

### 3.4 Transmitter Conducted Output power

#### 3.4.1 Specification

- FCC Part 2.1046
- FCC Part 27.50 (a)(1)(i)

#### 3.4.2 Test Description

The method used is as detailed in FCC KDB 971168

The measurement were performed in max output power transmitting mode at all channel of the 2350 MHz ~ 2360 MHz frequency ranges.

Peak Power Output not exceed 2000W(63dBm)

The EUT output power was connected to the spectrum analyzer through appropriate attenuator. The output power was measured using a spectrum analyzer CHANNEL POWER function.

The peak-to-average power ratio (PAPR) of the transmitter output power must not exceed 13 dB

Transmitter Conducted Output power was measured under the three types of modulation mode which are QPSK, 16QAM and 64QAM, and resource block was 50.

#### 3.4.3 Test Procedure

The test procedure used is as detailed in FCC KDB 935210 D05 V01 3.5.2 e)

The EUT antenna terminal was connected to the spectrum analyzer through an external attenuator and an appropriate coaxial cable.

The EUT RF output was modulated. Special attention was taken to prevent spectrum analyzer RF input overload.

#### 3.4.4 Test equipment list

| Equipment         | Model Name  | Manufacturer                                 |
|-------------------|-------------|--|
| EUT               | HX-WCS-SISO | Corning Optical Communications Wireless Inc. |
| MHU               | HX-WCS-MHU  | Corning Optical Communications Wireless Inc. |
| Signal Generator  | N5182A      | Agilent                                      |
| Spectrum Analyzer | N9020A      | Agilent                                      |
| Attenuator        | PE7019-20   | Pasternack                                   |
| DC Power Supply   | 6674A       | Agilent                                      |

#### 3.4.5 Test condition

- Test place: Shield room
- Test environment: 22.5 °C, 44 % R.H.

### 3.4.6 Test results

#### • Port1

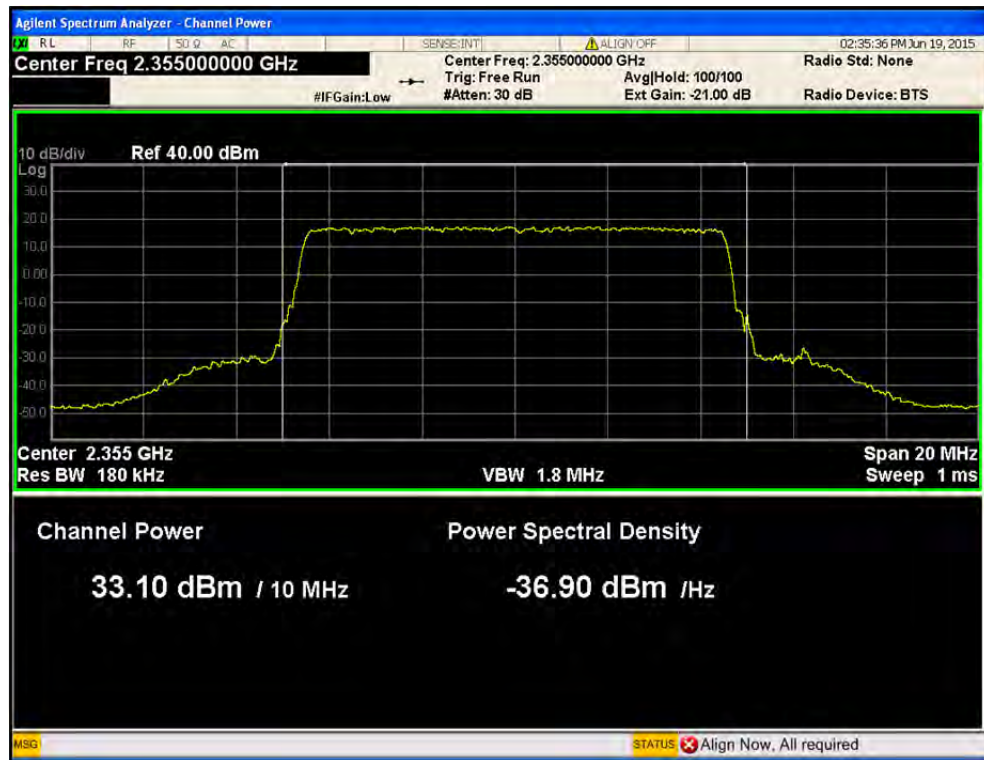
| WCS Block | Bandwidth [MHz] | Frequency [MHz] | Modulation | Conducted Output Level [dBm] | EIRP [dBm] |
|-----------|-----------------|-----------------|------------|------------------------------|------------|
| A+B       | 10              | 2 355.0         | QPSK       | 33.10                        | 48.10      |
|           |                 |                 | 16QAM      | 32.98                        | 47.99      |
|           |                 |                 | 64QAM      | 33.06                        | 48.06      |
| A         | 5               | 2 352.5         | QPSK       | 33.06                        | 48.06      |
|           |                 |                 | 16QAM      | 32.98                        | 47.98      |
|           |                 |                 | 64QAM      | 32.97                        | 47.97      |
| B         | 5               | 2 357.5         | QPSK       | 32.99                        | 47.99      |
|           |                 |                 | 16QAM      | 32.98                        | 47.98      |
|           |                 |                 | 64QAM      | 33.01                        | 48.01      |

#### • Port1 - PAPR

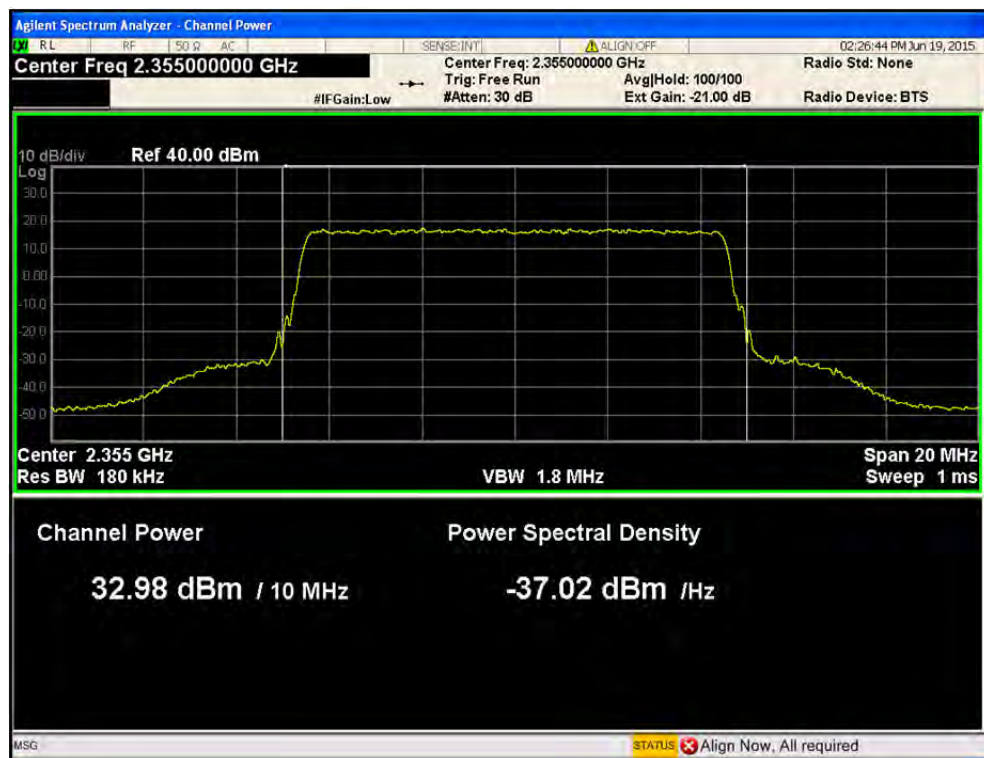
| WCS Block | Bandwidth [MHz] | Frequency [MHz] | Modulation | Average Power Level [dBm] | PAPR [dB] |
|-----------|-----------------|-----------------|------------|---------------------------|-----------|
| A+B       | 10              | 2 355.0         | QPSK       | 32.95                     | 10.33     |
|           |                 |                 | 16QAM      | 32.98                     | 10.26     |
|           |                 |                 | 64QAM      | 32.93                     | 10.43     |
| A         | 5               | 2 352.5         | QPSK       | 32.97                     | 10.05     |
|           |                 |                 | 16QAM      | 32.97                     | 10.28     |
|           |                 |                 | 64QAM      | 32.97                     | 10.19     |
| B         | 5               | 2 357.5         | QPSK       | 32.99                     | 9.92      |
|           |                 |                 | 16QAM      | 33.00                     | 10.13     |
|           |                 |                 | 64QAM      | 33.00                     | 10.18     |

### 3.4.7 Test Plots

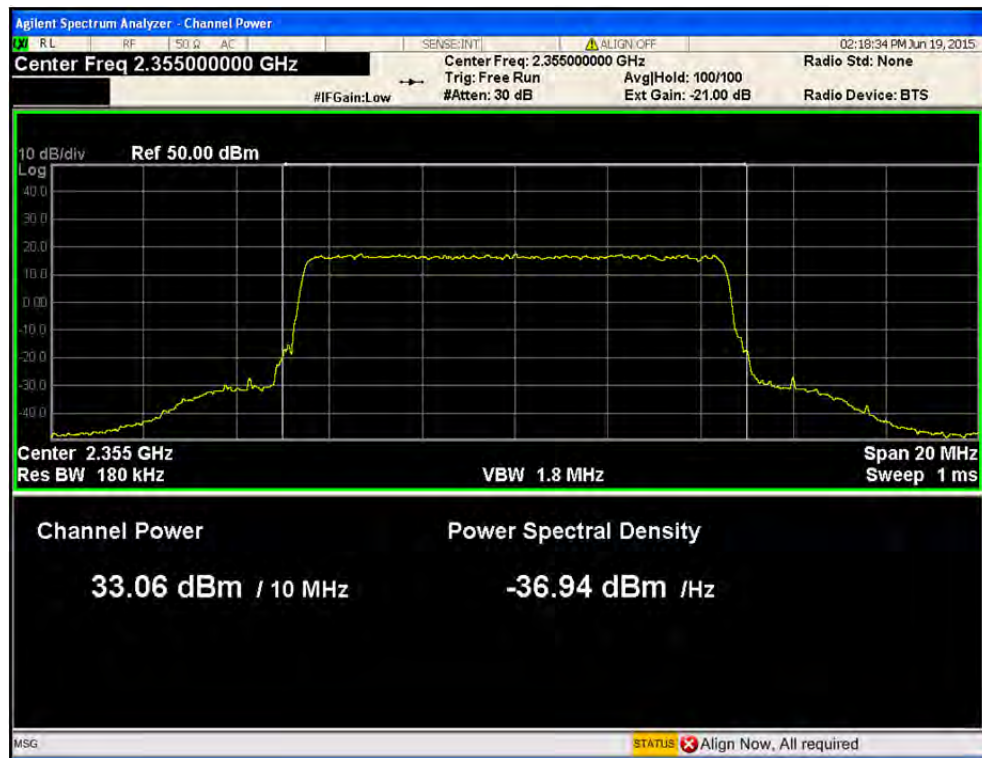
- Port1 / LTE 10 MHz / 2 355 MHz / QPSK



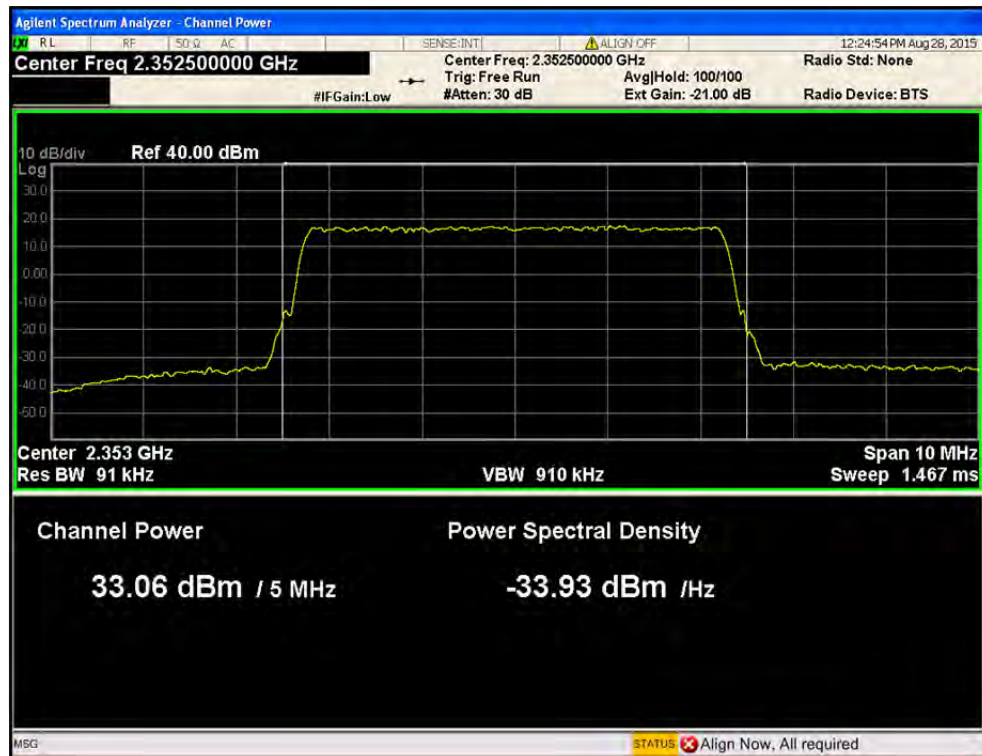
- Port1 / LTE 10 MHz / 2 355 MHz / 16QAM



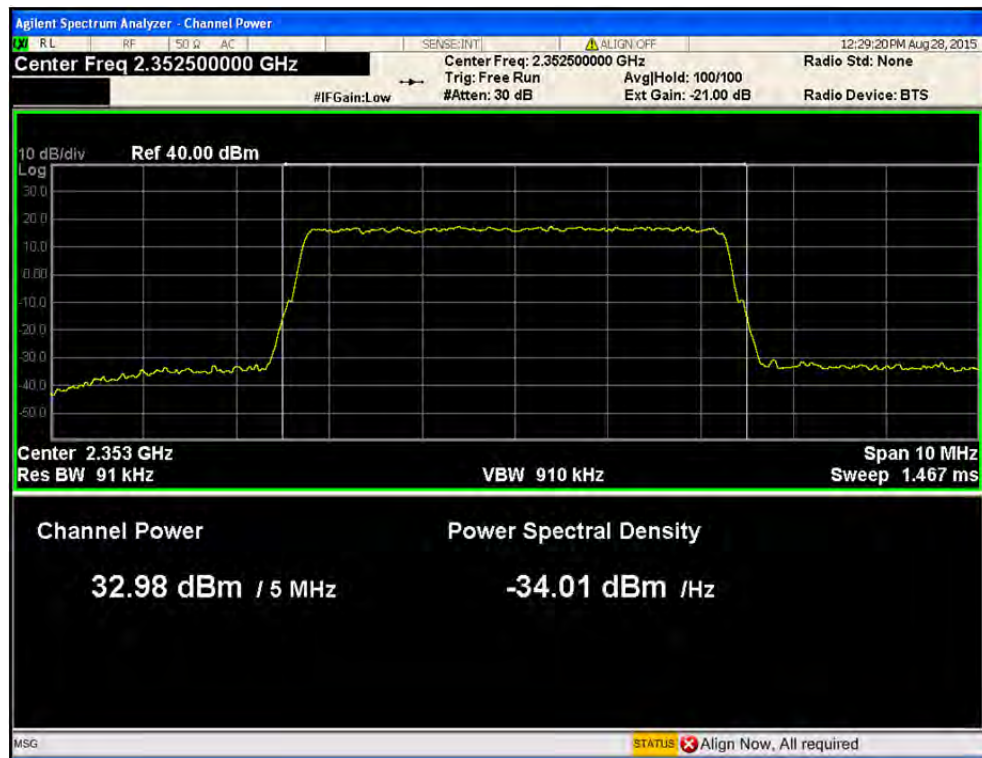
• Port1 / LTE 10 MHz / 2 355 MHz / 64QAM



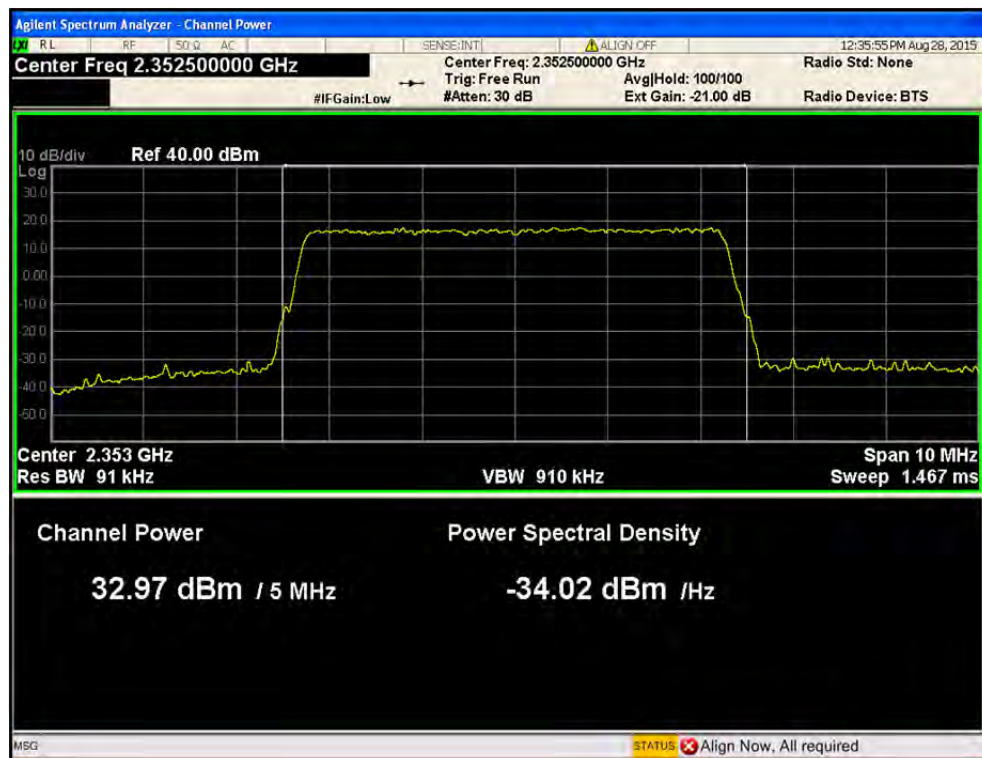
• Port1 / LTE 5 MHz / 2 352.5 MHz / QPSK



• Port1 / LTE 5 MHz / 2 352.5 MHz / 16QAM

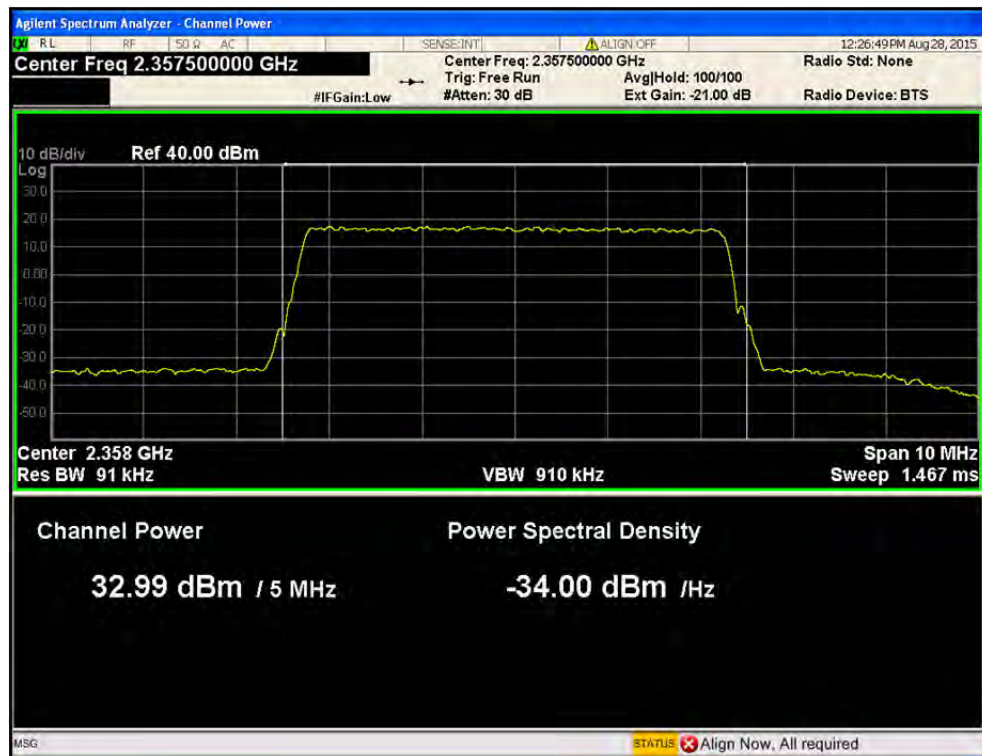


• Port1 / LTE 5 MHz / 2 352.5 MHz / 64QAM

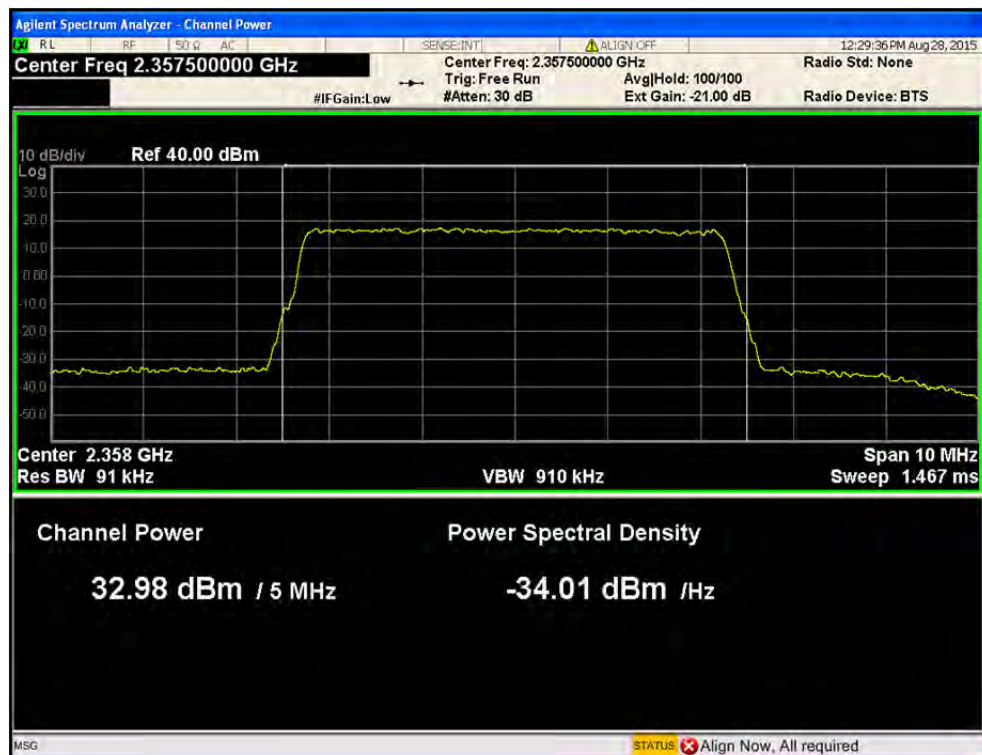




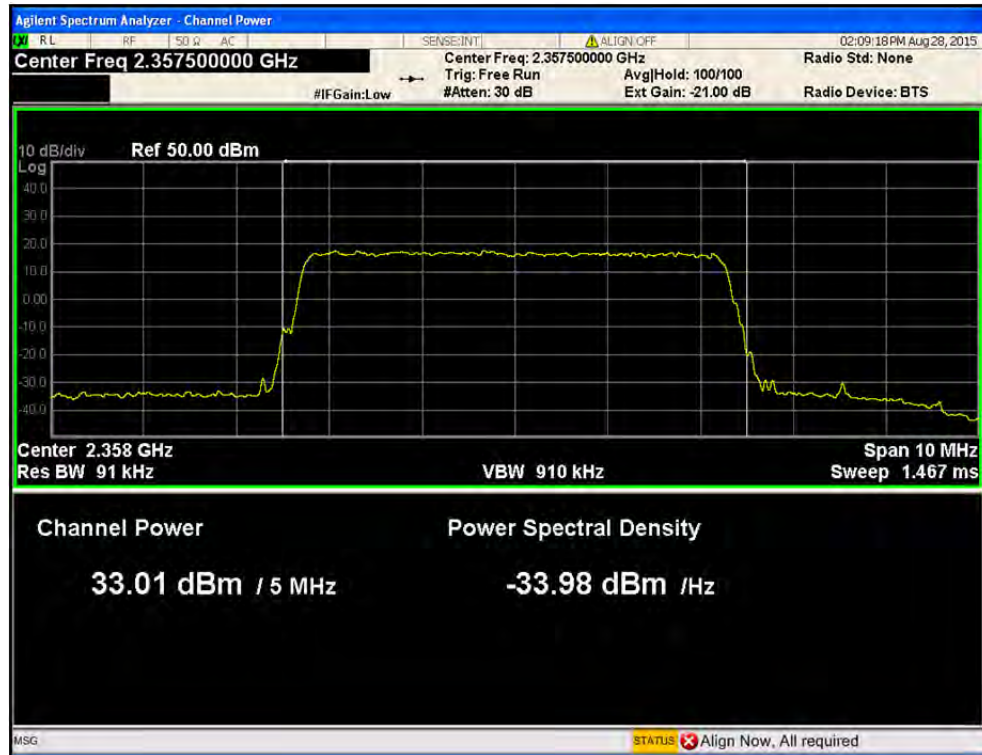
• Port1 / LTE 5 MHz / 2 357.5 MHz / QPSK



• Port1 / LTE 5 MHz / 2 357.5 MHz / 16QAM

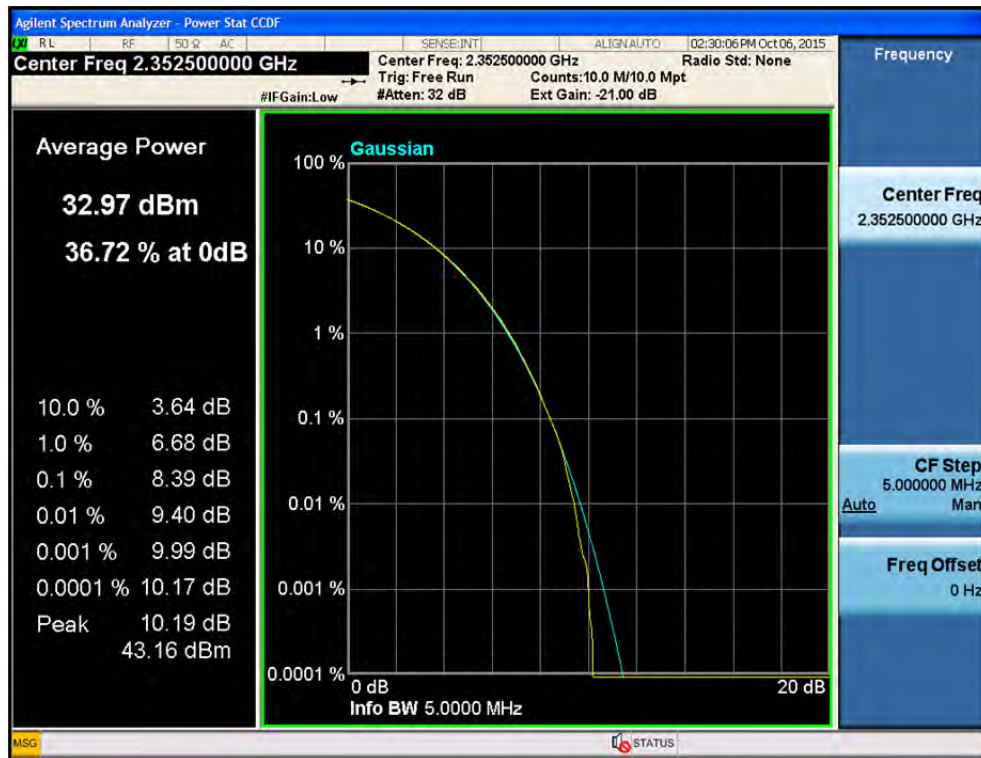


- Port1 / LTE 5 MHz / 2 357.5 MHz / 64QAM



### 3.4.8 PAPR Test Plots

- Port1 / LTE 5 MHz / 2 352.5 MHz / 64QAM



- Port1 / LTE 5 MHz / 2 357.5 MHz / 64QAM





• Port1 / LTE 10 MHz / 2 355 MHz / 64QAM



## 3.5 Radiated spurious emission

### 3.5.1 Specification

- FCC Part 2.1053
- FCC Part 27.53

### 3.5.2 Test Description

The highest gain antenna to be used with the EUT was tested for final measurements. The EUT was configured for the lowest and the highest transmit frequency. For each configuration, the spectrum was scanned throughout the specified range. While scanning, emissions from the EUT were maximized by rotating the EUT on a turntable, adjusting the position of the EUT and EUT antenna in three orthogonal axis, and adjusting the measurement antenna height and polarization (per ANSI C63. 10:2009). A preamp and high pass filter were used for this test in order to provide sufficient measured sensitivity.

For licensed transmitters, the FCC reference TIA/EIA-603 as the measurement procedure standard. TIA/EIA-603 Section 2.2.12 describes a method for measuring radiated spurious emission that utilizes an antenna substitution method:

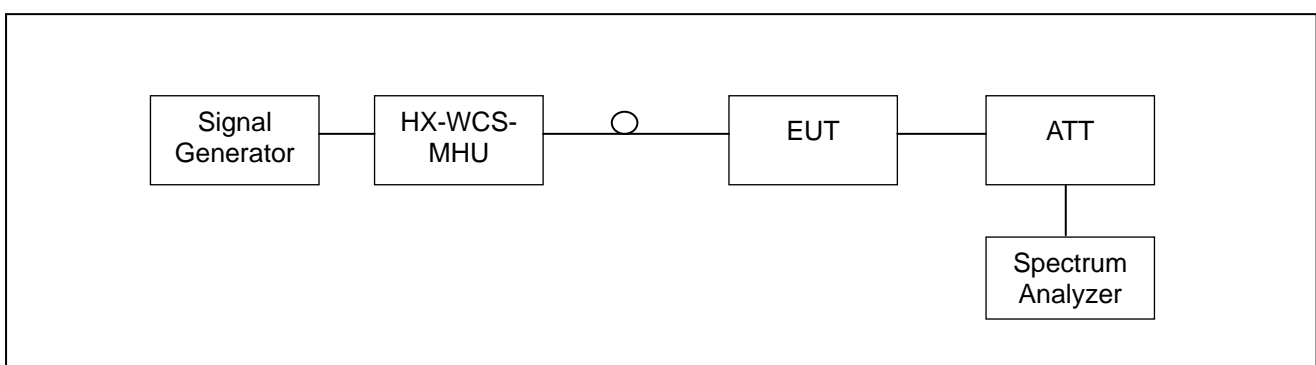
At an approved test site, the transmitter is place on a remotely controlled turntable, and the measurement antenna is place 3 meters from the transmitter.

The transmitter is place on a remotely controlled turntable, and the measurement antenna is placed 3 meters from the transmitter. The turntable azimuth is varied to maximize the level of spurious emissions. The height of the measurement antenna is also varied from 1 to 4 meters. The amplitude and frequency of the highest emission are noted. The transmitter is then replaced with a 1/2 wave dipole that is successively tuned to each of the highest spurious emission for emissions below 1 GHz, and a horn antenna for emission above 1 GHz.

A signal generator is connected to the dipole (horn antenna for frequency above 1GHz), and its output is adjusted to match the level previously noted for each frequency. The output of the signal generator is recorded, and by factoring in the cable loss to the antenna and its gain; the power(dBm) into an ideal 1/2 wave dipole antenna is determined for each radiated emission.

Radiated spurious emission was measured under the three types of modulation mode which are QPSK, 16QAM and 64QAM, and resource block was 50.

### 3.5.3 Set-Up



### 3.5.4 Test equipment list

| Equipment            | Model Name     | Manufacturer                                  |
|----------------------|----------------|---|
| EUT                  | HX-WCS-SISO    | Corning Optical Communications Wireless, Inc. |
| MHU                  | HX-WCS-MHU     | Corning Optical Communications Wireless Inc.  |
| Signal Generator     | N5182A         | Agilent                                       |
| Spectrum Analyzer    | N9020A         | Agilent                                       |
| EMI Test Receiver    | ESS            | R&S   |
| Bi-conical Antenna   | VHA9103        | R&S   |
| Spectrum Analyzer    | FSP            | R&S   |
| Log Periodic Antenna | VULP9118A      | R&S   |
| Turn table           | DS 1500 S-1t-O | Innco GmbH                                    |
| Antenna mast         | MA4000-O       | Innco GmbH                                    |
| Controller           | CO 2000        | Innco GmbH                                    |

### 3.5.5 Test condition

- Test place: Shield room
- Test environment: 23.0 °C, 43 % R.H.

### 3.5.6 Test results

#### • Modulation mode: QPSK

| Frequency [MHz] | S/A [dBuV] | S/G [dBm] | Antenna gain [dBi] | Antenna polarity [H/V] | Cable loss [dB] | Total Level [dBm] | Limit [dBuV] | Margin [dB] |
|-----------------|------------|-----------|--------------------|------------------------|-----------------|-------------------|--------------|-------------|
| 49.77           | 26.00      | -65.77    | 1.37               | H                      | 1.13            | -65.53            | -13.00       | 52.53       |
| 141.32          | 18.10      | -78.87    | 1.08               | H                      | 1.97            | -79.76            | -13.00       | 66.76       |
| 244.12          | 14.40      | -81.45    | 0.79               | H                      | 2.46            | -83.12            | -13.00       | 70.12       |
| 268.45          | 14.50      | -82.02    | 0.63               | H                      | 2.47            | -83.86            | -13.00       | 70.86       |
| 302.29          | 25.10      | -60.66    | 0.40               | H                      | 2.80            | -63.06            | -13.00       | 50.06       |
| 309.63          | 16.70      | -71.53    | 0.49               | V                      | 2.90            | -73.94            | -13.00       | 60.94       |
| 331.77          | 22.20      | -64.65    | 0.73               | H                      | 2.77            | -66.69            | -13.00       | 53.69       |

#### • Modulation mode: 16QAM

| Frequency [MHz] | Reading [dBuV] | Antenna polarity [H/V] | Antenna gain [dBi] | Cable loss [dB] | Level [dBuV] | Level [dBm] | Limit [dBuV] | Margin [dB] |
|-----------------|----------------|------------------------|--------------------|-----------------|--------------|-------------|--------------|-------------|
| 49.77           | 26.20          | -65.39                 | 1.37               | H               | 1.13         | -65.15      | -13.00       | 52.15       |
| 141.32          | 18.30          | -77.56                 | 1.08               | H               | 1.97         | -78.45      | -13.00       | 65.45       |
| 244.11          | 14.30          | -81.53                 | 0.79               | H               | 2.46         | -83.20      | -13.00       | 70.20       |
| 268.43          | 14.50          | -82.04                 | 0.63               | H               | 2.47         | -83.88      | -13.00       | 70.88       |
| 302.28          | 25.00          | -60.65                 | 0.40               | H               | 2.80         | -63.05      | -13.00       | 50.05       |
| 309.64          | 16.70          | -71.52                 | 0.49               | V               | 2.90         | -73.93      | -13.00       | 60.93       |
| 331.78          | 22.00          | -65.89                 | 0.73               | H               | 2.77         | -67.93      | -13.00       | 54.93       |

#### • Modulation mode: 64QAM

| Frequency [MHz] | Reading [dBuV] | Antenna polarity [H/V] | Antenna gain [dBi] | Cable loss [dB] | Level [dBuV] | Level [dBm] | Limit [dBuV] | Margin [dB] |
|-----------------|----------------|------------------------|--------------------|-----------------|--------------|-------------|--------------|-------------|
| 49.78           | 26.30          | -65.48                 | 1.37               | H               | 1.13         | -65.24      | -13.00       | 52.24       |
| 141.31          | 18.20          | -77.45                 | 1.08               | H               | 1.97         | -78.34      | -13.00       | 65.34       |
| 244.11          | 14.30          | -81.53                 | 0.79               | H               | 2.46         | -83.20      | -13.00       | 70.20       |
| 268.44          | 14.40          | -82.01                 | 0.63               | H               | 2.47         | -83.85      | -13.00       | 70.85       |
| 302.28          | 25.20          | -60.46                 | 0.40               | H               | 2.80         | -62.86      | -13.00       | 49.86       |
| 331.75          | 16.80          | -71.41                 | 0.49               | V               | 2.90         | -73.82      | -13.00       | 60.82       |
| 331.78          | 22.10          | -64.76                 | 0.73               | H               | 2.77         | -66.80      | -13.00       | 53.80       |



### 3.6 Frequency stability

#### 3.6.1 Specification

- FCC Rules Part 2.1055
- FCC Rules Part 27.54

#### 3.6.2 Test Description

A direct connect measurement was made between the EUT antenna cable and a spectrum analyzer. The spectrum analyzer is equipped with a precision frequency reference that exceeds the stability requirement of the EUT.

Measurements were made at the edges of the main transmit bands as called out on the data sheets. Testing was done with an absence of modulation in a CW mode of operation.

The primary supply voltage was varied from 85 % to 115 % of the nominal voltage using a temperature chamber, the transmit frequency was recorded at the extremes of the specified temperature (-30°C to +50°C)

#### 3.6.3 Test Procedure

The EUT was set up to the applicable test frequency with modulation. The EUT antenna terminal was conducted to the spectrum analyzer through an external attenuator (at the output test) and an appropriate coaxial cable.

The MAKER function was using for these evaluation.

#### 3.6.4 Test equipment list

| Equipment              | Model Name       | Manufacturer                                 |
|------------------------|------------------|--|
| EUT                    | HX-WCS-SISO-PLUS | Corning Optical Communications Wireless Inc. |
| MHU                    | HX-WCS-MHU       | Corning Optical Communications Wireless Inc. |
| Signal Generator       | N5182A           | Agilent                                      |
| Spectrum Analyzer      | N9020A           | Agilent                                      |
| Attenuator             | PE7019-20        | Pasternack                                   |
| DC power supply        | 6674A            | Agilent                                      |
| Temp. / Humid. Chamber | SJ-1016-TH       | Seo Jin                                      |

#### 3.6.5 Test condition

- Test place: Temperature and Humidity Chamber
- Test environment: -30°C to +50°C

### 3.6.6 Test result

#### • Port1 / LTE 10 MHz / 2 355.0 MHz

| Voltage [%] | Supplied power [Vdc] | Temperature [°C] | Frequency [MHz] | Deviation [ppm] | Limit [ppm] |
|-------------|----------------------|------------------|-----------------|-----------------|-------------|
| 85          | 40.8                 | -30              | 2 355.0         | -0.007 400      | 1.50        |
|             |                      | -20              |                 | 0.016 200       |             |
|             |                      | -10              |                 | 0.002 000       |             |
|             |                      | 0                |                 | 0.014 600       |             |
|             |                      | +10              |                 | 0.008 500       |             |
|             |                      | +20 (ref.)       |                 | 0.013 000       |             |
|             |                      | +30              |                 | 0.003 300       |             |
|             |                      | +40              |                 | 0.020 100       |             |
|             |                      | +50              |                 | 0.002 000       |             |
| 100         | 48.0                 | -30              |                 | 0.001 700       |             |
|             |                      | -20              |                 | 0.004 400       |             |
|             |                      | -10              |                 | 0.000 100       |             |
|             |                      | 0                |                 | -0.000 500      |             |
|             |                      | +10              |                 | 0.005 100       |             |
|             |                      | +20 (ref.)       |                 | -0.016 200      |             |
|             |                      | +30              |                 | 0.011 300       |             |
|             |                      | +40              |                 | 0.000 300       |             |
|             |                      | +50              |                 | -0.005 100      |             |
| 115         | 55.2                 | -30              |                 | -0.005 200      |             |
|             |                      | -20              |                 | -0.000 200      |             |
|             |                      | -10              |                 | 0.011 400       |             |
|             |                      | 0                |                 | -0.007 300      |             |
|             |                      | +10              |                 | -0.025 300      |             |
|             |                      | +20 (ref.)       |                 | 0.019 299       |             |
|             |                      | +30              |                 | 0.000 300       |             |
|             |                      | +40              |                 | -0.005 100      |             |
|             |                      | +50              |                 | -0.005 200      |             |

## • Port1 / LTE 10 MHz / 2 352.5 MHz

| Voltage [%] | Supplied power [Vdc] | Temperature [°C] | Frequency [MHz] | Deviation [ppm] | Limit [ppm] |
|-------------|----------------------|------------------|-----------------|-----------------|-------------|
| 85          | 40.8                 | -30              | 2 352.5         | -0.032 700      | 1.50        |
|             |                      | -20              |                 | 0.008 699       |             |
|             |                      | -10              |                 | -0.026 700      |             |
|             |                      | 0                |                 | -0.014 500      |             |
|             |                      | +10              |                 | -0.005 799      |             |
|             |                      | +20 (ref.)       |                 | -0.005 700      |             |
|             |                      | +30              |                 | 0.001 599       |             |
|             |                      | +40              |                 | 0.000 999       |             |
|             |                      | +50              |                 | 0.001 699       |             |
| 100         | 48.0                 | -30              |                 | 0.017 799       |             |
|             |                      | -20              |                 | 0.022 200       |             |
|             |                      | -10              |                 | 0.009 600       |             |
|             |                      | 0                |                 | 0.010 099       |             |
|             |                      | +10              |                 | 0.028 699       |             |
|             |                      | +20 (ref.)       |                 | -0.016 399      |             |
|             |                      | +30              |                 | -0.009 900      |             |
|             |                      | +40              |                 | -0.008 299      |             |
|             |                      | +50              |                 | -0.001 100      |             |
| 115         | 55.2                 | -30              |                 | 0.019 199       |             |
|             |                      | -20              |                 | 0.001 299       |             |
|             |                      | -10              |                 | 0.024 799       |             |
|             |                      | 0                |                 | 0.000 100       |             |
|             |                      | +10              |                 | -0.007 800      |             |
|             |                      | +20 (ref.)       |                 | 0.020 599       |             |
|             |                      | +30              |                 | -0.010 600      |             |
|             |                      | +40              |                 | -0.004 199      |             |
|             |                      | +50              |                 | 0.016 699       |             |

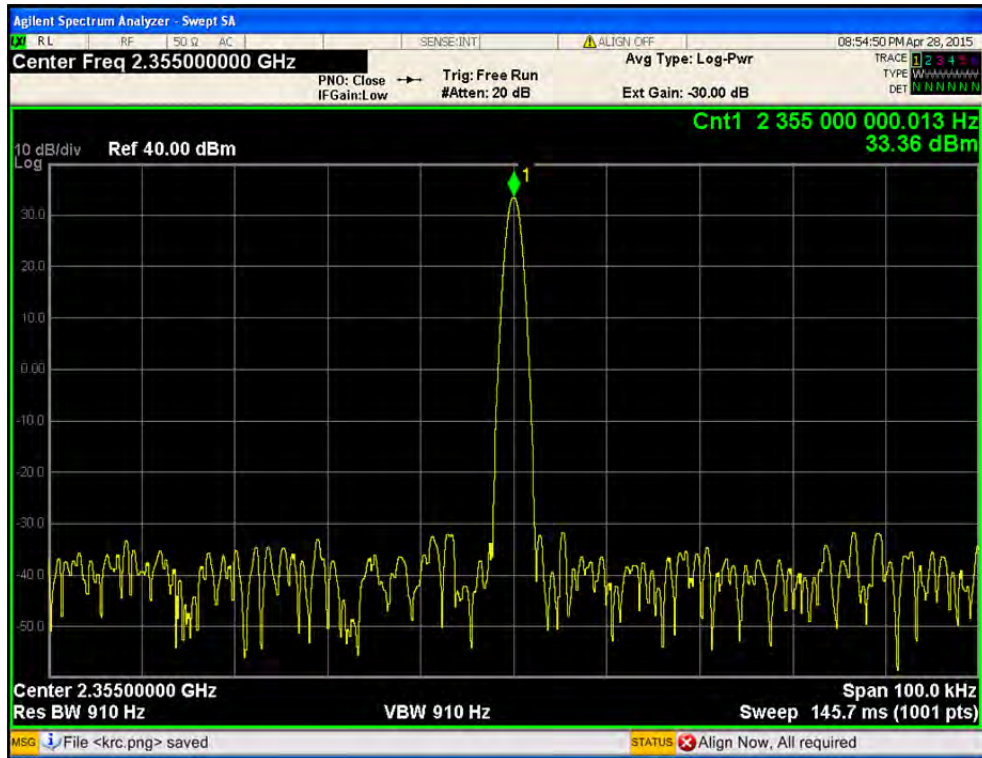
## • Port1 / LTE 5 MHz / 2 357.5 MHz

| Voltage<br>[%] | Supplied power<br>[Vdc] | Temperature<br>[°C] | Frequency<br>[MHz] | Deviation<br>[ppm] | Limit<br>[ppm] |
|----------------|-------------------------|---------------------|--------------------|--------------------|----------------|
| 85             | 40.8                    | -30                 | 2 357.5            | 0.003 300          | 1.50           |
|                |                         | -20                 |                    | -0.020 699         |                |
|                |                         | -10                 |                    | -0.004 199         |                |
|                |                         | 0                   |                    | 0.020 899          |                |
|                |                         | +10                 |                    | -0.000 899         |                |
|                |                         | +20 (ref.)          |                    | -0.016 300         |                |
|                |                         | +30                 |                    | -0.004 600         |                |
|                |                         | +40                 |                    | 0.011 600          |                |
|                |                         | +50                 |                    | 0.004 199          |                |
| 100            | 48.0                    | -30                 |                    | 0.016 099          |                |
|                |                         | -20                 |                    | -0.019 499         |                |
|                |                         | -10                 |                    | -0.021 699         |                |
|                |                         | 0                   |                    | 0.007 299          |                |
|                |                         | +10                 |                    | 0.034 399          |                |
|                |                         | +20 (ref.)          |                    | -0.004 099         |                |
|                |                         | +30                 |                    | 0.020 699          |                |
|                |                         | +40                 |                    | -0.018 099         |                |
|                |                         | +50                 |                    | -0.000 400         |                |
| 115            | 55.2                    | -30                 |                    | -0.014 800         |                |
|                |                         | -20                 |                    | -0.010 200         |                |
|                |                         | -10                 |                    | 0.011 600          |                |
|                |                         | 0                   |                    | 0.002 200          |                |
|                |                         | +10                 |                    | -0.011 000         |                |
|                |                         | +20 (ref.)          |                    | -0.004 099         |                |
|                |                         | +30                 |                    | 0.000 400          |                |
|                |                         | +40                 |                    | -0.017 399         |                |
|                |                         | +50                 |                    | -0.009 300         |                |

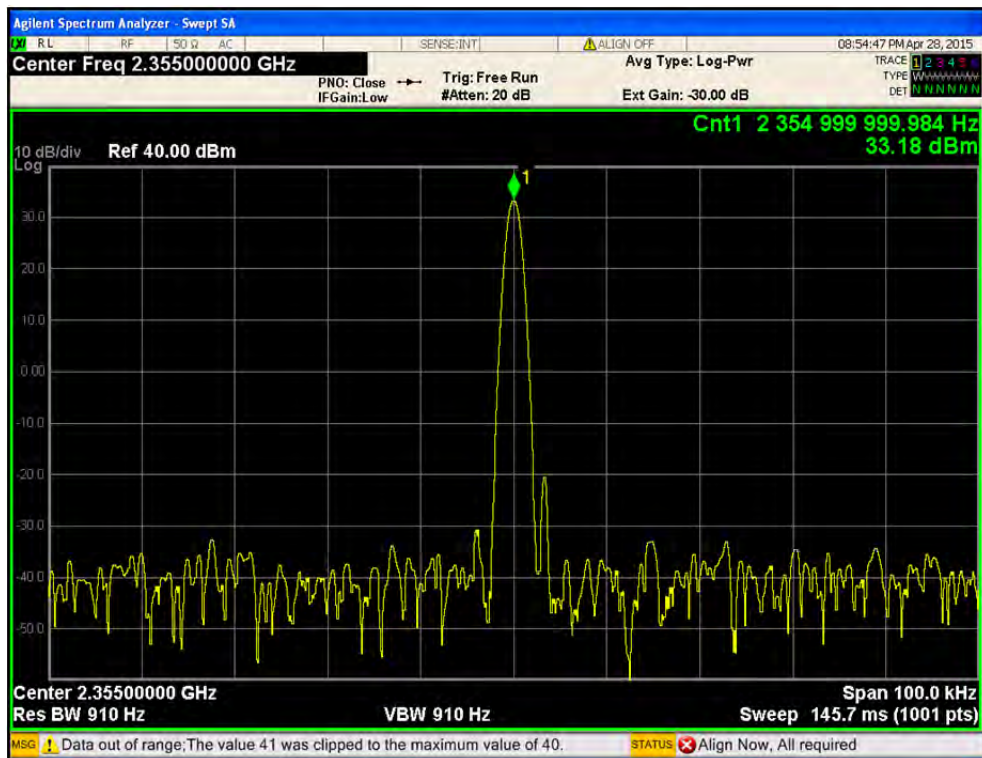


### 3.6.7 Test Plots

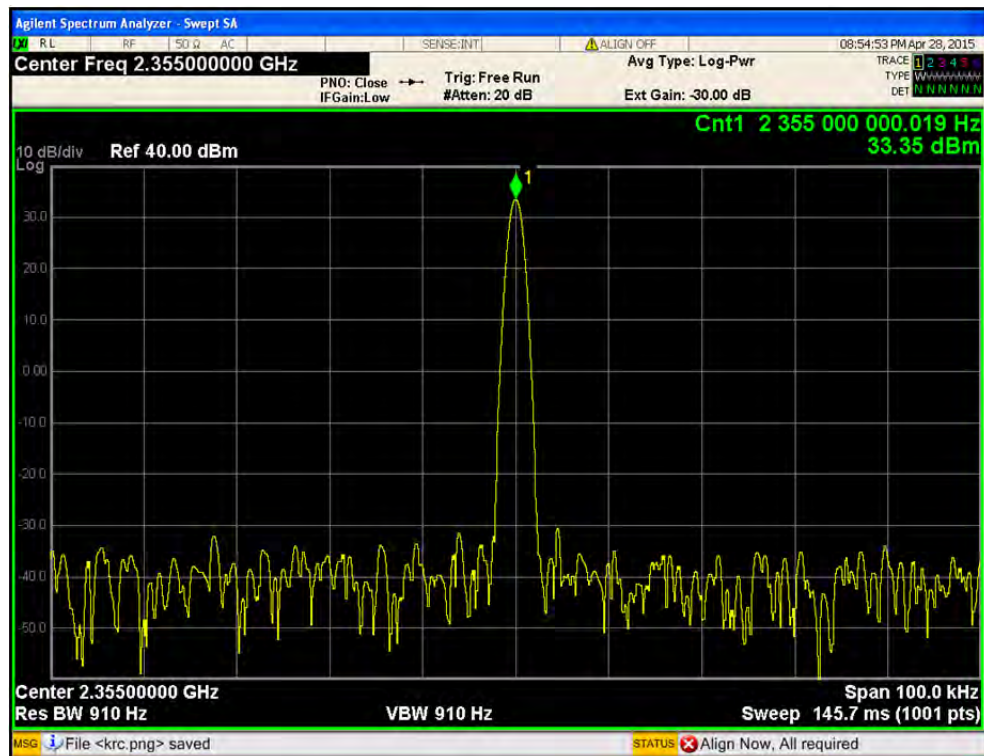
- Port1 / LTE 10 MHz / 2 355 MHz / 85 % of nominal voltage



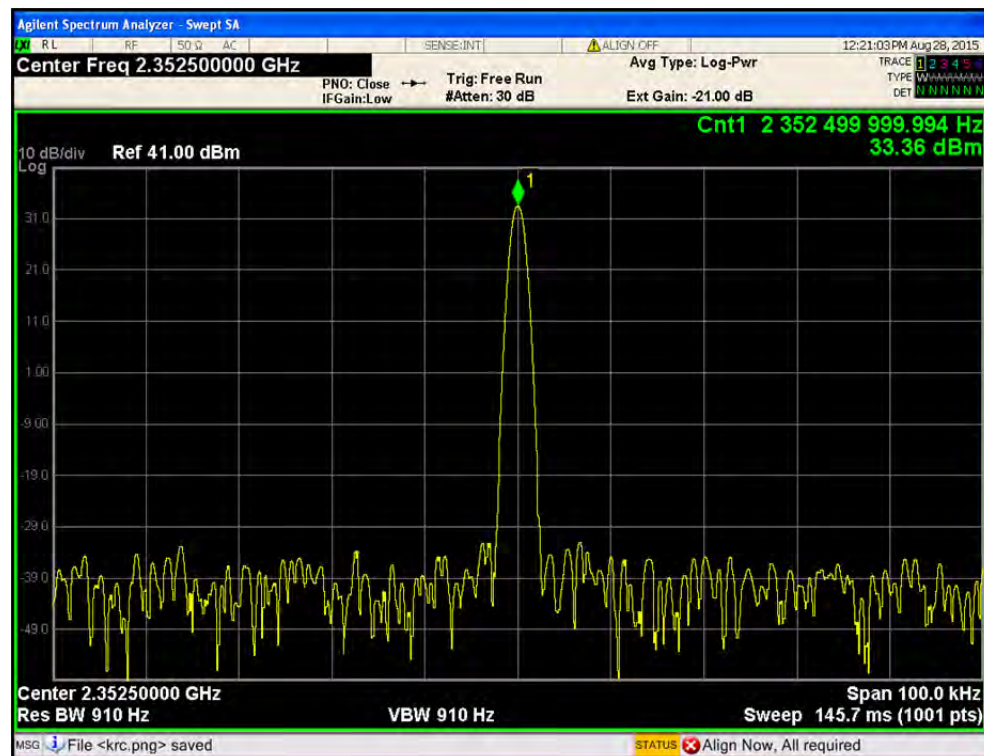
- Port1 / LTE 10 MHz / 2 355 MHz / 100 % of nominal voltage



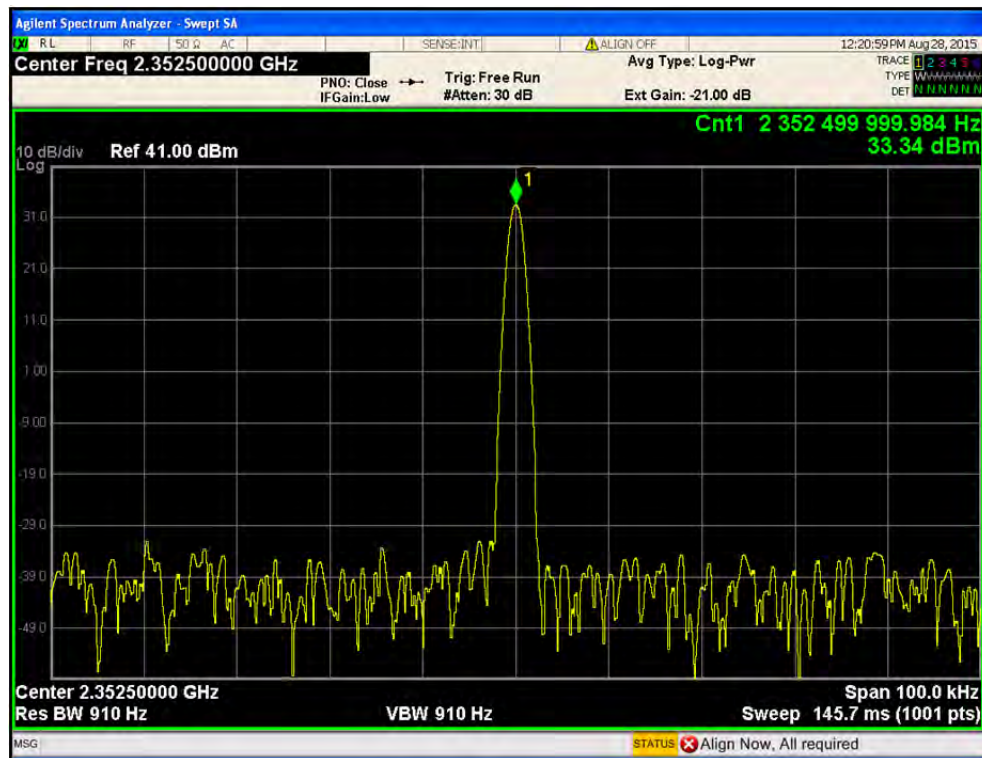
- Port1 / LTE 10 MHz / 2 355 MHz / 115 % of nominal voltage



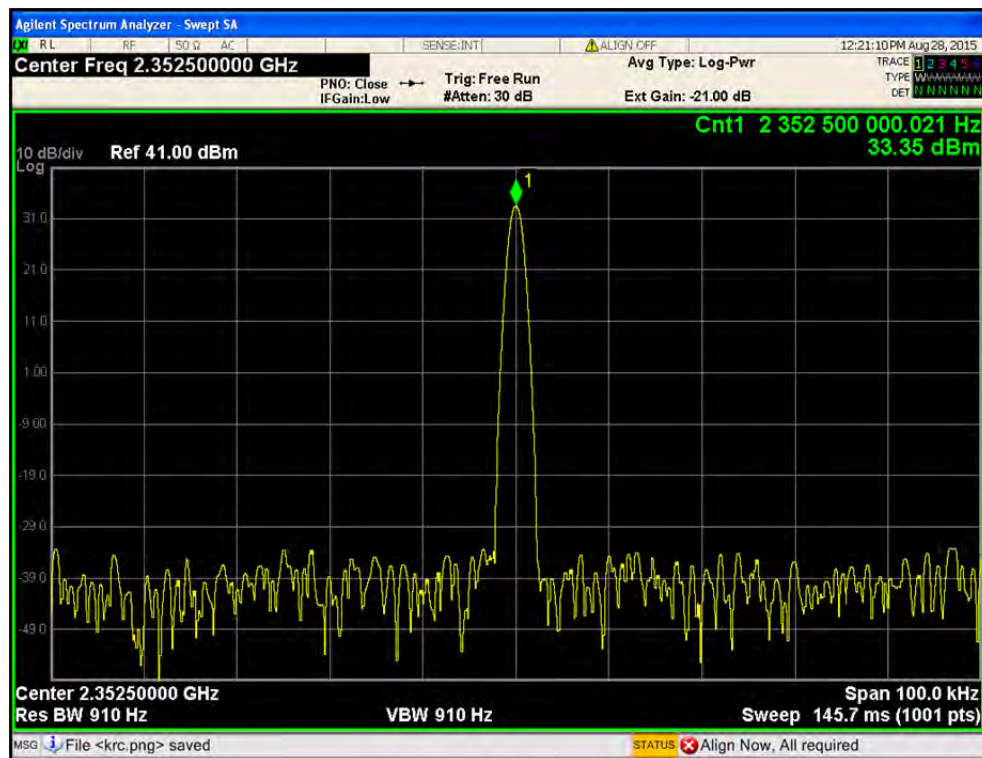
- Port1 / LTE 5 MHz / 2 352.5MHz / 85 % of nominal voltage



- Port1 / LTE 5 MHz / 2 352.5 MHz / 100 % of nominal voltage

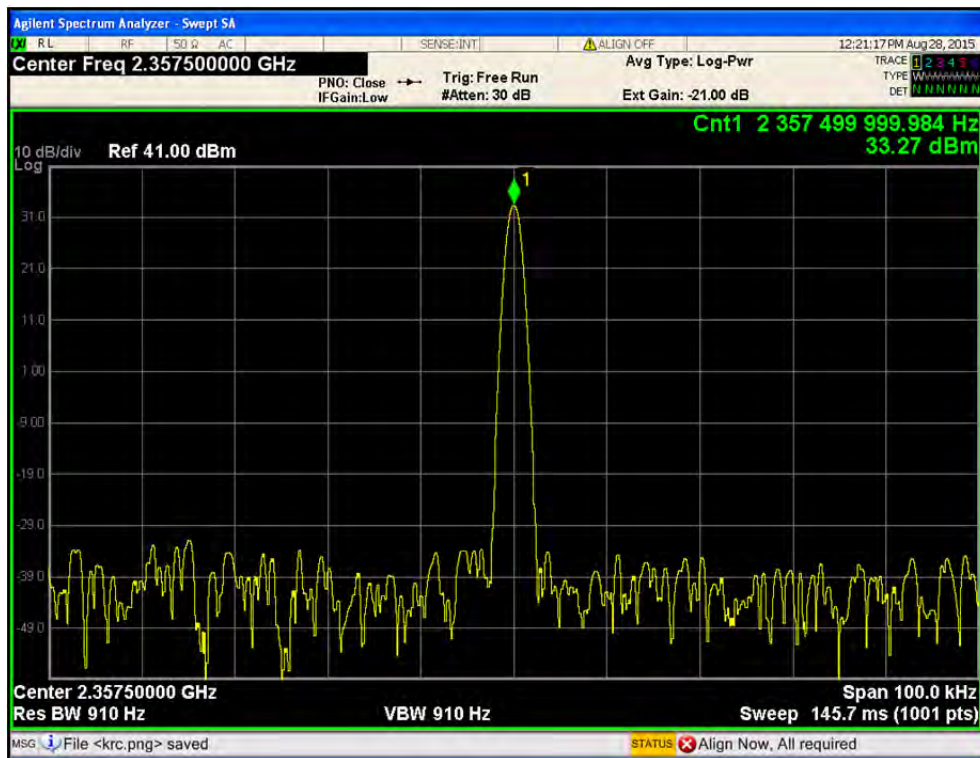


- Port1 / LTE 5 MHz / 2 352.5 MHz / 115 % of nominal voltage

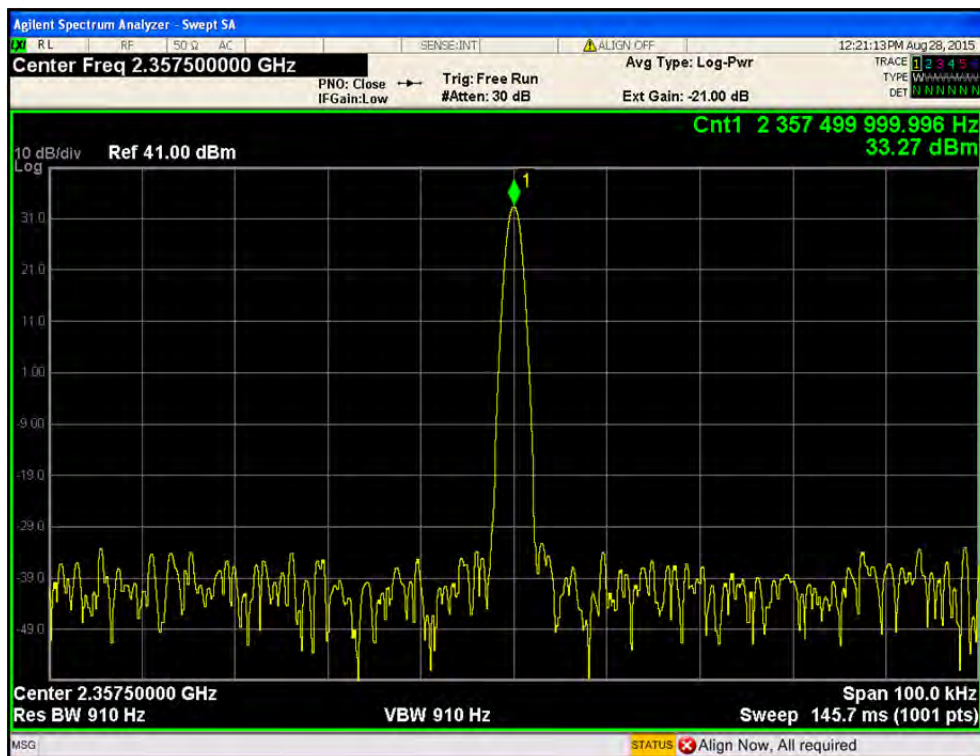




- Port1 / LTE 5 MHz / 2 357.5 MHz / 85 % of nominal voltage

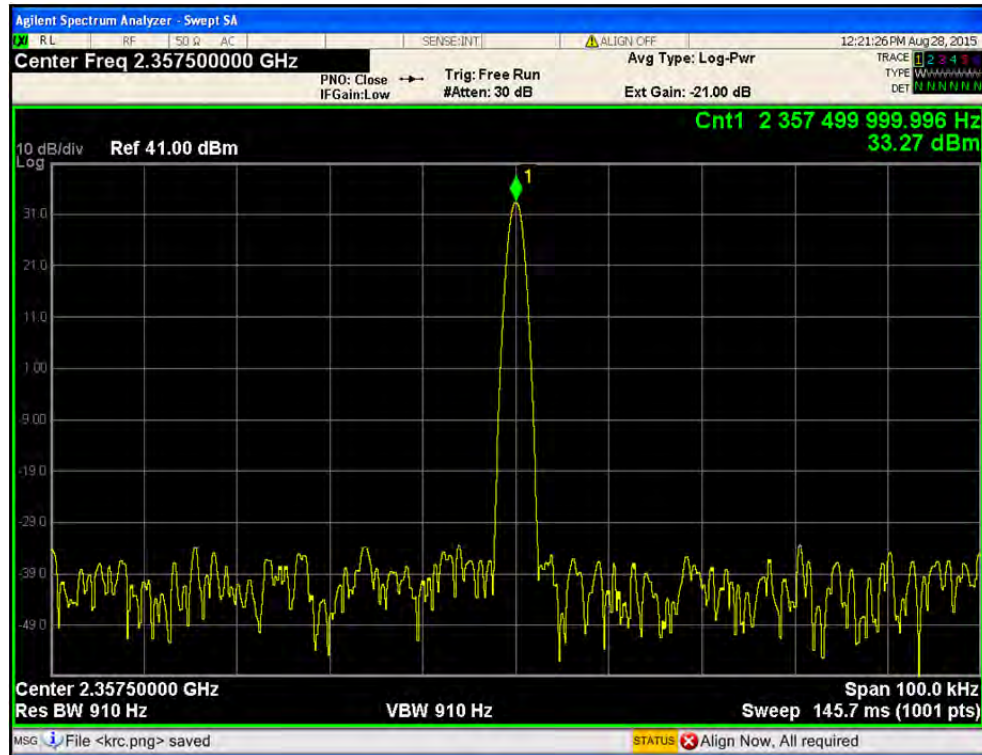


- Port1 / LTE 5 MHz / 2 357.5 MHz / 100 % of nominal voltage





- Port1 / LTE 5 MHz / 2 357.5 MHz / 115 % of nominal voltage



### 3.7 Out of band rejection

#### 3.7.1 Specification

- KDB935210 D02 V03

#### 3.7.2 Test Description

The method used is as detailed in FCC KDB 935210 D03 V03

A direct connect measurement was made between the EUT antenna cable and a spectrum

Testing was done with an absence of modulation in a sweep CW mode of operation.

#### 3.7.3 Test Procedure

The EUT was set up to the applicable test frequency. The EUT antenna terminal was conducted to the spectrum analyzer through an external attenuator (at the output test) and an appropriate coaxial cable.

The MAKER function and Trace MAX HOLD was using for these evaluation.

#### 3.7.4 Test equipment list

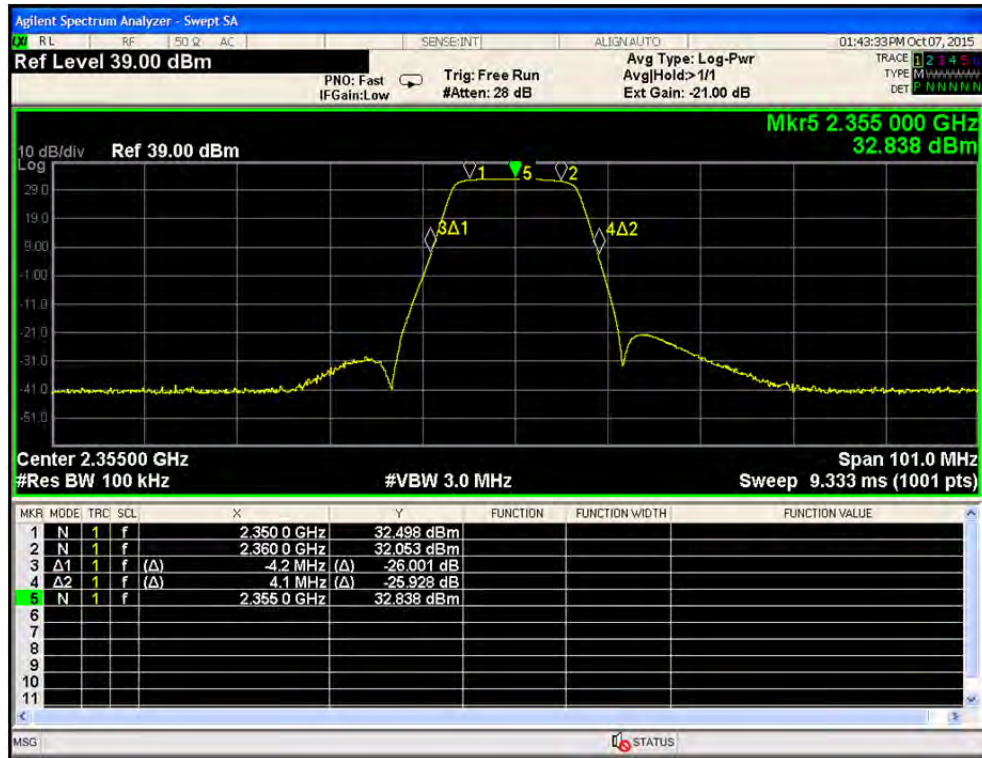
| Equipment         | Model Name  | Manufacturer                                 |
|-------------------|-------------|--|
| EUT               | HX-WCS-MIMO | Corning Optical Communications Wireless Inc. |
| MHU               | HX-WCS-MHU  | Corning Optical Communications Wireless Inc. |
| Signal Generator  | N5182A      | Agilent                                      |
| Spectrum Analyzer | N9020A      | Agilent                                      |
| Attenuator        | PE7019-20   | Pasternack                                   |
| DC power supply   | 6674A       | Agilent                                      |
| Divider           | 1580-1      | Weinschel                                    |

#### 3.7.5 Test condition

- Test place: Temperature and Humidity Chamber
- Test environment: 30°C to +50°C

### 3.7.6 Test Plots

- Port1



#### 4. RF exposure statement

According to FCC Part1 Section 1.1307~1.1310, systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

| Frequency Range<br>[MHz]                                   | Electric<br>Field Strength<br>[V/m] | Magnetic<br>Field Strength<br>[A/m] | Power Density<br>[mW/cm <sup>2</sup> ] | Averaging Time<br>[minute] |
|--|-------------------------------------|-------------------------------------|--|----------------------------|
| <b>Limits for General Population/Uncontrolled Exposure</b> |                                     |                                     |  |                            |
| 0.3 – 1.34   | 614                                 | 1.63                                | 100                                    | 30                         |
| 1.34 – 30  | 824/f                               | 2.19/f                              | 180/f <sup>2</sup>                     | 30                         |
| 30 – 300   | 27.5                                | 0.073                               | 0.2                                    | 30                         |
| 300 – 1500   | -                                   | -                                   | f/1500                                 | 30                         |
| 1500 – 100 000   | -                                   | -                                   | 1.0                                    | 30                         |

#### Limits for General Population/Uncontrolled Exposure

Here, f = frequency in MHz

#### 4.1 Friis transmission formula

$$P_d = (P_{out} \times G) / (4\pi r^2)$$

$P_d$  = Power density

$P_{out}$  = power input to antenna

G = power gain

r = distance to the center of radiation of the antenna



## 4.2 Information of Antenna

- Service antenna model name: D5777i / Galtronics Corporation Ltd.

| Electrical Specification |            |                      |
|--------------------------|------------|----------------------|
| Frequency Range          |            | 2360 MHz ~ 2700 MHz  |
| Polarization             |            | Dual slant 45°       |
| Band Width               |            | 910 MHz              |
| Gain                     |            | ≥ 15 dBi             |
| Beam width               | Horizontal | 27°                  |
|                          | Vertical   | 27°                  |
| VSWR                     |            | ≤ 1.7:1              |
| Impedance                |            | 50 Ω                 |
| IMD (3 <sup>rd</sup> )   |            | -150dBc (@ 2x43dBm ) |
| Maximum input power      |            | 250 W                |

| Mechanical Specification |  |               |
|--------------------------|--|---------------|
| Operating Temperature    |  | -40° ~ +70°   |
| Weight                   |  | ~10 kg        |
| Length                   |  | 787 mm        |
| Width                    |  | 627 mm        |
| Height                   |  | 145 mm        |
| RoHS                     |  | compliant     |
| Ingress Protection       |  | IP65(Outdoor) |
| Radome Color             |  | White         |
| Wind Survival Rating     |  | 241 km/h      |



#### 4.3 Calculation of MPE at 115 cm

| Port | WCS Block | Frequency [MHz] | Output power [dBm] | Antenna gain [dBi] | EIRP  |       | Power density [mW/cm <sup>2</sup> ] | Limit [mW/cm <sup>2</sup> ] |
|------|-----------|-----------------|--------------------|--------------------|-------|-------|-------------------------------------|-----------------------------|
|      |           |                 |                    |                    | [dBm] | [W]   |                                     |                             |
| 1    | A+B       | 2 355.0         | 33.10              | 15.00              | 48.10 | 64.56 | 0.388 700                           | 1                           |
|      |           |                 | 32.98              | 15.00              | 47.98 | 62.80 | 0.378 107                           |                             |
|      |           |                 | 33.06              | 15.00              | 48.06 | 63.97 | 0.385 136                           |                             |
|      | A         | 2 352.5         | 33.06              | 15.00              | 48.06 | 63.97 | 0.385 136                           |                             |
|      |           |                 | 32.98              | 15.00              | 47.98 | 62.80 | 0.378 107                           |                             |
|      |           |                 | 32.97              | 15.00              | 47.97 | 62.66 | 0.377 237                           |                             |
|      | B         | 2 357.5         | 32.99              | 15.00              | 48.00 | 63.09 | 0.379 852                           |                             |
|      |           |                 | 32.98              | 15.00              | 47.98 | 62.80 | 0.378 107                           |                             |
|      |           |                 | 33.01              | 15.00              | 48.01 | 63.24 | 0.388 700                           |                             |

## 5. Test equipment list

The listing below denotes the test equipment for the test(s).

| No. | Equipment            | Model          | Manufacturer     | Serial Number | Calibration Due date |
|-----|----------------------|----------------|------------------|---------------|----------------------|
| 1   | Spectrum analyzer    | N9020A         | Agilent          | MY48010456    | 2016.01.20           |
| 2   | Spectrum analyzer    | FSP            | R&S              | 10060         | 2016.08.28           |
| 3   | Signal generator     | N5182A         | Agilent          | MY49060695    | 2016.01.19           |
| 4   | Attenuator           | AF115A-09-34   | Weinschel        | 18405         | 2016.01.20           |
| 5   | Attenuator           | PE7019-20      | Pasternack       | TEMP_4        | 2015.08.21           |
| 6   | Biconical antenna    | VHA9103        | Schwarzbeck      | 2217          | 2015.11.15           |
| 7   | Log-Periodic antenna | VULP9118A      | Schwarzbeck      | 382           | 2015.11.15           |
| 8   | Horn antenna         | BBHA-9120D     | Schwarzbeck      | 395           | 2016.08.06           |
| 9   | Horn antenna         | FR6517         | Orbit Technology | 0511106       | 2016.08.07           |
| 10  | EMI Test Receiver    | ESS            | R&S              | 833776/011    | 2016.08.26           |
| 11  | Preamplifier         | 8449B          | Agilent          | 3008A02013    | 2016.04.16           |
| 12  | RF Amplifier         | SCU01          | R&S              | 10020         | 2016.08.26           |
| 13  | Turn table           | DS 1500 S-1t-O | Innco GmbH       | N/A           | N/A                  |
| 14  | Turn table           | ALL1.5TT       | Airlink Lab      | N/A           | N/A                  |
| 15  | Antenna mast         | MA4000-O       | Innco GmbH       | N/A           | N/A                  |
| 16  | Antenna mast         | ALL2.2MA       | Airlink Lab      | N/A           | N/A                  |
| 17  | Controller           | CO 2000        | Innco GmbH       | N/A           | N/A                  |
| 18  | Controller           | ALL-TC-V1.0    | Airlink Lab      | N/A           | N/A                  |
| 19  | DC power supply      | 6674A          | Agilent          | 3537A01582    | 2016.01.19           |
| 20  | Divider              | 1503           | Weinschel        | QS033         | 2016.01.28           |