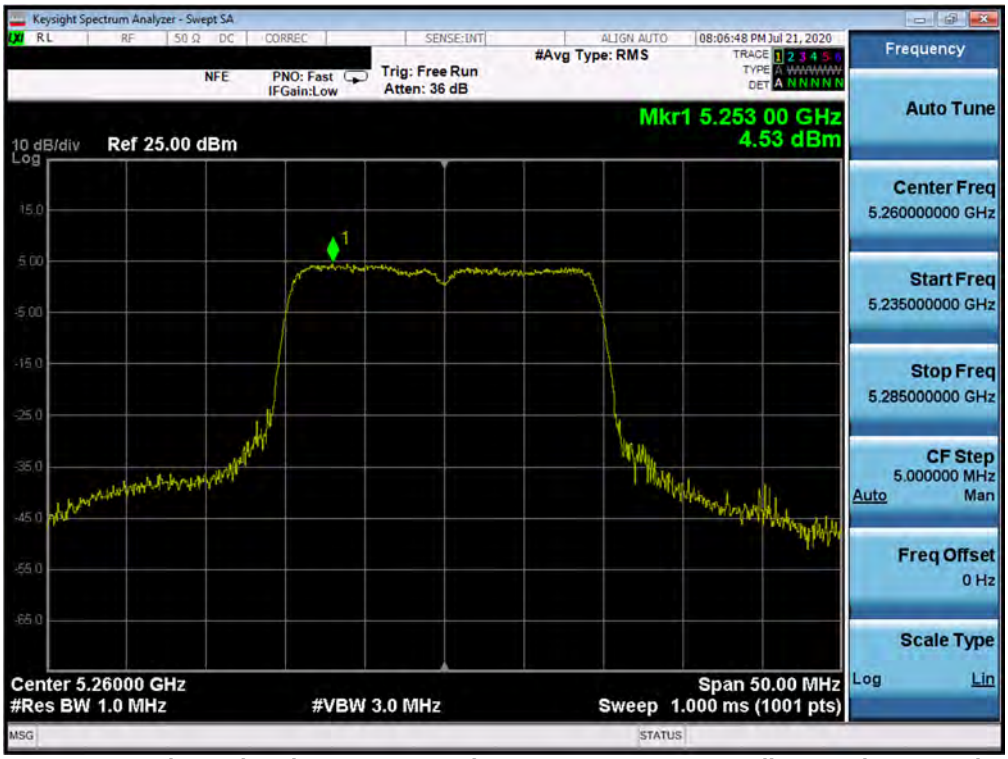
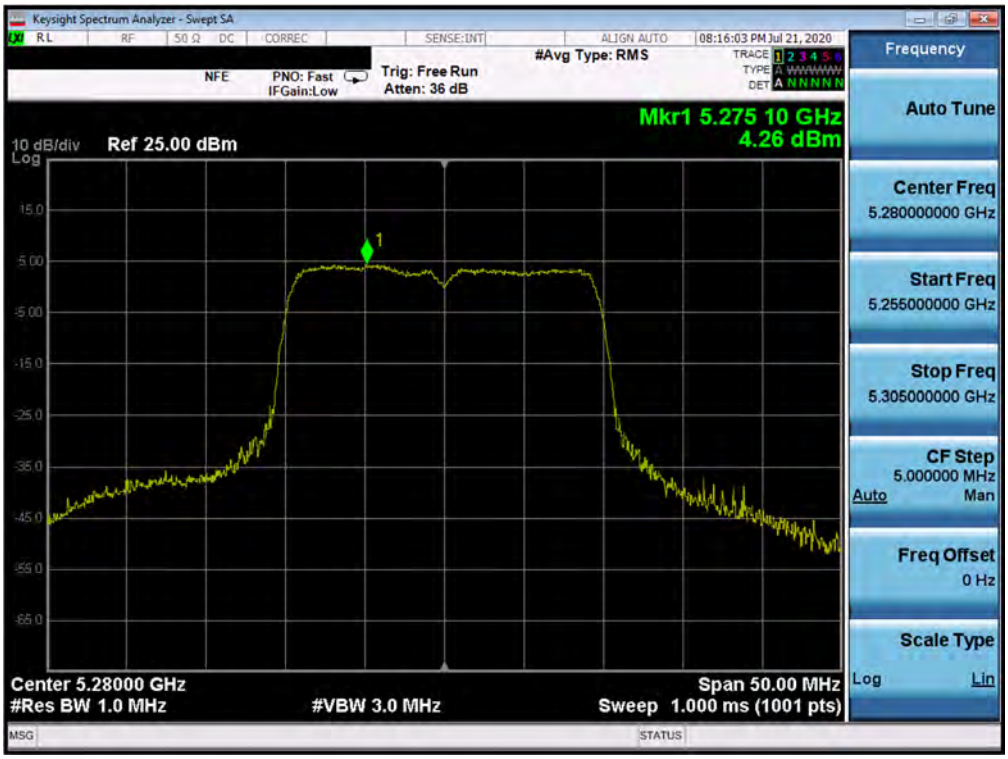
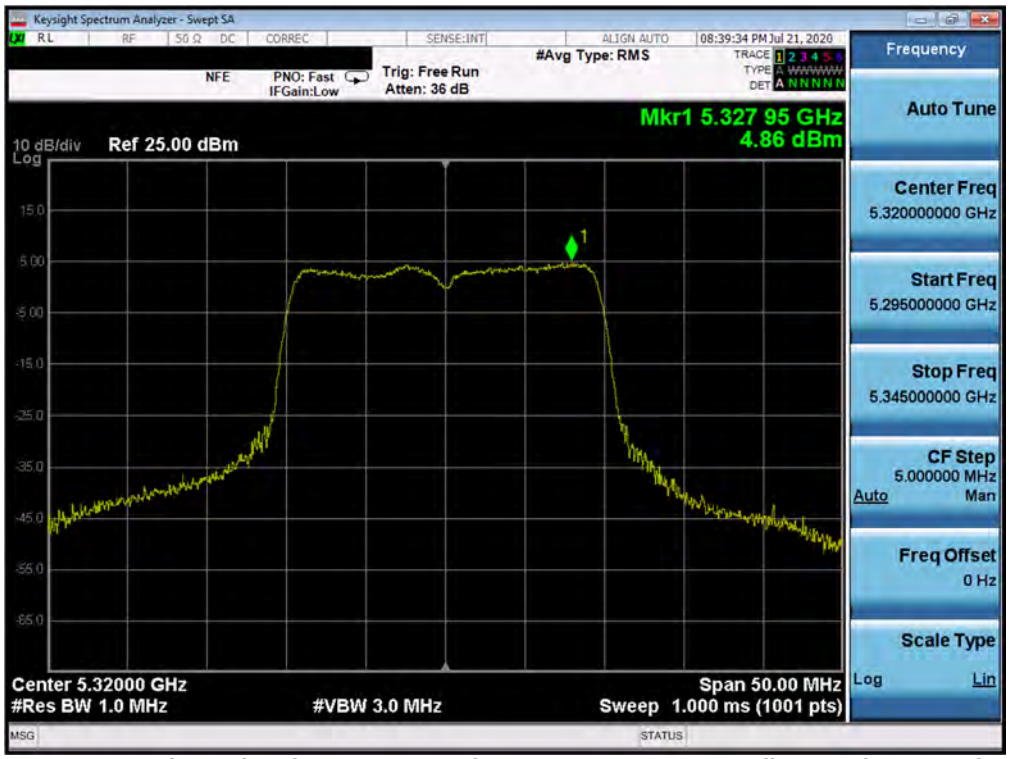


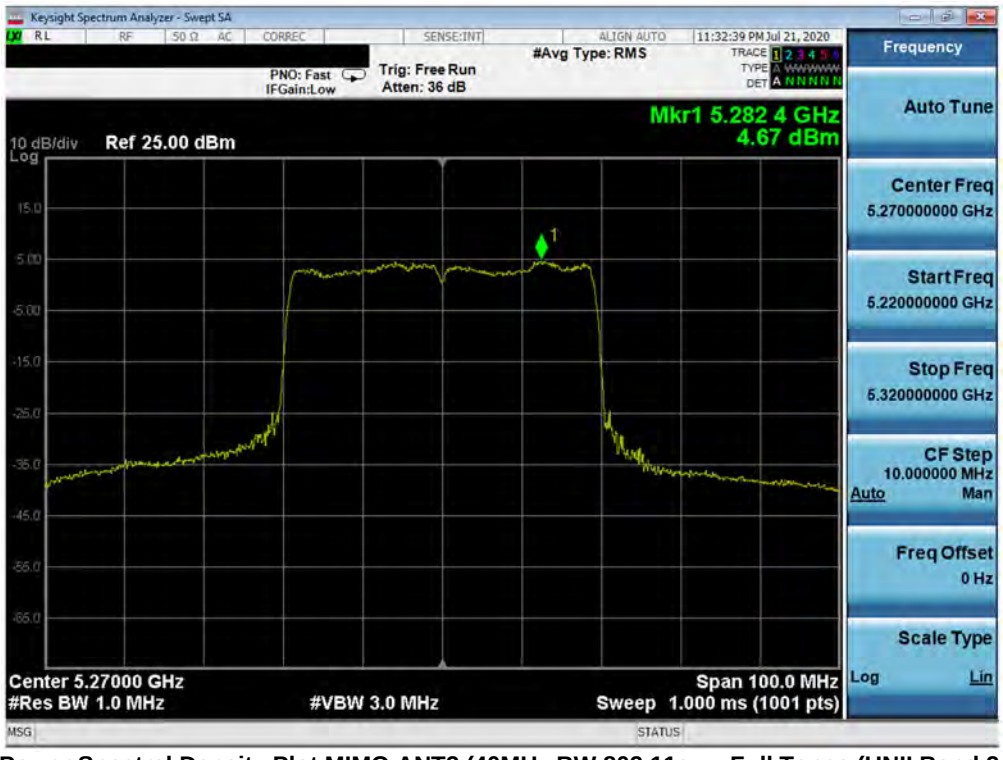
Plot 7-117. Power Spectral Density Plot MIMO ANT3 (20MHz BW 802.11ax – Full Tones (UNII Band 2A) – Ch. 52)



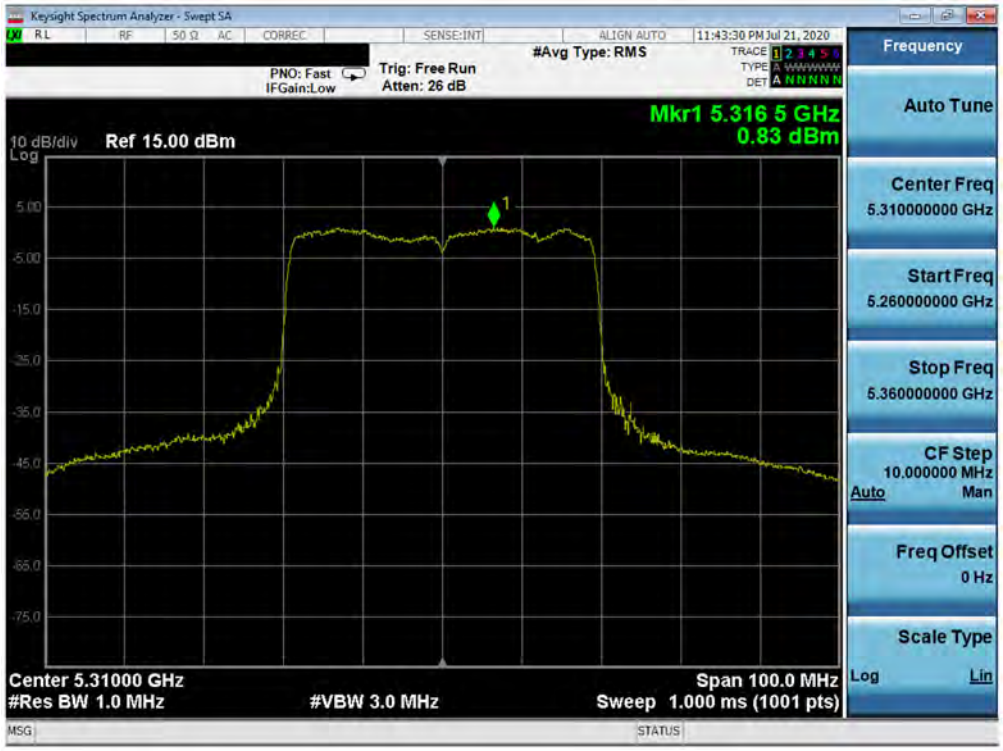
Plot 7-118. Power Spectral Density Plot MIMO ANT3 (20MHz BW 802.11ax – Full Tones (UNII Band 2A) – Ch. 56)



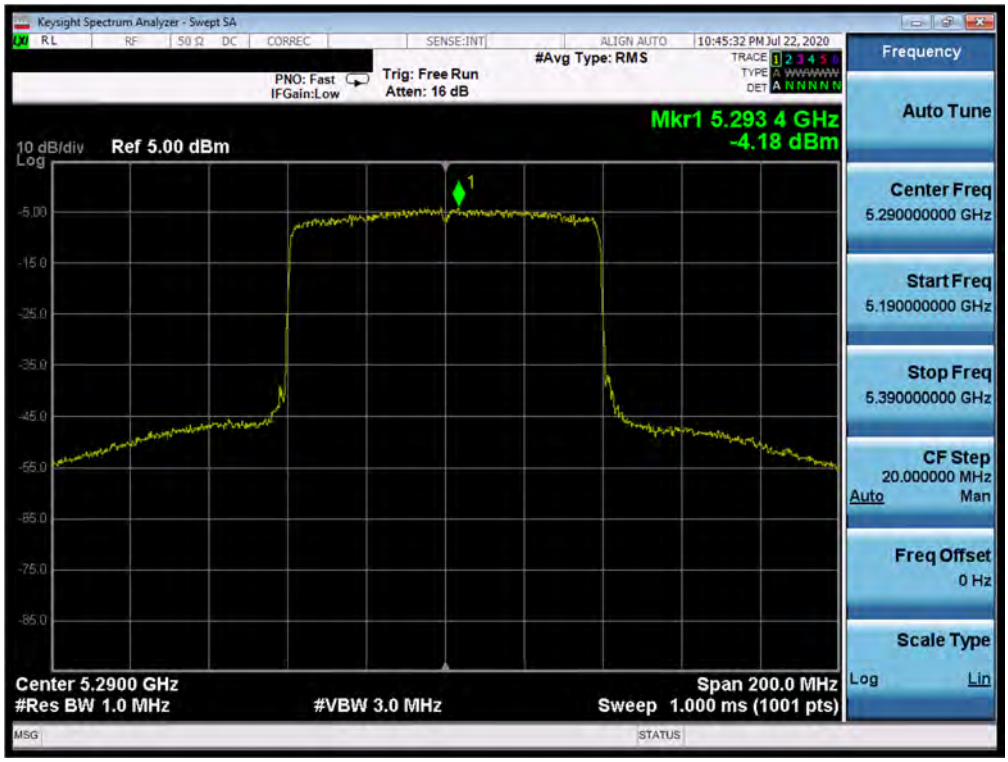
Plot 7-119. Power Spectral Density Plot MIMO ANT3 (20MHz BW 802.11ax – Full Tones (UNII Band 2A) – Ch. 64)



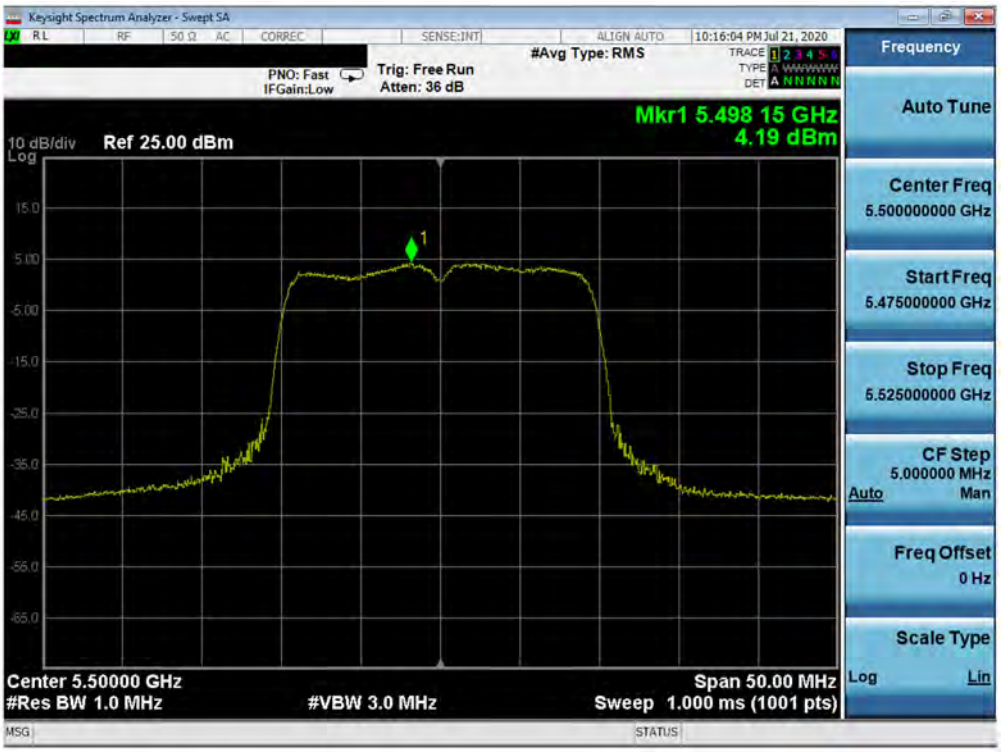
Plot 7-120. Power Spectral Density Plot MIMO ANT3 (40MHz BW 802.11ax – Full Tones (UNII Band 2A) – Ch. 54)



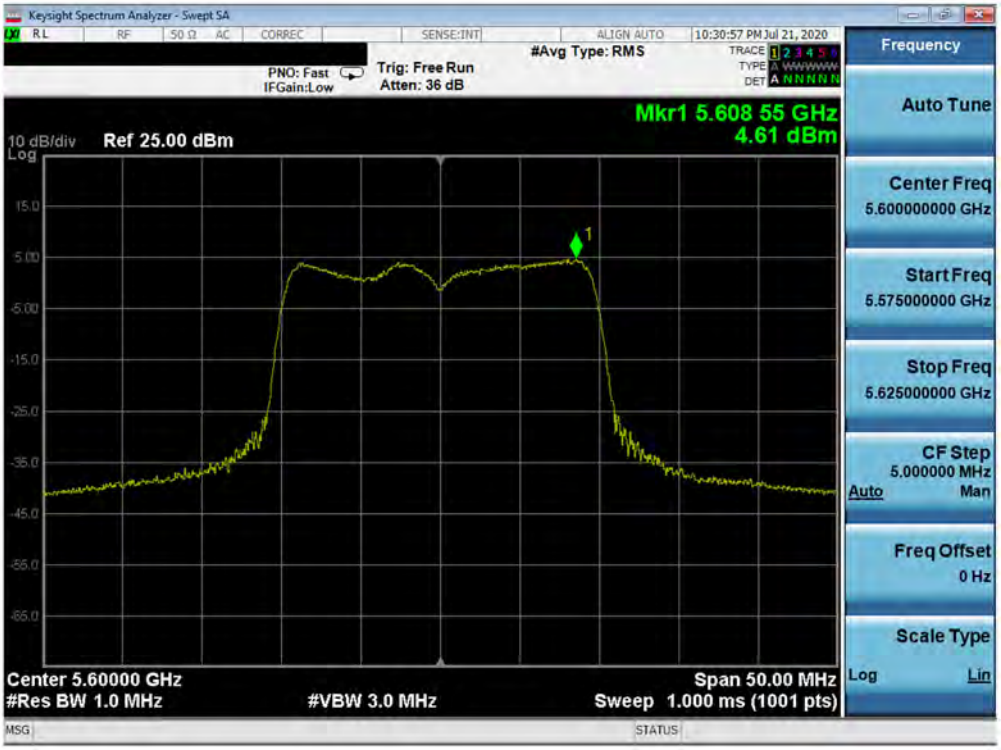
Plot 7-121. Power Spectral Density Plot MIMO ANT3 (40MHz BW 802.11ax – Full Tones (UNII Band 2A) – Ch. 62)



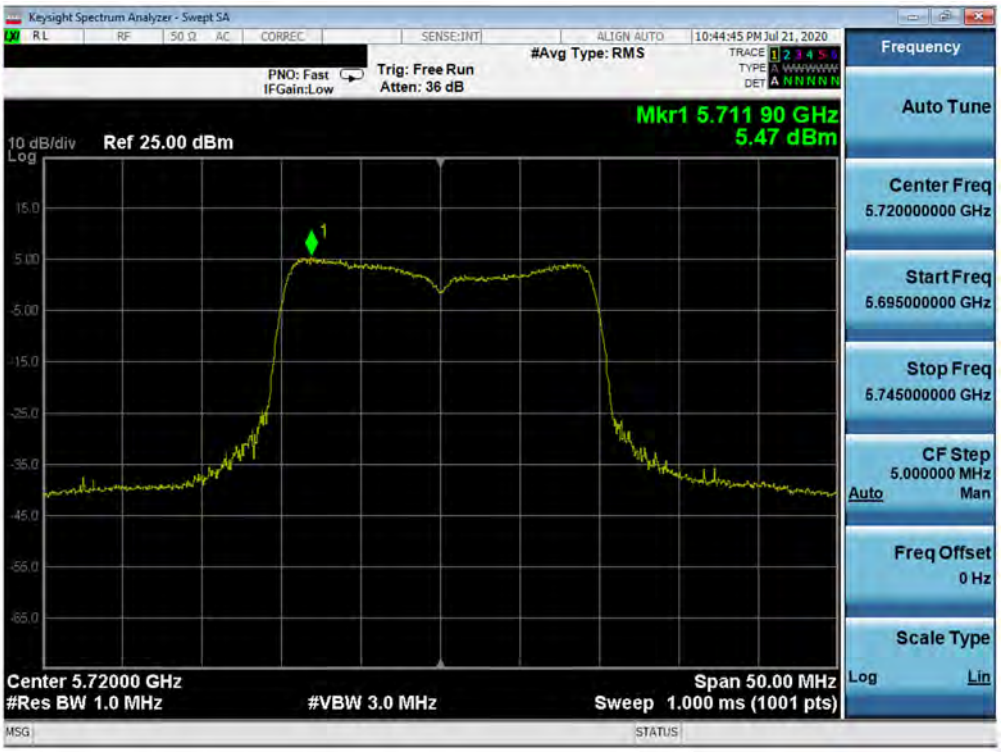
Plot 7-122. Power Spectral Density Plot MIMO ANT3 (80MHz BW 802.11ax – Full Tones (UNII Band 2A) – Ch. 58)



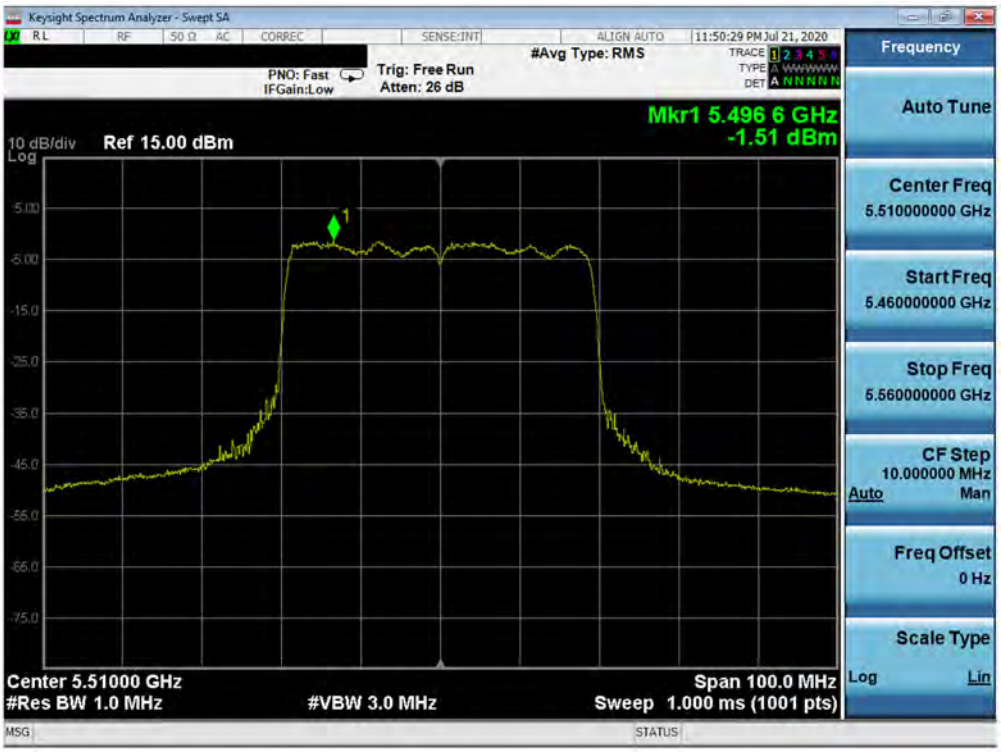
Plot 7-123. Power Spectral Density Plot MIMO ANT3 (20MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 100)



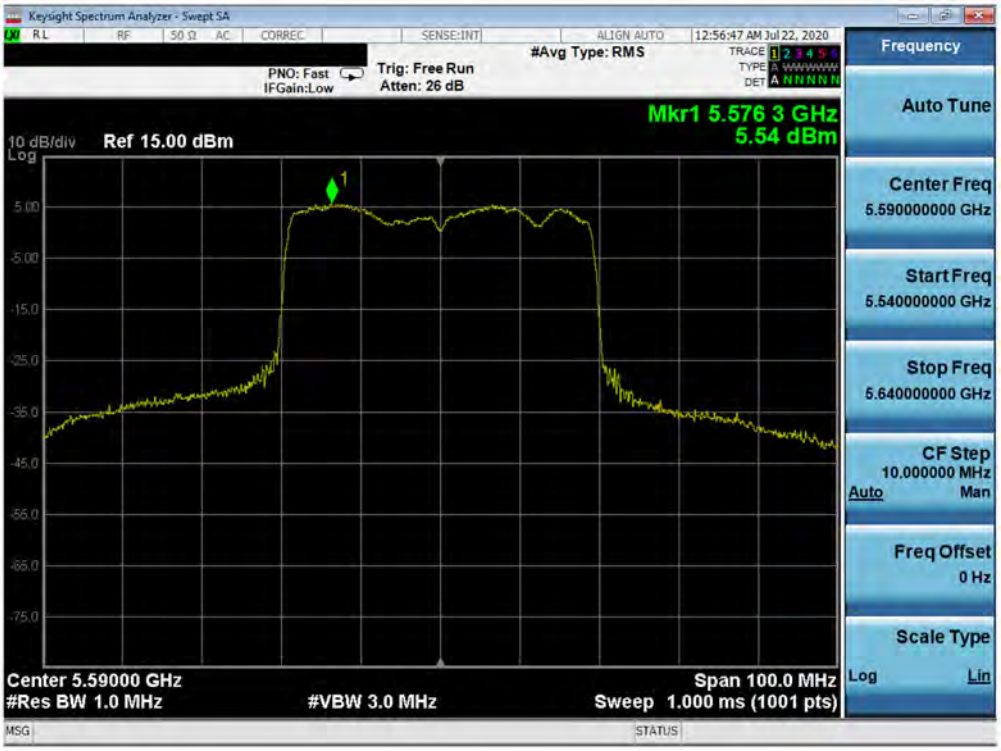
Plot 7-124. Power Spectral Density Plot MIMO ANT3 (20MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 120)



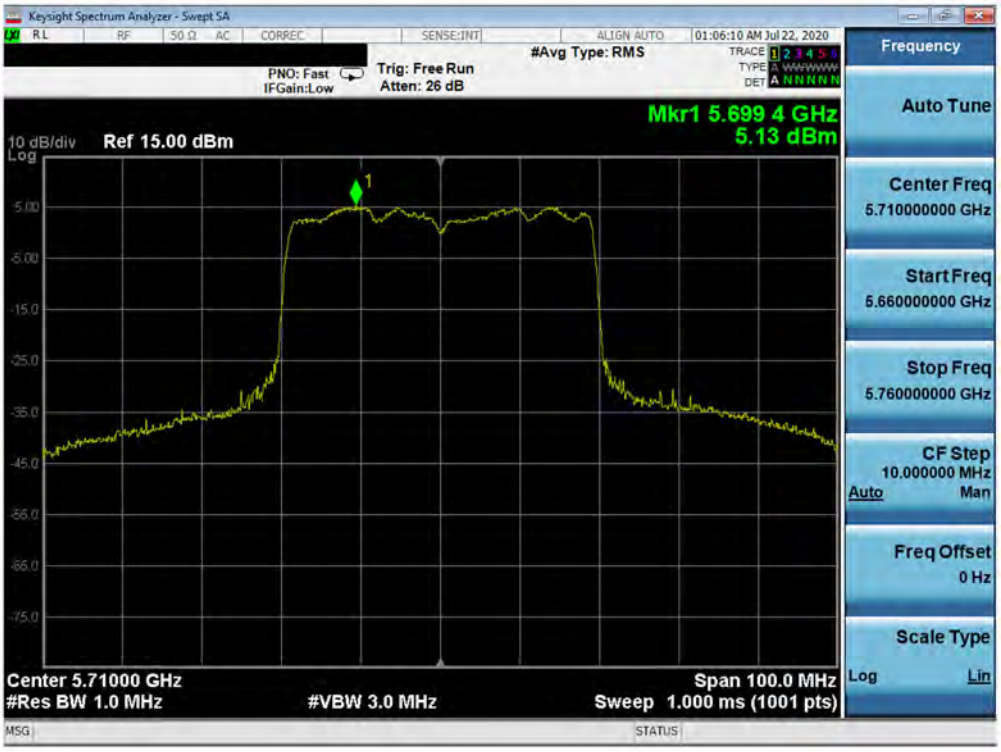
Plot 7-125. Power Spectral Density Plot MIMO ANT3 (20MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 144)



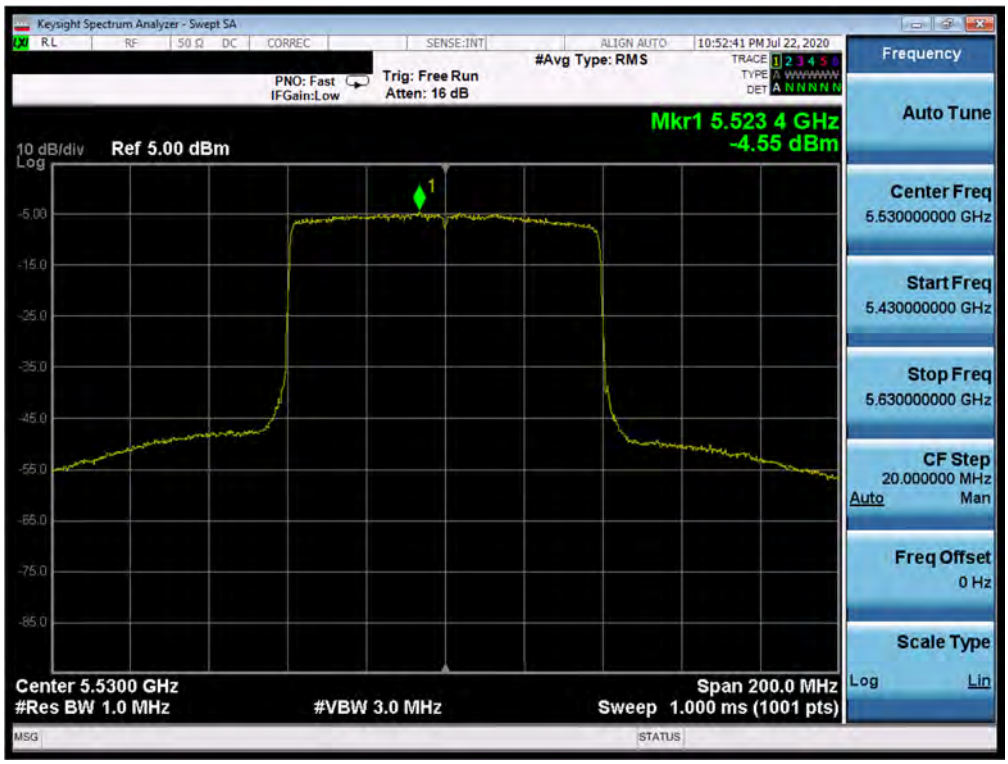
Plot 7-126. Power Spectral Density Plot MIMO ANT3 (40MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 102)



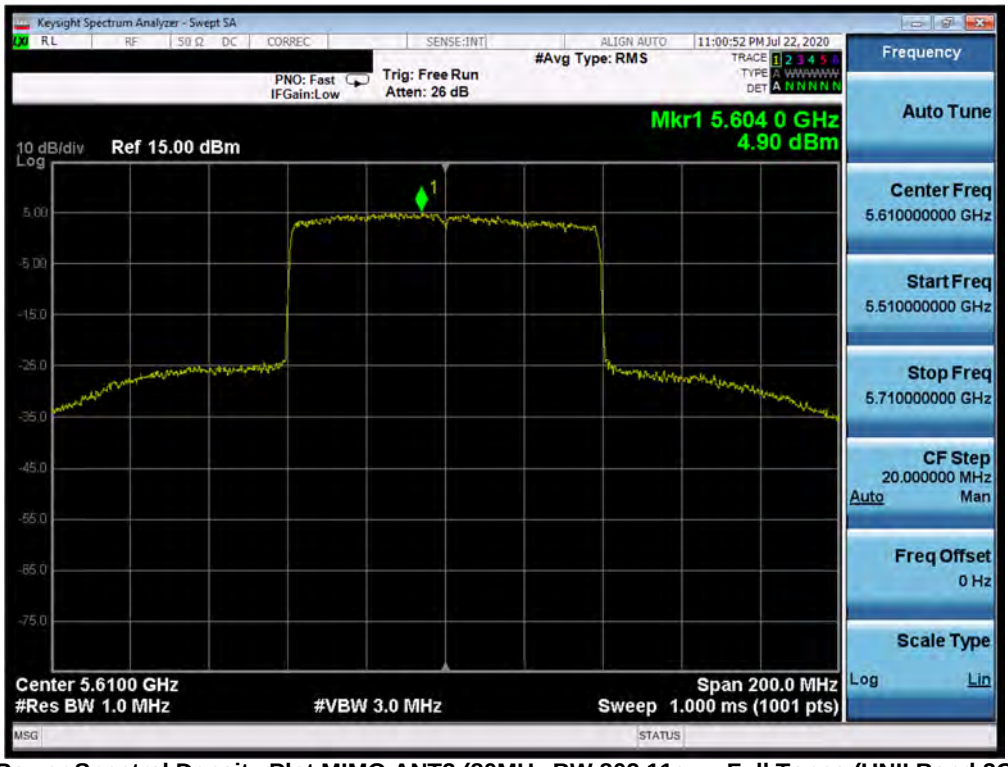
Plot 7-127. Power Spectral Density Plot MIMO ANT3 (40MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 118)



Plot 7-128. Power Spectral Density Plot MIMO ANT3 (40MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 142)

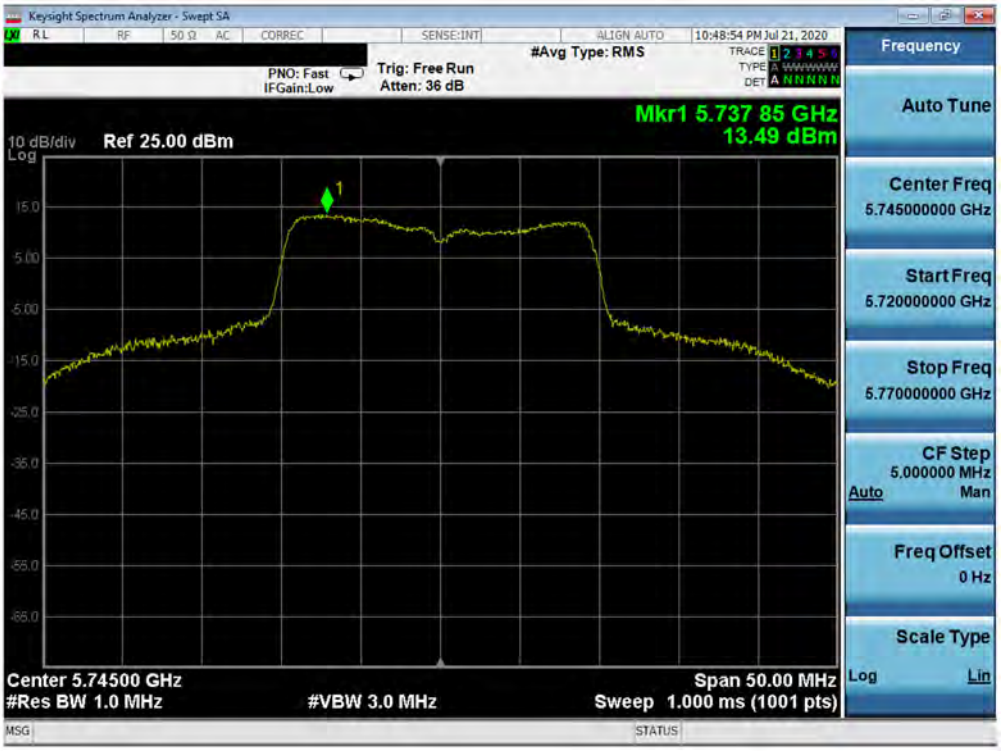


Plot 7-129. Power Spectral Density Plot MIMO ANT3 (80MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 106)

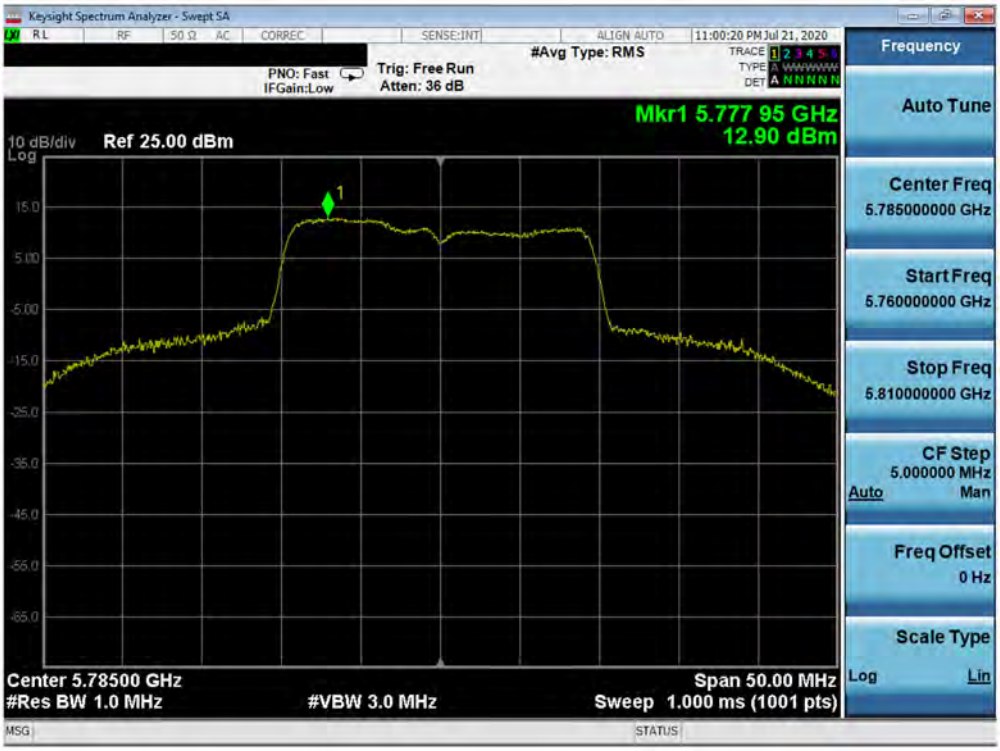


Plot 7-130. Power Spectral Density Plot MIMO ANT3 (80MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 122)

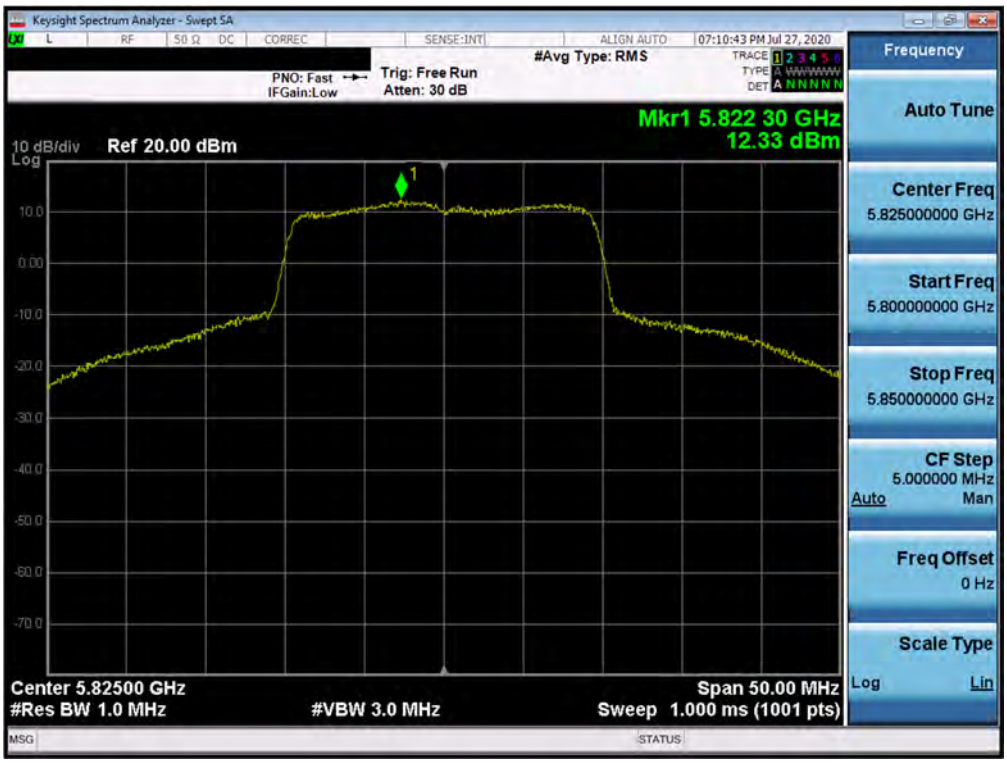
Plot 7-131. Power Spectral Density Plot MIMO ANT3 (80MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 138)



Plot 7-132. Power Spectral Density Plot MIMO ANT3 (20MHz BW 802.11ax – Full Tones (UNII Band 3) – Ch. 149)

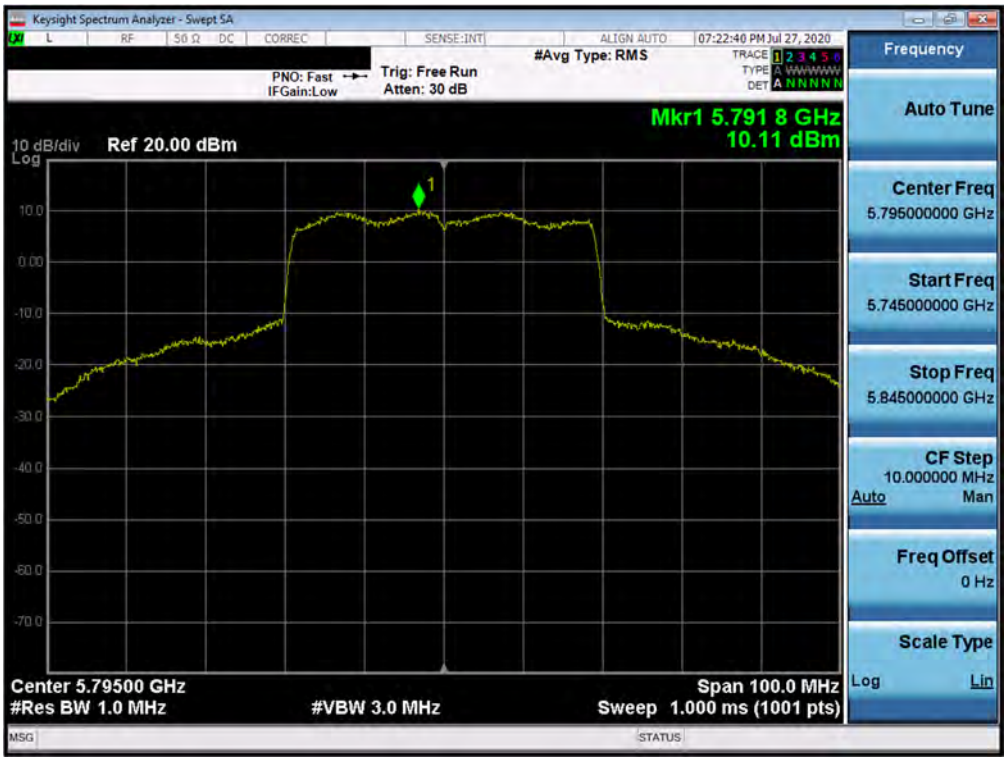


Plot 7-133. Power Spectral Density Plot MIMO ANT3 (20MHz BW 802.11ax – Full Tones (UNII Band 3) – Ch. 157)



Plot 7-134. Power Spectral Density Plot MIMO ANT3 (20 MHz BW 802.11ax – Full Tones (UNII Band 3) – Ch. 165)

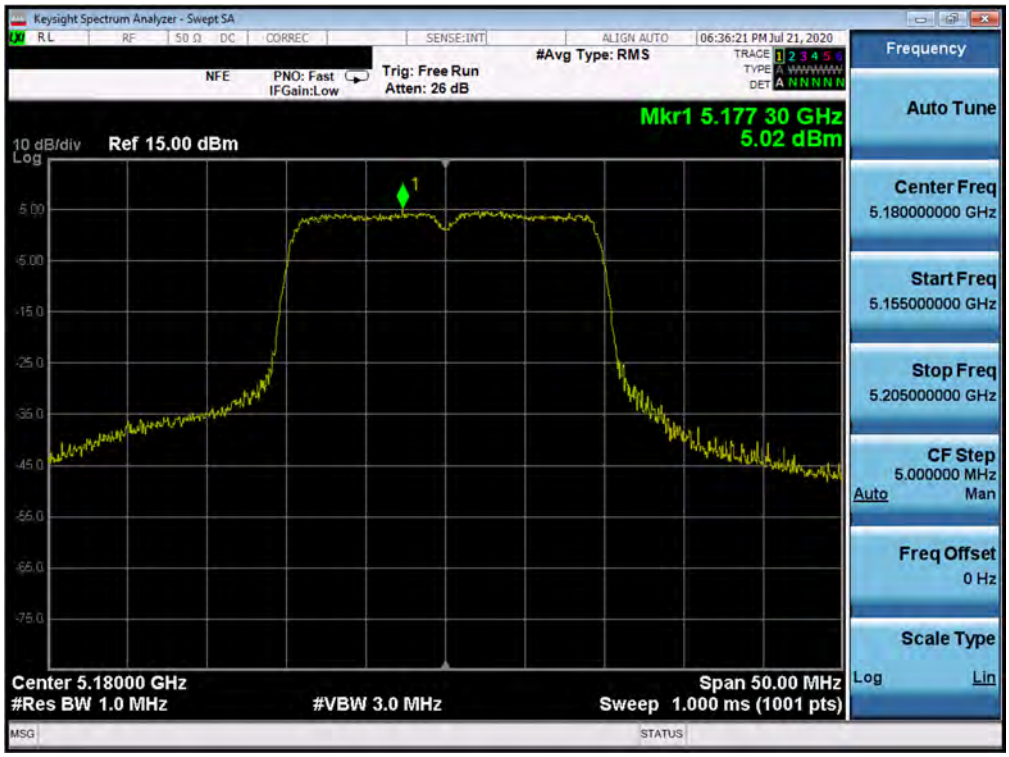
Plot 7-135. Power Spectral Density Plot MIMO ANT3 (40MHz BW 802.11ax – Full Tones (UNII Band 3) – Ch. 151)



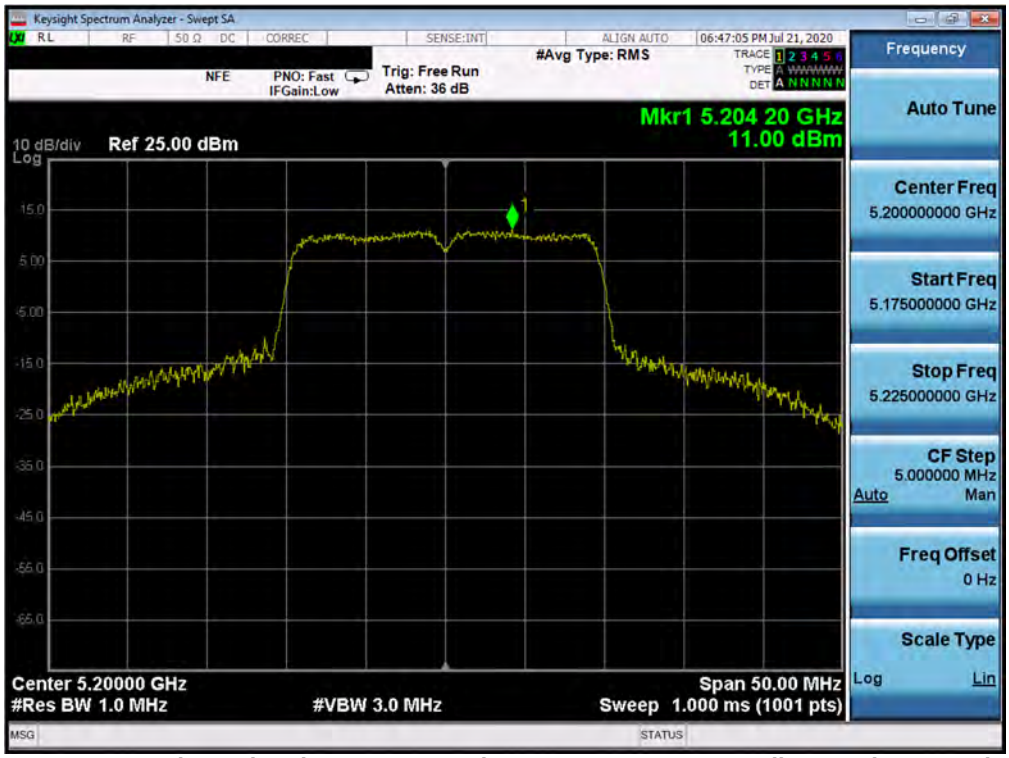
Plot 7-136. Power Spectral Density Plot MIMO ANT3 (40MHz BW 802.11ax – Full Tones (UNII Band 3) – Ch. 159)

Plot 7-137. Power Spectral Density Plot MIMO ANT3 (80MHz BW 802.11ax – Full Tones (UNII Band 3) – Ch. 155)

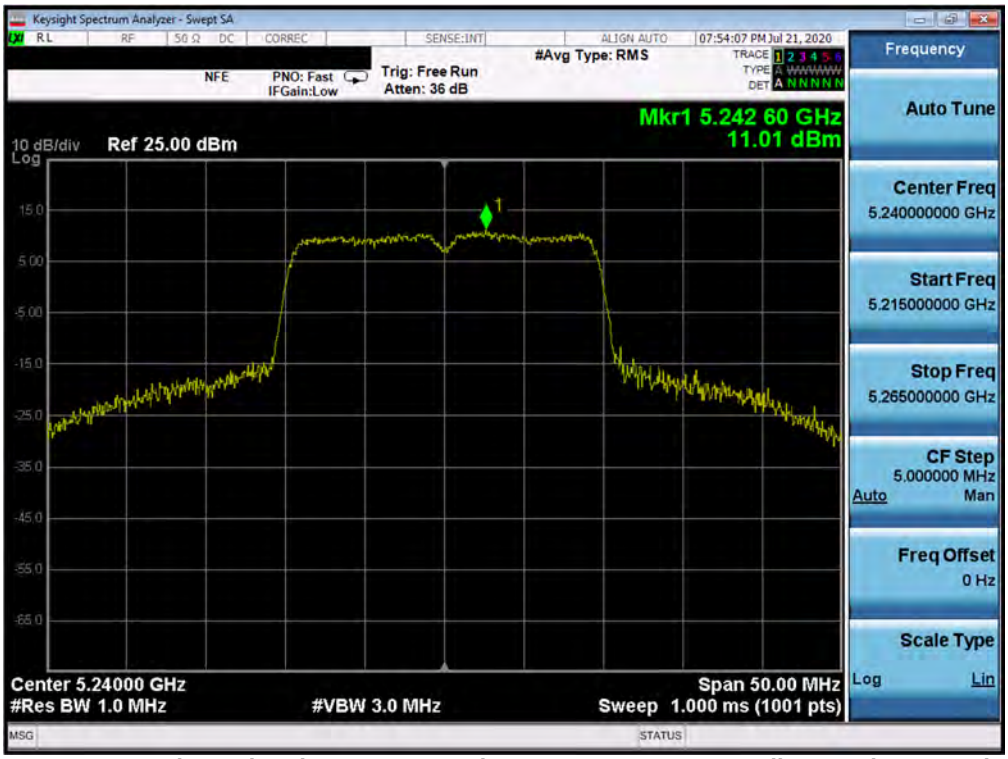
MIMO Antenna-4 Power Spectral Density Measurements (Full Tones)



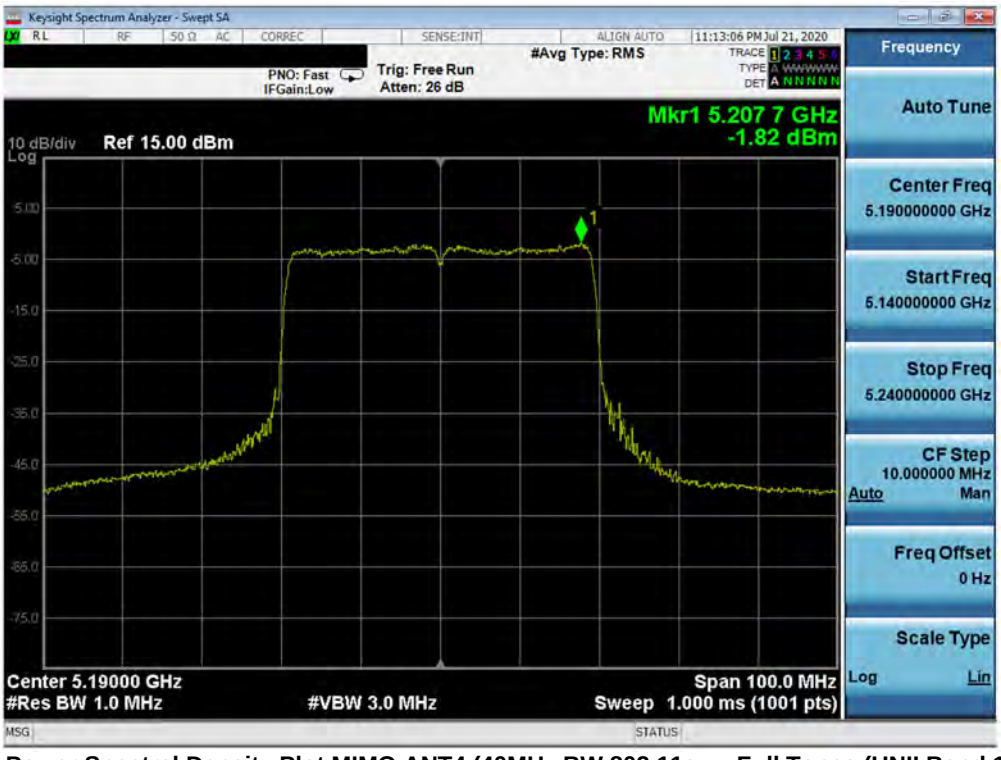
Plot 7-138. Power Spectral Density Plot MIMO ANT4 (20MHz BW 802.11ax – Full Tones (UNII Band 1) – Ch. 36)



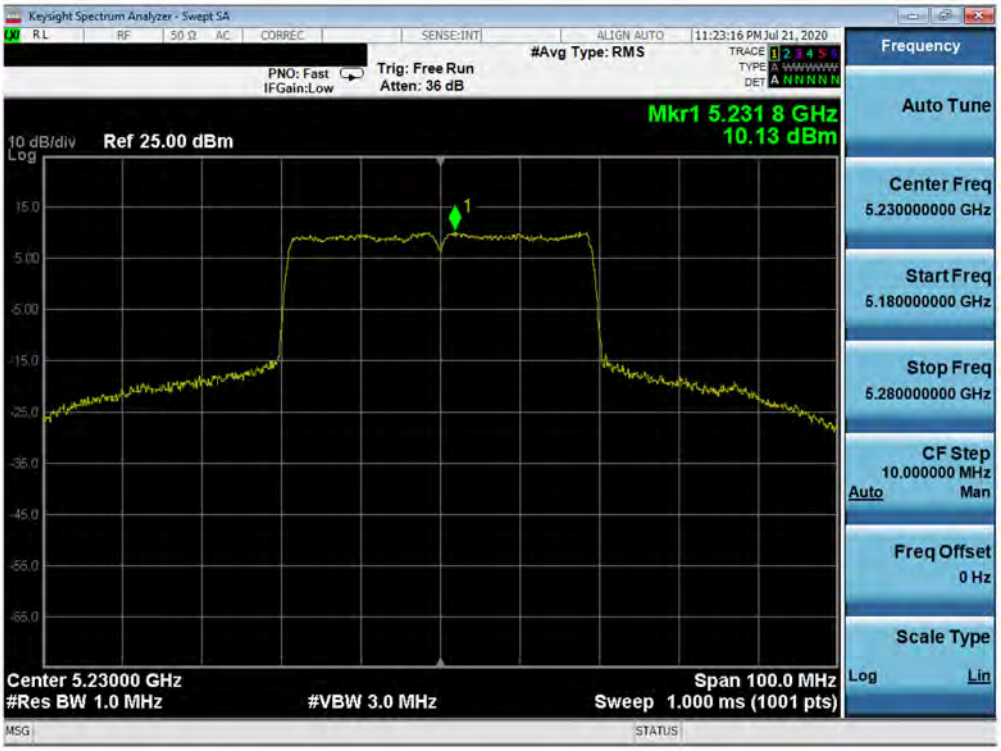
Plot 7-139. Power Spectral Density Plot MIMO ANT4 (20MHz BW 802.11ax – Full Tones (UNII Band 1) – Ch. 40)



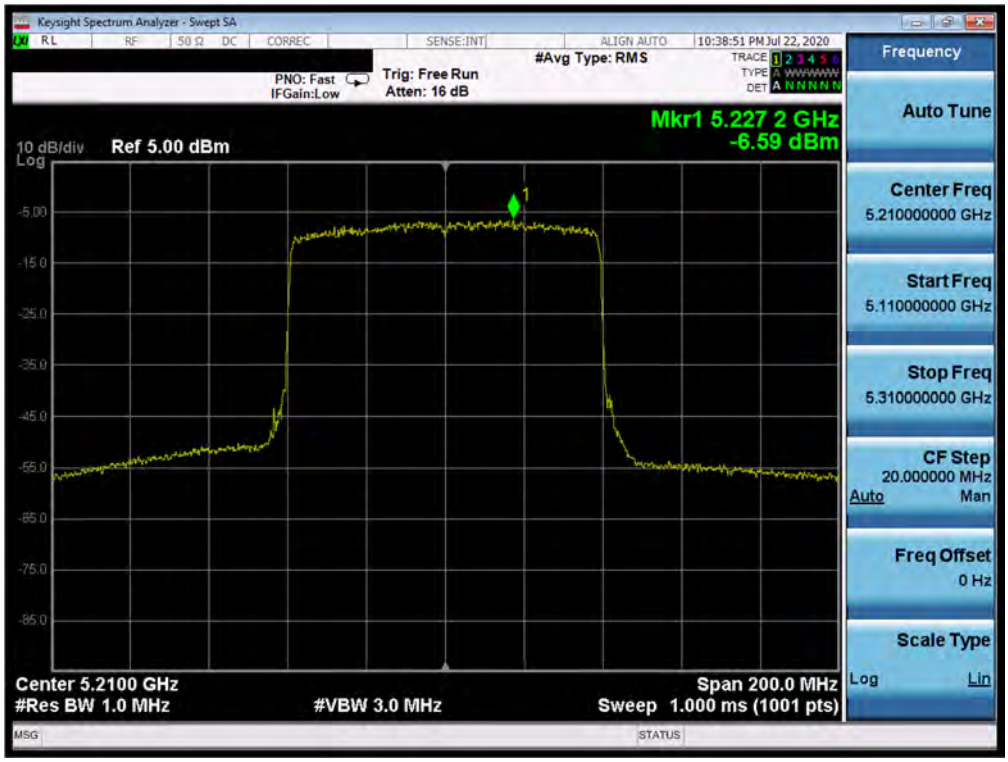
Plot 7-140. Power Spectral Density Plot MIMO ANT4 (20MHz BW 802.11ax – Full Tones (UNII Band 1) – Ch. 48)



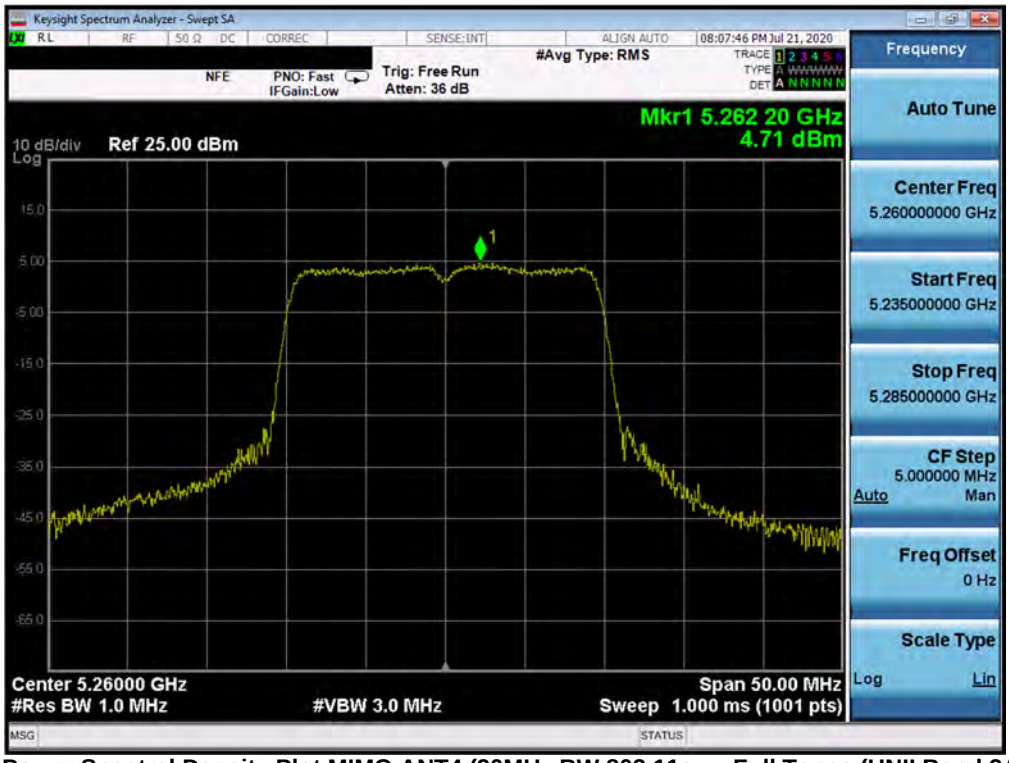
Plot 7-141. Power Spectral Density Plot MIMO ANT4 (40MHz BW 802.11ax – Full Tones (UNII Band 1) – Ch. 38)



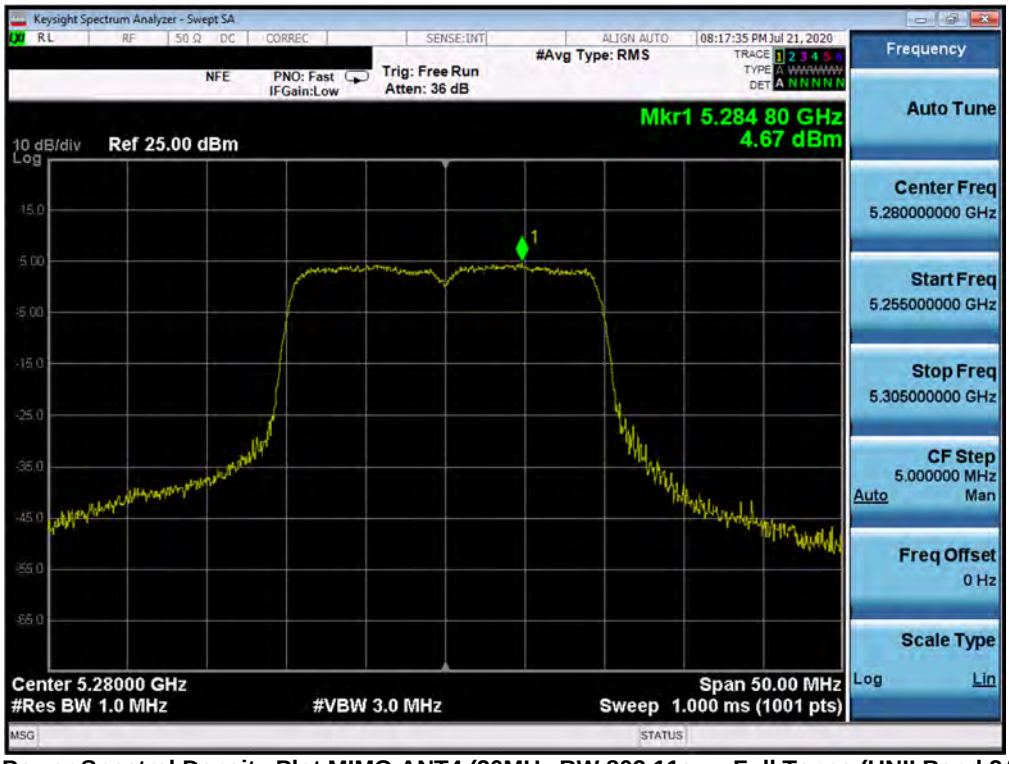
Plot 7-142. Power Spectral Density Plot MIMO ANT4 (40MHz BW 802.11ax – Full Tones (UNII Band 1) – Ch. 46)



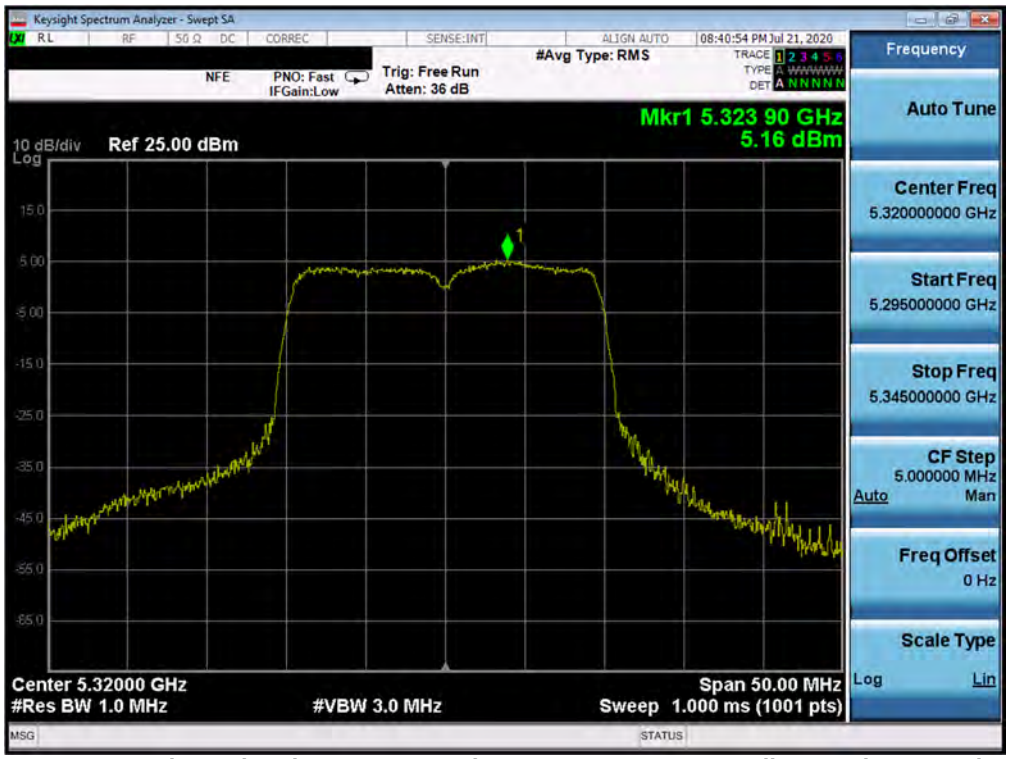
Plot 7-143. Power Spectral Density Plot MIMO ANT4 (80MHz BW 802.11ax – Full Tones (UNII Band 1) – Ch. 42)



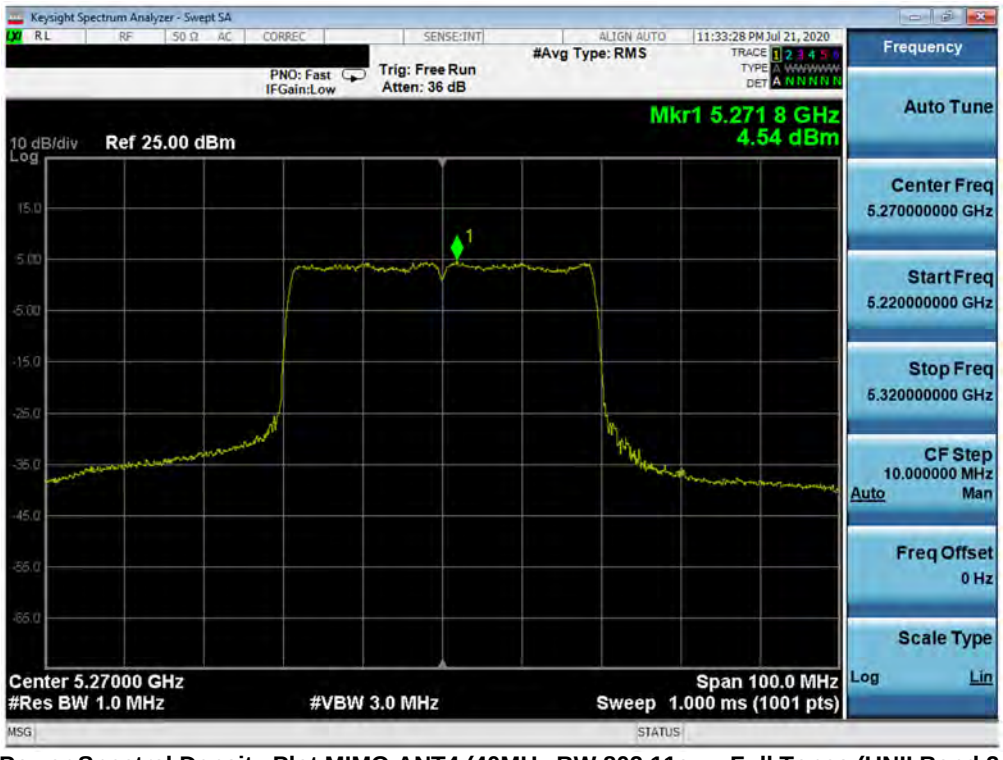
Plot 7-144. Power Spectral Density Plot MIMO ANT4 (20MHz BW 802.11ax – Full Tones (UNII Band 2A) – Ch. 52)



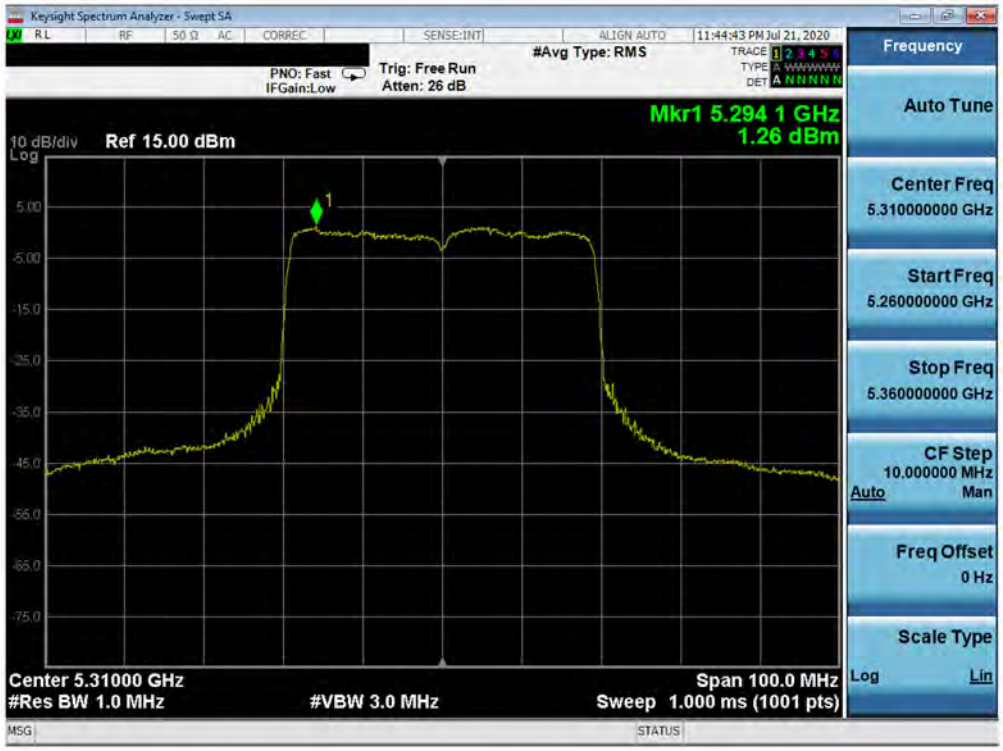
Plot 7-145. Power Spectral Density Plot MIMO ANT4 (20MHz BW 802.11ax – Full Tones (UNII Band 2A) – Ch. 56)



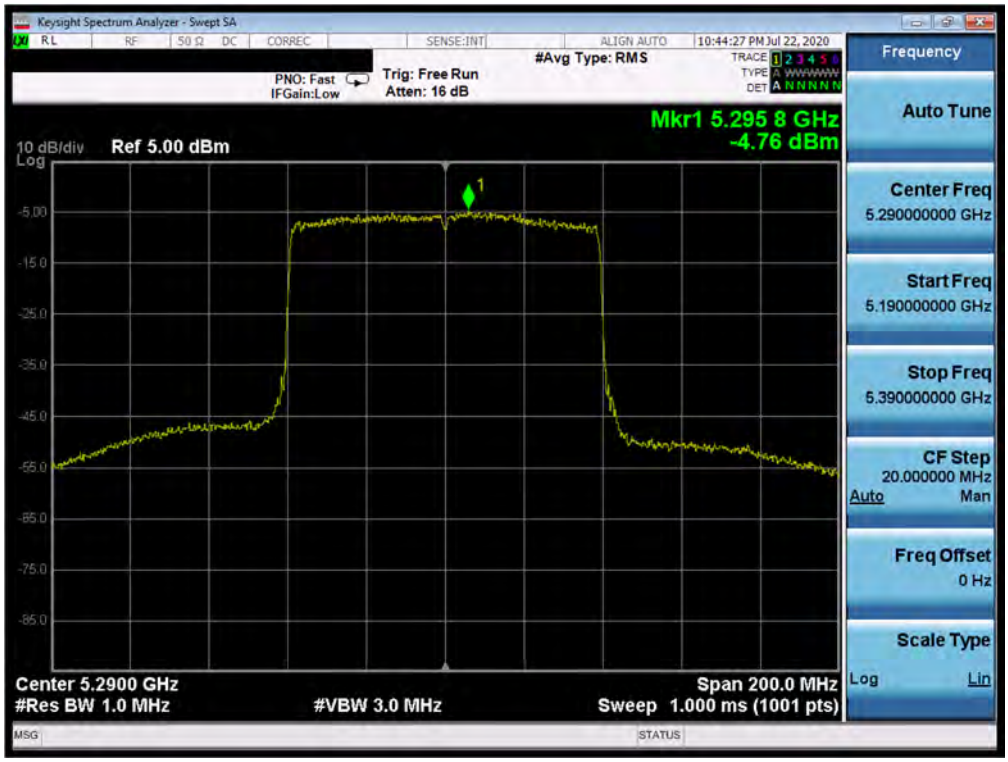
Plot 7-146. Power Spectral Density Plot MIMO ANT4 (20MHz BW 802.11ax – Full Tones (UNII Band 2A) – Ch. 64)



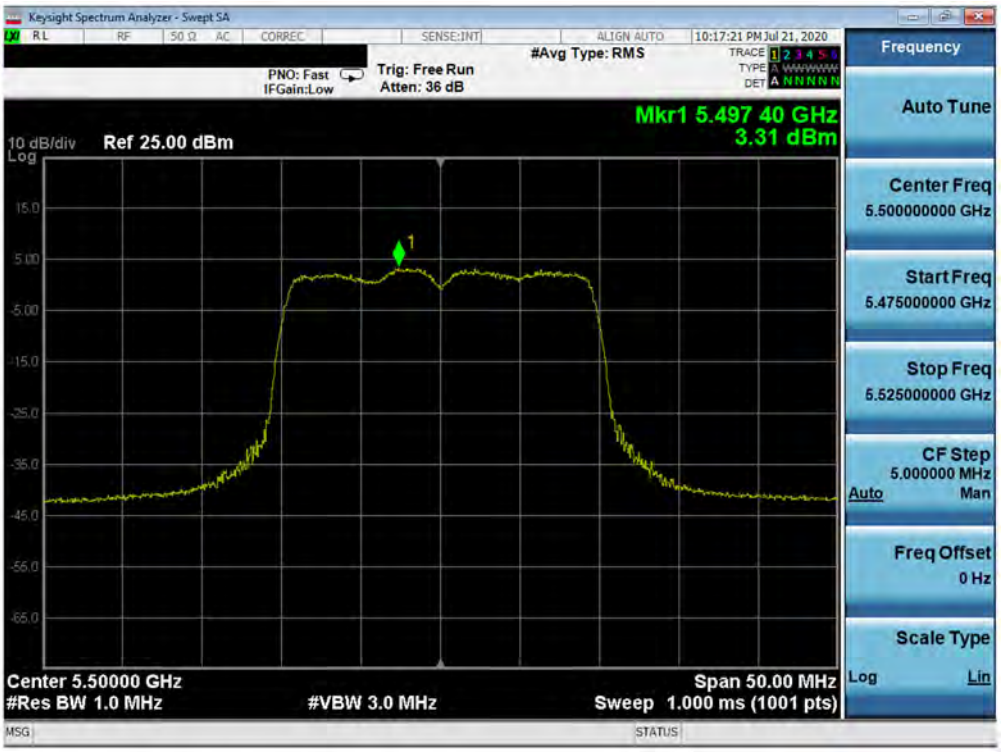
Plot 7-147. Power Spectral Density Plot MIMO ANT4 (40MHz BW 802.11ax – Full Tones (UNII Band 2A) – Ch. 54)



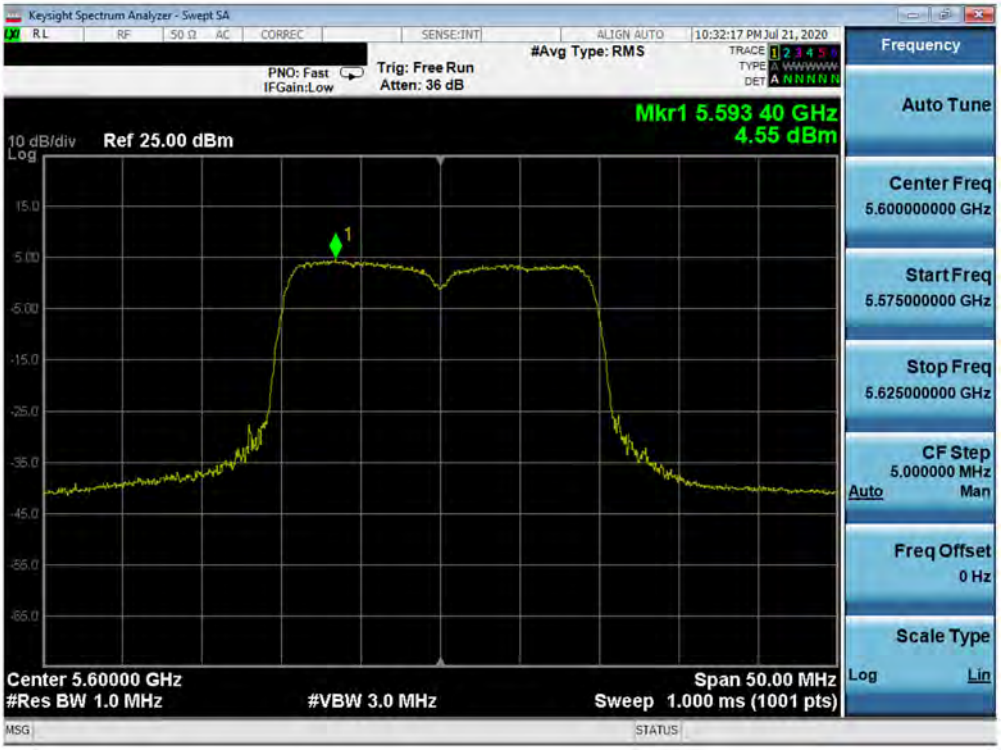
Plot 7-148. Power Spectral Density Plot MIMO ANT4 (40MHz BW 802.11ax – Full Tones (UNII Band 2A) – Ch. 62)



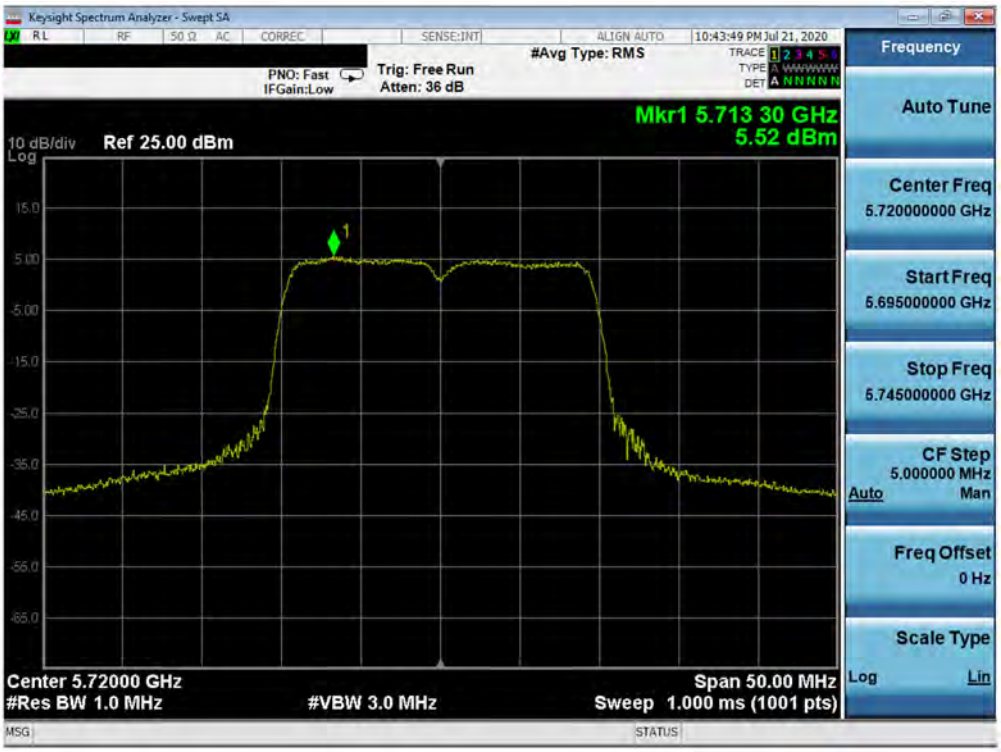
Plot 7-149. Power Spectral Density Plot MIMO ANT4 (80MHz BW 802.11ax – Full Tones (UNII Band 2A) – Ch. 58)



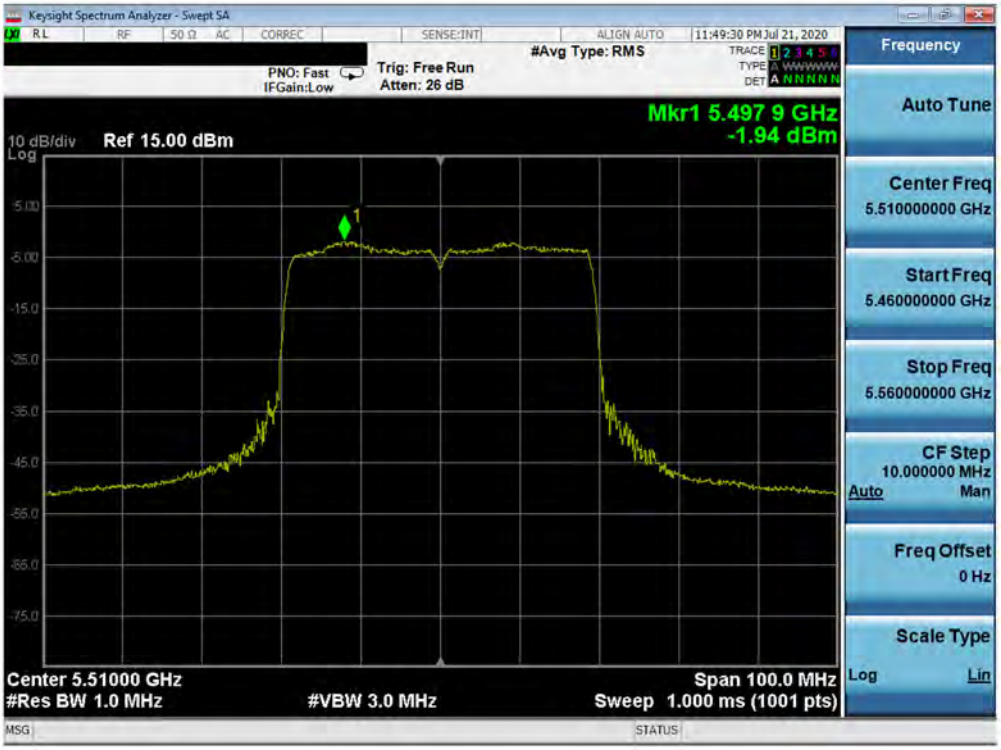
Plot 7-150. Power Spectral Density Plot MIMO ANT4 (20MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 100)



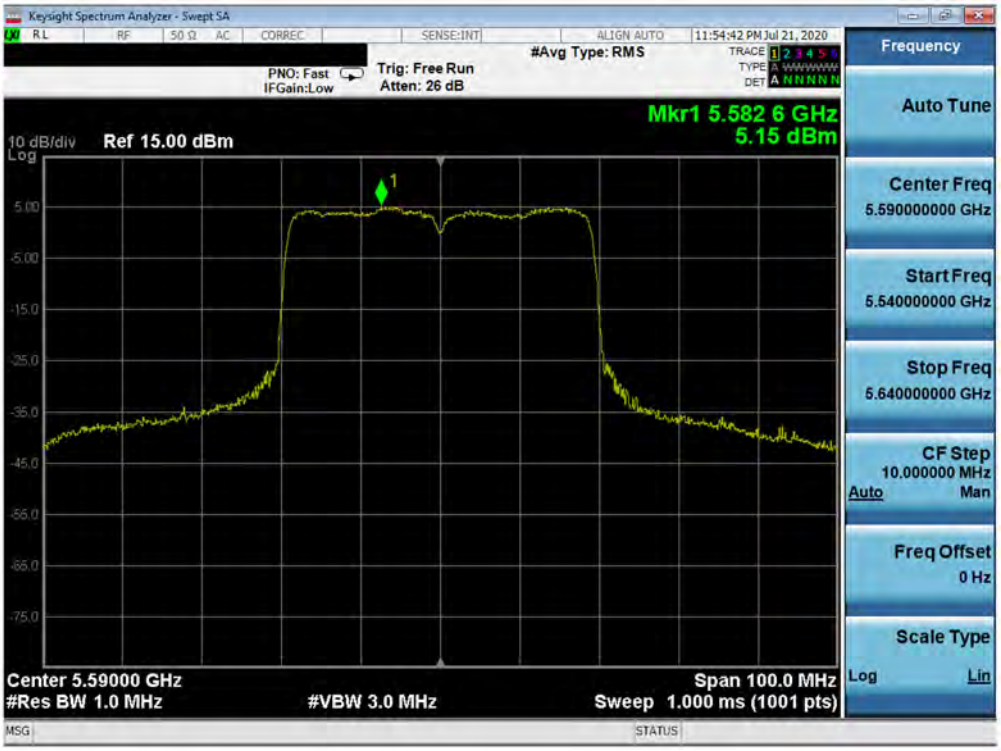
Plot 7-151. Power Spectral Density Plot MIMO ANT4 (20MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 120)



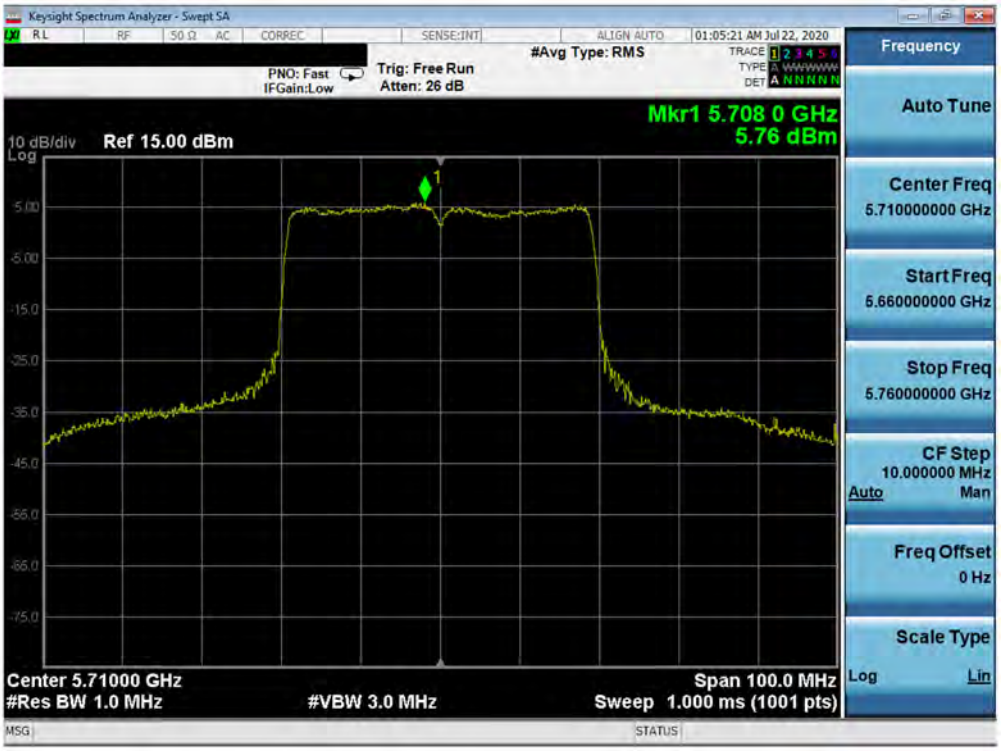
Plot 7-152. Power Spectral Density Plot MIMO ANT4 (20MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 144)



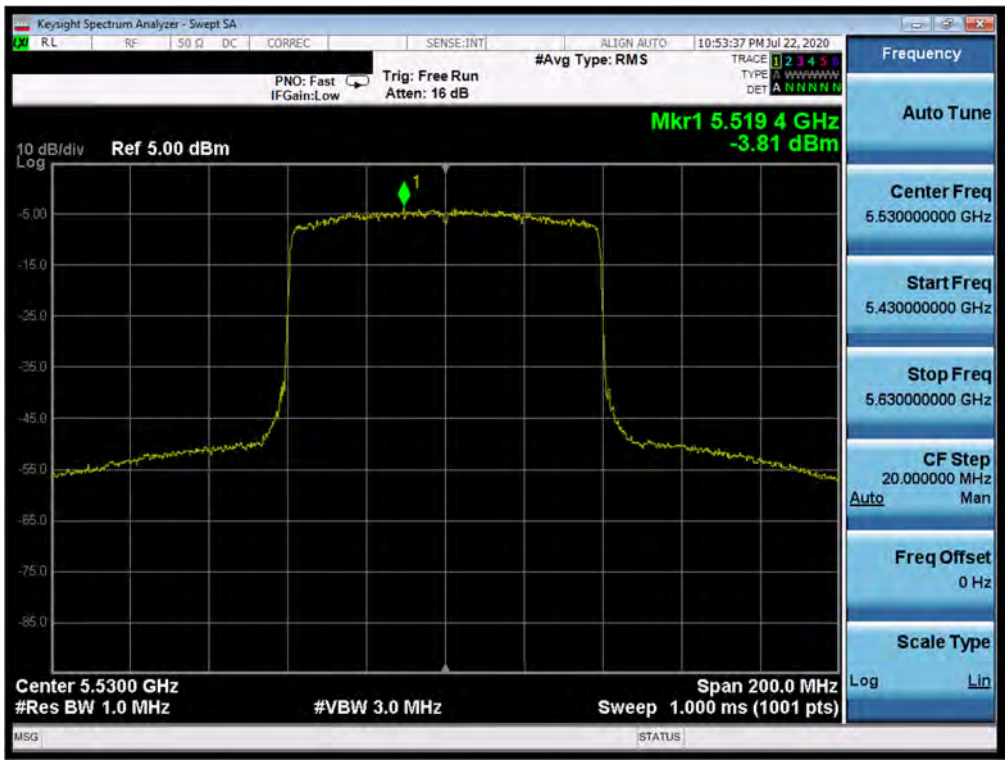
Plot 7-153. Power Spectral Density Plot MIMO ANT4 (40MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 102)



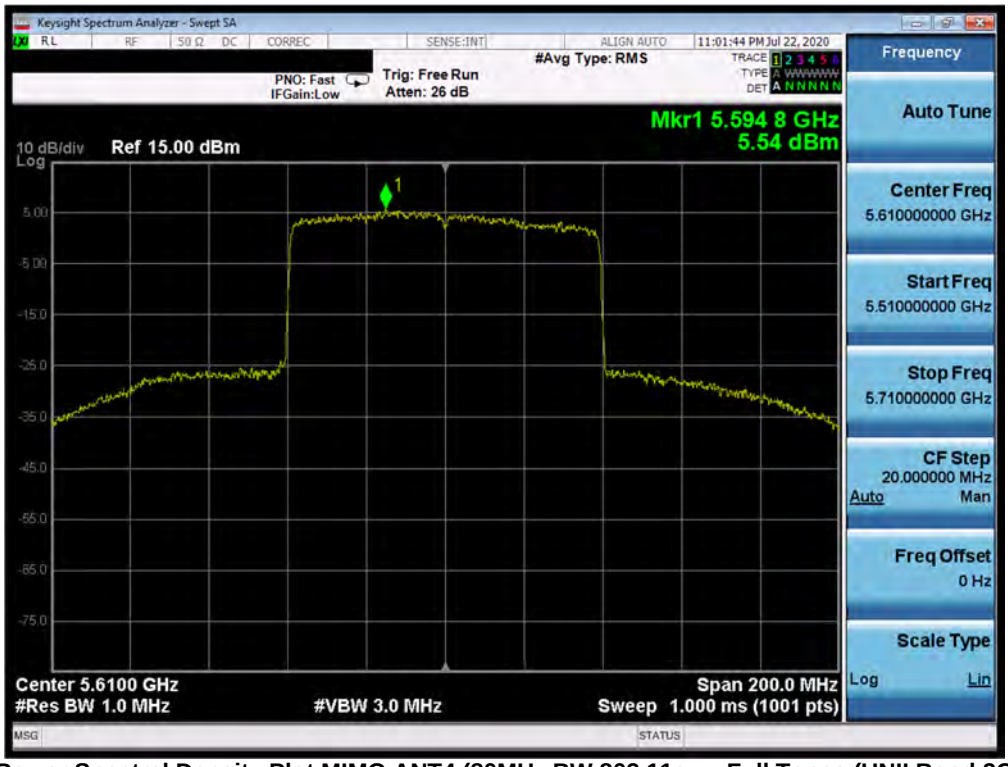
Plot 7-154. Power Spectral Density Plot MIMO ANT4 (40MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 118)



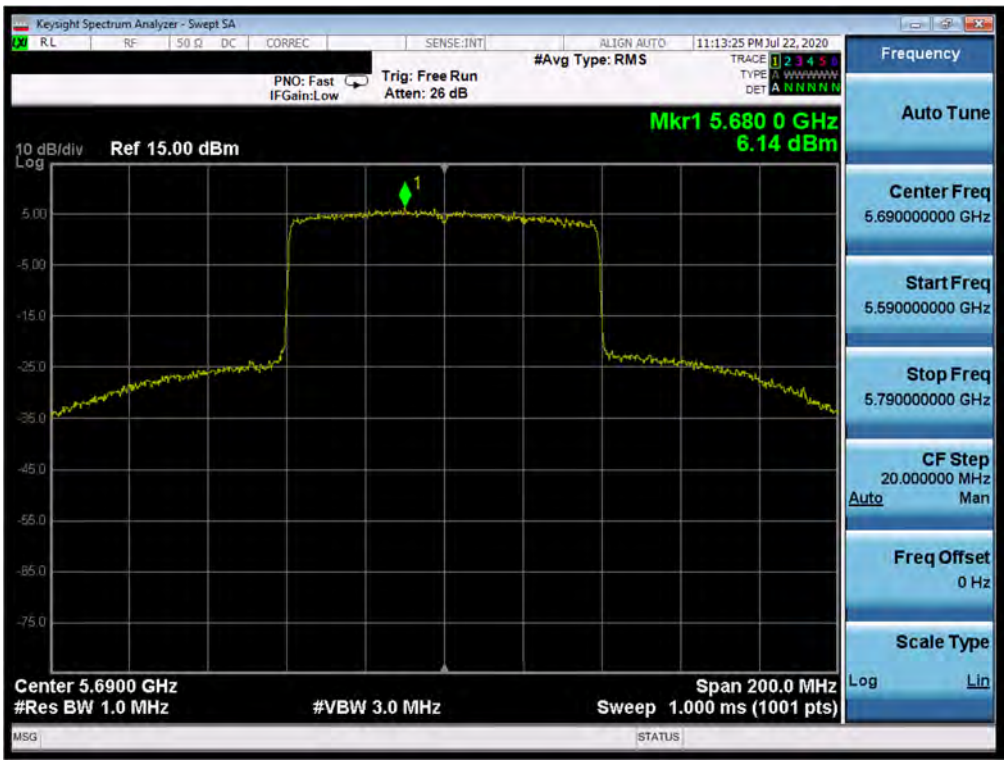
Plot 7-155. Power Spectral Density Plot MIMO ANT4 (40MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 142)



Plot 7-156. Power Spectral Density Plot MIMO ANT4 (80MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 106)



Plot 7-157. Power Spectral Density Plot MIMO ANT4 (80MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 122)

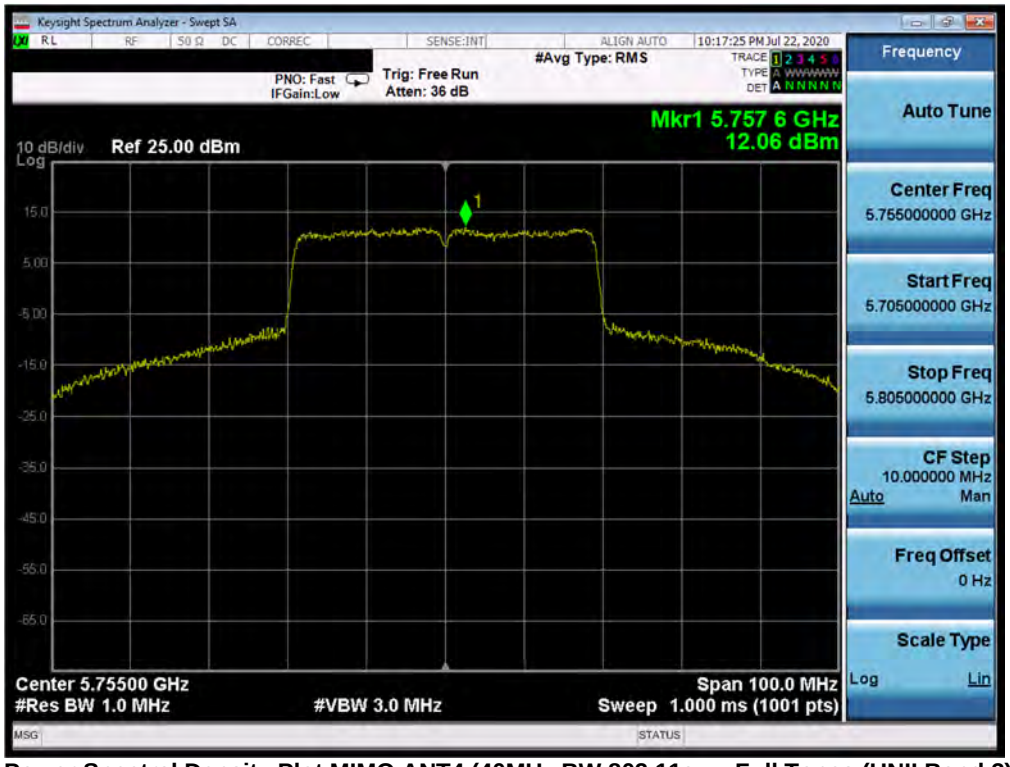


Plot 7-158. Power Spectral Density Plot MIMO ANT4 (80MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 138)

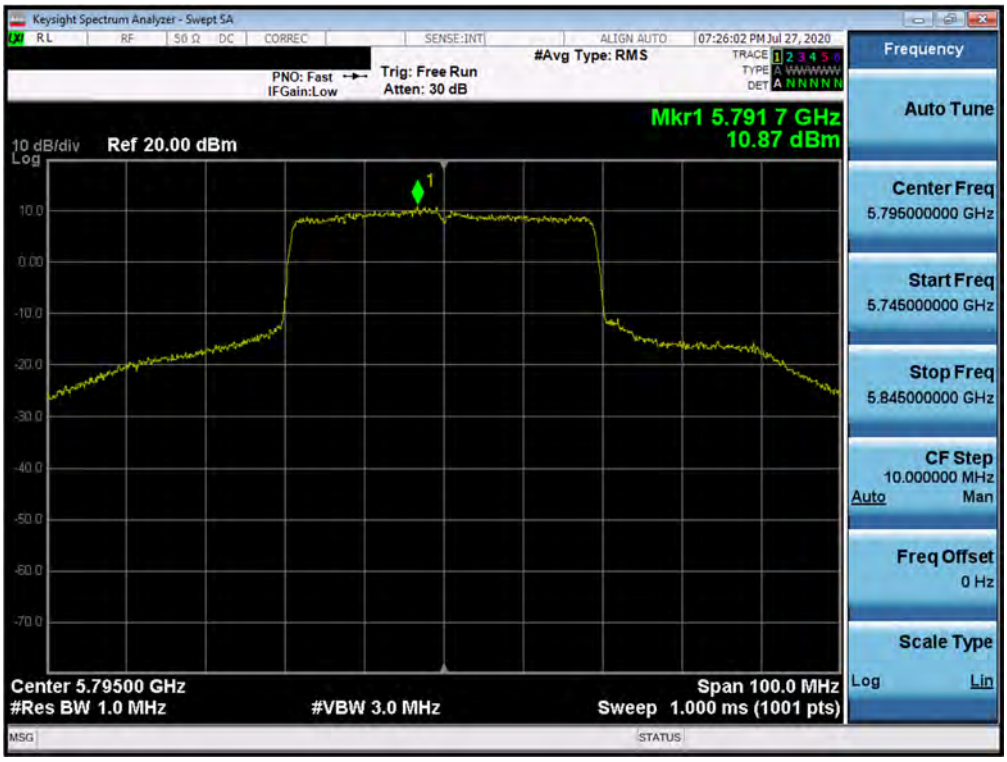
Plot 7-159. Power Spectral Density Plot MIMO ANT4 (20MHz BW 802.11ax – Full Tones (UNII Band 3) – Ch. 149)

Plot 7-160. Power Spectral Density Plot MIMO ANT4 (20MHz BW 802.11ax – Full Tones (UNII Band 3) – Ch. 157)

Plot 7-161. Power Spectral Density Plot MIMO ANT4 (20 MHz BW 802.11ax – Full Tones (UNII Band 3) – Ch. 165)



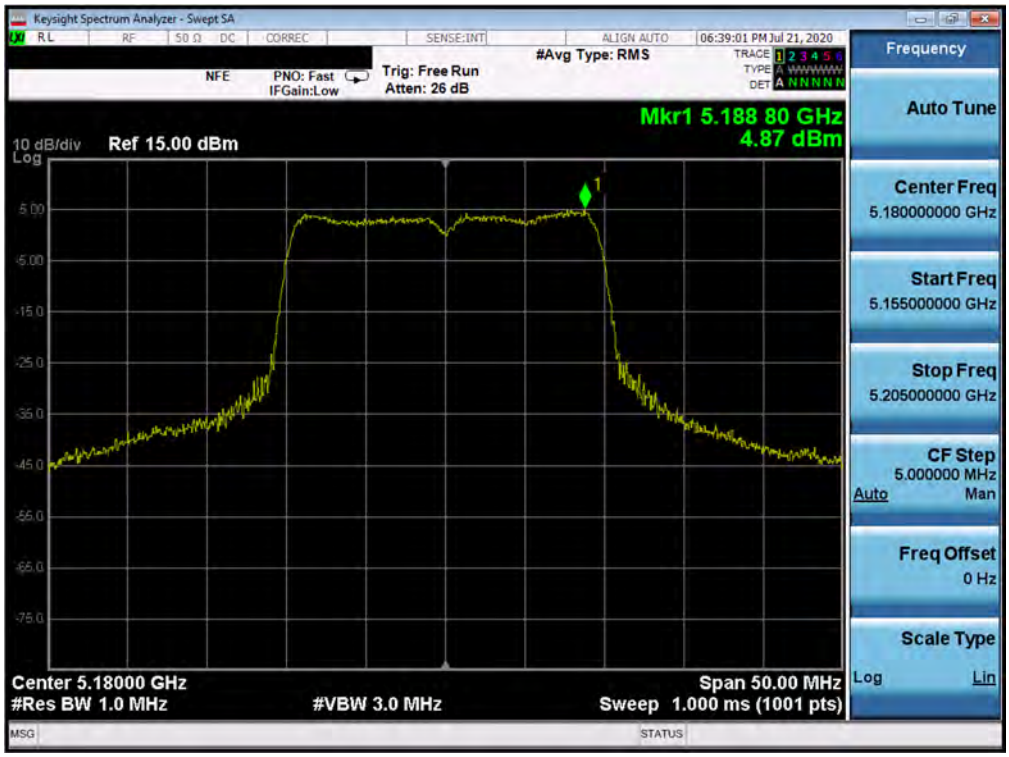
Plot 7-162. Power Spectral Density Plot MIMO ANT4 (40MHz BW 802.11ax – Full Tones (UNII Band 3) – Ch. 151)



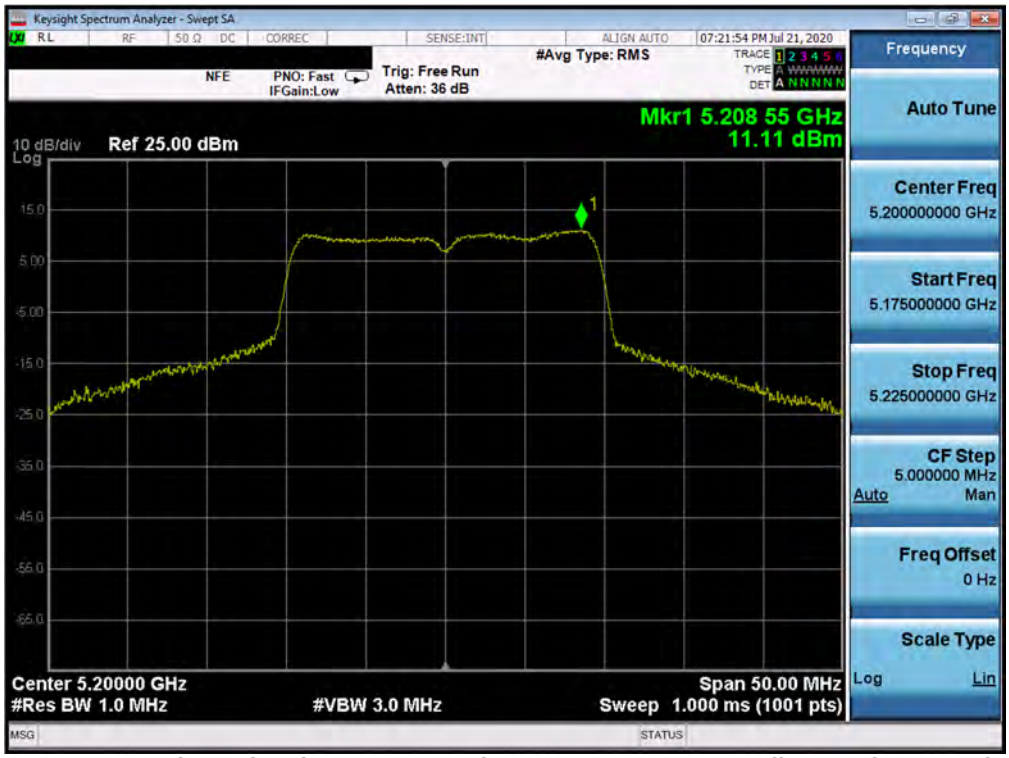
Plot 7-163. Power Spectral Density Plot MIMO ANT4 (40MHz BW 802.11ax – Full Tones (UNII Band 3) – Ch. 159)

Plot 7-164. Power Spectral Density Plot MIMO ANT4 (80MHz BW 802.11ax – Full Tones (UNII Band 3) – Ch. 155)

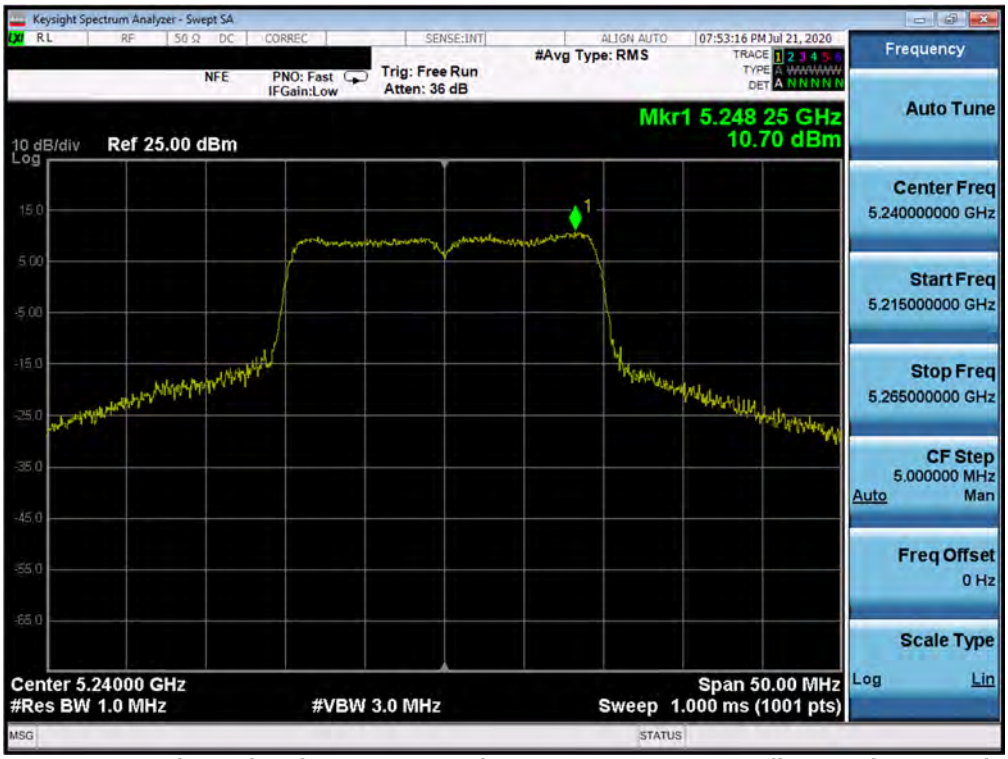
MIMO Antenna-5 Power Spectral Density Measurements (Full Tones)



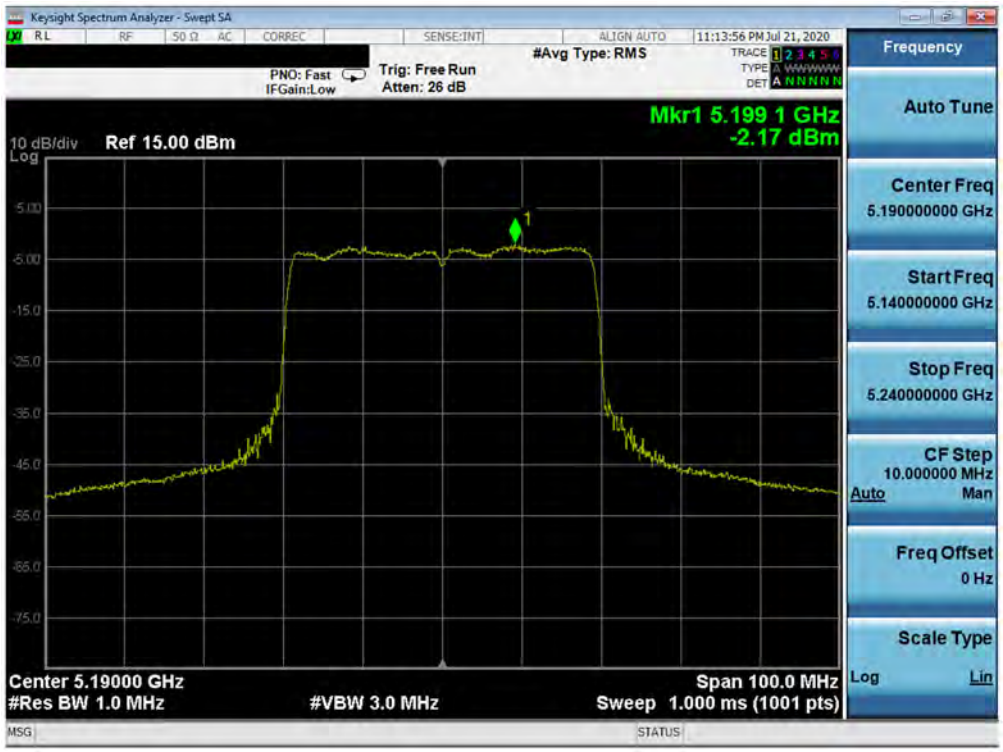
Plot 7-165. Power Spectral Density Plot MIMO ANT5 (20MHz BW 802.11ax – Full Tones (UNII Band 1) – Ch. 36)



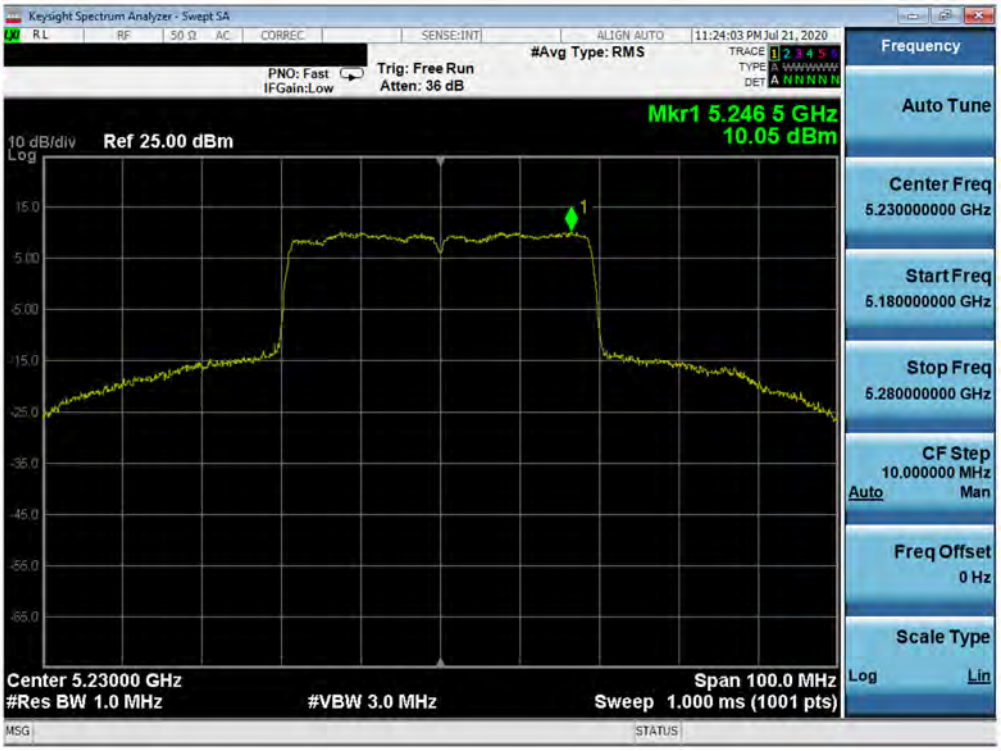
Plot 7-166. Power Spectral Density Plot MIMO ANT5 (20MHz BW 802.11ax – Full Tones (UNII Band 1) – Ch. 40)



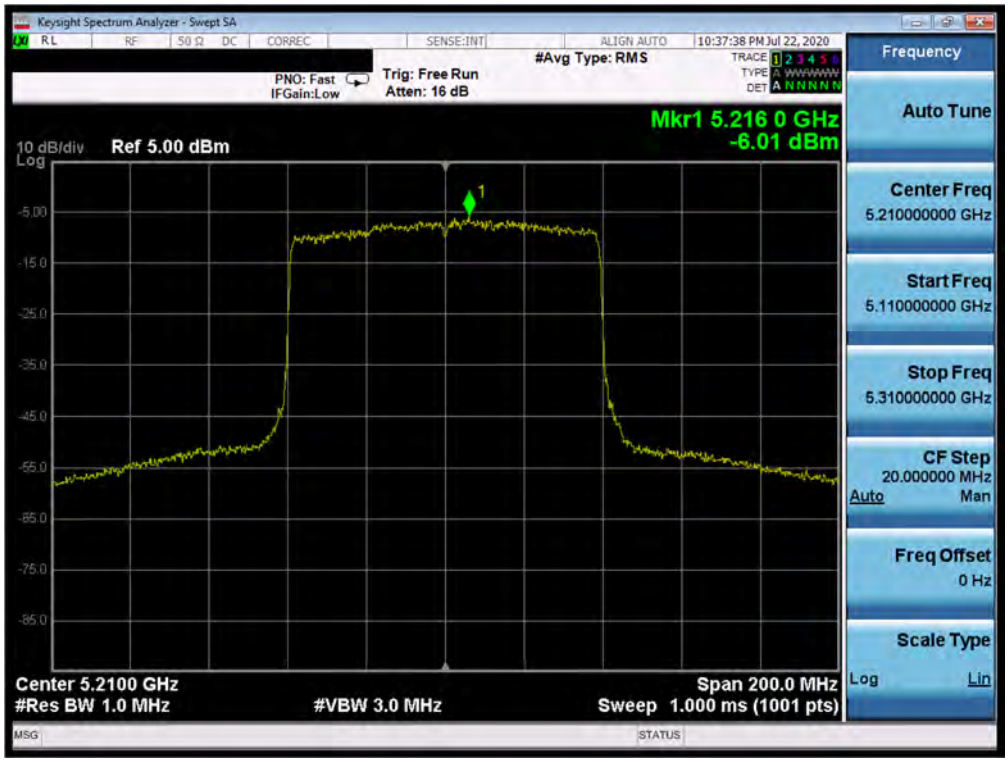
Plot 7-167. Power Spectral Density Plot MIMO ANT5 (20MHz BW 802.11ax – Full Tones (UNII Band 1) – Ch. 48)



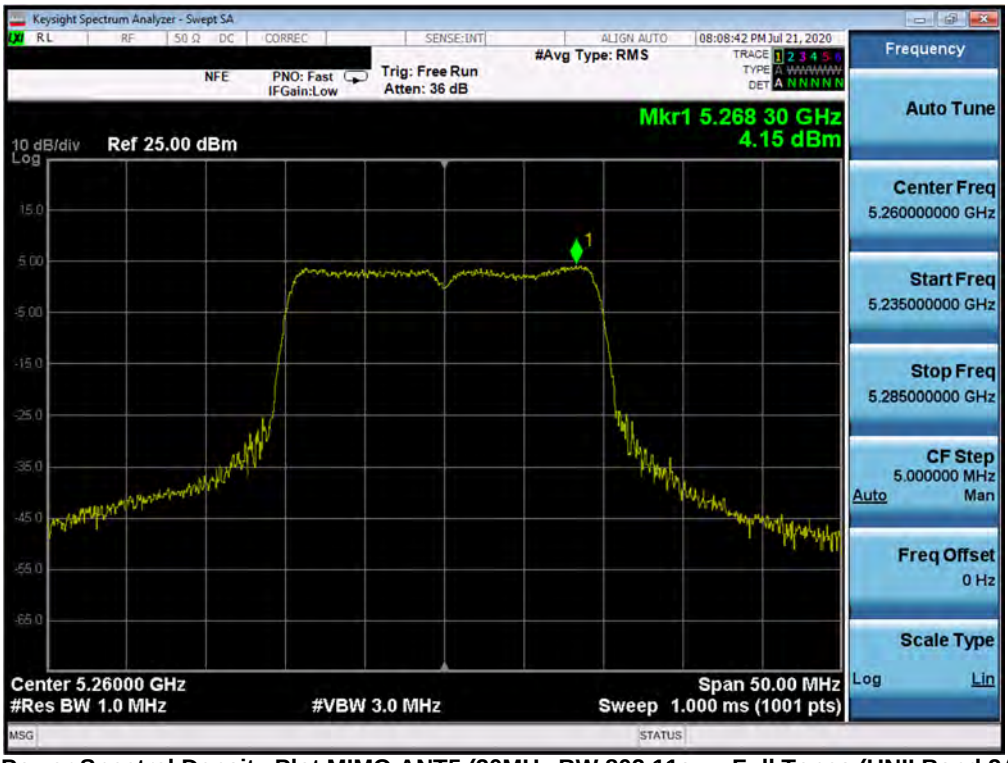
Plot 7-168. Power Spectral Density Plot MIMO ANT5 (40MHz BW 802.11ax – Full Tones (UNII Band 1) – Ch. 38)



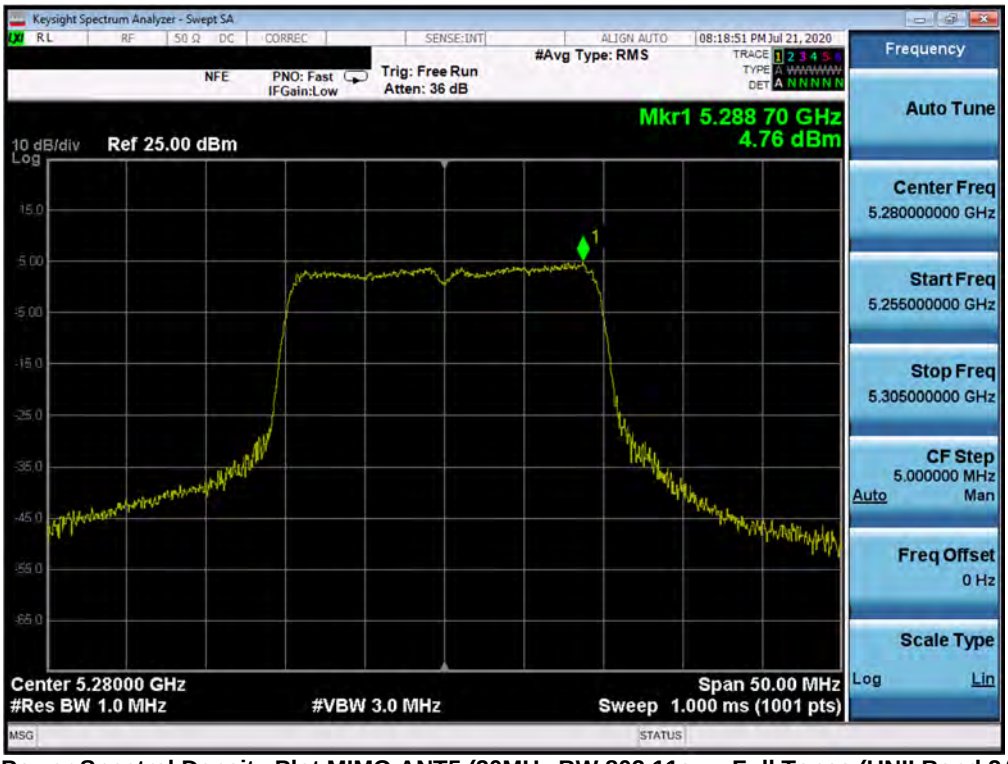
Plot 7-169. Power Spectral Density Plot MIMO ANT5 (40MHz BW 802.11ax – Full Tones (UNII Band 1) – Ch. 46)



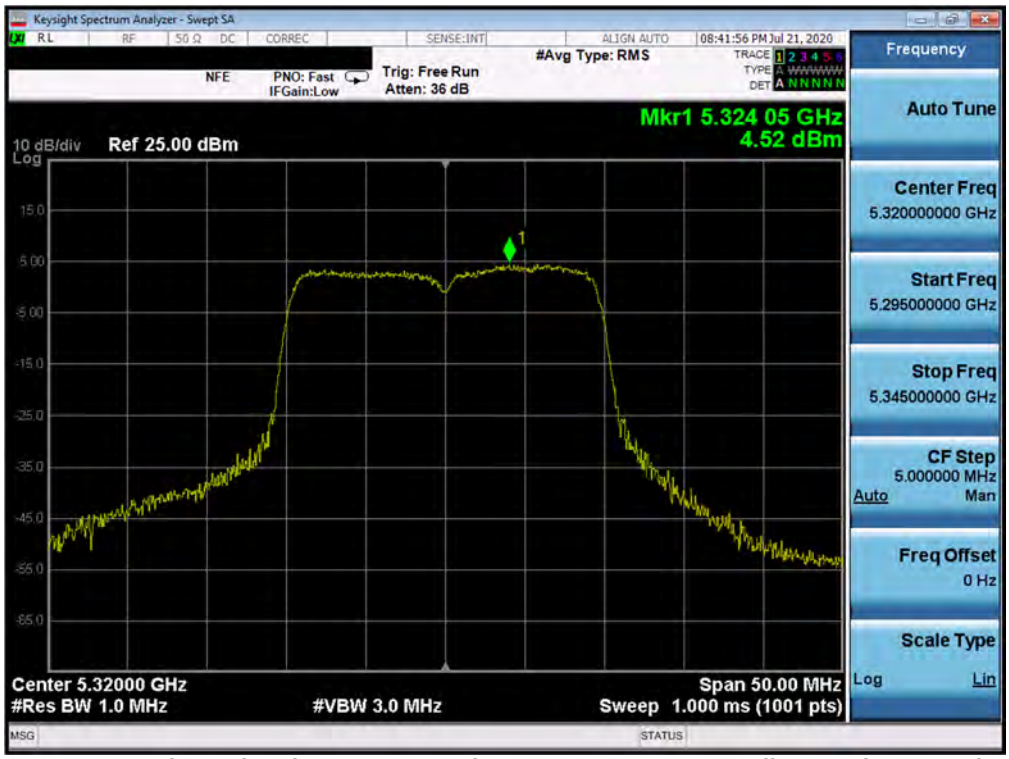
Plot 7-170. Power Spectral Density Plot MIMO ANT5 (80MHz BW 802.11ax – Full Tones (UNII Band 1) – Ch. 42)



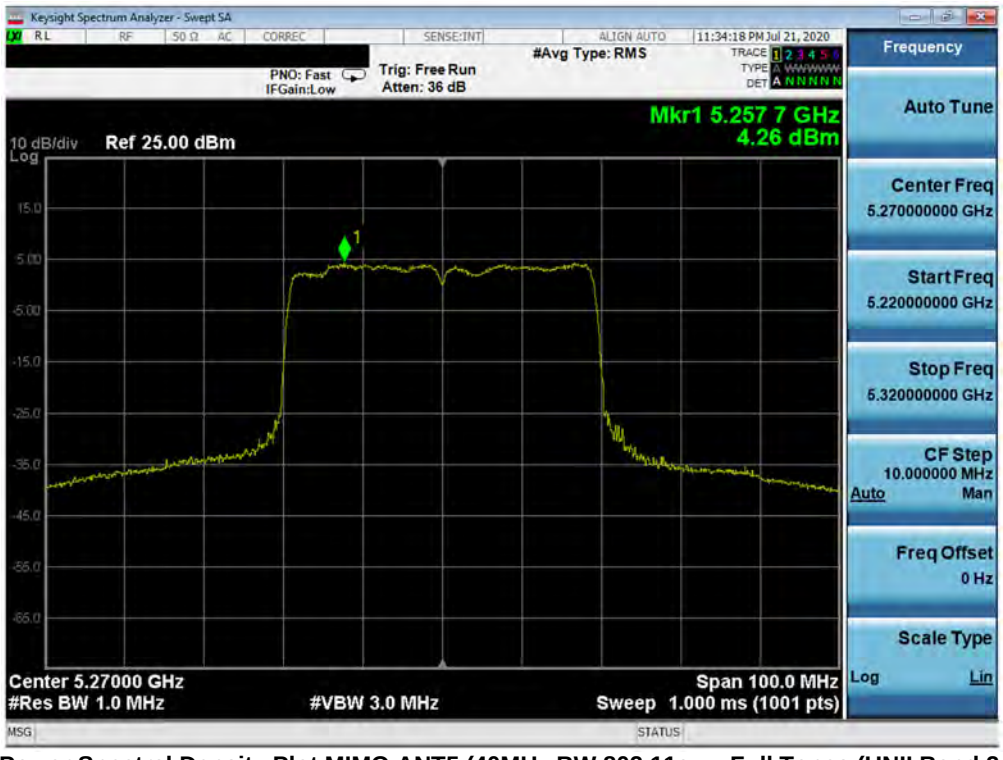
Plot 7-171. Power Spectral Density Plot MIMO ANT5 (20MHz BW 802.11ax – Full Tones (UNII Band 2A) – Ch. 52)



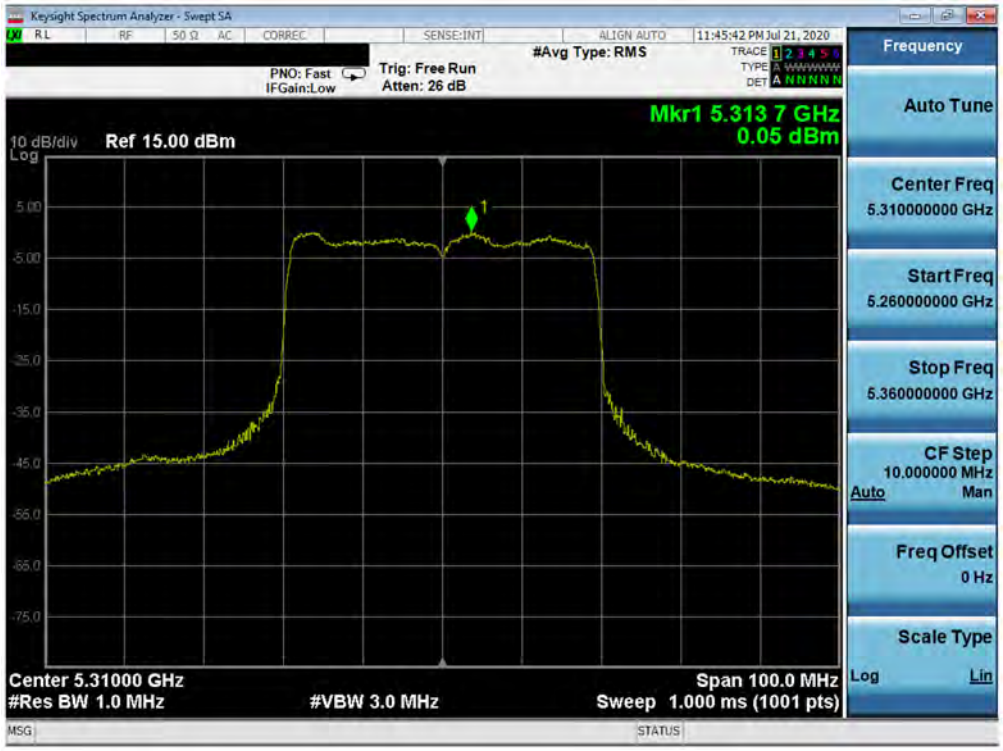
Plot 7-172. Power Spectral Density Plot MIMO ANT5 (20MHz BW 802.11ax – Full Tones (UNII Band 2A) – Ch. 56)



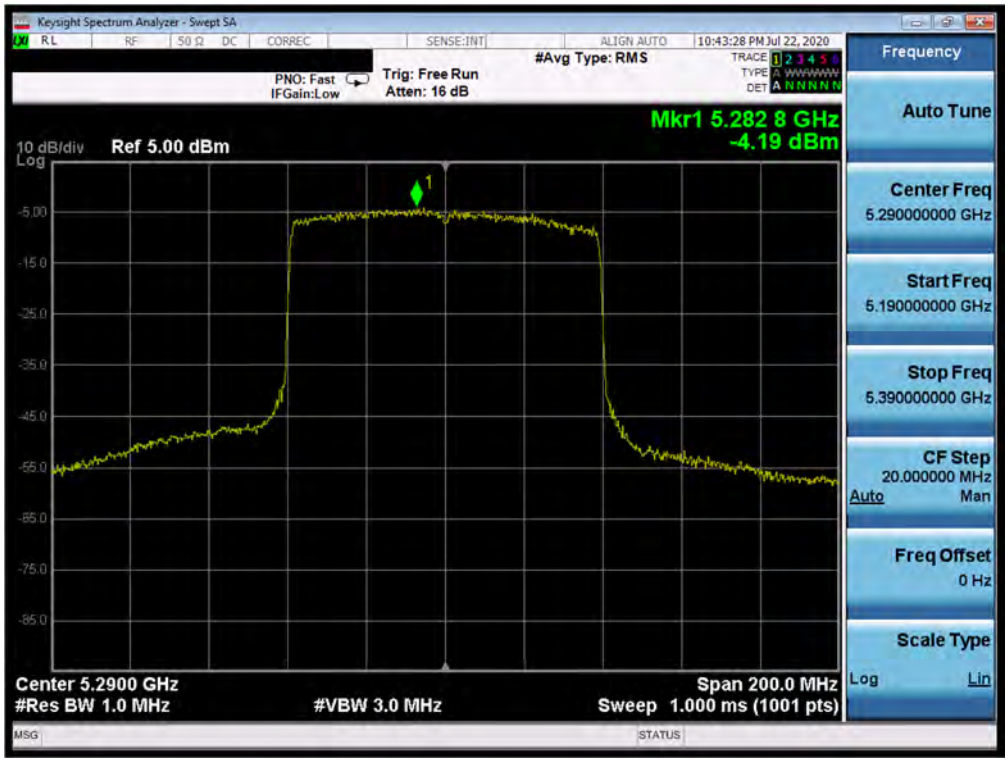
Plot 7-173. Power Spectral Density Plot MIMO ANT5 (20MHz BW 802.11ax – Full Tones (UNII Band 2A) – Ch. 64)



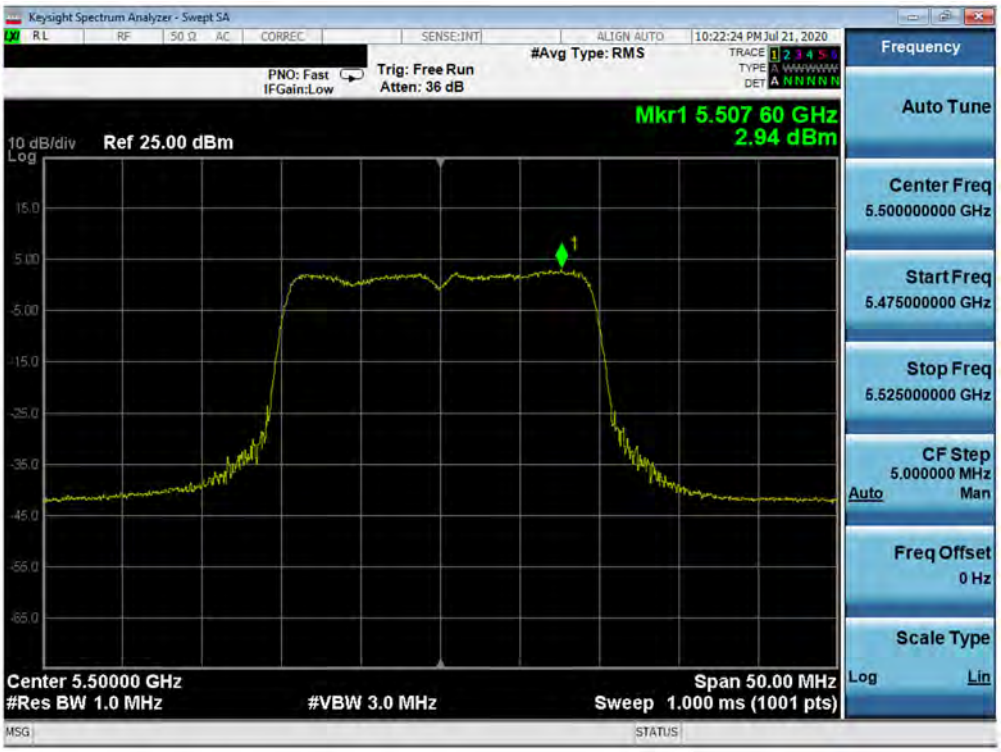
Plot 7-174. Power Spectral Density Plot MIMO ANT5 (40MHz BW 802.11ax – Full Tones (UNII Band 2A) – Ch. 54)



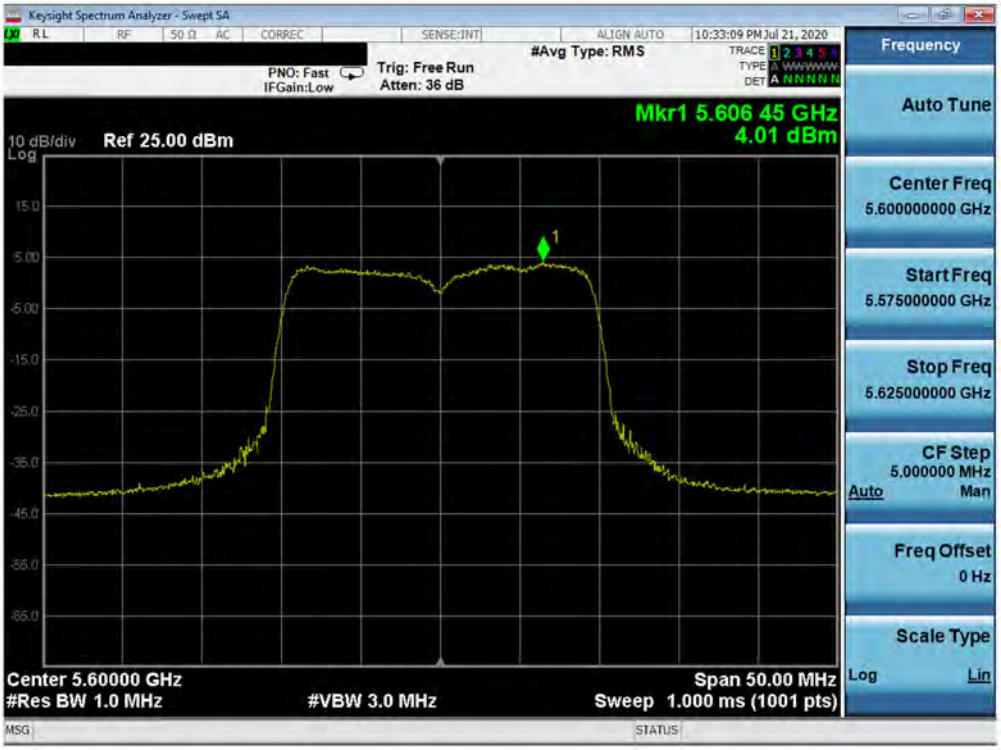
Plot 7-175. Power Spectral Density Plot MIMO ANT5 (40MHz BW 802.11ax – Full Tones (UNII Band 2A) – Ch. 62)



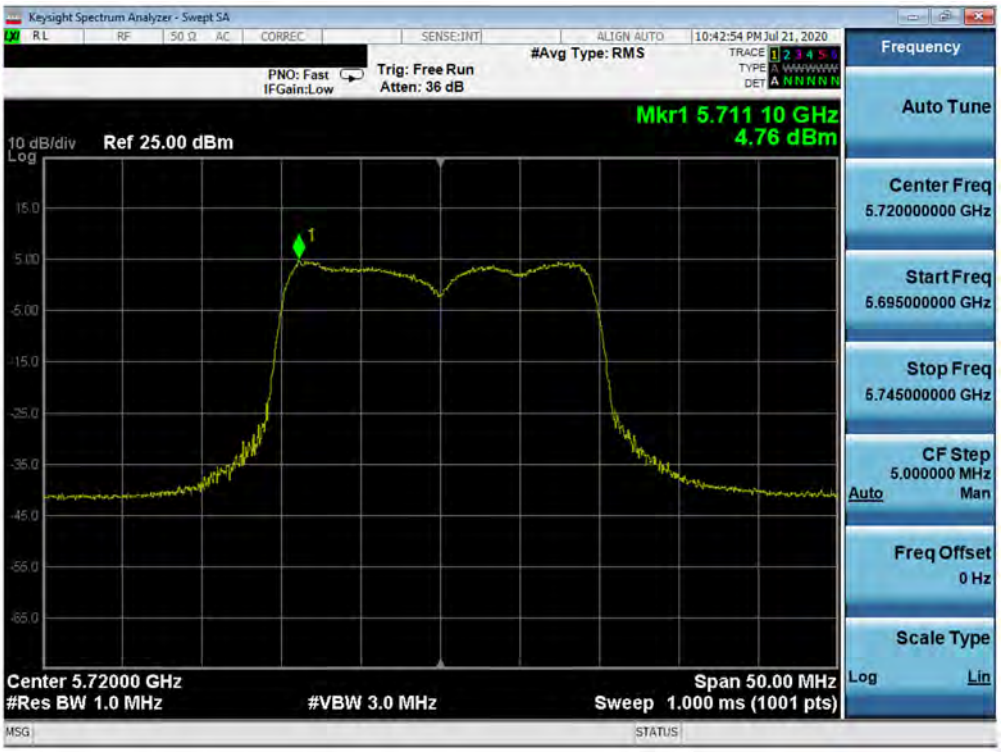
Plot 7-176. Power Spectral Density Plot MIMO ANT5 (80MHz BW 802.11ax – Full Tones (UNII Band 2A) – Ch. 58)



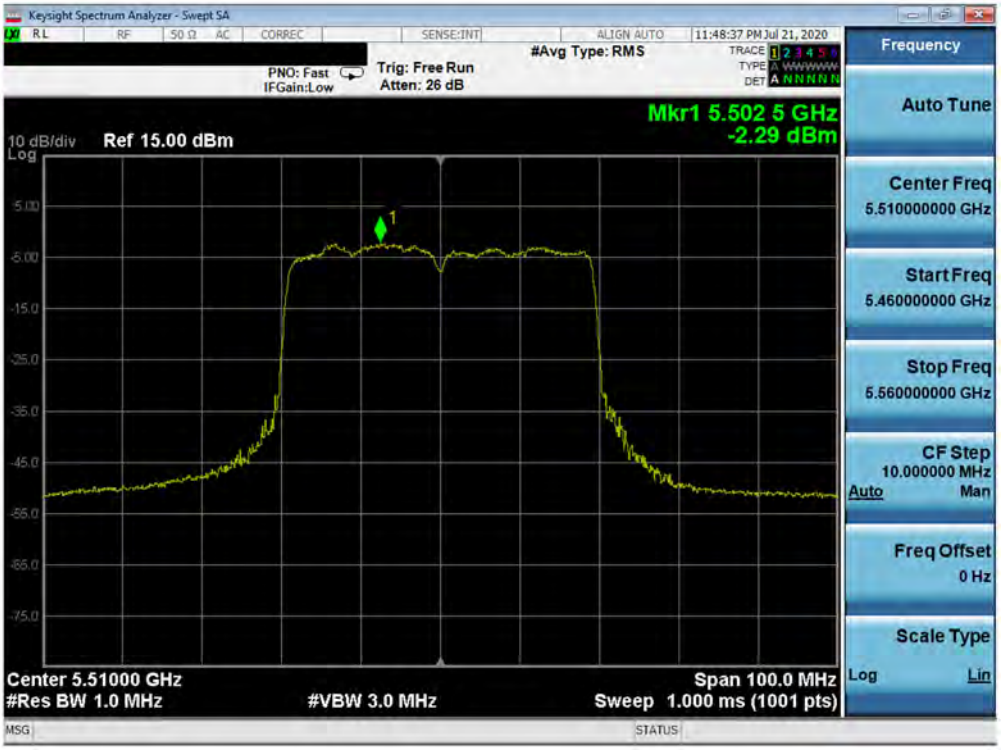
Plot 7-177. Power Spectral Density Plot MIMO ANT5 (20MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 100)



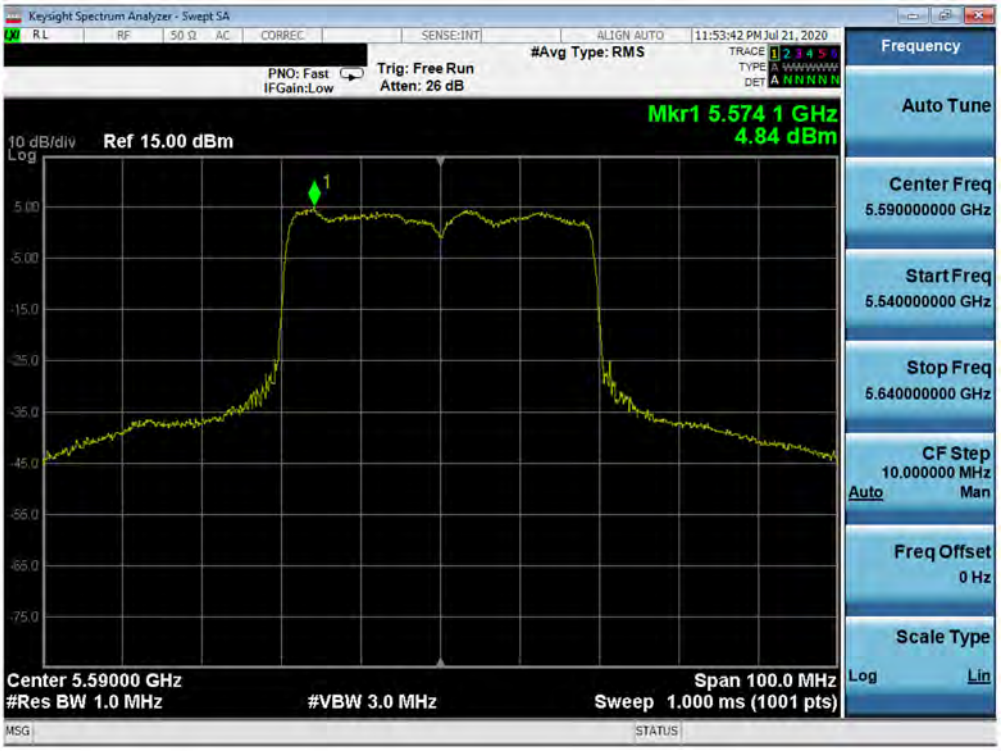
Plot 7-178. Power Spectral Density Plot MIMO ANT5 (20MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 120)



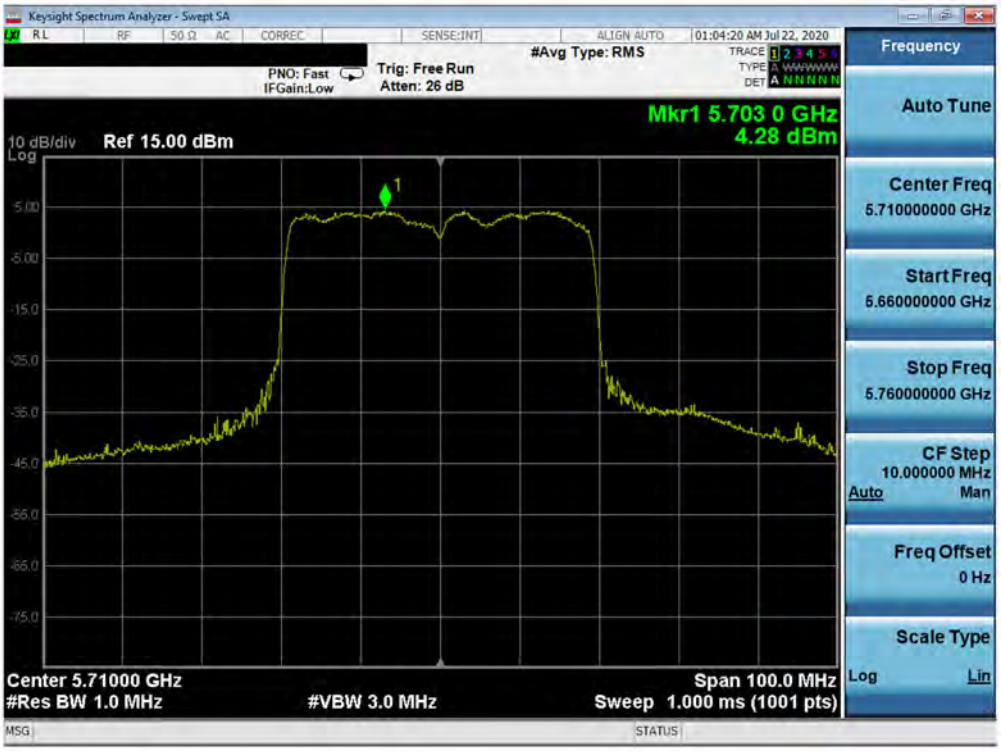
Plot 7-179. Power Spectral Density Plot MIMO ANT5 (20MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 144)



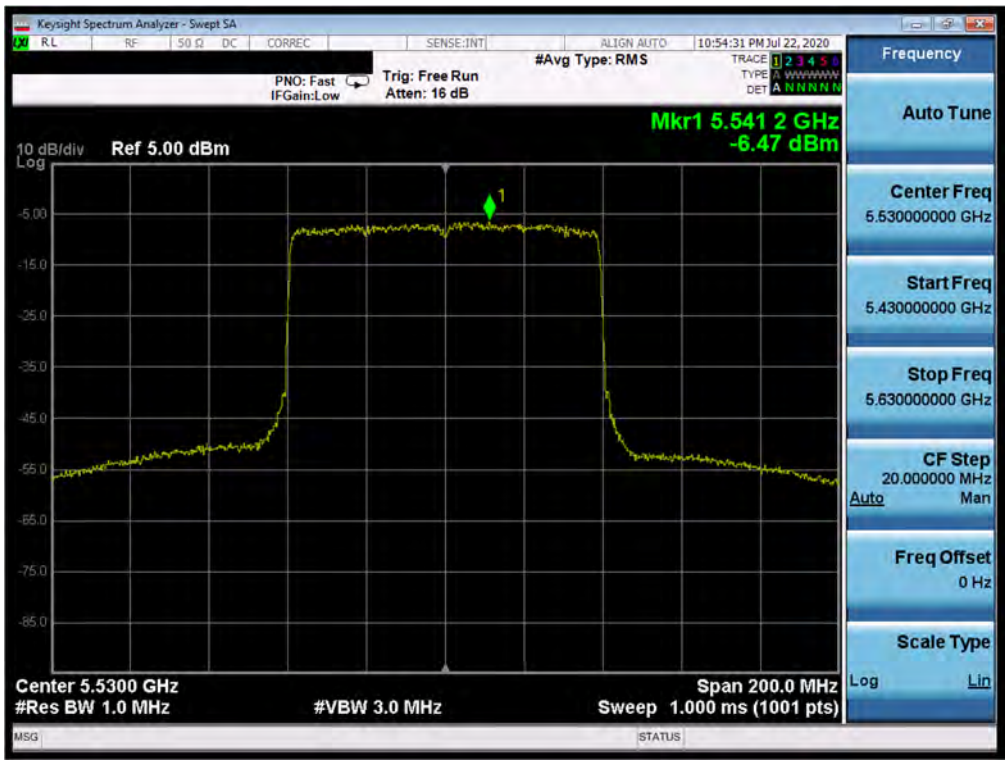
Plot 7-180. Power Spectral Density Plot MIMO ANT5 (40MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 102)



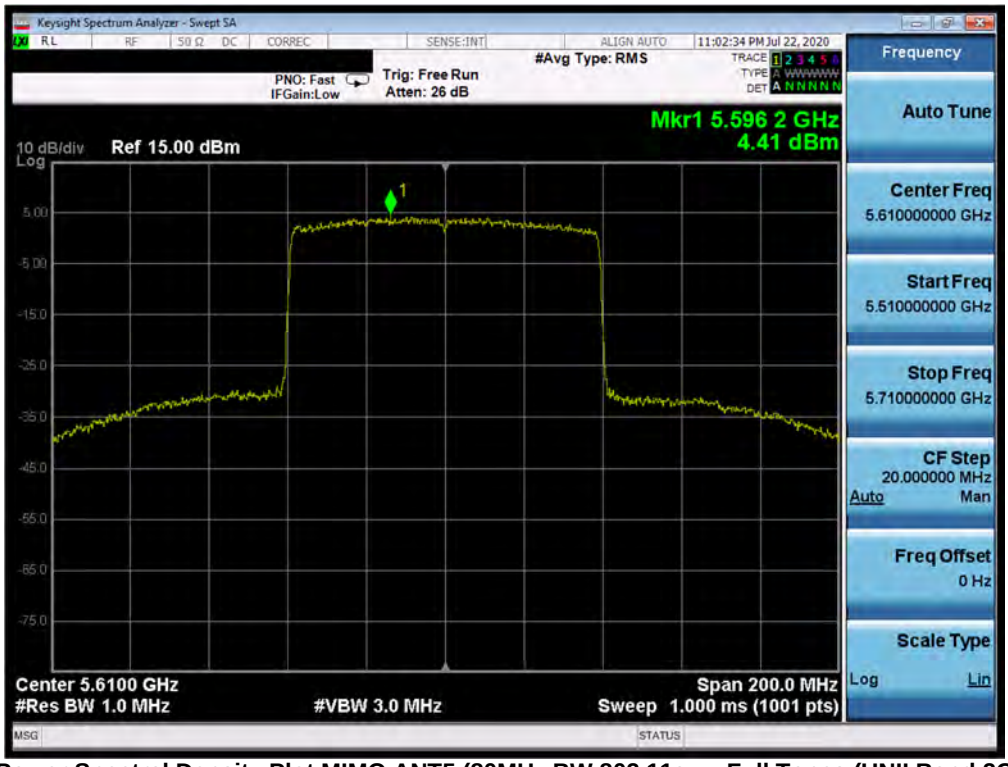
Plot 7-181. Power Spectral Density Plot MIMO ANT5 (40MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 118)



Plot 7-182. Power Spectral Density Plot MIMO ANT5 (40MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 142)



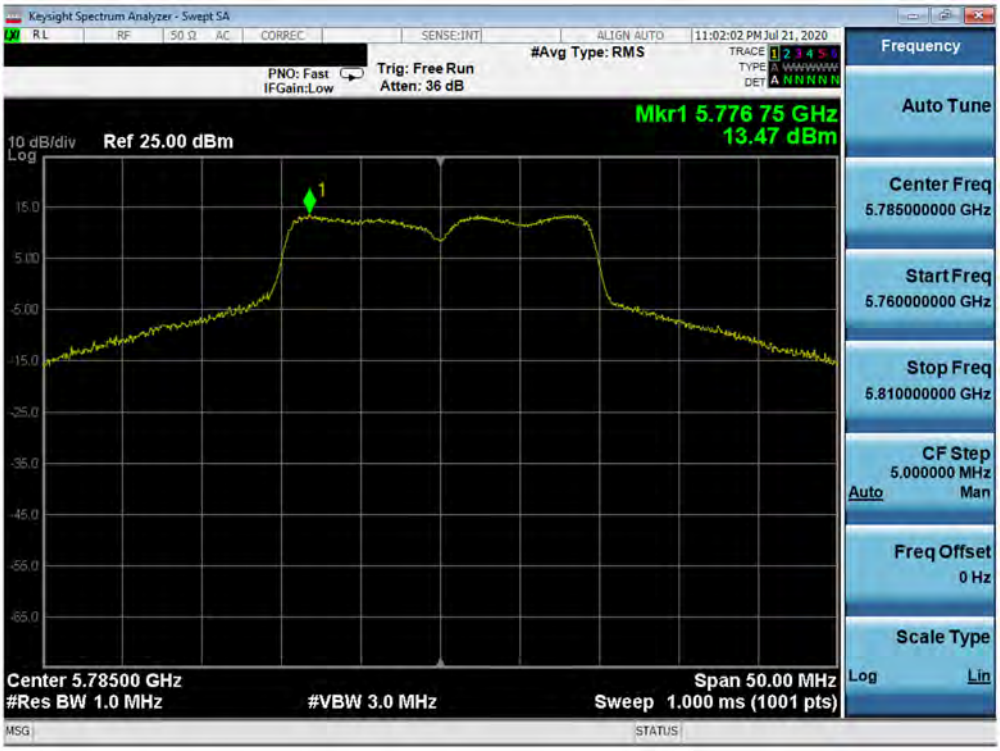
Plot 7-183. Power Spectral Density Plot MIMO ANT5 (80MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 106)



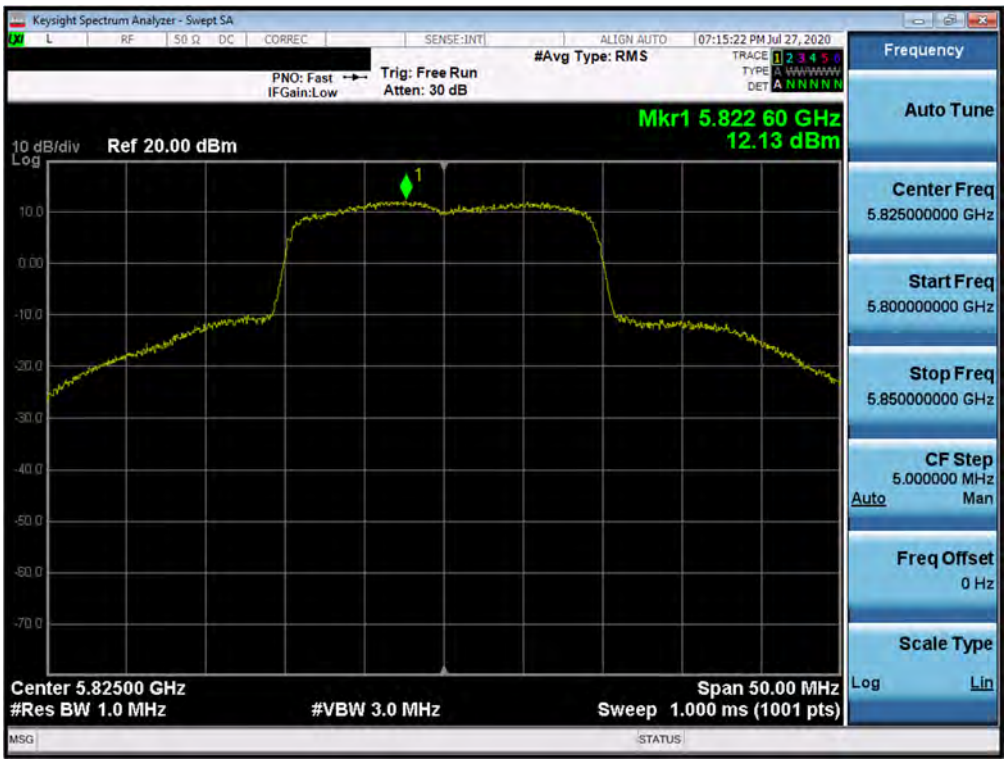
Plot 7-184. Power Spectral Density Plot MIMO ANT5 (80MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 122)

Plot 7-185. Power Spectral Density Plot MIMO ANT5 (80MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 138)

Plot 7-186. Power Spectral Density Plot MIMO ANT5 (20MHz BW 802.11ax – Full Tones (UNII Band 3) – Ch. 149)

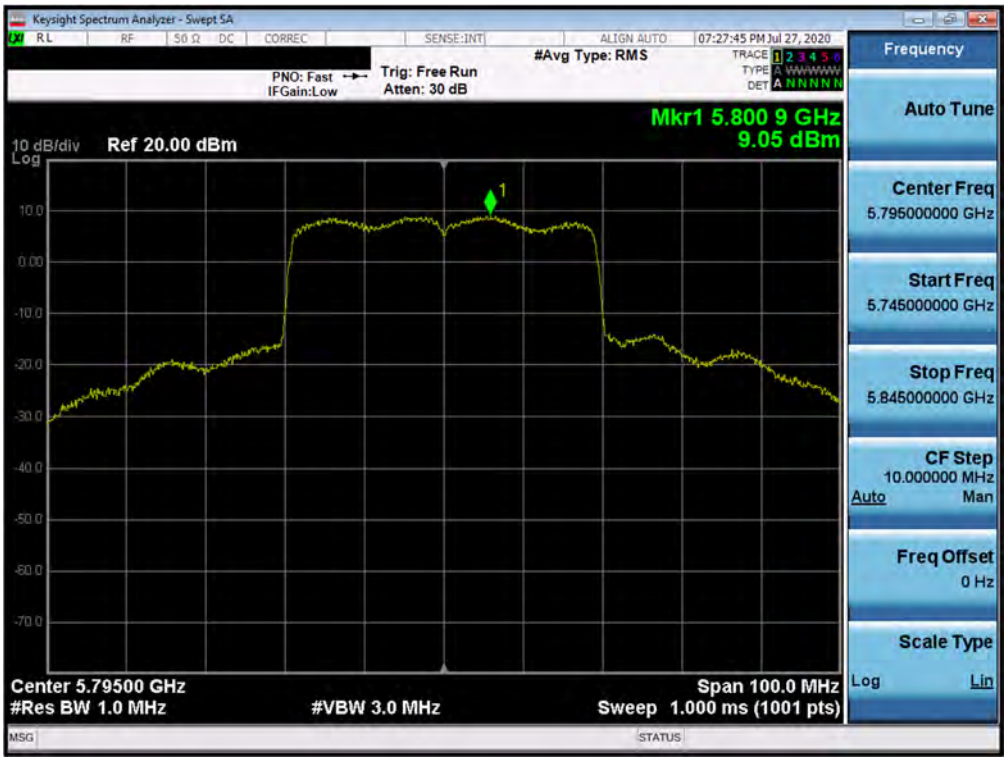


Plot 7-187. Power Spectral Density Plot MIMO ANT5 (20MHz BW 802.11ax – Full Tones (UNII Band 3) – Ch. 157)



Plot 7-188. Power Spectral Density Plot MIMO ANT5 (20 MHz BW 802.11ax – Full Tones (UNII Band 3) – Ch. 165)

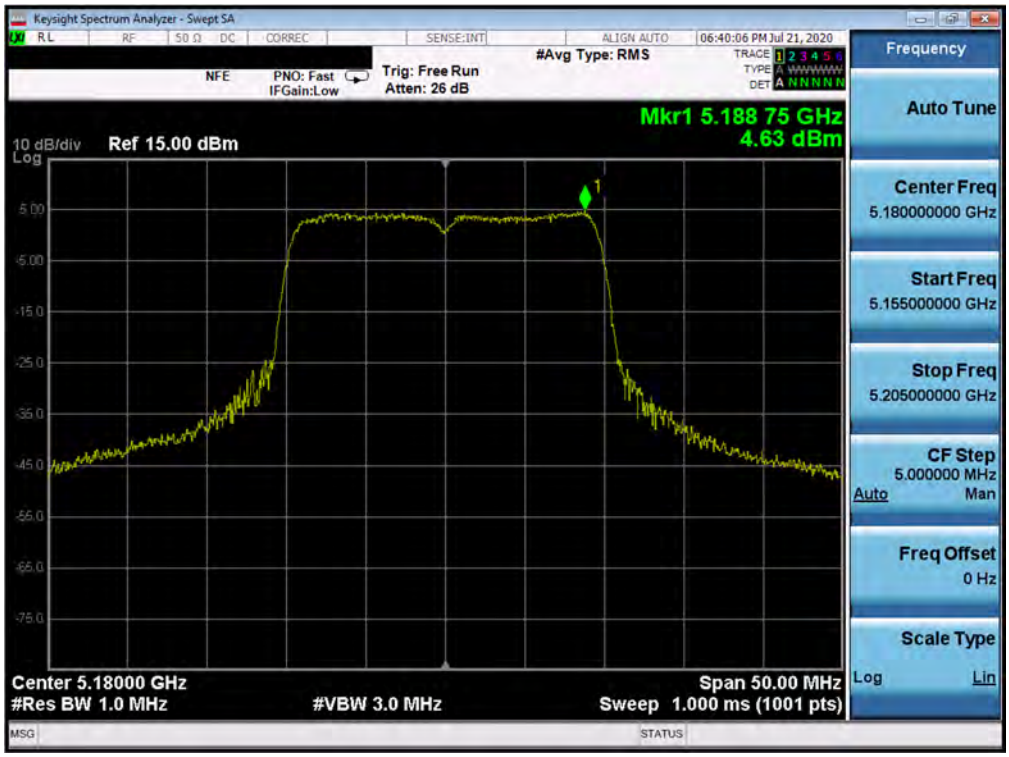
Plot 7-189. Power Spectral Density Plot MIMO ANT5 (40MHz BW 802.11ax – Full Tones (UNII Band 3) – Ch. 151)



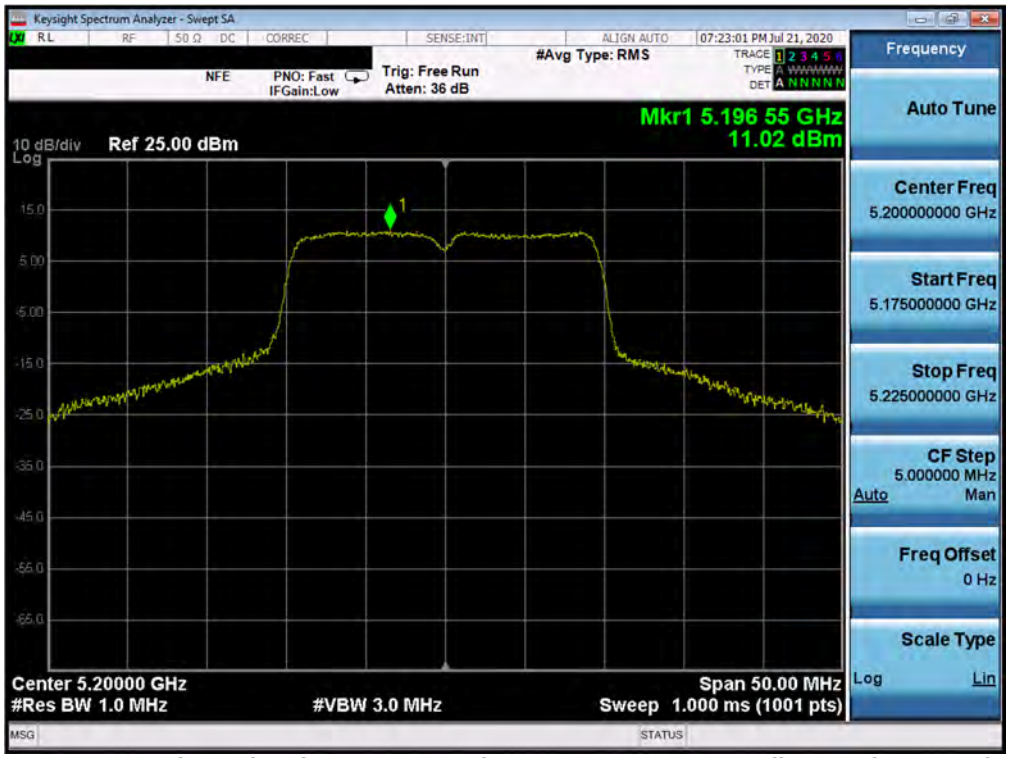
Plot 7-190. Power Spectral Density Plot MIMO ANT5 (40MHz BW 802.11ax – Full Tones (UNII Band 3) – Ch. 159)

Plot 7-191. Power Spectral Density Plot MIMO ANT5 (80MHz BW 802.11ax – Full Tones (UNII Band 3) – Ch. 155)

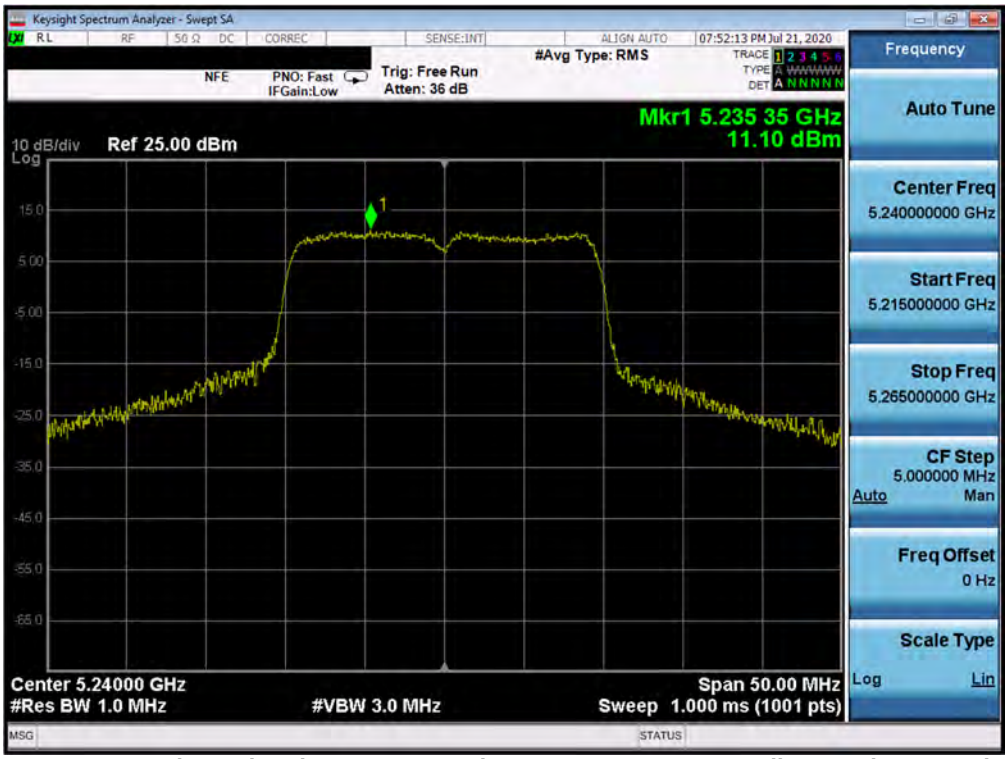
MIMO Antenna-6 Power Spectral Density Measurements (Full Tones)



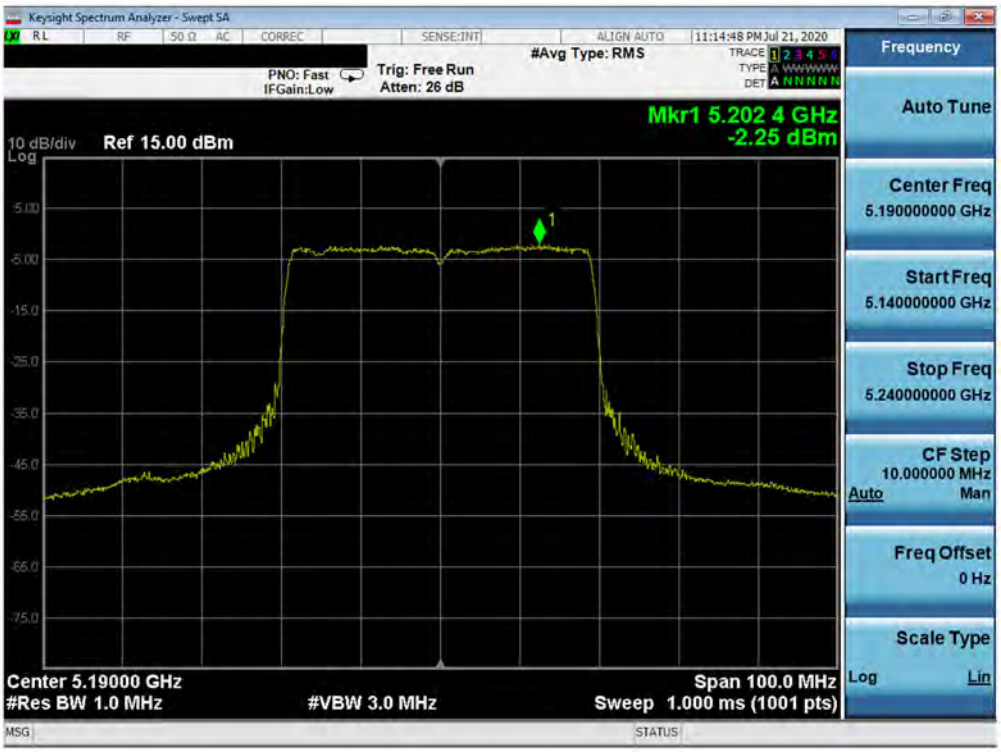
Plot 7-192. Power Spectral Density Plot MIMO ANT6 (20MHz BW 802.11ax – Full Tones (UNII Band 1) – Ch. 36)



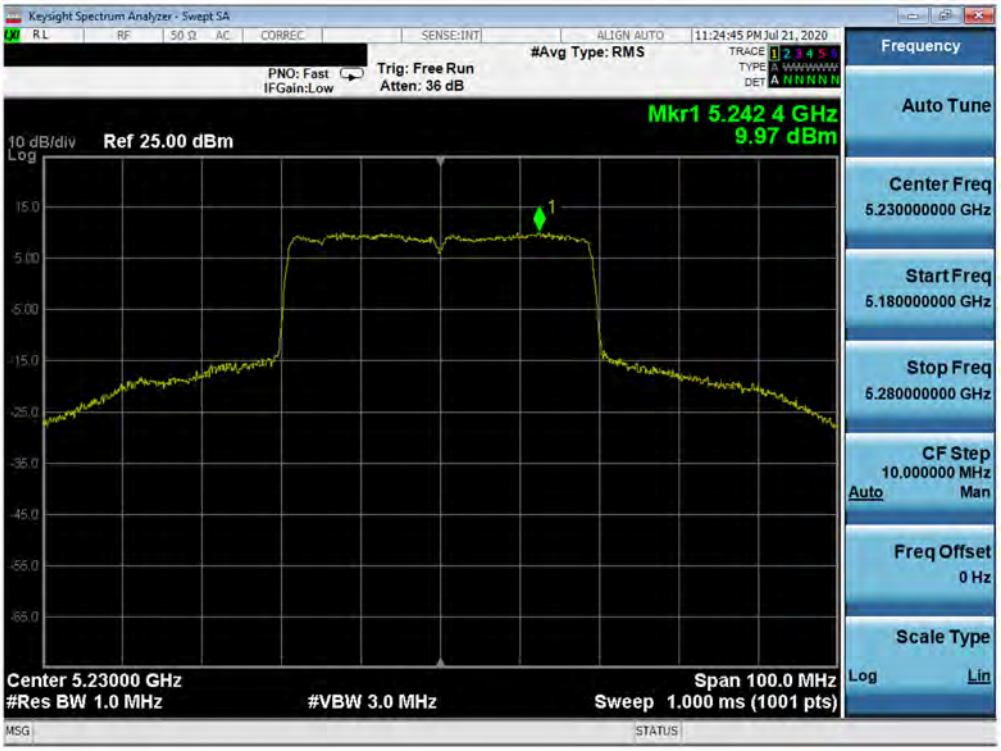
Plot 7-193. Power Spectral Density Plot MIMO ANT6 (20MHz BW 802.11ax – Full Tones (UNII Band 1) – Ch. 40)



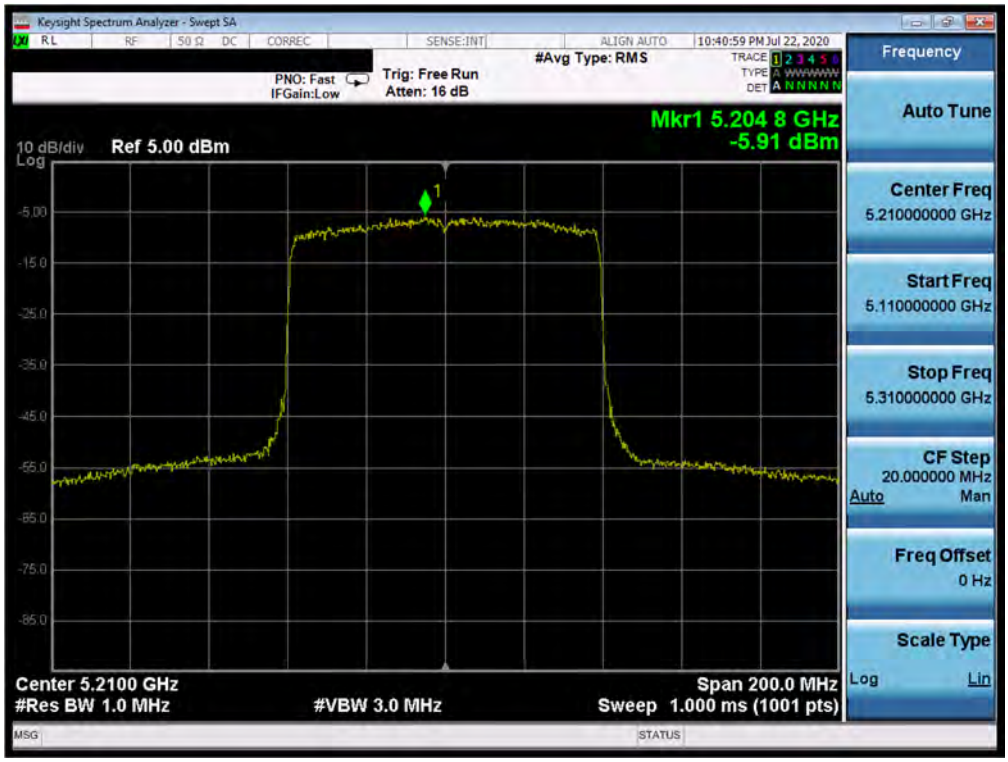
Plot 7-194. Power Spectral Density Plot MIMO ANT6 (20MHz BW 802.11ax – Full Tones (UNII Band 1) – Ch. 48)



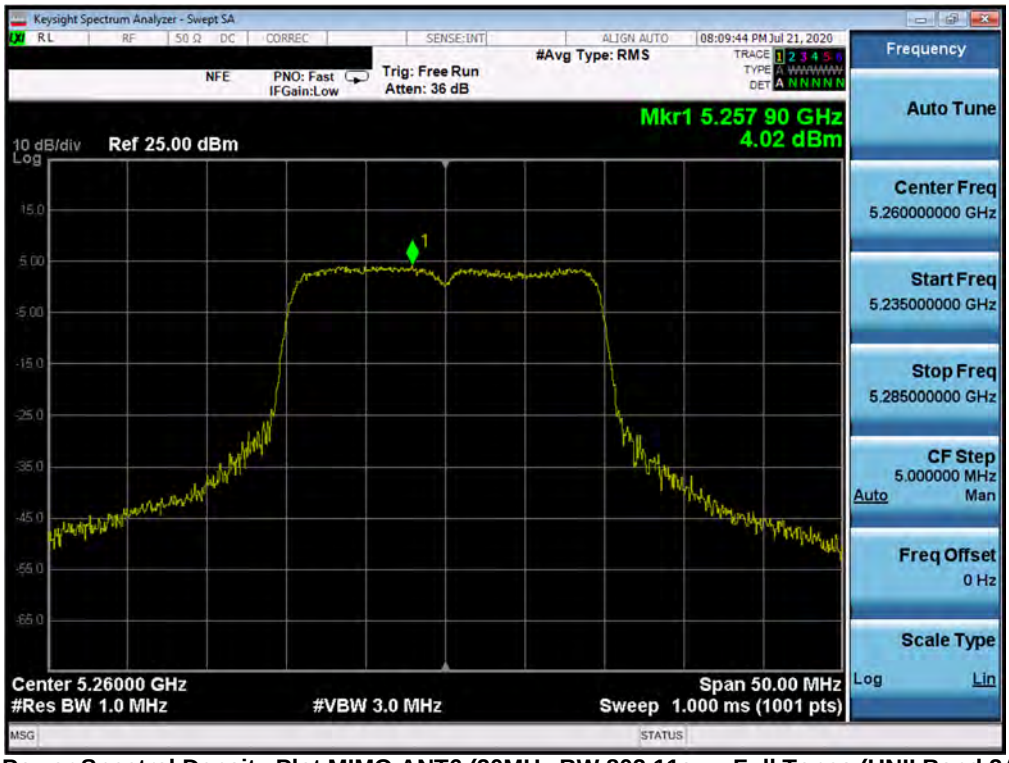
Plot 7-195. Power Spectral Density Plot MIMO ANT6 (40MHz BW 802.11ax – Full Tones (UNII Band 1) – Ch. 38)



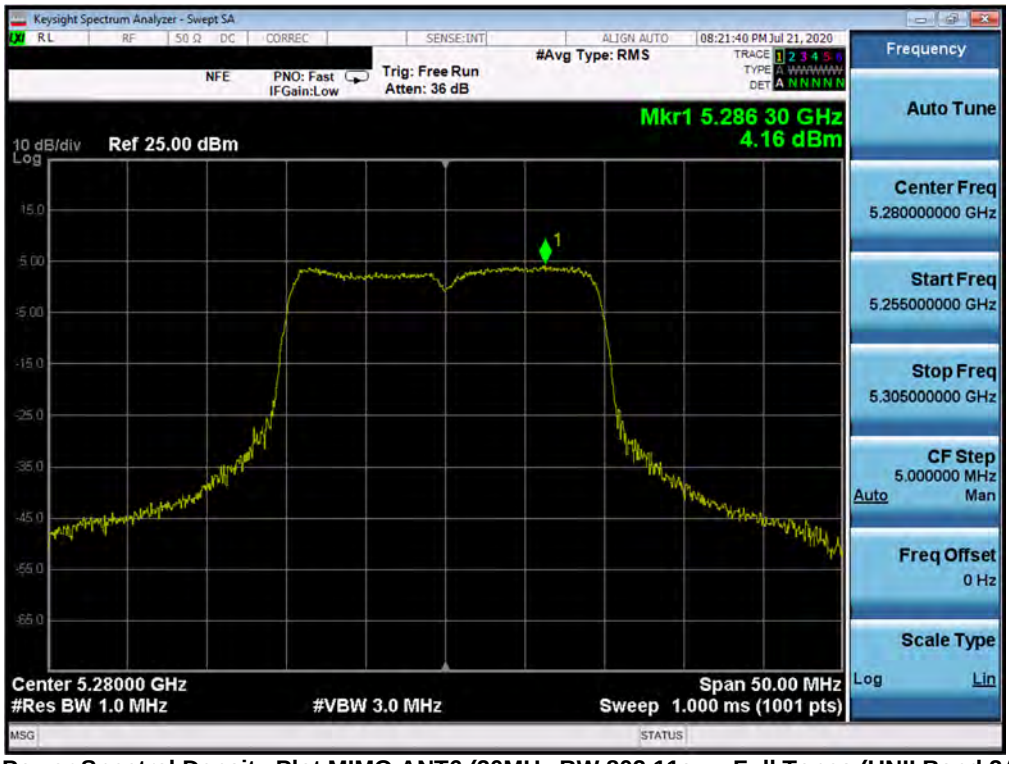
Plot 7-196. Power Spectral Density Plot MIMO ANT6 (40MHz BW 802.11ax – Full Tones (UNII Band 1) – Ch. 46)



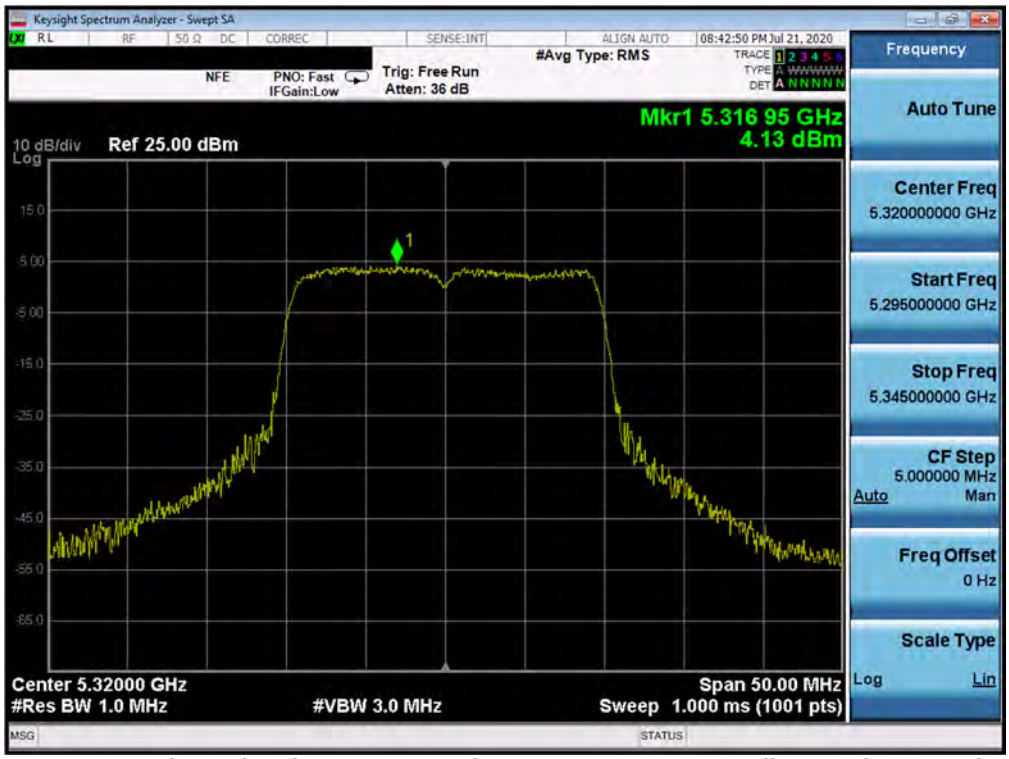
Plot 7-197. Power Spectral Density Plot MIMO ANT6 (80MHz BW 802.11ax – Full Tones (UNII Band 1) – Ch. 42)



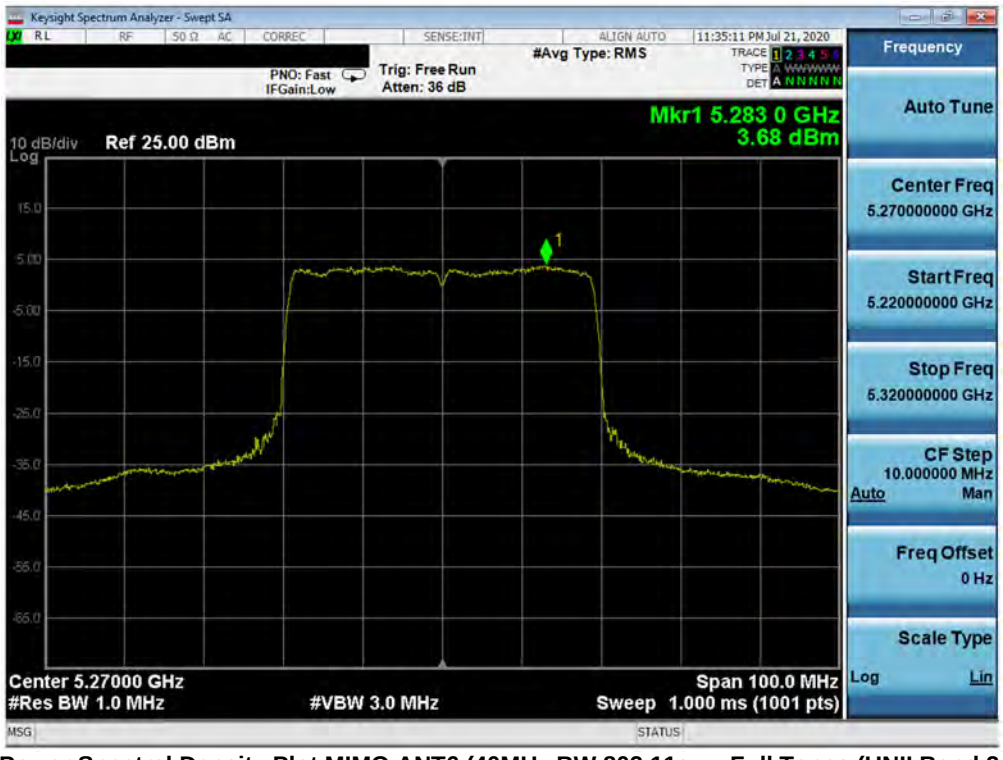
Plot 7-198. Power Spectral Density Plot MIMO ANT6 (20MHz BW 802.11ax – Full Tones (UNII Band 2A) – Ch. 52)



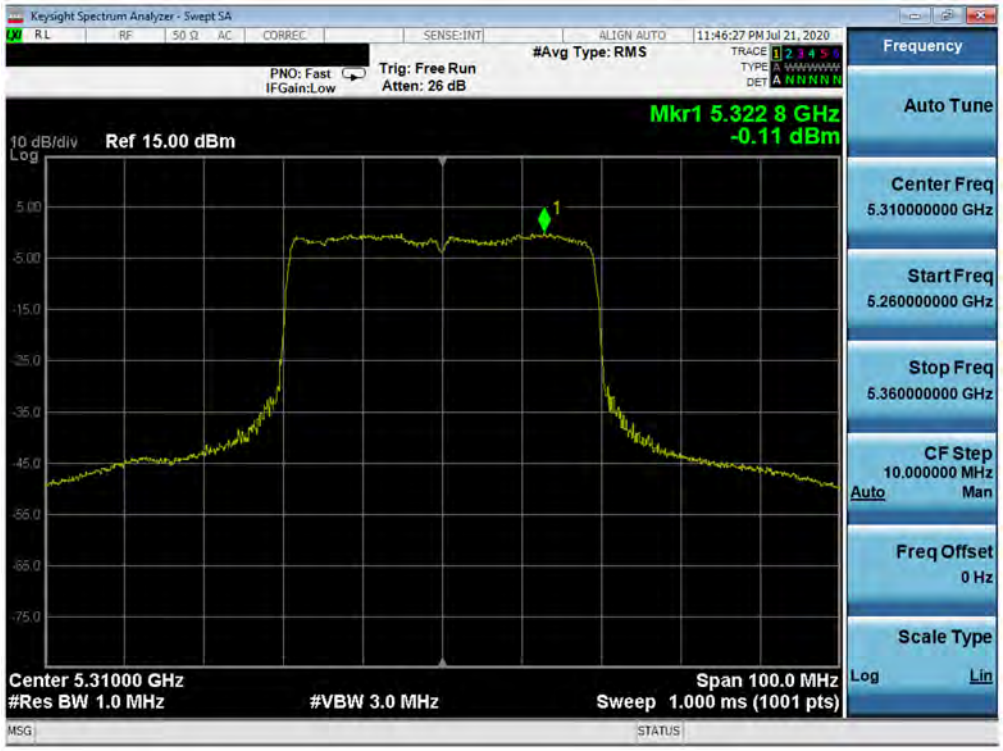
Plot 7-199. Power Spectral Density Plot MIMO ANT6 (20MHz BW 802.11ax – Full Tones (UNII Band 2A) – Ch. 56)



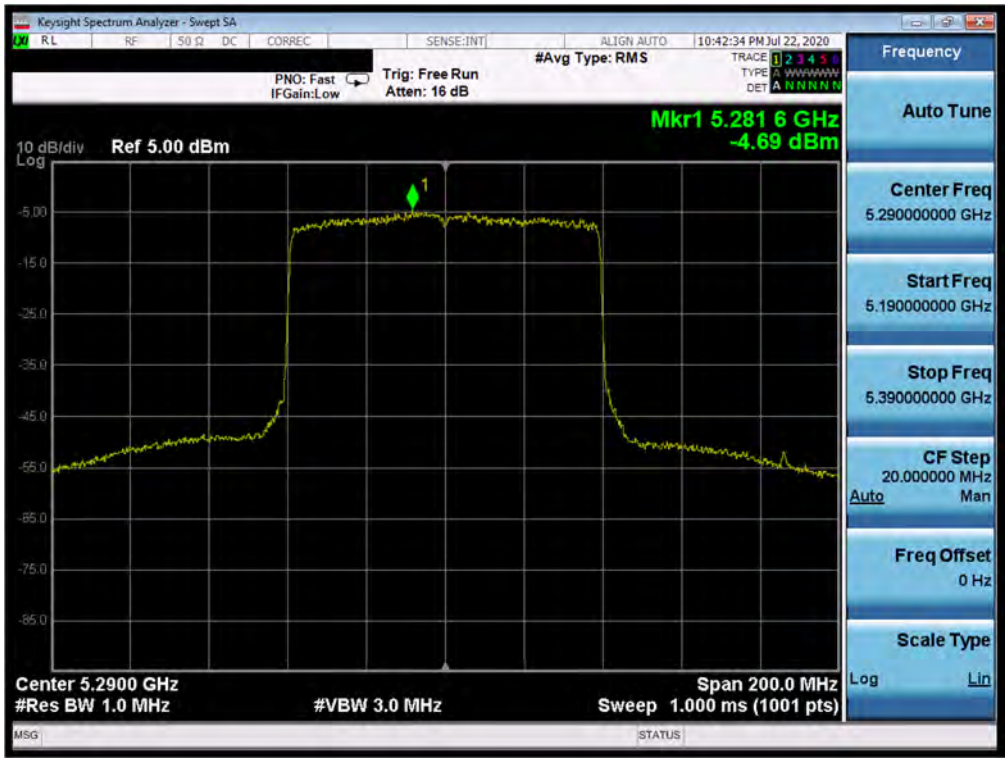
Plot 7-200. Power Spectral Density Plot MIMO ANT6 (20MHz BW 802.11ax – Full Tones (UNII Band 2A) – Ch. 64)



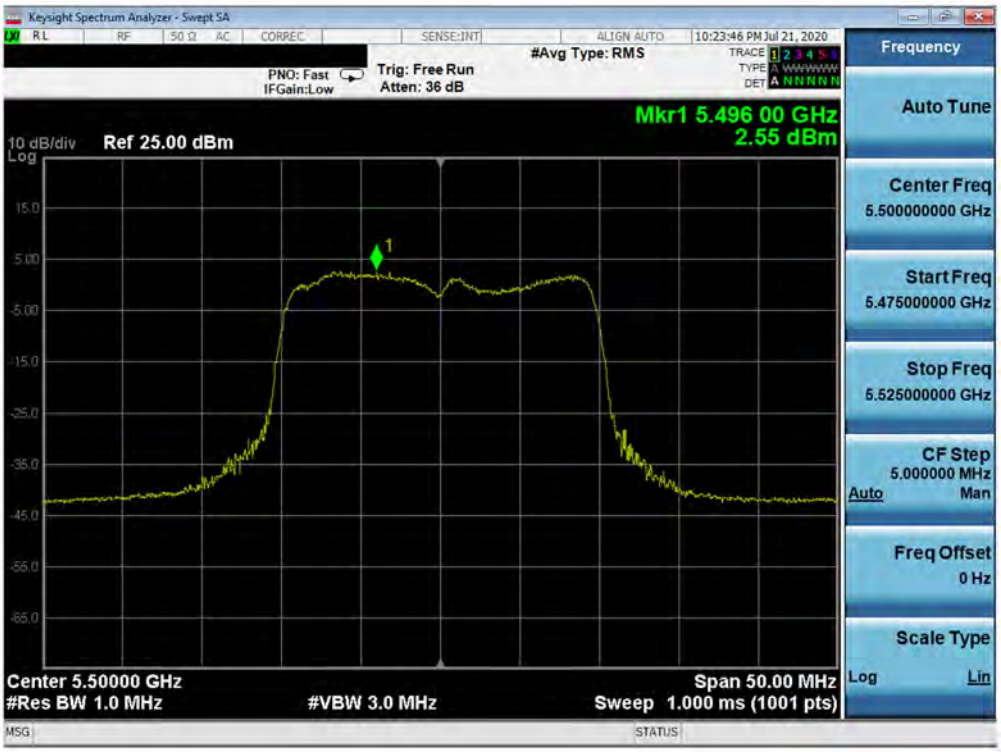
Plot 7-201. Power Spectral Density Plot MIMO ANT6 (40MHz BW 802.11ax – Full Tones (UNII Band 2A) – Ch. 54)



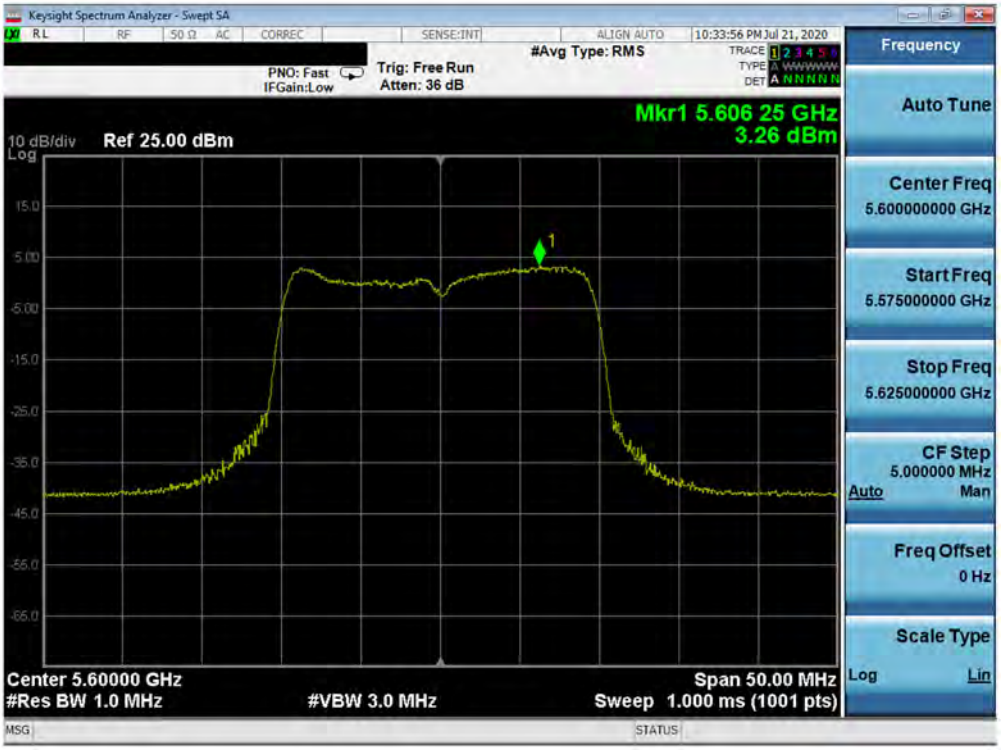
Plot 7-202. Power Spectral Density Plot MIMO ANT6 (40MHz BW 802.11ax – Full Tones (UNII Band 2A) – Ch. 62)



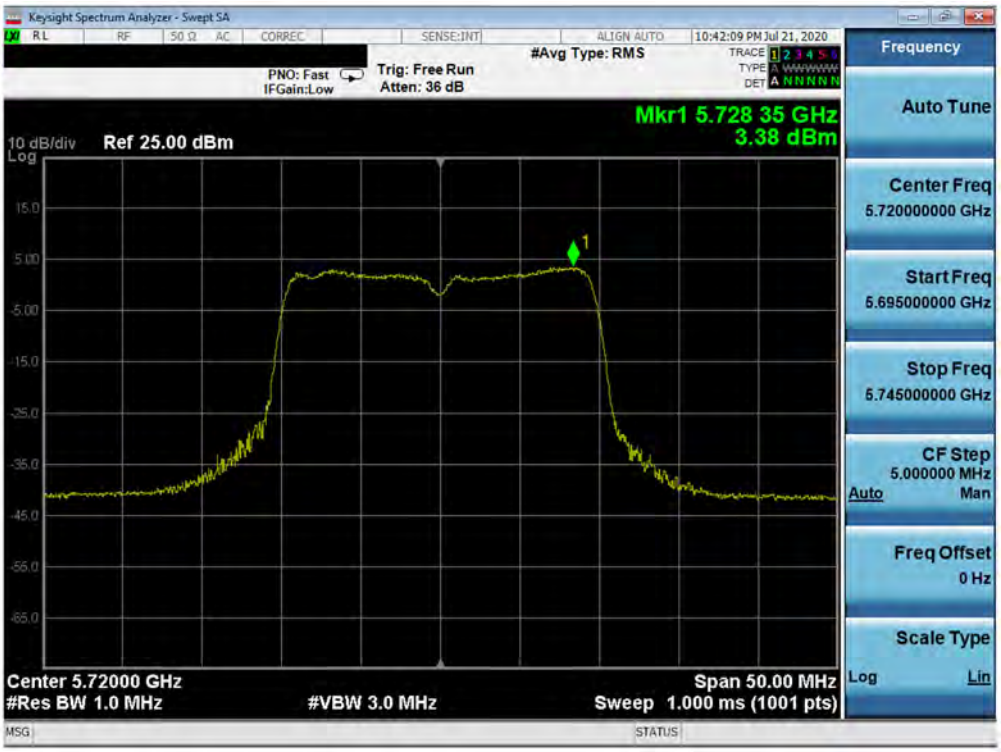
Plot 7-203. Power Spectral Density Plot MIMO ANT6 (80MHz BW 802.11ax – Full Tones (UNII Band 2A) – Ch. 58)



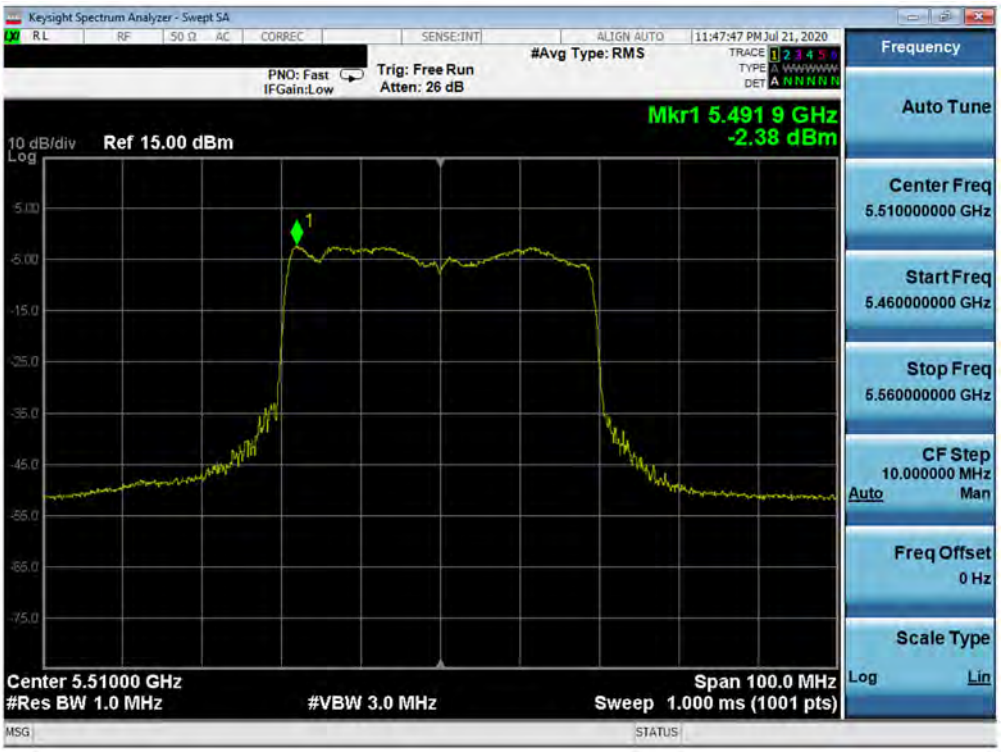
Plot 7-204. Power Spectral Density Plot MIMO ANT6 (20MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 100)



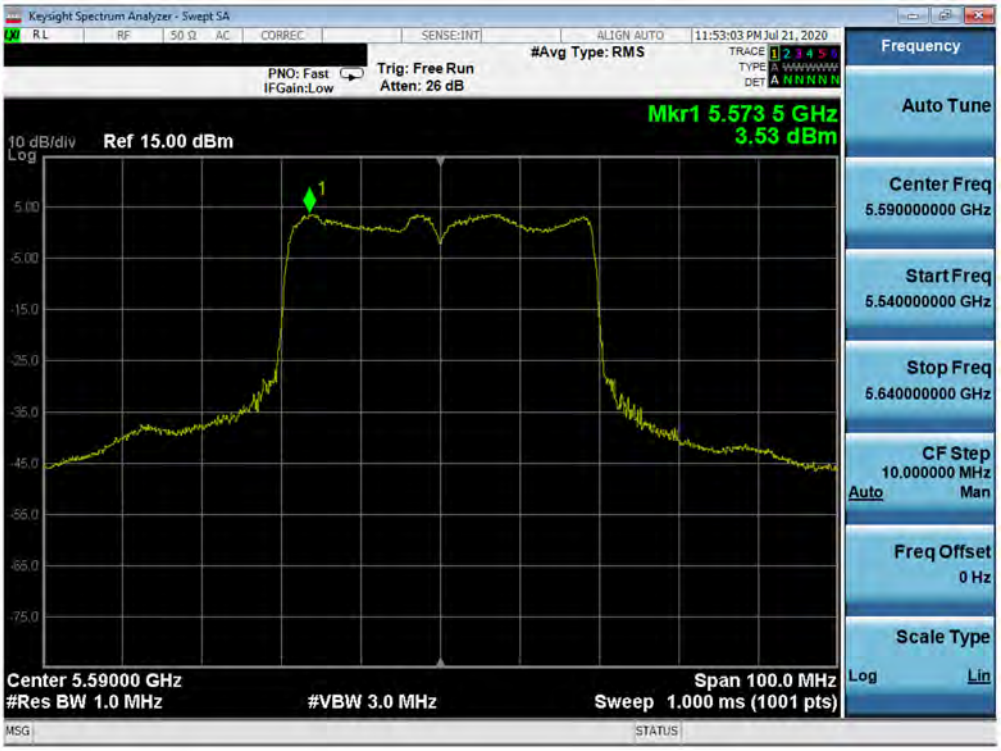
Plot 7-205. Power Spectral Density Plot MIMO ANT6 (20MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 120)



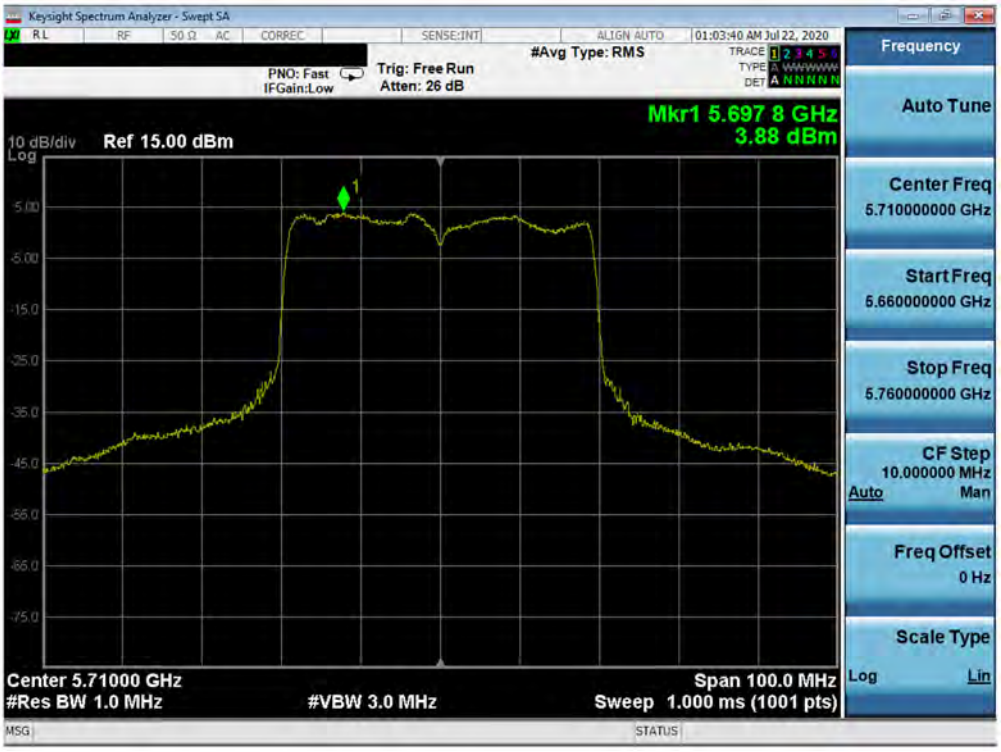
Plot 7-206. Power Spectral Density Plot MIMO ANT6 (20MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 144)



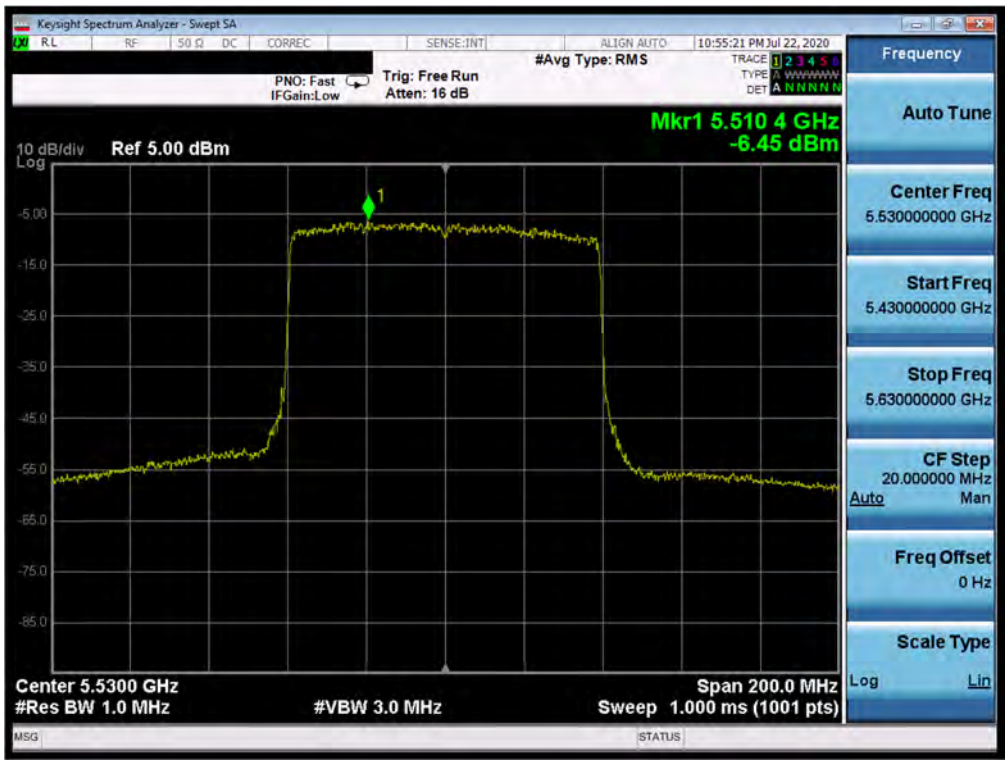
Plot 7-207. Power Spectral Density Plot MIMO ANT6 (40MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 102)



Plot 7-208. Power Spectral Density Plot MIMO ANT6 (40MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 118)



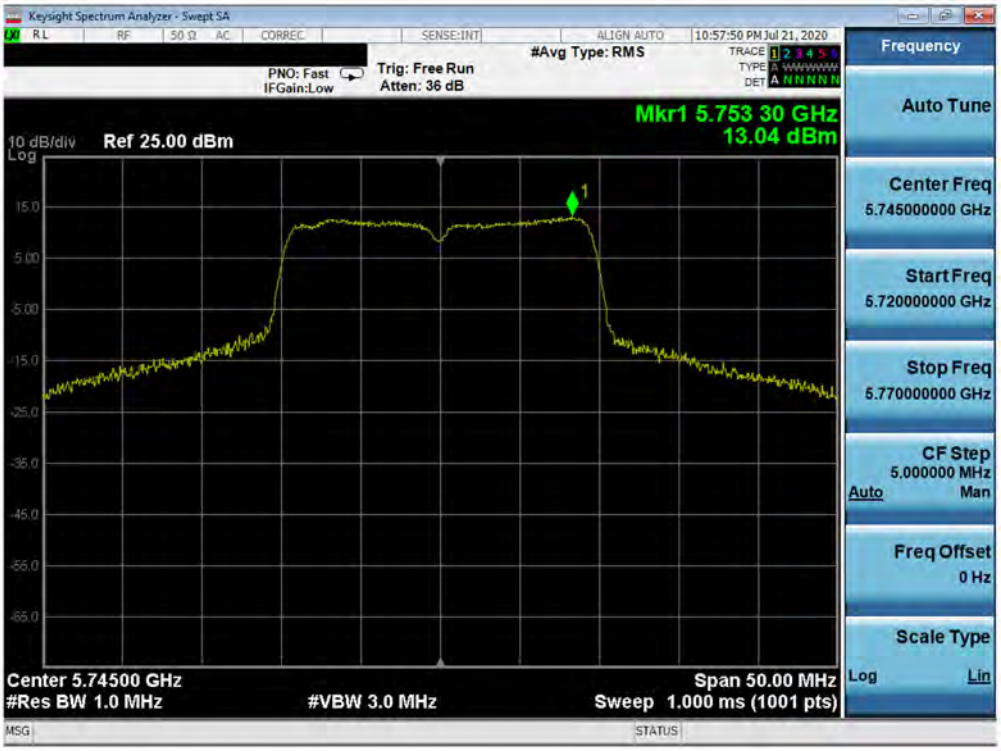
Plot 7-209. Power Spectral Density Plot MIMO ANT6 (40MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 142)



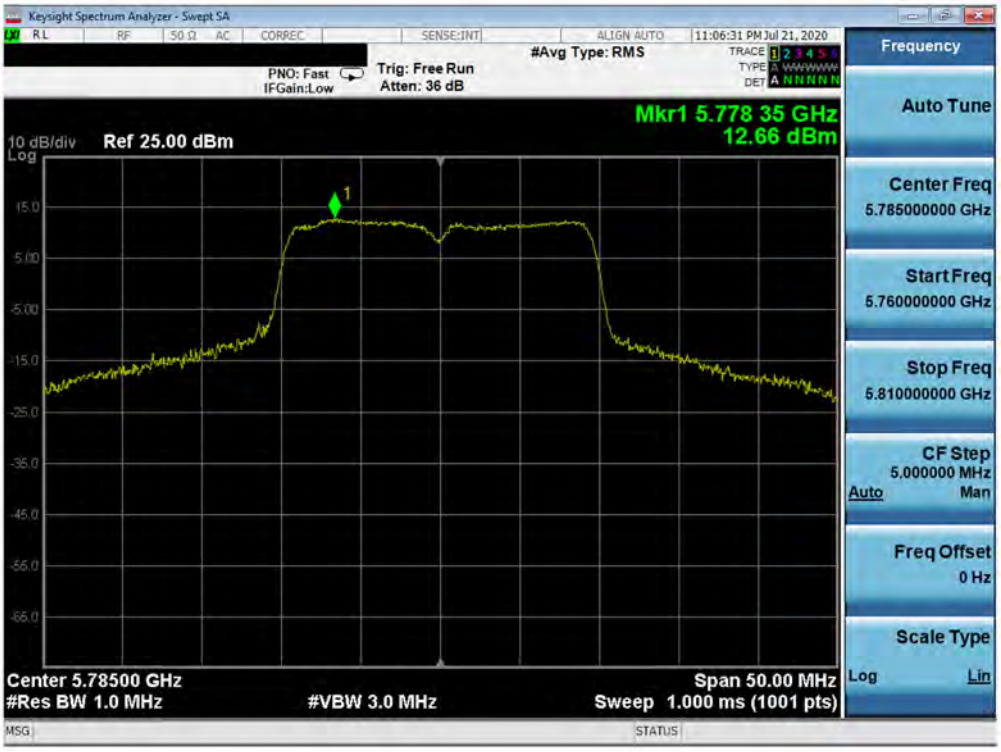
Plot 7-210. Power Spectral Density Plot MIMO ANT6 (80MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 106)

Plot 7-211. Power Spectral Density Plot MIMO ANT6 (80MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 122)

Plot 7-212. Power Spectral Density Plot MIMO ANT6 (80MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 138)

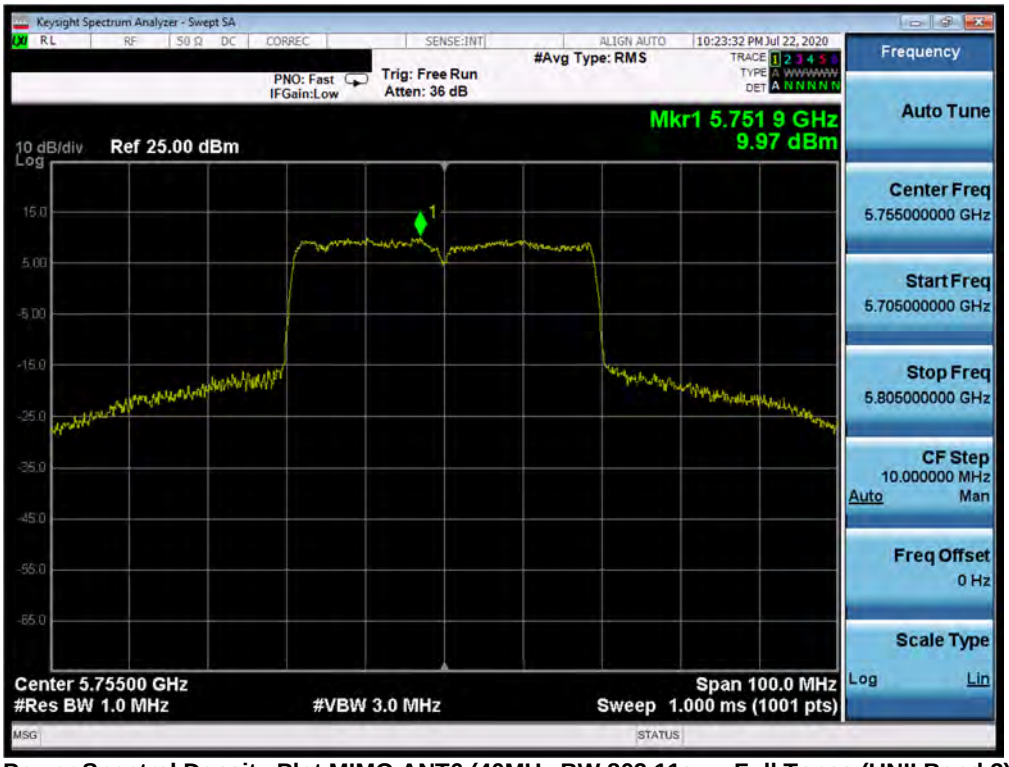


Plot 7-213. Power Spectral Density Plot MIMO ANT6 (20MHz BW 802.11ax – Full Tones (UNII Band 3) – Ch. 149)

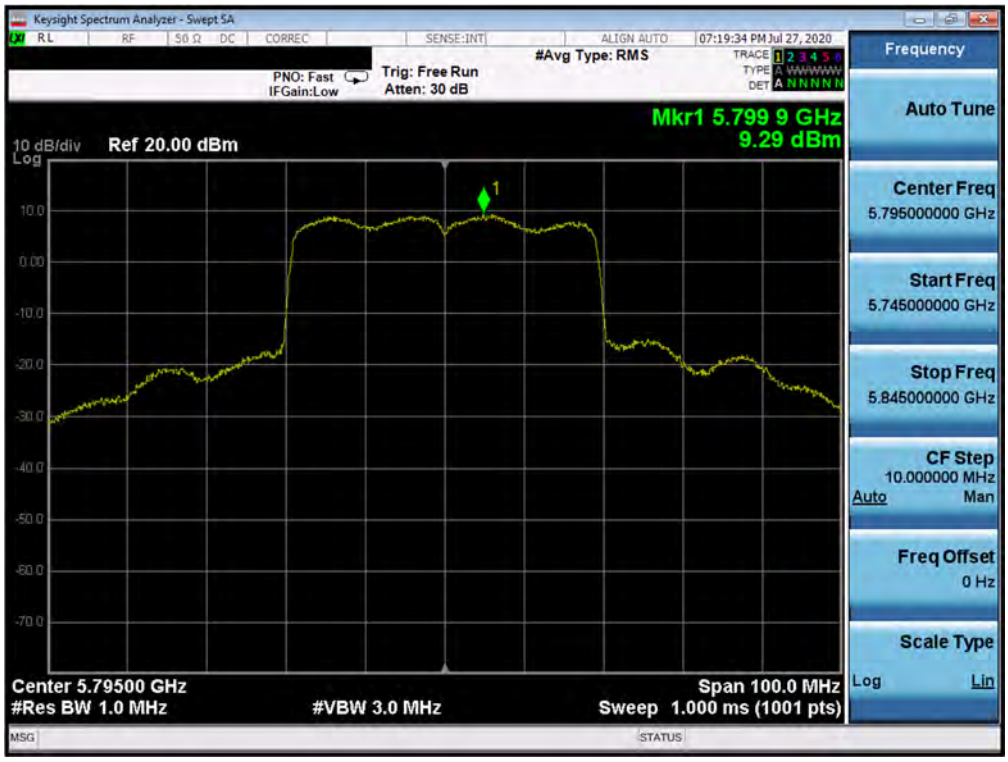


Plot 7-214. Power Spectral Density Plot MIMO ANT6 (20MHz BW 802.11ax – Full Tones (UNII Band 3) – Ch. 157)

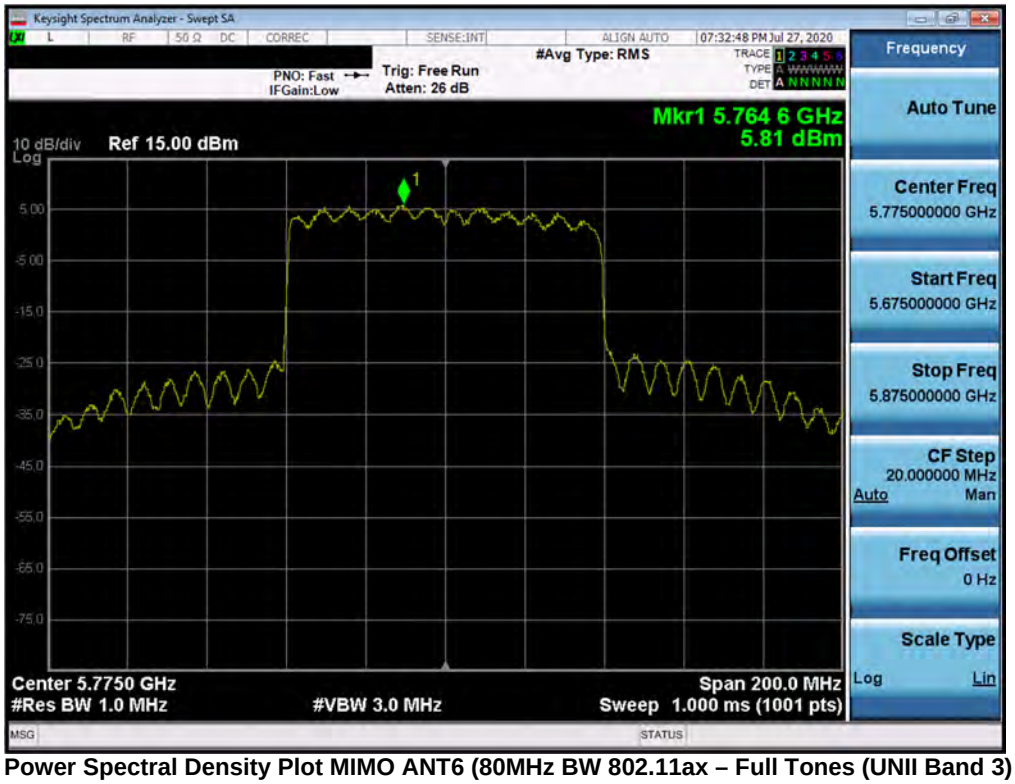
Plot 7-215. Power Spectral Density Plot MIMO ANT6 (20 MHz BW 802.11ax – Full Tones (UNII Band 3) – Ch. 165)



Plot 7-216. Power Spectral Density Plot MIMO ANT6 (40MHz BW 802.11ax – Full Tones (UNII Band 3) – Ch. 151)

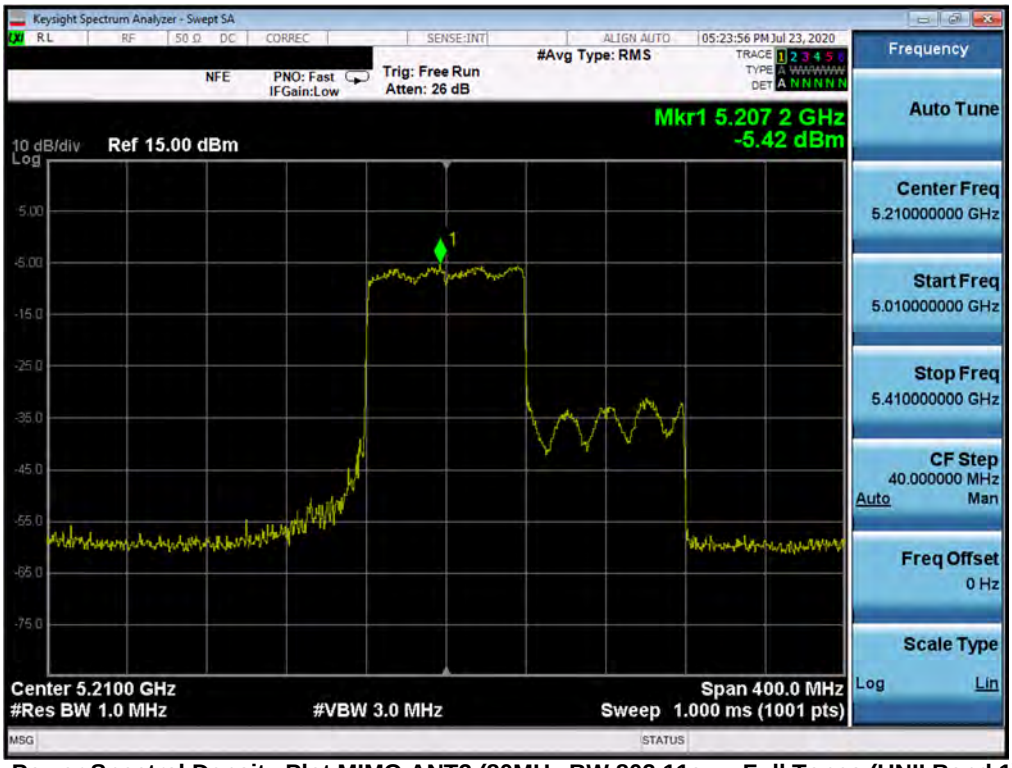


Plot 7-217. Power Spectral Density Plot MIMO ANT6 (40MHz BW 802.11ax – Full Tones (UNII Band 3) – Ch. 159)



Plot 7-218. Power Spectral Density Plot MIMO ANT6 (80MHz BW 802.11ax – Full Tones (UNII Band 3) – Ch. 155)

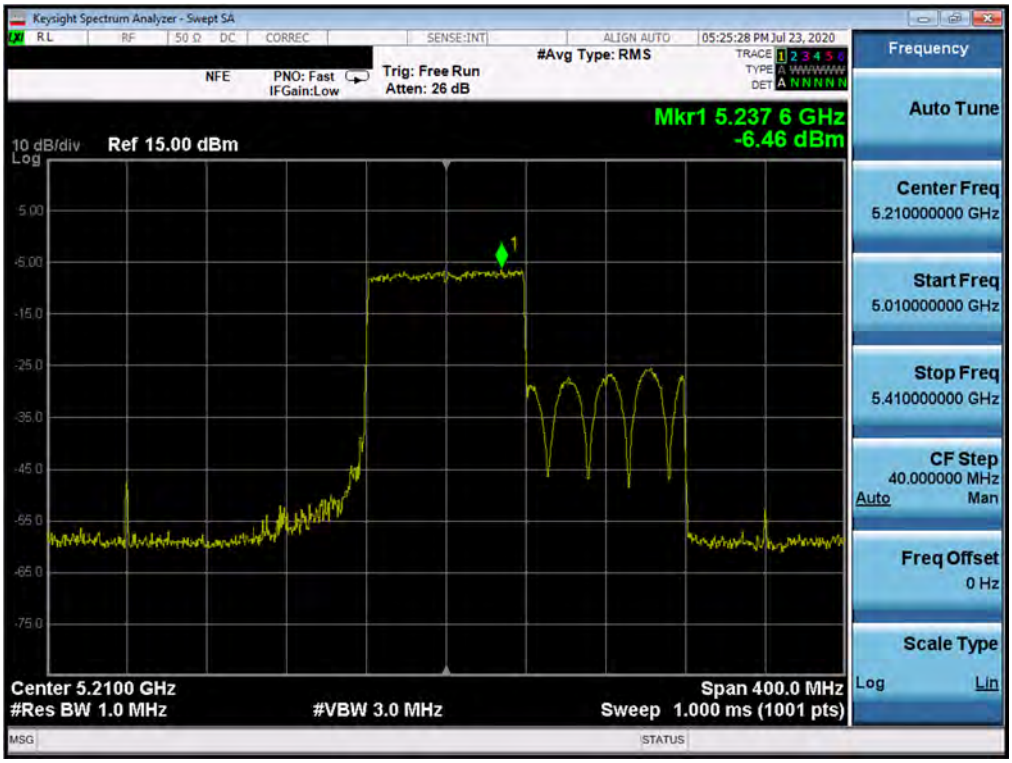
MIMO Antenna-3 Power Spectral Density Measurements 80+80MHz (Full Tones)



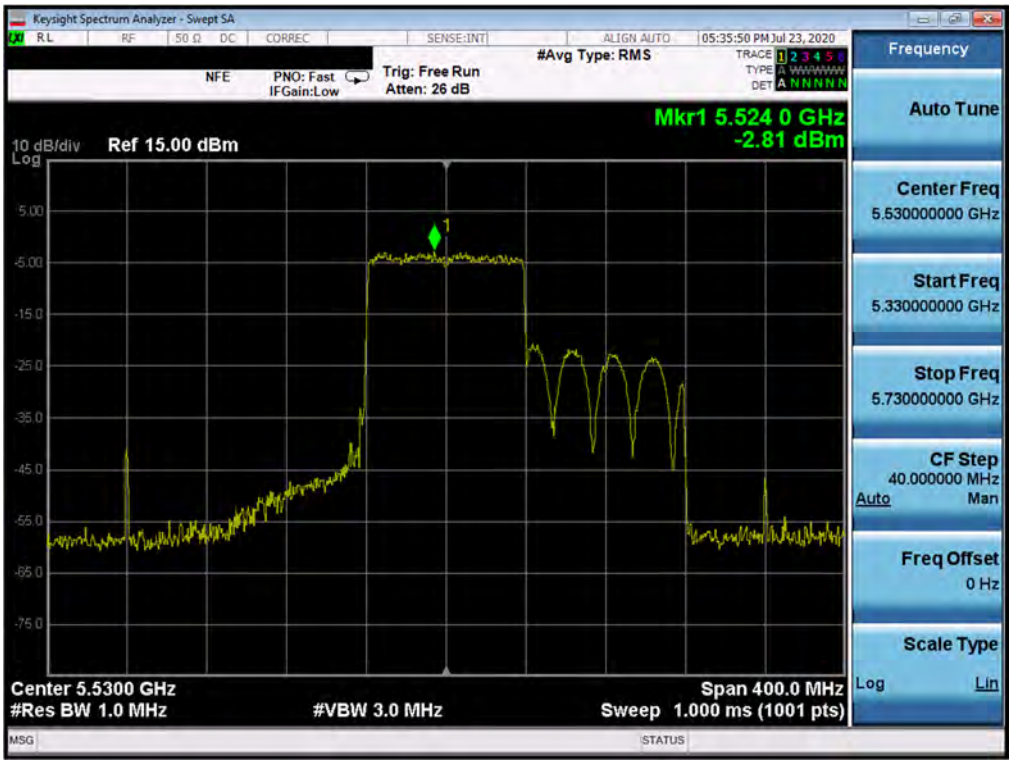
Plot 7-219. Power Spectral Density Plot MIMO ANT3 (80MHz BW 802.11ax – Full Tones (UNII Band 1) – Ch. 42)

Plot 7-220. Power Spectral Density Plot MIMO ANT3 (80MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 106)

MIMO Antenna-4 Power Spectral Density Measurements 80+80MHz (Full Tones)

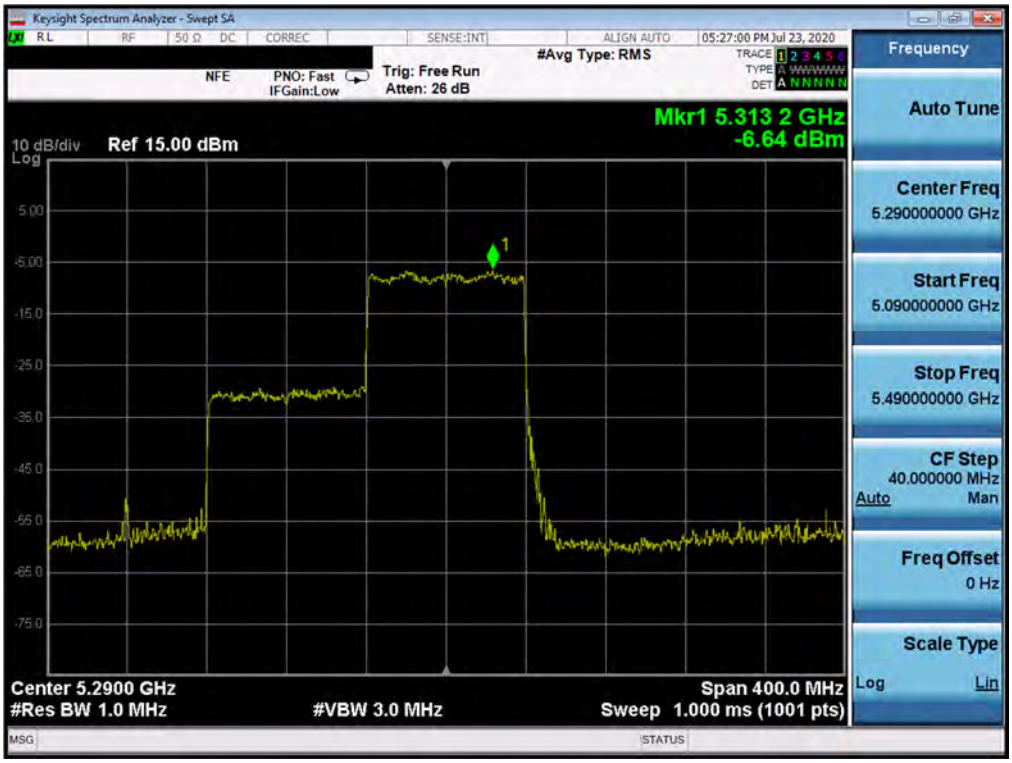


Plot 7-221. Power Spectral Density Plot MIMO ANT4 (80MHz BW 802.11ax – Full Tones (UNII Band 1) – Ch. 42)

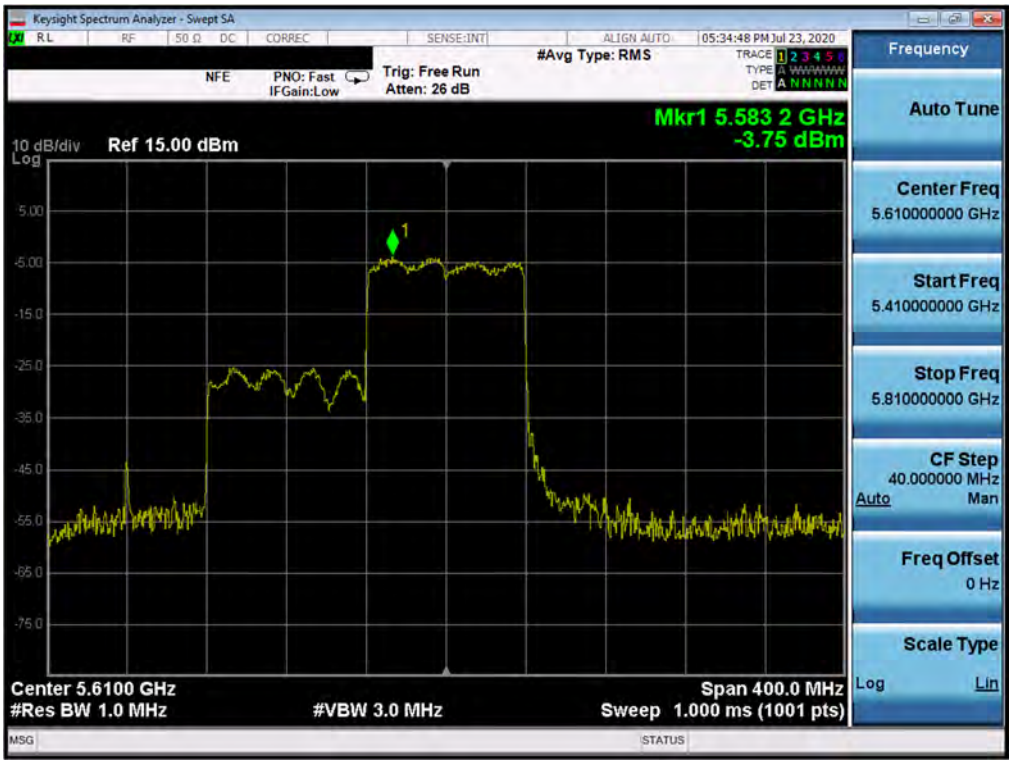


Plot 7-222. Power Spectral Density Plot MIMO ANT4 (80MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 106)

MIMO Antenna-5 Power Spectral Density Measurements 80+80MHz (Full Tones)

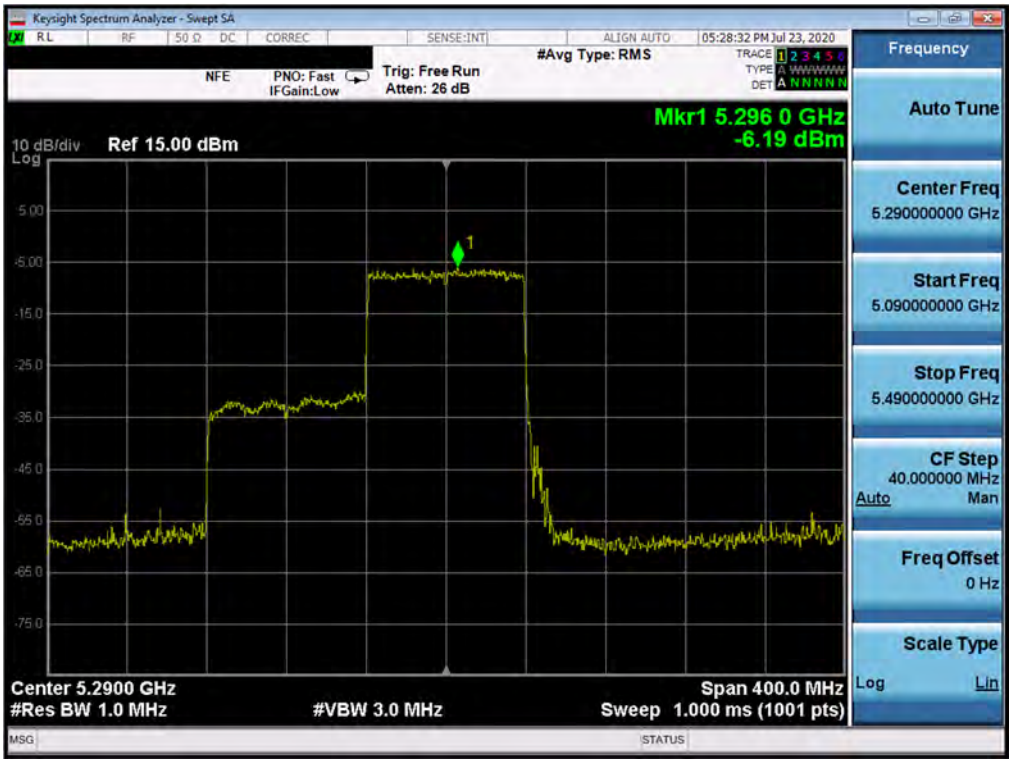


Plot 7-223. Power Spectral Density Plot MIMO ANT5 (80MHz BW 802.11ax – Full Tones (UNII Band 2A) – Ch. 58)

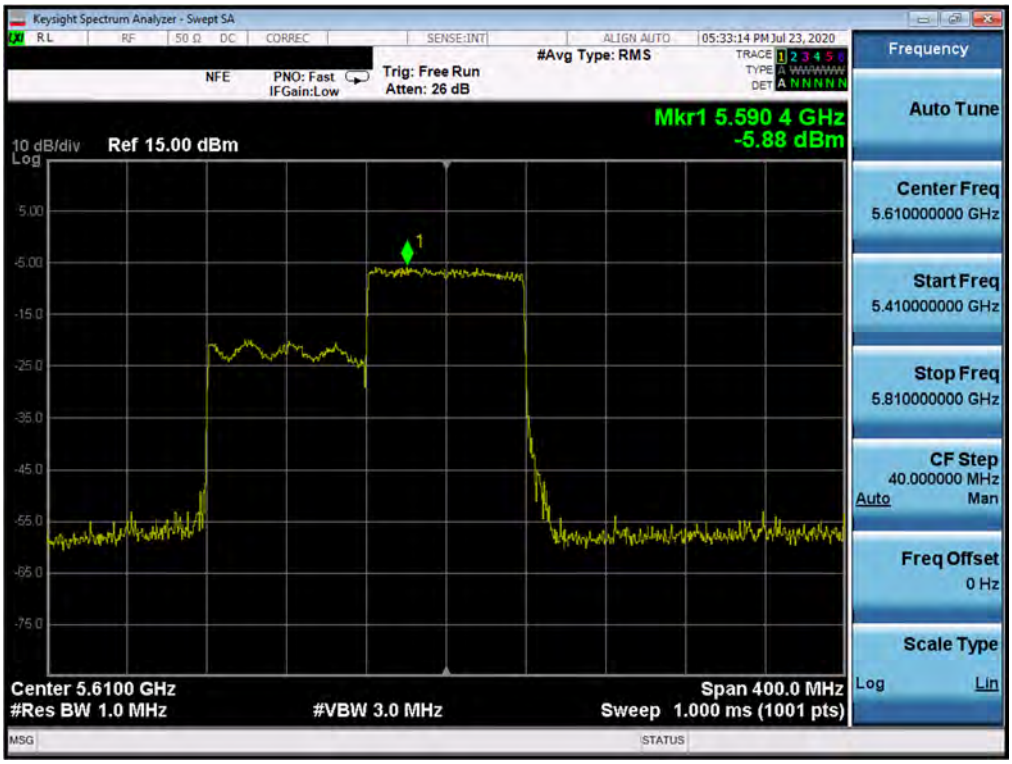


Plot 7-224. Power Spectral Density Plot MIMO ANT5 (80MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 122)

MIMO Antenna-6 Power Spectral Density Measurements 80+80MHz (Full Tones)



Plot 7-225. Power Spectral Density Plot MIMO ANT6 (80MHz BW 802.11ax – Full Tones (UNII Band 2A) – Ch. 58)



Plot 7-226. Power Spectral Density Plot MIMO ANT6 (80MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 122)

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. 26 Tones, 52 Tones, 106 Tones, 242 Tones, 484 Tones and 996 Tones), 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 7-18 ***per Section 15.209 and RSS-Gen (8.9).***

Frequency	Field Strength [μV/m]	Measured Distance [Meters]
Above 960.0 MHz	500	3

Table 7-18. 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 ≥ 2 x span/RBW)
6. Averaging type = power (RMS)
7. Sweep time = auto couple
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.

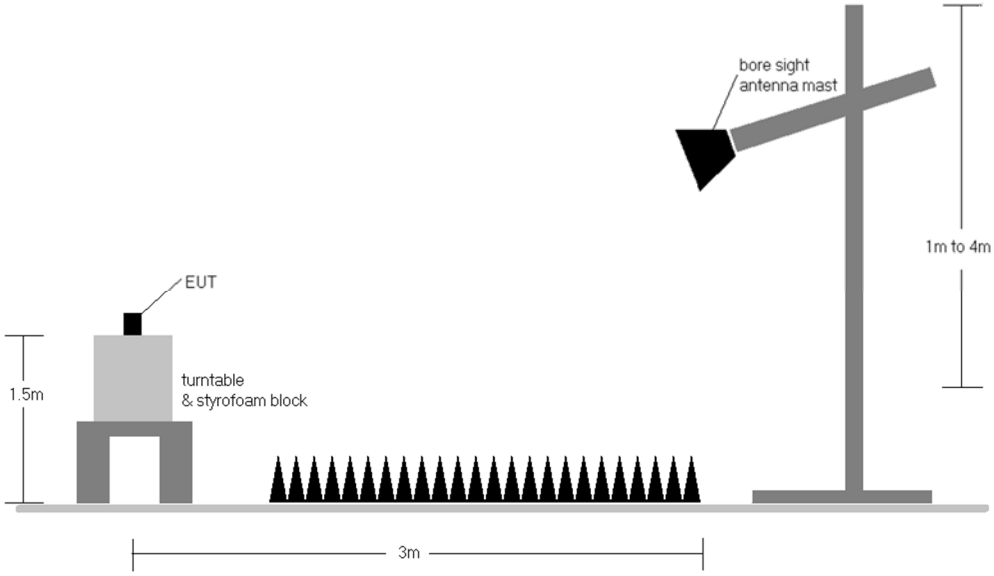


Figure 7-5. Test Instrument & Measurement Setup

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 7-18.
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 7-18. 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 while powered by an 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. The wide spectrum spurious emissions plots shown on the following pages are used only for the purpose of emission identification. Any emissions found to be within 20dB of the limit are fully investigated and the results are shown in this section.
8. The "-" shown in the following RSE tables are used to denote a noise floor measurement.
9. For radiated measurements, emissions were investigated for all of the full tone configuration.

Sample Calculations

Determining Spurious Emissions Levels

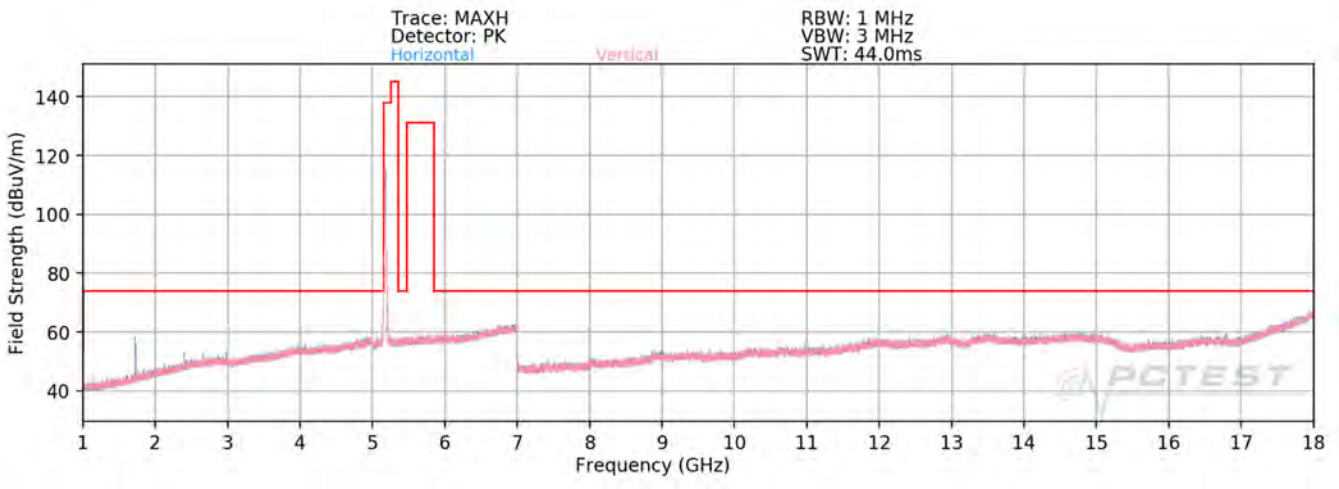
- Field Strength Level $_{[dB\mu V/m]}$ = Analyzer Level $_{[dBm]}$ + 107 + AFCL $_{[dB/m]}$
- AFCL $_{[dB/m]}$ = Antenna Factor $_{[dB/m]}$ + Cable Loss $_{[dB]}$
- Margin $_{[dB]}$ = Field Strength Level $_{[dB\mu V/m]}$ – Limit $_{[dB\mu V/m]}$

Radiated Band Edge Measurement Offset

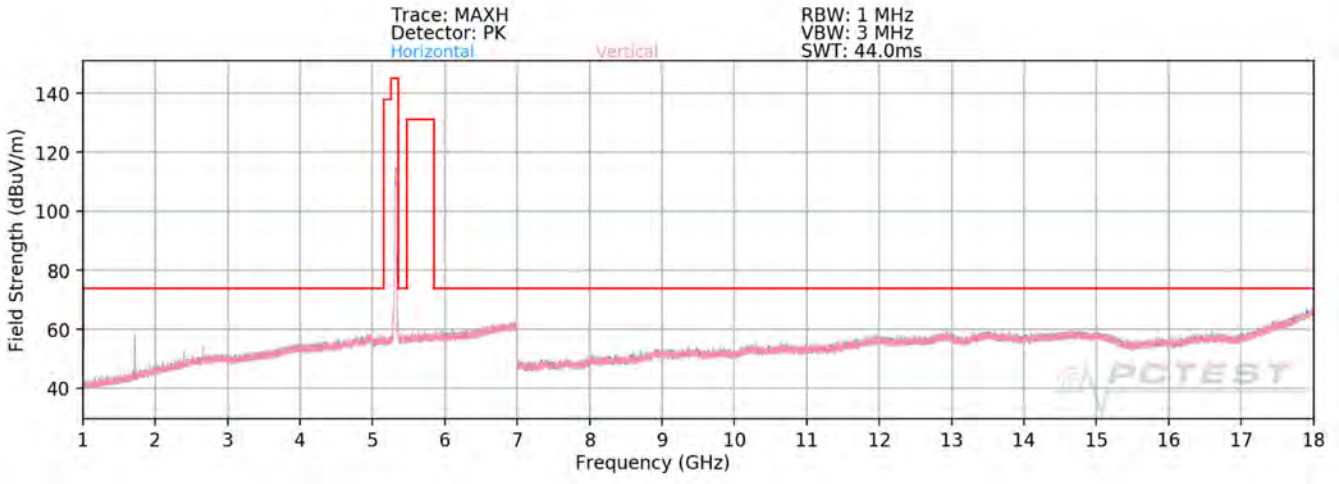
- The amplitude offset shown in the radiated restricted band edge plots in Section Radiated Spurious Emission Measurements – Above 1GHz was calculated using the formula:
  Offset (dB) = (Antenna Factor + Cable Loss + Attenuator) – Preamplifier Gain

7.6.1 MIMO Radiated Spurious Emission Measurements

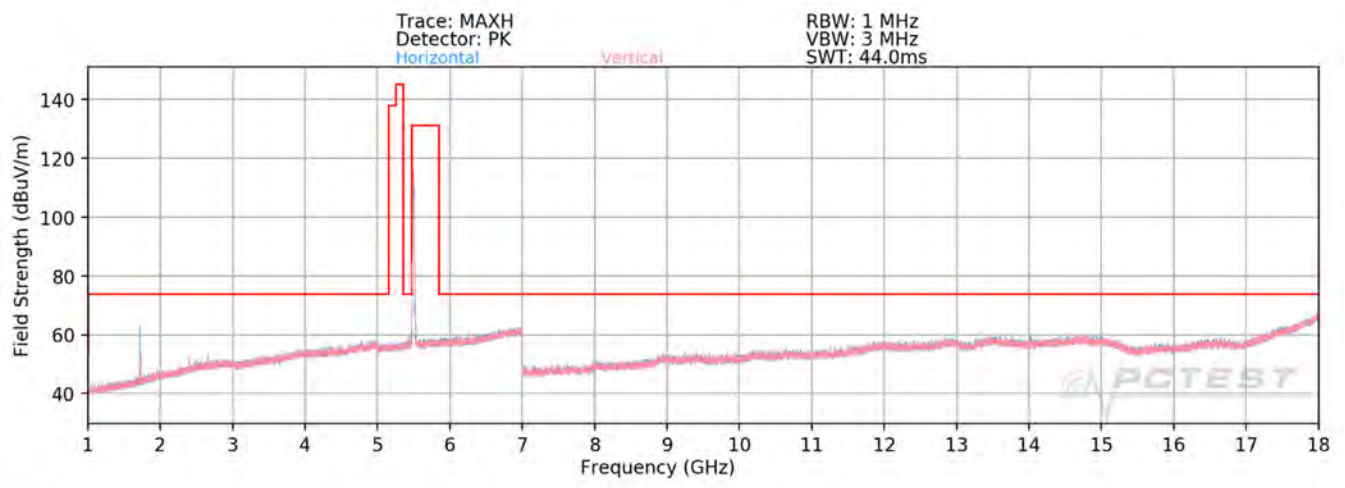
242 Tones



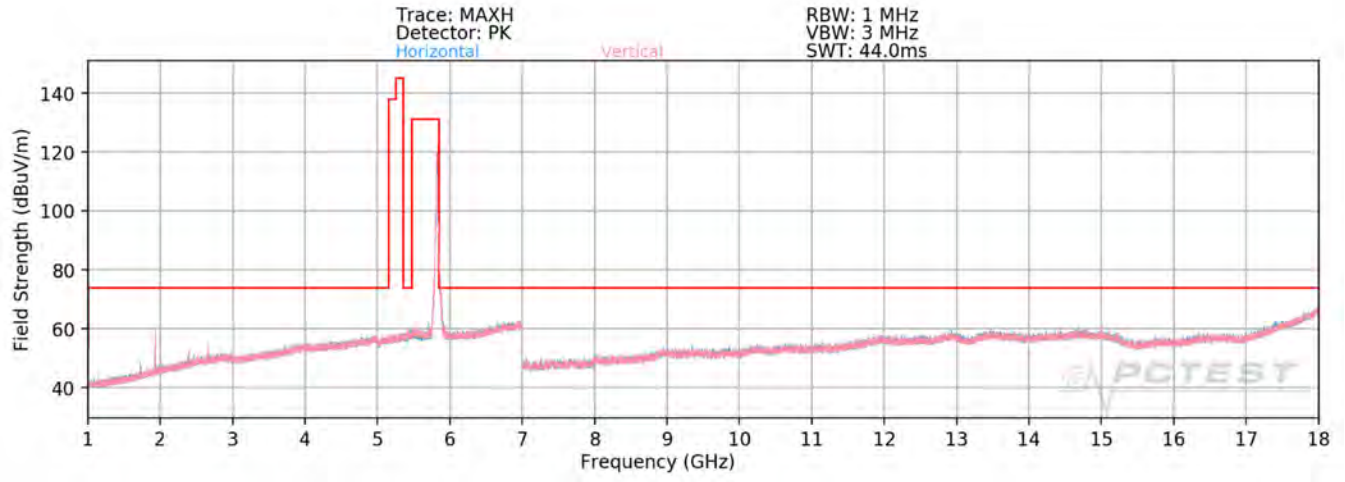
Plot 7-227. Radiated Spurious Plot above 1GHz MIMO (802.11ax – U1 Ch. 40 – 242 Tones)



Plot 7-228. Radiated Spurious Plot above 1GHz MIMO (802.11ax – U2A Ch. 56 – 242 Tones)

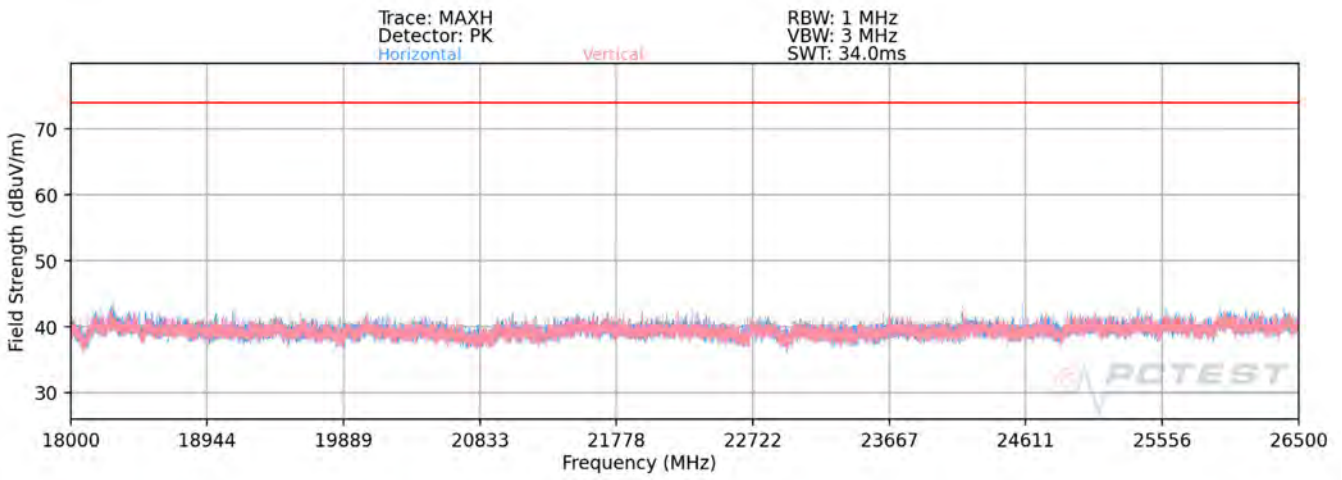


Plot 7-229. Radiated Spurious Plot above 1GHz MIMO (802.11ax – U2C Ch. 120 – 242 Tones)

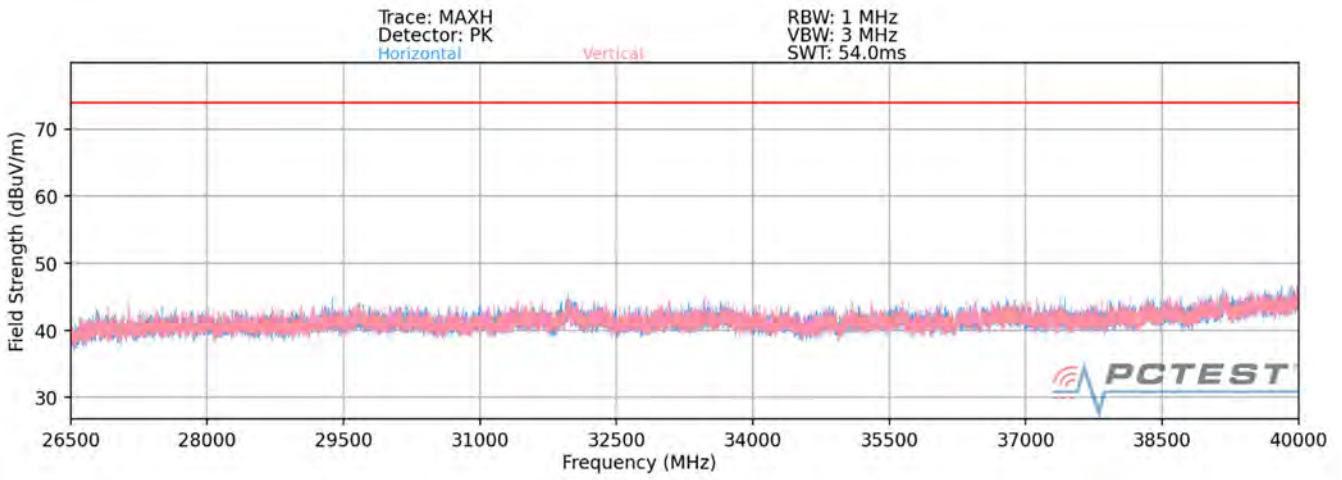


Plot 7-230. Radiated Spurious Plot above 1GHz MIMO (802.11ax – U3 Ch. 157 – 242 Tones)

MIMO Radiated Spurious Emissions Measurements (Above 18GHz)



Plot 7-231. Radiated Spurious Plot 18GHz - 26.5GHz MIMO (802.11ax – 242 Tones)



Plot 7-232. Radiated Spurious Plot 26.5GHz - 40GHz MIMO (802.11ax – 242 Tones)

MIMO Radiated Spurious Emission Measurements (242 Tones)

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

Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	61
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	137	231	-68.51	13.05	0.00	51.54	68.20	-16.66
*	15540.00	Average	V	-	-	-82.18	15.13	0.00	39.95	53.98	-14.03
*	15540.00	Peak	V	-	-	-71.65	15.13	0.00	50.48	73.98	-23.50
*	20720.00	Average	V	-	-	-63.88	-3.74	-9.54	29.84	53.98	-24.14
*	20720.00	Peak	V	-	-	-51.83	-3.74	-9.54	41.89	73.98	-32.09
	25900.00	Peak	V	-	-	-51.59	-3.03	-9.54	42.84	68.20	-25.36

Table 7-19. Radiated Measurements MIMO (242 Tones)

Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	61
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	V	142	227	-67.55	12.63	0.00	52.08	68.20	-16.12
*	15600.00	Average	V	-	-	-82.24	15.53	0.00	40.29	53.98	-13.69
*	15600.00	Peak	V	-	-	-70.77	15.53	0.00	51.76	73.98	-22.22
*	20800.00	Average	V	-	-	-63.78	-3.76	-9.54	29.92	53.98	-24.06
*	20800.00	Peak	V	-	-	-51.98	-3.76	-9.54	41.72	73.98	-32.26
	26000.00	Peak	V	-	-	-50.65	-2.81	-9.54	44.00	68.20	-24.20

Table 7-20. Radiated Measurements MIMO (242 Tones)

Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	61
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	V	141	226	-68.09	12.97	0.00	51.88	68.20	-16.32
*	15720.00	Average	V	-	-	-82.37	15.64	0.00	40.27	53.98	-13.71
*	15720.00	Peak	V	-	-	-72.10	15.64	0.00	50.54	73.98	-23.44
*	20960.00	Average	V	-	-	-63.40	-3.71	-9.54	30.35	53.98	-23.63
*	20960.00	Peak	V	-	-	-52.16	-3.71	-9.54	41.59	73.98	-32.39
	26200.00	Peak	V	-	-	-51.07	-2.65	-9.54	43.73	68.20	-24.47

Table 7-21. Radiated Measurements MIMO (242 Tones)

Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	61
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	136	240	-67.95	12.67	0.00	51.72	68.20	-16.48
*	15780.00	Average	V	-	-	-82.24	15.84	0.00	40.60	53.98	-13.38
*	15780.00	Peak	V	-	-	-71.16	15.84	0.00	51.68	73.98	-22.30
*	21040.00	Average	V	-	-	-63.33	-3.87	-9.54	30.26	53.98	-23.72
*	21040.00	Peak	V	-	-	-52.29	-3.87	-9.54	41.30	73.98	-32.68
	26300.00	Peak	V	-	-	-50.34	-2.82	-9.54	44.30	68.20	-23.90

Table 7-22. Radiated Measurements MIMO (242 Tones)

Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	61
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	129	240	-68.05	13.03	0.00	51.98	68.20	-16.22
*	15840.00	Average	V	-	-	-82.50	16.04	0.00	40.54	53.98	-13.44
*	15840.00	Peak	V	-	-	-71.52	16.04	0.00	51.52	73.98	-22.46
*	21120.00	Average	V	-	-	-63.63	-3.66	-9.54	30.17	53.98	-23.81
*	21120.00	Peak	V	-	-	-52.14	-3.66	-9.54	41.66	73.98	-32.32
	26400.00	Peak	V	-	-	-50.92	-2.63	-9.54	43.91	68.20	-24.29

Table 7-23. Radiated Measurements MIMO (242 Tones)

Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	61
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	131	242	-71.50	13.25	0.00	48.75	53.98	-5.23
*	10640.00	Peak	V	131	242	-66.76	13.25	0.00	53.49	73.98	-20.49
*	15960.00	Average	V	-	-	-82.24	15.61	0.00	40.37	53.98	-13.61
*	15960.00	Peak	V	-	-	-71.64	15.61	0.00	50.97	73.98	-23.01
*	21280.00	Average	V	-	-	-63.59	-3.58	-9.54	30.28	53.98	-23.70
*	21280.00	Peak	V	-	-	-51.73	-3.58	-9.54	42.14	73.98	-31.84
	26600.00	Peak	V	-	-	-51.65	-2.25	-9.54	43.56	68.20	-24.64

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

Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	61
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	146	237	-69.49	13.39	0.00	50.90	53.98	-3.08
*	11000.00	Peak	V	146	237	-65.36	13.39	0.00	55.03	73.98	-18.95
	16500.00	Peak	V	-	-	-71.36	15.45	0.00	51.09	68.20	-17.11
	22000.00	Peak	V	-	-	-51.76	-3.43	-9.54	42.27	68.20	-25.93
	27500.00	Peak	V	-	-	-50.63	-2.72	-9.54	44.11	68.20	-24.09

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

Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	61
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	137	240	-70.05	13.56	0.00	50.51	53.98	-3.47
*	11200.00	Peak	V	137	240	-66.29	13.56	0.00	54.27	73.98	-19.71
	16800.00	Peak	V	-	-	-71.32	16.45	0.00	52.13	68.20	-16.07
*	22400.00	Average	V	-	-	-63.59	-3.34	-9.54	30.53	53.98	-23.45
*	22400.00	Peak	V	-	-	-51.60	-3.34	-9.54	42.52	73.98	-31.46
	28000.00	Peak	V	-	-	-50.49	-2.26	-9.54	44.70	68.20	-23.50

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

Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	61
Distance of Measurements:	1 & 3 Meters
Operating Frequency:	5700MHz
Channel:	140

	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	139	238	-74.48	14.58	0.00	47.10	53.98	-6.88
*	11440.00	Peak	V	139	238	-69.22	14.58	0.00	52.36	73.98	-21.62
	17160.00	Peak	V	-	-	-73.05	17.92	0.00	51.87	68.20	-16.33
*	22880.00	Average	V	-	-	-62.88	-3.38	-9.54	31.20	53.98	-22.78
*	22880.00	Peak	V	-	-	-51.21	-3.38	-9.54	42.87	73.98	-31.11
	28600.00	Peak	V	-	-	-51.01	-2.02	-9.54	44.43	68.20	-23.77

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

Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	61
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	139	238	-74.48	14.58	0.00	47.10	53.98	-6.88
*	11490.00	Peak	V	139	238	-69.22	14.58	0.00	52.36	73.98	-21.62
	17235.00	Peak	V	-	-	-73.05	17.92	0.00	51.87	68.20	-16.33
*	22980.00	Average	V	-	-	-63.05	-3.46	-9.54	30.95	53.98	-23.03
*	22980.00	Peak	V	-	-	-51.11	-3.46	-9.54	42.89	73.98	-31.09
	28725.00	Peak	V	-	-	-51.15	-2.02	-9.54	44.28	68.20	-23.92

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

Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	61
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	159	127	-74.23	14.11	0.00	46.88	53.98	-7.10
*	11570.00	Peak	V	159	127	-66.14	14.11	0.00	54.97	73.98	-19.01
	17355.00	Peak	V	-	-	-81.02	19.83	0.00	45.81	68.20	-22.39
	23140.00	Peak	V	-	-	-51.34	-3.47	-9.54	42.65	68.20	-25.55
	28925.00	Peak	V	-	-	-51.38	-2.31	-9.54	43.77	68.20	-24.43

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

Worst Case Mode:	802.11ax (20MHz BW)
Worst Case Transfer Rate:	MCS0
RU Index:	61
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	163	160	-74.64	14.20	0.00	46.56	53.98	-7.42
*	11650.00	Peak	V	163	160	-68.25	14.20	0.00	52.95	73.98	-21.03
	17475.00	Peak	V	-	-	-71.85	21.13	0.00	56.28	68.20	-11.92
	23300.00	Peak	V	-	-	-51.71	-3.52	-9.54	42.23	68.20	-25.97
	29125.00	Peak	V	-	-	-51.51	-1.91	-9.54	44.04	68.20	-24.16

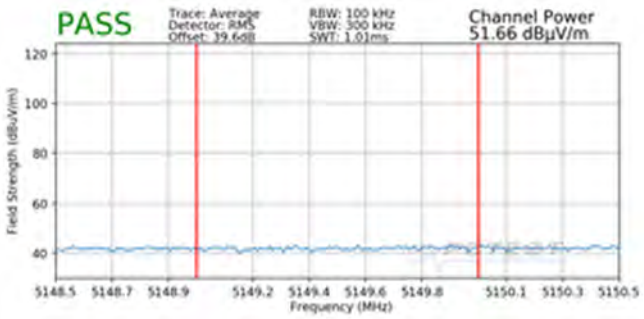
Table 7-30. Radiated Measurements MIMO (242 Tones)

7.6.2 MIMO Radiated Band Edge Measurements (20MHz BW)

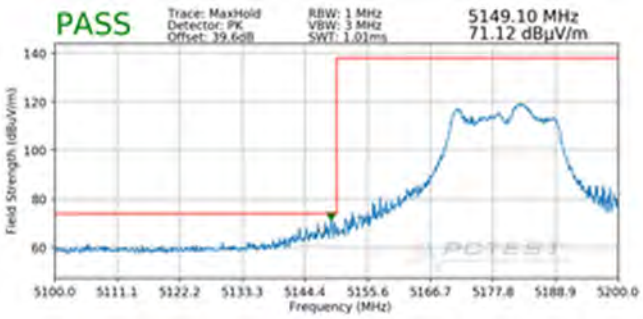
§15.407(b.1)(b.2) §15.205 §15.209; RSS-Gen [8.9]

242 Tones

Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
RU Index:	61
Distance of Measurements:	3 Meters
Operating Frequency:	5180MHz
Channel:	36

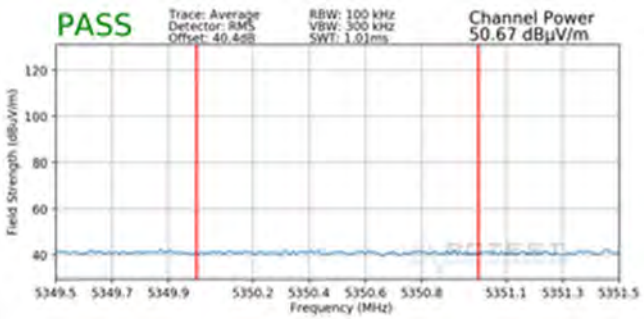


Plot 7-233. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 1 – 242 Tones)

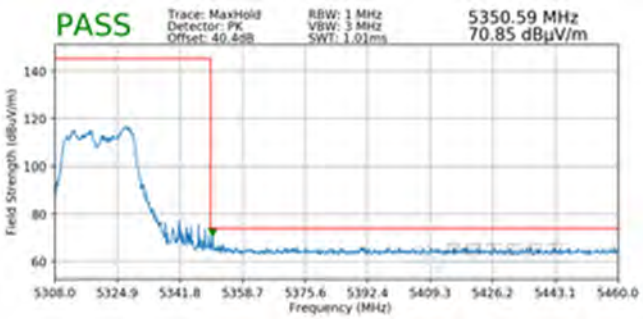


Plot 7-234. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 1 – 242 Tones)

Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
RU Index:	61
Distance of Measurements:	3 Meters
Operating Frequency:	5320MHz
Channel:	64

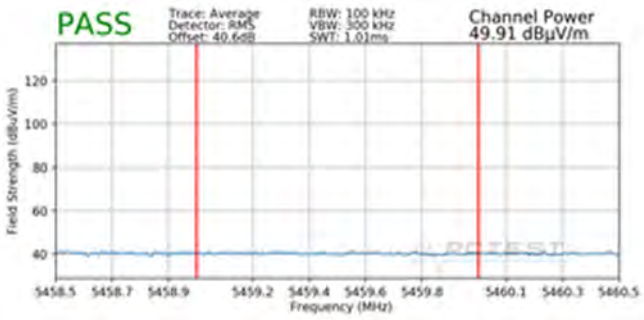


Plot 7-235. Radiated Upper Band Edge Plot MIMO (Average – UNII Band 2A – 242 Tones)

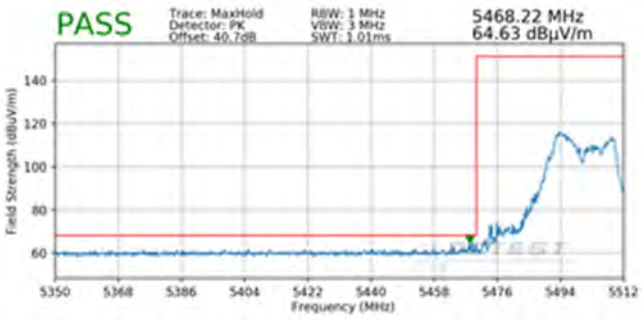


Plot 7-236. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 2A – 242 Tones)

Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
RU Index:	61
Distance of Measurements:	3 Meters
Operating Frequency:	5500MHz
Channel:	100

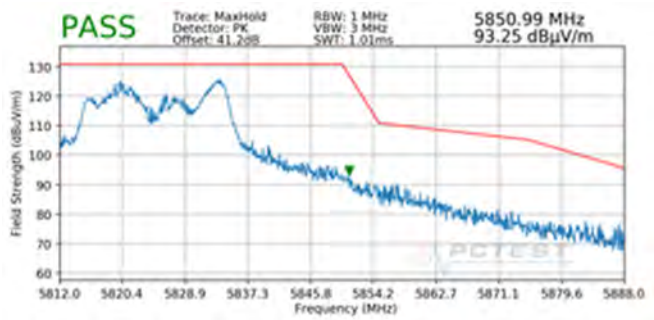


Plot 7-237. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 2C – 242 Tones)



Plot 7-238. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 2C – 242 Tones)

Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
RU Index:	61
Distance of Measurements:	3 Meters
Operating Frequency:	5825MHz
Channel:	165



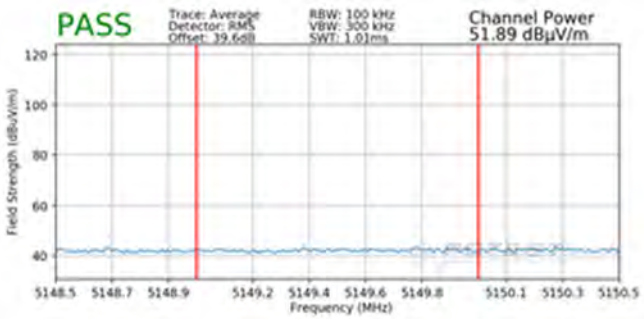
Plot 7-239. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 3 – 242 Tones)

7.6.3 MIMO Radiated Band Edge Measurements (40MHz BW)

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

484 Tones

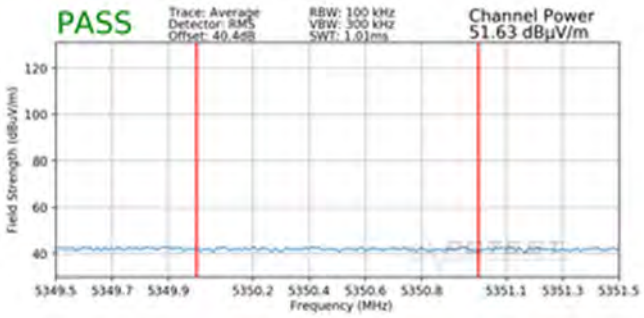
Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
RU Index:	65
Distance of Measurements:	3 Meters
Operating Frequency:	5190MHz
Channel:	38



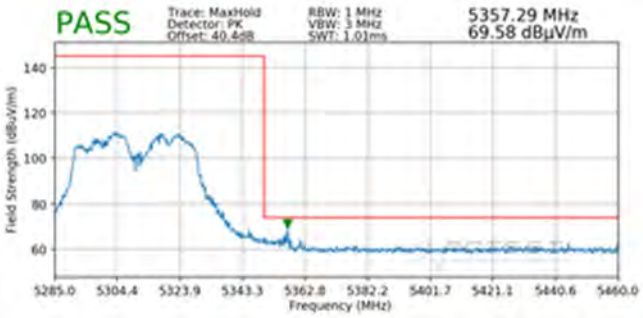
Plot 7-240. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 1 – 484 Tones)

Plot 7-241. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 1 – 484 Tones)

Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
RU Index:	65
Distance of Measurements:	3 Meters
Operating Frequency:	5310MHz
Channel:	62

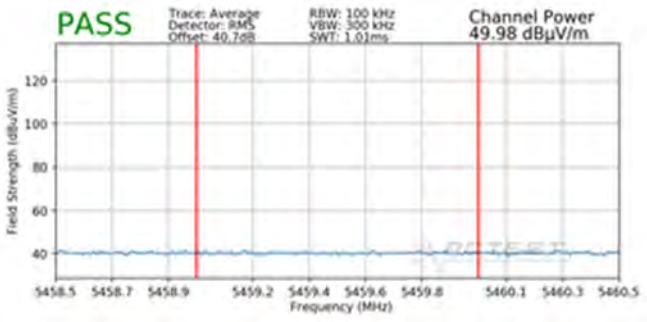


Plot 7-242. Radiated Upper Band Edge Plot MIMO (Average – UNII Band 2A – 484 Tones)

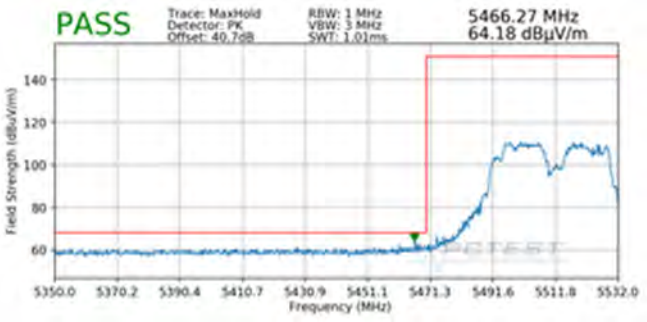


Plot 7-243. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 2A – 484 Tones)

Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
RU Index:	65
Distance of Measurements:	3 Meters
Operating Frequency:	5510MHz
Channel:	102

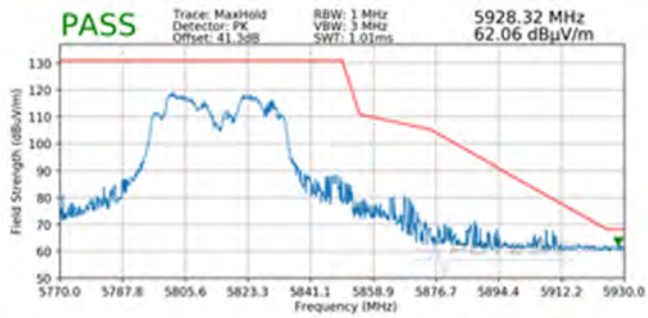


Plot 7-244. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 2C – 484 Tones)



Plot 7-245. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 2C – 484 Tones)

Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
RU Index:	65
Distance of Measurements:	3 Meters
Operating Frequency:	5795MHz
Channel:	159



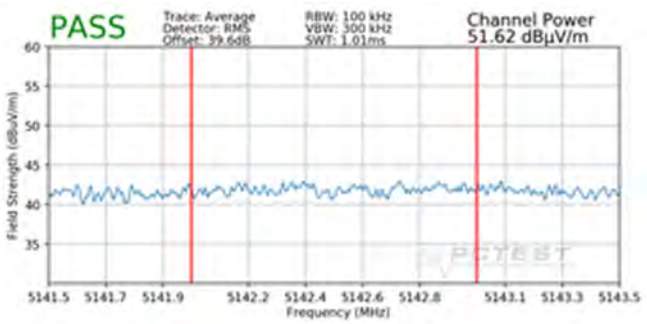
Plot 7-246. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 3 – 484 Tones)

7.6.4 MIMO Radiated Band Edge Measurements (80MHz BW)

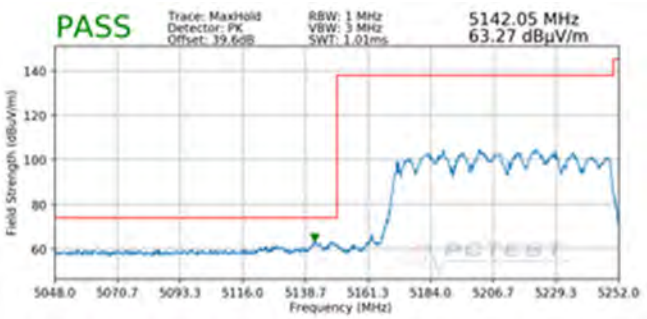
§15.407(b.1)(b.2) §15.205 §15.209; RSS-Gen [8.9]

996 Tones

Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
RU Index:	67
Distance of Measurements:	3 Meters
Operating Frequency:	5210MHz
Channel:	42

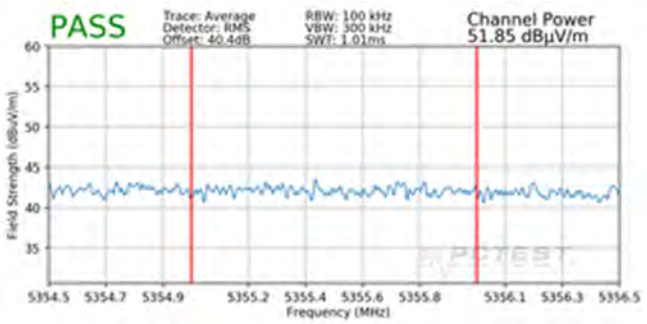


Plot 7-247. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 1 – 996 Tones)

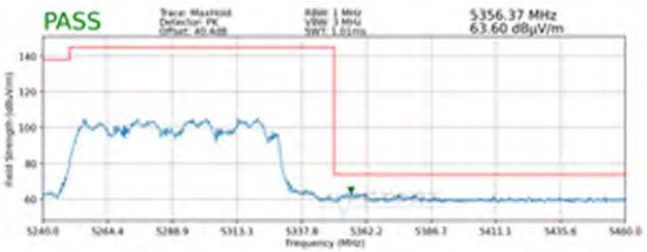


Plot 7-248. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 1 – 996 Tones)

Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
RU Index:	67
Distance of Measurements:	3 Meters
Operating Frequency:	5290MHz
Channel:	58

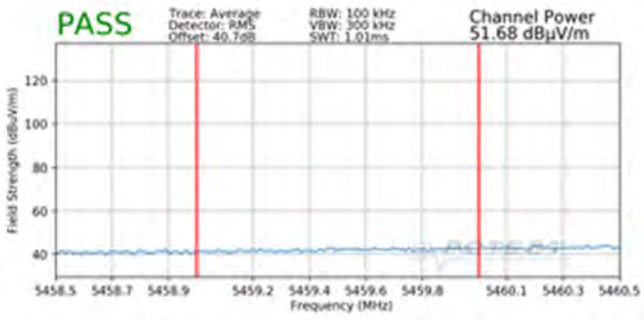


Plot 7-249. Radiated Upper Band Edge Plot MIMO (Average – UNII Band 2A – 996 Tones)

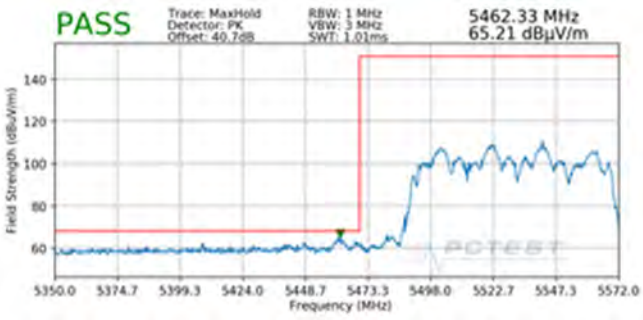


Plot 7-250. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 2A – 996 Tones)

Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
RU Index:	67
Distance of Measurements:	3 Meters
Operating Frequency:	5530MHz
Channel:	106

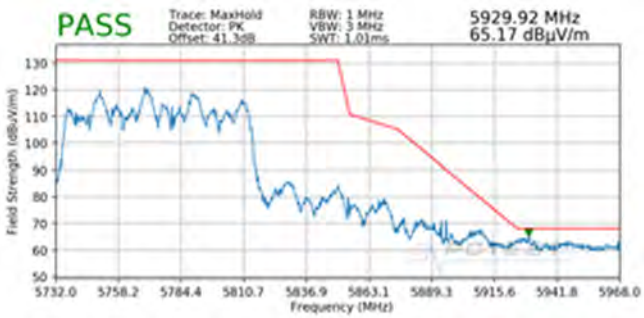


Plot 7-251. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 2C – 996 Tones)



Plot 7-252. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 2C – 996 Tones)

Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
RU Index:	67
Distance of Measurements:	3 Meters
Operating Frequency:	5775MHz
Channel:	155



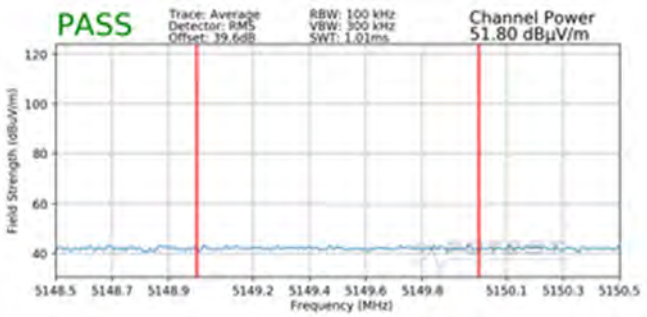
Plot 7-253. Radiated Upper Band Edge Plot MIMO (Peak – UNII Band 3 – 996 Tones)

7.6.5 MIMO Radiated Band Edge Measurements (80+80MHz BW)

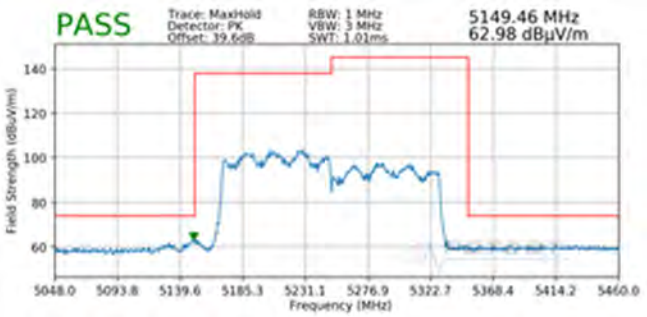
§15.407(b.1)(b.2) §15.205 §15.209; RSS-Gen [8.9]

996 Tones

Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
RU Index:	67
Distance of Measurements:	3 Meters
Operating Frequency:	5210MHz
Channel:	42+58

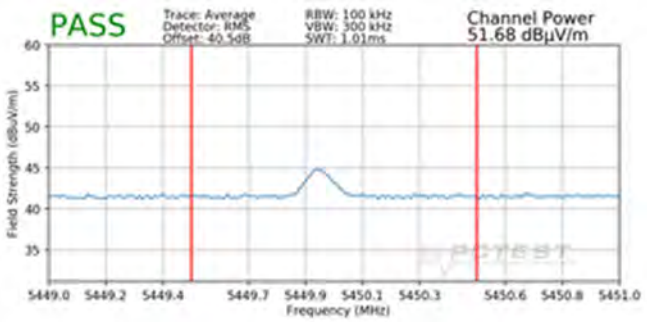


Plot 7-254. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 1 – 996 Tones)

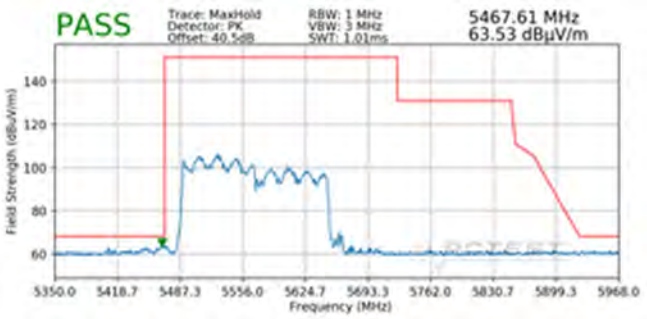


Plot 7-255. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 1 – 996 Tones)

Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
RU Index:	67
Distance of Measurements:	3 Meters
Operating Frequency:	5530MHz
Channel:	106+122



Plot 7-256. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 2C – 996 Tones)



Plot 7-257. Radiated Lower Band Edge Plot MIMO (Peak – UNII Band 2C – 996 Tones)

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 7-31 per Section 15.209 and RSS-Gen (8.9).

Frequency	Field Strength [µV/m]	Measured Distance [Meters]
0.009 – 0.490 MHz	2400/F (kHz)	300
0.490 – 1.705 MHz	24000/F (kHz)	30
1.705 – 30.00 MHz	30	30
30.00 – 88.00 MHz	100	3
88.00 – 216.0 MHz	150	3
216.0 – 960.0 MHz	200	3
Above 960.0 MHz	500	3

Table 7-31. 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

Test Setup

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

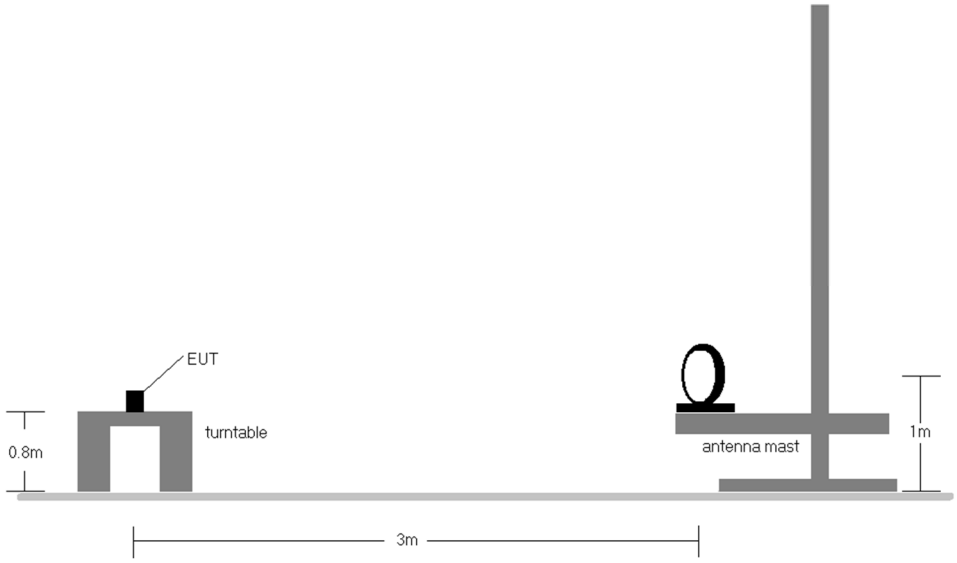


Figure 7-6. Radiated Test Setup < 30MHz

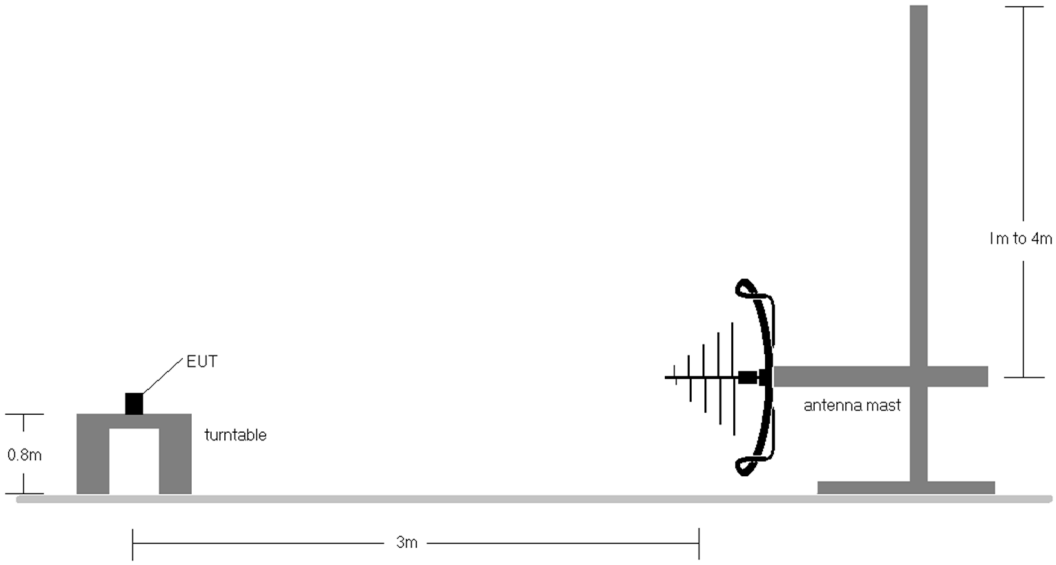


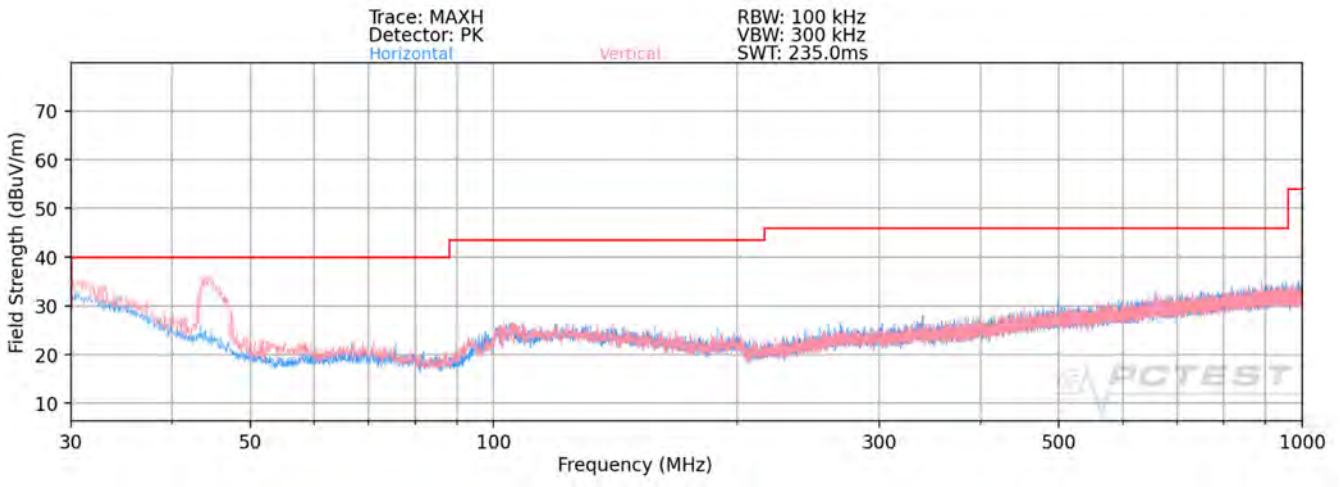
Figure 7-7. Radiated Test Setup < 1GHz

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 7-31.
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 while powered by an DC power source.
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.

MIMO Radiated Spurious Emissions Measurements (Below 1GHz)

§15.209; RSS-Gen [8.9]



Plot 7-258. Radiated Spurious Plot below 1GHz MIMO (802.11ax – 242 Tones – U2C Ch. 120)

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]
34.78	Quasi-Peak	V	112	342	-54.45	-17.13	35.42	40.00	-4.58
39.50	Quasi-Peak	V	101	298	-69.34	-15.28	22.38	40.00	-17.62
53.73	Quasi-Peak	V	100	101	-57.96	-13.83	35.21	40.00	-4.79
256.19	Quasi-Peak	V	108	74	-72.91	-14.35	19.74	46.02	-26.28
384.00	Quasi-Peak	V	130	19	-74.70	-11.47	20.83	46.02	-25.19
783.00	Quasi-Peak	H	134	140	-64.24	-4.94	37.82	46.02	-8.20

Table 7-32. Radiated Measurements below 1GHz

8.0 CONCLUSION

The data collected relate only the item(s) tested and show that the **Samsung Indoor Customer Premises Equipment (CPE) FCC ID: A3LSMH204V** is in compliance with Part 15 Subpart E (15.407) of the FCC Rules.