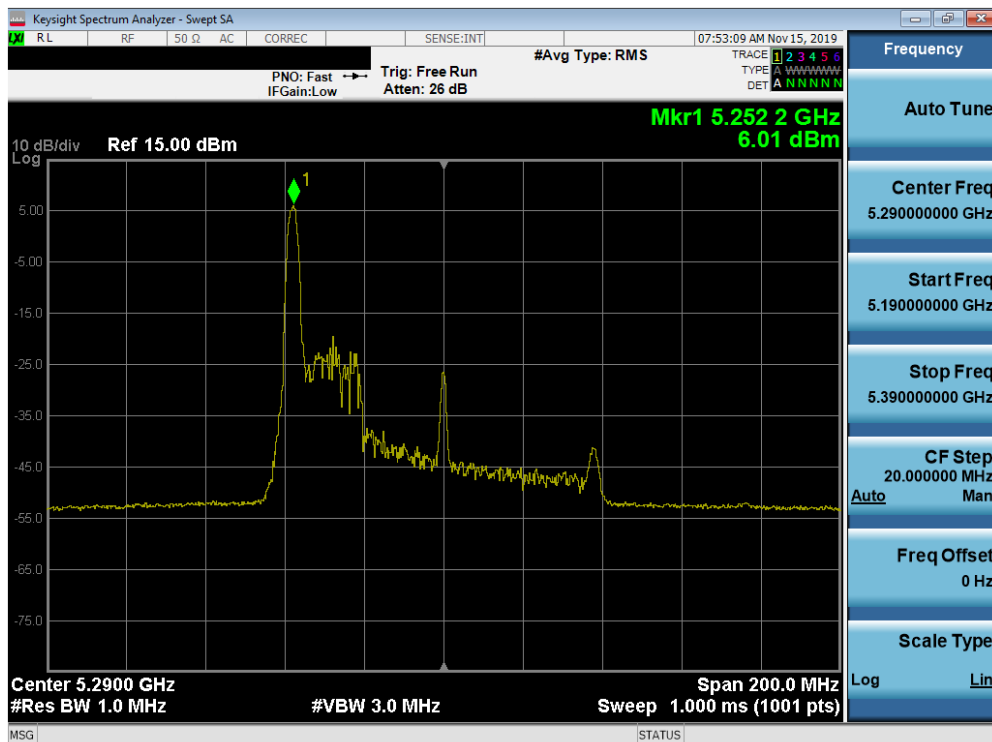
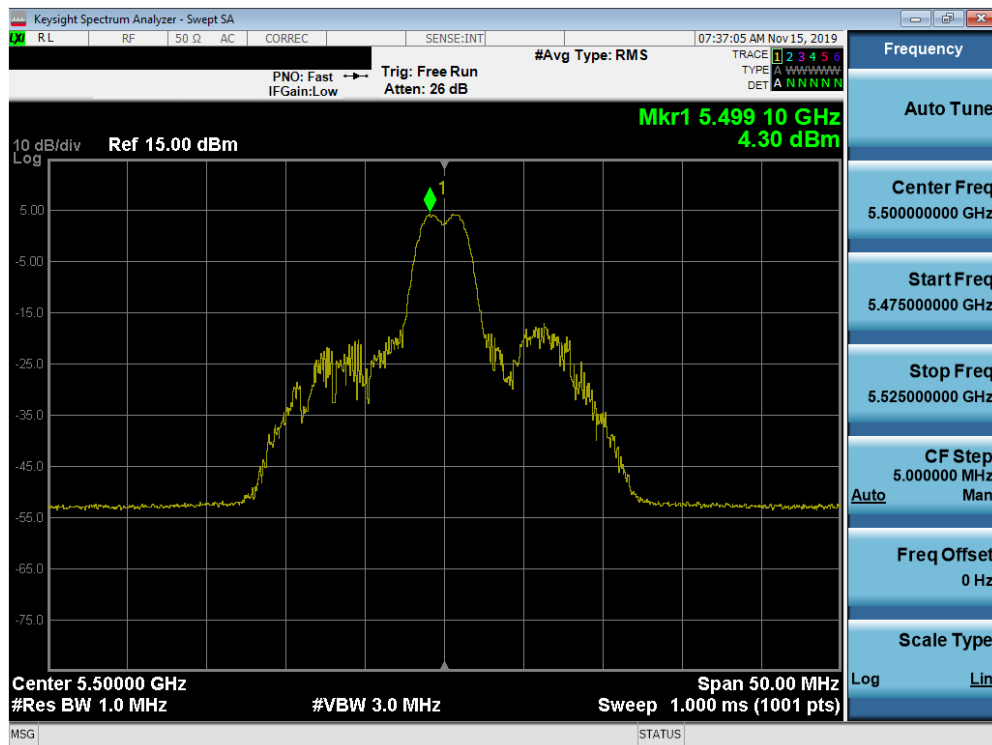


Plot 7-227. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – 26 Tones (UNII Band 2A) – Ch. 62)

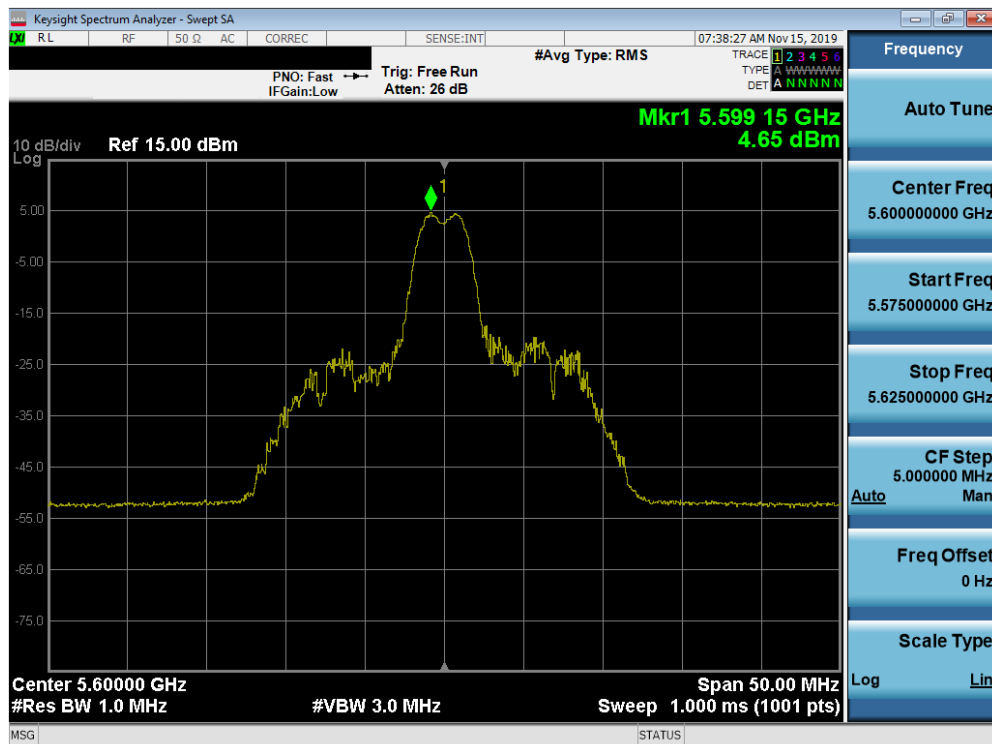


Plot 7-228. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax – 26 Tones (UNII Band 2A) – Ch. 58)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 165 of 266 |

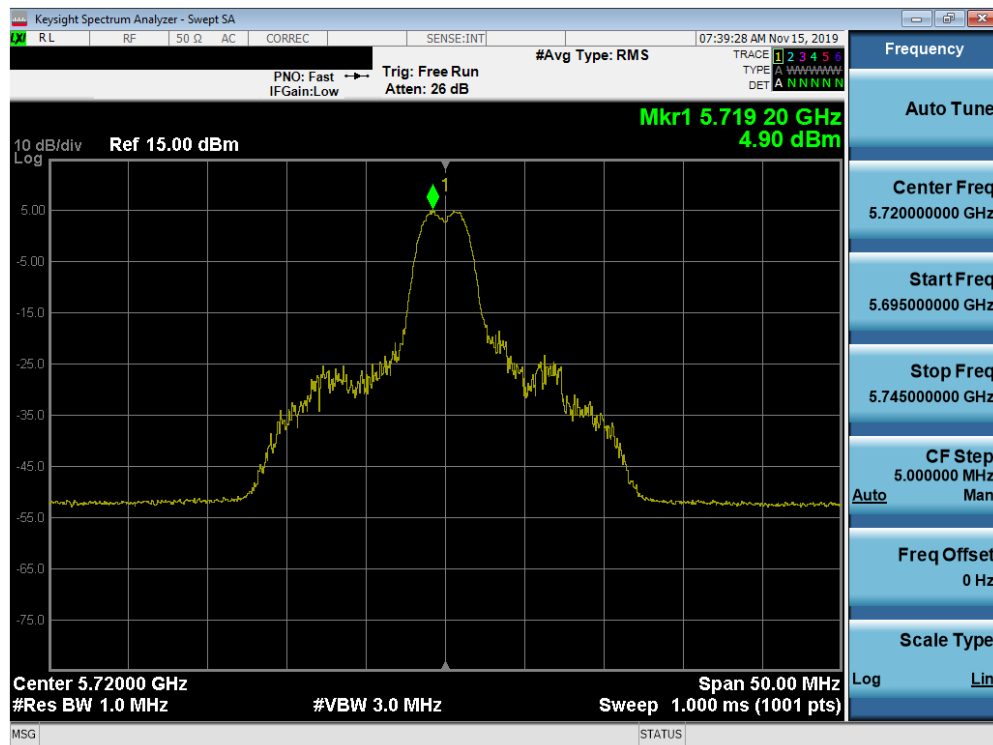


Plot 7-229. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 100)

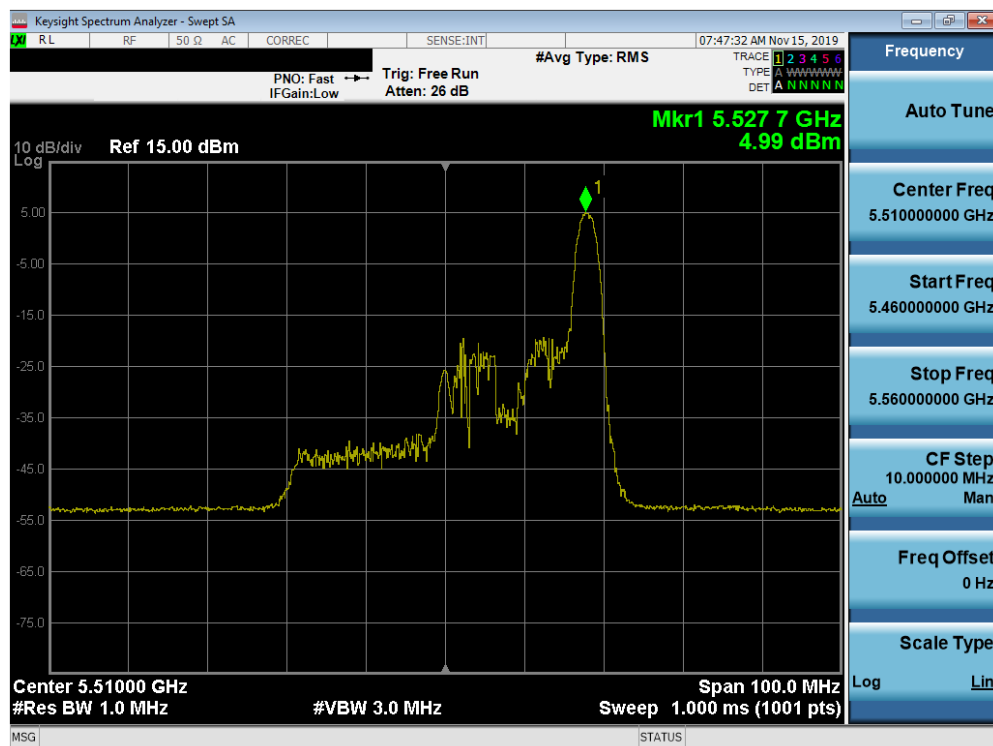


Plot 7-230. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 120)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 166 of 266 |

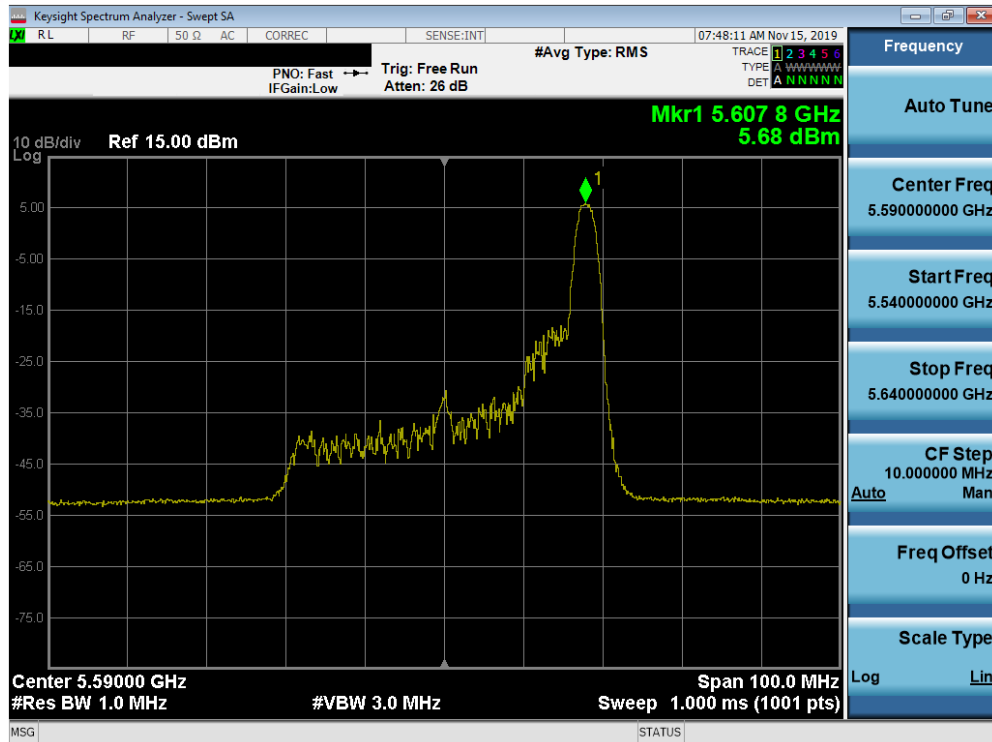


Plot 7-231. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 144)

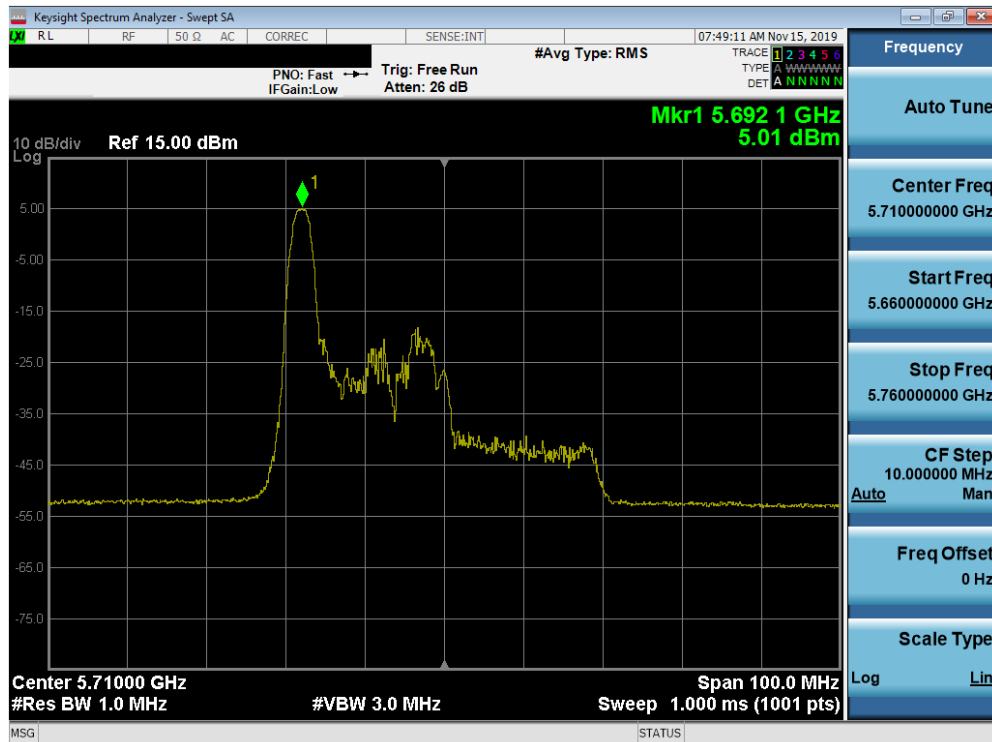


Plot 7-232. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 102)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 167 of 266 |

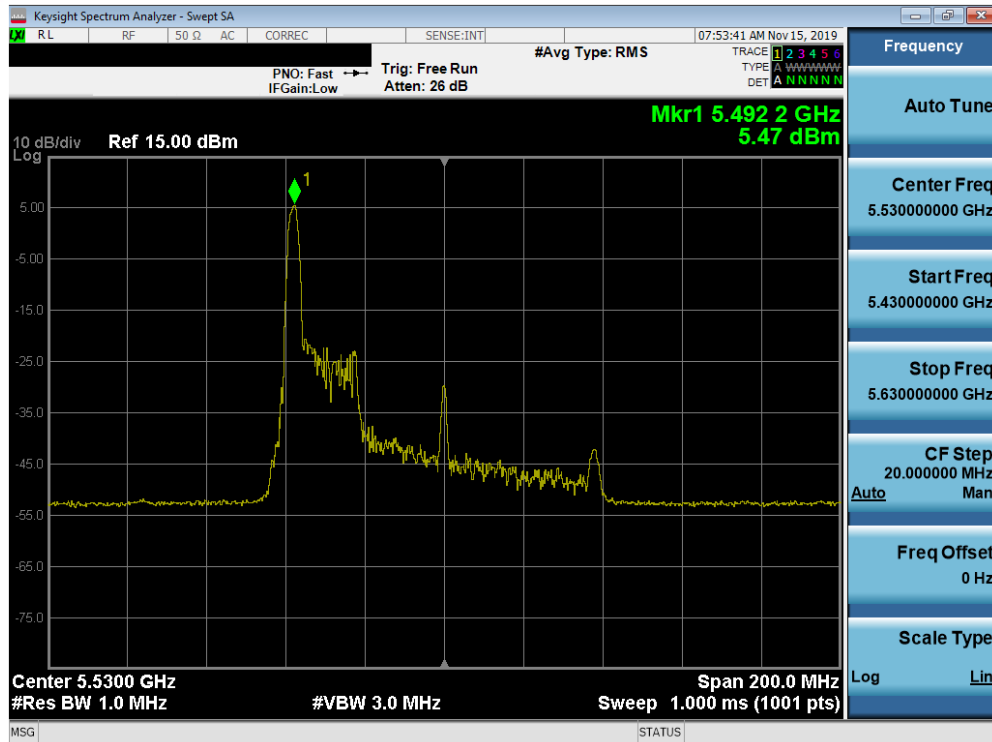


Plot 7-233. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 118)

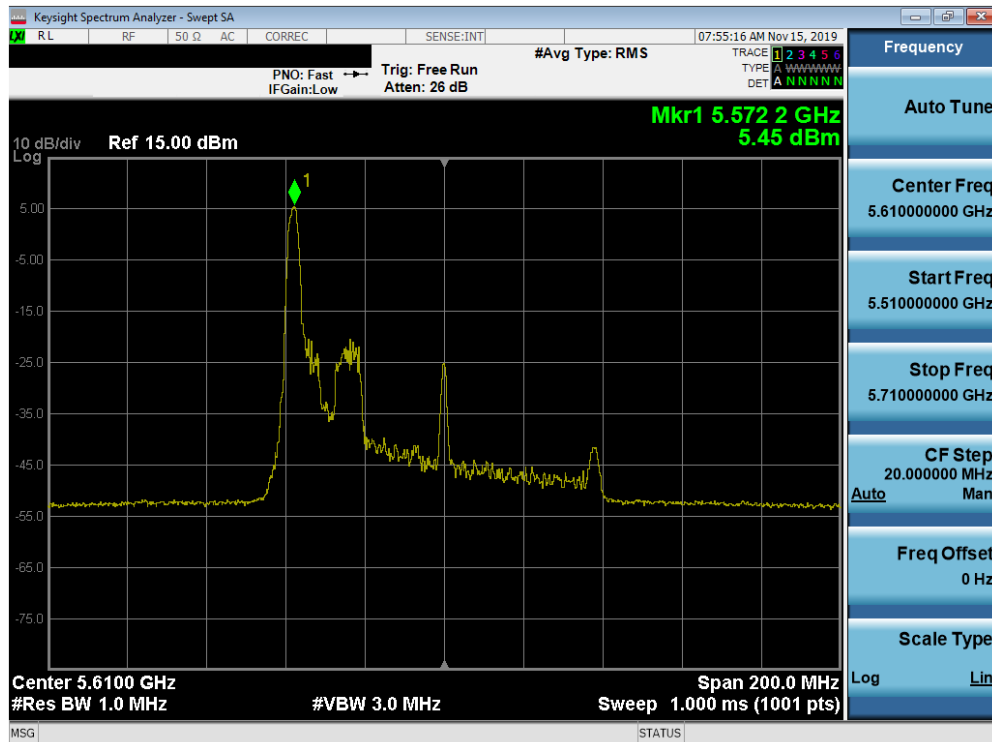


Plot 7-234. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 142)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 168 of 266 |

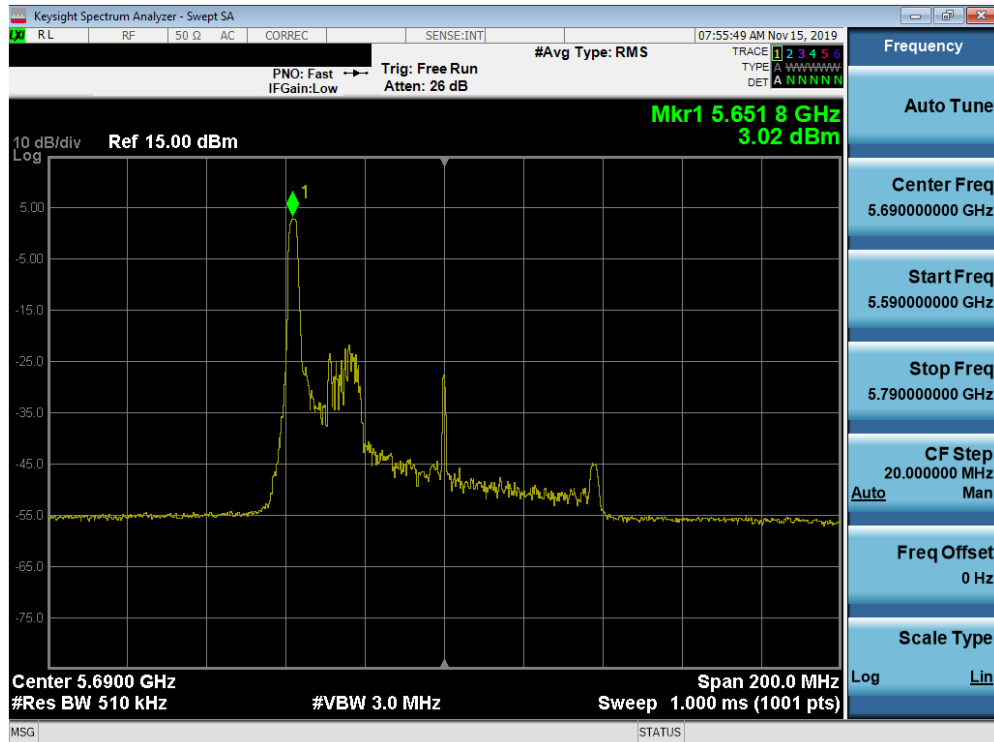


Plot 7-235. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 106)

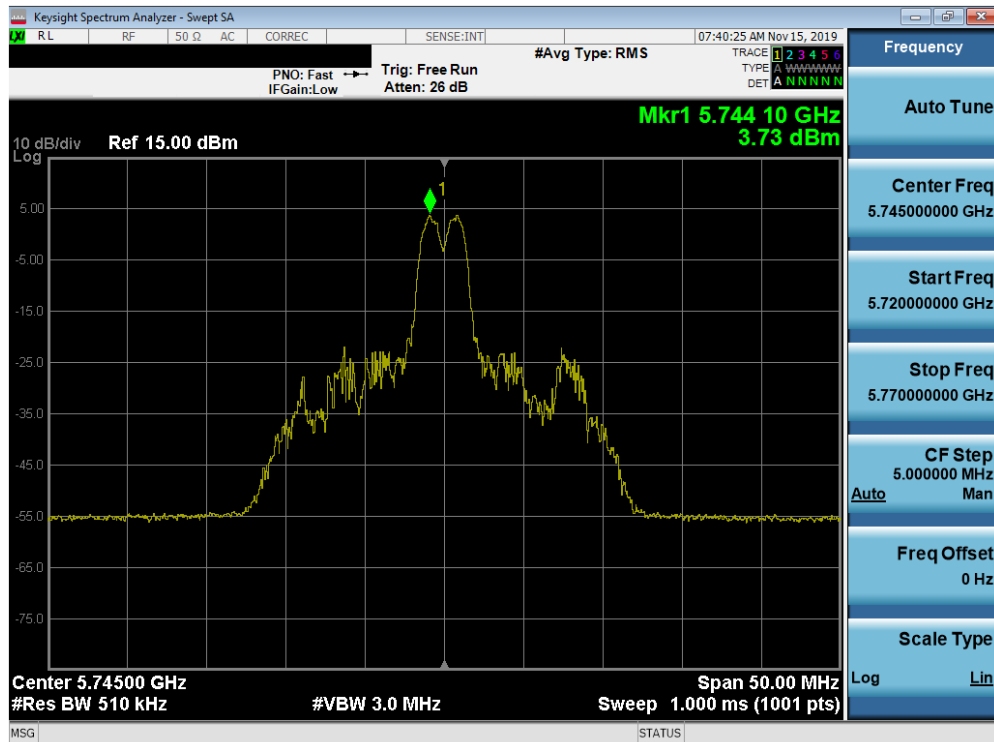


Plot 7-236. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 122)

| | | | | |
|---|--------------------------------------|---------------------------------------|----------------|---------------------------------|
| FCC ID: A3LSMG986JPN | PCTEST | MEASUREMENT REPORT (CERTIFICATION) | SAMSUNG | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 169 of 266 |

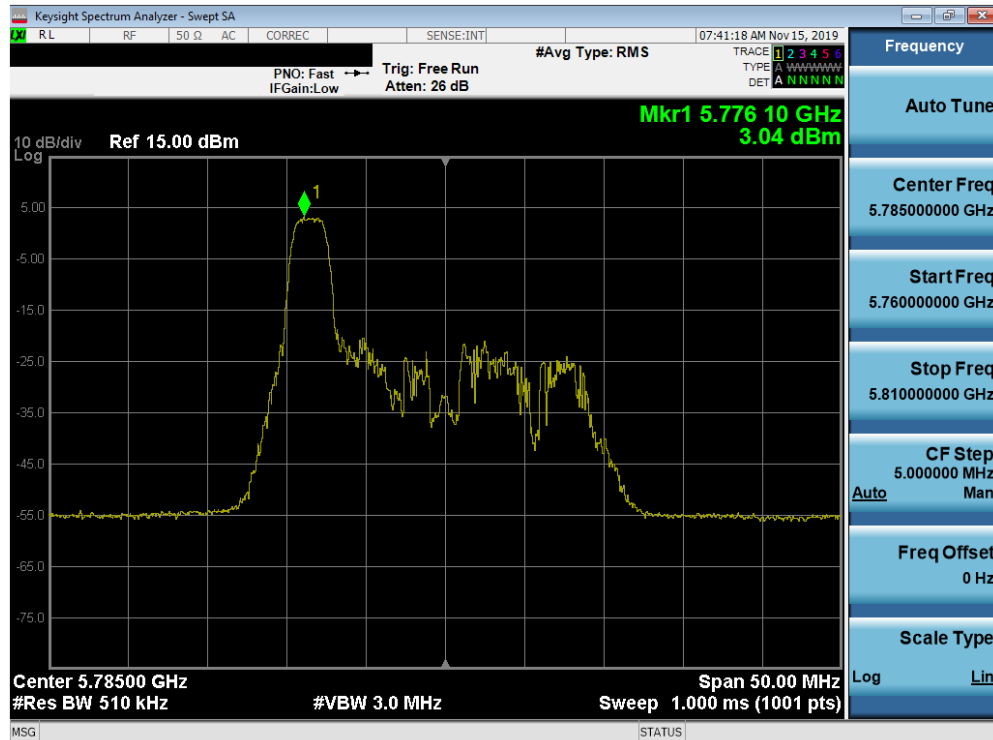


Plot 7-237. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax – 26 Tones (UNII Band 2C) – Ch. 138)

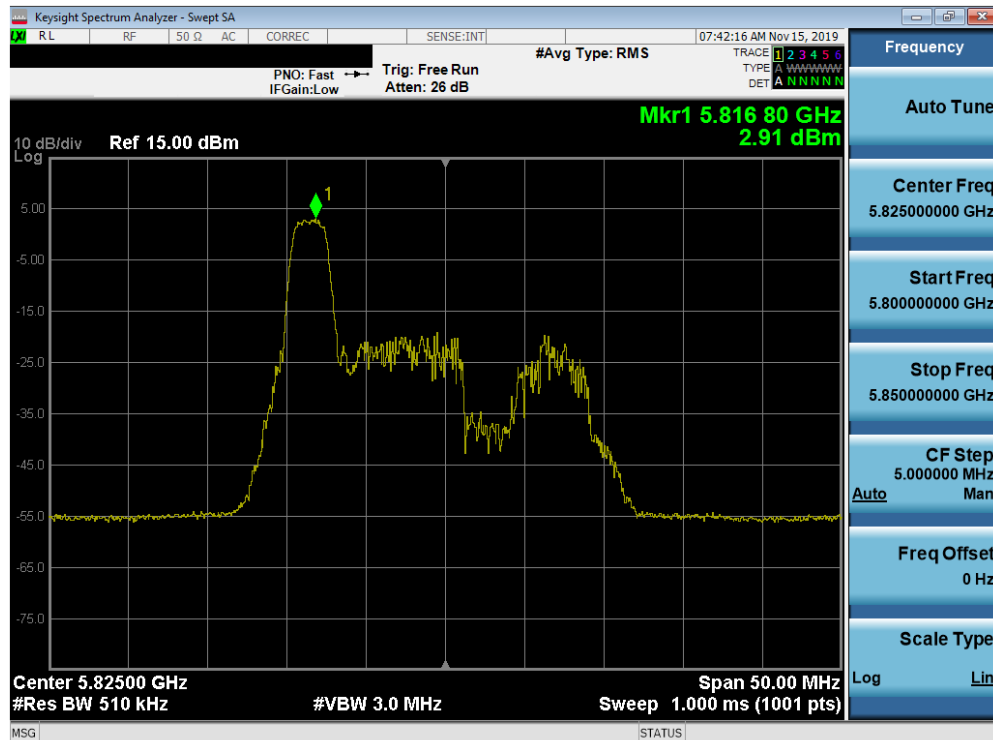


Plot 7-238. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax – 26 Tones (UNII Band 3) – Ch. 149)

| | | | | |
|---|--------------------------------------|---------------------------------------|----------------|---------------------------------|
| FCC ID: A3LSMG986JPN | PCTEST | MEASUREMENT REPORT (CERTIFICATION) | SAMSUNG | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 170 of 266 |

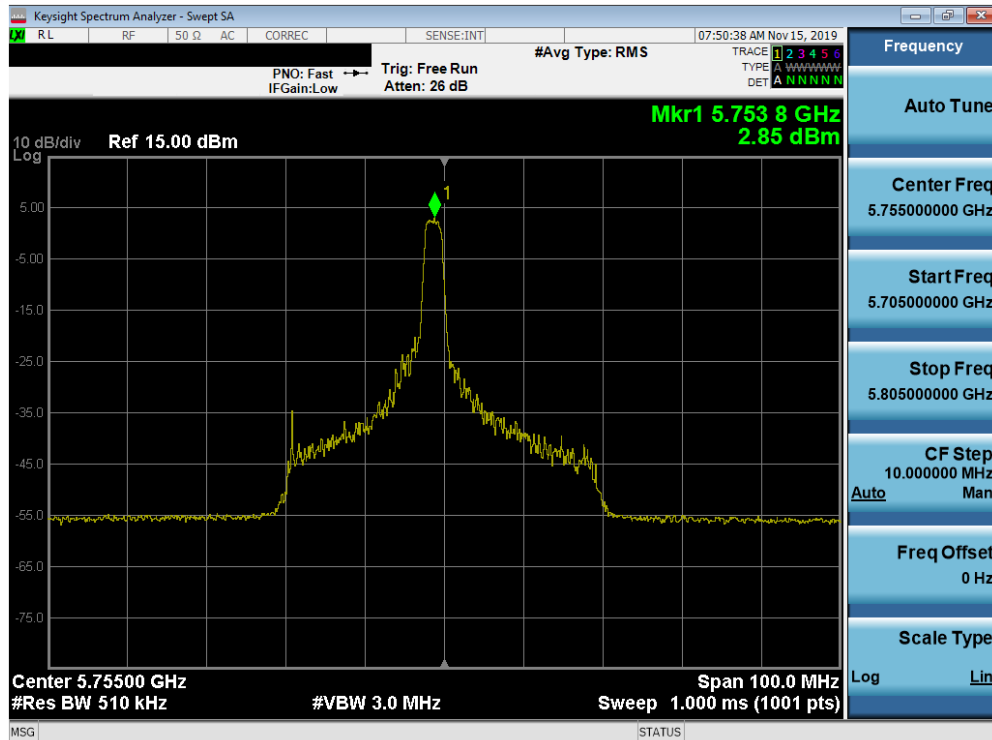


Plot 7-239. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax – 26 Tones (UNII Band 3) – Ch. 157)

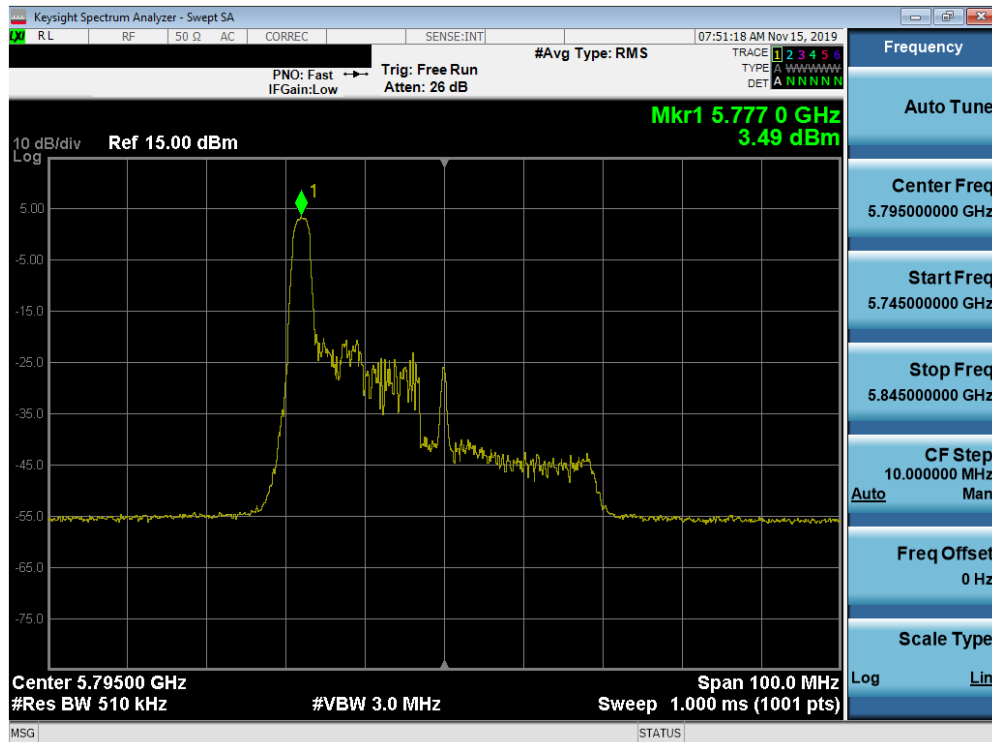


Plot 7-240. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax – 26 Tones (UNII Band 3) – Ch. 165)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 171 of 266 |

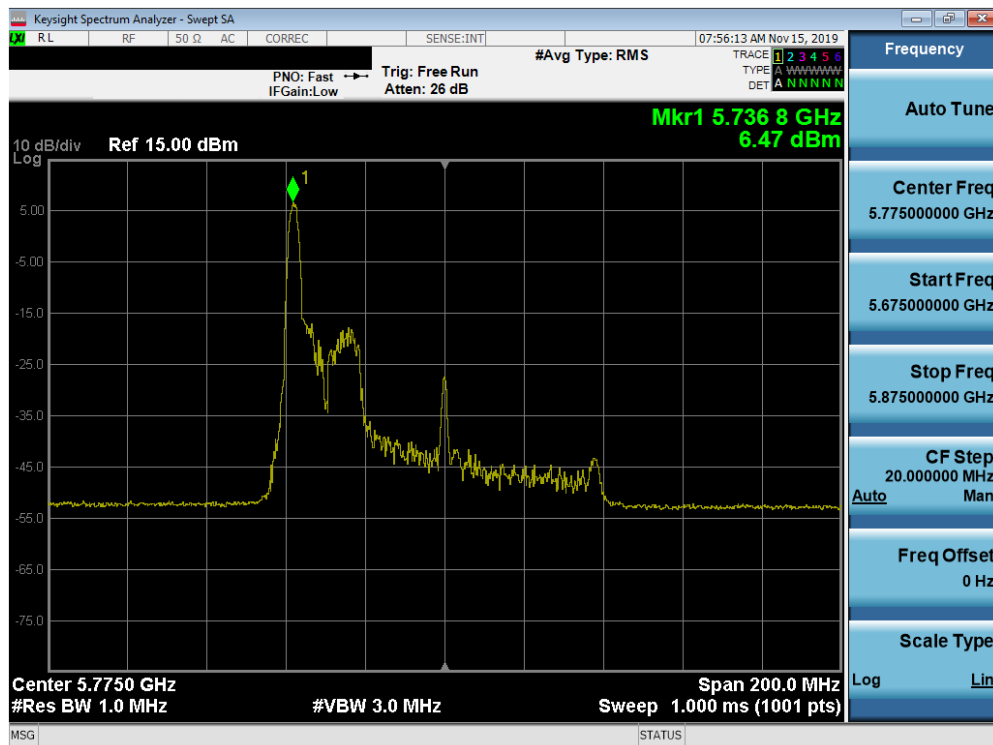


Plot 7-241. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – 26 Tones (UNII Band 3) – Ch. 151)

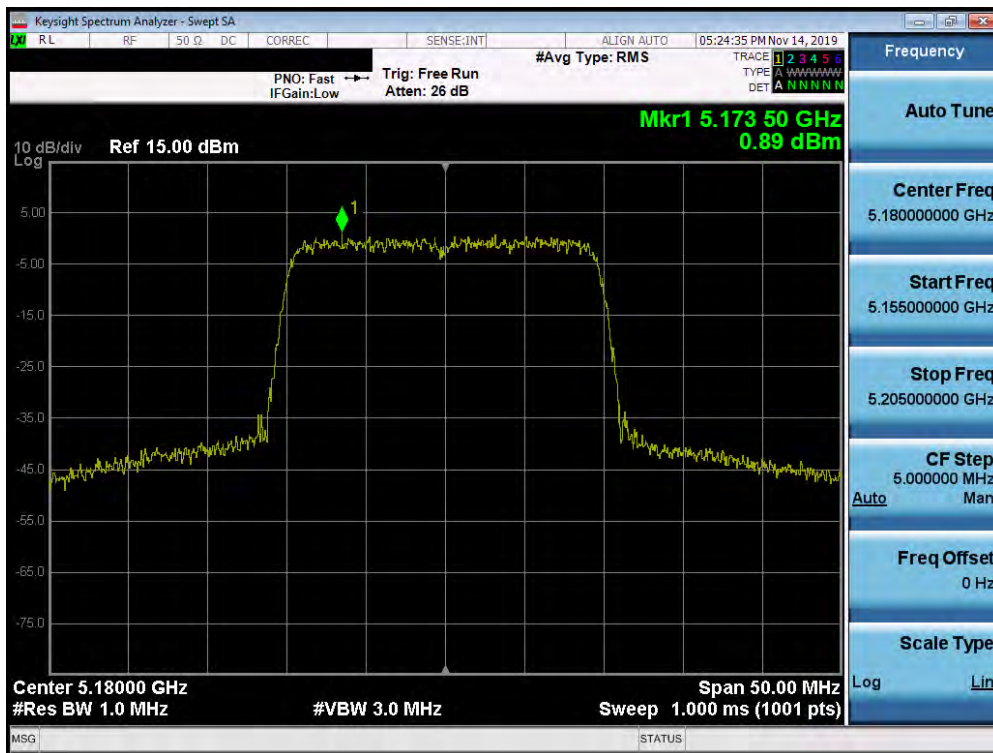


Plot 7-242. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – 26 Tones (UNII Band 3) – Ch. 159)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 172 of 266 |

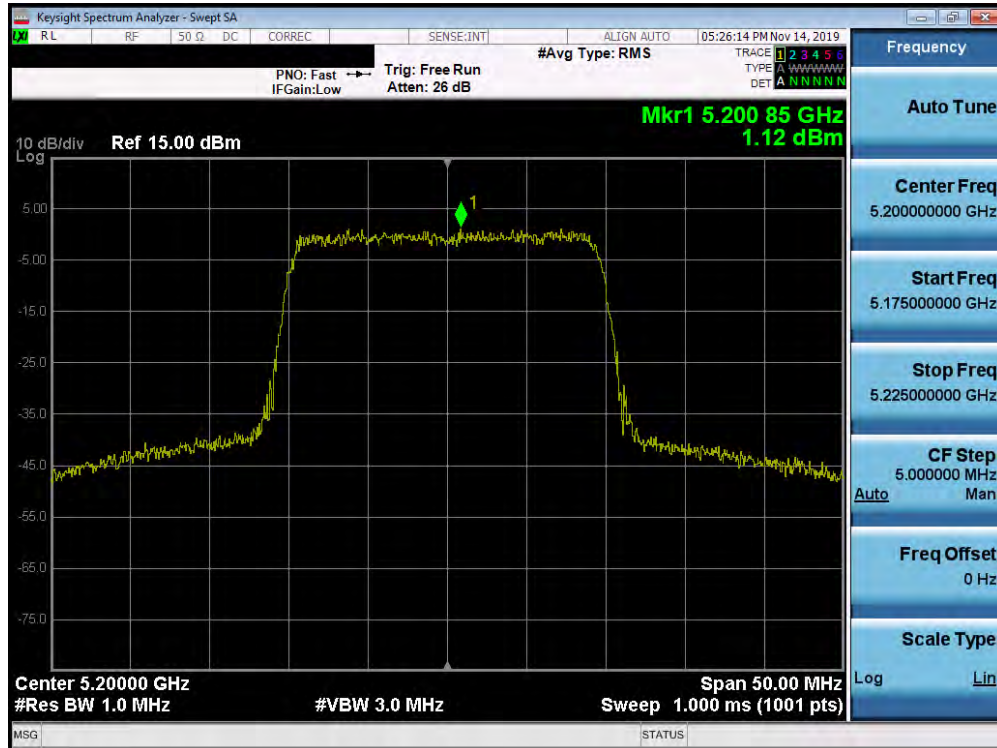


Plot 7-243. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax – 26 Tones (UNII Band 3) – Ch. 155)

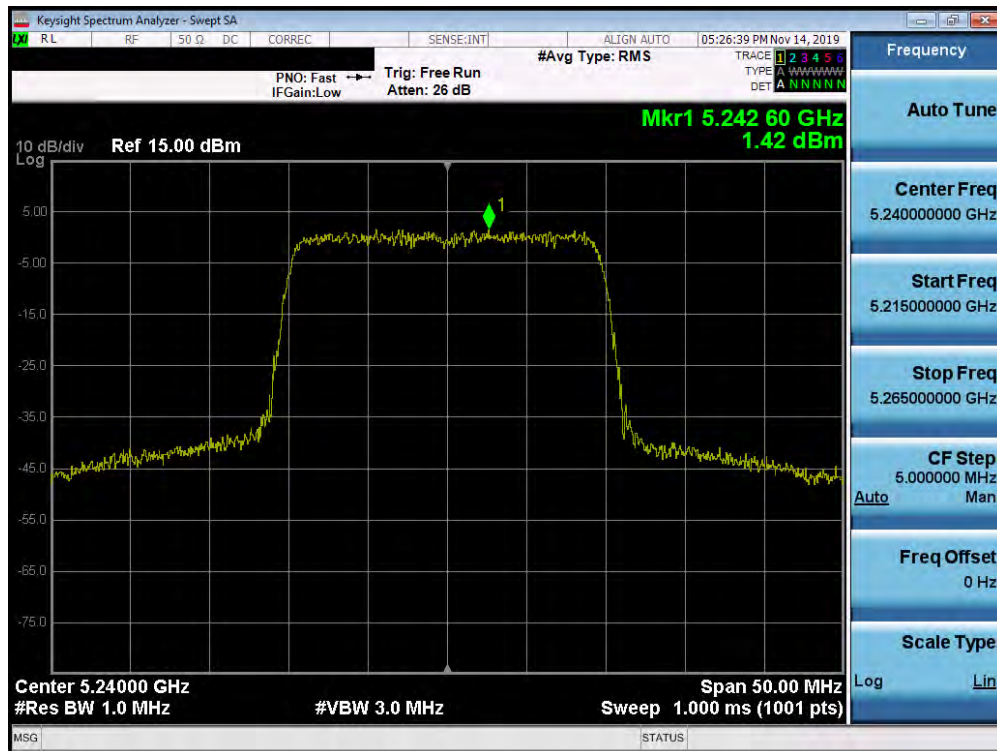


Plot 7-244. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax – Full Tones (UNII Band 1) – Ch. 36)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 173 of 266 |

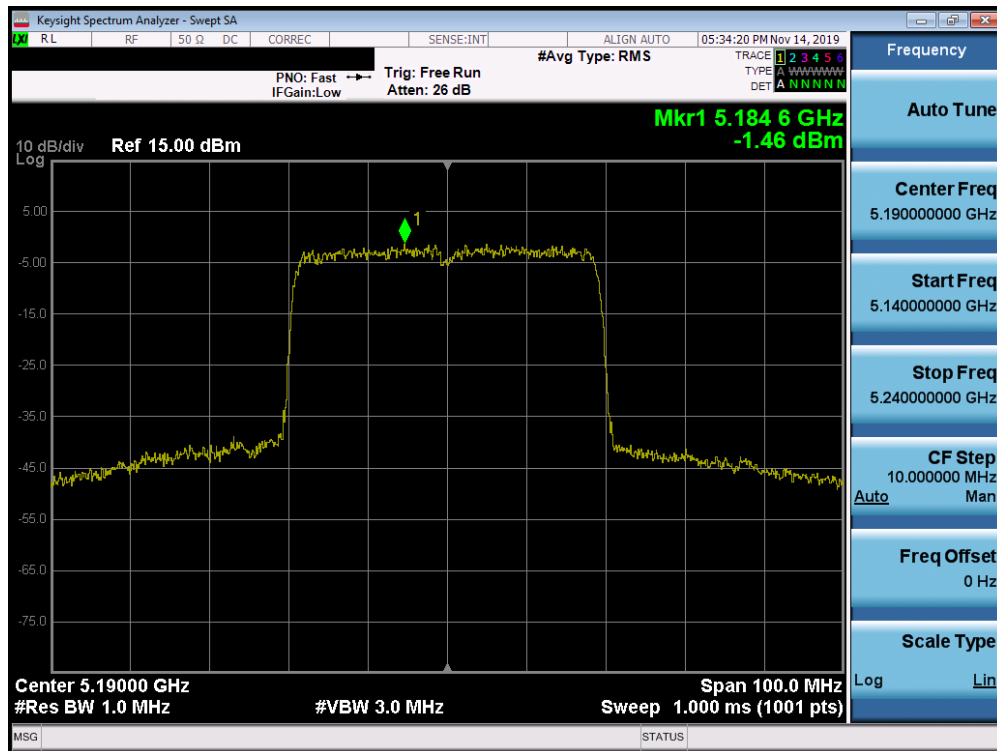


Plot 7-245. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax – Full Tones (UNII Band 1) – Ch. 40)

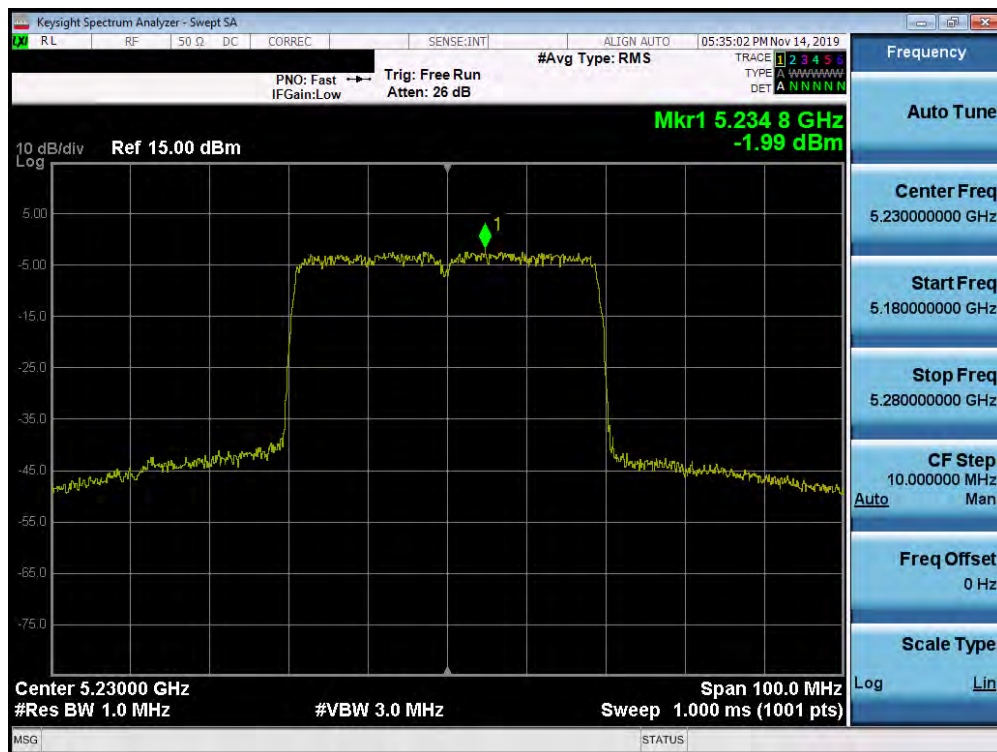


Plot 7-246. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax – Full Tones (UNII Band 1) – Ch. 48)

| | | | | |
|---|--------------------------------------|---------------------------------------|----------------|---------------------------------|
| FCC ID: A3LSMG986JPN | PCTEST | MEASUREMENT REPORT (CERTIFICATION) | SAMSUNG | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 174 of 266 |

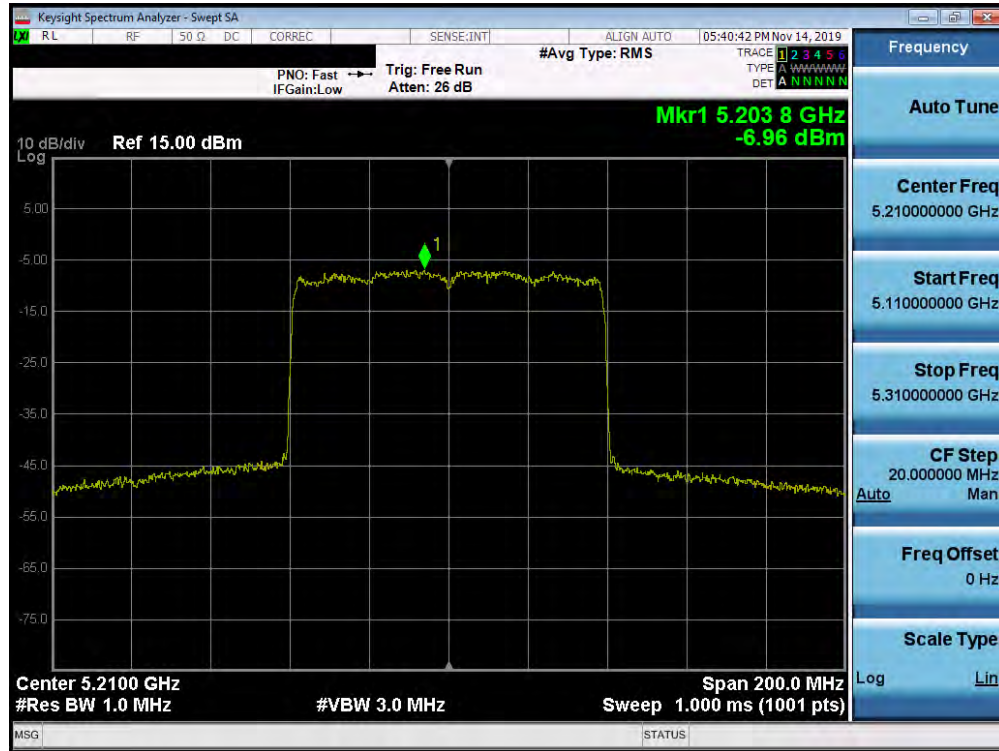


Plot 7-247. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – Full Tones (UNII Band 1) – Ch. 38)

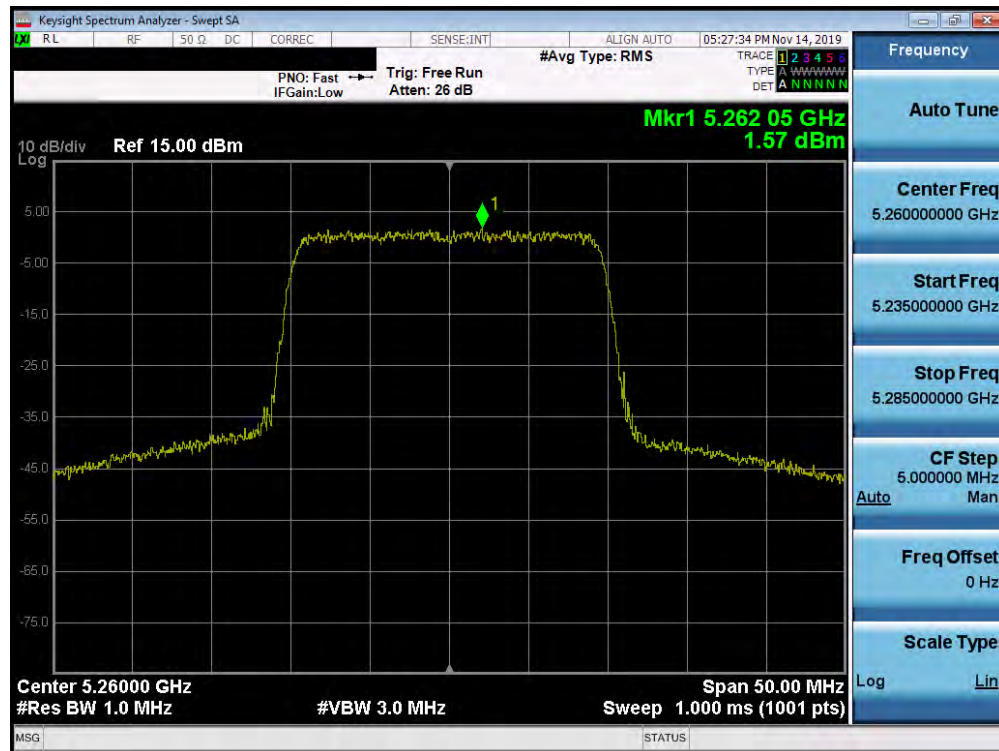


Plot 7-248. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – Full Tones (UNII Band 1) – Ch. 46)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 175 of 266 |

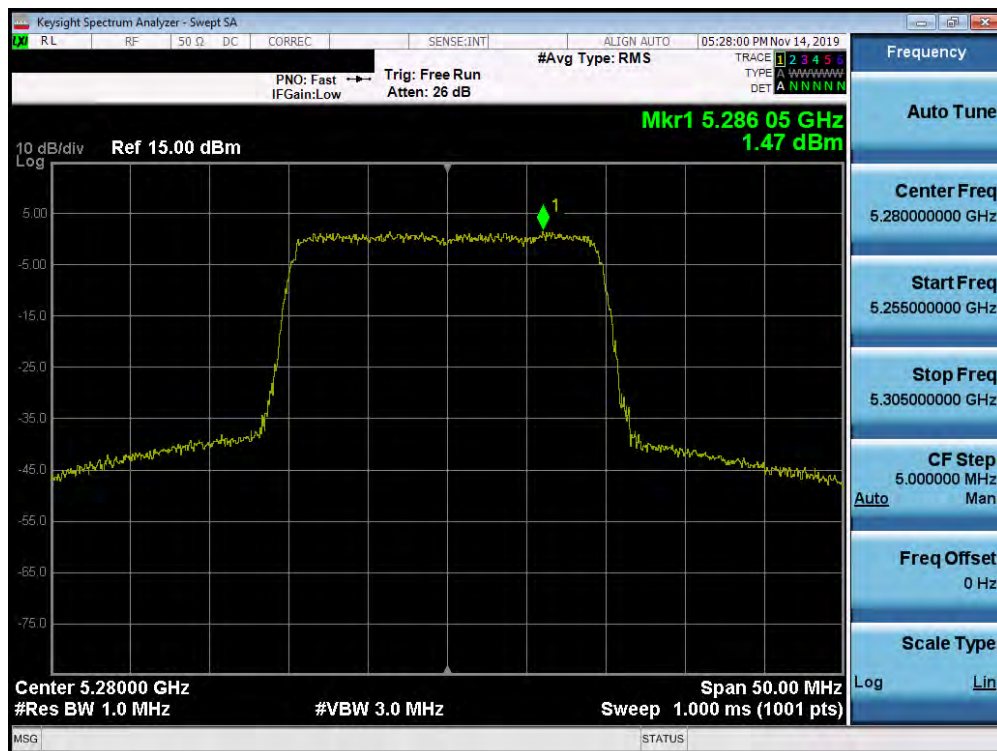


Plot 7-249. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax – Full Tones (UNII Band 1) – Ch. 42)

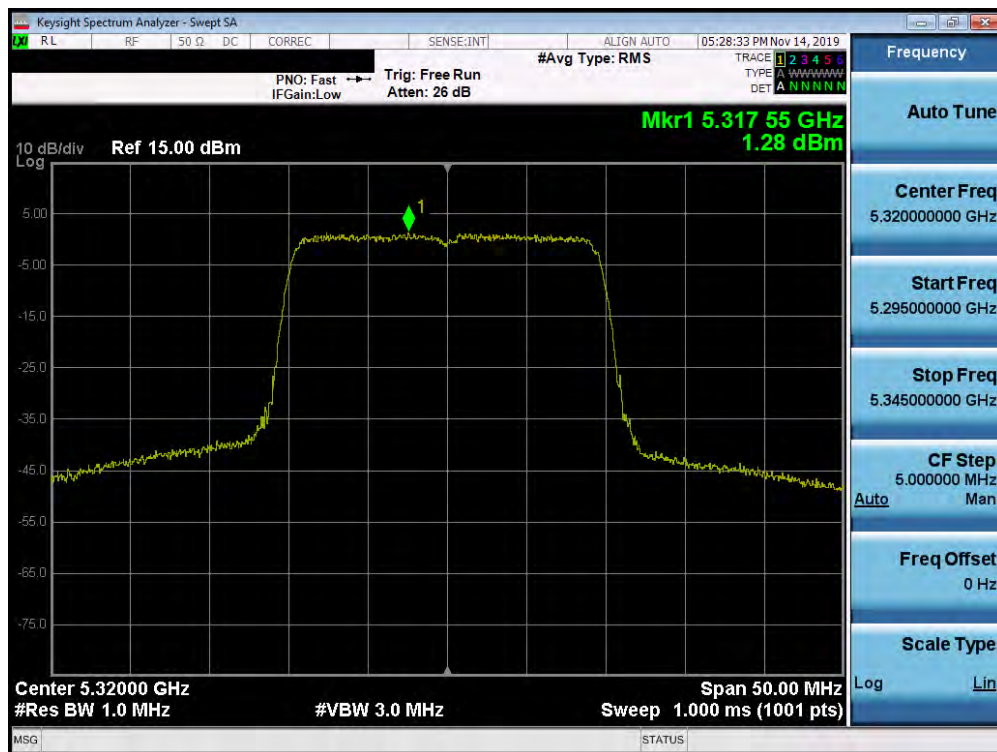


Plot 7-250. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax – Full Tones (UNII Band 2A) – Ch. 52)

| | | | | |
|---|--------------------------------------|---------------------------------------|----------------|---------------------------------|
| FCC ID: A3LSMG986JPN | PCTEST | MEASUREMENT REPORT (CERTIFICATION) | SAMSUNG | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 176 of 266 |

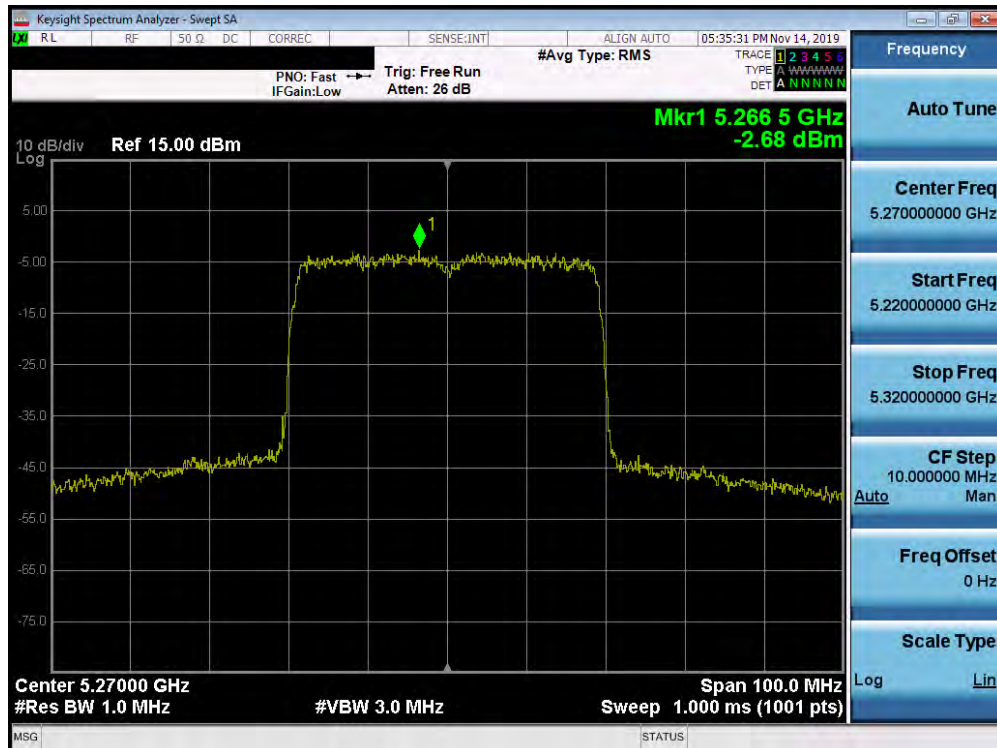


Plot 7-251. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax – Full Tones (UNII Band 2A) – Ch. 56)

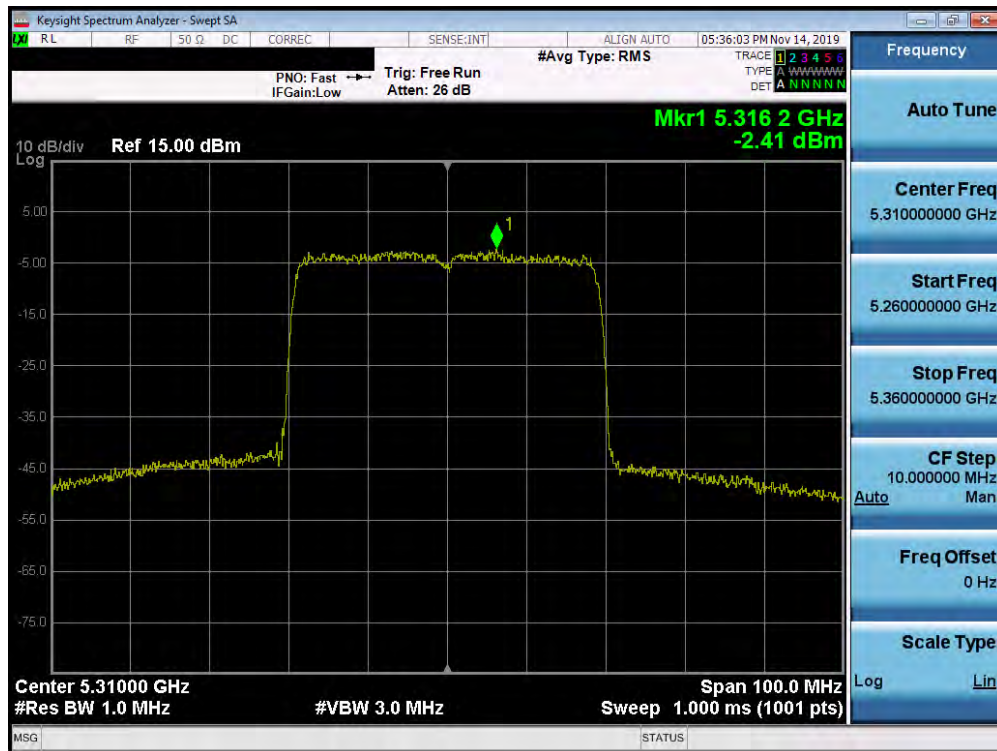


Plot 7-252. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax – Full Tones (UNII Band 2A) – Ch. 64)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 177 of 266 |

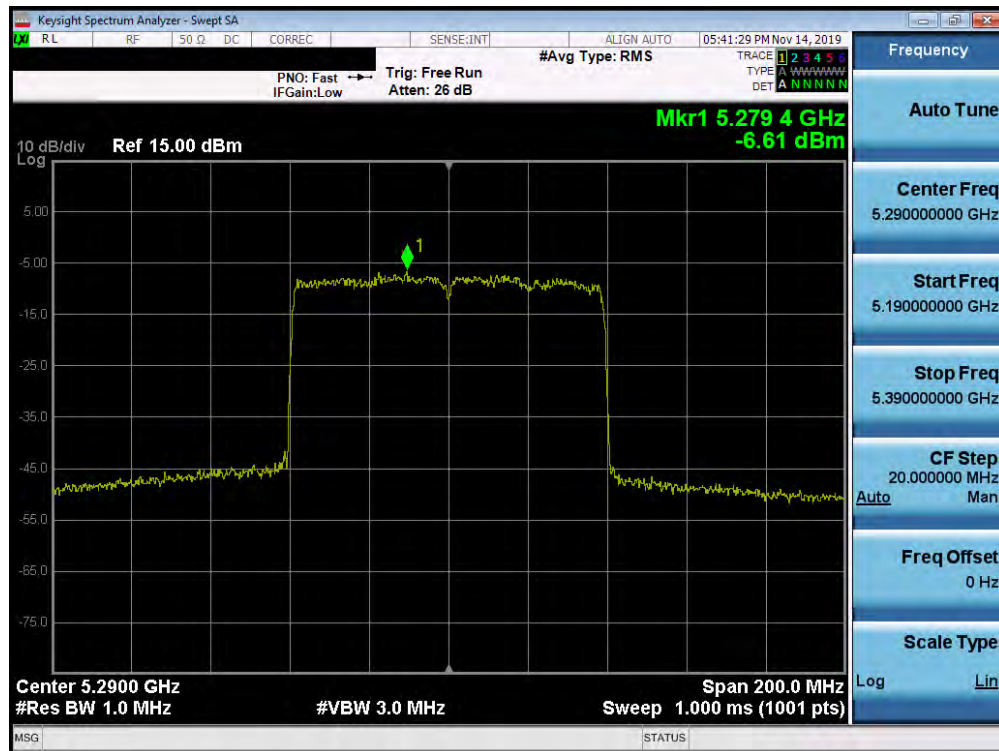


Plot 7-253. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – Full Tones (UNII Band 2A) – Ch. 54)

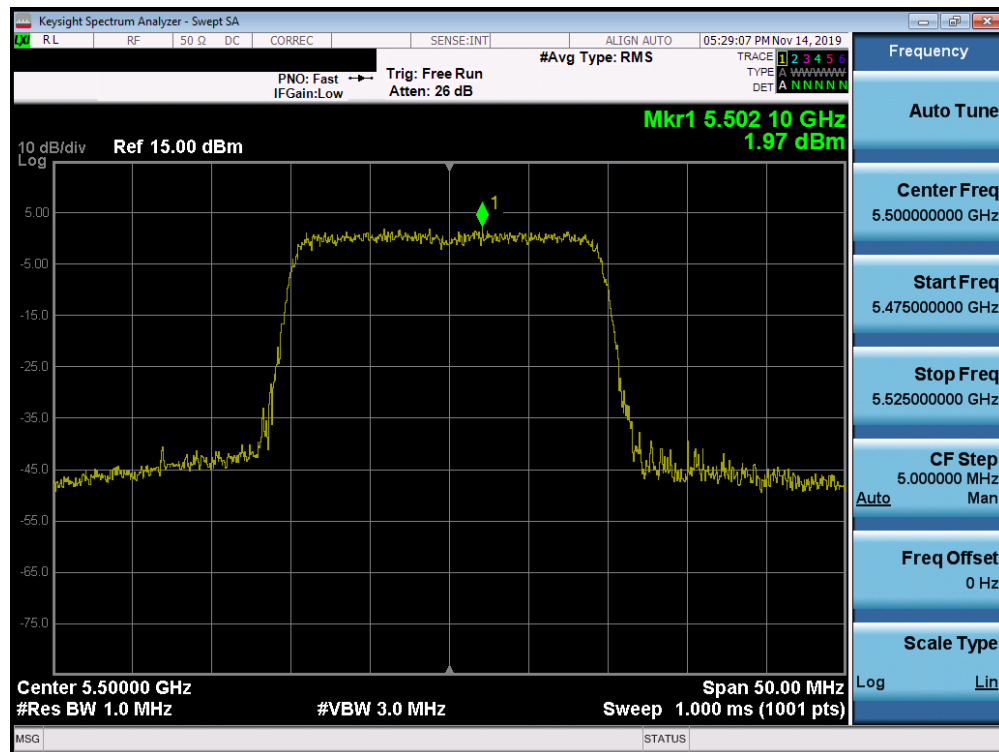


Plot 7-254. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – Full Tones (UNII Band 2A) – Ch. 62)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 178 of 266 |

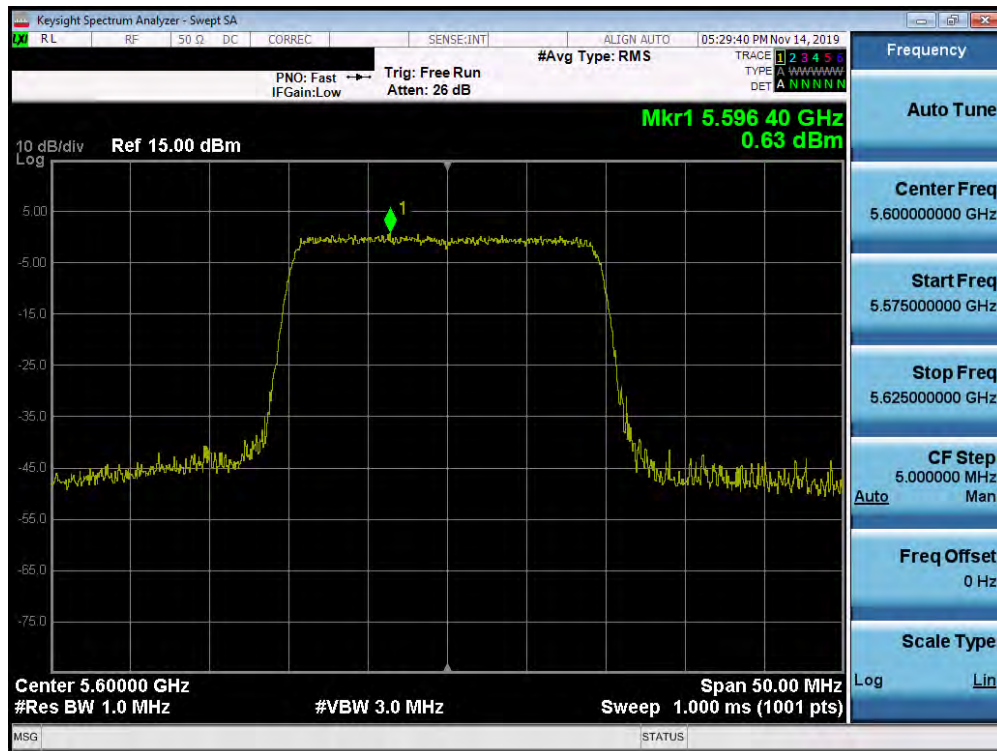


Plot 7-255. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax – Full Tones (UNII Band 2A) – Ch. 58)

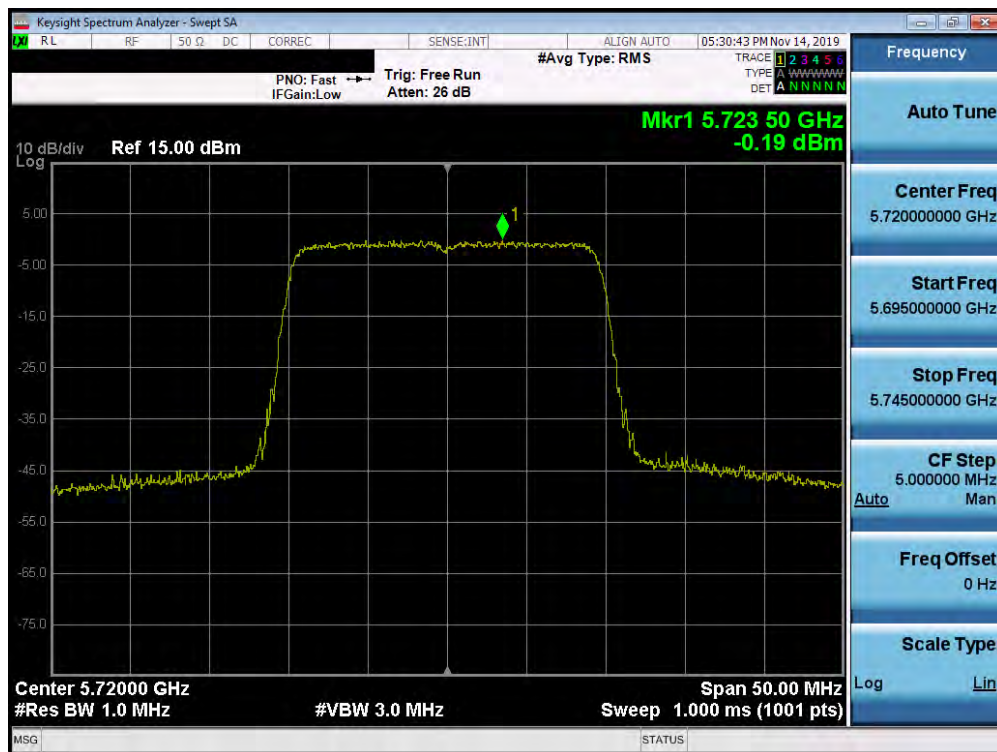


Plot 7-256. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 100)

| | | | | |
|---|--------------------------------------|---------------------------------------|----------------|---------------------------------|
| FCC ID: A3LSMG986JPN | PCTEST | MEASUREMENT REPORT (CERTIFICATION) | SAMSUNG | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 179 of 266 |

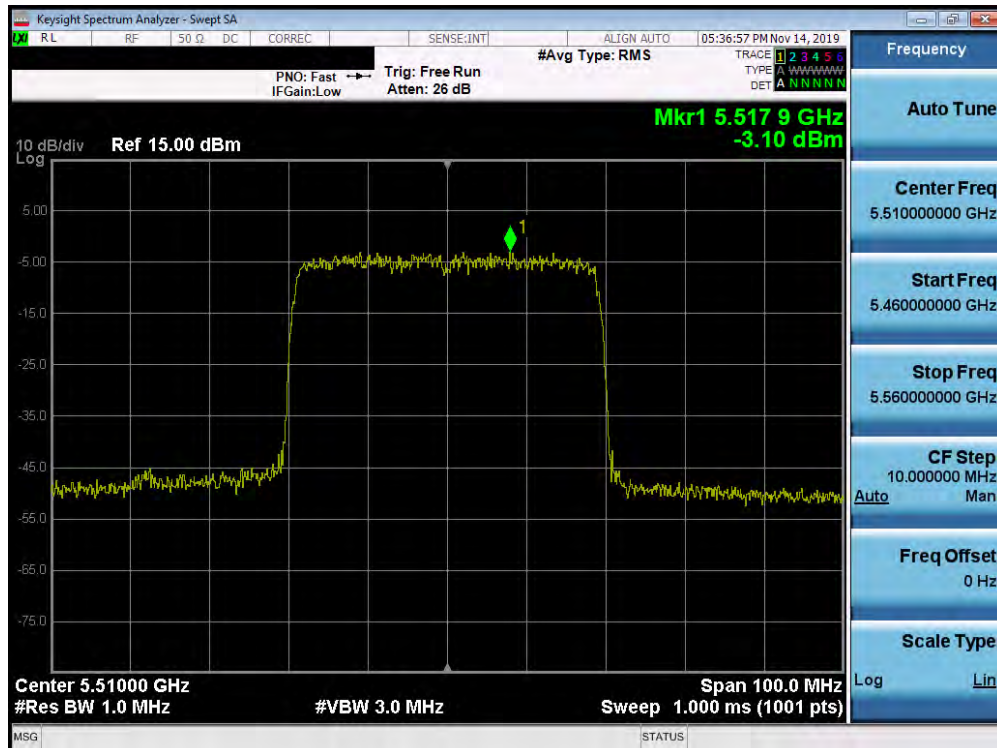


Plot 7-257. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 120)

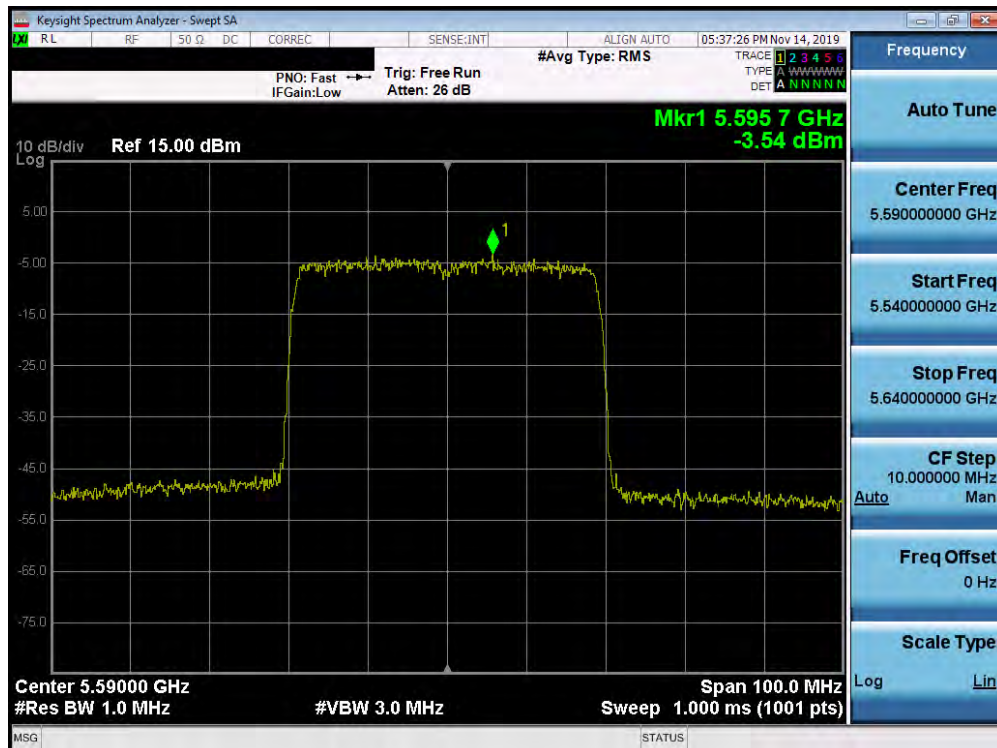


Plot 7-258. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 144)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 180 of 266 |

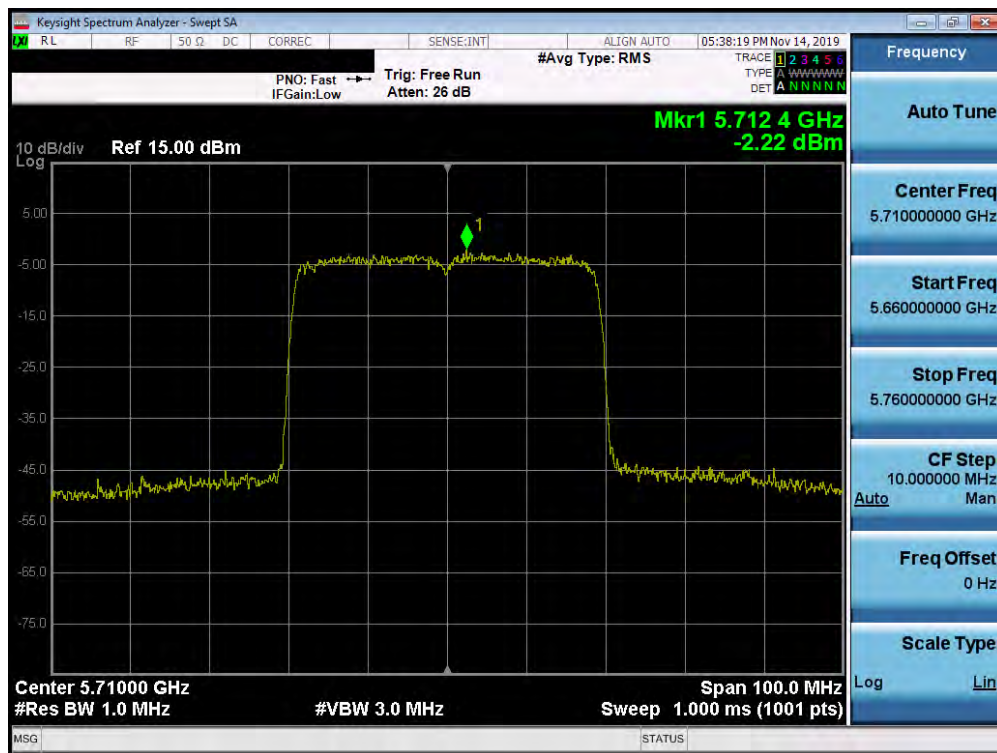


Plot 7-259. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 102)



Plot 7-260. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 118)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 181 of 266 |

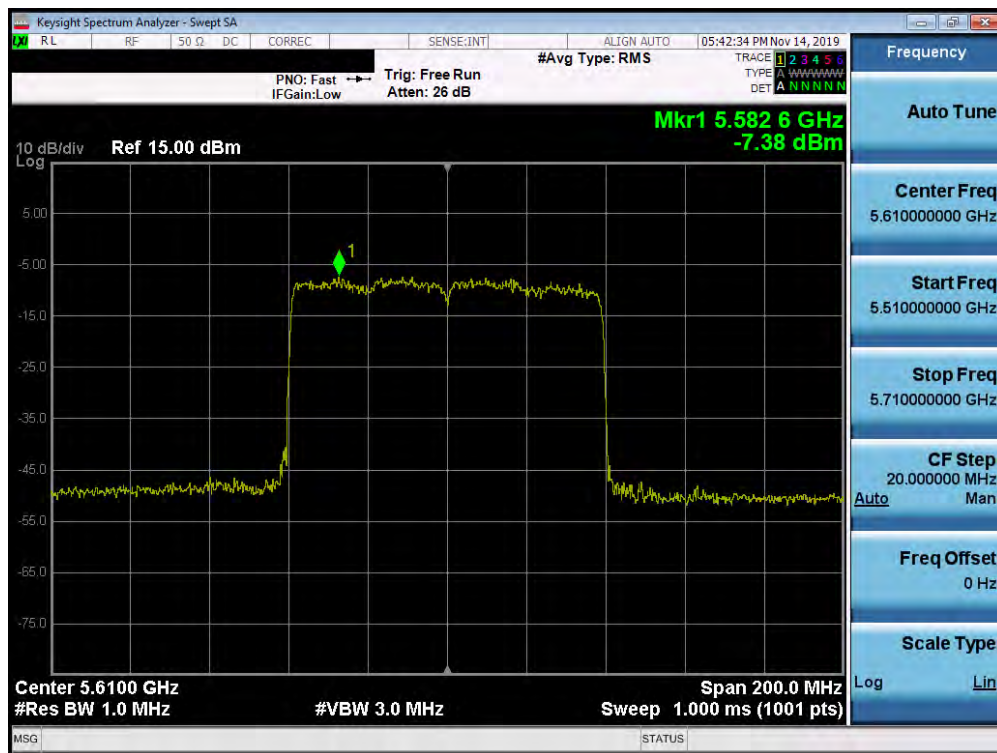


Plot 7-261. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 142)

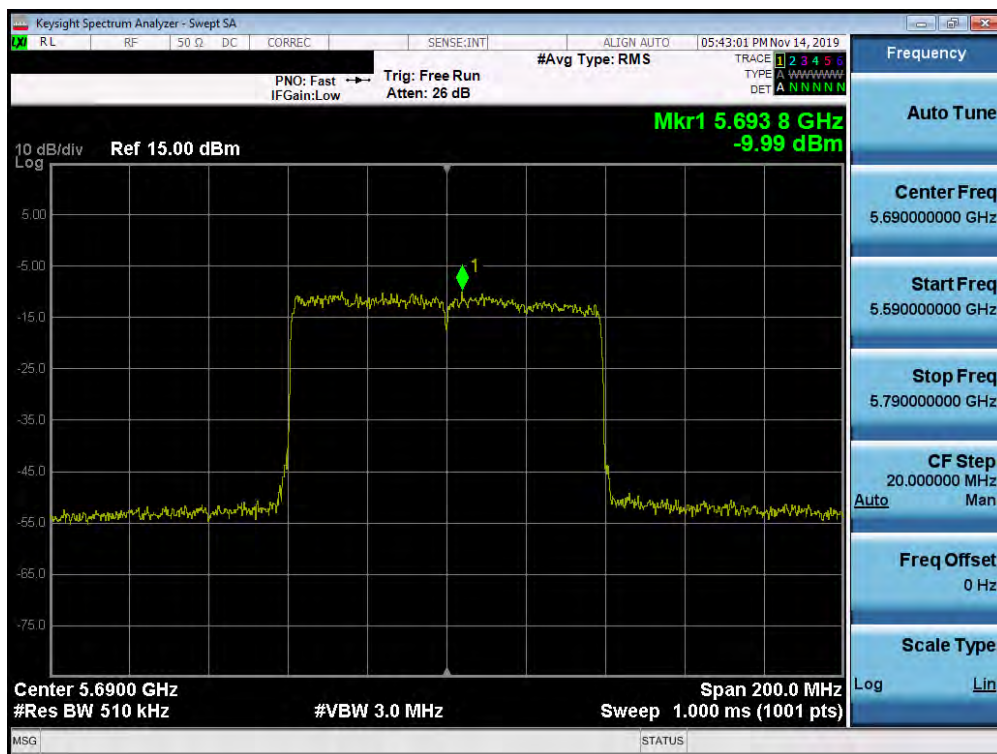


Plot 7-262. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 106)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 182 of 266 |

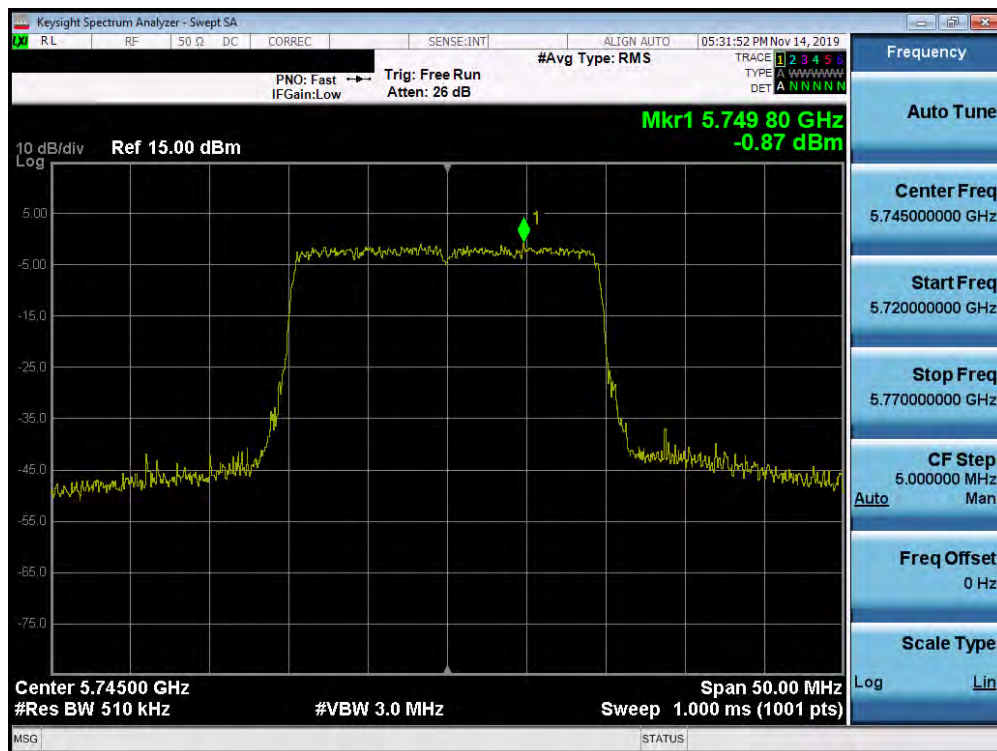


Plot 7-263. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 122)

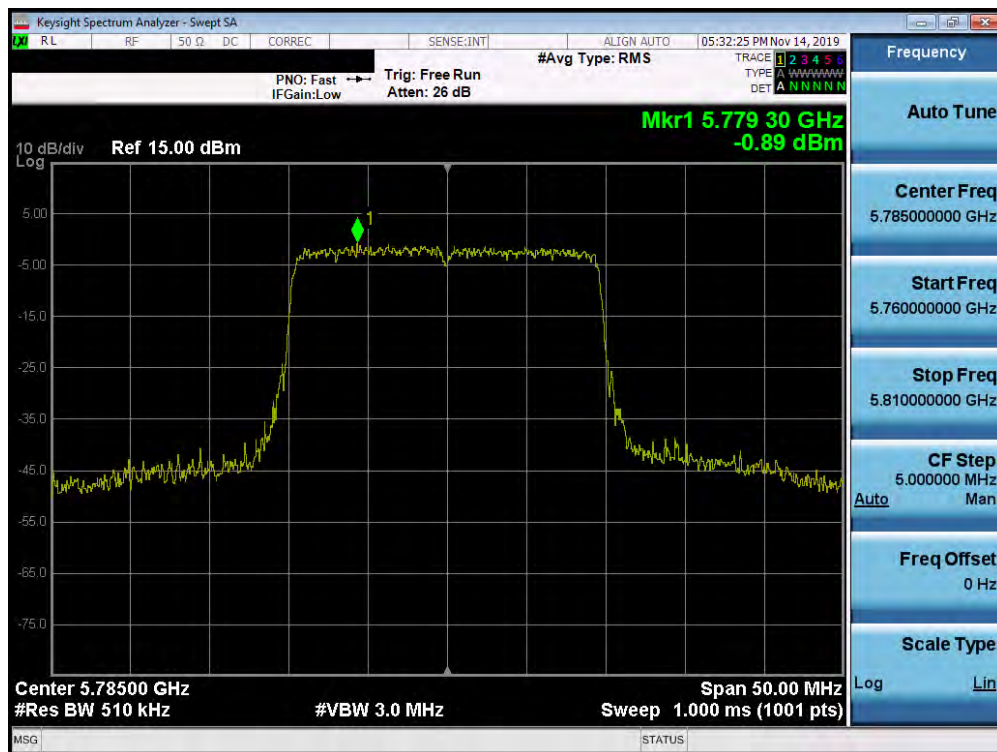


Plot 7-264. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax – Full Tones (UNII Band 2C) – Ch. 138)

| | | | | |
|---|--------------------------------------|---------------------------------------|----------------|---------------------------------|
| FCC ID: A3LSMG986JPN | PCTEST | MEASUREMENT REPORT (CERTIFICATION) | SAMSUNG | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 183 of 266 |

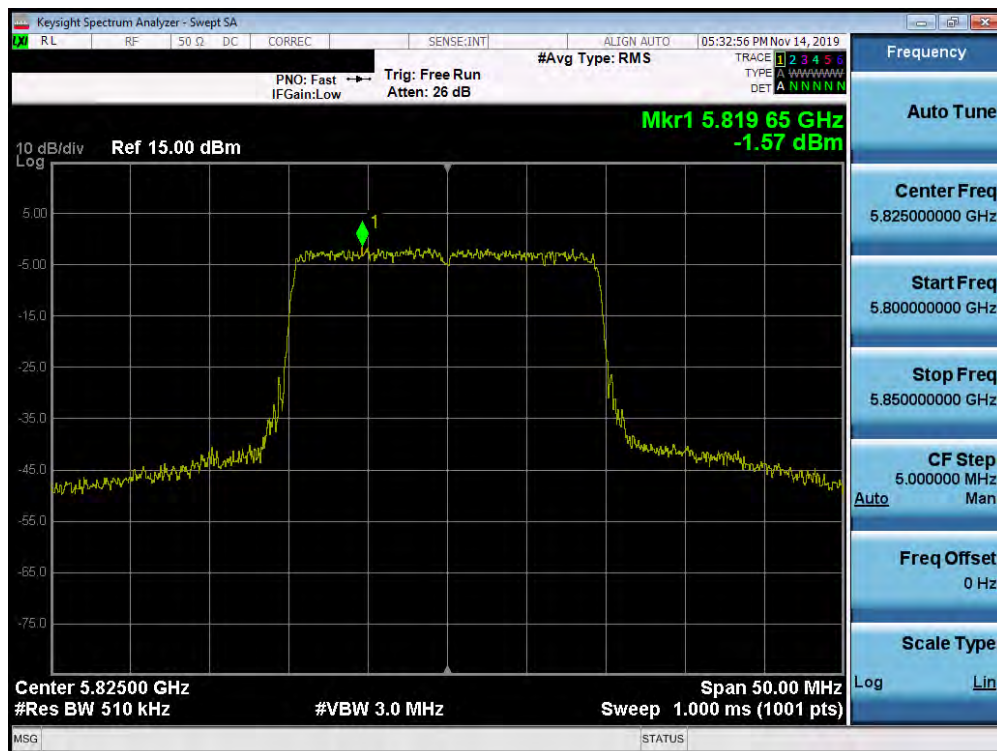


Plot 7-265. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax – Full Tones (UNII Band 3) – Ch. 149)

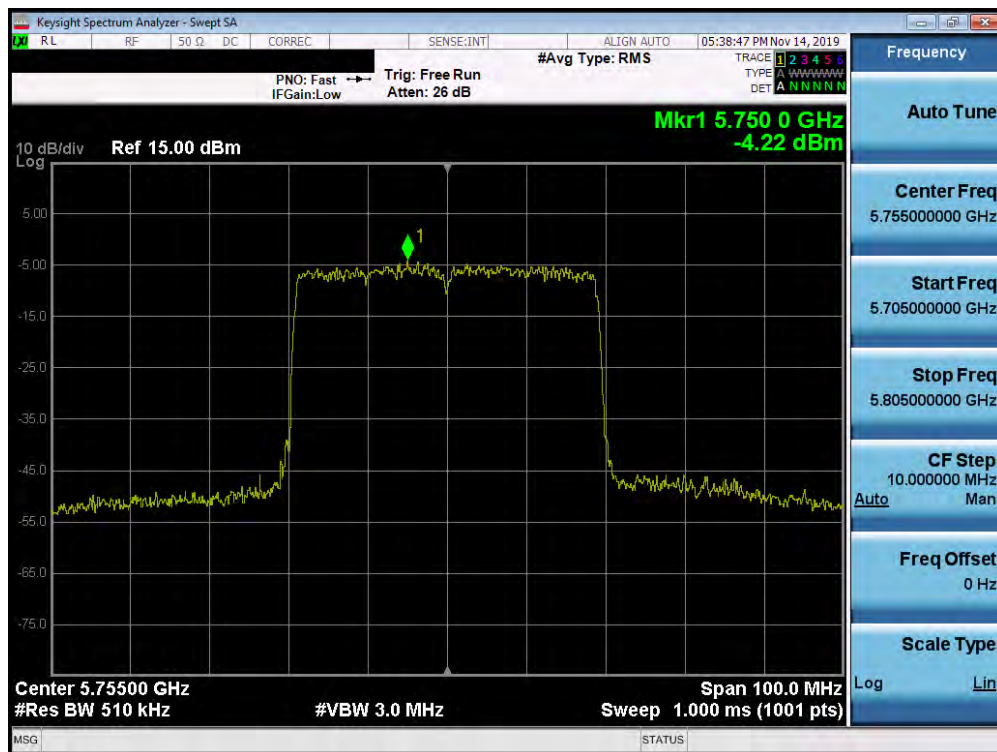


Plot 7-266. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax – Full Tones (UNII Band 3) – Ch. 157)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 184 of 266 |

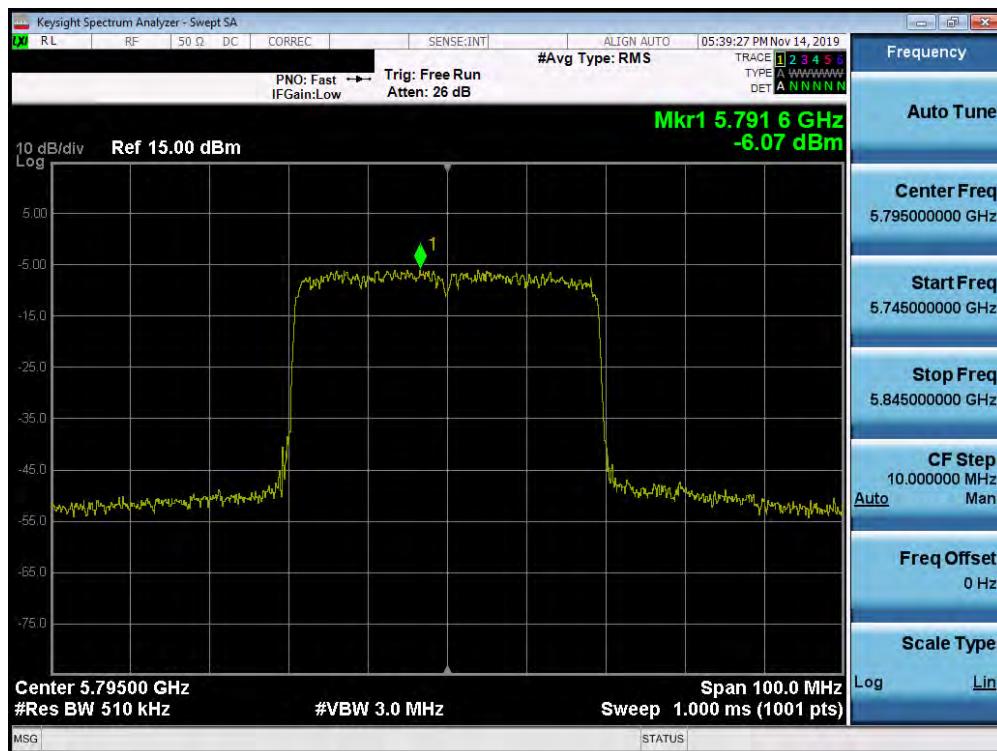


Plot 7-267. Power Spectral Density Plot MIMO ANT2 (20MHz BW 802.11ax – Full Tones (UNII Band 3) – Ch. 165)

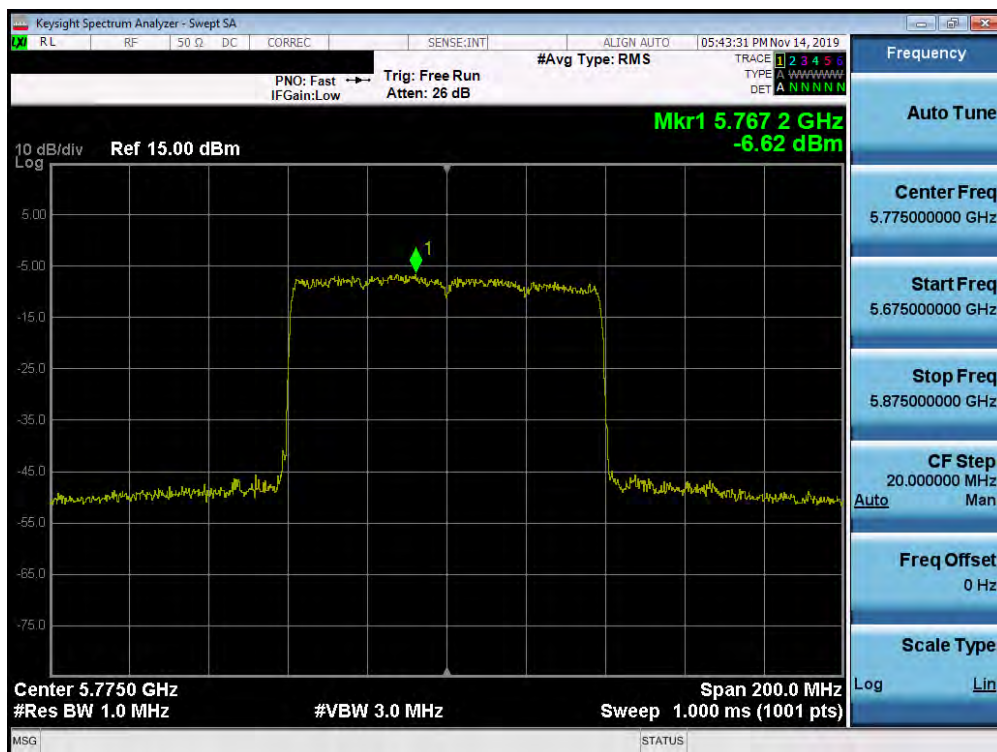


Plot 7-268. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – Full Tones (UNII Band 3) – Ch. 151)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 185 of 266 |



Plot 7-269. Power Spectral Density Plot MIMO ANT2 (40MHz BW 802.11ax – Full Tones (UNII Band 3) – Ch. 159)



Plot 7-270. Power Spectral Density Plot MIMO ANT2 (80MHz BW 802.11ax – Full Tones (UNII Band 3) – Ch. 155)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 186 of 266 |

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 7-30 per Section 15.209 and RSS-Gen (8.9).

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

Table 7-63. Radiated Limits

Test Procedures Used

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

Test Settings

Average Measurements above 1GHz (Method AD)

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = power average (RMS)
5. Number of measurement points = 1001 (Number of points must be $\geq 2 \times \text{span/RBW}$)
6. Averaging type = power (RMS)
7. Sweep time = auto couple
8. Trace was averaged over 100 sweeps

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 187 of 266 |

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.

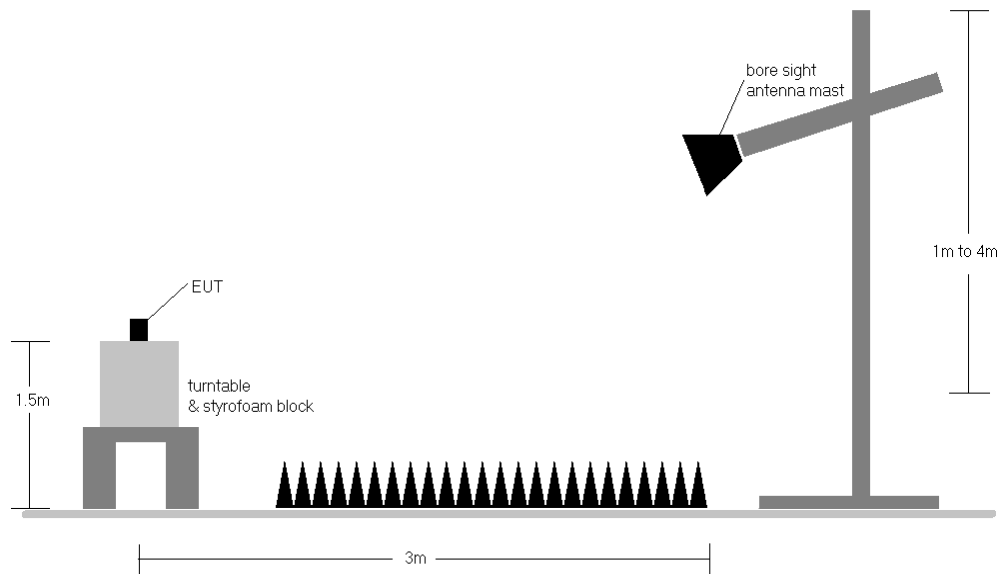


Figure 7-5. Test Instrument & Measurement Setup

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 188 of 266 |

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 7-30.
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 7-30. 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. The wide spectrum spurious emissions plots shown on the following pages are used only for the purpose of emission identification. Any emissions found to be within 20dB of the limit are fully investigated and the results are shown in this section.
8. The "-" shown in the following RSE tables are used to denote a noise floor measurement.
9. For radiated measurements, emissions were investigated for the fully-loaded RU configuration and for all of the partially-loaded RU configurations. Among all of the available partially-loaded RU configurations, only the configuration with the worst case emissions is reported.

Sample Calculations

Determining Spurious Emissions Levels

- Field Strength Level [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]

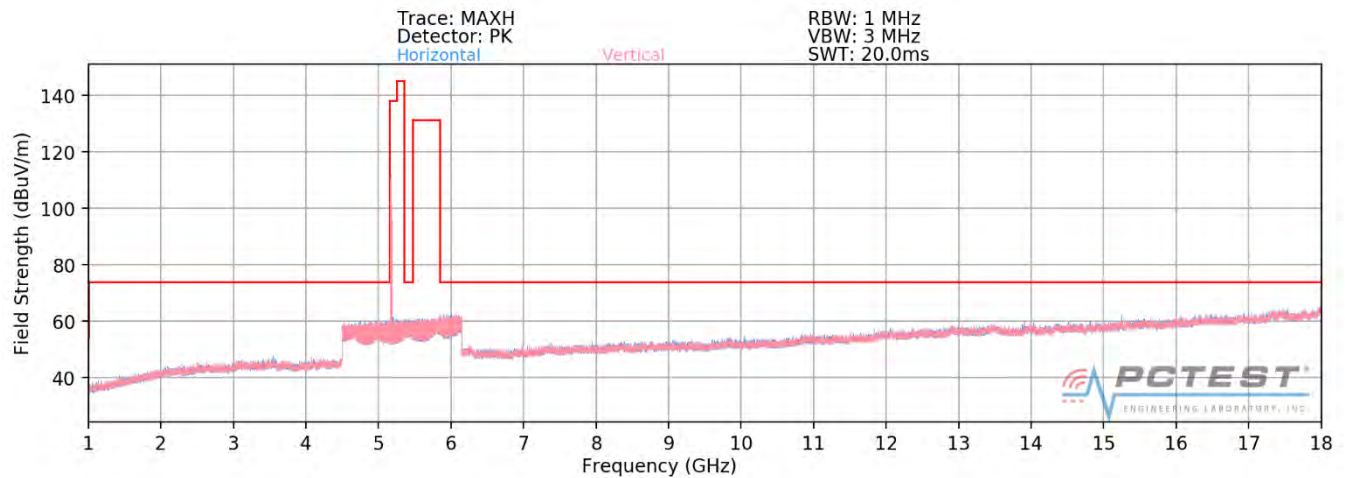
Radiated Band Edge Measurement Offset

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

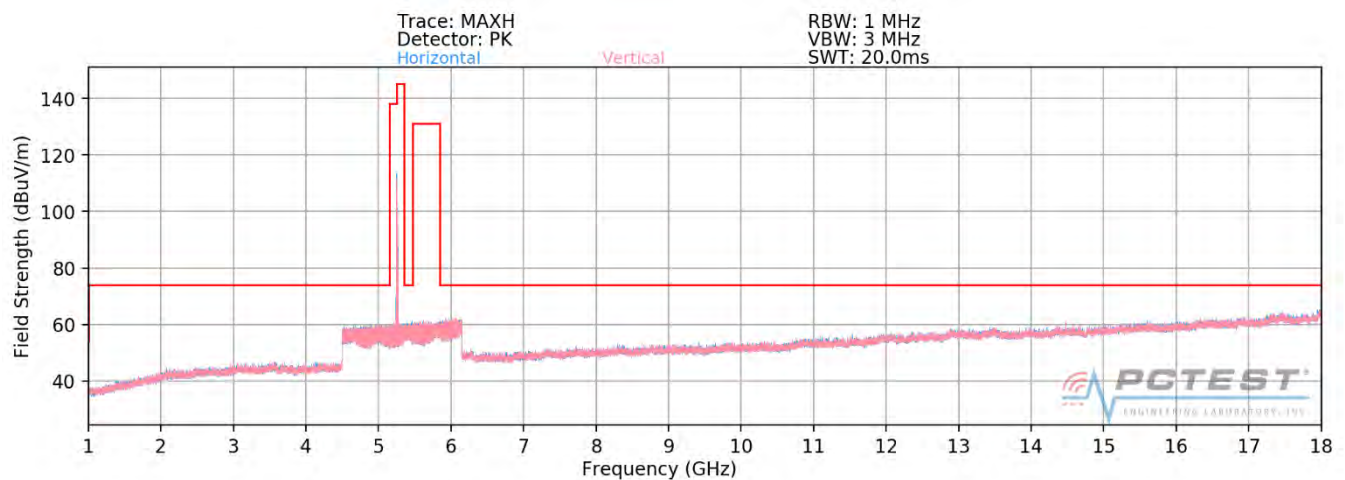
| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 189 of 266 |

7.6.1 SISO Antenna-1 Radiated Spurious Emission Measurements

26 Tones

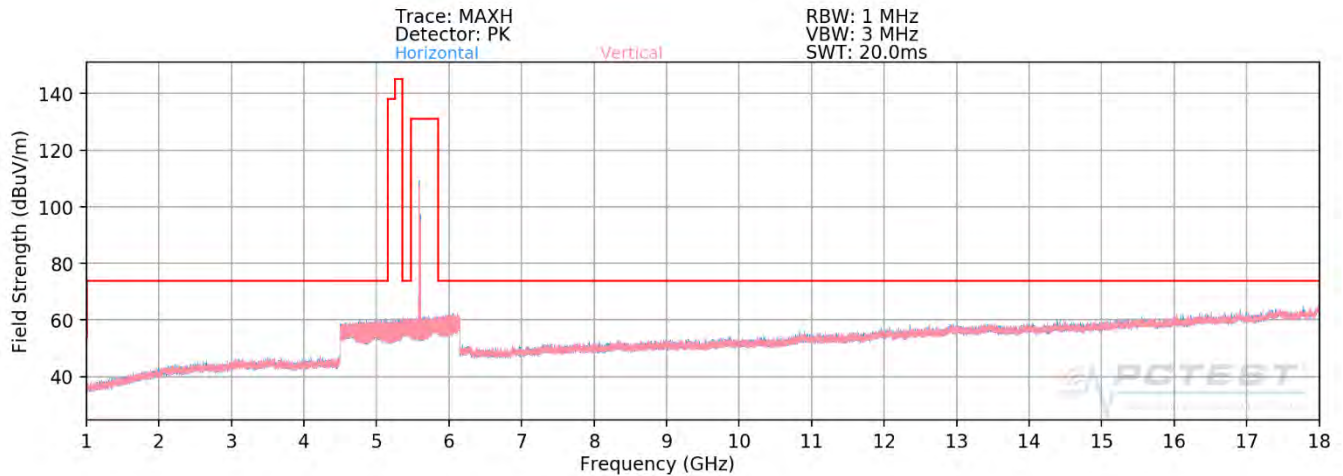


Plot 7-271. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11ax – U1 Ch. 40 – 26 Tones)

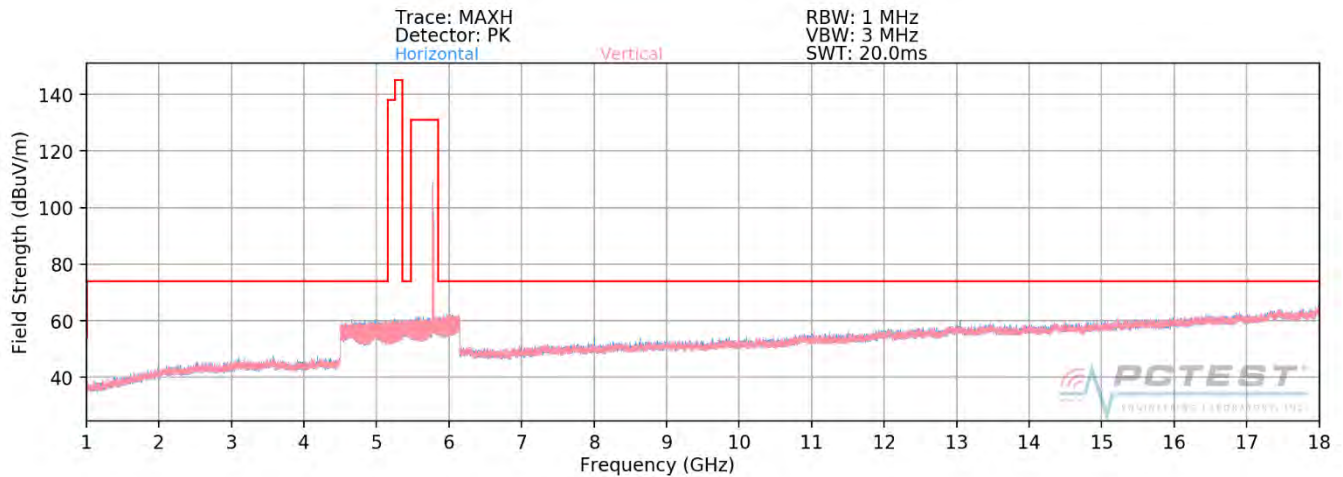


Plot 7-272. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11ax – U2A Ch. 56 – 26 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 190 of 266 |



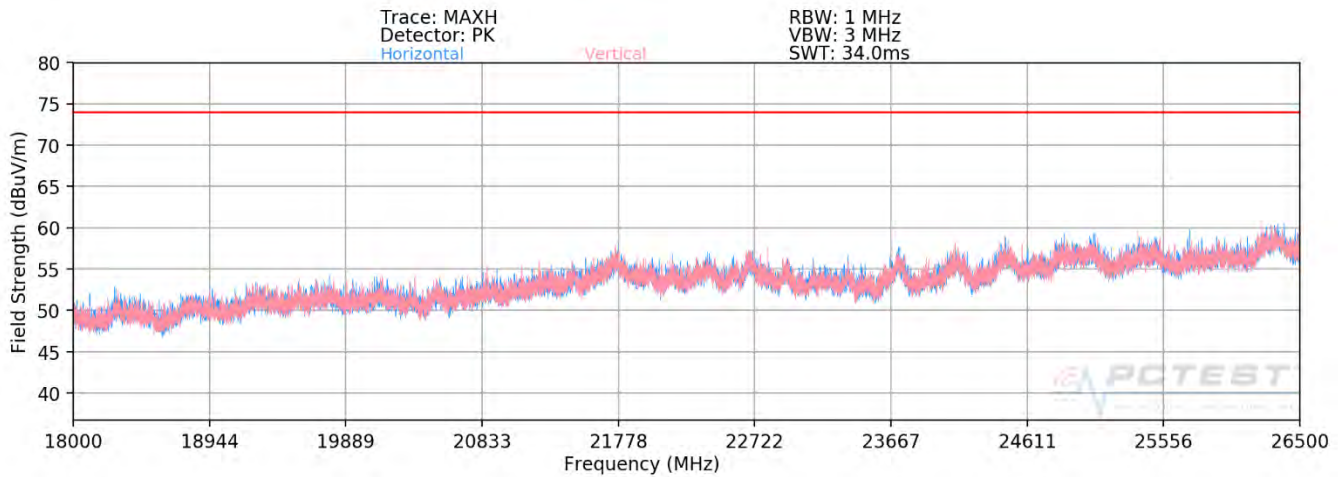
Plot 7-273. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11ax – U2C Ch. 120 – 26 Tones)



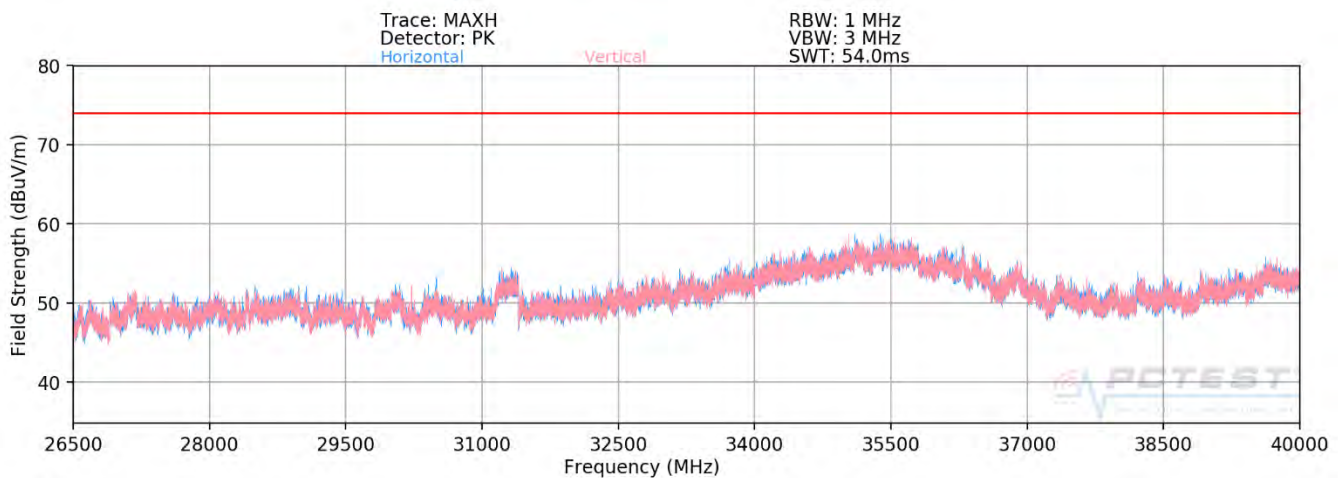
Plot 7-274. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11ax – U3 Ch. 157 – 26 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 191 of 266 |

SISO Antenna-1 Radiated Spurious Emissions Measurements (Above 18GHz)



Plot 7-275. Radiated Spurious Plot 18GHz - 26.5GHz SISO ANT1 (802.11ax – 26 Tones)



Plot 7-276. Radiated Spurious Plot 26.5GHz - 40GHz SISO ANT1 (802.11ax – 26 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 192 of 266 |

SISO Antenna-1 Radiated Spurious Emission Measurements (26 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: 54
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 | - | - | -69.75 | 15.23 | 0.00 | 52.48 | 68.20 | -15.72 |
| * 15540.00 | Average | V | 120 | 331 | -81.91 | 22.71 | 0.00 | 47.80 | 53.98 | -6.18 |
| * 15540.00 | Peak | V | 120 | 331 | -68.03 | 22.71 | 0.00 | 61.68 | 73.98 | -12.30 |
| * 20720.00 | Average | V | - | - | -78.06 | 17.51 | -9.54 | 36.91 | 53.98 | -17.07 |
| * 20720.00 | Peak | V | - | - | -67.90 | 17.51 | -9.54 | 47.07 | 73.98 | -26.91 |
| 25900.00 | Peak | V | - | - | -65.24 | 19.88 | -9.54 | 52.10 | 68.20 | -16.10 |

Table 7-64. Radiated Measurements SISO ANT1 (26 Tones)

Worst Case Mode: 802.11ax (20MHz BW)
Worst Case Transfer Rate: MCS0
RU Index: 54
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 | - | - | -69.95 | 15.67 | 0.00 | 52.72 | 68.20 | -15.48 |
| * 15600.00 | Average | V | 119 | 335 | -81.14 | 22.46 | 0.00 | 48.32 | 53.98 | -5.66 |
| * 15600.00 | Peak | V | 119 | 335 | -64.43 | 22.46 | 0.00 | 65.03 | 73.98 | -8.95 |
| * 20800.00 | Average | V | - | - | -77.84 | 17.87 | -9.54 | 37.49 | 53.98 | -16.49 |
| * 20800.00 | Peak | V | - | - | -68.12 | 17.87 | -9.54 | 47.21 | 73.98 | -26.77 |
| 26000.00 | Peak | V | - | - | -66.31 | 20.15 | -9.54 | 51.30 | 68.20 | -16.90 |

Table 7-65. Radiated Measurements SISO ANT1 (26 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 193 of 266 |

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 54
 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 | - | - | -70.92 | 15.49 | 0.00 | 51.57 | 68.20 | -16.63 |
| * 15720.00 | Average | V | 164 | 325 | -81.74 | 22.45 | 0.00 | 47.71 | 53.98 | -6.27 |
| * 15720.00 | Peak | V | 164 | 325 | -65.02 | 22.45 | 0.00 | 64.43 | 73.98 | -9.55 |
| * 20960.00 | Average | V | - | - | -78.03 | 18.06 | -9.54 | 37.49 | 53.98 | -16.49 |
| * 20960.00 | Peak | V | - | - | -67.45 | 18.06 | -9.54 | 48.07 | 73.98 | -25.91 |
| 26200.00 | Peak | V | - | - | -65.78 | 20.23 | -9.54 | 51.91 | 68.20 | -16.29 |

Table 7-66. Radiated Measurements SISO ANT1 (26 Tones)

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 54
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5260MHz
 Channel: 52

| Frequency [MHz] | Detector | Ant. Pol. [H/V] | Antenna Height [cm] | Turntable Azimuth [degree] | Analyzer Level [dBm] | AFCL [dB/m] | Distance Correction Factor [dB] | Field Strength [dBμV/m] | Limit [dBμV/m] | Margin [dB] |
|-----------------|----------|-----------------|---------------------|----------------------------|----------------------|-------------|---------------------------------|-------------------------|----------------|-------------|
| 10520.00 | Peak | V | - | - | -70.29 | 15.86 | 0.00 | 52.57 | 68.20 | -15.63 |
| * 15780.00 | Average | V | 109 | 329 | -82.27 | 22.77 | 0.00 | 47.50 | 53.98 | -6.48 |
| * 15780.00 | Peak | V | 109 | 329 | -67.47 | 22.77 | 0.00 | 62.30 | 73.98 | -11.68 |
| * 21040.00 | Average | V | - | - | -77.81 | 18.36 | -9.54 | 38.01 | 53.98 | -15.97 |
| * 21040.00 | Peak | V | - | - | -67.41 | 18.36 | -9.54 | 48.41 | 73.98 | -25.57 |
| 26300.00 | Peak | V | - | - | -65.64 | 20.96 | -9.54 | 52.78 | 68.20 | -15.42 |

Table 7-67. Radiated Measurements SISO ANT1 (26 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 194 of 266 |

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 54
 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 | - | - | -69.67 | 15.70 | 0.00 | 53.03 | 68.20 | -15.17 |
| * 15840.00 | Average | V | 196 | 331 | -82.74 | 22.66 | 0.00 | 46.92 | 53.98 | -7.06 |
| * 15840.00 | Peak | V | 196 | 331 | -66.19 | 22.66 | 0.00 | 63.47 | 73.98 | -10.51 |
| * 21120.00 | Average | V | - | - | -77.51 | 18.17 | -9.54 | 38.12 | 53.98 | -15.86 |
| * 21120.00 | Peak | V | - | - | -66.47 | 18.17 | -9.54 | 49.16 | 73.98 | -24.82 |
| * 26400.00 | Peak | V | - | - | -66.01 | 20.65 | -9.54 | 52.10 | 68.20 | -16.10 |

Table 7-68. Radiated Measurements SISO ANT1 (26 Tones)

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 54
 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 | - | - | -82.52 | 16.03 | 0.00 | 40.51 | 53.98 | -13.47 |
| * 10640.00 | Peak | V | - | - | -70.31 | 16.03 | 0.00 | 52.72 | 73.98 | -21.26 |
| * 15960.00 | Average | V | 115 | 331 | -82.88 | 23.09 | 0.00 | 47.21 | 53.98 | -6.77 |
| * 15960.00 | Peak | V | 115 | 331 | -68.00 | 23.09 | 0.00 | 62.09 | 73.98 | -11.89 |
| * 21280.00 | Average | V | - | - | -77.38 | 18.57 | -9.54 | 38.65 | 53.98 | -15.33 |
| * 21280.00 | Peak | V | - | - | -66.82 | 18.57 | -9.54 | 49.21 | 73.98 | -24.77 |
| * 26600.00 | Peak | V | - | - | -53.47 | 5.16 | -9.54 | 49.15 | 68.20 | -19.05 |

Table 7-69. Radiated Measurements SISO ANT1 (26 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 195 of 266 |

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 54
 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 | - | - | -82.31 | 16.51 | 0.00 | 41.20 | 53.98 | -12.78 |
| * 11000.00 | Peak | V | - | - | -69.47 | 16.51 | 0.00 | 54.04 | 73.98 | -19.94 |
| 16500.00 | Peak | V | - | - | -70.39 | 24.17 | 0.00 | 60.78 | 68.20 | -7.42 |
| 22000.00 | Peak | V | - | - | -67.29 | 19.12 | -9.54 | 49.29 | 68.20 | -18.91 |
| 27500.00 | Peak | V | - | - | -51.12 | 3.98 | -9.54 | 50.32 | 68.20 | -17.88 |

Table 7-70. Radiated Measurements SISO ANT1 (26 Tones)

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 54
 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 | - | - | -82.46 | 16.73 | 0.00 | 41.27 | 53.98 | -12.71 |
| * 11200.00 | Peak | V | - | - | -70.28 | 16.73 | 0.00 | 53.45 | 73.98 | -20.53 |
| 16800.00 | Peak | V | - | - | -70.36 | 24.00 | 0.00 | 60.64 | 68.20 | -7.56 |
| * 22400.00 | Average | V | - | - | -77.74 | 20.03 | -9.54 | 39.75 | 53.98 | -14.23 |
| * 22400.00 | Peak | V | - | - | -67.07 | 20.03 | -9.54 | 50.42 | 73.98 | -23.56 |
| 28000.00 | Peak | V | - | - | -51.86 | 4.70 | -9.54 | 50.30 | 68.20 | -17.90 |

Table 7-71. Radiated Measurements SISO ANT1 (26 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 196 of 266 |

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 54
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5720MHz
 Channel: 144

| Frequency [MHz] | Detector | Ant. Pol. [H/V] | Antenna Height [cm] | Turntable Azimuth [degree] | Analyzer Level [dBm] | AFCL [dB/m] | Distance Correction Factor [dB] | Field Strength [dBμV/m] | Limit [dBμV/m] | Margin [dB] |
|-----------------|----------|-----------------|---------------------|----------------------------|----------------------|-------------|---------------------------------|-------------------------|----------------|-------------|
| * 11440.00 | Average | V | 241 | 341 | -80.78 | 17.29 | 0.00 | 43.51 | 53.98 | -10.47 |
| * 11440.00 | Peak | V | 241 | 341 | -65.98 | 17.29 | 0.00 | 58.31 | 73.98 | -15.67 |
| 17160.00 | Peak | V | - | - | -70.70 | 24.37 | 0.00 | 60.67 | 68.20 | -7.53 |
| * 22880.00 | Average | V | - | - | -78.15 | 19.50 | -9.54 | 38.81 | 53.98 | -15.17 |
| * 22880.00 | Peak | V | - | - | -67.37 | 19.50 | -9.54 | 49.59 | 73.98 | -24.39 |
| 28600.00 | Peak | V | - | - | -52.84 | 5.14 | -9.54 | 49.76 | 68.20 | -18.44 |

Table 7-72. Radiated Measurements SISO ANT1 (26 Tones)

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 54
 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 | 104 | 328 | -79.96 | 17.63 | 0.00 | 44.67 | 53.98 | -9.30 |
| * 11490.00 | Peak | V | 104 | 328 | -66.67 | 17.63 | 0.00 | 57.96 | 73.98 | -16.01 |
| 17235.00 | Peak | V | - | - | -70.98 | 25.01 | 0.00 | 61.03 | 68.20 | -7.17 |
| * 22980.00 | Average | V | - | - | -78.27 | 19.89 | -9.54 | 39.08 | 53.98 | -14.90 |
| * 22980.00 | Peak | V | - | - | -67.73 | 19.89 | -9.54 | 49.62 | 73.98 | -24.36 |
| 28725.00 | Peak | V | - | - | -52.35 | 4.66 | -9.54 | 49.77 | 68.20 | -18.43 |

Table 7-73. Radiated Measurements SISO ANT1 (26 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 197 of 266 |

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 54
 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 | 125 | 338 | -77.80 | 17.35 | 0.00 | 46.55 | 53.98 | -7.43 |
| * 11570.00 | Peak | V | 125 | 338 | -65.09 | 17.35 | 0.00 | 59.26 | 73.98 | -14.72 |
| 17355.00 | Peak | V | - | - | -71.32 | 26.08 | 0.00 | 61.76 | 68.20 | -6.44 |
| 23140.00 | Peak | V | - | - | -68.15 | 19.59 | -9.54 | 48.90 | 68.20 | -19.30 |
| 28925.00 | Peak | V | - | - | -51.15 | 4.43 | -9.54 | 50.74 | 68.20 | -17.46 |

Table 7-74. Radiated Measurements SISO ANT1 (26 Tones)

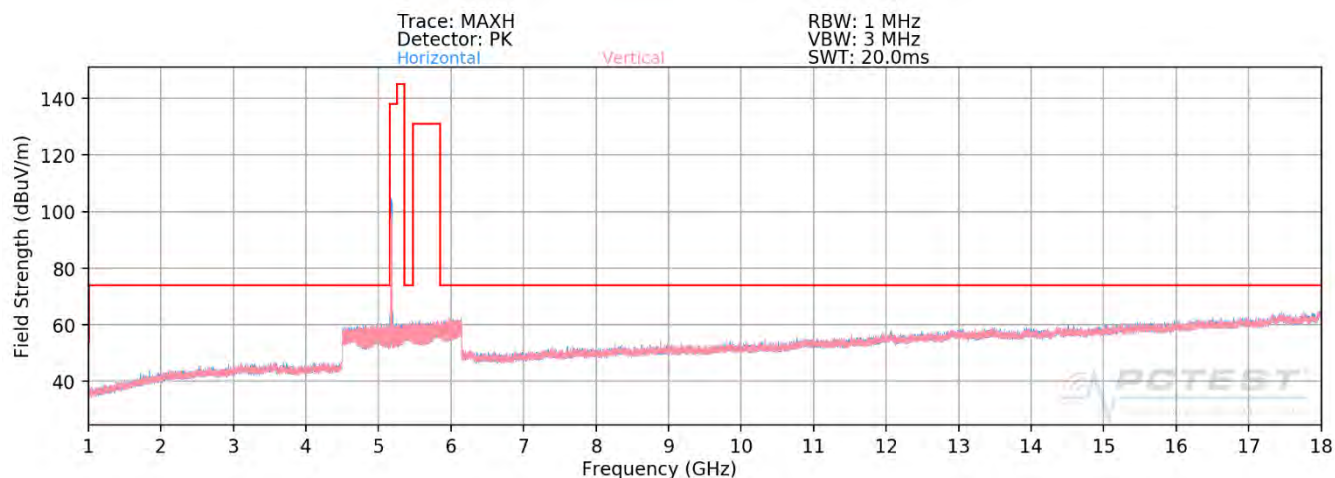
Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 54
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5825MHz
 Channel: 165

| 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 | 115 | 321 | -78.31 | 17.57 | 0.00 | 46.26 | 53.98 | -7.71 |
| * 11650.00 | Peak | V | 115 | 321 | -63.80 | 17.57 | 0.00 | 60.77 | 73.98 | -13.20 |
| 17475.00 | Peak | V | - | - | -70.80 | 26.23 | 0.00 | 62.43 | 68.20 | -5.77 |
| 23300.00 | Peak | V | - | - | -66.61 | 18.93 | -9.54 | 49.78 | 68.20 | -18.42 |
| 29125.00 | Peak | V | - | - | -51.23 | 3.48 | -9.54 | 49.71 | 68.20 | -18.49 |

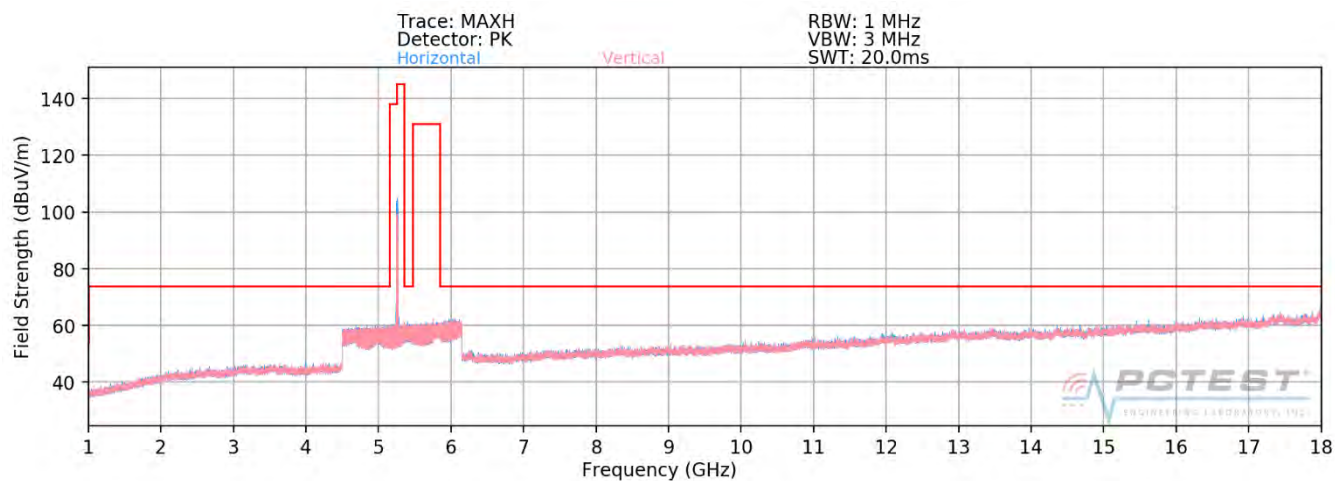
Table 7-75. Radiated Measurements SISO ANT1 (26 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 198 of 266 |

242 Tones

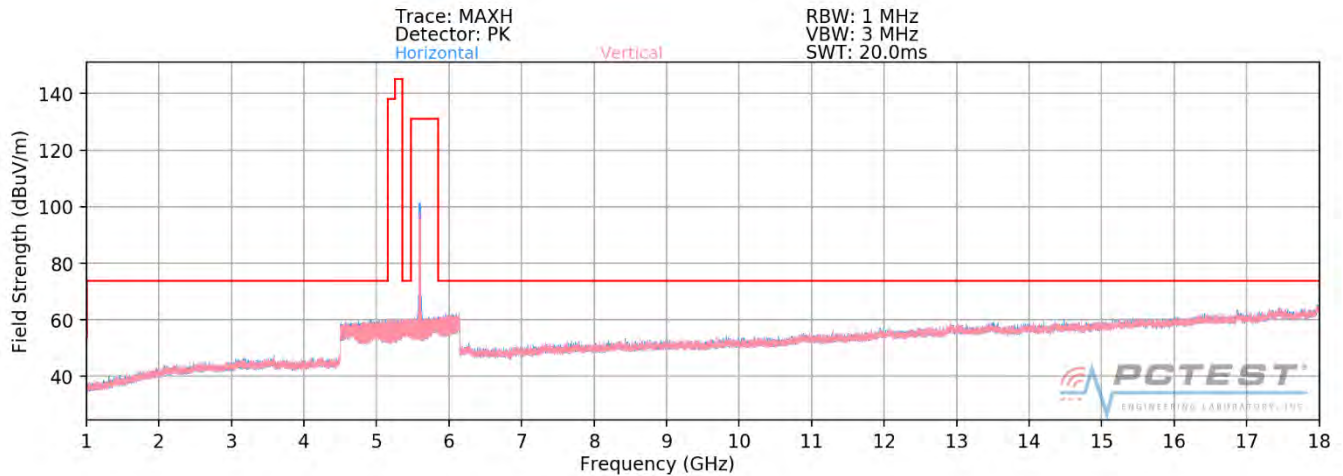


Plot 7-277. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11ax – U1 Ch. 40 – 242 Tones)

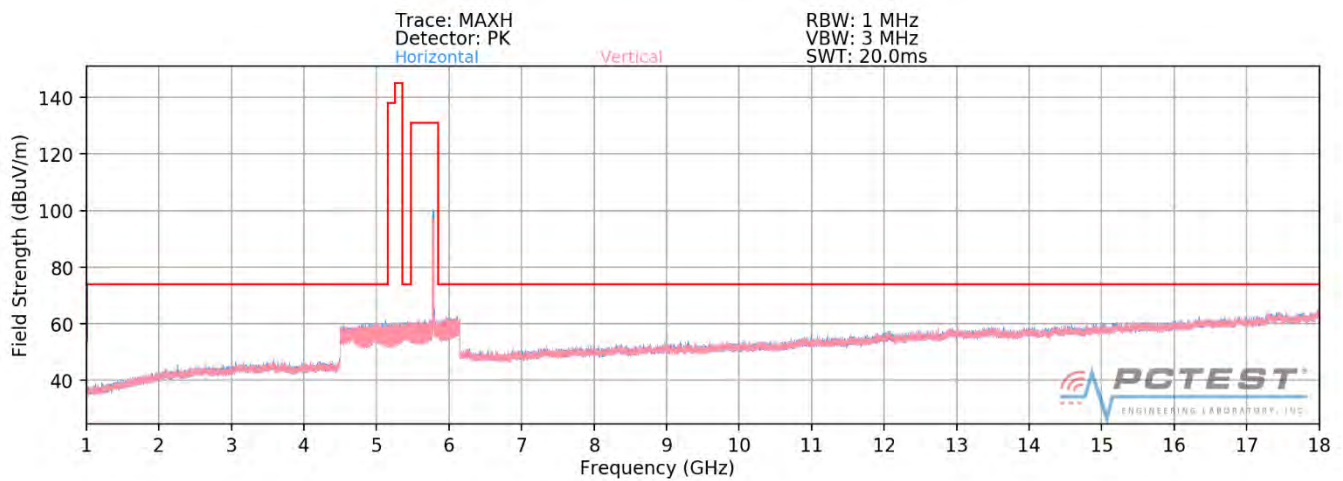


Plot 7-278. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11ax – U2A Ch. 56 – 242 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 199 of 266 |



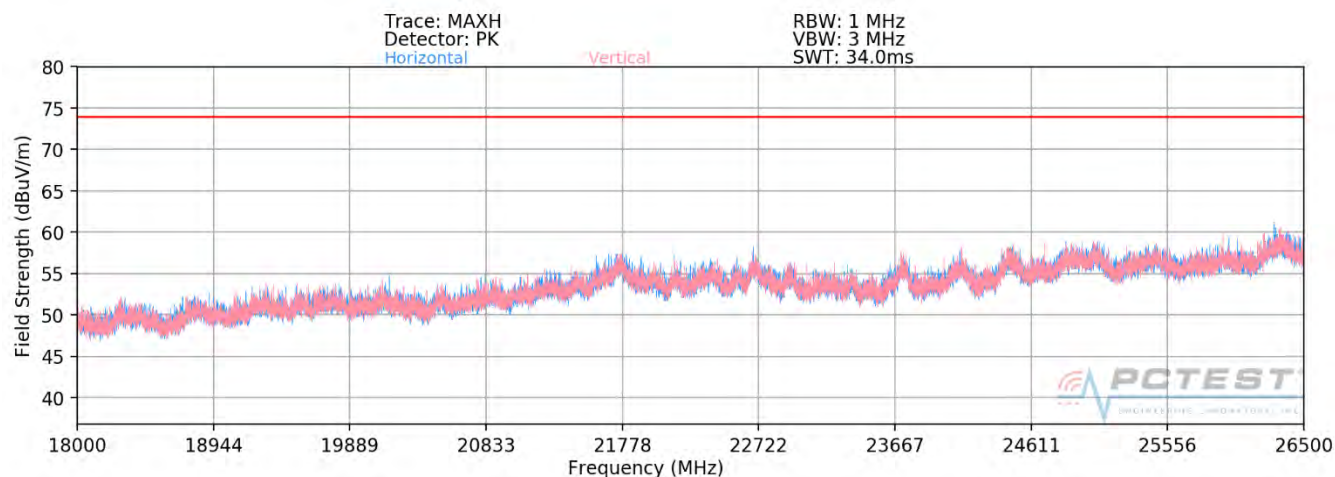
Plot 7-279. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11ax – U2C Ch. 120 – 242 Tones)



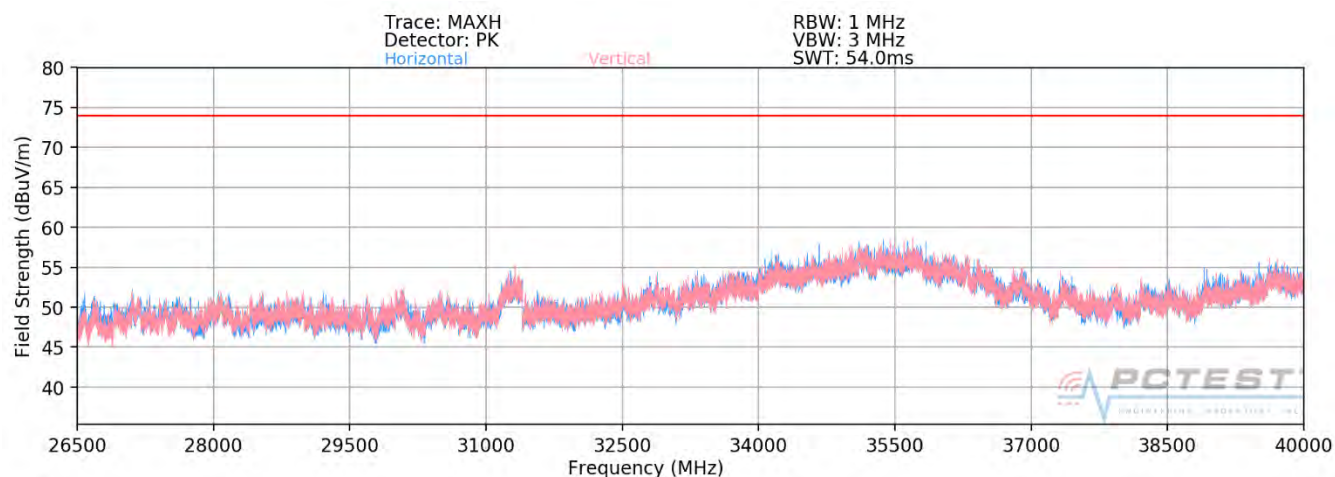
Plot 7-280. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11ax – U3 Ch. 157 – 242 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 200 of 266 |

SISO Antenna-1 Radiated Spurious Emissions Measurements (Above 18GHz)



Plot 7-281. Radiated Spurious Plot 18GHz - 26.5GHz SISO ANT1 (802.11ax - 242 Tones)



Plot 7-282. Radiated Spurious Plot 26.5GHz - 40GHz SISO ANT1 (802.11ax - 242 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 - 03/05/2020 | EUT Type: Portable Handset | | Page 201 of 266 |

SISO Antenna-1 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 | - | - | -70.63 | 15.23 | 0.00 | 51.60 | 68.20 | -16.60 |
| * 15540.00 | Average | V | 141 | 323 | -82.32 | 22.71 | 0.00 | 47.39 | 53.98 | -6.59 |
| * 15540.00 | Peak | V | 141 | 323 | -68.39 | 22.71 | 0.00 | 61.32 | 73.98 | -12.66 |
| * 20720.00 | Average | V | - | - | -77.53 | 17.51 | -9.54 | 37.44 | 53.98 | -16.54 |
| * 20720.00 | Peak | V | - | - | -66.92 | 17.51 | -9.54 | 48.05 | 73.98 | -25.93 |
| 25900.00 | Peak | V | - | - | -65.67 | 19.88 | -9.54 | 51.67 | 68.20 | -16.53 |

Table 7-76. Radiated Measurements SISO ANT1 (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 | - | - | -70.07 | 15.67 | 0.00 | 52.60 | 68.20 | -15.60 |
| * 15600.00 | Average | V | 125 | 327 | -81.79 | 22.46 | 0.00 | 47.67 | 53.98 | -6.31 |
| * 15600.00 | Peak | V | 125 | 327 | -67.94 | 22.46 | 0.00 | 61.52 | 73.98 | -12.46 |
| * 20800.00 | Average | V | - | - | -77.41 | 17.87 | -9.54 | 37.92 | 53.98 | -16.06 |
| * 20800.00 | Peak | V | - | - | -67.41 | 17.87 | -9.54 | 47.92 | 73.98 | -26.06 |
| 26000.00 | Peak | V | - | - | -66.07 | 20.15 | -9.54 | 51.54 | 68.20 | -16.66 |

Table 7-77. Radiated Measurements SISO ANT1 (242 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 202 of 266 |

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 | - | - | -70.73 | 15.49 | 0.00 | 51.76 | 68.20 | -16.44 |
| * 15720.00 | Average | V | 119 | 322 | -81.87 | 22.45 | 0.00 | 47.58 | 53.98 | -6.40 |
| * 15720.00 | Peak | V | 119 | 322 | -67.59 | 22.45 | 0.00 | 61.86 | 73.98 | -12.12 |
| * 20960.00 | Average | V | - | - | -78.00 | 18.06 | -9.54 | 37.52 | 53.98 | -16.46 |
| * 20960.00 | Peak | V | - | - | -67.93 | 18.06 | -9.54 | 47.59 | 73.98 | -26.39 |
| 26200.00 | Peak | V | - | - | -66.06 | 20.23 | -9.54 | 51.63 | 68.20 | -16.57 |

Table 7-78. Radiated Measurements SISO ANT1 (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 | - | - | -71.05 | 15.86 | 0.00 | 51.81 | 68.20 | -16.39 |
| * 15780.00 | Average | V | - | - | -83.17 | 22.77 | 0.00 | 46.60 | 53.98 | -7.38 |
| * 15780.00 | Peak | V | - | - | -70.68 | 22.77 | 0.00 | 59.09 | 73.98 | -14.89 |
| * 21040.00 | Average | V | - | - | -77.49 | 18.36 | -9.54 | 38.33 | 53.98 | -15.65 |
| * 21040.00 | Peak | V | - | - | -67.46 | 18.36 | -9.54 | 48.36 | 73.98 | -25.62 |
| 26300.00 | Peak | V | - | - | -65.42 | 20.96 | -9.54 | 53.00 | 68.20 | -15.20 |

Table 7-79. Radiated Measurements SISO ANT1 (242 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 203 of 266 |

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 | - | - | -70.03 | 15.70 | 0.00 | 52.67 | 68.20 | -15.53 |
| * 15840.00 | Average | V | - | - | -82.78 | 22.66 | 0.00 | 46.88 | 53.98 | -7.10 |
| * 15840.00 | Peak | V | - | - | -70.01 | 22.66 | 0.00 | 59.65 | 73.98 | -14.33 |
| * 21120.00 | Average | V | - | - | -77.41 | 18.17 | -9.54 | 38.22 | 53.98 | -15.76 |
| * 21120.00 | Peak | V | - | - | -67.44 | 18.17 | -9.54 | 48.19 | 73.98 | -25.79 |
| * 26400.00 | Peak | V | - | - | -65.37 | 20.65 | -9.54 | 52.74 | 68.20 | -15.46 |

Table 7-80. Radiated Measurements SISO ANT1 (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 | - | - | -82.55 | 16.03 | 0.00 | 40.48 | 53.98 | -13.50 |
| * 10640.00 | Peak | V | - | - | -70.90 | 16.03 | 0.00 | 52.13 | 73.98 | -21.85 |
| * 15960.00 | Average | V | - | - | -83.45 | 23.09 | 0.00 | 46.64 | 53.98 | -7.34 |
| * 15960.00 | Peak | V | - | - | -70.16 | 23.09 | 0.00 | 59.93 | 73.98 | -14.05 |
| * 21280.00 | Average | V | - | - | -77.31 | 18.57 | -9.54 | 38.72 | 53.98 | -15.26 |
| * 21280.00 | Peak | V | - | - | -66.52 | 18.57 | -9.54 | 49.51 | 73.98 | -24.47 |
| * 26600.00 | Peak | V | - | - | -53.21 | 5.16 | -9.54 | 49.41 | 68.20 | -18.79 |

Table 7-81. Radiated Measurements SISO ANT1 (242 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 204 of 266 |

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 | - | - | -81.55 | 16.51 | 0.00 | 41.96 | 53.98 | -12.02 |
| * 11000.00 | Peak | V | - | - | -69.72 | 16.51 | 0.00 | 53.79 | 73.98 | -20.19 |
| 16500.00 | Peak | V | - | - | -70.82 | 24.17 | 0.00 | 60.35 | 68.20 | -7.85 |
| 22000.00 | Peak | V | - | - | -67.07 | 19.12 | -9.54 | 49.51 | 68.20 | -18.69 |
| 27500.00 | Peak | V | - | - | -52.02 | 3.98 | -9.54 | 49.42 | 68.20 | -18.78 |

Table 7-82. Radiated Measurements SISO ANT1 (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 | - | - | -81.64 | 16.73 | 0.00 | 42.09 | 53.98 | -11.89 |
| * 11200.00 | Peak | V | - | - | -69.66 | 16.73 | 0.00 | 54.07 | 73.98 | -19.91 |
| 16800.00 | Peak | V | - | - | -70.26 | 24.00 | 0.00 | 60.74 | 68.20 | -7.46 |
| * 22400.00 | Average | V | - | - | -77.89 | 20.03 | -9.54 | 39.60 | 53.98 | -14.38 |
| * 22400.00 | Peak | V | - | - | -67.58 | 20.03 | -9.54 | 49.91 | 73.98 | -24.07 |
| 28000.00 | Peak | V | - | - | -52.35 | 4.70 | -9.54 | 49.81 | 68.20 | -18.39 |

Table 7-83. Radiated Measurements SISO ANT1 (242 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 205 of 266 |

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5720MHz
 Channel: 144

| Frequency [MHz] | Detector | Ant. Pol. [H/V] | Antenna Height [cm] | Turntable Azimuth [degree] | Analyzer Level [dBm] | AFCL [dB/m] | Distance Correction Factor [dB] | Field Strength [dBμV/m] | Limit [dBμV/m] | Margin [dB] |
|-----------------|----------|-----------------|---------------------|----------------------------|----------------------|-------------|---------------------------------|-------------------------|----------------|-------------|
| * 11440.00 | Average | V | 191 | 314 | -80.75 | 17.29 | 0.00 | 43.54 | 53.98 | -10.44 |
| * 11440.00 | Peak | V | 191 | 314 | -67.87 | 17.29 | 0.00 | 56.42 | 73.98 | -17.56 |
| 17160.00 | Peak | V | - | - | -70.20 | 24.37 | 0.00 | 61.17 | 68.20 | -7.03 |
| * 22880.00 | Average | V | - | - | -78.29 | 19.50 | -9.54 | 38.67 | 53.98 | -15.31 |
| * 22880.00 | Peak | V | - | - | -67.80 | 19.50 | -9.54 | 49.16 | 73.98 | -24.82 |
| 28600.00 | Peak | V | - | - | -51.81 | 5.14 | -9.54 | 50.79 | 68.20 | -17.41 |

Table 7-84. Radiated Measurements SISO ANT1 (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 | 137 | 323 | -80.74 | 17.63 | 0.00 | 43.89 | 53.98 | -10.08 |
| * 11490.00 | Peak | V | 137 | 323 | -67.77 | 17.63 | 0.00 | 56.86 | 73.98 | -17.11 |
| 17235.00 | Peak | V | - | - | -70.60 | 25.01 | 0.00 | 61.41 | 68.20 | -6.79 |
| * 22980.00 | Average | V | - | - | -78.21 | 19.89 | -9.54 | 39.14 | 53.98 | -14.84 |
| * 22980.00 | Peak | V | - | - | -67.56 | 19.89 | -9.54 | 49.79 | 73.98 | -24.19 |
| 28725.00 | Peak | V | - | - | -51.89 | 4.66 | -9.54 | 50.23 | 68.20 | -17.97 |

Table 7-85. Radiated Measurements SISO ANT1 (242 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 206 of 266 |

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 | 196 | 330 | -78.99 | 17.35 | 0.00 | 45.36 | 53.98 | -8.62 |
| * 11570.00 | Peak | V | 196 | 330 | -66.40 | 17.35 | 0.00 | 57.95 | 73.98 | -16.03 |
| 17355.00 | Peak | V | - | - | -70.87 | 26.08 | 0.00 | 62.21 | 68.20 | -5.99 |
| 23140.00 | Peak | V | - | - | -66.11 | 19.59 | -9.54 | 50.94 | 68.20 | -17.26 |
| 28925.00 | Peak | V | - | - | -52.16 | 4.43 | -9.54 | 49.73 | 68.20 | -18.47 |

Table 7-86. Radiated Measurements SISO ANT1 (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

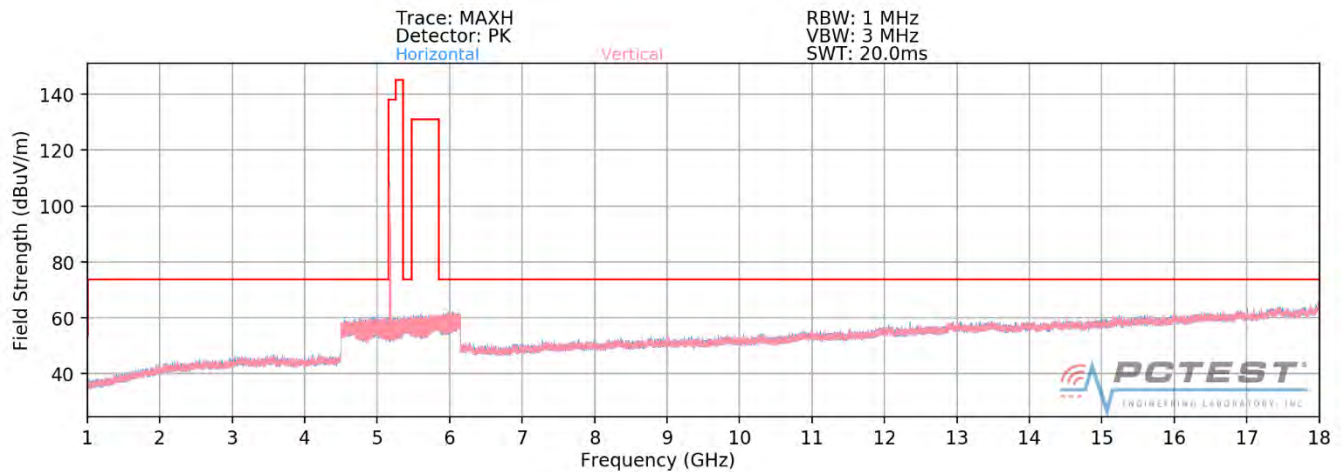
| Frequency [MHz] | Detector | Ant. Pol. [H/V] | Antenna Height [cm] | Turntable Azimuth [degree] | Analyzer Level [dBm] | AFCL [dB/m] | Distance Correction Factor [dB] | Field Strength [dBμV/m] | Limit [dBμV/m] | Margin [dB] |
|-----------------|----------|-----------------|---------------------|----------------------------|----------------------|-------------|---------------------------------|-------------------------|----------------|-------------|
| * 11650.00 | Average | V | 143 | 328 | -78.41 | 17.57 | 0.00 | 46.16 | 53.98 | -7.81 |
| * 11650.00 | Peak | V | 143 | 328 | -65.91 | 17.57 | 0.00 | 58.66 | 73.98 | -15.31 |
| 17475.00 | Peak | V | - | - | -70.54 | 26.23 | 0.00 | 62.69 | 68.20 | -5.51 |
| 23300.00 | Peak | V | - | - | -67.83 | 18.93 | -9.54 | 48.56 | 68.20 | -19.64 |
| 29125.00 | Peak | V | - | - | -50.88 | 3.48 | -9.54 | 50.06 | 68.20 | -18.14 |

Table 7-87. Radiated Measurements SISO ANT1 (242 Tones)

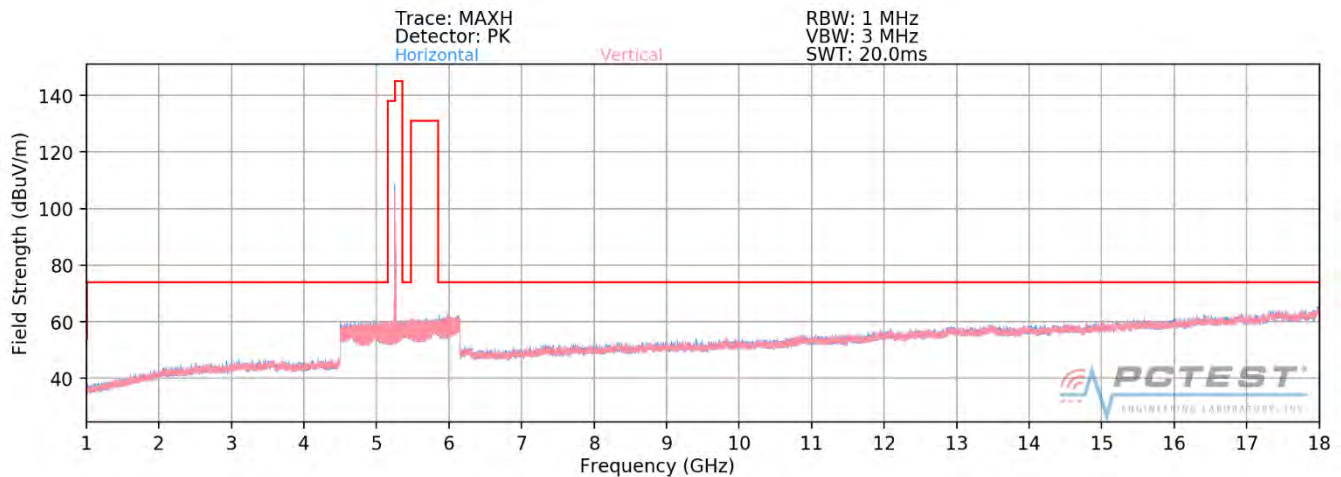
| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 207 of 266 |

7.6.2 SISO Antenna-2 Radiated Spurious Emission Measurements

26 Tones

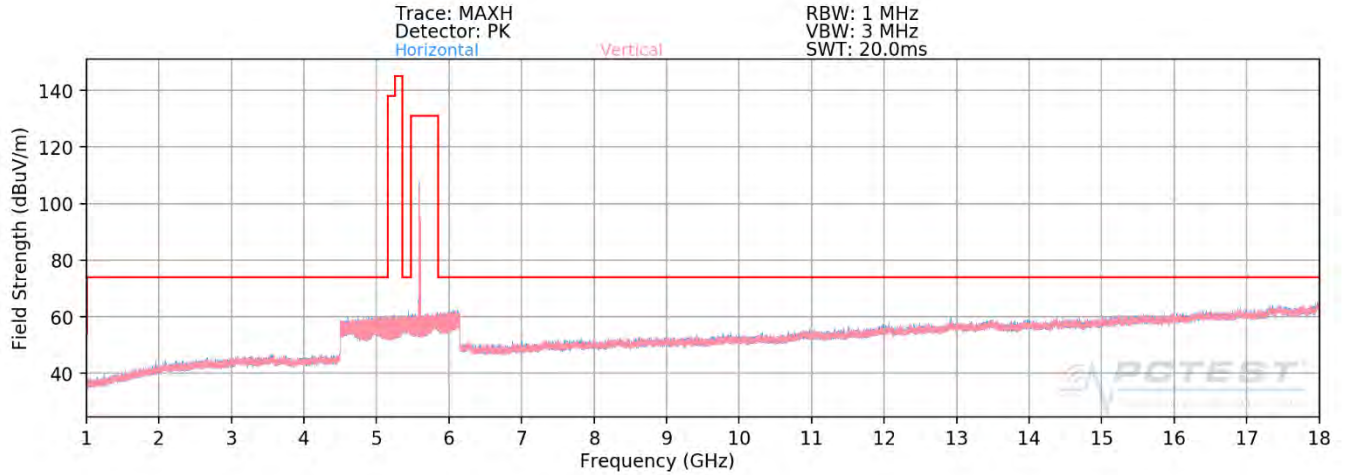


Plot 7-283. Radiated Spurious Plot above 1GHz SISO ANT2 (802.11ax – U1 Ch. 40 – 26 Tones)

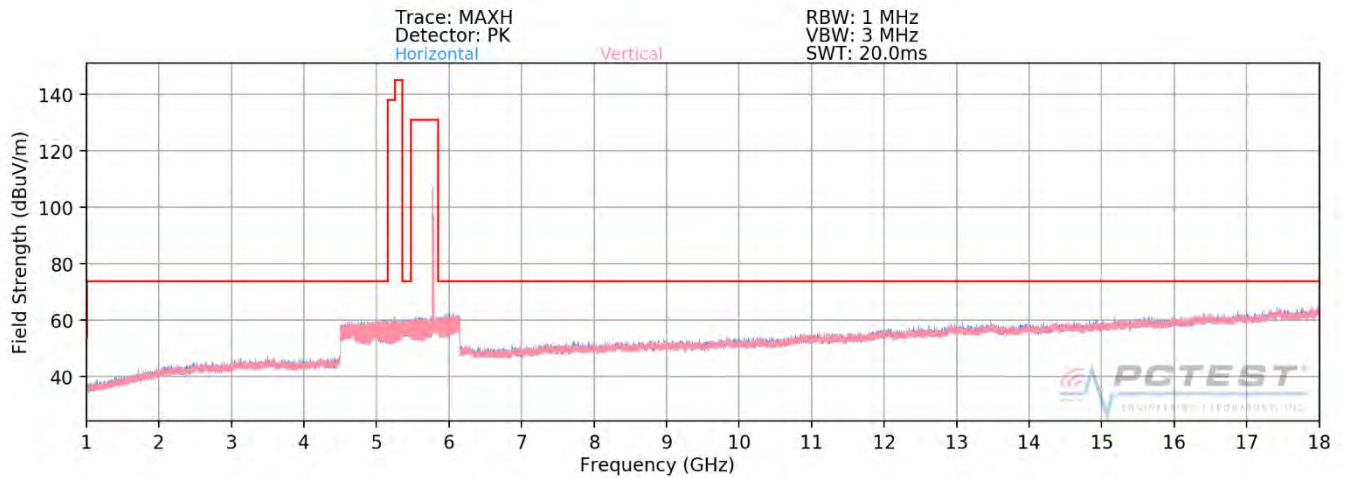


Plot 7-284. Radiated Spurious Plot above 1GHz SISO ANT2 (802.11ax – U2A Ch. 56 – 26 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 208 of 266 |



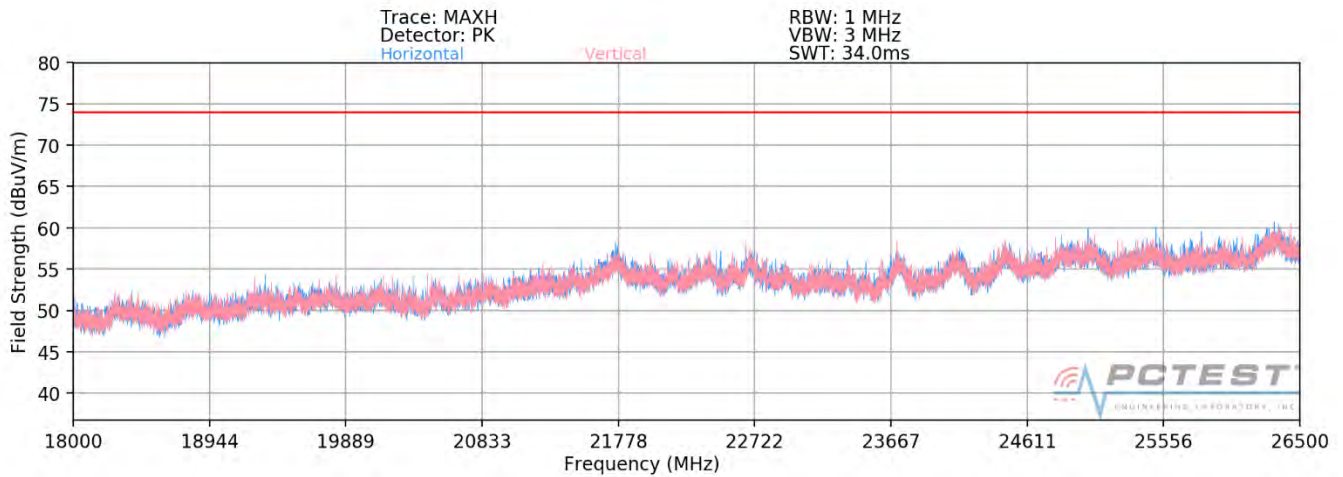
Plot 7-285. Radiated Spurious Plot above 1GHz SISO ANT2 (802.11ax – U2C Ch. 120 – 26 Tones)



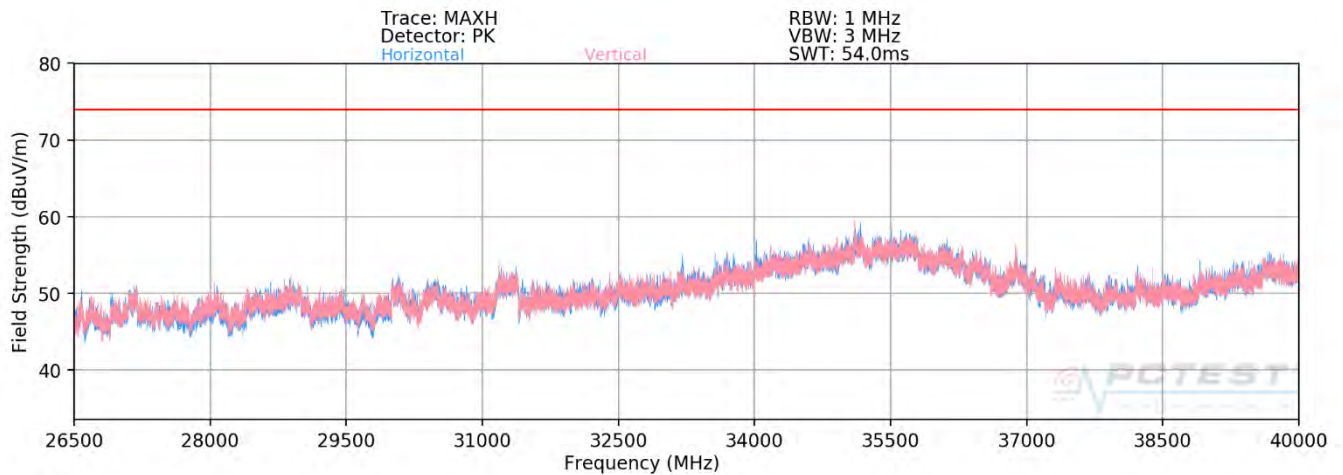
Plot 7-286. Radiated Spurious Plot above 1GHz SISO ANT2 (802.11ax – U3 Ch. 157 – 26 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 209 of 266 |

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



Plot 7-287. Radiated Spurious Plot 18GHz - 26.5GHz SISO ANT2 (802.11ax - 26 Tones)



Plot 7-288. Radiated Spurious Plot 26.5GHz - 40GHz SISO ANT2 (802.11ax - 26 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 - 03/05/2020 | EUT Type: Portable Handset | | Page 210 of 266 |

SISO Antenna-2 Radiated Spurious Emission Measurements

§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: 54
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 | 103 | 277 | -72.06 | 18.27 | 0.00 | 53.21 | 68.20 | -14.99 |
| * 15540.00 | Average | H | - | - | -86.23 | 28.22 | 0.00 | 48.99 | 53.98 | -4.99 |
| * 15540.00 | Peak | H | - | - | -74.38 | 28.22 | 0.00 | 60.84 | 73.98 | -13.14 |
| * 20720.00 | Average | H | - | - | -77.97 | 17.51 | -9.54 | 37.00 | 53.98 | -16.98 |
| * 20720.00 | Peak | H | - | - | -68.02 | 17.51 | -9.54 | 46.95 | 73.98 | -27.03 |
| 25900.00 | Peak | H | - | - | -65.65 | 19.88 | -9.54 | 51.69 | 68.20 | -16.51 |

Table 7-88. Radiated Measurements SISO ANT2 (26 Tones)

Worst Case Mode: 802.11ax (20MHz BW)
Worst Case Transfer Rate: MCS0
RU Index: 54
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 | - | - | -73.71 | 18.76 | 0.00 | 52.05 | 68.20 | -16.15 |
| * 15600.00 | Average | H | - | - | -86.32 | 27.97 | 0.00 | 48.65 | 53.98 | -5.33 |
| * 15600.00 | Peak | H | - | - | -75.35 | 27.97 | 0.00 | 59.62 | 73.98 | -14.36 |
| * 20800.00 | Average | H | - | - | -77.91 | 17.87 | -9.54 | 37.42 | 53.98 | -16.56 |
| * 20800.00 | Peak | H | - | - | -67.10 | 17.87 | -9.54 | 48.23 | 73.98 | -25.75 |
| 26000.00 | Peak | H | - | - | -65.70 | 20.15 | -9.54 | 51.91 | 68.20 | -16.29 |

Table 7-89. Radiated Measurements SISO ANT2 (26 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 211 of 266 |

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 54
 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 | - | - | -74.43 | 19.02 | 0.00 | 51.59 | 68.20 | -16.61 |
| * 15720.00 | Average | H | - | - | -86.43 | 27.74 | 0.00 | 48.31 | 53.98 | -5.67 |
| * 15720.00 | Peak | H | - | - | -74.53 | 27.74 | 0.00 | 60.21 | 73.98 | -13.77 |
| * 20960.00 | Average | H | - | - | -78.10 | 18.06 | -9.54 | 37.42 | 53.98 | -16.56 |
| * 20960.00 | Peak | H | - | - | -67.09 | 18.06 | -9.54 | 48.43 | 73.98 | -25.55 |
| 26200.00 | Peak | H | - | - | -66.51 | 20.23 | -9.54 | 51.18 | 68.20 | -17.02 |

Table 7-90. Radiated Measurements SISO ANT2 (26 Tones)

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 54
 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 | - | - | -73.54 | 18.89 | 0.00 | 52.35 | 68.20 | -15.85 |
| * 15780.00 | Average | H | - | - | -86.34 | 27.43 | 0.00 | 48.09 | 53.98 | -5.89 |
| * 15780.00 | Peak | H | - | - | -74.47 | 27.43 | 0.00 | 59.96 | 73.98 | -14.02 |
| * 21040.00 | Average | H | - | - | -77.70 | 18.36 | -9.54 | 38.12 | 53.98 | -15.86 |
| * 21040.00 | Peak | H | - | - | -67.06 | 18.36 | -9.54 | 48.76 | 73.98 | -25.22 |
| 26300.00 | Peak | H | - | - | -65.58 | 20.96 | -9.54 | 52.84 | 68.20 | -15.36 |

Table 7-91. Radiated Measurements SISO ANT2 (26 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 212 of 266 |

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 54
 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 | - | - | -73.66 | 18.87 | 0.00 | 52.21 | 68.20 | -15.99 |
| * 15840.00 | Average | H | - | - | -86.38 | 28.80 | 0.00 | 49.42 | 53.98 | -4.56 |
| * 15840.00 | Peak | H | - | - | -75.35 | 28.80 | 0.00 | 60.45 | 73.98 | -13.53 |
| * 21120.00 | Average | H | - | - | -77.41 | 18.17 | -9.54 | 38.22 | 53.98 | -15.76 |
| * 21120.00 | Peak | H | - | - | -67.30 | 18.17 | -9.54 | 48.33 | 73.98 | -25.65 |
| 26400.00 | Peak | H | - | - | -64.56 | 20.65 | -9.54 | 53.55 | 68.20 | -14.65 |

Table 7-92. Radiated Measurements SISO ANT2 (26 Tones)

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 54
 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 | - | - | -85.03 | 19.05 | 0.00 | 41.02 | 53.98 | -12.96 |
| * 10640.00 | Peak | H | - | - | -74.01 | 19.05 | 0.00 | 52.04 | 73.98 | -21.94 |
| * 15960.00 | Average | H | - | - | -86.37 | 27.12 | 0.00 | 47.75 | 53.98 | -6.23 |
| * 15960.00 | Peak | H | - | - | -75.75 | 27.12 | 0.00 | 58.37 | 73.98 | -15.61 |
| * 21280.00 | Average | H | - | - | -77.31 | 18.57 | -9.54 | 38.72 | 53.98 | -15.26 |
| * 21280.00 | Peak | H | - | - | -66.71 | 18.57 | -9.54 | 49.32 | 73.98 | -24.66 |
| 26600.00 | Peak | H | - | - | -52.18 | 5.16 | -9.54 | 50.44 | 68.20 | -17.76 |

Table 7-93. Radiated Measurements SISO ANT2 (26 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 213 of 266 |

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 54
 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 | - | - | -85.18 | 19.60 | 0.00 | 41.42 | 53.98 | -12.56 |
| * 11000.00 | Peak | H | - | - | -73.94 | 19.60 | 0.00 | 52.66 | 73.98 | -21.32 |
| 16500.00 | Peak | H | - | - | -75.09 | 28.33 | 0.00 | 60.24 | 68.20 | -7.96 |
| 22000.00 | Peak | H | - | - | -67.51 | 19.12 | -9.54 | 49.07 | 68.20 | -19.13 |
| 27500.00 | Peak | H | - | - | -51.88 | 3.98 | -9.54 | 49.56 | 68.20 | -18.64 |

Table 7-94. Radiated Measurements SISO ANT2 (26 Tones)

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 54
 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 | - | - | -85.30 | 19.94 | 0.00 | 41.64 | 53.98 | -12.34 |
| * 11200.00 | Peak | H | - | - | -73.89 | 19.94 | 0.00 | 53.05 | 73.98 | -20.93 |
| 16800.00 | Peak | H | - | - | -74.62 | 30.43 | 0.00 | 62.81 | 68.20 | -5.39 |
| * 22400.00 | Average | H | - | - | -78.05 | 20.03 | -9.54 | 39.44 | 53.98 | -14.54 |
| * 22400.00 | Peak | H | - | - | -67.43 | 20.03 | -9.54 | 50.06 | 73.98 | -23.92 |
| 28000.00 | Peak | H | - | - | -52.08 | 4.70 | -9.54 | 50.08 | 68.20 | -18.12 |

Table 7-95. Radiated Measurements SISO ANT2 (26 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 214 of 266 |

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 54
 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 | - | - | -84.80 | 19.66 | 0.00 | 41.86 | 53.98 | -12.12 |
| * 11440.00 | Peak | H | - | - | -73.63 | 19.66 | 0.00 | 53.03 | 73.98 | -20.95 |
| 17160.00 | Peak | H | - | - | -74.20 | 30.32 | 0.00 | 63.12 | 68.20 | -5.08 |
| * 22880.00 | Average | H | - | - | -78.24 | 19.50 | -9.54 | 38.72 | 53.98 | -15.26 |
| * 22880.00 | Peak | H | - | - | -67.16 | 19.50 | -9.54 | 49.80 | 73.98 | -24.18 |
| 28600.00 | Peak | H | - | - | -52.37 | 5.14 | -9.54 | 50.23 | 68.20 | -17.97 |

Table 7-96. Radiated Measurements SISO ANT2 (26 Tones)

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 54
 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 | - | - | -84.63 | 20.22 | 0.00 | 42.59 | 53.98 | -11.39 |
| * 11490.00 | Peak | H | - | - | -73.37 | 20.22 | 0.00 | 53.85 | 73.98 | -20.13 |
| 17235.00 | Peak | H | - | - | -74.17 | 29.88 | 0.00 | 62.71 | 68.20 | -5.49 |
| * 22980.00 | Average | H | - | - | -78.23 | 19.89 | -9.54 | 39.12 | 53.98 | -14.86 |
| * 22980.00 | Peak | H | - | - | -67.30 | 19.89 | -9.54 | 50.05 | 73.98 | -23.93 |
| 28725.00 | Peak | H | - | - | -52.21 | 4.66 | -9.54 | 49.91 | 68.20 | -18.29 |

Table 7-97. Radiated Measurements SISO ANT2 (26 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 215 of 266 |

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 54
 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 | - | - | -84.77 | 21.58 | 0.00 | 43.81 | 53.98 | -10.17 |
| * 11570.00 | Peak | H | - | - | -73.30 | 21.58 | 0.00 | 55.28 | 73.98 | -18.70 |
| 17355.00 | Peak | H | - | - | -74.89 | 29.28 | 0.00 | 61.39 | 68.20 | -6.81 |
| 23140.00 | Peak | H | - | - | -67.11 | 19.59 | -9.54 | 49.94 | 68.20 | -18.26 |
| 28925.00 | Peak | H | - | - | -53.20 | 4.43 | -9.54 | 48.69 | 68.20 | -19.51 |

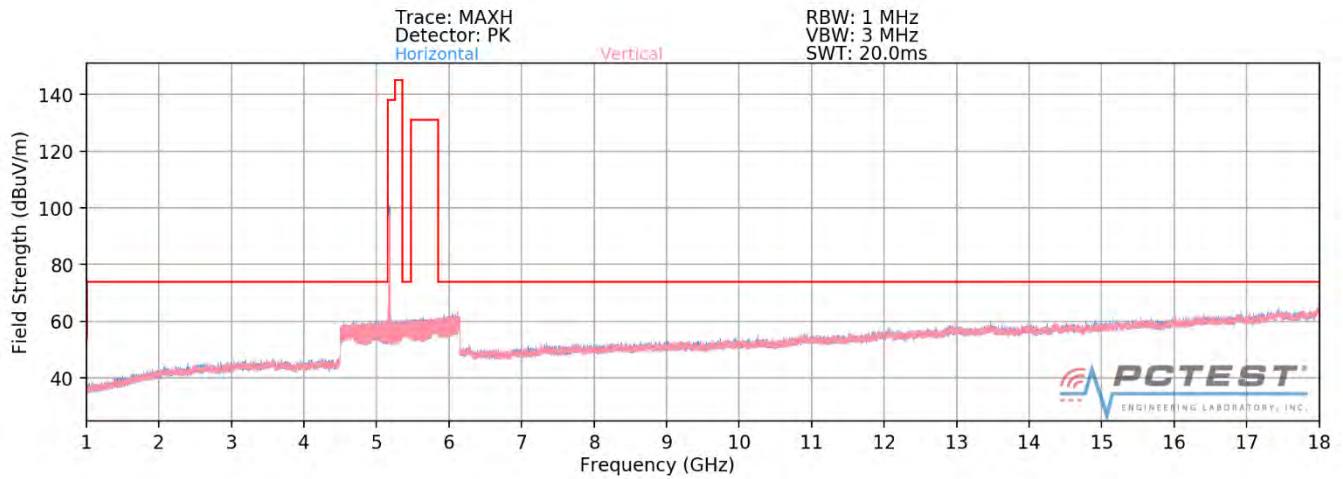
Table 7-98. Radiated Measurements SISO ANT2 (26 Tones)

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 54
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5825MHz
 Channel: 165

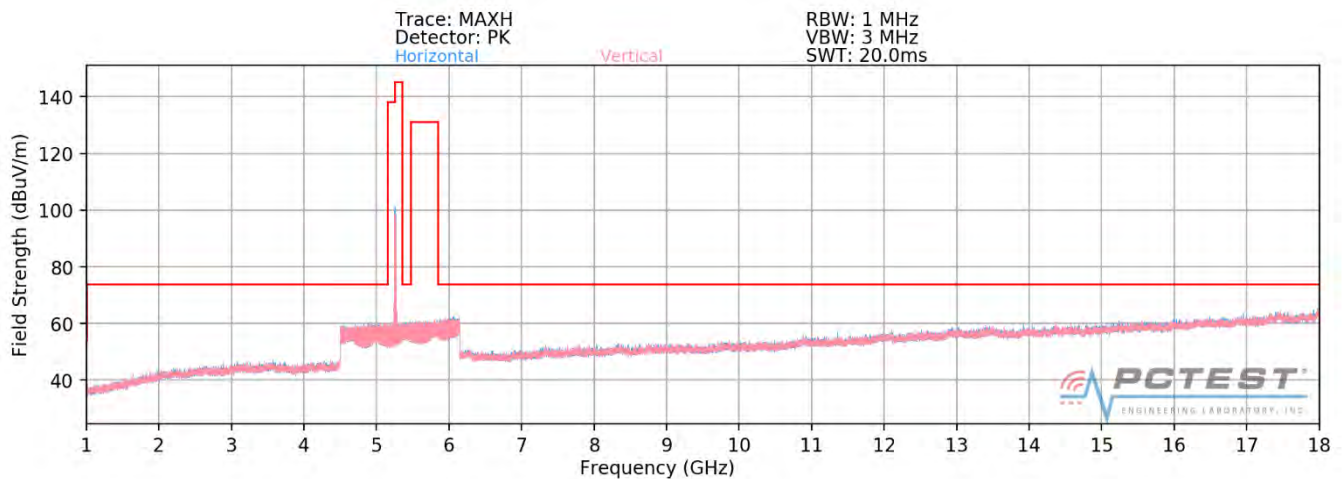
| Frequency [MHz] | Detector | Ant. Pol. [H/V] | Antenna Height [cm] | Turntable Azimuth [degree] | Analyzer Level [dBm] | AFCL [dB/m] | Distance Correction Factor [dB] | Field Strength [dBμV/m] | Limit [dBμV/m] | Margin [dB] |
|-----------------|----------|-----------------|---------------------|----------------------------|----------------------|-------------|---------------------------------|-------------------------|----------------|-------------|
| * 11650.00 | Average | H | - | - | -84.67 | 21.22 | 0.00 | 43.55 | 53.98 | -10.43 |
| * 11650.00 | Peak | H | - | - | -73.69 | 21.22 | 0.00 | 54.53 | 73.98 | -19.45 |
| 17475.00 | Peak | H | - | - | -75.43 | 30.91 | 0.00 | 62.48 | 68.20 | -5.72 |
| 23300.00 | Peak | H | - | - | -66.60 | 18.93 | -9.54 | 49.79 | 68.20 | -18.41 |
| 29125.00 | Peak | H | - | - | -51.50 | 3.48 | -9.54 | 49.44 | 68.20 | -18.76 |

Table 7-99. Radiated Measurements SISO ANT2 (26 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 216 of 266 |

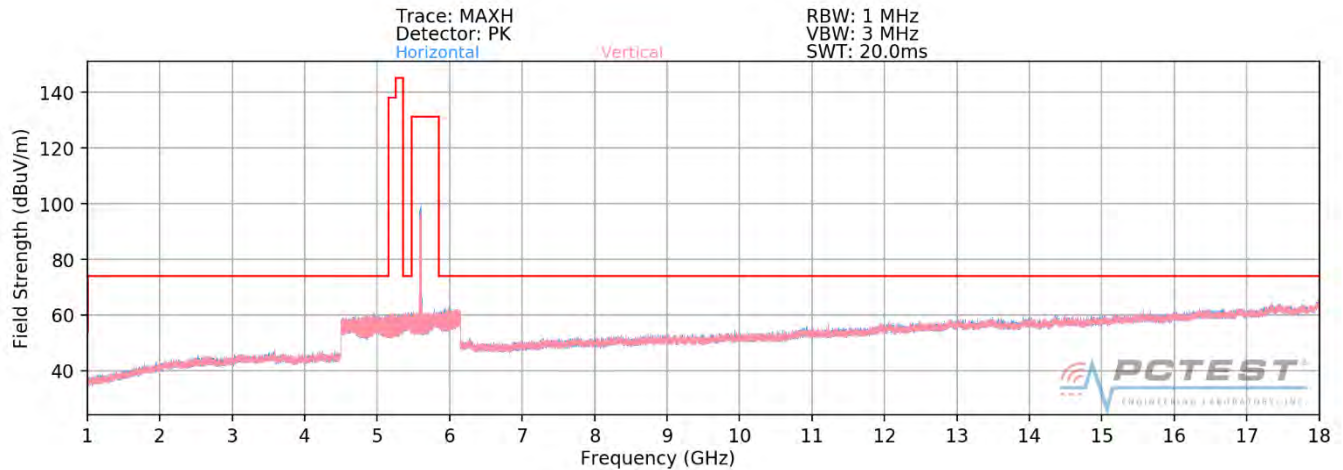


Plot 7-289. Radiated Spurious Plot above 1GHz SISO ANT2 (802.11ax – U1 Ch. 40 – 242 Tones)

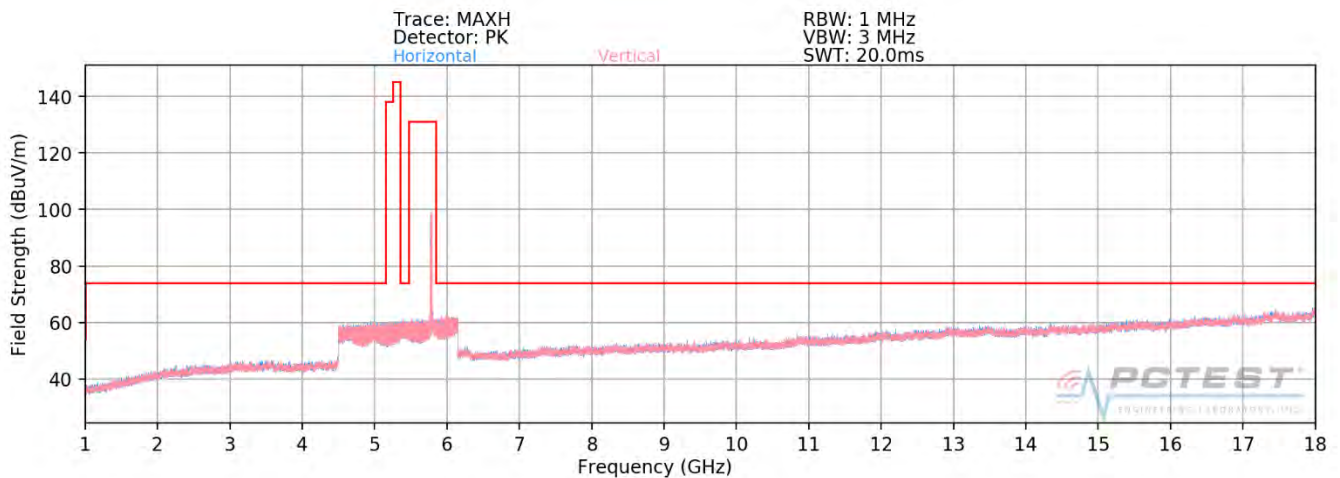


Plot 7-290. Radiated Spurious Plot above 1GHz SISO ANT2 (802.11ax – U2A Ch. 56 – 242 Tones)

| | | | | |
|---|--------------------------------------|---------------------------------------|----------------|---------------------------------|
| FCC ID: A3LSMG986JPN | PCTEST | MEASUREMENT REPORT (CERTIFICATION) | SAMSUNG | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 217 of 266 |



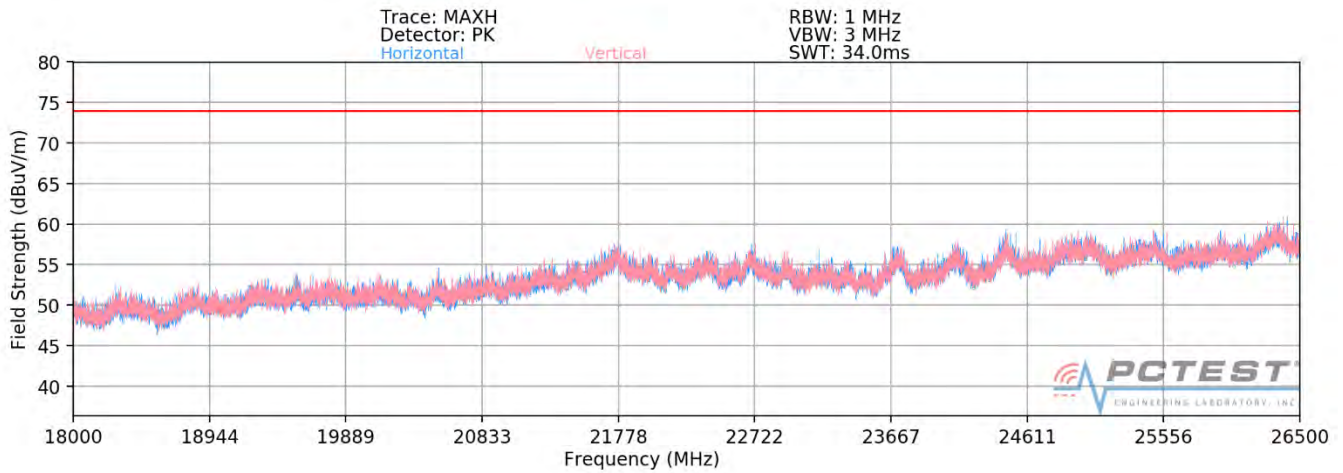
Plot 7-291. Radiated Spurious Plot above 1GHz SISO ANT2 (802.11ax – U2C Ch. 120 – 242 Tones)



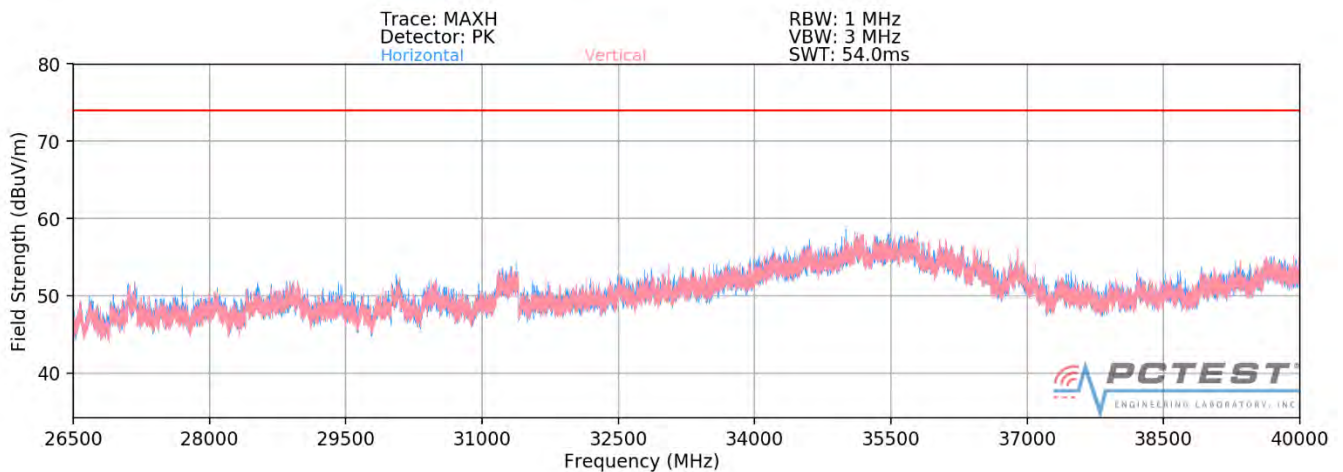
Plot 7-292. Radiated Spurious Plot above 1GHz SISO ANT2 (802.11ax – U3 Ch. 157 – 242 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 218 of 266 |

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



Plot 7-293. Radiated Spurious Plot 18GHz - 26.5GHz SISO ANT2 (802.11ax - 242 Tones)



Plot 7-294. Radiated Spurious Plot 26.5GHz - 40GHz SISO ANT2 (802.11ax - 242 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 - 03/05/2020 | EUT Type: Portable Handset | | Page 219 of 266 |

SISO Antenna-2 Radiated Spurious Emission Measurements

§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 | H | - | - | -73.62 | 18.27 | 0.00 | 51.65 | 68.20 | -16.55 |
| * 15540.00 | Average | H | - | - | -85.76 | 28.22 | 0.00 | 49.46 | 53.98 | -4.52 |
| * 15540.00 | Peak | H | - | - | -75.85 | 28.22 | 0.00 | 59.37 | 73.98 | -14.61 |
| * 20720.00 | Average | H | - | - | -77.99 | 17.51 | -9.54 | 36.98 | 53.98 | -17.00 |
| * 20720.00 | Peak | H | - | - | -67.77 | 17.51 | -9.54 | 47.20 | 73.98 | -26.78 |
| 25900.00 | Peak | H | - | - | -66.36 | 19.88 | -9.54 | 50.98 | 68.20 | -17.22 |

Table 7-100. Radiated Measurements SISO ANT2 (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 | H | - | - | -72.81 | 18.76 | 0.00 | 52.95 | 68.20 | -15.25 |
| * 15600.00 | Average | H | - | - | -86.05 | 27.97 | 0.00 | 48.92 | 53.98 | -5.06 |
| * 15600.00 | Peak | H | - | - | -74.31 | 27.97 | 0.00 | 60.66 | 73.98 | -13.32 |
| * 20800.00 | Average | H | - | - | -77.94 | 17.87 | -9.54 | 37.39 | 53.98 | -16.59 |
| * 20800.00 | Peak | H | - | - | -66.59 | 17.87 | -9.54 | 48.74 | 73.98 | -25.24 |
| 26000.00 | Peak | H | - | - | -66.43 | 20.15 | -9.54 | 51.18 | 68.20 | -17.02 |

Table 7-101. Radiated Measurements SISO ANT2 (242 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 220 of 266 |

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 | H | - | - | -73.92 | 19.02 | 0.00 | 52.10 | 68.20 | -16.10 |
| * 15720.00 | Average | H | - | - | -86.23 | 27.74 | 0.00 | 48.51 | 53.98 | -5.47 |
| * 15720.00 | Peak | H | - | - | -74.98 | 27.74 | 0.00 | 59.76 | 73.98 | -14.22 |
| * 20960.00 | Average | H | - | - | -77.99 | 18.06 | -9.54 | 37.53 | 53.98 | -16.45 |
| * 20960.00 | Peak | H | - | - | -67.70 | 18.06 | -9.54 | 47.82 | 73.98 | -26.16 |
| 26200.00 | Peak | H | - | - | -66.49 | 20.23 | -9.54 | 51.20 | 68.20 | -17.00 |

Table 7-102. Radiated Measurements SISO ANT2 (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 | H | - | - | -73.75 | 18.89 | 0.00 | 52.14 | 68.20 | -16.06 |
| * 15780.00 | Average | H | - | - | -86.08 | 27.43 | 0.00 | 48.35 | 53.98 | -5.63 |
| * 15780.00 | Peak | H | - | - | -74.85 | 27.43 | 0.00 | 59.58 | 73.98 | -14.40 |
| * 21040.00 | Average | H | - | - | -77.84 | 18.36 | -9.54 | 37.98 | 53.98 | -16.00 |
| * 21040.00 | Peak | H | - | - | -67.91 | 18.36 | -9.54 | 47.91 | 73.98 | -26.07 |
| 26300.00 | Peak | H | - | - | -64.99 | 20.96 | -9.54 | 53.43 | 68.20 | -14.77 |

Table 7-103. Radiated Measurements SISO ANT2 (242 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 221 of 266 |

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 | H | - | - | -73.62 | 18.87 | 0.00 | 52.25 | 68.20 | -15.95 |
| * 15840.00 | Average | H | - | - | -86.23 | 28.80 | 0.00 | 49.57 | 53.98 | -4.41 |
| * 15840.00 | Peak | H | - | - | -74.63 | 28.80 | 0.00 | 61.17 | 73.98 | -12.81 |
| * 21120.00 | Average | H | - | - | -77.44 | 18.17 | -9.54 | 38.19 | 53.98 | -15.79 |
| * 21120.00 | Peak | H | - | - | -66.83 | 18.17 | -9.54 | 48.80 | 73.98 | -25.18 |
| * 26400.00 | Peak | H | - | - | -65.21 | 20.65 | -9.54 | 52.90 | 68.20 | -15.30 |

Table 7-104. Radiated Measurements SISO ANT2 (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 | H | - | - | -84.83 | 19.05 | 0.00 | 41.22 | 53.98 | -12.76 |
| * 10640.00 | Peak | H | - | - | -73.04 | 19.05 | 0.00 | 53.01 | 73.98 | -20.97 |
| * 15960.00 | Average | H | - | - | -86.77 | 27.12 | 0.00 | 47.35 | 53.98 | -6.63 |
| * 15960.00 | Peak | H | - | - | -74.73 | 27.12 | 0.00 | 59.39 | 73.98 | -14.59 |
| * 21280.00 | Average | H | - | - | -77.23 | 18.57 | -9.54 | 38.80 | 53.98 | -15.18 |
| * 21280.00 | Peak | H | - | - | -66.68 | 18.57 | -9.54 | 49.35 | 73.98 | -24.63 |
| * 26600.00 | Peak | H | - | - | -53.32 | 5.16 | -9.54 | 49.30 | 68.20 | -18.90 |

Table 7-105. Radiated Measurements SISO ANT2 (242 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 222 of 266 |

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 | H | - | - | -85.13 | 19.60 | 0.00 | 41.47 | 53.98 | -12.51 |
| * 11000.00 | Peak | H | - | - | -73.56 | 19.60 | 0.00 | 53.04 | 73.98 | -20.94 |
| 16500.00 | Peak | H | - | - | -73.88 | 28.33 | 0.00 | 61.45 | 68.20 | -6.75 |
| 22000.00 | Peak | H | - | - | -66.91 | 19.12 | -9.54 | 49.67 | 68.20 | -18.53 |
| 27500.00 | Peak | H | - | - | -51.66 | 3.98 | -9.54 | 49.78 | 68.20 | -18.42 |

Table 7-106. Radiated Measurements SISO ANT2 (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 | H | - | - | -85.07 | 19.94 | 0.00 | 41.87 | 53.98 | -12.11 |
| * 11200.00 | Peak | H | - | - | -73.58 | 19.94 | 0.00 | 53.36 | 73.98 | -20.62 |
| 16800.00 | Peak | H | - | - | -74.71 | 30.43 | 0.00 | 62.72 | 68.20 | -5.48 |
| * 22400.00 | Average | H | - | - | -77.84 | 20.03 | -9.54 | 39.65 | 53.98 | -14.33 |
| * 22400.00 | Peak | H | - | - | -67.34 | 20.03 | -9.54 | 50.15 | 73.98 | -23.83 |
| 28000.00 | Peak | H | - | - | -52.34 | 4.70 | -9.54 | 49.82 | 68.20 | -18.38 |

Table 7-107. Radiated Measurements SISO ANT2 (242 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 223 of 266 |

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 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 | - | - | -84.61 | 19.66 | 0.00 | 42.05 | 53.98 | -11.93 |
| * 11440.00 | Peak | H | - | - | -73.67 | 19.66 | 0.00 | 52.99 | 73.98 | -20.99 |
| 17160.00 | Peak | H | - | - | -74.94 | 30.32 | 0.00 | 62.38 | 68.20 | -5.82 |
| * 22880.00 | Average | H | - | - | -78.18 | 19.50 | -9.54 | 38.78 | 53.98 | -15.20 |
| * 22880.00 | Peak | H | - | - | -67.61 | 19.50 | -9.54 | 49.35 | 73.98 | -24.63 |
| 28600.00 | Peak | H | - | - | -52.15 | 5.14 | -9.54 | 50.45 | 68.20 | -17.75 |

Table 7-108. Radiated Measurements SISO ANT2 (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 | H | - | - | -84.66 | 20.22 | 0.00 | 42.56 | 53.98 | -11.42 |
| * 11490.00 | Peak | H | - | - | -73.56 | 20.22 | 0.00 | 53.66 | 73.98 | -20.32 |
| 17235.00 | Peak | H | - | - | -74.46 | 29.88 | 0.00 | 62.42 | 68.20 | -5.78 |
| * 22980.00 | Average | H | - | - | -78.14 | 19.89 | -9.54 | 39.21 | 53.98 | -14.77 |
| * 22980.00 | Peak | H | - | - | -67.88 | 19.89 | -9.54 | 49.47 | 73.98 | -24.51 |
| 28725.00 | Peak | H | - | - | -52.21 | 4.66 | -9.54 | 49.91 | 68.20 | -18.29 |

Table 7-109. Radiated Measurements SISO ANT2 (242 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 224 of 266 |

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 | H | - | - | -84.96 | 21.58 | 0.00 | 43.62 | 53.98 | -10.36 |
| * 11570.00 | Peak | H | - | - | -73.90 | 21.58 | 0.00 | 54.68 | 73.98 | -19.30 |
| 17355.00 | Peak | H | - | - | -74.63 | 29.28 | 0.00 | 61.65 | 68.20 | -6.55 |
| 23140.00 | Peak | H | - | - | -67.61 | 19.59 | -9.54 | 49.44 | 68.20 | -18.76 |
| 28925.00 | Peak | H | - | - | -52.21 | 4.43 | -9.54 | 49.68 | 68.20 | -18.52 |

Table 7-110. Radiated Measurements SISO ANT2 (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

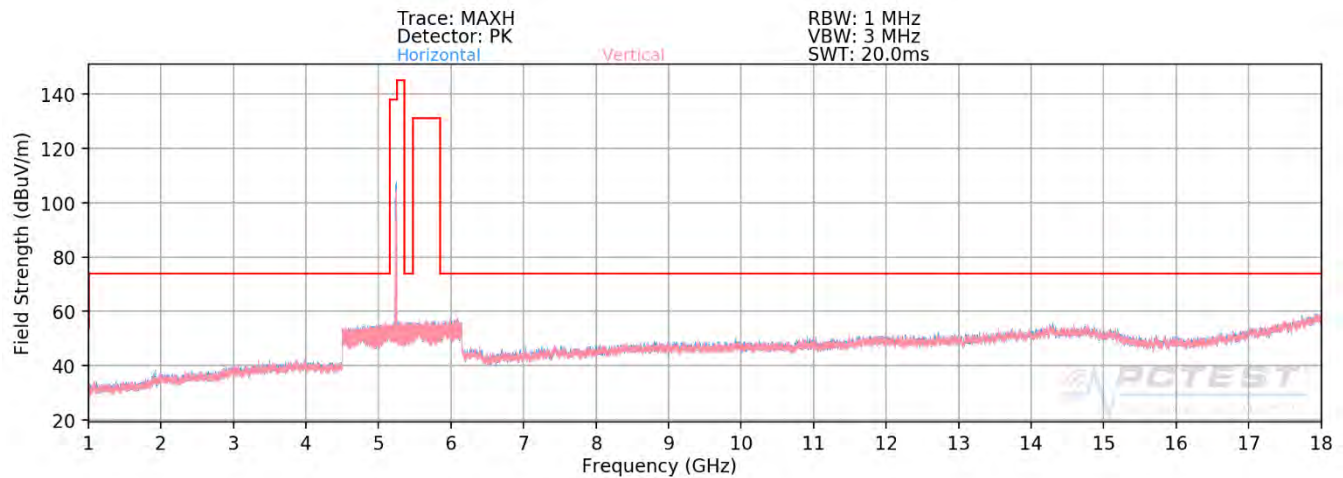
| Frequency [MHz] | Detector | Ant. Pol. [H/V] | Antenna Height [cm] | Turntable Azimuth [degree] | Analyzer Level [dBm] | AFCL [dB/m] | Distance Correction Factor [dB] | Field Strength [dBμV/m] | Limit [dBμV/m] | Margin [dB] |
|-----------------|----------|-----------------|---------------------|----------------------------|----------------------|-------------|---------------------------------|-------------------------|----------------|-------------|
| * 11650.00 | Average | H | - | - | -85.05 | 21.22 | 0.00 | 43.17 | 53.98 | -10.81 |
| * 11650.00 | Peak | H | - | - | -74.24 | 21.22 | 0.00 | 53.98 | 73.98 | -20.00 |
| 17475.00 | Peak | H | - | - | -75.57 | 30.91 | 0.00 | 62.34 | 68.20 | -5.86 |
| 23300.00 | Peak | H | - | - | -66.54 | 18.93 | -9.54 | 49.85 | 68.20 | -18.35 |
| 29125.00 | Peak | H | - | - | -51.49 | 3.48 | -9.54 | 49.45 | 68.20 | -18.75 |

Table 7-111. Radiated Measurements SISO ANT2 (242 Tones)

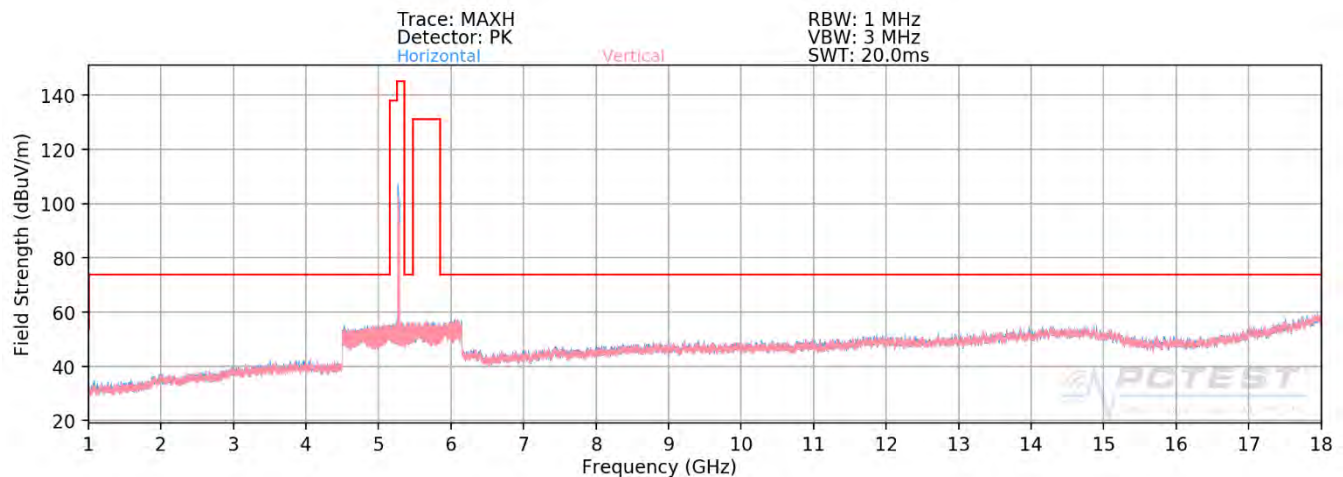
| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 225 of 266 |

7.6.3 MIMO Radiated Spurious Emission Measurements

26 Tones

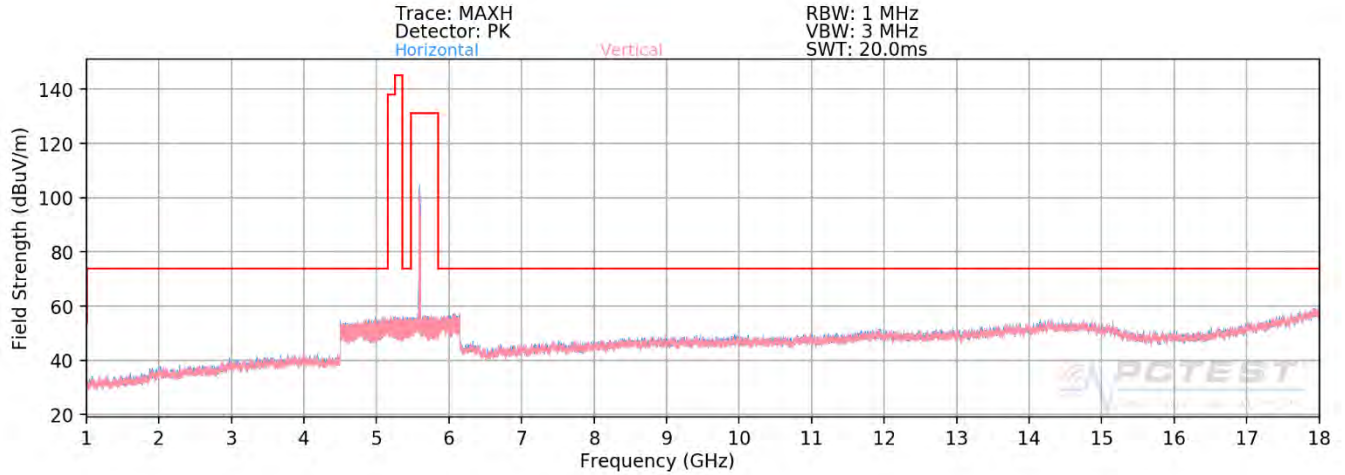


Plot 7-295. Radiated Spurious Plot above 1GHz MIMO (802.11ax – U1 Ch. 40 – 26 Tones)

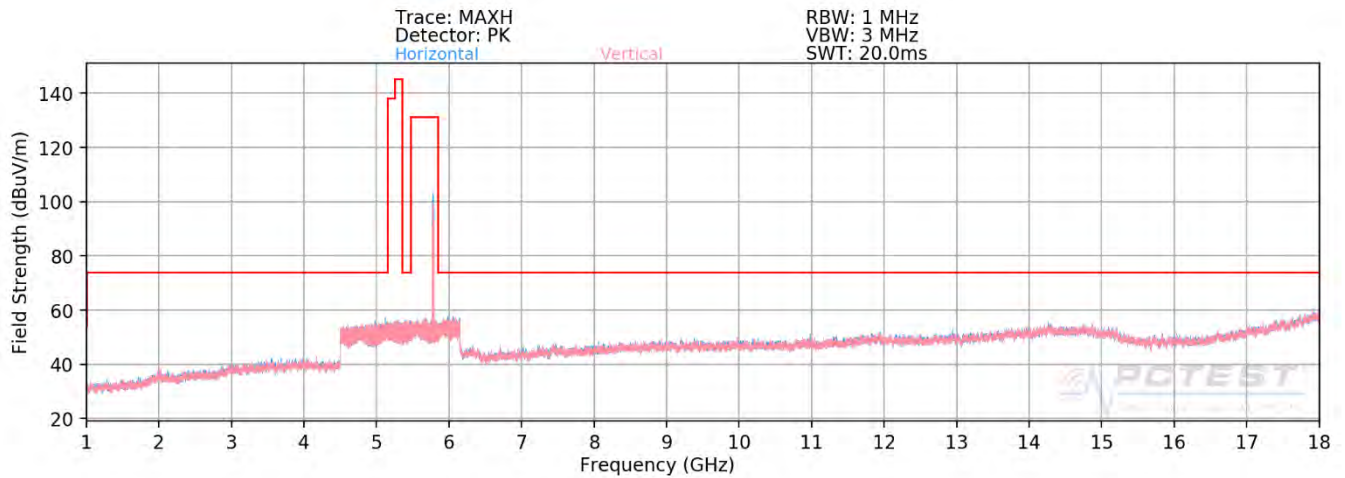


Plot 7-296. Radiated Spurious Plot above 1GHz MIMO (802.11ax – U2A Ch. 56 – 26 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 226 of 266 |



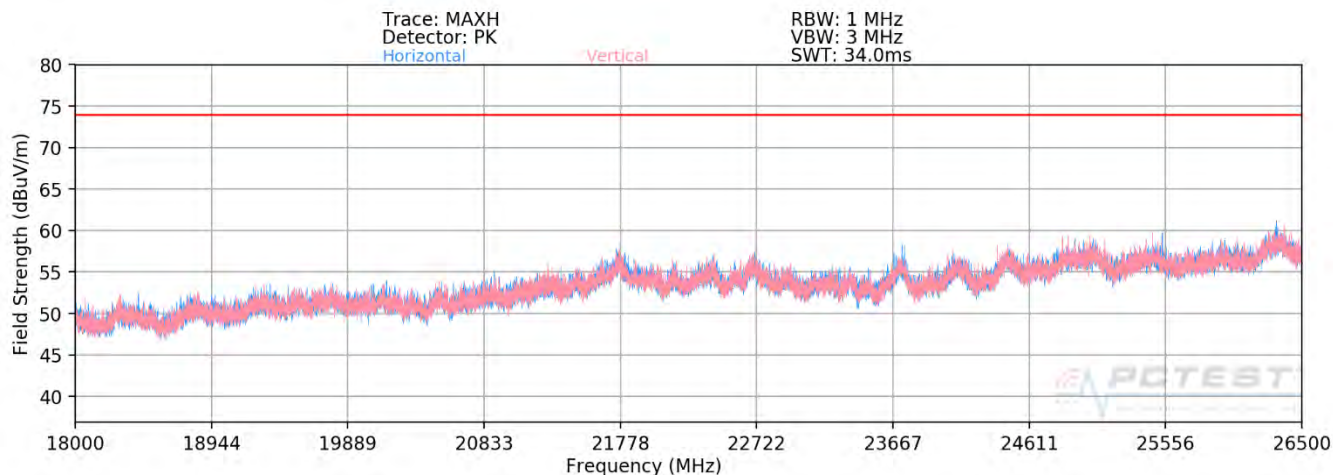
Plot 7-297. Radiated Spurious Plot above 1GHz MIMO (802.11ax – U2C Ch. 120 – 26 Tones)



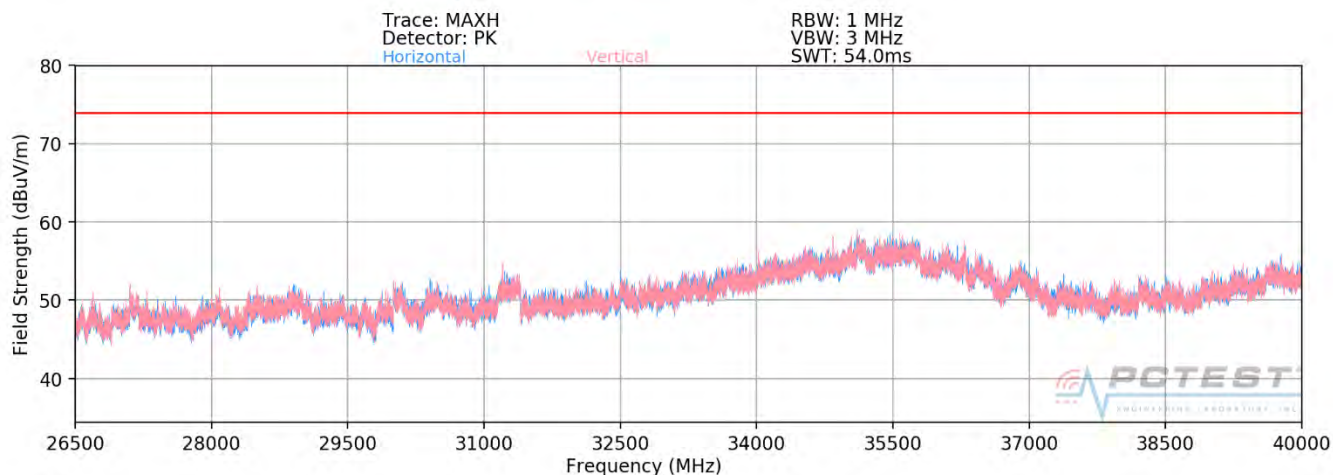
Plot 7-298. Radiated Spurious Plot above 1GHz MIMO (802.11ax – U3 Ch. 157 – 26 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 227 of 266 |

MIMO Radiated Spurious Emissions Measurements (Above 18GHz)



Plot 7-299. Radiated Spurious Plot 18GHz - 26.5GHz MIMO (802.11ax - 26 Tones)



Plot 7-300. Radiated Spurious Plot 26.5GHz - 40GHz MIMO (802.11ax - 26 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 - 03/05/2020 | EUT Type: Portable Handset | | Page 228 of 266 |

MIMO Radiated Spurious Emission Measurements (26 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: 54
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 | - | - | -69.38 | 15.23 | 0.00 | 52.85 | 68.20 | -15.35 |
| * 15540.00 | Average | V | - | - | -83.03 | 22.71 | 0.00 | 46.68 | 53.98 | -7.30 |
| * 15540.00 | Peak | V | - | - | -70.30 | 22.71 | 0.00 | 59.41 | 73.98 | -14.57 |
| * 20720.00 | Average | V | - | - | -79.60 | 17.51 | -9.54 | 35.37 | 53.98 | -18.61 |
| * 20720.00 | Peak | V | - | - | -67.67 | 17.51 | -9.54 | 47.30 | 73.98 | -26.68 |
| 25900.00 | Peak | V | - | - | -66.19 | 19.88 | -9.54 | 51.15 | 68.20 | -17.05 |

Table 7-112. Radiated Measurements MIMO (26 Tones)

Worst Case Mode: 802.11ax (20MHz BW)
Worst Case Transfer Rate: MCS0
RU Index: 54
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 | - | - | -70.20 | 15.67 | 0.00 | 52.47 | 68.20 | -15.73 |
| * 15600.00 | Average | V | - | - | -82.69 | 22.46 | 0.00 | 46.77 | 53.98 | -7.21 |
| * 15600.00 | Peak | V | - | - | -69.72 | 22.46 | 0.00 | 59.74 | 73.98 | -14.24 |
| * 20800.00 | Average | V | - | - | -79.06 | 17.87 | -9.54 | 36.27 | 53.98 | -17.71 |
| * 20800.00 | Peak | V | - | - | -66.31 | 17.87 | -9.54 | 49.02 | 73.98 | -24.96 |
| 26000.00 | Peak | V | - | - | -66.04 | 20.15 | -9.54 | 51.57 | 68.20 | -16.63 |

Table 7-113. Radiated Measurements MIMO (26 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 229 of 266 |

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 54
 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 | - | - | -69.88 | 15.49 | 0.00 | 52.61 | 68.20 | -15.59 |
| * 15720.00 | Average | V | - | - | -82.93 | 22.45 | 0.00 | 46.52 | 53.98 | -7.46 |
| * 15720.00 | Peak | V | - | - | -70.47 | 22.45 | 0.00 | 58.98 | 73.98 | -15.00 |
| * 20960.00 | Average | V | - | - | -78.30 | 18.06 | -9.54 | 37.22 | 53.98 | -16.76 |
| * 20960.00 | Peak | V | - | - | -67.23 | 18.06 | -9.54 | 48.29 | 73.98 | -25.69 |
| 26200.00 | Peak | V | - | - | -66.28 | 20.23 | -9.54 | 51.41 | 68.20 | -16.79 |

Table 7-114. Radiated Measurements MIMO (26 Tones)

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 54
 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 | - | - | -69.93 | 15.86 | 0.00 | 52.93 | 68.20 | -15.27 |
| * 15780.00 | Average | V | - | - | -83.21 | 22.77 | 0.00 | 46.56 | 53.98 | -7.42 |
| * 15780.00 | Peak | V | - | - | -70.26 | 22.77 | 0.00 | 59.51 | 73.98 | -14.47 |
| * 21040.00 | Average | V | - | - | -77.81 | 18.36 | -9.54 | 38.01 | 53.98 | -15.97 |
| * 21040.00 | Peak | V | - | - | -66.04 | 18.36 | -9.54 | 49.78 | 73.98 | -24.20 |
| 26300.00 | Peak | V | - | - | -65.95 | 20.96 | -9.54 | 52.47 | 68.20 | -15.73 |

Table 7-115. Radiated Measurements MIMO (26 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 230 of 266 |

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 54
 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 | - | - | -69.73 | 15.70 | 0.00 | 52.97 | 68.20 | -15.23 |
| * 15840.00 | Average | V | - | - | -83.08 | 22.66 | 0.00 | 46.58 | 53.98 | -7.40 |
| * 15840.00 | Peak | V | - | - | -70.16 | 22.66 | 0.00 | 59.50 | 73.98 | -14.48 |
| * 21120.00 | Average | V | - | - | -77.66 | 18.17 | -9.54 | 37.97 | 53.98 | -16.01 |
| * 21120.00 | Peak | V | - | - | -66.06 | 18.17 | -9.54 | 49.57 | 73.98 | -24.41 |
| * 26400.00 | Peak | V | - | - | -66.35 | 20.65 | -9.54 | 51.76 | 68.20 | -16.44 |

Table 7-116. Radiated Measurements MIMO (26 Tones)

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 54
 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 | - | - | -82.56 | 16.03 | 0.00 | 40.47 | 53.98 | -13.51 |
| * 10640.00 | Peak | V | - | - | -69.93 | 16.03 | 0.00 | 53.10 | 73.98 | -20.88 |
| * 15960.00 | Average | V | - | - | -83.49 | 23.09 | 0.00 | 46.60 | 53.98 | -7.38 |
| * 15960.00 | Peak | V | - | - | -70.19 | 23.09 | 0.00 | 59.90 | 73.98 | -14.08 |
| * 21280.00 | Average | V | - | - | -77.60 | 18.57 | -9.54 | 38.43 | 53.98 | -15.55 |
| * 21280.00 | Peak | V | - | - | -66.57 | 18.57 | -9.54 | 49.46 | 73.98 | -24.52 |
| * 26600.00 | Peak | V | - | - | -50.86 | 5.16 | -9.54 | 51.76 | 68.20 | -16.44 |

Table 7-117. Radiated Measurements MIMO (26 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 231 of 266 |

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 54
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5500MHz
 Channel: 100

| Frequency [MHz] | Detector | Ant. Pol. [H/V] | Antenna Height [cm] | Turntable Azimuth [degree] | Analyzer Level [dBm] | AFCL [dB/m] | Distance Correction Factor [dB] | Field Strength [dBμV/m] | Limit [dBμV/m] | Margin [dB] |
|-----------------|----------|-----------------|---------------------|----------------------------|----------------------|-------------|---------------------------------|-------------------------|----------------|-------------|
| * 11000.00 | Average | V | - | - | -81.59 | 16.51 | 0.00 | 41.92 | 53.98 | -12.06 |
| * 11000.00 | Peak | V | - | - | -69.91 | 16.51 | 0.00 | 53.60 | 73.98 | -20.38 |
| 16500.00 | Peak | V | - | - | -70.56 | 24.17 | 0.00 | 60.61 | 68.20 | -7.59 |
| 22000.00 | Peak | V | - | - | -66.07 | 19.12 | -9.54 | 50.51 | 68.20 | -17.69 |
| 27500.00 | Peak | V | - | - | -49.71 | 3.98 | -9.54 | 51.73 | 68.20 | -16.47 |

Table 7-118. Radiated Measurements MIMO (26 Tones)

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 54
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5600MHz
 Channel: 120

| Frequency [MHz] | Detector | Ant. Pol. [H/V] | Antenna Height [cm] | Turntable Azimuth [degree] | Analyzer Level [dBm] | AFCL [dB/m] | Distance Correction Factor [dB] | Field Strength [dBμV/m] | Limit [dBμV/m] | Margin [dB] |
|-----------------|----------|-----------------|---------------------|----------------------------|----------------------|-------------|---------------------------------|-------------------------|----------------|-------------|
| * 11200.00 | Average | V | - | - | -81.68 | 16.73 | 0.00 | 42.05 | 53.98 | -11.93 |
| * 11200.00 | Peak | V | - | - | -69.65 | 16.73 | 0.00 | 54.08 | 73.98 | -19.90 |
| 16800.00 | Peak | V | - | - | -70.15 | 24.00 | 0.00 | 60.85 | 68.20 | -7.35 |
| * 22400.00 | Average | V | - | - | -78.35 | 20.03 | -9.54 | 39.14 | 53.98 | -14.84 |
| * 22400.00 | Peak | V | - | - | -67.32 | 20.03 | -9.54 | 50.17 | 73.98 | -23.81 |
| 28000.00 | Peak | V | - | - | -50.35 | 4.70 | -9.54 | 51.81 | 68.20 | -16.39 |

Table 7-119. Radiated Measurements MIMO (26 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 232 of 266 |

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 54
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5720MHz
 Channel: 144

| Frequency [MHz] | Detector | Ant. Pol. [H/V] | Antenna Height [cm] | Turntable Azimuth [degree] | Analyzer Level [dBm] | AFCL [dB/m] | Distance Correction Factor [dB] | Field Strength [dBμV/m] | Limit [dBμV/m] | Margin [dB] |
|-----------------|----------|-----------------|---------------------|----------------------------|----------------------|-------------|---------------------------------|-------------------------|----------------|-------------|
| * 11440.00 | Average | V | 199 | 316 | -80.63 | 17.29 | 0.00 | 43.66 | 53.98 | -10.32 |
| * 11440.00 | Peak | V | 199 | 316 | -65.98 | 17.29 | 0.00 | 58.31 | 73.98 | -15.67 |
| 17160.00 | Peak | V | - | - | -70.19 | 24.37 | 0.00 | 61.18 | 68.20 | -7.02 |
| * 22880.00 | Average | V | - | - | -78.59 | 19.50 | -9.54 | 38.37 | 53.98 | -15.61 |
| * 22880.00 | Peak | V | - | - | -67.12 | 19.50 | -9.54 | 49.84 | 73.98 | -24.14 |
| 28600.00 | Peak | V | - | - | -50.68 | 5.14 | -9.54 | 51.92 | 68.20 | -16.28 |

Table 7-120. Radiated Measurements MIMO (26 Tones)

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 54
 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 | 115 | 339 | -81.09 | 17.63 | 0.00 | 43.54 | 53.98 | -10.43 |
| * 11490.00 | Peak | V | 115 | 339 | -67.79 | 17.63 | 0.00 | 56.84 | 73.98 | -17.13 |
| 17235.00 | Peak | V | - | - | -70.53 | 25.01 | 0.00 | 61.48 | 68.20 | -6.72 |
| * 22980.00 | Average | V | - | - | -78.34 | 19.89 | -9.54 | 39.01 | 53.98 | -14.97 |
| * 22980.00 | Peak | V | - | - | -66.28 | 19.89 | -9.54 | 51.07 | 73.98 | -22.91 |
| 28725.00 | Peak | V | - | - | -51.06 | 4.66 | -9.54 | 51.06 | 68.20 | -17.14 |

Table 7-121. Radiated Measurements MIMO (26 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 233 of 266 |

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 54
 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 | 252 | 323 | -80.14 | 17.35 | 0.00 | 44.21 | 53.98 | -9.77 |
| * 11570.00 | Peak | V | 252 | 323 | -66.71 | 17.35 | 0.00 | 57.64 | 73.98 | -16.34 |
| 17355.00 | Peak | V | - | - | -71.04 | 26.08 | 0.00 | 62.04 | 68.20 | -6.16 |
| 23140.00 | Peak | V | - | - | -66.83 | 19.59 | -9.54 | 50.22 | 68.20 | -17.98 |
| 28925.00 | Peak | V | - | - | -49.95 | 4.43 | -9.54 | 51.94 | 68.20 | -16.26 |

Table 7-122. Radiated Measurements MIMO (26 Tones)

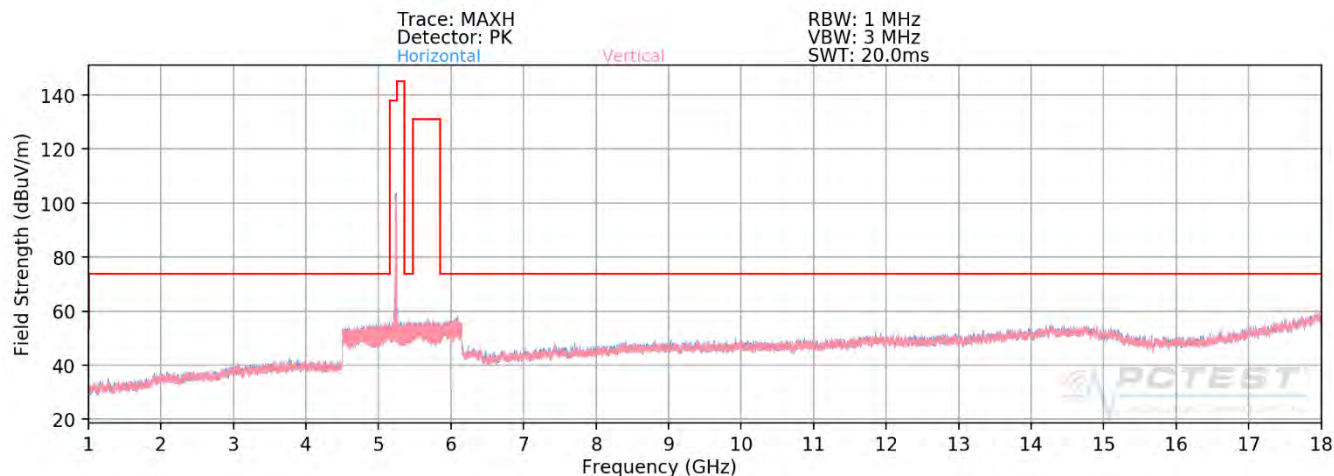
Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 54
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5825MHz
 Channel: 165

| 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 | 262 | 328 | -80.56 | 17.57 | 0.00 | 44.01 | 53.98 | -9.96 |
| * 11650.00 | Peak | V | 262 | 328 | -67.76 | 17.57 | 0.00 | 56.81 | 73.98 | -17.16 |
| 17475.00 | Peak | V | - | - | -70.24 | 26.23 | 0.00 | 62.99 | 68.20 | -5.21 |
| 23300.00 | Peak | V | - | - | -65.80 | 18.93 | -9.54 | 50.59 | 68.20 | -17.61 |
| 29125.00 | Peak | V | - | - | -50.89 | 3.48 | -9.54 | 50.05 | 68.20 | -18.15 |

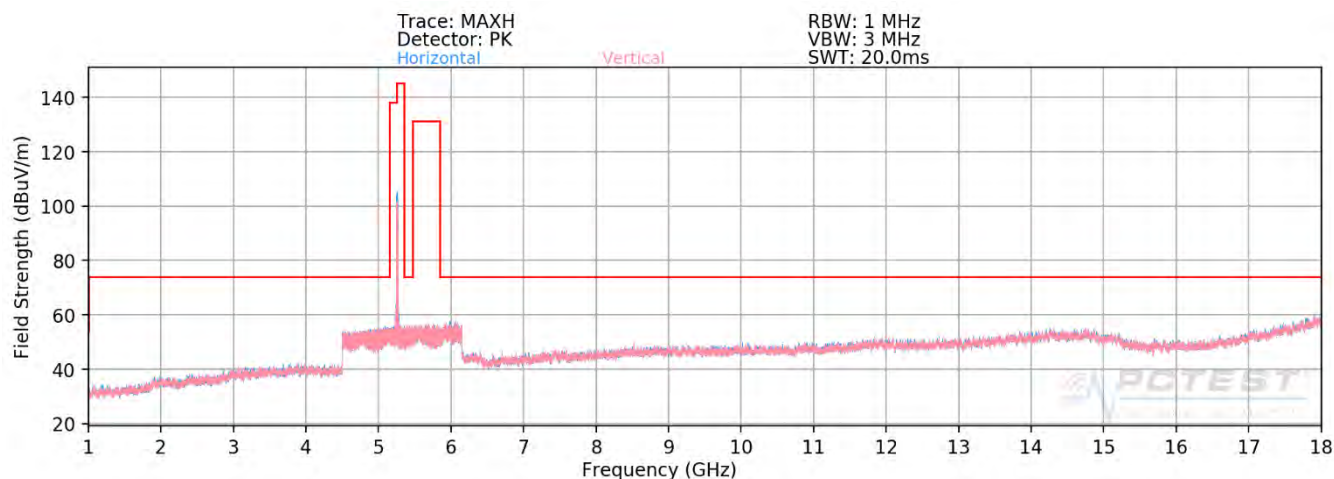
Table 7-123. Radiated Measurements MIMO (26 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 234 of 266 |

242 Tones

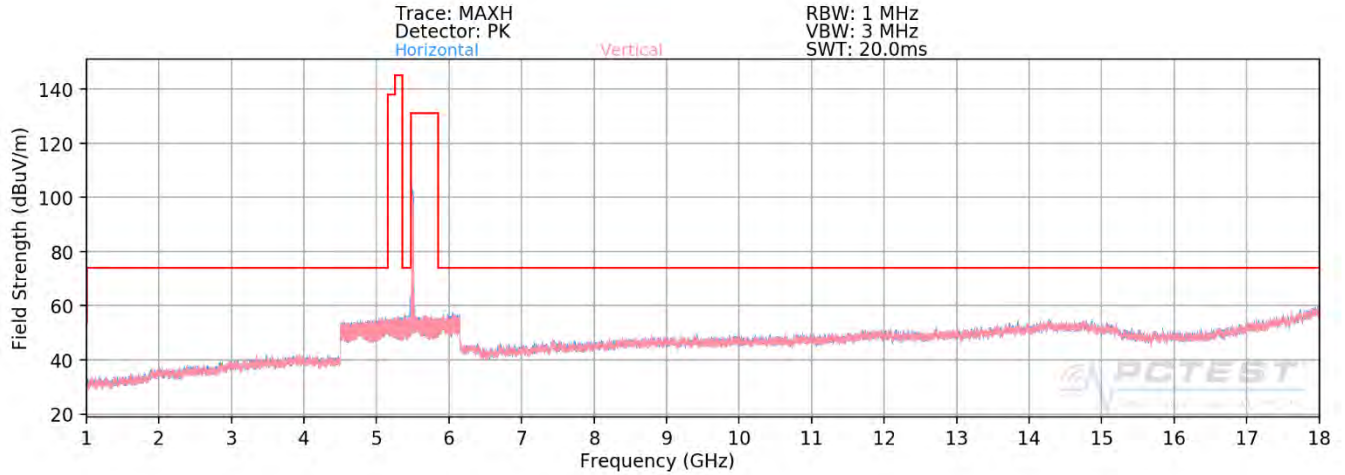


Plot 7-301. Radiated Spurious Plot above 1GHz MIMO (802.11ax – U1 Ch. 40 – 242 Tones)

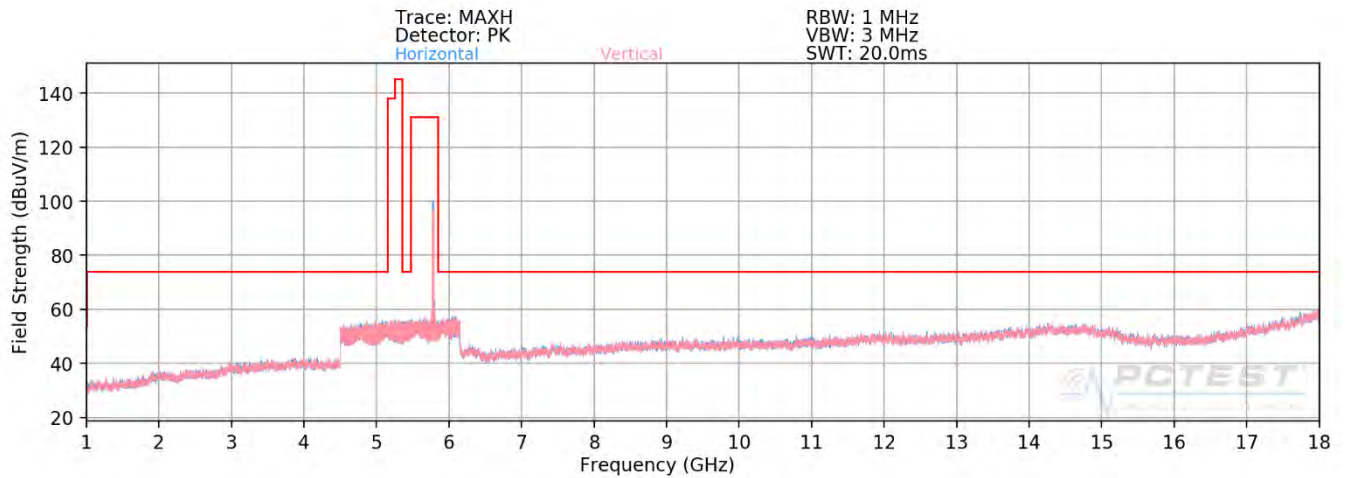


Plot 7-302. Radiated Spurious Plot above 1GHz MIMO (802.11ax – U2A Ch. 56 – 242 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 235 of 266 |



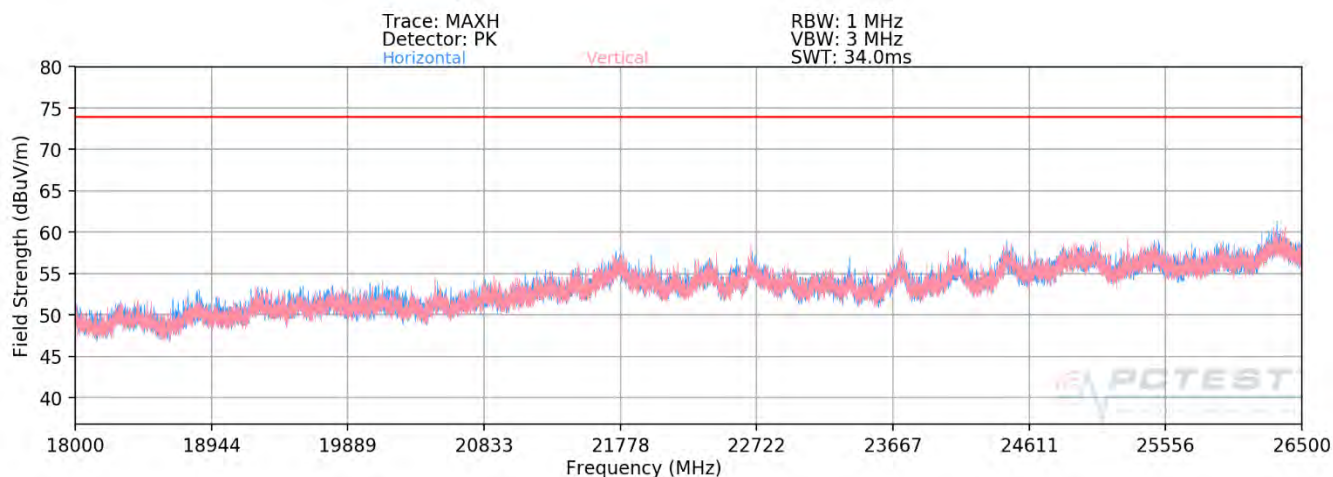
Plot 7-303. Radiated Spurious Plot above 1GHz MIMO (802.11ax – U2C Ch. 120 – 242 Tones)



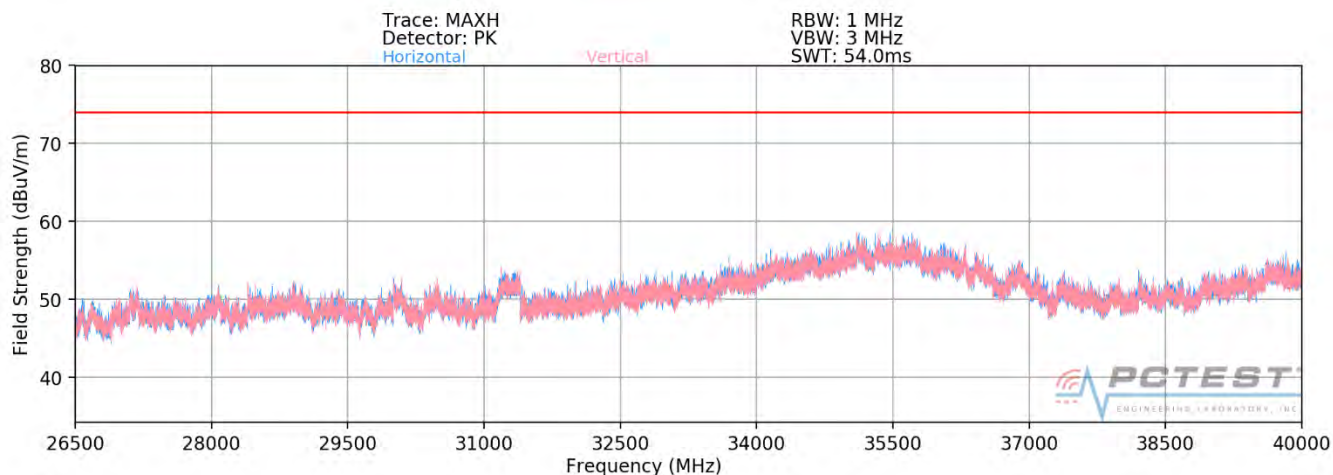
Plot 7-304. Radiated Spurious Plot above 1GHz MIMO (802.11ax – U3 Ch. 157 – 242 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 236 of 266 |

MIMO Radiated Spurious Emissions Measurements (Above 18GHz)



Plot 7-305. Radiated Spurious Plot 18GHz - 26.5GHz MIMO (802.11ax – 242 Tones)



Plot 7-306. Radiated Spurious Plot 26.5GHz - 40GHz MIMO (802.11ax – 242 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 237 of 266 |

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 | - | - | -70.44 | 15.23 | 0.00 | 51.79 | 68.20 | -16.41 |
| * 15540.00 | Average | V | - | - | -83.10 | 22.71 | 0.00 | 46.61 | 53.98 | -7.37 |
| * 15540.00 | Peak | V | - | - | -70.40 | 22.71 | 0.00 | 59.31 | 73.98 | -14.67 |
| * 20720.00 | Average | V | - | - | -77.87 | 17.51 | -9.54 | 37.10 | 53.98 | -16.88 |
| * 20720.00 | Peak | V | - | - | -67.61 | 17.51 | -9.54 | 47.36 | 73.98 | -26.62 |
| 25900.00 | Peak | V | - | - | -66.19 | 19.88 | -9.54 | 51.15 | 68.20 | -17.05 |

Table 7-124. 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 | - | - | -69.98 | 15.67 | 0.00 | 52.69 | 68.20 | -15.51 |
| * 15600.00 | Average | V | - | - | -82.85 | 22.46 | 0.00 | 46.61 | 53.98 | -7.37 |
| * 15600.00 | Peak | V | - | - | -69.61 | 22.46 | 0.00 | 59.85 | 73.98 | -14.13 |
| * 20800.00 | Average | V | - | - | -77.99 | 17.87 | -9.54 | 37.34 | 53.98 | -16.64 |
| * 20800.00 | Peak | V | - | - | -67.02 | 17.87 | -9.54 | 48.31 | 73.98 | -25.67 |
| 26000.00 | Peak | V | - | - | -65.81 | 20.15 | -9.54 | 51.80 | 68.20 | -16.40 |

Table 7-125. Radiated Measurements MIMO (242 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 238 of 266 |

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 | - | - | -70.03 | 15.49 | 0.00 | 52.46 | 68.20 | -15.74 |
| * 15720.00 | Average | V | - | - | -82.88 | 22.45 | 0.00 | 46.57 | 53.98 | -7.41 |
| * 15720.00 | Peak | V | - | - | -70.10 | 22.45 | 0.00 | 59.35 | 73.98 | -14.63 |
| * 20960.00 | Average | V | - | - | -78.07 | 18.06 | -9.54 | 37.45 | 53.98 | -16.53 |
| * 20960.00 | Peak | V | - | - | -67.88 | 18.06 | -9.54 | 47.64 | 73.98 | -26.34 |
| * 26200.00 | Peak | V | - | - | -66.34 | 20.23 | -9.54 | 51.35 | 68.20 | -16.85 |

Table 7-126. 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 | - | - | -70.22 | 15.86 | 0.00 | 52.64 | 68.20 | -15.56 |
| * 15780.00 | Average | V | - | - | -83.04 | 22.77 | 0.00 | 46.73 | 53.98 | -7.25 |
| * 15780.00 | Peak | V | - | - | -70.18 | 22.77 | 0.00 | 59.59 | 73.98 | -14.39 |
| * 21040.00 | Average | V | - | - | -77.58 | 18.36 | -9.54 | 38.24 | 53.98 | -15.74 |
| * 21040.00 | Peak | V | - | - | -67.49 | 18.36 | -9.54 | 48.33 | 73.98 | -25.65 |
| * 26300.00 | Peak | V | - | - | -65.19 | 20.96 | -9.54 | 53.23 | 68.20 | -14.97 |

Table 7-127. Radiated Measurements MIMO (242 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | Page 239 of 266 | |

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 | - | - | -69.73 | 15.70 | 0.00 | 52.97 | 68.20 | -15.23 |
| * 15840.00 | Average | V | - | - | -83.17 | 22.66 | 0.00 | 46.49 | 53.98 | -7.49 |
| * 15840.00 | Peak | V | - | - | -70.75 | 22.66 | 0.00 | 58.91 | 73.98 | -15.07 |
| * 21120.00 | Average | V | - | - | -77.64 | 18.17 | -9.54 | 37.99 | 53.98 | -15.99 |
| * 21120.00 | Peak | V | - | - | -67.27 | 18.17 | -9.54 | 48.36 | 73.98 | -25.62 |
| * 26400.00 | Peak | V | - | - | -66.71 | 20.65 | -9.54 | 51.40 | 68.20 | -16.80 |

Table 7-128. 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 | - | - | -82.54 | 16.03 | 0.00 | 40.49 | 53.98 | -13.49 |
| * 10640.00 | Peak | V | - | - | -70.01 | 16.03 | 0.00 | 53.02 | 73.98 | -20.96 |
| * 15960.00 | Average | V | - | - | -83.53 | 23.09 | 0.00 | 46.56 | 53.98 | -7.42 |
| * 15960.00 | Peak | V | - | - | -70.82 | 23.09 | 0.00 | 59.27 | 73.98 | -14.71 |
| * 21280.00 | Average | V | - | - | -77.28 | 18.57 | -9.54 | 38.75 | 53.98 | -15.23 |
| * 21280.00 | Peak | V | - | - | -66.78 | 18.57 | -9.54 | 49.25 | 73.98 | -24.73 |
| * 26600.00 | Peak | V | - | - | -53.17 | 5.16 | -9.54 | 49.45 | 68.20 | -18.75 |

Table 7-129. Radiated Measurements MIMO (242 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 240 of 266 |

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 | - | - | -81.71 | 16.51 | 0.00 | 41.80 | 53.98 | -12.18 |
| * 11000.00 | Peak | V | - | - | -69.89 | 16.51 | 0.00 | 53.62 | 73.98 | -20.36 |
| 16500.00 | Peak | V | - | - | -70.54 | 24.17 | 0.00 | 60.63 | 68.20 | -7.57 |
| 22000.00 | Peak | V | - | - | -67.25 | 19.12 | -9.54 | 49.33 | 68.20 | -18.87 |
| 27500.00 | Peak | V | - | - | -51.58 | 3.98 | -9.54 | 49.86 | 68.20 | -18.34 |

Table 7-130. 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 | - | - | -81.77 | 16.73 | 0.00 | 41.96 | 53.98 | -12.02 |
| * 11200.00 | Peak | V | - | - | -69.87 | 16.73 | 0.00 | 53.86 | 73.98 | -20.12 |
| 16800.00 | Peak | V | - | - | -71.34 | 24.00 | 0.00 | 59.66 | 68.20 | -8.54 |
| * 22400.00 | Average | V | - | - | -77.95 | 20.03 | -9.54 | 39.54 | 53.98 | -14.44 |
| * 22400.00 | Peak | V | - | - | -67.10 | 20.03 | -9.54 | 50.39 | 73.98 | -23.59 |
| 28000.00 | Peak | V | - | - | -52.68 | 4.70 | -9.54 | 49.48 | 68.20 | -18.72 |

Table 7-131. Radiated Measurements MIMO (242 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 241 of 266 |

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5720MHz
 Channel: 144

| Frequency [MHz] | Detector | Ant. Pol. [H/V] | Antenna Height [cm] | Turntable Azimuth [degree] | Analyzer Level [dBm] | AFCL [dB/m] | Distance Correction Factor [dB] | Field Strength [dBμV/m] | Limit [dBμV/m] | Margin [dB] |
|-----------------|----------|-----------------|---------------------|----------------------------|----------------------|-------------|---------------------------------|-------------------------|----------------|-------------|
| * 11440.00 | Average | V | - | - | -82.76 | 17.29 | 0.00 | 41.53 | 53.98 | -12.45 |
| * 11440.00 | Peak | V | - | - | -69.44 | 17.29 | 0.00 | 54.85 | 73.98 | -19.13 |
| 17160.00 | Peak | V | - | - | -70.21 | 24.37 | 0.00 | 61.16 | 68.20 | -7.04 |
| * 22880.00 | Average | V | - | - | -78.25 | 19.50 | -9.54 | 38.71 | 53.98 | -15.27 |
| * 22880.00 | Peak | V | - | - | -67.81 | 19.50 | -9.54 | 49.15 | 73.98 | -24.83 |
| 28600.00 | Peak | V | - | - | -51.29 | 5.14 | -9.54 | 51.31 | 68.20 | -16.89 |

Table 7-132. 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 | - | - | -82.98 | 17.63 | 0.00 | 41.65 | 53.98 | -12.32 |
| * 11490.00 | Peak | V | - | - | -71.26 | 17.63 | 0.00 | 53.37 | 73.98 | -20.60 |
| 17235.00 | Peak | V | - | - | -70.79 | 25.01 | 0.00 | 61.22 | 68.20 | -6.98 |
| * 22980.00 | Average | V | - | - | -78.04 | 19.89 | -9.54 | 39.31 | 53.98 | -14.67 |
| * 22980.00 | Peak | V | - | - | -67.02 | 19.89 | -9.54 | 50.33 | 73.98 | -23.65 |
| 28725.00 | Peak | V | - | - | -51.32 | 4.66 | -9.54 | 50.80 | 68.20 | -17.40 |

Table 7-133. Radiated Measurements MIMO (242 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 242 of 266 |

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 | 226 | 338 | -81.48 | 17.35 | 0.00 | 42.87 | 53.98 | -11.11 |
| * 11570.00 | Peak | V | 226 | 338 | -68.26 | 17.35 | 0.00 | 56.09 | 73.98 | -17.89 |
| 17355.00 | Peak | V | - | - | -71.47 | 26.08 | 0.00 | 61.61 | 68.20 | -6.59 |
| 23140.00 | Peak | V | - | - | -68.16 | 19.59 | -9.54 | 48.89 | 68.20 | -19.31 |
| 28925.00 | Peak | V | - | - | -51.35 | 4.43 | -9.54 | 50.54 | 68.20 | -17.66 |

Table 7-134. 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 | 107 | 318 | -81.35 | 17.57 | 0.00 | 43.22 | 53.98 | -10.75 |
| * 11650.00 | Peak | V | 107 | 318 | -68.43 | 17.57 | 0.00 | 56.14 | 73.98 | -17.83 |
| 17475.00 | Peak | V | - | - | -70.84 | 26.23 | 0.00 | 62.39 | 68.20 | -5.81 |
| 23300.00 | Peak | V | - | - | -66.61 | 18.93 | -9.54 | 49.78 | 68.20 | -18.42 |
| 29125.00 | Peak | V | - | - | -50.26 | 3.48 | -9.54 | 50.68 | 68.20 | -17.52 |

Table 7-135. Radiated Measurements MIMO (242 Tones)

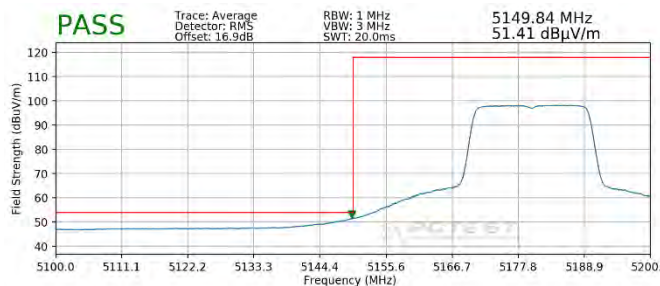
| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 243 of 266 |

7.6.4 SISO Antenna-1 Radiated Band Edge Measurements (20MHz BW)

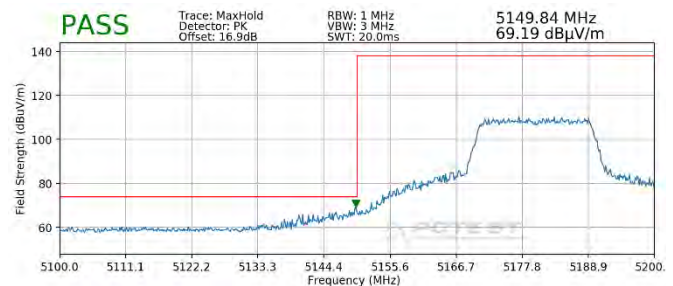
§15.407(b.1)(b.2) §15.205 §15.209; RSS-Gen [8.9]; RSS-Gen [8.9]

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 |

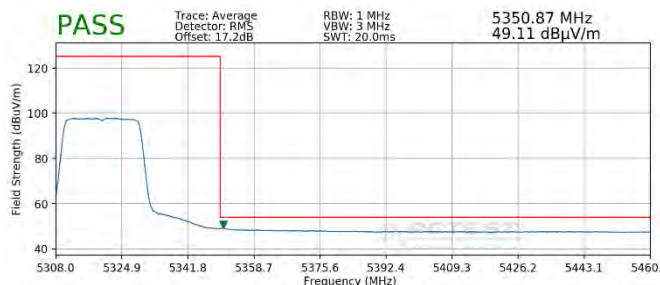


Plot 7-307. Radiated Lower Band Edge Plot SISO ANT1 (Average – UNII Band 1 – 242 Tones)

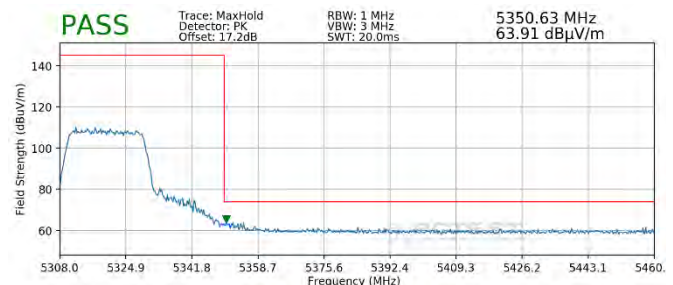


Plot 7-308. Radiated Lower Band Edge Plot SISO ANT1 (Peak – UNII Band 1 – 242 Tones)

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



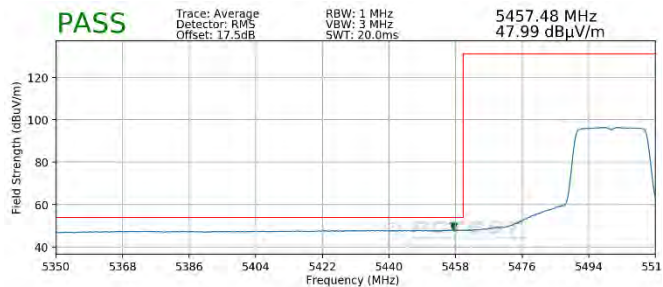
Plot 7-309. Radiated Upper Band Edge Plot SISO ANT1 (Average – UNII Band 2A – 242 Tones)



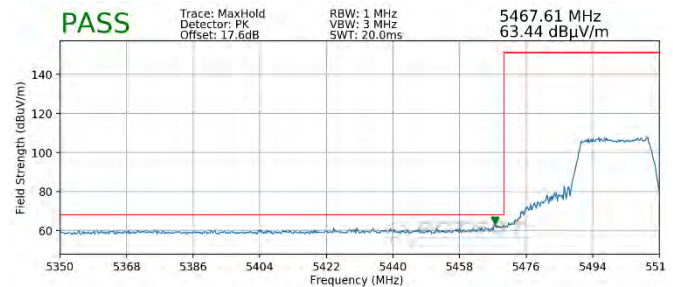
Plot 7-310. Radiated Upper Band Edge Plot SISO ANT1 (Peak – UNII Band 2A – 242 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 244 of 266 |

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

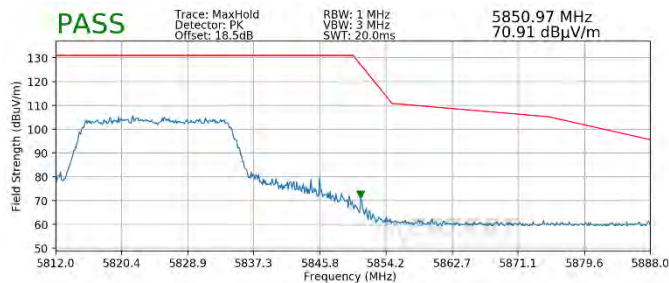


Plot 7-311. Radiated Lower Band Edge Plot SISO ANT1 (Average – UNII Band 2C – 242 Tones)



Plot 7-312. Radiated Lower Band Edge Plot SISO ANT1 (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 7-313. Radiated Upper Band Edge Plot SISO ANT1 (Peak – UNII Band 3 – 242 Tones)

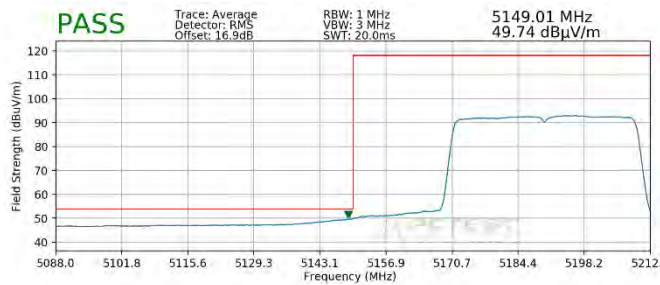
| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 245 of 266 |

7.6.5 SISO Antenna-1 Radiated Band Edge Measurements (40MHz BW)

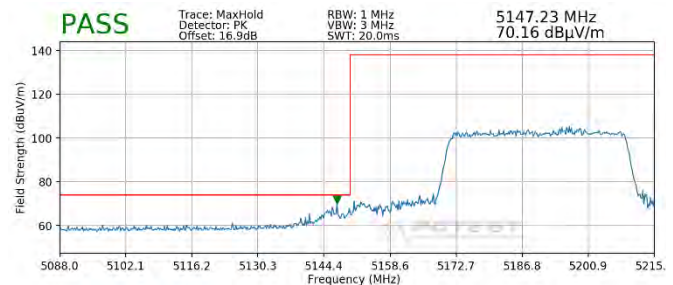
§15.407(b.1)(b.2) §15.205 §15.209; RSS-Gen [8.9]

484 Tones

| | |
|---------------------------|----------|
| Worst Case Mode: | 802.11ax |
| Worst Case Transfer Rate: | MCS0 |
| RU Index: | 62 |
| Distance of Measurements: | 3 Meters |
| Operating Frequency: | 5190MHz |
| Channel: | 38 |

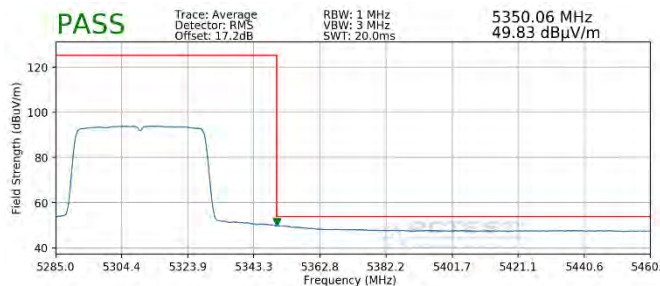


Plot 7-314. Radiated Lower Band Edge Plot SISO ANT1 (Average – UNII Band 1 – 484 Tones)

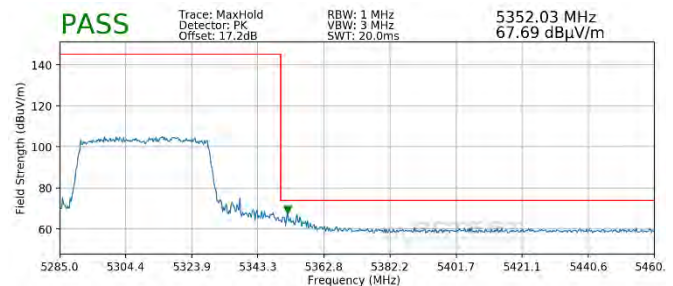


Plot 7-315. Radiated Lower Band Edge Plot SISO ANT1 (Peak – UNII Band 1 – 484 Tones)

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



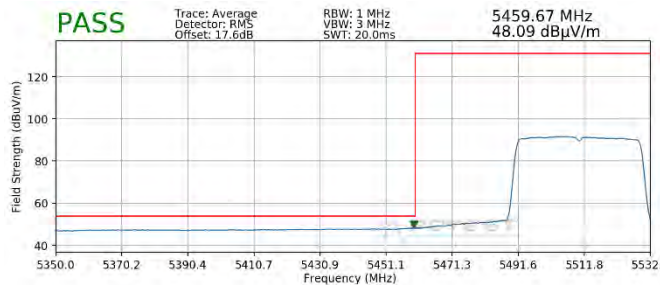
Plot 7-316. Radiated Upper Band Edge Plot SISO ANT1 (Average – UNII Band 2A – 484 Tones)



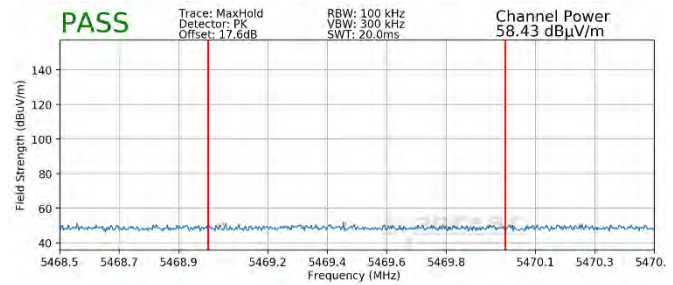
Plot 7-317. Radiated Upper Band Edge Plot SISO ANT1 (Peak – UNII Band 2A – 484 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 246 of 266 |

Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 RU Index: 62
 Distance of Measurements: 3 Meters
 Operating Frequency: 5510MHz
 Channel: 102

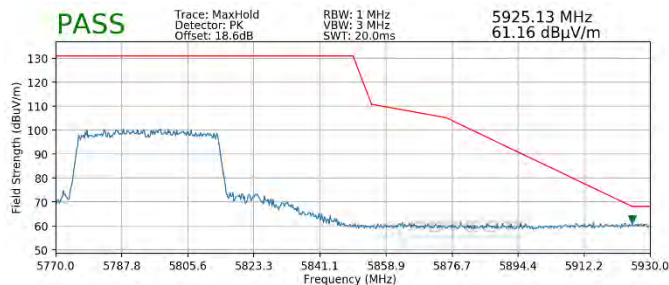


Plot 7-318. Radiated Lower Band Edge Plot SISO ANT1 (Average – UNII Band 2C – 484 Tones)



Plot 7-319. Radiated Lower Band Edge Plot SISO ANT1 (Peak – UNII Band 2C – 484 Tones)

Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 RU Index: 62
 Distance of Measurements: 3 Meters
 Operating Frequency: 5795MHz
 Channel: 159



Plot 7-320. Radiated Upper Band Edge Plot SISO ANT1 (Peak – UNII Band 3 – 484 Tones)

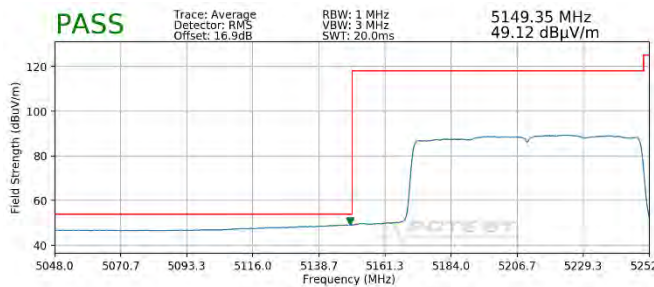
| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 247 of 266 |

7.6.6 SISO Antenna-1 Radiated Band Edge Measurements (80MHz BW)

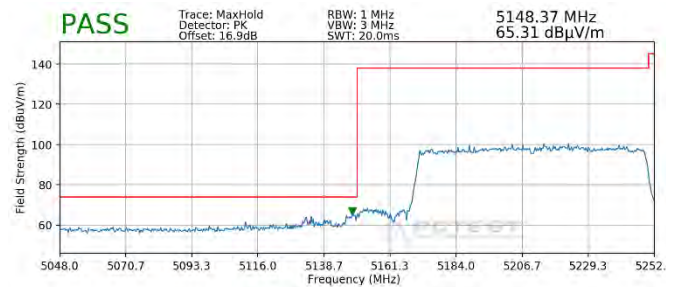
§15.407(b.1)(b.2) §15.205 §15.209; RSS-Gen [8.9]

996 Tones

| | |
|---------------------------|----------|
| Worst Case Mode: | 802.11ax |
| Worst Case Transfer Rate: | MCS0 |
| RU Index: | 64 |
| Distance of Measurements: | 3 Meters |
| Operating Frequency: | 5210MHz |
| Channel: | 42 |

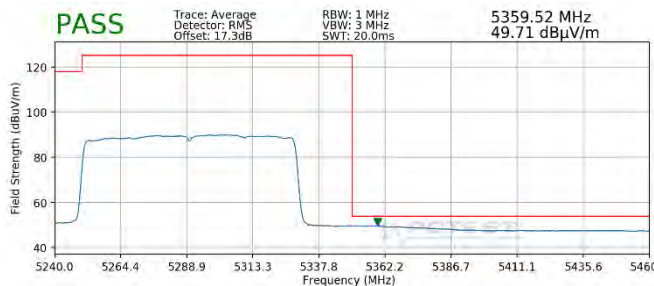


Plot 7-321. Radiated Lower Band Edge Plot SISO ANT1 (Average - UNII Band 1 - 996 Tones)

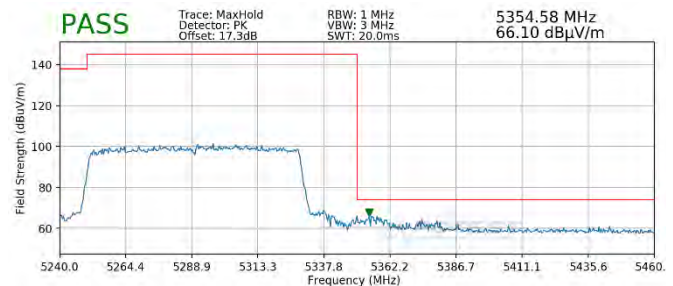


Plot 7-322. Radiated Lower Band Edge Plot SISO ANT1 (Peak - UNII Band 1 - 996 Tones)

| | |
|---------------------------|----------|
| Worst Case Mode: | 802.11ax |
| Worst Case Transfer Rate: | MCS0 |
| RU Index: | 64 |
| Distance of Measurements: | 3 Meters |
| Operating Frequency: | 5290MHz |
| Channel: | 58 |



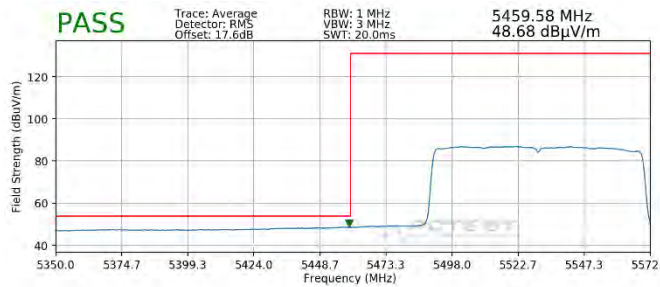
Plot 7-323. Radiated Upper Band Edge Plot SISO ANT1 (Average - UNII Band 2A - 996 Tones)



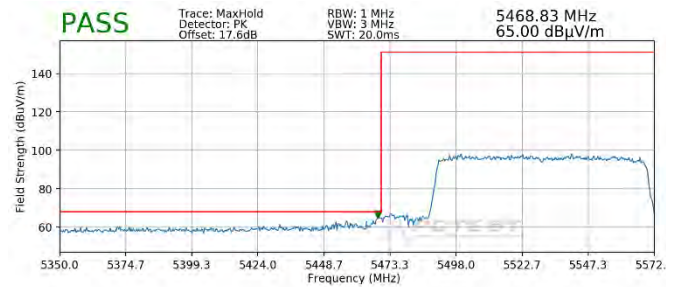
Plot 7-324. Radiated Upper Band Edge Plot SISO ANT1 (Peak - UNII Band 2A - 996 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 - 03/05/2020 | EUT Type: Portable Handset | | Page 248 of 266 |

Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 RU Index: 64
 Distance of Measurements: 3 Meters
 Operating Frequency: 5530MHz
 Channel: 106

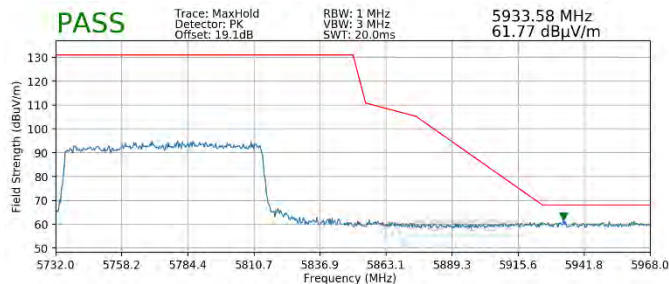


Plot 7-325. Radiated Lower Band Edge Plot SISO ANT1 (Average – UNII Band 2C – 996 Tones)



Plot 7-326. Radiated Lower Band Edge Plot SISO ANT1 (Peak – UNII Band 2C – 996 Tones)

Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 RU Index: 64
 Distance of Measurements: 3 Meters
 Operating Frequency: 5775MHz
 Channel: 155



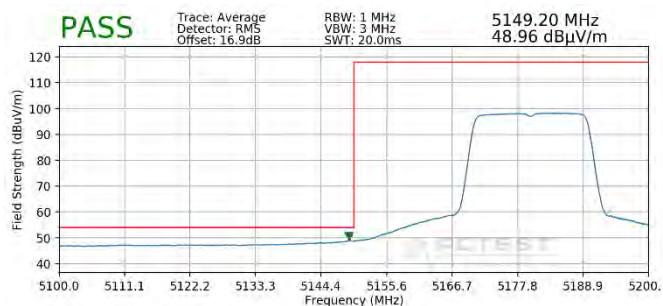
Plot 7-327. Radiated Upper Band Edge Plot SISO ANT1 (Peak – UNII Band 3 – 996 Tones)

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/19 – 03/05/2020 | EUT Type: Portable Handset | | Page 249 of 266 |

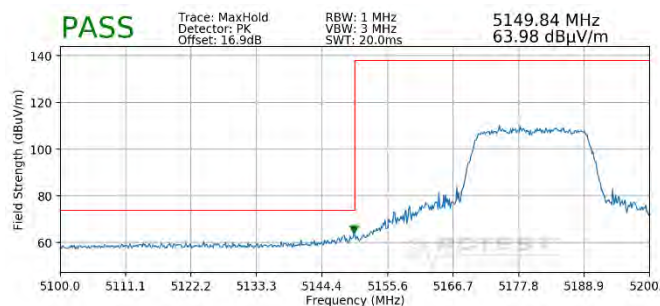
7.6.7 SISO Antenna-2 Radiated Band Edge Measurements (20MHz BW) §15.407(b.1)(b.2) §15.205 §15.209; RSS-Gen [8.9]

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 |

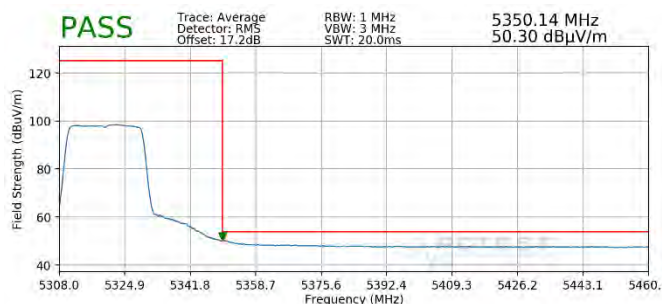


Plot 7-328. Radiated Lower Band Edge Plot SISO ANT2 (Average – UNII Band 1 – 242 Tones)

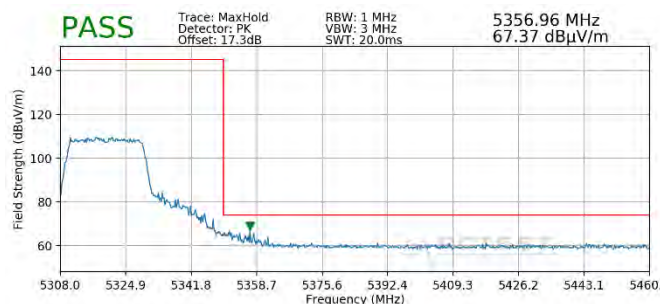


Plot 7-329. Radiated Lower Band Edge Plot SISO ANT2 (Peak – UNII Band 1 – 242 Tones)

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



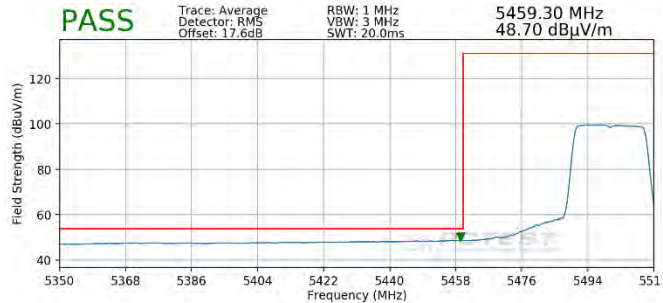
Plot 7-330. Radiated Upper Band Edge Plot SISO ANT2 (Average – UNII Band 2A – 242 Tones)



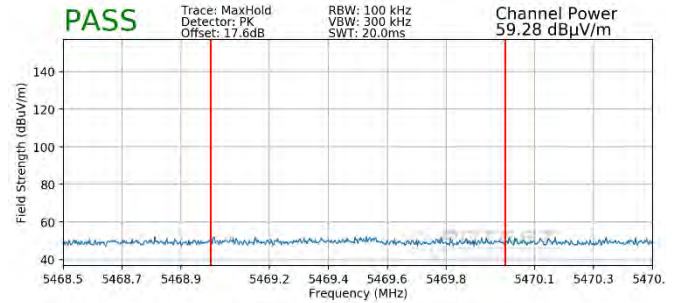
Plot 7-331. Radiated Upper Band Edge Plot SISO ANT2 (Peak – UNII Band 2A – 242 Tones)

| | | | | |
|---|---|---------------------------------------|----------------|---------------------------------|
| FCC ID: A3LSMG986JPN | PCTEST ENGINEERING LABORATORY, INC. | MEASUREMENT REPORT (CERTIFICATION) | SAMSUNG | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/2019 - 2/28/2020 | EUT Type: Portable Handset | | Page 250 of 266 |

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

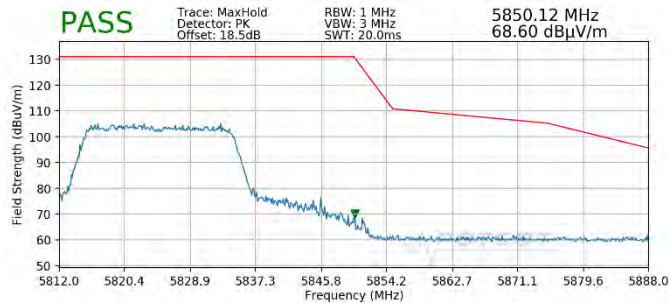


Plot 7-332. Radiated Lower Band Edge Plot SISO ANT2 (Average – UNII Band 2C – 242 Tones)



Plot 7-333. Radiated Lower Band Edge Plot SISO ANT2 (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 |



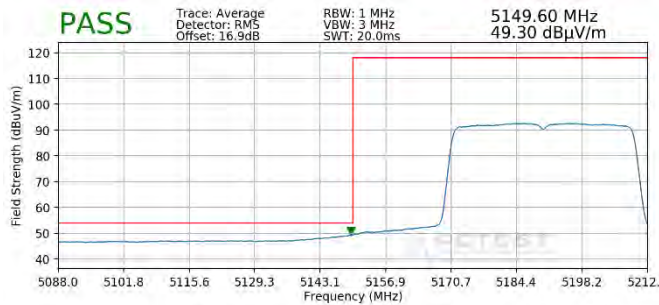
Plot 7-334. Radiated Upper Band Edge Plot SISO ANT2 (Peak – UNII Band 3 – 242 Tones)

| | | | | |
|---|---|---------------------------------------|----------------|---------------------------------|
| FCC ID: A3LSMG986JPN | PCTEST ENGINEERING LABORATORY, INC. | MEASUREMENT REPORT (CERTIFICATION) | SAMSUNG | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/2019 - 2/28/2020 | EUT Type: Portable Handset | | Page 251 of 266 |

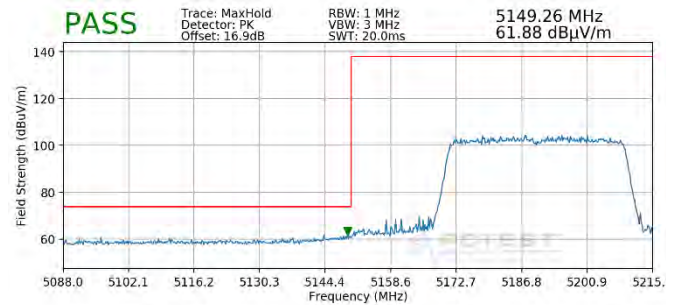
7.6.8 SISO Antenna-2 Radiated Band Edge Measurements (40MHz BW) §15.407(b.1)(b.2) §15.205 §15.209; RSS-Gen [8.9]

484 Tones

| | |
|---------------------------|----------|
| Worst Case Mode: | 802.11ax |
| Worst Case Transfer Rate: | MCS0 |
| RU Index: | 62 |
| Distance of Measurements: | 3 Meters |
| Operating Frequency: | 5190MHz |
| Channel: | 38 |

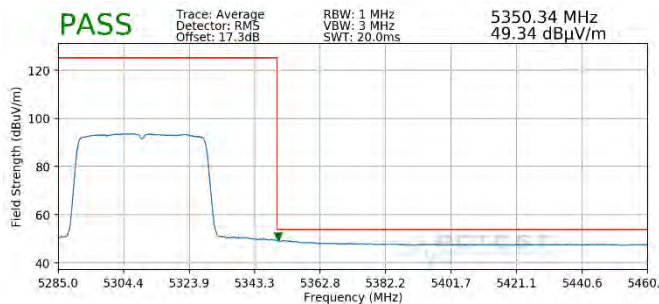


Plot 7-335. Radiated Lower Band Edge Plot SISO ANT2 (Average - UNII Band 1 - 484 Tones)

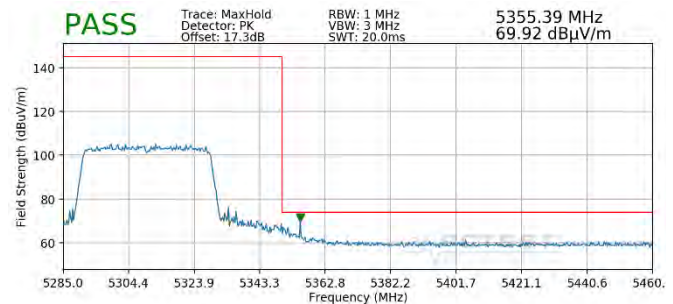


Plot 7-336. Radiated Lower Band Edge Plot SISO ANT2 (Peak - UNII Band 1 - 484 Tones)

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



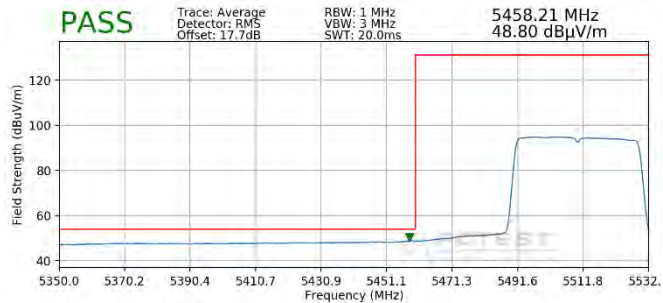
Plot 7-337. Radiated Upper Band Edge Plot SISO ANT2 (Average - UNII Band 2A - 484 Tones)



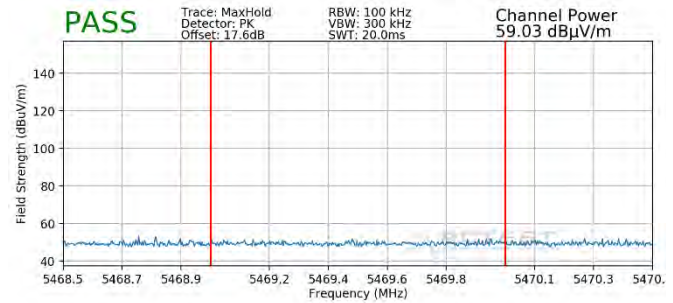
Plot 7-338. Radiated Upper Band Edge Plot SISO ANT2 (Peak - UNII Band 2A - 484 Tones)

| | | | | |
|---|---|---------------------------------------|----------------|---------------------------------|
| FCC ID: A3LSMG986JPN | PCTEST ENGINEERING LABORATORY, INC. | MEASUREMENT REPORT (CERTIFICATION) | SAMSUNG | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/2019 - 2/28/2020 | EUT Type: Portable Handset | | Page 252 of 266 |

Worst Case Mode: 802.11ax
Worst Case Transfer Rate: MCS0
RU Index: 62
Distance of Measurements: 3 Meters
Operating Frequency: 5510MHz
Channel: 102

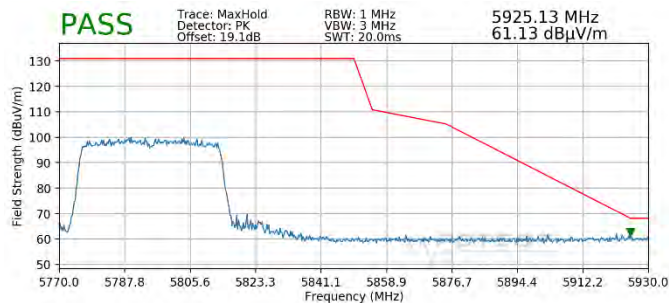


Plot 7-339. Radiated Lower Band Edge Plot SISO ANT2 (Average – UNII Band 2C – 484 Tones)



Plot 7-340. Radiated Lower Band Edge Plot SISO ANT2 (Peak – UNII Band 2C – 484 Tones)

Worst Case Mode: 802.11ax
Worst Case Transfer Rate: MCS0
RU Index: 62
Distance of Measurements: 3 Meters
Operating Frequency: 5795MHz
Channel: 159



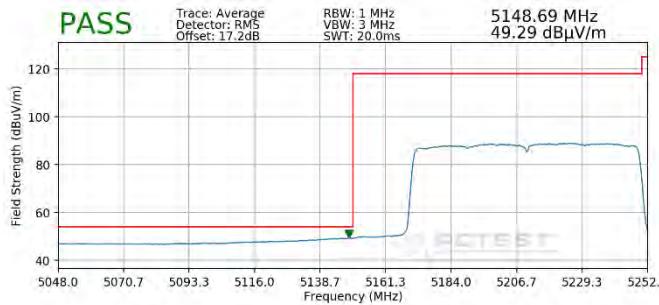
Plot 7-341. Radiated Upper Band Edge Plot SISO ANT2 (Peak – UNII Band 3 – 484 Tones)

| | | | | |
|---|---|---|----------------|---------------------------------|
| FCC ID: A3LSMG986JPN | PCTEST ENGINEERING LABORATORY, INC. | MEASUREMENT REPORT (CERTIFICATION) | SAMSUNG | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/2019 - 2/28/2020 | EUT Type: Portable Handset | | Page 253 of 266 |

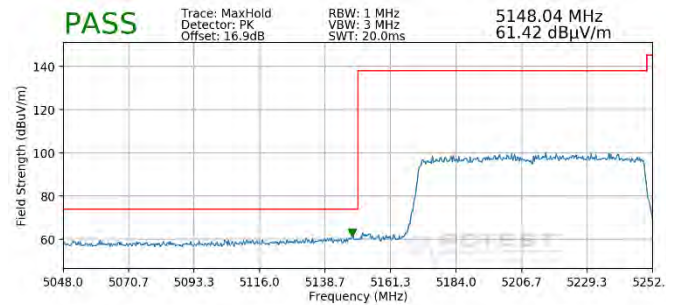
7.6.9 SISO Antenna-2 Radiated Band Edge Measurements (80MHz BW) §15.407(b.1)(b.2) §15.205 §15.209; RSS-Gen [8.9]

996 Tones

| | |
|---------------------------|----------|
| Worst Case Mode: | 802.11ax |
| Worst Case Transfer Rate: | MCS0 |
| RU Index: | 64 |
| Distance of Measurements: | 3 Meters |
| Operating Frequency: | 5210MHz |
| Channel: | 42 |

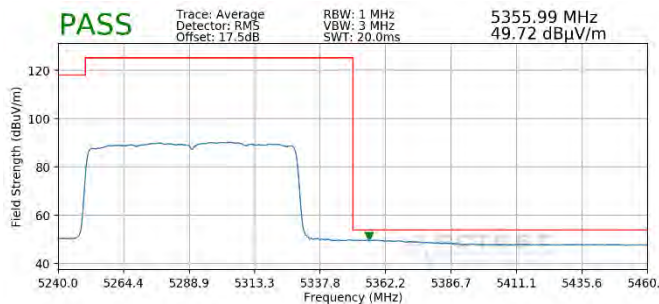


Plot 7-342. Radiated Lower Band Edge Plot SISO ANT2 (Average – UNII Band 1 – 996 Tones)

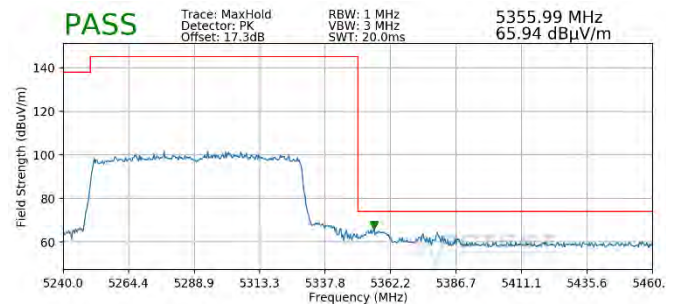


Plot 7-343. Radiated Lower Band Edge Plot SISO ANT2 (Peak – UNII Band 1 – 996 Tones)

| | |
|---------------------------|----------|
| Worst Case Mode: | 802.11ax |
| Worst Case Transfer Rate: | MCS0 |
| RU Index: | 64 |
| Distance of Measurements: | 3 Meters |
| Operating Frequency: | 5290MHz |
| Channel: | 58 |



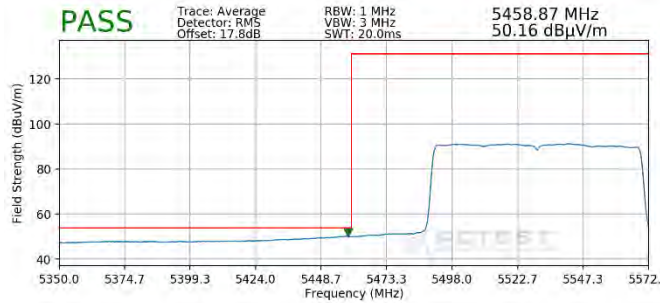
Plot 7-344. Radiated Upper Band Edge Plot SISO ANT2 (Average – UNII Band 2A – 996 Tones)



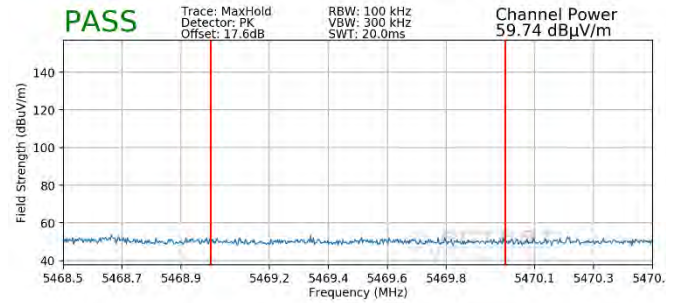
Plot 7-345. Radiated Upper Band Edge Plot SISO ANT2 (Peak – UNII Band 2A – 996 Tones)

| | | | | |
|---|---|---------------------------------------|----------------|---------------------------------|
| FCC ID: A3LSMG986JPN | PCTEST ENGINEERING LABORATORY, INC. | MEASUREMENT REPORT (CERTIFICATION) | SAMSUNG | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/2019 - 2/28/2020 | EUT Type: Portable Handset | | Page 254 of 266 |

Worst Case Mode: 802.11ax
Worst Case Transfer Rate: MCS0
RU Index: 64
Distance of Measurements: 3 Meters
Operating Frequency: 5530MHz
Channel: 106

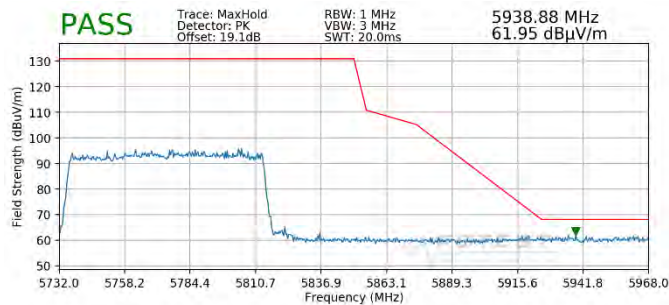


Plot 7-346. Radiated Lower Band Edge Plot SISO ANT2 (Average – UNII Band 2C – 996 Tones)



Plot 7-347. Radiated Lower Band Edge Plot SISO ANT2 (Peak – UNII Band 2C – 996 Tones)

Worst Case Mode: 802.11ax
Worst Case Transfer Rate: MCS0
RU Index: 64
Distance of Measurements: 3 Meters
Operating Frequency: 5775MHz
Channel: 155



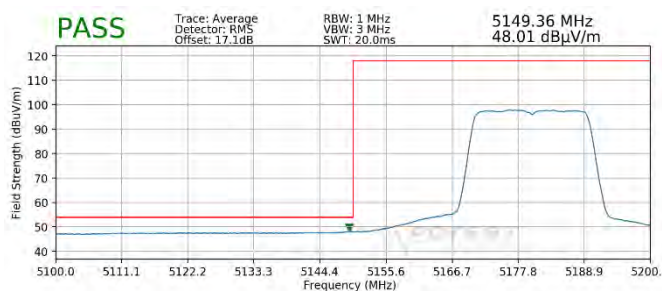
Plot 7-348. Radiated Upper Band Edge Plot SISO ANT2 (Peak – UNII Band 3 – 996 Tones)

| | | | | |
|---|---|---------------------------------------|----------------|---------------------------------|
| FCC ID: A3LSMG986JPN | PCTEST ENGINEERING LABORATORY, INC. | MEASUREMENT REPORT (CERTIFICATION) | SAMSUNG | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/2019 - 2/28/2020 | EUT Type: Portable Handset | | Page 255 of 266 |

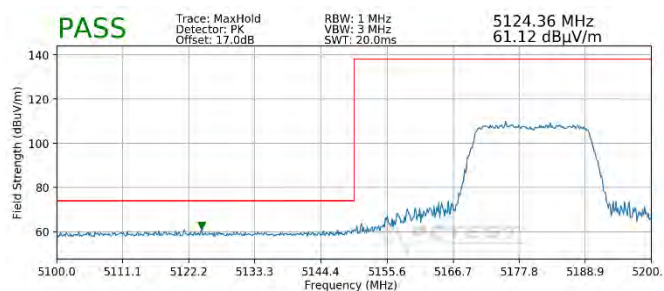
7.6.10 MIMO Radiated Band Edge Measurements (20MHz BW) §15.407(b.1)(b.2) §15.205 §15.209; RSS-Gen [8.9]

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 |

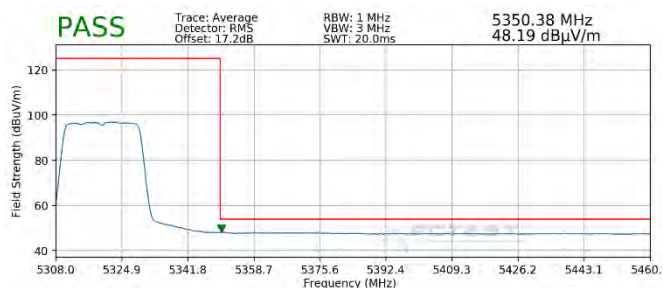


**Plot 7-349. Radiated Lower Band Edge Plot MIMO
(Average – UNII Band 1 – 242 Tones)**

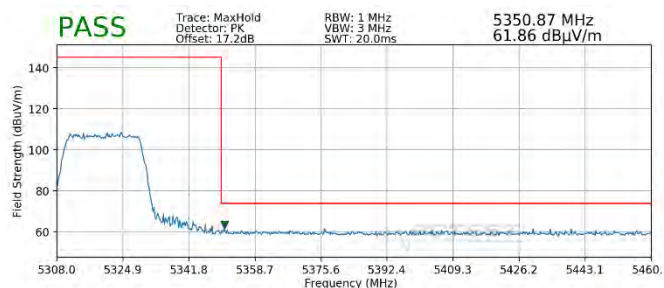


**Plot 7-350. Radiated Lower Band Edge Plot MIMO
(Peak – UNII Band 1 – 242 Tones)**

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



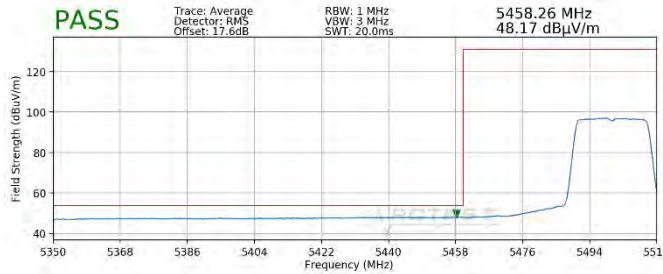
**Plot 7-351. Radiated Upper Band Edge Plot MIMO
(Average – UNII Band 2A – 242 Tones)**



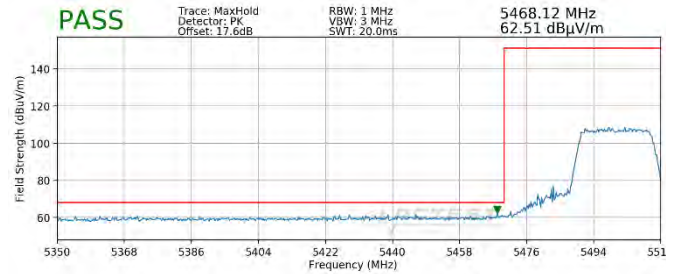
**Plot 7-352. Radiated Upper Band Edge Plot MIMO
(Peak – UNII Band 2A – 242 Tones)**

| | | | | |
|---|---|---|----------------|---------------------------------|
| FCC ID: A3LSMG986JPN | PCTEST ENGINEERING LABORATORY, INC. | MEASUREMENT REPORT (CERTIFICATION) | SAMSUNG | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/2019 - 2/28/2020 | EUT Type: Portable Handset | | Page 256 of 266 |

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

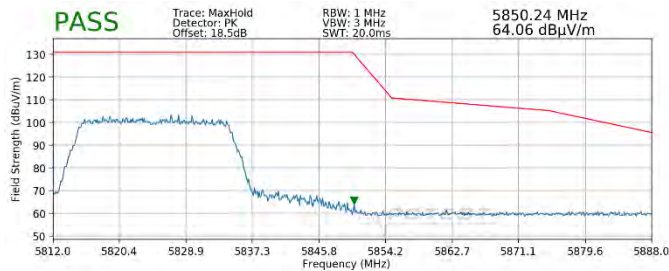


**Plot 7-353. Radiated Lower Band Edge Plot MIMO
(Average – UNII Band 2C – 242 Tones)**



**Plot 7-354. 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



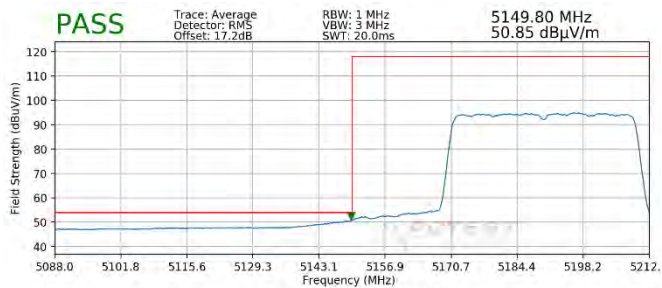
**Plot 7-355. Radiated Upper Band Edge Plot MIMO
(Peak – UNII Band 3 – 242 Tones)**

| | | | | |
|---|---|---------------------------------------|----------------|---------------------------------|
| FCC ID: A3LSMG986JPN | PCTEST ENGINEERING LABORATORY, INC. | MEASUREMENT REPORT (CERTIFICATION) | SAMSUNG | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/2019 - 2/28/2020 | EUT Type: Portable Handset | | Page 257 of 266 |

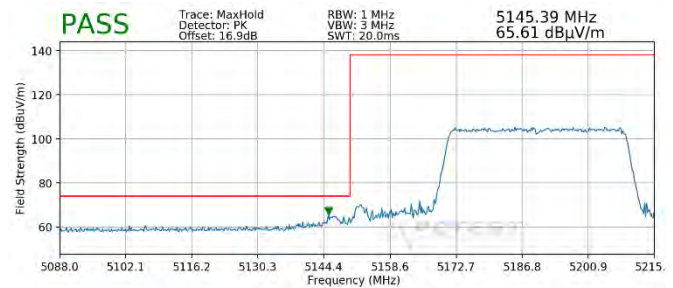
7.6.11 MIMO Radiated Band Edge Measurements (40MHz BW) §15.407(b.1)(b.2) §15.205 §15.209; RSS-Gen [8.9]

484 Tones

| | |
|---------------------------|----------|
| Worst Case Mode: | 802.11ax |
| Worst Case Transfer Rate: | MCS0 |
| RU Index: | 62 |
| Distance of Measurements: | 3 Meters |
| Operating Frequency: | 5190MHz |
| Channel: | 38 |

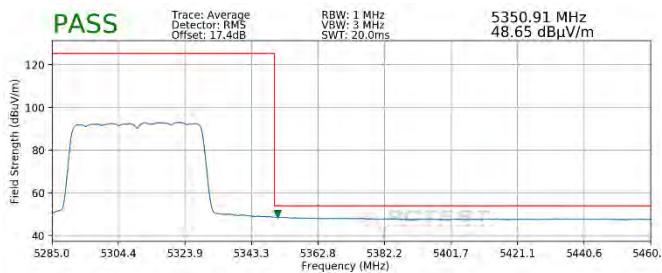


**Plot 7-356. Radiated Lower Band Edge Plot MIMO
(Average – UNII Band 1 – 484 Tones)**

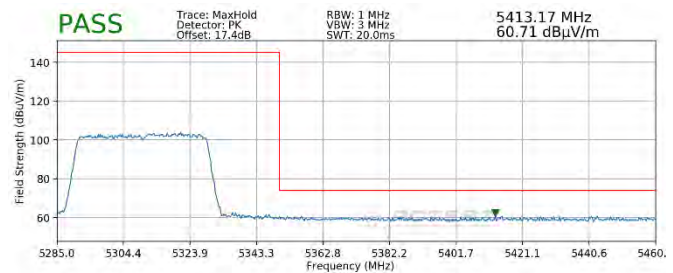


**Plot 7-357. Radiated Lower Band Edge Plot MIMO
(Peak – UNII Band 1 – 484 Tones)**

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



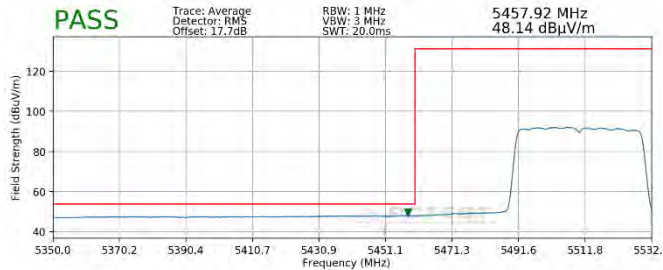
**Plot 7-358. Radiated Upper Band Edge Plot MIMO
(Average – UNII Band 2A – 484 Tones)**



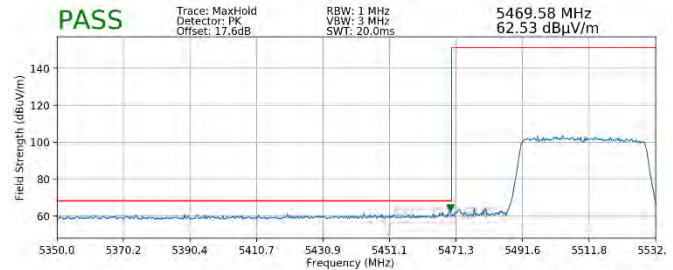
**Plot 7-359. Radiated Upper Band Edge Plot MIMO
(Peak – UNII Band 2A – 484 Tones)**

| | | | | |
|---|---|---------------------------------------|----------------|---------------------------------|
| FCC ID: A3LSMG986JPN | PCTEST ENGINEERING LABORATORY, INC. | MEASUREMENT REPORT (CERTIFICATION) | SAMSUNG | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/2019 - 2/28/2020 | EUT Type: Portable Handset | | Page 258 of 266 |

Worst Case Mode: 802.11ax
Worst Case Transfer Rate: MCS0
RU Index: 62
Distance of Measurements: 3 Meters
Operating Frequency: 5510MHz
Channel: 102

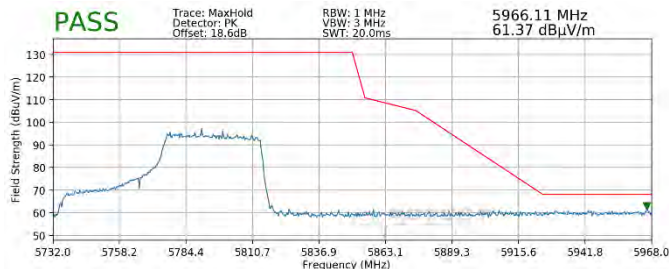


**Plot 7-360. Radiated Lower Band Edge Plot MIMO
(Average – UNII Band 2C – 484 Tones)**



**Plot 7-361. Radiated Lower Band Edge Plot MIMO
(Peak – UNII Band 2C – 484 Tones)**

Worst Case Mode: 802.11ax
Worst Case Transfer Rate: MCS0
RU Index: 62
Distance of Measurements: 3 Meters
Operating Frequency: 5795MHz
Channel: 159



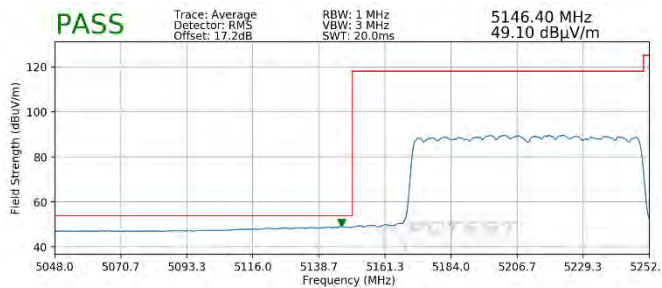
**Plot 7-362. Radiated Upper Band Edge Plot MIMO
(Peak – UNII Band 3 – 484 Tones)**

| | | | | |
|---|---|---------------------------------------|----------------|---------------------------------|
| FCC ID: A3LSMG986JPN | PCTEST ENGINEERING LABORATORY, INC. | MEASUREMENT REPORT (CERTIFICATION) | SAMSUNG | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/2019 - 2/28/2020 | EUT Type: Portable Handset | | Page 259 of 266 |

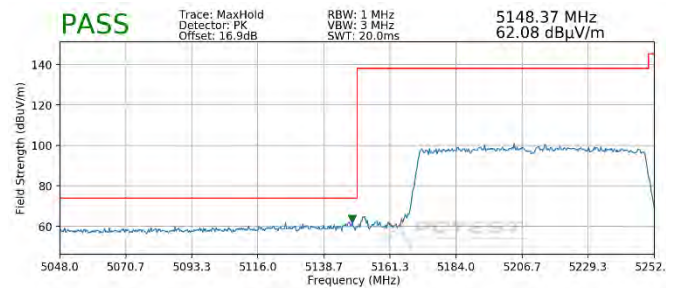
7.6.12 MIMO Radiated Band Edge Measurements (80MHz BW) §15.407(b.1)(b.2) §15.205 §15.209; RSS-Gen [8.9]

996 Tones

| | |
|---------------------------|----------|
| Worst Case Mode: | 802.11ax |
| Worst Case Transfer Rate: | MCS0 |
| RU Index: | 64 |
| Distance of Measurements: | 3 Meters |
| Operating Frequency: | 5210MHz |
| Channel: | 42 |

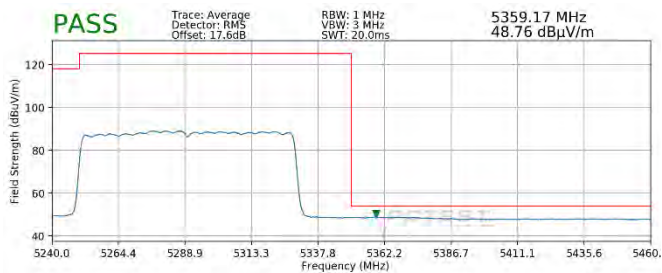


**Plot 7-363. Radiated Lower Band Edge Plot MIMO
(Average – UNII Band 1 – 996 Tones)**

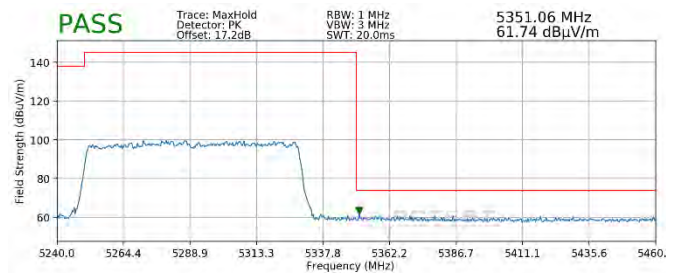


**Plot 7-364. Radiated Lower Band Edge Plot MIMO
(Peak – UNII Band 1 – 996 Tones)**

| | |
|---------------------------|----------|
| Worst Case Mode: | 802.11ax |
| Worst Case Transfer Rate: | MCS0 |
| RU Index: | 64 |
| Distance of Measurements: | 3 Meters |
| Operating Frequency: | 5290MHz |
| Channel: | 58 |



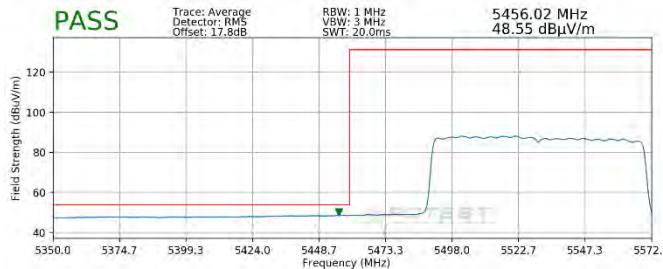
**Plot 7-365. Radiated Upper Band Edge Plot MIMO
(Average – UNII Band 2A – 996 Tones)**



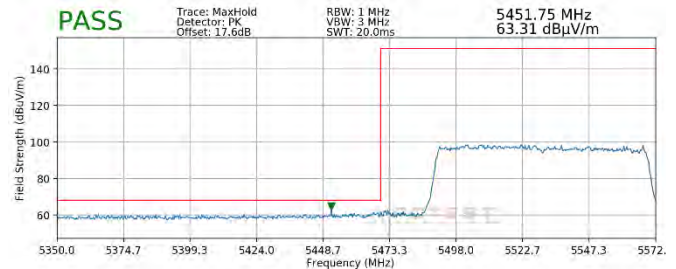
**Plot 7-366. Radiated Upper Band Edge Plot MIMO
(Peak – UNII Band 2A – 996 Tones)**

| | | | | |
|---|---|---------------------------------------|----------------|---------------------------------|
| FCC ID: A3LSMG986JPN | PCTEST ENGINEERING LABORATORY, INC. | MEASUREMENT REPORT (CERTIFICATION) | SAMSUNG | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/2019 - 2/28/2020 | EUT Type: Portable Handset | | Page 260 of 266 |

Worst Case Mode: 802.11ax
Worst Case Transfer Rate: MCS0
RU Index: 64
Distance of Measurements: 3 Meters
Operating Frequency: 5530MHz
Channel: 106

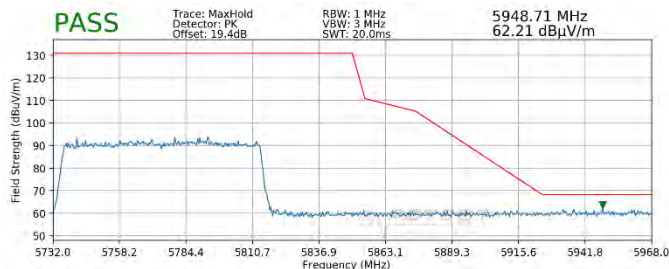


**Plot 7-367. Radiated Lower Band Edge Plot MIMO
(Average – UNII Band 2C – 996 Tones)**



**Plot 7-368. Radiated Lower Band Edge Plot MIMO
(Peak – UNII Band 2C – 996 Tones)**

Worst Case Mode: 802.11ax
Worst Case Transfer Rate: MCS0
RU Index: 64
Distance of Measurements: 3 Meters
Operating Frequency: 5775MHz
Channel: 155



**Plot 7-369. Radiated Upper Band Edge Plot MIMO
(Peak – UNII Band 3 – 996 Tones)**

| | | | | |
|---|---|---------------------------------------|----------------|---------------------------------|
| FCC ID: A3LSMG986JPN | PCTEST ENGINEERING LABORATORY, INC. | MEASUREMENT REPORT (CERTIFICATION) | SAMSUNG | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/2019 - 2/28/2020 | EUT Type: Portable Handset | | Page 261 of 266 |

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 7-65 per Section 15.209 and RSS-Gen (8.9).

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

Table 7-136. 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

| | | | | |
|---|---|---------------------------------------|---|---------------------------------|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/2019 - 2/28/2020 | EUT Type: Portable Handset | | Page 262 of 266 |

Test Setup

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

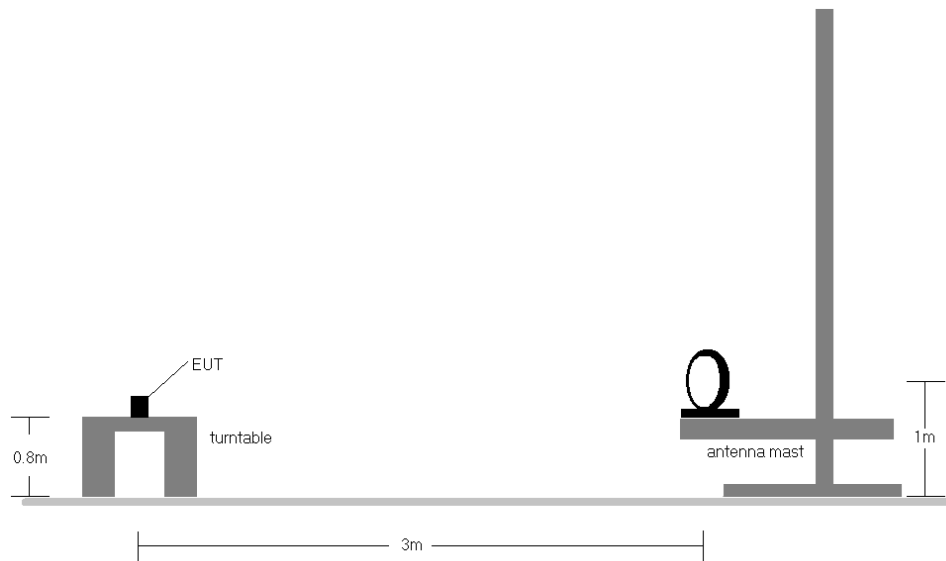


Figure 7-6. Radiated Test Setup < 30MHz

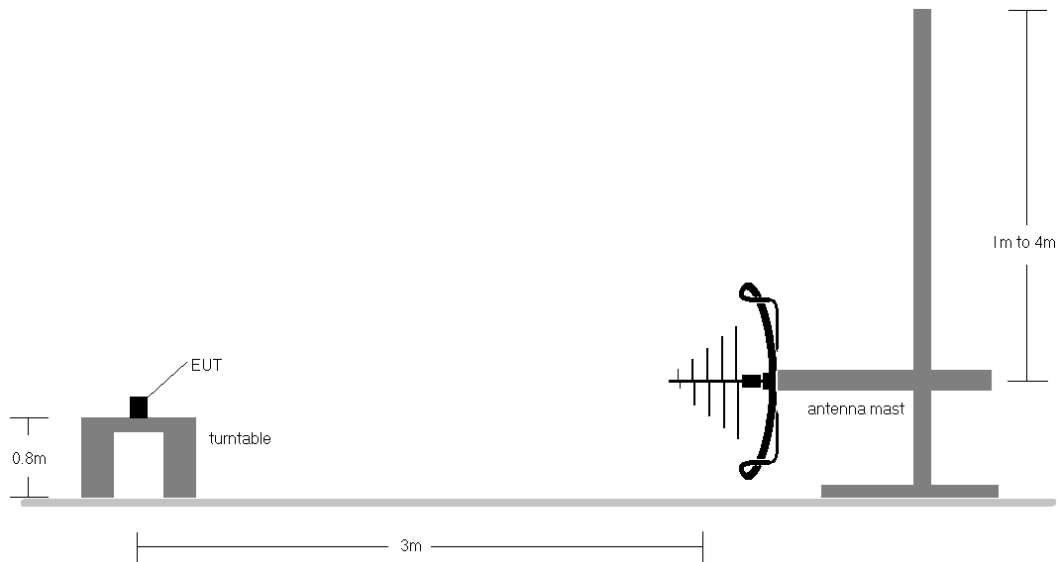


Figure 7-7. Radiated Test Setup < 1GHz

| | | | | |
|--|---|---|----------------|--|
| FCC ID: A3LSMG986JPN | PCTEST ENGINEERING LABORATORY, INC. | MEASUREMENT REPORT (CERTIFICATION) | SAMSUNG | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/2019 - 2/28/2020 | EUT Type: Portable Handset | | Page 263 of 266 |

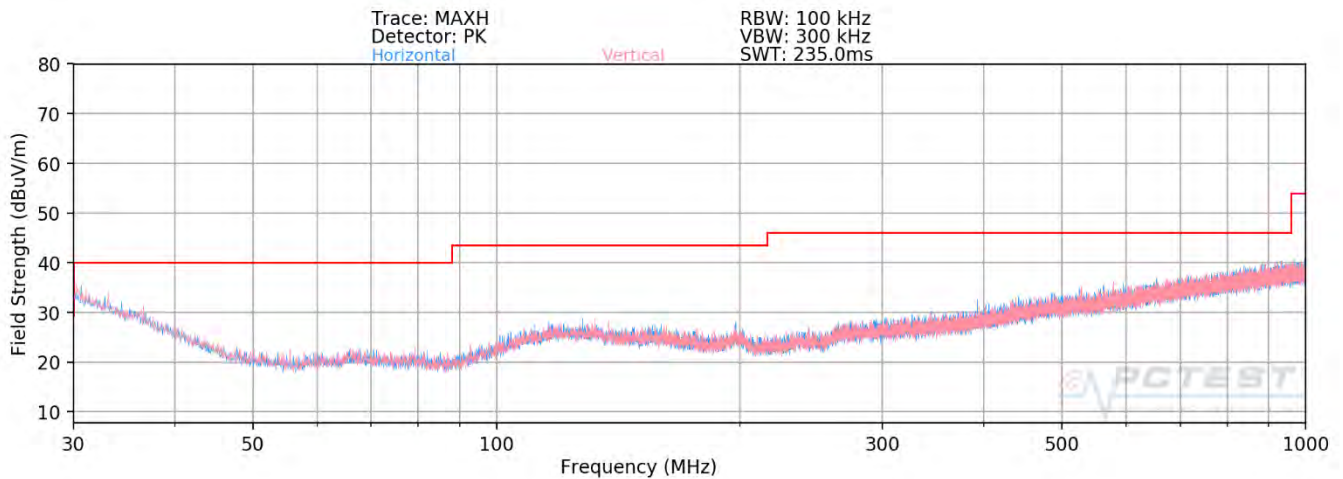
Test Notes

1. All emissions lying in restricted bands specified in §15.205 and RSS-Gen (8.10) are below the limit shown in Table 7-65.
2. The broadband receive antenna is manipulated through vertical and horizontal polarizations during the tests. The EUT is manipulated through three orthogonal planes.
3. This unit was tested with its standard battery.
4. The spectrum is investigated using a peak detector and final measurements are recorded using CISPR quasi peak detector. The worst-case emissions are reported however emissions whose levels were not within 20dB of the respective limits were not reported.
5. Emissions were measured at a 3 meter test distance.
6. Emissions are investigated while operating on the center channel of the mode, band, and modulation that produced the worst case results during the transmitter spurious emissions testing.
7. No spurious emissions were detected within 20dB of the limit below 30MHz.
8. The results recorded using the broadband antenna is known to correlate with the results obtained by using a tuned dipole with an acceptable degree of accuracy. The VSWR for the measurement antenna was found to be less than 2:1.
9. The wide spectrum spurious emissions plots shown on the following pages are used only for the purpose of emission identification. There were no emissions detected in the 30MHz – 1GHz frequency range, as shown in the subsequent plots.

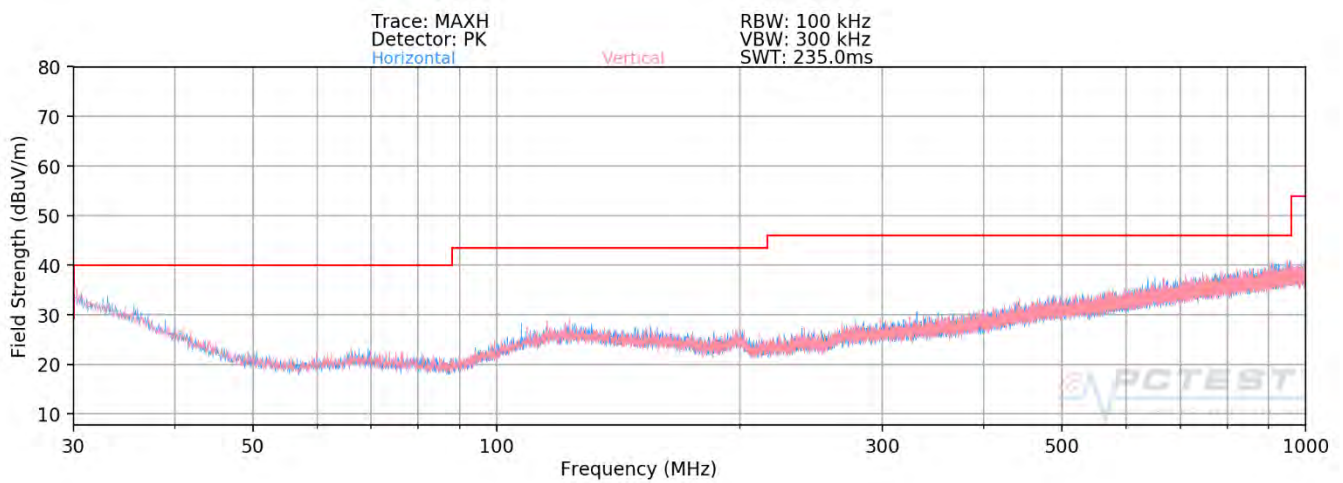
| | | | | |
|--|---|---|---|--|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/2019 - 2/28/2020 | EUT Type: Portable Handset | | Page 264 of 266 |

MIMO Radiated Spurious Emissions Measurements (Below 1GHz)

§15.209; RSS-Gen [8.9]



Plot 7-370. Radiated Spurious Plot below 1GHz MIMO (802.11ax – 26 Tones – U3 Ch. 157)



Plot 7-371. Radiated Spurious Plot below 1GHz MIMO (802.11ax – 242 Tones – U3 Ch. 157)

| | | | | |
|---|---|---|----------------|---------------------------------|
| FCC ID: A3LSMG986JPN | PCTEST ENGINEERING LABORATORY, INC. | MEASUREMENT REPORT (CERTIFICATION) | SAMSUNG | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/2019 - 2/28/2020 | EUT Type: Portable Handset | | Page 265 of 266 |

8.0 CONCLUSION

The data collected relate only the item(s) tested and show that the **Samsung Portable Handset FCC ID: A3LSMG986JPN** is in compliance with Part 15 Subpart E (15.407) of the FCC Rules.

| | | | | |
|--|---|---|---|--|
| FCC ID: A3LSMG986JPN |  | MEASUREMENT REPORT (CERTIFICATION) |  | Approved by: Quality Manager |
| Test Report S/N: 1M2001240012-06.A3L | Test Dates: 10/11/2019 - 2/28/2020 | EUT Type: Portable Handset | | Page 266 of 266 |