







# ISO/IEC17025Accredited Lab.

Report No: FCC 1505170-03 File reference No: 2015-06-30

Applicant: ShenZhen Netxeon Technology Co.,Ltd

Product: TV BOX

Model No: i826, i818, i828

Trademark: N/A

Test Standards: FCC Part 15 Subpart C, Paragraph 15.247

Test result:

It is herewith confirmed and found to comply with the

requirements set up by ANSI C63.10,FCC Part 15 Subpart C, Paragraph 15.247 regulations for the evaluation of

electromagnetic compatibility

Approved By

# Jack Chung

Jack Chung

Manager

Dated: June 30, 2015

Results appearing herein relate only to the sample tested The technical reports is issued errors and omissions exempt and is subject to withdrawal at

# SHENZHEN TIMEWAY TESTING LABORATORIES

Room 512-519, 5/F., East Tower, Building 4, Anhua Industrial Zone, Futian District, Shenzhen, Guangdong, China

Tel (755) 83448688, Fax (755) 83442996, E-Mail:info@timewaytech.com

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# **Special Statement:**

The testing quality ability of our laboratory meet with "Quality Law of People's Republic of China" Clause 19.

The testing quality system of our laboratory meet with ISO/IEC-17025 requirements, which is approved by CNAL. This approval result is accepted by MRA of APLAC.

Our test facility is recognized, certified, or accredited by the following organizations:

# **CNAL-LAB Code: L2292**

The EMC Laboratory has been assessed and in compliance with CNAL/AC01:2002 accreditation criteria for testing Laboratories (identical to ISO/IEC 17025:1999 General Requirements) for the Competence of testing Laboratories.

# FCC-Registration No.: 899988

The EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications commission. The acceptance letter from the FCC is maintained in our files. Registration No.: 899988.

# IC- Registration No.: IC5205A-02

The EMC Laboratory has been registered and fully described in a report filed with the (IC) Industry Canada. The acceptance letter from the IC is maintained in our files. Registration IC No.: 5205A-02.

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# Test Report Conclusion

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#### 1.0 General Details

#### 1.1 Test Lab Details

Name: SHENZHEN TIMEWAY TESTING LABORATORIES.

Address: Room 512-519,5/F., East Tower, Building 4, Anhua Industrial Zone, Futian District, Shenzhen,

Guangdong China

Telephone: (755) 83448688 Fax: (755) 83442996

Site on File with the Federal Communications Commission – United Sates

Registration Number: 899988

For 3m & 10 m OATS

Site Listed with Industry Canada of Ottawa, Canada

Registration Number: IC: 5205A-02

For 3m & 10 m OATS

1.2 Applicant Details

Applicant: ShenZhen Netxeon Technology Co.,Ltd

Address: Unit 708,7/F West, Building 202 Tai Ran Industrial Park, Chegongmiao, Shenzhen, China

Telephone: -Fax: --

#### 1.3 Description of EUT

Product: TV BOX

Manufacturer: ShenZhen Netxeon Technology Co.,Ltd

Address: Unit 708,7/F West,Building 202 Tai Ran Industrial

Park, Chegongmiao, Shenzhen, China

Brand Name: N/A
Model Number: i826
Additional Model Number: i818, i828

Type of Modulation GFSK (Bluetooth BLE)

Frequency range 2402-2480MHz Frequency Selection By software

Channel Number 40

# 1.4 Submitted Sample: 2 Samples

# 1.5 Test Duration

2015-05-26 to 2015-06-30

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1.6 Test Uncertainty

Conducted Emissions Uncertainty = 3.6dB Radiated Emissions Uncertainty =4.7dB

1.7 Test Engineer

The sample tested by

Print Name: Terry Tang

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2.0 Test Equipments					
Instrument Type	Manufacturer	Model	Serial No.	Date of Cal.	Due Date
ESPI Test Receiver	R&S	ESPI 3	100379	2014-08-21	2015-08-20
TWO	R&S	EZH3-Z5	100294	2014-08-22	2015-08-21
Line-V-NETW		EZH3-Z3	100294	2014-08-22	2013-08-21
TWO	R&S	EZH3-Z5	100253	2014-08-22	2015-08-21
Line-V-NETW		EZH3-Z3	100233	2014-08-22	2013-08-21
	R&S				
Ultra Broadband		HL562	100157	2014-08-23	2015-08-22
ANT					
	R&S	ESDV	100008	2014-08-22	2015-08-21
ESDV Test Receiver		ESD V	100000	2014 00 22	2013 00 21
Impuls-Begrenzer	R&S	ESH3-Z2	100281	2014-08-21	2015-08-20
System Controller	CT	SC100	-		
Loop Antenna	EMCO	6502	00042960	2014-08-22	2015-08-21
ESPI Test Receiver	R&S	ESI26	838786/013	2014-08-22	2015-08-21
3m OATS			N/A	2014-08-21	2015-08-20
Horn Antenna	R&S	BBHA 9170	BBHA9170265	2014-08-23	2015-08-22
Horn Antenna	R&S	BBHA 9120D	9120D-631	2014-08-23	2015-08-22
Power meter	Anritsu	ML2487A	6K00003613	2014-08-22	2015-08-21
Power sensor	Anritsu	MA2491A	32263	2014-08-22	2015-08-21
Bilog Antenna	Schwarebeck	VULB9163	9163/340	2014-08-23	2015-08-22
LISN	AFJ	LS16C	10010947251	2014-08-21	2015-08-20
LISN (Three Phase)	Schwarebeck	NSLK 8126	8126453	2014-08-22	2015-08-21
9*6*6 Anechoic			N/A	2014-08-21	2015-08-20
EMI Test Receiver	RS	ESCS30	100139	2014-08-22	2015-08-21

#### 2.1 **Auxiliary Equipment**

Name	Model No.	Serial No.	Manufacturer	Cable	FCC ID/DOC
TF Card		-	Kingston		
U-Disk					
Mouse					
LCD Monitor	PH2450	1	SAMSUNG		DOC
	JHD-AP012U-				
Power Supply	050200AB		JHD		VOC

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#### 3.0 **Technical Details**

#### 3.1 **Summary of test results**

Standard	Test Type	Result	Notes
FCC Part 15, Paragraph 15.107 & 15.207	Conducted Emission Test	PASS	Complies
FCC Part 15 Subpart C Paragraph 15.247(a)(2) Limit	Spectrum bandwidth of a Orthogonal Frequency Division Multiplex System Limit: 6dB bandwidth>500kHz	PASS	Complies
FCC Part 15, Paragraph 15.247(b)	Maximum peak output power Limit: max. 30dBm	PASS	Complies
FCC Part 15, Paragraph 15.109,15.205 & 15.209	Transmitter Radiated Emission Limit: Table 15.209	PASS	Complies
FCC Part 15, Paragraph 15.247(e)	Power Spectral Density Limit: max. 8dBm	PASS	Complies
FCC Part 15, Paragraph 15.247(d)	Out of Band Emission and Restricted Band Radiation Limit: 20dB less than peak value of fundamental frequency Restricted band limit: Table 15.209	PASS	Complies

#### 3.2 **Test Standards**

FCC Part 15 Subpart & Subpart C, Paragraph 15.247, ANSI 63.4 :2009 and ANSI 63.10 :2009

#### 4.0 **EUT Modification**

No modification by Shenzhen Timeway Technology Consulting Co., Ltd

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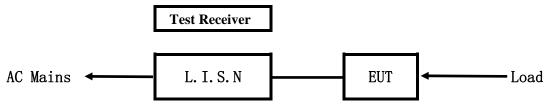
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# 5. Power Line Conducted Emission Test

# 5.1 Schematics of the test

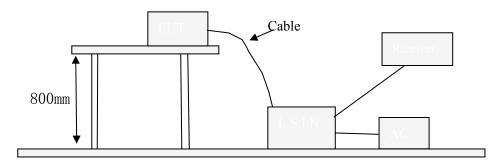


**EUT: Equipment Under Test** 

#### 5.2 Test Method and test Procedure

The EUT was tested according to ANSI C63.10-2009. The Frequency spectrum From 0.15MHz to 30MHz was investigated. The LISN used was 50ohm/50uH as specified by section 5.1 of ANSI C63.10 –2009.

Test Voltage: 120V~, 60Hz Block diagram of Test setup



# 5.3 Configuration of The EUT

The EUT was configured according to ANSI C63.4-2009. All interface ports were connected to the appropriate peripherals. All peripherals and cables are listed below.

#### A. EUT

Device	Manufacturer	Model	FCC ID
TV BOX	ShenZhen Netxeon Technology Co.,Ltd	i826, i818, i828	2AE6JI826

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#### B. Internal Device

Device	Manufacturer	Model	Rating

# C. Peripherals

Device	Manufacturer	Model	Rating	
Power	Power JHD JHD-AP012U-		Input: 100-240V~, 50/60Hz, 0.35A;	
Supplu 050		050200AB	Output: DC5V, 2A	

# 5.4 EUT Operating Condition

Operating condition is according to ANSI C63.10 -2009.

- A Setup the EUT and simulators as shown on follow
- B Enable AF signal and confirm EUT active to normal condition

# 5.5 Power line conducted Emission Limit according to Paragraph 15.207 and 15.107

Frequency	Class A Lim	its (dB µ V)	Class B Limits (dB µ V)		
(MHz)	Quasi-peak Level	Average Level	Quasi-peak Level	Average Level	
$0.15 \sim 0.50$	79.0	66.0	66.0~56.0*	56.0~46.0*	
$0.50 \sim 5.00$	73.0	60.0	56.0	46.0	
$5.00 \sim 30.00$	73.0	60.0	60.0	50.0	

Notes:

- 1. \*Decreasing linearly with logarithm of frequency.
- 2. The tighter limit shall apply at the transition frequencies

#### 5.6 Test Results

The frequency spectrum from 0.15MHz to 30MHz was investigated. All reading are quasi-peak values with a resolution bandwidth of 9kHz.

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# A: Conducted Emission on Live Terminal (150kHz to 30MHz)

# **EUT Operating Environment**

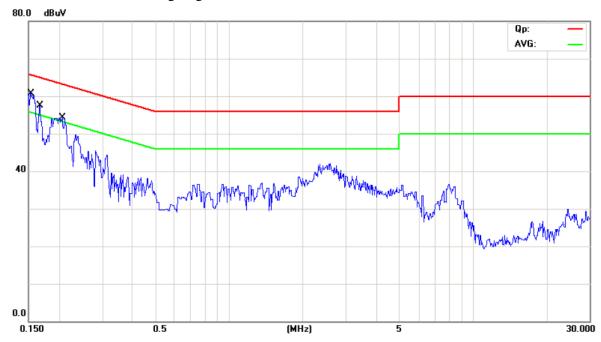
Temperature: 26°C Humidity: 65%RH Atmospheric Pressure: 101 KPa

**EUT set Condition: BLE MIMO Keeping TX mode** 

**Equipment Level: Class B** 

**Results: PASS** 

Please refer to following diagram for individual



No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
	MHz	dBuV	dB	dBu∀	dBuV	dB	Detector	Comment
1 *	0.1544	47.15	11.00	58.15	65.76	-7.61	QP	
2	0.1544	35.08	11.00	46.08	55.76	-9.68	AVG	
3	0.1666	44.51	11.02	55.53	65.13	-9.60	QP	
4	0.1666	31.52	11.02	42.54	55.13	-12.59	AVG	
5	0.2042	40.73	11.06	51.79	63.44	-11.65	QP	
6	0.2042	29.24	11.06	40.30	53.44	-13.14	AVG	

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# B: Conducted Emission on Neutral Terminal (150kHz to 30MHz)

**EUT Operating Environment** 

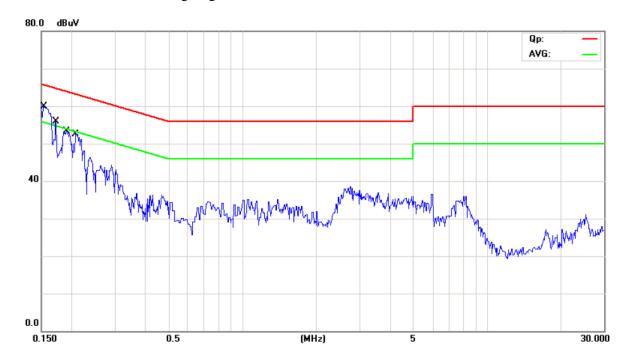
Temperature: 26°C Humidity: 65%RH Atmospheric Pressure: 101 KPa

**EUT set Condition: BLE MIMO Keeping TX mode** 

**Equipment Level: Class B** 

**Results: Pass** 

Please refer to following diagram for individual



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.1552	46.71	11.01	57.72	65.72	-8.00	QP	
2		0.1552	33.47	11.01	44.48	55.72	-11.24	AVG	
3		0.1720	42.82	11.02	53.84	64.86	-11.02	QP	
4		0.1720	30.16	11.02	41.18	54.86	-13.68	AVG	
5		0.1876	39.44	11.04	50.48	64.14	-13.66	QP	
6		0.1876	28.25	11.04	39.29	54.14	-14.85	AVG	
7		0.2077	39.43	11.06	50.49	63.30	-12.81	QP	
8		0.2077	27.89	11.06	38.95	53.30	-14.35	AVG	

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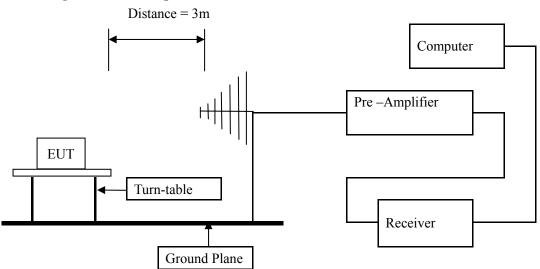
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#### 6 Radiated Emission Test

- 6.1 Test Method and test Procedure:
- (1) The EUT was tested according to ANSI C63.10 –2009. The radiated test was performed at Timeway Laboratory. This site is on file with the FCC laboratory division, Registration No.899988
- (2) The EUT, peripherals were put on the turntable which table size is 1m x 1.5 m, table high 0.8 m. All set up is according to ANSI C63.10-2009.
- (3) The frequency spectrum from 30 MHz to 25 GHz was investigated. All readings from 30 MHz to 1 GHz are Quasi-peak values with a resolution bandwidth of 120 kHz. For measurement above 1GHz, peak values with RBW=1MHz VBW=3MHz and PK detector. AV value with RBW=1MHz, VBW=3MHz and RMS detector. Measurements were made at 3 meters.
- (4) The antenna high is varied from 1 m to 4 m high to find the maximum emission for each frequency.
- (5) Maximizing procedure was performed on the six (6) highest emissions to ensure EUT compliance is with all installation combinations. All data was recorded in the peak detection mode. Quasi-peak readings was performed only when an emission was found to be marginal (within -4 dB of specification limit), and are distinguished with a "QP" in the data table.
- (6) The antenna polarization: Vertical polarization and Horizontal polarization.

# **Block diagram of Test setup**



- 6.2 Configuration of The EUT

  Same as section 5.3 of this report
- 6.3 EUT Operating Condition
  Same as section 5.4 of this report.

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#### 6.4 Radiated Emission Limit

All emission from a digital device, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strength specified below:

# Frequencies in restricted band are complied to limit on Paragraph 15.209 and 15.109

Frequency Range (MHz)	Distance (m)	Field strength (dB µ V/m)
30-88	3	40.0
88-216	3	43.5
216-960	3	46.0
Above 960	3	54.0

Note:

- 1. RF Voltage  $(dBuV) = 20 \log RF \text{ Voltage } (uV)$
- 2. In the Above Table, the higher limit applies at the band edges.
- 3. Distance refers to the distance in meters between the measuring instrument antenna and the EUT

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# Test result

# General Radiated Emission Data and Harmonics Radiated Emission Data

Radiated Emission In Horizontal (30MHz----1000MHz)

**EUT set Condition: BLE MIMO Keeping TX mode** 

**Results: Pass** 

Frequency (MHz)	Level@3m (dB \u03b4 V/m)	Antenna Polarity	Limit@3m (dB \mu V/m)
132.720	25.33	Н	43.50
148.480	31.03	Н	43.50
117.200	30.71	V	43.50
52.920	31.58	V	40.00

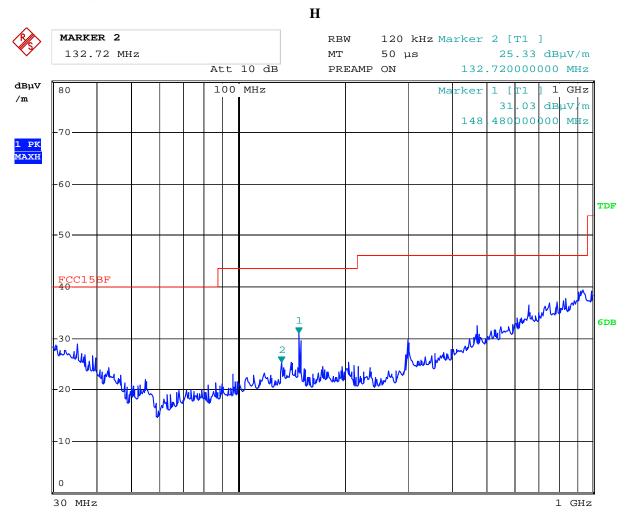
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# Test Figure:



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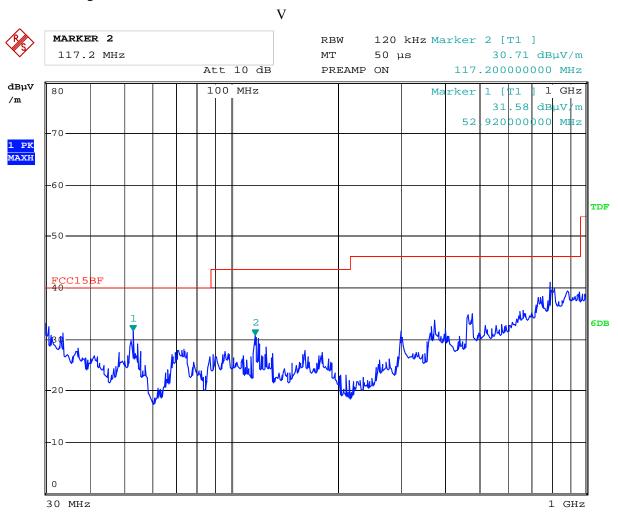
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# Test Figure:



26.JUN.2015 16:27:45 Date:

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# **Operation Mode: Transmitting under Low Channel (2402MHz)**

Frequency (MHz)	Level@3m (dB μ V/m)	Antenna Polarity	Limit@3m (dB µ V/m)
4804	1	H/V	74(Peak)/ 54(AV)
7206		H/V	74(Peak)/ 54(AV)
9608		H/V	74(Peak)/ 54(AV)
12010		H/V	74(Peak)/ 54(AV)
14412		H/V	74(Peak)/ 54(AV)
16814		H/V	74(Peak)/ 54(AV)
19216	-	H/V	74(Peak)/ 54(AV)
21618	-	H/V	74(Peak)/ 54(AV)
24020	-	H/V	74(Peak)/ 54(AV)

Note: 1. Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit

2. Remark "---" means that the emissions level is too low to be measured

# **Operation Mode: Transmitting g under Middle Channel (2440MHz)**

Frequency (MHz)	Level@3m (dB \u03b4 V/m)	Antenna Polarity	Limit@3m (dB $\mu$ V/m)
4880	-	H/V	74(Peak)/ 54(AV)
7320		H/V	74(Peak)/ 54(AV)
9760		H/V	74(Peak)/ 54(AV)
12200		H/V	74(Peak)/ 54(AV)
14640		H/V	74(Peak)/ 54(AV)
17080		H/V	74(Peak)/ 54(AV)
19520		H/V	74(Peak)/ 54(AV)
21960		H/V	74(Peak)/ 54(AV)
24400		H/V	74(Peak)/ 54(AV)

Note: 1. Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit

2. Remark "---" means that the emissions level is too low to be measured

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# Operation Mode: Transmitting under High Channel (2480MHz)

Frequency (MHz)	Level@3m (dB \u03bc V/m)	Antenna Polarity	Limit@3m (dB µ V/m)
4960		H/V	74(Peak)/ 54(AV)
7440		H/V	74(Peak)/ 54(AV)
9920		H/V	74(Peak)/ 54(AV)
12400		H/V	74(Peak)/ 54(AV)
14880		H/V	74(Peak)/ 54(AV)
17360		H/V	74(Peak)/ 54(AV)
19840		H/V	74(Peak)/ 54(AV)
22320		H/V	74(Peak)/ 54(AV)
24800		H/V	74(Peak)/ 54(AV)

Note: 1. Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit

<sup>2.</sup> Remark "---" means that the emissions level is too low to be measured

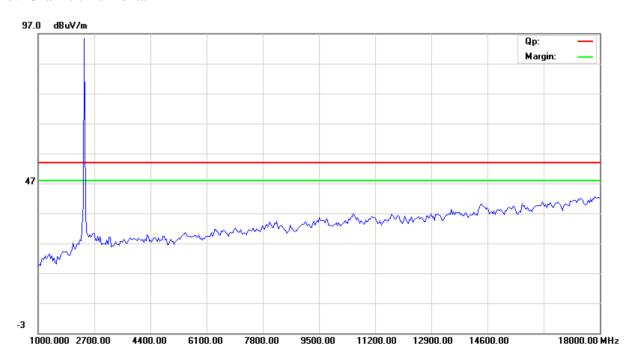
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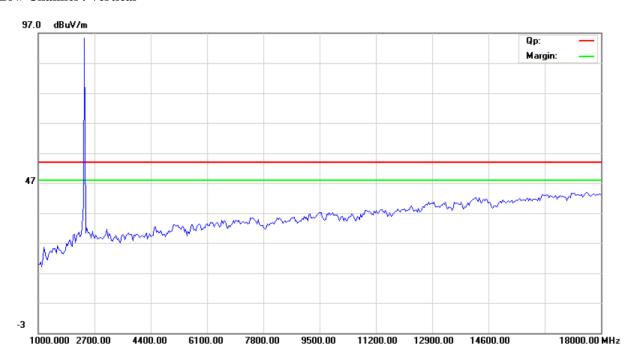


Please refer to the following test plots for details:

# Low Channel: Horizontal



#### **Low Channel: Vertical**



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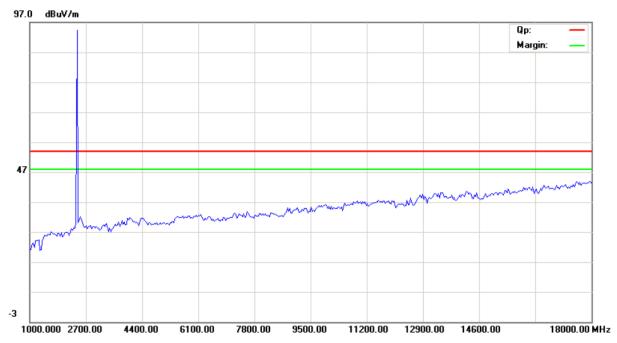
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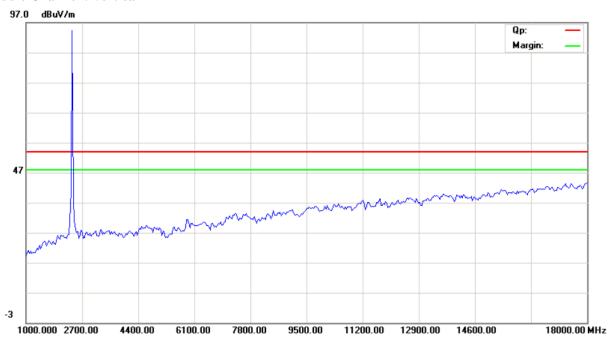
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# **Middle Channel: Horizontal**



# **Middle Channel: Vertical**



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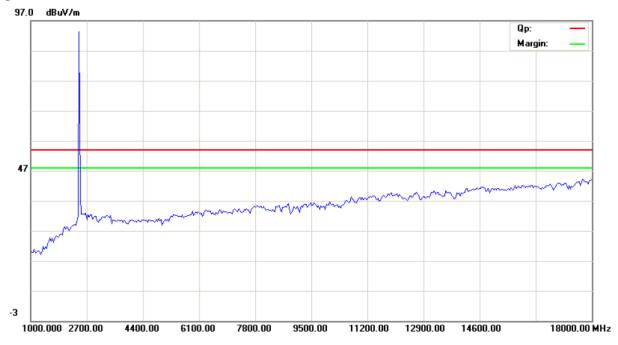
adopt any other remedies which may be appropriate.

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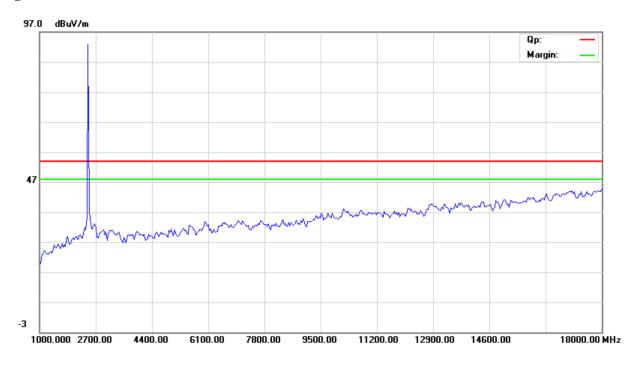
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# **High Channel: Horizontal**



# **High Channel: Vertical**



Note: for the radiated emissions above 18G, it is the floor noise.

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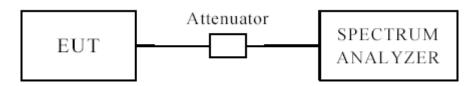
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# 7.0 6dB Bandwidth Measurement

# 7.1 Test Setup



#### 7.2 Limits of 6dB Bandwidth Measurement

The minimum of 6dB Bandwidth Measurement is >500 kHz

#### 7.3 Test Procedure

- 1. Set resolution bandwidth (RBW) = 100 kHz
- 2. Set the video bandwidth (VBW)  $\geq$  3 x RBW.
- 3. Detector = Peak.
- 4. Trace mode = max hold.
- 5. Sweep = auto couple.
- 6. Allow the trace to stabilize.
- 7. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

# 7.4 Test Result

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# Antenna A

EUT		TV BOX		Model		i826, i818, i828		
Mode		Keep Transmitting		Input Voltage			DC5V	
Temperat	ure	24 d	leg. C, Humidity		dity	56% RH		
Channel	Channel Frequency (MHz)		6 dB Bandwidth (kHz)		Maximum Limit (kHz)		Pass/ Fail	
Low		2402 739			0.5		Pass	
Middle		2440	745		0.5		Pass	
High		2480	745	·		0.5	Pass	

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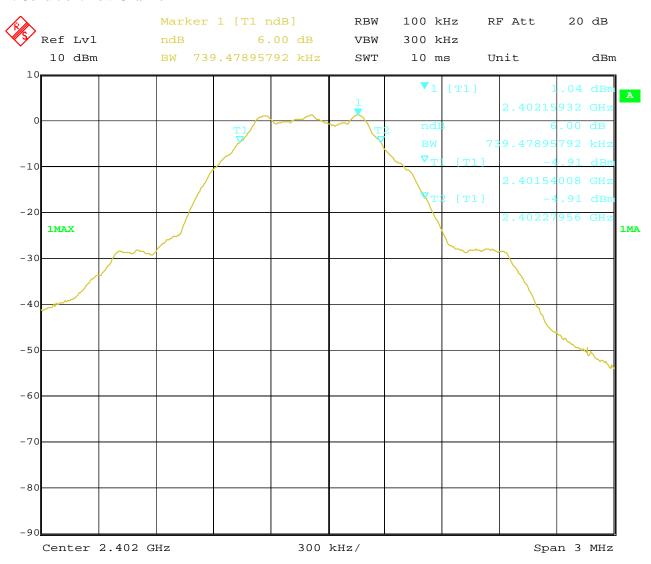
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# Test Figure:

# 1. Condition: Low Channel



Date: 9.JUN.2015 10:51:38

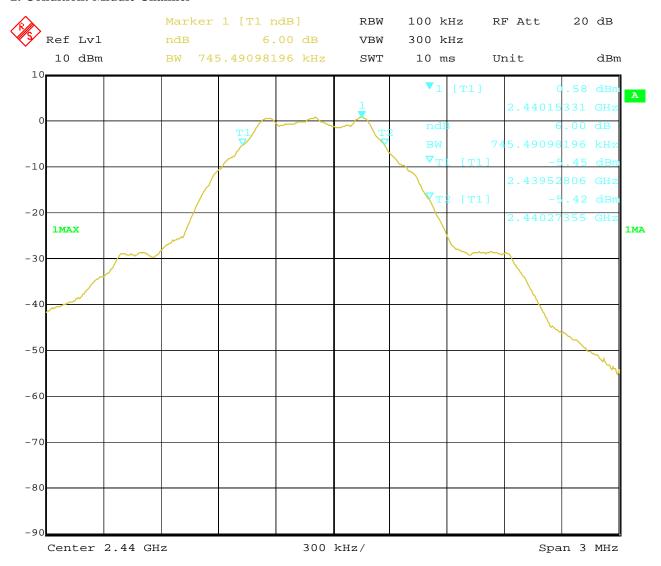
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# 2. Condition: Middle Channel



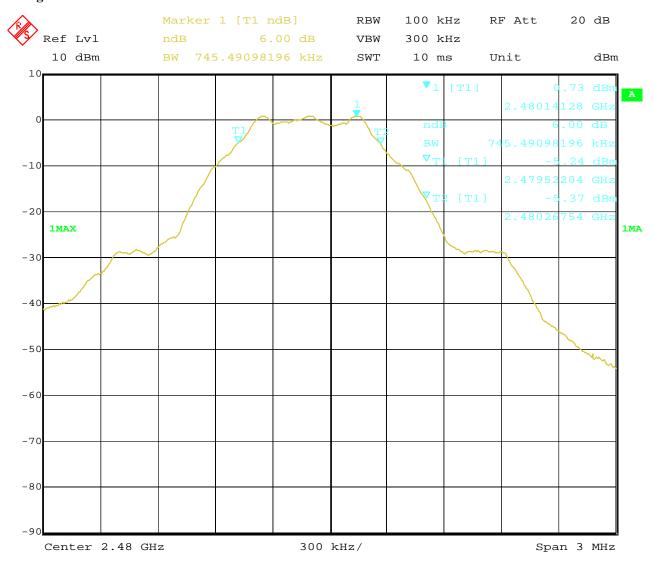
Date: 9.JUN.2015 10:53:00

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# 3. High Channel



Date: 9.JUN.2015 10:55:07

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# Antenna B

EUT		TV	Mod	Model		826, i818, i828		
Mode		Keep Transmitting		Input Vo	out Voltage		DC5V	
Temperati	ure	24 deg. C,		Humi	dity		56% RH	
Channel	Channel Frequency (MHz)		6 dB Bandwidth (kHz)			mum Limit (kHz)	Pass/ Fail	
Low		2402	745		0.5		Pass	
Middle		2440 752			0.5		Pass	
High		2480	745 0.5 Pass		0.5		Pass	

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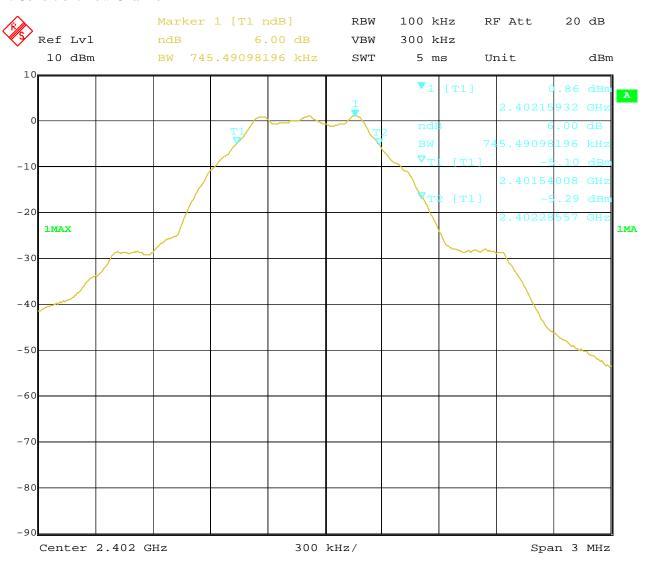
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# Test Figure:

# 1. Condition: Low Channel



Date: 9.JUN.2015 11:36:10

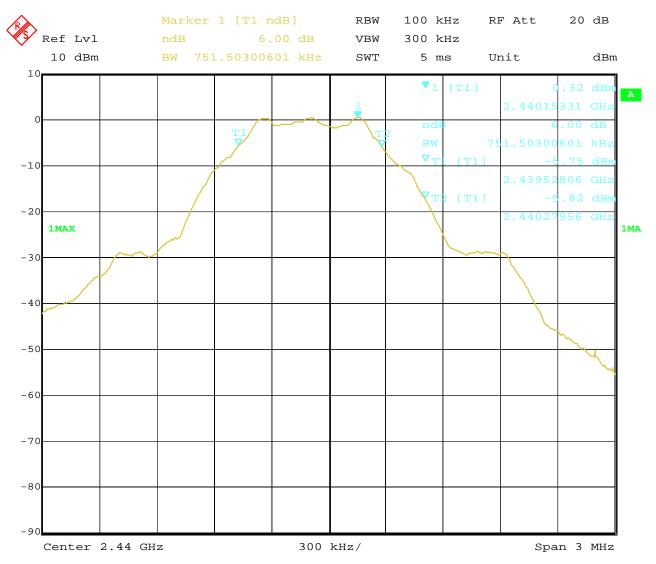
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# 2. Condition: Middle Channel



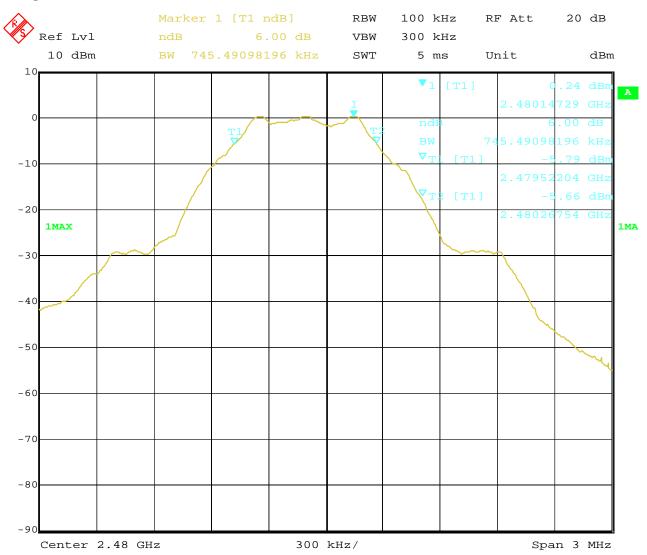
Date: 9.JUN.2015 11:32:19

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# 3. High Channel



Date: 9.JUN.2015 11:30:39

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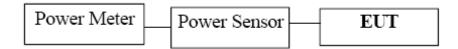
Date: 2015-06-30



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# 8. Maximum Output Power

# 8.1 Test Setup



# 8.2 Limits of Maximum Output Power

The Maximum Output Power Measurement is 30dBm.

# **8.3 Test Procedure**

The RF power output was measured with a Power meter connected to the RF Antenna connector (conducted measurement) while EUT was operating in transmit mode at the appropriate centre frequency.

Note: the Peak power were measured.

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# **8.4Test Results**

EUT		T	TV BOX Model i826, i818, i828		i826, i818, i828			
Mode			BLE	Input Voltage	DC5.0V			
Temperatu	re	24	deg. C,	Humidity		56% RH		
Channel	Fre	equency	Antenna	Peak Power	Total Power	Limit	Pass/ Fail	
	(]	MHz)	Port	Output (dBm)	(dBm)	(dBm)		
Low	2	2402	A	1.43	4.39	30	Pass	
			В	1.33				
Middle	2440		A	0.80	3.80	30	Pass	
			В	0.79				
High	2	2480	A	1.35	4.08	30	Pass	
			В	0.80				

Note: 1. the result basic equation calculation as follow:

Max. Power Output = Power Reading + Cable loss + Attenuator

2.MIMO technology was used for BLE

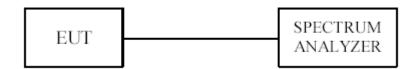
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# 9. Power Spectral Density Measurement

# 9.1 Test Setup



# 9.2 Limits of Power Spectral Density Measurement

The Maximum Power Spectral Density Measurement is 8dBm.

#### 9.3 Test Procedure

- 1. Use this procedure when the maximum peak conducted output power in the fundamental emission is used to demonstrate compliance.
- 2. Set the RBW = 10 kHz.
- 3. Set the VBW  $\geq$  30 kHz.
- 4. Set the span to 1.5 times the DTS channel bandwidth.
- 5. Detector = peak.
- 6. Sweep time = auto couple.
- 7. Trace mode = max hold.
- 8. Allow trace to fully stabilize.
- 9. Use the peak marker function to determine the maximum amplitude level.
- 10. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.
- 11. The resulting peak PSD level must be  $\leq 8$  dBm.

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# 9.4Test Result

EUT		r	TV BOX Model		i826, i818, i828				
Mode		BLE Inpu		Voltage DC5.0V		)V			
Temperat	are		24 deg. C,		Humidity		56% RH		RH
Channel	Re	Power ading (Bm)	Cable Loss (dB)	10 lo	og(N <sub>ANT</sub> ) dB	Final Power Spectral Density (dBm)		Maximum Limit (dBm)	Pass/ Fail
Low		7.37	0.2		3.01	-4.16		8	Pass
Middle	-′	7.95	0.2		3.01	-4.74		8	Pass
High	-8	8.06	0.2		3.01	-4.85		8	Pass

Note: The result basic equation calculation as follow:

Peak Power Output = Peak Power Reading + Cable loss

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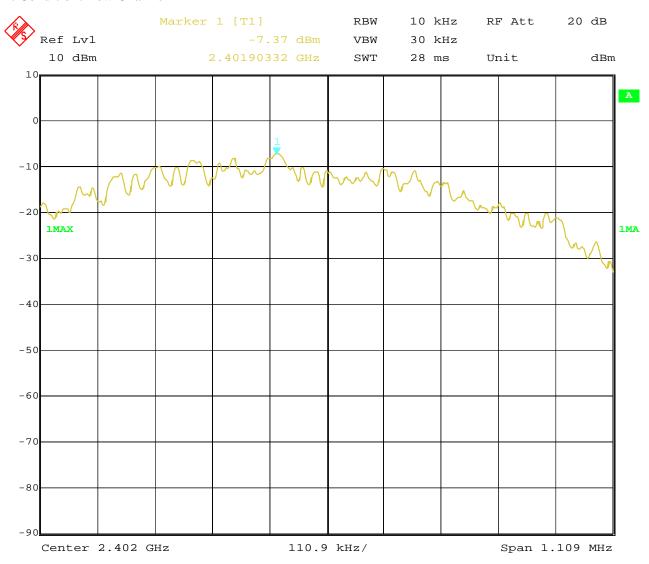
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# Test Figure:

# 1. Condition: Low Channel



Date: 9.JUN.2015 11:00:25

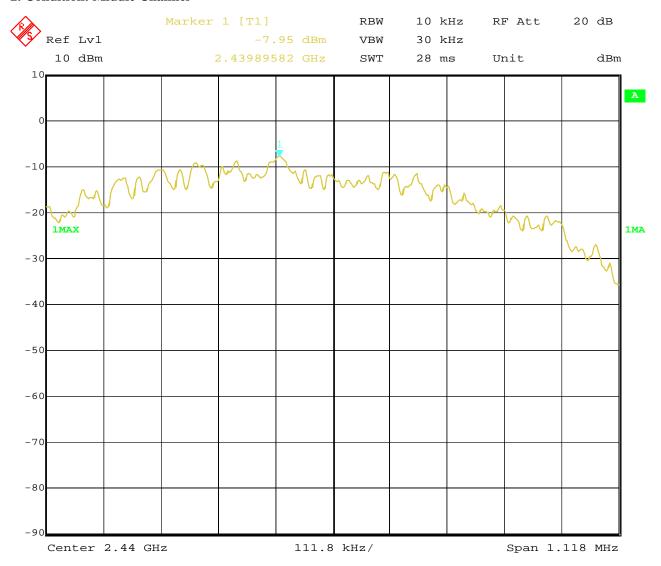
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# 2. Condition: Middle Channel



Date: 9.JUN.2015 11:01:21

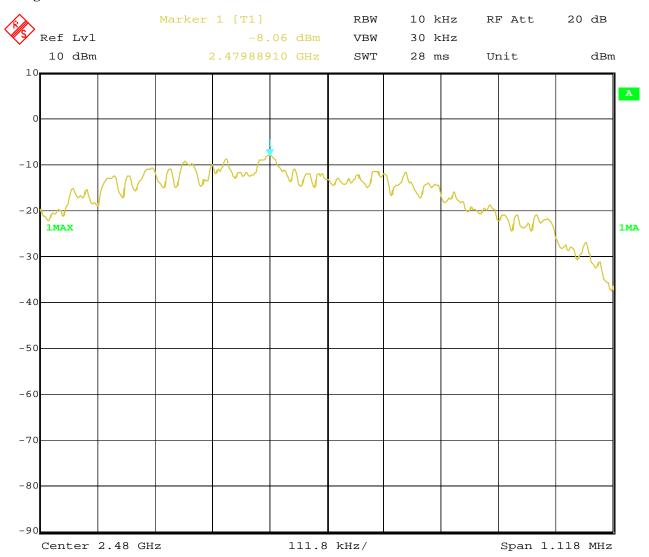
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## 3. High Channel



Date: 9.JUN.2015 11:01:58

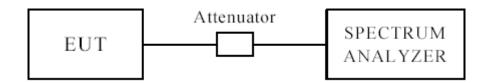
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# 10 Out of Band Measurement

# 10.1 Test Setup for band edge



The restricted band requirement based on radiated emission test; please see the clause 6 for the test setup

#### 10.2 Limits of Out of Band Emissions Measurement

- 1. Below –20dB of the highest emission level of operating band (in 100kHz Resolution Bandwidth).
- 2. Fall in the restricted bands listed in section 15.205. The maximum permitted average field strength is listed in section 15.209.

#### **10.3 Test Procedure**

For signals in the restricted bands above and below the 2.4-2.483GHz allocated band a measurement was made of Radiated emission test. (Peak values with RBW=1MHz, VBW=3MHz and PK detector. AV value with RBW=1MHz, VBW=3MHz and RMS detector)

For bandage test, the spectrum set as follows: RBW=VBW=100 kHz. A conducted measurement used

# 10.4 Test Result

Please see next pages

Note: For band-edge measurement, the frequency from 30MHz-25GHz was tested. And It met the FCC rule.

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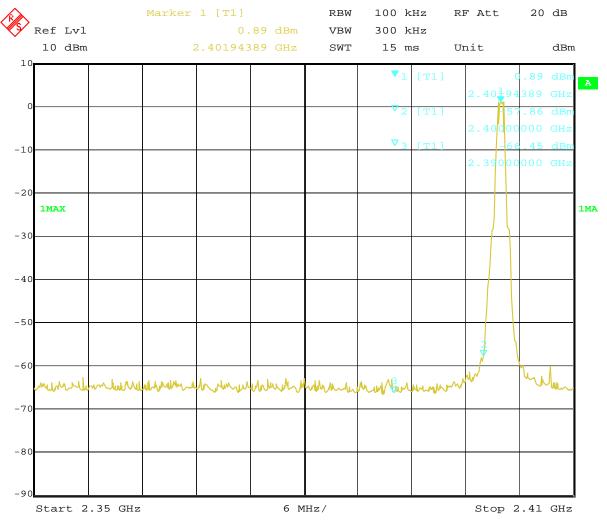


#### Antenna A

# **10.4** Band-edge Measurement

EUT	TV BOX	Model	i826, i818, i828
Mode	Keep Transmitting	Input Voltage	DC5V
Temperature	24 deg. C,	Humidity	56% RH
Test Result:	Pass	Detector	PK

# **Test Figure:**



Date: 9.JUN.2015 11:25:13

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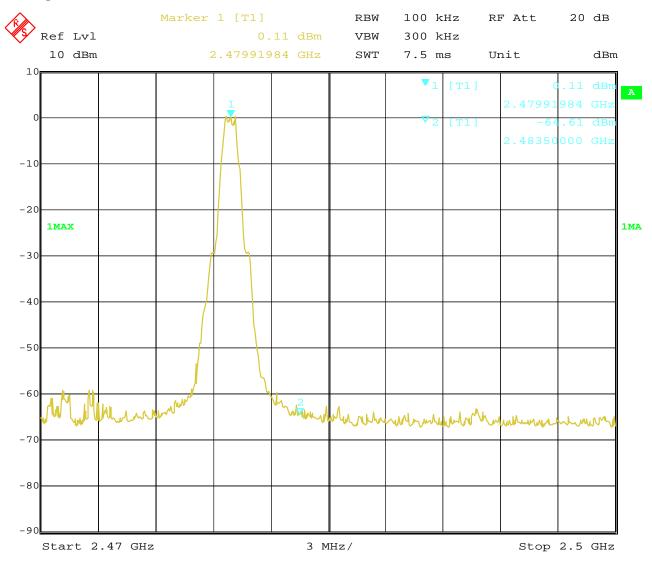
Date: 2015-06-30



#### **10.4** Band-edge Measurement

EUT	TV BOX	Model	i826, i818, i828
Mode	Keeping Transmitting	Input Voltage	DC5V
Temperature	24 deg. C,	Humidity	56% RH
Test Result:	Pass	Detector	PK

# **Test Figure:**



Date: 9.JUN.2015 11:26:28

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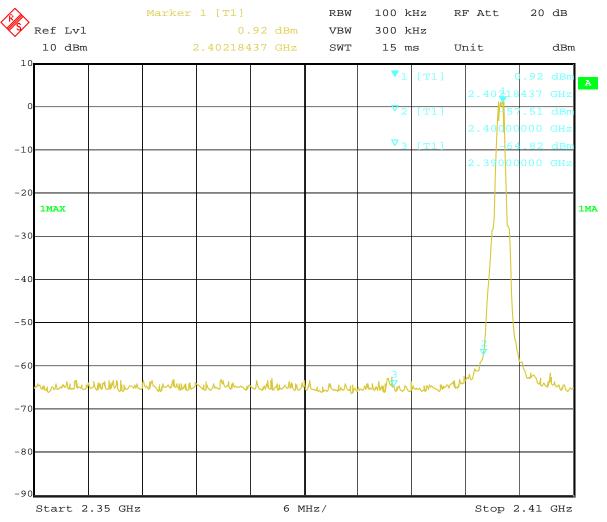


#### Antenna B

# **10.4** Band-edge Measurement

EUT	TV BOX	Model	i826, i818, i828
Mode	Keep Transmitting	Input Voltage	DC5V
Temperature	24 deg. C,	Humidity	56% RH
Test Result:	Pass	Detector	PK

# **Test Figure:**



Date: 9.JUN.2015 11:03:34

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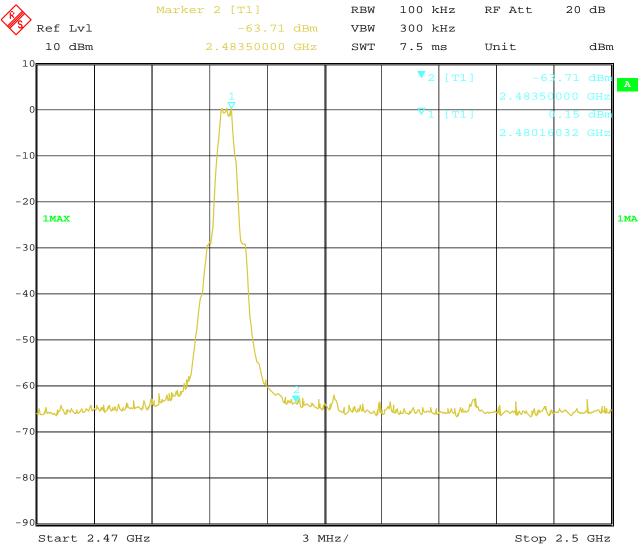
Date: 2015-06-30



# **10.4** Band-edge Measurement

EUT	TV BOX	Model	i826, i818, i828
Mode	Keeping Transmitting	Input Voltage	DC5V
Temperature	24 deg. C,	Humidity	56% RH
Test Result:	Pass	Detector	PK

# **Test Figure:**



Date: 9.JUN.2015 11:02:50

Note: The Max. FS in Restrict Band are measured in conventional method.

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#### **12.4** Restricted band Measurement

Product:	TV BOX		Test Mode:	Low Channel
Mode	BLE MIMO Keeping TX mode		Input Voltage	DC5.0V
Temperature	24 deg. C,		Humidity	56% RH
Test Result:	Pass		Detector	PK
2400MHz	PK (dBµV/m)	43.1(H)/ 44.6(V)	Limit	74(dBµV/m)
	AV (dBμV/m)		Limit	54(dBµV/m)
2390MHz	PK (dBµV/m)	39.6(H)/40.1(V)	Limit	$74(dB\mu V/m)$
	AV (dBμV/m)			$54(dB\mu V/m)$

#### **12.4** Restricted band Measurement

EUT	TV BOX		Test Mode:	High Channel
Mode	BLE MIMO Keeping TX mode		Input Voltage	DC5.0V
Temperature	24 deg. C,		Humidity	56% RH
Test Result:	Pass		Detector	PK
2483.5MHz	PK (dBµV/m)	40.6(H)/41.4(V)	T ::4	$74(dB\mu V/m)$
	AV (dBμV/m)		Limit	54(dBμV/m)

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# 11.0 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 transmitter antennas of directional gain greater than 6 dBi are used, the power shall be reduced by the mount in dB that the directional gain of the antenna exceeds 6 dBi.

#### 11.2 Antenna Connected construction

Two Integral antennas used. The maximum Gain of each antenna is 2.0 dBi.

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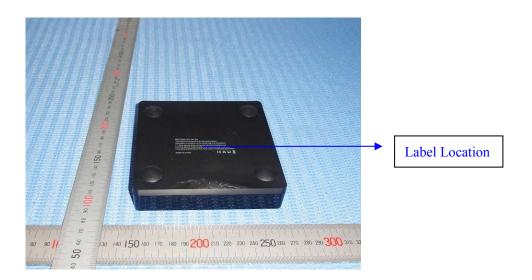
#### 12.0 FCC ID/IC Label

#### **FCC ID: 2AE6JI826**

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

The label must not be a stick-on paper label. The label on these products must be permanently affixed to the product and readily visible at the time of purchase and must last the expected lifetime of the equipment not be readily detachable.

#### **Mark Location:**



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#### 13.0 Photo of testing

Conducted Emission Test Setup:

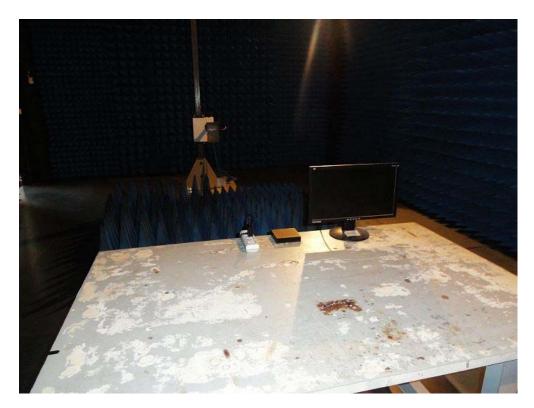


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## Radiated Emission Test Setup:





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## Photographs - EUT

Outside view





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Inside view





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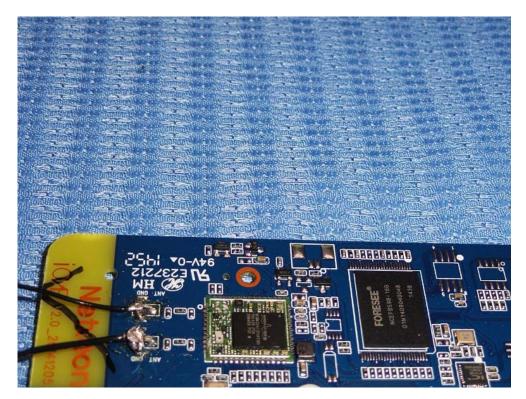
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Inside view





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