

FCC 15.247 & RSS-247 2.4 GHz Test Report

for

Acer Incorporated

**8F., No.88, Sec. 1, Xintai 5th Rd., Xizhi Dist.,
New Taipei City 221 Taiwan**

Product Name : Tablet Computer
Model Name : A8001
Marketing Name : B1-870
Brand acer
FCC ID : HLZA8001
IC : 1754F-A8001

**Prepared by: : AUDIX Technology Corporation,
EMC Department**



TABLE OF CONTENTS

Description	Page
TEST REPORT CERTIFICATION.....	4
1. REVISION RECORD OF TEST REPORT	5
2. SUMMARY OF TEST RESULTS	6
3. GENERAL INFORMATION	7
3.1. Description of Application	7
3.2. Description of EUT	7
3.3. Antenna Information	8
3.4. EUT Specifications Assessed in Current Report	8
3.5. Descriptions of Key Components.....	10
3.6. Data Rate Relative to Output Power.....	11
3.7. Test Configuration.....	12
3.8. Tested Supporting System List.....	14
3.9. Setup Configuration.....	14
3.10. Operating Condition of EUT	14
3.11. Description of Test Facility	15
3.12. Measurement Uncertainty	15
4. MEASUREMENT EQUIPMENT LIST.....	16
4.1. Conducted Emission Measurement	16
4.2. Radiated Emission Measurement	16
4.3. RF Conducted Measurement	16
5. CONDUCTED EMISSION.....	17
5.1. Block Diagram of Test Setup	17
5.2. Conducted Emission Limit	17
5.3. Test Procedure	17
5.4. Test Results	17
6. RADIATED EMISSION	18
6.1. Block Diagram of Test Setup	18
6.2. Radiated Emission Limits.....	19
6.3. Test Procedure	20
6.4. Measurement Result Explanation.....	21
6.5. Test Results	21
7. 6dB BANDWIDTH	22
7.1. Block Diagram of Test Setup	22
7.2. Specification Limits.....	22
7.3. Test Procedure	22
7.4. Test Results	22
8. MAXIMUM PEAK OUTPUT POWER.....	23
8.1. Block Diagram of Test Setup	23
8.2. Specification Limits.....	23
8.3. Test Procedure	23
8.4. Test Results	24
9. EMISSION LIMITATIONS.....	25
9.1. Block Diagram of Test Setup	25
9.2. Specification Limits.....	25

Audix Technology Corp.

No. 53-11, Dingfu, Linkou, Dist.,

New Taipei City 244, Taiwan

Tel: +886 2 26099301**Fax: +886 2 26099303**

9.3. Test Procedure	25
9.4. Test Results	26
10. POWER SPECTRAL DENSITY	27
10.1. Block Diagram of Test Setup	27
10.2. Specification Limits	27
10.3. Test Procedure	27
10.4. Test Results	27
11. DEVIATION TO TEST SPECIFICATIONS	28

APPENDIX A TEST DATA AND PLOTS

APPENDIX B TEST PHOTOGRAPHS

APPENDIX C EUT PHOTOGRAPHS

TEST REPORT CERTIFICATION

Applicant : Acer Incorporated
Manufacturer : Acer Incorporated
EUT Description
(1) Product : Tablet Computer
(2) Model : A8001
(3) Marketing Name: B1-870
(4) Brand : acer
(5) Power Supply : (1)DC 5.2V, 2.0A (Via AC/DC Adapter)
(2)DC 3.8V (Via Battery)

Applicable Standards:

47 CFR FCC Part 15 Subpart C
RSS-Gen (Issue 4), November 2014
RSS-247 (Issue 2), February 2017
ANSI C63.10:2013
KDB 558074 D01 DTS Meas Guidance v04

Audix Technology Corp. tested the equipment mentioned in accordance with the requirements set forth in the above standards. Test results indicate that the equipment tested is capable of demonstrating compliance with the requirements as documented within this report.

Audix Technology Corp. does not assume responsibility for any conclusions and generalizations drawn from the test results with regard to other specimens and samples.

Date of Report: 2017. 12. 18

Reviewed by: Sabrina Wang (Sabrina Wang/Administrator)

Approved by: Ben Cheng (Ben Cheng/Manager)

Audix Technology Corp.

No. 53-11, Dingfu, Linkou, Dist.,

New Taipei City 244, Taiwan

Tel: +886 2 26099301**Fax: +886 2 26099303**

1. REVISION RECORD OF TEST REPORT

Edition No	Issued Data	Revision Summary	Report Number
0	2017. 12. 18	Original Report	EM-F170784

2. SUMMARY OF TEST RESULTS

Rule		Description	Results
FCC	IC		
15.207	RSS-Gen §8.8	Conducted Emission	PASS
15.247(d)/ 15.205	RSS-Gen §8.9 RSS-247 §5.5	Radiated Band Edge and Radiated Spurious Emission	PASS
15.247(a)(2)	RSS-247 §5.2(1)	6dB Bandwidth	PASS
15.247(b)(3)	RSS-247 §5.4(4)	Maximum Peak Output	PASS
15.247(d)	RSS-247 §5.5	Conducted Band Edges and Conducted Spurious Emission	PASS
15.247 (e)	RSS-247 §5.2(2)	Peak Power Spectral Density	PASS
15.203	RSS-Gen §8.3	Antenna Requirement	Compliance

3. GENERAL INFORMATION

3.1. Description of Application

Applicant	Acer Incorporated 8F., No.88, Sec. 1, Xintai 5th Rd., Xizhi Dist., New Taipei City 221 Taiwan
Applicant	Acer Incorporated 8F., No.88, Sec. 1, Xintai 5th Rd., Xizhi Dist., New Taipei City 221 Taiwan
Product	Tablet Computer
Model	A8001
Marketing Name	B1-870
Brand	acer

3.2. Description of EUT

Test Model	A8001											
Serial Number	N/A											
Power Rating	(1)DC 5.2V, 2.0A (Via AC/DC Adapter) (2)DC 3.8V (Via Battery)											
RF Features	WLAN:802.11 b/g/n Bluetooth: BT and BLE											
Transmit Type	<table><tr><td>802.11b</td><td>1T1R</td></tr><tr><td>802.11g</td><td>1T1R</td></tr><tr><td>802.11n-HT20</td><td>1T1R</td></tr><tr><td>802.11n-HT40</td><td>1T1R</td></tr><tr><td>BT/BLE</td><td>1T1R</td></tr></table>		802.11b	1T1R	802.11g	1T1R	802.11n-HT20	1T1R	802.11n-HT40	1T1R	BT/BLE	1T1R
802.11b	1T1R											
802.11g	1T1R											
802.11n-HT20	1T1R											
802.11n-HT40	1T1R											
BT/BLE	1T1R											
Sample Status	Production											
Date of Receipt	2017. 12. 04											
Date of Test	2017. 12. 06 ~ 18											
Interface Ports of EUT	● MicroSD card slot x1 ● Micro USB port x1 ● Audio jack x1											
Accessories Supplied	● AC/DC Adapter ● USB Cable: Shielded, Detachable, 0.8m											

3.3. Antenna Information

No.	Antenna Part Number	Manufacture	Antenna Type	Frequency (GHz)	Max Gain (dBi)
1	A8L3	Shenzhen Neostra Technology Co.,Ltd	FPC	2.4 ~ 2.5	2.93

3.4. EUT Specifications Assessed in Current Report

Mode	Fundamental Range (MHz)	Channel Number	Modulation	Data Rate (Mbps)
802.11b	2412-2462	11	DSSS (DBPSK/DQPSK/CCK)	Up to 11
802.11g		11	OFDM (BPSK/QPSK/16QAM/64QAM)	Up to 54
802.11n-HT20				Up to 72.2
802.11n-HT40	2422-2452	7		Up to 150
BLE	2402-2480	40	GFSK	1

Channel List			
802.11 b/g/n-HT20		802.11n-HT40	
Channel Number	Frequency (MHz)	Channel Number	Frequency (MHz)
1	2412	3	2422
2	2417	4	2427
3	2422	5	2432
4	2427	6	2437
5	2432	7	2442
6	2437	8	2447
7	2442	9	2452
8	2447		
9	2452		
10	2457		
11	2462		

Channel List							
BLE							
Channel Number	Frequency (MHz)	Channel Number	Frequency (MHz)	Channel Number	Frequency (MHz)	Channel Number	Frequency (MHz)
37	2402	09	2422	18	2442	28	2462
00	2404	10	2424	19	2444	29	2464
01	2406	38	2426	20	2446	30	2466
02	2408	11	2428	21	2448	31	2468
03	2410	12	2430	22	2450	32	2470
04	2412	13	2432	23	2452	33	2472
05	2414	14	2434	24	2454	34	2474
06	2416	15	2436	25	2456	35	2476
07	2418	16	2438	26	2458	36	2478
08	2420	17	2440	27	2460	39	2480

RMS Output Power (dBm)				
Channel	802.11b	802.11g	802.11n-HT20	802.11n-HT40
1	11.27	11.22	11.07	---
2	11.33	11.25	11.26	
3	11.52	11.30	11.35	11.54
4	11.60	11.38	11.4	11.60
5	11.65	11.46	11.44	11.62
6	11.67	11.51	11.47	11.67
7	11.59	11.6	11.5	11.79
8	11.48	11.71	11.57	11.83
9	11.46	11.76	11.68	11.87
10	11.55	11.9	11.85	---
11	11.62	11.97	11.91	

Note: For output power are same as all channels, we shall assess lowest & highest channels radiated band-edge measurements are sufficient.

3.5. Descriptions of Key Components

3.5.1. For the All Component Lists

Item	Supplier	Model / Type	Character
Main Board	Kingshine electronics	A8L3_MB_V2.1	---
MCU	MTK	MT8167A	1.3GHz (406ball) 802.11 b/g/n, BT 4.0 1728-BZASHBEP18027-B
GPS module	MTK	MT3337V	---
eMMC	SK hynix	H26M52208FPR	16GB
Memory	SK hynix	H5TC4G63EFR-PBA	1GB LPDDR3 1600MHz
8.0"LCD Panel	Shenzhen K&D Technology Co., Ltd	KD080D24-40NH-B7-L	800*1280 IPS panel
Battery	TCL	PR-2874E9G	DC3.8V, 17.1Wh, 4500mAh
Camera(Front)	MicroKore	SP2509	2.0 Mega Pixels
Camera(Rear)	MicroKore	SP5506	5.0 Mega Pixels
AC/DC Adapter	Lite-On	PA-1100-25	I/P: AC100-240V, 0.3A 50/60Hz O/P: DC5.2V, 2A
	Delta	ADP-10HW A	I/P: AC100-240V, 0.4A 50-60Hz O/P: DC5.35V, 2A
USB Cable	Perth Tai	N/A	Shielded, Detachable, 0.8m
	Shuttle	N/A	Shielded, Detachable, 0.8m

Remark: For more detailed features description, please refer to the manufacturer's specifications or the user manual.

3.5.2. According to Radiated and AC conducted emission pre-test results, the EUT collocates with following worst components, which are used to establish a basic configuration of system during test:

Item	Supplier	Model / Type	Character
Main Board	Kingshine electronics	A8L3_MB_V2.1	---
MCU	MTK	MT8167A	1.3GHz (406ball) 802.11 b/g/n, BT 4.0 1728-BZASHBEP18027-B
GPS module	MTK	MT3337V	---
eMMC	SK hynix	H26M52208FPR	16GB
Memory	SK hynix	H5TC4G63EFR-PBA	1GB LPDDR3 1600MHz
8.0"LCD Panel	Shenzhen K&D Technology Co., Ltd	KD080D24-40NH-B7-L	800*1280 IPS panel
Battery	TCL	PR-2874E9G	DC3.8V, 17.1Wh, 4500mAh
Camera(Front)	MicroKore	SP2509	2.0 Mega Pixels
Camera(Rear)	MicroKore	SP5506	5.0 Mega Pixels
AC/DC Adapter	Lite-On	PA-1100-25	I/P: AC100-240V, 0.3A 50/60Hz O/P: DC5.2V, 2A
USB Cable	Perth Tai	N/A	Shielded, Detachable, 0.8m

3.6. Data Rate Relative to Output Power

802.11b			
Channel	Modulation	Date Rate(Mbps)	Power(dBm)
1	DBPSK	1	13.89
1	DQPSK	2	13.80
1	CCK	5.5	13.75
1	CCK	11	13.67

802.11g			
Channel	Modulation	Date Rate(Mbps)	Power(dBm)
1	BPSK	6	18.57
1	BPSK	9	18.39
1	QPSK	12	18.29
1	QPSK	18	18.24
1	16-QAM	24	18.21
1	16-QAM	36	18.16
1	64-QAM	48	18.12
1	64-QAM	54	18.00

802.11n-HT20				802.11n-HT40			
Channel	Modulation	Date Rate (Mbps)	Power (dBm)	Channel	Modulation	Date Rate (Mbps)	Power (dBm)
1	BPSK	MCS0	18.74	3	BPSK	MCS0	19.38
1	QPSK	MCS1	18.65	3	QPSK	MCS1	19.27
1	QPSK	MCS2	18.58	3	QPSK	MCS2	19.23
1	16-QAM	MCS3	18.55	3	16-QAM	MCS3	19.17
1	16-QAM	MCS4	18.46	3	16-QAM	MCS4	19.09
1	64-QAM	MCS5	18.33	3	64-QAM	MCS5	19.06
1	64-QAM	MCS6	18.29	3	64-QAM	MCS6	19.01
1	64-QAM	MCS7	18.24	3	64-QAM	MCS7	18.97

BLE			
Channel	Modulation	Date Rate(Mbps)	Power(dBm)
17	GFSK	1	1.85

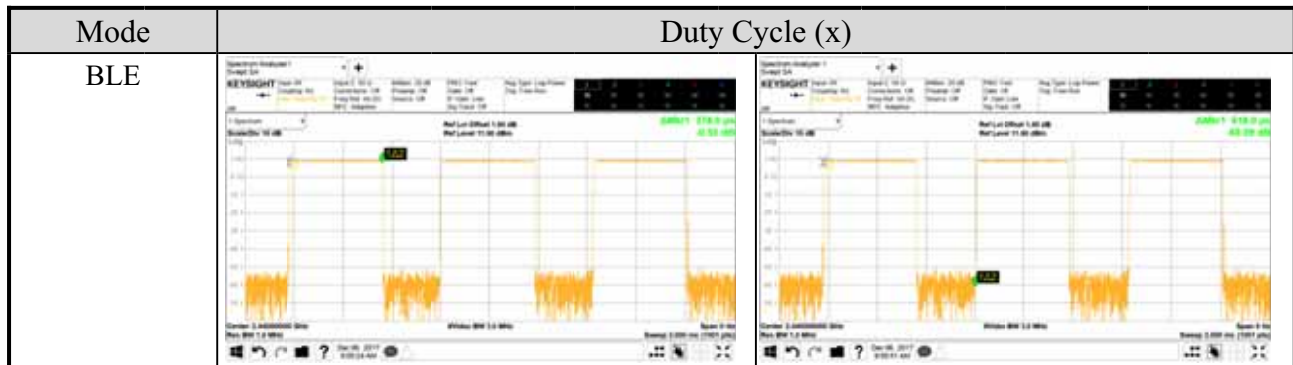
Note: Above results are assessed in peak power.

3.7. Test Configuration

Mode	Duty Cycle (x)	T (ms)	Duty Cycle Factor (dB)
802.11b	0.99	8.340	0.040
802.11g	0.99	1.359	0.043
802.11n-HT20	0.98	1.302	0.087
802.11n-HT40	0.96	0.645	0.177
BLE	0.61	0.379	2.146

Note: When duty cycle is less than 98% (0.98) that duty cycle factor 10log(1/x) is needed to add in conducted test items measured in average detector.





AC Conduction	
Test Case	Normal operation

Item		Mode	Data Rate	Test Channel
Radiated Test Case	Radiated Band Edge ^{Note1}	802.11b	1Mbps	1/6/11
		802.11g	6Mbps	1/6/11
		802.11n-HT20	MCS0	1/6/11
		802.11n-HT40	MCS0	3/6/9
		BLE	1Mbps	37/17/39
	Radiated Spurious Emission ^{Note1 & 2}	802.11b	1Mbps	1/6/11
		802.11g	6Mbps	1/6/11
		802.11n-HT20	MCS0	1/6/11
		802.11n-HT40	MCS0	3/6/9
		BLE	1Mbps	37/17/39
Conducted Test Case	6dB Bandwidth	802.11b	1Mbps	1/6/11
		802.11g	6Mbps	1/6/11
		802.11n-HT20	MCS0	1/6/11
		802.11n-HT40	MCS0	3/6/9
		BLE	1Mbps	37/17/39
	Peak Output Power	802.11b	1Mbps	1/6/11
		802.11g	6Mbps	1/6/11
		802.11n-HT20	MCS0	1/6/11
		802.11n-HT40	MCS0	3/6/9
		BLE	1Mbps	37/17/39
	Band Edge	802.11b	1Mbps	1/11
		802.11g	6Mbps	1/11
		802.11n-HT20	MCS0	1/11
		802.11n-HT40	MCS0	3/9
		BLE	1Mbps	37/39

Item		Mode	Data Rate	Test Channel
	Spurious Emission	802.11b	1Mbps	1/6/11
		802.11g	6Mbps	1/6/11
		802.11n-HT20	MCS0	1/6/11
		802.11n-HT40	MCS0	3/6/9
		BLE	1Mbps	37/17/39
	Peak Power Spectral Density	802.11b	1Mbps	1/6/11
		802.11g	6Mbps	1/6/11
		802.11n-HT20	MCS0	1/6/11
		802.11n-HT40	MCS0	3/6/9
		BLE	1Mbps	37/17/39

Note 1: ☐ Mobile Device☒ Portable Device, and 3 axis were assessed. The worst scenario for Radiated Spurious Emission as follow: ☒ Lie ☐ Side ☐ Stand

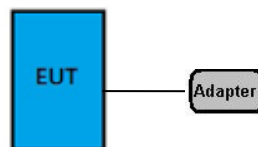
Note 2: Low, mid, and high channels were measured, only the worst channel of each modulation was presented in this report.

3.8. Tested Supporting System List

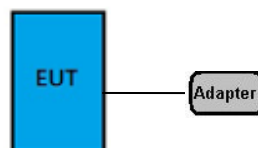
None

3.9. Setup Configuration

3.9.1. EUT Configuration for Power Line & Radiated Emission



3.9.2. EUT Configuration for RF Conducted Test Items



3.10. Operating Condition of EUT

Test program “Android of Engineer mode” is used for enabling EUT BLE or WLAN function under continues transmitting and choosing data rate/ channel.

3.11. Description of Test Facility

Name of Test Firm	Audix Technology Corporation / EMC Department No. 53-11, Dingfu, Linkou Dist., New Taipei City 244, Taiwan Tel: +886-2-26092133 Fax: +886-2-26099303 Website : www.audixtech.com Contact e-mail: attemc_report@audixtech.com
Accreditations	The laboratory is accredited by following organizations under ISO/IEC 17025:2005 (1) NVLAP(USA) NVLAP Lab Code 200077-0 (2) TAF(Taiwan) No. 1724 (3) FCC OET Designation No. TW1004 & TW1090 & TW1724
Test Facilities	(1) No. 8 Shielding Room (2) Semi-Anechoic Chamber (IC Test Site Registration No.: 5183B-1) (3) Fully Anechoic Chamber (IC Test Site Registration No.: 5183B-4)

3.12. Measurement Uncertainty

Test Item	Frequency Range	Uncertainty
Conduction Test	150kHz~30MHz	±3.50dB
Radiation Test (Distance: 3m)	30MHz~1000MHz	± 3.68dB
	Above 1GHz	± 5.82dB

Remark : Uncertainty = $ku_c(y)$

Test Item	Uncertainty
6dB Bandwidth	± 0.05kHz
Maximum peak output power	± 0.33dB
Power spectral density	± 0.13dB
Conducted Emission Limitations	± 0.13dB

4. MEASUREMENT EQUIPMENT LIST

4.1. Conducted Emission Measurement

Item	Type	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Interval
1.	Test Receiver	R&S	ESR3	101774	2017. 02. 07	1 Year
2.	A.M.N.	R&S	ENV4200	825358/003	2017. 04. 14	1 Year
3.	L.I.S.N.	Kyoritsu	KNW-407	8-855-9	2016. 12. 14	1 Year
4.	Pulse Limiter	R&S	ESH3-Z2	100354	2017. 01. 16	1 Year
5.	Digital Thermo-Hygro Meter	iMax	HTC-1	No.8 S/R	2017. 04. 21	1 Year
6.	Test Software	Audix	e3	V.6.120424	N.C.R.	1 Year
7.	Signal Cable	Yeida	RG/58AU	CE-08	2017. 09. 22	1 Year

4.2. Radiated Emission Measurement

Item	Type	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Interval
1.	Spectrum Analyzer	Agilent	N9010A-526	MY53400071	2017. 09. 13	1 Year
2.	Spectrum Analyzer	Agilent	N9010A-526	MY52220368	2017. 11. 18	1 Year
3.	Test Receiver	R & S	ESCS30	100338	2017. 06. 19	1 Year
4.	Amplifier	HP	8447D	2944A06305	2017. 02. 16	1 Year
5.	Amplifier	Sonoma	310N	187161	2017. 06. 08	1 Year
6.	Bilog Antenna	CHASE	CBL6112D	33821	2017. 01. 21	1 Year
7.	Loop Antenna	R&S	HFH2-Z2	891847/27	2016. 12. 23	2 Years
8.	Horn Antenna	ETS-Lindgren	3117	00135902	2017. 03. 08	1 Year
9.	Horn Antenna	COM-POWER	AH-840	101092	2017. 05. 04	1 Year
10.	2.4GHz Notch Filter	K&L	7NSL10-244 1.5E130.5-0 0	1	2017. 07. 26	1 Year
11.	3GHz Notch Filter	Microwave	H3G018G1	484798	2017. 08. 25	1 Year
12.	Digital Thermo-Hygro Meter	EVERY DAY	E-512	RF-02	2017. 04. 21	1 Year
13.	Test Software	Audix	e3	V.6.110601	N.C.R.	N.C.R.
14.	Signal Cable	MIYAZAKI	5D2W	RE-11	2017. 02. 15	1 Year
14.	Signal Cable	HUBER+SUH NER	SUCOFLEX 106	54602/6	2017. 02. 15	1 Year

4.3. RF Conducted Measurement

Item	Type	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Interval
1.	Spectrum Analyzer	Keysight	N9010B-544	MY55460198	2017. 04. 18	1 Year
2.	Power Meter	Anritsu	ML2495A	1145008	2017. 11. 03	1 Year
3.	Power Sensor	Anritsu	MA2411B	1126096	2017. 11. 03	1 Year
4.	Digital Thermo-Hygro Meter	Datronn	KT-905	RF	2017. 04. 21	1 Year

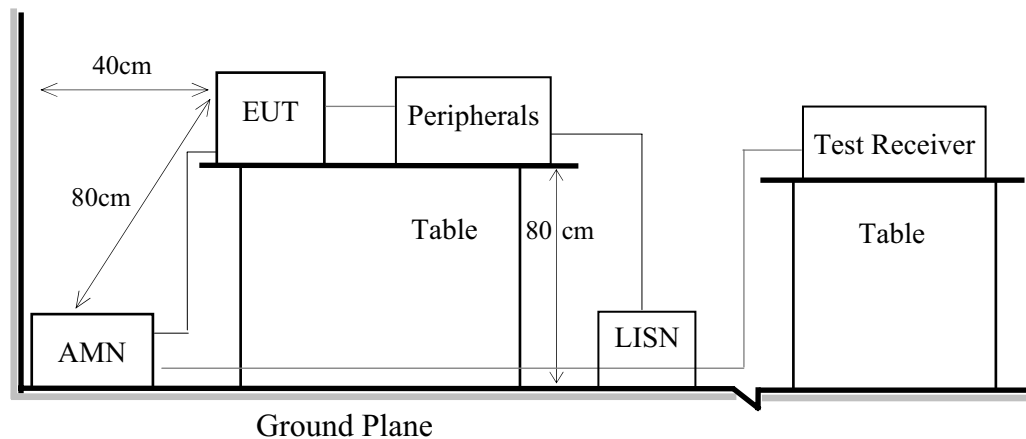
5. CONDUCTED EMISSION

5.1. Block Diagram of Test Setup

5.1.1. Block Diagram of EUT

Indicated as section 3.9

5.1.2. Shielded Room Setup Diagram



5.2. Conducted Emission Limit

Frequency	Conducted Limit	
	Quasi-Peak Level	Average Level
150kHz ~ 500kHz	66 ~ 56 dB μ V	56 ~ 46 dB μ V
500kHz ~ 5MHz	56 dB μ V	46 dB μ V
5MHz ~ 30MHz	60 dB μ V	50 dB μ V

Remark 1.: If the average limit is met when using a Quasi-Peak detector, the measurement using the average detector is not required.

2.: The lower limit applies to the band edges.

5.3. Test Procedure

- 5.3.1. To set up the EUT as indicated in ANSI C 63.10. The EUT was placed on the table which has 80 cm height to the ground and 40 cm distance to the conducting wall.
- 5.3.2. Power supplier of the EUT was connected to the AC mains through an Artificial Mains Network (A.M.N.).
- 5.3.3. The AC power supplies to all peripheral devices must be provided through line impedance stabilization network (L.I.S.N.)
- 5.3.4. Checking frequency range from 150 kHz to 30 MHz and record the emission which does not have 20 dB below limit.

5.4. Test Results

Please refer to Appendix A.

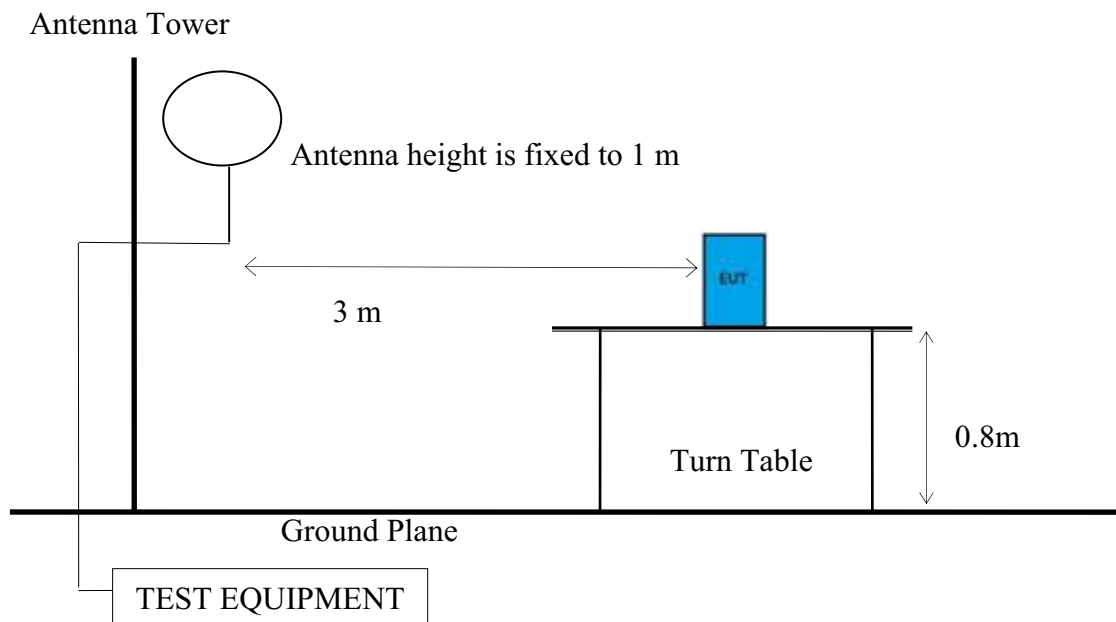
6. RADIATED EMISSION

6.1. Block Diagram of Test Setup

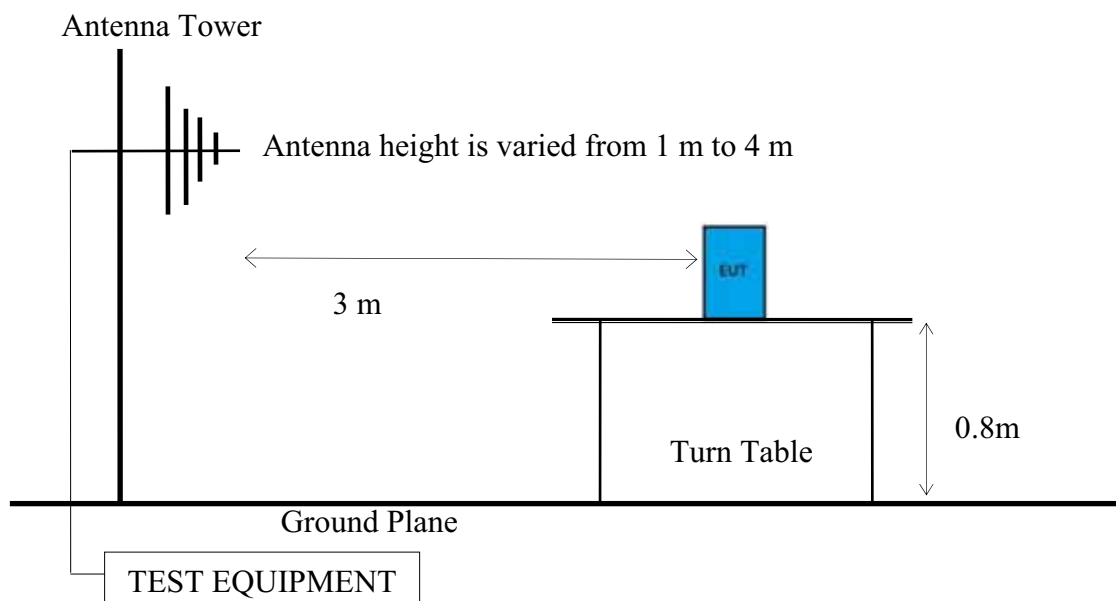
6.1.1. Block Diagram of EUT

Indicated as section 3.9

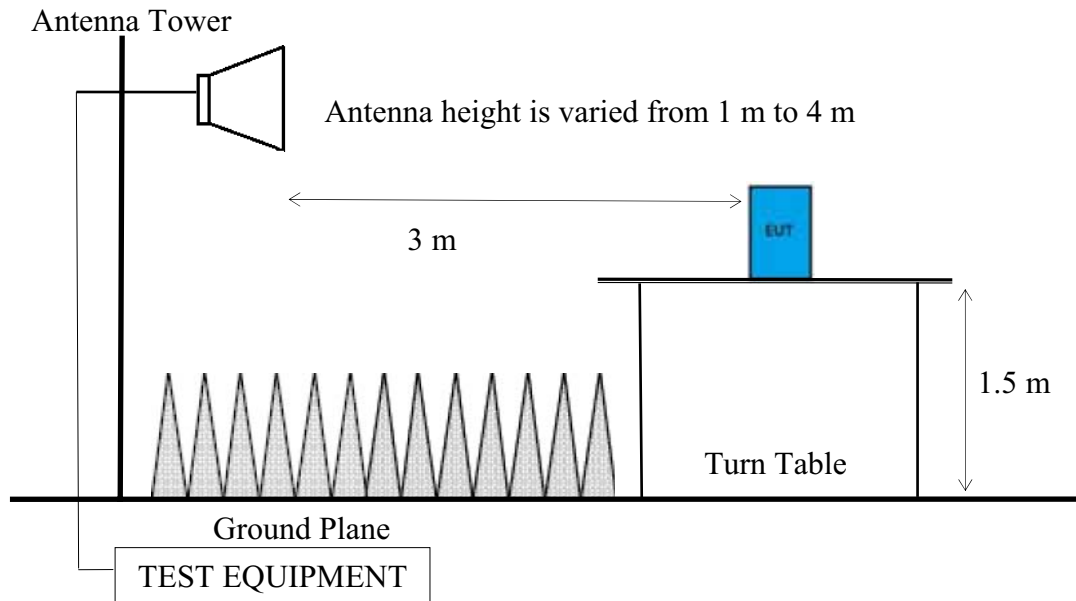
6.1.2. Setup Diagram for 9kHz-30MHz



6.1.3. Setup Diagram for 30-1000 MHz



6.1.4. Setup Diagram for above 1GHz



6.2. Radiated Emission Limits

In any 100kHz bandwidth outside the frequency band, the radio frequency power produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level. In addition, radiated emissions which fall in restricted bands, as defined in Section 15.205/RSS-Gen Section 8.10 table 6, must also comply with the radiated emission limits specified as below.

Frequency (MHz)	Distance (m)	Limits	
		dB μ V/m	μ V/m
0.009 - 0.490	300	67.6	2400/kHz
0.490 - 1.705	30	87.6	24000/kHz
1.705 - 30	30	29.5	30
30 - 88	3	40.0	100
88- 216	3	43.5	150
216- 960	3	46.0	200
Above 960	3	54.0	500
Above 1000	3	74.0 dB μ V/m (Peak) 54.0 dB μ V/m (Average)	

Remark : (1) dB μ V/m = 20 log (μ V/m)

- (2) The tighter limit applies to the edge between two frequency bands.
- (3) Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.
- (4) Fundamental and emission fall within operation band are exempted from this section.
- (5) Pursuant to ANSI C63.10: 6.6.4.3, if the maximized peak measured value complies with the average limit, then it is unnecessary to perform an average measurement.

6.3. Test Procedure

Frequency Range 9kHz~30MHz:

The EUT setup on the turn table which has 0.8 m height to the ground. The turn table rotated 360 degrees and antenna fixed to 1 m to find the maximum emission level. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10-2013 regulation.

- (1) RBW = 9kHz with peak and average detector.
- (2) Detector: average and peak (9kHz-490kHz)
Q.P. (490kHz-30MHz)

Frequency Range 30MHz ~ 25GHz:

The EUT setup on the turn find table which has 80 cm (for 30-1000 MHz) and 1.5m (for above 1GHz) height to the ground. The turn table rotated 360 degrees and antenna varied from 1 m to 4 m to find the maximum emission level. Both horizontal and vertical polarization are required. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10-2013 regulation.

Frequency below 1 GHz:

Spectrum Analyzer is used for pre-testing with following setting:

- (1) RBW = 120KHz
- (2) VBW $\geq 3 \times$ RBW.
- (3) Detector = Peak.
- (4) Sweep time = auto.
- (5) Trace mode = max hold.
- (6) Allow sweeps to continue until the trace stabilizes.
- (7) When peak-detected value is lower than limit that the measurement using the Q.P. detector is not required. Otherwise using Q.P. for finally measurement.

Frequency above 1GHz to 10th harmonic (up to 25 GHz):

Peak Detector:

- (1) RBW = 1MHz
- (2) VBW $\geq 3 \times$ RBW.
- (3) Detector = Peak.
- (4) Sweep time = auto.
- (5) Trace mode = max hold.
- (6) Allow sweeps to continue until the trace stabilizes.
- (7) When peak-detected value is lower than limit that the measurement using the average detector is not required. Otherwise using average detector for finally measurement.

Average Detector:**■ Option 1:**

(1) RBW = 1MHz

(2) VBW $\geq$ 1/ T.

Modulation Type	T (ms)	1/ T (kHz)	VBW Setting (kHz)
802.11b	8.340	0.120	10Hz
802.11g	1.359	0.736	10Hz
802.11n-HT20	1.302	0.768	10Hz
802.11n-HT40	0.645	1.550	2kHz
BLE	0.379	2.639	2.7kHz

N/A: 1/ T is not implemented when duty cycle presented in section 3.7 is $\geq$ 98 %.

(1) Detector = Peak.

(2) Sweep time = auto.

(3) Trace mode = max hold.

(4) Allow sweeps to continue until the trace stabilizes.

□ Option 2:

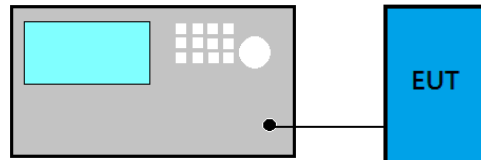
Average Emission Level = Peak Emission Level + D.C.C.F.

6.4. Measurement Result Explanation**■** Peak Emission Level = Antenna Factor + Cable Loss + Meter Reading**■** Average Emission Level = Antenna Factor + Cable Loss + Meter Reading**□** Average Emission Level = Peak Emission Level + DCCFDuty Cycle Correction Factor (DCCF) = $20\log(TX_{on}/TX_{on+off})$ presented in section 3.7**□** ERP = Peak Emission Level - 95.2dB - 2.14dB**6.5. Test Results**

Please refer to Appendix A.

7. 6dB BANDWIDTH

7.1. Block Diagram of Test Setup



7.2. Specification Limits

The minimum 6dB bandwidth shall be at least 500kHz.

7.3. Test Procedure

Following measurement procedure is reference to KDB 558074 D01 DTS Meas Guidance v04:

- (1) Set RBW = 100 kHz.
- (2) Set the video bandwidth (VBW) $\geq 3 \times$ RBW.
- (3) Detector = Peak.
- (4) Trace mode = max hold.
- (5) Sweep = auto couple.
- (6) Allow the trace to stabilize.
- (7) Setting channel bandwidth function x dB to -6 dB to record the final bandwidth.

7.4. Test Results

Please refer to Appendix A

8. MAXIMUM PEAK OUTPUT POWER

8.1. Block Diagram of Test Setup



8.2. Specification Limits

The Limits of maximum Peak Output Power for digital modulation in 2400-2483.5MHz is : 1Watt. (30dBm), and E.I.R.P.: 4Watt (36dBm)

8.3. Test Procedure

Following measurement procedure is reference to KDB 558074 D01 DTS Meas Guidance v04:

■ PKPM1 Peak power meter method:

EUT is connected to power sensor and record the maximum output power.

■ Maximum peak conducted output power method:

- (1) Set the RBW $\geq$ DTS bandwidth
- (2) Set RBW $\geq 3 \times$ RBW
- (3) Set span $\geq 3 \times$ 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.

☐ Method AVGPM (Measurement using an RF average power meter):

EUT is connected to power sensor and record the maximum average output power and duty cycle factor is added when duty cycle presented in section 3.7 is $< 98\%$.

☐ Method AVGSA-2 (Spectrum channel power)

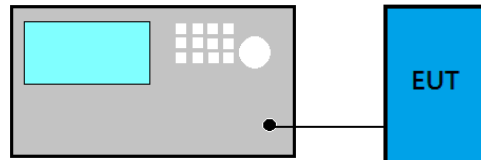
- (1) Set span to at least 1.5 times the OBW
- (2) Set RBW = 1 -5% of OBW
- (3) Set the video bandwidth (VBW) $\geq 3 \times$ RBW.
- (4) Detector = RMS.
- (5) Trace mode = trace average at least 100 traces
- (6) Sweep = auto couple.
- (7) Compute power by integrating the spectrum across the OBW of the signal using the instrument's band power measurement function with band limits set equal to the OBW band edges.
- (8) Duty cycle factor is added when duty cycle presented in section 3.7 is $< 98\%$.

8.4. Test Results

Please refer to Appendix A

9. EMISSION LIMITATIONS

9.1. Block Diagram of Test Setup



9.2. Specification Limits

In any 100kHz 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 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, that the required attenuation shall be 30 dB instead of 20 dB.

Attenuation below the general limits specified in Section 15.209(a)/RSS-Gen Section 8.9 table 4 is not required. In addition, radiated emissions which fall in restricted bands, as defined in Section 15.205(a)/RSS-Gen Section 8.10 table 6, must also comply with the radiated emission limits specified in Section 15.209(a)/RSS-Gen Section 8.9 table 4 (See Section 15.205(c)).

9.3. Test Procedure

Following measurement procedure is reference to KDB 558074 D01 DTS Meas Guidance v04:

■ Reference Level

- (1) Set analyzer center frequency to DTS channel center frequency.
- (2) Set the span to 1.5 times the DTS bandwidth.
- (3) Set the RBW to: 100 kHz.
- (4) Set the VBW $\geq 3 \times$ RBW.
- (5) Detector = peak.
- (6) Sweep time = auto couple.
- (7) Trace mode = max hold.
- (8) Allow trace to fully stabilize to find the max PSD as reference level.

■ Emission Level Measurement

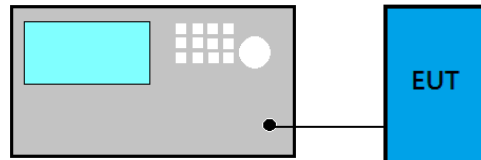
- (1) Set analyzer center frequency to DTS channel center frequency.
- (2) Set the span to 1.5 times the DTS bandwidth.
- (3) Set the RBW to: 100 kHz.
- (4) Set the VBW $\geq 3 \times$ RBW.
- (5) Detector = peak.
- (6) Sweep time = auto couple.
- (7) Trace mode = max hold.
- (8) Allow trace to fully stabilize to find the max level.

9.4. Test Results

Please refer to Appendix A

10. POWER SPECTRAL DENSITY

10.1. Block Diagram of Test Setup



10.2. Specification Limits

The peak power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8dBm in any 3kHz band.

10.3. Test Procedure

Following measurement procedure is reference to KDB 558074 D01 DTS Meas Guidance v04:

■ Method PKPSD (peak PSD)

- (1) Set analyzer center frequency to DTS channel center frequency.
- (2) Set the span to 1.5 times the DTS bandwidth.
- (3) Set the RBW to: $3 \text{ kHz} \leq \text{RBW} \leq 100 \text{ kHz}$.
- (4) Set the VBW $\geq 3 \times \text{RBW}$.
- (5) Detector = peak.
- (6) Sweep time = auto couple.
- (7) Trace mode = max hold.
- (8) Allow trace to fully stabilize.
- (9) Use the peak marker function to determine the maximum amplitude level.
- (10) If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

□ Method AVGPSD-2

- (1) Using peak PSD procedure step 1 to step 4.
- (2) Detector = RMS detector
- (3) Sweep time = auto couple
- (4) Trace mode = trace averaging over a minimum of 100 traces
- (5) Use the peak marker function to determine the maximum amplitude level.
- (6) Duty cycle factor is added when duty cycle presented in section 3.7 < 98%.
- (7) If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

10.4. Test Results

Please refer to Appendix A

11.DEVIATION TO TEST SPECIFICATIONS

【NONE】



Audix Technology Corp.
No. 53-11, Dingfu, Linkou, Dist.,
New Taipei City 244, Taiwan

APPENDIX A

Tel: +886 2 26099301
Fax: +886 2 26099303

APPENDIX A

TEST DATA AND PLOTS

(Model: A8001)

TABLE OF CONTENTS

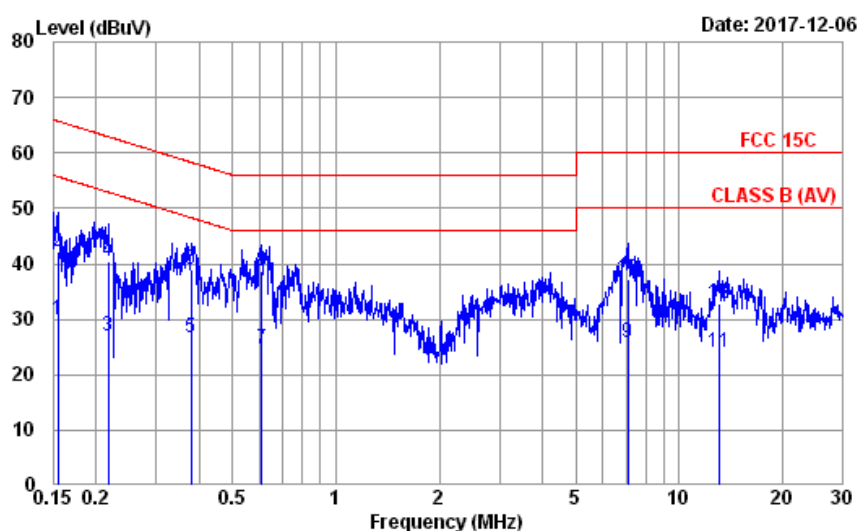
A.1 CONDUCTED EMISSION.....	2
A.2 RADIATED EMISSION	4
A.2.1 Emissions within Restricted Frequency Bands.....	4
A.2.2 Emissions outside the frequency band:.....	26
A.2.3 Emissions in Non-restricted Frequency Bands:.....	29
A.3 6dB BANDWIDTH	30
A.3.1 6dB Bandwidth Result.....	30
A.3.2 Measurement Plots	31
A.4 MAXIMUM PEAK OUTPUT POWER	34
A.4.1 Peak Output Power	34
A.4.2 Average Output Power (Reporting only).....	35
A.4.3 Measurement Plots	36
A.5 EMISSION LIMITATIONS	37
A.6 POWER SPECTRAL DENSITY	52
A.6.1 Power Spectral Density Result	52
A.6.2 Measurement Plots	53

Audix Technology Corp.
No. 53-11, Dingfu, Linkou, Dist.,
New Taipei City 244, Taiwan

Tel: +886 2 26099301
Fax: +886 2 26099303

A.1 CONDUCTED EMISSION

Test Date	2017/12/06	Temp./Hum.	22°C/47%
Test Voltage	AC 120V, 60Hz (Via AC Adapter)		



Site no. : No.8 Shielded Room Data no. : 4
Condition : ENV4200 100169 LISN Phase : NEUTRAL
Limit : FCC 15B-B
Env. / Ins. : 22°C / 47% ESR3 (1774) Engineer : Nick Du
EUT : A8001
Power Rating : 120Vac/60Hz
Test Mode : Operating

	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Pulse Att. (dB)	Reading (dBμV)	Emission Level (dBμV)	Limits (dBμV)	Margin (dB)	Remark
1	0.155	10.56	0.03	9.86	9.32	29.77	55.74	25.97	Average
2	0.155	10.56	0.03	9.86	21.87	42.32	65.74	23.42	QP
3	0.217	10.51	0.03	9.86	6.42	26.82	52.92	26.10	Average
4	0.217	10.51	0.03	9.86	20.17	40.57	62.92	22.35	QP
5	0.379	10.44	0.04	9.86	6.19	26.53	48.30	21.77	Average
6	0.379	10.44	0.04	9.86	18.74	39.08	58.30	19.22	QP
7	0.608	10.43	0.05	9.86	4.23	24.57	46.00	21.43	Average
8	0.608	10.43	0.05	9.86	18.43	38.77	56.00	17.23	QP
9	7.100	11.03	0.16	9.88	4.82	25.89	50.00	24.11	Average
10	7.100	11.03	0.16	9.88	16.10	37.17	60.00	22.83	QP
11	13.127	12.16	0.22	9.91	1.85	24.14	50.00	25.86	Average
12	13.127	12.16	0.22	9.91	10.48	32.77	60.00	27.23	QP

Remarks: 1. Emission Level= AMN Factor + Cable Loss + Pulse Att. + Reading.

Audix Technology Corp.

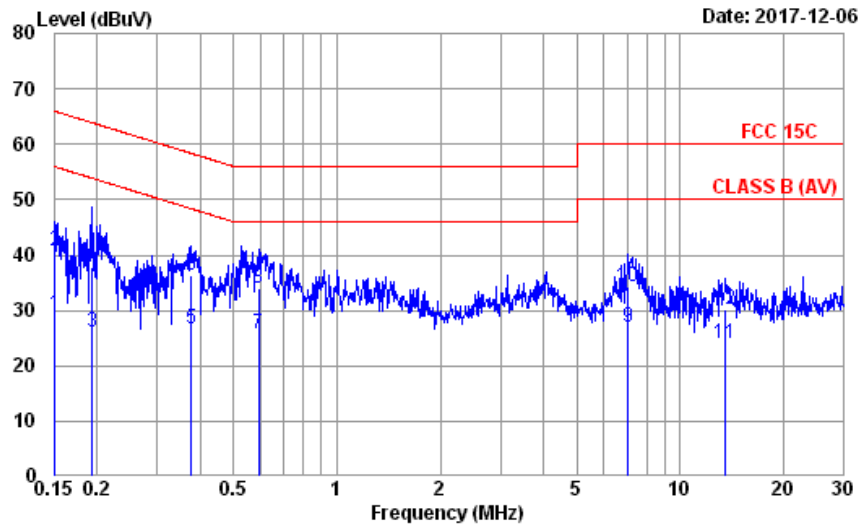
No. 53-11, Dingfu, Linkou, Dist.,

New Taipei City 244, Taiwan

Tel: +886 2 26099301

Fax: +886 2 26099303

Test Date	2017/12/06	Temp./Hum.	22°C/47%
Test Voltage	AC 120V, 60Hz (Via AC Adapter)		



Site no. : No.8 Shielded Room Data no. : 3
Condition : ENV4200 100169 LISN Phase : LINE
Limit : FCC 15B-B
Env. / Ins. : 22°C / 47% ESR3 (1774) Engineer : Nick Du
EUT : A8001
Power Rating : 120Vac/60Hz
Test Mode : Operating

	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Pulse Att. (dB)	Reading (dBμV)	Emission Level (dBμV)	Limits (dBμV)	Margin (dB)	Remark
1	0.151	10.63	0.03	9.86	8.82	29.34	55.96	26.62	Average
2	0.151	10.63	0.03	9.86	20.35	40.87	65.96	25.09	QP
3	0.193	10.57	0.03	9.86	5.77	26.23	53.89	27.66	Average
4	0.193	10.57	0.03	9.86	17.31	37.77	63.89	26.12	QP
5	0.377	10.46	0.04	9.86	6.18	26.54	48.34	21.80	Average
6	0.377	10.46	0.04	9.86	16.09	36.45	58.34	21.89	QP
7	0.592	10.45	0.05	9.86	5.48	25.84	46.00	20.16	Average
8	0.592	10.45	0.05	9.86	13.62	33.98	56.00	22.02	QP
9	7.062	11.03	0.16	9.88	5.94	27.01	50.00	22.99	Average
10	7.062	11.03	0.16	9.88	13.11	34.18	60.00	25.82	QP
11	13.551	12.29	0.22	9.91	1.64	24.06	50.00	25.94	Average
12	13.551	12.29	0.22	9.91	7.64	30.06	60.00	29.94	QP

Remarks: 1. Emission Level= AMN Factor + Cable Loss + Pulse Att. + Reading.

A.2 RADIATED EMISSION

Test Date	2017/12/15	Temp./Hum.	26°C/48%
Test Voltage	(1) AC 120V, 60Hz (Via AC Adapter), (2) DC 3.8V (Via Battery)		

A.2.1 Emissions within Restricted Frequency Bands

A.2.1.1 Frequency 9kHz~30MHz

The emissions (9kHz~30MHz) not reported for there is no emission be found.

A.2.1.2 Frequency Below 1 GHz

Mode	Charge	Frequency	---
------	--------	-----------	-----

Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dB μ V)	Emission Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Detector
34.85	22.37	1.31	0.33	24.01	40.00	15.99	Peak
90.14	15.59	2.14	13.73	31.46	43.50	12.04	Peak
151.25	16.97	2.84	6.84	26.65	43.50	16.85	Peak
219.15	17.14	3.53	15.35	36.02	46.00	9.98	Peak
333.61	20.43	4.77	5.49	30.69	46.00	15.31	Peak
660.50	24.79	6.96	2.87	34.62	46.00	11.38	Peak

Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dB μ V)	Emission Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Detector
34.85	22.37	1.31	8.43	32.11	40.00	7.89	Peak
90.14	15.59	2.14	18.55	36.28	43.50	7.22	Peak
116.33	18.59	2.46	10.02	31.07	43.50	12.43	Peak
216.24	16.92	3.50	9.20	29.62	46.00	16.38	Peak
322.94	20.15	4.63	6.61	31.39	46.00	14.61	Peak
807.94	25.99	7.65	0.84	34.48	46.00	11.52	Peak

Mode	802.11n-HT40	Frequency	TX 2452MHz
------	--------------	-----------	------------

Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dB μ V)	Emission Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Detector
30.00	24.77	1.20	-0.26	25.71	40.00	14.29	Peak
101.78	17.60	2.29	4.35	24.24	43.50	19.26	Peak
398.60	22.04	5.54	2.80	30.38	46.00	15.62	Peak

Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dB μ V)	Emission Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Detector
30.00	24.77	1.20	0.15	26.12	40.00	13.88	Peak
332.64	20.40	4.75	5.40	30.55	46.00	15.45	Peak
640.13	24.74	6.89	2.21	33.84	46.00	12.16	Peak

Mode	BLE	Frequency	TX 2440MHz
------	-----	-----------	------------

Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dB μ V)	Emission Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Detector
30.00	24.77	1.20	1.21	27.18	40.00	12.82	Peak
101.78	17.60	2.29	4.90	24.79	43.50	18.71	Peak
538.28	23.75	6.55	2.70	33.00	46.00	13.00	Peak

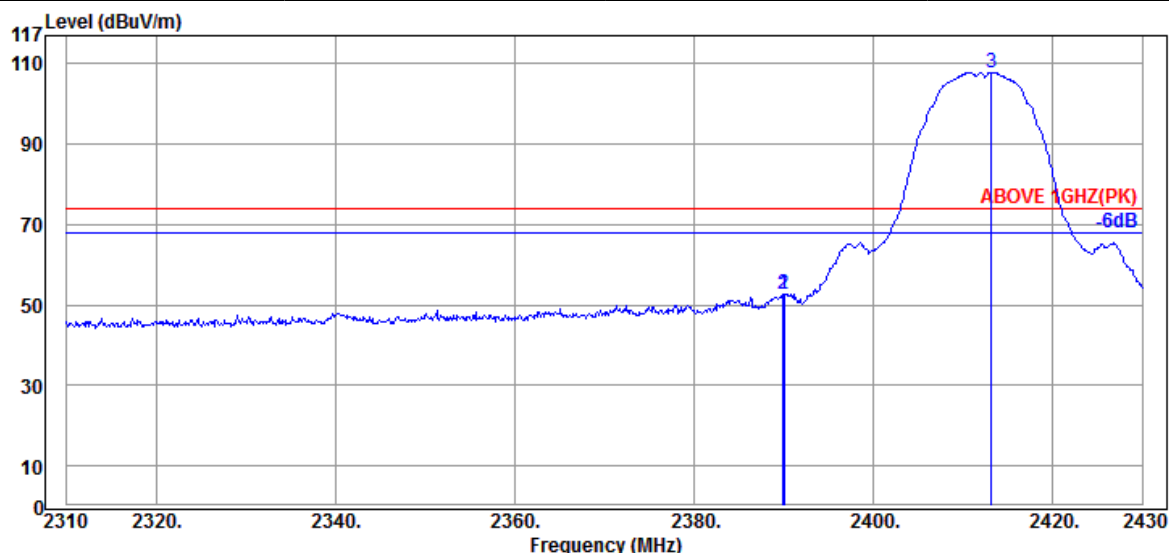
Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dB μ V)	Emission Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Detector
30.00	24.77	1.20	0.76	26.73	40.00	13.27	Peak
251.16	19.17	3.82	2.58	25.57	46.00	20.43	Peak
326.82	20.25	4.68	5.16	30.09	46.00	15.91	Peak

A.2.1.3 Frequency Above 1 GHz to 10th harmonics

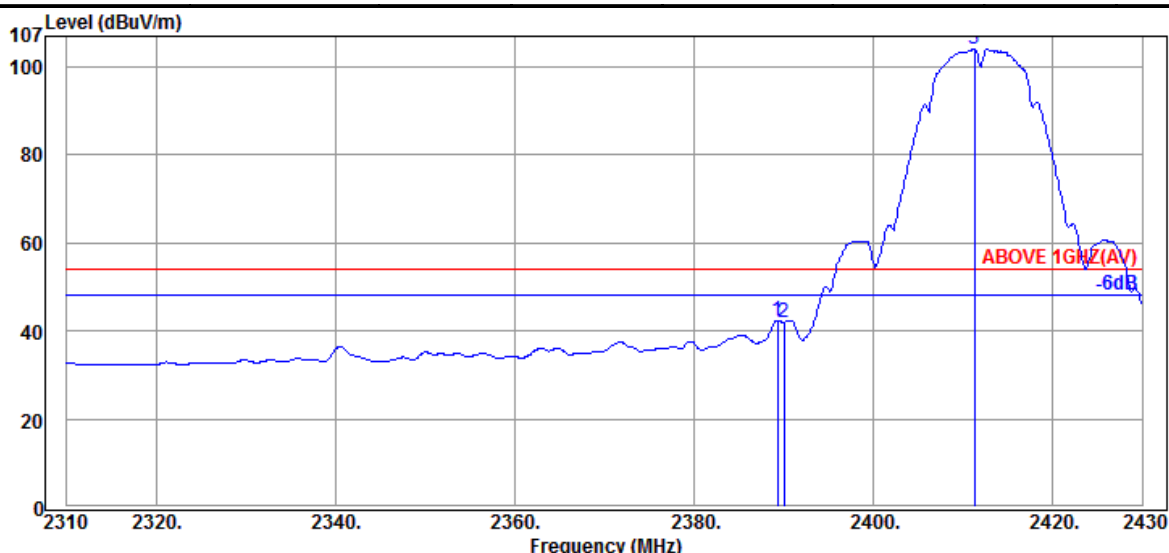
Band Edge:

Mode	802.11b	Frequency	TX 2412MHz
------	---------	-----------	------------



Antenna at Horizontal Polarization

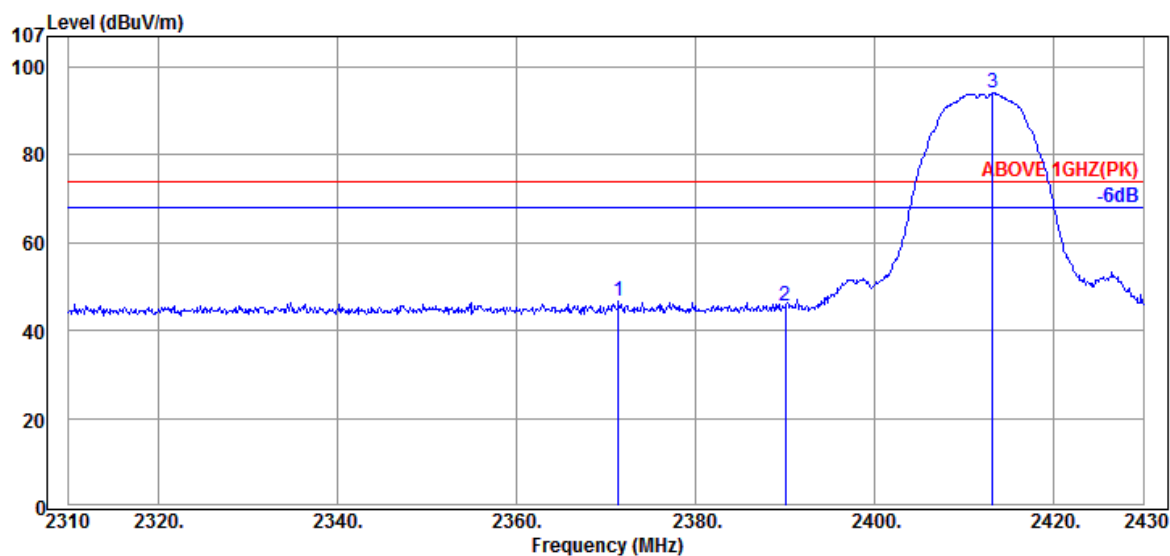
Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2389.92	32.16	6.57	13.89	52.62	74.00	21.38	Peak
2390.04	32.16	6.57	13.81	52.54	74.00	21.46	Peak
2413.20	32.18	6.59	69.06	107.83	---	---	Peak



Antenna at Horizontal Polarization

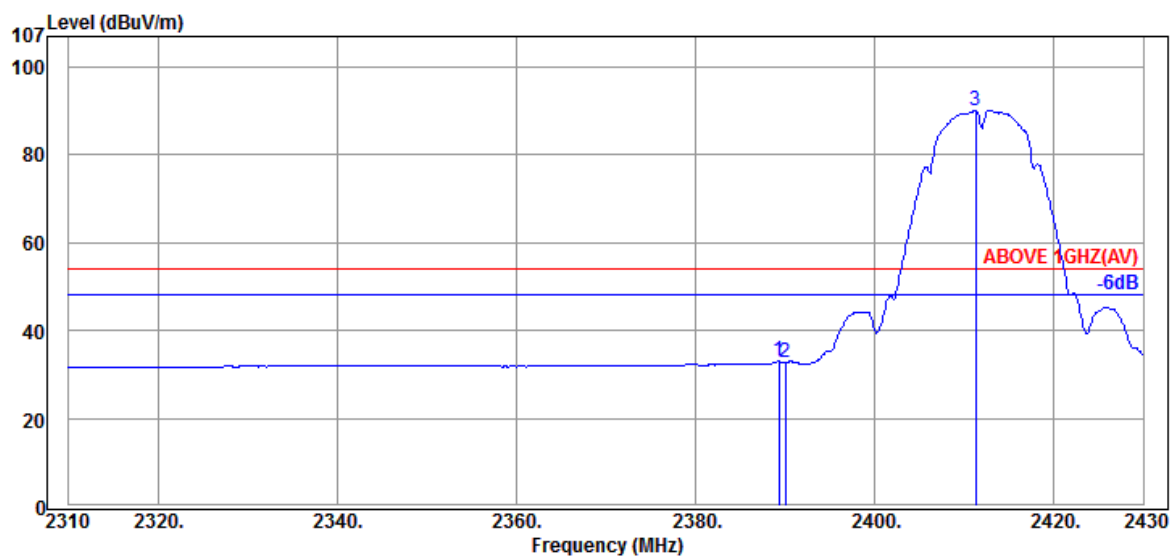
Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2389.32	32.16	6.57	3.70	42.43	54.00	11.57	Average
2390.04	32.16	6.57	3.33	42.06	54.00	11.94	Average
2411.28	32.18	6.59	65.36	104.13	---	---	Average

Mode	802.11b	Frequency	TX 2412MHz
------	---------	-----------	------------



Antenna at Vertical Polarization

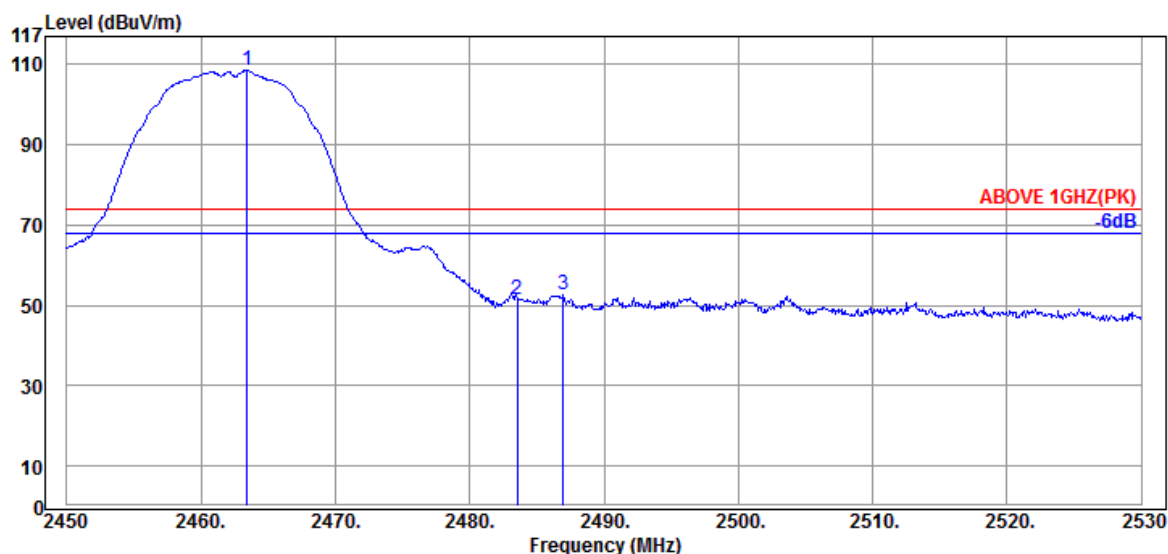
Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2371.44	32.13	6.55	7.98	46.66	74.00	27.34	Peak
2390.04	32.16	6.57	6.73	45.46	74.00	28.54	Peak
2413.20	32.18	6.59	55.20	93.97	---	---	Peak



Antenna at Vertical Polarization

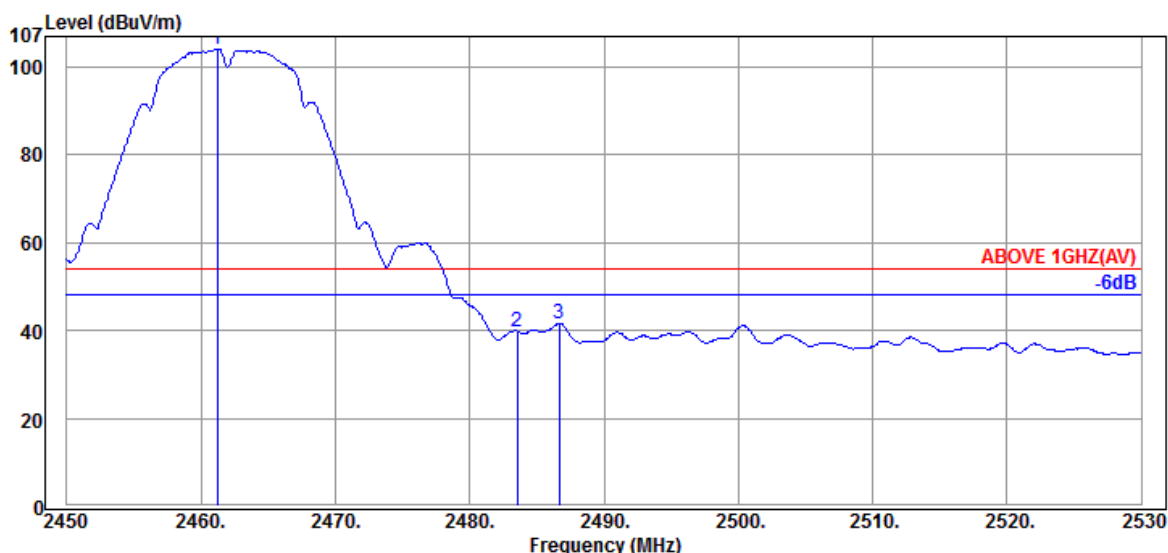
Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2389.32	32.16	6.57	-5.80	32.93	54.00	21.07	Average
2390.04	32.16	6.57	-5.87	32.86	54.00	21.14	Average
2411.28	32.18	6.59	51.48	90.25	---	---	Average

Mode	802.11b	Frequency	TX 2462MHz
------	---------	-----------	------------



Antenna at Horizontal Polarization

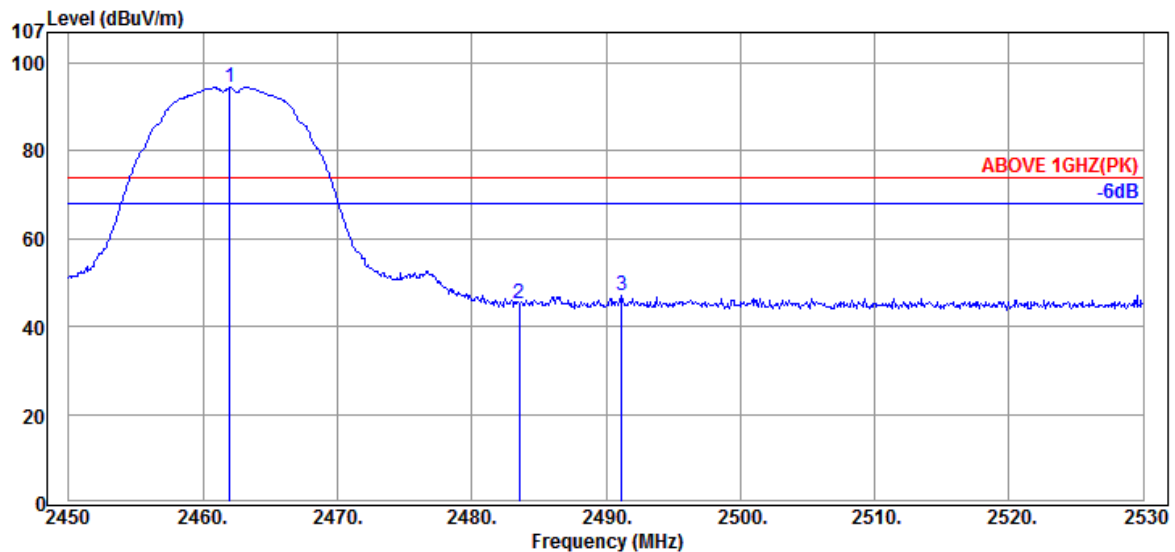
Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2463.44	32.25	6.65	69.79	108.69	---	---	Peak
2483.52	32.28	6.67	12.58	51.53	74.00	22.47	Peak
2486.96	32.28	6.67	13.67	52.62	74.00	21.38	Peak



Antenna at Horizontal Polarization

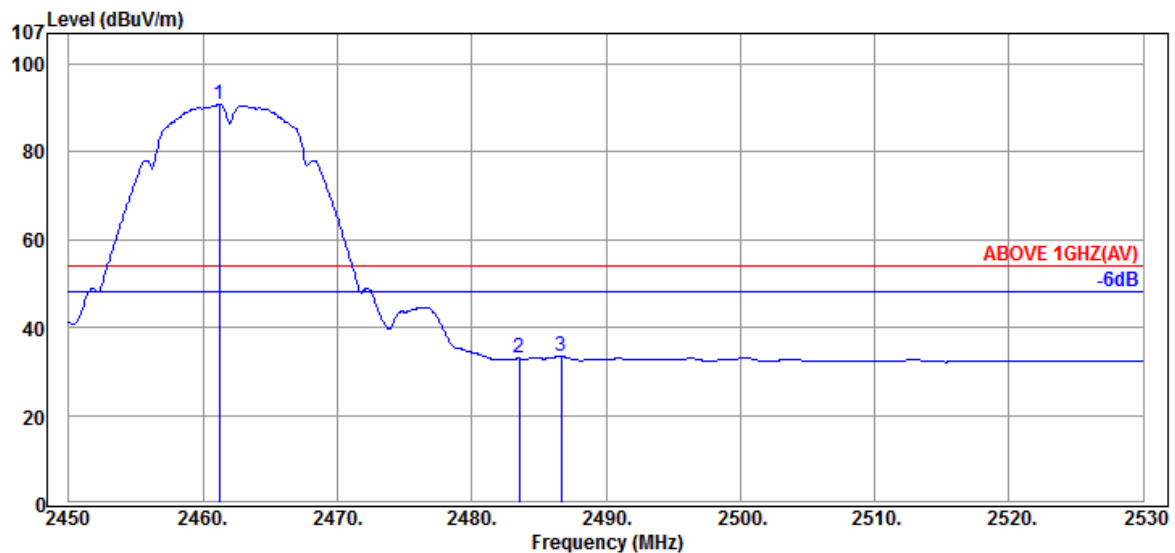
Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2461.20	32.25	6.65	65.33	104.23	---	---	Average
2483.52	32.28	6.67	0.90	39.85	54.00	14.15	Average
2486.64	32.28	6.67	2.61	41.56	54.00	12.44	Average

Mode	802.11b	Frequency	TX 2462MHz
------	---------	-----------	------------



Antenna at Vertical Polarization

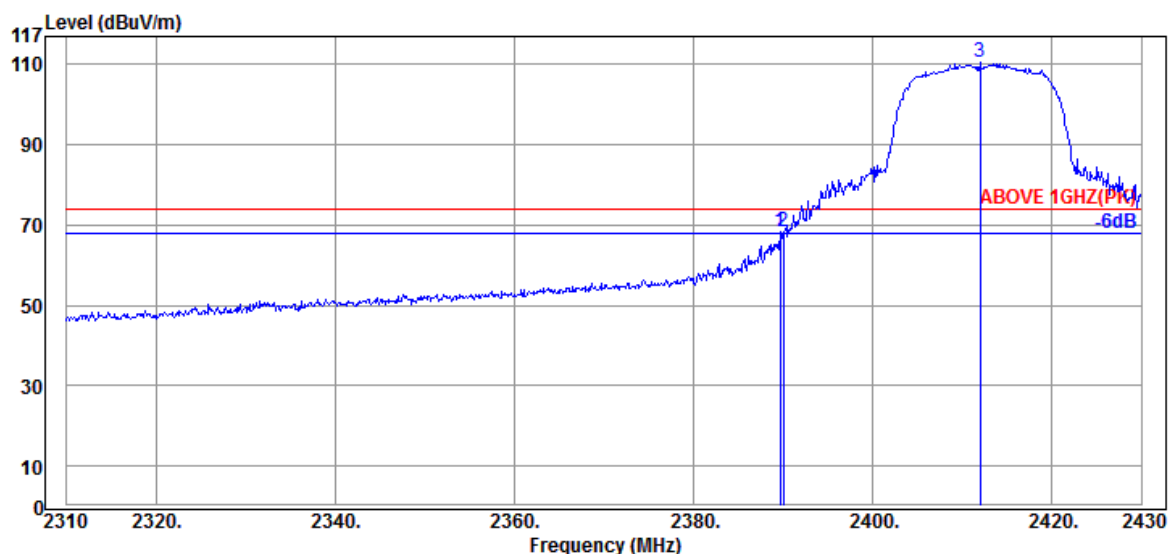
Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2462.00	32.25	6.65	55.50	94.40	---	---	Peak
2483.52	32.28	6.67	6.15	45.10	74.00	28.90	Peak
2491.20	32.30	6.69	8.05	47.04	74.00	26.96	Peak



Antenna at Vertical Polarization

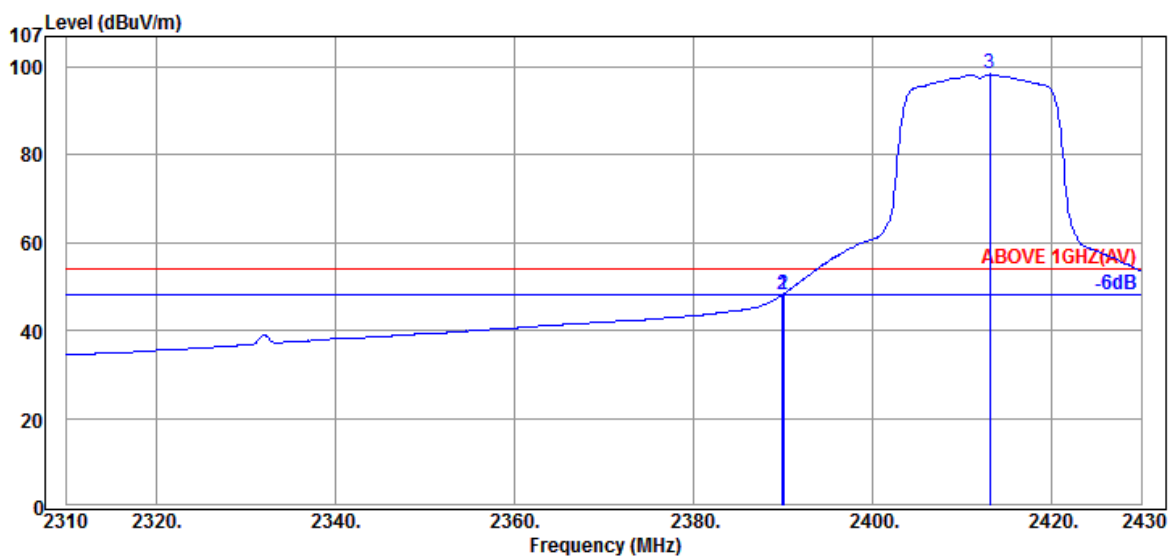
Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2461.20	32.25	6.65	51.93	90.83	---	---	Average
2483.52	32.28	6.67	-6.02	32.93	54.00	21.07	Average
2486.64	32.28	6.67	-5.60	33.35	54.00	20.65	Average

Mode	802.11g	Frequency	TX 2412MHz
------	---------	-----------	------------



Antenna at Horizontal Polarization

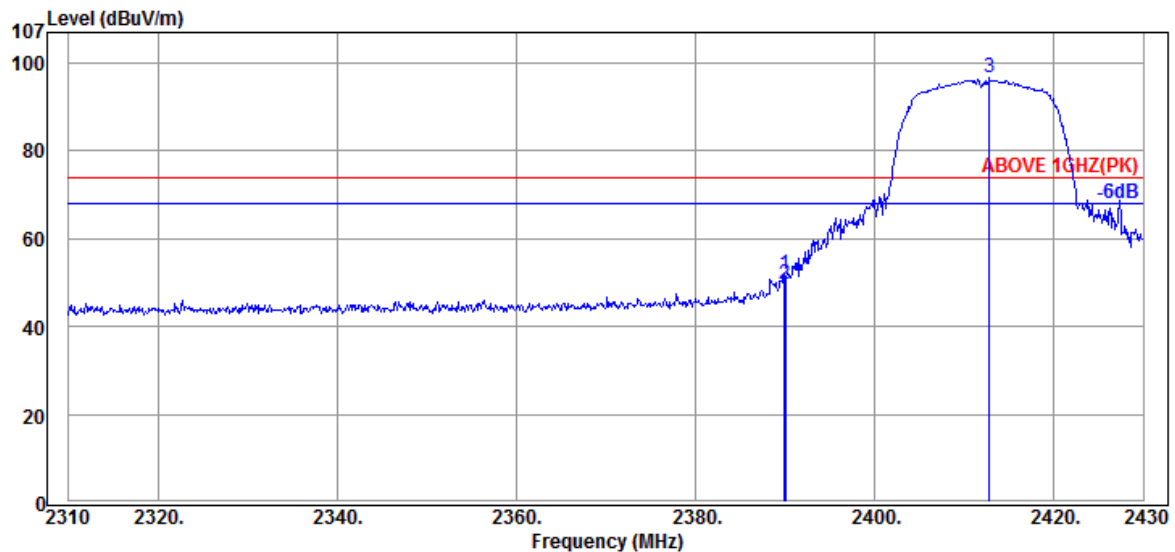
Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2389.68	32.16	6.57	29.60	68.33	74.00	5.67	Peak
2390.04	32.16	6.57	29.80	68.53	74.00	5.47	Peak
2412.00	32.18	6.59	71.82	110.59	---	---	Peak



Antenna at Horizontal Polarization

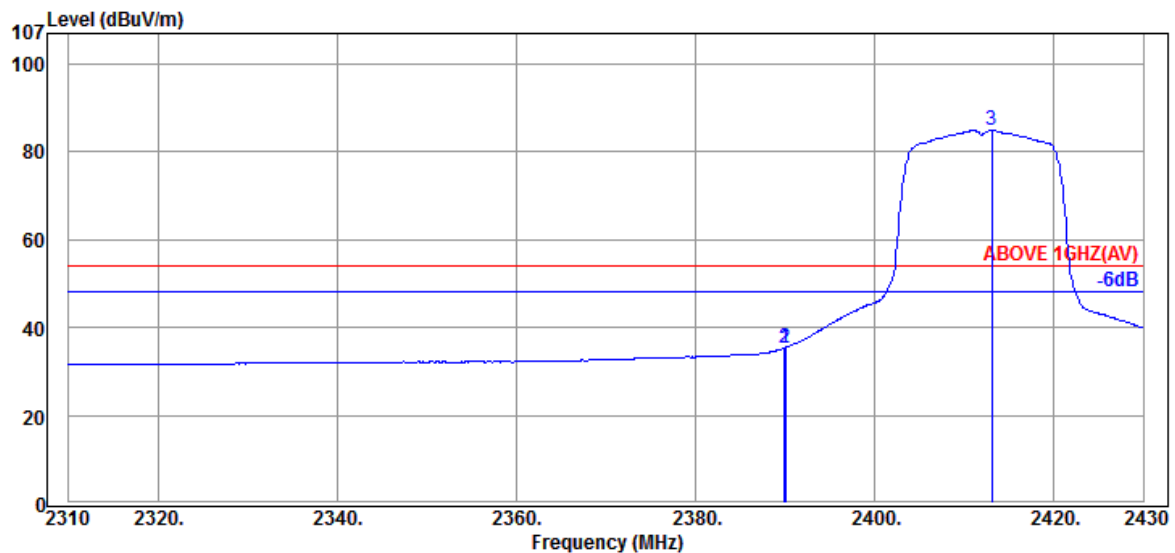
Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2389.92	32.16	6.57	9.38	48.11	54.00	5.89	Average
2390.04	32.16	6.57	9.55	48.28	54.00	5.72	Average
2413.08	32.18	6.59	59.60	98.37	---	---	Average

Mode	802.11g	Frequency	TX 2412MHz
------	---------	-----------	------------



Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2389.92	32.16	6.57	12.95	51.68	74.00	22.32	Peak
2390.04	32.16	6.57	11.02	49.75	74.00	24.25	Peak
2412.84	32.18	6.59	57.77	96.54	---	---	Peak



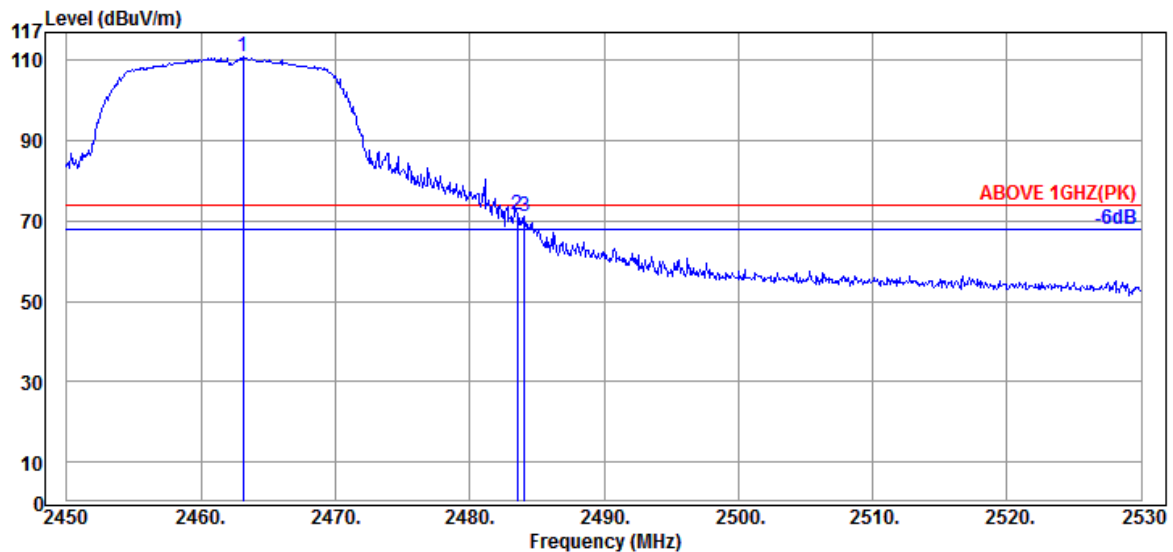
Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2389.92	32.16	6.57	-3.42	35.31	54.00	18.69	Average
2390.04	32.16	6.57	-3.32	35.41	54.00	18.59	Average
2413.08	32.18	6.59	46.21	84.98	---	---	Average

Audix Technology Corp.
No. 53-11, Dingfu, Linkou, Dist.,
New Taipei City 244, Taiwan

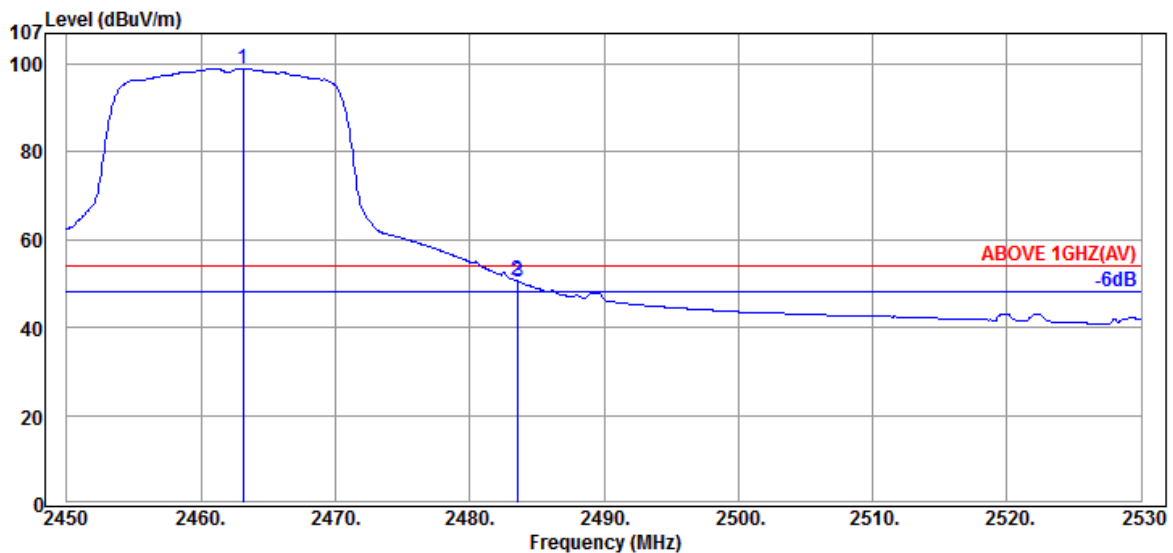
Tel: +886 2 26099301
Fax: +886 2 26099303

Mode	802.11g	Frequency	TX 2462MHz
------	---------	-----------	------------



Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2463.12	32.25	6.65	72.04	110.94	---	---	Peak
2483.52	32.28	6.67	32.70	71.65	74.00	2.35	Peak
2484.08	32.28	6.67	32.29	71.24	74.00	2.76	Peak



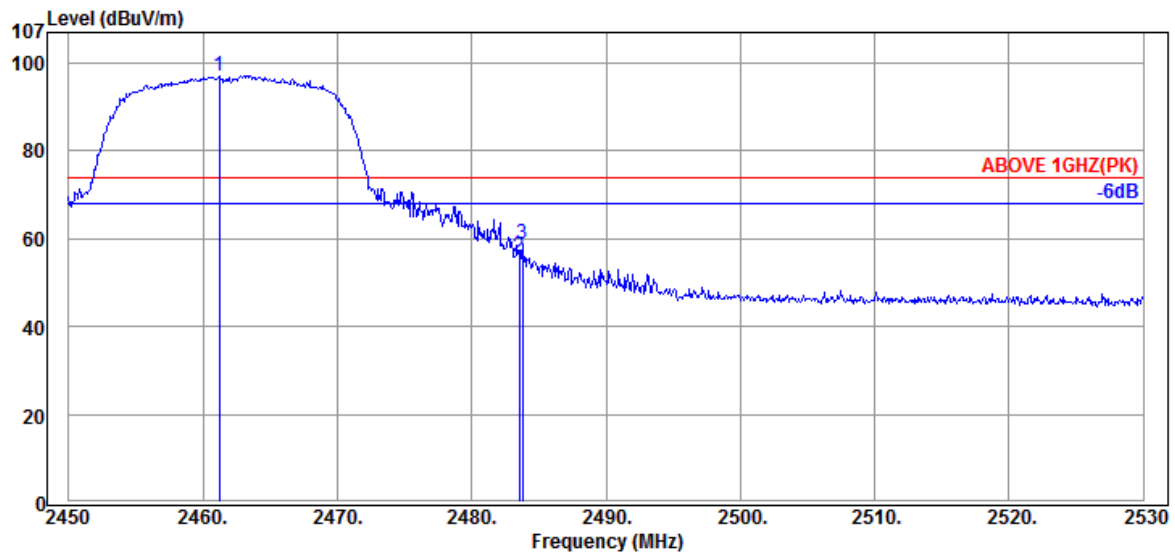
Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2463.12	32.25	6.65	60.13	99.03	---	---	Average
2483.52	32.28	6.67	11.64	50.59	54.00	3.41	Average
2483.60	32.28	6.67	11.53	50.48	54.00	3.52	Average

Audix Technology Corp.
No. 53-11, Dingfu, Linkou, Dist.,
New Taipei City 244, Taiwan

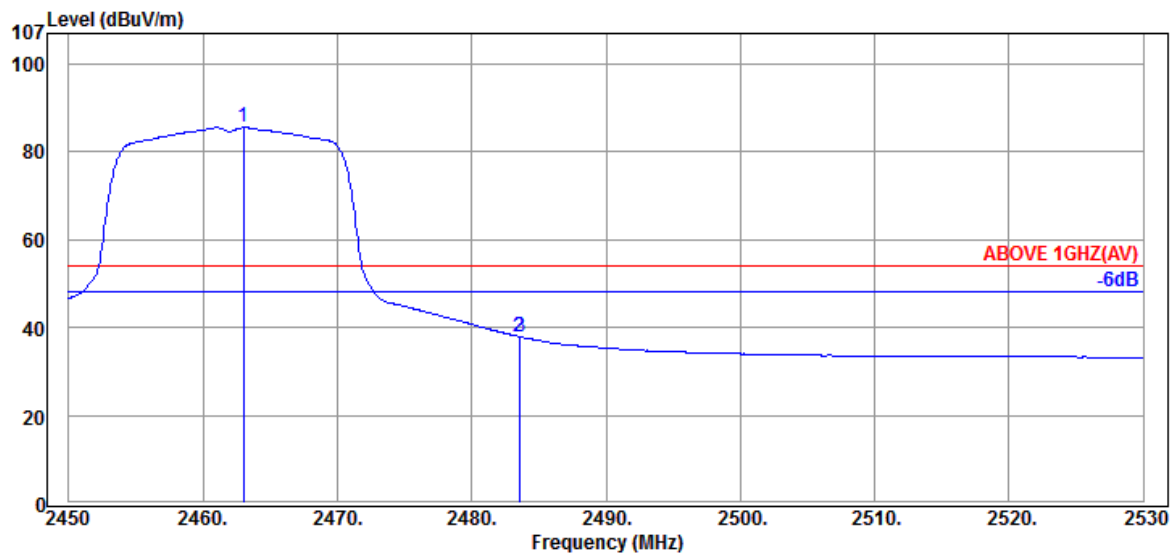
Tel: +886 2 26099301
Fax: +886 2 26099303

Mode	802.11g	Frequency	TX 2462MHz
------	---------	-----------	------------



Antenna at Vertical Polarization

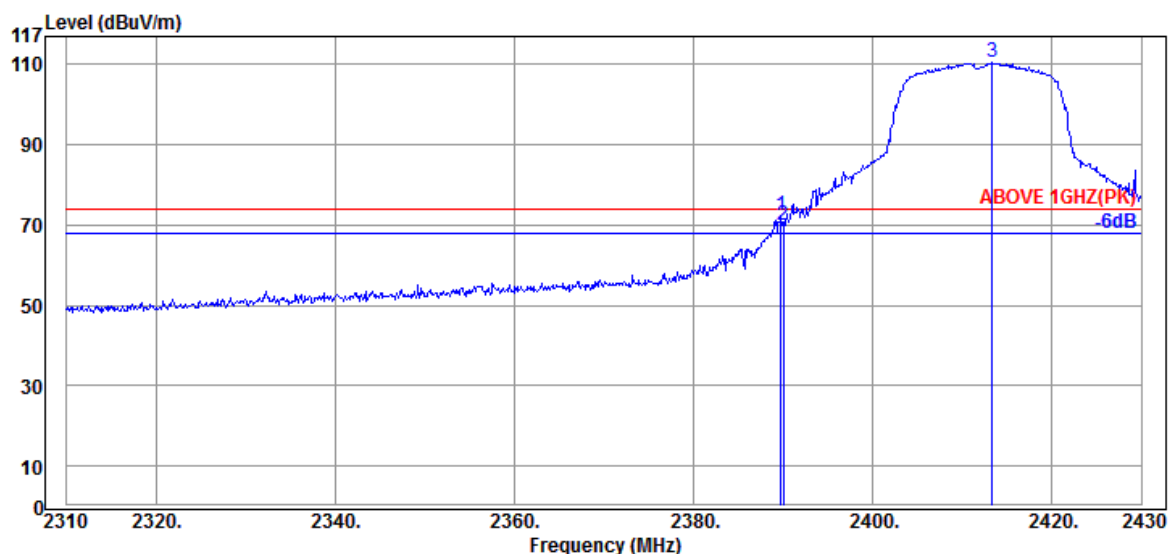
Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2461.20	32.25	6.65	58.34	97.24	---	---	Peak
2483.52	32.28	6.67	16.99	55.94	74.00	18.06	Peak
2483.76	32.28	6.67	20.02	58.97	74.00	15.03	Peak



Antenna at Vertical Polarization

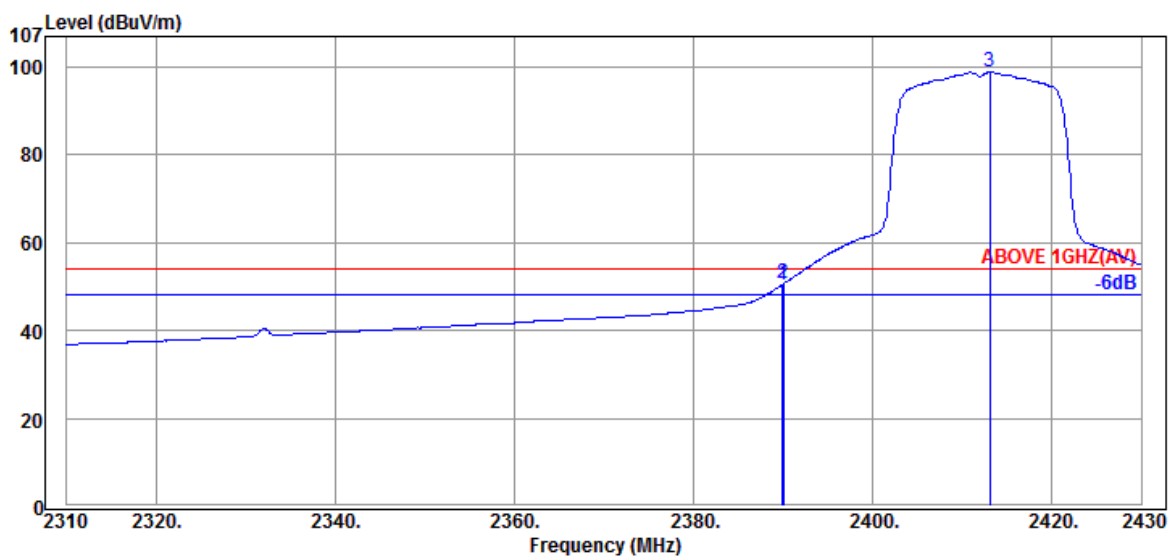
Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2463.04	32.25	6.65	46.70	85.60	---	---	Average
2483.52	32.28	6.67	-0.97	37.98	54.00	16.02	Average
2483.60	32.28	6.67	-1.06	37.89	54.00	16.11	Average

Mode	802.11n-HT20	Frequency	TX 2412MHz
------	--------------	-----------	------------



Antenna at Horizontal Polarization

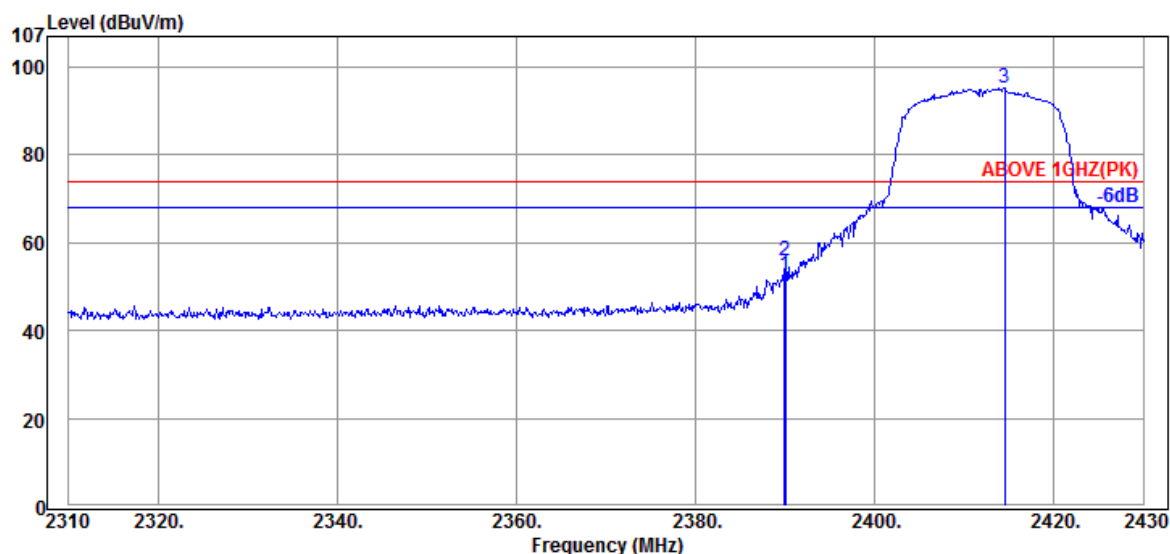
Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2389.80	32.16	6.57	33.48	72.21	74.00	1.79	Peak
2390.04	32.16	6.57	31.34	70.07	74.00	3.93	Peak
2413.32	32.18	6.59	71.62	110.39	---	---	Peak



Antenna at Horizontal Polarization

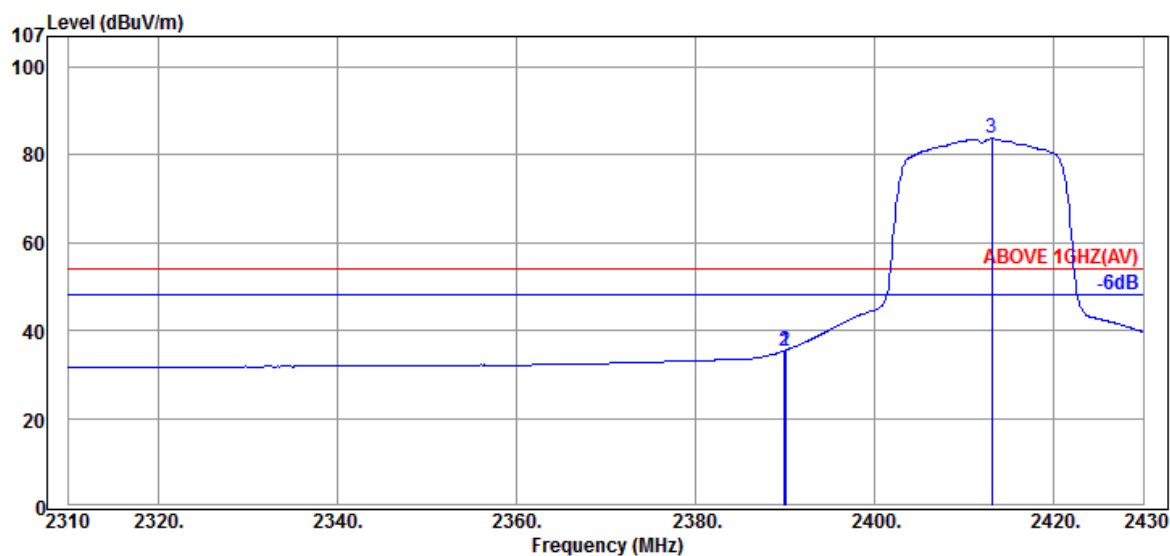
Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2389.92	32.16	6.57	11.68	50.41	54.00	3.59	Average
2390.04	32.16	6.57	11.85	50.58	54.00	3.42	Average
2413.08	32.18	6.59	60.06	98.83	---	---	Average

Mode	802.11n-HT20	Frequency	TX 2412MHz
------	--------------	-----------	------------



Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2389.92	32.16	6.57	13.85	52.58	74.00	21.42	Peak
2390.04	32.16	6.57	17.06	55.79	74.00	18.21	Peak
2414.52	32.18	6.59	56.63	95.40	---	---	Peak



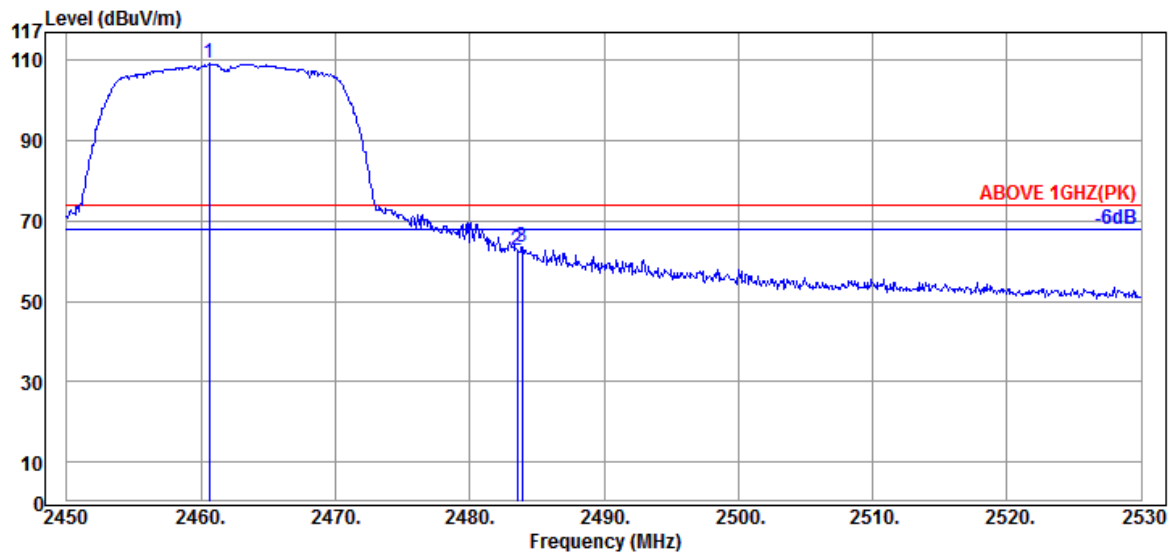
Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2389.92	32.16	6.57	-3.36	35.37	54.00	18.63	Average
2390.04	32.16	6.57	-3.25	35.48	54.00	18.52	Average
2413.08	32.18	6.59	44.95	83.72	---	---	Average

Audix Technology Corp.
No. 53-11, Dingfu, Linkou, Dist.,
New Taipei City 244, Taiwan

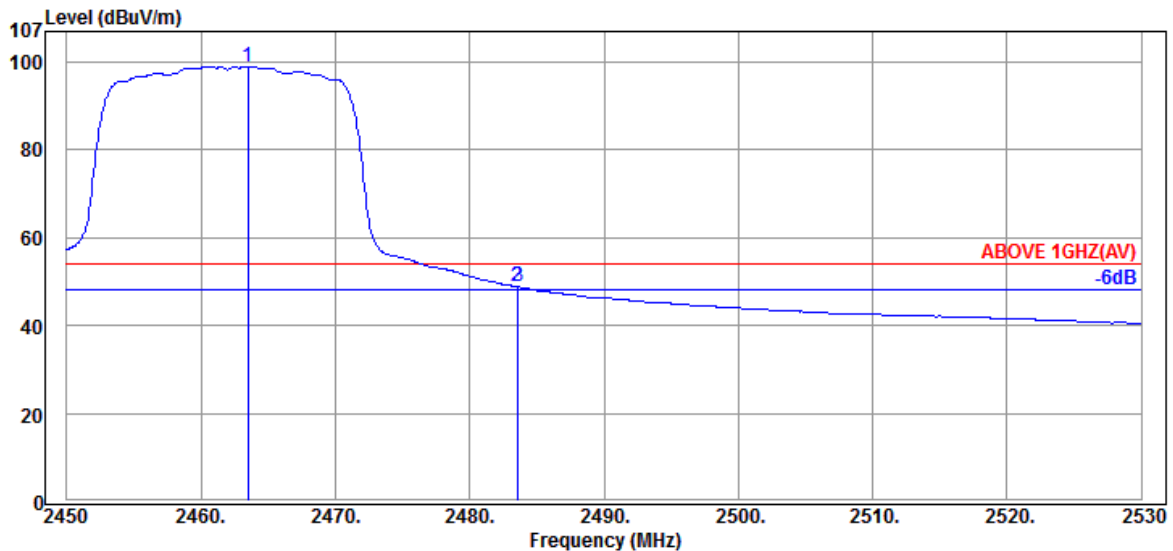
Tel: +886 2 26099301
Fax: +886 2 26099303

Mode	802.11n-HT20	Frequency	TX 2462MHz
------	--------------	-----------	------------



Antenna at Horizontal Polarization

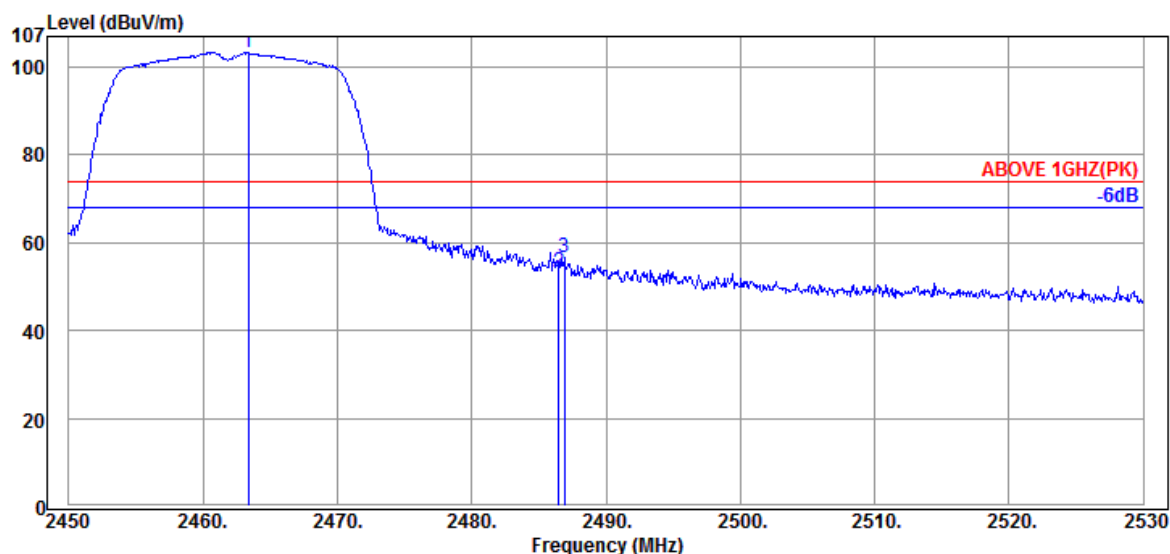
Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2460.64	32.25	6.65	70.28	109.18	---	---	Peak
2483.52	32.28	6.67	23.89	62.84	74.00	11.16	Peak
2483.92	32.28	6.67	24.75	63.70	74.00	10.30	Peak



Antenna at Horizontal Polarization

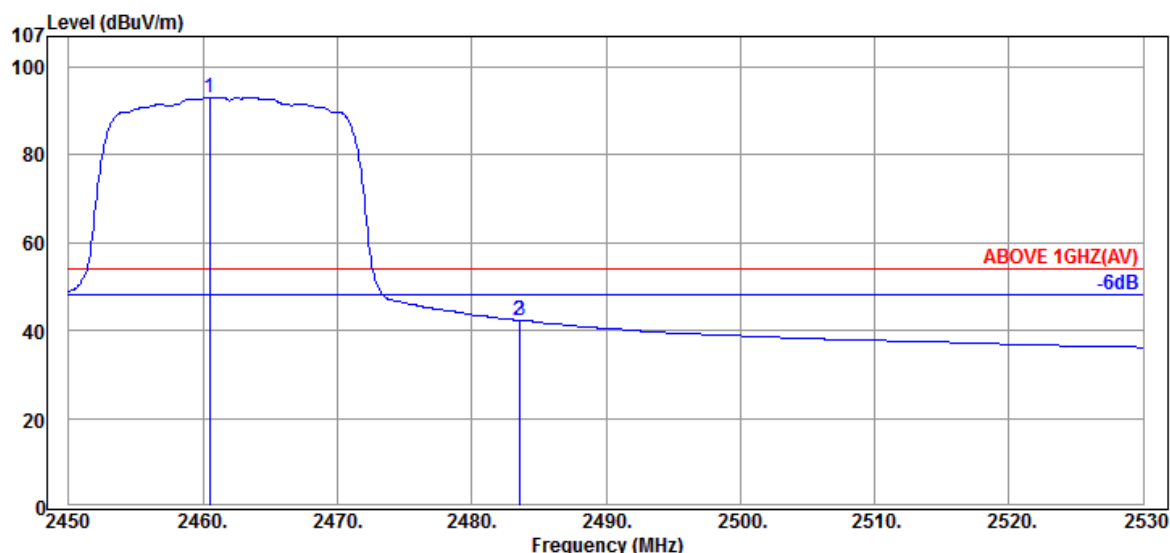
Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2463.52	32.25	6.65	60.13	99.03	---	---	Average
2483.52	32.28	6.67	9.89	48.84	54.00	5.16	Average
2483.60	32.28	6.67	9.83	48.78	54.00	5.22	Average

Mode	802.11n-HT20	Frequency	TX 2462MHz
------	--------------	-----------	------------



Antenna at Vertical Polarization

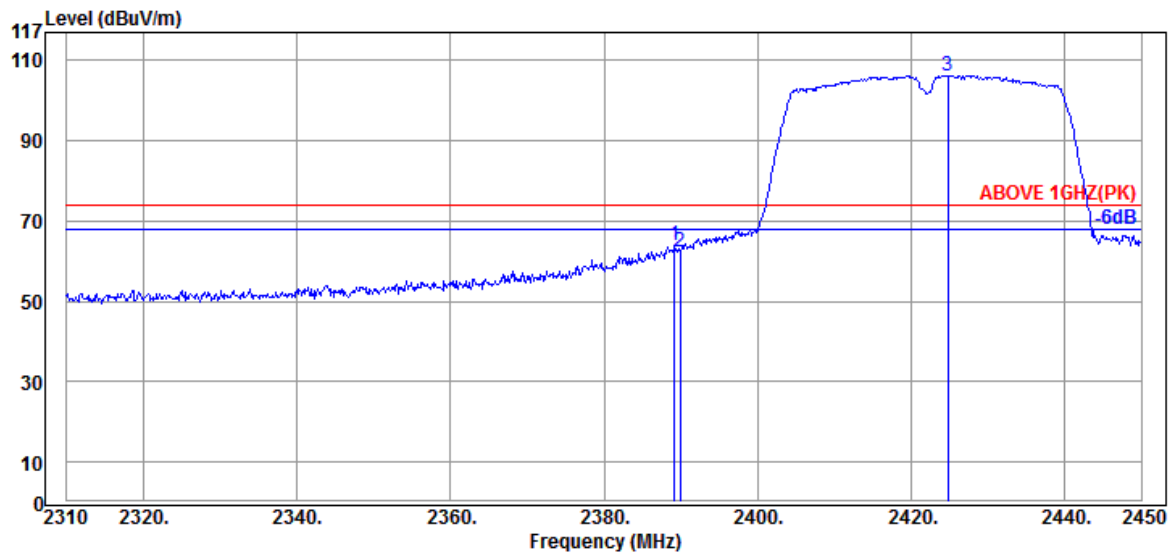
Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2463.36	32.25	6.65	64.35	103.25	---	---	Peak
2486.48	32.28	6.67	14.49	53.44	74.00	20.56	Peak
2486.88	32.28	6.67	17.71	56.66	74.00	17.34	Peak



Antenna at Vertical Polarization

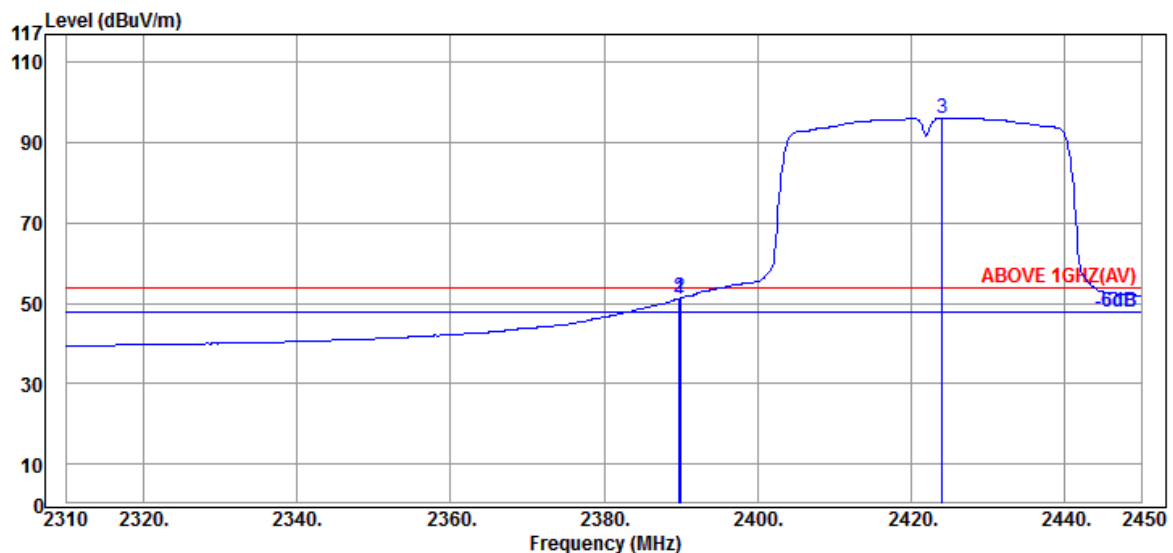
Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2460.48	32.25	6.65	54.25	93.15	---	---	Average
2483.52	32.28	6.67	3.38	42.33	54.00	11.67	Average
2483.60	32.28	6.67	3.34	42.29	54.00	11.71	Average

Mode	802.11n-HT40	Frequency	TX 2422MHz
------	--------------	-----------	------------



Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2389.24	32.16	6.57	25.10	63.83	74.00	10.17	Peak
2389.94	32.16	6.57	23.71	62.44	74.00	11.56	Peak
2424.80	32.20	6.61	67.45	106.26	---	---	Peak



Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2389.80	32.16	6.57	12.48	51.21	54.00	2.79	Average
2389.94	32.16	6.57	12.59	51.32	54.00	2.68	Average
2424.10	32.20	6.61	57.37	96.18	---	---	Average

Audix Technology Corp.

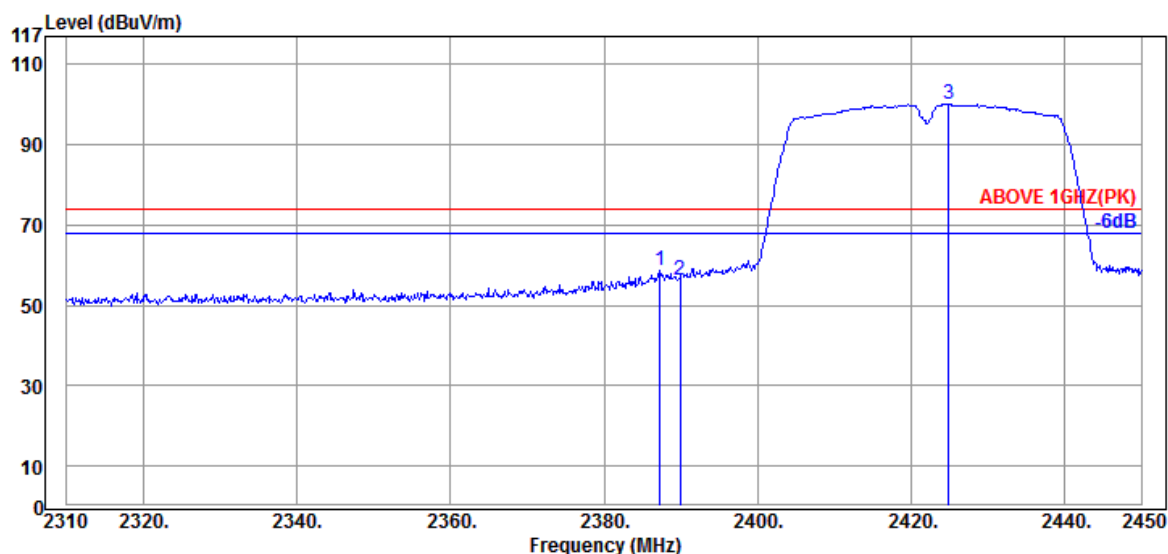
No. 53-11, Dingfu, Linkou, Dist.,

New Taipei City 244, Taiwan

Tel: +886 2 26099301

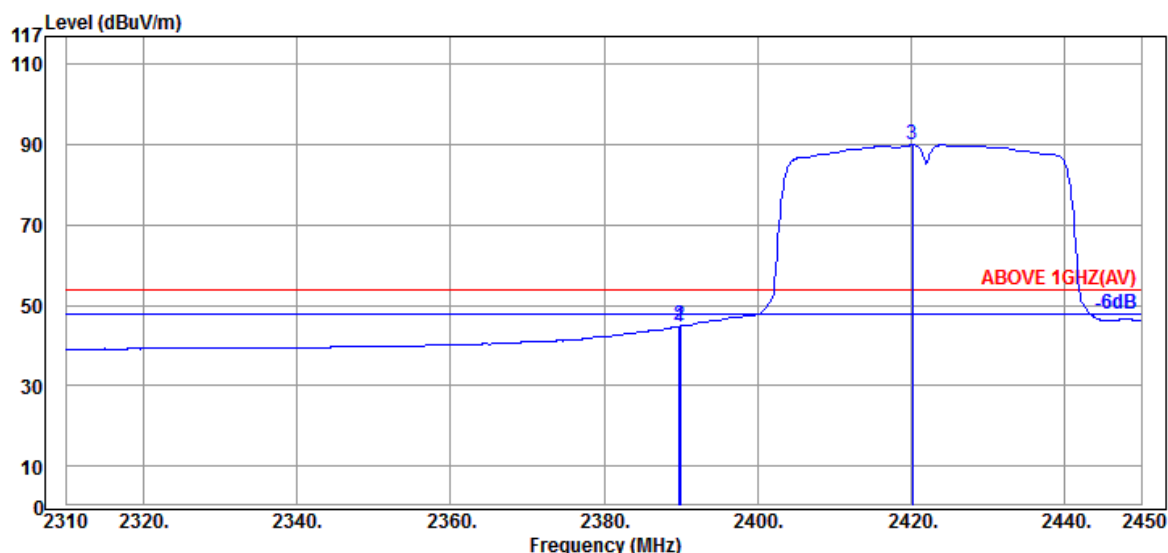
Fax: +886 2 26099303

Mode	802.11n-HT40	Frequency	TX 2422MHz
------	--------------	-----------	------------



Antenna at Vertical Polarization

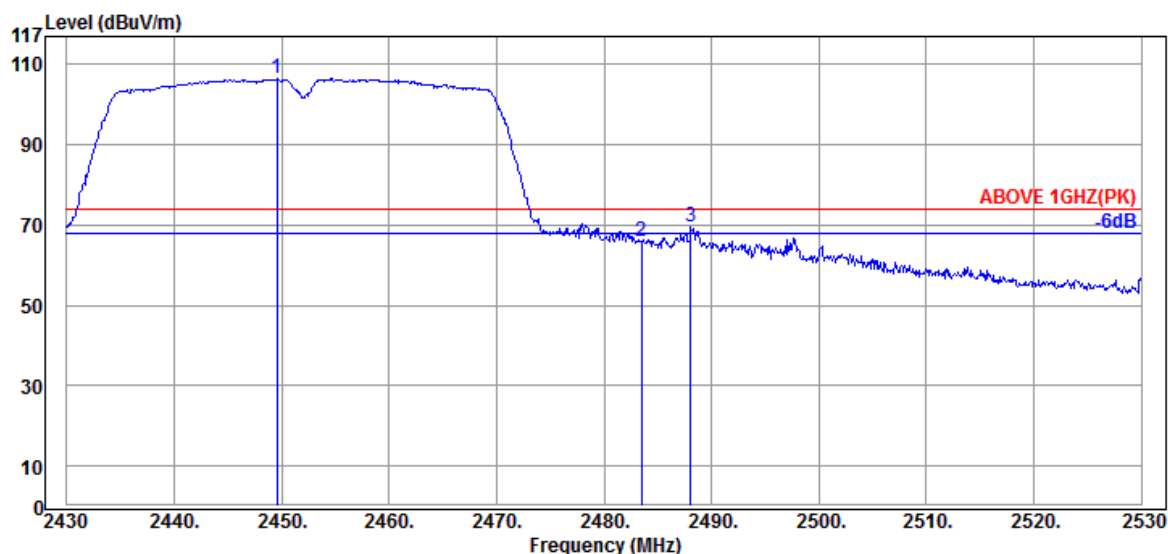
Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2387.28	32.16	6.57	19.86	58.59	74.00	15.41	Peak
2389.94	32.16	6.57	17.46	56.19	74.00	17.81	Peak
2424.94	32.20	6.61	61.29	100.10	---	---	Peak



Antenna at Vertical Polarization

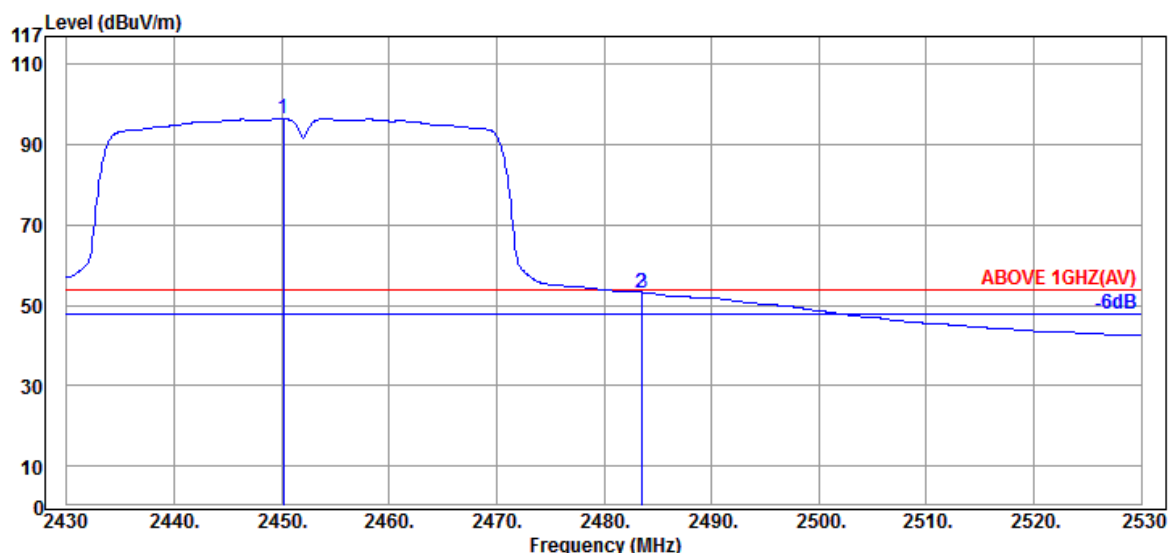
Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2389.80	32.16	6.57	6.09	44.82	54.00	9.18	Average
2389.94	32.16	6.57	6.18	44.91	54.00	9.09	Average
2420.18	32.20	6.61	51.13	89.94	---	---	Average

Mode	802.11n-HT40	Frequency	TX 2452MHz
------	--------------	-----------	------------



Antenna at Horizontal Polarization

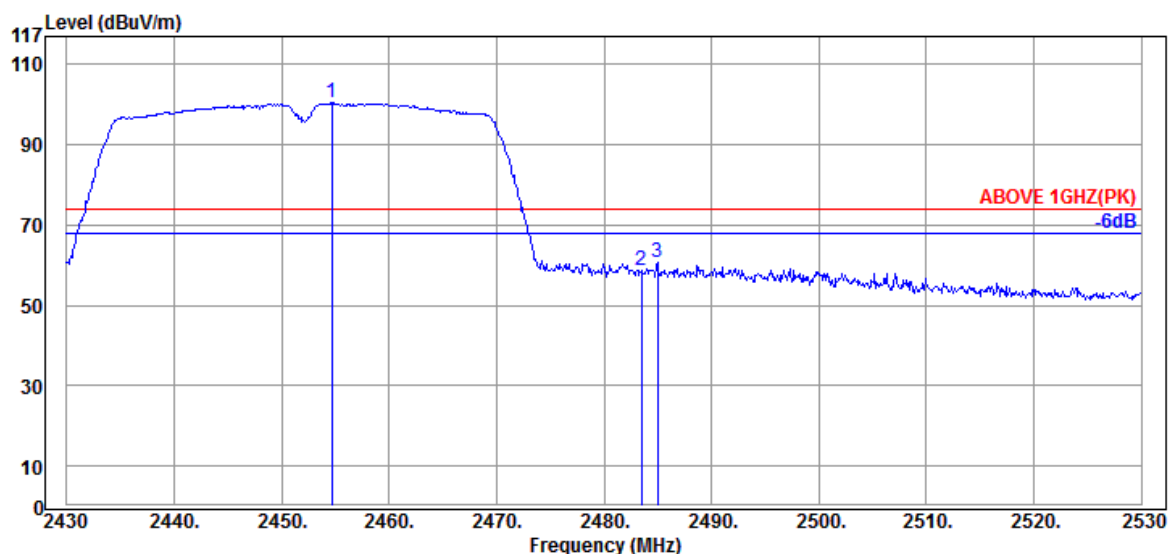
Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2449.60	32.23	6.63	67.70	106.56	---	---	Peak
2483.50	32.28	6.67	27.19	66.14	74.00	7.86	Peak
2488.10	32.30	6.69	30.41	69.40	74.00	4.60	Peak



Antenna at Horizontal Polarization

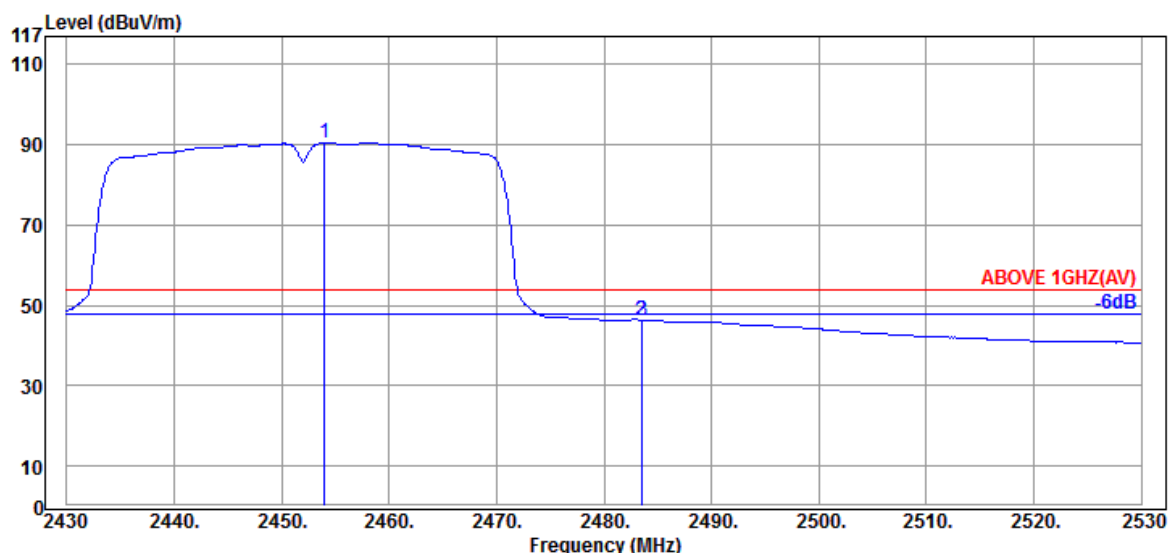
Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2450.20	32.23	6.63	57.59	96.45	---	---	Average
2483.50	32.28	6.67	14.02	52.97	54.00	1.03	Average
2483.60	32.28	6.67	14.00	52.95	54.00	1.05	Average

Mode	802.11n-HT40	Frequency	TX 2452MHz
------	--------------	-----------	------------



Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2454.70	32.25	6.65	61.43	100.33	---	---	Peak
2483.50	32.28	6.67	19.95	58.90	74.00	15.10	Peak
2485.00	32.28	6.67	21.83	60.78	74.00	13.22	Peak



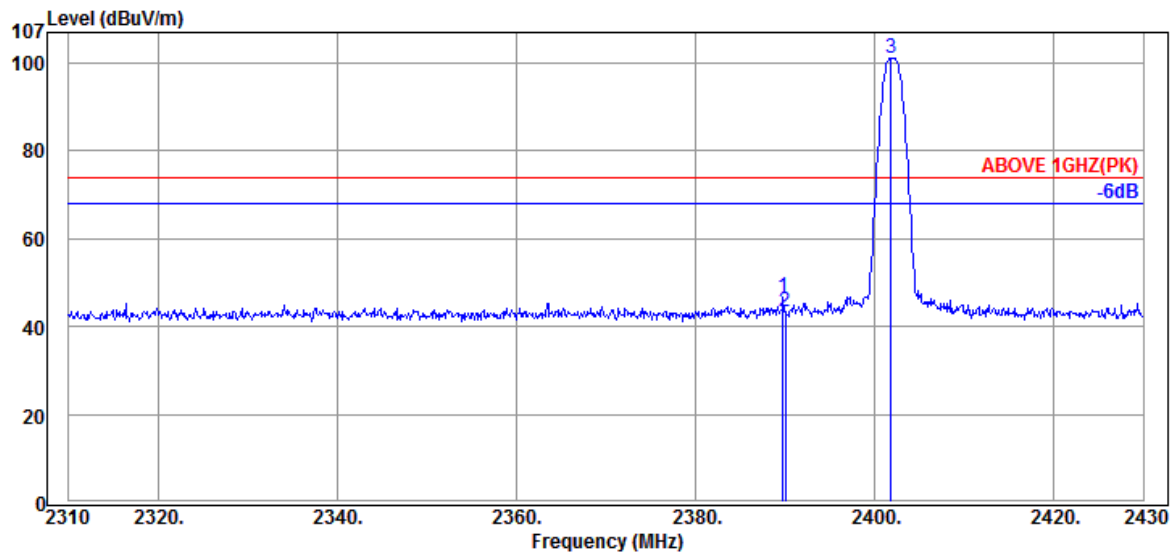
Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2454.00	32.25	6.65	51.53	90.43	---	---	Average
2483.50	32.28	6.67	7.39	46.34	54.00	7.66	Average
2483.60	32.28	6.67	7.38	46.33	54.00	7.67	Average

Audix Technology Corp.
No. 53-11, Dingfu, Linkou, Dist.,
New Taipei City 244, Taiwan

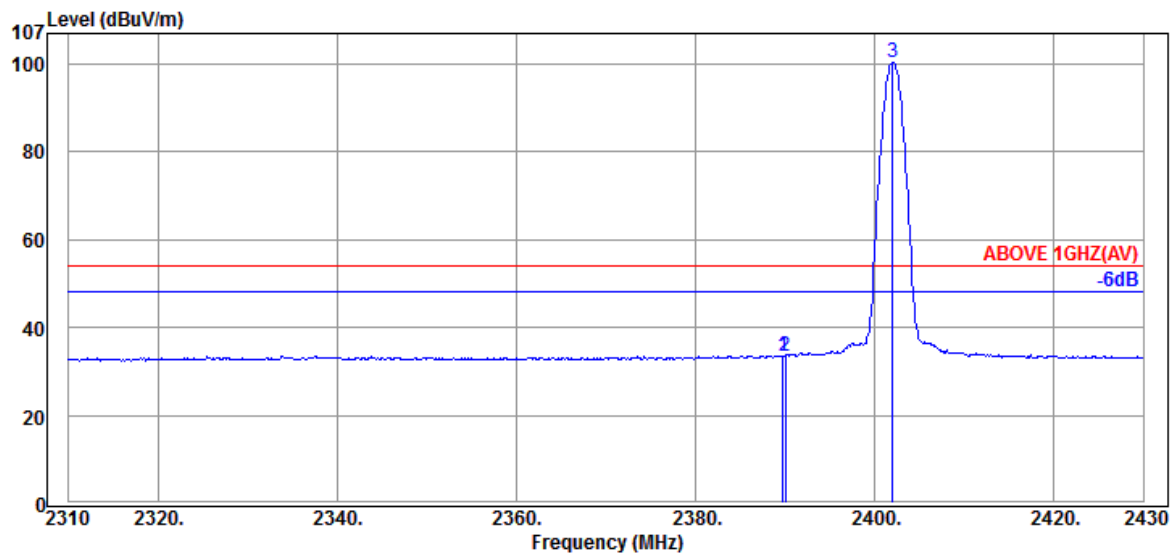
Tel: +886 2 26099301
Fax: +886 2 26099303

Mode	BLE	Frequency	TX 2402MHz
------	-----	-----------	------------



Antenna at Horizontal Polarization

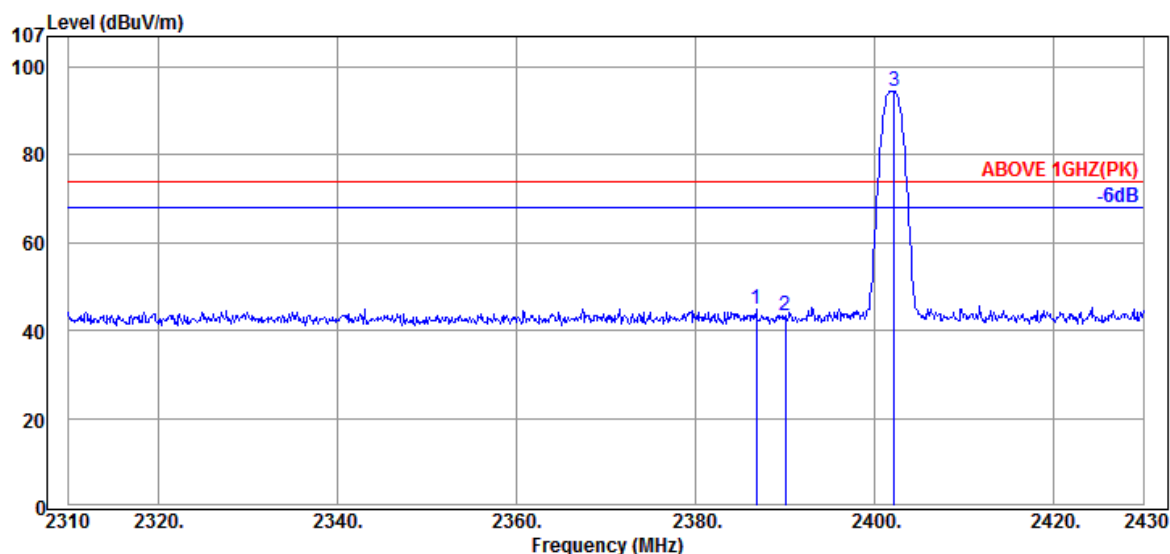
Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2389.80	32.16	6.57	7.87	46.60	74.00	27.40	Peak
2390.04	32.16	6.57	4.63	43.36	74.00	30.64	Peak
2401.80	32.16	6.57	62.34	101.07	---	---	Peak



Antenna at Horizontal Polarization

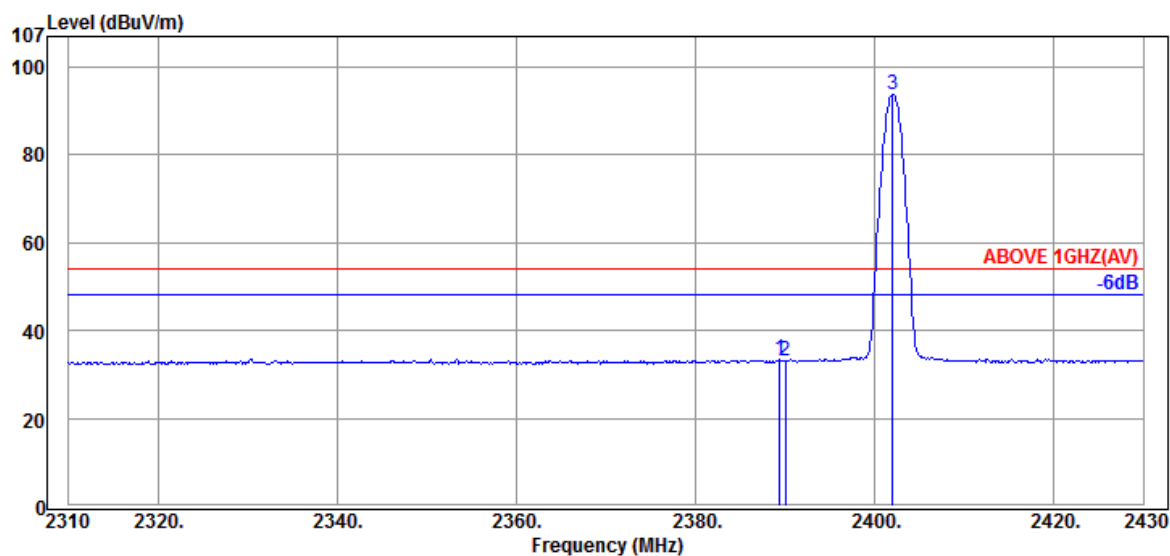
Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2389.80	32.16	6.57	-5.11	33.62	54.00	20.38	Average
2390.04	32.16	6.57	-5.09	33.64	54.00	20.36	Average
2402.04	32.16	6.57	61.70	100.43	---	---	Average

Mode	BLE	Frequency	TX 2402MHz
------	-----	-----------	------------



Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2386.80	32.16	6.57	6.17	44.90	74.00	29.10	Peak
2390.04	32.16	6.57	4.55	43.28	74.00	30.72	Peak
2402.16	32.16	6.57	55.79	94.52	---	---	Peak



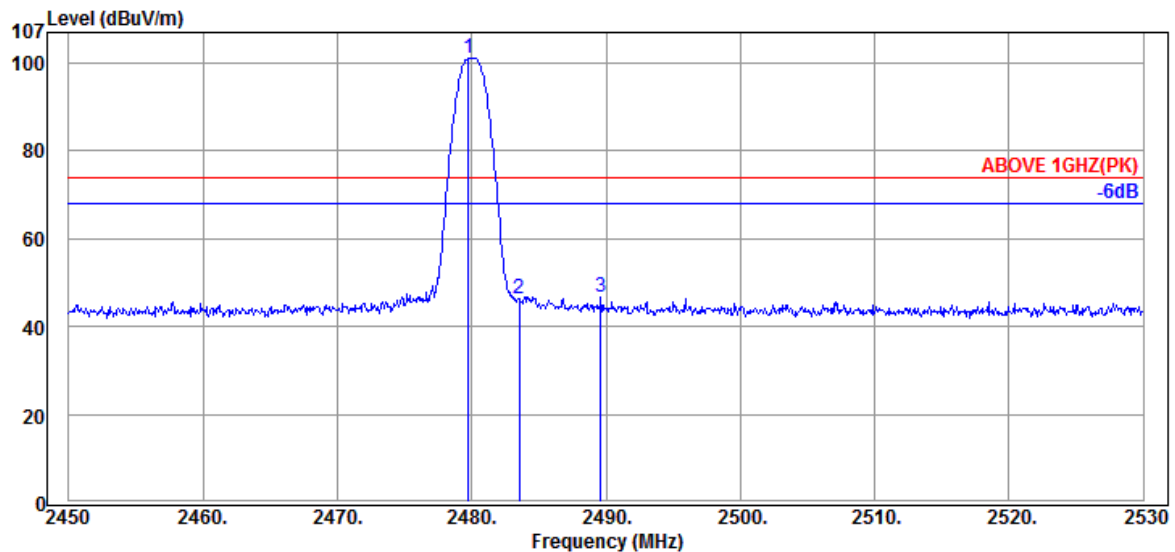
Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2389.44	32.16	6.57	-5.35	33.38	54.00	20.62	Average
2390.04	32.16	6.57	-5.73	33.00	54.00	21.00	Average
2402.04	32.16	6.57	55.05	93.78	---	---	Average

Audix Technology Corp.
No. 53-11, Dingfu, Linkou, Dist.,
New Taipei City 244, Taiwan

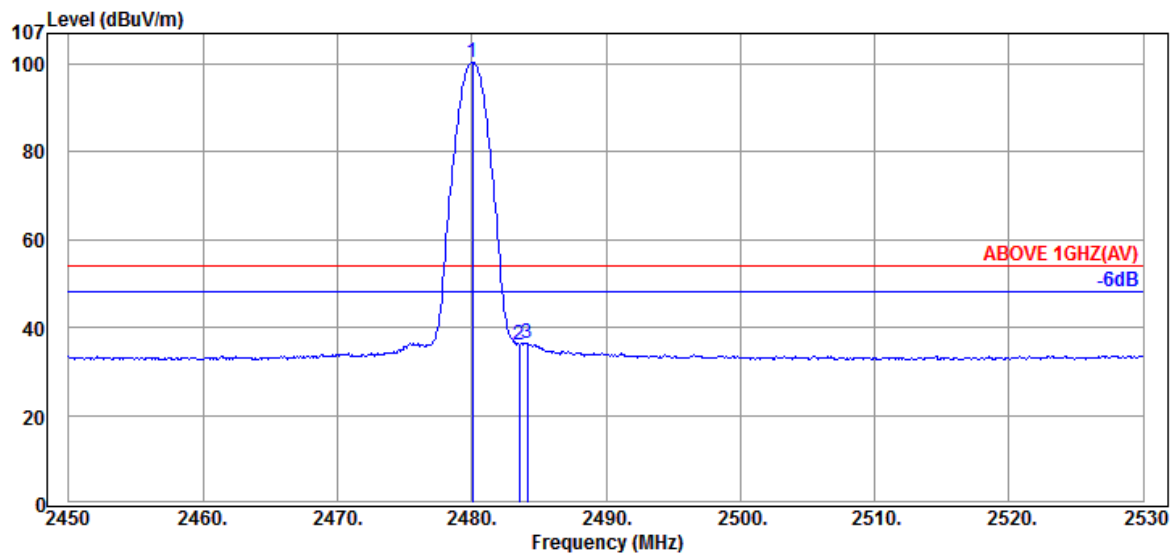
Tel: +886 2 26099301
Fax: +886 2 26099303

Mode	BLE	Frequency	TX 2480MHz
------	-----	-----------	------------



Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2479.76	32.28	6.67	62.06	101.01	---	---	Peak
2483.52	32.28	6.67	7.29	46.24	74.00	27.76	Peak
2489.60	32.30	6.69	7.79	46.78	74.00	27.22	Peak



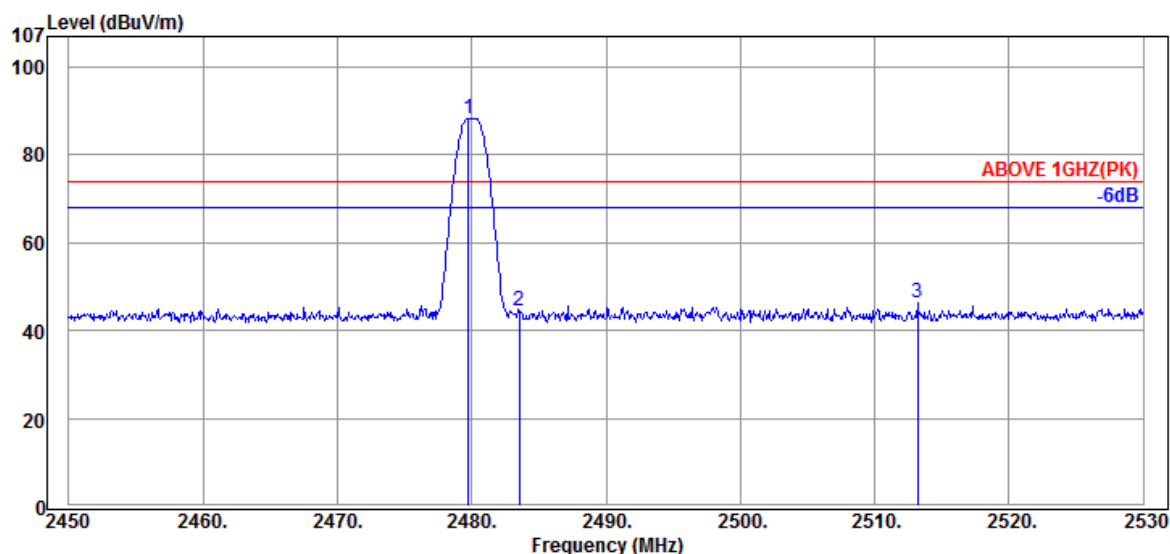
Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2480.08	32.28	6.67	61.45	100.40	---	---	Average
2483.52	32.28	6.67	-2.78	36.17	54.00	17.83	Average
2484.16	32.28	6.67	-2.60	36.35	54.00	17.65	Average

Audix Technology Corp.
No. 53-11, Dingfu, Linkou, Dist.,
New Taipei City 244, Taiwan

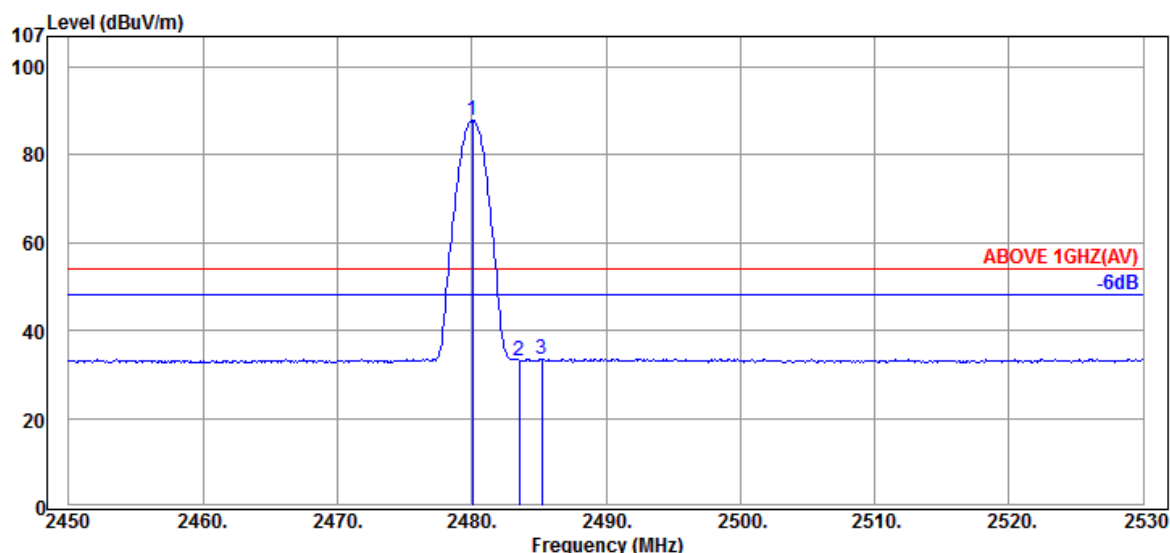
Tel: +886 2 26099301
Fax: +886 2 26099303

Mode	BLE	Frequency	TX 2480MHz
------	-----	-----------	------------



Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2479.76	32.28	6.67	49.45	88.40	---	---	Peak
2483.52	32.28	6.67	5.63	44.58	74.00	29.42	Peak
2513.20	32.32	6.72	7.29	46.33	74.00	27.67	Peak



Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2480.08	32.28	6.67	48.82	87.77	---	---	Average
2483.52	32.28	6.67	-5.81	33.14	54.00	20.86	Average
2485.20	32.28	6.67	-5.31	33.64	54.00	20.36	Average

A.2.2 Emissions outside the frequency band:

The emissions (up to 25GHz) not reported for there is no emission be found.

Mode	802.11b	Frequency	TX 2462MHz
------	---------	-----------	------------

Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dB μ V)	Emission Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Detector
2238.00	31.94	6.38	6.44	44.76	54.00	9.24	Peak
3695.00	33.01	8.41	2.91	44.33	54.00	9.67	Peak
4925.00	34.27	9.58	1.46	45.31	54.00	8.69	Peak

Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dB μ V)	Emission Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Detector
4925.00	34.27	9.58	5.81	49.66	54.00	4.34	Peak
7135.00	35.80	11.74	2.80	50.34	54.00	3.66	Peak
9520.00	36.72	15.13	0.25	52.10	54.00	1.90	Peak

Mode	802.11g	Frequency	TX 2462MHz
------	---------	-----------	------------

Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dB μ V)	Emission Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Detector
2190.00	31.87	6.32	4.83	43.02	54.00	10.98	Peak
3615.00	32.92	8.32	7.71	48.95	54.00	5.05	Peak

Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dB μ V)	Emission Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Detector
4925.00	34.27	9.58	-0.47	43.38	54.00	10.62	Peak
7135.00	35.80	11.74	1.83	49.37	54.00	4.63	Peak
9520.00	36.72	15.13	-0.88	50.97	54.00	3.03	Peak

Mode	802.11n-HT20	Frequency	TX 2462MHz
------	--------------	-----------	------------

Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dB μ V)	Emission Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Detector
3690.00	32.99	8.39	38.76	45.69	54.00	8.31	Peak
4925.00	34.27	9.58	33.81	43.25	54.00	10.75	Peak
7385.00	35.80	11.99	33.60	46.66	54.00	7.34	Peak

Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dB μ V)	Emission Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Detector
1958.00	31.24	6.01	42.20	44.96	54.00	9.04	Peak
4925.00	34.27	9.58	33.32	42.76	54.00	11.24	Peak
7135.00	35.80	11.74	37.03	49.92	54.00	4.08	Peak
9520.00	36.72	15.13	35.47	52.15	54.00	1.85	Peak

Mode	802.11n-HT40	Frequency	TX 2437MHz
------	--------------	-----------	------------

Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dB μ V)	Emission Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Detector
4905.00	34.27	9.58	-1.11	42.74	54.00	11.26	Peak
7355.00	35.80	11.95	-2.98	44.77	54.00	9.23	Peak

Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dB μ V)	Emission Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Detector
1816.00	30.28	5.78	6.62	42.68	54.00	11.32	Peak
4905.00	34.27	9.58	-1.37	42.48	54.00	11.52	Peak
7135.00	35.80	11.74	2.67	50.21	54.00	3.79	Peak
9520.00	36.72	15.13	-0.74	51.11	54.00	2.89	Peak

Mode	BLE	Frequency	TX 2402MHz
------	-----	-----------	------------

Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dB μ V)	Emission Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Detector
3605.00	32.90	8.30	5.10	46.30	54.00	7.70	Peak
4805.00	34.22	9.54	-0.96	42.80	54.00	11.20	Peak
7205.00	35.80	11.80	-3.10	44.50	54.00	9.50	Peak

Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dB μ V)	Emission Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Detector
1958.00	31.24	6.01	7.73	44.98	54.00	9.02	Peak
4805.00	34.22	9.54	-1.19	42.57	54.00	11.43	Peak
7135.00	35.80	11.74	-0.27	47.27	54.00	6.73	Peak

Mode	BLE	Frequency	TX 2440MHz
------	-----	-----------	------------

Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dB μ V)	Emission Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Detector
3660.00	32.96	8.35	4.12	45.43	54.00	8.57	Peak
4880.00	34.25	9.56	-1.00	42.81	54.00	11.19	Peak
7320.00	35.80	11.92	-2.69	45.03	54.00	8.97	Peak

Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dB μ V)	Emission Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Detector
3790.00	33.09	8.50	2.52	44.11	54.00	9.89	Peak
4880.00	34.25	9.56	-0.73	43.08	54.00	10.92	Peak
7135.00	35.80	11.74	0.96	48.50	54.00	5.50	Peak

Mode	BLE	Frequency	TX 2480MHz
------	-----	-----------	------------

Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dB μ V)	Emission Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Detector
3720.00	33.02	8.43	3.43	44.88	54.00	9.12	Peak
4960.00	34.29	9.60	-2.87	41.02	54.00	12.98	Peak
7440.00	35.80	12.04	-2.62	45.22	54.00	8.78	Peak

Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dB μ V)	Emission Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Detector
2016.00	31.62	6.12	5.09	42.83	54.00	11.17	Peak
4960.00	34.29	9.60	-1.20	42.69	54.00	11.31	Peak
7440.00	35.80	12.04	-1.74	46.10	54.00	7.90	Peak

A.2.3 Emissions in Non-restricted Frequency Bands:

Pursuant to KDB 558074 D01 DTS Meas Guidance v04 that emission levels below the 15.209 general radiated emissions limits is not required.

A.3 6dB BANDWIDTH

Test Date	2017/12/05 ~ 18	Temp./Hum.	20~23℃/56~60%
Cable Loss	---	Test Voltage	DC3.8V(Via Battery)

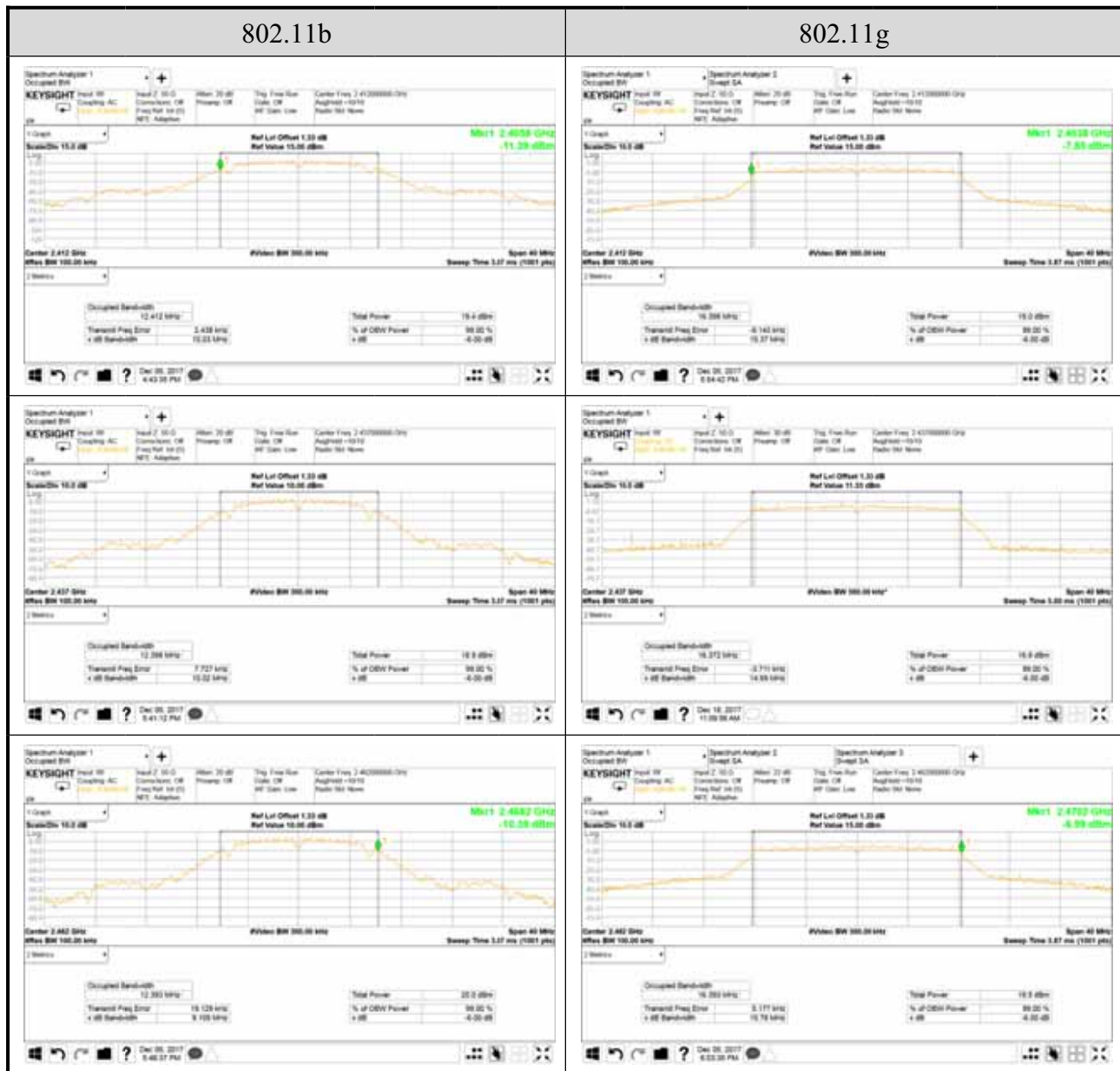
A.3.1 6dB Bandwidth Result

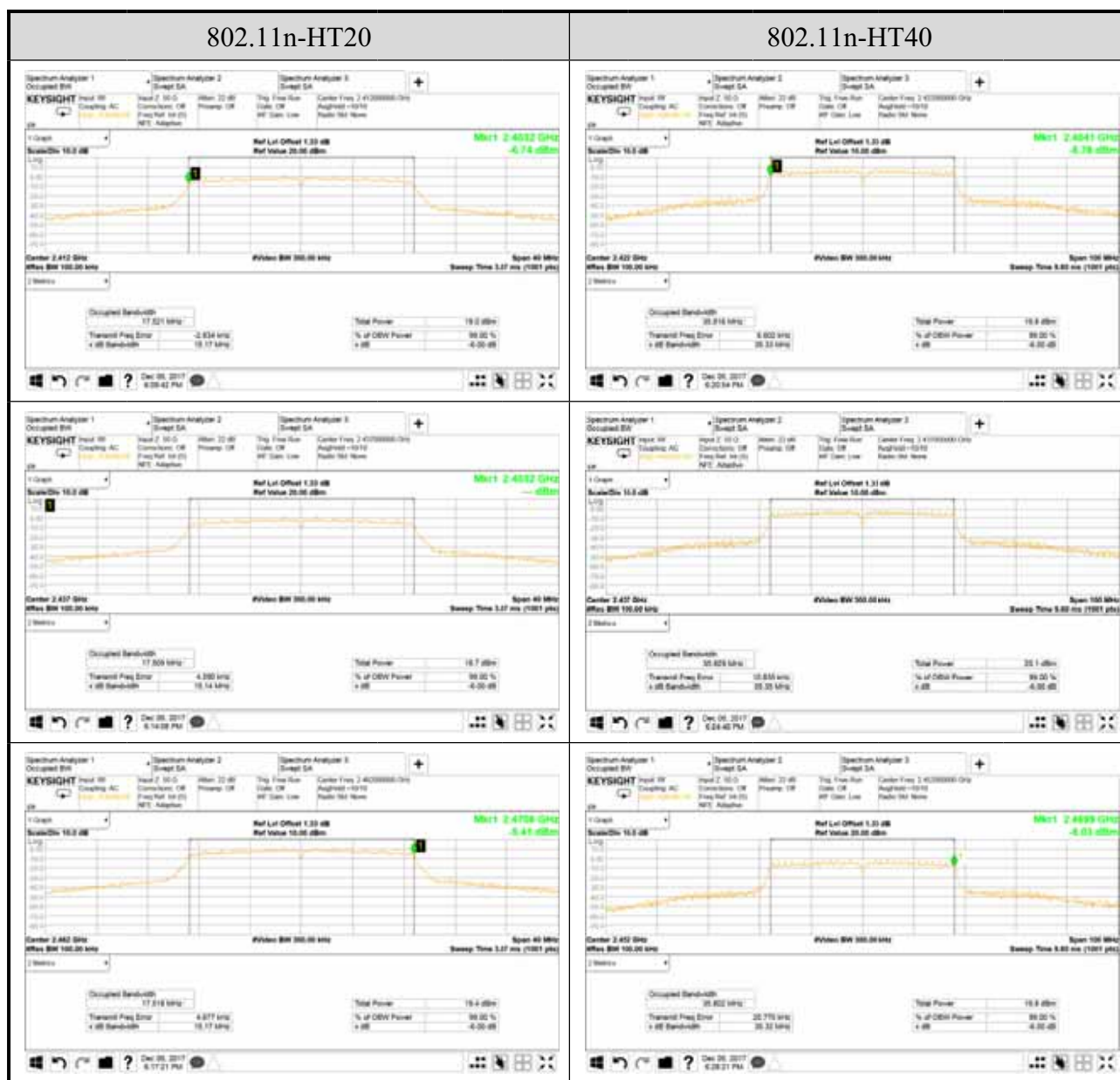
Mode	Centre Frequency (MHz)	6 dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz) (Reference only)	Limit
802.11b	2412	10.03	12.412	>500kHz
	2437	10.02	12.398	
	2462	9.109	12.393	
802.11g	2412	15.37	16.398	
	2437	14.69	16.372	
	2462	15.78	16.393	
802.11n-HT20	2412	15.17	17.521	
	2437	15.14	17.509	
	2462	15.17	17.518	
802.11n-HT40	2422	35.33	35.816	
	2437	35.35	35.829	
	2452	35.32	35.802	
BLE	2402	0.7203	1.0758	
	2440	0.7222	1.0751	
	2480	0.7216	1.0748	

Audix Technology Corp.
No. 53-11, Dingfu, Linkou, Dist.,
New Taipei City 244, Taiwan

Tel: +886 2 26099301
Fax: +886 2 26099303

A.3.2 Measurement Plots

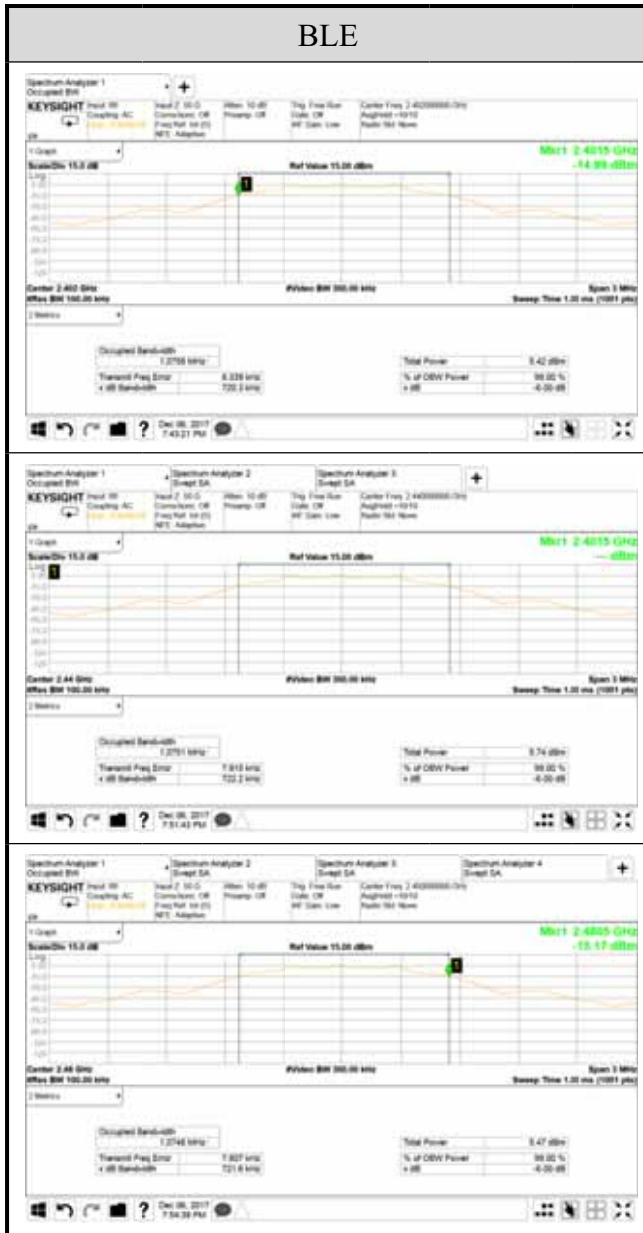




Audix Technology Corp.
No. 53-11, Dingfu, Linkou, Dist.,
New Taipei City 244, Taiwan

Tel: +886 2 26099301
Fax: +886 2 26099303

BLE



A.4 MAXIMUM PEAK OUTPUT POWER

Test Date	2017/12/05 ~ 06	Temp./Hum.	23~24°C/56~58%
Cable Loss	2.30dB	Test Voltage	DC3.8V(Via Battery)

A.4.1 Peak Output Power

Mode	Centre Frequency (MHz)	Peak Output Power		Antenna Gain (dBi)	Peak Power (E.I.R.P.)		Limit
		(dBm)	(W)		(dBm)	(W)	
802.11b	2412	13.89	0.024	2.93	16.82	0.048	< 30dBm (1W) (Maximum Peak Output Power) < 36dBm (4W) (E.I.R.P)
	2437	14.53	0.028		17.46	0.056	
	2462	14.51	0.028		17.44	0.055	
Mode	Centre Frequency (MHz)	Peak Output Power		Antenna Gain (dBi)	Peak Power (E.I.R.P.)		Limit
		(dBm)	(W)		(dBm)	(W)	
802.11g	2412	18.57	0.072	2.93	21.50	0.141	< 30dBm (1W) (Maximum Peak Output Power) < 36dBm (4W) (E.I.R.P)
	2437	19.25	0.084		22.18	0.165	
	2462	19.73	0.094		22.66	0.185	
Mode	Centre Frequency (MHz)	Peak Output Power		Antenna Gain (dBi)	Peak Power (E.I.R.P.)		Limit
		(dBm)	(W)		(dBm)	(W)	
802.11n-HT20	2412	18.74	0.075	2.93	21.67	0.147	< 30dBm (1W) (Maximum Peak Output Power) < 36dBm (4W) (E.I.R.P)
	2437	19.24	0.084		22.17	0.165	
	2462	19.61	0.091		22.54	0.179	
Mode	Centre Frequency (MHz)	Peak Output Power		Antenna Gain (dBi)	Peak Power (E.I.R.P.)		Limit
		(dBm)	(W)		(dBm)	(W)	
802.11n-HT40	2422	19.38	0.087	2.93	22.31	0.170	< 30dBm (1W) (Maximum Peak Output Power) < 36dBm (4W) (E.I.R.P)
	2437	19.68	0.093		22.61	0.182	
	2452	19.89	0.097		22.82	0.191	
Mode	Centre Frequency (MHz)	Peak Output Power		Antenna Gain (dBi)	Peak Power (E.I.R.P.)		Limit
		(dBm)	(W)		(dBm)	(W)	
BLE	2402	1.70	0.001	2.93	4.63	0.003	< 30dBm (1W) (Maximum Peak Output Power) < 36dBm (4W) (E.I.R.P)
	2440	1.85	0.002		4.78	0.003	
	2480	1.55	0.001		4.48	0.003	

Note: The results have been included cable loss.

Audix Technology Corp.

No. 53-11, Dingfu, Linkou, Dist.,

New Taipei City 244, Taiwan

Tel: +886 2 26099301

Fax: +886 2 26099303

A.4.2 Average Output Power (Reporting only)

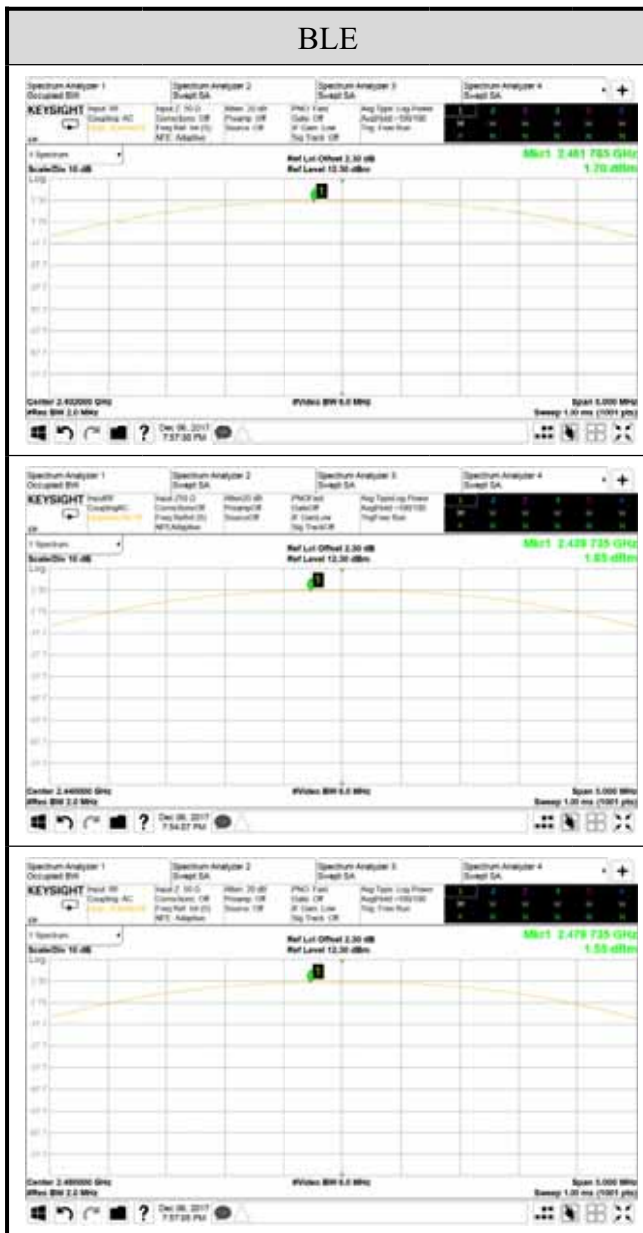
Mode	Centre Frequency (MHz)	Average Output Power (dBm)	10log (1/X)	Average Output Power		Antenna Gain (dBi)	Total Average Output Power (E.I.R.P.)		Limit
				(dBm)	(W)		(dBm)	(W)	
802.11b	2412	11.27	0	11.27	0.013	2.93	14.20	0.026	< 30dBm (1W) (Maximum Peak Output Power) < 36dBm (4W) (E.I.R.P)
	2437	11.67		11.67	0.015		14.60	0.029	
	2462	11.62		11.62	0.015		14.55	0.029	
802.11g	2412	11.22	0	11.22	0.013	2.93	14.15	0.026	
	2437	11.51		11.51	0.014		14.44	0.028	
	2462	11.97		11.97	0.016		14.90	0.031	
802.11n-HT20	2412	11.07	0	11.07	0.013	2.93	14.00	0.025	
	2437	11.47		11.47	0.014		14.40	0.025	
	2462	11.91		11.91	0.016		14.84	0.025	
802.11n-HT40	2422	11.36	0.18	11.54	0.014	2.93	14.47	0.028	
	2437	11.49		11.67	0.015		14.60	0.029	
	2452	11.69		11.87	0.015		14.80	0.030	

Note: The results have been included cable loss.

Audix Technology Corp.
No. 53-11, Dingfu, Linkou, Dist.,
New Taipei City 244, Taiwan

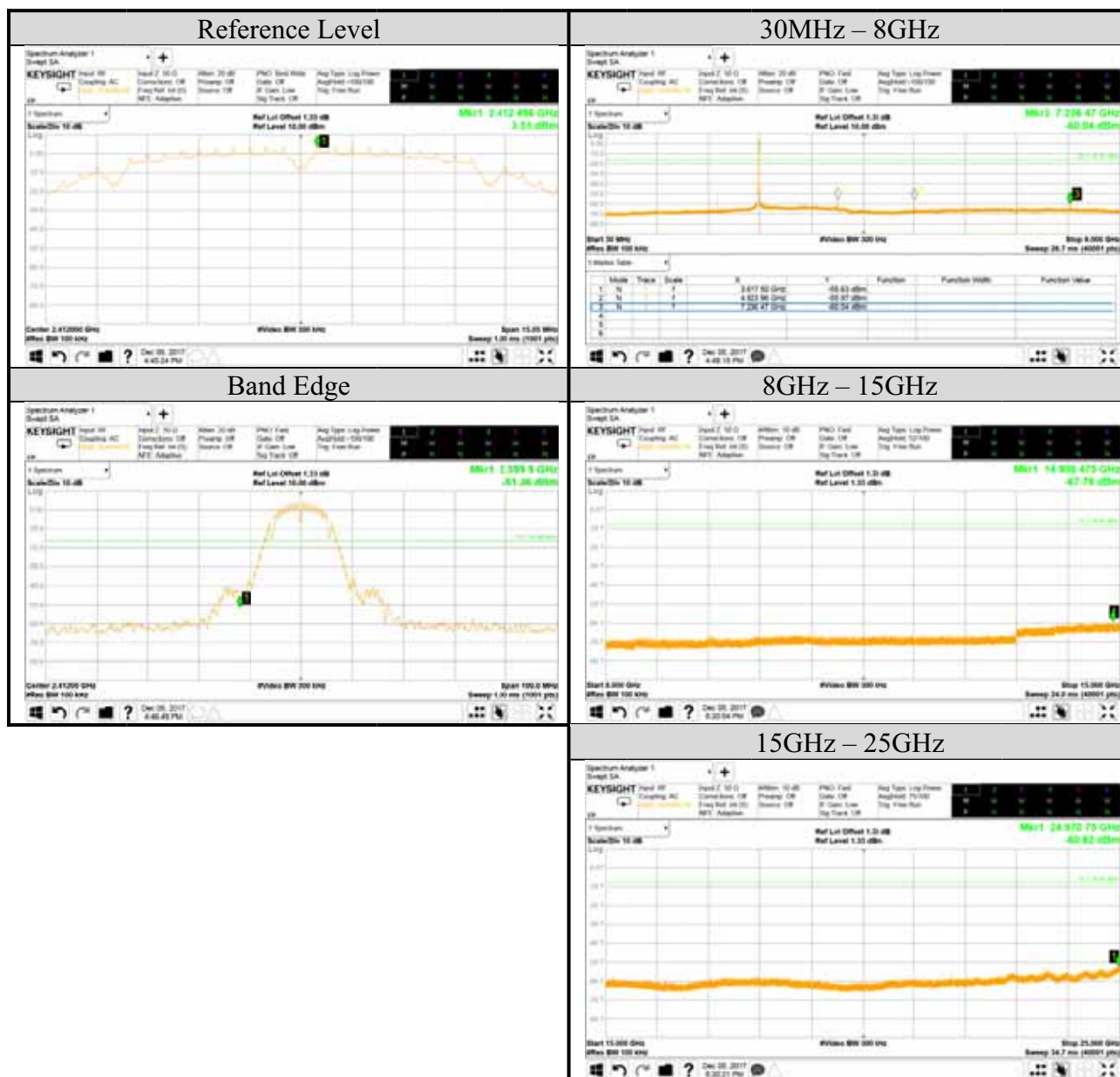
Tel: +886 2 26099301
Fax: +886 2 26099303

A.4.3 Measurement Plots



A.5 EMISSION LIMITATIONS

Test Date	2017/12/05	Temp./Hum.	23°C/56%
Cable Loss	1.33dB	Test Voltage	DC3.8V(Via Battery)
Mode	802.11b	Frequency	TX 2412MHz
Simultaneous Factor	10 log(n) (Note: "n" is antenna number)		0



Audix Technology Corp.

No. 53-11, Dingfu, Linkou, Dist.,

New Taipei City 244, Taiwan

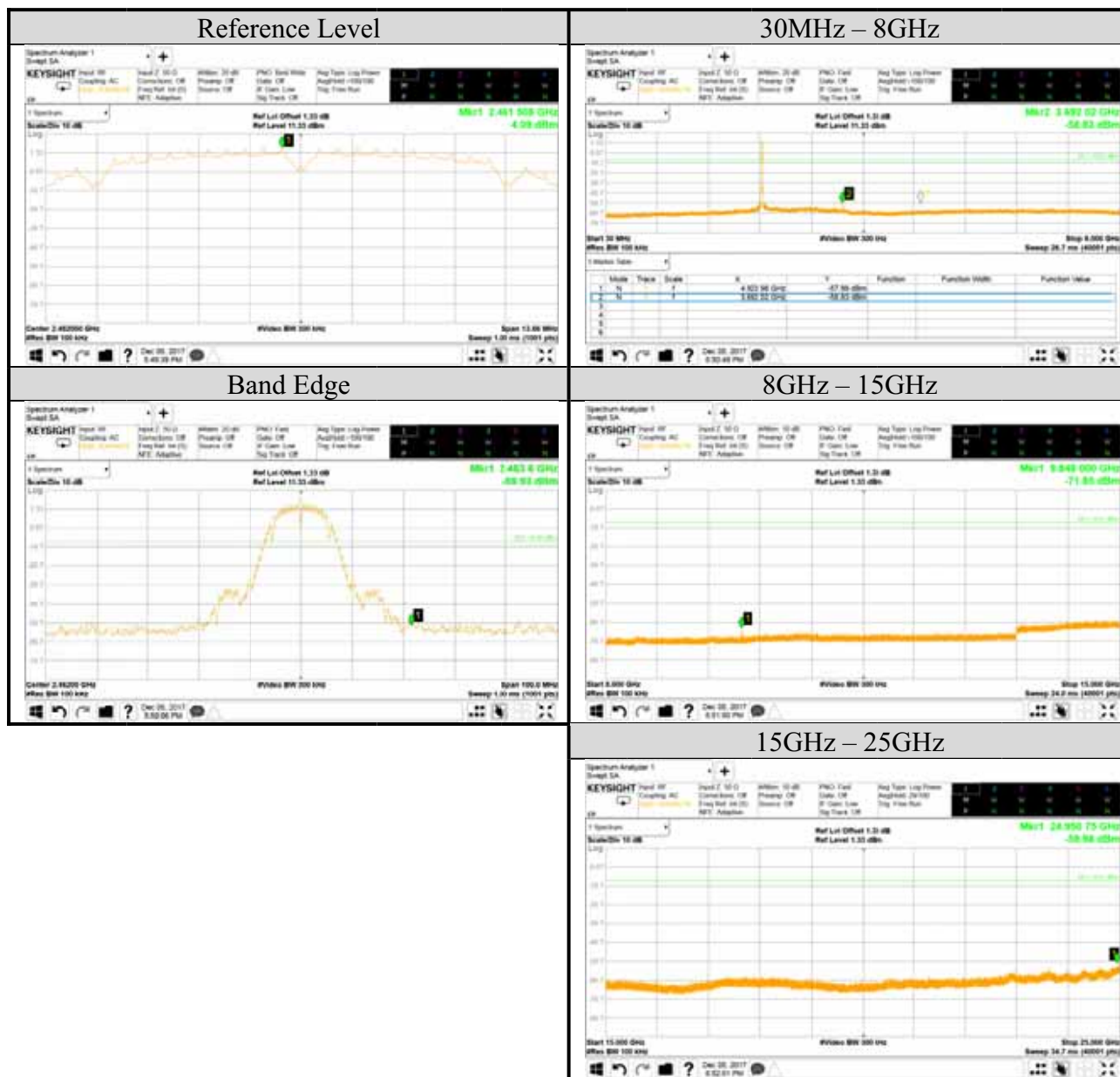
Tel: +886 2 26099301

Fax: +886 2 26099303

Test Date	2017/12/05	Temp./Hum.	23°C/56%
Cable Loss	1.33dB	Test Voltage	DC3.8V(Via Battery)
Mode	802.11b	Frequency	TX 2437MHz
Simultaneous Factor	10 log(n) (Note: "n" is antenna number)		0



Test Date	2017/12/05	Temp./Hum.	23°C/56%
Cable Loss	1.33dB	Test Voltage	DC3.8V(Via Battery)
Mode	802.11b	Frequency	TX 2462MHz
Simultaneous Factor	10 log(n) (Note: "n" is antenna number)		0



Audix Technology Corp.

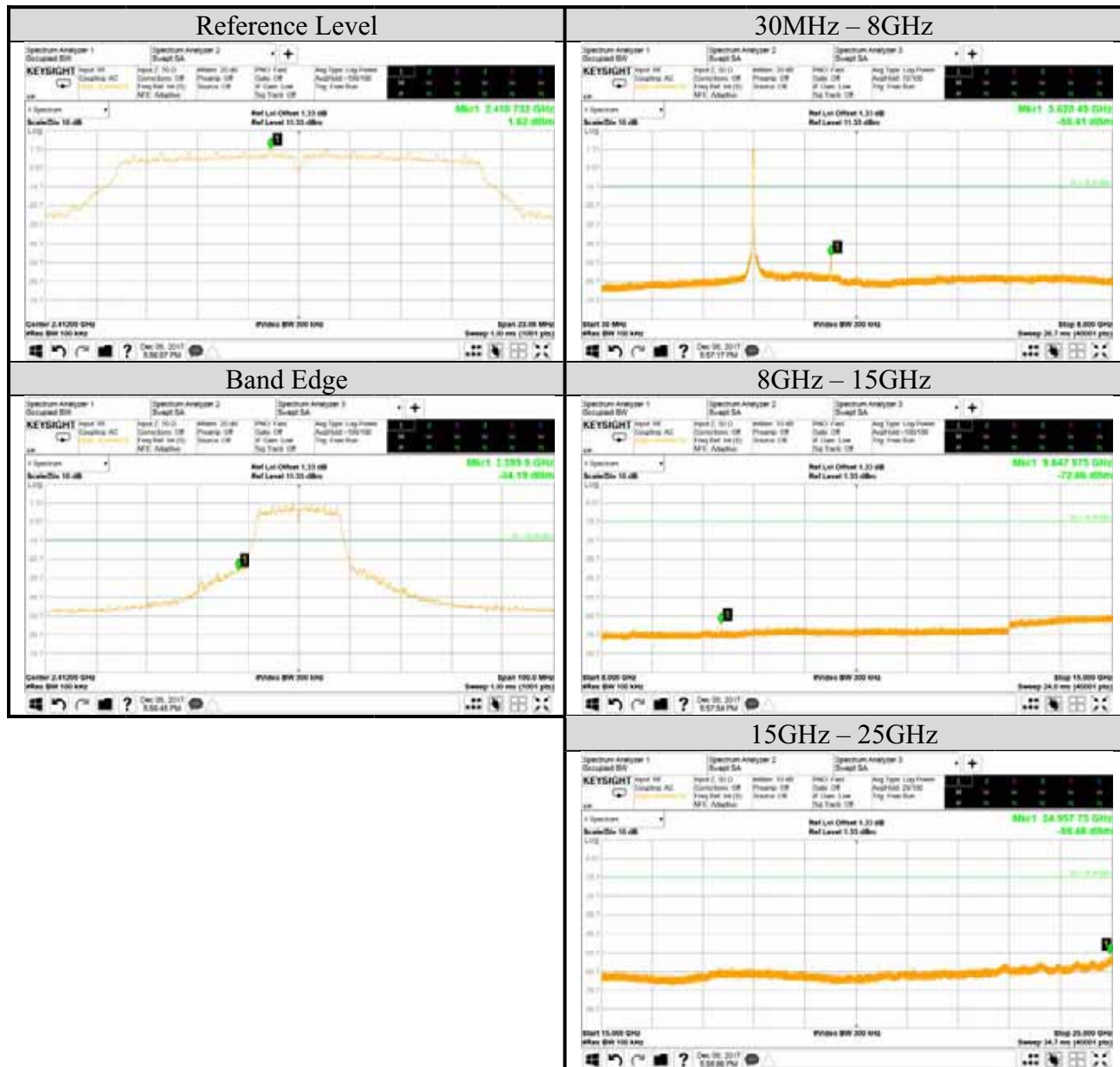
No. 53-11, Dingfu, Linkou, Dist.,

New Taipei City 244, Taiwan

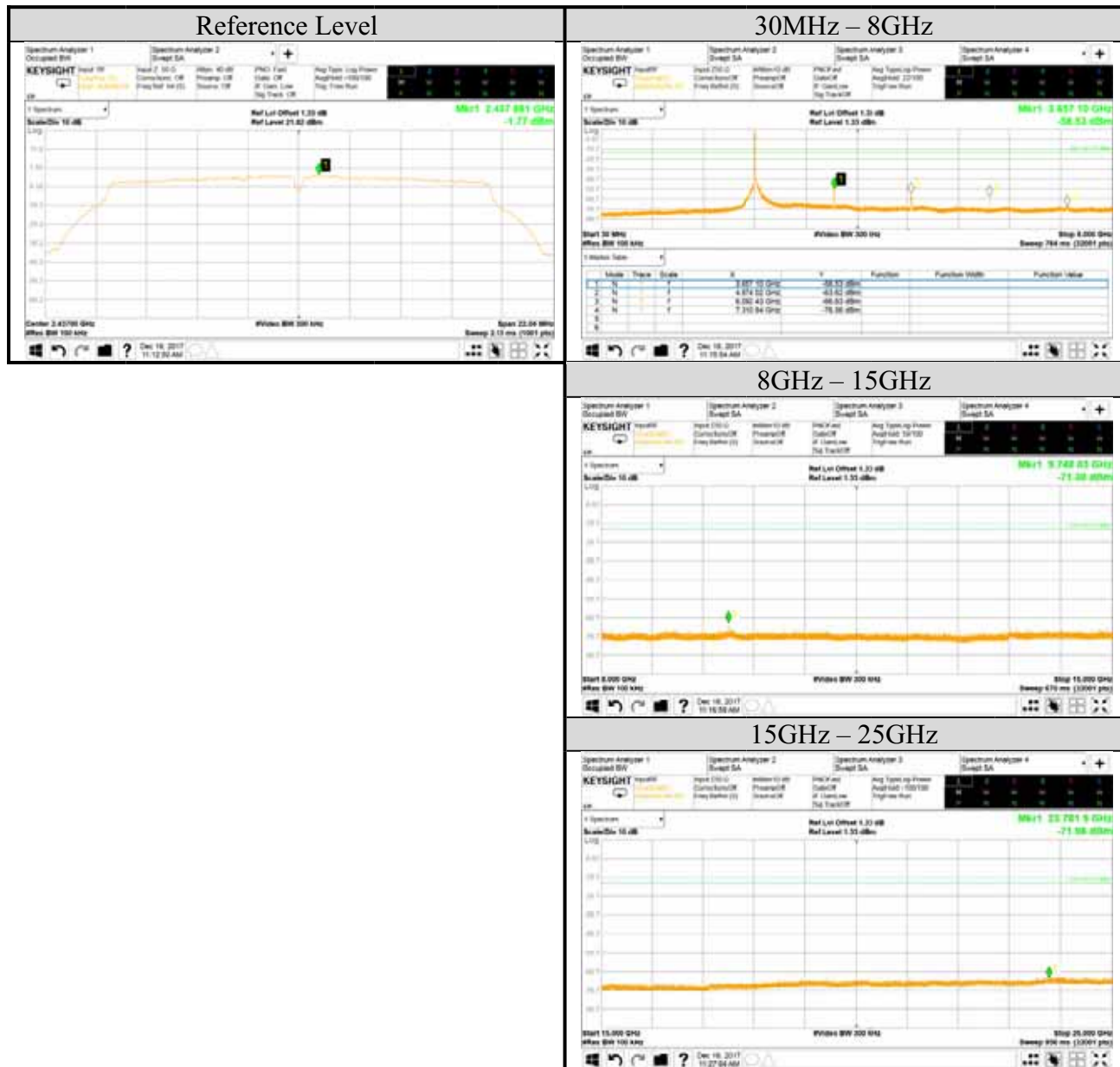
Tel: +886 2 26099301

Fax: +886 2 26099303

Test Date	2017/12/05	Temp./Hum.	23°C/56%
Cable Loss	1.33dB	Test Voltage	DC3.8V(Via Battery)
Mode	802.11g	Frequency	TX 2412MHz
Simultaneous Factor	10 log(n) (Note: "n" is antenna number)		0



Test Date	2017/12/18	Temp./Hum.	20°C/60%
Cable Loss	1.33dB	Test Voltage	DC3.8V(Via Battery)
Mode	802.11g	Frequency	TX 2437MHz
Simultaneous Factor	10 log(n) (Note: "n" is antenna number)		0



Audix Technology Corp.

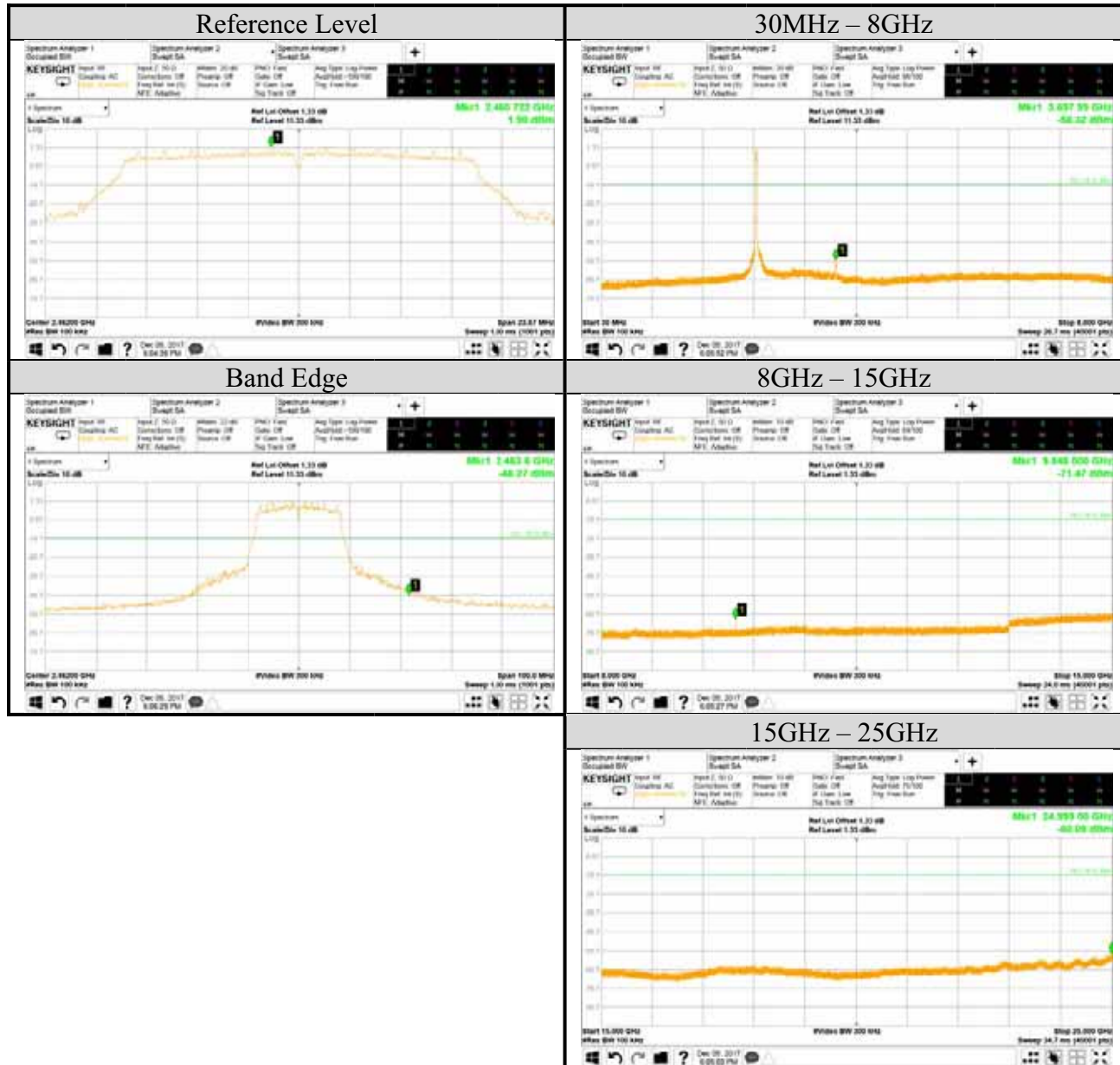
No. 53-11, Dingfu, Linkou, Dist.,

New Taipei City244, Taiwan

Tel: +886 2 26099301

Fax: +886 2 26099303

Test Date	2017/12/05	Temp./Hum.	23°C/56%
Cable Loss	1.33dB	Test Voltage	DC3.8V(Via Battery)
Mode	802.11g	Frequency	TX 2462MHz
Simultaneous Factor	10 log(n) (Note: “n” is antenna number)		0



Audix Technology Corp.

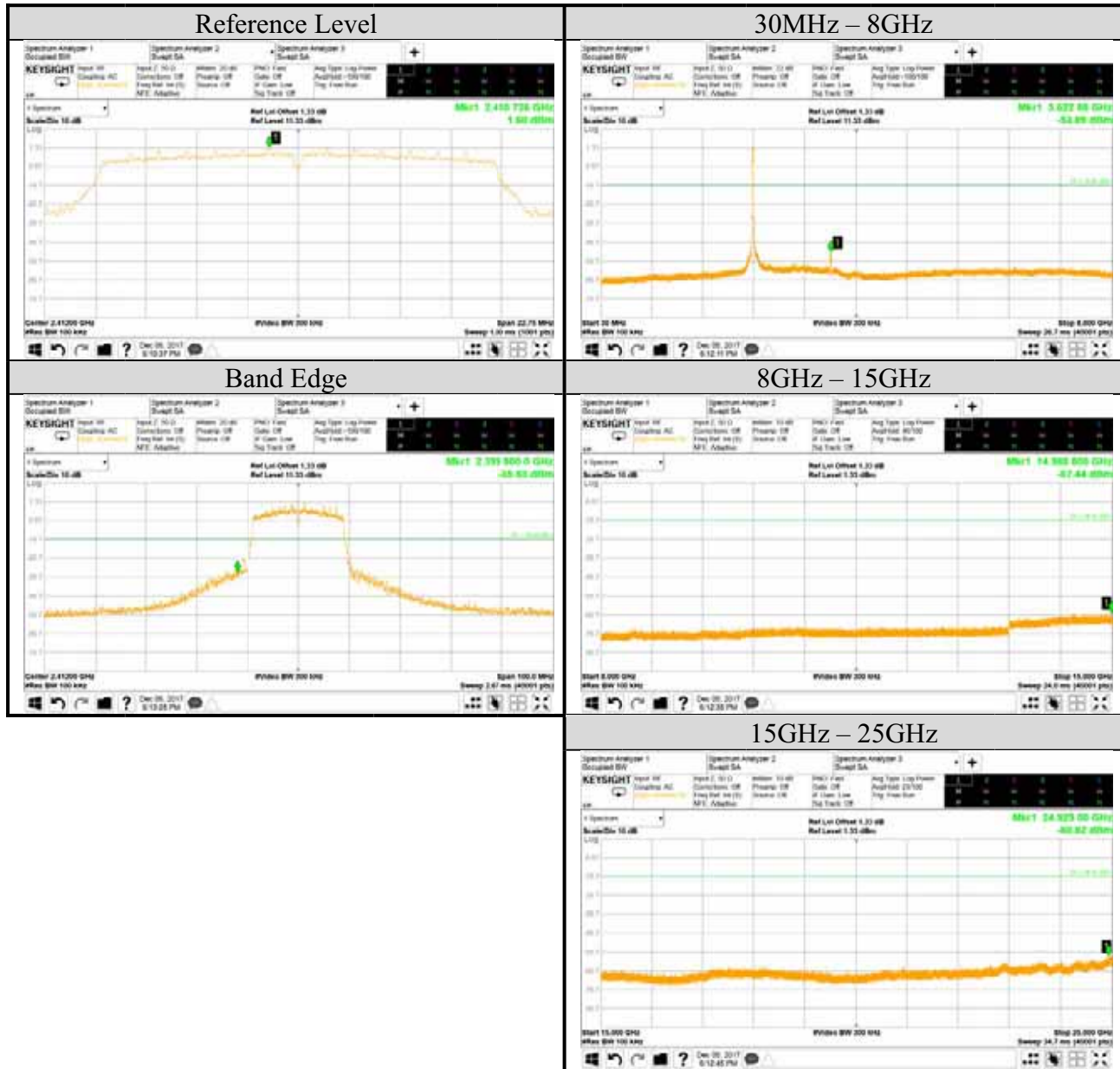
No. 53-11, Dingfu, Linkou, Dist.,

New Taipei City244, Taiwan

Tel: +886 2 26099301

Fax: +886 2 26099303

Test Date	2017/12/05	Temp./Hum.	23°C/56%
Cable Loss	1.33dB	Test Voltage	DC3.8V(Via Battery)
Mode	802.11n-HT20	Frequency	TX 2412MHz
Simultaneous Factor	10 log(n) (Note: "n" is antenna number)		0



Audix Technology Corp.

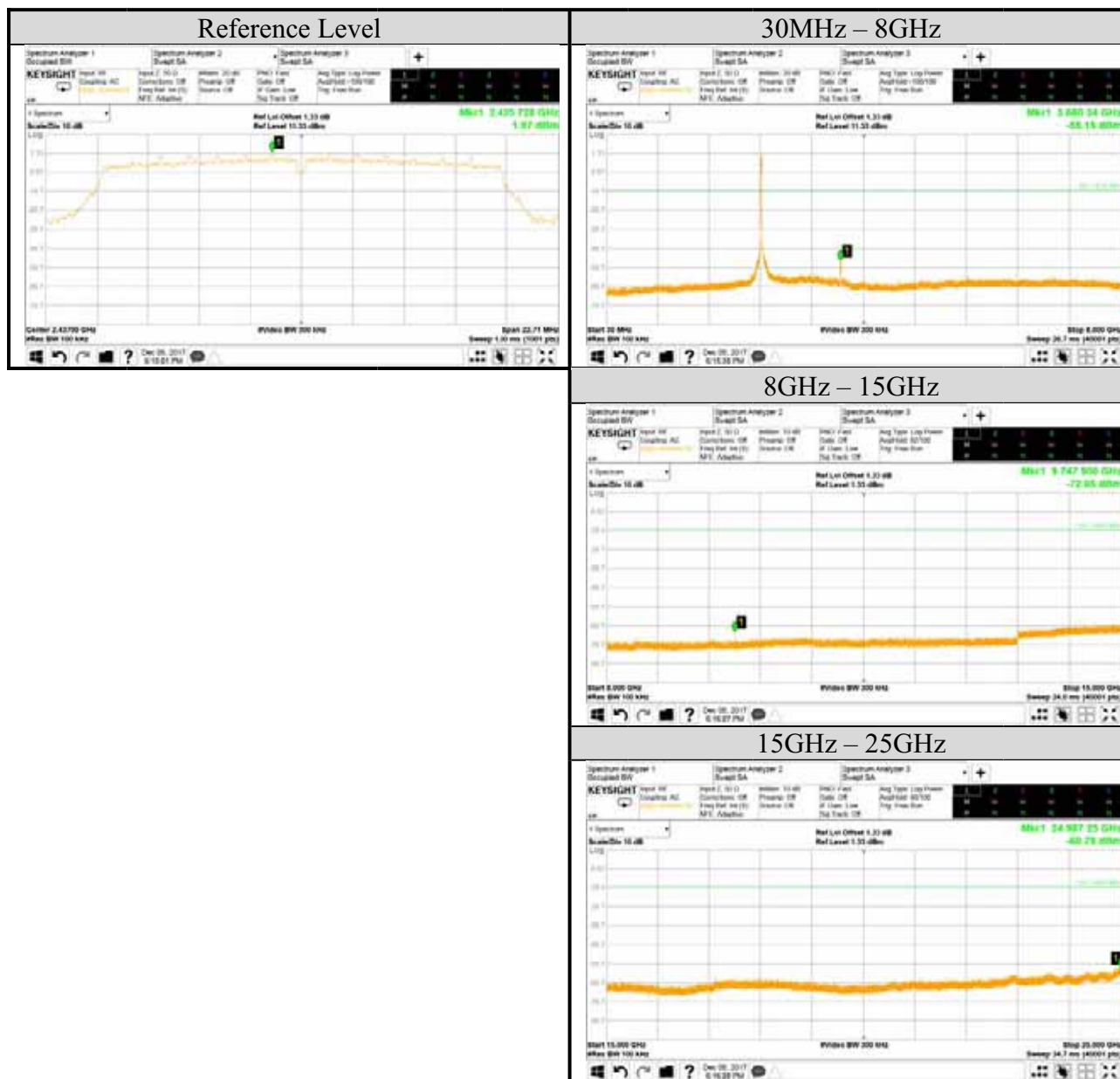
No. 53-11, Dingfu, Linkou, Dist.,

New Taipei City 244, Taiwan

Tel: +886 2 26099301

Fax: +886 2 26099303

Test Date	2017/12/05	Temp./Hum.	23°C/56%
Cable Loss	1.33dB	Test Voltage	DC3.8V(Via Battery)
Mode	802.11n-HT20	Frequency	TX 2437MHz
Simultaneous Factor	10 log(n) (Note: "n" is antenna number)		0



Audix Technology Corp.

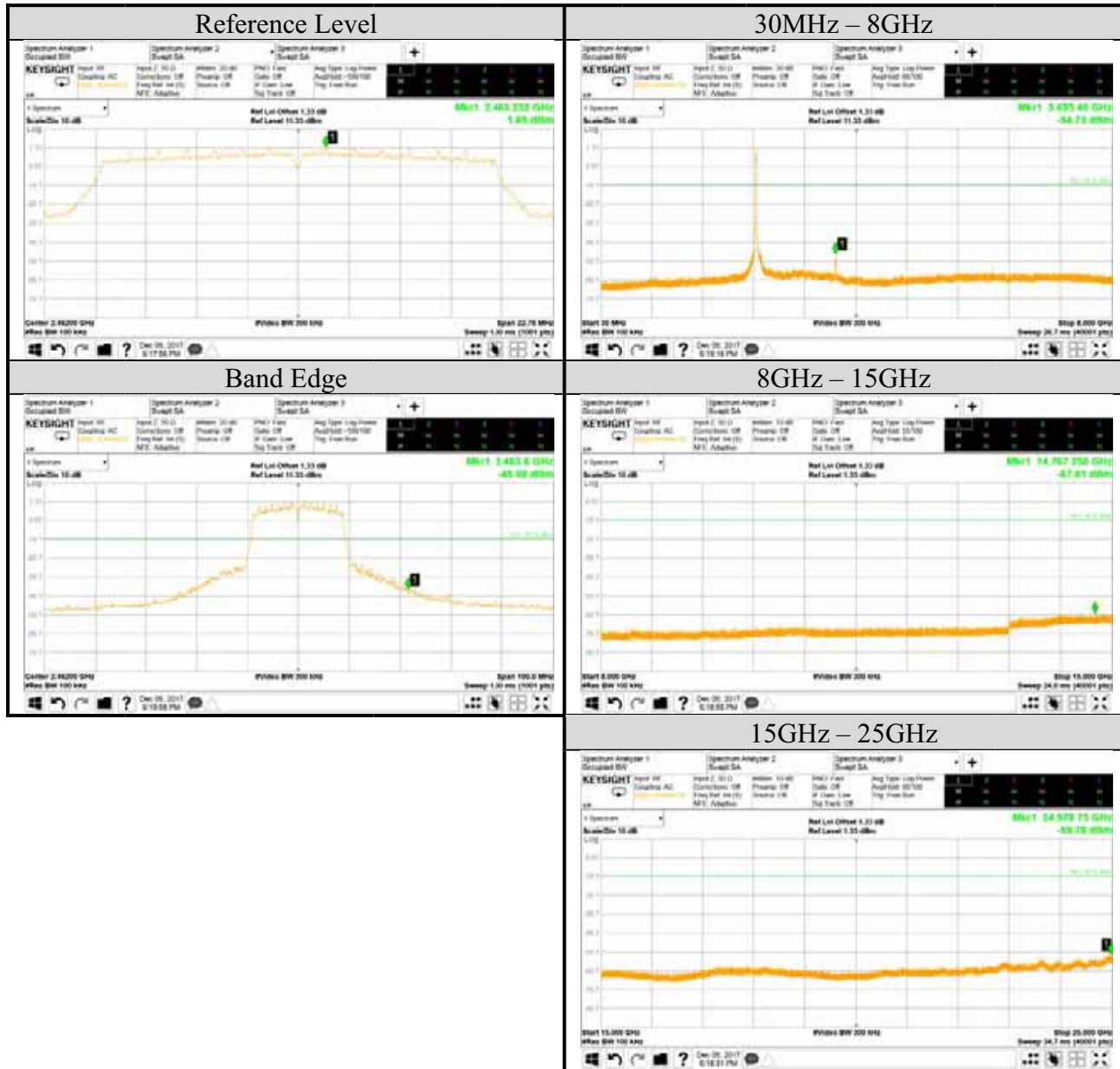
No. 53-11, Dingfu, Linkou, Dist.,

New Taipei City244, Taiwan

Tel: +886 2 26099301

Fax: +886 2 26099303

Test Date	2017/12/05	Temp./Hum.	23°C/56%
Cable Loss	1.33dB	Test Voltage	DC3.8V(Via Battery)
Mode	802.11n-HT20	Frequency	TX 2462MHz
Simultaneous Factor	10 log(n) (Note: “n” is antenna number)		0



Audix Technology Corp.

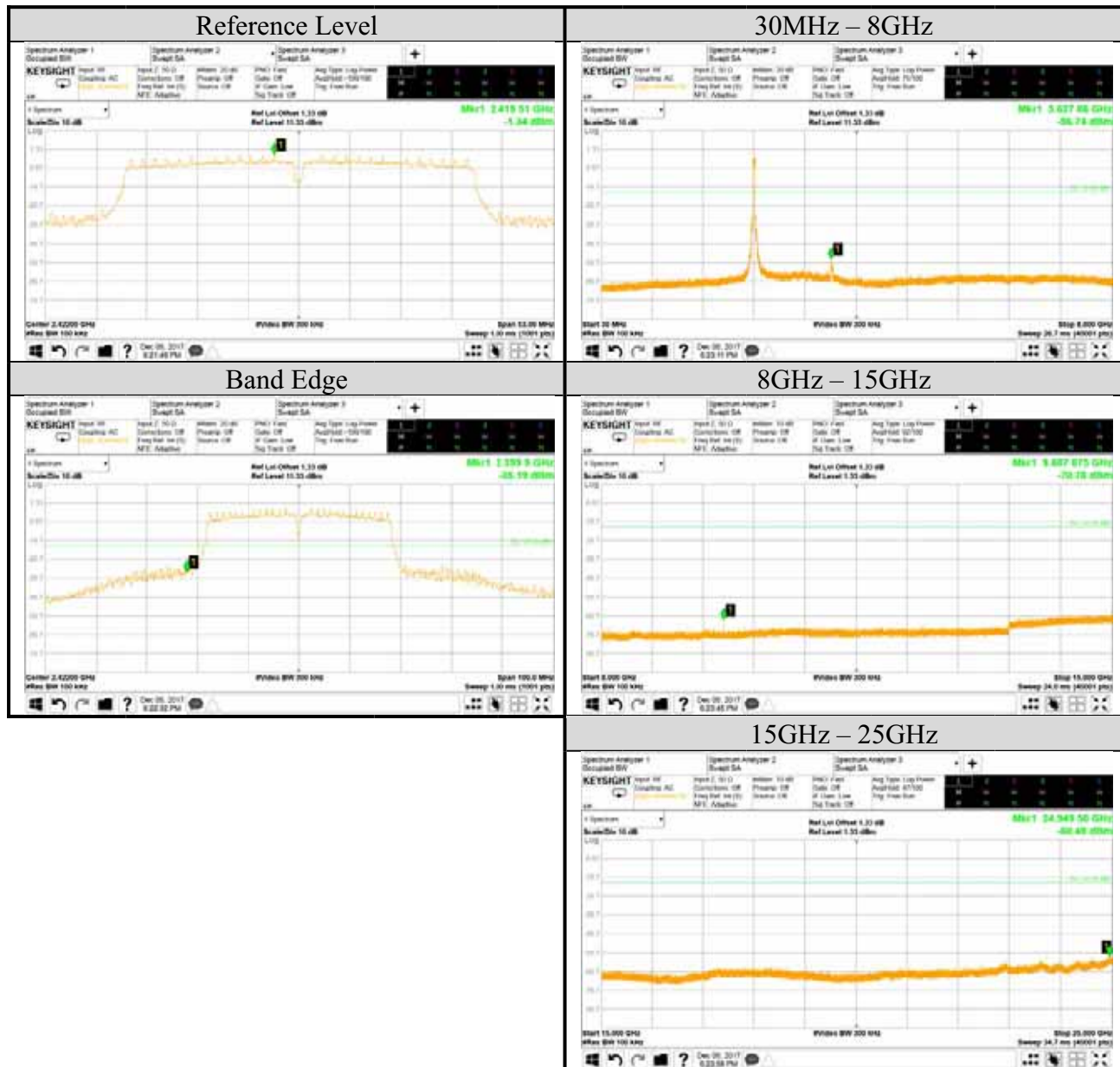
No. 53-11, Dingfu, Linkou, Dist.,

New Taipei City 244, Taiwan

Tel: +886 2 26099301

Fax: +886 2 26099303

Test Date	2017/12/05	Temp./Hum.	23°C/56%
Cable Loss	1.33dB	Test Voltage	DC3.8V(Via Battery)
Mode	802.11n-HT40	Frequency	TX 2422MHz
Simultaneous Factor	10 log(n) (Note: "n" is antenna number)		0



Audix Technology Corp.

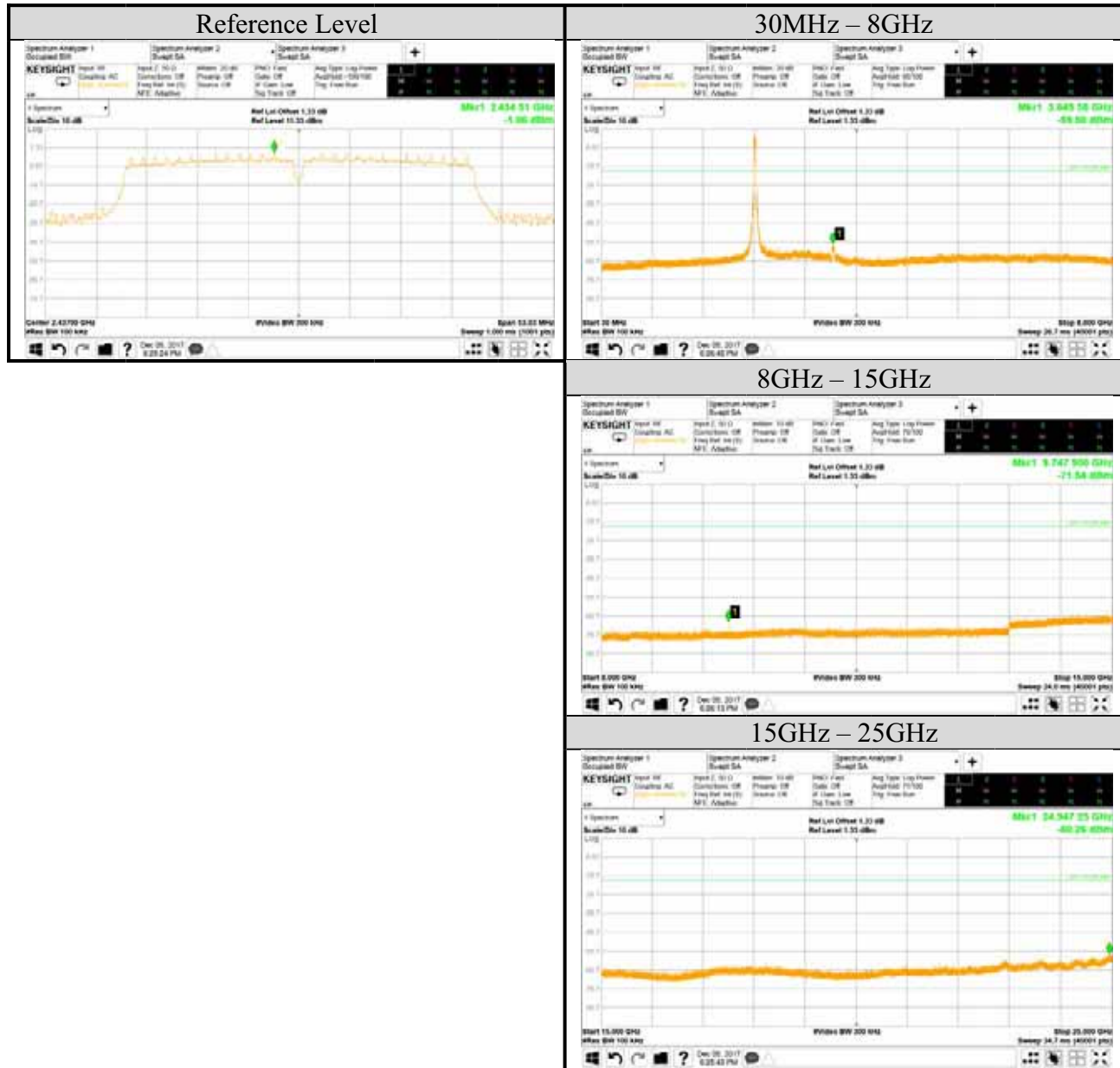
No. 53-11, Dingfu, Linkou, Dist.,

New Taipei City 244, Taiwan

Tel: +886 2 26099301

Fax: +886 2 26099303

Test Date	2017/12/05	Temp./Hum.	23°C/56%
Cable Loss	1.33dB	Test Voltage	DC3.8V(Via Battery)
Mode	802.11n-HT40	Frequency	TX 2437MHz
Simultaneous Factor	10 log(n) (Note: "n" is antenna number)		0



Audix Technology Corp.

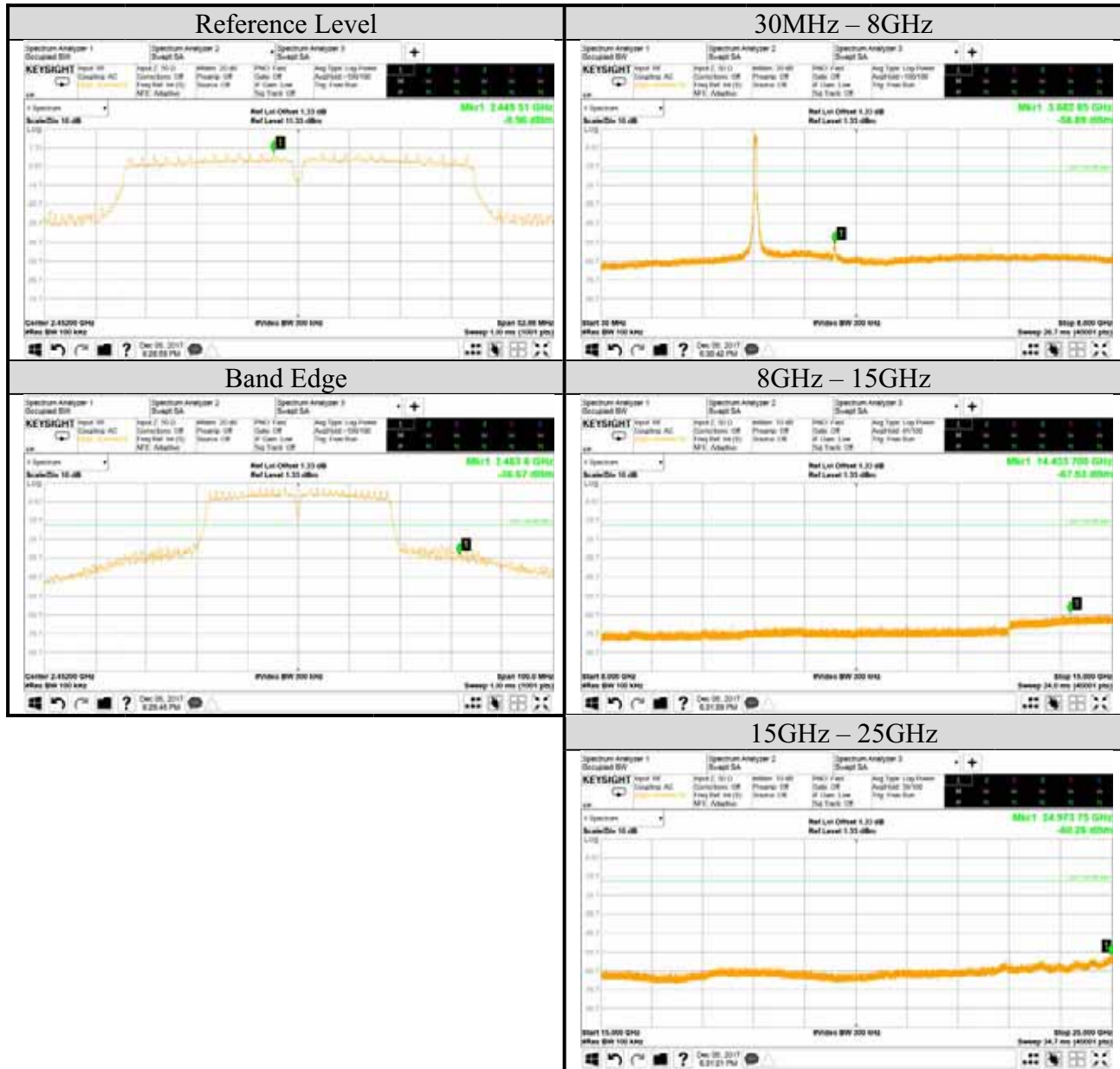
No. 53-11, Dingfu, Linkou, Dist.,

New Taipei City 244, Taiwan

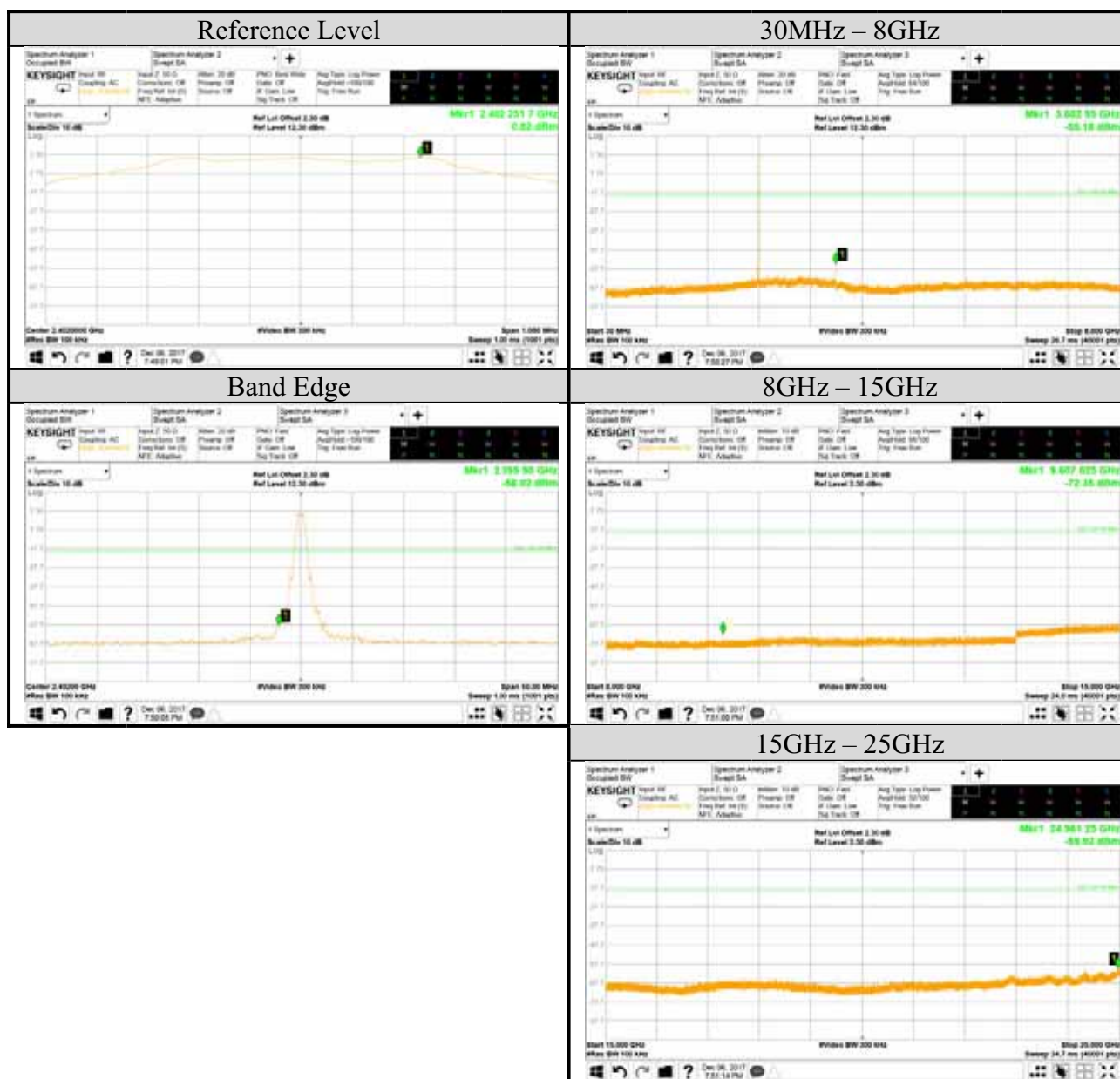
Tel: +886 2 26099301

Fax: +886 2 26099303

Test Date	2017/12/05	Temp./Hum.	23°C/56%
Cable Loss	1.33dB	Test Voltage	DC3.8V(Via Battery)
Mode	802.11n-HT40	Frequency	TX 2452MHz
Simultaneous Factor	10 log(n) (Note: "n" is antenna number)		0



Test Date	2017/12/06	Temp./Hum.	24°C/58%
Cable Loss	2.30dB	Test Voltage	DC3.8V(Via Battery)
Mode	BLE	Frequency	TX 2402MHz
Simultaneous Factor	10 log(n) (Note: "n" is antenna number)		0



Audix Technology Corp.

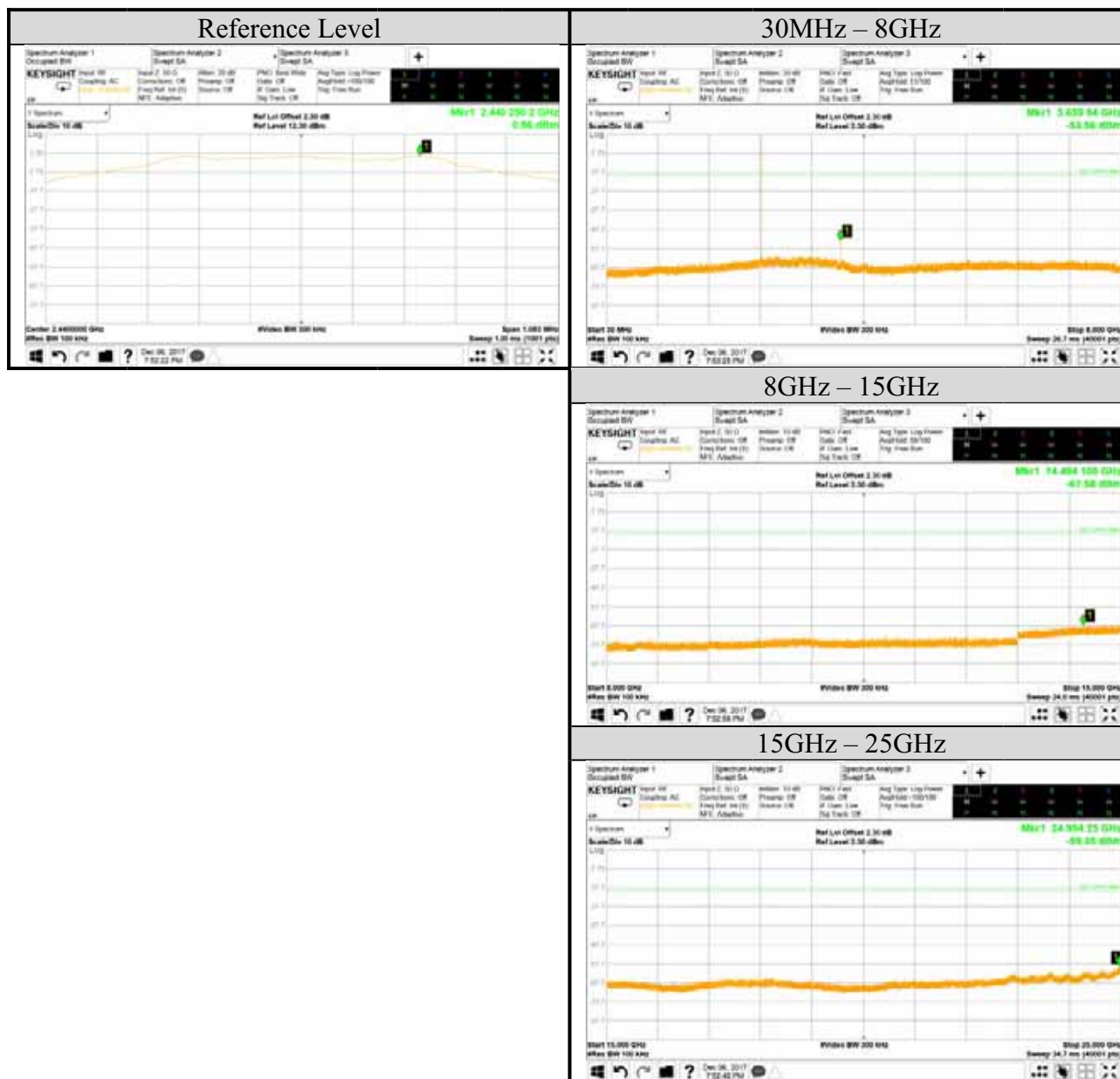
No. 53-11, Dingfu, Linkou, Dist.,

New Taipei City 244, Taiwan

Tel: +886 2 26099301

Fax: +886 2 26099303

Test Date	2017/12/06	Temp./Hum.	24°C/58%
Cable Loss	2.30dB	Test Voltage	DC3.8V(Via Battery)
Mode	BLE	Frequency	TX 2440MHz
Simultaneous Factor	10 log(n) (Note: "n" is antenna number)		0



Audix Technology Corp.

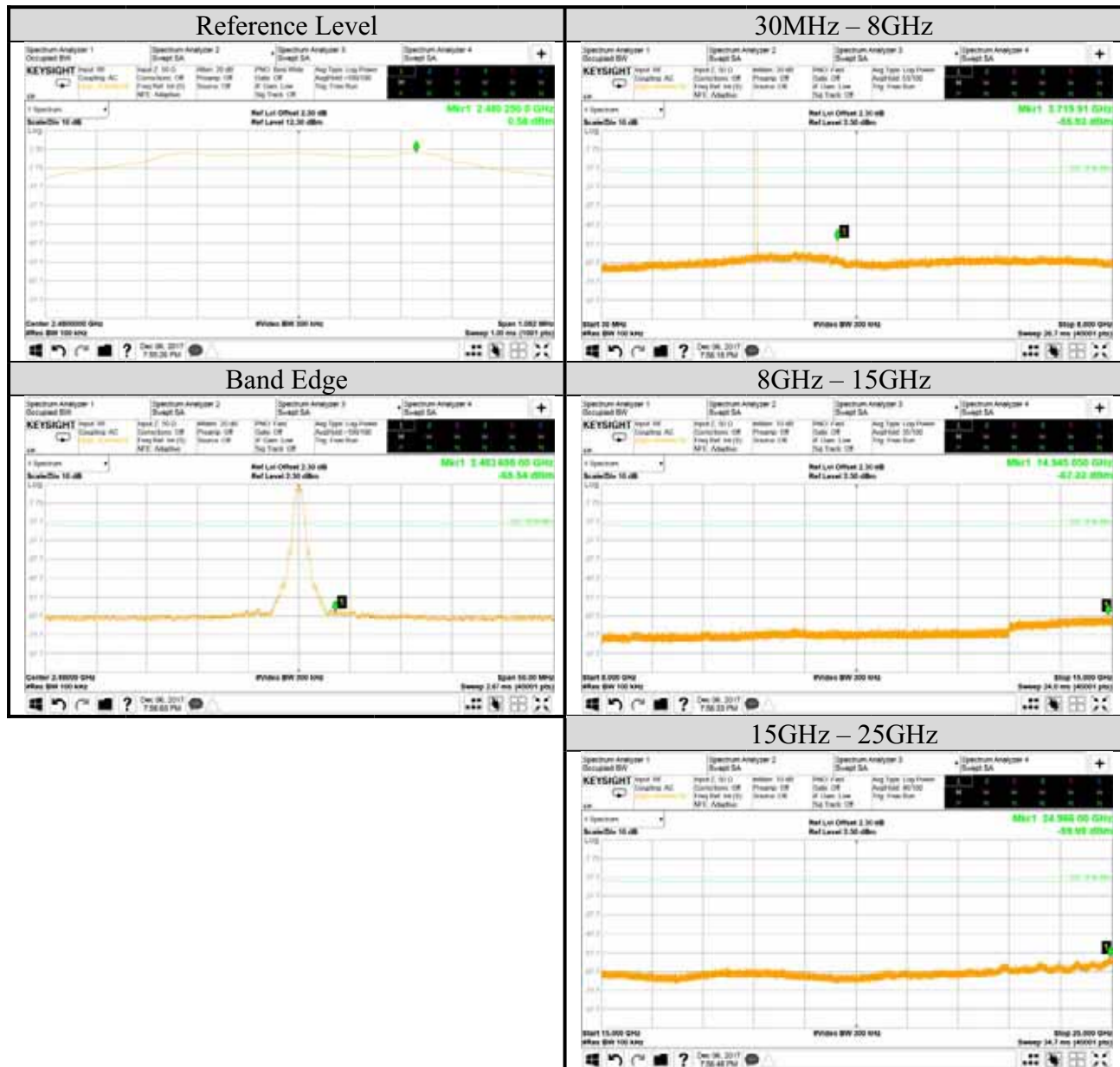
No. 53-11, Dingfu, Linkou, Dist.,

New Taipei City 244, Taiwan

Tel: +886 2 26099301

Fax: +886 2 26099303

Test Date	2017/12/06	Temp./Hum.	24°C/58%
Cable Loss	2.30dB	Test Voltage	DC3.8V(Via Battery)
Mode	BLE	Frequency	TX 2480MHz
Simultaneous Factor	10 log(n) (Note: "n" is antenna number)		0



A.6 POWER SPECTRAL DENSITY

Test Date	2017/12/05 ~ 18	Temp./Hum.	20~23°C /56~60%
Cable Loss	WL:1.33dB, BLE: 2.30dB	Test Voltage	DC3.8V(Via Battery)
Simultaneous Factor 10 log(n) (Note: "n" is antenna number)			0

A.6.1 Power Spectral Density Result

Mode	Centre Frequency (MHz)	Power Spectral Density (dBm)	Limit
802.11b	2412	3.51	< 8 dBm/3kHz
	2437	3.26	
	2462	4.09	
802.11g	2412	1.62	
	2437	-1.77	
	2462	1.90	
802.11n-HT20	2412	1.60	
	2437	1.97	
	2462	1.85	
802.11n-HT40	2422	-1.34	
	2437	-1.06	
	2452	-0.96	
BLE	2402	0.82	
	2440	0.86	
	2480	0.58	

Note: All results have been included cable loss and Simultaneous Factor.

Audix Technology Corp.

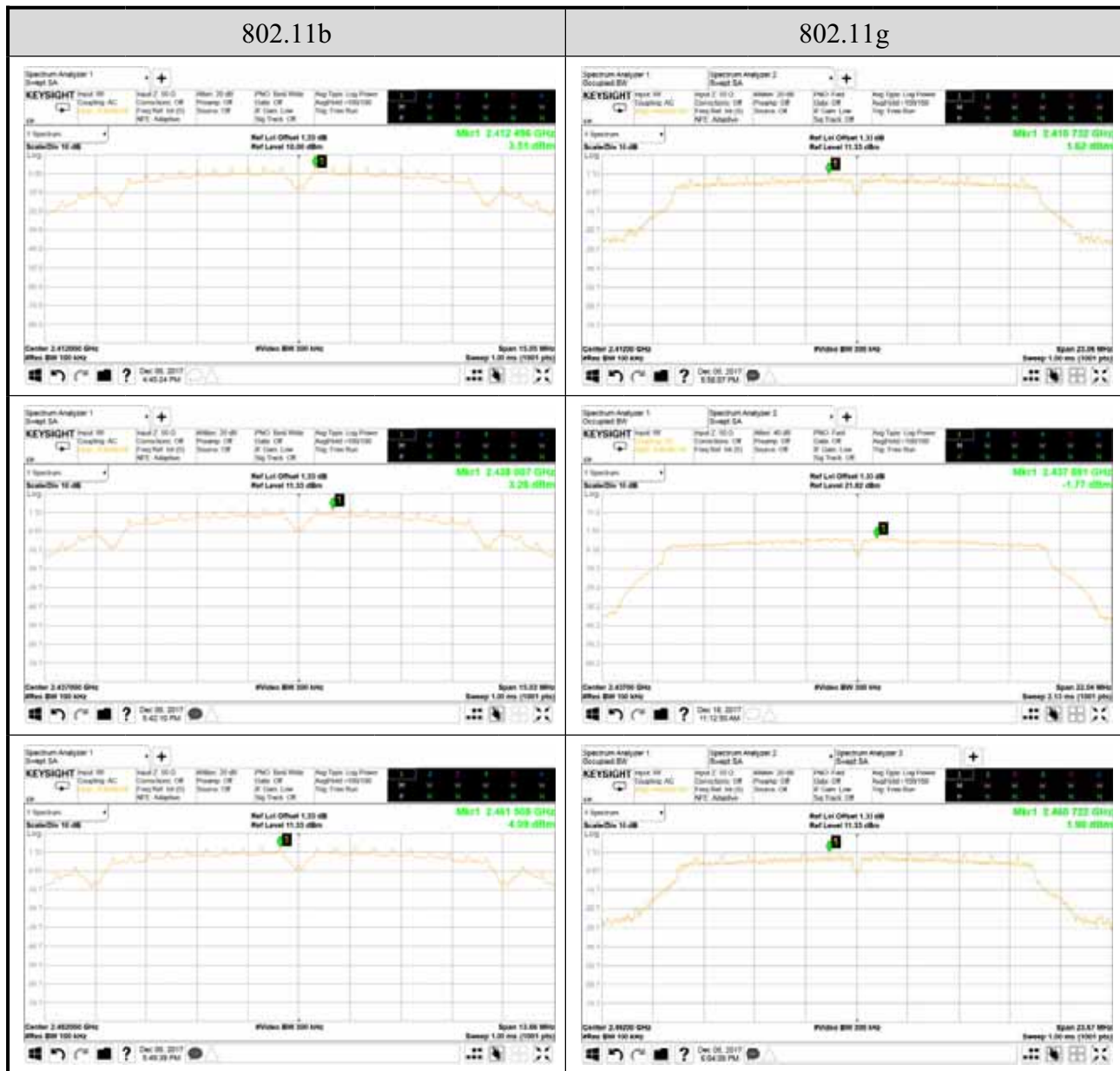
No. 53-11, Dingfu, Linkou, Dist.,

New Taipei City 244, Taiwan

Tel: +886 2 26099301

Fax: +886 2 26099303

A.6.2 Measurement Plots



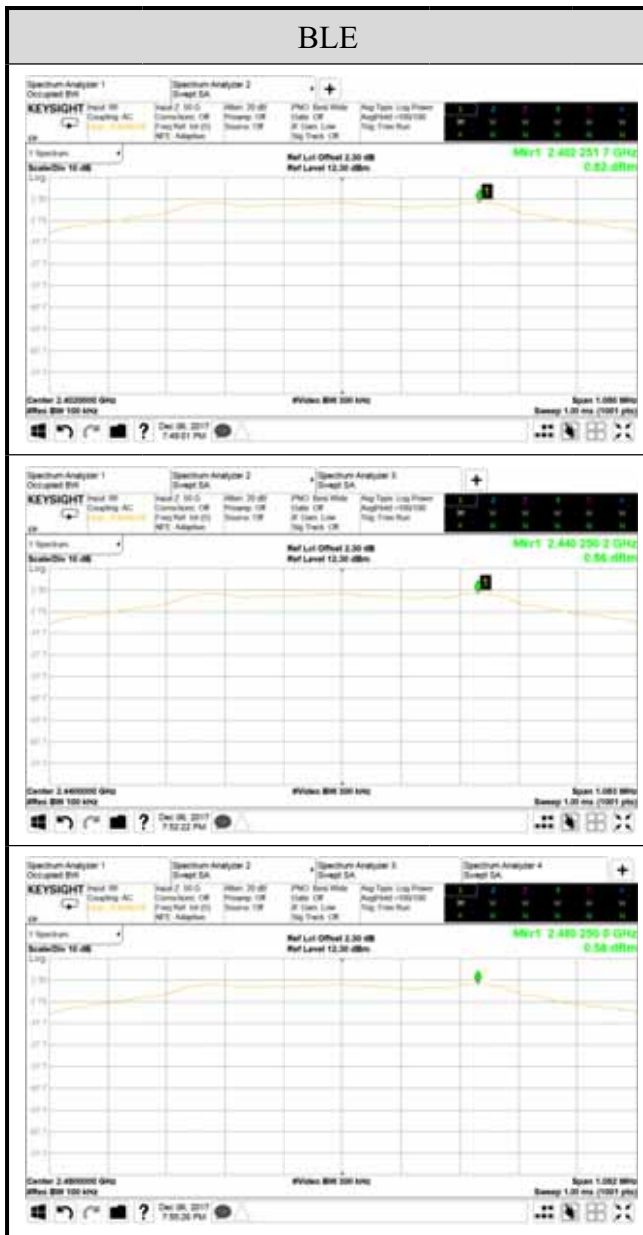
Note: All results have been included cable loss and Simultaneous Factor.

Audix Technology Corp.
No. 53-11, Dingfu, Linkou, Dist.,
New Taipei City 244, Taiwan

Tel: +886 2 26099301
Fax: +886 2 26099303



Note: All results have been included cable loss and Simultaneous Factor.



Note: All results have been included cable loss and Simultaneous Factor.



Audix Technology Corp.
No. 53-11, Dingfu, Linkou, Dist.,
New Taipei City 244, Taiwan

APPENDIX B

Tel: +886 2 26099301
Fax: +886 2 26099303

APPDNDIX B

TEST PHOTOGRAPHS

(Model: A8001)



Audix Technology Corp.
No. 53-11, Dingfu, Linkou, Dist.,
New Taipei City 244, Taiwan

APPENDIX C

Tel: +886 2 26099301
Fax: +886 2 26099303

APPDNDIX C

EUT PHOTOGRAPHS

(Model: A8001)