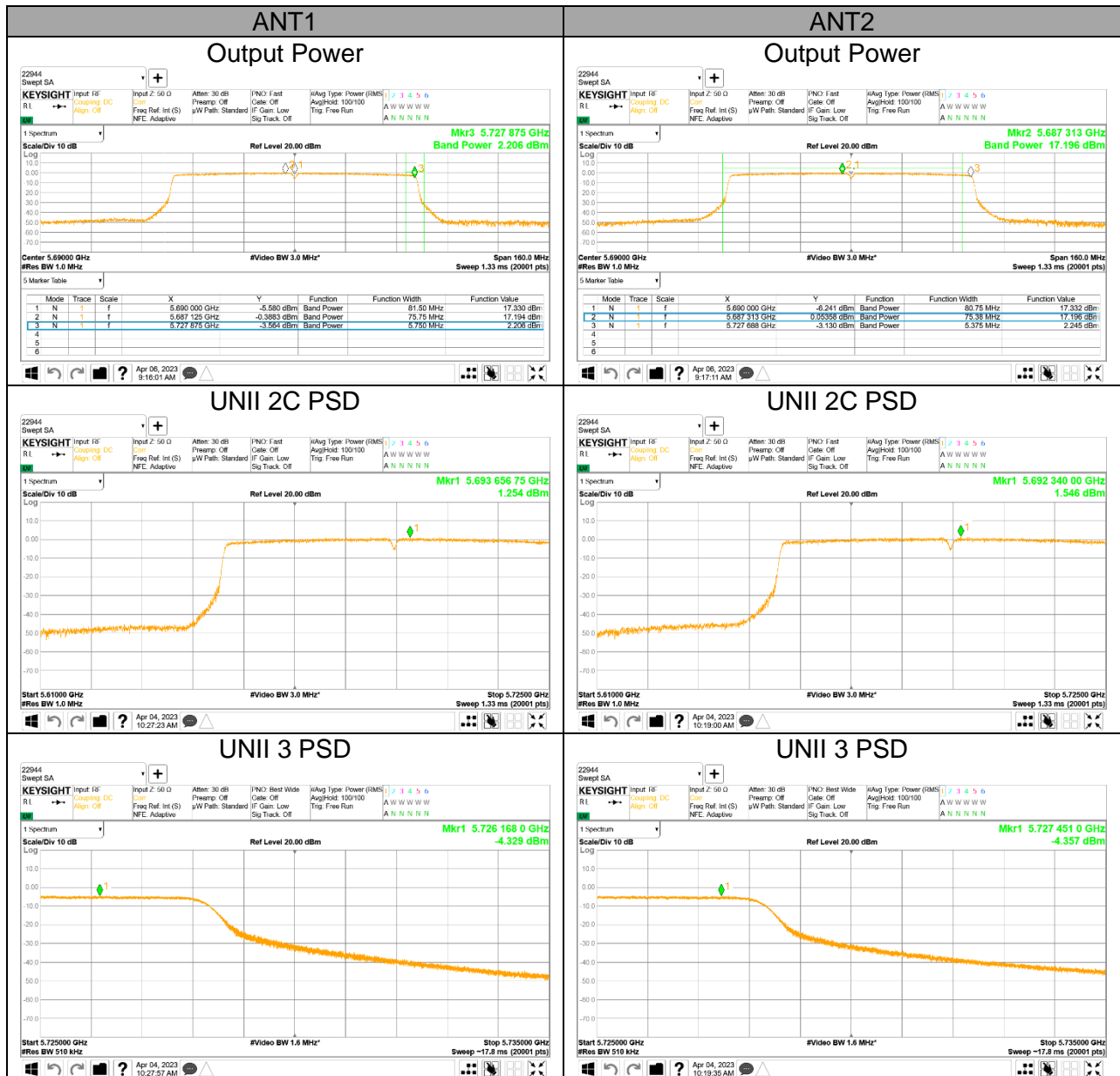
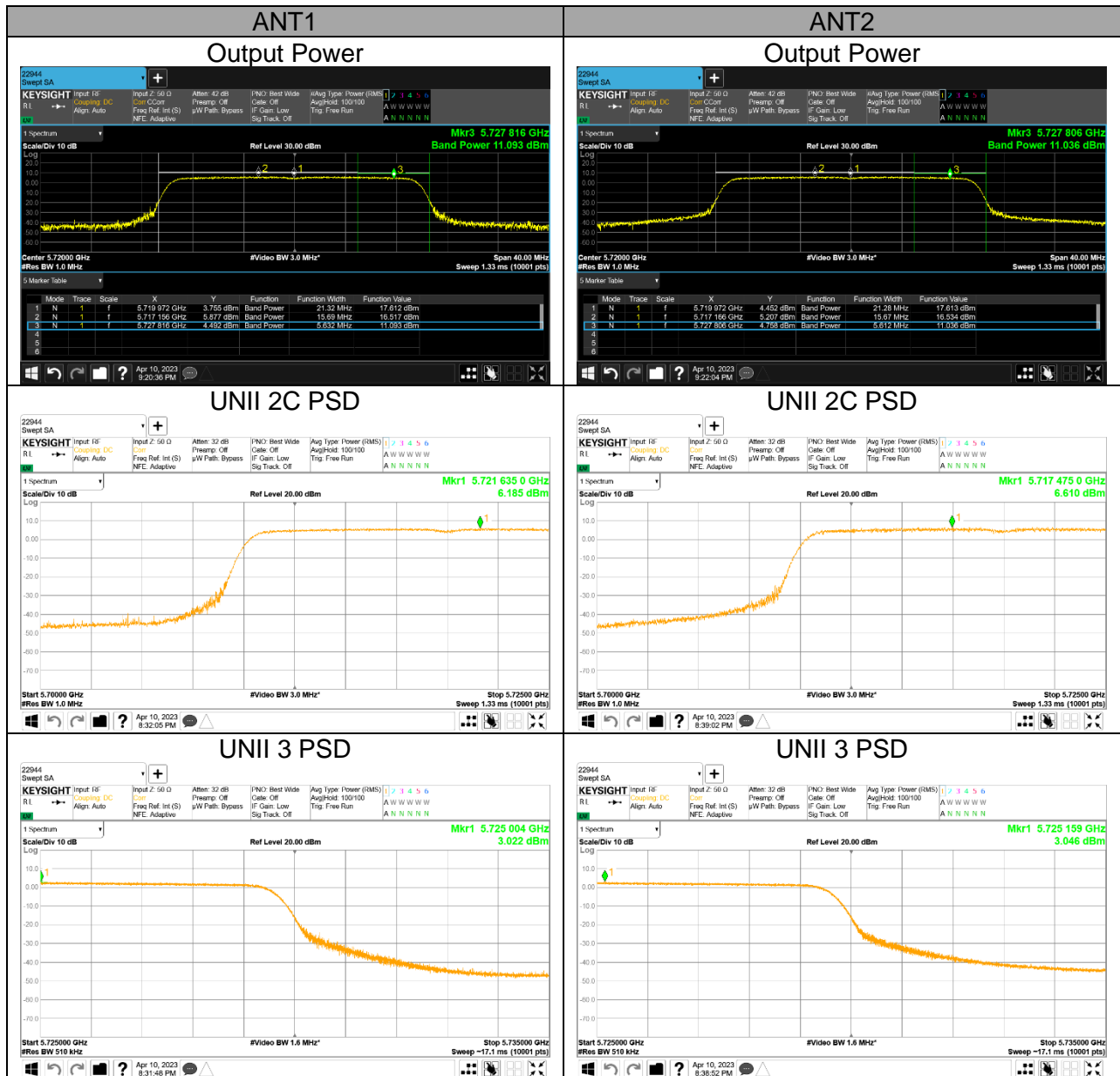


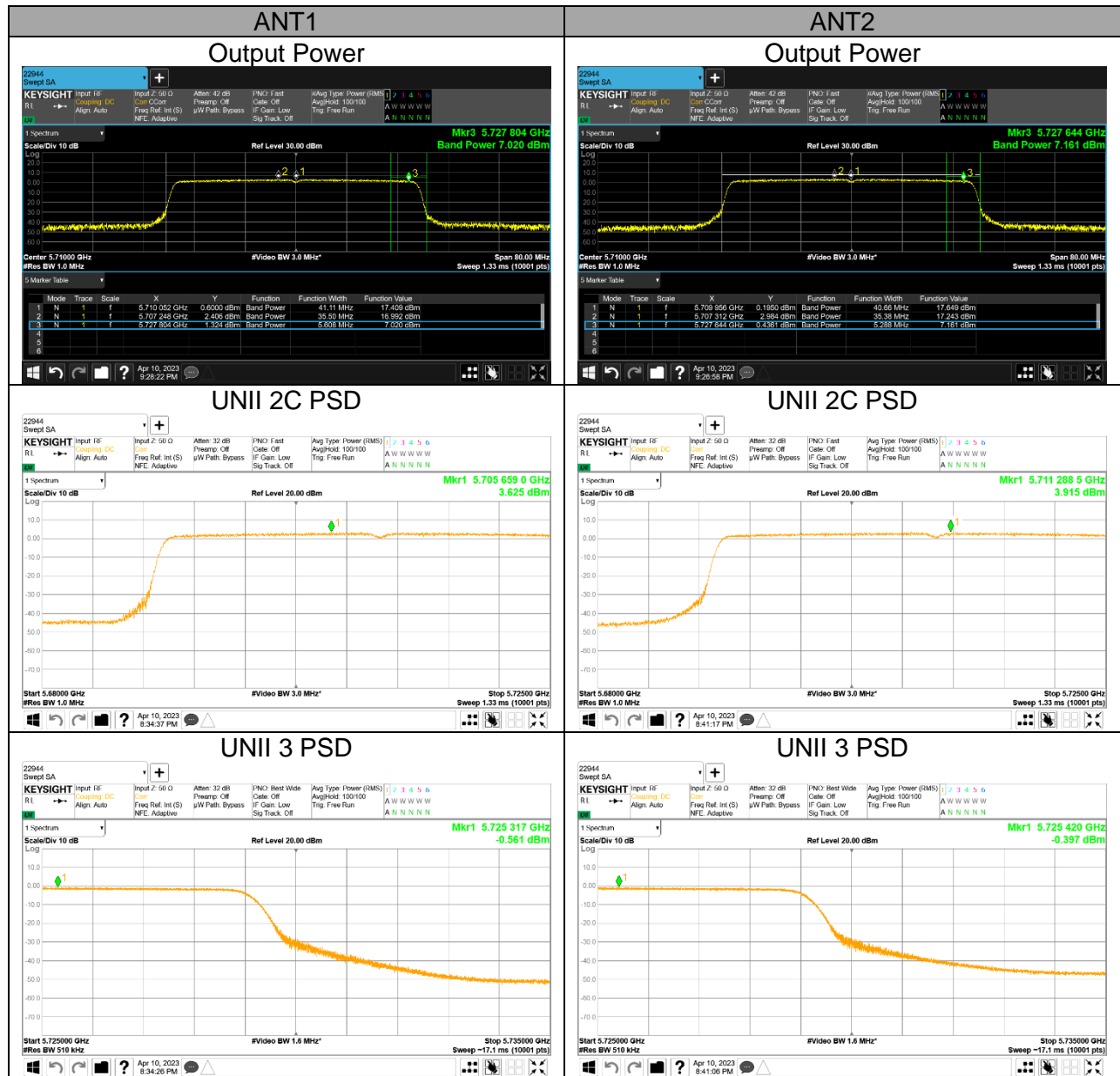
**UNII Straddle Ch. IEEE 802.11ac VHT80 mode Output Power and PSD**



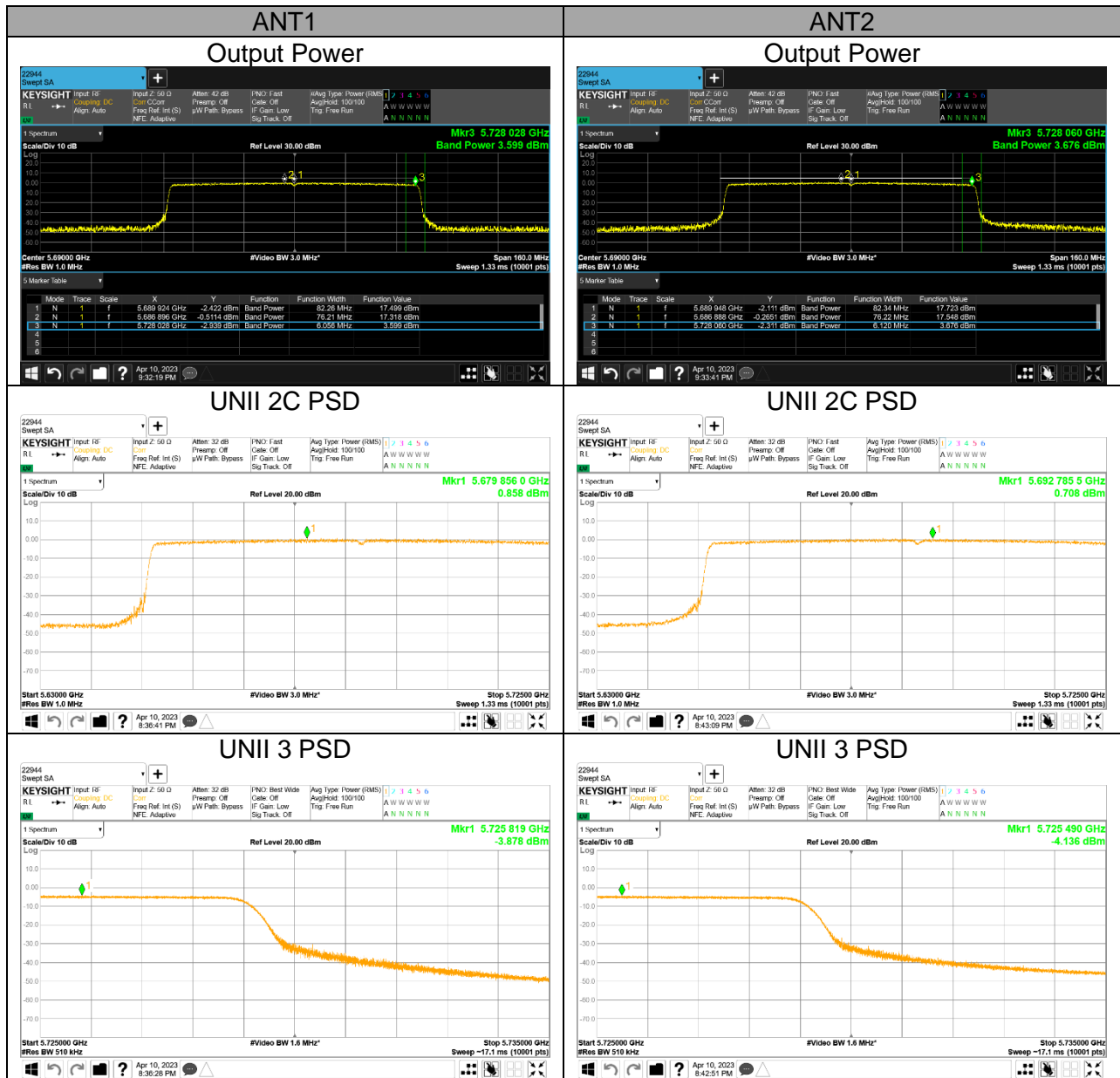
**UNII Straddle Ch. IEEE 802.11ax HE20(SU) mode Output Power and PSD**



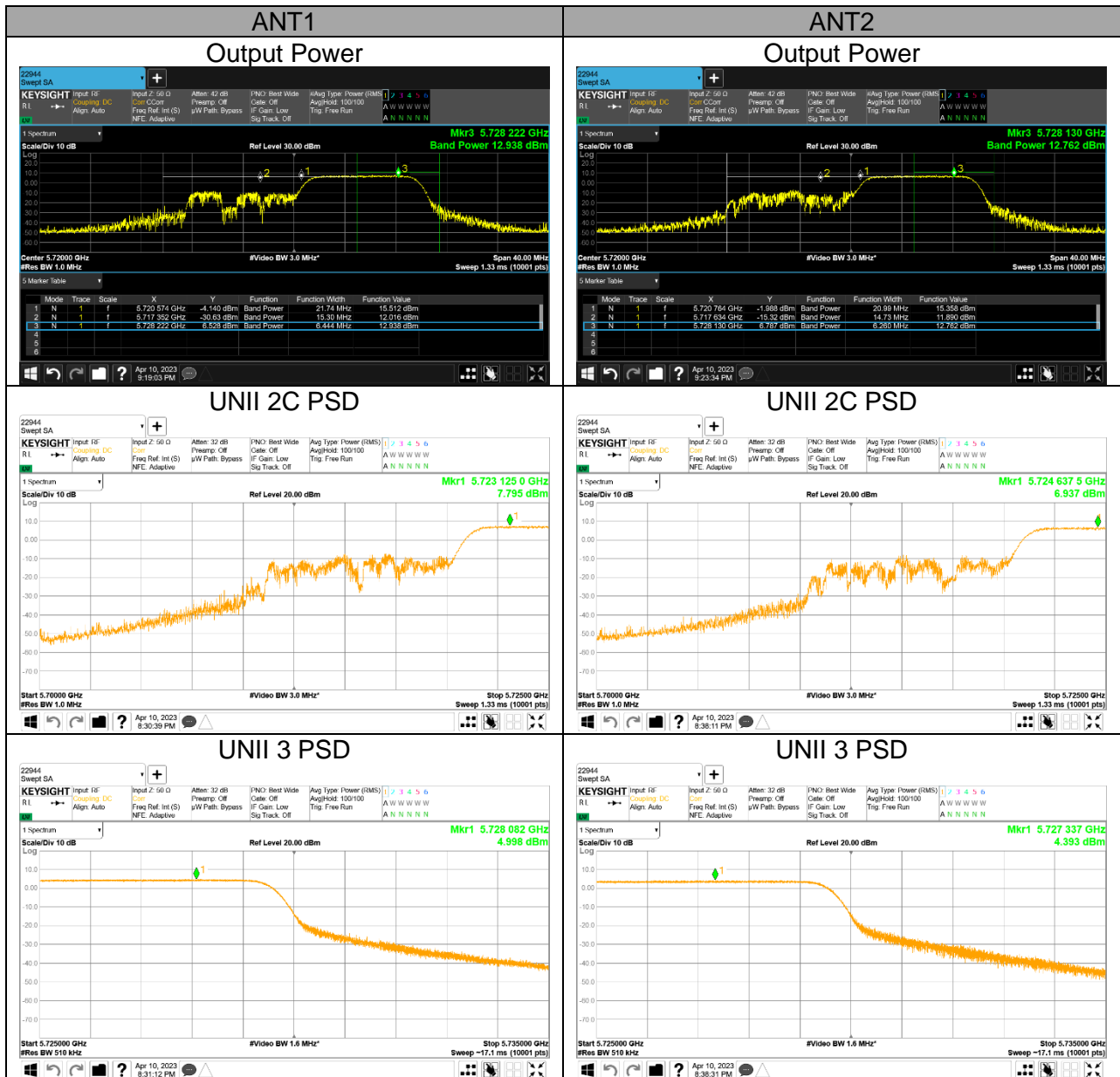
**UNII Straddle Ch. IEEE 802.11ax HE40(SU) mode Output Power and PSD**



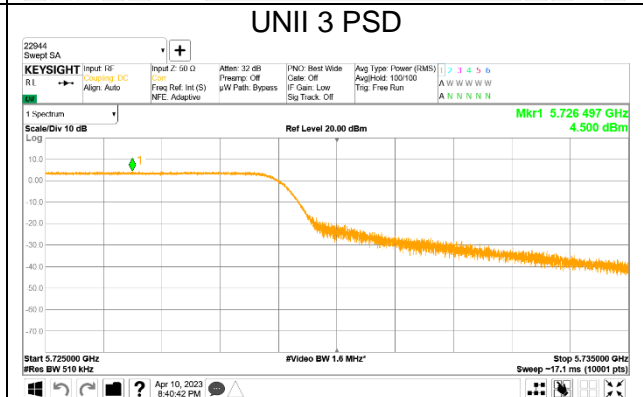
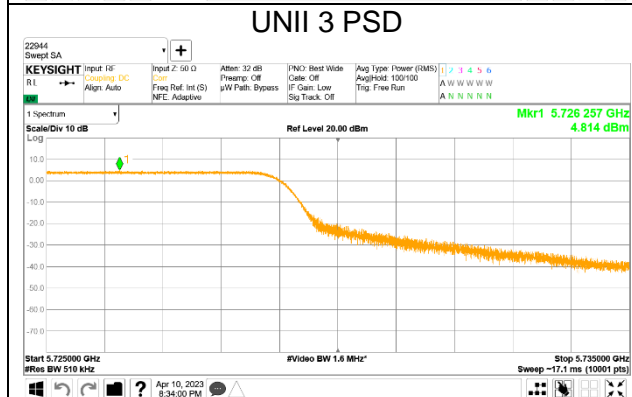
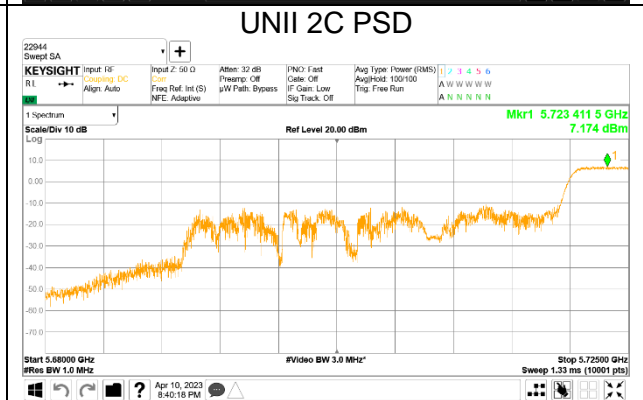
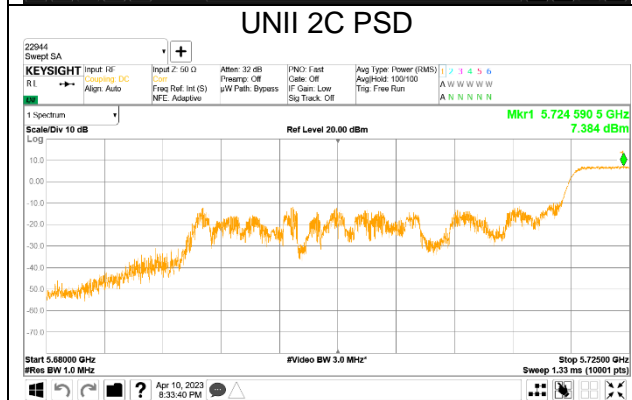
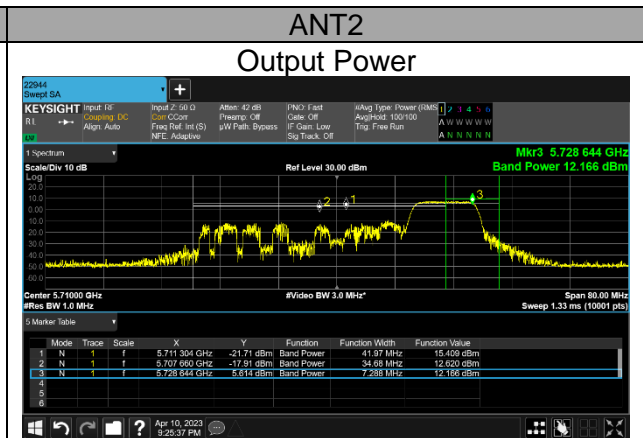
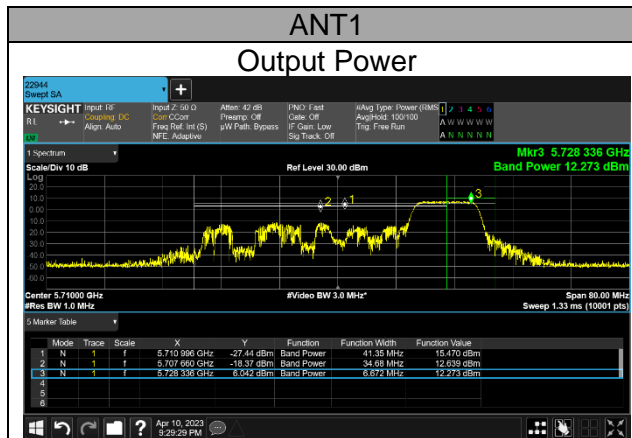
**UNII Straddle Ch. IEEE 802.11ax HE80(SU) mode Output Power and PSD**



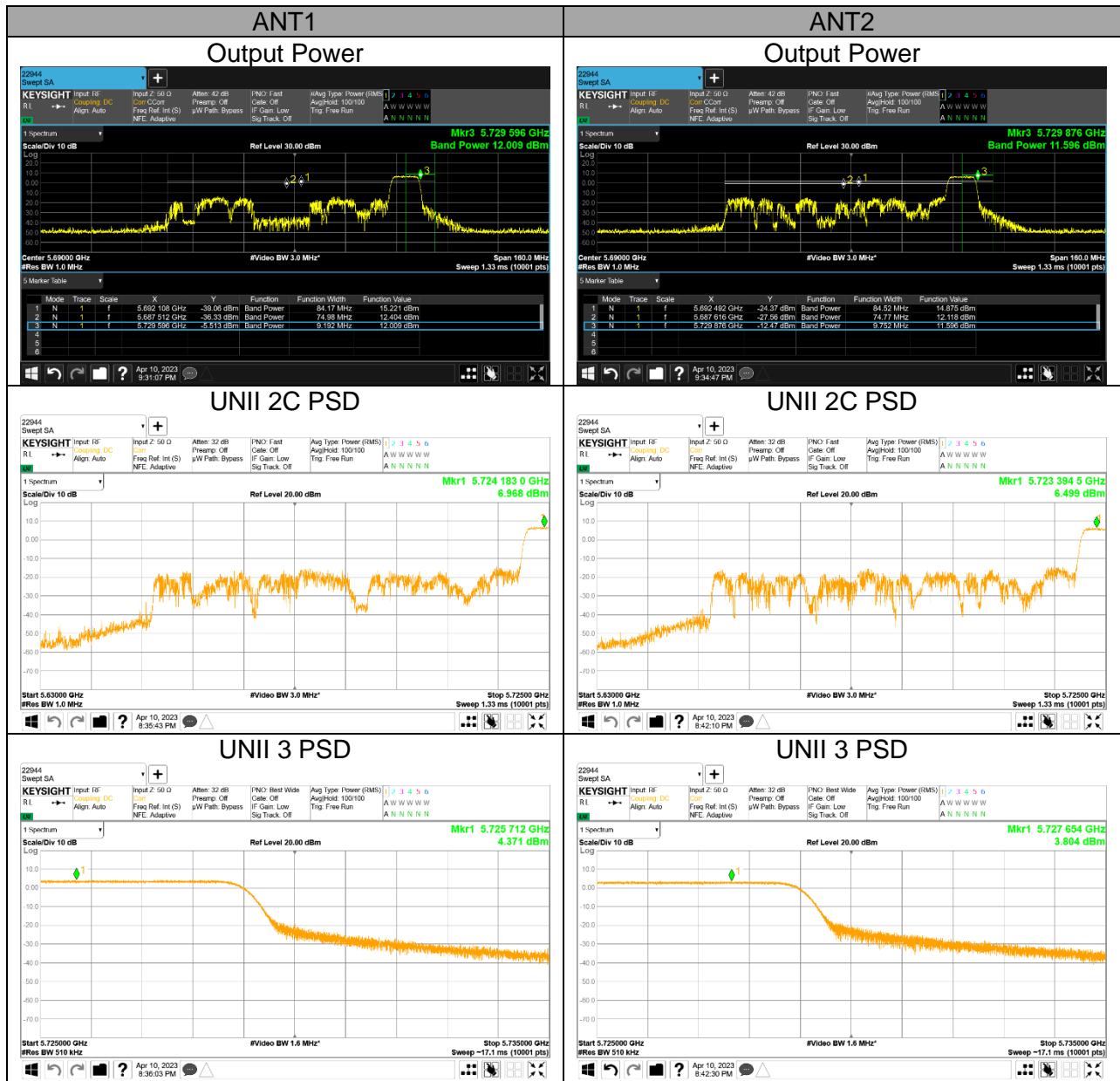
**UNII Straddle Ch. IEEE 802.11ax HE20(54RU) mode Output Power and PSD**



**UNII Straddle Ch. IEEE 802.11ax HE40(56RU) mode Output Power and PSD**



**UNII Straddle Ch. IEEE 802.11ax HE80(60RU) mode Output Power and PSD**



## 11. TRANSMITTER ABOVE 1 GHz

### LIMITS

FCC §15.205 and §15.209

| Limits for radiated disturbance of an intentional radiator |                 |                          |
|--|-----------------|--------------------------|
| Frequency range (MHz)                                      | Limits (µV/m)   | Measurement Distance (m) |
| 0.009 – 0.490  | 2400 / F (kHz)  | 300                      |
| 0.490 – 1.705  | 24000 / F (kHz) | 30                       |
| 1.705 – 30.0   | 30              | 30                       |
| 30 – 88  | 100**           | 3                        |
| 88 - 216   | 150**           | 3                        |
| 216 – 960  | 200**           | 3                        |
| Above 960  | 500             | 3                        |

\*\* Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g. §§ 15.231 and 15.241.

FCC Part 15.205 (a) : Only spurious emissions are permitted in any of the frequency bands listed below :

| MHz               | MHz                 | MHz                   | MHz                          | GHz          | GHz           |
|-------------------|---------------------|-----------------------|------------------------------|--------------|---------------|
| 0.009 ~ 0.110     | 8.41425 ~ 8.41475   | 108 ~ 121.94          | 1300 ~ 1427                  | 4.5 ~ 5.15   | 14.47 ~ 14.5  |
| 0.495 ~ 0.505     | 12.29 ~ 12.293      | 123 ~ 138             | 1435 ~ 1626.5                | 5.35 ~ 5.46  | 15.35 ~ 16.2  |
| 2.1735 ~ 2.1905   | 12.51975 ~ 12.52025 | 149.9 ~ 150.05        | 1645.5 ~ 1646.5              | 7.25 ~ 7.75  | 17.7 ~ 21.4   |
| 4.125 ~ 4.128     | 12.57675 ~ 12.57725 | 156.52475 ~ 156.52525 | 1660 ~ 1710                  | 8.025 ~ 8.5  | 22.01 ~ 23.12 |
| 4.17725 ~ 4.17775 | 13.36 ~ 13.41       | 156.7 ~ 156.9         | 1718.8 ~ 1722.2              | 9.0 ~ 9.2    | 23.6 ~ 24.0   |
| 4.20725 ~ 4.20775 | 16.42 ~ 16.423      | 162.0125 ~ 167.17     | 2200 ~ 2300                  | 9.3 ~ 9.5    | 31.2 ~ 31.8   |
| 6.215 ~ 6.218     | 16.69475 ~ 16.69525 | 167.72 ~ 173.2        | 2310 ~ 2390                  | 10.6 ~ 12.7  | 36.43 ~ 36.5  |
| 6.26775 ~ 6.26825 | 16.80425 ~ 16.80475 | 240 ~ 285             | 2483.5 ~ 2500                | 13.25 ~ 13.4 | Above 38.6    |
| 6.31175 ~ 6.31225 | 25.5 ~ 25.67        | 322 ~ 335.4           | 2655 ~ 2900                  |              |               |
| 8.291 ~ 8.294     | 37.5 ~ 38.25        | 399.90 ~ 410          | 3260 ~ 3267                  |              |               |
| 8.362 ~ 8.366     | 73 ~ 74.6           | 608 ~ 614             | 3332 ~ 3339                  |              |               |
| 8.37625 ~ 8.38675 | 74.8 ~ 75.2         | 960 ~ 1240            | 3345.8 ~ 3358<br>3600 ~ 4400 |              |               |

▪ FCC Part 15.205(b) : The field strength of emissions appearing within these frequency bands shall not exceed the limits shown in §15.209. At frequencies equal to or less than 1000 MHz, compliance with the limits in §15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000 MHz, compliance with the emission limits in §15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in §15.35 apply to these measurements.



**FCC §15.407 (b)**

(b) Undesirable emission limits. Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

- (1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (3) 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 e.i.r.p. of -27 dBm/MHz.
- (4) For transmitters operating solely in the 5.850-5.895 GHz band or operating on a channel that spans across 5.725-5.895 GHz:

(iii) For a client device or indoor access point or subordinate device, all emissions below 5.725 GHz shall not exceed an e.i.r.p. of -27 dBm/MHz at 5.65 GHz increasing linearly to 10 dBm/MHz at 5.7 GHz, and from 5.7 GHz increasing linearly to a level of 15.6 dBm/MHz at 5.72 GHz, and from 5.72 GHz increasing linearly to a level of 27 dBm/MHz at 5.725 GHz

- (5) The emission measurements shall be performed using a minimum resolution bandwidth of 1 MHz. A lower resolution bandwidth may be employed near the band edge, when necessary,  
provided the measured energy is integrated to show the total power over 1 MHz.
- (6) Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in §15.209. Further, any U-NII devices using an AC power line are required to comply also with the conducted limits set forth in §15.207.
- (7) The provisions of §15.205 apply to intentional radiators operating under this section.
- (8) When measuring the emission limits, the nominal carrier frequency shall be adjusted as close to the upper and lower frequency band edges as the design of the equipment permits.

**Note**

- Limit translation to field strength level (FCC §15.407)

$$E[\text{dBuV/m}] = \text{EIRP}[\text{dBm}] + 95.2 = -27\text{dBm} + 95.2 = 68.2\text{dBuV/m}$$

$$E[\text{dBuV/m}] = \text{EIRP}[\text{dBm}] + 95.2 = -17\text{dBm} + 95.2 = 78.2\text{dBuV/m}$$

## **TEST PROCEDURE**

The EUT is placed on a non-conducting table 80 cm above the ground plane for below 1GHz and 150 cm for above 1GHz. The antenna to EUT distance is 3 meters. The EUT is configured in accordance with ANSI C63.10. The EUT is set to transmit in a continuous mode.

For measurements below 1 GHz the resolution bandwidth is set to 100 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

Reference to KDB 789033 D02 v02r01 UNII part G) 6) c) Method AD:

For measurements above 1 GHz the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 3 MHz for peak measurements and add duty cycle factor to the reading offset for average measurements. In UNII-4, unwanted emissions outside of restricted bands are measured with an RMS detector.

Pre-scans to detect harmonic and spurious emissions, the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 30 kHz for peak measurements.

The spectrum from 1GHz to 40 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in each applicable band.  
(From 30MHz to 1GHz, test was performed with the EUT set to transmit at the channel with highest output power)

The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized in both the vertical and the horizontal positions.

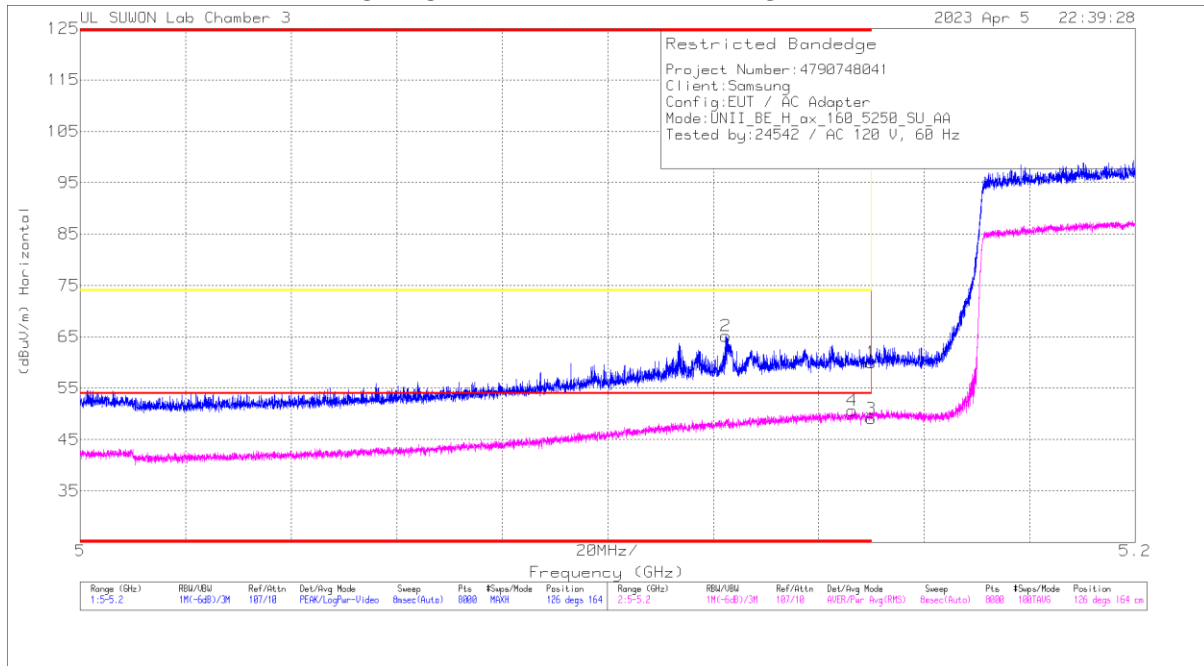
Note : Emission was pre-scanned from 9kHz to 30MHz; No emissions were detected which was at least 20dB below the specification limit (consider distance correction factor).  
Per FCC part 15.31(o), test results were not reported.

Although these tests were performed other than open field test site, adequate comparison measurements were confirmed against 30 m open area test site.  
Therefore sufficient tests were made to demonstrate that the alternative site produces results that correlate with the one of tests made in an open field based on KDB 414788.

### 11.1. TX ABOVE 1GHz 2Tx MODE IN THE 5.2GHz BAND

**BANDEDGE (WORST CASE: 802.11ax HE160 / 5250 MHz Lower)**

#### HORIZONTAL PEAK AND AVERAGE DATA



#### Trace Markers

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117_00218957 | 10dB_ATT(dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Acimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|---------------|--------------|--------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1      | * 5.14999       | 46.42                | Pk  | 34.4          | -20.8        | 0            | 60.02                      | -                      | -           | 74                  | -13.98         | 126            | 164         | H        |
| 2      | * 5.12239       | 51.65                | Pk  | 34.3          | -20.8        | 0            | 65.15                      | -                      | -           | 74                  | -8.85          | 126            | 164         | H        |
| 3      | * 5.14999       | 35.45                | RMS | 34.4          | -20.8        | 0            | 49.05                      | 54                     | -4.95       | -                   | -              | 126            | 164         | H        |
| 4      | * 5.14632       | 37.05                | RMS | 34.4          | -20.8        | 0            | 50.65                      | 54                     | -3.35       | -                   | -              | 126            | 164         | H        |

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

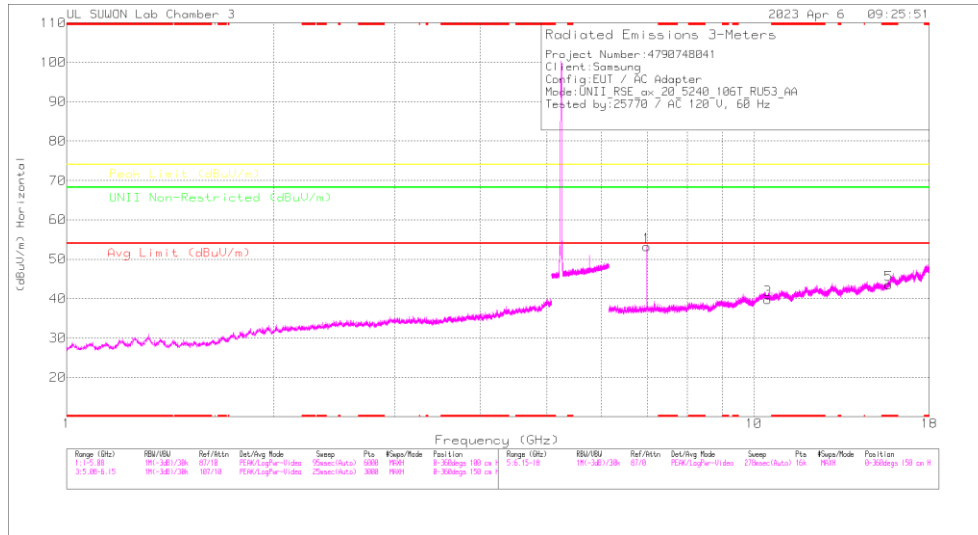
RMS - RMS detection

**BANDEDGE TEST DATA**

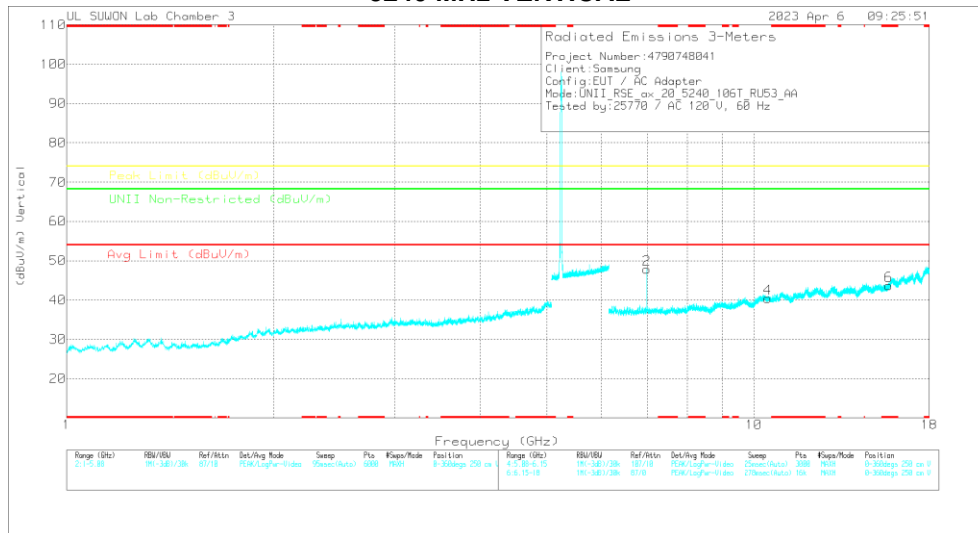
| Mode              | Freq. [MHz] | Antenna | Frequency [GHz] | Reading [dBuV] | Detector Mode | ANT Factor | Loss [dB] | DC Corr [dB] | Result [dBuV/m] | AV Limit [dBuV/m] | AV Margin [dB] | PK Limit [dBuV/m] | PK Margin [dB] | Azimuth [Degs] | Height [cm] | Polarity |
|-------------------|-------------|---------|-----------------|----------------|---------------|------------|-----------|--------------|-----------------|-------------------|----------------|-------------------|----------------|----------------|-------------|----------|
| 802.11a           | 5180        | MIMO    | * 5.14999       | 38.86          | Pk            | 34.40      | -20.80    | 0.00         | 52.46           | -                 | -              | 74.00             | -21.54         | 119            | 100         | H        |
|                   |             |         | * 5.11189       | 41.13          | Pk            | 34.30      | -20.80    | 0.00         | 54.63           | -                 | -              | 74.00             | -19.37         | 119            | 100         | H        |
|                   |             |         | * 5.14999       | 27.66          | RMS           | 34.40      | -20.80    | 0.15         | 41.41           | 54.00             | -12.59         | -                 | -              | 119            | 100         | H        |
|                   |             |         | * 5.00525       | 29.66          | RMS           | 34.30      | -20.90    | 0.15         | 43.21           | 54.00             | -10.79         | -                 | -              | 119            | 100         | H        |
|                   |             |         | * 5.14999       | 39.82          | Pk            | 34.40      | -20.80    | 0.00         | 53.42           | -                 | -              | 74.00             | -20.58         | 191            | 305         | V        |
|                   |             |         | * 5.04451       | 40.85          | Pk            | 34.30      | -20.80    | 0.00         | 54.35           | -                 | -              | 74.00             | -19.65         | 191            | 305         | V        |
|                   |             |         | * 5.14999       | 28.07          | RMS           | 34.40      | -20.80    | 0.15         | 41.82           | 54.00             | -12.18         | -                 | -              | 191            | 305         | V        |
|                   |             |         | * 5.00533       | 29.41          | RMS           | 34.30      | -20.90    | 0.15         | 42.96           | 54.00             | -11.04         | -                 | -              | 191            | 305         | V        |
| 802.11n (HT20)    | 5180        | MIMO    | * 5.14999       | 44.53          | Pk            | 34.40      | -20.80    | 0.00         | 58.13           | -                 | -              | 74.00             | -15.87         | 126            | 100         | H        |
|                   |             |         | * 5.14777       | 45.83          | Pk            | 34.40      | -20.80    | 0.00         | 59.43           | -                 | -              | 74.00             | -14.57         | 126            | 100         | H        |
|                   |             |         | * 5.14999       | 30.83          | RMS           | 34.40      | -20.80    | 0.00         | 44.43           | 54.00             | -9.57          | -                 | -              | 126            | 100         | H        |
|                   |             |         | * 5.14957       | 31.73          | RMS           | 34.40      | -20.80    | 0.00         | 45.33           | 54.00             | -8.67          | -                 | -              | 126            | 100         | H        |
|                   |             |         | * 5.14999       | 44.36          | Pk            | 34.40      | -20.80    | 0.00         | 57.96           | -                 | -              | 74.00             | -16.04         | 188            | 235         | V        |
|                   |             |         | * 5.14874       | 46.04          | Pk            | 34.40      | -20.80    | 0.00         | 59.64           | -                 | -              | 74.00             | -14.36         | 188            | 235         | V        |
|                   |             |         | * 5.14999       | 31.62          | RMS           | 34.40      | -20.80    | 0.00         | 45.22           | 54.00             | -8.78          | -                 | -              | 188            | 235         | V        |
|                   |             |         | * 5.14967       | 32.18          | RMS           | 34.40      | -20.80    | 0.00         | 45.78           | 54.00             | -8.22          | -                 | -              | 188            | 235         | V        |
| 802.11n (HT40)    | 5190        | MIMO    | * 5.14999       | 44.31          | Pk            | 34.40      | -20.80    | 0.00         | 57.91           | -                 | -              | 74.00             | -16.09         | 124            | 107         | H        |
|                   |             |         | * 5.14567       | 50.61          | Pk            | 34.40      | -20.80    | 0.00         | 64.21           | -                 | -              | 74.00             | -9.79          | 124            | 107         | H        |
|                   |             |         | * 5.14999       | 33.21          | RMS           | 34.40      | -20.80    | 0.00         | 46.81           | 54.00             | -7.19          | -                 | -              | 124            | 107         | H        |
|                   |             |         | * 5.14592       | 36.66          | RMS           | 34.40      | -20.80    | 0.00         | 50.26           | 54.00             | -3.74          | -                 | -              | 124            | 107         | H        |
|                   |             |         | * 5.14999       | 47.03          | Pk            | 34.40      | -20.80    | 0.00         | 60.63           | -                 | -              | 74.00             | -13.37         | 233            | 100         | V        |
|                   |             |         | * 5.14934       | 51.09          | Pk            | 34.40      | -20.80    | 0.00         | 64.69           | -                 | -              | 74.00             | -9.31          | 233            | 100         | V        |
|                   |             |         | * 5.14999       | 35.33          | RMS           | 34.40      | -20.80    | 0.00         | 48.93           | 54.00             | -5.07          | -                 | -              | 233            | 100         | V        |
|                   |             |         | * 5.14987       | 36.02          | RMS           | 34.40      | -20.80    | 0.00         | 49.62           | 54.00             | -4.38          | -                 | -              | 233            | 100         | V        |
| 802.11ac (VHT80)  | 5210        | MIMO    | * 5.14999       | 43.16          | Pk            | 34.40      | -20.80    | 0.00         | 56.76           | -                 | -              | 74.00             | -17.24         | 115            | 185         | H        |
|                   |             |         | * 5.14752       | 46.46          | Pk            | 34.40      | -20.80    | 0.00         | 60.06           | -                 | -              | 74.00             | -13.94         | 115            | 185         | H        |
|                   |             |         | * 5.14999       | 32.67          | RMS           | 34.40      | -20.80    | 0.12         | 46.39           | 54.00             | -7.61          | -                 | -              | 115            | 185         | H        |
|                   |             |         | * 5.14747       | 33.50          | RMS           | 34.40      | -20.80    | 0.12         | 47.22           | 54.00             | -6.78          | -                 | -              | 115            | 185         | H        |
|                   |             |         | * 5.14999       | 39.86          | Pk            | 34.40      | -20.80    | 0.00         | 53.46           | -                 | -              | 74.00             | -20.54         | 111            | 187         | V        |
|                   |             |         | * 5.13764       | 42.95          | Pk            | 34.40      | -20.70    | 0.00         | 56.65           | -                 | -              | 74.00             | -17.35         | 111            | 187         | V        |
|                   |             |         | * 5.14999       | 28.58          | RMS           | 34.40      | -20.80    | 0.12         | 42.30           | 54.00             | -11.70         | -                 | -              | 111            | 187         | V        |
|                   |             |         | * 5.14649       | 29.99          | RMS           | 34.40      | -20.80    | 0.12         | 43.71           | 54.00             | -10.29         | -                 | -              | 111            | 187         | V        |
| 802.11ac (VHT160) | 5250 Lower  | MIMO    | * 5.14999       | 42.90          | Pk            | 34.40      | -20.80    | 0.00         | 56.50           | -                 | -              | 74.00             | -17.50         | 115            | 172         | H        |
|                   |             |         | * 5.11301       | 46.85          | Pk            | 34.30      | -20.80    | 0.00         | 60.35           | -                 | -              | 74.00             | -13.65         | 115            | 172         | H        |
|                   |             |         | * 5.14999       | 32.59          | RMS           | 34.40      | -20.80    | 0.12         | 46.31           | 54.00             | -7.69          | -                 | -              | 115            | 172         | H        |
|                   |             |         | * 5.14362       | 33.28          | RMS           | 34.40      | -20.80    | 0.12         | 47.00           | 54.00             | -7.00          | -                 | -              | 115            | 172         | H        |
|                   |             |         | * 5.14999       | 41.41          | Pk            | 34.40      | -20.80    | 0.00         | 55.01           | -                 | -              | 74.00             | -18.99         | 167            | 235         | V        |
|                   |             |         | * 5.11619       | 44.82          | Pk            | 34.30      | -20.80    | 0.00         | 58.32           | -                 | -              | 74.00             | -15.68         | 167            | 235         | V        |
|                   |             |         | * 5.14999       | 31.09          | RMS           | 34.40      | -20.80    | 0.12         | 44.81           | 54.00             | -9.19          | -                 | -              | 167            | 235         | V        |
|                   |             |         | * 5.14724       | 31.91          | RMS           | 34.40      | -20.80    | 0.12         | 45.63           | 54.00             | -8.37          | -                 | -              | 167            | 235         | V        |
| 802.11ax (HE20)   | 5180        | MIMO    | * 5.14999       | 47.33          | Pk            | 34.40      | -20.80    | 0.00         | 60.93           | -                 | -              | 74.00             | -13.07         | 118            | 185         | H        |
|                   |             |         | * 5.14974       | 50.81          | Pk            | 34.40      | -20.80    | 0.00         | 64.41           | -                 | -              | 74.00             | -9.59          | 118            | 185         | H        |
|                   |             |         | * 5.14999       | 31.26          | RMS           | 34.40      | -20.80    | 0.00         | 44.86           | 54.00             | -9.14          | -                 | -              | 118            | 185         | H        |
|                   |             |         | * 5.14954       | 31.90          | RMS           | 34.40      | -20.80    | 0.00         | 45.50           | 54.00             | -8.50          | -                 | -              | 118            | 185         | H        |
|                   |             |         | * 5.14999       | 44.51          | Pk            | 34.40      | -20.80    | 0.00         | 58.11           | -                 | -              | 74.00             | -15.89         | 203            | 100         | V        |
|                   |             |         | * 5.14972       | 47.88          | Pk            | 34.40      | -20.80    | 0.00         | 61.48           | -                 | -              | 74.00             | -12.52         | 203            | 100         | V        |
|                   |             |         | * 5.14999       | 29.25          | RMS           | 34.40      | -20.80    | 0.00         | 42.85           | 54.00             | -11.15         | -                 | -              | 203            | 100         | V        |
|                   |             |         | * 5.14942       | 30.54          | RMS           | 34.40      | -20.80    | 0.00         | 44.14           | 54.00             | -9.86          | -                 | -              | 203            | 100         | V        |
| 802.11ax (HE40)   | 5190        | MIMO    | * 5.14999       | 42.90          | Pk            | 34.40      | -20.80    | 0.00         | 56.50           | -                 | -              | 74.00             | -17.50         | 121            | 194         | H        |
|                   |             |         | * 5.14874       | 52.60          | Pk            | 34.40      | -20.80    | 0.00         | 66.20           | -                 | -              | 74.00             | -7.80          | 121            | 194         | H        |
|                   |             |         | * 5.14999       | 32.81          | RMS           | 34.40      | -20.80    | 0.00         | 46.41           | 54.00             | -7.59          | -                 | -              | 121            | 194         | H        |
|                   |             |         | * 5.14989       | 32.86          | RMS           | 34.40      | -20.80    | 0.00         | 46.46           | 54.00             | -7.54          | -                 | -              | 121            | 194         | H        |
|                   |             |         | * 5.14999       | 41.77          | Pk            | 34.40      | -20.80    | 0.00         | 55.37           | -                 | -              | 74.00             | -18.63         | 203            | 100         | V        |
|                   |             |         | * 5.14647       | 46.82          | Pk            | 34.40      | -20.80    | 0.00         | 60.42           | -                 | -              | 74.00             | -13.58         | 203            | 100         | V        |
|                   |             |         | * 5.14999       | 31.27          | RMS           | 34.40      | -20.80    | 0.00         | 44.87           | 54.00             | -9.13          | -                 | -              | 203            | 100         | V        |
|                   |             |         | * 5.14924       | 31.30          | RMS           | 34.40      | -20.80    | 0.00         | 44.90           | 54.00             | -9.10          | -                 | -              | 203            | 100         | V        |
| 802.11ax (HE80)   | 5210        | MIMO    | * 5.14999       | 45.73          | Pk            | 34.40      | -20.80    | 0.00         | 59.33           | -                 | -              | 74.00             | -14.67         | 124            | 186         | H        |
|                   |             |         | * 5.13622       | 50.48          | Pk            | 34.40      | -20.70    | 0.00         | 64.18           | -                 | -              | 74.00             | -9.82          | 124            | 186         | H        |
|                   |             |         | * 5.14999       | 34.40          | RMS           | 34.40      | -20.80    | 0.00         | 48.00           | 54.00             | -6.00          | -                 | -              | 124            | 186         | H        |
|                   |             |         | * 5.14814       | 35.95          | RMS           | 34.40      | -20.80    | 0.00         | 49.55           | 54.00             | -4.45          | -                 | -              | 124            | 186         | H        |
|                   |             |         | * 5.14999       | 42.82          | Pk            | 34.40      | -20.80    | 0.00         | 56.42           | -                 | -              | 74.00             | -17.58         | 202            | 100         | V        |
|                   |             |         | * 5.14532       | 46.81          | Pk            | 34.40      | -20.80    | 0.00         | 60.41           | -                 | -              | 74.00             | -13.59         | 202            | 100         | V        |
|                   |             |         | * 5.14999       | 30.66          | RMS           | 34.40      | -20.80    | 0.00         | 44.26           | 54.00             | -9.74          | -                 | -              | 202            | 100         | V        |
|                   |             |         | * 5.14927       | 32.03          | RMS           | 34.40      | -20.80    | 0.00         | 45.63           | 54.00             | -8.37          | -                 | -              | 202            | 100         | V        |
| 802.11ax (HE160)  | 5250 Lower  | MIMO    | * 5.14999       | 46.42          | Pk            | 34.40      | -20.80    | 0.00         | 60.02           | -                 | -              | 74.00             | -13.98         | 126            | 164         | H        |
|                   |             |         | * 5.12239       | 51.65          | Pk            | 34.30      | -20.80    | 0.00         | 65.15           | -                 | -              | 74.00             | -8.85          | 126            | 164         | H        |
|                   |             |         | * 5.14999       | 35.45          | RMS           | 34.40      | -20.80    | 0.00         | 49.05           | 54.00             | -4.95          | -                 | -              | 126            | 164         | H        |
|                   |             |         | * 5.14632       | 37.05          | RMS           | 34.40      | -20.80    | 0.00         | 50.65           | 54.00             | -3.35          | -                 | -              | 126            | 164         | H        |
|                   |             |         | * 5.14999       | 46.11          | Pk            | 34.40      | -20.80    | 0.00         | 59.71           | -                 | -              | 74.00             | -14.29         | 205            | 100         | V        |
|                   |             |         | * 5.12589       | 47.36          | Pk            | 34.40      | -20.80    | 0.00         | 60.96           | -                 | -              | 74.00             | -13.04         | 205            | 100         | V        |
|                   |             |         | * 5.14999       | 33.29          | RMS           | 34.40      | -20.80    | 0.00         | 46.89           | 54.00             | -7.11          | -                 | -              | 205            | 100         | V        |
|                   |             |         | * 5.14439       | 34.37          | RMS           | 34.40      | -20.80    | 0.00         | 47.97           | 54.00             | -6.03          | -                 | -              | 205            | 100         | V        |

Note1. Pk - Peak detector, RMS - RMS detector  
 Note2. \* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

**HARMONICS AND SPURIOUS EMISSIONS(WORST CASE: 802.11ax HE20 53RU / 5240 MHz)**  
**5240 MHz HORIZONTAL**



**5240 MHz VERTICAL**



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

**5240 MHz DATA**

**Radiated Emissions**

| Frequency (GHz) | Meas Reading (dBuV) | Det  | 317_0021897 | 60Hz HF(dB) | DC Corr (dB) | Corrected Reading (dBuV) | Avg Limit (dBuV/m) | Meas (dB) | Peak Limit (dBuV/m) | Meas (dB) | UNII Non-Restricted (dBuV/m) | Meas (dB) | Azimuth (Deg) | Height (cm) | Polarity |
|-----------------|---------------------|------|-------------|-------------|--------------|--------------------------|--------------------|-----------|---------------------|-----------|------------------------------|-----------|---------------|-------------|----------|
| 6.98661         | 46.51               | PK-U | 36          | -26         | 0            | 56.51                    | -                  | -         | -                   | -         | 68.2                         | -11.69    | 214           | 168         | H        |
| 6.98656         | 40.52               | PK-U | 36          | -26         | 0            | 50.52                    | -                  | -         | -                   | -         | 68.2                         | -17.68    | 135           | 100         | V        |
| 10.47574        | 33.03               | PK-U | 37.6        | -20.9       | 0            | 49.73                    | -                  | -         | -                   | -         | 68.2                         | -18.47    | 0             | 100         | H        |
| 10.47792        | 33.59               | PK-U | 37.6        | -21         | 0            | 50.19                    | -                  | -         | -                   | -         | 68.2                         | -18.01    | 0             | 100         | V        |
| * 15.71924      | 34.44               | PK-U | 40.4        | -21.2       | 0            | 53.64                    | -                  | -         | 74                  | -20.36    | -                            | -         | 0             | 100         | H        |
| * 15.72083      | 34.01               | PK-U | 40.4        | -21.2       | 0            | 53.21                    | -                  | -         | 74                  | -20.79    | -                            | -         | 0             | 100         | V        |

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band  
 PK-U - U-NII: Maximum Peak

**HARMONICS AND SPURIOUS EMISSIONS TEST DATA**

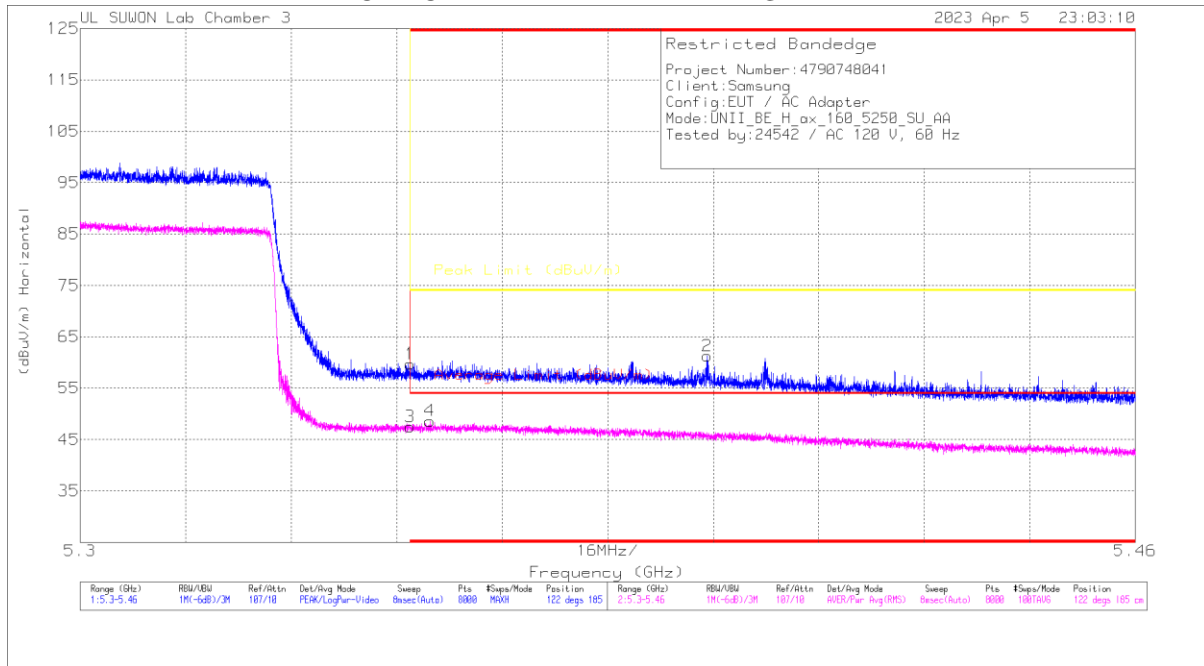
| Mode                 | Freq. [MHz] | Antenna | Frequency [GHz] | Reading [dBuV] | Detector Mode | ANT Factor | Loss [dB] | DC Corr [dB] | Result [dBuV/m] | AV Limit [dBuV/m] | AV Margin [dB] | PK Limit [dBuV/m] | PK Margin [dB] | Non-Restricted [dBuV/m] | Margin [dB] | Azimuth [Degs] | Height [cm] | Polarity |   |
|----------------------|-------------|---------|-----------------|----------------|---------------|------------|-----------|--------------|-----------------|-------------------|----------------|-------------------|----------------|-------------------------|-------------|----------------|-------------|----------|---|
| 802.11a              | 5180        | MIMO    | 6.907           | 46.10          | PK-U          | 36.00      | -26.60    | 0.00         | 55.50           | -                 | -              | -                 | -              | 68.20                   | -12.70      | 190            | 143         | H        |   |
|                      |             |         | 6.907           | 42.74          | PK-U          | 36.00      | -26.60    | 0.00         | 52.14           | -                 | -              | -                 | -              | -                       | 68.20       | -16.06         | 190         | 175      | V |
|                      |             |         | 10.359          | 34.08          | PK-U          | 37.50      | -20.80    | 0.00         | 50.78           | -                 | -              | -                 | -              | -                       | 68.20       | -17.42         | 0           | 100      | H |
|                      |             |         | 10.359          | 33.71          | PK-U          | 37.50      | -20.80    | 0.00         | 50.41           | -                 | -              | -                 | -              | -                       | 68.20       | -17.79         | 0           | 100      | V |
|                      |             |         | * 15.5411       | 34.27          | PK-U          | 40.10      | -21.70    | 0.00         | 52.67           | -                 | -              | 74.00             | -21.33         | -                       | -           | -              | 0           | 100      | H |
|                      | * 15.53989  | 34.23   | PK-U            | 40.10          | -21.70        | 0.00       | 52.63     | -            | -               | 74.00             | -21.37         | -                 | -              | -                       | 0           | 100            | V           |          |   |
|                      | 5200        | MIMO    | 6.933           | 45.82          | PK-U          | 36.00      | -26.50    | 0.00         | 55.32           | -                 | -              | -                 | -              | 68.20                   | -12.88      | 190            | 150         | H        |   |
|                      |             |         | 6.933           | 42.20          | PK-U          | 36.00      | -26.50    | 0.00         | 51.70           | -                 | -              | -                 | -              | 68.20                   | -16.50      | 191            | 165         | V        |   |
|                      |             |         | 10.398          | 33.97          | PK-U          | 37.50      | -20.90    | 0.00         | 50.57           | -                 | -              | -                 | -              | 68.20                   | -17.63      | 0              | 100         | H        |   |
|                      |             |         | 10.398          | 33.69          | PK-U          | 37.50      | -20.90    | 0.00         | 50.29           | -                 | -              | -                 | -              | 68.20                   | -17.91      | 0              | 100         | V        |   |
|                      |             |         | * 15.59794      | 33.30          | PK-U          | 40.20      | -21.50    | 0.00         | 52.00           | -                 | -              | 74.00             | -22.00         | -                       | -           | -              | 0           | 100      | H |
|                      | * 15.59971  | 33.96   | PK-U            | 40.20          | -21.50        | 0.00       | 52.66     | -            | -               | 74.00             | -21.34         | -                 | -              | -                       | 0           | 100            | V           |          |   |
|                      | 5240        | MIMO    | 6.987           | 45.41          | PK-U          | 36.00      | -26.00    | 0.00         | 55.41           | -                 | -              | -                 | -              | 68.20                   | -12.79      | 217            | 179         | H        |   |
|                      |             |         | 6.987           | 38.83          | PK-U          | 36.00      | -26.00    | 0.00         | 48.83           | -                 | -              | -                 | -              | 68.20                   | -19.37      | 133            | 108         | V        |   |
|                      |             |         | 10.476          | 33.45          | PK-U          | 37.60      | -21.00    | 0.00         | 50.05           | -                 | -              | -                 | -              | 68.20                   | -18.15      | 0              | 100         | H        |   |
| 10.484               |             |         | 32.93           | PK-U           | 37.60         | -20.90     | 0.00      | 49.63        | -               | -                 | -              | -                 | 68.20          | -18.57                  | 0           | 100            | V           |          |   |
| * 15.71752           |             |         | 33.86           | PK-U           | 40.40         | -21.30     | 0.00      | 52.96        | -               | -                 | 74.00          | -21.04            | -              | -                       | -           | 0              | 100         | H        |   |
| * 15.72135           | 33.59       | PK-U    | 40.40           | -21.30         | 0.00          | 52.69      | -         | -            | 74.00           | -21.31            | -              | -                 | -              | 0                       | 100         | V              |             |          |   |
| 802.11n HT20         | 5180        | MIMO    | 6.907           | 46.09          | PK-U          | 36.00      | -26.60    | 0.00         | 55.49           | -                 | -              | -                 | -              | 68.20                   | -12.71      | 208            | 169         | H        |   |
|                      |             |         | 6.907           | 41.53          | PK-U          | 36.00      | -26.60    | 0.00         | 50.93           | -                 | -              | -                 | -              | 68.20                   | -17.27      | 196            | 282         | V        |   |
|                      |             |         | 10.354          | 34.13          | PK-U          | 37.50      | -20.80    | 0.00         | 50.83           | -                 | -              | -                 | -              | 68.20                   | -17.37      | 0              | 100         | H        |   |
|                      |             |         | 10.366          | 34.42          | PK-U          | 37.50      | -20.60    | 0.00         | 51.32           | -                 | -              | -                 | -              | 68.20                   | -16.88      | 0              | 100         | V        |   |
|                      |             |         | * 15.54014      | 33.89          | PK-U          | 40.10      | -21.70    | 0.00         | 52.29           | -                 | -              | 74.00             | -21.71         | -                       | -           | -              | 0           | 100      | H |
| * 15.53814           | 34.03       | PK-U    | 40.10           | -21.70         | 0.00          | 52.43      | -         | -            | 74.00           | -21.57            | -              | -                 | -              | 0                       | 100         | V              |             |          |   |
| 802.11n HT40         | 5190        | MIMO    | 6.920           | 45.45          | PK-U          | 36.00      | -26.60    | 0.00         | 54.85           | -                 | -              | -                 | -              | 68.20                   | -13.35      | 227            | 108         | H        |   |
|                      |             |         | 6.920           | 40.21          | PK-U          | 36.00      | -26.60    | 0.00         | 49.61           | -                 | -              | -                 | -              | 68.20                   | -18.59      | 138            | 103         | V        |   |
|                      |             |         | 10.379          | 33.72          | PK-U          | 37.50      | -20.70    | 0.00         | 50.52           | -                 | -              | -                 | -              | 68.20                   | -17.58      | 0              | 100         | H        |   |
|                      |             |         | 10.381          | 33.99          | PK-U          | 37.50      | -20.70    | 0.00         | 50.79           | -                 | -              | -                 | -              | 68.20                   | -17.41      | 0              | 100         | V        |   |
|                      |             |         | * 15.5723       | 33.33          | PK-U          | 40.10      | -21.60    | 0.00         | 51.83           | -                 | -              | 74.00             | -22.17         | -                       | -           | -              | 0           | 100      | H |
| * 15.5693            | 33.63       | PK-U    | 40.10           | -21.60         | 0.00          | 52.13      | -         | -            | 74.00           | -21.87            | -              | -                 | -              | 0                       | 100         | V              |             |          |   |
| 802.11ac VHT80       | 5210        | MIMO    | 6.947           | 45.21          | PK-U          | 36.00      | -26.30    | 0.00         | 54.91           | -                 | -              | -                 | -              | 68.20                   | -13.29      | 226            | 108         | H        |   |
|                      |             |         | 6.946           | 40.83          | PK-U          | 36.00      | -26.30    | 0.00         | 50.53           | -                 | -              | -                 | -              | 68.20                   | -17.67      | 138            | 101         | V        |   |
|                      |             |         | 10.421          | 34.85          | PK-U          | 37.50      | -21.00    | 0.00         | 51.35           | -                 | -              | -                 | -              | 68.20                   | -16.85      | 0              | 100         | H        |   |
|                      |             |         | 10.420          | 33.69          | PK-U          | 37.50      | -21.10    | 0.00         | 50.09           | -                 | -              | -                 | -              | 68.20                   | -18.11      | 0              | 100         | V        |   |
|                      |             |         | * 15.63151      | 33.35          | PK-U          | 40.30      | -21.50    | 0.00         | 52.15           | -                 | -              | 74.00             | -21.85         | -                       | -           | -              | 0           | 100      | H |
| * 15.63253           | 32.96       | PK-U    | 40.30           | -21.60         | 0.00          | 51.66      | -         | -            | 74.00           | -22.34            | -              | -                 | -              | 0                       | 100         | V              |             |          |   |
| 802.11ac VHT160      | 5250        | MIMO    | 7.000           | 43.78          | PK-U          | 36.00      | -25.90    | 0.00         | 53.88           | -                 | -              | -                 | -              | 68.20                   | -14.32      | 211            | 107         | H        |   |
|                      |             |         | 7.000           | 40.51          | PK-U          | 36.00      | -25.90    | 0.00         | 50.61           | -                 | -              | -                 | -              | 68.20                   | -17.59      | 138            | 100         | V        |   |
|                      |             |         | 10.499          | 32.91          | PK-U          | 37.60      | -20.70    | 0.00         | 49.81           | -                 | -              | -                 | -              | 68.20                   | -18.39      | 0              | 100         | H        |   |
|                      |             |         | 10.500          | 33.12          | PK-U          | 37.60      | -20.70    | 0.00         | 50.02           | -                 | -              | -                 | -              | 68.20                   | -18.18      | 0              | 100         | V        |   |
|                      |             |         | * 15.75265      | 33.42          | PK-U          | 40.50      | -21.10    | 0.00         | 52.82           | -                 | -              | 74.00             | -21.18         | -                       | -           | -              | 0           | 100      | H |
| * 15.75123           | 33.36       | PK-U    | 40.50           | -21.10         | 0.00          | 52.76      | -         | -            | 74.00           | -21.24            | -              | -                 | -              | 0                       | 100         | V              |             |          |   |
| 802.11ax (HE20) 54RU | 5180        | MIMO    | 6.907           | 45.64          | PK-U          | 36.00      | -26.60    | 0.00         | 55.04           | -                 | -              | -                 | -              | 68.20                   | -13.16      | 177            | 116         | H        |   |
|                      |             |         | 6.907           | 40.95          | PK-U          | 36.00      | -26.60    | 0.00         | 50.35           | -                 | -              | -                 | -              | 68.20                   | -17.85      | 136            | 168         | V        |   |
|                      |             |         | 10.362          | 33.74          | PK-U          | 37.50      | -20.70    | 0.00         | 50.54           | -                 | -              | -                 | -              | 68.20                   | -17.66      | 0              | 100         | H        |   |
|                      |             |         | 10.360          | 33.56          | PK-U          | 37.50      | -20.80    | 0.00         | 50.26           | -                 | -              | -                 | -              | 68.20                   | -17.94      | 0              | 100         | V        |   |
|                      |             |         | * 15.54256      | 34.18          | PK-U          | 40.10      | -21.70    | 0.00         | 52.58           | -                 | -              | 74.00             | -21.42         | -                       | -           | -              | 0           | 100      | H |
| * 15.54256           | 34.38       | PK-U    | 40.10           | -21.70         | 0.00          | 52.78      | -         | -            | 74.00           | -21.22            | -              | -                 | -              | 0                       | 100         | V              |             |          |   |
| 802.11ax (HE20) 54RU | 5200        | MIMO    | 6.933           | 46.71          | PK-U          | 36.00      | -26.50    | 0.00         | 56.21           | -                 | -              | -                 | -              | 68.20                   | -11.99      | 180            | 161         | H        |   |
|                      |             |         | 6.933           | 40.67          | PK-U          | 36.00      | -26.50    | 0.00         | 50.17           | -                 | -              | -                 | -              | 68.20                   | -18.03      | 132            | 172         | V        |   |
|                      |             |         | 10.402          | 34.40          | PK-U          | 37.50      | -21.00    | 0.00         | 50.90           | -                 | -              | -                 | -              | 68.20                   | -17.30      | 0              | 100         | H        |   |
|                      |             |         | 10.401          | 34.30          | PK-U          | 37.50      | -21.00    | 0.00         | 50.80           | -                 | -              | -                 | -              | 68.20                   | -17.40      | 0              | 100         | V        |   |
|                      |             |         | * 15.59937      | 33.57          | PK-U          | 40.20      | -21.50    | 0.00         | 52.27           | -                 | -              | 74.00             | -21.73         | -                       | -           | -              | 0           | 100      | H |
| * 15.60128           | 33.46       | PK-U    | 40.20           | -21.50         | 0.00          | 52.16      | -         | -            | 74.00           | -21.84            | -              | -                 | -              | 0                       | 100         | V              |             |          |   |
| 802.11ax (HE20) 53RU | 5240        | MIMO    | 6.987           | 46.51          | PK-U          | 36.00      | -26.00    | 0.00         | 56.51           | -                 | -              | -                 | -              | 68.20                   | -11.69      | 214            | 168         | H        |   |
|                      |             |         | 6.987           | 40.52          | PK-U          | 36.00      | -26.00    | 0.00         | 50.52           | -                 | -              | -                 | -              | 68.20                   | -17.68      | 135            | 100         | V        |   |
|                      |             |         | 10.480          | 33.03          | PK-U          | 37.60      | -20.90    | 0.00         | 49.73           | -                 | -              | -                 | -              | 68.20                   | -18.47      | 0              | 100         | H        |   |
|                      |             |         | 10.478          | 33.59          | PK-U          | 37.60      | -21.00    | 0.00         | 50.19           | -                 | -              | -                 | -              | 68.20                   | -18.01      | 0              | 100         | V        |   |
|                      |             |         | * 15.71924      | 34.44          | PK-U          | 40.40      | -21.20    | 0.00         | 53.64           | -                 | -              | 74.00             | -20.36         | -                       | -           | -              | 0           | 100      | H |
| * 15.72083           | 34.01       | PK-U    | 40.40           | -21.20         | 0.00          | 53.21      | -         | -            | 74.00           | -20.79            | -              | -                 | -              | 0                       | 100         | V              |             |          |   |

Note1. PK-U - U-NII: Maximum Peak  
 Note2. \* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

## 11.2. TX ABOVE 1GHz 2Tx MODE IN THE 5.3GHz BAND

### BANDEDGE (WORST CASE: 802.11ax HE160 / 5250 MHz Upper )

#### HORIZONTAL PEAK AND AVERAGE DATA



#### Trace Markers

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117_00218957 | 10dB_ATT(dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Average Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|---------------|--------------|--------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1      | * 5.35001       | 45.51                | Pk  | 34.7          | -20.5        | 0            | 59.71                      | -                      | -           | 74                  | -14.29         | 122            | 185         | H        |
| 2      | * 5.39507       | 46.87                | Pk  | 34.8          | -20.4        | 0            | 61.27                      | -                      | -           | 74                  | -12.73         | 122            | 185         | H        |
| 3      | * 5.35001       | 33.29                | RMS | 34.7          | -20.5        | 0            | 47.49                      | 54                     | -6.51       | -                   | -              | 122            | 185         | H        |
| 4      | * 5.35303       | 34.43                | RMS | 34.7          | -20.5        | 0            | 48.63                      | 54                     | -5.37       | -                   | -              | 122            | 185         | H        |

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

**BANDEDGE TEST DATA**

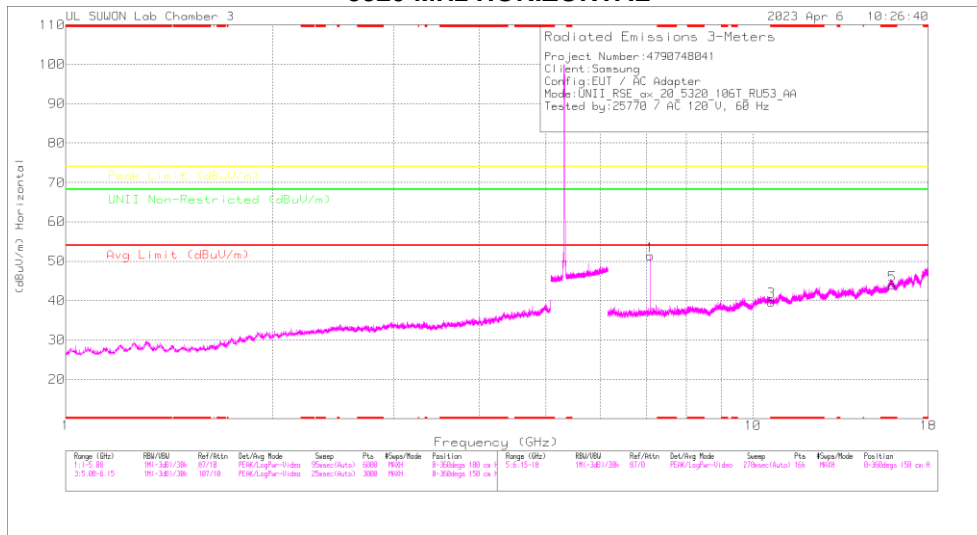
| Mode             | Freq. [MHz] | Antenna | Frequency [GHz] | Reading [dBuV] | Detector Mode | ANT Factor | Loss [dB] | DC Corr [dB] | Result [dBuV/m] | AV Limit [dBuV/m] | AV Margin [dB] | PK Limit [dBuV/m] | PK Margin [dB] | Azimuth [Degs] | Height [cm] | Polarity |   |
|------------------|-------------|---------|-----------------|----------------|---------------|------------|-----------|--------------|-----------------|-------------------|----------------|-------------------|----------------|----------------|-------------|----------|---|
| 802.11a          | 5320        | MIMO    | * 5.35001       | 39.03          | Pk            | 34.70      | -20.50    | 0.00         | 53.23           | -                 | -              | 74.00             | -20.77         | 117            | 107         | H        |   |
|                  |             |         | * 5.44554       | 40.80          | Pk            | 34.90      | -20.40    | 0.00         | 55.30           | -                 | -              | 74.00             | -18.70         | 117            | 107         | H        |   |
|                  |             |         | * 5.35001       | 28.30          | RMS           | 34.70      | -20.50    | 0.15         | 42.65           | 54.00             | -11.35         | -                 | -              | -              | 117         | 107      | H |
|                  |             |         | * 5.35045       | 29.59          | RMS           | 34.70      | -20.50    | 0.15         | 43.94           | 54.00             | -10.06         | -                 | -              | -              | 117         | 107      | H |
|                  |             |         | * 5.35001       | 37.54          | Pk            | 34.70      | -20.50    | 0.00         | 51.74           | -                 | -              | -                 | 74.00          | -22.26         | 158         | 220      | V |
|                  |             |         | * 5.35071       | 40.97          | Pk            | 34.70      | -20.50    | 0.00         | 55.17           | -                 | -              | -                 | 74.00          | -18.83         | 158         | 220      | V |
|                  |             |         | * 5.35001       | 27.37          | RMS           | 34.70      | -20.50    | 0.15         | 41.72           | 54.00             | -12.28         | -                 | -              | -              | 158         | 220      | V |
|                  |             |         | * 5.37307       | 28.79          | RMS           | 34.70      | -20.50    | 0.15         | 43.14           | 54.00             | -10.86         | -                 | -              | -              | 158         | 220      | V |
|                  |             |         | * 5.35001       | 38.92          | Pk            | 34.70      | -20.50    | 0.00         | 53.12           | -                 | -              | -                 | 74.00          | -20.88         | 216         | 170      | H |
|                  |             |         | * 5.39611       | 40.34          | Pk            | 34.80      | -20.50    | 0.00         | 54.64           | -                 | -              | -                 | 74.00          | -19.36         | 216         | 170      | H |
| 802.11n (HT20)   | 5320        | MIMO    | * 5.35001       | 28.34          | RMS           | 34.70      | -20.50    | 0.00         | 42.54           | 54.00             | -11.46         | -                 | -              | 216            | 170         | H        |   |
|                  |             |         | * 5.35037       | 29.03          | RMS           | 34.70      | -20.50    | 0.00         | 43.23           | 54.00             | -10.77         | -                 | -              | 216            | 170         | H        |   |
|                  |             |         | * 5.35001       | 37.89          | Pk            | 34.70      | -20.50    | 0.00         | 52.09           | -                 | -              | 74.00             | -21.91         | 144            | 159         | V        |   |
|                  |             |         | * 5.35895       | 40.67          | Pk            | 34.70      | -20.50    | 0.00         | 54.87           | -                 | -              | 74.00             | -19.13         | 144            | 159         | V        |   |
|                  |             |         | * 5.35001       | 27.78          | RMS           | 34.70      | -20.50    | 0.00         | 41.98           | 54.00             | -12.02         | -                 | -              | 144            | 159         | V        |   |
|                  |             |         | * 5.41184       | 28.61          | RMS           | 34.80      | -20.40    | 0.00         | 43.01           | 54.00             | -10.99         | -                 | -              | 144            | 159         | V        |   |
|                  |             |         | * 5.35001       | 41.73          | Pk            | 34.70      | -20.50    | 0.00         | 55.93           | -                 | -              | 74.00             | -18.07         | 214            | 197         | H        |   |
|                  |             |         | * 5.35241       | 42.91          | Pk            | 34.70      | -20.50    | 0.00         | 57.11           | -                 | -              | 74.00             | -16.89         | 214            | 197         | H        |   |
|                  |             |         | * 5.35001       | 30.43          | RMS           | 34.70      | -20.50    | 0.00         | 44.63           | 54.00             | -9.37          | -                 | -              | 214            | 197         | H        |   |
|                  |             |         | * 5.35019       | 31.03          | RMS           | 34.70      | -20.50    | 0.00         | 45.23           | 54.00             | -8.77          | -                 | -              | 214            | 197         | H        |   |
| 802.11n (HT40)   | 5310        | MIMO    | * 5.35001       | 39.18          | Pk            | 34.70      | -20.50    | 0.00         | 53.38           | -                 | -              | 74.00             | -20.62         | 199            | 177         | V        |   |
|                  |             |         | * 5.35051       | 41.58          | Pk            | 34.70      | -20.50    | 0.00         | 55.78           | -                 | -              | 74.00             | -18.22         | 199            | 177         | V        |   |
|                  |             |         | * 5.35001       | 29.20          | RMS           | 34.70      | -20.50    | 0.00         | 43.40           | 54.00             | -10.60         | -                 | -              | 199            | 177         | V        |   |
|                  |             |         | * 5.35167       | 30.18          | RMS           | 34.70      | -20.50    | 0.00         | 44.38           | 54.00             | -9.62          | -                 | -              | 199            | 177         | V        |   |
|                  |             |         | * 5.35001       | 42.91          | Pk            | 34.70      | -20.50    | 0.00         | 57.11           | -                 | -              | 74.00             | -16.89         | 116            | 102         | H        |   |
|                  |             |         | * 5.35351       | 48.99          | Pk            | 34.70      | -20.50    | 0.00         | 63.19           | -                 | -              | 74.00             | -10.81         | 116            | 102         | H        |   |
|                  |             |         | * 5.35001       | 31.46          | RMS           | 34.70      | -20.50    | 0.12         | 45.78           | 54.00             | -8.22          | -                 | -              | 116            | 102         | H        |   |
|                  |             |         | * 5.35121       | 32.86          | RMS           | 34.70      | -20.50    | 0.12         | 47.18           | 54.00             | -6.82          | -                 | -              | 116            | 102         | H        |   |
|                  |             |         | * 5.35001       | 42.37          | Pk            | 34.70      | -20.50    | 0.00         | 56.57           | -                 | -              | 74.00             | -17.43         | 192            | 103         | V        |   |
|                  |             |         | * 5.36767       | 46.39          | Pk            | 34.70      | -20.50    | 0.00         | 60.59           | -                 | -              | 74.00             | -13.41         | 192            | 103         | V        |   |
| 802.11ac (VHT80) | 5290        | MIMO    | * 5.35001       | 30.59          | RMS           | 34.70      | -20.50    | 0.12         | 44.91           | 54.00             | -9.09          | -                 | -              | 192            | 103         | V        |   |
|                  |             |         | * 5.35025       | 31.37          | RMS           | 34.70      | -20.50    | 0.12         | 45.69           | 54.00             | -8.31          | -                 | -              | 192            | 103         | V        |   |
|                  |             |         | * 5.35001       | 40.67          | Pk            | 34.70      | -20.50    | 0.00         | 54.87           | -                 | -              | 74.00             | -19.13         | 119            | 107         | H        |   |
|                  |             |         | * 5.36243       | 44.09          | Pk            | 34.70      | -20.50    | 0.00         | 58.29           | -                 | -              | 74.00             | -15.71         | 119            | 107         | H        |   |
|                  |             |         | * 5.35001       | 30.99          | RMS           | 34.70      | -20.50    | 0.12         | 45.31           | 54.00             | -8.69          | -                 | -              | 119            | 107         | H        |   |
|                  |             |         | * 5.35387       | 31.98          | RMS           | 34.70      | -20.50    | 0.12         | 46.30           | 54.00             | -7.70          | -                 | -              | 119            | 107         | H        |   |
|                  |             |         | * 5.35001       | 40.14          | Pk            | 34.70      | -20.50    | 0.00         | 54.34           | -                 | -              | 74.00             | -19.66         | 202            | 248         | V        |   |
|                  |             |         | * 5.37597       | 41.67          | Pk            | 34.80      | -20.50    | 0.00         | 55.97           | -                 | -              | 74.00             | -18.03         | 202            | 248         | V        |   |
|                  |             |         | * 5.35001       | 29.30          | RMS           | 34.70      | -20.50    | 0.12         | 43.62           | 54.00             | -10.38         | -                 | -              | 202            | 248         | V        |   |
|                  |             |         | * 5.37187       | 30.19          | RMS           | 34.70      | -20.50    | 0.12         | 44.51           | 54.00             | -9.49          | -                 | -              | 202            | 248         | V        |   |
| 802.11ax (HE20)  | 5320        | MIMO    | * 5.35001       | 39.66          | Pk            | 34.70      | -20.50    | 0.00         | 53.86           | -                 | -              | 74.00             | -20.14         | 119            | 105         | H        |   |
|                  |             |         | * 5.35057       | 42.66          | Pk            | 34.70      | -20.50    | 0.00         | 56.86           | -                 | -              | 74.00             | -17.14         | 119            | 105         | H        |   |
|                  |             |         | * 5.35001       | 29.18          | RMS           | 34.70      | -20.50    | 0.00         | 43.38           | 54.00             | -10.62         | -                 | -              | 119            | 105         | H        |   |
|                  |             |         | * 5.35351       | 29.15          | RMS           | 34.70      | -20.50    | 0.00         | 43.35           | 54.00             | -10.65         | -                 | -              | 119            | 105         | H        |   |
|                  |             |         | * 5.35001       | 37.44          | Pk            | 34.70      | -20.50    | 0.00         | 51.64           | -                 | -              | 74.00             | -22.36         | 201            | 103         | V        |   |
|                  |             |         | * 5.37733       | 39.88          | Pk            | 34.80      | -20.40    | 0.00         | 54.28           | -                 | -              | 74.00             | -19.72         | 201            | 103         | V        |   |
|                  |             |         | * 5.35001       | 27.76          | RMS           | 34.70      | -20.50    | 0.00         | 41.96           | 54.00             | -12.04         | -                 | -              | 201            | 103         | V        |   |
|                  |             |         | * 5.45046       | 28.57          | RMS           | 34.90      | -20.40    | 0.00         | 43.07           | 54.00             | -10.93         | -                 | -              | 201            | 103         | V        |   |
|                  |             |         | * 5.35001       | 42.02          | Pk            | 34.70      | -20.50    | 0.00         | 56.22           | -                 | -              | 74.00             | -17.78         | 127            | 177         | H        |   |
|                  |             |         | * 5.36061       | 46.46          | Pk            | 34.70      | -20.50    | 0.00         | 60.66           | -                 | -              | 74.00             | -13.34         | 127            | 177         | H        |   |
| 802.11ax (HE40)  | 5310        | MIMO    | * 5.35001       | 30.38          | RMS           | 34.70      | -20.50    | 0.00         | 44.58           | 54.00             | -9.42          | -                 | -              | 127            | 177         | H        |   |
|                  |             |         | * 5.35129       | 31.34          | RMS           | 34.70      | -20.50    | 0.00         | 45.54           | 54.00             | -8.46          | -                 | -              | 127            | 177         | H        |   |
|                  |             |         | * 5.35001       | 37.62          | Pk            | 34.70      | -20.50    | 0.00         | 51.82           | -                 | -              | 74.00             | -22.18         | 203            | 103         | V        |   |
|                  |             |         | * 5.36035       | 41.65          | Pk            | 34.70      | -20.50    | 0.00         | 55.85           | -                 | -              | 74.00             | -18.15         | 203            | 103         | V        |   |
|                  |             |         | * 5.35001       | 28.14          | RMS           | 34.70      | -20.50    | 0.00         | 42.34           | 54.00             | -11.66         | -                 | -              | 203            | 103         | V        |   |
|                  |             |         | * 5.35075       | 29.27          | RMS           | 34.70      | -20.50    | 0.00         | 43.47           | 54.00             | -10.53         | -                 | -              | 203            | 103         | V        |   |
|                  |             |         | * 5.35001       | 46.20          | Pk            | 34.70      | -20.50    | 0.00         | 60.40           | -                 | -              | 74.00             | -13.60         | 123            | 185         | H        |   |
|                  |             |         | * 5.35329       | 45.90          | Pk            | 34.70      | -20.50    | 0.00         | 60.10           | -                 | -              | 74.00             | -13.90         | 123            | 185         | H        |   |
|                  |             |         | * 5.35001       | 32.70          | RMS           | 34.70      | -20.50    | 0.00         | 46.90           | 54.00             | -7.10          | -                 | -              | 123            | 185         | H        |   |
|                  |             |         | * 5.35019       | 34.00          | RMS           | 34.70      | -20.50    | 0.00         | 48.20           | 54.00             | -5.80          | -                 | -              | 123            | 185         | H        |   |
| 802.11ax (HE80)  | 5290        | MIMO    | * 5.35001       | 41.59          | Pk            | 34.70      | -20.50    | 0.00         | 55.79           | -                 | -              | 74.00             | -18.21         | 156            | 282         | V        |   |
|                  |             |         | * 5.35105       | 43.75          | Pk            | 34.70      | -20.50    | 0.00         | 57.95           | -                 | -              | 74.00             | -16.05         | 156            | 282         | V        |   |
|                  |             |         | * 5.35001       | 31.07          | RMS           | 34.70      | -20.50    | 0.00         | 45.27           | 54.00             | -8.73          | -                 | -              | 156            | 282         | V        |   |
|                  |             |         | * 5.35049       | 31.20          | RMS           | 34.70      | -20.50    | 0.00         | 45.40           | 54.00             | -8.60          | -                 | -              | 156            | 282         | V        |   |
|                  |             |         | * 5.35001       | 45.51          | Pk            | 34.70      | -20.50    | 0.00         | 59.71           | -                 | -              | 74.00             | -14.29         | 122            | 185         | H        |   |
|                  |             |         | * 5.39507       | 46.87          | Pk            | 34.80      | -20.40    | 0.00         | 61.27           | -                 | -              | 74.00             | -12.73         | 122            | 185         | H        |   |
|                  |             |         | * 5.35001       | 33.29          | RMS           | 34.70      | -20.50    | 0.00         | 47.49           | 54.00             | -6.51          | -                 | -              | 122            | 185         | H        |   |
|                  |             |         | * 5.35303       | 34.43          | RMS           | 34.70      | -20.50    | 0.00         | 48.63           | 54.00             | -5.37          | -                 | -              | 122            | 185         | H        |   |
|                  |             |         | * 5.35001       | 41.67          | Pk            | 34.70      | -20.50    | 0.00         | 55.87           | -                 | -              | 74.00             | -18.13         | 204            | 103         | V        |   |
|                  |             |         | * 5.35381       | 43.44          | Pk            | 34.70      | -20.50    | 0.00         | 57.64           | -                 | -              | 74.00             | -16.36         | 204            | 103         | V        |   |
| 802.11ax (HE160) | 5250 Upper  | MIMO    | * 5.35001       | 30.20          | RMS           | 34.70      | -20.50    | 0.00         | 44.40           | 54.00             | -9.60          | -                 | -              | 204            | 103         | V        |   |
|                  |             |         | * 5.35159       | 31.66          | RMS           | 34.70      | -20.50    | 0.00         | 45.86           | 54.00             | -8.14          | -                 | -              | 204            | 103         | V        |   |

Note1. Pk - Peak detector, RMS - RMS detector  
 Note2. \* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

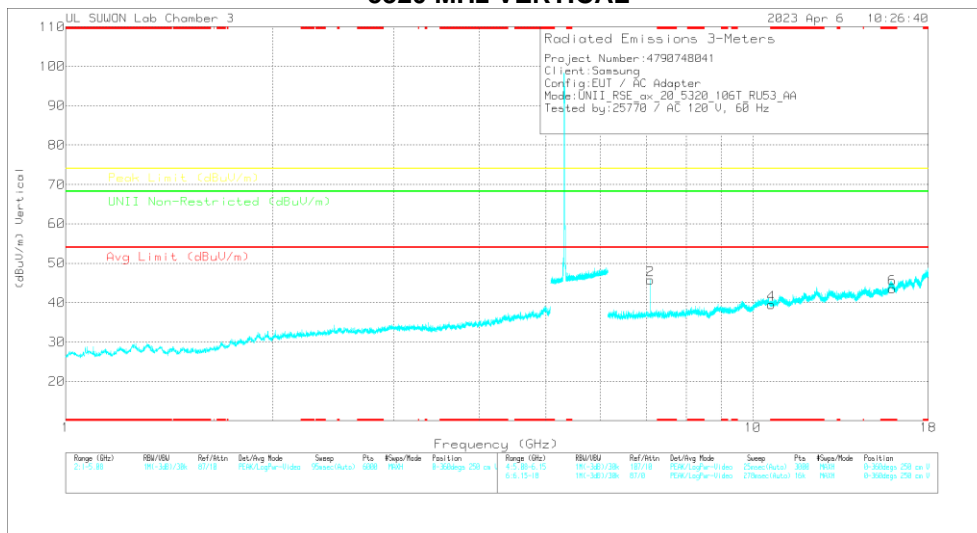


**HARMONICS AND SPURIOUS EMISSIONS(WORST CASE: 802.11ax HE20 53RU / 5320 MHz)**

**5320 MHz HORIZONTAL**



**5320 MHz VERTICAL**



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

**5320 MHz DATA**

**Radiated Emissions**

| Frequency (GHz) | Meas. Reading (dBuV) | Det. | 317_0021857 | 6GHz_HPI(dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | Margin (dB) | UNII Non-Restricted (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|-----------------|----------------------|------|-------------|--------------|--------------|----------------------------|--------------------|-------------|---------------------|-------------|------------------------------|-------------|----------------|-------------|----------|
| 7.09323         | 45.99                | PK-U | 35.9        | -26.1        | 0            | 55.79                      | -                  | -           | -                   | -           | 68.2                         | -12.41      | 212            | 171         | H        |
| 7.09322         | 40.06                | PK-U | 35.9        | -26.1        | 0            | 49.86                      | -                  | -           | -                   | -           | 68.2                         | -18.34      | 138            | 103         | V        |
| *10.63894       | 32.41                | PK-U | 37.7        | -20.9        | 0            | 49.21                      | -                  | -           | 74                  | -24.79      | -                            | -           | 0              | 100         | H        |
| *10.6407        | 32.78                | PK-U | 37.7        | -20.9        | 0            | 49.53                      | -                  | -           | 74                  | -24.42      | -                            | -           | 0              | 100         | V        |
| *15.96192       | 34.2                 | PK-U | 40.9        | -20.7        | 0            | 54.4                       | -                  | -           | 74                  | -19.6       | -                            | -           | 0              | 100         | H        |
| *15.9615        | 33.18                | PK-U | 40.9        | -20.7        | 0            | 53.38                      | -                  | -           | 74                  | -20.62      | -                            | -           | 0              | 100         | V        |

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band  
 PK-U - U-NII: Maximum Peak

**HARMONICS AND SPURIOUS EMISSIONS TEST DATA**

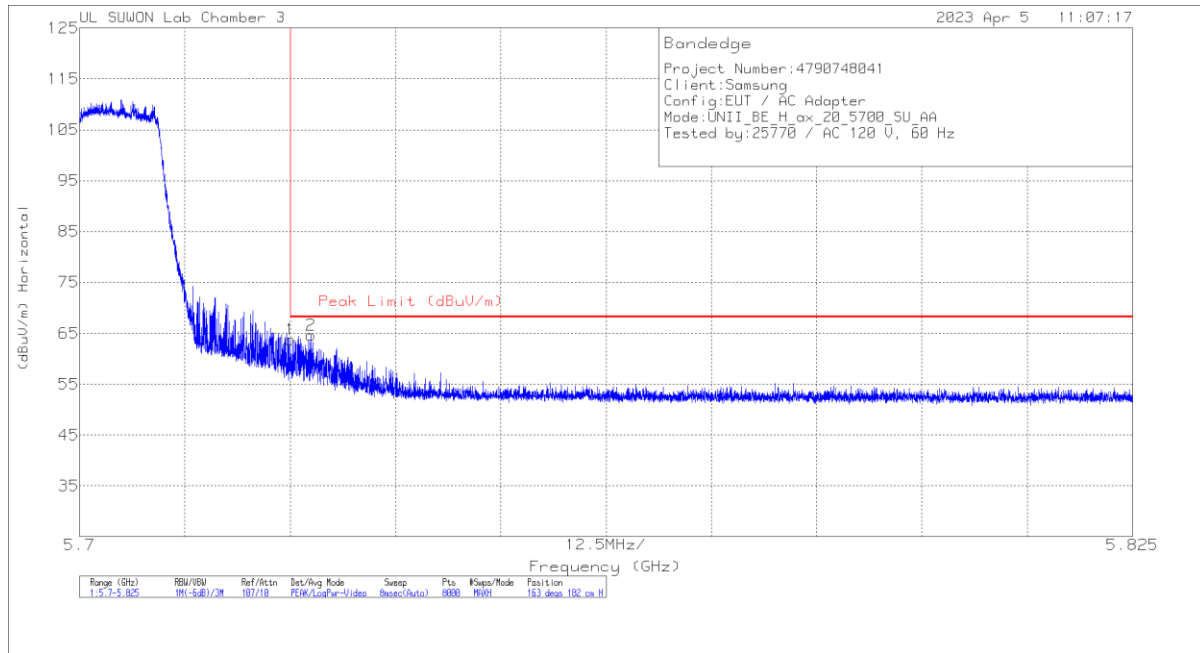
| Mode                            | Freq. [MHz] | Antenna | Frequency [GHz] | Reading [dBuV] | Detector Mode | ANT Factor | Loss [dB] | DC Corr [dB] | Result [dBuV/m] | AV Limit [dBuV/m] | AV Margin [dB] | PK Limit [dBuV/m] | PK Margin [dB] | Non-Restricted [dBuV/m] | Margin [dB] | Azimuth [Degs] | Height [cm] | Polarity |     |   |
|---------------------------------|-------------|---------|-----------------|----------------|---------------|------------|-----------|--------------|-----------------|-------------------|----------------|-------------------|----------------|-------------------------|-------------|----------------|-------------|----------|-----|---|
| 802.11a                         | 5260        | MIMO    | 7.013           | 45.36          | PK-U          | 36.00      | -25.90    | 0.00         | 55.46           | -                 | -              | -                 | -              | 68.20                   | -12.74      | 225            | 104         | H        |     |   |
|                                 |             |         | 7.013           | 40.77          | PK-U          | 36.00      | -25.90    | 0.00         | 50.87           | -                 | -              | -                 | -              | -                       | 68.20       | -17.33         | 133         | 105      | V   |   |
|                                 |             |         | 10.523          | 32.78          | PK-U          | 37.60      | -20.90    | 0.00         | 49.48           | -                 | -              | -                 | -              | -                       | 68.20       | -18.72         | 0           | 100      | H   |   |
|                                 |             |         | 10.520          | 33.34          | PK-U          | 37.60      | -20.90    | 0.00         | 50.04           | -                 | -              | -                 | -              | -                       | 68.20       | -18.16         | 0           | 100      | V   |   |
|                                 |             |         | * 15.77041      | 34.48          | PK-U          | 40.50      | -21.10    | 0.00         | 53.88           | -                 | -              | -                 | -              | 74.00                   | -20.12      | -              | -           | 0        | 100 | H |
|                                 |             |         | * 15.78167      | 34.54          | PK-U          | 40.60      | -21.10    | 0.00         | 54.04           | -                 | -              | -                 | -              | 74.00                   | -19.96      | -              | -           | 0        | 100 | V |
|                                 | 5300        | MIMO    | 7.067           | 45.22          | PK-U          | 35.90      | -26.00    | 0.00         | 55.12           | -                 | -              | -                 | -              | -                       | 68.20       | -13.08         | 197         | 212      | H   |   |
|                                 |             |         | 7.067           | 39.96          | PK-U          | 35.90      | -26.00    | 0.00         | 49.86           | -                 | -              | -                 | -              | -                       | 68.20       | -18.34         | 133         | 103      | V   |   |
|                                 |             |         | 10.599          | 33.04          | PK-U          | 37.70      | -21.00    | 0.00         | 49.74           | -                 | -              | -                 | -              | -                       | 68.20       | -18.46         | 0           | 100      | H   |   |
|                                 |             |         | 10.598          | 32.37          | PK-U          | 37.70      | -21.00    | 0.00         | 49.07           | -                 | -              | -                 | -              | -                       | 68.20       | -19.13         | 0           | 100      | V   |   |
|                                 |             |         | * 15.9017       | 33.88          | PK-U          | 40.80      | -20.60    | 0.00         | 54.08           | -                 | -              | -                 | -              | 74.00                   | -19.92      | -              | -           | 0        | 100 | H |
|                                 |             |         | * 15.90087      | 33.79          | PK-U          | 40.80      | -20.60    | 0.00         | 53.99           | -                 | -              | -                 | -              | 74.00                   | -20.01      | -              | -           | 0        | 100 | V |
|                                 | 5320        | MIMO    | 7.093           | 44.39          | PK-U          | 35.90      | -26.10    | 0.00         | 54.19           | -                 | -              | -                 | -              | -                       | 68.20       | -14.01         | 223         | 103      | H   |   |
|                                 |             |         | 7.093           | 39.49          | PK-U          | 35.90      | -26.10    | 0.00         | 49.29           | -                 | -              | -                 | -              | -                       | 68.20       | -18.91         | 133         | 110      | V   |   |
|                                 |             |         | * 10.63988      | 32.43          | PK-U          | 37.70      | -20.90    | 0.00         | 49.23           | -                 | -              | -                 | -              | 74.00                   | -24.77      | -              | -           | 0        | 100 | H |
|                                 |             |         | * 10.63848      | 33.07          | PK-U          | 37.70      | -20.90    | 0.00         | 49.87           | -                 | -              | -                 | -              | 74.00                   | -24.13      | -              | -           | 0        | 100 | V |
|                                 |             |         | * 15.96179      | 33.18          | PK-U          | 40.90      | -20.70    | 0.00         | 53.38           | -                 | -              | -                 | -              | 74.00                   | -20.62      | -              | -           | 0        | 100 | H |
|                                 |             |         | * 15.96028      | 33.49          | PK-U          | 40.90      | -20.80    | 0.00         | 53.59           | -                 | -              | -                 | -              | 74.00                   | -20.41      | -              | -           | 0        | 100 | V |
| 802.11ax (HE20) 53RU Spot-Check | 5320        | MIMO    | 7.093           | 45.99          | PK-U          | 35.90      | -26.10    | 0.00         | 55.79           | -                 | -              | -                 | -              | -                       | 68.20       | -12.41         | 212         | 171      | H   |   |
|                                 |             |         | 7.093           | 40.06          | PK-U          | 35.90      | -26.10    | 0.00         | 49.86           | -                 | -              | -                 | -              | -                       | 68.20       | -18.34         | 138         | 103      | V   |   |
|                                 |             |         | * 10.63894      | 32.41          | PK-U          | 37.70      | -20.90    | 0.00         | 49.21           | -                 | -              | -                 | -              | 74.00                   | -24.79      | -              | -           | 0        | 100 | H |
|                                 |             |         | * 10.6407       | 32.78          | PK-U          | 37.70      | -20.90    | 0.00         | 49.58           | -                 | -              | -                 | -              | 74.00                   | -24.42      | -              | -           | 0        | 100 | V |
|                                 |             |         | * 15.96192      | 34.20          | PK-U          | 40.90      | -20.70    | 0.00         | 54.40           | -                 | -              | -                 | -              | 74.00                   | -19.60      | -              | -           | 0        | 100 | H |
|                                 |             |         | * 15.9615       | 33.18          | PK-U          | 40.90      | -20.70    | 0.00         | 53.38           | -                 | -              | -                 | -              | 74.00                   | -20.62      | -              | -           | 0        | 100 | V |

Note1. PK-U - U-NII: Maximum Peak / ADR - U-NII AD primary method, RMS average  
 Note2. \* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

### 11.3. TX ABOVE 1GHz 2Tx MODE IN THE 5.5 GHz BAND

**BANDEDGE (WORST CASE: 802.11ax HE20 / 5700 MHz)**

**HORIZONTAL PEAK AND AVERAGE DATA**



**Trace Markers**

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117_00218957 | 10dB_ATT(dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Peak Limit (dBuV/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|---------------|--------------|--------------|----------------------------|---------------------|----------------|----------------|-------------|----------|
| 1      | 5.725           | 48.46                | Pk  | 35            | -19.7        | 0            | 63.76                      | 68.2                | -4.44          | 163            | 182         | H        |
| 2      | 5.72749         | 49.38                | Pk  | 35            | -19.7        | 0            | 64.68                      | 68.2                | -3.52          | 163            | 182         | H        |

Pk - Peak detector

**BANDEDGE TEST DATA**

| Mode             | Freq. [MHz] | Antenna | Frequency [GHz] | Reading [dBuV] | Detector Mode | ANT Factor | Loss [dB] | DC Corr [dB] | Result dBuV/m | AV Limit dBuV/m | AV Margin [dB] | PK Limit dBuV/m | PK Margin [dB] | Azimuth [Degs] | Height [cm] | Polarity |   |
|------------------|-------------|---------|-----------------|----------------|---------------|------------|-----------|--------------|---------------|-----------------|----------------|-----------------|----------------|----------------|-------------|----------|---|
| 802.11a          | 5500        | MIMO    | * 5.45998       | 37.86          | Pk            | 34.90      | -20.40    | 0.00         | 52.36         | -               | -              | 74.00           | -21.64         | 123            | 106         | H        |   |
|                  |             |         | * 5.41811       | 40.98          | Pk            | 34.80      | -20.30    | 0.00         | 55.48         | -               | -              | 74.00           | -18.52         | 123            | 106         | H        |   |
|                  |             |         | 5.46998         | 38.08          | Pk            | 34.90      | -20.30    | 0.00         | 52.68         | -               | -              | 68.20           | -15.52         | 123            | 106         | H        |   |
|                  |             |         | 5.46961         | 40.84          | Pk            | 34.90      | -20.30    | 0.00         | 55.44         | -               | -              | 68.20           | -12.76         | 123            | 106         | H        |   |
|                  |             |         | * 5.45998       | 27.69          | RMS           | 34.90      | -20.40    | 0.15         | 42.34         | 54.00           | -11.66         | -               | -              | -              | 123         | 106      | H |
|                  |             |         | * 5.45283       | 28.84          | RMS           | 34.90      | -20.40    | 0.15         | 43.49         | 54.00           | -10.51         | -               | -              | -              | 123         | 106      | H |
|                  |             |         | 5.46998         | 28.07          | RMS           | 34.90      | -20.30    | 0.15         | 42.82         | -               | -              | -               | -              | -              | 123         | 106      | H |
|                  |             |         | 5.46932         | 29.06          | RMS           | 34.90      | -20.30    | 0.15         | 43.81         | -               | -              | -               | -              | -              | 123         | 106      | H |
|                  |             |         | * 5.45998       | 37.46          | Pk            | 34.90      | -20.40    | 0.00         | 51.96         | -               | -              | 74.00           | -22.04         | 262            | 126         | V        |   |
|                  |             |         | * 5.4316        | 40.27          | Pk            | 34.90      | -20.40    | 0.00         | 54.77         | -               | -              | 74.00           | -19.23         | 262            | 126         | V        |   |
|                  | 5.46998     | 36.14   | Pk              | 34.90          | -20.30        | 0.00       | 50.74     | -            | -             | 68.20           | -17.46         | 262             | 126            | V              |             |          |   |
|                  | 5.46346     | 39.19   | Pk              | 34.90          | -20.30        | 0.00       | 53.79     | -            | -             | 68.20           | -14.41         | 262             | 126            | V              |             |          |   |
|                  | * 5.45998   | 27.59   | RMS             | 34.90          | -20.40        | 0.15       | 42.24     | 54.00        | -11.76        | -               | -              | -               | 262            | 126            | V           |          |   |
|                  | * 5.45361   | 28.35   | RMS             | 34.90          | -20.40        | 0.15       | 43.00     | 54.00        | -11.00        | -               | -              | -               | 262            | 126            | V           |          |   |
|                  | 5.46998     | 27.74   | RMS             | 34.90          | -20.30        | 0.15       | 42.49     | -            | -             | -               | -              | -               | 262            | 126            | V           |          |   |
|                  | 5.46136     | 28.49   | RMS             | 34.90          | -20.40        | 0.15       | 43.14     | -            | -             | -               | -              | -               | 262            | 126            | V           |          |   |
|                  | 5.72500     | 39.13   | Pk              | 35.00          | -19.70        | 0.00       | 54.43     | -            | -             | 68.20           | -13.77         | 119             | 101            | H              |             |          |   |
|                  | 5.73018     | 41.11   | Pk              | 35.00          | -19.60        | 0.00       | 56.51     | -            | -             | 68.20           | -11.69         | 119             | 101            | H              |             |          |   |
|                  | 5.72500     | 40.21   | Pk              | 35.00          | -19.70        | 0.00       | 55.51     | -            | -             | 68.20           | -12.69         | 147             | 100            | V              |             |          |   |
|                  | 5.79812     | 39.30   | Pk              | 35.10          | -19.50        | 0.00       | 54.90     | -            | -             | 68.20           | -13.30         | 147             | 100            | V              |             |          |   |
| 802.11n (HT20)   | 5500        | MIMO    | * 5.45998       | 38.06          | Pk            | 34.90      | -20.40    | 0.00         | 52.56         | -               | -              | 74.00           | -21.44         | 189            | 168         | H        |   |
|                  |             |         | * 5.38514       | 40.15          | Pk            | 34.80      | -20.40    | 0.00         | 54.55         | -               | -              | 74.00           | -19.45         | 189            | 168         | H        |   |
|                  |             |         | 5.46998         | 38.32          | Pk            | 34.90      | -20.30    | 0.00         | 52.92         | -               | -              | 68.20           | -15.28         | 189            | 168         | H        |   |
|                  |             |         | 5.46571         | 40.16          | Pk            | 34.90      | -20.30    | 0.00         | 54.76         | -               | -              | 68.20           | -13.44         | 189            | 168         | H        |   |
|                  |             |         | * 5.45998       | 28.50          | RMS           | 34.90      | -20.40    | 0.00         | 43.00         | 54.00           | -11.00         | -               | -              | -              | 189         | 168      | H |
|                  |             |         | * 5.4458        | 29.23          | RMS           | 34.90      | -20.40    | 0.00         | 43.73         | 54.00           | -10.27         | -               | -              | -              | 189         | 168      | H |
|                  |             |         | 5.46998         | 27.81          | RMS           | 34.90      | -20.30    | 0.00         | 42.41         | -               | -              | -               | -              | -              | 189         | 168      | H |
|                  |             |         | 5.46878         | 29.19          | RMS           | 34.90      | -20.40    | 0.00         | 43.69         | -               | -              | -               | -              | -              | 189         | 168      | H |
|                  |             |         | * 5.45998       | 38.58          | Pk            | 34.90      | -20.40    | 0.00         | 53.08         | -               | -              | 74.00           | -20.92         | 253            | 107         | V        |   |
|                  |             |         | * 5.38321       | 40.61          | Pk            | 34.80      | -20.40    | 0.00         | 55.01         | -               | -              | 74.00           | -18.99         | 253            | 107         | V        |   |
|                  | 5.46998     | 37.40   | Pk              | 34.90          | -20.30        | 0.00       | 52.00     | -            | -             | 68.20           | -16.20         | 253             | 107            | V              |             |          |   |
|                  | 5.46164     | 39.86   | Pk              | 34.90          | -20.40        | 0.00       | 54.36     | -            | -             | 68.20           | -13.84         | 253             | 107            | V              |             |          |   |
|                  | * 5.45998   | 27.78   | RMS             | 34.90          | -20.40        | 0.00       | 42.28     | 54.00        | -11.72        | -               | -              | -               | 253            | 107            | V           |          |   |
|                  | * 5.42929   | 28.57   | RMS             | 34.90          | -20.40        | 0.00       | 43.07     | 54.00        | -10.93        | -               | -              | -               | 253            | 107            | V           |          |   |
|                  | 5.46998     | 27.56   | RMS             | 34.90          | -20.30        | 0.00       | 42.16     | -            | -             | -               | -              | -               | 253            | 107            | V           |          |   |
|                  | 5.46770     | 28.40   | RMS             | 34.90          | -20.40        | 0.00       | 42.90     | -            | -             | -               | -              | -               | 253            | 107            | V           |          |   |
|                  | 5.72500     | 39.08   | Pk              | 35.00          | -19.70        | 0.00       | 54.38     | -            | -             | 68.20           | -13.82         | 117             | 101            | H              |             |          |   |
|                  | 5.72638     | 41.08   | Pk              | 35.00          | -19.70        | 0.00       | 56.38     | -            | -             | 68.20           | -11.82         | 117             | 101            | H              |             |          |   |
|                  | 5.72500     | 38.06   | Pk              | 35.00          | -19.70        | 0.00       | 53.36     | -            | -             | 68.20           | -14.84         | 148             | 188            | V              |             |          |   |
|                  | 5.80901     | 39.51   | Pk              | 35.10          | -19.50        | 0.00       | 55.11     | -            | -             | 68.20           | -13.09         | 148             | 188            | V              |             |          |   |
| 802.11n (HT40)   | 5510        | MIMO    | * 5.45998       | 39.14          | Pk            | 34.90      | -20.40    | 0.00         | 53.64         | -               | -              | 74.00           | -20.36         | 191            | 175         | H        |   |
|                  |             |         | * 5.45637       | 41.75          | Pk            | 34.90      | -20.40    | 0.00         | 56.25         | -               | -              | 74.00           | -17.75         | 191            | 175         | H        |   |
|                  |             |         | 5.46998         | 41.24          | Pk            | 34.90      | -20.30    | 0.00         | 55.84         | -               | -              | 68.20           | -12.36         | 191            | 175         | H        |   |
|                  |             |         | 5.46976         | 43.14          | Pk            | 34.90      | -20.30    | 0.00         | 57.74         | -               | -              | 68.20           | -10.46         | 191            | 175         | H        |   |
|                  |             |         | * 5.45998       | 29.17          | RMS           | 34.90      | -20.40    | 0.00         | 43.67         | 54.00           | -10.33         | -               | -              | -              | 191         | 175      | H |
|                  |             |         | * 5.45952       | 29.47          | RMS           | 34.90      | -20.40    | 0.00         | 43.97         | 54.00           | -10.03         | -               | -              | -              | 191         | 175      | H |
|                  |             |         | 5.46998         | 30.82          | RMS           | 34.90      | -20.30    | 0.00         | 45.42         | -               | -              | -               | -              | -              | 191         | 175      | H |
|                  |             |         | 5.46991         | 31.13          | RMS           | 34.90      | -20.30    | 0.00         | 45.73         | -               | -              | -               | -              | -              | 191         | 175      | H |
|                  |             |         | * 5.45998       | 37.62          | Pk            | 34.90      | -20.40    | 0.00         | 52.12         | -               | -              | 74.00           | -21.88         | 145            | 163         | V        |   |
|                  |             |         | * 5.45937       | 40.23          | Pk            | 34.90      | -20.40    | 0.00         | 54.73         | -               | -              | 74.00           | -19.27         | 145            | 163         | V        |   |
|                  | 5.46998     | 39.19   | Pk              | 34.90          | -20.30        | 0.00       | 53.79     | -            | -             | 68.20           | -14.41         | 145             | 163            | V              |             |          |   |
|                  | 5.46991     | 41.37   | Pk              | 34.90          | -20.30        | 0.00       | 55.97     | -            | -             | 68.20           | -12.23         | 145             | 163            | V              |             |          |   |
|                  | * 5.45998   | 28.85   | RMS             | 34.90          | -20.40        | 0.00       | 43.35     | 54.00        | -10.65        | -               | -              | -               | 145            | 163            | V           |          |   |
|                  | * 5.45932   | 28.92   | RMS             | 34.90          | -20.40        | 0.00       | 43.42     | 54.00        | -10.58        | -               | -              | -               | 145            | 163            | V           |          |   |
|                  | 5.46998     | 28.71   | RMS             | 34.90          | -20.30        | 0.00       | 43.31     | -            | -             | -               | -              | -               | 145            | 163            | V           |          |   |
|                  | 5.46913     | 29.98   | RMS             | 34.90          | -20.30        | 0.00       | 44.58     | -            | -             | -               | -              | -               | 145            | 163            | V           |          |   |
|                  | 5.72500     | 38.45   | Pk              | 35.00          | -19.70        | 0.00       | 53.75     | -            | -             | 68.20           | -14.45         | 214             | 152            | H              |             |          |   |
|                  | 5.73954     | 40.46   | Pk              | 35.00          | -19.70        | 0.00       | 55.76     | -            | -             | 68.20           | -12.44         | 214             | 152            | H              |             |          |   |
|                  | 5.72500     | 36.86   | Pk              | 35.00          | -19.70        | 0.00       | 52.16     | -            | -             | 68.20           | -16.04         | 148             | 172            | V              |             |          |   |
|                  | 5.78400     | 39.47   | Pk              | 35.10          | -19.60        | 0.00       | 54.97     | -            | -             | 68.20           | -13.23         | 148             | 172            | V              |             |          |   |
| 802.11ac (VHT80) | 5530        | MIMO    | * 5.45998       | 39.51          | Pk            | 34.90      | -20.40    | 0.00         | 54.01         | -               | -              | 74.00           | -19.99         | 116            | 105         | H        |   |
|                  |             |         | * 5.45738       | 41.96          | Pk            | 34.90      | -20.40    | 0.00         | 56.46         | -               | -              | 74.00           | -17.54         | 116            | 105         | H        |   |
|                  |             |         | 5.46998         | 39.67          | Pk            | 34.90      | -20.30    | 0.00         | 54.27         | -               | -              | 68.20           | -13.93         | 116            | 105         | H        |   |
|                  |             |         | 5.46630         | 41.86          | Pk            | 34.90      | -20.30    | 0.00         | 56.46         | -               | -              | 68.20           | -11.74         | 116            | 105         | H        |   |
|                  |             |         | * 5.45998       | 28.72          | RMS           | 34.90      | -20.40    | 0.12         | 43.34         | 54.00           | -10.66         | -               | -              | -              | 116         | 105      | H |
|                  |             |         | * 5.45834       | 30.24          | RMS           | 34.90      | -20.40    | 0.12         | 44.86         | 54.00           | -9.14          | -               | -              | -              | 116         | 105      | H |
|                  |             |         | 5.46998         | 29.94          | RMS           | 34.90      | -20.30    | 0.12         | 44.66         | -               | -              | -               | -              | -              | 116         | 105      | H |
|                  |             |         | 5.46987         | 30.61          | RMS           | 34.90      | -20.30    | 0.12         | 45.33         | -               | -              | -               | -              | -              | 116         | 105      | H |
|                  |             |         | * 5.45998       | 37.61          | Pk            | 34.90      | -20.40    | 0.00         | 52.11         | -               | -              | 74.00           | -21.89         | 146            | 201         | V        |   |
|                  |             |         | * 5.45681       | 40.27          | Pk            | 34.90      | -20.40    | 0.00         | 54.77         | -               | -              | 74.00           | -19.23         | 146            | 201         | V        |   |
|                  | 5.46998     | 39.58   | Pk              | 34.90          | -20.30        | 0.00       | 54.18     | -            | -             | 68.20           | -14.02         | 146             | 201            | V              |             |          |   |
|                  | 5.46486     | 40.78   | Pk              | 34.90          | -20.30        | 0.00       | 55.38     | -            | -             | 68.20           | -12.82         | 146             | 201            | V              |             |          |   |
|                  | * 5.45998   | 27.49   | RMS             | 34.90          | -20.40        | 0.12       | 42.11     | 54.00        | -11.89        | -               | -              | -               | 146            | 201            | V           |          |   |
|                  | * 5.45771   | 29.43   | RMS             | 34.90          | -20.40        | 0.12       | 44.05     | 54.00        | -9.95         | -               | -              | -               | 146            | 201            | V           |          |   |
|                  | 5.46998     | 28.12   | RMS             | 34.90          | -20.30        | 0.12       | 42.84     | -            | -             | -               | -              | -               | 146            | 201            | V           |          |   |
|                  | 5.46278     | 29.48   | RMS             | 34.90          | -20.40        | 0.12       | 44.10     | -            | -             | -               | -              | -               | 146            | 201            | V           |          |   |
|                  | 5.72500     | 37.67   | Pk              | 35.00          | -19.70        | 0.00       | 52.97     | -            | -             | 68.20           | -15.23         | 190             | 173            | H              |             |          |   |
|                  | 5.77681     | 40.36   | Pk              | 35.10          | -19.60        | 0.00       | 55.86     | -            | -             | 68.20           | -12.34         | 190             | 173            | H              |             |          |   |
|                  | 5.72500     | 36.96   | Pk              | 35.00          | -19.70        | 0.00       | 52.26     | -            | -             | 68.20           | -15.94         | 147             | 102            | V              |             |          |   |
|                  | 5.72746     | 39.83   | Pk              | 35.00          | -19.70        | 0.00       | 55.13     | -            | -             | 68.20           | -13.07         | 147             | 102            | V              |             |          |   |

| Mode              | Freq. [MHz] | Antenna | Frequency [GHz] | Reading [dBuV] | Detector Mode | ANT Factor | Loss [dB] | DC Corr [dB] | Result dBuV/m | AV Limit dBuV/m | AV Margin [dB] | PK Limit dBuV/m | PK Margin [dB] | Azimuth [Degs] | Height [cm] | Polarity |   |
|-------------------|-------------|---------|-----------------|----------------|---------------|------------|-----------|--------------|---------------|-----------------|----------------|-----------------|----------------|----------------|-------------|----------|---|
| 802.11ac (VHT160) | 5570 Lower  | MIMO    | * 5.45998       | 42.78          | Pk            | 34.90      | -20.40    | 0.00         | 57.28         | -               | -              | 74.00           | -16.72         | 120            | 104         | H        |   |
|                   |             |         | * 5.44723       | 44.89          | Pk            | 34.90      | -20.40    | 0.00         | 59.39         | -               | -              | 74.00           | -14.61         | 120            | 104         | H        |   |
|                   |             |         | 5.46998         | 41.45          | Pk            | 34.90      | -20.30    | 0.00         | 56.05         | -               | -              | 68.20           | -12.15         | 120            | 104         | H        |   |
|                   |             |         | 5.46985         | 43.71          | Pk            | 34.90      | -20.30    | 0.00         | 58.31         | -               | -              | 68.20           | -9.89          | 120            | 104         | H        |   |
|                   |             |         | * 5.45998       | 31.21          | RMS           | 34.90      | -20.40    | 0.12         | 45.83         | 54.00           | -8.17          | -               | -              | -              | 120         | 104      | H |
|                   |             |         | * 5.45814       | 31.93          | RMS           | 34.90      | -20.40    | 0.12         | 46.55         | 54.00           | -7.45          | -               | -              | -              | 120         | 104      | H |
|                   |             |         | 5.46998         | 30.72          | RMS           | 34.90      | -20.30    | 0.12         | 45.44         | -               | -              | -               | -              | -              | 120         | 104      | H |
|                   |             |         | 5.46149         | 32.12          | RMS           | 34.90      | -20.40    | 0.12         | 46.74         | -               | -              | -               | -              | -              | 120         | 104      | H |
|                   |             |         | * 5.45998       | 39.06          | Pk            | 34.90      | -20.40    | 0.00         | 53.56         | -               | -              | 74.00           | -20.44         | 153            | 201         | V        |   |
|                   |             |         | * 5.44397       | 42.16          | Pk            | 34.90      | -20.40    | 0.00         | 56.66         | -               | -              | 74.00           | -17.34         | 153            | 201         | V        |   |
|                   | 5.46998     | 39.59   | Pk              | 34.90          | -20.30        | 0.00       | 54.19     | -            | -             | 68.20           | -14.01         | 153             | 201            | V              |             |          |   |
|                   | 5.46611     | 41.32   | Pk              | 34.90          | -20.30        | 0.00       | 55.92     | -            | -             | 68.20           | -12.28         | 153             | 201            | V              |             |          |   |
|                   | * 5.45998   | 28.30   | RMS             | 34.90          | -20.40        | 0.12       | 42.92     | 54.00        | -11.08        | -               | -              | 153             | 201            | V              |             |          |   |
|                   | * 5.45501   | 29.98   | RMS             | 34.90          | -20.40        | 0.12       | 44.60     | 54.00        | -9.40         | -               | -              | 153             | 201            | V              |             |          |   |
|                   | 5.46998     | 29.14   | RMS             | 34.90          | -20.30        | 0.12       | 43.86     | -            | -             | -               | -              | 153             | 201            | V              |             |          |   |
|                   | 5.46493     | 29.62   | RMS             | 34.90          | -20.30        | 0.12       | 44.34     | -            | -             | -               | -              | 153             | 201            | V              |             |          |   |
|                   | 5.72501     | 41.01   | Pk              | 35.00          | -19.70        | 0.00       | 56.31     | -            | -             | 68.20           | -11.89         | 197             | 223            | H              |             |          |   |
|                   | 5.73063     | 43.52   | Pk              | 35.00          | -19.60        | 0.00       | 58.92     | -            | -             | 68.20           | -9.28          | 197             | 223            | H              |             |          |   |
|                   | 5.72501     | 38.88   | Pk              | 35.00          | -19.70        | 0.00       | 54.18     | -            | -             | 68.20           | -14.02         | 150             | 101            | V              |             |          |   |
|                   | 5.74453     | 41.04   | Pk              | 35.00          | -19.60        | 0.00       | 56.44     | -            | -             | 68.20           | -11.76         | 150             | 101            | V              |             |          |   |
| 802.11ax (HE20)   | 5500        | MIMO    | * 5.45998       | 38.62          | Pk            | 34.90      | -20.40    | 0.00         | 53.12         | -               | -              | 74.00           | -20.88         | 122            | 105         | H        |   |
|                   |             |         | * 5.3978        | 40.33          | Pk            | 34.80      | -20.40    | 0.00         | 54.73         | -               | -              | 74.00           | -19.27         | 122            | 105         | H        |   |
|                   |             |         | 5.46998         | 38.37          | Pk            | 34.90      | -20.30    | 0.00         | 52.97         | -               | -              | 68.20           | -15.23         | 122            | 105         | H        |   |
|                   |             |         | 5.46792         | 40.70          | Pk            | 34.90      | -20.40    | 0.00         | 55.20         | -               | -              | 68.20           | -13.00         | 122            | 105         | H        |   |
|                   |             |         | * 5.45998       | 28.38          | RMS           | 34.90      | -20.40    | 0.00         | 42.88         | 54.00           | -11.12         | -               | -              | 122            | 105         | H        |   |
|                   |             |         | * 5.42684       | 29.11          | RMS           | 34.90      | -20.40    | 0.00         | 43.61         | 54.00           | -10.39         | -               | -              | 122            | 105         | H        |   |
|                   |             |         | 5.46998         | 28.62          | RMS           | 34.90      | -20.30    | 0.00         | 43.22         | -               | -              | -               | -              | 122            | 105         | H        |   |
|                   |             |         | 5.46517         | 29.32          | RMS           | 34.90      | -20.30    | 0.00         | 43.92         | -               | -              | -               | -              | 122            | 105         | H        |   |
|                   |             |         | * 5.45998       | 37.30          | Pk            | 34.90      | -20.40    | 0.00         | 51.80         | -               | -              | 74.00           | -22.20         | 270            | 191         | V        |   |
|                   |             |         | * 5.44655       | 40.11          | Pk            | 34.90      | -20.40    | 0.00         | 54.61         | -               | -              | 74.00           | -19.39         | 270            | 191         | V        |   |
|                   | 5.46998     | 39.30   | Pk              | 34.90          | -20.30        | 0.00       | 53.90     | -            | -             | 68.20           | -14.30         | 270             | 191            | V              |             |          |   |
|                   | 5.46140     | 39.74   | Pk              | 34.90          | -20.40        | 0.00       | 54.24     | -            | -             | 68.20           | -13.96         | 270             | 191            | V              |             |          |   |
|                   | * 5.45998   | 27.72   | RMS             | 34.90          | -20.40        | 0.00       | 42.22     | 54.00        | -11.78        | -               | -              | 270             | 191            | V              |             |          |   |
|                   | * 5.44204   | 28.57   | RMS             | 34.90          | -20.40        | 0.00       | 43.07     | 54.00        | -10.93        | -               | -              | 270             | 191            | V              |             |          |   |
|                   | 5.46998     | 28.21   | RMS             | 34.90          | -20.30        | 0.00       | 42.81     | -            | -             | -               | -              | 270             | 191            | V              |             |          |   |
|                   | 5.46889     | 28.61   | RMS             | 34.90          | -20.30        | 0.00       | 43.21     | -            | -             | -               | -              | 270             | 191            | V              |             |          |   |
|                   | 5.72500     | 48.46   | Pk              | 35.00          | -19.70        | 0.00       | 63.76     | -            | -             | 68.20           | -4.44          | 163             | 182            | H              |             |          |   |
|                   | 5.72749     | 49.38   | Pk              | 35.00          | -19.70        | 0.00       | 64.68     | -            | -             | 68.20           | -3.52          | 163             | 182            | H              |             |          |   |
|                   | 5.72500     | 38.53   | Pk              | 35.00          | -19.70        | 0.00       | 53.83     | -            | -             | 68.20           | -14.37         | 263             | 188            | V              |             |          |   |
|                   | 5.72557     | 41.03   | Pk              | 35.00          | -19.70        | 0.00       | 56.33     | -            | -             | 68.20           | -11.87         | 263             | 188            | V              |             |          |   |
| 802.11ax (HE40)   | 5510        | MIMO    | * 5.45998       | 38.03          | Pk            | 34.90      | -20.40    | 0.00         | 52.53         | -               | -              | 74.00           | -21.47         | 167            | 188         | H        |   |
|                   |             |         | * 5.45202       | 40.70          | Pk            | 34.90      | -20.40    | 0.00         | 55.20         | -               | -              | 74.00           | -18.80         | 167            | 188         | H        |   |
|                   |             |         | 5.46998         | 40.88          | Pk            | 34.90      | -20.30    | 0.00         | 55.48         | -               | -              | 68.20           | -12.72         | 167            | 188         | H        |   |
|                   |             |         | 5.46359         | 42.94          | Pk            | 34.90      | -20.30    | 0.00         | 57.54         | -               | -              | 68.20           | -10.66         | 167            | 188         | H        |   |
|                   |             |         | * 5.45998       | 28.67          | RMS           | 34.90      | -20.40    | 0.00         | 43.17         | 54.00           | -10.83         | -               | -              | 167            | 188         | H        |   |
|                   |             |         | * 5.45915       | 29.35          | RMS           | 34.90      | -20.40    | 0.00         | 43.85         | 54.00           | -10.15         | -               | -              | 167            | 188         | H        |   |
|                   |             |         | 5.46998         | 30.55          | RMS           | 34.90      | -20.30    | 0.00         | 45.15         | -               | -              | -               | -              | 167            | 188         | H        |   |
|                   |             |         | 5.46978         | 31.01          | RMS           | 34.90      | -20.30    | 0.00         | 45.61         | -               | -              | -               | -              | 167            | 188         | H        |   |
|                   |             |         | * 5.45998       | 38.14          | Pk            | 34.90      | -20.40    | 0.00         | 52.64         | -               | -              | 74.00           | -21.36         | 265            | 201         | V        |   |
|                   |             |         | * 5.43259       | 40.25          | Pk            | 34.90      | -20.40    | 0.00         | 54.75         | -               | -              | 74.00           | -19.25         | 265            | 201         | V        |   |
|                   | 5.46998     | 39.04   | Pk              | 34.90          | -20.30        | 0.00       | 53.64     | -            | -             | 68.20           | -14.56         | 265             | 201            | V              |             |          |   |
|                   | 5.46549     | 40.55   | Pk              | 34.90          | -20.30        | 0.00       | 55.15     | -            | -             | 68.20           | -13.05         | 265             | 201            | V              |             |          |   |
|                   | * 5.45998   | 27.05   | RMS             | 34.90          | -20.40        | 0.00       | 41.55     | 54.00        | -12.45        | -               | -              | 265             | 201            | V              |             |          |   |
|                   | * 5.45937   | 28.67   | RMS             | 34.90          | -20.40        | 0.00       | 43.17     | 54.00        | -10.83        | -               | -              | 265             | 201            | V              |             |          |   |
|                   | 5.46998     | 28.43   | RMS             | 34.90          | -20.30        | 0.00       | 43.03     | -            | -             | -               | -              | 265             | 201            | V              |             |          |   |
|                   | 5.46889     | 29.01   | RMS             | 34.90          | -20.30        | 0.00       | 43.61     | -            | -             | -               | -              | 265             | 201            | V              |             |          |   |
|                   | 5.72500     | 38.72   | Pk              | 35.00          | -19.70        | 0.00       | 54.02     | -            | -             | 68.20           | -14.18         | 167             | 148            | H              |             |          |   |
|                   | 5.73113     | 41.38   | Pk              | 35.00          | -19.70        | 0.00       | 56.68     | -            | -             | 68.20           | -11.52         | 167             | 148            | H              |             |          |   |
|                   | 5.72500     | 36.74   | Pk              | 35.00          | -19.70        | 0.00       | 52.04     | -            | -             | 68.20           | -16.16         | 90              | 189            | V              |             |          |   |
|                   | 5.80026     | 39.64   | Pk              | 35.10          | -19.50        | 0.00       | 55.24     | -            | -             | 68.20           | -12.96         | 90              | 189            | V              |             |          |   |
| 802.11ax (HE80)   | 5530        | MIMO    | * 5.45998       | 40.62          | Pk            | 34.90      | -20.40    | 0.00         | 55.12         | -               | -              | 74.00           | -18.88         | 160            | 186         | H        |   |
|                   |             |         | * 5.45613       | 43.53          | Pk            | 34.90      | -20.40    | 0.00         | 58.03         | -               | -              | 74.00           | -15.97         | 160            | 186         | H        |   |
|                   |             |         | 5.46998         | 41.06          | Pk            | 34.90      | -20.30    | 0.00         | 56.66         | -               | -              | 68.20           | -12.54         | 160            | 186         | H        |   |
|                   |             |         | 5.46952         | 44.13          | Pk            | 34.90      | -20.30    | 0.00         | 58.73         | -               | -              | 68.20           | -9.47          | 160            | 186         | H        |   |
|                   |             |         | * 5.45998       | 30.15          | RMS           | 34.90      | -20.40    | 0.00         | 44.65         | 54.00           | -9.35          | -               | -              | 160            | 186         | H        |   |
|                   |             |         | * 5.45718       | 31.04          | RMS           | 34.90      | -20.40    | 0.00         | 45.54         | 54.00           | -8.46          | -               | -              | 160            | 186         | H        |   |
|                   |             |         | 5.46998         | 31.16          | RMS           | 34.90      | -20.30    | 0.00         | 45.76         | -               | -              | -               | -              | 160            | 186         | H        |   |
|                   |             |         | 5.46816         | 32.08          | RMS           | 34.90      | -20.40    | 0.00         | 46.58         | -               | -              | -               | -              | 160            | 186         | H        |   |
|                   |             |         | * 5.45998       | 39.08          | Pk            | 34.90      | -20.40    | 0.00         | 53.58         | -               | -              | 74.00           | -20.42         | 151            | 100         | V        |   |
|                   |             |         | * 5.44948       | 40.92          | Pk            | 34.90      | -20.40    | 0.00         | 55.42         | -               | -              | 74.00           | -18.58         | 151            | 100         | V        |   |
|                   | 5.46998     | 38.63   | Pk              | 34.90          | -20.30        | 0.00       | 53.23     | -            | -             | 68.20           | -14.97         | 151             | 100            | V              |             |          |   |
|                   | 5.46854     | 41.34   | Pk              | 34.90          | -20.40        | 0.00       | 55.84     | -            | -             | 68.20           | -12.36         | 151             | 100            | V              |             |          |   |
|                   | * 5.45998   | 27.78   | RMS             | 34.90          | -20.40        | 0.00       | 42.28     | 54.00        | -11.72        | -               | -              | 151             | 100            | V              |             |          |   |
|                   | * 5.45589   | 29.59   | RMS             | 34.90          | -20.40        | 0.00       | 44.09     | 54.00        | -9.91         | -               | -              | 151             | 100            | V              |             |          |   |
|                   | 5.46998     | 28.60   | RMS             | 34.90          | -20.30        | 0.00       | 43.20     | -            | -             | -               | -              | 151             | 100            | V              |             |          |   |
|                   | 5.46867     | 30.12   | RMS             | 34.90          | -20.40        | 0.00       | 44.62     | -            | -             | -               | -              | 151             | 100            | V              |             |          |   |
|                   | 5.72500     | 38.19   | Pk              | 35.00          | -19.70        | 0.00       | 53.49     | -            | -             | 68.20           | -14.71         | 170             | 193            | H              |             |          |   |
|                   | 5.80883     | 40.53   | Pk              | 35.10          | -19.50        | 0.00       | 56.13     | -            | -             | 68.20           | -12.07         | 170             | 193            | H              |             |          |   |
|                   | 5.72500     | 37.12   | Pk              | 35.00          | -19.70        | 0.00       | 52.42     | -            | -             | 68.20           | -15.78         | 145             | 104            | V              |             |          |   |
|                   | 5.77440     | 39.78   | Pk              | 35.00          | -19.60        | 0.00       | 55.18     | -            | -             | 68.20           | -13.02         | 145             | 104            | V              |             |          |   |

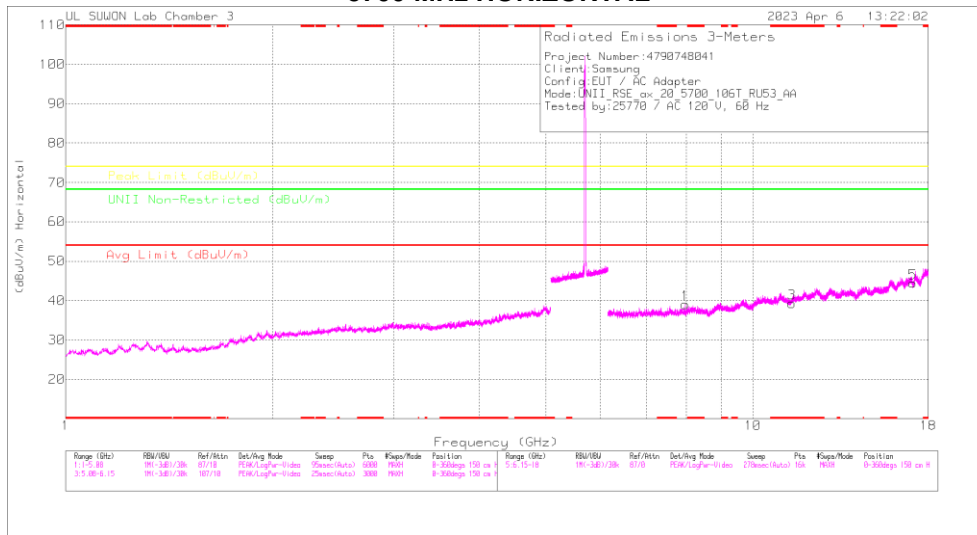
| Mode             | Freq. [MHz] | Antenna | Frequency [GHz] | Reading [dBuV] | Detector Mode | ANT Factor | Loss [dB] | DC Corr [dB] | Result dBuV/m | AV Limit dBuV/m | AV Margin [dB] | PK Limit dBuV/m | PK Margin [dB] | Azimuth [Degs] | Height [cm] | Polarity |   |
|------------------|-------------|---------|-----------------|----------------|---------------|------------|-----------|--------------|---------------|-----------------|----------------|-----------------|----------------|----------------|-------------|----------|---|
| 802.11ax (HE160) | 5570 Lower  | MIMO    | * 5.45998       | 42.20          | Pk            | 34.90      | -20.40    | 0.00         | 56.70         | -               | -              | 74.00           | -17.30         | 157            | 175         | H        |   |
|                  |             |         | * 5.44235       | 45.38          | Pk            | 34.90      | -20.40    | 0.00         | 59.88         | -               | -              | 74.00           | -14.12         | 157            | 175         | H        |   |
|                  |             |         | 5.46998         | 42.97          | Pk            | 34.90      | -20.30    | 0.00         | 57.57         | -               | -              | 68.20           | -10.63         | 157            | 175         | H        |   |
|                  |             |         | 5.46412         | 44.94          | Pk            | 34.90      | -20.30    | 0.00         | 59.54         | -               | -              | 68.20           | -8.66          | 157            | 175         | H        |   |
|                  |             |         | * 5.45998       | 31.40          | RMS           | 34.90      | -20.40    | 0.00         | 45.90         | 54.00           | -8.10          | -               | -              | -              | 157         | 175      | H |
|                  |             |         | * 5.4551        | 32.95          | RMS           | 34.90      | -20.40    | 0.00         | 47.45         | 54.00           | -6.55          | -               | -              | -              | 157         | 175      | H |
|                  |             |         | 5.46998         | 32.25          | RMS           | 34.90      | -20.30    | 0.00         | 46.85         | -               | -              | -               | -              | -              | 157         | 175      | H |
|                  |             |         | 5.46753         | 33.18          | RMS           | 34.90      | -20.40    | 0.00         | 47.68         | -               | -              | -               | -              | -              | 157         | 175      | H |
|                  |             |         | * 5.45998       | 39.10          | Pk            | 34.90      | -20.40    | 0.00         | 53.60         | -               | -              | 74.00           | -20.40         | 254            | 200         | V        |   |
|                  |             |         | * 5.44696       | 42.15          | Pk            | 34.90      | -20.40    | 0.00         | 56.65         | -               | -              | 74.00           | -17.35         | 254            | 200         | V        |   |
|                  | 5.46998     | 39.60   | Pk              | 34.90          | -20.30        | 0.00       | 54.20     | -            | -             | 68.20           | -14.00         | 254             | 200            | V              |             |          |   |
|                  | 5.46320     | 41.31   | Pk              | 34.90          | -20.30        | 0.00       | 55.91     | -            | -             | 68.20           | -12.29         | 254             | 200            | V              |             |          |   |
|                  | * 5.45998   | 28.75   | RMS             | 34.90          | -20.40        | 0.00       | 43.25     | 54.00        | -10.75        | -               | -              | -               | 254            | 200            | V           |          |   |
|                  | * 5.45705   | 30.10   | RMS             | 34.90          | -20.40        | 0.00       | 44.60     | 54.00        | -9.40         | -               | -              | -               | 254            | 200            | V           |          |   |
|                  | 5.46998     | 28.98   | RMS             | 34.90          | -20.30        | 0.00       | 43.58     | -            | -             | -               | -              | -               | 254            | 200            | V           |          |   |
|                  | 5.46961     | 30.04   | RMS             | 34.90          | -20.30        | 0.00       | 44.64     | -            | -             | -               | -              | -               | 254            | 200            | V           |          |   |
|                  | 5.72501     | 40.27   | Pk              | 35.00          | -19.70        | 0.00       | 55.57     | -            | -             | 68.20           | -12.63         | 179             | 178            | H              |             |          |   |
|                  | 5.72658     | 41.73   | Pk              | 35.00          | -19.70        | 0.00       | 57.03     | -            | -             | 68.20           | -11.17         | 179             | 178            | H              |             |          |   |
|                  | 5.72501     | 37.35   | Pk              | 35.00          | -19.70        | 0.00       | 52.65     | -            | -             | 68.20           | -15.55         | 150             | 211            | V              |             |          |   |
|                  | 5.73502     | 39.90   | Pk              | 35.00          | -19.70        | 0.00       | 55.20     | -            | -             | 68.20           | -13.00         | 150             | 211            | V              |             |          |   |

Note1. Pk - Peak detector, RMS - RMS detector

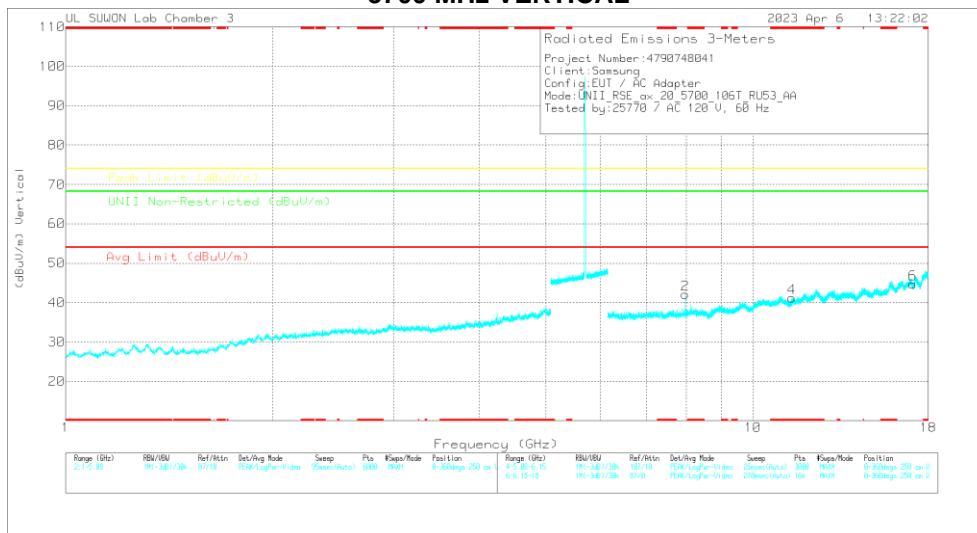
Note2. \* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

**HARMONICS AND SPURIOUS EMISSIONS(WORST CASE: 802.11ax HE20 53RU / 5700 MHz)**

**5700 MHz HORIZONTAL**



**5700 MHz VERTICAL**



Note. Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

**5700 MHz DATA**

**Radiated Emissions**

| Frequency (GHz) | Meas. Reading (dBuV) | Det. | 317_0021867 | 6GHz_HF(dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | Margin (dB) | UNII Non-Restricted (dBuV/m) | Margin (dB) | Altitude (Digits) | Height (cm) | Polarity |
|-----------------|----------------------|------|-------------|-------------|--------------|----------------------------|--------------------|-------------|---------------------|-------------|------------------------------|-------------|-------------------|-------------|----------|
| 7.97351         | 38.39                | PK-U | 35.9        | -24.4       | 0            | 49.89                      | -                  | -           | -                   | -           | 68.2                         | -18.31      | 162               | 297         | H        |
| 7.97196         | 41.2                 | PK-U | 35.9        | -24.4       | 0            | 52.7                       | -                  | -           | -                   | -           | 68.2                         | -15.5       | 191               | 113         | V        |
| * 11.39922      | 32.23                | PK-U | 38.1        | -21.3       | 0            | 49.02                      | -                  | -           | 74                  | -24.98      | -                            | -           | 0                 | 100         | H        |
| * 11.40012      | 32.54                | PK-U | 38.1        | -21.3       | 0            | 49.34                      | -                  | -           | 74                  | -24.66      | -                            | -           | 0                 | 100         | V        |
| 17.09905        | 31.56                | PK-U | 41.4        | -18.4       | 0            | 54.56                      | -                  | -           | -                   | -           | 68.2                         | -13.64      | 0                 | 100         | H        |
| 17.10086        | 32.36                | PK-U | 41.4        | -18.4       | 0            | 55.36                      | -                  | -           | -                   | -           | 68.2                         | -12.84      | 0                 | 100         | V        |

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band  
 PK-U - U-NII: Maximum Peak

**HARMONICS AND SPURIOUS EMISSIONS TEST DATA**

| Mode                            | Freq. [MHz] | Antenna | Frequency [GHz] | Reading [dBuV] | Detector Mode | ANT Factor | Loss [dB] | DC Corr [dB] | Result [dBuV/m] | AV Limit [dBuV/m] | AV Margin [dB] | PK Limit [dBuV/m] | PK Margin [dB] | Non-Restricted [dBuV/m] | Margin [dB] | Azimuth [Degs] | Height [cm] | Polarity |   |
|---------------------------------|-------------|---------|-----------------|----------------|---------------|------------|-----------|--------------|-----------------|-------------------|----------------|-------------------|----------------|-------------------------|-------------|----------------|-------------|----------|---|
| 802.11a                         | 5500        | MIMO    | * 8.24679       | 35.71          | PK-U          | 36.00      | -23.80    | 0.00         | 47.91           | -                 | -              | 74.00             | -26.09         | -                       | -           | 0              | 100         | H        |   |
|                                 |             |         | * 8.2474        | 35.99          | PK-U          | 36.00      | -23.70    | 0.00         | 48.29           | -                 | -              | 74.00             | -25.71         | -                       | -           | 0              | 100         | V        |   |
|                                 |             |         | * 11.00104      | 33.26          | PK-U          | 38.00      | -21.00    | 0.00         | 50.26           | -                 | -              | 74.00             | -23.74         | -                       | -           | 0              | 100         | H        |   |
|                                 |             |         | * 11.00089      | 33.66          | PK-U          | 38.00      | -21.00    | 0.00         | 50.66           | -                 | -              | 74.00             | -23.34         | -                       | -           | 0              | 100         | V        |   |
|                                 |             |         | * 16.501        | 32.84          | PK-U          | 41.60      | -19.80    | 0.00         | 54.64           | -                 | -              | -                 | -              | -                       | 68.20       | -13.56         | 0           | 100      | H |
|                                 |             |         | * 16.802        | 31.61          | PK-U          | 41.90      | -19.00    | 0.00         | 54.51           | -                 | -              | -                 | -              | -                       | 68.20       | -13.69         | 0           | 100      | V |
|                                 | 5580        | MIMO    | * 8.36803       | 35.40          | PK-U          | 36.00      | -23.70    | 0.00         | 47.70           | -                 | -              | 74.00             | -26.30         | -                       | -           | 0              | 100         | H        |   |
|                                 |             |         | * 8.36989       | 35.66          | PK-U          | 36.00      | -23.70    | 0.00         | 47.96           | -                 | -              | 74.00             | -26.04         | -                       | -           | 0              | 100         | V        |   |
|                                 |             |         | * 11.16172      | 33.66          | PK-U          | 38.10      | -21.30    | 0.00         | 50.46           | -                 | -              | 74.00             | -23.54         | -                       | -           | 0              | 100         | H        |   |
|                                 |             |         | * 11.16037      | 34.51          | PK-U          | 38.10      | -21.40    | 0.00         | 51.21           | -                 | -              | 74.00             | -22.79         | -                       | -           | 0              | 100         | V        |   |
|                                 |             |         | * 16.738        | 31.60          | PK-U          | 41.80      | -19.20    | 0.00         | 54.20           | -                 | -              | -                 | -              | -                       | 68.20       | -14.00         | 0           | 100      | H |
|                                 |             |         | * 16.739        | 31.92          | PK-U          | 41.80      | -19.20    | 0.00         | 54.52           | -                 | -              | -                 | -              | -                       | 68.20       | -13.68         | 0           | 100      | V |
|                                 | 5700        | MIMO    | * 7.982         | 37.16          | PK-U          | 35.90      | -24.30    | 0.00         | 48.76           | -                 | -              | -                 | -              | 68.20                   | -19.44      | 165            | 164         | H        |   |
|                                 |             |         | * 7.979         | 39.22          | PK-U          | 35.90      | -24.40    | 0.00         | 50.72           | -                 | -              | -                 | -              | 68.20                   | -17.48      | 192            | 162         | V        |   |
|                                 |             |         | * 11.39955      | 32.39          | PK-U          | 38.10      | -21.30    | 0.00         | 49.19           | -                 | -              | 74.00             | -24.81         | -                       | -           | 0              | 100         | H        |   |
|                                 |             |         | * 11.40601      | 32.45          | PK-U          | 38.10      | -21.40    | 0.00         | 49.15           | -                 | -              | 74.00             | -24.85         | -                       | -           | 0              | 100         | V        |   |
|                                 |             |         | * 17.100        | 31.93          | PK-U          | 41.40      | -18.40    | 0.00         | 54.93           | -                 | -              | -                 | -              | -                       | 68.20       | -13.27         | 0           | 100      | H |
|                                 |             |         | * 17.106        | 31.96          | PK-U          | 41.40      | -18.50    | 0.00         | 54.86           | -                 | -              | -                 | -              | -                       | 68.20       | -13.34         | 0           | 100      | V |
|                                 | 5720        | MIMO    | * 8.009         | 38.02          | PK-U          | 35.90      | -24.30    | 0.00         | 49.62           | -                 | -              | -                 | -              | 68.20                   | -18.58      | 164            | 138         | H        |   |
|                                 |             |         | * 8.005         | 40.04          | PK-U          | 35.90      | -24.30    | 0.00         | 51.64           | -                 | -              | -                 | -              | 68.20                   | -16.56      | 188            | 157         | V        |   |
|                                 |             |         | * 11.4011       | 32.78          | PK-U          | 38.10      | -21.30    | 0.00         | 49.58           | -                 | -              | 74.00             | -24.42         | -                       | -           | 0              | 100         | H        |   |
|                                 |             |         | * 11.39788      | 32.60          | PK-U          | 38.10      | -21.40    | 0.00         | 49.30           | -                 | -              | 74.00             | -24.70         | -                       | -           | 0              | 100         | V        |   |
|                                 |             |         | * 17.159        | 32.20          | PK-U          | 41.30      | -18.50    | 0.00         | 55.00           | -                 | -              | -                 | -              | -                       | 68.20       | -13.20         | 0           | 100      | H |
|                                 |             |         | * 17.160        | 32.22          | PK-U          | 41.30      | -18.40    | 0.00         | 55.12           | -                 | -              | -                 | -              | -                       | 68.20       | -13.08         | 0           | 100      | V |
| 802.11ax (HE20) 53RU Spot-Check | 5700        | MIMO    | * 7.974         | 38.39          | PK-U          | 35.90      | -24.40    | 0.00         | 49.89           | -                 | -              | -                 | -              | 68.20                   | -18.31      | 162            | 297         | H        |   |
|                                 |             |         | * 7.972         | 41.20          | PK-U          | 35.90      | -24.40    | 0.00         | 52.70           | -                 | -              | -                 | -              | 68.20                   | -15.50      | 191            | 113         | V        |   |
|                                 |             |         | * 11.39922      | 32.22          | PK-U          | 38.10      | -21.30    | 0.00         | 49.02           | -                 | -              | 74.00             | -24.98         | -                       | -           | 0              | 100         | H        |   |
|                                 |             |         | * 11.40012      | 32.54          | PK-U          | 38.10      | -21.30    | 0.00         | 49.34           | -                 | -              | 74.00             | -24.66         | -                       | -           | 0              | 100         | V        |   |
|                                 |             |         | * 17.099        | 31.56          | PK-U          | 41.40      | -18.40    | 0.00         | 54.56           | -                 | -              | -                 | -              | -                       | 68.20       | -13.64         | 0           | 100      | H |
|                                 |             |         | * 17.101        | 32.36          | PK-U          | 41.40      | -18.40    | 0.00         | 55.36           | -                 | -              | -                 | -              | -                       | 68.20       | -12.84         | 0           | 100      | V |

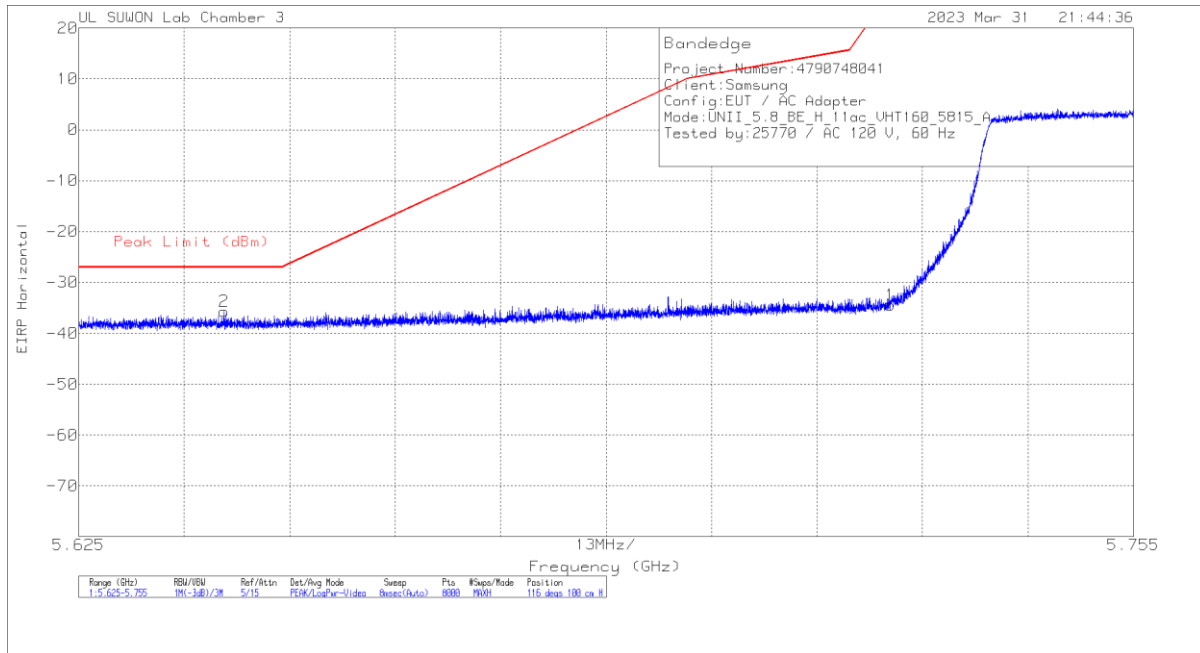
Note1. PK-U - U-NII: Maximum Peak / ADR - U-NII AD primary method, RMS average  
 Note2. \* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band



### 11.4. TX ABOVE 1GHz 2Tx MODE IN THE 5.8 GHz BAND

**BANDEDGE (WORST CASE: 802.11ac VHT160 / 5815 MHz Lower)**

**HORIZONTAL PEAK DATA**



**Trace Markers**

| Marker | Frequency (GHz) | Meter Reading (dBm) | Det | 3117_00218957 | 10dB_ATT(dB) | Conversion Factor (dB) | DC Corr (dB) | Corrected Reading EIRP | Peak Limit (dBm) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|---------------------|-----|---------------|--------------|------------------------|--------------|------------------------|------------------|----------------|----------------|-------------|----------|
| 1      | 5.725           | -61.48              | Pk  | 34.9          | -19.7        | 11.8                   | 0            | -34.48                 | 27               | -61.48         | 116            | 100         | H        |
| 2      | 5.64289         | -62.42              | Pk  | 34.9          | -20          | 11.8                   | 0            | -35.72                 | -27              | -8.72          | 116            | 100         | H        |

Pk - Peak detector

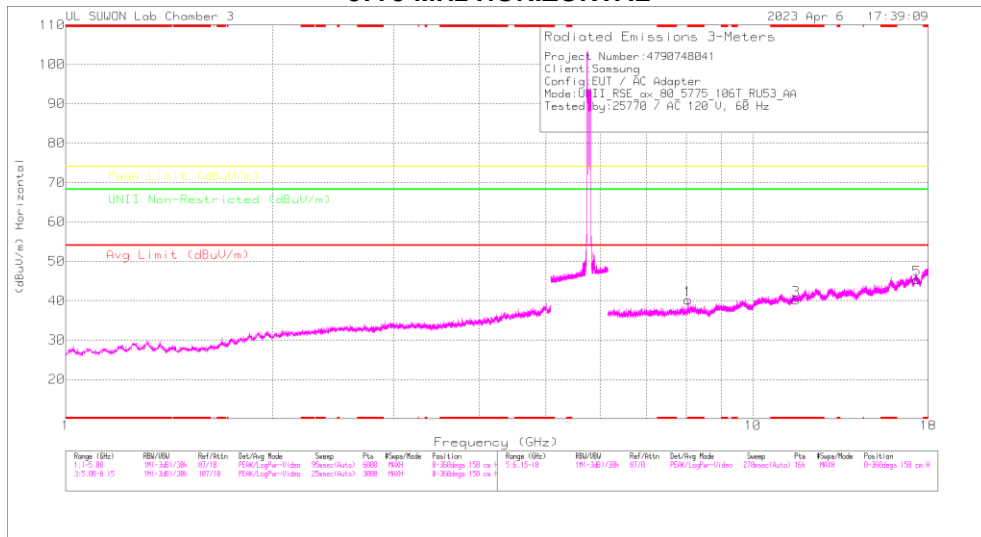
**BANDEDGE TEST DATA**

| Mode              | Freq. [MHz]       | Antenna | Frequency [GHz] | Reading [dBm] | Detector Mode | ANT Factor | Loss [dB] | Conv. F [dB] | DC Corr [dB] | Result [dBm] | PK Limit [dBm] | PK Margin [dB] | Azimuth [Degs] | Height [cm] | Polarity |
|-------------------|-------------------|---------|-----------------|---------------|---------------|------------|-----------|--------------|--------------|--------------|----------------|----------------|----------------|-------------|----------|
| 802.11a           | 5745              | MIMO    | 5.72500         | -58.01        | Pk            | 34.90      | -19.70    | 11.80        | 0.00         | -31.01       | 27.00          | -58.01         | 207            | 179         | H        |
|                   |                   |         | 5.64965         | -63.01        | Pk            | 34.90      | -20.00    | 11.80        | 0.00         | -36.31       | -27.00         | -9.31          | 207            | 179         | H        |
|                   |                   |         | 5.72500         | -65.00        | Pk            | 34.90      | -19.70    | 11.80        | 0.00         | -38.00       | 27.00          | -65.00         | 141            | 112         | V        |
|                   |                   |         | 5.64122         | -63.66        | Pk            | 34.90      | -20.00    | 11.80        | 0.00         | -36.96       | -27.00         | -9.96          | 141            | 112         | V        |
| 802.11n (HT20)    | 5745              | MIMO    | 5.72500         | -58.71        | Pk            | 34.90      | -19.70    | 11.80        | 0.00         | -31.71       | 27.00          | -58.71         | 197            | 152         | H        |
|                   |                   |         | 5.63797         | -63.35        | Pk            | 34.90      | -20.00    | 11.80        | 0.00         | -36.65       | -27.00         | -9.65          | 197            | 152         | H        |
|                   |                   |         | 5.72500         | -64.21        | Pk            | 34.90      | -19.70    | 11.80        | 0.00         | -37.21       | 27.00          | -64.21         | 145            | 124         | V        |
|                   |                   |         | 5.64952         | -63.56        | Pk            | 34.90      | -20.00    | 11.80        | 0.00         | -36.86       | -27.00         | -9.86          | 145            | 124         | V        |
| 802.11n (HT40)    | 5755              | MIMO    | 5.72500         | -58.46        | Pk            | 34.90      | -19.70    | 11.80        | 0.00         | -31.46       | 27.00          | -58.46         | 191            | 177         | H        |
|                   |                   |         | 5.63581         | -62.77        | Pk            | 34.90      | -20.00    | 11.80        | 0.00         | -36.07       | -27.00         | -9.07          | 191            | 177         | H        |
|                   |                   |         | 5.72500         | -65.87        | Pk            | 34.90      | -19.70    | 11.80        | 0.00         | -38.87       | 27.00          | -65.87         | 139            | 108         | V        |
|                   |                   |         | 5.64800         | -63.03        | Pk            | 34.90      | -20.10    | 11.80        | 0.00         | -36.43       | -27.00         | -9.43          | 139            | 108         | V        |
| 802.11ac (VHT80)  | 5775 (Lower Side) | MIMO    | 5.72500         | -59.43        | Pk            | 34.90      | -19.70    | 11.80        | 0.00         | -32.43       | 27.00          | -59.43         | 225            | 219         | H        |
|                   |                   |         | 5.63813         | -62.68        | Pk            | 34.90      | -20.00    | 11.80        | 0.00         | -35.98       | -27.00         | -8.98          | 225            | 219         | H        |
|                   |                   |         | 5.72500         | -65.87        | Pk            | 34.90      | -19.70    | 11.80        | 0.00         | -38.87       | 27.00          | -65.87         | 159            | 188         | V        |
|                   |                   |         | 5.63860         | -63.07        | Pk            | 34.90      | -20.00    | 11.80        | 0.00         | -36.37       | -27.00         | -9.37          | 159            | 188         | V        |
| 802.11ac (VHT160) | 5815 (Lower Side) | MIMO    | 5.72500         | -61.48        | Pk            | 34.90      | -19.70    | 11.80        | 0.00         | -34.48       | 27.00          | -61.48         | 116            | 100         | H        |
|                   |                   |         | 5.64289         | -62.42        | Pk            | 34.90      | -20.00    | 11.80        | 0.00         | -35.72       | -27.00         | -8.72          | 116            | 100         | H        |
|                   |                   |         | 5.72500         | -64.61        | Pk            | 34.90      | -19.70    | 11.80        | 0.00         | -37.61       | 27.00          | -64.61         | 142            | 110         | V        |
|                   |                   |         | 5.62534         | -62.97        | Pk            | 34.90      | -20.20    | 11.80        | 0.00         | -36.47       | -27.00         | -9.47          | 142            | 110         | V        |
| 802.11ax (HE20)   | 5745              | MIMO    | 5.72500         | -58.47        | Pk            | 34.90      | -19.70    | 11.80        | 0.00         | -31.47       | 27.00          | -58.47         | 224            | 100         | H        |
|                   |                   |         | 5.63904         | -63.52        | Pk            | 34.90      | -20.00    | 11.80        | 0.00         | -36.82       | -27.00         | -9.82          | 224            | 100         | H        |
|                   |                   |         | 5.72500         | -64.02        | Pk            | 34.90      | -19.70    | 11.80        | 0.00         | -37.02       | 27.00          | -64.02         | 145            | 124         | V        |
|                   |                   |         | 5.63774         | -63.66        | Pk            | 34.90      | -20.00    | 11.80        | 0.00         | -36.96       | -27.00         | -9.96          | 145            | 124         | V        |
| 802.11ax (HE40)   | 5755              | MIMO    | 5.72500         | -61.41        | Pk            | 34.90      | -19.70    | 11.80        | 0.00         | -34.41       | 27.00          | -61.41         | 153            | 175         | H        |
|                   |                   |         | 5.64878         | -62.99        | Pk            | 34.90      | -20.10    | 11.80        | 0.00         | -36.39       | -27.00         | -9.39          | 153            | 175         | H        |
|                   |                   |         | 5.72500         | -65.29        | Pk            | 34.90      | -19.70    | 11.80        | 0.00         | -38.29       | 27.00          | -65.29         | 281            | 197         | V        |
|                   |                   |         | 5.63816         | -63.74        | Pk            | 34.90      | -20.00    | 11.80        | 0.00         | -37.04       | -27.00         | -10.04         | 281            | 197         | V        |
| 802.11ax (HE80)   | 5775 (Lower Side) | MIMO    | 5.72500         | -60.78        | Pk            | 34.90      | -19.70    | 11.80        | 0.00         | -33.78       | 27.00          | -60.78         | 195            | 122         | H        |
|                   |                   |         | 5.63004         | -62.74        | Pk            | 34.90      | -20.00    | 11.80        | 0.00         | -36.04       | -27.00         | -9.04          | 195            | 122         | H        |
|                   |                   |         | 5.72500         | -65.41        | Pk            | 34.90      | -19.70    | 11.80        | 0.00         | -38.41       | 27.00          | -65.41         | 142            | 186         | V        |
|                   |                   |         | 5.63189         | -63.45        | Pk            | 34.90      | -20.10    | 11.80        | 0.00         | -36.85       | -27.00         | -9.85          | 142            | 186         | V        |
| 802.11ax (HE160)  | 5815 Lower        | MIMO    | 5.72500         | -60.69        | Pk            | 34.90      | -19.70    | 11.80        | 0.00         | -33.69       | 27.00          | -60.69         | 206            | 164         | H        |
|                   |                   |         | 5.64379         | -63.02        | Pk            | 34.90      | -20.00    | 11.80        | 0.00         | -36.32       | -27.00         | -9.32          | 206            | 164         | H        |
|                   |                   |         | 5.72500         | -65.04        | Pk            | 34.90      | -19.70    | 11.80        | 0.00         | -38.04       | 27.00          | -65.04         | 142            | 176         | V        |
|                   |                   |         | 5.62849         | -62.93        | Pk            | 34.90      | -20.00    | 11.80        | 0.00         | -36.23       | -27.00         | -9.23          | 142            | 176         | V        |

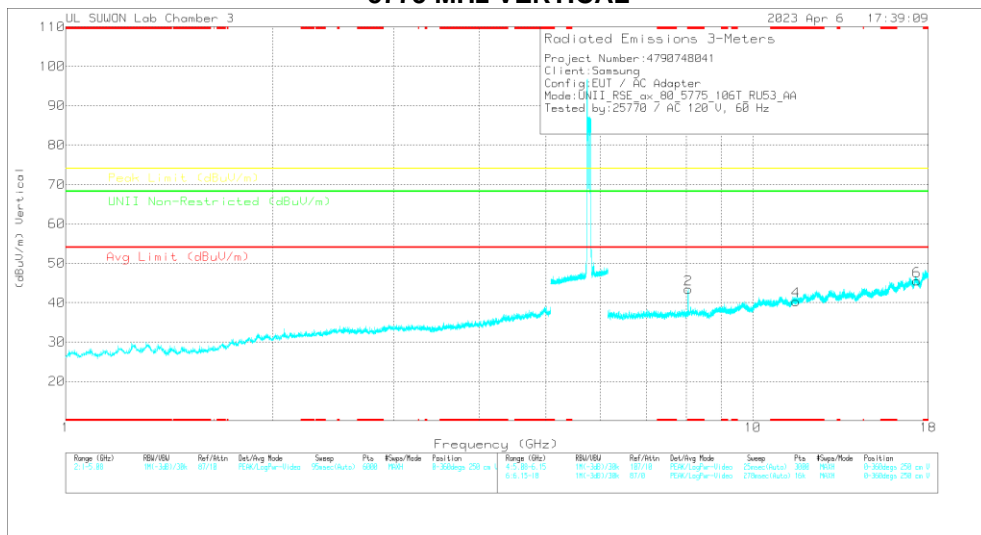
Note. Pk - Peak detector

**HARMONICS AND SPURIOUS EMISSIONS(WORST CASE: 802.11ax HE80 53RU / 5775 MHz)**

**5775 MHz HORIZONTAL**



**5775 MHz VERTICAL**



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

**5775 MHz DATA**

**Radiated Emissions**

| Frequency (GHz) | Meas. Reading (dBuV) | Det. | 317_0021867 | 6GHz_HPI(dB) | DC Corr (dB) | Corrected Reading (dBuV/m) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | Margin (dB) | UNII Non-Restricted (dBuV/m) | Margin (dB) | Azimuth (Deg) | Height (cm) | Polarity |
|-----------------|----------------------|------|-------------|--------------|--------------|----------------------------|--------------------|-------------|---------------------|-------------|------------------------------|-------------|---------------|-------------|----------|
| * 8.04735       | 39.67                | PK-U | 35.9        | -24.3        | 0            | 51.27                      | -                  | -           | 74                  | -22.73      | -                            | -           | 164           | 143         | H        |
| * 8.04826       | 28.31                | ADR  | 35.9        | -24.2        | 0            | 40.01                      | 54                 | -13.99      | -                   | -           | -                            | -           | 164           | 143         | H        |
| * 8.04719       | 42.16                | PK-U | 35.9        | -24.3        | 0            | 53.76                      | -                  | -           | 74                  | -20.24      | -                            | -           | 150           | 131         | V        |
| * 8.04869       | 31.3                 | ADR  | 35.9        | -24.2        | 0            | 43                         | 54                 | -11         | -                   | -           | -                            | -           | 150           | 131         | V        |
| * 11.54919      | 33.59                | PK-U | 38.2        | -21.4        | 0            | 50.39                      | -                  | -           | 74                  | -23.61      | -                            | -           | 0             | 100         | H        |
| * 11.55079      | 33.29                | PK-U | 38.2        | -21.5        | 0            | 49.99                      | -                  | -           | 74                  | -24.01      | -                            | -           | 0             | 100         | V        |
| 17.32171        | 31.82                | PK-U | 41.1        | -17.7        | 0            | 55.22                      | -                  | -           | -                   | -           | 68.2                         | -12.98      | 0             | 100         | H        |
| 17.32635        | 32.31                | PK-U | 41.1        | -17.7        | 0            | 55.71                      | -                  | -           | -                   | -           | 68.2                         | -12.49      | 0             | 100         | V        |

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band  
 PK-U - U-NII: Maximum Peak  
 ADR - U-NII AD primary method, RMS average

**HARMONICS AND SPURIOUS EMISSIONS TEST DATA**

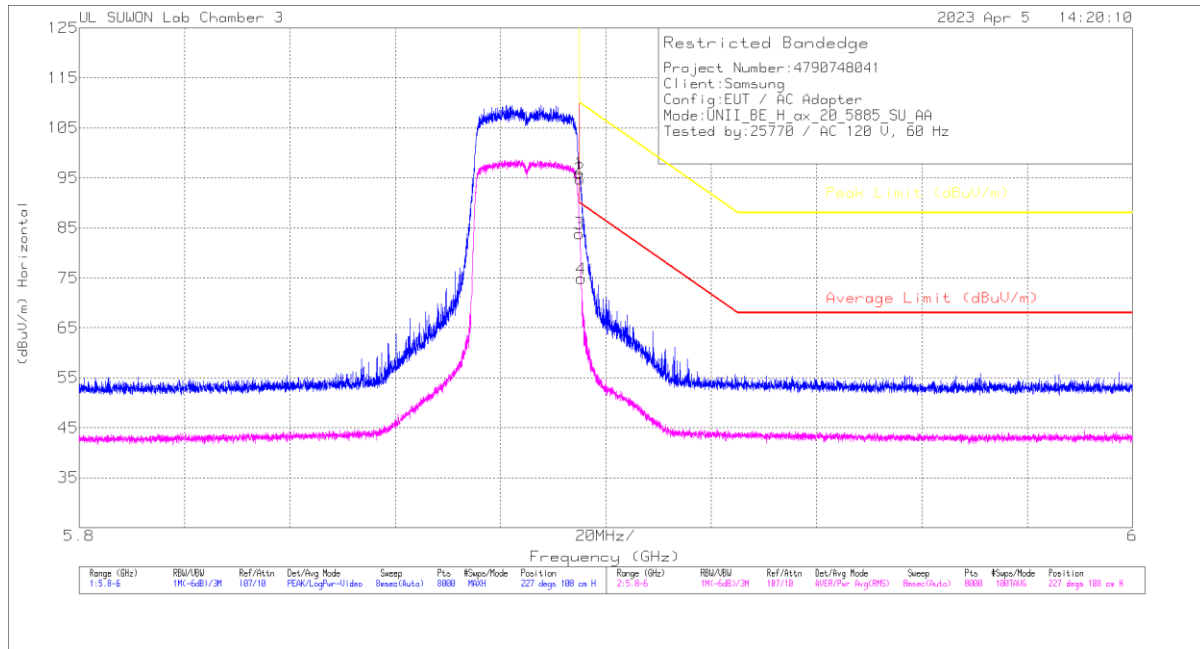
| Mode                             | Freq. [MHz] | Antenna | Frequency [GHz]                 | Reading [dBuV] | Detector Mode | ANT Factor | Loss [dB] | DC Corr [dB] | Result [dBuV/m] | AV Limit [dBuV/m] | AV Margin [dB] | PK Limit [dBuV/m] | PK Margin [dB] | Non-Restricted [dBuV/m] | Margin [dB] | Azimuth [Degs] | Height [cm] | Polarity |     |     |
|----------------------------------|-------------|---------|---------------------------------|----------------|---------------|------------|-----------|--------------|-----------------|-------------------|----------------|-------------------|----------------|-------------------------|-------------|----------------|-------------|----------|-----|-----|
| 802.11a                          | 5745        | MIMO    | * 8.04623                       | 37.69          | PK-U          | 35.90      | -24.30    | 0.00         | 49.29           | -                 | -              | 74.00             | -24.71         | -                       | -           | 162            | 161         | H        |     |     |
|                                  |             |         | ** 8.04548                      | 27.18          | ADR           | 35.90      | -24.30    | 0.15         | 38.93           | 54.00             | -15.07         | -                 | -              | -                       | -           | -              | 162         | 161      | H   |     |
|                                  |             |         | * 8.04622                       | 40.13          | PK-U          | 35.90      | -24.30    | 0.00         | 51.73           | -                 | -              | -                 | 74.00          | -22.27                  | -           | -              | 181         | 223      | V   |     |
|                                  |             |         | ** 8.04087                      | 29.20          | ADR           | 35.90      | -24.30    | 0.15         | 40.95           | 54.00             | -13.05         | -                 | -              | -                       | -           | -              | 181         | 223      | V   |     |
|                                  |             |         | * 11.4941                       | 32.62          | PK-U          | 38.20      | -21.30    | 0.00         | 49.52           | -                 | -              | -                 | 74.00          | -24.48                  | -           | -              | 0           | 100      | H   |     |
|                                  |             |         | ** 11.51187                     | 32.62          | PK-U          | 38.20      | -21.30    | 0.00         | 49.52           | -                 | -              | -                 | 74.00          | -24.48                  | -           | -              | 0           | 100      | V   |     |
|                                  |             |         | 17.231                          | 32.05          | PK-U          | 41.10      | -17.60    | 0.00         | 55.55           | -                 | -              | -                 | -              | -                       | -           | 68.20          | -12.65      | 0        | 100 | H   |
|                                  | 17.235      | 32.15   | PK-U                            | 41.10          | -17.60        | 0.00       | 55.65     | -            | -               | -                 | -              | -                 | -              | 68.20                   | -12.55      | 0              | 100         | V        |     |     |
|                                  | 5785        | MIMO    | * 8.09585                       | 37.05          | PK-U          | 36.00      | -24.00    | 0.00         | 49.05           | -                 | -              | 74.00             | -24.95         | -                       | -           | -              | 164         | 166      | H   |     |
|                                  |             |         | * 8.09575                       | 26.09          | ADR           | 36.00      | -24.00    | 0.15         | 38.24           | 54.00             | -15.76         | -                 | -              | -                       | -           | -              | 164         | 166      | H   |     |
|                                  |             |         | * 8.10213                       | 38.71          | PK-U          | 36.00      | -23.90    | 0.00         | 50.81           | -                 | -              | -                 | 74.00          | -23.19                  | -           | -              | 164         | 146      | V   |     |
|                                  |             |         | ** 8.09692                      | 27.82          | ADR           | 36.00      | -24.00    | 0.15         | 39.97           | 54.00             | -14.03         | -                 | -              | -                       | -           | -              | 164         | 146      | V   |     |
|                                  |             |         | * 11.56993                      | 34.12          | PK-U          | 38.20      | -21.50    | 0.00         | 50.82           | -                 | -              | -                 | 74.00          | -23.18                  | -           | -              | 0           | 100      | H   |     |
|                                  |             |         | ** 11.56795                     | 33.62          | PK-U          | 38.20      | -21.50    | 0.00         | 50.32           | -                 | -              | -                 | 74.00          | -23.68                  | -           | -              | 0           | 100      | V   |     |
|                                  |             |         | 17.352                          | 31.56          | PK-U          | 41.10      | -17.80    | 0.00         | 54.86           | -                 | -              | -                 | -              | -                       | -           | 68.20          | -13.34      | 0        | 100 | H   |
|                                  | 17.365      | 31.56   | PK-U                            | 41.10          | -17.70        | 0.00       | 54.96     | -            | -               | -                 | -              | -                 | -              | 68.20                   | -13.24      | 0              | 100         | V        |     |     |
|                                  | 5825        | MIMO    | 8.736                           | 34.00          | PK-U          | 36.10      | -22.70    | 0.00         | 47.40           | -                 | -              | -                 | -              | -                       | 68.20       | -20.80         | 0           | 100      | H   |     |
|                                  |             |         | 8.735                           | 34.81          | PK-U          | 36.10      | -22.70    | 0.00         | 48.21           | -                 | -              | -                 | -              | -                       | 68.20       | -19.99         | 0           | 100      | V   |     |
|                                  |             |         | * 11.64843                      | 34.62          | PK-U          | 38.30      | -21.40    | 0.00         | 51.52           | -                 | -              | -                 | 74.00          | -22.48                  | -           | -              | 0           | 100      | H   |     |
|                                  |             |         | * 11.65146                      | 34.85          | PK-U          | 38.30      | -21.40    | 0.00         | 51.75           | -                 | -              | -                 | 74.00          | -22.25                  | -           | -              | 0           | 100      | V   |     |
|                                  |             |         | 17.476                          | 31.02          | PK-U          | 41.20      | -17.20    | 0.00         | 55.02           | -                 | -              | -                 | -              | -                       | -           | 68.20          | -13.18      | 0        | 100 | H   |
| 17.479                           |             |         | 30.98                           | PK-U           | 41.20         | -17.20     | 0.00      | 54.98        | -               | -                 | -              | -                 | -              | -                       | 68.20       | -13.22         | 0           | 100      | V   |     |
| 802.11ax (HE20) 53RU Spot-check  |             |         | 5745                            | MIMO           | * 8.03637     | 40.02      | PK-U      | 35.90        | -24.30          | 0.00              | 51.62          | -                 | -              | 74.00                   | -22.38      | -              | -           | 166      | 154 | H   |
|                                  | ** 8.0403   | 28.83   |                                 |                | ADR           | 35.90      | -24.30    | 0.00         | 40.43           | 54.00             | -13.57         | -                 | -              | -                       | -           | 166            | 154         | H        |     |     |
|                                  | * 8.03478   | 42.54   |                                 |                | PK-U          | 35.90      | -24.30    | 0.00         | 54.14           | -                 | -              | -                 | 74.00          | -19.86                  | -           | -              | 191         | 124      | V   |     |
|                                  | ** 8.03702  | 31.12   |                                 |                | ADR           | 35.90      | -24.30    | 0.00         | 42.72           | 54.00             | -11.28         | -                 | -              | -                       | -           | 191            | 124         | V        |     |     |
|                                  | * 11.49376  | 33.01   |                                 |                | PK-U          | 38.20      | -21.30    | 0.00         | 49.91           | -                 | -              | -                 | 74.00          | -24.09                  | -           | -              | 0           | 100      | H   |     |
|                                  | ** 11.49184 | 32.41   |                                 |                | PK-U          | 38.20      | -21.20    | 0.00         | 49.41           | -                 | -              | -                 | 74.00          | -24.59                  | -           | -              | 0           | 100      | V   |     |
|                                  | 17.233      | 33.19   |                                 |                | PK-U          | 41.10      | -17.60    | 0.00         | 56.69           | -                 | -              | -                 | -              | -                       | -           | 68.20          | -11.51      | 0        | 100 | H   |
| 17.236                           | 32.21       | PK-U    | 41.10                           | -17.60         | 0.00          | 55.71      | -         | -            | -               | -                 | -              | -                 | 68.20          | -12.49                  | 0           | 100            | V           |          |     |     |
| 802.11ax (HE20) 54RU Spot-check  | 5825        | MIMO    | 8.738                           | 34.24          | PK-U          | 36.10      | -22.70    | 0.00         | 47.64           | -                 | -              | -                 | -              | -                       | 68.20       | -20.56         | 0           | 100      | H   |     |
|                                  |             |         | 8.737                           | 34.14          | PK-U          | 36.10      | -22.70    | 0.00         | 47.54           | -                 | -              | -                 | -              | -                       | 68.20       | -20.66         | 0           | 100      | V   |     |
|                                  |             |         | * 11.65056                      | 34.50          | PK-U          | 38.30      | -21.50    | 0.00         | 51.30           | -                 | -              | -                 | 74.00          | -22.70                  | -           | -              | 0           | 100      | H   |     |
|                                  |             |         | * 11.64847                      | 34.99          | PK-U          | 38.30      | -21.40    | 0.00         | 51.89           | -                 | -              | -                 | 74.00          | -22.11                  | -           | -              | 0           | 100      | V   |     |
|                                  |             |         | 17.475                          | 31.21          | PK-U          | 41.10      | -17.20    | 0.00         | 55.11           | -                 | -              | -                 | -              | -                       | -           | 68.20          | -13.09      | 0        | 100 | H   |
|                                  |             |         | 17.477                          | 31.18          | PK-U          | 41.20      | -17.20    | 0.00         | 55.18           | -                 | -              | -                 | -              | -                       | -           | 68.20          | -13.02      | 0        | 100 | V   |
|                                  |             |         | 802.11ax (HE40) 53RU Spot-check | 5755           | MIMO          | * 8.0395   | 40.01     | PK-U         | 35.90           | -24.30            | 0.00           | 51.61             | -              | -                       | 74.00       | -22.39         | -           | -        | 165 | 143 |
| ** 8.0405                        | 28.66       | ADR     |                                 |                |               | 35.90      | -24.30    | 0.00         | 40.26           | 54.00             | -13.74         | -                 | -              | -                       | -           | 165            | 143         | H        |     |     |
| * 8.0387                         | 42.46       | PK-U    |                                 |                |               | 35.90      | -24.30    | 0.00         | 54.06           | -                 | -              | -                 | 74.00          | -19.94                  | -           | -              | 170         | 203      | V   |     |
| * 8.04077                        | 31.17       | ADR     |                                 |                |               | 35.90      | -24.30    | 0.00         | 42.77           | 54.00             | -11.23         | -                 | -              | -                       | -           | 170            | 203         | V        |     |     |
| * 11.51093                       | 32.88       | PK-U    |                                 |                |               | 38.20      | -21.30    | 0.00         | 49.78           | -                 | -              | -                 | 74.00          | -24.22                  | -           | -              | 0           | 100      | H   |     |
| * 11.513                         | 32.72       | PK-U    |                                 |                |               | 38.20      | -21.30    | 0.00         | 49.62           | -                 | -              | -                 | 74.00          | -24.38                  | -           | -              | 0           | 100      | V   |     |
| 17.264                           | 32.27       | PK-U    |                                 |                |               | 41.10      | -17.50    | 0.00         | 56.87           | -                 | -              | -                 | -              | -                       | -           | 68.20          | -12.33      | 0        | 100 | H   |
| 17.260                           | 32.65       | PK-U    | 41.10                           | -17.50         | 0.00          | 56.25      | -         | -            | -               | -                 | -              | -                 | 68.20          | -11.95                  | 0           | 100            | V           |          |     |     |
| 802.11ax (HE80) 53RU Spot-check  | 5775        | MIMO    | * 8.04735                       | 39.67          | PK-U          | 35.90      | -24.30    | 0.00         | 51.27           | -                 | -              | 74.00             | -22.73         | -                       | -           | 164            | 143         | H        |     |     |
|                                  |             |         | * 8.04826                       | 28.31          | ADR           | 35.90      | -24.20    | 0.00         | 40.01           | 54.00             | -13.99         | -                 | -              | -                       | -           | 164            | 143         | H        |     |     |
|                                  |             |         | * 8.04719                       | 42.16          | PK-U          | 35.90      | -24.30    | 0.00         | 53.76           | -                 | -              | -                 | 74.00          | -20.24                  | -           | -              | 190         | 131      | V   |     |
|                                  |             |         | * 8.04969                       | 31.30          | ADR           | 35.90      | -24.20    | 0.00         | 43.00           | 54.00             | -11.00         | -                 | -              | -                       | -           | 190            | 131         | V        |     |     |
|                                  |             |         | * 11.54919                      | 33.59          | PK-U          | 38.20      | -21.40    | 0.00         | 50.39           | -                 | -              | -                 | 74.00          | -23.61                  | -           | -              | 0           | 100      | H   |     |
|                                  |             |         | ** 11.55079                     | 33.29          | PK-U          | 38.20      | -21.50    | 0.00         | 49.99           | -                 | -              | -                 | 74.00          | -24.01                  | -           | -              | 0           | 100      | V   |     |
|                                  |             |         | 17.322                          | 31.82          | PK-U          | 41.10      | -17.70    | 0.00         | 55.22           | -                 | -              | -                 | -              | -                       | -           | 68.20          | -12.98      | 0        | 100 | H   |
| 17.326                           | 32.31       | PK-U    | 41.10                           | -17.70         | 0.00          | 55.71      | -         | -            | -               | -                 | -              | -                 | 68.20          | -12.49                  | 0           | 100            | V           |          |     |     |
| 802.11ax (HE160) 53RU Spot-check | 5815        | MIMO    | 8.720                           | 34.21          | PK-U          | 36.10      | -22.80    | 0.00         | 47.51           | -                 | -              | -                 | -              | -                       | 68.20       | -20.69         | 0           | 100      | H   |     |
|                                  |             |         | 8.732                           | 34.11          | PK-U          | 36.10      | -22.70    | 0.00         | 47.51           | -                 | -              | -                 | -              | -                       | 68.20       | -20.69         | 0           | 100      | V   |     |
|                                  |             |         | * 11.62051                      | 34.20          | PK-U          | 38.30      | -21.40    | 0.00         | 51.10           | -                 | -              | -                 | 74.00          | -22.90                  | -           | -              | 0           | 100      | H   |     |
|                                  |             |         | * 11.62943                      | 34.67          | PK-U          | 38.30      | -21.50    | 0.00         | 51.47           | -                 | -              | -                 | 74.00          | -22.53                  | -           | -              | 0           | 100      | V   |     |
|                                  |             |         | 17.448                          | 31.63          | PK-U          | 41.10      | -17.40    | 0.00         | 55.33           | -                 | -              | -                 | -              | -                       | -           | 68.20          | -12.87      | 0        | 100 | H   |
|                                  |             |         | 17.444                          | 31.40          | PK-U          | 41.10      | -17.40    | 0.00         | 55.10           | -                 | -              | -                 | -              | -                       | -           | 68.20          | -13.10      | 0        | 100 | V   |

Note1. PK-U - U-NII: Maximum Peak / ADR - U-NII AD primary method, RMS average  
 Note2. \* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

## 11.5. TX ABOVE 1GHz 2Tx MODE IN THE 5.9 GHz BAND

### BANDEDGE (WORST CASE: 802.11ax HE20 / 5885 MHz)

#### HORIZONTAL PEAK DATA



#### Trace Markers

| Marker | Frequency (GHz) | Meter Reading (dBUU) | Det | 3117_00218957 | 10dB_ATT(dB) | DC Corr (dB) | Corrected Reading (dBUU/m) | Average Limit (dBUU/m) | Margin (dB) | Peak Limit (dBUU/m) | PK Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|---------------|--------------|--------------|----------------------------|------------------------|-------------|---------------------|----------------|----------------|-------------|----------|
| 1      | 5.89501         | 79.97                | Pk  | 35.4          | -19.5        | 0            | 95.87                      | -                      | -           | 109.99              | -14.12         | 227            | 108         | H        |
| 2      | 5.89514         | 78.9                 | Pk  | 35.4          | -19.5        | 0            | 94.8                       | -                      | -           | 109.9               | -15.1          | 227            | 108         | H        |
| 3      | 5.89501         | 67.97                | RMS | 35.4          | -19.5        | 0            | 83.87                      | 89.99                  | -6.12       | -                   | -              | 227            | 108         | H        |
| 4      | 5.89531         | 58.92                | RMS | 35.4          | -19.5        | 0            | 74.82                      | 89.77                  | -14.95      | -                   | -              | 227            | 108         | H        |

Pk - Peak detector  
 RMS - RMS detection