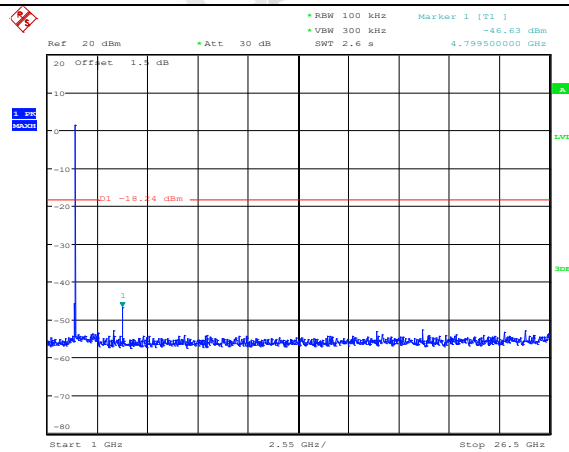
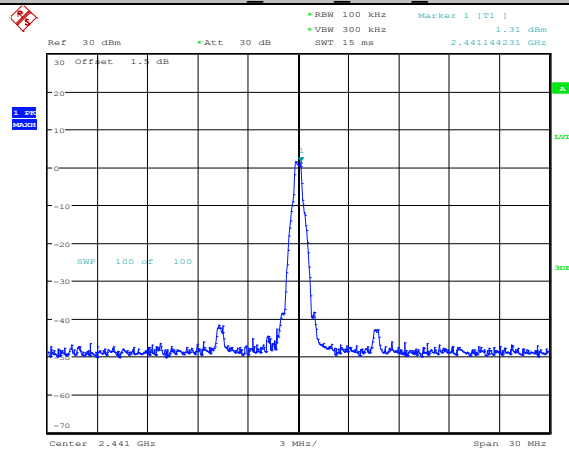




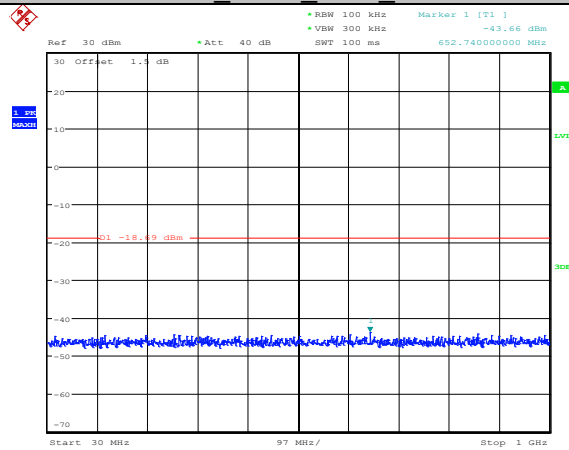
Date: 21.JUN.2021 16:03:28

## DH5 ANT1 2441 Ref



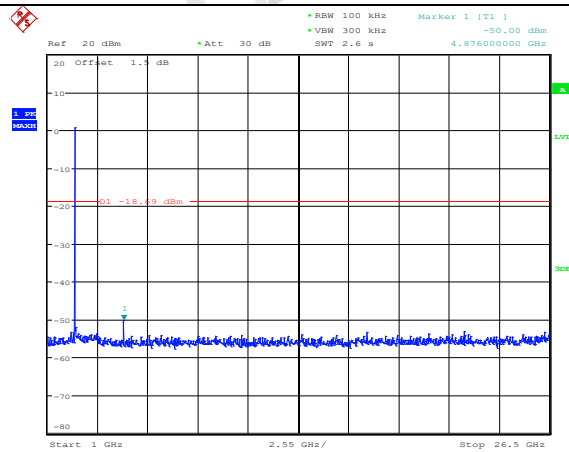
Date: 21.JUN.2021 16:04:16

## DH5 ANT1 2441 30~1000



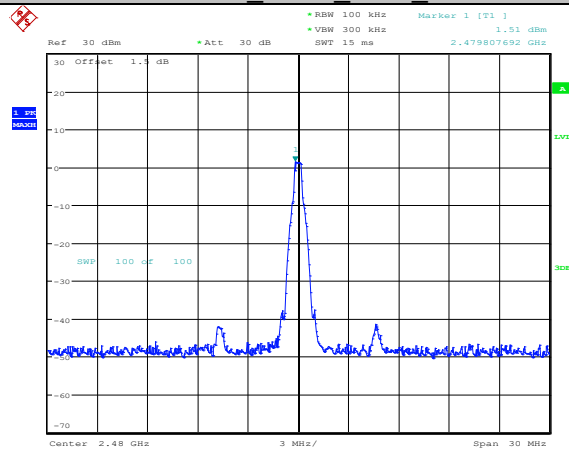
Date: 21.JUN.2021 16:04:24

## DH5 ANT1 2441 1000~26500



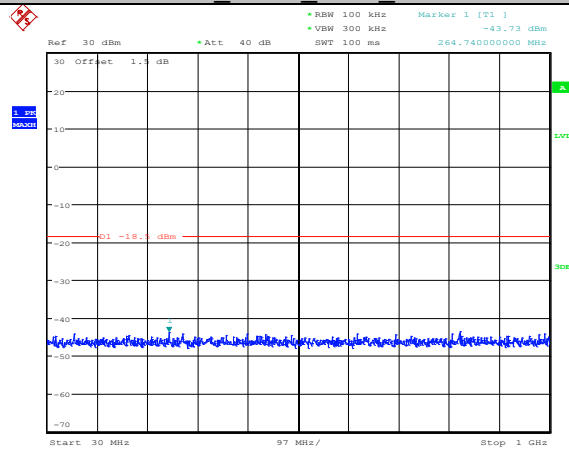
Date: 21.JUN.2021 16:04:35

## DH5 ANT1 2480 Ref



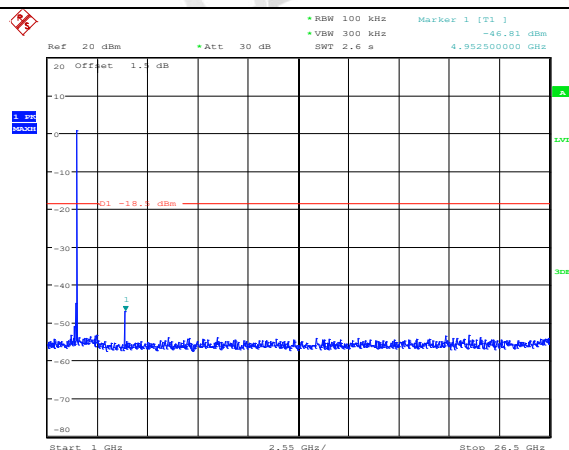
Date: 21.JUN.2021 16:06:11

## DH5 ANT1 2480 30~1000



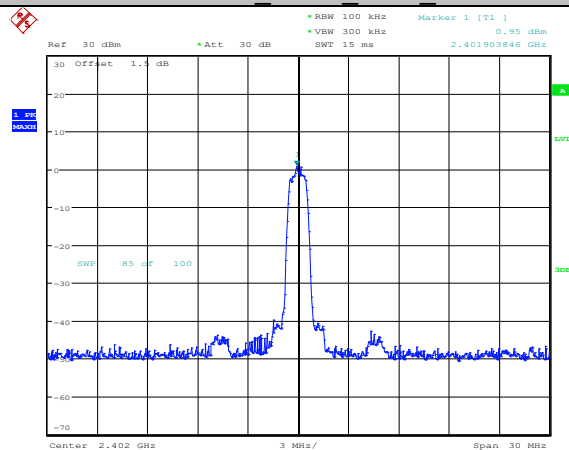
Date: 21.JUN.2021 16:06:19

## DH5 ANT1 2480 1000~26500



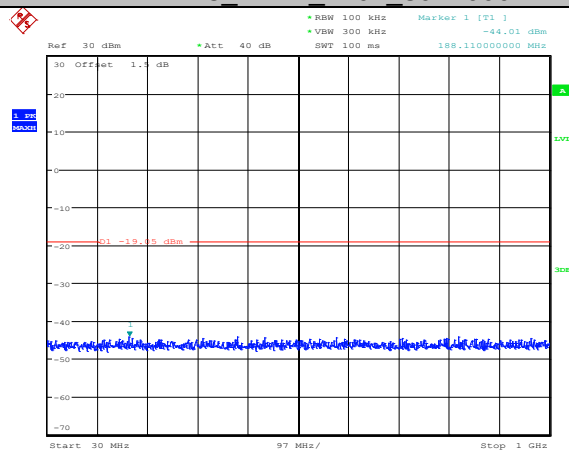
Date: 21.JUN.2021 16:06:31

## 2DH5\_ANT1\_2402\_Ref



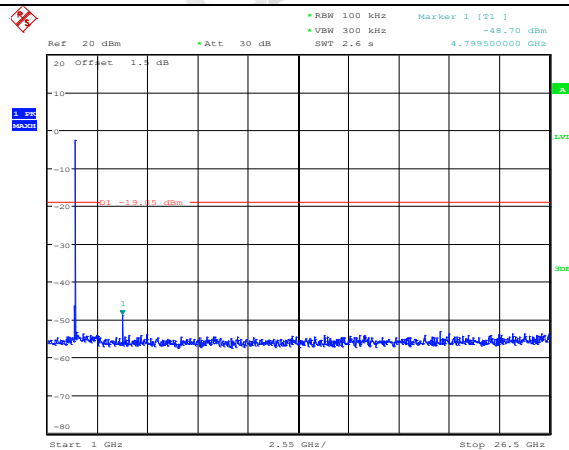
Date: 21.JUN.2021 16:07:46

## 2DH5\_ANT1\_2402\_30~1000



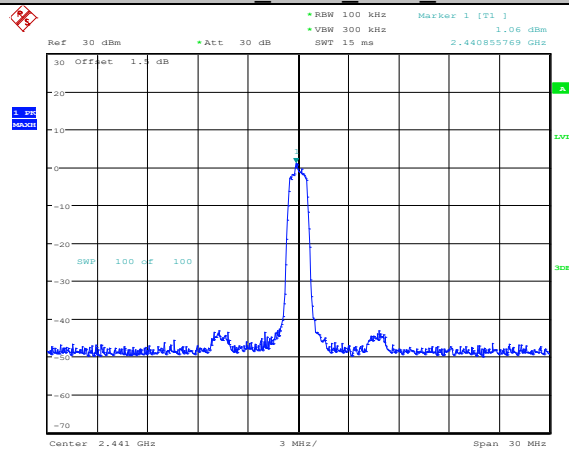
Date: 21.JUN.2021 16:07:55

## 2DH5\_ANT1\_2402\_1000~26500



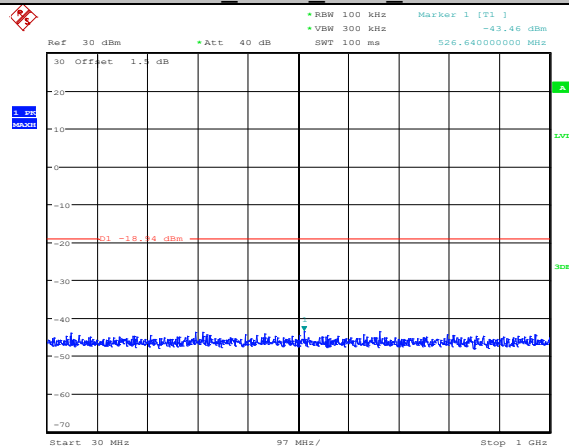
Date: 21.JUN.2021 16:08:06

## 2DH5 ANT1 2441 Ref



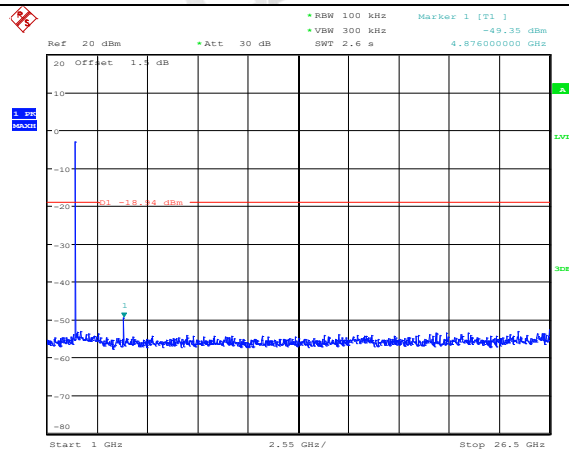
Date: 21.JUN.2021 16:08:56

## 2DH5 ANT1 2441 30~1000



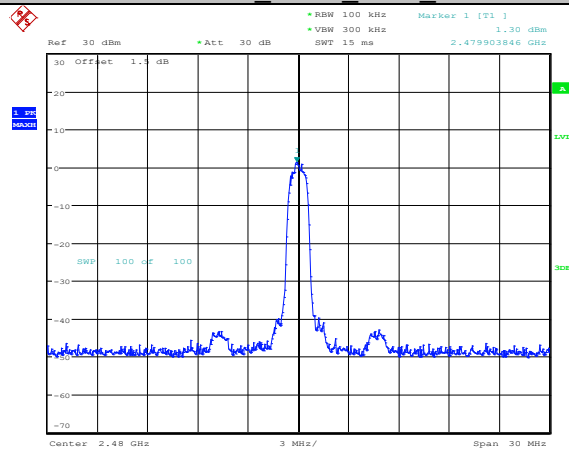
Date: 21.JUN.2021 16:09:04

## 2DH5 ANT1 2441 1000~26500



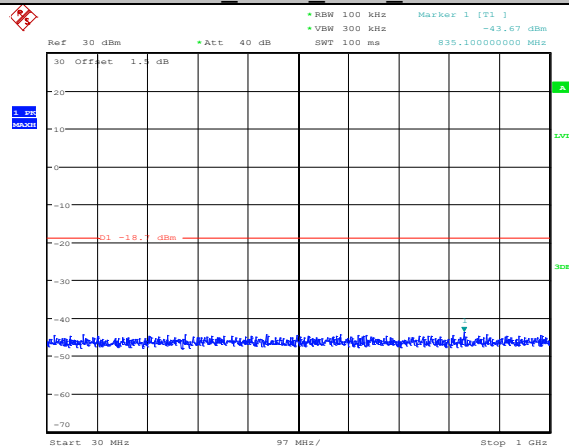
Date: 21.JUN.2021 16:09:15

## 2DH5 ANT1 2480 Ref



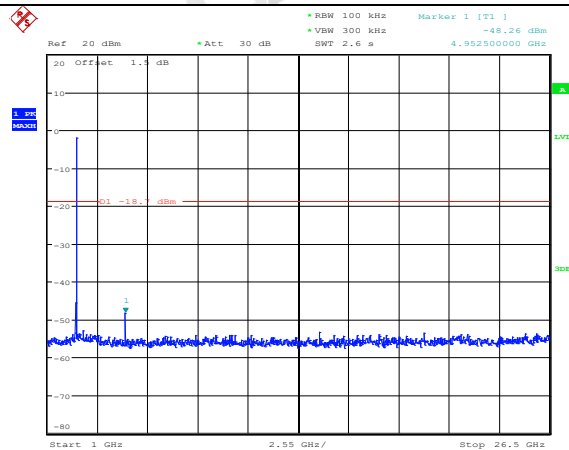
Date: 21.JUN.2021 16:10:29

## 2DH5 ANT1 2480 30~1000



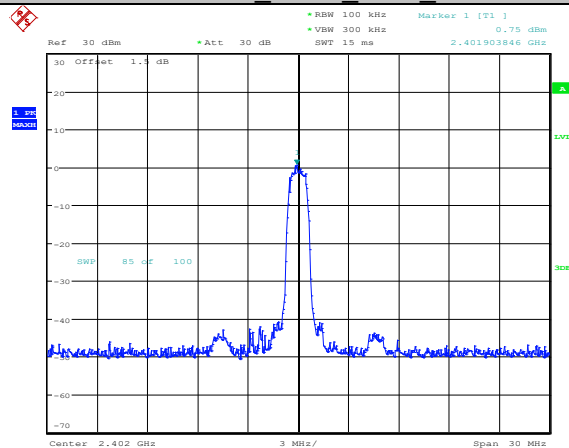
Date: 21.JUN.2021 16:10:37

## 2DH5 ANT1 2480 1000~26500



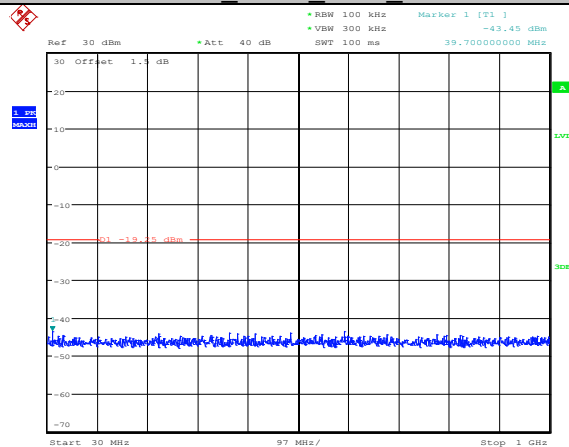
Date: 21.JUN.2021 16:10:49

## 3DH5\_ANT1\_2402\_Ref



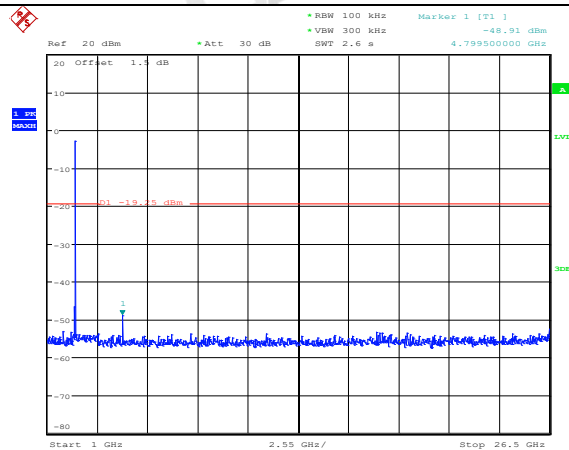
Date: 21.JUN.2021 16:13:01

## 3DH5\_ANT1\_2402\_30~1000



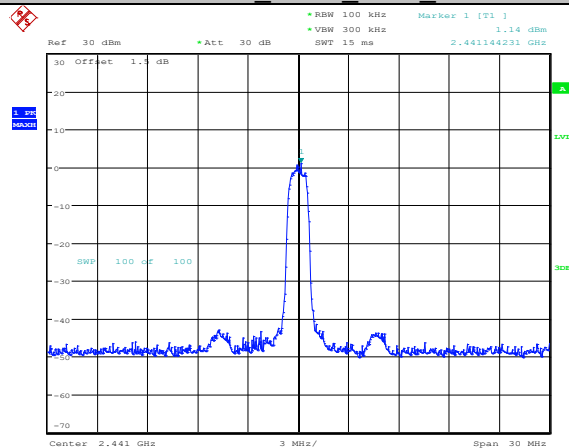
Date: 21.JUN.2021 16:13:10

## 3DH5\_ANT1\_2402\_1000~26500



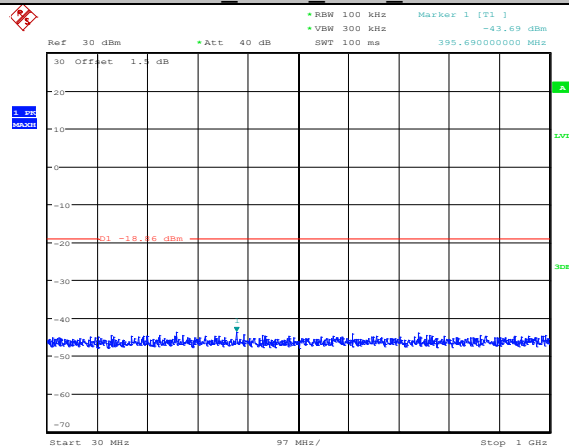
Date: 21.JUN.2021 16:13:21

## 3DH5 ANT1 2441 Ref



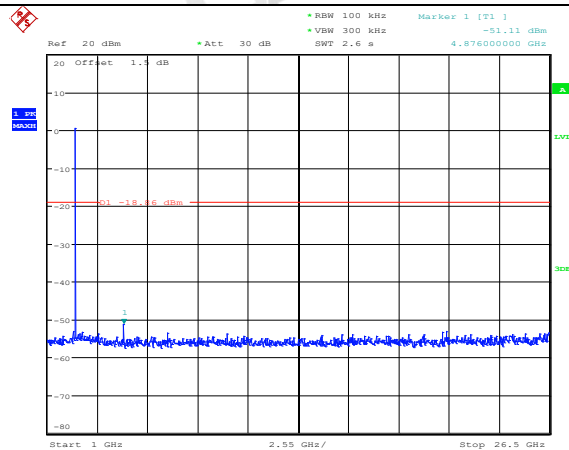
Date: 21.JUN.2021 16:15:27

## 3DH5 ANT1 2441 30~1000



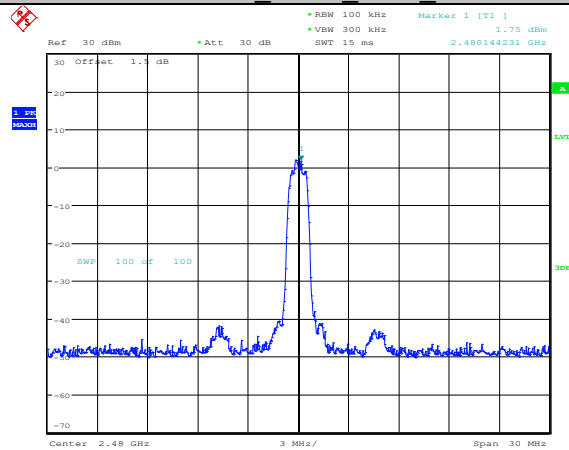
Date: 21.JUN.2021 16:15:36

## 3DH5 ANT1 2441 1000~26500



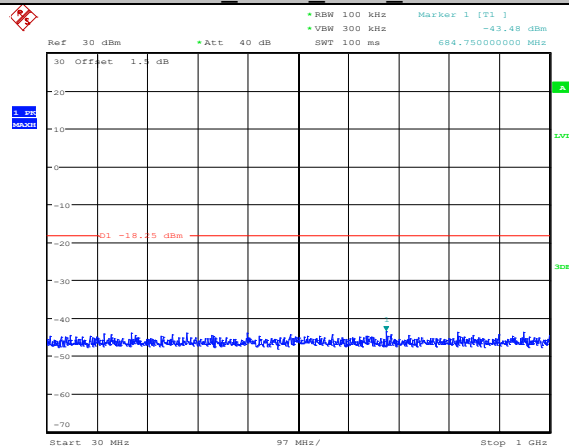
Date: 21.JUN.2021 16:15:47

## 3DH5 ANT1 2480 Ref



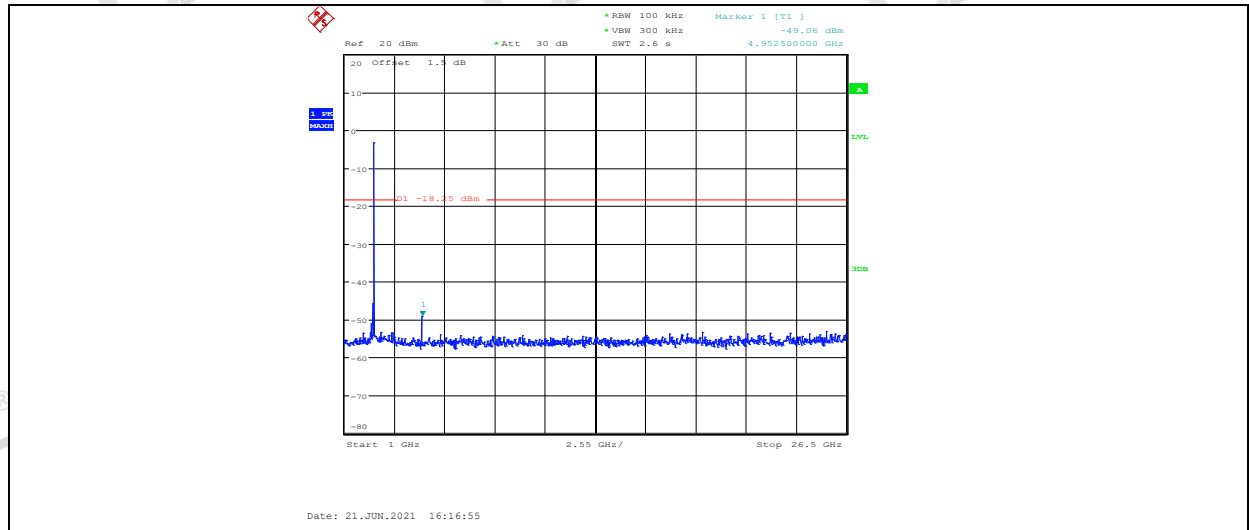
Date: 21.JUN.2021 16:16:35

## 3DH5 ANT1 2480 30~1000



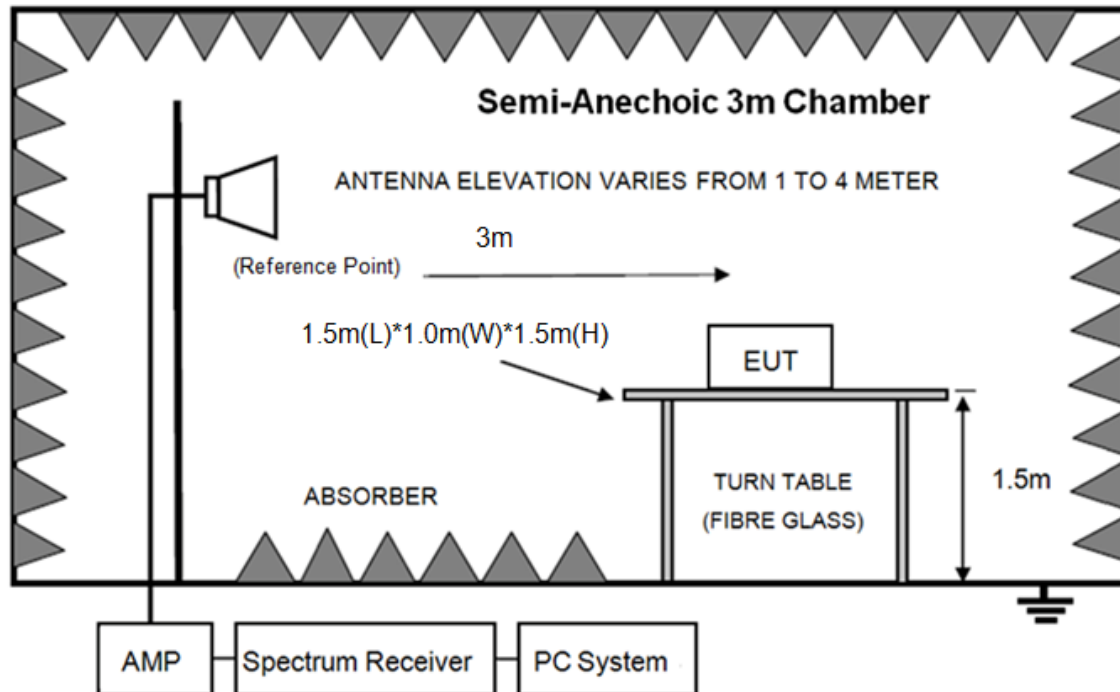
Date: 21.JUN.2021 16:16:44

## 3DH5 ANT1 2480 1000~26500



## 12. Band Edge Compliance (Radiated Method)

### 12.1. Block diagram of test setup



### 12.2. Limit

All restriction band should comply with 15.209, other emission should be at least 20 dB below the fundamental.

### 12.3. Test procedure

Same with clause 10.3 except change investigated frequency range from 2310 MHz to 2410 MHz and 2470 MHz to 2500 MHz.

Remark: All restriction band have been tested, and only the worst case is shown in report.

### 12.4. Test result

Pass. (See below detailed test result)

Remark: hopping on and hopping off mode all have been test, hopping off mode is worse and reported only, the worst case recorded in this report.

## TR-4-E-009 Radiated Emission Test Result

**Test Site** : DDT 3m Chamber 2#

D:\2021 RE2# Report Data\Q21042507-2E aBOOM\FCC  
ABOVE 1G.EM6

**Test Date** : 2021-06-24

**Tested By** : Bairong

**EUT** : Bluetooth Speaker

**Model Number** : aBOOM

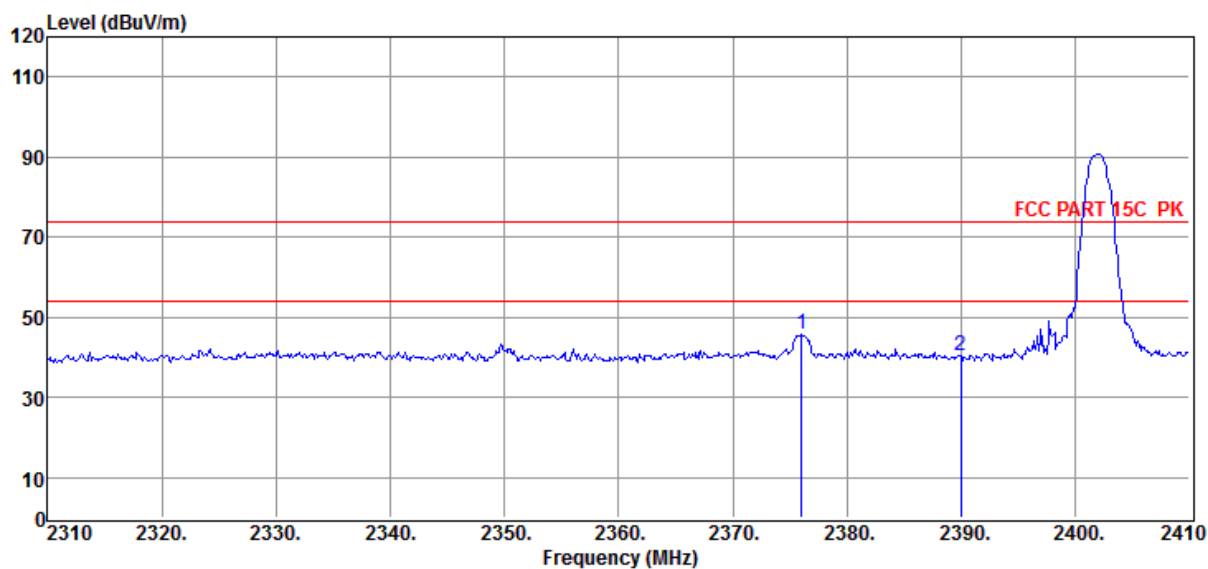
**Power Supply** : Battery

**Test Mode** : Tx mode

**Condition** : Temp:24.5°C,Humi:55%,Press:100.1kPa

**Antenna/Distance** : 2020 BBHA9120D/3m/HORIZONTAL

**Memo** : DH5 2402



| Item<br>(Mark) | Freq.<br>(MHz) | Read<br>Level<br>(dBμV) | Antenna<br>Factor<br>(dB/m) | PRM<br>Factor<br>dB | Cable<br>Loss<br>dB | Result<br>Level<br>(dBμV/m) | Limit<br>Line<br>(dBμV/m) | Over<br>Limit<br>(dB) | Detector | Polarization |
|----------------|----------------|-------------------------|-----------------------------|---------------------|---------------------|-----------------------------|---------------------------|-----------------------|----------|--------------|
| 1              | 2376.00        | 56.03                   | 27.88                       | 43.12               | 4.78                | 45.57                       | 74.00                     | -28.43                | Peak     | HORIZONTAL   |
| 2              | 2390.00        | 50.91                   | 27.89                       | 43.14               | 4.80                | 40.46                       | 74.00                     | -33.54                | Peak     | HORIZONTAL   |

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

## TR-4-E-009 Radiated Emission Test Result

**Test Site** : DDT 3m Chamber 2#

D:\2021 RE2# Report Data\Q21042507-2E aBOOM\FCC  
ABOVE 1G.EM6

**Test Date** : 2021-06-24

**Tested By** : Bairong

**EUT** : Bluetooth Speaker

**Model Number** : aBOOM

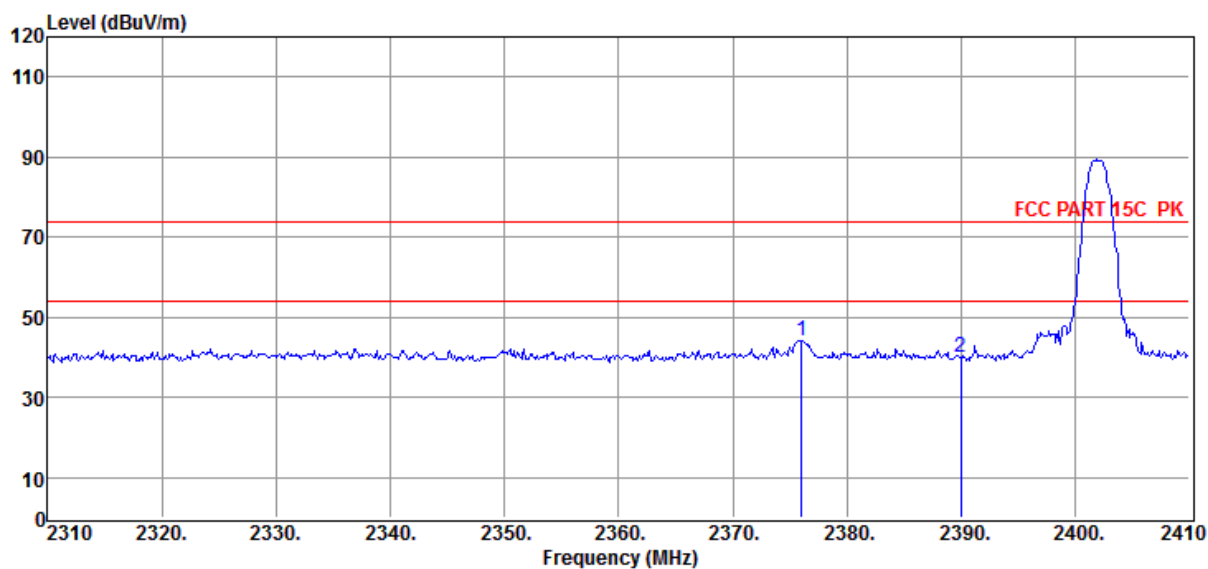
**Power Supply** : Battery

**Test Mode** : Tx mode

**Condition** : Temp:24.5°C,Humi:55%,Press:100.1kPa

**Antenna/Distance** : 2020 BBHA9120D/3m/VERTICAL

**Memo** : DH5 2402



| Item<br>(Mark) | Freq.<br>(MHz) | Read<br>Level<br>(dBμV) | Antenna<br>Factor<br>(dB/m) | PRM<br>Factor<br>dB | Cable<br>Loss<br>dB | Result<br>Level<br>(dBμV/m) | Limit<br>Line<br>(dBμV/m) | Over<br>Limit<br>(dB) | Detector | Polarization |
|----------------|----------------|-------------------------|-----------------------------|---------------------|---------------------|-----------------------------|---------------------------|-----------------------|----------|--------------|
| 1              | 2376.00        | 54.72                   | 27.88                       | 43.12               | 4.78                | 44.26                       | 74.00                     | -29.74                | Peak     | VERTICAL     |
| 2              | 2390.00        | 50.27                   | 27.89                       | 43.14               | 4.80                | 39.82                       | 74.00                     | -34.18                | Peak     | VERTICAL     |

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

## TR-4-E-009 Radiated Emission Test Result

**Test Site** : DDT 3m Chamber 2#

D:\2021 RE2# Report Data\Q21042507-2E aBOOM\FCC ABOVE 1G.EM6

**Test Date** : 2021-06-24

**Tested By** : Bairong

**EUT** : Bluetooth Speaker

**Model Number** : aBOOM

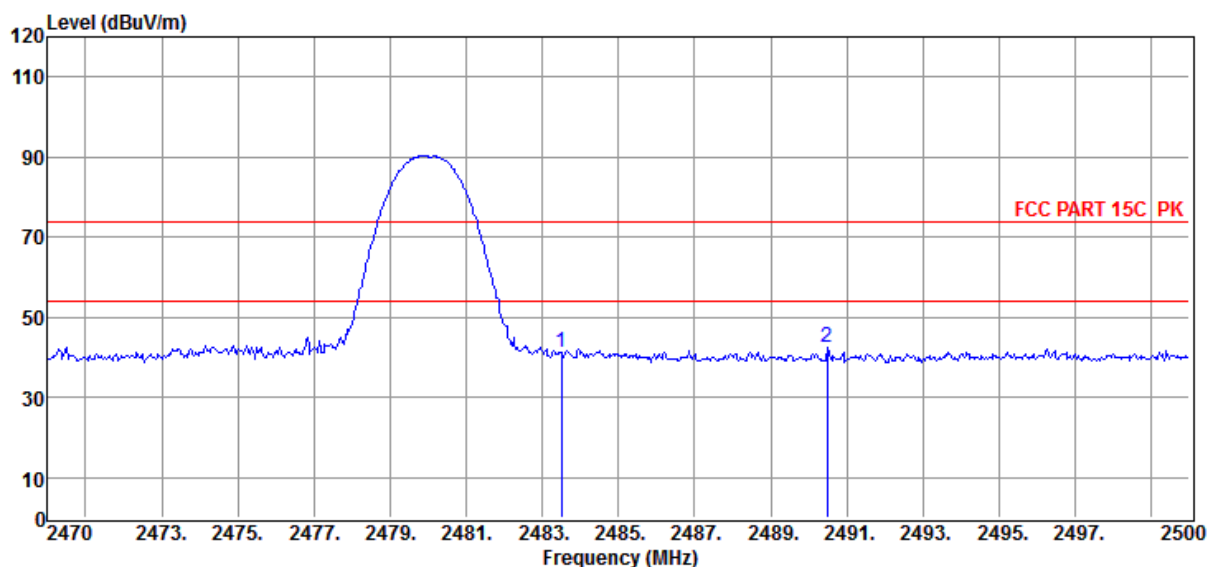
**Power Supply** : Battery

**Test Mode** : Tx mode

**Condition** : Temp:24.5°C,Humi:55%,Press:100.1kPa

**Antenna/Distance** : 2020 BBHA9120D/3m/HORIZONTAL

**Memo** : DH5 2480



| Item<br>(Mark) | Freq.<br>(MHz) | Read<br>Level<br>(dBμV) | Antenna<br>Factor<br>(dB/m) | PRM<br>Factor<br>dB | Cable<br>Loss<br>dB | Result<br>Level<br>(dBμV/m) | Limit<br>Line<br>(dBμV/m) | Over<br>Limit<br>(dB) | Detector | Polarization |
|----------------|----------------|-------------------------|-----------------------------|---------------------|---------------------|-----------------------------|---------------------------|-----------------------|----------|--------------|
| 1              | 2483.50        | 51.64                   | 27.98                       | 43.23               | 4.90                | 41.29                       | 74.00                     | -32.71                | Peak     | HORIZONTAL   |
| 2              | 2490.49        | 52.69                   | 27.99                       | 43.24               | 4.91                | 42.35                       | 74.00                     | -31.65                | Peak     | HORIZONTAL   |

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

## TR-4-E-009 Radiated Emission Test Result

**Test Site** : DDT 3m Chamber 2#

D:\2021 RE2# Report Data\Q21042507-2E aBOOM\FCC  
ABOVE 1G.EM6

**Test Date** : 2021-06-24

**Tested By** : Bairong

**EUT** : Bluetooth Speaker

**Model Number** : aBOOM

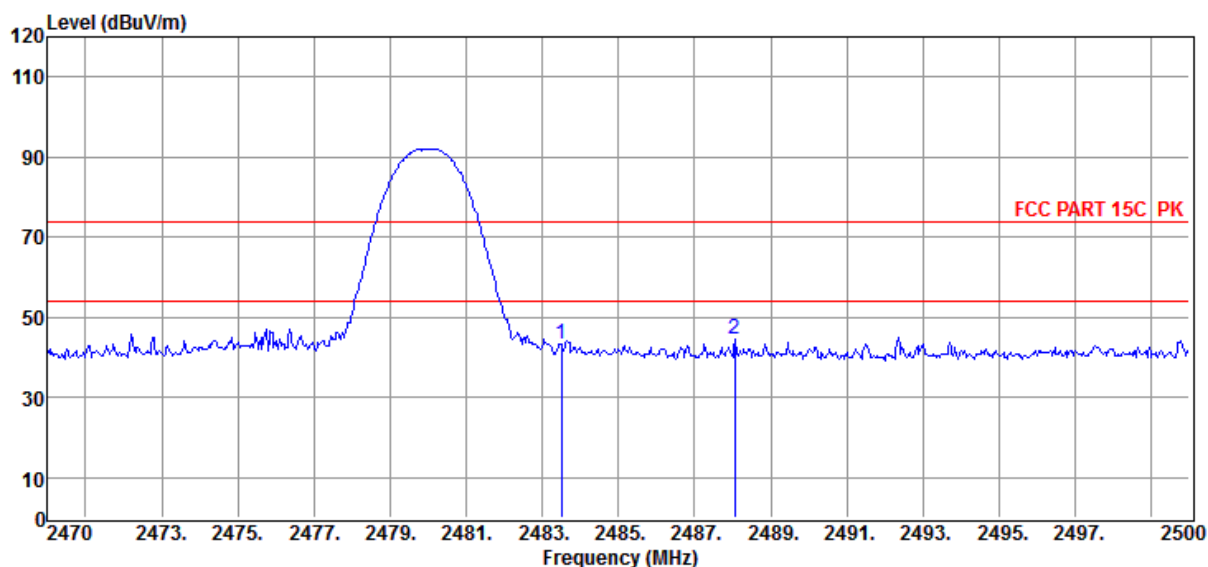
**Power Supply** : Battery

**Test Mode** : Tx mode

**Condition** : Temp:24.5°C,Humi:55%,Press:100.1kPa

**Antenna/Distance** : 2020 BBHA9120D/3m/VERTICAL

**Memo** : DH5 2480



| Item<br>(Mark) | Freq.<br>(MHz) | Read<br>Level<br>(dBμV) | Antenna<br>Factor<br>(dB/m) | PRM<br>Factor<br>dB | Cable<br>Loss<br>dB | Result<br>Level<br>(dBμV/m) | Limit<br>Line<br>(dBμV/m) | Over<br>Limit<br>(dB) | Detector | Polarization |
|----------------|----------------|-------------------------|-----------------------------|---------------------|---------------------|-----------------------------|---------------------------|-----------------------|----------|--------------|
| 1              | 2483.50        | 53.85                   | 27.98                       | 43.23               | 4.90                | 43.50                       | 74.00                     | -30.50                | Peak     | VERTICAL     |
| 2              | 2488.06        | 54.86                   | 27.99                       | 43.24               | 4.91                | 44.52                       | 74.00                     | -29.48                | Peak     | VERTICAL     |

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

## TR-4-E-009 Radiated Emission Test Result

**Test Site** : DDT 3m Chamber 2#

D:\2021 RE2# Report Data\Q21042507-2E aBOOM\FCC  
ABOVE 1G.EM6

**Test Date** : 2021-06-24

**Tested By** : Bairong

**EUT** : Bluetooth Speaker

**Model Number** : aBOOM

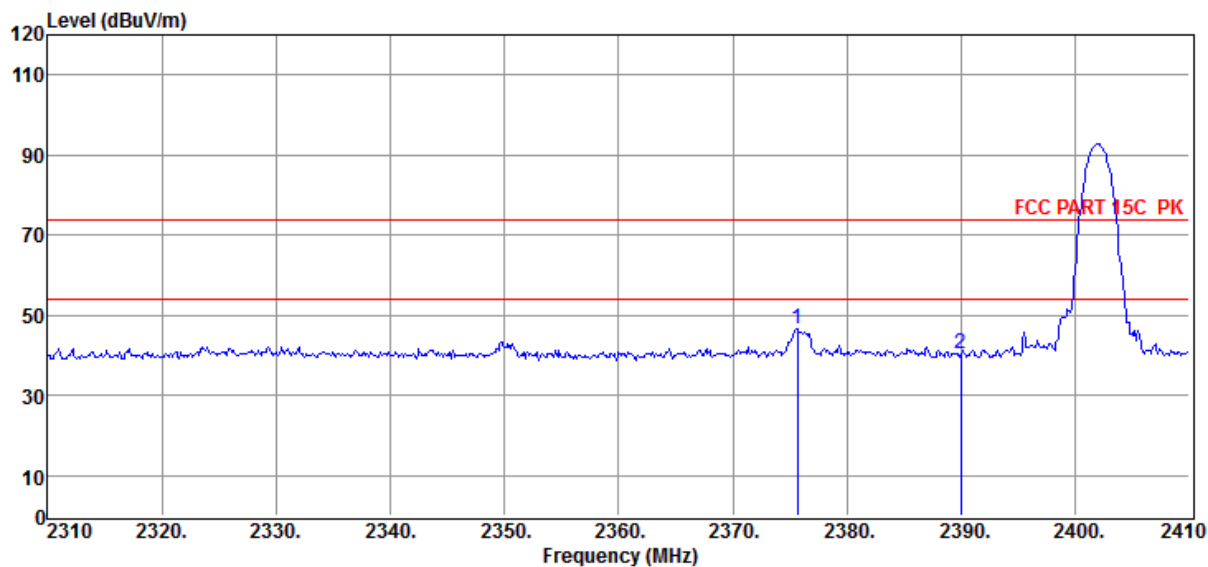
**Power Supply** : Battery

**Test Mode** : Tx mode

**Condition** : Temp:24.5°C,Humi:55%,Press:100.1kPa

**Antenna/Distance** : 2020 BBHA9120D/3m/HORIZONTAL

**Memo** : 2DH5 2402



| Item<br>(Mark) | Freq.<br>(MHz) | Read<br>Level<br>(dBμV) | Antenna<br>Factor<br>(dB/m) | PRM<br>Factor<br>dB | Cable<br>Loss<br>dB | Result<br>Level<br>(dBμV/m) | Limit<br>Line<br>(dBμV/m) | Over<br>Limit<br>(dB) | Detector | Polarization |
|----------------|----------------|-------------------------|-----------------------------|---------------------|---------------------|-----------------------------|---------------------------|-----------------------|----------|--------------|
| 1              | 2375.70        | 57.14                   | 27.88                       | 43.12               | 4.78                | 46.68                       | 74.00                     | -27.32                | Peak     | HORIZONTAL   |
| 2              | 2390.00        | 50.97                   | 27.89                       | 43.14               | 4.80                | 40.52                       | 74.00                     | -33.48                | Peak     | HORIZONTAL   |

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

## TR-4-E-009 Radiated Emission Test Result

**Test Site** : DDT 3m Chamber 2#

D:\2021 RE2# Report Data\Q21042507-2E aBOOM\FCC  
ABOVE 1G.EM6

**Test Date** : 2021-06-24

**Tested By** : Bairong

**EUT** : Bluetooth Speaker

**Model Number** : aBOOM

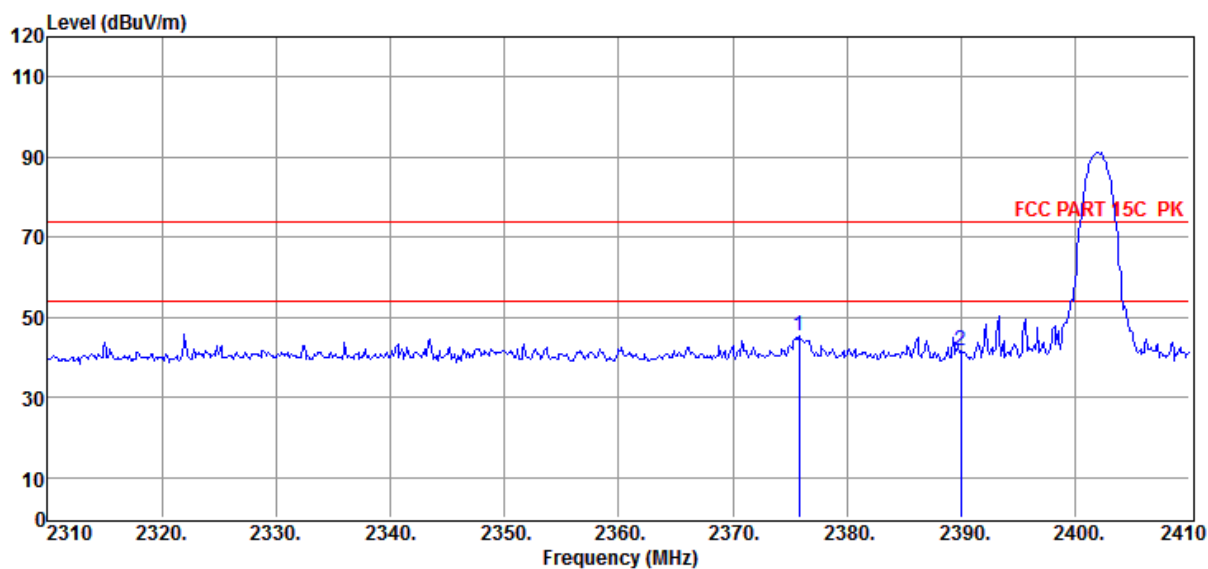
**Power Supply** : Battery

**Test Mode** : Tx mode

**Condition** : Temp:24.5°C,Humi:55%,Press:100.1kPa

**Antenna/Distance** : 2020 BBHA9120D/3m/VERTICAL

**Memo** : 2DH5 2402



| Item<br>(Mark) | Freq.<br>(MHz) | Read<br>Level<br>(dBμV) | Antenna<br>Factor<br>(dB/m) | PRM<br>Factor<br>dB | Cable<br>Loss<br>dB | Result<br>Level<br>(dBμV/m) | Limit<br>Line<br>(dBμV/m) | Over<br>Limit<br>(dB) | Detector | Polarization |
|----------------|----------------|-------------------------|-----------------------------|---------------------|---------------------|-----------------------------|---------------------------|-----------------------|----------|--------------|
| 1              | 2375.80        | 55.92                   | 27.88                       | 43.12               | 4.78                | 45.46                       | 74.00                     | -28.54                | Peak     | VERTICAL     |
| 2              | 2390.00        | 52.05                   | 27.89                       | 43.14               | 4.80                | 41.60                       | 74.00                     | -32.40                | Peak     | VERTICAL     |

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

## TR-4-E-009 Radiated Emission Test Result

**Test Site** : DDT 3m Chamber 2#

D:\2021 RE2# Report Data\Q21042507-2E aBOOM\FCC  
ABOVE 1G.EM6

**Test Date** : 2021-06-24

**Tested By** : Bairong

**EUT** : Bluetooth Speaker

**Model Number** : aBOOM

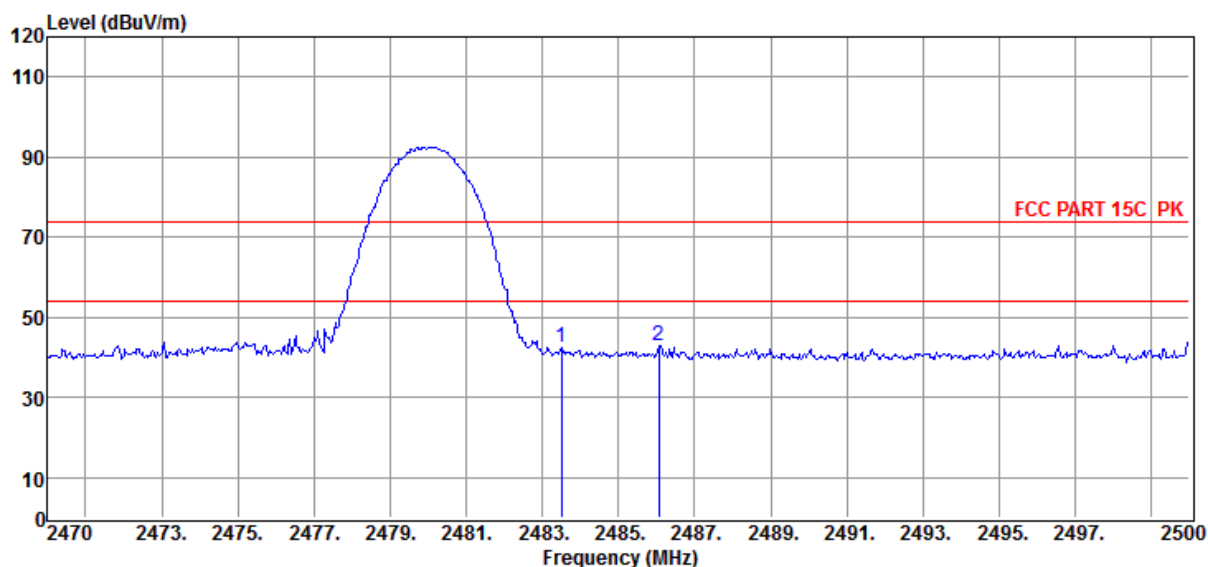
**Power Supply** : Battery

**Test Mode** : Tx mode

**Condition** : Temp:24.5°C,Humi:55%,Press:100.1kPa

**Antenna/Distance** : 2020 BBHA9120D/3m/HORIZONTAL

**Memo** : 2DH5 2480



| Item<br>(Mark) | Freq.<br>(MHz) | Read<br>Level<br>(dBμV) | Antenna<br>Factor<br>(dB/m) | PRM<br>Factor<br>dB | Cable<br>Loss<br>dB | Result<br>Level<br>(dBμV/m) | Limit<br>Line<br>(dBμV/m) | Over<br>Limit<br>(dB) | Detector | Polarization |
|----------------|----------------|-------------------------|-----------------------------|---------------------|---------------------|-----------------------------|---------------------------|-----------------------|----------|--------------|
| 1              | 2483.50        | 52.82                   | 27.98                       | 43.23               | 4.90                | 42.47                       | 74.00                     | -31.53                | Peak     | HORIZONTAL   |
| 2              | 2486.05        | 53.22                   | 27.99                       | 43.24               | 4.90                | 42.87                       | 74.00                     | -31.13                | Peak     | HORIZONTAL   |

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

## TR-4-E-009 Radiated Emission Test Result

**Test Site** : DDT 3m Chamber 2#

D:\2021 RE2# Report Data\Q21042507-2E aBOOM\FCC  
ABOVE 1G.EM6

**Test Date** : 2021-06-24

**Tested By** : Bairong

**EUT** : Bluetooth Speaker

**Model Number** : aBOOM

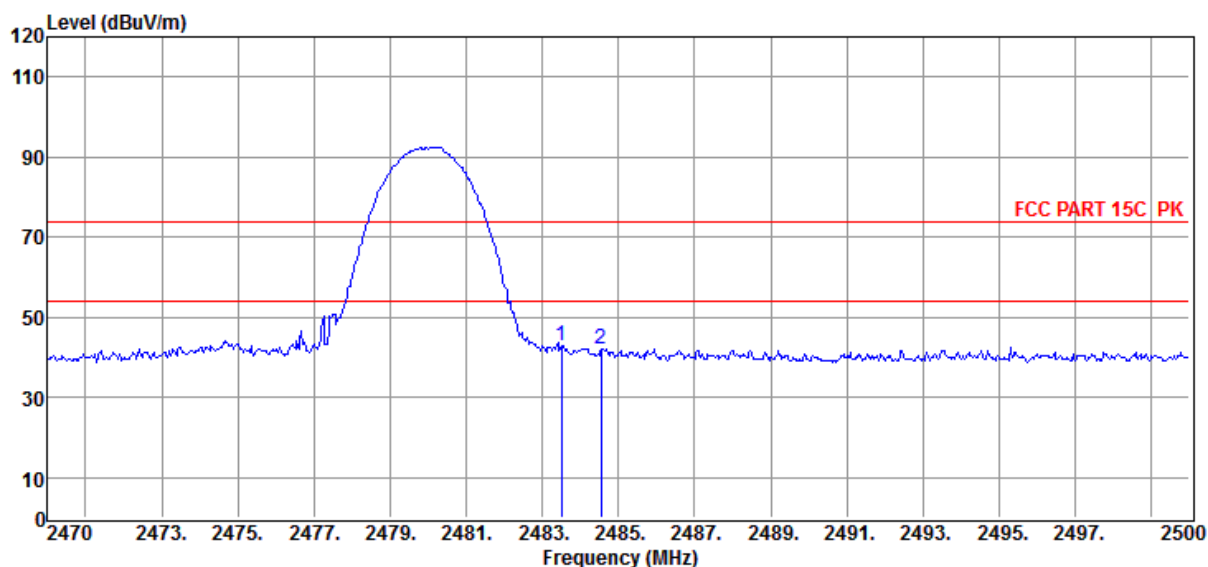
**Power Supply** : Battery

**Test Mode** : Tx mode

**Condition** : Temp:24.5°C,Humi:55%,Press:100.1kPa

**Antenna/Distance** : 2020 BBHA9120D/3m/VERTICAL

**Memo** : 2DH5 2480



| Item<br>(Mark) | Freq.<br>(MHz) | Read<br>Level<br>(dBμV) | Antenna<br>Factor<br>(dB/m) | PRM<br>Factor<br>dB | Cable<br>Loss<br>dB | Result<br>Level<br>(dBμV/m) | Limit<br>Line<br>(dBμV/m) | Over<br>Limit<br>(dB) | Detector | Polarization |
|----------------|----------------|-------------------------|-----------------------------|---------------------|---------------------|-----------------------------|---------------------------|-----------------------|----------|--------------|
| 1              | 2483.50        | 53.28                   | 27.98                       | 43.23               | 4.90                | 42.93                       | 74.00                     | -31.07                | Peak     | VERTICAL     |
| 2              | 2484.55        | 52.62                   | 27.98                       | 43.24               | 4.90                | 42.26                       | 74.00                     | -31.74                | Peak     | VERTICAL     |

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

## TR-4-E-009 Radiated Emission Test Result

**Test Site** : DDT 3m Chamber 2#

D:\2021 RE2# Report Data\Q21042507-2E aBOOM\FCC  
ABOVE 1G.EM6

**Test Date** : 2021-06-24

**Tested By** : Bairong

**EUT** : Bluetooth Speaker

**Model Number** : aBOOM

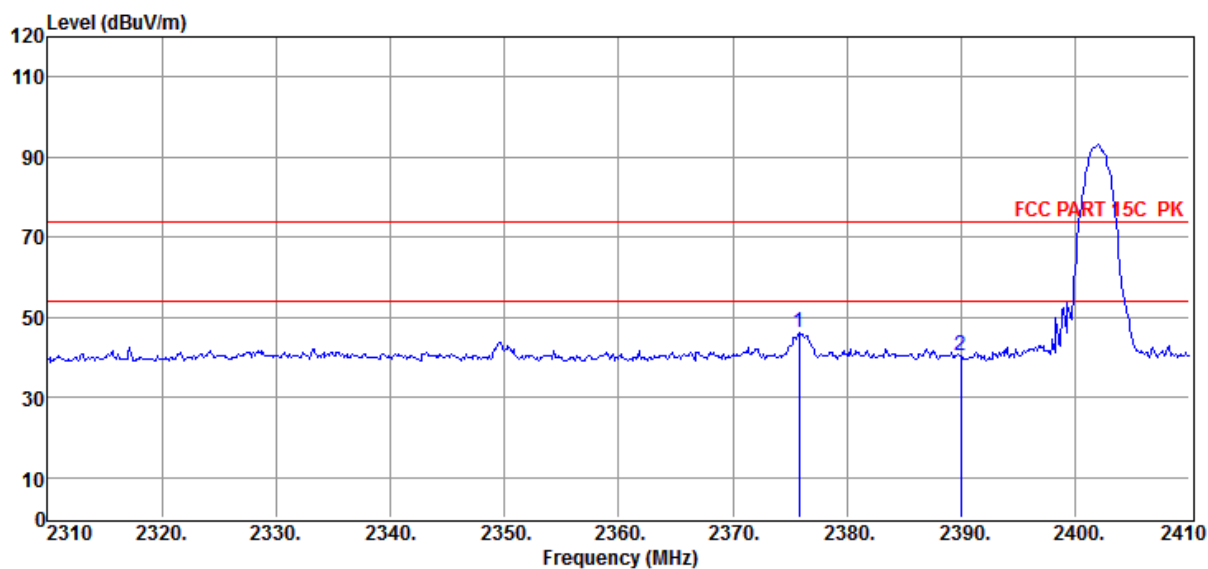
**Power Supply** : Battery

**Test Mode** : Tx mode

**Condition** : Temp:24.5°C,Humi:55%,Press:100.1kPa

**Antenna/Distance** : 2020 BBHA9120D/3m/HORIZONTAL

**Memo** : 3DH5 2402



| Item<br>(Mark) | Freq.<br>(MHz) | Read<br>Level<br>(dBμV) | Antenna<br>Factor<br>(dB/m) | PRM<br>Factor<br>dB | Cable<br>Loss<br>dB | Result<br>Level<br>(dBμV/m) | Limit<br>Line<br>(dBμV/m) | Over<br>Limit<br>(dB) | Detector | Polarization |
|----------------|----------------|-------------------------|-----------------------------|---------------------|---------------------|-----------------------------|---------------------------|-----------------------|----------|--------------|
| 1              | 2375.80        | 56.78                   | 27.88                       | 43.12               | 4.78                | 46.32                       | 74.00                     | -27.68                | Peak     | HORIZONTAL   |
| 2              | 2390.00        | 50.68                   | 27.89                       | 43.14               | 4.80                | 40.23                       | 74.00                     | -33.77                | Peak     | HORIZONTAL   |

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

## TR-4-E-009 Radiated Emission Test Result

**Test Site** : DDT 3m Chamber 2#

D:\2021 RE2# Report Data\Q21042507-2E aBOOM\FCC  
ABOVE 1G.EM6

**Test Date** : 2021-06-24

**Tested By** : Bairong

**EUT** : Bluetooth Speaker

**Model Number** : aBOOM

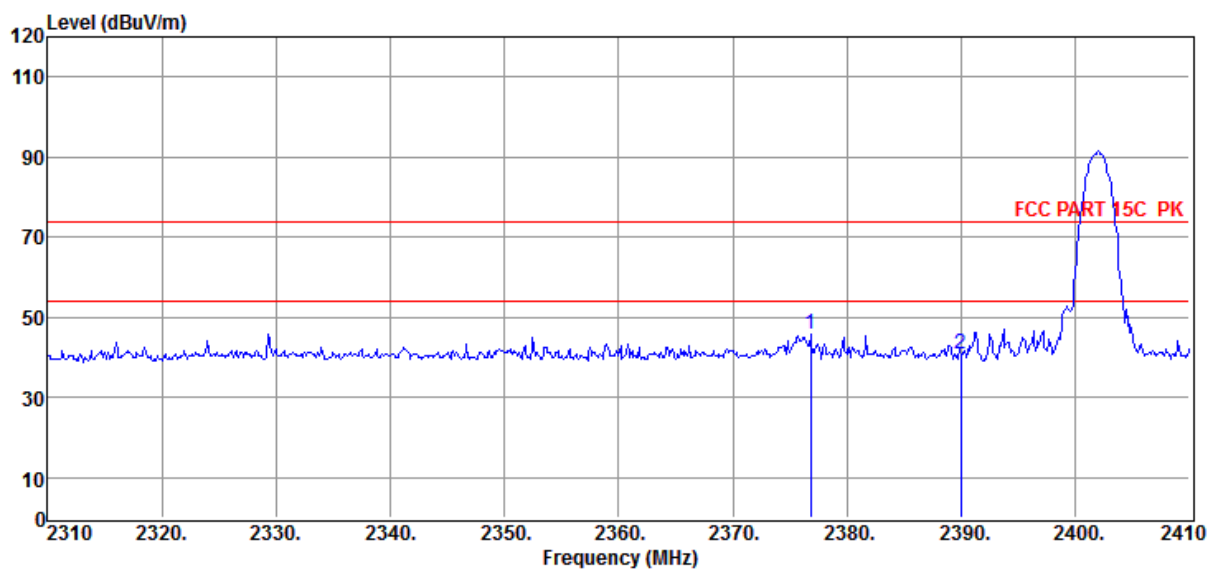
**Power Supply** : Battery

**Test Mode** : Tx mode

**Condition** : Temp:24.5°C,Humi:55%,Press:100.1kPa

**Antenna/Distance** : 2020 BBHA9120D/3m/VERTICAL

**Memo** : 3DH5 2402



| Item<br>(Mark) | Freq.<br>(MHz) | Read<br>Level<br>(dBμV) | Antenna<br>Factor<br>(dB/m) | PRM<br>Factor<br>dB | Cable<br>Loss<br>dB | Result<br>Level<br>(dBμV/m) | Limit<br>Line<br>(dBμV/m) | Over<br>Limit<br>(dB) | Detector | Polarization |
|----------------|----------------|-------------------------|-----------------------------|---------------------|---------------------|-----------------------------|---------------------------|-----------------------|----------|--------------|
| 1              | 2376.80        | 56.07                   | 27.88                       | 43.13               | 4.78                | 45.60                       | 74.00                     | -28.40                | Peak     | VERTICAL     |
| 2              | 2390.00        | 51.12                   | 27.89                       | 43.14               | 4.80                | 40.67                       | 74.00                     | -33.33                | Peak     | VERTICAL     |

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

## TR-4-E-009 Radiated Emission Test Result

**Test Site** : DDT 3m Chamber 2#

D:\2021 RE2# Report Data\Q21042507-2E aBOOM\FCC  
ABOVE 1G.EM6

**Test Date** : 2021-06-24

**Tested By** : Bairong

**EUT** : Bluetooth Speaker

**Model Number** : aBOOM

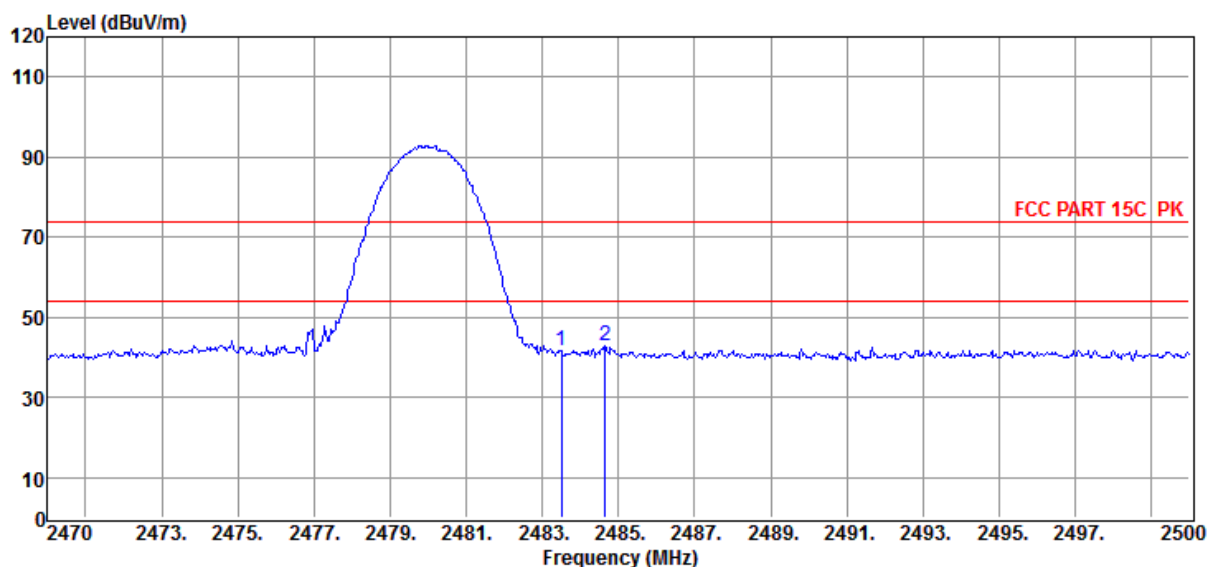
**Power Supply** : Battery

**Test Mode** : Tx mode

**Condition** : Temp:24.5°C,Humi:55%,Press:100.1kPa

**Antenna/Distance** : 2020 BBHA9120D/3m/HORIZONTAL

**Memo** : 3DH5 2480



| Item<br>(Mark) | Freq.<br>(MHz) | Read<br>Level<br>(dBμV) | Antenna<br>Factor<br>(dB/m) | PRM<br>Factor<br>dB | Cable<br>Loss<br>dB | Result<br>Level<br>(dBμV/m) | Limit<br>Line<br>(dBμV/m) | Over<br>Limit<br>(dB) | Detector | Polarization |
|----------------|----------------|-------------------------|-----------------------------|---------------------|---------------------|-----------------------------|---------------------------|-----------------------|----------|--------------|
| 1              | 2483.50        | 52.05                   | 27.98                       | 43.23               | 4.90                | 41.70                       | 74.00                     | -32.30                | Peak     | HORIZONTAL   |
| 2              | 2484.64        | 53.06                   | 27.98                       | 43.24               | 4.90                | 42.70                       | 74.00                     | -31.30                | Peak     | HORIZONTAL   |

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

## TR-4-E-009 Radiated Emission Test Result

**Test Site** : DDT 3m Chamber 2#

D:\2021 RE2# Report Data\Q21042507-2E aBOOM\FCC  
ABOVE 1G.EM6

**Test Date** : 2021-06-24

**Tested By** : Bairong

**EUT** : Bluetooth Speaker

**Model Number** : aBOOM

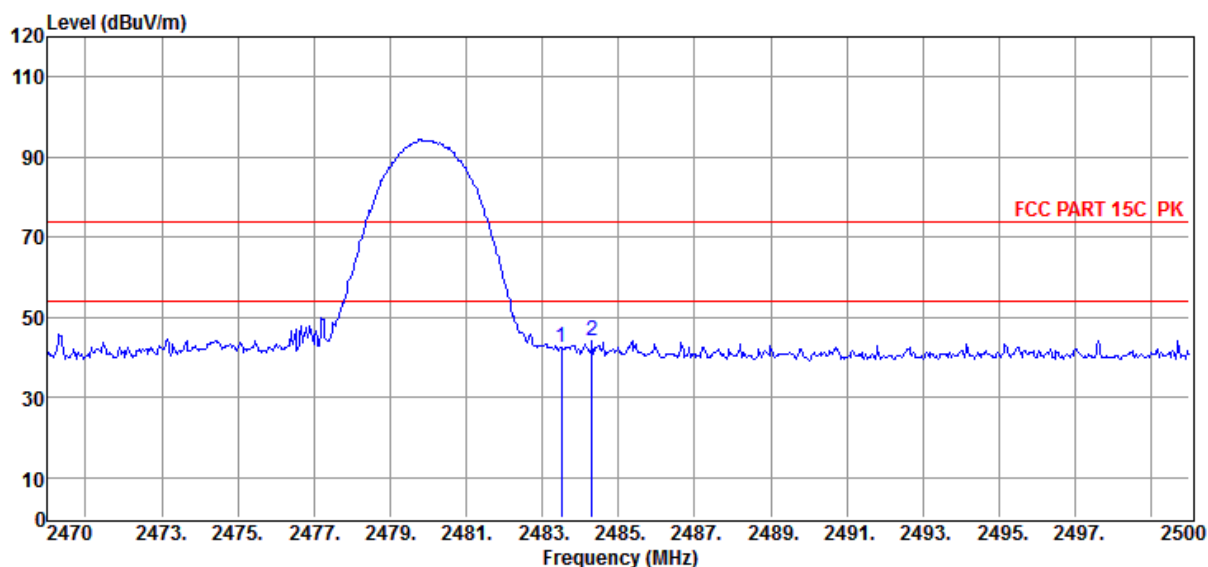
**Power Supply** : Battery

**Test Mode** : Tx mode

**Condition** : Temp:24.5°C,Humi:55%,Press:100.1kPa

**Antenna/Distance** : 2020 BBHA9120D/3m/VERTICAL

**Memo** : 3DH5 2480



| Item<br>(Mark) | Freq.<br>(MHz) | Read<br>Level<br>(dBμV) | Antenna<br>Factor<br>(dB/m) | PRM<br>Factor<br>dB | Cable<br>Loss<br>dB | Result<br>Level<br>(dBμV/m) | Limit<br>Line<br>(dBμV/m) | Over<br>Limit<br>(dB) | Detector | Polarization |
|----------------|----------------|-------------------------|-----------------------------|---------------------|---------------------|-----------------------------|---------------------------|-----------------------|----------|--------------|
| 1              | 2483.50        | 52.88                   | 27.98                       | 43.23               | 4.90                | 42.53                       | 74.00                     | -31.47                | Peak     | VERTICAL     |
| 2              | 2484.31        | 54.34                   | 27.98                       | 43.23               | 4.90                | 43.99                       | 74.00                     | -30.01                | Peak     | VERTICAL     |

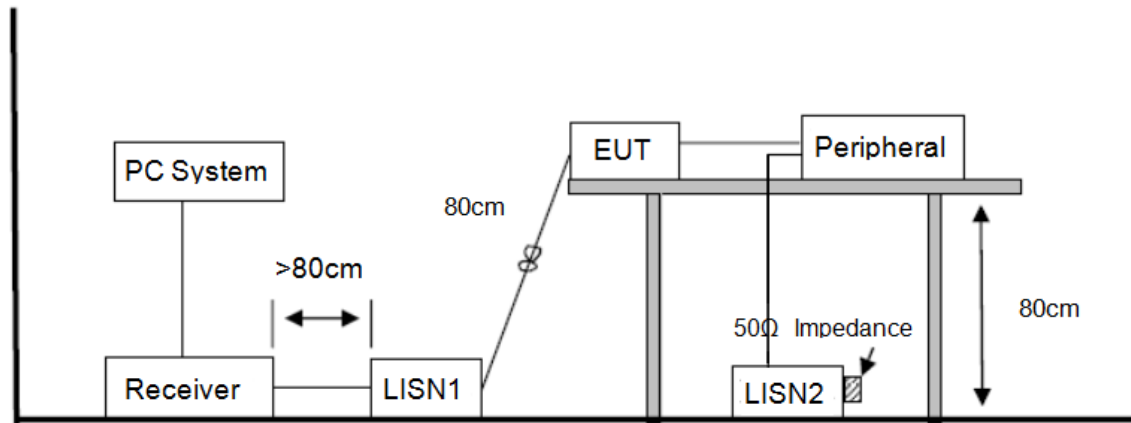
Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

## 13. Power Line Conducted Emission

### 13.1. Block diagram of test setup



### 13.2. Power line conducted emission limits

| Frequency         | Quasi-Peak Level<br>dB( $\mu$ V) | Average Level<br>dB( $\mu$ V) |
|-------------------|----------------------------------|-------------------------------|
| 150 kHz ~ 500 kHz | 66 ~ 56*                         | 56 ~ 46*                      |
| 500 kHz ~ 5 MHz   | 56                               | 46                            |
| 5 MHz ~ 30 MHz    | 60                               | 50                            |

Note 1: \* Decreasing linearly with logarithm of frequency.

Note 2: The lower limit shall apply at the transition frequencies.

### 13.3. Test procedure

The EUT and Support equipment, if needed, were put placed on a non-metallic table, 80cm above the ground plane.

Configuration EUT to simulate typical usage as described in clause 2.4 and test equipment as described in clause 10.2 of this report.

All I/O cables were positioned to simulate typical actual usage as per ANSI C63.10.

All support equipment power received from a second LISN.

Emissions were measured on each current carrying line of the EUT using an EMI Test Receiver connected to the LISN powering the EUT.

The Receiver scanned from 150 kHz to 30 MHz for emissions in each of the test modes.

During the above scans, the emissions were maximized by cable manipulation.

The test mode(s) described in clause 2.4 were scanned during the preliminary test.

After the preliminary scan, we found the test mode producing the highest emission level.

The EUT configuration and worse cable configuration of the above highest emission levels were recorded for reference of the final test.

EUT and support equipment were set up on the test bench as per the configuration with highest emission level in the preliminary test.

A scan was taken on both power lines, Neutral and Line, recording at least the six highest emissions.

Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit.

The test data of the worst-case condition(s) was recorded.

The bandwidth of test receiver is set at 9 kHz.

#### 13.4. Test result

Pass. (See below detailed test result)

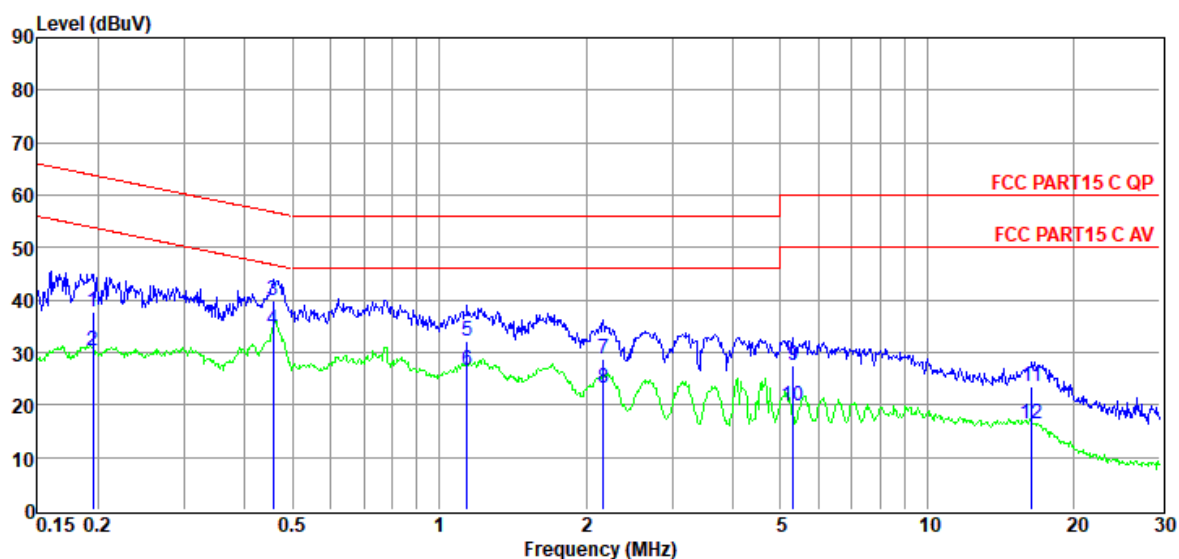
Note1: All emissions not reported below are too low against the prescribed limits.

Note2: “----” means Peak detection; “----” means Average detection.

Note3: Pre-test AC conducted emission at both voltage AC 120V/60Hz and AC 240V/50Hz, recorded worse case.

## TR-4-E-010 Conducted Emission Test Result

**Test Site** : DDT 5# Shield Room **D:\2021 report data\Q21042507-2E\CE.EM6**  
**Test Date** : 2021-06-29 **Tested By** : Bairong  
**EUT** : Bluetooth Speaker **Model Number** : aBOOM  
**Power Supply** : AC 120V 60Hz **Test Mode** : TX mode  
**Condition** : Temp:24.5°C,Humi:55.5%,Press:101.4kPa **LISN** : 2020 ENV 216 1#/NEUTRAL  
**Memo** : BT



| Item<br>(Mark) | Freq.<br>(MHz) | Read Level<br>(dBμV) | LISN Factor<br>(dB) | Cable Loss<br>(dB) | Pulse Limiter Factor<br>(dB) | Result Level<br>(dBμV) | Limit Line<br>(dBμV) | Over Limit<br>(dB) | Detector | Phase   |
|----------------|----------------|----------------------|---------------------|--------------------|------------------------------|------------------------|----------------------|--------------------|----------|---------|
| 1              | 0.20           | 18.25                | 9.39                | 0.02               | 10.01                        | 37.67                  | 63.80                | -26.13             | QP       | NEUTRAL |
| 2              | 0.20           | 10.97                | 9.39                | 0.02               | 10.01                        | 30.39                  | 53.80                | -23.41             | Average  | NEUTRAL |
| 3              | 0.46           | 20.62                | 9.40                | 0.02               | 10.01                        | 40.05                  | 56.76                | -16.71             | QP       | NEUTRAL |
| 4              | 0.46           | 14.86                | 9.40                | 0.02               | 10.01                        | 34.29                  | 46.76                | -12.47             | Average  | NEUTRAL |
| 5              | 1.14           | 12.56                | 9.41                | 0.03               | 10.01                        | 32.01                  | 56.00                | -23.99             | QP       | NEUTRAL |
| 6              | 1.14           | 7.02                 | 9.41                | 0.03               | 10.01                        | 26.47                  | 46.00                | -19.53             | Average  | NEUTRAL |
| 7              | 2.17           | 9.34                 | 9.41                | 0.05               | 10.01                        | 28.81                  | 56.00                | -27.19             | QP       | NEUTRAL |
| 8              | 2.17           | 3.72                 | 9.41                | 0.05               | 10.01                        | 23.19                  | 46.00                | -22.81             | Average  | NEUTRAL |
| 9              | 5.31           | 7.95                 | 9.48                | 0.08               | 10.01                        | 27.52                  | 60.00                | -32.48             | QP       | NEUTRAL |
| 10             | 5.31           | 0.26                 | 9.48                | 0.08               | 10.01                        | 19.83                  | 50.00                | -30.17             | Average  | NEUTRAL |
| 11             | 16.40          | 3.85                 | 9.60                | 0.14               | 10.02                        | 23.61                  | 60.00                | -36.39             | QP       | NEUTRAL |
| 12             | 16.40          | -3.34                | 9.60                | 0.14               | 10.02                        | 16.42                  | 50.00                | -33.58             | Average  | NEUTRAL |

Note:

1. Result Level = Read Level + LISN Factor + Pulse Limiter Factor + Cable loss.
2. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 200 Hz (9 kHz—150 kHz), 9 kHz (150 kHz—30 MHz).
4. Step size: 80Hz (0.009MHz-0.15MHz), 4 kHz (0.15MHz-30MHz), Scan time: auto.

## TR-4-E-010 Conducted Emission Test Result

**Test Site** : DDT 5# Shield Room

D:\2021 report data\Q21042507-2E\CE.EM6

**Test Date** : 2021-06-29

**Tested By** : Bairong

**EUT** : Bluetooth Speaker

**Model Number** : aBOOM

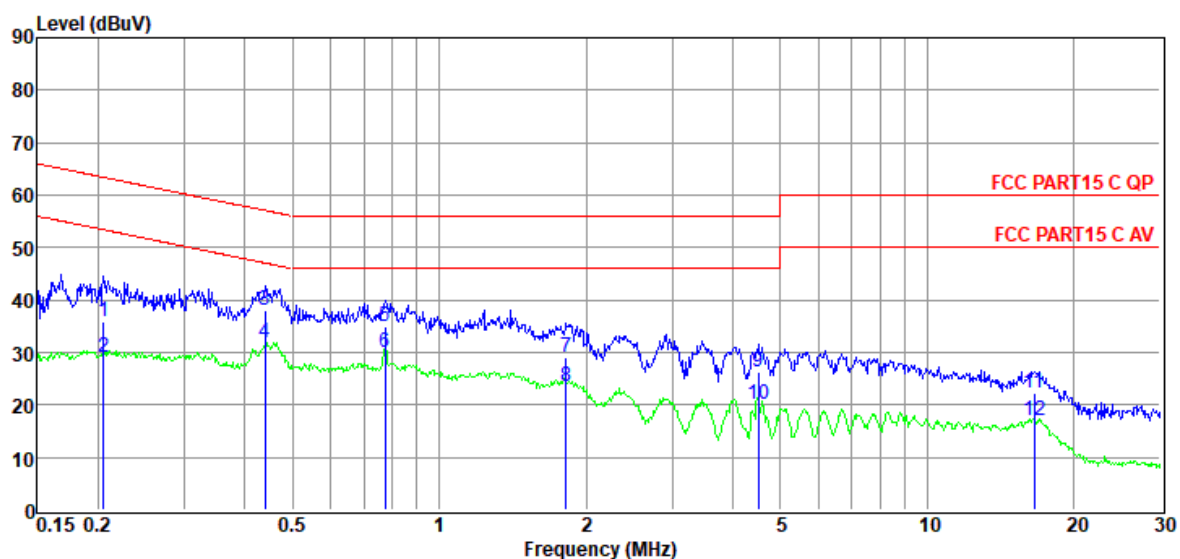
**Power Supply** : AC 120V 60Hz

**Test Mode** : TX mode

**Condition** : Temp:24.5°C,Humi:55.5%,Press:101.4kPa

**LISN** : 2020 ENV 216 1#/LINE

**Memo** : BT



| Item<br>(Mark) | Freq.<br>(MHz) | Read Level<br>(dBμV) | LISN Factor<br>(dB) | Cable Loss<br>(dB) | Pulse Limiter Factor<br>(dB) | Result Level<br>(dBμV) | Limit Line<br>(dBμV) | Over Limit<br>(dB) | Detector | Phase |
|----------------|----------------|----------------------|---------------------|--------------------|------------------------------|------------------------|----------------------|--------------------|----------|-------|
| 1              | 0.21           | 16.33                | 9.42                | 0.02               | 10.01                        | 35.78                  | 63.40                | -27.62             | QP       | LINE  |
| 2              | 0.21           | 9.78                 | 9.42                | 0.02               | 10.01                        | 29.23                  | 53.40                | -24.17             | Average  | LINE  |
| 3              | 0.44           | 18.59                | 9.45                | 0.02               | 10.01                        | 38.07                  | 57.07                | -19.00             | QP       | LINE  |
| 4              | 0.44           | 12.33                | 9.45                | 0.02               | 10.01                        | 31.81                  | 47.07                | -15.26             | Average  | LINE  |
| 5              | 0.78           | 15.60                | 9.44                | 0.03               | 10.01                        | 35.08                  | 56.00                | -20.92             | QP       | LINE  |
| 6              | 0.78           | 10.45                | 9.44                | 0.03               | 10.01                        | 29.93                  | 46.00                | -16.07             | Average  | LINE  |
| 7              | 1.82           | 9.51                 | 9.43                | 0.05               | 10.01                        | 29.00                  | 56.00                | -27.00             | QP       | LINE  |
| 8              | 1.82           | 3.89                 | 9.43                | 0.05               | 10.01                        | 23.38                  | 46.00                | -22.62             | Average  | LINE  |
| 9              | 4.50           | 6.58                 | 9.47                | 0.08               | 10.01                        | 26.14                  | 56.00                | -29.86             | QP       | LINE  |
| 10             | 4.50           | 0.64                 | 9.47                | 0.08               | 10.01                        | 20.20                  | 46.00                | -25.80             | Average  | LINE  |
| 11             | 16.57          | 2.65                 | 9.55                | 0.14               | 10.02                        | 22.36                  | 60.00                | -37.64             | QP       | LINE  |
| 12             | 16.57          | -2.63                | 9.55                | 0.14               | 10.02                        | 17.08                  | 50.00                | -32.92             | Average  | LINE  |

Note:

1. Result Level = Read Level + LISN Factor + Pulse Limiter Factor + Cable loss.
2. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 200 Hz (9 kHz—150 kHz), 9 kHz (150 kHz—30 MHz).
4. Step size: 80Hz (0.009MHz-0.15MHz), 4 kHz (0.15MHz-30MHz), Scan time: auto.

## **14. Antenna Requirements**

### **14.1. Limit**

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. And according to FCC 47 CFR Section 15.247 (b), if transmitting antennas of directional gain greater than 6 dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

### **14.2. Result**

The antenna used for this product is PCB antenna and that no antenna other than that furnished by the responsible party shall be used with the device, the maximum peak gain is 0 dBi.

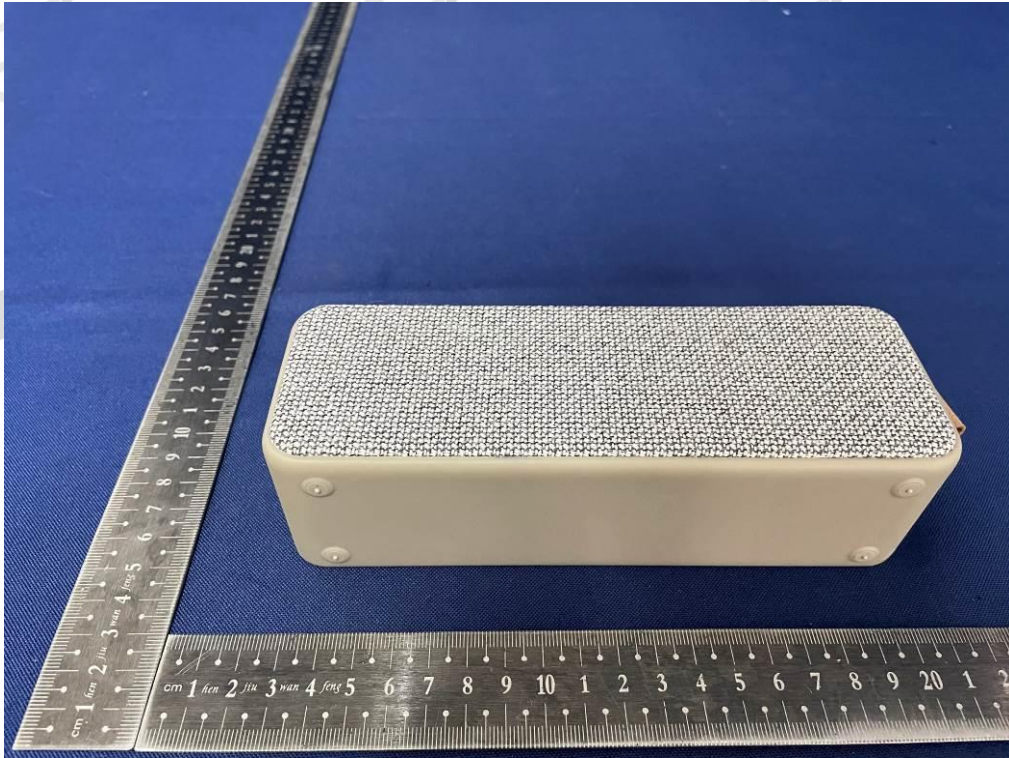
## 15. Test Setup Photograph

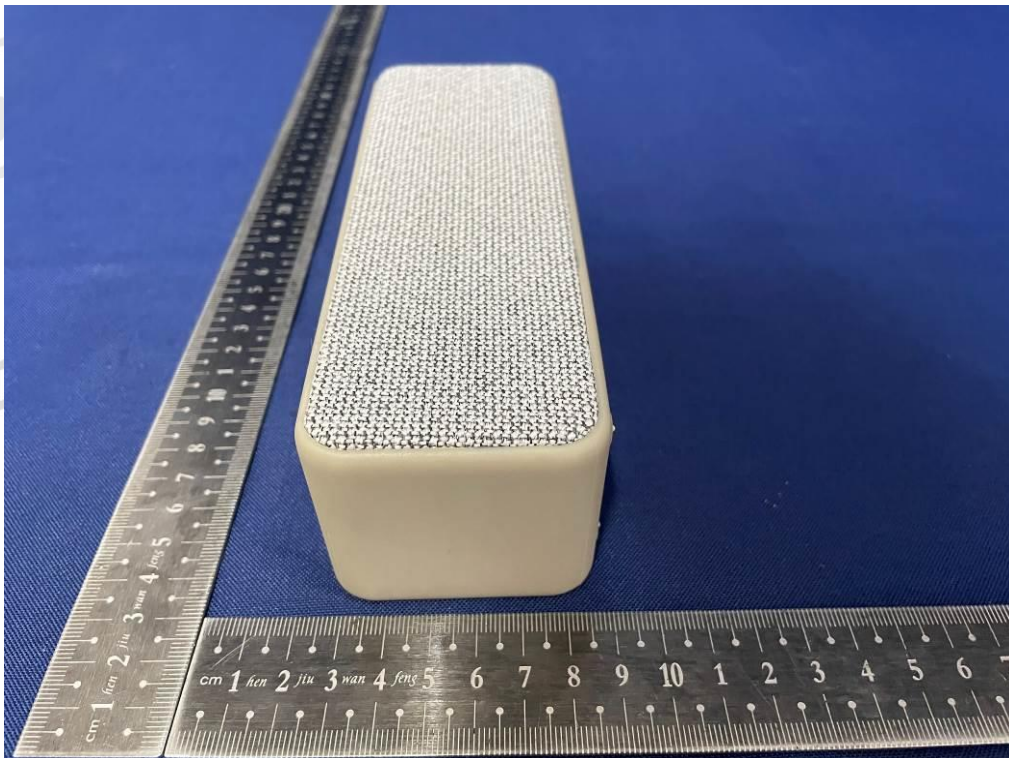


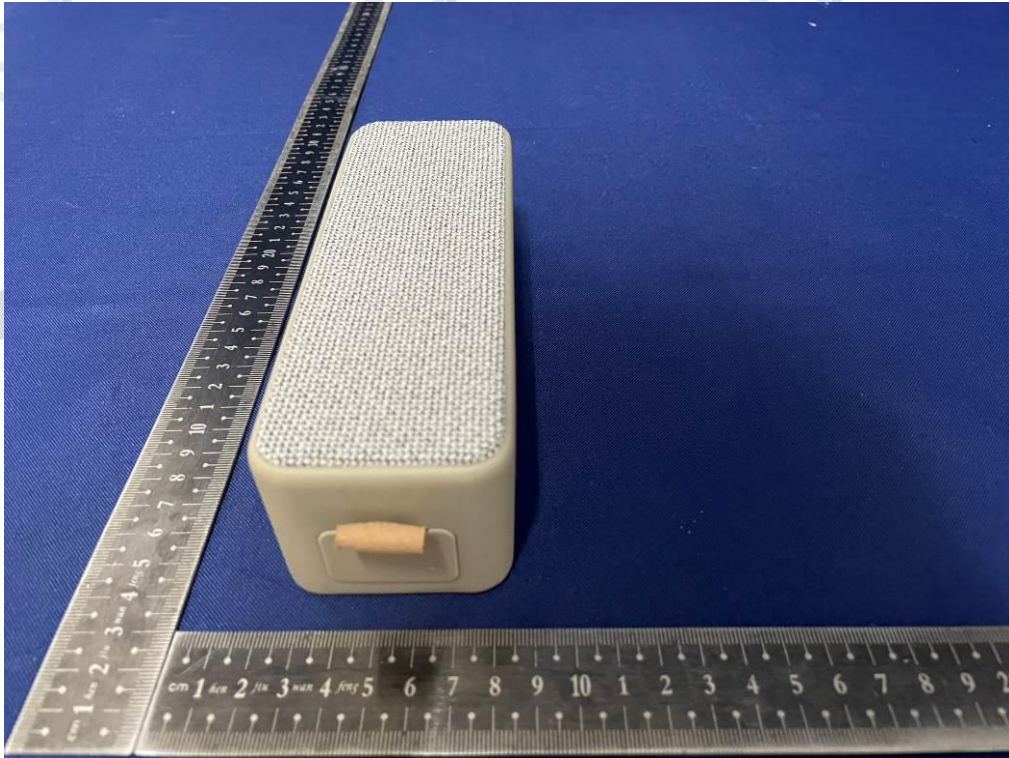


## 16. Photos of the EUT

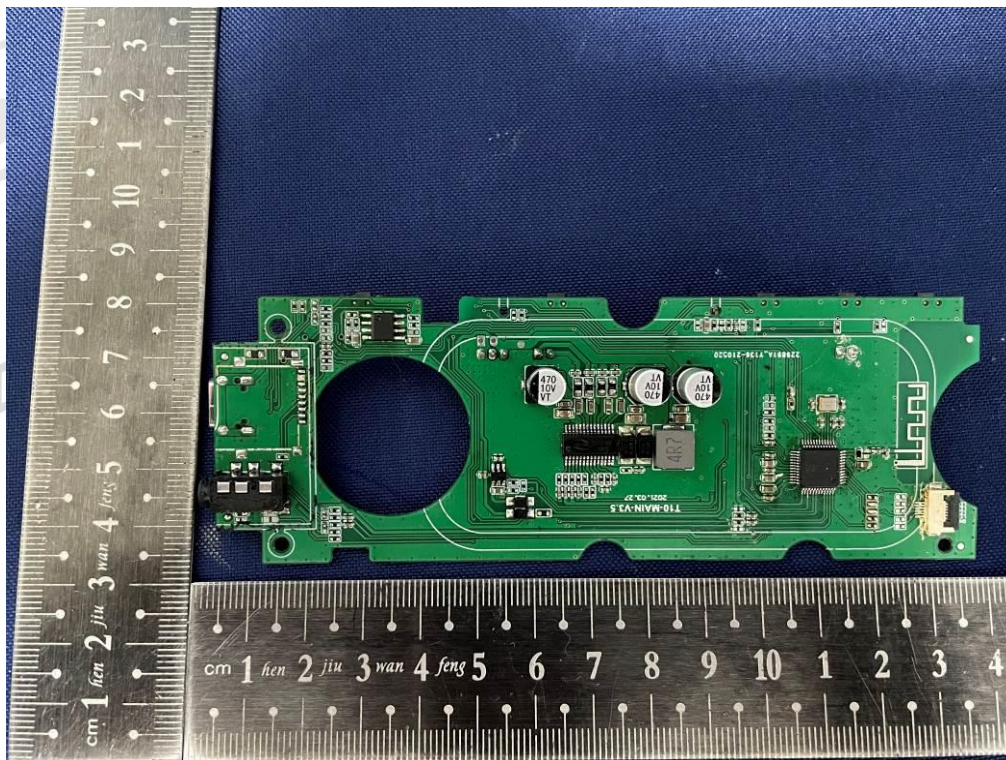
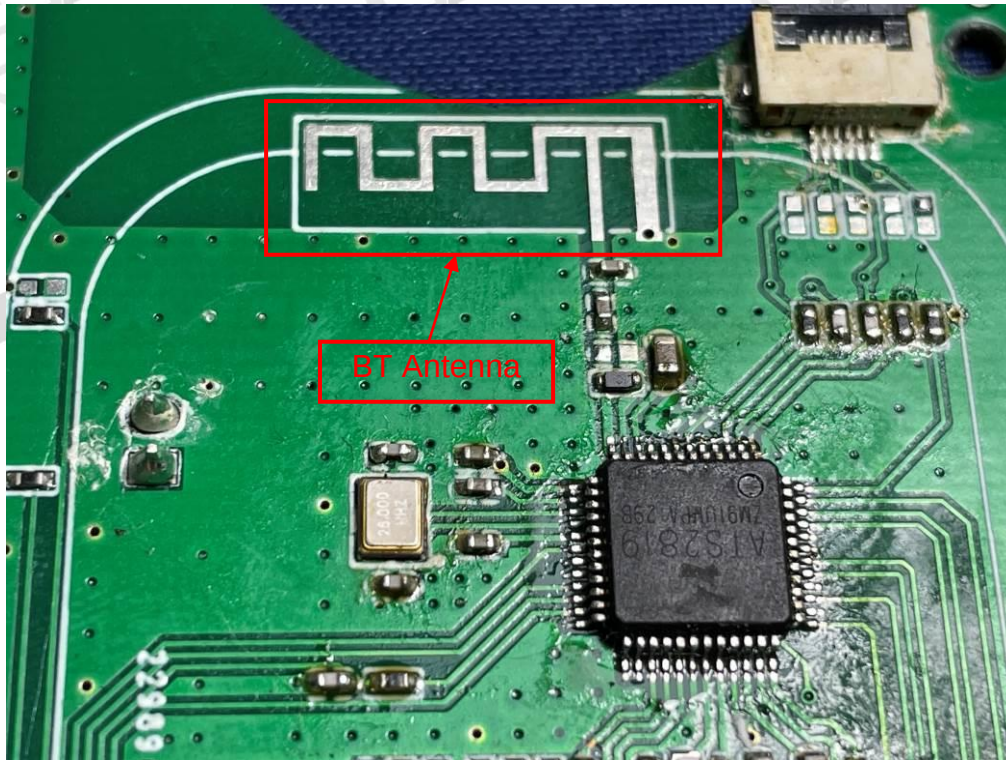


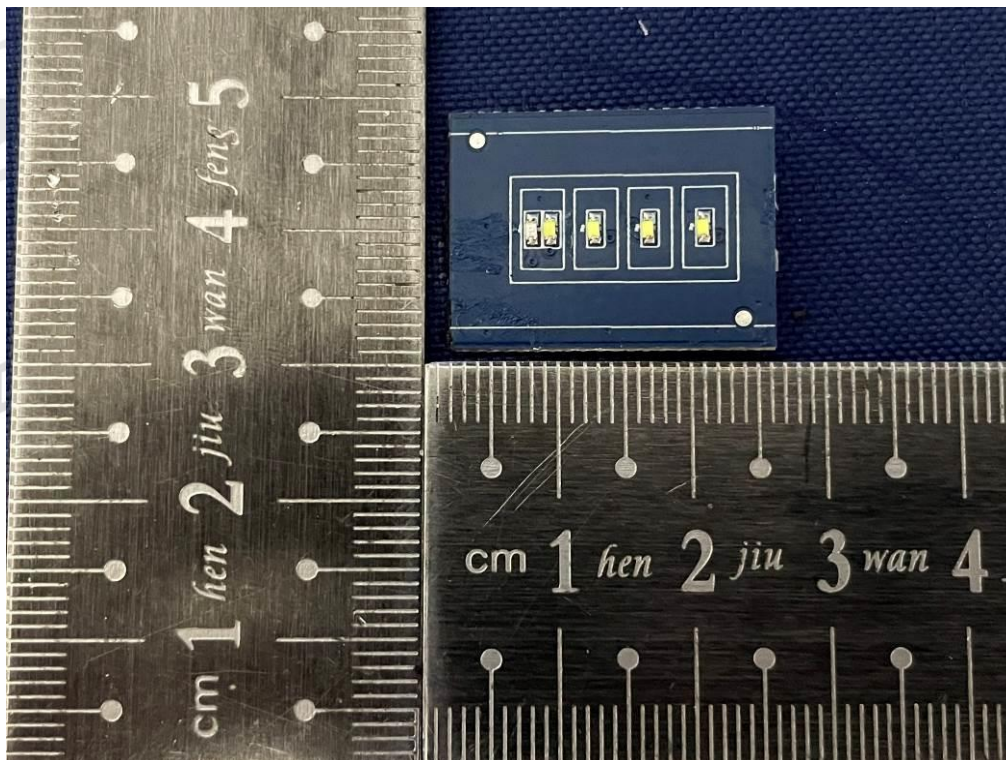


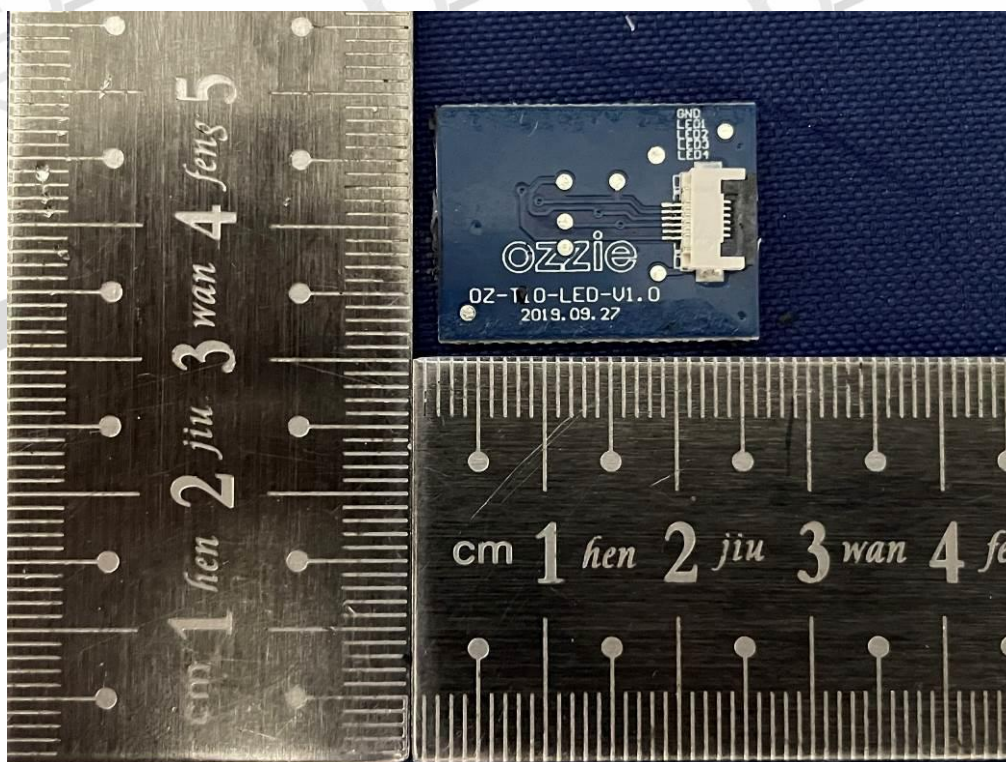


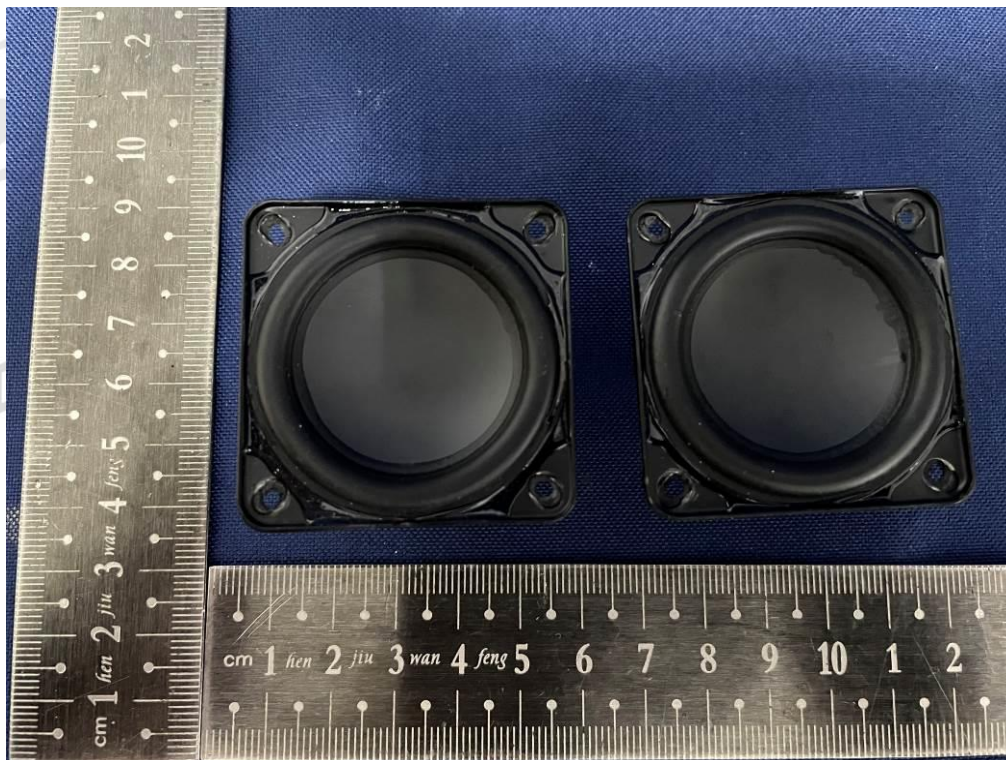
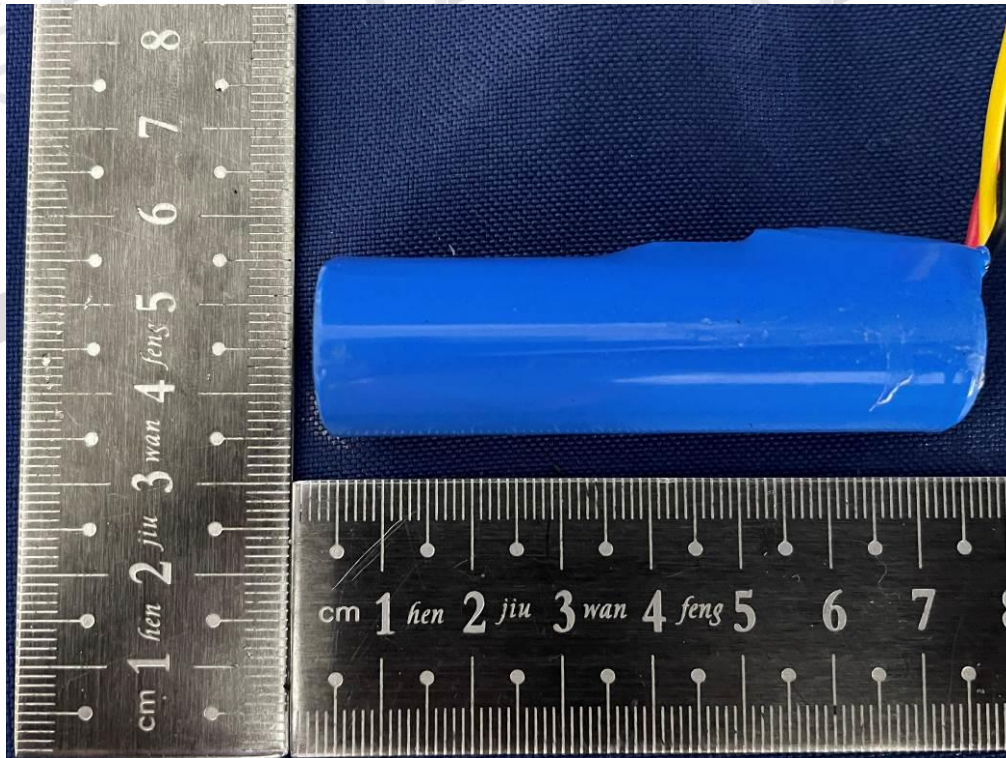


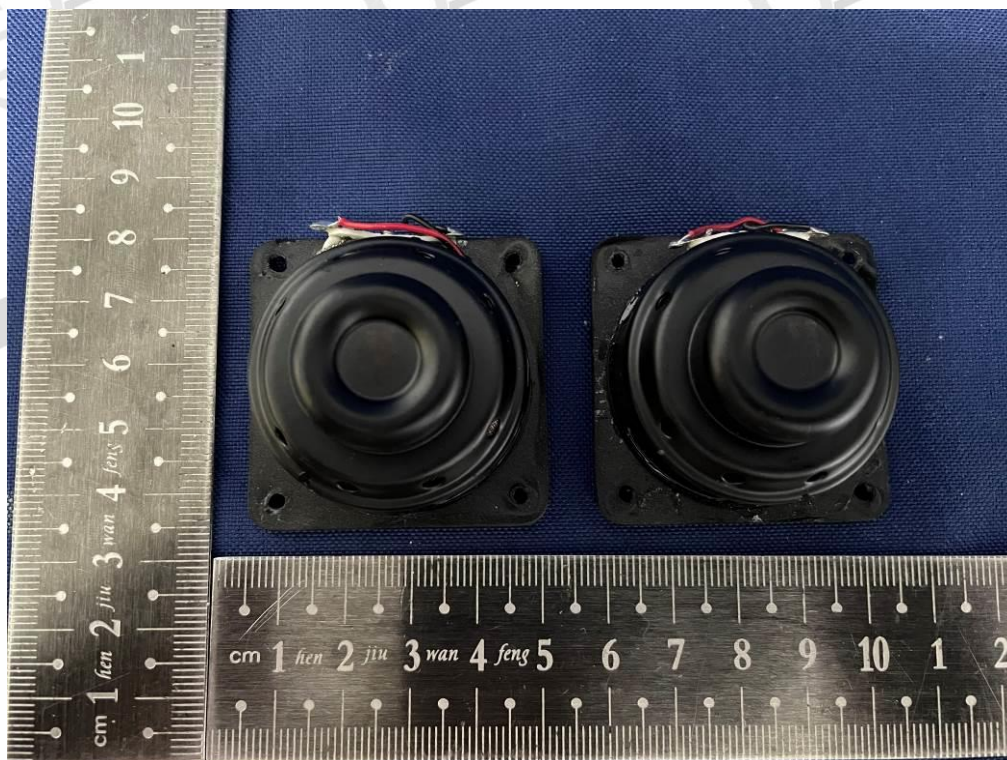












END OF REPORT