

11AC20SISO-Ant1-5180



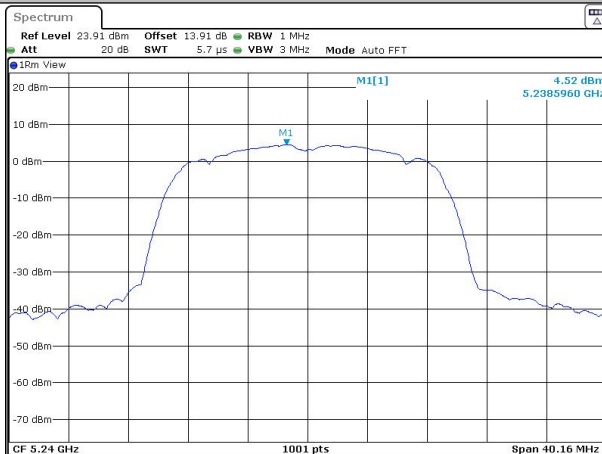
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11AC20SISO-Ant1-5200



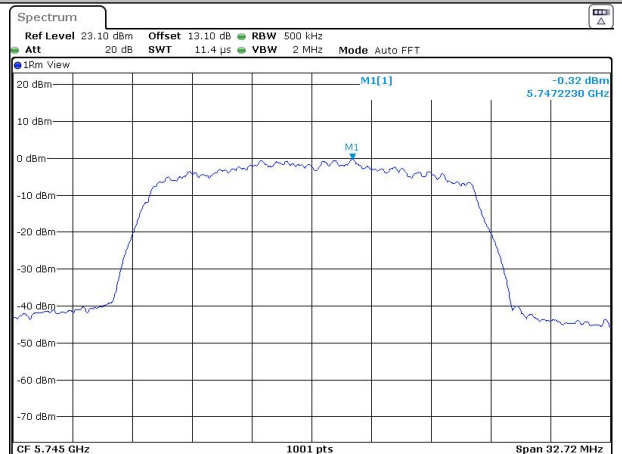
Date: 24 SEP 2021 10:31:26

11AC20SISO-Ant1-5240



Date: 24 SEP 2021 10:38:54

11AC20SISO-Ant1-5745



Date: 24 SEP 2021 10:44:42

11AC20SISO-Ant1-5785



Date: 24 SEP 2021 10:50:38

11AC20SISO-Ant1-5825



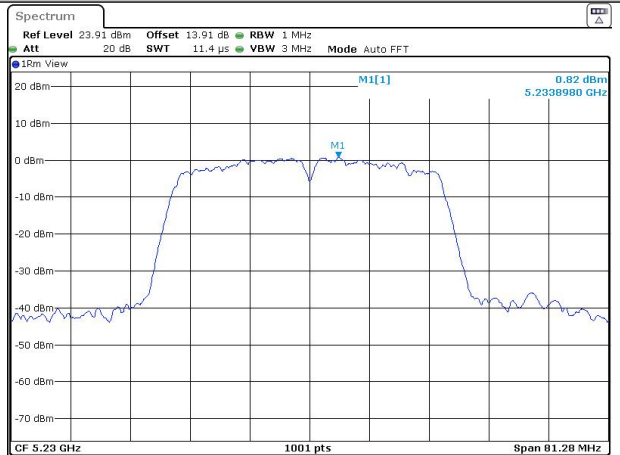
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11N40SISO-Ant1-5190



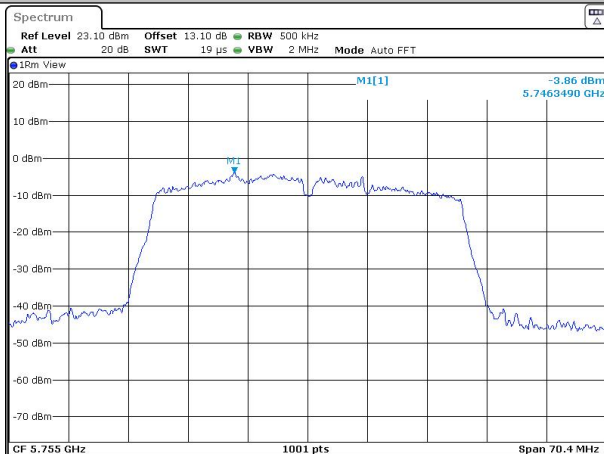
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11N40SISO-Ant1-5230



Date: 24 SEP 2021 09:22:52

11N40SISO-Ant1-5755



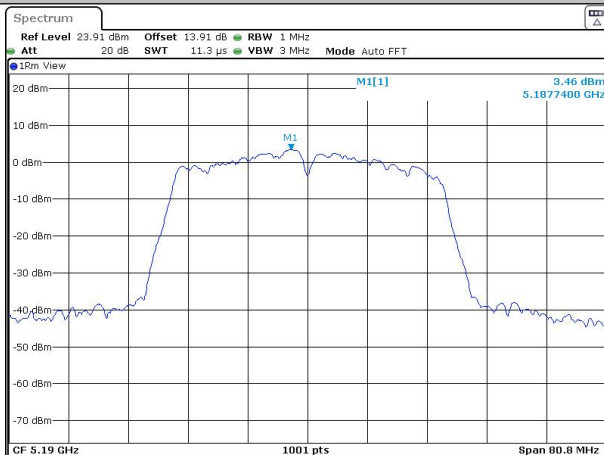
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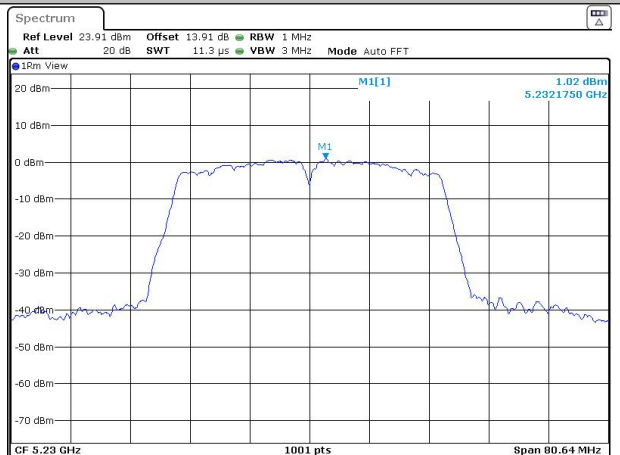
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11AC40SISO-Ant1-5190



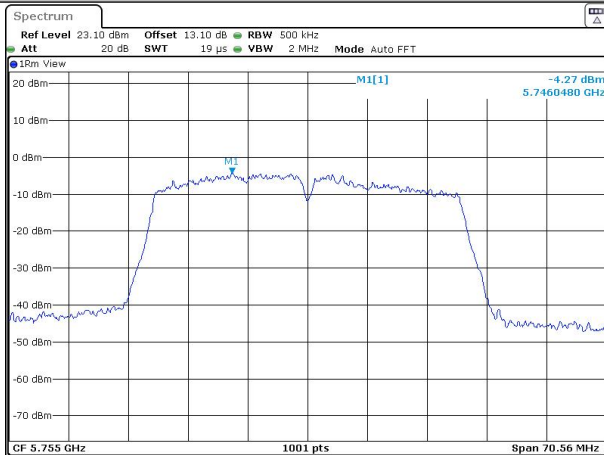
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11AC40SISO-Ant1-5230

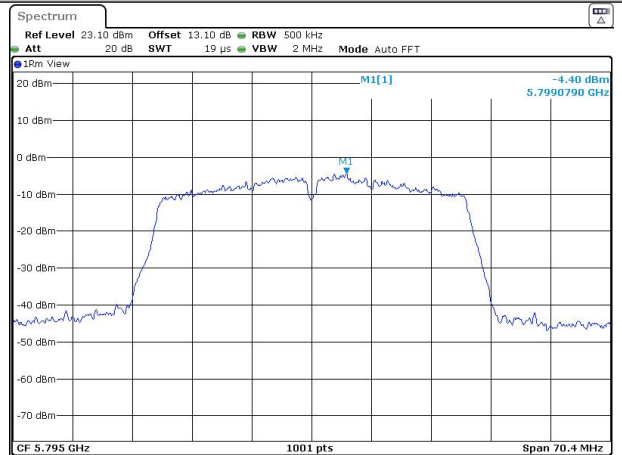


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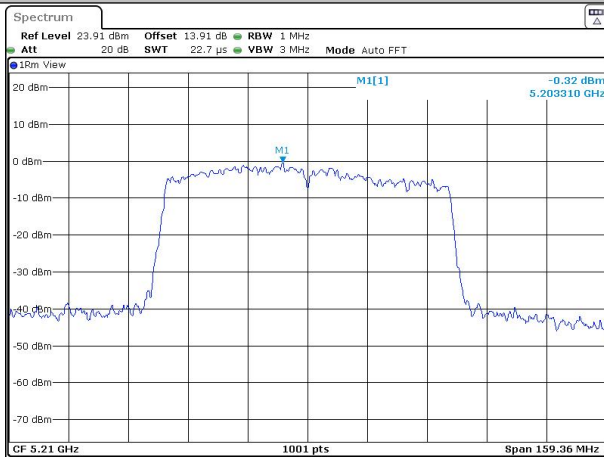
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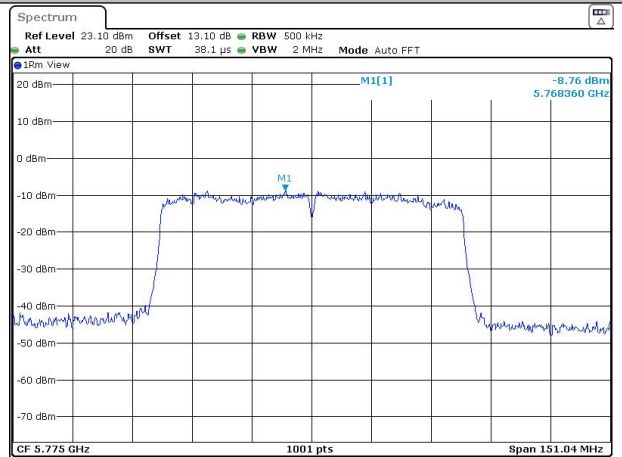
11AC40SISO-Ant1-5795



11AC80SISO-Ant1-5210



11AC80SISO-Ant1-5775



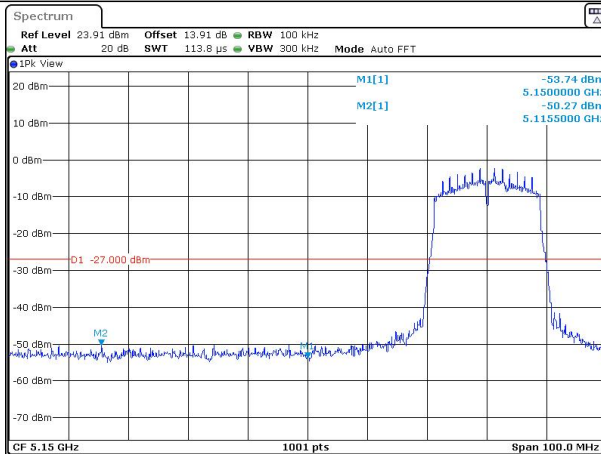
## Appendix D): Band Edge Measurements

Result Table

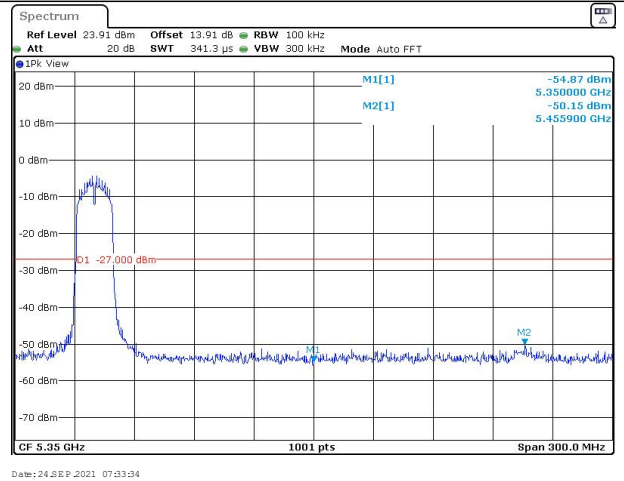
| Test Mode | Antenna | Channel | Max.Level [dBm] |            | Verdict |
|-----------|---------|---------|-----------------|------------|---------|
| 11A       | Ant1    | 5180    | -50.27          |            | PASS    |
| 11A       | Ant1    | 5240    | -50.15          |            | PASS    |
| Test Mode | Antenna | Channel | Max.Level [dBm] |            | Verdict |
|           |         |         | Below 5715      | 5715-5725  |         |
| 11A       | Ant1    | 5745    | -51.41          | -51.17     | PASS    |
| Test Mode | Antenna | Channel | Max.Level [dBm] |            | Verdict |
|           |         |         | 5850-5860       | Above 5860 |         |
| 11A       | Ant1    | 5825    | -51.17          | -50.47     | PASS    |
| Test Mode | Antenna | Channel | Max.Level [dBm] |            | Verdict |
| 11N20     | Ant1    | 5180    | -49.47          |            | PASS    |
| 11N20     | Ant1    | 5240    | -50.70          |            | PASS    |
| Test Mode | Antenna | Channel | Max.Level [dBm] |            | Verdict |
|           |         |         | Below 5715      | 5715-5725  |         |
| 11N20     | Ant1    | 5745    | -50.23          | -51.05     | PASS    |
| Test Mode | Antenna | Channel | Max.Level [dBm] |            | Verdict |
|           |         |         | 5850-5860       | Above 5860 |         |
| 11N20     | Ant1    | 5825    | -49.75          | -50.42     | PASS    |
| Test Mode | Antenna | Channel | Max.Level [dBm] |            | Verdict |
| 11N40     | Ant1    | 5190    | -48.28          |            | PASS    |
| 11N40     | Ant1    | 5230    | -51.19          |            | PASS    |
| Test Mode | Antenna | Channel | Max.Level [dBm] |            | Verdict |
|           |         |         | Below 5715      | 5715-5725  |         |
| 11N40     | Ant1    | 5755    | -50.23          | -51.05     | PASS    |
| Test Mode | Antenna | Channel | Max.Level [dBm] |            | Verdict |
|           |         |         | 5850-5860       | Above 5860 |         |
| 11N40     | Ant1    | 5795    | -49.75          | -50.42     | PASS    |

| Test Mode | Antenna | Channel | Max.Level [dBm] |            | Verdict |
|-----------|---------|---------|-----------------|------------|---------|
| 11AC20    | Ant1    | 5180    | -50.41          |            | PASS    |
| 11AC20    | Ant1    | 5240    | -51.31          |            | PASS    |
| Test Mode | Antenna | Channel | Max.Level [dBm] |            | Verdict |
|           |         |         | Below 5715      | 5715-5725  |         |
| 11AC20    | Ant1    | 5745    | -51.17          | -50.63     | PASS    |
| Test Mode | Antenna | Channel | Max.Level [dBm] |            | Verdict |
|           |         |         | 5850-5860       | Above 5860 |         |
| 11AC20    | Ant1    | 5825    | -50.50          | -50.52     | PASS    |
| Test Mode | Antenna | Channel | Max.Level [dBm] |            | Verdict |
| 11AC40    | Ant1    | 5190    | -48.28          |            | PASS    |
| 11AC40    | Ant1    | 5230    | -51.19          |            | PASS    |
| Test Mode | Antenna | Channel | Max.Level [dBm] |            | Verdict |
|           |         |         | Below 5715      | 5715-5725  |         |
| 11AC40    | Ant1    | 5755    | -47.92          | -50.32     | PASS    |
| Test Mode | Antenna | Channel | Max.Level [dBm] |            | Verdict |
|           |         |         | 5850-5860       | Above 5860 |         |
| 11AC40    | Ant1    | 5795    | -50.09          | -50.43     | PASS    |
| Test Mode | Antenna | Channel | Max.Level [dBm] |            | Verdict |
| 11AC80    | Ant1    | 5210    | -48.95          |            | PASS    |
| Test Mode | Antenna | Channel | Max.Level [dBm] |            | Verdict |
|           |         |         | Below 5715      | 5715-5725  |         |
| 11AC80    | Ant1    | 5775    | -50.27          | -50.12     | PASS    |

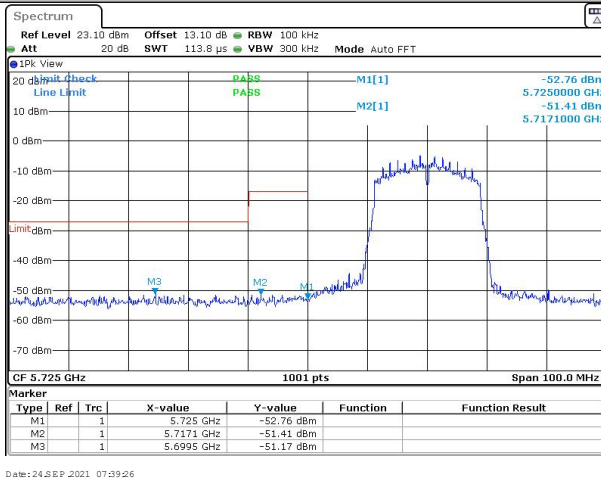
11A-Ant1-5180



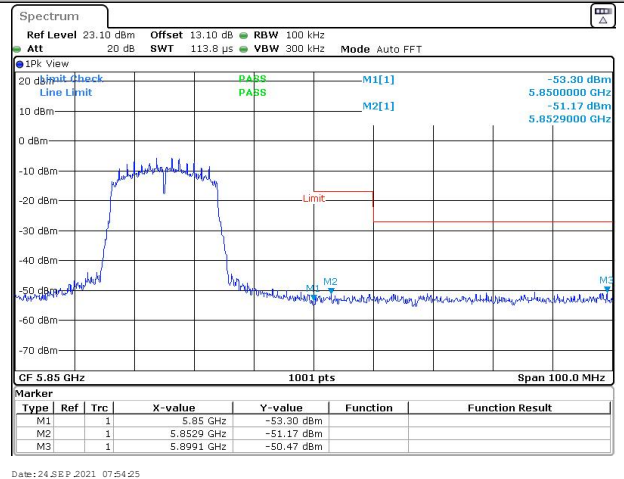
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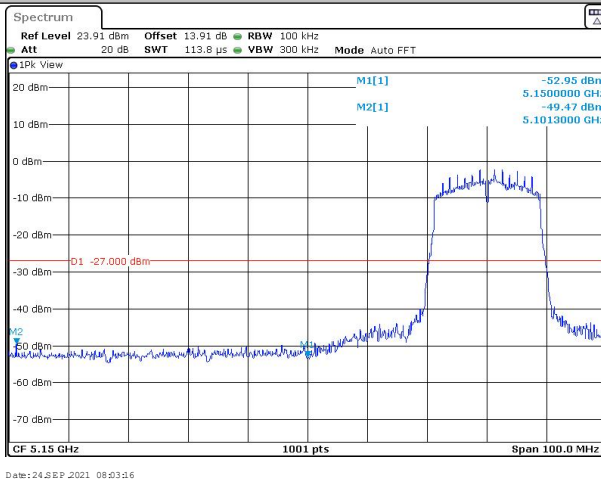
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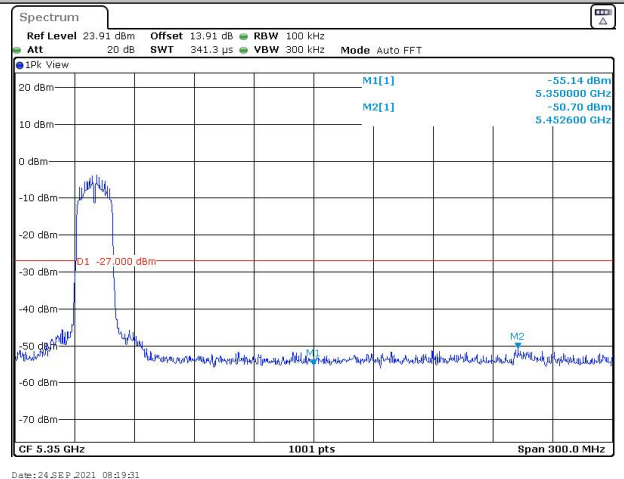
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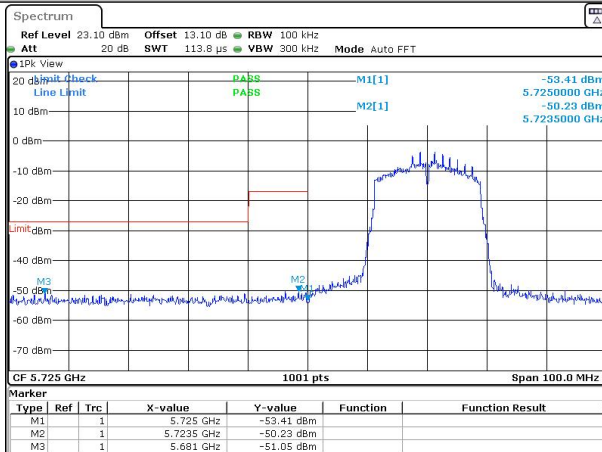
11N20SISO-Ant1-5180



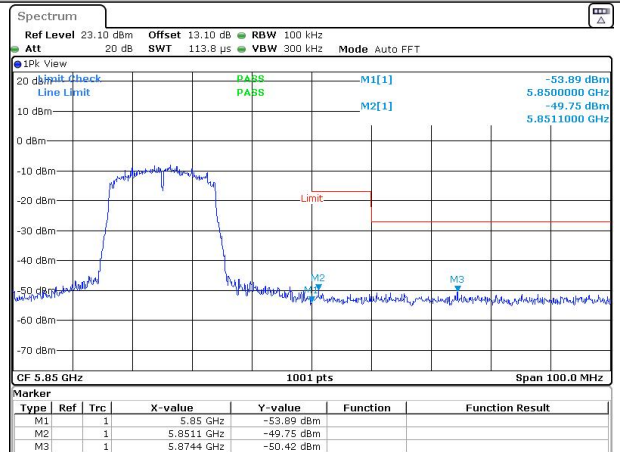
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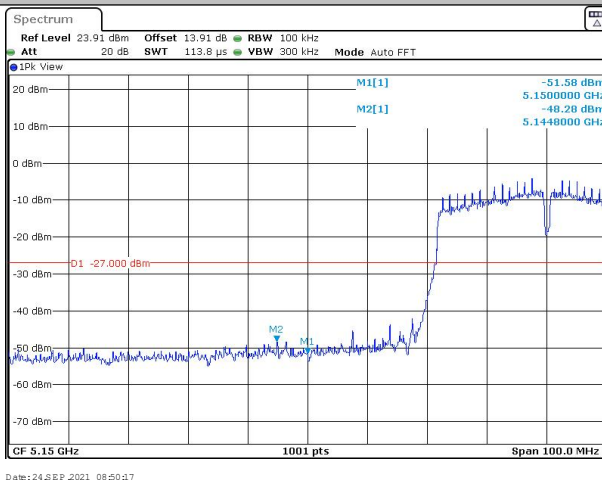
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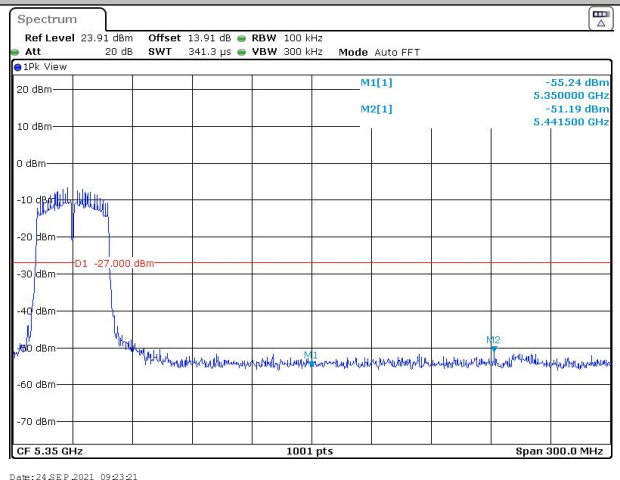
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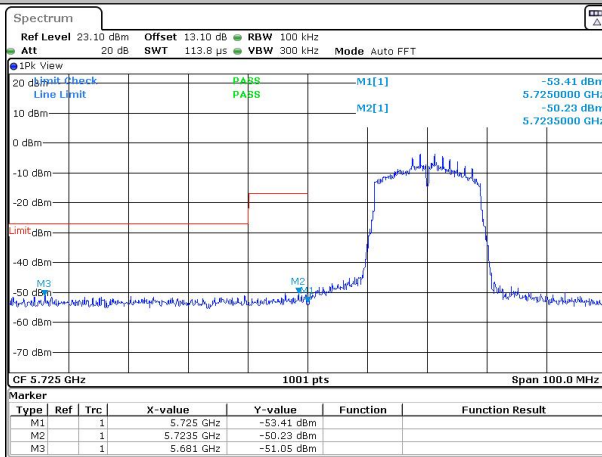
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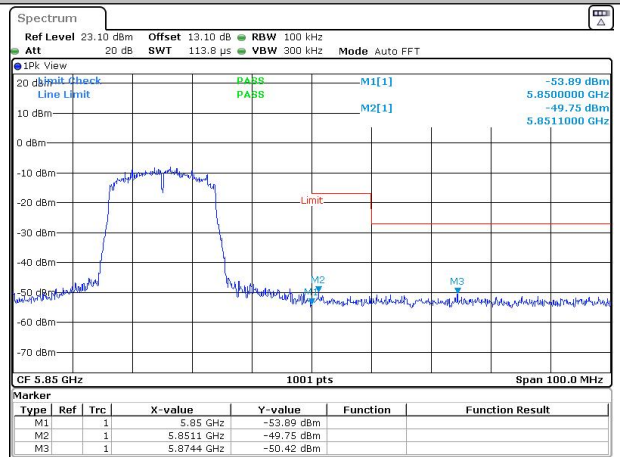
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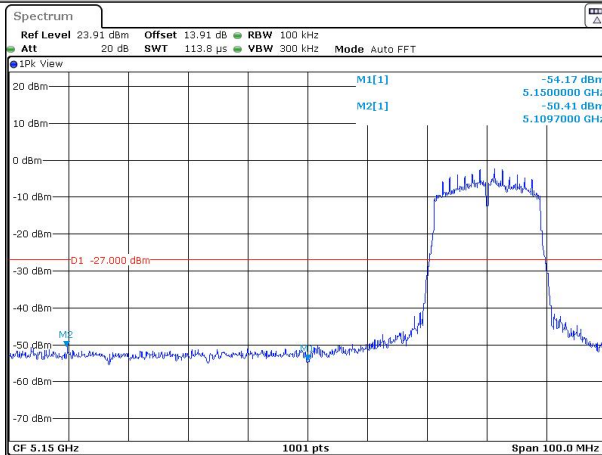
### 11N40SISO-Ant1-5755



### 11N40SISO-Ant1-5795

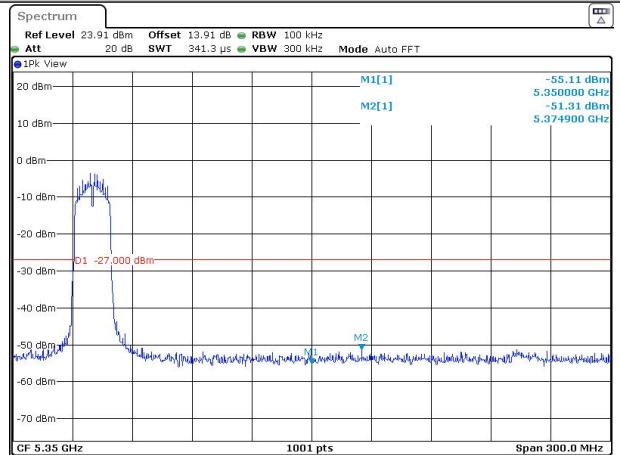


11AC20SISO-Ant1-5180



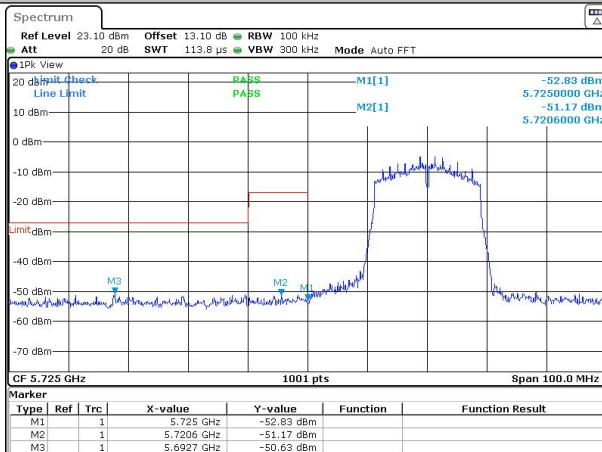
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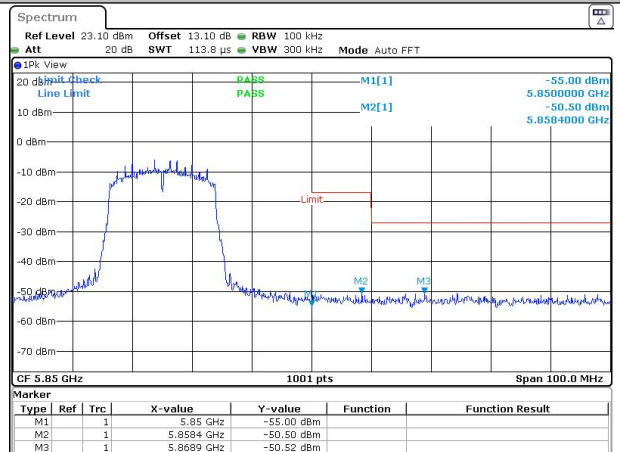
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11AC20SISO-Ant1-5745



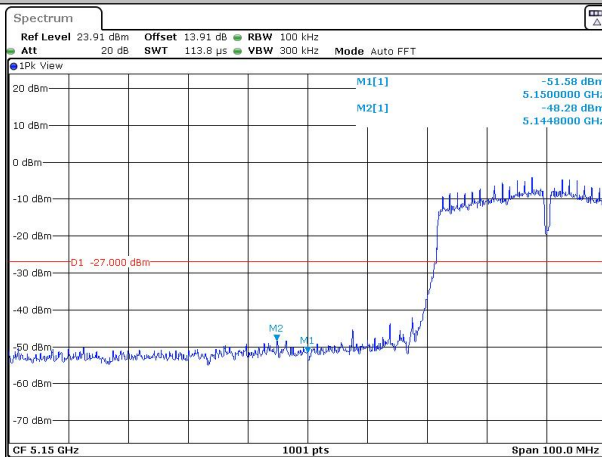
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11AC20SISO-Ant1-5825



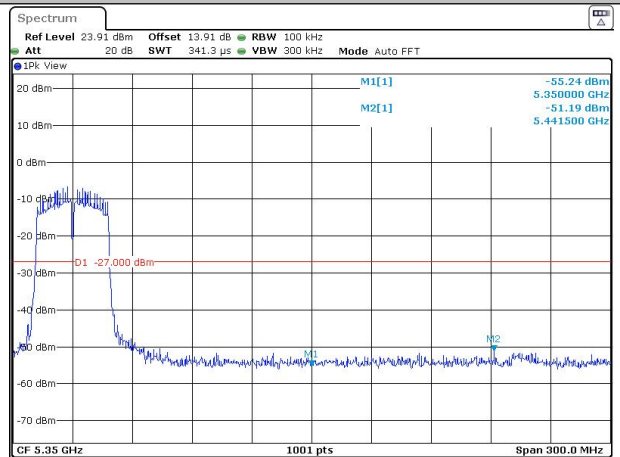
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11AC40SISO-Ant1-5190



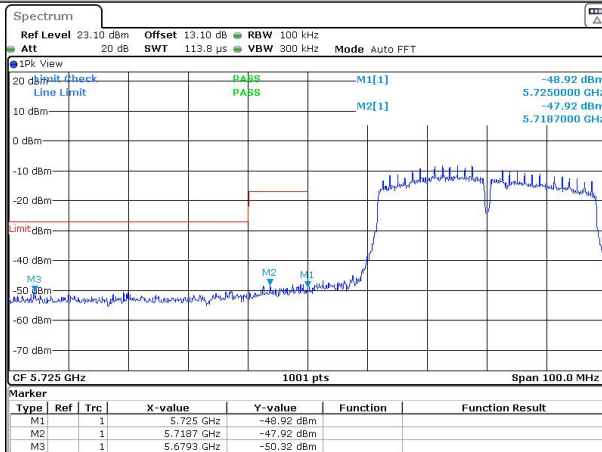
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11AC40SISO-Ant1-5230



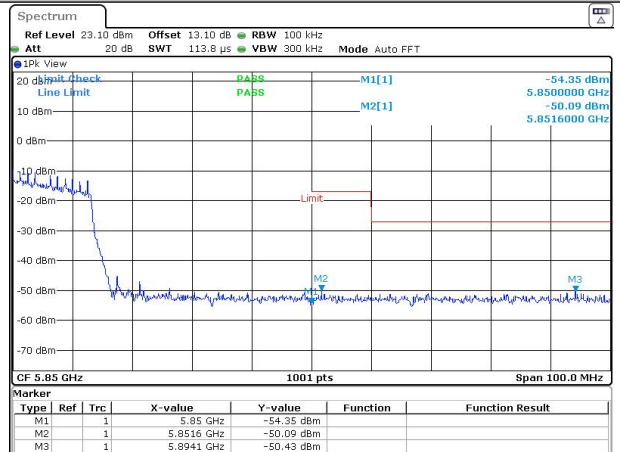
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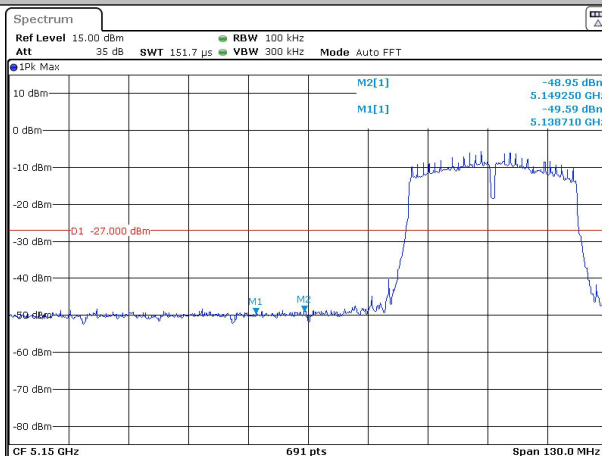
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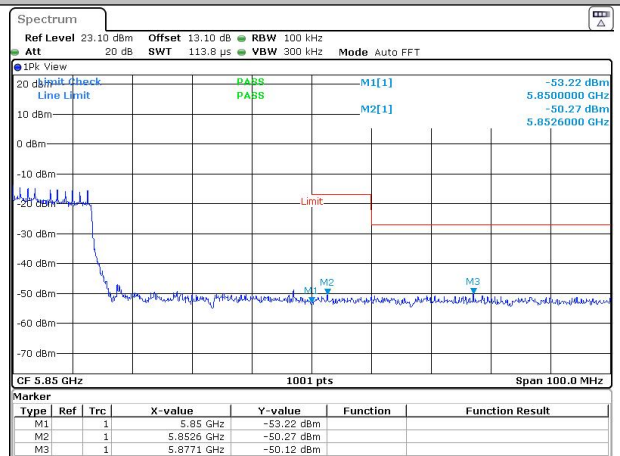
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### 11AC80SISO-Ant1-5210



Date: 29 SEP 2021 13:38:07

### 11AC80SISO-Ant1-5775



Date: 24 SEP 2021 11:45:45

## Appendix E): Frequency Stability

### Measurement Data

| Frequency Stability Versus Temp. |          |                             |                          |
|----------------------------------|----------|-----------------------------|--------------------------|
| Operating Frequency: 5240 MHz    |          |                             |                          |
| Temp<br>(°C)                     | Volta ge | Measured Frequency<br>(MHz) | Frequency Drift<br>(ppm) |
| 50                               | VN       | 5240.03                     | 5.72519                  |
| 40                               |          | 5240.02                     | 3.81679                  |
| 30                               |          | 5240.01                     | 1.90840                  |
| 20                               |          | 5240.02                     | 3.81679                  |
| 10                               |          | 5240.02                     | 3.81679                  |
| 0                                |          | 5240.01                     | 1.90840                  |
| -10                              |          | 5240.02                     | 3.81679                  |
| -20                              |          | 5240.03                     | 5.72519                  |

| Frequency Stability Versus Temp. |          |                             |                          |
|----------------------------------|----------|-----------------------------|--------------------------|
| Operating Frequency: 5210 MHz    |          |                             |                          |
| Temp.                            | Volta ge | Measured Frequency<br>(MHz) | Frequency Drift<br>(ppm) |
| TN                               | VL       | 5210.00                     | 0.00000                  |
|                                  | VN       | 5210.03                     | 5.75816                  |
|                                  | VH       | 5210.02                     | 3.83877                  |

Note: All the modulation and channels had been tested, but only the worst data recorded in the report.

## Appendix F): Antenna Requirement

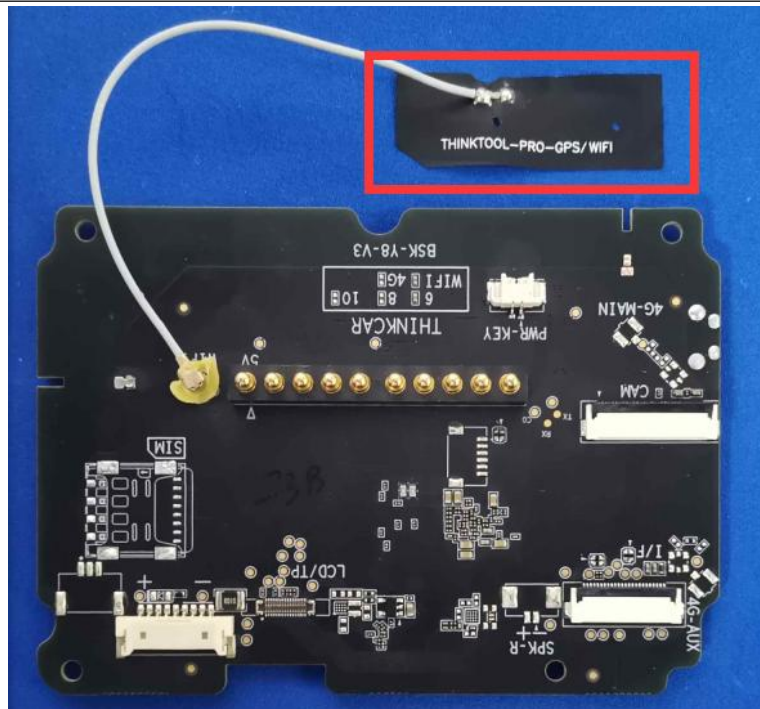
### 15.203 requirement:

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

### 15.407(a)(1) (2) requirement:

The conducted output power limit specified in paragraph (a) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (a) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power and the peak power spectral density shall be reduced by the by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

#### EUT Antenna:



The antenna is internal antenna with ipex connector. The best case gain of the 5G WiFi antenna is 1.52dBi@Band 1, 2.05dBi@Band 4.

## Appendix G): Operation in the absence of information to the transmit

### 15.407(c) requirement:

The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signaling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals. Applicants shall include in their application for equipment authorization a description of how this requirement is met.

### Operation in the absence of information to the transmit

While the EUT is not transmitting any information, the EUT can automatically discontinue transmission and become standby mode for power saving. The EUT can detect the controlling signal of ASK message transmitting from remote device and verify whether it shall resend or discontinue transmission. (manufacturer declare )

## Appendix H): AC Power Line Conducted Emission

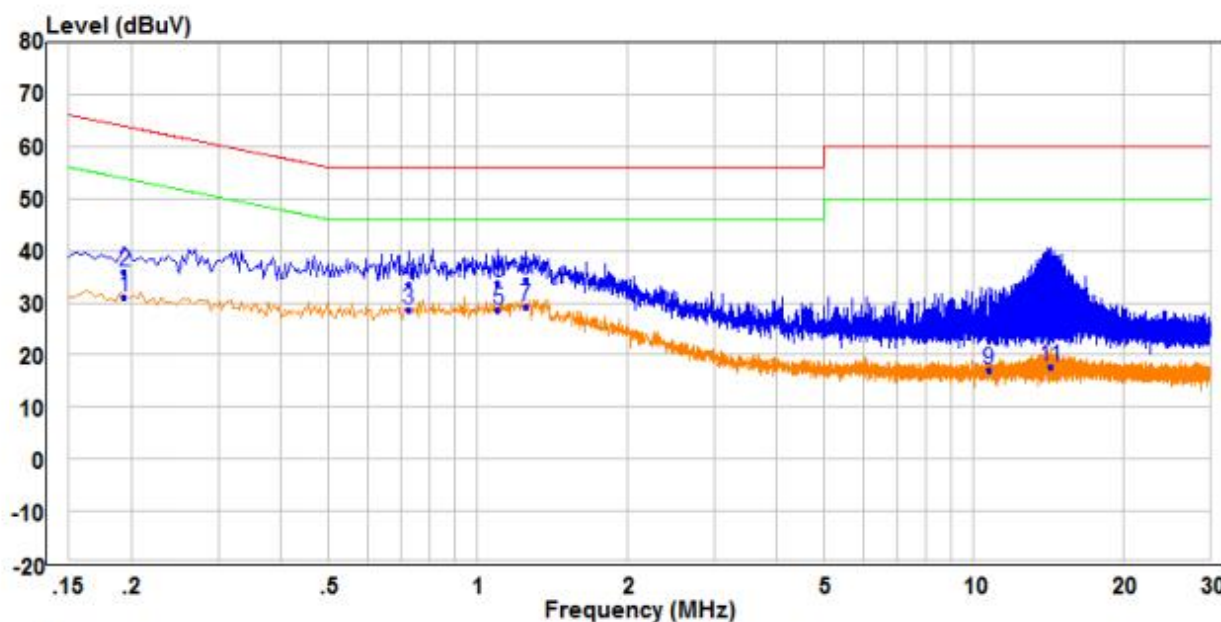
| Test Procedure:       | <p>Test frequency range :150KHz-30MHz</p> <ol style="list-style-type: none"> <li>1)The mains terminal disturbance voltage test was conducted in a shielded room.</li> <li>2) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a <math>50\Omega/50\mu\text{H} + 5\Omega</math> linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a single LISN provided the rating of the LISN was not exceeded.</li> <li>3)The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane,</li> <li>4) The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0.4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal ground reference plane. The LISN 1 was placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane. This distance was between the closest points of the LISN 1 and the EUT. All other units of the EUT and associated equipment was at least 0.8 m from the LISN 2.</li> <li>5) In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10 on conducted measurement.</li> </ol> |           |                       |                    |  |            |         |          |           |           |       |    |    |      |    |    |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-----------------------|--------------------|--|------------|---------|----------|-----------|-----------|-------|----|----|------|----|----|
| Limit:                | <table border="1"> <thead> <tr> <th rowspan="2">Frequency range (MHz)</th><th colspan="2">Limit (dB<math>\mu</math>V)</th></tr> <tr> <th>Quasi-peak</th><th>Average</th></tr> </thead> <tbody> <tr> <td>0.15-0.5</td><td>66 to 56*</td><td>56 to 46*</td></tr> <tr> <td>0.5-5</td><td>56</td><td>46</td></tr> <tr> <td>5-30</td><td>60</td><td>50</td></tr> </tbody> </table> <p>* The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz.<br/>NOTE : The lower limit is applicable at the transition frequency</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |           | Frequency range (MHz) | Limit (dB $\mu$ V) |  | Quasi-peak | Average | 0.15-0.5 | 66 to 56* | 56 to 46* | 0.5-5 | 56 | 46 | 5-30 | 60 | 50 |
| Frequency range (MHz) | Limit (dB $\mu$ V)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |           |                       |                    |  |            |         |          |           |           |       |    |    |      |    |    |
|                       | Quasi-peak                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Average   |                       |                    |  |            |         |          |           |           |       |    |    |      |    |    |
| 0.15-0.5              | 66 to 56*                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 56 to 46* |                       |                    |  |            |         |          |           |           |       |    |    |      |    |    |
| 0.5-5                 | 56                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 46        |                       |                    |  |            |         |          |           |           |       |    |    |      |    |    |
| 5-30                  | 60                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 50        |                       |                    |  |            |         |          |           |           |       |    |    |      |    |    |

### Measurement Data

An initial pre-scan was performed on the live and neutral lines with peak detector.

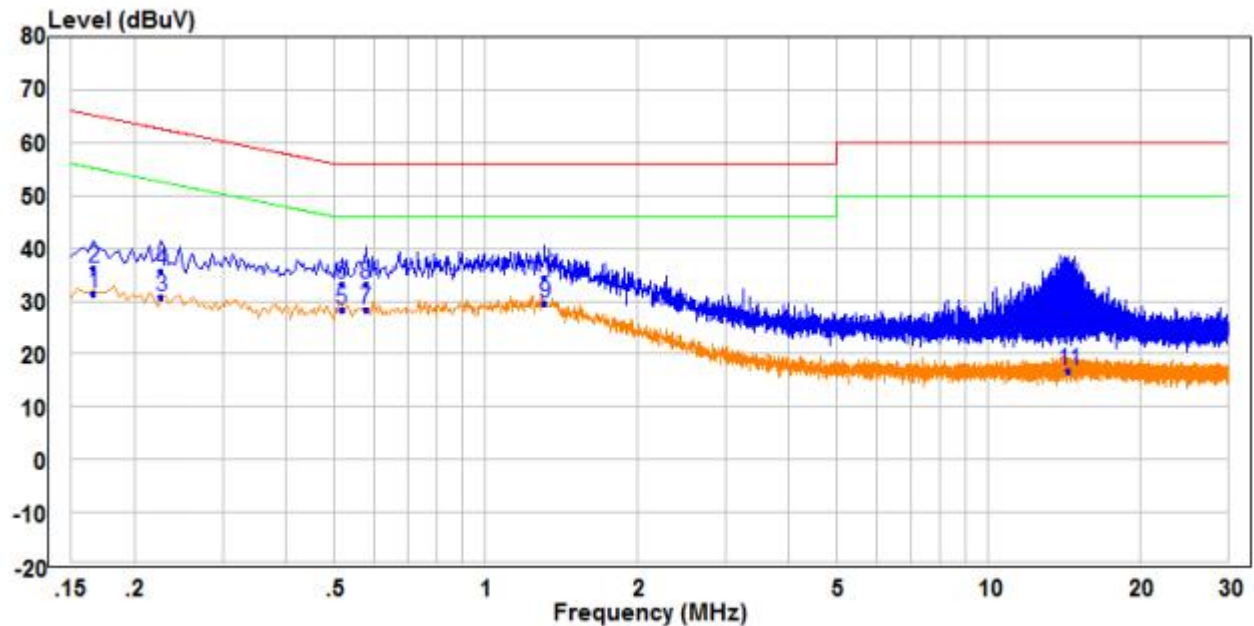
Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission were detected.

Live line:



|      | Freq   | Read Level | Factor | Level | Limit Line | Over Limit | Remark  | Pol/Phase |
|------|--------|------------|--------|-------|------------|------------|---------|-----------|
|      | MHz    | dBuV       | dB     | dBuV  | dBuV       | dB         |         |           |
| 1    | 0.194  | 21.53      | 9.49   | 31.02 | 53.86      | -22.84     | Average | Line      |
| 2    | 0.194  | 26.39      | 9.49   | 35.88 | 63.86      | -27.98     | QP      | Line      |
| 3    | 0.726  | 18.78      | 9.84   | 28.62 | 46.00      | -17.38     | Average | Line      |
| 4    | 0.726  | 23.80      | 9.84   | 33.64 | 56.00      | -22.36     | QP      | Line      |
| 5    | 1.098  | 19.27      | 9.52   | 28.79 | 46.00      | -17.21     | Average | Line      |
| 6    | 1.098  | 24.38      | 9.52   | 33.90 | 56.00      | -22.10     | QP      | Line      |
| 7 PP | 1.250  | 19.68      | 9.52   | 29.20 | 46.00      | -16.80     | Average | Line      |
| 8 QP | 1.250  | 24.87      | 9.52   | 34.39 | 56.00      | -21.61     | QP      | Line      |
| 9    | 10.721 | 7.20       | 9.83   | 17.03 | 50.00      | -32.97     | Average | Line      |
| 10   | 10.721 | 13.17      | 9.83   | 23.00 | 60.00      | -37.00     | QP      | Line      |
| 11   | 14.281 | 7.76       | 9.88   | 17.64 | 50.00      | -32.36     | Average | Line      |
| 12   | 14.281 | 20.80      | 9.88   | 30.68 | 60.00      | -29.32     | QP      | Line      |

Neutral line:



|       | Freq   | Read Level | Factor | Level | Limit Line | Over Limit | Remark  | Pol/Phase |
|-------|--------|------------|--------|-------|------------|------------|---------|-----------|
|       | MHz    | dBuV       | dB     | dBuV  | dBuV       | dB         |         |           |
| 1     | 0.166  | 22.03      | 9.48   | 31.51 | 55.16      | -23.65     | Average | Neutral   |
| 2     | 0.166  | 26.74      | 9.48   | 36.22 | 65.16      | -28.94     | QP      | Neutral   |
| 3     | 0.226  | 21.19      | 9.48   | 30.67 | 52.60      | -21.93     | Average | Neutral   |
| 4     | 0.226  | 26.18      | 9.48   | 35.66 | 62.60      | -26.94     | QP      | Neutral   |
| 5     | 0.518  | 18.78      | 9.61   | 28.39 | 46.00      | -17.61     | Average | Neutral   |
| 6     | 0.518  | 23.59      | 9.61   | 33.20 | 56.00      | -22.80     | QP      | Neutral   |
| 7     | 0.578  | 18.61      | 9.69   | 28.30 | 46.00      | -17.70     | Average | Neutral   |
| 8     | 0.578  | 23.52      | 9.69   | 33.21 | 56.00      | -22.79     | QP      | Neutral   |
| 9 PP  | 1.310  | 19.90      | 9.72   | 29.62 | 46.00      | -16.38     | Average | Neutral   |
| 10 QP | 1.310  | 24.70      | 9.72   | 34.42 | 56.00      | -21.58     | QP      | Neutral   |
| 11    | 14.437 | 6.99       | 9.93   | 16.92 | 50.00      | -33.08     | Average | Neutral   |
| 12    | 14.437 | 17.76      | 9.93   | 27.69 | 60.00      | -32.31     | QP      | Neutral   |

Notes:

1. The following Quasi-Peak and Average measurements were performed on the EUT:
2. Final Test Level =Receiver Reading + LISN Factor + Cable Loss.
3. The 6Mbps of rate of 802.11A\_5240 is the worst case, only the worst data recorded in the report.

## Appendix I): Restricted bands around fundamental frequency (Radiated Emission)

|                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                     |                  |        |            |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|------------------|--------|------------|
| Receiver Setup: | Frequency                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Detector            | RBW              | VBW    | Remark     |
|                 | 30MHz-1GHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Quasi-peak          | 120kHz           | 300kHz | Quasi-peak |
|                 | Above 1GHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Peak                | 1MHz             | 3MHz   | Peak       |
|                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Peak                | 1MHz             | 10Hz   | Average    |
| Test Procedure: | <p><b>Below 1GHz test procedure as below:</b></p> <ol style="list-style-type: none"> <li>The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.</li> <li>The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.</li> <li>The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.</li> <li>For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable was turned from 0 degrees to 360 degrees to find the maximum reading.</li> <li>The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.</li> <li>Place a marker at the end of the restricted band closest to the transmit frequency to show compliance. Also measure any emissions in the restricted bands. Save the spectrum analyzer plot. Repeat for each power and modulation for lowest and highest channel</li> </ol> <p><b>Above 1GHz test procedure as below:</b></p> <ol style="list-style-type: none"> <li>Different between above is the test site, change from Semi- Anechoic Chamber to fully Anechoic Chamber and change form table 0.8 metre to 1.5 metre( Above 18GHz the distance is 1 meter and table is 1.5 metre).</li> <li>Test the EUT in the lowest channel , the Highest channel</li> <li>The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is worse case.</li> <li>Repeat above procedures until all frequencies measured was complete.</li> </ol> |                     |                  |        |            |
| Limit:          | Frequency                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Limit (dBμV/m @3cm) | Remark           |        |            |
|                 | 30MHz-88MHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 40.0                | Quasi-peak Value |        |            |
|                 | 88MHz-216MHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 43.5                | Quasi-peak Value |        |            |
|                 | 216MHz-960MHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 46.0                | Quasi-peak Value |        |            |
|                 | 960MHz-1GHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 54.0                | Quasi-peak Value |        |            |
|                 | Above 1GHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 54.0                | Average Value    |        |            |
|                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 74.0                | Peak Value       |        |            |

Test plot as follows:

| Worse case mode: |               | 802.11a(6Mbps) |                | Test channel: |        | 36            |           |
|------------------|---------------|----------------|----------------|---------------|--------|---------------|-----------|
| Frequency        | Meter Reading | Factor         | Emission Level | Limits        | Over   | Detector Type | Ant. Pol. |
| (MHz)            | (dBμV)        | (dB)           | (dBμV/m)       | (dBμV/m)      | (dB)   |               | H/V       |
| 5150.00          | 56.61         | -3.63          | 52.98          | 74            | -21.02 | peak          | H         |
| 5150.00          | 42.63         | -3.63          | 39.00          | 54            | -15.00 | AVG           | H         |
| 5150.00          | 56.91         | -3.63          | 53.28          | 74            | -20.72 | peak          | V         |
| 5150.00          | 43.79         | -3.63          | 40.16          | 54            | -13.84 | AVG           | V         |

| Worse case mode: |               | 802.11a(6Mbps) |                | Test channel: |        | 48            |           |
|------------------|---------------|----------------|----------------|---------------|--------|---------------|-----------|
| Frequency        | Meter Reading | Factor         | Emission Level | Limits        | Over   | Detector Type | Ant. Pol. |
| (MHz)            | (dBμV)        | (dB)           | (dBμV/m)       | (dBμV/m)      | (dB)   |               | H/V       |
| 5350.00          | 58.62         | -3.59          | 55.03          | 74            | -18.97 | peak          | H         |
| 5350.00          | 41.76         | -3.59          | 38.17          | 54            | -15.83 | AVG           | H         |
| 5350.00          | 57.20         | -3.59          | 53.61          | 74            | -20.39 | peak          | V         |
| 5350.00          | 44.31         | -3.59          | 40.72          | 54            | -13.28 | AVG           | V         |

| Worse case mode: |               | 802.11a(6Mbps) |                | Test channel: |        | 149           |           |
|------------------|---------------|----------------|----------------|---------------|--------|---------------|-----------|
| Frequency        | Meter Reading | Factor         | Emission Level | Limits        | Over   | Detector Type | Ant. Pol. |
| (MHz)            | (dBμV)        | (dB)           | (dBμV/m)       | (dBμV/m)      | (dB)   |               | H/V       |
| 5650             | 56.50         | -3.46          | 53.04          | 68.2          | -15.16 | peak          | H         |
| 5738.38          | 92.93         | -3.44          | 89.49          | 122.2         | -32.71 | peak          | H         |
| 5650             | 56.66         | -3.46          | 53.20          | 68.2          | -15.00 | peak          | V         |
| 5742.65          | 94.20         | -3.44          | 90.76          | 122.2         | -31.44 | peak          | V         |

| Worse case mode: |               | 802.11a(6Mbps) |                | Test channel: |        | 165           |           |
|------------------|---------------|----------------|----------------|---------------|--------|---------------|-----------|
| Frequency        | Meter Reading | Factor         | Emission Level | Limits        | Over   | Detector Type | Ant. Pol. |
| (MHz)            | (dBμV)        | (dB)           | (dBμV/m)       | (dBμV/m)      | (dB)   |               | H/V       |
| 5824.10          | 93.80         | -3.42          | 90.38          | 122.2         | -31.82 | peak          | H         |
| 5925             | 42.03         | -3.41          | 38.62          | 68.2          | -29.58 | peak          | H         |
| 5827.03          | 92.96         | -3.42          | 89.54          | 122.2         | -32.66 | peak          | V         |
| 5925             | 44.11         | -3.41          | 40.70          | 68.2          | -27.50 | peak          | V         |

| Worse case mode: |               | 802.11n(HT20)(6.5Mbps) |                | Test channel: |        | 36            |           |
|------------------|---------------|------------------------|----------------|---------------|--------|---------------|-----------|
| Frequency        | Meter Reading | Factor                 | Emission Level | Limits        | Over   | Detector Type | Ant. Pol. |
| (MHz)            | (dBμV)        | (dB)                   | (dBμV/m)       | (dBμV/m)      | (dB)   |               | H/V       |
| 5150.00          | 57.58         | -3.63                  | 53.95          | 74            | -20.05 | peak          | H         |
| 5150.00          | 42.07         | -3.63                  | 38.44          | 54            | -15.56 | AVG           | H         |
| 5150.00          | 57.34         | -3.63                  | 53.71          | 74            | -20.29 | peak          | V         |
| 5150.00          | 42.12         | -3.63                  | 38.49          | 54            | -15.51 | AVG           | V         |

| Worse case mode: |               | 802.11n(HT20)(6.5Mbps) |                | Test channel: |        | 48            |           |
|------------------|---------------|------------------------|----------------|---------------|--------|---------------|-----------|
| Frequency        | Meter Reading | Factor                 | Emission Level | Limits        | Over   | Detector Type | Ant. Pol. |
| (MHz)            | (dBμV)        | (dB)                   | (dBμV/m)       | (dBμV/m)      | (dB)   |               | H/V       |
| 5350.00          | 55.84         | -3.59                  | 52.25          | 74            | -21.75 | peak          | H         |
| 5350.00          | 43.90         | -3.59                  | 40.31          | 54            | -13.69 | AVG           | H         |
| 5350.00          | 57.99         | -3.59                  | 54.40          | 74            | -19.60 | peak          | V         |
| 5350.00          | 43.13         | -3.59                  | 39.54          | 54            | -14.46 | AVG           | V         |

| Worse case mode: |               | 802.11n(HT20)(6.5Mbps) |                | Test channel: |        | 149           |           |
|------------------|---------------|------------------------|----------------|---------------|--------|---------------|-----------|
| Frequency        | Meter Reading | Factor                 | Emission Level | Limits        | Over   | Detector Type | Ant. Pol. |
| (MHz)            | (dBμV)        | (dB)                   | (dBμV/m)       | (dBμV/m)      | (dB)   |               | H/V       |
| 5650             | 55.86         | -3.46                  | 52.40          | 68.2          | -15.80 | peak          | H         |
| 5738.25          | 95.19         | -3.44                  | 91.75          | 122.2         | -30.45 | peak          | H         |
| 5650             | 58.29         | -3.46                  | 54.83          | 68.2          | -13.37 | peak          | V         |
| 5742.95          | 93.15         | -3.44                  | 89.71          | 122.2         | -32.49 | peak          | V         |

| Worse case mode: |               | 802.11n(HT20)(6.5Mbps) |                | Test channel: |        | 165           |           |
|------------------|---------------|------------------------|----------------|---------------|--------|---------------|-----------|
| Frequency        | Meter Reading | Factor                 | Emission Level | Limits        | Over   | Detector Type | Ant. Pol. |
| (MHz)            | (dBμV)        | (dB)                   | (dBμV/m)       | (dBμV/m)      | (dB)   |               | H/V       |
| 5823.48          | 94.28         | -3.42                  | 90.86          | 122.2         | -31.34 | peak          | H         |
| 5925             | 44.36         | -3.41                  | 40.95          | 68.2          | -27.25 | peak          | H         |
| 5820.43          | 93.88         | -3.42                  | 90.46          | 122.2         | -31.74 | peak          | V         |
| 5925             | 44.45         | -3.41                  | 41.04          | 68.2          | -27.16 | peak          | V         |

| Worse case mode: |               | 802.11n(HT40)(13.5Mbps) |                | Test channel: |        | 38            |           |
|------------------|---------------|-------------------------|----------------|---------------|--------|---------------|-----------|
| Frequency        | Meter Reading | Factor                  | Emission Level | Limits        | Over   | Detector Type | Ant. Pol. |
| (MHz)            | (dBμV)        | (dB)                    | (dBμV/m)       | (dBμV/m)      | (dB)   |               | H/V       |
| 5150             | 58.51         | -3.63                   | 54.88          | 74            | -19.12 | peak          | H         |
| 5150             | 41.73         | -3.63                   | 38.10          | 54            | -15.90 | AVG           | H         |
| 5150             | 56.04         | -3.63                   | 52.41          | 74            | -21.59 | peak          | V         |
| 5150             | 44.04         | -3.63                   | 40.41          | 54            | -13.59 | AVG           | V         |

| Worse case mode: |               | 802.11n(HT40)(13.5Mbps) |                | Test channel: |        | 46            |           |
|------------------|---------------|-------------------------|----------------|---------------|--------|---------------|-----------|
| Frequency        | Meter Reading | Factor                  | Emission Level | Limits        | Over   | Detector Type | Ant. Pol. |
| (MHz)            | (dBμV)        | (dB)                    | (dBμV/m)       | (dBμV/m)      | (dB)   |               | H/V       |
| 5350.00          | 57.27         | -3.59                   | 53.68          | 74            | -20.32 | peak          | H         |
| 5350.00          | 44.11         | -3.59                   | 40.52          | 54            | -13.48 | AVG           | H         |
| 5350.00          | 55.79         | -3.59                   | 52.20          | 74            | -21.80 | peak          | V         |
| 5350.00          | 41.99         | -3.59                   | 38.40          | 54            | -15.60 | AVG           | V         |

| Worse case mode: |               | 802.11n(HT40)(13.5Mbps) |                | Test channel: |        | 151           |           |
|------------------|---------------|-------------------------|----------------|---------------|--------|---------------|-----------|
| Frequency        | Meter Reading | Factor                  | Emission Level | Limits        | Over   | Detector Type | Ant. Pol. |
| (MHz)            | (dBμV)        | (dB)                    | (dBμV/m)       | (dBμV/m)      | (dB)   |               | H/V       |
| 5650             | 55.89         | -3.46                   | 52.43          | 68.2          | -15.77 | peak          | H         |
| 5757.68          | 93.52         | -3.44                   | 90.08          | 122.2         | -32.12 | peak          | H         |
| 5650             | 57.35         | -3.46                   | 53.89          | 68.2          | -14.31 | peak          | V         |
| 5750.47          | 94.70         | -3.44                   | 91.26          | 122.2         | -30.94 | peak          | V         |

| Worse case mode: |               | 802.11n(HT40)(13.5Mbps) |                | Test channel: |        | 159           |           |
|------------------|---------------|-------------------------|----------------|---------------|--------|---------------|-----------|
| Frequency        | Meter Reading | Factor                  | Emission Level | Limits        | Over   | Detector Type | Ant. Pol. |
| (MHz)            | (dBμV)        | (dB)                    | (dBμV/m)       | (dBμV/m)      | (dB)   |               | H/V       |
| 5786.79          | 94.21         | -3.42                   | 90.79          | 122.2         | -31.41 | peak          | H         |
| 5925             | 42.89         | -3.41                   | 39.48          | 68.2          | -28.72 | peak          | H         |
| 5786.23          | 93.12         | -3.42                   | 89.70          | 122.2         | -32.50 | peak          | V         |
| 5925             | 43.18         | -3.41                   | 39.77          | 68.2          | -28.43 | peak          | V         |

| Worse case mode: |               | 802.11ac(HT20)(6.5Mbps) |                | Test channel: |        | 36            |           |
|------------------|---------------|-------------------------|----------------|---------------|--------|---------------|-----------|
| Frequency        | Meter Reading | Factor                  | Emission Level | Limits        | Over   | Detector Type | Ant. Pol. |
| (MHz)            | (dBμV)        | (dB)                    | (dBμV/m)       | (dBμV/m)      | (dB)   |               | H/V       |
| 5150.00          | 56.70         | -3.63                   | 53.07          | 74            | -20.93 | peak          | H         |
| 5150.00          | 44.17         | -3.63                   | 40.54          | 54            | -13.46 | AVG           | H         |
| 5150.00          | 58.57         | -3.63                   | 54.94          | 74            | -19.06 | peak          | V         |
| 5150.00          | 44.64         | -3.63                   | 41.01          | 54            | -12.99 | AVG           | V         |

| Worse case mode: |               | 802.11ac(HT20)(6.5Mbps) |                | Test channel: |        | 48            |           |
|------------------|---------------|-------------------------|----------------|---------------|--------|---------------|-----------|
| Frequency        | Meter Reading | Factor                  | Emission Level | Limits        | Over   | Detector Type | Ant. Pol. |
| (MHz)            | (dBμV)        | (dB)                    | (dBμV/m)       | (dBμV/m)      | (dB)   |               | H/V       |
| 5350.00          | 56.20         | -3.59                   | 52.61          | 74            | -21.39 | peak          | H         |
| 5350.00          | 43.43         | -3.59                   | 39.84          | 54            | -14.16 | AVG           | H         |
| 5350.00          | 57.43         | -3.59                   | 53.84          | 74            | -20.16 | peak          | V         |
| 5350.00          | 44.46         | -3.59                   | 40.87          | 54            | -13.13 | AVG           | V         |

| Worse case mode: |               | 802.11ac(HT20)(6.5Mbps) |                | Test channel: |        | 149           |           |
|------------------|---------------|-------------------------|----------------|---------------|--------|---------------|-----------|
| Frequency        | Meter Reading | Factor                  | Emission Level | Limits        | Over   | Detector Type | Ant. Pol. |
| (MHz)            | (dBμV)        | (dB)                    | (dBμV/m)       | (dBμV/m)      | (dB)   |               | H/V       |
| 5650             | 56.25         | -3.46                   | 52.79          | 68.2          | -15.41 | peak          | H         |
| 5738.69          | 94.76         | -3.44                   | 91.32          | 122.2         | -30.88 | peak          | H         |
| 5650             | 58.40         | -3.46                   | 54.94          | 68.2          | -13.26 | peak          | V         |
| 5743.37          | 94.21         | -3.44                   | 90.77          | 122.2         | -31.43 | peak          | V         |

| Worse case mode: |               | 802.11ac(HT20)(6.5Mbps) |                | Test channel: |        | 165           |           |
|------------------|---------------|-------------------------|----------------|---------------|--------|---------------|-----------|
| Frequency        | Meter Reading | Factor                  | Emission Level | Limits        | Over   | Detector Type | Ant. Pol. |
| (MHz)            | (dBμV)        | (dB)                    | (dBμV/m)       | (dBμV/m)      | (dB)   |               | H/V       |
| 5820.70          | 94.16         | -3.42                   | 90.74          | 122.2         | -31.46 | peak          | H         |
| 5925             | 43.02         | -3.41                   | 39.61          | 68.2          | -28.59 | peak          | H         |
| 5827.28          | 93.36         | -3.42                   | 89.94          | 122.2         | -32.26 | peak          | V         |
| 5925             | 42.31         | -3.41                   | 38.90          | 68.2          | -29.30 | peak          | V         |

| Worse case mode: |               | 802.11ac(VHT40)(13.5Mbps) |                | Test channel: |        | 38            |           |
|------------------|---------------|---------------------------|----------------|---------------|--------|---------------|-----------|
| Frequency        | Meter Reading | Factor                    | Emission Level | Limits        | Over   | Detector Type | Ant. Pol. |
| (MHz)            | (dBμV)        | (dB)                      | (dBμV/m)       | (dBμV/m)      | (dB)   |               | H/V       |
| 5150.00          | 56.00         | -3.63                     | 52.37          | 74            | -21.63 | peak          | H         |
| 5150.00          | 44.50         | -3.63                     | 40.87          | 54            | -13.13 | AVG           | H         |
| 5150.00          | 56.97         | -3.63                     | 53.34          | 74            | -20.66 | peak          | V         |
| 5150.00          | 43.52         | -3.63                     | 39.89          | 54            | -14.11 | AVG           | V         |

| Worse case mode: |               | 802.11ac(VHT40)(13.5Mbps) |                | Test channel: |        | 46            |           |
|------------------|---------------|---------------------------|----------------|---------------|--------|---------------|-----------|
| Frequency        | Meter Reading | Factor                    | Emission Level | Limits        | Over   | Detector Type | Ant. Pol. |
| (MHz)            | (dBμV)        | (dB)                      | (dBμV/m)       | (dBμV/m)      | (dB)   |               | H/V       |
| 5350.00          | 58.65         | -3.59                     | 55.06          | 74            | -18.94 | peak          | H         |
| 5350.00          | 44.57         | -3.59                     | 40.98          | 54            | -13.02 | AVG           | H         |
| 5350.00          | 56.40         | -3.59                     | 52.81          | 74            | -21.19 | peak          | V         |
| 5350.00          | 42.38         | -3.59                     | 38.79          | 54            | -15.21 | AVG           | V         |

| Worse case mode: |               | 802.11ac(VHT40)(13.5Mbps) |                | Test channel: |        | 151           |           |
|------------------|---------------|---------------------------|----------------|---------------|--------|---------------|-----------|
| Frequency        | Meter Reading | Factor                    | Emission Level | Limits        | Over   | Detector Type | Ant. Pol. |
| (MHz)            | (dBμV)        | (dB)                      | (dBμV/m)       | (dBμV/m)      | (dB)   |               | H/V       |
| 5650             | 55.80         | -3.46                     | 52.34          | 68.2          | -15.86 | peak          | H         |
| 5750.13          | 94.61         | -3.44                     | 91.17          | 122.2         | -31.03 | peak          | H         |
| 5650             | 55.74         | -3.46                     | 52.28          | 68.2          | -15.92 | peak          | V         |
| 5751.61          | 93.54         | -3.44                     | 90.10          | 122.2         | -32.10 | peak          | V         |

| Worse case mode: |               | 802.11ac(VHT40)(13.5Mbps) |                | Test channel: |        | 159           |           |
|------------------|---------------|---------------------------|----------------|---------------|--------|---------------|-----------|
| Frequency        | Meter Reading | Factor                    | Emission Level | Limits        | Over   | Detector Type | Ant. Pol. |
| (MHz)            | (dBμV)        | (dB)                      | (dBμV/m)       | (dBμV/m)      | (dB)   |               | H/V       |
| 5793.85          | 94.55         | -3.42                     | 91.13          | 122.2         | -31.07 | peak          | H         |
| 5925             | 43.46         | -3.41                     | 40.05          | 68.2          | -28.15 | peak          | H         |
| 5794.14          | 94.34         | -3.42                     | 90.92          | 122.2         | -31.28 | peak          | V         |
| 5925             | 43.94         | -3.41                     | 40.53          | 68.2          | -27.67 | peak          | V         |

| Worse case mode: |               | 802.11ac(VHT80)(29.3Mbps) |                | Test channel: |        | 42            |           |
|------------------|---------------|---------------------------|----------------|---------------|--------|---------------|-----------|
| Frequency        | Meter Reading | Factor                    | Emission Level | Limits        | Over   | Detector Type | Ant. Pol. |
| (MHz)            | (dBμV)        | (dB)                      | (dBμV/m)       | (dBμV/m)      | (dB)   |               | H/V       |
| 5150.00          | 58.63         | -3.63                     | 55.00          | 74            | -19.00 | peak          | H         |
| 5150.00          | 43.71         | -3.63                     | 40.08          | 54            | -13.92 | AVG           | H         |
| 5150.00          | 56.98         | -3.63                     | 53.35          | 74            | -20.65 | peak          | V         |
| 5150.00          | 41.82         | -3.63                     | 38.19          | 54            | -15.81 | AVG           | V         |
| 5350.00          | 56.44         | -3.59                     | 52.85          | 74            | -21.15 | peak          | H         |
| 5350.00          | 42.82         | -3.59                     | 39.23          | 54            | -14.77 | AVG           | H         |
| 5350.00          | 57.55         | -3.59                     | 53.96          | 74            | -20.04 | peak          | V         |
| 5350.00          | 44.16         | -3.59                     | 40.57          | 54            | -13.43 | AVG           | V         |

| Worse case mode: |               | 802.11ac(VHT80)(29.3Mbps) |                | Test channel: |        | 155           |           |
|------------------|---------------|---------------------------|----------------|---------------|--------|---------------|-----------|
| Frequency        | Meter Reading | Factor                    | Emission Level | Limits        | Over   | Detector Type | Ant. Pol. |
| (MHz)            | (dBμV)        | (dB)                      | (dBμV/m)       | (dBμV/m)      | (dB)   |               | H/V       |
| 5650             | 56.06         | -3.46                     | 52.60          | 68.2          | -15.60 | peak          | H         |
| 5773.45          | 92.59         | -3.44                     | 89.15          | 122.2         | -33.05 | peak          | H         |
| 5925             | 57.54         | -3.46                     | 54.08          | 68.2          | -14.12 | peak          | H         |
| 5650             | 56.63         | -3.41                     | 53.22          | 68.2          | -14.98 | peak          | V         |
| 5774.91          | 93.74         | -3.42                     | 90.32          | 122.2         | -31.88 | peak          | V         |
| 5925             | 42.85         | -3.41                     | 39.44          | 68.2          | -28.76 | peak          | V         |

Note:

1) Through Pre-scan transmitting mode with all kind of modulation and data rate, find the 6Mbps is the worst case of 802.11a; MCS0 is the worst case of 802.11n(20M)(40M); MCS0 is the worst case of 802.11ac(20M)(40M)(80M); and then Only the worst case is recorded in the report.

2) The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

Final Test Level =Receiver Reading - Correct Factor

Correct Factor = Preamplifier Factor– Antenna Factor–Cable Factor

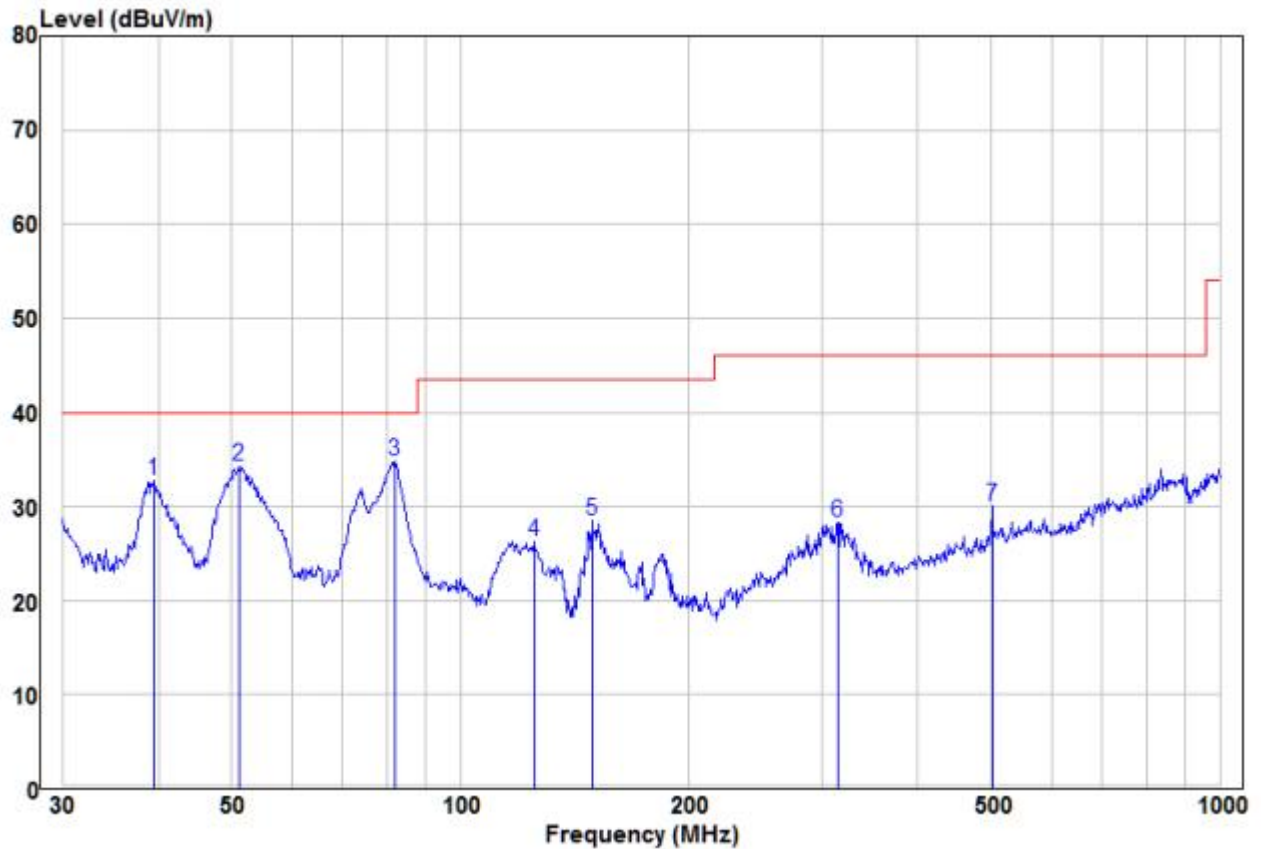
## Appendix J): Radiated Spurious Emissions

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                             |                                  |                 |            |                           |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|-----------------|------------|---------------------------|
| Receiver Setup:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Frequency                                                                                                                                                                                                                                                                   | Detector                         | RBW             | VBW        | Remark                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 0.009MHz-0.090MHz                                                                                                                                                                                                                                                           | Peak                             | 10kHz           | 30kHz      | Peak                      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 0.009MHz-0.090MHz                                                                                                                                                                                                                                                           | Average                          | 10kHz           | 30kHz      | Average                   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 0.090MHz-0.110MHz                                                                                                                                                                                                                                                           | Quasi-peak                       | 10kHz           | 30kHz      | Quasi-peak                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 0.110MHz-0.490MHz                                                                                                                                                                                                                                                           | Peak                             | 10kHz           | 30kHz      | Peak                      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 0.110MHz-0.490MHz                                                                                                                                                                                                                                                           | Average                          | 10kHz           | 30kHz      | Average                   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 0.490MHz -30MHz                                                                                                                                                                                                                                                             | Quasi-peak                       | 10kHz           | 30kHz      | Quasi-peak                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 30MHz-1GHz                                                                                                                                                                                                                                                                  | Quasi-peak                       | 120kHz          | 300kHz     | Quasi-peak                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Above 1GHz                                                                                                                                                                                                                                                                  | Peak                             | 1MHz            | 3MHz       | Peak                      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                             | Peak                             | 1MHz            | 10Hz       | Average                   |
| Test Procedure:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                             |                                  |                 |            |                           |
| <b>Below 1GHz test procedure as below:</b><br>a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation.<br>b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.<br>c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.<br>d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rota table was turned from 0 degrees to 360 degrees to find the maximum reading.<br>e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.<br>f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.<br><b>Above 1GHz test procedure as below:</b><br>g. Different between above is the test site, change from Semi- Anechoic Chamber to fully Anechoic Chamber and change form table 0.8 metre to 1.5 metre( Above 18GHz the distance is 1 meter and table is 1.5 metre)<br>h. Test the EUT in the lowest channel ,the middle channel ,the Highest channel<br>i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is worse case.<br>j. Repeat above procedures until all frequencies measured was complete. |                                                                                                                                                                                                                                                                             |                                  |                 |            |                           |
| Limit:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Frequency                                                                                                                                                                                                                                                                   | Field strength (microvolt/meter) | Limit (dBµV/cm) | Remark     | Measurement distance (cm) |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 0.009MHz-0.490MHz                                                                                                                                                                                                                                                           | 2400/F(kHz)                      | -               | -          | 300                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 0.490MHz-1.705MHz                                                                                                                                                                                                                                                           | 24000/F(kHz)                     | -               | -          | 30                        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 1.705MHz-30MHz                                                                                                                                                                                                                                                              | 30                               | -               | -          | 30                        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 30MHz-88MHz                                                                                                                                                                                                                                                                 | 100                              | 40.0            | Quasi-peak | 3                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 88MHz-216MHz                                                                                                                                                                                                                                                                | 150                              | 43.5            | Quasi-peak | 3                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 216MHz-960MHz                                                                                                                                                                                                                                                               | 200                              | 46.0            | Quasi-peak | 3                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 960MHz-1GHz                                                                                                                                                                                                                                                                 | 500                              | 54.0            | Quasi-peak | 3                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Above 1GHz                                                                                                                                                                                                                                                                  | 500                              | 54.0            | Average    | 3                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Note: 15.35(b), Unless otherwise specified, the limit on peak radio frequency emissions is 20dB above the maximum permitted average emission limit applicable to the equipment under test. This peak limit applies to the total peak emission level radiated by the device. |                                  |                 |            |                           |
| Test result: PASS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                             |                                  |                 |            |                           |

**Test Data:**

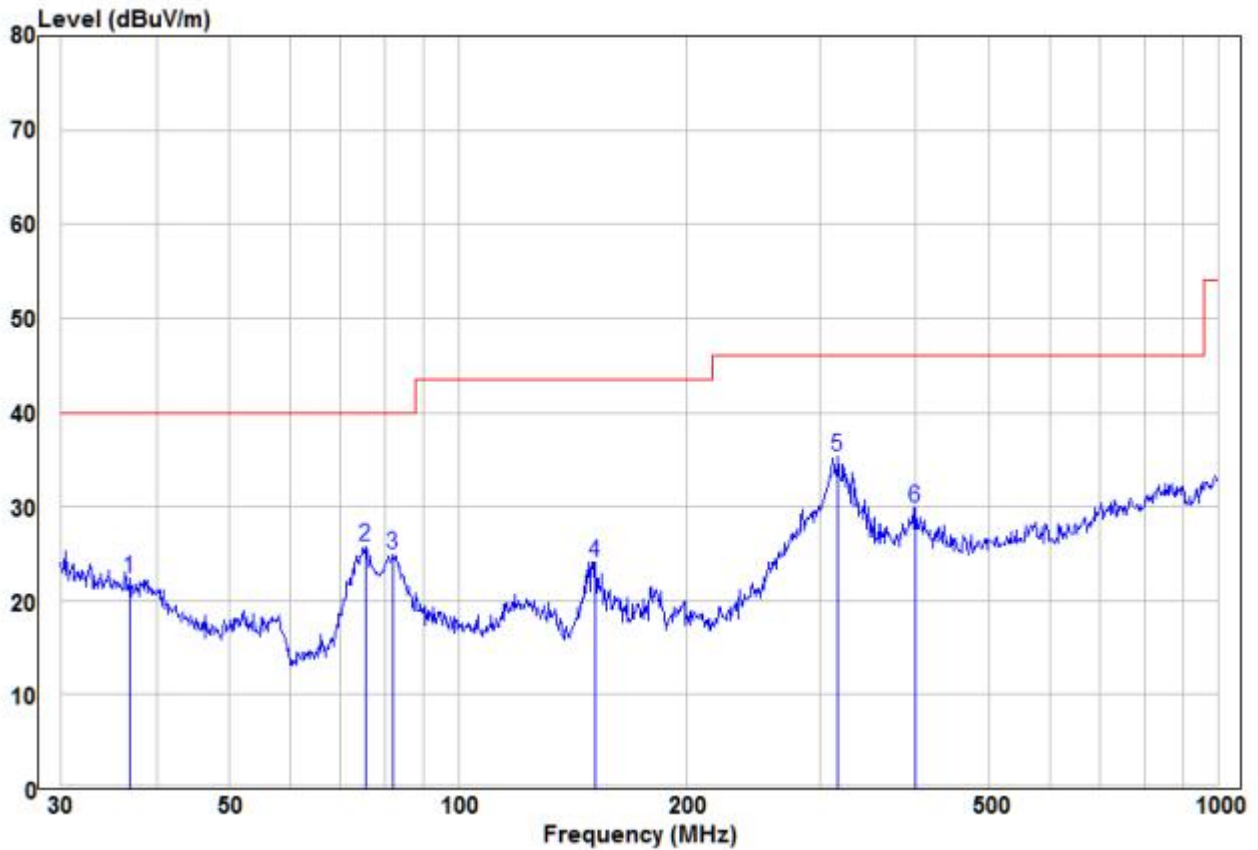
**Radiated Emission below 1GHz**

| 30MHz~1GHz |              |          |
|------------|--------------|----------|
| Test mode: | Transmitting | Vertical |



|      | Freq   | Read Level | Factor | Level  | Limit Line | Over Limit | Remark | Pol/Phase |
|------|--------|------------|--------|--------|------------|------------|--------|-----------|
|      | MHz    | dBuV       | dB/m   | dBuV/m | dBuV/m     | dB         |        |           |
| 1    | 39.58  | 19.76      | 12.95  | 32.71  | 40.00      | -7.29      | Peak   | VERTICAL  |
| 2    | 51.12  | 26.43      | 7.85   | 34.28  | 40.00      | -5.72      | Peak   | VERTICAL  |
| 3 pp | 82.07  | 25.03      | 9.83   | 34.86  | 40.00      | -5.14      | Peak   | VERTICAL  |
| 4    | 125.01 | 15.77      | 10.51  | 26.28  | 43.50      | -17.22     | Peak   | VERTICAL  |
| 5    | 148.96 | 19.99      | 8.43   | 28.42  | 43.50      | -15.08     | Peak   | VERTICAL  |
| 6    | 314.38 | 14.28      | 14.08  | 28.36  | 46.00      | -17.64     | Peak   | VERTICAL  |
| 7    | 501.18 | 11.66      | 18.29  | 29.95  | 46.00      | -16.05     | Peak   | VERTICAL  |

|            |              |            |
|------------|--------------|------------|
| Test mode: | Transmitting | Horizontal |
|------------|--------------|------------|



|      | Freq   | Read Level | Factor | Level  | Limit  | Over Limit | Remark | Pol/Phase  |
|------|--------|------------|--------|--------|--------|------------|--------|------------|
|      | MHz    | dBuV       | dB/m   | dBuV/m | dBuV/m | dB         |        |            |
| 1    | 36.90  | 8.37       | 13.92  | 22.29  | 40.00  | -17.71     | Peak   | HORIZONTAL |
| 2    | 75.45  | 16.72      | 9.04   | 25.76  | 40.00  | -14.24     | Peak   | HORIZONTAL |
| 3    | 82.07  | 15.14      | 9.83   | 24.97  | 40.00  | -15.03     | Peak   | HORIZONTAL |
| 4    | 151.60 | 15.72      | 8.36   | 24.08  | 43.50  | -19.42     | Peak   | HORIZONTAL |
| 5 pp | 316.59 | 21.20      | 14.13  | 35.33  | 46.00  | -10.67     | Peak   | HORIZONTAL |
| 6    | 399.03 | 14.74      | 15.13  | 29.87  | 46.00  | -16.13     | Peak   | HORIZONTAL |

**Transmitter Emission above 1GHz**

| Test mode: |               | 802.11a(6Mbps) |                | Test channel: |        | 48            |           |
|------------|---------------|----------------|----------------|---------------|--------|---------------|-----------|
| Frequency  | Meter Reading | Factor         | Emission Level | Limits        | Over   | Detector Type | Ant. Pol. |
| (MHz)      | (dBμV)        | (dB)           | (dBμV/m)       | (dBμV/m)      | (dB)   |               | H/V       |
| 10480      | 50.24         | 2.31           | 52.55          | 74            | -21.45 | peak          | H         |
| 10480      | 30.08         | 2.31           | 32.39          | 54            | -21.61 | AVG           | H         |
| 15720      | 49.92         | 3.79           | 53.71          | 74            | -20.29 | peak          | H         |
| 15720      | 29.58         | 3.79           | 33.37          | 54            | -20.63 | AVG           | H         |
| 10480      | 48.97         | 2.31           | 51.28          | 74            | -22.72 | peak          | V         |
| 10480      | 30.81         | 2.31           | 33.12          | 54            | -20.88 | AVG           | V         |
| 15720      | 50.49         | 3.79           | 54.28          | 74            | -19.72 | peak          | V         |
| 15720      | 30.51         | 3.79           | 34.30          | 54            | -19.70 | AVG           | V         |

**Remark:**

- 1) The 6Mbps of rate of 802.11a at 48 channel is the worst case, only the worst data recorded in the report.
- 2) The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:  
 Final Test Level = Receiver Reading + Antenna Factor + Cable Factor – Preamplifier Factor
- 3) Scan from 9kHz to 40GHz, The disturbance above 18GHz and below 30MHz was very low, and the above harmonics were the highest point could be found when testing, so only the above harmonics had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.

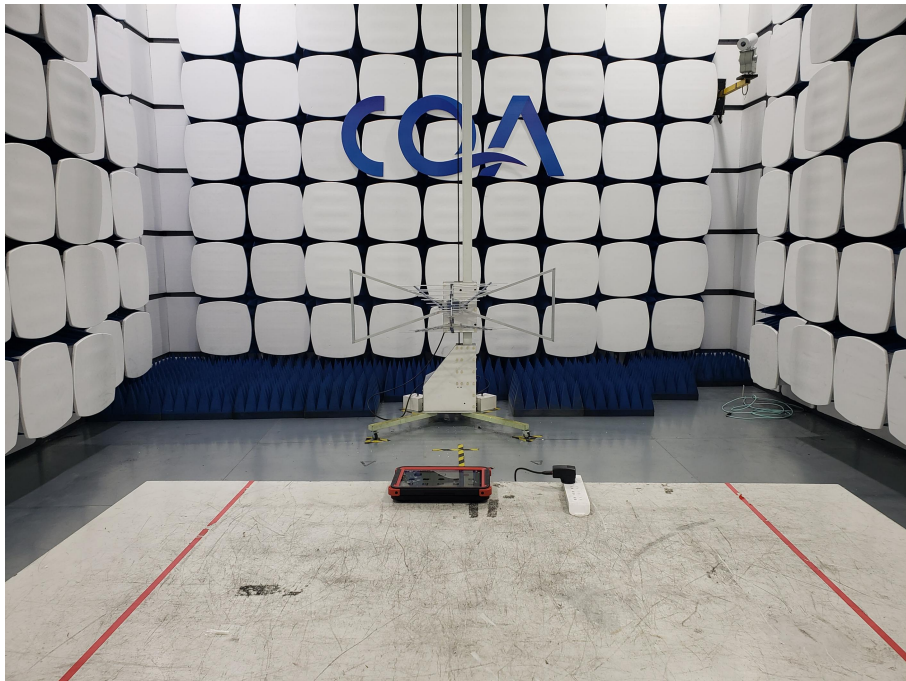
## 7 Photographs - EUT Test Setup

### 7.1 Radiated Spurious Emission

9kHz~30MHz:



30MHz~1GHz:



Above 1GHz:



## 7.2 Conducted Emission



## 8 Photographs - EUT Constructional Details

Refer to PHOTOGRAPHS OF EUT for CQASZ20240801587E-01.

\*\*\* End of Report \*\*\*