FCC RF Test Report
(Bluetooth)

Applicant:	Wuhu Hongjing Electronic Co., Ltd.
Address of Applicant:	No. 216, Huashan Road, Economic and Technological Development Zone, Wuhu, Anhui, China
Product Name:	HEAD UNIT
Model No.:	8015 AIO BASE (More models are listed in Section 2.2)
Brand Name:	
FCC ID:	2BVPG-8015AIOBASE
Test Standards:	FCC CFR Title 47 Part 15C (§15.247)
Date of Sample Receipt:	Jul. 13, 2026
Date of Test:	Jul. 14 to 26, 2026

Date of Report Issue:
Jul. 27, 2026

Prepared By:
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Winner Zhang / Manager
Approved by

Aron Wu / Senior Engineer
Reviewed by

Report Revision History

Rev.	Issue Date	Description
V00	Jul. 27, 2026	Initial Release

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1 Laboratory Introduction

1.1 Laboratory Location

Company Name:	Shenzhen Acote Technology Co., Ltd.
Address of Laboratory:	Room 719, Excellence Times Building, No. 27, Xinqiao 3rd Road, Xinqiao Community, Xinqiao Street, Bao'an District, Shenzhen, Guangdong Province, China.
	101, F1, building 15, zhongda 365, Xincheng Road No.9, Songshanhu, Dongguan, Guangdong, China.
Website:	www.acotelabs.com
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1.2 Laboratory Facility

Our company's laboratory facilities have received accreditation, certification, or authorization from the following organizations:

- **FCC - Designation No.: CN1450**
  Shenzhen Acote Technology Co., Ltd. has been certified by the FCC (Federal Communications Commission) as a testing laboratory. Test Firm Registration Number: **832670**.
- **ISED - CAB Identifier: CN0202**
  Shenzhen Acote Technology Co., Ltd. is registered with ISED (Innovation, Science and Economic Development Canada) as a Conformity Assessment Body (CAB) for radio equipment testing.
- **A2LA - Accreditation Number: 7697.01**
  Shenzhen Acote Technology Co., Ltd. has been accredited by A2LA (American Association for Laboratory Accreditation) in compliance with the internationally recognized standard ISO/IEC 17025:2017, "General Requirements for the Competence of Testing and Calibration Laboratories."

1.3 Announcement

Shenzhen Acote Technology Co., Ltd. tested the equipment in accordance with the requirements set forth in the test standards. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. It is the manufacturer's responsibility to assure that additional production units of this model are manufactured with identical electrical and mechanical components. All samples tested were in good operating condition throughout the entire test program. Measurement Uncertainties are published for informational purposes only and were not taken into account unless noted otherwise.

This document may not be altered or revised in any way unless done so by Shenzhen Acote Technology Co., Ltd. and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by Shenzhen Acote Technology Co., Ltd. will constitute fraud and shall nullify the document.

1.4 Disclaimer

For the information or data provided by the client in this report, the relevant results or conclusions of this report are only made for these data or information. The testing laboratory is not responsible for the authenticity and accuracy of these data or information.

2 Equipment Under Test Information

2.1 Application Information

Applicant:	Wuhu Hongjing Electronic Co., Ltd.
Address of Applicant:	No. 216, Huashan Road, Economic and Technological Development Zone, Wuhu, Anhui, China
Manufacturer:	Wuhu Hongjing Electronic Co., Ltd.
Address of Manufacturer:	No. 216, Huashan Road, Economic and Technological Development Zone, Wuhu, Anhui, China
Factory:	Wuhu Hongjing Electronic Co., Ltd.
Address of Factory:	No. 216, Huashan Road, Economic and Technological Development Zone, Wuhu, Anhui, China

2.2 Product Information

Product Name:	HEAD UNIT
Model No.:	8015 AIO BASE
Models of Product Family:	8015 AIO DAB
Description of Model Differentiation:	The two products share identical shell structures and PCBs. The difference lies in whether they support DAB functionality: those that support DAB (type 8015 AIODAB) utilize the corresponding DAB chips and connectors, while those that do not omit them (type 8015 AIO BASE). The difference refer the below table:
Hardware Version:	0.0.1
Software Version:	10.20.10

Function	8015 AIO BASE	8015 AIO DAB
BT(5.0)	√	√
Wifi 5G (band 6)	√	√
FM/AM	√	√
DAB	×	√
DAB HSD socket	√	√
DMS	×	×
DMS HSD socket	×	×
Offline navigation (software)	×	×
Online navigation (software)	×	×
Memory (RAM)	4G	4G
GNSS receiver	√	√

2.3 EUT Technical Parameters

Operation Frequency:	2402 MHz ~ 2480 MHz
Modulation Technology:	Frequency Hopping Spread Spectrum(FHSS)
Modulation Type:	☒GFSK ☒π/4-DQPSK ☒8DPSK
Date Speed:	☒1 Mbps ☒2 Mbps ☒3 Mbps
Channel Numbers:	79
Antenna Type:	Chip Antenna
Antenna Gain:	3.0 dBi (declared by applicant)
Power Supply:	DC 6 ~ 18V
Test Sample Condition:	The test samples were provided in good working order with no visible defects.

3 Test Information

3.1 Test Methodology

The tests documented in this report were performed in accordance with:

- FCC CFR Title 47 Part 2
- FCC CFR Title 47 Part 15C (§15.247)
- ANSI C63.10:2020
- KDB 558074 D01 15.247 Meas Guidance v05r02

3.2 Test Result Summary

Report Section	Test Items	Standard Clause	Test Result
5.1	Antenna Requirement	§15.203 §15.247 (b)(4)	Pass
5.2	AC Power Line Conducted Emission	§15.207	N/A
5.3	20dB Occupied Bandwidth	§15.247 (a)(1)	Pass
5.4	Conducted Output Power	§15.247 (b)(1)	Pass
5.5	Carrier Frequencies Separation	§15.247 (a)(1)	Pass
5.6	Hopping Channel Number	§15.247 (a)(1)(iii)	Pass
5.7	Dwell Time	§15.247 (a)(1)(iii)	Pass
5.8	Band-edge Emission	§15.247 (d)	Pass
5.9	Conduction Spurious Emission	§15.247 (d)	Pass
5.10	Emissions in Restricted Frequency Bands	§15.205 §15.247 (d)	Pass
5.11	Emissions in Non-restricted Frequency Bands	§15.209 §15.247(d)	Pass

Remark:

a) Pass: The EUT complies with the essential requirements in the standard.

b) N/A: Not applicable.

c) The test cable insertion loss used for RF output power and other conducted measurements is provided by the applicant.

3.3 Environment of test site

Temperature:	15 ~ 35°C
Humidity:	20 ~ 75% RH
Atmospheric Pressure:	990 ~ 1010 mbar

3.4 Measurement Uncertainty

Parameter	Expanded Uncertainty (Confidence of 95%(U = 2Uc(y)))
Radio Frequency	±2 x 10^{-8}
RF Power, Conducted	±0.66 dB
Spurious emission, Conducted	±2.28 dB
Bandwidth, Conducted	±4%
Temperature	±0.3 °C
Voltage	±0.1 %
Humidity	±2 %
Conducted Emission (9kHz ~ 150kHz)	±3.02 dB
Conducted Emission (30MHz ~ 1000MHz)	±2.52 dB
Radiated Emission (30MHz ~ 1000MHz) (3m SAC)	±4.78 dB
Radiated Emission (1GHz ~ 6GHz) (3m SAC)	±5.16 dB
Radiated Emission (6GHz ~ 18GHz) (3m SAC)	±5.48 dB
Radiated Emission (18GHz ~ 40GHz) (3m SAC)	±5.48 dB
Note: *All the measurement uncertainty value were shown with a coverage k=2 to indicate 95% level of confidence. The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.*	

3.5 Description of Support Units

The EUT was test as an independent unit.

3.6 Additions to, Deviations, or Exclusions from the Method

None

3.7 Test Instruments List

Radiated Emission(3m SAC)				
Test Equipment	Manufacturer	Model	Serial No.	Cal Due
3m SAC	YiHeng	9m*6m*6m	20250422	2028/05/28
EMI Test Receiver	Rohde & Schwarz	ESR7	101542	2026/08/31
TRILOG Broad Band Antenna (30MHz – 1000MHz)	Schwarzbeck	VULB 9168	9168-771	2026/09/08
6dB Attenuator	SRTechnology Corporate	N-ATTENUATOR(6dB)	311248	2026/08/31
Preamplifier (30MHz – 1000MHz)	TESTEK	TK-PA06S	190014-L	2026/08/31
Broadband Horn Antenna (1GHz – 18GHz)	Gwave Technology	GHA0118A-11	20251014010	2026/11/16
Preamplifier (1GHz – 18GHz)	Gwave Technology	GWLAN008018-50	20251014010	2026/10/23
Broadband Horn Antenna (18GHz – 40GHz)	Gwave Technology	GHA180400-292F-20	20251014010	2026/11/16
Preamplifier (18GHz – 40GHz)	Gwave Technology	GWLAN018040-45	20251014010	2026/10/23
RF Cable (9kHz – 18GHz)	REBES	SF104/10000MM	805225/4	2026/08/31
RF Cable (9kHz – 18GHz)	REBES	SF104/10000MM	805226/4	2026/08/31
RF Cable (18GHz – 40GHz)	MWRFTest	UCA400-2.92M2092M-1.5M	004	2026/10/23
RF Cable (18GHz – 40GHz)	Gwave Technology	GAU3-292M292M-3000A1	20251021001-01-01	2026/10/23
RF Cable (18GHz – 40GHz)	Gwave Technology	GAU3-292M292M-600A1	20251021001-01-01	2026/10/23
High-pass filter (1GHz – 18GHz)	K&L MICROWAVE	11SH10-2000/U1800-O/O	350	2026/10/23
High-pass filter (3GHz – 18GHz)	UIY	UIYHPF3025A4T18SF	DL0019131	2026/10/23
High-pass filter (7GHz – 18GHz)	Narda	F4036A	1572	2026/10/23
Spectrum Analyzer	Rohde & Schwarz	FSP40	102129	2027/07/03
Test Software	Frad	EZ_EMC	Version: EMEC-3A1	N/A

Conducted Emission				
Test Equipment	Manufacturer	Model	Serial No.	Cal Due
EMI Test Receiver	Rohde & Schwarz	ESR3	101763	2026/08/31
TWO-LINE V-NETWORK	Rohde & Schwarz	ENV216	101078	2026/08/31
RF Cable (9kHz – 30MHz)	REBES	WG4R-60-60-3	210305	2026/08/31
Test Software	Frad	EZ_EMC	Version: EMEC-3A1	N/A

RF Conducted Measurement				
Test Equipment	Manufacturer	Model	Serial No.	Cal Due
Spectrum Analyzer	Keysight	N9020A	MY56060179	2026/11/13
Vector Signal Generator	Agilent	N5182A	MY49060467	2026/11/13
Wideband Radio Communication Tester	Rohde & Schwarz	CMW500	123351	2026/11/13
Automatic control unit (including power sensor)	MWRFTest	MW100-RFCB	MW250722AKT-59	2026/11/13
BT/WiFi automated testing software	MWRFTest	MTS8310	Version: 2.0.0.0	N/A

4 Test Configuration of EUT

4.1 Channels Selected to Perform the Tests

Channels	Channel No.	Frequency (MHz)
Lowest	0	2402
Middle	39	2441
Highest	78	2480

4.2 Test Mode

TM 1:	Keep the EUT in continuously transmitting mode
TM 2:	Keep the EUT in hopping mode

4.3 Worst-case Configuration

The worst-case scenario for all measurements is based on an engineering evaluation made on different modulations. The details are as follows:

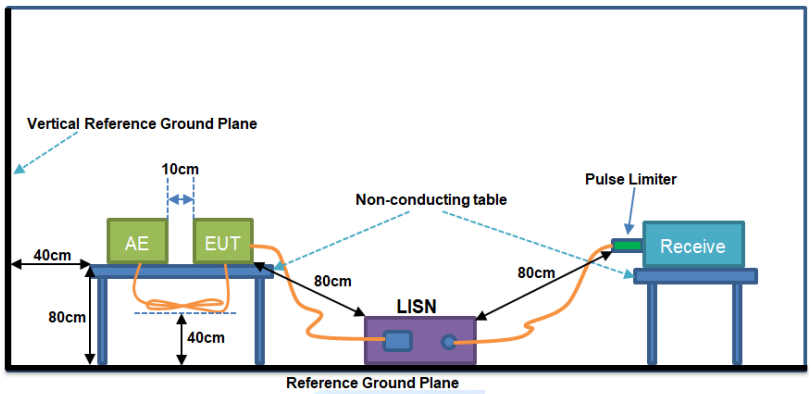
Report Section	Test Channel	Test Mode	Modulation Type
5.2	/	/	1-DH5, 2-DH5, 3-DH5
5.3	L, M, H	TM 1	
5.4	L, M, H	TM 1	
5.5	Hopping	TM 2	
5.6	Hopping	TM 2	
5.7	Hopping	TM 2	1-DH1, 1-DH3, 1-DH5 2-DH1, 2-DH3, 2-DH5 3-DH1, 3-DH3, 3-DH5
5.8	L, H	TM 1	1-DH5, 2-DH5, 3-DH5
	Hopping	TM 2	
5.9	L, M, H	TM 1	
5.10	L, H	TM 1	
5.11	L, M, H	TM 1	

Note:

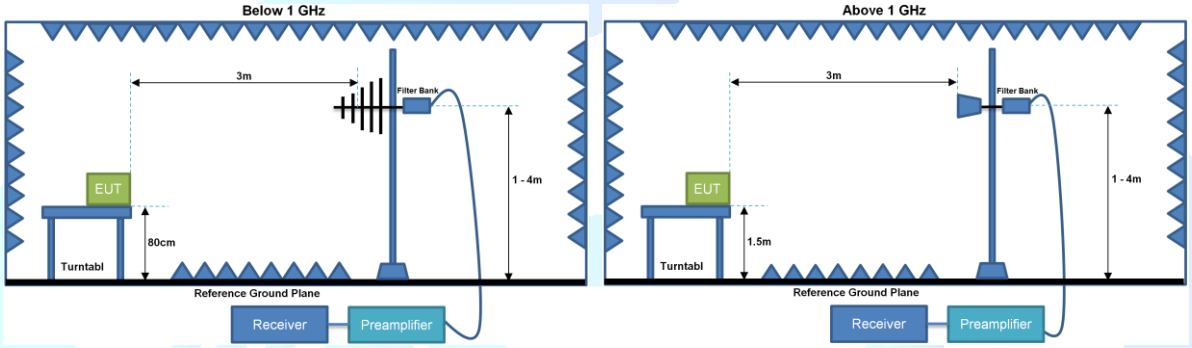
1) The EUT was investigated in three orthogonal orientations X, Y and Z, it was determined that Y was the worst-case of radiated field strength.
2) For Section 5.2, only the modulation type and the channel corresponding to the highest output power were tested.
3) For the 30 MHz to 1000 MHz range in Section 5.11, only the modulation type and the channel corresponding to the highest output power were tested.
4) For frequencies above 1 GHz in Section 5.11, measurements were performed up to the 10th harmonic of the fundamental frequency (or up to 40 GHz). Frequencies with emission levels at least 20 dB below the limit are not presented in the test report.

4.4 Test Setup Block

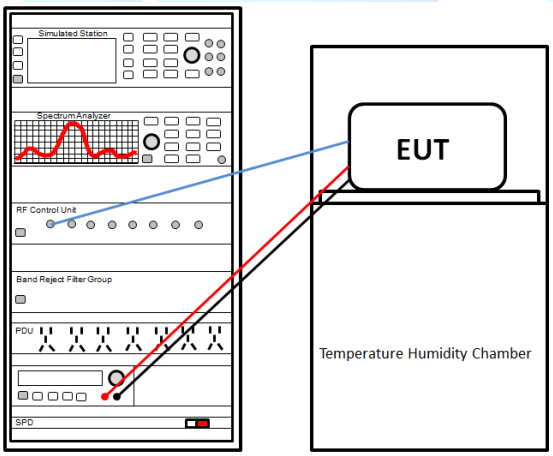
Setup 1 (Conducted Emission):



Setup 2 (Radiated Emission):



Setup 3 (MTS8310 Testing System):



5 Technical requirements specification

5.1 Antenna Requirement

5.1.1 Requirement

15.203 Requirement:

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, 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.

15.247(b) (4) Requirement:

The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

5.1.2 Results

Pass.

The Bluetooth antenna is an chip antenna which permanently attached, and the best case gain of the antenna is 3.0 dBi. See product internal photos for details.

5.2 AC Power Line Conducted Emission

5.2.1 Limits

Frequency (MHz)	Limit (dBµV)	
	Quasi-peak	Average
0.15 – 0.5	66 to 56 Note 1	56 to 46 Note 1
0.5 – 5	56	46
5 – 30	60	50
Note 1: The limit level in dBµV decreases linearly with the logarithm of frequency. Note 2: The more stringent limit applies at transition frequencies.		

5.2.2 Test Procedure

a) The EUT was placed on a non-conductive table, 40 cm from the vertical ground plane and 80 cm from the horizontal ground plane. The EUT was arranged in accordance with ANSI C63.10.

b) The EUT was configured to operate in TM 1 mode as specified in Section 4.2. The test channels and modulation types of the EUT are described in Section 4.3.

c) The phase of the LISN was set to L1.

d) Open the test software, load the conducted emission test script, or create a new conducted emission test script, and configure the test parameters, including the test frequency range, RBW = 9kHz, VBW = 30kHz, test standard, LISN, receiver, and other related settings.

e) The test script was executed, the measurement was performed. Save the test data.

f) The phase of the LISN was set to N, and steps d) and e) were repeated.

5.2.3 Test Setup

See setup 1 in section 4.4.

5.2.4 Test Instruments

Refer to section 3.7.

5.2.5 Test Results

N/A

5.3 20dB Occupied Bandwidth

5.3.1 Limits

N/A. Within authorization band.

5.3.2 Test Procedure

a) The EUT antenna port is connected to the RF port of the test system control unit via an RF cable.
b) The EUT is set to operate in TM 1 mode as described in Section 4.2. The EUT test channel and modulation type settings are described in Section 4.3.
c) Open the test software, load the BT test script, and select the test items and other relevant test parameters.
d) The test script was executed, the measurement was performed.
e) Save the test data.

5.3.3 Test Setup

See setup 3 in section 4.4.

5.3.4 Test Instruments

Refer to section 3.7.

5.3.5 Test Results

Pass.

5.3.6 Test Data

For detailed test data, see Appendix – BT Test Data (Section 1).

5.4 Conducted Output Power

5.4.1 Limits

For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 non-overlapping hopping channels, and all frequency hopping systems in the 5725-5850 MHz band: 1 watt. For all other frequency hopping systems in the 2400-2483.5 MHz band: 0.125 watts.

5.4.2 Test Procedure

a) The EUT antenna port is connected to the RF port of the test system control unit via an RF cable.
b) The EUT is set to operate in TM 1 mode as described in Section 4.2. The EUT test channel and modulation type settings are described in Section 4.3.
c) Open the test software, load the BT test script, and select the test items and other relevant test parameters.
d) The test script was executed, the measurement was performed.
e) Save the test data.

5.4.3 Test Setup

See setup 3 in section 4.4.

5.4.4 Test Instruments

Refer to section 3.7.

5.4.5 Test Results

Pass.

5.4.6 Test Data

For detailed test data, see Appendix – BT Test Data (Section 2).

5.5 Carrier Frequencies Separation

5.5.1 Limits

Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater.

Alternatively, frequency hopping systems operating in the 2400–2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW.

5.5.2 Test Procedure

a) The EUT antenna port is connected to the RF port of the test system control unit via an RF cable.
b) The EUT is set to operate in TM 2 mode as described in Section 4.2. The EUT test channel and modulation type settings are described in Section 4.3.
c) Open the test software, load the BT test script, and select the test items and other relevant test parameters.
d) The test script was executed, the measurement was performed.
e) Save the test data.

5.5.3 Test Setup

See setup 3 in section 4.4.

5.5.4 Test Instruments

Refer to section 3.7.

5.5.5 Test Results

Pass.

5.5.6 Test Data

For detailed test data, see Appendix – BT Test Data (Section 3).

5.6 Hopping Channel Number

5.6.1 Limits

Frequency hopping systems in the 2400–2483.5 MHz band shall use at least 15 channels.

5.6.2 Test Procedure

a) The EUT antenna port is connected to the RF port of the test system control unit via an RF cable.
b) The EUT is set to operate in TM 2 mode as described in Section 4.2. The EUT test channel and modulation type settings are described in Section 4.3.
c) Open the test software, load the BT test script, and select the test items and other relevant test parameters.
d) The test script was executed, the measurement was performed.
e) Save the test data.

5.6.3 Test Setup

See setup 3 in section 4.4.

5.6.4 Test Instruments

Refer to section 3.7.

5.6.5 Test Results

Pass.

5.6.6 Test Data

For detailed test data, see Appendix – BT Test Data (Section 4).

5.7 Dwell Time

5.7.1 Limits

The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed.

5.7.2 Test Procedure

a) The EUT antenna port is connected to the RF port of the test system control unit via an RF cable.
b) The EUT is set to operate in TM 2 mode as described in Section 4.2. The EUT test channel and modulation type settings are described in Section 4.3.
c) Open the test software, load the BT test script, and select the test items and other relevant test parameters.
d) The test script was executed, the measurement was performed.
e) Save the test data.

5.7.3 Test Setup

See setup 3 in section 4.4.

5.7.4 Test Instruments

Refer to section 3.7.

5.7.5 Test Results

Pass.

5.7.6 Test Data

For detailed test data, see Appendix – BT Test Data (Section 5).

5.8 Band-edge Emission

5.8.1 Limits

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB.

5.8.2 Test Procedure

a) The EUT antenna port is connected to the RF port of the test system control unit via an RF cable.
b) The EUT is set to operate in TM 1 and TM 2 mode as described in Section 4.2. The EUT test channel and modulation type settings are described in Section 4.3.
c) Open the test software, load the BT test script, and select the test items and other relevant test parameters.
d) The test script was executed, the measurement was performed.
e) Save the test data.

5.8.3 Test Setup

See setup 3 in section 4.4.

5.8.4 Test Instruments

Refer to section 3.7.

5.8.5 Test Results

Pass.

5.8.6 Test Data

For detailed test data, see Appendix – BT Test Data (Section 6 and Section 7).

5.9 Conduction Spurious Emission

5.9.1 Limits

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB.

5.9.2 Test Procedure

a) The EUT antenna port is connected to the RF port of the test system control unit via an RF cable.
b) The EUT is set to operate in TM 1 mode as described in Section 4.2. The EUT test channel and modulation type settings are described in Section 4.3.
c) Open the test software, load the BT test script, and select the test items and other relevant test parameters.
d) The test script was executed, the measurement was performed.
e) Save the test data.

5.9.3 Test Setup

See setup 3 in section 4.4.

5.9.4 Test Instruments

Refer to section 3.7.

5.9.5 Test Results

Pass.

5.9.6 Test Data

For detailed test data, see Appendix – BT Test Data (Section 8).

5.10 Emissions in Restricted Frequency Bands

5.10.1 Limits

Frequency (MHz)	Limits (dBμV/m) at 3m	Detector
30 - 88	40.0	Quasi-peak
88 - 216	43.5	Quasi-peak
216 - 960	46.0	Quasi-peak
960 - 1000	54.0	Quasi-peak
Note: The more stringent limits applies at transition frequencies.		
Frequency (MHz)	Limits (dBμV/m) at 3m	
	Average	Peak
Above 1GHz	54.0	74.0

5.10.2 Test Procedure

a) The EUT is placed on a non-conducting table of the 3m SAC turntable, 80 cm above the ground plane for measurement below 1GHz, 1.5 m above the ground plane for measurement above 1GHz. The measurement receiving antenna to EUT distance is 3 meters. The EUT was arranged in accordance with ANSI C63.10.

b) The EUT is operated in TM 1 mode as described in Section 4.2. The EUT test channel and modulation type settings are described in Section 4.3.

c) Open the test software, load the radiated emissions test script, or create a new radiated emissions test script, and configure the test parameters, including the test frequency range, RBW = 100kHz (for below 1GHz) or 1MHz (for above 1GHz), VBW = 300kHz (for below 1GHz) or 3MHz (for above 1GHz), test standard, test antenna, spectrum analyzer, and other related settings.

d) The test script was executed, the measurement was performed.

e) The turntable rotates 360 degrees, and the test antenna is raised and lowered within a range of 1 to 4 meters.

f) Use the spectrum analyzer's Max Hold function to record the maximum test trace. For frequencies below 1 GHz, mark the maximum Quasi-peak value. For frequencies above 1 GHz, mark the maximum Peak and Average values. Save the test data.

g) Both vertical and horizontal polarizations of the test antenna need to be tested.

5.10.3 Test Setup

See setup 2 in section 4.4.

5.10.4 Test Instruments

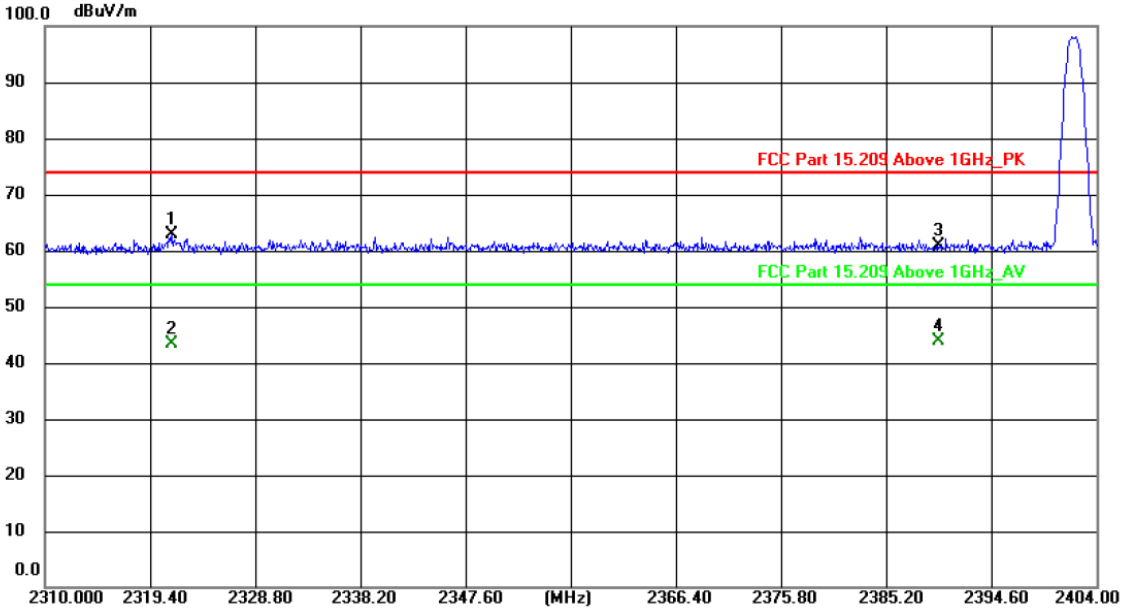
Refer to section 3.7.

5.10.5 Test Results

Pass.

5.10.6 Test Data

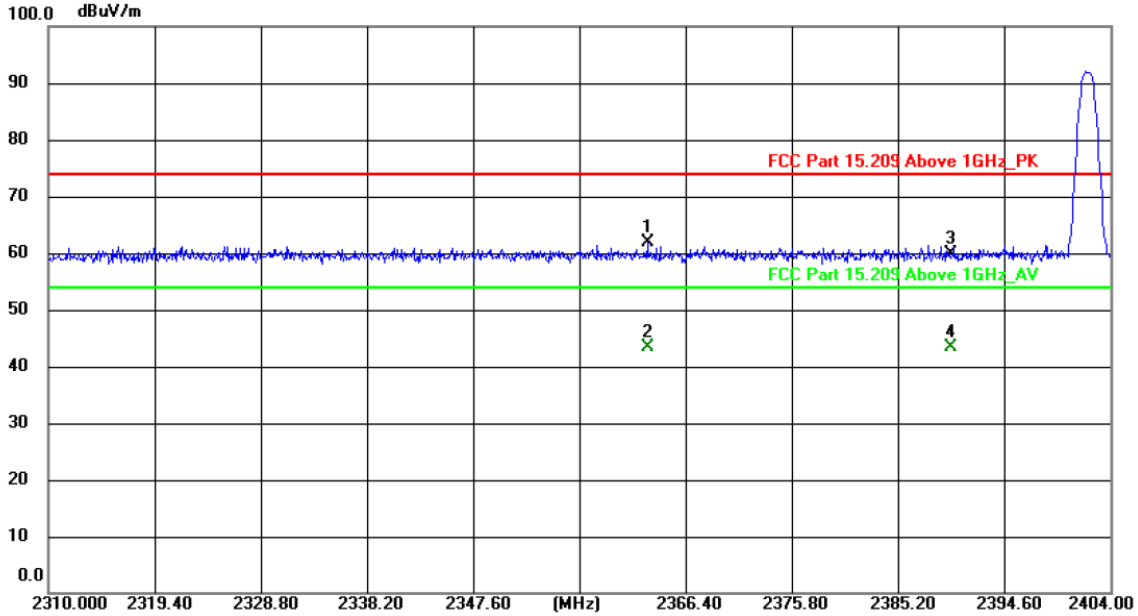
Product Name:	HEAD UNIT	**Model No.:**	8015 AIO BASE
Test By:	Albers Liu	**Test mode:**	TM 1
Test Channel:	Lowest channel (1-DH5)	**Polarization:**	Vertical
Test Voltage:	DC 12V		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	2321.374	30.69	32.13	62.82	74.00	-11.18	peak	P
2	2321.374	11.25	32.13	43.38	54.00	-10.62	AVG	P
3	2390.000	28.74	32.26	61.00	74.00	-13.00	peak	P
4 *	2390.000	11.74	32.26	44.00	54.00	-10.00	AVG	P

Remark: *Level = Read level + Factor (Antenna Factor + Cable Loss – Preamplifier Factor).*

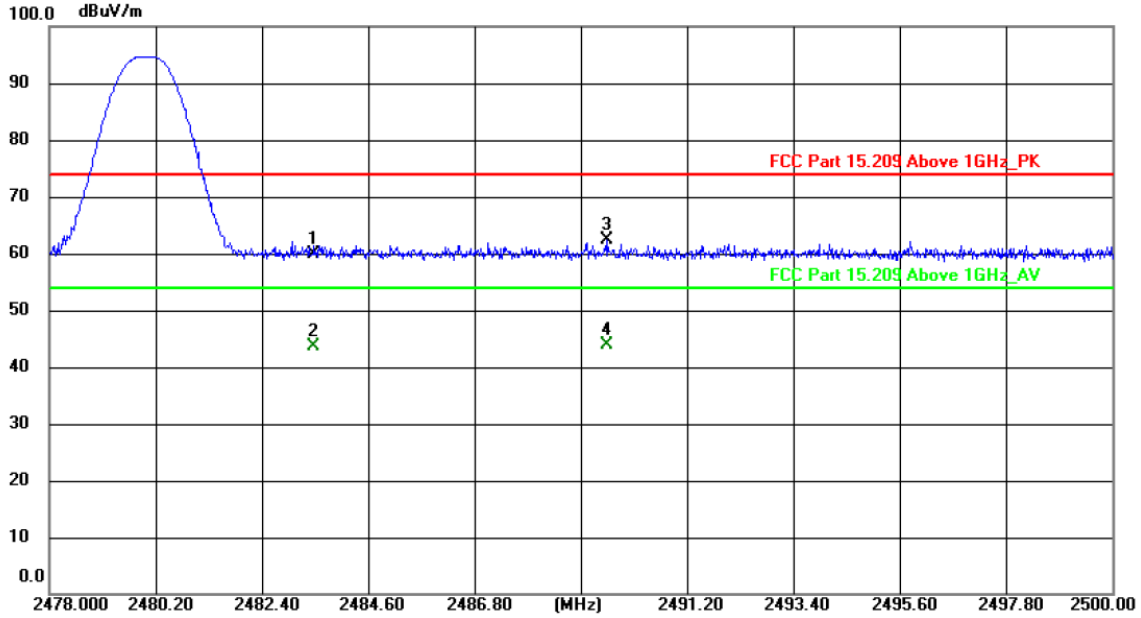
Product Name:	HEAD UNIT	**Model No.:**	8015 AIO BASE
Test By:	Albers Liu	**Test mode:**	TM 1
Test Channel:	Lowest channel (1-DH5)	**Polarization:**	Horizontal
Test Voltage:	DC 12V		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	2363.063	29.73	32.21	61.94	74.00	-12.06	peak	P
2 *	2363.063	11.24	32.21	43.45	54.00	-10.55	AVG	P
3	2390.000	27.57	32.26	59.83	74.00	-14.17	peak	P
4	2390.000	11.06	32.26	43.32	54.00	-10.68	AVG	P

Remark: *Level = Read level + Factor (Antenna Factor + Cable Loss – Preamplifier Factor).*

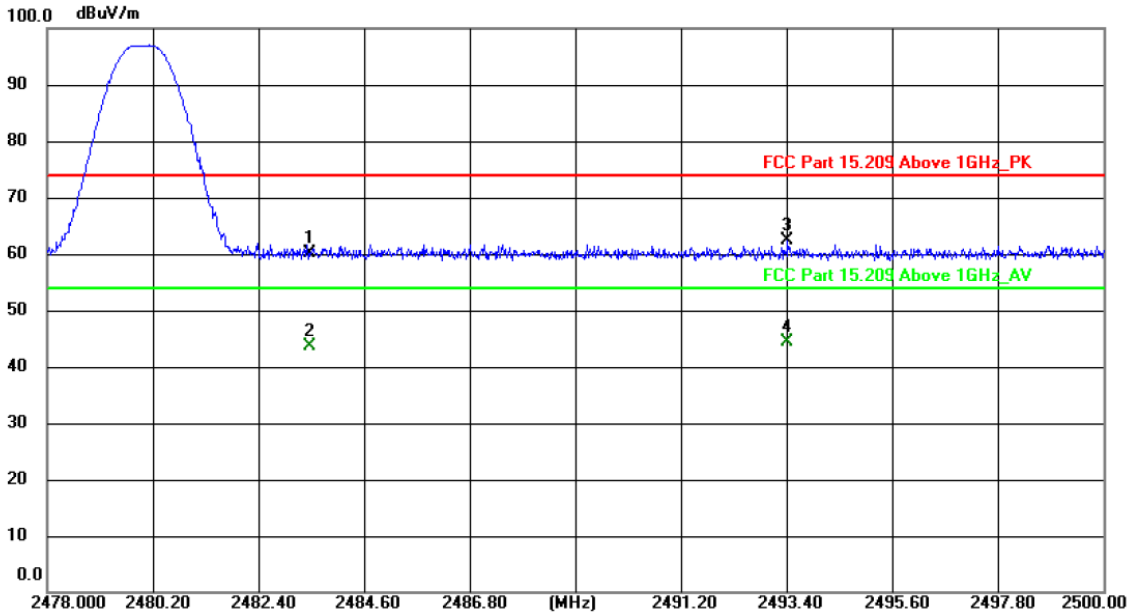
Product Name:	HEAD UNIT	**Model No.:**	8015 AIO BASE
Test By:	Albers Liu	**Test mode:**	TM 1
Test Channel:	Highest channel (1-DH5)	**Polarization:**	Vertical
Test Voltage:	DC 12V		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	2483.500	27.39	32.44	59.83	74.00	-14.17	peak	P
2	2483.500	11.17	32.44	43.61	54.00	-10.39	AVG	P
3	2489.561	29.99	32.45	62.44	74.00	-11.56	peak	P
4 *	2489.561	11.33	32.45	43.78	54.00	-10.22	AVG	P

Remark: *Level = Read level + Factor (Antenna Factor + Cable Loss – Preamplifier Factor).*

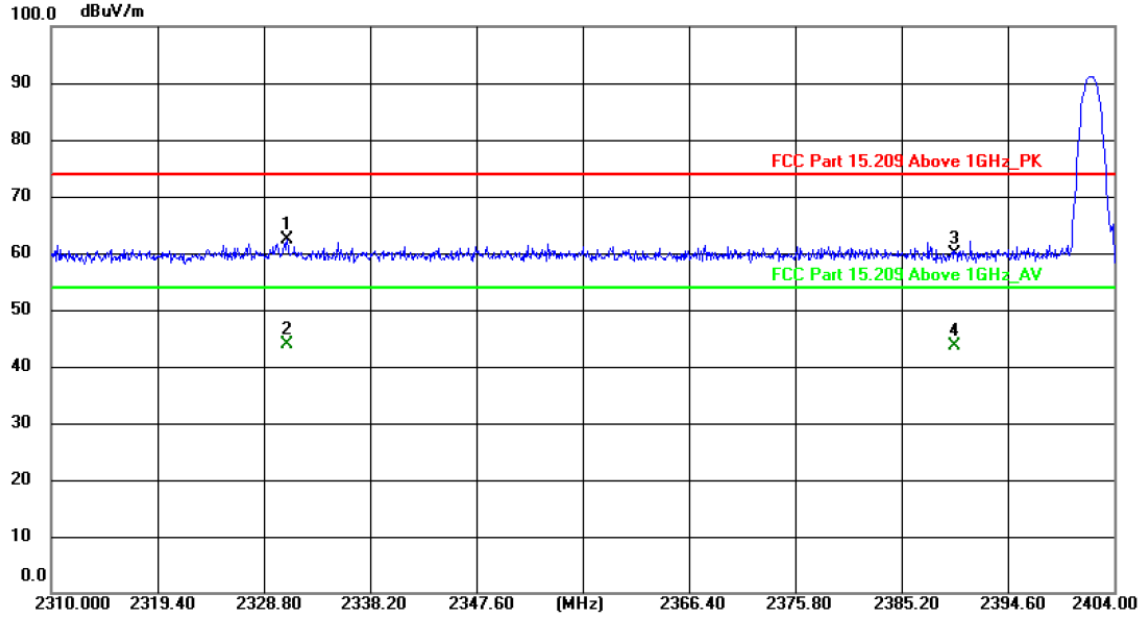
Product Name:	HEAD UNIT	**Model No.:**	8015 AIO BASE
Test By:	Albers Liu	**Test mode:**	TM 1
Test Channel:	Highest channel (1-DH5)	**Polarization:**	Horizontal
Test Voltage:	DC 12V		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	2483.500	27.79	32.44	60.23	74.00	-13.77	peak	P
2	2483.500	11.28	32.44	43.72	54.00	-10.28	AVG	P
3	2493.433	29.92	32.46	62.38	74.00	-11.62	peak	P
4 *	2493.433	11.84	32.46	44.30	54.00	-9.70	AVG	P

Remark: *Level = Read level + Factor (Antenna Factor + Cable Loss – Preamplifier Factor).*

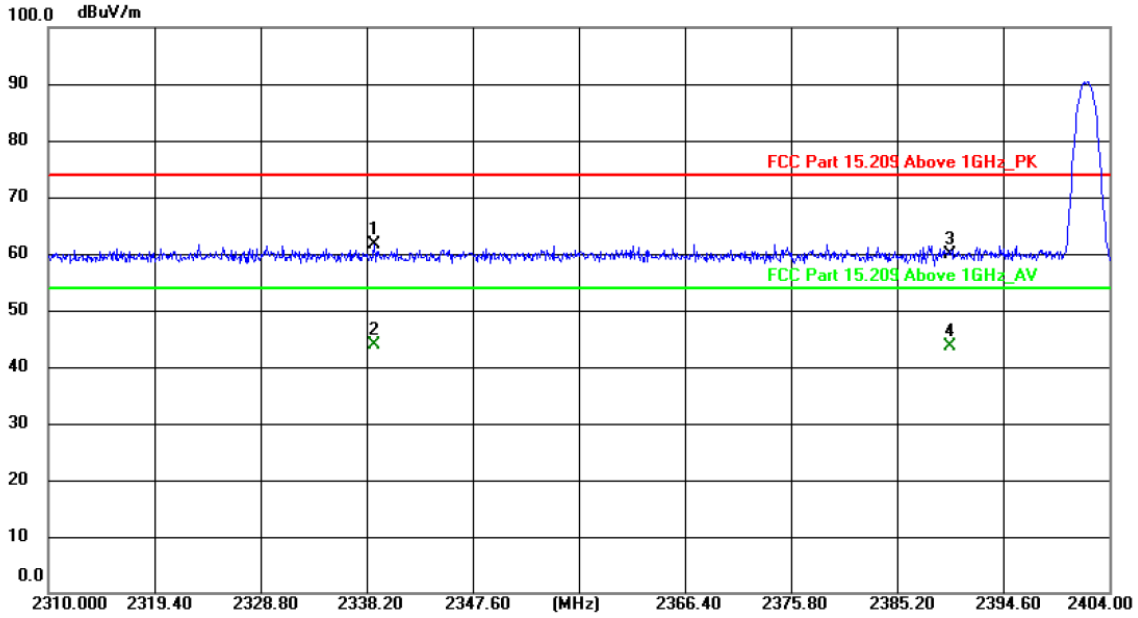
Product Name:	HEAD UNIT	**Model No.:**	8015 AIO BASE
Test By:	Albers Liu	**Test mode:**	TM 1
Test Channel:	Lowest channel (2-DH5)	**Polarization:**	Vertical
Test Voltage:	DC 12V		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	2330.939	30.31	32.15	62.46	74.00	-11.54	peak	P
2 *	2330.939	11.74	32.15	43.89	54.00	-10.11	AVG	P
3	2390.000	27.50	32.26	59.76	74.00	-14.24	peak	P
4	2390.000	11.35	32.26	43.61	54.00	-10.39	AVG	P

Remark: *Level = Read level + Factor (Antenna Factor + Cable Loss – Preamplifier Factor).*

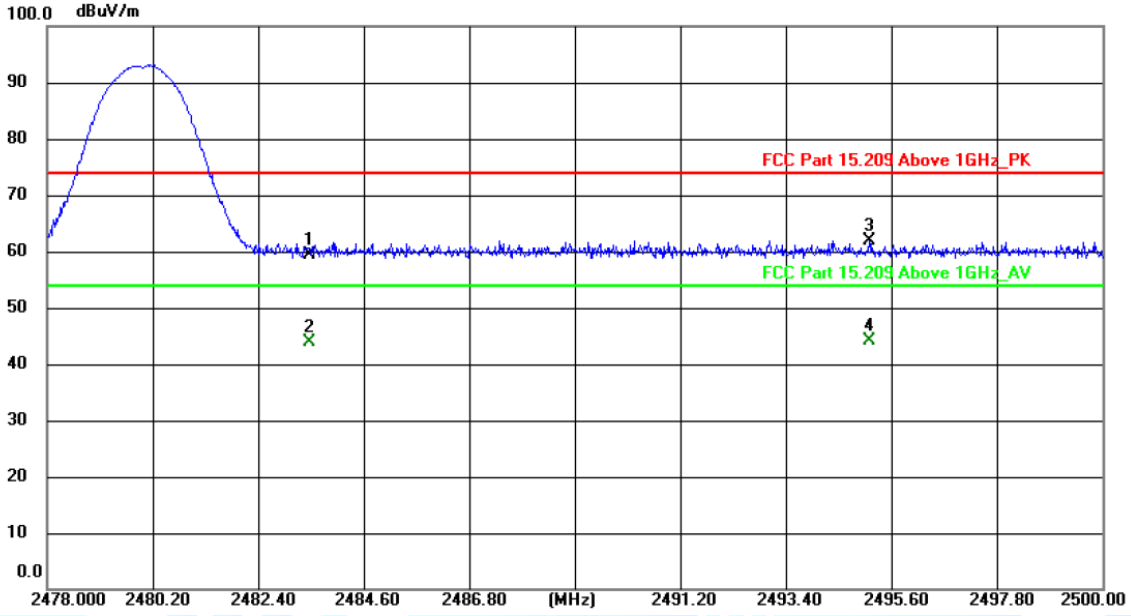
Product Name:	HEAD UNIT	**Model No.:**	8015 AIO BASE
Test By:	Albers Liu	**Test mode:**	TM 1
Test Channel:	Lowest channel (2-DH5)	**Polarization:**	Horizontal
Test Voltage:	DC 12V		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	2338.858	29.44	32.17	61.61	74.00	-12.39	peak	P
2 *	2338.858	11.69	32.17	43.86	54.00	-10.14	AVG	P
3	2390.000	27.53	32.26	59.79	74.00	-14.21	peak	P
4	2390.000	11.25	32.26	43.51	54.00	-10.49	AVG	P

Remark: *Level = Read level + Factor (Antenna Factor + Cable Loss – Preamplifier Factor).*

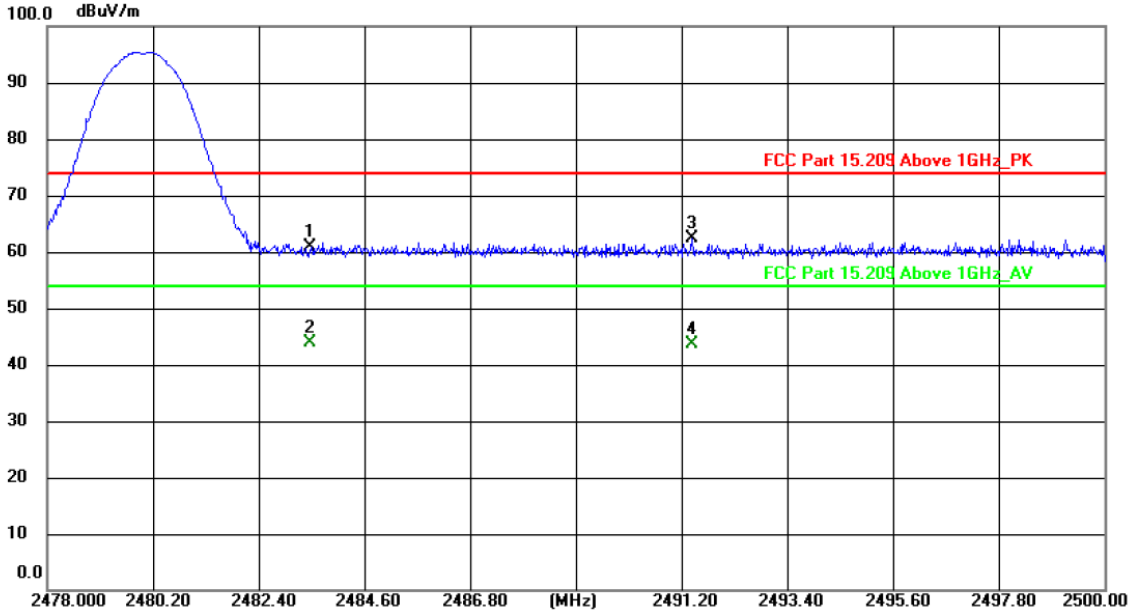
Product Name:	HEAD UNIT	**Model No.:**	8015 AIO BASE
Test By:	Albers Liu	**Test mode:**	TM 1
Test Channel:	Highest channel (2-DH5)	**Polarization:**	Vertical
Test Voltage:	DC 12V		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	2483.500	26.98	32.44	59.42	74.00	-14.58	peak	P
2	2483.500	11.54	32.44	43.98	54.00	-10.02	AVG	P
3	2495.144	29.53	32.46	61.99	74.00	-12.01	peak	P
4 *	2495.144	11.64	32.46	44.10	54.00	-9.90	AVG	P

Remark: *Level = Read level + Factor (Antenna Factor + Cable Loss – Preamplifier Factor).*

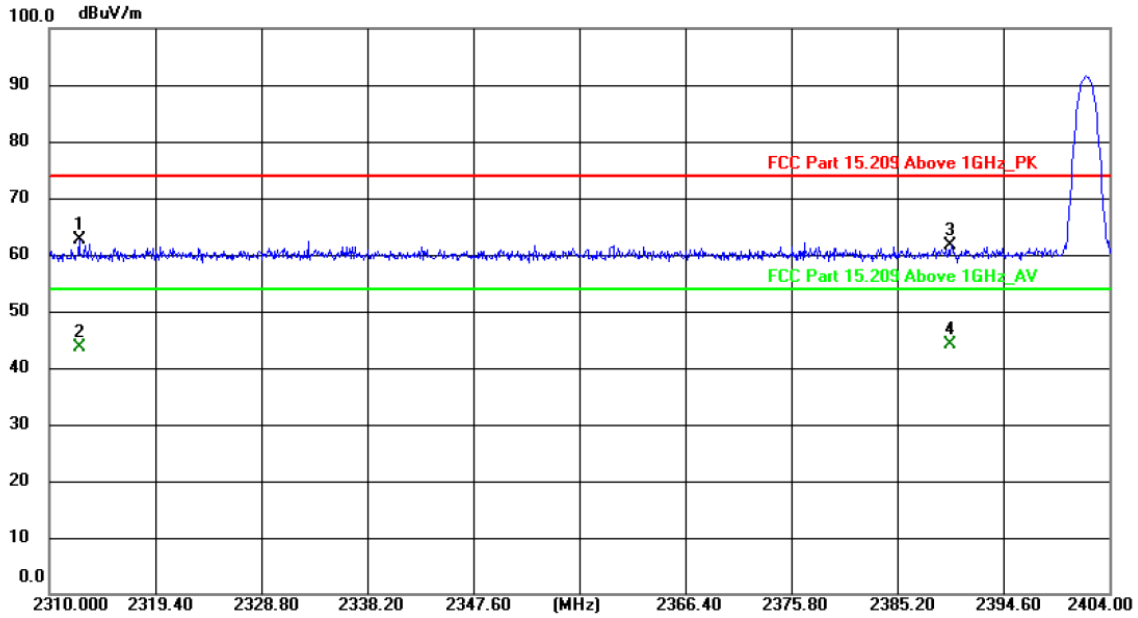
Product Name:	HEAD UNIT	**Model No.:**	8015 AIO BASE
Test By:	Albers Liu	**Test mode:**	TM 1
Test Channel:	Highest channel (2-DH5)	**Polarization:**	Horizontal
Test Voltage:	DC 12V		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	2483.500	28.36	32.44	60.80	74.00	-13.20	peak	P
2 *	2483.500	11.34	32.44	43.78	54.00	-10.22	AVG	P
3	2491.434	29.97	32.45	62.42	74.00	-11.58	peak	P
4	2491.434	11.11	32.45	43.56	54.00	-10.44	AVG	P

Remark: *Level = Read level + Factor (Antenna Factor + Cable Loss – Preamplifier Factor).*

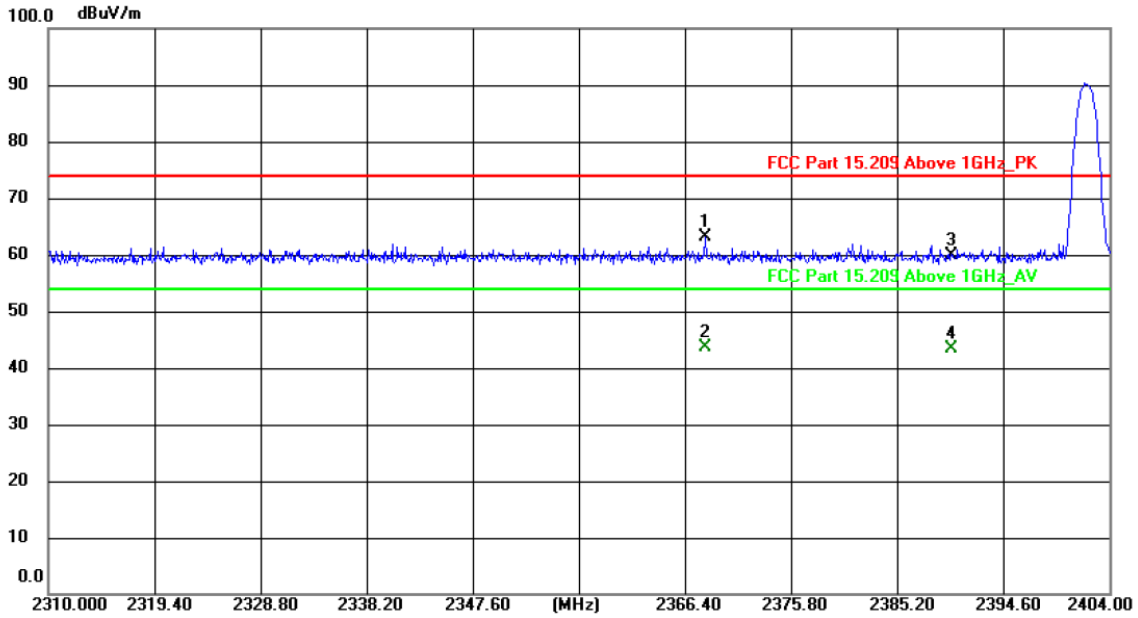
Product Name:	HEAD UNIT	**Model No.:**	8015 AIO BASE
Test By:	Albers Liu	**Test mode:**	TM 1
Test Channel:	Lowest channel (3-DH5)	**Polarization:**	Vertical
Test Voltage:	DC 12V		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	2312.679	30.44	32.12	62.56	74.00	-11.44	peak	P
2	2312.679	11.58	32.12	43.70	54.00	-10.30	AVG	P
3	2390.000	29.29	32.26	61.55	74.00	-12.45	peak	P
4 *	2390.000	11.76	32.26	44.02	54.00	-9.98	AVG	P

Remark: *Level = Read level + Factor (Antenna Factor + Cable Loss – Preamplifier Factor).*

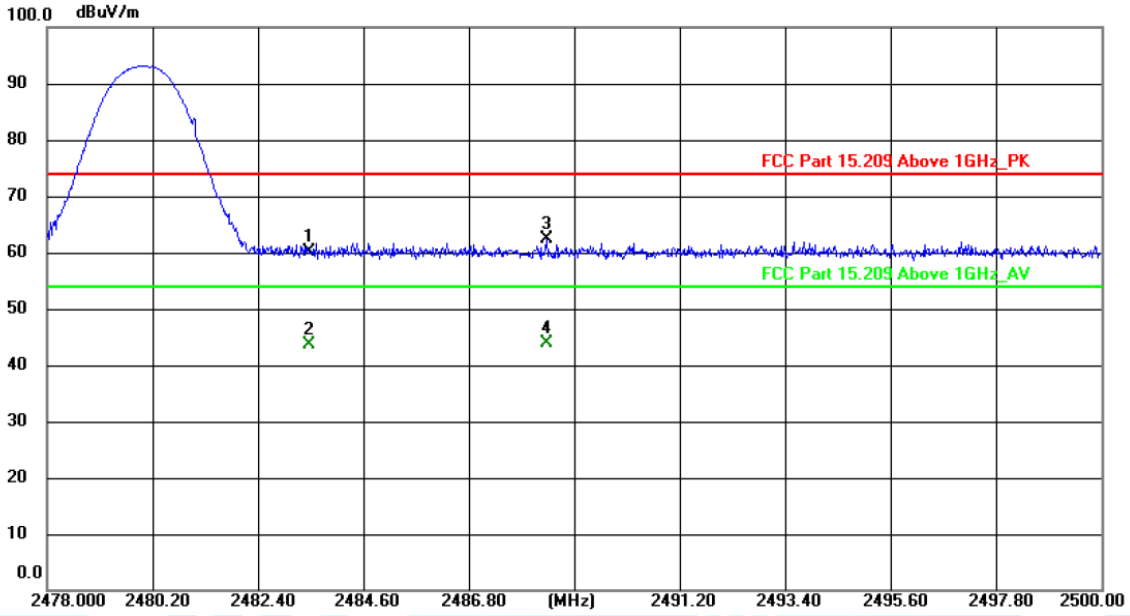
Product Name:	HEAD UNIT	**Model No.:**	8015 AIO BASE
Test By:	Albers Liu	**Test mode:**	TM 1
Test Channel:	Lowest channel (3-DH5)	**Polarization:**	Horizontal
Test Voltage:	DC 12V		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	2368.245	30.84	32.22	63.06	74.00	-10.94	peak	P
2 *	2368.245	11.29	32.22	43.51	54.00	-10.49	AVG	P
3	2390.000	27.72	32.26	59.98	74.00	-14.02	peak	P
4	2390.000	11.09	32.26	43.35	54.00	-10.65	AVG	P

Remark: *Level = Read level + Factor (Antenna Factor + Cable Loss – Preamplifier Factor).*

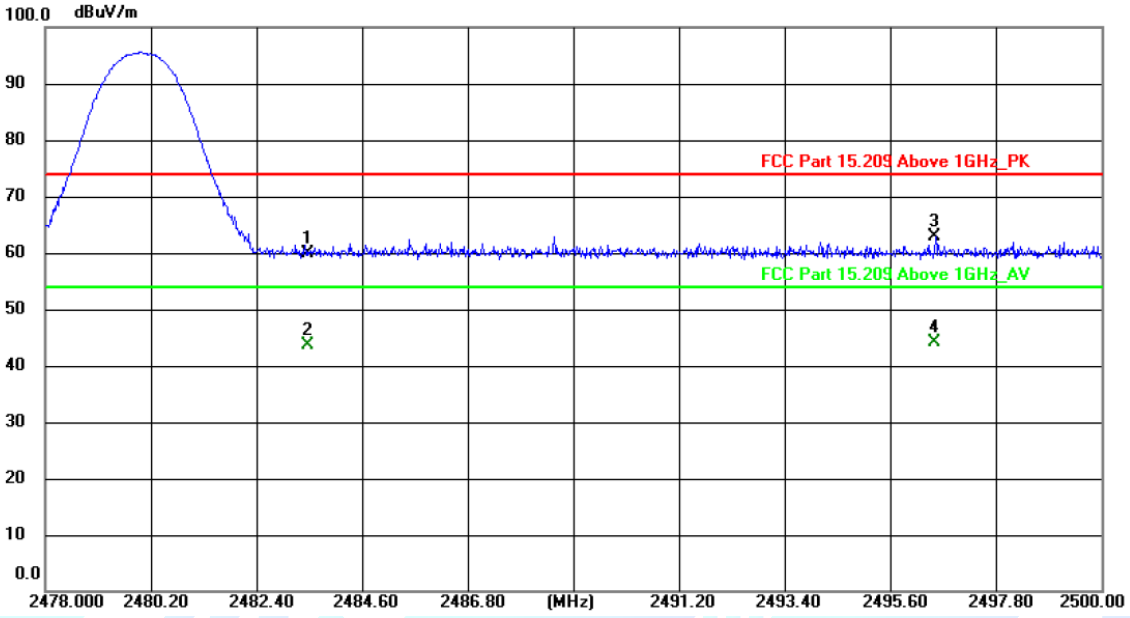
Product Name:	HEAD UNIT	**Model No.:**	8015 AIO BASE
Test By:	Albers Liu	**Test mode:**	TM 1
Test Channel:	Highest channel (3-DH5)	**Polarization:**	Vertical
Test Voltage:	DC 12V		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	2483.500	27.80	32.44	60.24	74.00	-13.76	peak	P
2	2483.500	11.14	32.44	43.58	54.00	-10.42	AVG	P
3	2488.431	29.91	32.45	62.36	74.00	-11.64	peak	P
4 *	2488.431	11.36	32.45	43.81	54.00	-10.19	AVG	P

Remark: *Level = Read level + Factor (Antenna Factor + Cable Loss – Preamplifier Factor).*

Product Name:	HEAD UNIT	**Model No.:**	8015 AIO BASE
Test By:	Albers Liu	**Test mode:**	TM 1
Test Channel:	Highest channel (3-DH5)	**Polarization:**	Horizontal
Test Voltage:	DC 12V		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	2483.500	27.39	32.44	59.83	74.00	-14.17	peak	P
2	2483.500	11.29	32.44	43.73	54.00	-10.27	AVG	P
3	2496.565	30.39	32.46	62.85	74.00	-11.15	peak	P
4 *	2496.565	11.75	32.46	44.21	54.00	-9.79	AVG	P

Remark: *Level = Read level + Factor (Antenna Factor + Cable Loss – Preamplifier Factor).*

5.11 Emissions in Non-restricted Frequency Bands

5.11.1 Limits

Frequency (MHz)	Limits (dBμV/m) at 3m	Detector
30 - 88	40.0	Quasi-peak
88 - 216	43.5	Quasi-peak
216 - 960	46.0	Quasi-peak
960 - 1000	54.0	Quasi-peak
Note: The more stringent limits applies at transition frequencies.		
Frequency (MHz)	Limits (dBμV/m) at 3m	
	Average	Peak
Above 1GHz	54.0	74.0

5.11.2 Test Procedure

a) The EUT is placed on a non-conducting table of the 3m SAC turntable, 80 cm above the ground plane for measurement below 1GHz, 1.5 m above the ground plane for measurement above 1GHz. The measurement receiving antenna to EUT distance is 3 meters. The EUT was arranged in accordance with ANSI C63.10.

b) The EUT is operated in TM 1 mode as described in Section 4.2. The EUT test channel and modulation type settings are described in Section 4.3.

c) Open the test software, load the radiated emissions test script, or create a new radiated emissions test script, and configure the test parameters, including the test frequency range, RBW = 100kHz (for below 1GHz) or 1MHz (for above 1GHz), VBW = 300kHz (for below 1GHz) or 3MHz (for above 1GHz), test standard, test antenna, spectrum analyzer, and other related settings.

d) The test script was executed, the measurement was performed.

e) The turntable rotates 360 degrees, and the test antenna is raised and lowered within a range of 1 to 4 meters.

f) Use the spectrum analyzer's Max Hold function to record the maximum test trace. For frequencies below 1 GHz, mark the maximum Quasi-peak value. For frequencies above 1 GHz, mark the maximum Peak and Average values. Save the test data.

g) Both vertical and horizontal polarizations of the test antenna need to be tested.

5.11.3 Test Setup

See setup 2 in section 4.4.

5.11.4 Test Instruments

Refer to section 3.7.

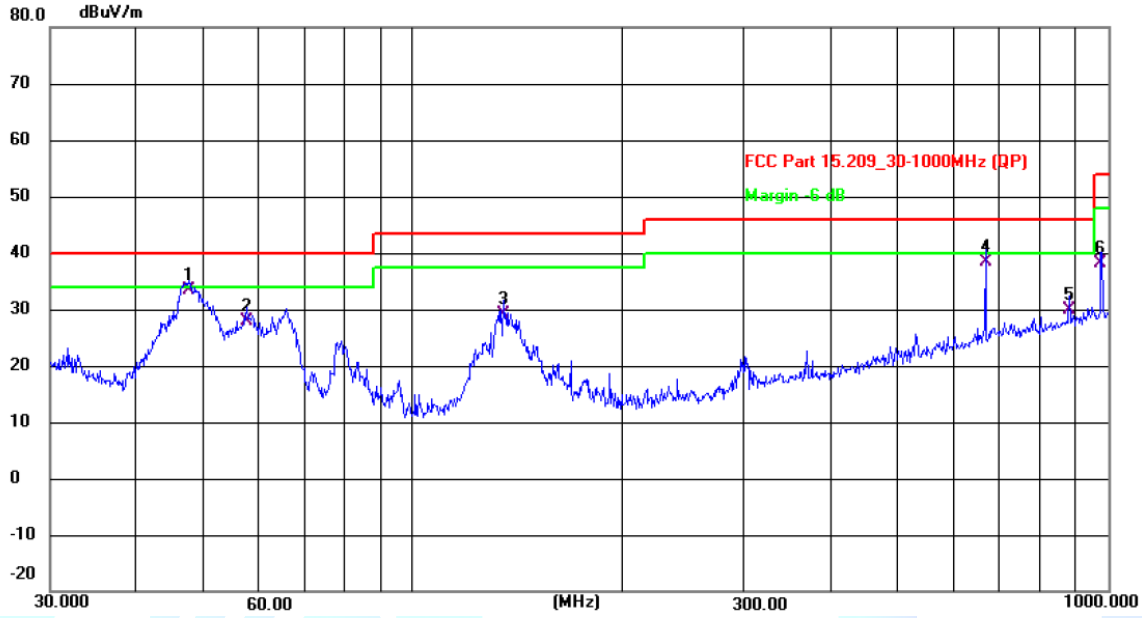
5.11.5 Test Results

Pass.

5.11.6 Test Data

1) Test Frequency Range: Below 1GHz

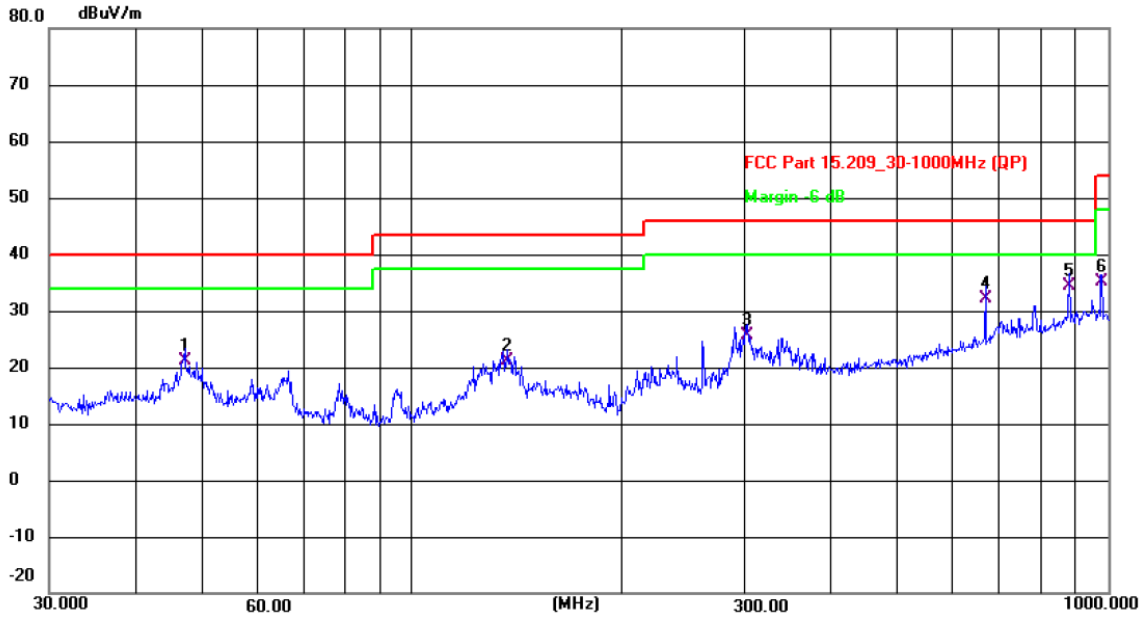
Product Name:	HEAD UNIT	**Model No.:**	8015 AIO BASE
Test By:	Albers Liu	**Test mode:**	TM 1
Test Channel:	30MHz ~ 1GHz	**Polarization:**	Vertical
Test Voltage:	DC 12V		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1 *	47.5334	59.65	-26.30	33.35	40.00	-6.65	QP	P
2	57.6697	54.12	-26.17	27.95	40.00	-12.05	QP	P
3	134.9135	63.25	-34.14	29.11	43.50	-14.39	QP	P
4	666.6796	69.47	-31.19	38.28	46.00	-7.72	QP	P
5	881.0205	60.12	-30.14	29.98	46.00	-16.02	QP	P
6	978.7513	67.98	-29.76	38.22	54.00	-15.78	QP	P

Remark: *Level = Read level + Factor (Antenna Factor + Cable Loss – Preamplifier Factor).*

Product Name:	HEAD UNIT	**Model No.:**	8015 AIO BASE
Test By:	Albers Liu	**Test mode:**	TM 1
Test Channel:	30MHz ~ 1GHz	**Polarization:**	Horizontal
Test Voltage:	DC 12V		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	47.0360	47.56	-26.31	21.25	40.00	-18.75	QP	P
2	136.9992	55.32	-34.13	21.19	43.50	-22.31	QP	P
3	303.1447	58.67	-33.02	25.65	46.00	-20.35	QP	P
4	666.6793	63.32	-31.19	32.13	46.00	-13.87	QP	P
5 *	881.0203	64.55	-30.14	34.41	46.00	-11.59	QP	P
6	979.1802	64.96	-29.75	35.21	54.00	-18.79	QP	P

Remark: *Level = Read level + Factor (Antenna Factor + Cable Loss – Preamplifier Factor).*

2) Test Frequency Range: Above 1GHz

Modulation Type: 1-DH5 **Test channel:** Lowest channel							
Frequency (MHz)	Read Level (dBuV)	Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Polarization
4804.00	65.32	-8.52	56.80	74.00	17.20	Peak	Vertical
	46.12	-8.52	37.60	54.00	16.40	Average	
	65.14	-8.52	56.62	74.00	17.38	Peak	Horizontal
	46.22	-8.52	37.70	54.00	16.30	Average	
Test channel: Middle channel							
Frequency (MHz)	Read Level (dBuV)	Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Polarization
4882.00	64.85	-8.05	56.80	74.00	17.20	Peak	Vertical
	45.12	-8.05	37.07	54.00	16.93	Average	
	64.74	-8.05	56.69	74.00	17.31	Peak	Horizontal
	45.39	-8.05	37.34	54.00	16.66	Average	
Test channel: Highest channel							
Frequency (MHz)	Read Level (dBuV)	Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Polarization
4960.00	64.87	-8.29	56.58	74.00	17.42	Peak	Vertical
	45.85	-8.29	37.56	54.00	16.44	Average	
	64.33	-8.29	56.04	74.00	17.96	Peak	Horizontal
	45.65	-8.29	37.36	54.00	16.64	Average	

Remark: *Level = Read level + Factor (Antenna Factor + Cable Loss – Preamplifier Factor).*

Modulation Type: 2-DH5 **Test channel:** Lowest channel							
Frequency (MHz)	Read Level (dBuV)	Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Polarization
4804.00	64.95	-8.52	56.43	74.00	17.57	Peak	Vertical
	45.87	-8.52	37.35	54.00	16.65	Average	
	64.74	-8.52	56.22	74.00	17.78	Peak	Horizontal
	46.12	-8.52	37.60	54.00	16.40	Average	
Test channel: Middle channel							
Frequency (MHz)	Read Level (dBuV)	Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Polarization
4882.00	64.21	-8.05	56.16	74.00	17.84	Peak	Vertical
	45.35	-8.05	37.30	54.00	16.70	Average	
	64.74	-8.05	56.69	74.00	17.31	Peak	Horizontal
	45.39	-8.05	37.34	54.00	16.66	Average	
Test channel: Highest channel							
Frequency (MHz)	Read Level (dBuV)	Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Polarization
4960.00	64.42	-8.29	56.13	74.00	17.87	Peak	Vertical
	45.39	-8.29	37.10	54.00	16.90	Average	
	64.73	-8.29	56.44	74.00	17.56	Peak	Horizontal
	45.36	-8.29	37.07	54.00	16.93	Average	

Remark: *Level = Read level + Factor (Antenna Factor + Cable Loss – Preamplifier Factor).*

Modulation Type: 3-DH5 **Test channel:** Lowest channel							
Frequency (MHz)	Read Level (dBuV)	Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Polarization
4804.00	65.47	-8.52	56.95	74.00	17.05	Peak	Vertical
	45.55	-8.52	37.03	54.00	16.97	Average	
	64.89	-8.52	56.37	74.00	17.63	Peak	Horizontal
	46.25	-8.52	37.73	54.00	16.27	Average	
Test channel: Middle channel							
Frequency (MHz)	Read Level (dBuV)	Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Polarization
4882.00	64.84	-8.05	56.79	74.00	17.21	Peak	Vertical
	45.40	-8.05	37.35	54.00	16.65	Average	
	64.51	-8.05	56.46	74.00	17.54	Peak	Horizontal
	45.33	-8.05	37.28	54.00	16.72	Average	
Test channel: Highest channel							
Frequency (MHz)	Read Level (dBuV)	Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Polarization
4960.00	64.65	-8.29	56.36	74.00	17.64	Peak	Vertical
	45.38	-8.29	37.09	54.00	16.91	Average	
	64.24	-8.29	55.95	74.00	18.05	Peak	Horizontal
	45.87	-8.29	37.58	54.00	16.42	Average	

Remark: *Level = Read level + Factor (Antenna Factor + Cable Loss – Preamplifier Factor).*