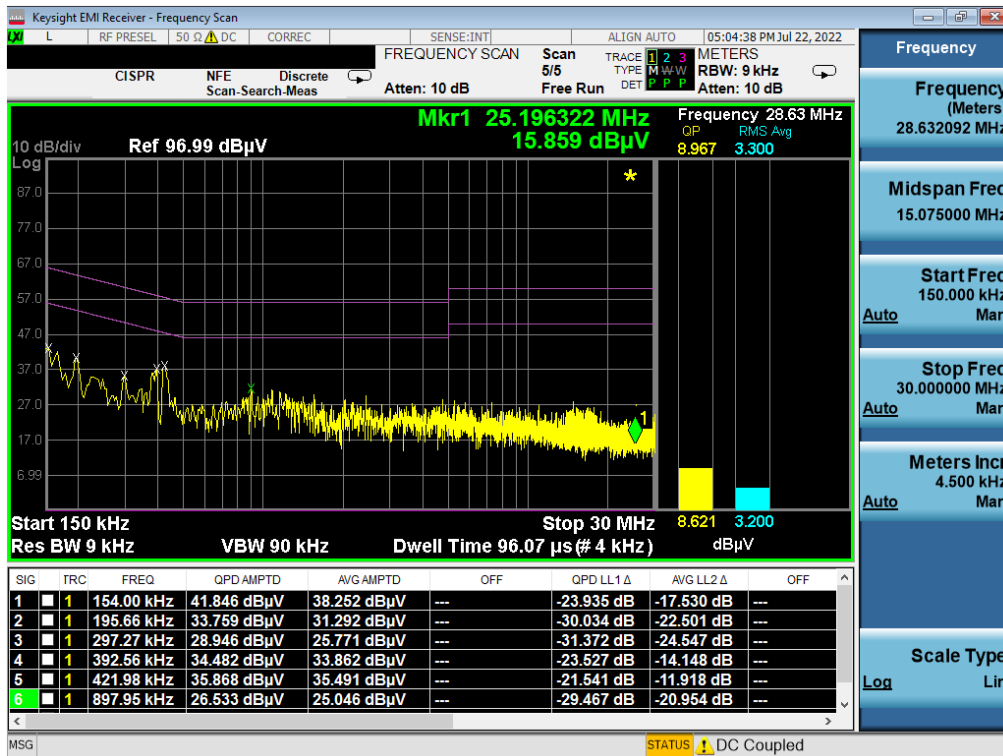


Plot 7-330. Line Conducted Plot with 802.11a UNII Band 2C (N) - WCP

FCC ID: PY7-76056F		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
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Plot 7-331. Line Conducted Plot with 802.11a UNII Band 3 (L1) - WCP



Plot 7-332. Line Conducted Plot with 802.11a UNII Band 3 (N) - WCP

MEASUREMENT REPORT (CERTIFICATION)			Approved by: Technical Manager
FCC ID: PY7-76056F	Test Report S/N: 1M2205240663-15.PY7	Test Dates: 6/3/2022-7/29/2022	Page 209 of 210
EUT Type: Portable Handset			

8.0 CONCLUSION

The data collected relate only the item(s) tested and show that the **Sony Corporation Portable Handset FCC ID: PY7-76056F** is in compliance with Part 15 Subpart E (15.407) of the FCC Rules.

FCC ID: PY7-76056F	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2205240663-15.PY7	Test Dates: 6/3/2022-7/29/2022	EUT Type: Portable Handset	Page 210 of 210