

# Appendix A

## BLE Test Data

"Shanghai ATBL Technology Co., Ltd." hereby certifies that according to actual testing conditions. The test results or observations are provided in accordance with measured value, without taking risks caused by uncertainty into account. Without explicit stipulation in special agreements, standards, or regulations, ATBL shall not assume any responsibility. The test results or observations are applicable only to tested sample. Client shall be responsible for representativeness of the sample and authenticity of the material. This report will be void without authorized signature or special seal for testing report. Do not copied without authorization.

Tel: +86(0)21-51298625

Web: [www.atbl-lab.com](http://www.atbl-lab.com)

Email: [atbl@atbl-lab.com](mailto:atbl@atbl-lab.com)

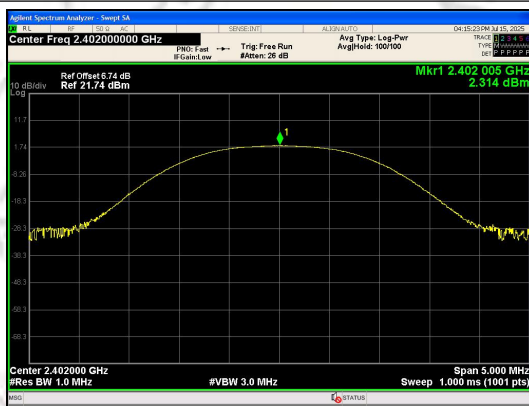
## Conducted Test Data

### Conducted Output Power

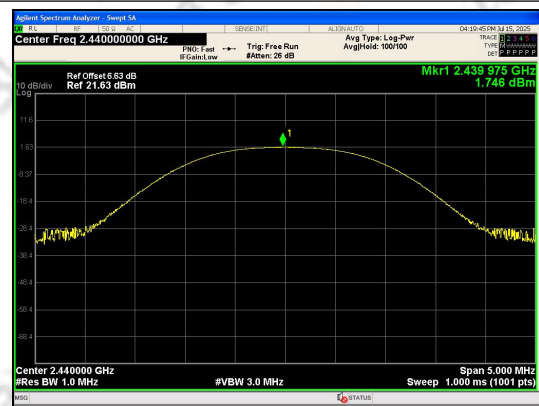
#### Test Result

| Mode   | Channel | Peak Output Power (dBm) | Peak Output Power (mW) | Limit (dBm) | Result |
|--------|---------|-------------------------|------------------------|-------------|--------|
| BLE 1M | 0       | 2.31                    | 1.7                    | ≤30         | PASS   |
|        | 19      | 1.75                    | 1.5                    | ≤30         | PASS   |
|        | 39      | 0.74                    | 1.19                   | ≤30         | PASS   |

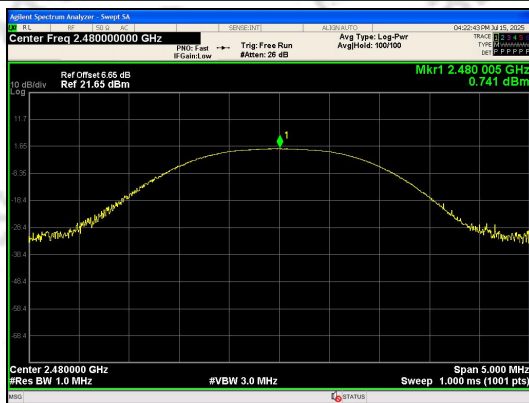
#### Test Graphs



Peak Output Power  
BLE 1M\_Channel 0



Peak Output Power  
BLE 1M\_Channel 19



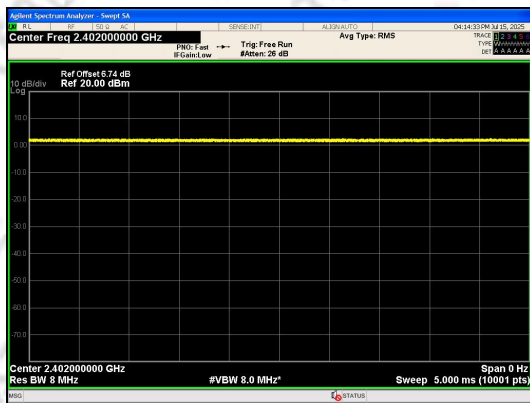
Peak Output Power  
BLE 1M\_Channel 39

## Duty Cycle

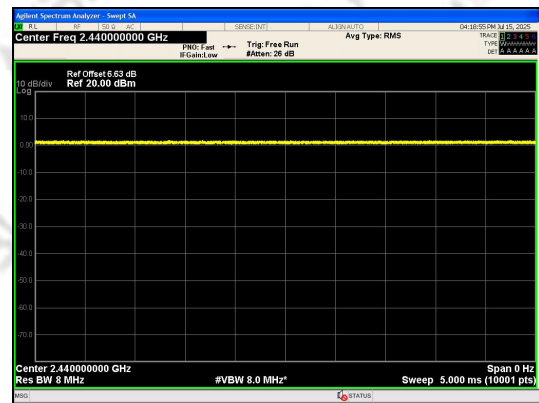
### Test Result

| Mode   | Channel | On Time (ms) | Period (ms) | Duty Cycle (%) | Duty Cycle (linear) | Duty Cycle Factor (dB) | 1/T    |
|--------|---------|--------------|-------------|----------------|---------------------|------------------------|--------|
| BLE 1M | 0       | 5.000        | 5.000       | 100            | 1                   | 0.0                    | 0.2000 |
|        | 19      | 5.000        | 5.000       | 100            | 1                   | 0.0                    | 0.2000 |
|        | 39      | 5.000        | 5.000       | 100            | 1                   | 0.0                    | 0.2000 |

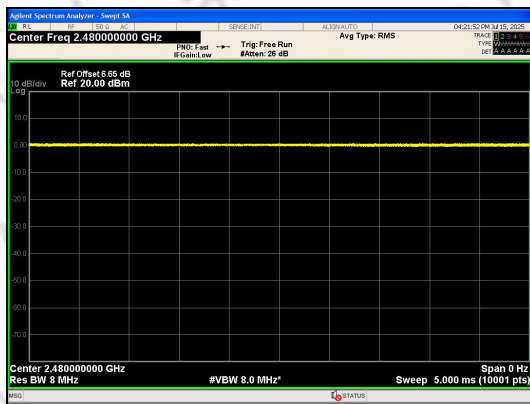
### Test Graphs



BLE 1M\_Channel 0



BLE 1M\_Channel 19



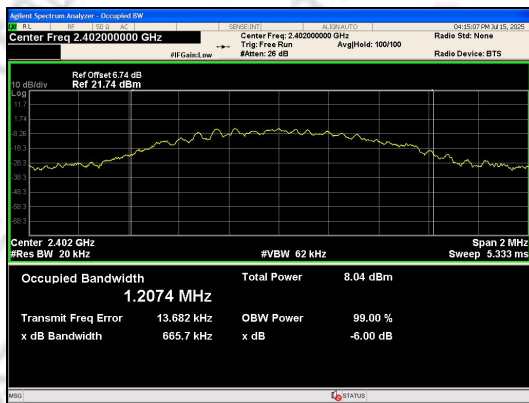
BLE 1M\_Channel 39

## 6dB Bandwidth

### Test Result

| Mode   | Channel | Center Frequency (MHz) | 6 dB Bandwidth (MHz) | Limit (MHz) | Result |
|--------|---------|------------------------|----------------------|-------------|--------|
| BLE 1M | 0       | 2402                   | 0.6700               | ≥0.5        | PASS   |
|        | 19      | 2440                   | 0.6600               |             | PASS   |
|        | 39      | 2480                   | 0.6600               |             | PASS   |

### Test Graphs



BLE 1M\_Channel 0



BLE 1M\_Channel 19



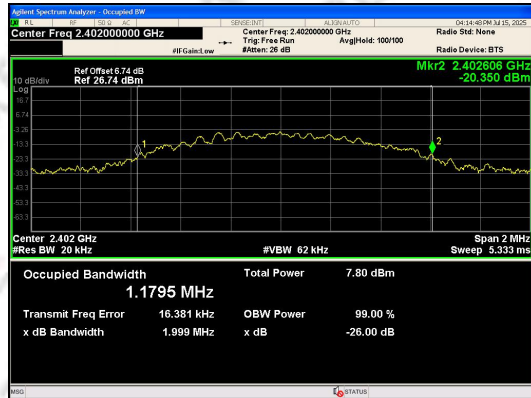
BLE 1M\_Channel 39

## 99% Bandwidth

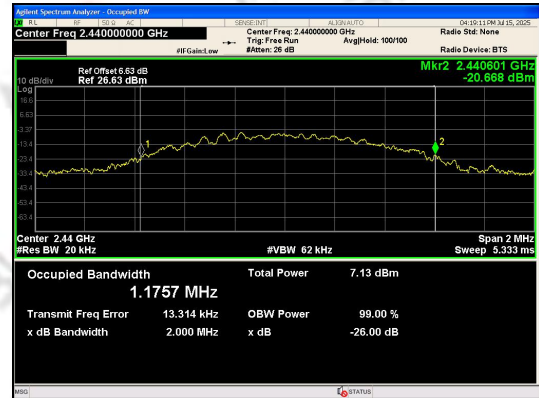
### Test Result

| Mode   | Channel | Center Frequency (MHz) | 99% BW (MHz) |
|--------|---------|------------------------|--------------|
| BLE 1M | 0       | 2402                   | 1.1795       |
| BLE 1M | 19      | 2440                   | 1.1757       |
| BLE 1M | 39      | 2480                   | 1.1934       |

### Test Graphs



BLE 1M\_Channel 0



BLE 1M\_Channel 19



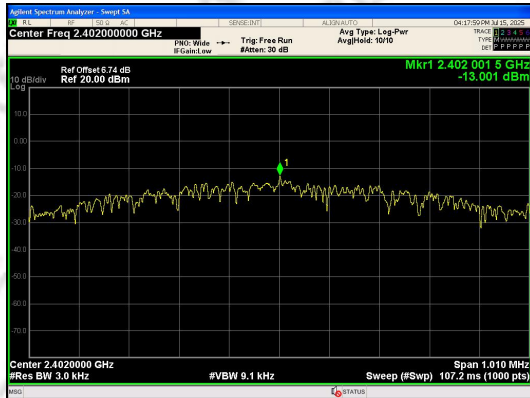
BLE 1M\_Channel 39

## Power Spectral Density

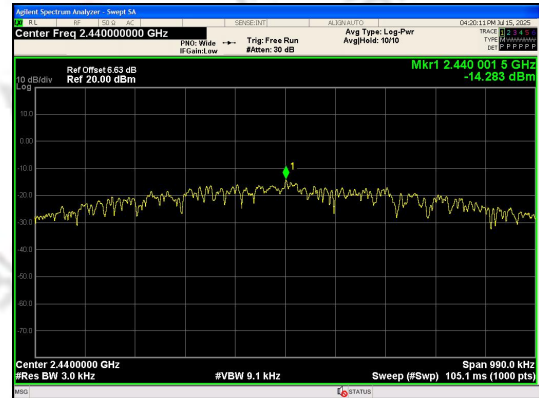
### Test Result

| Mode   | Channel | PSD (dBm/3kHz) | Limit (dBm/3kHz) | Result |
|--------|---------|----------------|------------------|--------|
| BLE 1M | 0       | -13.000        | ≤8               | PASS   |
| BLE 1M | 19      | -14.280        | ≤8               | PASS   |
| BLE 1M | 39      | -14.600        | ≤8               | PASS   |

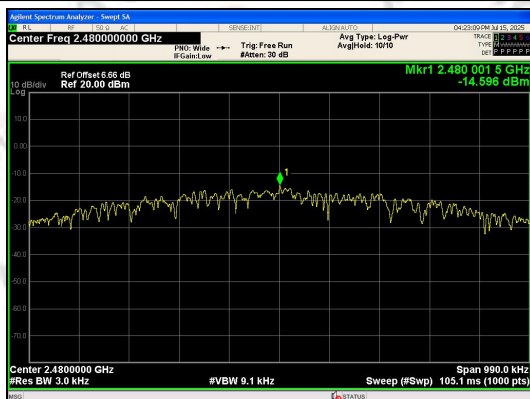
### Test Graphs



BLE 1M\_Channel 0



BLE 1M\_Channel 19



BLE 1M\_Channel 39

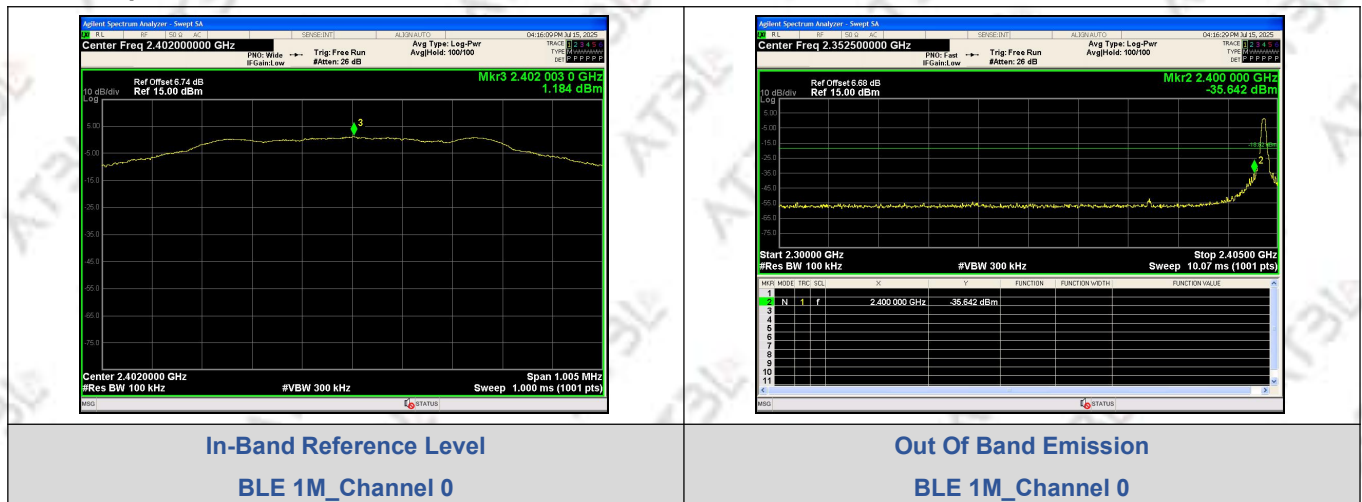
## Conducted Out Of Band Emission

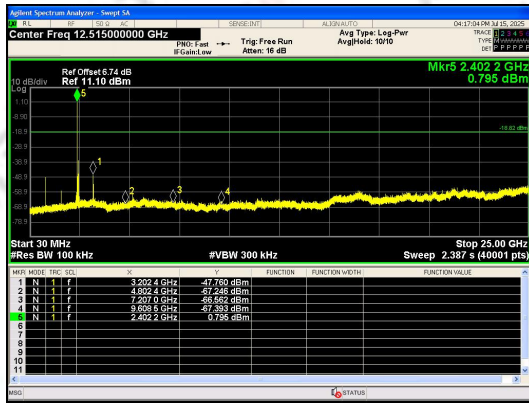
Note: The maximum loss of the test system for testing at 30MHz-26.5GHz is 17.2dB. The offset on the test chart is the offset of the main frequency, and the margin is sufficient to offset the difference between the maximum loss of the system and the offset of the main frequency.

### Test Result

| Mode   | Channel | OOB Emission Frequency (MHz) | OOB Emission Level (dBm) | Limit (dBm) | Over Limit (dB) | Result |
|--------|---------|------------------------------|--------------------------|-------------|-----------------|--------|
| BLE 1M | 0       | 2400.00                      | -35.640                  | -18.82      | -16.820         | PASS   |
|        |         | 3202.44                      | -47.760                  | -18.82      | -28.940         | PASS   |
|        |         | 4802.39                      | -67.246                  | -18.82      | -48.426         | PASS   |
|        |         | 7207.00                      | -66.562                  | -18.82      | -47.742         | PASS   |
|        |         | 9608.49                      | -67.393                  | -18.82      | -48.573         | PASS   |
|        | 19      | 3253.63                      | -50.057                  | -19.43      | -30.627         | PASS   |
|        |         | 4880.42                      | -66.502                  | -19.43      | -47.072         | PASS   |
|        |         | 7320.62                      | -66.674                  | -19.43      | -47.244         | PASS   |
|        |         | 9761.43                      | -67.863                  | -19.43      | -48.433         | PASS   |
|        | 39      | 826.54                       | -53.100                  | -20.53      | -32.570         | PASS   |
|        |         | 2483.50                      | -43.210                  | -20.53      | -22.680         | PASS   |
|        |         | 4960.33                      | -66.299                  | -20.53      | -45.769         | PASS   |
|        |         | 7439.85                      | -66.102                  | -20.53      | -45.572         | PASS   |
|        |         | 9919.99                      | -67.628                  | -20.53      | -47.098         | PASS   |

### Test Graphs

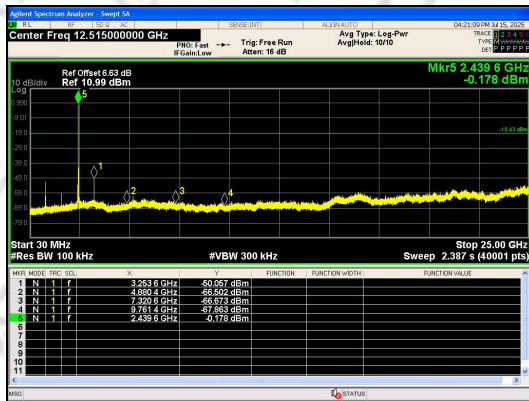




30.0 MHz - 25000.0 MHz  
BLE 1M\_Channel 0



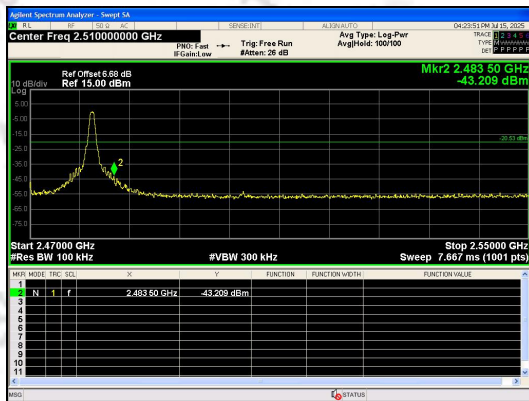
In-Band Reference Level  
BLE 1M\_Channel 19



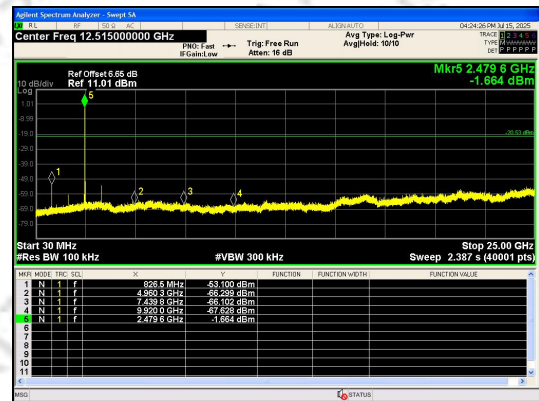
30.0 MHz - 25000.0 MHz  
BLE 1M\_Channel 19



In-Band Reference Level  
BLE 1M\_Channel 39



Out Of Band Emission  
BLE 1M\_Channel 39



30.0 MHz - 25000.0 MHz  
BLE 1M\_Channel 39

## Radiated Test Data

### Radiated Spurious Emission

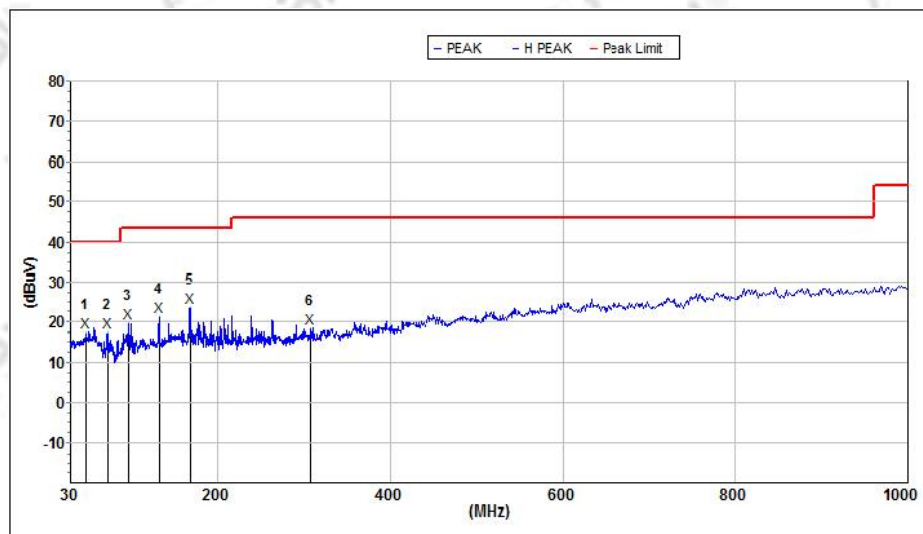
#### Radiated Emission (9KHz-30MHz)

Note:The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

#### Radiated Emission (30MHz-1GHz)

Note:All modes have been tested, only worst case mode(BLE 1M) was recorded in the test report.

|               |                |                    |            |
|---------------|----------------|--------------------|------------|
| Temperature:  | 24℃            | Relative Humidity: | 53%        |
| Test Voltage: | AC 120V/60Hz   | Phase:             | Horizontal |
| Test Mode:    | BLE 1M-2402MHz | Comment:           | 30MHz-1GHz |



Test Summary Result

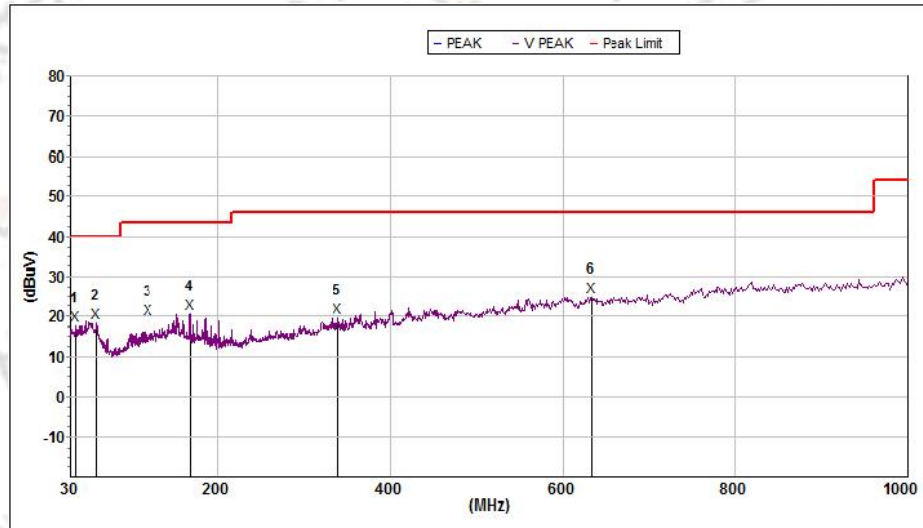
| Mk.   | Freq.<br>(MHz) | Level<br>(dBμV/m) | Limit<br>(dBμV/m) | Margin<br>(dB) | Ant.F/G.<br>(dB) | Amp.G.<br>(dB) | Pol. |
|-------|----------------|-------------------|-------------------|----------------|------------------|----------------|------|
| Peak: |                |                   |                   |                |                  |                |      |
| 1     | 47.492         | 17.6              | 40.0              | 22.4           | 19.4             | 31.1           | H    |
| 2     | 72.084         | 17.5              | 40.0              | 22.5           | 16.1             | 32.8           | H    |
| 3     | 95.930         | 19.9              | 43.5              | 23.6           | 14.8             | 31.1           | H    |
| 4     | 133.151        | 21.4              | 43.5              | 22.1           | 17.7             | 31.1           | H    |
| 5     | 168.119        | 23.6              | 43.5              | 19.9           | 17.9             | 31.5           | H    |
| 6     | 307.831        | 18.4              | 46.0              | 27.6           | 19.4             | 32.4           | H    |

Note:

1.Margin = Result (Result =Reading + Factor)-Limit

2.Factor= Cable Loss +Antenna Factor-Amplifier Gain

|               |                |                    |            |
|---------------|----------------|--------------------|------------|
| Temperature:  | 24 °C          | Relative Humidity: | 53%        |
| Test Voltage: | AC 120V/60Hz   | Phase:             | Vertical   |
| Test Mode:    | BLE 1M-2402MHz | Comment:           | 30MHz-1GHz |



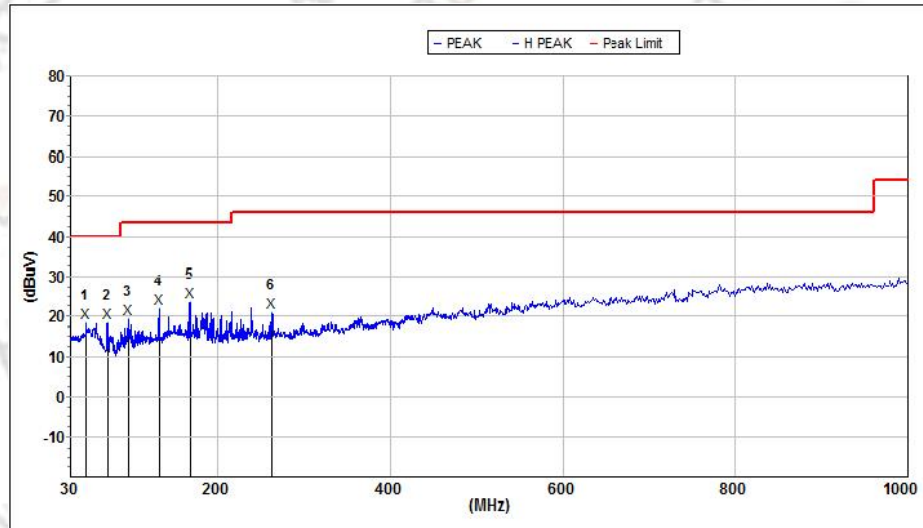
Test Summary Result

| Mk.   | Freq.<br>(MHz) | Level<br>(dBμV/m) | Limit<br>(dBμV/m) | Margin<br>(dB) | Ant.F/G.<br>(dB) | Amp.G.<br>(dB) | Pol. |
|-------|----------------|-------------------|-------------------|----------------|------------------|----------------|------|
| Peak: |                |                   |                   |                |                  |                |      |
| 1     | 36.254         | 17.7              | 40.0              | 22.3           | 18.8             | 31.8           | V    |
| 2     | 60.069         | 18.6              | 40.0              | 21.4           | 18.0             | 31.2           | V    |
| 3     | 120.066        | 19.5              | 43.5              | 24.0           | 16.6             | 31.0           | V    |
| 4     | 168.119        | 20.8              | 43.5              | 22.7           | 17.9             | 31.5           | V    |
| 5     | 340.185        | 19.9              | 46.0              | 26.1           | 20.0             | 32.7           | V    |
| 6     | 632.797        | 25.1              | 46.0              | 20.9           | 26.2             | 31.8           | V    |

Note:

- 1.Margin = Result (Result =Reading + Factor)-Limit
- 2.Factor= Cable Loss +Antenna Factor-Amplifier Gain

|               |                |                    |            |
|---------------|----------------|--------------------|------------|
| Temperature:  | 24°C           | Relative Humidity: | 53%        |
| Test Voltage: | AC 120V/60Hz   | Phase:             | Horizontal |
| Test Mode:    | BLE 1M-2480MHz | Comment:           | 30MHz-1GHz |



Test Summary Result

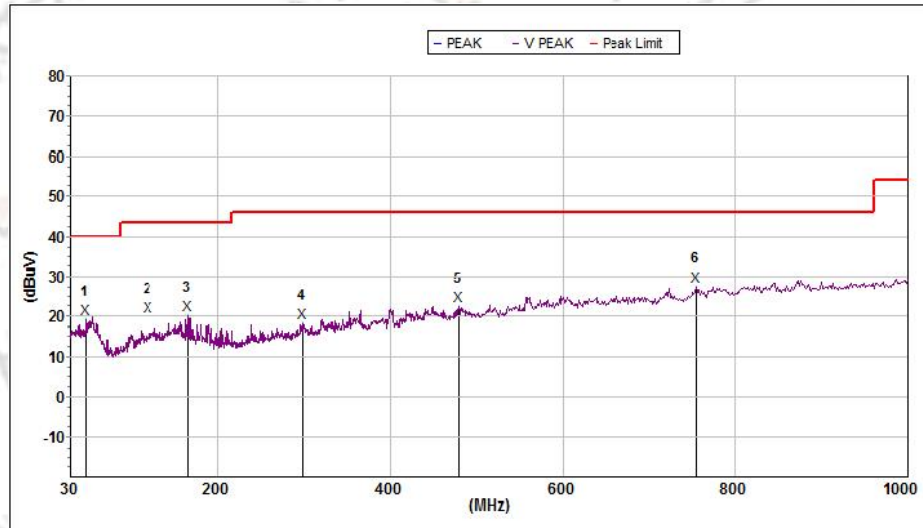
| Mk.   | Freq.<br>(MHz) | Level<br>(dBμV/m) | Limit<br>(dBμV/m) | Margin<br>(dB) | Ant.F/G.<br>(dB) | Amp.G.<br>(dB) | Pol. |
|-------|----------------|-------------------|-------------------|----------------|------------------|----------------|------|
| Peak: |                |                   |                   |                |                  |                |      |
| 1     | 47.910         | 18.4              | 40.0              | 21.6           | 19.5             | 31.1           | H    |
| 2     | 72.084         | 18.5              | 40.0              | 21.5           | 16.1             | 32.8           | H    |
| 3     | 95.930         | 19.4              | 43.5              | 24.1           | 14.8             | 31.1           | H    |
| 4     | 133.151        | 22.1              | 43.5              | 21.4           | 17.7             | 31.1           | H    |
| 5     | 168.119        | 23.8              | 43.5              | 19.7           | 17.9             | 31.5           | H    |
| 6     | 263.357        | 21.0              | 46.0              | 25.0           | 18.0             | 32.1           | H    |

Note:

1.Margin = Result (Result =Reading + Factor)-Limit

2.Factor= Cable Loss +Antenna Factor-Amplifier Gain

|               |                |                    |            |
|---------------|----------------|--------------------|------------|
| Temperature:  | 24℃            | Relative Humidity: | 53%        |
| Test Voltage: | AC 120V/60Hz   | Phase:             | Vertical   |
| Test Mode:    | BLE 1M-2480MHz | Comment:           | 30MHz-1GHz |



Test Summary Result

| Mk.   | Freq.<br>(MHz) | Level<br>(dBμV/m) | Limit<br>(dBμV/m) | Margin<br>(dB) | Ant.F/G.<br>(dB) | Amp.G.<br>(dB) | Pol. |
|-------|----------------|-------------------|-------------------|----------------|------------------|----------------|------|
| Peak: |                |                   |                   |                |                  |                |      |
| 1     | 47.910         | 19.5              | 40.0              | 20.5           | 19.5             | 31.1           | V    |
| 2     | 120.066        | 20.1              | 43.5              | 23.4           | 16.6             | 31.0           | V    |
| 3     | 165.197        | 20.6              | 43.5              | 22.9           | 18.1             | 31.5           | V    |
| 4     | 298.792        | 18.5              | 46.0              | 27.5           | 19.2             | 32.3           | V    |
| 5     | 479.686        | 22.8              | 46.0              | 23.2           | 23.2             | 31.8           | V    |
| 6     | 754.064        | 27.7              | 46.0              | 18.3           | 27.7             | 32.0           | V    |

Note:

1.Margin = Result (Result =Reading + Factor)-Limit

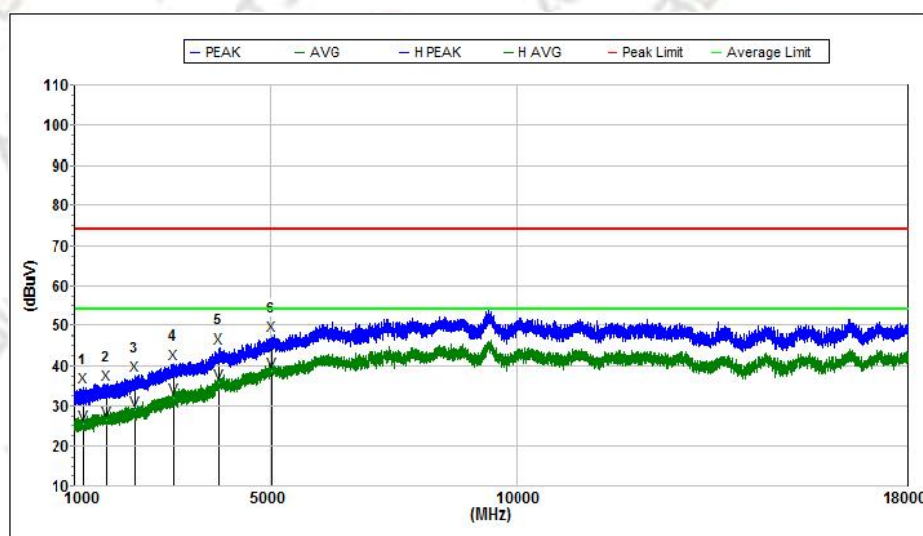
2.Factor= Cable Loss +Antenna Factor-Amplifier Gain

## Radiated Emission (Above 1GHz)

Note:

- 1.All modes have been tested, only worst case mode(BLE 1M) was recorded in the test report.
- 2.We used the filter to test and the main frequency was filtered out.
- 3.Other 18G-25G Emission detected are more than 20dB below the limit.

|               |                |                    |            |
|---------------|----------------|--------------------|------------|
| Temperature:  | 24°C           | Relative Humidity: | 53%        |
| Test Voltage: | AC 120V/60Hz   | Phase:             | Horizontal |
| Test Mode:    | BLE 1M-2402MHz | Comment:           | 1GHz-18GHz |



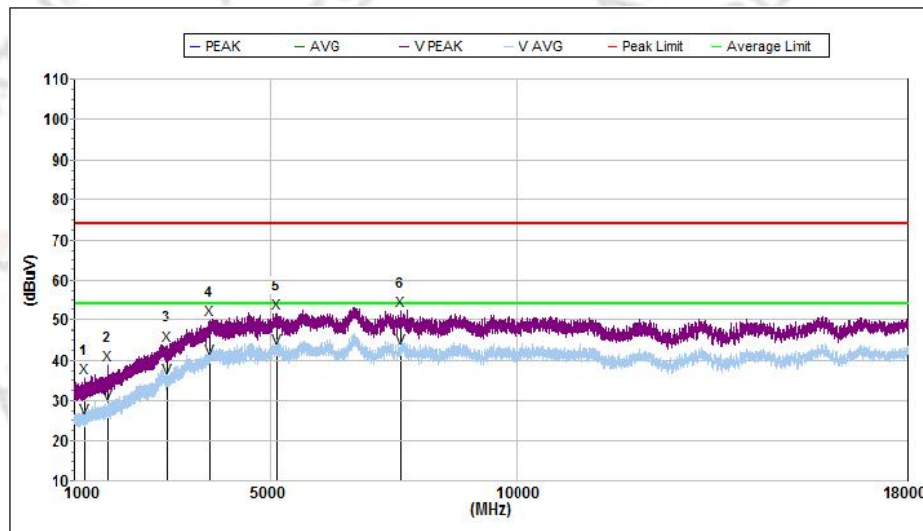
Test Summary Result

| Mk.   | Freq.<br>(MHz) | Level<br>(dBμV/m) | Limit<br>(dBμV/m) | Margin<br>(dB) | Ant.F/G.<br>(dB) | Amp.G.<br>(dB) | Pol. |
|-------|----------------|-------------------|-------------------|----------------|------------------|----------------|------|
| Peak: |                |                   |                   |                |                  |                |      |
| 1     | 1176.100       | 34.6              | 74.0              | 39.4           | 25.6             | 53.6           | H    |
| 2     | 1639.900       | 35.3              | 74.0              | 38.7           | 25.3             | 53.5           | H    |
| 3     | 2230.600       | 37.5              | 74.0              | 36.5           | 27.0             | 54.0           | H    |
| 4     | 3018.700       | 40.7              | 74.0              | 33.3           | 29.4             | 54.1           | H    |
| 5     | 3944.800       | 44.5              | 74.0              | 29.5           | 30.7             | 53.3           | H    |
| 6     | 5020.900       | 47.5              | 74.0              | 26.5           | 33.1             | 52.4           | H    |
| Avg:  |                |                   |                   |                |                  |                |      |
| 1     | 1176.100       | 25.6              | 54.0              | 28.4           | 25.6             | 53.6           | H    |
| 2     | 1639.900       | 26.6              | 54.0              | 27.4           | 25.3             | 53.5           | H    |
| 3     | 2230.600       | 29.1              | 54.0              | 24.9           | 27.0             | 54.0           | H    |
| 4     | 3018.700       | 31.9              | 54.0              | 22.1           | 29.4             | 54.1           | H    |
| 5     | 3944.800       | 35.7              | 54.0              | 18.3           | 30.7             | 53.3           | H    |
| 6     | 5020.900       | 38.5              | 54.0              | 15.5           | 33.1             | 52.4           | H    |

Note:

- 1.Margin = Result (Result =Reading + Factor)-Limit
- 2.Factor= Cable Loss +Antenna Factor-Amplifier Gain

|               |                |                    |            |
|---------------|----------------|--------------------|------------|
| Temperature:  | 24℃            | Relative Humidity: | 53%        |
| Test Voltage: | AC 120V/60Hz   | Phase:             | Vertical   |
| Test Mode:    | BLE 1M-2402MHz | Comment:           | 1GHz-18GHz |



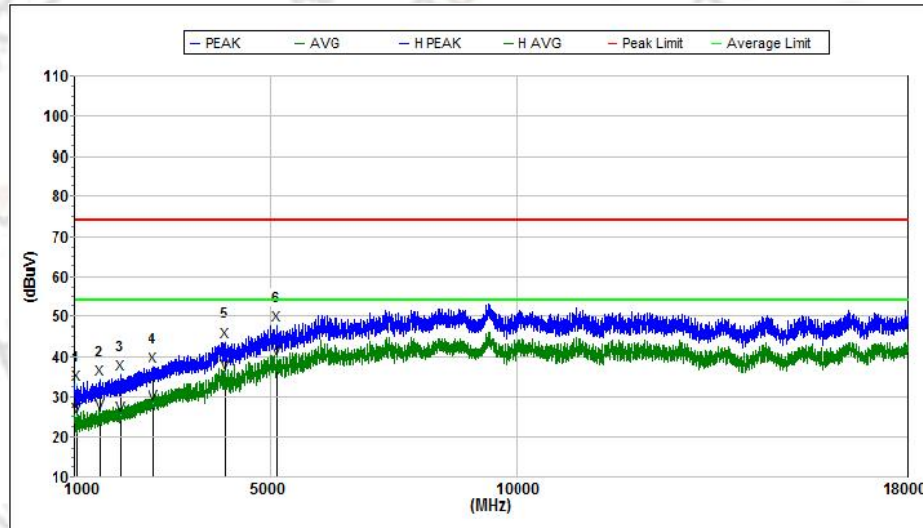
Test Summary Result

| Mk.   | Freq.<br>(MHz) | Level<br>(dBμV/m) | Limit<br>(dBμV/m) | Margin<br>(dB) | Ant.F/G.<br>(dB) | Amp.G.<br>(dB) | Pol. |
|-------|----------------|-------------------|-------------------|----------------|------------------|----------------|------|
| Peak: |                |                   |                   |                |                  |                |      |
| 1     | 1212.976       | 35.5              | 74.0              | 38.5           | 25.7             | 53.6           | V    |
| 2     | 1669.036       | 39.0              | 74.0              | 35.0           | 25.2             | 53.6           | V    |
| 3     | 2896.736       | 44.0              | 74.0              | 30.0           | 29.0             | 54.1           | V    |
| 4     | 3751.668       | 50.2              | 74.0              | 23.8           | 30.2             | 53.5           | V    |
| 5     | 5114.710       | 51.8              | 74.0              | 22.2           | 33.1             | 52.4           | V    |
| 6     | 7650.888       | 52.4              | 74.0              | 21.6           | 36.5             | 51.9           | V    |
| Avg:  |                |                   |                   |                |                  |                |      |
| 1     | 1212.976       | 25.7              | 54.0              | 28.3           | 25.7             | 53.6           | V    |
| 2     | 1669.036       | 29.3              | 54.0              | 24.7           | 25.2             | 53.6           | V    |
| 3     | 2896.736       | 35.8              | 54.0              | 18.2           | 29.0             | 54.1           | V    |
| 4     | 3751.668       | 40.6              | 54.0              | 13.4           | 30.2             | 53.5           | V    |
| 5     | 5114.710       | 43.3              | 54.0              | 10.7           | 33.1             | 52.4           | V    |
| 6     | 7650.888       | 43.2              | 54.0              | 10.8           | 36.5             | 51.9           | V    |

Note:

- 1.Margin = Result (Result =Reading + Factor)-Limit
- 2.Factor= Cable Loss +Antenna Factor-Amplifier Gain

|               |                |                    |            |
|---------------|----------------|--------------------|------------|
| Temperature:  | 24°C           | Relative Humidity: | 53%        |
| Test Voltage: | AC 120V/60Hz   | Phase:             | Horizontal |
| Test Mode:    | BLE 1M-2480MHz | Comment:           | 1GHz-18GHz |



Test Summary Result

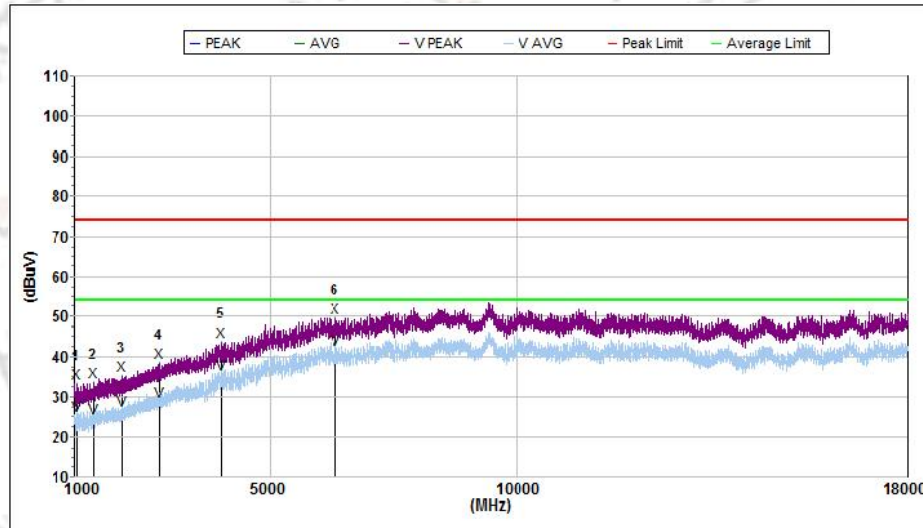
| Mk.   | Freq.<br>(MHz) | Level<br>(dBμV/m) | Limit<br>(dBμV/m) | Margin<br>(dB) | Ant.F/G.<br>(dB) | Amp.G.<br>(dB) | Pol. |
|-------|----------------|-------------------|-------------------|----------------|------------------|----------------|------|
| Peak: |                |                   |                   |                |                  |                |      |
| 1     | 1063.300       | 32.9              | 74.0              | 41.1           | 25.2             | 53.7           | H    |
| 2     | 1513.900       | 34.4              | 74.0              | 39.6           | 25.4             | 53.4           | H    |
| 3     | 1922.500       | 35.7              | 74.0              | 38.3           | 26.0             | 53.8           | H    |
| 4     | 2615.500       | 37.7              | 74.0              | 36.3           | 28.0             | 54.1           | H    |
| 5     | 4050.400       | 44.0              | 74.0              | 30.0           | 31.0             | 53.2           | H    |
| 6     | 5133.100       | 47.7              | 74.0              | 26.3           | 33.0             | 52.4           | H    |
| Avg:  |                |                   |                   |                |                  |                |      |
| 1     | 1063.300       | 25.1              | 54.0              | 28.9           | 25.2             | 53.7           | H    |
| 2     | 1513.900       | 26.0              | 54.0              | 28.0           | 25.4             | 53.4           | H    |
| 3     | 1922.500       | 25.3              | 54.0              | 28.7           | 26.0             | 53.8           | H    |
| 4     | 2615.500       | 28.3              | 54.0              | 25.7           | 28.0             | 54.1           | H    |
| 5     | 4050.400       | 36.1              | 54.0              | 17.9           | 31.0             | 53.2           | H    |
| 6     | 5133.100       | 39.7              | 54.0              | 14.3           | 33.0             | 52.4           | H    |

Note:

1.Margin = Result (Result =Reading + Factor)-Limit

2.Factor= Cable Loss +Antenna Factor-Amplifier Gain

|               |                |                    |            |
|---------------|----------------|--------------------|------------|
| Temperature:  | 24℃            | Relative Humidity: | 53%        |
| Test Voltage: | AC 120V/60Hz   | Phase:             | Vertical   |
| Test Mode:    | BLE 1M-2480MHz | Comment:           | 1GHz-18GHz |



Test Summary Result

| Mk.   | Freq.<br>(MHz) | Level<br>(dBμV/m) | Limit<br>(dBμV/m) | Margin<br>(dB) | Ant.F/G.<br>(dB) | Amp.G.<br>(dB) | Pol. |
|-------|----------------|-------------------|-------------------|----------------|------------------|----------------|------|
| Peak: |                |                   |                   |                |                  |                |      |
| 1     | 1063.000       | 33.5              | 74.0              | 40.5           | 25.2             | 53.7           | V    |
| 2     | 1386.400       | 33.7              | 74.0              | 40.3           | 25.5             | 53.5           | V    |
| 3     | 1952.800       | 35.2              | 74.0              | 38.8           | 26.2             | 53.9           | V    |
| 4     | 2749.900       | 38.5              | 74.0              | 35.5           | 28.5             | 54.1           | V    |
| 5     | 3992.200       | 43.9              | 74.0              | 30.1           | 30.9             | 53.2           | V    |
| 6     | 6331.900       | 49.8              | 74.0              | 24.2           | 34.9             | 51.6           | V    |
| Avg:  |                |                   |                   |                |                  |                |      |
| 1     | 1063.000       | 25.5              | 54.0              | 28.5           | 25.2             | 53.7           | V    |
| 2     | 1386.400       | 24.8              | 54.0              | 29.2           | 25.5             | 53.5           | V    |
| 3     | 1952.800       | 26.9              | 54.0              | 27.1           | 26.2             | 53.9           | V    |
| 4     | 2749.900       | 29.0              | 54.0              | 25.0           | 28.5             | 54.1           | V    |
| 5     | 3992.200       | 35.5              | 54.0              | 18.5           | 30.9             | 53.2           | V    |
| 6     | 6331.900       | 41.8              | 54.0              | 12.2           | 34.9             | 51.6           | V    |

Note:

1.Margin = Result (Result =Reading + Factor)-Limit

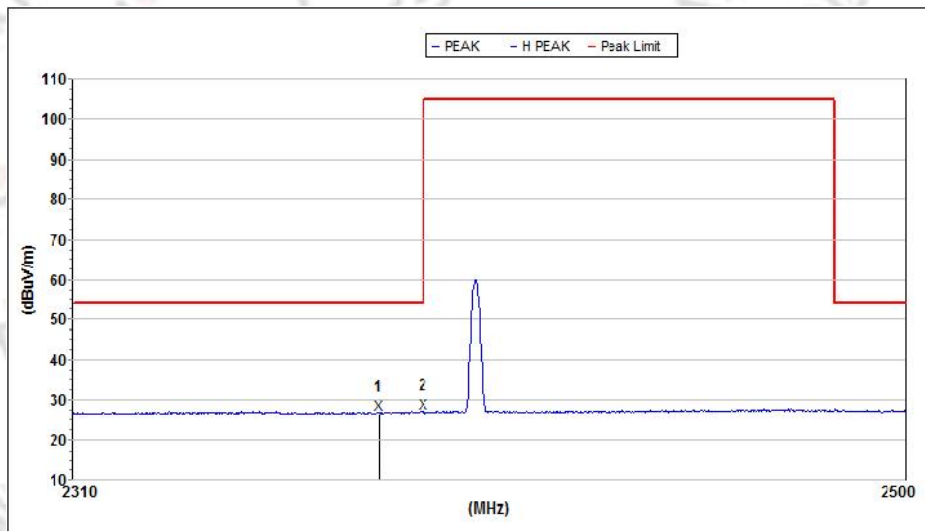
2.Factor= Cable Loss +Antenna Factor-Amplifier Gain

## Restricted Band

Note: During the test, pre-scan All mode, the report only reflects the test data of worst mode(BLE 1M).

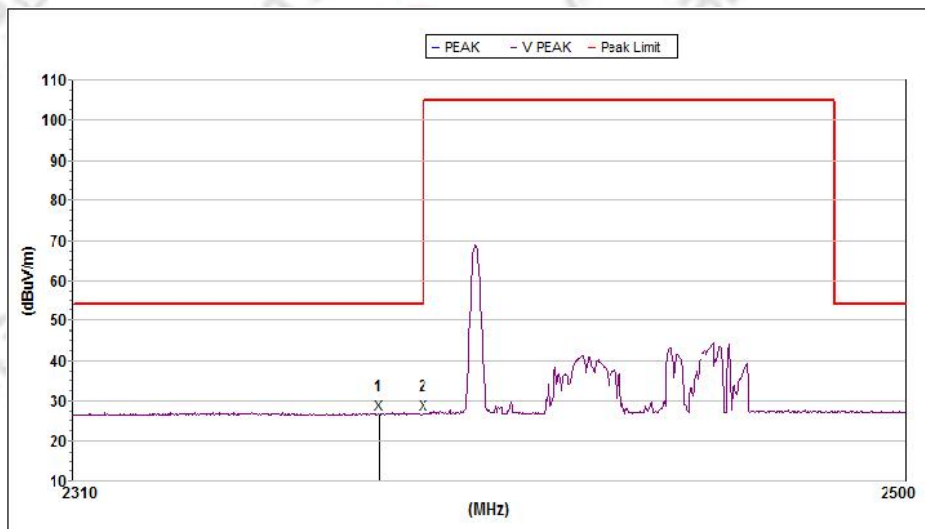
Test Mode: BLE 1M

Test Channel: Lowest channel, Test Polarization: Horizontal



| Mk. | Frequency<br>(MHz) | Level<br>(dBμV/m) | Limit<br>(dBμV/m) | Margin<br>(dB) | Ant.F/G.<br>(dB/m) | Amp.G.<br>(dB) | Pol. |
|-----|--------------------|-------------------|-------------------|----------------|--------------------|----------------|------|
| AVG |                    |                   |                   |                |                    |                |      |
| 1   | 2380.000           | 26.6              | 54.0              | 27.4           | 27.3               | 54.1           | H    |
| 2   | 2390.000           | 26.7              | 54.0              | 27.3           | 27.4               | 54.1           | H    |

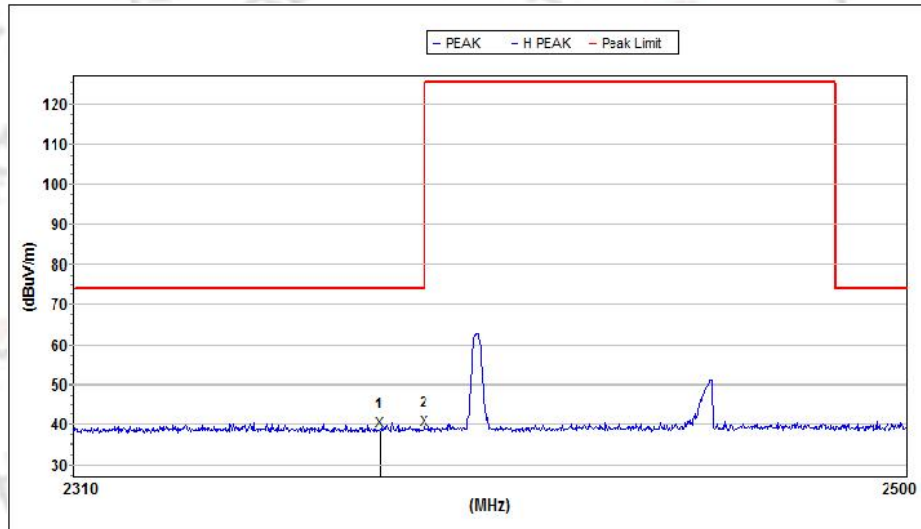
Test Channel: Lowest channel, Test Polarization: Vertical



| Mk. | Frequency<br>(MHz) | Level<br>(dBμV/m) | Limit<br>(dBμV/m) | Margin<br>(dB) | Ant.F/G.<br>(dB/m) | Amp.G.<br>(dB) | Pol. |
|-----|--------------------|-------------------|-------------------|----------------|--------------------|----------------|------|
| AVG |                    |                   |                   |                |                    |                |      |
| 1   | 2380.000           | 26.9              | 54.0              | 27.1           | 27.3               | 54.1           | V    |
| 2   | 2390.000           | 26.9              | 54.0              | 27.1           | 27.4               | 54.1           | V    |

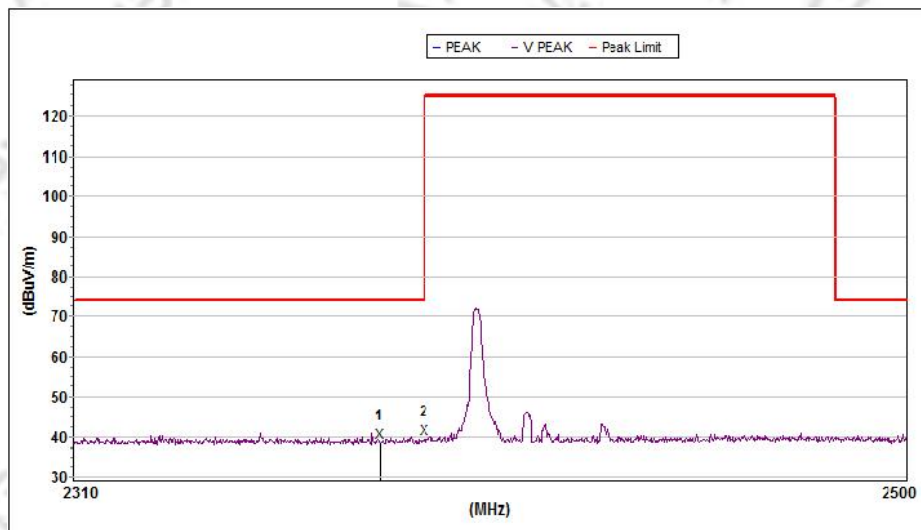
## Test Mode: BLE 1M

Test Channel: Lowest channel, Test Polarization: Horizontal



| Mk.  | Frequency<br>(MHz) | Level<br>(dBμV/m) | Limit<br>(dBμV/m) | Margin<br>(dB) | Ant.F/G.<br>(dB/m) | Amp.G.<br>(dB) | Pol. |
|------|--------------------|-------------------|-------------------|----------------|--------------------|----------------|------|
| PEAK |                    |                   |                   |                |                    |                |      |
| 1    | 2380.000           | 38.5              | 74.0              | 35.5           | 27.3               | 54.1           | H    |
| 2    | 2390.000           | 38.9              | 74.0              | 35.1           | 27.4               | 54.1           | H    |

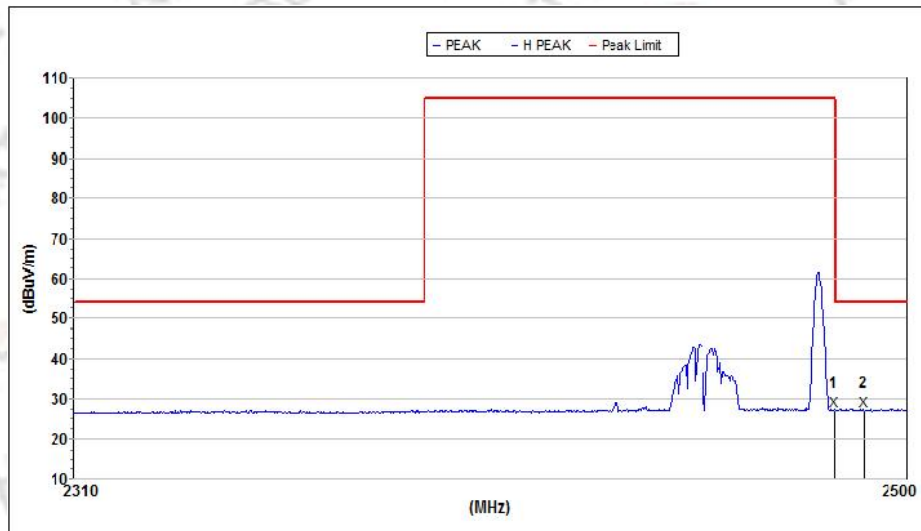
Test Channel: Lowest channel, Test Polarization: Vertical



| Mk.  | Frequency<br>(MHz) | Level<br>(dBμV/m) | Limit<br>(dBμV/m) | Margin<br>(dB) | Ant.F/G.<br>(dB/m) | Amp.G.<br>(dB) | Pol. |
|------|--------------------|-------------------|-------------------|----------------|--------------------|----------------|------|
| PEAK |                    |                   |                   |                |                    |                |      |
| 1    | 2380.000           | 38.6              | 74.0              | 35.4           | 27.3               | 54.1           | V    |
| 2    | 2390.000           | 39.6              | 74.0              | 34.4           | 27.4               | 54.1           | V    |

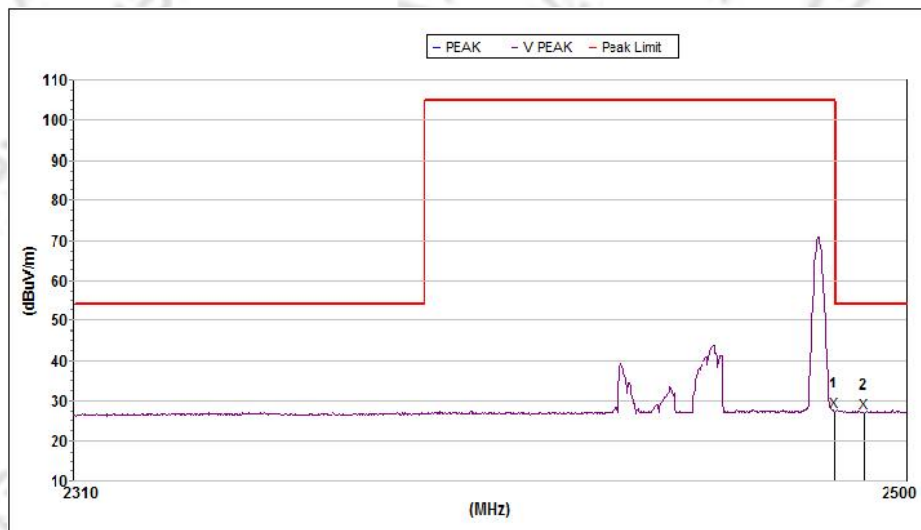
Test Mode: BLE 1M

Test Channel: Highest channel, Test Polarization: Horizontal



| Mk. | Frequency<br>(MHz) | Level<br>(dBμV/m) | Limit<br>(dBμV/m) | Margin<br>(dB) | Ant.F/G.<br>(dB/m) | Amp.G.<br>(dB) | Pol. |
|-----|--------------------|-------------------|-------------------|----------------|--------------------|----------------|------|
| AVG |                    |                   |                   |                |                    |                |      |
| 1   | 2483.600           | 27.2              | 54.0              | 26.8           | 27.6               | 54.1           | H    |
| 2   | 2490.000           | 27.1              | 54.0              | 26.9           | 27.6               | 54.1           | H    |

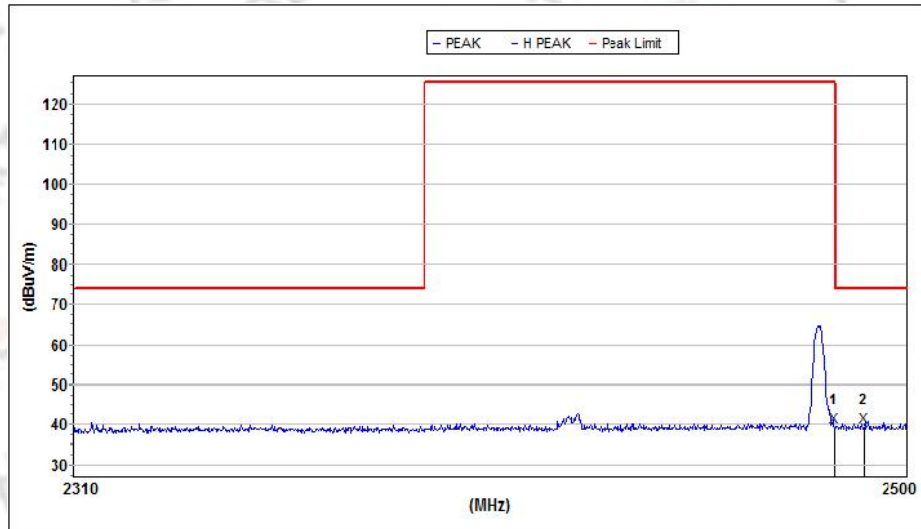
Test Channel: Highest channel, Test Polarization: Vertical



| Mk. | Frequency<br>(MHz) | Level<br>(dBμV/m) | Limit<br>(dBμV/m) | Margin<br>(dB) | Ant.F/G.<br>(dB/m) | Amp.G.<br>(dB) | Pol. |
|-----|--------------------|-------------------|-------------------|----------------|--------------------|----------------|------|
| AVG |                    |                   |                   |                |                    |                |      |
| 1   | 2483.600           | 27.3              | 54.0              | 26.7           | 27.6               | 54.1           | V    |
| 2   | 2490.000           | 27.2              | 54.0              | 26.8           | 27.6               | 54.1           | V    |

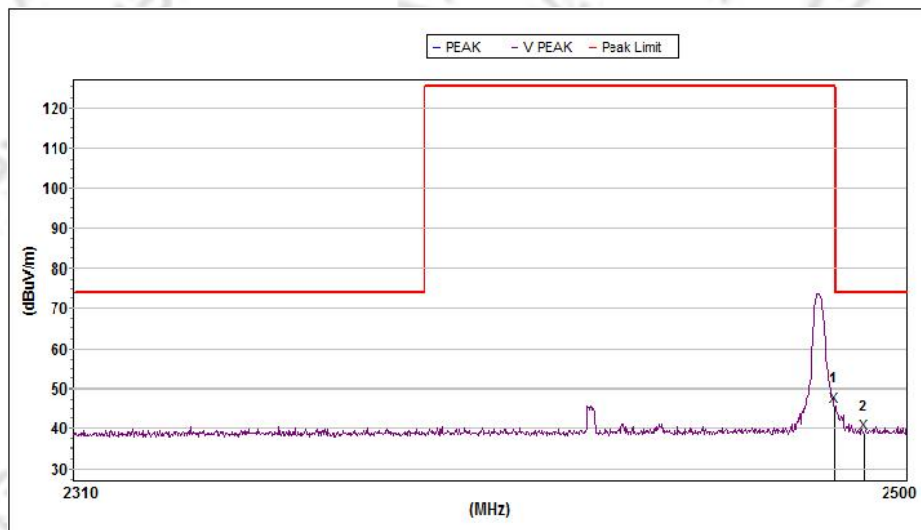
Test Mode: BLE 1M

Test Channel: Highest channel, Test Polarization: Horizontal



| Mk.  | Frequency<br>(MHz) | Level<br>(dBμV/m) | Limit<br>(dBμV/m) | Margin<br>(dB) | Ant.F/G.<br>(dB/m) | Amp.G.<br>(dB) | Pol. |
|------|--------------------|-------------------|-------------------|----------------|--------------------|----------------|------|
| PEAK |                    |                   |                   |                |                    |                |      |
| 1    | 2483.600           | 39.4              | 74.0              | 34.6           | 27.6               | 54.1           | H    |
| 2    | 2490.000           | 39.6              | 74.0              | 34.4           | 27.6               | 54.1           | H    |

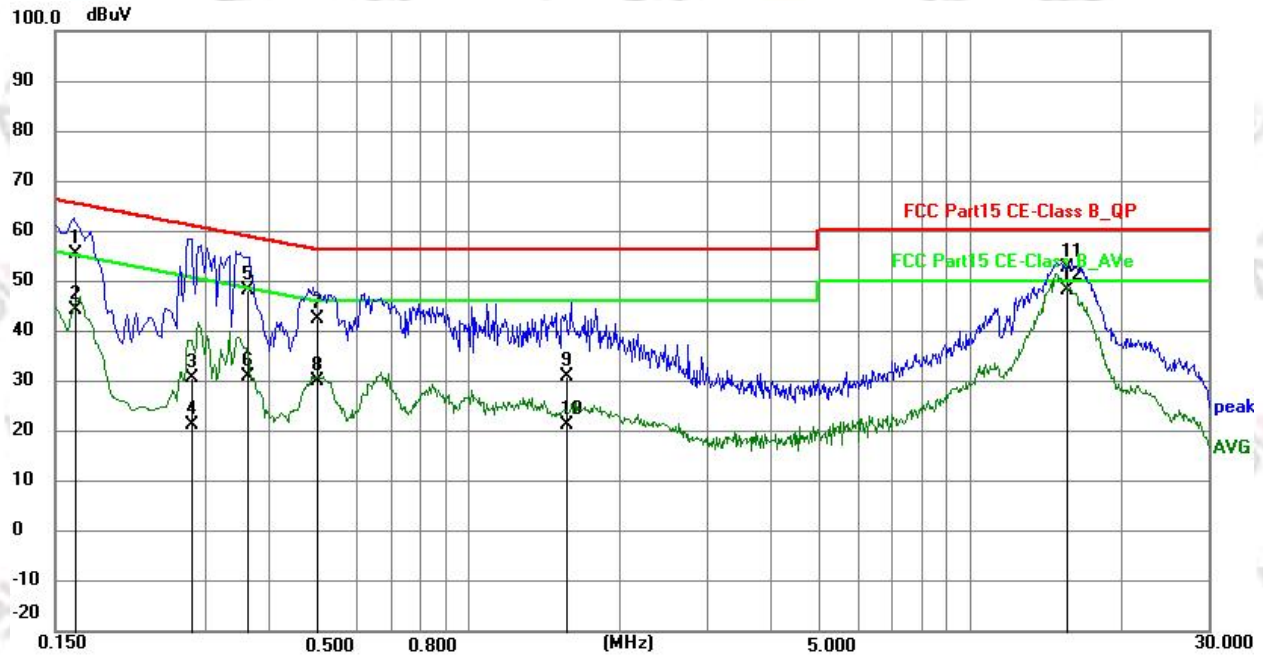
Test Channel: Highest channel, Test Polarization: Vertical



| Mk.  | Frequency<br>(MHz) | Level<br>(dBμV/m) | Limit<br>(dBμV/m) | Margin<br>(dB) | Ant.F/G.<br>(dB/m) | Amp.G.<br>(dB) | Pol. |
|------|--------------------|-------------------|-------------------|----------------|--------------------|----------------|------|
| PEAK |                    |                   |                   |                |                    |                |      |
| 1    | 2483.600           | 45.8              | 74.0              | 28.2           | 27.6               | 54.1           | V    |
| 2    | 2490.000           | 38.9              | 74.0              | 35.1           | 27.6               | 54.1           | V    |

## AC Power-Line Conducted Emission Test Data

|               |              |                    |            |
|---------------|--------------|--------------------|------------|
| Temperature:  | 23.1℃        | Relative Humidity: | 37%        |
| Phase:        | L            | Test Mode:         | Mode7      |
| Test Voltage: | AC 120V/60Hz | Test Date:         | 2025.07.15 |

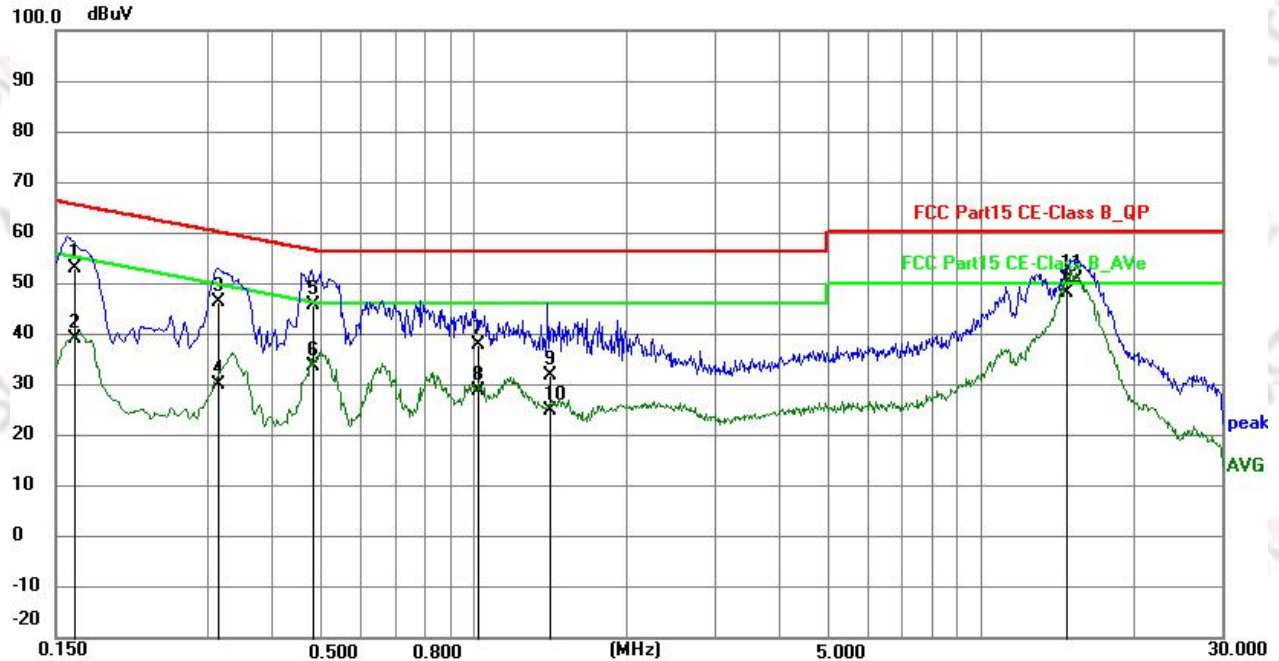


| No. | Frequency (MHz) | Reading (dBuV) | Correct Factor (dB) | Result (dBuV) | Limit (dBuV) | Margin (dB) | Detector |
|-----|-----------------|----------------|---------------------|---------------|--------------|-------------|----------|
| 1   | 0.1650          | 44.64          | 10.63               | 55.27         | 65.21        | -9.94       | QP       |
| 2   | 0.1650          | 33.61          | 10.63               | 44.24         | 55.21        | -10.97      | AVG      |
| 3   | 0.2810          | 20.07          | 10.53               | 30.60         | 60.79        | -30.19      | QP       |
| 4   | 0.2810          | 10.88          | 10.53               | 21.41         | 50.79        | -29.38      | AVG      |
| 5   | 0.3630          | 37.66          | 10.47               | 48.13         | 58.66        | -10.53      | QP       |
| 6   | 0.3630          | 20.41          | 10.47               | 30.88         | 48.66        | -17.78      | AVG      |
| 7   | 0.4990          | 32.16          | 10.39               | 42.55         | 56.02        | -13.47      | QP       |
| 8   | 0.4990          | 19.72          | 10.39               | 30.11         | 46.02        | -15.91      | AVG      |
| 9   | 1.5690          | 20.52          | 10.45               | 30.97         | 56.00        | -25.03      | QP       |
| 10  | 1.5690          | 10.85          | 10.45               | 21.30         | 46.00        | -24.70      | AVG      |
| 11  | 15.5630         | 40.14          | 12.43               | 52.57         | 60.00        | -7.43       | QP       |
| 12  | 15.5630         | 35.85          | 12.43               | 48.28         | 50.00        | -1.72       | AVG      |

Remark:

1. Margin = Result (Result =Reading + Factor)–Limit
2. Factor= Cable Loss +Antenna Factor–Amplifier Gain

|               |              |                    |            |
|---------------|--------------|--------------------|------------|
| Temperature:  | 23.1℃        | Relative Humidity: | 37%        |
| Phase:        | N            | Test Mode:         | Mode7      |
| Test Voltage: | AC 120V/60Hz | Test Date:         | 2025.07.15 |



| No. | Frequency (MHz) | Reading (dBuV) | Correct Factor (dB) | Result (dBuV) | Limit (dBuV) | Margin (dB) | Detector |
|-----|-----------------|----------------|---------------------|---------------|--------------|-------------|----------|
| 1   | 0.1630          | 42.39          | 10.62               | 53.01         | 65.31        | -12.30      | QP       |
| 2   | 0.1630          | 28.39          | 10.62               | 39.01         | 55.31        | -16.30      | AVG      |
| 3   | 0.3140          | 35.75          | 10.50               | 46.25         | 59.86        | -13.61      | QP       |
| 4   | 0.3140          | 19.58          | 10.50               | 30.08         | 49.86        | -19.78      | AVG      |
| 5   | 0.4820          | 35.32          | 10.39               | 45.71         | 56.30        | -10.59      | QP       |
| 6   | 0.4820          | 23.40          | 10.39               | 33.79         | 46.30        | -12.51      | AVG      |
| 7   | 1.0180          | 27.50          | 10.40               | 37.90         | 56.00        | -18.10      | QP       |
| 8   | 1.0180          | 18.50          | 10.40               | 28.90         | 46.00        | -17.10      | AVG      |
| 9   | 1.4120          | 21.44          | 10.43               | 31.87         | 56.00        | -24.13      | QP       |
| 10  | 1.4120          | 14.47          | 10.43               | 24.90         | 46.00        | -21.10      | AVG      |
| 11  | 14.7840         | 38.47          | 12.36               | 50.83         | 60.00        | -9.17       | QP       |
| 12  | 14.7840         | 35.94          | 12.36               | 48.30         | 50.00        | -1.70       | AVG      |

Remark:

1. Margin = Result (Result =Reading + Factor)–Limit
2. Factor= Cable Loss +Antenna Factor–Amplifier Gain

\*\*\*\*\*END OF THE Appendix A\*\*\*\*\*