

**FCC TEST REPORT** 

Test report
On Behalf of
Shenzhen Zidoo Technology Co.,Ltd
For
SMART TV BOX
Model No.: X1 II

FCC ID: 2AGN7-X1

Prepared for: Shenzhen Zidoo Technology Co.,Ltd

Central Avenue building A m, Unit 12D Xixiang Ave, BaoAn District, Shenzhen.

Prepared By: WST Certification & Testing (HK) Limited

12/F., San Toi Building,137-139 Connaught Road Central,Hong Kong

Date of Test: Mar. 28, 2016 ~ April. 06, 2016

Date of Report: April. 06, 2016

Report Number: WST160303156-E





# **TEST RESULT CERTIFICATION**

Applicant's name	Shenzhen Zidoo	Technology Co.,Ltd	
Address	Central Avenue b	ouilding A m, Unit 12D Xixiang Ave,BaoAn	District,Shenzhen.
Manufacture's Name	Shenzhen Zidoo	Technology Co.,Ltd	
Address	Central Avenue b	ouilding A m, Unit 12D Xixiang Ave,BaoAn	District,Shenzhen.
Product description			
Trade Mark:	ZIDOO		
Product name	SMART TV BOX		
Model and/or type reference	X1 II		
Standards	FCC Rules and R ANSI C63.10: 201	egulations Part 15 Subpart C Section 15.24	19
WST Certification & Tematerial. WST Certification	esting (HK) Limite ation & Testing (Hesulting from the r	whole or in part for non-commercial purposed is acknowledged as copyright owner and the second that the second is acknowledged as copyright owner and the second in the second control of the second c	and source of the d will not assume
Date (s) of performance	of tests Mar. 2	8, 2016 ~ April. 06, 2016	
Date of Issue	April.	06, 2016	
Test Result	Pass		
Test	ting Engineer	: Zin Xie (Eric Xie)	
Tecl	hnical Manager	: Dora Qin (Dora Qin)	
Auth	norized Signatory	:	
		(Kait Chen)	

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8.1 Radiated Emission

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## 1. TEST SUMMARY

## 1.1 TEST PROCEDURES AND RESULTS

DESCRIPTION OF TEST	RESULT
CONDUCTED EMISSIONS TEST	COMPLIANT
RADIATED EMISSION TEST	COMPLIANT
BAND EDGE	COMPLIANT
OCCUPIED BANDWIDTH MEASUREMENT	COMPLIANT
ANTENNA REQUIREMENT	COMPLIANT

## 1.2 TEST FACILITY

Test Firm : Shenzhen WST Testing Technology Co., Ltd.

Certificated by FCC, Registration No.: 939433

Address : 1F,No.9 Building,TGK Science & Technology Park,Yangtian Rd.,

NO.72 Bao'an Dist., Shenzhen, Guangdong, China. 518101

Tel : (86)755-33916437 Fax : (86)755-27822175

## 1.3 MEASUREMENT UNCERTAINTY

Measurement Uncertainty

Conducted Emission Expanded Uncertainty = 2.23dB, k=2 Radiated emission expanded uncertainty(9kHz-30MHz) = 3.08dB, k=2 Radiated emission expanded uncertainty(30MHz-1000MHz) = 4.42dB, k=2 Radiated emission expanded uncertainty(Above 1GHz) = 4.06dB, k=2



# 2. GENERAL INFORMATION

# 2.1 GENERAL DESCRIPTION OF EUT

Equipment	SMART TV BOX
Model Name	X1 II
Serial No	N/A
Model Difference	N/A
FCC ID	2AGN7-X1
Antenna Type	Internal Antenna
BT Operation frequency	2402-2480MHz
Number of Channels	40CH
Modulation Type	GFSK
Power Source	DC 5V from adapter
Power Rating	/
Adaptor Model	KA23-0502000DES
Adapter Model	Input: AC 100-240V, 0.35A, Output: DC5V, 2A



# 2.1.1 Carrier Frequency of Channels

Channel	Frequeeny (MHz)	Channel	Frequeeny (MHz)	Channel	Frequeeny (MHz)	Channe 1	Frequeeny (MHz)
0	2402	10	2422	20	2442	30	2462
1	2404	11	2424	21	2444	31	2464
2	2406	12	2426	22	2446	32	2466
3	2408	13	2428	23	2448	33	2468
4	2410	14	2430	24	2450	34	2470
5	2412	15	2432	25	2452	35	2472
6	2414	16	2434	26	2454	36	2474
7	2416	17	2436	27	2456	37	2476
8	2418	18	2438	28	2458	38	2478
9	2420	19	2440	29	2460	39	2480

# Operation of EUT during testing

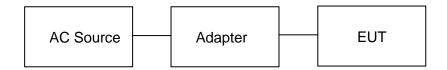
**Operating Mode** 

The mode is used: Transmitting mode

Low Channel: 2402MHz Middle Channel: 2440MHz High Channel: 2480MHz

# 2.2 DESCRIPTION OF TEST SETUP

Operation of EUT during testing





# 2.3 MEASUREMENT INSTRUMENTS LIST

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	EMI Receiver	Rohde & Schwarz	ESCI	100627	May 19, 2015	1 Year
2.	LISN	SchwarzBeck	NSLK 8126	8126377	May 19, 2015	1 Year
3.	RF Switching Unit	Compliance Direction	RSU-M2	38303	May 19, 2015	1 Year
4.	EMI Test Software ES-K1	Rohde & Schwarz	N/A	N/A	N/A	N/A
5.	EMI Test Receiver	Rohde & Schwarz	ESCI	100627	May 19, 2015	1 Year
6.	Trilog Broadband Antenna	Schwarzbeck	VULB9163	VULB 9163-289	May 17, 2015	1 Year
7.	Pre-amplifier	Compliance Direction	PAP-0203	22008	May 19, 2015	1 Year
8.	EMI Test Software EZ-EMC	SHURPLE	N/A	N/A	N/A	N/A
9.	EMI Receiver	Rohde & Schwarz	ESCI	100627	May 19, 2015	1 Year
10.	LISN	SchwarzBeck	NSLK 8126	8126377	May 19, 2015	1 Year
11.	RF Switching Unit	Compliance Direction	RSU-M2	38303	May 19, 2015	1 Year
12.	EMI Test Software ES-K1	Rohde & Schwarz	N/A	N/A	N/A	N/A
13.	EMI Receiver	Rohde & Schwarz	ESCI	100627	May 19, 2015	1 Year
14.	EMI Receiver	Rohde & Schwarz	ESCI	100627	May 19, 2015	1 Year
15.	LISN	SchwarzBeck	NSLK 8126	8126377	May 19, 2015	1 Year
16.	RF Switching Unit	Compliance Direction	RSU-M2	38303	May 19, 2015	1 Year
17.	EMI Test Software ES-K1	Rohde & Schwarz	N/A	N/A	N/A	N/A
18.	Programmable AC Power source	SOPH POWER	PAG-1050	630250	May 26, 2015	1 Year
19.	Harmonic and Flicker Analyzer	LAPLACE	AC2000A	272629	May 26, 2015	1 Year
20.	Harmonic and Flicker Test Software AC 2000A	LAPLACE	N/A	N/A	N/A	N/A
21.	ESD Simulators	KIKUSUI	KES4021	LJ003477	May 25, 2015	1 Year
22.	EFT Generator	EMPEK	EFT-4040B	0430928N	May 19, 2015	1 Year
23.	Shielding Room	ChangZhou ZhongYu	JB88	SEL0166	May 19, 2015	1 Year
24.	Signal Generator 9KHz~2.2GHz	R&S	SML02	SEL0143	May 19, 2015	1 Year
25.	Signal Generator 9KHz~1.1GHz	R&S	SML01	SEL0135	May 19, 2015	1 Year
26.	Power Meter	R&S	NRVS	SEL0144	May 19, 2015	1 Year
27.	RF Level Meter		URV35	SEL0137	May 19, 2015	1 Year
28.	Audio Analyzer	R&S	UPL	SEL0136	May 19, 2015	1 Year
29.	RF-Amplifier 150KHz~150MH z	BONN Elektronik	BSA1515-25	SEL0157	May 19, 2015	1 Year



Stripline Test Cell Erika Fiedler VDE0872 SEL0167 N/A 30. N/A TV Test Transmitter R&S SFM SEL0159 May 17, 2015 1 Year 31. TV Generator PAL R&S SGPF SEL0138 32. May 19, 2015 1 Year TV Generator Ntsc R&S SGMF SEL0140 33. May 19, 2015 1 Year TV Generator R&S **SGSF** SEL0139 34. May 19, 2015 1 Year Secam TV Test Transmitter R&S **SFQ** SEL0142 35. May 19, 2015 1 Year 0.3MHz~3300MHz MPEG2 R&S DVG SEL0141 36. Measurement May 19, 2015 1 Year Generator Spectrum Analyzer R&S **FSP** SEL0177 37. May 19, 2015 1 Year SEL0146 N/A Matching R&S RAM 38. N/A RAM SEL0148 N/A Matching R&S N/A 39. Absorbing Clamp R&S MDS21 SEL0158 May 17, 2015 40. 1 Year N/A Coupling Set Erika Fiedler Rco, Rci, SEL0149 N/A 41. MC, AC, LC Filters N/A SEL0150 42. Erika Fiedler Sr. LBS N/A N/A Matching Network SEL0151 N/A Erika Fiedler MN, T1 43. Fully Anechoic ChangZhou SEL0169 Jun. 10, 2015 44. 854 1 Year Room ZhongYu SEL0068 Signal Generator May 17, 2015 1 Year 45. R&S SML03 RF-Amplifier Amplifier SEL0066 Oct. 24, 2015 46. 250W1000A 1 Year 30M~1GHz Reasearch RF-Amplifier **Amplifier** SEL0065 Oct. 24, 2015 1 Year 47. 60S1G3 0.8~3.0GHz Reasearch Power Meter NRVD SEL0069 May 17, 2015 R&S 1 Year 48. Power Sensor R&S SEL0071 May 17, 2015 1 Year URV5-Z2 49. Power Sensor R&S SEL0072 May 17, 2015 50. URV5-Z2 1 Year Software R&S SEL0082 N/A N/A 51. EMC32-S EMC32 Amplifier SEL0073 N/A Log-periodic 52. AT1080 N/A Antenna Reasearch Amplifier SEL0074 N/A N/A Antenna Tripod 53. TP1000A Reasearch High Gain Horn SEL0075 N/A 54. Amplifier Antenna(0.8-5G AT4002A N/A Reasearch Hz)



## CONDUCTED EMISSIONS TEST

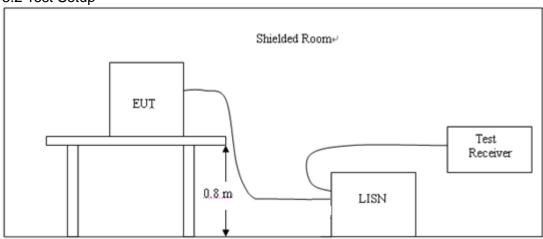
## 3.1 Conducted Power Line Emission Limit

For unintentional device, according to § 15.107(a) Line Conducted Emission Limits is as following

Eraguanav	Maximum RF Line Voltage (dBμV)							
Frequency (MHz)	CLAS	SS A	C	CLASS B				
(11112)	Q.P.	Ave.	Q.P.	Ave.				
0.15 - 0.50	79	66	66-56*	56-46*				
0.50 - 5.00	73	60	56	46				
5.00 - 30.0	73	60	60	50				

\* Decreasing linearly with the logarithm of the frequency
For intentional device, according to §15.207(a) Line Conducted Emission Limit is same as above table.

# 3.2 Test Setup



## 3.3 Test Procedure

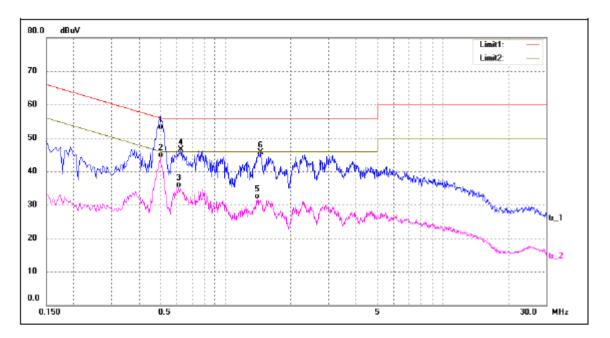
- 1, The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. The EUT is a tabletop system, a wooden table with a height of 0.8 meters is used and is placed on the ground plane as per ANSI C63.10.
- 2, Support equipment, if needed, was placed as per ANSI ANSI C63.10.
- 3, All I/O cables were positioned to simulate typical actual usage as per ANSI C63.10.
- 4, If a EUT received DC power from the USB Port of Notebook PC, the PC's adapter received AC120V/60Hz power through a Line Impedance Stabilization Network (LISN) which supplied power source and was grounded to the ground plane.
- 5, All support equipments received AC power from a second LISN, if any.
- 6, The EUT test program was started. Emissions were measured on each current carrying line of the EUT using a spectrum Analyzer / Receiver connected to the LISN powering the EUT. The LISN has two monitoring points: Line 1 (Hot Side) and Line 2 (Neutral Side). Two scans were taken: one with Line 1 connected to Analyzer / Receiver and Line 2 connected to a 50 ohm load; the second scan had Line 1 connected to a 50 ohm load and Line 2 connected to the Analyzer / Receiver.
- 7, Analyzer / Receiver scanned from 150 KHz to 30MHz for emissions in each of the test modes.

# 3.4 Test Result

**PASS** 



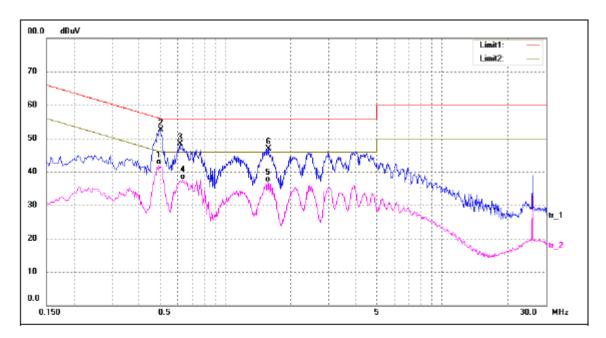




No.	Frequency	Reading	Correct	Result	Limit	Margin	Detector
	(MHz)	(dBuV)	(dB/m)	(dBuV)	(dBuV)	(dB)	
1	0.5020	40.00	12.50	52.50	56.00	-3.50	QP
2*	0.5020	31.66	12.50	44.16	46.00	-1.84	AVG
3	0.6100	22.45	12.61	35.06	46.00	-10.94	AVG
4	0.6260	33.90	12.63	46.53	56.00	-9.47	peak
5	1.4060	18.67	13.00	31.67	46.00	-14.33	AVG
6	1.4500	32.64	13.00	45.64	56.00	-10.36	peak







No.	Frequency	Reading	Correct	Result	Limit	Margin	Detector
	(MHz)	(dBuV)	(dB/m)	(dBuV)	(dBuV)	(dB)	
1	0.4940	29.63	12.50	42.13	46.10	-3.97	AVG
2*	0.5020	40.07	12.50	52.57	56.00	-3.43	peak
3	0.6180	35.63	12.62	48.25	56.00	-7.75	peak
4	0.6340	25.04	12.63	37.67	46.00	-8.33	AVG
5	1.5740	23.92	13.00	36.92	46.00	-9.08	AVG
6	1.5820	33.84	13.00	46.84	56.00	-9.16	peak



**4 RADIATED EMISSION TEST** 

## 4.1 Radiation Limit

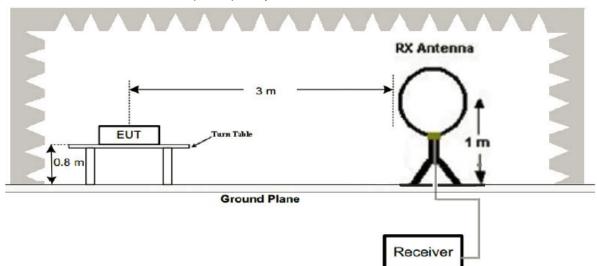
For unintentional device, according to § 15.109(a), except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

Frequency (MHz)	Distance (Meters)	Radiated (dBµV/m)	Radiated (µV/m)
30-88	3	40	100
88-216	3	43.5	150
216-960	3	46	200
Above 960	3	54	500

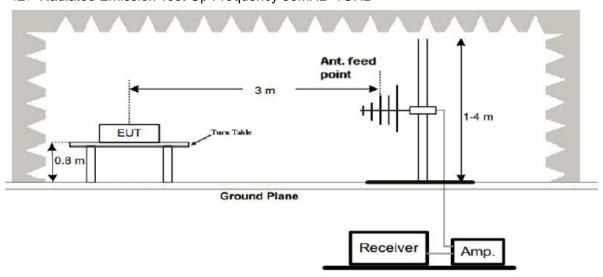
For intentional device, according to § 15.209(a), the general requirement of field strength of radiated emissions from intentional radiators at a distance of 3 meters shall not exceed the above table.

# 4.2 Test Setup

# (1) Radiated Emission Test-Up Frequency Below 30MHz

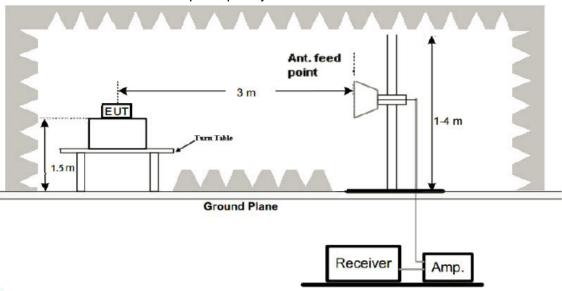


# (2) Radiated Emission Test-Up Frequency 30MHz~1GHz





(3) Radiated Emission Test-Up Frequency Above 1GHz



#### 4.3 Test Procedure

- 1, The EUT is placed on a turntable, which is 0.8m above ground plane below 1GHz and 1.5m above ground plane above 1GHz..
- 2, The turntable shall be 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 emissions
- 4, For the radiated emission test above 1GHz: Place the measurement antenna away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response. The measurement antenna may have to be higher or lower than the EUT, depending on the radiation pattern of the emission and staying aimed at the emission source for receiving the maximum signal. The final measurement antenna elevation shall be that which maximizes the emissions. The measurement antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane.
- 5, Maximum procedure was performed on the six highest emissions to ensure EUT compliance
- 6, And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical
- 7, Repeat above procedures until the measurements for all frequencies are complete.
- 8, Based on the Frequency Generator in the device include 16MHz. The test frequency range from 9KHz to 25GHz per FCC PART 15.33(a)

#### Note:

For battery operated equipment, the equipment tests shall be performed using a new battery.

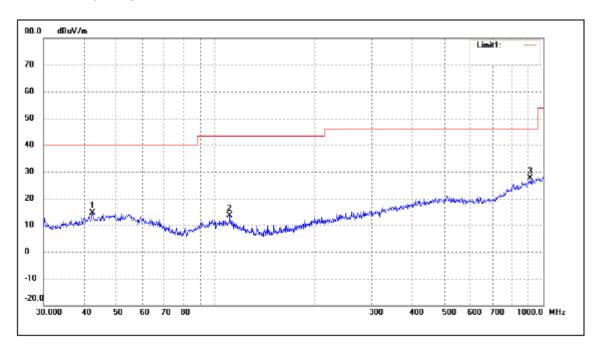
## 4.4 Test Result

### **PASS**

All the test modes completed for test. The worst case of Radiated Emission is CH 2480; the test data of this mode was reported.

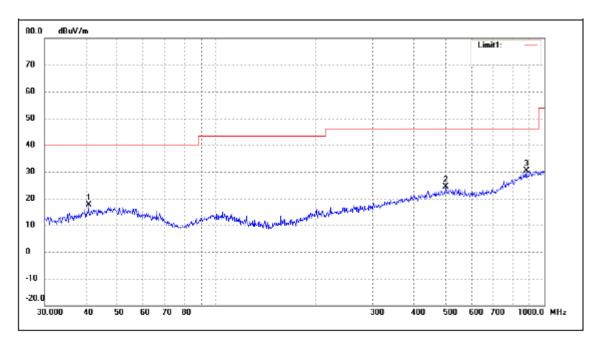


Below 1GHz Test Results: Antenna polarity: H



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	42.3022	22.64	-8.00	14.64	40.00	-25.36	162	100	QP
2	110.9571	23.39	-9.76	13.63	43.50	-29.87	187	100	QP
3	912.8620	22.16	5.53	27.69	46.00	-18.31	203	100	QP

Antenna polarity: V



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	(•)	(cm)	
1	40.8446	25.79	-8.27	17.52	40.00	-22.48	240	100	QP
2	501.1790	25.44	-1.10	24.34	46.00	-21.66	187	100	QP
3	881.4067	25.48	5.01	30.49	46.00	-15.51	220	100	QP

# Remark:

- (1) Measuring frequencies from 9 KHz to the 1 GHz, Radiated emission test from 9KHz to 30MHz was verified, and no any emission was found except system noise floor.
- (2) \* denotes emission frequency which appearing within the Restricted Bands specified in provision of 15.205, then the general radiated emission limits in 15.209 apply.
- (3) The IF bandwidth of EMI Test Receiver between 30MHz to 1GHz was 120KHz, 1 MHz for measuring above 1 GHz, below 30MHz was 10KHz.



# Above 1 GHz Test Results:

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector
(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	H/V	
			Low Channe	el-2402MHz			
2402	84.08	-3.49	80.59	114	-33.47	Н	PK
2402	75.05	-3.49	71.56	94	-22.42	Н	AV
4804	60.81	0.57	61.38	74	-12.59	Н	PK
4804	46.75	0.57	47.32	54	-6.66	Н	AV
7206	40.82	7.18	48.02	74	-25.98	Н	PK
7206	28.80	7.18	35.98	54	-18.02	Н	AV
2402	83.22	-3.49	79.73	114	-34.27	V	PK
2402	78.24	-3.49	74.75	94	-19.25	V	AV
4804	48.39	0.57	48.96	74	-25.04	V	PK
4804	35.12	0.57	35.69	54	-18.31	V	AV
7206	40.12	5.89	46.01	74	-27.99	V	PK
7206	28.10	6.15	34.25	54	-19.75	V	AV

	1		Middle Chan	nel-2440MHz	1		
2440	81.03	-3.43	77.60	114	-33.40	Н	PK
2440	73.23	-3.43	69.80	94	-24.21	Н	AV
4880	57.47	0.66	58.13	74	-15.87	Н	PK
4880	42.89	0.66	43.55	54	-10.45	Н	AV
7320	41.08	3.11	44.19	74	-29.81	Н	PK
7320	28.93	3.33	32.26	54	-21.74	Н	AV
2440	82.48	-3.43	79.05	114	-34.95	V	PK
2440	75.13	-3.43	71.70	94	-22.30	V	AV
4880	49.01	0.66	49.67	74	-24.33	V	PK
4880	36.08	0.66	36.74	54	-17.26	V	AV
7320	41.03	7.18	48.21	74	-25.79	V	PK
7320	28.83	7.18	36.01	54	-17.99	V	AV

Frequency	Reading	Correct	Result	Limit	Margin	Polar	Detector				
(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	H/V					
	High Channel-2480MHz										
2480	84.03	-3.33	80.70	114	-33.33	Н	PK				
2480	75.13	-3.33	71.80	94	-22.23	Н	AV				
4960	53.18	0.75	53.93	74	-20.07	Н	PK				
4960	39.56	0.75	40.31	54	-13.69	Н	AV				
7440	40.49	7.11	47.60	74	-26.40	Н	PK				
7440	28.70	7.18	35.88	54	-18.12	Н	AV				
2480	82.30	-3.33	78.97	114	-35.03	V	PK				
2480	76.15	-3.33	72.82	94	-21.18	V	AV				
4960	46.52	0.75	47.27	74	-26.73	V	PK				
4960	33.70	0.75	34.45	54	-19.55	V	AV				
7440	41.30	7.23	48.53	74	-25.47	V	PK				
7440	28.76	7.18	35.94	54	-18.06	V	AV				

#### Remark:

- (1) Measuring frequencies from 1 GHz to the 25 GHz.
- (2) "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency.
- (3) \* denotes emission frequency which appearing within the Restricted Bands specified in provision of 15.205, then the general radiated emission limits in 15.209 apply.
- (4) Data of measurement within this frequency range shown "--- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (5) The IF bandwidth of EMI Test Receiver between 30MHz to 1GHz was 120KHz, 1 MHz for measuring above 1 GHz, below 30MHz was 10KHz.
- (6) When the test results of Peak Detected below the limits of Average Detected, the Average Detected is not need completed. For example: Top Channel at Fundamental 73.16dBuV/m(PK Value) <93.98(AV Limit), at harmonic 53.20 dBuV/m(PK Value) <54 dBuV/m(AV Limit), the Average Detected not need to completed.



## **5 BAND EDGE**

#### 5.1 Limits

FCC PART 15.249(d) Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in §15.209, whichever is the lesser attenuation.

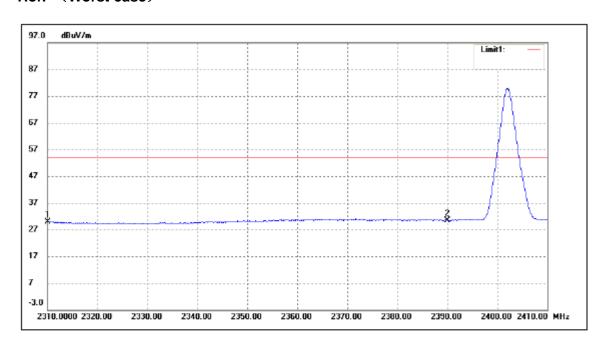
# 5.2 Test Procedure

The band edge compliance of RF radiated emission should be measured by following the guidance in ANSI C63.10 with respect to maximizing the emission by rotating the EUT, measuring the emission while the EUT is situated in three orthogonal planes (if appropriate), adjusting the measurement antenna height and polarization etc. Set RBW to 100KHz and VBM to 300KHz to measure the peak field strength and set RBW to 1MHz and VBW to 10Hz to measure the average radiated field strength. The conducted RF band edge was measured by using a spectrum analyzer. Set span wide enough to capture the highest in-band emission and the emission at the band edge. Set RBW to 100 KHz and VBM to 300 KHz, to measure the conducted peak band edge.

### 5.3 Test Result

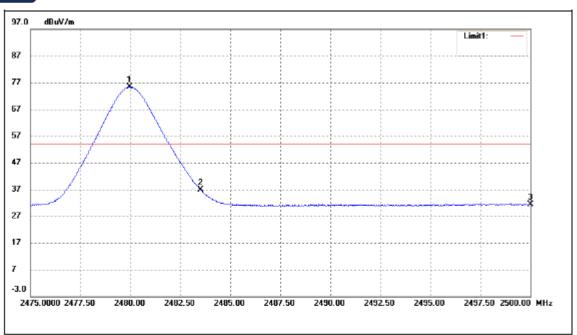
### **PASS**

## Hor. (Worst case)



No.	Frequency	Reading	Correct	Result	Limit	Margin Remark	
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
1	2310.000	34.33	-4.42	29.91	54.00	-24.09	Average Detector
	2310.000	45.19	-4.42	40.77	74.00	-33.23	Peak Detector
2	2390.000	34.20	-3.72	30.48	54.00	-23.52	Average Detector
	2390.000	46.84	-3.72	43.12	74.00	-30.88	Peak Detector

Hor. (Worst case)



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No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
1	2479.950	78.47	-3.04	75.43	1	1	Average Detector
	2480.125	82.82	-3.04	79.78	1	1	Peak Detector
2	2483.500	40.01	-3.01	37.00	54.00	-17.00	Average Detector
	2483.500	48.67	-3.01	45.66	74.00	-28.34	Peak Detector
3	2500.000	34.23	-2.88	31.35	54.00	-22.65	Average Detector
	2500.000	46.50	-2.88	43.62	74.00	-30.38	Peak Detector





6.1 Test Setup

Same as Radiated Emission Measurement

### 6.2 Test Procedure

- 1. The EUT was placed on a turn table which is 1.5m above ground plane.
- 2. Set EUT as normal operation.
- 3. Based on FCC Part15 C Section 15.249(a): RBW= 10KHz. VBW= 30 KHz, Span=1MHz.
- 4. The useful radiated emission from the EUT was detected by the spectrum analyser with peak detector.

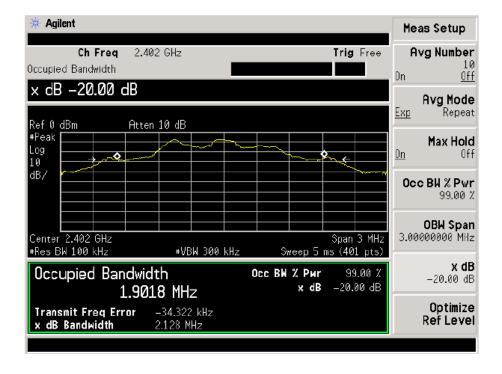
# 6.3 Measurement Equipment Used

Same as Radiated Emission Measurement

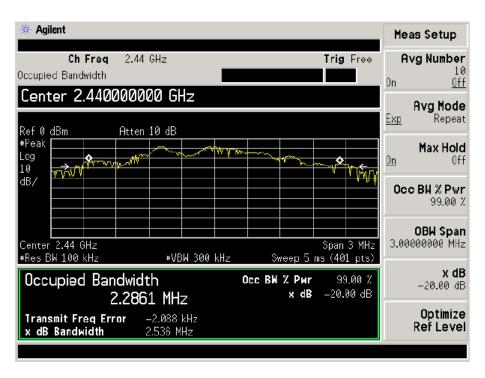
### 6.4 Test Result

### **PASS**

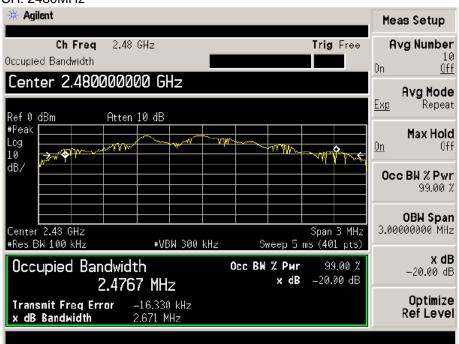
CH: 2402MHz







### CH: 2480MHz





# 7 ANTENNA REQUIREMENT

### 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 15.249, 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.

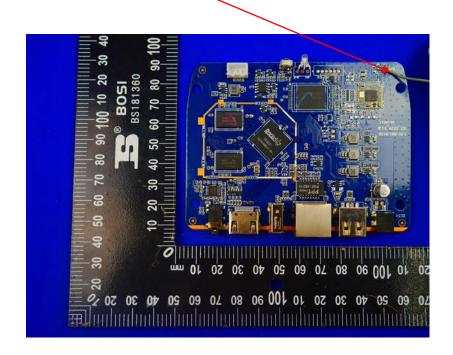
## Refer to statement below for compliance.

The manufacturer may design the unit so that the user can replace a broken antenna, but the use of a standard antenna jack or electrical connector is prohibited. Further, this requirement does not apply to intentional radiators that must be professionally installed.

### **Antenna Connected Construction**

The antenna used in this product is a Internal Antenna, The directional gains of antenna used for transmitting is 0dBi.

## **ANTENNA**





# **8 PHOTOGRAPH OF TEST**

# 8.1 Radiated Emission







# 8.2 Conducted Emission



