

# FCC TEST REPORT

## (Part 15, Subpart E)

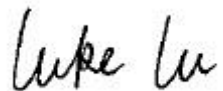
|            |                                                                            |
|------------|----------------------------------------------------------------------------|
| Applicant: | Honeywell International Inc<br>Honeywell Safety and Productivity Solutions |
| Address:   | 9680 Old Bailes Road, Fort Mill, SC 29707 United States                    |

|                           |                                                                            |
|---------------------------|----------------------------------------------------------------------------|
| Manufacturer or Supplier: | Honeywell International Inc<br>Honeywell Safety and Productivity Solutions |
| Address:                  | 9680 Old Bailes Road, Fort Mill, SC 29707 United States                    |
| Product:                  | Mobile Computer                                                            |
| Brand Name:               | Honeywell                                                                  |
| Model Name:               | CT45P-L1N-2                                                                |
| FCC ID:                   | HD5-CT45PL1N2                                                              |
| Date of tests:            | Jun. 19, 2021 ~ Aug. 31, 2021                                              |

The tests have been carried out according to the requirements of the following standard:

☒ **FCC Part 15, Subpart E, Section 15.407**

**CONCLUSION:** The submitted sample was found to COMPLY with the test requirement

|                                                                                                            |                                                                                                              |
|------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
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| <br>Date: Sep. 01, 2021 | <br>Date: Sep. 01, 2021 |

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**RELEASE CONTROL RECORD**

| ISSUE NO.         | REASON FOR CHANGE | DATE ISSUED   |
|-------------------|-------------------|---------------|
| W7L-P21080006RF14 | Original release  | Sep. 01, 2021 |

# 1 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

| APPLIED STANDARD: FCC PART 15, SUBPART E |                                           |            |
|------------------------------------------|-------------------------------------------|------------|
| STANDARD SECTION                         | TEST TYPE AND LIMIT                       | RESULT     |
| 15.407(b)(6)                             | AC Power Conducted Emission               | Compliance |
| 15.407(b)<br>(1/2/3/4/5)                 | Radiated Emission & Band Edge Measurement | Compliance |
| 15.407(a/1/2/3)                          | Maximum conducted output Power            | Compliance |
| 15.407(a/1/2/3)                          | Peak Power Spectral Density               | Compliance |
| 15.403(i)                                | 26 dB Bandwidth                           | Compliance |
| 15.407(e)                                | 6 dB Bandwidth                            | Compliance |
| 15.203                                   | Antenna Requirement                       | Compliance |

## 1.1 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

| MEASUREMENT                         | UNCERTAINTY           |
|-------------------------------------|-----------------------|
| AC Power Conducted emissions        | $\pm 2.70\text{dB}$   |
| Radiated emissions (30MHz~1GMHz)    | $\pm 4.98\text{dB}$   |
| Radiated emissions (1GMHz ~6GMHz)   | $\pm 4.70\text{dB}$   |
| Radiated emissions (6GMHz ~18GMHz)  | $\pm 4.60\text{dB}$   |
| Radiated emissions (18GMHz ~40GMHz) | $\pm 4.12\text{dB}$   |
| Conducted emissions                 | $\pm 4.01\text{dB}$   |
| Occupied Channel Bandwidth          | $\pm 43.58\text{KHz}$ |
| Conducted Output power              | $\pm 2.06\text{dB}$   |
| Power Spectral Density              | $\pm 0.85\text{ dB}$  |

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of  $k = 2$ .



## 2 GENERAL INFORMATION

### 2.1 GENERAL DESCRIPTION OF EUT

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>PRODUCT</b>             | Mobile Computer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>BRAND NAME</b>          | Honeywell                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>MODEL NAME</b>          | CT45P-L1N-2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>NOMINAL VOLTAGE</b>     | 3.85Vdc (Lithium-ion cell, battery)                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>MODULATION</b>          | OFDM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>TRANSFER RATE</b>       | 802.11a: 54.0/ 48.0/ 36.0/ 24.0/ 18.0/ 12.0/ 9.0/ 6.0Mbps<br>802.11n: up to MCS7<br>802.11ac: up to 390.0Mbps                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>OPERATING FREQUENCY</b> | 5180 ~ 5240MHz, 5260 ~ 5320MHz,<br>5500 ~ 5720MHz, 5745 ~ 5825MHz                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>NUMBER OF CHANNEL</b>   | 5180 ~ 5240MHz: 4 for 802.11a, 802.11n, 802.11ac (20MHz)<br>2 for 802.11n, 802.11ac (40MHz)<br>1 for 802.11ac (80MHz)<br>5260 ~ 5320MHz: 4 for 802.11a, 802.11n, 802.11ac (20MHz)<br>2 for 802.11n, 802.11ac (40MHz)<br>1 for 802.11ac (80MHz)<br>5500 ~ 5720MHz: 12 for 802.11a, 802.11n, 802.11ac(20MHz)<br>6 for 802.11n, 802.11ac (40MHz)<br>3 for 802.11ac (80MHz)<br>5745 ~ 5825MHz: 5 for 802.11a, 802.11n, 802.11ac (20MHz)<br>3 for 802.11n, 802.11ac (40MHz)<br>2 for 802.11ac (80MHz) |
| <b>AVERAGE POWER</b>       | 40.46mW for 5180 ~ 5240MHz<br>40.18mW for 5260 ~ 5320MHz<br>46.77mW for 5500 ~ 5720MHz<br>56.75mW for 5745 ~ 5825MHz                                                                                                                                                                                                                                                                                                                                                                             |
| <b>ANTENNA TYPE</b>        | PIFA Antenna                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>ANTENNA GAIN</b>        | 0.72 dBi for 5180 ~ 5240MHz<br>0.62 dBi for 5260 ~ 5320MHz<br>0.52 dBi for 5500 ~ 5720MHz<br>0.78 dBi for 5745 ~ 5825MHz                                                                                                                                                                                                                                                                                                                                                                         |
| <b>HW VERSION</b>          | V1.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>SW VERSION</b>          | OS.11.002-HON.11.002                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>I/O PORTS</b>           | Refer to user's manual                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>CABLE SUPPLIED</b>      | USB cable: unshielded without ferrite, 1.25 meter<br>Earphone cable: unshielded without ferrite, 1.27 meter                                                                                                                                                                                                                                                                                                                                                                                      |



**NOTE:**

1. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.
2. This product includes the following Three SKU which hardware is exactly same, the difference is described as following, Sample 1 was full test, sample 2 verify the worst case, check worst case Radiated emission:

| SAMPLE | EUT CONFIGURATION INFORMATION                                                                  |
|--------|------------------------------------------------------------------------------------------------|
| 1      | SKU ID:CT45-L1N-37D120G ,Assembled Scanner Imager: <a href="#">7-S0703</a>                     |
| 2      | SKU ID:CT45-L1N-38D120G ,Assembled Scanner Imager: <a href="#">8 - N6803/S0803</a>             |
| 3      | SKU ID: CT45-L1N-37D220G , Assembled with Scanner: 7-S0703 for China Only with Android non-GMS |

3. The EUT incorporates a SISO function. Physically, the EUT provides one completed transmitter and one receiver.

| MODULATION MODE          | TX FUNCTION |
|--------------------------|-------------|
| 802.11a                  | 1TX/1RX     |
| 802.11n/802.11ac (20MHz) | 1TX/1RX     |
| 802.11n/802.11ac (40MHz) | 1TX/1RX     |
| 802.11ac (80MHz)         | 1TX/1RX     |

4. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.

**List of Accessory:**

| ACCESSORIES | BRAND     | MODEL                | SPECIFICATION                         |
|-------------|-----------|----------------------|---------------------------------------|
| Battery     | Honeywell | CT50-BTSC            | Capacity: 3.85vdc 4020mAh             |
| AC Adapter  | HONOR     | ADS-12B-06<br>05010E | I/P:100-240Vac, 0.3A<br>O/P: 5Vdc, 2A |
| USB Cable   | Honeywell | CT40-SN              | Shielded, 1.25meter                   |
| Earphone    | VIVO      | N/A                  | Shielded, 1.27meter                   |
| LCD Panel   | CASIL     | CTM10801920T01       | 5.0" FHD(1928*1080)                   |

## 2.2 DESCRIPTION OF TEST MODES

### FOR 5180 ~ 5240MHz

4 channels are provided for 802.11a, 802.11n, 802.11ac (20MHz):

| CHANNEL | FREQUENCY | CHANNEL | FREQUENCY |
|---------|-----------|---------|-----------|
| 36      | 5180 MHz  | 44      | 5220 MHz  |
| 40      | 5200 MHz  | 48      | 5240 MHz  |

2 channels are provided for 802.11n, 802.11ac (40MHz):

| CHANNEL | FREQUENCY | CHANNEL | FREQUENCY |
|---------|-----------|---------|-----------|
| 38      | 5190 MHz  | 46      | 5230 MHz  |

1 channel is provided for 802.11ac (80MHz):

| CHANNEL | FREQUENCY | CHANNEL | FREQUENCY |
|---------|-----------|---------|-----------|
| 42      | 5210 MHz  |         |           |

### FOR 5260 ~ 5320MHz

4 channels are provided for 802.11a, 802.11n, 802.11ac (20MHz):

| CHANNEL | FREQUENCY | CHANNEL | FREQUENCY |
|---------|-----------|---------|-----------|
| 52      | 5260 MHz  | 60      | 5300 MHz  |
| 56      | 5280 MHz  | 64      | 5320 MHz  |

2 channels are provided for 802.11n, 802.11ac (40MHz):

| CHANNEL | FREQUENCY | CHANNEL | FREQUENCY |
|---------|-----------|---------|-----------|
| 54      | 5270 MHz  | 62      | 5310 MHz  |

1 channel is provided for 802.11ac (80MHz):

| CHANNEL | FREQUENCY | CHANNEL | FREQUENCY |
|---------|-----------|---------|-----------|
| 58      | 5290 MHz  |         |           |



**FOR 5500 ~ 5720MHz**

12 channels are provided for 802.11a, 802.11n, 802.11ac (20MHz):

| CHANNEL | FREQUENCY | CHANNEL | FREQUENCY |
|---------|-----------|---------|-----------|
| 100     | 5500 MHz  | 124     | 5620MHz   |
| 104     | 5520 MHz  | 128     | 5640MHz   |
| 108     | 5540 MHz  | 132     | 5660 MHz  |
| 112     | 5560 MHz  | 136     | 5680 MHz  |
| 116     | 5580 MHz  | 140     | 5700 MHz  |
| 120     | 5600 MHz  | 144     | 5720 MHz  |

6 channels are provided for 802.11n, 802.11ac (40MHz):

| CHANNEL | FREQUENCY | CHANNEL | FREQUENCY |
|---------|-----------|---------|-----------|
| 102     | 5510 MHz  | 126     | 5630MHz   |
| 110     | 5550 MHz  | 134     | 5670 MHz  |
| 118     | 5590 MHz  | 142     | 5710 MHz  |

3 channel is provided for 802.11ac (80MHz):

| CHANNEL | FREQUENCY | CHANNEL | FREQUENCY |
|---------|-----------|---------|-----------|
| 106     | 5530 MHz  | 138     | 5690 MHz  |
| 122     | 5610 MHz  |         |           |

**FOR 5745 ~ 5825MHz**

5 channels are provided for 802.11a, 802.11n, 802.11ac (20MHz):

| CHANNEL | FREQUENCY | CHANNEL | FREQUENCY |
|---------|-----------|---------|-----------|
| 144     | 5720MHz   | 157     | 5785 MHz  |
| 149     | 5745 MHz  | 165     | 5825 MHz  |
| 153     | 5765 MHz  |         |           |

3 channels are provided for 802.11n, 802.11ac (40MHz):

| CHANNEL | FREQUENCY | CHANNEL | FREQUENCY |
|---------|-----------|---------|-----------|
| 142     | 5710 MHz  | 159     | 5795 MHz  |
| 151     | 5755 MHz  |         |           |

2 channel is provided for 802.11ac (80MHz):

| CHANNEL | FREQUENCY | CHANNEL | FREQUENCY |
|---------|-----------|---------|-----------|
| 138     | 5690MHz   | 155     | 5775 MHz  |

## 2.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

| EUT<br>CONFIGURE<br>MODE | APPLICABLE TO |       |     |      | DESCRIPTION                           |
|--------------------------|---------------|-------|-----|------|---------------------------------------|
|                          | RE $\geq$ 1G  | RE<1G | PLC | APCM |                                       |
| A                        | √             | √     | √   | -    | Powered by Adapter with wifi(5G) link |
| B                        | -             | -     | -   | √    | Powered by Battery with wifi(5G) link |
| C                        | -             | -     | -   | -    | Powered by USB with wifi(5G) link     |

Where

**RE $\geq$ 1G:** Radiated Emission above 1GHz

**RE<1G:** Radiated Emission below 1GHz

**PLC:** Power Line Conducted Emission

**APCM:** Antenna Port Conducted Measurement

**NOTE:**

The EUT had been pre-tested on the positioned of each 3 axis. The worst case was found when positioned on **X-plane**.

**NOTE:** “-” means no effect.

### **RADIATED EMISSION TEST (BELOW 1GHz):**

- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- ☒ Following channel(s) was (were) selected for the final test as listed below.

| EUT<br>CONFIGURE<br>MODE | MODE            | FREQ. BAND<br>(MHz) | AVAILABLE<br>CHANNEL | TESTED<br>CHANNEL | MODULATION | DATA RATE<br>(Mbps) |
|--------------------------|-----------------|---------------------|----------------------|-------------------|------------|---------------------|
| A                        | 802.11n (20MHz) | 5180-5240           | 36 to 48             | 48                | OFDM       | MCS0                |

**RADIATED EMISSION TEST (ABOVE 1GHz):**

- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- ☒ Following channel(s) was (were) selected for the final test as listed below.

| EUT<br>CONFIGURE<br>MODE | MODE             | FREQ. BAND<br>(MHz) | AVAILABLE<br>CHANNEL | TESTED CHANNEL     | MODULATION | DATA RATE (Mbps) |
|--------------------------|------------------|---------------------|----------------------|--------------------|------------|------------------|
| A                        | 802.11a          | 5180-5240           | 36 to 48             | 36, 40, 48         | OFDM       | 6.0              |
| A                        | 802.11n (20MHz)  |                     | 36 to 48             | 36, 40, 48         | OFDM       | MCS0             |
| A                        | 802.11n (40MHz)  |                     | 38 to 46             | 38, 46             | OFDM       | MCS0             |
| A                        | 802.11ac (80MHz) |                     | 42                   | 42                 | OFDM       | MCS0             |
| A                        | 802.11a          | 5260-5320           | 52 to 64             | 52, 60, 64         | OFDM       | 6.0              |
| A                        | 802.11n (20MHz)  |                     | 52 to 64             | 52, 60, 64         | OFDM       | MCS0             |
| A                        | 802.11n (40MHz)  |                     | 54 to 62             | 54, 62             | OFDM       | MCS0             |
| A                        | 802.11ac (80MHz) |                     | 58                   | 58                 | OFDM       | MCS0             |
| A                        | 802.11a          | 5500-5720           | 100 to 144           | 100, 116, 140, 144 | OFDM       | 6.0              |
| A                        | 802.11n (20MHz)  |                     | 100 to 144           | 100, 116, 140, 144 | OFDM       | MCS0             |
| A                        | 802.11n (40MHz)  |                     | 102 to 142           | 102, 110, 134, 142 | OFDM       | MCS0             |
| A                        | 802.11ac (80MHz) |                     | 106 to 138           | 106, 138           | OFDM       | MCS0             |
| A                        | 802.11a          | 5745-5825           | 144 to 165           | 144, 149, 157, 165 | OFDM       | 6.0              |
| A                        | 802.11n (20MHz)  |                     | 144 to 165           | 144, 149, 157, 165 | OFDM       | MCS0             |
| A                        | 802.11ac (40MHz) |                     | 142 to 159           | 142, 151, 159      | OFDM       | MCS0             |
| A                        | 802.11ac (80MHz) |                     | 138, 155             | 138, 155           | OFDM       | MCS0             |

**POWER LINE CONDUCTED EMISSION TEST:**

- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- ☒ Following channel(s) was (were) selected for the final test as listed below.

| EUT<br>CONFIGURE<br>MODE | MODE            | FREQ. BAND<br>(MHz) | AVAILABLE<br>CHANNEL | TESTED<br>CHANNEL | MODULATION | DATA RATE<br>(Mbps) |
|--------------------------|-----------------|---------------------|----------------------|-------------------|------------|---------------------|
| A                        | 802.11n (40MHz) | 5180-5240           | 36 to 48             | 48                | OFDM       | MCS0                |

**BANDEDGE MEASUREMENT:**

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

☒ Following channel(s) was (were) selected for the final test as listed below.

| EUT<br>CONFIGURE<br>MODE | MODE             | FREQ. BAND<br>(MHz) | AVAILABLE<br>CHANNEL | TESTED CHANNEL     | MODULATION | DATA RATE (Mbps) |
|--------------------------|------------------|---------------------|----------------------|--------------------|------------|------------------|
| A                        | 802.11a          | 5180-5240           | 36 to 48             | 36, 48             | 36 to 48   | 6.0              |
| A                        | 802.11n (20MHz)  |                     | 36 to 48             | 36, 48             | 36 to 48   | MCS0             |
| A                        | 802.11n (40MHz)  |                     | 38 to 46             | 38, 46             | 38 to 46   | MCS0             |
| A                        | 802.11ac (20MHz) |                     | 36 to 48             | 36, 48             | 36 to 48   | MCS0             |
| A                        | 802.11ac (40MHz) |                     | 38 to 46             | 38, 46             | 38 to 46   | MCS0             |
| A                        | 802.11ac (80MHz) |                     | 42                   | 42                 | 42         | MCS0             |
| A                        | 802.11a          | 5260-5320           | 52 to 64             | 52, 64             | 52 to 64   | 6.0              |
| A                        | 802.11n (20MHz)  |                     | 52 to 64             | 52, 64             | 52 to 64   | MCS0             |
| A                        | 802.11n (40MHz)  |                     | 54 to 62             | 54, 62             | 54 to 62   | MCS0             |
| A                        | 802.11ac (20MHz) |                     | 52 to 64             | 52, 64             | 52 to 64   | MCS0             |
| A                        | 802.11ac (40MHz) |                     | 54 to 62             | 54, 62             | 54 to 62   | MCS0             |
| A                        | 802.11ac (80MHz) |                     | 58                   | 58                 | 58         | MCS0             |
| A                        | 802.11a          | 5500-5720           | 100 to 144           | 100, 116, 140, 144 | 100 to 144 | 6.0              |
| A                        | 802.11n (20MHz)  |                     | 100 to 144           | 100, 116, 140, 144 | 100 to 144 | MCS0             |
| A                        | 802.11n (40MHz)  |                     | 102 to 142           | 102, 110, 134, 142 | 102 to 142 | MCS0             |
| A                        | 802.11ac (20MHz) |                     | 100 to 144           | 100, 116, 140, 144 | 100 to 144 | MCS0             |
| A                        | 802.11ac (40MHz) |                     | 102 to 142           | 102, 110, 134, 142 | 102 to 142 | MCS0             |
| A                        | 802.11ac (80MHz) |                     | 106 to 138           | 106, 138           | 106 to 138 | MCS0             |
| EUT<br>CONFIGURE<br>MODE | MODE             | FREQ. BAND<br>(MHz) | AVAILABLE<br>CHANNEL | TESTED CHANNEL     | MODULATION | DATA RATE (Mbps) |
| A                        | 802.11a          | 5745-5825           | 144 to 165           | 144, 149, 157,165  | OFDM       | 6.0              |
| A                        | 802.11n (20MHz)  |                     | 144 to 165           | 144, 149, 157,165  | OFDM       | MCS0             |
| A                        | 802.11n (40MHz)  |                     | 142 to 159           | 142, 151, 159      | OFDM       | MCS0             |
| A                        | 802.11ac (20MHz) |                     | 144 to 165           | 144, 149, 157,165  | OFDM       | MCS0             |



|   |                     |  |            |               |      |      |
|---|---------------------|--|------------|---------------|------|------|
| A | 802.11ac<br>(40MHz) |  | 142 to 159 | 142, 151, 159 | OFDM | MCS0 |
| A | 802.11ac<br>(80MHz) |  | 138,155    | 138, 155      | OFDM | MCS0 |

**ANTENNA PORT CONDUCTED MEASUREMENT:**

- ☒ This item includes all test value of each mode, but only includes spectrum plot of worst value of each mode.
- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- ☒ Following channel(s) was (were) selected for the final test as listed below.

| EUT<br>CONFIGURE<br>MODE | MODE             | FREQ. BAND<br>(MHz) | AVAILABLE<br>CHANNEL | TESTED CHANNEL | MODULATION | DATA RATE (Mbps) |
|--------------------------|------------------|---------------------|----------------------|----------------|------------|------------------|
| A                        | 802.11a          | 5180-5240           | 36 to 48             | 36, 40, 48     | OFDM       | 6.0              |
| A                        | 802.11n (20MHz)  |                     | 36 to 48             | 36, 40, 48     | OFDM       | MCS0             |
| A                        | 802.11n (40MHz)  |                     | 38 to 46             | 38, 46         | OFDM       | MCS0             |
| A                        | 802.11ac (20MHz) |                     | 36 to 48             | 36, 40, 48     | OFDM       | MCS0             |
| A                        | 802.11ac (40MHz) |                     | 38 to 46             | 38, 46         | OFDM       | MCS0             |
| A                        | 802.11ac (80MHz) |                     | 42                   | 42             | OFDM       | MCS0             |
| A                        | 802.11a          | 5260-5320           | 52 to 64             | 52, 60, 64     | OFDM       | 6.0              |
| A                        | 802.11n (20MHz)  |                     | 52 to 64             | 52, 60, 64     | OFDM       | MCS0             |
| A                        | 802.11n (40MHz)  |                     | 54 to 62             | 54, 62         | OFDM       | MCS0             |
| A                        | 802.11ac (20MHz) |                     | 52 to 64             | 52, 60, 64     | OFDM       | MCS0             |
| A                        | 802.11ac (40MHz) |                     | 54 to 62             | 54, 62         | OFDM       | MCS0             |
| A                        | 802.11ac (80MHz) |                     | 58                   | 58             | OFDM       | MCS0             |

|   |                  |           |            |                    |      |      |
|---|------------------|-----------|------------|--------------------|------|------|
| A | 802.11a          | 5500-5720 | 100 to 144 | 100, 116, 140, 144 | OFDM | 6.0  |
| A | 802.11n (20MHz)  |           | 100 to 144 | 100, 116, 140, 144 | OFDM | MCS0 |
| A | 802.11n (40MHz)  |           | 102 to 142 | 102, 110, 134, 142 | OFDM | MCS0 |
| A | 802.11ac (20MHz) |           | 100 to 144 | 100, 116, 140, 144 | OFDM | MCS0 |
| A | 802.11ac (40MHz) |           | 102 to 142 | 102, 110, 134, 142 | OFDM | MCS0 |
| A | 802.11ac (80MHz) |           | 106 to 138 | 106, 138           | OFDM | MCS0 |
| A | 802.11a          | 5745-5825 | 144 to 165 | 144, 149, 157,165  | OFDM | 6.0  |
| A | 802.11n (20MHz)  |           | 144 to 165 | 144, 149, 157,165  | OFDM | MCS0 |
| A | 802.11n (40MHz)  |           | 142 to 159 | 142, 151, 159      | OFDM | MCS0 |
| A | 802.11ac (20MHz) |           | 144 to 165 | 144, 149, 157,165  | OFDM | MCS0 |
| A | 802.11ac (40MHz) |           | 142 to 159 | 142, 151, 159      | OFDM | MCS0 |
| A | 802.11ac (80MHz) |           | 138,155    | 138, 155           | OFDM | MCS0 |

**TEST CONDITION:**

| APPLICABLE TO | ENVIRONMENTAL CONDITIONS | INPUT POWER         | TESTED BY   |
|---------------|--------------------------|---------------------|-------------|
| RE<1G         | 23deg. C, 70%RH          | DC 3.85V By Battery | Star Le     |
| RE≥1G         | 23deg. C, 70%RH          | DC 3.85V By Battery | Star Le     |
| PLC           | 25deg. C, 52%RH          | DC 3.85V By Battery | Jimmy Liu   |
| APCM          | 25deg. C, 60%RH          | DC 3.85V By Battery | Kevin Zhang |

## 2.3 DUTY CYCLE OF TEST SIGNAL

Duty cycle of test signal is < 98%, duty factor shall be considered.

**802.11a:** Duty cycle =  $2.060/2.119=0.972$  , Duty factor =  $10 * \log(1/ 0.972) = 0.123$

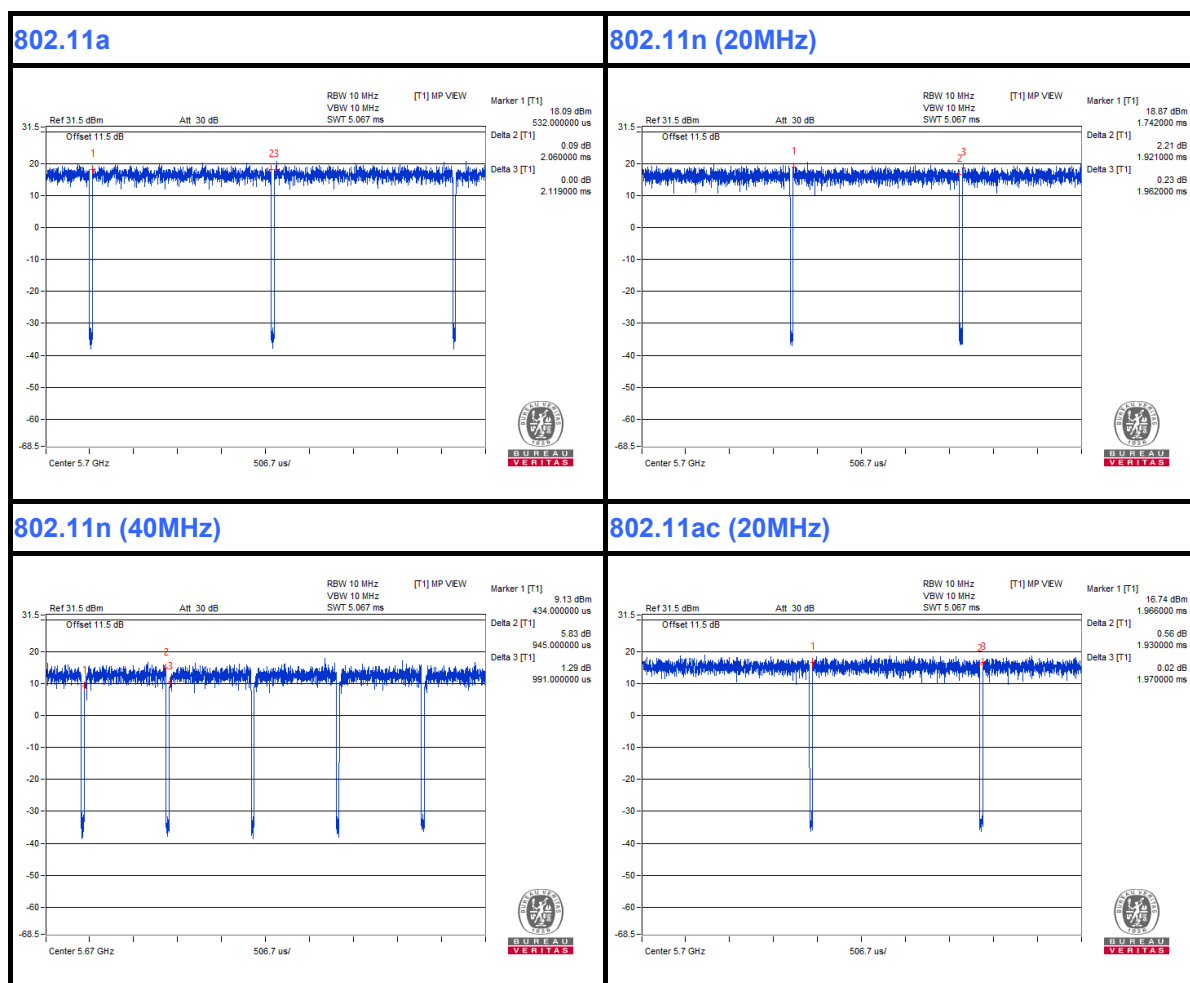
**802.11n (20MHz):** Duty cycle =  $1.921/1.962=0.979$  , Duty factor =  $10 * \log(1/ 0.979)= 0.092$

**802.11n (40MHz):** Duty cycle =  $0.945/0.991=0.954$  Duty factor =  $10 * \log(1/ 0.954)=0.205$

**802.11ac (20MHz):** Duty cycle =  $1.930/1.970 =0.980=98\%$  , Duty factor shall be not considered

**802.11ac (40MHz):** Duty cycle =  $0.949/0.993=0.956$  , Duty factor =  $10 * \log(1/ 0.956)=0.195$

**802.11ac (80MHz):** Duty cycle =  $0.459/0.502=0.914$  , Duty factor =  $10 * \log(1/ 0.914)=.0391$

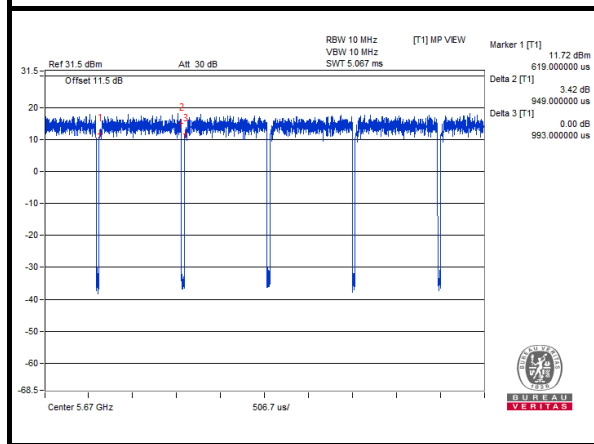




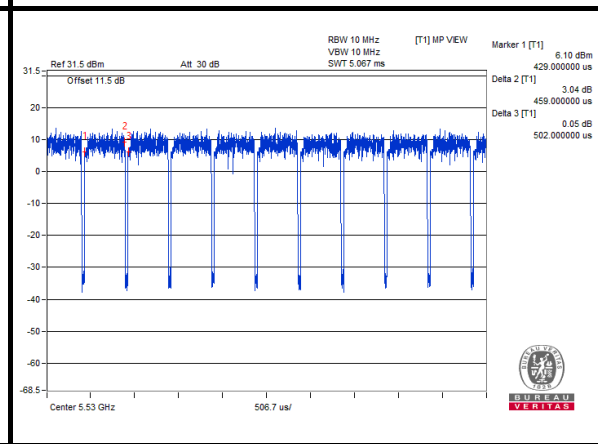
BUREAU  
VERITAS

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### 802.11 ac (40MHz)



### 802.11ac (80MHz)





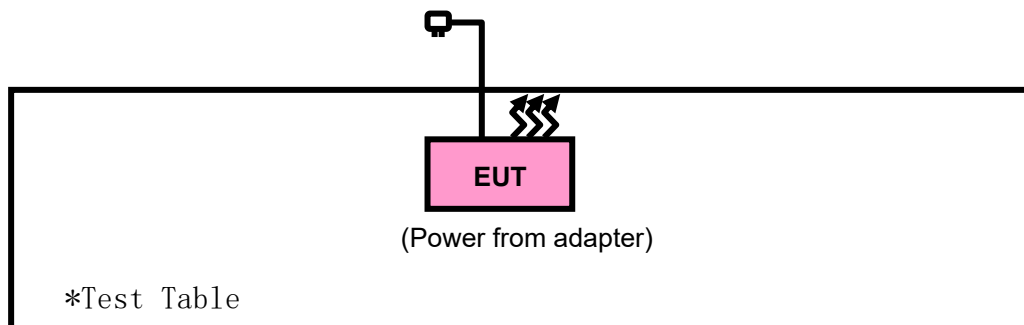
## 2.4 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

| NO. | PRODUCT   | BRAND      | MODEL NO.     | SERIAL NO. | FCC ID |
|-----|-----------|------------|---------------|------------|--------|
| 1   | Desktop   | Lenovo     | M73 SFF       | PC04GRQV   | N/A    |
| 2   | Desktop   | Lenovo     | M73 SFF       | PC06CS27   | N/A    |
| 3   | Laptop    | Lenovo     | Thnikpad L440 | R90FTFKN   | N/A    |
| 4   | DC source | Kikusui/JP | PMX18-5A      | 0000001    | N/A    |

| NO. | SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS |
|-----|-----------------------------------------------------|
| 1   | AC Line: Unshielded, Detachable 1.5m                |
| 2   | AC Line: Unshielded, Detachable 1.5m                |
| 3   | AC Line: Unshielded, Detachable 1.5m                |
| 4   | DC Line: Unshielded, Detachable 1.0m                |

## 2.4.1 CONFIGURATION OF SYSTEM UNDER TEST



## 2.5 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a RF Product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

**FCC Part 15, Subpart E (15.407)**

**KDB 789033 D02 General U-NII Test Procedures New Rules v02r01**

**ANSI C63.10-2013**

All test items have been performed and recorded as per the above standards.

**NOTE:** The EUT is also considered as a kind of computer peripheral, because the connection to computer is necessary for typical use. It has been verified to comply with the requirements of FCC Part 15, Subpart B, Class B (Certification). The test report has been issued separately.

### 3 TEST TYPES AND RESULTS

#### 3.1 RADIATED EMISSION AND BANDEDGE MEASUREMENT

##### 3.1.1 LIMITS OF RADIATED EMISSION AND BANDEDGE MEASUREMENT

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table:

| FREQUENCIES<br>(MHz) | FIELD STRENGTH<br>(microvolts/meter) | MEASUREMENT DISTANCE<br>(meters) |
|----------------------|--------------------------------------|----------------------------------|
| 0.009 ~ 0.490        | 2400/F(kHz)                          | 300                              |
| 0.490 ~ 1.705        | 24000/F(kHz)                         | 30                               |
| 1.705 ~ 30.0         | 30                                   | 30                               |
| 30 ~ 88              | 100                                  | 3                                |
| 88 ~ 216             | 150                                  | 3                                |
| 216 ~ 960            | 200                                  | 3                                |
| Above 960            | 500                                  | 3                                |

**NOTE:**

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. For frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

##### 3.1.2 LIMITS OF UNWANTED EMISSION

| RESTRICTED BANDS            | APPLICABLE TO                                                  | LIMIT                         |                                          |
|-----------------------------|----------------------------------------------------------------|-------------------------------|------------------------------------------|
|                             | 789033 D02 General<br>UNII Test Procedures<br>New Rules v02r01 | FIELD STRENGTH AT 3m (dBµV/m) |                                          |
|                             |                                                                | PK : 74                       | AV : 54                                  |
| OUT OF THE RESTRICTED BANDS | APPLICABLE TO                                                  | EIRP LIMIT (dBm/MHz)          | EQUIVALENT FIELD STRENGTH AT 3m (dBµV/m) |
|                             | 15.407(b)(1)                                                   | PK : -27                      | PK : 68.2                                |
|                             | 15.407(b)(2)                                                   |                               |                                          |
|                             | 15.407(b)(3)                                                   |                               |                                          |
|                             | 15.407(b)(4)                                                   | See note 2 (FCC 16-24)        |                                          |

**NOTE:** The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

$$E = \frac{1000000\sqrt{30P}}{3} \mu\text{V/m, where } P \text{ is the eirp (Watts).}$$

2. All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

### 3.1.3 TEST INSTRUMENTS

| Equipment                  | Manufacturer | Model No.                   | Serial No.                  | Last Cal.   | Next Cal.   |
|----------------------------|--------------|-----------------------------|-----------------------------|-------------|-------------|
| 3m Semi-anechoic Chamber   | ETS-LINDGREN | 9m*6m*6m                    | Euroshieldpn-CT0001143-1216 | May. 19,20  | May. 18,23  |
| Bilog Antenna              | ETS-LINDGREN | 3143B                       | 00161965                    | Mar. 05,21  | Mar. 04,22  |
| Horn Antenna               | ETS-LINDGREN | 3117                        | 00168728                    | Apr. 02,21  | Apr. 01,22  |
| Horn Antenna (18GHz-40GHz) | N/A          | QWH-SL-18-40-K-SG/QMS-00361 | 15433                       | Aug. 26, 20 | Aug. 25, 21 |
| Horn Antenna (18GHz-40GHz) | N/A          | QWH-SL-18-40-K-SG/QMS-00361 | 15433                       | Aug. 25, 21 | Aug. 24, 22 |
| Test Software              | E3           | V 9.160323                  | N/A                         | N/A         | N/A         |
| Test Software              | ADT          | ADT_Radiated_V7.6.15.9.2    | N/A                         | N/A         | N/A         |
| 10dB Attenuator            | JFW/USA      | 50HF-010-SMA                | 1505                        | Jun. 03,21  | Jun. 02,22  |
| MXE EMI Receiver           | KEYSIGHT     | N9038A-544                  | MY54450026                  | Apr. 22,21  | Apr. 21,22  |
| Signal Pre-Amplifier       | EMSI         | EMC 9135                    | 980249                      | Jun. 02,21  | Jun. 01,22  |
| Signal Pre-Amplifier       | EMSI         | EMC 012645B                 | 980257                      | Jun. 03,21  | Jun. 02,22  |
| Signal Pre-Amplifier       | EMSI         | EMC 184045B                 | 980259                      | Apr. 22,21  | Apr. 21,22  |

**NOTE:** 1. The calibration interval of the above test instruments is 12 months or 36 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.  
2. The test was performed in 3m Chamber.  
3. The FCC Site Registration No. is 525120; The Designation No. is CN1171.

### 3.1.4 TEST PROCEDURES

- a. The EUT was placed on the top of a rotating table 0.8 meters (for below 1GHz) / 1.5 meters (for above 1GHz) above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna is a broadband antenna, and its 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.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

**NOTE:**

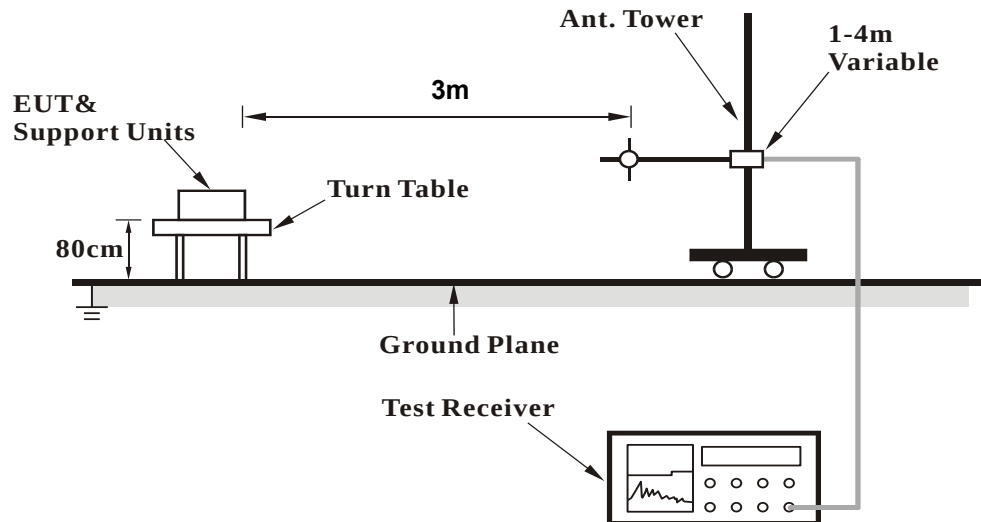
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Peak detection (PK) and Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 3MHz for RMS Average (Duty cycle < 98%) for Average detection (AV) at frequency above 1GHz, then the measurement results was added to a correction factor ( $10 \log(1/\text{duty cycle})$ ).
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 10Hz (Duty cycle  $\geq 98\%$ ) for Average detection (AV) at frequency above 1GHz.
5. All modes of operation were investigated and the worst-case emissions are reported.

### 3.1.5 DEVIATION FROM TEST STANDARD

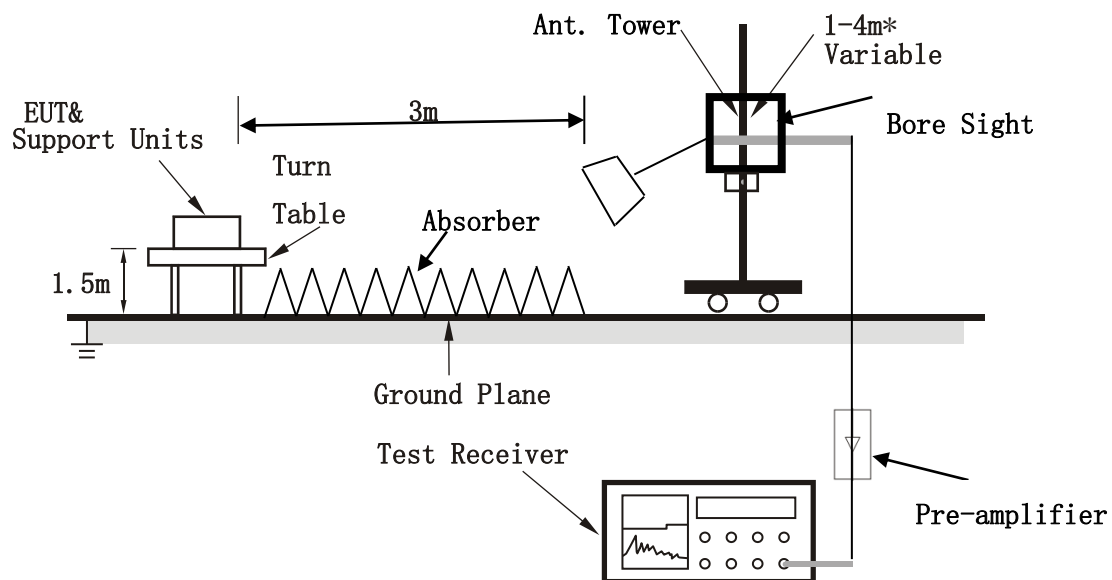
No deviation.

### 3.1.6 TEST SETUP

#### < Frequency Range 30MHz~1GHz >



#### <Frequency Range above 1GHz>



**Note:** Above 1G is a directional antenna

Depends on the EUT height and the antenna 3dB beamwidth both, refer to section 7.3 of CISPR 16-2-3.

For the actual test configuration, please refer to the attached file (Test Setup Photo).



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### 3.1.7 EUT OPERATING CONDITION

- a. Set the EUT under full load condition and placed them on a testing table.
- b. Set the transmitter part of EUT under transmission condition continuously at specific channel frequency.
- c. The necessary accessories enable the EUT in full functions.

### 3.1.8 TEST RESULTS

#### BELOW 1GHz WORST-CASE DATA:

30 MHz – 1GHz data:

Band 2

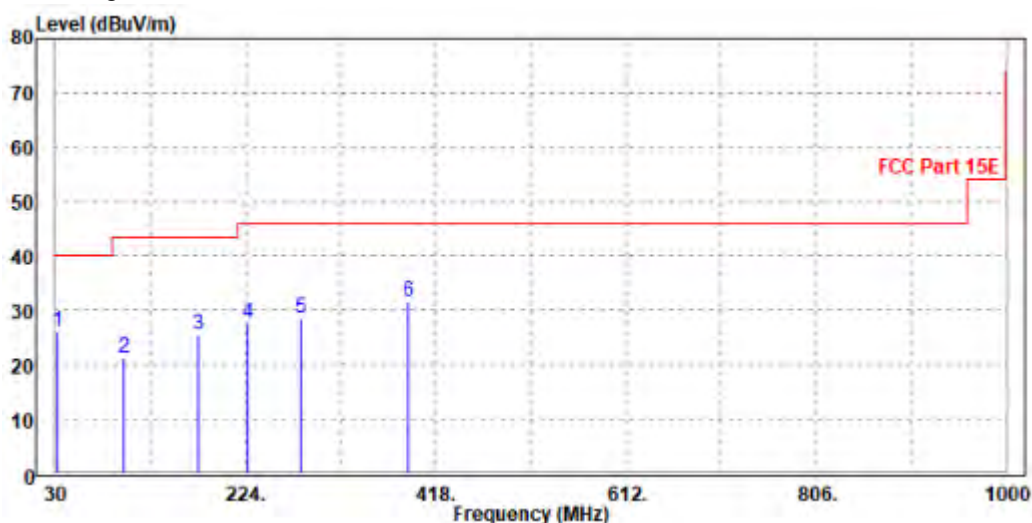
802.11n (20MHz)

|                        |               |                          |                 |
|------------------------|---------------|--------------------------|-----------------|
| <b>CHANNEL</b>         | TX Channel 52 | <b>DETECTOR FUNCTION</b> | Quasi-Peak (QP) |
| <b>FREQUENCY RANGE</b> | 30MHz ~ 1GHz  |                          |                 |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |        |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|--------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK |
| 31.94                                               | 26.05                         | 42.74                   | 40                | -13.95         | 19.93                        | 0.8                   | 37.42                    | 100                       | 0                          | QP     |
| 100.81                                              | 21.19                         | 47.99                   | 43.5              | -22.31         | 9.04                         | 1.32                  | 37.16                    | 100                       | 0                          | QP     |
| 176.47                                              | 25.64                         | 50.57                   | 43.5              | -17.86         | 10.04                        | 1.69                  | 36.66                    | 100                       | 0                          | QP     |
| 225.94                                              | 27.53                         | 50.39                   | 46                | -18.47         | 11.82                        | 1.92                  | 36.6                     | 100                       | 0                          | QP     |
| 281.23                                              | 28.58                         | 49.58                   | 46                | -17.42         | 13.56                        | 2.15                  | 36.71                    | 100                       | 0                          | QP     |
| 389.87                                              | 31.49                         | 49.25                   | 46                | -14.51         | 16.48                        | 2.58                  | 36.82                    | 100                       | 0                          | QP     |

#### REMARKS:

1. Emission level (dBuV/m) = Read level (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.



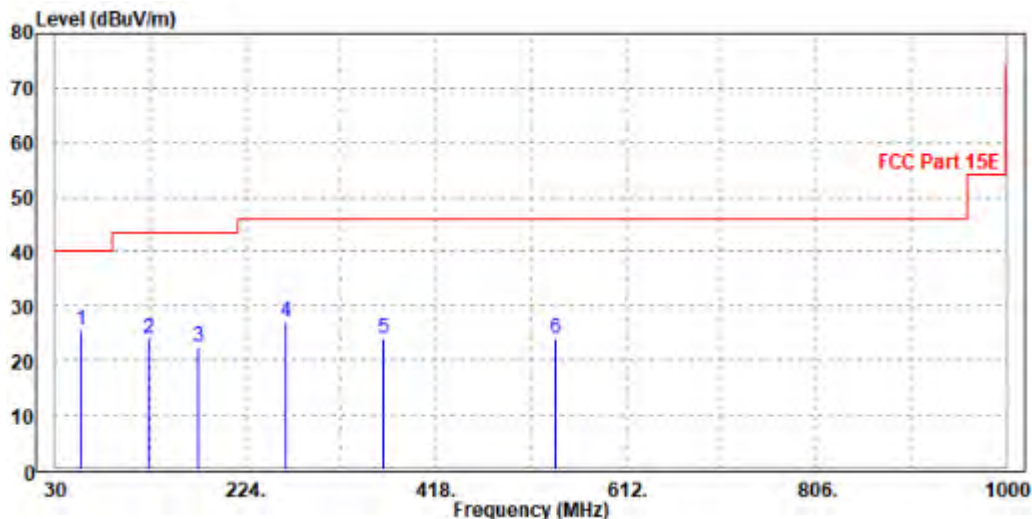


|                        |              |                          |                 |
|------------------------|--------------|--------------------------|-----------------|
| <b>CHANNEL</b>         | Channel 52   | <b>DETECTOR FUNCTION</b> | Quasi-Peak (QP) |
| <b>FREQUENCY RANGE</b> | 30MHz ~ 1GHz |                          |                 |

| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |        |
|---------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|--------|
| FREQ.<br>(MHz)                                    | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK |
| 56.19                                             | 25.54                         | 54.13                   | 40                | -14.46         | 7.7                          | 1.04                  | 37.33                    | 200                       | 0                          | QP     |
| 125.06                                            | 24.08                         | 52.25                   | 43.5              | -19.42         | 7.4                          | 1.47                  | 37.04                    | 200                       | 0                          | QP     |
| 176.47                                            | 22.6                          | 47.53                   | 43.5              | -20.9          | 10.04                        | 1.69                  | 36.66                    | 200                       | 0                          | QP     |
| 264.74                                            | 26.99                         | 48.05                   | 46                | -19.01         | 13.53                        | 2.09                  | 36.68                    | 200                       | 0                          | QP     |
| 365.62                                            | 24.17                         | 42.79                   | 46                | -21.83         | 15.7                         | 2.48                  | 36.8                     | 200                       | 0                          | QP     |
| 540.22                                            | 24.08                         | 38.69                   | 46                | -21.92         | 19.48                        | 3.06                  | 37.15                    | 200                       | 0                          | QP     |

**REMARKS:**

1. Emission level (dBuV/m) = Read level (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.





## ABOVE 1GHz WORST-CASE DATA:

**Note:** For higher frequency, the emission is too low to be detected.

## Band 1

## 802.11a

|                 |               |                   |              |
|-----------------|---------------|-------------------|--------------|
| CHANNEL         | TX Channel 36 | DETECTOR FUNCTION | Peak (PK)    |
| FREQUENCY RANGE | 1GHz ~ 40GHz  |                   | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5150                                                | 56.78                         | 59.09                   | 74                | -17.22         | 34.52                        | 9.52                  | 46.35                    | 140                       | 280                        | Peak    |
| 5150                                                | 50.49                         | 52.8                    | 54                | -3.51          | 34.52                        | 9.52                  | 46.35                    | 140                       | 280                        | Average |
| 5180                                                | 103.26                        | 105.49                  | -                 | -              | 34.54                        | 9.58                  | 46.35                    | 140                       | 280                        | Peak    |
| 5180                                                | 94.45                         | 96.68                   | -                 | -              | 34.54                        | 9.58                  | 46.35                    | 140                       | 280                        | Average |
| 5350                                                | 53.49                         | 55.17                   | 74                | -20.51         | 34.68                        | 9.94                  | 46.3                     | 140                       | 280                        | Peak    |
| 5350                                                | 47.47                         | 49.15                   | 54                | -6.53          | 34.68                        | 9.94                  | 46.3                     | 140                       | 280                        | Average |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5150                                                | 56.06                         | 58.29                   | 74                | -17.94         | 34.6                         | 9.52                  | 46.35                    | 100                       | 160                        | Peak    |
| 5150                                                | 49.76                         | 51.99                   | 54                | -4.24          | 34.6                         | 9.52                  | 46.35                    | 100                       | 160                        | Average |
| 5180                                                | 96.01                         | 98.18                   | -                 | -              | 34.6                         | 9.58                  | 46.35                    | 100                       | 160                        | Peak    |
| 5180                                                | 88.86                         | 91.03                   | -                 | -              | 34.6                         | 9.58                  | 46.35                    | 100                       | 160                        | Average |
| 5350                                                | 53.51                         | 55.27                   | 74                | -20.49         | 34.6                         | 9.94                  | 46.3                     | 100                       | 160                        | Peak    |
| 5350                                                | 48.01                         | 49.77                   | 54                | -5.99          | 34.6                         | 9.94                  | 46.3                     | 100                       | 160                        | Average |

## REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5180MHz: Fundamental frequency.

|                        |               |                          |              |
|------------------------|---------------|--------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 40 | <b>DETECTOR FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz  |                          | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5150                                                | 56.29                         | 58.6                    | 74                | -17.71         | 34.52                        | 9.52                  | 46.35                    | 140                       | 280                        | Peak    |
| 5150                                                | 50.15                         | 52.46                   | 54                | -3.85          | 34.52                        | 9.52                  | 46.35                    | 140                       | 280                        | Average |
| 5200                                                | 107.35                        | 109.51                  | –                 | –              | 34.56                        | 9.62                  | 46.34                    | 140                       | 280                        | Peak    |
| 5200                                                | 99.24                         | 101.4                   | –                 | –              | 34.56                        | 9.62                  | 46.34                    | 140                       | 280                        | Average |
| 5350                                                | 56.55                         | 58.23                   | 74                | -17.45         | 34.68                        | 9.94                  | 46.3                     | 140                       | 280                        | Peak    |
| 5350                                                | 48.68                         | 50.36                   | 54                | -5.32          | 34.68                        | 9.94                  | 46.3                     | 140                       | 280                        | Average |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5150                                                | 56.2                          | 58.43                   | 74                | -17.8          | 34.6                         | 9.52                  | 46.35                    | 100                       | 160                        | Peak    |
| 5150                                                | 49.54                         | 51.77                   | 54                | -4.46          | 34.6                         | 9.52                  | 46.35                    | 100                       | 160                        | Average |
| 5200                                                | 102.9                         | 105.02                  | –                 | –              | 34.6                         | 9.62                  | 46.34                    | 100                       | 160                        | Peak    |
| 5200                                                | 93.46                         | 95.58                   | –                 | –              | 34.6                         | 9.62                  | 46.34                    | 100                       | 160                        | Average |
| 5350                                                | 56.67                         | 58.43                   | 74                | -17.33         | 34.6                         | 9.94                  | 46.3                     | 100                       | 160                        | Peak    |
| 5350                                                | 48.63                         | 50.39                   | 54                | -5.37          | 34.6                         | 9.94                  | 46.3                     | 100                       | 160                        | Average |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
2. 5200MHz: Fundamental frequency.

|                        |               |                          |              |
|------------------------|---------------|--------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 48 | <b>DETECTOR FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz  |                          | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5150                                                | 57.25                         | 59.56                   | 74                | -16.75         | 34.52                        | 9.52                  | 46.35                    | 160                       | 280                        | Peak    |
| 5150                                                | 49.9                          | 52.21                   | 54                | -4.1           | 34.52                        | 9.52                  | 46.35                    | 160                       | 280                        | Average |
| 5240                                                | 109                           | 111.03                  | -                 | -              | 34.59                        | 9.71                  | 46.33                    | 160                       | 280                        | Peak    |
| 5240                                                | 101.24                        | 103.27                  | -                 | -              | 34.59                        | 9.71                  | 46.33                    | 160                       | 280                        | Average |
| 5350                                                | 56.32                         | 58                      | 74                | -17.68         | 34.68                        | 9.94                  | 46.3                     | 160                       | 280                        | Peak    |
| 5350                                                | 48.27                         | 49.95                   | 54                | -5.73          | 34.68                        | 9.94                  | 46.3                     | 160                       | 280                        | Average |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5150                                                | 55.6                          | 57.83                   | 74                | -18.4          | 34.6                         | 9.52                  | 46.35                    | 100                       | 160                        | Peak    |
| 5150                                                | 49.29                         | 51.52                   | 54                | -4.71          | 34.6                         | 9.52                  | 46.35                    | 100                       | 160                        | Average |
| 5240                                                | 102.8                         | 104.82                  | -                 | -              | 34.6                         | 9.71                  | 46.33                    | 100                       | 160                        | Peak    |
| 5240                                                | 93.85                         | 95.87                   | -                 | -              | 34.6                         | 9.71                  | 46.33                    | 100                       | 160                        | Average |
| 5350                                                | 56.13                         | 57.89                   | 74                | -17.87         | 34.6                         | 9.94                  | 46.3                     | 100                       | 160                        | Peak    |
| 5350                                                | 48.46                         | 50.22                   | 54                | -5.54          | 34.6                         | 9.94                  | 46.3                     | 100                       | 160                        | Average |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
2. 5240MHz: Fundamental frequency.



## 802.11n (20MHz)

|                 |               |                   |              |
|-----------------|---------------|-------------------|--------------|
| CHANNEL         | TX Channel 36 | DETECTOR FUNCTION | Peak (PK)    |
| FREQUENCY RANGE | 1GHz ~ 40GHz  |                   | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5150                                                | 57.84                         | 60.15                   | 74                | -16.16         | 34.52                        | 9.52                  | 46.35                    | 140                       | 280                        | Peak    |
| 5150                                                | 50.25                         | 52.56                   | 54                | -3.75          | 34.52                        | 9.52                  | 46.35                    | 140                       | 280                        | Average |
| 5180                                                | 101.07                        | 103.3                   | -                 | -              | 34.54                        | 9.58                  | 46.35                    | 140                       | 280                        | Peak    |
| 5180                                                | 91.62                         | 93.85                   | -                 | -              | 34.54                        | 9.58                  | 46.35                    | 140                       | 280                        | Average |
| 5350                                                | 53.21                         | 54.89                   | 74                | -20.79         | 34.68                        | 9.94                  | 46.3                     | 140                       | 280                        | Peak    |
| 5350                                                | 47.37                         | 49.05                   | 54                | -6.63          | 34.68                        | 9.94                  | 46.3                     | 140                       | 280                        | Average |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5150                                                | 54.88                         | 57.11                   | 74                | -19.12         | 34.6                         | 9.52                  | 46.35                    | 105                       | 160                        | Peak    |
| 5150                                                | 49.91                         | 52.14                   | 54                | -4.09          | 34.6                         | 9.52                  | 46.35                    | 105                       | 160                        | Average |
| 5180                                                | 95.47                         | 97.64                   | -                 | -              | 34.6                         | 9.58                  | 46.35                    | 105                       | 160                        | Peak    |
| 5180                                                | 88.23                         | 90.4                    | -                 | -              | 34.6                         | 9.58                  | 46.35                    | 105                       | 160                        | Average |
| 5350                                                | 56.49                         | 58.25                   | 74                | -17.51         | 34.6                         | 9.94                  | 46.3                     | 105                       | 160                        | Peak    |
| 5350                                                | 46.81                         | 48.57                   | 54                | -7.19          | 34.6                         | 9.94                  | 46.3                     | 105                       | 160                        | Average |

## REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5180MHz: Fundamental frequency.

|                        |               |                          |              |
|------------------------|---------------|--------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 40 | <b>DETECTOR FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz  |                          | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5150                                                | 55.16                         | 57.47                   | 74                | -18.84         | 34.52                        | 9.52                  | 46.35                    | 160                       | 280                        | Peak    |
| 5150                                                | 49.13                         | 51.44                   | 54                | -4.87          | 34.52                        | 9.52                  | 46.35                    | 160                       | 280                        | Average |
| 5200                                                | 106.03                        | 108.19                  | -                 | -              | 34.56                        | 9.62                  | 46.34                    | 160                       | 280                        | Peak    |
| 5200                                                | 98.72                         | 100.88                  | -                 | -              | 34.56                        | 9.62                  | 46.34                    | 160                       | 280                        | Average |
| 5350                                                | 53.43                         | 55.11                   | 74                | -20.57         | 34.68                        | 9.94                  | 46.3                     | 160                       | 280                        | Peak    |
| 5350                                                | 47.66                         | 49.34                   | 54                | -6.34          | 34.68                        | 9.94                  | 46.3                     | 160                       | 280                        | Average |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5150                                                | 54.18                         | 56.41                   | 74                | -19.82         | 34.6                         | 9.52                  | 46.35                    | 100                       | 160                        | Peak    |
| 5150                                                | 48.53                         | 50.76                   | 54                | -5.47          | 34.6                         | 9.52                  | 46.35                    | 100                       | 160                        | Average |
| 5200                                                | 101.78                        | 103.9                   | -                 | -              | 34.6                         | 9.62                  | 46.34                    | 100                       | 160                        | Peak    |
| 5200                                                | 92.98                         | 95.1                    | -                 | -              | 34.6                         | 9.62                  | 46.34                    | 100                       | 160                        | Average |
| 5350                                                | 53.61                         | 55.37                   | 74                | -20.39         | 34.6                         | 9.94                  | 46.3                     | 100                       | 160                        | Peak    |
| 5350                                                | 46.85                         | 48.61                   | 54                | -7.15          | 34.6                         | 9.94                  | 46.3                     | 100                       | 160                        | Average |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
2. 5200MHz: Fundamental frequency.

|                        |               |                          |              |
|------------------------|---------------|--------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 48 | <b>DETECTOR FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz  |                          | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5150                                                | 55.28                         | 57.59                   | 74                | -18.72         | 34.52                        | 9.52                  | 46.35                    | 160                       | 280                        | Peak    |
| 5150                                                | 48.8                          | 51.11                   | 54                | -5.2           | 34.52                        | 9.52                  | 46.35                    | 160                       | 280                        | Average |
| 5240                                                | 108.81                        | 110.84                  | -                 | -              | 34.59                        | 9.71                  | 46.33                    | 160                       | 280                        | Peak    |
| 5240                                                | 101.2                         | 103.23                  | -                 | -              | 34.59                        | 9.71                  | 46.33                    | 160                       | 280                        | Average |
| 5350                                                | 54.61                         | 56.29                   | 74                | -19.39         | 34.68                        | 9.94                  | 46.3                     | 160                       | 280                        | Peak    |
| 5350                                                | 47.51                         | 49.19                   | 54                | -6.49          | 34.68                        | 9.94                  | 46.3                     | 160                       | 280                        | Average |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5150                                                | 54.77                         | 57                      | 74                | -19.23         | 34.6                         | 9.52                  | 46.35                    | 100                       | 160                        | Peak    |
| 5150                                                | 49.19                         | 51.42                   | 54                | -4.81          | 34.6                         | 9.52                  | 46.35                    | 100                       | 160                        | Average |
| 5240                                                | 102.54                        | 104.56                  | -                 | -              | 34.6                         | 9.71                  | 46.33                    | 100                       | 160                        | Peak    |
| 5240                                                | 95.2                          | 97.22                   | -                 | -              | 34.6                         | 9.71                  | 46.33                    | 100                       | 160                        | Average |
| 5350                                                | 55.92                         | 57.68                   | 74                | -18.08         | 34.6                         | 9.94                  | 46.3                     | 100                       | 160                        | Peak    |
| 5350                                                | 47.71                         | 49.47                   | 54                | -6.29          | 34.6                         | 9.94                  | 46.3                     | 100                       | 160                        | Average |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
2. 5240MHz: Fundamental frequency.



802.11n (40MHz)

|                        |               |                          |              |
|------------------------|---------------|--------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 38 | <b>DETECTOR FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz  |                          | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5150                                                | 57.17                         | 59.48                   | 74                | -16.83         | 34.52                        | 9.52                  | 46.35                    | 115                       | 275                        | Peak    |
| 5150                                                | 50.99                         | 53.3                    | 54                | -3.01          | 34.52                        | 9.52                  | 46.35                    | 115                       | 275                        | Average |
| 5190                                                | 92.39                         | 94.58                   | -                 | -              | 34.55                        | 9.6                   | 46.34                    | 115                       | 275                        | Peak    |
| 5190                                                | 85.98                         | 88.17                   | -                 | -              | 34.55                        | 9.6                   | 46.34                    | 115                       | 275                        | Average |
| 5350                                                | 54.96                         | 56.64                   | 74                | -19.04         | 34.68                        | 9.94                  | 46.3                     | 115                       | 275                        | Peak    |
| 5350                                                | 48.53                         | 50.21                   | 54                | -5.47          | 34.68                        | 9.94                  | 46.3                     | 115                       | 275                        | Average |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5150                                                | 56.51                         | 58.74                   | 74                | -17.49         | 34.6                         | 9.52                  | 46.35                    | 100                       | 170                        | Peak    |
| 5150                                                | 48.05                         | 50.28                   | 54                | -5.95          | 34.6                         | 9.52                  | 46.35                    | 100                       | 170                        | Average |
| 5190                                                | 91.89                         | 94.03                   | -                 | -              | 34.6                         | 9.6                   | 46.34                    | 100                       | 170                        | Peak    |
| 5190                                                | 85.69                         | 87.83                   | -                 | -              | 34.6                         | 9.6                   | 46.34                    | 100                       | 170                        | Average |
| 5350                                                | 53.26                         | 55.02                   | 74                | -20.74         | 34.6                         | 9.94                  | 46.3                     | 100                       | 170                        | Peak    |
| 5350                                                | 46.48                         | 48.24                   | 54                | -7.52          | 34.6                         | 9.94                  | 46.3                     | 100                       | 170                        | Average |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
2. 5190MHz: Fundamental frequency.



|                        |               |                          |              |
|------------------------|---------------|--------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 46 | <b>DETECTOR FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz  |                          | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5150                                                | 55.7                          | 58.01                   | 74                | -18.3          | 34.52                        | 9.52                  | 46.35                    | 140                       | 280                        | Peak    |
| 5150                                                | 50.8                          | 53.11                   | 54                | -3.2           | 34.52                        | 9.52                  | 46.35                    | 140                       | 280                        | Average |
| 5230                                                | 104.5                         | 106.56                  | –                 | –              | 34.58                        | 9.69                  | 46.33                    | 140                       | 280                        | Peak    |
| 5230                                                | 97.67                         | 99.73                   | –                 | –              | 34.58                        | 9.69                  | 46.33                    | 140                       | 280                        | Average |
| 5350                                                | 53.85                         | 55.53                   | 74                | -20.15         | 34.68                        | 9.94                  | 46.3                     | 140                       | 280                        | Peak    |
| 5350                                                | 48.36                         | 50.04                   | 54                | -5.64          | 34.68                        | 9.94                  | 46.3                     | 140                       | 280                        | Average |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5150                                                | 56.37                         | 58.6                    | 74                | -17.63         | 34.6                         | 9.52                  | 46.35                    | 100                       | 160                        | Peak    |
| 5150                                                | 50.18                         | 52.41                   | 54                | -3.82          | 34.6                         | 9.52                  | 46.35                    | 100                       | 160                        | Average |
| 5230                                                | 98.81                         | 100.85                  | –                 | –              | 34.6                         | 9.69                  | 46.33                    | 100                       | 160                        | Peak    |
| 5230                                                | 91.3                          | 93.34                   | –                 | –              | 34.6                         | 9.69                  | 46.33                    | 100                       | 160                        | Average |
| 5350                                                | 52.41                         | 54.17                   | 74                | -21.59         | 34.6                         | 9.94                  | 46.3                     | 100                       | 160                        | Peak    |
| 5350                                                | 47.47                         | 49.23                   | 54                | -6.53          | 34.6                         | 9.94                  | 46.3                     | 100                       | 160                        | Average |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
2. 5230MHz: Fundamental frequency.



## 802.11ac (20MHz)

|                 |               |                   |              |
|-----------------|---------------|-------------------|--------------|
| CHANNEL         | TX Channel 36 | DETECTOR FUNCTION | Peak (PK)    |
| FREQUENCY RANGE | 1GHz ~ 40GHz  |                   | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5150                                                | 56.04                         | 58.35                   | 74                | -17.96         | 34.52                        | 9.52                  | 46.35                    | 160                       | 280                        | Peak    |
| 5150                                                | 50.95                         | 53.26                   | 54                | -3.05          | 34.52                        | 9.52                  | 46.35                    | 160                       | 280                        | Average |
| 5180                                                | 102.24                        | 104.47                  | -                 | -              | 34.54                        | 9.58                  | 46.35                    | 160                       | 280                        | Peak    |
| 5180                                                | 93.76                         | 95.99                   | -                 | -              | 34.54                        | 9.58                  | 46.35                    | 160                       | 280                        | Average |
| 5350                                                | 55.44                         | 57.12                   | 74                | -18.56         | 34.68                        | 9.94                  | 46.3                     | 160                       | 280                        | Peak    |
| 5350                                                | 48.08                         | 49.76                   | 54                | -5.92          | 34.68                        | 9.94                  | 46.3                     | 160                       | 280                        | Average |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5150                                                | 54.97                         | 57.2                    | 74                | -19.03         | 34.6                         | 9.52                  | 46.35                    | 110                       | 160                        | Peak    |
| 5150                                                | 49.2                          | 51.43                   | 54                | -4.8           | 34.6                         | 9.52                  | 46.35                    | 110                       | 160                        | Average |
| 5180                                                | 96.31                         | 98.48                   | -                 | -              | 34.6                         | 9.58                  | 46.35                    | 110                       | 160                        | Peak    |
| 5180                                                | 87.01                         | 89.18                   | -                 | -              | 34.6                         | 9.58                  | 46.35                    | 110                       | 160                        | Average |
| 5350                                                | 53.37                         | 55.13                   | 74                | -20.63         | 34.6                         | 9.94                  | 46.3                     | 110                       | 160                        | Peak    |
| 5350                                                | 48.38                         | 50.14                   | 54                | -5.62          | 34.6                         | 9.94                  | 46.3                     | 110                       | 160                        | Average |

## REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5180MHz: Fundamental frequency.

|                        |               |                          |              |
|------------------------|---------------|--------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 40 | <b>DETECTOR FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz  |                          | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5150                                                | 54.55                         | 56.86                   | 74                | -19.45         | 34.52                        | 9.52                  | 46.35                    | 160                       | 280                        | Peak    |
| 5150                                                | 49.52                         | 51.83                   | 54                | -4.48          | 34.52                        | 9.52                  | 46.35                    | 160                       | 280                        | Average |
| 5200                                                | 105.72                        | 107.88                  | -                 | -              | 34.56                        | 9.62                  | 46.34                    | 160                       | 280                        | Peak    |
| 5200                                                | 98.55                         | 100.71                  | -                 | -              | 34.56                        | 9.62                  | 46.34                    | 160                       | 280                        | Average |
| 5350                                                | 54.09                         | 55.77                   | 74                | -19.91         | 34.68                        | 9.94                  | 46.3                     | 160                       | 280                        | Peak    |
| 5350                                                | 47.96                         | 49.64                   | 54                | -6.04          | 34.68                        | 9.94                  | 46.3                     | 160                       | 280                        | Average |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5150                                                | 55.17                         | 57.4                    | 74                | -18.83         | 34.6                         | 9.52                  | 46.35                    | 105                       | 160                        | Peak    |
| 5150                                                | 48.78                         | 51.01                   | 54                | -5.22          | 34.6                         | 9.52                  | 46.35                    | 105                       | 160                        | Average |
| 5200                                                | 101.51                        | 103.63                  | -                 | -              | 34.6                         | 9.62                  | 46.34                    | 105                       | 160                        | Peak    |
| 5200                                                | 94.34                         | 96.46                   | -                 | -              | 34.6                         | 9.62                  | 46.34                    | 105                       | 160                        | Average |
| 5350                                                | 54.29                         | 56.05                   | 74                | -19.71         | 34.6                         | 9.94                  | 46.3                     | 105                       | 160                        | Peak    |
| 5350                                                | 47.63                         | 49.39                   | 54                | -6.37          | 34.6                         | 9.94                  | 46.3                     | 105                       | 160                        | Average |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
2. 5200MHz: Fundamental frequency.

|                        |               |                          |              |
|------------------------|---------------|--------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 48 | <b>DETECTOR FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz  |                          | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5150                                                | 54.36                         | 56.67                   | 74                | -19.64         | 34.52                        | 9.52                  | 46.35                    | 160                       | 280                        | Peak    |
| 5150                                                | 48.82                         | 51.13                   | 54                | -5.18          | 34.52                        | 9.52                  | 46.35                    | 160                       | 280                        | Average |
| 5240                                                | 107.9                         | 109.93                  | -                 | -              | 34.59                        | 9.71                  | 46.33                    | 160                       | 280                        | Peak    |
| 5240                                                | 100.56                        | 102.59                  | -                 | -              | 34.59                        | 9.71                  | 46.33                    | 160                       | 280                        | Average |
| 5350                                                | 53.81                         | 55.49                   | 74                | -20.19         | 34.68                        | 9.94                  | 46.3                     | 160                       | 280                        | Peak    |
| 5350                                                | 47.25                         | 48.93                   | 54                | -6.75          | 34.68                        | 9.94                  | 46.3                     | 160                       | 280                        | Average |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5150                                                | 53.81                         | 56.04                   | 74                | -20.19         | 34.6                         | 9.52                  | 46.35                    | 105                       | 160                        | Peak    |
| 5150                                                | 48.7                          | 50.93                   | 54                | -5.3           | 34.6                         | 9.52                  | 46.35                    | 105                       | 160                        | Average |
| 5240                                                | 103.1                         | 105.12                  | -                 | -              | 34.6                         | 9.71                  | 46.33                    | 105                       | 160                        | Peak    |
| 5240                                                | 96.15                         | 98.17                   | -                 | -              | 34.6                         | 9.71                  | 46.33                    | 105                       | 160                        | Average |
| 5350                                                | 53.59                         | 55.35                   | 74                | -20.41         | 34.6                         | 9.94                  | 46.3                     | 105                       | 160                        | Peak    |
| 5350                                                | 47.2                          | 48.96                   | 54                | -6.8           | 34.6                         | 9.94                  | 46.3                     | 105                       | 160                        | Average |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
2. 5240MHz: Fundamental frequency.



802.11ac (40MHz)

|                        |               |                          |              |
|------------------------|---------------|--------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 38 | <b>DETECTOR FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz  |                          | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5150                                                | 56.48                         | 58.79                   | 74                | -17.52         | 34.52                        | 9.52                  | 46.35                    | 160                       | 280                        | Peak    |
| 5150                                                | 50.7                          | 53.01                   | 54                | -3.3           | 34.52                        | 9.52                  | 46.35                    | 160                       | 280                        | Average |
| 5190                                                | 93.9                          | 96.09                   | -                 | -              | 34.55                        | 9.6                   | 46.34                    | 160                       | 280                        | Peak    |
| 5190                                                | 86.01                         | 88.2                    | -                 | -              | 34.55                        | 9.6                   | 46.34                    | 160                       | 280                        | Average |
| 5350                                                | 53.46                         | 55.14                   | 74                | -20.54         | 34.68                        | 9.94                  | 46.3                     | 160                       | 280                        | Peak    |
| 5350                                                | 46.7                          | 48.38                   | 54                | -7.3           | 34.68                        | 9.94                  | 46.3                     | 160                       | 280                        | Average |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5150                                                | 53.73                         | 55.96                   | 74                | -20.27         | 34.6                         | 9.52                  | 46.35                    | 105                       | 160                        | Peak    |
| 5150                                                | 49.82                         | 52.05                   | 54                | -4.18          | 34.6                         | 9.52                  | 46.35                    | 105                       | 160                        | Average |
| 5190                                                | 87.89                         | 90.03                   | -                 | -              | 34.6                         | 9.6                   | 46.34                    | 105                       | 160                        | Peak    |
| 5190                                                | 82.29                         | 84.43                   | -                 | -              | 34.6                         | 9.6                   | 46.34                    | 105                       | 160                        | Average |
| 5350                                                | 54                            | 55.76                   | 74                | -20            | 34.6                         | 9.94                  | 46.3                     | 105                       | 160                        | Peak    |
| 5350                                                | 47.9                          | 49.66                   | 54                | -6.1           | 34.6                         | 9.94                  | 46.3                     | 105                       | 160                        | Average |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
2. 5190MHz: Fundamental frequency.

|                        |               |                          |              |
|------------------------|---------------|--------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 46 | <b>DETECTOR FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz  |                          | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5150                                                | 56.83                         | 59.14                   | 74                | -17.17         | 34.52                        | 9.52                  | 46.35                    | 160                       | 280                        | Peak    |
| 5150                                                | 50.49                         | 52.8                    | 54                | -3.51          | 34.52                        | 9.52                  | 46.35                    | 160                       | 280                        | Average |
| 5230                                                | 104.36                        | 106.42                  | -                 | -              | 34.58                        | 9.69                  | 46.33                    | 160                       | 280                        | Peak    |
| 5230                                                | 98.49                         | 100.55                  | -                 | -              | 34.58                        | 9.69                  | 46.33                    | 160                       | 280                        | Average |
| 5350                                                | 53.4                          | 55.08                   | 74                | -20.6          | 34.68                        | 9.94                  | 46.3                     | 160                       | 280                        | Peak    |
| 5350                                                | 48.76                         | 50.44                   | 54                | -5.24          | 34.68                        | 9.94                  | 46.3                     | 160                       | 280                        | Average |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5150                                                | 54.85                         | 57.08                   | 74                | -19.15         | 34.6                         | 9.52                  | 46.35                    | 105                       | 160                        | Peak    |
| 5150                                                | 49                            | 51.23                   | 54                | -5             | 34.6                         | 9.52                  | 46.35                    | 105                       | 160                        | Average |
| 5230                                                | 98.83                         | 100.87                  | -                 | -              | 34.6                         | 9.69                  | 46.33                    | 105                       | 160                        | Peak    |
| 5230                                                | 92.74                         | 94.78                   | -                 | -              | 34.6                         | 9.69                  | 46.33                    | 105                       | 160                        | Average |
| 5350                                                | 54.05                         | 55.81                   | 74                | -19.95         | 34.6                         | 9.94                  | 46.3                     | 105                       | 160                        | Peak    |
| 5350                                                | 47.75                         | 49.51                   | 54                | -6.25          | 34.6                         | 9.94                  | 46.3                     | 105                       | 160                        | Average |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
2. 5230MHz: Fundamental frequency.



802.11ac (80MHz)

|                        |               |                          |              |
|------------------------|---------------|--------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 42 | <b>DETECTOR FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz  |                          | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5150                                                | 55.23                         | 57.54                   | 74                | -18.77         | 34.52                        | 9.52                  | 46.35                    | 160                       | 280                        | Peak    |
| 5150                                                | 50.98                         | 53.29                   | 54                | -3.02          | 34.52                        | 9.52                  | 46.35                    | 160                       | 280                        | Average |
| 5210                                                | 89.86                         | 91.99                   | -                 | -              | 34.57                        | 9.64                  | 46.34                    | 160                       | 280                        | Peak    |
| 5210                                                | 83                            | 85.13                   | -                 | -              | 34.57                        | 9.64                  | 46.34                    | 160                       | 280                        | Peak    |
| 5350                                                | 52.36                         | 54.04                   | 74                | -21.64         | 34.68                        | 9.94                  | 46.3                     | 160                       | 280                        | Peak    |
| 5350                                                | 47.68                         | 49.36                   | 54                | -6.32          | 34.68                        | 9.94                  | 46.3                     | 160                       | 280                        | Average |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5150                                                | 53.14                         | 55.37                   | 74                | -20.86         | 34.6                         | 9.52                  | 46.35                    | 105                       | 160                        | Peak    |
| 5150                                                | 49.64                         | 51.87                   | 54                | -4.36          | 34.6                         | 9.52                  | 46.35                    | 105                       | 160                        | Average |
| 5210                                                | 83.5                          | 85.6                    | -                 | -              | 34.6                         | 9.64                  | 46.34                    | 105                       | 160                        | Peak    |
| 5210                                                | 77.65                         | 79.75                   | -                 | -              | 34.6                         | 9.64                  | 46.34                    | 105                       | 160                        | Average |
| 5350                                                | 50.4                          | 52.16                   | 74                | -23.6          | 34.6                         | 9.94                  | 46.3                     | 105                       | 160                        | Peak    |
| 5350                                                | 46.45                         | 48.21                   | 54                | -7.55          | 34.6                         | 9.94                  | 46.3                     | 105                       | 160                        | Average |

**REMARKS:**

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5210MHz: Fundamental frequency.



## Band 2

## 802.11a

|                 |               |                   |              |
|-----------------|---------------|-------------------|--------------|
| CHANNEL         | TX Channel 52 | DETECTOR FUNCTION | Peak (PK)    |
| FREQUENCY RANGE | 1GHz ~ 40GHz  |                   | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5150                                                | 54.34                         | 56.65                   | 74                | -19.66         | 34.52                        | 9.52                  | 46.35                    | 155                       | 275                        | Peak    |
| 5150                                                | 48.81                         | 51.12                   | 54                | -5.19          | 34.52                        | 9.52                  | 46.35                    | 155                       | 275                        | Average |
| 5260                                                | 107.29                        | 109.25                  | -                 | -              | 34.61                        | 9.75                  | 46.32                    | 155                       | 275                        | Peak    |
| 5260                                                | 98.33                         | 100.29                  | -                 | -              | 34.61                        | 9.75                  | 46.32                    | 155                       | 275                        | Average |
| 5350                                                | 52.35                         | 54.03                   | 74                | -21.65         | 34.68                        | 9.94                  | 46.3                     | 155                       | 275                        | Peak    |
| 5350                                                | 48.02                         | 49.7                    | 54                | -5.98          | 34.68                        | 9.94                  | 46.3                     | 155                       | 275                        | Average |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5150                                                | 53.53                         | 55.76                   | 74                | -20.47         | 34.6                         | 9.52                  | 46.35                    | 100                       | 160                        | Peak    |
| 5150                                                | 48.39                         | 50.62                   | 54                | -5.61          | 34.6                         | 9.52                  | 46.35                    | 100                       | 160                        | Average |
| 5260                                                | 100.73                        | 102.7                   | -                 | -              | 34.6                         | 9.75                  | 46.32                    | 100                       | 160                        | Peak    |
| 5260                                                | 91.21                         | 93.18                   | -                 | -              | 34.6                         | 9.75                  | 46.32                    | 100                       | 160                        | Average |
| 5350                                                | 52.73                         | 54.49                   | 74                | -21.27         | 34.6                         | 9.94                  | 46.3                     | 100                       | 160                        | Peak    |
| 5350                                                | 47.61                         | 49.37                   | 54                | -6.39          | 34.6                         | 9.94                  | 46.3                     | 100                       | 160                        | Average |

## REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5260MHz: Fundamental frequency.



|                        |               |                          |              |
|------------------------|---------------|--------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 60 | <b>DETECTOR FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz  |                          | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5150                                                | 55.42                         | 57.73                   | 74                | -18.58         | 34.52                        | 9.52                  | 46.35                    | 160                       | 275                        | Peak    |
| 5150                                                | 49.44                         | 51.75                   | 54                | -4.56          | 34.52                        | 9.52                  | 46.35                    | 160                       | 275                        | Average |
| 5300                                                | 106.56                        | 108.4                   | –                 | –              | 34.64                        | 9.83                  | 46.31                    | 160                       | 275                        | Peak    |
| 5300                                                | 98.9                          | 100.74                  | –                 | –              | 34.64                        | 9.83                  | 46.31                    | 160                       | 275                        | Average |
| 5350                                                | 54.2                          | 55.88                   | 74                | -19.8          | 34.68                        | 9.94                  | 46.3                     | 160                       | 275                        | Peak    |
| 5350                                                | 48.22                         | 49.9                    | 54                | -5.78          | 34.68                        | 9.94                  | 46.3                     | 160                       | 275                        | Average |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5150                                                | 54.35                         | 56.58                   | 74                | -19.65         | 34.6                         | 9.52                  | 46.35                    | 100                       | 160                        | Peak    |
| 5150                                                | 49.27                         | 51.5                    | 54                | -4.73          | 34.6                         | 9.52                  | 46.35                    | 100                       | 160                        | Average |
| 5300                                                | 99.19                         | 101.07                  | –                 | –              | 34.6                         | 9.83                  | 46.31                    | 100                       | 160                        | Peak    |
| 5300                                                | 92.79                         | 94.67                   | –                 | –              | 34.6                         | 9.83                  | 46.31                    | 100                       | 160                        | Average |
| 5350                                                | 53.82                         | 55.58                   | 74                | -20.18         | 34.6                         | 9.94                  | 46.3                     | 100                       | 160                        | Peak    |
| 5350                                                | 46.61                         | 48.37                   | 54                | -7.39          | 34.6                         | 9.94                  | 46.3                     | 100                       | 160                        | Average |

**REMARKS:**

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5300MHz: Fundamental frequency.

|                        |               |                          |              |
|------------------------|---------------|--------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 64 | <b>DETECTOR FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz  |                          | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5150                                                | 54                            | 56.31                   | 74                | -20            | 34.52                        | 9.52                  | 46.35                    | 140                       | 275                        | Peak    |
| 5150                                                | 48.11                         | 50.42                   | 54                | -5.89          | 34.52                        | 9.52                  | 46.35                    | 140                       | 275                        | Average |
| 5320                                                | 104.1                         | 105.86                  | –                 | –              | 34.66                        | 9.88                  | 46.3                     | 140                       | 275                        | Peak    |
| 5320                                                | 96.34                         | 98.1                    | –                 | –              | 34.66                        | 9.88                  | 46.3                     | 140                       | 275                        | Average |
| 5350                                                | 55.57                         | 57.25                   | 74                | -18.43         | 34.68                        | 9.94                  | 46.3                     | 140                       | 275                        | Peak    |
| 5350                                                | 48.18                         | 49.86                   | 54                | -5.82          | 34.68                        | 9.94                  | 46.3                     | 140                       | 275                        | Average |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5150                                                | 54.42                         | 56.65                   | 74                | -19.58         | 34.6                         | 9.52                  | 46.35                    | 100                       | 160                        | Peak    |
| 5150                                                | 48.37                         | 50.6                    | 54                | -5.63          | 34.6                         | 9.52                  | 46.35                    | 100                       | 160                        | Average |
| 5320                                                | 96.88                         | 98.7                    | –                 | –              | 34.6                         | 9.88                  | 46.3                     | 100                       | 160                        | Peak    |
| 5320                                                | 89.08                         | 90.9                    | –                 | –              | 34.6                         | 9.88                  | 46.3                     | 100                       | 160                        | Average |
| 5350                                                | 53.57                         | 55.33                   | 74                | -20.43         | 34.6                         | 9.94                  | 46.3                     | 100                       | 160                        | Peak    |
| 5350                                                | 47.25                         | 49.01                   | 54                | -6.75          | 34.6                         | 9.94                  | 46.3                     | 100                       | 160                        | Average |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
2. 5320MHz: Fundamental frequency.



## 802.11n (20MHz)

|                 |               |                   |              |
|-----------------|---------------|-------------------|--------------|
| CHANNEL         | TX Channel 52 | DETECTOR FUNCTION | Peak (PK)    |
| FREQUENCY RANGE | 1GHz ~ 40GHz  |                   | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5150                                                | 53.74                         | 56.05                   | 74                | -20.26         | 34.52                        | 9.52                  | 46.35                    | 175                       | 275                        | Peak    |
| 5150                                                | 48.61                         | 50.92                   | 54                | -5.39          | 34.52                        | 9.52                  | 46.35                    | 175                       | 275                        | Average |
| 5260                                                | 109                           | 110.96                  | -                 | -              | 34.61                        | 9.75                  | 46.32                    | 175                       | 275                        | Peak    |
| 5260                                                | 102.1                         | 104.06                  | -                 | -              | 34.61                        | 9.75                  | 46.32                    | 175                       | 275                        | Average |
| 5350                                                | 53.75                         | 55.43                   | 74                | -20.25         | 34.68                        | 9.94                  | 46.3                     | 175                       | 275                        | Peak    |
| 5350                                                | 47.01                         | 48.69                   | 54                | -6.99          | 34.68                        | 9.94                  | 46.3                     | 175                       | 275                        | Average |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5150                                                | 54.02                         | 56.25                   | 74                | -19.98         | 34.6                         | 9.52                  | 46.35                    | 100                       | 170                        | Peak    |
| 5150                                                | 48.78                         | 51.01                   | 54                | -5.22          | 34.6                         | 9.52                  | 46.35                    | 100                       | 170                        | Average |
| 5260                                                | 102.47                        | 104.44                  | -                 | -              | 34.6                         | 9.75                  | 46.32                    | 100                       | 170                        | Peak    |
| 5260                                                | 95.55                         | 97.52                   | -                 | -              | 34.6                         | 9.75                  | 46.32                    | 100                       | 170                        | Average |
| 5350                                                | 54.66                         | 56.42                   | 74                | -19.34         | 34.6                         | 9.94                  | 46.3                     | 100                       | 170                        | Peak    |
| 5350                                                | 48.14                         | 49.9                    | 54                | -5.86          | 34.6                         | 9.94                  | 46.3                     | 100                       | 170                        | Average |

## REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5260MHz: Fundamental frequency.

|                        |               |                          |              |
|------------------------|---------------|--------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 60 | <b>DETECTOR FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz  |                          | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5150                                                | 53.33                         | 55.64                   | 74                | -20.67         | 34.52                        | 9.52                  | 46.35                    | 175                       | 275                        | Peak    |
| 5150                                                | 48.21                         | 50.52                   | 54                | -5.79          | 34.52                        | 9.52                  | 46.35                    | 175                       | 275                        | Average |
| 5300                                                | 108.38                        | 110.22                  | –                 | –              | 34.64                        | 9.83                  | 46.31                    | 175                       | 275                        | Peak    |
| 5300                                                | 101.22                        | 103.06                  | –                 | –              | 34.64                        | 9.83                  | 46.31                    | 175                       | 275                        | Average |
| 5350                                                | 54.95                         | 56.63                   | 74                | -19.05         | 34.68                        | 9.94                  | 46.3                     | 175                       | 275                        | Peak    |
| 5350                                                | 47.94                         | 49.62                   | 54                | -6.06          | 34.68                        | 9.94                  | 46.3                     | 175                       | 275                        | Average |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5150                                                | 54.67                         | 56.9                    | 74                | -19.33         | 34.6                         | 9.52                  | 46.35                    | 150                       | 65                         | Peak    |
| 5150                                                | 48.2                          | 50.43                   | 54                | -5.8           | 34.6                         | 9.52                  | 46.35                    | 150                       | 65                         | Average |
| 5300                                                | 103.29                        | 105.17                  | –                 | –              | 34.6                         | 9.83                  | 46.31                    | 150                       | 65                         | Peak    |
| 5300                                                | 96.73                         | 98.61                   | –                 | –              | 34.6                         | 9.83                  | 46.31                    | 150                       | 65                         | Average |
| 5350                                                | 54.31                         | 56.07                   | 74                | -19.69         | 34.6                         | 9.94                  | 46.3                     | 150                       | 65                         | Peak    |
| 5350                                                | 47.21                         | 48.97                   | 54                | -6.79          | 34.6                         | 9.94                  | 46.3                     | 150                       | 65                         | Average |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
2. 5300MHz: Fundamental frequency.

|                        |               |                          |              |
|------------------------|---------------|--------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 64 | <b>DETECTOR FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz  |                          | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5150                                                | 54                            | 56.31                   | 74                | -20            | 34.52                        | 9.52                  | 46.35                    | 170                       | 275                        | Peak    |
| 5150                                                | 48.25                         | 50.56                   | 54                | -5.75          | 34.52                        | 9.52                  | 46.35                    | 170                       | 275                        | Average |
| 5320                                                | 105.62                        | 107.38                  | –                 | –              | 34.66                        | 9.88                  | 46.3                     | 170                       | 275                        | Peak    |
| 5320                                                | 98.2                          | 99.96                   | –                 | –              | 34.66                        | 9.88                  | 46.3                     | 170                       | 275                        | Average |
| 5350                                                | 56.91                         | 58.59                   | 74                | -17.09         | 34.68                        | 9.94                  | 46.3                     | 170                       | 275                        | Peak    |
| 5350                                                | 48.64                         | 50.32                   | 54                | -5.36          | 34.68                        | 9.94                  | 46.3                     | 170                       | 275                        | Average |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5150                                                | 53.67                         | 55.9                    | 74                | -20.33         | 34.6                         | 9.52                  | 46.35                    | 155                       | 65                         | Peak    |
| 5150                                                | 48.06                         | 50.29                   | 54                | -5.94          | 34.6                         | 9.52                  | 46.35                    | 155                       | 65                         | Average |
| 5320                                                | 100.55                        | 102.37                  | –                 | –              | 34.6                         | 9.88                  | 46.3                     | 155                       | 65                         | Peak    |
| 5320                                                | 53.84                         | 55.66                   | –                 | –              | 34.6                         | 9.88                  | 46.3                     | 155                       | 65                         | Average |
| 5350                                                | 55.64                         | 57.4                    | 74                | -18.36         | 34.6                         | 9.94                  | 46.3                     | 155                       | 65                         | Peak    |
| 5350                                                | 47.49                         | 49.25                   | 54                | -6.51          | 34.6                         | 9.94                  | 46.3                     | 155                       | 65                         | Average |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
2. 5320MHz: Fundamental frequency.



## 802.11n (40MHz)

|                 |               |                   |              |
|-----------------|---------------|-------------------|--------------|
| CHANNEL         | TX Channel 54 | DETECTOR FUNCTION | Peak (PK)    |
| FREQUENCY RANGE | 1GHz ~ 40GHz  |                   | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5150                                                | 55.49                         | 57.8                    | 74                | -18.51         | 34.52                        | 9.52                  | 46.35                    | 160                       | 275                        | Peak    |
| 5150                                                | 48.34                         | 50.65                   | 54                | -5.66          | 34.52                        | 9.52                  | 46.35                    | 160                       | 275                        | Average |
| 5270                                                | 102.73                        | 104.66                  | -                 | -              | 34.62                        | 9.77                  | 46.32                    | 160                       | 275                        | Peak    |
| 5270                                                | 97.07                         | 99                      | -                 | -              | 34.62                        | 9.77                  | 46.32                    | 160                       | 275                        | Average |
| 5350                                                | 57.28                         | 58.96                   | 74                | -16.72         | 34.68                        | 9.94                  | 46.3                     | 160                       | 275                        | Peak    |
| 5350                                                | 47.58                         | 49.26                   | 54                | -6.42          | 34.68                        | 9.94                  | 46.3                     | 160                       | 275                        | Average |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5150                                                | 55.26                         | 57.49                   | 74                | -18.74         | 34.6                         | 9.52                  | 46.35                    | 160                       | 65                         | Peak    |
| 5150                                                | 48.00                         | 50.23                   | 54                | -6.00          | 34.6                         | 9.52                  | 46.35                    | 160                       | 65                         | Average |
| 5270                                                | 98.36                         | 100.31                  | -                 | -              | 34.6                         | 9.77                  | 46.32                    | 160                       | 65                         | Peak    |
| 5270                                                | 92.43                         | 94.38                   | -                 | -              | 34.6                         | 9.77                  | 46.32                    | 160                       | 65                         | Average |
| 5350                                                | 53.31                         | 55.07                   | 74                | -20.69         | 34.6                         | 9.94                  | 46.3                     | 160                       | 65                         | Peak    |
| 5350                                                | 47.87                         | 49.63                   | 54                | -6.13          | 34.6                         | 9.94                  | 46.3                     | 160                       | 65                         | Average |

## REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5270MHz: Fundamental frequency.

|                        |               |                          |              |
|------------------------|---------------|--------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 62 | <b>DETECTOR FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz  |                          | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5150                                                | 53.03                         | 55.34                   | 74                | -20.97         | 34.52                        | 9.52                  | 46.35                    | 170                       | 275                        | Peak    |
| 5150                                                | 48.56                         | 50.87                   | 54                | -5.44          | 34.52                        | 9.52                  | 46.35                    | 170                       | 275                        | Average |
| 5310                                                | 97.52                         | 99.33                   | -                 | -              | 34.65                        | 9.85                  | 46.31                    | 170                       | 275                        | Peak    |
| 5310                                                | 91.55                         | 93.36                   | -                 | -              | 34.65                        | 9.85                  | 46.31                    | 170                       | 275                        | Average |
| 5350                                                | 56.44                         | 58.12                   | 74                | -17.56         | 34.68                        | 9.94                  | 46.3                     | 170                       | 275                        | Peak    |
| 5350                                                | 48.35                         | 50.03                   | 54                | -5.65          | 34.68                        | 9.94                  | 46.3                     | 170                       | 275                        | Average |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5150                                                | 53.23                         | 55.46                   | 74                | -20.77         | 34.6                         | 9.52                  | 46.35                    | 160                       | 65                         | Peak    |
| 5150                                                | 48.86                         | 51.09                   | 54                | -5.14          | 34.6                         | 9.52                  | 46.35                    | 160                       | 65                         | Average |
| 5310                                                | 92.47                         | 94.33                   | -                 | -              | 34.6                         | 9.85                  | 46.31                    | 160                       | 65                         | Peak    |
| 5310                                                | 86.24                         | 88.1                    | -                 | -              | 34.6                         | 9.85                  | 46.31                    | 160                       | 65                         | Average |
| 5350                                                | 53.84                         | 55.6                    | 74                | -20.16         | 34.6                         | 9.94                  | 46.3                     | 160                       | 65                         | Peak    |
| 5350                                                | 47.48                         | 49.24                   | 54                | -6.52          | 34.6                         | 9.94                  | 46.3                     | 160                       | 65                         | Average |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
2. 5310MHz: Fundamental frequency.



## 802.11ac (20MHz)

|                 |               |                   |              |
|-----------------|---------------|-------------------|--------------|
| CHANNEL         | TX Channel 52 | DETECTOR FUNCTION | Peak (PK)    |
| FREQUENCY RANGE | 1GHz ~ 40GHz  |                   | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5150                                                | 54.41                         | 56.72                   | 74                | -19.59         | 34.52                        | 9.52                  | 46.35                    | 170                       | 275                        | Peak    |
| 5150                                                | 48.05                         | 50.36                   | 54                | -5.95          | 34.52                        | 9.52                  | 46.35                    | 170                       | 275                        | Average |
| 5260                                                | 107.88                        | 109.84                  | -                 | -              | 34.61                        | 9.75                  | 46.32                    | 170                       | 275                        | Peak    |
| 5260                                                | 100.74                        | 102.7                   | -                 | -              | 34.61                        | 9.75                  | 46.32                    | 170                       | 275                        | Average |
| 5350                                                | 54.41                         | 56.09                   | 74                | -19.59         | 34.68                        | 9.94                  | 46.3                     | 170                       | 275                        | Peak    |
| 5350                                                | 47.37                         | 49.05                   | 54                | -6.63          | 34.68                        | 9.94                  | 46.3                     | 170                       | 275                        | Average |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5150                                                | 54.97                         | 57.2                    | 74                | -19.03         | 34.6                         | 9.52                  | 46.35                    | 155                       | 65                         | Peak    |
| 5150                                                | 48.39                         | 50.62                   | 54                | -5.61          | 34.6                         | 9.52                  | 46.35                    | 155                       | 65                         | Average |
| 5260                                                | 104.1                         | 106.07                  | -                 | -              | 34.6                         | 9.75                  | 46.32                    | 155                       | 65                         | Peak    |
| 5260                                                | 97.01                         | 98.98                   | -                 | -              | 34.6                         | 9.75                  | 46.32                    | 155                       | 65                         | Average |
| 5350                                                | 53.87                         | 55.63                   | 74                | -20.13         | 34.6                         | 9.94                  | 46.3                     | 155                       | 65                         | Peak    |
| 5350                                                | 47.23                         | 48.99                   | 54                | -6.77          | 34.6                         | 9.94                  | 46.3                     | 155                       | 65                         | Average |

## REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5260MHz: Fundamental frequency.



|                        |               |                          |              |
|------------------------|---------------|--------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 60 | <b>DETECTOR FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz  |                          | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5150                                                | 54.21                         | 56.52                   | 74                | -19.79         | 34.52                        | 9.52                  | 46.35                    | 175                       | 275                        | Peak    |
| 5150                                                | 47.44                         | 49.75                   | 54                | -6.56          | 34.52                        | 9.52                  | 46.35                    | 175                       | 275                        | Average |
| 5300                                                | 107.52                        | 109.36                  | -                 | -              | 34.64                        | 9.83                  | 46.31                    | 175                       | 275                        | Peak    |
| 5300                                                | 101.29                        | 103.13                  | -                 | -              | 34.64                        | 9.83                  | 46.31                    | 175                       | 275                        | Average |
| 5350                                                | 54.61                         | 56.29                   | 74                | -19.39         | 34.68                        | 9.94                  | 46.3                     | 175                       | 275                        | Peak    |
| 5350                                                | 48                            | 49.68                   | 54                | -6             | 34.68                        | 9.94                  | 46.3                     | 175                       | 275                        | Average |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5150                                                | 54.49                         | 56.72                   | 74                | -19.51         | 34.6                         | 9.52                  | 46.35                    | 160                       | 65                         | Peak    |
| 5150                                                | 47.87                         | 50.1                    | 54                | -6.13          | 34.6                         | 9.52                  | 46.35                    | 160                       | 65                         | Average |
| 5300                                                | 102.68                        | 104.56                  | -                 | -              | 34.6                         | 9.83                  | 46.31                    | 160                       | 65                         | Peak    |
| 5300                                                | 95.84                         | 97.72                   | -                 | -              | 34.6                         | 9.83                  | 46.31                    | 160                       | 65                         | Average |
| 5350                                                | 53.31                         | 55.07                   | 74                | -20.69         | 34.6                         | 9.94                  | 46.3                     | 160                       | 65                         | Peak    |
| 5350                                                | 47.66                         | 49.42                   | 54                | -6.34          | 34.6                         | 9.94                  | 46.3                     | 160                       | 65                         | Average |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
2. 5300MHz: Fundamental frequency.

|                        |               |                          |              |
|------------------------|---------------|--------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 64 | <b>DETECTOR FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz  |                          | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5150                                                | 54.9                          | 57.21                   | 74                | -19.1          | 34.52                        | 9.52                  | 46.35                    | 175                       | 275                        | Peak    |
| 5150                                                | 48.36                         | 50.67                   | 54                | -5.64          | 34.52                        | 9.52                  | 46.35                    | 175                       | 275                        | Average |
| 5320                                                | 105.36                        | 107.12                  | -                 | -              | 34.66                        | 9.88                  | 46.3                     | 175                       | 275                        | Peak    |
| 5320                                                | 98.4                          | 100.16                  | -                 | -              | 34.66                        | 9.88                  | 46.3                     | 175                       | 275                        | Average |
| 5350                                                | 57.75                         | 59.43                   | 74                | -16.25         | 34.68                        | 9.94                  | 46.3                     | 175                       | 275                        | Peak    |
| 5350                                                | 49.57                         | 51.25                   | 54                | -4.43          | 34.68                        | 9.94                  | 46.3                     | 175                       | 275                        | Average |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5150                                                | 53.82                         | 56.05                   | 74                | -20.18         | 34.6                         | 9.52                  | 46.35                    | 170                       | 65                         | Peak    |
| 5150                                                | 47.97                         | 50.2                    | 54                | -6.03          | 34.6                         | 9.52                  | 46.35                    | 170                       | 65                         | Average |
| 5320                                                | 100.36                        | 102.18                  | -                 | -              | 34.6                         | 9.88                  | 46.3                     | 170                       | 65                         | Peak    |
| 5320                                                | 92.81                         | 94.63                   | -                 | -              | 34.6                         | 9.88                  | 46.3                     | 170                       | 65                         | Average |
| 5350                                                | 54.13                         | 55.89                   | 74                | -19.87         | 34.6                         | 9.94                  | 46.3                     | 170                       | 65                         | Peak    |
| 5350                                                | 47.88                         | 49.64                   | 54                | -6.12          | 34.6                         | 9.94                  | 46.3                     | 170                       | 65                         | Average |

**REMARKS:**

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5320MHz: Fundamental frequency.



## 802.11ac (40MHz)

|                 |               |                   |              |
|-----------------|---------------|-------------------|--------------|
| CHANNEL         | TX Channel 54 | DETECTOR FUNCTION | Peak (PK)    |
| FREQUENCY RANGE | 1GHz ~ 40GHz  |                   | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5150                                                | 53.69                         | 56                      | 74                | -20.31         | 34.52                        | 9.52                  | 46.35                    | 175                       | 275                        | Peak    |
| 5150                                                | 48.84                         | 51.15                   | 54                | -5.16          | 34.52                        | 9.52                  | 46.35                    | 175                       | 275                        | Average |
| 5270                                                | 102.77                        | 104.7                   | -                 | -              | 34.62                        | 9.77                  | 46.32                    | 175                       | 275                        | Peak    |
| 5270                                                | 97.5                          | 99.43                   | -                 | -              | 34.62                        | 9.77                  | 46.32                    | 175                       | 275                        | Average |
| 5350                                                | 55.22                         | 56.9                    | 74                | -18.78         | 34.68                        | 9.94                  | 46.3                     | 175                       | 275                        | Peak    |
| 5350                                                | 48.54                         | 50.22                   | 54                | -5.46          | 34.68                        | 9.94                  | 46.3                     | 175                       | 275                        | Average |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5150                                                | 53.4                          | 55.63                   | 74                | -20.6          | 34.6                         | 9.52                  | 46.35                    | 175                       | 65                         | Peak    |
| 5150                                                | 48.76                         | 50.99                   | 54                | -5.24          | 34.6                         | 9.52                  | 46.35                    | 175                       | 65                         | Average |
| 5270                                                | 98.16                         | 100.11                  | -                 | -              | 34.6                         | 9.77                  | 46.32                    | 175                       | 65                         | Peak    |
| 5270                                                | 92.6                          | 94.55                   | -                 | -              | 34.6                         | 9.77                  | 46.32                    | 175                       | 65                         | Average |
| 5350                                                | 53.85                         | 55.61                   | 74                | -20.15         | 34.6                         | 9.94                  | 46.3                     | 175                       | 65                         | Peak    |
| 5350                                                | 48.29                         | 50.05                   | 54                | -5.71          | 34.6                         | 9.94                  | 46.3                     | 175                       | 65                         | Average |

## REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5270MHz: Fundamental frequency.

|                        |               |                          |              |
|------------------------|---------------|--------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 62 | <b>DETECTOR FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz  |                          | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5150                                                | 52.94                         | 55.25                   | 74                | -21.06         | 34.52                        | 9.52                  | 46.35                    | 140                       | 275                        | Peak    |
| 5150                                                | 47.79                         | 50.1                    | 54                | -6.21          | 34.52                        | 9.52                  | 46.35                    | 140                       | 275                        | Average |
| 5310                                                | 98.71                         | 100.52                  | -                 | -              | 34.65                        | 9.85                  | 46.31                    | 140                       | 275                        | Peak    |
| 5310                                                | 93.45                         | 95.26                   | -                 | -              | 34.65                        | 9.85                  | 46.31                    | 140                       | 275                        | Average |
| 5350                                                | 56.78                         | 58.46                   | 74                | -17.22         | 34.68                        | 9.94                  | 46.3                     | 140                       | 275                        | Peak    |
| 5350                                                | 50.94                         | 52.62                   | 54                | -3.06          | 34.68                        | 9.94                  | 46.3                     | 140                       | 275                        | Average |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5150                                                | 52.98                         | 55.21                   | 74                | -21.02         | 34.6                         | 9.52                  | 46.35                    | 170                       | 65                         | Peak    |
| 5150                                                | 47.97                         | 50.2                    | 54                | -6.03          | 34.6                         | 9.52                  | 46.35                    | 170                       | 65                         | Average |
| 5310                                                | 93.5                          | 95.36                   | -                 | -              | 34.6                         | 9.85                  | 46.31                    | 170                       | 65                         | Peak    |
| 5310                                                | 88                            | 89.86                   | -                 | -              | 34.6                         | 9.85                  | 46.31                    | 170                       | 65                         | Average |
| 5350                                                | 54.76                         | 56.52                   | 74                | -19.24         | 34.6                         | 9.94                  | 46.3                     | 170                       | 65                         | Peak    |
| 5350                                                | 48.9                          | 50.66                   | 54                | -5.1           | 34.6                         | 9.94                  | 46.3                     | 170                       | 65                         | Average |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
2. 5310MHz: Fundamental frequency.



**802.11ac (80MHz)**

|                        |               |                          |              |
|------------------------|---------------|--------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 58 | <b>DETECTOR FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz  |                          | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5150                                                | 53.93                         | 56.24                   | 74                | -20.07         | 34.52                        | 9.52                  | 46.35                    | 175                       | 275                        | Peak    |
| 5150                                                | 48.83                         | 51.14                   | 54                | -5.17          | 34.52                        | 9.52                  | 46.35                    | 175                       | 275                        | Average |
| 5290                                                | 95.25                         | 97.12                   | -                 | -              | 34.63                        | 9.81                  | 46.31                    | 175                       | 275                        | Peak    |
| 5290                                                | 90.4                          | 92.27                   | -                 | -              | 34.63                        | 9.81                  | 46.31                    | 175                       | 275                        | Average |
| 5350                                                | 57.92                         | 59.6                    | 74                | -16.08         | 34.68                        | 9.94                  | 46.3                     | 175                       | 275                        | Peak    |
| 5350                                                | 50.6                          | 52.28                   | 54                | -3.4           | 34.68                        | 9.94                  | 46.3                     | 175                       | 275                        | Average |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5150                                                | 53.76                         | 55.99                   | 74                | -20.24         | 34.6                         | 9.52                  | 46.35                    | 175                       | 65                         | Peak    |
| 5150                                                | 48.75                         | 50.98                   | 54                | -5.25          | 34.6                         | 9.52                  | 46.35                    | 175                       | 65                         | Average |
| 5290                                                | 90.19                         | 92.09                   | -                 | -              | 34.6                         | 9.81                  | 46.31                    | 175                       | 65                         | Peak    |
| 5290                                                | 85.34                         | 87.24                   | -                 | -              | 34.6                         | 9.81                  | 46.31                    | 175                       | 65                         | Average |
| 5350                                                | 53.69                         | 55.45                   | 74                | -20.31         | 34.6                         | 9.94                  | 46.3                     | 175                       | 65                         | Peak    |
| 5350                                                | 48.83                         | 50.59                   | 54                | -5.17          | 34.6                         | 9.94                  | 46.3                     | 175                       | 65                         | Average |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
2. 5290MHz: Fundamental frequency.



## Band 3

## 802.11a

|                 |                |                   |              |
|-----------------|----------------|-------------------|--------------|
| CHANNEL         | TX Channel 100 | DETECTOR FUNCTION | Peak (PK)    |
| FREQUENCY RANGE | 1GHz ~ 40GHz   |                   | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5460                                                | 55.42                         | 56.74                   | 74                | -18.58         | 34.77                        | 10.17                 | 46.26                    | 135                       | 280                        | Peak    |
| 5460                                                | 48.41                         | 49.73                   | 54                | -5.59          | 34.77                        | 10.17                 | 46.26                    | 135                       | 280                        | Average |
| 5470                                                | 55.65                         | 56.94                   | 68.2              | -12.55         | 34.78                        | 10.19                 | 46.26                    | 135                       | 280                        | Peak    |
| 5500                                                | 102.69                        | 103.88                  | -                 | -              | 34.8                         | 10.26                 | 46.25                    | 135                       | 280                        | Peak    |
| 5500                                                | 96.29                         | 97.48                   | -                 | -              | 34.8                         | 10.26                 | 46.25                    | 135                       | 280                        | Average |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5460                                                | 53.83                         | 55.32                   | 74                | -20.17         | 34.6                         | 10.17                 | 46.26                    | 105                       | 155                        | Peak    |
| 5460                                                | 47.99                         | 49.48                   | 54                | -6.01          | 34.6                         | 10.17                 | 46.26                    | 105                       | 155                        | Average |
| 5470                                                | 54.59                         | 56.06                   | 68.2              | -13.61         | 34.6                         | 10.19                 | 46.26                    | 105                       | 155                        | Peak    |
| 5500                                                | 95.82                         | 97.21                   | -                 | -              | 34.6                         | 10.26                 | 46.25                    | 105                       | 155                        | Peak    |
| 5500                                                | 87.95                         | 89.34                   | -                 | -              | 34.6                         | 10.26                 | 46.25                    | 105                       | 155                        | Average |

## REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
2. 5500MHz: Fundamental frequency.
3. #: Out of restricted band.

|                        |                |                          |              |
|------------------------|----------------|--------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 116 | <b>DETECTOR FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz   |                          | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5460                                                | 55.92                         | 57.24                   | 74                | -18.08         | 34.77                        | 10.17                 | 46.26                    | 135                       | 280                        | Peak    |
| 5460                                                | 47.97                         | 49.29                   | 54                | -6.03          | 34.77                        | 10.17                 | 46.26                    | 135                       | 280                        | Average |
| 5470                                                | 53.04                         | 54.33                   | 68.2              | -15.16         | 34.78                        | 10.19                 | 46.26                    | 135                       | 280                        | Peak    |
| 5580                                                | 102.15                        | 102.89                  | -                 | -              | 34.9                         | 10.59                 | 46.23                    | 135                       | 280                        | Peak    |
| 5580                                                | 95.25                         | 95.99                   | -                 | -              | 34.9                         | 10.59                 | 46.23                    | 135                       | 280                        | Average |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5460                                                | 54.55                         | 56.04                   | 74                | -19.45         | 34.6                         | 10.17                 | 46.26                    | 100                       | 155                        | Peak    |
| 5460                                                | 47.34                         | 48.83                   | 54                | -6.66          | 34.6                         | 10.17                 | 46.26                    | 100                       | 155                        | Average |
| 5470                                                | 54.27                         | 55.74                   | 68.2              | -13.93         | 34.6                         | 10.19                 | 46.26                    | 100                       | 155                        | Peak    |
| 5580                                                | 95.56                         | 96.5                    | -                 | -              | 34.7                         | 10.59                 | 46.23                    | 100                       | 155                        | Peak    |
| 5580                                                | 88.4                          | 89.34                   | -                 | -              | 34.7                         | 10.59                 | 46.23                    | 100                       | 155                        | Average |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
2. 5580MHz: Fundamental frequency.
3. #: Out of restricted band.

|                        |                |                          |              |
|------------------------|----------------|--------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 140 | <b>DETECTOR FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz   |                          | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5700                                                | 103.1                         | 103.16                  | -                 | -              | 35.04                        | 11.09                 | 46.19                    | 135                       | 280                        | Peak    |
| 5700                                                | 95.76                         | 95.82                   | -                 | -              | 35.04                        | 11.09                 | 46.19                    | 135                       | 280                        | Average |
| 5725                                                | 59.48                         | 59.4                    | 68.2              | -8.72          | 35.07                        | 11.2                  | 46.19                    | 135                       | 280                        | Peak    |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5700                                                | 97.64                         | 97.9                    | -                 | -              | 34.84                        | 11.09                 | 46.19                    | 100                       | 155                        | Peak    |
| 5700                                                | 91.27                         | 91.53                   | -                 | -              | 34.84                        | 11.09                 | 46.19                    | 100                       | 155                        | Average |
| 5725                                                | 56.25                         | 56.37                   | 68.2              | -11.95         | 34.87                        | 11.2                  | 46.19                    | 100                       | 155                        | Peak    |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
2. 5700MHz: Fundamental frequency.
3. #: Out of restricted band.



|                        |                |                          |              |
|------------------------|----------------|--------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 144 | <b>DETECTOR FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz   |                          | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5470                                                | 53.25                         | 54.54                   | 74                | -20.75         | 34.78                        | 10.19                 | 46.26                    | 135                       | 280                        | Peak    |
| 5720                                                | 105.45                        | 105.4                   | -                 | -              | 35.06                        | 11.18                 | 46.19                    | 135                       | 280                        | Peak    |
| 5720                                                | 98.89                         | 98.84                   | -                 | -              | 35.06                        | 11.18                 | 46.19                    | 135                       | 280                        | Average |
| 5850                                                | 57.69                         | 56.9                    | 68.2              | -10.51         | 35.22                        | 11.72                 | 46.15                    | 135                       | 280                        | Peak    |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5470                                                | 52.91                         | 54.38                   | 74                | -21.09         | 34.6                         | 10.19                 | 46.26                    | 100                       | 155                        | Peak    |
| 5720                                                | 101.12                        | 101.27                  | -                 | -              | 34.86                        | 11.18                 | 46.19                    | 100                       | 155                        | Peak    |
| 5720                                                | 94.05                         | 94.2                    | -                 | -              | 34.86                        | 11.18                 | 46.19                    | 100                       | 155                        | Average |
| 5850                                                | 57.11                         | 56.52                   | 68.2              | -11.09         | 35.02                        | 11.72                 | 46.15                    | 100                       | 155                        | Peak    |

**REMARKS:**

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5720MHz: Fundamental frequency.
- #: Out of restricted band.

802.11n (20MHz)

|                        |                |                          |              |
|------------------------|----------------|--------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 100 | <b>DETECTOR FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz   |                          | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5460                                                | 53.83                         | 55.15                   | 74                | -20.17         | 34.77                        | 10.17                 | 46.26                    | 100                       | 280                        | Peak    |
| 5460                                                | 48.34                         | 49.66                   | 54                | -5.66          | 34.77                        | 10.17                 | 46.26                    | 100                       | 280                        | Average |
| 5470                                                | 57.05                         | 58.34                   | 68.2              | -11.15         | 34.78                        | 10.19                 | 46.26                    | 100                       | 280                        | Peak    |
| 5500                                                | 101.77                        | 102.96                  | -                 | -              | 34.8                         | 10.26                 | 46.25                    | 100                       | 280                        | Peak    |
| 5500                                                | 94.68                         | 95.87                   | -                 | -              | 34.8                         | 10.26                 | 46.25                    | 100                       | 280                        | Average |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5460                                                | 54.17                         | 55.66                   | 74                | -19.83         | 34.6                         | 10.17                 | 46.26                    | 100                       | 155                        | Peak    |
| 5460                                                | 47.66                         | 49.15                   | 54                | -6.34          | 34.6                         | 10.17                 | 46.26                    | 100                       | 155                        | Average |
| 5470                                                | 53.95                         | 55.42                   | 74                | -20.05         | 34.6                         | 10.19                 | 46.26                    | 100                       | 155                        | Peak    |
| 5500                                                | 94.78                         | 96.17                   | -                 | -              | 34.6                         | 10.26                 | 46.25                    | 100                       | 155                        | Peak    |
| 5500                                                | 87.68                         | 89.07                   | -                 | -              | 34.6                         | 10.26                 | 46.25                    | 100                       | 155                        | Average |

**REMARKS:**

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5500MHz: Fundamental frequency.
- #: Out of restricted band.

|                        |                |                          |              |
|------------------------|----------------|--------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 116 | <b>DETECTOR FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz   |                          | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5460                                                | 54.52                         | 55.84                   | 74                | -19.48         | 34.77                        | 10.17                 | 46.26                    | 130                       | 280                        | Peak    |
| 5460                                                | 47.5                          | 48.82                   | 54                | -6.5           | 34.77                        | 10.17                 | 46.26                    | 130                       | 280                        | Average |
| 5470                                                | 55.25                         | 56.54                   | 68.2              | -12.95         | 34.78                        | 10.19                 | 46.26                    | 130                       | 280                        | Peak    |
| 5580                                                | 99.74                         | 100.48                  | -                 | -              | 34.9                         | 10.59                 | 46.23                    | 130                       | 280                        | Peak    |
| 5580                                                | 92.39                         | 93.13                   | -                 | -              | 34.9                         | 10.59                 | 46.23                    | 130                       | 280                        | Average |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5460                                                | 54.45                         | 55.94                   | 74                | -19.55         | 34.6                         | 10.17                 | 46.26                    | 100                       | 165                        | Peak    |
| 5460                                                | 47.45                         | 48.94                   | 54                | -6.55          | 34.6                         | 10.17                 | 46.26                    | 100                       | 165                        | Average |
| 5470                                                | 57.13                         | 58.6                    | 74                | -16.87         | 34.6                         | 10.19                 | 46.26                    | 100                       | 165                        | Peak    |
| 5580                                                | 96.3                          | 97.24                   | -                 | -              | 34.7                         | 10.59                 | 46.23                    | 100                       | 165                        | Peak    |
| 5580                                                | 87.6                          | 88.54                   | -                 | -              | 34.7                         | 10.59                 | 46.23                    | 100                       | 165                        | Average |

**REMARKS:**

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5580MHz: Fundamental frequency.
- #: Out of restricted band.

|                        |                |                          |              |
|------------------------|----------------|--------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 140 | <b>DETECTOR FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz   |                          | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5700                                                | 101.45                        | 101.51                  | -                 | -              | 35.04                        | 11.09                 | 46.19                    | 115                       | 280                        | Peak    |
| 5700                                                | 95.53                         | 95.59                   | -                 | -              | 35.04                        | 11.09                 | 46.19                    | 115                       | 280                        | Average |
| 5725                                                | 58.03                         | 57.95                   | 68.2              | -10.17         | 35.07                        | 11.2                  | 46.19                    | 115                       | 280                        | Peak    |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5700                                                | 97.04                         | 97.3                    | -                 | -              | 34.84                        | 11.09                 | 46.19                    | 110                       | 160                        | Peak    |
| 5700                                                | 90.56                         | 90.82                   | -                 | -              | 34.84                        | 11.09                 | 46.19                    | 110                       | 160                        | Average |
| 5725                                                | 57.22                         | 57.34                   | 74                | -16.78         | 34.87                        | 11.2                  | 46.19                    | 110                       | 160                        | Peak    |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
2. 5700MHz: Fundamental frequency.
3. #: Out of restricted band.

|                        |                |                          |              |
|------------------------|----------------|--------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 144 | <b>DETECTOR FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz   |                          | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5470                                                | 53.89                         | 55.18                   | 74                | -20.11         | 34.78                        | 10.19                 | 46.26                    | 115                       | 280                        | Peak    |
| 5720                                                | 103.42                        | 103.37                  | -                 | -              | 35.06                        | 11.18                 | 46.19                    | 115                       | 280                        | Peak    |
| 5720                                                | 97.43                         | 97.38                   | -                 | -              | 35.06                        | 11.18                 | 46.19                    | 115                       | 280                        | Average |
| 5850                                                | 57.41                         | 56.62                   | 68.2              | -10.79         | 35.22                        | 11.72                 | 46.15                    | 115                       | 280                        | Peak    |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5470                                                | 53.58                         | 55.05                   | 74                | -20.42         | 34.6                         | 10.19                 | 46.26                    | 115                       | 160                        | Peak    |
| 5720                                                | 98.9                          | 99.05                   | -                 | -              | 34.86                        | 11.18                 | 46.19                    | 115                       | 160                        | Peak    |
| 5720                                                | 91.82                         | 91.97                   | -                 | -              | 34.86                        | 11.18                 | 46.19                    | 115                       | 160                        | Average |
| 5850                                                | 57.09                         | 56.5                    | 68.2              | -11.11         | 35.02                        | 11.72                 | 46.15                    | 115                       | 160                        | Peak    |

**REMARKS:**

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5720MHz: Fundamental frequency.
- #: Out of restricted band.



**BUREAU  
VERITAS**

**Test Report No.: W7L-P21080006RF14**

**802.11n (40MHz)**

|                        |                |                          |              |
|------------------------|----------------|--------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 102 | <b>DETECTOR FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz   |                          | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5460                                                | 53.95                         | 55.27                   | 74                | -20.05         | 34.77                        | 10.17                 | 46.26                    | 100                       | 270                        | Peak    |
| 5460                                                | 47.35                         | 48.67                   | 54                | -6.65          | 34.77                        | 10.17                 | 46.26                    | 100                       | 270                        | Average |
| 5470                                                | 55.53                         | 56.82                   | 68.2              | -12.67         | 34.78                        | 10.19                 | 46.26                    | 100                       | 270                        | Peak    |
| 5510                                                | 95.95                         | 97.09                   | -                 | -              | 34.81                        | 10.3                  | 46.25                    | 100                       | 270                        | Peak    |
| 5510                                                | 91.58                         | 92.72                   | -                 | -              | 34.81                        | 10.3                  | 46.25                    | 100                       | 270                        | Average |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5460                                                | 53.84                         | 55.33                   | 74                | -20.16         | 34.6                         | 10.17                 | 46.26                    | 175                       | 230                        | Peak    |
| 5460                                                | 48.08                         | 49.57                   | 54                | -5.92          | 34.6                         | 10.17                 | 46.26                    | 175                       | 230                        | Average |
| 5470                                                | 56.88                         | 58.35                   | 68.2              | -11.32         | 34.6                         | 10.19                 | 46.26                    | 175                       | 230                        | Peak    |
| 5510                                                | 90.18                         | 91.52                   | -                 | -              | 34.61                        | 10.3                  | 46.25                    | 175                       | 230                        | Peak    |
| 5510                                                | 85.07                         | 86.41                   | -                 | -              | 34.61                        | 10.3                  | 46.25                    | 175                       | 230                        | Average |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
2. 5510MHz: Fundamental frequency.
3. #: Out of restricted band.

|                        |                |                          |              |
|------------------------|----------------|--------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 110 | <b>DETECTOR FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz   |                          | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5460                                                | 51.9                          | 53.22                   | 74                | -22.1          | 34.77                        | 10.17                 | 46.26                    | 100                       | 270                        | Peak    |
| 5460                                                | 47.18                         | 48.5                    | 54                | -6.82          | 34.77                        | 10.17                 | 46.26                    | 100                       | 270                        | Average |
| 5470                                                | 54.9                          | 56.19                   | 68.2              | -13.3          | 34.78                        | 10.19                 | 46.26                    | 100                       | 270                        | Peak    |
| 5550                                                | 95.57                         | 96.48                   | -                 | -              | 34.86                        | 10.47                 | 46.24                    | 100                       | 270                        | Peak    |
| 5550                                                | 90.58                         | 91.49                   | -                 | -              | 34.86                        | 10.47                 | 46.24                    | 100                       | 270                        | Average |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5460                                                | 54.9                          | 56.39                   | 74                | -19.1          | 34.6                         | 10.17                 | 46.26                    | 170                       | 225                        | Peak    |
| 5460                                                | 47.82                         | 49.31                   | 54                | -6.18          | 34.6                         | 10.17                 | 46.26                    | 170                       | 225                        | Average |
| 5470                                                | 55.4                          | 56.87                   | 68.2              | -12.8          | 34.6                         | 10.19                 | 46.26                    | 170                       | 225                        | Peak    |
| 5550                                                | 91.24                         | 92.35                   | -                 | -              | 34.66                        | 10.47                 | 46.24                    | 170                       | 225                        | Peak    |
| 5550                                                | 85.54                         | 86.65                   | -                 | -              | 34.66                        | 10.47                 | 46.24                    | 170                       | 225                        | Average |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
2. 5500MHz: Fundamental frequency.
3. #: Out of restricted band.

|                        |                |                          |              |
|------------------------|----------------|--------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 134 | <b>DETECTOR FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz   |                          | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5670                                                | 94.84                         | 95.07                   | -                 | -              | 35                           | 10.97                 | 46.2                     | 150                       | 280                        | Peak    |
| 5670                                                | 91.59                         | 91.82                   | -                 | -              | 35                           | 10.97                 | 46.2                     | 150                       | 280                        | Average |
| 5725                                                | 56.49                         | 56.41                   | 68.2              | -11.71         | 35.07                        | 11.2                  | 46.19                    | 150                       | 280                        | Peak    |
| ANTENNA POLARITY & test distance: Vertical at 3 m   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5670                                                | 90.56                         | 90.99                   | -                 | -              | 34.8                         | 10.97                 | 46.2                     | 200                       | 225                        | Peak    |
| 5670                                                | 86.12                         | 86.55                   | -                 | -              | 34.8                         | 10.97                 | 46.2                     | 200                       | 225                        | Average |
| 5725                                                | 57.65                         | 57.77                   | 68.2              | -10.55         | 34.87                        | 11.2                  | 46.19                    | 200                       | 225                        | Peak    |

**REMARKS:**

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5670MHz: Fundamental frequency.
- #: Out of restricted band.



|                        |                |                          |              |
|------------------------|----------------|--------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 142 | <b>DETECTOR FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz   |                          | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5470                                                | 52.95                         | 54.24                   | 74                | -21.05         | 34.78                        | 10.19                 | 46.26                    | 150                       | 280                        | Peak    |
| 5710                                                | 98.1                          | 98.1                    | -                 | -              | 35.05                        | 11.14                 | 46.19                    | 150                       | 280                        | Peak    |
| 5710                                                | 94.12                         | 94.12                   | -                 | -              | 35.05                        | 11.14                 | 46.19                    | 150                       | 280                        | Average |
| 5850                                                | 57.86                         | 57.07                   | 68.2              | -10.34         | 35.22                        | 11.72                 | 46.15                    | 150                       | 280                        | Peak    |
| ANTENNA POLARITY & test distance: Vertical at 3 m   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5470                                                | 53.41                         | 54.88                   | 74                | -20.59         | 34.6                         | 10.19                 | 46.26                    | 110                       | 160                        | Peak    |
| 5710                                                | 94.21                         | 94.41                   | -                 | -              | 34.85                        | 11.14                 | 46.19                    | 110                       | 160                        | Peak    |
| 5710                                                | 89.34                         | 89.54                   | -                 | -              | 34.85                        | 11.14                 | 46.19                    | 110                       | 160                        | Average |
| 5850                                                | 57.47                         | 56.88                   | 68.2              | -10.73         | 35.02                        | 11.72                 | 46.15                    | 110                       | 160                        | Peak    |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
2. 5710MHz: Fundamental frequency.
3. #: Out of restricted band.



**BUREAU  
VERITAS**

**Test Report No.: W7L-P21080006RF14**

**802.11ac (20MHz)**

|                        |                |                          |              |
|------------------------|----------------|--------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 100 | <b>DETECTOR FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz   |                          | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5460                                                | 53.37                         | 54.69                   | 74                | -20.63         | 34.77                        | 10.17                 | 46.26                    | 100                       | 280                        | Peak    |
| 5460                                                | 46.97                         | 48.29                   | 54                | -7.03          | 34.77                        | 10.17                 | 46.26                    | 100                       | 280                        | Average |
| 5470                                                | 55.59                         | 56.88                   | 68.2              | -12.61         | 34.78                        | 10.19                 | 46.26                    | 100                       | 280                        | Peak    |
| 5500                                                | 100.98                        | 102.17                  | -                 | -              | 34.8                         | 10.26                 | 46.25                    | 100                       | 280                        | Peak    |
| 5500                                                | 94.45                         | 95.64                   | -                 | -              | 34.8                         | 10.26                 | 46.25                    | 100                       | 280                        | Average |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5460                                                | 54.24                         | 55.73                   | 74                | -19.76         | 34.6                         | 10.17                 | 46.26                    | 110                       | 160                        | Peak    |
| 5460                                                | 47.28                         | 48.77                   | 54                | -6.72          | 34.6                         | 10.17                 | 46.26                    | 110                       | 160                        | Average |
| 5470                                                | 53.32                         | 54.79                   | 68.2              | -14.88         | 34.6                         | 10.19                 | 46.26                    | 110                       | 160                        | Peak    |
| 5500                                                | 92.94                         | 94.33                   | -                 | -              | 34.6                         | 10.26                 | 46.25                    | 110                       | 160                        | Peak    |
| 5500                                                | 86.94                         | 88.33                   | -                 | -              | 34.6                         | 10.26                 | 46.25                    | 110                       | 160                        | Average |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
2. 5500MHz: Fundamental frequency.
3. #: Out of restricted band.

|                        |                |                          |              |
|------------------------|----------------|--------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 116 | <b>DETECTOR FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz   |                          | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5460                                                | 53.33                         | 54.65                   | 74                | -20.67         | 34.77                        | 10.17                 | 46.26                    | 200                       | 280                        | Peak    |
| 5460                                                | 48.95                         | 50.27                   | 54                | -5.05          | 34.77                        | 10.17                 | 46.26                    | 200                       | 280                        | Average |
| 5470                                                | 53.66                         | 54.95                   | 68.2              | -14.54         | 34.78                        | 10.19                 | 46.26                    | 200                       | 280                        | Peak    |
| 5580                                                | 99.94                         | 100.68                  | -                 | -              | 34.9                         | 10.59                 | 46.23                    | 200                       | 280                        | Peak    |
| 5580                                                | 92.76                         | 93.5                    | -                 | -              | 34.9                         | 10.59                 | 46.23                    | 200                       | 280                        | Average |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5460                                                | 53.2                          | 54.69                   | 74                | -20.8          | 34.6                         | 10.17                 | 46.26                    | 110                       | 155                        | Peak    |
| 5460                                                | 48.09                         | 49.58                   | 54                | -5.91          | 34.6                         | 10.17                 | 46.26                    | 110                       | 155                        | Average |
| 5470                                                | 53.95                         | 55.42                   | 68.2              | -14.25         | 34.6                         | 10.19                 | 46.26                    | 110                       | 155                        | Peak    |
| 5580                                                | 94.44                         | 95.38                   | -                 | -              | 34.7                         | 10.59                 | 46.23                    | 110                       | 155                        | Peak    |
| 5580                                                | 87.53                         | 88.47                   | -                 | -              | 34.7                         | 10.59                 | 46.23                    | 110                       | 155                        | Average |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
2. 5580MHz: Fundamental frequency.
3. #: Out of restricted band.

|                        |                |                          |              |
|------------------------|----------------|--------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 140 | <b>DETECTOR FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz   |                          | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5700                                                | 101.36                        | 101.42                  | -                 | -              | 35.04                        | 11.09                 | 46.19                    | 195                       | 275                        | Peak    |
| 5700                                                | 95.37                         | 95.43                   | -                 | -              | 35.04                        | 11.09                 | 46.19                    | 195                       | 275                        | Average |
| 5725                                                | 56.77                         | 56.69                   | 68.2              | -11.43         | 35.07                        | 11.2                  | 46.19                    | 195                       | 275                        | Peak    |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5700                                                | 95.29                         | 95.55                   | -                 | -              | 34.84                        | 11.09                 | 46.19                    | 110                       | 155                        | Peak    |
| 5700                                                | 88.93                         | 89.19                   | -                 | -              | 34.84                        | 11.09                 | 46.19                    | 110                       | 155                        | Average |
| 5725                                                | 57.82                         | 57.94                   | 68.2              | -10.38         | 34.87                        | 11.2                  | 46.19                    | 110                       | 155                        | Peak    |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
2. 5700MHz: Fundamental frequency.
3. #: Out of restricted band.

|                        |                |                          |              |
|------------------------|----------------|--------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 144 | <b>DETECTOR FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz   |                          | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5470                                                | 54.23                         | 55.52                   | 74                | -19.77         | 34.78                        | 10.19                 | 46.26                    | 195                       | 275                        | Peak    |
| 5720                                                | 103.99                        | 103.94                  | -                 | -              | 35.06                        | 11.18                 | 46.19                    | 195                       | 275                        | Peak    |
| 5720                                                | 97.53                         | 97.48                   | -                 | -              | 35.06                        | 11.18                 | 46.19                    | 195                       | 275                        | Average |
| 5850                                                | 58.79                         | 58                      | 68.2              | -9.41          | 35.22                        | 11.72                 | 46.15                    | 195                       | 275                        | Peak    |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5470                                                | 55.45                         | 56.92                   | 74                | -18.55         | 34.6                         | 10.19                 | 46.26                    | 100                       | 150                        | Peak    |
| 5720                                                | 99.43                         | 99.58                   | -                 | -              | 34.86                        | 11.18                 | 46.19                    | 100                       | 150                        | Peak    |
| 5720                                                | 92.26                         | 92.41                   | -                 | -              | 34.86                        | 11.18                 | 46.19                    | 100                       | 150                        | Average |
| 5850                                                | 57.37                         | 56.78                   | 68.2              | -10.83         | 35.02                        | 11.72                 | 46.15                    | 100                       | 150                        | Peak    |

**REMARKS:**

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5720MHz: Fundamental frequency.
- #: Out of restricted band.



802.11ac (40MHz)

|                        |                |                          |              |
|------------------------|----------------|--------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 102 | <b>DETECTOR FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz   |                          | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5460                                                | 53.52                         | 54.84                   | 74                | -20.48         | 34.77                        | 10.17                 | 46.26                    | 100                       | 275                        | Peak    |
| 5460                                                | 48.52                         | 49.84                   | 54                | -5.48          | 34.77                        | 10.17                 | 46.26                    | 100                       | 275                        | Average |
| 5470                                                | 55.59                         | 56.88                   | 68.2              | -12.61         | 34.78                        | 10.19                 | 46.26                    | 100                       | 275                        | Peak    |
| 5510                                                | 94.49                         | 95.63                   | -                 | -              | 34.81                        | 10.3                  | 46.25                    | 100                       | 275                        | Peak    |
| 5510                                                | 90.57                         | 91.71                   | -                 | -              | 34.81                        | 10.3                  | 46.25                    | 100                       | 275                        | Average |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5460                                                | 53.68                         | 55.17                   | 74                | -20.32         | 34.6                         | 10.17                 | 46.26                    | 115                       | 70                         | Peak    |
| 5460                                                | 48.92                         | 50.41                   | 54                | -5.08          | 34.6                         | 10.17                 | 46.26                    | 115                       | 70                         | Average |
| 5470                                                | 54.63                         | 56.1                    | 68.2              | -13.57         | 34.6                         | 10.19                 | 46.26                    | 115                       | 70                         | Peak    |
| 5510                                                | 90.75                         | 92.09                   | -                 | -              | 34.61                        | 10.3                  | 46.25                    | 115                       | 70                         | Peak    |
| 5510                                                | 84.75                         | 86.09                   | -                 | -              | 34.61                        | 10.3                  | 46.25                    | 115                       | 70                         | Average |

**REMARKS:**

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5510MHz: Fundamental frequency.
- #: Out of restricted band.

|                        |                |                          |              |
|------------------------|----------------|--------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 110 | <b>DETECTOR FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz   |                          | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5460                                                | 53.1                          | 54.42                   | 74                | -20.9          | 34.77                        | 10.17                 | 46.26                    | 200                       | 275                        | Peak    |
| 5460                                                | 47.87                         | 49.19                   | 54                | -6.13          | 34.77                        | 10.17                 | 46.26                    | 200                       | 275                        | Average |
| 5470                                                | 53.79                         | 55.08                   | 68.2              | -14.41         | 34.78                        | 10.19                 | 46.26                    | 200                       | 275                        | Peak    |
| 5550                                                | 95.08                         | 95.99                   | -                 | -              | 34.86                        | 10.47                 | 46.24                    | 200                       | 275                        | Peak    |
| 5550                                                | 89.4                          | 90.31                   | -                 | -              | 34.86                        | 10.47                 | 46.24                    | 200                       | 275                        | Average |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5460                                                | 54.98                         | 56.47                   | 74                | -19.02         | 34.6                         | 10.17                 | 46.26                    | 145                       | 70                         | Peak    |
| 5460                                                | 47.57                         | 49.06                   | 54                | -6.43          | 34.6                         | 10.17                 | 46.26                    | 145                       | 70                         | Average |
| 5470                                                | 53.59                         | 55.06                   | 68.2              | -14.61         | 34.6                         | 10.19                 | 46.26                    | 145                       | 70                         | Peak    |
| 5550                                                | 90.62                         | 91.73                   | -                 | -              | 34.66                        | 10.47                 | 46.24                    | 145                       | 70                         | Peak    |
| 5550                                                | 87.28                         | 88.39                   | -                 | -              | 34.66                        | 10.47                 | 46.24                    | 145                       | 70                         | Average |

**REMARKS:**

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5500MHz: Fundamental frequency.
- #: Out of restricted band.

|                        |                |                          |              |
|------------------------|----------------|--------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 134 | <b>DETECTOR FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz   |                          | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5670                                                | 97.75                         | 97.98                   | -                 | -              | 35                           | 10.97                 | 46.2                     | 150                       | 275                        | Peak    |
| 5670                                                | 93.67                         | 93.9                    | -                 | -              | 35                           | 10.97                 | 46.2                     | 150                       | 275                        | Average |
| 5725                                                | 57.06                         | 56.98                   | 68.2              | -11.14         | 35.07                        | 11.2                  | 46.19                    | 150                       | 275                        | Peak    |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5670                                                | 95.46                         | 95.89                   | -                 | -              | 34.8                         | 10.97                 | 46.2                     | 145                       | 70                         | Peak    |
| 5670                                                | 91.61                         | 92.04                   | -                 | -              | 34.8                         | 10.97                 | 46.2                     | 145                       | 70                         | Average |
| 5725                                                | 55.62                         | 55.74                   | 68.2              | -12.58         | 34.87                        | 11.2                  | 46.19                    | 145                       | 70                         | Peak    |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
2. 5670MHz: Fundamental frequency.
3. #: Out of restricted band.



|                        |                |                          |              |
|------------------------|----------------|--------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 142 | <b>DETECTOR FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz   |                          | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5470                                                | 54.38                         | 55.67                   | 74                | -19.62         | 34.78                        | 10.19                 | 46.26                    | 150                       | 275                        | Peak    |
| 5710                                                | 97.49                         | 97.49                   | -                 | -              | 35.05                        | 11.14                 | 46.19                    | 150                       | 275                        | Peak    |
| 5710                                                | 92.8                          | 92.8                    | -                 | -              | 35.05                        | 11.14                 | 46.19                    | 150                       | 275                        | Average |
| 5850                                                | 56.53                         | 55.74                   | 68.2              | -11.67         | 35.22                        | 11.72                 | 46.15                    | 150                       | 275                        | Peak    |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5470                                                | 53.54                         | 55.01                   | 74                | -20.46         | 34.6                         | 10.19                 | 46.26                    | 100                       | 160                        | Peak    |
| 5710                                                | 93.16                         | 93.36                   | -                 | -              | 34.85                        | 11.14                 | 46.19                    | 100                       | 160                        | Peak    |
| 5710                                                | 87.78                         | 87.98                   | -                 | -              | 34.85                        | 11.14                 | 46.19                    | 100                       | 160                        | Average |
| 5850                                                | 57.5                          | 56.91                   | 68.2              | -10.7          | 35.02                        | 11.72                 | 46.15                    | 100                       | 160                        | Peak    |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
2. 5710MHz: Fundamental frequency.
3. #: Out of restricted band.



## 802.11ac (80MHz)

|                 |                |                   |              |
|-----------------|----------------|-------------------|--------------|
| CHANNEL         | TX Channel 106 | DETECTOR FUNCTION | Peak (PK)    |
| FREQUENCY RANGE | 1GHz ~ 40GHz   |                   | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5460                                                | 55.74                         | 57.06                   | 74                | -18.26         | 34.77                        | 10.17                 | 46.26                    | 200                       | 280                        | Peak    |
| 5460                                                | 50.5                          | 51.82                   | 54                | -3.5           | 34.77                        | 10.17                 | 46.26                    | 200                       | 280                        | Average |
| 5470                                                | 57.02                         | 58.31                   | 68.2              | -11.18         | 34.78                        | 10.19                 | 46.26                    | 200                       | 280                        | Peak    |
| 5530                                                | 88.65                         | 89.67                   | -                 | -              | 34.84                        | 10.38                 | 46.24                    | 200                       | 280                        | Peak    |
| 5530                                                | 85.73                         | 86.75                   | -                 | -              | 34.84                        | 10.38                 | 46.24                    | 200                       | 280                        | Average |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5460                                                | 53.06                         | 54.55                   | 74                | -20.94         | 34.6                         | 10.17                 | 46.26                    | 150                       | 80                         | Peak    |
| 5460                                                | 47.28                         | 48.77                   | 54                | -6.72          | 34.6                         | 10.17                 | 46.26                    | 150                       | 80                         | Average |
| 5470                                                | 54.9                          | 56.37                   | 68.2              | -13.3          | 34.6                         | 10.19                 | 46.26                    | 150                       | 80                         | Peak    |
| 5530                                                | 84.42                         | 85.64                   | -                 | -              | 34.64                        | 10.38                 | 46.24                    | 150                       | 80                         | Peak    |
| 5530                                                | 79.72                         | 80.94                   | -                 | -              | 34.64                        | 10.38                 | 46.24                    | 150                       | 80                         | Average |

## REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
2. 5530MHz: Fundamental frequency.
3. #: Out of restricted band.

|                        |                |                          |              |
|------------------------|----------------|--------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 122 | <b>DETECTOR FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz   |                          | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5610                                                | 93.38                         | 93.95                   | -                 | -              | 34.93                        | 10.72                 | 46.22                    | 165                       | 280                        | Peak    |
| 5610                                                | 90.36                         | 90.93                   | -                 | -              | 34.93                        | 10.72                 | 46.22                    | 165                       | 280                        | Average |
| 5725                                                | 55.09                         | 55.01                   | 68.2              | -13.11         | 35.07                        | 11.2                  | 46.19                    | 165                       | 280                        | Peak    |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5610                                                | 87.62                         | 88.39                   | -                 | -              | 34.73                        | 10.72                 | 46.22                    | 120                       | 155                        | Peak    |
| 5610                                                | 84.78                         | 85.55                   | -                 | -              | 34.73                        | 10.72                 | 46.22                    | 120                       | 155                        | Average |
| 5725                                                | 54.98                         | 55.1                    | 68.2              | -13.22         | 34.87                        | 11.2                  | 46.19                    | 120                       | 155                        | Peak    |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
2. 5610MHz: Fundamental frequency.
3. #: Out of restricted band.

|                        |                |                          |              |
|------------------------|----------------|--------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 138 | <b>DETECTOR FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz   |                          | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5470                                                | 52.19                         | 53.48                   | 74                | -21.81         | 34.78                        | 10.19                 | 46.26                    | 190                       | 280                        | Peak    |
| 5690                                                | 93.11                         | 93.23                   | -                 | -              | 35.03                        | 11.05                 | 46.2                     | 190                       | 280                        | Peak    |
| 5690                                                | 89.23                         | 89.35                   | -                 | -              | 35.03                        | 11.05                 | 46.2                     | 190                       | 280                        | Average |
| 5850                                                | 55.94                         | 55.15                   | 68.2              | -12.26         | 35.22                        | 11.72                 | 46.15                    | 190                       | 280                        | Peak    |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5470                                                | 51.24                         | 52.71                   | 74                | -22.76         | 34.6                         | 10.19                 | 46.26                    | 120                       | 160                        | Peak    |
| 5690                                                | 88.39                         | 88.71                   | -                 | -              | 34.83                        | 11.05                 | 46.2                     | 120                       | 160                        | Peak    |
| 5690                                                | 84.95                         | 85.27                   | -                 | -              | 34.83                        | 11.05                 | 46.2                     | 120                       | 160                        | Average |
| 5850                                                | 54.16                         | 53.57                   | 68.2              | -14.04         | 35.02                        | 11.72                 | 46.15                    | 120                       | 160                        | Peak    |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
2. 5690MHz: Fundamental frequency.
3. #: Out of restricted band.



**Band 4:**

**802.11a**

|                        |                |                              |              |
|------------------------|----------------|------------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 149 | <b>DETECTOR<br/>FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz   |                              | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5745                                                | 108.14                        | 107.95                  | -                 | -              | 35.09                        | 11.28                 | 46.18                    | 150                       | 275                        | Peak    |
| 5745                                                | 100.96                        | 100.77                  | -                 | -              | 35.09                        | 11.28                 | 46.18                    | 150                       | 275                        | Average |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5745                                                | 103.73                        | 103.74                  | -                 | -              | 34.89                        | 11.28                 | 46.18                    | 100                       | 150                        | Peak    |
| 5745                                                | 97                            | 97.01                   | -                 | -              | 34.89                        | 11.28                 | 46.18                    | 100                       | 150                        | Average |

**REMARKS:**

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5745MHz: Fundamental frequency.

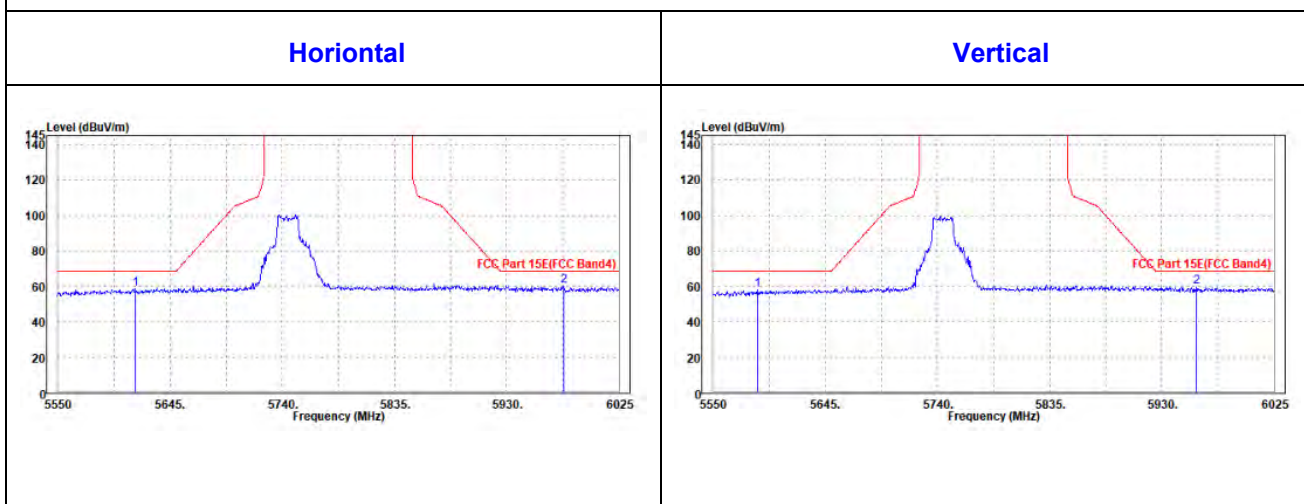


## Oobe DATA

### 802.11a

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |        |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|--------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK |
| 5616.025                                            | 58.64                         | 59.18                   | 68.2              | -9.56          | 34.94                        | 10.74                 | 46.22                    | 200                       | 0                          | Peak   |
| 5977.975                                            | 60.09                         | 58.58                   | 68.2              | -8.11          | 35.37                        | 12.26                 | 46.12                    | 200                       | 0                          | Peak   |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |        |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK |
| 5587.525                                            | 57.83                         | 58.73                   | 68.2              | -10.37         | 34.71                        | 10.62                 | 46.23                    | 100                       | 0                          | Peak   |
| 5959.45                                             | 59.37                         | 58.16                   | 68.2              | -8.83          | 35.15                        | 12.18                 | 46.12                    | 100                       | 0                          | Peak   |

### CH 149



|                        |                |                              |              |
|------------------------|----------------|------------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 157 | <b>DETECTOR<br/>FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz   |                              | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5785                                                | 108.57                        | 108.15                  | -                 | -              | 35.14                        | 11.45                 | 46.17                    | 100                       | 253                        | Peak    |
| 5785                                                | 102.01                        | 101.59                  | -                 | -              | 35.14                        | 11.45                 | 46.17                    | 100                       | 253                        | Average |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5785                                                | 104.83                        | 104.61                  | -                 | -              | 34.94                        | 11.45                 | 46.17                    | 100                       | 150                        | Peak    |
| 5785                                                | 98.17                         | 97.95                   | -                 | -              | 34.94                        | 11.45                 | 46.17                    | 100                       | 150                        | Average |

**REMARKS:**

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5785MHz: Fundamental frequency.

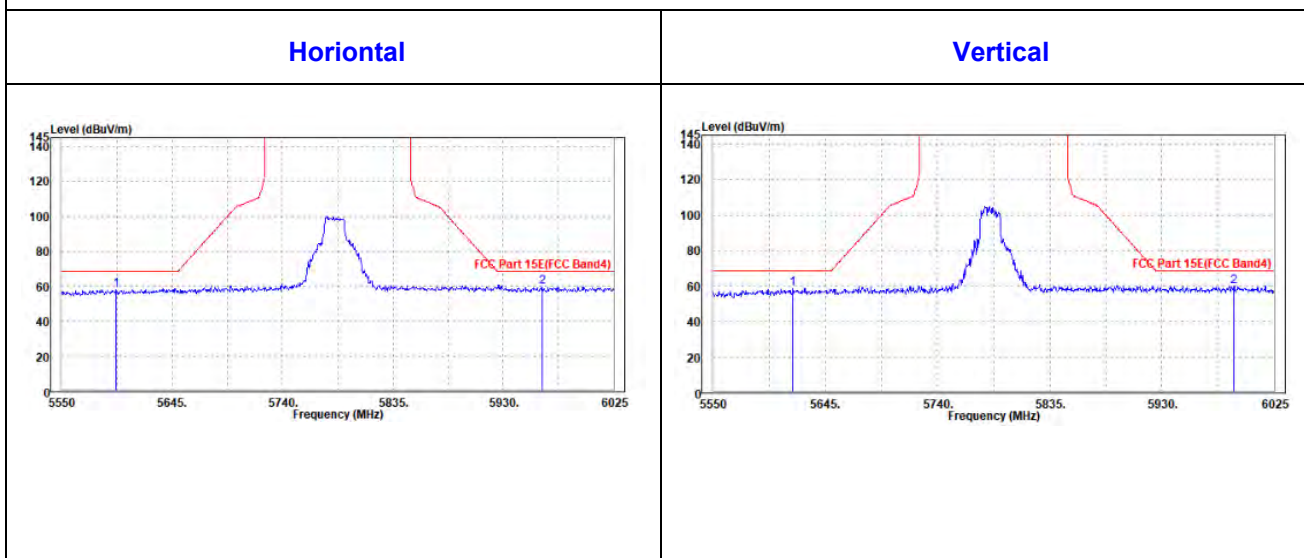


## Oobe DATA

### 802.11a

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |        |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|--------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK |
| 5596.55                                             | 58                            | 58.64                   | 68.2              | -10.2          | 34.92                        | 10.66                 | 46.22                    | 100                       | 0                          | Peak   |
| 5963.25                                             | 59.38                         | 57.94                   | 68.2              | -8.82          | 35.36                        | 12.2                  | 46.12                    | 100                       | 0                          | Peak   |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |        |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK |
| 5617.45                                             | 58.38                         | 59.11                   | 68.2              | -9.82          | 34.74                        | 10.75                 | 46.22                    | 200                       | 0                          | Peak   |
| 5990.8                                              | 59.66                         | 58.27                   | 68.2              | -8.54          | 35.19                        | 12.31                 | 46.11                    | 200                       | 0                          | Peak   |

### CH 157







|                        |                |                              |              |
|------------------------|----------------|------------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 165 | <b>DETECTOR<br/>FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz   |                              | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5825                                                | 107.3                         | 106.65                  | -                 | -              | 35.19                        | 11.62                 | 46.16                    | 155                       | 275                        | Peak    |
| 5825                                                | 100.78                        | 100.13                  | -                 | -              | 35.19                        | 11.62                 | 46.16                    | 155                       | 275                        | Average |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5825                                                | 105.26                        | 104.81                  | -                 | -              | 34.99                        | 11.62                 | 46.16                    | 100                       | 145                        | Peak    |
| 5825                                                | 96.77                         | 96.32                   | -                 | -              | 34.99                        | 11.62                 | 46.16                    | 100                       | 145                        | Average |

**REMARKS:**

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5825MHz: Fundamental frequency.

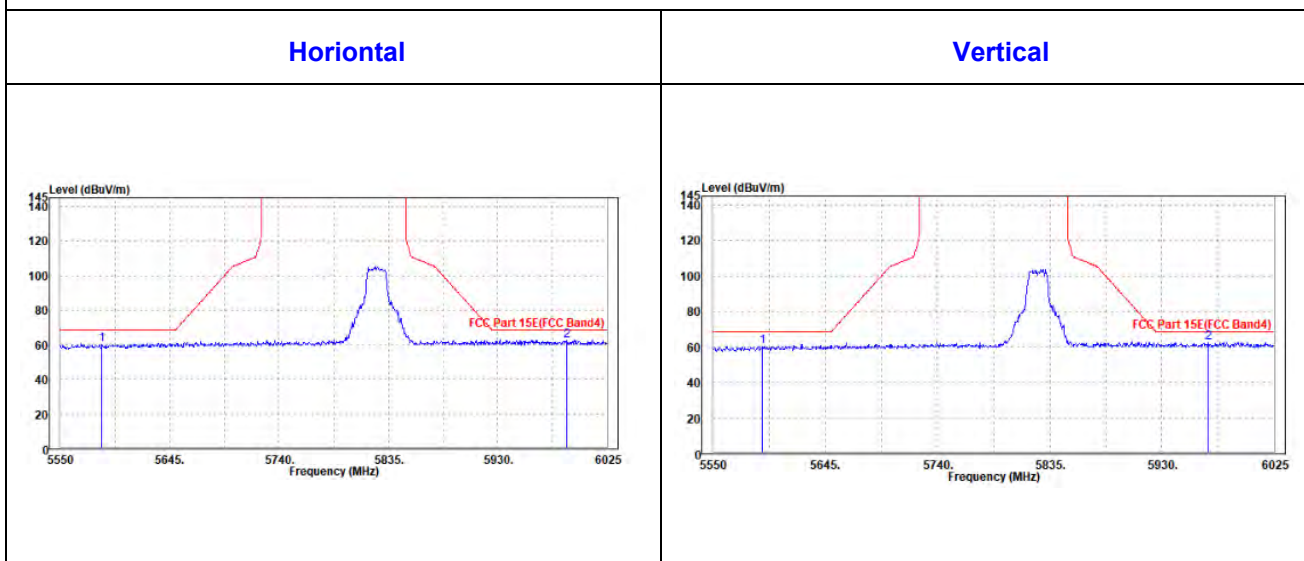


## Oobe DATA

### 802.11a

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |        |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|--------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK |
| 5586.1                                              | 60.3                          | 61.01                   | 68.2              | -7.9           | 34.9                         | 10.62                 | 46.23                    | 100                       | 0                          | Peak   |
| 5989.85                                             | 62.28                         | 60.69                   | 68.2              | -5.92          | 35.39                        | 12.31                 | 46.11                    | 100                       | 0                          | Peak   |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |        |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK |
| 5591.8                                              | 60.1                          | 60.97                   | 68.2              | -8.1           | 34.71                        | 10.64                 | 46.22                    | 200                       | 0                          | Peak   |
| 5968.95                                             | 62.51                         | 61.25                   | 68.2              | -5.69          | 35.16                        | 12.22                 | 46.12                    | 200                       | 0                          | Peak   |

### CH 165





**802.11n (20MHz)**

|                        |                |                              |              |
|------------------------|----------------|------------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 149 | <b>DETECTOR<br/>FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz   |                              | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5745                                                | 106.9                         | 106.71                  | -                 | -              | 35.09                        | 11.28                 | 46.18                    | 155                       | 255                        | Peak    |
| 5745                                                | 99.65                         | 99.46                   | -                 | -              | 35.09                        | 11.28                 | 46.18                    | 155                       | 255                        | Average |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5745                                                | 103.97                        | 103.98                  | -                 | -              | 34.89                        | 11.28                 | 46.18                    | 105                       | 50                         | Peak    |
| 5745                                                | 97.42                         | 97.43                   | -                 | -              | 34.89                        | 11.28                 | 46.18                    | 105                       | 50                         | Average |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
2. 5745MHz: Fundamental frequency.

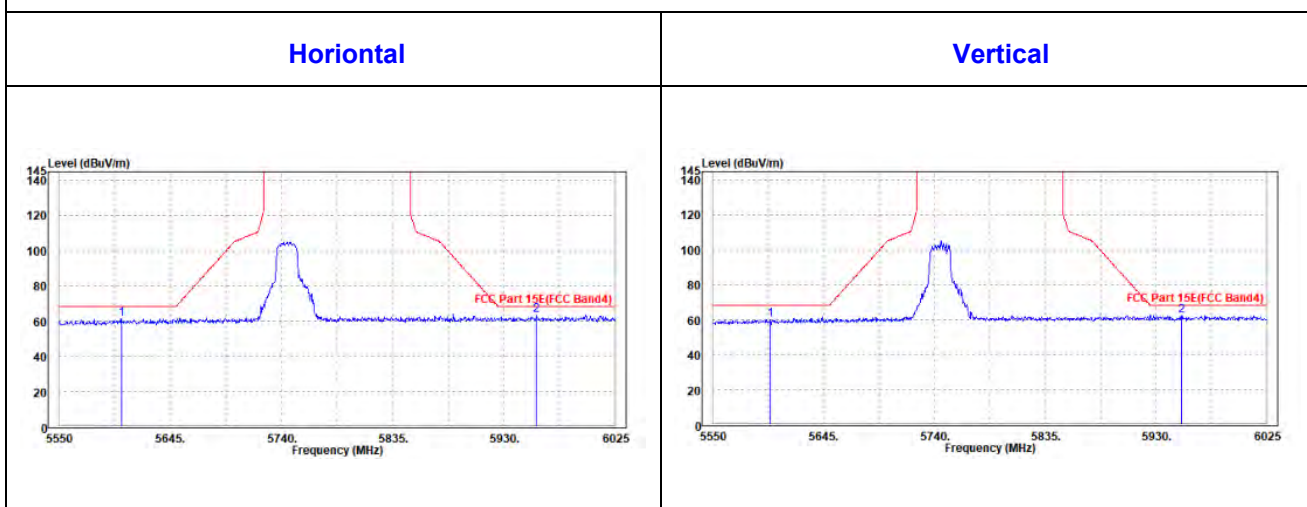


## Oobe DATA

### 802.11n (20MHZ)

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |        |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|--------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK |
| 5603.2                                              | 61.26                         | 61.87                   | 68.2              | -6.94          | 34.92                        | 10.69                 | 46.22                    | 200                       | 0                          | Peak   |
| 5958.025                                            | 63.39                         | 61.99                   | 68.2              | -4.81          | 35.35                        | 12.17                 | 46.12                    | 200                       | 0                          | Peak   |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |        |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK |
| 5598.925                                            | 60.1                          | 60.93                   | 68.2              | -8.1           | 34.72                        | 10.67                 | 46.22                    | 100                       | 0                          | Peak   |
| 5951.85                                             | 62.19                         | 61.02                   | 68.2              | -6.01          | 35.14                        | 12.15                 | 46.12                    | 100                       | 0                          | Peak   |

## CH 149





|                        |                |                              |              |
|------------------------|----------------|------------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 157 | <b>DETECTOR<br/>FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz   |                              | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5785                                                | 106.38                        | 105.96                  | -                 | -              | 35.14                        | 11.45                 | 46.17                    | 155                       | 255                        | Peak    |
| 5785                                                | 99.77                         | 99.35                   | -                 | -              | 35.14                        | 11.45                 | 46.17                    | 155                       | 255                        | Average |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5785                                                | 103.79                        | 103.57                  | -                 | -              | 34.94                        | 11.45                 | 46.17                    | 100                       | 50                         | Peak    |
| 5785                                                | 98.19                         | 97.97                   | -                 | -              | 34.94                        | 11.45                 | 46.17                    | 100                       | 50                         | Average |

**REMARKS:**

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5785MHz: Fundamental frequency.

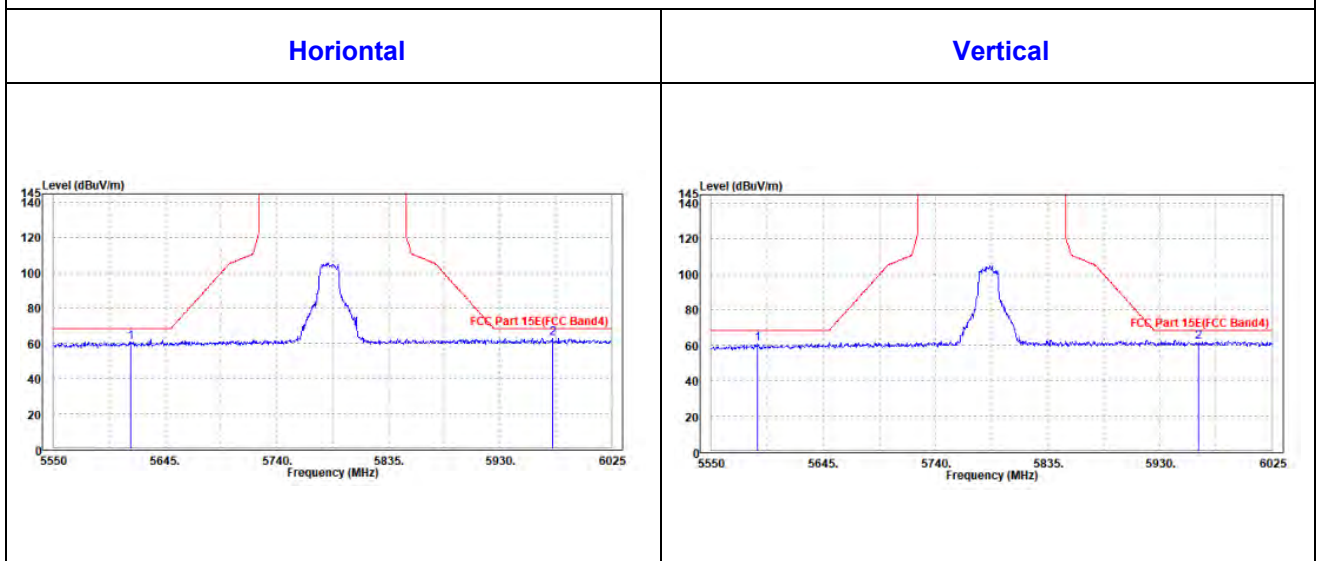


## Oobe Data

802.11n (20MHz)

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                       |                |                              |                       |                          |                           |                            |        |
|-----------------------------------------------------|-------------------------------|-------------------------|-----------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|--------|
| FREQ. (MHz)                                         | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV<br>/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK |
| 5615.55                                             | 60.83                         | 61.37                   | 68.2                  | -7.37          | 34.94                        | 10.74                 | 46.22                    | 100                       | 0                          | Peak   |
| 5974.65                                             | 62.98                         | 61.49                   | 68.2                  | -5.22          | 35.37                        | 12.24                 | 46.12                    | 100                       | 0                          | Peak   |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                       |                |                              |                       |                          |                           |                            |        |
| FREQ. (MHz)                                         | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV<br>/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK |
| 5589.425                                            | 60.47                         | 61.35                   | 68.2                  | -7.73          | 34.71                        | 10.63                 | 46.22                    | 200                       | 0                          | Peak   |
| 5962.775                                            | 61.79                         | 60.56                   | 68.2                  | -6.41          | 35.16                        | 12.19                 | 46.12                    | 200                       | 0                          | Peak   |

## CH 157





|                        |                |                              |              |
|------------------------|----------------|------------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 165 | <b>DETECTOR<br/>FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz   |                              | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5825                                                | 106.16                        | 105.51                  | -                 | -              | 35.19                        | 11.62                 | 46.16                    | 100                       | 255                        | Peak    |
| 5825                                                | 99.62                         | 98.97                   | -                 | -              | 35.19                        | 11.62                 | 46.16                    | 100                       | 255                        | Average |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5825                                                | 103.82                        | 103.37                  | -                 | -              | 34.99                        | 11.62                 | 46.16                    | 100                       | 50                         | Peak    |
| 5825                                                | 97.42                         | 96.97                   | -                 | -              | 34.99                        | 11.62                 | 46.16                    | 100                       | 50                         | Average |

**REMARKS:**

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5825MHz: Fundamental frequency.

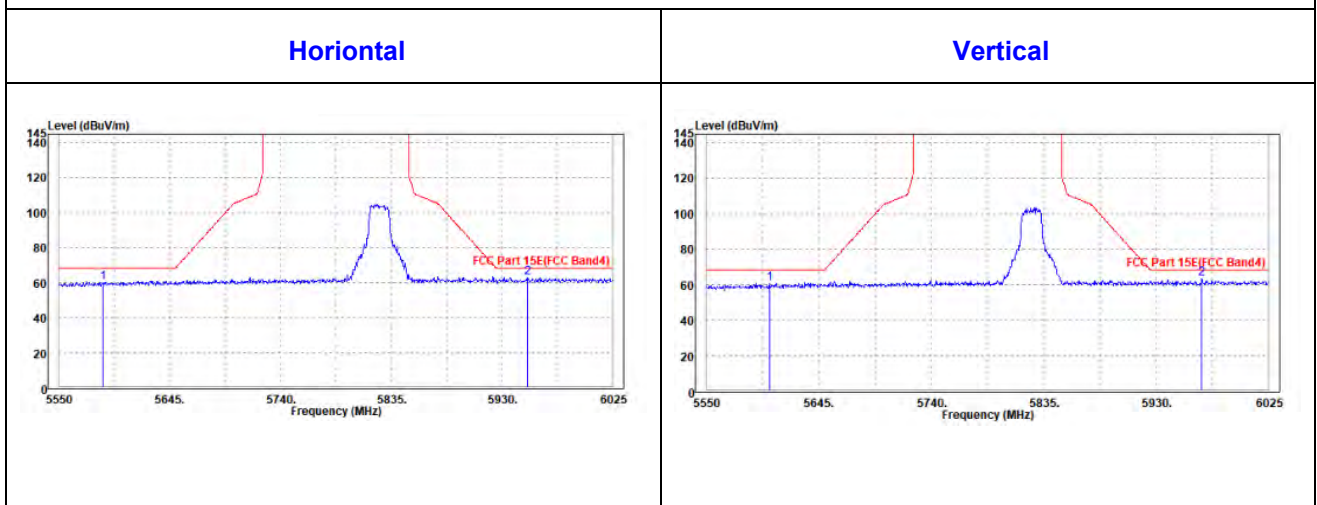


## OOBE DATA

### 802.11n (20MHZ)

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |        |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|--------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK |
| 5587.525                                            | 60.25                         | 60.95                   | 68.2              | -7.95          | 34.91                        | 10.62                 | 46.23                    | 200                       | 0                          | Peak   |
| 5951.85                                             | 62.88                         | 61.51                   | 68.2              | -5.32          | 35.34                        | 12.15                 | 46.12                    | 200                       | 0                          | Peak   |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |        |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK |
| 5603.2                                              | 60.81                         | 61.62                   | 68.2              | -7.39          | 34.72                        | 10.69                 | 46.22                    | 100                       | 0                          | Peak   |
| 5968.475                                            | 63.28                         | 62.02                   | 68.2              | -4.92          | 35.16                        | 12.22                 | 46.12                    | 100                       | 0                          | Peak   |

## CH 165







**802.11n (40MHz)**

|                        |                |                              |              |
|------------------------|----------------|------------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 151 | <b>DETECTOR<br/>FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz   |                              | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5755                                                | 101.52                        | 101.27                  | -                 | -              | 35.11                        | 11.32                 | 46.18                    | 120                       | 255                        | Peak    |
| 5755                                                | 97.3                          | 97.05                   | -                 | -              | 35.11                        | 11.32                 | 46.18                    | 120                       | 255                        | Average |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5755                                                | 98.82                         | 98.77                   | -                 | -              | 34.91                        | 11.32                 | 46.18                    | 100                       | 50                         | Peak    |
| 5755                                                | 94.83                         | 94.78                   | -                 | -              | 34.91                        | 11.32                 | 46.18                    | 100                       | 50                         | Average |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
2. 5755MHz: Fundamental frequency.

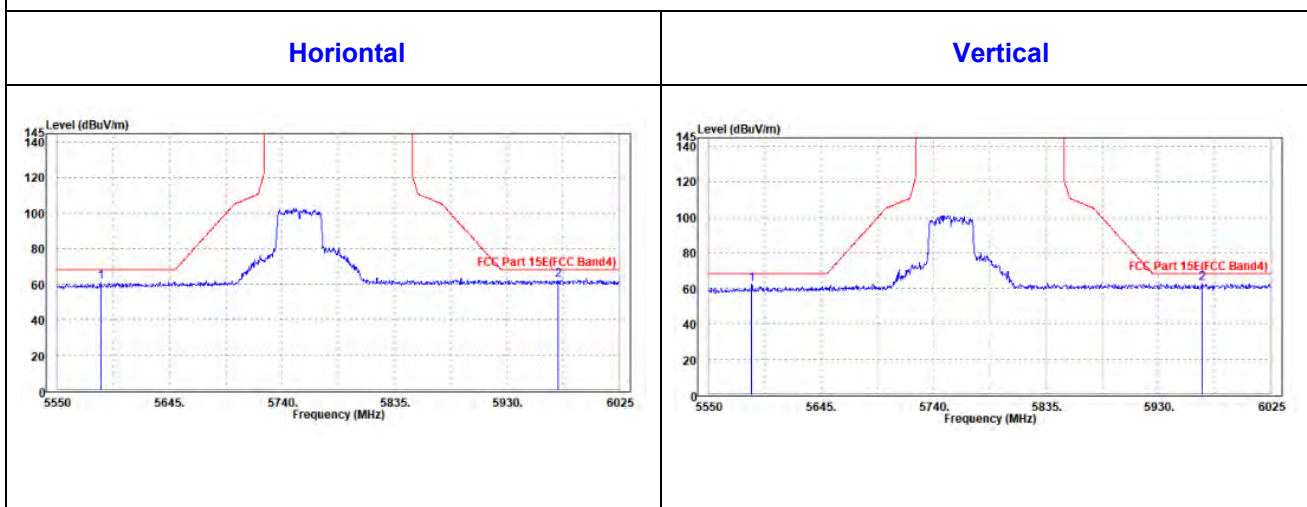


## OOBE DATA

802.11n (40MHZ)

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |        |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|--------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK |
| 5587.05                                             | 61.07                         | 61.78                   | 68.2              | -7.13          | 34.9                         | 10.62                 | 46.23                    | 100                       | 0                          | Peak   |
| 5973.7                                              | 62.34                         | 60.85                   | 68.2              | -5.86          | 35.37                        | 12.24                 | 46.12                    | 100                       | 0                          | Peak   |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |        |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK |
| 5586.1                                              | 62.31                         | 63.22                   | 68.2              | -5.89          | 34.7                         | 10.62                 | 46.23                    | 200                       | 0                          | Peak   |
| 5966.575                                            | 62.67                         | 61.42                   | 68.2              | -5.53          | 35.16                        | 12.21                 | 46.12                    | 200                       | 0                          | Peak   |

## CH 151





|                        |                |                              |              |
|------------------------|----------------|------------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 159 | <b>DETECTOR<br/>FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz   |                              | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5795                                                | 102.16                        | 101.69                  | -                 | -              | 35.15                        | 11.49                 | 46.17                    | 165                       | 255                        | Peak    |
| 5795                                                | 96.95                         | 96.48                   | -                 | -              | 35.15                        | 11.49                 | 46.17                    | 165                       | 255                        | Average |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5795                                                | 102.54                        | 102.27                  | -                 | -              | 34.95                        | 11.49                 | 46.17                    | 100                       | 50                         | Peak    |
| 5795                                                | 94.78                         | 94.51                   | -                 | -              | 34.95                        | 11.49                 | 46.17                    | 100                       | 50                         | Average |

**REMARKS:**

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5795MHz: Fundamental frequency.



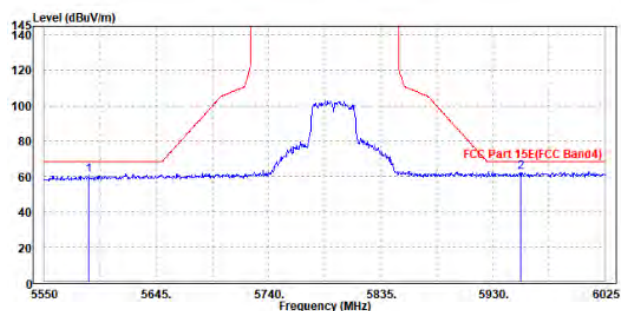
OUBE DATA

802.11n (40MHZ)

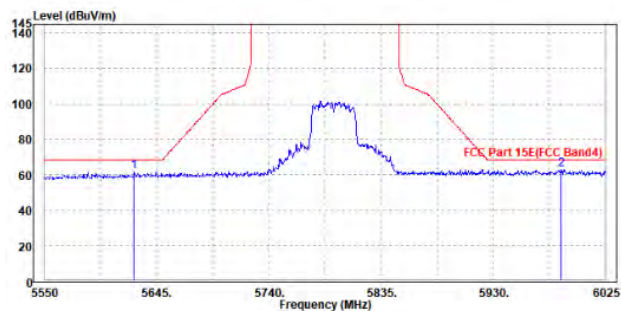
| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |        |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|--------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK |
| 5588                                                | 60.47                         | 61.17                   | 68.2              | -7.73          | 34.91                        | 10.62                 | 46.23                    | 200                       | 0                          | Peak   |
| 5953.75                                             | 62.43                         | 61.05                   | 68.2              | -5.77          | 35.34                        | 12.16                 | 46.12                    | 200                       | 0                          | Peak   |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |        |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK |
| 5626                                                | 61.99                         | 62.67                   | 68.2              | -6.21          | 34.75                        | 10.78                 | 46.21                    | 100                       | 0                          | Peak   |
| 5987.475                                            | 63.05                         | 61.68                   | 68.2              | -5.15          | 35.18                        | 12.3                  | 46.11                    | 100                       | 0                          | Peak   |

CH 159

Horizontal



Vertical





**802.11ac (20MHz)**

|                        |                |                              |              |
|------------------------|----------------|------------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 149 | <b>DETECTOR<br/>FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz   |                              | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5745                                                | 104.85                        | 104.66                  | -                 | -              | 35.09                        | 11.28                 | 46.18                    | 100                       | 255                        | Peak    |
| 5745                                                | 98.26                         | 98.07                   | -                 | -              | 35.09                        | 11.28                 | 46.18                    | 100                       | 255                        | Average |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5745                                                | 102.91                        | 102.92                  | -                 | -              | 34.89                        | 11.28                 | 46.18                    | 100                       | 50                         | Peak    |
| 5745                                                | 96.79                         | 96.8                    | -                 | -              | 34.89                        | 11.28                 | 46.18                    | 100                       | 50                         | Average |

**REMARKS:**

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5745MHz: Fundamental frequency.



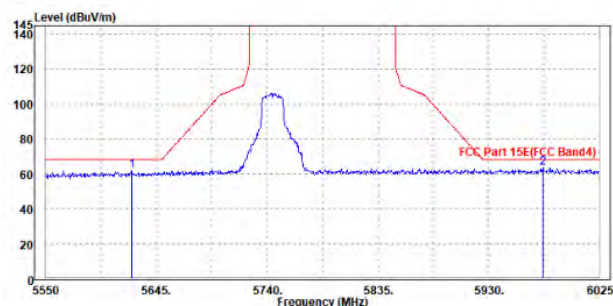
## Oobe Data

### 802.11ac (20MHz)

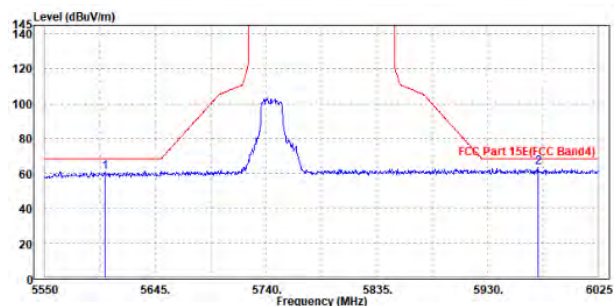
| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |        |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|--------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK |
| 5623.625                                            | 61.54                         | 62.04                   | 68.2              | -6.66          | 34.95                        | 10.77                 | 46.22                    | 100                       | 0                          | Peak   |
| 5976.55                                             | 63.34                         | 61.84                   | 68.2              | -4.86          | 35.37                        | 12.25                 | 46.12                    | 100                       | 0                          | Peak   |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |        |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK |
| 5601.3                                              | 60.79                         | 61.61                   | 68.2              | -7.41          | 34.72                        | 10.68                 | 46.22                    | 200                       | 0                          | Peak   |
| 5973.225                                            | 63.14                         | 61.85                   | 68.2              | -5.06          | 35.17                        | 12.24                 | 46.12                    | 200                       | 0                          | Peak   |

## CH 149

### Horizontal



### Vertical



|                        |                |                              |              |
|------------------------|----------------|------------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 157 | <b>DETECTOR<br/>FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz   |                              | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5785                                                | 106.26                        | 105.84                  | -                 | -              | 35.14                        | 11.45                 | 46.17                    | 195                       | 255                        | Peak    |
| 5785                                                | 99.91                         | 99.49                   | -                 | -              | 35.14                        | 11.45                 | 46.17                    | 195                       | 255                        | Average |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5785                                                | 105.29                        | 105.07                  | -                 | -              | 34.94                        | 11.45                 | 46.17                    | 100                       | 50                         | Peak    |
| 5785                                                | 98.63                         | 98.41                   | -                 | -              | 34.94                        | 11.45                 | 46.17                    | 100                       | 50                         | Average |

**REMARKS:**

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5785MHz: Fundamental frequency.

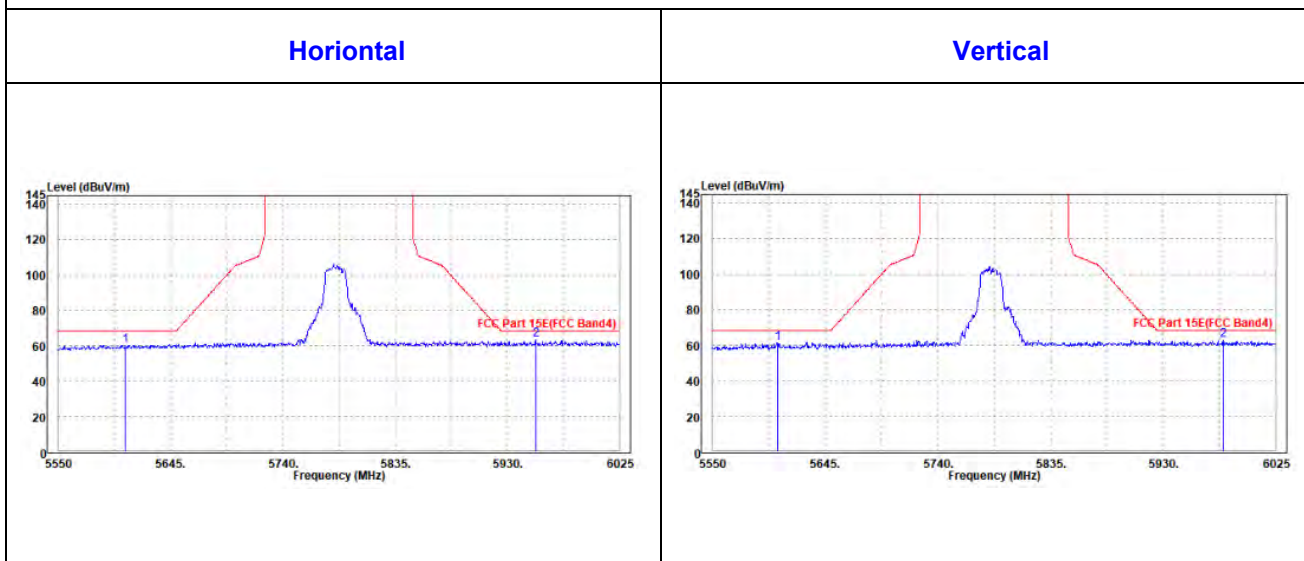


## Oobe Data

### 802.11ac (20MHz)

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                       |                |                              |                       |                          |                           |                            |        |
|-----------------------------------------------------|-------------------------------|-------------------------|-----------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|--------|
| FREQ. (MHz)                                         | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV<br>/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK |
| 5606.525                                            | 60.26                         | 60.85                   | 68.2                  | -7.94          | 34.93                        | 10.7                  | 46.22                    | 200                       | 0                          | Peak   |
| 5954.225                                            | 63.31                         | 61.92                   | 68.2                  | -4.89          | 35.35                        | 12.16                 | 46.12                    | 200                       | 0                          | Peak   |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                       |                |                              |                       |                          |                           |                            |        |
| FREQ. (MHz)                                         | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV<br>/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK |
| 5604.625                                            | 61.39                         | 62.19                   | 68.2                  | -6.81          | 34.73                        | 10.69                 | 46.22                    | 100                       | 0                          | Peak   |
| 5980.825                                            | 62.69                         | 61.36                   | 68.2                  | -5.51          | 35.18                        | 12.27                 | 46.12                    | 100                       | 0                          | Peak   |

## CH 157







|                        |                |                              |              |
|------------------------|----------------|------------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 165 | <b>DETECTOR<br/>FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz   |                              | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5825                                                | 105.54                        | 104.89                  | -                 | -              | 35.19                        | 11.62                 | 46.16                    | 165                       | 255                        | Peak    |
| 5825                                                | 99.24                         | 98.59                   | -                 | -              | 35.19                        | 11.62                 | 46.16                    | 165                       | 255                        | Average |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5825                                                | 104.41                        | 103.96                  | -                 | -              | 34.99                        | 11.62                 | 46.16                    | 100                       | 50                         | Peak    |
| 5825                                                | 98.03                         | 97.58                   | -                 | -              | 34.99                        | 11.62                 | 46.16                    | 100                       | 50                         | Average |

**REMARKS:**

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5825MHz: Fundamental frequency.



**BUREAU  
VERITAS**

Test Report No.: W7L-P21080006RF14

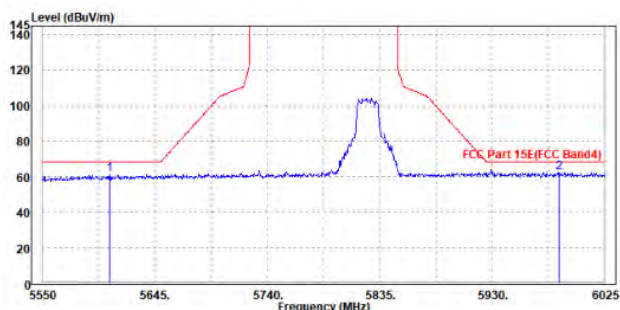
## Oobe Data

### 802.11ac (20MHz)

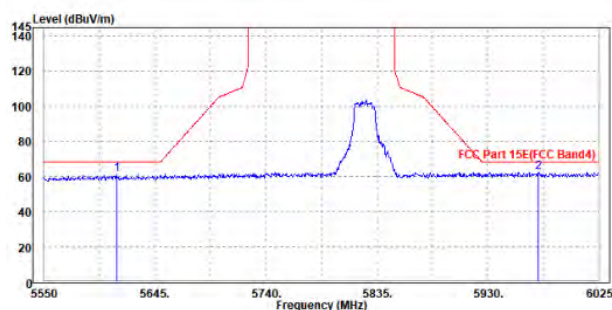
| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |        |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|--------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK |
| 5606.525                                            | 61.09                         | 61.68                   | 68.2              | -7.11          | 34.93                        | 10.7                  | 46.22                    | 100                       | 0                          | Peak   |
| 5986.525                                            | 62.55                         | 60.99                   | 68.2              | -5.65          | 35.38                        | 12.29                 | 46.11                    | 100                       | 0                          | Peak   |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |        |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK |
| 5612.225                                            | 61.05                         | 61.81                   | 68.2              | -7.15          | 34.73                        | 10.73                 | 46.22                    | 200                       | 0                          | Peak   |
| 5973.7                                              | 62.4                          | 61.11                   | 68.2              | -5.8           | 35.17                        | 12.24                 | 46.12                    | 200                       | 0                          | Peak   |

## CH 165

### Horizontal



### Vertical





**802.11ac (40MHz)**

|                        |                |                              |              |
|------------------------|----------------|------------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 151 | <b>DETECTOR<br/>FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz   |                              | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5755                                                | 100.46                        | 100.21                  | -                 | -              | 35.11                        | 11.32                 | 46.18                    | 180                       | 255                        | Peak    |
| 5755                                                | 96.54                         | 96.29                   | -                 | -              | 35.11                        | 11.32                 | 46.18                    | 180                       | 255                        | Average |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5755                                                | 98.93                         | 98.88                   | -                 | -              | 34.91                        | 11.32                 | 46.18                    | 100                       | 50                         | Peak    |
| 5755                                                | 93.58                         | 93.53                   | -                 | -              | 34.91                        | 11.32                 | 46.18                    | 100                       | 50                         | Average |

**REMARKS:**

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
2. 5755MHz: Fundamental frequency.



**BUREAU  
VERITAS**

Test Report No.: W7L-P21080006RF14

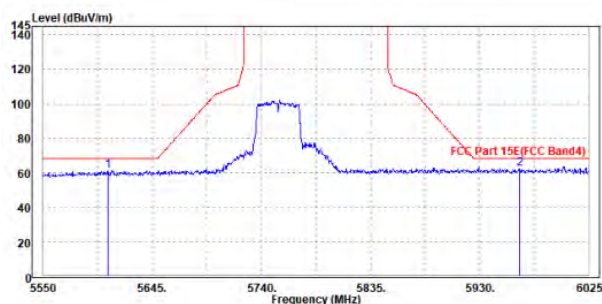
## Oobe Data

### 802.11ac (40MHz)

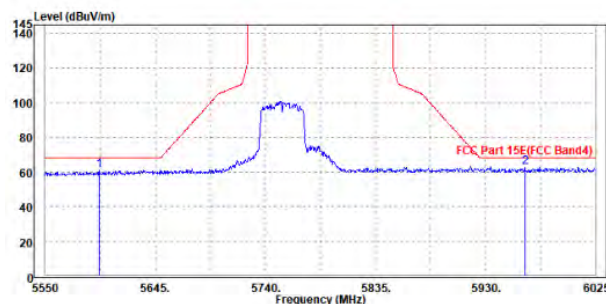
| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |        |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|--------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK |
| 5606.525                                            | 61.03                         | 61.62                   | 68.2              | -7.17          | 34.93                        | 10.7                  | 46.22                    | 200                       | 0                          | Peak   |
| 5965.15                                             | 62.26                         | 60.82                   | 68.2              | -5.94          | 35.36                        | 12.2                  | 46.12                    | 200                       | 0                          | Peak   |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |        |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK |
| 5596.55                                             | 61.18                         | 62.02                   | 68.2              | -7.02          | 34.72                        | 10.66                 | 46.22                    | 100                       | 0                          | Peak   |
| 5964.2                                              | 62.74                         | 61.5                    | 68.2              | -5.46          | 35.16                        | 12.2                  | 46.12                    | 100                       | 0                          | Peak   |

## CH 151

### Horizontal



### Vertical





|                        |                |                              |              |
|------------------------|----------------|------------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 159 | <b>DETECTOR<br/>FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz   |                              | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5795                                                | 101.96                        | 101.49                  | -                 | -              | 35.15                        | 11.49                 | 46.17                    | 180                       | 255                        | Peak    |
| 5795                                                | 96.95                         | 96.48                   | -                 | -              | 35.15                        | 11.49                 | 46.17                    | 180                       | 255                        | Average |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5795                                                | 99.87                         | 99.6                    | -                 | -              | 34.95                        | 11.49                 | 46.17                    | 100                       | 50                         | Peak    |
| 5795                                                | 95.07                         | 94.8                    | -                 | -              | 34.95                        | 11.49                 | 46.17                    | 100                       | 50                         | Average |

**REMARKS:**

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5795MHz: Fundamental frequency.

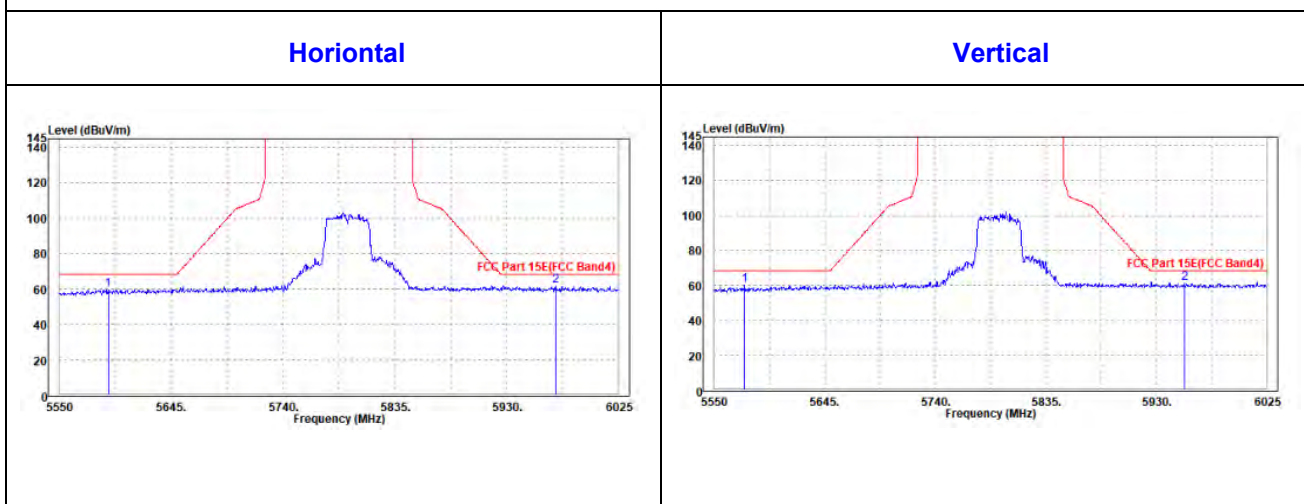


## Oobe Data

### 802.11ac (40MHz)

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |        |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|--------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK |
| 5591.325                                            | 59.76                         | 60.43                   | 68.2              | -8.44          | 34.91                        | 10.64                 | 46.22                    | 100                       | 0                          | Peak   |
| 5971.8                                              | 61.61                         | 60.13                   | 68.2              | -6.59          | 35.37                        | 12.23                 | 46.12                    | 100                       | 0                          | Peak   |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |        |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK |
| 5576.125                                            | 59.89                         | 60.86                   | 68.2              | -8.31          | 34.69                        | 10.57                 | 46.23                    | 200                       | 0                          | Peak   |
| 5954.7                                              | 60.95                         | 59.76                   | 68.2              | -7.25          | 35.15                        | 12.16                 | 46.12                    | 200                       | 0                          | Peak   |

## CH 159





802.11ac (80MHz)

|                        |                |                              |              |
|------------------------|----------------|------------------------------|--------------|
| <b>CHANNEL</b>         | TX Channel 155 | <b>DETECTOR<br/>FUNCTION</b> | Peak (PK)    |
| <b>FREQUENCY RANGE</b> | 1GHz ~ 40GHz   |                              | Average (AV) |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|---------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5775                                                | 96.81                         | 96.44                   | -                 | -              | 35.13                        | 11.41                 | 46.17                    | 100                       | 255                        | Peak    |
| 5775                                                | 93.5                          | 93.13                   | -                 | -              | 35.13                        | 11.41                 | 46.17                    | 100                       | 255                        | Average |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |         |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK  |
| 5775                                                | 95.35                         | 95.18                   | -                 | -              | 34.93                        | 11.41                 | 46.17                    | 100                       | 50                         | Peak    |
| 5775                                                | 91.09                         | 90.92                   | -                 | -              | 34.93                        | 11.41                 | 46.17                    | 100                       | 50                         | Average |

**REMARKS:**

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor  
Margin value = Emission level – Limit value.
- 5775MHz: Fundamental frequency.



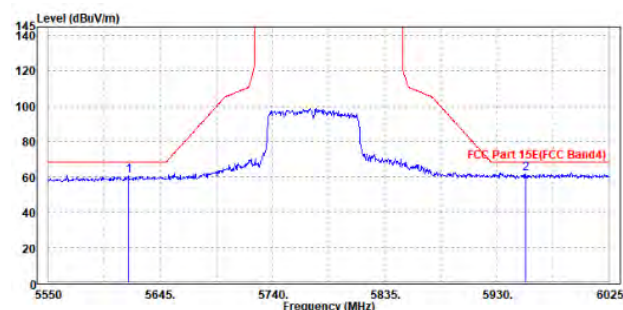
## Oobe Data

### 802.11ac (80MHz)

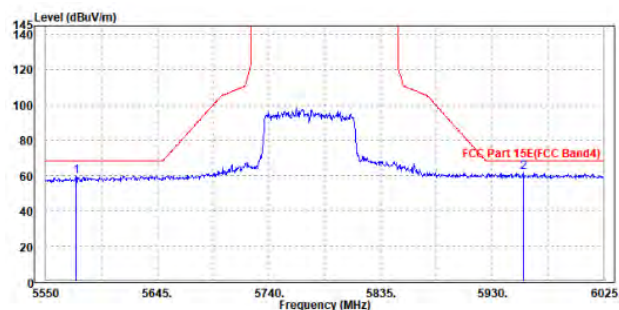
| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M |                               |                         |                   |                |                              |                       |                          |                           |                            |        |
|-----------------------------------------------------|-------------------------------|-------------------------|-------------------|----------------|------------------------------|-----------------------|--------------------------|---------------------------|----------------------------|--------|
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK |
| 5617.925                                            | 60.68                         | 61.21                   | 68.2              | -7.52          | 34.94                        | 10.75                 | 46.22                    | 200                       | 0                          | Peak   |
| 5954.225                                            | 61.66                         | 60.27                   | 68.2              | -6.54          | 35.35                        | 12.16                 | 46.12                    | 200                       | 0                          | Peak   |
| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M   |                               |                         |                   |                |                              |                       |                          |                           |                            |        |
| FREQ.<br>(MHz)                                      | EMISSION<br>LEVEL<br>(dBuV/m) | READ<br>LEVEL<br>(dBuV) | LIMIT<br>(dBuV/m) | MARGIN<br>(dB) | ANTENNA<br>FACTOR<br>(dB /m) | CABLE<br>LOSS<br>(dB) | PREAMP<br>FACTOR<br>(dB) | ANTENNA<br>HEIGHT<br>(cm) | TABLE<br>ANGLE<br>(Degree) | REMARK |
| 5575.65                                             | 59.44                         | 60.41                   | 68.2              | -8.76          | 34.69                        | 10.57                 | 46.23                    | 100                       | 0                          | Peak   |
| 5956.6                                              | 61.5                          | 60.3                    | 68.2              | -6.7           | 35.15                        | 12.17                 | 46.12                    | 100                       | 0                          | Peak   |

## CH 155

### Horizontal



### Vertical





## 3.2 OUT OF BAND EMISSION MEASUREMENT

### 3.2.1 LIMITS OF OUT OF BAND EMISSION MEASUREMENT

| OUT OF THE<br>RESTRICTED<br>BANDS | APPLICABLE TO | EIRP LIMIT<br>(dBm/MHz) |
|-----------------------------------|---------------|-------------------------|
|                                   | 15.407(b)(1)  | -27                     |
|                                   | 15.407(b)(2)  |                         |
|                                   | 15.407(b)(3)  |                         |
|                                   | 15.407(b)(4)  | See note                |

**NOTE:**

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

(1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

(2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

(3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

(4) For transmitters operating in the 5.725-5.85 GHz band:

(i) All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

### 3.2.2 TEST INSTRUMENTS

| Equipment           | Manufacturer | Model No.    | Serial No. | Last Cal.  | Next Cal.  |
|---------------------|--------------|--------------|------------|------------|------------|
| 10dB Attenuator     | JFW/USA      | 50HF-010-SMA | 1505       | Jun. 03,21 | Jun. 02,22 |
| EXA Signal Analyzer | KEYSIGHT     | N9010A-544   | MY54510355 | Jun. 03,21 | Jun. 02,22 |

**NOTE:**

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.
2. The test was performed in RF OVEN ROOM.
3. The FCC Site Registration No. is 525120; The Designation No. is CN1171.

### 3.2.3 TEST PROCEDURES

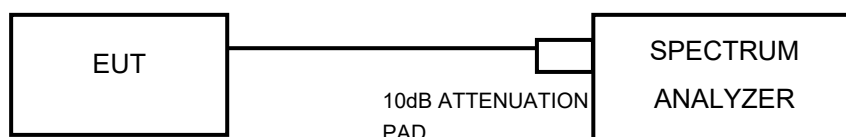
- a. Check the calibration of the measurement instrument using either an internal calibrator or a known signal from an external generator.
- b. The resolution bandwidth is set to 1MHzThe Video bandwidth is set to  $\geq 1\text{MHz}$ , report the peak value out of operating band.
- c. Repeat above procedures until all frequencies measured were complete.

**NOTE:** All modes of operation were investigated and the worst-case emissions are reported, antenna gain was added into the test result.

### 3.2.4 DEVIATION FROM TEST STANDARD

No deviation.

### 3.2.5 TEST SETUP



### 3.2.6 EUT OPERATING CONDITION

- a. Set the EUT under full load condition and placed them on a testing table.
- b. Set the transmitter part of EUT under transmission condition continuously at specific channel frequency.
- c. The necessary accessories enable the EUT in full functions.

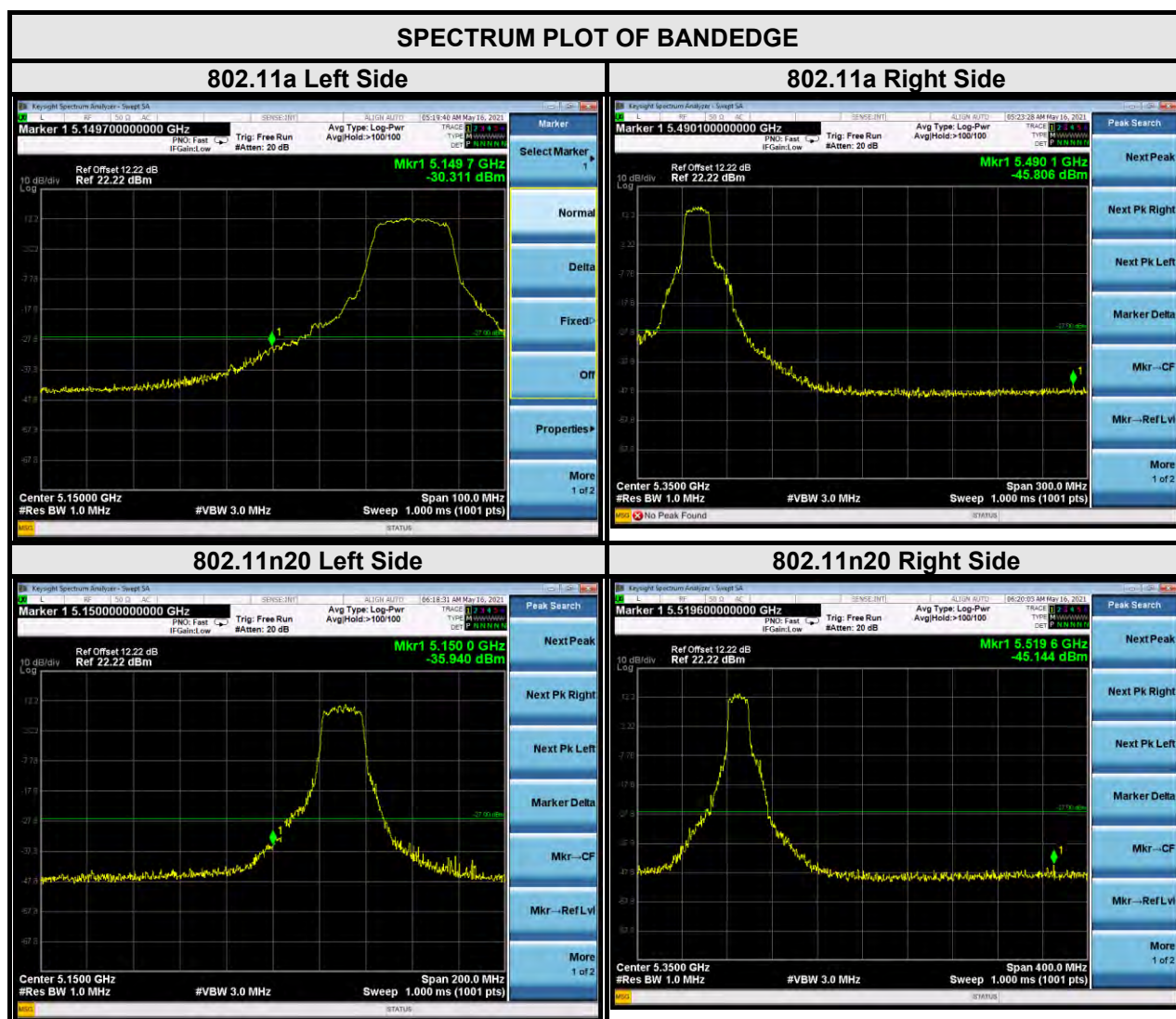


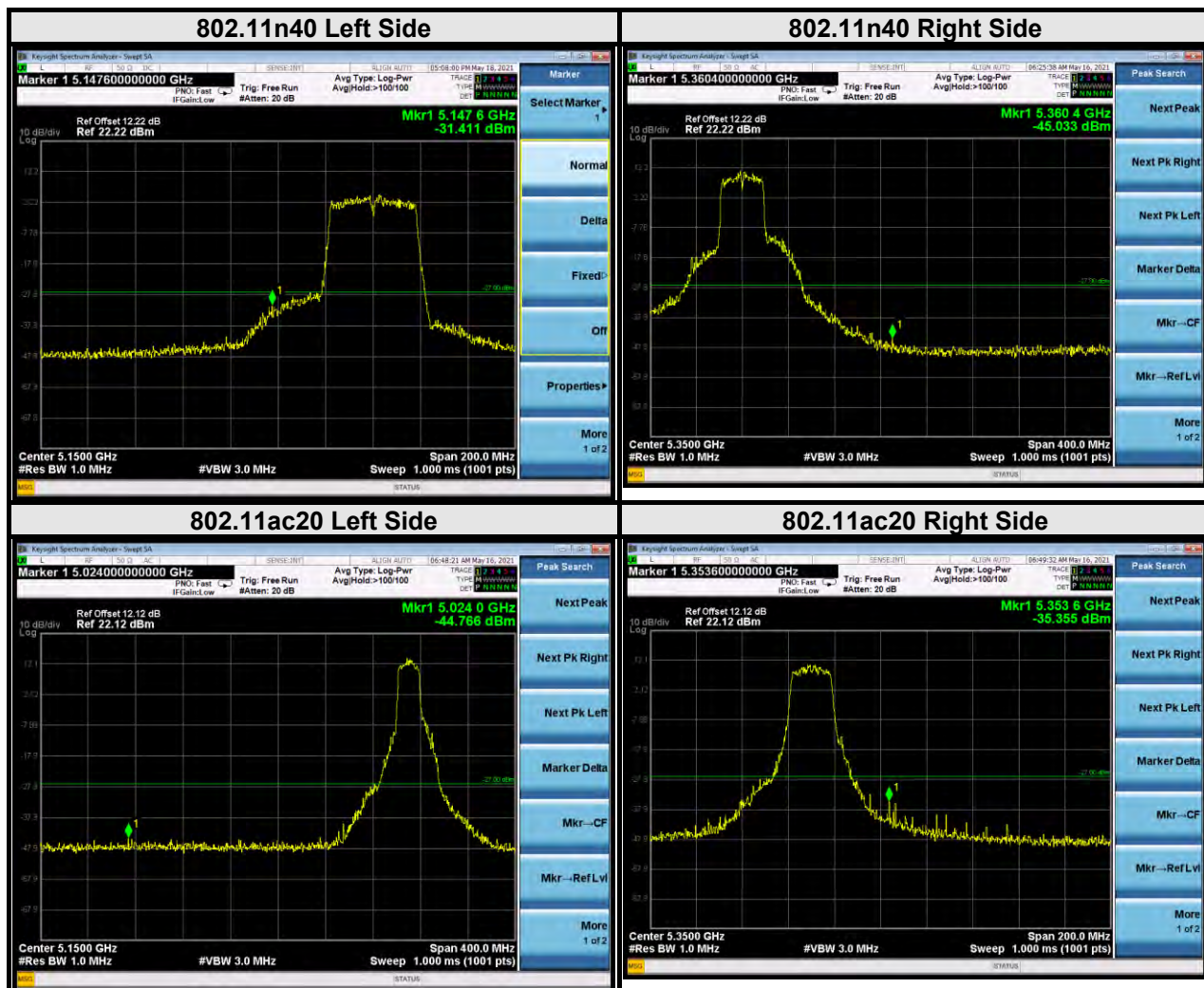
BUREAU  
VERITAS

Test Report No.: W7L-P21080006RF14

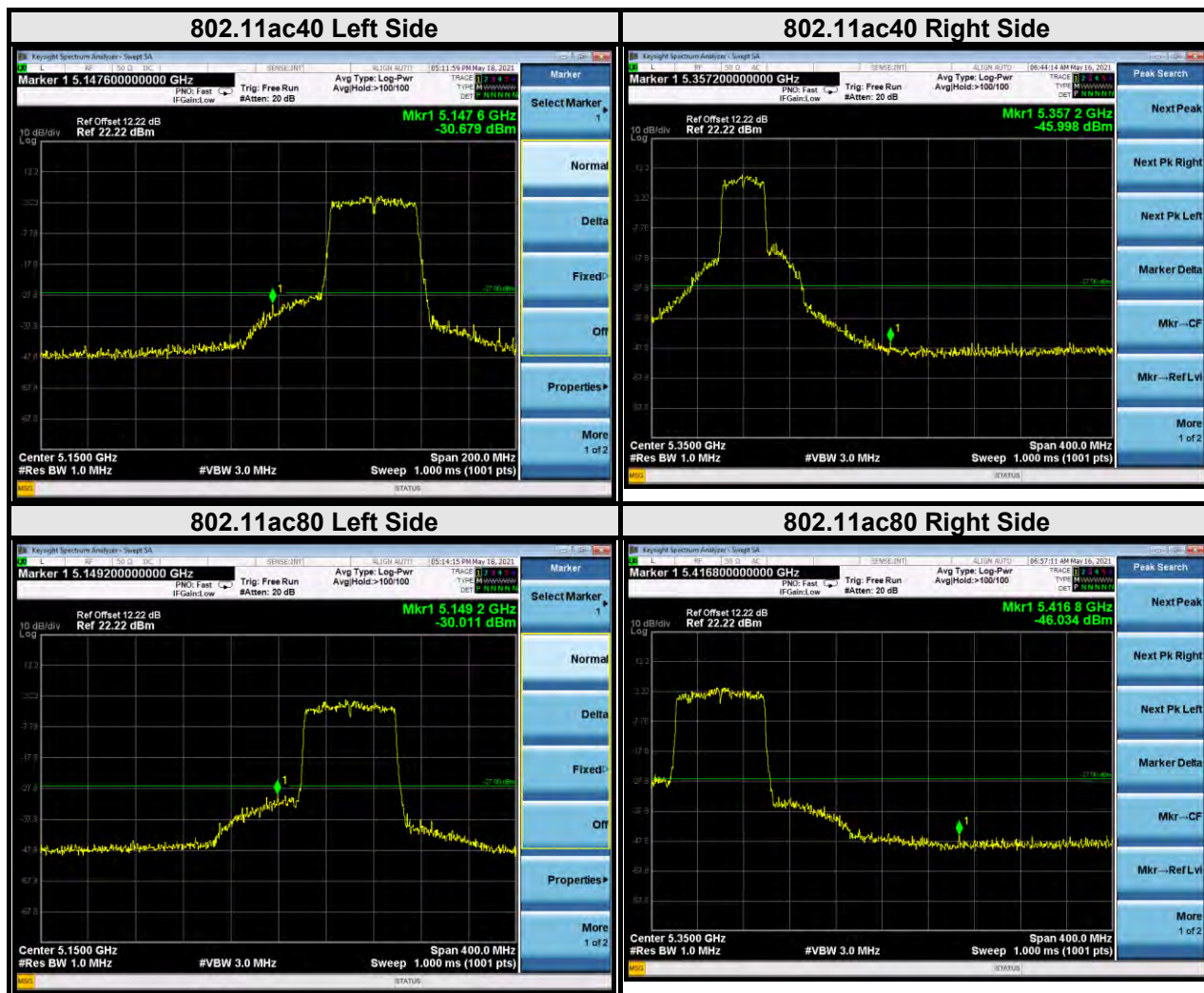
### 3.2.7 TEST RESULTS

For U-NII-1:







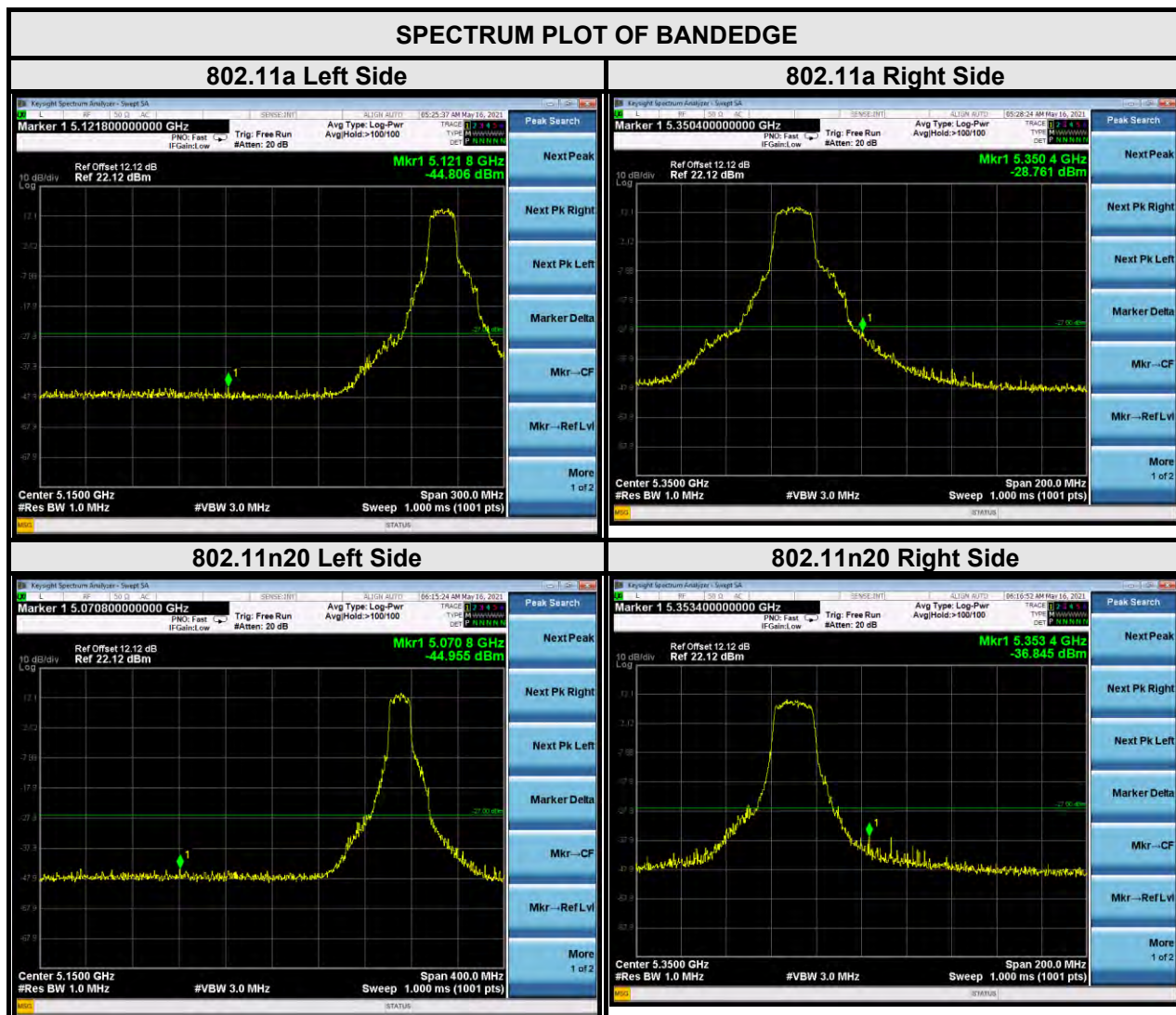


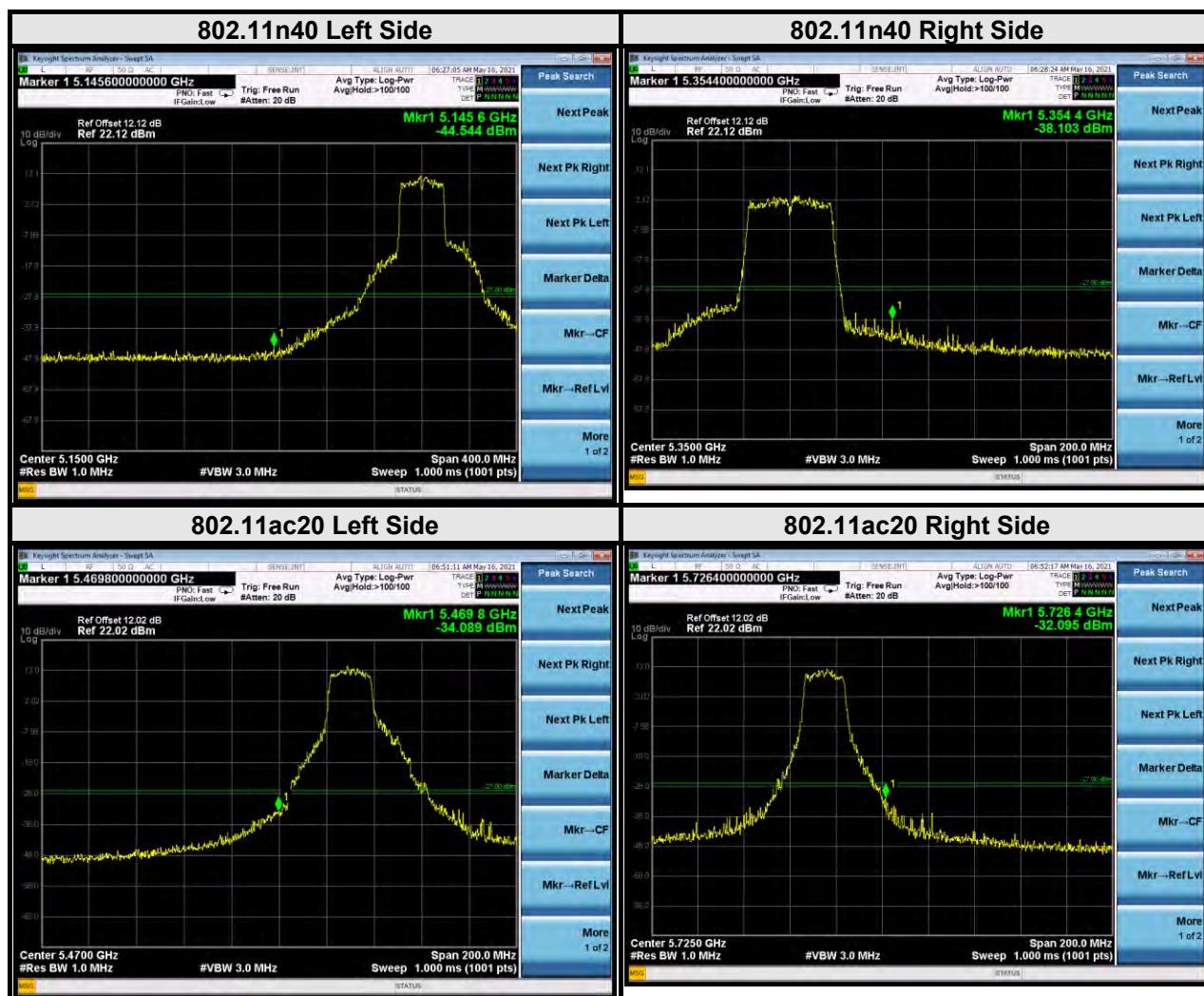


BUREAU  
VERITAS

Test Report No.: W7L-P21080006RF14

For U-NII-2A:



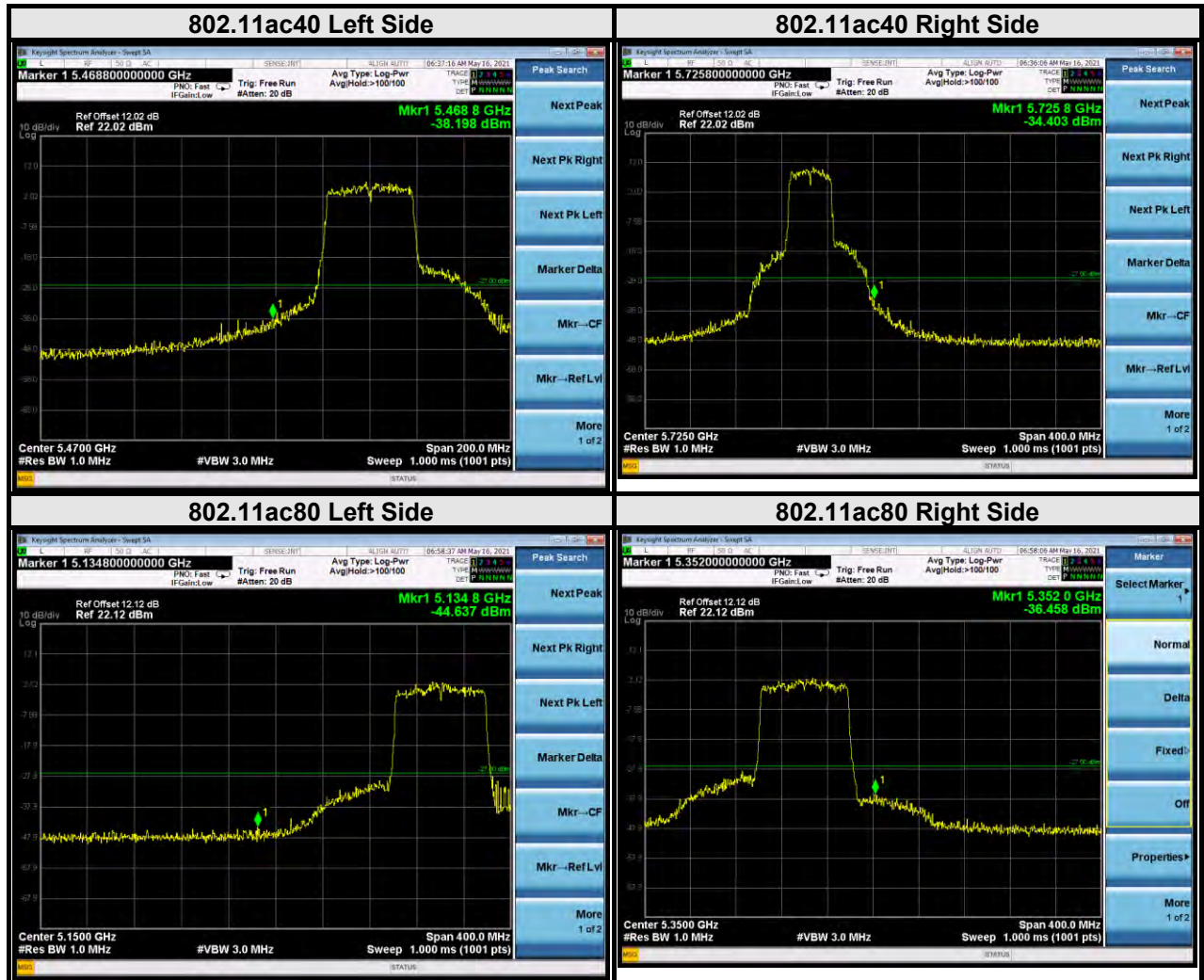






BUREAU  
VERITAS

Test Report No.: W7L-P21080006RF14







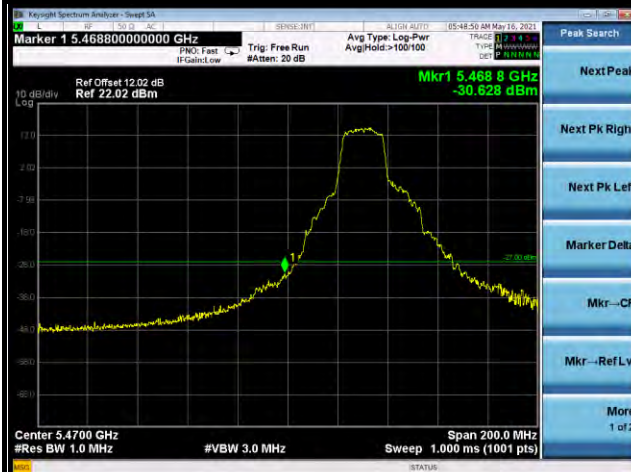
BUREAU  
VERITAS

Test Report No.: W7L-P21080006RF14

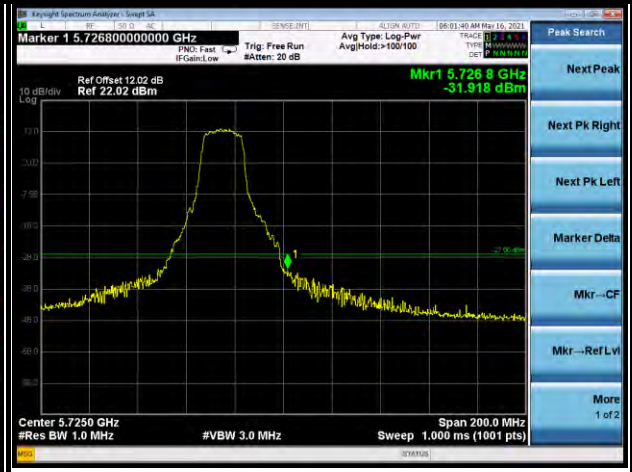
For U-NII-2C:

### SPECTRUM PLOT OF BANDEDGE

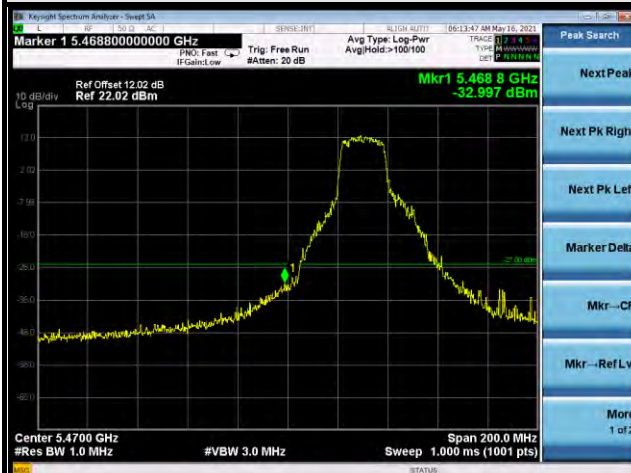
802.11a Left Side



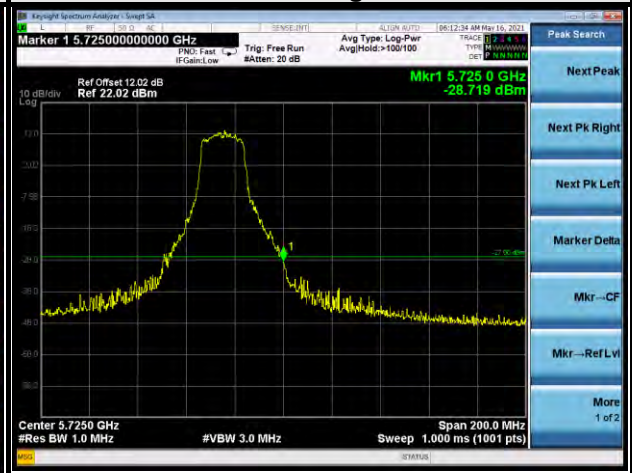
802.11a Right Side

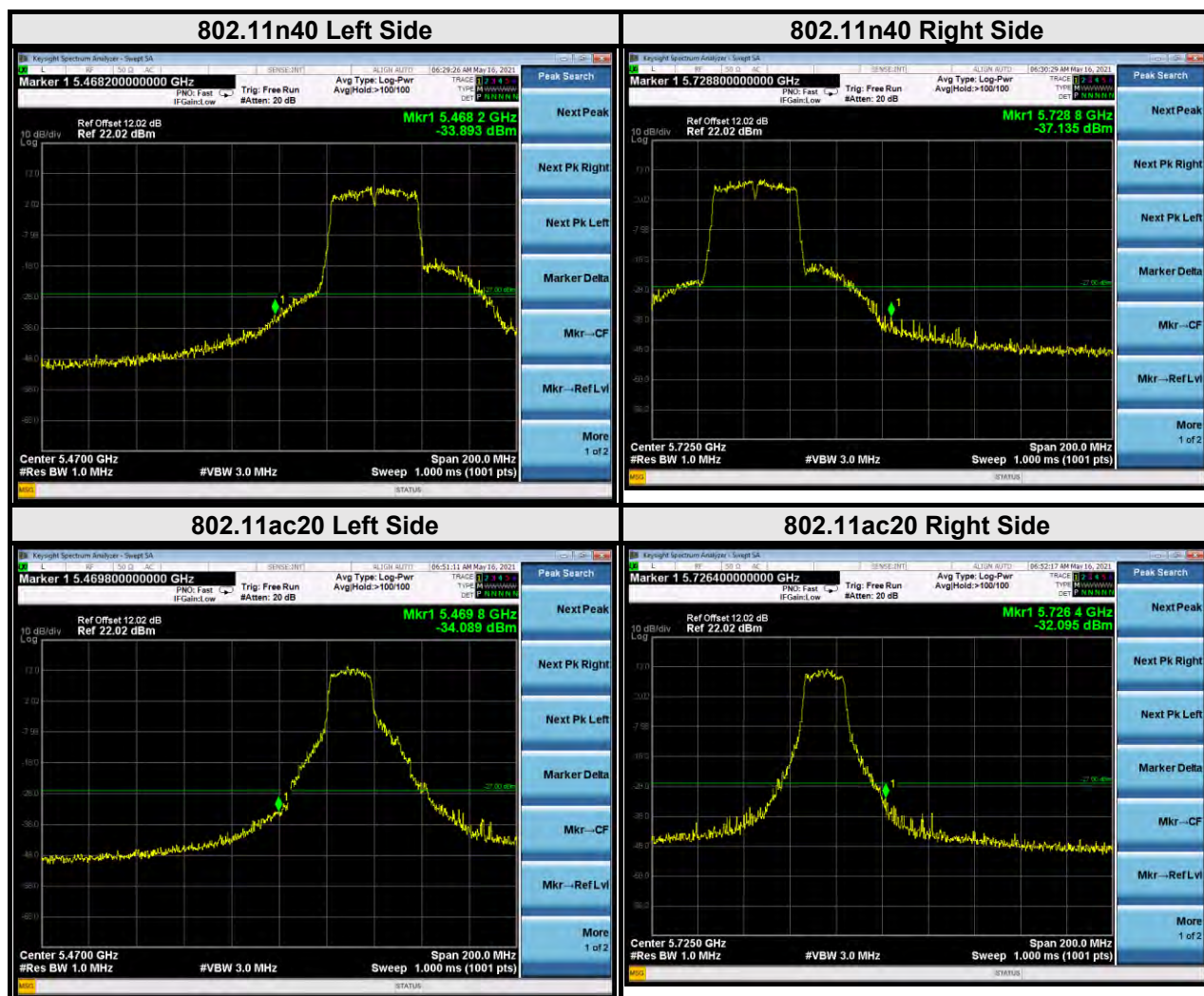


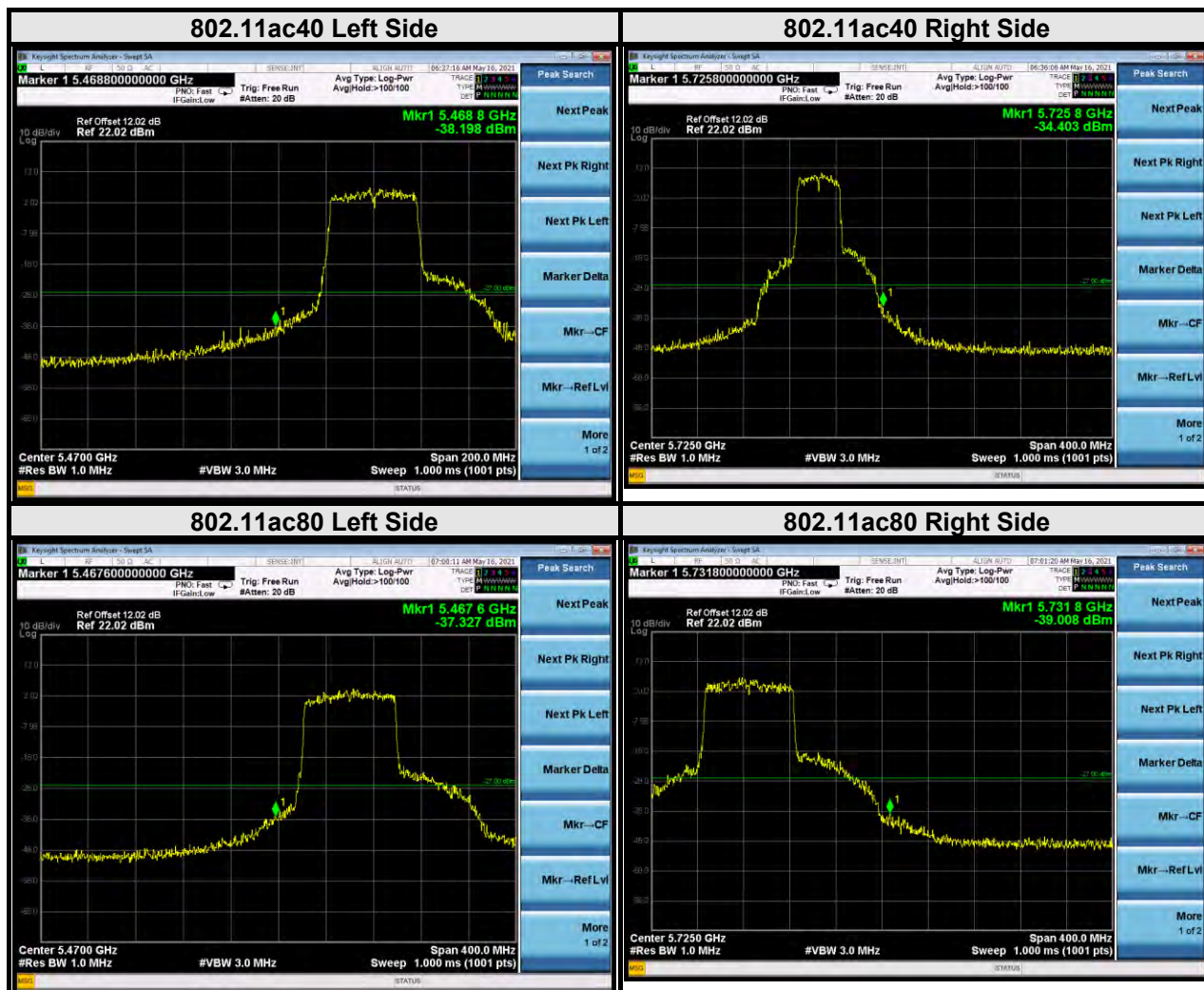
802.11n20 Left Side



802.11n20 Right Side







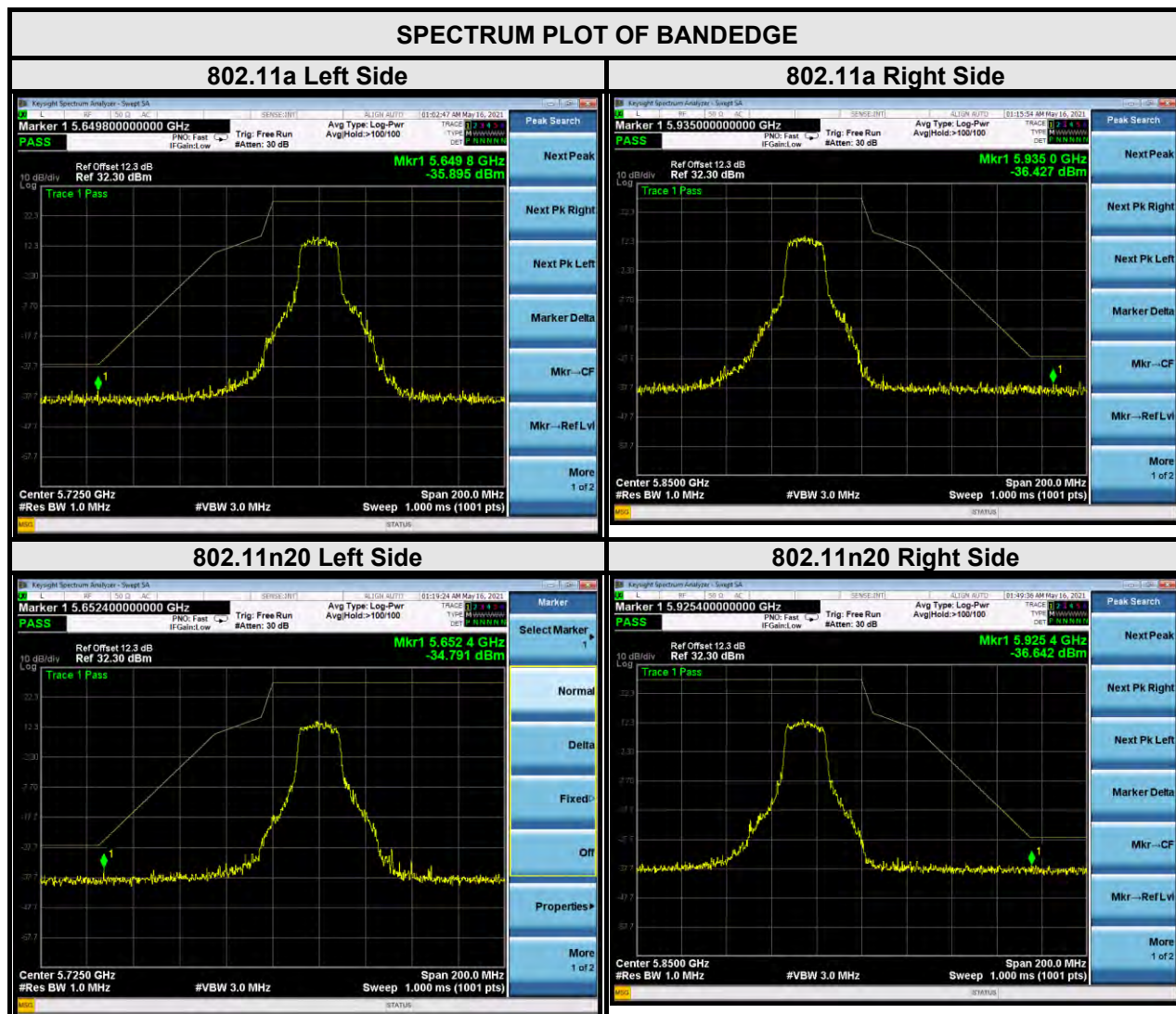




BUREAU  
VERITAS

Test Report No.: W7L-P21080006RF14

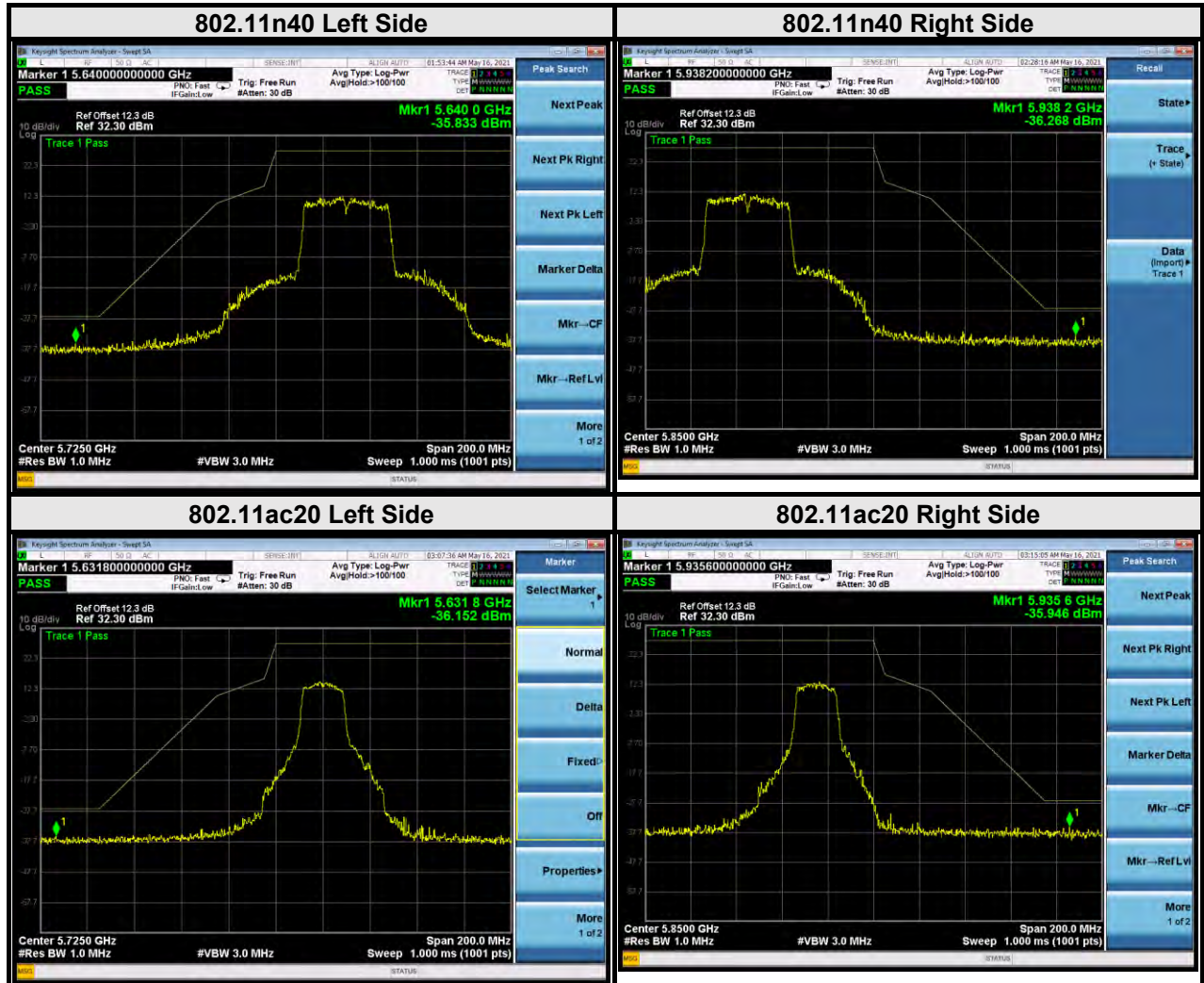
For U-NII-3:





BUREAU  
VERITAS

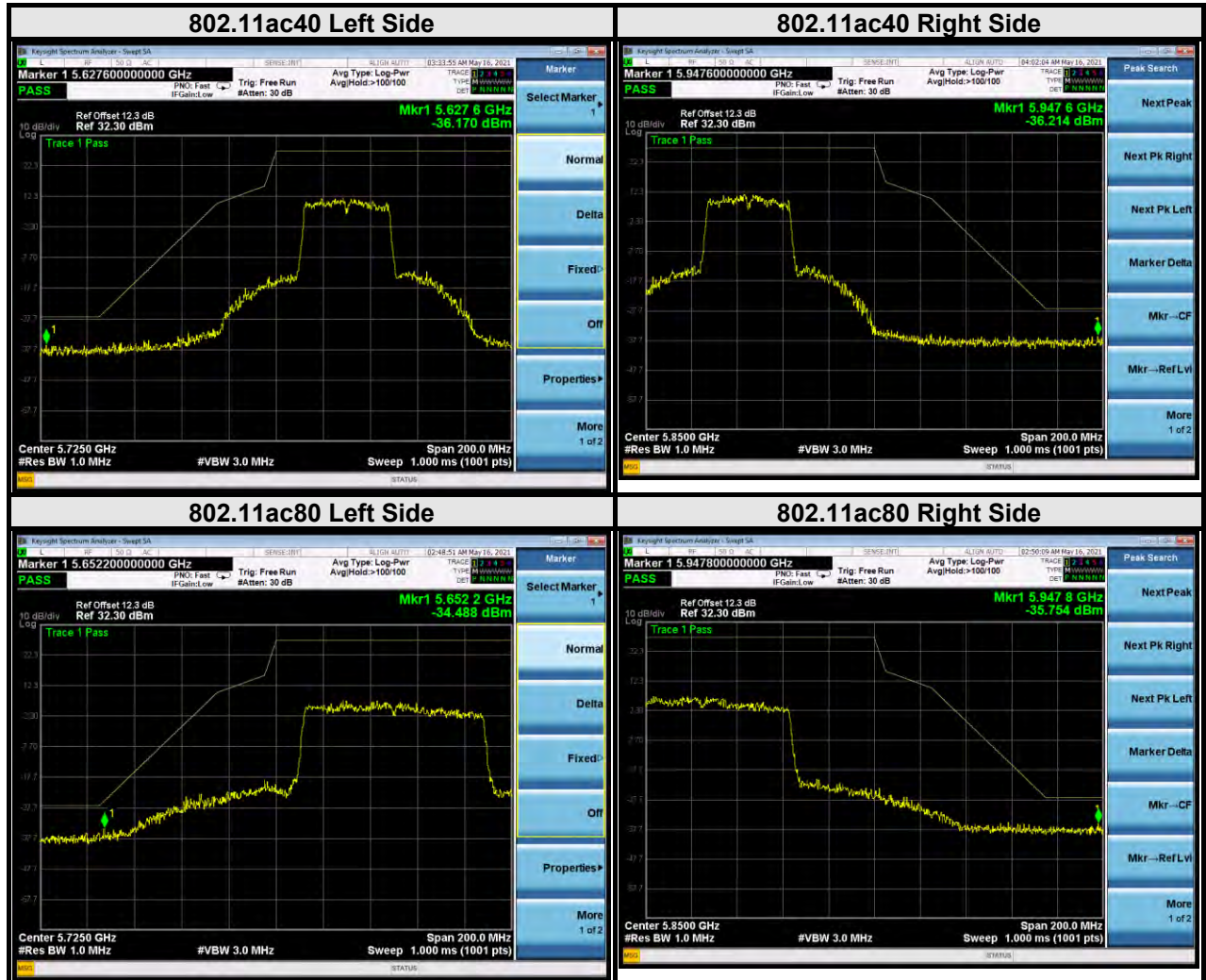
Test Report No.: W7L-P21080006RF14





BUREAU  
VERITAS

Test Report No.: W7L-P21080006RF14





### 3.3 CONDUCTED EMISSION MEASUREMENT

#### 3.3.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

| FREQUENCY OF EMISSION (MHz) | CONDUCTED LIMIT (dB $\mu$ V) |          |
|-----------------------------|------------------------------|----------|
|                             | Quasi-peak                   | Average  |
| 0.15 ~ 0.5                  | 66 to 56                     | 56 to 46 |
| 0.5 ~ 5                     | 56                           | 46       |
| 5 ~ 30                      | 60                           | 50       |

- NOTE:**
1. The lower limit shall apply at the transition frequencies.
  2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.
  3. All emanations from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

#### 3.3.2 TEST INSTRUMENTS

| Equipment           | Manufacturer  | Model No. | Serial No. | Last Cal.  | Next Cal.  |
|---------------------|---------------|-----------|------------|------------|------------|
| EMI Test Receiver   | Rohde&Schwarz | ESR3      | 101900     | Mar. 03,21 | Mar. 02,22 |
| EMC32 test software | Rohde&Schwarz | EMC32     | NA         | NA         | NA         |
| LISN network        | Rohde&Schwarz | ENV216    | 101922     | Feb. 22,21 | Feb. 21,22 |

**NOTE:**

1. The test was performed in CE shielded room.
2. The calibration interval of the above test instruments is 12 months. And the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.

#### 3.3.3 TEST PROCEDURES

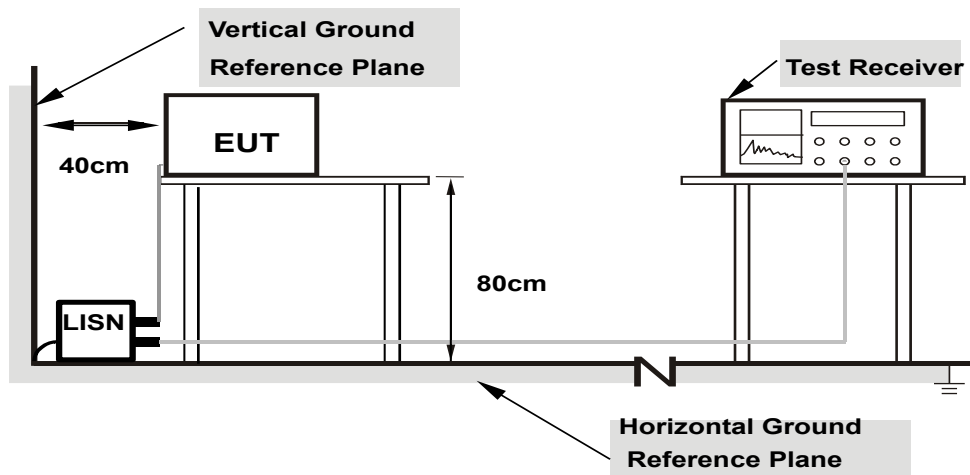
- a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- c. The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) was not recorded.

**NOTE:** All modes of operation were investigated and the worst-case emissions are reported.

### 3.3.4 DEVIATION FROM TEST STANDARD

No deviation.

### 3.3.5 TEST SETUP



**Note: 1.Support units were connected to second LISN.  
2.Both of LISNs (AMN) are 80 cm from EUT and at least 80  
from other units and other metal planes**

For the actual test configuration, please refer to the attached file (Test Setup Photo).

### 3.3.6 EUT OPERATING CONDITIONS

Same as 3.1.6.



### 3.3.7 TEST RESULTS

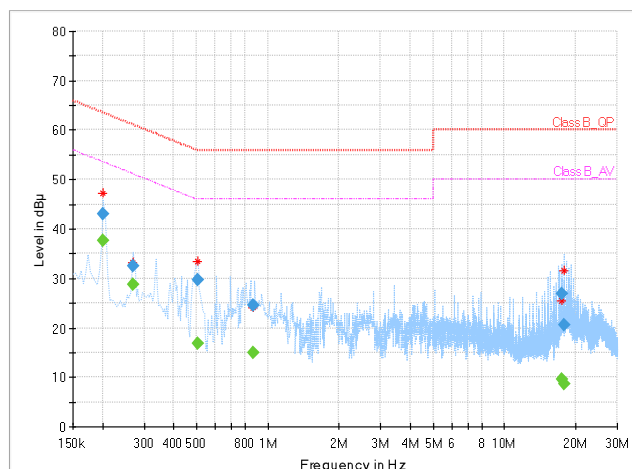
#### CONDUCTED WORST-CASE DATA:

|                 |                |                                          |                                       |
|-----------------|----------------|------------------------------------------|---------------------------------------|
| Frequency Range | 150KHz ~ 30MHz | Detector Function & Resolution Bandwidth | Quasi-Peak (QP) / Average (AV), 9 kHz |
| Input Power     | 120Vac, 60Hz   | Environmental Conditions                 | 24deg. C, 55%RH                       |
| Tested By       | Carl Xie       |                                          |                                       |

| Frequency (MHz) | QuasiPeak (dBuV) | CAverage (dBuV) | Limit (dBuV) | Margin (dB) | Line | Filter | Corr. (dB) |
|-----------------|------------------|-----------------|--------------|-------------|------|--------|------------|
| 0.202000        | ---              | 37.72           | 53.53        | 15.81       | L1   | ON     | 10.0       |
| 0.202000        | 43.00            | ---             | 63.53        | 20.52       | L1   | ON     | 10.0       |
| 0.268000        | ---              | 28.70           | 51.18        | 22.48       | L1   | ON     | 10.0       |
| 0.268000        | 32.48            | ---             | 61.18        | 28.70       | L1   | ON     | 10.0       |
| 0.508000        | ---              | 16.94           | 46.00        | 29.06       | L1   | ON     | 10.0       |
| 0.508000        | 29.62            | ---             | 56.00        | 26.38       | L1   | ON     | 10.0       |
| 0.872000        | ---              | 15.04           | 46.00        | 30.96       | L1   | ON     | 10.0       |
| 0.872000        | 24.67            | ---             | 56.00        | 31.33       | L1   | ON     | 10.0       |
| 17.540000       | ---              | 9.61            | 50.00        | 40.39       | L1   | ON     | 10.0       |
| 17.540000       | 26.85            | ---             | 60.00        | 33.15       | L1   | ON     | 10.0       |
| 17.932000       | ---              | 8.56            | 50.00        | 41.44       | L1   | ON     | 10.0       |
| 17.932000       | 20.56            | ---             | 60.00        | 39.44       | L1   | ON     | 10.0       |

- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
  2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
  3. The emission levels of other frequencies were very low against the limit.
  4. Margin value = Limit value -Emission level
  5. Correction factor = Insertion loss + Cable loss
  6. Emission Level = Correction Factor + Reading Value.

Full Spectrum

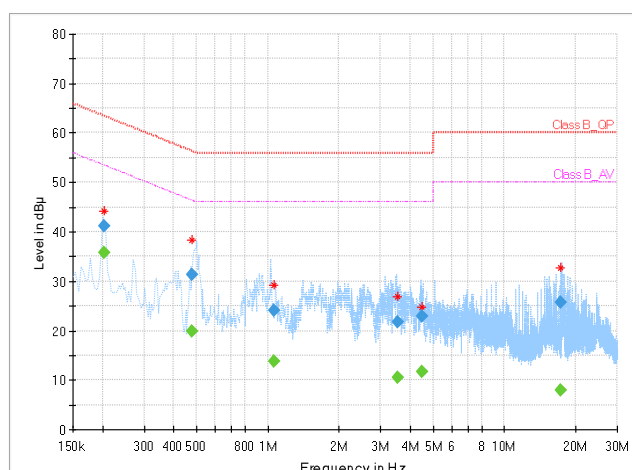


|                 |                |                                          |                                       |
|-----------------|----------------|------------------------------------------|---------------------------------------|
| Frequency Range | 150KHz ~ 30MHz | Detector Function & Resolution Bandwidth | Quasi-Peak (QP) / Average (AV), 9 kHz |
| Input Power     | 120Vac, 60Hz   | Environmental Conditions                 | 24deg. C, 55%RH                       |
| Tested By       | Carl Xie       |                                          |                                       |

| Frequency (MHz) | QuasiPeak (dBuV) | CAverage (dBuV) | Limit (dBuV) | Margin (dB) | Line | Filter | Corr. (dB) |
|-----------------|------------------|-----------------|--------------|-------------|------|--------|------------|
| 0.204000        | ---              | 35.87           | 53.45        | 17.57       | N    | ON     | 10.0       |
| 0.204000        | 41.21            | ---             | 63.45        | 22.23       | N    | ON     | 10.0       |
| 0.480000        | ---              | 19.77           | 46.34        | 26.57       | N    | ON     | 10.0       |
| 0.480000        | 31.33            | ---             | 56.34        | 25.01       | N    | ON     | 10.0       |
| 1.062000        | ---              | 13.73           | 46.00        | 32.27       | N    | ON     | 10.0       |
| 1.062000        | 24.12            | ---             | 56.00        | 31.88       | N    | ON     | 10.0       |
| 3.532000        | ---              | 10.52           | 46.00        | 35.48       | N    | ON     | 10.0       |
| 3.532000        | 21.65            | ---             | 56.00        | 34.35       | N    | ON     | 10.0       |
| 4.460000        | ---              | 11.73           | 46.00        | 34.27       | N    | ON     | 10.0       |
| 4.460000        | 22.90            | ---             | 56.00        | 33.10       | N    | ON     | 10.0       |
| 17.332000       | ---              | 7.90            | 50.00        | 42.10       | N    | ON     | 10.0       |
| 17.332000       | 25.71            | ---             | 60.00        | 34.29       | N    | ON     | 10.0       |

- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
  2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
  3. The emission levels of other frequencies were very low against the limit.
  4. Margin value = Limit value - Emission level
  5. Correction factor = Insertion loss + Cable loss
  6. Emission Level = Correction Factor + Reading Value.

Full Spectrum



### 3.4 MAXIMUM CONDUCTED OUTPUT POWER MEASUREMENT

#### 3.4.1 LIMITS OF MAXIMUM CONDUCTED OUTPUT POWER MEASUREMENT

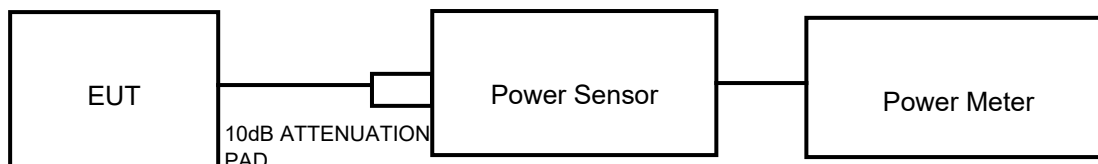
| Operation Band | EUT Category |                                   | LIMIT                                                                                                                       |
|----------------|--------------|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| U-NII-1        |              | Outdoor Access Point              | 1 Watt (30 dBm)<br>(Max. e.i.r.p $\leq$ 125mW(21 dBm) at any elevation angle above 30 degrees as measured from the horizon) |
|                |              | Fixed point-to-point Access Point | 1 Watt (30 dBm)                                                                                                             |
|                | <b>B</b>     | Indoor Access Point               | 1 Watt (30 dBm)                                                                                                             |
|                | √            | Client devices                    | 250mW (24 dBm)                                                                                                              |
| U-NII-2A       | √            |                                   | 250mW (24 dBm) or 11 dBm+10 log B*                                                                                          |
| U-NII-2C       | √            |                                   | 250mW (24 dBm) or 11 dBm+10 log B*                                                                                          |
| U-NII-3        | √            |                                   | 1 Watt (30 dBm)                                                                                                             |

**NOTE:** Where B is the 26dB emission bandwidth in MHz.

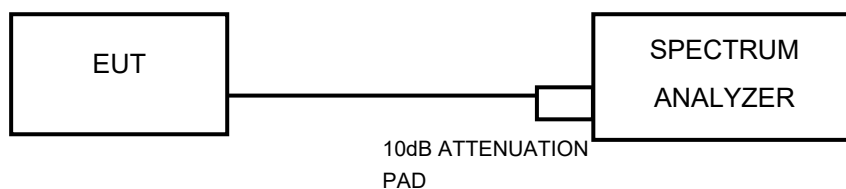
### 3.4.2 TEST SETUP

#### FOR POWER OUTPUT MEASUREMENT

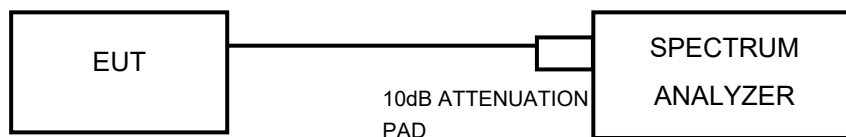
##### 802.11a, 802.11n (20MHz), 802.11n (40MHz) TEST CONFIGURATION



##### 11ac TEST CONFIGURATION



##### FOR 26dB BANDWIDTH



### 3.4.3 TEST INSTRUMENTS

| Equipment           | Manufacturer | Model No.  | Serial No. | Last Cal.  | Next Cal.  |
|---------------------|--------------|------------|------------|------------|------------|
| Power Meter         | ANRITSU      | ML2495A    | 1506002    | Feb. 22,21 | Feb. 21,22 |
| EXA Signal Analyzer | KEYSIGHT     | N9010A-526 | MY54510322 | Feb. 25,21 | Feb. 24,22 |
| EXA Signal Analyzer | KEYSIGHT     | N9010A-544 | MY54510355 | Jun. 03,21 | Jun. 02,22 |
| Power Sensor        | ANRITSU      | MA2411B    | 1339352    | May. 07,21 | May. 08,22 |

**NOTE:**

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.
2. The test was performed in RF Oven room.

### 3.4.4 TEST PROCEDURE

#### FOR POWER MEASUREMENT

##### For 802.11a, 802.11n (20MHz), 802.11n (40MHz)

Method PM is used to perform output power measurement, trigger and gating function of wide band power meter is enabled to measure max output power of TX on burst. Duty factor is not added to measured value.

##### For 802.11ac (80MHz)

1. Measure the duty cycle,  $x$ , of the transmitter output signal as described in II.B.
2. Set span to encompass the EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal.
3. Set RBW = 1 MHz.
4. Set VBW  $\geq$  3 MHz.
5. Number of points in sweep  $\geq 2 \times \text{span} / \text{RBW}$ . (This ensures that bin-to-bin spacing is  $\leq \text{RBW}/2$ , so that narrowband signals are not lost between frequency bins.)
6. Sweep time = auto.
7. Detector = power averaging (rms), if available. Otherwise, use sample detector mode.
8. Do not use sweep triggering. Allow the sweep to “free run.”
9. Trace average at least 100 traces in power averaging (rms) mode; however, the number of traces to be averaged shall be increased above 100 as needed to ensure that the average accurately represents the true average over the on and off periods of the transmitter.
10. Add  $10 \log (1/x)$ , where  $x$  is the duty cycle, to the measured power to compute the average power during the actual transmission times (because the measurement represents an average over both the on and off times of the transmission). For example, add  $10 \log (1/0.25) = 6 \text{ dB}$  if the duty cycle is 25%.

#### **FOR 99 PERCENT OCCUPIED BANDWIDTH**

The following procedure shall be used for measuring (99 %) power bandwidth:

1. Set center frequency to the nominal EUT channel center frequency.
2. Set span = 1.5 times to 5.0 times the OBW.
3. Set RBW = 1 % to 5 % of the OBW
4. Set VBW  $\geq 3 \cdot$  RBW
5. Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
6. Use the 99 % power bandwidth function of the instrument (if available).
7. If the instrument does not have a 99 % power bandwidth function, the trace data points are recovered and directly summed in power units. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5 % of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5 % of the total is reached; that frequency is recorded as the upper frequency. The 99% occupied bandwidth is the difference between these two frequencies.

#### **FOR 26dB BANDWIDTH**

- 1) Set RBW = approximately 1% of the emission bandwidth.
- 2) Set the VBW > RBW.
- 3) Detector = Peak.
- 4) Trace mode = max hold.
- 5) Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

#### **FOR 6dB BANDWIDTH**

1. Set RBW = 100 kHz.
2. Set the video bandwidth (VBW)  $\geq 3$  RBW.
3. Detector = Peak.
4. Trace mode = max hold.
5. Sweep = auto couple.
6. Allow the trace to stabilize.
7. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

### 3.4.5 DEVIATION FROM TEST STANDARD

No deviation.

### 3.4.6 EUT OPERATING CONDITIONS

The software provided by client to enable the EUT under transmission condition continuously at specific channel frequencies individually.



Test Report No.: W7L-P21080006RF14

### 3.4.7 TEST RESULTS

#### OUTPUT POWER:

802.11a

| CHANNEL | CHANNEL<br>FREQUENCY<br>(MHz) | AVERAGE<br>POWER (dBm) | Duty<br>Factor | FINAL<br>AVERAGE<br>POWER<br>(dBm) | FINAL<br>AVERAGE<br>POWER<br>(mW) | POWER<br>LIMIT<br>(dBm) | PASS/FAIL |
|---------|-------------------------------|------------------------|----------------|------------------------------------|-----------------------------------|-------------------------|-----------|
| 36      | 5180                          | 13.62                  | 0.12           | 13.74                              | 23.66                             | 24                      | PASS      |
| 40      | 5200                          | 15.76                  | 0.12           | 15.88                              | 38.73                             | 24                      | PASS      |
| 48      | 5240                          | 15.95                  | 0.12           | 16.07                              | 40.46                             | 24                      | PASS      |
| 52      | 5260                          | 15.70                  | 0.12           | 15.82                              | 38.19                             | 24                      | PASS      |
| 60      | 5300                          | 15.92                  | 0.12           | 16.04                              | 40.18                             | 24                      | PASS      |
| 64      | 5320                          | 14.78                  | 0.12           | 14.90                              | 30.90                             | 24                      | PASS      |
| 100     | 5500                          | 14.45                  | 0.12           | 14.57                              | 28.64                             | 24                      | PASS      |
| 116     | 5580                          | 14.72                  | 0.12           | 14.84                              | 30.48                             | 24                      | PASS      |
| 140     | 5700                          | 14.40                  | 0.12           | 14.52                              | 27.54                             | 24                      | PASS      |
| 144     | 5720                          | 16.58                  | 0.12           | 16.70                              | 46.77                             | 24                      | PASS      |
| 144     | 5720                          | 16.58                  | 0.12           | 16.70                              | 46.77                             | 30                      | PASS      |
| 149     | 5745                          | 17.52                  | 0.00           | 17.52                              | 56.49                             | 30                      | PASS      |
| 157     | 5785                          | 17.54                  | 0.00           | <b>17.54</b>                       | 56.75                             | 30                      | PASS      |
| 165     | 5825                          | 16.88                  | 0.00           | 16.88                              | 48.75                             | 30                      | PASS      |



**802.11n (20MHz)**

| CHANNEL | CHANNEL<br>FREQUENCY<br>(MHz) | AVERAGE<br>POWER (dBm) | Duty<br>Factor | FINAL<br>AVERAGE<br>POWER<br>(dBm) | FINAL<br>AVERAGE<br>POWER<br>(mW) | POWER<br>LIMIT<br>(dBm) | PASS/FAIL |
|---------|-------------------------------|------------------------|----------------|------------------------------------|-----------------------------------|-------------------------|-----------|
| 36      | 5180                          | 12.94                  | 0.09           | 13.03                              | 20.09                             | 24                      | PASS      |
| 40      | 5200                          | 15.50                  | 0.09           | 15.59                              | 36.22                             | 24                      | PASS      |
| 48      | 5240                          | 15.68                  | 0.09           | 15.77                              | 37.76                             | 24                      | PASS      |
| 52      | 5260                          | 15.85                  | 0.09           | 15.94                              | 39.26                             | 24                      | PASS      |
| 60      | 5300                          | 15.72                  | 0.09           | 15.81                              | 38.11                             | 24                      | PASS      |
| 64      | 5320                          | 13.55                  | 0.09           | 13.64                              | 23.12                             | 24                      | PASS      |
| 100     | 5500                          | 14.22                  | 0.09           | 14.31                              | 26.98                             | 24                      | PASS      |
| 116     | 5580                          | 14.52                  | 0.09           | 14.61                              | 28.91                             | 24                      | PASS      |
| 140     | 5700                          | 14.38                  | 0.09           | 14.47                              | 27.99                             | 24                      | PASS      |
| 144     | 5720                          | 15.60                  | 0.09           | 15.69                              | 37.07                             | 24                      | PASS      |
| 144     | 5720                          | 15.60                  | 0.09           | 15.69                              | 37.07                             | 30                      | PASS      |
| 149     | 5745                          | 16.50                  | 0.09           | 16.59                              | 45.60                             | 30                      | PASS      |
| 157     | 5785                          | 16.70                  | 0.09           | 16.79                              | 47.75                             | 30                      | PASS      |
| 165     | 5825                          | 15.92                  | 0.09           | 16.01                              | 39.90                             | 30                      | PASS      |



## 802.11n (40MHz)

| CHANNEL | CHANNEL<br>FREQUENCY<br>(MHz) | AVERAGE<br>POWER (dBm) | Duty<br>Factor | FINAL<br>AVERAGE<br>POWER<br>(dBm) | FINAL<br>AVERAGE<br>POWER<br>(mW) | POWER<br>LIMIT<br>(dBm) | PASS/FAIL |
|---------|-------------------------------|------------------------|----------------|------------------------------------|-----------------------------------|-------------------------|-----------|
| 38      | 5190                          | 9.12                   | 0.21           | 9.33                               | 8.57                              | 24                      | PASS      |
| 46      | 5230                          | 15.40                  | 0.21           | 15.61                              | 36.39                             | 24                      | PASS      |
| 54      | 5270                          | 14.85                  | 0.21           | 15.06                              | 32.06                             | 24                      | PASS      |
| 62      | 5310                          | 9.30                   | 0.21           | 9.51                               | 8.93                              | 24                      | PASS      |
| 102     | 5510                          | 13.78                  | 0.21           | 13.99                              | 25.06                             | 24                      | PASS      |
| 110     | 5550                          | 14.12                  | 0.21           | 14.33                              | 27.10                             | 24                      | PASS      |
| 134     | 5670                          | 13.80                  | 0.21           | 14.01                              | 25.18                             | 24                      | PASS      |
| 142     | 5710                          | 15.57                  | 0.21           | 15.78                              | 37.84                             | 24                      | PASS      |
| 142     | 5710                          | 15.57                  | 0.21           | 15.78                              | 37.84                             | 30                      | PASS      |
| 151     | 5755                          | 16.75                  | 0.21           | 16.96                              | 49.66                             | 30                      | PASS      |
| 159     | 5795                          | 16.76                  | 0.21           | 16.97                              | 49.77                             | 30                      | PASS      |

## 802.11ac (20MHz)

| CHANNEL | CHANNEL<br>FREQUENCY<br>(MHz) | AVERAGE<br>POWER (dBm) | Duty<br>Factor | FINAL<br>AVERAGE<br>POWER<br>(dBm) | FINAL<br>AVERAGE<br>POWER<br>(mW) | POWER<br>LIMIT<br>(dBm) | PASS/FAIL |
|---------|-------------------------------|------------------------|----------------|------------------------------------|-----------------------------------|-------------------------|-----------|
| 36      | 5180                          | 12.92                  | 0.09           | 13.01                              | 20.00                             | 24                      | PASS      |
| 40      | 5200                          | 15.48                  | 0.09           | 15.57                              | 36.06                             | 24                      | PASS      |
| 48      | 5240                          | 15.67                  | 0.09           | 15.76                              | 37.67                             | 24                      | PASS      |
| 52      | 5260                          | 15.82                  | 0.09           | 15.91                              | 38.99                             | 24                      | PASS      |
| 60      | 5300                          | 15.70                  | 0.09           | 15.79                              | 37.93                             | 24                      | PASS      |
| 64      | 5320                          | 13.52                  | 0.09           | 13.61                              | 22.96                             | 24                      | PASS      |
| 100     | 5500                          | 14.20                  | 0.09           | 14.29                              | 26.85                             | 24                      | PASS      |
| 116     | 5580                          | 14.48                  | 0.09           | 14.57                              | 28.64                             | 24                      | PASS      |
| 140     | 5700                          | 13.40                  | 0.09           | 13.49                              | 22.34                             | 24                      | PASS      |
| 144     | 5720                          | 15.59                  | 0.09           | 15.68                              | 36.98                             | 24                      | PASS      |
| 144     | 5720                          | 15.59                  | 0.09           | 15.68                              | 36.98                             | 30                      | PASS      |
| 149     | 5745                          | 16.42                  | 0.09           | 16.51                              | 44.77                             | 30                      | PASS      |
| 157     | 5785                          | 16.68                  | 0.09           | 16.77                              | 47.53                             | 30                      | PASS      |
| 165     | 5825                          | 15.90                  | 0.09           | 15.99                              | 39.72                             | 30                      | PASS      |

802.11ac (40MHz)

| CHANNEL | CHANNEL<br>FREQUENCY<br>(MHz) | AVERAGE<br>POWER (dBm) | Duty<br>Factor | FINAL<br>AVERAGE<br>POWER<br>(dBm) | FINAL<br>AVERAGE<br>POWER<br>(mW) | POWER<br>LIMIT<br>(dBm) | PASS/FAIL |
|---------|-------------------------------|------------------------|----------------|------------------------------------|-----------------------------------|-------------------------|-----------|
| 38      | 5190                          | 9.11                   | 0.20           | 9.31                               | 8.53                              | 24                      | PASS      |
| 46      | 5230                          | 15.38                  | 0.20           | 15.58                              | 36.14                             | 24                      | PASS      |
| 54      | 5270                          | 15.36                  | 0.20           | 15.56                              | 35.97                             | 24                      | PASS      |
| 62      | 5310                          | 10.45                  | 0.20           | 10.65                              | 11.61                             | 24                      | PASS      |
| 102     | 5510                          | 12.80                  | 0.20           | 13.00                              | 19.95                             | 24                      | PASS      |
| 110     | 5550                          | 14.10                  | 0.20           | 14.30                              | 26.92                             | 24                      | PASS      |
| 134     | 5670                          | 15.54                  | 0.20           | 15.74                              | 37.50                             | 24                      | PASS      |
| 142     | 5710                          | 14.83                  | 0.20           | 15.03                              | 31.84                             | 24                      | PASS      |
| 142     | 5710                          | 14.83                  | 0.19           | 15.02                              | 31.77                             | 30                      | PASS      |
| 151     | 5755                          | 15.78                  | 0.19           | 15.97                              | 39.54                             | 30                      | PASS      |
| 159     | 5795                          | 15.94                  | 0.19           | 16.23                              | 41.98                             | 30                      | PASS      |

802.11ac (80MHz)

| CHANNEL | CHANNEL<br>FREQUENCY<br>(MHz) | AVERAGE<br>POWER (dBm) | Duty<br>Factor | FINAL<br>AVERAGE<br>POWER<br>(dBm) | FINAL<br>AVERAGE<br>POWER<br>(mW) | POWER<br>LIMIT<br>(dBm) | PASS/FAIL |
|---------|-------------------------------|------------------------|----------------|------------------------------------|-----------------------------------|-------------------------|-----------|
| 42      | 5210                          | 7.48                   | 0.39           | 7.87                               | 6.12                              | 24                      | PASS      |
| 58      | 5290                          | 9.50                   | 0.39           | 9.89                               | 9.75                              | 24                      | PASS      |
| 106     | 5530                          | 10.64                  | 0.39           | 11.03                              | 12.68                             | 24                      | PASS      |
| 122     | 5610                          | 14.35                  | 0.39           | 14.74                              | 29.79                             | 24                      | PASS      |
| 138     | 5690                          | 13.60                  | 0.39           | 13.99                              | 25.06                             | 24                      | PASS      |
| 138     | 5690                          | 13.60                  | 0.42           | 14.02                              | 25.23                             | 30                      | PASS      |
| 155     | 5775                          | 14.80                  | 0.42           | 15.22                              | 33.27                             | 30                      | PASS      |

**99% OCCUPIED BANDWIDTH & 26dB BANDWIDTH/6dB BANDWIDTH DATA FROM:**

**802.11a**

| CHANNEL | CHANNEL<br>FREQUENCY<br>(MHz) | 99% OCCUPIED<br>BANDWIDTH | 26dB<br>BANDWIDTH<br>(MHz) | PASS/FAIL |
|---------|-------------------------------|---------------------------|----------------------------|-----------|
| 36      | 5180                          | 16.80                     | 23.86                      | PASS      |
| 40      | 5200                          | 16.98                     | 28.57                      | PASS      |
| 48      | 5240                          | 17.04                     | 27.38                      | PASS      |
| 52      | 5260                          | 17.16                     | 26.30                      | PASS      |
| 60      | 5300                          | 17.64                     | 30.28                      | PASS      |
| 64      | 5320                          | 16.86                     | 23.25                      | PASS      |
| 100     | 5500                          | 17.16                     | 26.24                      | PASS      |
| 116     | 5580                          | 17.10                     | 26.36                      | PASS      |
| 140     | 5700                          | 17.04                     | 26.05                      | PASS      |
| 144     | 5720                          | 19.14                     | 33.91                      | PASS      |
| CHANNEL | CHANNEL<br>FREQUENCY          | 99% OCCUPIED<br>BANDWIDTH | 6dB<br>BANDWIDTH           | PASS/FAIL |
| 144     | 5720                          | 19.14                     | 15.06                      | PASS      |
| 149     | 5745                          | 18.60                     | 15.31                      | PASS      |
| 157     | 5785                          | 18.48                     | 15.09                      | PASS      |
| 165     | 5825                          | 17.58                     | 15.26                      | PASS      |



802.11n (20MHz)

| CHANNEL | CHANNEL<br>FREQUENCY<br>(MHz) | 99% OCCUPIED<br>BANDWIDTH | 26dB<br>BANDWIDTH<br>(MHz) | PASS/FAIL |
|---------|-------------------------------|---------------------------|----------------------------|-----------|
| 36      | 5180                          | 17.88                     | 25.29                      | PASS      |
| 40      | 5200                          | 18.18                     | 28.33                      | PASS      |
| 48      | 5240                          | 18.24                     | 28.56                      | PASS      |
| 52      | 5260                          | 18.24                     | 26.80                      | PASS      |
| 60      | 5300                          | 18.12                     | 26.02                      | PASS      |
| 64      | 5320                          | 17.88                     | 23.93                      | PASS      |
| 100     | 5500                          | 18.24                     | 27.62                      | PASS      |
| 116     | 5580                          | 18.24                     | 28.00                      | PASS      |
| 140     | 5700                          | 18.00                     | 26.71                      | PASS      |
| 142     | 5720                          | 18.60                     | 31.59                      | PASS      |
| CHANNEL | CHANNEL<br>FREQUENCY          | 99% OCCUPIED<br>BANDWIDTH | 6dB<br>BANDWIDTH           | PASS/FAIL |
| 144     | 5720                          | 18.60                     | 15.16                      | PASS      |
| 149     | 5745                          | 18.48                     | 16.79                      | PASS      |
| 157     | 5785                          | 18.60                     | 14.14                      | PASS      |
| 165     | 5825                          | 18.24                     | 15.42                      | PASS      |

802.11n (40MHz)

| CHANNEL | CHANNEL<br>FREQUENCY<br>(MHz) | 99% OCCUPIED<br>BANDWIDTH | 26dB<br>BANDWIDTH<br>(MHz) | PASS/FAIL |
|---------|-------------------------------|---------------------------|----------------------------|-----------|
| 38      | 5190                          | 36.40                     | 41.66                      | PASS      |
| 46      | 5230                          | 36.80                     | 56.92                      | PASS      |
| 54      | 5270                          | 36.50                     | 46.11                      | PASS      |
| 62      | 5310                          | 36.40                     | 41.90                      | PASS      |
| 102     | 5510                          | 36.60                     | 57.21                      | PASS      |
| 110     | 5550                          | 36.80                     | 56.74                      | PASS      |
| 134     | 5670                          | 36.50                     | 41.80                      | PASS      |
| 142     | 5710                          | 36.90                     | 55.16                      | PASS      |
| CHANNEL | CHANNEL<br>FREQUENCY          | 99% OCCUPIED<br>BANDWIDTH | 6dB<br>BANDWIDTH           | PASS/FAIL |
| 142     | 5710                          | 36.90                     | 35.13                      | PASS      |
| 151     | 5755                          | 36.90                     | 35.69                      | PASS      |
| 159     | 5795                          | 36.80                     | 35.70                      | PASS      |



802.11ac (20MHz)

| CHANNEL | CHANNEL<br>FREQUENCY<br>(MHz) | 99% OCCUPIED<br>BANDWIDTH | 26dB<br>BANDWIDTH<br>(MHz) | PASS/FAIL |
|---------|-------------------------------|---------------------------|----------------------------|-----------|
| 36      | 5180                          | 17.94                     | 24.62                      | PASS      |
| 40      | 5200                          | 18.12                     | 27.68                      | PASS      |
| 48      | 5240                          | 18.48                     | 30.20                      | PASS      |
| 52      | 5260                          | 18.24                     | 27.07                      | PASS      |
| 60      | 5300                          | 18.06                     | 26.30                      | PASS      |
| 64      | 5320                          | 17.88                     | 24.52                      | PASS      |
| 100     | 5500                          | 18.18                     | 28.60                      | PASS      |
| 116     | 5580                          | 18.42                     | 28.42                      | PASS      |
| 140     | 5700                          | 18.00                     | 26.39                      | PASS      |
| 144     | 5720                          | 18.60                     | 29.79                      | PASS      |
| CHANNEL | CHANNEL<br>FREQUENCY          | 99% OCCUPIED<br>BANDWIDTH | 6dB<br>BANDWIDTH           | PASS/FAIL |
| 144     | 5720                          | 18.60                     | 14.19                      | PASS      |
| 149     | 5745                          | 18.60                     | 15.07                      | PASS      |
| 157     | 5785                          | 18.48                     | 15.15                      | PASS      |
| 165     | 5825                          | 18.18                     | 15.13                      | PASS      |



## 802.11ac (40MHz)

| CHANNEL | CHANNEL<br>FREQUENCY<br>(MHz) | 99% OCCUPIED<br>BANDWIDTH | 26dB<br>BANDWIDTH<br>(MHz) | PASS/FAIL |
|---------|-------------------------------|---------------------------|----------------------------|-----------|
| 38      | 5190                          | 36.20                     | 41.92                      | PASS      |
| 46      | 5230                          | 36.60                     | 56.88                      | PASS      |
| 54      | 5270                          | 36.70                     | 57.26                      | PASS      |
| 62      | 5310                          | 36.30                     | 41.62                      | PASS      |
| 102     | 5510                          | 36.40                     | 47.03                      | PASS      |
| 110     | 5550                          | 36.60                     | 56.95                      | PASS      |
| 134     | 5670                          | 36.60                     | 54.76                      | PASS      |
| 142     | 5710                          | 36.50                     | 47.42                      | PASS      |
| CHANNEL | CHANNEL<br>FREQUENCY          | 99% OCCUPIED<br>BANDWIDTH | 6dB<br>BANDWIDTH           | PASS/FAIL |
| 142     | 5710                          | 36.50                     | 35.40                      | PASS      |
| 151     | 5755                          | 37.00                     | 35.62                      | PASS      |
| 159     | 5795                          | 36.90                     | 35.65                      | PASS      |

## 802.11ac (80MHz)

| CHANNEL | CHANNEL<br>FREQUENCY<br>(MHz) | 99% OCCUPIED<br>BANDWIDTH | 26dB<br>BANDWIDTH<br>(MHz) | PASS/FAIL |
|---------|-------------------------------|---------------------------|----------------------------|-----------|
| 42      | 5210                          | 75.60                     | 83.27                      | PASS      |
| 58      | 5290                          | 75.60                     | 83.04                      | PASS      |
| 106     | 5530                          | 75.72                     | 90.86                      | PASS      |
| 122     | 5610                          | 75.72                     | 104.57                     | PASS      |
| 138     | 5690                          | 75.72                     | 82.78                      | PASS      |
| CHANNEL | CHANNEL<br>FREQUENCY          | 99% OCCUPIED<br>BANDWIDTH | 6dB<br>BANDWIDTH           | PASS/FAIL |
| 138     | 5690                          | 75.72                     | 74.21                      | PASS      |
| 155     | 5775                          | 75.72                     | 75.17                      | PASS      |



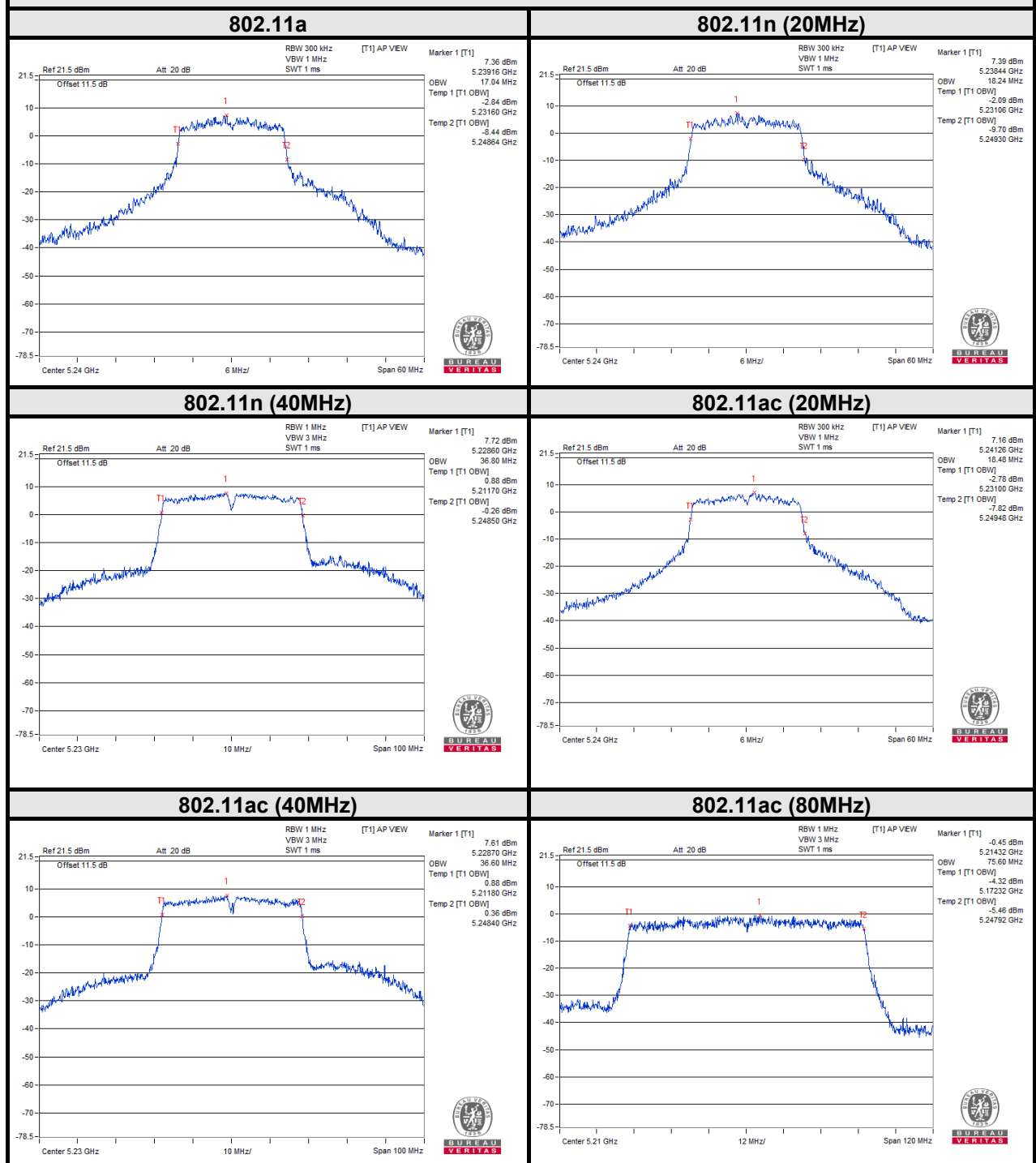


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VERITAS

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For U-NII-1:

### SPECTRUM PLOT OF WORST VALUE of 99% OCCUPIED BANDWIDTH



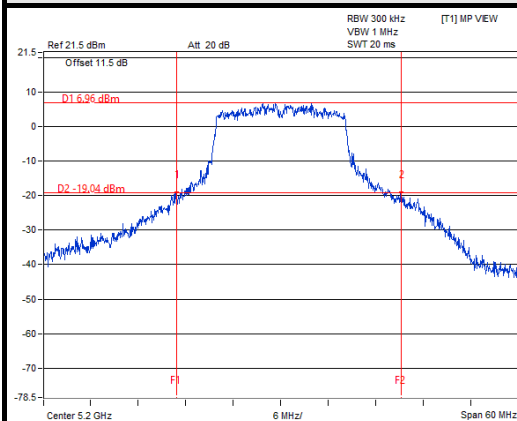


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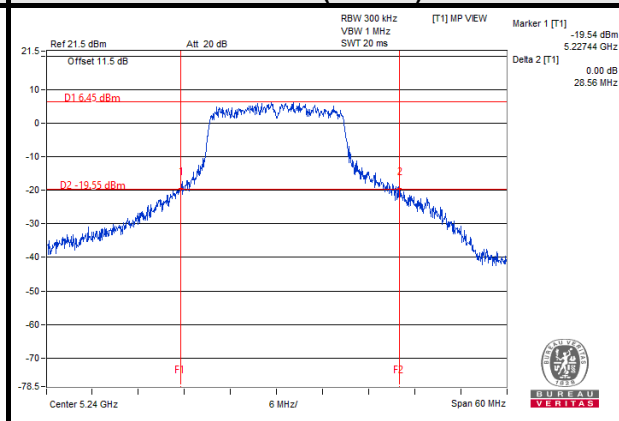
Test Report No.: W7L-P21080006RF14

## SPECTRUM PLOT OF WORST VALUE of 26dB Bandwidth

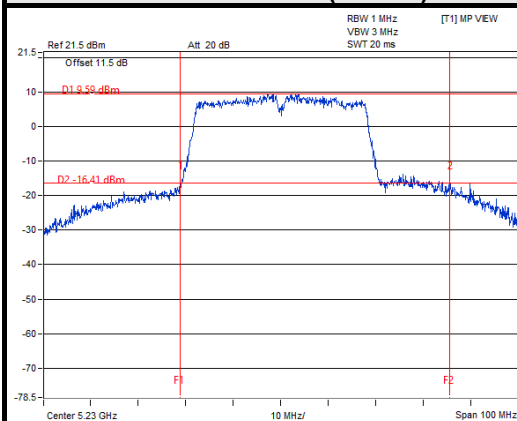
### 802.11a



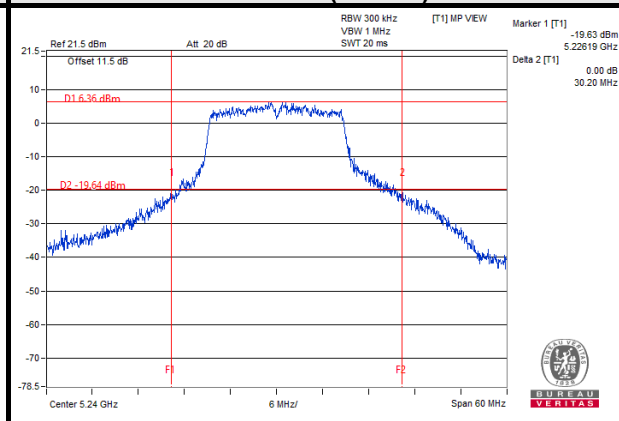
### 802.11n (20MHz)



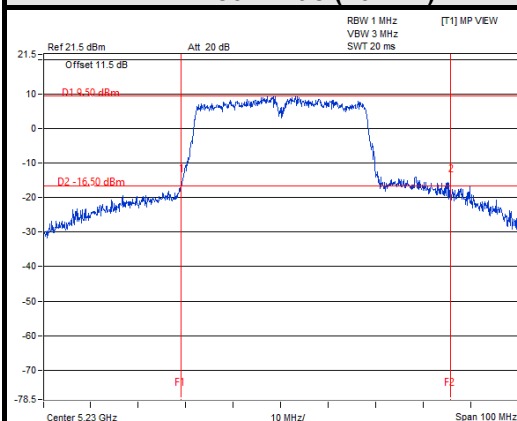
### 802.11n (40MHz)



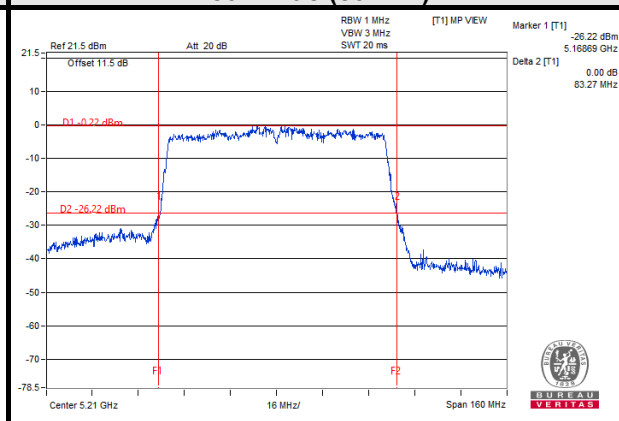
### 802.11ac (20MHz)



### 802.11ac (40MHz)



### 802.11ac (80MHz)

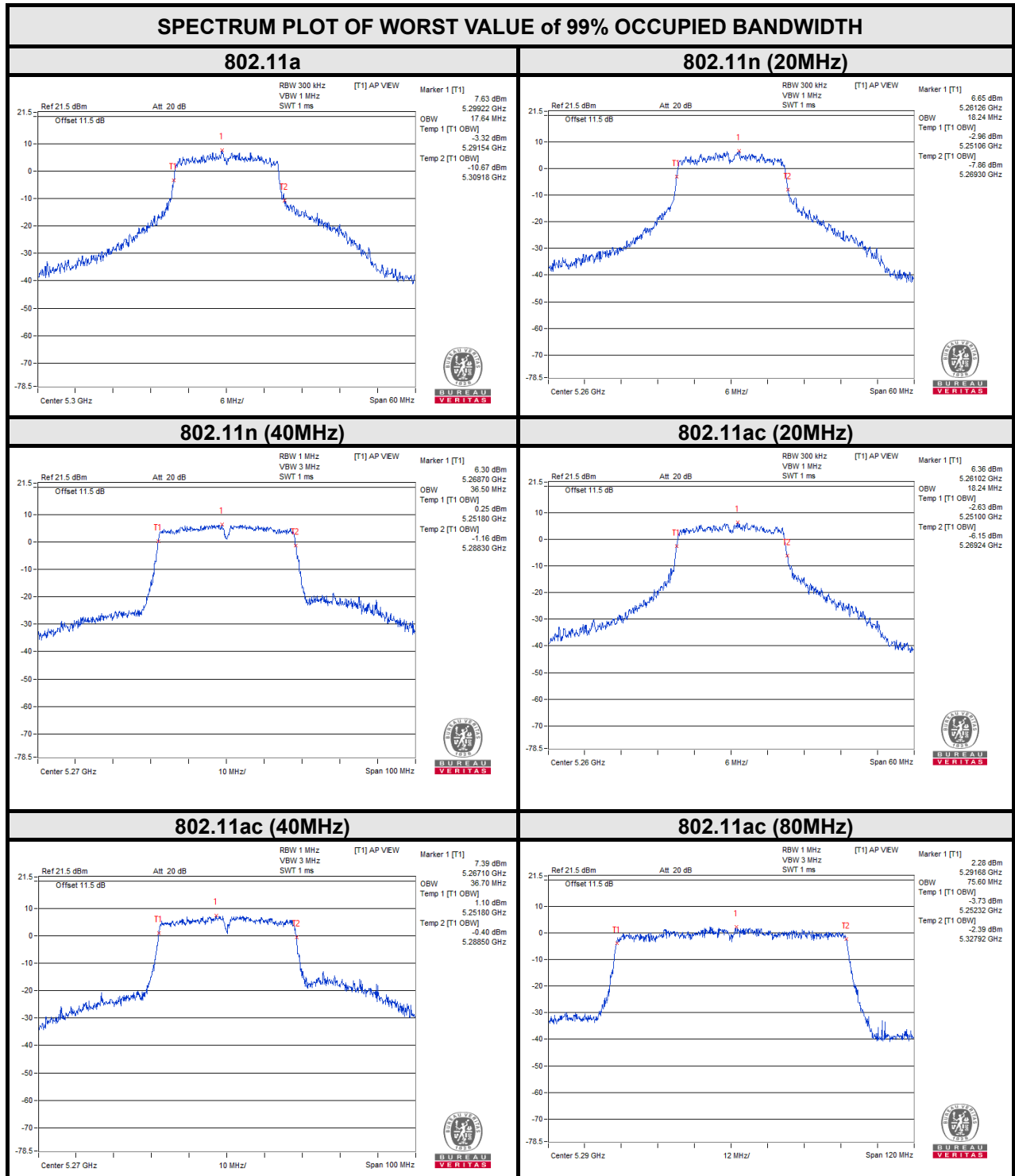




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VERITAS

Test Report No.: W7L-P21080006RF14

For U-NII-2A:



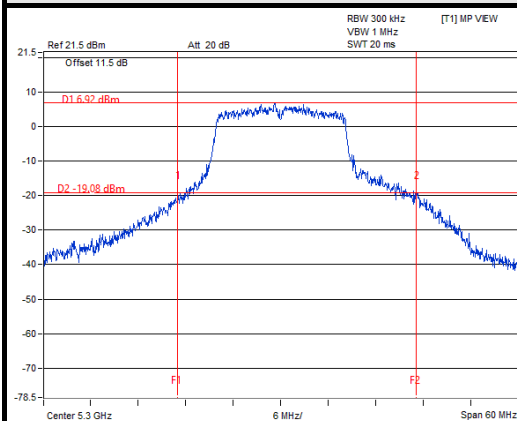


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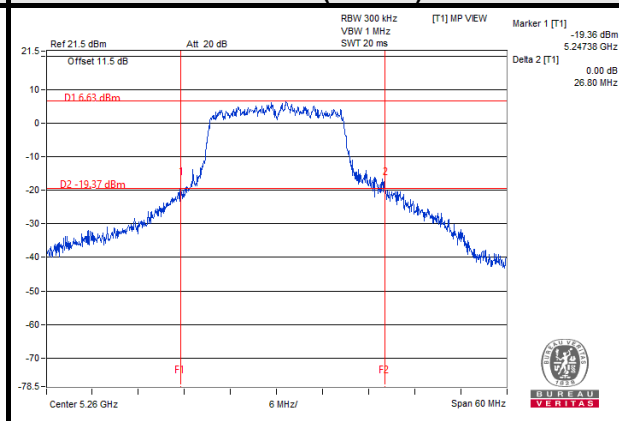
Test Report No.: W7L-P21080006RF14

## SPECTRUM PLOT OF WORST VALUE of 26dB Bandwidth

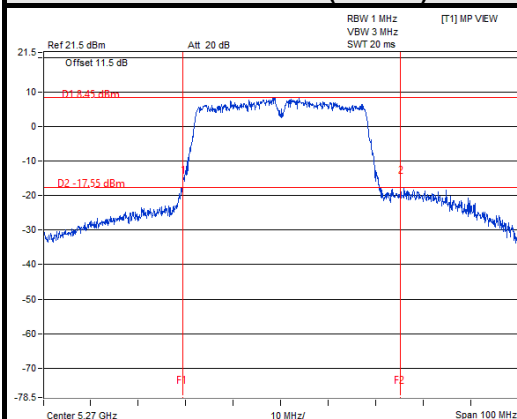
### 802.11a



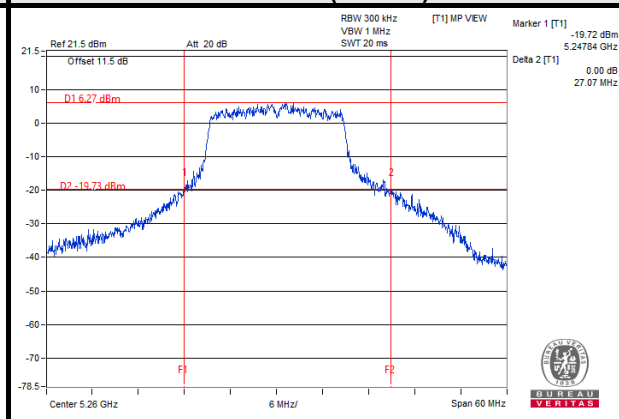
### 802.11n (20MHz)



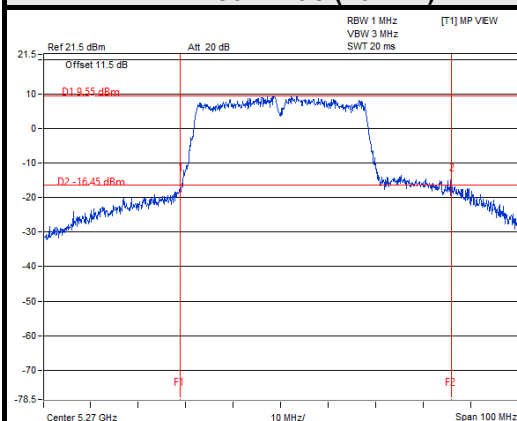
### 802.11n (40MHz)



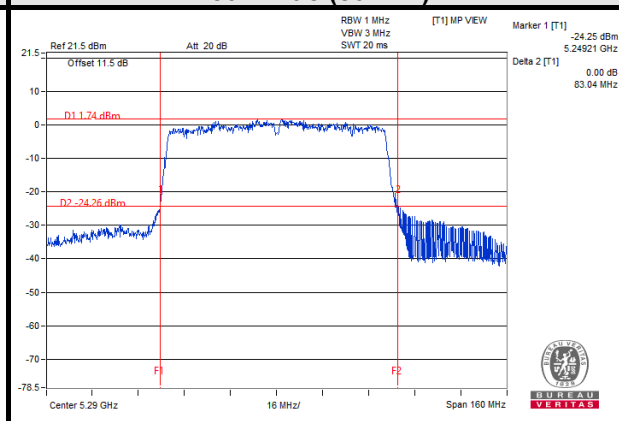
### 802.11ac (20MHz)



### 802.11ac (40MHz)



### 802.11ac (80MHz)

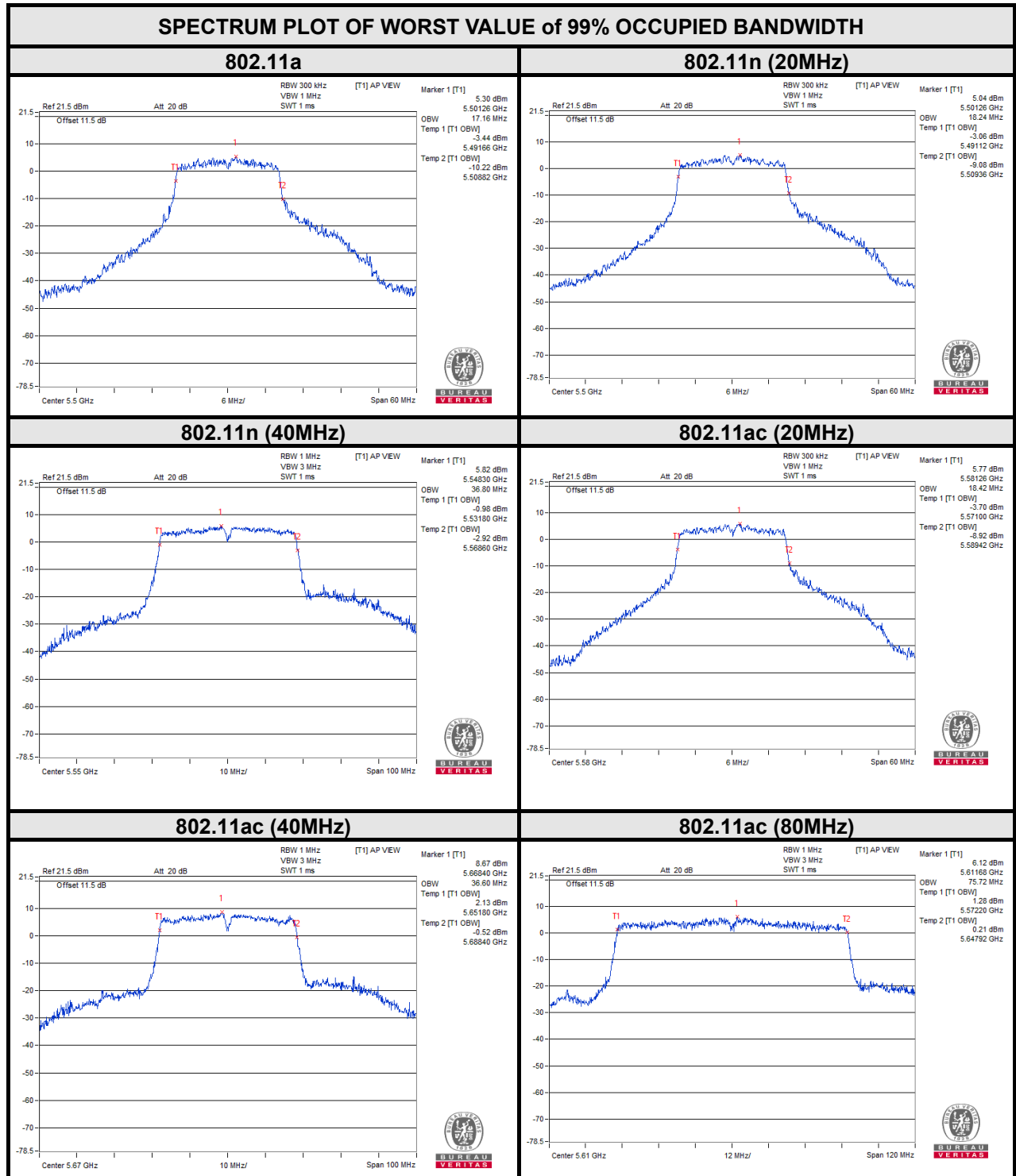




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For U-NII-2C:



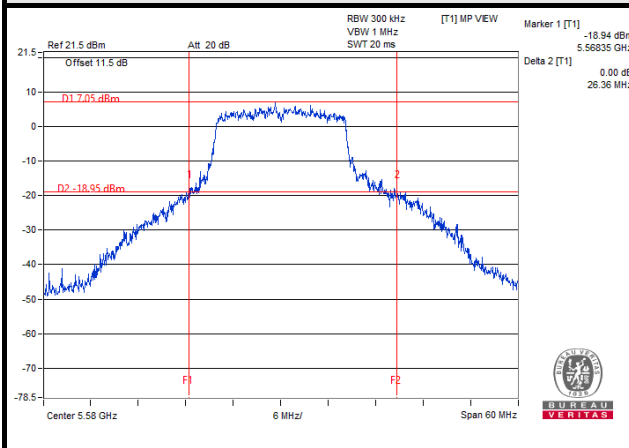


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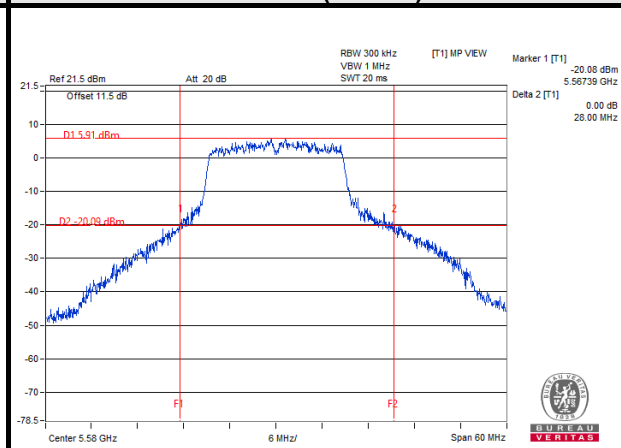
Test Report No.: W7L-P21080006RF14

## SPECTRUM PLOT OF WORST VALUE of 26dB Bandwidth

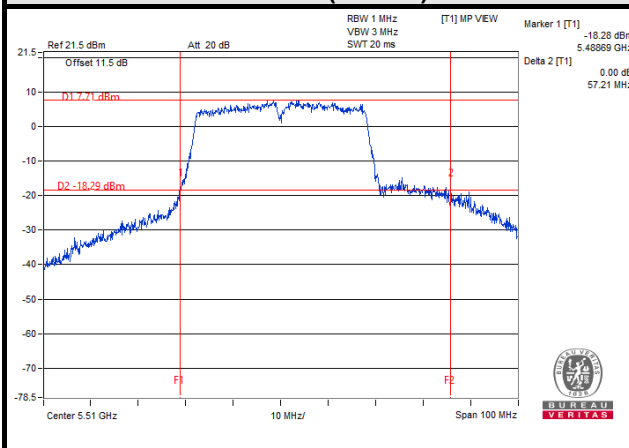
### 802.11a



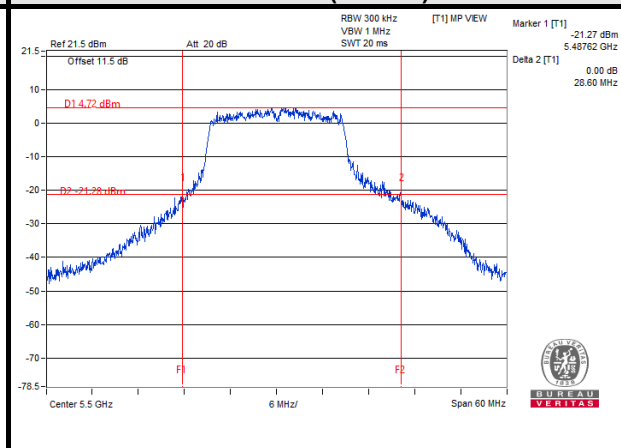
### 802.11n (20MHz)



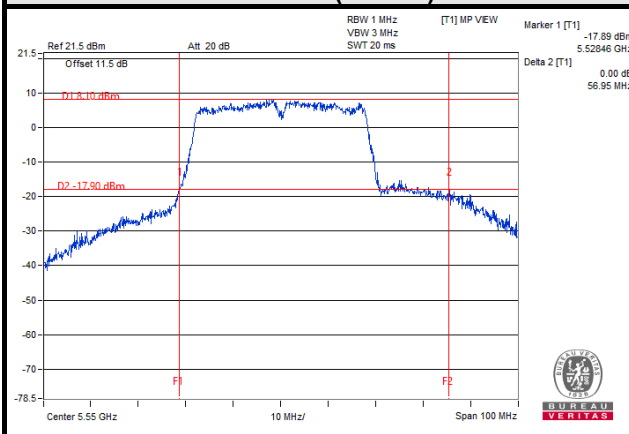
### 802.11n (40MHz)



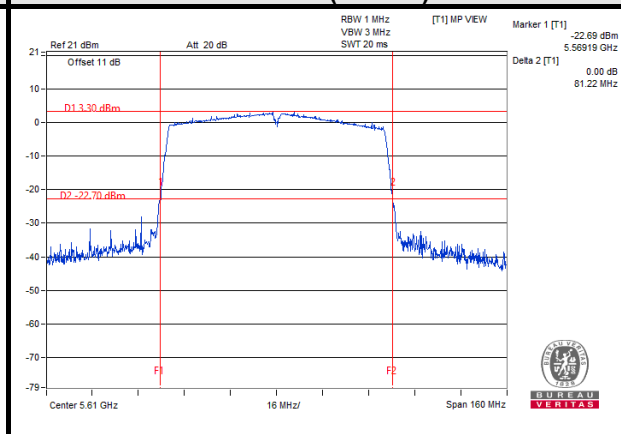
### 802.11ac (20MHz)



### 802.11ac (40MHz)



### 802.11ac (80MHz)





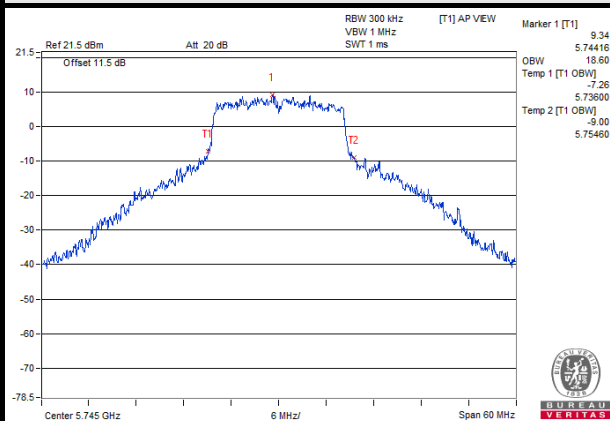
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Test Report No.: W7L-P21080006RF14

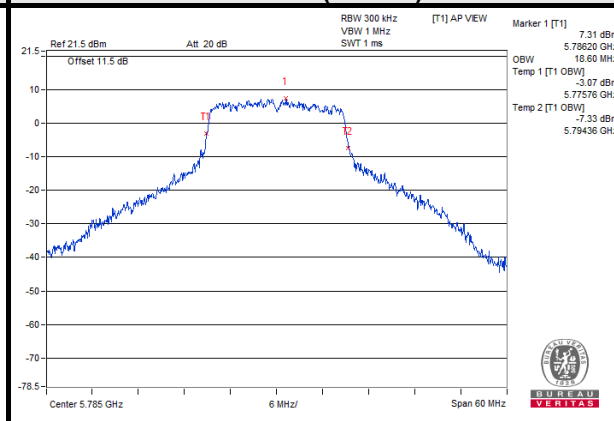
For U-NII-3:

### SPECTRUM PLOT OF WORST VALUE of 99% OCCUPIED BANDWIDTH

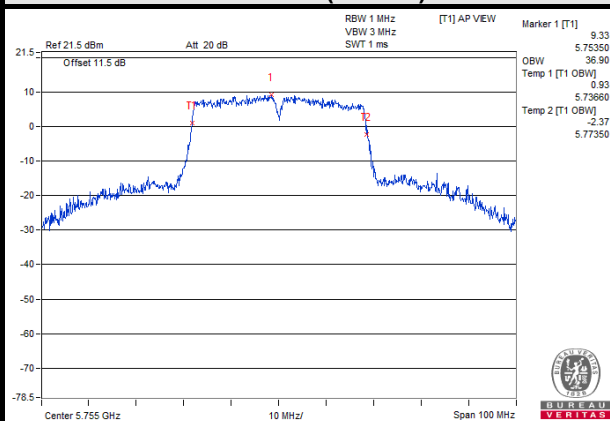
#### 802.11a



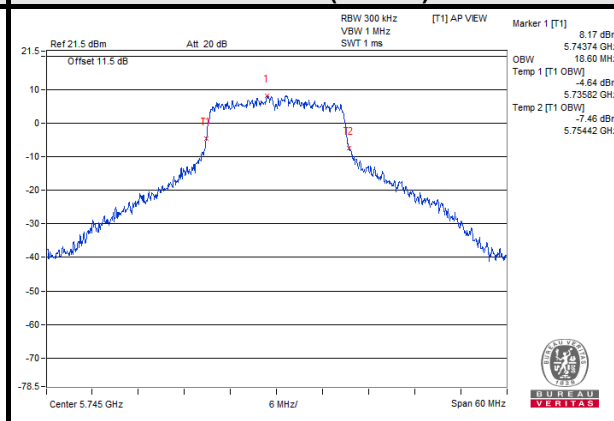
#### 802.11n (20MHz)



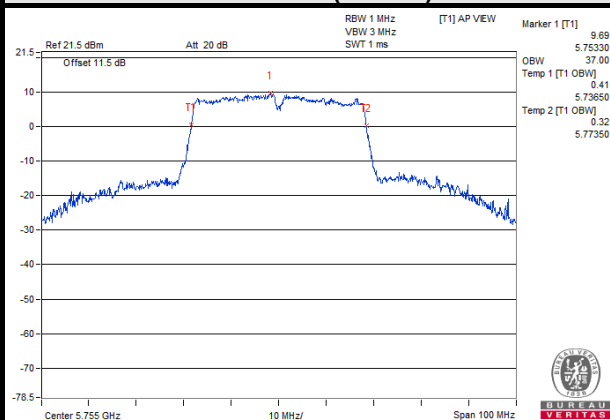
#### 802.11n (40MHz)



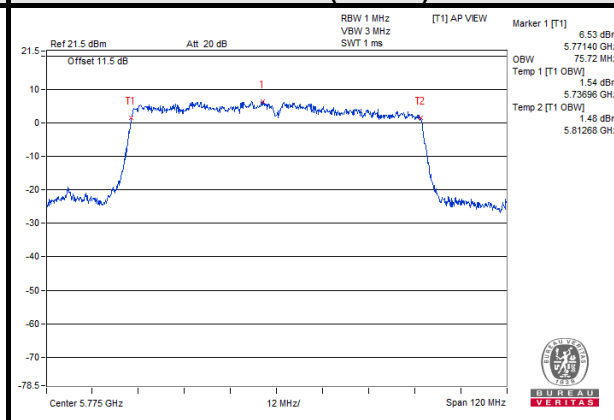
#### 802.11ac (20MHz)



#### 802.11ac (40MHz)



#### 802.11ac (80MHz)



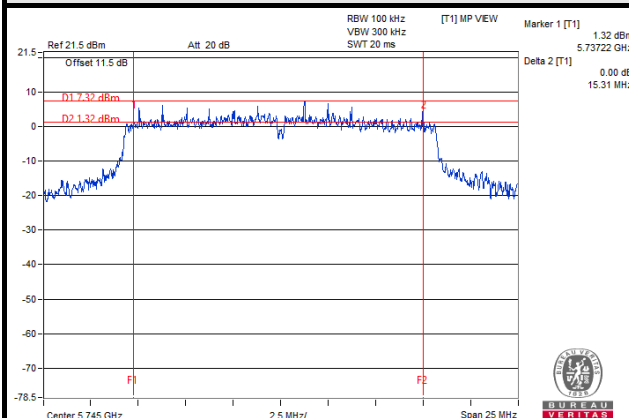


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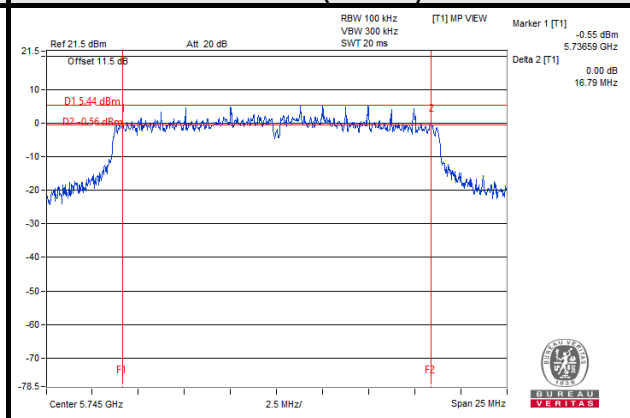
Test Report No.: W7L-P21080006RF14

## SPECTRUM PLOT OF WORST VALUE of 6dB Bandwidth

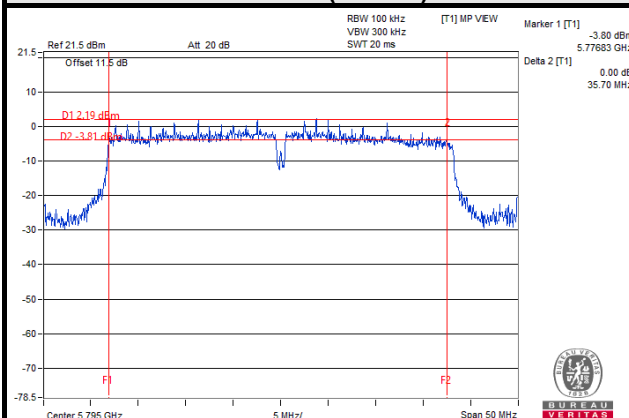
### 802.11a



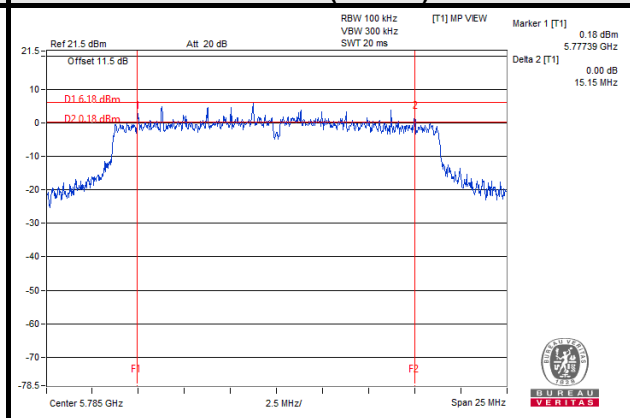
### 802.11n (20MHz)



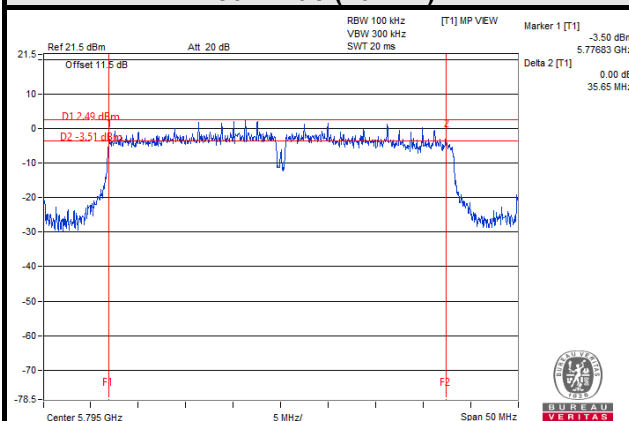
### 802.11n (40MHz)



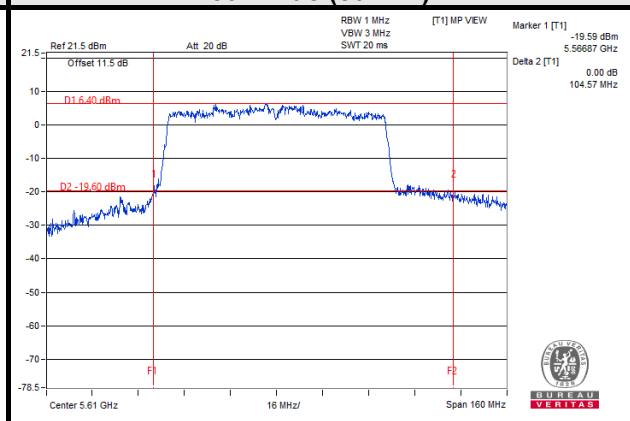
### 802.11ac (20MHz)



### 802.11ac (40MHz)



### 802.11ac (80MHz)



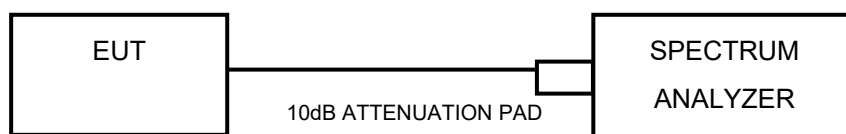


### 3.5 MAXIMUM POWER SPECTRAL DENSITY MEASUREMENT

#### 3.5.1 LIMITS OF MAXIMUM POWER SPECTRAL DENSITY MEASUREMENT

| Operation Band | EUT Category |                                   | LIMIT         |
|----------------|--------------|-----------------------------------|---------------|
| U-NII-1        |              | Outdoor Access Point              | 17dBm/ MHz    |
|                |              | Fixed point-to-point Access Point |               |
|                |              | Indoor Access Point               |               |
|                | √            | Client devices                    | 11dBm/ MHz    |
| U-NII-2A       | √            |                                   | 11dBm/ MHz    |
| U-NII-2C       | √            |                                   | 11dBm/ MHz    |
| U-NII-3        | √            |                                   | 30dBm/ 500kHz |

#### 3.5.2 TEST SETUP



#### 3.5.3 TEST INSTRUMENTS

Refer to section 3.3.3 to get information of above instrument.

### 3.5.4 TEST PROCEDURES

Using method SA-2

- 1) Set span to encompass the entire emission bandwidth (EBW) of the signal.
- 2) Set RBW = 1 MHz, Set VBW  $\geq$  3 MHz, Detector = RMS
- 3) Set Channel power measure = 1MHz
- 4) Sweep time = auto, trigger set to "free run".
- 5) Trace average at least 100 traces in power averaging mode.
- 6) Add  $10 \log (1/x)$ , where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times (because the measurement represents an average over both the on and off times of the transmission).
- 7) Record the max value

### 3.5.5 DEVIATION FROM TEST STANDARD

No deviation.

### 3.5.6 EUT OPERATING CONDITIONS

Same as 3.1.6.

### 3.5.7 TEST RESULTS

For U-NII-1 & U-NII-2A& U-NII-2C:

802.11a

| CHANNEL | FREQUENCY<br>(MHz) | PSD w/o<br>Duty Factor<br>(dBm/MHz) | Duty Factor | PSD with<br>Duty Factor<br>(dBm/MHz) | MAXIMUM<br>LIMIT<br>(dBm/MHz) | PASS/FAIL |
|---------|--------------------|-------------------------------------|-------------|--------------------------------------|-------------------------------|-----------|
| 36      | 5180               | 2.49                                | 0.12        | 2.61                                 | 11                            | PASS      |
| 40      | 5200               | 4.03                                | 0.12        | 4.15                                 | 11                            | PASS      |
| 48      | 5240               | 4.11                                | 0.12        | 4.23                                 | 11                            | PASS      |
| 52      | 5260               | 3.58                                | 0.12        | 3.70                                 | 11                            | PASS      |
| 60      | 5300               | 3.72                                | 0.12        | 3.84                                 | 11                            | PASS      |
| 64      | 5320               | 2.36                                | 0.12        | 2.48                                 | 11                            | PASS      |
| 100     | 5500               | 2.28                                | 0.12        | 2.40                                 | 11                            | PASS      |
| 116     | 5580               | 2.89                                | 0.12        | 3.01                                 | 11                            | PASS      |
| 140     | 5700               | 3.12                                | 0.12        | 3.24                                 | 11                            | PASS      |
| 144     | 5720               | 5.94                                | 0.12        | 6.06                                 | 11                            | PASS      |

802.11n (20MHz)

| CHANNEL | FREQUENCY<br>(MHz) | PSD w/o<br>Duty Factor<br>(dBm/MHz) | Duty Factor | PSD with<br>Duty Factor<br>(dBm/MHz) | MAXIMUM<br>LIMIT<br>(dBm/MHz) | PASS/FAIL |
|---------|--------------------|-------------------------------------|-------------|--------------------------------------|-------------------------------|-----------|
| 36      | 5180               | 1.15                                | 0.09        | 1.24                                 | 11                            | PASS      |
| 40      | 5200               | 3.05                                | 0.09        | 3.14                                 | 11                            | PASS      |
| 48      | 5240               | 3.24                                | 0.09        | 3.33                                 | 11                            | PASS      |
| 52      | 5260               | 2.80                                | 0.09        | 2.89                                 | 11                            | PASS      |
| 60      | 5300               | 2.05                                | 0.09        | 2.14                                 | 11                            | PASS      |
| 64      | 5320               | 0.89                                | 0.09        | 0.98                                 | 11                            | PASS      |
| 100     | 5500               | 1.35                                | 0.09        | 1.44                                 | 11                            | PASS      |
| 116     | 5580               | 2.05                                | 0.09        | 2.14                                 | 11                            | PASS      |
| 140     | 5700               | 2.89                                | 0.09        | 2.98                                 | 11                            | PASS      |
| 144     | 5720               | 4.78                                | 0.09        | 4.87                                 | 11                            | PASS      |

802.11n (40MHz)

| CHANNEL | FREQUENCY<br>(MHz) | PSD w/o<br>Duty Factor<br>(dBm/MHz) | Duty Factor | PSD with<br>Duty Factor<br>(dBm/MHz) | MAXIMUM<br>LIMIT<br>(dBm/MHz) | PASS/FAIL |
|---------|--------------------|-------------------------------------|-------------|--------------------------------------|-------------------------------|-----------|
| 38      | 5190               | -5.63                               | 0.21        | -5.42                                | 11                            | PASS      |
| 46      | 5230               | 0.14                                | 0.21        | 0.35                                 | 11                            | PASS      |
| 54      | 5270               | -0.81                               | 0.21        | -0.60                                | 11                            | PASS      |
| 62      | 5310               | -6.29                               | 0.21        | -6.08                                | 11                            | PASS      |
| 102     | 5510               | -1.92                               | 0.21        | -1.71                                | 11                            | PASS      |
| 110     | 5550               | -1.65                               | 0.21        | -1.44                                | 11                            | PASS      |
| 134     | 5670               | -1.27                               | 0.21        | -1.06                                | 11                            | PASS      |
| 142     | 5710               | 1.72                                | 0.21        | 1.93                                 | 11                            | PASS      |

802.11 ac (20MHz)

| CHANNEL | FREQUENCY<br>(MHz) | PSD w/o<br>Duty Factor<br>(dBm/MHz) | Duty Factor | PSD with<br>Duty Factor<br>(dBm/MHz) | MAXIMUM<br>LIMIT<br>(dBm/MHz) | PASS/FAIL |
|---------|--------------------|-------------------------------------|-------------|--------------------------------------|-------------------------------|-----------|
| 36      | 5180               | 1.03                                | 0           | 1.03                                 | 11                            | PASS      |
| 40      | 5200               | 3.19                                | 0           | 3.19                                 | 11                            | PASS      |
| 48      | 5240               | 3.39                                | 0           | 3.39                                 | 11                            | PASS      |
| 52      | 5260               | 2.89                                | 0           | 2.89                                 | 11                            | PASS      |
| 60      | 5300               | 2.31                                | 0           | 2.31                                 | 11                            | PASS      |
| 64      | 5320               | 0.82                                | 0           | 0.82                                 | 11                            | PASS      |
| 100     | 5500               | 1.18                                | 0           | 1.18                                 | 11                            | PASS      |
| 116     | 5580               | 2.20                                | 0           | 2.20                                 | 11                            | PASS      |
| 140     | 5700               | 1.69                                | 0           | 1.69                                 | 11                            | PASS      |
| 144     | 5720               | 4.50                                | 0           | 4.50                                 | 11                            | PASS      |

**802.11ac (40MHz)**

| CHANNEL | FREQUENCY<br>(MHz) | PSD w/o<br>Duty Factor<br>(dBm/MHz) | Duty Factor | PSD with<br>Duty Factor<br>(dBm/MHz) | MAXIMUM<br>LIMIT<br>(dBm/MHz) | PASS/FAIL |
|---------|--------------------|-------------------------------------|-------------|--------------------------------------|-------------------------------|-----------|
| 38      | 5190               | -6.08                               | 0.20        | -5.88                                | 11                            | PASS      |
| 46      | 5230               | 0.00                                | 0.20        | 0.20                                 | 11                            | PASS      |
| 54      | 5270               | 0.04                                | 0.20        | 0.24                                 | 11                            | PASS      |
| 62      | 5310               | -2.42                               | 0.20        | -2.22                                | 11                            | PASS      |
| 102     | 5510               | -3.13                               | 0.20        | -2.93                                | 11                            | PASS      |
| 110     | 5550               | -1.58                               | 0.20        | -1.38                                | 11                            | PASS      |
| 134     | 5670               | 0.40                                | 0.20        | 0.60                                 | 11                            | PASS      |
| 142     | 5710               | 0.92                                | 0.20        | 1.12                                 | 11                            | PASS      |

**802.11ac (80MHz)**

| CHANNEL | FREQUENCY<br>(MHz) | PSD w/o<br>Duty Factor<br>(dBm/MHz) | Duty Factor | PSD with<br>Duty Factor<br>(dBm/MHz) | MAXIMUM<br>LIMIT<br>(dBm/MHz) | PASS/FAIL |
|---------|--------------------|-------------------------------------|-------------|--------------------------------------|-------------------------------|-----------|
| 42      | 5210               | -9.52                               | 0.39        | -9.13                                | 11                            | PASS      |
| 58      | 5290               | -7.56                               | 0.39        | -7.17                                | 11                            | PASS      |
| 106     | 5530               | -5.82                               | 0.39        | -5.43                                | 11                            | PASS      |
| 122     | 5610               | -4.05                               | 0.39        | -3.66                                | 11                            | PASS      |
| 138     | 5690               | -3.68                               | 0.39        | -3.29                                | 11                            | PASS      |

For U-NII-3:

Note: dBm/500kHz= dBm/300kHz+10\*log(0.5/0.3)= dBm/300kHz+2.22

802.11a

| CHANNEL | FREQUENCY<br>(MHz) | PSD w/o<br>Duty Factor<br>(dBm/300kHz) | PSD w/o<br>Duty Factor<br>(dBm/500kHz) | Duty Factor | PSD with<br>Duty Factor<br>(dBm/500kHz) | LIMIT<br>(dBm/500kHz) | PASS<br>/FAIL |
|---------|--------------------|----------------------------------------|----------------------------------------|-------------|-----------------------------------------|-----------------------|---------------|
| 144     | 5720               | 0.20                                   | 2.42                                   | 0.00        | 2.42                                    | 30                    | PASS          |
| 149     | 5745               | 0.19                                   | 2.41                                   | 0.00        | 2.41                                    | 30                    | PASS          |
| 157     | 5785               | -0.31                                  | 1.91                                   | 0.00        | 1.91                                    | 30                    | PASS          |
| 165     | 5825               | -1.14                                  | 1.08                                   | 0.00        | 1.08                                    | 30                    | PASS          |

802.11n (20MHz)

| CHANNEL | FREQUENCY<br>(MHz) | PSD w/o<br>Duty Factor<br>(dBm/300kHz) | PSD w/o<br>Duty Factor<br>(dBm/500kHz) | Duty Factor | PSD with<br>Duty Factor<br>(dBm/500kHz) | LIMIT<br>(dBm/500kHz) | PASS<br>/FAIL |
|---------|--------------------|----------------------------------------|----------------------------------------|-------------|-----------------------------------------|-----------------------|---------------|
| 144     | 5720               | -1.04                                  | 1.18                                   | 0.09        | 1.27                                    | 30                    | PASS          |
| 149     | 5745               | -1.30                                  | 0.92                                   | 0.09        | 1.01                                    | 30                    | PASS          |
| 157     | 5785               | -1.50                                  | 0.72                                   | 0.09        | 0.81                                    | 30                    | PASS          |
| 165     | 5825               | -2.62                                  | -0.40                                  | 0.09        | -0.31                                   | 30                    | PASS          |

802.11n (40MHz)

| CHANNEL | FREQUENCY<br>(MHz) | PSD w/o<br>Duty Factor<br>(dBm/300kHz) | PSD w/o<br>Duty Factor<br>(dBm/500kHz) | Duty Factor | PSD with<br>Duty Factor<br>(dBm/500kHz) | LIMIT<br>(dBm/500kHz) | PASS<br>/FAIL |
|---------|--------------------|----------------------------------------|----------------------------------------|-------------|-----------------------------------------|-----------------------|---------------|
| 142     | 5710               | -3.94                                  | -1.72                                  | 0.21        | -1.51                                   | 30                    | PASS          |
| 151     | 5755               | -4.33                                  | -2.11                                  | 0.21        | -1.90                                   | 30                    | PASS          |
| 159     | 5795               | -4.62                                  | -2.40                                  | 0.21        | -2.19                                   | 30                    | PASS          |



### 802.11ac (20MHz)

| CHANNEL | FREQUENCY<br>(MHz) | PSD w/o<br>Duty Factor<br>(dBm/300kHz) | PSD w/o<br>Duty Factor<br>(dBm/500kHz) | Duty Factor | PSD with<br>Duty Factor<br>(dBm/500kHz) | LIMIT<br>(dBm/500kHz) | PASS<br>/FAIL |
|---------|--------------------|----------------------------------------|----------------------------------------|-------------|-----------------------------------------|-----------------------|---------------|
| 144     | 5720               | -1.07                                  | 1.15                                   | 0.09        | 1.24                                    | 30                    | PASS          |
| 149     | 5745               | -1.20                                  | 1.02                                   | 0.09        | 1.11                                    | 30                    | PASS          |
| 157     | 5785               | -1.53                                  | 0.69                                   | 0.09        | 0.78                                    | 30                    | PASS          |
| 165     | 5825               | -2.59                                  | -0.37                                  | 0.09        | -0.28                                   | 30                    | PASS          |

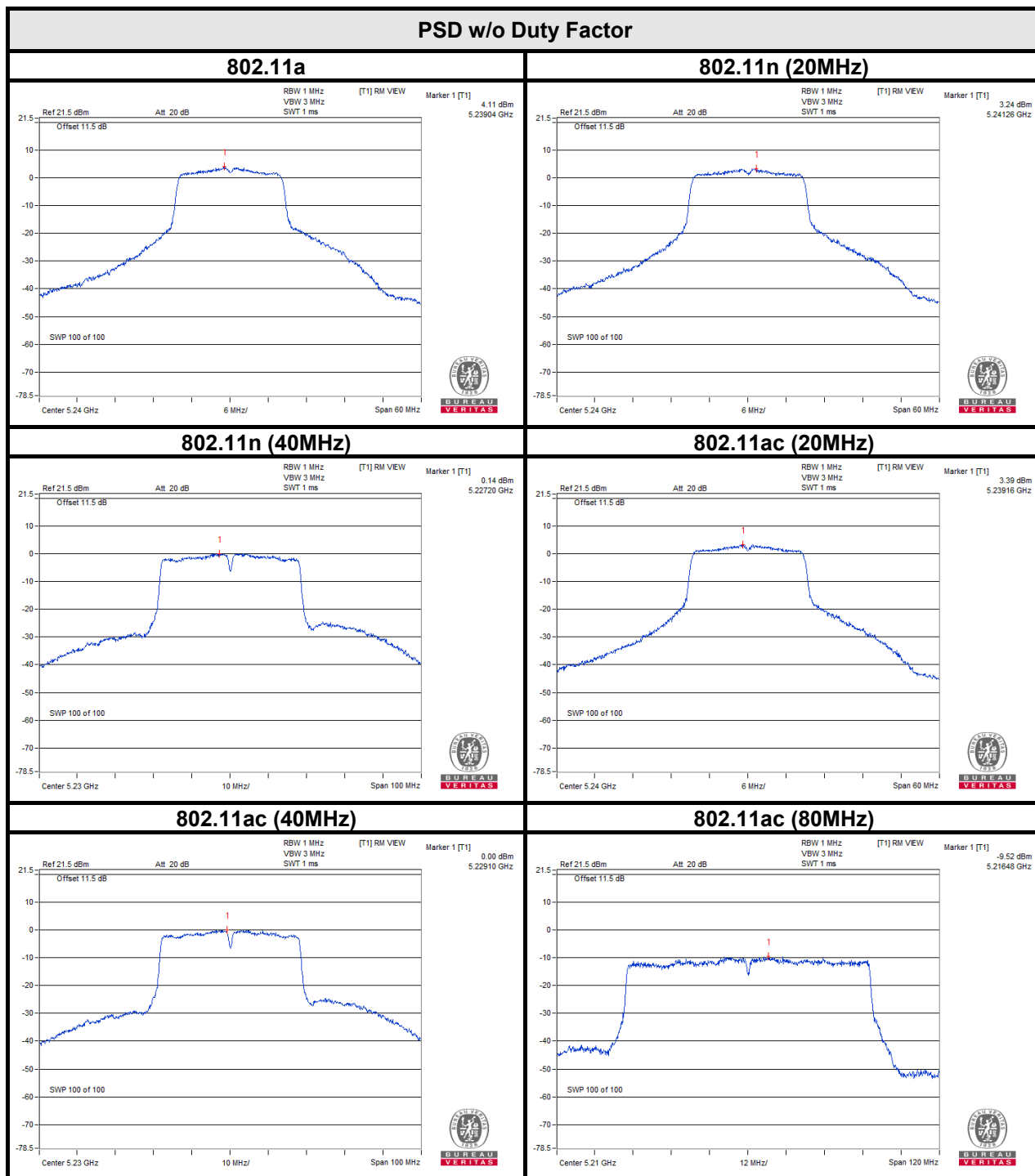
### 802.11ac (40MHz)

| CHANNEL | FREQUENCY<br>(MHz) | PSD w/o<br>Duty Factor<br>(dBm/300kHz) | PSD w/o<br>Duty Factor<br>(dBm/500kHz) | Duty Factor | PSD with<br>Duty Factor<br>(dBm/500kHz) | LIMIT<br>(dBm/500kHz) | PASS<br>/FAIL |
|---------|--------------------|----------------------------------------|----------------------------------------|-------------|-----------------------------------------|-----------------------|---------------|
| 142     | 5710               | -4.78                                  | -2.56                                  | 0.19        | -2.37                                   | 30                    | PASS          |
| 151     | 5755               | -5.33                                  | -3.11                                  | 0.19        | -2.92                                   | 30                    | PASS          |
| 159     | 5795               | -5.56                                  | -3.34                                  | 0.19        | -3.15                                   | 30                    | PASS          |

### 802.11ac (80MHz)

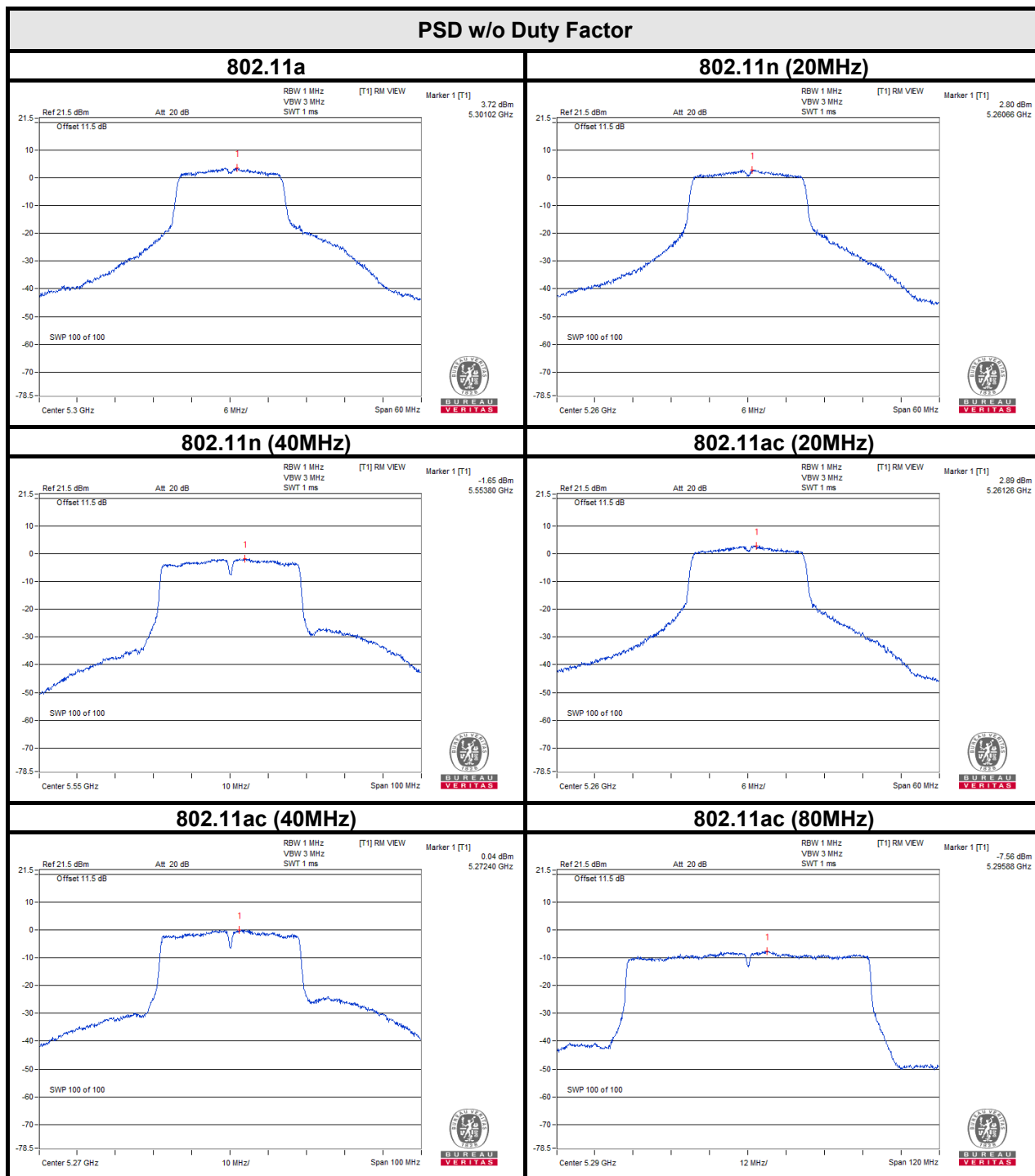
| CHANNEL | FREQUENCY<br>(MHz) | PSD w/o<br>Duty Factor<br>(dBm/300kHz) | PSD w/o<br>Duty Factor<br>(dBm/500kHz) | Duty Factor | PSD with<br>Duty Factor<br>(dBm/500kHz) | LIMIT<br>(dBm/500kHz) | PASS<br>/FAIL |
|---------|--------------------|----------------------------------------|----------------------------------------|-------------|-----------------------------------------|-----------------------|---------------|
| 138     | 5690               | -8.72                                  | -6.50                                  | 0.42        | -6.08                                   | 30                    | PASS          |
| 155     | 5775               | -9.32                                  | -7.10                                  | 0.42        | -6.68                                   | 30                    | PASS          |

For 5180~5240MHz





For 5260~5320MHz

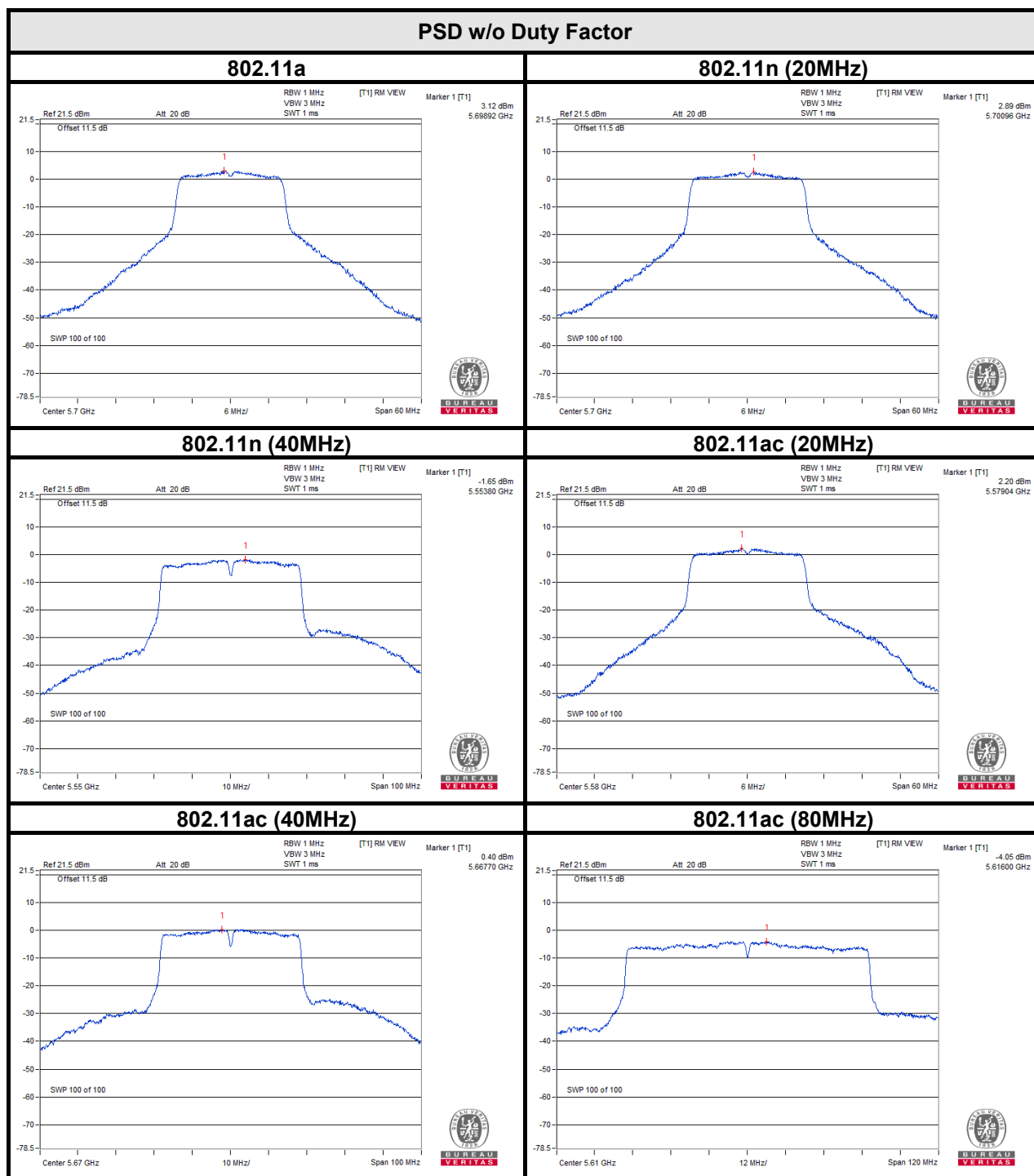




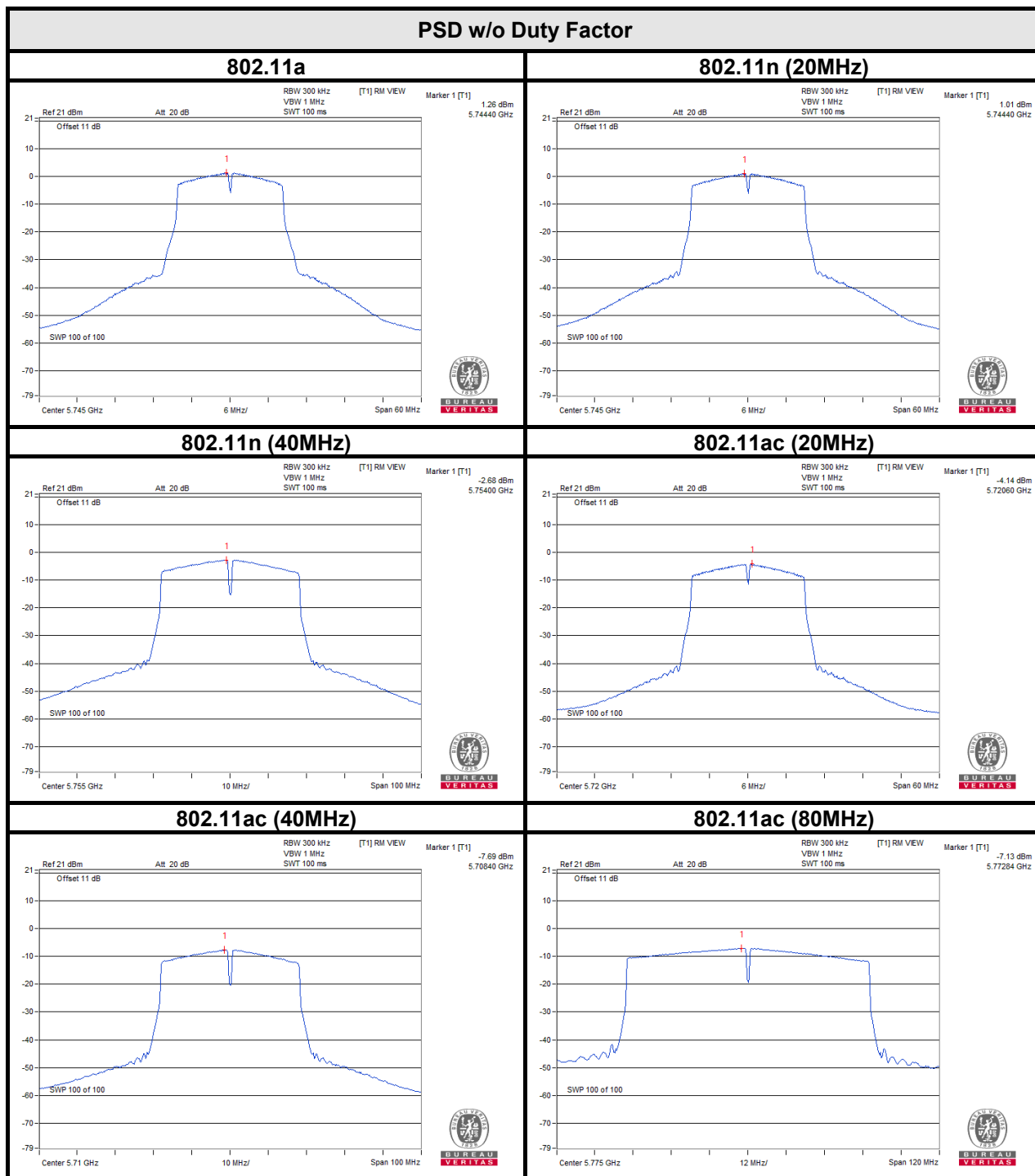
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For 5500~5700MHz



For 5745~5825MHz





Test Report No.: W7L-P21080006RF14

## 4 PHOTOGRAPHS OF THE TEST CONFIGURATION

Please refer to the attached file (Test Setup Photo).

## **5 APPENDIX A – MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB**

No modifications were made to the EUT by the lab during the test.

**---END---**