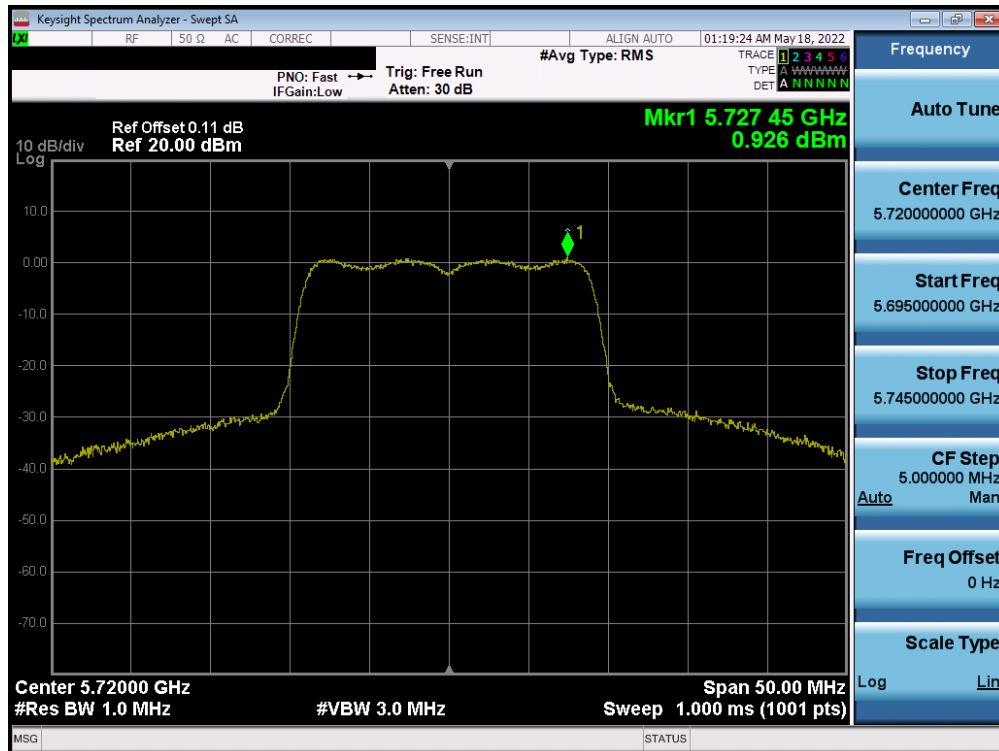


Plot 7-89. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11n (UNII Band 2C) – Ch. 120)

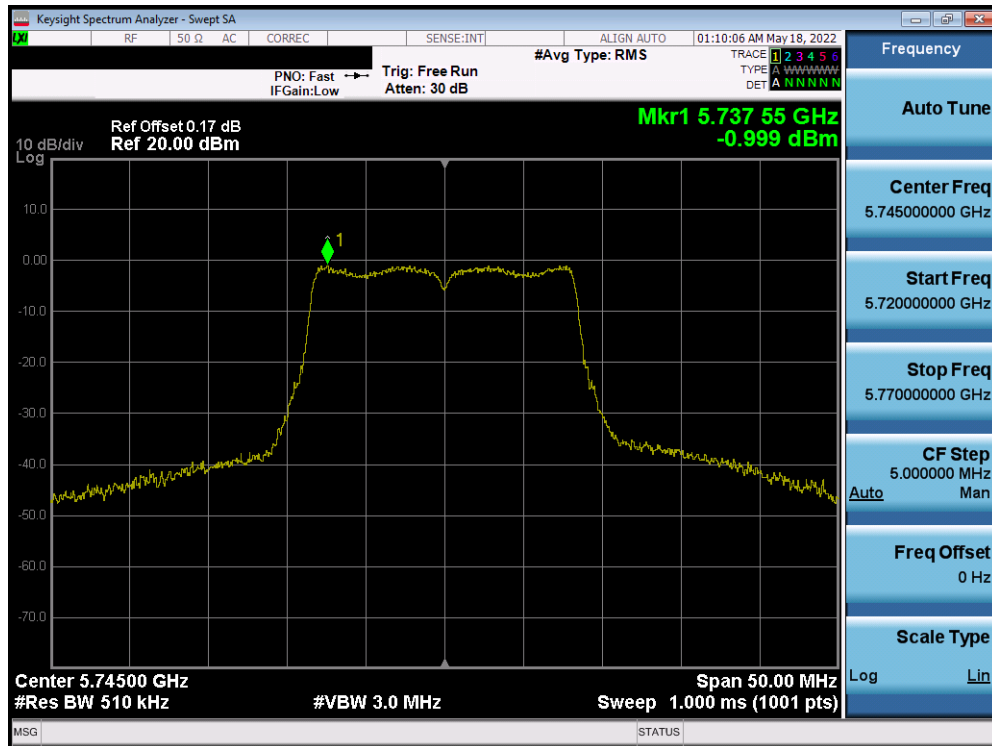


Plot 7-90. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11n (UNII Band 2C) – Ch. 144)

FCC ID: V7MESLCTGA	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1M2202090014-04.V7M	Test Dates: 02/11/2022 ~ 05/23/2022	EUT Type: LTE Indoor CPE	Page 74 of 173

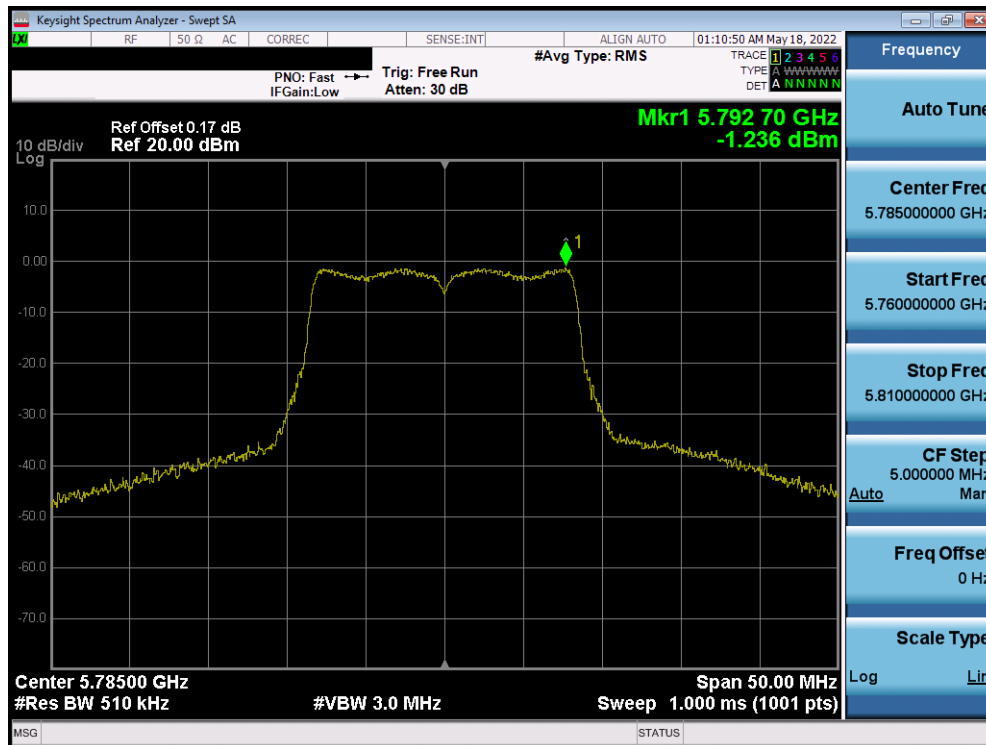
	Frequency [MHz]	Channel No.	802.11 Mode	Data Rate [Mbps]	Measured Power Density [dBm]	Max Permissible Power Density [dBm/500kHz]	Margin [dB]
Band 3	5745	149	a	6	-1.00	30.0	-31.00
	5785	157	a	6	-1.24	30.0	-31.24
	5825	165	a	6	-1.48	30.0	-31.48
	5745	149	n (20MHz)	6.5/7.2 (MCS0)	-1.32	30.0	-31.32
	5785	157	n (20MHz)	6.5/7.2 (MCS0)	-1.44	30.0	-31.44
	5825	165	n (20MHz)	6.5/7.2 (MCS0)	-2.62	30.0	-32.62

Table 7-14. Band 3 Conducted Power Spectral Density Measurements SISO ANT2

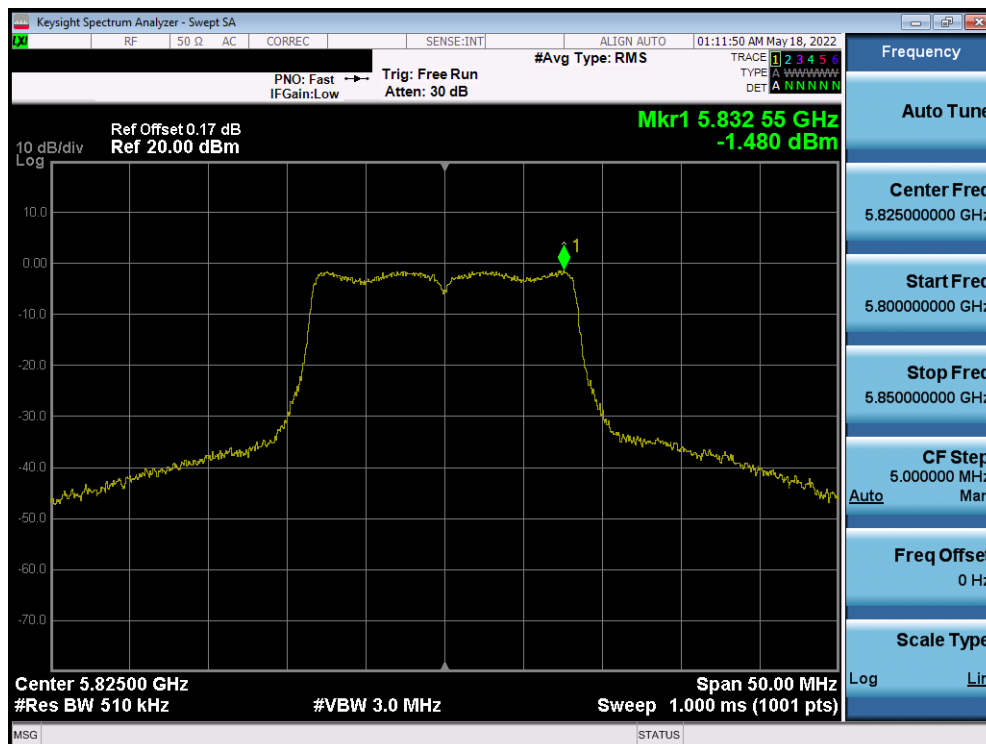


Plot 7-91. Power Spectral Density Plot SISO ANT2 (802.11a (UNII Band 3) – Ch. 149)

FCC ID: V7MESLCTGA	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1M2202090014-04.V7M	Test Dates: 02/11/2022 ~ 05/23/2022	EUT Type: LTE Indoor CPE	Page 75 of 173

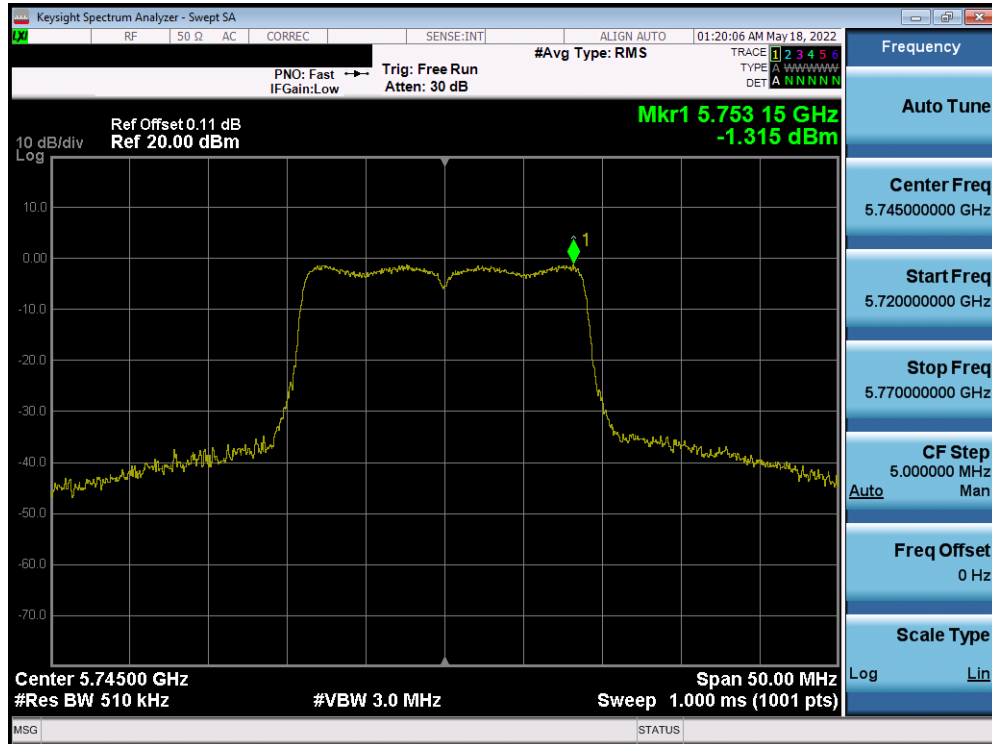


Plot 7-92. Power Spectral Density Plot SISO ANT2 (802.11a (UNII Band 3) – Ch. 157)

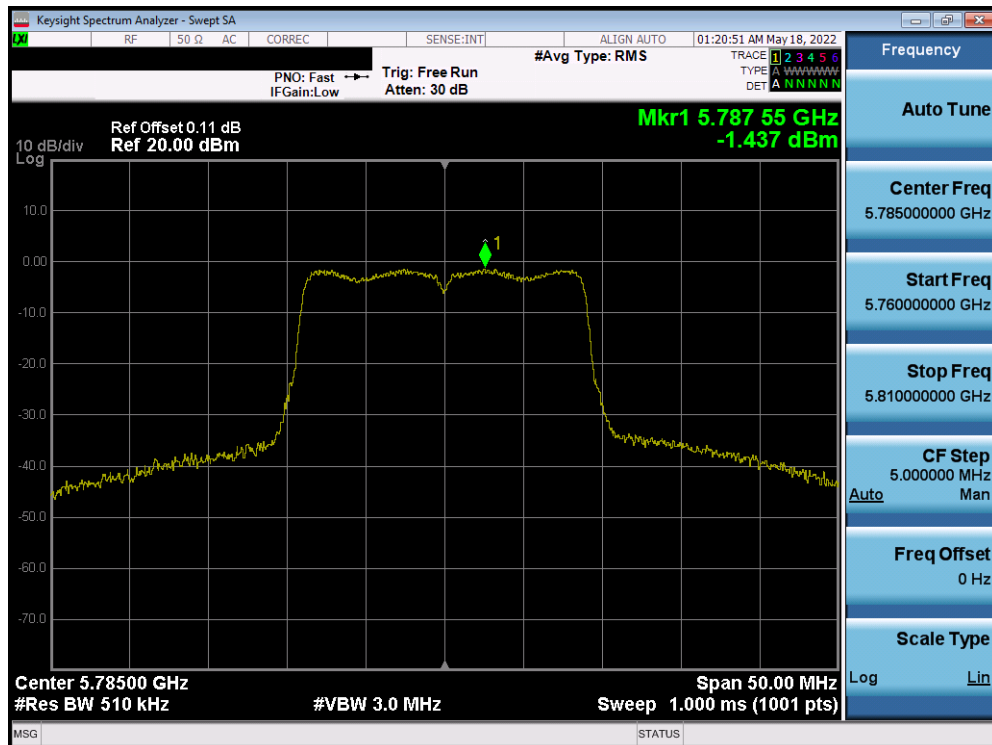


Plot 7-93. Power Spectral Density Plot SISO ANT2 (802.11a (UNII Band 3) – Ch. 165)

FCC ID: V7MESLCTGA	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1M2202090014-04.V7M	Test Dates: 02/11/2022 ~ 05/23/2022	EUT Type: LTE Indoor CPE	Page 76 of 173

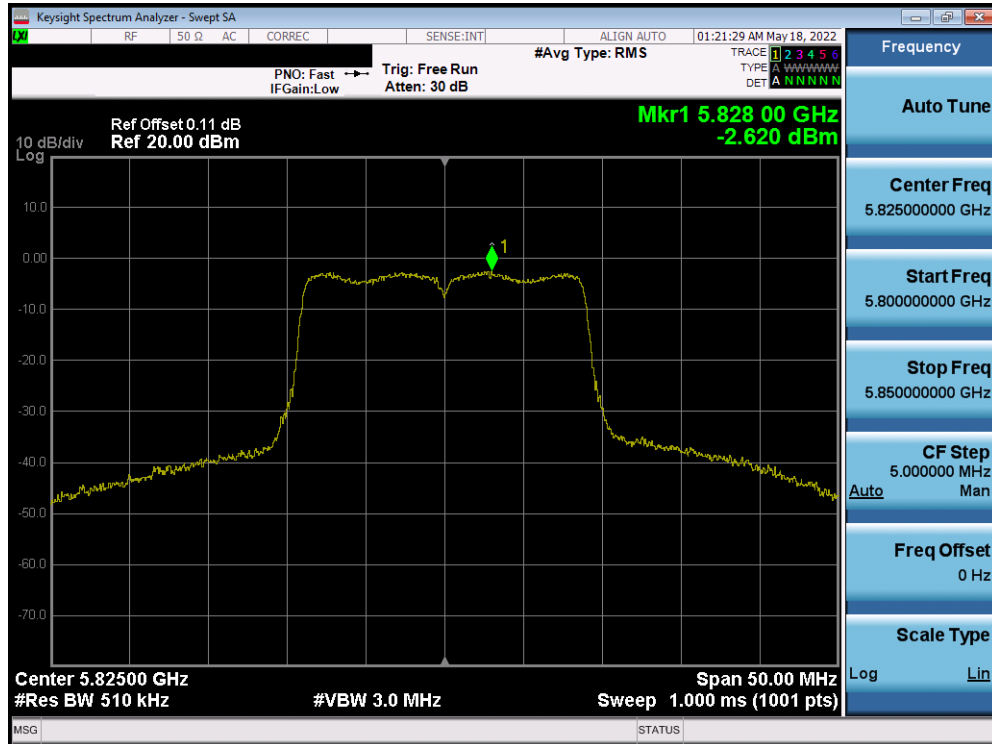


Plot 7-94. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11n (UNII Band 3) – Ch. 149)



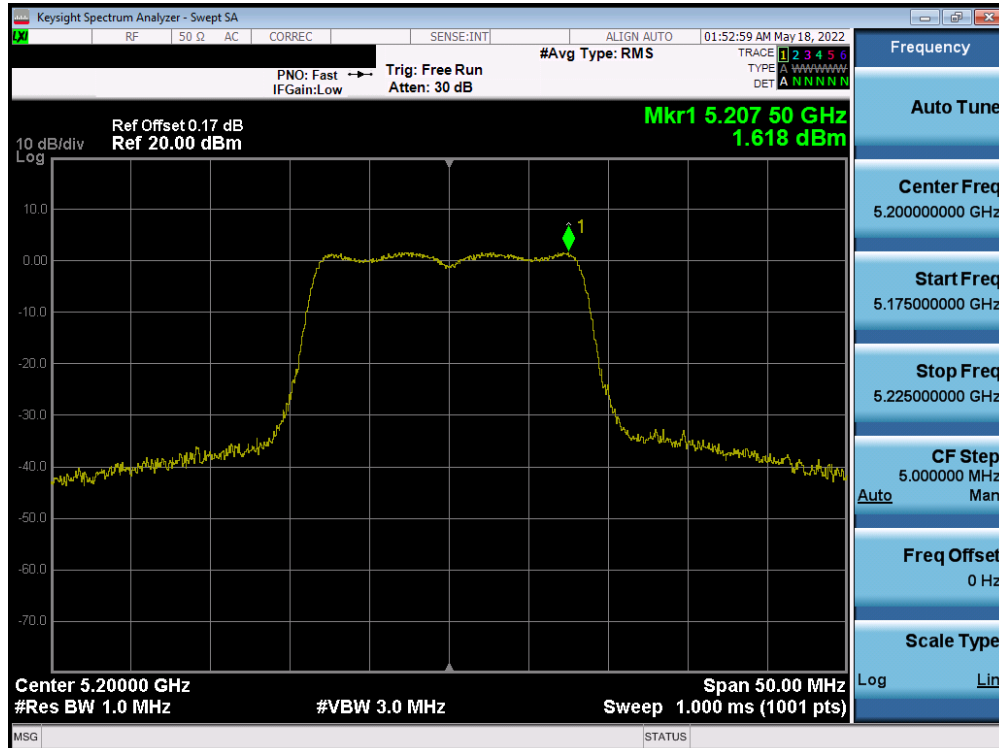
Plot 7-95. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11n (UNII Band 3) – Ch. 157)

FCC ID: V7MESLCTGA		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1M2202090014-04.V7M	Test Dates: 02/11/2022 ~ 05/23/2022	EUT Type: LTE Indoor CPE	Page 77 of 173

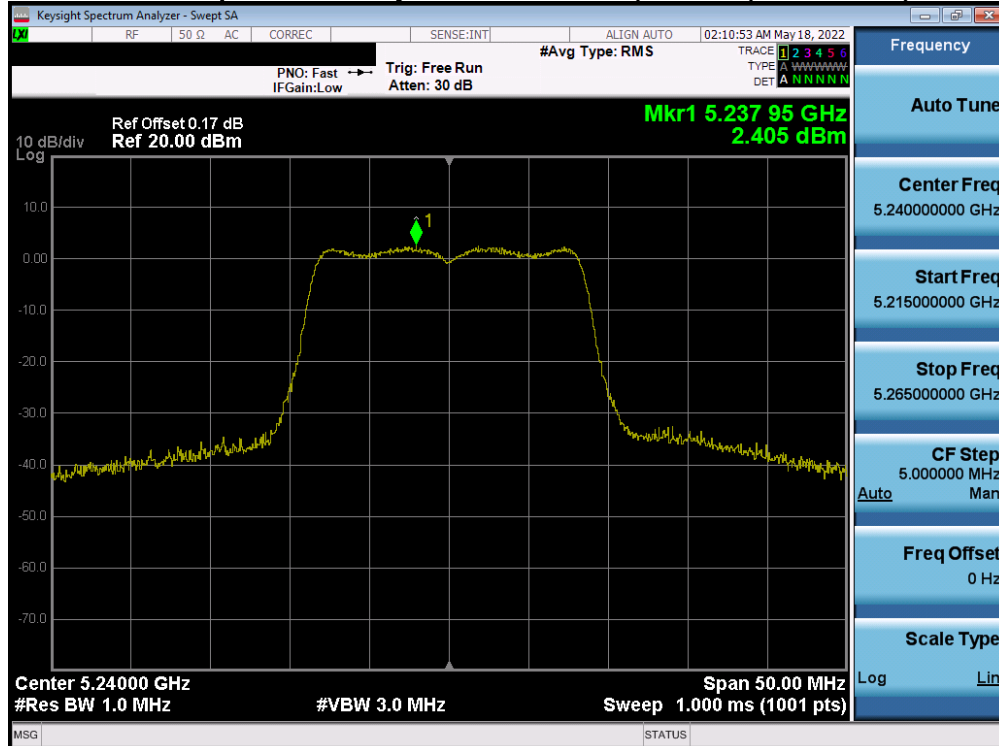


Plot 7-96. Power Spectral Density Plot SISO ANT2 (20MHz BW 802.11n (UNII Band 3) – Ch. 165)

FCC ID: V7MESLCTGA	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1M2202090014-04.V7M	Test Dates: 02/11/2022 ~ 05/23/2022	EUT Type: LTE Indoor CPE	Page 78 of 173

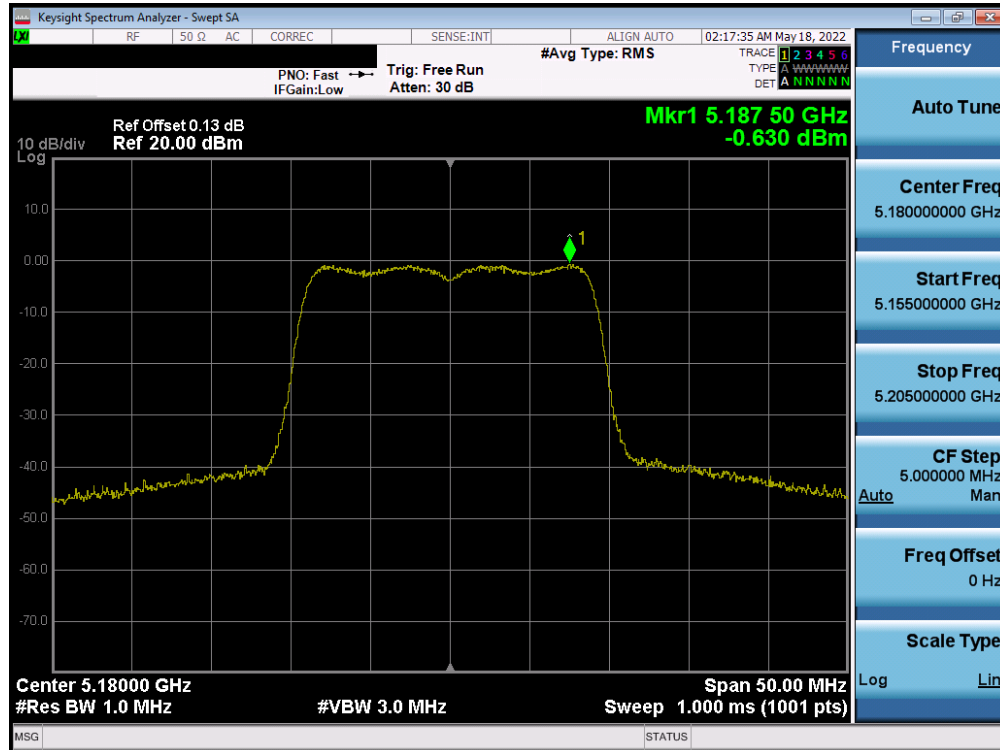


Plot 7-98. Power Spectral Density Plot MIMO ANT1 (802.11a (UNII Band 1) – Ch. 40)

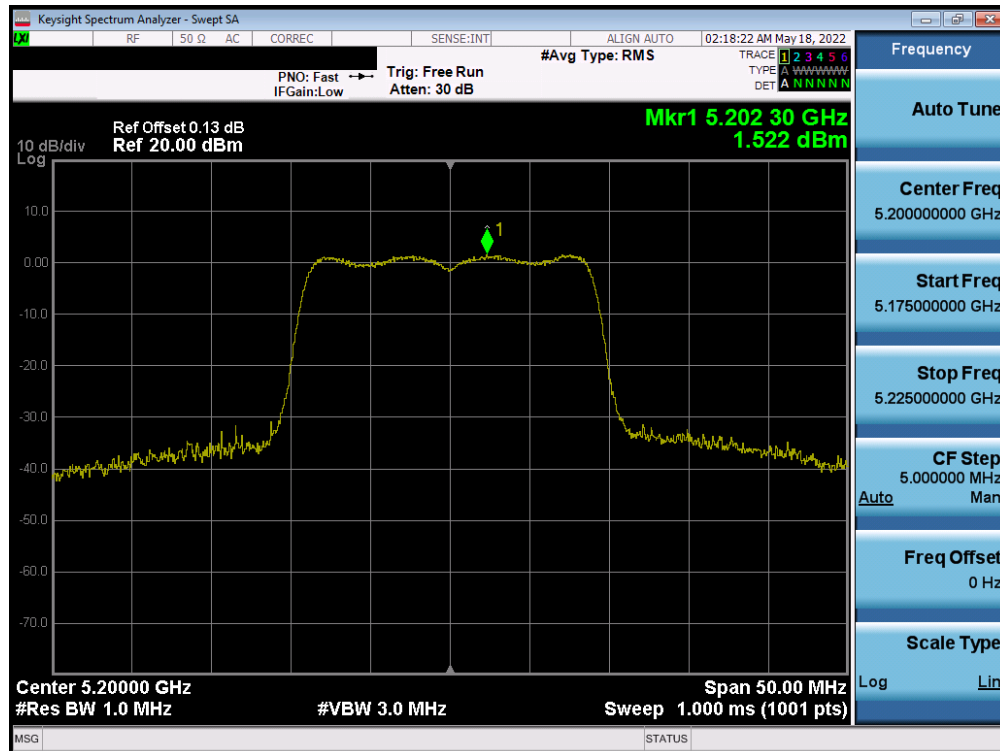


Plot 7-99. Power Spectral Density Plot MIMO ANT1 (802.11a (UNII Band 1) – Ch. 48)

FCC ID: V7MESLCTGA	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1M2202090014-04.V7M	Test Dates: 02/11/2022 ~ 05/23/2022	EUT Type: LTE Indoor CPE	Page 80 of 173

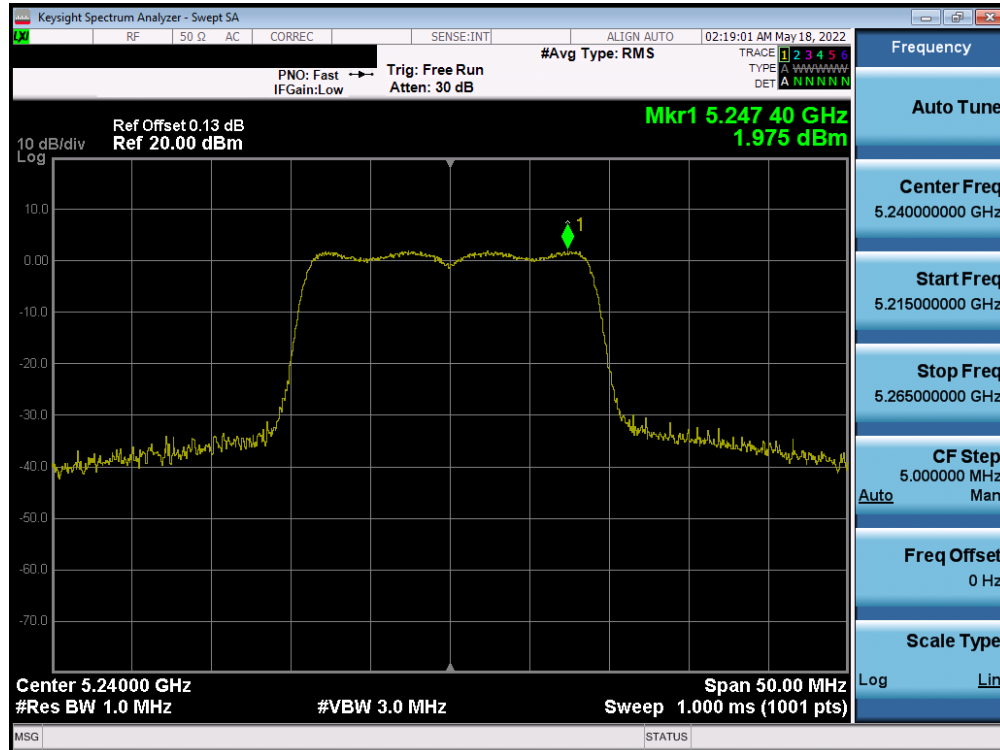


Plot 7-100. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11n (UNII Band 1) – Ch. 36)

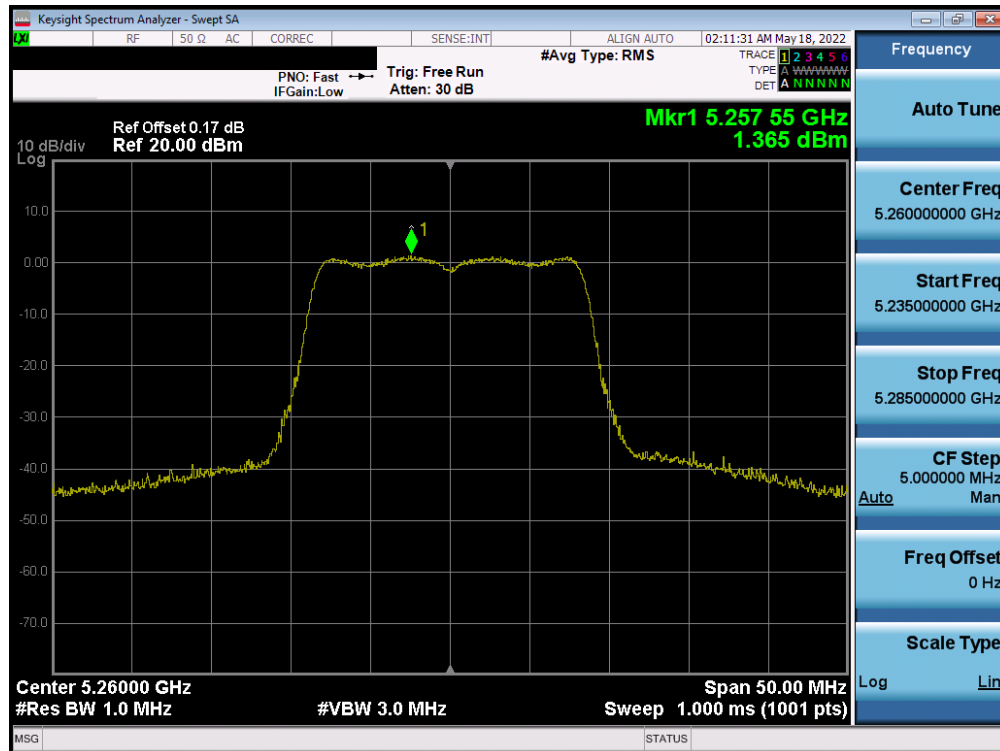


Plot 7-101. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11n (UNII Band 1) – Ch. 40)

FCC ID: V7MESLCTGA	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1M2202090014-04.V7M	Test Dates: 02/11/2022 ~ 05/23/2022	EUT Type: LTE Indoor CPE	Page 81 of 173

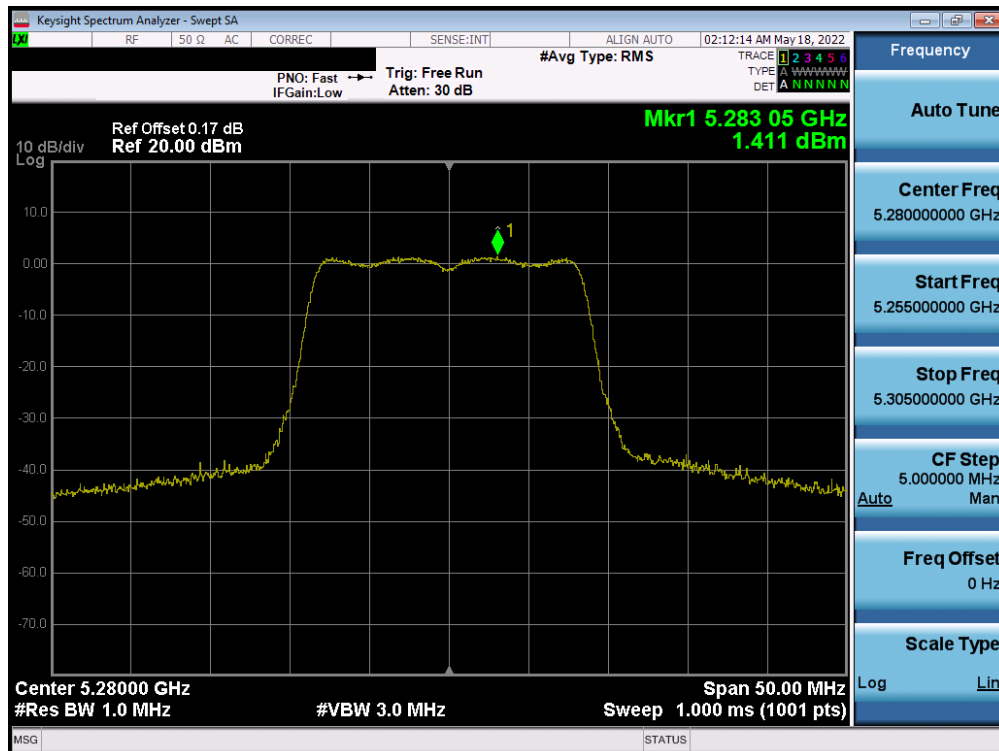


Plot 7-102. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11n (UNII Band 1) – Ch. 48)

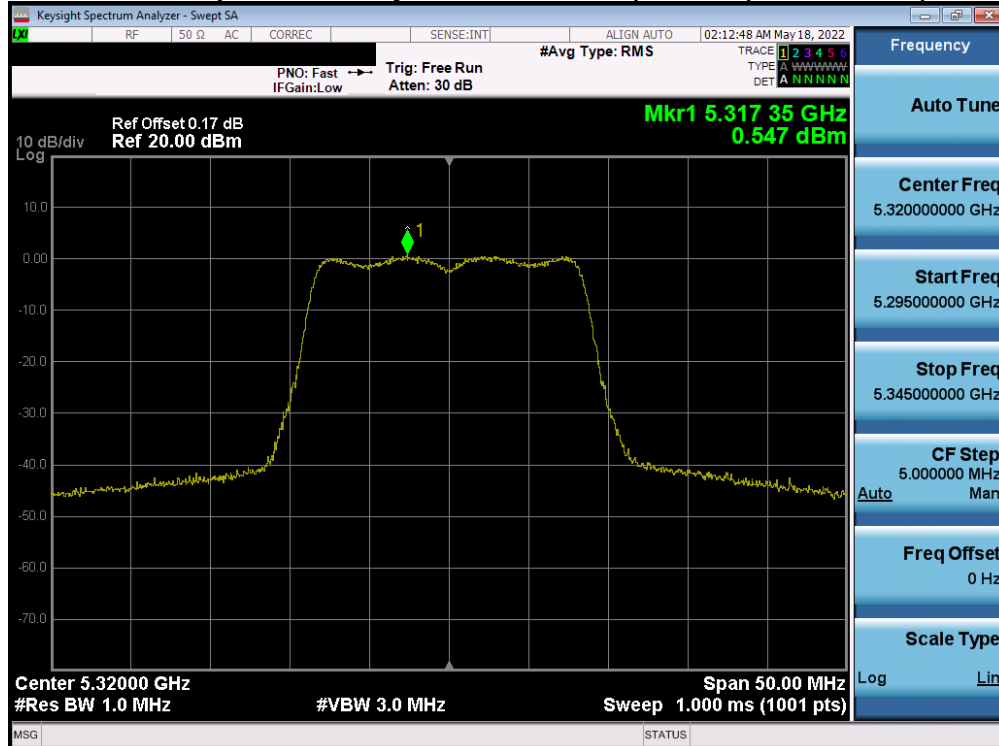


Plot 7-103. Power Spectral Density Plot MIMO ANT1 (802.11a (UNII Band 2A) – Ch. 52)

FCC ID: V7MESLCTGA	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1M2202090014-04.V7M	Test Dates: 02/11/2022 ~ 05/23/2022	EUT Type: LTE Indoor CPE	Page 82 of 173

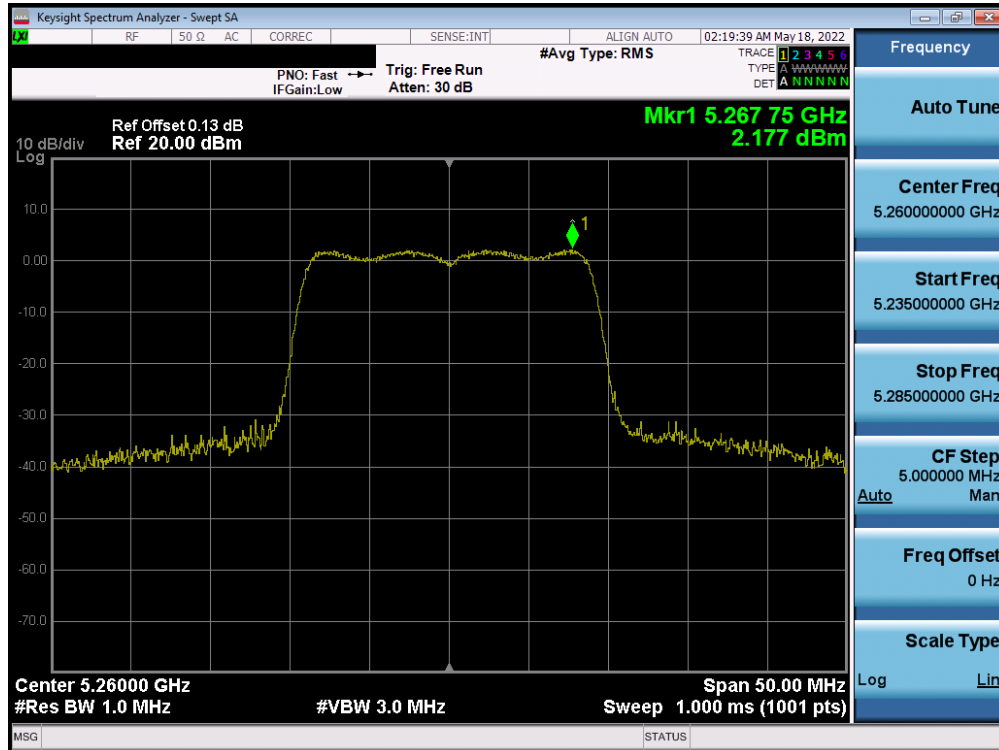


Plot 7-104. Power Spectral Density Plot MIMO ANT1 (802.11a (UNII Band 2A) – Ch. 56)

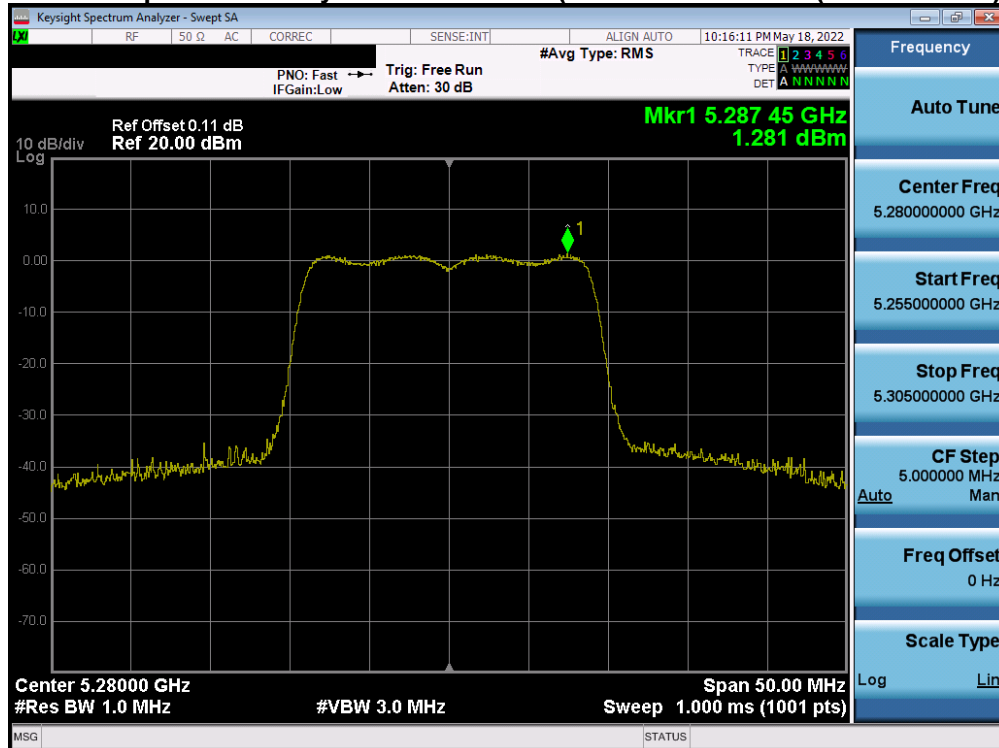


Plot 7-105. Power Spectral Density Plot MIMO ANT1 (802.11a (UNII Band 2A) – Ch. 64)

FCC ID: V7MESLCTGA	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1M2202090014-04.V7M	Test Dates: 02/11/2022 ~ 05/23/2022	EUT Type: LTE Indoor CPE	Page 83 of 173

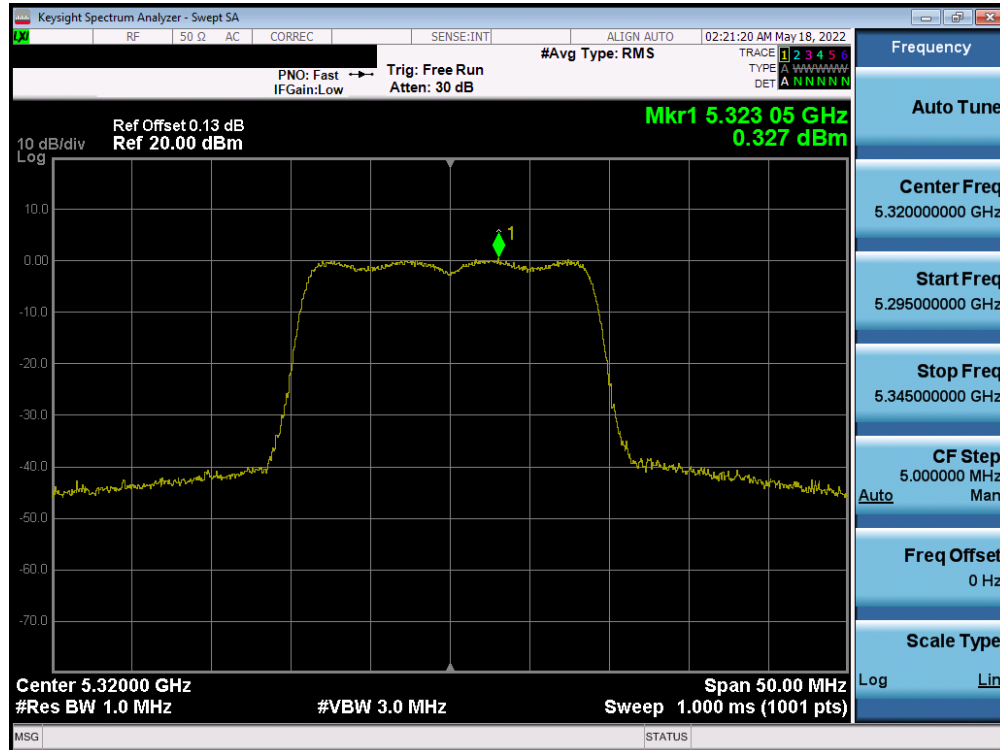


Plot 7-106. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11n (UNII Band 2A) – Ch. 52)

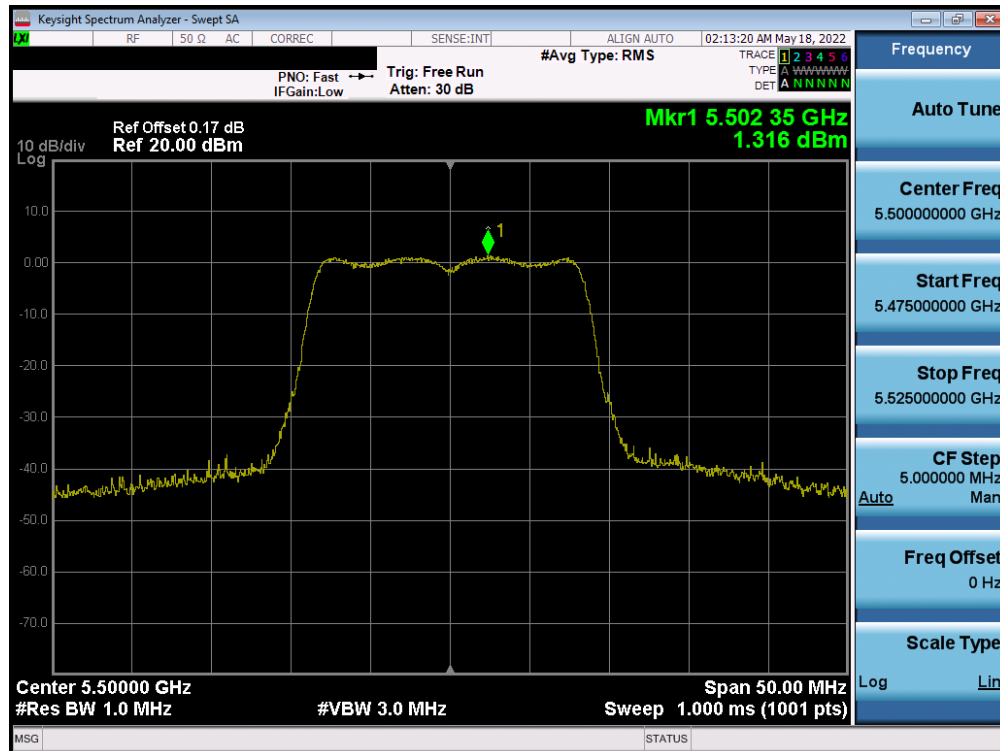


Plot 7-107. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11n (UNII Band 2A) – Ch. 56)

FCC ID: V7MESLCTGA	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1M2202090014-04.V7M	Test Dates: 02/11/2022 ~ 05/23/2022	EUT Type: LTE Indoor CPE	Page 84 of 173

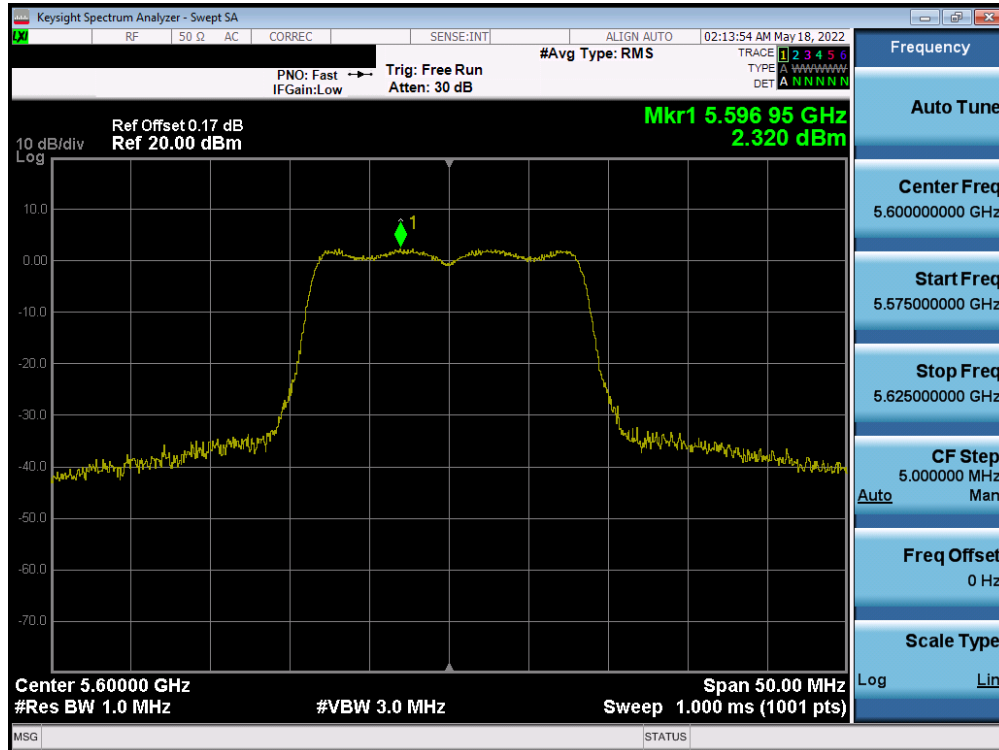


Plot 7-108. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11n (UNII Band 2A) – Ch. 64)

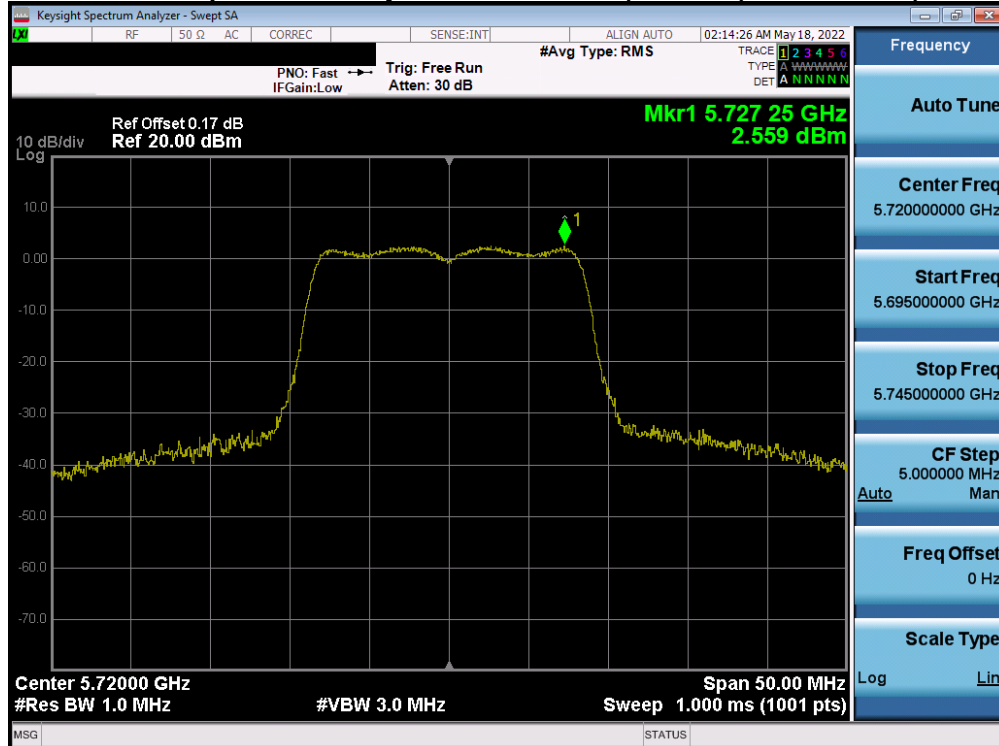


Plot 7-109. Power Spectral Density Plot MIMO ANT1 (802.11a (UNII Band 2C) – Ch. 100)

FCC ID: V7MESLCTGA	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1M2202090014-04.V7M	Test Dates: 02/11/2022 ~ 05/23/2022	EUT Type: LTE Indoor CPE	Page 85 of 173

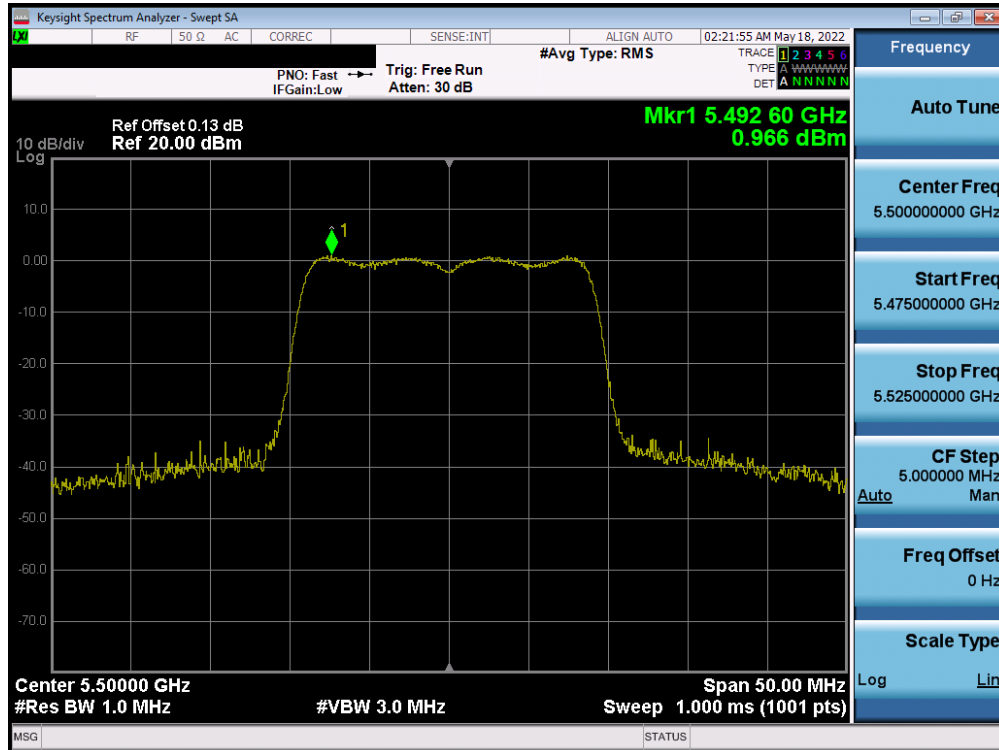


Plot 7-110. Power Spectral Density Plot MIMO ANT1 (802.11a (UNII Band 2C) – Ch. 120)

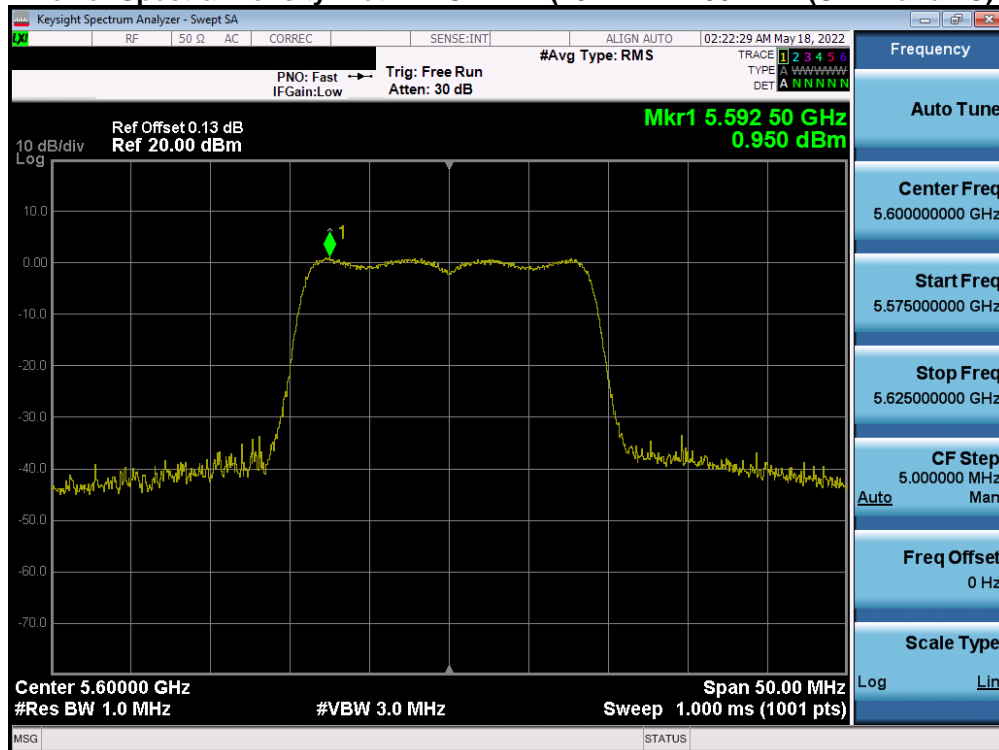


Plot 7-111. Power Spectral Density Plot MIMO ANT1 (802.11a (UNII Band 2C) – Ch. 144)

FCC ID: V7MESLCTGA	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1M2202090014-04.V7M	Test Dates: 02/11/2022 ~ 05/23/2022	EUT Type: LTE Indoor CPE	Page 86 of 173

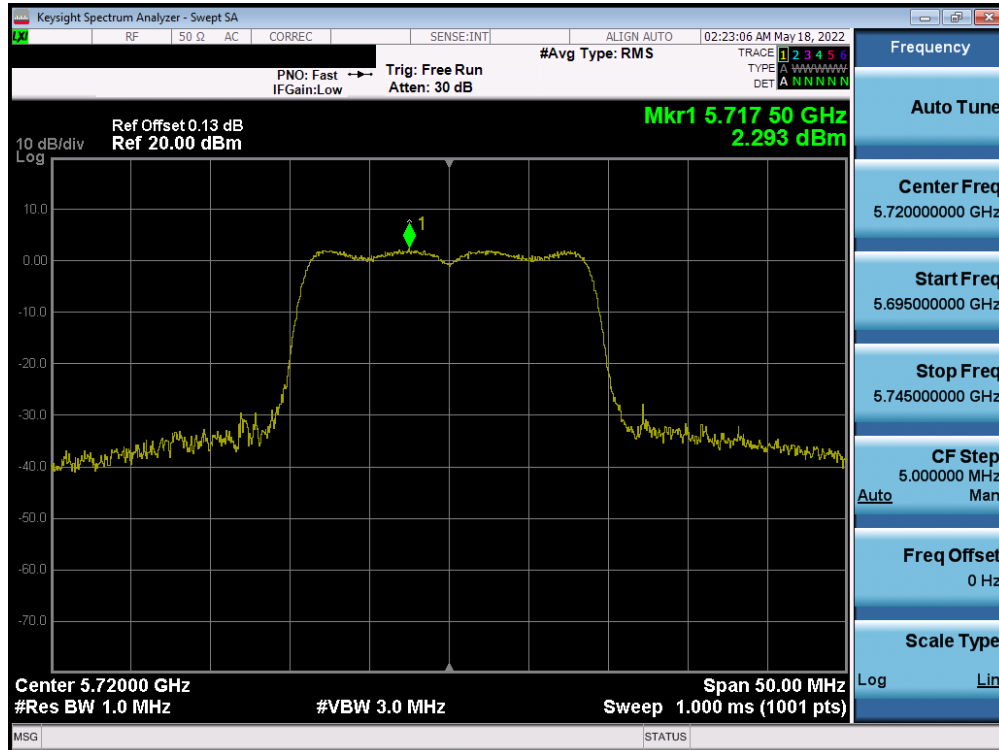


Plot 7-112. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11n (UNII Band 2C) – Ch. 100)

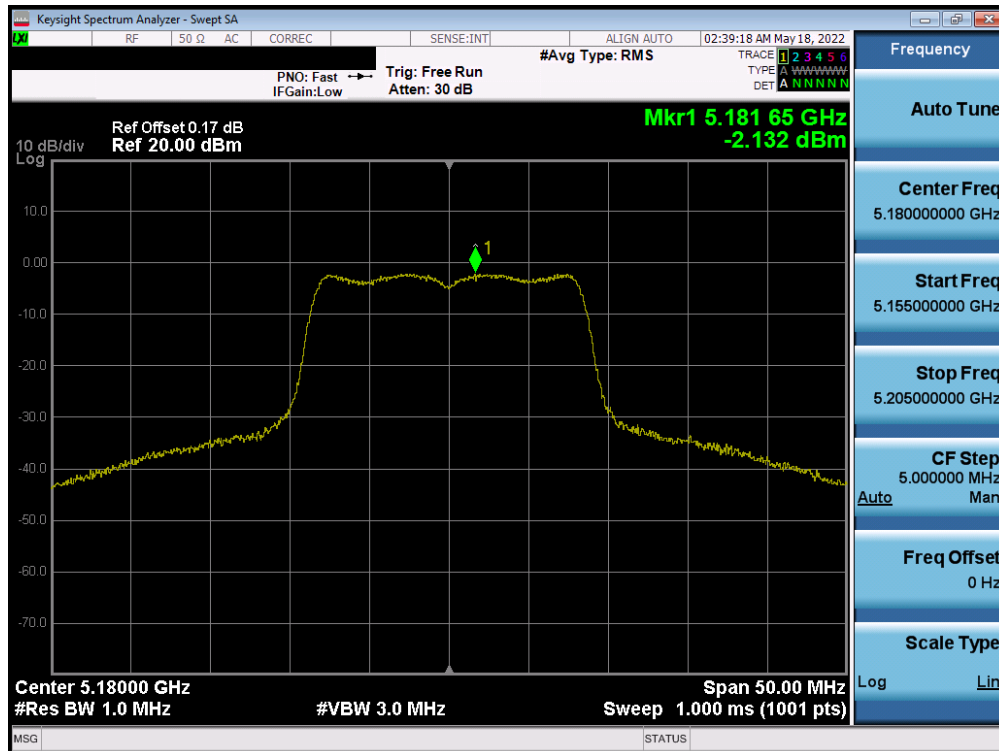


Plot 7-113. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11n (UNII Band 2C) – Ch. 120)

FCC ID: V7MESLCTGA	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1M2202090014-04.V7M	Test Dates: 02/11/2022 ~ 05/23/2022	EUT Type: LTE Indoor CPE	Page 87 of 173

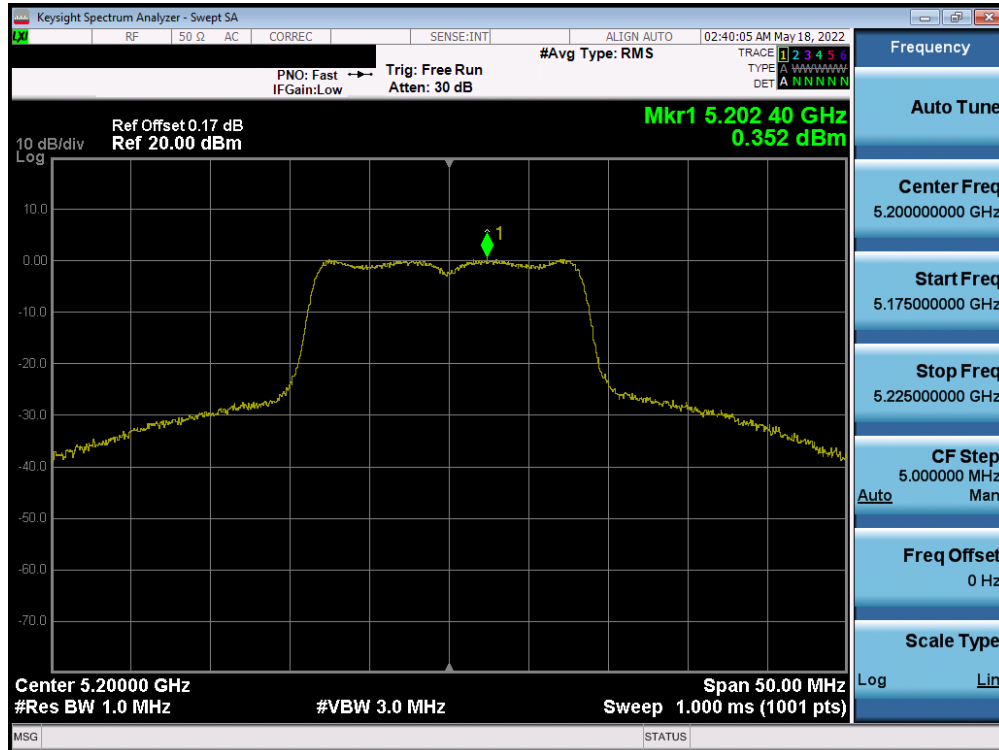


Plot 7-114. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11n (UNII Band 2C) – Ch. 144)

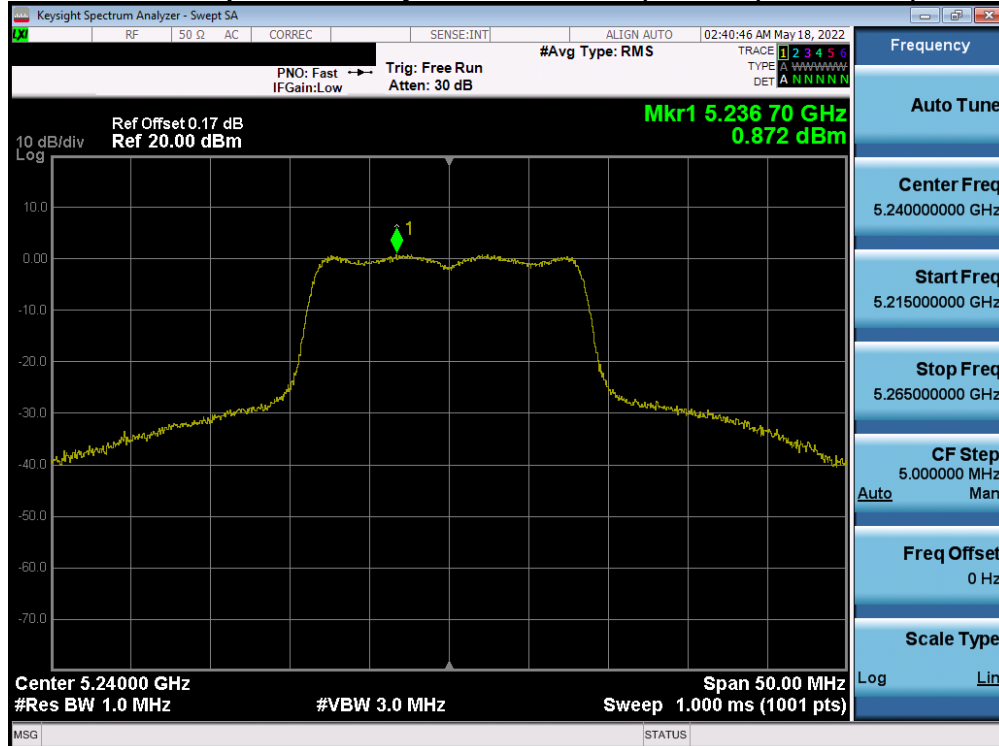


Plot 7-115. Power Spectral Density Plot MIMO ANT2 (802.11a (UNII Band 1) – Ch. 36)

FCC ID: V7MESLCTGA	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1M2202090014-04.V7M	Test Dates: 02/11/2022 ~ 05/23/2022	EUT Type: LTE Indoor CPE	Page 88 of 173

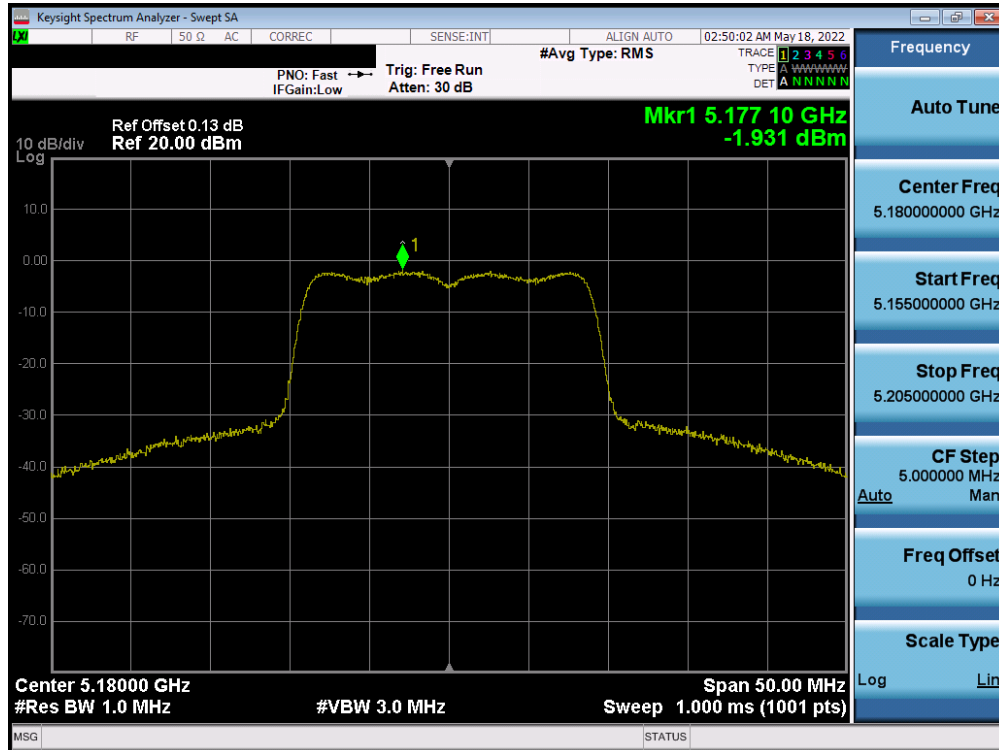


Plot 7-116. Power Spectral Density Plot MIMO ANT2 (802.11a (UNII Band 1) – Ch. 40)

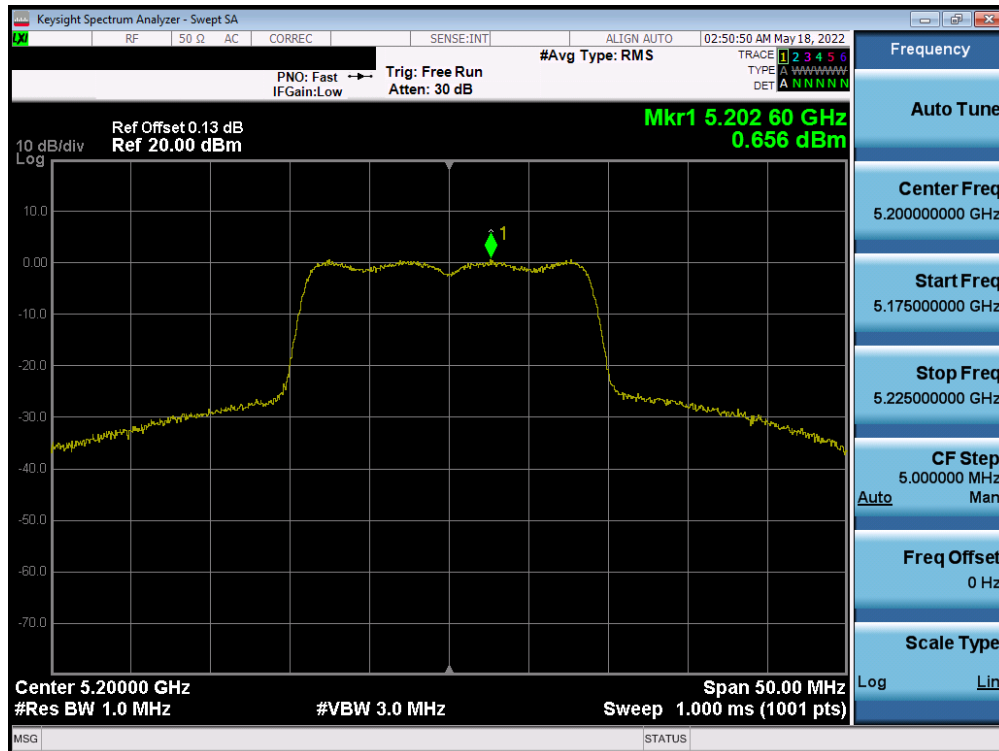


Plot 7-117. Power Spectral Density Plot MIMO ANT2 (802.11a (UNII Band 1) – Ch. 48)

FCC ID: V7MESLCTGA	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1M2202090014-04.V7M	Test Dates: 02/11/2022 ~ 05/23/2022	EUT Type: LTE Indoor CPE	Page 89 of 173

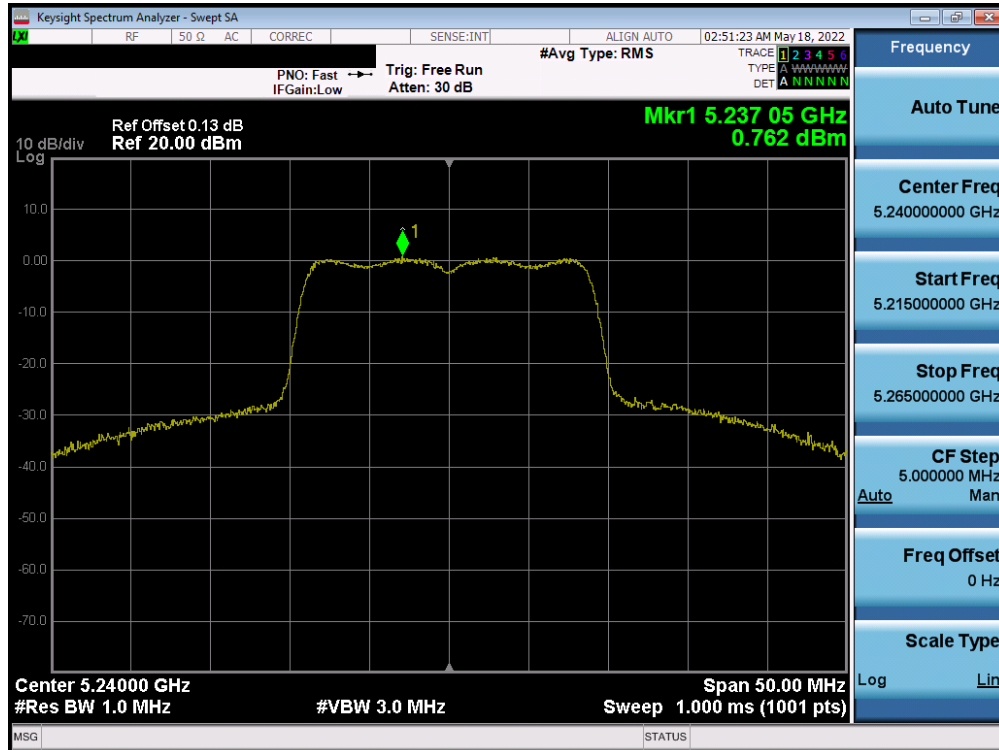


Plot 7-118. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11n (UNII Band 1) – Ch. 36)

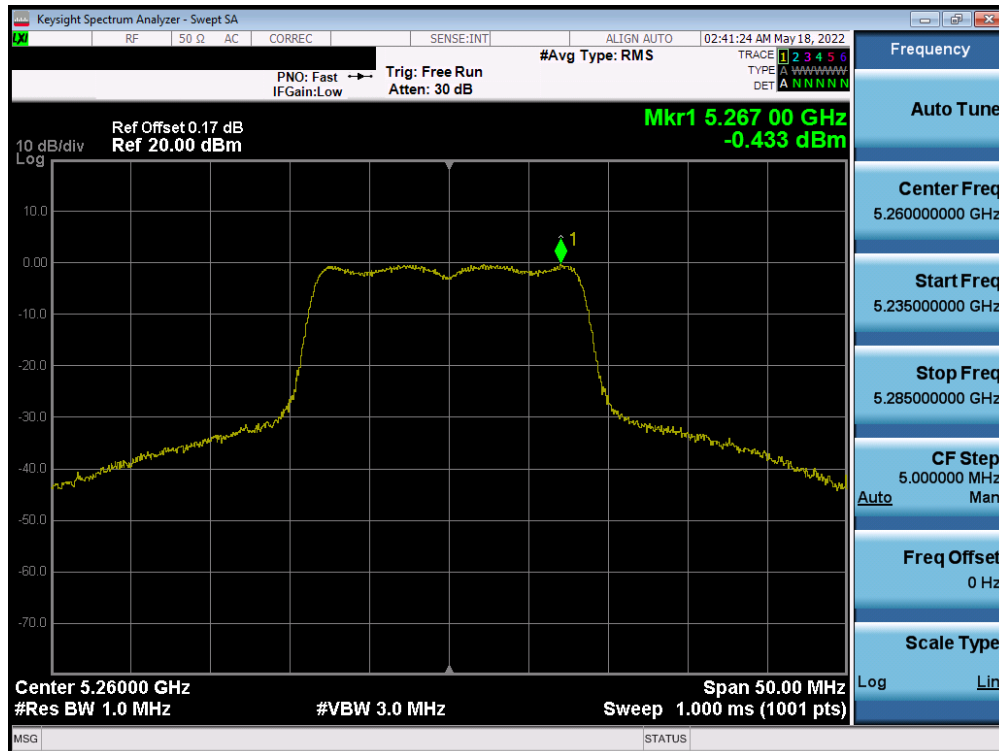


Plot 7-119. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11n (UNII Band 1) – Ch. 40)

FCC ID: V7MESLCTGA	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1M2202090014-04.V7M	Test Dates: 02/11/2022 ~ 05/23/2022	EUT Type: LTE Indoor CPE	Page 90 of 173

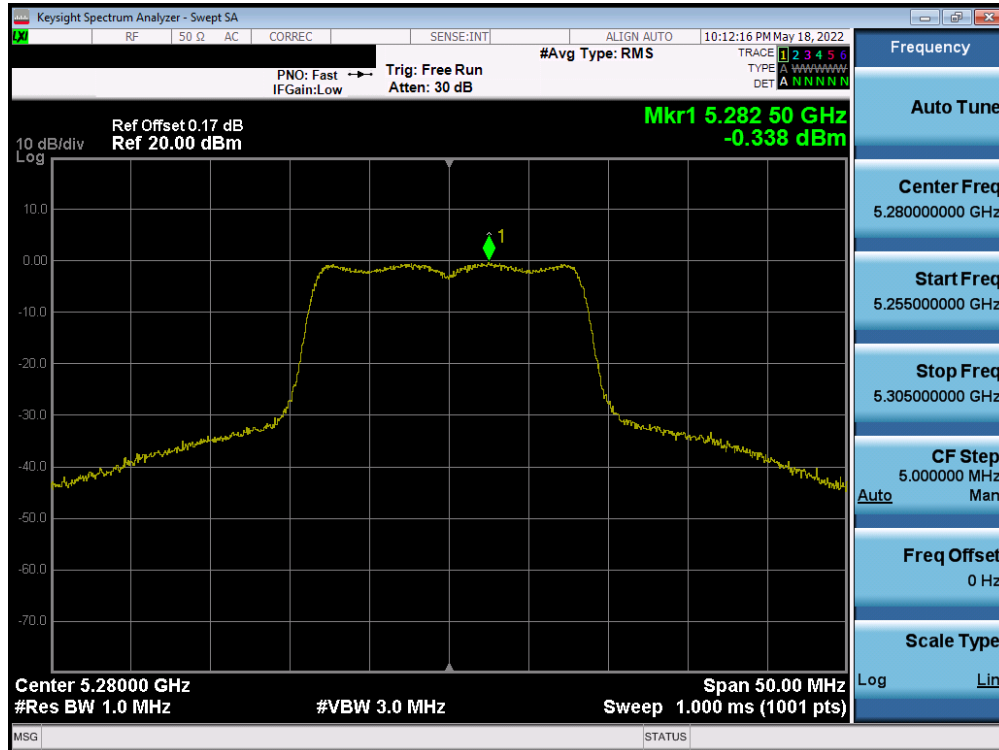


Plot 7-120. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11n (UNII Band 1) – Ch. 48)

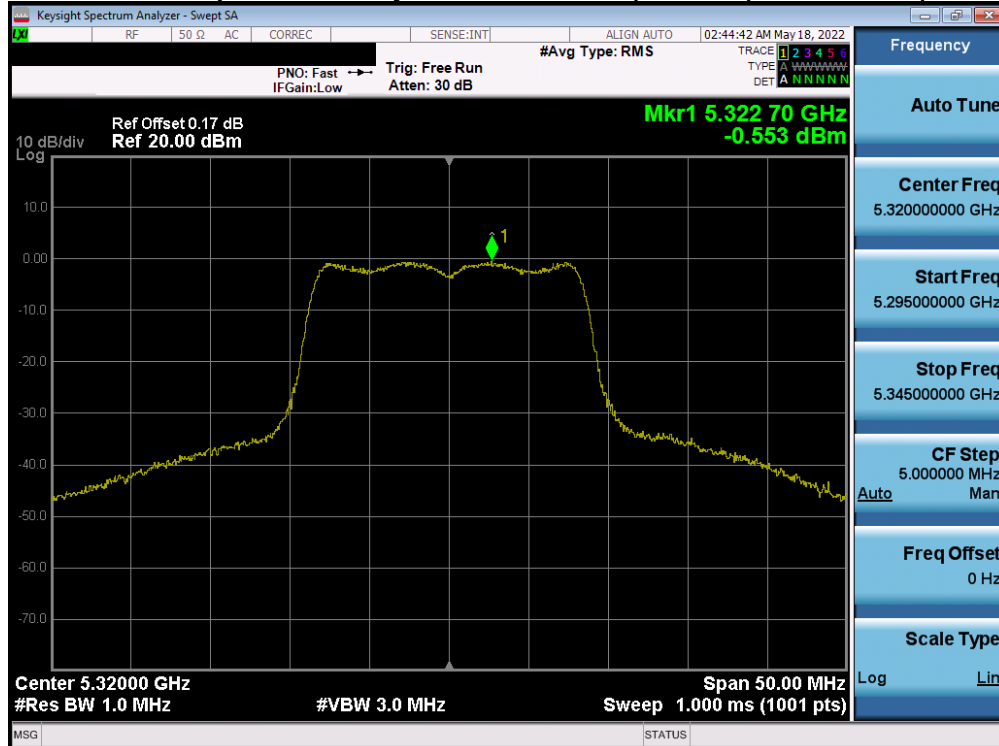


Plot 7-121. Power Spectral Density Plot MIMO ANT2 (802.11a (UNII Band 2A) – Ch. 52)

FCC ID: V7MESLCTGA	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1M2202090014-04.V7M	Test Dates: 02/11/2022 ~ 05/23/2022	EUT Type: LTE Indoor CPE	Page 91 of 173

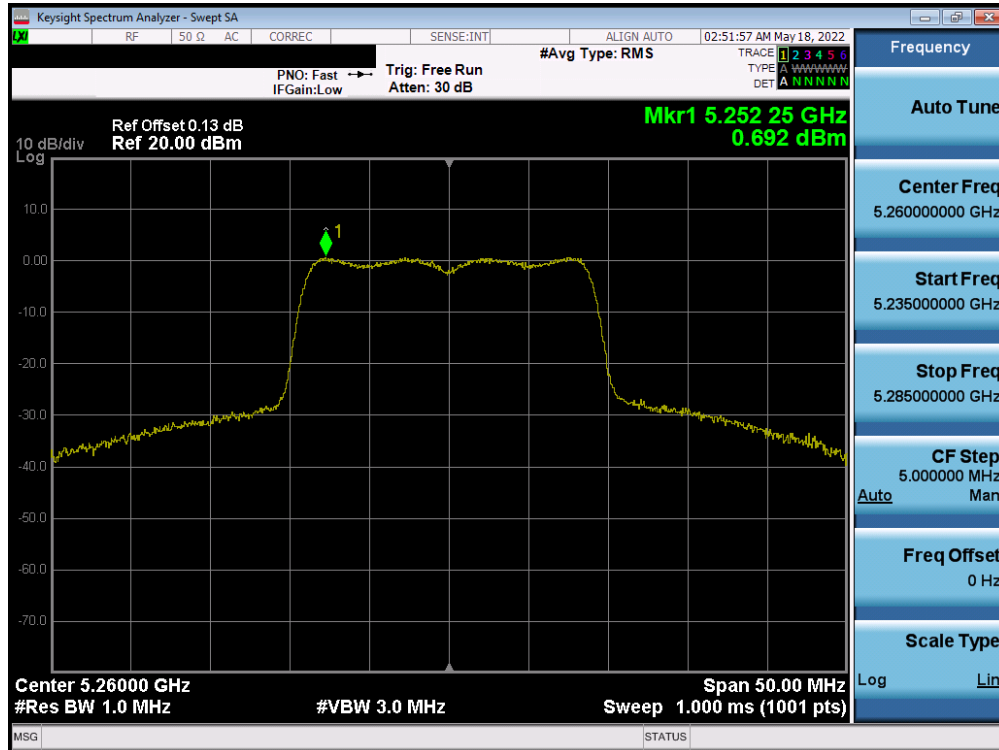


Plot 7-122. Power Spectral Density Plot MIMO ANT2 (802.11a (UNII Band 2A) – Ch. 56)

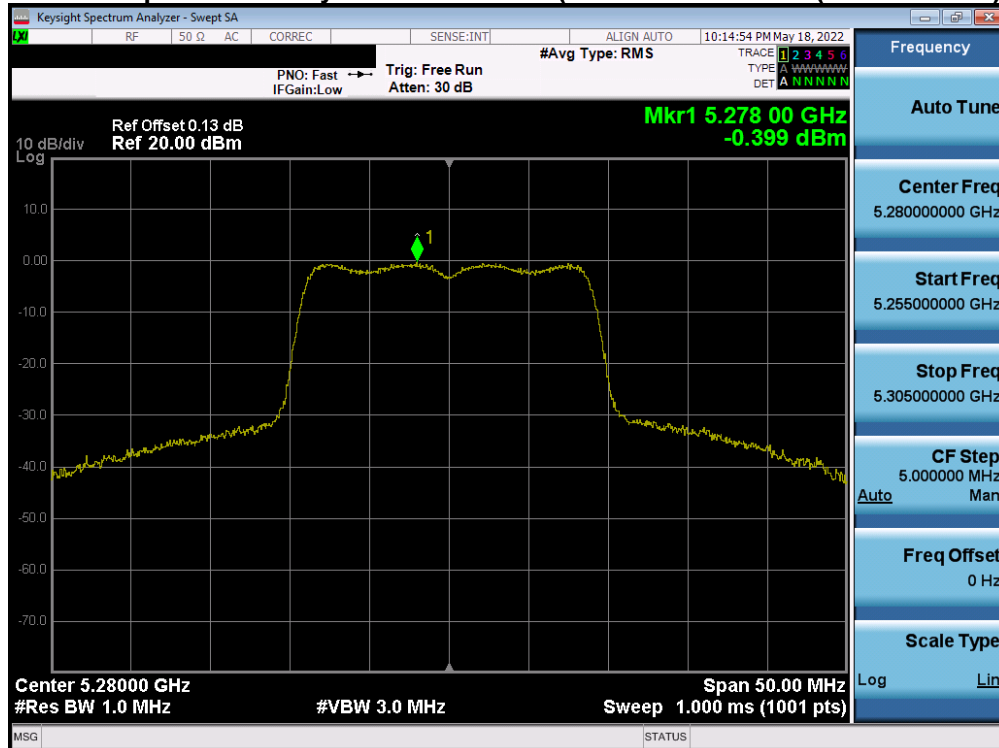


Plot 7-123. Power Spectral Density Plot MIMO ANT2 (802.11a (UNII Band 2A) – Ch. 64)

FCC ID: V7MESLCTGA	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1M2202090014-04.V7M	Test Dates: 02/11/2022 ~ 05/23/2022	EUT Type: LTE Indoor CPE	Page 92 of 173

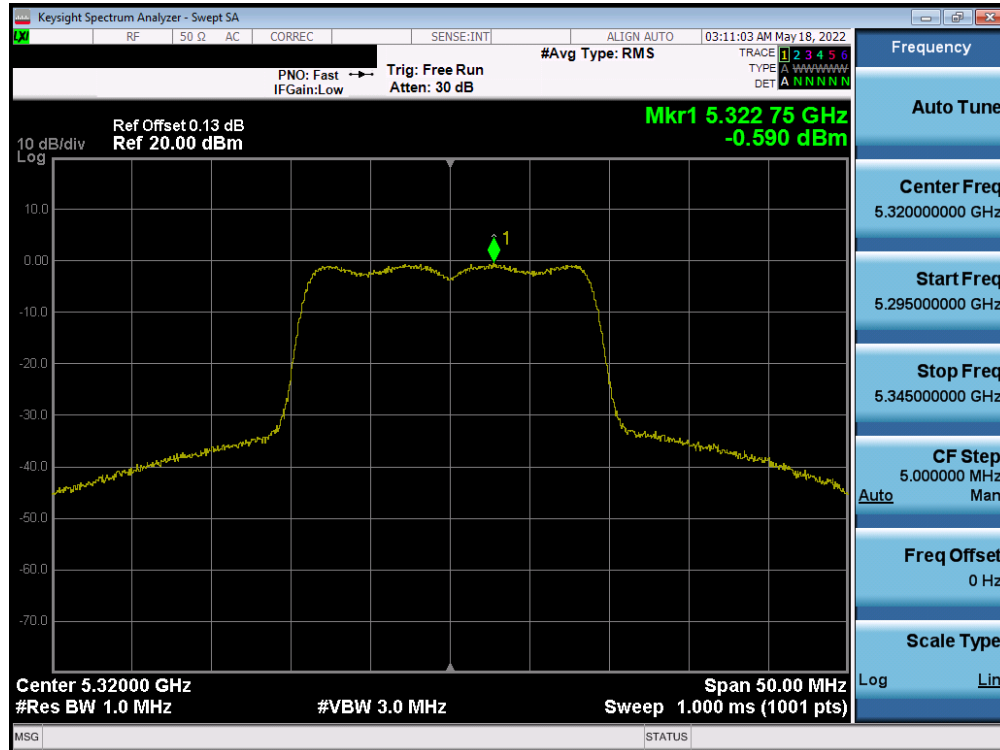


Plot 7-124. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11n (UNII Band 2A) – Ch. 52)

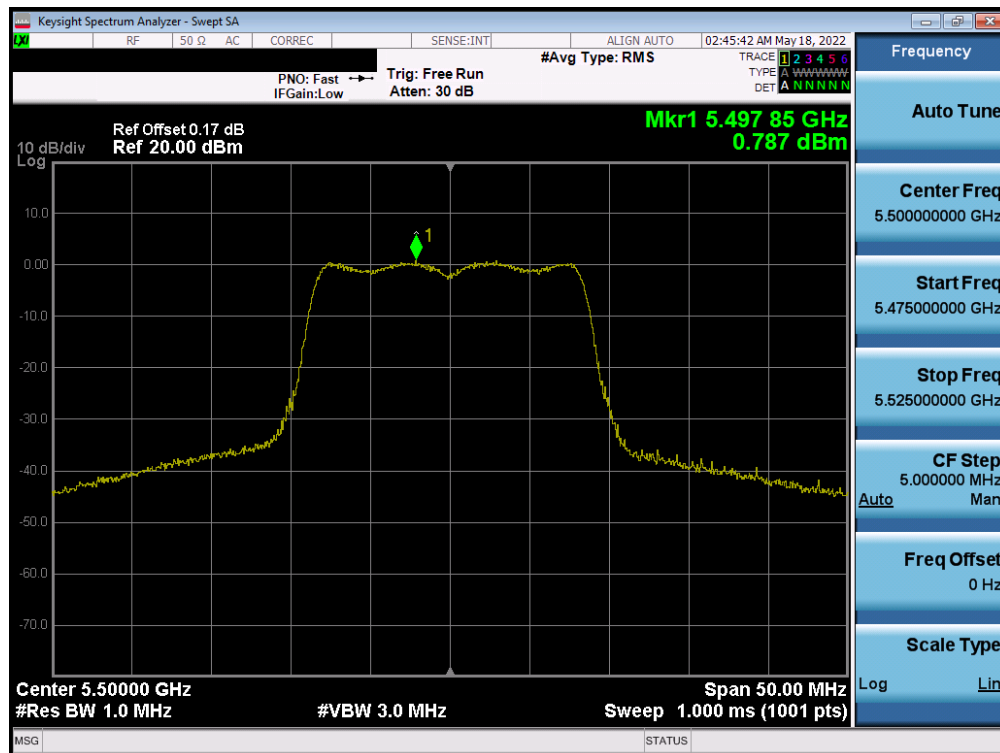


Plot 7-125. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11n (UNII Band 2A) – Ch. 56)

FCC ID: V7MESLCTGA	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1M2202090014-04.V7M	Test Dates: 02/11/2022 ~ 05/23/2022	EUT Type: LTE Indoor CPE	Page 93 of 173

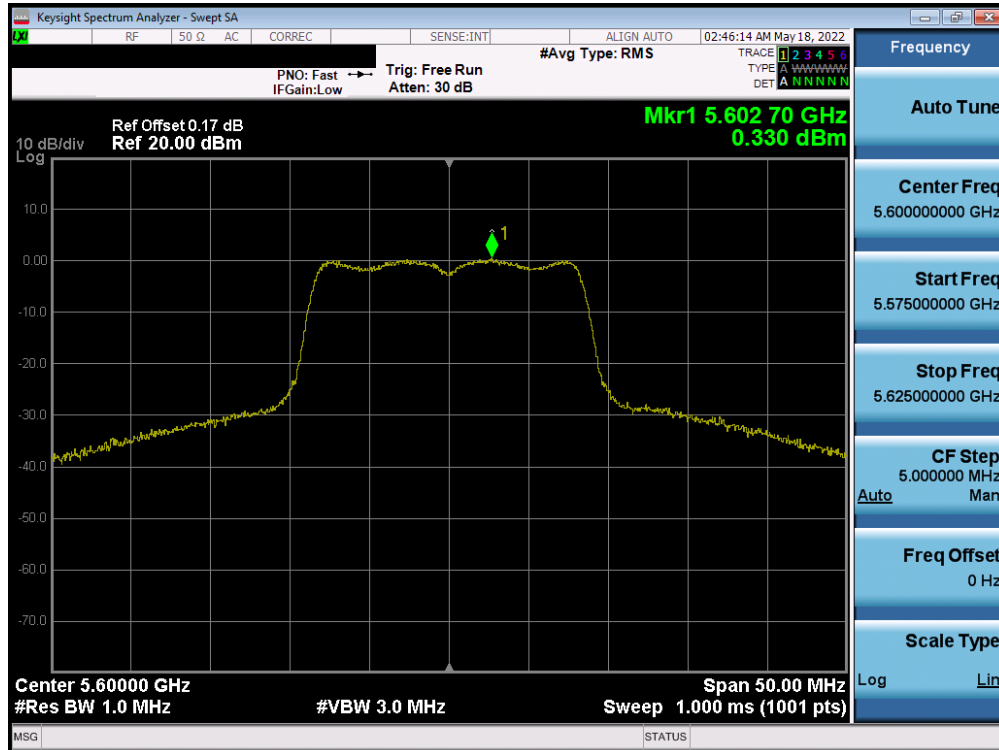


Plot 7-126. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11n (UNII Band 2A) – Ch. 64)

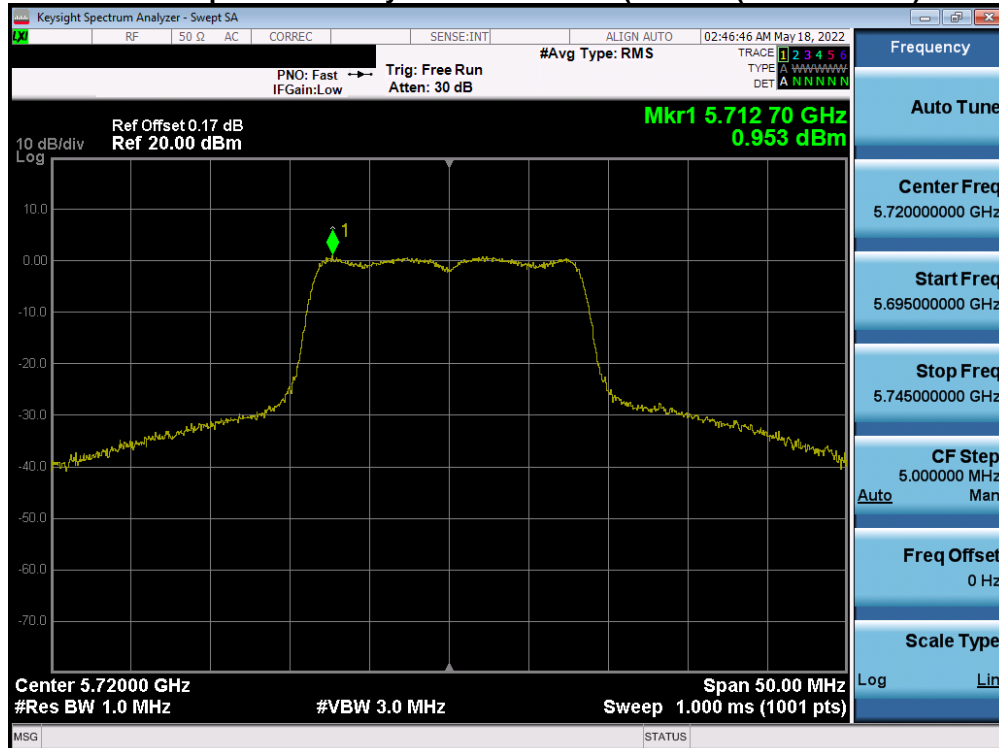


Plot 7-127. Power Spectral Density Plot MIMO ANT2 (802.11a (UNII Band 2C) – Ch. 100)

FCC ID: V7MESLCTGA	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1M2202090014-04.V7M	Test Dates: 02/11/2022 ~ 05/23/2022	EUT Type: LTE Indoor CPE	Page 94 of 173

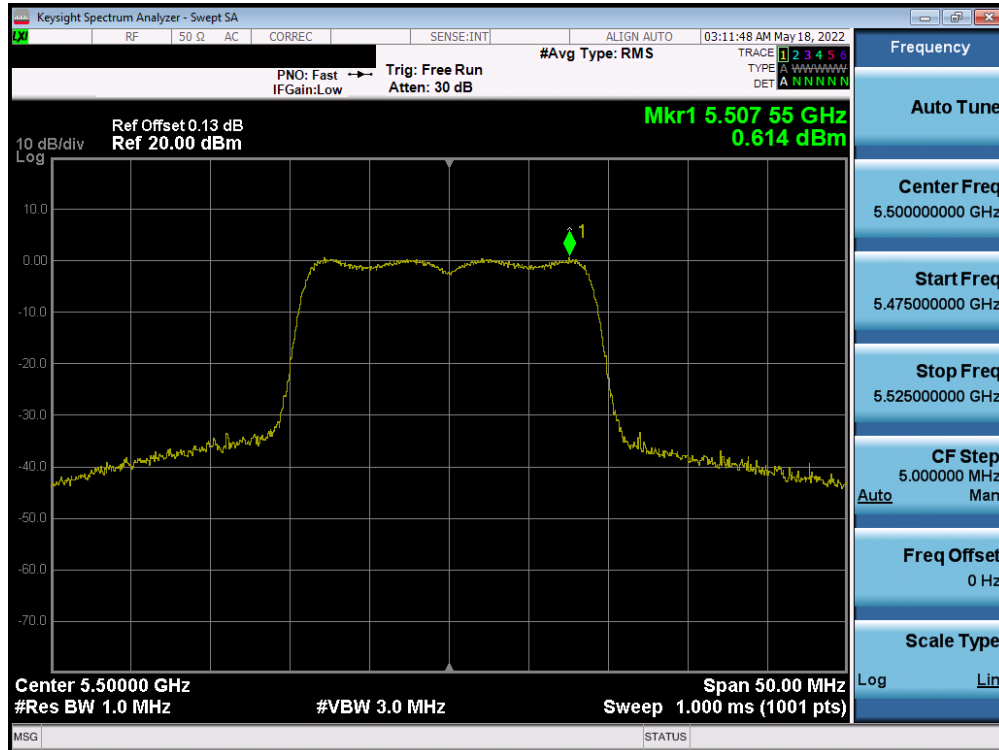


Plot 7-128. Power Spectral Density Plot MIMO ANT2 (802.11a (UNII Band 2C) – Ch. 120)

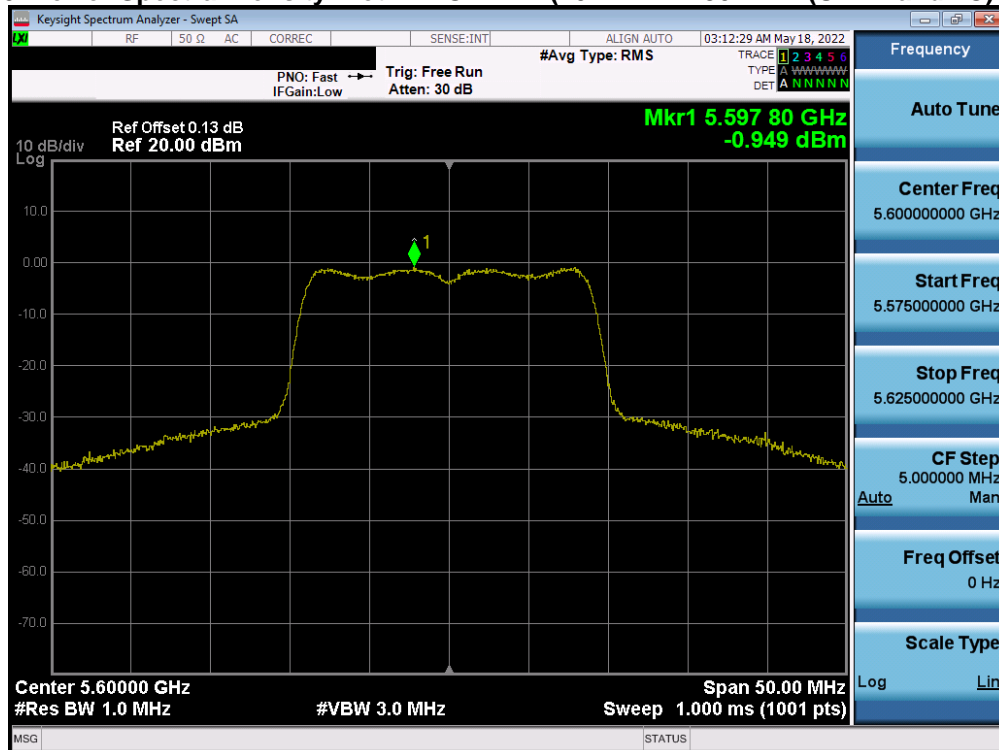


Plot 7-129. Power Spectral Density Plot MIMO ANT2 (802.11a (UNII Band 2C) – Ch. 144)

FCC ID: V7MESLCTGA	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1M2202090014-04.V7M	Test Dates: 02/11/2022 ~ 05/23/2022	EUT Type: LTE Indoor CPE	Page 95 of 173

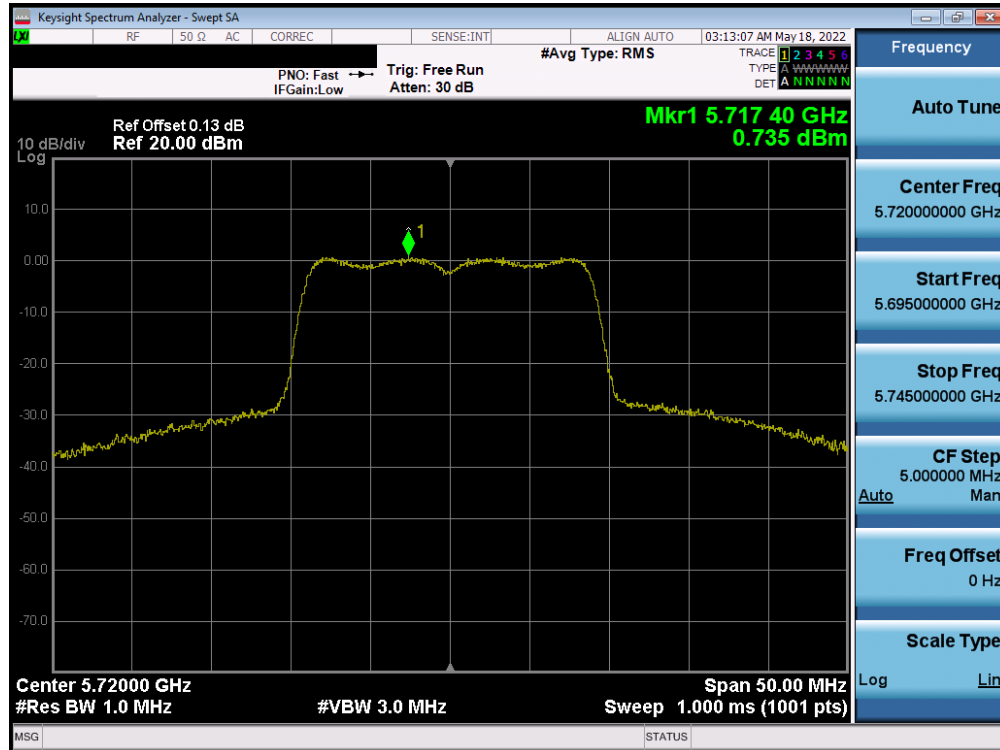


Plot 7-130. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11n (UNII Band 2C) – Ch. 100)



Plot 7-131. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11n (UNII Band 2C) – Ch. 120)

FCC ID: V7MESLCTGA	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1M2202090014-04.V7M	Test Dates: 02/11/2022 ~ 05/23/2022	EUT Type: LTE Indoor CPE	Page 96 of 173

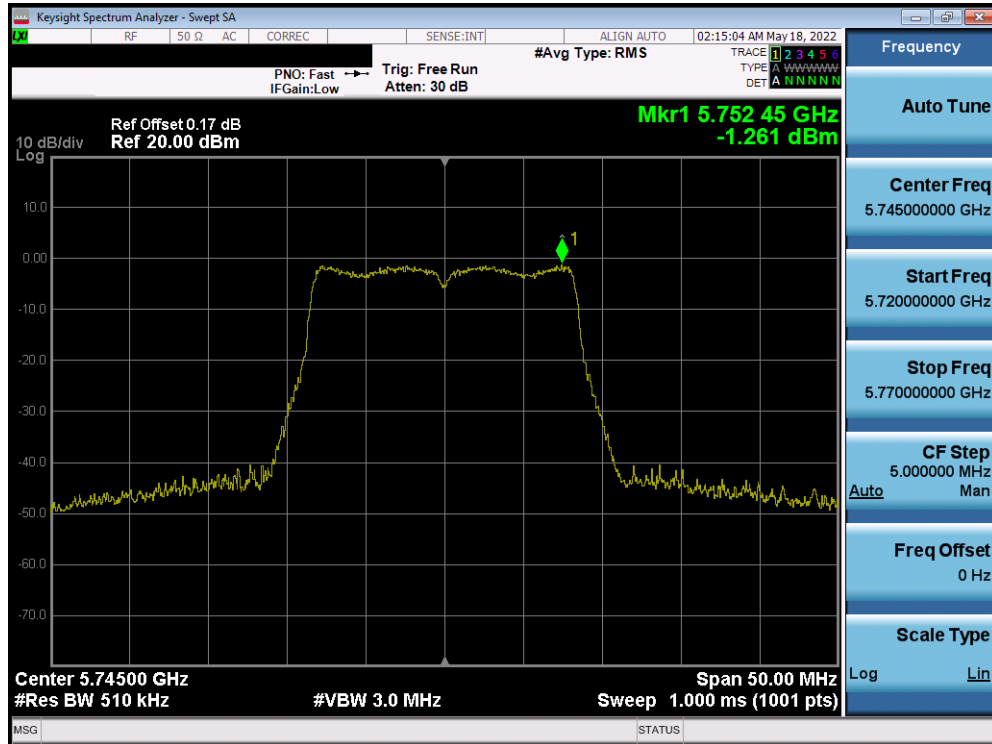


Plot 7-132. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11n (UNII Band 2C) – Ch. 144)

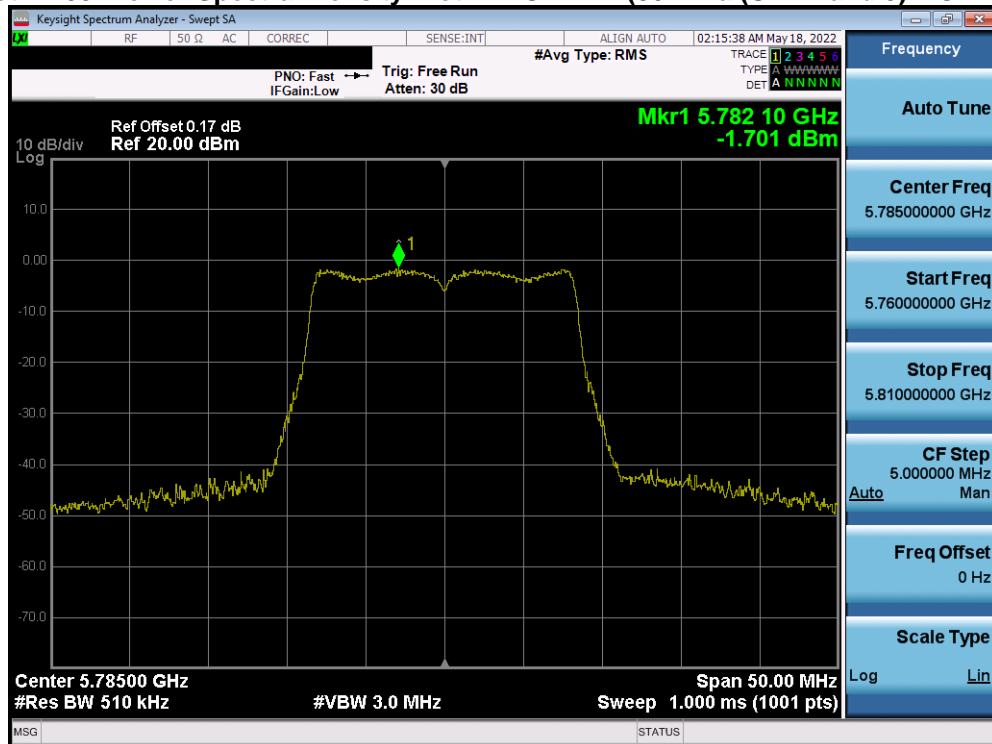
	Frequency [MHz]	Channel No.	802.11 Mode	Data Rate [Mbps]	Antenna-1 Power Density [dBm]	Antenna-2 Power Density [dBm]	Summed MIMO Power Density [dBm]	Max Permissible Power Density [dBm/500kHz]	Directional Ant. Gain [dBi]	Adjusted Power Density Limit [dBm]	Margin [dB]
Band 3	5745	149	a	6	-1.26	-2.32	1.25	30.0	8.51	27.49	-26.24
	5785	157	a	6	-1.70	-2.08	1.12	30.0	7.56	28.44	-27.32
	5825	165	a	6	-1.92	-2.42	0.85	30.0	7.56	28.44	-27.59
	5745	149	n (20MHz)	6.5/7.2 (MCS0)	-1.69	-2.38	0.99	30.0	8.51	27.49	-26.50
	5785	157	n (20MHz)	6.5/7.2 (MCS0)	-1.71	-2.51	0.92	30.0	7.56	28.44	-27.52
	5825	165	n (20MHz)	6.5/7.2 (MCS0)	-2.14	-2.74	0.58	30.0	7.56	28.44	-27.86

Table 7-16. Band 3 Conducted Power Spectral Density Measurements MIMO

FCC ID: V7MESLCTGA	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2202090014-04.V7M	Test Dates: 02/11/2022 ~ 05/23/2022	EUT Type: LTE Indoor CPE		Page 97 of 173

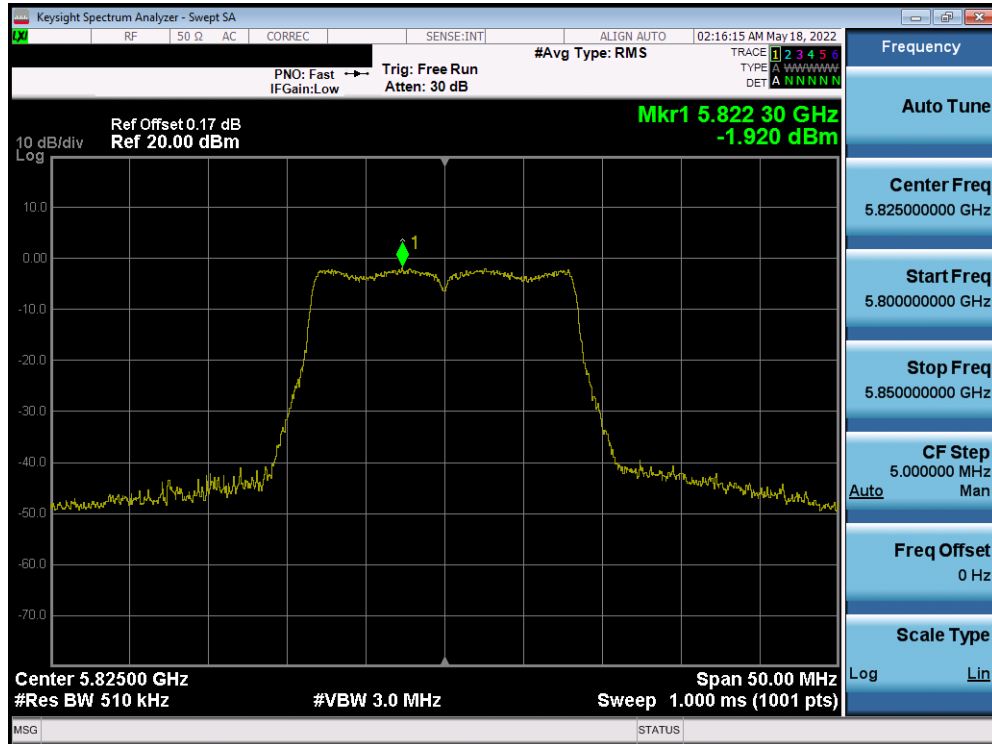


Plot 7-133. Power Spectral Density Plot MIMO ANT1 (802.11a (UNII Band 3) – Ch. 149)

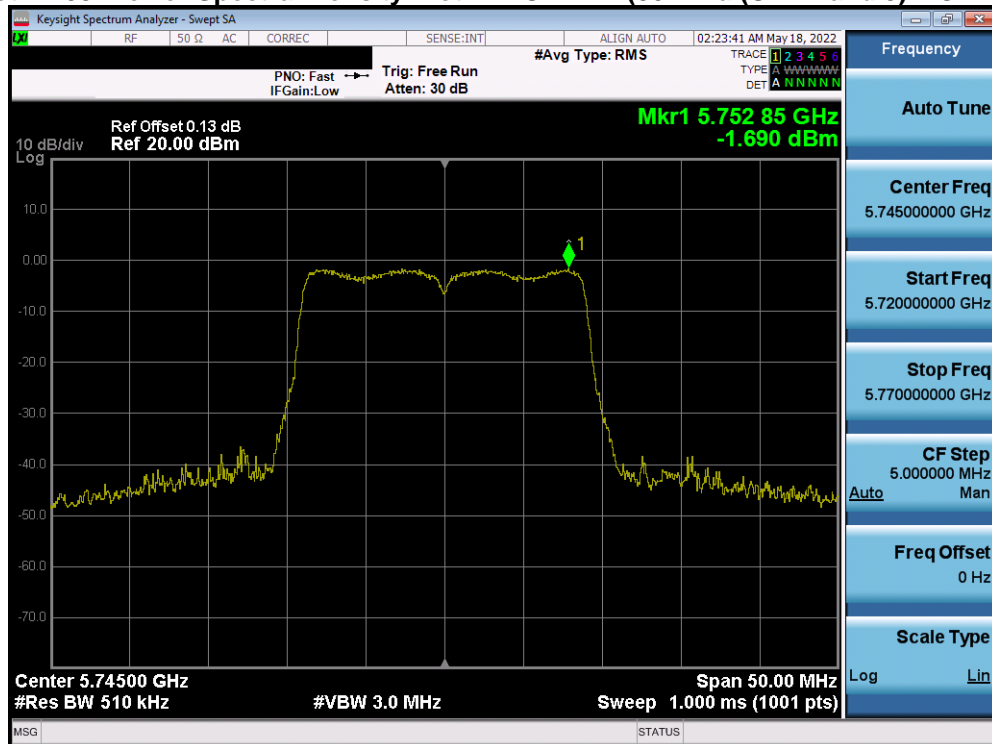


Plot 7-134. Power Spectral Density Plot MIMO ANT1 (802.11a (UNII Band 3) – Ch. 157)

FCC ID: V7MESLCTGA	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1M2202090014-04.V7M	Test Dates: 02/11/2022 ~ 05/23/2022	EUT Type: LTE Indoor CPE	Page 98 of 173

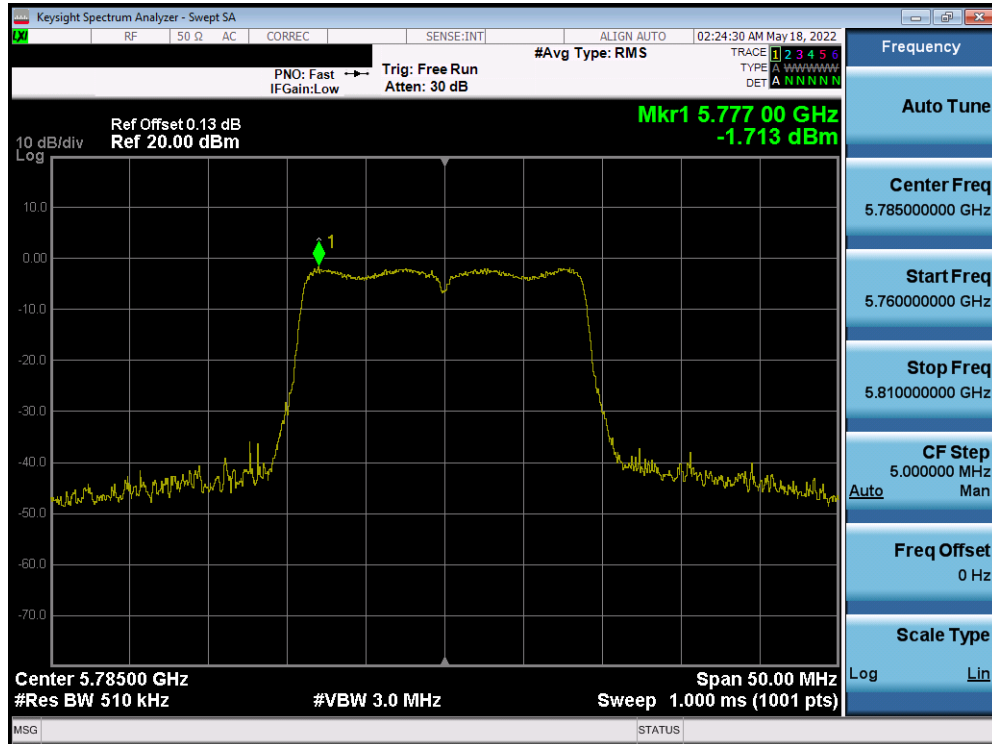


Plot 7-135. Power Spectral Density Plot MIMO ANT1 (802.11a (UNII Band 3) – Ch. 165)

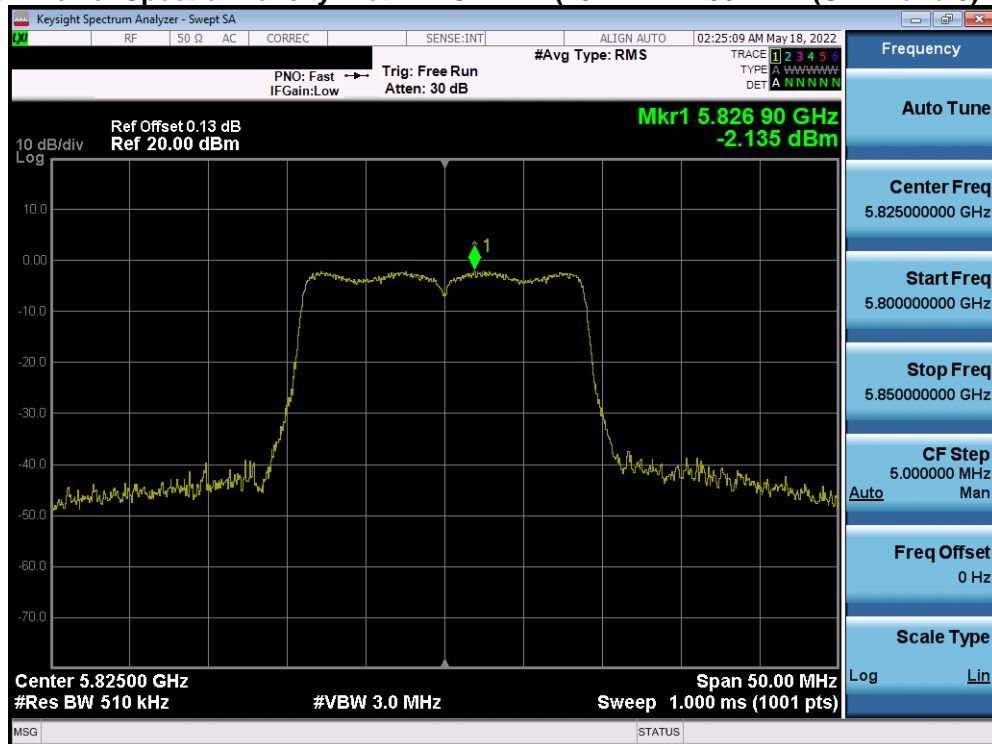


Plot 7-136. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11n (UNII Band 3) – Ch. 149)

FCC ID: V7MESLCTGA	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1M2202090014-04.V7M	Test Dates: 02/11/2022 ~ 05/23/2022	EUT Type: LTE Indoor CPE	Page 99 of 173

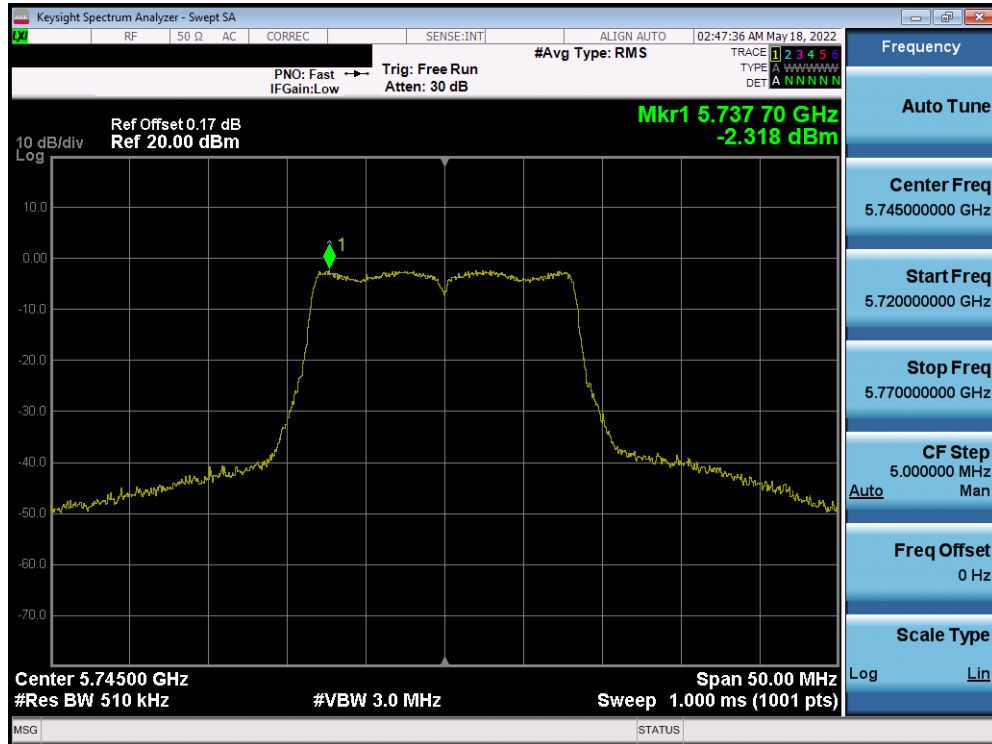


Plot 7-137. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11n (UNII Band 3) – Ch. 157)

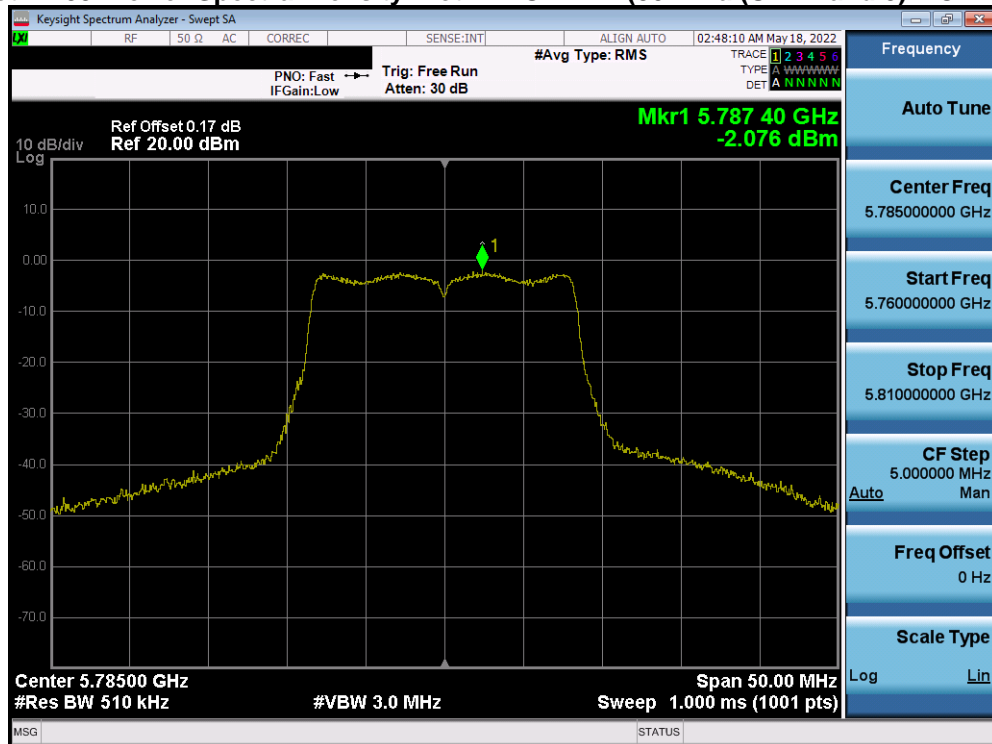


Plot 7-138. Power Spectral Density Plot MIMO ANT1 (20MHz BW 802.11n (UNII Band 3) – Ch. 165)

FCC ID: V7MESLCTGA	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1M2202090014-04.V7M	Test Dates: 02/11/2022 ~ 05/23/2022	EUT Type: LTE Indoor CPE	Page 100 of 173

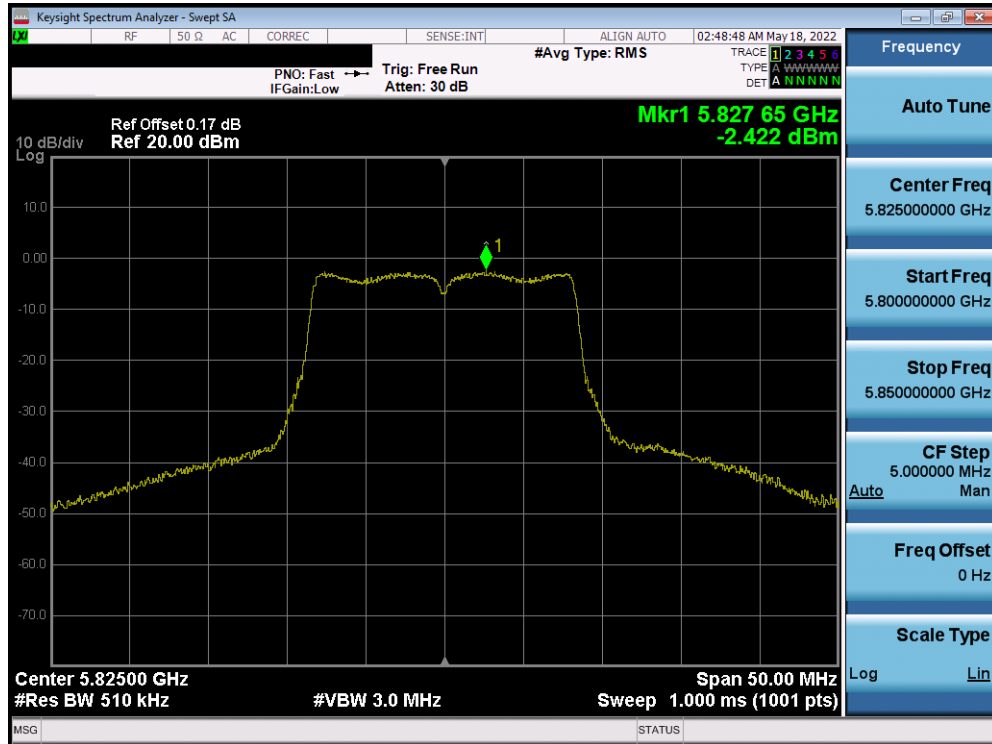


Plot 7-139. Power Spectral Density Plot MIMO ANT2 (802.11a (UNII Band 3) – Ch. 149)

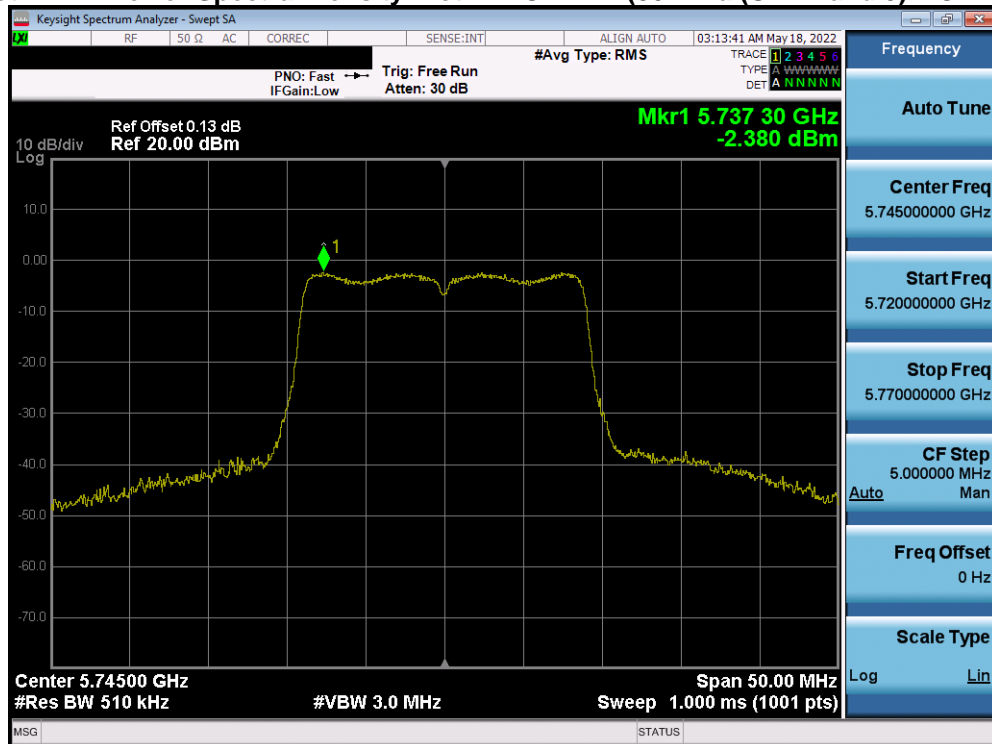


Plot 7-140. Power Spectral Density Plot MIMO ANT2 (802.11a (UNII Band 3) – Ch. 157)

FCC ID: V7MESLCTGA	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1M2202090014-04.V7M	Test Dates: 02/11/2022 ~ 05/23/2022	EUT Type: LTE Indoor CPE	Page 101 of 173

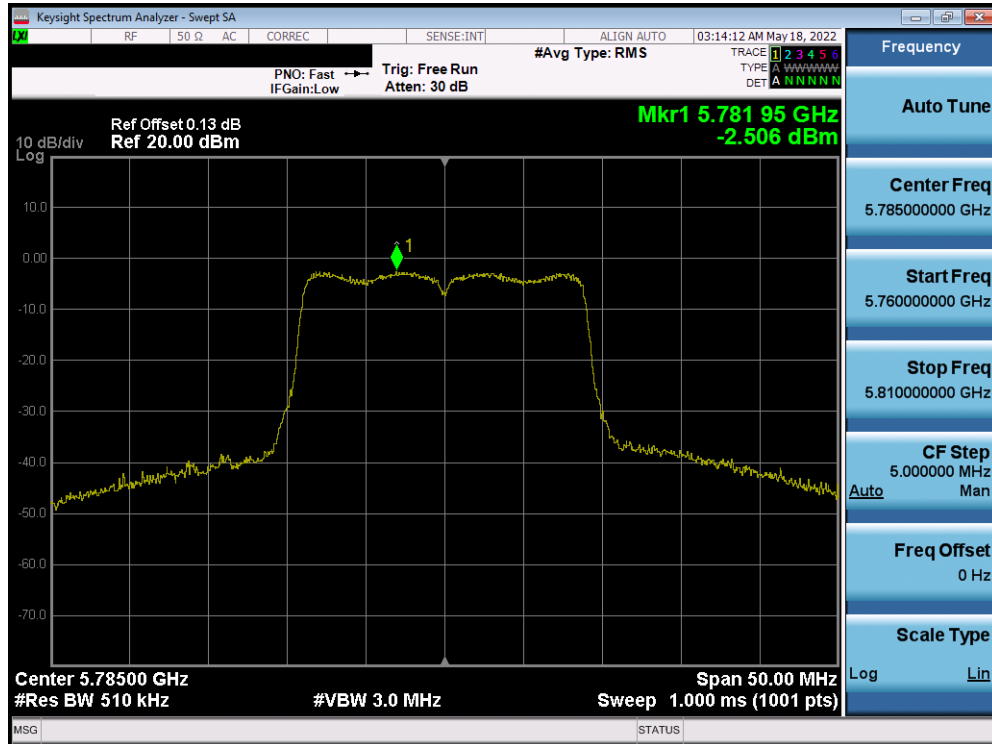


Plot 7-141. Power Spectral Density Plot MIMO ANT2 (802.11a (UNII Band 3) – Ch. 165)

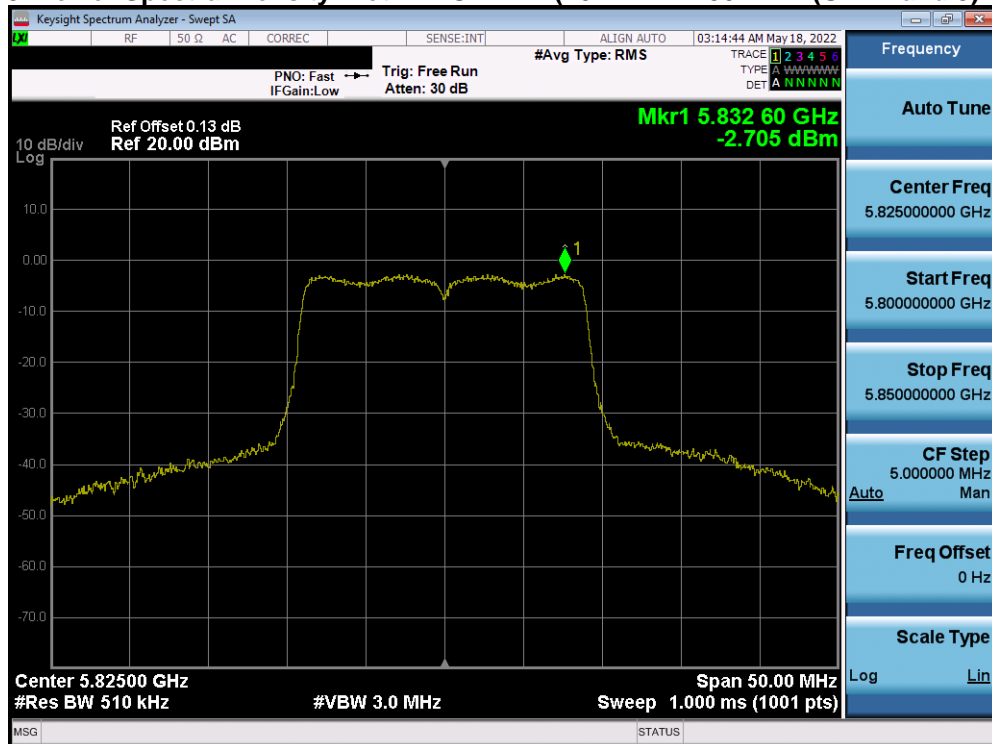


Plot 7-142. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11n (UNII Band 3) – Ch. 149)

FCC ID: V7MESLCTGA	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1M2202090014-04.V7M	Test Dates: 02/11/2022 ~ 05/23/2022	EUT Type: LTE Indoor CPE	Page 102 of 173



Plot 7-143. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11n (UNII Band 3) – Ch. 157)



Plot 7-144. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11n (UNII Band 3) – Ch. 165)

Note:

FCC ID: V7MESLCTGA	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
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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 Calculations:

1) At 5180MHz in 802.11n (20MHz BW) mode, the average conducted power spectral density was measured to be -0.63 dBm for Antenna-1 and -1.93 dBm for Antenna-2.

Antenna 1 + Antenna 2 = MIMO

$$(-0.63 \text{ dBm} + -1.93 \text{ dBm}) = (0.865 \text{ mW} + 0.641 \text{ mW}) = 1.506 \text{ mW} = 1.78 \text{ dBm}$$

2) This section contains MIMO conducted power measurements with directional gains that exceed the 6dBi limit specified in 15.407(a). As a result, the maximum conducted output power limits are reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. For example, when the specified limit is 11dBm/MHz and the directional gain is 7.82dBi, then the adjusted limit is:

$$11\text{dBm/MHz} - (7.82\text{dBi} - 6\text{dBi}) = 9.18\text{dBm/MHz}$$

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 1.78 dBm with directional gain of 7.16 dBi.

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

$$1.78 \text{ dBm} + 7.16 \text{ dBi} = 8.94 \text{ dBm}$$

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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 7-17 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 7-17. 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
8. Trace was averaged over 100 sweeps

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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.

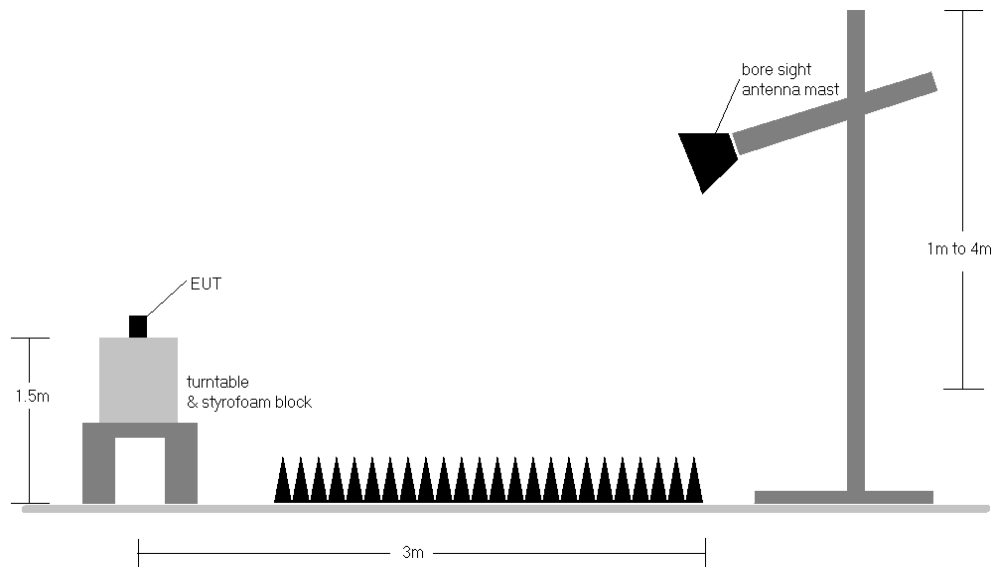


Figure 7-5. Test Instrument & Measurement Setup

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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 7-17.
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 7-17. 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. The unit was tested while powered by a DC power source.
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

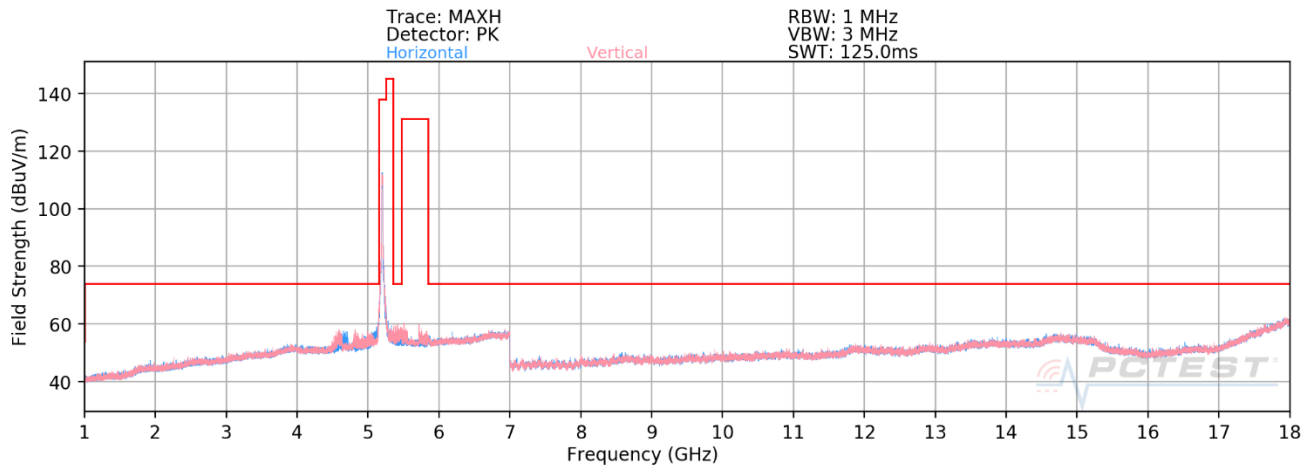
- Field Strength Level [dBμV/m] = Analyzer Level [dBm] + 107 + AFCL [dB/m]
- AFCL [dB/m] = Antenna Factor [dB/m] + Cable Loss [dB]
- Margin [dB] = Field Strength Level [dBμV/m] – Limit [dBμV/m]

Radiated Band Edge Measurement Offset

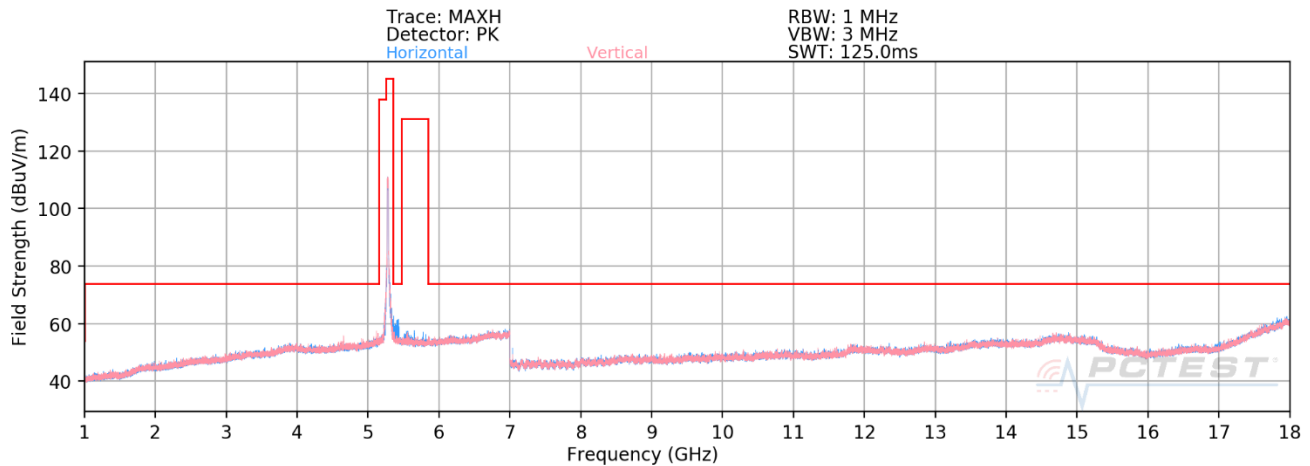
- The amplitude offset shown in the radiated restricted band edge plots was calculated using the formula:
Offset (dB) = (Antenna Factor + Cable Loss + Attenuator) – Preamplifier Gain

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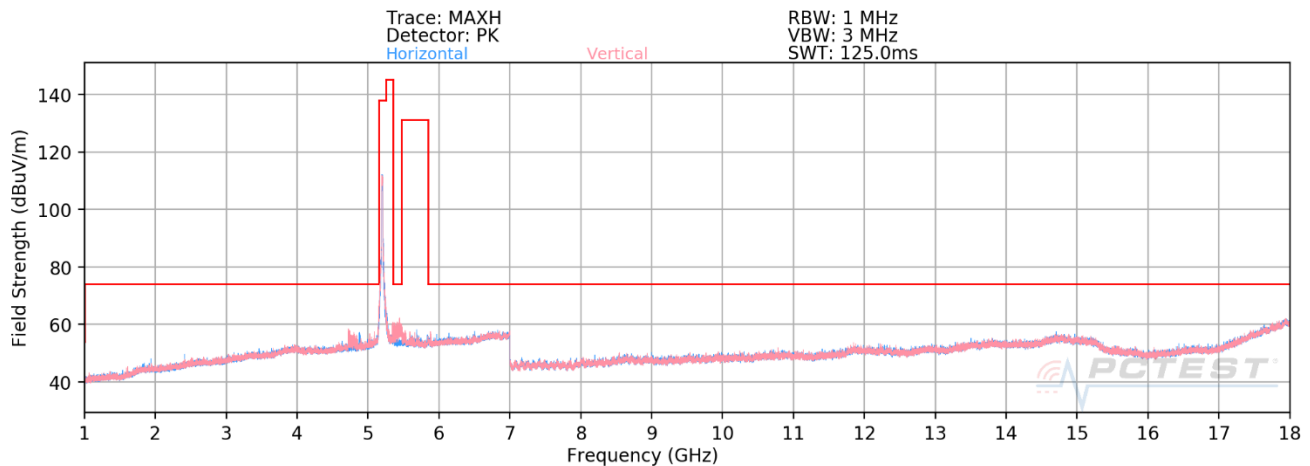
7.6.1 SISO Antenna-1 Radiated Spurious Emission Measurements



Plot 7-145. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11a – U1 Ch. 40)

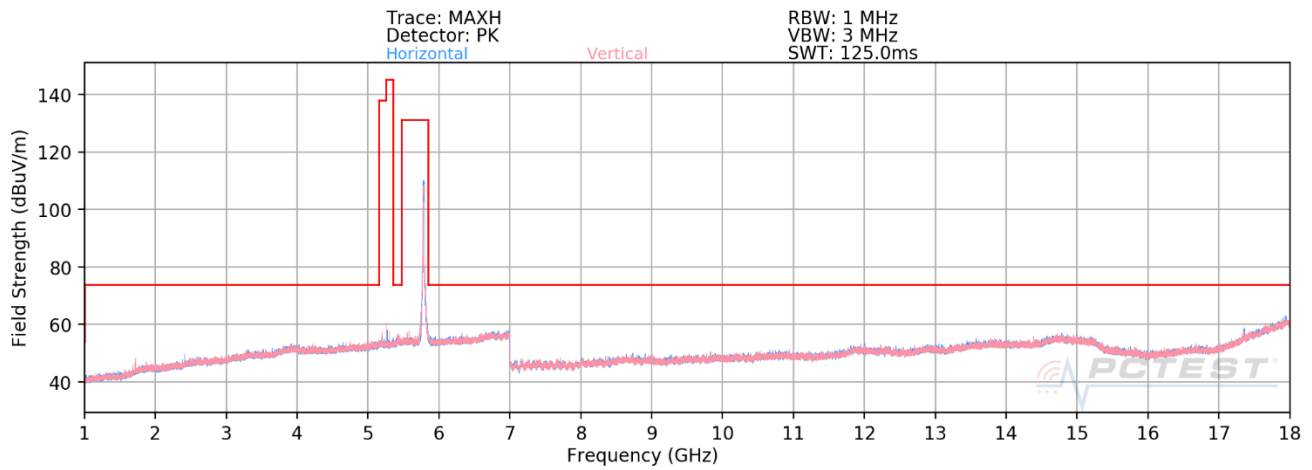


Plot 7-146. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11a – U2A Ch. 56)



Plot 7-147. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11a – U2C Ch. 120)

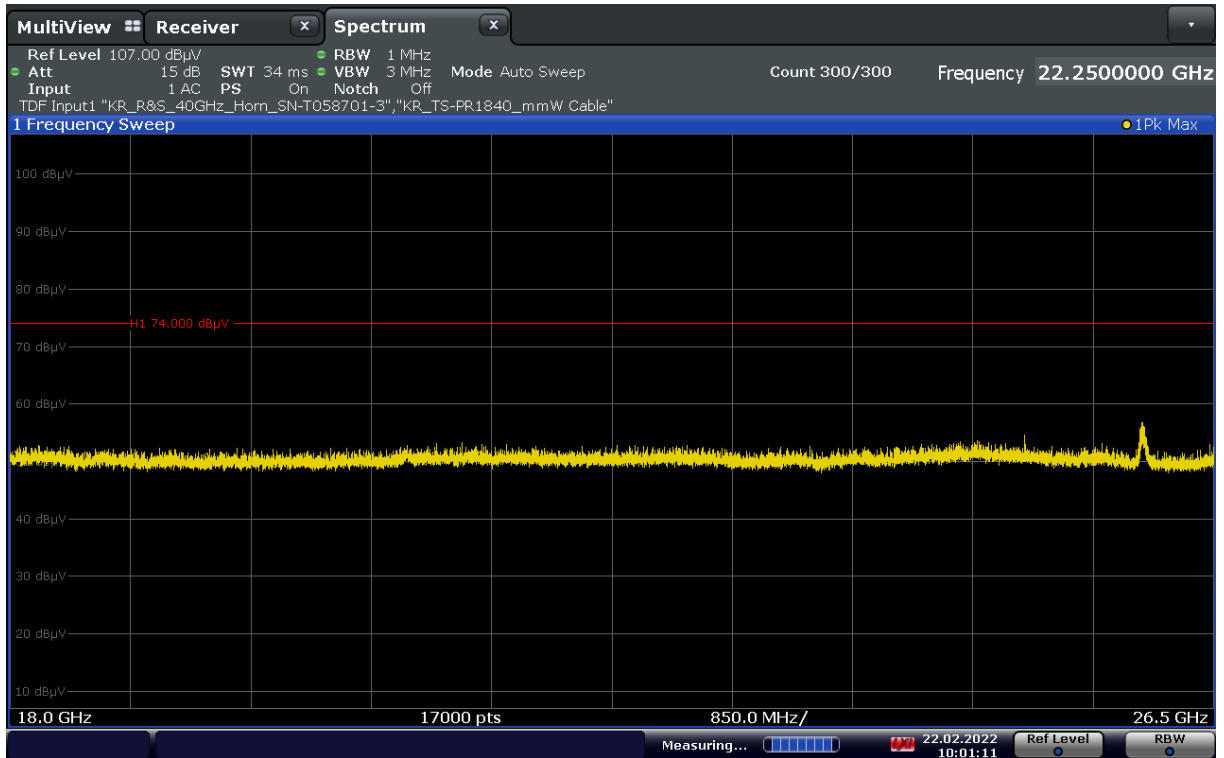
FCC ID: V7MESLCTGA	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
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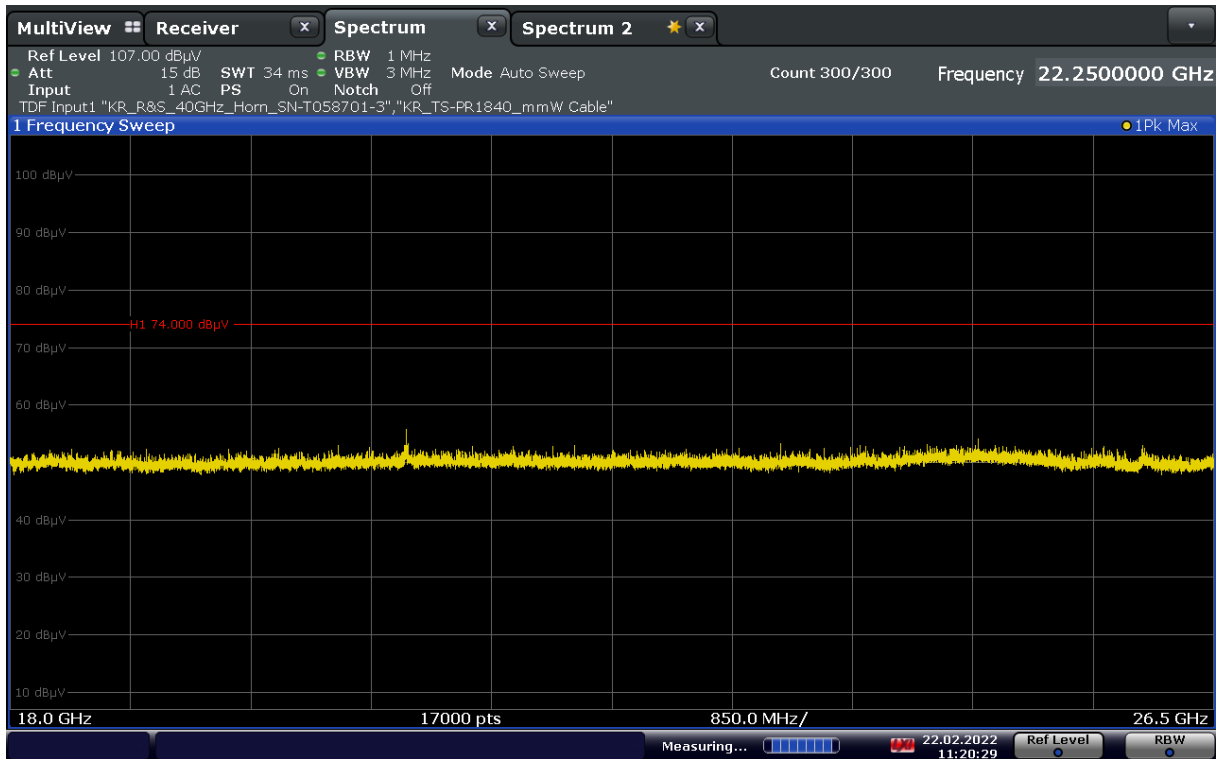
Plot 7-148. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11a – U3 Ch. 157)

FCC ID: V7MESLCTGA	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
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SISO Antenna-1 Radiated Spurious Emissions Measurements (Above 18GHz)

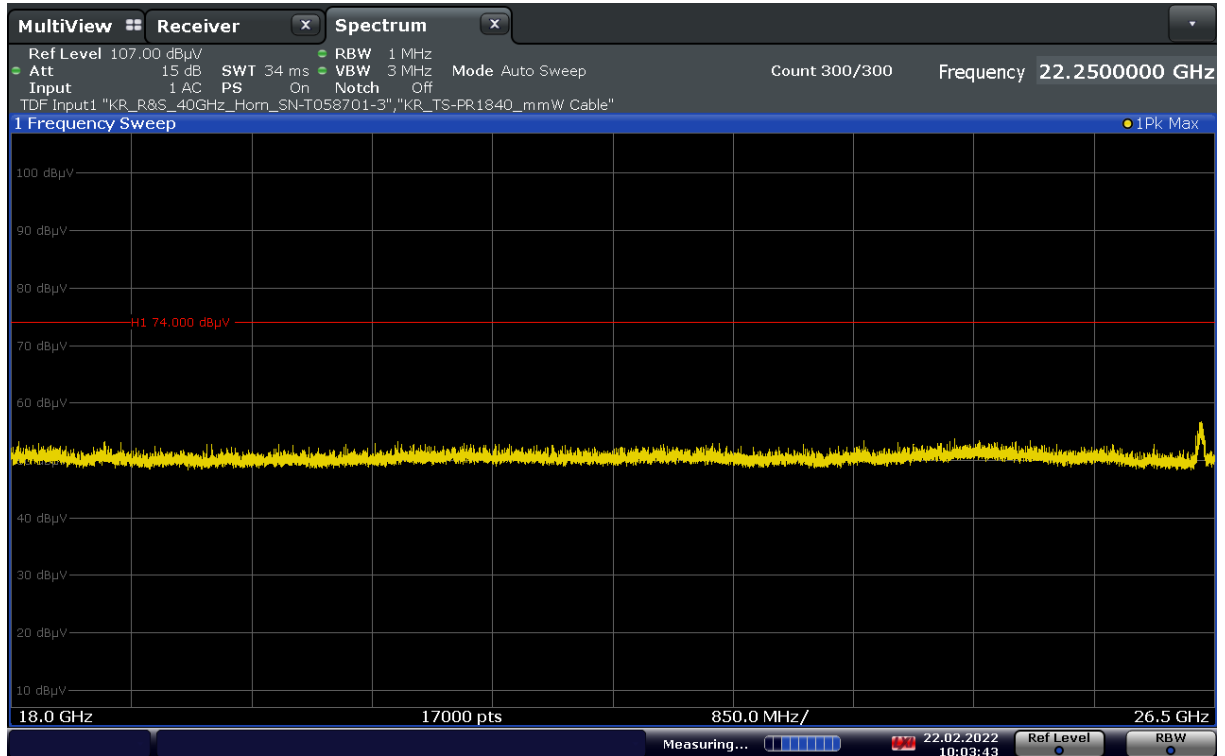


Plot 7-149. Radiated Spurious Plot 18GHz - 26.5GHz SISO ANT1 (802.11a – U1 Ch. 40 – Ant. Pol. H)

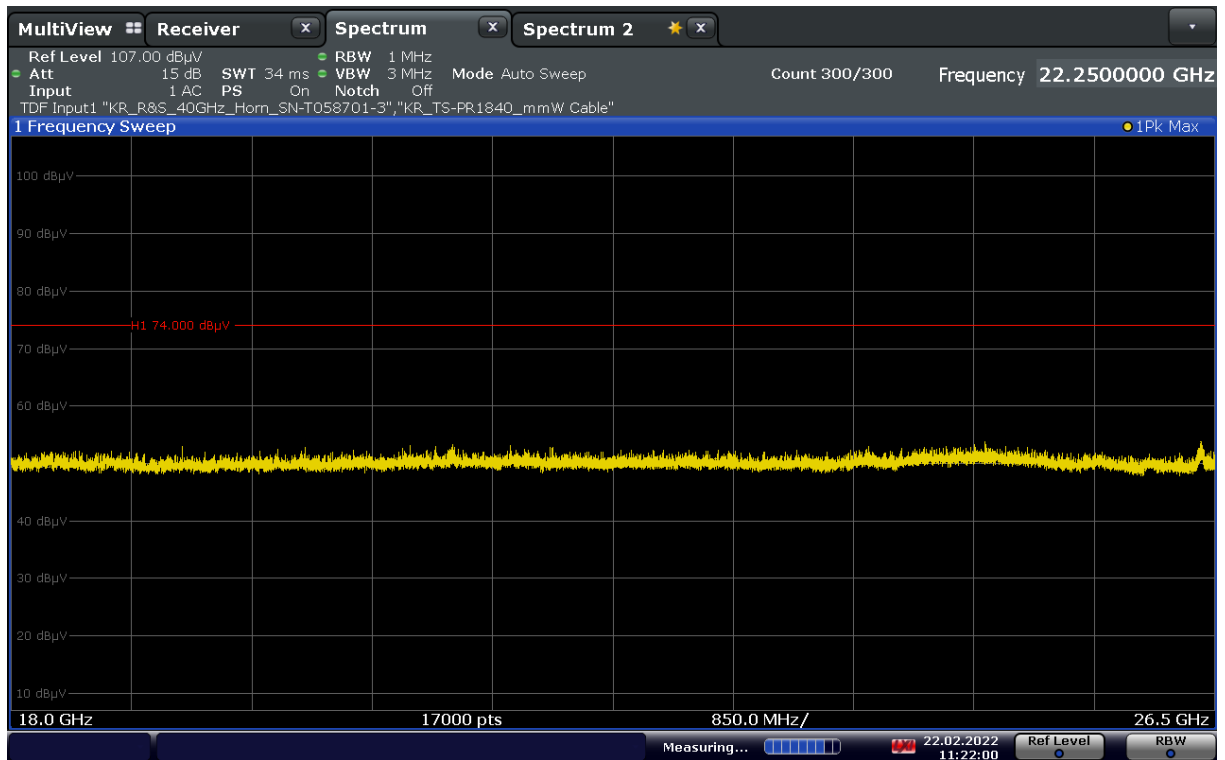


Plot 7-150. Radiated Spurious Plot 18GHz - 26.5GHz SISO ANT1 (802.11a – U1 Ch. 40 – Ant. Pol. V)

FCC ID: V7MESLCTGA		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
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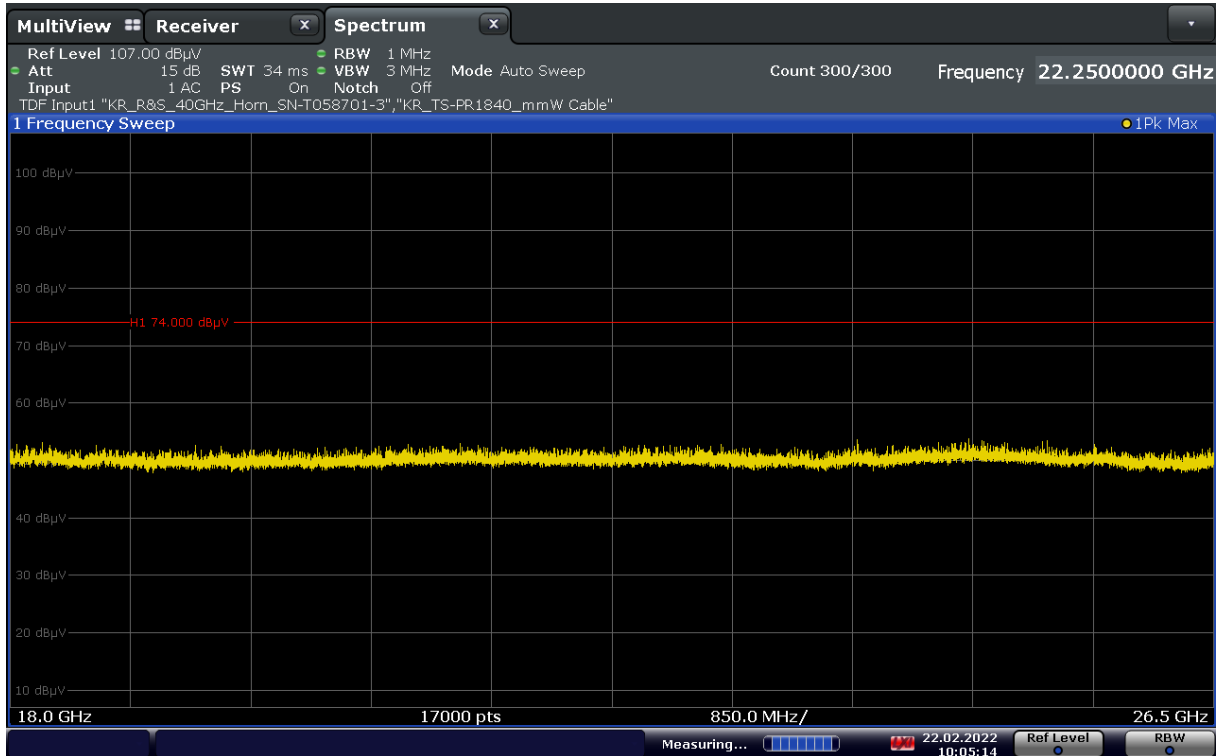


Plot 7-151. Radiated Spurious Plot 18GHz - 26.5GHz SISO ANT1 (802.11a – U2A Ch. 56 – Ant. Pol. H)

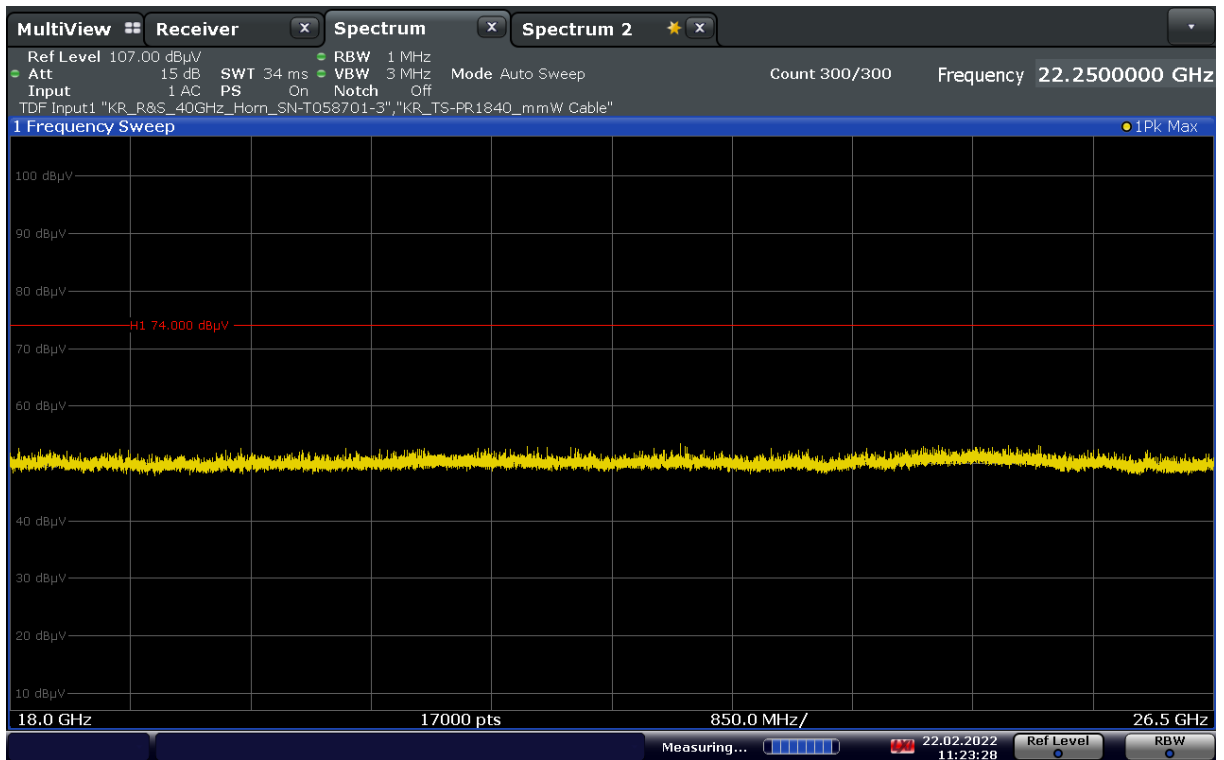


Plot 7-152. Radiated Spurious Plot 18GHz - 26.5GHz SISO ANT1 (802.11a – U2A Ch. 56 – Ant. Pol. V)

FCC ID: V7MESLCTGA	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
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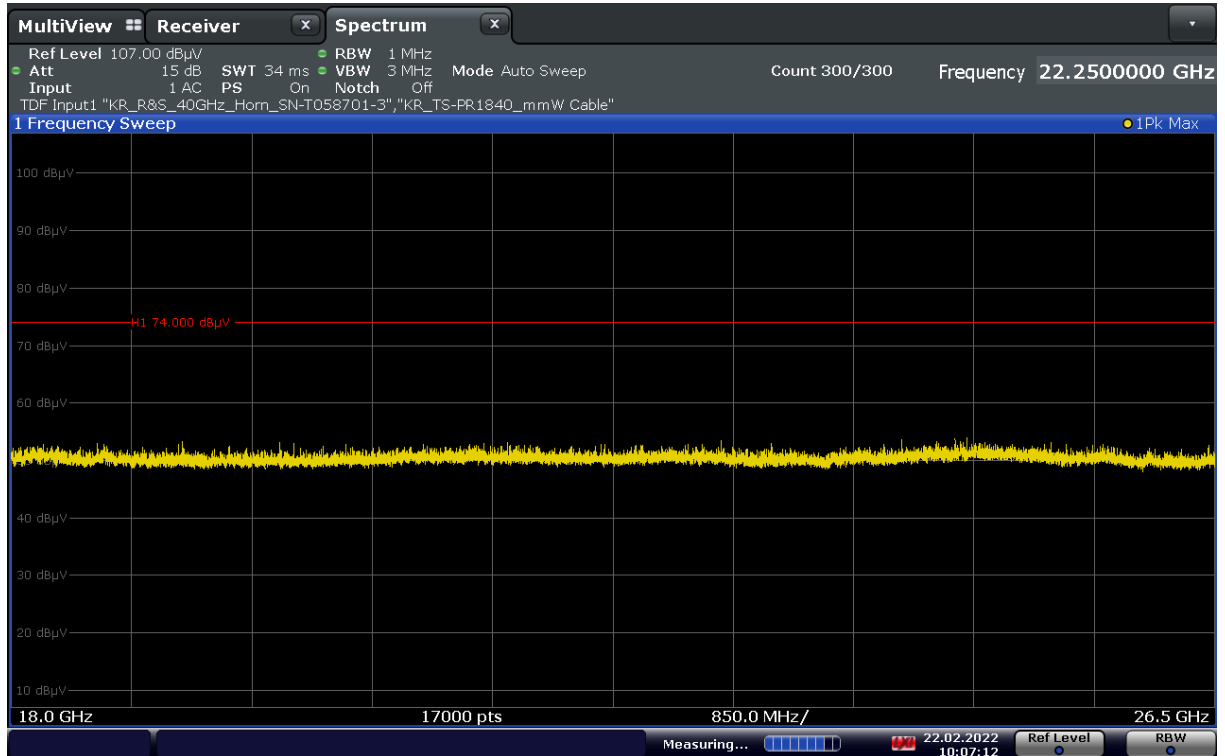


Plot 7-153. Radiated Spurious Plot 18GHz - 26.5GHz SISO ANT1 (802.11a – U2C Ch. 120 – Ant. Pol. H)

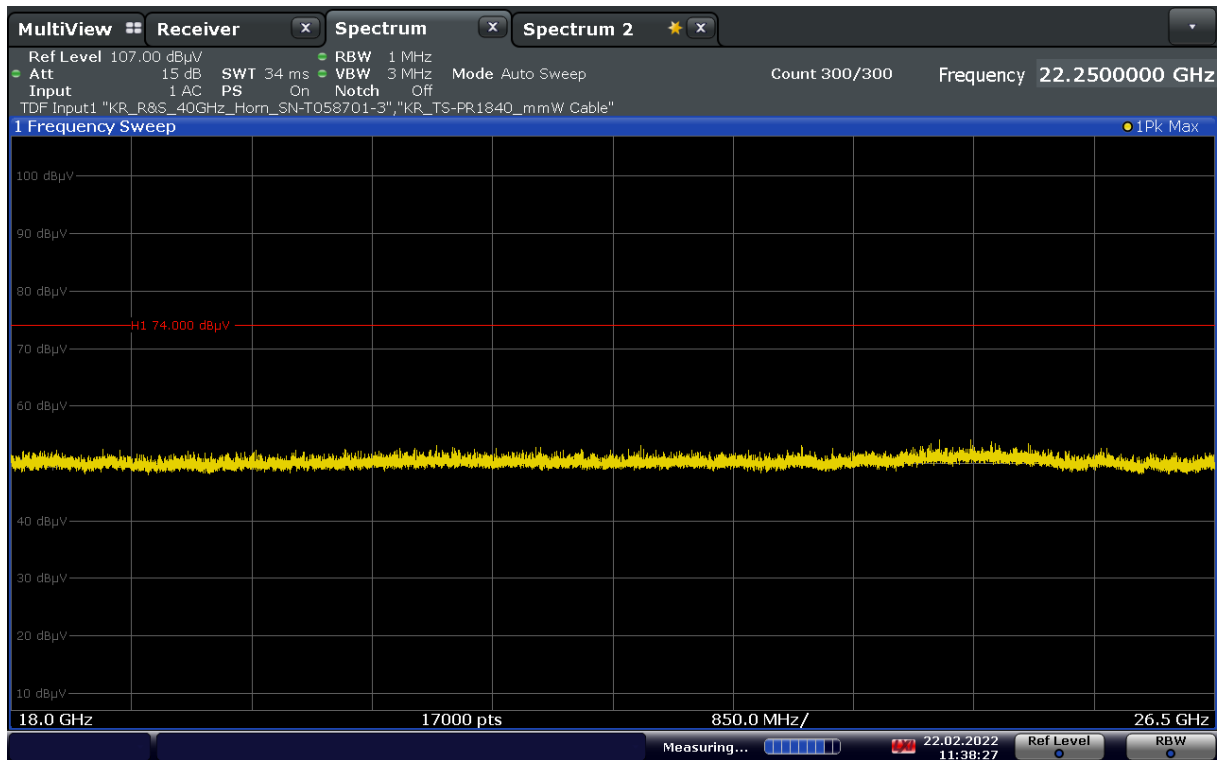


Plot 7-154. Radiated Spurious Plot 18GHz - 26.5GHz SISO ANT1 (802.11a – U2C Ch. 120 – Ant. Pol. V)

FCC ID: V7MESLCTGA	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
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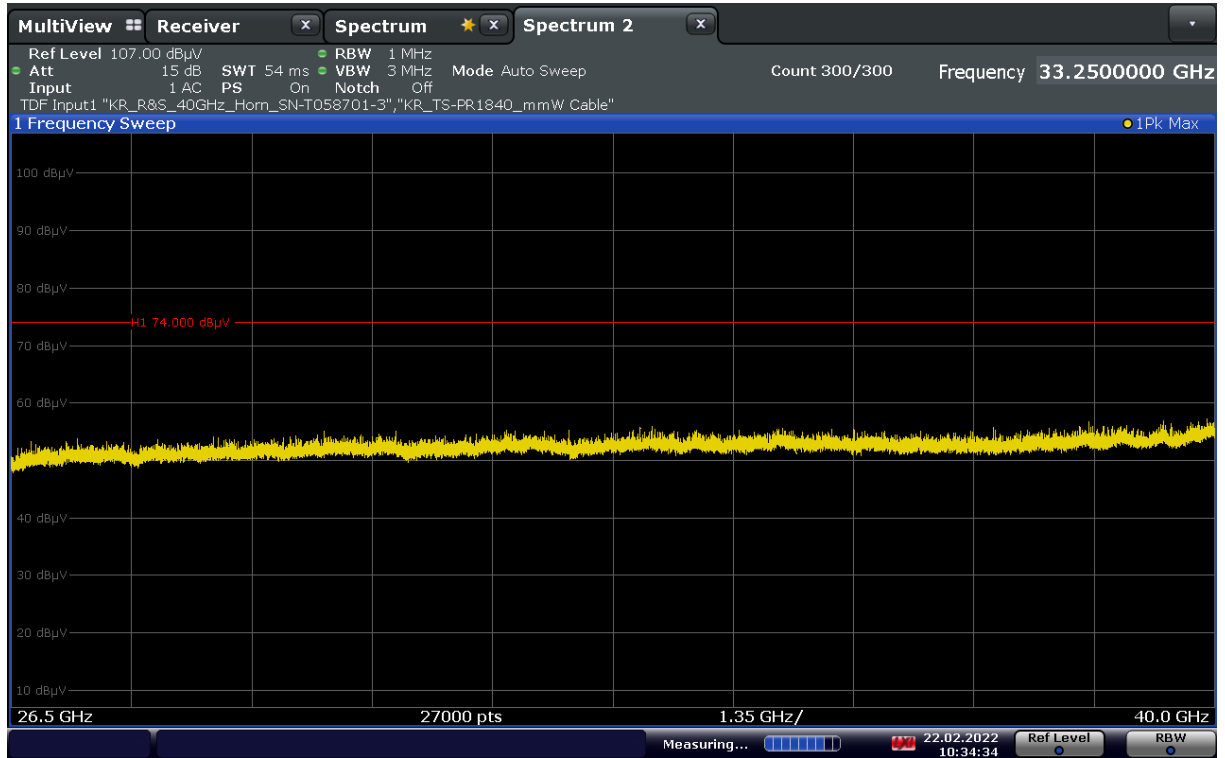


Plot 7-155. Radiated Spurious Plot 18GHz - 26.5GHz SISO ANT1 (802.11a – U3 Ch. 157 – Ant. Pol. H)

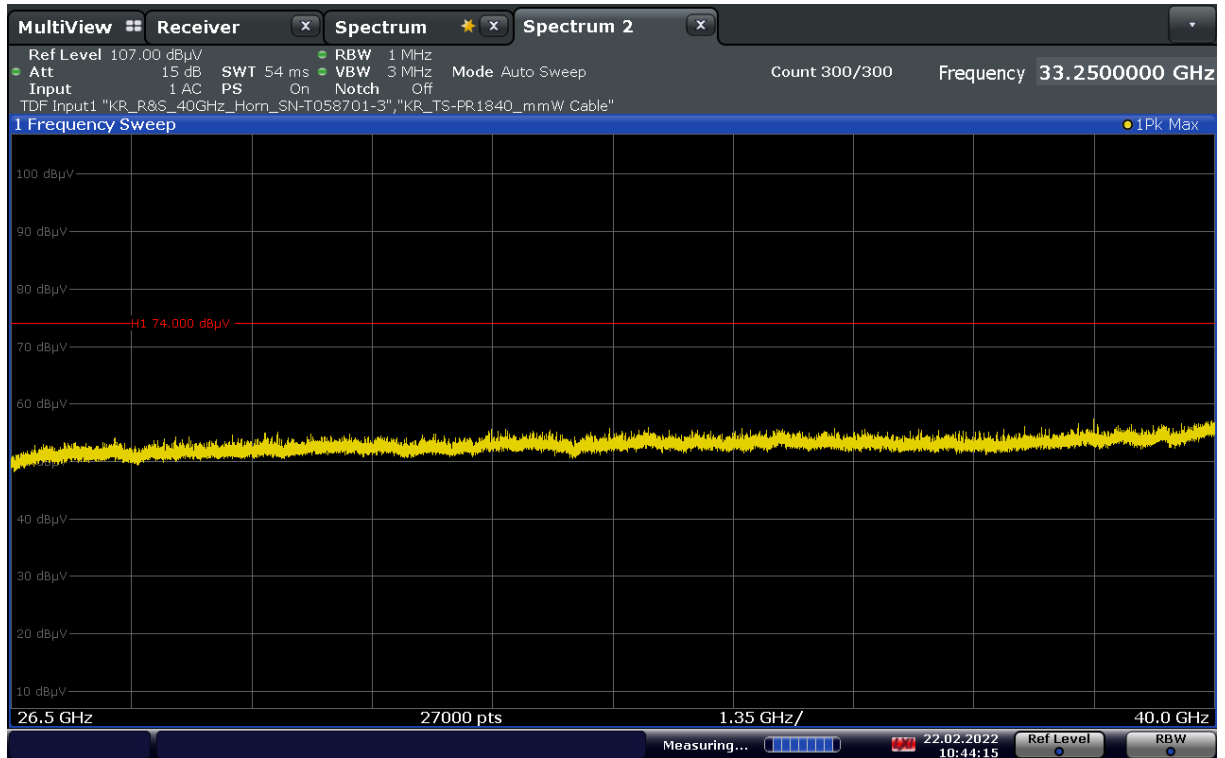


Plot 7-156. Radiated Spurious Plot 18GHz - 26.5GHz SISO ANT1 (802.11a – U3 Ch. 157 – Ant. Pol. V)

FCC ID: V7MESLCTGA	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
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Plot 7-157. Radiated Spurious Plot 26.5GHz - 40GHz SISO ANT1 (802.11a – Ant. Pol. H)



Plot 7-158. Radiated Spurious Plot 26.5GHz - 40GHz SISO ANT1 (802.11a – Ant. Pol. V)

FCC ID: V7MESLCTGA	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
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SISO Antenna-1 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	H	-	-	-70.71	13.60	0.00	49.89	68.20	-18.31
* 15540.00	Average	H	-	-	-83.29	16.45	0.00	40.16	53.98	-13.82
* 15540.00	Peak	H	-	-	-72.56	16.45	0.00	50.89	73.98	-23.09
* 20720.00	Average	H	150	328	-57.83	-3.62	-9.54	36.01	53.98	-17.97
* 20720.00	Peak	H	150	328	-48.36	-3.62	-9.54	45.48	73.98	-28.50
25900.00	Peak	H	150	282	-45.63	-3.07	-9.54	48.76	68.20	-19.44

Table 7-18. Radiated Measurements SISO ANT1

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]
10400.00	Peak	H	-	-	-71.08	13.03	0.00	48.95	68.20	-19.25
* 15600.00	Average	H	-	-	-83.72	16.13	0.00	39.41	53.98	-14.57
* 15600.00	Peak	H	-	-	-72.71	16.13	0.00	50.42	73.98	-23.56
* 20800.00	Average	H	150	334	-57.56	-3.63	-9.54	36.27	53.98	-17.71
* 20800.00	Peak	H	150	334	-46.64	-3.63	-9.54	47.19	73.98	-26.79
26000.00	Peak	H	150	276	-44.89	-3.02	-9.54	49.55	68.20	-18.65

Table 7-19. Radiated Measurements SISO ANT1

FCC ID: V7MESLCTGA	 Proud to be part of 	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: 5240MHz
Channel: 48

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
10480.00	Peak	H	-	-	-71.19	13.93	0.00	49.74	68.20	-18.46
* 15720.00	Average	H	-	-	-83.52	15.65	0.00	39.13	53.98	-14.85
* 15720.00	Peak	H	-	-	-72.23	15.65	0.00	50.42	73.98	-23.56
* 20960.00	Average	H	150	329	-57.98	-3.65	-9.54	35.83	53.98	-18.15
* 20960.00	Peak	H	150	329	-48.42	-3.65	-9.54	45.39	73.98	-28.59
26200.00	Peak	H	150	288	-45.06	-2.67	-9.54	49.73	68.20	-18.47

Table 7-20. Radiated Measurements SISO ANT1

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	H	-	-	-71.67	13.28	0.00	48.61	68.20	-19.59
* 15780.00	Average	H	-	-	-83.66	15.74	0.00	39.08	53.98	-14.90
* 15780.00	Peak	H	-	-	-72.06	15.74	0.00	50.68	73.98	-23.30
* 21040.00	Average	H	150	335	-58.39	-3.67	-9.54	35.40	53.98	-18.58
* 21040.00	Peak	H	150	335	-48.93	-3.67	-9.54	44.86	73.98	-29.12
26300.00	Peak	H	150	296	-45.76	-2.49	-9.54	49.21	68.20	-18.99

Table 7-21. Radiated Measurements SISO ANT1

FCC ID: V7MESLCTGA	 MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1M2202090014-04.V7M	Test Dates: 02/11/2022 ~ 05/23/2022	EUT Type: LTE Indoor CPE
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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	H	-	-	-70.81	13.77	0.00	49.96	68.20	-18.24
* 15840.00	Average	H	-	-	-83.15	15.67	0.00	39.52	53.98	-14.46
* 15840.00	Peak	H	-	-	-71.87	15.67	0.00	50.80	73.98	-23.18
* 21120.00	Average	H	150	326	-58.18	-3.68	-9.54	35.60	53.98	-18.38
* 21120.00	Peak	H	150	326	-48.54	-3.68	-9.54	45.24	73.98	-28.74
26400.00	Peak	H	150	292	-47.14	-2.31	-9.54	48.01	68.20	-20.19

Table 7-22. Radiated Measurements SISO ANT1

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	H	-	-	-82.33	13.38	0.00	38.05	53.98	-15.93
* 10640.00	Peak	H	-	-	-71.21	13.38	0.00	49.17	73.98	-24.81
* 15960.00	Average	H	-	-	-83.14	14.75	0.00	38.61	53.98	-15.37
* 15960.00	Peak	H	-	-	-72.28	14.75	0.00	49.47	73.98	-24.51
* 21280.00	Average	H	150	337	-58.83	-3.64	-9.54	34.99	53.98	-18.99
* 21280.00	Peak	H	150	337	-49.41	-3.64	-9.54	44.41	73.98	-29.57
26600.00	Peak	H	150	289	-48.03	-1.87	-9.54	47.56	68.20	-20.64

Table 7-23. Radiated Measurements SISO ANT1

FCC ID: V7MESLCTGA		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1M2202090014-04.V7M	Test Dates: 02/11/2022 ~ 05/23/2022	EUT Type: LTE Indoor CPE	Page 117 of 173

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	H	-	-	-82.82	13.69	0.00	37.87	53.98	-16.11
* 11000.00	Peak	H	-	-	-71.99	13.69	0.00	48.70	73.98	-25.28
16500.00	Peak	H	-	-	-71.49	15.49	0.00	51.00	68.20	-17.20
22000.00	Peak	H	150	332	-50.28	-3.97	-9.54	43.21	68.20	-24.99
27500.00	Peak	H	150	298	-50.05	-1.30	-9.54	46.11	68.20	-22.09

Table 7-24. Radiated Measurements SISO ANT1

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	H	-	-	-83.03	14.17	0.00	38.14	53.98	-15.84
* 11200.00	Peak	H	-	-	-71.49	14.17	0.00	49.68	73.98	-24.30
16800.00	Peak	H	-	-	-71.81	17.00	0.00	52.19	68.20	-16.01
* 22400.00	Average	H	150	336	-60.44	-3.79	-9.54	33.23	53.98	-20.75
* 22400.00	Peak	H	150	336	-51.34	-3.79	-9.54	42.33	73.98	-31.65
28000.00	Peak	H	150	301	-50.68	-1.48	-9.54	45.30	68.20	-22.90

Table 7-25. Radiated Measurements SISO ANT1

FCC ID: V7MESLCTGA	 PCTEST Proud to be part of 	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1M2202090014-04.V7M	Test Dates: 02/11/2022 ~ 05/23/2022	EUT Type: LTE Indoor CPE	Page 118 of 173

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	H	-	-	-83.81	14.83	0.00	38.02	53.98	-15.96
* 11440.00	Peak	H	-	-	-72.89	14.83	0.00	48.94	73.98	-25.04
17160.00	Peak	H	-	-	-72.42	18.59	0.00	53.17	68.20	-15.03
* 22880.00	Average	H	150	327	-60.85	-3.74	-9.54	32.87	53.98	-21.11
* 22880.00	Peak	H	150	327	-51.00	-3.74	-9.54	42.72	73.98	-31.26
28600.00	Peak	H	150	298	-53.01	-0.98	-9.54	43.47	68.20	-24.73

Table 7-26. Radiated Measurements SISO ANT1

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	H	-	-	-83.42	14.92	0.00	38.50	53.98	-15.48
* 11490.00	Peak	H	-	-	-72.61	14.92	0.00	49.31	73.98	-24.67
17235.00	Peak	H	-	-	-72.07	19.05	0.00	53.98	68.20	-14.22
* 22980.00	Average	H	150	336	-61.30	-3.80	-9.54	32.36	53.98	-21.62
* 22980.00	Peak	H	150	336	-50.78	-3.80	-9.54	42.88	73.98	-31.10
28725.00	Peak	H	150	306	-52.04	-0.80	-9.54	44.62	68.20	-23.58

Table 7-27. Radiated Measurements SISO ANT1

FCC ID: V7MESLCTGA	 PCTEST Proud to be part of 	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1M2202090014-04.V7M	Test Dates: 02/11/2022 ~ 05/23/2022	EUT Type: LTE Indoor CPE	Page 119 of 173

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	H	-	-	-83.12	14.62	0.00	38.50	53.98	-15.48
* 11570.00	Peak	H	-	-	-72.30	14.62	0.00	49.32	73.98	-24.66
17355.00	Peak	H	-	-	-71.55	20.61	0.00	56.06	68.20	-12.14
23140.00	Peak	H	150	321	-50.79	-3.82	-9.54	42.85	68.20	-25.35
28925.00	Peak	H	150	305	-51.61	-0.97	-9.54	44.88	68.20	-23.32

Table 7-28. Radiated Measurements SISO ANT1

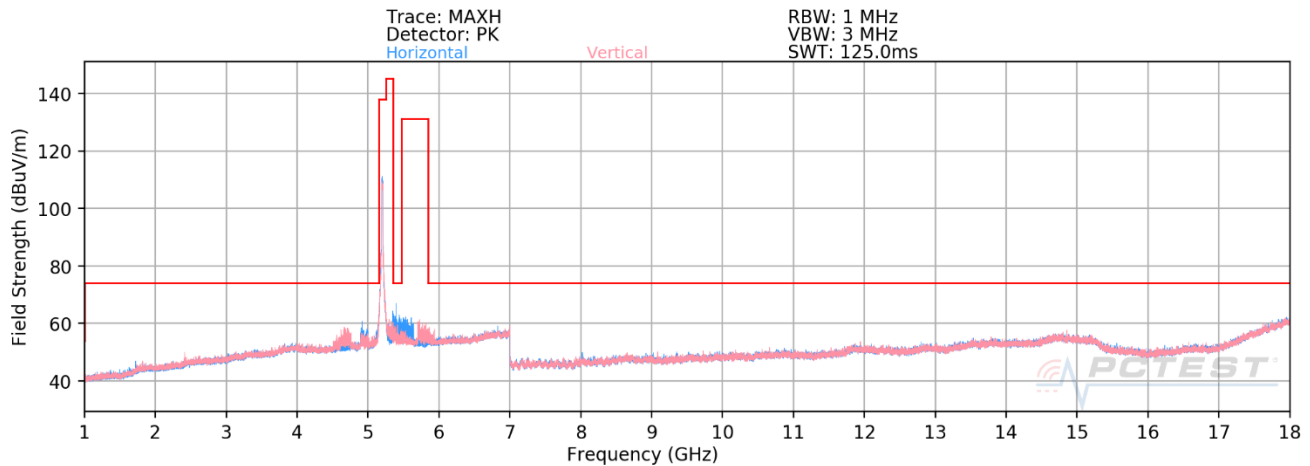
Worst Case Mode: 802.11a
Worst Case Transfer Rate: 6Mbps
Distance of Measurements: 1 & 3 Meters
Operating Frequency: 5825MHz
Channel: 165

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	H	-	-	-83.09	14.29	0.00	38.20	53.98	-15.78
* 11650.00	Peak	H	-	-	-72.68	14.29	0.00	48.61	73.98	-25.37
17475.00	Peak	H	-	-	-72.11	21.71	0.00	56.60	68.20	-11.60
23300.00	Peak	H	150	329	-51.35	-3.83	-9.54	42.28	68.20	-25.92
29125.00	Peak	H	150	311	-51.05	-0.31	-9.54	46.10	68.20	-22.10

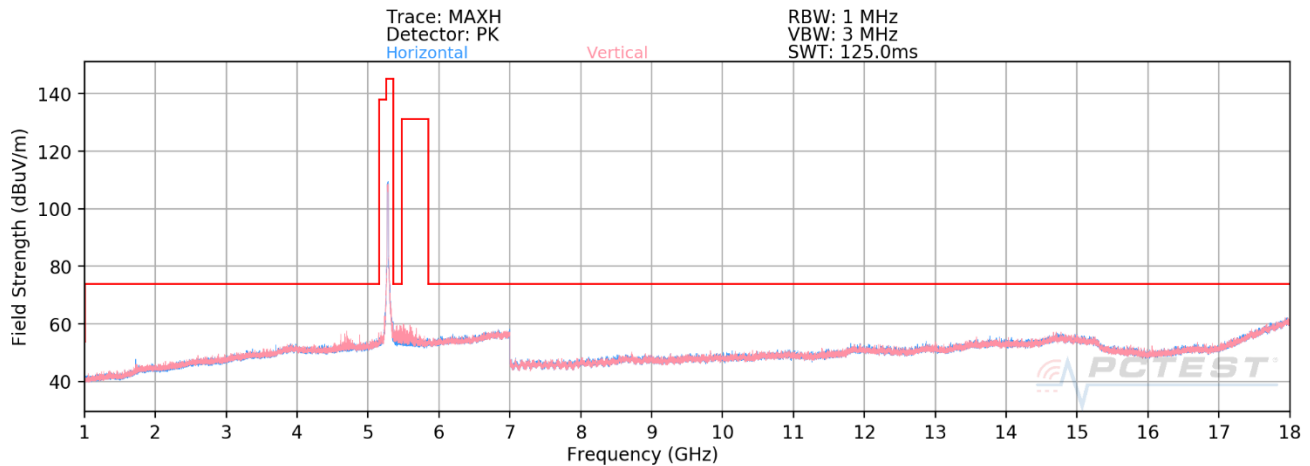
Table 7-29. Radiated Measurements SISO ANT1

FCC ID: V7MESLCTGA	 PCTEST Proud to be part of 	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1M2202090014-04.V7M	Test Dates: 02/11/2022 ~ 05/23/2022	EUT Type: LTE Indoor CPE	Page 120 of 173

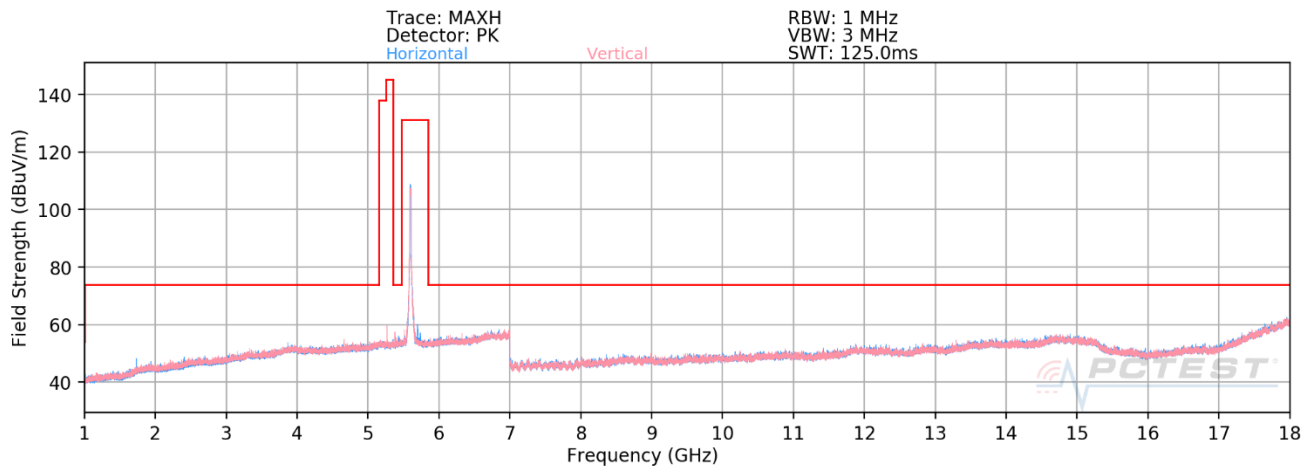
7.6.2 SISO Antenna-2 Radiated Spurious Emission Measurements



Plot 7-159. Radiated Spurious Plot above 1GHz SISO ANT2 (802.11a – U1 Ch. 40)

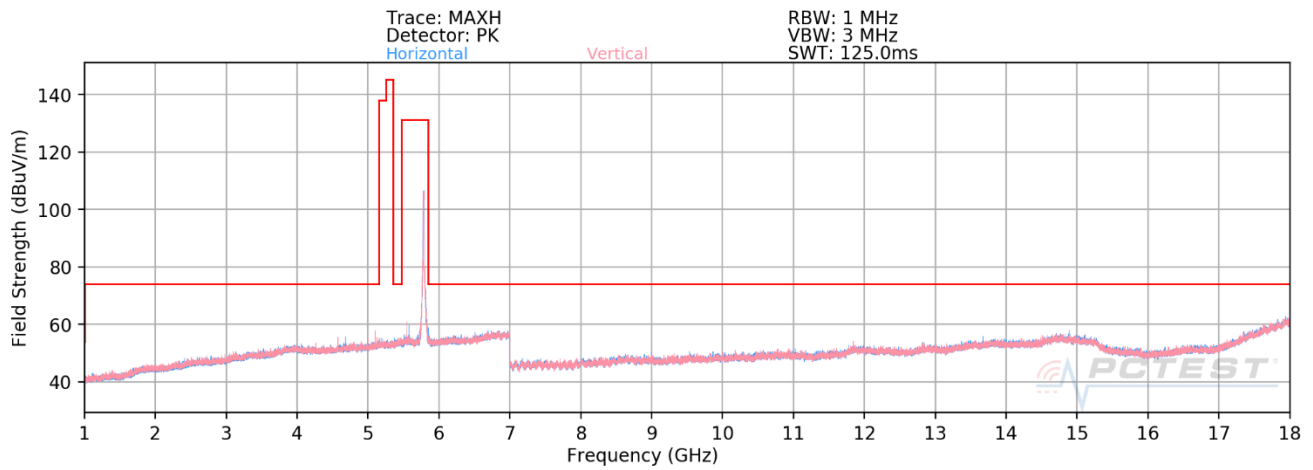


Plot 7-160. Radiated Spurious Plot above 1GHz SISO ANT2 (802.11a – U2A Ch. 56)



Plot 7-161. Radiated Spurious Plot above 1GHz SISO ANT2 (802.11a – U2C Ch. 120)

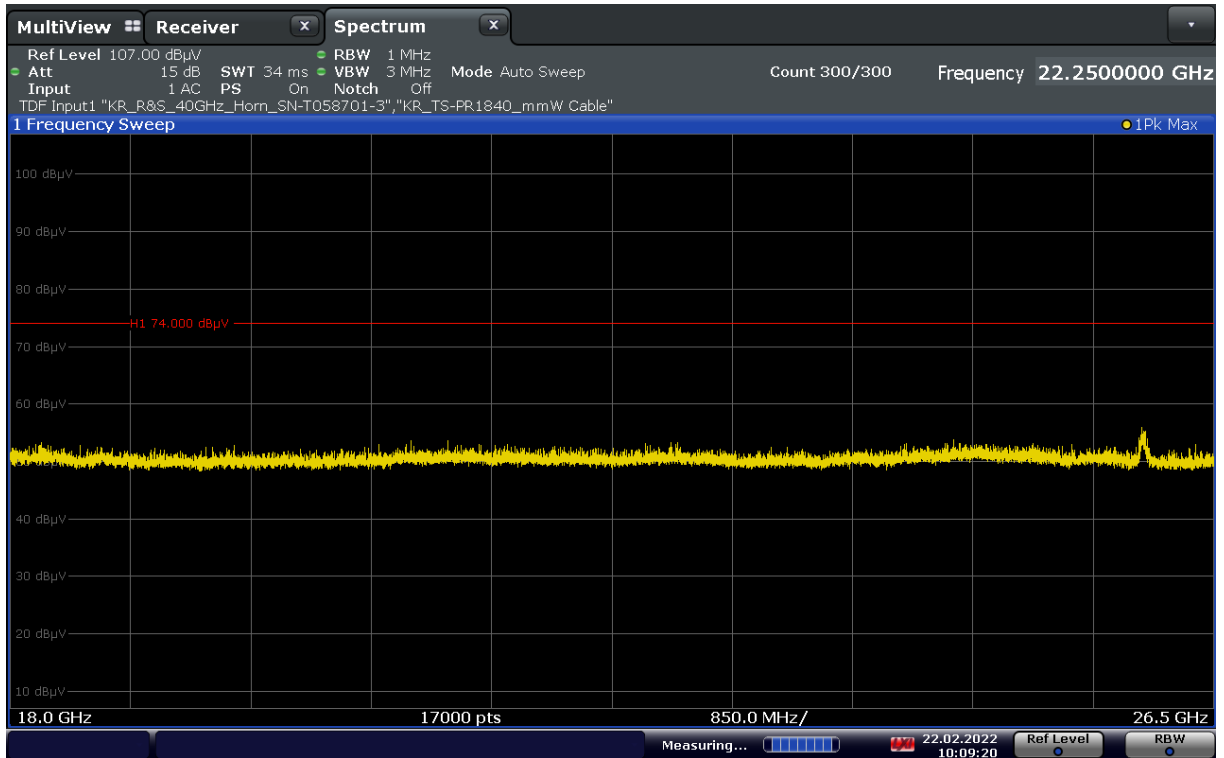
FCC ID: V7MESLCTGA	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1M2202090014-04.V7M	Test Dates: 02/11/2022 ~ 05/23/2022	EUT Type: LTE Indoor CPE	Page 121 of 173



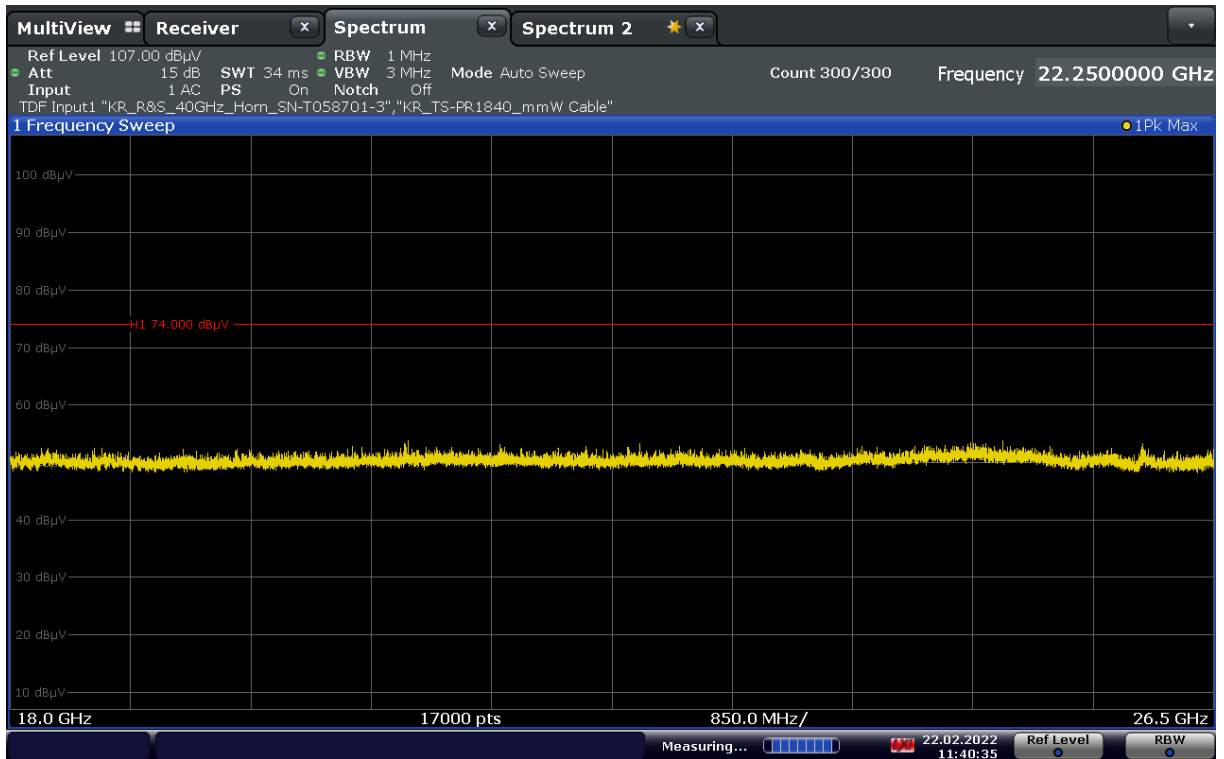
Plot 7-162. Radiated Spurious Plot above 1GHz SISO ANT2 (802.11a – U3 Ch. 157)

FCC ID: V7MESLCTGA	 Proud to be part of 	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1M2202090014-04.V7M	Test Dates: 02/11/2022 ~ 05/23/2022	EUT Type: LTE Indoor CPE	Page 122 of 173

SISO Antenna-2 Radiated Spurious Emissions Measurements (Above 18GHz)

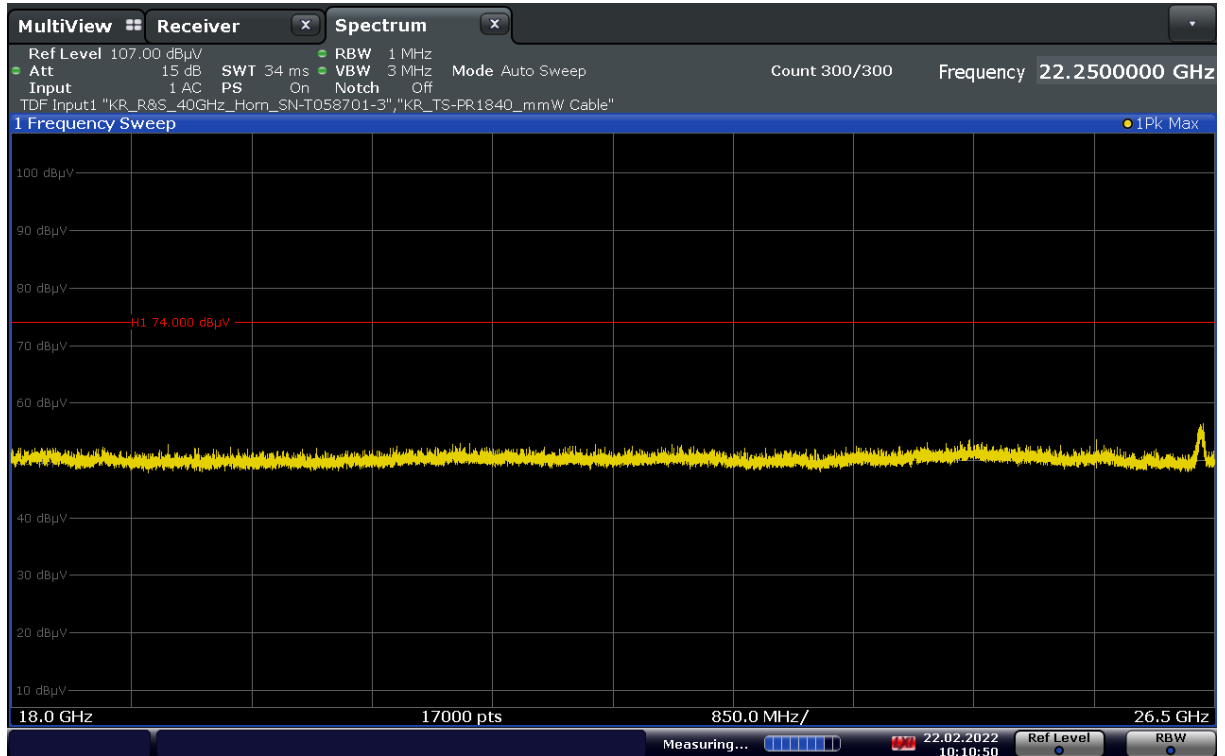


Plot 7-163. Radiated Spurious Plot above 18GHz - 26.5GHz SISO ANT2 (802.11a – U1 Ch. 40 – Ant. Pol. H)

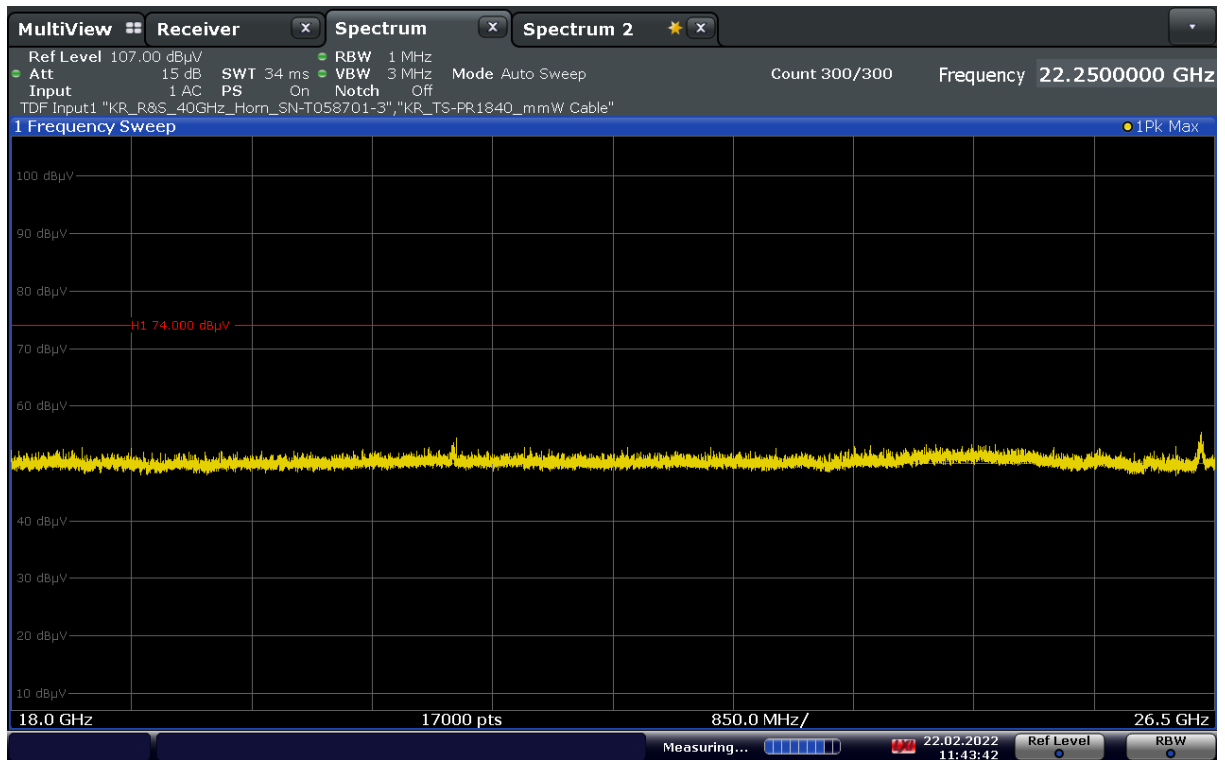


Plot 7-164. Radiated Spurious Plot above 18GHz - 26.5GHz SISO ANT2 (802.11a – U1 Ch. 40 – Ant. Pol. V)

FCC ID: V7MESLCTGA	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1M2202090014-04.V7M	Test Dates: 02/11/2022 ~ 05/23/2022	EUT Type: LTE Indoor CPE	Page 123 of 173

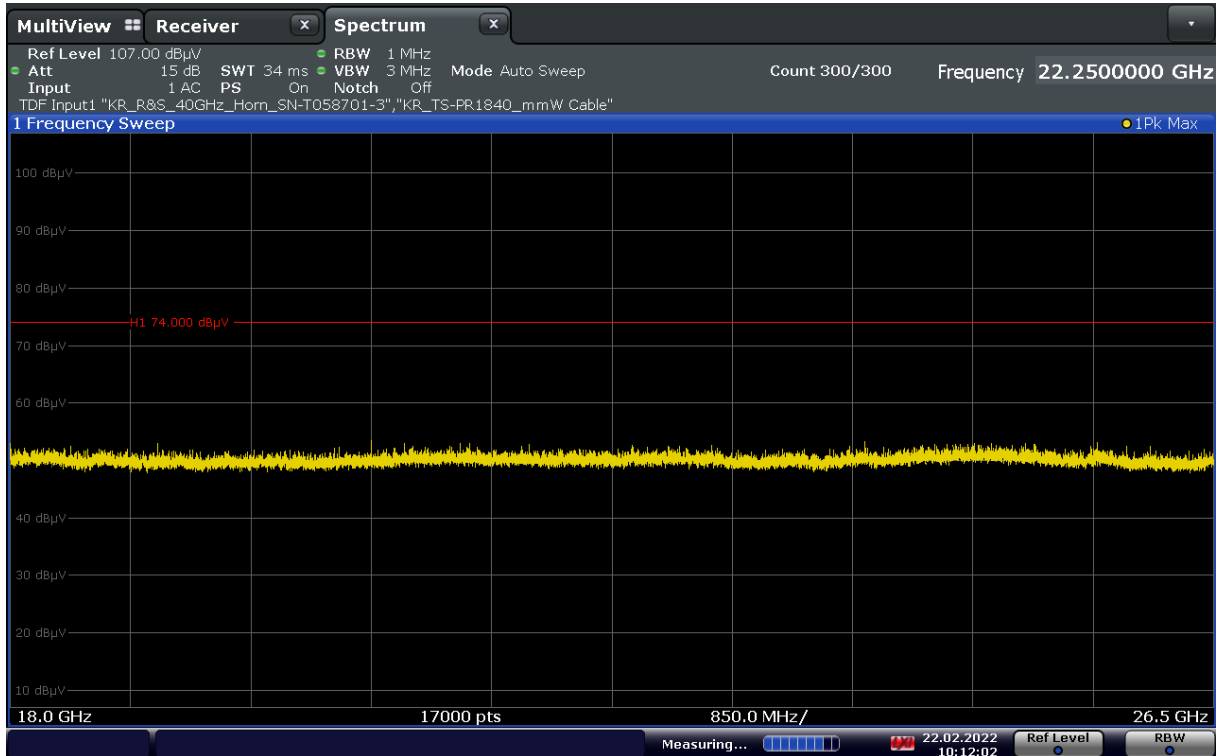


Plot 7-165. Radiated Spurious Plot above 18GHz - 26.5GHz SISO ANT2 (802.11a – U2A Ch. 56 – Ant. Pol. H)

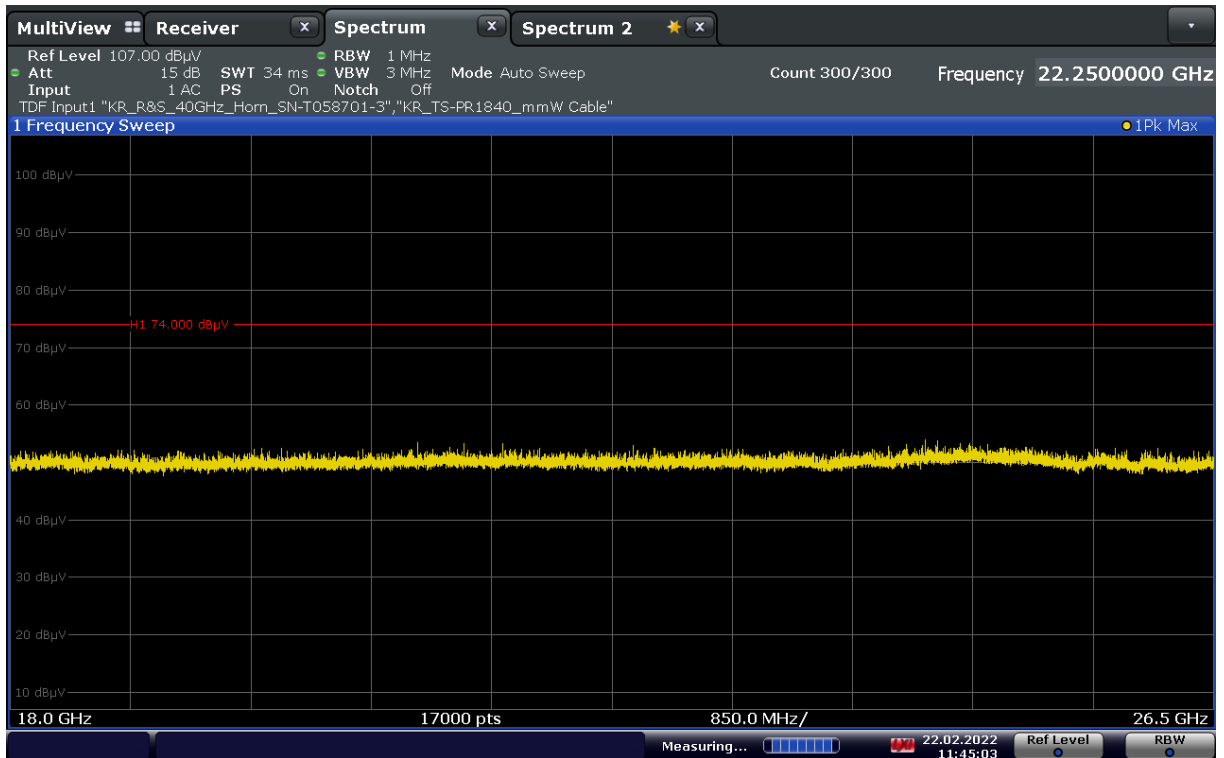


Plot 7-166. Radiated Spurious Plot above 18GHz - 26.5GHz SISO ANT2 (802.11a – U2A Ch. 56 – Ant. Pol. V)

FCC ID: V7MESLCTGA	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1M2202090014-04.V7M	Test Dates: 02/11/2022 ~ 05/23/2022	EUT Type: LTE Indoor CPE	Page 124 of 173

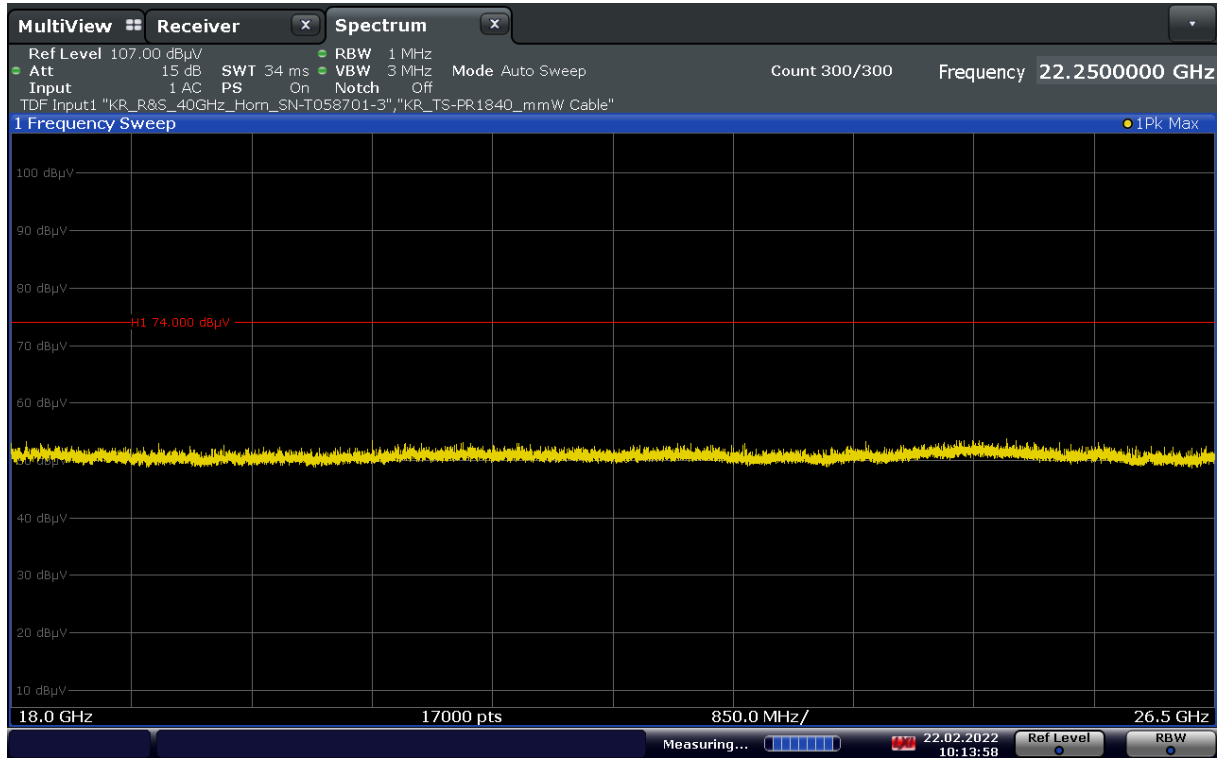


Plot 7-167. Radiated Spurious Plot above 18GHz - 26.5GHz SISO ANT2 (802.11a – U2C Ch. 120 – Ant. Pol. H)

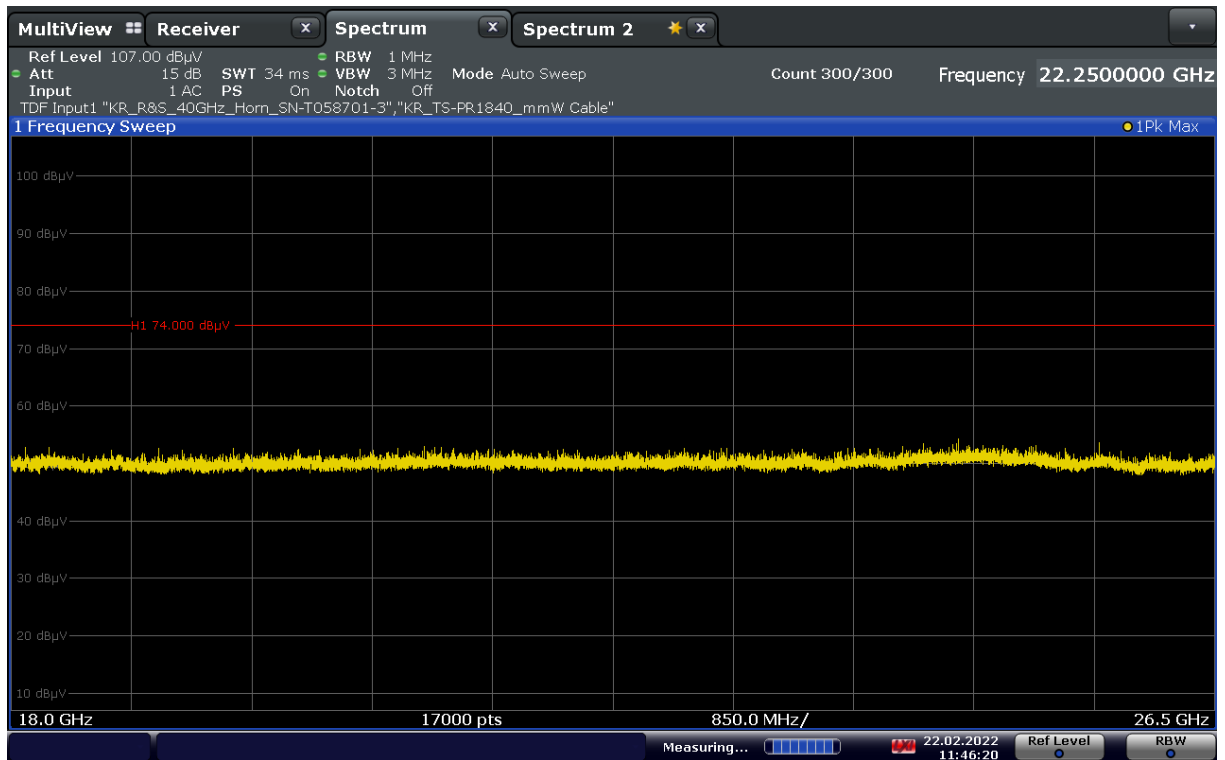


Plot 7-168. Radiated Spurious Plot above 18GHz - 26.5GHz SISO ANT2 (802.11a – U2C Ch. 120 – Ant. Pol. V)

FCC ID: V7MESLCTGA	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1M2202090014-04.V7M	Test Dates: 02/11/2022 ~ 05/23/2022	EUT Type: LTE Indoor CPE	Page 125 of 173

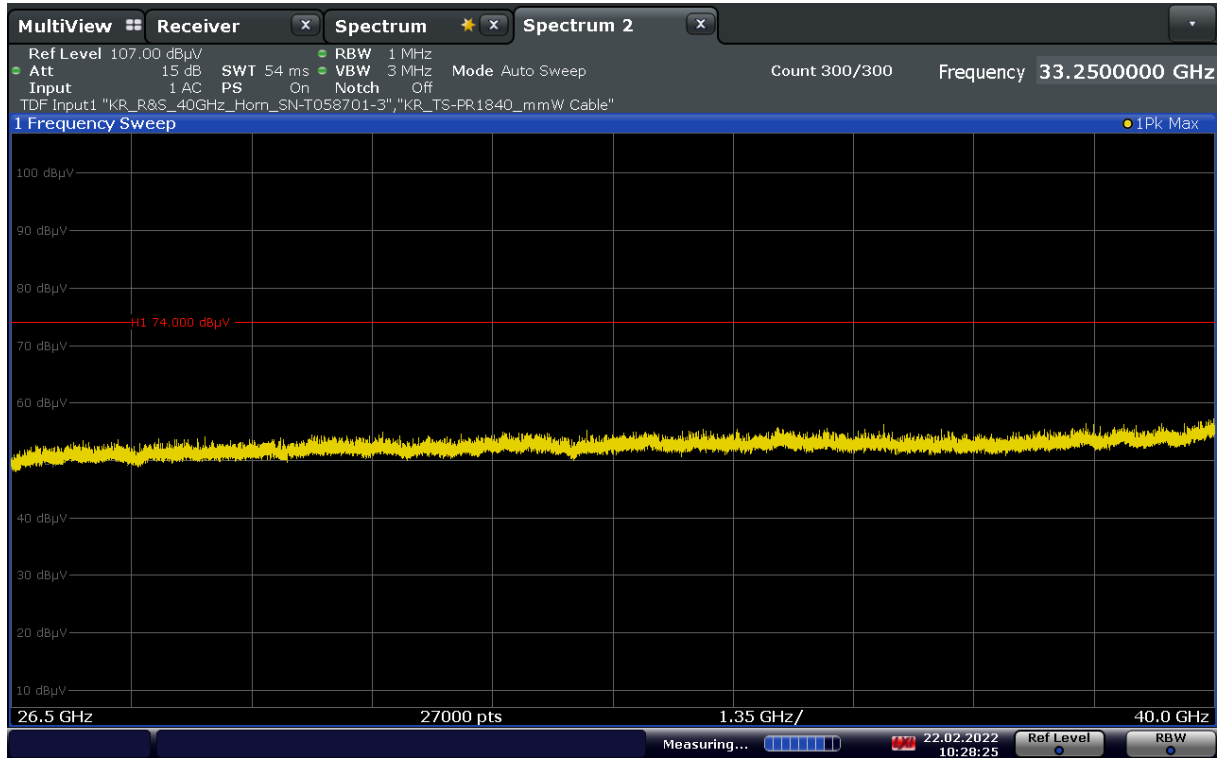


Plot 7-169. Radiated Spurious Plot above 18GHz - 26.5GHz SISO ANT2 (802.11a – U3 Ch. 157 – Ant. Pol. H)

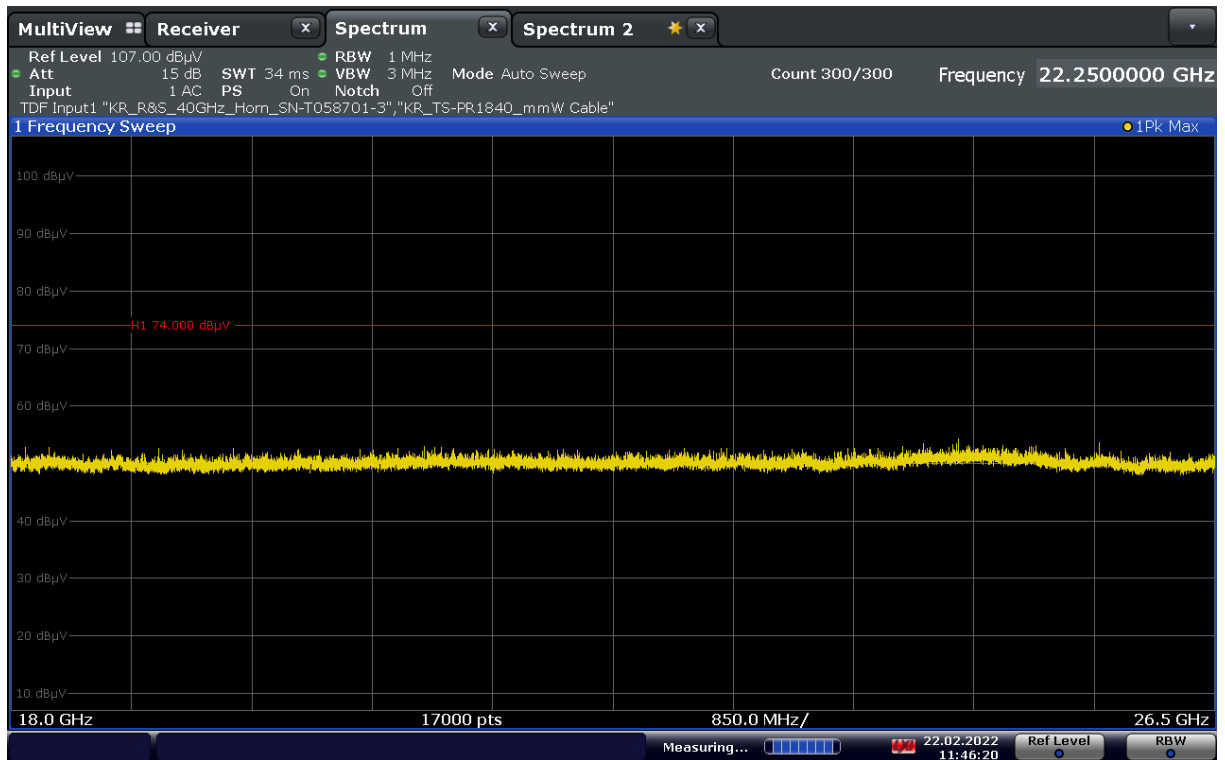


Plot 7-170. Radiated Spurious Plot above 18GHz - 26.5GHz SISO ANT2 (802.11a – U3 Ch. 157 – Ant. Pol. V)

FCC ID: V7MESLCTGA	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1M2202090014-04.V7M	Test Dates: 02/11/2022 ~ 05/23/2022	EUT Type: LTE Indoor CPE	Page 126 of 173



Plot 7-171. Radiated Spurious Plot 26.5GHz - 40GHz SISO ANT2 (802.11a – Ant. Pol. H)



Plot 7-172. Radiated Spurious Plot 26.5GHz - 40GHz SISO ANT2 (802.11a – Ant. Pol. V)

FCC ID: V7MESLCTGA	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1M2202090014-04.V7M	Test Dates: 02/11/2022 ~ 05/23/2022	EUT Type: LTE Indoor CPE	Page 127 of 173

SISO Antenna-2 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	H	-	-	-71.79	13.60	0.00	48.81	68.20	-19.39
* 15540.00	Average	H	-	-	-83.68	16.45	0.00	39.77	53.98	-14.21
* 15540.00	Peak	H	-	-	-72.76	16.45	0.00	50.69	73.98	-23.29
* 20720.00	Average	H	150	332	-58.97	-3.62	-9.54	34.87	53.98	-19.11
* 20720.00	Peak	H	150	332	-49.81	-3.62	-9.54	44.03	73.98	-29.95
25900.00	Peak	H	150	312	-46.28	-3.07	-9.54	48.11	68.20	-20.09

Table 7-30. Radiated Measurements SISO ANT2

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]
10400.00	Peak	H	-	-	-71.27	13.03	0.00	48.76	68.20	-19.44
* 15600.00	Average	H	-	-	-83.89	16.13	0.00	39.24	53.98	-14.74
* 15600.00	Peak	H	-	-	-72.75	16.13	0.00	50.38	73.98	-23.60
* 20800.00	Average	H	150	332	-57.93	-3.63	-9.54	35.90	53.98	-18.08
* 20800.00	Peak	H	150	332	-49.81	-3.63	-9.54	44.02	73.98	-29.96
26000.00	Peak	H	150	299	-45.36	-3.02	-9.54	49.08	68.20	-19.12

Table 7-31. Radiated Measurements SISO ANT2

FCC ID: V7MESLCTGA	 PCTEST Proud to be part of 	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1M2202090014-04.V7M	Test Dates: 02/11/2022 ~ 05/23/2022	EUT Type: LTE Indoor CPE	Page 128 of 173

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]
10480.00	Peak	H	-	-	-71.55	13.93	0.00	49.38	68.20	-18.82
* 15720.00	Average	H	-	-	-83.53	15.65	0.00	39.12	53.98	-14.86
* 15720.00	Peak	H	-	-	-71.48	15.65	0.00	51.17	73.98	-22.81
* 20960.00	Average	H	150	329	-58.22	-3.65	-9.54	35.59	53.98	-18.39
* 20960.00	Peak	H	150	329	-49.14	-3.65	-9.54	44.67	73.98	-29.31
26200.00	Peak	H	150	318	-45.40	-2.67	-9.54	49.39	68.20	-18.81

Table 7-32. Radiated Measurements SISO ANT2

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	H	-	-	-71.25	13.28	0.00	49.03	68.20	-19.17
* 15780.00	Average	H	-	-	-83.75	15.74	0.00	38.99	53.98	-14.99
* 15780.00	Peak	H	-	-	-72.90	15.74	0.00	49.84	73.98	-24.14
* 21040.00	Average	H	150	335	-58.73	-3.67	-9.54	35.06	53.98	-18.92
* 21040.00	Peak	H	150	335	-50.07	-3.67	-9.54	43.72	73.98	-30.26
26300.00	Peak	H	150	302	-46.56	-2.49	-9.54	48.41	68.20	-19.79

Table 7-33. Radiated Measurements SISO ANT2

FCC ID: V7MESLCTGA	 PCTEST Proud to be part of 	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1M2202090014-04.V7M	Test Dates: 02/11/2022 ~ 05/23/2022	EUT Type: LTE Indoor CPE	Page 129 of 173

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	H	-	-	-70.80	13.77	0.00	49.97	68.20	-18.23
* 15840.00	Average	H	-	-	-83.28	15.67	0.00	39.39	53.98	-14.59
* 15840.00	Peak	H	-	-	-72.06	15.67	0.00	50.61	73.98	-23.37
* 21120.00	Average	H	150	338	-58.84	-3.68	-9.54	34.94	53.98	-19.04
* 21120.00	Peak	H	150	338	-49.68	-3.68	-9.54	44.10	73.98	-29.88
26400.00	Peak	H	150	319	-47.53	-2.31	-9.54	47.62	68.20	-20.58

Table 7-34. Radiated Measurements SISO ANT2

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	H	-	-	-82.49	13.38	0.00	37.89	53.98	-16.09
* 10640.00	Peak	H	-	-	-71.55	13.38	0.00	48.83	73.98	-25.15
* 15960.00	Average	H	-	-	-83.29	14.75	0.00	38.46	53.98	-15.52
* 15960.00	Peak	H	-	-	-72.05	14.75	0.00	49.70	73.98	-24.28
* 21280.00	Average	H	150	326	-57.79	-3.64	-9.54	36.03	53.98	-17.95
* 21280.00	Peak	H	150	326	-48.91	-3.64	-9.54	44.91	73.98	-29.07
26600.00	Peak	H	150	315	-49.07	-1.87	-9.54	46.52	68.20	-21.68

Table 7-35. Radiated Measurements SISO ANT2

FCC ID: V7MESLCTGA	 PCTEST Proud to be part of 	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	H	-	-	-83.01	13.69	0.00	37.68	53.98	-16.30
* 11000.00	Peak	H	-	-	-72.10	13.69	0.00	48.59	73.98	-25.39
16500.00	Peak	H	-	-	-72.24	15.49	0.00	50.25	68.20	-17.95
22000.00	Peak	H	150	332	-48.84	-3.97	-9.54	44.65	68.20	-23.55
27500.00	Peak	H	150	298	-51.40	-1.30	-9.54	44.76	68.20	-23.44

Table 7-36. Radiated Measurements SISO ANT2

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	H	-	-	-82.98	14.17	0.00	38.19	53.98	-15.79
* 11200.00	Peak	H	-	-	-72.40	14.17	0.00	48.77	73.98	-25.21
16800.00	Peak	H	149	264	-70.10	17.00	0.00	53.90	68.20	-14.30
* 22400.00	Average	H	150	329	-60.06	-3.79	-9.54	33.61	53.98	-20.37
* 22400.00	Peak	H	150	329	-50.89	-3.79	-9.54	42.78	73.98	-31.20
28000.00	Peak	H	150	288	-49.56	-1.48	-9.54	46.42	68.20	-21.78

Table 7-37. Radiated Measurements SISO ANT2

FCC ID: V7MESLCTGA	 PCTEST Proud to be part of 	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: 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	H	-	-	-83.74	14.83	0.00	38.09	53.98	-15.89
* 11440.00	Peak	H	-	-	-72.84	14.83	0.00	48.99	73.98	-24.99
17160.00	Peak	H	164	262	-69.81	18.59	0.00	55.78	68.20	-12.42
* 22880.00	Average	H	150	331	-58.82	-3.74	-9.54	34.90	53.98	-19.08
* 22880.00	Peak	H	150	331	-50.43	-3.74	-9.54	43.29	73.98	-30.69
28600.00	Peak	H	150	316	-51.46	-0.98	-9.54	45.02	68.20	-23.18

Table 7-38. Radiated Measurements SISO ANT2

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	H	-	-	-83.53	14.92	0.00	38.39	53.98	-15.59
* 11490.00	Peak	H	-	-	-72.83	14.92	0.00	49.09	73.98	-24.89
17235.00	Peak	H	158	263	-70.59	19.05	0.00	55.46	68.20	-12.74
* 22980.00	Average	H	150	339	-59.33	-3.80	-9.54	34.33	53.98	-19.65
* 22980.00	Peak	H	150	339	-50.25	-3.80	-9.54	43.41	73.98	-30.57
28725.00	Peak	H	150	298	-50.94	-0.80	-9.54	45.72	68.20	-22.48

Table 7-39. Radiated Measurements SISO ANT2

FCC ID: V7MESLCTGA	 PCTEST Proud to be part of 	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: 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	H	-	-	-83.17	14.62	0.00	38.45	53.98	-15.53
* 11570.00	Peak	H	-	-	-72.34	14.62	0.00	49.28	73.98	-24.70
17355.00	Peak	H	133	244	-70.61	20.61	0.00	57.00	68.20	-11.20
23140.00	Peak	H	150	336	-50.15	-3.82	-9.54	43.49	68.20	-24.71
28925.00	Peak	H	150	310	-51.27	-0.97	-9.54	45.22	68.20	-22.98

Table 7-40. Radiated Measurements SISO ANT2

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	H	-	-	-83.17	14.29	0.00	38.12	53.98	-15.86
* 11650.00	Peak	H	-	-	-72.05	14.29	0.00	49.24	73.98	-24.74
17475.00	Peak	H	145	242	-69.64	21.71	0.00	59.07	68.20	-9.13
23300.00	Peak	H	150	321	-49.92	-3.83	-9.54	43.71	68.20	-24.49
29125.00	Peak	H	150	295	-50.88	-0.31	-9.54	46.27	68.20	-21.93

Table 7-41. Radiated Measurements SISO ANT2

FCC ID: V7MESLCTGA	 PCTEST Proud to be part of 	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
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