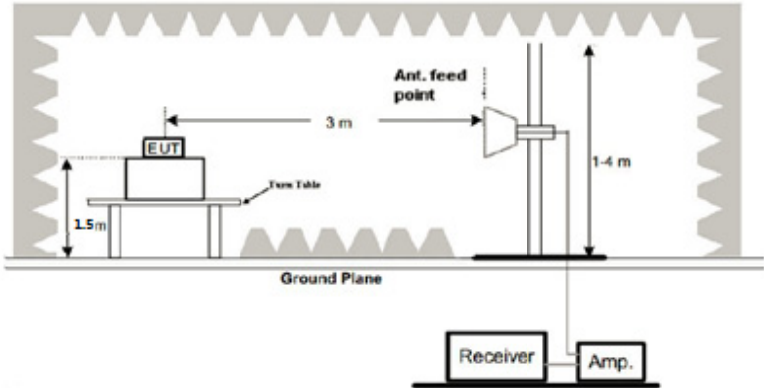




## 4.6. Band Edge

### 4.6.1. Test Specification

|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Test Requirement:</b> | FCC CFR47 Part 15E Section 15.407                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Test Method:</b>      | ANSI C63.10 2013                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Limit:</b>            | <p>For band I&amp;II&amp;III: <math>E[dB\mu V/m] = EIRP[dBm] + 95.2 = 68.2 \text{ dB}\mu V/m</math>, for <math>EIRP(dBm) = -27 \text{ dBm}</math></p> <p>For transmitters operating in the 5.725-5.85 GHz band:</p> <p>All emissions shall be limited to a level of <math>-27 \text{ dBm/MHz}</math> at 75 MHz or more above or below the band edge increasing linearly to <math>10 \text{ dBm/MHz}</math> at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of <math>15.6 \text{ dBm/MHz}</math> at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of <math>27 \text{ dBm/MHz}</math> at the band edge.</p> <p>For band IV(5715-5725MHz&amp;5850-5860MHz): <math>E[dB\mu V/m] = EIRP[dBm] + 95.2 = 78.2 \text{ dB}\mu V/m</math>, for <math>EIRP(dBm) = -27 \text{ dBm}</math>;</p> <p>For band IV(other un-restricted band): <math>E[dB\mu V/m] = EIRP[dBm] + 95.2 = 68.2 \text{ dB}\mu V/m</math>, for <math>EIRP(dBm) = -27 \text{ dBm}</math></p> |
| <b>Test Setup:</b>       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Test Mode:</b>        | Transmitting mode with modulation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |



|                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Test Procedure:</b> | <ol style="list-style-type: none"><li>1. The EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation.</li><li>2. 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>3. 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>4. 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 rota table was turned from 0 degrees to 360 degrees to find the maximum reading.</li><li>5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.</li><li>6. 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.</li></ol> |
| <b>Test Result:</b>    | PASS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |



## 4.6.2. Test Instruments

| Radiated Emission Test Site (966) |                 |                |               |                  |                 |
|-----------------------------------|-----------------|----------------|---------------|------------------|-----------------|
| Name of Equipment                 | Manufacturer    | Model          | Serial Number | Calibration Date | Calibration Due |
| Spectrum analyzer                 | Agilent         | N9020A         | HKE-025       | Feb. 19, 2025    | Feb. 18, 2026   |
| Spectrum analyzer                 | R&S             | FSV3044        | HKE-126       | Feb. 19, 2025    | Feb. 18, 2026   |
| Preamplifier                      | EMCI            | EMC051845S     | HKE-006       | Feb. 19, 2025    | Feb. 18, 2026   |
| Preamplifier                      | Schwarzbeck     | BBV 9743       | HKE-016       | Feb. 19, 2025    | Feb. 18, 2026   |
| Preamplifier                      | A.H. Systems    | SAS-574        | HKE-182       | Feb. 19, 2025    | Feb. 18, 2026   |
| 6dB Attenuator                    | Pasternack      | 6db            | HKE-184       | Feb. 19, 2025    | Feb. 18, 2026   |
| EMI Test Receiver                 | Rohde & Schwarz | ESR-7          | HKE-010       | Feb. 19, 2025    | Feb. 18, 2026   |
| Broadband Antenna                 | Schwarzbeck     | VULB9168       | HKE-167       | Feb. 21, 2024    | Feb. 20, 2026   |
| Loop Antenna                      | COM-POWER       | AL-130R        | HKE-014       | Feb. 21, 2024    | Feb. 20, 2026   |
| Horn Antenna                      | Schwarzbeck     | 9120D          | HKE-013       | Feb. 21, 2024    | Feb. 20, 2026   |
| EMI Test Software                 | Tonscend        | JS32-RE 5.0.0  | HKE-082       | N/A              | N/A             |
| RSE Test Software                 | Tonscend        | JS36-RSE 5.0.0 | HKE-184       | N/A              | N/A             |

**Note:** The calibration interval of the above test instruments is 12 months and the calibrations are traceable to international system unit (SI).

**4.6.3. Test Data****ANT. 1**

Operation Mode: 802.11a Mode with 5.2G TX CH Low

Horizontal

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5150                                                                                                                      | 55.26         | -2.49  | 52.77          | 74       | -21.23 | peak          |
| 5150                                                                                                                      | /             | -2.49  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |

Vertical:

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5150                                                                                                                      | 53.41         | -2.49  | 50.92          | 74       | -23.08 | peak          |
| 5150                                                                                                                      | /             | -2.49  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |





Operation Mode: TX CH High with 5.2G

Horizontal

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5350                                                                                                                      | 54.26         | -2.11  | 52.15          | 74       | -21.85 | peak          |
| 5350                                                                                                                      | /             | -2.11  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |

Vertical:

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5350                                                                                                                      | 52.41         | -2.11  | 50.3           | 74       | -23.7  | peak          |
| 5350                                                                                                                      | /             | -2.11  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |



Operation Mode: 802.11n/HT20 Mode with 5.2G TX CH Low

Horizontal

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5150                                                                                                                      | 53.65         | -2.49  | 51.16          | 74       | -22.84 | peak          |
| 5150                                                                                                                      | /             | -2.49  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |

Vertical:

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5150                                                                                                                      | 51.49         | -2.49  | 49             | 74       | -25    | peak          |
| 5150                                                                                                                      | /             | -2.49  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |



Operation Mode: TX CH High with 5.2G

Horizontal

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5350                                                                                                                      | 54.26         | -2.11  | 52.15          | 74       | -21.85 | peak          |
| 5350                                                                                                                      | /             | -2.11  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |

Vertical:

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5350                                                                                                                      | 53.22         | -2.11  | 51.11          | 74       | -22.89 | peak          |
| 5350                                                                                                                      | /             | -2.11  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |



Operation Mode: 802.11 n/HT40 Mode with 5.2G TX CH Low

Horizontal

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5150                                                                                                                      | 54.18         | -2.49  | 51.69          | 74       | -22.31 | peak          |
| 5150                                                                                                                      | /             | -2.49  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |

Vertical:

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5150                                                                                                                      | 52.47         | -2.49  | 49.98          | 74       | -24.02 | peak          |
| 5150                                                                                                                      | /             | -2.49  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |





Operation Mode: TX CH High with 5.2G

Horizontal

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5350                                                                                                                      | 54.16         | -2.11  | 52.05          | 74       | -21.95 | peak          |
| 5350                                                                                                                      | /             | -2.11  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |

Vertical:

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5350                                                                                                                      | 52.47         | -2.11  | 50.36          | 74       | -23.64 | peak          |
| 5350                                                                                                                      | /             | -2.11  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |



Operation Mode: 802.11 ac/HT20 Mode with 5.2G TX CH Low

## Horizontal

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5150                                                                                                                      | 54.19         | -2.49  | 51.7           | 74       | -22.3  | peak          |
| 5150                                                                                                                      | /             | -2.49  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |

## Vertical:

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5150                                                                                                                      | 52.47         | -2.49  | 49.98          | 74       | -24.02 | peak          |
| 5150                                                                                                                      | /             | -2.49  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |



Operation Mode: TX CH High with 5.2G

Horizontal

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5350                                                                                                                      | 55.03         | -2.11  | 52.92          | 74       | -21.08 | peak          |
| 5350                                                                                                                      | /             | -2.11  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |

Vertical:

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5350                                                                                                                      | 53.19         | -2.11  | 51.08          | 74       | -22.92 | peak          |
| 5350                                                                                                                      | /             | -2.11  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |



Operation Mode: 802.11 ac/HT40 Mode with 5.2G TX CH Low

## Horizontal

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5150                                                                                                                      | 54.26         | -2.49  | 51.77          | 74       | -22.23 | peak          |
| 5150                                                                                                                      | /             | -2.49  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |

## Vertical:

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5150                                                                                                                      | 53.19         | -2.49  | 50.7           | 74       | -23.3  | peak          |
| 5150                                                                                                                      | /             | -2.49  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |





Operation Mode: TX CH High with 5.2G

Horizontal

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5350                                                                                                                      | 53.19         | -2.11  | 51.08          | 74       | -22.92 | peak          |
| 5350                                                                                                                      | /             | -2.11  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |

Vertical:

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5350                                                                                                                      | 51.47         | -2.11  | 49.36          | 74       | -24.64 | peak          |
| 5350                                                                                                                      | /             | -2.11  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |



Operation Mode: 802.11 ac/HT80 Mode with 5.2G TX CH Low

## Horizontal

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5150                                                                                                                      | 54.16         | -2.49  | 51.67          | 74       | -22.33 | peak          |
| 5150                                                                                                                      | /             | -2.49  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |

## Vertical:

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5150                                                                                                                      | 52.72         | -2.49  | 50.23          | 74       | -23.77 | peak          |
| 5150                                                                                                                      | /             | -2.49  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |



Operation Mode: TX CH High with 5.2G

Horizontal

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5350                                                                                                                      | 54.61         | -2.11  | 52.5           | 74       | -21.5  | peak          |
| 5350                                                                                                                      | /             | -2.11  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |

Vertical:

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5350                                                                                                                      | 53.19         | -2.11  | 51.08          | 74       | -22.92 | peak          |
| 5350                                                                                                                      | /             | -2.11  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |

**ANT. 2**

Operation Mode: 802.11a Mode with 5.2G TX CH Low

Horizontal

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5150                                                                                                                      | 53.19         | -2.49  | 50.7           | 74       | -23.3  | peak          |
| 5150                                                                                                                      | /             | -2.49  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |

Vertical:

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5150                                                                                                                      | 52.08         | -2.49  | 49.59          | 74       | -24.41 | peak          |
| 5150                                                                                                                      | /             | -2.49  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |





Operation Mode: TX CH High with 5.2G

Horizontal

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5350                                                                                                                      | 54.26         | -2.11  | 52.15          | 74       | -21.85 | peak          |
| 5350                                                                                                                      | /             | -2.11  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |

Vertical:

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5350                                                                                                                      | 51.64         | -2.11  | 49.53          | 74       | -24.47 | peak          |
| 5350                                                                                                                      | /             | -2.11  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |



Operation Mode: 802.11n/HT20 Mode with 5.2G TX CH Low

Horizontal

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5150                                                                                                                      | 54.16         | -2.49  | 51.67          | 74       | -22.33 | peak          |
| 5150                                                                                                                      | /             | -2.49  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |

Vertical:

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5150                                                                                                                      | 52.32         | -2.49  | 49.83          | 74       | -24.17 | peak          |
| 5150                                                                                                                      | /             | -2.49  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |



Operation Mode: TX CH High with 5.2G

Horizontal

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5350                                                                                                                      | 55.16         | -2.11  | 53.05          | 74       | -20.95 | peak          |
| 5350                                                                                                                      | /             | -2.11  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |

Vertical:

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5350                                                                                                                      | 52.47         | -2.11  | 50.36          | 74       | -23.64 | peak          |
| 5350                                                                                                                      | /             | -2.11  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |



Operation Mode: 802.11 n/HT40 Mode with 5.2G TX CH Low

## Horizontal

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5150                                                                                                                      | 52.66         | -2.49  | 50.17          | 74       | -23.83 | peak          |
| 5150                                                                                                                      | /             | -2.49  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |

## Vertical:

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5150                                                                                                                      | 51.03         | -2.49  | 48.54          | 74       | -25.46 | peak          |
| 5150                                                                                                                      | /             | -2.49  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |





Operation Mode: TX CH High with 5.2G

Horizontal

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5350                                                                                                                      | 53.26         | -2.11  | 51.15          | 74       | -22.85 | peak          |
| 5350                                                                                                                      | /             | -2.11  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |

Vertical:

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5350                                                                                                                      | 51.72         | -2.11  | 49.61          | 74       | -24.39 | peak          |
| 5350                                                                                                                      | /             | -2.11  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |



Operation Mode: 802.11 ac/HT20 Mode with 5.2G TX CH Low

## Horizontal

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5150                                                                                                                      | 54.62         | -2.49  | 52.13          | 74       | -21.87 | peak          |
| 5150                                                                                                                      | /             | -2.49  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |

## Vertical:

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5150                                                                                                                      | 52.48         | -2.49  | 49.99          | 74       | -24.01 | peak          |
| 5150                                                                                                                      | /             | -2.49  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |



Operation Mode: TX CH High with 5.2G

Horizontal

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5350                                                                                                                      | 53.27         | -2.11  | 51.16          | 74       | -22.84 | peak          |
| 5350                                                                                                                      | /             | -2.11  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |

Vertical:

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5350                                                                                                                      | 51.49         | -2.11  | 49.38          | 74       | -24.62 | peak          |
| 5350                                                                                                                      | /             | -2.11  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |



Operation Mode: 802.11 ac/HT40 Mode with 5.2G TX CH Low

## Horizontal

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5150                                                                                                                      | 53.66         | -2.49  | 51.17          | 74       | -22.83 | peak          |
| 5150                                                                                                                      | /             | -2.49  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |

## Vertical:

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5150                                                                                                                      | 52.17         | -2.49  | 49.68          | 74       | -24.32 | peak          |
| 5150                                                                                                                      | /             | -2.49  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |





Operation Mode: TX CH High with 5.2G

Horizontal

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5350                                                                                                                      | 55.01         | -2.11  | 52.9           | 74       | -21.1  | peak          |
| 5350                                                                                                                      | /             | -2.11  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |

Vertical:

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5350                                                                                                                      | 53.27         | -2.11  | 51.16          | 74       | -22.84 | peak          |
| 5350                                                                                                                      | /             | -2.11  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |



Operation Mode: 802.11 ac/HT80 Mode with 5.2G TX CH Low

## Horizontal

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5150                                                                                                                      | 53.16         | -2.49  | 50.67          | 74       | -23.33 | peak          |
| 5150                                                                                                                      | /             | -2.49  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |

## Vertical:

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5150                                                                                                                      | 52.18         | -2.49  | 49.69          | 74       | -24.31 | peak          |
| 5150                                                                                                                      | /             | -2.49  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |



Operation Mode: TX CH High with 5.2G

Horizontal

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5350                                                                                                                      | 54.29         | -2.11  | 52.18          | 74       | -21.82 | peak          |
| 5350                                                                                                                      | /             | -2.11  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |

Vertical:

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5350                                                                                                                      | 51.72         | -2.11  | 49.61          | 74       | -24.39 | peak          |
| 5350                                                                                                                      | /             | -2.11  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |

**MIMO**

Operation Mode: 802.11n/HT20 Mode with 5.2G TX CH Low

**Horizontal**

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5150                                                                                                                      | 53.66         | -2.49  | 51.17          | 74       | -22.83 | peak          |
| 5150                                                                                                                      | /             | -2.49  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |

**Vertical:**

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5150                                                                                                                      | 51.42         | -2.49  | 48.93          | 74       | -25.07 | peak          |
| 5150                                                                                                                      | /             | -2.49  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |





Operation Mode: TX CH High with 5.2G

Horizontal

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5350                                                                                                                      | 54.16         | -2.11  | 52.05          | 74       | -21.95 | peak          |
| 5350                                                                                                                      | /             | -2.11  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |

Vertical:

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5350                                                                                                                      | 52.72         | -2.11  | 50.61          | 74       | -23.39 | peak          |
| 5350                                                                                                                      | /             | -2.11  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |



Operation Mode: 802.11 n/HT40 Mode with 5.2G TX CH Low

Horizontal

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5150                                                                                                                      | 54.02         | -2.49  | 51.53          | 74       | -22.47 | peak          |
| 5150                                                                                                                      | /             | -2.49  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |

Vertical:

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5150                                                                                                                      | 53.11         | -2.49  | 50.62          | 74       | -23.38 | peak          |
| 5150                                                                                                                      | /             | -2.49  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |



Operation Mode: TX CH High with 5.2G

Horizontal

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5350                                                                                                                      | 53.96         | -2.11  | 51.85          | 74       | -22.15 | peak          |
| 5350                                                                                                                      | /             | -2.11  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |

Vertical:

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5350                                                                                                                      | 51.48         | -2.11  | 49.37          | 74       | -24.63 | peak          |
| 5350                                                                                                                      | /             | -2.11  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |



Operation Mode: 802.11 ac/HT20 Mode with 5.2G TX CH Low

## Horizontal

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5150                                                                                                                      | 53.22         | -2.49  | 50.73          | 74       | -23.27 | peak          |
| 5150                                                                                                                      | /             | -2.49  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |

## Vertical:

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5150                                                                                                                      | 52.09         | -2.49  | 49.6           | 74       | -24.4  | peak          |
| 5150                                                                                                                      | /             | -2.49  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |





Operation Mode: TX CH High with 5.2G

Horizontal

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5350                                                                                                                      | 54.11         | -2.11  | 52             | 74       | -22    | peak          |
| 5350                                                                                                                      | /             | -2.11  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |

Vertical:

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5350                                                                                                                      | 53.26         | -2.11  | 51.15          | 74       | -22.85 | peak          |
| 5350                                                                                                                      | /             | -2.11  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |



Operation Mode: 802.11 ac/HT40 Mode with 5.2G TX CH Low

## Horizontal

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5150                                                                                                                      | 53.26         | -2.49  | 50.77          | 74       | -23.23 | peak          |
| 5150                                                                                                                      | /             | -2.49  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |

## Vertical:

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5150                                                                                                                      | 52.17         | -2.49  | 49.68          | 74       | -24.32 | peak          |
| 5150                                                                                                                      | /             | -2.49  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |



Operation Mode: TX CH High with 5.2G

Horizontal

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5350                                                                                                                      | 54.03         | -2.11  | 51.92          | 74       | -22.08 | peak          |
| 5350                                                                                                                      | /             | -2.11  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |

Vertical:

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5350                                                                                                                      | 52.71         | -2.11  | 50.6           | 74       | -23.4  | peak          |
| 5350                                                                                                                      | /             | -2.11  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |



Operation Mode: 802.11 ac/HT80 Mode with 5.2G TX CH Low

## Horizontal

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5150                                                                                                                      | 53.16         | -2.49  | 50.67          | 74       | -23.33 | peak          |
| 5150                                                                                                                      | /             | -2.49  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |

## Vertical:

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5150                                                                                                                      | 52.41         | -2.49  | 49.92          | 74       | -24.08 | peak          |
| 5150                                                                                                                      | /             | -2.49  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |





Operation Mode: TX CH High with 5.2G

Horizontal

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5350                                                                                                                      | 54.23         | -2.11  | 52.12          | 74       | -21.88 | peak          |
| 5350                                                                                                                      | /             | -2.11  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |

Vertical:

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 5350                                                                                                                      | 52.47         | -2.11  | 50.36          | 74       | -23.64 | peak          |
| 5350                                                                                                                      | /             | -2.11  | /              | 54       | /      | AVG           |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |

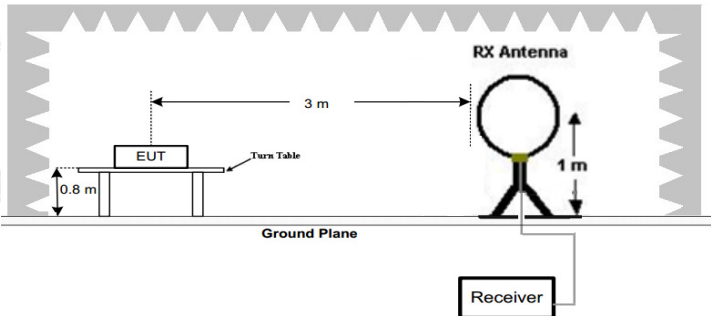
Remark:

1. If the PK measured levels comply with average limit, then the average level were deemed to comply with average limit.
2. In restricted bands of operation, the spurious emissions below the permissible value more than 20dB.
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.



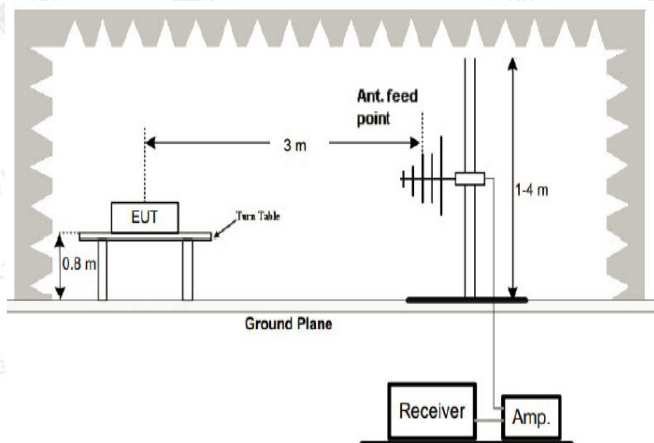
## 4.7. Spurious Emission

### 4.7.1.1. Test Specification

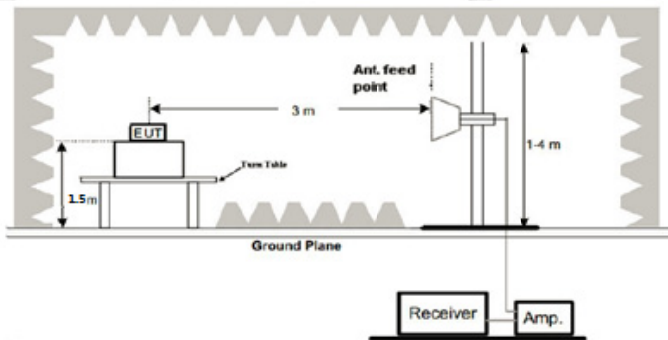
|                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |            |        |        |                  |
|------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------|--------|------------------|
| <b>Test Requirement:</b>     | FCC CFR47 Part 15 Section 15.407                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |            |        |        |                  |
| <b>Test Method:</b>          | KDB 789033 D02 v02r01                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |            |        |        |                  |
| <b>Frequency Range:</b>      | 9kHz to 40GHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |            |        |        |                  |
| <b>Measurement Distance:</b> | 3 m                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |            |        |        |                  |
| <b>Antenna Polarization:</b> | Horizontal & Vertical                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |            |        |        |                  |
| <b>Operation mode:</b>       | Transmitting mode with modulation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |            |        |        |                  |
| <b>Receiver Setup:</b>       | Frequency                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Detector   | RBW    | VBW    | Remark           |
|                              | 9kHz- 150kHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Quasi-peak | 200Hz  | 1kHz   | Quasi-peak Value |
|                              | 150kHz- 30MHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Quasi-peak | 9kHz   | 30kHz  | Quasi-peak Value |
|                              | 30MHz-1GHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Quasi-peak | 120KHz | 300KHz | Quasi-peak Value |
|                              | Above 1GHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Peak       | 1MHz   | 3MHz   | Peak Value       |
|                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Peak       | 1MHz   | 10Hz   | Average Value    |
| <b>Limit:</b>                | <p>(1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of <math>-27</math> dBm/MHz.</p> <p>(i) All emissions shall be limited to a level of <math>-27</math> dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.</p> <p>The limit of frequency below 1GHz and which fall in rest ricted bands should complies 15.209.</p> |            |        |        |                  |
| <b>Test setup:</b>           | <p>For radiated emissions below 30MHz</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |            |        |        |                  |



## 30MHz to 1GHz



## Above 1GHz

**Test Procedure:**

1. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation.
2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
3. 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.
4. 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.
5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.



|               |                                                                                                                                                                                                                                                                                                                                                        |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|               | 6. 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. |
| Test results: | PASS                                                                                                                                                                                                                                                                                                                                                   |

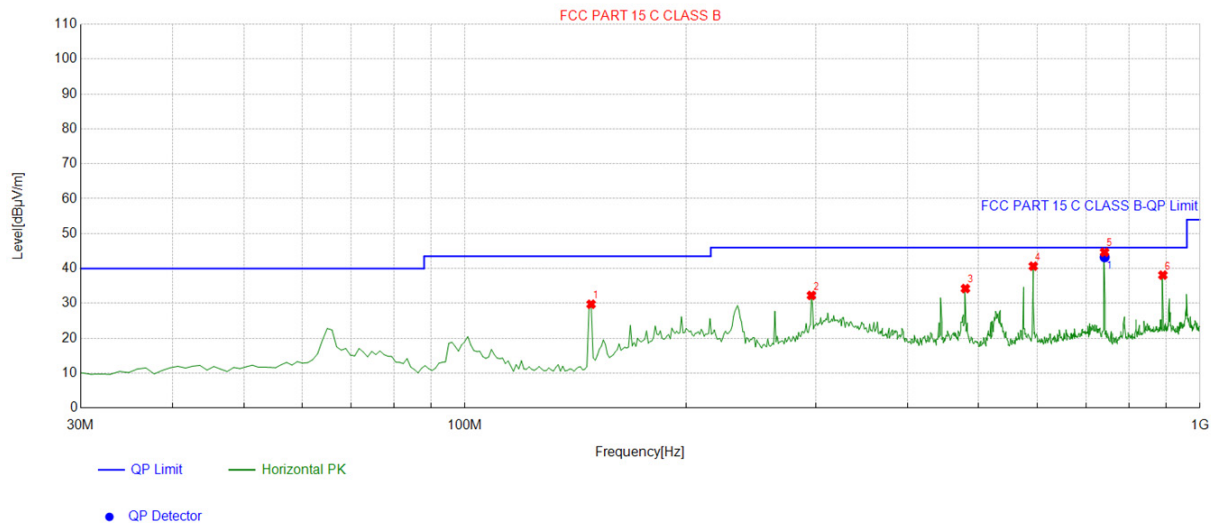




#### 4.7.2. Test Data

All the test modes completed for test. only the worst result of (802.11a at 5180MHz)  
was reported  
Below 1GHz

##### Horizontal



##### Suspected List

| NO. | Freq.<br>[MHz] | Factor<br>[dB] | Reading<br>[dBμV/m] | Level<br>[dBμV/m] | Limit<br>[dBμV/m] | Margin<br>[dB] | Height<br>[cm] | Angle<br>[°] | Polarity   |
|-----|----------------|----------------|---------------------|-------------------|-------------------|----------------|----------------|--------------|------------|
| 1   | 148.45845      | -18.14         | 47.90               | 29.76             | 43.50             | 13.74          | 100            | 323          | Horizontal |
| 2   | 296.04604      | -11.88         | 44.16               | 32.28             | 46.00             | 13.72          | 100            | 29           | Horizontal |
| 3   | 479.55956      | -8.27          | 42.51               | 34.24             | 46.00             | 11.76          | 100            | 138          | Horizontal |
| 4   | 593.16316      | -5.37          | 46.02               | 40.65             | 46.00             | 5.35           | 100            | 205          | Horizontal |
| 5   | 741.72172      | -3.40          | 48.05               | 44.65             | 46.00             | 1.35           | 100            | 320          | Horizontal |
| 6   | 890.28028      | -1.59          | 39.69               | 38.10             | 46.00             | 7.90           | 100            | 106          | Horizontal |

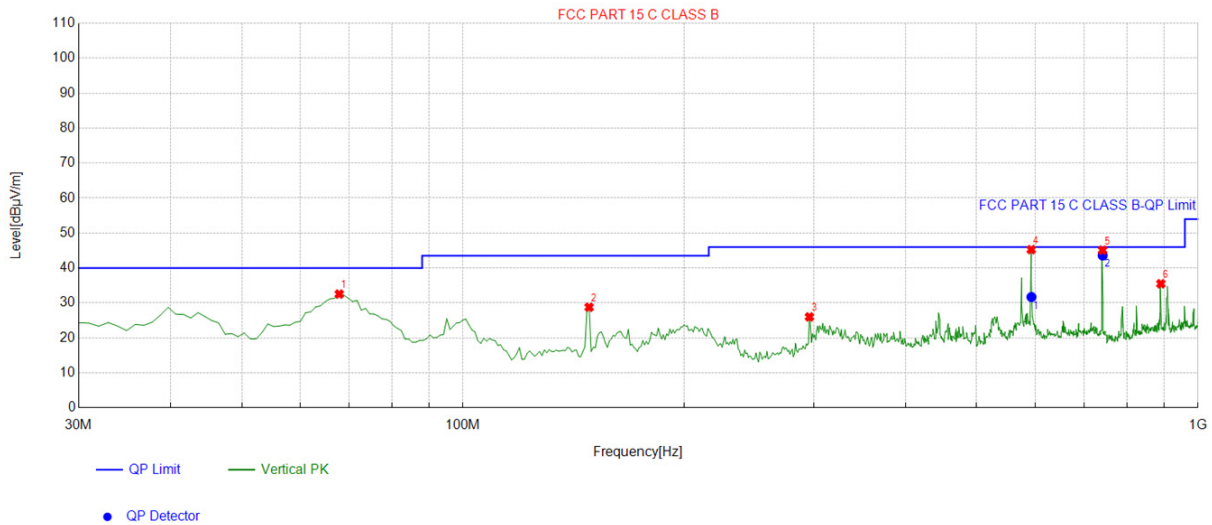
##### Final Data List

| NO. | Freq.<br>[MHz] | Factor<br>[dB] | QP Reading<br>[dBμV/m] | QP Value<br>[dBμV/m] | QP Limit<br>[dBμV/m] | QP Margin<br>[dB] | Height<br>[cm] | Angle<br>[°] | Polarity   |
|-----|----------------|----------------|------------------------|----------------------|----------------------|-------------------|----------------|--------------|------------|
| 1   | 741.7647       | -3.40          | 46.62                  | 43.22                | 46.00                | 2.78              | 100            | 320          | Horizontal |

Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Limit – Level



## Vertical



## Suspected List

| NO. | Freq.<br>[MHz] | Factor<br>[dB] | Reading<br>[dBμV/m] | Level<br>[dBμV/m] | Limit<br>[dBμV/m] | Margin<br>[dB] | Height<br>[cm] | Angle<br>[°] | Polarity |
|-----|----------------|----------------|---------------------|-------------------|-------------------|----------------|----------------|--------------|----------|
| 1   | 67.867868      | -16.02         | 48.56               | 32.54             | 40.00             | 7.46           | 100            | 307          | Vertical |
| 2   | 148.45845      | -18.14         | 46.92               | 28.78             | 43.50             | 14.72          | 100            | 154          | Vertical |
| 3   | 296.04604      | -11.88         | 37.89               | 26.01             | 46.00             | 19.99          | 100            | 293          | Vertical |
| 4   | 593.16316      | -5.37          | 50.63               | 45.26             | 46.00             | 0.74           | 100            | 39           | Vertical |
| 5   | 741.72172      | -3.40          | 48.49               | 45.09             | 46.00             | 0.91           | 100            | 353          | Vertical |
| 6   | 890.28028      | -1.59          | 37.08               | 35.49             | 46.00             | 10.51          | 100            | 3            | Vertical |

## Final Data List

| NO. | Freq.<br>[MHz] | Factor<br>[dB] | QP Reading<br>[dBμV/m] | QP Value<br>[dBμV/m] | QP Limit<br>[dBμV/m] | QP Margin<br>[dB] | Height<br>[cm] | Angle<br>[°] | Polarity |
|-----|----------------|----------------|------------------------|----------------------|----------------------|-------------------|----------------|--------------|----------|
| 1   | 593.507        | -5.37          | 37.07                  | 31.70                | 46.00                | 14.30             | 100            | 39           | Vertical |
| 2   | 741.7647       | -3.40          | 46.99                  | 43.59                | 46.00                | 2.41              | 100            | 353          | Vertical |

Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Limit – Level

### Harmonics and Spurious Emissions Frequency Range (9kHz-30MHz)

| Frequency (MHz) | Level@3m (dBμV/m) | Limit@3m (dBμV/m) |
|-----------------|-------------------|-------------------|
| --              | --                | --                |
| --              | --                | --                |
| --              | --                | --                |
| --              | --                | --                |

**Note:** 1. Emission Level=Reading+ Cable loss-Antenna factor-Amp factor.

2. The emission levels are 20 dB below the limit value, which are not reported. It is deemed to comply with the requirement.



All modes of operation were investigated and the worst-case of Ant.2 are reported.

LOW CH 36 (802.11 a Mode with 5.2G)/5180

Horizontal:

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 3647                                                                                                                      | 53.86         | -4.59  | 49.27          | 74       | -24.73 | peak          |
| 3647                                                                                                                      | 42.49         | -4.59  | 37.9           | 54       | -16.1  | AVG           |
| 10360                                                                                                                     | 50.32         | 3.74   | 54.06          | 68.2     | -14.14 | peak          |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |

Vertical:

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 3647                                                                                                                      | 54.86         | -4.59  | 50.27          | 74       | -23.73 | peak          |
| 3647                                                                                                                      | 40.44         | -4.59  | 35.85          | 54       | -18.15 | AVG           |
| 10360                                                                                                                     | 52.33         | 3.74   | 56.07          | 68.2     | -12.13 | peak          |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |



MID CH40 (802.11 a Mode with 5.2G)/5200

Horizontal:

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 3647                                                                                                                      | 55.01         | -4.59  | 50.42          | 74       | -23.58 | peak          |
| 3647                                                                                                                      | 42.91         | -4.59  | 38.32          | 54       | -15.68 | AVG           |
| 10400                                                                                                                     | 52.41         | 3.74   | 56.15          | 68.2     | -12.05 | peak          |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |

Vertical:

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 3647                                                                                                                      | 54.94         | -4.59  | 50.35          | 74       | -23.65 | peak          |
| 3647                                                                                                                      | 40.96         | -4.59  | 36.37          | 54       | -17.63 | AVG           |
| 10400                                                                                                                     | 50.17         | 3.74   | 53.91          | 68.2     | -14.29 | peak          |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |





HIGH CH 48 (802.11a Mode with 5.2G)/5240

Horizontal:

| Frequency                                                                                                                  | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|----------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                      | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 3647                                                                                                                       | 55.07         | -4.59  | 50.48          | 74       | -23.52 | peak          |
| 3647                                                                                                                       | 39.81         | -4.59  | 35.22          | 54       | -18.78 | AVG           |
| 10480                                                                                                                      | 52.16         | 3.75   | 55.91          | 68.2     | -12.29 | peak          |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |

Vertical:

| Frequency                                                                                                                  | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|----------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                      | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 3647                                                                                                                       | 54.64         | -4.59  | 50.05          | 74       | -23.95 | peak          |
| 3647                                                                                                                       | 43.62         | -4.59  | 39.03          | 54       | -14.97 | AVG           |
| 10480                                                                                                                      | 52.51         | 3.75   | 56.26          | 68.2     | -11.94 | peak          |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Pre-amplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |

Remark:

- (1) Measuring frequencies from 1 GHz to the 40 GHz.
- (2) "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency.
- (3) \* denotes emission frequency which appearing within the Restricted Bands specified in provision of 15.205, then the general radiated emission limits in 15.209 apply.
- (4) The emissions are attenuated more than 20dB below the permissible limits are not record in the report.
- (5) The IF bandwidth of EMI Test Receiver between 30MHz to 1GHz was 120KHz, 1 MHz for measuring above 1 GHz, below 30MHz was 10KHz.
- (6) When the test results of Peak Detected below the limits of Average Detected, the Average Detected is not need completed. For example: Top Channel at Fundamental 73.16dBuV/m(PK Value) <93.98(AV Limit), at harmonic 53.20 dBuV/m(PK Value) <54 dBuV/m(AV Limit), the Average Detected not need to completed.

**5.2G 802.11n/HT20 Mode**

All modes of operation were investigated and the worst-case of MIMO are reported.

LOW CH 36

Horizontal:

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 3647                                                                                                                      | 55.55         | -4.59  | 50.96          | 74       | -23.04 | peak          |
| 3647                                                                                                                      | 42.38         | -4.59  | 37.79          | 54       | -16.21 | AVG           |
| 10360                                                                                                                     | 53.11         | 3.74   | 56.85          | 68.2     | -11.35 | peak          |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |

Vertical:

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 3647                                                                                                                      | 55.99         | -4.59  | 51.4           | 74       | -22.6  | peak          |
| 3647                                                                                                                      | 44.96         | -4.59  | 40.37          | 54       | -13.63 | AVG           |
| 10360                                                                                                                     | 51.23         | 3.74   | 54.97          | 68.2     | -13.23 | peak          |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |



MID CH40

Horizontal:

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 3647                                                                                                                      | 54.22         | -4.59  | 49.63          | 74       | -24.37 | peak          |
| 3647                                                                                                                      | 39.02         | -4.59  | 34.43          | 54       | -19.57 | AVG           |
| 10400                                                                                                                     | 51.36         | 3.74   | 55.1           | 68.2     | -13.1  | peak          |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |

Vertical:

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 3647                                                                                                                      | 54.16         | -4.59  | 49.57          | 74       | -24.43 | peak          |
| 3647                                                                                                                      | 44.88         | -4.59  | 40.29          | 54       | -13.71 | AVG           |
| 10400                                                                                                                     | 51.66         | 3.74   | 55.4           | 68.2     | -12.8  | peak          |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |



HIGH CH 48

Horizontal:

| Frequency | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|-----------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 3647      | 56.35         | -4.59  | 51.76          | 74       | -22.24 | peak          |
| 3647      | 39.99         | -4.59  | 35.4           | 54       | -18.6  | AVG           |
| 10480     | 52.47         | 3.75   | 56.22          | 68.2     | -11.98 | peak          |

Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit.

Vertical:

| Frequency | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|-----------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 3647      | 55.43         | -4.59  | 50.84          | 74       | -23.16 | peak          |
| 3647      | 43.16         | -4.59  | 38.57          | 54       | -15.43 | AVG           |
| 10480     | 51.76         | 3.75   | 55.51          | 68.2     | -12.69 | peak          |

Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit.

Remark:

- (1) Measuring frequencies from 1 GHz to the 40 GHz.
- (2) "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency.
- (3) \* denotes emission frequency which appearing within the Restricted Bands specified in provision of 15.205, then the general radiated emission limits in 15.209 apply.
- (4) The emissions are attenuated more than 20dB below the permissible limits are not record in the report.
- (5) The IF bandwidth of EMI Test Receiver between 30MHz to 1GHz was 120KHz, 1 MHz for measuring above 1 GHz, below 30MHz was 10KHz.
- (6) When the test results of Peak Detected below the limits of Average Detected, the Average Detected is not need completed. For example: Top Channel at Fundamental 73.16dBuV/m(PK Value) <93.98(AV Limit), at harmonic 53.20 dBuV/m(PK Value) <54 dBuV/m(AV Limit), the Average Detected not need to completed.





5.2G 802.11n/HT40 Mode

All modes of operation were investigated and the worst-case of MIMO are reported.

LOW CH 38

Horizontal:

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 3647                                                                                                                      | 57.98         | -4.59  | 53.39          | 74       | -20.61 | peak          |
| 3647                                                                                                                      | 44.63         | -4.59  | 40.04          | 54       | -13.96 | AVG           |
| 10360                                                                                                                     | 54.22         | 3.74   | 57.96          | 68.2     | -10.24 | peak          |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |

Vertical:

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 3647                                                                                                                      | 58.31         | -4.59  | 53.72          | 74       | -20.28 | peak          |
| 3647                                                                                                                      | 39.54         | -4.59  | 34.95          | 54       | -19.05 | AVG           |
| 10360                                                                                                                     | 51.98         | 3.74   | 55.72          | 68.2     | -12.48 | peak          |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |



HIGH CH 46

Horizontal:

| Frequency<br>(MHz) | Meter Reading<br>(dB $\mu$ V) | Factor<br>(dB) | Emission Level<br>(dB $\mu$ V/m) | Limits<br>(dB $\mu$ V/m) | Margin<br>(dB) | Detector Type |
|--------------------|-------------------------------|----------------|----------------------------------|--------------------------|----------------|---------------|
| 3647               | 58.95                         | -4.59          | 54.36                            | 74                       | -19.64         | peak          |
| 3647               | 39.32                         | -4.59          | 34.73                            | 54                       | -19.27         | AVG           |
| 10480              | 52.07                         | 3.75           | 55.82                            | 68.2                     | -12.38         | peak          |

Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit.

Vertical:

| Frequency<br>(MHz) | Meter Reading<br>(dB $\mu$ V) | Factor<br>(dB) | Emission Level<br>(dB $\mu$ V/m) | Limits<br>(dB $\mu$ V/m) | Margin<br>(dB) | Detector Type |
|--------------------|-------------------------------|----------------|----------------------------------|--------------------------|----------------|---------------|
| 3647               | 55.06                         | -4.59          | 50.47                            | 74                       | -23.53         | peak          |
| 3647               | 41.27                         | -4.59          | 36.68                            | 54                       | -17.32         | AVG           |
| 10480              | 53.87                         | 3.75           | 57.62                            | 68.2                     | -10.58         | peak          |

Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit.

Remark:

- (1) Measuring frequencies from 1 GHz to the 40 GHz.
- (2) "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency.
- (3) \* denotes emission frequency which appearing within the Restricted Bands specified in provision of 15.205, then the general radiated emission limits in 15.209 apply.
- (4) The emissions are attenuated more than 20dB below the permissible limits are not record in the report.
- (5) The IF bandwidth of EMI Test Receiver between 30MHz to 1GHz was 120KHz, 1 MHz for measuring above 1 GHz, below 30MHz was 10KHz.
- (6) When the test results of Peak Detected below the limits of Average Detected, the Average Detected is not need completed. For example: Top Channel at Fundamental 73.16dBuV/m(PK Value) <93.98(AV Limit), at harmonic 53.20 dBuV/m(PK Value) <54 dBuV/m(AV Limit), the Average Detected not need to completed.



## 5.2G 802.11ac/HT20 Mode

All modes of operation were investigated and the worst-case of MIMO are reported.

LOW CH 36

Horizontal:

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 3647                                                                                                                      | 56.07         | -4.59  | 51.48          | 74       | -22.52 | peak          |
| 3647                                                                                                                      | 41.91         | -4.59  | 37.32          | 54       | -16.68 | AVG           |
| 10360                                                                                                                     | 54.23         | 3.74   | 57.97          | 68.2     | -10.23 | peak          |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |

Vertical:

| Frequency                                                                                                                 | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|---------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 3647                                                                                                                      | 54.91         | -4.59  | 50.32          | 74       | -23.68 | peak          |
| 3647                                                                                                                      | 41.39         | -4.59  | 36.8           | 54       | -17.2  | AVG           |
| 10360                                                                                                                     | 53.16         | 3.74   | 56.9           | 68.2     | -11.3  | peak          |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |



MID CH40

Horizontal:

| Frequency | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|-----------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 3647      | 57.37         | -4.59  | 52.78          | 74       | -21.22 | peak          |
| 3647      | 44.86         | -4.59  | 40.27          | 54       | -13.73 | AVG           |
| 10400     | 53.13         | 3.74   | 56.87          | 68.2     | -11.33 | peak          |

Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit.

Vertical:

| Frequency | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|-----------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 3647      | 58.69         | -4.59  | 54.1           | 74       | -19.9  | peak          |
| 3647      | 41.85         | -4.59  | 37.26          | 54       | -16.74 | AVG           |
| 10400     | 52.24         | 3.74   | 55.98          | 68.2     | -12.22 | peak          |

Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit.





HIGH CH 48

Horizontal:

| Frequency | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|-----------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 3647      | 58.76         | -4.59  | 54.17          | 74       | -19.83 | peak          |
| 3647      | 41.26         | -4.59  | 36.67          | 54       | -17.33 | AVG           |
| 10480     | 51.56         | 3.75   | 55.31          | 68.2     | -12.89 | peak          |

Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit.

Vertical:

| Frequency | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|-----------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 3647      | 53.86         | -4.59  | 49.27          | 74       | -24.73 | peak          |
| 3647      | 41.02         | -4.59  | 36.43          | 54       | -17.57 | AVG           |
| 10480     | 50.98         | 3.75   | 54.73          | 68.2     | -13.47 | peak          |

Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit.

Remark:

- (1) Measuring frequencies from 1 GHz to the 40 GHz.
- (2) "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency.
- (3) \* denotes emission frequency which appearing within the Restricted Bands specified in provision of 15.205, then the general radiated emission limits in 15.209 apply.
- (4) The emissions are attenuated more than 20dB below the permissible limits are not record in the report.
- (5) The IF bandwidth of EMI Test Receiver between 30MHz to 1GHz was 120KHz, 1 MHz for measuring above 1 GHz, below 30MHz was 10KHz.
- (6) When the test results of Peak Detected below the limits of Average Detected, the Average Detected is not need completed. For example: Top Channel at Fundamental 73.16dBuV/m(PK Value) <93.98(AV Limit), at harmonic 53.20 dBuV/m(PK Value) <54 dBuV/m(AV Limit), the Average Detected not need to completed.



## 5.2G 802.11ac/HT40 Mode

All modes of operation were investigated and the worst-case of MIMO are reported.

LOW CH 38

Horizontal:

| Frequency                                                                                                                   | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|-----------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                       | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 3647                                                                                                                        | 60.16         | -4.59  | 55.57          | 74       | -18.43 | peak          |
| 3647                                                                                                                        | 46.76         | -4.59  | 42.17          | 54       | -11.83 | AVG           |
| 10360                                                                                                                       | 52.63         | 3.74   | 56.37          | 68.2     | -11.83 | peak          |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplicifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |

Vertical:

| Frequency                                                                                                                   | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|-----------------------------------------------------------------------------------------------------------------------------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)                                                                                                                       | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 3647                                                                                                                        | 60.02         | -4.59  | 55.43          | 74       | -18.57 | peak          |
| 3647                                                                                                                        | 42.42         | -4.59  | 37.83          | 54       | -16.17 | AVG           |
| 10360                                                                                                                       | 55.12         | 3.74   | 58.86          | 68.2     | -9.34  | peak          |
| Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplicifier; Level = Reading + Factor; Margin = Level-Limit. |               |        |                |          |        |               |



HIGH CH 46

Horizontal:

| Frequency | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|-----------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 3647      | 54.19         | -4.59  | 49.6           | 74       | -24.4  | peak          |
| 3647      | 40.18         | -4.59  | 35.59          | 54       | -18.41 | AVG           |
| 10480     | 52.35         | 3.75   | 56.1           | 68.2     | -12.1  | peak          |

Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit.

Vertical:

| Frequency | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|-----------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 3647      | 55.62         | -4.59  | 51.03          | 74       | -22.97 | peak          |
| 3647      | 43.26         | -4.59  | 38.67          | 54       | -15.33 | AVG           |
| 10480     | 54.11         | 3.75   | 57.86          | 68.2     | -10.34 | peak          |

Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamplifier; Level = Reading + Factor; Margin = Level-Limit.

Remark:

- (1) Measuring frequencies from 1 GHz to the 40 GHz.
- (2) "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency.
- (3)\* denotes emission frequency which appearing within the Restricted Bands specified in provision of 15.205, then the general radiated emission limits in 15.209 apply.
- (4) The emissions are attenuated more than 20dB below the permissible limits are not record in the report.
- (5) The IF bandwidth of EMI Test Receiver between 30MHz to 1GHz was 120KHz, 1 MHz for measuring above 1 GHz, below 30MHz was 10KHz.
- (6) When the test results of Peak Detected below the limits of Average Detected, the Average Detected is not need completed. For example: Top Channel at Fundamental 73.16dBuV/m(PK Value) <93.98(AV Limit), at harmonic 53.20 dBuV/m(PK Value) <54 dBuV/m(AV Limit), the Average Detected not need to completed.

**5.2G 802.11ac/HT80 Mode**

All modes of operation were investigated and the worst-case of MIMO are reported.

CH 42

Horizontal:

| Frequency | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|-----------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 3647      | 56.79         | -4.59  | 52.2           | 74       | -21.8  | peak          |
| 3647      | 41.17         | -4.59  | 36.58          | 54       | -17.42 | AVG           |
| 10360     | 53.14         | 3.74   | 56.88          | 68.2     | -11.32 | peak          |

Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamp; Level = Reading + Factor; Margin = Level-Limit.

Vertical:

| Frequency | Meter Reading | Factor | Emission Level | Limits   | Margin | Detector Type |
|-----------|---------------|--------|----------------|----------|--------|---------------|
| (MHz)     | (dBμV)        | (dB)   | (dBμV/m)       | (dBμV/m) | (dB)   |               |
| 3647      | 55.81         | -4.59  | 51.22          | 74       | -22.78 | peak          |
| 3647      | 40.34         | -4.59  | 35.75          | 54       | -18.25 | AVG           |
| 10360     | 52.37         | 3.74   | 56.11          | 68.2     | -12.09 | peak          |

Remark: Factor = Cable loss + Antenna factor + Attenuator – Preamp; Level = Reading + Factor; Margin = Level-Limit.

**Remark:**

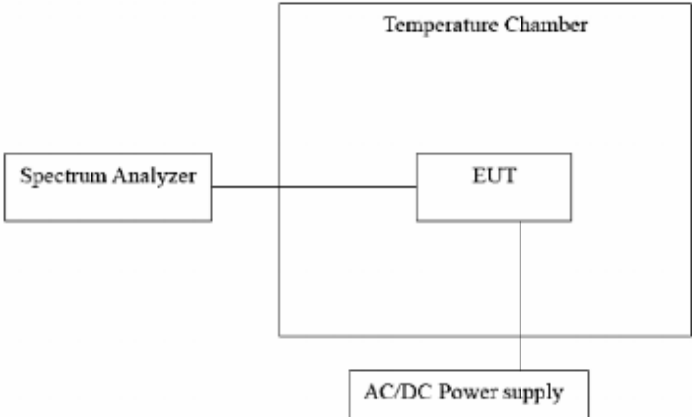
- (1) Measuring frequencies from 1 GHz to the 40 GHz.
- (2) "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency.
- (3) \* denotes emission frequency which appearing within the Restricted Bands specified in provision of 15.205, then the general radiated emission limits in 15.209 apply.
- (4) The emissions are attenuated more than 20dB below the permissible limits are not record in the report.
- (5) The IF bandwidth of EMI Test Receiver between 30MHz to 1GHz was 120KHz, 1 MHz for measuring above 1 GHz, below 30MHz was 10KHz.
- (6) When the test results of Peak Detected below the limits of Average Detected, the Average Detected is not need completed. For example: Top Channel at Fundamental 73.16dBuV/m(PK Value) <93.98(AV Limit), at harmonic 53.20 dBuV/m(PK Value) <54 dBuV/m(AV Limit), the Average Detected not need to completed.





## 4.8. Frequency Stability Measurement

### 4.8.1. Test Specification

|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Test Requirement:</b> | FCC Part15 Section 15.407(g)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Test Method:</b>      | ANSI C63.10: 2013                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Limit:</b>            | The frequency tolerance shall be maintained within the band of operation frequency over a temperature variation of 0 degrees to 35 degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C.                                                                                                                                                                                                                                                                                                                |
| <b>Test Setup:</b>       |  <pre>graph LR; SA[Spectrum Analyzer] --- EUT[EUT]; subgraph TC [Temperature Chamber]; EUT; end; P[AC/DC Power supply] --- EUT;</pre>                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Test Procedure:</b>   | The EUT was placed inside the environmental test chamber and powered by nominal AC/DC voltage. b. Turn the EUT on and couple its output to a spectrum analyzer. c. Turn the EUT off and set the chamber to the highest temperature specified. d. Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize. e. Repeat step 2 and 3 with the temperature chamber set to the lowest temperature. f. The test chamber was allowed to stabilize at +20 degree C for a minimum of 30 minutes. The supply voltage was then adjusted on the EUT from 85% to 115% and the frequency record. |
| <b>Test Result:</b>      | PASS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Remark:</b>           | N/A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

**Test Result as follows:**

| Mode      | Voltage (V) | FHL (5180MHz) | Deviation (KHz) | FHH (5240MHz) | Deviation (KHz) |
|-----------|-------------|---------------|-----------------|---------------|-----------------|
| 5.2G Band | 4.25V       | 5179.985      | -15             | 5239.988      | -12             |
|           | 5V          | 5180.013      | 13              | 5240.022      | 22              |
|           | 5.75V       | 5180.009      | 9               | 5239.992      | -8              |

| Mode      | Temperature (°C) | FHL (5180MHz) | Deviation (KHz) | FHH (5240MHz) | Deviation (KHz) |
|-----------|------------------|---------------|-----------------|---------------|-----------------|
| 5.2G Band | -30              | 5179.981      | -19             | 5239.976      | -24             |
|           | -20              | 5180.011      | 11              | 5240.009      | 9               |
|           | -10              | 5179.981      | -19             | 5239.971      | -29             |
|           | 0                | 5180.022      | 22              | 5239.969      | -31             |
|           | 10               | 5179.979      | -21             | 5239.981      | -19             |
|           | 20               | 5179.989      | -11             | 5240.011      | 11              |
|           | 30               | 5180.021      | 21              | 5239.979      | -21             |
|           | 40               | 5179.977      | -23             | 5239.975      | -25             |
|           | 50               | 5179.983      | -17             | 5240.016      | 16              |



## 4.9. Antenna Requirement

### Standard Applicable

For intentional device, according to FCC 47 CFR Section 15.203, 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.

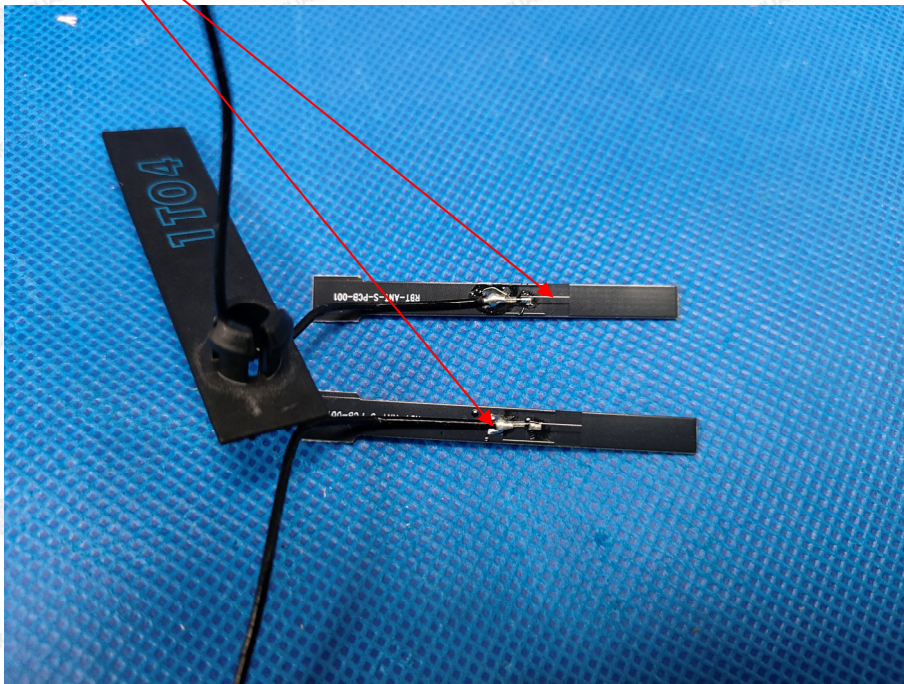
### Refer to statement below for compliance.

The manufacturer may design the unit so that the user can replace a broken antenna, but the use of a standard antenna jack or electrical connector is prohibited. Further, this requirement does not apply to intentional radiators that must be professionally installed.

### Antenna Connected Construction

The antenna used in this product is a PCB Antenna, need professional installation, not easy to remove. It conforms to the standard requirements. and the best case gain of the antenna is Antenna port 1:3.55dBi and Antenna port 2:3.55dBi.

### WIFI Antenna

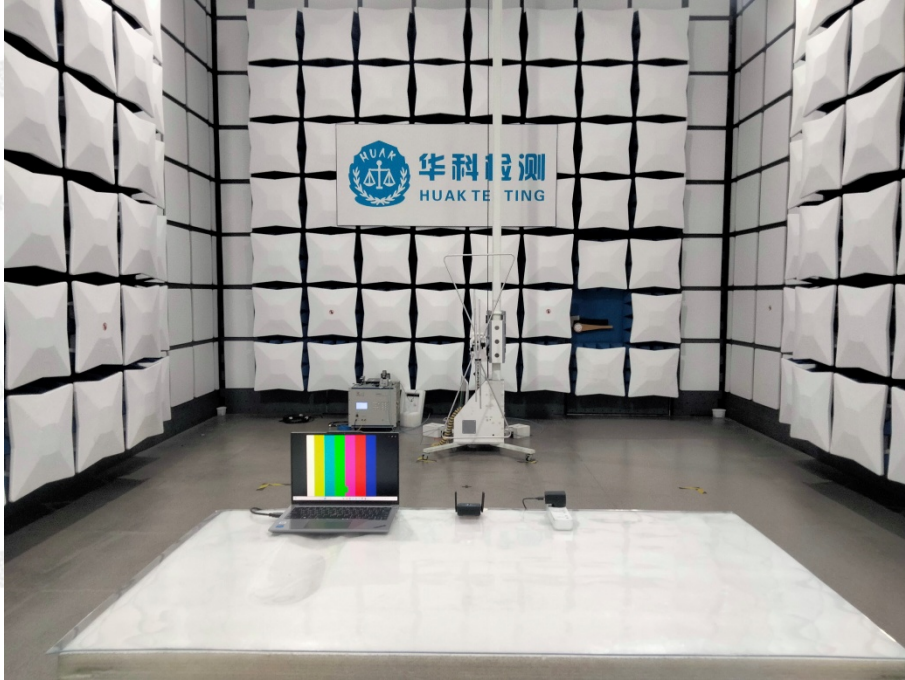






## 5. Test Setup Photos of the EUT

### Radiated Emission







## Conducted Emission



The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by HUAKE, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at <http://www.cer-mark.com>.

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## 6. Photos of the EUT

Reference to the report: ANNEX A of external photos and ANNEX B of internal photos

-----End of test report-----