

Industrial Internet Innovation Center (Shanghai) Co.,Ltd.

FCC BLE TEST REPORT

| | |
|-------------|------------------------------------|
| PRODUCT | ELECTRONIC SHELF LABEL |
| BRAND | SUNMI |
| MODEL | BL260 |
| APPLICANT | Shanghai Sunmi Technology Co.,Ltd. |
| FCC ID | 2AH25BL260 |
| ISSUE DATE | September 26, 2022 |
| STANDARD(S) | FCC Part15 |

Prepared by: Tao Lingyan

Signature



Reviewed by: Yang Fan

Signature



Approved by: Liu Long

Signature

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1. Summary of Test Report

1.1 Test Standard(s)

| No. | Test Standard(s) | Title | Version |
|-----|------------------|--|---------|
| 1 | FCC Part15 | FCC CFR 47, Part 15, Subpart C: 15.205 Restricted bands of operation; 15.209 Radiated emission limits, general requirements; 15.247 Operation within the bands 902-928MHz, 2400-2483.5MHz, and 5725-5850MHz. | 2020 |

1.2 Reference Document(s)

| No. | Reference | Title | Version |
|-----|-------------|--|---------|
| 1 | ANSI C63.10 | American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices | 2013 |
| 2 | KDB 558074 | Guidance for Performing Compliance Measurements on Frequency Hopping Spread Spectrum systems (DSS) Operating Under §15.247 | 2019 |

1.3 Summary of Test Results

| Measurement Items | Sub-clause of Part15C | Verdict |
|---|-----------------------|---------|
| Maximum Peak Output Power | 15.247(b) | Pass |
| Peak Power Spectral Density | 15.247(e) | Pass |
| 6dB Occupied Bandwidth | 15.247(a) | Pass |
| 99% Occupied Bandwidth | 15.247(a) | Pass |
| Band Edges Compliance | 15.247(d) | Pass |
| Transmitter Spurious Emission-Conducted | 15.247(d) | Pass |
| Transmitter Spurious Emission-Radiated | 15.247/15.205/15.209 | Pass |
| AC Powerline Conducted Emission | 15.207 | N/A |

NOTE:

The BL260, manufactured by Shanghai Sunmi Technology Co.,Ltd. is a new product for testing. Industrial Internet Innovation Center (Shanghai) Co., Ltd. only performed test cases which identified with Pass/Fail/Inc result in section 1.2.

Industrial Internet Innovation Center (Shanghai) Co., Ltd. has verified that the compliance of the tested device specified in section 4 of this test report is successfully evaluated according to the procedure and test methods as defined in type certification requirement listed in section 1 of this test report.

a. All the test data for each data were verified, but only the worst case was reported.

1.4 Data Provided by Applicant

| No. | Item(s) | Data |
|-----|---------------------|----------|
| 1 | Antenna gain of EUT | -0.5 dBi |

Note: The data of 1.3 is provided by the customer may affect the validity of the test results in this report, and the impact and consequences of this shall be undertaken by the customer.

2. General Information of The Laboratory

2.1 Testing Laboratory

| | |
|----------------------|--|
| Lab Name | Industrial Internet Innovation Center (Shanghai) Co.,Ltd. |
| Address | Building 4, No. 766, Jingang Road, Pudong, Shanghai, China |
| Telephone | 021-68866880 |
| FCC Registration No. | 958356 |
| FCC Designation No. | CN1177 |

2.2 Laboratory Environmental Requirements

| | |
|----------------------|-------------|
| Temperature | 15°C~35°C |
| Relative Humidity | 25%RH~75%RH |
| Atmospheric Pressure | 101kPa |

2.3 Project Information

| | |
|-----------------|---------------------------------------|
| Project Manager | Gao Hongning |
| Test Date | August 16, 2022 to September 16, 2022 |

3. General Information of The Customer

3.1 Applicant

| | |
|-----------|--|
| Company | Shanghai Sunmi Technology Co.,Ltd. |
| Address | Room 505, No.388 Song Hu Road, Yang Pu District, Shanghai, China |
| Telephone | 18826519551 |

3.2 Manufacturer

| | |
|---------|--|
| Company | Shanghai Sunmi Technology Co.,Ltd. |
| Address | Room 505, No.388 Song Hu Road, Yang Pu District, Shanghai, China |

4. General Information of The Product

4.1 Product Description for Equipment under Test (EUT)

| | |
|---|--------------------------------|
| Product | ELECTRONIC SHELF LABEL |
| Model | BL260 |
| Date of Receipt | August 16,2022/ August 16,2022 |
| EUT ID* | S01/S02 |
| SN/IMEI | B110D27T00006/ B110D27T00008 |
| Supported Radio Technology and Bands | BLE NFC |
| Hardware Version | N/A |
| Software Version | N/A |
| FCC ID | 2AH25BL260 |
| NOTE: EUT ID is the internal identification code of the laboratory. | |

5. Test Configuration Information

5.1 Laboratory Environmental Conditions

5.1.1 Permanent Facilities

| | | | |
|------------------------|--------------------------|---------|---------|
| Relative Humidity | Min. = 45 %, Max. = 55 % | | |
| Atmospheric Pressure | 101kPa | | |
| Temperature | Normal | Minimum | Maximum |
| | 25℃ | 3℃ | 40℃ |
| Working Voltage of EUT | Normal | Minimum | Maximum |
| | 3V | 2.2V | 3.3V |

5.2 Test Equipments Utilized

5.2.1 Conducted Test System

| No. | Name | Model | S/N | Manufacturer | Cal. Date | Cal. Interval |
|-----|---|---------------|-------------------|--------------|-------------------|---------------|
| 1 | Programmable Power Supply | Keithley 2303 | 4039070 | Starpont | May 10, 2021 | 1.5 Years |
| 2 | Vector Signal Generator | SMBV100 A | 257904 | R&S | February 21, 2022 | 1 Year |
| 3 | Temperature box | B-TF-107C | BTF107C-201804107 | Boyi | May 10, 2021 | 1.5 Years |
| 4 | Spectrum Analyzer | FSQ40 | 200063 | R&S | November 02, 2021 | 1 Year |
| 5 | USB Wideband Power Sensor | U2021XA | MY56410009 | Keysight | February 21, 2022 | 1 Year |
| 6 | Simultaneous Sampling DQA | U2531A | TW56183514 | Agilent | March 02, 2022 | 1 Year |
| 7 | Vector Signal Generator | SMU200A | 104684 | R&S | May 10, 2021 | 1.5 Years |
| 8 | Wireless communication comprehensive tester | CMW270 | 100919 | R&S | May 10, 2021 | 1.5 Years |
| 9 | Eagle Test Software | Eagle V3.3 | N/A | ECIT | N/A | N/A |

5.2.2 Radiated Emission Test System

| No. | Name | Model | S/N | Manufacturer | Cal. Date | Cal. Interval |
|-----|--------------------------------------|-----------------|--------------|--------------|-----------|---------------|
| 1 | Universal Radio Communication Tester | CMU200 | 123123 | R&S | 2021/5/10 | 1.5 year |
| 2 | Universal Radio Communication Tester | CMW500 | 104178 | R&S | 2021/5/10 | 1.5 year |
| 3 | EMI Test Receiver | ESU40 | 100307 | R&S | 2022/2/23 | 1 year |
| 4 | TRILOG Broadband Antenna | VULB9163 | VULB9163-515 | Schwarzbeck | 2022/3/11 | 1 year |
| 5 | Double- ridged Waveguide Antenna | ETS-3117 | 00135890 | ETS | 2022/3/9 | 2 years |
| 6 | Horn Antenna | 3160-09 | LM6321 | ETS | 2021/2/3 | 3 years |
| 7 | Horn Antenna | 3160-10 | LM5942 | ETS | 2021/2/3 | 3 years |
| 8 | Pre-amplifier | SCU08F1 | 8320024 | R&S | 2021/5/10 | 1.5 year |
| 9 | Pre-amplifier | SCU18 | 10155 | R&S | 2021/5/10 | 1.5 year |
| 10 | Pre-amplifier | SCU26 | 10025 | R&S | 2021/5/10 | 1.5 year |
| 11 | Pre-amplifier | SCU40 | 10020 | R&S | 2021/5/10 | 1.5 year |
| 12 | 2-Line V-Network | ENV216 | 101380 | R&S | 2022/2/21 | 1 year |
| 13 | EMI Test Receiver | ESCI | 101235 | R&S | 2022/2/23 | 1 year |
| 14 | EMI Test software | EMC32 V9.15 | N/A | R&S | N/A | N/A |
| 15 | EMI Test software | EMC32 V10.35.02 | N/A | R&S | N/A | N/A |

5.3 Measurement Uncertainty

| Item(s) | Range | Confidence Level | Calculated Uncertainty |
|--------------------------------|-------------------|------------------|------------------------|
| Peak Output Power-Conducted | 2402MHz-2480MHz | 95% | 0.544dB |
| Peak Power Spectral Density | 2402MHz-2480MHz | 95% | 0.544dB |
| 6dB Bandwidth | 2402MHz-2480MHz | 95% | 62.04Hz |
| Frequency Band Edges-Conducted | 2390MHz-2488.5MHz | 95% | 0.544dB |
| Conducted Emission | 9KHz-30MHz | 95% | 0.89dB |

| Item(s) | Range | Confidence Level | Calculated Uncertainty |
|--|--------------------|------------------|------------------------|
| Conducted Emission | 30MHz-2GHz | 95% | 0.90dB |
| Conducted Emission | 2GHz-3.6GHz | 95% | 0.88dB |
| Conducted Emission | 3.6GHz-8GHz | 95% | 0.96dB |
| Conducted Emission | 8GHz-20GHz | 95% | 0.94dB |
| Conducted Emission | 20GHz-22GHz | 95% | 0.88dB |
| Conducted Emission | 22GHz-26GHz | 95% | 0.86dB |
| Transmitter Spurious Emission-Radiated | 9KHz-30MHz | 95% | 5.66dB |
| Transmitter Spurious Emission-Radiated | 30MHz-1000MHz | 95% | 4.98dB |
| Transmitter Spurious Emission-Radiated | 1000MHz -18000MHz | 95% | 5.06dB |
| Transmitter Spurious Emission-Radiated | 18000MHz -40000MHz | 95% | 5.20dB |
| AC Power line Conducted Emission | 0.15MHz-30MHz | 95% | 3.66 dB |

6. Test Results

6.1 Peak Output Power-Conducted

6.1.1 Measurement Limit

| Standard | Limit (dBm) |
|--------------------------|-------------|
| FCC 47 Part 15.247(b)(3) | <30 |

6.1.2 Test Condition

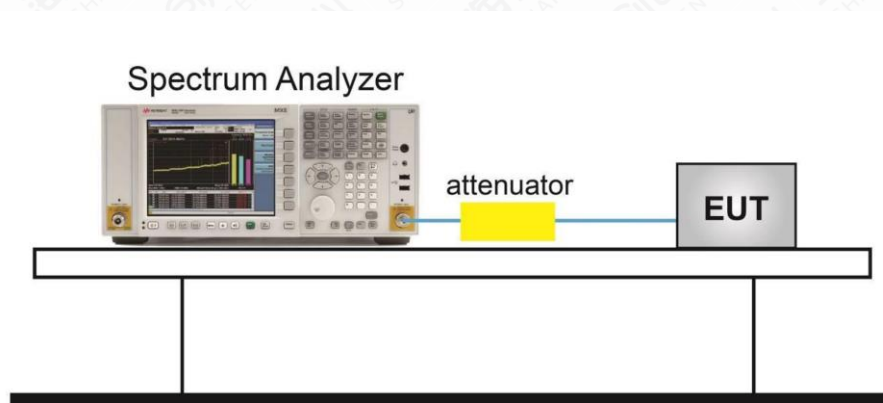
| DTS procedure | RBW | VBW | Span | Sweeptime |
|---------------|------|-------|-------|-----------|
| BT-LE | 3MHz | 10MHz | 10MHz | Auto |

6.1.3 Test Procedure

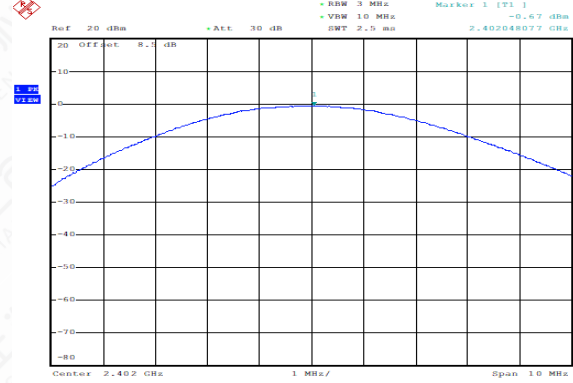
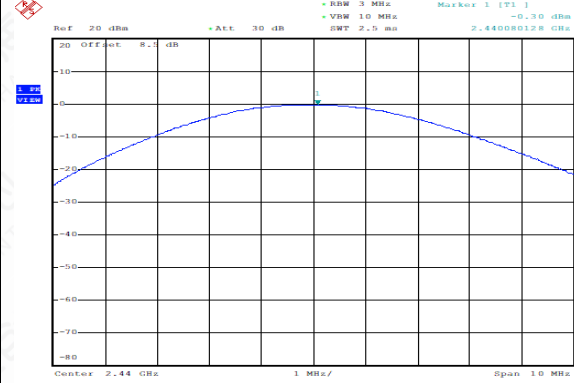
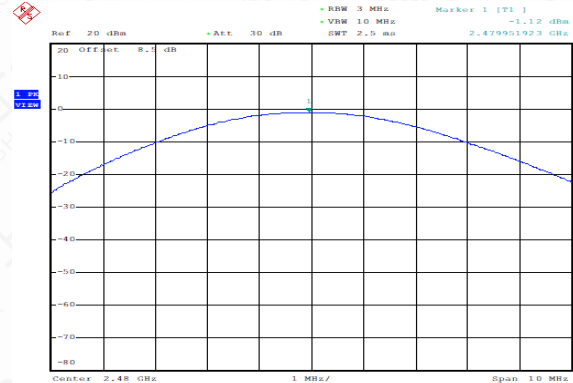
The measurement is according to ANSI C63.10 clause 11.9.1

1. Set the RBW \geq DTS bandwidth.
2. Set VBW $\geq [3 \times \text{RBW}]$.
3. Set span $\geq [3 \times \text{RBW}]$.
4. Sweep time = auto couple.
5. Detector = peak.
6. Trace mode = max hold.
7. Allow trace to fully stabilize.
8. Use peak marker function to determine the peak amplitude level.

6.1.4 Test setup



Measurement Results

| | | | |
|--|---------------|---|-------------|
| Peak Conducted Output Power CH0 (dBm) | -0.673 | Peak Conducted Output Power CH19 (dBm) | -0.3 |
|  <p>Ref: 20 dBm, Att: 30 dB, RBW: 3 MHz, VSW: 10 MHz, Span: 10 MHz, Center: 2.402 GHz, Marker 1 [T1]: -0.673 dBm, 2.402048077 GHz</p> <p>Date: 19.AUG.2022 12:26:08</p> | |  <p>Ref: 20 dBm, Att: 30 dB, RBW: 3 MHz, VSW: 10 MHz, Span: 10 MHz, Center: 2.44 GHz, Marker 1 [T1]: -0.30 dBm, 2.440080128 GHz</p> <p>Date: 19.AUG.2022 12:27:09</p> | |
| Peak Conducted Output Power CH39 (dBm) | -0.139 | / | / |
|  <p>Ref: 20 dBm, Att: 30 dB, RBW: 3 MHz, VSW: 10 MHz, Span: 10 MHz, Center: 2.48 GHz, Marker 1 [T1]: -0.132 dBm, 2.479951923 GHz</p> <p>Date: 19.AUG.2022 12:27:47</p> | | | |

6.2 99% Occupied Bandwidth

6.2.1 Measurement Limit

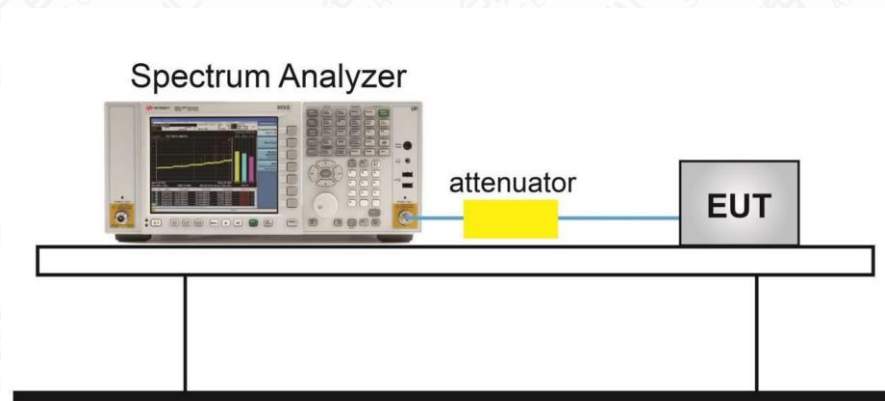
| Standard | Limit |
|-----------|-------|
| 15.247(a) | N/A |

6.2.2 Test procedures

The measurement is according to ANSI C63.10 clause 6.9.3.

1. The output power of EUT was connected to the spectrum analyzer. The path loss was compensated to the results for each measurement.
2. Enable EUT transmitter maximum power continuously.
3. Set RBW shall be in the range of 1% to 5% of the OBW.
4. Set the VBW $\geq [3 \times \text{RBW}]$.
5. Detector = peak.
6. Trace mode = max hold.
7. Sweep = auto couple.
8. Allow the trace to stabilize.
9. The occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers are each equal to 0.5% of the total mean power of the given emission.

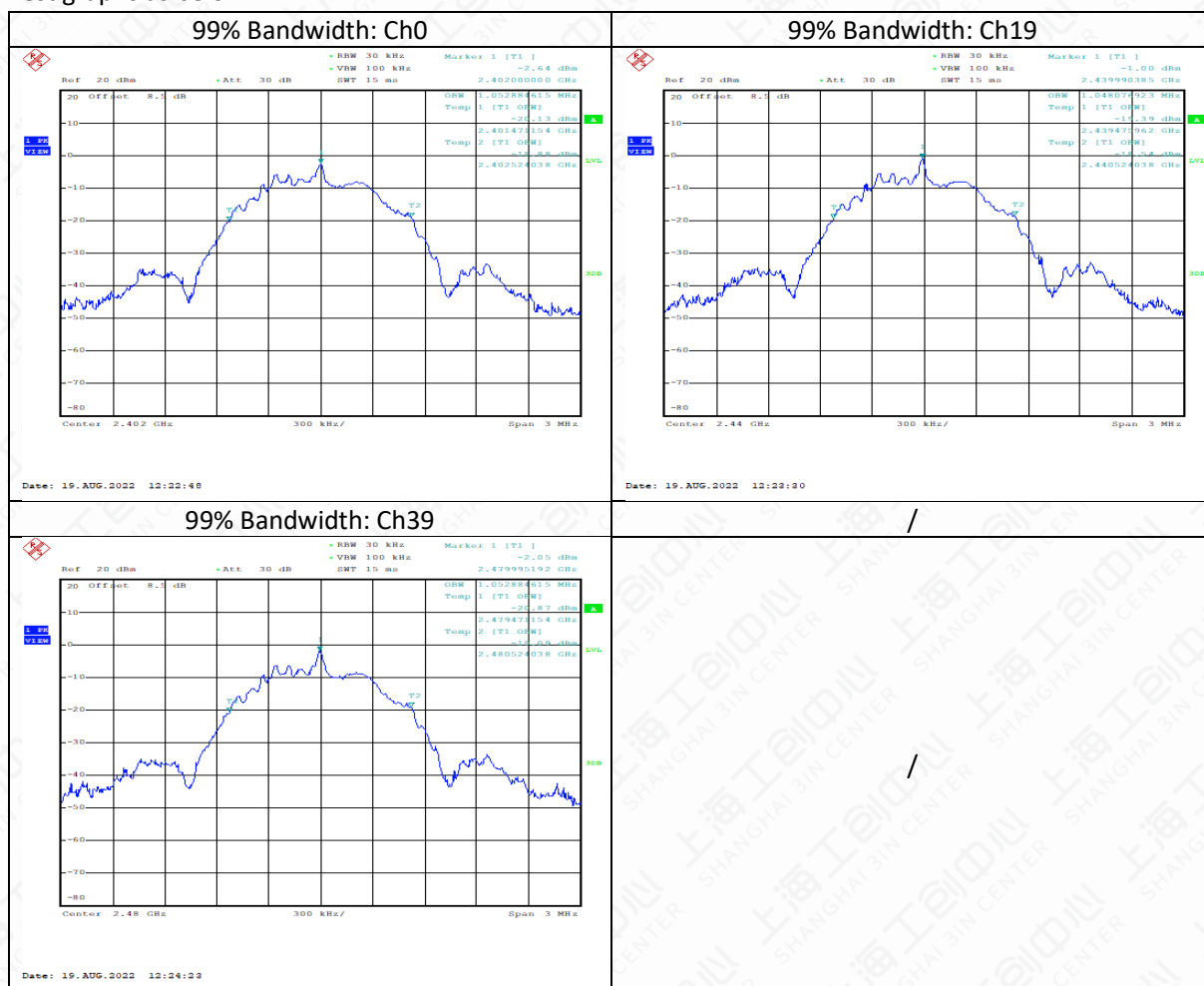
6.2.3 Test setup



Measurement Result

| Modulation type | Channel | 99% Bandwidth (MHz) |
|-----------------|---------|---------------------|
| GFSK DH5 | Ch 0 | 1.053 |
| | Ch 19 | 1.048 |
| | Ch 39 | 1.053 |

Test graphs as below



6.3 Peak Power Spectral Density

6.3.1 Measurement Limit

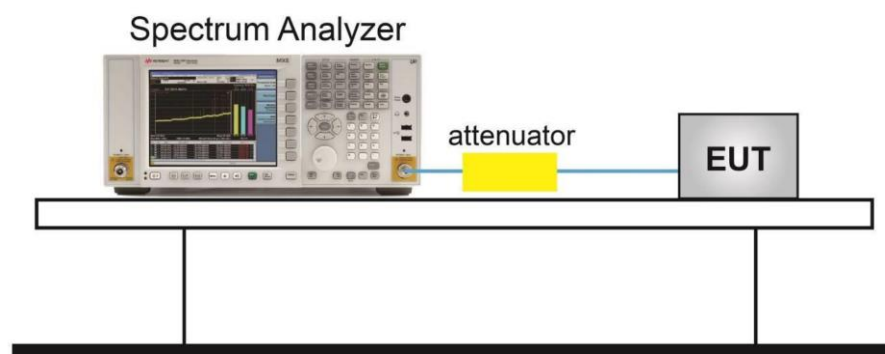
| Standard | Limit |
|-----------------------|---------------------------------|
| FCC 47 Part 15.247(e) | $\leq 8\text{dBm}/3\text{ kHz}$ |

6.3.2 Test procedures

The measurement is according to ANSI C63.10 clause 11.10.

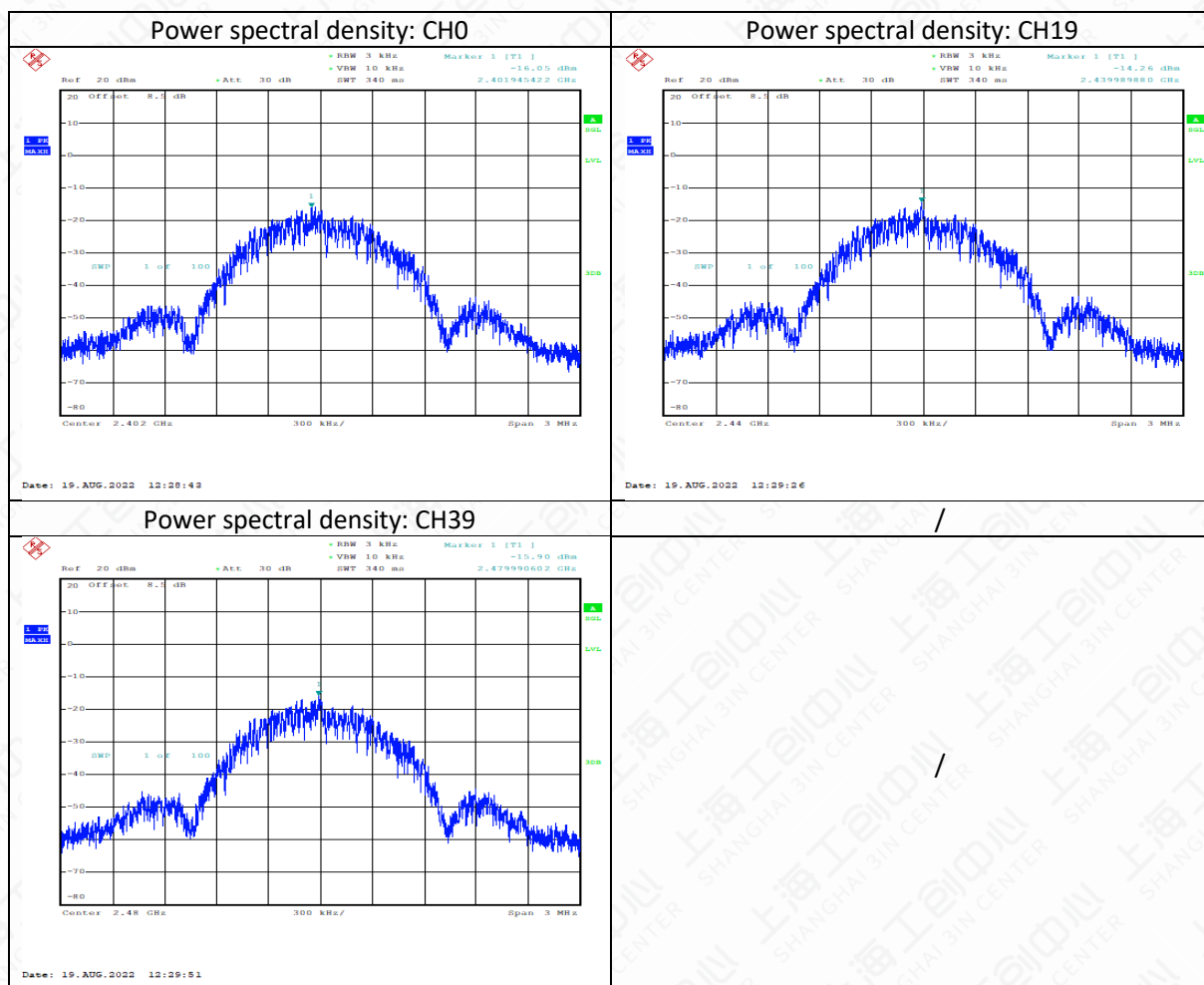
1. The output power of EUT was connected to the spectrum analyzer. The path loss was compensated to the results for each measurement.
2. Enable EUT transmitter maximum power continuously.
3. Set analyzer center frequency to DTS channel center frequency.
4. Set the span to 1.5 times the DTS bandwidth.
5. Set the RBW to $3\text{ kHz} \leq \text{RBW} \leq 100\text{ kHz}$.
6. Set the VBW $\geq [3 \times \text{RBW}]$.
7. Detector = peak.
8. Sweep time = auto couple.
9. Trace mode = max hold.
10. Allow trace to fully stabilize.
11. Use the peak marker function to determine the maximum amplitude level within the RBW.
12. If measured value exceeds requirement, then reduce RBW (but no less than 3 kHz) and repeat.

6.3.3 Test Setup



Measurement Results

| Modulation type | Channel | PSD (dBm/3kHz) |
|-----------------|---------|-------------------|
| GFSK DH5 | Ch 0 | -16.052 |
| | Ch 19 | -14.255 |
| | Ch 39 | -15.9 |



6.4 6dB Bandwidth

6.4.1 Measurement Limit

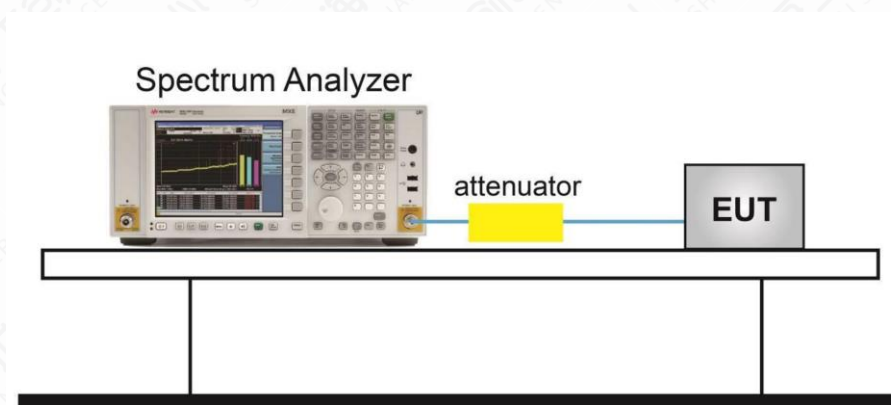
| Standard | Limit |
|----------------------------|----------------------|
| FCC 47 Part 15.247 (a) (2) | $\geq 500\text{kHz}$ |

6.4.2 Test procedures

The measurement is according to ANSI C63.10 clause 11.8.

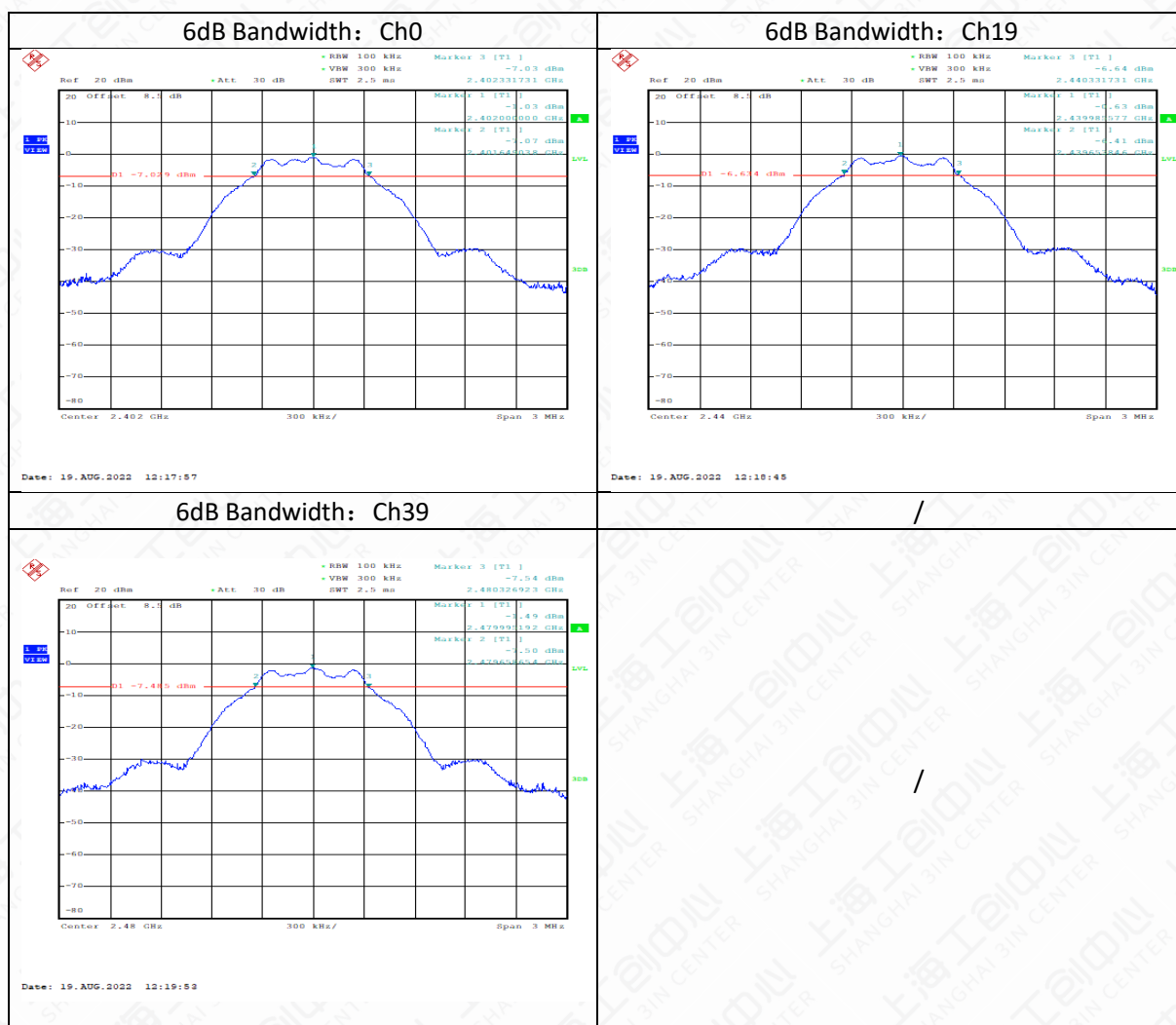
1. The output power of EUT was connected to the spectrum analyzer. The path loss was compensated to the results for each measurement.
2. Enable EUT transmitter maximum power continuously.
3. Set RBW = 100 kHz.
4. Set the VBW $\geq [3 \times \text{RBW}]$.
5. Detector = peak.
6. Trace mode = max hold.
7. Sweep = auto couple.
8. Allow the trace to stabilize.
9. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

6.4.3 Test Setup



Measurement Result

| Modulation type | Channel | 6dB Bandwidth (Khz) |
|-----------------|---------|---------------------|
| GFSK DH5 | Ch 0 | 683 |
| | Ch 19 | 678 |
| | Ch 39 | 668 |



6.5 Frequency Band Edges-Conducted

6.5.1 Measurement Limit

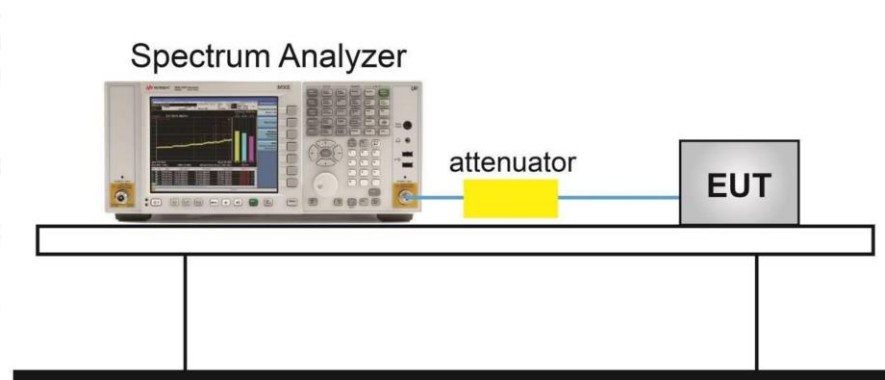
| Standard | Limit(dBc) |
|-----------------------|------------|
| FCC 47 Part 15.247(d) | >20 |

6.5.2 Test procedures

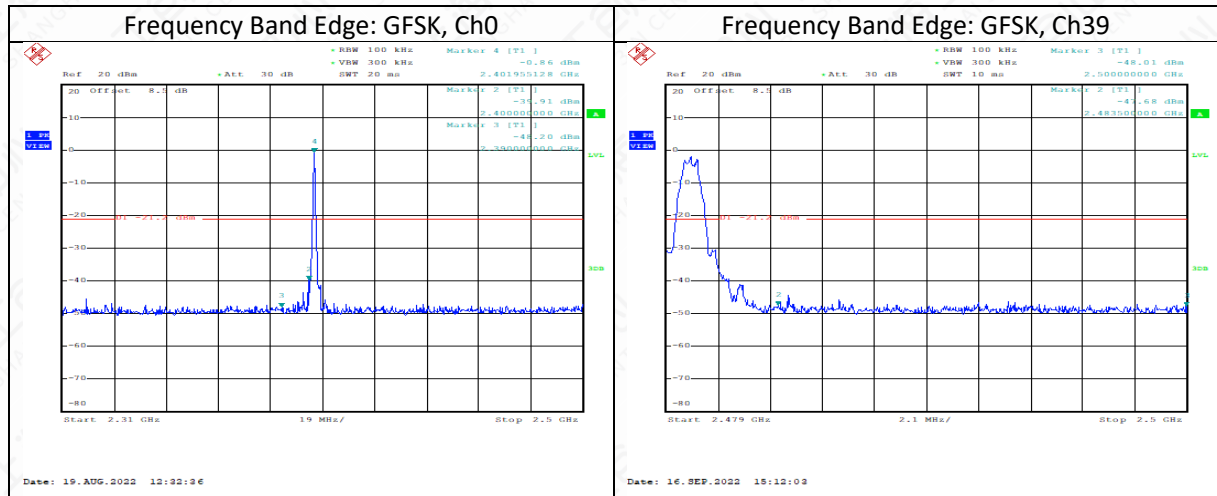
The measurement is according to ANSI C63.10 clause 11.13.2

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 that fall outside of the authorized band of operation.
2. Reference level: As required to keep the signal from exceeding the maximum instrument input mixer level for linear operation. In general, the peak of the spectral envelope shall be more than $[10 \log (OBW/RBW)]$ below the reference level. Specific guidance is given in 4.1.5.2.
3. Attenuation: Auto (at least 10 dB preferred).
4. Sweep time: Coupled.
5. Resolution bandwidth: 100 kHz.6) Video bandwidth: 300 kHz.7) Detector: Peak.8) Trace: Max hold.

6.5.3 Test Setup



Measurement Result



6.6 Conducted Emission

6.6.1 Measurement Limit

| Standard | Limit(dBc) |
|-----------------------|--|
| FCC 47 Part 15.247(d) | 20dB below peak output power in 100KHz bandwidth |

6.6.2 Test procedures

This measurement is according to ANSI C63.10 clause 11.11.

1. The output power of EUT was connected to the spectrum analyzer. The path loss was compensated to the results for each measurement.
2. Enable EUT transmitter maximum power continuously.

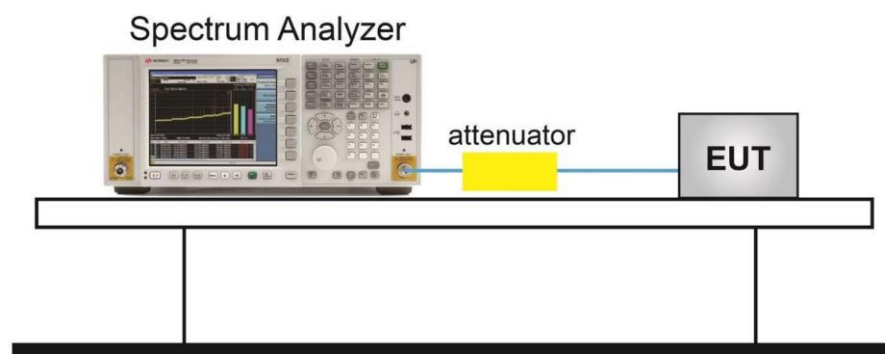
Reference level measurement

3. Set instrument center frequency to DTS channel center frequency.
4. Set the span to ≥ 1.5 times the DTS bandwidth.
5. Set the RBW = 100 kHz.
6. Set the VBW $\geq [3 \times \text{RBW}]$.
7. Detector = peak.
8. Sweep time = auto couple.
9. Trace mode = max hold.
10. Allow trace to fully stabilize.
11. Use the peak marker function to determine the maximum PSD level.

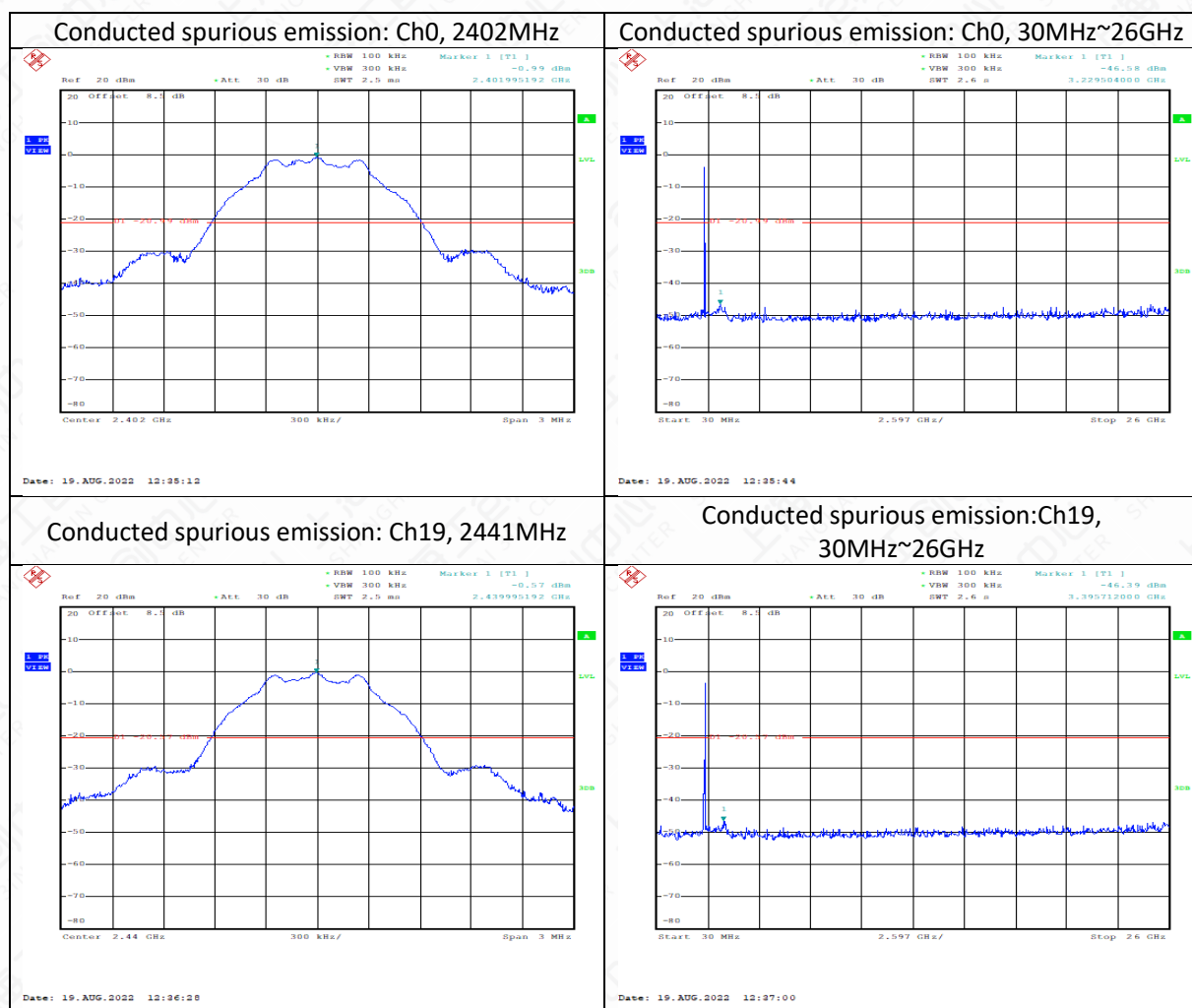
Emission level measurement

12. Set the center frequency and span to encompass frequency range to be measured.
13. Set the RBW = 100 kHz.
14. Set the VBW $\geq [3 \times \text{RBW}]$.
15. Detector = peak.
16. Sweep time = auto couple.
17. Trace mode = max hold.
18. Allow trace to fully stabilize.
19. Use the peak marker function to determine the maximum amplitude level.

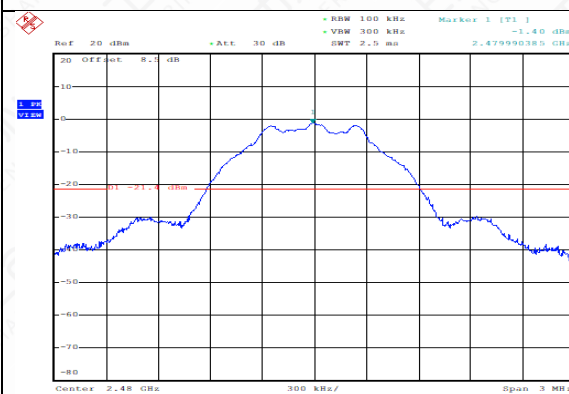
6.6.3 Test Setup



Measurement Result

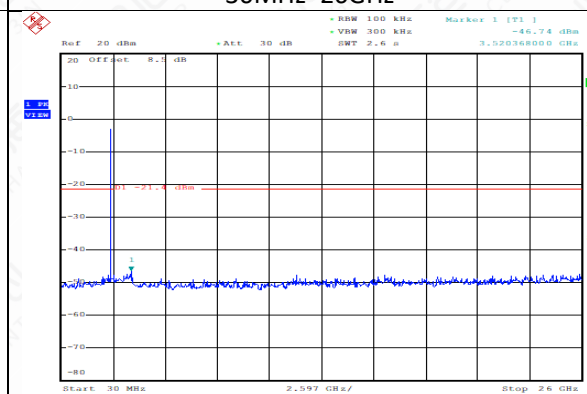


Conducted spurious emission: Ch39, 2480MHz



Date: 19.AUG.2022 12:37:45

Conducted spurious emission: Ch39, 30MHz~26GHz



Date: 19.AUG.2022 12:38:17

6.7 Radiated Emission

6.7.1 Measurement Limit

| Standard | Limit(dBc) |
|---|------------------------------|
| FCC 47 Part 15.247(d),15.205(a),15.209(a) | 20dB below peak output power |

In addition, radiated emissions which fall in the restricted bands, as defined in 15.205(a), must also comply with the radiated emission limits specified in 15.209(a) (see 15.205(c)).

Limit in restricted band

| Frequency of emission (MHz) | Field strength (uV/m) | Field strength (dBuV/m) |
|-----------------------------|-----------------------|-------------------------|
| 0.009~0.49 | 2400/F (kHz) | 129-94 |
| 0.49~1.705 | 24000/F (kHz) | 74-63 |
| 1.705~30 | 30 | 70 |
| 30~88 | 100 | 40 |
| 88~216 | 150 | 43.5 |
| 216~960 | 200 | 46 |
| Above 960 | 500 | 54 |

6.7.2 Test Method

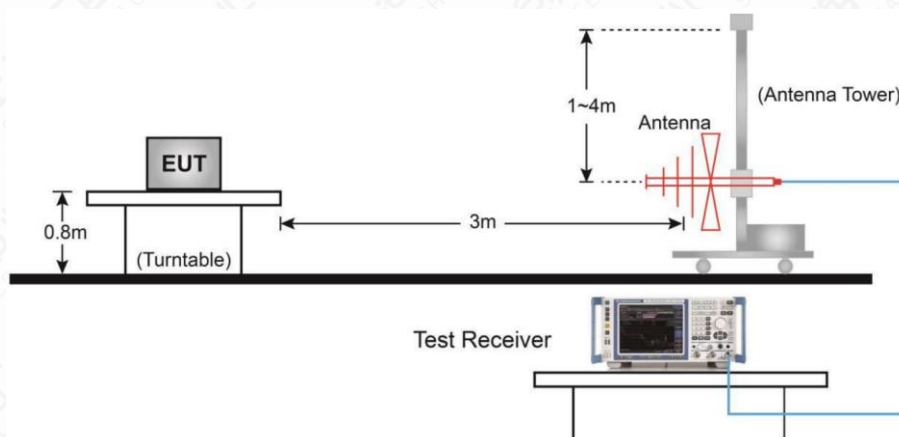
Portable, small, lightweight, or modular devices that may be handheld, worn on the body, or placed on a table during operation shall be positioned on a non-conducting platform, the top of which is 80 cm above the reference ground plane. The preferred area occupied by the EUT arrangement is 1 m by 1.5 m, but it may be larger or smaller to accommodate various sized EUTs. For testing purposes, ceiling- and wall-mounted devices also shall be positioned on a tabletop (see also ANSI C63.10-2013 section 6.3.4 and 6.3.5). In making any tests involving handheld, body-worn, or ceiling-mounted equipment, it is essential to recognize that the measured levels may be dependent on the orientation (attitude) of the three orthogonal axes of the EUT. Thus, exploratory tests as specified in 8.3.1 shall be carried out for various axes orientations to determine the attitude having maximum or near-maximum emission level.

The EUT was placed on a non-conductive table. The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and the EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations.

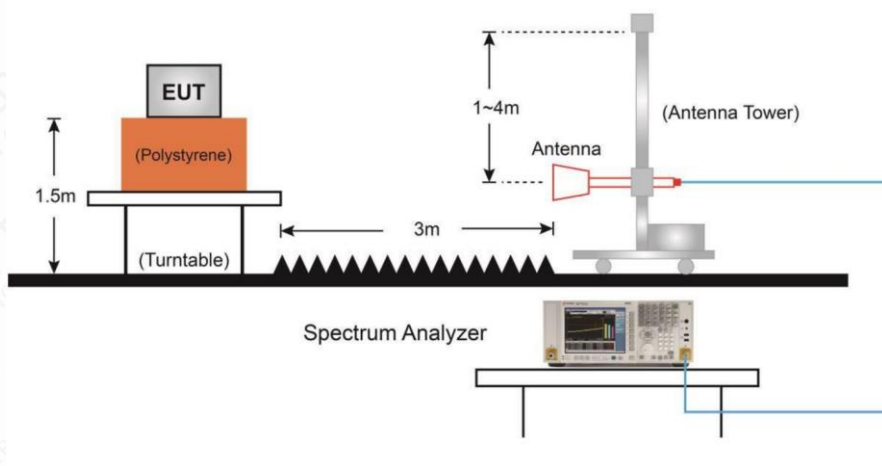
| Frequency of emission (MHz) | RBW/VBW | Sweep Time (s) |
|-----------------------------|---------------|----------------|
| 0.009~30 | 9KHz/30KHz | Auto |
| 30~1000 | 100KHz/300KHz | 5 |
| 1000~4000 | 1MHz/3MHz | 15 |
| 4000~18000 | 1MHz/3MHz | 40 |
| 18000~26500 | 1MHz/3MHz | 20 |

6.7.3 Test Setup

Below 1GHz Test Setup



Above 1GHz Test Setup



Measurement Results:

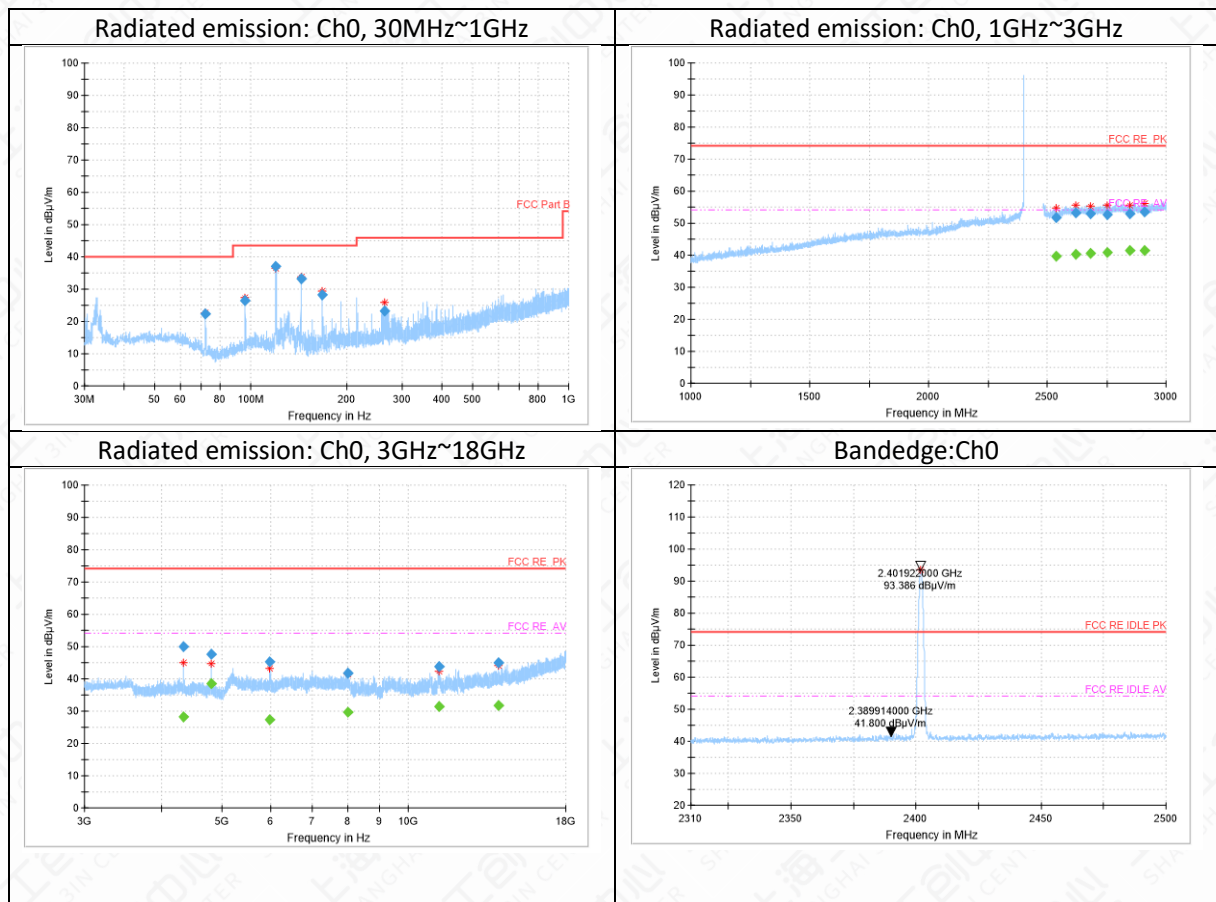
A “reference path loss” is established and AR_{pi} is the attenuation of “reference path loss”, and including the gain of receive antenna, the gain of the preamplifier, the cable loss.

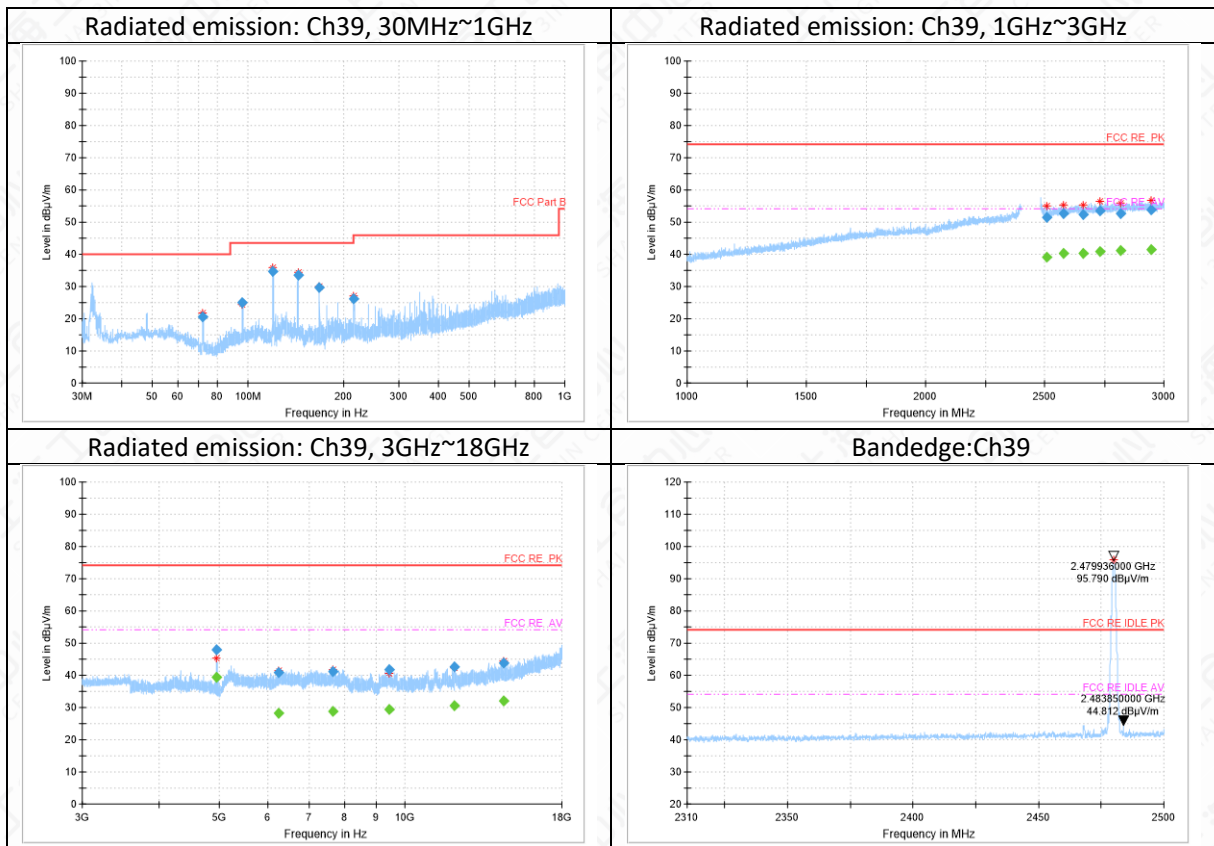
The measurement results are obtained as described below:

$$AR_{pi} = \text{Cable loss} + \text{Antenna Factor} - \text{Preamplifier gain}$$

$$\text{Result} = P_{\text{Mea}} + AR_{pi}$$

The test data below 30MHz is more than 20dB lower than the limit value, so it is not provided in the report.





Note: The out-of-limit signal in the picture is the main frequency signal.

Ch0 30MHz-1GHz

| Frequency (MHz) | Result (dBμV/m) | ARpl (dB) | PMea (dBμV/m) | Polarity |
|-----------------|-----------------|-----------|---------------|----------|
| 72.0 | 22.43 | -16.2 | 38.63 | H |
| 96.0 | 26.38 | -14.2 | 40.58 | H |
| 120.0 | 37.11 | -15 | 52.11 | H |
| 144.0 | 33.14 | -17.1 | 50.24 | H |
| 168.1 | 28.24 | -15.3 | 43.54 | H |
| 264.0 | 23.16 | -11.5 | 34.66 | H |

Ch0 1GHz-3GHz

| Frequency (MHz) | Result (dBμV/m) | ARpl (dB) | PMea (dBμV/m) | Polarity |
|-----------------|-----------------|-----------|---------------|----------|
| 2535.1 | 51.62 | 14.8 | 36.82 | H |
| 2620.0 | 53.26 | 15.7 | 37.56 | H |
| 2683.7 | 52.84 | 15.9 | 36.94 | H |
| 2751.3 | 52.58 | 16.2 | 36.38 | V |
| 2845.4 | 53.04 | 16.6 | 36.44 | V |
| 2907.2 | 53.63 | 16.7 | 36.93 | H |

Ch0 3GHz-18GHz

| Frequency (MHz) | Result (dBμV/m) | ARpl (dB) | PMea (dBμV/m) | Polarity |
|-----------------|-----------------|-----------|---------------|----------|
| 4332.0 | 50.11 | -5.3 | 55.41 | V |
| 4804.1 | 47.63 | -4.9 | 52.53 | H |
| 5981.2 | 45.29 | -4 | 49.29 | V |
| 8005.6 | 41.75 | -1 | 42.75 | H |
| 11217.2 | 43.84 | 1.7 | 42.14 | H |
| 14002.8 | 44.88 | 4.7 | 40.18 | H |

Ch39 30MHz-1GHz

| Frequency (MHz) | Result (dBμV/m) | ARpl (dB) | PMea (dBμV/m) | Polarity |
|-----------------|-----------------|-----------|---------------|----------|
| 72.0 | 20.63 | -16.2 | 36.83 | H |
| 96.0 | 25.11 | -14.2 | 39.31 | H |
| 120.0 | 34.85 | -15 | 49.85 | H |
| 144.0 | 33.57 | -17.1 | 50.67 | H |
| 168.0 | 29.59 | -15.3 | 44.89 | H |
| 216.0 | 26.29 | -12.8 | 39.09 | H |

Ch39 1GHz-3GHz

| Frequency (MHz) | Result (dBμV/m) | ARpl (dB) | PMea (dBμV/m) | Polarity |
|-----------------|-----------------|-----------|---------------|----------|
| 2510.1 | 51.51 | 14.7 | 36.81 | V |
| 2578.7 | 52.64 | 15.3 | 37.34 | H |
| 2661.3 | 52.39 | 15.9 | 36.49 | H |
| 2733.0 | 53.52 | 16.1 | 37.42 | V |
| 2819.6 | 52.78 | 16.6 | 36.18 | V |
| 2944.6 | 53.85 | 16.8 | 37.05 | V |

Ch39 3GHz-18GHz

| Frequency (MHz) | Result (dBμV/m) | ARpl (dB) | PMea (dBμV/m) | Polarity |
|-----------------|-----------------|-----------|---------------|----------|
| 4960.0 | 47.91 | -4.2 | 52.11 | V |
| 6249.8 | 41.02 | -2.7 | 43.72 | V |
| 7642.9 | 41.17 | -1.8 | 42.97 | V |
| 9454.0 | 41.65 | -0.3 | 41.95 | H |
| 12055.3 | 42.69 | 2 | 40.69 | V |
| 14485.6 | 43.94 | 5.1 | 38.84 | H |

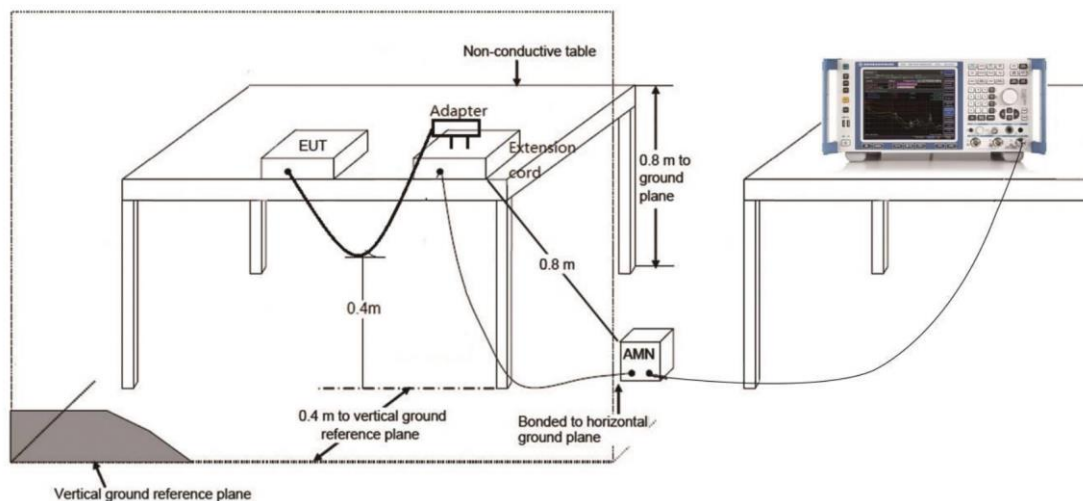
6.8 AC Powerline Conducted Emission

6.8.1 Method of Measurement: ANSI C63.10-2013-clause 6.2

1. The one EUT cable configuration and arrangement and mode of operation that produced the emission with the highest amplitude relative to the limit is selected for the final measurement, while applying the appropriate modulating signal to the EUT.
2. If the EUT is relocated from an exploratory test site to a final test site, the highest emissions shall be remaximized at the final test location before final ac power-line conducted emission measurements are performed.
3. The final test on all current-carrying conductors of all of the power cords to the equipment that comprises the EUT (but not the cords associated with other non-EUT equipment in the system) is then performed for the full frequency range for which the EUT is being tested for compliance without further variation of the EUT arrangement, cable positions, or EUT mode of operation.
4. If the EUT is comprised of equipment units that have their own separate ac power connections, e.g., floor-standing equipment with independent power cords for each shelf that are able to connect directly to the ac power network, each current-carrying conductor of one unit is measured while the other units are connected to a second (or more) LISN(s). All units shall be separately measured. If a power strip is provided by the manufacturer, to supply all of the units making up the EUT, only the conductors in the power cord of the power strip shall be measured.

If the EUT uses a detachable antenna, these measurements shall be made with a suitable dummy load connected to the antenna output terminals; otherwise, the tests shall be made with the antenna connected and, if adjustable, fully extended. When measuring the ac conducted emissions from a device that operates between 150 kHz and 30 MHz a non-detachable antenna may be replaced with a dummy load for the measurements within the fundamental emission band of the transmitter, but only for those measurements.³⁶ Record the six highest EUT emissions relative to the limit of each of the current-carrying conductors of the power cords of the equipment that comprises the EUT over the frequency range specified by the procuring or regulatory agency. Diagram or photograph the test setup that was used. See Clause 8 for full reporting requirements.

6.8.2 Test Setup



Measurement Result and limit:

In accordance with the requirements of standard FCC Part 15.207, conducted emission is not applicable.

Annex A: Revised History

| Version | Revised Content |
|---------|-----------------|
| V00 | Initial |

Annex B: Accreditation Certificate**END OF REPORT**