

## 9. FREQUENCY STABILITY MEASUREMENT

### 9.1. Test Equipment

| Item | Equipment           | Manufacturer | Model No.             | Serial No. | Last Cal. | Cal. Interval |
|------|---------------------|--------------|-----------------------|------------|-----------|---------------|
| 1.   | PXA Signal Analyzer | Agilent      | N9030A                | MY51380221 | Jun.30,19 | 1 Year        |
| 2.   | Amplifier           | HP           | 8449B                 | 3008A00863 | Apr.23,19 | 1 Year        |
| 3.   | RF Cable            | EMCI         | EMC102-KM-K<br>M 3500 | 170702     | May.13,19 | 1 Year        |

### 9.2. Limit

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

### 9.3. Test Procedure

Use the test method described in ANSI C63.10 clause 6.8:

1. The transmitter output (antenna port) was connected to the spectrum analyzer.  
EUT have transmitted absence of modulation signal and fixed channelise. Set the spectrum analyzer span to view the entire absence of modulation emissions bandwidth. Set RBW = 10 kHz, VBW = 10 kHz with peak detector and maxhold settings.  $f_c$  is declaring of channel frequency. Then the frequency error formula is  $(f_c - f)/f \times 10^{-6}$  ppm. The test extreme voltage is to change the primary supply voltage from 85 to 115 percent of the nominal value.
2. Extreme temperature rule is 0°C--40°C.

#### 9.4. Test Result

|                            |                         |                          |
|----------------------------|-------------------------|--------------------------|
| EUT: COSMO                 |                         |                          |
| M/N: COSMO COMMUNICATOR VE |                         |                          |
| Test date: 2019-12-03      | Pressure: 102.7±1.0 kpa | Humidity: 52.5±3.0%      |
| Tested by: Garry           | Test site: RF site      | Temperature: 22.7±0.6 °C |

#### Frequency Stability vs. Voltage:

| Test Voltage | Temperature | CH    | Max. Reading (MHz) | Target Frequency (MHz) | Result (ppm) |
|--------------|-------------|-------|--------------------|------------------------|--------------|
| DC<br>3.27V  | 20°C        | CH36  | 5179.995           | 5180                   | -0.97        |
|              |             | CH38  | 5189.992           | 5190                   | -1.54        |
|              |             | CH40  | 5199.996           | 5200                   | -0.77        |
|              |             | CH42  | 5209.997           | 5210                   | -0.58        |
|              |             | CH46  | 5229.964           | 5230                   | -6.88        |
|              |             | CH48  | 5239.995           | 5240                   | -0.95        |
|              |             | CH52  | 5259.934           | 5260                   | -12.55       |
|              |             | CH54  | 5269.935           | 5270                   | -12.33       |
|              |             | CH58  | 5289.935           | 5290                   | -12.29       |
|              |             | CH60  | 5299.968           | 5300                   | -6.04        |
|              |             | CH62  | 5309.968           | 5310                   | -6.03        |
|              |             | CH64  | 5319.968           | 5320                   | -6.02        |
|              |             | CH100 | 5499.964           | 5500                   | -6.55        |
|              |             | CH102 | 5509.964           | 5510                   | -6.53        |
|              |             | CH106 | 5529.964           | 5530                   | -6.51        |
|              |             | CH116 | 5579.964           | 5580                   | -6.45        |
|              |             | CH118 | 5589.972           | 5590                   | -5.01        |
|              |             | CH122 | 5609.972           | 5610                   | -4.99        |
|              |             | CH134 | 5669.972           | 5670                   | -4.94        |
|              |             | CH140 | 5699.997           | 5700                   | -0.53        |
|              |             | CH149 | 5744.992           | 5745                   | -1.39        |
|              |             | CH151 | 5754.994           | 5755                   | -1.04        |
|              |             | CH155 | 5774.993           | 5775                   | -1.21        |
|              |             | CH157 | 5784.994           | 5785                   | -1.04        |
|              |             | CH159 | 5794.997           | 5795                   | -0.52        |
|              |             | CH165 | 5824.999           | 5825                   | -0.17        |

| Test Voltage | Temperature | CH    | Max. Reading ( MHz ) | Target Frequency (MHz) | Result (ppm) |
|--------------|-------------|-------|----------------------|------------------------|--------------|
| DC<br>3.85V  | 20°C        | CH36  | 5179.994             | 5180                   | -1.16        |
|              |             | CH38  | 5189.993             | 5190                   | -1.35        |
|              |             | CH40  | 5199.992             | 5200                   | -1.54        |
|              |             | CH42  | 5209.996             | 5210                   | -0.77        |
|              |             | CH46  | 5229.962             | 5230                   | -7.27        |
|              |             | CH48  | 5239.992             | 5240                   | -1.53        |
|              |             | CH52  | 5259.994             | 5260                   | -1.14        |
|              |             | CH54  | 5269.993             | 5270                   | -1.33        |
|              |             | CH58  | 5289.995             | 5290                   | -0.95        |
|              |             | CH60  | 5299.993             | 5300                   | -1.32        |
|              |             | CH62  | 5309.982             | 5310                   | -3.39        |
|              |             | CH64  | 5319.985             | 5320                   | -2.82        |
|              |             | CH100 | 5499.994             | 5500                   | -1.09        |
|              |             | CH102 | 5509.992             | 5510                   | -1.45        |
|              |             | CH106 | 5529.992             | 5530                   | -1.45        |
|              |             | CH116 | 5579.993             | 5580                   | -1.25        |
|              |             | CH118 | 5589.994             | 5590                   | -1.07        |
|              |             | CH122 | 5609.995             | 5610                   | -0.89        |
|              |             | CH134 | 5669.992             | 5670                   | -1.41        |
|              |             | CH140 | 5699.996             | 5700                   | -0.70        |
|              |             | CH149 | 5744.992             | 5745                   | -1.39        |
|              |             | CH151 | 5754.996             | 5755                   | -0.70        |
|              |             | CH155 | 5774.993             | 5775                   | -1.21        |
|              |             | CH157 | 5784.996             | 5785                   | -0.69        |
|              |             | CH159 | 5794.991             | 5795                   | -1.55        |
|              |             | CH165 | 5824.991             | 5825                   | -1.55        |

| Test Voltage | Temperature | CH    | Max. Reading ( MHz ) | Target Frequency (MHz) | Result (ppm) |
|--------------|-------------|-------|----------------------|------------------------|--------------|
| DC<br>4.43V  | 20℃         | CH36  | 5179.996             | 5180                   | -0.77        |
|              |             | CH38  | 5189.995             | 5190                   | -0.96        |
|              |             | CH40  | 5199.996             | 5200                   | -0.77        |
|              |             | CH42  | 5209.993             | 5210                   | -1.34        |
|              |             | CH46  | 5229.965             | 5230                   | -6.69        |
|              |             | CH48  | 5239.994             | 5240                   | -1.15        |
|              |             | CH52  | 5259.991             | 5260                   | -1.71        |
|              |             | CH54  | 5269.989             | 5270                   | -2.09        |
|              |             | CH58  | 5289.989             | 5290                   | -2.08        |
|              |             | CH60  | 5299.994             | 5300                   | -1.13        |
|              |             | CH62  | 5309.993             | 5310                   | -1.32        |
|              |             | CH64  | 5319.993             | 5320                   | -1.32        |
|              |             | CH100 | 5499.998             | 5500                   | -0.36        |
|              |             | CH102 | 5509.998             | 5510                   | -0.36        |
|              |             | CH106 | 5529.979             | 5530                   | -3.80        |
|              |             | CH116 | 5579.979             | 5580                   | -3.76        |
|              |             | CH118 | 5589.992             | 5590                   | -1.43        |
|              |             | CH122 | 5609.992             | 5610                   | -1.43        |
|              |             | CH134 | 5669.961             | 5670                   | -6.88        |
|              |             | CH140 | 5699.961             | 5700                   | -6.84        |
|              |             | CH149 | 5744.993             | 5745                   | -1.22        |
|              |             | CH151 | 5754.992             | 5755                   | -1.39        |
|              |             | CH155 | 5774.993             | 5775                   | -1.21        |
|              |             | CH157 | 5784.992             | 5785                   | -1.38        |
|              |             | CH159 | 5794.996             | 5795                   | -0.69        |
|              |             | CH165 | 5824.993             | 5825                   | -1.20        |

**Frequency Stability vs. Temperature:**

| Test Voltage | Temperature | CH    | Max. Reading ( MHz ) | Target Frequency (MHz) | Result (ppm) |
|--------------|-------------|-------|----------------------|------------------------|--------------|
| DC<br>3.85V  | -20℃        | CH36  | 5179.984             | 5180                   | -3.09        |
|              |             | CH38  | 5189.956             | 5190                   | -8.48        |
|              |             | CH40  | 5199.935             | 5200                   | -12.50       |
|              |             | CH42  | 5209.927             | 5210                   | -14.01       |
|              |             | CH46  | 5229.927             | 5230                   | -13.96       |
|              |             | CH48  | 5239.939             | 5240                   | -11.64       |
|              |             | CH52  | 5259.939             | 5260                   | -11.60       |
|              |             | CH54  | 5269.939             | 5270                   | -11.57       |
|              |             | CH58  | 5289.934             | 5290                   | -12.48       |
|              |             | CH60  | 5299.935             | 5300                   | -12.26       |
|              |             | CH62  | 5309.935             | 5310                   | -12.24       |
|              |             | CH64  | 5319.935             | 5320                   | -12.22       |
|              |             | CH100 | 5499.939             | 5500                   | -11.09       |
|              |             | CH102 | 5509.939             | 5510                   | -11.07       |
|              |             | CH106 | 5529.939             | 5530                   | -11.03       |
|              |             | CH116 | 5579.939             | 5580                   | -10.93       |
|              |             | CH118 | 5589.957             | 5590                   | -7.69        |
|              |             | CH122 | 5609.969             | 5610                   | -5.53        |
|              |             | CH134 | 5669.969             | 5670                   | -5.47        |
|              |             | CH140 | 5699.969             | 5700                   | -5.44        |
|              |             | CH149 | 5744.969             | 5745                   | -5.40        |
|              |             | CH151 | 5754.969             | 5755                   | -5.39        |
|              |             | CH155 | 5774.963             | 5775                   | -6.41        |
|              |             | CH157 | 5784.963             | 5785                   | -6.40        |
|              |             | CH159 | 5794.996             | 5795                   | -0.69        |
|              |             | CH165 | 5824.994             | 5825                   | -1.03        |

| Test Voltage | Temperature | CH    | Max. Reading ( MHz ) | Target Frequency (MHz) | Result (ppm) |
|--------------|-------------|-------|----------------------|------------------------|--------------|
| DC<br>3.85V  | -10℃        | CH36  | 5179.989             | 5180                   | -2.12        |
|              |             | CH38  | 5189.989             | 5190                   | -2.12        |
|              |             | CH40  | 5199.996             | 5200                   | -0.77        |
|              |             | CH42  | 5209.987             | 5210                   | -2.50        |
|              |             | CH46  | 5229.987             | 5230                   | -2.49        |
|              |             | CH48  | 5239.985             | 5240                   | -2.86        |
|              |             | CH52  | 5259.985             | 5260                   | -2.85        |
|              |             | CH54  | 5269.985             | 5270                   | -2.85        |
|              |             | CH58  | 5289.993             | 5290                   | -1.32        |
|              |             | CH60  | 5299.993             | 5300                   | -1.32        |
|              |             | CH62  | 5309.996             | 5310                   | -0.75        |
|              |             | CH64  | 5319.993             | 5320                   | -1.32        |
|              |             | CH100 | 5499.997             | 5500                   | -0.55        |
|              |             | CH102 | 5509.997             | 5510                   | -0.54        |
|              |             | CH106 | 5529.995             | 5530                   | -0.90        |
|              |             | CH116 | 5579.995             | 5580                   | -0.90        |
|              |             | CH118 | 5589.996             | 5590                   | -0.72        |
|              |             | CH122 | 5609.994             | 5610                   | -1.07        |
|              |             | CH134 | 5669.998             | 5670                   | -0.35        |
|              |             | CH140 | 5699.991             | 5700                   | -1.58        |
|              |             | CH149 | 5744.991             | 5745                   | -1.57        |
|              |             | CH151 | 5754.991             | 5755                   | -1.56        |
|              |             | CH155 | 5774.993             | 5775                   | -1.21        |
|              |             | CH157 | 5784.998             | 5785                   | -0.35        |
|              |             | CH159 | 5794.992             | 5795                   | -1.38        |
|              |             | CH165 | 5824.992             | 5825                   | -1.37        |

| Test Voltage | Temperature | CH    | Max. Reading ( MHz ) | Target Frequency (MHz) | Result (ppm) |
|--------------|-------------|-------|----------------------|------------------------|--------------|
| DC<br>3.85V  | 0℃          | CH36  | 5179.993             | 5180                   | -1.35        |
|              |             | CH38  | 5189.992             | 5190                   | -1.54        |
|              |             | CH40  | 5199.992             | 5200                   | -1.54        |
|              |             | CH42  | 5209.993             | 5210                   | -1.34        |
|              |             | CH46  | 5229.961             | 5230                   | -7.46        |
|              |             | CH48  | 5239.998             | 5240                   | -0.38        |
|              |             | CH52  | 5259.999             | 5260                   | -0.19        |
|              |             | CH54  | 5269.999             | 5270                   | -0.19        |
|              |             | CH58  | 5289.999             | 5290                   | -0.19        |
|              |             | CH60  | 5299.993             | 5300                   | -1.32        |
|              |             | CH62  | 5309.991             | 5310                   | -1.69        |
|              |             | CH64  | 5319.9946            | 5320                   | -1.02        |
|              |             | CH100 | 5500                 | 5500                   | 0.00         |
|              |             | CH102 | 5509.993             | 5510                   | -1.27        |
|              |             | CH106 | 5529.998             | 5530                   | -0.36        |
|              |             | CH116 | 5579.992             | 5580                   | -1.43        |
|              |             | CH118 | 5589.994             | 5590                   | -1.07        |
|              |             | CH122 | 5609.998             | 5610                   | -0.36        |
|              |             | CH134 | 5669.998             | 5670                   | -0.35        |
|              |             | CH140 | 5699.995             | 5700                   | -0.88        |
|              |             | CH149 | 5744.995             | 5745                   | -0.87        |
|              |             | CH151 | 5754.996             | 5755                   | -0.70        |
|              |             | CH155 | 5774.991             | 5775                   | -1.56        |
|              |             | CH157 | 5784.996             | 5785                   | -0.69        |
|              |             | CH159 | 5794.994             | 5795                   | -1.04        |
|              |             | CH165 | 5824.994             | 5825                   | -1.03        |

| Test Voltage | Temperature | CH    | Max. Reading ( MHz ) | Target Frequency (MHz) | Result (ppm) |
|--------------|-------------|-------|----------------------|------------------------|--------------|
| DC<br>3.85V  | 10℃         | CH36  | 5179.996             | 5180                   | -0.77        |
|              |             | CH38  | 5189.992             | 5190                   | -1.54        |
|              |             | CH40  | 5199.996             | 5200                   | -0.77        |
|              |             | CH42  | 5209.994             | 5210                   | -1.15        |
|              |             | CH46  | 5229.965             | 5230                   | -6.69        |
|              |             | CH48  | 5239.991             | 5240                   | -1.72        |
|              |             | CH52  | 5259.9935            | 5260                   | -1.24        |
|              |             | CH54  | 5269.9989            | 5270                   | -0.21        |
|              |             | CH58  | 5289.9988            | 5290                   | -0.23        |
|              |             | CH60  | 5299.9925            | 5300                   | -1.42        |
|              |             | CH62  | 5309.9905            | 5310                   | -1.79        |
|              |             | CH64  | 5319.9959            | 5320                   | -0.77        |
|              |             | CH100 | 5499.9998            | 5500                   | -0.04        |
|              |             | CH102 | 5509.9974            | 5510                   | -0.47        |
|              |             | CH106 | 5529.9975            | 5530                   | -0.45        |
|              |             | CH116 | 5579.9916            | 5580                   | -1.51        |
|              |             | CH118 | 5589.9952            | 5590                   | -0.86        |
|              |             | CH122 | 5609.9975            | 5610                   | -0.45        |
|              |             | CH134 | 5669.9955            | 5670                   | -0.79        |
|              |             | CH140 | 5699.9956            | 5700                   | -0.77        |
|              |             | CH149 | 5744.996             | 5745                   | -0.70        |
|              |             | CH151 | 5754.997             | 5755                   | -0.52        |
|              |             | CH155 | 5774.996             | 5775                   | -0.69        |
|              |             | CH157 | 5784.992             | 5785                   | -1.38        |
|              |             | CH159 | 5794.994             | 5795                   | -1.04        |
|              |             | CH165 | 5824.996             | 5825                   | -0.69        |

| Test Voltage | Temperature | CH    | Max. Reading ( MHz ) | Target Frequency (MHz) | Result (ppm) |
|--------------|-------------|-------|----------------------|------------------------|--------------|
| DC<br>3.85V  | 20℃         | CH36  | 5179.993             | 5180                   | -1.35        |
|              |             | CH38  | 5189.992             | 5190                   | -1.54        |
|              |             | CH40  | 5199.996             | 5200                   | -0.77        |
|              |             | CH42  | 5209.992             | 5210                   | -1.54        |
|              |             | CH46  | 5229.995             | 5230                   | -0.96        |
|              |             | CH48  | 5239.996             | 5240                   | -0.76        |
|              |             | CH52  | 5259.997             | 5260                   | -0.57        |
|              |             | CH54  | 5269.998             | 5270                   | -0.38        |
|              |             | CH58  | 5289.991             | 5290                   | -1.70        |
|              |             | CH60  | 5299.992             | 5300                   | -1.51        |
|              |             | CH62  | 5309.996             | 5310                   | -0.75        |
|              |             | CH64  | 5319.993             | 5320                   | -1.32        |
|              |             | CH100 | 5499.994             | 5500                   | -1.09        |
|              |             | CH102 | 5509.992             | 5510                   | -1.45        |
|              |             | CH106 | 5529.993             | 5530                   | -1.27        |
|              |             | CH116 | 5579.996             | 5580                   | -0.72        |
|              |             | CH118 | 5589.997             | 5590                   | -0.54        |
|              |             | CH122 | 5609.995             | 5610                   | -0.89        |
|              |             | CH134 | 5669.992             | 5670                   | -1.41        |
|              |             | CH140 | 5699.996             | 5700                   | -0.70        |
|              |             | CH149 | 5744.995             | 5745                   | -0.87        |
|              |             | CH151 | 5754.997             | 5755                   | -0.52        |
|              |             | CH155 | 5774.996             | 5775                   | -0.69        |
|              |             | CH157 | 5784.994             | 5785                   | -1.04        |
|              |             | CH159 | 5794.996             | 5795                   | -0.69        |
|              |             | CH165 | 5824.994             | 5825                   | -1.03        |

| Test Voltage | Temperature | CH    | Max. Reading ( MHz ) | Target Frequency (MHz) | Result (ppm) |
|--------------|-------------|-------|----------------------|------------------------|--------------|
| DC<br>3.85V  | 30℃         | CH36  | 5179.997             | 5180                   | -0.58        |
|              |             | CH38  | 5189.996             | 5190                   | -0.77        |
|              |             | CH40  | 5199.994             | 5200                   | -1.15        |
|              |             | CH42  | 5209.992             | 5210                   | -1.54        |
|              |             | CH46  | 5229.995             | 5230                   | -0.96        |
|              |             | CH48  | 5239.992             | 5240                   | -1.53        |
|              |             | CH52  | 5259.996             | 5260                   | -0.76        |
|              |             | CH54  | 5269.996             | 5270                   | -0.76        |
|              |             | CH58  | 5289.999             | 5290                   | -0.19        |
|              |             | CH60  | 5299.997             | 5300                   | -0.57        |
|              |             | CH62  | 5309.993             | 5310                   | -1.32        |
|              |             | CH64  | 5319.997             | 5320                   | -0.56        |
|              |             | CH100 | 5499.991             | 5500                   | -1.64        |
|              |             | CH102 | 5510                 | 5510                   | 0.00         |
|              |             | CH106 | 5529.998             | 5530                   | -0.36        |
|              |             | CH116 | 5579.999             | 5580                   | -0.18        |
|              |             | CH118 | 5589.995             | 5590                   | -0.89        |
|              |             | CH122 | 5609.998             | 5610                   | -0.36        |
|              |             | CH134 | 5669.996             | 5670                   | -0.71        |
|              |             | CH140 | 5699.996             | 5700                   | -0.70        |
|              |             | CH149 | 5744.999             | 5745                   | -0.17        |
|              |             | CH151 | 5754.993             | 5755                   | -1.22        |
|              |             | CH155 | 5774.994             | 5775                   | -1.04        |
|              |             | CH157 | 5784.992             | 5785                   | -1.38        |
|              |             | CH159 | 5794.993             | 5795                   | -1.21        |
|              |             | CH165 | 5824.994             | 5825                   | -1.03        |

| Test Voltage | Temperature | CH    | Max. Reading ( MHz ) | Target Frequency (MHz) | Result (ppm) |
|--------------|-------------|-------|----------------------|------------------------|--------------|
| DC<br>3.85V  | 40℃         | CH36  | 5179.998             | 5180                   | -0.39        |
|              |             | CH38  | 5189.994             | 5190                   | -1.16        |
|              |             | CH40  | 5199.996             | 5200                   | -0.77        |
|              |             | CH42  | 5209.993             | 5210                   | -1.34        |
|              |             | CH46  | 5229.994             | 5230                   | -1.15        |
|              |             | CH48  | 5239.994             | 5240                   | -1.15        |
|              |             | CH52  | 5259.998             | 5260                   | -0.38        |
|              |             | CH54  | 5269.999             | 5270                   | -0.19        |
|              |             | CH58  | 5289.999             | 5290                   | -0.19        |
|              |             | CH60  | 5299.996             | 5300                   | -0.75        |
|              |             | CH62  | 5309.993             | 5310                   | -1.32        |
|              |             | CH64  | 5320                 | 5320                   | 0.00         |
|              |             | CH100 | 5499.991             | 5500                   | -1.64        |
|              |             | CH102 | 5509.997             | 5510                   | -0.54        |
|              |             | CH106 | 5529.999             | 5530                   | -0.18        |
|              |             | CH116 | 5579.991             | 5580                   | -1.61        |
|              |             | CH118 | 5589.995             | 5590                   | -0.89        |
|              |             | CH122 | 5609.998             | 5610                   | -0.36        |
|              |             | CH134 | 5669.997             | 5670                   | -0.53        |
|              |             | CH140 | 5700                 | 5700                   | 0.00         |
|              |             | CH149 | 5744.995             | 5745                   | -0.87        |
|              |             | CH151 | 5754.995             | 5755                   | -0.87        |
|              |             | CH155 | 5774.993             | 5775                   | -1.21        |
|              |             | CH157 | 5784.992             | 5785                   | -1.38        |
|              |             | CH159 | 5794.994             | 5795                   | -1.04        |
|              |             | CH165 | 5824.995             | 5825                   | -0.86        |

| Test Voltage | Temperature | CH    | Max. Reading ( MHz ) | Target Frequency (MHz) | Result (ppm) |
|--------------|-------------|-------|----------------------|------------------------|--------------|
| DC<br>3.85V  | 50℃         | CH36  | 5179.984             | 5180                   | -3.09        |
|              |             | CH38  | 5189.987             | 5190                   | -2.50        |
|              |             | CH40  | 5199.983             | 5200                   | -3.27        |
|              |             | CH42  | 5209.982             | 5210                   | -3.45        |
|              |             | CH46  | 5229.982             | 5230                   | -3.44        |
|              |             | CH48  | 5239.986             | 5240                   | -2.67        |
|              |             | CH52  | 5259.986             | 5260                   | -2.66        |
|              |             | CH54  | 5269.984             | 5270                   | -3.04        |
|              |             | CH58  | 5289.984             | 5290                   | -3.02        |
|              |             | CH60  | 5299.982             | 5300                   | -3.40        |
|              |             | CH62  | 5309.982             | 5310                   | -3.39        |
|              |             | CH64  | 5319.984             | 5320                   | -3.01        |
|              |             | CH100 | 5499.984             | 5500                   | -2.91        |
|              |             | CH102 | 5509.984             | 5510                   | -2.90        |
|              |             | CH106 | 5529.986             | 5530                   | -2.53        |
|              |             | CH116 | 5579.983             | 5580                   | -3.05        |
|              |             | CH118 | 5589.983             | 5590                   | -3.04        |
|              |             | CH122 | 5609.985             | 5610                   | -2.67        |
|              |             | CH134 | 5669.984             | 5670                   | -2.82        |
|              |             | CH140 | 5699.982             | 5700                   | -3.16        |
|              |             | CH149 | 5744.982             | 5745                   | -3.13        |
|              |             | CH151 | 5754.982             | 5755                   | -3.13        |
|              |             | CH155 | 5774.983             | 5775                   | -2.94        |
|              |             | CH157 | 5784.987             | 5785                   | -2.25        |
|              |             | CH159 | 5794.987             | 5795                   | -2.24        |
|              |             | CH165 | 5824.989             | 5825                   | -1.89        |

## 10. ANTENNA REQUIREMENT

### 10.1. Standard Applicable

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. And according to FCC 47 CFR Section 15.407 (a), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

### 10.2. Antenna Connected Construction

The antennas used for this product are MONOPOLE antenna that no antenna other than that furnished by the responsible party shall be used with the device, the maximum peak gain of the transmit antenna is 0.6dBi.

## 11. DEVIATION TO TEST SPECIFICATIONS

[ NONE ]

..... **End of Report** .....