

# FCC PART 15C TEST REPORT FOR CERTIFICATION On Behalf of

#### TOP WAY INTELLIGENT SCIENCE & TECHNOLOGY CO., LTD.

Wireless Video Doorbell

WF100; WF215; WF1370; WF1380; WF206; WF201

FCC ID: 2AK8LWF100

Prepared for: TOP WAY INTELLIGENT SCIENCE & TECHNOLOGY CO.,

LTD.

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Report Number : ACS-F17041

Date of Test : Jan.13~Apr.11, 2017

Date of Report : May.05, 2017



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#### TEST REPORT CERTIFICATION

Applicant TOP WAY INTELLIGENT SCIENCE & TECHNOLOGY CO., LTD.

Manufacturer TOP WAY INTELLIGENT SCIENCE & TECHNOLOGY CO., LTD.

Product Wireless Video Doorbell

FCC ID 2AK8LWF100

> (A)Model No. : WF100; WF215; WF1370; WF1380; WF206; WF201

(B) Power Supply : DC 12V

(C) Test Voltage : DC 12V From Adapter Input AC 120V/60Hz

Tested for comply with:

FCC CFR 47 Part 15 Subpart C

Test procedure used: ANSI C63.10: 2013 KDB558074 D01 v03r03

The device described above is tested by AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. to confirm comply with all the FCC Part 15 Subpart C requirements. The test results are contained in this test report and AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. is assumed full responsibility for the accuracy and completeness of these tests. Also, this report shows that the Equipment Under Test (EUT) is to be technically compliant with the FCC and IC requirements. This report contains data that are not covered by the NVLAP accreditation.

This Report is made under FCC Part 2.1075. No modifications were required during testing to bring this product into compliance.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of AUDIX TECHNOLOGY (SHENZHEN) CO., LTD.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government.

Date of Test:	Jan.13~Apr.11, 201	7 Report of date:	May.05, 2017
Prepared by :		(for) Reviewed by:	2 Jan
	Cindy Zhu / Assista	@ 12 st at 11 /m 11 1 1 m	Sunny Lu / Deputy Manager
1 m 14	<i>A</i> 0	福季科技(深圳)有限公司 Audix Technology (Shenzher EMC 部門報告専用章	
Approved & Aut		Stamp only for EMC Dept. Re	
		David Jin / Ma	nager



### 1. SUMMARY OF STANDARDS AND RESULTS

## 1.1.Description of Standards and Results

The EUT has been tested according to the applicable standards as referenced below.

EMISSION						
Description of Test Item	Standard	Results				
Power Line Conducted Emission	FCC Part 15: 15.207	PASS				
Radiated Emission	FCC Part 15: 15.209	PASS				
Band Edge Compliance	FCC Part 15: 15.247	PASS				
Conducted spurious emissions	FCC Part 15: 15.247	PASS				
6dB Bandwidth	FCC Part 15: 15.247	PASS				
Peak Output Power	FCC Part 15: 15.247	PASS				
Power Spectral Density	FCC Part 15: 15.247	PASS				
MPE Estimation	FCC Part 15: 15.247	PASS				
Antenna requirement	FCC Part 15: 15.203	PASS				

N/A is an abbreviation for Not Applicable.

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#### 2. GENERAL INFORMATION

2.1.Description of Device (EUT)

Product : Wireless Video Doorbell

Model No. : WF100; WF215; WF1370; WF1380; WF206; WF201

The mainly different is that, WF215, WF1370 WF1380, WF206, WF201 use separated module to assemble, however, WF100 use a single module(Camera module and Main-board is a unibody), besides,

their size is difference.

Test Model : WF100

FCC ID : 2AK8LWF100

Radio : IEEE802.11 b/g/n

Operation : IEEE 802.11b: 2412MHz—2462MHz Frequency IEEE 802.11g: 2412MHz—2462MHz

IEEE802.11nHT20: 2412MHz—2462MHz; IEEE802.11nHT40: 2422MHz—2452MHz;

Modulation : IEEE 802.11b: DSSS(CCK,DQPSK,DBPSK)

Technology IEEE 802.11g: OFDM(64QAM, 16QAM, QPSK, BPSK)

IEEE 802.11n HT20, HT40: OFDM (64QAM, 16QAM, QPSK, BPSK)

Antenna : Antenna Type: Dipole Antenna, 2dBi gain;

Assembly Gain

Applicant: TOP WAY INTELLIGENT SCIENCE & TECHNOLOGY CO., LTD.

North Qianting, Qingrong Rd, Rongqiao Industrial Area, Fuqing,

Fujian, China

Manufacturer : TOP WAY INTELLIGENT SCIENCE & TECHNOLOGY CO., LTD.

North Qianting, Qingrong Rd, Rongqiao Industrial Area, Fuqing,

Fujian, China

Power Adapter: M/N: AMS135-0901000FU

Input: 100-240V; 50-60Hz, 0.3A

Output: 14V; 600mA

DC Cable: Shielded, Undetachable, 1.5m

Date of Test : Jan.13~Apr.11, 2017

Date of Receipt : Jan.11, 2017



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#### 2.2. Test Information

A special test software was used to control EUT work in Continuous TX mode(nearly 100% duty cycle), and select test channel, wireless mode and data rate.

Tested mode, channel, and data rate information						
Mode	data rate	Channel	Frequency			
Mode	(Mbps)(see Note)		(MHz)			
	1	Low:CH1	2412			
IEEE 802.11b	1	Middle: CH6	2437			
	1	High: CH11	2462			
	6	Low:CH1	2412			
IEEE 802.11g	6	Middle: CH6	2437			
	6	High: CH11	2462			
	MCS0	Low:CH1	2412			
IEEE 802.11n HT20	MCS0	Middle: CH6	2437			
	MCS0	High: CH11	2462			
	MCS0	Low :CH3	2422			
IEEE 802.11n HT40	MCS0	Middle: CH6	2437			
	MCS0	High: CH9	2452			

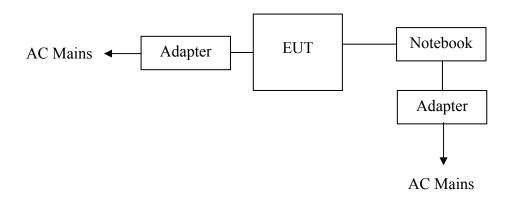
Note: 1. According exploratory test, EUT will have maximum output power in those data rate, so those data rate were used for all test.



# 2.1.Tested Supporting System Details

No.	Description	ACS No.	Manufacturer	Model	Serial Number		
		N/A	acer	ZOW	NVX7C		
1.	Notebook	Power Adapter: Manufacturer: LITEON, Model: PA-1900-32 Input: 100-240V~, 1.5A, 50/60Hz Output: 19V4.74A					
		Power Cord: Unshielded, Detachable, 1.8m					

# 2.2.Block diagram of connection between the EUT and simulators



(EUT: Wireless Video Doorbell)



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### 2.3. Test Facility

EMC Lab.

Site Description

Audix Technology (Shenzhen) Co., Ltd.

Name of Firm No. 6, Kefeng Road, Science & Technology Park,

Nanshan District, Shenzhen, Guangdong, China

Certificated by FCC, USA

3m Anechoic Chamber Registration Number: 90454

Valid Date: Jul.12, 2017

Certificated by FCC, USA

3m & 10m Anechoic Chamber Registration Number: 794232

Valid Date: Jul.12, 2017

Certificated by Industry Canada

Registration Number: IC 5183A-1

Valid Date: May.14, 2017

Certificated by DAkkS, Germany

Registration No: D-PL-12151-01-00 Valid Date: Dec.07, 2021

Accredited by NVLAP, USA

NVLAP Code: 200372-0 Valid Date: Mar.31, 2018

### 2.4. Measurement Uncertainty (95% confidence levels, k=2)

Test Item	Uncertainty		
Uncertainty for Conduction emission test in No. 1 Conduction	3.2dB (150kHz to 30MHz)		
	2.8dB(30~200MHz, Polarization: H)		
Uncertainty for Radiation Emission test	2.8dB(30~200MHz, Polarization: V)		
in 3m chamber	3.0dB(200M~1GHz, Polarization: H)		
	3.0dB(200M~1GHz, Polarization: V)		
Uncertainty for Radiation Emission test in	5.8dB(1~6GHz, Distance: 3m)		
3m chamber (1GHz-18GHz)	5.8dB(6~18GHz, Distance: 3m)		
Uncertainty for Radiated Spurious Emission test in RF chamber	3.6dB		
Uncertainty for Conduction Spurious emission test	2.0dB		
Uncertainty for Output power test	0.8dB		
Uncertainty for Bandwidth test	83kHz		
Uncertainty for DC power test	0.1 %		
Uncertainty for test site temperature and	0.6		
humidity	3%		

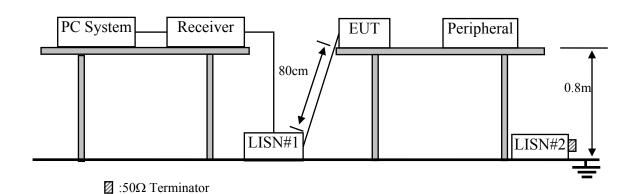


### 3. POWER LINE CONDUCTED EMISSION TEST

### 3.1.Test Equipments

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval		
1.	1# Shielding Room	AUDIX	N/A	N/A	Apr.17,16	1 Year		
2.	Test Receiver	Rohde & Schwarz	ESCI	100842	Apr.24,16	1 Year		
3.	L.I.S.N.#1	Rohde & Schwarz	ESH2-Z5	100429	Oct.15,16	1 Year		
4.	L.I.S.N.#2	Kyoritsu	K NW-403D	8-1750-2	Apr.24,16	1 Year		
5.	Terminator	Hubersuhner	50Ω	No.1	May.05.16	1 Year		
6.	Terminator	Hubersuhner	50Ω	No.2	May.05.16	1 Year		
7.	RF Cable	MIYAZAKI	3D-2W	No.1	Apr.24,16	1Year		
8.	Coaxial Switch	Anritsu	MP59B	6200766906	Apr.23,16	1 Year		
9.								
Note:	N/A means Not applic	able.						

### 3.2.Block Diagram of Test Setup



#### 3.3. Power Line Conducted Emission Test Limits

	Maximum RF Line Voltage			
Frequency	Quasi-Peak Level	Average Level		
	dB(µV)	$dB(\mu V)$		
150kHz ~ 500kHz	66 ~ 56*	56 ~ 46*		
500kHz ~ 5MHz	56	46		
$5MHz \sim 30MHz$	60	50		

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

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

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#### 3.4. Configuration of EUT on Test

The following equipment are installed on Power Line Conducted Emission Test to meet the commission requirement and operating regulations in a manner which tends to maximize its emission characteristics in a normal application.

3.4.1. Wireless Video Doorbell (EUT)

Model No. : WF100

3.4.2. Support Equipment: As Tested Supporting System Details, in Section 2.2.

### 3.5. Operating Condition of EUT

- 3.5.1. Setup the EUT and simulator as shown as Section 3.2.
- 3.5.2. Turn on the power of all equipments.
- 3.5.3. PC run test software to control EUT work in Tx (WiFi 2.4GHz) mode.

#### 3.6. Test Procedure

The EUT was placed on a non-metallic table, 80cm above the ground plane. The EUT Power Via PC connected to the power mains through a line impedance stabilization network (L.I.S.N. 1#). This provides a 50 ohm coupling impedance for the EUT (Please refer the block diagram of the test setup and photographs). The AC line are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to ANSI C63.10: 2013 on Conducted Emission Test.

The bandwidth of test receiver (R & S ESCI) is set at 9kHz.

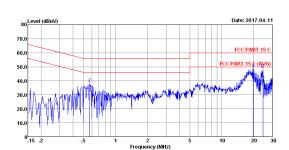
The frequency range from 150kHz to 30MHz is checked.

#### 3.7 Power Line Conducted Emission Test Results

**PASS.** (All emissions not reported below are too low against the prescribed limits.)



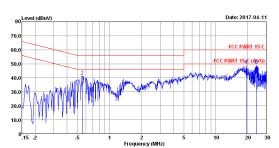
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Engineer :Evan

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.570	0.14	0.04	30.84	31.02	46.00	14.98	Average
2	0.570	0.14	0.04	37.93	38.11	56.00	17.89	Peak
3	19.740	0.82	0.20	39.97	40.99	50.00	9.01	Average
4	19.740	0.82	0.20	47.72	48.74	60.00	11.26	Peak
5	24.400	0.94	0.22	40.13	41.29	50.00	8.71	Average
6	24.400	0.94	0.22	47.10	48.26	60.00	11.74	Peak

Remarks: 1.Emission Level=LISN Factor+Cable Loss+Reading.
2.If the average limit is met when using a quasi-peak detector.
the EUT shall be deemed to meet both limits and measurement
with average detector is unnecessary.



Site no :1# Conduction
Dis/Jism 12015 ESH2-25 NEUTRAL
Limit :PCC PART 15 C
Env./Ins. :22:53\*C/54 Engi
Forer Rating |10 T100 From Adapter Input AC 120V/60Hz
Test Mode :Tx Mode

Engineer : Evan

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	n Limits (dBuV)	Margin (dB)	Remark
1	0.555	0.15	0.03	33.28	33.46	46.00	12.54	Average
2	0.555	0.15	0.03	41.29	41.47	56.00	14.53	Peak
3	19.326	1.01	0.20	40.07	41.28	50.00	8.72	Average
4	19.326	1.01	0.20	47.75	48.96	60.00	11.04	Peak
5	24.142	1.10	0.22	47.72	49.04	50.00	0.96	Average
6	24.142	1.10	0.22	47.72	49.04	60.00	10.96	Peak

Remarks: 1.Emission Level=LISN Factor+Cable Loss+Reading.
2.If the average limit is met when using a quasi-peak detector.
the EUT shall be deemed to meet both limits and measurement
with average detector is unnecessary.



### 4. RADIATED EMISSION TEST

### 4.1.Test Equipment

### 4.1.1. For frequency range 30MHz~1000MHz (In 3m Anechoic Chamber)

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	3#Chamber	AUDIX	N/A	N/A	Mar.28,17	1 Year
2.	Spectrum Analyzer	Agilent	N9010A	MY52220804	Oct.15,16	1 Year
3.	EMI Test Receiver	Rohde & Schwarz	ESR7	101547	Apr.24,16	1 Year
4.	Amplifier	HP	8447D	2648A04738	Apr.24,16	1 Year
5.	Tri-log-Broadband Antenna	SCHWARZBECK	VULB 9168	9168-710	Jul.20,16	1 Year
6.	RF Cable	MIYAZAKI	CFD400NL- LW	No.3	Sep.26.16	1 Year
7.	Coaxial Switch	Anritsu	MP59B	6201397222	Apr.23,16	1 Year
8.	Attenuator	EMCI	EMCI-N-6- 06	AT-N0639	Sep.26.16	1 Year
9.	Test Software	AUDIX	e3	6.2009-5-21a(n)	N/A	N/A
Note:	N/A means Not appli	cable.				

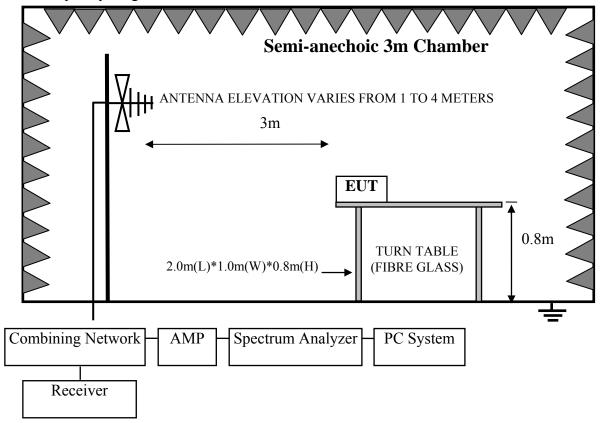
#### 4.1.2. For frequency range 1GHz~40GHz (In 3m Anechoic Chamber)

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval				
1.	3#Chamber	AUDIX	N/A	N/A	May.21,16	1 Year				
2.	Spectrum Analyzer	Agilent	N9010A	MY52220804	Oct.15,16	1 Year				
3.	Horn Antenna	ETS	3115	9510-4580	Nov.16,16	1 Year				
4.	Amplifier	Agilent	83017A	MY53270084	May.17,16	1 Year				
5.	RF Cable	Hubersuhner	SUCOFLEX106	505238/6	Apr.24,16	1 Year				
6.	Horn Antenna	ETS	3116	00060089	Nov.16,16	1 Year				
7.	Test Software	AUDIX	e3	6.2009-5-21a(n)	N/A	N/A				
Note	Note: N/A means Not applicable.									

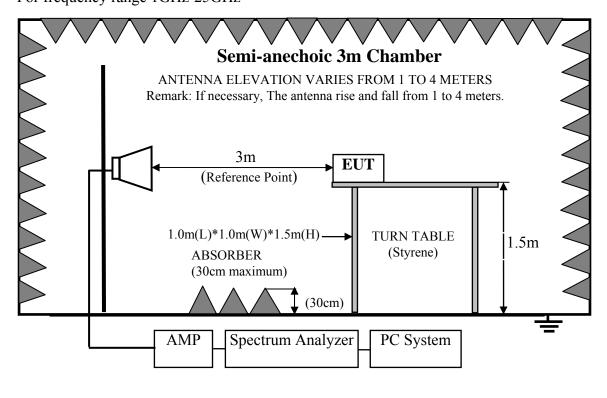


#### 4.2.Block Diagram of Test Setup

For frequency range 30MHz-1000MHz



For frequency range 1GHz-25GHz





#### 4.3. Radiated Emission Limit

#### 4.3.1.15.247&209 limits

FREQUENCY	DISTANCE	FIELD STRENGTHS LIMIT			
MHz	Meters	μV/m	dB(μV)/m		
30 ~ 88	3	100	40.0		
88 ~ 216	3	150	43.5		
216 ~ 960	3	200	46.0		
960 ~ 1000	3	500	54.0		
Above 1000	3	74.0 dB(μV)/m (Peak)			
		$54.0 \text{ dB}(\mu\text{V})/\text{m} \text{ (Average)}$			

Remark: (1) Emission level dB $\mu$ V = 20 log Emission level  $\mu$ V/m

- (2) The smaller limit shall apply at the cross point between two frequency bands.
- (3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.

#### 4.3.2. 15.205 Restricted bands of operation

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
<sup>1</sup> 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	(2)

All the emissions appearing within 15.205 restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions shall be at least 20dB below the fundamental emissions or comply with 15.209 limits.

### 4.4.EUT Configuration on Test

The following equipment are installed on Power Line Conducted Emission Test to meet the commission requirement and operating regulations in a manner which tends to maximize its emission characteristics in a normal application.

#### 4.4.1. Wireless Video Doorbell (EUT)

Model No.: WF100 Serial No.: N/A

4.4.2. Support Equipment: As Tested Supporting System Details, in Section 2.2.



#### 4.5. Operating Condition of EUT

- 4.5.1. Setup the EUT and simulator as shown as Section 4.2.
- 4.5.2. Turn on the power of all equipments.
- 4.5.3. Let EUT work in Tx(WiFi 2.4GHz) mode

#### 4.6.Test Procedure

EUT and its simulators are placed on a turn table, which is 0.8 meter high above ground for frequency 30MHz~1000MHz, 1.5 meter high above ground for frequency above 1GHz and put the absorbing with 2.4m(L)\*2.4m(W)\*0.3m(H) on the ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. Power on the EUT and let it working in test mode, then test it.EUT is set 3 meters away from the receiving antenna, which is mounted on a antenna tower. The antenna can be moved up and down between 1 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bilog antenna) is used as receiving antenna for frequency 30MHz~1000MHz, and the Horm antenna is used as receiving antenna for frequency above 1GHz. Both horizontal and vertical polarization of the antenna are set on test.

This test was performed with EUT in X, Y, Z position, and the worse case was found when EUT in X position as test photo indicated.

The bandwidth of the EMI test receiver (R&S ESR7) is set at 120kHz for frequency range from 30MHz to 1000 MHz.

The bandwidth of the Spectrum's VBW is set at 3MHz and RBW is set at 1MHz for peak emissions measurement above 1GHz and 1MHz RBW, 10Hz VBW for average emissions measure above 1GHz

The frequency range from 30MHz to 10<sup>th</sup> harmonic (25GHz) are checked. and no any emissions were found from 18GHz to 25GHz, So the radiated emissions from 18GHz to 25GHz were not record.

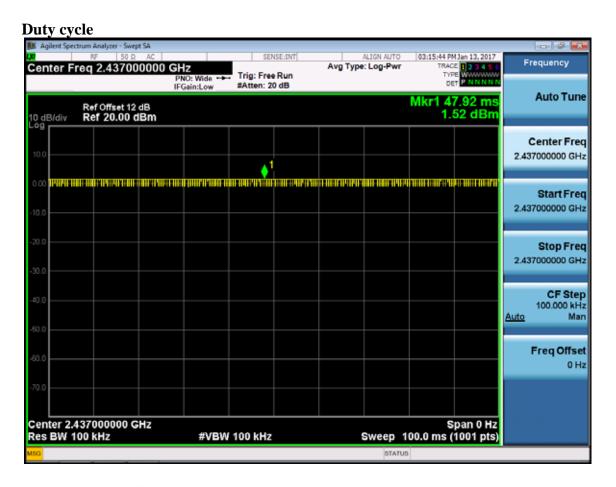
#### 4.7 Radiated Emission Test Results

#### PASS.

All the emissions from 30MHz to 25 GHz were comply with 15.209 limits.

Note: For emissions above 1GHz, if peak level comply with average limit, then the average level is deemed to comply with average limit.

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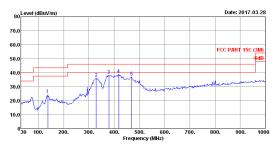
Note: The Duty Cycle is close to 100%.



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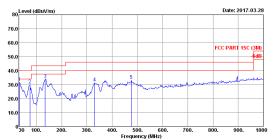
#### Frequency: 30MHz~1GHz



Data no. : 8 Ant. pol. : HORIZONTAL Engineer : Jolly\_Xu

		Ant.	Cable	AMP	Emission	n			
No.	Freq.	Factor (dB/m)	Loss (dB)	factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	136.700	0.00	0.00	0.00	24.19	24.19	43.50	19.31	QP
2	328.760	0.00	0.00	0.00	35.88	35.88	46.00	10.12	QP
3	379.200	0.00	0.00	0.00	38.15	38.15	46.00	7.85	QP
4	418.000	0.00	0.00	0.00	38.76	38.76	46.00	7.24	QP
5	468.440	0.00	0.00	0.00	36.96	36.96	46.00	9.04	QP

Remarks: 1. Emission Level- Antenna Factor + Cable Loss + Reading
-Amp factor.
2. The emission levels that are 20dB below the official
limit are not reported.



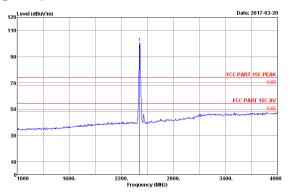
Data no. : 9
Ant. pol. : HORIZONTAL Engineer : Jolly\_Ku

No.	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dB)	Emission Reading (dBuV)	-	Limits (dBuV/m)	Margin (dB)	Remark
1	31.940	0.00	0.00	0.00	31.55	31.55	40.00	8.45	QP
2	73.650	0.00	0.00	0.00	29.77	29.77	40.00	10.23	QP
3	134.760	0.00	0.00	0.00	34.07	34.07	43.50	9.43	QP
4	330.700	0.00	0.00	0.00	31.26	31.26	46.00	14.74	QP
5	476.200	0.00	0.00	0.00	32.96	32.96	46.00	13.04	QP



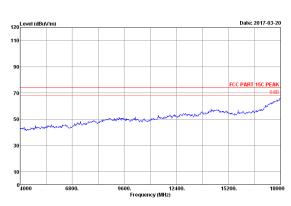


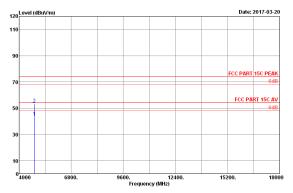
#### Frequency: 1GHz~18GHz



Site no. : 3m Chamber Data no. : 1
Dis. / Ant. : 3m 2016 3115(4580) Ant. pol. : VERTICAL
Limit : FCC PART 18C FERS
Env. / Ins. : 23.2×C/50% Engineer : Leo-Li
EUT : WF100
Power rating : DC 127 From Adapter Input 120V/60Hz
lest Mode : IEEE802. 11b 2412MHz Ix Mode

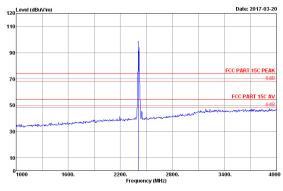
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp Factor
2. The emission levels that are 20dB below the official
limit are not reported.



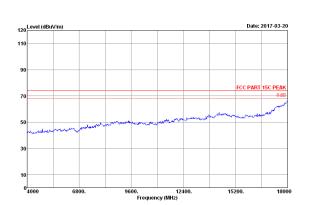


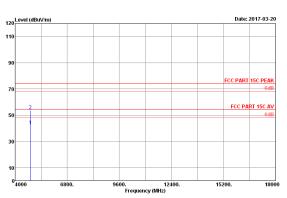
No. Freq. Factor Loss Reading factor Level Limits Margin Remark (BLz) (BLz1 4824.00 32.98 11.77 34.28 35.68 43.35 54.00 10.65 Average 2 4824.00 32.98 11.77 43.94 35.68 53.01 74.00 20.99 Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp Factor
2. The emission levels that are 20dB below the official
limit are not reported.



page 4-8

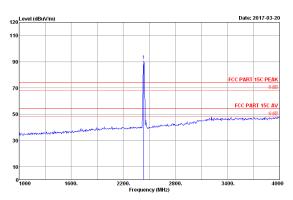




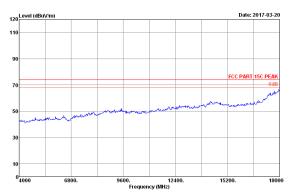
No. Freq. Factor Loss Reading factor Loss (dBuV) and Limits Hargin Remark

1 4824.00 32.98 11.77 32.83 56.88 41.90 40.00 12.10 Average 2 4824.00 32.98 11.77 44.25 36.88 58.88 59.88

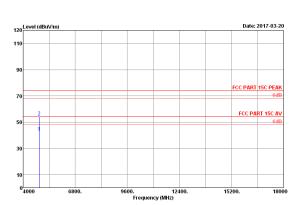
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp Factor
2. The emission levels that are 20dB below the official
limit are not reported.



Remarks: 1. Emission Level= Anterna Factor + Cable Loss + Reading
-Amp Factor
2. The emission levels that are 20dB below the official
limit are not reported.



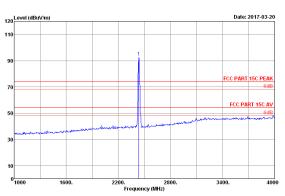
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| Site no. | 1 3m Chamber | Data no. | 13m Chamber | Pre | 13m Chamber | Pre | 13m Chamber | 13m Cha

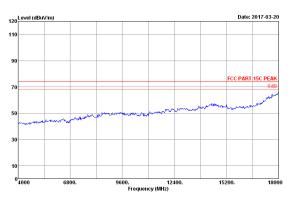
1 4874.00 33.10 11.80 33.15 35.69 42.36 54.00 11.64 Average 2 4874.00 33.10 11.80 44.77 35.69 53.98 74.00 20.02 Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp Factor
2. The emission levels that are 20dB below the official
limit are not reported.

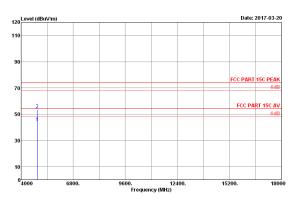


| No. | Freq. | Factor | Loss | Reading | Factor | Loss | Loss | Loss | Loss | Loss | Reading | Remark | Loss | Loss | Loss | Loss | Loss | Reading | Remark | Loss | Los

Remarks: 1. Emission Level= Anterna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.

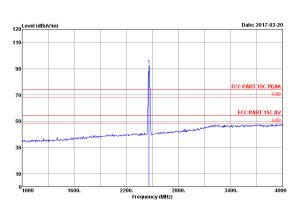


| Site no. | 1.5 m | Chamber | Dis. / Ant. | 1.5 m | 2016 | 3115 (4580) | Data no. | 1.5 m | 2016 | 3115 (4580) | Ant. | pol. | YERTICAL Limit | Inc. | TCC PART 15C PEAR | Pre | 1.01. | ZhPa | Engineer | 1.02. | 262. | 262. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. | 263. |



1 4874.00 33.10 11.80 34.18 35.69 43.39 54.00 10.61 Average 2 4874.00 33.10 11.80 44.23 35.69 53.44 74.00 20.56 Peak

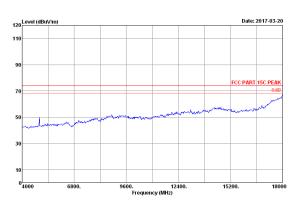
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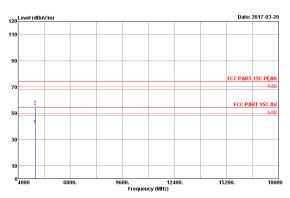


Site no. : 3a Chamber | Data no. : 17 |
Dis. / Ant. : 3a 2016 3115 (4580) | Ant. pol. : HORITOWIAL |
Limit | FCC PART 18C FEAK | Pre | : 101.2kPa |
Env. / Ins. : 23.28C/58M | Engineer : 1co-Li |
Power rating : DC 12V From Adapter Input 120V/60Hz |
Test Mode | IEEE802.11b 2462MHz Tx Mode |

| No. | Freq. | Factor | Cable | Factor | Cuttle | Factor | Cable | Factor | Cable | Factor | Cattle |

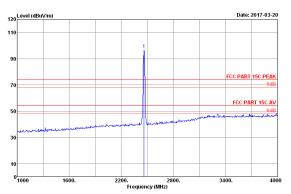
Remarks: 1. Emission Level= Anterna Factor + Cable Loss + Reading
-Amp Factor
2. The emission levels that are 20dB below the official
limit are not reported.





No. Freq. Factor Loss Reading factor Level Limits Margin Remark (BLz) (BLz1 4924.00 33.22 11.83 31.65 35.70 41.00 54.00 13.00 Average 2 4924.00 33.22 11.83 45.88 35.70 55.23 74.00 18.77 Peak

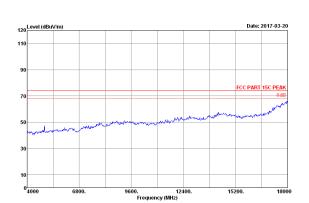
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp Factor
2. The emission levels that are 20dB below the official
limit are not reported.

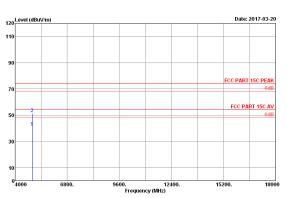


| No. | Freq. | Factor | Loss | Reading | factor | Level | Limits | Margin | Remark | (dbu/n) |

FCC ID: 2AK8LWF100

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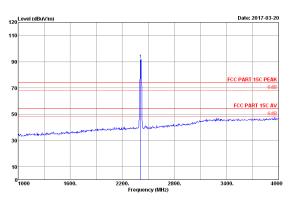




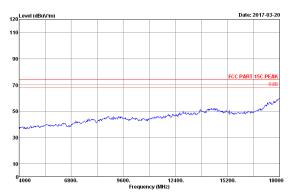
No. Freq. Factor Loss Reading factor Loss (dBuV) and Limits Hargin Remark

1 4924.00 33.22 11.83 31.25 35.70 51.23 74.00 22.77 Peak

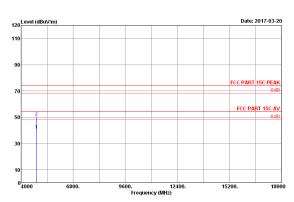
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp Factor
2. The emission levels that are 20dB below the official
limit are not reported.



Remarks: 1. Emission Level= Anterna Factor + Cable Loss + Reading
-Amp Factor
2. The emission levels that are 20dB below the official
limit are not reported.

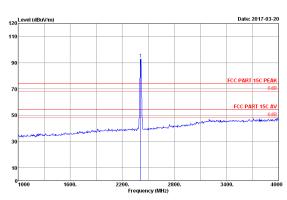


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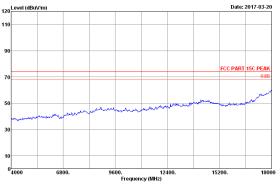
1 4824.00 32.98 11.77 30.96 35.68 40.03 54.00 13.97 Average 2 4824.00 32.98 11.77 41.24 35.68 50.31 74.00 23.69 Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp Factor
2. The emission levels that are 20dB below the official
limit are not reported.

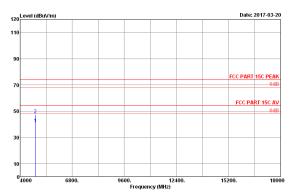


| No. | Freq. | Factor | Loss | Reading | Factor | Loss | Loss | Loss | Loss | Loss | Reading | Reading | Loss | Loss | Loss | Reading | Reading | Loss | Loss | Loss | Reading | Reading | Loss | Loss | Loss | Loss | Loss | Reading | Reading | Loss | Los

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp Factor
2. The emission levels that are 20dB below the official
limit are not reported.



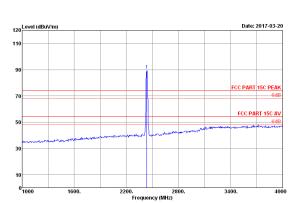
| Site no. | 1.5 m | Chamber | Dis. / Ant. | 1.5 m | 2016 | 3115 (4580) | Data no. | 1.5 m | 2016 | 3115 (4580) | Ant. | pol. | YERTICAL Limit | Inc. | TCC PART 15C PEAR | Pre | Engineer | 1.6 loc\_Li | 25.2 kc/158 | Engine



1 4824.00 32.98 11.77 31.23 35.68 40.30 54.00 13.70 Average 2 4824.00 32.98 11.77 38.33 35.68 47.40 74.00 26.60 Peak

FCC ID: 2AK8LWF100

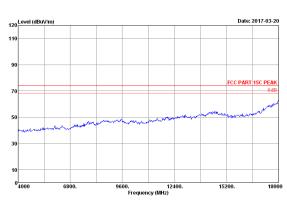
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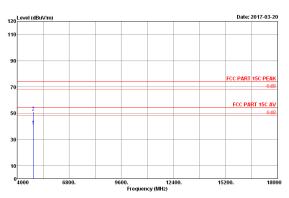


Site no. : 3a Chamber | Data no. : 37 |
Dis. / Ant. : 3a 2016 3115 (4580) | Ant. pol. : HORIZONTAL |
Linit | FCC PART 18C FEAK | Pre | : 101.2kPa |
Env. / Ins. : 23.287/58% | Engineer : 1co-Li |
Power rating : DC 12V From Adapter Input 120V/60Hz |
IEEEB02.11g 2437MHz Tx Mode | TX

| No. | Freq. | Factor | Loss | Reading | Factor | Level | Limits | Margin | Renark | (MRIZ) | (MRIZ)

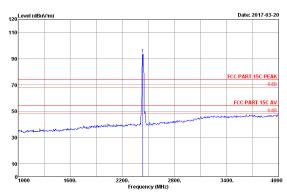
Remarks: 1. Emission Level= Anterna Factor + Cable Loss + Reading
-Amp Factor
2. The emission levels that are 20dB below the official
limit are not reported.





No. Freq. Factor Loss Reading factor Level Limits Margin Remark (BLz) (BLz1 4874.00 33.10 11.80 31.25 35.69 40.46 54.00 13.54 Average 2 4874.00 33.10 11.80 41.82 35.69 51.03 74.00 22.97 Peak

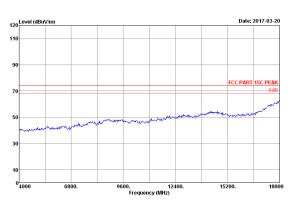
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp Factor
2. The emission levels that are 20dB below the official
limit are not reported.



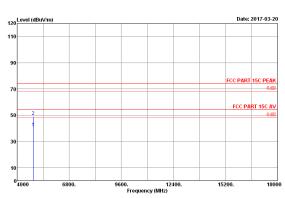
| No. | Freq. | Factor | Loss | Reading | factor | Level | Limits | Margin | Remark | (dbu/n) |



page

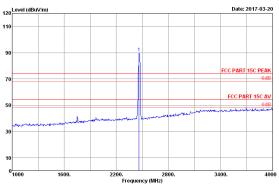


| Site no. | : 3m Chamber | Dis. / Ant. | : 5m 2016 3115(4580) | Data no. : 41 | Ant. | 10 | EVERTICAL | Limit | : FCC PART 156 FEAK | Pre | : 101.2%Pa | Env. / Ins. : 23.2%C/55% | Engineer : Leo-Li | : 102.2%Pa | Prover rating : DC 12V From Adapter Input 120V/60Hz | : IEEEB0C.11g 2437MHz IX Mode | |



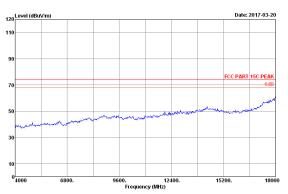
1 4874.00 33.10 11.80 31.05 35.69 40.26 54.00 13.74 Average 2 4874.00 33.10 11.80 39.69 35.69 48.90 74.00 25.10 Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp Factor
2. The emission levels that are 20dB below the official
limit are not reported.

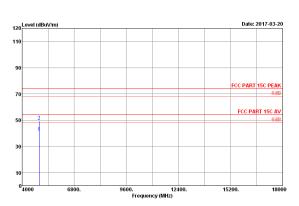


| No. | Freq. | Factor | Cable | Cable

Remarks: 1. Emission Level= Anterna Factor + Cable Loss + Reading
-Amp Factor
2. The emission levels that are 20dB below the official
limit are not reported.

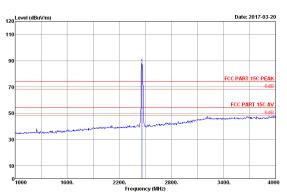


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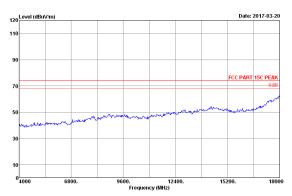
| No. | Freq. | Ant. | Cable | Freq. | Factor | Loss | Reading | factor | Loss | Hargin | Renark | Loss | Hargin | Hargi

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp Factor
2. The emission levels that are 20dB below the official
limit are not reported.

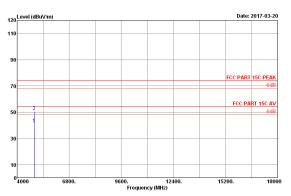


| No. | Freq. | Ant. | Cable | Factor | Loss | Reading | Factor | Loss | Reading | Factor | Loss | Reading | Factor | Loss | Loss | Loss | Loss | Loss | Loss | Reading | Loss | Loss | Loss | Loss | Reading | Renark | Loss | Lo

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp Factor
2. The emission levels that are 20dB below the official
limit are not reported.

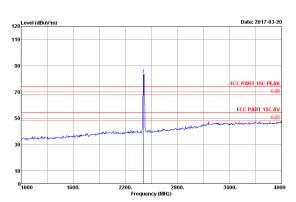


Site no. : 3m Chamber 2016 3115 (4580) Data no. : 47 TAUTONTAL Limit In: FCC PART 15C FEAK Engineer : Leo-Li 2016 228 (750% Engineer : Leo-Li 101.2kPa Power rating : DC 127 From Adapter Input 1207/60Hz Insert 15E802.11g 2462MHz Tx Mode

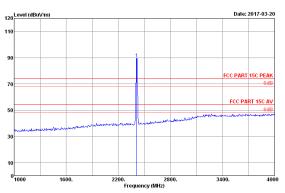


| No. | Freq. Factor Loss Reading factor | AMP | Emission | Emission | CMHz | C

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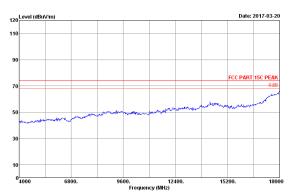


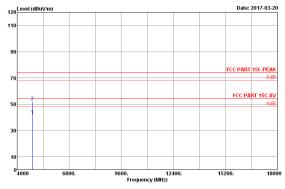
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp Factor
2. The emission levels that are 20dB below the official
limit are not reported.



| No. | Freq. | Ant. | Cable | Factor | Loss | Reading | Factor | Loss | Reading | Factor | Loss | Reading | Factor | Loss | Loss | Loss | Loss | Loss | Reading | Loss | Loss | Loss | Loss | Reading | Renark | Loss | Lo

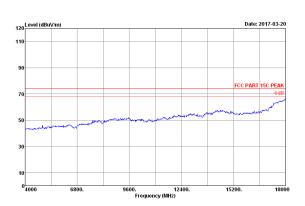
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp Factor
2. The emission levels that are 20dB below the official
limit are not reported.

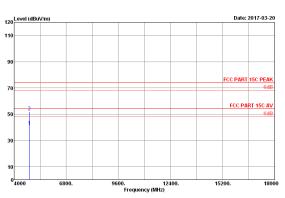




| No. | Freq. Factor | Case | Reading | Factor | Case | C

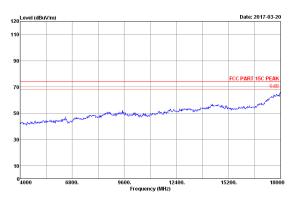
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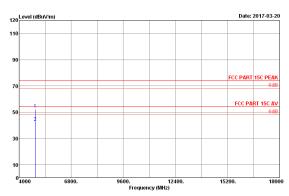




1 4824.00 32.98 11.77 31.56 35.68 40.63 54.00 13.37 Average 2 4824.00 32.98 11.77 42.93 35.68 52.00 74.00 22.00 Peak

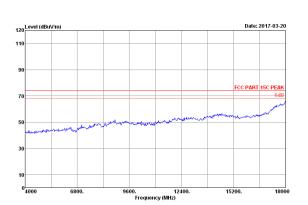
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp Factor
2. The emission levels that are 20dB below the official
limit are not reported.

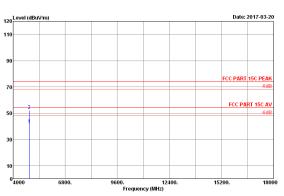




1 4874.00 33.10 11.80 43.06 35.69 52.27 74.00 21.73 2 4874.00 33.10 11.80 32.95 35.69 42.16 54.00 11.84 Average

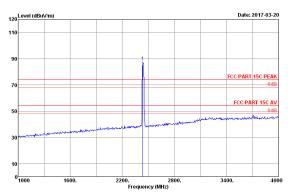
page 4-18





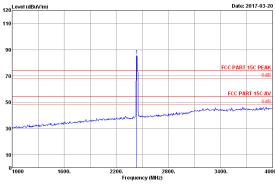
| No. | Freq. | Ant. | Cable | Rading | Factor | Loss | Reading | Factor | Loss | Reading | Factor | Loss | Reading | Factor | Loss | Rading | Factor | Loss | Loss | Rading | Reark | Rading | Reark | Rading | R

Remarks: 1. Emission Level- Antenna Factor + Cable Loss + Reading
-Amp Factor
2. The emission levels that are 20dB below the official
linkt are not reported.



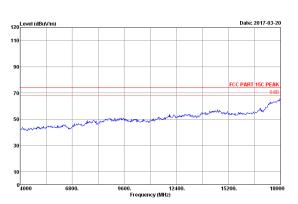
| No. | Freq. | Factor | Cable | Reading | Cable | Factor | Cable | Cable

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp Factor
2. The emission levels that are 20dB below the official
limit are not reported.

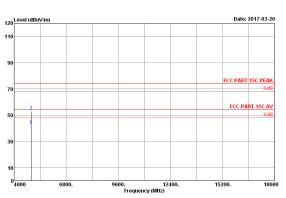


| No. | Freq. | Factor | Loss | Reading | factor | Level | Limits | Margin | Renark | (dbu/x) |

page 4-19

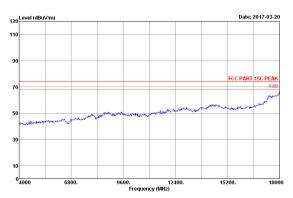


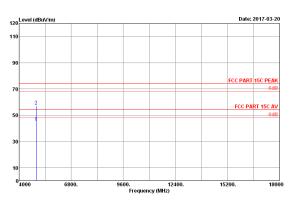




No.	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 2	4924.00	33. 22	11.83	32.56	35.70	41.91	54.00	12.09	Average
	4924.00	33. 22	11.83	43.49	35.70	52.84	74.00	21.16	Peak

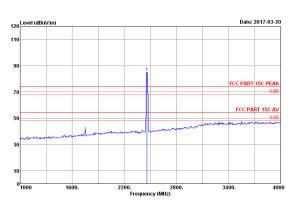
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp Factor
2. The emission levels that are 20dB below the official
limit are not reported.





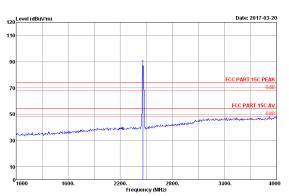
No.	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 2	4924.00 4924.00	33.22 33.22	11.83 11.83	35.29 47.68	35.70 35.70	44.64 57.03	54.00 74.00	9.36 16.97	Average Peak

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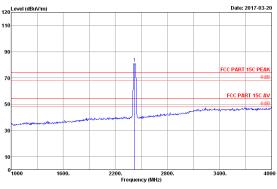


| No. | Freq. | Art. | Cable | Reading | Factor | Cable | Garden |

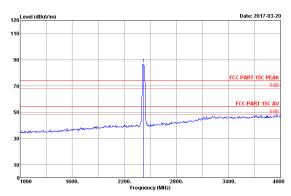
Remarks: 1. Emission Level= Anterna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.



Remarks: 1. Emission Level= Anterna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.

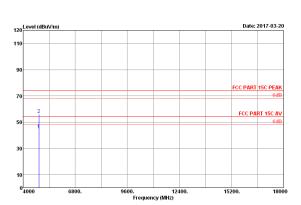


Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp Factor
2. The emission levels that are 20dB below the official
limit are not reported.



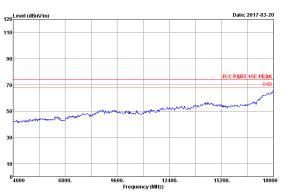
| Site no. | 1 3m Chamber | Data no. | 1 80 | River | Site no. | 2 3m Chamber | Data no. | 1 80 | River | Site no. | 2 3m Chamber | 2

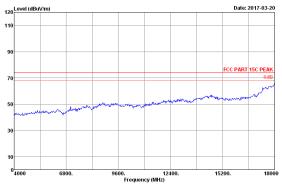
page

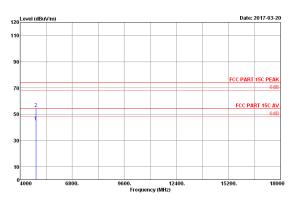


1 4844.00 33.03 11.78 34.97 35.68 44.10 54.00 9.90 Average 2 4844.00 33.03 11.78 46.80 35.68 55.93 74.00 18.07 Peak

Remarks: 1. Emission Level= Anterna Factor + Cable Loss + Reading
-Amp Factor
2. The emission levels that are 20dB below the official
limit are not reported.

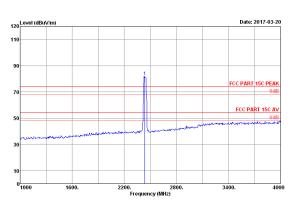




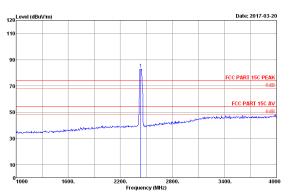


1 4844.00 33.03 11.78 34.92 35.68 44.05 54.00 9.95 Average 2 4844.00 33.03 11.78 45.32 35.68 54.45 74.00 19.55 Peak

page 4-22

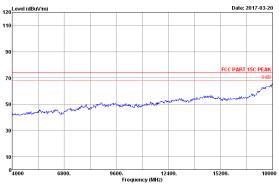


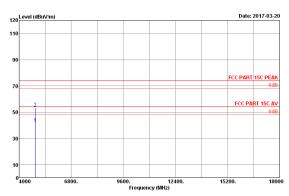
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp Factor
2. The emission levels that are 20dB below the official
limit are not reported.



| No. | Freq. | Ant. | Cable | Factor | Loss | Reading | Factor | Loss | Reading | Factor | Loss | Reading | Factor | Loss | Loss | Loss | Loss | Loss | Loss | Reading | Loss | Loss | Loss | Loss | Loss | Loss | Reading | Loss | Loss

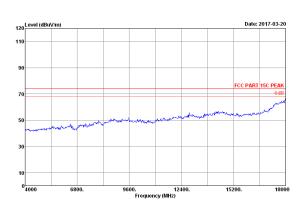
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp Factor
2. The emission levels that are 20dB below the official
limit are not reported.



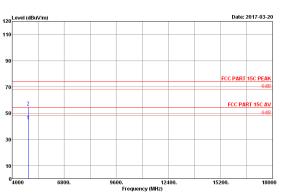


| No. | Freq. Factor Loss Reading factor | AMP | Enission | Enissi

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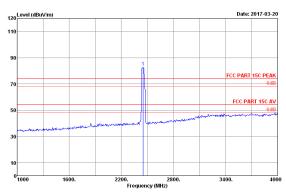


Site no.	: 3m Chamber	Data no. : 93	
Dis. / Ant.	: 3m 2016 3115 (4580)	Ant. pol. : HORITONTAL	
Limit	: FCC PART 15C FEAK	Pre	: 101.2kPa
Env. / Ins.	: 23.2c/55W	Engineer : Lo-Li	
Defer rating : FC 107 From Adapter Input 120V/60Hz			
IEEEB02.11mHT40 2437MHz Tx Mode	TX		
Table	TX	Table	Table
Table			

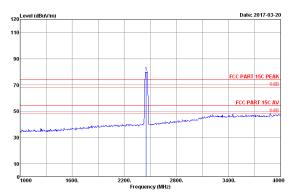


No. Freq. Factor Loss Reading factor Loss (dBuV) and Limits Hargin Remark 12 4874.00 33.10 11.80 43.43 35.69 44.05 54.00 9.95 Average 2 4874.00 33.10 11.80 45.43 35.69 54.64 74.00 19.36 Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp Factor
2. The emission levels that are 20dB below the official
limit are not reported.

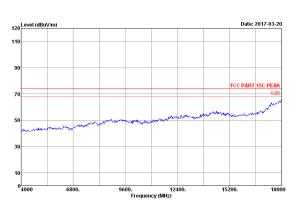


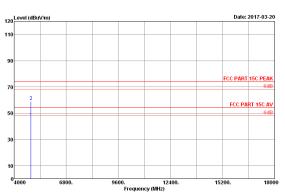
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp Factor
2. The emission levels that are 20dB below the official
limit are not reported.



| No. | Freq. | Ant. | Cable | Factor | Loss | Reading | factor | Level | Limits | Margin | Remark | (dbuy) | (

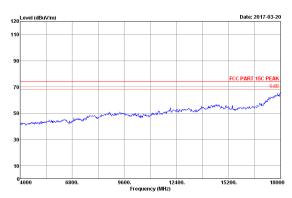
page 4-24



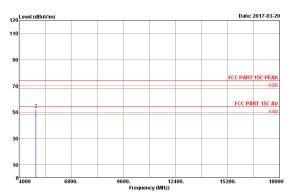


| No. | Freq. | Factor | Loss | Reading | AMP | Enission | Limits | Hargin | Remark | CBD | CBD

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp Factor
2. The emission levels that are 20dB below the official
limit are not reported.



Site no. : 3a Chamber Data no. : 103
Dis. / Ant. : 3a 2016 315 (4580) Ant. pol. : VERTICAL
Limit Inc. FCC PART 15C PEAR Pre : 101.2FPa
Env. / Inc. : 22.2K/56% Engineer : Leo-Li
Power rating : DC 12V From Adapter Input 120V/60Hz
TEX INGEROR : IEEEB02.11nHT40 2452MHz Tx Mode



No. | Free, Factor | Cable | Reading | Factor | Cable | Cable

CC ID: 2AK8LWF100 page 5-1

## 5. CONDUCTED SPURIOUS EMISSIONS

## 5.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum	Agilent	N9030A	MY51380221	Oct.15,16	1Year
2.	Attenuator	Agilent	8491B	MY39262165	Apr.23,16	1 Year
3.	RF Cable	Marvelous Microwave Inc	SFL402105FLEX	NO.1	Oct.15,16	1 Year

#### 5.2.Limit

In any 100kHz bandwidth outside the frequency bands in which the spread spectrum intentional radiator in 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.

#### 5.3.Test Procedure

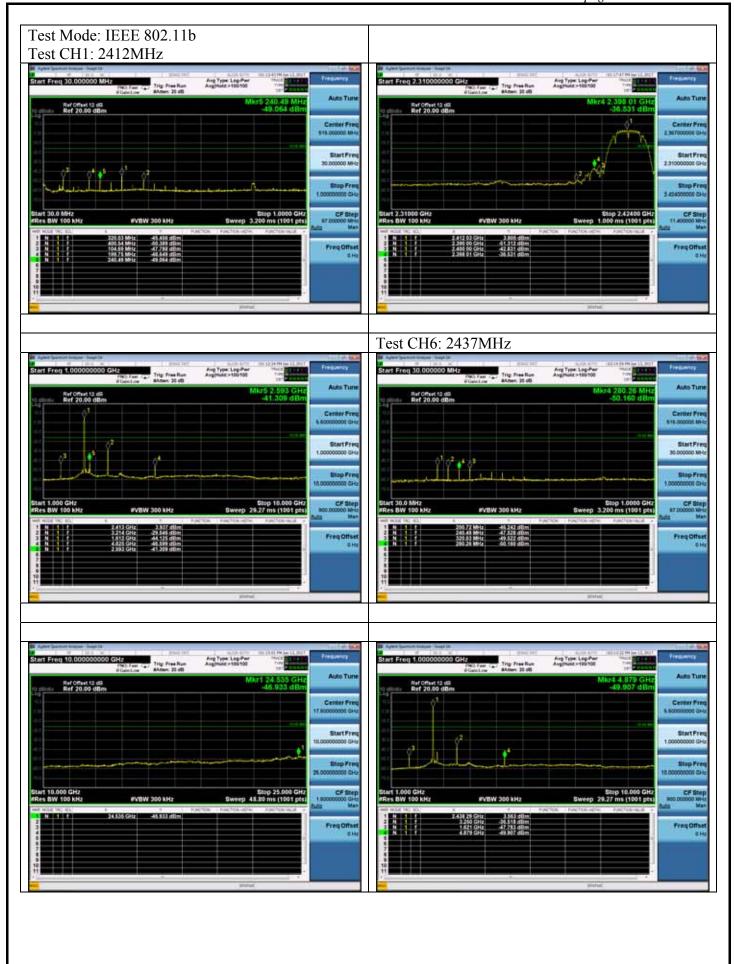
The transmitter output was connected to a spectrum analyzer, The resolution bandwidth is set to 100 kHz, The video bandwidth is set to 300 kHz and measure all the emissions with peak detector.

#### 5.4. Test result

**PASS** (The testing data was attached in the next pages.)

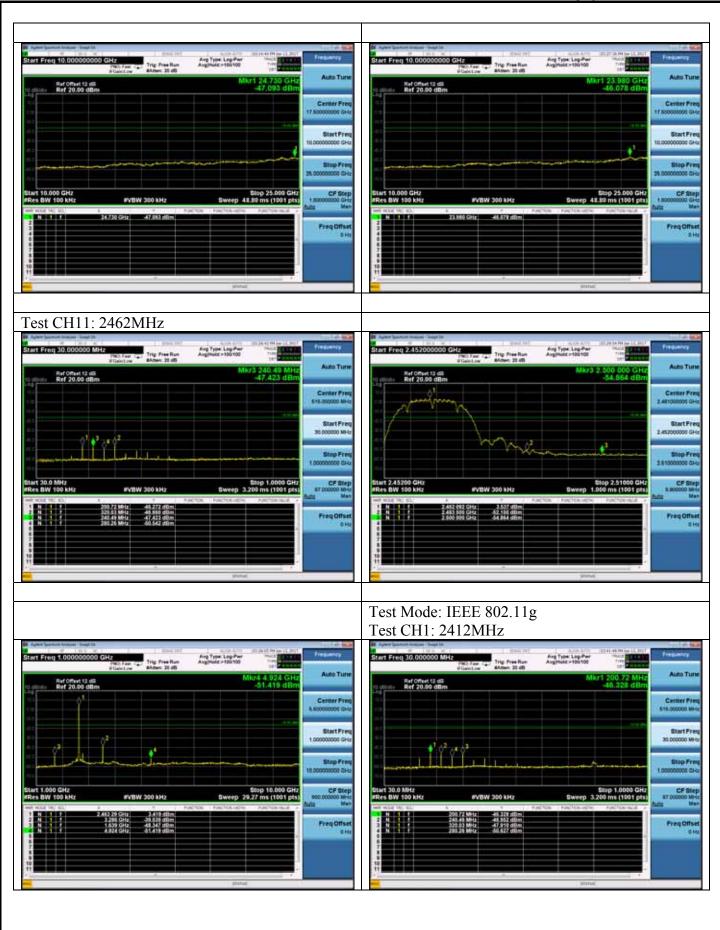


FCC ID: 2AK8LWF100 page 5-



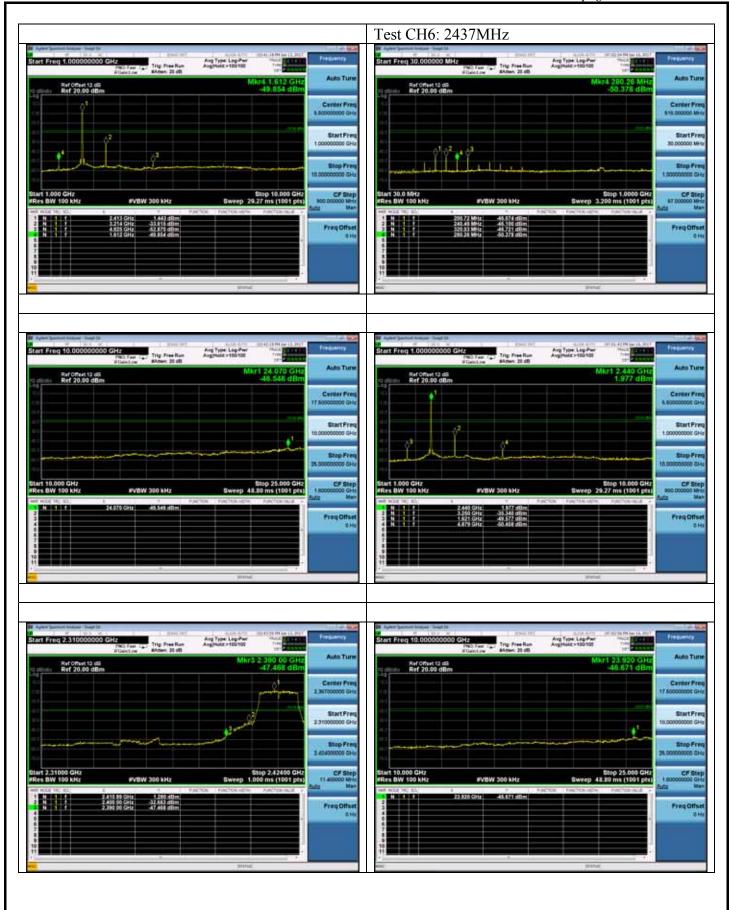


FCC ID: 2AK8LWF100 page 5-3



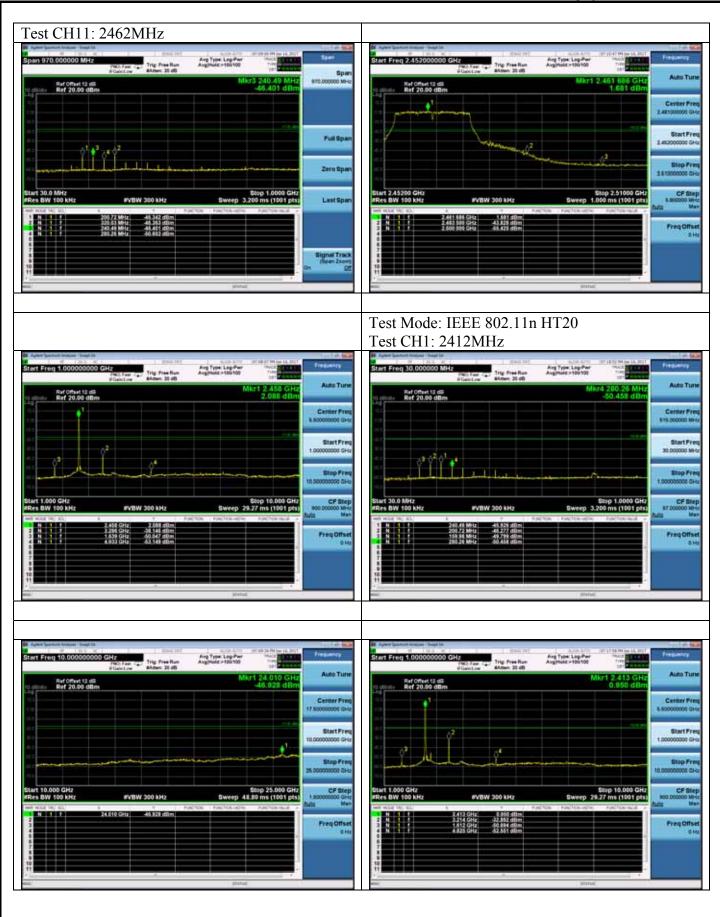
# AUDIX Technology (Shenzhen) Co., Ltd.

page 5-4



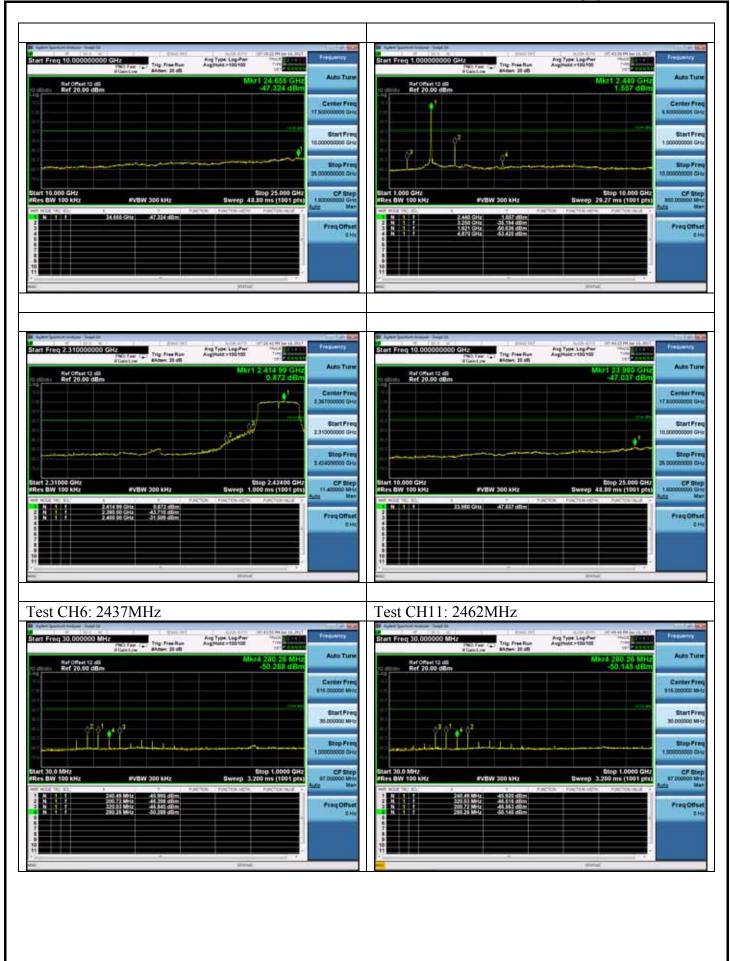


FCC ID: 2AK8LWF100 page 5-:



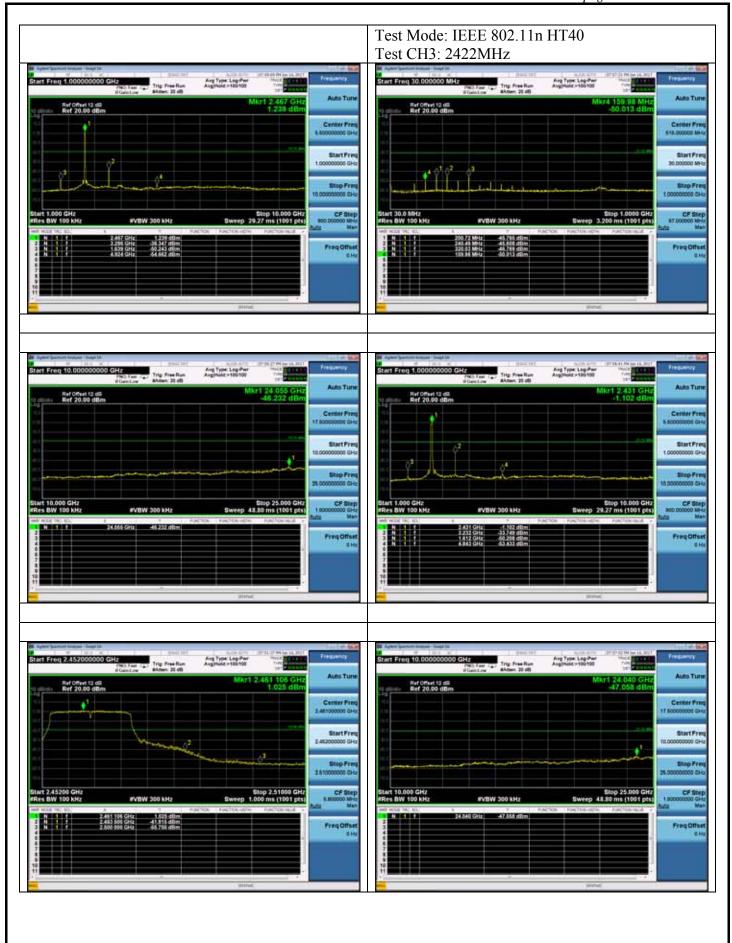
FCC ID: 2AK8LWF100

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# AUDIX Technology (Shenzhen) Co., Ltd.

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FCC ID: 2AK8LWF100 page 5-8



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### 6. BAND EDGE COMPLIANCE TEST

### 6.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum	Agilent	E4446A	US44300459	Apr.24,16	1 Year
2.	Amp	HP	8449B	3008A02495	Apr.24,16	1 Year
3.	Horn Antenna	ETC	MCTD 1209	DRH15F03007	Apr.11,16	1 Year
4.	HF Cable	Hubersuhner	Sucoflex104	274094/4	Apr.24,16	1 Year

#### 6.2.Limit

All the lower and upper band-edges emissions appearing within 2310MHz to 2390MHz and 2483.5MHz to 2500MHz restricted frequency bands shall not exceed the limits shown in 15.209 all the other emissions outside operation frequency band 2400MHz to 2483.5MHz shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits.

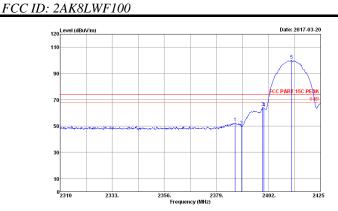
#### 6.3. Test Produce

- 1. The EUT is placed on a turntable, which is 1.5m above the ground plane and worked at highest radiated power.
- 2. The turntable was rotated for 360 degrees to determine the position of maximum emission level.
- 3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emission.
- 4. Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of the emission:
- (a) PEAK: RBW=1MHz; VBW=3MHz; Sweep=AUTO
- (b) AVERAGE: RBW=1MHz; VBW=10Hz; Sweep=AUTO

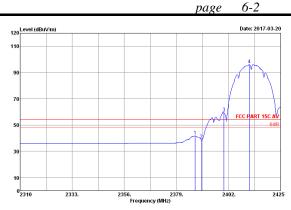
#### 6.4. Test Results

Pass (The testing data was attached in the next pages.)

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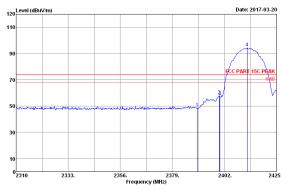
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp Factor
2. The emission levels that are 20dB below the official
limit are not reported.



Site no. : 3m Chamber Data no.
Dis. / Ant. : 3m 2016 3115 (4580) Ant. pol
Each For Parr 15C AW PreEach Inc. 23.264/56% Engineer : LeoEUY ... WF100
Power rating : DC 12V From Adapter Input 120V/60Hz
Test Mode : IEEE802.11b 2412MHz Tx Mode Data no. : 3
(4580) Ant. pol. : VERTICAL
Pre : 101.2kPa
Engineer : Leo-Li

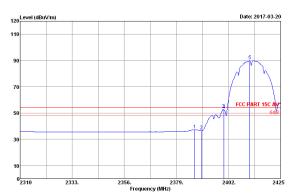
No.	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2387.28	28. 23	8.33	41.57	36.39	41.74	54.00	12.26	Average
2	2390.00	28. 23	8.33	38.44	36.39	38.61	54.00	15.39	Average
3	2400.00	28. 24	8.34	59.13	36.39	59.32	54.00	-5.32	Average
4	2411.20	28. 25	8.35	95.90	36.39	96.11	54.00	-42.11	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp Factor
2. The emission levels that are 20dB below the official
limit are not reported.



Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor

The emission levels that are 20dB below the official limit are not reported.

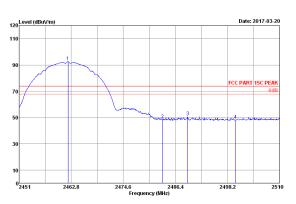


| Site no. | : 3m Chamber | Data no. | : 8m Chamber | Site no. | | : 3m 2016 3115 (4580) | Art. | pol. | : HORIZONTAL Limit | : FCC PART 19C AV | Fre | : 101.2 Pa | Env. | / Ins. | : 23.2 eV/58% | Engineer : Leo-Li | : 102.2 Pa | Env. | | : 102.2 Pa | Env. | | : 102.2 Pa | Env. | : 102.2 Pa | : 1

No.	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2387.05	28.23	8.32	37.07	36.39	37.23	54.00	16.77	Average
2	2390.00	28.23	8.33	36.23	36.39	36.40	54.00	17.60	Average
3	2399.93	28.24	8.34	52.56	36.39	52.75	54.00	1.25	Average
4	2400.00	28.24	8.34	52.21	36.39	52.40	54.00	1.60	Average
6	2411 43	28 25	9 35	90 60	36 30	20 00	64 00	-35 00	Arrevege



FCC ID: 2AK8LWF100 6-3 page



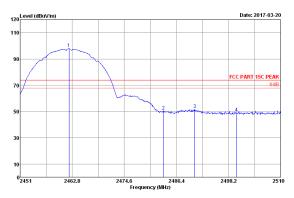
No.	Freq.	Factor (dB/m)	Loss (dB)	Reading (dBuV)	factor (dB)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2462.09	28. 28	8.40	92.21	36.38	92.51	74.00	-18.51	Peak
2	2483.50	28. 29	8.42	47.92	36.38	48.25	74.00	25.75	Peak
3	2489.17	28. 29	8.43	50.30	36.38	50.64	74.00	23.36	Peak
4	2500.00	28. 30	8.44	47.72	36.38	48.08	74.00	25.92	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp Factor
2. The emission levels that are 20dB below the official
limit are not reported.



No.	Freq.	Factor (dB/m)	Loss (dB)	Reading (dBuV)	factor (dB)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2461.33	28. 28	8.40	88.39	36.38	88. 69	54.00	-34.69	Average
2	2483.50	28. 29	8.42	36.28	36.38	36. 61	54.00	17.39	Average
3	2490.83	28. 29	8.43	37.28	36.38	37. 62	54.00	16.38	Average
4	2500.00	28. 30	8.44	35.63	36.38	35. 99	54.00	18.01	Average

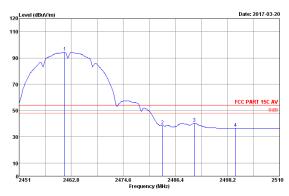
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp Factor
2. The emission levels that are 20dB below the official
limit are not reported.



| Site no. | 1 Sa Chamber | Dis. / Ant. | 23 Ant. | 2016 3115(4580) | Data no. | 23 Ant. | 2016 3115(4580) | Ant. pol. | VERTICAL Limit | Inc. | ECC PART 156 PERK | Pre e - 101.2kPa | Env. / Ins. | 23.2xC/55% | Engineer | Lec-Li | 2016 2016 2016 | Engineer | Engin

No.	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2462.09 2483.50	28.28 28.29	8.40 8.42	97.67 49.83	36.38 36.38	97.97 50.16	74.00 74.00	-23.97 23.84	Peak Peak
3	2490.53	28.29	8.43	51.17	36.38	51.51	74.00	22.49	Peak
3									

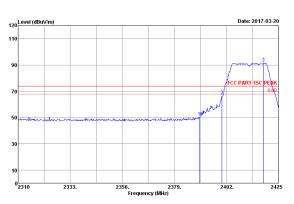
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp Factor
2. The emission levels that are 20dB below the official
limit are not reported.



No.	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2461.33	28. 28	8.40	94. 24	36.38	94.54	54.00	-40.54	Average
2	2483.50	28. 29	8.42	38. 02	36.38	38.35	54.00	15.65	Average
3	2490.71	28. 29	8.43	39. 88	36.38	40.22	54.00	13.78	Average
4	2500.00	28. 30	8.44	36. 04	36.38	36.40	54.00	17.60	Average

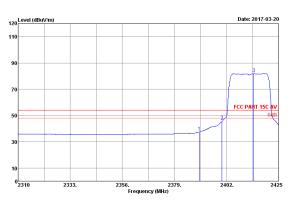


FCC ID: 2AK8LWF100 page 6-4



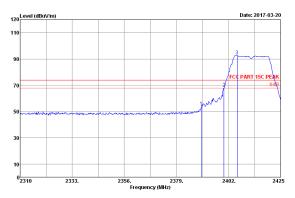
| No. Freq. | Ant. Cable | Cable | Preq. | Factor Lose | Factor Lose | Cable |

Remarks: 1. Emission Level= Anterna Factor + Cable Loss + Reading
-Amp Factor
2. The emission levels that are 20dB below the official
limit are not reported.



No.	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.00	28.23	8.33	37.30	36.39	37.47	54.00	16.53	Average
2	2400.00	28.24	8.34	45.42	36.39	45.61	54.00	8.39	Average
3	2414.08	28.25	8.35	81.67	36.39	81.88	54.00	-27.88	Average

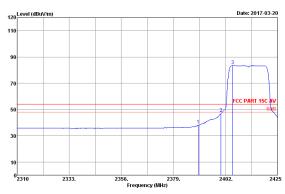
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp Factor
2. The emission levels that are 20dB below the official
limit are not reported.



| Site no. | : 3m Chamber | Dis. / Ant. | : 3m 2016 3115(4580) | Data no. | : 33 | Dis. / Ant. | : 7cC PART 15C FEAR | Pre | : 101.2kPa | Engineer | : Leo-Li | : 23.2kC/55% | Engineer | : Leo-Li | : 101.2kPa | Engineer | : Leo-Li | : 101.2kPa | Engineer | : Leo-Li | : 101.2kPa | : 101.2kPa

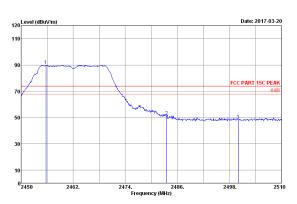
| No. | Freq. | Fact. | Cable | Cable

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp Factor
2. The emission levels that are 20dB below the official
limit are not reported.



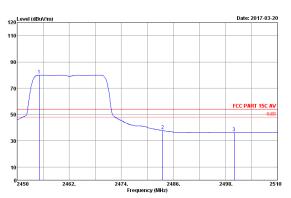


FCC ID: 2AK8LWF100 page 6-3



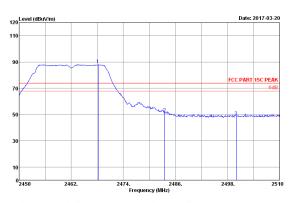
No.	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2455.70	28. 27	8.39	89.45	36.38	89.73	74.00	-15.73	Peak
2	2483.50	28. 29	8.42	50.48	36.38	50.81	74.00	23.19	Peak
3	2500.00	28. 30	8.44	47.68	36.38	48.04	74.00	25.96	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor 2. The emission levels that are 20dB below the official limit are not reported.



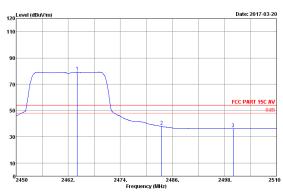
No.	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits Margin (dBuV/m) (dB)	Remark
1	2455.10	28.27	8.39	79.78	36.38	80.06	54.00 -26.06	Average
2	2483.50	28.29	8.42	37.49	36.38	37.82	54.00 16.18	Average
3	2500.00	28.30	8.44	35.81	36.38	36.17	54.00 17.83	Average

Remarks: 1. Emission Level= Artenna Factor + Cable Loss + Reading -Amp Factor 2. The emission levels that are 20dB below the official limit are not reported.



No.	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2468.18	28.28	8.41	87.62	36.38	87.93		-13.93	Peak
2	2483.50	28. 29	8.42 8.44	50.69 47.97	36.38 36.38	51.02 48.33	74.00 74.00	22.98 25.67	Peak Peak

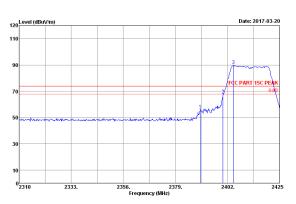
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp Factor
2. The emission levels that are 20dB below the official
limit are not reported.



No.	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 2 3	2464.10 2483.50 2500.00	28. 28 28. 29 28. 30	8.40 8.42 8.44	78.91 37.59 35.80	36.38 36.38 36.38	79. 21 37. 92 36. 16	54.00 54.00 54.00	-25.21 16.08	Peak Peak Peak

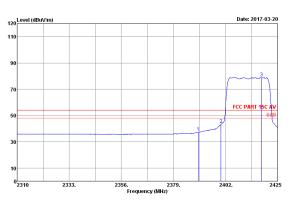


FCC ID: 2AK8LWF100 page



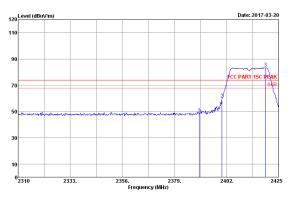
No.	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.00	28. 23	8.33	55. 61	36.39	55.78	74.00	18.22	Peak
2	2400.00	28. 24	8.34	66. 87	36.39	67.06	74.00	6.94	Peak
3	2404.53	28. 24	8.34	89. 40	36.39	89.59	74.00	-15.59	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp Factor
2. The emission levels that are 20dB below the official
limit are not reported.



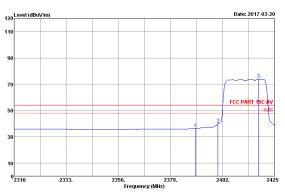
No.	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.00	28.23	8.33	37.03	36.39	37. 20	54.00	16.80	Average
2	2400.00	28.24	8.34	43.08	36.39	43. 27	54.00	10.73	Average
3	2417.87	28.25	8.36	78.60	36.38	78. 83	54.00	-24.83	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp Factor
2. The emission levels that are 20dB below the official
limit are not reported.



No. Freq. Factor Loss Reading factor Level Limits Margin Remark (MHz) (dD/m) (dB) (dD-W) (dB) (dD-W) (dB) (dD-W/m) (dD-W/m) (dB) 1 2390.00 28.23 8.33 48.36 36.39 48.53 74.00 25.47 Peak 2 2400.00 28.24 8.34 59.20 36.39 59.39 74.00 14.61 Peak 3 2419.25 28.25 8.36 83.11 36.38 83.34 74.00 -9.34 Peak

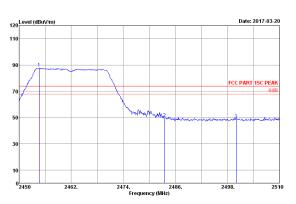
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp Factor
2. The emission levels that are 20dB below the official
limit are not reported.



No. Freq. Factor Loss Reading factor Level Limits Margin Remark (MHz) (dD/n) (dD) (dD) (dD) (dD) (dD) (dD) (dD) (dD) (dD)1 2390.00 28.23 8.33 36.13 36.39 36.30 54.00 17.70 Average 2 2400.00 28.24 8.34 39.56 36.39 39.75 54.00 14.25 Average 3 2417.87 28.25 8.36 73.64 36.38 73.87 54.00 -19.87 Average



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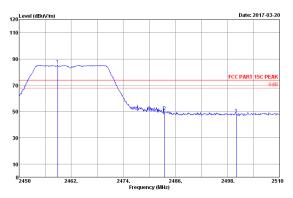


Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp Factor
2. The emission levels that are 20dB below the official
limit are not reported.

2017-03-20
110
90
FCC PART 15C AV
50
2
30
10
0
2450
2462
2474, 2486. 2498. 2510

No.	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits Margin (dBuV/m) (dB)	Remark
1	2456.30	28.27	8.40	77.39	36.38	77.68	54.00 -23.68	Average
2	2483.50	28.29	8.42	36.71	36.38	37.04	54.00 16.96	Average
3	2500.00	28.30	8.44	35.77	36.38	36.13	54.00 17.87	Average

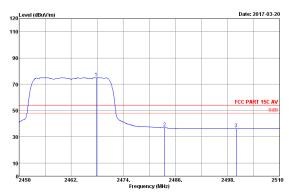
Remarks: 1. Emission Lewel= Antenna Factor + Cable Loss + Reading
-Amp Factor
2. The emission levels that are 20dB below the official
limit are not reported.



Site no. : 3m Chamber Data no. : 77
Dis. / Ant. : 3m 2016 3115 (4580) Ant. pol. : VERTICAL
Limit Pol. : VERTIC

No.	Freq.	Factor (dB/m)	Loss (dB)	Reading (dBuV)	factor (dB)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2458.88	28. 28	8.40	84.99	36.38	85. 29	74.00 -	-11.29	Peak
2	2483.50	28. 29	8.42	49.46	36.38	49. 79	74.00	24.21	Peak
3	2500.00	28. 30	8.44	47.60	36.38	47. 96	74.00	26.04	Peak

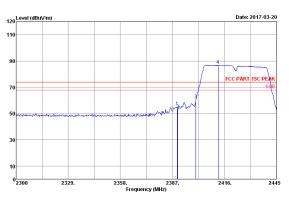
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp Factor
2. The emission levels that are 20dB below the official
limit are not reported.



No.	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2467.82	28. 28	8.41	74.67	36.38	74. 98	54.00	-20.98	Average
2	2483.50	28. 29	8.42	36.44	36.38	36. 77	54.00	17.23	Average
3	2500.00	28. 30	8.44	35.76	36.38	36. 12	54.00	17.88	Average

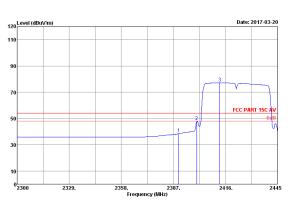


FCC ID: 2AK8LWF100 6-8 page



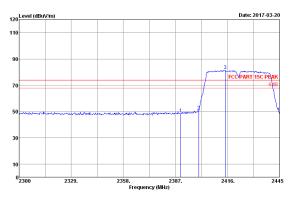
No. Freq. Factor Loss Reading factor Level Limits Margin Remark (MHz) (dM/m) (dM/m) (dm) (dm) (dm/m) (dm) (dm)

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.



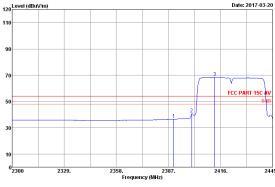
No.	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.00	28.23	8.33	38.18	36.39	38.35	54.00	15.65	Average
2	2400.00	28.24	8.34	47.61	36.39	47.80	54.00	6.20	Average
3	2412.81	28.25	8.35	77.02	36.39	77.23	54.00	-23.23	Average

Remarks: 1. Emission Level= Anterna Factor + Cable Loss + Reading
-Amp Factor
2. The emission levels that are 20dB below the official
limit are not reported.



No. Freq. Factor Loss Reading factor Level Limits Margin Remark (MHz) (dD/m) (dB) (dBuV) (dB) (dBuV/m) (dBuV/m) (dBuV/m) (dBuV/m) (dBuV/m) (dBuV/m) 1 2390.00 28.23 8.33 48.24 36.39 48.41 74.00 25.59 Peak 2 2400.00 28.24 8.34 50.14 36.39 50.33 74.00 23.67 Peak 3 2414.84 28.25 8.35 81.08 36.39 81.29 74.00 -7.29 Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp Factor
2. The emission levels that are 20dB below the official
limit are not reported.

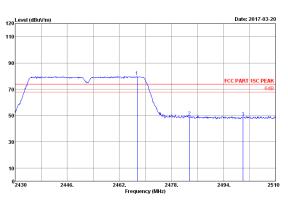


Data no. : 84
(4580) Ant. pol. : WERTICAL
Pre : 101.2kPa
Engineer : Leo-Li

No.	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 2 3	2390.00	28. 23	8.33	36.33	36.39	36.50	54.00	17.50	Peak
	2400.00	28. 24	8.34	40.32	36.39	40.51	54.00	13.49	Peak
	2412.81	28. 25	8.35	68.26	36.39	68.47	54.00	-14.47	Peak

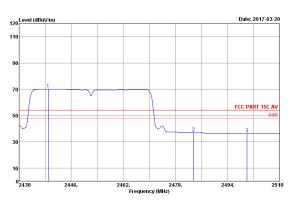


FCC ID: 2AK8LWF100 page 6-5



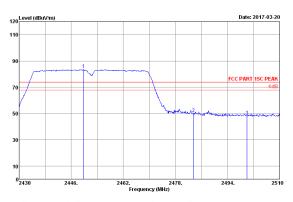
No.	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2467.44	28. 28	8.41	79.51	36.38	79. 82	74.00	-5.82	Peak
2	2483.50	28. 29	8.42	48.64	36.38	48. 97	74.00	25.03	Peak
3	2500.00	28. 30	8.44	47.89	36.38	48. 25	74.00	25.75	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor
2. The emission levels that are 20dB below the official limit are not reported.



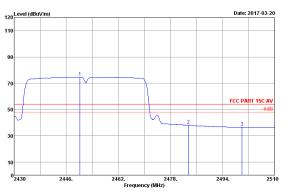
No.	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2438.96	28. 26	8.38	69.95	36.38	70. 21	54.00 -	-16.21	Average
2	2483.50	28. 29	8.42	36.60	36.38	36. 93	54.00	17.07	Average
3	2500.00	28. 30	8.44	35.77	36.38	36. 13	54.00	17.87	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor 2. The emission levels that are 20dB below the official limit are not reported.



No.	Freq.	Factor (dB/m)	Loss (dB)	Reading (dBuV)	factor (dB)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2449.84	28.27	8.39	83.35	36.38	83.63	74.00	-9.63	Peak
2	2483.50	28.29	8.42	49.59	36.38	49.92	74.00	24.08	Peak
3	2500.00	28.30	8.44	47.50	36.38	47.86	74.00	26.14	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
-Amp Factor
2. The emission levels that are 20dB below the official
limit are not reported.



No.	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 2 3	2450.24	28. 27	8.39	74.37	36.38	74.65	54.00	-20.65	Average
	2483.50	28. 29	8.42	37.76	36.38	38.09	54.00	15.91	Average
	2500.00	28. 30	8.44	35.98	36.38	36.34	54.00	17.66	Average

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# 7. 6dB Bandwidth Test

## 7.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum	Agilent	N9030A	MY51380221	Oct.15,16	1Year
2.	Attenuator (20dB)	Agilent	8491B	MY39262165	Apr.23,16	1 Year
3.	RF Cable	Marvelous Microwave Inc	SFL402105FLEX	NO.1	Oct.15,16	1 Year

### 7.2.Limit

For direct sequence systems, the minimum 6dB bandwidth shall be at least 500kHz

### 7.3.Test Procedure

The transmitter output was connected to a spectrum analyzer, The bandwidth of the fundamental frequency was measured by spectrum analyzer with 100kHz RBW and 300kHz VBW. The 6dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6dB.

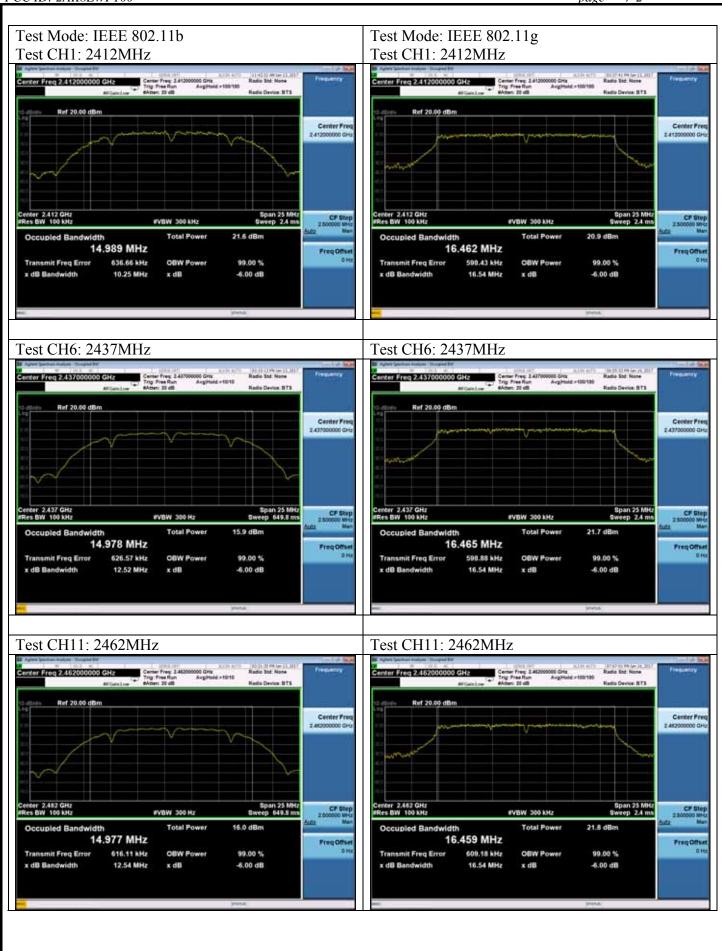
### 7.4. Test Results

EUT: Wireless Video Doorbell		
M/N:WF100		
Test date: 2017-01-13	Pressure: 102.3±1.0 kpa	Humidity: 50.2±3.0%
Tested by: Allan-He	Test site: RF site	Temperature:23.1±0.6

Test Mode	СН	6dB bandwidth ( MHz )	Limit (KHz)
	CH1	10.25	500
11b	CH6	12.52	500
	CH11	12.54	500
	CH1	16.54	500
11g	CH6	16.54	500
	CH11	16.54	500
1.1	CH1	17.74	500
11n HT20	CH6	17.73	500
П120	CH11	17.73	500
1.1	СНЗ	36.43	500
11n HT40	СН6	36.44	500
П140	СН9	36.44	500
Conclusion: PA	ASS		



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FCC ID: 2AK8LWF100 page 7-3





#### 8. OUTPUT POWER TEST

### 8.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum	Agilent	N9030A	MY51380221	Oct.15,16	1Year
2.	Power meter	Anritsu	ML2487A	6K00002472	Apr.23,16	1Year
3.	Power sensor	Anritsu	MA2491A	0033005	Apr.23,16	1Year
4.	Attenuator (20dB)	Agilent	8491B	MY39262165	Apr.23,16	1 Year
5.	RF Cable	Marvelous Microwave Inc	SFL402105FLEX	NO.1	Oct.15,16	1 Year

## 8.2.Limit (FCC Part 15C 15.247 b(3))

For systems using digital modulation in the 2400—2483.5MHz, The Peak output Power shall not exceed 1W(30dBm), As an alternative to a peak power measurement, compliance with the one Watt limit can be based on a measurement of the maximum conducted output power. Maximum Conducted Output Power is defined as the total transmit power delivered to all antennas and antenna elements averaged across all symbols in the signaling alphabet when the transmitter is operating at its maximum power control level.

#### 8.3.Test Procedure

- 1, Connected the EUT's antenna port to measure device by 26dB attenuator.
- 2, For IEEE 802.11b/g and IEEE802.11n HT20 modes, use a power meter which bandwidth is 20MHz, above the bandwidth of signals, to measure out output power in each mode.
- 3, For IEEE802.11n HT40 mode, since the signal bandwidth is nearly 40MHz, which is above 20MHz bandwidth of power sensor of ML2491A. use the test method descried in KDB558074 clause 9.2.2.
  - 1) Set the RBW=1MHz and VBW =3MHz
  - 2) Set the span at least 1.5 times the OBW
  - 3) Detector = RMS
  - 4) Sweep time = auto couple
  - 5) allow trace to fully stabilize
  - 6) use the spectrum amalyser's integrated band power measurement function with band limits set equal to the EBW band edges.

Note: The cable loss and attenuator loss were offset into measure device as an amplitude offset.

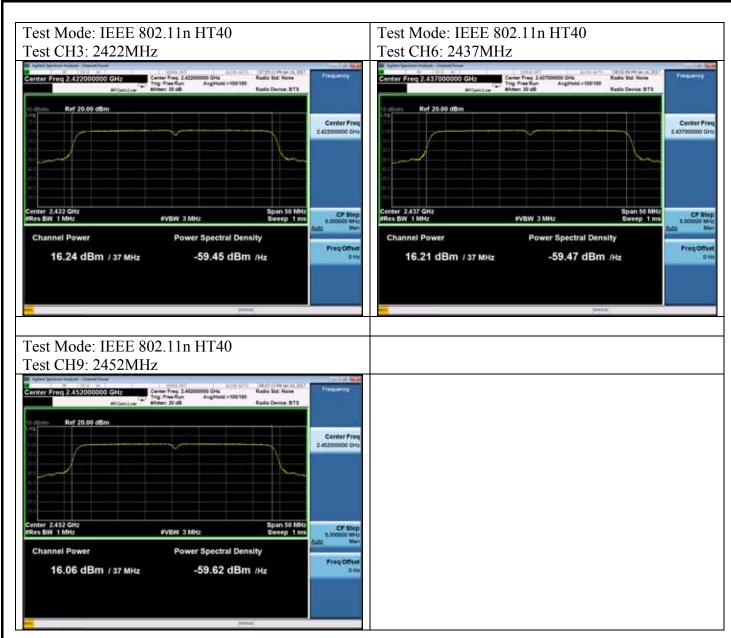


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# 8.4.Test Results

EUT: Wirele	ess Video Doorbell				
M/N:WF100	)				
Test date: 2017-01-16		Pressur	re: 102.3±1.0 kpa	Humidity: 50.	2±3.0%
Tested by: A	Allan-He	Test sit	e: RF site	Temperature:2	23.1±0.6
Test Mode	СН		Output Po ( dBm		Limit (dBm)
	CH1		15.50		30
11b	CH6		15.25		30
	CH11	15.35			30
	CH1		15.06		30
11g	СН6		16.40		30
	CH11		16.03		30
1.1	CH1		15.57		30
11n HT20	CH6		15.86		30
11120	CH11		15.67		30
11	CH3		16.24		30
11n HT40	CH6		16.21		30
П140	СН9		16.06		30
Conclusion:	PASS				

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## 9. POWER SPECTRAL DENSITY TEST

### 9.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum	Agilent	N9030A	MY51380221	Oct.15,16	1Year
2.	Attenuator (20dB)	Agilent	8491B	MY39262165	Apr.23,16	1 Year
3.	RF Cable	Marvelous Microwave Inc	SFL402105FLEX	NO.1	Oct.15,16	1 Year

#### 9.2.Limit

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8dBm in any 3kHz band during any time interval of continuous transmission.

#### 9.3.Test Procedure

- 1. Connected the EUT's antenna port to spectrum analyzer device by 20dB attenuator.
- 2. Set span to 1.5 times the DTS Bandwidth.
- 3. Set the RBW=3KHz, VBW=10KHz.
- 4. Detector=peak, Sweep time=Auto, Trace mode=max Hold
- 5. All the trace to fully stabilize.
- 6. Use the peak marker function to determine the maximum amplitude level with in the RBW.

Note: The cable loss and attenuator loss were offset into measure device as an amplitude



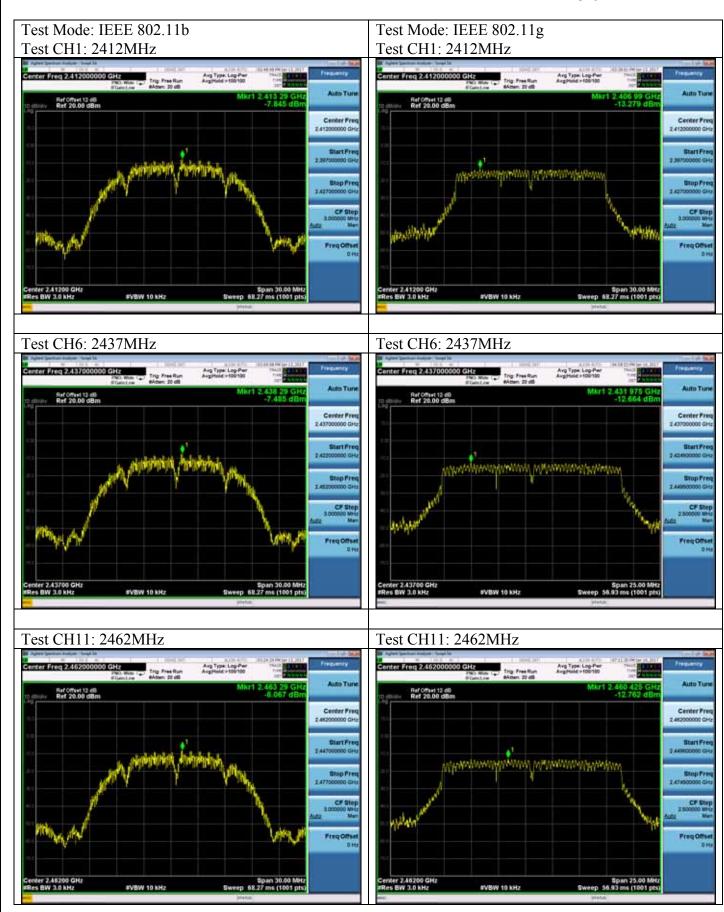
ECC ID: 2AK8LWF100 page 9-2

# 9.4.Test Results

EUT: Wirele	ess Video Doorbell				
M/N:WF100					
Test date: 2017-01-13 Pressu		Pressur	e: 102.3±1.0 kpa	Humidity: 50.	2±3.0%
Tested by: A	llan-He	Test sit	e: RF site	Temperature:2	23.1±0.6
Test Mode CH			Power Density (dBm/3KHz)		Limit (dBm/3KHz)
CH1		-7.845			8
11b	CH6		-7.485		8
	CH11		-8.067		8
	CH1		-13.279		8
11g	CH6		-12.664		8
	CH11		-12.762		8
1.1	CH1		-11.554		8
11n	CH6		-11.458		8
HT20	CH11	-11.342		2	8
1.1	CH3		-13.250		8
11n	CH6		-12.537		8
HT40	СН9		-12.990		8
Conclusion:	PASS				

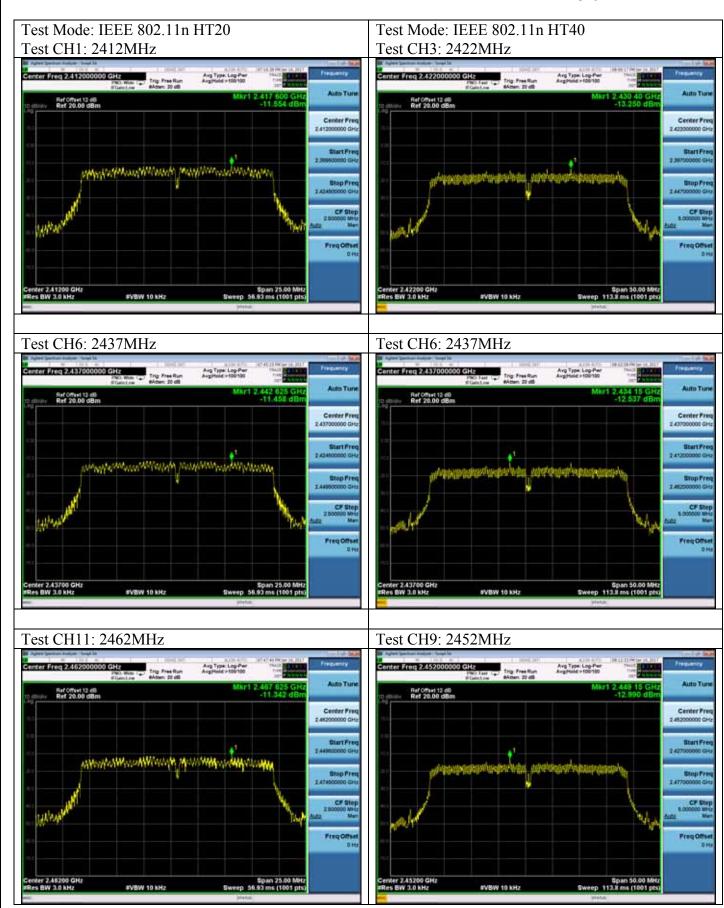


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# 10. MPE ESTIMATION

# 10.1.Limit for General Population/ Uncontrolled Exposures

Frequency	Power density (mW/cm2)	Averaging time(minutes)	
300MHz1.5GHz	F/1500	30	
1.5GHz100GHz	1.0	30	

Frequency	Power density (mW/cm2)	Averaging time(minutes)
2412	1	30
2437	1	30
2462	1	30

Note: F= Frequency in MHz

# 10.2.Estimation Result

EUT: Wireless Video Doorbell			
M/N:WF100			
Test date: 2017-04-05	Pressure: 102.3±1.0 kpa	Humidity: 51.5±3.0%	
Tested by: Allan-He	Test site: RF site	Temperature:22.1±0.6	

Test Mode	Frequency (MHz)	Peak Output Power (dBm)	Peak Output Power (mW)	Antenna Gain (dBi)	Antenna Gain (Linear)	МРЕ
	2412	15.50	35.48	2	1.58	0.0112
11b	2437	15.25	33.50	2	1.58	0.0106
	2462	15.35	34.28	2	1.58	0.0108
	2412	15.06	32.06	2	1.58	0.0101
11g	2437	16.40	43.65	2	1.58	0.0138
	2462	16.03	40.09	2	1.58	0.0126
11	2412	15.57	36.06	2	1.58	0.0114
11n HT20	2437	15.86	38.55	2	1.58	0.0122
11120	2462	15.67	36.90	2	1.58	0.0116
11	2422	16.24	42.07	2	1.58	0.0133
11n HT40	2437	16.21	41.78	2	1.58	0.0132
11140	2452	16.06	40.36	2	1.58	0.0127

$$MPE = \frac{PG}{4\pi R^2} \quad (R=20 \text{ cm})$$



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## 11. ANTENNA REQUIREMENT

### 11.1. Standard Applicable

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

#### 11.2. Antenna Connected Construction

The antennas used for this product are Dipole antenna that no antenna other than that furnished by the responsible party shall be used with the device, the maximum peak gain of the transmit antenna is 2dBi.



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12.DEVIATION TO TEST SPECIFICATIONS	
[ NONE]	