APPLICATION CERTIFICATION FCC Part 15C
On Behalf of
Outform Ltd.

iDISPLAY MEDIA PLAYER
Model No.: UIM200B-B20, UIM200X-XYY

FCC ID: 2AC8G-UIM

Prepared for	:	Outform Ltd.
Address	:	Room A103 and A105, Nanshan Medical Instrument Industry Park, No.1019, Nanhai Avenue, Nanshan District, Shenzhen, Guangdong Province, China
Prepared by	:	ACCURATE TECHNOLOGY CO., LTD
Address	:	F1, Bldg. A, Changyuan New Material Port, Keyuan Rd. Science & Industry Park, Nanshan, Shenzhen, Guangdong P.R. China Tel: (0755) 26503290 Fax: (0755) 26503396

Report No.	:	ATE20141759
Date of Test	:	Sep 05, 2014-Sep 18, 2014
Date of Report	:	Sep 18, 2014

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Description Page

Test Report Certification

Applicant : Outform Ltd.

Manufacturer : Pipo Technology Co.,Ltd.

EUT Description : iDISPLAY MEDIA PLAYER

(A) MODEL NO.: UIM200B-B20, UIM200X-XYY

(B) Trade Name.: iDISPLAY

(C) POWER SUPPLY: AC 120V/60Hz (Powered by Adapter)

Measurement Procedure Used:

FCC Rules and Regulations Part 15 Subpart C Section 15.247
ANSI C63.4: 2009

The EUT was tested according to DTS test procedure of Jun 05, 2014 KDB558074 D01 DTS Meas Guidance v03r02 for compliance to FCC 47CFR 15.247 requirements

The device described above is tested by ACCURATE TECHNOLOGY CO. LTD to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart C Section 15.247 limits. The measurement results are contained in this test report and ACCURATE TECHNOLOGY CO. LTD is assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the Equipment Under Test (EUT) is to be technically compliant with the FCC requirements.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of ACCURATE TECHNOLOGY CO. LTD.

Date of Test : Sep 05-18,2014

Prepared by : Tim Zhang

(Tim.zhang, Engineer)

Approved & Authorized Signer :

(Sean Liu, Manager)

1. GENERAL INFORMATION

1.1.Description of Device (EUT)

EUT	:	iDISPLAY MEDIA PLAYER UIM200B-B20, UIM200X-XYY
Model Number	:	Note:UIM200X-XYY, The 1st X is "A" or "B" represents the software version; The 2nd X is A-Z represents the color; YY is client number from "01" to "50".
Frequency Range	:	802.11b/g/n(20MHz): 2412-2462MHz 802.11n(40MHz): 2422-2452MHz
Number of Channels	:	802.11b/g/n (20MHz):11 802.11n (40MHz): 7
Antenna Gain	:	0dBi
Type of Antenna	:	Integral Antenna
Power Supply	:	AC 120V/60Hz (Powered by Adapter)
Data Rate	:	802.11b: 11, 5.5, 2, 1 Mbps 802.11g: 54, 48, 36, 24, 18, 12, 9, 6 Mbps 802.11n: up to 150Mbps
Adapter	:	Model:KZ0502000 Input: AC 100-240VAC 50/60Hz 0.5AMAX Output: 5.0V 2.0A
Modulation Type	:	CCK, OFDM
Applicant	:	Outform Ltd.
Address	:	Room A103 and A105, Nanshan Medical Instrument Industry Park, No.1019, Nanhai Avenue, Nanshan District, Shenzhen, Guangdong Province, China
Manufacturer	:	Pipo Technology Co.,Ltd.
Address	:	Area C, 3F, Bao Yun Da Logistics Centre, Warehouse Building,Xi Xiang Avenue,Bao an District, Shenzhen, China.
Date of sample received	:	Sep 05, 2014
Date of Test	:	Sep 05-18, 2014

1.2.Carrier Frequency of Channels

802.11b, 802.11g, 802.11n (20MHz)

Channel	Frequency(MHz)	Channel	Frequency(MHz)
01	2412	07	2442
02	2417	08	2447
03	2422	09	2452
04	2427	10	2457
05	2432	11	2462
06	2437	---	---

802.11n (40MHz)

Channel	Frequency(MHz)	Channel	Frequency(MHz)
---	---	07	2442
---	---	08	2447
03	2422	09	2452
04	2427	---	---
05	2432	---	---
06	2437	---	---

1.3.Accessory and Auxiliary Equipment

N/A

1.4.Description of Test Facility

EMC Lab : Accredited by TUV Rheinland Shenzhen

Listed by FCC
The Registration Number is 752051

Listed by Industry Canada
The Registration Number is 5077A-2

Accredited by China National Accreditation Committee for Laboratories
The Certificate Registration Number is L3193

Name of Firm : ACCURATE TECHNOLOGY CO. LTD

Site Location : F1, Bldg. A, Changyuan New Material Port, Keyuan Rd. Science & Industry Park, Nanshan, Shenzhen, Guangdong P.R. China

1.5.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. MEASURING DEVICE AND TEST EQUIPMENT

Table 1: List of Test and Measurement Equipment

Kind of equipment	Manufacturer	Type	S/N	Calibrated dates	Calibrated until
EMI Test Receiver	Rohde&Schwarz	ESCS30	100307	Jan. 11, 2014	Jan. 10, 2015
EMI Test Receiver	Rohde&Schwarz	ESPI3	101526/003	Jan. 11, 2014	Jan. 10, 2015
Spectrum Analyzer	Agilent	E7405A	MY45115511	Jan. 11, 2014	Jan. 10, 2015
Pre-Amplifier	Rohde&Schwarz	CBLU1183540-01	3791	Jan. 11, 2014	Jan. 10, 2015
Loop Antenna	Schwarzbeck	FMZB1516	1516131	Jan. 15, 2014	Jan. 14, 2015
Bilog Antenna	Schwarzbeck	VULB9163	9163-323	Jan. 15, 2014	Jan. 14, 2015
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-655	Jan. 15, 2014	Jan. 14, 2015
Horn Antenna	Schwarzbeck	BBHA9170	9170-359	Jan. 15, 2014	Jan. 14, 2015
LISN	Rohde&Schwarz	ESH3-Z5	100305	Jan. 11, 2014	Jan. 10, 2015
LISN	Schwarzbeck	NSLK8126	8126431	Jan. 11, 2014	Jan. 10, 2015
Highpass Filter	Wainwright Instruments	WHKX3.6/18G-10SS	N/A	Jan. 11, 2014	Jan. 10, 2015
Band Reject Filter	Wainwright Instruments	WRCG2400/2485-2375/2510-60/11SS	N/A	Jan. 11, 2014	Jan. 10, 2015

3. OPERATION OF EUT DURING TESTING

3.1.Operating Mode

The mode is used: **1.802.11b Transmitting mode**
Low Channel: 2412MHz
Middle Channel: 2437MHz
High Channel: 2462MHz

2.802.11g Transmitting mode
Low Channel: 2412MHz
Middle Channel: 2437MHz
High Channel: 2462MHz

3.802.11n (20MHz) Transmitting mode
Low Channel: 2412MHz
Middle Channel: 2437MHz
High Channel: 2462MHz

4.802.11n (40MHz) Transmitting mode
Low Channel: 2422MHz
Middle Channel: 2437MHz
High Channel: 2452MHz

3.2.Configuration and peripherals

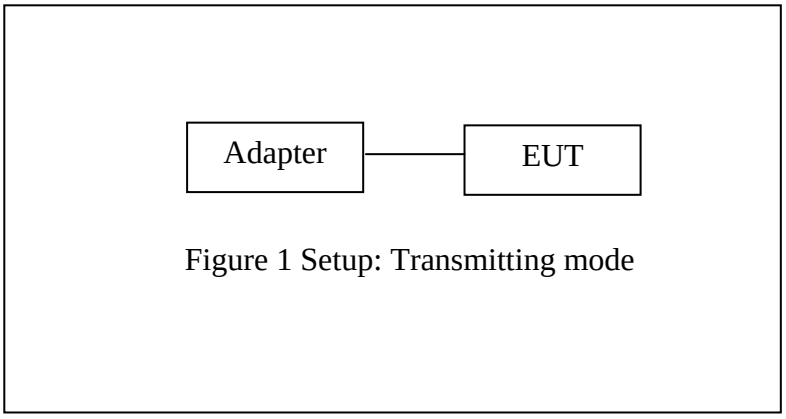


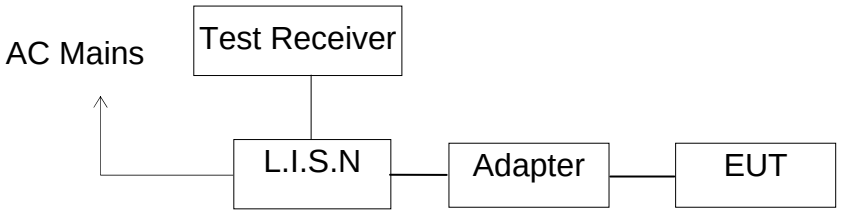
Figure 1 Setup: Transmitting mode

4. TEST PROCEDURES AND RESULTS

FCC Rules	Description of Test	Result
Section 15.207	Power Line Conducted Emission	Compliant
Section 15.247(a)(2)	6dB Bandwidth Test	Compliant
Section 15.247(e)	Power Spectral Density Test	Compliant
Section 15.247(b)(3)	Maximum Peak Output Power Test	Compliant
Section 15.247(d)	Band Edge Compliance Test	Compliant
Section 15.247(d) Section 15.209	Radiated Spurious Emission Test	Compliant
Section 15.247(d)	Conducted Spurious Emission Test	Compliant
Section 15.203	Antenna Requirement	Compliant

5. POWER LINE CONDUCTED MEASUREMENT

5.1.Block Diagram of Test Setup



(EUT: iDISPLAY MEDIA PLAYER)

5.2.Power Line Conducted Emission Measurement Limits

Frequency (MHz)	Limit dB(μV)	
	Quasi-peak Level	Average Level
0.15 - 0.50	66.0 – 56.0 *	56.0 – 46.0 *
0.50 - 5.00	56.0	46.0
5.00 - 30.00	60.0	50.0
NOTE1: The lower limit shall apply at the transition frequencies. NOTE2: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.50MHz.		

5.3.Configuration of EUT on Measurement

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

5.4.Operating Condition of EUT

5.4.1.Setup the EUT and simulator as shown as Section 5.1.

5.4.2.Turn on the power of all equipment.

5.4.3.Let the EUT work in test mode and measure it.

5.5. Test Procedure

The EUT is put on the plane 0.8m high above the ground by insulating support and is connected to the power mains through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm coupling impedance for the EUT system. Please refer the block diagram of the test setup and photographs. Both sides of AC lines 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 C63.4: 2009 on Conducted Emission Measurement.
The bandwidth of test receiver (R & S ESCS30) is set at 9kHz.

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

5.6. Power Line Conducted Emission Measurement Results

PASS.

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

Test mode : Charging&WIFI communicating

MEASUREMENT RESULT: "QP-02_fin"

9/15/2014 10:42AM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.425000	48.40	10.7	57	8.9	QP	L1	GND
1.665000	34.90	10.9	56	21.1	QP	L1	GND
5.810000	31.50	11.2	60	28.5	QP	L1	GND

MEASUREMENT RESULT: "QP-02_fin2"

9/15/2014 10:42AM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.425000	38.30	10.7	47	9.0	AV	L1	GND
1.400000	22.80	10.9	46	23.2	AV	L1	GND
5.210000	18.20	11.2	50	31.8	AV	L1	GND

MEASUREMENT RESULT: "QP-01_fin"

9/15/2014 10:39AM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.425000	46.30	10.7	57	11.0	QP	N	GND
1.100000	33.60	10.9	56	22.4	QP	N	GND
6.190000	32.30	11.2	60	27.7	QP	N	GND

MEASUREMENT RESULT: "QP-01_fin2"

9/15/2014 10:39AM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.425000	39.00	10.7	47	8.3	AV	N	GND
1.115000	22.20	10.9	46	23.8	AV	N	GND
5.790000	19.10	11.2	50	30.9	AV	N	GND

Emissions attenuated more than 20 dB below the permissible value are not reported.

The spectral diagrams are attached as below.

ACCURATE TECHNOLOGY CO.,LTD

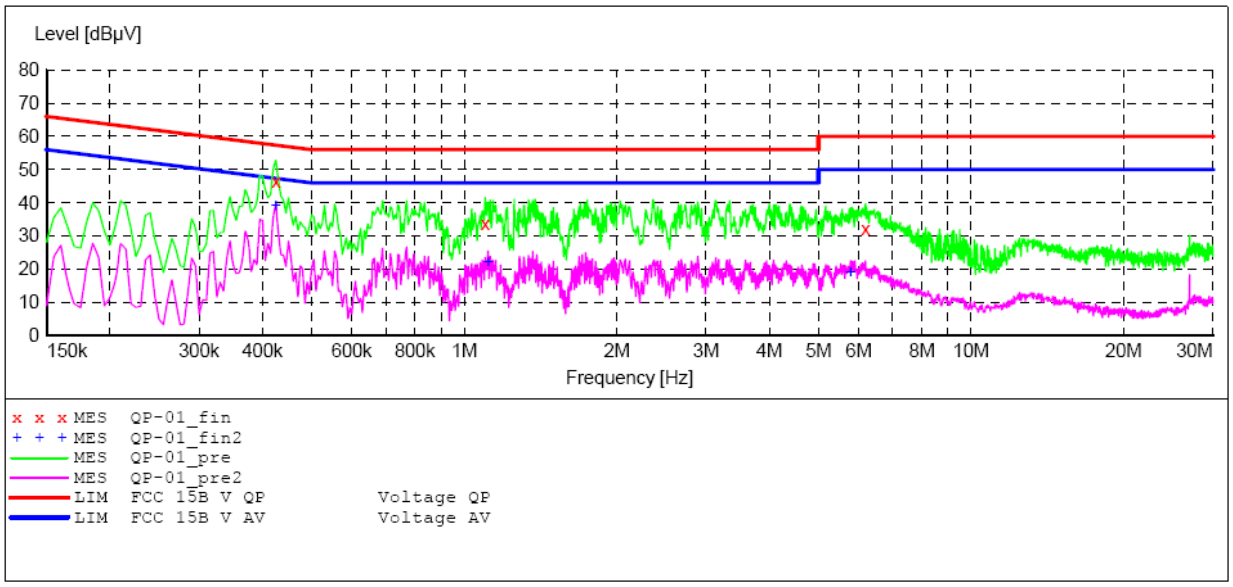
CONDUCTED EMISSION STANDARD FCC Part 15B

EUT: iDISPLAY MEDIA PLAYER M/N:UIM200B-B20
Manufacturer: Pipo
Operating Condition: WIFI
Test Site: 1#Shielding Room
Operator: Carry
Test Specification: N 120V/60Hz
Comment: Report NO.:ATE20141759
Start of Test: 9/15/2014 / 10:36:04AM

SCAN TABLE: "V 150K-30MHz fin"

Short Description: _SUB_STD_VTERM2 1.70

Start Frequency	Stop Frequency	Step Width	Detector	Meas. Time	IF Bandw.	Transducer
150.0 kHz	30.0 MHz	4.5 kHz	QuasiPeak Average	1.0 s	9 kHz	NSLK8126 2008



MEASUREMENT RESULT: "QP-01_fin"

9/15/2014 10:39AM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.425000	46.30	10.7	57	11.0	QP	N	GND
1.100000	33.60	10.9	56	22.4	QP	N	GND
6.190000	32.30	11.2	60	27.7	QP	N	GND

MEASUREMENT RESULT: "QP-01_fin2"

9/15/2014 10:39AM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.425000	39.00	10.7	47	8.3	AV	N	GND
1.115000	22.20	10.9	46	23.8	AV	N	GND
5.790000	19.10	11.2	50	30.9	AV	N	GND

ACCURATE TECHNOLOGY CO.,LTD

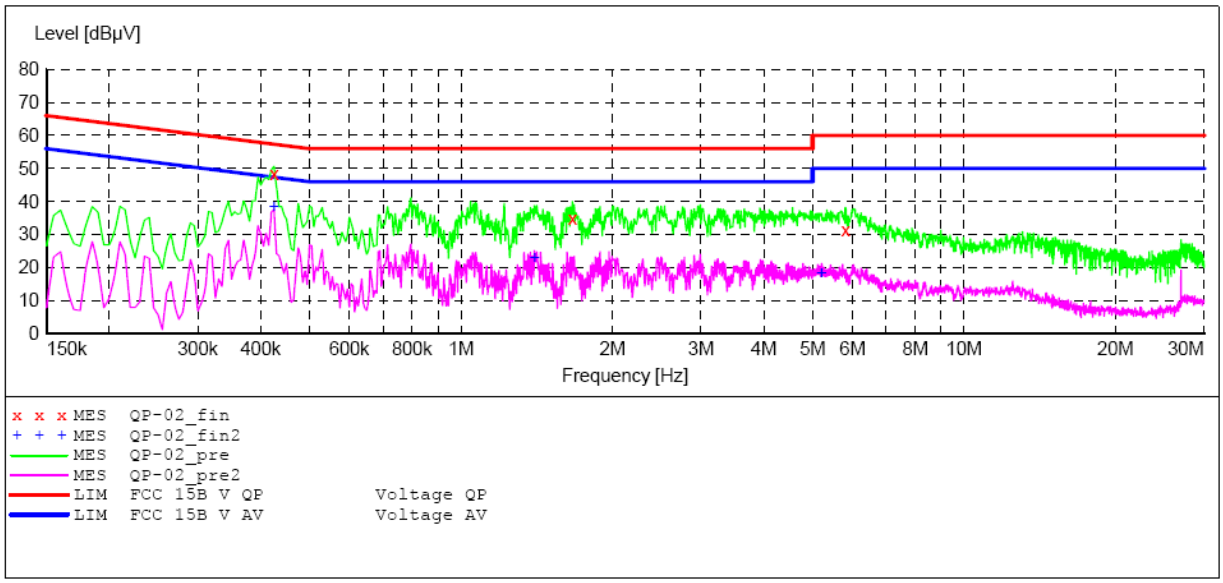
CONDUCTED EMISSION STANDARD FCC Part 15B

EUT: iDISPLAY MEDIA PLAYER M/N:UIM200B-B20
Manufacturer: Pipo
Operating Condition: WIFI
Test Site: 1#Shielding Room
Operator: Carry
Test Specification: L 120V/60Hz
Comment: Report NO.:ATE20141759
Start of Test: 9/15/2014 / 10:39:43AM

SCAN TABLE: "V 150K-30MHz fin"

Short Description: _SUB_STD_VTERM2 1.70

Start Frequency	Stop Frequency	Step Width	Detector	Meas. Time	IF Bandw.	Transducer
150.0 kHz	30.0 MHz	4.5 kHz	QuasiPeak Average	1.0 s	9 kHz	NSLK8126 2008



MEASUREMENT RESULT: "QP-02_fin"

9/15/2014 10:42AM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.425000	48.40	10.7	57	8.9	QP	L1	GND
1.665000	34.90	10.9	56	21.1	QP	L1	GND
5.810000	31.50	11.2	60	28.5	QP	L1	GND

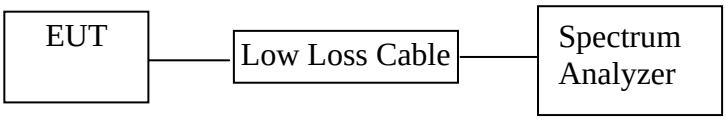
MEASUREMENT RESULT: "QP-02_fin2"

9/15/2014 10:42AM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.425000	38.30	10.7	47	9.0	AV	L1	GND
1.400000	22.80	10.9	46	23.2	AV	L1	GND
5.210000	18.20	11.2	50	31.8	AV	L1	GND

6. 6DB BANDWIDTH MEASUREMENT

6.1.Block Diagram of Test Setup



6.2.The Requirement For Section 15.247(a)(2)

Section 15.247(a)(2): Systems using digital modulation techniques may operate in the 902-928MHz, 2400-2483.5MHz, and 5725-5850MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.

6.3.EUT Configuration on Measurement

The equipment are installed on the emission measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

6.4.Operating Condition of EUT

6.4.1.Setup the EUT and simulator as shown as Section 6.1.

6.4.2.Turn on the power of all equipment.

6.4.3.Let the EUT work in TX modes measure it. The transmit frequency are 2412-2462 and 2422-2452MHz. We select 2412MHz, 2437MHz, 2462MHz and 2422MHz, 2437MHz, 2452MHz TX frequency to transmit.

6.5.Test Procedure

1. Set resolution bandwidth (RBW) = 100 kHz.
2. Set the video bandwidth (VBW) ≥ 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.

6.6.Test Result

The test was performed with 802.11b			
Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)
Low	2412	10.32	> 0.5MHz
Middle	2437	10.32	> 0.5MHz
High	2462	10.32	> 0.5MHz

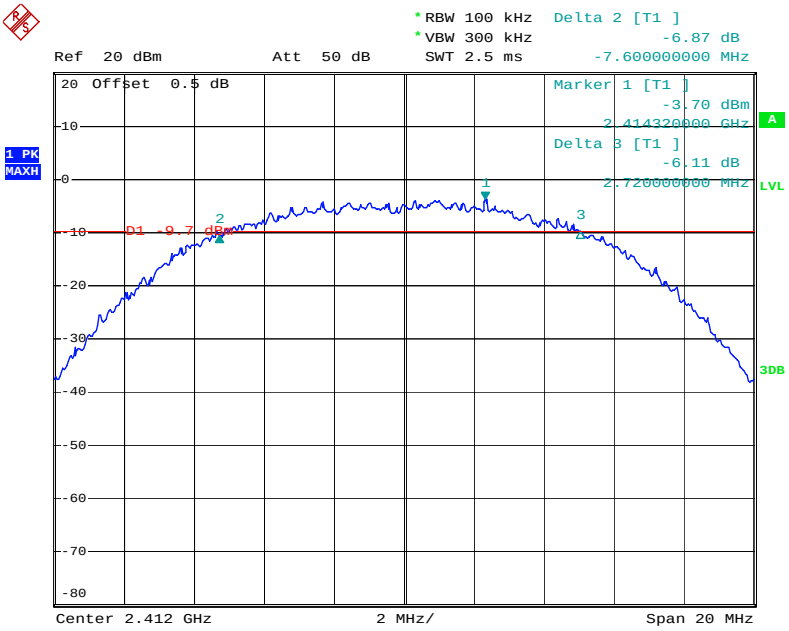
The test was performed with 802.11g			
Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)
Low	2412	16.60	> 0.5MHz
Middle	2437	16.60	> 0.5MHz
High	2462	16.60	> 0.5MHz

The test was performed with 802.11n (Bandwidth: 20 MHz)			
Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)
Low	2412	17.80	> 0.5MHz
Middle	2437	17.80	> 0.5MHz
High	2462	17.80	> 0.5MHz

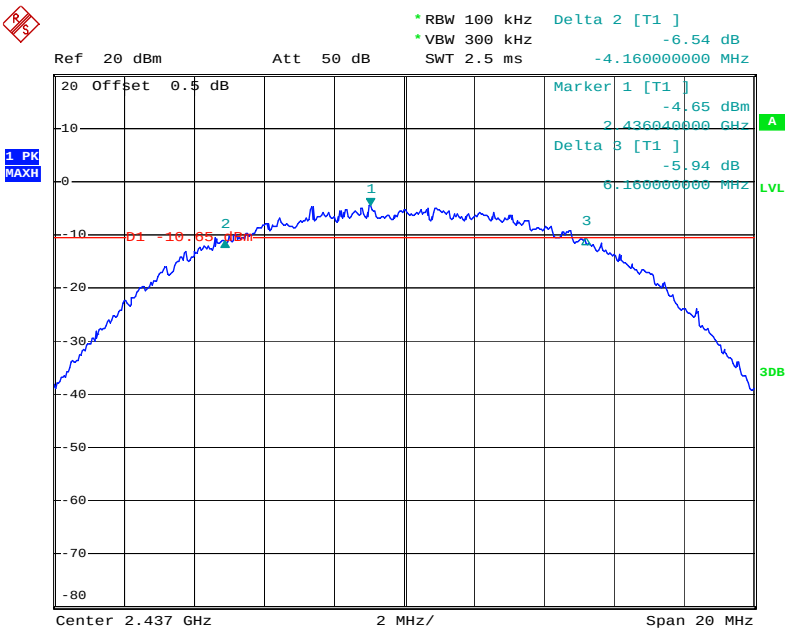
The test was performed with 802.11n (Bandwidth: 40 MHz)			
Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)
Low	2422	36.56	> 0.5MHz
Middle	2437	36.56	> 0.5MHz
High	2452	36.56	> 0.5MHz

The spectrum analyzer plots are attached as below.

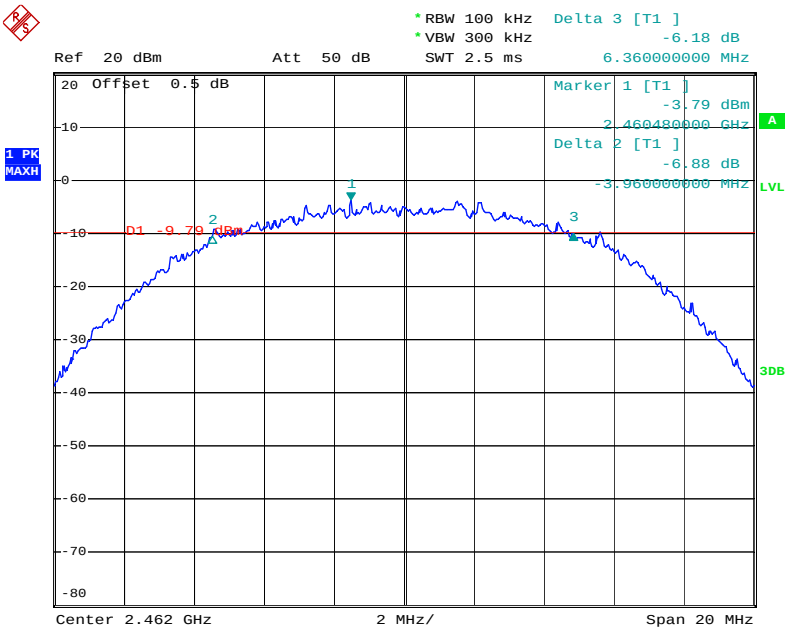
802.11b Channel Low 2412MHz



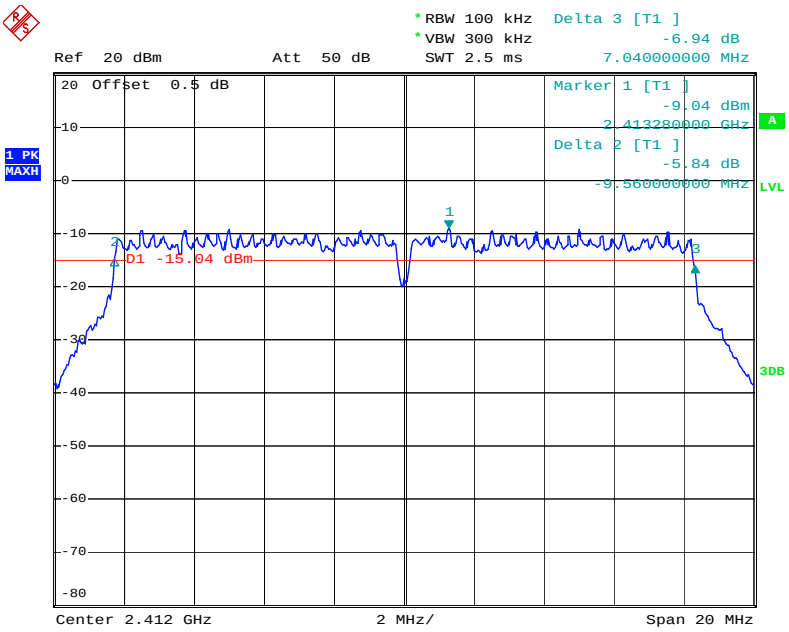
802.11b Channel Middle 2437MHz



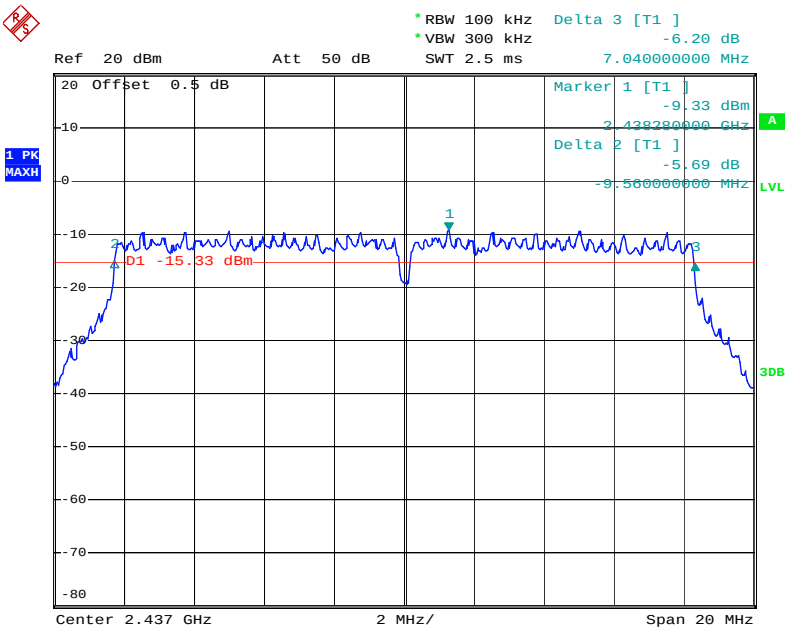
802.11b Channel High 2462MHz



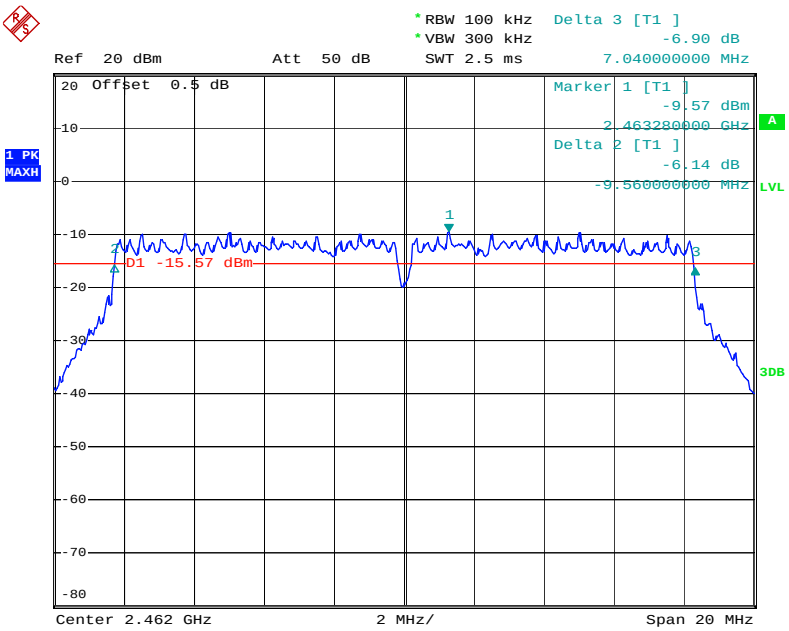
802.11g Channel Low 2412MHz



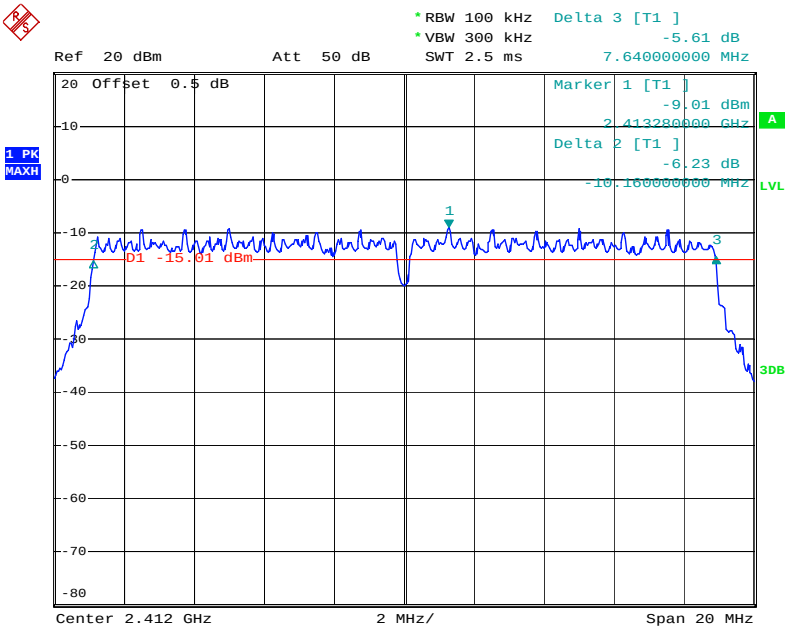
802.11g Channel Middle 2437MHz



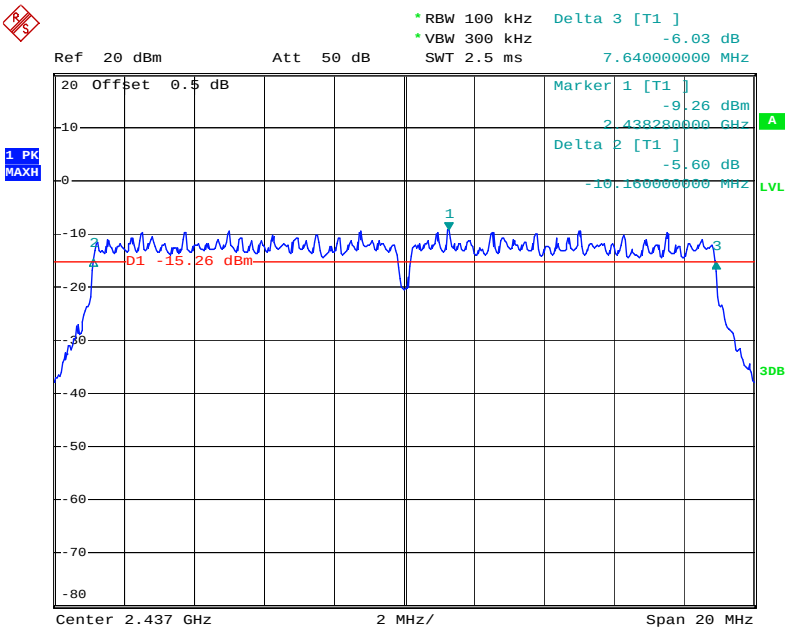
802.11g Channel High 2462MHz



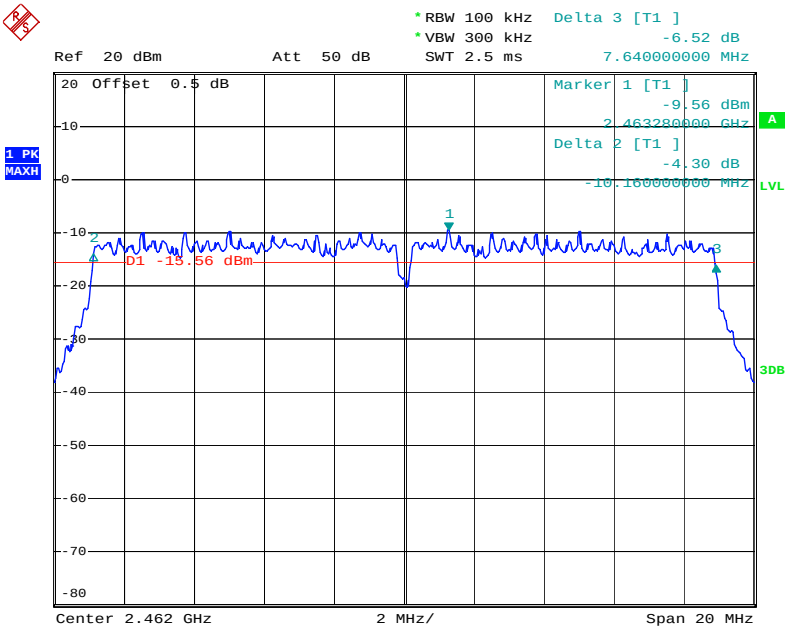
802.11n Channel Low 2412MHz (20MHz)



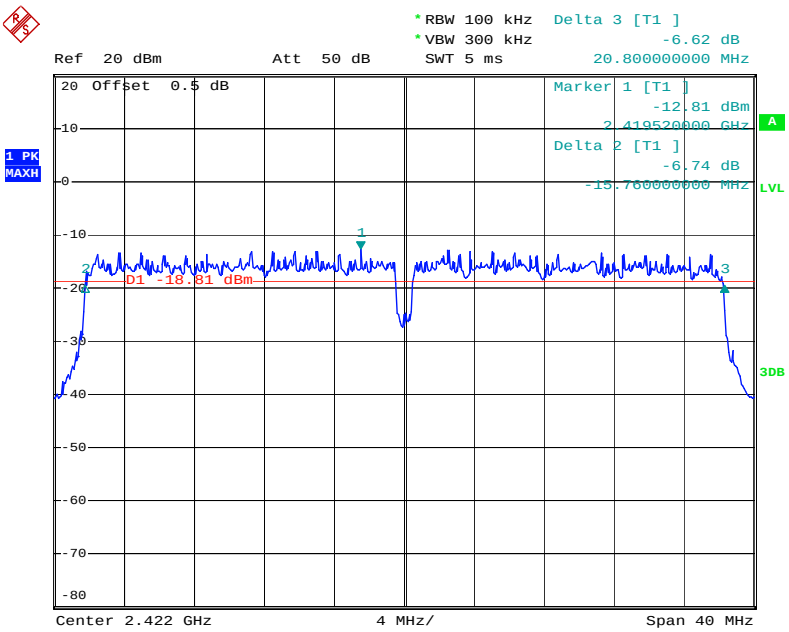
802.11n Channel Middle 2437MHz(20MHz)



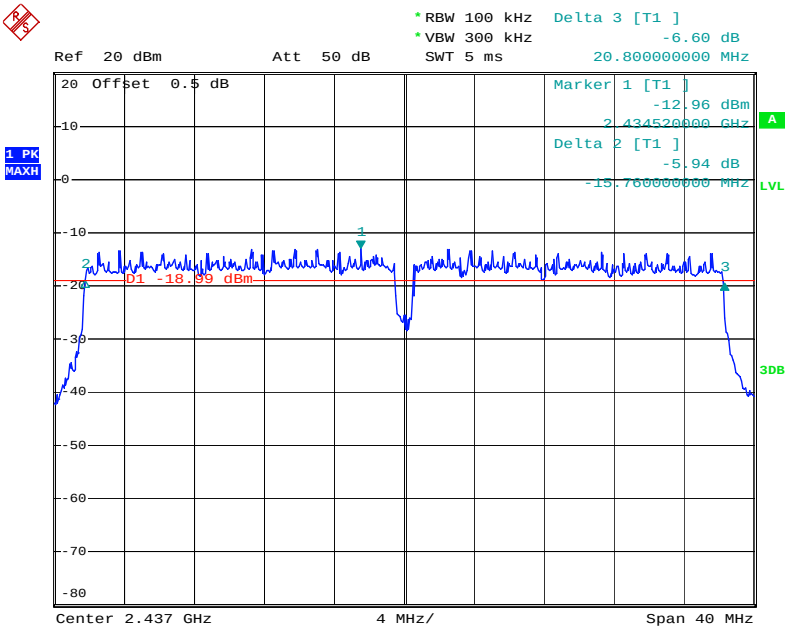
802.11n Channel High 2462MHz(20MHz)



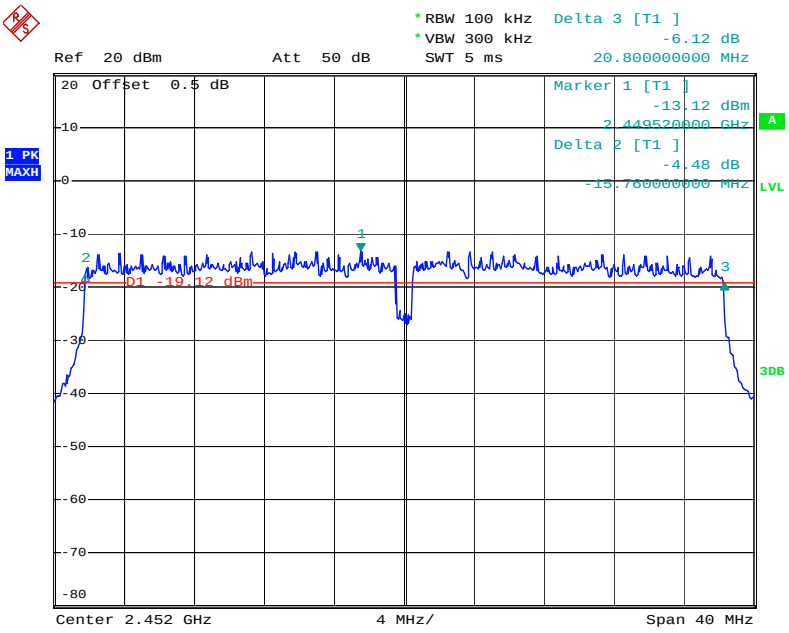
802.11n Channel Low 2422MHz (40MHz)



802.11n Channel Middle 2437MHz(40MHz)

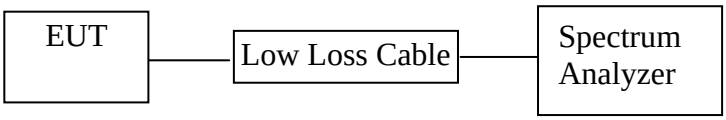


802.11n Channel High 2452MHz(40MHz)



7. MAXIMUM CONDUCTED (AVERAGE) OUTPUT POWER

7.1.Block Diagram of Test Setup



7.2.The Requirement For Section 15.247(b)(3)

Section 15.247(b)(3): For systems using digital modulation in the 902-928MHz, 2400-2483.5MHz, and 5725-5850MHz bands: 1 Watt.

7.3.EUT Configuration on Measurement

The equipment is installed on the emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

7.4.Operating Condition of EUT

7.4.1.Setup the EUT and simulator as shown as Section 7.1.

7.4.2.Turn on the power of all equipment.

7.4.3.Let the EUT work in TX modes measure it. The transmit frequency are 2412-2462 and 2422-2452MHz. We select 2412MHz, 2437MHz, 2462MHz and 2422MHz, 2437MHz, 2452MHz TX frequency to transmit.

7.5.Test Procedure

7.5.1.The EUT was tested according to DTS test procedure of Jun 05, 2014 KDB558074 D01 DTS Meas Guidance v03r02 for compliance to FCC 47CFR 15.247 requirements.

7.5.2.The transmitter output was connected to the spectrum analyzer through a low loss cable.

7.5.3.Set RBW = 1-5% of the OBW, not to exceed 1 MHz, VBW $\geqslant$ 3 x RBW, Sweep time = auto, Set span to at least 1.5 times the OBW, Detector = RMS.

7.5.4.Measurement the Maximum conducted (average) output power.

7.6.Test Result

The test was performed with 802.11b				
Channel	Frequency (MHz)	Ave output power (dBm)	Ave output power (mW)	Limits dBm / W
Low	2412	9.35	8.61	30 dBm / 1 W
Middle	2437	9.49	8.89	30 dBm / 1 W
High	2462	9.26	8.43	30 dBm / 1 W

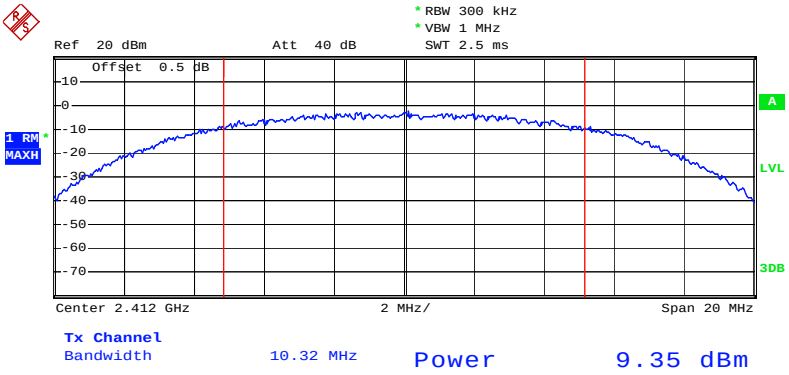
The test was performed with 802.11g				
Channel	Frequency (MHz)	Ave output power (dBm)	Ave output power (mW)	Limits dBm / W
Low	2412	8.57	7.19	30 dBm / 1 W
Middle	2437	8.54	7.14	30 dBm / 1 W
High	2462	8.79	7.57	30 dBm / 1 W

The test was performed with 802.11n (20MHz)				
Channel	Frequency (MHz)	Ave output power (dBm)	Ave output power (mW)	Limits dBm / W
Low	2412	8.16	6.55	30 dBm / 1 W
Middle	2437	7.98	6.28	30 dBm / 1 W
High	2462	7.57	5.71	30 dBm / 1 W

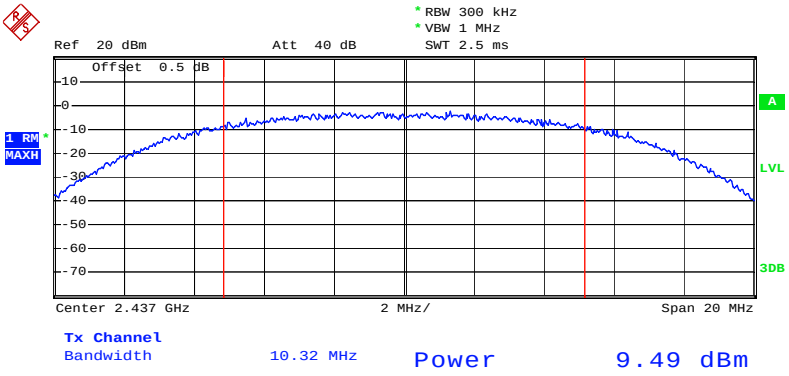
The test was performed with 802.11n (40MHz)				
Channel	Frequency (MHz)	Ave output power (dBm)	Ave output power (mW)	Limits dBm / W
Low	2422	7.20	5.25	30 dBm / 1 W
Middle	2437	7.03	5.05	30 dBm / 1 W
High	2452	7.11	5.14	30 dBm / 1 W

The spectrum analyzer plots are attached as below.

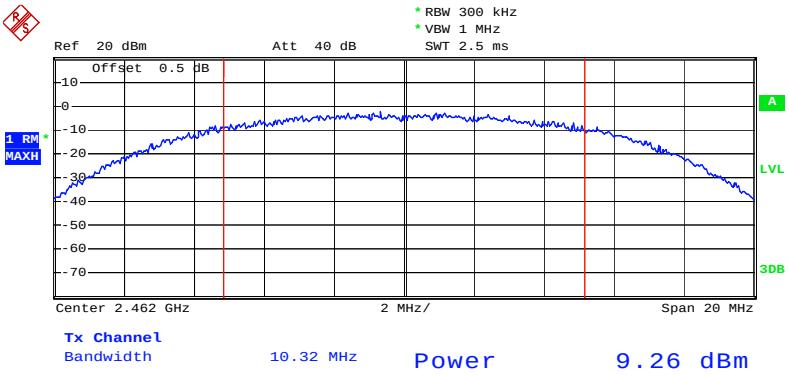
802.11b Channel Low 2412MHz



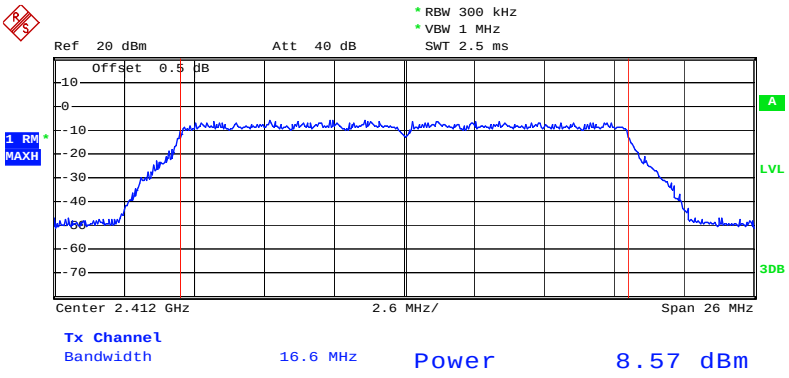
802.11b Channel Middle 2437MHz



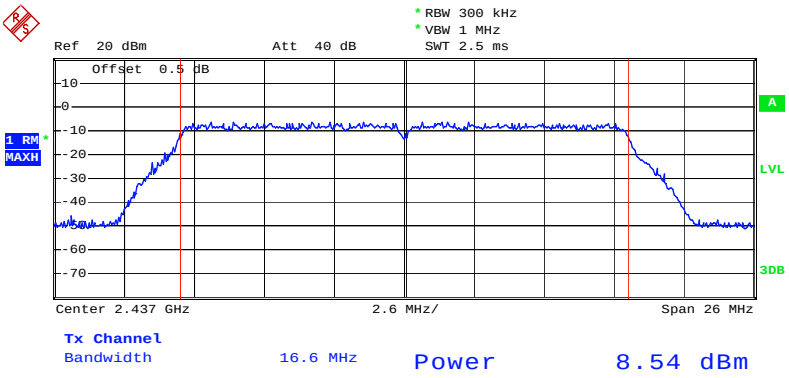
802.11b Channel High 2462MHz



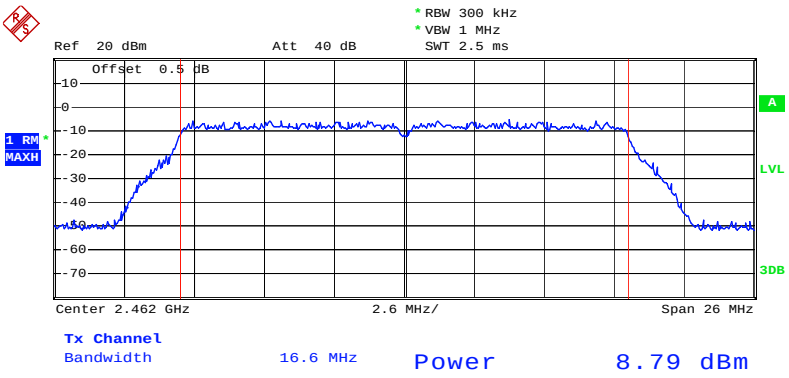
802.11g Channel Low 2412MHz



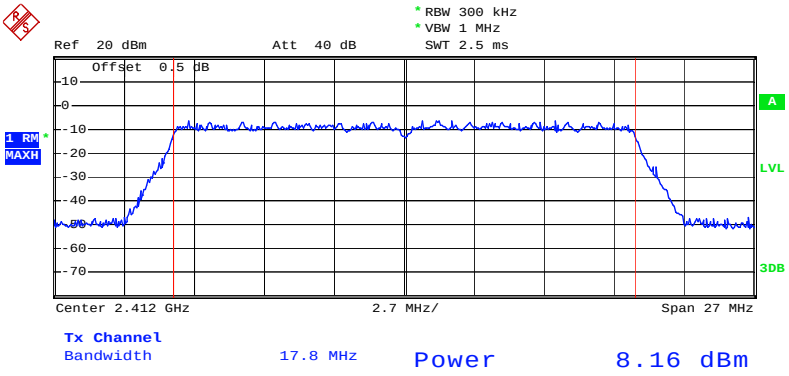
802.11g Channel Middle 2437MHz



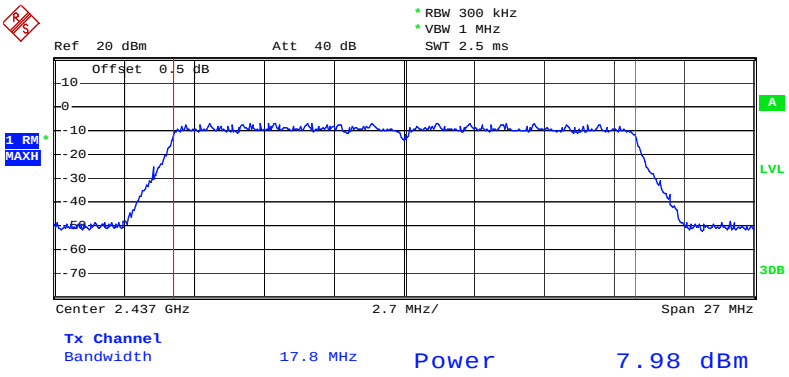
802.11g Channel High 2462MHz



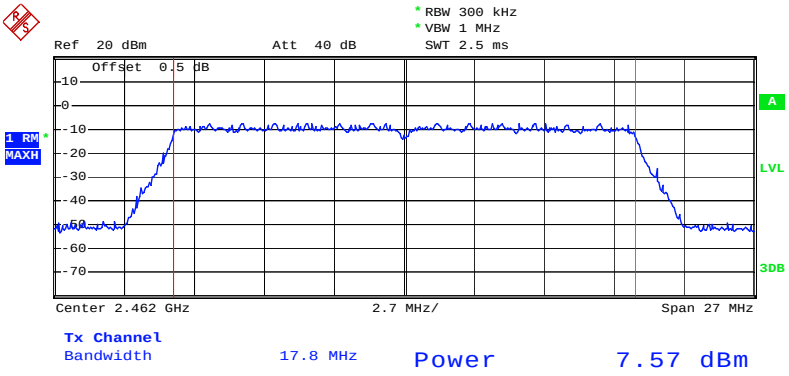
802.11n Channel Low 2412MHz (20MHz)



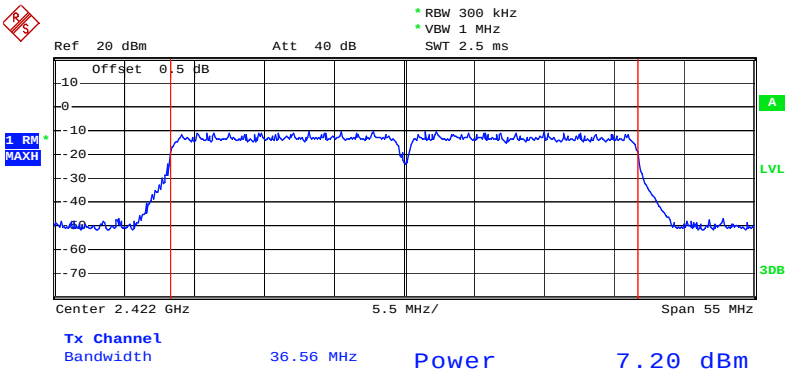
802.11n Channel Middle 2437MHz (20MHz)



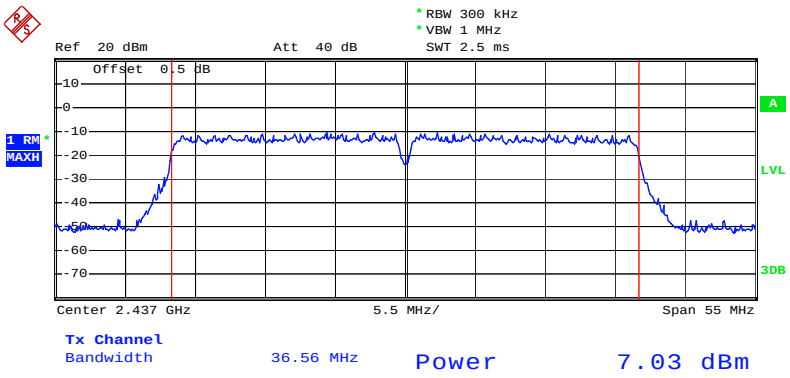
802.11n Channel High 2462MHz (20MHz)



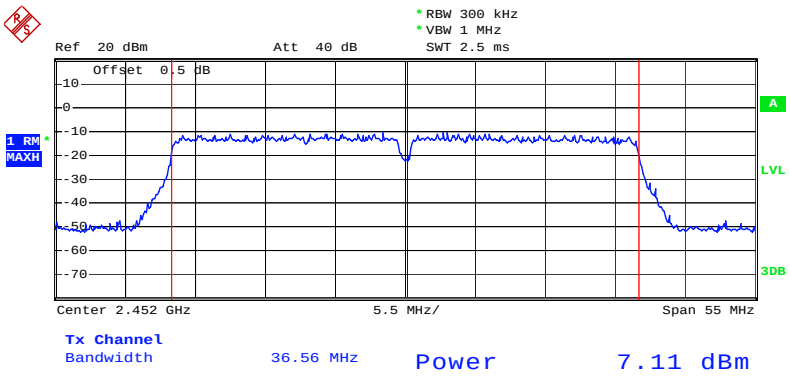
802.11n Channel Low 2422MHz (40MHz)



802.11n Channel Middle 2437MHz (40MHz)

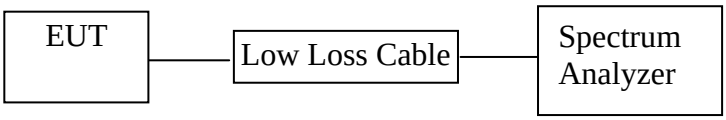


802.11n Channel High 2452MHz (40MHz)



8. POWER SPECTRAL DENSITY MEASUREMENT

8.1.Block Diagram of Test Setup



8.2.The Requirement For Section 15.247(e)

Section 15.247(e): For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

8.3.EUT Configuration on Measurement

The equipment are installed on the emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

8.4.Operating Condition of EUT

8.4.1.Setup the EUT and simulator as shown as Section 8.1.

8.4.2.Turn on the power of all equipment.

8.4.3.Let the EUT work in TX modes measure it. The transmit frequency are 2412-2462 and 2422-2452MHz. We select 2412MHz, 2437MHz, 2462MHz and 2422MHz, 2437MHz, 2452MHz TX frequency to transmit.

8.5.Test Procedure

8.5.1.The transmitter output was connected to the spectrum analyzer through a low loss cable.

8.5.2.Measurement Procedure PKPSD:

This procedure must be used if maximum peak conducted output power was used to demonstrate compliance to the fundamental output power limit, and is optional if the maximum (average) conducted output power was used to demonstrate compliance.

1. Set analyzer center frequency to DTS channel center frequency.
2. Set the span to 1.5 times the DTS channel bandwidth.

3. Set the RBW 3 kHz ≤ RBW ≤ 100 kHz.
4. Set the VBW ≥ 3 x RBW.
5. Detector = peak.
6. Sweep time = auto couple.
7. Trace mode = max hold.
8. Allow trace to fully stabilize.
9. Use the peak marker function to determine the maximum amplitude level.
10. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

8.5.3.Measurement the maximum power spectral density.

8.6.Test Result

The test was performed with 802.11b			
Channel	Frequency (MHz)	Power Spectral Density (dBm)	Limits (dBm)
Low	2412	-19.36	8 dBm
Middle	2437	-19.20	8 dBm
High	2462	-20.11	8 dBm

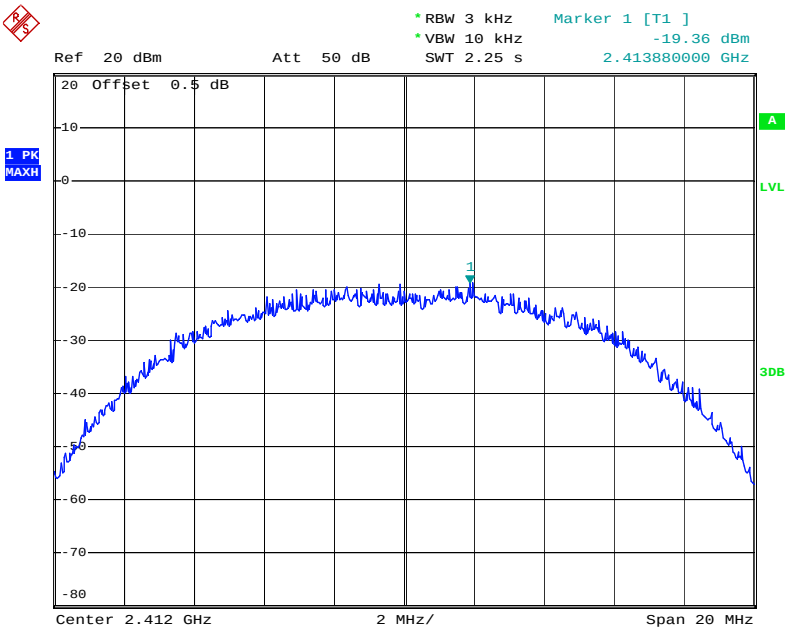
The test was performed with 802.11g			
Channel	Frequency (MHz)	Power Spectral Density (dBm)	Limits (dBm)
Low	2412	-23.88	8 dBm
Middle	2437	-24.52	8 dBm
High	2462	-23.79	8 dBm

The test was performed with 802.11n (20MHz)			
Channel	Frequency (MHz)	Power Spectral Density (dBm)	Limits (dBm)
Low	2412	-24.54	8 dBm
Middle	2437	-25.50	8 dBm
High	2462	-24.74	8 dBm

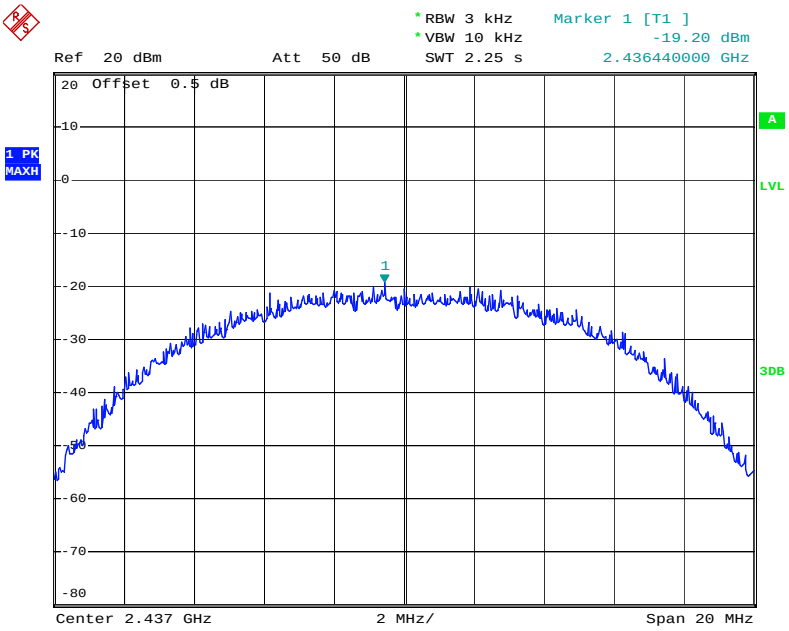
The test was performed with 802.11n (40MHz)			
Channel	Frequency (MHz)	Power Spectral Density (dBm)	Limits (dBm)
Low	2422	-29.52	8 dBm
Middle	2437	-29.55	8 dBm
High	2452	-30.52	8 dBm

The spectrum analyzer plots are attached as below.

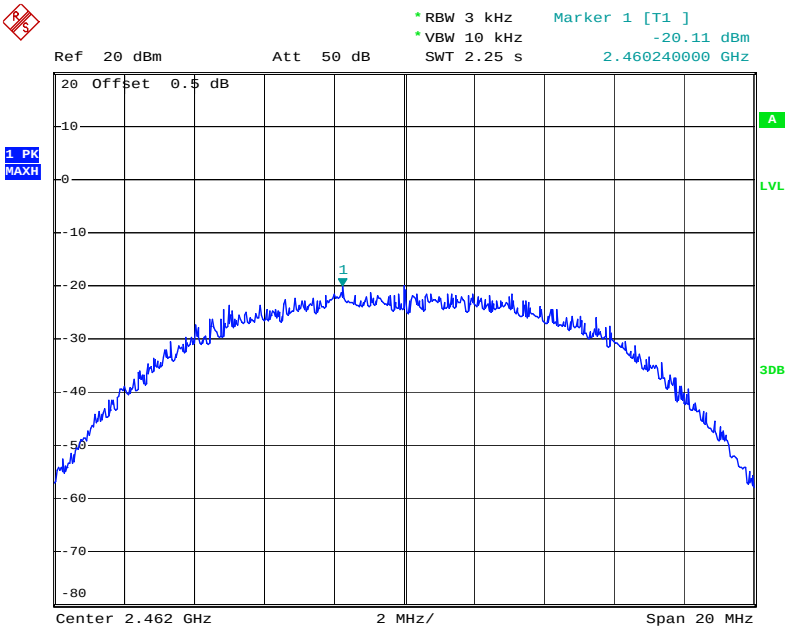
802.11b Channel Low 2412MHz



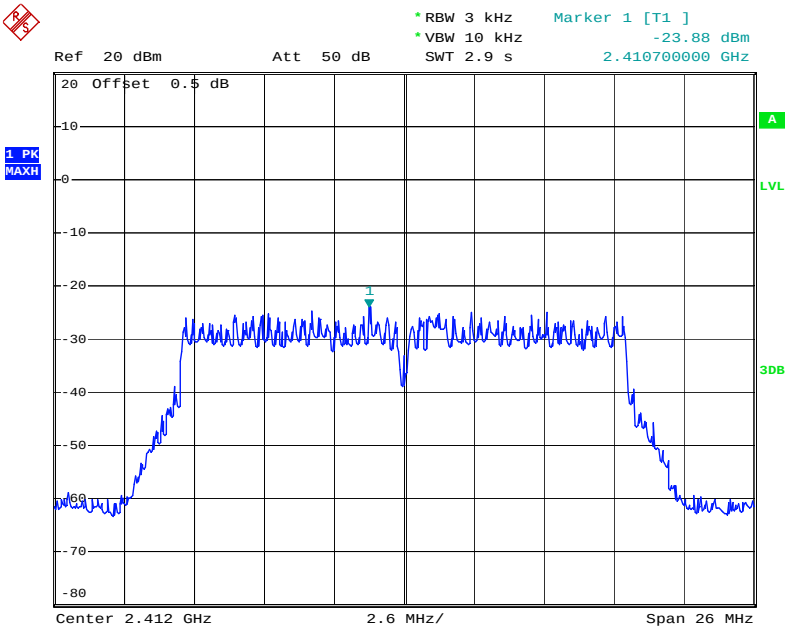
802.11b Channel Middle 2437MHz



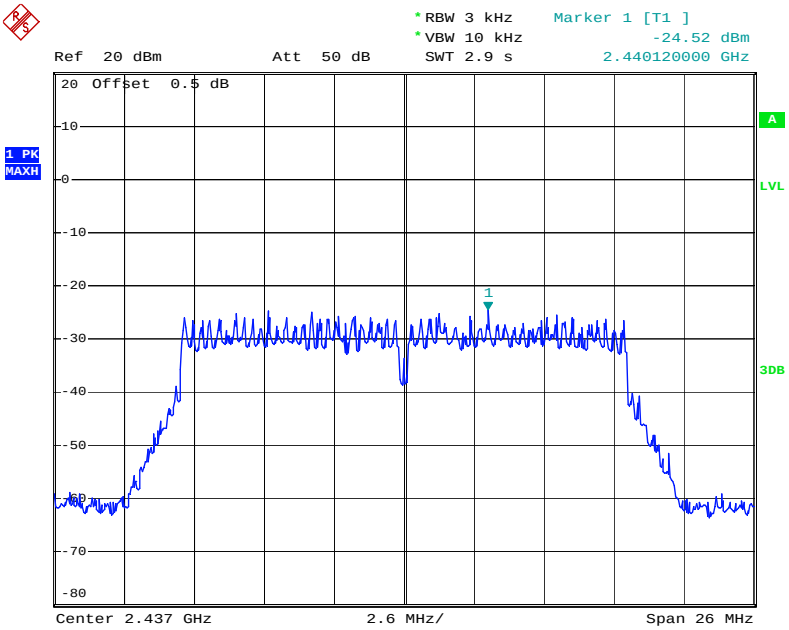
802.11b Channel High 2462MHz



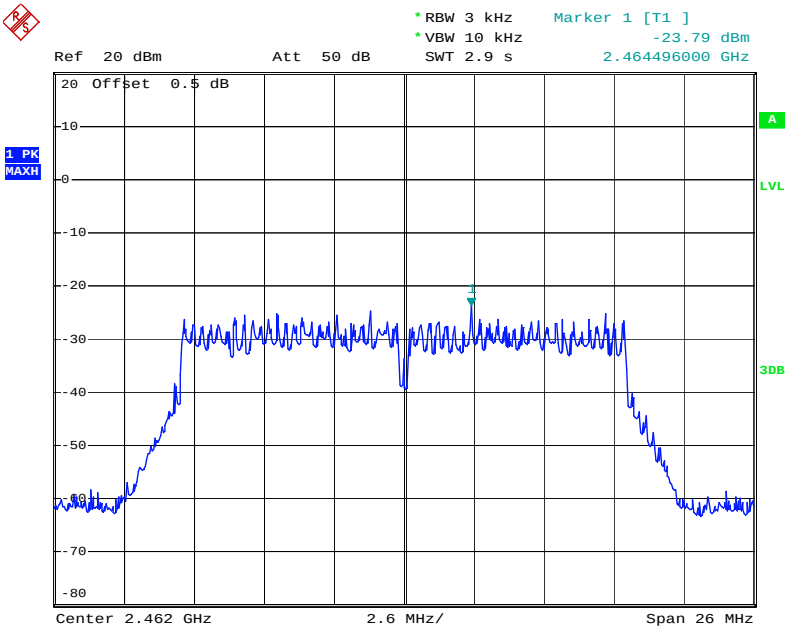
802.11g Channel Low 2412MHz



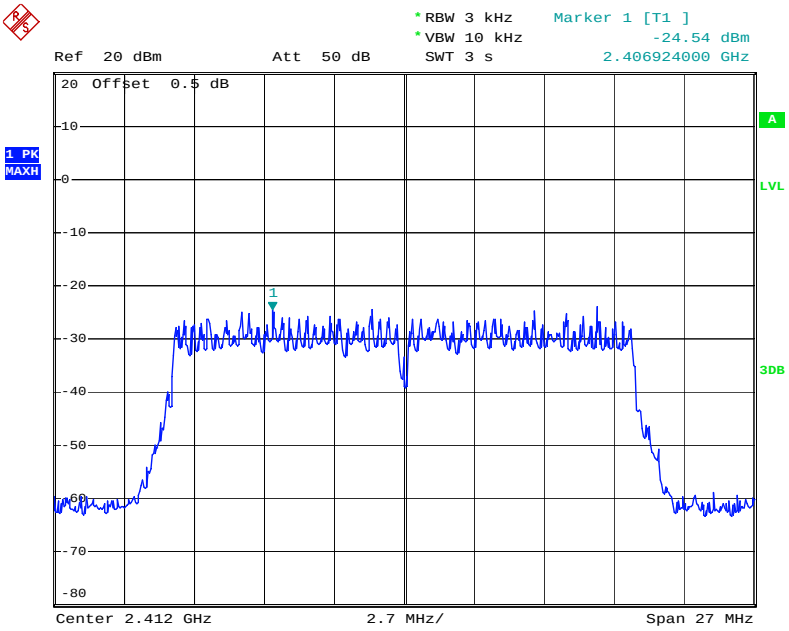
802.11g Channel Middle 2437MHz



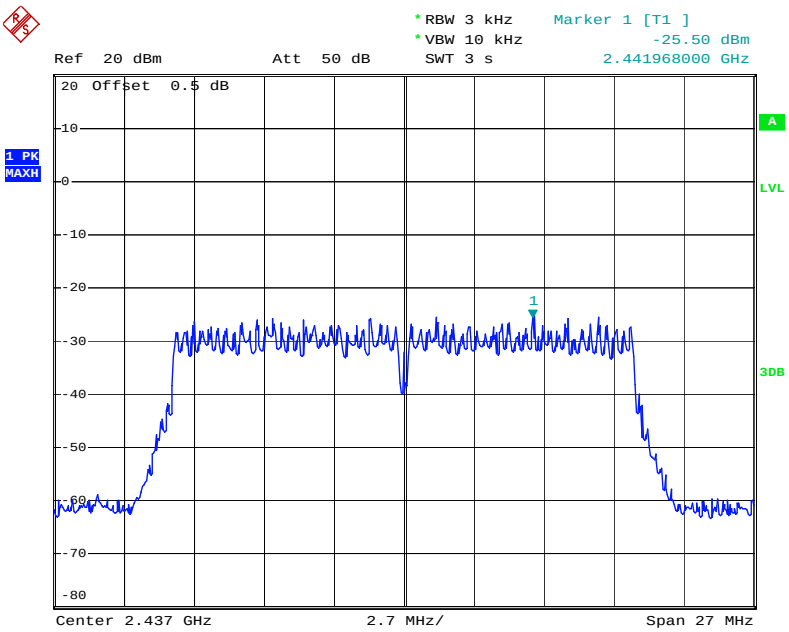
802.11g Channel High 2462MHz



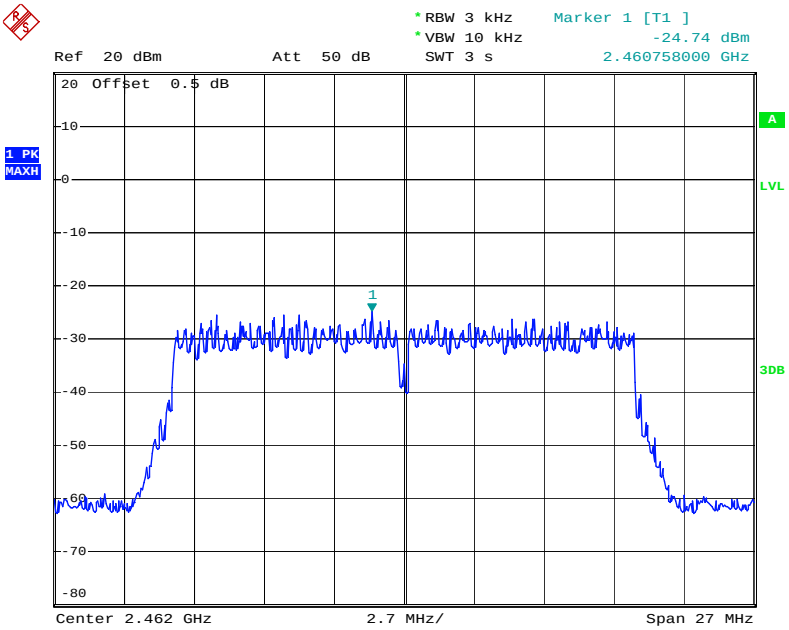
802.11n Channel Low 2412MHz (20MHz)



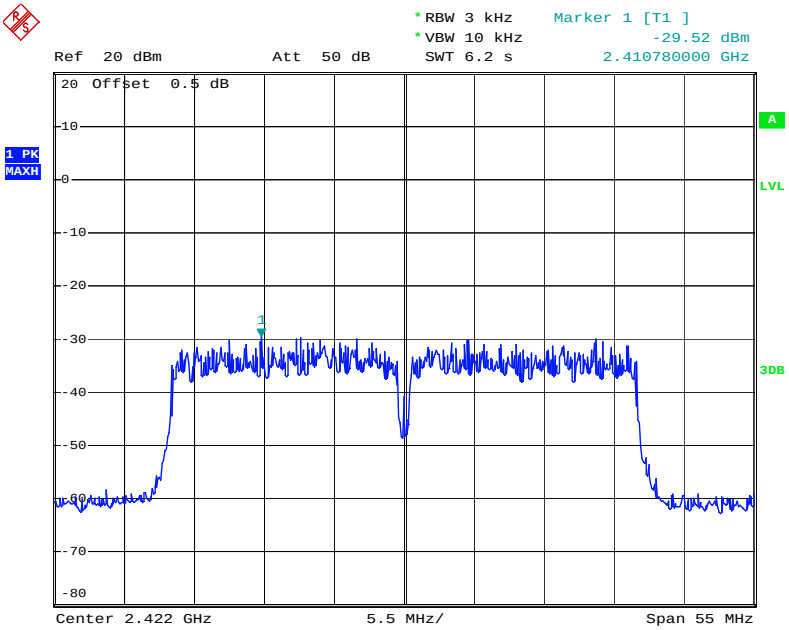
802.11n Channel Middle 2437MHz (20MHz)



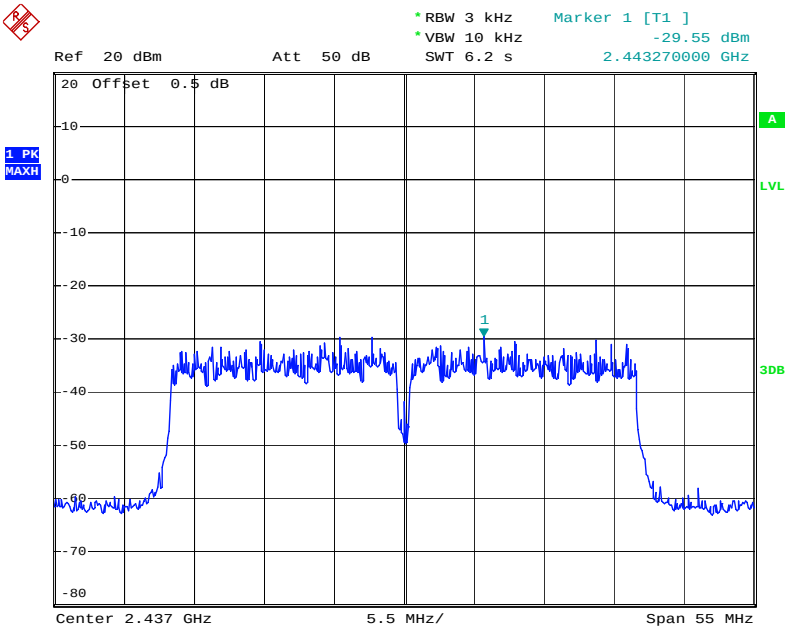
802.11n Channel High 2462MHz(20MHz)



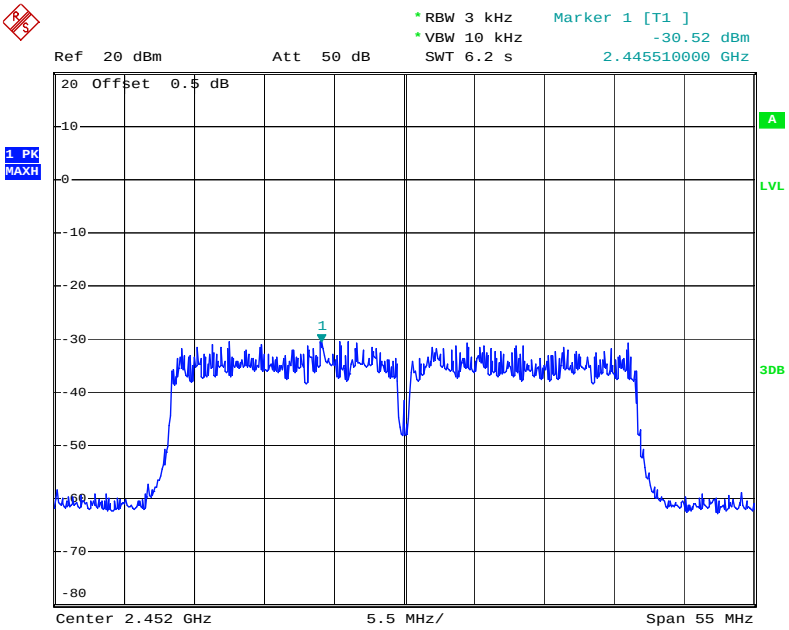
802.11n Channel Low 2422MHz (40MHz)



802.11n Channel Middle 2437MHz(40MHz)

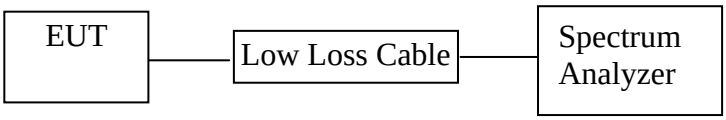


802.11n Channel High 2452MHz(40MHz)



9. BAND EDGE COMPLIANCE TEST

9.1. Block Diagram of Test Setup



9.2. The Requirement For Section 15.247(d)

Section 15.247(d): In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a).

9.3. EUT Configuration on Measurement

The equipment are installed on the emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

9.4. Operating Condition of EUT

9.4.1. Setup the EUT and simulator as shown as Section 9.1.

9.4.2. Turn on the power of all equipment.

9.4.3. Let the EUT work in TX modes measure it. The transmit frequency are 2412-2462 and 2422-2452MHz MHz. We select 2412MHz, 2462MHz and 2422MHz, 2452MHz TX frequency to transmit.

9.5. Test Procedure

Conducted Band Edge:

9.5.1. The transmitter output was connected to the spectrum analyzer via a low loss cable.

9.5.2.Set RBW of spectrum analyzer to 100kHz and VBW to 300kHz.

Radiate Band Edge:

9.5.3.The EUT is placed on a turntable, which is 0.8m above the ground plane and worked at highest radiated power.

9.5.4.The turntable was rotated for 360 degrees to determine the position of maximum emission level.

9.5.5.EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emission.

9.5.6.Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of the emission:

9.5.7.RBW=1MHz, VBW=1MHz

9.5.8.The band edges was measured and recorded.

9.6.Test Result

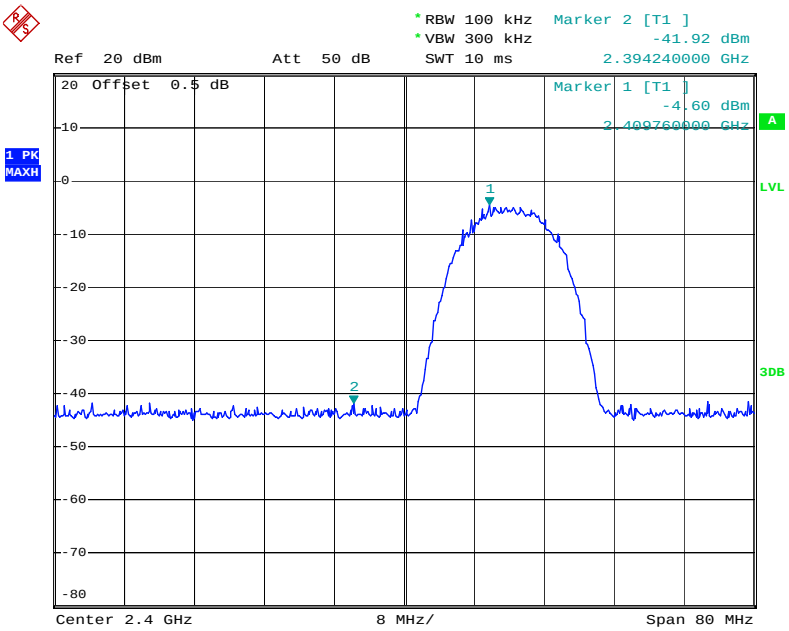
The test was performed with 802.11b		
Frequency (MHz)	Result of Band Edge (dBc)	Limit of Band Edge (dBc)
2412	37.32	> 20dBc
2462	36.98	> 20dBc

The test was performed with 802.11g		
Frequency (MHz)	Result of Band Edge (dBc)	Limit of Band Edge (dBc)
2412	33.63	> 20dBc
2462	33.11	> 20dBc

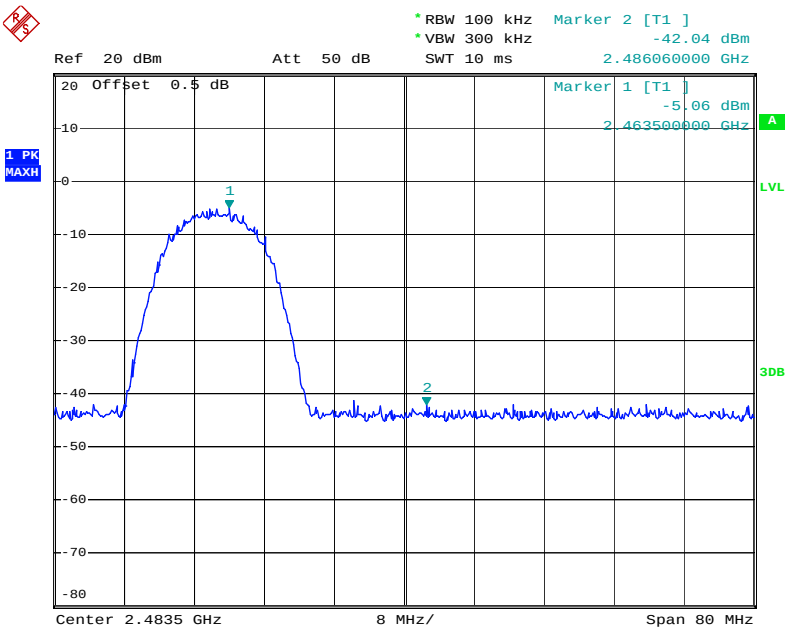
The test was performed with 802.11n (20MHz)		
Frequency (MHz)	Result of Band Edge (dBc)	Limit of Band Edge (dBc)
2412	34.39	> 20dBc
2462	33.21	> 20dBc

The test was performed with 802.11n (40MHz)		
Frequency (MHz)	Result of Band Edge (dBc)	Limit of Band Edge (dBc)
2422	29.43	> 20dBc
2452	29.21	> 20dBc

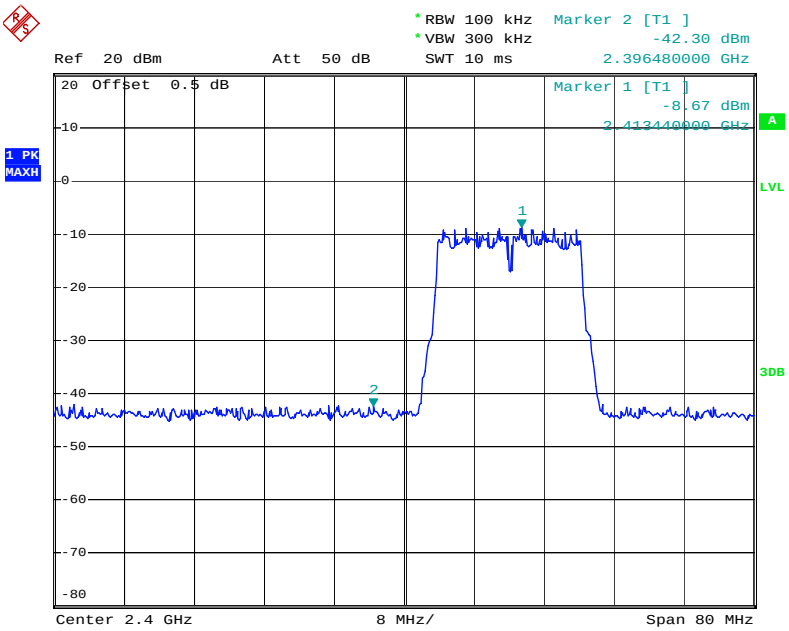
802.11b Channel Low 2412MHz



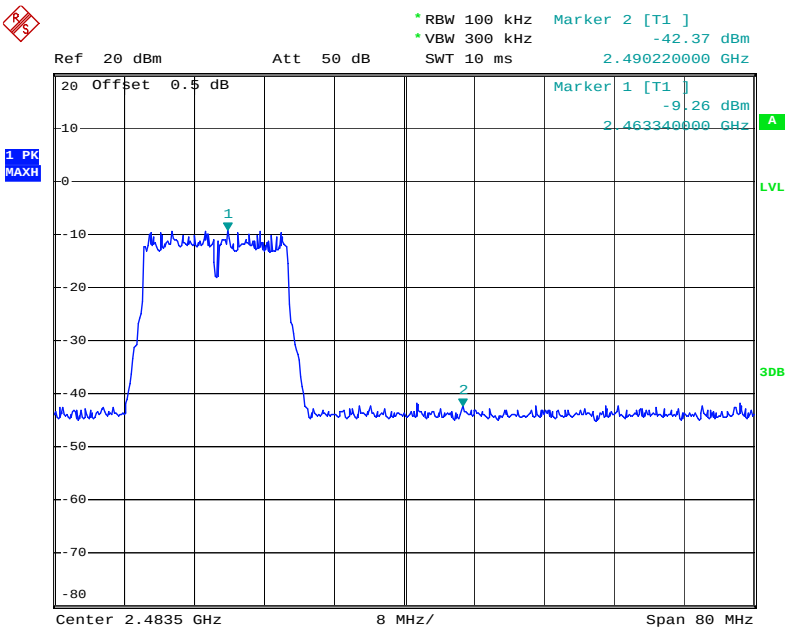
802.11b Channel High 2462MHz



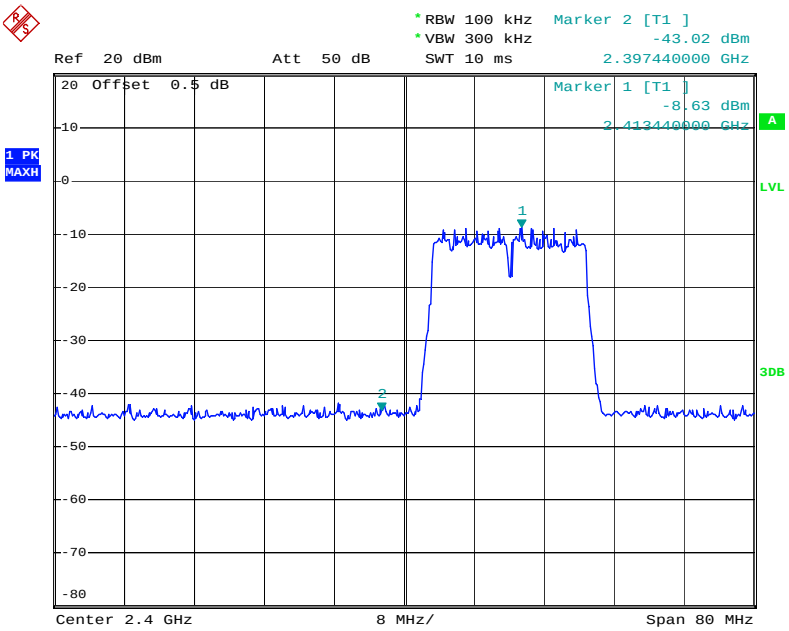
802.11g Channel Low 2412MHz



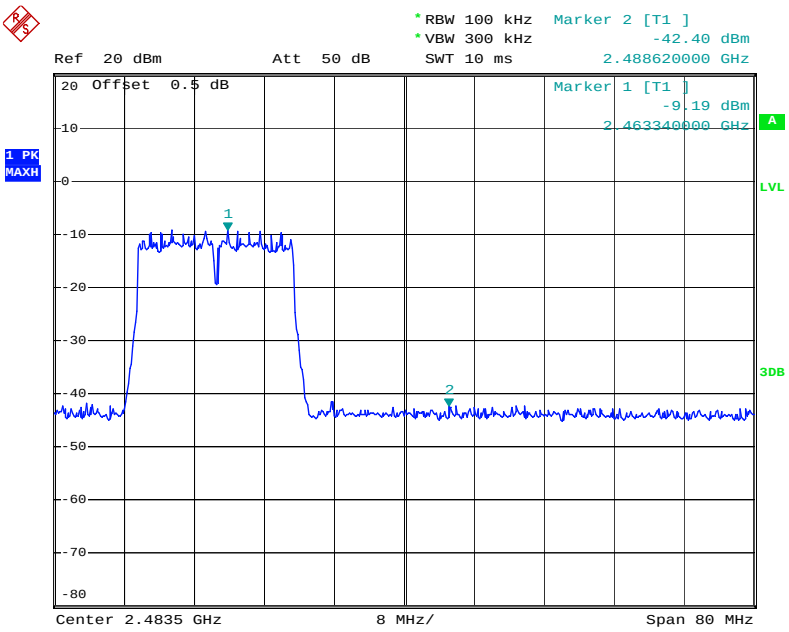
802.11g Channel High 2462MHz



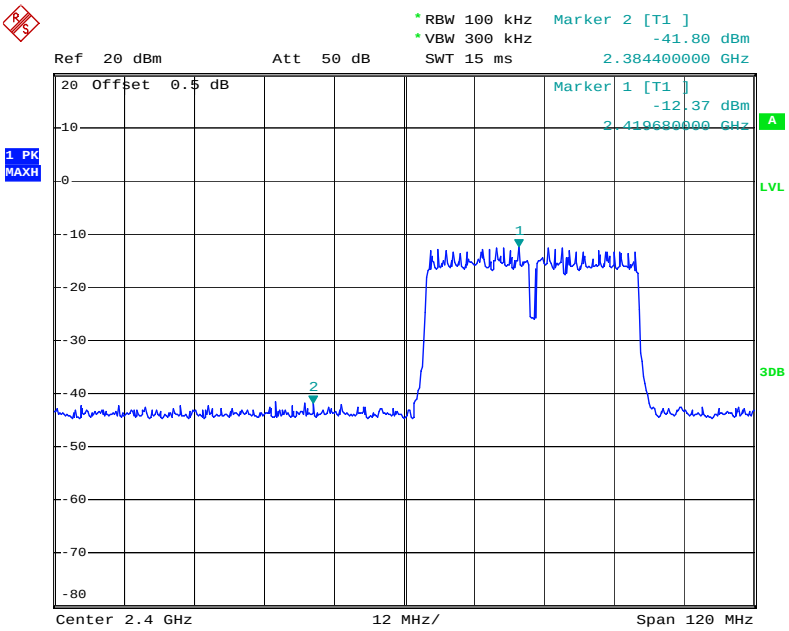
802.11n Channel Low 2412MHz (20MHz)



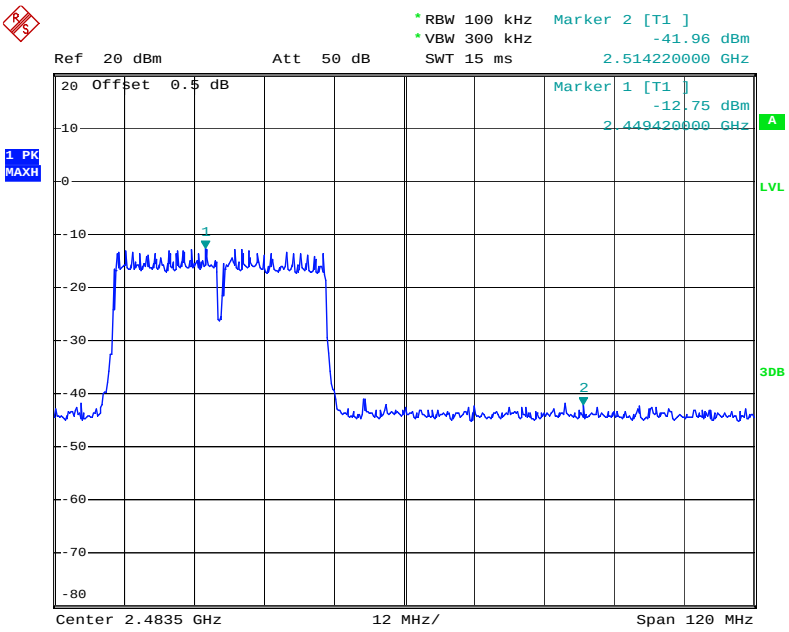
802.11n Channel High 2462MHz (20MHz)



802.11n Channel Low 2422MHz (40MHz)



802.11n Channel High 2452MHz (40MHz)



Radiated Band Edge Result

Note:

1. Emissions attenuated more than 20 dB below the permissible value are not reported.
2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:

   Result = Reading + Corrected Factor
3. Display the measurement of peak values.

ACCURATE TECHNOLOGY CO., LTD.
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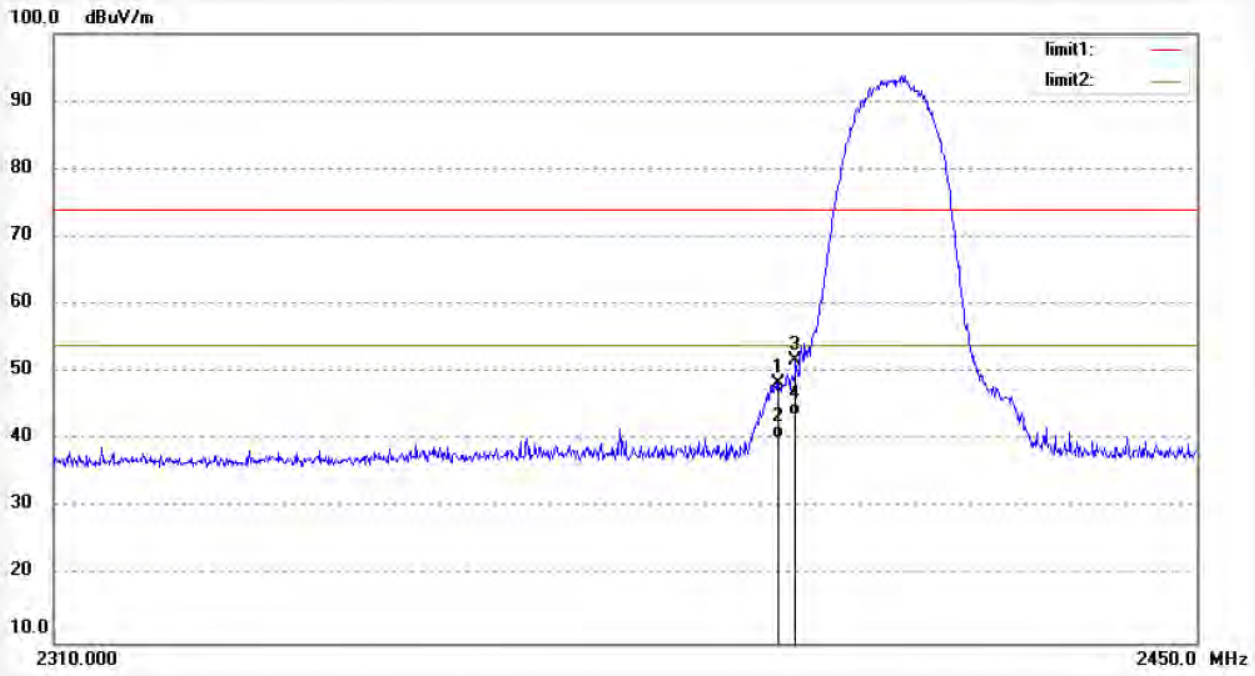
Site: 1# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: alen #4582	Polarization: Horizontal
Standard: FCC PK	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 14/09/15/
Temp.(C)/Hum.(%) 25 C / 55 %	Time: 9/32/45
EUT: iDISPLAY MEDIA PLAYER	Engineer Signature:
Mode: TX 2412MHz(802.11b)	Distance: 3m
Model: UIM200B-B20	
Manufacturer: Pipo	

Note: Report NO.:ATE20141759



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2397.920	55.02	-6.76	48.26	74.00	-25.74	peak			
2	2397.920	47.01	-6.76	40.25	54.00	-13.75	AVG			
3	2400.020	58.43	-6.76	51.67	74.00	-22.33	peak			
4	2400.020	50.37	-6.76	43.61	54.00	-10.39	AVG			

ACCURATE TECHNOLOGY CO., LTD.
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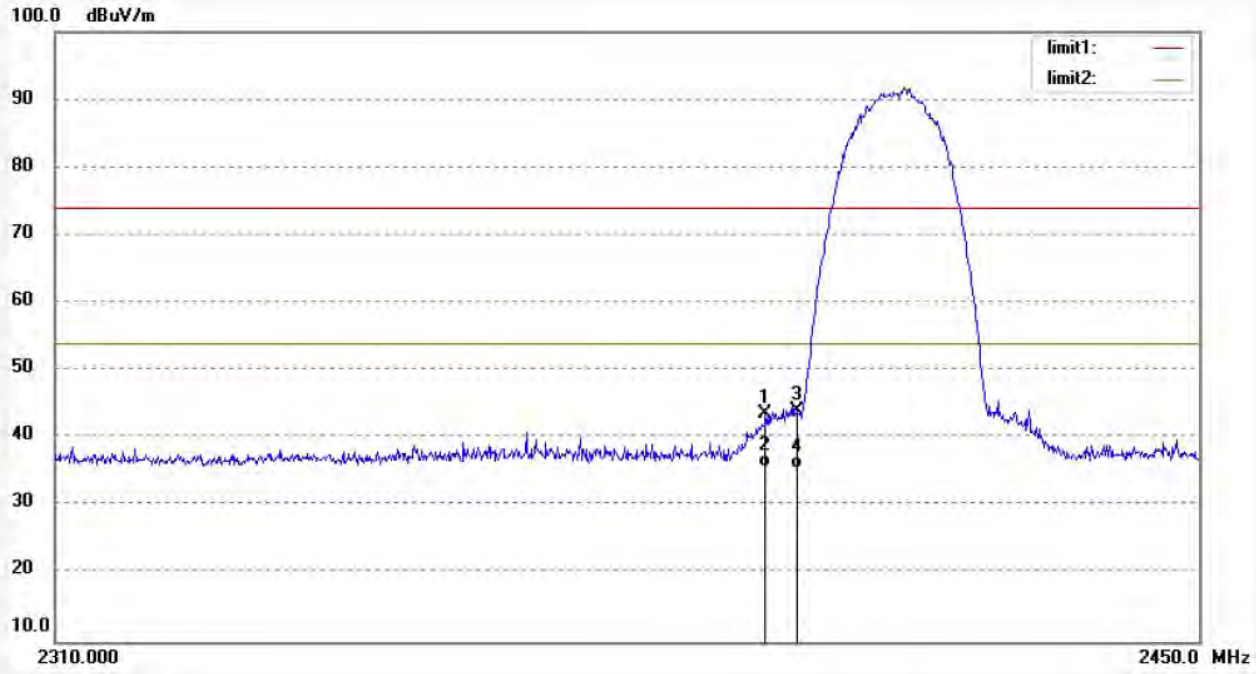
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 1# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: alen #4583
Standard: FCC PK
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 55 %
EUT: iDISPLAY MEDIA PLAYER
Mode: TX 2412MHz(802.11b)
Model: UIM200B-B20
Manufacturer: Pipo

Polarization: Vertical
Power Source: AC 120V/60Hz
Date: 14/09/15/
Time: 9/35/57
Engineer Signature:
Distance: 3m

Note: Report NO.:ATE20141759



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2396.100	50.41	-6.76	43.65	74.00	-30.35	peak			
2	2396.100	42.48	-6.76	35.72	54.00	-18.28	AVG			
3	2400.020	50.74	-6.76	43.98	74.00	-30.02	peak			
4	2400.020	42.38	-6.76	35.62	54.00	-18.38	AVG			

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Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 1# Chamber
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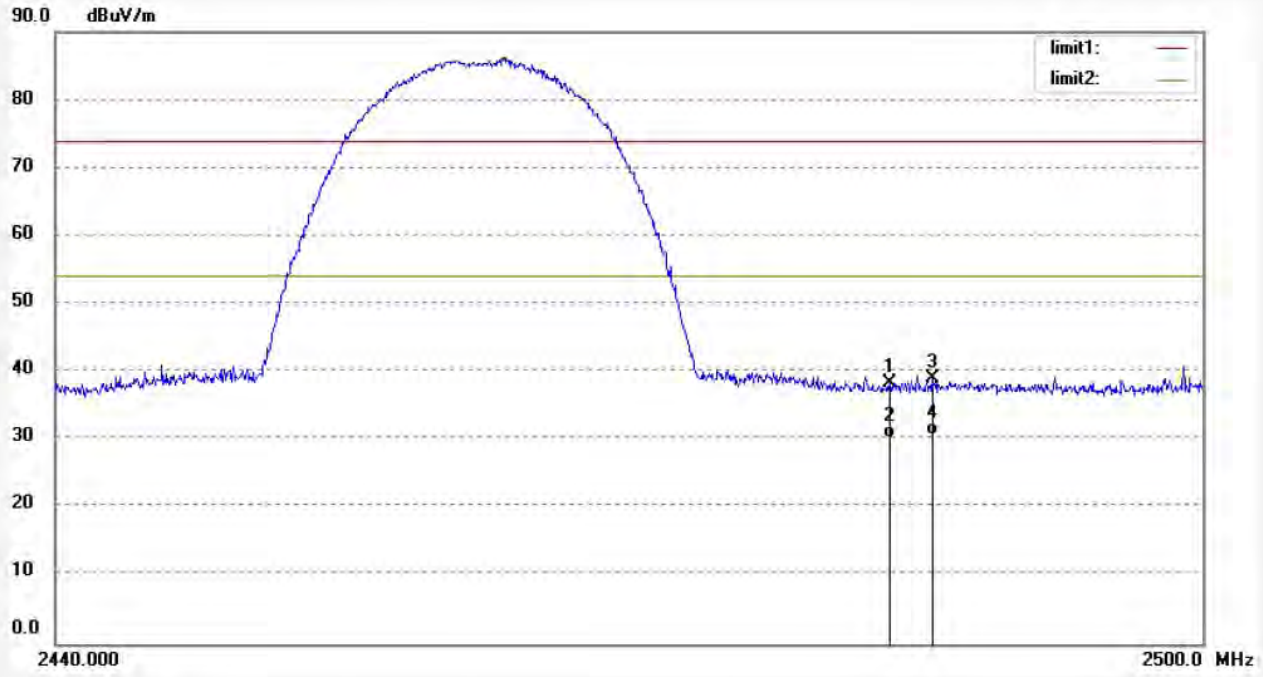
Fax:+86-0755-26503396

Job No.: alen #4585	Polarization: Horizontal
Standard: FCC PK	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 14/09/15/
Temp.(C)/Hum.(%) 25 C / 55 %	Time: 9/39/55
EUT: iDISPLAY MEDIA PLAYER	Engineer Signature:
Mode: TX 2462MHz(802.11b)	Distance: 3m
Model: UIM200B-B20	
Manufacturer: Pipo	

Note: Report NO.:ATE20141759



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.500	44.83	-6.54	38.29	74.00	-35.71	peak			
2	2483.500	36.78	-6.54	30.24	54.00	-23.76	AVG			
3	2485.720	45.47	-6.54	38.93	74.00	-35.07	peak			
4	2485.720	37.35	-6.54	30.81	54.00	-23.19	AVG			

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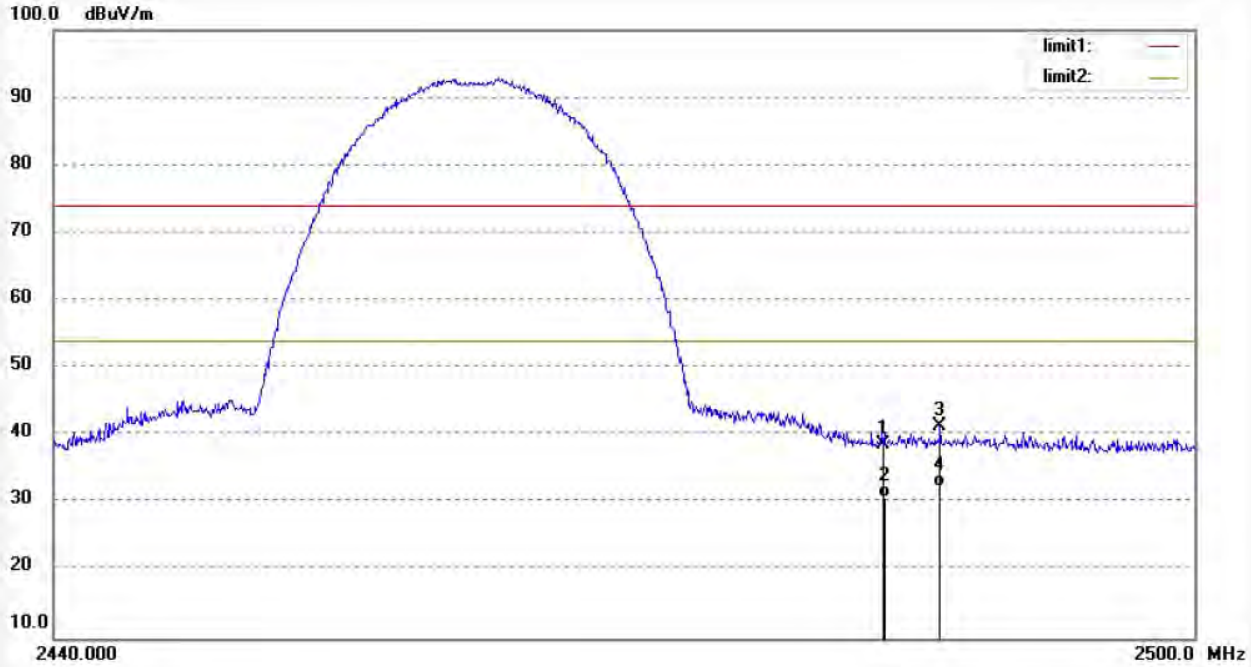
Job No.: alen #4584
Standard: FCC PK
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 55 %
EUT: iDISPLAY MEDIA PLAYER
Mode: TX 2462MHz(802.11b)
Model: UIM200B-B20
Manufacturer: Pipo

Polarization: Vertical
Power Source: AC 120V/60Hz
Date: 14/09/15/
Time: 9/38/37
Engineer Signature:
Distance: 3m

Note: Report NO.:ATE20141759



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.500	45.22	-6.54	38.68	74.00	-35.32	peak			
2	2483.500	37.35	-6.54	30.81	54.00	-23.19	AVG			
3	2486.500	47.98	-6.54	41.44	74.00	-32.56	peak			
4	2486.500	38.98	-6.54	32.44	54.00	-21.56	AVG			

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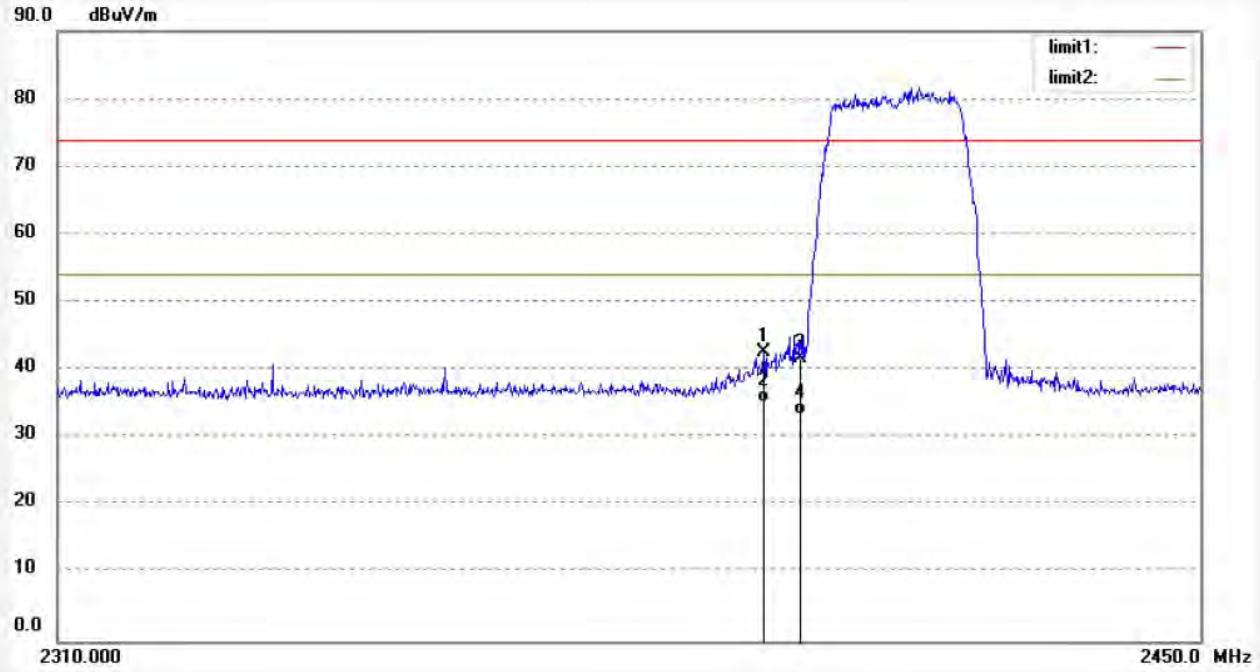
Job No.: alen #4589
Standard: FCC PK
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 55 %
EUT: iDISPLAY MEDIA PLAYER
Mode: TX 2412MHz(802.11g)
Model: UIM200B-B20
Manufacturer: Pipo

Polarization: Horizontal
Power Source: AC 120V/60Hz
Date: 14/09/15/
Time: 9/45/37
Engineer Signature:
Distance: 3m

Note: Report NO.:ATE20141759



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2395.680	49.44	-6.76	42.68	74.00	-31.32	peak			
2	2395.680	42.03	-6.76	35.27	54.00	-18.73	AVG			
3	2400.020	48.43	-6.76	41.67	74.00	-32.33	peak			
4	2400.020	40.21	-6.76	33.45	54.00	-20.55	AVG			

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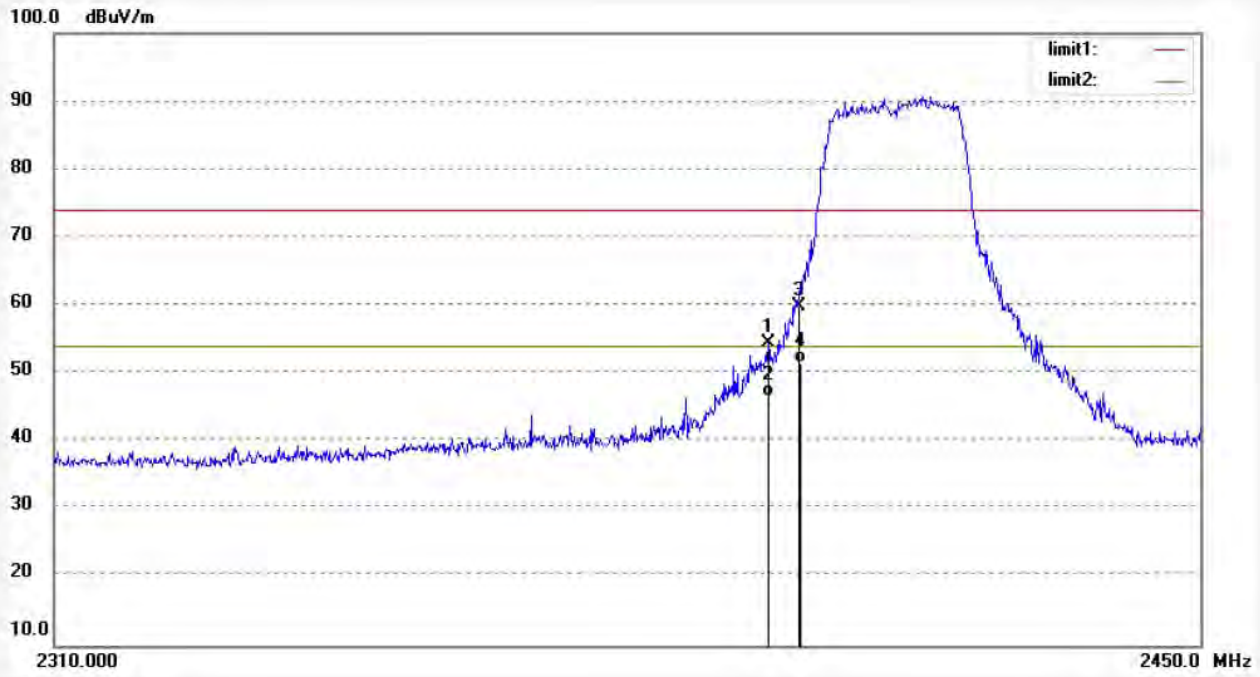
Fax:+86-0755-26503396

Job No.: alen #4588
Standard: FCC PK
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 55 %
EUT: iDISPLAY MEDIA PLAYER
Mode: TX 2412MHz(802.11g)
Model: UIM200B-B20
Manufacturer: Pipo

Polarization: Vertical
Power Source: AC 120V/60Hz
Date: 14/09/15/
Time: 9/44/28
Engineer Signature:
Distance: 3m

Note: Report NO.:ATE20141759



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2396.380	61.12	-6.76	54.36	74.00	-19.64	peak			
2	2396.380	53.24	-6.76	46.48	54.00	-7.52	AVG			
3	2400.020	66.59	-6.76	59.83	74.00	-14.17	peak			
4	2400.020	58.23	-6.76	51.47	54.00	-2.53	AVG			

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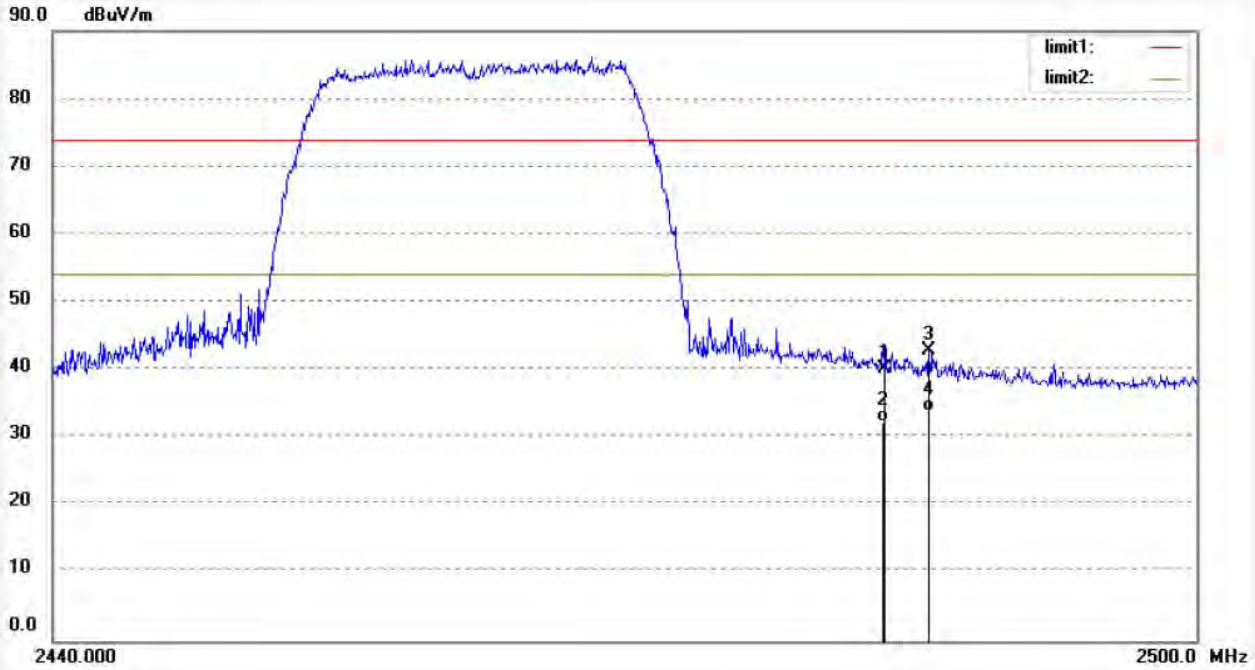
Fax:+86-0755-26503396

Job No.: alen #4586
Standard: FCC PK
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 55 %
EUT: iDISPLAY MEDIA PLAYER
Mode: TX 2462MHz(802.11g)
Model: UIM200B-B20
Manufacturer: Pipo

Polarization: Horizontal
Power Source: AC 120V/60Hz
Date: 14/09/15/
Time: 9/41/23
Engineer Signature:
Distance: 3m

Note: Report NO.:ATE20141759



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.500	46.73	-6.54	40.19	74.00	-33.81	peak			
2	2483.500	38.86	-6.54	32.32	54.00	-21.68	AVG			
3	2485.840	49.37	-6.54	42.83	74.00	-31.17	peak			
4	2485.840	40.35	-6.54	33.81	54.00	-20.19	AVG			

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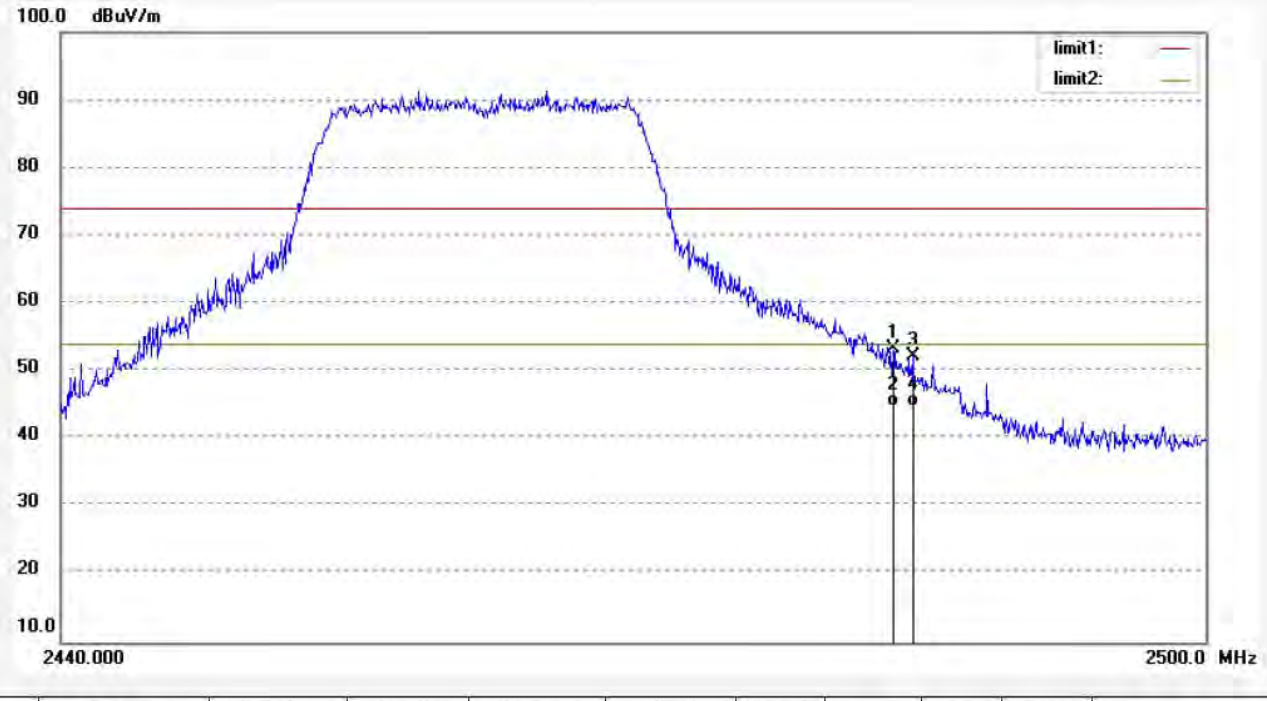
Fax:+86-0755-26503396

Job No.: alen #4587
Standard: FCC PK
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 55 %
EUT: iDISPLAY MEDIA PLAYER
Mode: TX 2462MHz(802.11g)
Model: UIM200B-B20
Manufacturer: Pipo

Polarization: Vertical
Power Source: AC 120V/60Hz
Date: 14/09/15/
Time: 9/42/26
Engineer Signature:
Distance: 3m

Note: Report NO.:ATE20141759



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.500	59.74	-6.54	53.20	74.00	-20.80	peak			
2	2483.500	51.36	-6.54	44.82	54.00	-9.18	AVG			
3	2484.520	58.78	-6.54	52.24	74.00	-21.76	peak			
4	2484.520	51.23	-6.54	44.69	54.00	-9.31	AVG			

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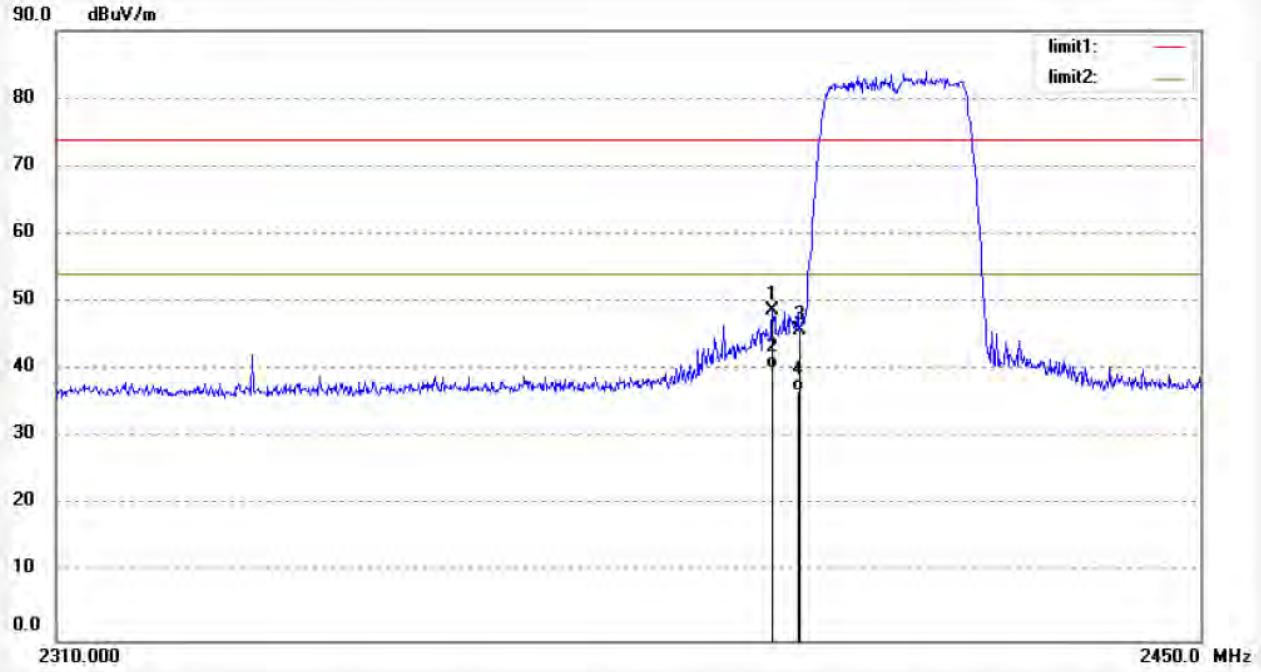
Job No.: alen #4590
Standard: FCC PK
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 55 %
EUT: iDISPLAY MEDIA PLAYER
Mode: TX 2412MHz(802.11n20)
Model: UIM200B-B20
Manufacturer: Pipo

Polarization: Horizontal
Power Source: AC 120V/60Hz
Date: 14/09/15/
Time: 9/47/04
Engineer Signature:
Distance: 3m

Note: Report NO.:ATE20141759



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2396.800	55.41	-6.76	48.65	74.00	-25.35	peak			
2	2396.800	46.89	-6.76	40.13	54.00	-13.87	AVG			
3	2400.020	52.56	-6.76	45.80	74.00	-28.20	peak			
4	2400.020	43.51	-6.76	36.75	54.00	-17.25	AVG			

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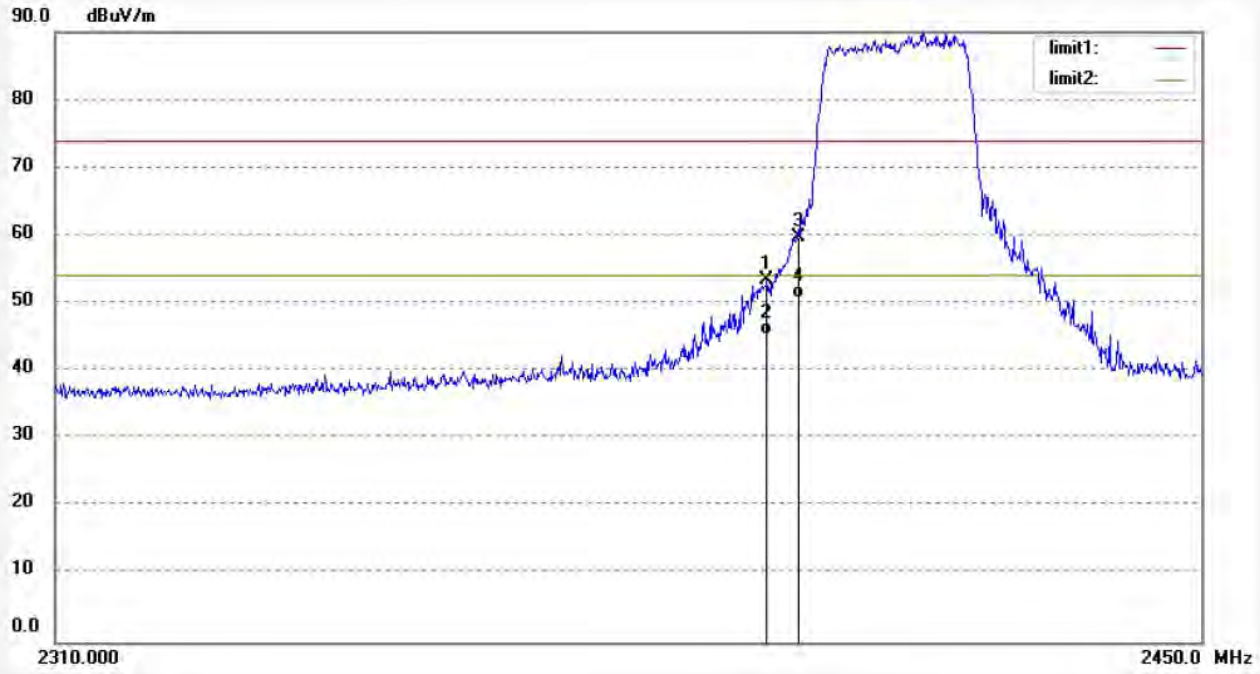
Fax:+86-0755-26503396

Job No.: alen #4591
Standard: FCC PK
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 55 %
EUT: iDISPLAY MEDIA PLAYER
Mode: TX 2412MHz(802.11n20)
Model: UIM200B-B20
Manufacturer: Pipo

Polarization: Vertical
Power Source: AC 120V/60Hz
Date: 14/09/15/
Time: 9/48/12
Engineer Signature:
Distance: 3m

Note: Report NO.:ATE20141759



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2396.100	60.28	-6.76	53.52	74.00	-20.48	peak			
2	2396.100	52.12	-6.76	45.36	54.00	-8.64	AVG			
3	2399.740	66.39	-6.76	59.63	74.00	-14.37	peak			
4	2399.740	57.54	-6.76	50.78	54.00	-3.22	AVG			

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Site: 1# Chamber
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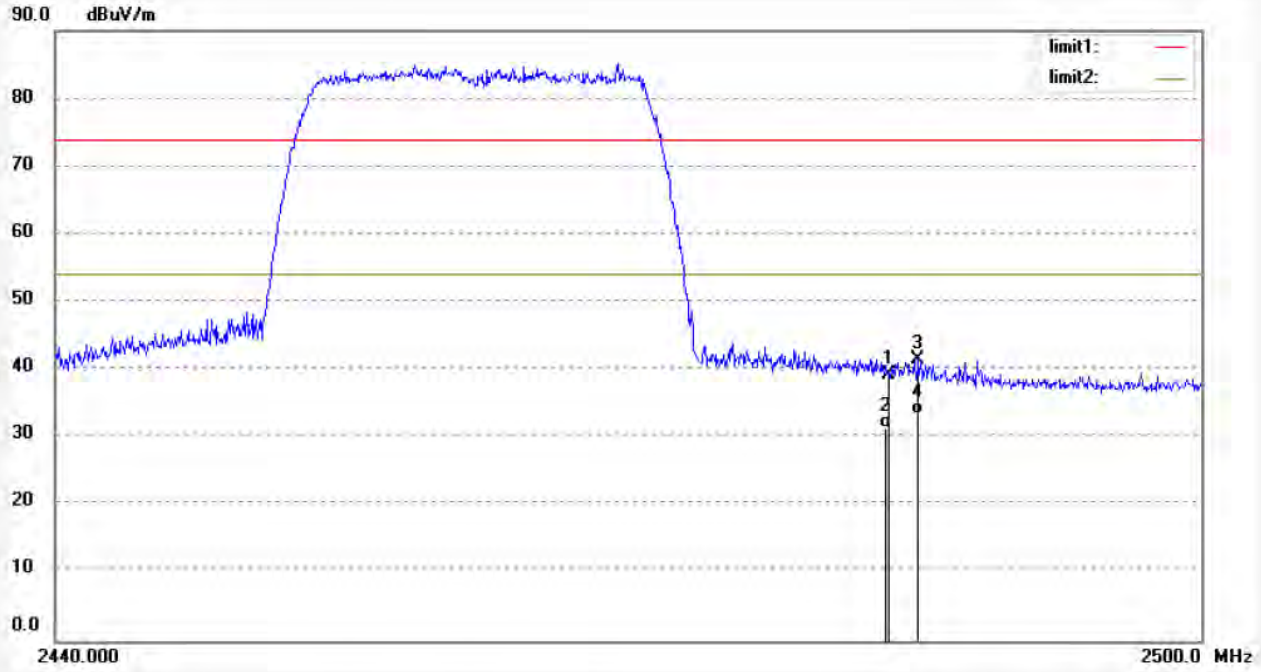
Fax:+86-0755-26503396

Job No.: alen #4593
Standard: FCC PK
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 55 %
EUT: iDISPLAY MEDIA PLAYER
Mode: TX 2462MHz(802.11n20)
Model: UIM200B-B20
Manufacturer: Pipo

Polarization: Horizontal
Power Source: AC 120V/60Hz
Date: 14/09/15/
Time: 9/51/40
Engineer Signature:
Distance: 3m

Note: Report NO.:ATE20141759



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.500	45.86	-6.54	39.32	74.00	-34.68	peak			
2	2483.500	38.01	-6.54	31.47	54.00	-22.53	AVG			
3	2485.060	48.05	-6.54	41.51	74.00	-32.49	peak			
4	2485.060	40.02	-6.54	33.48	54.00	-20.52	AVG			

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Site: 1# Chamber
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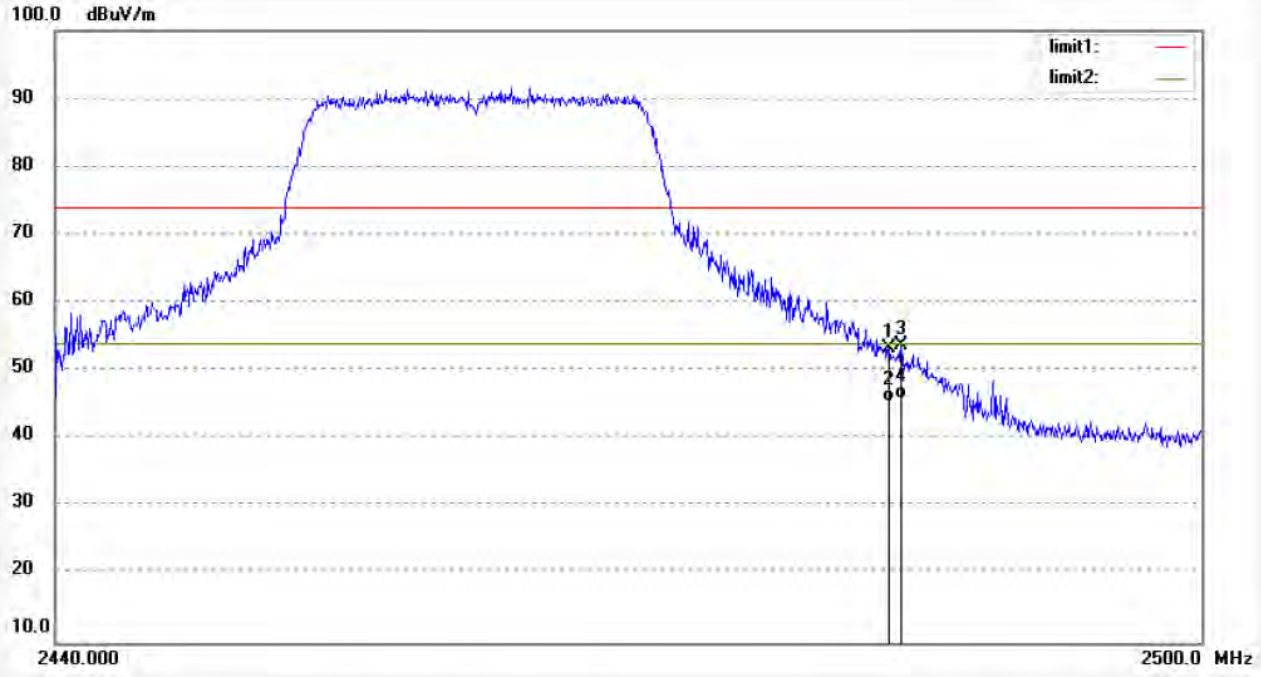
Job No.: alen #4592
Standard: FCC PK
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 55 %
EUT: iDISPLAY MEDIA PLAYER
Mode: TX 2462MHz(802.11n20)
Model: UIM200B-B20
Manufacturer: Pipo

Polarization: Vertical
Power Source: AC 120V/60Hz
Date: 14/09/15/
Time: 9/50/28
Engineer Signature:
Distance: 3m

Note: Report NO.:ATE20141759



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.500	59.90	-6.54	53.36	74.00	-20.64	peak			
2	2483.500	52.01	-6.54	45.47	54.00	-8.53	AVG			
3	2484.160	60.41	-6.54	53.87	74.00	-20.13	peak			
4	2484.160	52.35	-6.54	45.81	54.00	-8.19	AVG			

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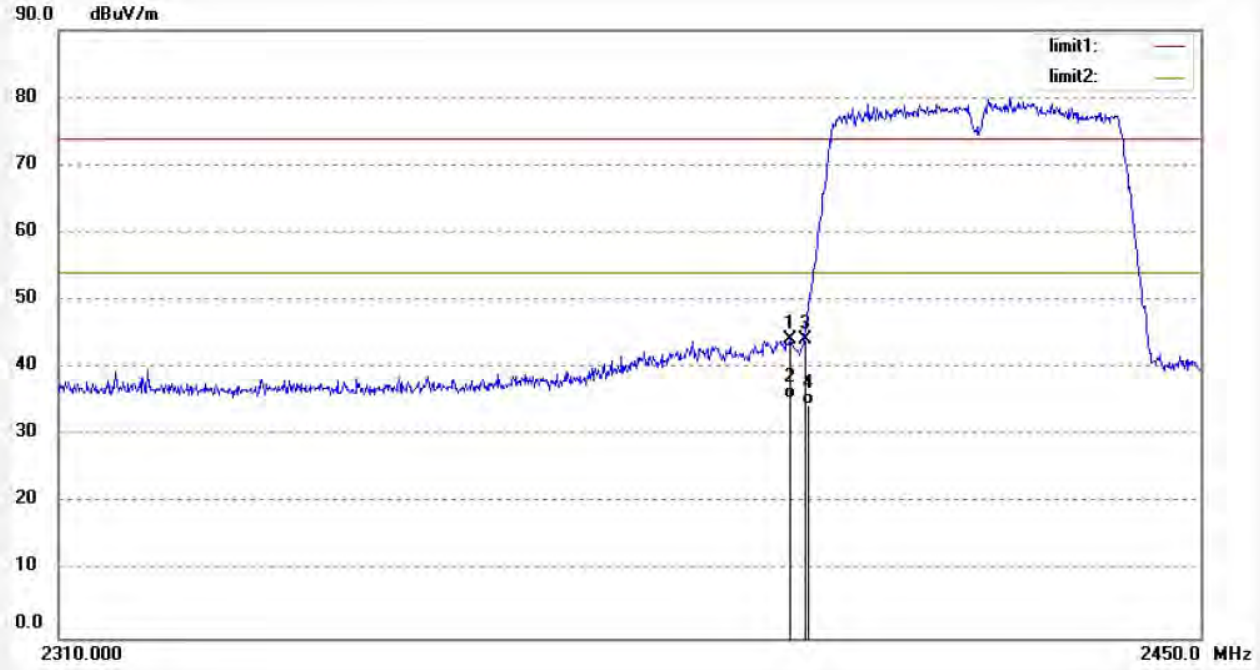
Job No.: alen #4597
Standard: FCC PK
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 55 %
EUT: iDISPLAY MEDIA PLAYER
Mode: TX 2422MHz(802.11n40)
Model: UIM200B-B20
Manufacturer: Pipo

Polarization: Horizontal
Power Source: AC 120V/60Hz
Date: 14/09/15/
Time: 9/58/40
Engineer Signature:
Distance: 3m

Note: Report NO.:ATE20141759



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2398.760	51.08	-6.76	44.32	74.00	-29.68	peak			
2	2398.760	42.13	-6.76	35.37	54.00	-18.63	AVG			
3	2400.580	50.95	-6.76	44.19	74.00	-29.81	peak			
4	2400.580	41.36	-6.76	34.60	54.00	-19.40	AVG			

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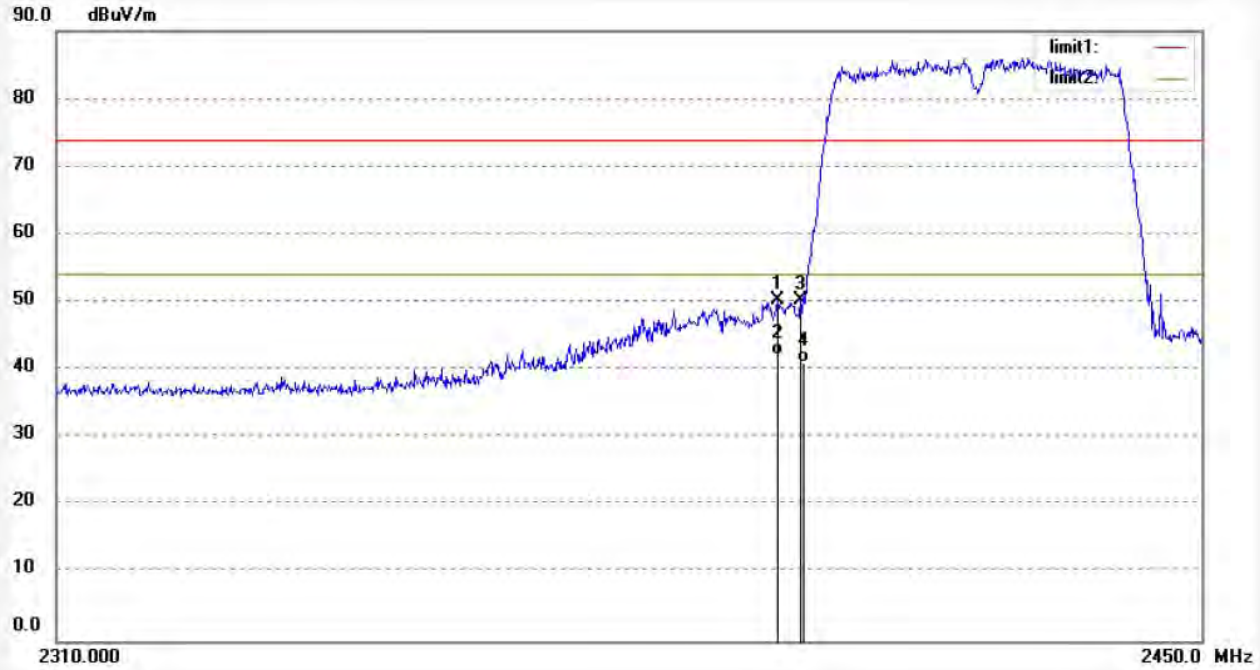
Job No.: alen #4596
Standard: FCC PK
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 55 %
EUT: iDISPLAY MEDIA PLAYER
Mode: TX 2422MHz(802.11n40)
Model: UIM200B-B20
Manufacturer: Pipo

Polarization: Vertical
Power Source: AC 120V/60Hz
Date: 14/09/15/
Time: 9/57/08
Engineer Signature:
Distance: 3m

Note: Report NO.:ATE20141759



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2397.360	57.00	-6.76	50.24	74.00	-23.76	peak			
2	2397.360	48.96	-6.76	42.20	54.00	-11.80	AVG			
3	2400.160	56.99	-6.76	50.23	74.00	-23.77	peak			
4	2400.160	47.89	-6.76	41.13	54.00	-12.87	AVG			

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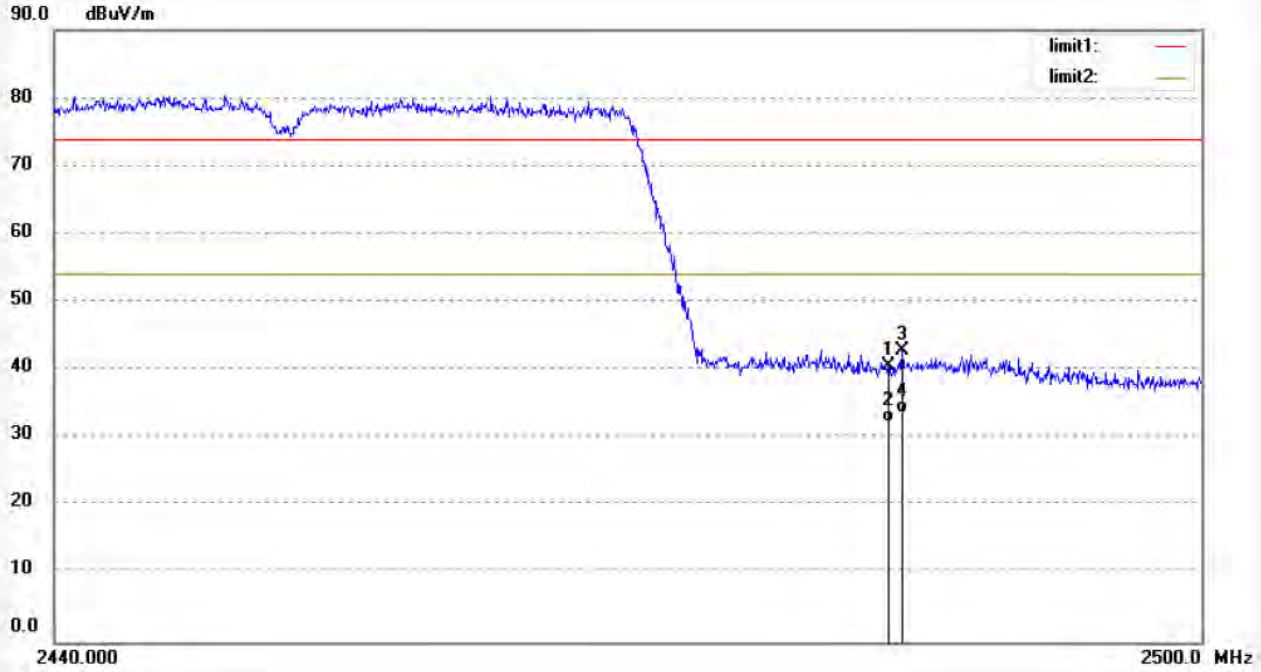
Job No.: alen #4594
Standard: FCC PK
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 55 %
EUT: iDISPLAY MEDIA PLAYER
Mode: TX 2452MHz(802.11n40)
Model: UIM200B-B20
Manufacturer: Pipo

Polarization: Horizontal
Power Source: AC 120V/60Hz
Date: 14/09/15/
Time: 9/53/17
Engineer Signature:
Distance: 3m

Note: Report NO.:ATE20141759



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.500	47.13	-6.54	40.59	74.00	-33.41	peak			
2	2483.500	38.89	-6.54	32.35	54.00	-21.65	AVG			
3	2484.220	49.32	-6.54	42.78	74.00	-31.22	peak			
4	2484.220	40.24	-6.54	33.70	54.00	-20.30	AVG			

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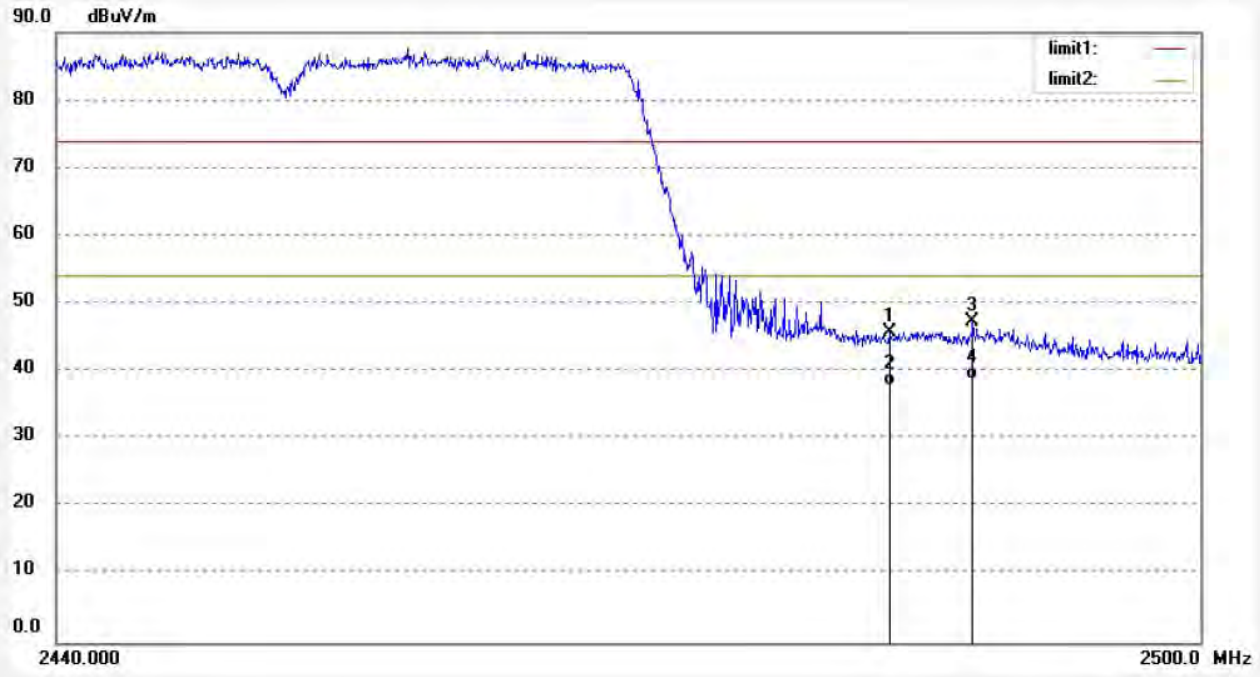
Fax:+86-0755-26503396

Job No.: alen #4595
Standard: FCC PK
Test item: Radiation Test
Temp.(C)/Hum.(%) 25 C / 55 %
EUT: iDISPLAY MEDIA PLAYER
Mode: TX 2452MHz(802.11n40)
Model: UIM200B-B20
Manufacturer: Pipo

Polarization: Vertical
Power Source: AC 120V/60Hz
Date: 14/09/15/
Time: 9/54/42
Engineer Signature:
Distance: 3m

Note: Report NO.:ATE20141759



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.560	52.22	-6.54	45.68	74.00	-28.32	peak			
2	2483.560	44.35	-6.54	37.81	54.00	-16.19	AVG			
3	2488.000	53.90	-6.52	47.38	74.00	-26.62	peak			
4	2488.000	45.35	-6.52	38.83	54.00	-15.17	AVG			

10.RADIATED SPURIOUS EMISSION TEST

10.1.Block Diagram of Test Setup

10.1.1.Block diagram of connection between the EUT and peripherals

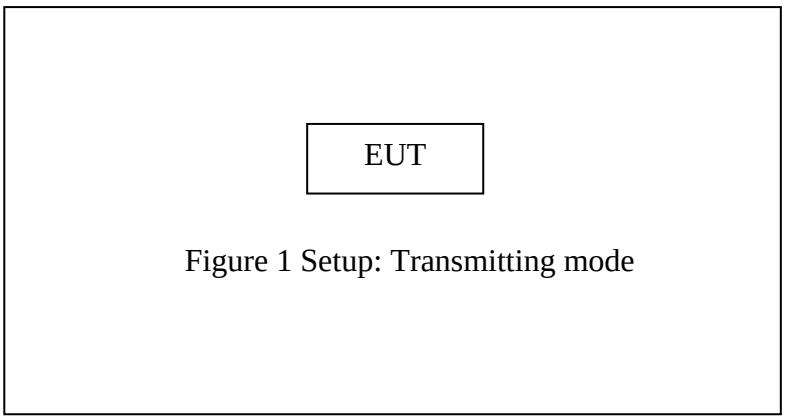
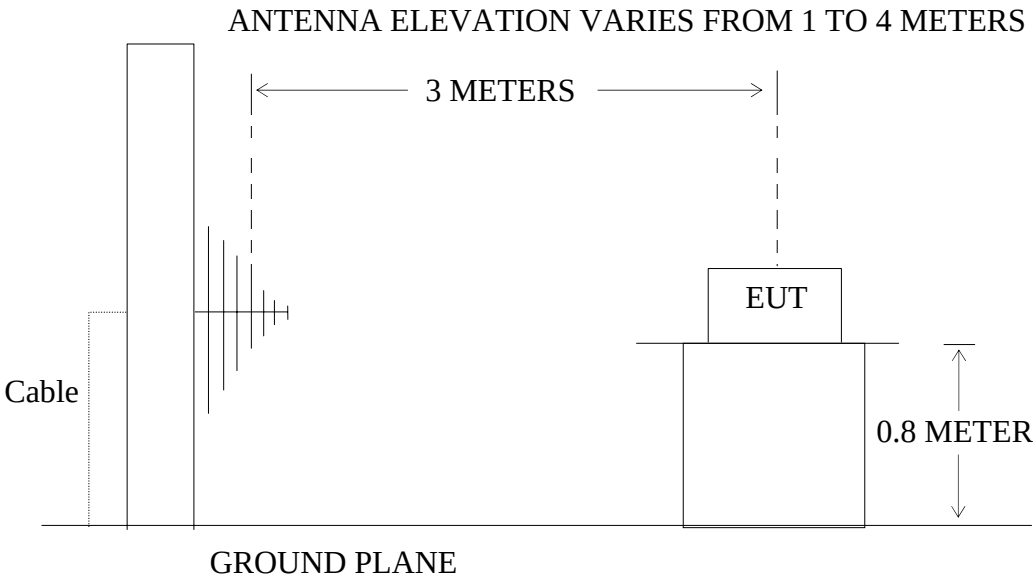


Figure 1 Setup: Transmitting mode

10.1.2.Semi-Anechoic Chamber Test Setup Diagram



10.2.The Limit For Section 15.247(d)

Section 15.247(d): In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the

transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a).

10.3.Restricted bands of operation

10.3.1.FCC Part 15.205 Restricted bands of operation

(a) Except as shown in paragraph (d) of this section, Only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
[1]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])
13.36-13.41			

[1]Until February 1, 1999, this restricted band shall be 0.490-0.510
[2]Above 38.6

(b) Except as provided in paragraphs (d) and (e), the field strength of emission appearing within these frequency bands shall not exceed the limits shown in Section 15.209. At frequencies equal to or less than 1000MHz, Compliance with the limits in Section 15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000MHz, compliance with the emission limits in Section15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in Section 15.35 apply to these measurements.

10.4.Configuration of EUT on Measurement

The equipment are installed on Radiated Emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

10.5.Operating Condition of EUT

10.5.1.Setup the EUT and simulator as shown as Section 10.1.

10.5.2.Turn on the power of all equipment.

10.5.3.Let the EUT work in TX modes measure it. The transmit frequency are 2412-2462 and 2422-2452MHz. We select 2412MHz, 2437MHz, 2462MHz and 2422MHz, 2437MHz, 2452MHz TX frequency to transmit.

10.6.Test Procedure

The EUT and its simulators are placed on a turntable, which is 0.8 meter high above ground. The turntable can rotate 360 degrees to determine the position of the maximum emission level. EUT is set 3.0 meters away from the receiving antenna, which is mounted on an antenna tower. The antenna can be moved up and down between 1.0 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bilog antenna) is used as receiving antenna. Both horizontal and vertical polarizations of the antenna are set on measurement. In order to find the maximum emission levels, all of the interface cables must be manipulated according to ANSI C63.4: 2009 on radiated emission measurement. The EUT was tested in 3 orthogonal planes.

The worst-case data rate for this channel to be 1Mbps for 802.11b mode and 6Mbps for 802.11g mode and 150Mbps for 802.11n mode, based on previous with 802.11 WLAN product design architectures.

The final measurement in band 9-90 kHz, 110-490 kHz and above 1000MHz is performed with Average detector. Except those frequency bands mention above, the final measurement for frequencies below 1000MHz is performed with Quasi Peak detector.
When average radiated emissions measurements are specified there is also a limit on the peak emissions level which is 20 dB above the applicable maximum permitted average emission limit

During the radiated emission test, the spectrum analyzer was set with the following configurations:

Frequency band(MHz)	Detector	RBW(KHz)	VBW(KHz)
30-1000	QP	120	300
Above 1000	Peak	1000	3000
	Average	1000	0.01

10.7.The Field Strength of Radiation Emission Measurement Results

Note: 1. Emissions attenuated more than 20 dB below the permissible value are not reported.

2. *: Denotes restricted band of operation.

3. The fundamental radiated emissions were reduced by Band Reject Filter in the attached plots.

4. The EUT is tested radiation emission at each test mode (802.11 b/g/n) in three axes. The worst emissions are reported in all test mode and channels.

5. The radiation emissions from 18-25GHz are not reported, because the test values lower than the limits of 20dB.

Below 1G

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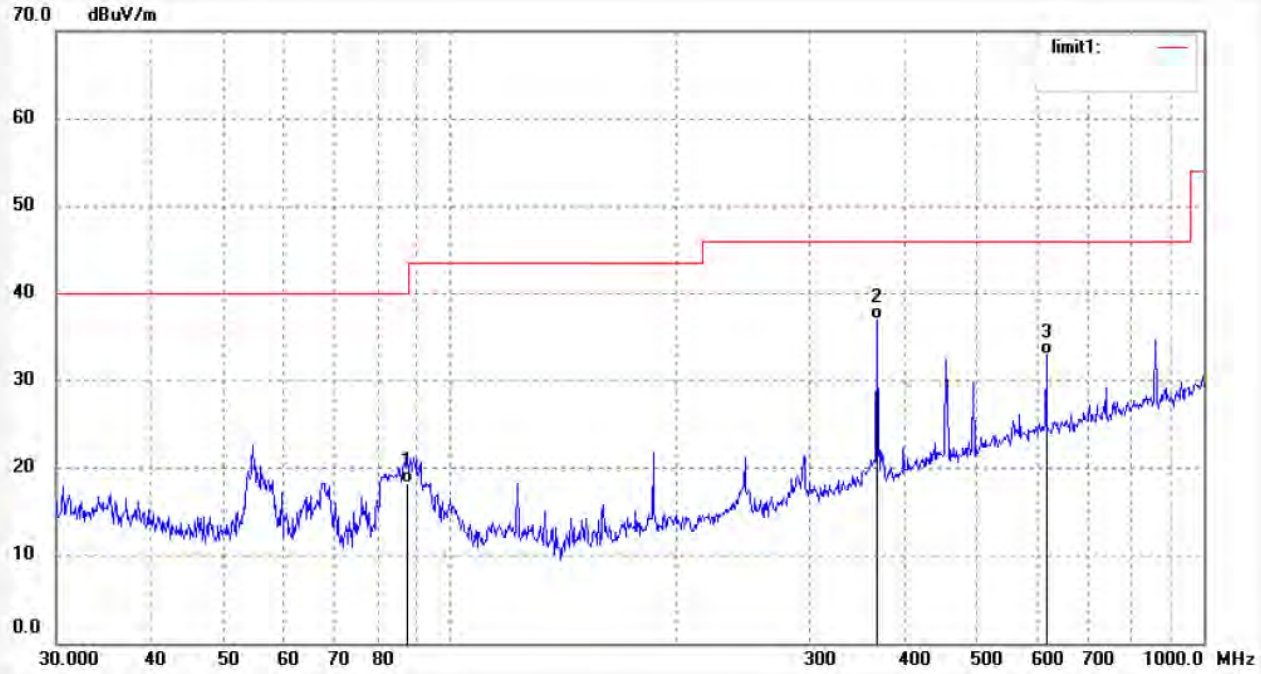
Job No.: carry #354
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT: iDISPLAY MEDIA PLAYER
Mode: TX Channel 1(802.11b)
Model: UIM200B-B20
Manufacturer: Pipo

Polarization: Horizontal
Power Source: AC 120V/60Hz
Date: 14/09/15/
Time: 9/19/37
Engineer Signature:
Distance: 3m

Note: Report NO.:ATE20141759



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	87.9136	33.58	-15.21	18.37	40.00	-21.63	QP			
2	368.6681	44.57	-7.51	37.06	46.00	-8.94	QP			
3	617.9417	35.72	-2.73	32.99	46.00	-13.01	QP			

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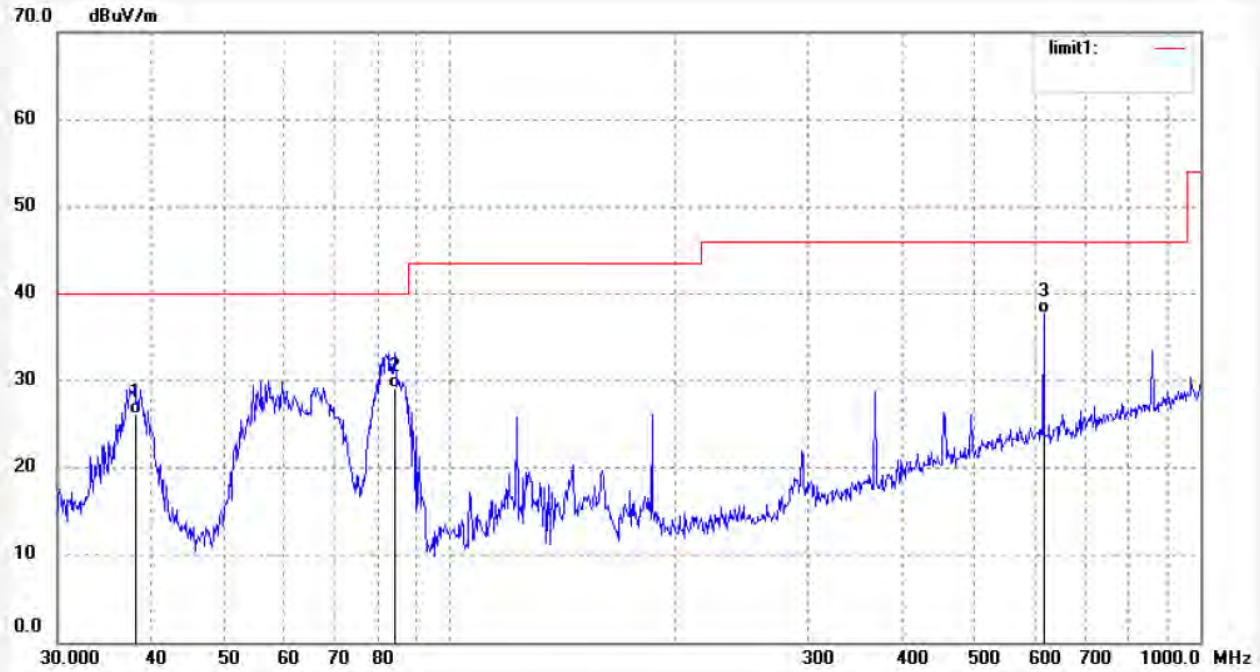
Job No.: carry #355
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT: iDISPLAY MEDIA PLAYER
Mode: TX Channel 1(802.11b)
Model: UIM200B-B20
Manufacturer: Pipo

Polarization: Vertical
Power Source: AC 120V/60Hz
Date: 14/09/15/
Time: 9/20/35
Engineer Signature:
Distance: 3m

Note: Report NO.:ATE20141759



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	38.0965	37.28	-11.11	26.17	40.00	-13.83	QP			
2	84.5806	44.56	-15.49	29.07	40.00	-10.93	QP			
3	617.9417	40.44	-2.73	37.71	46.00	-8.29	QP			

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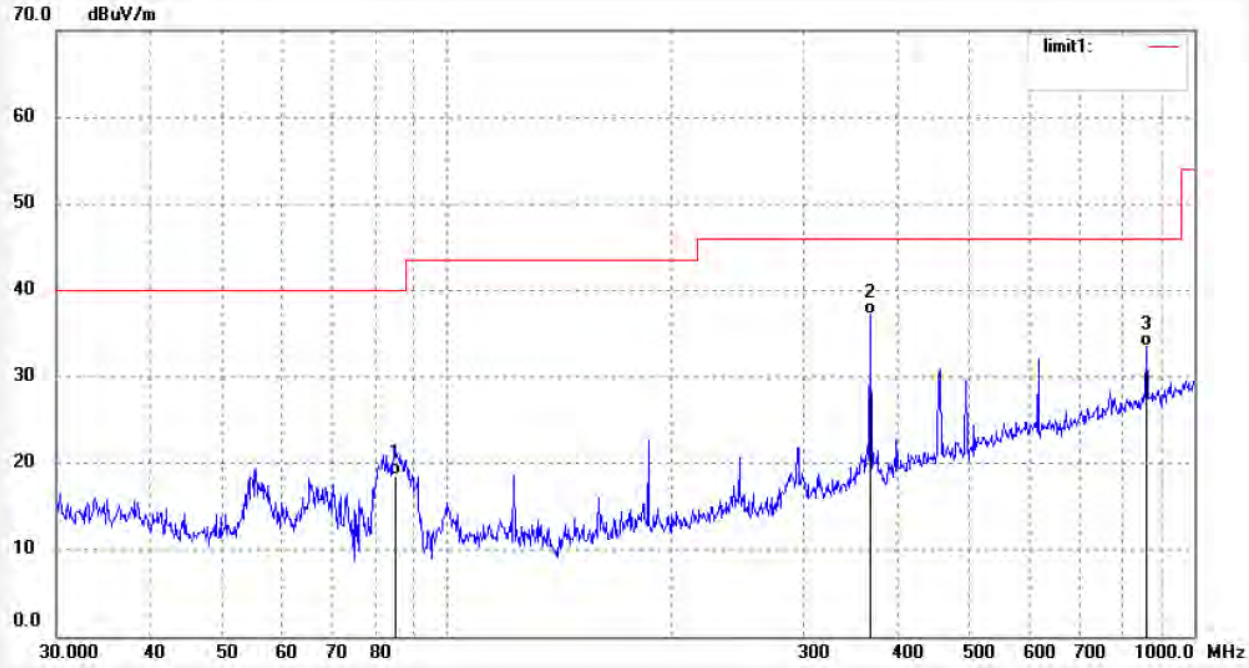
Job No.: carry #357
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT: iDISPLAY MEDIA PLAYER
Mode: TX Channel 6(802.11b)
Model: UIM200B-B20
Manufacturer: Pipo

Polarization: Horizontal
Power Source: AC 120V/60Hz
Date: 14/09/15/
Time: 9/21/56
Engineer Signature:
Distance: 3m

Note: Report NO.:ATE20141759



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	85.1771	34.03	-15.38	18.65	40.00	-21.35	QP			
2	368.6681	44.71	-7.51	37.20	46.00	-8.80	QP			
3	862.8015	32.52	0.95	33.47	46.00	-12.53	QP			

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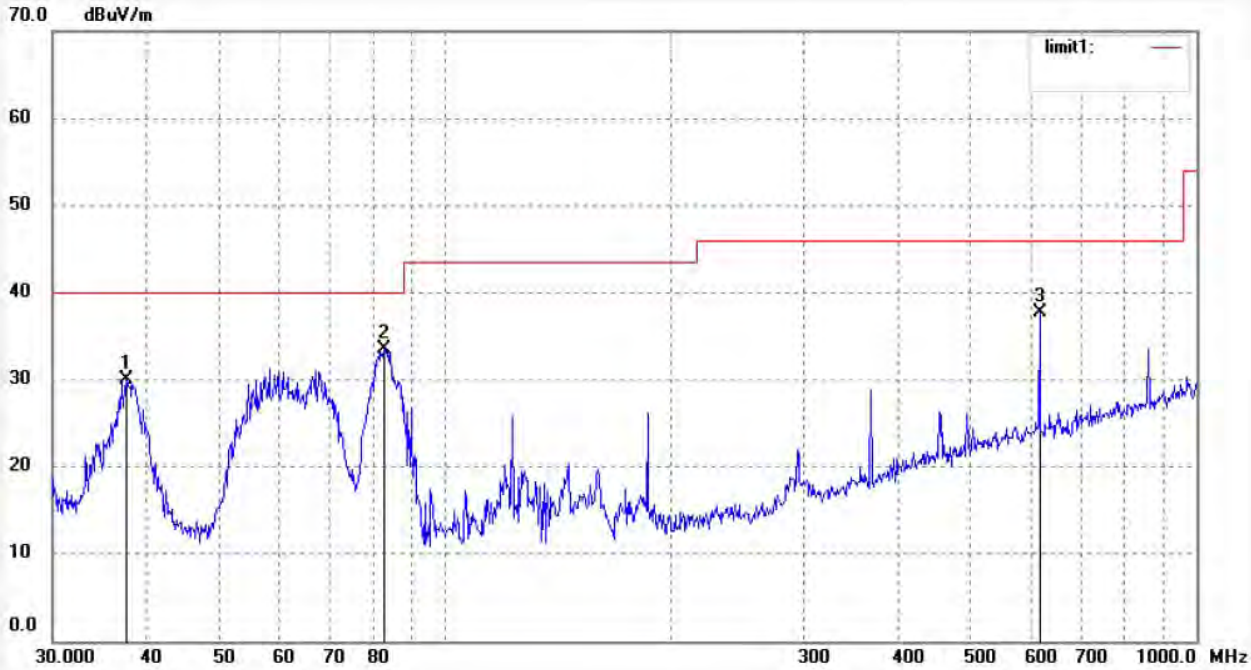
Job No.: carry #356	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 14/09/15/
Temp.(C)/Hum.(%) 23 C / 48 %	Time: 9/20/58
EUT: iDISPLAY MEDIA PLAYER	Engineer Signature:
Mode: TX Channel 6(802.11b)	Distance: 3m
Model: UIM200B-B20	
Manufacturer: Pipo	

Note: Report NO.:ATE20141759



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	37.6970	41.12	-11.02	30.10	40.00	-9.90	peak			
2	82.8162	49.41	-15.89	33.52	40.00	-6.48	peak			
3	617.9417	40.44	-2.73	37.71	46.00	-8.29	peak			

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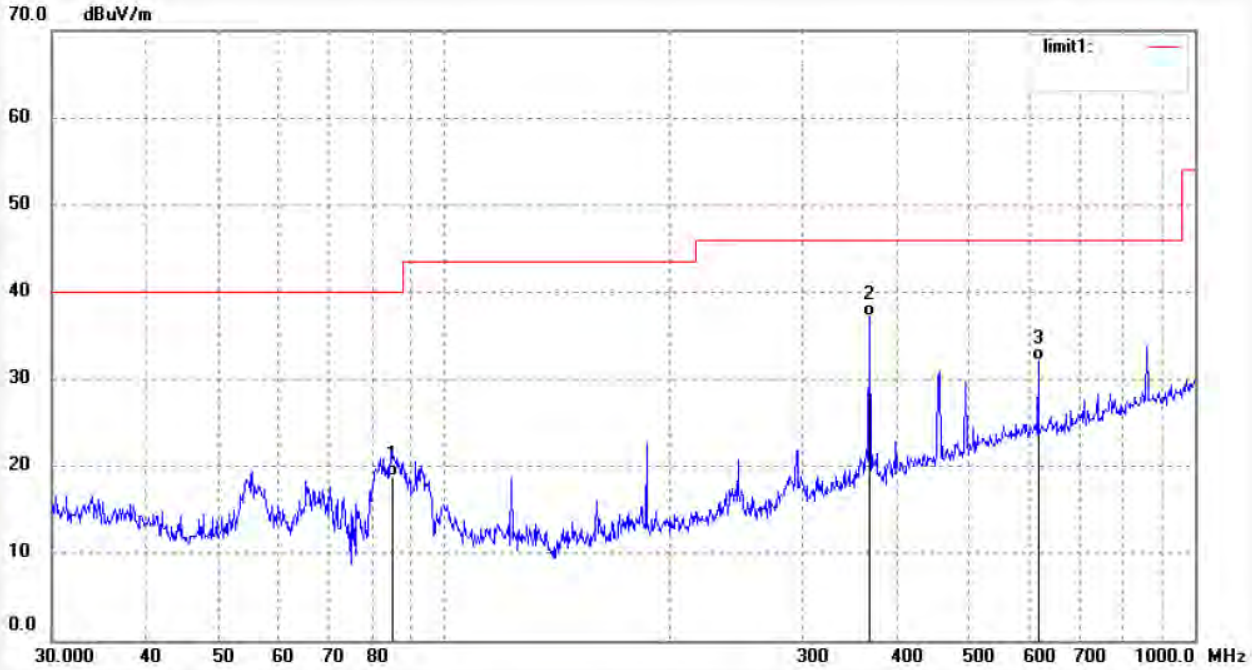
Job No.: carry #358
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT: iDISPLAY MEDIA PLAYER
Mode: TX Channel 11(802.11b)
Model: UIM200B-B20
Manufacturer: Pipo

Polarization: Horizontal
Power Source: AC 120V/60Hz
Date: 14/09/15/
Time: 9/22/30
Engineer Signature:
Distance: 3m

Note: Report NO.:ATE20141759



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	85.1771	34.25	-15.38	18.87	40.00	-21.13	QP			
2	368.6681	44.71	-7.51	37.20	46.00	-8.80	QP			
3	617.9417	34.79	-2.73	32.06	46.00	-13.94	QP			

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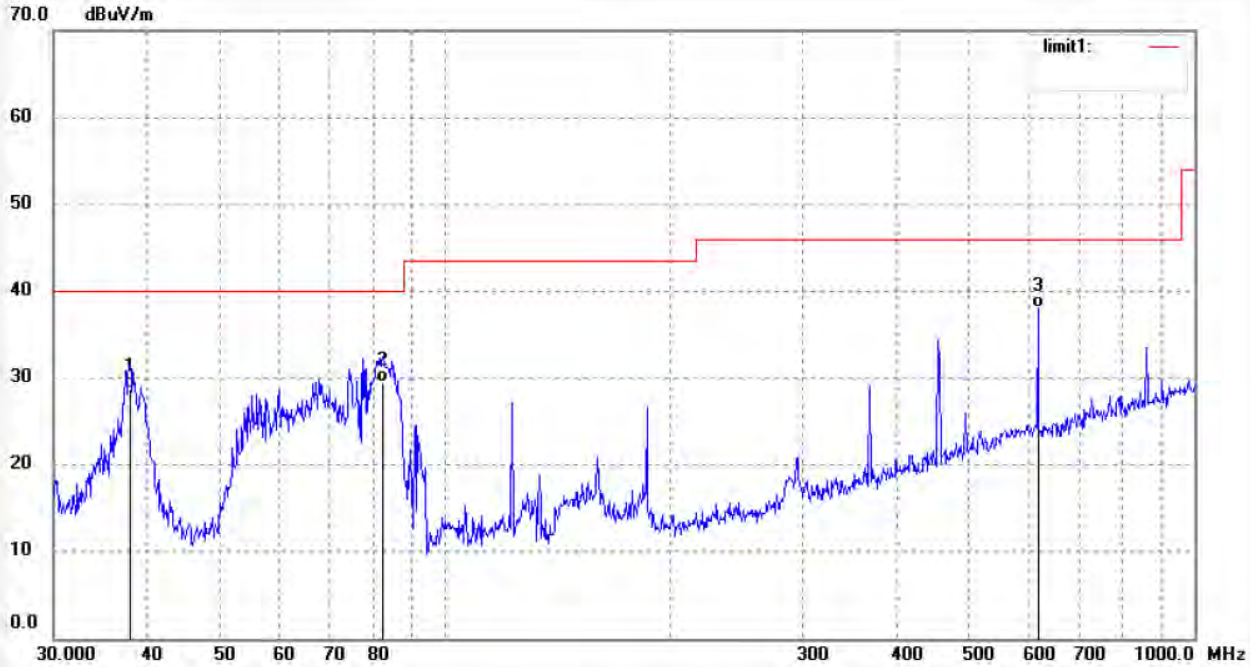
Job No.: carry #359
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT: iDISPLAY MEDIA PLAYER
Mode: TX Channel 11(802.11b)
Model: UIM200B-B20
Manufacturer: Pipo

Polarization: Vertical
Power Source: AC 120V/60Hz
Date: 14/09/15/
Time: 9/23/27
Engineer Signature:
Distance: 3m

Note: Report NO.:ATE20141759



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	37.9628	39.86	-11.09	28.77	40.00	-11.23	QP			
2	82.5257	45.38	-15.95	29.43	40.00	-10.57	QP			
3	617.9417	40.80	-2.73	38.07	46.00	-7.93	QP			

Above 1G

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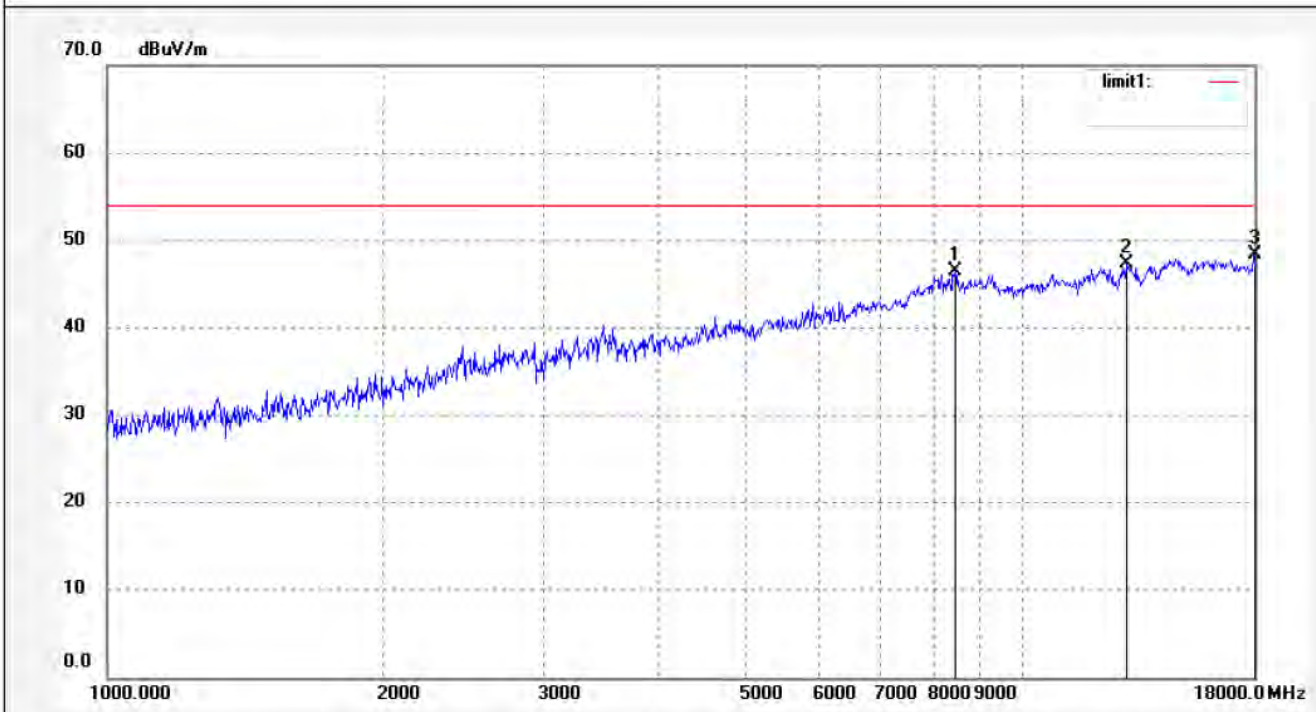
Job No.: carry #378	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 14/09/15/
Temp.(C)/Hum.(%) 23 C / 48 %	Time: 9/50/46
EUT: iDISPLAY MEDIA PLAYER	Engineer Signature:
Mode: TX Channel 1(802.11b)	Distance: 3m
Model: UIM200B-B20	
Manufacturer: Pipo	

Note: Report NO.:ATE20141759



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	8469.642	38.42	7.96	46.38	54.00	-7.62	peak			
2	13030.319	8.38	39.04	47.42	54.00	-6.58	peak			
3	17947.683	2.57	45.85	48.42	54.00	-5.58	peak			

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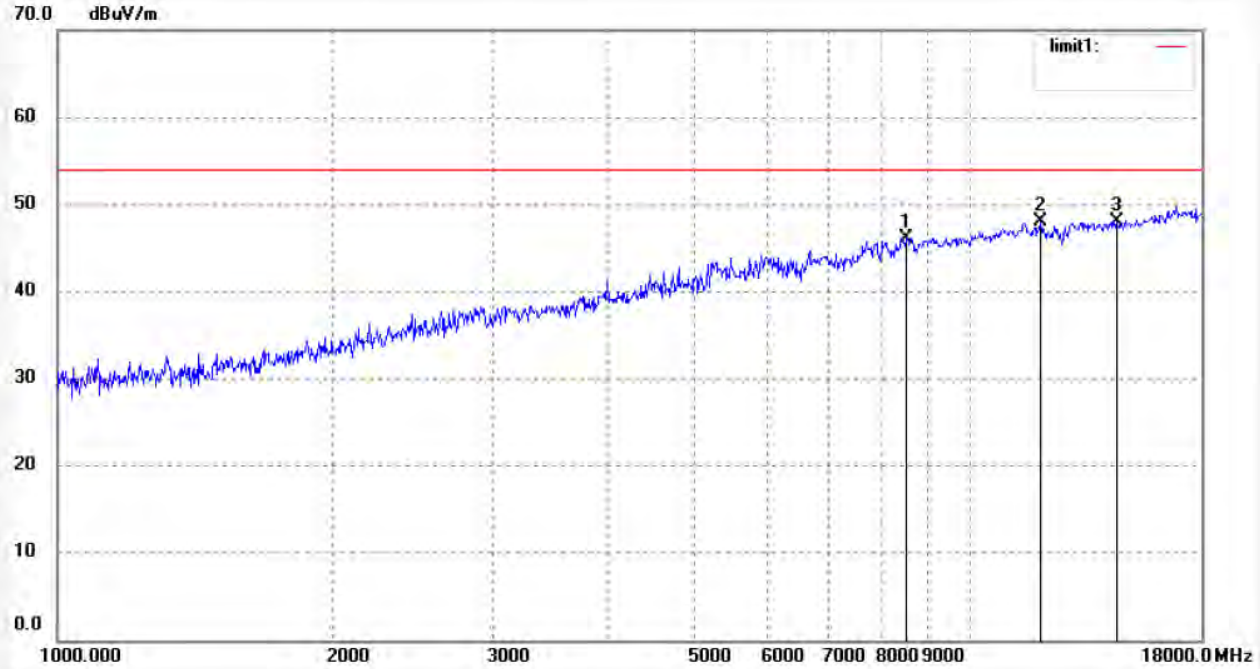
Job No.: carry #379
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT: iDISPLAY MEDIA PLAYER
Mode: TX Channel 1(802.11b)
Model: UIM200B-B20
Manufacturer: Pipo

Polarization: Vertical
Power Source: AC 120V/60Hz
Date: 14/09/15/
Time: 9/51/28
Engineer Signature:
Distance: 3m

Note: Report NO.:ATE20141759



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	8543.925	38.39	7.78	46.17	54.00	-7.83	peak			
2	11975.551	37.26	10.70	47.96	54.00	-6.04	peak			
3	14512.008	5.54	42.56	48.10	54.00	-5.90	peak			

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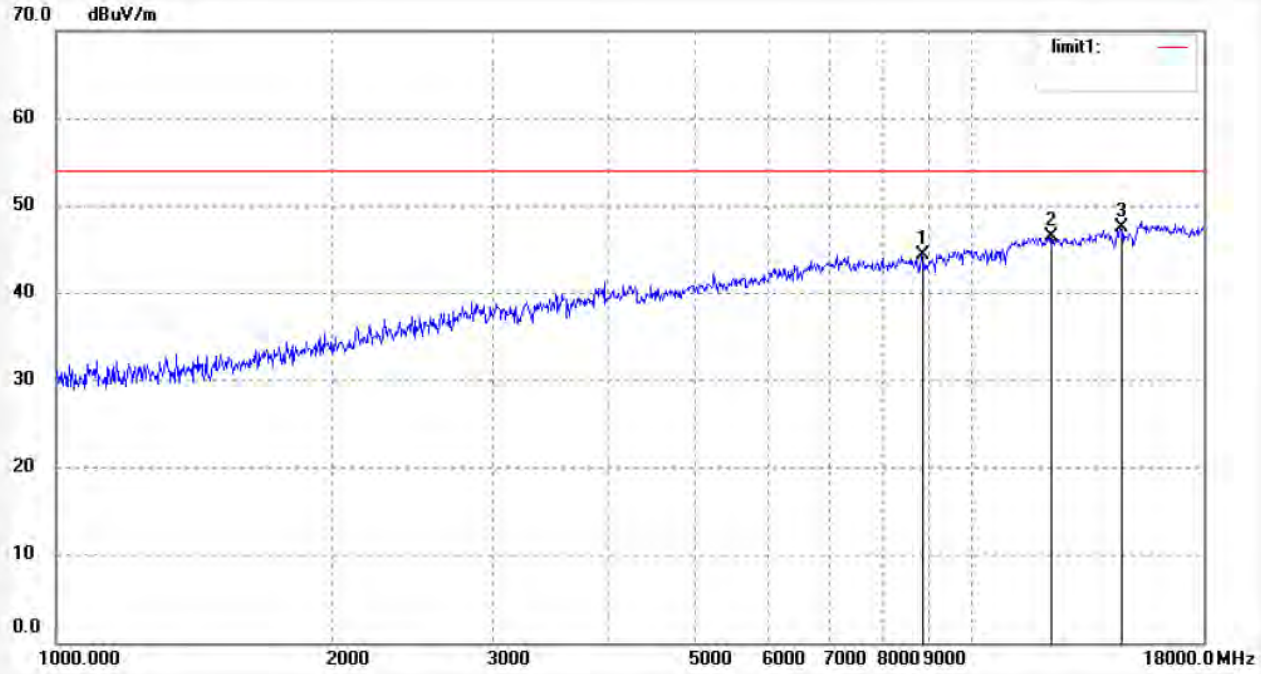
Job No.: carry #380
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT: iDISPLAY MEDIA PLAYER
Mode: TX Channel 6(802.11b)
Model: UIM200B-B20
Manufacturer: Pipo

Polarization: Horizontal
Power Source: AC 120V/60Hz
Date: 14/09/15/
Time: 9/52/48
Engineer Signature:
Distance: 3m

Note: Report NO.:ATE20141759



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	8847.629	36.92	7.39	44.31	54.00	-9.69	peak			
2	12222.059	8.36	38.12	46.48	54.00	-7.52	peak			
3	14596.737	5.28	42.31	47.59	54.00	-6.41	peak			

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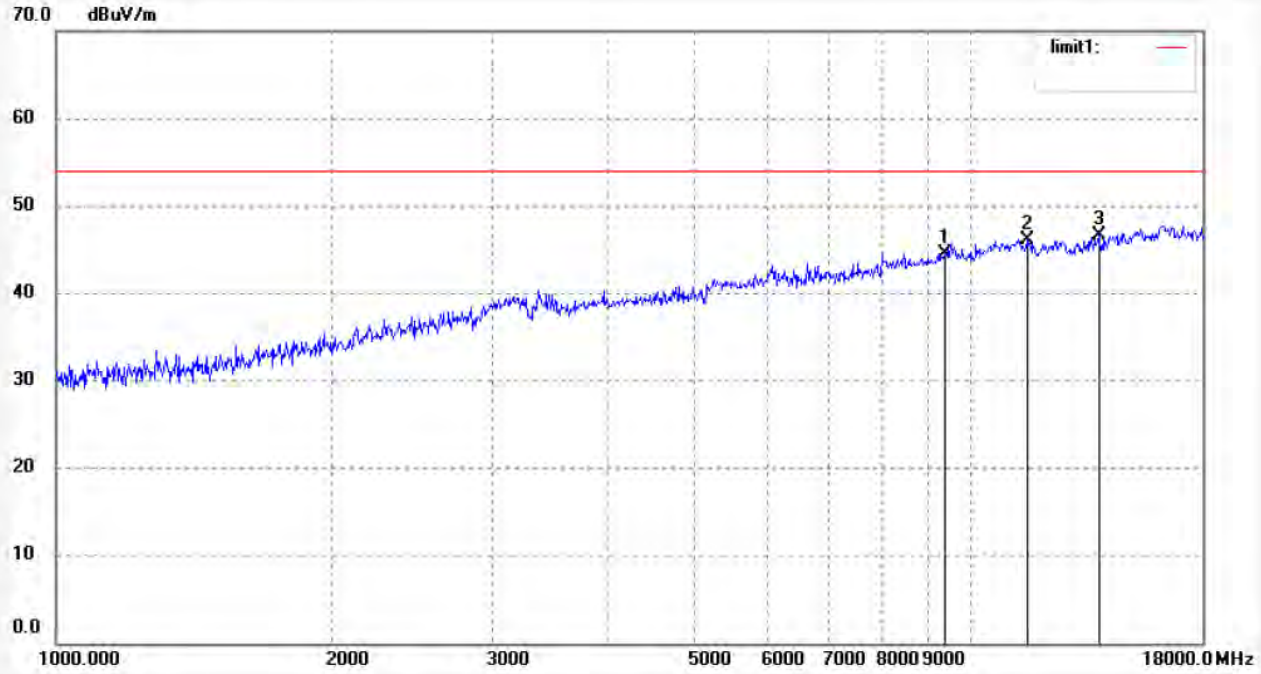
Job No.: carry #381
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT: iDISPLAY MEDIA PLAYER
Mode: TX Channel 6(802.11b)
Model: UIM200B-B20
Manufacturer: Pipo

Polarization: Vertical
Power Source: AC 120V/60Hz
Date: 14/09/15/
Time: 9/53/42
Engineer Signature:
Distance: 3m

Note: Report NO.:ATE20141759



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	9405.317	35.13	9.42	44.55	54.00	-9.45	peak			
2	11564.479	35.53	10.56	46.09	54.00	-7.91	peak			
3	13851.652	6.51	40.16	46.67	54.00	-7.33	peak			

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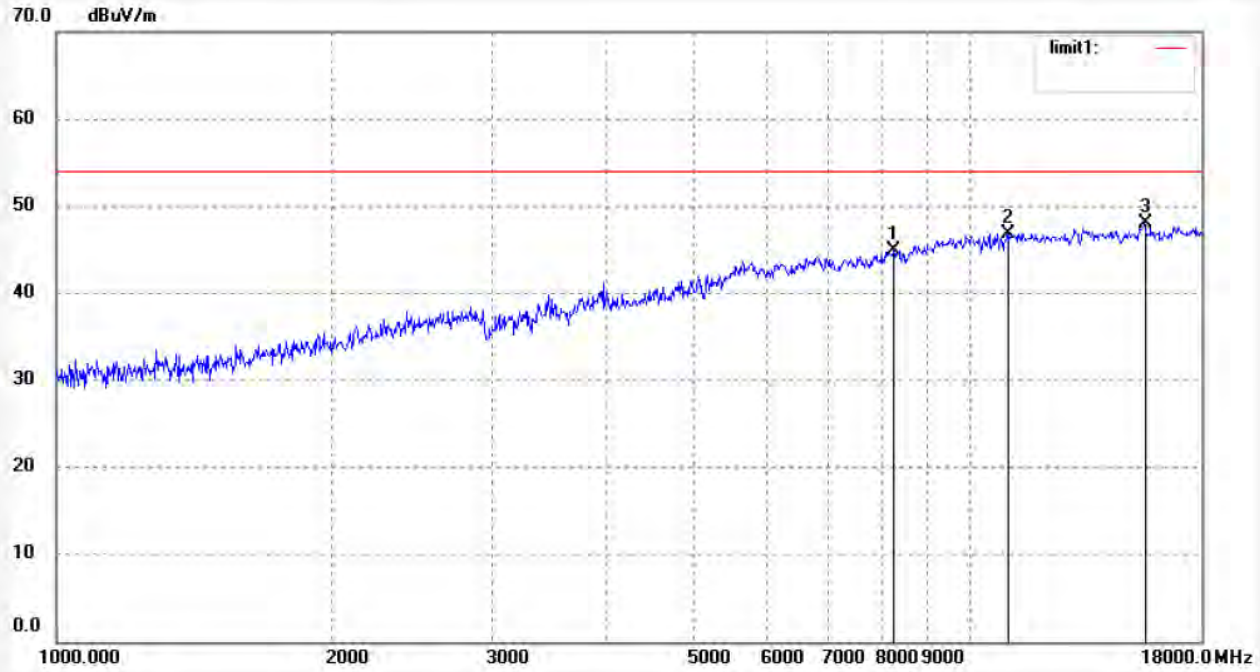
Fax:+86-0755-26503396

Job No.: carry #382
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT: iDISPLAY MEDIA PLAYER
Mode: TX Channel 11(802.11b)
Model: UIM200B-B20
Manufacturer: Pipo

Polarization: Horizontal
Power Source: AC 120V/60Hz
Date: 14/09/15/
Time: 9/54/46
Engineer Signature:
Distance: 3m

Note: Report NO.:ATE20141759



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	8274.697	37.55	7.41	44.96	54.00	-9.04	peak			
2	11038.247	37.40	9.47	46.87	54.00	-7.13	peak			
3	15607.400	7.97	40.08	48.05	54.00	-5.95	peak			

ACCURATE TECHNOLOGY CO., LTD.
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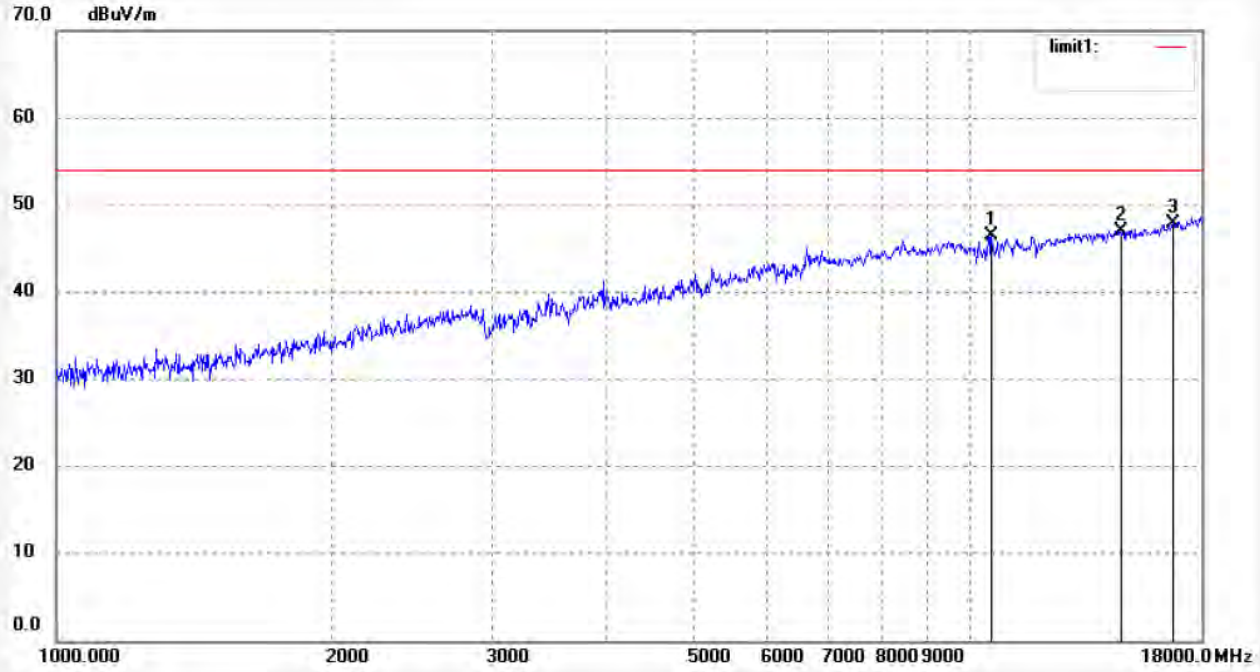
Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: carry #383
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT: iDISPLAY MEDIA PLAYER
Mode: TX Channel 11(802.11b)
Model: UIM200B-B20
Manufacturer: Pipo

Polarization: Vertical
Power Source: AC 120V/60Hz
Date: 14/09/15/
Time: 9/55/39
Engineer Signature:
Distance: 3m

Note: Report NO.:ATE20141759



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	10597.475	38.13	8.33	46.46	54.00	-7.54	peak			
2	14639.286	4.84	42.18	47.02	54.00	-6.98	peak			
3	16736.686	6.88	40.96	47.84	54.00	-6.16	peak			

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Site: 2# Chamber
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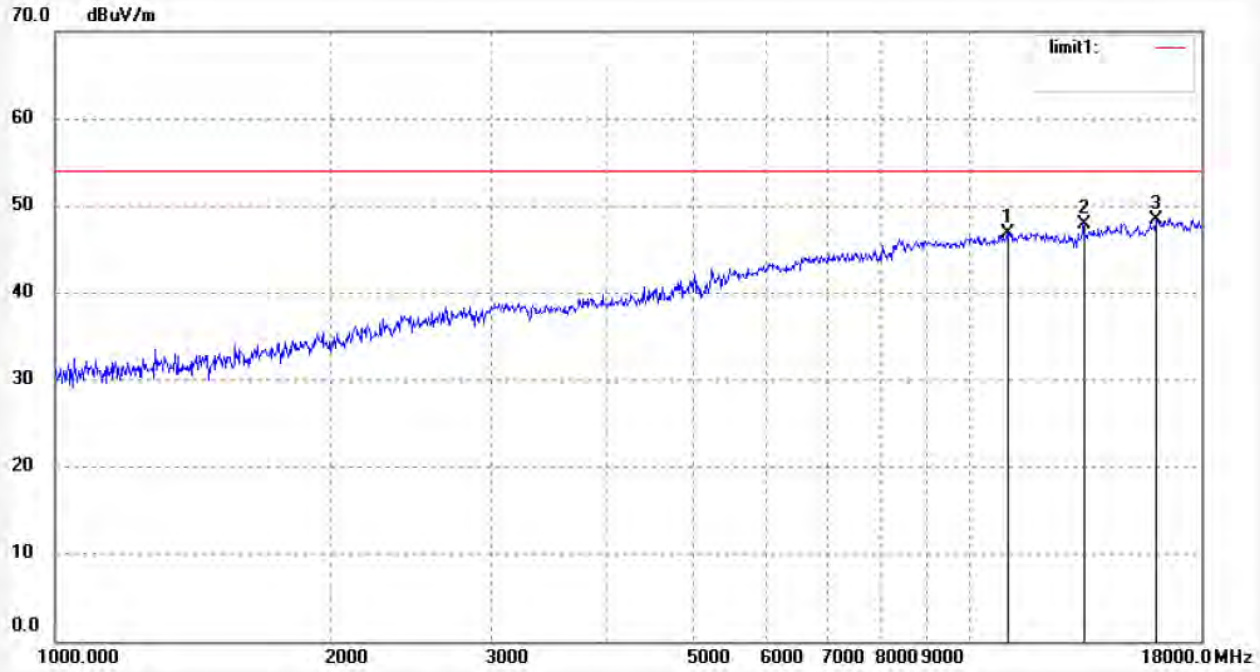
Fax:+86-0755-26503396

Job No.: carry #384
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT: iDISPLAY MEDIA PLAYER
Mode: TX Channel 1(802.11g)
Model: UIM200B-B20
Manufacturer: Pipo

Polarization: Horizontal
Power Source: AC 120V/60Hz
Date: 14/09/15/
Time: 9/56/40
Engineer Signature:
Distance: 3m

Note: Report NO.:ATE20141759



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	11038.247	37.40	9.47	46.87	54.00	-7.13	peak			
2	13376.181	8.42	39.45	47.87	54.00	-6.13	peak			
3	16068.368	8.29	40.04	48.33	54.00	-5.67	peak			

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Site: 2# Chamber
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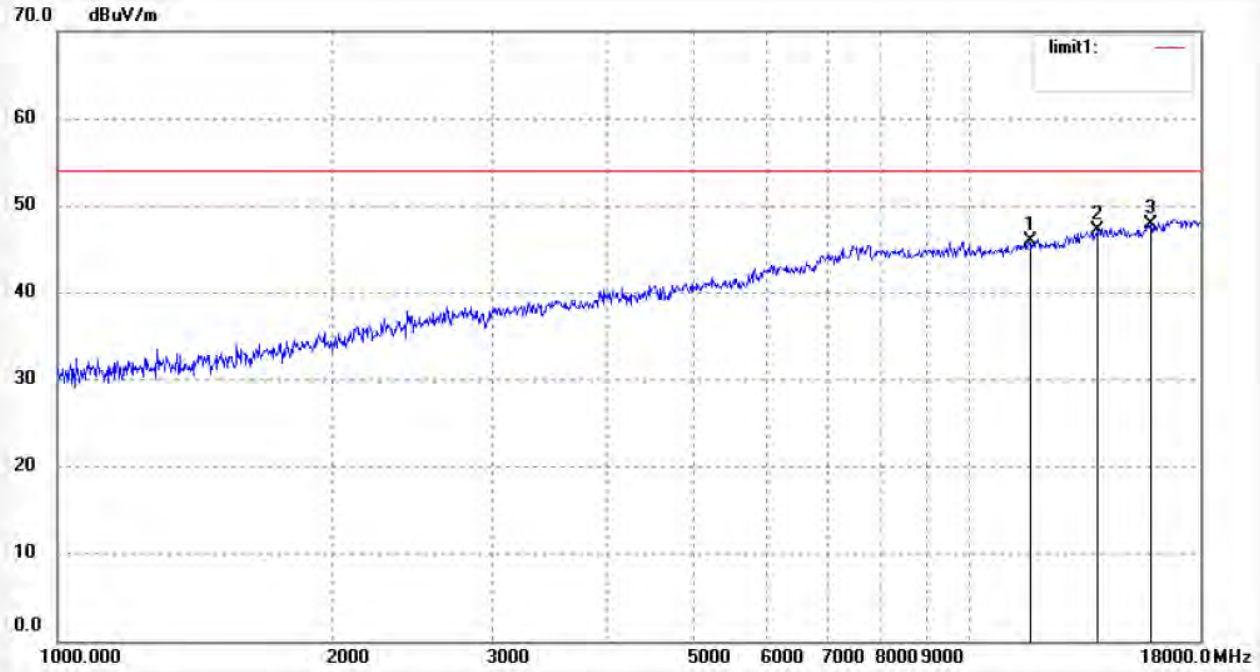
Fax:+86-0755-26503396

Job No.: carry #385
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT: iDISPLAY MEDIA PLAYER
Mode: TX Channel 1(802.11g)
Model: UIM200B-B20
Manufacturer: Pipo

Polarization: Vertical
Power Source: AC 120V/60Hz
Date: 14/09/15/
Time: 9/57/18
Engineer Signature:
Distance: 3m

Note: Report NO.:ATE20141759



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	11665.905	34.80	11.06	45.86	54.00	-8.14	peak			
2	13851.652	7.01	40.16	47.17	54.00	-6.83	peak			
3	15882.369	7.80	40.02	47.82	54.00	-6.18	peak			

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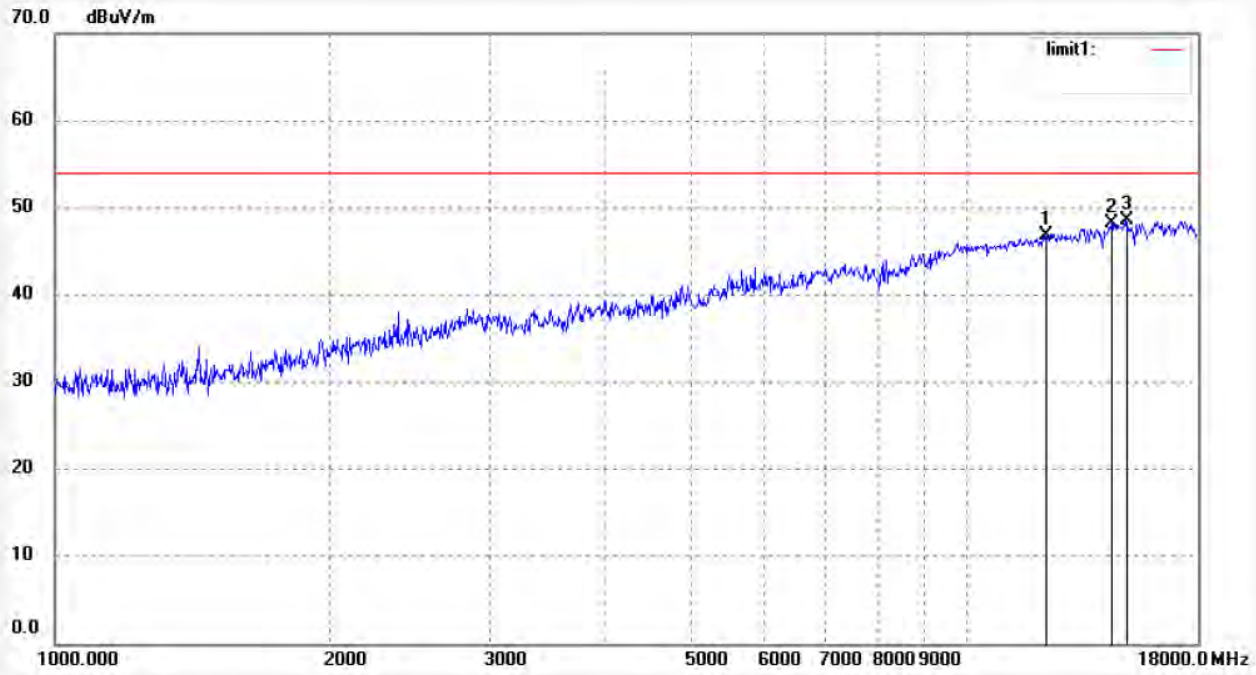
Fax:+86-0755-26503396

Job No.: carry #386
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT: iDISPLAY MEDIA PLAYER
Mode: TX Channel 6(802.11g)
Model: UIM200B-B20
Manufacturer: Pipo

Polarization: Horizontal
Power Source: AC 120V/60Hz
Date: 14/09/15/
Time: 9/58/06
Engineer Signature:
Distance: 3m

Note: Report NO.:ATE20141759



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	12222.059	8.61	38.12	46.73	54.00	-7.27	peak			
2	14469.829	5.77	42.47	48.24	54.00	-5.76	peak			
3	14984.176	7.49	41.15	48.64	54.00	-5.36	peak			

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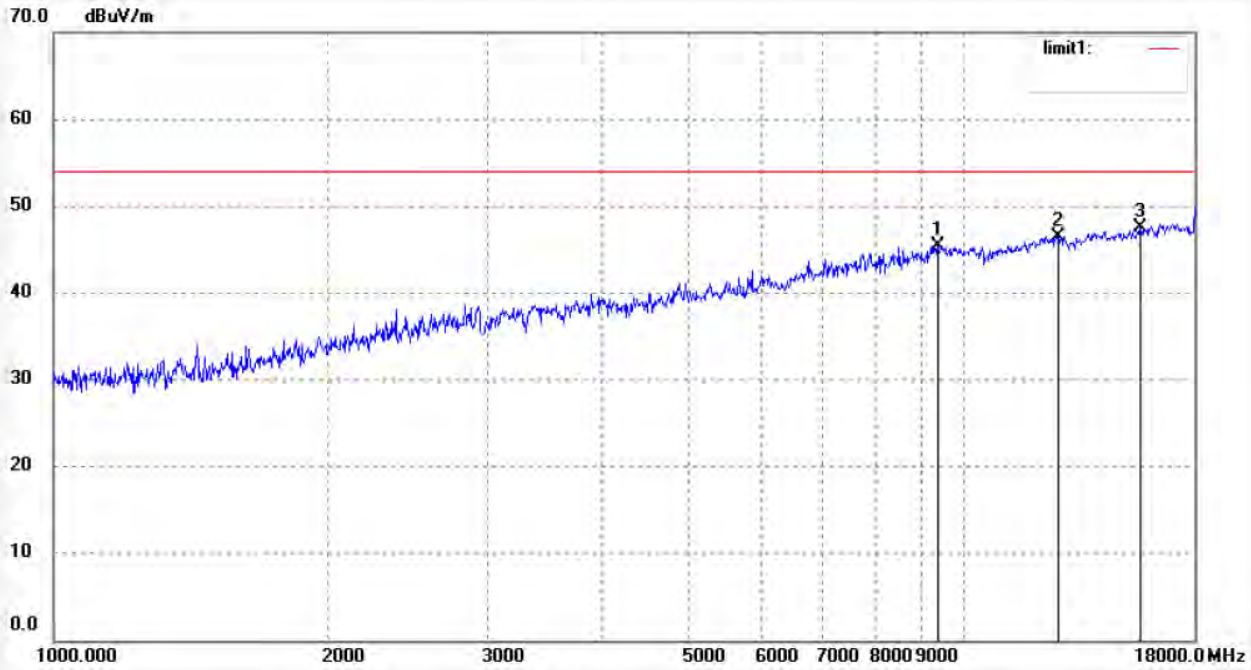
Fax:+86-0755-26503396

Job No.: carry #387
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT: iDISPLAY MEDIA PLAYER
Mode: TX Channel 6(802.11g)
Model: UIM200B-B20
Manufacturer: Pipo

Polarization: Vertical
Power Source: AC 120V/60Hz
Date: 14/09/15/
Time: 9/58/45
Engineer Signature:
Distance: 3m

Note: Report NO.:ATE20141759



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	9405.317	35.94	9.42	45.36	54.00	-8.64	peak			
2	12730.400	7.81	38.68	46.49	54.00	-7.51	peak			
3	15698.523	7.45	40.06	47.51	54.00	-6.49	peak			

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Site: 2# Chamber
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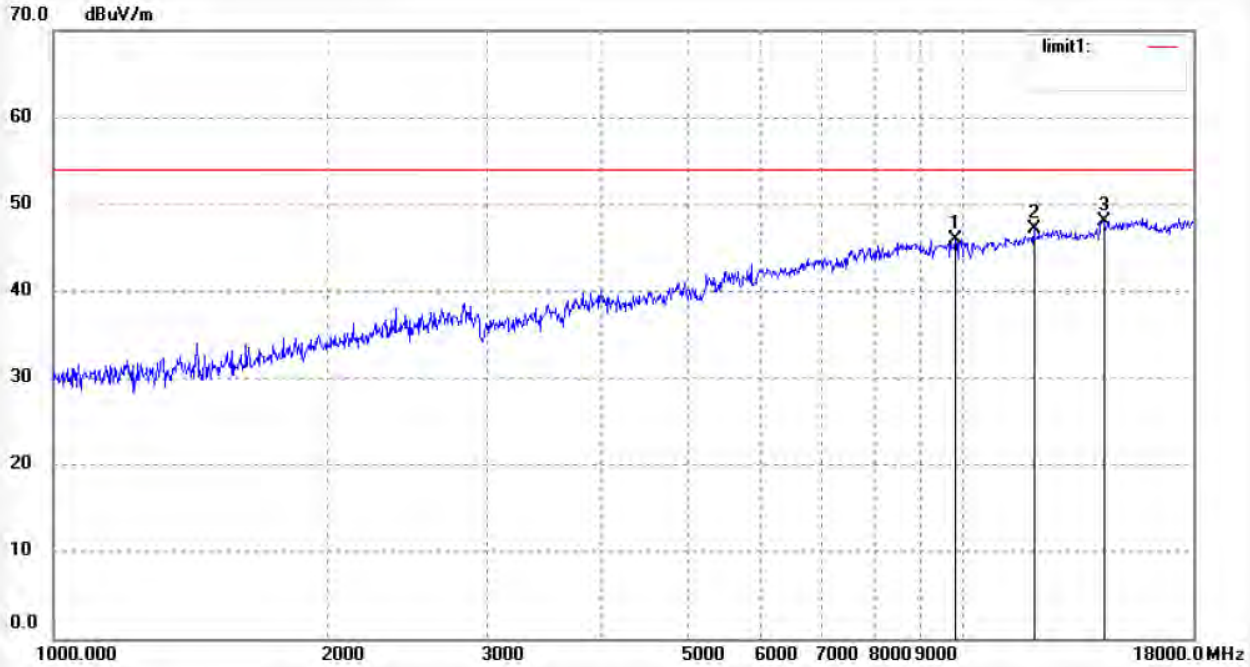
Fax:+86-0755-26503396

Job No.: carry #388
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT: iDISPLAY MEDIA PLAYER
Mode: TX Channel 11(802.11g)
Model: UIM200B-B20
Manufacturer: Pipo

Polarization: Horizontal
Power Source: AC 120V/60Hz
Date: 14/09/15/
Time: 9/59/18
Engineer Signature:
Distance: 3m

Note: Report NO.:ATE20141759



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	9853.701	36.36	9.65	46.01	54.00	-7.99	peak			
2	12010.460	36.75	10.47	47.22	54.00	-6.78	peak			
3	14344.025	6.12	41.91	48.03	54.00	-5.97	peak			

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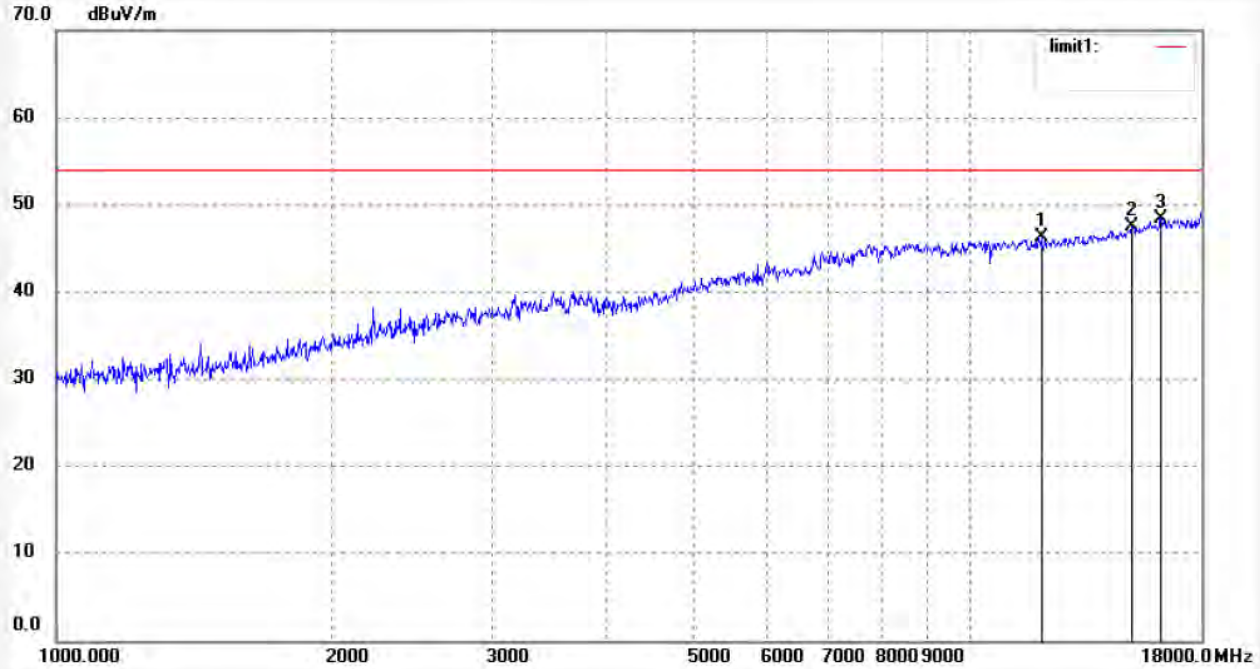
Fax:+86-0755-26503396

Job No.: carry #389
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT: iDISPLAY MEDIA PLAYER
Mode: TX Channel 11(802.11g)
Model: UIM200B-B20
Manufacturer: Pipo

Polarization: Vertical
Power Source: AC 120V/60Hz
Date: 14/09/15/
Time: 9/59/46
Engineer Signature:
Distance: 3m

Note: Report NO.:ATE20141759



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	12010.460	35.75	10.47	46.22	54.00	-7.78	peak			
2	15115.594	6.57	40.87	47.44	54.00	-6.56	peak			
3	16256.545	8.27	40.15	48.42	54.00	-5.58	peak			

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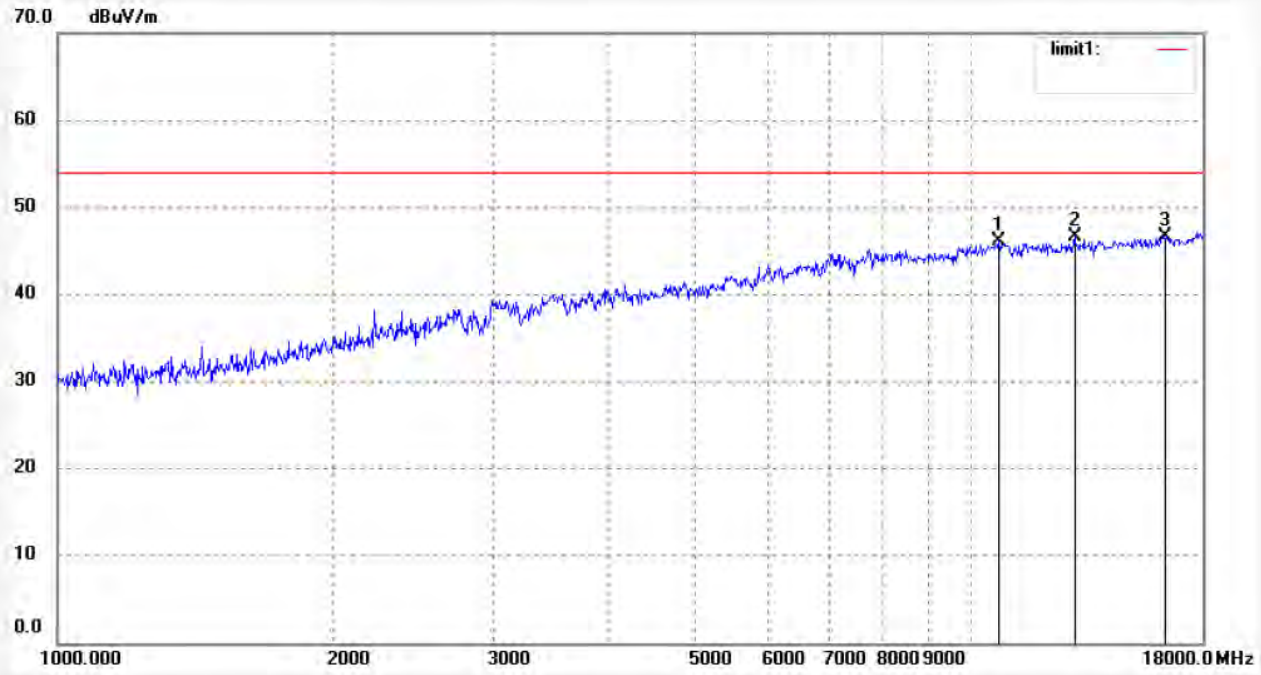
Fax:+86-0755-26503396

Job No.: carry #390
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT: iDISPLAY MEDIA PLAYER
Mode: TX Channel 1(802.11n20)
Model: UIM200B-B20
Manufacturer: Pipo

Polarization: Horizontal
Power Source: AC 120V/60Hz
Date: 14/09/15/
Time: 10/00/41
Engineer Signature:
Distance: 3m

Note: Report NO.:ATE20141759



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	10752.836	37.26	8.81	46.07	54.00	-7.93	peak			
2	13030.319	7.56	39.04	46.60	54.00	-7.40	peak			
3	16303.933	6.54	40.18	46.72	54.00	-7.28	peak			

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Site: 2# Chamber
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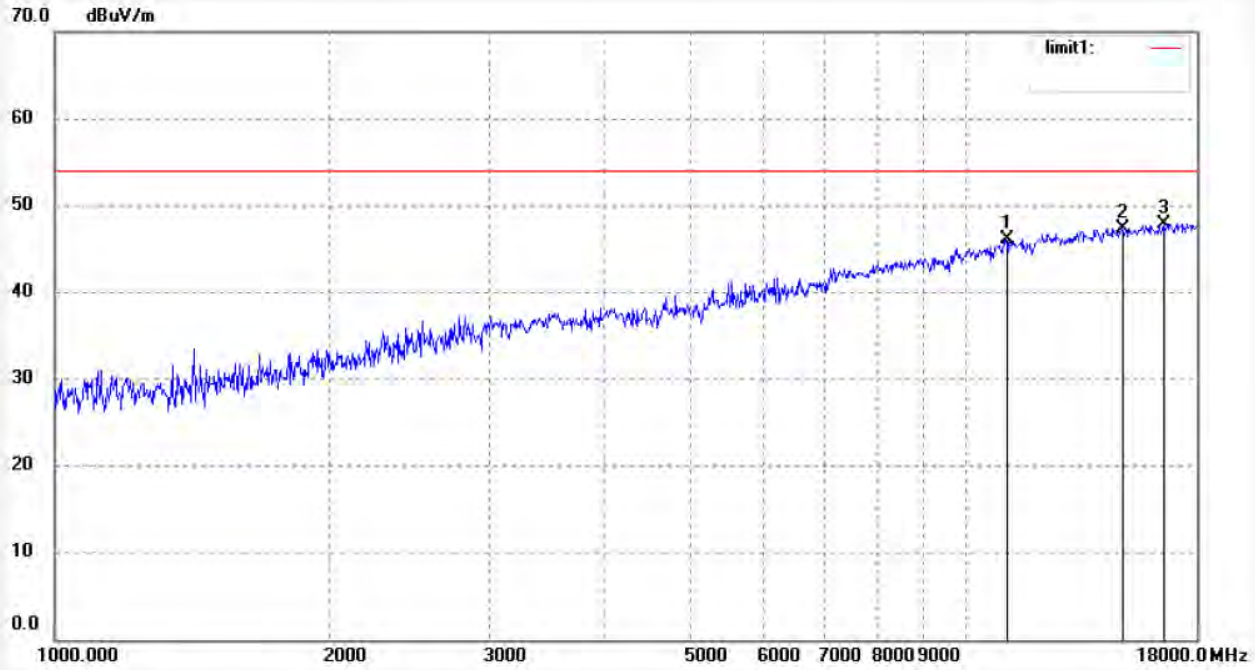
Fax:+86-0755-26503396

Job No.: carry #391
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT: iDISPLAY MEDIA PLAYER
Mode: TX Channel 1(802.11n20)
Model: UIM200B-B20
Manufacturer: Pipo

Polarization: Vertical
Power Source: AC 120V/60Hz
Date: 14/09/15/
Time: 10/02/24
Engineer Signature:
Distance: 3m

Note: Report NO.:ATE20141759



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	11102.694	36.61	9.58	46.19	54.00	-7.81	peak			
2	14897.199	5.97	41.41	47.38	54.00	-6.62	peak			
3	16542.951	7.50	40.42	47.92	54.00	-6.08	peak			

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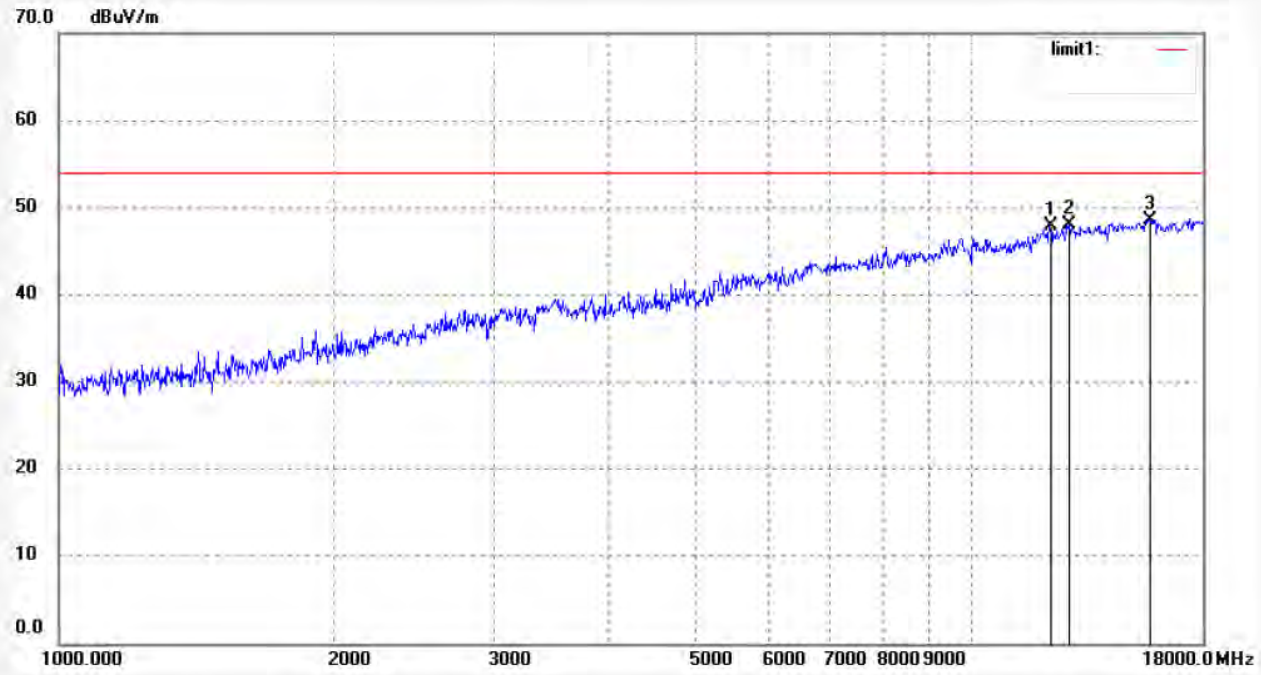
Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: carry #392
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT: iDISPLAY MEDIA PLAYER
Mode: TX Channel 6(802.11n20)
Model: UIM200B-B20
Manufacturer: Pipo

Polarization: Horizontal
Power Source: AC 120V/60Hz
Date: 14/09/15/
Time: 10/03/34
Engineer Signature:
Distance: 3m

Note: Report NO.:ATE20141759



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	12222.059	9.76	38.12	47.88	54.00	-6.12	peak			
2	12842.052	9.30	38.81	48.11	54.00	-5.89	peak			
3	15744.284	8.56	40.05	48.61	54.00	-5.39	peak			

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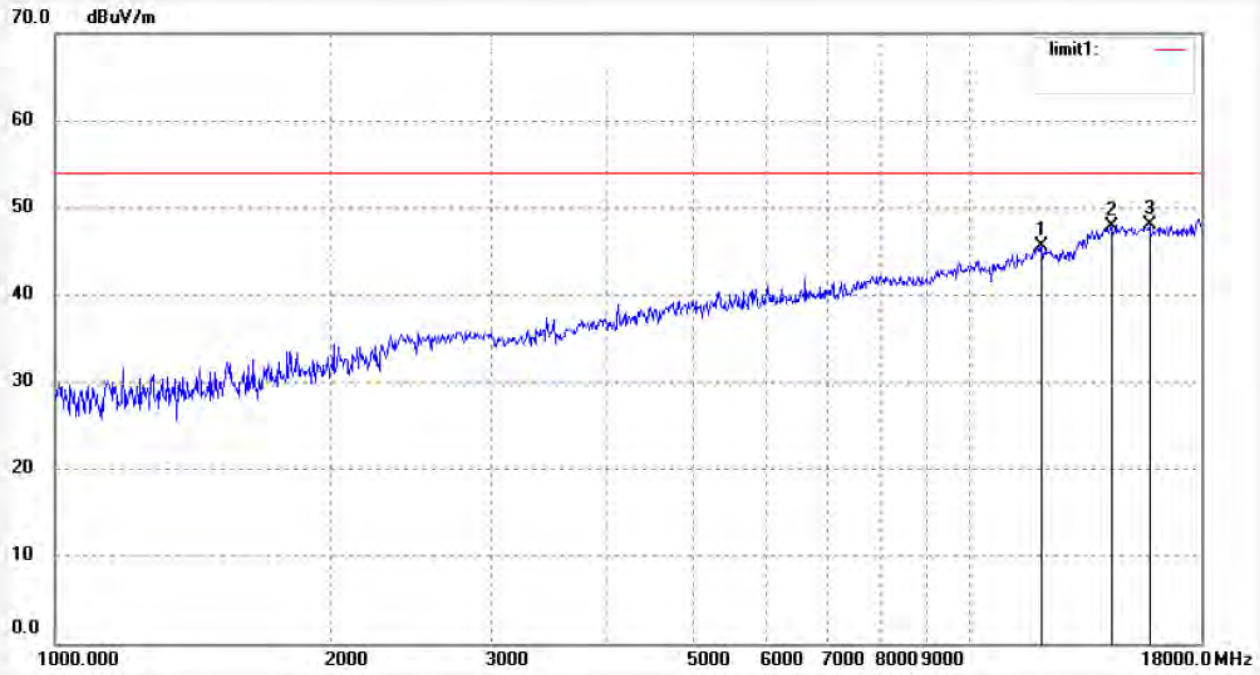
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: carry #393
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT: iDISPLAY MEDIA PLAYER
Mode: TX Channel 6(802.11n20)
Model: UIM200B-B20
Manufacturer: Pipo

Polarization: Vertical
Power Source: AC 120V/60Hz
Date: 14/09/15/
Time: 10/05/02
Engineer Signature:
Distance: 3m

Note: Report NO.:ATE20141759



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	12045.470	35.25	10.39	45.64	54.00	-8.36	peak			
2	14344.025	6.01	41.91	47.92	54.00	-6.08	peak			
3	15790.179	8.05	40.04	48.09	54.00	-5.91	peak			

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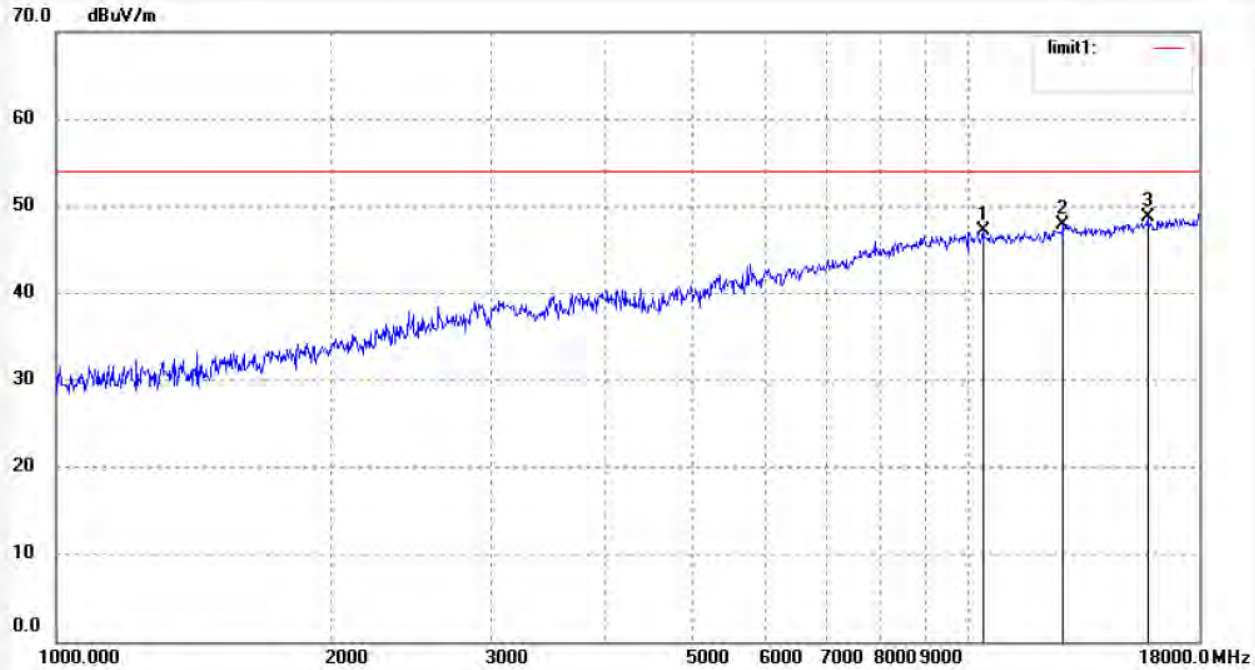
Fax:+86-0755-26503396

Job No.: carry #394
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT: iDISPLAY MEDIA PLAYER
Mode: TX Channel 11(802.11n20)
Model: UIM200B-B20
Manufacturer: Pipo

Polarization: Horizontal
Power Source: AC 120V/60Hz
Date: 14/09/15/
Time: 10/06/17
Engineer Signature:
Distance: 3m

Note: Report NO.:ATE20141759



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	10414.003	38.29	8.83	47.12	54.00	-6.88	peak			
2	12767.509	9.15	38.72	47.87	54.00	-6.13	peak			
3	15790.179	8.65	40.04	48.69	54.00	-5.31	peak			

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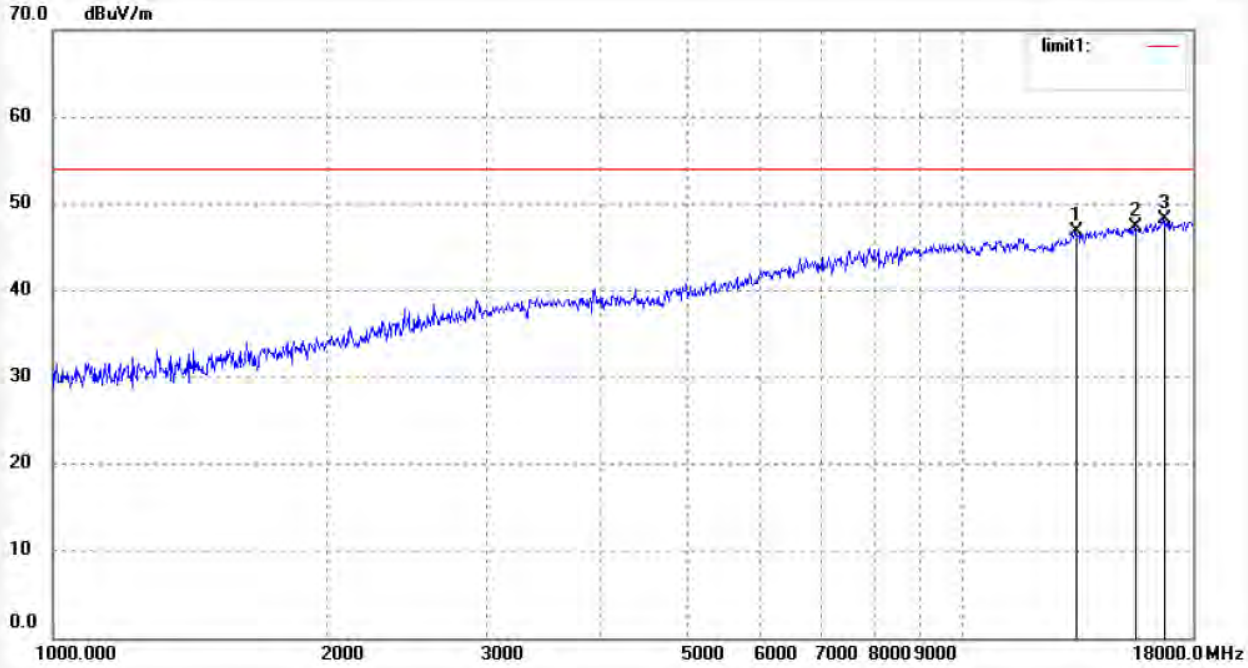
Fax:+86-0755-26503396

Job No.: carry #395
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT: iDISPLAY MEDIA PLAYER
Mode: TX Channel 11(802.11n20)
Model: UIM200B-B20
Manufacturer: Pipo

Polarization: Vertical
Power Source: AC 120V/60Hz
Date: 14/09/15/
Time: 10/06/53
Engineer Signature:
Distance: 3m

Note: Report NO.:ATE20141759



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	13376.181	7.30	39.45	46.75	54.00	-7.25	peak			
2	15516.806	7.22	40.10	47.32	54.00	-6.68	peak			
3	16688.041	7.38	40.83	48.21	54.00	-5.79	peak			

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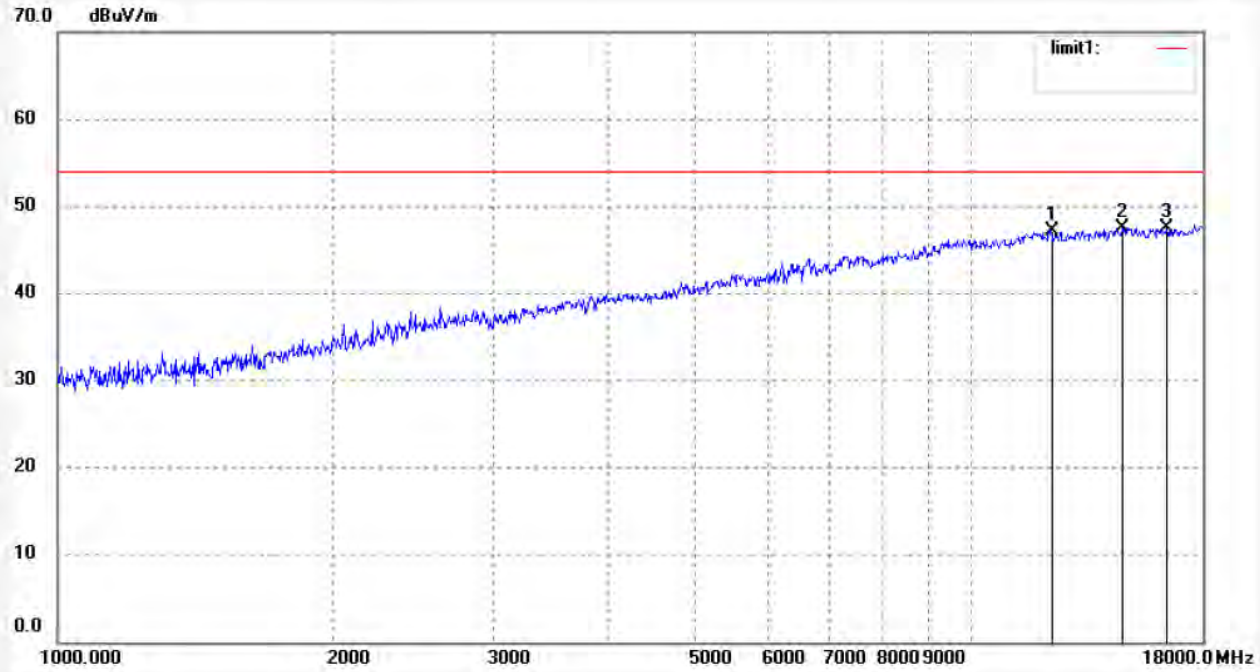
Fax:+86-0755-26503396

Job No.: carry #396
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT: iDISPLAY MEDIA PLAYER
Mode: TX Channel 3(802.11n40)
Model: UIM200B-B20
Manufacturer: Pipo

Polarization: Horizontal
Power Source: AC 120V/60Hz
Date: 14/09/15/
Time: 10/07/40
Engineer Signature:
Distance: 3m

Note: Report NO.:ATE20141759



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	12257.686	9.09	38.16	47.25	54.00	-6.75	peak			
2	14681.959	5.51	42.05	47.56	54.00	-6.44	peak			
3	16446.926	7.25	40.27	47.52	54.00	-6.48	peak			

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 2# Chamber
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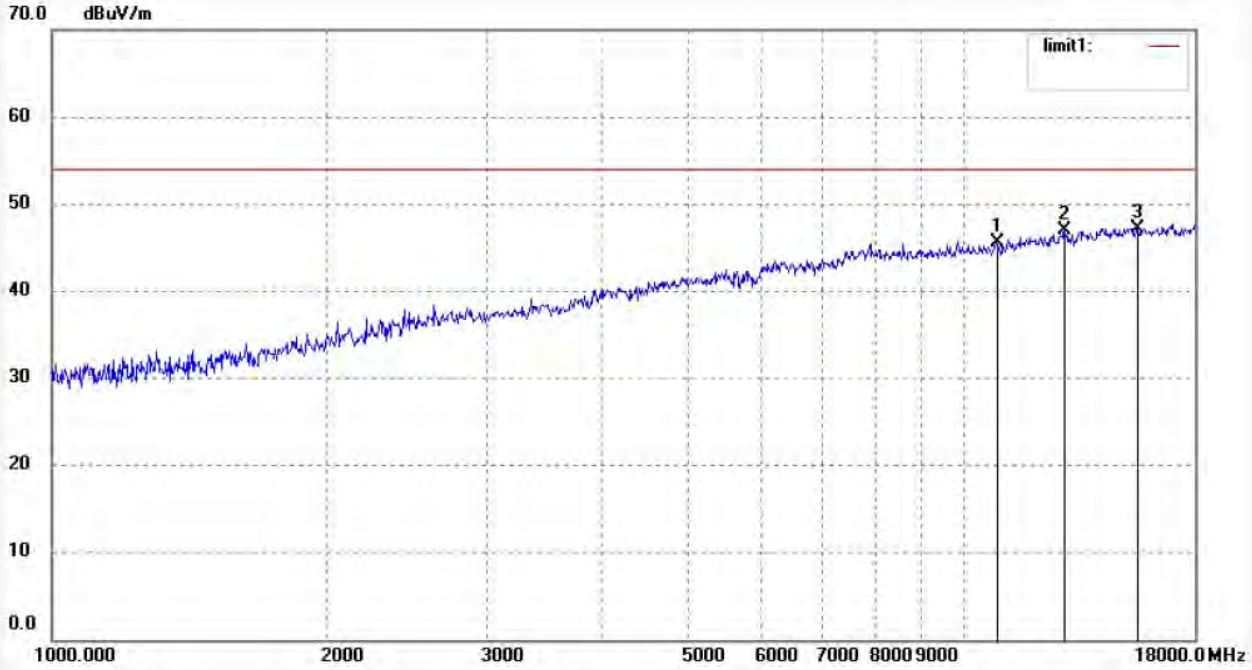
Fax:+86-0755-26503396

Job No.: carry #397
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT: iDISPLAY MEDIA PLAYER
Mode: TX Channel 3(802.11n40)
Model: UIM200B-B20
Manufacturer: Pipo

Polarization: Vertical
Power Source: AC 120V/60Hz
Date: 14/09/15/
Time: 10/08/16
Engineer Signature:
Distance: 3m

Note: Report NO.:ATE20141759



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	10878.763	36.46	9.14	45.60	54.00	-8.40	peak			
2	12954.683	7.97	38.95	46.92	54.00	-7.08	peak			
3	15516.806	7.11	40.10	47.21	54.00	-6.79	peak			

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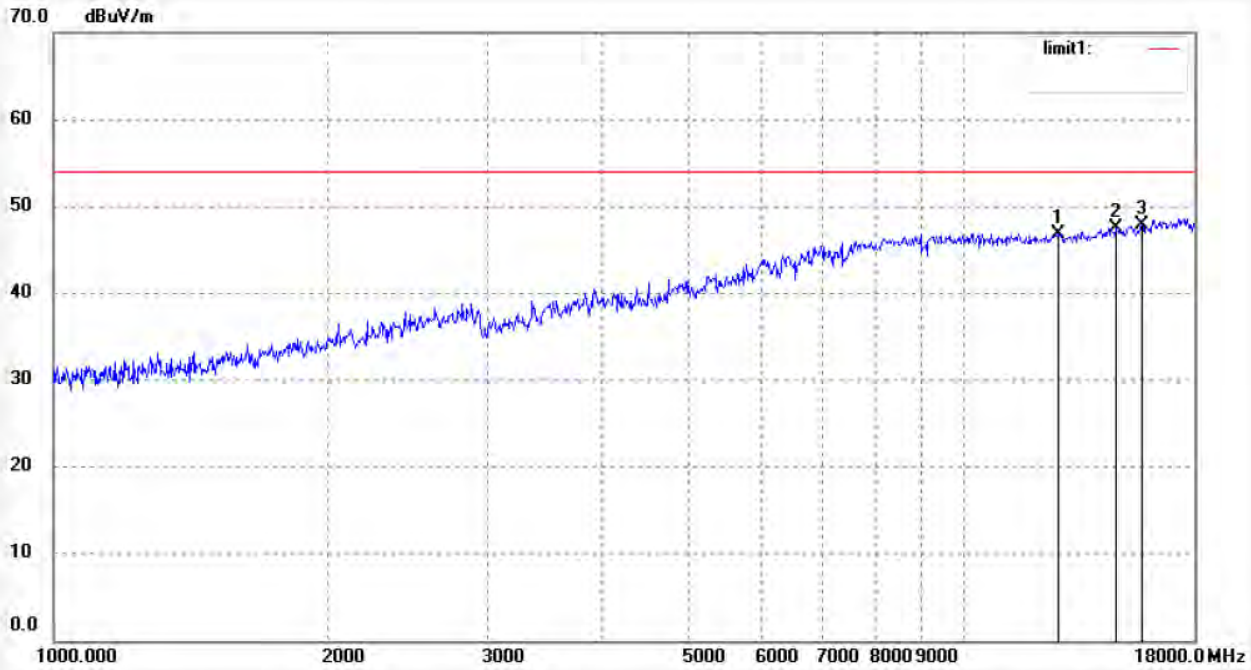
Fax:+86-0755-26503396

Job No.: carry #398
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT: iDISPLAY MEDIA PLAYER
Mode: TX Channel 6(802.11n40)
Model: UIM200B-B20
Manufacturer: Pipo

Polarization: Horizontal
Power Source: AC 120V/60Hz
Date: 14/09/15/
Time: 10/09/02
Engineer Signature:
Distance: 3m

Note: Report NO.:ATE20141759



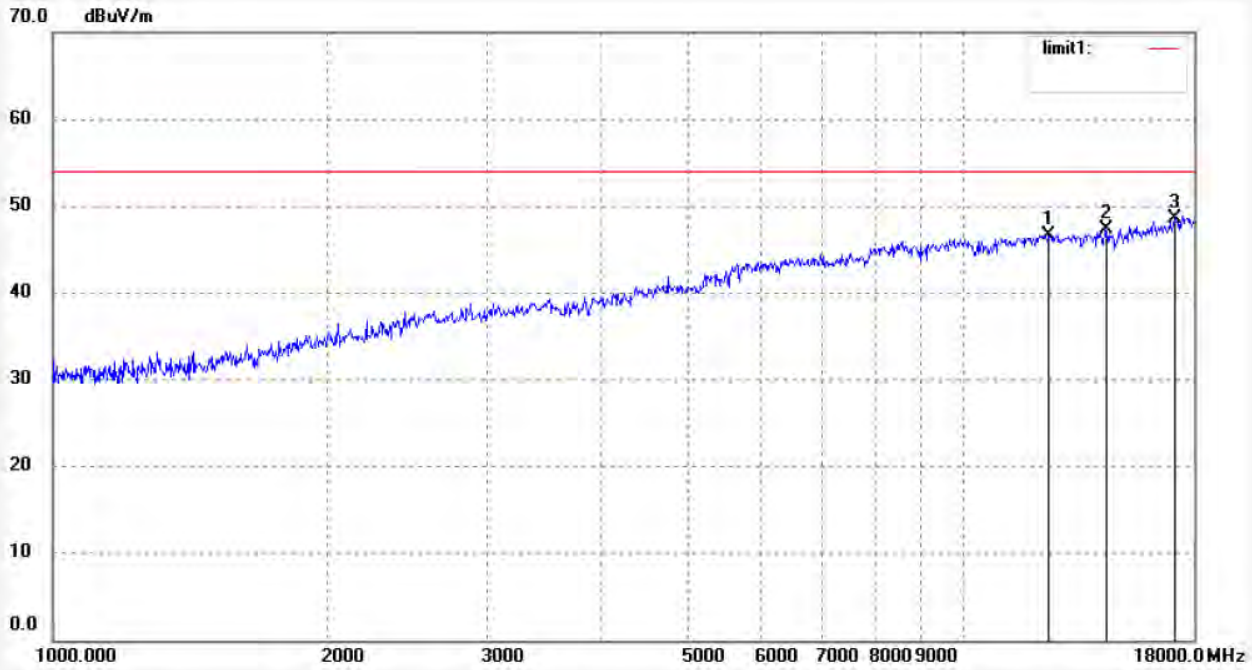
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	12767.509	8.15	38.72	46.87	54.00	-7.13	peak			
2	14767.679	5.64	41.80	47.44	54.00	-6.56	peak			
3	15744.284	7.78	40.05	47.83	54.00	-6.17	peak			

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: carry #399
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT: iDISPLAY MEDIA PLAYER
Mode: TX Channel 6(802.11n40)
Model: UIM200B-B20
Manufacturer: Pipo

Polarization: Vertical
Power Source: AC 120V/60Hz
Date: 14/09/15/
Time: 10/09/56
Engineer Signature:
Distance: 3m

Note: Report NO.:ATE20141759



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	12473.640	8.32	38.37	46.69	54.00	-7.31	peak			
2	14385.838	5.31	42.10	47.41	54.00	-6.59	peak			
3	17130.989	6.29	42.22	48.51	54.00	-5.49	peak			

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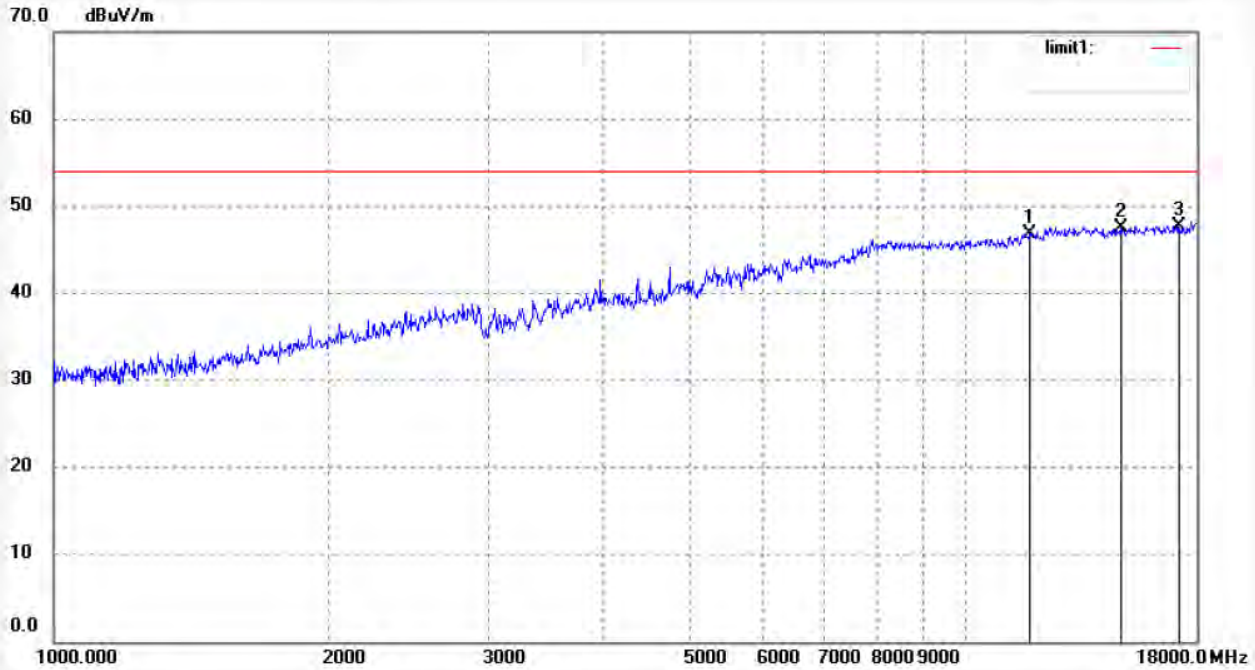
Fax:+86-0755-26503396

Job No.: carry #400
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT: iDISPLAY MEDIA PLAYER
Mode: TX Channel 9(802.11n40)
Model: UIM200B-B20
Manufacturer: Pipo

Polarization: Horizontal
Power Source: AC 120V/60Hz
Date: 14/09/15/
Time: 10/11/00
Engineer Signature:
Distance: 3m

Note: Report NO.:ATE20141759



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	11802.524	34.79	12.06	46.85	54.00	-7.15	peak			
2	14853.900	6.00	41.54	47.54	54.00	-6.46	peak			
3	17180.926	5.34	42.42	47.76	54.00	-6.24	peak			

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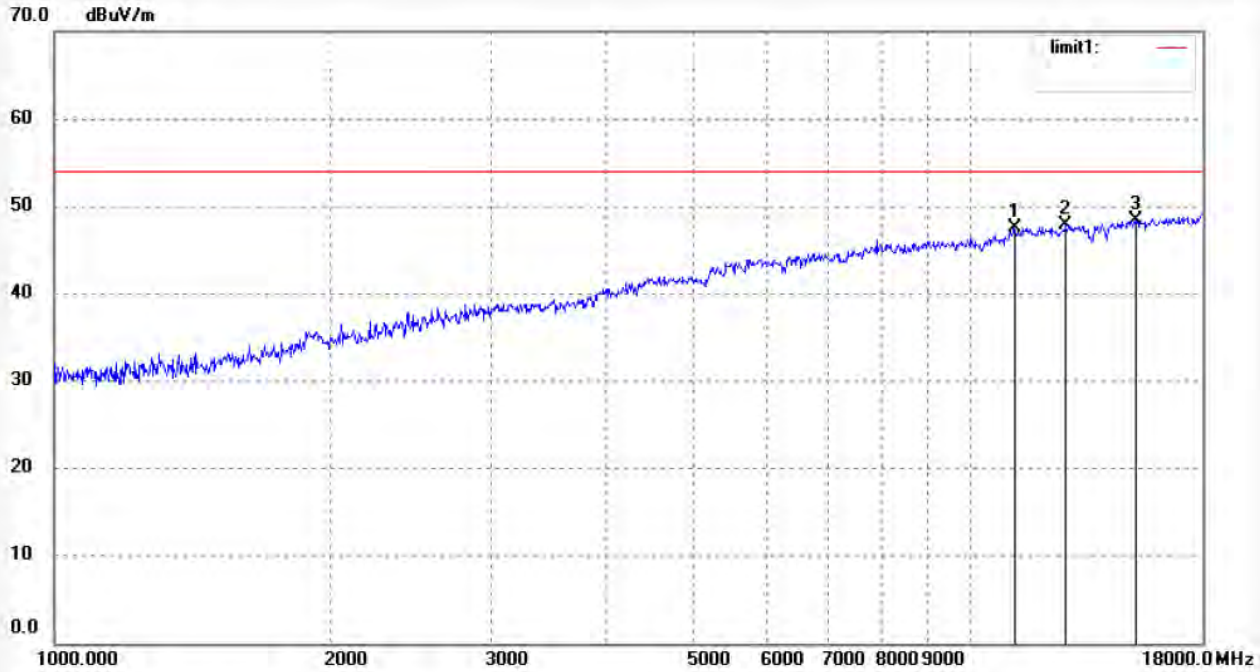
Job No.: carry #401
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT: iDISPLAY MEDIA PLAYER
Mode: TX Channel 9(802.11n40)
Model: UIM200B-B20
Manufacturer: Pipo

Polarization: Vertical
Power Source: AC 120V/60Hz
Date: 14/09/15/
Time: 10/11/21
Engineer Signature:
Distance: 3m

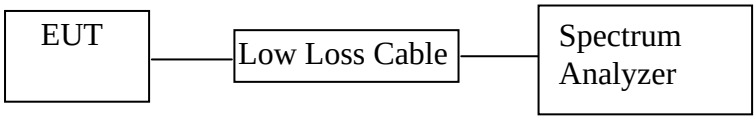
Note: Report NO.:ATE20141759



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	11200.070	37.77	9.76	47.53	54.00	-6.47	peak			
2	12767.509	9.15	38.72	47.87	54.00	-6.13	peak			
3	15248.165	7.83	40.60	48.43	54.00	-5.57	peak			

11. CONDUCTED SPURIOUS EMISSION COMPLIANCE TEST

11.1. Block Diagram of Test Setup



11.2. The Requirement For Section 15.247(d)

Section 15.247(d): In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a).

11.3. EUT Configuration on Measurement

The equipment is installed on the emission measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

11.4. Operating Condition of EUT

11.4.1. Setup the EUT and simulator as shown as Section 11.1.

11.4.2. Turn on the power of all equipment.

11.4.3. Let the EUT work in TX modes measure it. The transmit frequency are 2412-2462 and 2422-2452MHz. We select 2412MHz, 2437MHz, 2462MHz and 2422MHz, 2437MHz, 2452MHz TX frequency to transmit.

11.5.Test Procedure

11.5.1.The transmitter output was connected to the spectrum analyzer via a low loss cable.

11.5.2.Set RBW of spectrum analyzer to 100kHz and VBW to 300kHz.

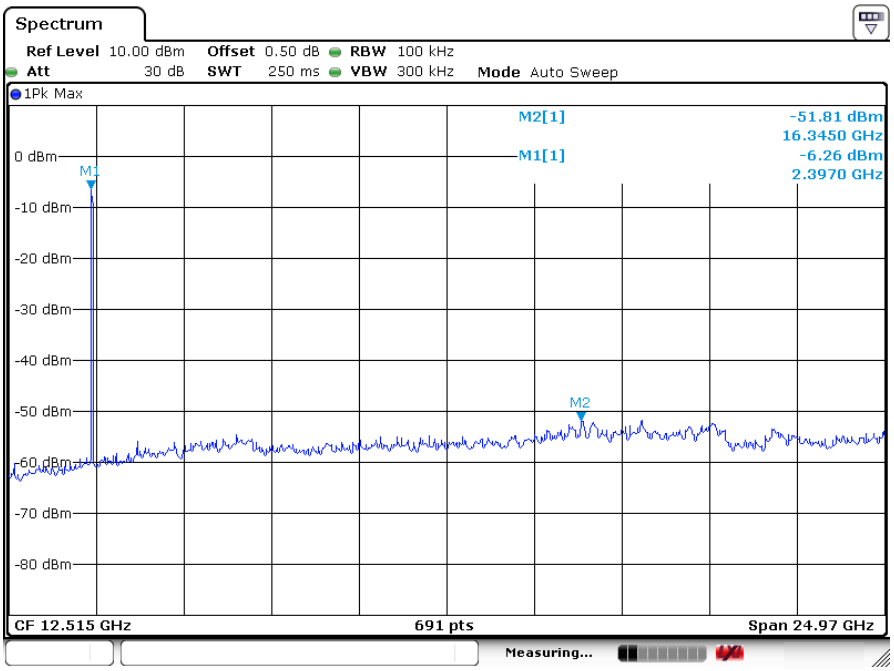
11.5.3.The Conducted Spurious Emission was measured and recorded.

11.6.Test Result

Pass.

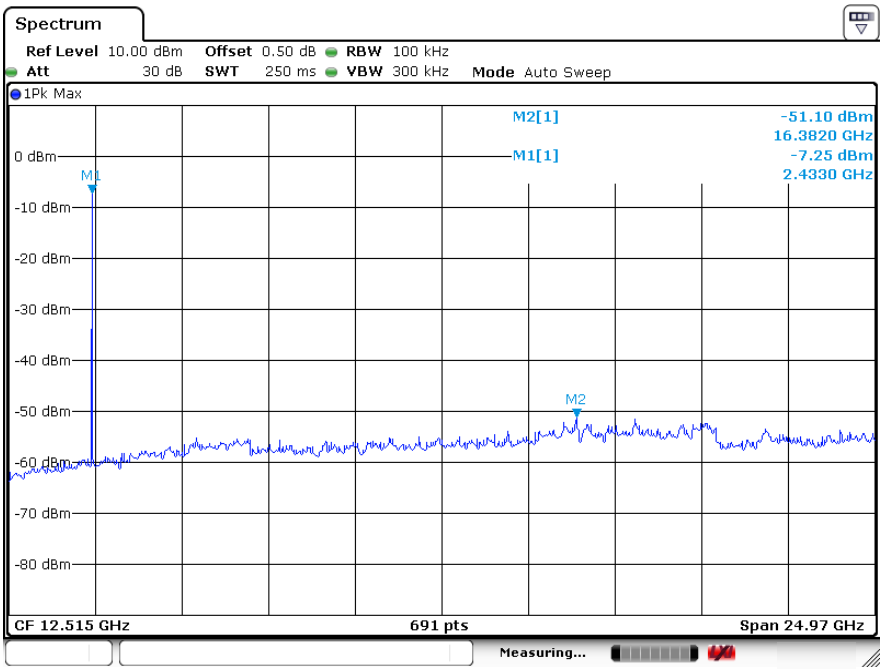
The spectrum analyzer plots are attached as below.

TX 802.11b Channel Low 2412MHz



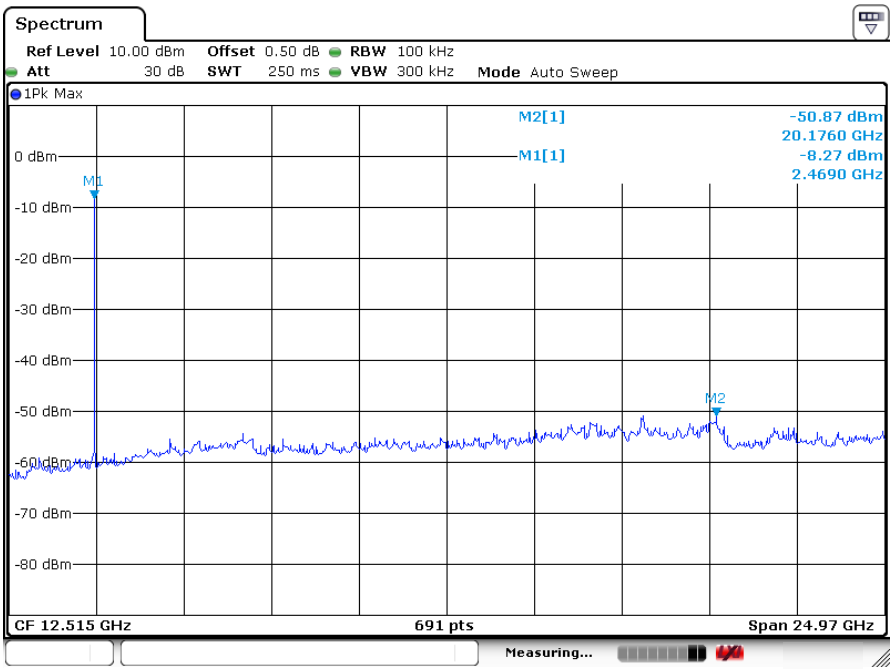
Date: 14.Sep.2014 10:48:13

TX 802.11b Channel Middle 2437MHz



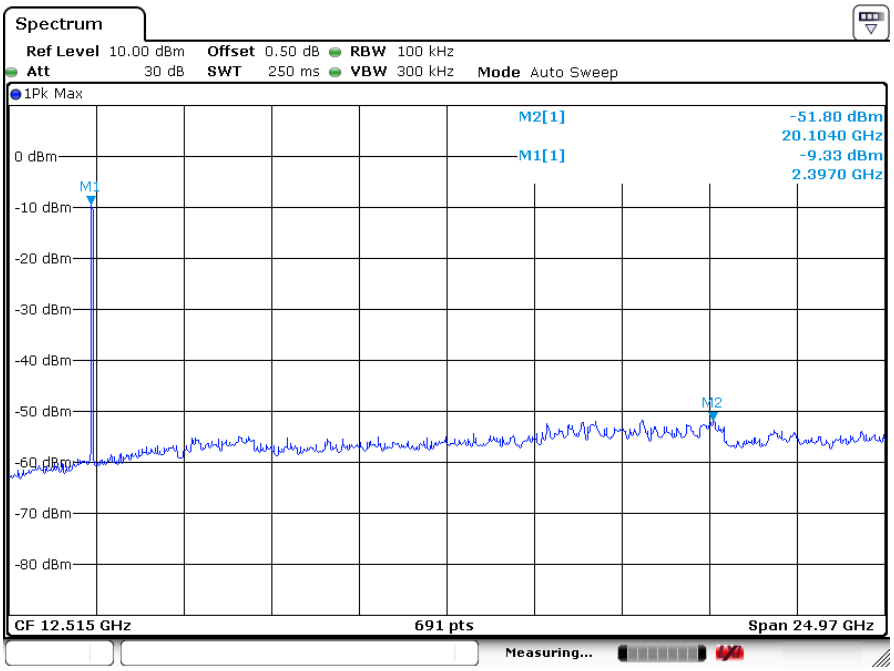
Date: 14.Sep.2014 10:47:00

TX 802.11b Channel High 2462MHz



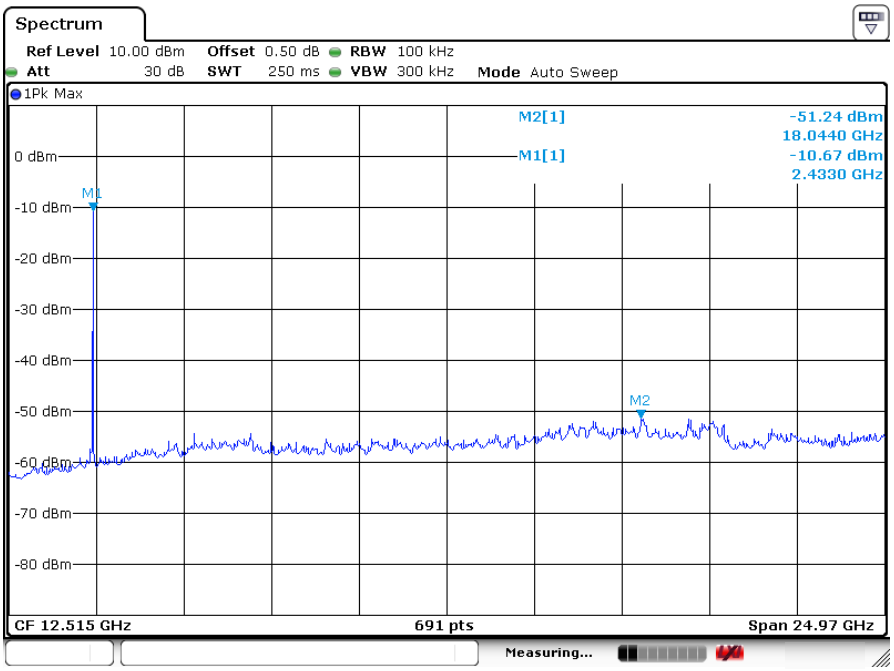
Date: 14.Sep.2014 10:49:12

TX 802.11g Channel Low 2412MHz



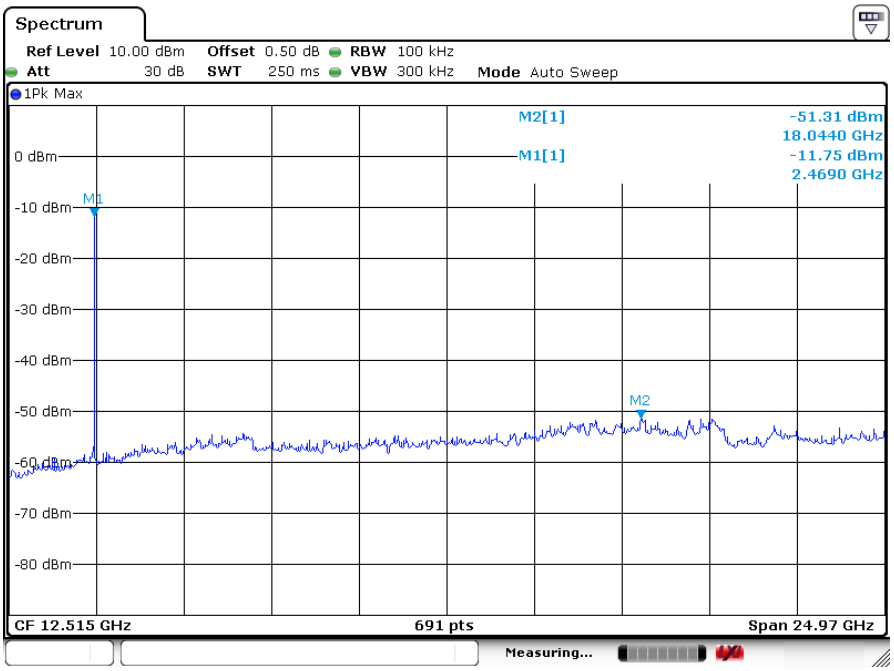
Date: 14.Sep.2014 10:55:30

TX 802.11g Channel Middle 2437MHz



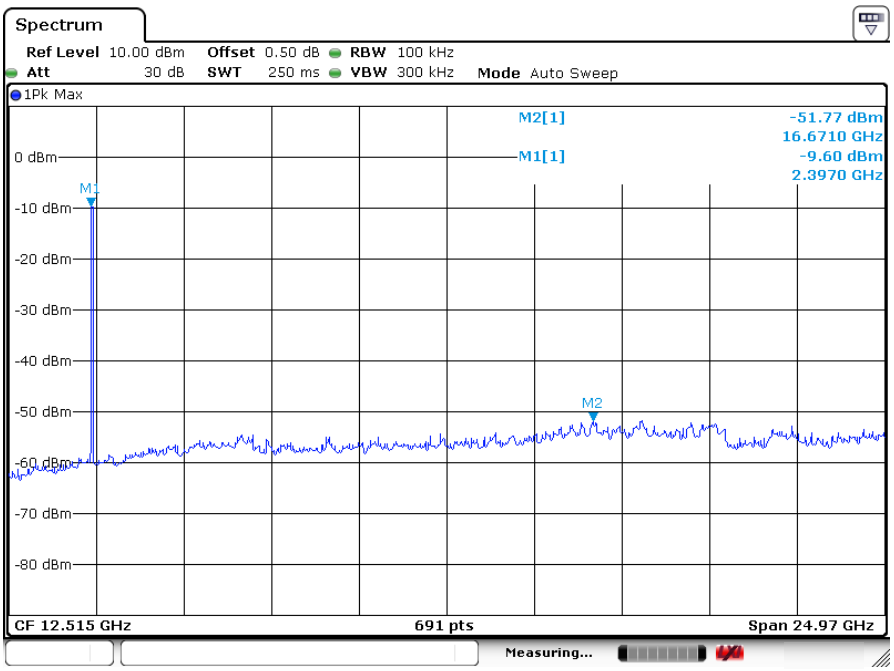
Date: 14.Sep.2014 10:53:11

TX 802.11g Channel High 2462MHz



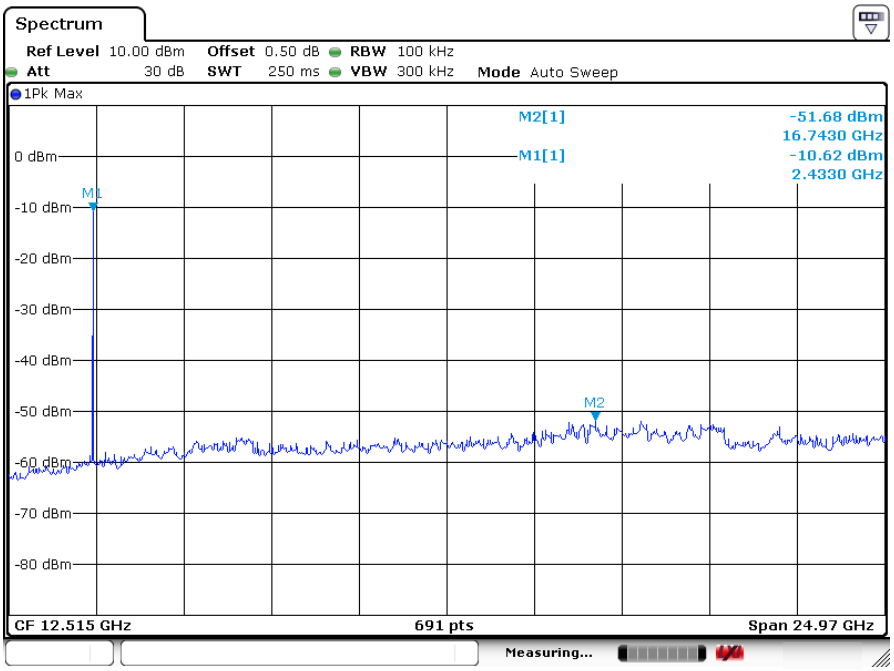
Date: 14.Sep.2014 10:52:12

TX 802.11n Channel Low 2412MHz (20MHz)



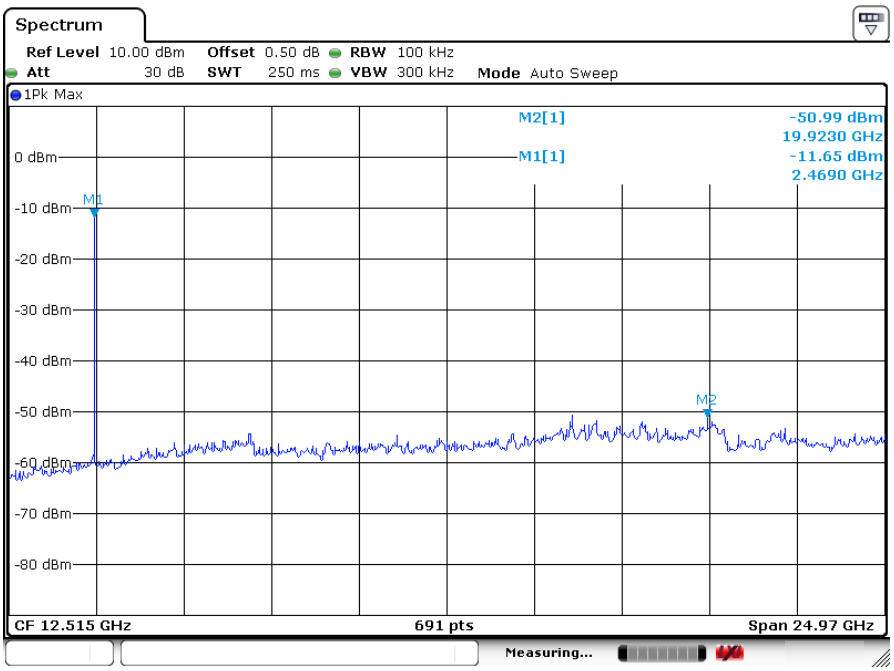
Date: 14.Sep.2014 10:56:43

TX 802.11n Channel Middle 2437MHz (20MHz)



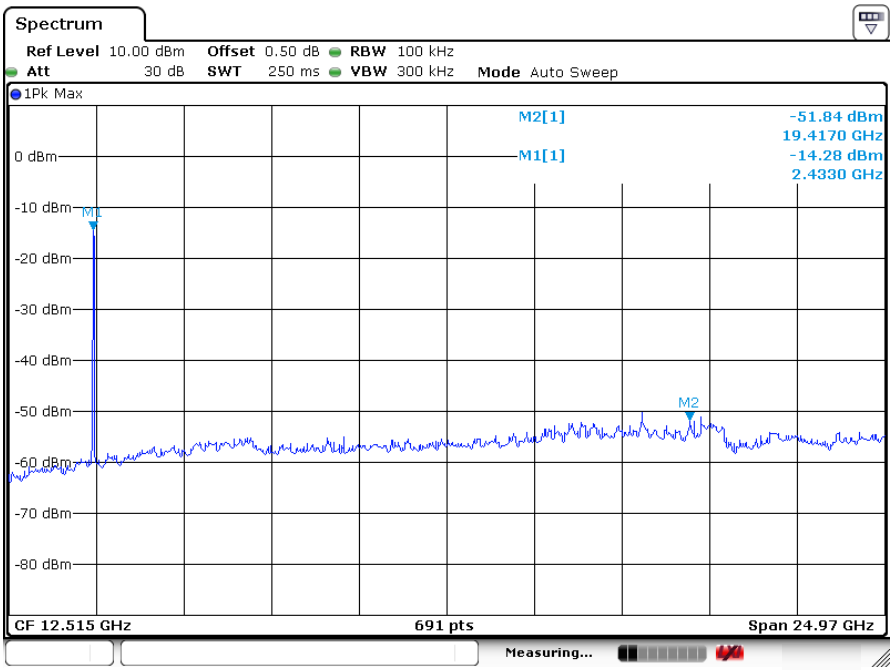
Date: 14.Sep.2014 10:57:29

TX 802.11n Channel High 2462MHz (20MHz)



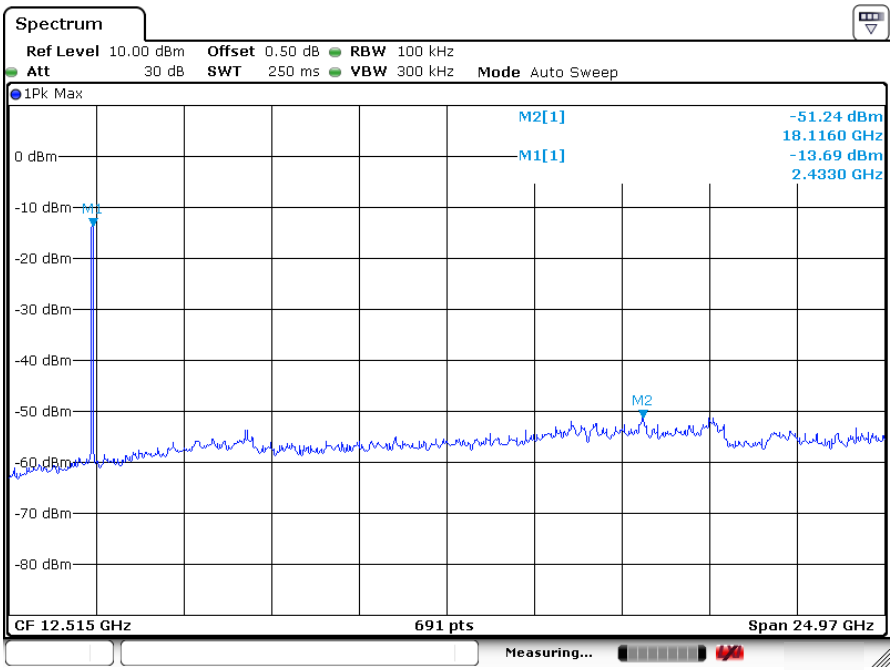
Date: 14.Sep.2014 10:59:15

TX 802.11n Channel Low 2422MHz (40MHz)



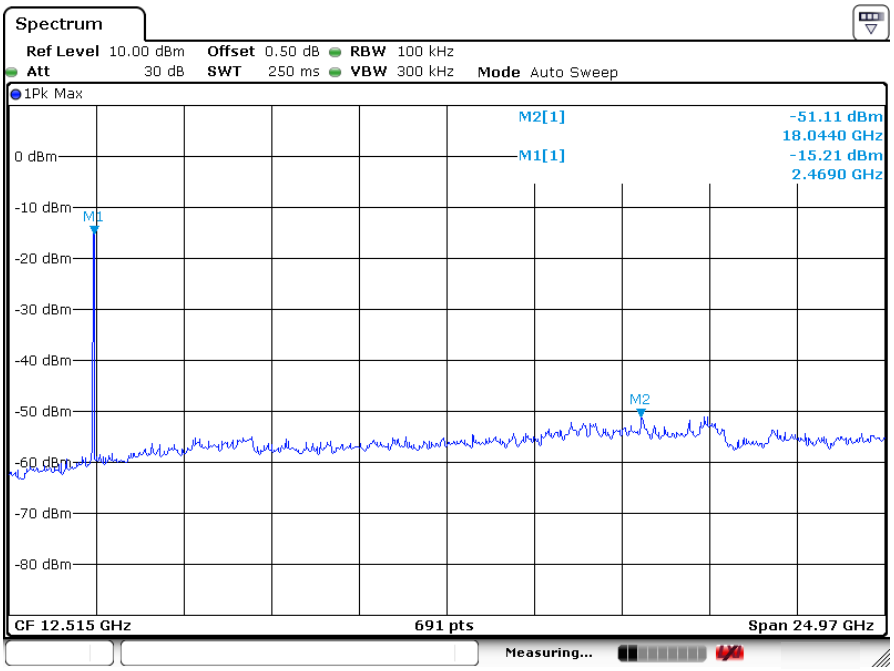
Date: 14.Sep.2014 11:02:38

TX 802.11n Channel Middle 2437MHz (40MHz)



Date: 14.Sep.2014 11:00:27

TX 802.11n Channel High 2452MHz (40MHz)



Date: 14.Sep.2014 11:03:35

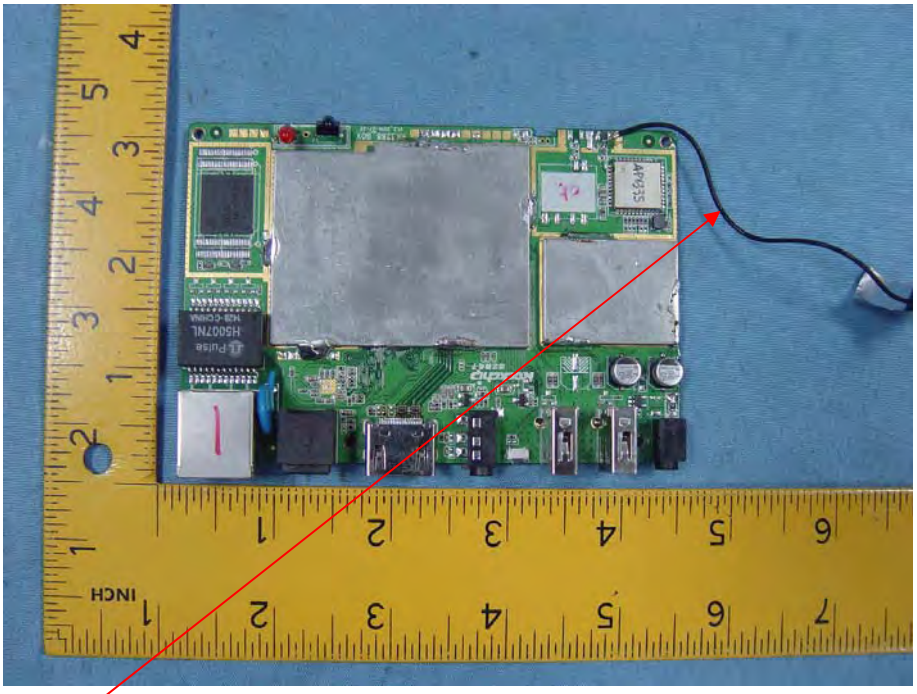
12. ANTENNA REQUIREMENT

12.1. The Requirement

According to 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.

12.2. Antenna Construction

Device is equipped with Ceramic antenna, which isn't displaced by other antenna. Therefore, the equipment complies with the antenna requirement of Section 15.203.



Antenna