## 7.6. Time of Occupancy Measurement

### 7.6.1. Test Limit

The maximum permissible time of occupancy is 400ms within a period of 400ms multiplied by the number of hopping channels employed.

### 7.6.2. Test Procedure Used

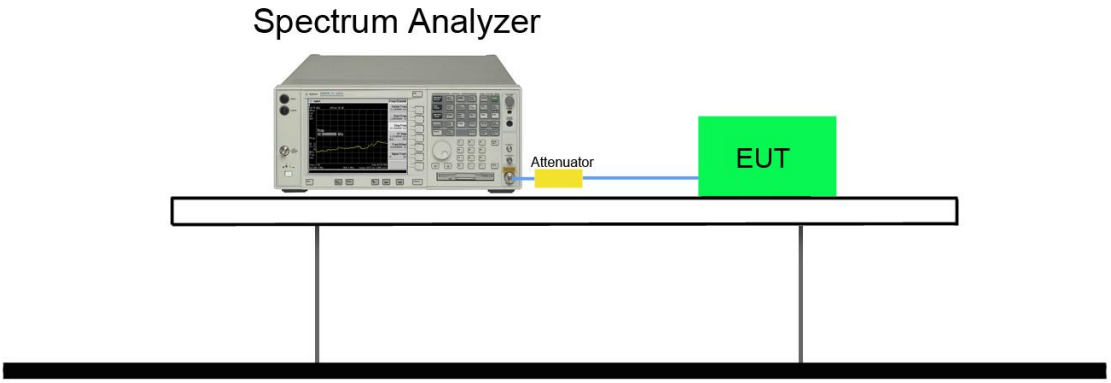
ANSI C63.10-2013 - Section 7.8.4

### 7.6.3. Test Settitng

1. Span = zero span, centered on a hopping channel.
2. RBW = 1MHz
3. VBW ≥ RBW
4. Sweep time = as necessary to capture the entire dwell time per hopping channel
5. Detector = Peak
6. Trace mode = max hold

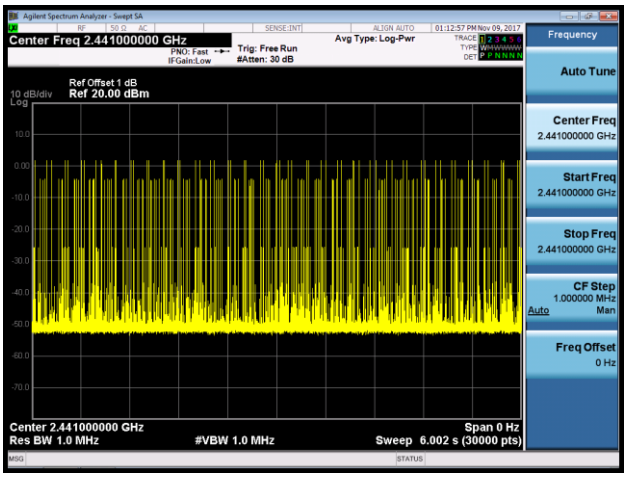
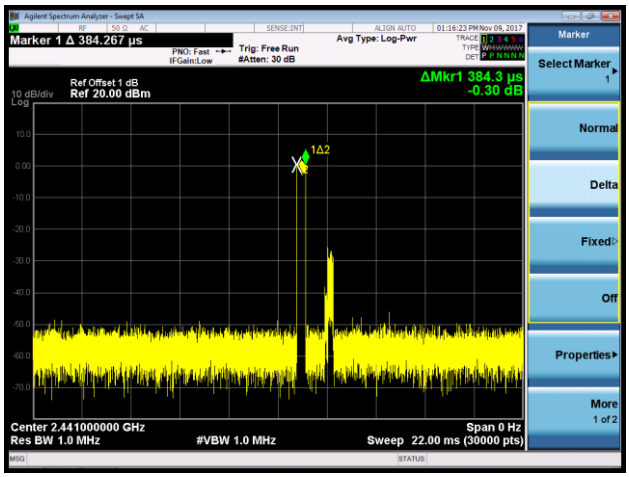
If possible, use the marker-delta function to determine the dwell time. If this value varies with different modes of operation (data rate, modulation format, etc.), repeat this test for each variation. An oscilloscope may be used instead of a spectrum analyzer. The EUT shall show compliance with the appropriate regulatory limit for the number of hopping channels. A plot of the data shall be included in the test report.

### 7.6.4. Test Setup



### 7.6.5. Test Result

| Test Mode | Channel No. | Frequency (MHz) | Time of Occupancy (ms) | Limit (ms) | Result |
|---|---|---|---|---|---|
| 3DH1 | 39 | 2441 | 133.58 | < 400 | Pass |
| 3DH3 | 39 | 2441 | 305.64 | < 400 | Pass |
| 3DH5 | 39 | 2441 | 273.97 | < 400 | Pass |

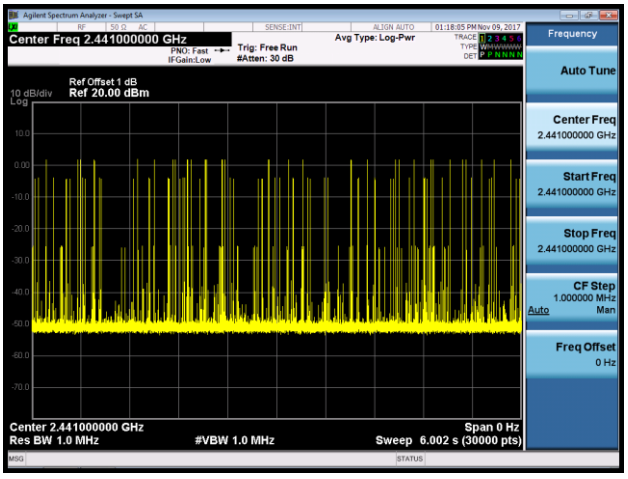
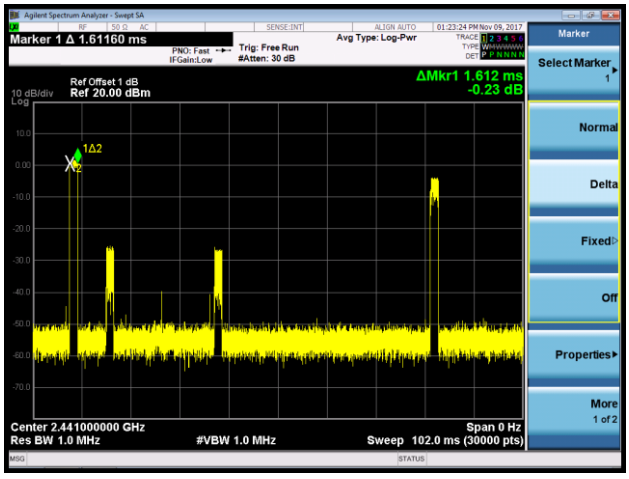
| 3DH1 Time of Occupancy | |
|---|---|
| **Channel 39(2441MHz) - 64 hops** | **Channel 39(2441MHz)** |
|  |  |





Note: Test Time Period: 0.4*79=31.6sec, Hopping Times Within 1sec: 64hops/6 sec≈11 hops/sec.

The Maximum Occupancy Time within 31.6sec: (0.3843ms*11)*31.6 =133.58 msec.

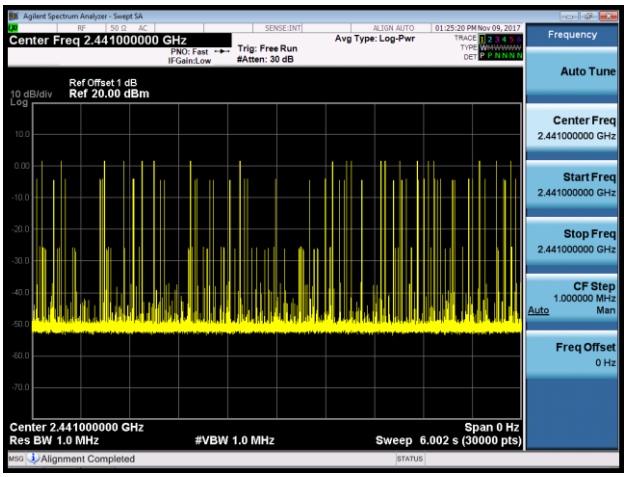
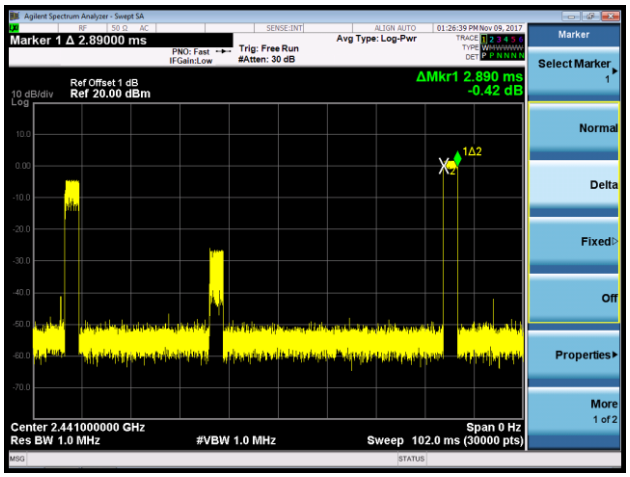
| 3DH3 Time of Occupancy | |
|---|---|
| **Channel 39(2441MHz) - 36 hops** | **Channel 39(2441MHz)** |
|  |  |





Note: Test Time Period: 0.4*79=31.6sec, Hopping Times Within 1sec: 36hops/6 sec≈6 hops/sec.

The Maximum Occupancy Time within 31.6sec: (1.612ms*6)*31.6 =305.64 msec.

| 3DH5 Time of Occupancy | |
|---|---|
| **Channel 39(2441MHz) - 15 hops** | **Channel 39(2441MHz)** |
|  |  |





Note: Test Time Period: 0.4*79=31.6sec, Hopping Times Within 1sec: 15hops/6 sec≈3 hops/sec.

The Maximum Occupancy Time within 31.6sec: (2.890ms*3)*31.6 =273.97 msec.

## 7.7. Band-edge Compliance Measurement

### 7.7.1. Test Limit

The maximum permissible emission level is 20dBc. Any emissions were lying outside of the emission bandwidth and in authorized band edges to a field strength limit specified in Section 15.209 of the Title 47 CFR.

### 7.7.2. Test Procedure Used

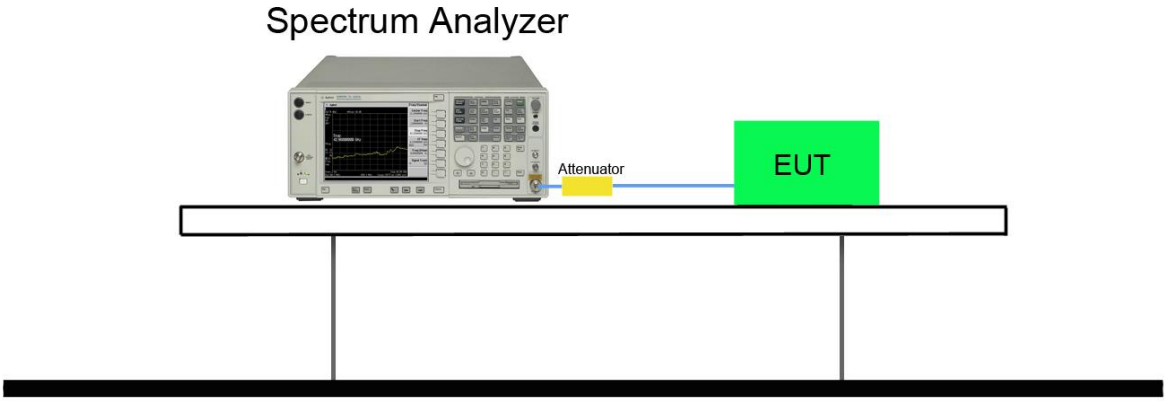
ANSI C63.10-2013 - Section 6.10.4

### 7.7.3. Test Setting

1. Span = wide enough to capture the peak level of the emission operating on the channel closest to the band edge, as well as any modulation products which fall outside of the authorized band of operation.
2. RBW ≥ 1% of spectrum analyzer display span
3. VBW ≥ RBW
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

Allow the trace to stabilize. Set the marker on the emission at the band edge, or on the highest modulation product outside of the band, if this level is greater than that at the band edge. Enable the marker-delta function, than use the marker-to-peak function to move the marker to the peak of the in-band emission.

### 7.7.4. Test Setup



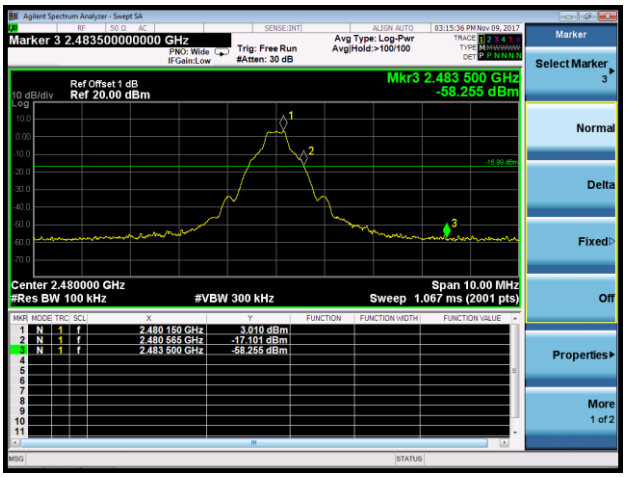
### 7.7.5. Test Result

| Test Mode | Channel No. | Frequency (MHz) | Limit | Result |
|---|---|---|---|---|
| DH5 | 00 | 2402 | 20dBc | Pass |
| DH5 | 78 | 2480 | 20dBc | Pass |
| 2DH5 | 00 | 2402 | 20dBc | Pass |
| 2DH5 | 78 | 2480 | 20dBc | Pass |
| 3DH5 | 00 | 2402 | 20dBc | Pass |
| 3DH5 | 78 | 2480 | 20dBc | Pass |

**DH5 Band-edge Compliance**

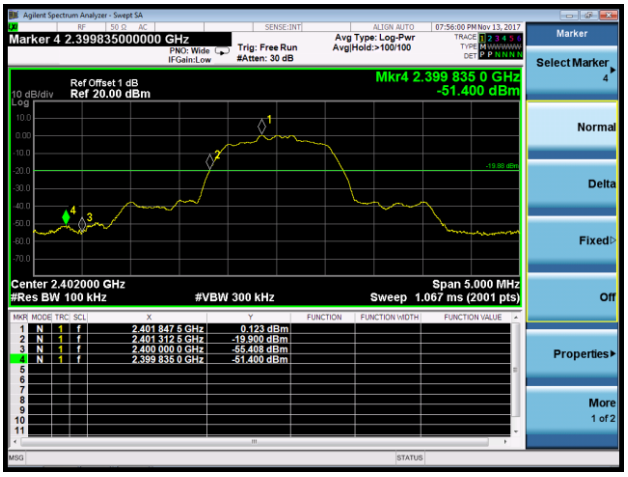
**Channel 00 (2402MHz)**

**Channel 78 (2480MHz)**

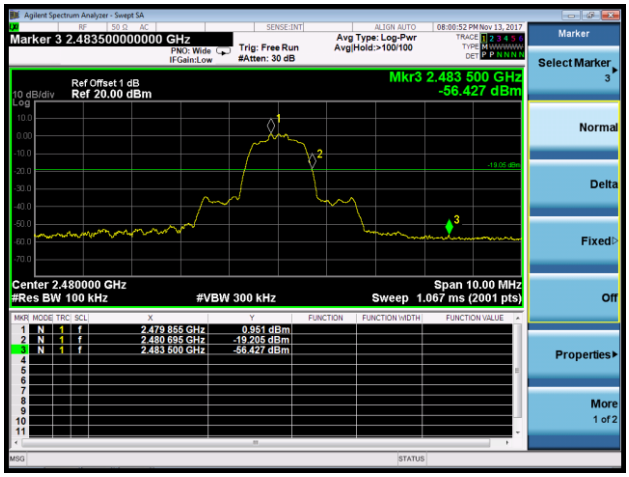



**2DH5 Band-edge Compliance**

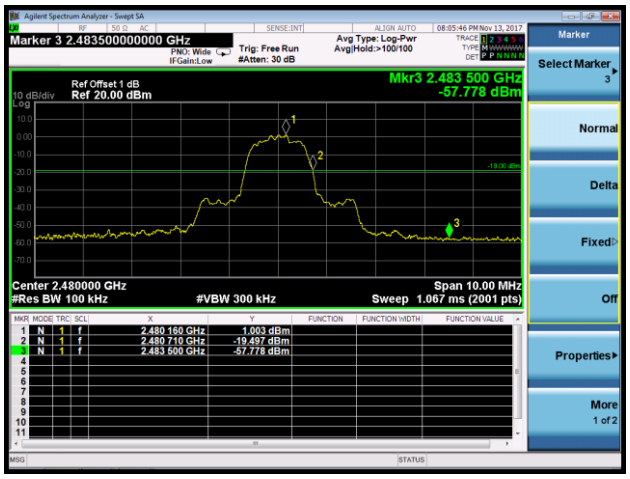
**Channel 00 (2402MHz)**




**Channel 78 (2480MHz)**



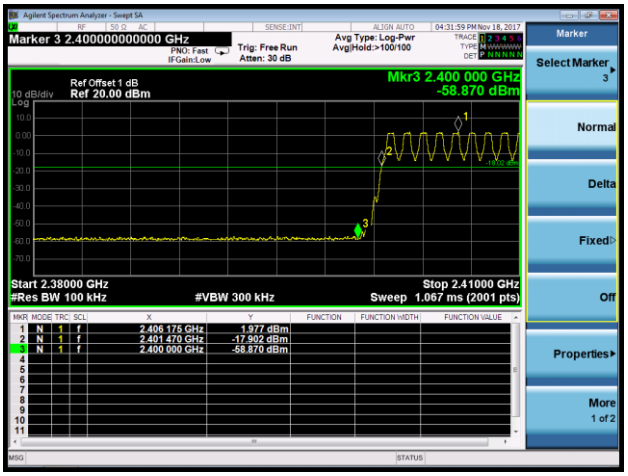
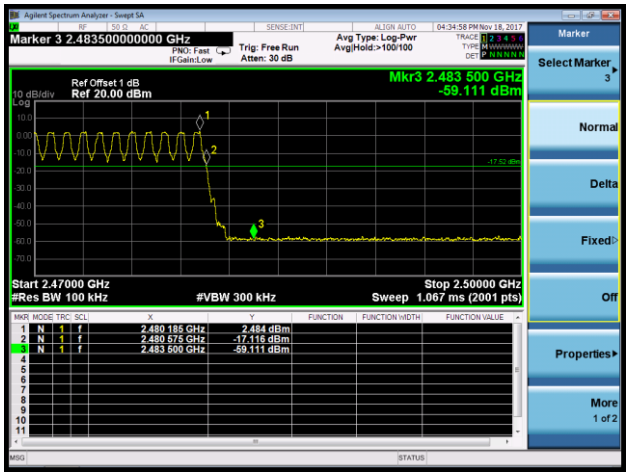
## 3DH5 Band-edge Compliance

| Channel 00 (2402MHz) | Channel 78 (2480MHz) |
|---|---|
| |  |





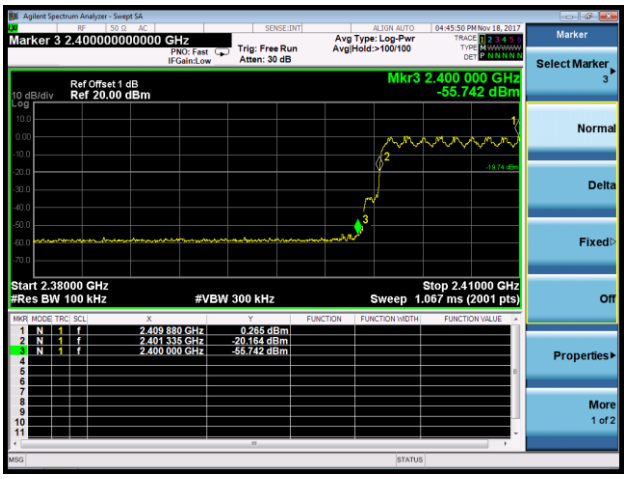
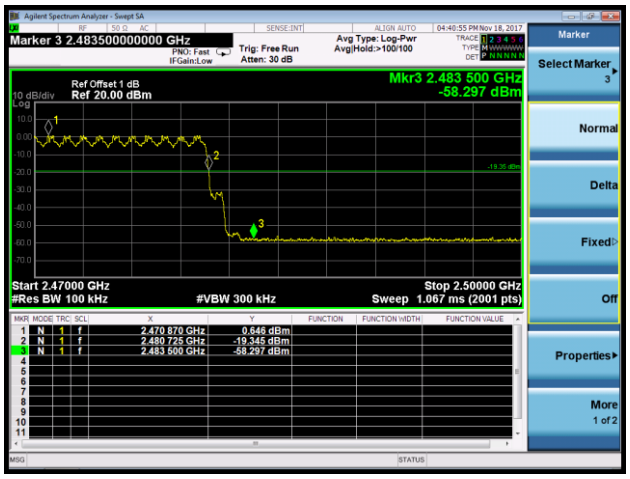
## DH5 Operation Frequency Range of 20dB Bandwidth within Hopping Mode

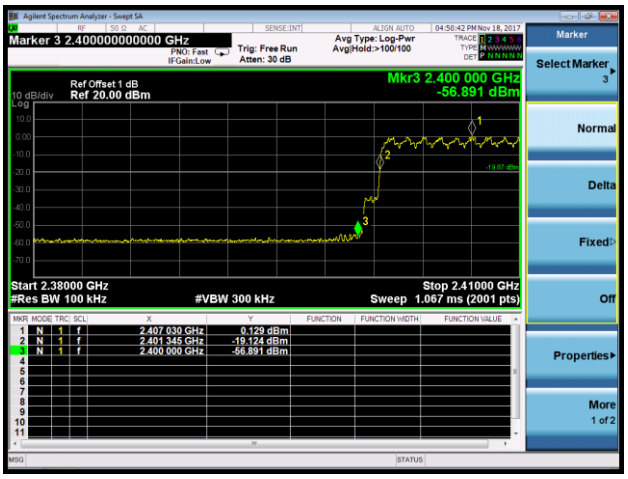
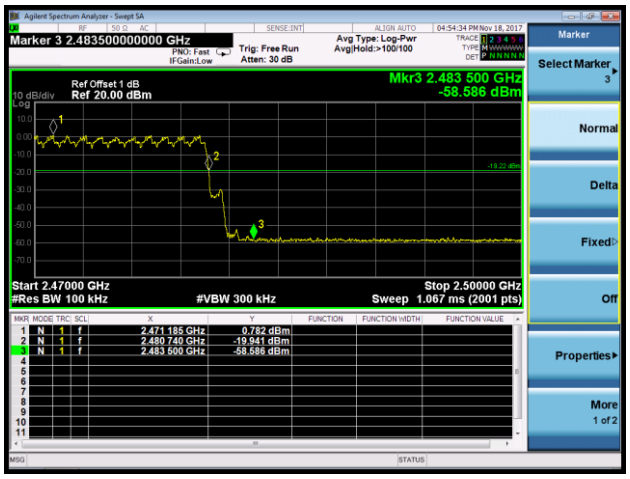
| Channel 00 (2402MHz) | Channel 78 (2480MHz) |
|---|---|
|  |  |





## 2DH5 Operation Frequency Range of 20dB Bandwidth within Hopping Mode

| Channel 00 (2402MHz) | Channel 78 (2480MHz) |
|---|---|
|  |  |

| 3DH5 Operation Frequency Range of 20dB Bandwidth within Hopping Mode | |
|---|---|
| **Channel 00 (2402MHz)** | **Channel 78 (2480MHz)** |
|  |  |

## 7.8. Conducted Spurious Emissions Measurement

### 7.8.1. Test Limit

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, the attenuation required under this paragraph shall be 30 dB instead of 20 dB.

### 7.8.2. Test Procedure Used

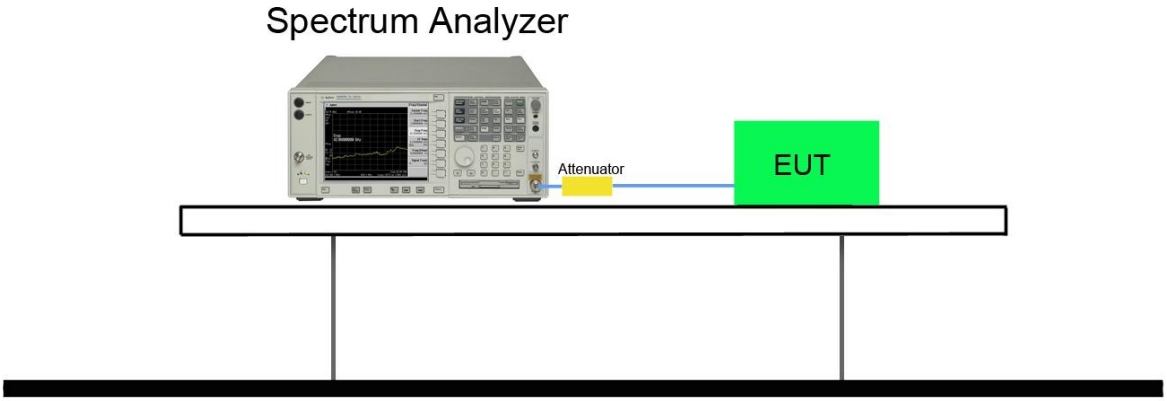
ANSI C63.10-2013 - Section 7.8.8

### 7.8.3. Test Setting

1. Span = wide enough to capture the peak level of the in-band emission and all spurious emissions (e.g., harmonics) from the lowest frequency generated in the EUT up through the 10$^{th}$ harmonic. Typically, several plots are required to cover this entire span.
2. RBW = 100 KHz
3. VBW ≥ RBW
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

Set the marker on the peak of any spurious emission recorded. The level displayed must comply with the limit specified in this section.

### 7.8.4. Test Setup

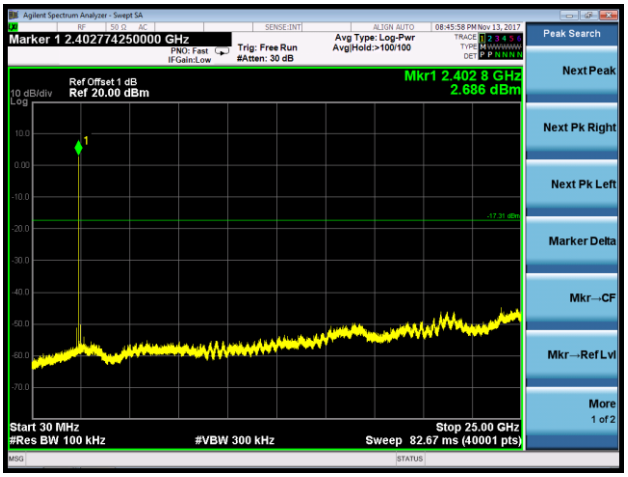


### 7.8.5. Test Result

| Test Mode | Channel No. | Frequency (MHz) | Limit (MHz) | Result |
|---|---|---|---|---|
| DH5 | 00 | 2402 | 20dBc | Pass |
| DH5 | 39 | 2441 | 20dBc | Pass |
| DH5 | 78 | 2480 | 20dBc | Pass |
| 2DH5 | 00 | 2402 | 20dBc | Pass |
| 2DH5 | 39 | 2441 | 20dBc | Pass |
| 2DH5 | 78 | 2480 | 20dBc | Pass |
| 3DH5 | 00 | 2402 | 20dBc | Pass |
| 3DH5 | 39 | 2441 | 20dBc | Pass |
| 3DH5 | 78 | 2480 | 20dBc | Pass |

**DH5 Conducted Spurious Emissions**

**Channel 00 (2402MHz)**

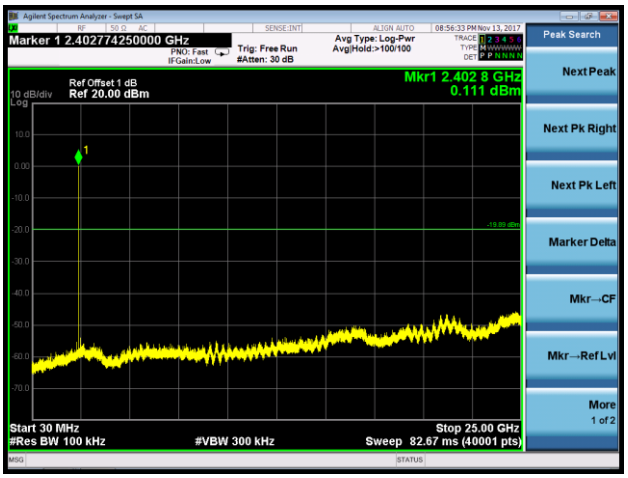



**Channel 39 (2441MHz)**

**Channel 78 (2480MHz)**

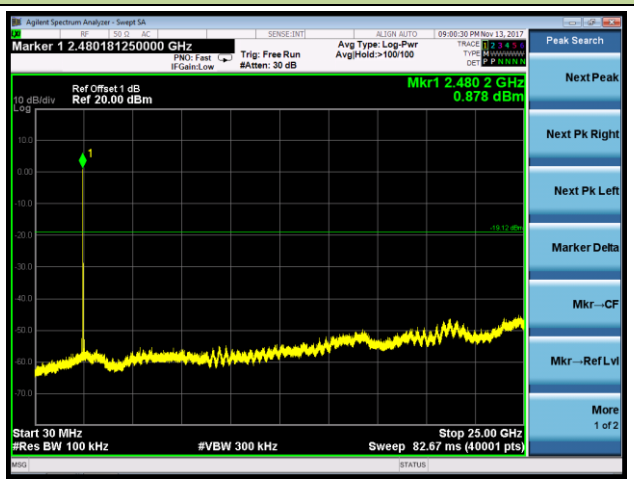
## 2DH5 Conducted Spurious Emissions

### Channel 00 (2402MHz)



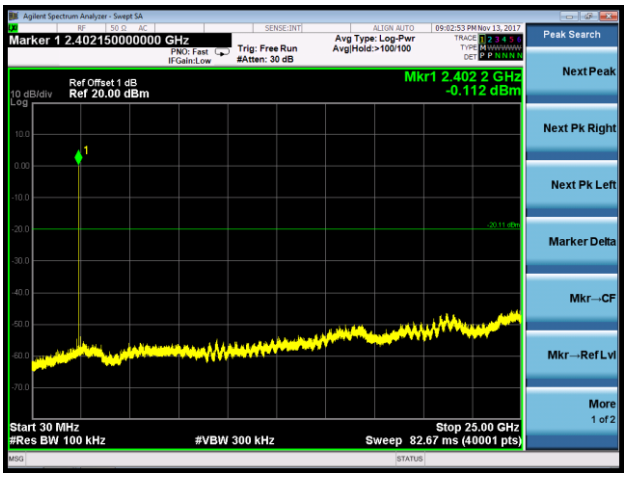

### Channel 39 (2441MHz)

### Channel 78 (2480MHz)



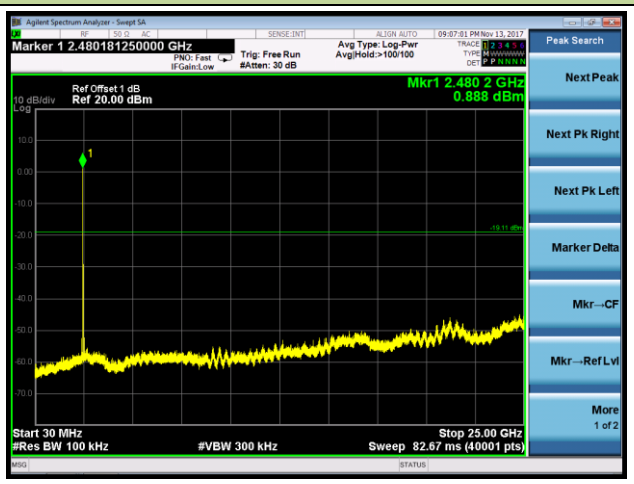
## 3DH5 Conducted Spurious Emissions

### Channel 00 (2402MHz)




### Channel 39 (2441MHz)

### Channel 78 (2480MHz)



## 7.9. Radiated Spurious Emission Measurement

### 7.9.1. Test Limit

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47 CFR must not exceed the limits shown in Table per Section 15.209.

| FCC Part 15 Subpart C Paragraph 15.209 | | |
|---|---|---|
| Frequency [MHz] | Field Strength [uV/m] | Measured Distance [Meters] |
| 0.009 - 0.490 | 2400/F (kHz) | 300 |
| 0.490 - 1.705 | 24000/F (kHz) | 30 |
| 1.705 – 30 | 30 | 30 |
| 30 – 88 | 100 | 3 |
| 88 – 216 | 150 | 3 |
| 216 – 960 | 200 | 3 |
| Above 960 | 500 | 3 |

### 7.9.2. Test Procedure Used

ANSI C63.10-2013 - Section 11.12.1

### 7.9.3. Test Setting

**Peak Field Strength Measurements**

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = as specified in Table 1
3. VBW = 3 * RBW
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

**Table 1 - RBW as a function of frequency**

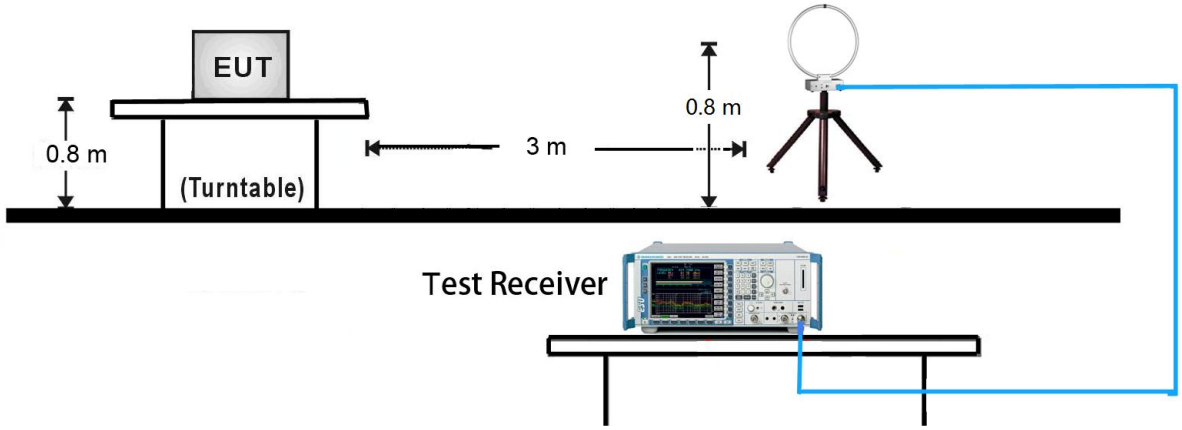
| Frequency | RBW |
|---|---|
| 9 ~ 150 kHz | 200 ~ 300 Hz |
| 0.15 ~ 30 MHz | 9 ~ 10 kHz |
| 30 ~ 1000 MHz | 100 ~ 120 kHz |
| > 1000 MHz | 1 MHz |

**Average Field Strength Measurements**

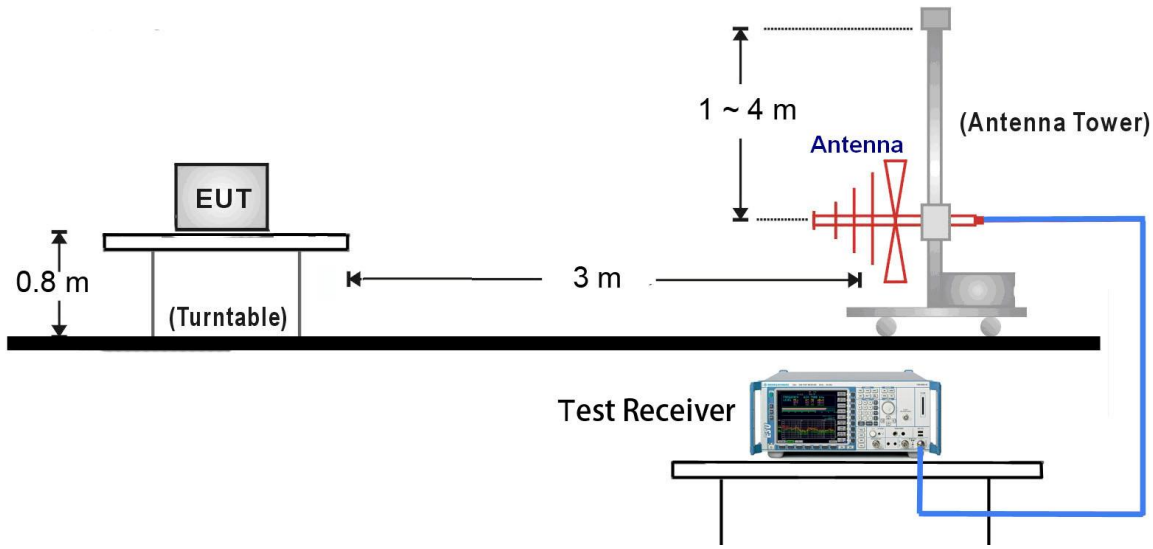
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW ≥ 1/T
4. De As an alternative, the instrument may be set to linear detector mode. Ensure that video filtering is applied in linear voltage domain (rather than in a log or dB domain). Some instruments require linear display mode in order to accomplish this. Others have a setting for Average-VBW Type, which can be set to “Voltage” regardless of the display mode
5. Detector = Peak
6. Sweep time = auto
7. Trace mode = max hold
8. Allow max hold to run for at least 50 times (1/duty cycle) traces

### 7.9.4. Test Setup

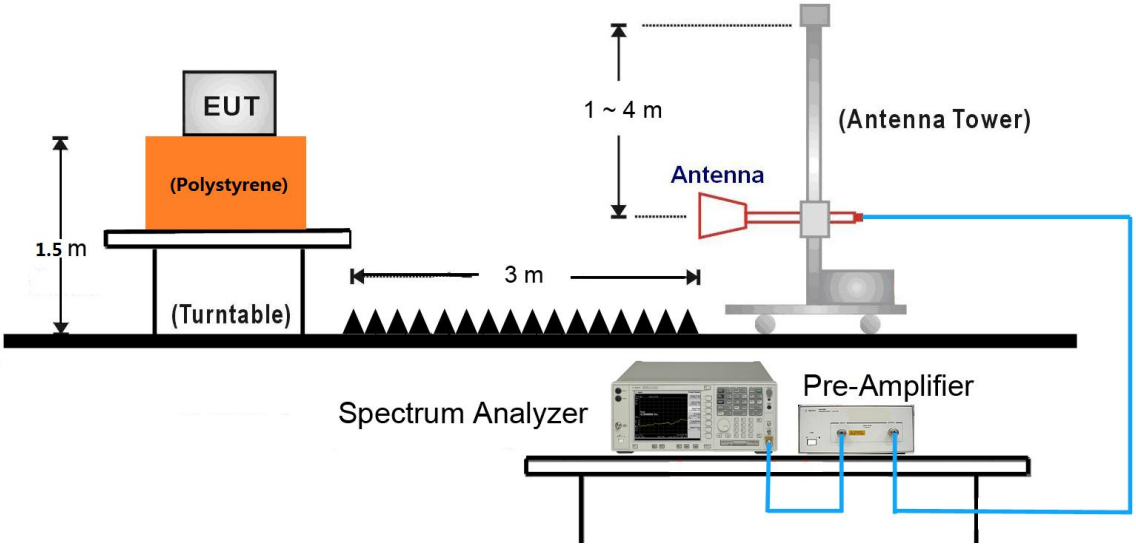
9kHz ~ 30MHz Test Setup:



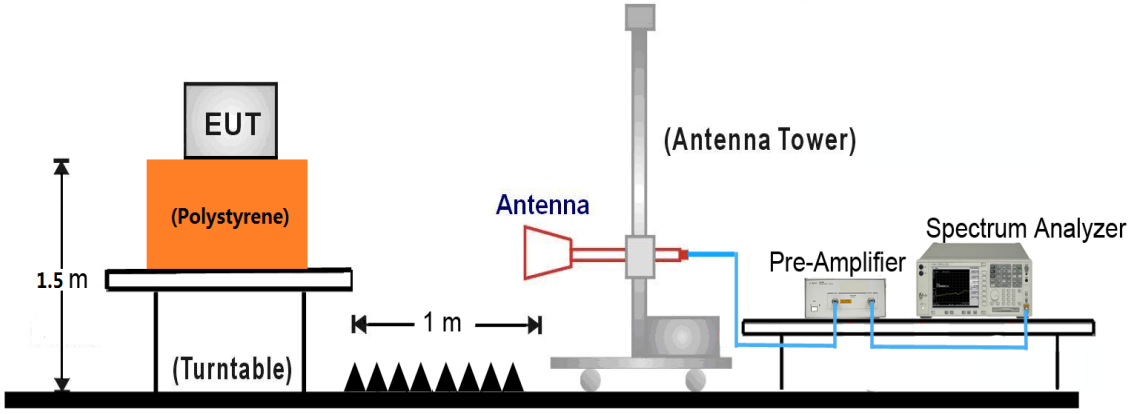

30MHz ~ 1GHz Test Setup:



1GHz ~ 18GHz Test Setup:




18GHz ~25GHz Test Setup:



### 7.9.5. Test Result

**Remark:** There are the ambient noise within frequency range 9 kHz ~ 30 MHz and 18GHz ~ 25GHz, the permissible value is not show in the report.

| | | | |
|---|---|---|---|
| Test Mode: | DH5 | Test Site: | AC1 |
| Test Channel: | 00 | Test Engineer: | Will Yan |
| Remark: | 1. Average measurement was not performed if peak level lower than average limit.<br>2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report. | | |

| Mark | Frequency (MHz) | Reading Level (dBμV) | Factor (dB) | Measure Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Detector | Polarization |
|---|---|---|---|---|---|---|---|---|
| | 3830.5 | 37.0 | -0.1 | 36.9 | 74.0 | -37.1 | Peak | Horizontal |
| | 4918.5 | 36.0 | 2.8 | 38.8 | 74.0 | -35.2 | Peak | Horizontal |
| * | 6499.5 | 34.9 | 6.0 | 40.9 | 74.0 | -33.1 | Peak | Horizontal |
| * | 9925.0 | 34.6 | 11.5 | 46.1 | 74.0 | -27.9 | Peak | Horizontal |
| | 3881.5 | 36.1 | 0.1 | 36.2 | 74.0 | -37.8 | Peak | Vertical |
| | 4876.0 | 36.2 | 2.7 | 38.9 | 74.0 | -35.1 | Peak | Vertical |
| * | 6533.5 | 34.9 | 5.9 | 40.8 | 74.0 | -33.2 | Peak | Vertical |
| * | 9857.0 | 34.2 | 11.6 | 45.8 | 74.0 | -28.2 | Peak | Vertical |

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (90.1dBμV/m) or 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

| | | | |
|---|---|---|---|
| Test Mode: | DH5 | Test Site: | AC1 |
| Test channel: | 39 | Test Engineer: | Will Yan |
| Remark: | 1. Average measurement was not performed if peak level lower than average limit.<br>2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report. | | |

| Mark | Frequency (MHz) | Reading Level (dBμV) | Factor (dB) | Measure Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Detector | Polarization |
|---|---|---|---|---|---|---|---|---|
| | 3847.5 | 37.3 | 0.0 | 37.3 | 74.0 | -36.7 | Peak | Horizontal |
| | 4731.5 | 36.8 | 2.5 | 39.3 | 74.0 | -34.7 | Peak | Horizontal |
| * | 6576.0 | 35.2 | 6.0 | 41.2 | 74.0 | -32.8 | Peak | Horizontal |
| * | 9916.5 | 35.4 | 11.5 | 46.9 | 74.0 | -27.1 | Peak | Horizontal |
| | 3847.5 | 36.7 | 0.0 | 36.7 | 74.0 | -37.3 | Peak | Vertical |
| | 4927.0 | 35.6 | 2.8 | 38.4 | 74.0 | -35.6 | Peak | Vertical |
| * | 6542.0 | 35.6 | 5.9 | 41.5 | 74.0 | -32.5 | Peak | Vertical |
| * | 9772.0 | 32.6 | 11.4 | 44.0 | 74.0 | -30.0 | Peak | Vertical |

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (90.5dBμV/m) or 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

| | | | |
|---|---|---|---|
| Test Mode: | DH5 | Test Site: | AC1 |
| Test channel: | 78 | Test Engineer: | Will Yan |
| Remark: | 1. Average measurement was not performed if peak level lower than average limit.<br>2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report. | | |

| Mark | Frequency (MHz) | Reading Level (dBμV) | Factor (dB) | Measure Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Detector | Polarization |
|---|---|---|---|---|---|---|---|---|
| | 3864.5 | 35.6 | 0.1 | 35.7 | 74.0 | -38.3 | Peak | Horizontal |
| | 4867.5 | 35.0 | 2.7 | 37.7 | 74.0 | -36.3 | Peak | Horizontal |
| * | 6652.5 | 35.1 | 6.0 | 41.1 | 74.0 | -32.9 | Peak | Horizontal |
| * | 9916.5 | 33.3 | 11.5 | 44.8 | 74.0 | -29.2 | Peak | Horizontal |
| | 3856.0 | 36.3 | 0.1 | 36.4 | 74.0 | -37.6 | Peak | Vertical |
| | 4816.5 | 35.3 | 2.7 | 38.0 | 74.0 | -36.0 | Peak | Vertical |
| * | 6559.0 | 35.1 | 6.0 | 41.1 | 74.0 | -32.9 | Peak | Vertical |
| * | 9874.0 | 34.5 | 11.6 | 46.1 | 74.0 | -27.9 | Peak | Vertical |

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (91.5dBμV/m) or 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

| | | | |
|---|---|---|---|
| Test Mode: | 2DH5 | Test Site: | AC1 |
| Test channel: | 00 | Test Engineer: | Will Yan |
| Remark: | 1. Average measurement was not performed if peak level lower than average limit.<br>2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report. | | |

| Mark | Frequency (MHz) | Reading Level (dBμV) | Factor (dB) | Measure Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Detector | Polarization |
|---|---|---|---|---|---|---|---|---|
| | 3796.5 | 37.3 | -0.2 | 37.1 | 74.0 | -36.9 | Peak | Horizontal |
| | 4782.5 | 35.7 | 2.7 | 38.4 | 74.0 | -35.6 | Peak | Horizontal |
| * | 6525.0 | 35.0 | 5.9 | 40.9 | 74.0 | -33.1 | Peak | Horizontal |
| * | 9814.5 | 33.1 | 11.6 | 44.7 | 74.0 | -29.3 | Peak | Horizontal |
| | 3915.5 | 35.7 | 0.2 | 35.9 | 74.0 | -38.1 | Peak | Vertical |
| | 4969.5 | 34.4 | 3.0 | 37.4 | 74.0 | -36.6 | Peak | Vertical |
| * | 6508.0 | 34.0 | 6.0 | 40.0 | 74.0 | -34.0 | Peak | Vertical |
| * | 9678.5 | 34.7 | 10.9 | 45.6 | 74.0 | -28.4 | Peak | Vertical |

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (89.7dBμV/m) or 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

| | | | |
|---|---|---|---|
| Test Mode: | 2DH5 | Test Site: | AC1 |
| Test channel: | 39 | Test Engineer: | Will Yan |
| Remark: | 1. Average measurement was not performed if peak level lower than average limit.<br>2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report. | | |

| Mark | Frequency (MHz) | Reading Level (dBμV) | Factor (dB) | Measure Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Detector | Polarization |
|---|---|---|---|---|---|---|---|---|
| | 3924.0 | 35.6 | 0.3 | 35.9 | 74.0 | -38.1 | Peak | Horizontal |
| | 4808.0 | 35.6 | 2.7 | 38.3 | 74.0 | -35.7 | Peak | Horizontal |
| * | 6797.0 | 35.8 | 6.0 | 41.8 | 74.0 | -32.2 | Peak | Horizontal |
| * | 9857.0 | 33.3 | 11.6 | 44.9 | 74.0 | -29.1 | Peak | Horizontal |
| | 3898.5 | 36.1 | 0.2 | 36.3 | 74.0 | -37.7 | Peak | Vertical |
| | 4901.5 | 36.4 | 2.7 | 39.1 | 74.0 | -34.9 | Peak | Vertical |
| * | 6550.5 | 35.3 | 5.9 | 41.2 | 74.0 | -32.8 | Peak | Vertical |
| * | 9874.0 | 33.7 | 11.6 | 45.3 | 74.0 | -28.7 | Peak | Vertical |

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (89.7dBμV/m) or 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

| | | | |
|---|---|---|---|
| Test Mode: | 2DH5 | Test Site: | AC1 |
| Test channel: | 78 | Test Engineer: | Will Yan |
| Remark: | 1. Average measurement was not performed if peak level lower than average limit.<br>2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report. | | |

| Mark | Frequency (MHz) | Reading Level (dBμV) | Factor (dB) | Measure Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Detector | Polarization |
|---|---|---|---|---|---|---|---|---|
| | 3881.5 | 35.2 | 0.1 | 35.3 | 74.0 | -38.7 | Peak | Horizontal |
| | 4833.5 | 34.4 | 2.7 | 37.1 | 74.0 | -36.9 | Peak | Horizontal |
| * | 6525.0 | 34.7 | 5.9 | 40.6 | 74.0 | -33.4 | Peak | Horizontal |
| * | 9678.5 | 35.1 | 10.9 | 46.0 | 74.0 | -28.0 | Peak | Horizontal |
| | 3796.5 | 36.3 | -0.2 | 36.1 | 74.0 | -37.9 | Peak | Vertical |
| | 4901.5 | 34.4 | 2.7 | 37.1 | 74.0 | -36.9 | Peak | Vertical |
| * | 6465.5 | 34.7 | 5.8 | 40.5 | 74.0 | -33.5 | Peak | Vertical |
| * | 9865.5 | 33.9 | 11.6 | 45.5 | 74.0 | -28.5 | Peak | Vertical |

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (89.8dBμV/m) or 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

| | | | |
|---|---|---|---|
| Test Mode: | 3DH5 | Test Site: | AC1 |
| Test channel: | 00 | Test Engineer: | Will Yan |
| Remark: | 1. Average measurement was not performed if peak level lower than average limit.<br>2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report. | | |

| Mark | Frequency (MHz) | Reading Level (dBμV) | Factor (dB) | Measure Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Detector | Polarization |
|---|---|---|---|---|---|---|---|---|
| | 3839.0 | 35.7 | 0.0 | 35.7 | 74.0 | -38.3 | Peak | Horizontal |
| | 4833.5 | 35.4 | 2.7 | 38.1 | 74.0 | -35.9 | Peak | Horizontal |
| * | 6550.5 | 35.2 | 5.9 | 41.1 | 74.0 | -32.9 | Peak | Horizontal |
| * | 9857.0 | 33.9 | 11.6 | 45.5 | 74.0 | -28.5 | Peak | Horizontal |
| | 3856.0 | 36.9 | 0.1 | 37.0 | 74.0 | -37.0 | Peak | Vertical |
| | 4884.5 | 35.6 | 2.7 | 38.3 | 74.0 | -35.7 | Peak | Vertical |
| * | 6627.0 | 34.8 | 6.0 | 40.8 | 74.0 | -33.2 | Peak | Vertical |
| * | 9814.5 | 33.5 | 11.6 | 45.1 | 74.0 | -28.9 | Peak | Vertical |

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (89.9dBμV/m) or 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

| | | | |
|---|---|---|---|
| Test Mode: | 3DH5 | Test Site: | AC1 |
| Test channel: | 39 | Test Engineer: | Will Yan |
| Remark: | 1. Average measurement was not performed if peak level lower than average limit.<br>2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report. | | |

| Mark | Frequency (MHz) | Reading Level (dBμV) | Factor (dB) | Measure Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Detector | Polarization |
|---|---|---|---|---|---|---|---|---|
| | 3796.5 | 36.2 | -0.2 | 36.0 | 74.0 | -38.0 | Peak | Horizontal |
| | 4816.5 | 36.2 | 2.7 | 38.9 | 74.0 | -35.1 | Peak | Horizontal |
| * | 6627.0 | 34.5 | 6.0 | 40.5 | 74.0 | -33.5 | Peak | Horizontal |
| * | 9908.0 | 33.0 | 11.6 | 44.6 | 74.0 | -29.4 | Peak | Horizontal |
| | 3796.5 | 36.4 | -0.2 | 36.2 | 74.0 | -37.8 | Peak | Vertical |
| | 4791.0 | 34.7 | 2.7 | 37.4 | 74.0 | -36.6 | Peak | Vertical |
| * | 6584.5 | 35.8 | 6.0 | 41.8 | 74.0 | -32.2 | Peak | Vertical |
| * | 9840.0 | 33.5 | 11.6 | 45.1 | 74.0 | -28.9 | Peak | Vertical |

Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (90.2dBμV/m) or 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

| | | | |
|---|---|---|---|
| Test Mode: | 3DH5 | Test Site: | AC1 |
| Test channel: | 78 | Test Engineer: | Will Yan |
| Remark: | 1. Average measurement was not performed if peak level lower than average limit.<br>2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report. | | |

| Mark | Frequency (MHz) | Reading Level (dBμV) | Factor (dB) | Measure Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Detector | Polarization |
|---|---|---|---|---|---|---|---|---|
| | 3830.5 | 36.9 | -0.1 | 36.8 | 74.0 | -37.2 | Peak | Horizontal |
| | 4893.0 | 34.8 | 2.7 | 37.5 | 74.0 | -36.5 | Peak | Horizontal |
| * | 6533.5 | 34.7 | 5.9 | 40.6 | 74.0 | -33.4 | Peak | Horizontal |
| * | 9831.5 | 34.8 | 11.6 | 46.4 | 74.0 | -27.6 | Peak | Horizontal |
| | 3941.0 | 35.9 | 0.3 | 36.2 | 74.0 | -37.8 | Peak | Vertical |
| | 4859.0 | 35.9 | 2.7 | 38.6 | 74.0 | -35.4 | Peak | Vertical |
| * | 6610.0 | 34.5 | 6.0 | 40.5 | 74.0 | -33.5 | Peak | Vertical |
| * | 9831.5 | 33.9 | 11.6 | 45.5 | 74.0 | -28.5 | Peak | Vertical |

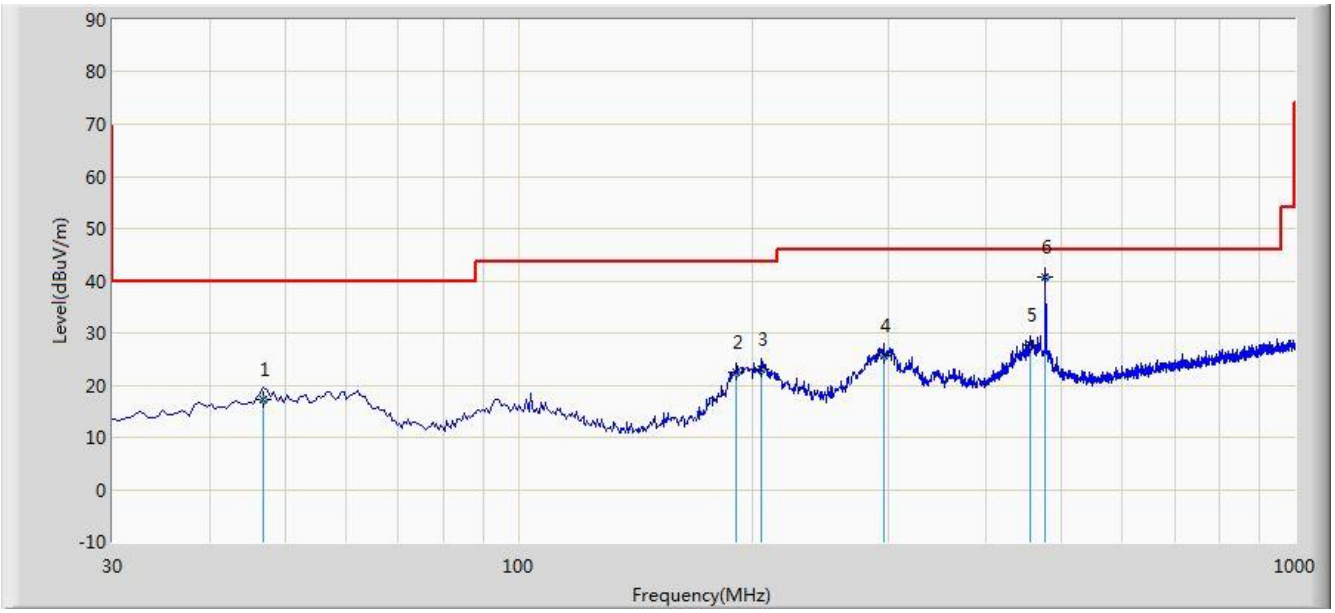
Note 1: "*" is not in restricted band, its limit is 20dBc of the fundamental emission level (90.5dBμV/m) or 15.209 which is higher.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

**The worst case of Radiated Emission 9kHz ~ 1GHz and 18GHz ~ 25GHz:**

| | |
|---|---|
| Site: AC1 | Time: 2017/11/15 - 15:39 |
| Limit: FCC_Part15.209_RE(3m) | Engineer: Snake Ni |
| Probe: VULB9168_20-2000MHz | Polarity: Horizontal |
| EUT: VR All-In-One Headset | Power: By Battery |
| **Worst Case Mode:** Transmit at Channel 2480MHz by 2DH5 | |

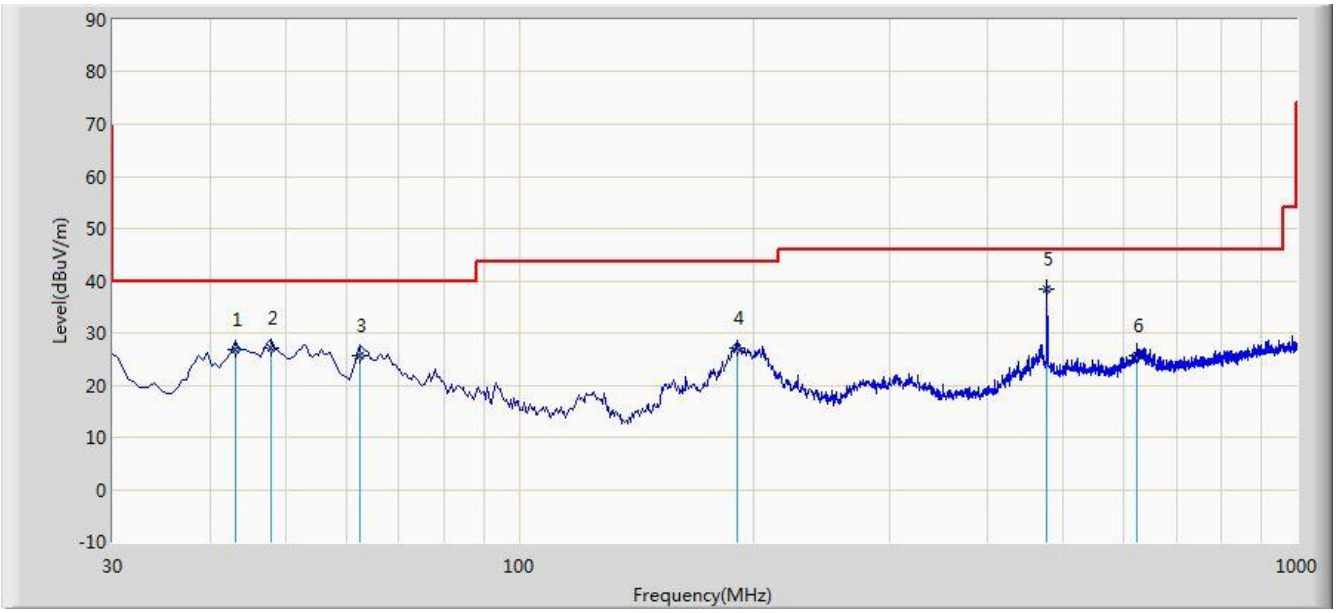



| No | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 46.975 | 17.140 | 2.160 | -22.860 | 40.000 | 14.980 | QP |
| 2 | | 191.020 | 22.492 | 10.630 | -21.008 | 43.500 | 11.862 | QP |
| 3 | | 205.085 | 23.017 | 10.650 | -20.483 | 43.500 | 12.366 | QP |
| 4 | | 295.295 | 25.709 | 11.240 | -20.291 | 46.000 | 14.468 | QP |
| 5 | | 455.345 | 27.825 | 10.290 | -18.175 | 46.000 | 17.535 | QP |
| 6 | * | 477.655 | 40.850 | 22.890 | -5.150 | 46.000 | 17.960 | QP |

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

| | |
|---|---|
| Site: AC1 | Time: 2017/11/15 - 15:45 |
| Limit: FCC_Part15.209_RE(3m) | Engineer: Snake Ni |
| Probe: VULB9168_20-2000MHz | Polarity: Vertical |
| EUT: VR All-In-One Headset | Power: By Battery |
| **Worst Case Mode:** Transmit at Channel 2480MHz by 2DH5 | |




| No | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 43.095 | 26.672 | 12.220 | -13.328 | 40.000 | 14.451 | QP |
| 2 | | 47.945 | 26.959 | 11.990 | -13.041 | 40.000 | 14.969 | QP |
| 3 | | 62.495 | 25.789 | 12.420 | -14.211 | 40.000 | 13.369 | QP |
| 4 | | 190.535 | 27.014 | 15.180 | -16.486 | 43.500 | 11.834 | QP |
| 5 | * | 477.655 | 38.370 | 20.410 | -7.630 | 46.000 | 17.960 | QP |
| 6 | | 624.125 | 25.629 | 5.260 | -20.371 | 46.000 | 20.369 | QP |

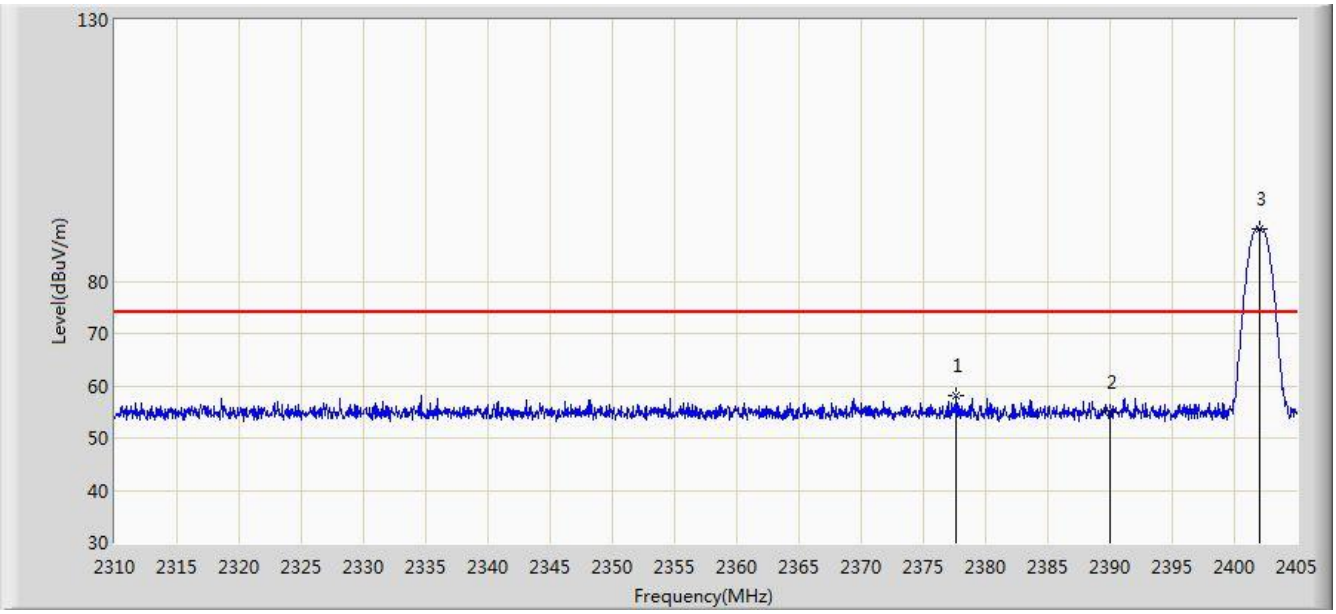
Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

## 7.10. Radiated Restricted Band Edge Measurement

### 7.10.1. Test Result

| | |
|---|---|
| Site: AC1 | Time: 2017/11/16 - 20:05 |
| Limit: FCC_Part15.209_RE(3m) | Engineer: Will Yan |
| Probe: BBHA9120D_1-18GHz | Polarity: Horizontal |
| EUT: VR All-In-One Headset | Power: By Battery |
| Test Mode: Transmit by DH5 at Channel 2402MHz | |

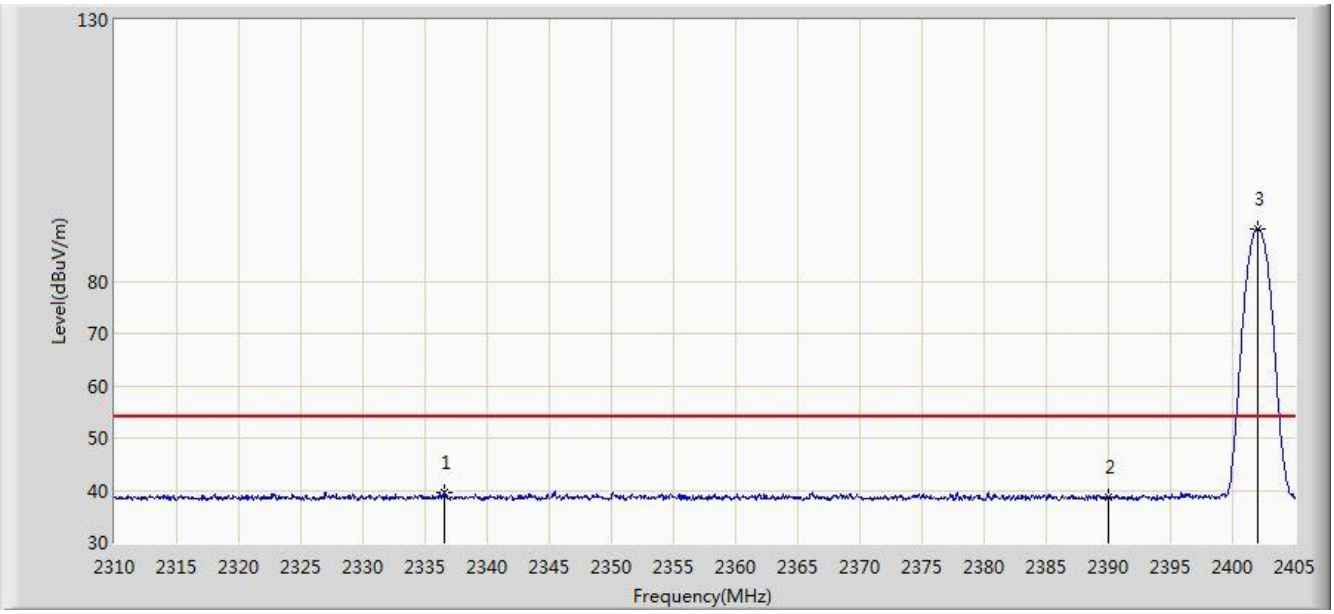



| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | 2377.640 | 58.179 | 26.954 | -15.821 | 74.000 | 31.225 | PK |
| 2 | | | 2390.000 | 54.857 | 23.654 | -19.143 | 74.000 | 31.203 | PK |
| 3 | | * | 2402.008 | 90.117 | 58.933 | N/A | N/A | 31.184 | PK |

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

| | |
|---|---|
| Site: AC1 | Time: 2017/11/16 - 20:10 |
| Limit: FCC_Part15.209_RE(3m) | Engineer: Will Yan |
| Probe: BBHA9120D_1-18GHz | Polarity: Horizontal |
| EUT: VR All-In-One Headset | Power: By Battery |
| Test Mode: Transmit by DH5 at Channel 2402MHz | |

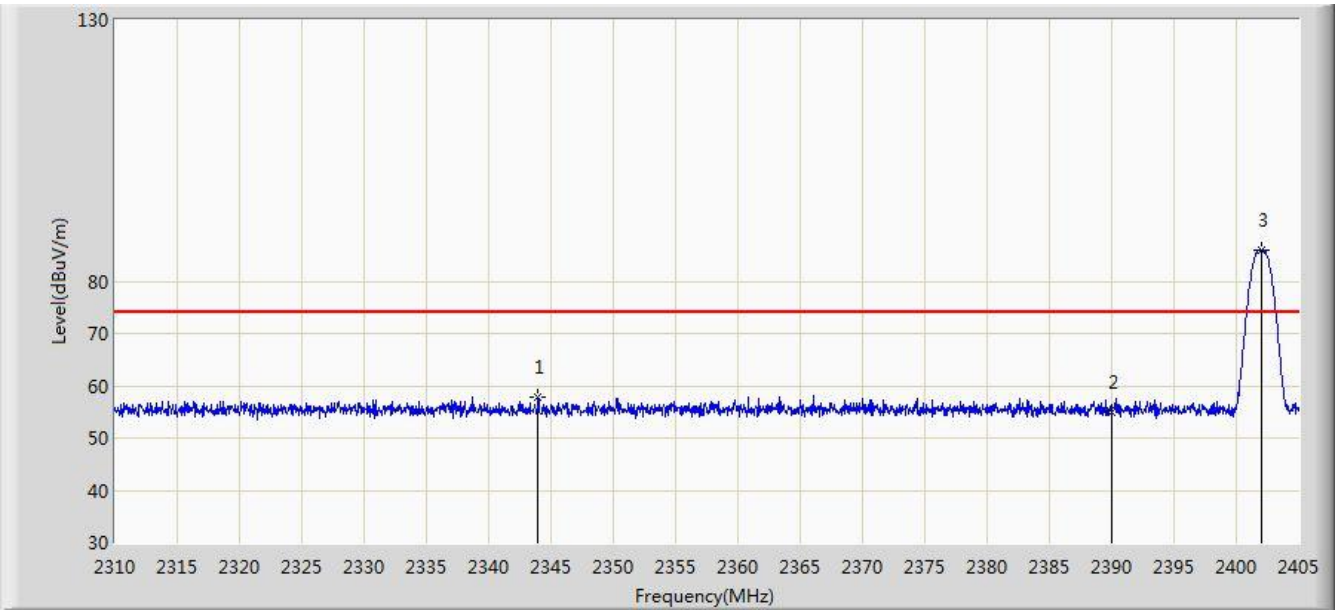



| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | 2336.505 | 39.485 | 8.139 | -14.515 | 54.000 | 31.345 | AV |
| 2 | | | 2390.000 | 38.663 | 7.460 | -15.337 | 54.000 | 31.203 | AV |
| 3 | | * | 2402.008 | 90.103 | 58.919 | N/A | N/A | 31.184 | AV |

Note: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

| | |
|---|---|
| Site: AC1 | Time: 2017/11/16 - 20:14 |
| Limit: FCC_Part15.209_RE(3m) | Engineer: Will Yan |
| Probe: BBHA9120D_1-18GHz | Polarity: Vertical |
| EUT: VR All-In-One Headset | Power: By Battery |
| Test Mode: Transmit by DH5 at Channel 2402MHz | |

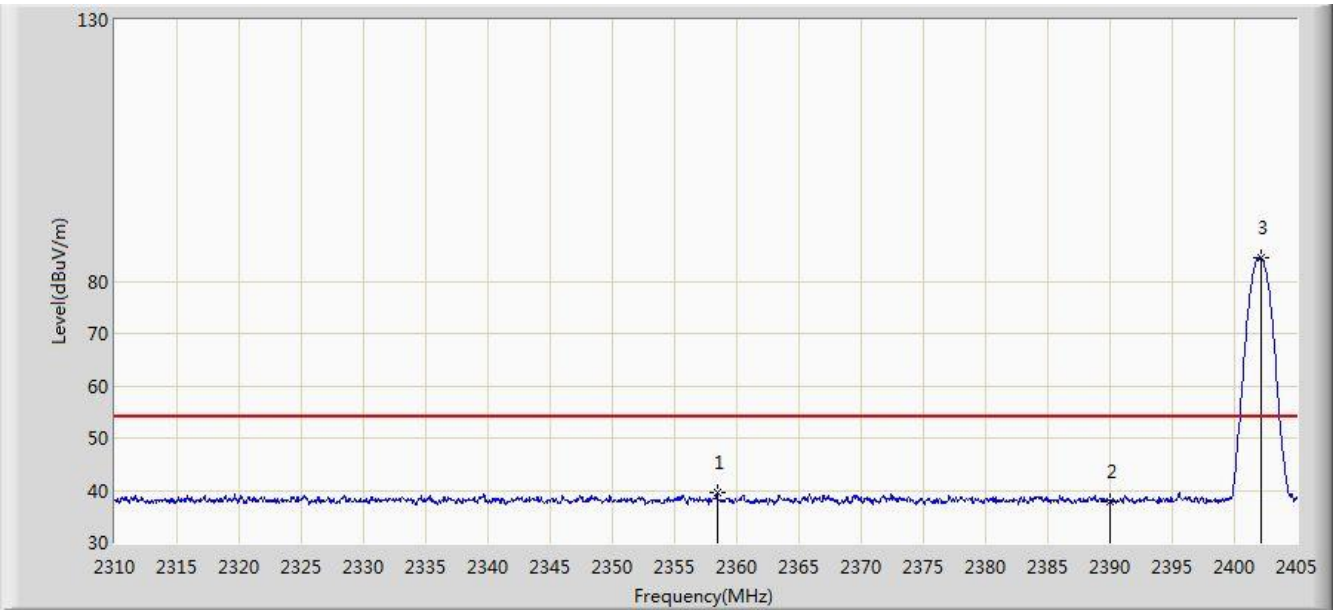



| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | 2343.962 | 57.867 | 26.552 | -16.133 | 74.000 | 31.315 | PK |
| 2 | | | 2390.000 | 54.840 | 23.637 | -19.160 | 74.000 | 31.203 | PK |
| 3 | | * | 2402.008 | 85.911 | 54.727 | N/A | N/A | 31.184 | PK |

Note: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

| | |
|---|---|
| Site: AC1 | Time: 2017/11/16 - 20:15 |
| Limit: FCC_Part15.209_RE(3m) | Engineer: Will Yan |
| Probe: BBHA9120D_1-18GHz | Polarity: Vertical |
| EUT: VR All-In-One Headset | Power: By Battery |
| Test Mode: Transmit by DH5 at Channel 2402MHz | |

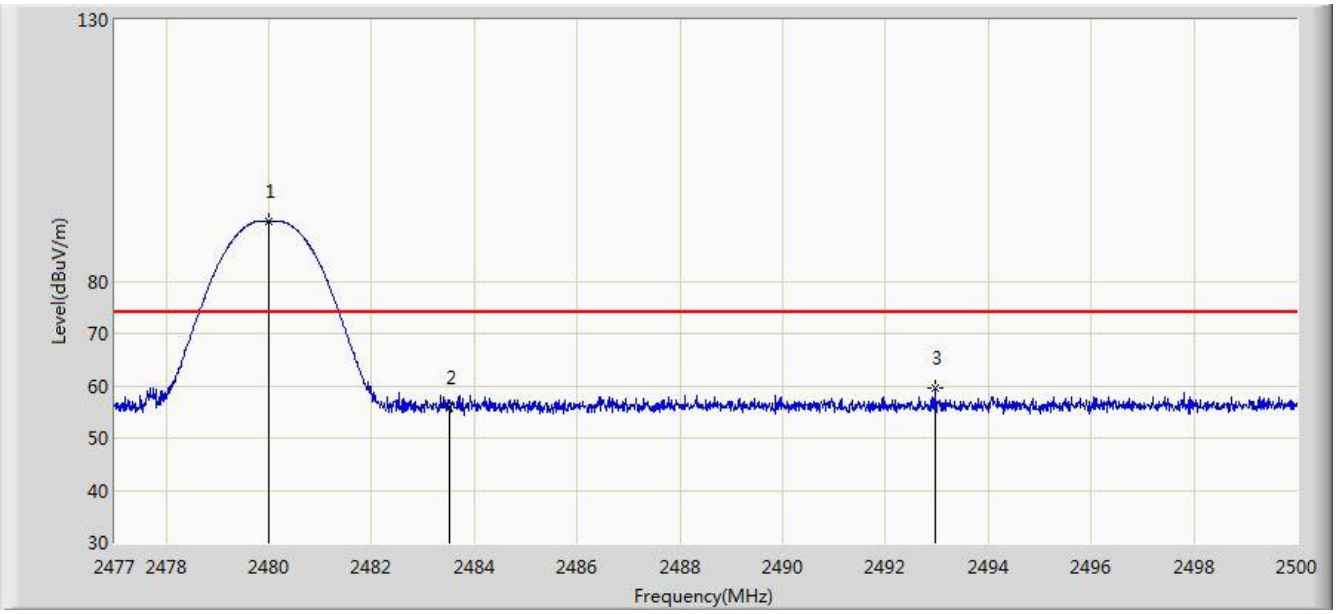



| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | 2358.403 | 39.427 | 8.165 | -14.573 | 54.000 | 31.262 | AV |
| 2 | | | 2390.000 | 37.892 | 6.689 | -16.108 | 54.000 | 31.203 | AV |
| 3 | | * | 2402.150 | 84.514 | 53.330 | N/A | N/A | 31.184 | AV |

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

| | |
|---|---|
| Site: AC1 | Time: 2017/11/16 - 20:16 |
| Limit: FCC_Part15.209_RE(3m) | Engineer: Will Yan |
| Probe: BBHA9120D_1-18GHz | Polarity: Horizontal |
| EUT: VR All-In-One Headset | Power: By Battery |
| Test Mode: Transmit by DH5 at Channel 2480MHz | |

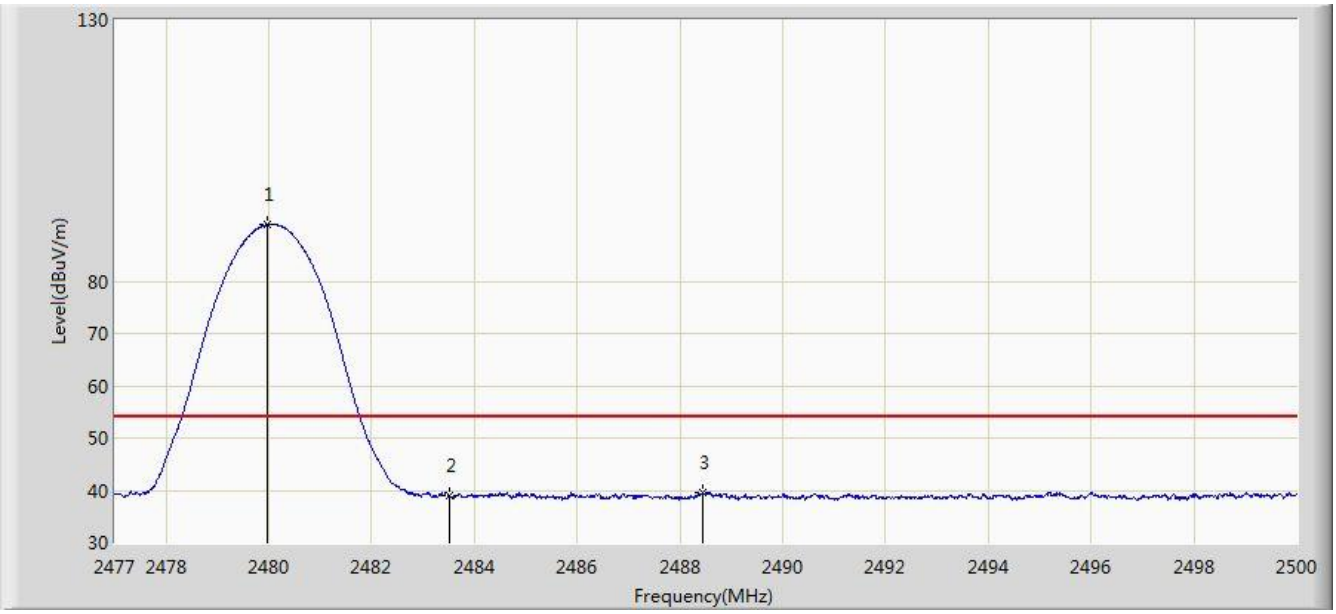



| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | * | 2479.990 | 91.456 | 60.272 | N/A | N/A | 31.184 | PK |
| 2 | | | 2483.500 | 55.701 | 24.508 | -18.299 | 74.000 | 31.194 | PK |
| 3 | | | 2492.962 | 59.424 | 28.206 | -14.576 | 74.000 | 31.218 | PK |

Note: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

| | |
|---|---|
| Site: AC1 | Time: 2017/11/16 - 20:18 |
| Limit: FCC_Part15.209_RE(3m) | Engineer: Will Yan |
| Probe: BBHA9120D_1-18GHz | Polarity: Horizontal |
| EUT: VR All-In-One Headset | Power: By Battery |
| Test Mode: Transmit by DH5 at Channel 2480MHz | |

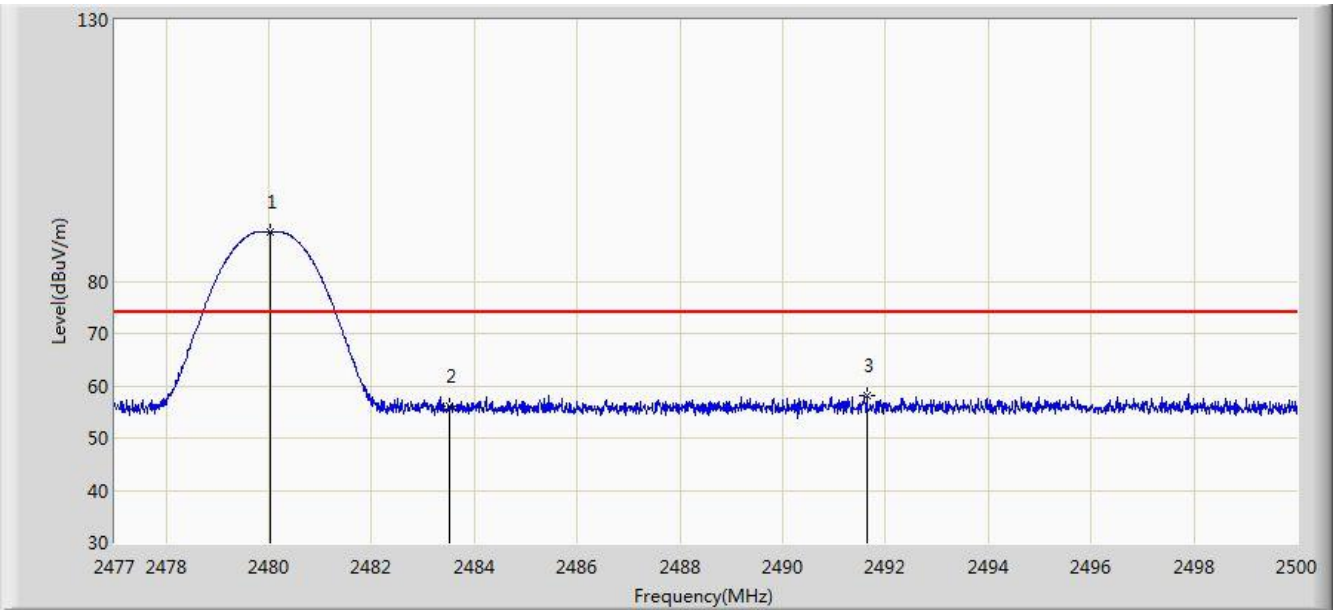



| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | * | 2479.956 | 90.815 | 59.631 | N/A | N/A | 31.184 | AV |
| 2 | | | 2483.500 | 39.041 | 7.848 | -14.959 | 54.000 | 31.194 | AV |
| 3 | | | 2488.431 | 39.613 | 8.407 | -14.387 | 54.000 | 31.207 | AV |

Note: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

| | |
|---|---|
| Site: AC1 | Time: 2017/11/16 - 20:18 |
| Limit: FCC_Part15.209_RE(3m) | Engineer: Will Yan |
| Probe: BBHA9120D_1-18GHz | Polarity: Vertical |
| EUT: VR All-In-One Headset | Power: By Battery |
| Test Mode: Transmit by DH5 at Channel 2480MHz | |

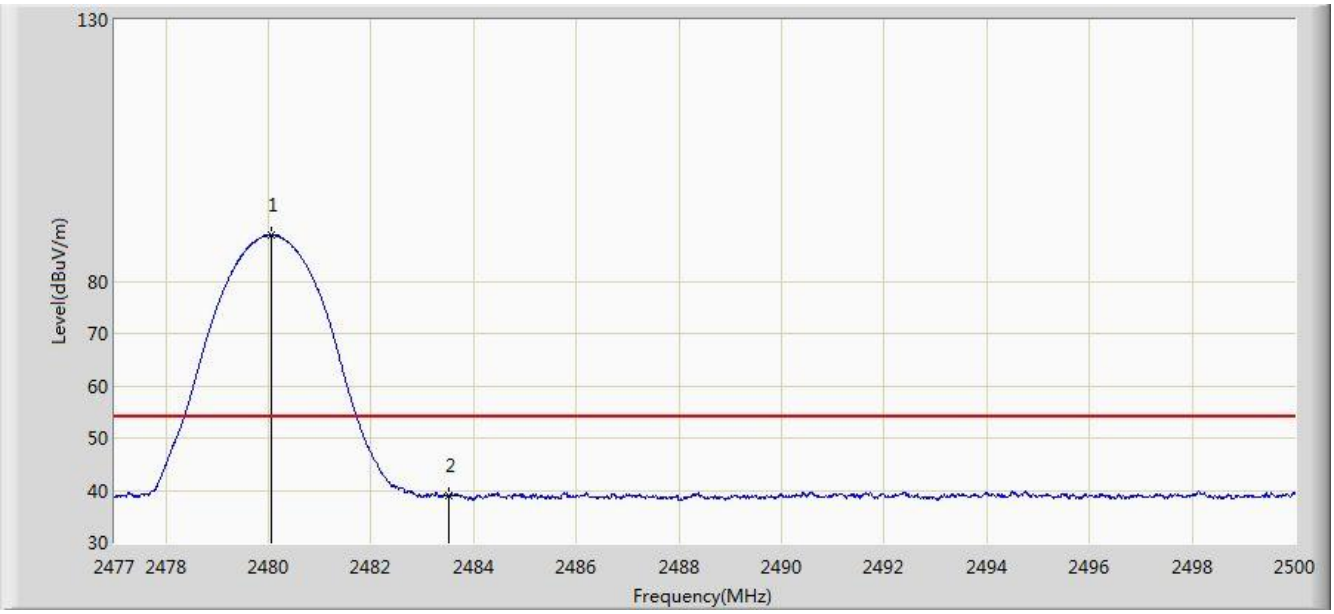



| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | * | 2480.024 | 89.478 | 58.294 | N/A | N/A | 31.184 | PK |
| 2 | | | 2483.500 | 56.072 | 24.879 | -17.928 | 74.000 | 31.194 | PK |
| 3 | | | 2491.639 | 58.214 | 26.999 | -15.786 | 74.000 | 31.214 | PK |

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

| | |
|---|---|
| Site: AC1 | Time: 2017/11/16 - 20:19 |
| Limit: FCC_Part15.209_RE(3m) | Engineer: Will Yan |
| Probe: BBHA9120D_1-18GHz | Polarity: Vertical |
| EUT: VR All-In-One Headset | Power: By Battery |
| Test Mode: Transmit by DH5 at Channel 2480MHz | |

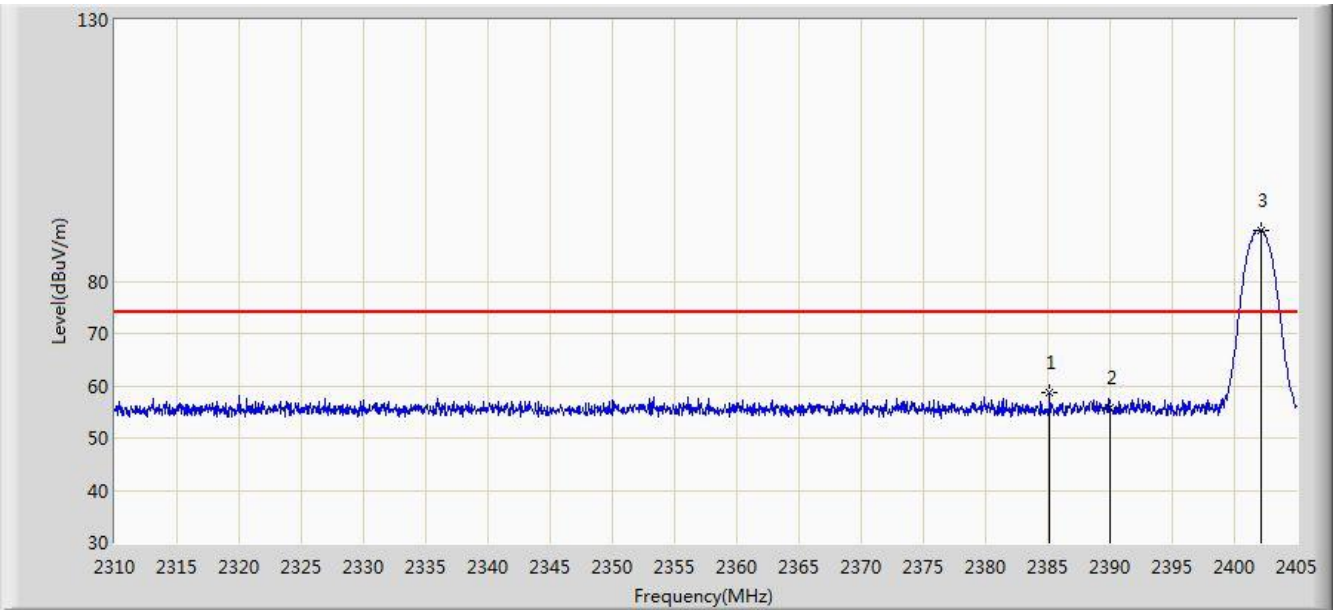



| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | * | 2480.059 | 88.764 | 57.580 | N/A | N/A | 31.184 | AV |
| 2 | | | 2483.500 | 39.077 | 7.884 | -14.923 | 54.000 | 31.194 | AV |

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

| | |
|---|---|
| Site: AC1 | Time: 2017/11/16 - 20:20 |
| Limit: FCC_Part15.209_RE(3m) | Engineer: Will Yan |
| Probe: BBHA9120D_1-18GHz | Polarity: Horizontal |
| EUT: VR All-In-One Headset | Power: By Battery |
| Test Mode: Transmit by 2DH5 at Channel 2402MHz | |

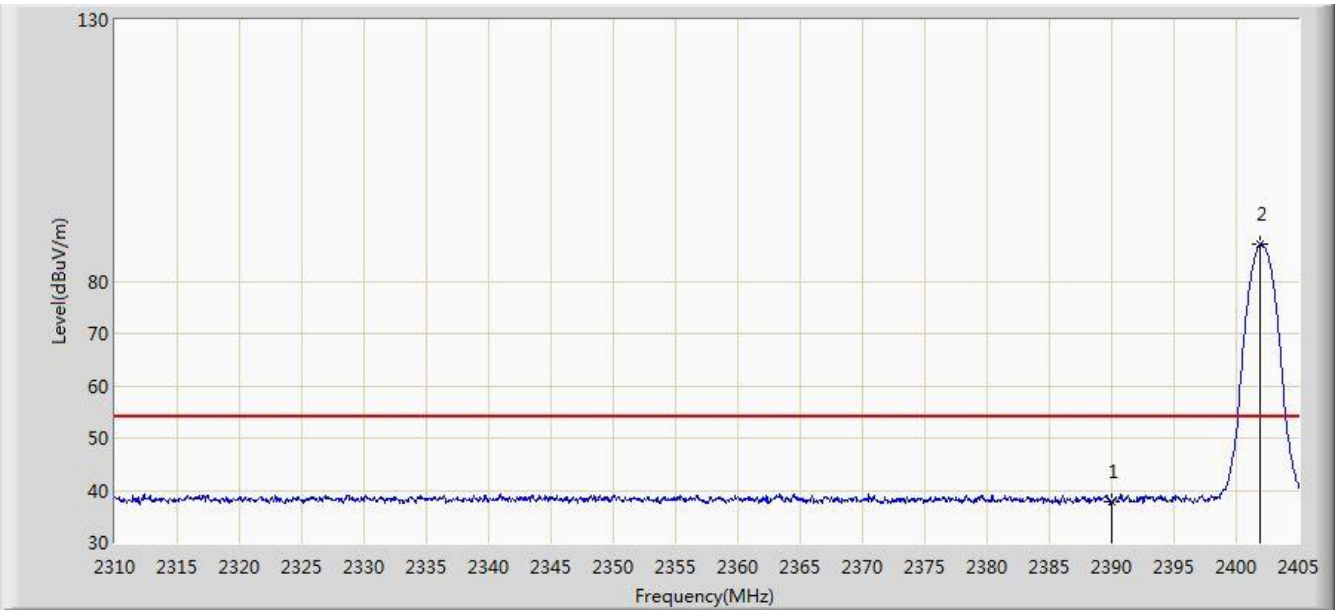



| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | 2385.145 | 58.643 | 27.431 | -15.357 | 74.000 | 31.211 | PK |
| 2 | | | 2390.000 | 55.902 | 24.699 | -18.098 | 74.000 | 31.203 | PK |
| 3 | | * | 2402.150 | 89.695 | 58.511 | N/A | N/A | 31.184 | PK |

Note: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

| | |
|---|---|
| Site: AC1 | Time: 2017/11/16 - 20:22 |
| Limit: FCC_Part15.209_RE(3m) | Engineer: Will Yan |
| Probe: BBHA9120D_1-18GHz | Polarity: Horizontal |
| EUT: VR All-In-One Headset | Power: By Battery |
| Test Mode: Transmit by 2DH5 at Channel 2402MHz | |

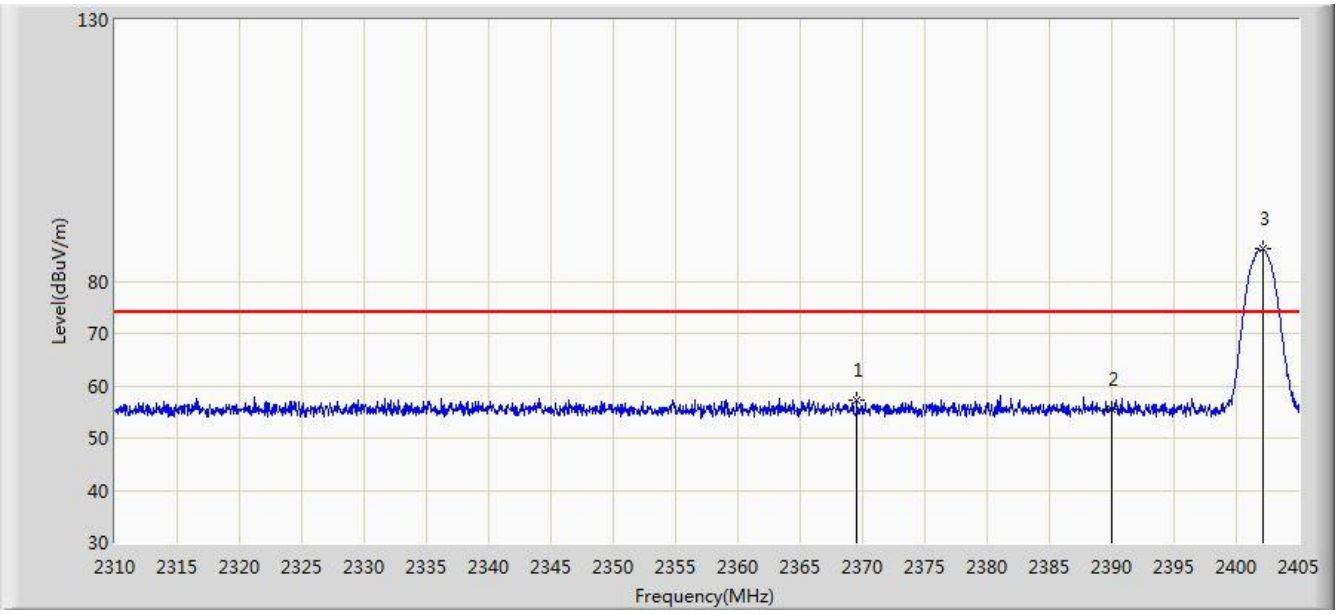



| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | 2390.000 | 37.699 | 6.496 | -16.301 | 54.000 | 31.203 | AV |
| 2 | | * | 2401.960 | 87.038 | 55.854 | N/A | N/A | 31.184 | AV |

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

| | |
|---|---|
| Site: AC1 | Time: 2017/11/16 - 20:22 |
| Limit: FCC_Part15.209_RE(3m) | Engineer: Will Yan |
| Probe: BBHA9120D_1-18GHz | Polarity: Vertical |
| EUT: VR All-In-One Headset | Power: By Battery |
| Test Mode: Transmit by 2DH5 at Channel 2402MHz | |

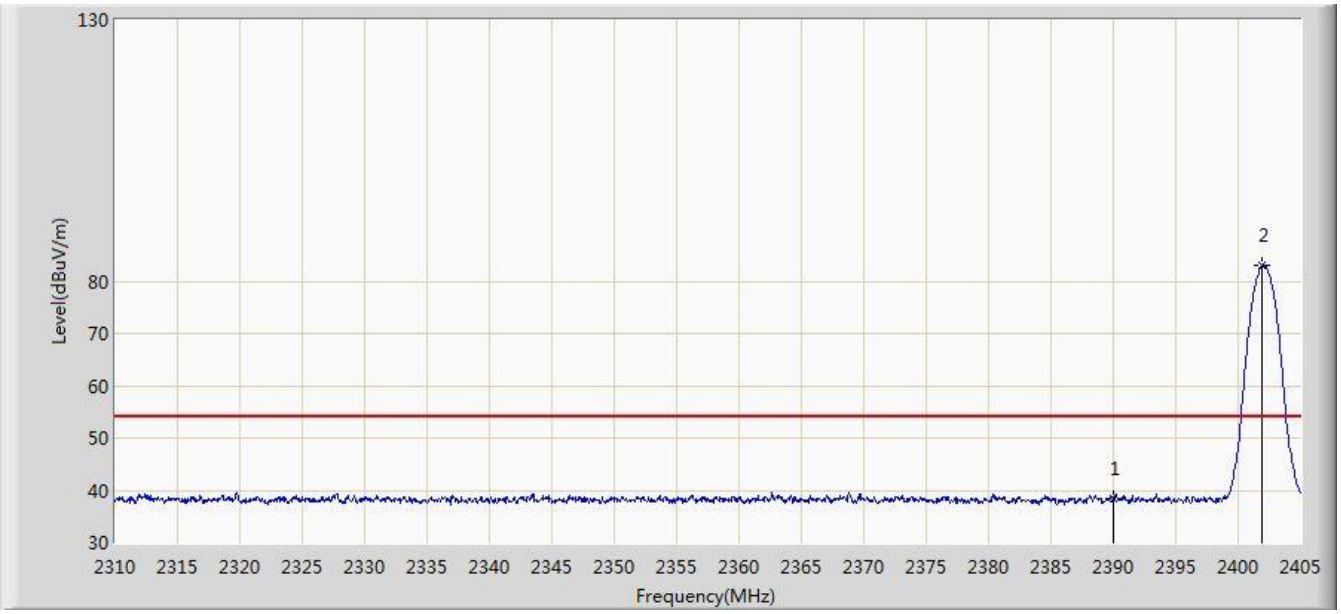



| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | 2369.565 | 57.243 | 26.002 | -16.757 | 74.000 | 31.241 | PK |
| 2 | | | 2390.000 | 55.433 | 24.230 | -18.567 | 74.000 | 31.203 | PK |
| 3 | | * | 2402.198 | 86.125 | 54.941 | N/A | N/A | 31.184 | PK |

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

| | |
|---|---|
| Site: AC1 | Time: 2017/11/16 - 20:24 |
| Limit: FCC_Part15.209_RE(3m) | Engineer: Will Yan |
| Probe: BBHA9120D_1-18GHz | Polarity: Vertical |
| EUT: VR All-In-One Headset | Power: By Battery |
| Test Mode: Transmit by 2DH5 at Channel 2402MHz | |

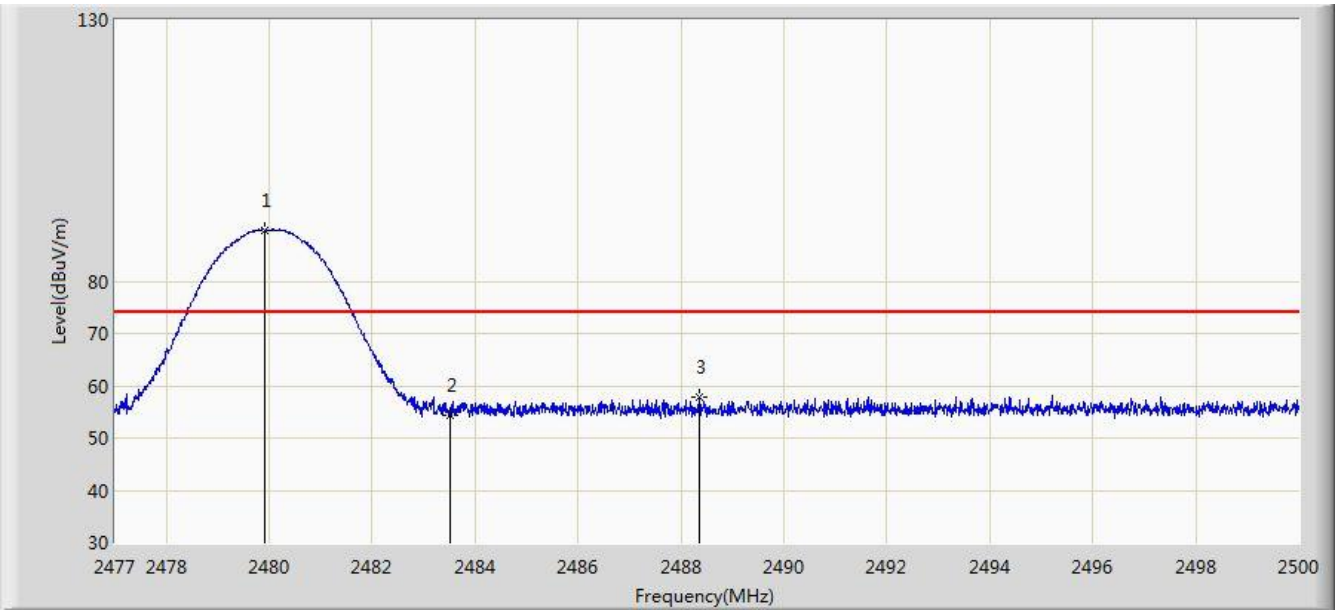



| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | 2390.000 | 38.498 | 7.295 | -15.502 | 54.000 | 31.203 | AV |
| 2 | | * | 2401.960 | 83.019 | 51.835 | N/A | N/A | 31.184 | AV |

Note: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

| | |
|---|---|
| Site: AC1 | Time: 2017/11/16 - 20:24 |
| Limit: FCC_Part15.209_RE(3m) | Engineer: Will Yan |
| Probe: BBHA9120D_1-18GHz | Polarity: Horizontal |
| EUT: VR All-In-One Headset | Power: By Battery |
| Test Mode: Transmit by 2DH5 at Channel 2480MHz | |

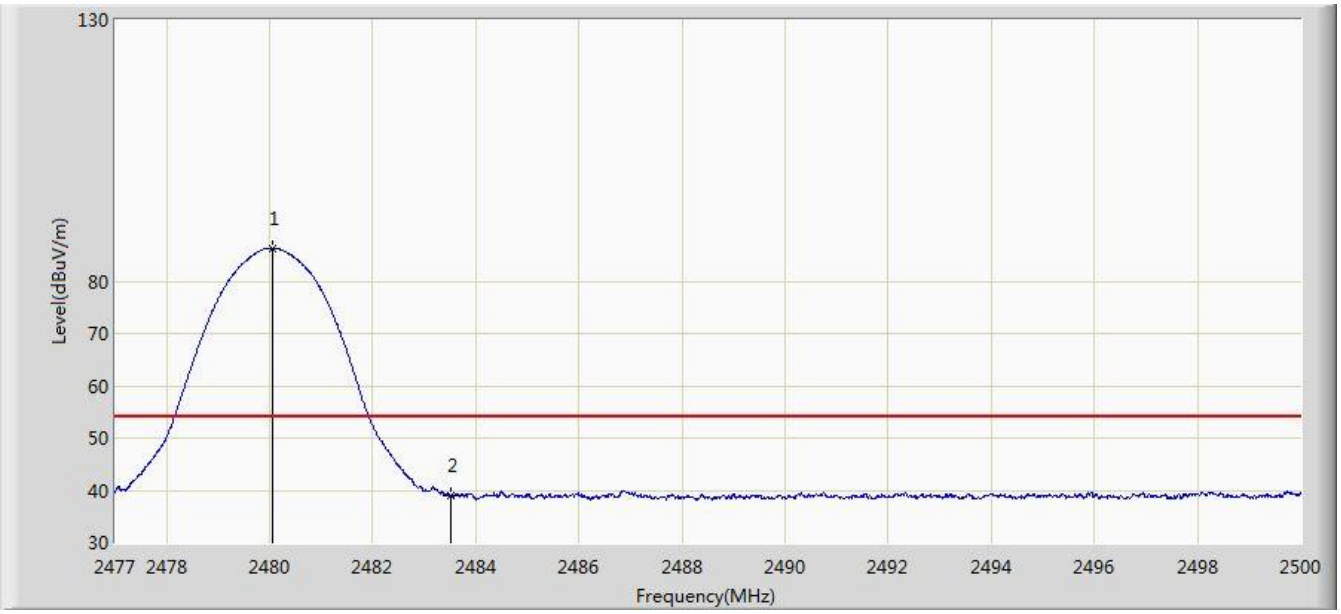



| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | * | 2479.921 | 89.812 | 58.628 | N/A | N/A | 31.184 | PK |
| 2 | | | 2483.500 | 54.454 | 23.261 | -19.546 | 74.000 | 31.194 | PK |
| 3 | | | 2488.362 | 57.967 | 26.761 | -16.033 | 74.000 | 31.206 | PK |

Note: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

| | |
|---|---|
| Site: AC1 | Time: 2017/11/16 - 20:26 |
| Limit: FCC_Part15.209_RE(3m) | Engineer: Will Yan |
| Probe: BBHA9120D_1-18GHz | Polarity: Horizontal |
| EUT: VR All-In-One Headset | Power: By Battery |
| Test Mode: Transmit by 2DH5 at Channel 2480MHz | |

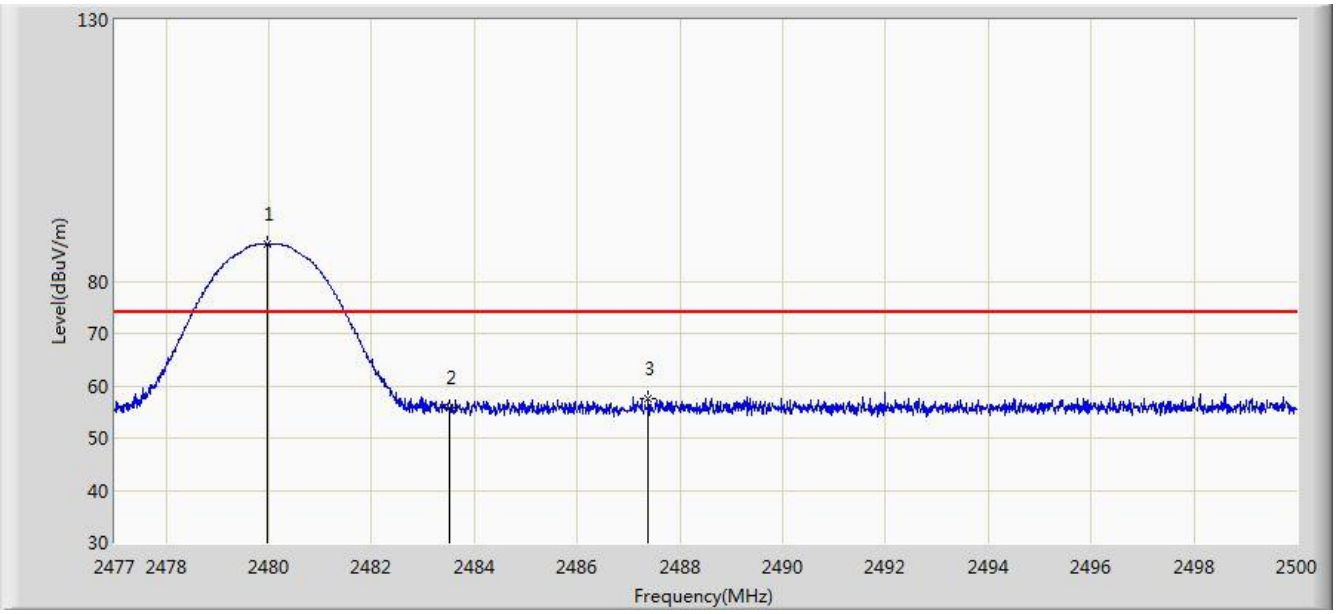



| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | * | 2480.059 | 86.369 | 55.185 | N/A | N/A | 31.184 | AV |
| 2 | | | 2483.500 | 39.040 | 7.847 | -14.960 | 54.000 | 31.194 | AV |

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

| | |
|---|---|
| Site: AC1 | Time: 2017/11/16 - 20:26 |
| Limit: FCC_Part15.209_RE(3m) | Engineer: Will Yan |
| Probe: BBHA9120D_1-18GHz | Polarity: Vertical |
| EUT: VR All-In-One Headset | Power: By Battery |
| Test Mode: Transmit by 2DH5 at Channel 2480MHz | |

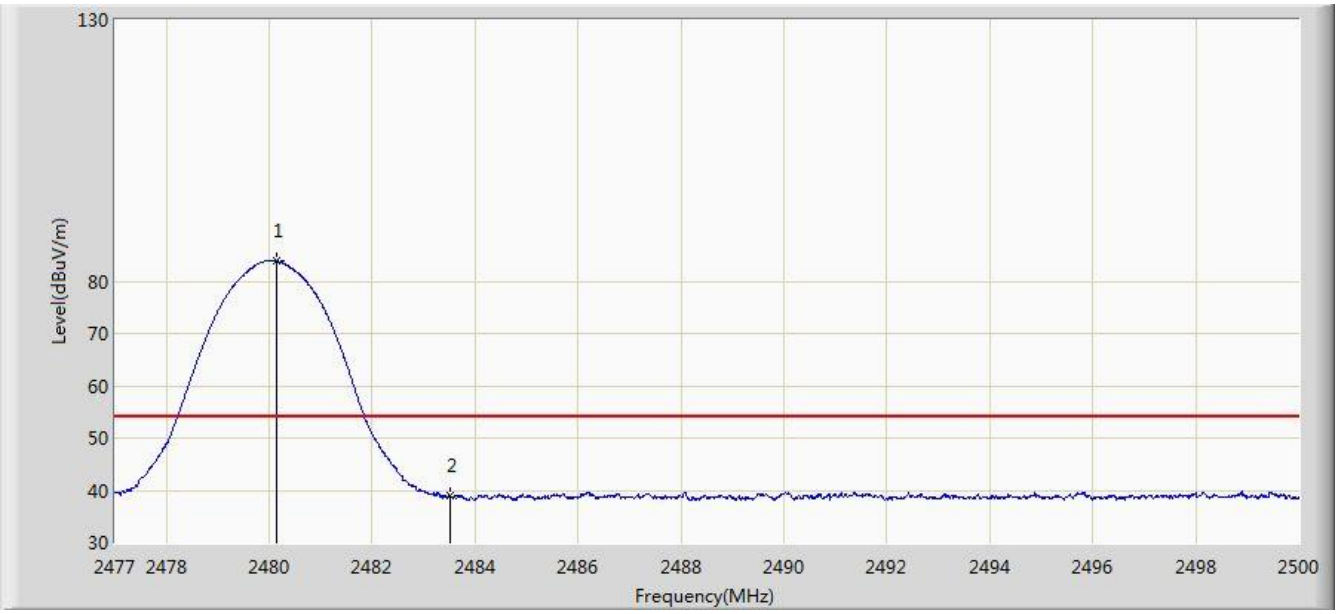



| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | * | 2479.956 | 87.096 | 55.912 | N/A | N/A | 31.184 | PK |
| 2 | | | 2483.500 | 55.881 | 24.688 | -18.119 | 74.000 | 31.194 | PK |
| 3 | | | 2487.385 | 57.598 | 26.394 | -16.402 | 74.000 | 31.204 | PK |

Note: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

| | |
|---|---|
| Site: AC1 | Time: 2017/11/16 - 20:27 |
| Limit: FCC_Part15.209_RE(3m) | Engineer: Will Yan |
| Probe: BBHA9120D_1-18GHz | Polarity: Vertical |
| EUT: VR All-In-One Headset | Power: By Battery |
| Test Mode: Transmit by 2DH5 at Channel 2480MHz | |

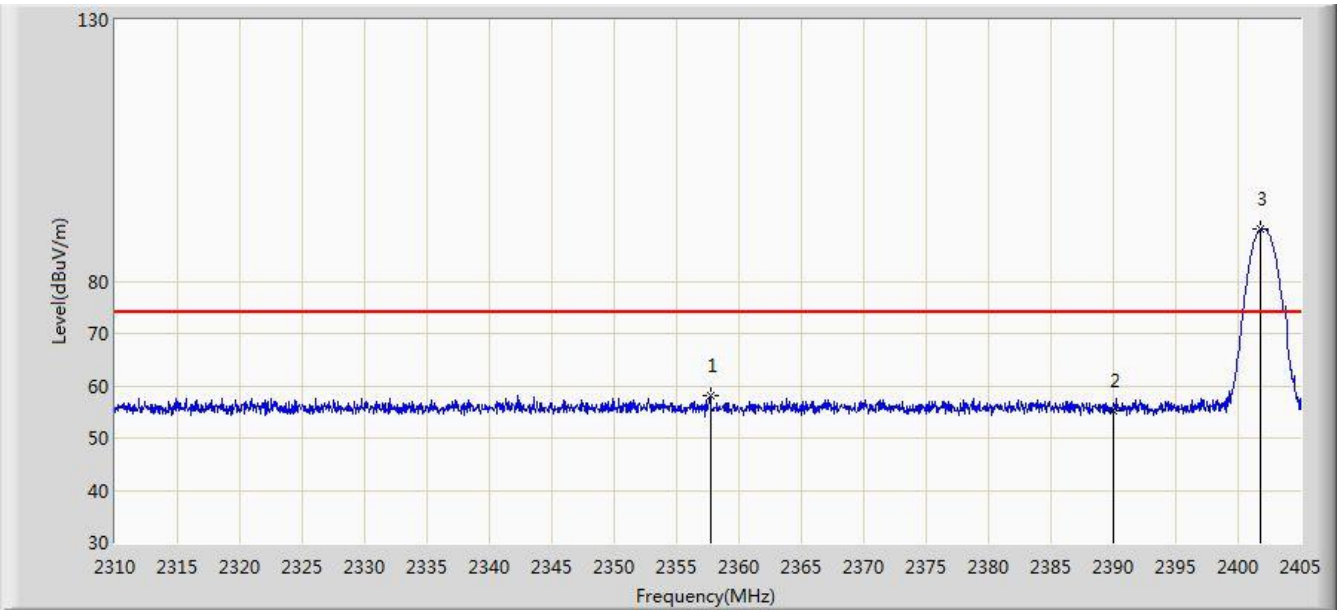



| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | * | 2480.139 | 83.895 | 52.711 | N/A | N/A | 31.185 | AV |
| 2 | | | 2483.500 | 39.104 | 7.911 | -14.896 | 54.000 | 31.194 | AV |

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

| | |
|---|---|
| Site: AC1 | Time: 2017/11/16 - 20:28 |
| Limit: FCC_Part15.209_RE(3m) | Engineer: Will Yan |
| Probe: BBHA9120D_1-18GHz | Polarity: Horizontal |
| EUT: VR All-In-One Headset | Power: By Battery |
| Test Mode: Transmit by 3DH5 at Channel 2402MHz | |

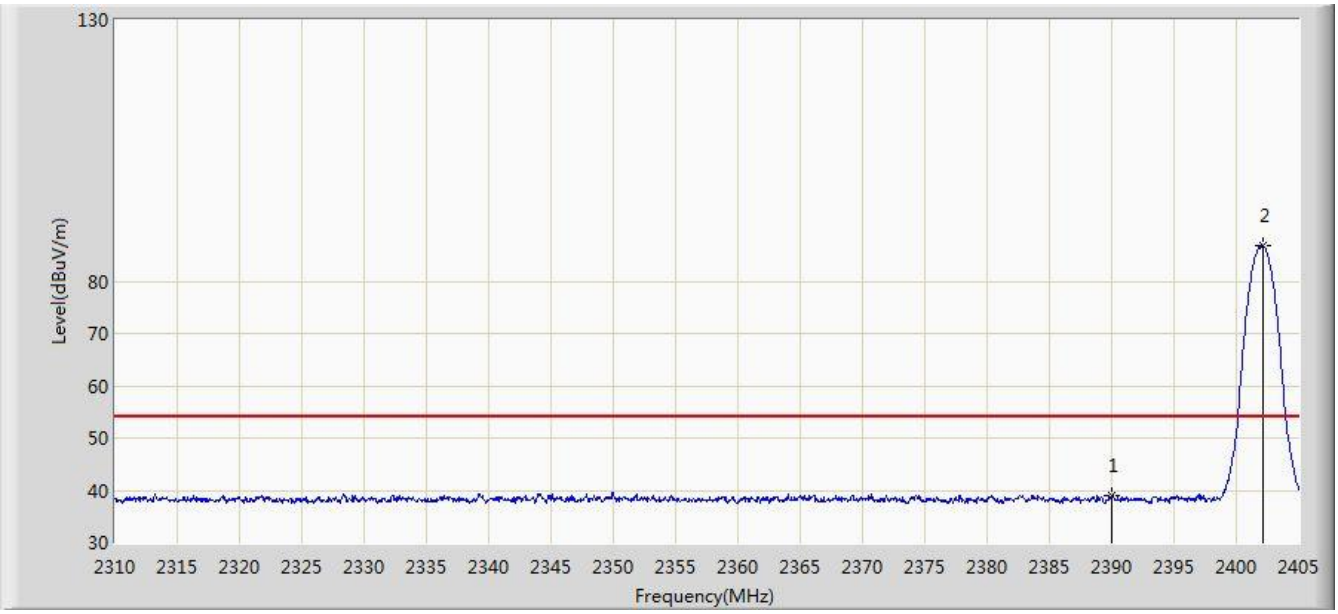



| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | 2357.690 | 58.000 | 26.736 | -16.000 | 74.000 | 31.264 | PK |
| 2 | | | 2390.000 | 55.133 | 23.930 | -18.867 | 74.000 | 31.203 | PK |
| 3 | | * | 2401.770 | 89.904 | 58.720 | N/A | N/A | 31.184 | PK |

Note: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

| | |
|---|---|
| Site: AC1 | Time: 2017/11/16 - 20:30 |
| Limit: FCC_Part15.209_RE(3m) | Engineer: Will Yan |
| Probe: BBHA9120D_1-18GHz | Polarity: Horizontal |
| EUT: VR All-In-One Headset | Power: By Battery |
| Test Mode: Transmit by 3DH5 at Channel 2402MHz | |

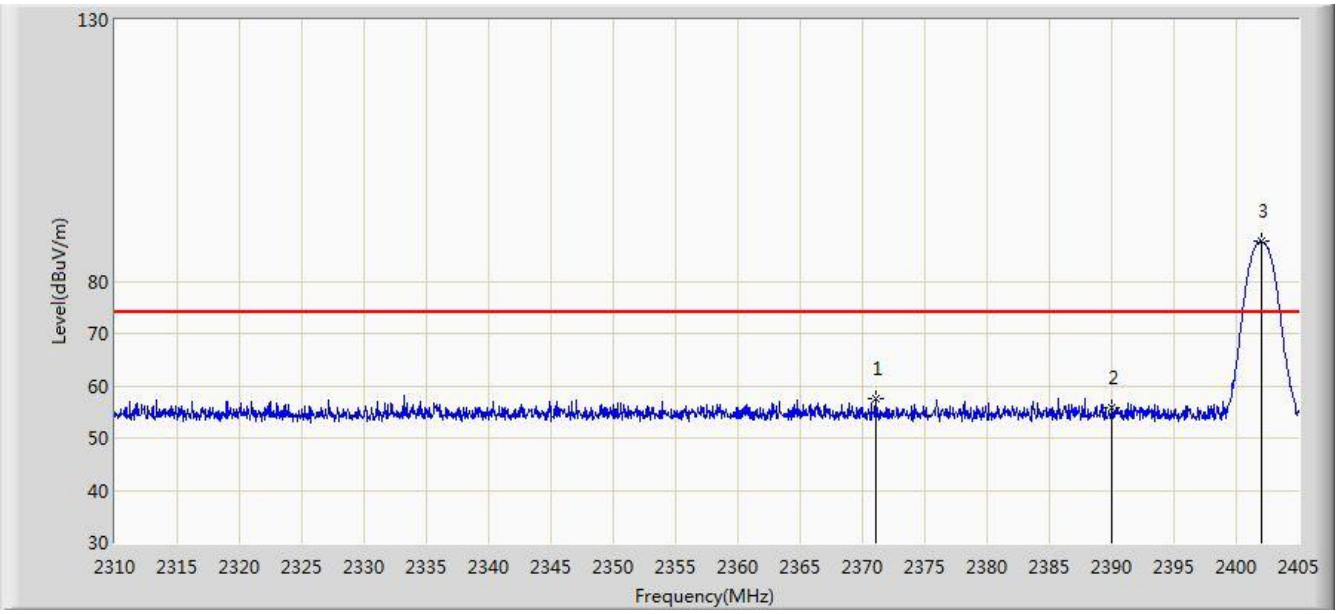



| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | 2390.000 | 39.049 | 7.846 | -14.951 | 54.000 | 31.203 | AV |
| 2 | | * | 2402.150 | 86.765 | 55.581 | N/A | N/A | 31.184 | AV |

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

| | |
|---|---|
| Site: AC1 | Time: 2017/11/16 - 20:30 |
| Limit: FCC_Part15.209_RE(3m) | Engineer: Will Yan |
| Probe: BBHA9120D_1-18GHz | Polarity: Vertical |
| EUT: VR All-In-One Headset | Power: By Battery |
| Test Mode: Transmit by 3DH5 at Channel 2402MHz | |

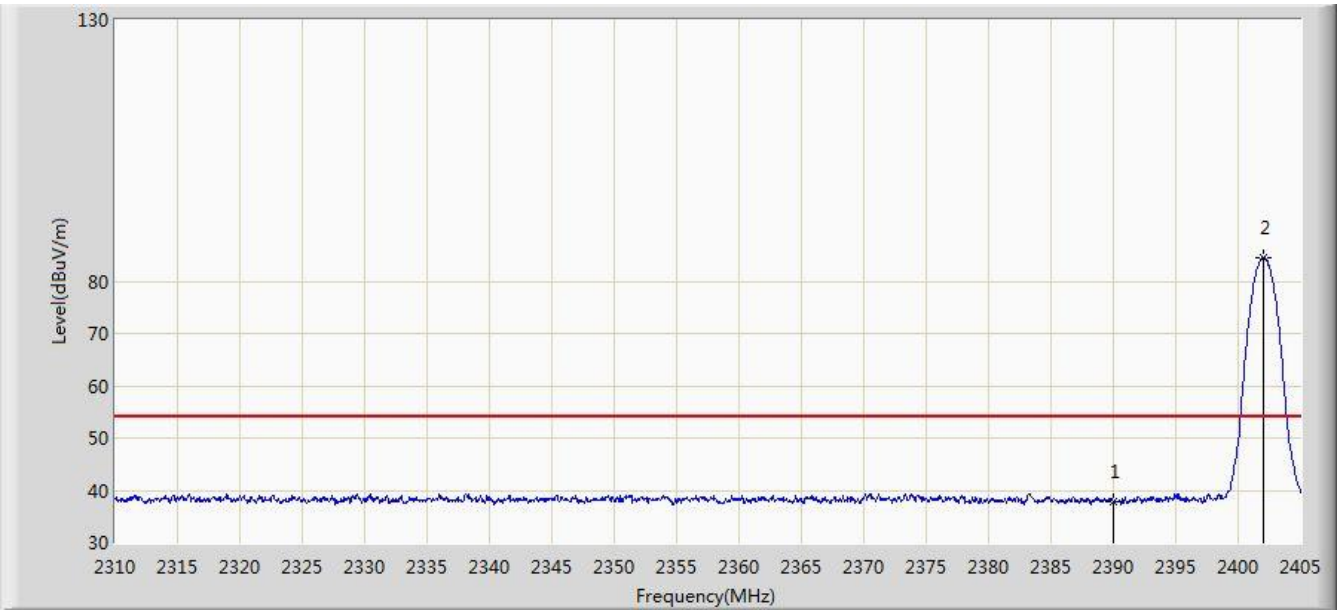



| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | 2371.038 | 57.589 | 26.351 | -16.411 | 74.000 | 31.238 | PK |
| 2 | | | 2390.000 | 55.799 | 24.596 | -18.201 | 74.000 | 31.203 | PK |
| 3 | | * | 2402.008 | 87.609 | 56.425 | N/A | N/A | 31.184 | PK |

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

| | |
|---|---|
| Site: AC1 | Time: 2017/11/16 - 20:32 |
| Limit: FCC_Part15.209_RE(3m) | Engineer: Will Yan |
| Probe: BBHA9120D_1-18GHz | Polarity: Vertical |
| EUT: VR All-In-One Headset | Power: By Battery |
| Test Mode: Transmit by 3DH5 at Channel 2402MHz | |

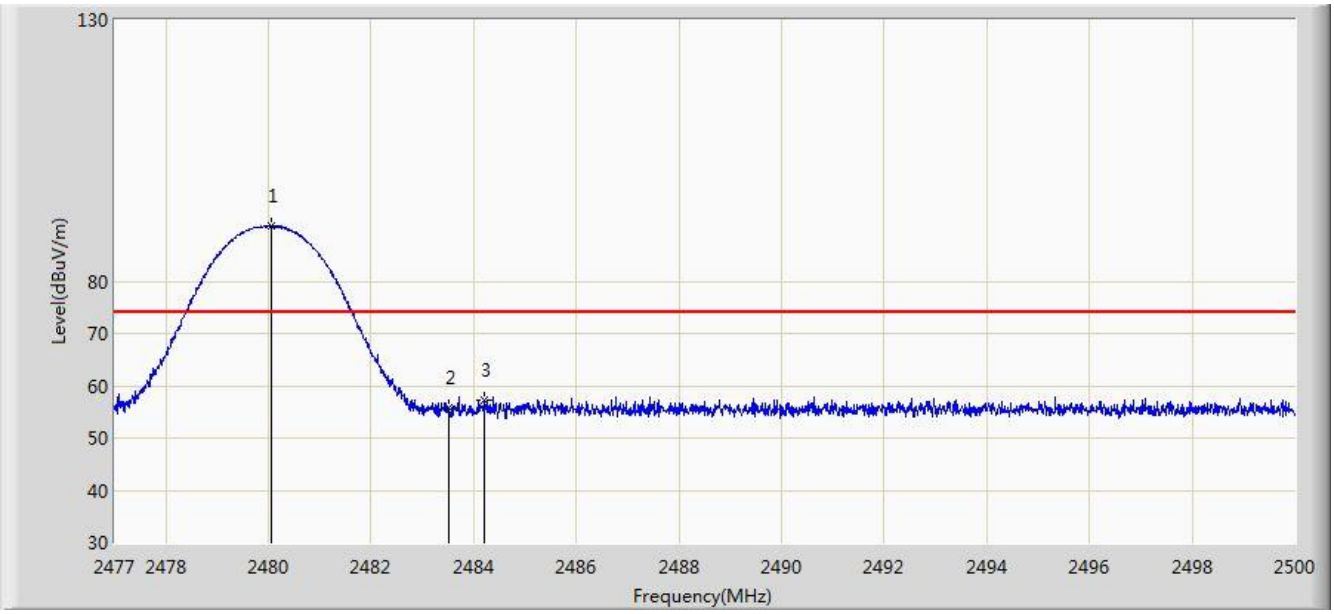



| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | 2390.000 | 37.734 | 6.531 | -16.266 | 54.000 | 31.203 | AV |
| 2 | | * | 2402.055 | 84.511 | 53.327 | N/A | N/A | 31.184 | AV |

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

| | |
|---|---|
| Site: AC1 | Time: 2017/11/16 - 20:33 |
| Limit: FCC_Part15.209_RE(3m) | Engineer: Will Yan |
| Probe: BBHA9120D_1-18GHz | Polarity: Horizontal |
| EUT: VR All-In-One Headset | Power: By Battery |
| Test Mode: Transmit by 3DH5 at Channel 2480MHz | |

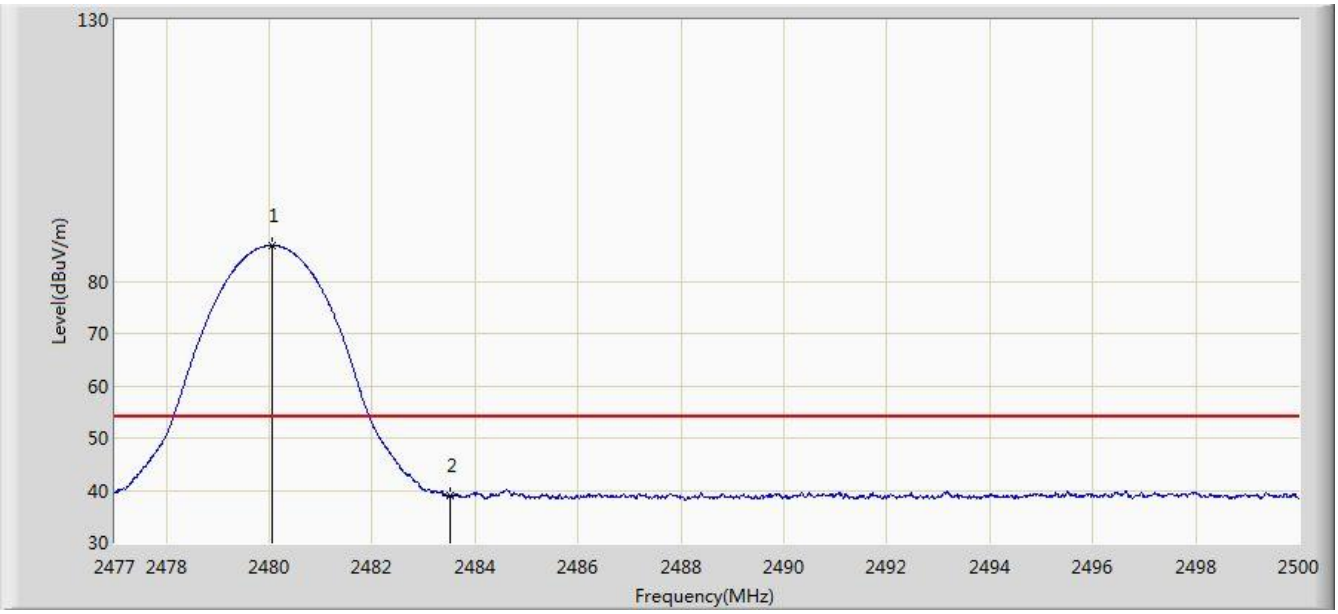



| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | * | 2480.059 | 90.461 | 59.277 | N/A | N/A | 31.184 | PK |
| 2 | | | 2483.500 | 55.756 | 24.563 | -18.244 | 74.000 | 31.194 | PK |
| 3 | | | 2484.210 | 57.204 | 26.009 | -16.796 | 74.000 | 31.195 | PK |

Note: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

| | |
|---|---|
| Site: AC1 | Time: 2017/11/16 - 20:34 |
| Limit: FCC_Part15.209_RE(3m) | Engineer: Will Yan |
| Probe: BBHA9120D_1-18GHz | Polarity: Horizontal |
| EUT: VR All-In-One Headset | Power: By Battery |
| Test Mode: Transmit by 3DH5 at Channel 2480MHz | |

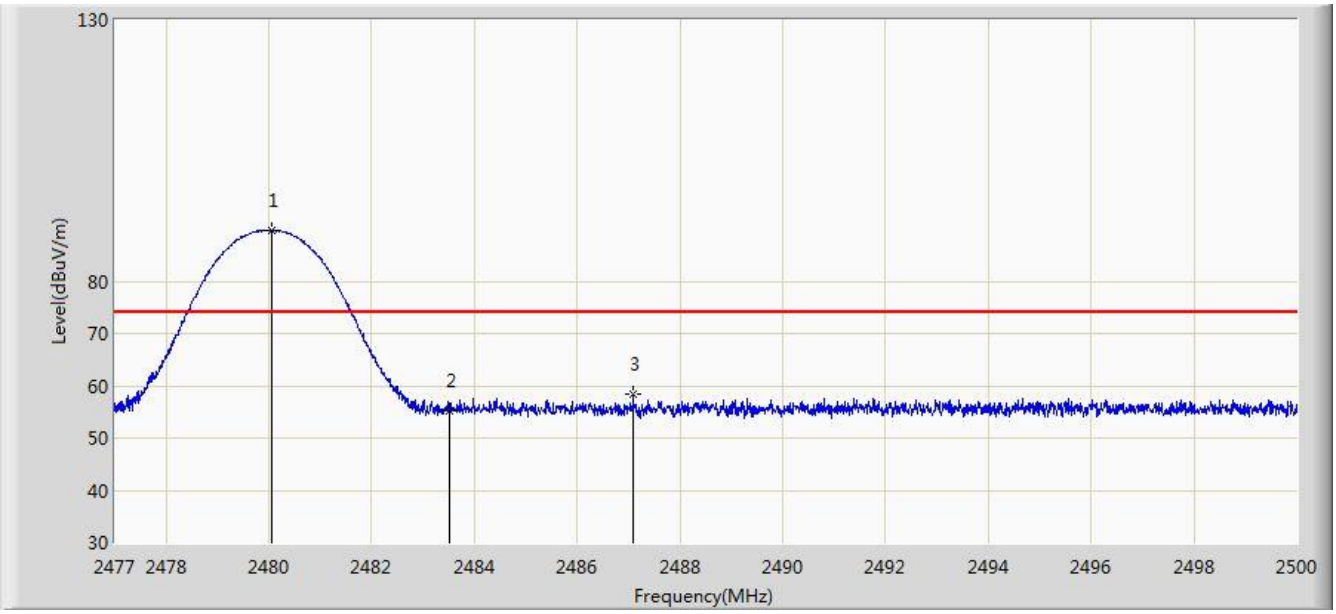



| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | * | 2480.059 | 86.851 | 55.667 | N/A | N/A | 31.184 | AV |
| 2 | | | 2483.500 | 39.069 | 7.876 | -14.931 | 54.000 | 31.194 | AV |

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

| | |
|---|---|
| Site: AC1 | Time: 2017/11/16 - 20:40 |
| Limit: FCC_Part15.209_RE(3m) | Engineer: Will Yan |
| Probe: BBHA9120D_1-18GHz | Polarity: Vertical |
| EUT: VR All-In-One Headset | Power: By Battery |
| Test Mode: Transmit by 3DH5 at Channel 2480MHz | |

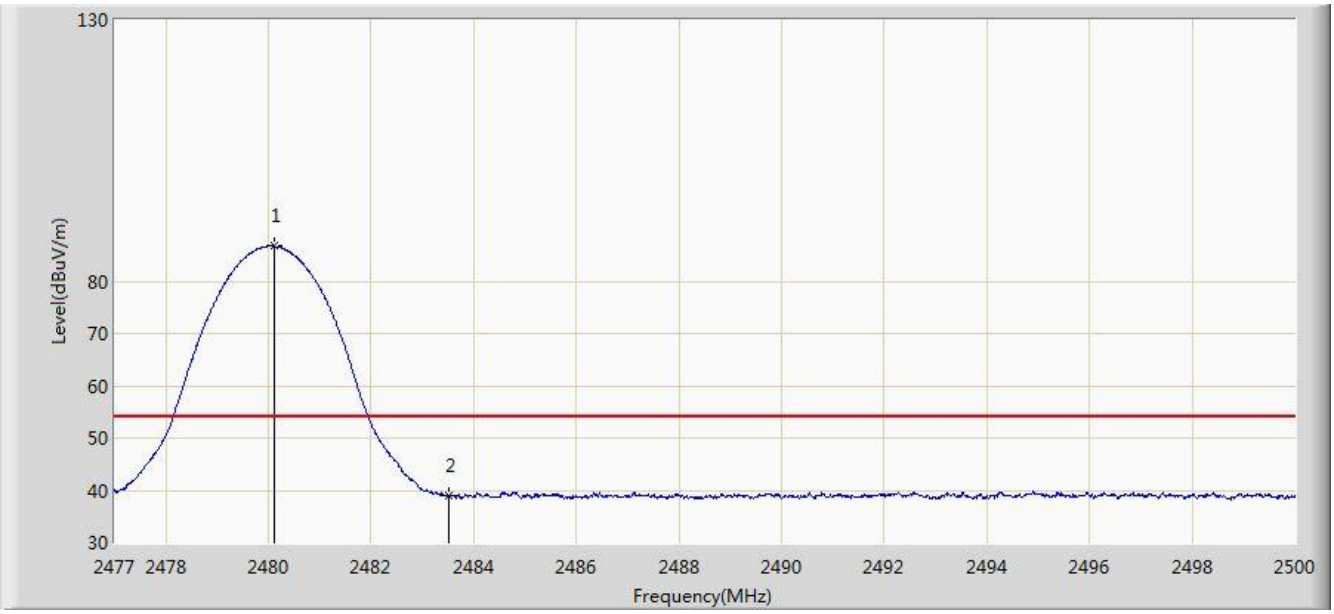



| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | * | 2480.059 | 89.714 | 58.530 | N/A | N/A | 31.184 | PK |
| 2 | | | 2483.500 | 55.300 | 24.107 | -18.700 | 74.000 | 31.194 | PK |
| 3 | | | 2487.085 | 58.366 | 27.163 | -15.634 | 74.000 | 31.203 | PK |

Note: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

| | |
|---|---|
| Site: AC1 | Time: 2017/11/16 - 20:41 |
| Limit: FCC_Part15.209_RE(3m) | Engineer: Will Yan |
| Probe: BBHA9120D_1-18GHz | Polarity: Vertical |
| EUT: VR All-In-One Headset | Power: By Battery |
| Test Mode: Transmit by 3DH5 at Channel 2480MHz | |




| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | * | 2480.105 | 86.693 | 55.509 | N/A | N/A | 31.184 | AV |
| 2 | | | 2483.500 | 38.949 | 7.756 | -15.051 | 54.000 | 31.194 | AV |

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

## 7.11. AC Conducted Emissions Measurement

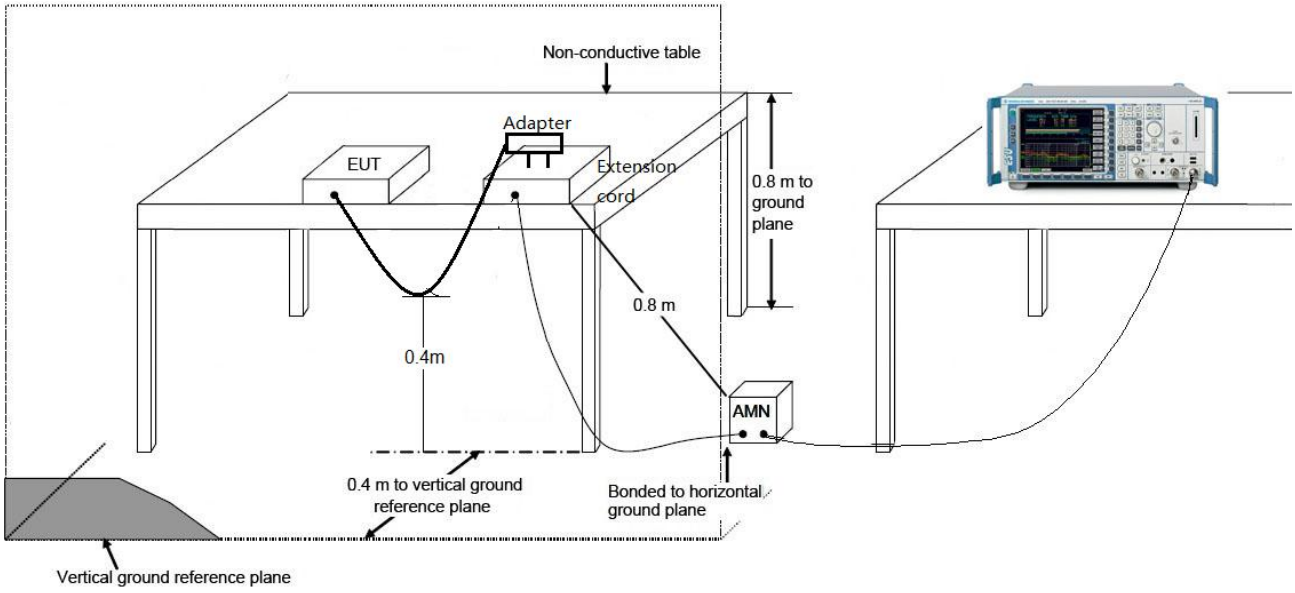
### 7.11.1. Test Limit

| FCC Part 15 Subpart C Paragraph 15.207 / RSS-Gen Limits | | |
|---|---|---|
| Frequency (MHz) | QP (dBμV) | Average (dBμV) |
| 0.15 - 0.50 | 66 - 56 | 56 - 46 |
| 0.50 - 5.0 | 56 | 46 |
| 5.0 - 30 | 60 | 50 |

Note 1: The lower limit shall apply at the transition frequencies.

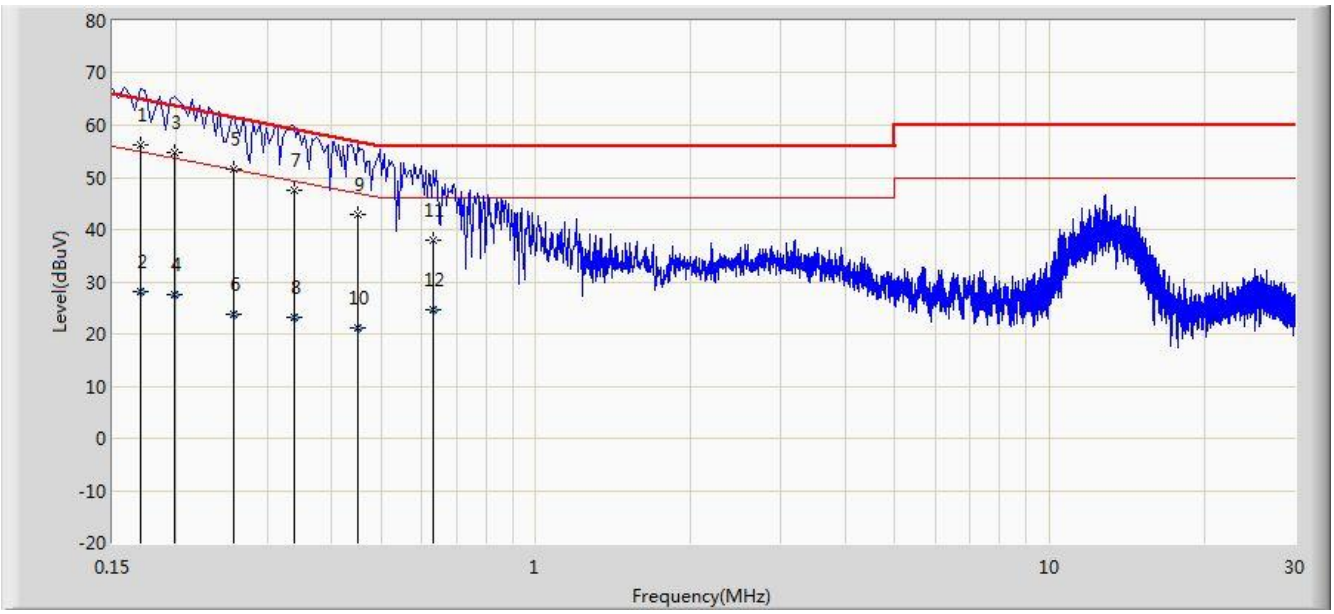
Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.5MHz.

### 7.11.2. Test Setup



### 7.11.3. Test Result

| | |
|---|---|
| Site: SR2 | Time: 2017/11/15 - 18:48 |
| Limit: FCC_Part15.207_CE_AC Power | Engineer: Bacon Dong |
| Probe: ENV216_101683_Filter On | Polarity: Line |
| EUT: VR All-In-One Headset | Power: AC 120V/60Hz |
| **Worst Case Mode:** Transmit at Channel 2480MHz By 2DH5 | |

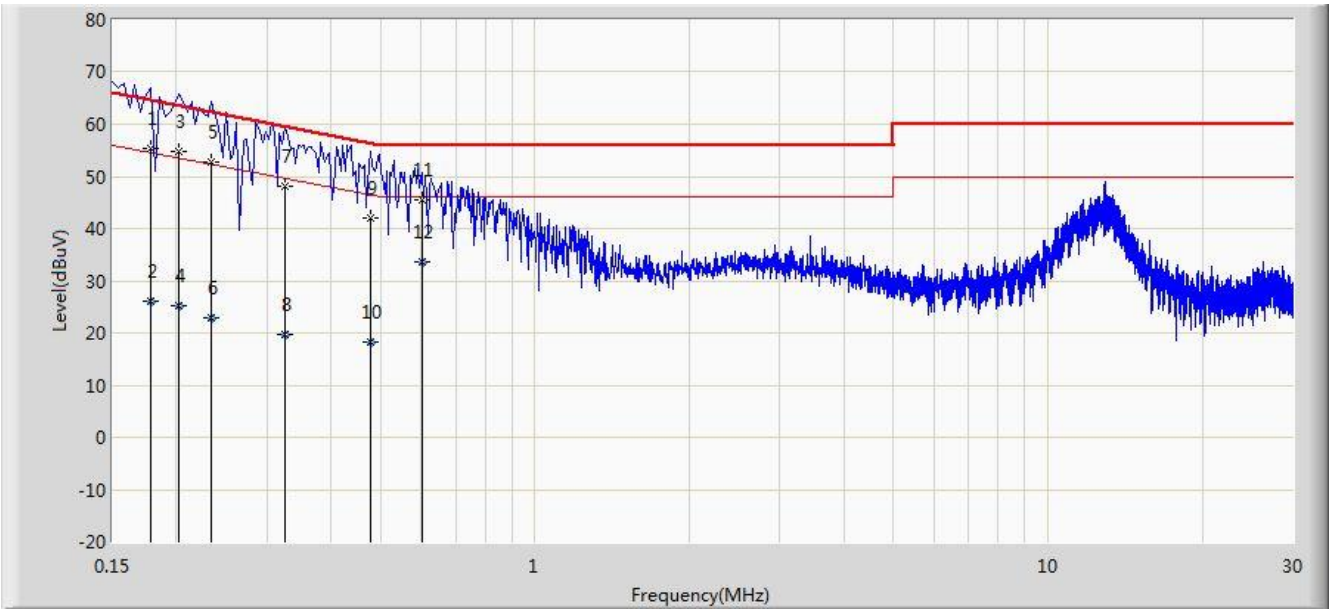



| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV) | Factor (dB) | Type |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | * | 0.170 | 56.316 | 46.239 | -8.644 | 64.960 | 10.078 | QP |
| 2 | | | 0.170 | 28.079 | 18.002 | -26.881 | 54.960 | 10.078 | AV |
| 3 | | | 0.198 | 54.754 | 44.749 | -8.940 | 63.694 | 10.005 | QP |
| 4 | | | 0.198 | 27.412 | 17.407 | -26.282 | 53.694 | 10.005 | AV |
| 5 | | | 0.258 | 51.575 | 41.605 | -9.920 | 61.496 | 9.970 | QP |
| 6 | | | 0.258 | 23.887 | 13.917 | -27.609 | 51.496 | 9.970 | AV |
| 7 | | | 0.338 | 47.571 | 37.537 | -11.681 | 59.252 | 10.034 | QP |
| 8 | | | 0.338 | 23.166 | 13.132 | -26.086 | 49.252 | 10.034 | AV |
| 9 | | | 0.450 | 42.947 | 32.821 | -13.928 | 56.875 | 10.126 | QP |
| 10 | | | 0.450 | 21.184 | 11.058 | -25.691 | 46.875 | 10.126 | AV |
| 11 | | | 0.630 | 37.963 | 27.863 | -18.037 | 56.000 | 10.099 | QP |
| 12 | | | 0.630 | 24.634 | 14.535 | -21.366 | 46.000 | 10.099 | AV |

Note: Measure Level (dBμV) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + LISN Factor (dB).

| | |
|---|---|
| Site: SR2 | Time: 2017/11/15 - 18:52 |
| Limit: FCC_Part15.207_CE_AC Power | Engineer: Bacon Dong |
| Probe: ENV216_101683_Filter On | Polarity: Neutral |
| EUT: VR All-In-One Headset | Power: AC 120V/60Hz |
| **Worst Case Mode:** Transmit at Channel 2480MHz By 2DH5 | |




| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV) | Factor (dB) | Type |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | 0.178 | 55.354 | 45.305 | -9.224 | 64.578 | 10.049 | QP |
| 2 | | | 0.178 | 26.082 | 16.032 | -28.497 | 54.578 | 10.049 | AV |
| 3 | | * | 0.202 | 54.864 | 44.857 | -8.663 | 63.528 | 10.008 | QP |
| 4 | | | 0.202 | 25.325 | 15.317 | -28.203 | 53.528 | 10.008 | AV |
| 5 | | | 0.234 | 52.697 | 42.708 | -9.609 | 62.307 | 9.989 | QP |
| 6 | | | 0.234 | 22.812 | 12.823 | -29.494 | 52.307 | 9.989 | AV |
| 7 | | | 0.326 | 48.230 | 38.173 | -11.323 | 59.552 | 10.057 | QP |
| 8 | | | 0.326 | 19.664 | 9.607 | -29.889 | 49.552 | 10.057 | AV |
| 9 | | | 0.478 | 42.013 | 31.843 | -14.360 | 56.374 | 10.170 | QP |
| 10 | | | 0.478 | 18.297 | 8.126 | -28.077 | 46.374 | 10.170 | AV |
| 11 | | | 0.602 | 45.605 | 35.475 | -10.395 | 56.000 | 10.130 | QP |
| 12 | | | 0.602 | 33.721 | 23.591 | -12.279 | 46.000 | 10.130 | AV |

Note: Measure Level (dBμV) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + LISN Factor (dB).

# 8. CONCLUSION

The data collected relate only the item(s) tested and show that the **VR All-In-One Headset FCC ID: 2AI3G-A7215** is in compliance with Part 15C of the FCC Rules.

The End