# FCC CERTIFICATION TEST REPORT

## FOR

| | | |
|---|---|---|
| **Applicant** | : | PRAISE PERFECTION LIMITED |
| **Address** | : | FLAT C, 10/F., PHASE 4, KWUN TONG IND. CTR., 472-478 KWUN TONG RD., KWUN TONG, KL. HK |
| **Equipment under Test** | : | Night Light Speaker with wireless charging |
| **Model No.** | : | YW-012, YW-012W, YW-012B, MD-106, BL-106, PL-106 |
| **Trade Mark** | : | DPNAO, MODERN, BLL, PPL |
| **FCC ID** | : | 2ASQA696YW012 |
| **Manufacturer** | : | PRAISE PERFECTION LIMITED |
| **Address** | : | FLAT C, 10/F., PHASE 4, KWUN TONG IND. CTR., 472-478 KWUN TONG RD., KWUN TONG, KL. HK |

**Issued By: Dongguan Dongdian Testing Service Co., Ltd.**

**Add:** No. 17, Zongbu Road 2, Songshan Lake Sci&Tech, Industry Park, Dongguan City, Guangdong Province, China, 523808

**Tel:** +86-0769-38826678, **E-mail:** ddt@dgddt.com, http://www.dgddt.com

REPORT

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# TEST REPORT DECLARE

| | | |
|---|---|---|
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| **Address** | : | FLAT C, 10/F., PHASE 4, KWUN TONG IND. CTR., 472-478 KWUN TONG RD., KWUN TONG, KL. HK |

**Test Standard Used:**

FCC Rules and Regulations Part 15 Subpart C

**Test procedure used:**

ANSI C63.10:2013

**We Declare:**

The equipment described above is tested by Dongguan Dongdian Testing Service Co., Ltd and in the configuration tested the equipment complied with the standards specified above. The test results are contained in this test report and Dongguan Dongdian Testing Service Co., Ltd is assumed of full responsibility for the accuracy and completeness of these tests.

**After test and evaluation, our opinion is that the equipment provided for test compliance with the requirement of the above FCC standards.**

| | | | |
|---|---|---|---|
| **Report No:** | DDT-R19052707-1E5 | | |
| **Date of Receipt:** | Jul. 03, 2019 | **Date of Test:** | Jul. 03, 2019 ~ Aug. 13, 2019 |

***Prepared By:*** ***Approved By:***

Sam Li

***Sam Li/Engineer***

Damon Hu

***Damon Hu/EMC Manager***

Note: This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of Dongguan Dongdian Testing Service Co., Ltd.

# Revision history

| Rev. | Revisions | Issue Date | Revised By |
|---|---|---|---|
| --- | Initial issue | Aug. 15, 2019 | |
| | | | |

# 1 Summary of test results

| Description of Test Item | Standard | Results |
|---|---|---|
| 20dB Bandwidth | FCC Part 15: 15.215 | PASS |
| Radiated Emission | FCC Part 15: 15.209 | PASS |
| Power Line Conducted Emissions | FCC Part 15: 15.207 | PASS |
| Antenna requirement | FCC Part 15: 15.203 | PASS |

# 2 General test information

## 2.1. Description of EUT

| | | |
|---|---|---|
| EUT* Name | : | Night Light Speaker with wireless charging |
| Model Number | : | YW-012, YW-012W, YW-012B, MD-106, BL-106, PL-106 |
| Difference of model number | : | All models have the same Circuit diagram and PCB Layout, only difference on color and brand. |
| EUT function description | : | Please reference user manual of this device |
| Power supply | : | DC 9V/2A from external AC Adapter |
| Wireless charging Operation frequency | : | 112-205kHz |
| Antenna Type | : | Inductive loop coil antenna |
| Sample Type | : | Series production |

Note: EUT is the ab. of equipment under test.

| Channel information | | | | | | | |
|---|---|---|---|---|---|---|---|
| Channel | Frequency | Channel | Frequency | Channel | Frequency | Channel | Frequency |
| 1 | 112kHz | 25 | 136kHz | 49 | 160kHz | 73 | 184kHz |
| 2 | 113kHz | 26 | 137kHz | 50 | 161kHz | 74 | 185kHz |
| 3 | 114kHz | 27 | 138kHz | 51 | 162kHz | 75 | 186kHz |
| 4 | 115kHz | 28 | 139kHz | 52 | 163kHz | 76 | 187kHz |
| 5 | 116kHz | 29 | 140kHz | 53 | 164kHz | 77 | 188kHz |
| 6 | 117kHz | 30 | 141kHz | 54 | 165kHz | 78 | 189kHz |
| 7 | 118kHz | 31 | 142kHz | 55 | 166kHz | 79 | 190kHz |
| 8 | 119kHz | 32 | 143kHz | 56 | 167kHz | 80 | 191kHz |
| 9 | 120kHz | 33 | 144kHz | 57 | 168kHz | 81 | 192kHz |
| 10 | 121kHz | 34 | 145kHz | 58 | 169kHz | 82 | 193kHz |
| 11 | 122kHz | 35 | 146kHz | 59 | 170kHz | 83 | 194kHz |
| 12 | 123kHz | 36 | 147kHz | 60 | 171kHz | 84 | 195kHz |
| 13 | 124kHz | 37 | 148kHz | 61 | 172kHz | 85 | 196kHz |
| 14 | 125kHz | 38 | 149kHz | 62 | 173kHz | 86 | 197kHz |
| 15 | 126kHz | 39 | 150kHz | 63 | 174kHz | 87 | 198kHz |
| 16 | 127kHz | 40 | 151kHz | 64 | 175kHz | 88 | 199kHz |
| 17 | 128kHz | 41 | 152kHz | 65 | 176kHz | 89 | 200kHz |
| 18 | 129kHz | 42 | 153kHz | 66 | 177kHz | 90 | 201kHz |
| 19 | 130kHz | 43 | 154kHz | 67 | 178kHz | 91 | 202kHz |
| 20 | 131kHz | 44 | 155kHz | 68 | 179kHz | 92 | 203kHz |
| 21 | 132kHz | 45 | 156kHz | 69 | 180kHz | 93 | 204kHz |
| 22 | 133kHz | 46 | 157kHz | 70 | 181kHz | 94 | 205kHz |
| 23 | 134kHz | 47 | 158kHz | 71 | 182kHz | | |
| 24 | 135kHz | 48 | 159kHz | 72 | 183kHz | | |

Note:
In section 15.31(m), regards to the operating frequency range less than 1 MHz, only one of channel was selected to perform the test.

| Channel | Frequency (kHz) |
|---|---|
| Testing channel | 147 |

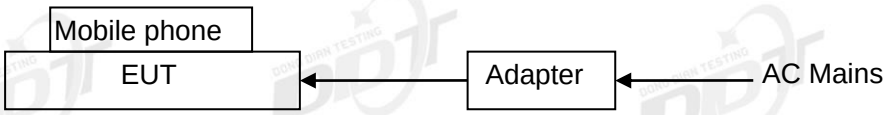
## 2.2. Accessories of EUT

| Description of Accessories | Manufacturer | Model number | Description | Other |
|---|---|---|---|---|
| AC Adapter | JIEDONG ELECTRON FACTORY | JDA0900200WUS | N/A | INPUT: 100-240V~50/60Hz 0.8A OUTPUT: 9.0V/2.0A |

## 2.3. Assistant equipment used for test

| Assistant equipment | Manufacturer | Model number or Type | Serial No. | Other |
|---|---|---|---|---|
| Mobile phone | SAMSUNG | SM-G9600/DS | R28K331TTNF | N/A |

## 2.4. Block diagram of EUT configuration for test




## 2.5. Deviations of test standard

No Deviation.

## 2.6. Test environment conditions

During the measurement the environmental conditions were within the listed ranges:

| | |
|---|---|
| Temperature range: | 21-25℃ |
| Humidity range: | 40-75% |
| Pressure range: | 86-106kPa |

## 2.7. Test laboratory

Dongguan Dongdian Testing Service Co., Ltd

Add: No. 17, Zongbu Road 2, Songshan Lake Sci&Tech, Industry Park, Dongguan City, Guangdong Province, China, 523808

Tel: +86-0769-38826678, http://www.dgddt.com, Email: ddt@dgddt.com

CNAS Accreditation No. L6451; A2LA Accreditation No. 3870.01

FCC Designation Number: CN1182; FCC Test Firm Registration Number: 540522

Industry Canada site registration number: 10288A-1

## 2.8. Measurement uncertainty

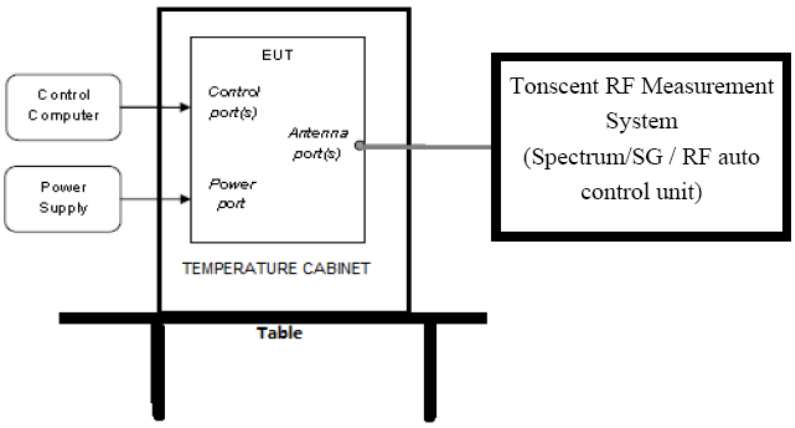
| Test Item | Uncertainty |
|---|---|
| Uncertainty for Conduction emission test | 3.32dB (150kHz-30MHz) |
| | 3.72dB (9kHz-150kHz) |
| Uncertainty for Radiation Emission test (30MHz-1GHz) | 4.70dB (Antenna Polarize: V) |
| | 4.84dB (Antenna Polarize: H) |
| Uncertainty for Radiation Emission test (1GHz to 18GHz) | 4.10dB (1-6GHz) |
| | 4.40dB (6GHz-18GHz) |
| Bandwidth | 1.1% |
| Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2. | |

# 3 Equipment used during test

| Equipment | Manufacturer | Model No. | Serial No. | Last Cal. | Cal. Interval |
|---|---|---|---|---|---|
| **RF Connected Test (Tonscend RF Measurement System)** | | | | | |
| Spectrum analyzer | R&S | FSU26 | 200071 | Oct. 12, 2018 | 1 Year |
| Wideband Radio Communication tester | R&S | CMW500 | 117491 | Jun. 25, 2019 | 1 Year |
| Vector Signal Generator | Agilent | E8267D | US49060192 | Oct. 12, 2018 | 1 Year |
| Vector Signal Generator | Agilent | N5182A | MY48180737 | Jun. 25, 2019 | 1 Year |
| Power Sensor | Agilent | U2021XA | MY55150010 | Jun. 28, 2019 | 1 Year |
| Power Sensor | Agilent | U2021XA | MY55150011 | Jun. 28, 2019 | 1 Year |
| DC Power Source | MATRIS | MPS-3005L-3 | D813058W | Aug. 18, 2018 | 1 Year |
| Attenuator | Mini-Circuits | BW-S10W2 | 101109 | Aug. 18, 2018 | 1 Year |
| RF Cable | Micable | C10-01-01-1 | 100309 | Oct. 21, 2018 | 1 Year |
| Temp&Humi Programmable | ZHIXIANG | ZXGDJS-150L | ZX170110-A | Oct. 21, 2018 | 1 Year |
| Test Software | JS Tonscend | JS1120-3 | Ver.2.7 | N/A | N/A |
| **Radiation 1#chamber** | | | | | |
| EMI Test Receiver | R&S | ESU8 | 100316 | Oct. 12, 2018 | 1 Year |
| Spectrum analyzer | Agilent | E4447A | MY50180031 | Jun. 25, 2019 | 1 Year |
| Trilog Broadband Antenna | Schwarzbeck | VULB9163 | 9163-462 | Nov. 09, 2018 | 1 Year |
| Active Loop antenna | Schwarzbeck | FMZB-1519 | 1519-038 | Oct. 20, 2018 | 1 Year |
| Double Ridged Horn Antenna | R&S | HF907 | 100276 | Nov. 16, 2018 | 1 Year |
| Broad Band Horn Antenna | Schwarzbeck | BBHA 9170 | 790 | Oct. 25, 2018 | 1 Year |
| Pre-amplifier | A.H. | PAM-0118 | 360 | Oct. 12, 2018 | 1 Year |
| Pre-amplifier | TERA-MW | TRLA-0040 G35 | 101303 | Oct. 12, 2018 | 1 Year |
| RF Cable | HUBSER | CP-X2+ CP-X1 | W11.03+ W12.02 | Oct. 21, 2018 | 1 Year |
| RF Cable | N/A | SMAJ-SMA J-1M+ 11M | 17070133+17070131 | Nov. 08, 2018 | 1 Year |
| MI Cable | HUBSER | C10-01-01-1 M | 1091629 | Oct. 21, 2018 | 1 Year |
| Test software | Audix | E3 | V 6.11111b | N/A | N/A |
| **Power Line Conducted Emissions Test 2#** | | | | | |
| EMI Test Receiver | R&S | ESU8 | 100316 | Oct. 12, 2018 | 1 Year |
| LISN 1 | R&S | ENV216 | 101109 | Oct. 12, 2018 | 1 Year |
| LISN 2 | R&S | ESH2-Z5 | 100309 | Oct. 12, 2018 | 1 Year |
| Pulse Limiter | R&S | ESH3-Z2 | 101242 | Oct. 12, 2018 | 1 Year |
| CE Cable 1 | HUBSER | N/A | W10.01 | Oct. 12, 2018 | 1 Year |
| Test software | Audix | E3 | V 6.11111b | N/A | N/A |

# 4 20dB Bandwidth

## 4.1. Block diagram of test setup




## 4.2. Limits

Intentional radiators operating under the alternative provisions to the general emission limits, as contained in § 15.217 through 15.257 and in Subpart E of this part, must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated.

## 4.3. Test Procedure

(1) Connect EUT's antenna output to spectrum analyzer by RF cable.

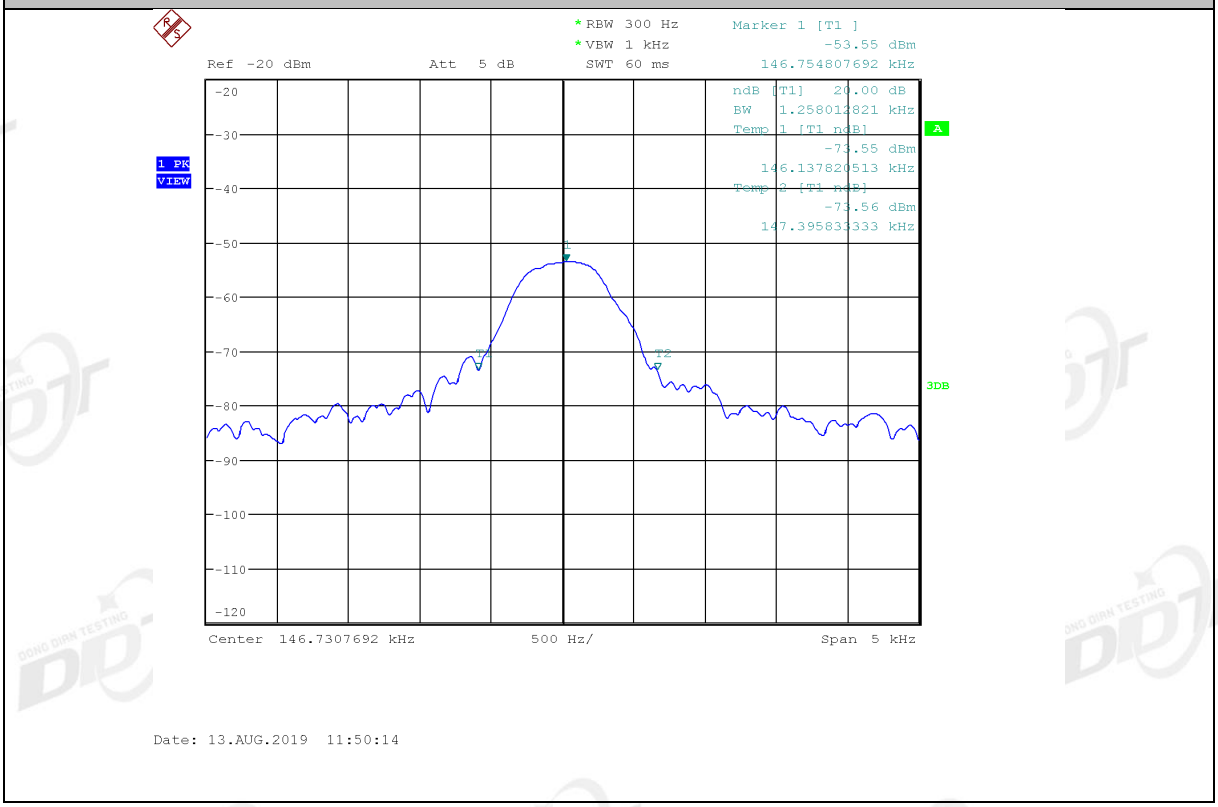
(2) The bandwidth of the fundamental frequency was measured by spectrum analyzer with 300 Hz RBW and 1 kHz VBW. The 20dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 20dB.

## 4.4. Test Result

| Freq. (kHz) | 20dB bandwidth Result (kHz) | Conclusion |
|---|---|---|
| 147 | 1.258 | PASS |

## 4.5. Original test data

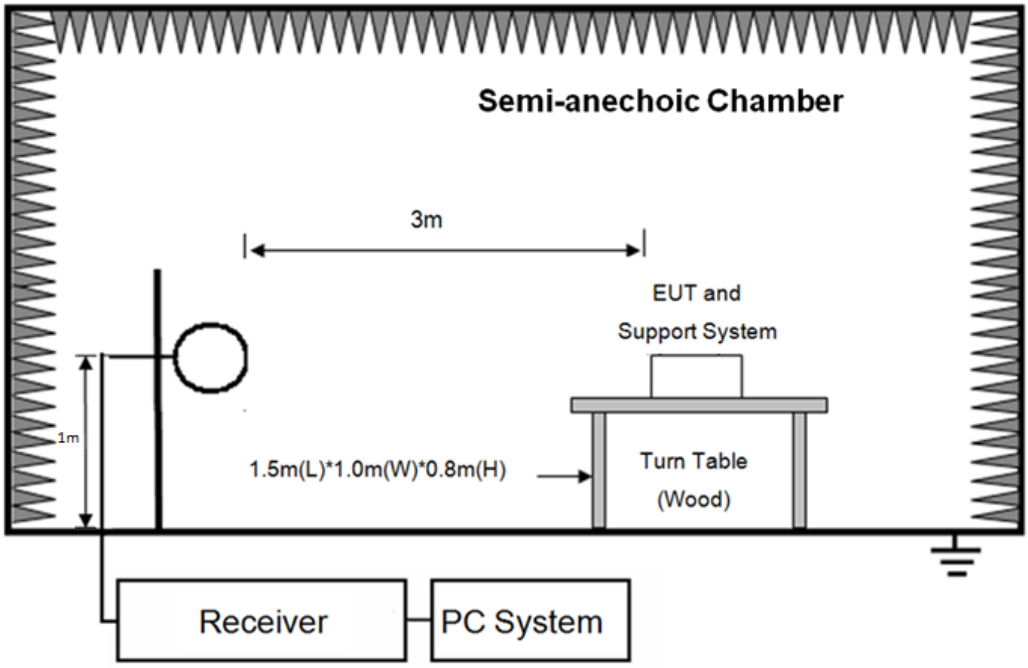
Graphs



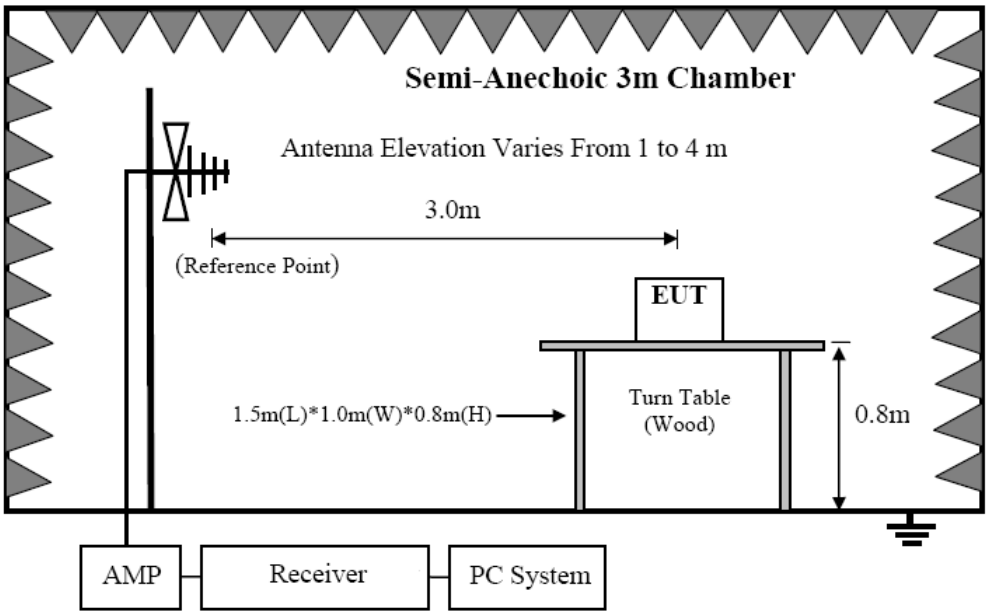
# 5 Radiated emission

## 5.1. Block diagram of test setup

In 3m Anechoic Chamber Test Setup Diagram for 9kHz~30MHz




In 3m Anechoic Chamber Test Setup Diagram for 30MHz~1GHz



## 5.2. Limit

| FREQUENCY MHz | DISTANCE Meters | FIELD STRENGTHS LIMIT | |
|---|---|---|---|
| | | μV/m | dB(μV)/m |
| 0.009 ~ 0.490 | 300 | 2400/F(kHz) | 67.6-20log(F) |
| 0.490 ~ 1.705 | 30 | 24000/F(kHz) | 87.6-20log(F) |
| 1.705 ~ 30.0 | 30 | 30 | 29.54 |
| 30 ~ 88 | 3 | 100 | 40.0 |
| 88 ~ 216 | 3 | 150 | 43.5 |
| 216 ~ 960 | 3 | 200 | 46.0 |
| 960 ~ 1000 | 3 | 500 | 54.0 |

Note: (1) The emission limits shown in the above table are based on measurements employing a CISPR QP detector except for the frequency bands 9-90kHz, 110-490kHz and above 1000MHz. Radiated emissions limits in these three bands are based on measurements employing an average detector.

(2) At frequencies below 30MHz, measurement may be performed at a distance closer than that specified, and the limit at closer measurement distance can be extrapolated by below formula:

$Limit_{3m}$(dBuV/m)= $Limit_{300m}$(dBuV/m) + 40Log(300m/3m) = $Limit_{300m}$(dBuV/m) + 80
$Limit_{3m}$(dBuV/m)= $Limit_{30m}$(dBuV/m) + 40Log(30m/3m) = $Limit_{30m}$(dBuV/m) + 40

## 5.3. Test Procedure

(1) EUT was placed on a non-metallic table, 150 cm above the ground plane inside a semi-anechoic chamber.

(2) Test antenna was located 3m from the EUT on an adjustable mast, and the antenna used as below table.

| Test frequency range | Test antenna used | Test antenna distance |
|---|---|---|
| 9kHz-30MHz | Active Loop antenna | 3m |
| 30MHz-1GHz | Trilog Broadband Antenna | 3m |

According ANSI C63.10:2013 clause 6.4.4.2 and 6,5.3, for measurements below 30 MHz, the loop antenna was positioned with its plane vertical from the EUT and rotated about its vertical axis for maximum response at each azimuth position around the EUT. And the loop antenna also be positioned with its plane horizontal at the specified distance from the EUT. The center of the loop is 1 m above the ground. for measurement above 30MHz, the Trilog Broadband Antenna or Horn Antenna was located 3m from EUT, Measurements were made with the antenna positioned in both the horizontal and vertical planes of Polarization, and the measurement antenna was varied from 1 m to 4 m. in height above the reference ground plane to obtain the maximum signal strength.

(3) Below pre-scan procedure was first performed in order to find prominent frequency spectrum radiated emissions from 9kHz to 1GHz:

(a) Scanning the peak frequency spectrum with the antenna specified in step (3), and the EUT was rotated 360 degree, the antenna height was varied from 1m to 4m(Except loop antenna, it's

fixed 1m above ground.)

(b) Change work frequency or channel of device if practicable.

(c) Change modulation type of device if practicable.

(d) Rotated EUT though three orthogonal axes to determine the attitude of EUT arrangement produces highest emissions. Spectrum frequency from 9kHz to 1GHz (tenth harmonic of fundamental frequency) was investigated.

(4) For final emissions measurements at each frequency of interest, the EUT was rotated and the antenna height was varied between 1m and 4m in order to maximize the emission. Measurements in both horizontal and vertical polarities were made and the data was recorded. In order to find the maximum emission, the relative positions of equipments and all of the interface cables were changed according to ANSI C63.10:2013 on Radiated Emission test.

(5) The emissions from 9kHz to 1GHz were measured based on CISPR QP detector except for the frequency bands 9-90kHz, 110-490kHz, for emissions from 9kHz-90kHz,110kHz-490kHz and above 1GHz were measured based on average detector, for emissions above 1GHz, peak emissions also be measured and need comply with Peak limit.

(6) The emissions from 9kHz to 1GHz, QP or average values were measured with EMI receiver with below RBW.

| Frequency band | RBW |
|---|---|
| 9kHz-150kHz | 200Hz |
| 150kHz-30MHz | 9kHz |
| 30MHz-1GHz | 120kHz |

## 5.4. Test result

**PASS. (See below detailed test result)**

**Below 30MHz:**

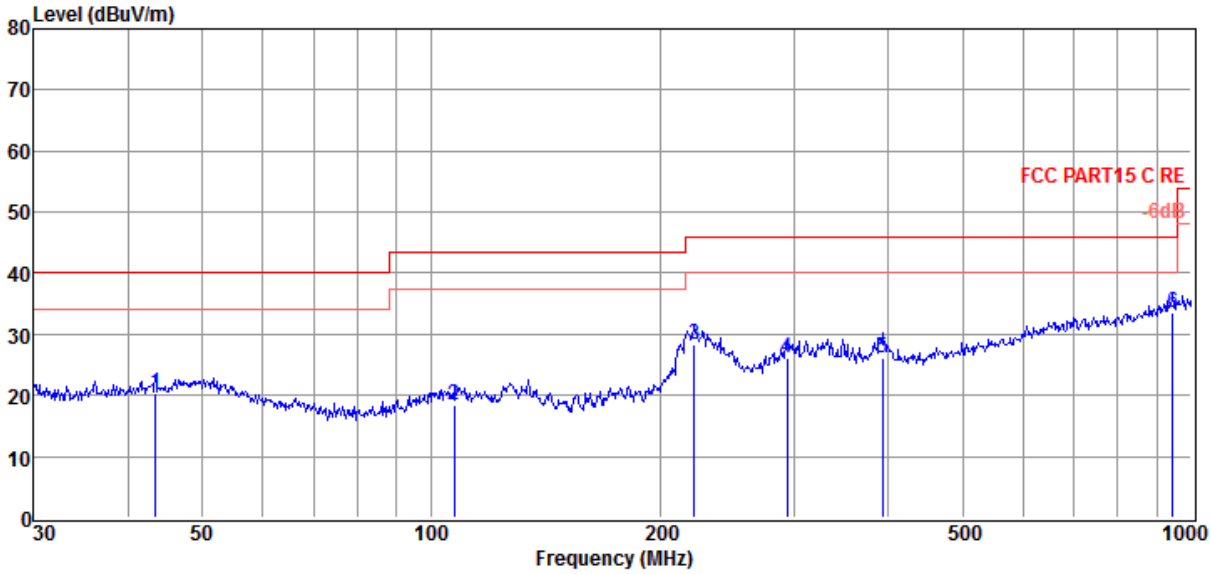
| Frequency (MHz) | Result@**3m** (dBuV/m) | Limit @**3m** (dBuV/m) | Detector | Conclusion |
|---|---|---|---|---|
| 0.03 | 69.95 | 138.06 | Peak | PASS |
| 0.03 | 62.46 | 118.06 | Average | PASS |
| 0.147 | 92.55 | 124.25 | Peak | PASS |
| 0.147 | 81.92 | 104.25 | Average | PASS |
| 0.39 | 70.61 | 115.78 | Peak | PASS |
| 0.39 | 64.67 | 95.78 | Average | PASS |
| 0.51 | 63.40 | 73.45 | QP | PASS |
| 0.64 | 61.09 | 71.48 | QP | PASS |
| 7.14 | 54.64 | 69.54 | QP | PASS |

**Above 30MHz:**

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

| | | | |
|---|---|---|---|
| **Test Site** | : DDT 3m Chamber 1# | D:\2019 RE1# Report Data\Q19052707-1E YW-012\FCC BELOW1G.EM6 | |
| **Test Date** | : 2019-08-15 | **Tested By** | : Talent |
| **EUT** | : Night Light Speaker with wireless charging | **Model Number** | : YW-012 |
| **Power Supply** | : AC 120V/60Hz | **Test Mode** | : Tx mode |
| **Condition** | : Temp:24.5'C, Humi:55%, Press:100.1kPa | **Antenna/Distance** | : 2018 VULB 9163 1#/3m/HORIZONTAL |
| **Memo** | : | | |

Data: 6



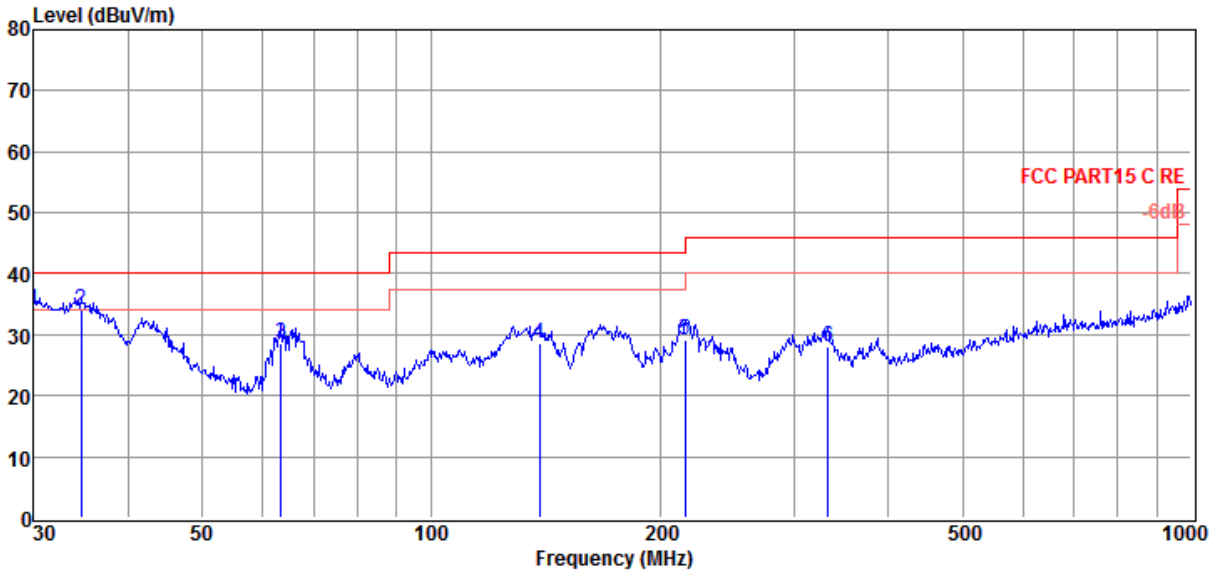

| Item (Mark) | Freq. (MHz) | Read Level (dBµV) | Antenna Factor (dB/m) | Cable Loss dB | Result Level (dBµV/m) | Limit Line (dBµV/m) | Over Limit (dB) | Detector | Polarization |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 43.35 | 2.62 | 13.83 | 3.81 | 20.26 | 40.00 | -19.74 | QP | HORIZONTAL |
| 2 | 107.13 | 2.44 | 11.77 | 4.24 | 18.45 | 43.50 | -25.05 | QP | HORIZONTAL |
| 3 | 222.17 | 11.30 | 12.07 | 4.89 | 28.26 | 46.00 | -17.74 | QP | HORIZONTAL |
| 4 | 294.11 | 6.99 | 13.87 | 5.16 | 26.02 | 46.00 | -19.98 | QP | HORIZONTAL |
| 5 | 392.10 | 5.20 | 15.49 | 5.48 | 26.17 | 46.00 | -19.83 | QP | HORIZONTAL |
| 6 | 945.44 | 4.32 | 22.21 | 7.06 | 33.59 | 46.00 | -12.41 | QP | HORIZONTAL |

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.
3. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto.

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

| | | | |
|---|---|---|---|
| **Test Site** | : DDT 3m Chamber 1# | D:\2019 RE1# Report Data\Q19052707-1E YW-012\FCC BELOW1G.EM6 | |
| **Test Date** | : 2019-08-15 | **Tested By** | : Talent |
| **EUT** | : Night Light Speaker with wireless charging | **Model Number** | : YW-012 |
| **Power Supply** | : AC 120V/60Hz | **Test Mode** | : Tx mode |
| **Condition** | : Temp:24.5'C, Humi:55%, Press:100.1kPa | **Antenna/Distance** | : 2018 VULB 9163 1#/3m/VERTICAL |
| **Memo** | : | | |

Data: 7

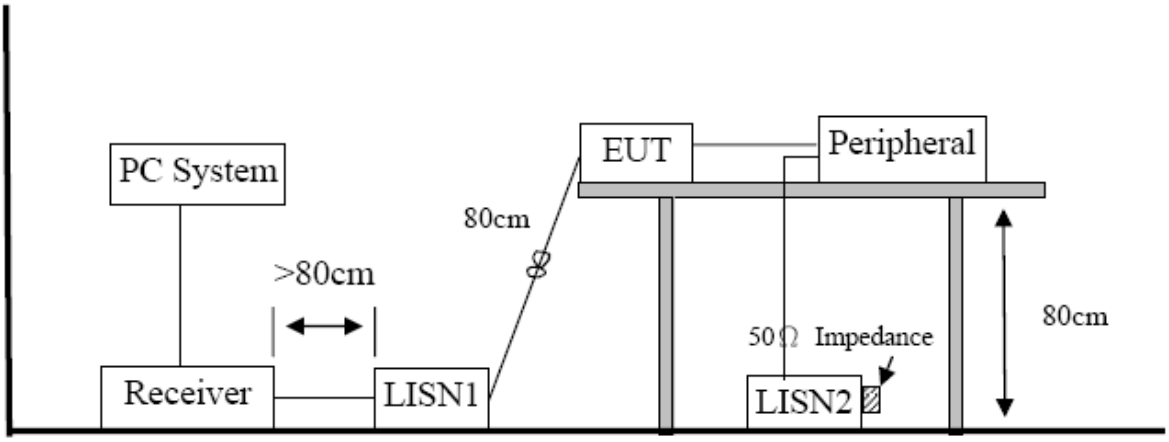



| Item (Mark) | Freq. (MHz) | Read Level (dBµV) | Antenna Factor (dB/m) | Cable Loss dB | Result Level (dBµV/m) | Limit Line (dBµV/m) | Over Limit (dB) | Detector | Polarization |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 30.00 | 19.38 | 11.10 | 3.64 | 34.12 | 40.00 | -5.88 | QP | VERTICAL |
| 2 | 34.64 | 18.01 | 12.25 | 3.70 | 33.96 | 40.00 | -6.04 | QP | VERTICAL |
| 3 | 63.54 | 13.85 | 10.69 | 3.98 | 28.52 | 40.00 | -11.48 | QP | VERTICAL |
| 4 | 138.87 | 15.25 | 8.79 | 4.43 | 28.47 | 43.50 | -15.03 | QP | VERTICAL |
| 5 | 216.02 | 12.42 | 11.89 | 4.87 | 29.18 | 46.00 | -16.82 | QP | VERTICAL |
| 6 | 332.52 | 8.15 | 14.57 | 5.30 | 28.02 | 46.00 | -17.98 | QP | VERTICAL |

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.
2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.
3. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto.

# 6 Power Line Conducted Emission

## 6.1. Block diagram of test setup




## 6.2. Power Line Conducted Emission Limits

| Frequency | Quasi-Peak Level dB(μV) | Average Level dB(μV) |
|---|---|---|
| 150kHz ~ 500kHz | 66 ~ 56* | 56 ~ 46* |
| 500kHz ~ 5MHz | 56 | 46 |
| 5MHz ~ 30MHz | 60 | 50 |

Note 1: * Decreasing linearly with logarithm of frequency.

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

## 6.3. 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 30MHz 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.

## 6.4. Test Result

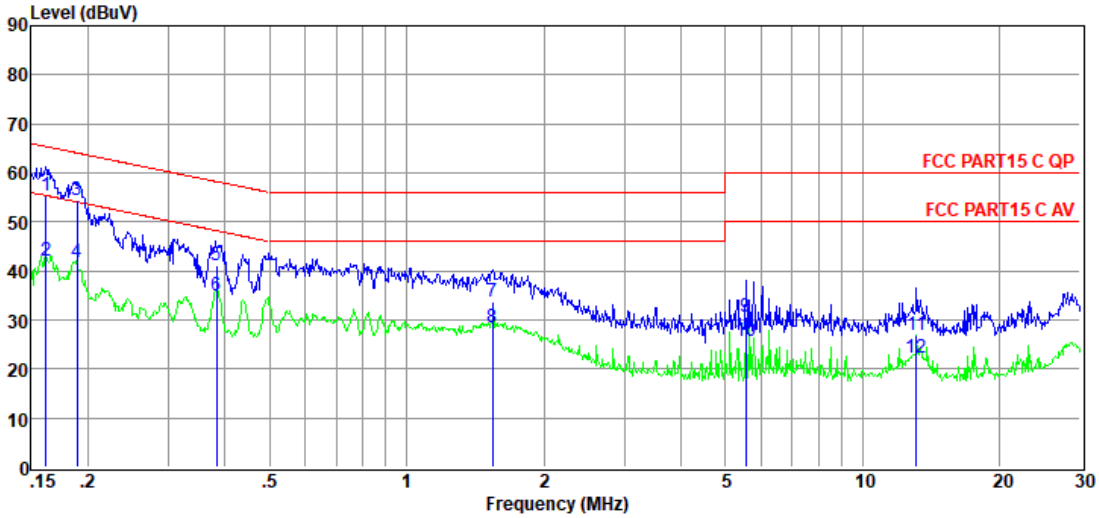
**PASS. (See below detailed test result)**

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/60Hz, recorded worse case.

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

| | | | |
|---|---|---|---|
| **Test Site** | : DDT 1# Shield Room | D:\2019 CE report data\Q19052707-1E\20190704 CE.EM6 | |
| **Test Date** | : 2019-07-04 | **Tested By** | : Telamon |
| **EUT** | : Night Light Speaker with wireless charging | **Model Number** | : YW-012 |
| **Power Supply** | : AC 120V/60Hz | **Test Mode** | : Tx mode |
| **Condition** | : Temp:24.5'C, Humi:71.2%, Press:101.4kPa | **LISN** | : 2018 ENV216/LINE |
| **Memo** | : | | |

Data: 35



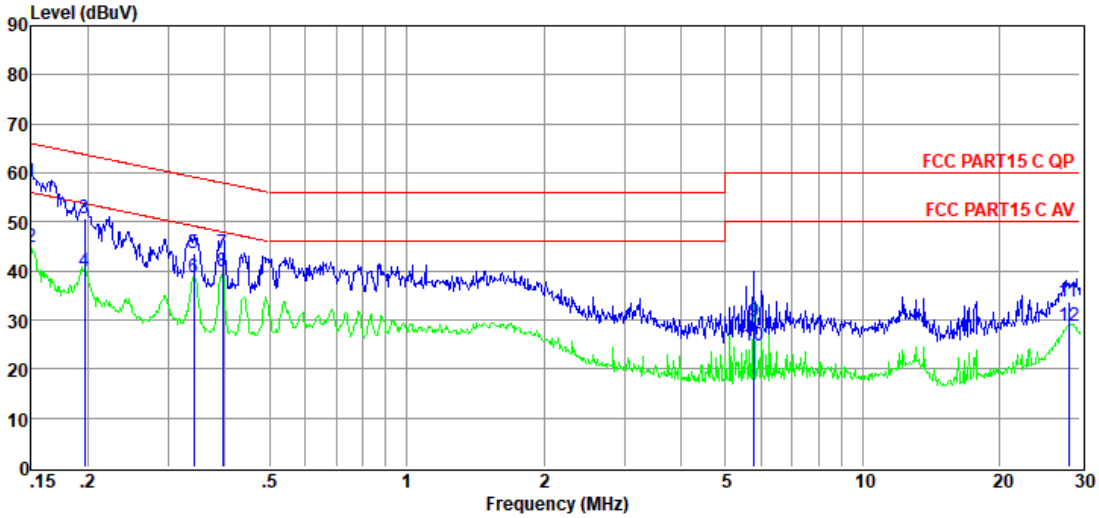

| Item (Mark) | Freq. (MHz) | Read Level (dBµV) | LISN Factor (dB) | Cable Loss (dB) | Pulse Limiter Factor (dB) | Result Level (dBµV) | Limit Line (dBµV) | Over Limit (dB) | Detector | Phase |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.16 | 35.76 | 9.63 | 0.02 | 9.86 | 55.27 | 65.38 | -10.11 | QP | LINE |
| 2 | 0.16 | 22.47 | 9.63 | 0.02 | 9.86 | 41.98 | 55.38 | -13.40 | Average | LINE |
| 3 | 0.19 | 35.03 | 9.63 | 0.02 | 9.86 | 54.54 | 64.06 | -9.52 | QP | LINE |
| 4 | 0.19 | 22.12 | 9.63 | 0.02 | 9.86 | 41.63 | 54.06 | -12.43 | Average | LINE |
| 5 | 0.38 | 21.54 | 9.64 | 0.02 | 9.86 | 41.06 | 58.21 | -17.15 | QP | LINE |
| 6 | 0.38 | 15.40 | 9.64 | 0.02 | 9.86 | 34.92 | 48.21 | -13.29 | Average | LINE |
| 7 | 1.54 | 14.18 | 9.65 | 0.07 | 9.87 | 33.77 | 56.00 | -22.23 | QP | LINE |
| 8 | 1.54 | 8.98 | 9.65 | 0.07 | 9.87 | 28.57 | 46.00 | -17.43 | Average | LINE |
| 9 | 5.54 | 10.90 | 9.70 | 0.07 | 9.88 | 30.55 | 60.00 | -29.45 | QP | LINE |
| 10 | 5.54 | 6.02 | 9.70 | 0.07 | 9.88 | 25.67 | 50.00 | -24.33 | Average | LINE |
| 11 | 13.13 | 6.89 | 10.08 | 0.09 | 9.92 | 26.98 | 60.00 | -33.02 | QP | LINE |
| 12 | 13.13 | 2.07 | 10.08 | 0.09 | 9.92 | 22.16 | 50.00 | -27.84 | 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.

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

| | | | |
|---|---|---|---|
| **Test Site** | : DDT 1# Shield Room | D:\2019 CE report data\Q19052707-1E\20190704 CE.EM6 | |
| **Test Date** | : 2019-07-04 | **Tested By** | : Telamon |
| **EUT** | : Night Light Speaker with wireless charging | **Model Number** | : YW-012 |
| **Power Supply** | : AC 120V/60Hz | **Test Mode** | : Tx mode |
| **Condition** | : Temp:24.5'C, Humi:71.2%, Press:101.4kPa | **LISN** | : 2018 ENV216/NEUTRAL |
| **Memo** | : | | |

Data: 36




| Item (Mark) | Freq. (MHz) | Read Level (dBµV) | LISN Factor (dB) | Cable Loss (dB) | Pulse Limiter Factor (dB) | Result Level (dBµV) | Limit Line (dBµV) | Over Limit (dB) | Detector | Phase |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.15 | 38.58 | 9.64 | 0.02 | 9.86 | 58.10 | 66.00 | -7.90 | QP | NEUTRAL |
| 2 | 0.15 | 25.19 | 9.64 | 0.02 | 9.86 | 44.71 | 56.00 | -11.29 | Average | NEUTRAL |
| 3 | 0.20 | 31.25 | 9.64 | 0.02 | 9.86 | 50.77 | 63.76 | -12.99 | QP | NEUTRAL |
| 4 | 0.20 | 20.42 | 9.64 | 0.02 | 9.86 | 39.94 | 53.76 | -13.82 | Average | NEUTRAL |
| 5 | 0.34 | 24.12 | 9.64 | 0.02 | 9.86 | 43.64 | 59.18 | -15.54 | QP | NEUTRAL |
| 6 | 0.34 | 19.21 | 9.64 | 0.02 | 9.86 | 38.73 | 49.18 | -10.45 | Average | NEUTRAL |
| 7 | 0.40 | 23.96 | 9.64 | 0.02 | 9.86 | 43.48 | 57.95 | -14.47 | QP | NEUTRAL |
| 8 | 0.40 | 20.24 | 9.64 | 0.02 | 9.86 | 39.76 | 47.95 | -8.19 | Average | NEUTRAL |
| 9 | 5.77 | 9.98 | 9.72 | 0.07 | 9.88 | 29.65 | 60.00 | -30.35 | QP | NEUTRAL |
| 10 | 5.77 | 5.13 | 9.72 | 0.07 | 9.88 | 24.80 | 50.00 | -25.20 | Average | NEUTRAL |
| 11 | 28.30 | 13.44 | 10.19 | 0.19 | 10.01 | 33.83 | 60.00 | -26.17 | QP | NEUTRAL |
| 12 | 28.30 | 8.29 | 10.19 | 0.19 | 10.01 | 28.68 | 50.00 | -21.32 | 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.

# 7 Antenna Requirements

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. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

**END OF REPORT**