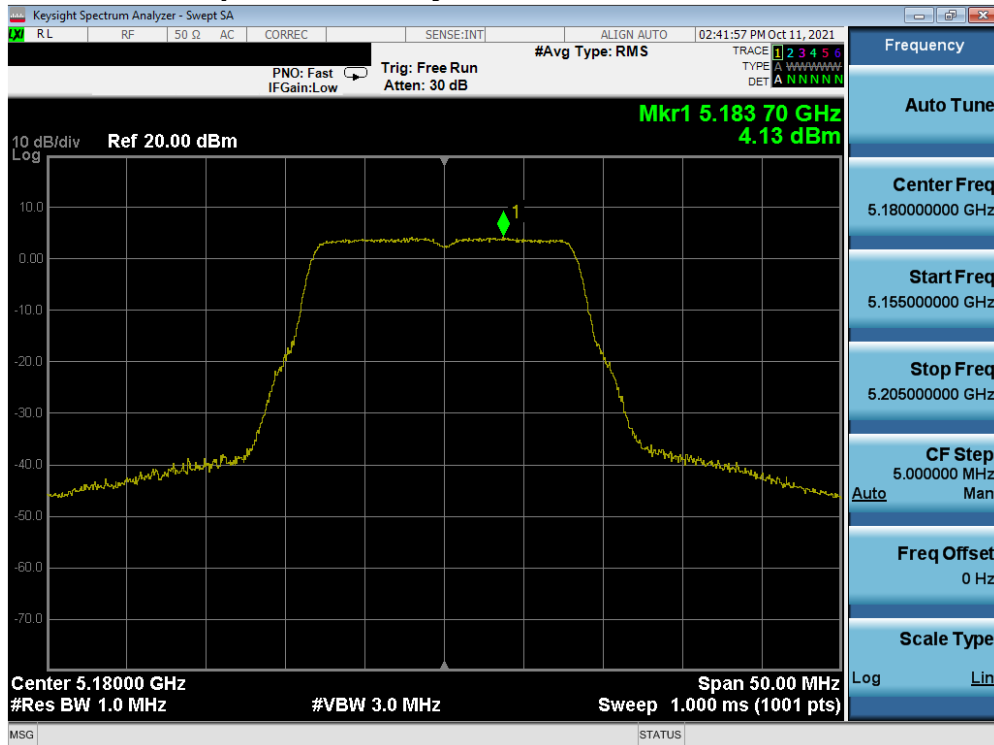




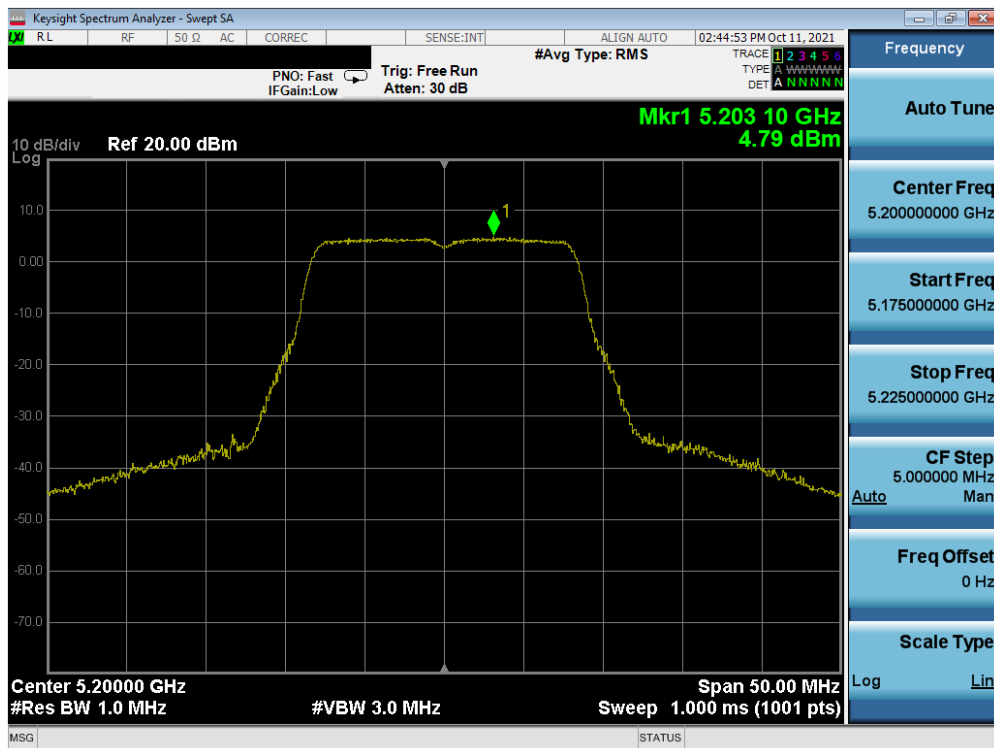
Plot 7-261. Power Spectral Density Plot MIMO ANT1 (160MHz BW 802.11ax (UNII Band 3/4) – Ch. 163)

FCC ID: A3LSMS906E	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2110010116-09.A3L	Test Dates: 09/09/2021 - 12/06/2021	EUT Type: Portable Handset		Page 162 of 254

MIMO Antenna-2 Power Spectral Density Measurements

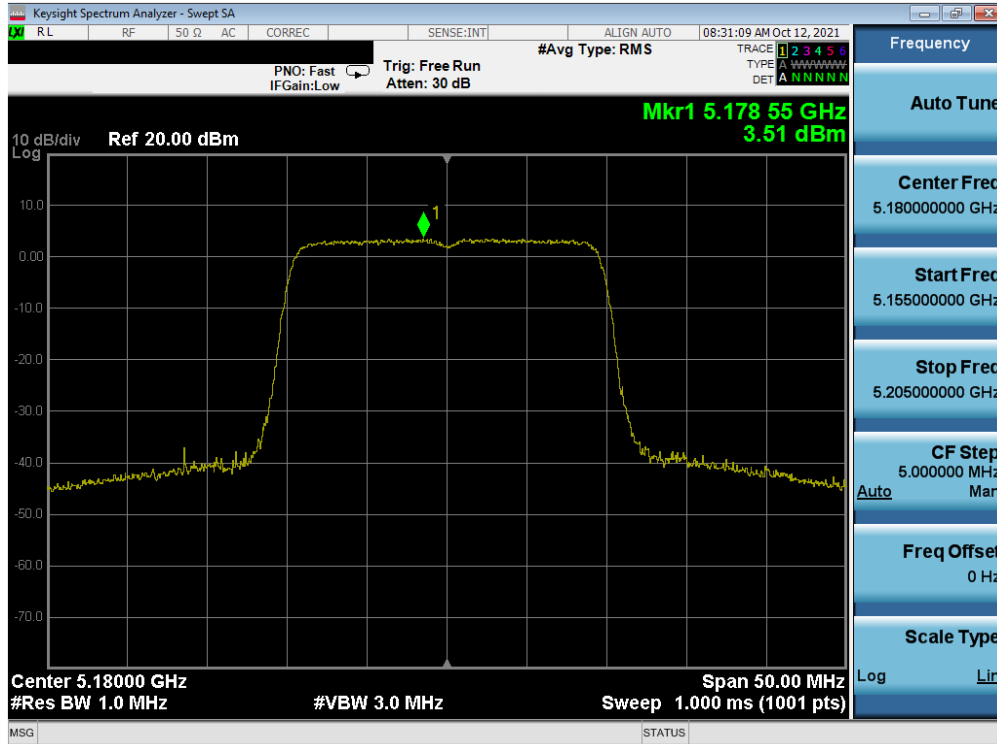


Plot 7-262. Power Spectral Density Plot MIMO ANT2 (802.11a (UNII Band 1) – Ch. 36)

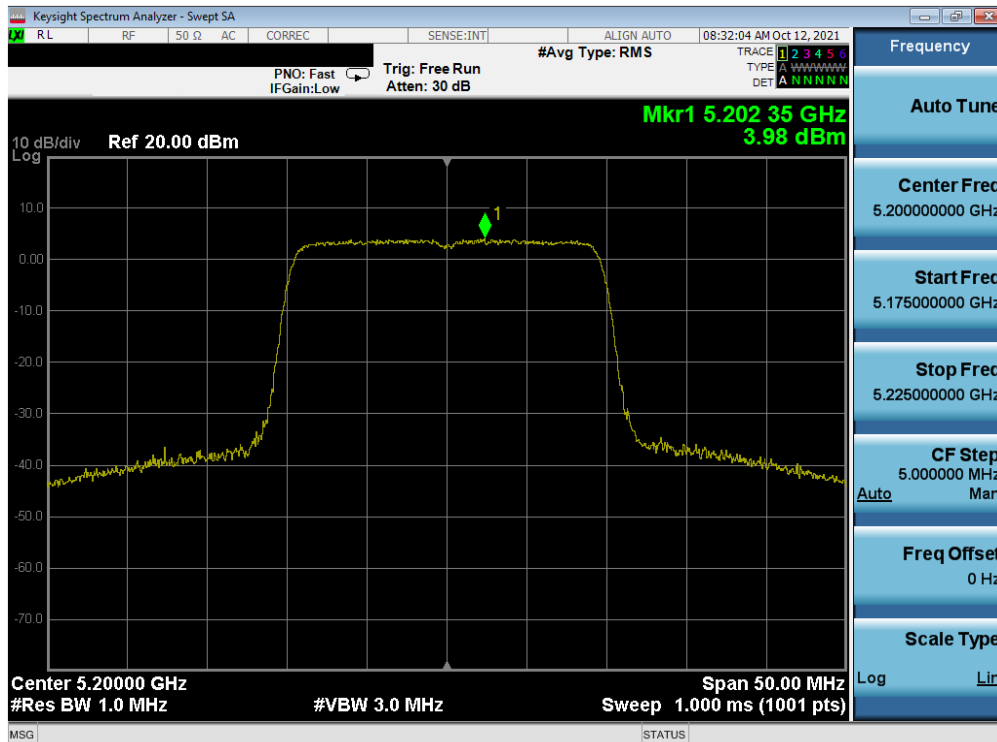


Plot 7-263. Power Spectral Density Plot MIMO ANT2 (802.11a (UNII Band 1) – Ch. 40)

FCC ID: A3LSMS906E	Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2110010116-09.A3L	Test Dates: 09/09/2021 - 12/06/2021	EUT Type: Portable Handset		Page 163 of 254

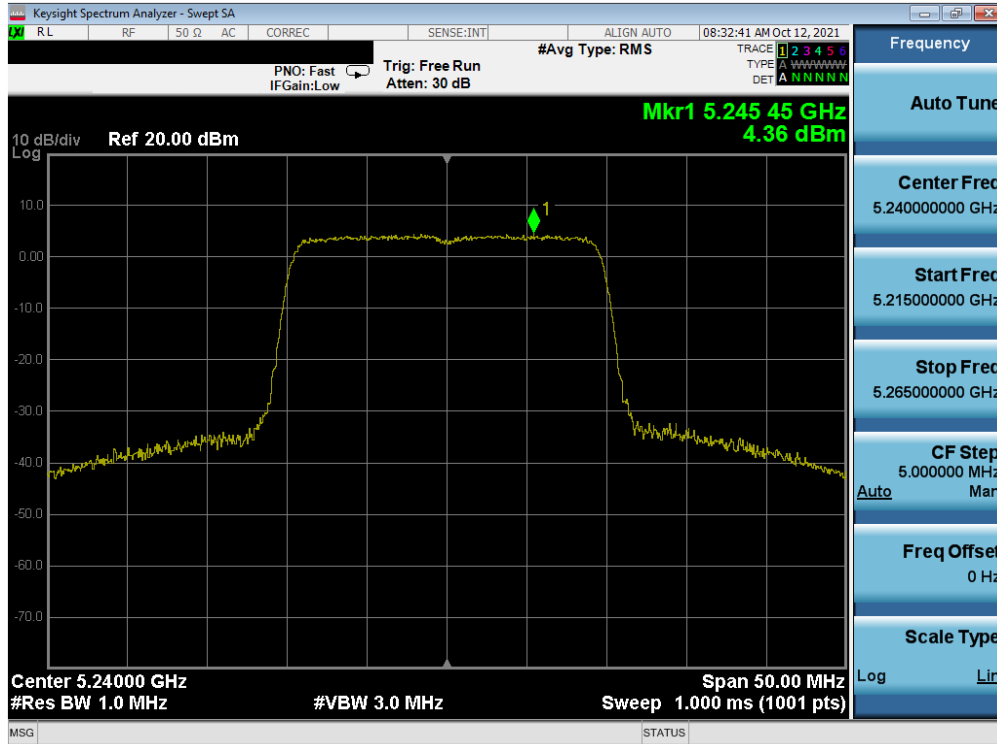


Plot 7-268. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax (UNII Band 1) – Ch. 36)

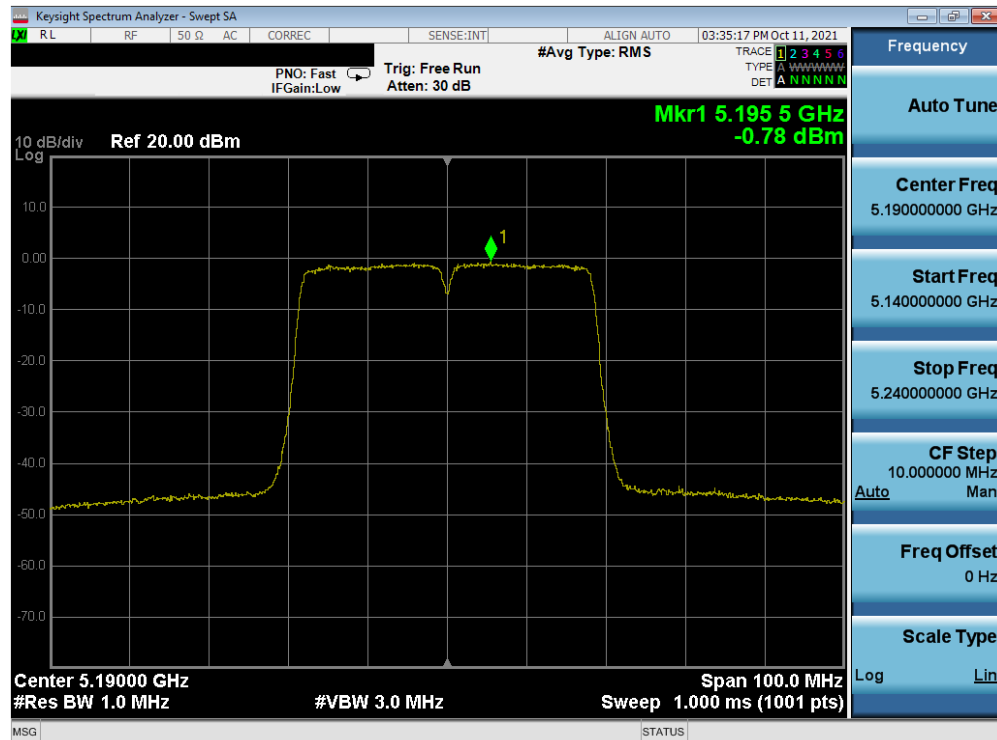


Plot 7-269. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax (UNII Band 1) – Ch. 40)

FCC ID: A3LSMS906E	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
Test Report S/N: 1M2110010116-09.A3L	Test Dates: 09/09/2021 - 12/06/2021	EUT Type: Portable Handset		Page 166 of 254

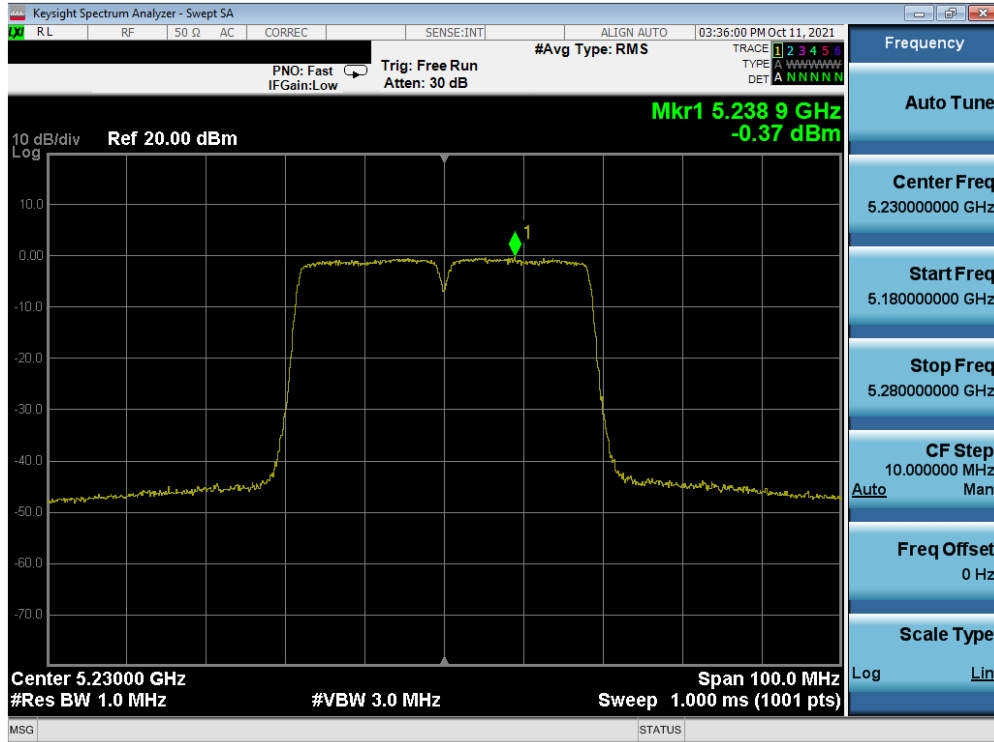


Plot 7-270. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax (UNII Band 1) – Ch. 48)

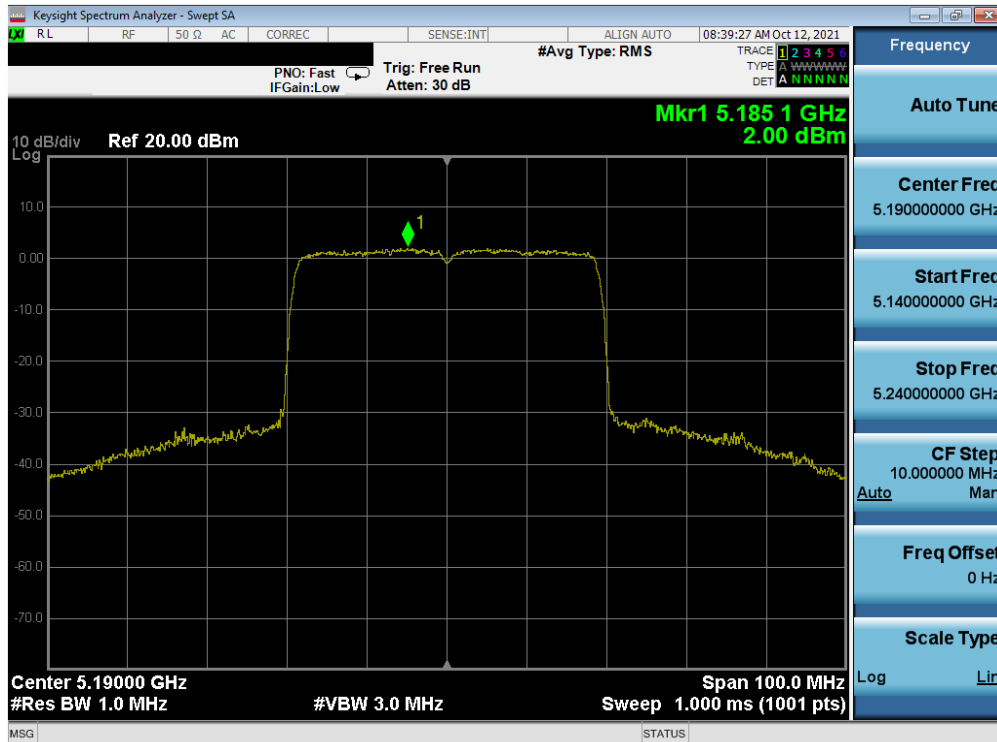


Plot 7-271. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11n (UNII Band 1) – Ch. 38)

FCC ID: A3LSMS906E	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
Test Report S/N: 1M2110010116-09.A3L	Test Dates: 09/09/2021 - 12/06/2021	EUT Type: Portable Handset		Page 167 of 254

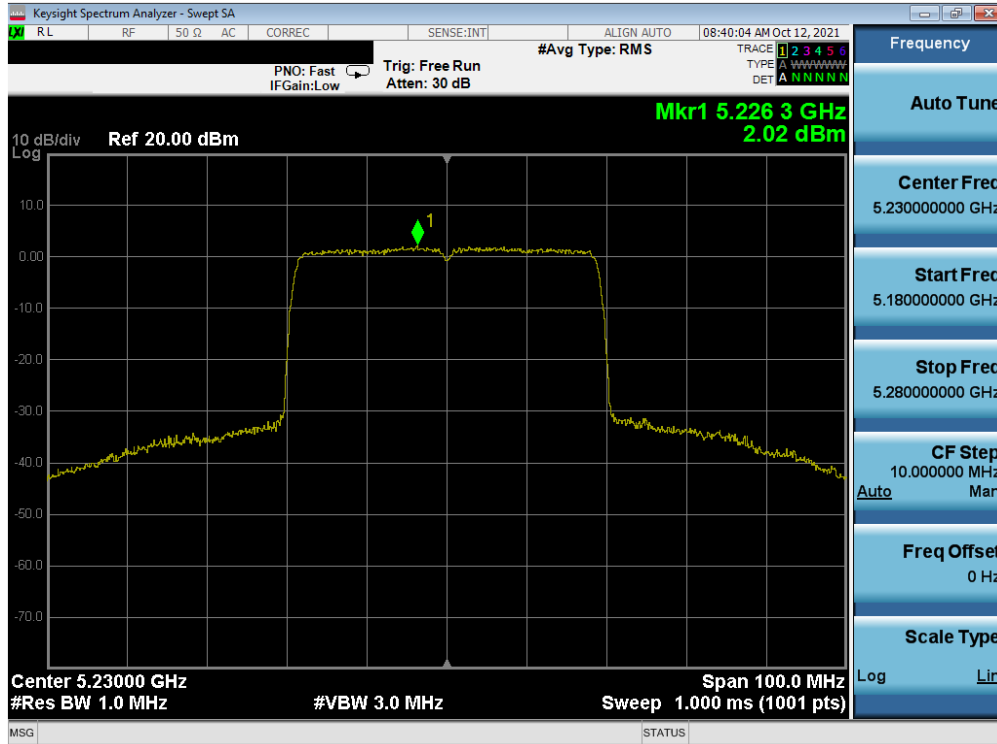


Plot 7-272. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11n (UNII Band 1) – Ch. 46)

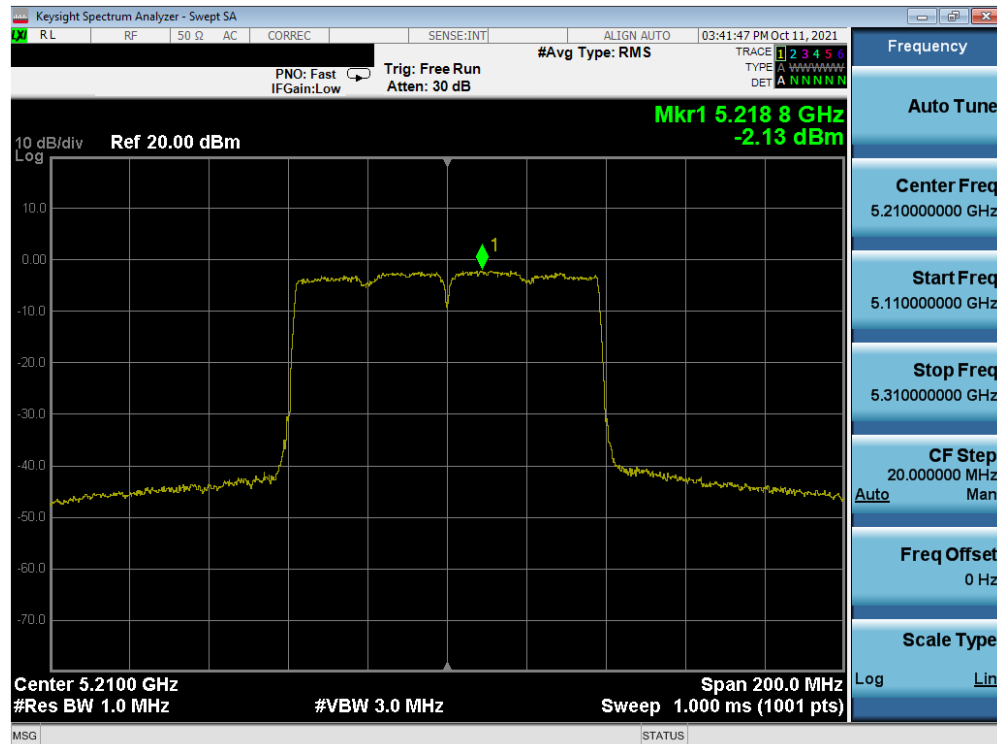


Plot 7-273. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax (UNII Band 1) – Ch. 38)

FCC ID: A3LSMS906E	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2110010116-09.A3L	Test Dates: 09/09/2021 - 12/06/2021	EUT Type: Portable Handset		Page 168 of 254

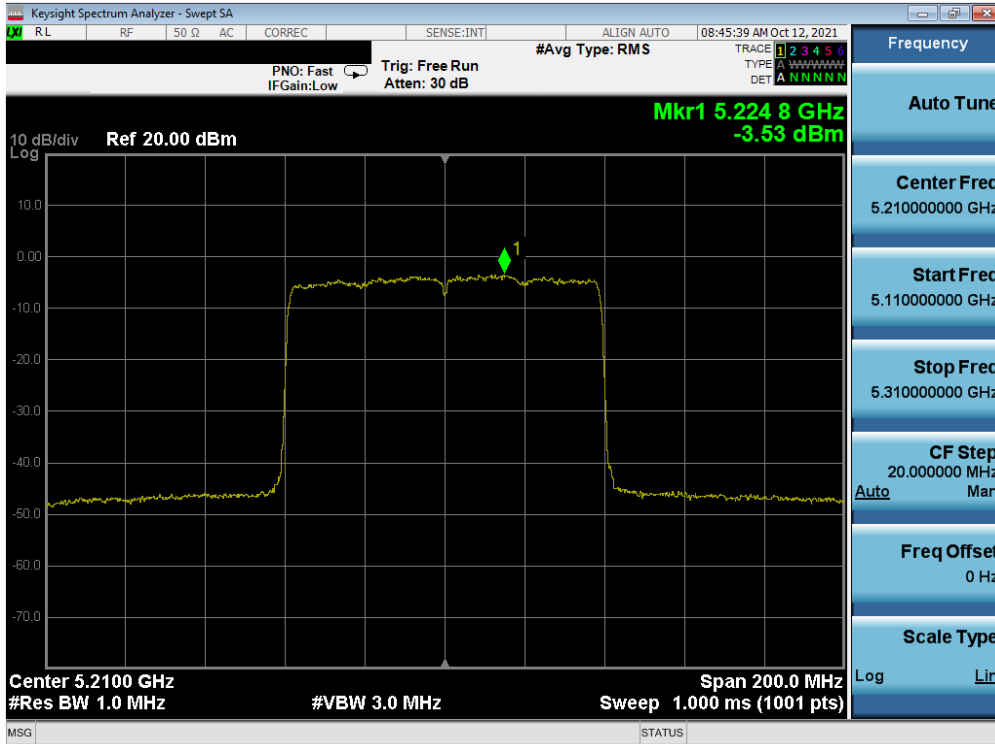


Plot 7-274. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax (UNII Band 1) – Ch. 46)

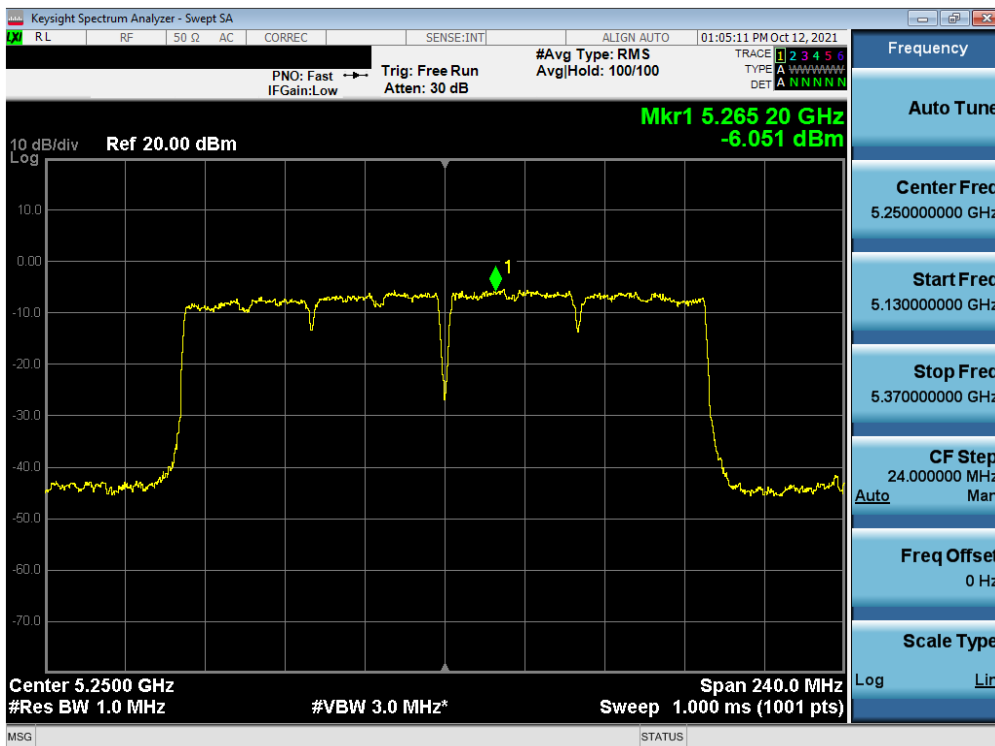


Plot 7-275. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ac (UNII Band 1) – Ch. 42)

FCC ID: A3LSMS906E	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
Test Report S/N: 1M2110010116-09.A3L	Test Dates: 09/09/2021 - 12/06/2021	EUT Type: Portable Handset		Page 169 of 254

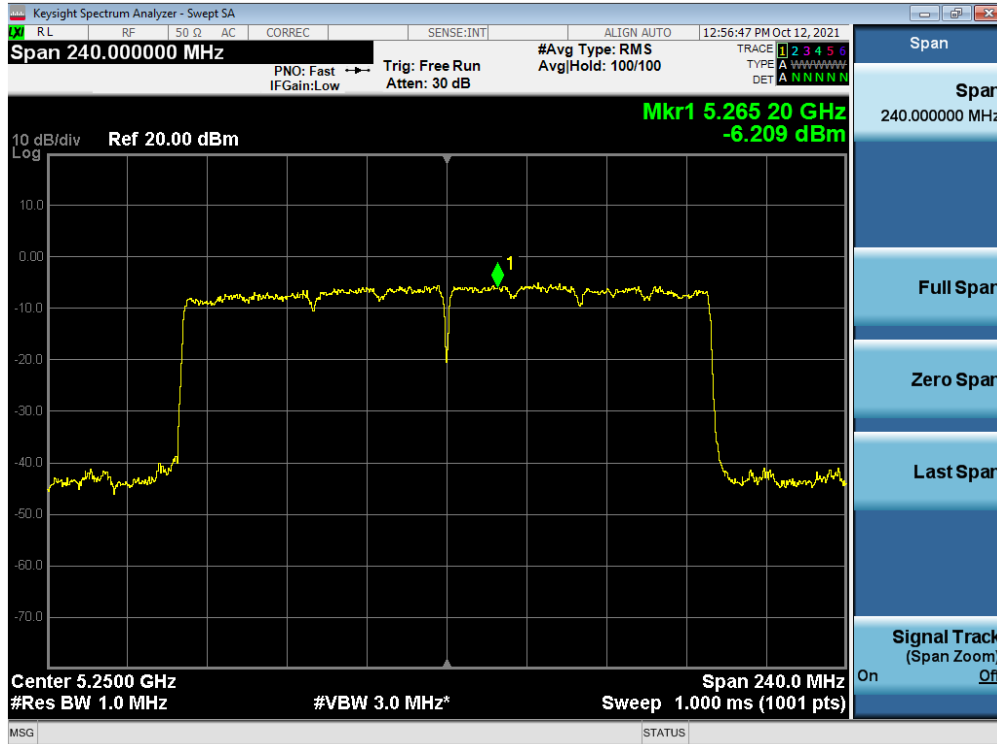


Plot 7-276. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax (UNII Band 1) – Ch. 42)

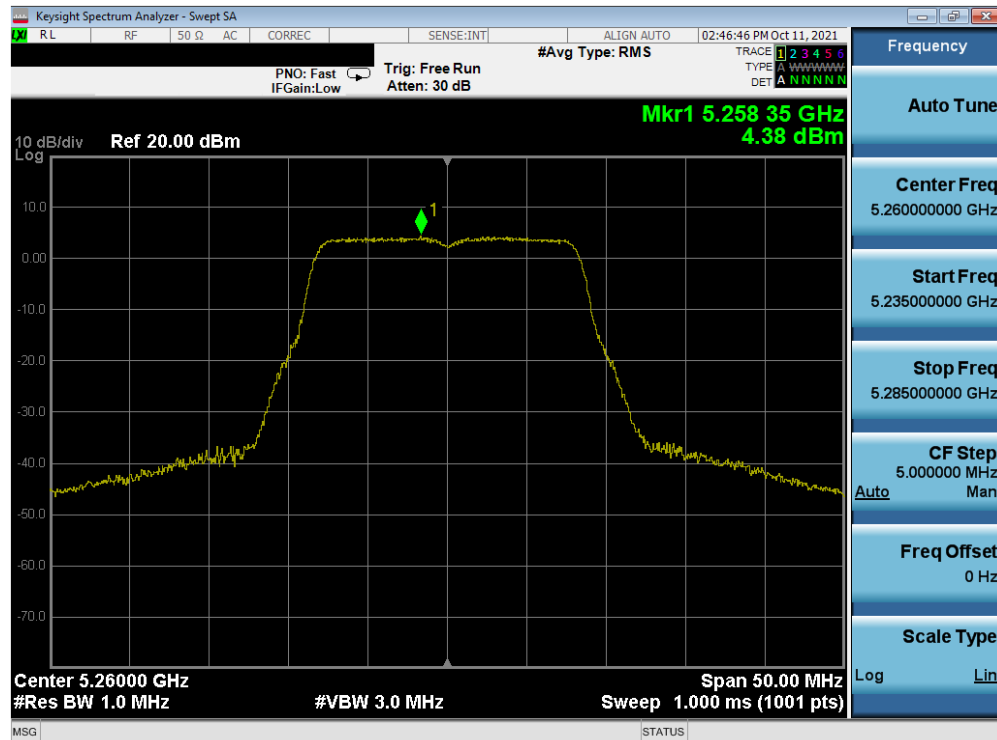


Plot 7-277. Power Spectral Density Plot MIMO ANT2 (160MHz BW 802.11ac (UNII Band 1) – Ch. 50)

FCC ID: A3LSMS906E	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2110010116-09.A3L	Test Dates: 09/09/2021 - 12/06/2021	EUT Type: Portable Handset		Page 170 of 254

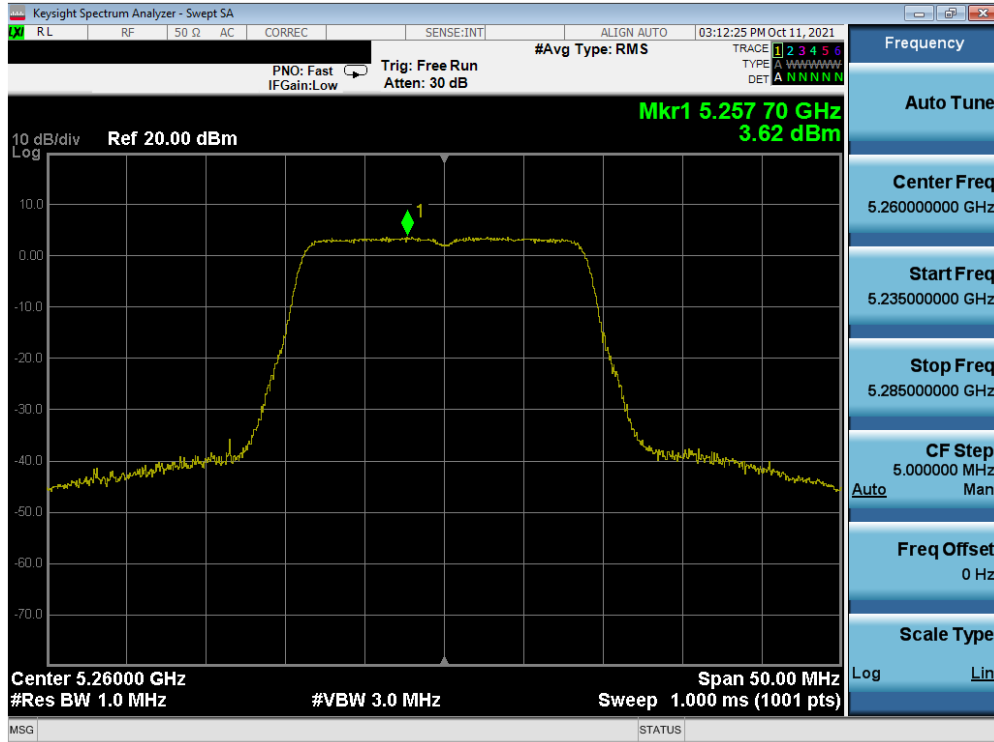


Plot 7-278. Power Spectral Density Plot MIMO ANT2 (160MHz BW 802.11ax (UNII Band 1) – Ch. 50)

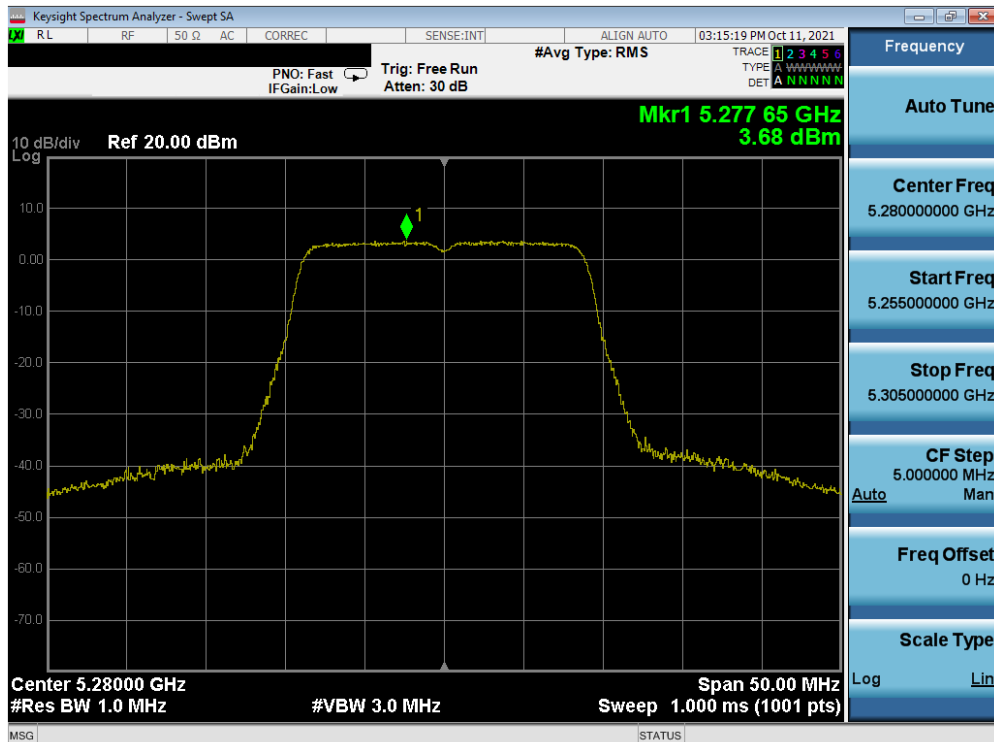


Plot 7-279. Power Spectral Density Plot MIMO ANT2 (802.11a (UNII Band 2A) – Ch. 52)

FCC ID: A3LSMS906E	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
Test Report S/N: 1M2110010116-09.A3L	Test Dates: 09/09/2021 - 12/06/2021	EUT Type: Portable Handset		Page 171 of 254

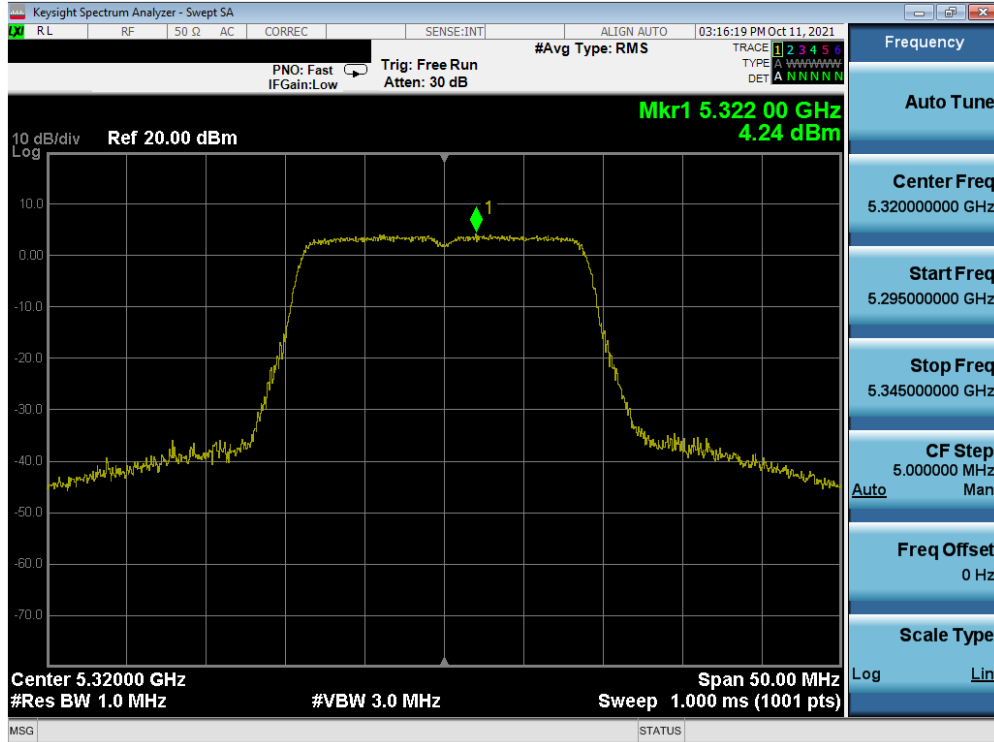


Plot 7-282. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11n (UNII Band 2A) – Ch. 52)

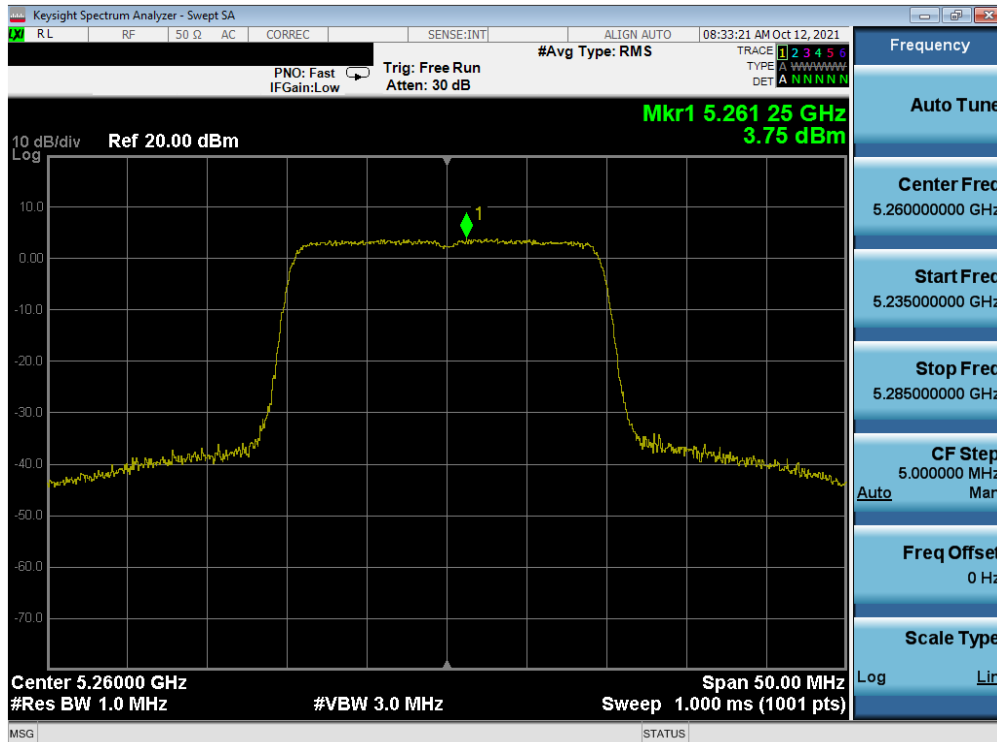


Plot 7-283. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11n (UNII Band 2A) – Ch. 56)

FCC ID: A3LSMS906E	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2110010116-09.A3L	Test Dates: 09/09/2021 - 12/06/2021	EUT Type: Portable Handset		Page 173 of 254

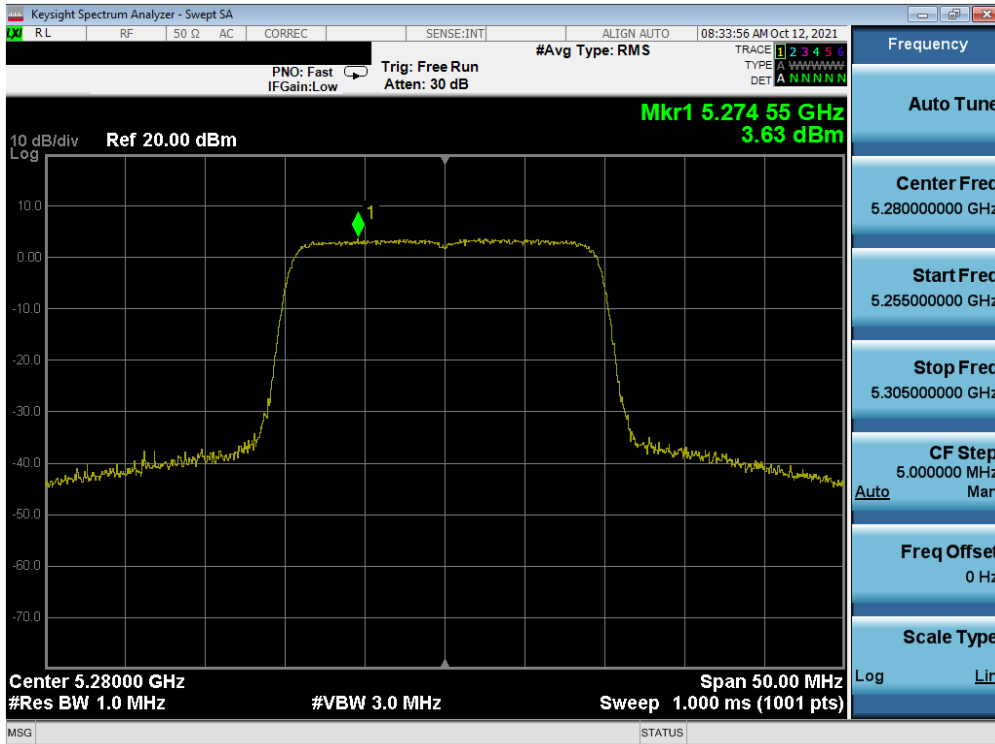


Plot 7-284. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11n (UNII Band 2A) – Ch. 64)

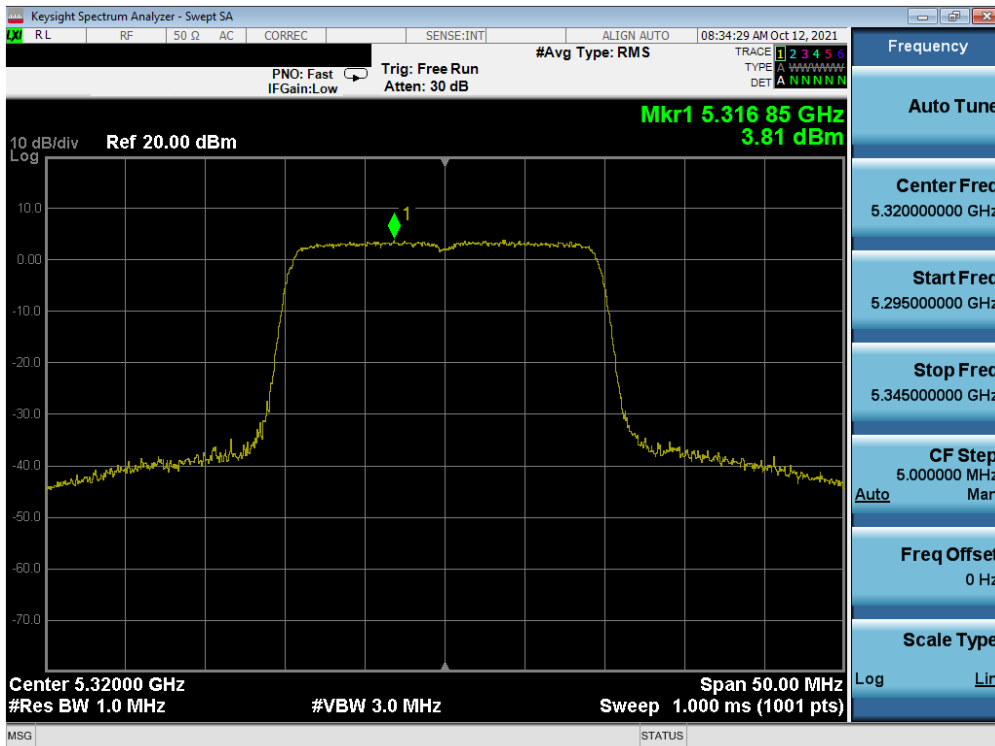


Plot 7-285. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax (UNII Band 2A) – Ch. 52)

FCC ID: A3LSMS906E	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2110010116-09.A3L	Test Dates: 09/09/2021 - 12/06/2021	EUT Type: Portable Handset		Page 174 of 254

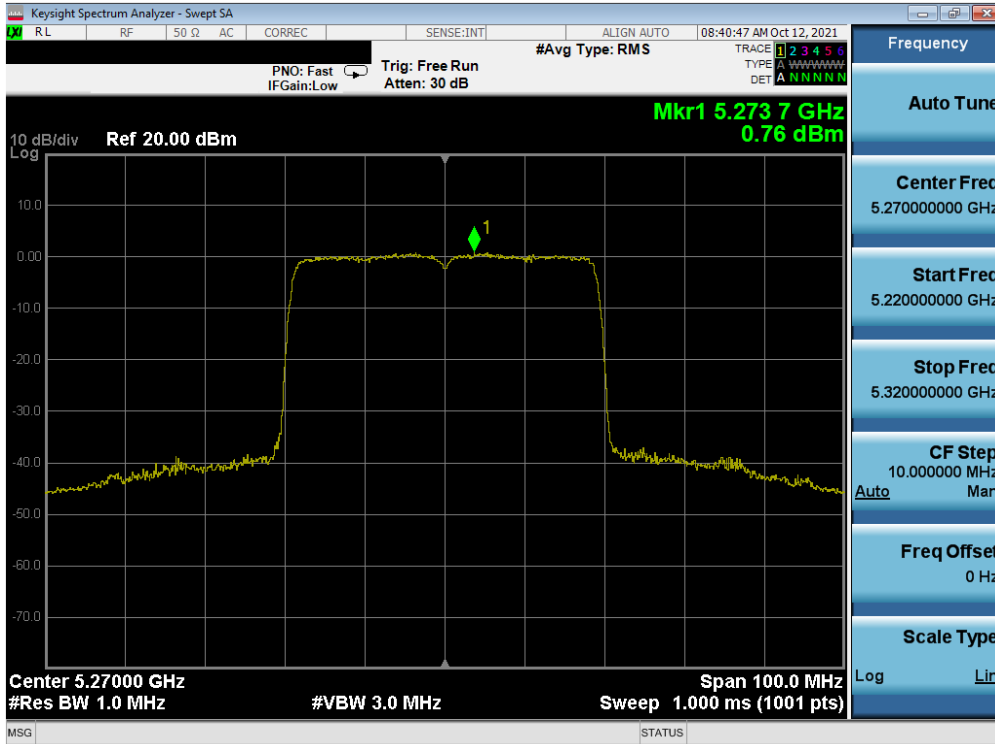


Plot 7-286. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax (UNII Band 2A) – Ch. 56)

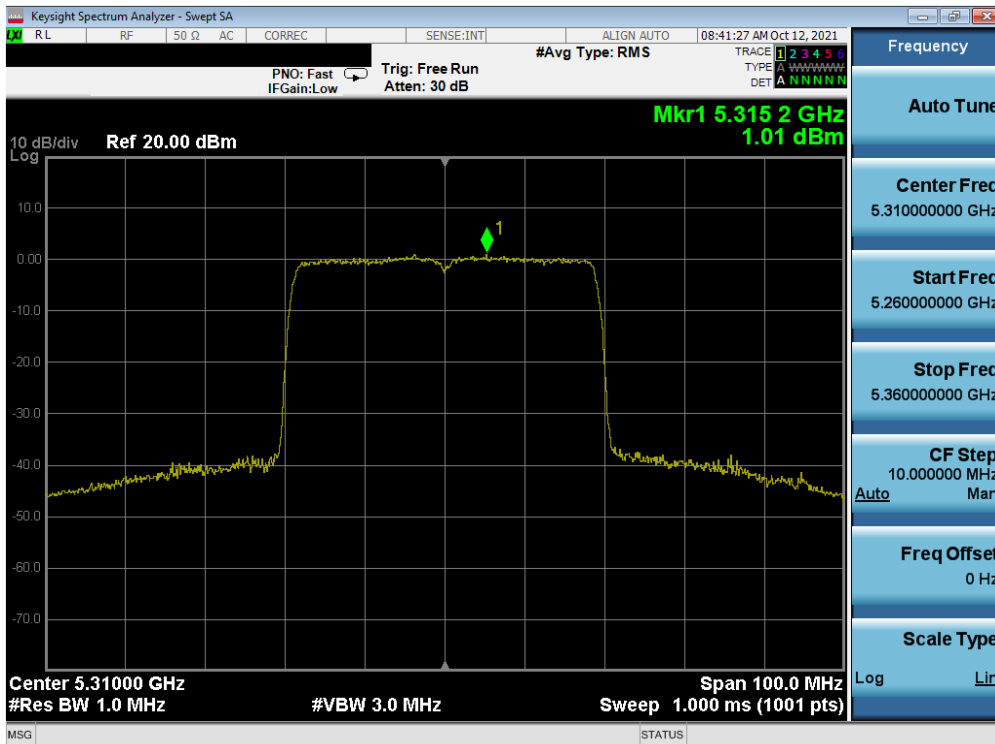


Plot 7-287. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax (UNII Band 2A) – Ch. 64)

FCC ID: A3LSMS906E	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
Test Report S/N: 1M2110010116-09.A3L	Test Dates: 09/09/2021 - 12/06/2021	EUT Type: Portable Handset		Page 175 of 254

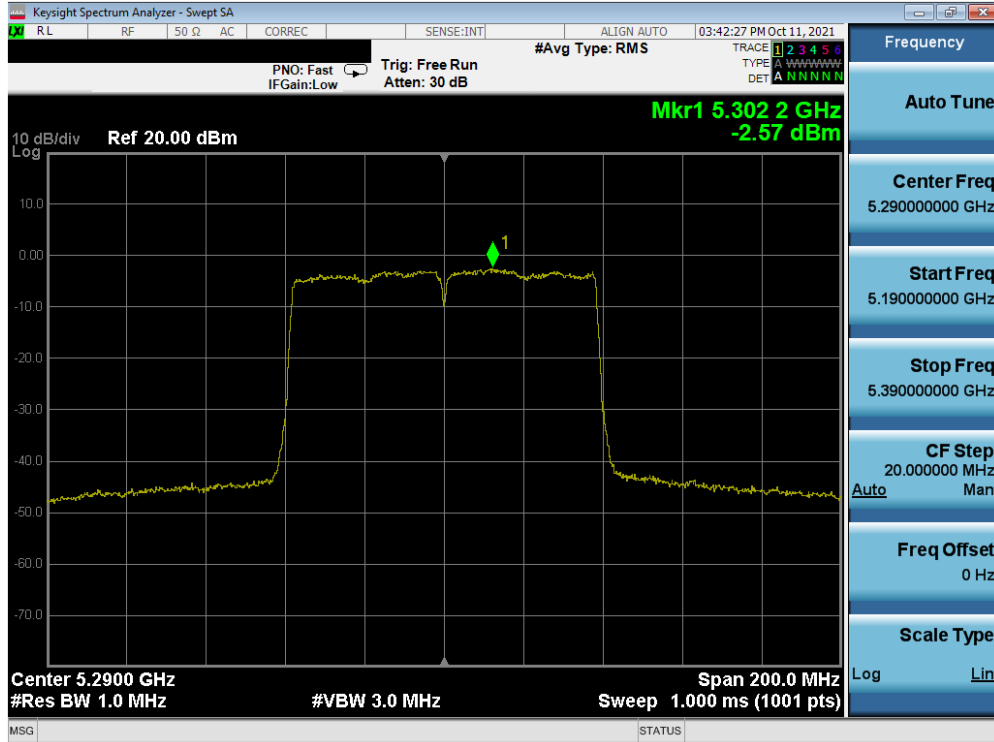


Plot 7-290. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax (UNII Band 2A) – Ch. 54)

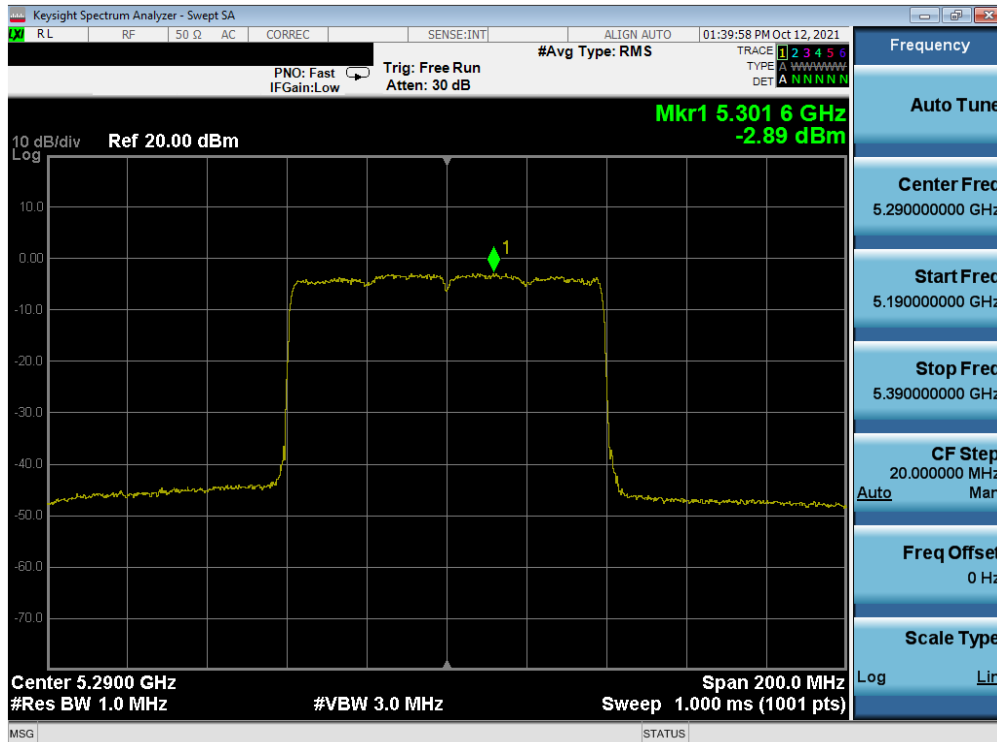


Plot 7-291. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11x (UNII Band 2A) – Ch. 62)

FCC ID: A3LSMS906E	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
Test Report S/N: 1M2110010116-09.A3L	Test Dates: 09/09/2021 - 12/06/2021	EUT Type: Portable Handset		Page 177 of 254

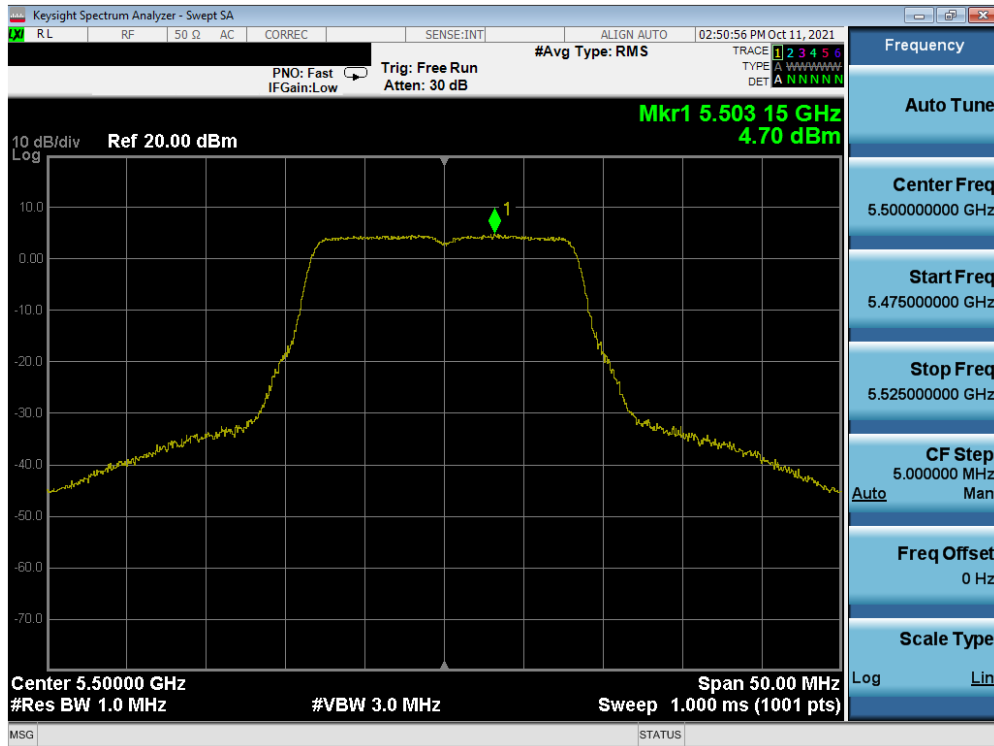


Plot 7-292. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ac (UNII Band 2A) – Ch. 58)

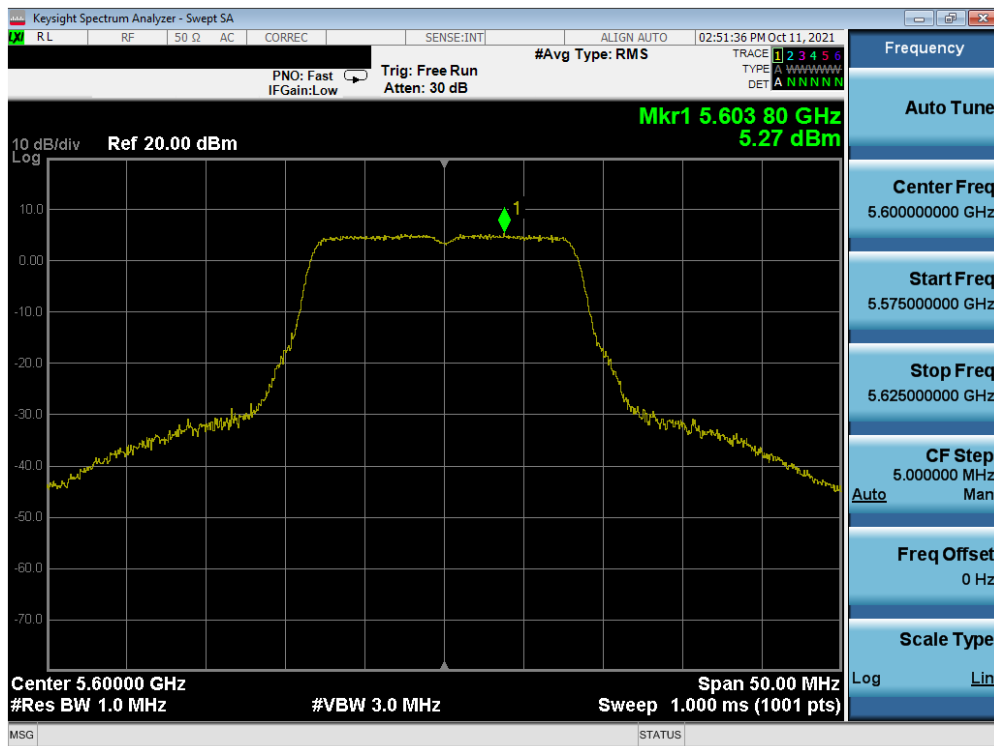


Plot 7-293. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax (UNII Band 2A) – Ch. 58)

FCC ID: A3LSMS906E	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2110010116-09.A3L	Test Dates: 09/09/2021 - 12/06/2021	EUT Type: Portable Handset		Page 178 of 254

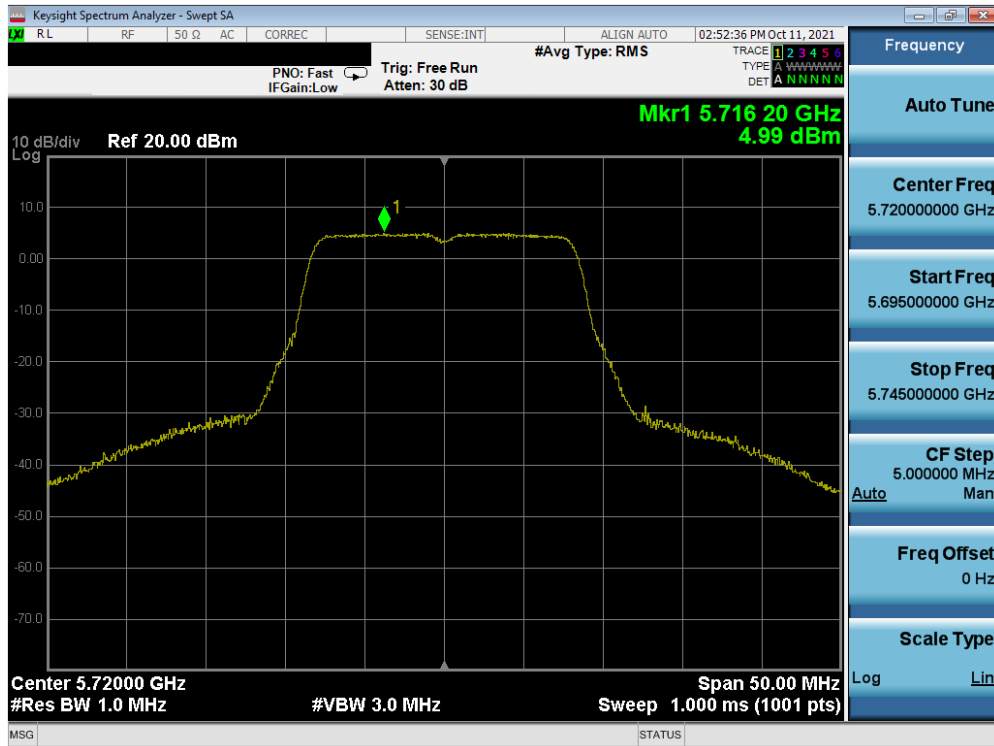


Plot 7-294. Power Spectral Density Plot MIMO ANT2 (802.11a (UNII Band 2C) – Ch. 100)

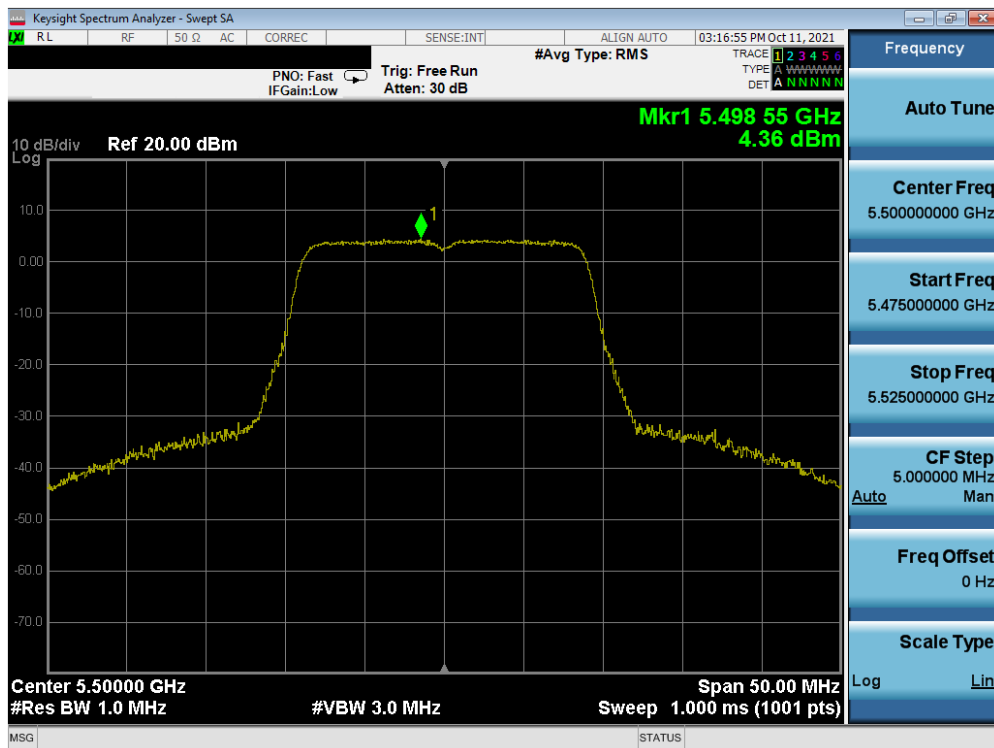


Plot 7-295. Power Spectral Density Plot MIMO ANT2 (802.11a (UNII Band 2C) – Ch. 120)

FCC ID: A3LSMS906E	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2110010116-09.A3L	Test Dates: 09/09/2021 - 12/06/2021	EUT Type: Portable Handset		Page 179 of 254

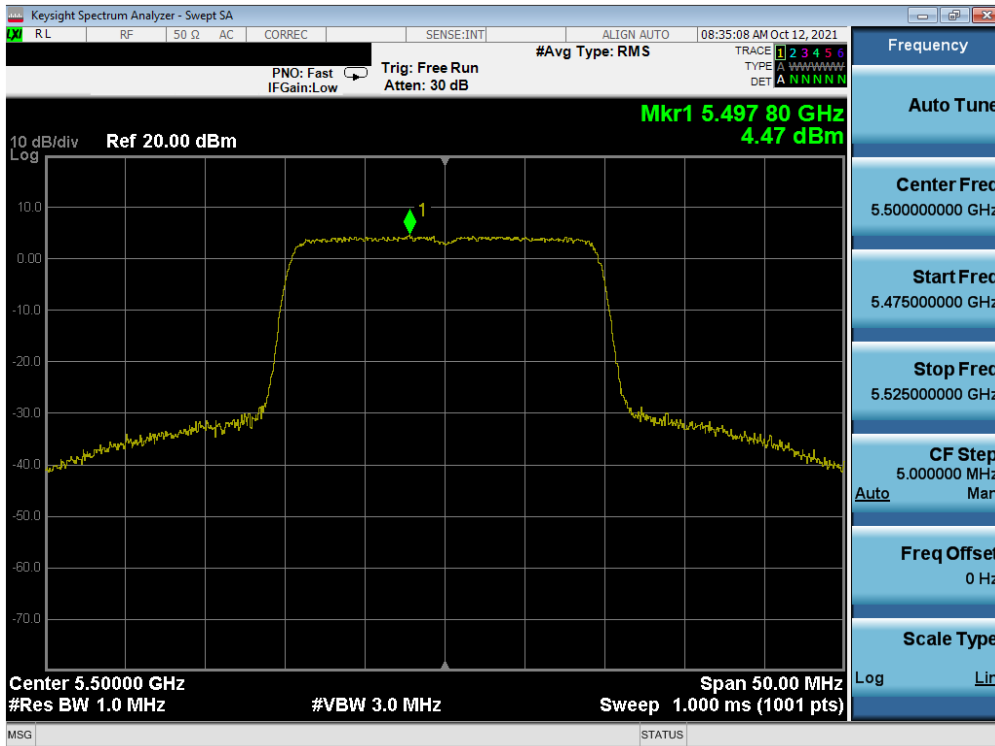


Plot 7-296. Power Spectral Density Plot MIMO ANT2 (802.11a (UNII Band 2C) – Ch. 144)

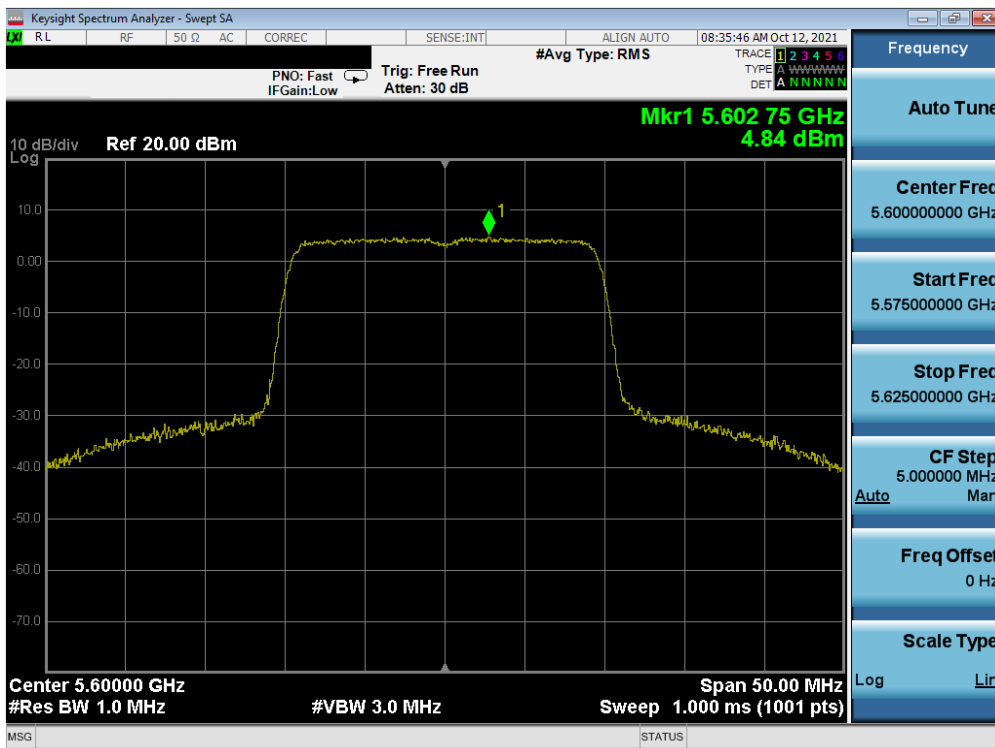


Plot 7-297. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11n (UNII Band 2C) – Ch. 100)

FCC ID: A3LSMS906E	Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2110010116-09.A3L	Test Dates: 09/09/2021 - 12/06/2021	EUT Type: Portable Handset		Page 180 of 254

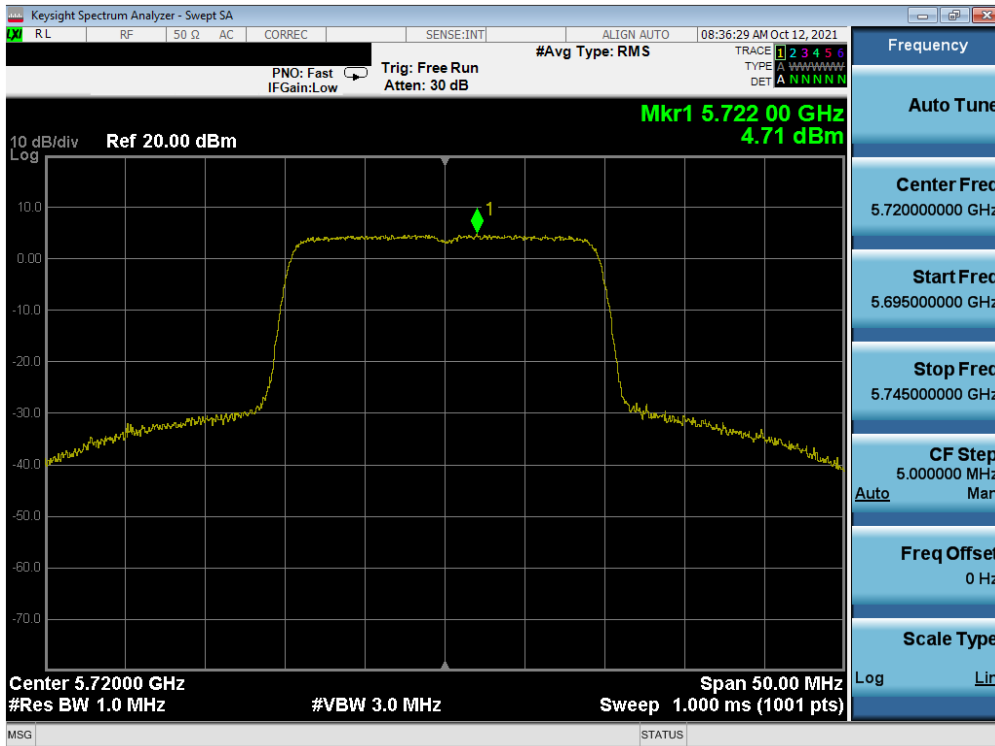


Plot 7-300. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax (UNII Band 2C) – Ch. 144)

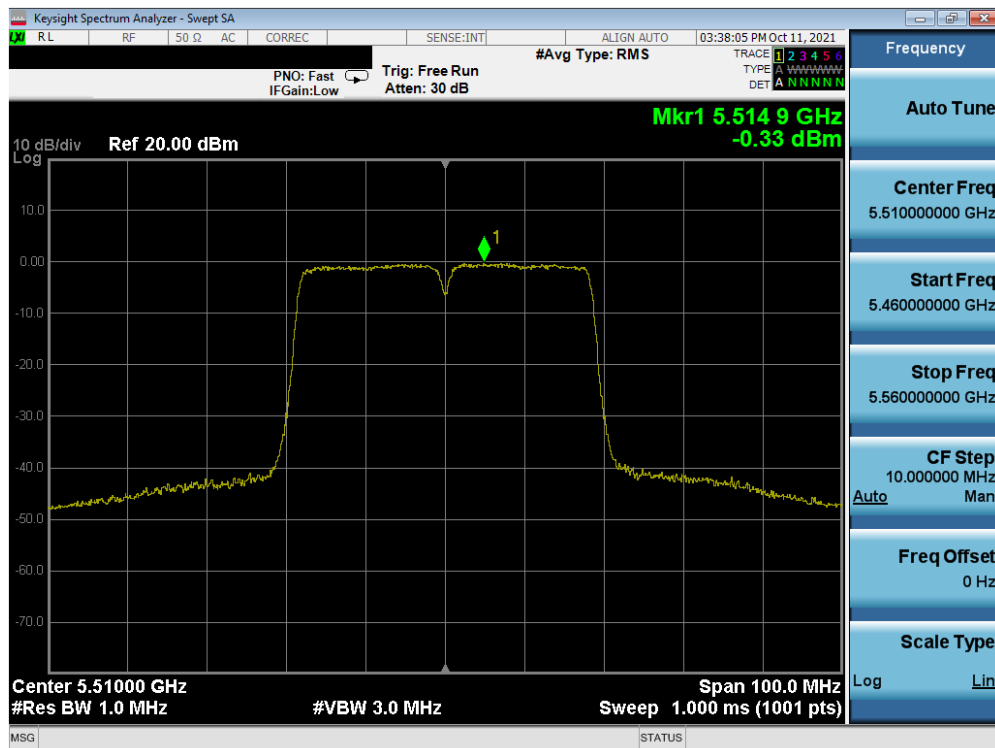


Plot 7-301. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax (UNII Band 2C) – Ch. 100)

FCC ID: A3LSMS906E	Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2110010116-09.A3L	Test Dates: 09/09/2021 - 12/06/2021	EUT Type: Portable Handset		Page 182 of 254

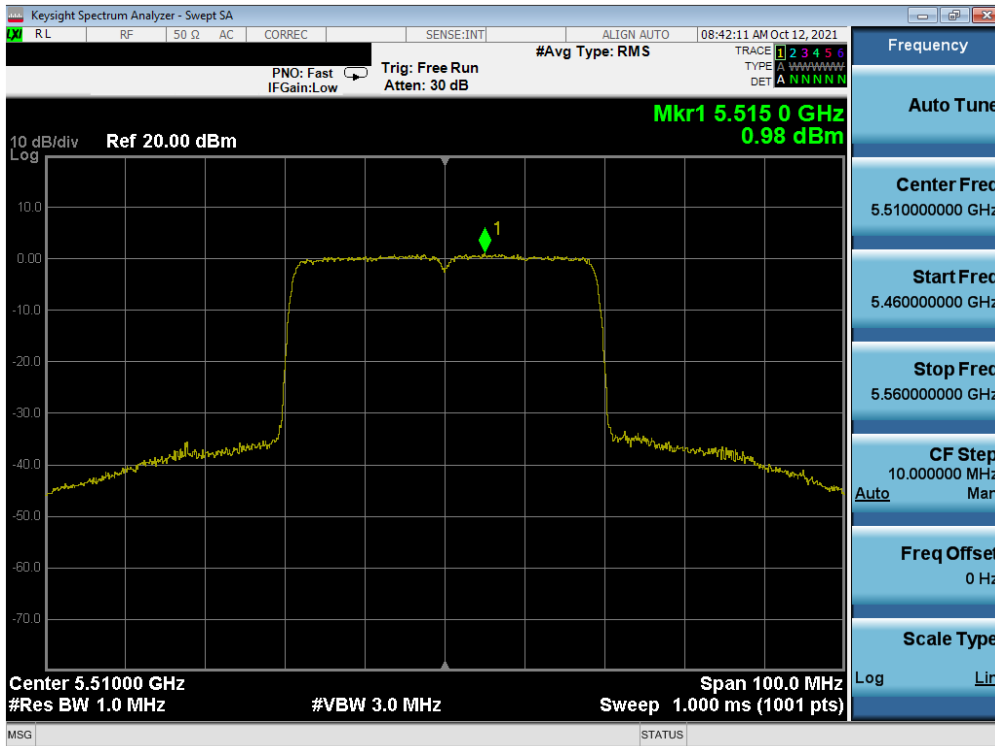


Plot 7-302. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax (UNII Band 2C) – Ch. 120)

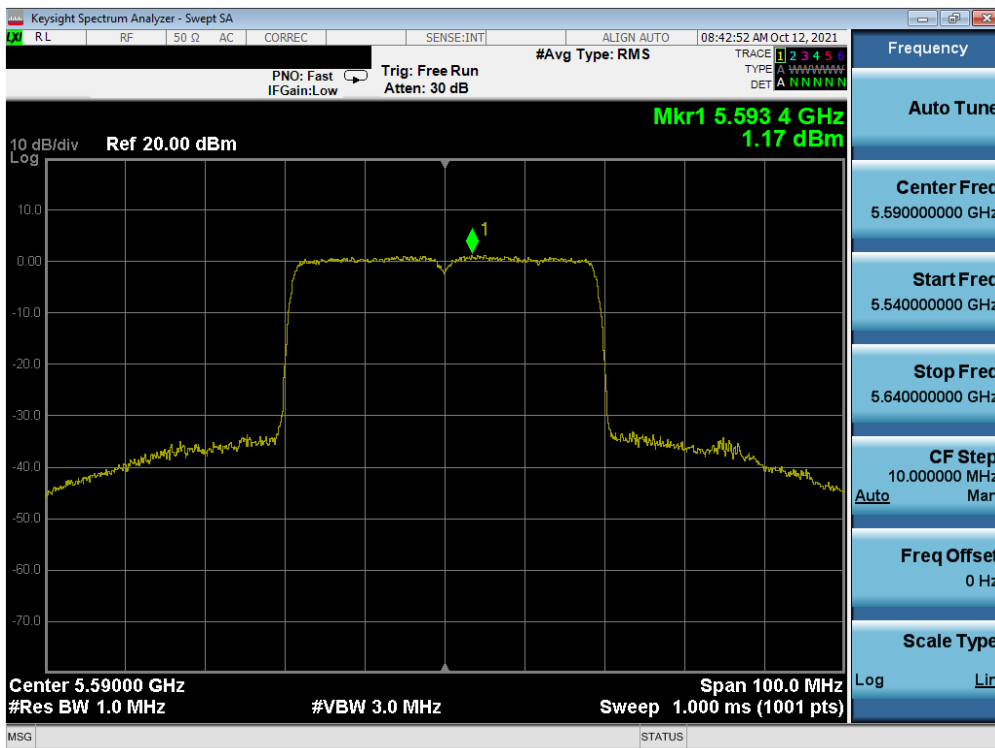


Plot 7-303. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11n (UNII Band 2C) – Ch. 102)

FCC ID: A3LSMS906E	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Technical Manager
Test Report S/N: 1M2110010116-09.A3L	Test Dates: 09/09/2021 - 12/06/2021	EUT Type: Portable Handset		Page 183 of 254

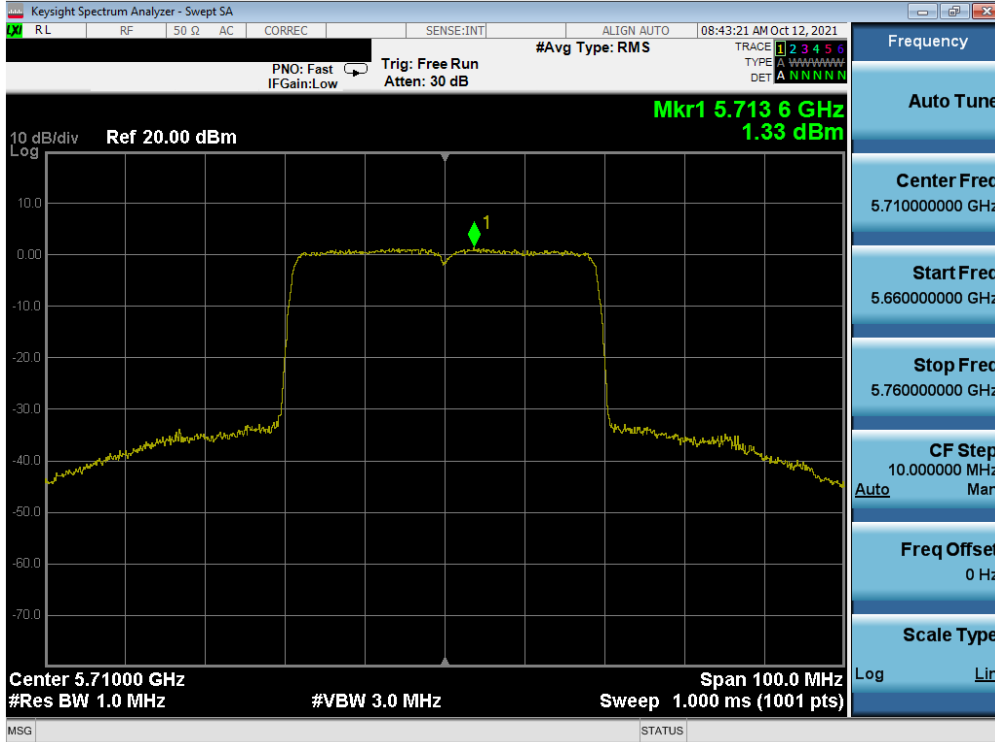


Plot 7-306. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax (UNII Band 2C) – Ch. 102)

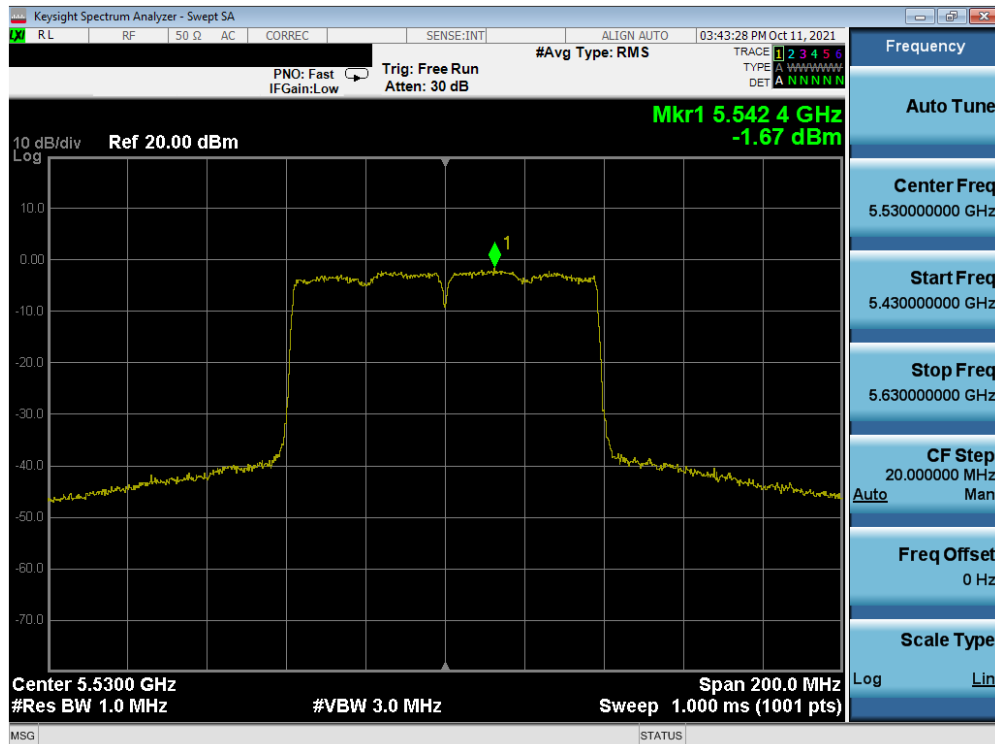


Plot 7-307. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax (UNII Band 2C) – Ch. 118)

FCC ID: A3LSMS906E	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2110010116-09.A3L	Test Dates: 09/09/2021 - 12/06/2021	EUT Type: Portable Handset		Page 185 of 254

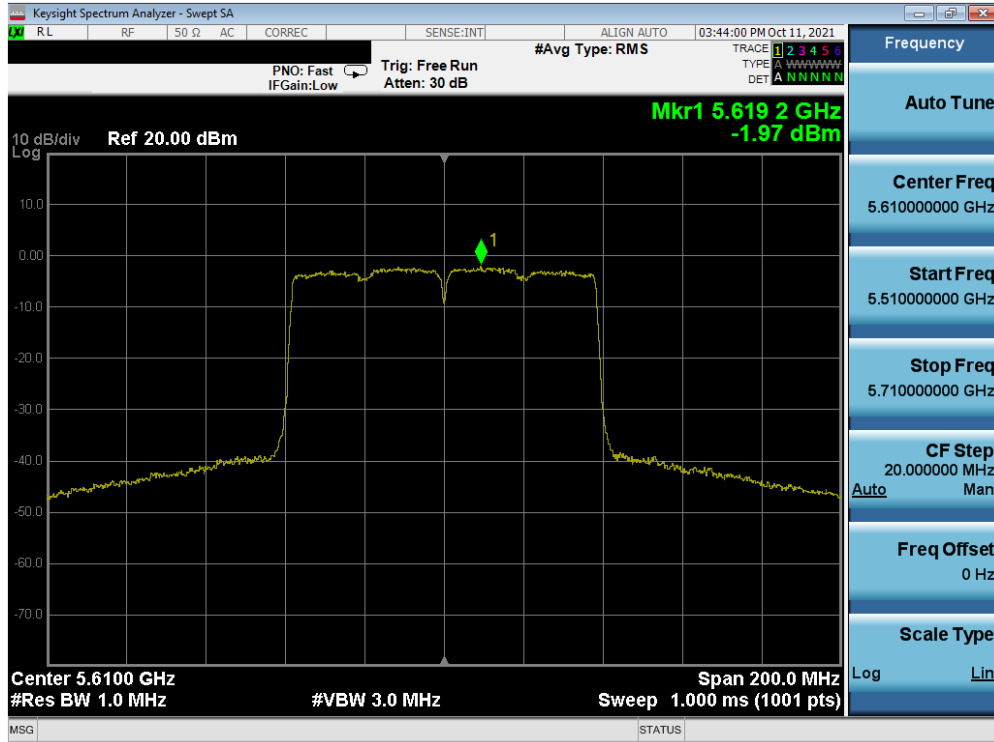


Plot 7-308. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax (UNII Band 2C) – Ch. 142)

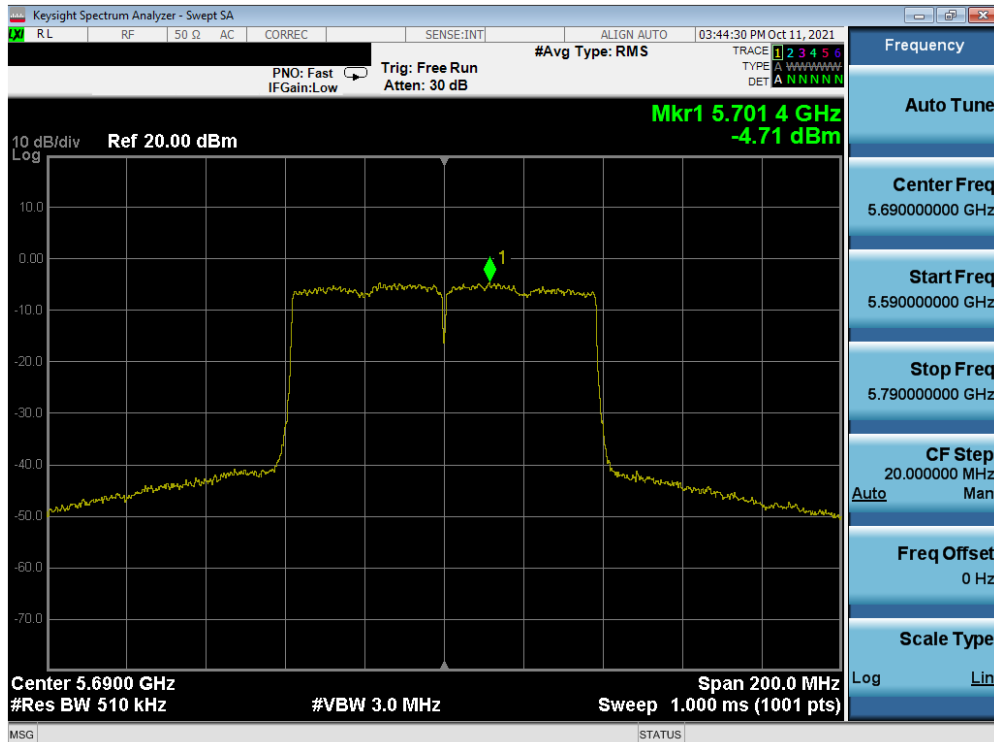


Plot 7-309. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ac (UNII Band 2C) – Ch. 106)

FCC ID: A3LSMS906E	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2110010116-09.A3L	Test Dates: 09/09/2021 - 12/06/2021	EUT Type: Portable Handset		Page 186 of 254

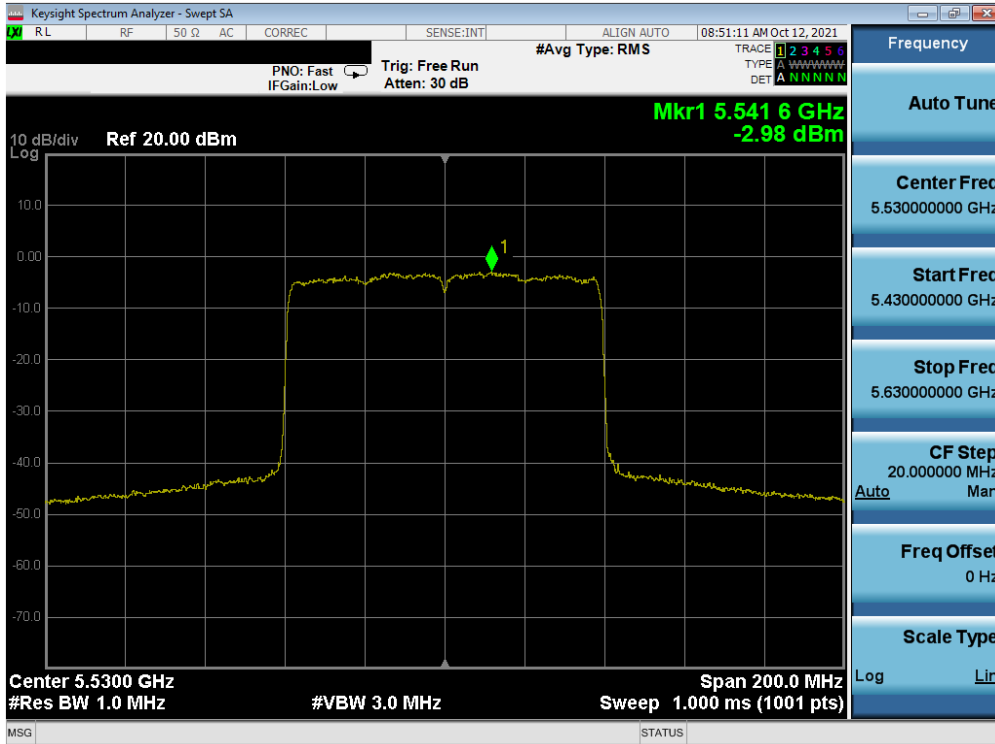


Plot 7-310. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ac (UNII Band 2C) – Ch. 122)

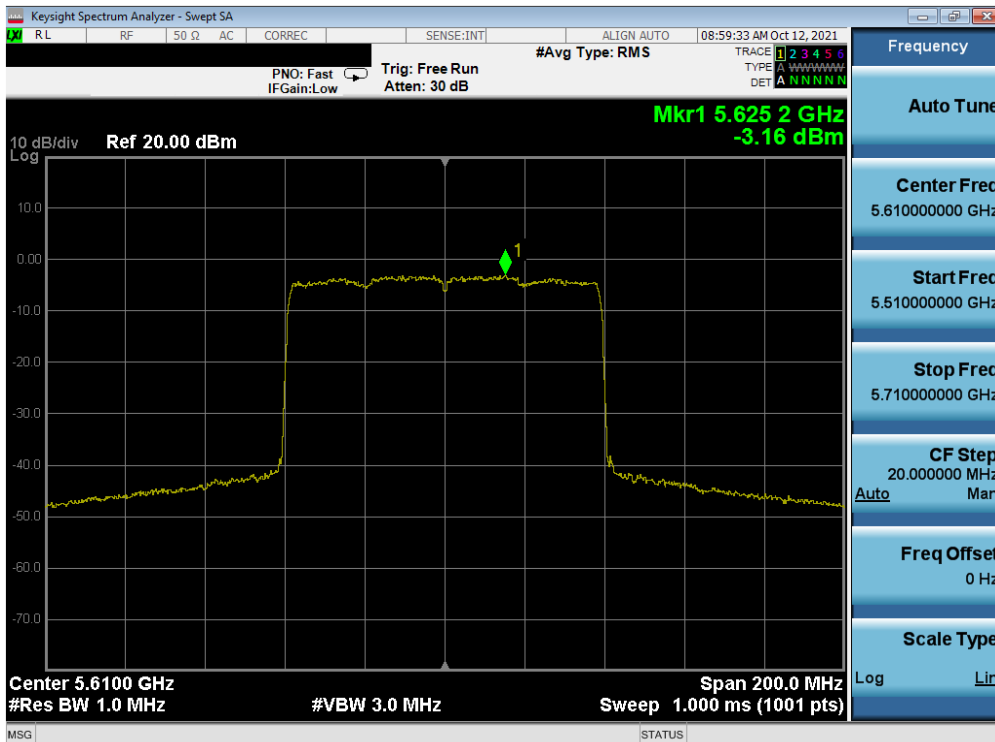


Plot 7-311. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ac (UNII Band 2C) – Ch. 138)

FCC ID: A3LSMS906E	Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2110010116-09.A3L	Test Dates: 09/09/2021 - 12/06/2021	EUT Type: Portable Handset		Page 187 of 254

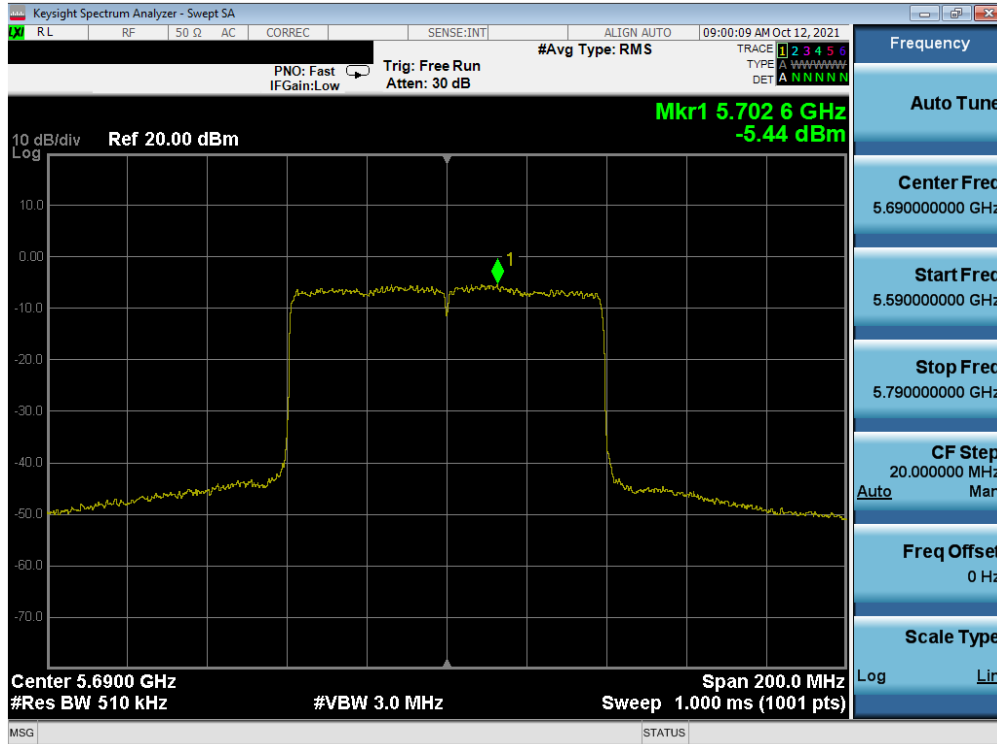


Plot 7-312. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax (UNII Band 2C) – Ch. 106)

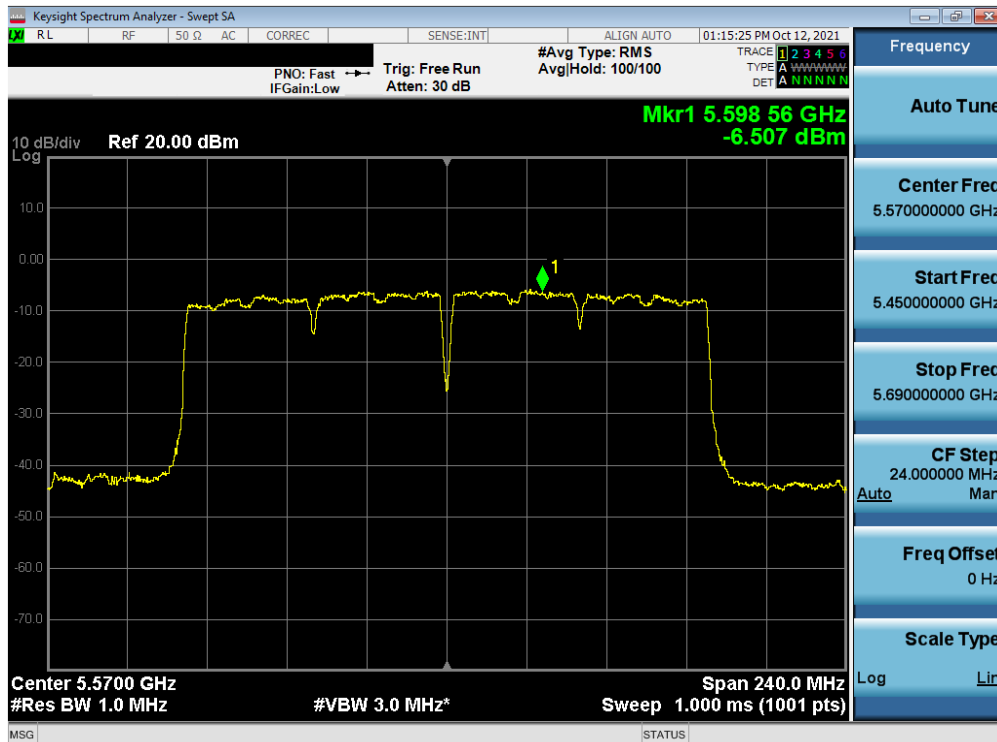


Plot 7-313. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax (UNII Band 2C) – Ch. 122)

FCC ID: A3LSMS906E	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2110010116-09.A3L	Test Dates: 09/09/2021 - 12/06/2021	EUT Type: Portable Handset		Page 188 of 254

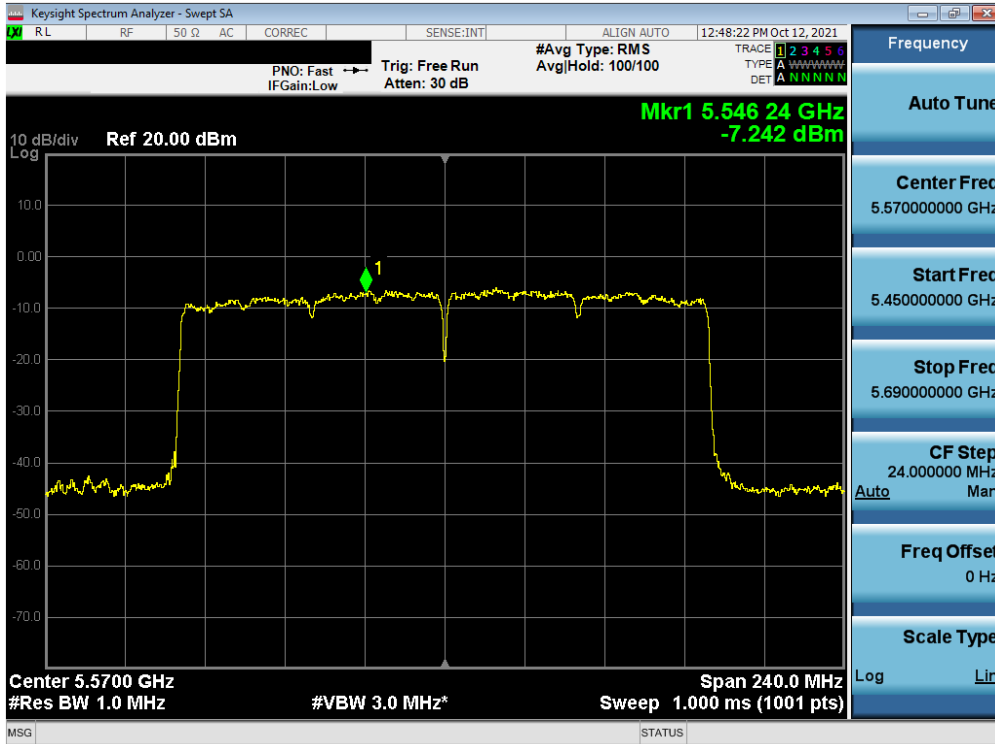


Plot 7-314. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax (UNII Band 2C) – Ch. 138)

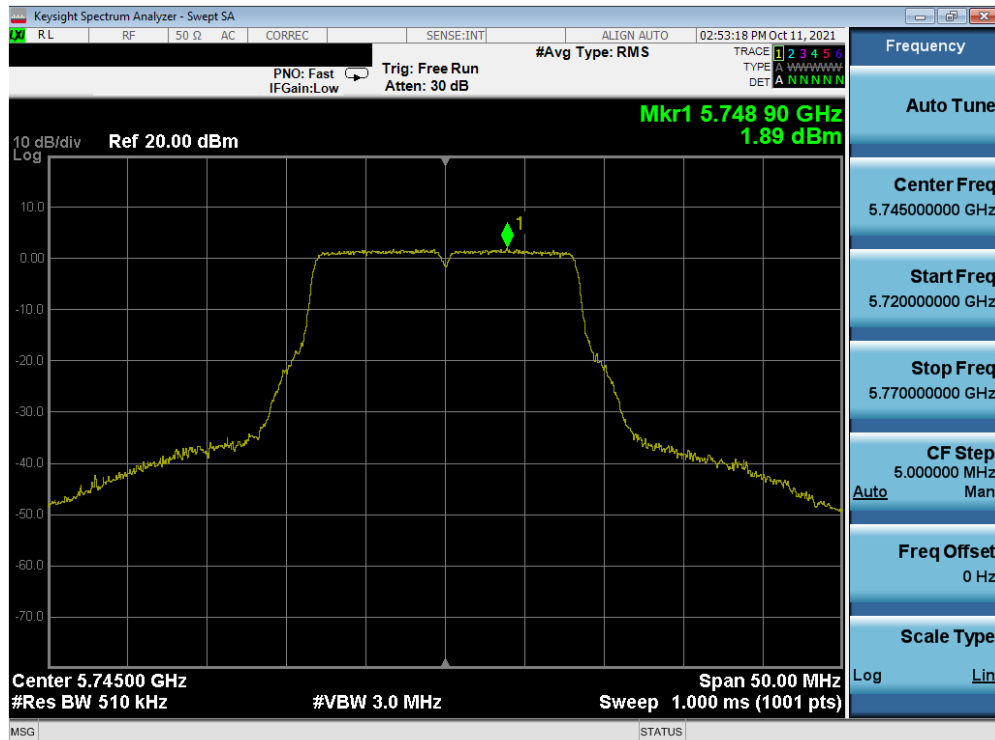


Plot 7-315. Power Spectral Density Plot MIMO ANT2 (160MHz BW 802.11ax (UNII Band 2C) – Ch. 114)

FCC ID: A3LSMS906E	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2110010116-09.A3L	Test Dates: 09/09/2021 - 12/06/2021	EUT Type: Portable Handset		Page 189 of 254

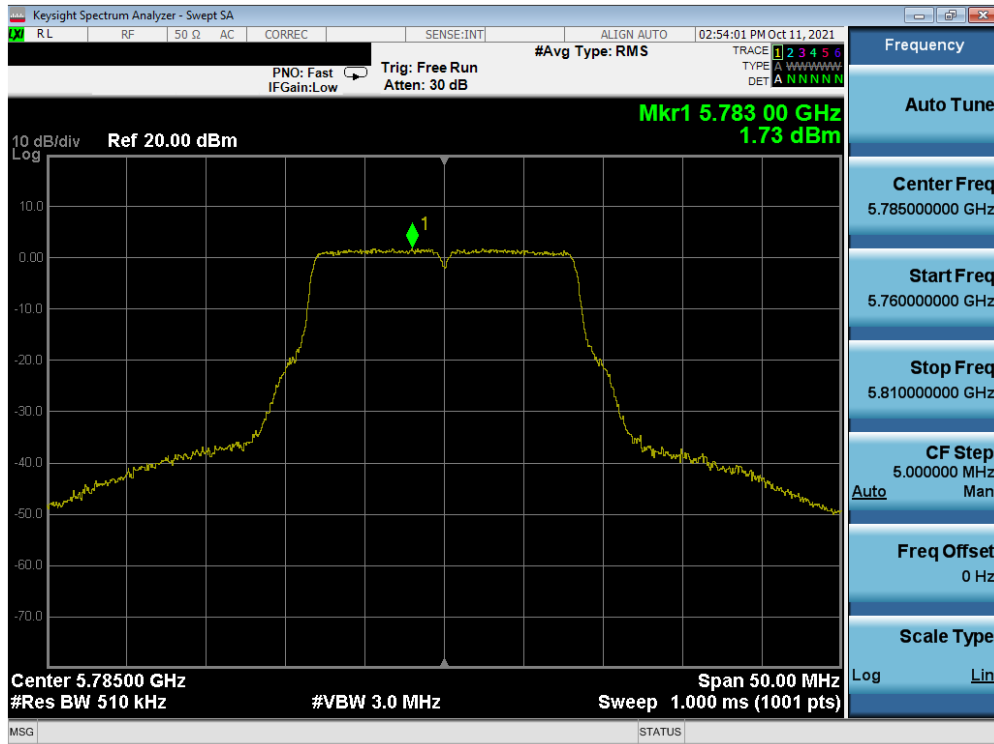


Plot 7-316. Power Spectral Density Plot MIMO ANT2 (160MHz BW 802.11ax (UNII Band 2C) – Ch. 114)

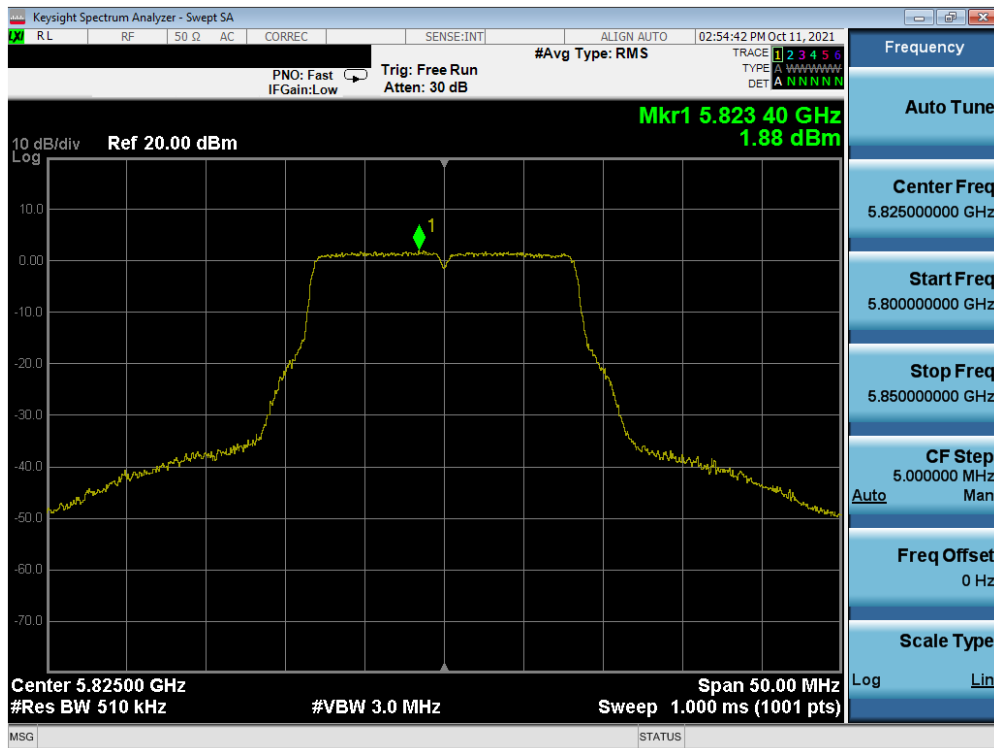


Plot 7-317. Power Spectral Density Plot MIMO ANT2 (802.11a (UNII Band 3) – Ch. 149)

FCC ID: A3LSMS906E	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2110010116-09.A3L	Test Dates: 09/09/2021 - 12/06/2021	EUT Type: Portable Handset		Page 190 of 254

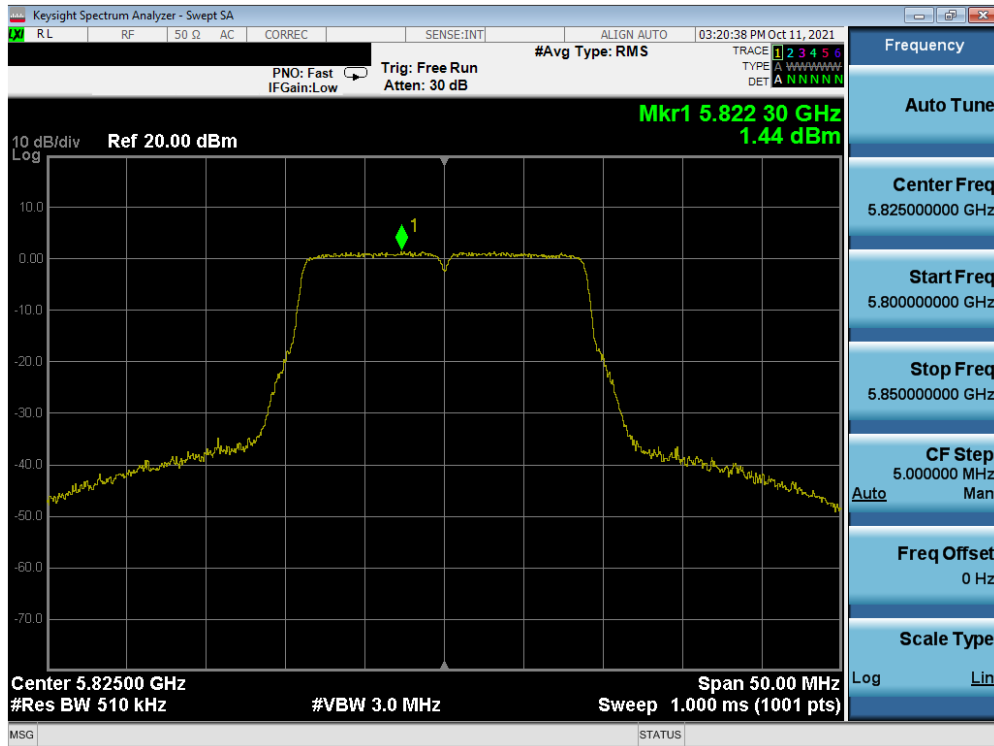


Plot 7-318. Power Spectral Density Plot MIMO ANT2 (802.11a (UNII Band 3) – Ch. 157)

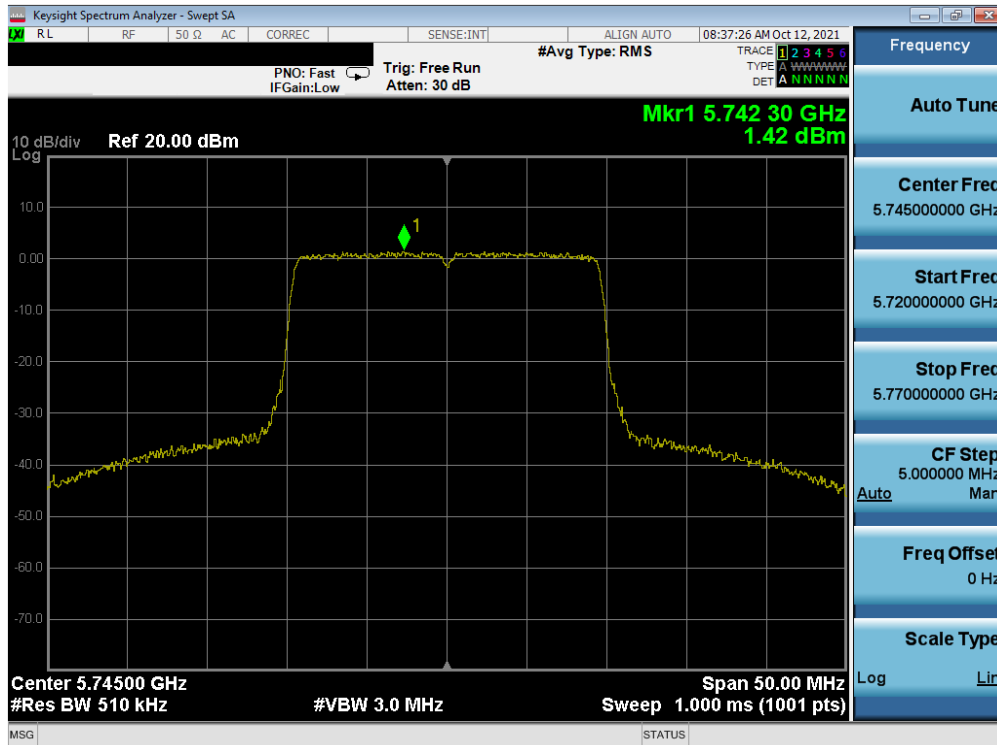


Plot 7-319. Power Spectral Density Plot MIMO ANT2 (802.11a (UNII Band 3) – Ch. 165)

FCC ID: A3LSMS906E	Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2110010116-09.A3L	Test Dates: 09/09/2021 - 12/06/2021	EUT Type: Portable Handset		Page 191 of 254

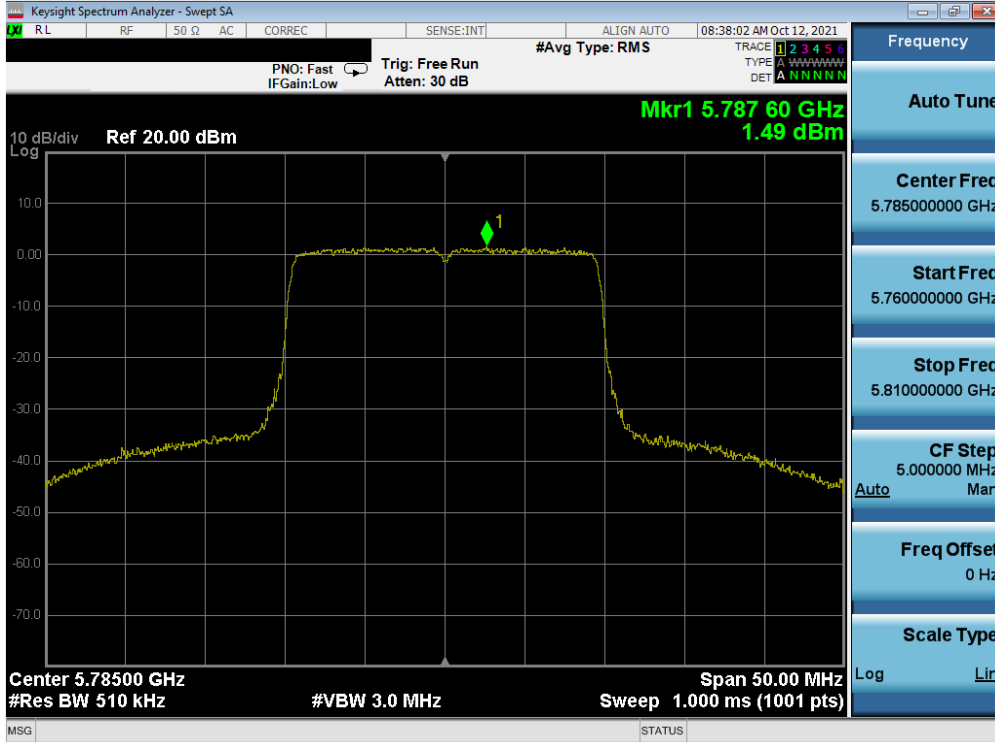


Plot 7-322. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11n (UNII Band 3) – Ch. 165)

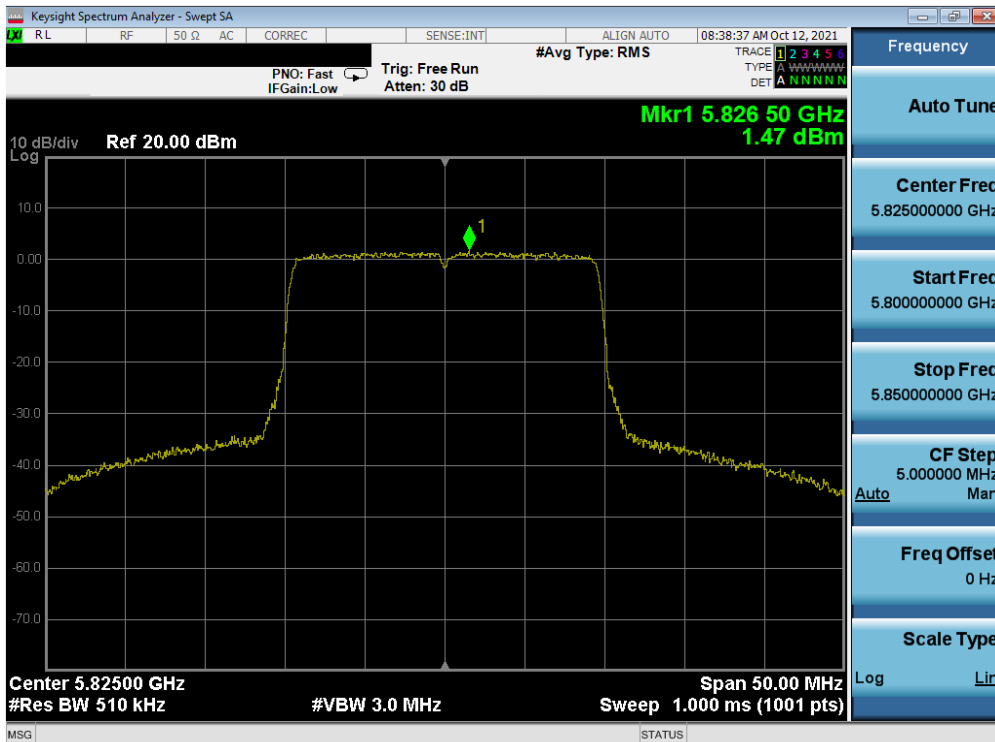


Plot 7-323. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax (UNII Band 3) – Ch. 149)

FCC ID: A3LSMS906E	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2110010116-09.A3L	Test Dates: 09/09/2021 - 12/06/2021	EUT Type: Portable Handset		Page 193 of 254

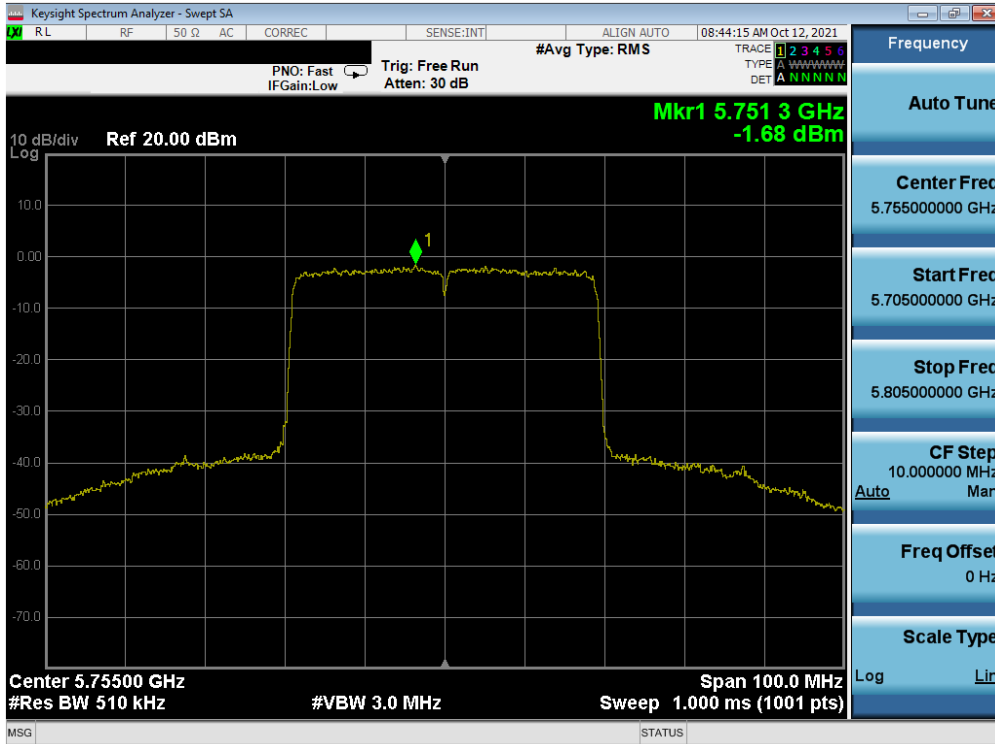


Plot 7-324. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax (UNII Band 3) – Ch. 157)

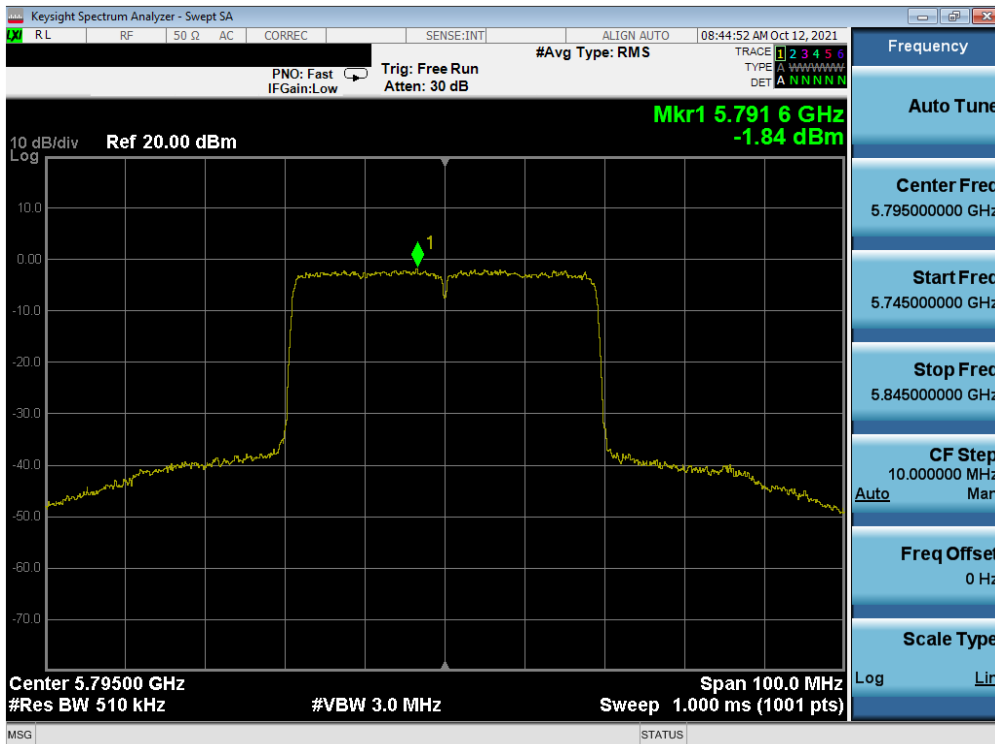


Plot 7-325. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax (UNII Band 3) – Ch. 165)

FCC ID: A3LSMS906E	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
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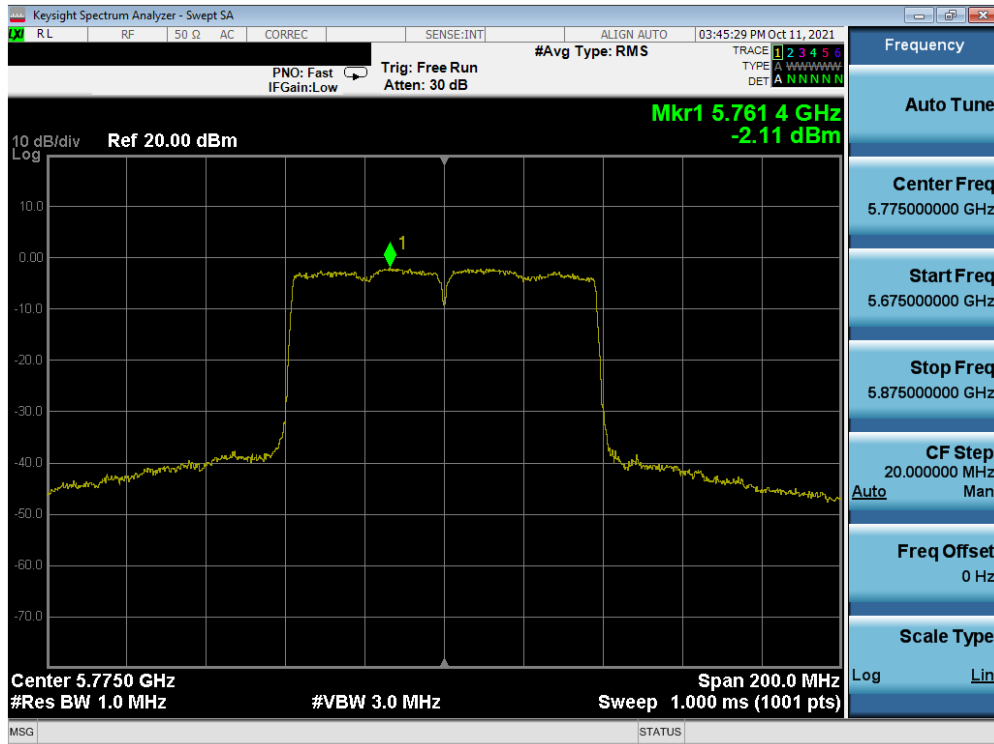


Plot 7-328. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax (UNII Band 3) – Ch. 151)

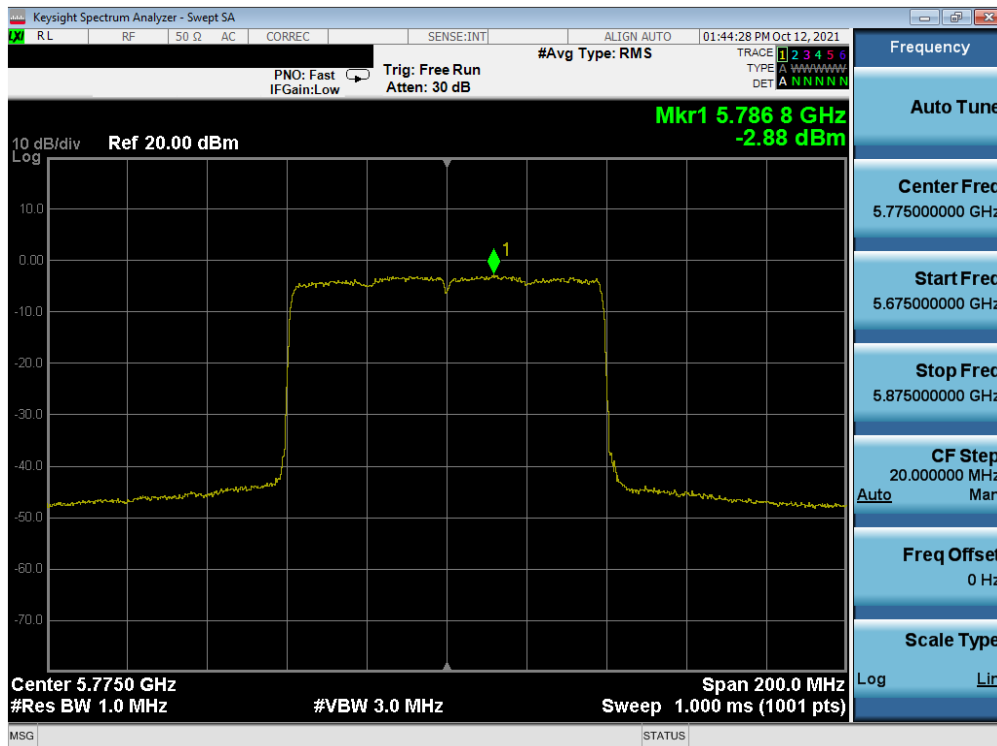


Plot 7-329. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax (UNII Band 3) – Ch. 159)

FCC ID: A3LSMS906E	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
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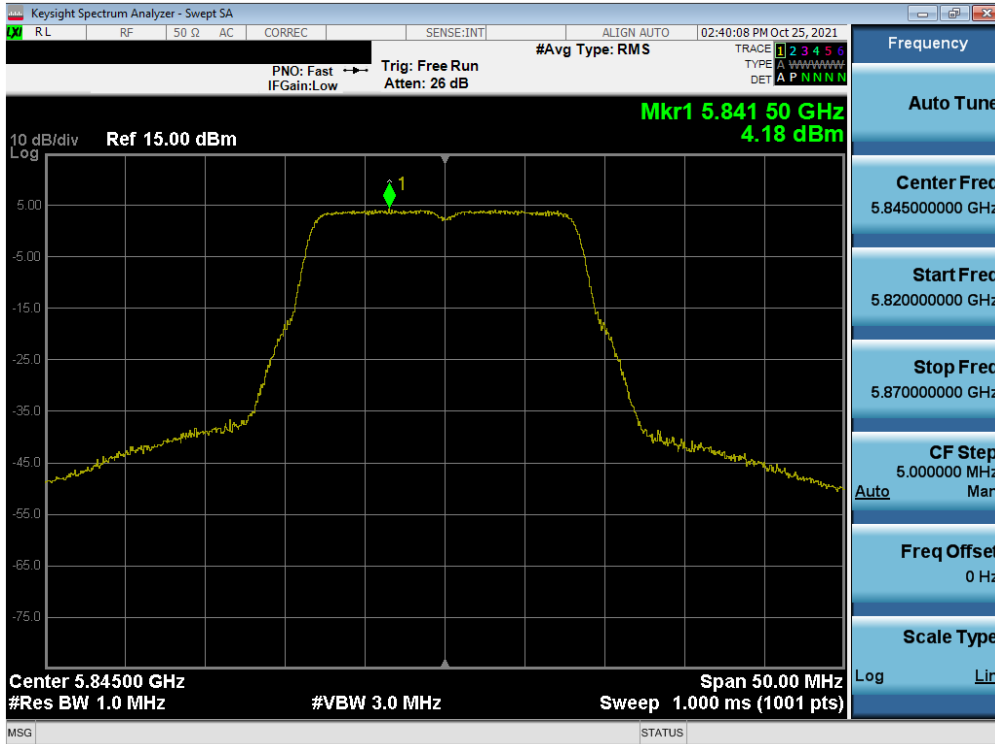


Plot 7-330. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ac (UNII Band 3) – Ch. 155)

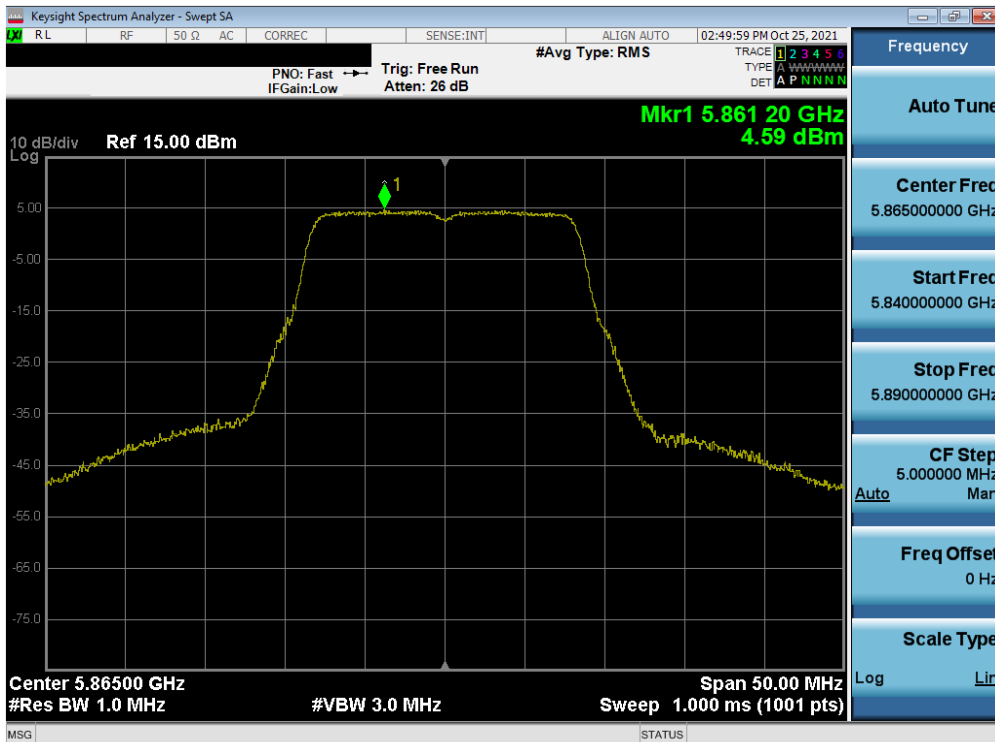


Plot 7-331. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax (UNII Band 3) – Ch. 155)

FCC ID: A3LSMS906E	Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2110010116-09.A3L	Test Dates: 09/09/2021 - 12/06/2021	EUT Type: Portable Handset		Page 197 of 254

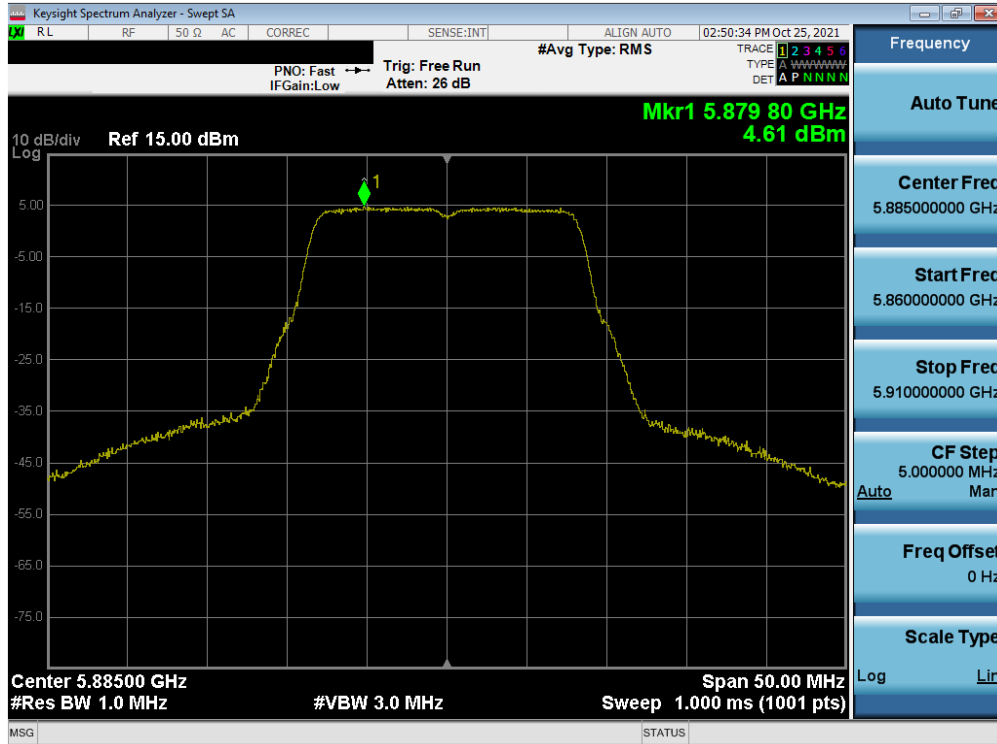


Plot 7-332. Power Spectral Density Plot MIMO ANT2 (802.11a (UNII Band 3/4) – Ch. 169)

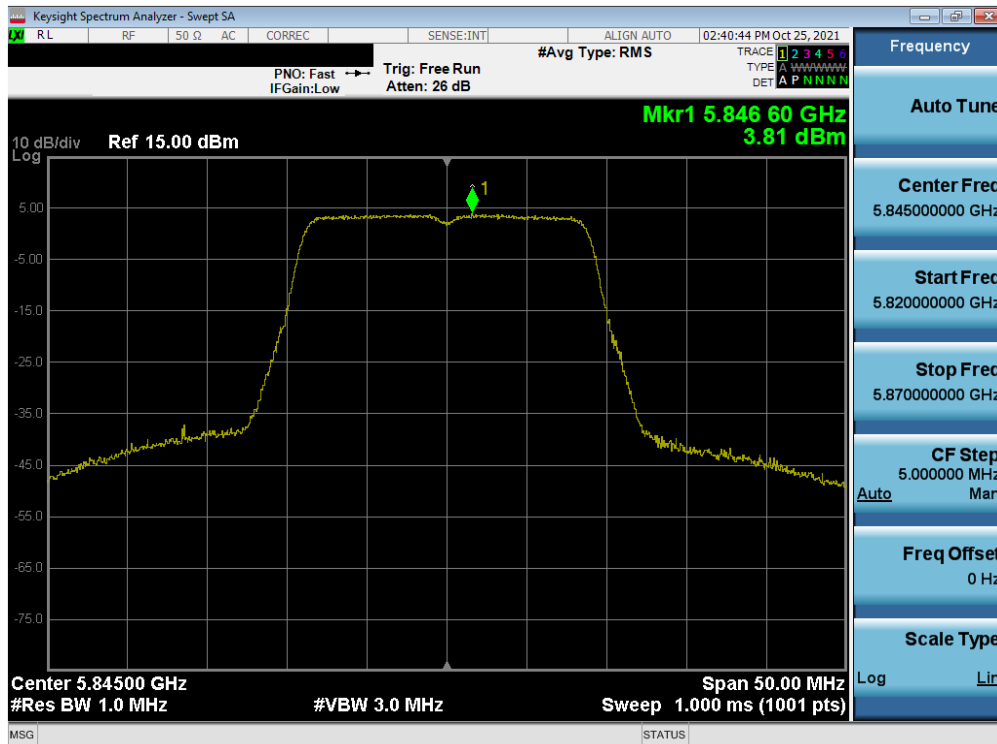


Plot 7-333. Power Spectral Density Plot MIMO ANT2 (802.11a (UNII Band 4) – Ch. 173)

FCC ID: A3LSMS906E	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
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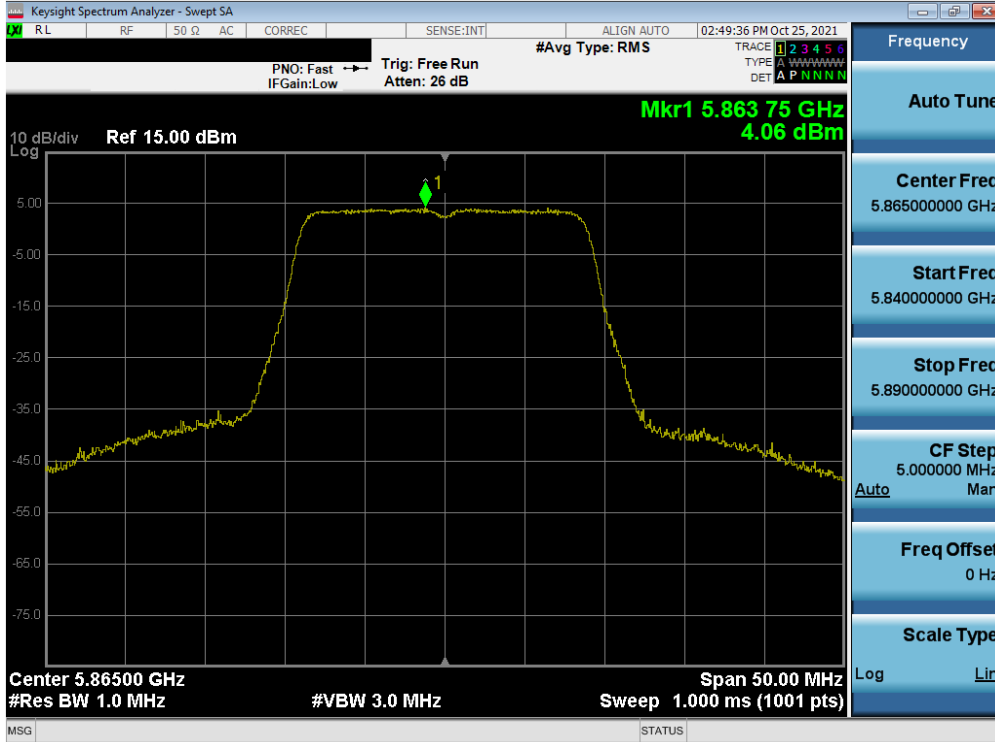


Plot 7-334. Power Spectral Density Plot MIMO ANT2 (802.11a (UNII Band 4) – Ch. 177)

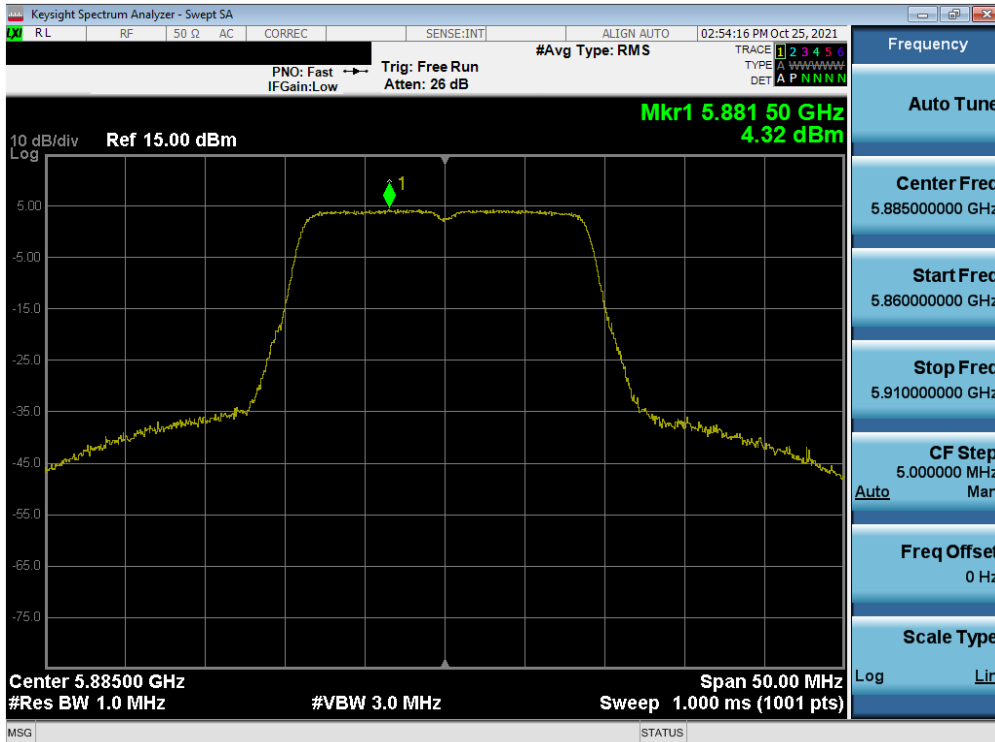


Plot 7-335. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11n (UNII Band 3/4) – Ch. 169)

FCC ID: A3LSMS906E	Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
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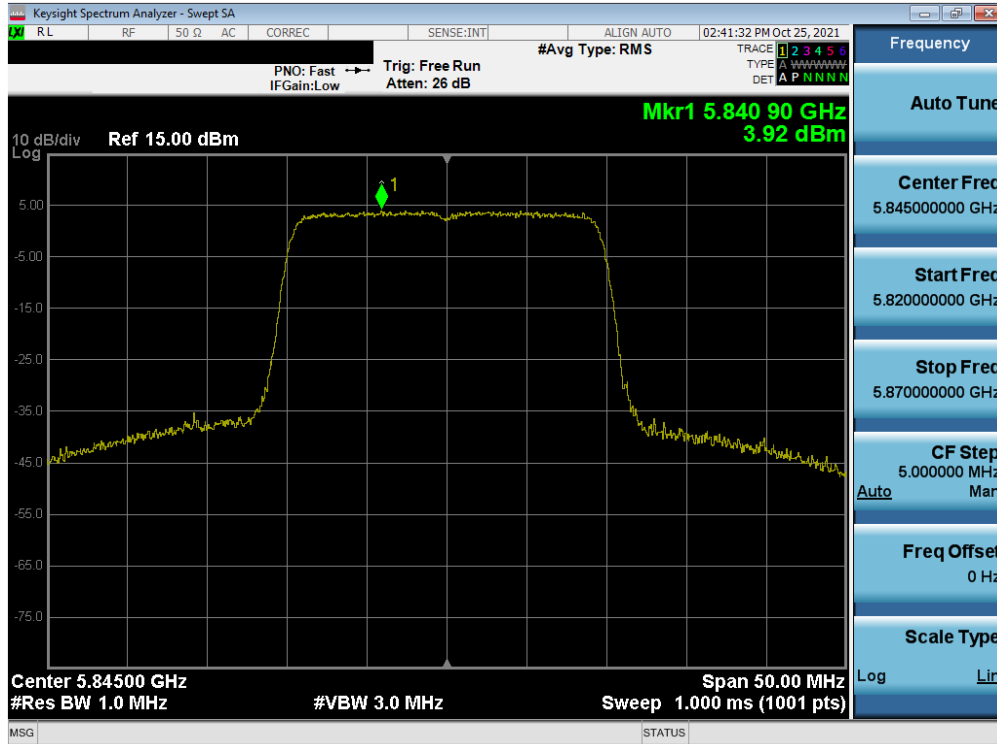


Plot 7-336. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11n (UNII Band 4) – Ch. 173)

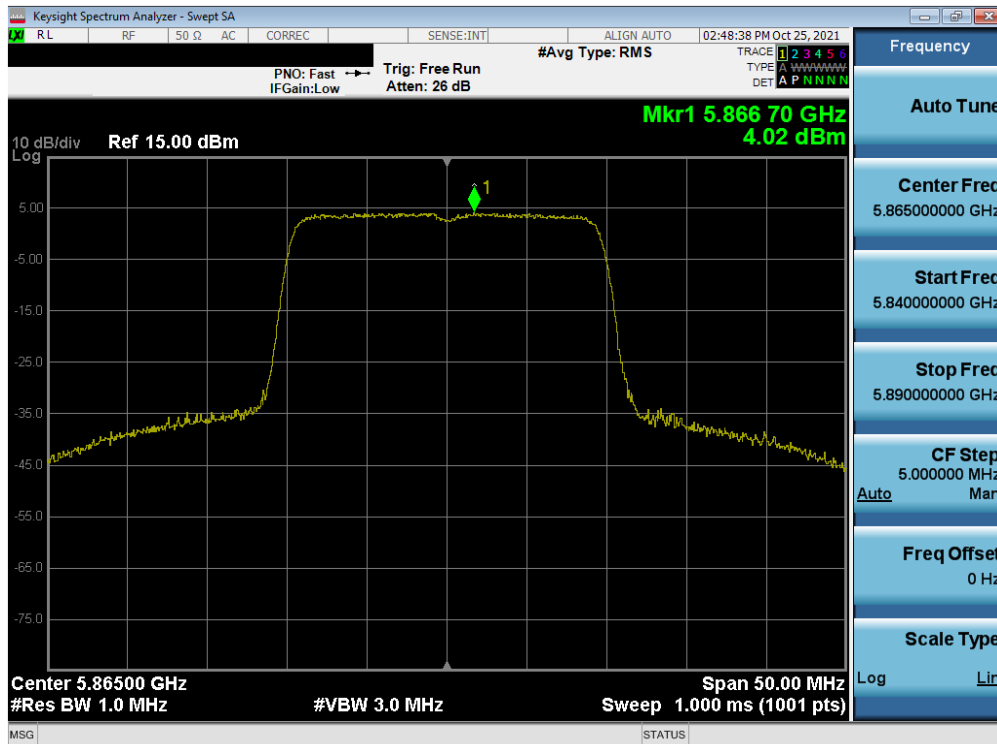


Plot 7-337. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11n (UNII Band 4) – Ch. 177)

FCC ID: A3LSMS906E	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
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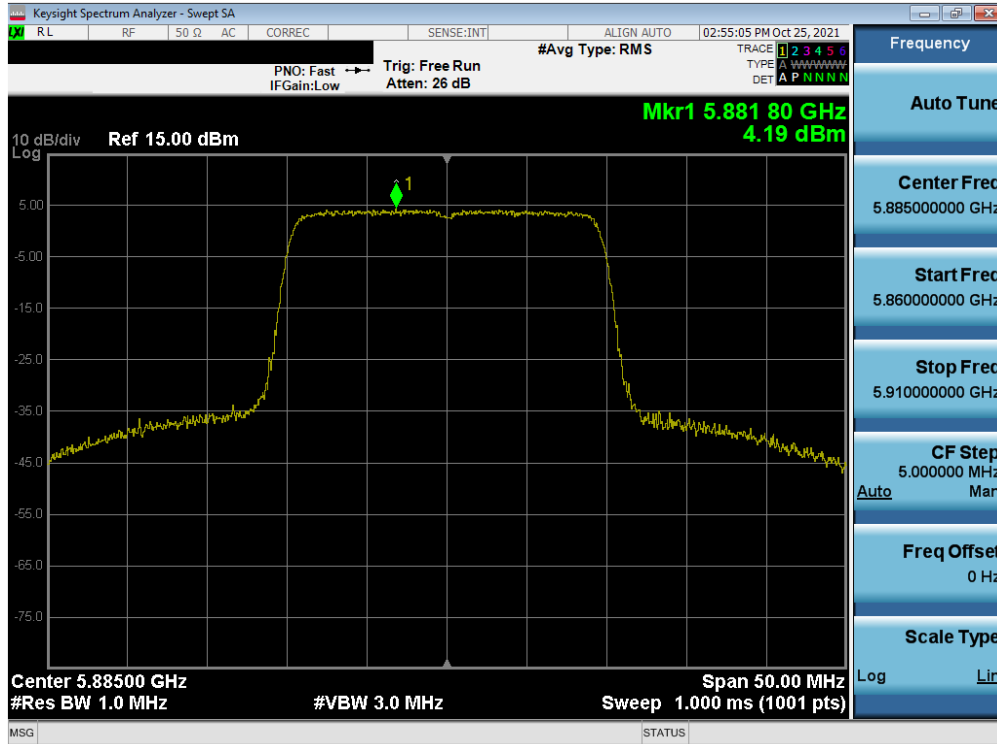


Plot 7-338. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax (UNII Band 3/4) – Ch. 169)

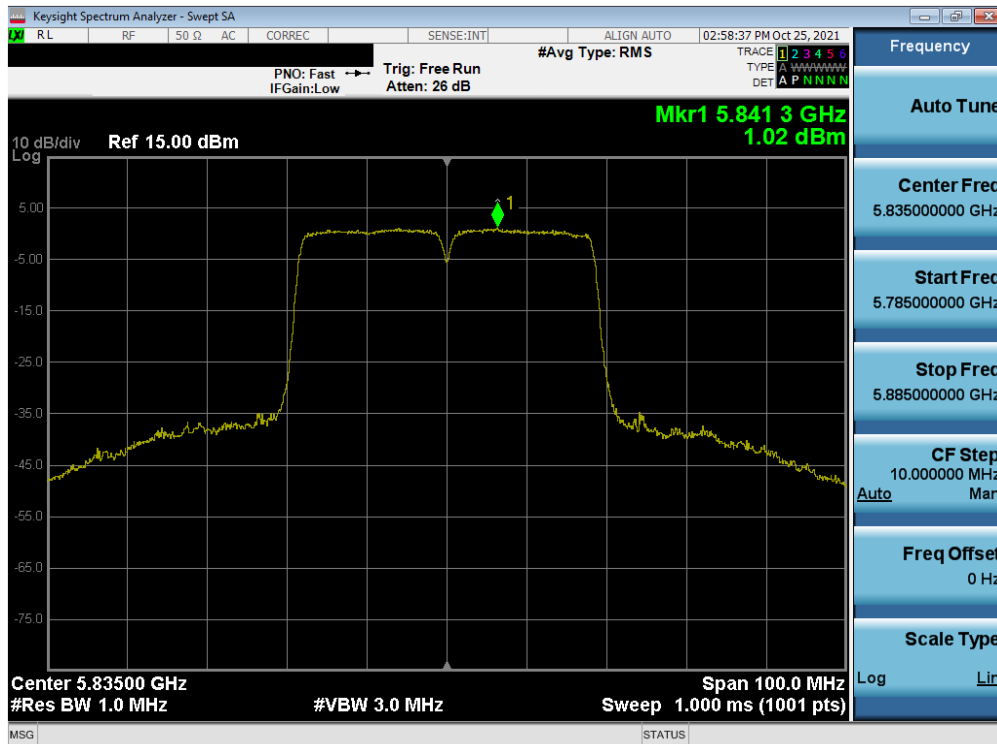


Plot 7-339. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax (UNII Band 4) – Ch. 173)

FCC ID: A3LSMS906E	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2110010116-09.A3L	Test Dates: 09/09/2021 - 12/06/2021	EUT Type: Portable Handset		Page 201 of 254

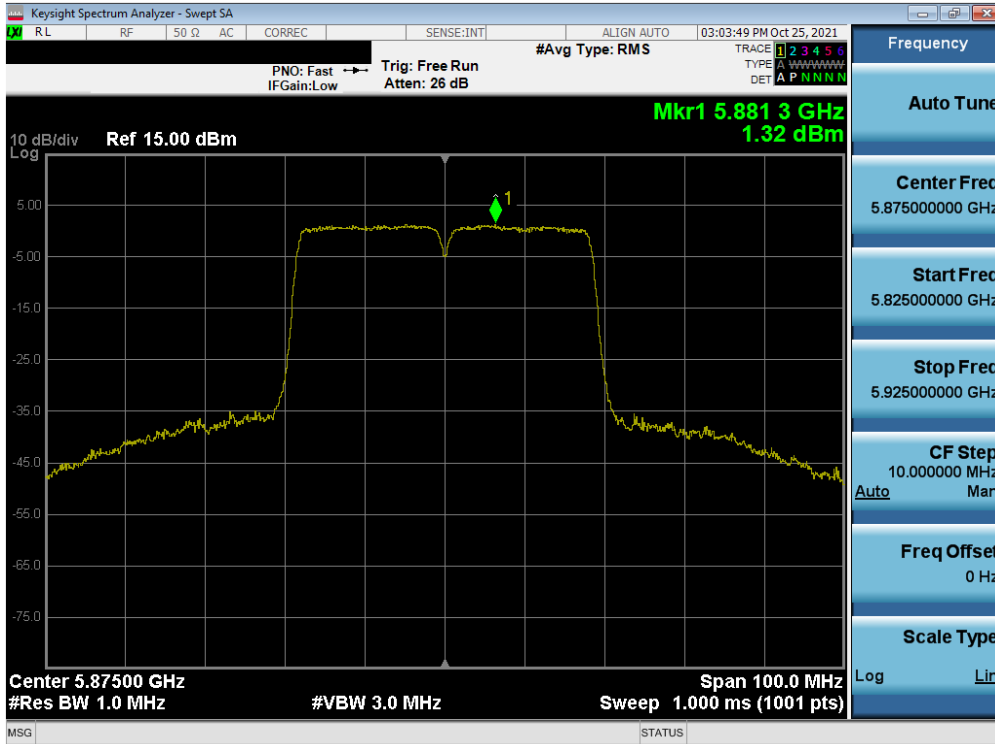


Plot 7-340. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax (UNII Band 4) – Ch. 177)

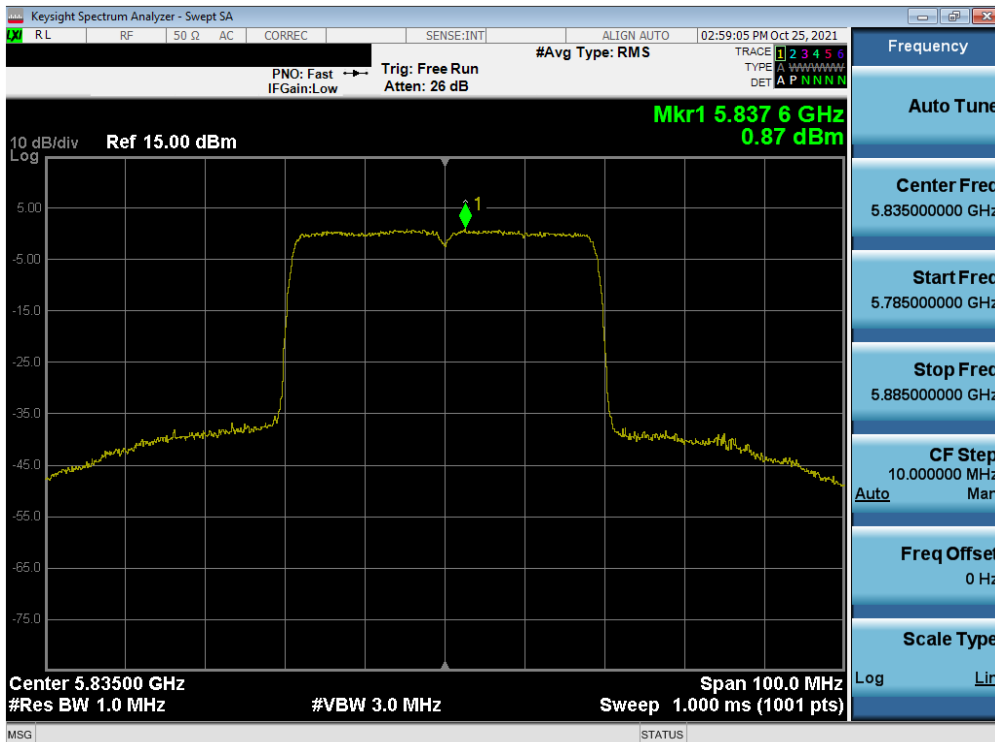


Plot 7-341. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11n (UNII Band 3/4) – Ch. 167)

FCC ID: A3LSMS906E	Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
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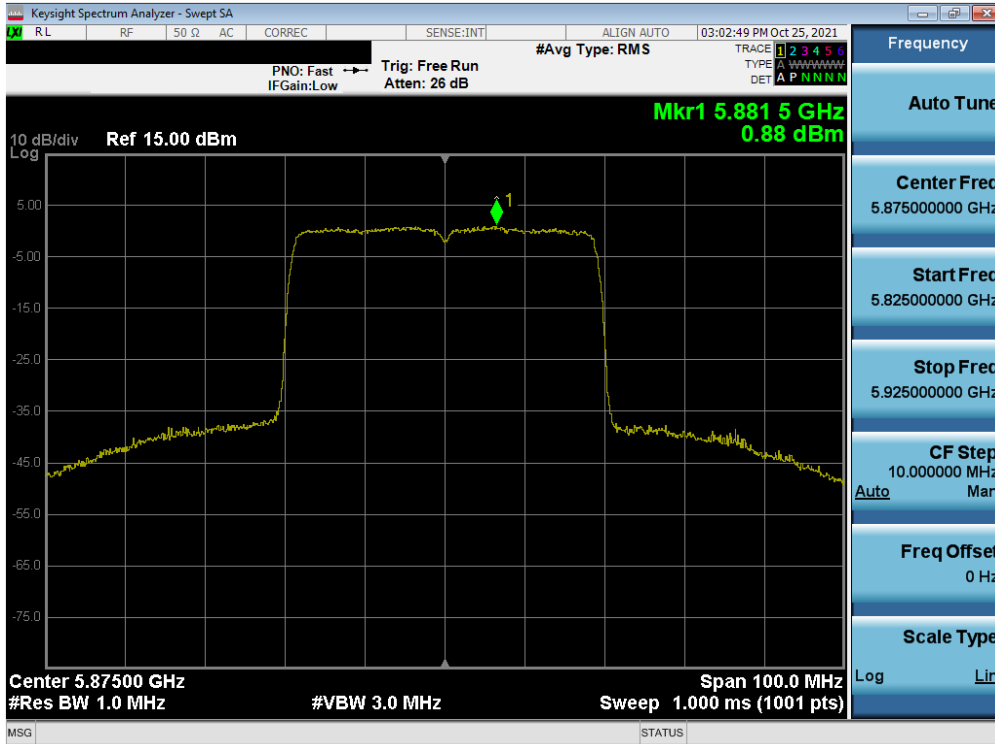


Plot 7-342. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11n (UNII Band 4) – Ch. 175)

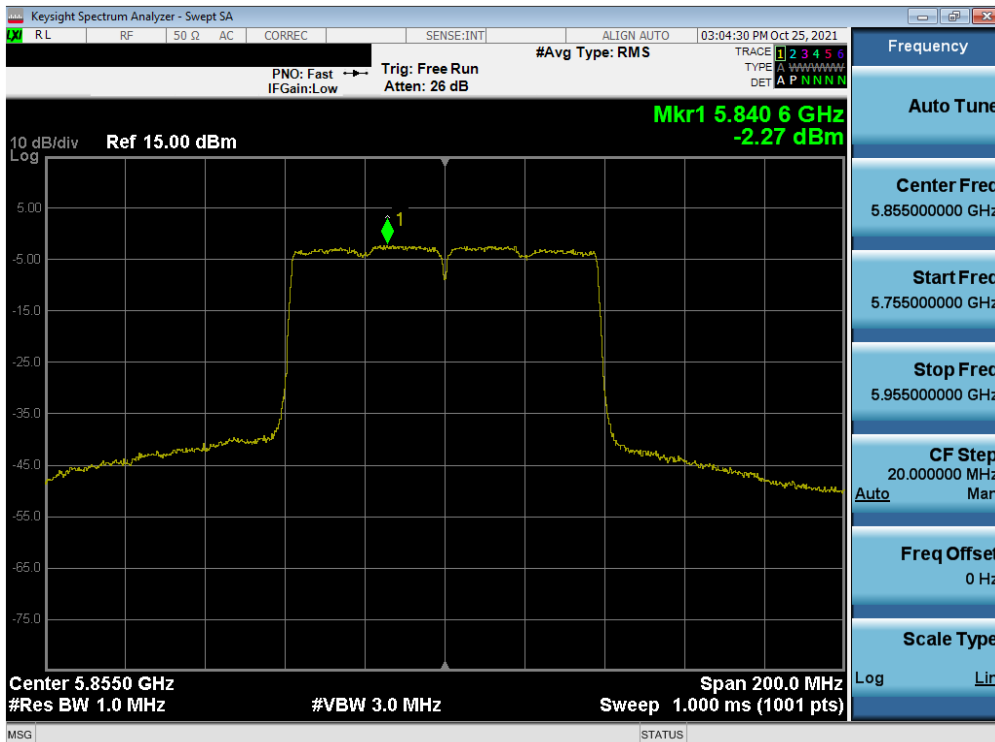


Plot 7-343. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax (UNII Band 3/4) – Ch. 167)

FCC ID: A3LSMS906E	Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2110010116-09.A3L	Test Dates: 09/09/2021 - 12/06/2021	EUT Type: Portable Handset		Page 203 of 254

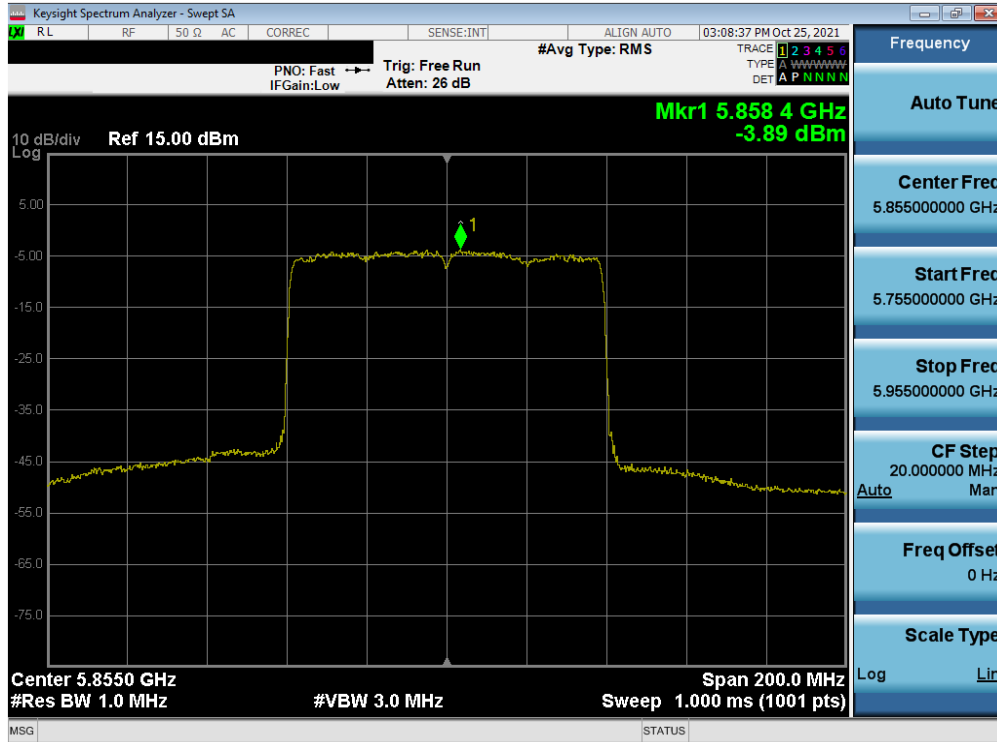


Plot 7-344. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax (UNII Band 4) – Ch. 175)



Plot 7-345. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ac (UNII Band 3/4) – Ch. 171)

FCC ID: A3LSMS906E	Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
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Plot 7-346. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax (UNII Band 3/4) – Ch. 171)



Plot 7-347. Power Spectral Density Plot MIMO ANT2 (160MHz BW 802.11ac (UNII Band 3/4) – Ch. 163)

FCC ID: A3LSMS906E	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
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Plot 7-348. Power Spectral Density Plot MIMO ANT2 (160MHz BW 802.11ax (UNII Band 3/4) – Ch. 163)

FCC ID: A3LSMS906E	PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
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Note:

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

Sample MIMO Calculation:

At 5180MHz in 802.11n (20MHz BW) mode, the average conducted power spectral density was measured to be 7.77 dBm for Antenna-1 and 8.06 dBm for Antenna-2.

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

$$(7.77 \text{ dBm} + 8.06 \text{ dBm}) = (5.99 \text{ mW} + 6.40 \text{ mW}) = 12.39 \text{ mW} = 10.93 \text{ dBm}$$

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

At 5180MHz in 802.11n (20MHz BW) mode, the average MIMO power density was calculated to be 10.93 dBm with directional gain of -3.72 dBi.

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

$$10.93 \text{ dBm} + (-3.72) \text{ dBi} = 7.21 \text{ dBm}$$

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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), 802.11ac (80MHz) and 802.11ax (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.

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

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47 CFR and Table 6 of RSS-Gen (8.10) must not exceed the limits shown in Table 7-26 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 7-26. 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)

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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

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.

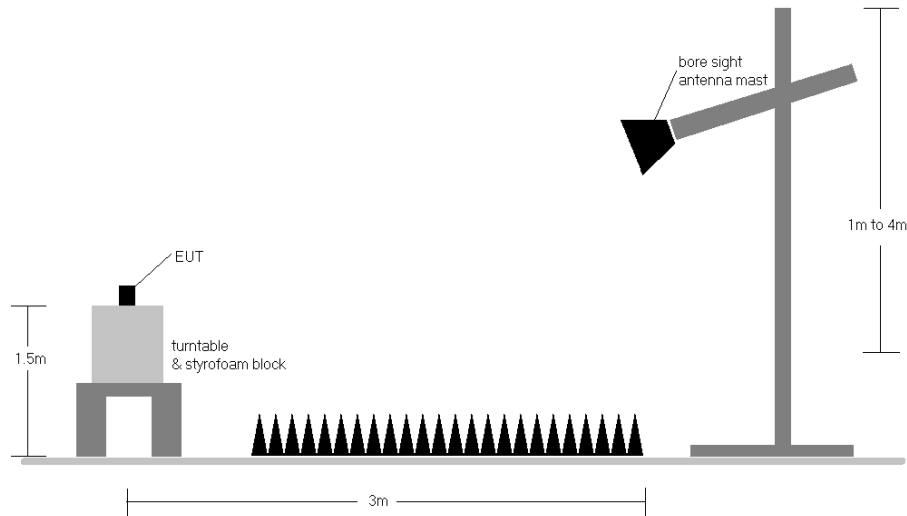


Figure 7-5. Test Instrument & Measurement Setup

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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 7-26.
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 7-26. All spurious emissions that do not lie in a restricted band are subject to a peak limit of -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions of 68.2dBµV/m.
3. The antenna is manipulated through typical positions, polarity and length during the tests. The EUT is manipulated through three orthogonal planes.
4. This unit was tested with its standard battery.
5. The spectrum is measured from 9kHz to the 10th harmonic of the fundamental frequency of the transmitter using CISPR quasi peak detector below 1GHz. Above 1 GHz, average and peak measurements were taken using linearly polarized horn antennas. The worst-case emissions are reported however emissions whose levels were not within 20dB of the respective limits were not reported.
6. Emissions below 18GHz were measured at a 3 meter test distance while emissions above 18GHz were measured at a 1 meter test distance with the application of a distance correction factor.
7. Radiated spurious emissions were investigated while operating in MIMO mode, however, it was determined that single antenna operation produced the worst case emissions. Since the emissions produced from MIMO operation were found to be more than 20dB below the limit, the MIMO emissions are not reported.
8. The wide spectrum spurious emissions plots shown on the following pages are used only for the purpose of emission identification. Any emissions found to be within 20dB of the limit are fully investigated and the results are shown in this section.
9. The "-" shown in the following RSE tables are used to denote a noise floor measurement.

Sample Calculations

Determining Spurious Emissions Levels

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

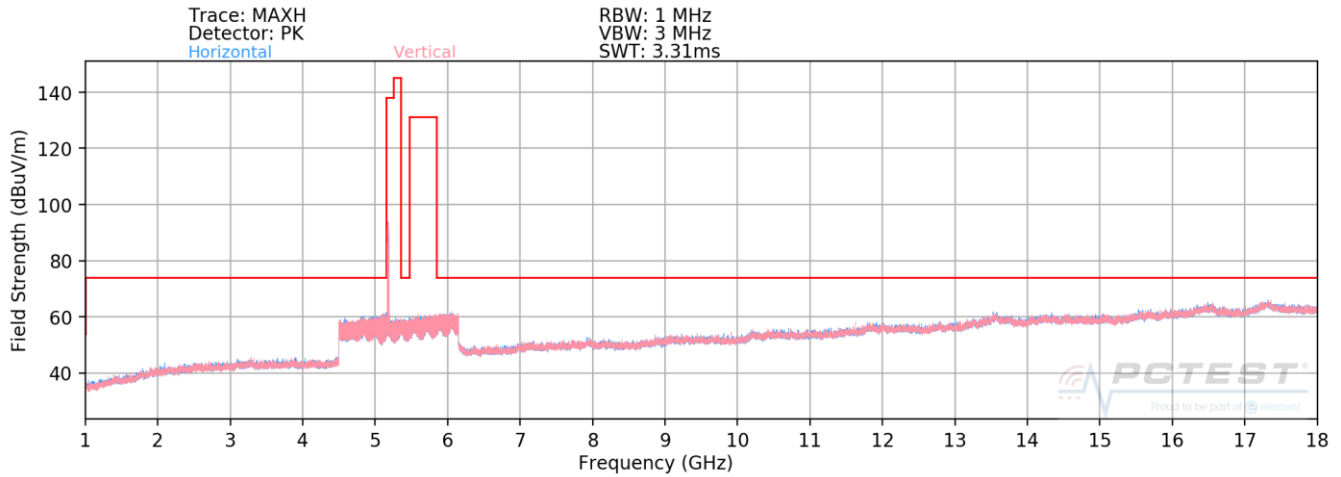
Radiated Band Edge Measurement Offset

- The amplitude offset shown in the radiated restricted band edge plots was calculated using the formula:

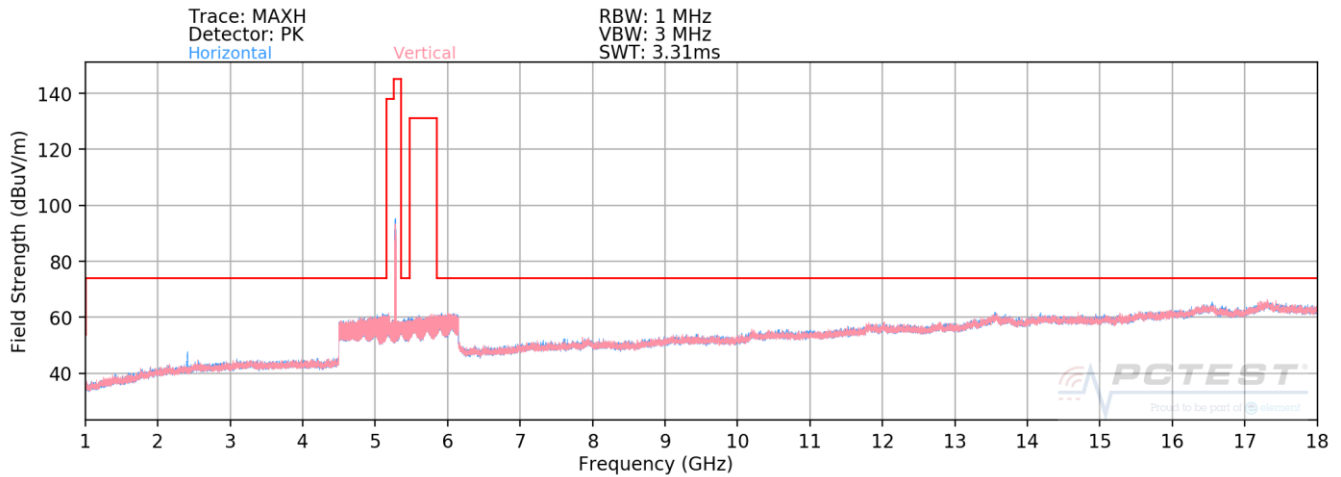
$$\text{Offset (dB)} = (\text{Antenna Factor} + \text{Cable Loss} + \text{Attenuator}) - \text{Preamplifier Gain}$$

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7.6.1 MIMO Radiated Spurious Emission Measurements

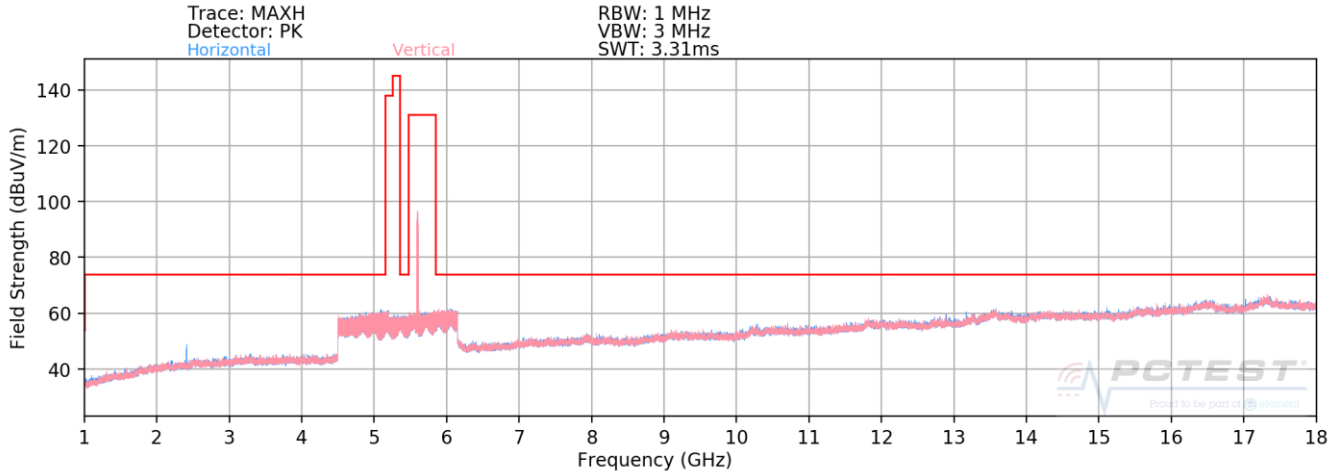


Plot 7-349. Radiated Spurious Plot above 1GHz MIMO (802.11a – U1 Ch. 40)

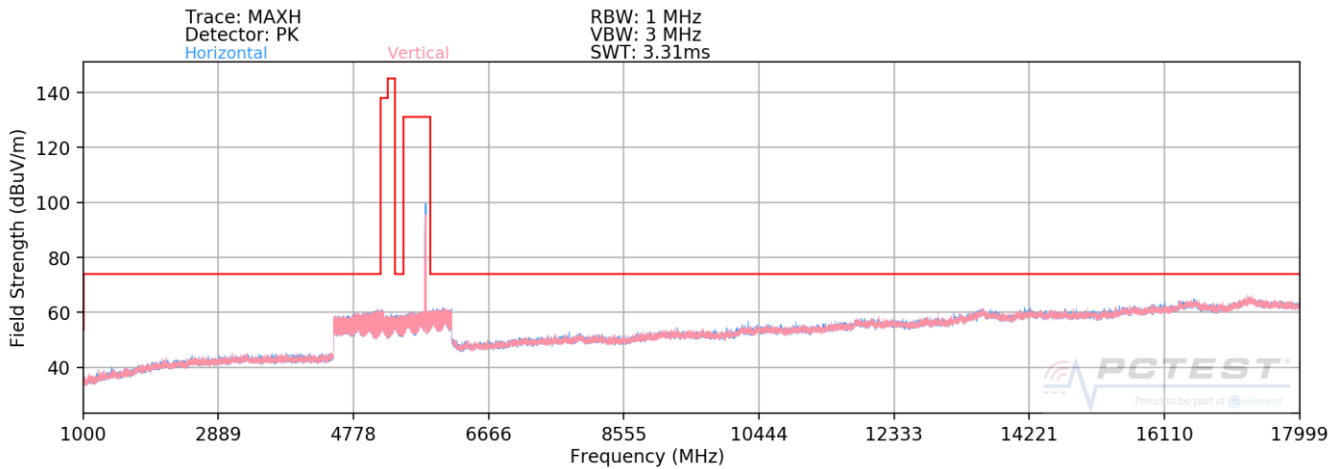


Plot 7-350. Radiated Spurious Plot above 1GHz MIMO (802.11a – U2A Ch. 56)

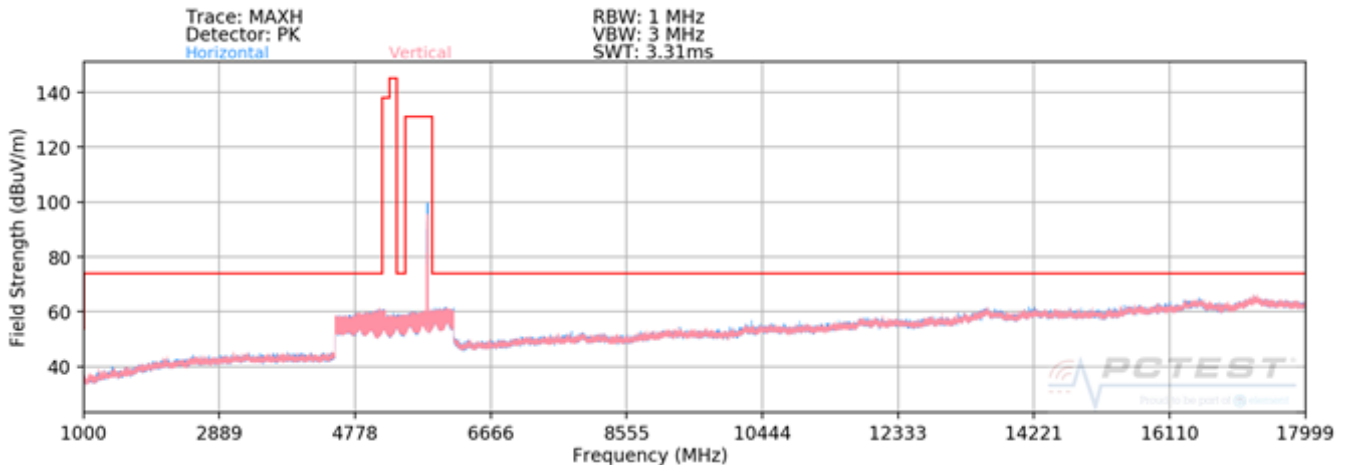
FCC ID: A3LSMS906E	 PCTEST Proud to be part of 	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
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Plot 7-351. Radiated Spurious Plot above 1GHz MIMO (802.11a – U2C Ch. 120)



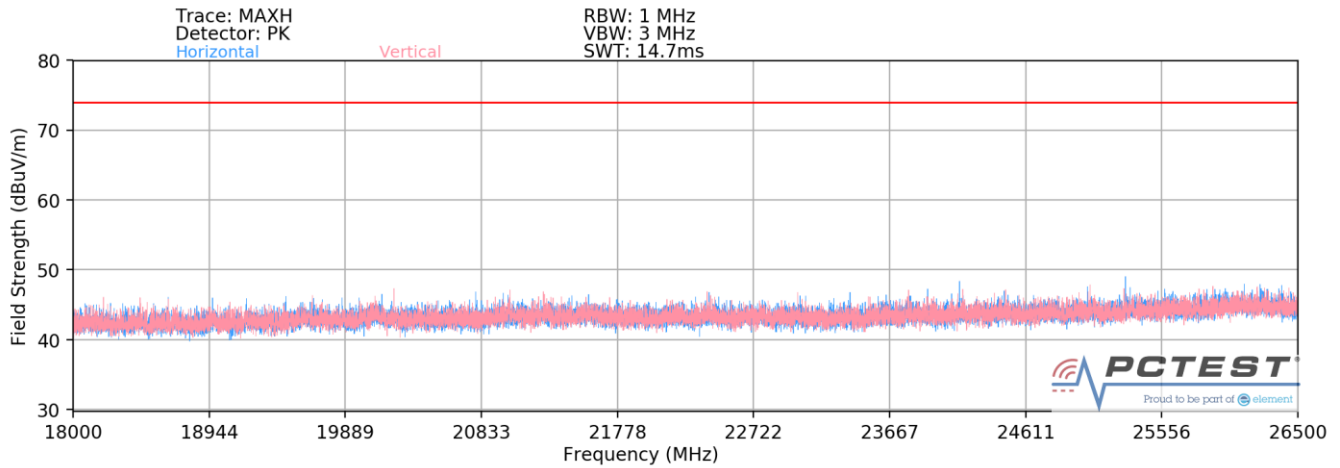
Plot 7-352. Radiated Spurious Plot above 1GHz MIMO (802.11a – U3 Ch. 157)



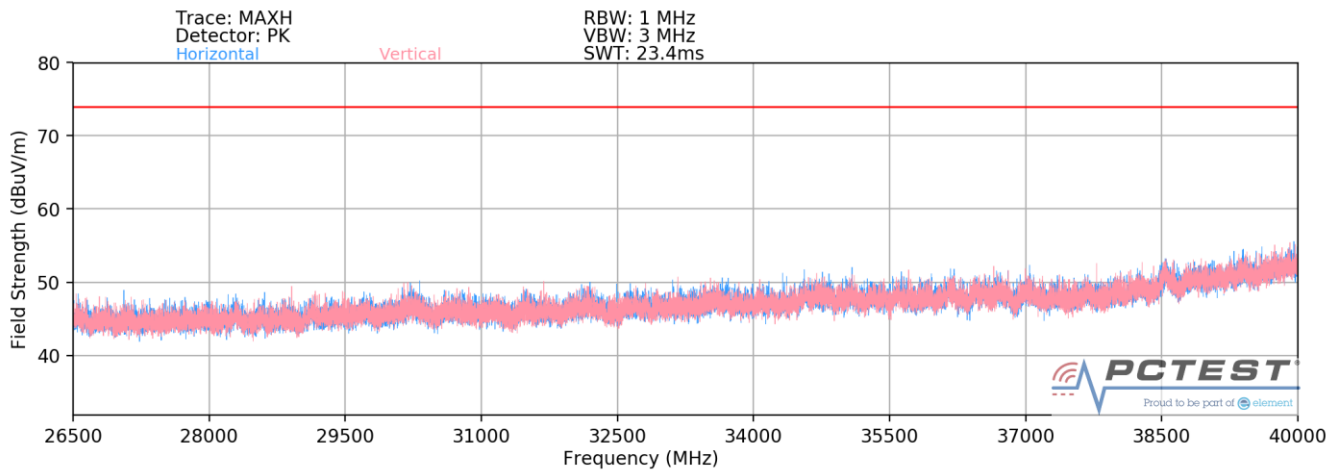
Plot 7-353. Radiated Spurious Plot above 1GHz MIMO (802.11a – U4 Ch. 173)

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MIMO Radiated Spurious Emissions Measurements (Above 18GHz)



Plot 7-354. Radiated Spurious Plot above 18GHz - 26.5GHz MIMO (802.11a)



Plot 7-355. Radiated Spurious Plot 26.5GHz - 40GHz MIMO (802.11a)

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CDD 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	-	-	-70.74	19.95	0.00	56.21	68.20	-11.99
* 15540.00	Average	H	-	-	-85.12	29.30	0.00	51.18	53.98	-2.80
* 15540.00	Peak	H	-	-	-75.39	29.30	0.00	60.91	73.98	-13.07
* 20720.00	Average	H	-	-	-71.08	4.37	-9.54	30.75	53.98	-23.23
* 20720.00	Peak	H	-	-	-61.13	4.37	-9.54	40.70	73.98	-33.28
25900.00	Peak	H	-	-	-61.35	5.87	-9.54	41.98	68.20	-26.22

Table 7-27. Radiated Measurements CDD

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	-	-	-73.10	20.31	0.00	54.21	68.20	-13.99
* 15600.00	Average	H	-	-	-85.03	28.77	0.00	50.74	53.98	-3.24
* 15600.00	Peak	H	-	-	-74.70	28.77	0.00	61.07	73.98	-12.91
* 20800.00	Average	H	-	-	-70.31	4.47	-9.54	31.62	53.98	-22.36
* 20800.00	Peak	H	-	-	-60.86	4.47	-9.54	41.07	73.98	-32.91
26000.00	Peak	H	-	-	-61.05	6.04	-9.54	42.45	68.20	-25.75

Table 7-28. Radiated Measurements CDD

FCC ID: A3LSMS906E		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2110010116-09.A3L	Test Dates: 09/09/2021 - 12/06/2021	EUT Type: Portable Handset	Page 214 of 254	

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	-	-	-72.99	20.80	0.00	54.81	68.20	-13.39
* 15720.00	Average	H	-	-	-84.91	29.07	0.00	51.16	53.98	-2.82
* 15720.00	Peak	H	-	-	-74.39	29.07	0.00	61.68	73.98	-12.30
* 20960.00	Average	H	-	-	-71.55	4.65	-9.54	30.56	53.98	-23.42
* 20960.00	Peak	H	-	-	-61.35	4.65	-9.54	40.76	73.98	-33.22
26200.00	Peak	H	-	-	-60.19	5.76	-9.54	43.02	68.20	-25.18

Table 7-29. Radiated Measurements CDD

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	-	-	-73.35	20.29	0.00	53.94	68.20	-14.26
* 15780.00	Average	H	-	-	-85.06	28.77	0.00	50.71	53.98	-3.27
* 15780.00	Peak	H	-	-	-74.33	28.77	0.00	61.44	73.98	-12.54
* 21040.00	Average	H	-	-	-70.86	4.68	-9.54	31.28	53.98	-22.70
* 21040.00	Peak	H	-	-	-61.26	4.68	-9.54	40.88	73.98	-33.10
26300.00	Peak	H	-	-	-61.99	5.68	-9.54	41.15	68.20	-27.05

Table 7-30. Radiated Measurements CDD

FCC ID: A3LSMS906E	 PCTEST® Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2110010116-09.A3L	Test Dates: 09/09/2021 - 12/06/2021	EUT Type: Portable Handset	Page 215 of 254	

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	-	-	-73.75	20.86	0.00	54.11	68.20	-14.09
* 15840.00	Average	H	-	-	-84.86	28.91	0.00	51.05	53.98	-2.93
* 15840.00	Peak	H	-	-	-74.71	28.91	0.00	61.20	73.98	-12.78
* 21120.00	Average	H	-	-	-70.79	4.78	-9.54	31.44	53.98	-22.54
* 21120.00	Peak	H	-	-	-60.78	4.78	-9.54	41.45	73.98	-32.53
26400.00	Peak	H	-	-	-60.91	5.75	-9.54	42.29	68.20	-25.91

Table 7-31. Radiated Measurements CDD

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	-	-	-84.33	20.65	0.00	43.32	53.98	-10.66
* 10640.00	Peak	H	-	-	-73.36	20.65	0.00	54.29	73.98	-19.69
* 15960.00	Average	H	-	-	-84.85	29.02	0.00	51.17	53.98	-2.81
* 15960.00	Peak	H	-	-	-74.67	29.02	0.00	61.35	73.98	-12.63
* 21280.00	Average	H	-	-	-70.89	4.92	-9.54	31.49	53.98	-22.49
* 21280.00	Peak	H	-	-	-60.19	4.92	-9.54	42.19	73.98	-31.79
26600.00	Peak	H	-	-	-62.29	5.78	-9.54	40.95	68.20	-27.25

Table 7-32. Radiated Measurements CDD

FCC ID: A3LSMS906E	 PCTEST® Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2110010116-09.A3L	Test Dates: 09/09/2021 - 12/06/2021	EUT Type: Portable Handset	Page 216 of 254	

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	-	-	-85.43	21.50	0.00	43.07	53.98	-10.91
* 11000.00	Peak	H	-	-	-73.66	21.50	0.00	54.84	73.98	-19.14
16500.00	Peak	H	-	-	-73.74	30.30	0.00	63.56	68.20	-4.64
22000.00	Peak	H	-	-	-60.65	4.80	-9.54	41.61	68.20	-26.59
27500.00	Peak	H	-	-	-60.53	5.93	-9.54	42.85	68.20	-25.35

Table 7-33. Radiated Measurements CDD

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	-	-	-84.05	21.58	0.00	44.53	53.98	-9.45
* 11200.00	Peak	H	-	-	-73.87	21.58	0.00	54.71	73.98	-19.27
16800.00	Peak	H	-	-	-73.20	30.19	0.00	63.99	68.20	-4.21
* 22400.00	Average	H	-	-	-70.54	4.84	-9.54	31.75	53.98	-22.23
* 22400.00	Peak	H	-	-	-61.35	4.84	-9.54	40.94	73.98	-33.04
28000.00	Peak	H	-	-	-60.61	6.12	-9.54	42.96	68.20	-25.24

Table 7-34. Radiated Measurements CDD

FCC ID: A3LSMS906E	 PCTEST Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2110010116-09.A3L	Test Dates: 09/09/2021 - 12/06/2021	EUT Type: Portable Handset	Page 217 of 254	

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	-	-	-84.17	21.84	0.00	44.67	53.98	-9.31
* 11440.00	Peak	H	-	-	-74.20	21.84	0.00	54.64	73.98	-19.34
17160.00	Peak	H	-	-	-74.53	30.41	0.00	62.88	68.20	-5.32
* 22880.00	Average	H	-	-	-70.72	4.77	-9.54	31.51	53.98	-22.47
* 22880.00	Peak	H	-	-	-61.33	4.77	-9.54	40.90	73.98	-33.08
28600.00	Peak	H	-	-	-62.72	6.32	-9.54	41.05	68.20	-27.15

Table 7-35. Radiated Measurements CDD

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	-	-	-84.08	21.98	0.00	44.90	53.98	-9.08
* 11490.00	Peak	H	-	-	-73.95	21.98	0.00	55.03	73.98	-18.95
17235.00	Peak	H	-	-	-73.87	31.06	0.00	64.19	68.20	-4.01
* 22980.00	Average	H	-	-	-71.26	4.67	-9.54	30.87	53.98	-23.11
* 22980.00	Peak	H	-	-	-62.03	4.67	-9.54	40.10	73.98	-33.88
28725.00	Peak	H	-	-	-61.22	6.42	-9.54	42.65	69.20	-26.55

Table 7-36. Radiated Measurements CDD

FCC ID: A3LSMS906E	 PCTEST Proud to be part of 	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2110010116-09.A3L	Test Dates: 09/09/2021 - 12/06/2021	EUT Type: Portable Handset	Page 218 of 254	

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	-	-	-84.05	22.21	0.00	45.16	53.98	-8.82
* 11570.00	Peak	H	-	-	-74.13	22.21	0.00	55.08	73.98	-18.90
17355.00	Peak	H	-	-	-73.20	31.07	0.00	64.87	68.20	-3.33
23140.00	Peak	H	-	-	-60.63	4.61	-9.54	41.43	68.20	-26.77
28925.00	Peak	H	-	-	-60.73	6.50	-9.54	43.22	68.20	-24.98

Table 7-37. Radiated Measurements CDD

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	-	-	-84.00	22.09	0.00	45.09	53.98	-8.89
* 11650.00	Peak	H	-	-	-73.33	22.09	0.00	55.76	73.98	-18.22
17475.00	Peak	H	-	-	-73.53	30.99	0.00	64.46	68.20	-3.74
23300.00	Peak	H	-	-	-62.19	4.72	-9.54	39.99	68.20	-28.21
29125.00	Peak	H	-	-	-62.48	6.86	-9.54	41.84	68.20	-26.36

Table 7-38. Radiated Measurements CDD

FCC ID: A3LSMS906E	 PCTEST® Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2110010116-09.A3L	Test Dates: 09/09/2021 - 12/06/2021	EUT Type: Portable Handset	Page 219 of 254	

Worst Case Mode: 802.11a
Worst Case Transfer Rate: 6 Mbps
Distance of Measurements: 1 & 3 meters
Operating Frequency: 5845 MHz
Channel: 169

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]
* 11690.00	Average	H	369	146	-88.42	27.50	0.00	46.08	53.98	-7.90
* 11690.00	Peak	H	369	146	-78.01	27.50	0.00	56.49	73.98	-17.49
17535.00	Peak	H	-	-	-85.03	34.60	0.00	56.57	62.80	-6.23
23380.00	Peak	H	-	-	-64.98	4.67	-9.54	46.69	62.80	-16.11
29225.00	Peak	H	-	-	-65.99	6.67	-9.54	47.68	62.80	-15.12
35070.00	Peak	H	-	-	-66.33	8.57	-9.54	49.24	62.80	-13.56

Table 7-39. Radiated Measurements CDD

Worst Case Mode: 802.11a
Worst Case Transfer Rate: 6 Mbps
Distance of Measurements: 1 & 3 meters
Operating Frequency: 5865 MHz
Channel: 173

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]
* 11730.00	Average	H	371	146	-88.24	27.50	0.00	46.26	53.98	-7.72
* 11730.00	Peak	H	371	146	-77.20	27.50	0.00	57.30	73.98	-16.68
17595.00	Peak	H	-	-	-84.92	34.60	0.00	56.68	62.80	-6.12
23460.00	Peak	H	-	-	-65.69	4.63	-9.54	45.94	62.80	-16.86
29325.00	Peak	H	-	-	-66.89	6.99	-9.54	47.10	62.80	-15.70
35190.00	Peak	H	-	-	-68.01	8.73	-9.54	47.72	62.80	-15.08

Table 7-40. Radiated Measurements CDD

FCC ID: A3LSMS906E	 PCTEST® Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
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Worst Case Mode: 802.11a
 Worst Case Transfer Rate: 6 Mbps
 Distance of Measurements: 1 & 3 meters
 Operating Frequency: 5885 MHz
 Channel: 177

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]
* 11770.00	Average	H	366	152	-88.89	27.68	0.00	45.79	53.98	-8.19
* 11770.00	Peak	H	366	152	-79.99	27.68	0.00	54.69	73.98	-19.29
17655.00	Peak	H	-	-	-83.69	35.08	0.00	58.39	62.80	-4.41
23540.00	Peak	H	-	-	-64.99	4.72	-9.54	46.73	62.80	-16.07
29425.00	Peak	H	-	-	-66.21	7.00	-9.54	47.79	62.80	-15.01
35310.00	Peak	H	-	-	-68.93	8.79	-9.54	46.86	62.80	-15.94

Table 7-41. Radiated Measurements CDD

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	-	-	-84.15	22.09	0.00	44.94	53.98	-9.04
* 11650.00	Peak	H	-	-	-74.12	22.09	0.00	54.97	73.98	-19.01
17475.00	Peak	H	-	-	-73.64	30.99	0.00	64.35	68.20	-3.85
23300.00	Peak	H	-	-	-62.35	4.72	-9.54	39.83	68.20	-28.37
29125.00	Peak	H	-	-	-63.33	6.86	-9.54	40.99	68.20	-27.21

Table 7-42. Radiated Measurements CDD - WCP

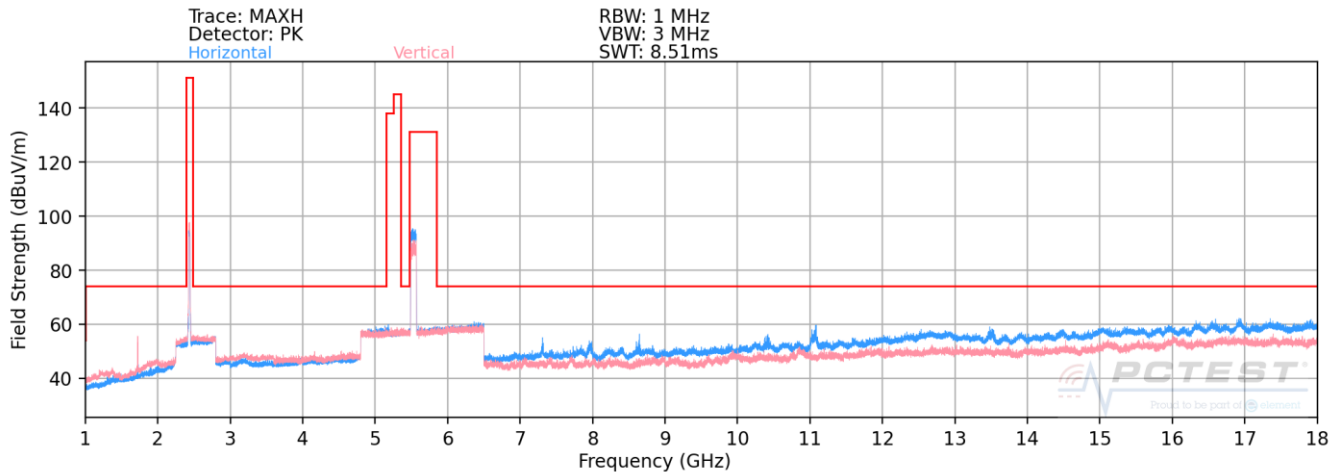
FCC ID: A3LSMS906E	 PCTEST® Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
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7.6.2 Simultaneous Tx Radiated Spurious Emissions Measurements

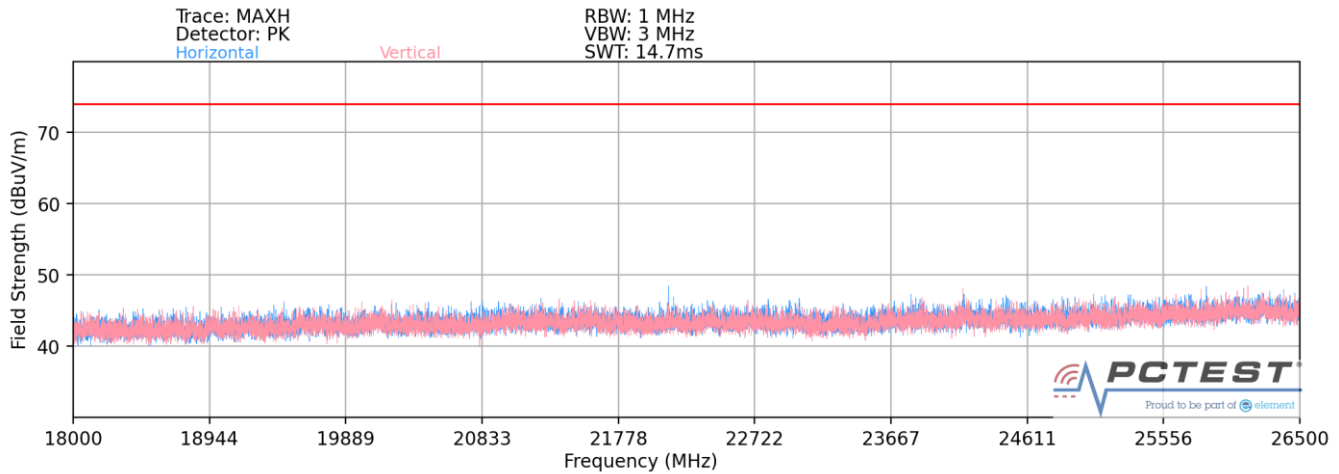
§15.407(b) §15.205 & §15.209; RSS-Gen [8.9]

Description	2.4 GHz Emission	5 GHz Emission
Antenna	1	1,2
Channel	6	100
Operating Frequency (MHz)	2437	5500
Data Rate (Mbps)	1	6
Mode	802.11b	802.11a

Table 7-43. Simultaneous Transmission Config-1

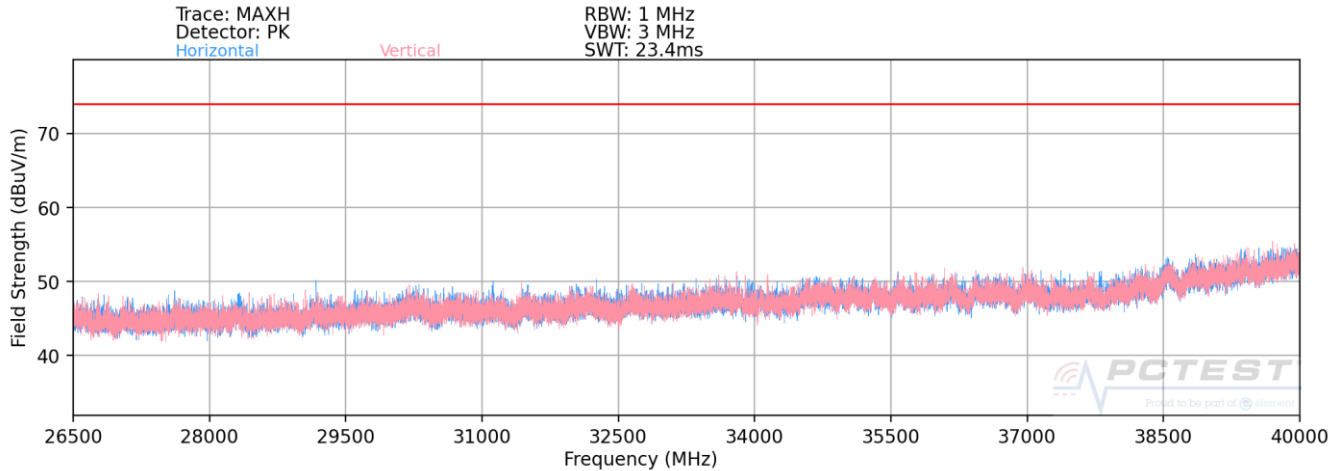


Plot 7-356. Radiated Spurious Plot above 1GHz (2.4GHz – 5GHz)



Plot 7-357. Radiated Spurious Plot 18GHz – 26.5GHz (2.4GHz – 5GHz)

FCC ID: A3LSMS906E		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
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Plot 7-358. Radiated Spurious Plot above 26.5GHz (2.4GHz – 5GHz)

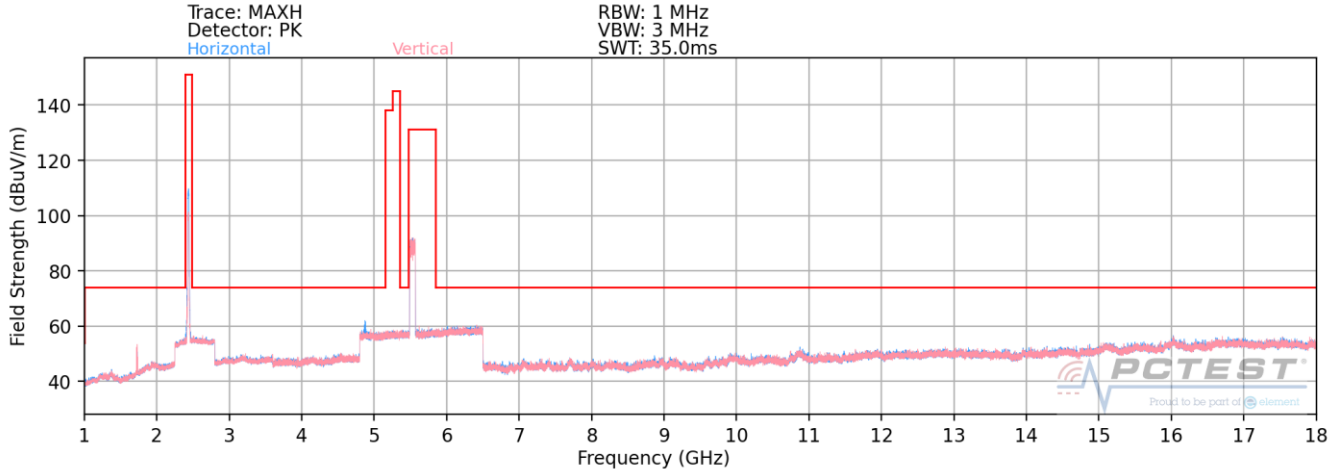
Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
1821.00	Average	H	123	114	-72.66	2.84	37.18	53.98	-16.80
1821.00	Peak	H	123	114	-63.56	2.84	46.28	73.98	-27.70
8566.00	Peak	H	-	-	-78.92	17.61	45.69	53.98	-8.29
10500.00	Peak	H	-	-	-79.52	22.26	49.74	68.20	-18.46
13540.00	Peak	H	-	-	-81.36	25.53	51.17	68.20	-17.03

Table 7-44. Radiated Measurements (2.4GHz – 5GHz)

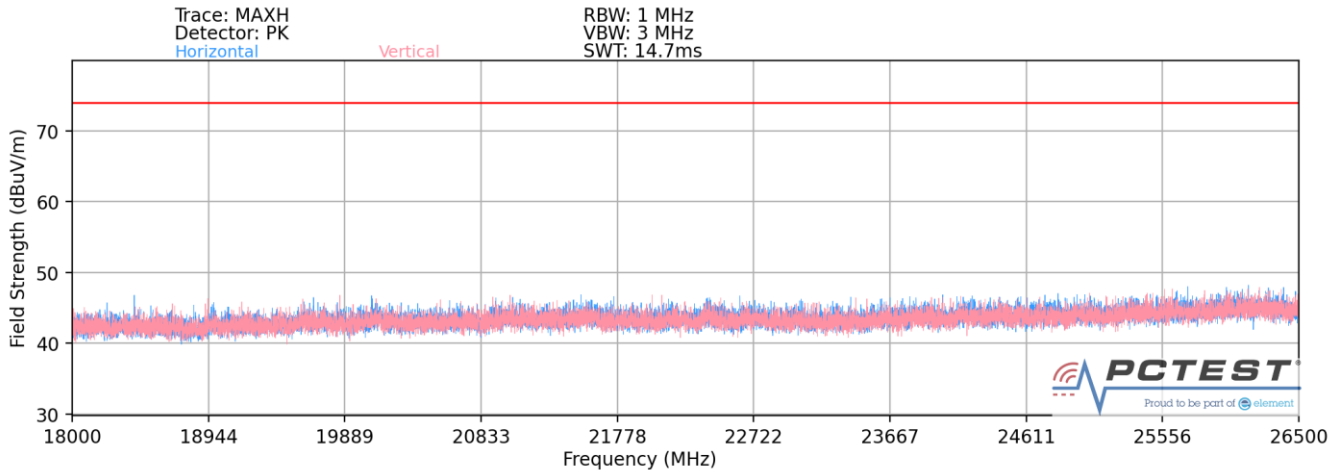
FCC ID: A3LSMS906E	 PCTEST® Proud to be part of element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
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Description	2.4 GHz Emission	5 GHz Emission
Antenna	2	1,2
Channel	6	120
Operating Frequency (MHz)	2437	5600
Data Rate (Mbps)	1	6
Mode	802.11b	802.11a

Table 7-45. Simultaneous Transmission Config-2

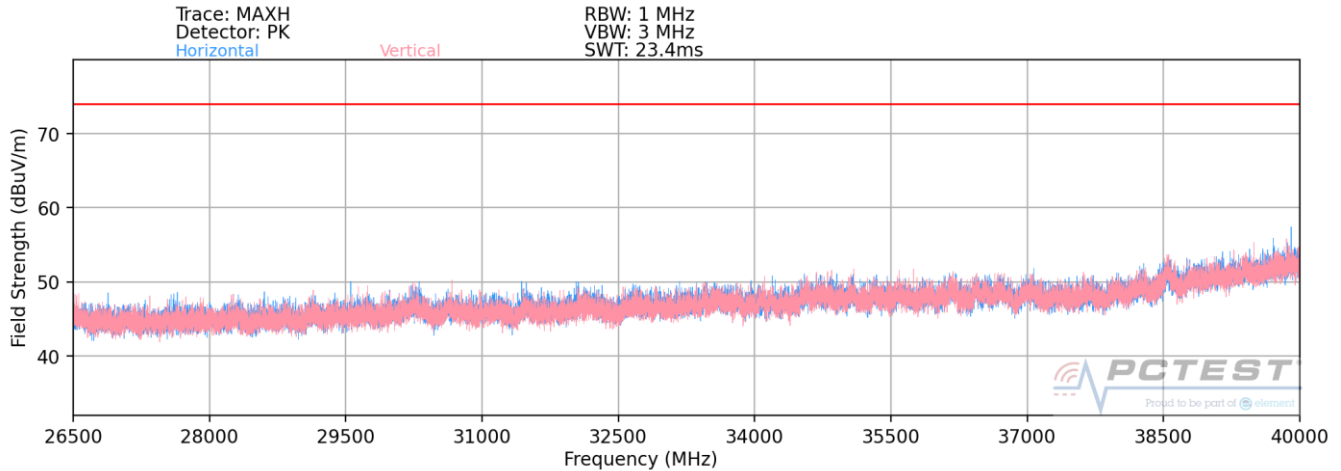


Plot 7-359. Radiated Spurious Plot above 1GHz (5GHz – 2.4 GHz)



Plot 7-360. Radiated Spurious Plot 18GHz – 26.5GHz (5GHz – 2.4 GHz)

FCC ID: A3LSMS906E	 PCTEST Proud to be part of 	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2110010116-09.A3L	Test Dates: 09/09/2021 - 12/06/2021	EUT Type: Portable Handset		Page 224 of 254



Plot 7-361. Radiated Spurious Plot above 26.5GHz (5GHz – 2.4 GHz)

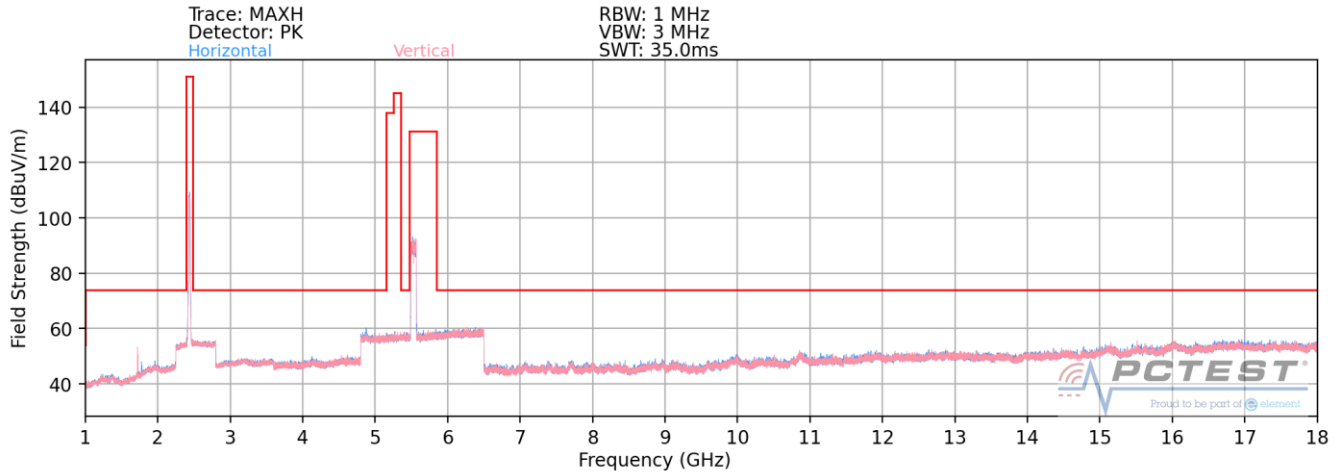
Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
1821.00	Average	H	-	-	-77.21	2.84	32.63	53.98	-21.35
1821.00	Peak	H	-	-	-65.42	2.84	44.42	73.98	-29.56
4932.00	Average	H	-	-	-87.63	23.57	42.94	53.98	-11.04
4932.00	Peak	H	-	-	-77.33	23.57	53.24	73.98	-20.74
9752.00	Peak	H	-	-	-81.23	20.43	46.20	68.20	-22.00
16980.00	Peak	H	-	-	-89.32	30.35	48.03	68.20	-20.17

Table 7-46. Radiated Measurements (MIMO 5GHz – ANT2 2.4GHz)

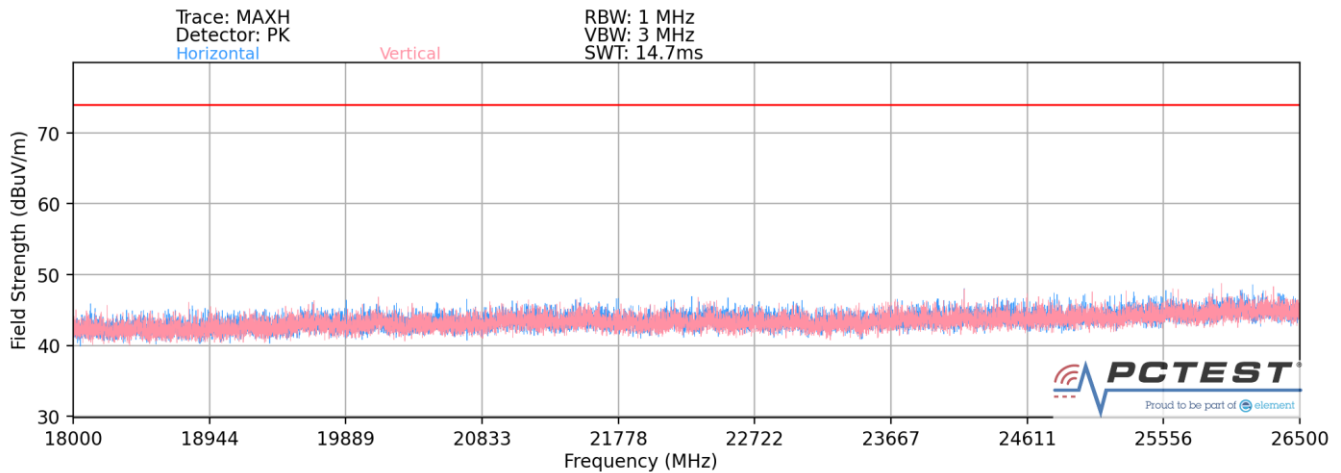
FCC ID: A3LSMS906E	 PCTEST Proud to be part of  element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2110010116-09.A3L	Test Dates: 09/09/2021 - 12/06/2021	EUT Type: Portable Handset		Page 225 of 254

Description	2.4 GHz Emission	5 GHz Emission
Antenna	1,2	1,2
Channel	6	120
Operating Frequency (MHz)	2437	5600
Data Rate (Mbps)	1Mbps	6Mbps
Mode	b	a

Table 7-47. Dual Band Simultaneous Transmission

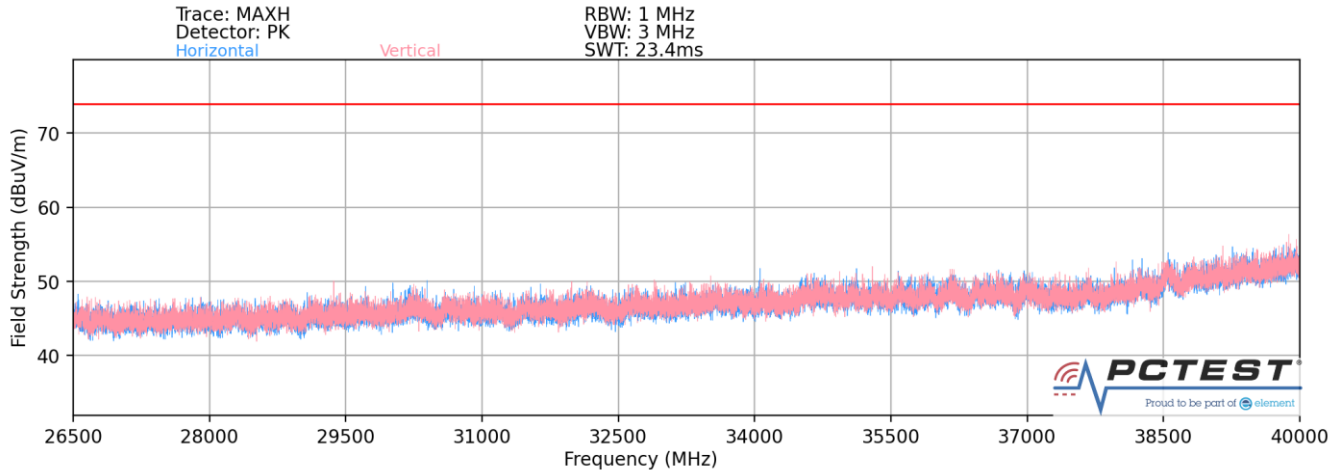


Plot 7-362. Radiated Spurious Plot above 1GHz (Dual Band Simult. Tx)



Plot 7-363. Radiated Spurious Plot 18GHz – 26.5GHz (Dual Band Simult. Tx)

FCC ID: A3LSMS906E	 PCTEST Proud to be part of 	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2110010116-09.A3L	Test Dates: 09/09/2021 - 12/06/2021	EUT Type: Portable Handset		Page 226 of 254



Plot 7-364. Radiated Spurious Plot above 26.5GHz (Dual Band Simult. Tx)

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]
1600.00	Average	H	-	-	-74.25	1.35	34.10	53.98	-19.88
1600.00	Peak	H	-	-	-64.55	1.35	43.80	73.98	-30.18
4200.00	Average	H	-	-	-77.01	8.30	38.29	53.98	-15.69
4200.00	Peak	H	-	-	-69.32	8.30	45.98	73.98	-28.00
9750.00	Peak	H	-	-	-73.21	20.44	54.23	68.20	-13.97
17200.00	Peak	H	-	-	-78.99	31.14	59.15	68.20	-9.05

Table 7-48. Radiated Measurements (Dual Band Simult. Tx)

FCC ID: A3LSMS906E	 PCTEST Proud to be part of  element	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1M2110010116-09.A3L	Test Dates: 09/09/2021 - 12/06/2021	EUT Type: Portable Handset		Page 227 of 254