

APPLICATION FOR CERTIFICATION

On Behalf of

Philips (China) Investment Co., Ltd.

LED Lamp

Model No. : 9290002579A
Brand : Philips
FCC ID : O3M9290002579AX

Prepared for

Philips (China) Investment Co., Ltd.

No. 9, Lane 888, Tian Lin Road, 200233, Shanghai, China

Prepared by

Audix Technology (Wujiang) Co., Ltd. EMC Dept.

No. 1289 Jiangxing East Road, the Part of Wujiang Economic Development Zone
Jiangsu China 215200

Tel : +86-512-63403993

Fax :+86-512-63403339

Report Number : ACWE-F1505002

Date of Test : Apr.28~Jul.04, 2015

Date of Report : Aug.03, 2015

TABLE OF CONTENTS

Description	Page
TEST REPORT CERTIFICATION	4
1. SUMMARY OF MEASUREMENTS AND RESULTS	5
2. GENERAL INFORMATION.....	6
2.1. Description of Device (EUT).....	6
2.2. Description of Test Facility	7
2.3. Measurement Uncertainty.....	7
3. CONDUCTED EMISSION MEASUREMENT	8
3.1. Test Equipment.....	8
3.2. Block Diagram of Test Setup.....	8
3.3. Power line Conducted Emission Limit	8
3.4. Test Procedure	9
3.5. Conducted Emission Measurement Results.....	9
4. RADIATED EMISSION MEASUREMENT.....	16
4.1. Test Equipment.....	16
4.2. Block Diagram of Test Setup.....	16
4.3. Radiated Emission Limits.....	18
4.4. Test Procedure	18
4.5. Assessment In All Three Orthogonal Planes	19
4.6. Measurement Results.....	19
4.7. Restricted Bands Measurement Results (For Below 1GHz).....	21
4.8. Restricted Bands Measurement Results (For Above 1GHz)	29
4.9. Spurious Emission Measurement Results in Band Edge Emission (FCC Part 15, 15.205).....	37
5. 6 DB BANDWIDTH MEASUREMENT	45
5.1. Test Equipment.....	45
5.2. Block Diagram of Test Setup.....	45
5.3. Specification Limits (§15.247(a)(2)).....	45
5.4. Test Procedure	45
5.5. Test Results.....	45
6. OUTPUT POWER MEASUREMENT.....	48
6.1. Test Equipment.....	48
6.2. Block Diagram of Test Setup.....	48
6.3. Specification Limits (§15.247(b)(3)).....	48
6.4. Test Procedure	49
6.5. Test Results.....	49
7. BAND EDGES MEASUREMENT	50
7.1. Test Equipment.....	50
7.2. Block Diagram of Test Setup.....	50
7.3. Specification Limits (§15.247(d)).....	50
7.4. Test Procedure	50
7.5. Test Results.....	50
8. POWER SPECTRAL DENSITY MEASUREMENT.....	52
8.1. Test Equipment.....	52
8.2. Block Diagram of Test Setup.....	52
8.3. Specification Limits (§15.247(e)).....	52
8.4. Test Results.....	52

9. EMISSION LIMITATIONS MEASUREMENT.....55
9.1. Test Equipment..... 55
9.2. Block Diagram of Test Setup..... 55
9.3. Specification Limits (§15.247(d))..... 55
9.4. Test Procedure 55
9.5. Test Results..... 56

10. DUTY CYCLE66
10.1. Test Equipment..... 66
10.2. Test Results 66

11. DEVIATION TO TEST SPECIFICATIONS67

TEST REPORT CERTIFICATION

Applicant : Philips (China) Investment Co., Ltd.
 Manufacturer : Philips (China) Investment Co., Ltd.
 EUT Description : LED Lamp
 FCC ID : O3M9290002579AX
 (A) Model No. : 9290002579A
 (B) Brand : Philips
 (C) Power Supply : AC 110-130V
 (D) Test Voltage : AC 120V, 60Hz

Applicable Standards:

FCC RULES AND REGULATIONS PART 15 SUBPART C, Oct. 2014
ANSI C63.10-2013
KDB 558074 D01 DTS Meas Guidance v03r02

The device described above was tested by Audix Technology (Wujiang) Co., Ltd. EMC Dept. to determine the maximum emission levels emanating from the device. The maximum emission levels were compared to the FCC Part 15 subpart C section 15.207, 15.205, 15.209&15.247 limits.

The measurement results are contained in this test report and Audix Technology (Wujiang) Co., Ltd. EMC Dept. is assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT to be technically compliant with the FCC limits.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of Audix Technology (Wujiang) Co., Ltd. EMC Dept.

Date of Test: Apr.28~Jul.04, 2015

Date of Report: Aug.03, 2015

Prepared by

:



(Emma Hu/Assistant Administrator)

Reviewer


:



(Danny Sun/Section Manager)

Approved & Authorized Signer

:



(Ken Lu/Assistant General Manager)

1. SUMMARY OF MEASUREMENTS AND RESULTS

The EUT has been tested according to the applicable standards and test results are referred as below.

Description of Test Item	Standard	Results	Remark
CONDUCTED EMISSION	FCC 47 CFR Part 15 Subpart C/ Section 15.207 And ANSI C63.10-2013 And KDB 558074 D01 DTS Meas Guidance v03r02	PASS	Minimum passing margin is 9.43 dB at 2.66MHz
RADIATED EMISSION	FCC 47 CFR Part 15 Subpart C/ Section 15.209& Section 15.205 And ANSI C63.10-2013 And KDB 558074 D01 DTS Meas Guidance v03r02	PASS	Minimum passing margin is 5.12 dB at 49.40MHz
6 dB BANDWIDTH	FCC 47 CFR Part 15 Subpart C/ Section 15.247(a)(2) And ANSI C63.10-2013 And KDB 558074 D01 DTS Meas Guidance v03r02	PASS	Minimum passing margin is 1.050MHz at CH 20
OUTPUT POWER	FCC 47 CFR Part 15 Subpart C/ Section 15.247(b)(3) And ANSI C63.10-2013 And KDB 558074 D01 DTS Meas Guidance v03r02	PASS	Minimum passing margin is 26.52dB at CH 11
BAND EDGES	FCC 47 CFR Part 15 Subpart C/ Section 15.247(d) And ANSI C63.10-2013 And KDB 558074 D01 DTS Meas Guidance v03r02	PASS	Minimum passing margin is 6.10 dB at 2483.5MHz
POWER SPECTRAL DENSITY	FCC 47 CFR Part 15 Subpart C/ Section 15.247(e) And ANSI C63.10-2013 And KDB 558074 D01 DTS Meas Guidance v03r02	PASS	Minimum passing margin is 20.974dB at CH 26
EMISSION LIMITATIONS	FCC 47 CFR Part 15 Subpart C/ Section 15.247(d) And ANSI C63.10-2013 And KDB 558074 D01 DTS Meas Guidance v03r02	PASS	---

2. GENERAL INFORMATION

2.1. Description of Device (EUT)

Description	:	LED Lamp
Model No.	:	92900025789A
FCC ID	:	O3M9290002579AX
Brand	:	Philips
Applicant	:	Philips (China) Investment Co., Ltd. No. 9, Lane 888, Tian Lin Road, 200233, Shanghai, China
Manufacturer	:	Philips (China) Investment Co., Ltd. No. 9, Lane 888, Tian Lin Road, 200233, Shanghai, China
Radio Technology	:	IEEE 802.15.4 (ZigBee®)
Antenna Gain	:	1dBi
Fundamental Range	:	2405 MHz -2480MHz
Tested Frequency	:	2405MHz (CH11) 2450MHz (CH20) 2480MHz (CH26)
Highest Working Frequency	:	2.4GHz
Power Rating	:	8W, 150mA
Modulation type	:	O-QPSK
Date of Receipt of Sample	:	Apr.17, 2015
Date of Test	:	Apr.28~Jul.04, 2015

2.2. Description of Test Facility

Name of Firm : **Audix Technology (Wujiang) Co., Ltd. EMC Dept.**

Site Location : No. 1289 Jiangxing East Road, the Eastern Part of
Wujiang Economic Development Zone
Jiangsu China 215200

Test Facilities : **No.1 Conducted Shielding Enclosure**

No.1 3m Semi-anechoic Chamber
Date of Validity: May. 23, 2015
FCC Registration No.: 897661
IC Registration No.:5183D-2

RF Fully Chamber

NVLAP Lab Code : 200786-0
Valid until on Sep.30, 2015
(NVLAP is a signatory member of ILAC MRA)
Remark: This report shall not be imply endorsement,
certification or approval by NVLAP, NIST, or any agency
of the U.S. Federal Government.

2.3. Measurement Uncertainty

Test Item	Range Frequency	Uncertainty
Conducted Disturbance Measurement	0.15MHz ~ 30MHz	± 3.30dB
Radiated Disturbance Measurement (At 3m Chamber)	Below 1GHz	± 4.50dB
Radiated Disturbance Measurement (At 3m Chamber)	Above 1GHz	± 5.15dB

Remark: Uncertainty = $ku_c(y)$

Test Item	Uncertainty
6 dB Bandwidth	± 0.16 MHz
Maximum Peak Output Power	± 0.12dB
Band Edges	± 0.38dB
Power Spectral Density	± 0.38dB
Emission Limitations	± 0.38dB

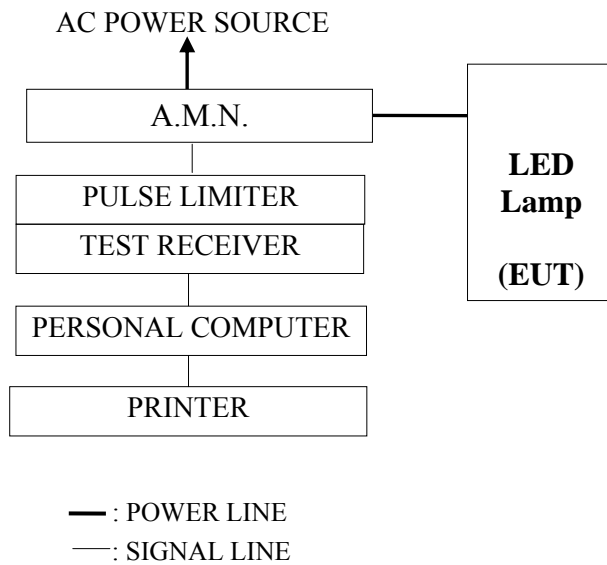
Remark: Uncertainty = $ku_c(y)$

3. CONDUCTED EMISSION MEASUREMENT

3.1. Test Equipment

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Test Receiver	R & S	ESCI	100352	2015-01-05	2016-01-04
2.	A.M.N	R&S	ESH2-Z5	100153	2015-05-15	2016-05-14
3.	Pulse Limiter	R&S	ESH3-Z2	100605	2015-07-03	2016-07-02
4.	RF Cable	Harbour Industries	RG400	002	2015-01-05	2016-01-04

3.2. Block Diagram of Test Setup



3.3. Power line Conducted Emission Limit

(FCC Part 15, Section 15.207, Class B)

Frequency	Maximum RF Line Voltage	
	Quasi-Peak Level	Average Level
150kHz ~ 500kHz	66 ~ 56 dB μ V	56 ~ 46 dB μ V
500kHz ~ 5MHz	56 dB μ V	46 dB μ V
5MHz ~ 30MHz	60 dB μ V	50 dB μ V

Remark1: If the average limit is met when using a Quasi-Peak detector, the EUT shall be deemed to meet both limits and measurement with the average detector is unnecessary.

2: The lower limit applies at the band edges.

3.4. Test Procedure

The measuring process is according to ANSI C63.10-2013 and laboratory internal procedure TKC-301-004. (For FCC Part15 Subpart C)

In the conducted emission measurement, the EUT and all peripheral devices were set up on a non-metallic table which was 0.8 meters height above the ground plane, and 0.4 meters far away from the vertical plane. The EUT (installed in PC system) was powered by AC mains through Artificial Mains Network (A.M.N), other peripheral devices were powered by AC mains through the second Line Impedance Stabilization Network (L.I.S.N). For the measurement, the A.M.N measuring port was terminated by a 50Ω measuring equipment and the second L.I.S.N measuring port was terminated by a 50Ω resistive load. All measurements were done on the phase and neutral line of the EUT’s power cord. All cables or wires placement were verified to find out the maximum emission.

The bandwidth of measuring receiver was set at 9 kHz.

The required frequency band (0.15 MHz ~ 30 MHz) was pre-scanned with peak detector, the final measurement was measured with quasi-peak detector and average detector. (If the average limit is met when using a quasi-peak detector, the average detector is necessary).

The emission level is calculated automatically by the test system which uses the following equation:

$$\text{Emission level (dB}\mu\text{V)} = \text{Meter-Reading (dB}\mu\text{V)} + \text{A.M.N factor (dB)} + \text{Cable loss (dB)}.$$

(Cable loss include pulse limiter loss)

3.5. Conducted Emission Measurement Results

For FCC Part15 Subpart C

PASSED.

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

EUT was performed during this section testing and all the test results are attached in next pages.

Test Date : Jun.24, 2015 Temperature : 18.3°C Humidity : 49%

Mode	Test Condition	Reference Test Data No.	
		Neutral	Line
1	CH 11	# 5	# 6
2	CH 20	※# 8	# 7
3	CH 26	# 9	# 10

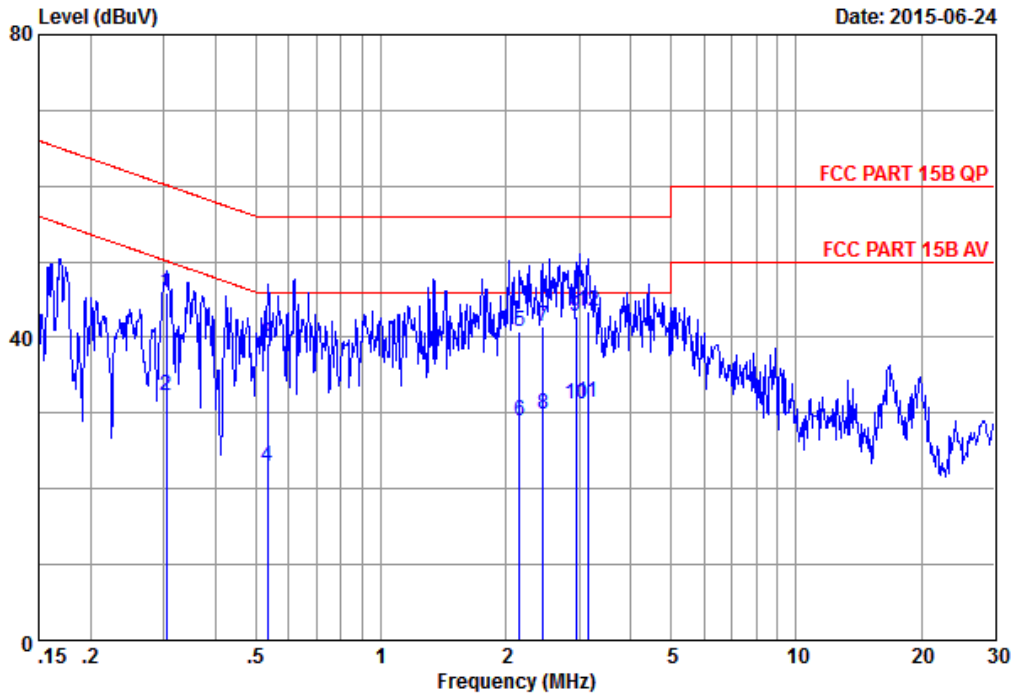
NOTE 1- ‘※’means the worst test mode.

NOTE 2- The worst emission is detected at 2.66 MHz with emission level of 46.57 dB (μV) and with QP detector (Limit is 56.00 dB (μV)), when the Neutral of the EUT is connected to AMN.



Audix Technology(Wujiang)Co.,Ltd.
 No.1289,Jiang Xing East Road,Eastern Part of WuJiang
 Economic Development Zone,JiangSu,China
 Tel:0512-63403993 Fax:0512-63403339

Data: 5 File: F:\2015Test Data\Report4\G1504018.EM6 (10)



Site no. : No.1 Conducted shielding Enclosure Data no. : 5
 AMN/LISN : ESH2-Z5-1505 Phase : NEUTRAL
 Limit : FCC PART 15B QP
 Env. / Ins. : 18.3C&49%/ESCI Engineer : KM Tong
 EUT : LED Lamp
 M/N : 9290002579A
 Power Rating : 120Vac/60Hz
 Test mode : Transmitting
 Memo : CH11

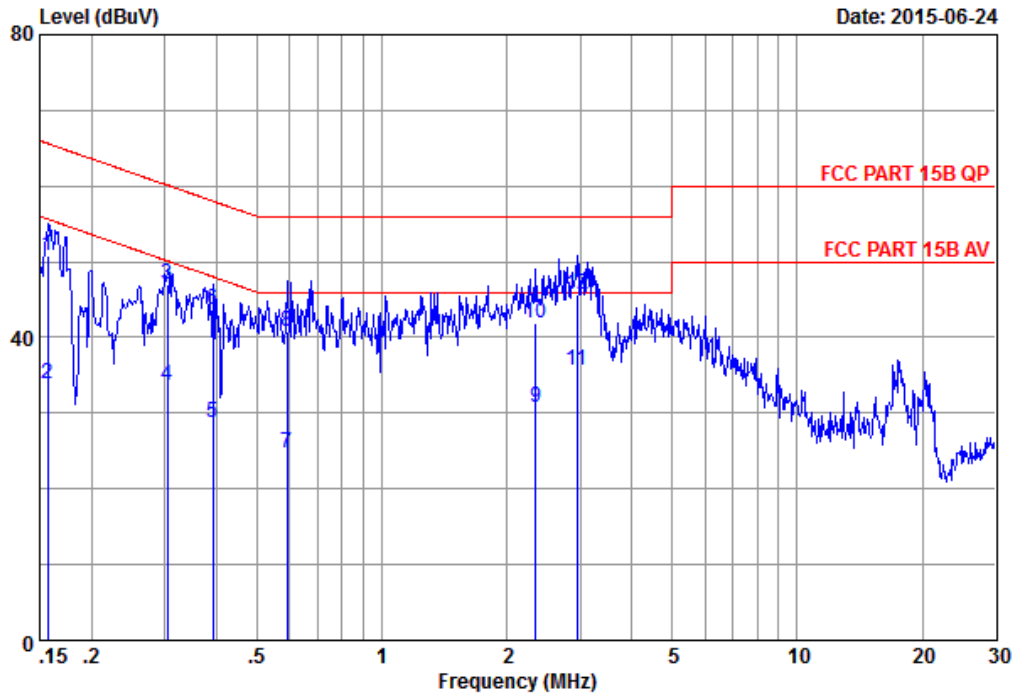
	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.31	0.14	9.88	36.00	46.02	60.11	14.09	QP
2	0.31	0.14	9.88	22.20	32.22	50.11	17.89	Average
3	0.53	0.15	9.88	29.20	39.23	56.00	16.77	QP
4	0.53	0.15	9.88	12.90	22.93	46.00	23.07	Average
5	2.16	0.22	9.93	30.70	40.85	56.00	15.15	QP
6	2.16	0.22	9.93	18.80	28.95	46.00	17.05	Average
7	2.46	0.23	9.93	31.30	41.46	56.00	14.54	QP
8	2.46	0.23	9.93	19.80	29.96	46.00	16.04	Average
9	2.95	0.25	9.94	32.50	42.69	56.00	13.31	QP
10	2.95	0.25	9.94	20.90	31.09	46.00	14.91	Average
11	3.15	0.25	9.94	21.31	31.50	46.00	14.50	Average
12	3.15	0.25	9.94	33.21	43.40	56.00	12.60	QP

Remarks:
 1.Emission Level= LISN factor + Cable loss + Reading .



Audix Technology(Wujiang)Co.,Ltd.
 No.1289,Jiang Xing East Road,Eastern Part of WuJiang
 Economic Development Zone,JiangSu,China
 Tel:0512-63403993 Fax:0512-63403339

Data: 6 File: F:\2015Test Data\Report4\G1504018.EM6 (10)



Site no. : No.1 Conducted shielding Enclosure Data no. : 6
 AMN/LISN : ESH2-Z5-1505 Phase : LINE
 Limit : FCC PART 15B QP
 Env. / Ins. : 18.3C&49%/ESCI Engineer : KM Tong
 EUT : LED Lamp
 M/N : 9290002579A
 Power Rating : 120Vac/60Hz
 Test mode : Transmitting
 Memo : CH11

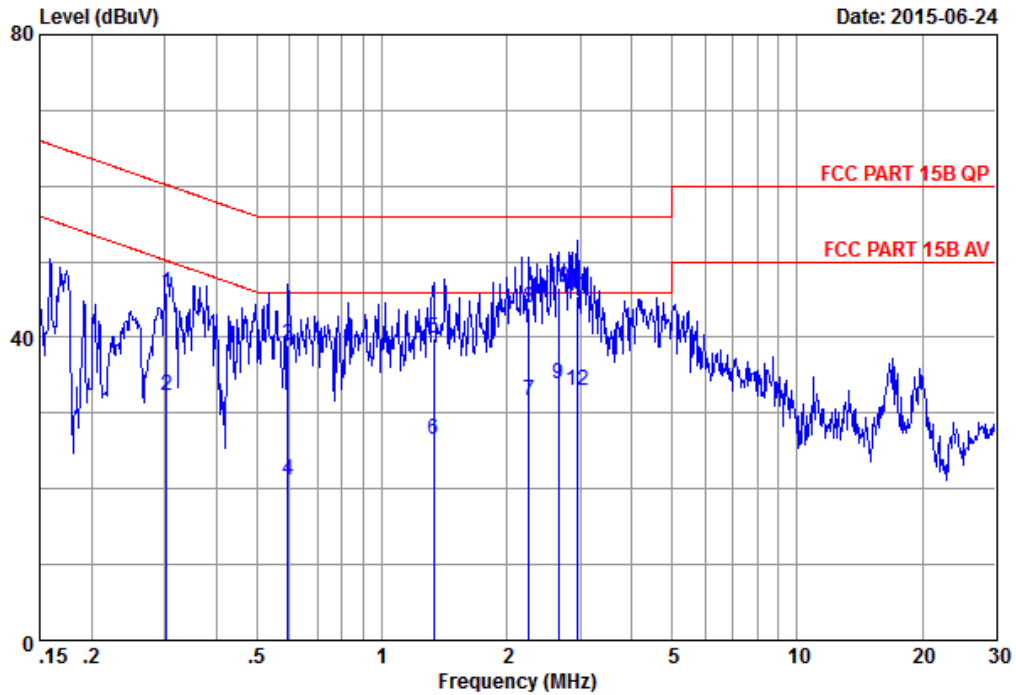
	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.16	0.13	9.87	40.71	50.71	65.62	14.91	QP
2	0.16	0.13	9.87	23.91	33.91	55.62	21.71	Average
3	0.31	0.14	9.88	36.90	46.92	60.11	13.19	QP
4	0.31	0.14	9.88	23.70	33.72	50.11	16.39	Average
5	0.39	0.14	9.88	18.80	28.82	48.04	19.22	Average
6	0.39	0.14	9.88	33.60	43.62	58.04	14.42	QP
7	0.59	0.16	9.88	14.60	24.64	46.00	21.36	Average
8	0.59	0.16	9.88	30.80	40.84	56.00	15.16	QP
9	2.35	0.21	9.93	20.60	30.74	46.00	15.26	Average
10	2.35	0.21	9.93	31.80	41.94	56.00	14.06	QP
11	2.95	0.23	9.94	25.60	35.77	46.00	10.23	Average
12	2.95	0.23	9.94	35.50	45.67	56.00	10.33	QP

Remarks:
 1.Emission Level= LISN factor + Cable loss + Reading .



Audix Technology(Wujiang)Co.,Ltd.
 No.1289,Jiang King East Road,Eastern Part of WuJiang
 Economic Development Zone,JiangSu,China
 Tel:0512-63403993 Fax:0512-63403339

Data: 8 File: F:\2015Test Data\Report4\G1504018.EM6 (10)



Site no. : No.1 Conducted shielding Enclosure Data no. : 8
 AMN/LISN : ESH2-Z5-1505 Phase : NEUTRAL
 Limit : FCC PART 15B QP
 Env. / Ins. : 18.3C&49%/ESCI Engineer : KM Tong
 EUT : LED Lamp
 M/N : 9290002579A
 Power Rating : 120Vac/60Hz
 Test mode : Transmitting
 Memo : CH20

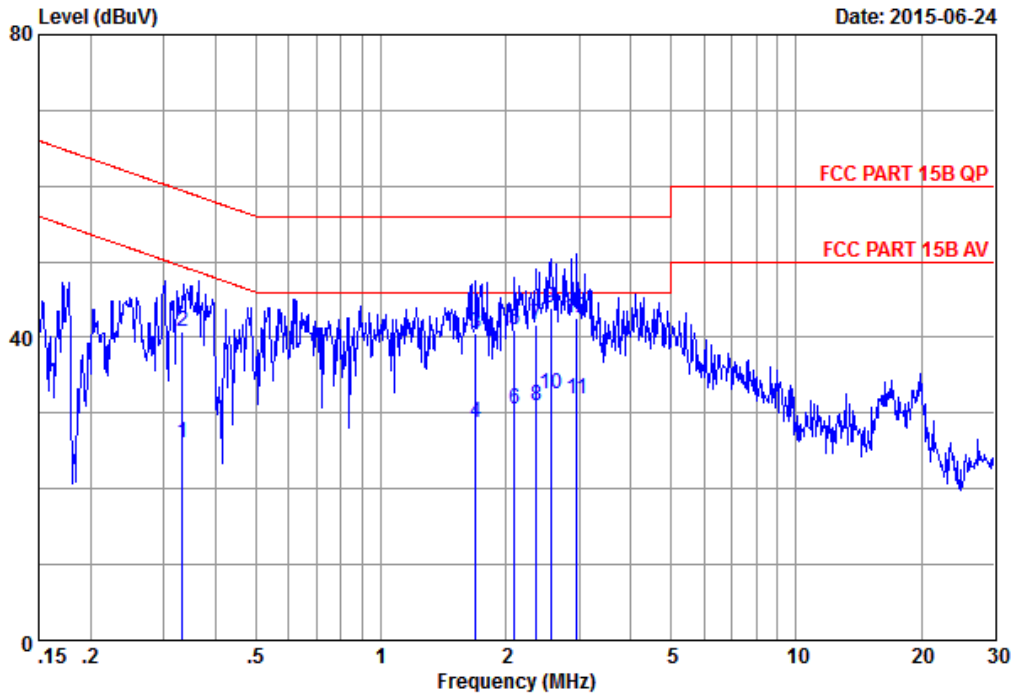
	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.30	0.14	9.88	35.90	45.92	60.16	14.24	QP
2	0.30	0.14	9.88	22.20	32.22	50.16	17.94	Average
3	0.59	0.16	9.88	28.90	38.94	56.00	17.06	QP
4	0.59	0.16	9.88	11.20	21.24	46.00	24.76	Average
5	1.33	0.19	9.91	29.80	39.90	56.00	16.10	QP
6	1.33	0.19	9.91	16.50	26.60	46.00	19.40	Average
7	2.26	0.22	9.93	21.50	31.65	46.00	14.35	Average
8	2.26	0.22	9.93	33.70	43.85	56.00	12.15	QP
9	2.66	0.24	9.94	23.59	33.77	46.00	12.23	Average
10	2.66	0.24	9.94	36.39	46.57	56.00	9.43	QP
11	2.95	0.25	9.94	35.20	45.39	56.00	10.61	QP
12	2.95	0.25	9.94	22.90	33.09	46.00	12.91	Average

Remarks:
 1.Emission Level= LISN factor + Cable loss + Reading .



Audix Technology(Wujiang)Co.,Ltd.
 No.1289,Jiang King East Road,Eastern Part of WuJiang
 Economic Development Zone,JiangSu,China
 Tel:0512-63403993 Fax:0512-63403339

Data: 7 File: F:\2015Test Data\Report4\G1504018.EM6 (10)



Site no. : No.1 Conducted shielding Enclosure Data no. : 7
 AMN/LISN : ESH2-Z5-1505 Phase : LINE
 Limit : FCC PART 15B QP
 Env. / Ins. : 18.3C&49%/ESCI Engineer : KM Tong
 EUT : LED Lamp
 M/N : 9290002579A
 Power Rating : 120Vac/60Hz
 Test mode : Transmitting
 Memo : CH20

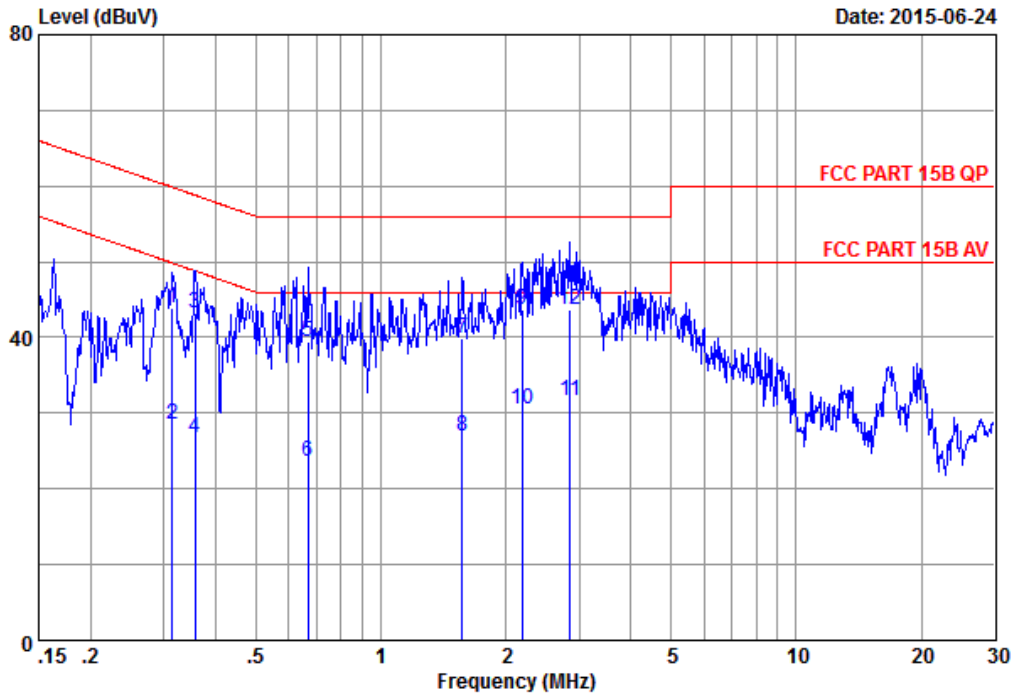
	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.33	0.14	9.88	16.10	26.12	49.38	23.26	Average
2	0.33	0.14	9.88	30.80	40.82	59.38	18.56	QP
3	1.69	0.19	9.92	30.50	40.61	56.00	15.39	QP
4	1.69	0.19	9.92	18.60	28.71	46.00	17.29	Average
5	2.10	0.20	9.93	30.80	40.93	56.00	15.07	QP
6	2.10	0.20	9.93	20.40	30.53	46.00	15.47	Average
7	2.37	0.21	9.93	31.50	41.64	56.00	14.36	QP
8	2.37	0.21	9.93	20.90	31.04	46.00	14.96	Average
9	2.57	0.22	9.94	33.79	43.95	56.00	12.05	QP
10	2.57	0.22	9.94	22.39	32.55	46.00	13.45	Average
11	2.96	0.23	9.94	21.70	31.87	46.00	14.13	Average
12	2.96	0.23	9.94	32.40	42.57	56.00	13.43	QP

Remarks:
 1.Emission Level= LISN factor + Cable loss + Reading .



Audix Technology(Wujiang)Co.,Ltd.
 No.1289,Jiang Xing East Road,Eastern Part of WuJiang
 Economic Development Zone,JiangSu,China
 Tel:0512-63403993 Fax:0512-63403339

Data: 9 File: F:\2015Test Data\Report4\G1504018.EM6 (10)



Site no. : No.1 Conducted shielding Enclosure Data no. : 9
 AMN/LISN : ESH2-Z5-1505 Phase : NEUTRAL
 Limit : FCC PART 15B QP
 Env. / Ins. : 18.3C&49%/ESCI Engineer : KM Tong
 EUT : LED Lamp
 M/N : 9290002579A
 Power Rating : 120Vac/60Hz
 Test mode : Transmitting
 Memo : CH26

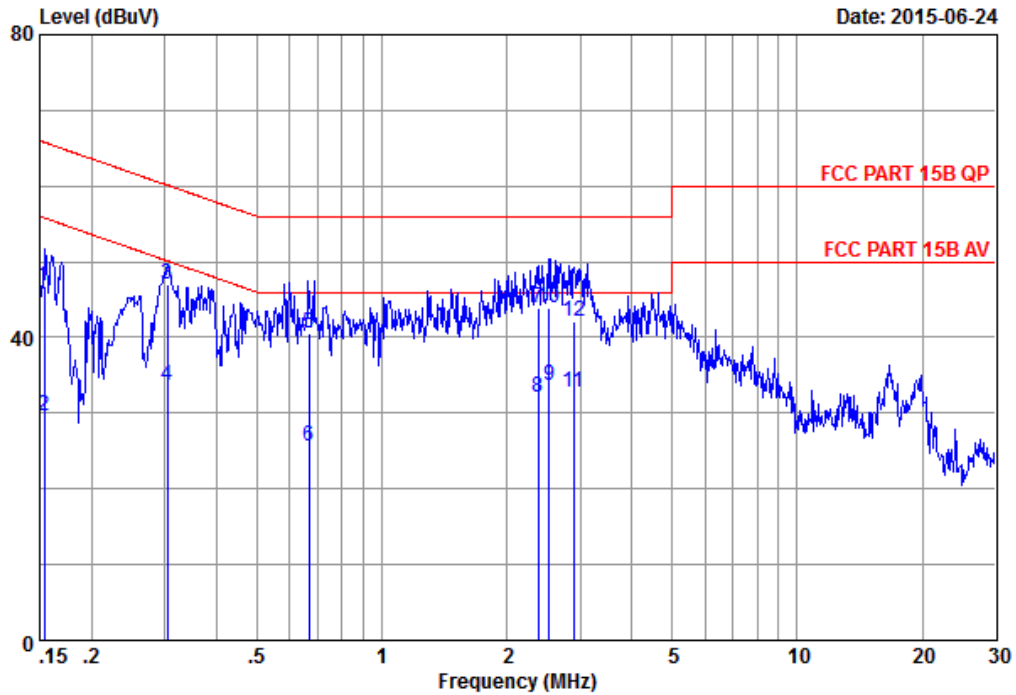
	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.31	0.14	9.88	33.80	43.82	59.86	16.04	QP
2	0.31	0.14	9.88	18.60	28.62	49.86	21.24	Average
3	0.36	0.14	9.88	33.20	43.22	58.80	15.58	QP
4	0.36	0.14	9.88	16.80	26.82	48.80	21.98	Average
5	0.67	0.16	9.89	29.50	39.55	56.00	16.45	QP
6	0.67	0.16	9.89	13.60	23.65	46.00	22.35	Average
7	1.57	0.20	9.92	29.79	39.91	56.00	16.09	QP
8	1.57	0.20	9.92	16.79	26.91	46.00	19.09	Average
9	2.19	0.22	9.93	33.50	43.65	56.00	12.35	QP
10	2.19	0.22	9.93	20.30	30.45	46.00	15.55	Average
11	2.85	0.25	9.94	21.49	31.68	46.00	14.32	Average
12	2.85	0.25	9.94	33.59	43.78	56.00	12.22	QP

Remarks:
 1.Emission Level= LISN factor + Cable loss + Reading .



Audix Technology(Wujiang)Co.,Ltd.
 No.1289,Jiang King East Road,Eastern Part of WuJiang
 Economic Development Zone,JiangSu,China
 Tel:0512-63403993 Fax:0512-63403339

Data: 10 File: F:\2015Test Data\Report4\G1504018.EM6 (10)



Site no. : No.1 Conducted shielding Enclosure Data no. : 10
 AMN/LISN : ESH2-Z5-1505 Phase : LINE
 Limit : FCC PART 15B QP
 Env. / Ins. : 18.3C&49%/ESCI Engineer : KM Tong
 EUT : LED Lamp
 M/N : 9290002579A
 Power Rating : 120Vac/60Hz
 Test mode : Transmitting
 Memo : CH26

	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.15	0.13	9.87	36.71	46.71	65.78	19.07	QP
2	0.15	0.13	9.87	19.71	29.71	55.78	26.07	Average
3	0.31	0.14	9.88	36.90	46.92	60.11	13.19	QP
4	0.31	0.14	9.88	23.70	33.72	50.11	16.39	Average
5	0.67	0.16	9.89	30.60	40.65	56.00	15.35	QP
6	0.67	0.16	9.89	15.60	25.65	46.00	20.35	Average
7	2.38	0.21	9.93	33.80	43.94	56.00	12.06	QP
8	2.38	0.21	9.93	21.90	32.04	46.00	13.96	Average
9	2.53	0.22	9.93	23.40	33.55	46.00	12.45	Average
10	2.53	0.22	9.93	33.80	43.95	56.00	12.05	QP
11	2.90	0.22	9.94	22.70	32.86	46.00	13.14	Average
12	2.90	0.22	9.94	31.90	42.06	56.00	13.94	QP

Remarks:
 1.Emission Level= LISN factor + Cable loss + Reading .

4. RADIATED EMISSION MEASUREMENT

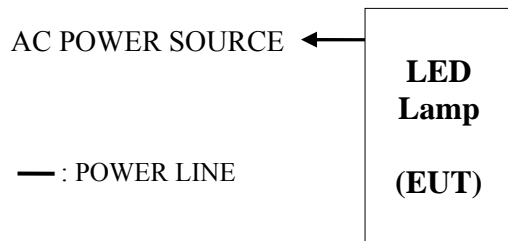
4.1. Test Equipment

The following test equipment was used during the radiated emission measurement:
At 3m Semi-Anechoic Chamber

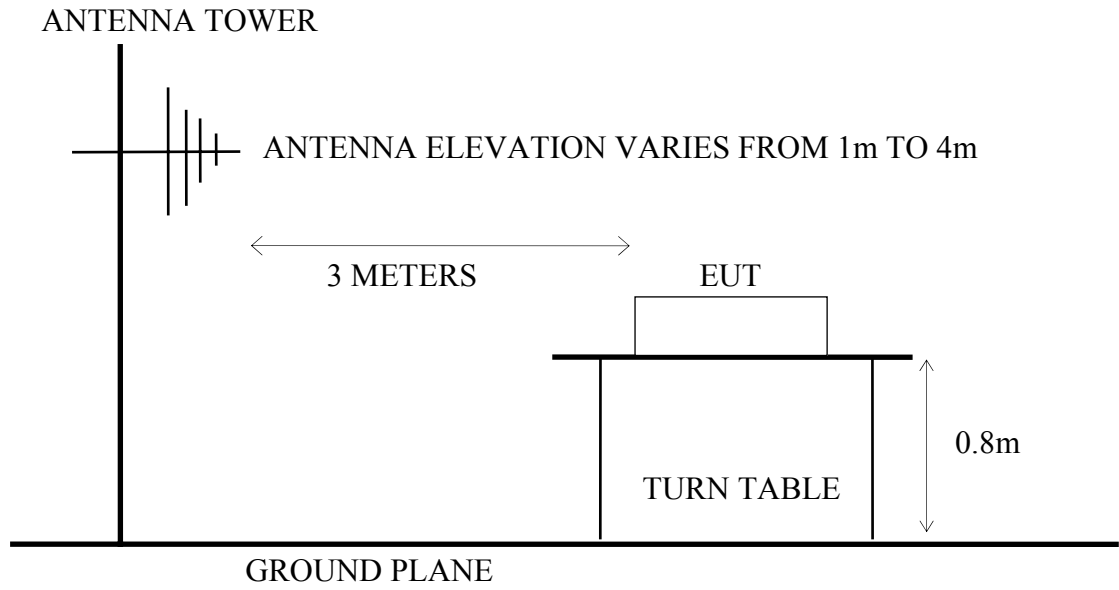
Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	Preamplifier	Agilent	8447D	2944A10921	2015-07-03	2016-07-02
2.	PXA Signal Analyzer	Agilent	N9030A	MY53120367	2015-06-23	2016-06-22
3.	Test Receiver	R&S	ESCI	100361	2015-01-05	2016-01-04
4.	Bi-log Antenna	Schaffner	CBL6112D	22251	2015-05-20	2016-05-19
5.	Horn Antenna	EMCO	3115	62961	2014-09-03	2015-09-02
6.	Test Receiver	R&S	ESCI	100361	2015-01-05	2016-01-04
7.	RF Cable #1	Yuhang CSYH	cable-3m	001(0.5m)	2015-01-05	2016-01-04
8.	RF Cable #2	Yuhang CSYH	cable-3m	002(0.5m)	2015-01-05	2016-01-04
9.	RF Cable #3	Yuhang CSYH	cable-3m	003(3.0m)	2015-01-05	2016-01-04

4.2. Block Diagram of Test Setup

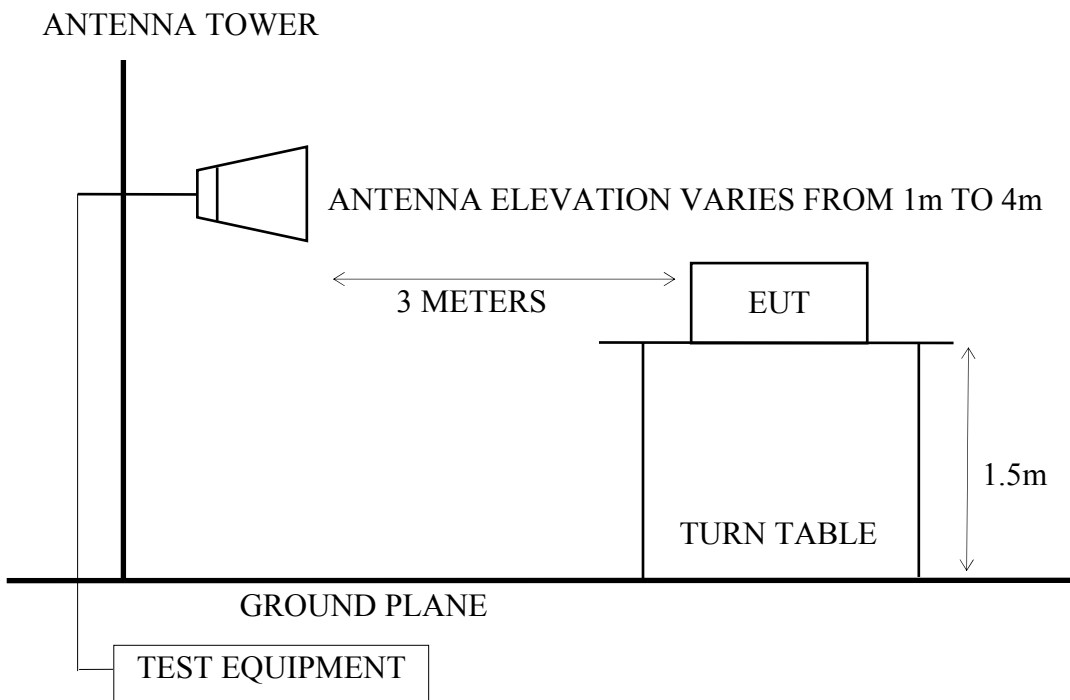
4.2.1. Block Diagram of Test Setup between EUT and simulators



4.2.2. No. 1 3m Semi-Anechoic Chamber Setup Diagram (Test distance:3m) for 30-1000MHz



4.2.3. No. 1 3m Semi-Anechoic Chamber Setup Diagram (Test distance: 3m) for above 1GHz



4.3. Radiated Emission Limits

Radiated Emission Limits (FCC Part15 C, section 15.209)

FREQUENCY (MHz)	DISTANCE (Meters)	FIELD STRENGTHS LIMITS	
		($\mu\text{V/m}$)	($\text{dB}\mu\text{V/m}$)
30 ~ 88	3	100	40
88~216	3	150	43.5
216~960	3	200	46
Above 960	3	500	54

- Remark : (1) Emission level ($\text{dB}\mu\text{V/m}$) = 20 log Emission level ($\mu\text{V/m}$)
 (2)The tighter limit applies at the edge between two frequency bands.

4.4. Test Procedure

The measuring process is according to ANSI C63.10-2013 and laboratory internal procedure TKC-301-001. (For FCC Part15 Subpart C)

In the radiated disturbance measurement, the EUT and all simulators were set up on a non-metallic turn table which was 1.5 meters above the ground plane. Measurement distance between EUT and receiving antennas was set at 3 meters at 30MHz~1000MHz and 3 meters at above 1GHz. The specified distance is the distance between the antennas and the closest periphery of EUT. During the radiated measurement, the EUT was rotated 360° and receiving antennas were moved from 1 ~ 4 meters for finding maximum emission. Two receiving antennas were used for both horizontal and vertical polarization detection for 30MHz~1GHz, One receiving antennas was used for both horizontal and vertical polarization detection for above 1GHz (the absorbing material was added when testing of above 1GHz was done). All cables or wires placement were verified to find out the maximum emission.

The bandwidth of measuring receiver (or spectrum analyzer) was set to:

- RBW (120 kHz), VBW (300 kHz) for QP detector below 1GHz
- RBW (1 MHz), VBW (1MHz) for Peak detector above 1GHz
- RBW (1 MHz), VBW (10Hz) for AV detector above 1GHz

The frequency range from 30MHz to 10th harmonic(25GHz) are checked, and no any emissions were found from 18GHz to 25GHz.

The emission level is calculated automatically by the test system which uses the following equation :

1. For 30-1000MHz measurement:
 Emission Level ($\text{dB}\mu\text{V/m}$) = Meter-Reading ($\text{dB}\mu\text{V}$)+Antenna Factor (dB/m)+Cable Loss (dB)
2. For Above 1GHz measurement:
 Emission Level ($\text{dB}\mu\text{V/m}$) = Meter-Reading ($\text{dB}\mu\text{V}$)+Antenna Factor (dB/m)+Cable Loss(dB)
 -Pre-amplifier factor (dB)

4.5. Assessment In All Three Orthogonal Planes

After assessment in all three orthogonal planes, when choosing Channel11 test in the radiation, found that XY plan is the worst mode in Horizontal and XY plan is the worst mode in Vertical, so in the test of radiation, all with XY plan(in Horizontal) & XY plan(in Vertical) model test, refer to the following specific data.

Test Mode:XY Plan

Polarization	Frequency (MHz)	Reading dB (μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Emission Level dB (μ V/m)	Limits dB (μ V/m)	Margin (dB)	Remark
Horizontal	2404.67	97.48	28.31	4.38	34.94	95.23	74.00	-21.23	Peak
Vertical	2404.55	101.03	28.31	4.38	34.94	98.78	74.00	-24.78	Peak

Test Mode:XZ Plan

Polarization	Frequency (MHz)	Reading dB (μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Emission Level dB (μ V/m)	Limits dB (μ V/m)	Margin (dB)	Remark
Horizontal	2404.55	96.12	28.31	4.38	34.94	93.87	74.00	-19.87	Peak
Vertical	2404.58	94.69	28.31	4.38	34.94	92.44	74.00	-18.44	Peak

Test Mode:YZ Plan

Polarization	Frequency (MHz)	Reading dB (μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Emission Level dB (μ V/m)	Limits dB (μ V/m)	Margin (dB)	Remark
Horizontal	2405.51	96.57	28.31	4.38	34.94	94.32	74.00	-20.32	Peak
Vertical	2405.60	96.95	28.31	4.38	34.94	94.70	74.00	-20.70	Peak

4.6. Measurement Results

PASSED

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

4.6.1. For Restricted Bands:

The EUT was tested in restricted bands and all the test results are listed in section 4.7 & 4.8.
(The restricted bands defined in part 15.205(a))

For Frequency range: below 1GHz

No.	Test Mode and Frequency		Reference Test Data No.	
			Horizontal	Vertical
1.	Transmitting	2405MHz (Channel 11)	# 1	# 2
2.		2450MHz (Channel 20)	# 3	# 4
3.		2480MHz (Channel 26)	# 5	# 6
4.	Receiving		# 7	# 8

For Frequency range: above 1GHz

No.	Test Mode and Frequency		Reference Test Data No.	
			Horizontal	Vertical
1.	Transmitting	2405MHz (Channel 11)	# 9	# 10
2.		2450MHz (Channel 20)	# 11	# 12
3.		2480MHz (Channel 26)	# 13	# 14
4.	Receiving		# 15	# 16

4.6.2. For Band Edge Emission

The EUT was tested in restricted bands and all the test results are listed in section 4.9. The restricted bands defined in part 15.205(a))

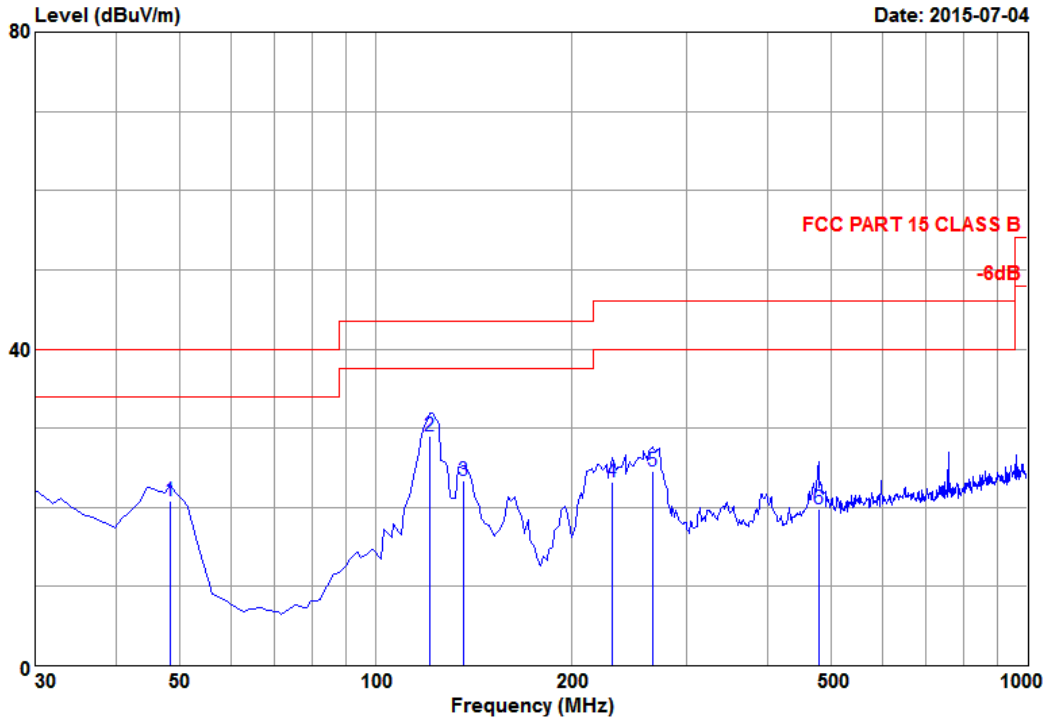
No.	Test Mode and Frequency		Reference Test Data No.	
			Horizontal	Vertical
1.	Transmitting	2405MHz (Channel 11)	# 17, # 19	# 18, # 20
2.		2480MHz (Channel 26)	# 21, # 23	# 22, # 24

4.7. Restricted Bands Measurement Results (For Below 1GHz)



Audix Technology(Wujiang)Co.,Ltd.
 No.1289,Jiang Xing East Road,The Eastern Part of Wu Jiang
 Economic Development Zone,JiangSu,China
 Tel: (0512) 63403993 Fax: (0512) 63403993

Data: 1 File: G:\Test Data\2015\Reports\04\G1504018.EM6 (30) Date: 2015-07-04



Site NO. : 3m Chamber Data NO. :1
 Dis. / Ant. : 3m 6112D(22251)-150520 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15 CLASS B
 Env. / Ins. : 20.6*CC&42%/ESCI Engineer : Mickey
 EUT : LED Lamp
 M/N : 9290002579A
 Power Rating : 120Vac/60Hz
 Test Mode : TX CH11 2405MHz
 Memo :

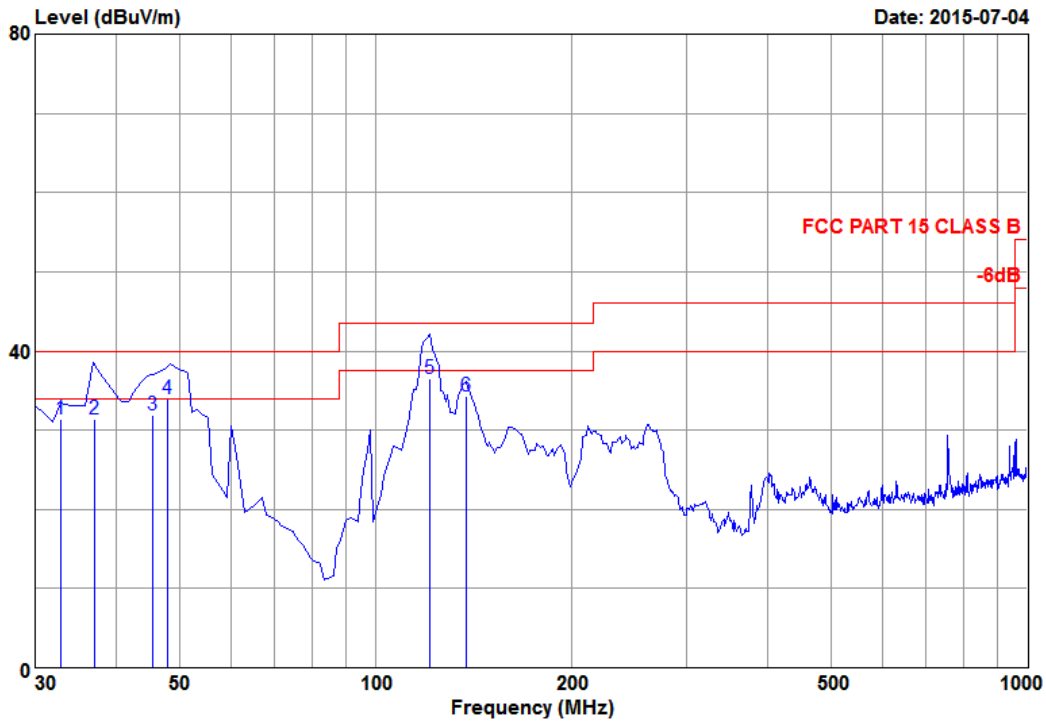
	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	48.43	9.88	0.29	38.02	20.79	40.00	19.21	QP
2	121.18	13.06	0.78	42.27	28.95	43.50	14.55	QP
3	136.70	12.13	0.88	37.37	23.31	43.50	20.19	QP
4	230.79	11.38	1.27	37.37	23.29	46.00	22.71	QP
5	265.71	13.63	1.34	36.29	24.60	46.00	21.40	QP
6	478.14	17.70	2.01	27.38	19.71	46.00	26.29	QP

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



Audix Technology(Wujiang)Co.,Ltd.
 No.1289,Jiang Xing East Road,The Eastern Part of Wu Jiang
 Economic Development Zone,JiangSu,China
 Tel:(0512)63403993 Fax:(0512)63403993

Data: 2 File: G:\Test Data\2015\Reports\04\G1504018.EM6 (30)



Site NO. : 3m Chamber
 Dis. / Ant. : 3m 6112D(22251)-150520
 Limit : FCC PART 15 CLASS B
 Env. / Ins. : 20.6*CS&42%/ESCI
 EUT : LED Lamp
 M/N : 9290002579A
 Power Rating : 120Vac/60Hz
 Test Mode : TX CH11 2405MHz
 Memo :
 Data NO. :2
 Ant. pol. : VERTICAL
 Engineer : Mickey

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	32.91	17.66	0.24	40.98	31.45	40.00	8.55	QP
2	37.01	15.33	0.25	43.21	31.37	40.00	8.63	QP
3	45.47	11.29	0.28	47.70	31.86	40.00	8.14	QP
4	47.90	10.14	0.28	50.91	33.93	40.00	6.07	QP
5	120.90	13.05	0.77	49.90	36.56	43.50	6.94	QP
6	137.67	12.03	0.89	48.36	34.21	43.50	9.29	QP

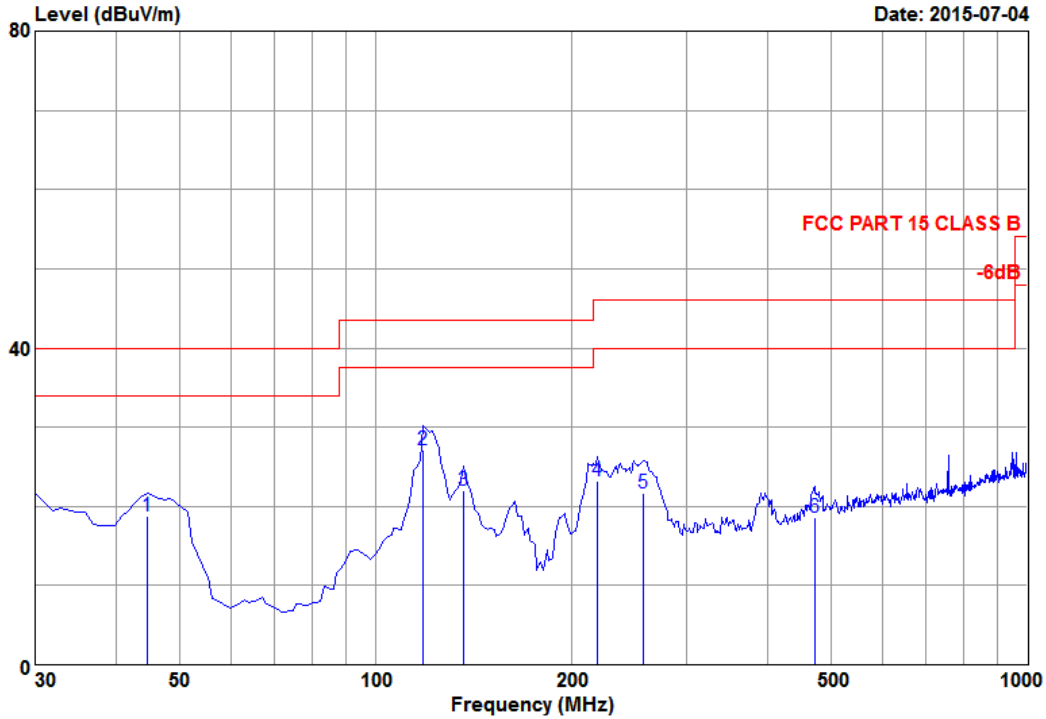
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



Audix Technology(Wujiang)Co.,Ltd.
 No.1289,Jiang Xing East Road,The Eastern Part of Wu Jiang
 Economic Development Zone,JiangSu,China
 Tel:(0512)63403993 Fax:(0512)63403993

Data: 3 File: G:\Test Data\2015\Reports\04\G1504018.EM6 (30)

Date: 2015-07-04



Site NO. : 3m Chamber
 Dis. / Ant. : 3m 6112D(22251)-150520
 Limit : FCC PART 15 CLASS B
 Env. / Ins. : 20.6*CS&42%/ESCI
 EUT : LED Lamp
 M/N : 9290002579A
 Power Rating : 120Vac/60Hz
 Test Mode : TX CH20 2450MHz
 Memo :
 Data NO. : 3
 Ant. pol. : HORIZONTAL
 Engineer : Mickey

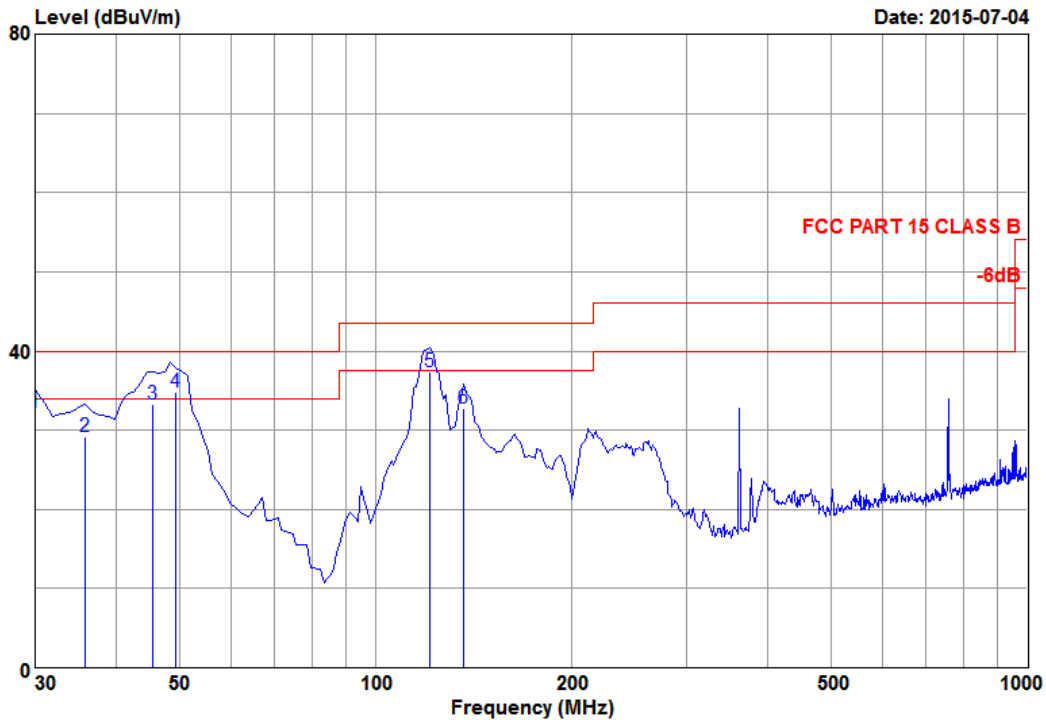
	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	44.55	11.79	0.28	34.08	18.74	40.00	21.26	QP
2	118.27	13.00	0.76	40.56	27.14	43.50	16.36	QP
3	136.70	12.13	0.88	36.10	22.04	43.50	21.46	QP
4	219.15	10.66	1.25	38.05	23.21	46.00	22.79	QP
5	257.95	13.80	1.32	33.29	21.74	46.00	24.26	QP
6	471.35	17.63	1.98	26.29	18.53	46.00	27.47	QP

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



Audix Technology(Wujiang)Co.,Ltd.
 No.1289,Jiang Xing East Road,The Eastern Part of Wu Jiang
 Economic Development Zone,JiangSu,China
 Tel:(0512)63403993 Fax:(0512)63403993

Data: 4 File: G:\Test Data\2015\Reports\04\G1504018.EM6 (30)



Site NO. : 3m Chamber Data NO. :4
 Dis. / Ant. : 3m 6112D(22251)-150520 Ant. pol. : VERTICAL
 Limit : FCC PART 15 CLASS B
 Env. / Ins. : 20.6*CS&42%/ESCI Engineer : Mickey
 EUT : LED Lamp
 M/N : 9290002579A
 Power Rating : 120Vac/60Hz
 Test Mode : TX CH20 2450MHz
 Memo :

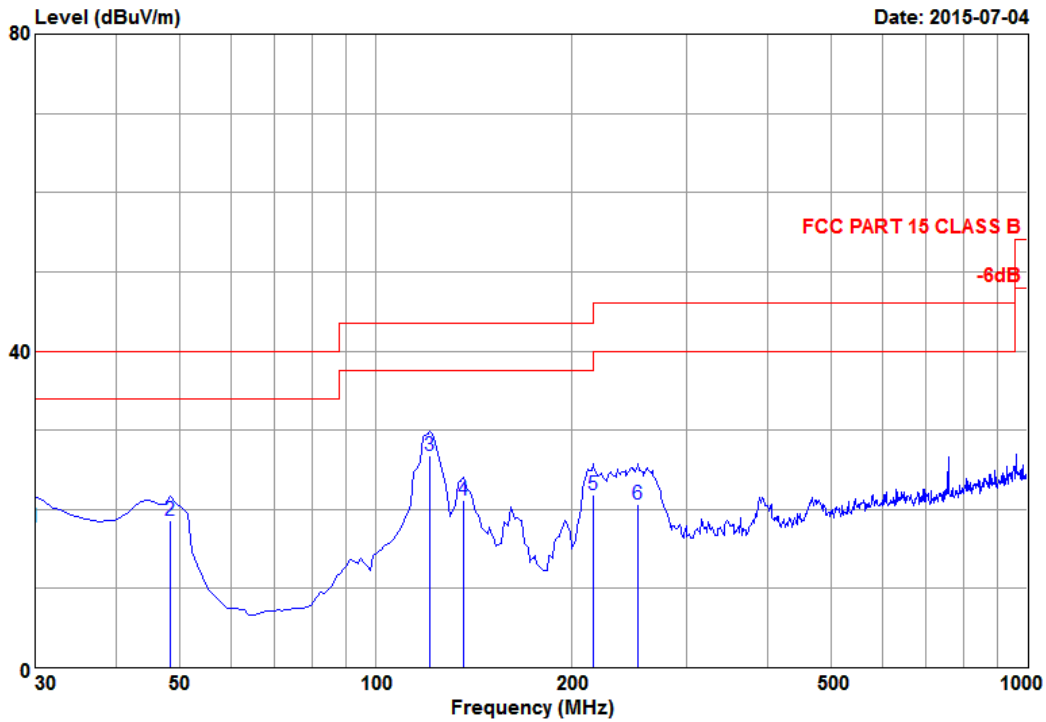
	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	30.00	19.70	0.23	39.73	32.23	40.00	7.77	QP
2	35.82	15.98	0.25	40.38	29.19	40.00	10.81	QP
3	45.52	11.26	0.28	49.16	33.29	40.00	6.71	QP
4	49.40	9.40	0.29	52.59	34.88	40.00	5.12	QP
5	121.18	13.06	0.78	50.75	37.43	43.50	6.07	QP
6	136.70	12.13	0.88	46.85	32.79	43.50	10.71	QP

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



Audix Technology(Wujiang)Co.,Ltd.
 No.1289,Jiang Xing East Road,The Eastern Part of Wu Jiang
 Economic Development Zone,JiangSu,China
 Tel:(0512) 63403993 Fax:(0512) 63403993

Data: 5 File: G:\Test Data\2015\Reports\04\G1504018.EM6 (30)



Site NO. : 3m Chamber Data NO. :5
 Dis. / Ant. : 3m 6112D(22251)-150520 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15 CLASS B
 Env. / Ins. : 20.6*CS&42%/ESCI Engineer : Mickey
 EUT : LED Lamp
 M/N : 9290002579A
 Power Rating : 120Vac/60Hz
 Test Mode : TX CH26 2480MHz
 Memo :

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	30.00	19.70	0.23	25.23	17.73	40.00	22.27	QP
2	48.43	9.88	0.29	35.84	18.61	40.00	21.39	QP
3	121.18	13.06	0.78	40.19	26.87	43.50	16.63	QP
4	136.70	12.13	0.88	35.19	21.13	43.50	22.37	QP
5	215.27	10.36	1.24	37.00	21.84	43.50	21.66	QP
6	253.10	13.31	1.31	32.77	20.71	46.00	25.29	QP

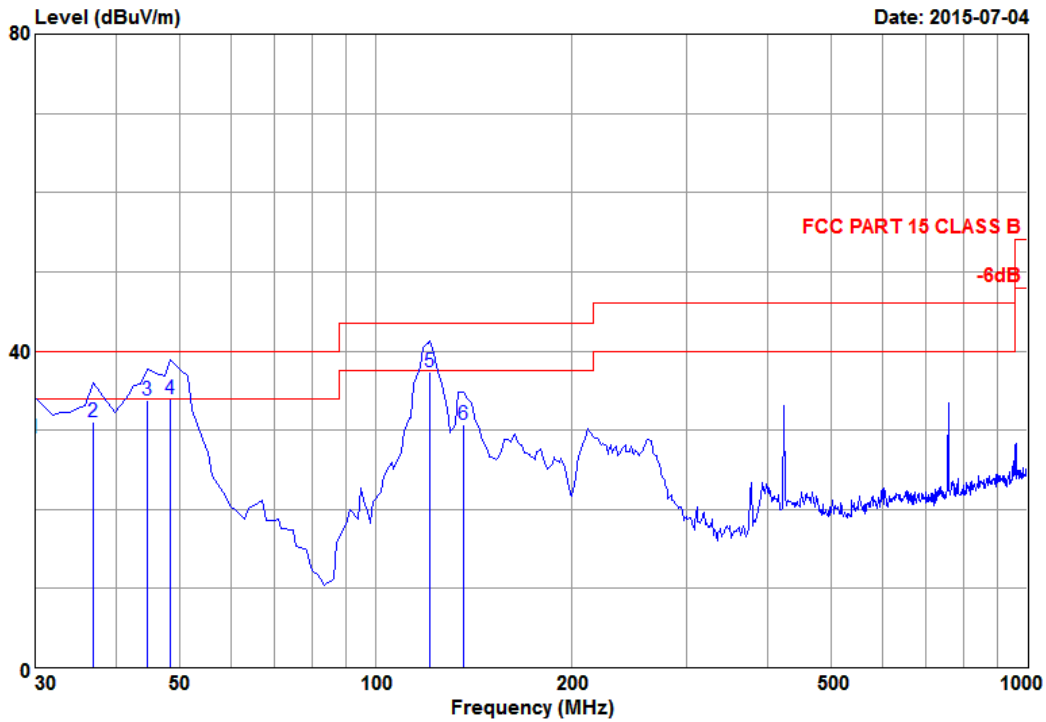
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



Audix Technology(Wujiang)Co.,Ltd.
 No.1289,Jiang Xing East Road,The Eastern Part of Wu Jiang
 Economic Development Zone,JiangSu,China
 Tel:(0512)63403993 Fax:(0512)63403993

Data: 6 File: G:\Test Data\2015\Reports\04\G1504018.EM6 (30)

Date: 2015-07-04



Site NO. : 3m Chamber
 Dis. / Ant. : 3m 6112D(22251)-150520
 Limit : FCC PART 15 CLASS B
 Env. / Ins. : 20.6*CS&42%/ESCI
 EUT : LED Lamp
 M/N : 9290002579A
 Power Rating : 120Vac/60Hz
 Test Mode : TX CH26 2480MHz
 Memo :

Data NO. :6
 Ant. pol. : VERTICAL
 Engineer : Mickey

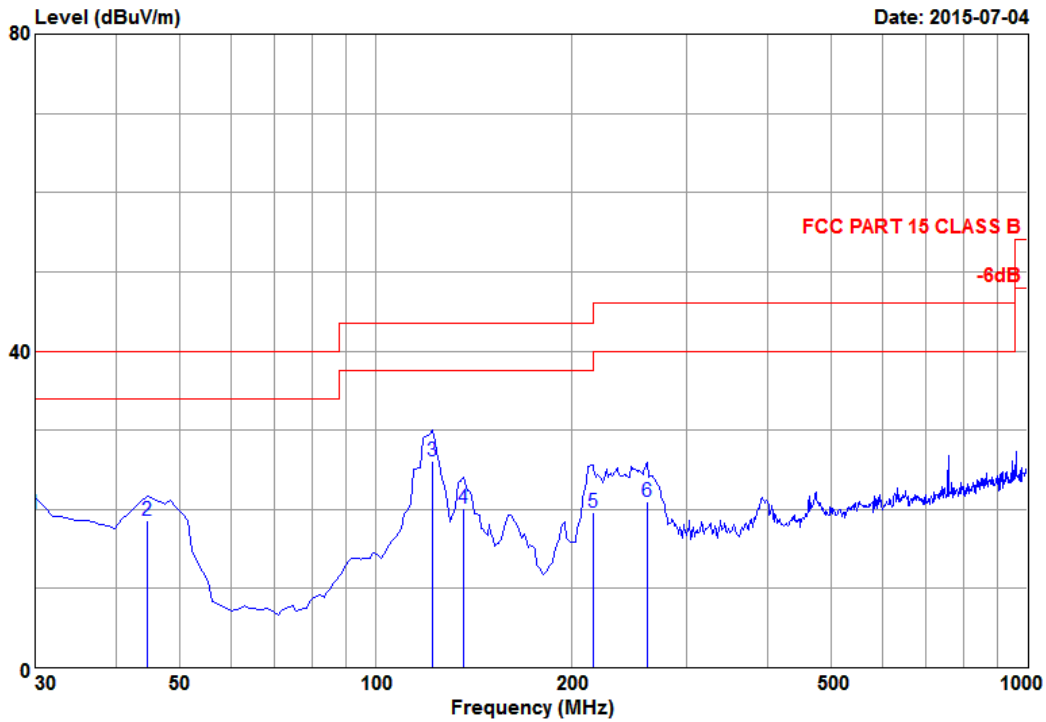
	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	30.00	19.70	0.23	36.56	29.06	40.00	10.94	QP
2	36.79	15.46	0.25	42.79	31.08	40.00	8.92	QP
3	44.55	11.79	0.28	49.06	33.72	40.00	6.28	QP
4	48.43	9.88	0.29	51.12	33.89	40.00	6.11	QP
5	121.18	13.06	0.78	50.67	37.35	43.50	6.15	QP
6	136.70	12.13	0.88	44.83	30.77	43.50	12.73	QP

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



Audix Technology(Wujiang)Co.,Ltd.
 No.1289,Jiang Xing East Road,The Eastern Part of Wu Jiang
 Economic Development Zone,JiangSu,China
 Tel:(0512)63403993 Fax:(0512)63403993

Data: 7 File: G:\Test Data\2015\Reports\04\G1504018.EM6 (30)



Site NO. : 3m Chamber
 Dis. / Ant. : 3m 6112D(22251)-150520
 Limit : FCC PART 15 CLASS B
 Env. / Ins. : 20.6*CS&42%/ESCI
 EUT : LED Lamp
 M/N : 9290002579A
 Power Rating : 120Vac/60Hz
 Test Mode : RX
 Memo :
 Data NO. : 7
 Ant. pol. : HORIZONTAL
 Engineer : Mickey

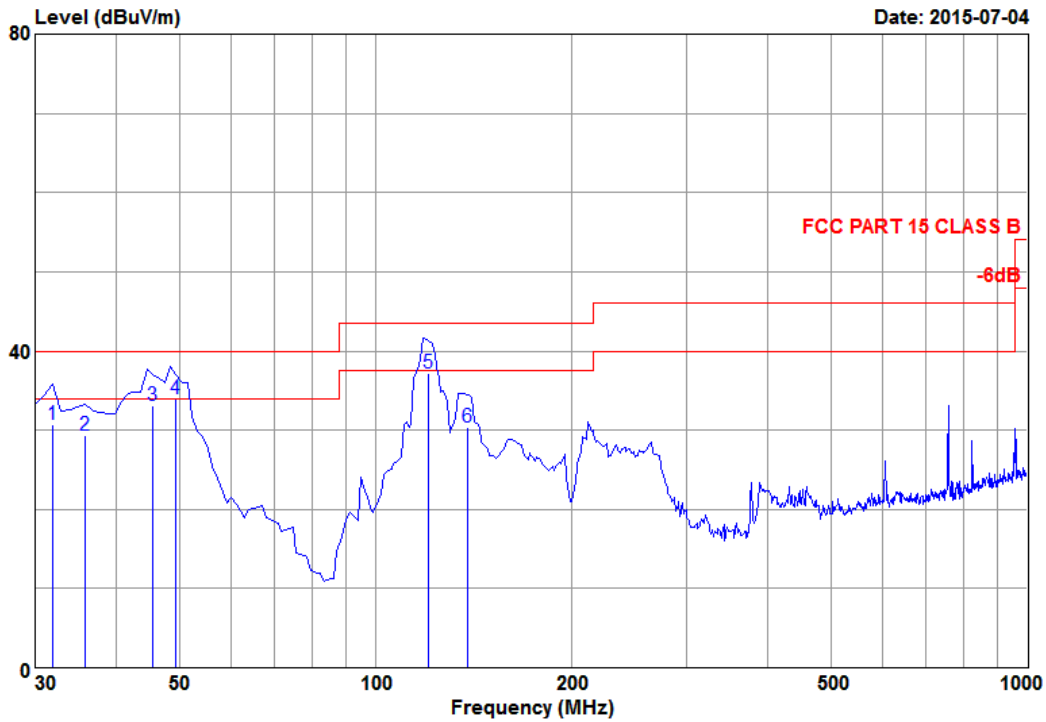
	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	30.00	19.70	0.23	26.98	19.48	40.00	20.52	QP
2	44.55	11.79	0.28	33.98	18.64	40.00	21.36	QP
3	122.15	13.10	0.78	39.31	26.03	43.50	17.47	QP
4	136.70	12.13	0.88	34.15	20.09	43.50	23.41	QP
5	215.27	10.36	1.24	34.80	19.64	43.50	23.86	QP
6	260.86	13.90	1.33	32.37	20.93	46.00	25.07	QP

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



Audix Technology(Wujiang)Co.,Ltd.
 No.1289,Jiang Xing East Road,The Eastern Part of Wu Jiang
 Economic Development Zone,JiangSu,China
 Tel:(0512)63403993 Fax:(0512)63403993

Data: 8 File: G:\Test Data\2015\Reports\04\G1504018.EM6 (30)



Site NO. : 3m Chamber Data NO. :8
 Dis. / Ant. : 3m 6112D(22251)-150520 Ant. pol. : VERTICAL
 Limit : FCC PART 15 CLASS B
 Env. / Ins. : 20.6*CS&42%/ESCI Engineer : Mickey
 EUT : LED Lamp
 M/N : 9290002579A
 Power Rating : 120Vac/60Hz
 Test Mode : RX
 Memo :

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	31.94	18.44	0.24	39.51	30.76	40.00	9.24	QP
2	35.82	15.98	0.25	40.52	29.33	40.00	10.67	QP
3	45.52	11.26	0.28	48.95	33.08	40.00	6.92	QP
4	49.40	9.40	0.29	51.71	34.00	40.00	6.00	QP
5	120.21	13.01	0.77	50.65	37.26	43.50	6.24	QP
6	138.64	11.97	0.89	44.58	30.38	43.50	13.12	QP

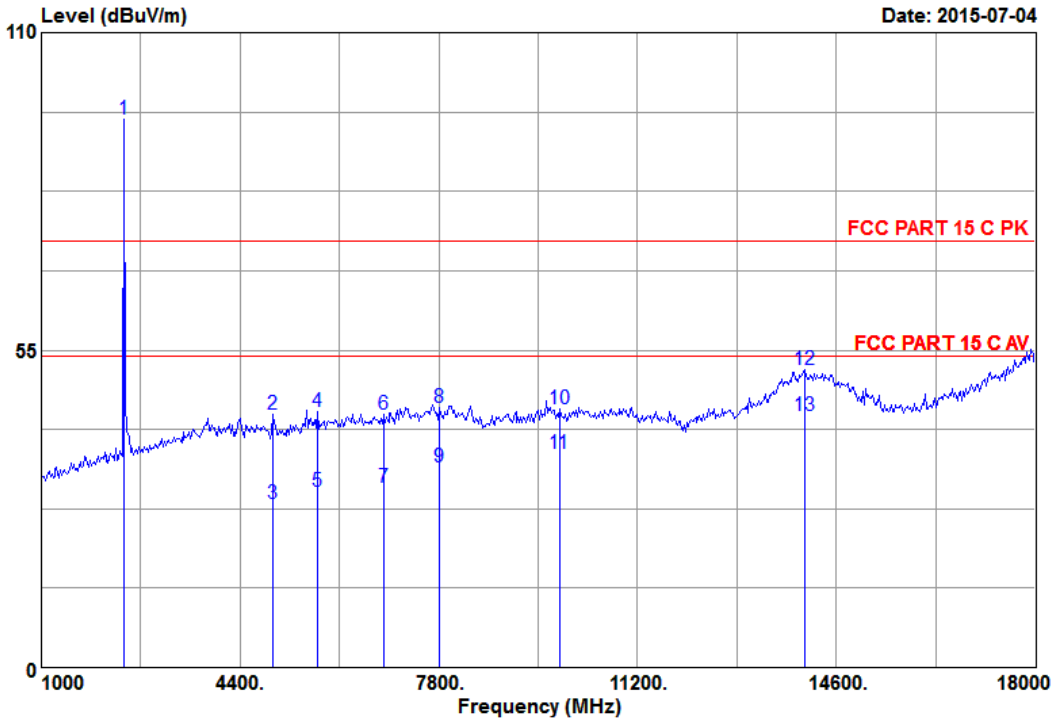
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.

4.8. Restricted Bands Measurement Results (For Above 1GHz)



Audix Technology(Wujiang)Co.,Ltd.
 No.1289,Jiang Xing East Road,The Eastern Part of Wu Jiang
 Economic Development Zone,JiangSu,China
 Tel:(0512)63403993 Fax:(0512)63403993

Data: 9 File: G:\Test Data\2015\Reports\04\G1504018.EM6 (30) Date: 2015-07-04



Site NO. : 3m Semi-Anechoic Chamber Data NO. : 9
 Dis. / Ant. : 3m 3115-62961-140903 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15 C PK
 Env. / Ins. : 20.6*C&42%/N9030A Engineer : Mickey
 EUT : LED Lamp
 M/N : 9290002579A
 Power Rating: 120Vac/60Hz
 Test Mode : TX CH11 2405MHz
 Memo :

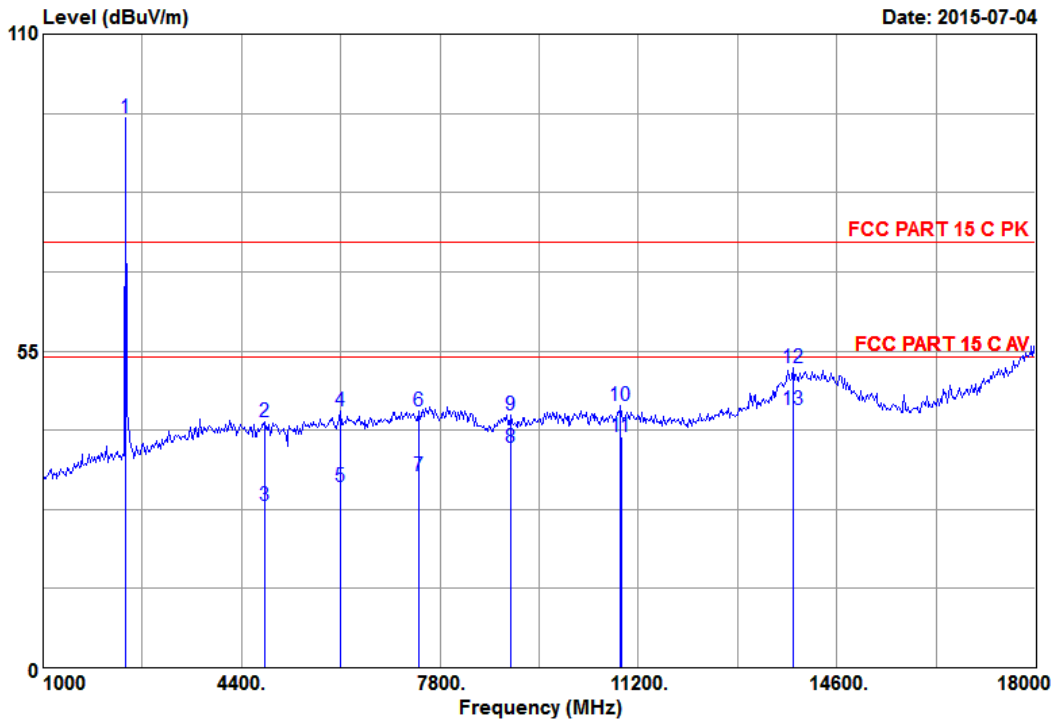
	Freq. (MHz)	Ant. Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2408.00	28.32	4.38	97.29	34.94	95.05	74.00	-21.05	Peak
2	4960.00	33.13	6.42	38.69	34.36	43.88	74.00	30.12	Peak
3	4961.20	33.13	6.42	23.20	34.36	28.39	54.00	25.61	Average
4	5730.00	33.99	7.35	37.00	34.10	44.24	74.00	29.76	Peak
5	5731.14	33.99	7.38	23.11	34.09	30.39	54.00	23.61	Average
6	6852.00	34.97	7.90	34.65	33.66	43.86	74.00	30.14	Peak
7	6853.25	34.97	7.90	22.01	33.65	31.23	54.00	22.77	Average
8	7798.00	36.82	8.64	34.02	34.52	44.96	74.00	29.04	Peak
9	7799.01	36.82	8.64	23.70	34.52	34.64	54.00	19.36	Average
10	9866.00	38.09	9.97	31.47	34.68	44.85	74.00	29.15	Peak
11	9867.25	38.10	9.97	23.59	34.68	36.98	54.00	17.02	Average
12	14068.00	41.98	12.08	29.16	31.53	51.69	74.00	22.31	Peak
13	14069.25	41.98	12.09	21.25	31.57	43.75	54.00	10.25	Average

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



Audix Technology(Wujiang)Co.,Ltd.
 No.1289,Jiang Xing East Road,The Eastern Part of Wu Jiang
 Economic Development Zone,JiangSu,China
 Tel:(0512)63403993 Fax:(0512)63403993

Data: 10 File: G:\Test Data\2015\Reports\04\G1504018.EM6 (30)



Site NO. : 3m Semi-Anechoic Chamber Data NO. : 10
 Dis. / Ant. : 3m 3115-62961-140903 Ant. pol. : VERTICAL
 Limit : FCC PART 15 C PK
 Env. / Ins. : 20.6*C&42%/N9030A Engineer : Mickey
 EUT : LED Lamp
 M/N : 9290002579A
 Power Rating: 120Vac/60Hz
 Test Mode : TX CH11 2405MHz
 Memo :

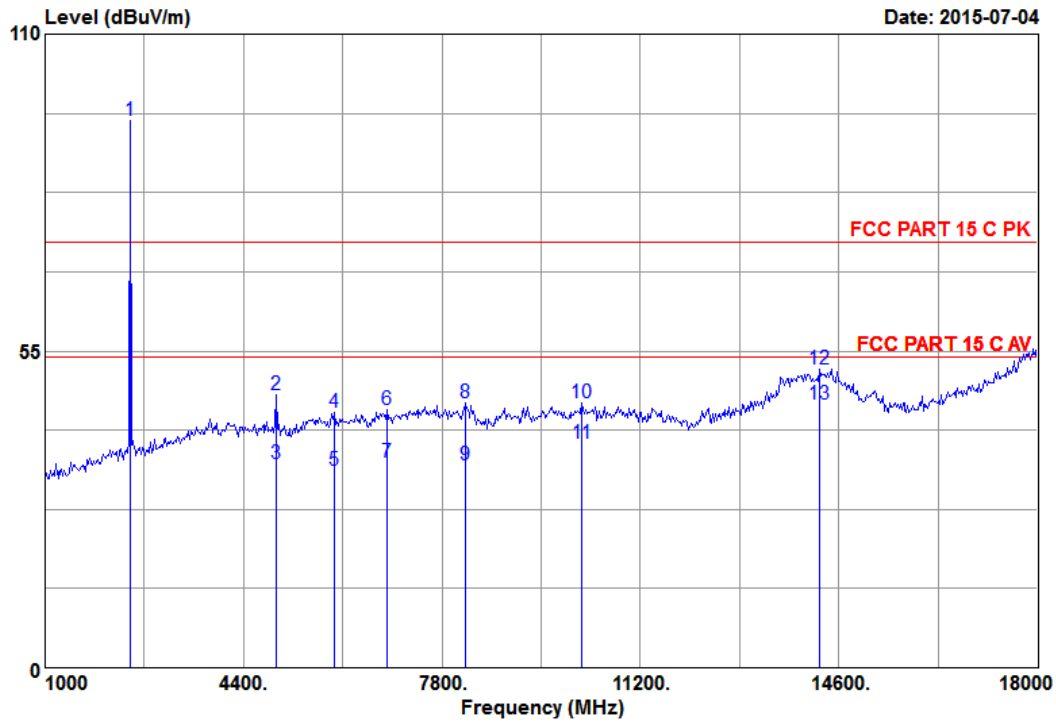
	Freq. (MHz)	Ant. Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2408.00	28.32	4.38	97.70	34.94	95.46	74.00	-21.46	Peak
2	4806.00	32.86	6.36	37.86	34.37	42.71	74.00	31.29	Peak
3	4807.25	32.86	6.36	23.21	34.37	28.06	54.00	25.94	Average
4	6104.00	34.16	7.73	36.57	33.96	44.50	74.00	29.50	Peak
5	6105.60	34.17	7.73	23.50	33.96	31.44	54.00	22.56	Average
6	7446.00	36.54	8.33	33.83	34.12	44.58	74.00	29.42	Peak
7	7447.14	36.55	8.33	22.50	34.12	33.26	54.00	20.74	Average
8	9007.80	37.80	9.02	26.50	34.97	38.35	54.00	15.65	Average
9	9008.00	37.80	9.02	32.07	34.97	43.92	74.00	30.08	Peak
10	10900.00	38.36	10.61	30.26	33.73	45.50	74.00	28.50	Peak
11	10901.28	38.36	10.61	24.87	33.73	40.11	54.00	13.89	Average
12	13848.00	41.57	11.98	30.19	31.56	52.18	74.00	21.82	Peak
13	13849.25	41.57	11.98	22.90	31.56	44.89	54.00	9.11	Average

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



Audix Technology(Wujiang)Co.,Ltd.
 No.1289,Jiang Xing East Road,The Eastern Part of Wu Jiang
 Economic Development Zone,JiangSu,China
 Tel:(0512)63403993 Fax:(0512)63403993

Data: 11 File: G:\Test Data\2015\Reports\04\G1504018.EM6 (30)



Site NO. : 3m Semi-Anechoic Chamber Data NO. : 11
 Dis. / Ant. : 3m 3115-62961-140903 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15 C PK
 Env. / Ins. : 20.6*C&42%/N9030A Engineer : Mickey
 EUT : LED Lamp
 M/N : 9290002579A
 Power Rating: 120Vac/60Hz
 Test Mode : TX CH20 2450MHz
 Memo :

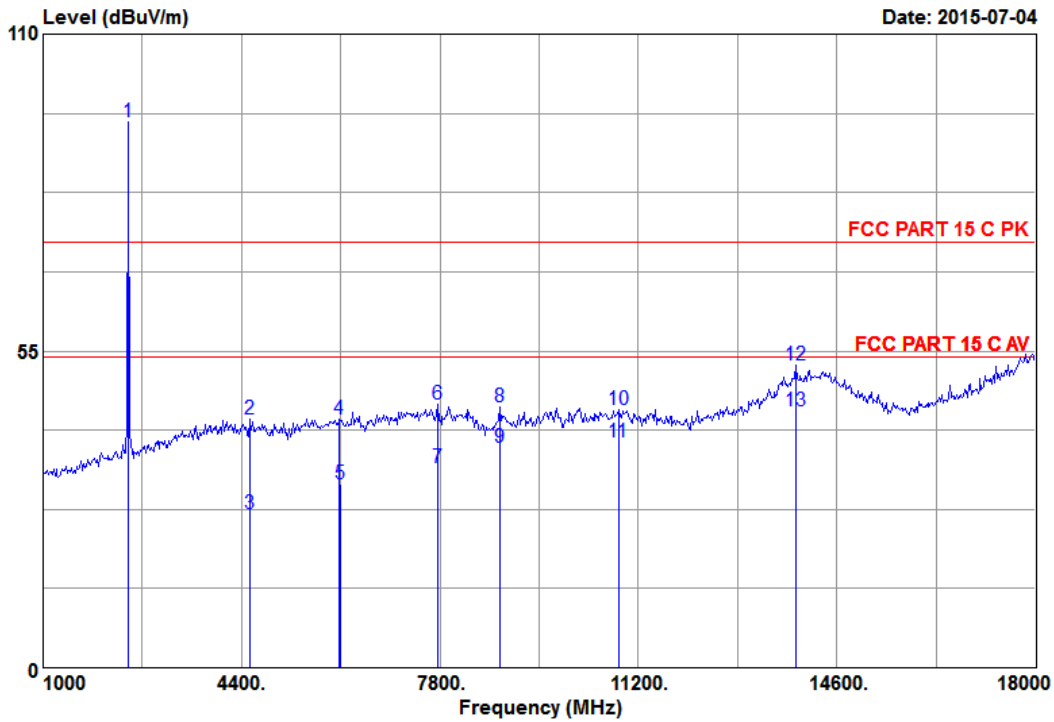
	Freq. (MHz)	Ant. Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2452.00	28.40	4.42	97.03	34.95	94.90	74.00	-20.90	Peak
2	4960.00	33.13	6.42	42.09	34.36	47.28	74.00	26.72	Peak
3	4961.25	33.13	6.42	30.20	34.36	35.39	54.00	18.61	Average
4	5950.00	34.08	7.64	36.60	34.02	44.30	74.00	29.70	Peak
5	5951.25	34.08	7.64	26.51	34.02	34.21	54.00	19.79	Average
6	6852.00	34.97	7.90	35.54	33.66	44.75	74.00	29.25	Peak
7	6853.25	34.97	7.90	26.50	33.65	35.72	54.00	18.28	Average
8	8194.00	37.14	8.86	34.77	34.79	45.98	74.00	28.02	Peak
9	8195.25	37.14	8.86	23.90	34.79	35.11	54.00	18.89	Average
10	10196.00	38.20	10.22	31.89	34.43	45.88	74.00	28.12	Peak
11	10197.25	38.20	10.22	24.90	34.43	38.89	54.00	15.11	Average
12	14266.00	42.22	12.12	29.52	31.91	51.95	74.00	22.05	Peak
13	14267.25	42.22	12.12	23.41	31.91	45.84	54.00	8.16	Average

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



Audix Technology(Wujiang)Co.,Ltd.
 No.1289,Jiang Xing East Road,The Eastern Part of Wu Jiang
 Economic Development Zone,JiangSu,China
 Tel:(0512)63403993 Fax:(0512)63403993

Data: 12 File: G:\Test Data\2015\Reports\04\G1504018.EM6 (30)



Site NO. : 3m Semi-Anechoic Chamber Data NO. : 12
 Dis. / Ant. : 3m 3115-62961-140903 Ant. pol. : VERTICAL
 Limit : FCC PART 15 C PK
 Env. / Ins. : 20.6*C&42%/N9030A Engineer : Mickey
 EUT : LED Lamp
 M/N : 9290002579A
 Power Rating: 120Vac/60Hz
 Test Mode : TX CH20 2450MHz
 Memo :

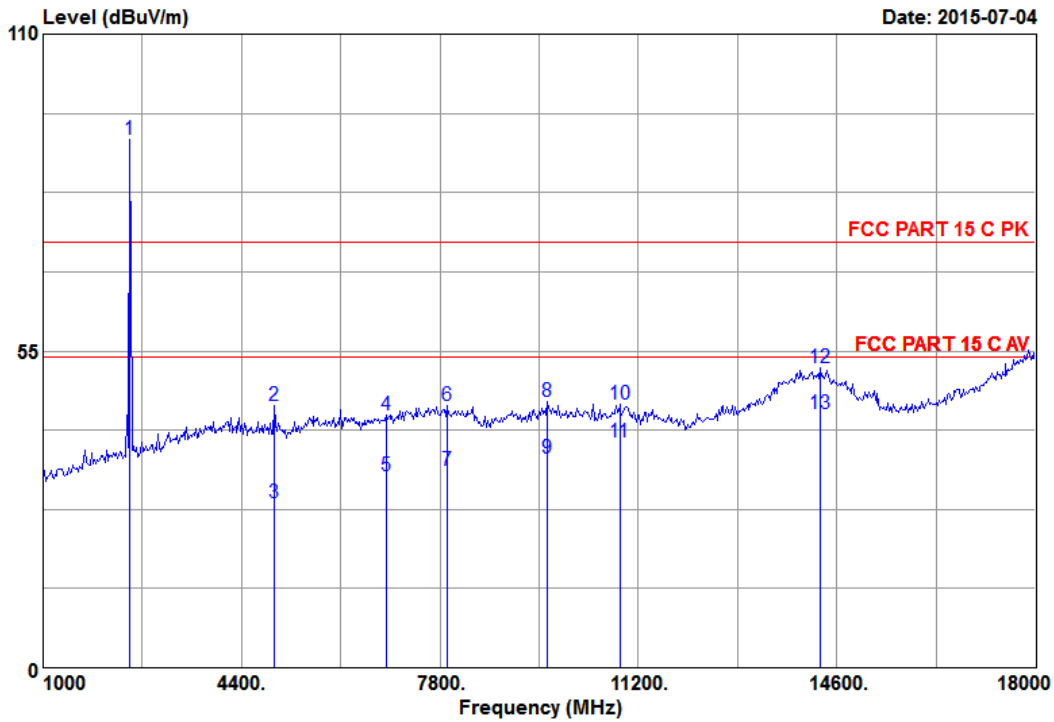
	Freq. (MHz)	Ant. Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2452.00	28.40	4.42	96.97	34.95	94.84	74.00	-20.84	Peak
2	4542.00	32.38	6.26	39.00	34.38	43.26	74.00	30.74	Peak
3	4543.25	32.38	6.26	22.51	34.38	26.77	54.00	27.23	Average
4	6082.00	34.15	7.73	35.15	33.97	43.06	74.00	30.94	Peak
5	6083.25	34.15	7.73	24.10	33.97	32.01	54.00	21.99	Average
6	7754.00	36.80	8.60	34.82	34.46	45.76	74.00	28.24	Peak
7	7755.14	36.80	8.60	23.90	34.46	34.84	54.00	19.16	Average
8	8832.00	37.70	8.98	33.49	34.93	45.24	74.00	28.76	Peak
9	8833.21	37.70	8.98	26.55	34.93	38.30	54.00	15.70	Average
10	10856.00	38.34	10.60	29.74	33.76	44.92	74.00	29.08	Peak
11	10857.14	38.34	10.60	24.10	33.76	39.28	54.00	14.72	Average
12	13892.00	41.67	12.01	30.27	31.52	52.43	74.00	21.57	Peak
13	13893.21	41.67	12.01	22.50	31.52	44.66	54.00	9.34	Average

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



Audix Technology(Wujiang)Co.,Ltd.
 No.1289,Jiang Xing East Road,The Eastern Part of Wu Jiang
 Economic Development Zone,JiangSu,China
 Tel:(0512)63403993 Fax:(0512)63403993

Data: 13 File: G:\Test Data\2015\Reports\04\G1504018.EM6 (30)



Site NO. : 3m Semi-Anechoic Chamber Data NO. : 13
 Dis. / Ant. : 3m 3115-62961-140903 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15 C PK
 Env. / Ins. : 20.6*C&42%/N9030A Engineer : Mickey
 EUT : LED Lamp
 M/N : 9290002579A
 Power Rating: 120Vac/60Hz
 Test Mode : TX CH26 2480MHz
 Memo :

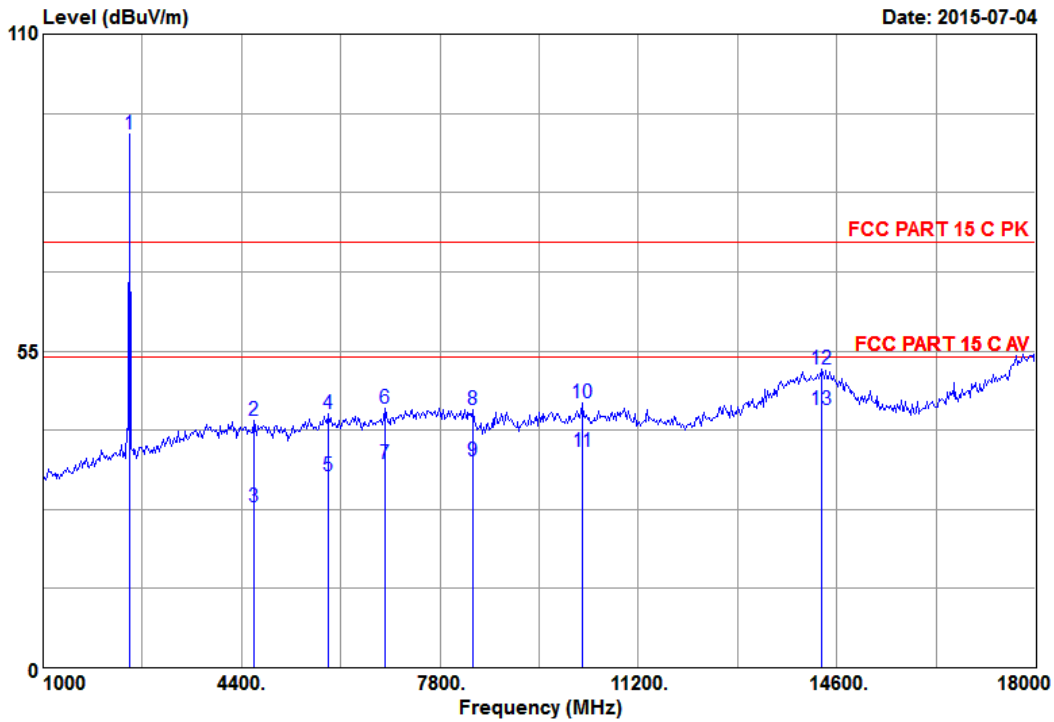
	Freq. (MHz)	Ant. Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2474.00	28.45	4.44	93.69	34.96	91.62	74.00	-17.62	Peak
2	4960.00	33.13	6.42	40.37	34.36	45.56	74.00	28.44	Peak
3	4961.25	33.13	6.42	23.50	34.36	28.69	54.00	25.31	Average
4	6874.00	35.00	7.90	34.58	33.65	43.83	74.00	30.17	Peak
5	6875.29	35.01	7.90	24.10	33.65	33.36	54.00	20.64	Average
6	7930.00	36.87	8.75	34.66	34.66	45.62	74.00	28.38	Peak
7	7931.14	36.87	8.75	23.20	34.66	34.16	54.00	19.84	Average
8	9646.00	37.92	9.72	33.23	34.76	46.11	74.00	27.89	Peak
9	9647.25	37.92	9.72	23.50	34.76	36.38	54.00	17.62	Average
10	10878.00	38.35	10.60	30.50	33.76	45.69	74.00	28.31	Peak
11	10879.25	38.35	10.60	23.90	33.76	39.09	54.00	14.91	Average
12	14310.00	42.27	12.13	29.61	32.01	52.00	74.00	22.00	Peak
13	14311.14	42.28	12.13	21.70	32.01	44.10	54.00	9.90	Average

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



Audix Technology(Wujiang)Co.,Ltd.
 No.1289,Jiang Xing East Road,The Eastern Part of Wu Jiang
 Economic Development Zone,JiangSu,China
 Tel:(0512)63403993 Fax:(0512)63403993

Data: 14 File: G:\Test Data\2015\Reports\04\G1504018.EM6 (30)



Site NO. : 3m Semi-Anechoic Chamber Data NO. : 14
 Dis. / Ant. : 3m 3115-62961-140903 Ant. pol. : VERTICAL
 Limit : FCC PART 15 C PK
 Env. / Ins. : 20.6*C&42%/N9030A Engineer : Mickey
 EUT : LED Lamp
 M/N : 9290002579A
 Power Rating: 120Vac/60Hz
 Test Mode : TX CH26 2480MHz
 Memo :

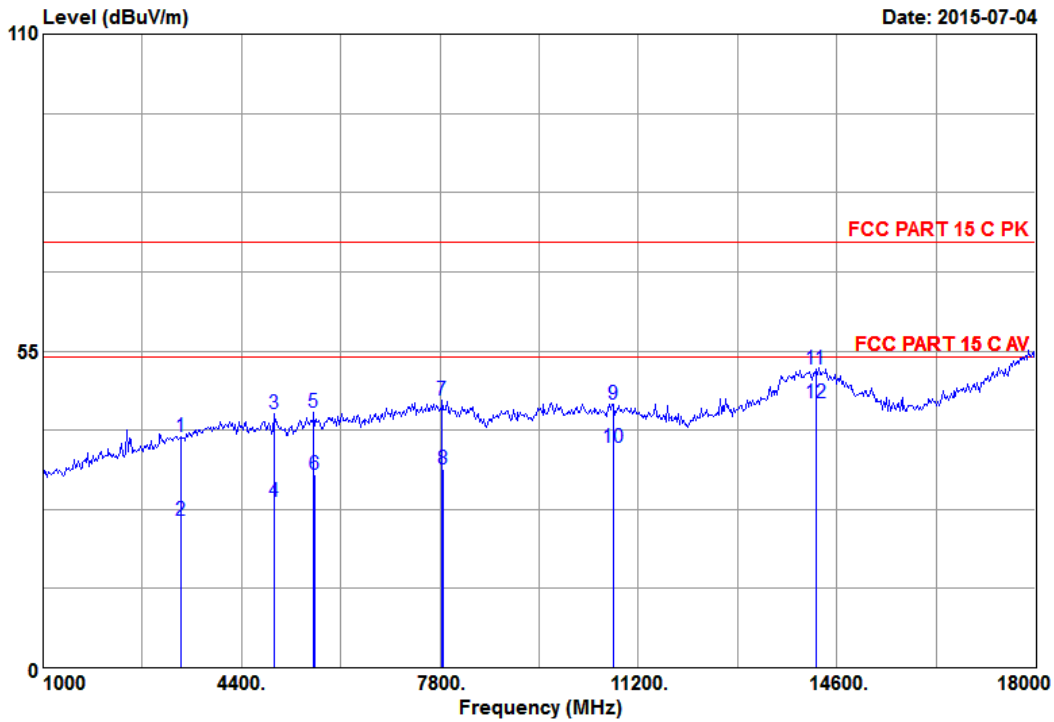
	Freq. (MHz)	Ant. Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2474.00	28.45	4.44	94.72	34.96	92.65	74.00	-18.65	Peak
2	4608.00	32.50	6.28	38.44	34.38	42.84	74.00	31.16	Peak
3	4609.21	32.50	6.29	23.61	34.38	28.02	54.00	25.98	Average
4	5884.00	34.06	7.58	36.58	34.04	44.18	74.00	29.82	Peak
5	5885.14	34.06	7.58	25.60	34.04	33.20	54.00	20.80	Average
6	6852.00	34.97	7.90	35.86	33.66	45.07	74.00	28.93	Peak
7	6853.25	34.97	7.90	26.20	33.65	35.42	54.00	18.58	Average
8	8370.00	37.35	8.89	33.51	34.83	44.92	74.00	29.08	Peak
9	8371.25	37.35	8.89	24.50	34.83	35.91	54.00	18.09	Average
10	10240.00	38.20	10.24	31.93	34.41	45.96	74.00	28.04	Peak
11	10241.14	38.20	10.24	23.50	34.41	37.53	54.00	16.47	Average
12	14332.00	42.30	12.14	29.51	32.05	51.90	74.00	22.10	Peak
13	14333.21	42.30	12.14	22.50	32.05	44.89	54.00	9.11	Average

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



Audix Technology(Wujiang)Co.,Ltd.
 No.1289,Jiang Xing East Road,The Eastern Part of Wu Jiang
 Economic Development Zone,JiangSu,China
 Tel:(0512)63403993 Fax:(0512)63403993

Data: 15 File: G:\Test Data\2015\Reports\04\G1504018.EM6 (30)



Site NO. : 3m Semi-Anechoic Chamber Data NO. : 15
 Dis. / Ant. : 3m 3115-62961-140903 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15 C PK
 Env. / Ins. : 20.6*C&42%/N9030A Engineer : Mickey
 EUT : LED Lamp
 M/N : 9290002579A
 Power Rating: 120Vac/60Hz
 Test Mode : RX
 Memo :

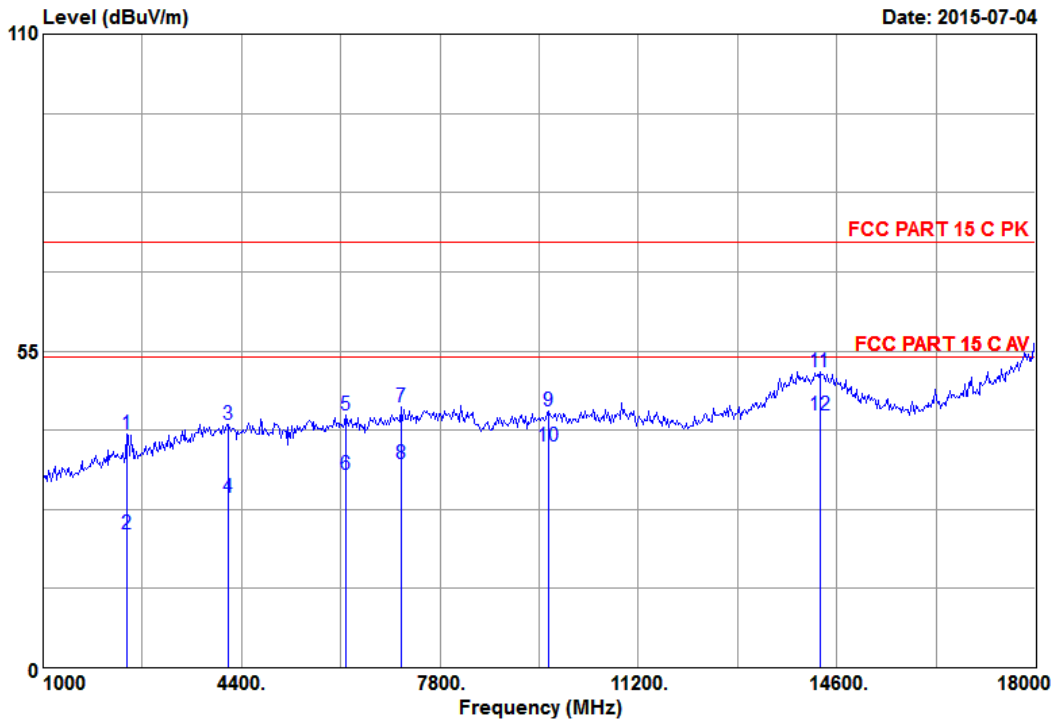
	Freq. (MHz)	Ant. Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	3354.00	31.04	5.31	38.67	34.86	40.16	74.00	33.84	Peak
2	3355.25	31.04	5.31	24.10	34.86	25.59	54.00	28.41	Average
3	4960.00	33.13	6.42	38.89	34.36	44.08	74.00	29.92	Peak
4	4961.25	33.13	6.42	23.60	34.36	28.79	54.00	25.21	Average
5	5642.00	33.96	7.25	37.23	34.13	44.31	74.00	29.69	Peak
6	5643.25	33.96	7.25	26.50	34.13	33.58	54.00	20.42	Average
7	7842.00	36.84	8.66	35.41	34.55	46.36	74.00	27.64	Peak
8	7843.25	36.84	8.66	23.60	34.55	34.55	54.00	19.45	Average
9	10768.00	38.31	10.54	30.87	33.86	45.86	74.00	28.14	Peak
10	10769.25	38.31	10.54	23.20	33.86	38.19	54.00	15.81	Average
11	14244.00	42.20	12.12	29.35	31.86	51.81	74.00	22.19	Peak
12	14245.25	42.20	12.12	23.49	31.86	45.95	54.00	8.05	Average

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



Audix Technology(Wujiang)Co.,Ltd.
 No.1289,Jiang Xing East Road,The Eastern Part of Wu Jiang
 Economic Development Zone,JiangSu,China
 Tel:(0512)63403993 Fax:(0512)63403993

Data: 16 File: G:\Test Data\2015\Reports\04\G1504018.EM6 (30)



Site NO. : 3m Semi-Anechoic Chamber Data NO. : 16
 Dis. / Ant. : 3m 3115-62961-140903 Ant. pol. : VERTICAL
 Limit : FCC PART 15 C PK
 Env. / Ins. : 20.6*C&42%/N9030A Engineer : Mickey
 EUT : LED Lamp
 M/N : 9290002579A
 Power Rating: 120Vac/60Hz
 Test Mode : RX
 Memo :

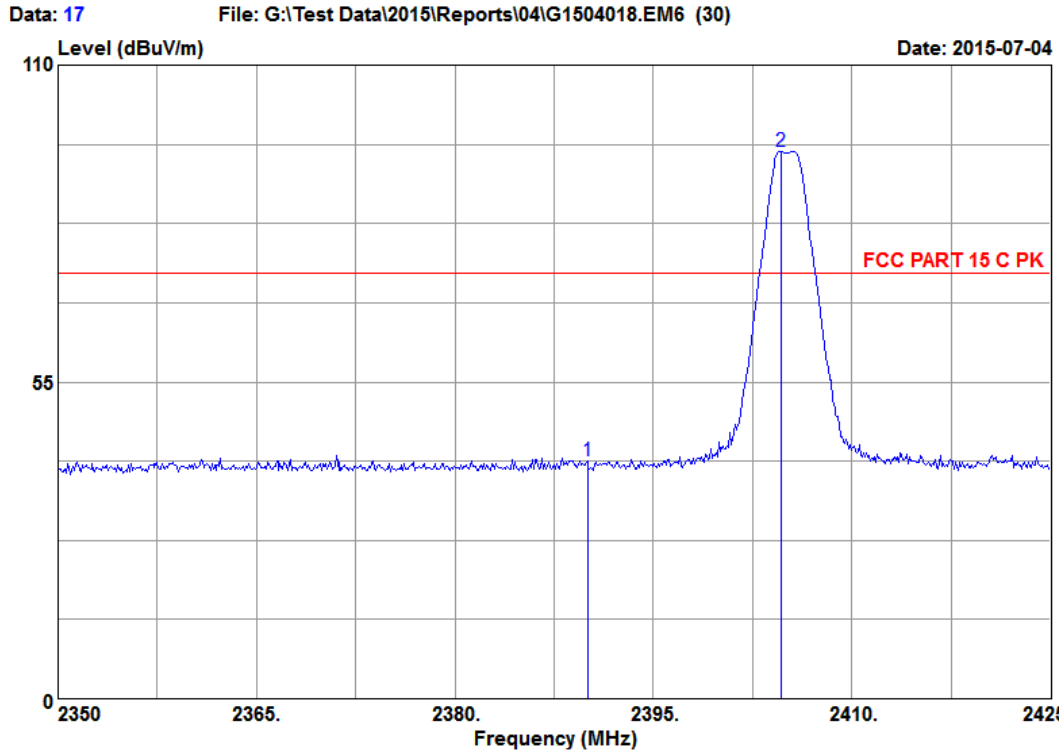
	Freq. (MHz)	Ant. Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2430.00	28.36	4.40	42.70	34.95	40.51	74.00	33.49	Peak
2	2431.25	28.36	4.40	25.50	34.95	23.31	54.00	30.69	Average
3	4168.00	32.43	6.12	38.16	34.39	42.32	74.00	31.68	Peak
4	4169.25	32.43	6.12	25.49	34.39	29.65	54.00	24.35	Average
5	6192.00	34.22	7.76	35.87	33.92	43.93	74.00	30.07	Peak
6	6193.25	34.22	7.76	25.50	33.92	33.56	54.00	20.44	Average
7	7138.00	35.62	8.06	35.30	33.77	45.21	74.00	28.79	Peak
8	7139.25	35.63	8.06	25.50	33.77	35.42	54.00	18.58	Average
9	9668.00	37.94	9.75	31.62	34.75	44.56	74.00	29.44	Peak
10	9669.21	37.94	9.75	25.49	34.75	38.43	54.00	15.57	Average
11	14310.00	42.27	12.13	29.04	32.01	51.43	74.00	22.57	Peak
12	14311.25	42.28	12.13	21.50	32.01	43.90	54.00	10.10	Average

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

4.9. Spurious Emission Measurement Results in Band Edge Emission (FCC Part 15, 15.205)



Audix Technology(Wujiang)Co.,Ltd.
 No.1289,Jiang Xing East Road,The Eastern Part of Wu Jiang
 Economic Development Zone,JiangSu,China
 Tel: (0512) 63403993 Fax: (0512) 63403993



Site NO. : 3m Semi-Anechoic Chamber	Data NO. : 17
Dis. / Ant. : 3m 3115-62961-140903	Ant. pol. : HORIZONTAL
Limit : FCC PART 15 C PK	Engineer : Mickey
Env. / Ins. : 20.6°C&42%/N9030A	
EUT : LED Lamp	
M/N : 9290002579A	
Power Rating: 120Vac/60Hz	
Test Mode : TX CH11 2405MHz	
Memo :	

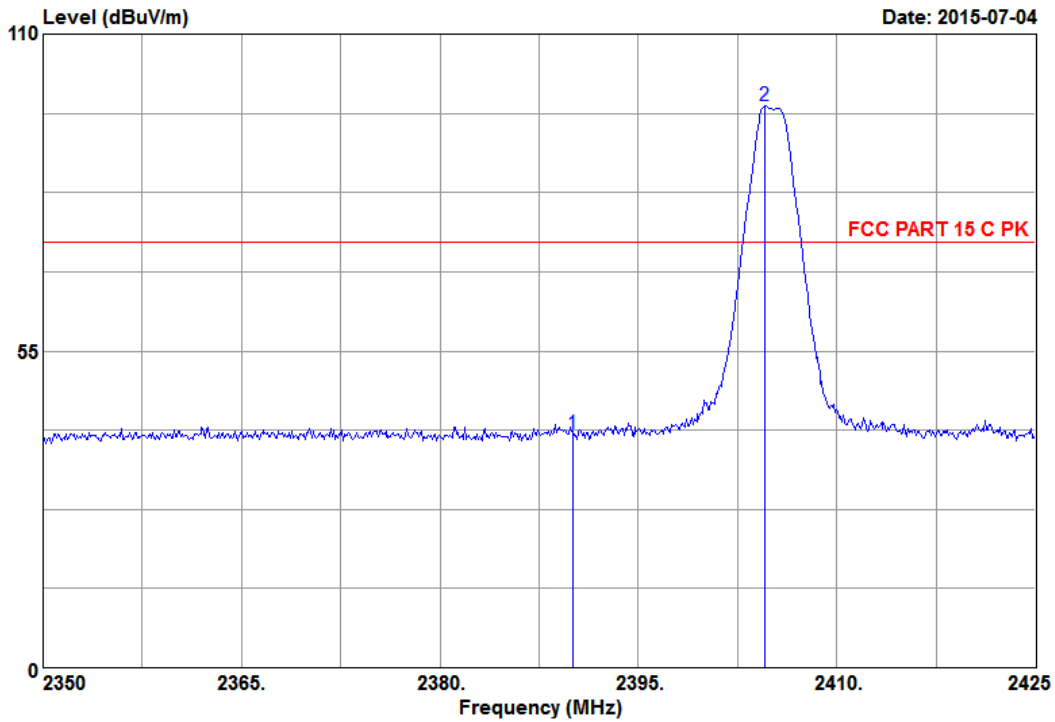
	Freq. (MHz)	Ant. Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.00	28.15	4.38	43.78	34.94	41.37	74.00	32.63	Peak
2	2404.70	28.19	4.38	97.48	34.94	95.11	74.00	-21.11	Peak

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



Audix Technology(Wujiang)Co.,Ltd.
 No.1289,Jiang Xing East Road,The Eastern Part of Wu Jiang
 Economic Development Zone,JiangSu,China
 Tel: (0512) 63403993 Fax: (0512) 63403993

Data: 18 File: G:\Test Data\2015\Reports\04\G1504018.EM6 (30)



Site NO. : 3m Semi-Anechoic Chamber Data NO. : 18
 Dis. / Ant. : 3m 3115-62961-140903 Ant. pol. : VERTICAL
 Limit : FCC PART 15 C PK
 Env. / Ins. : 20.6*CS&42%/N9030A Engineer : Mickey
 EUT : LED Lamp
 M/N : 9290002579A
 Power Rating: 120Vac/60Hz
 Test Mode : TX CH11 2405MHz
 Memo :

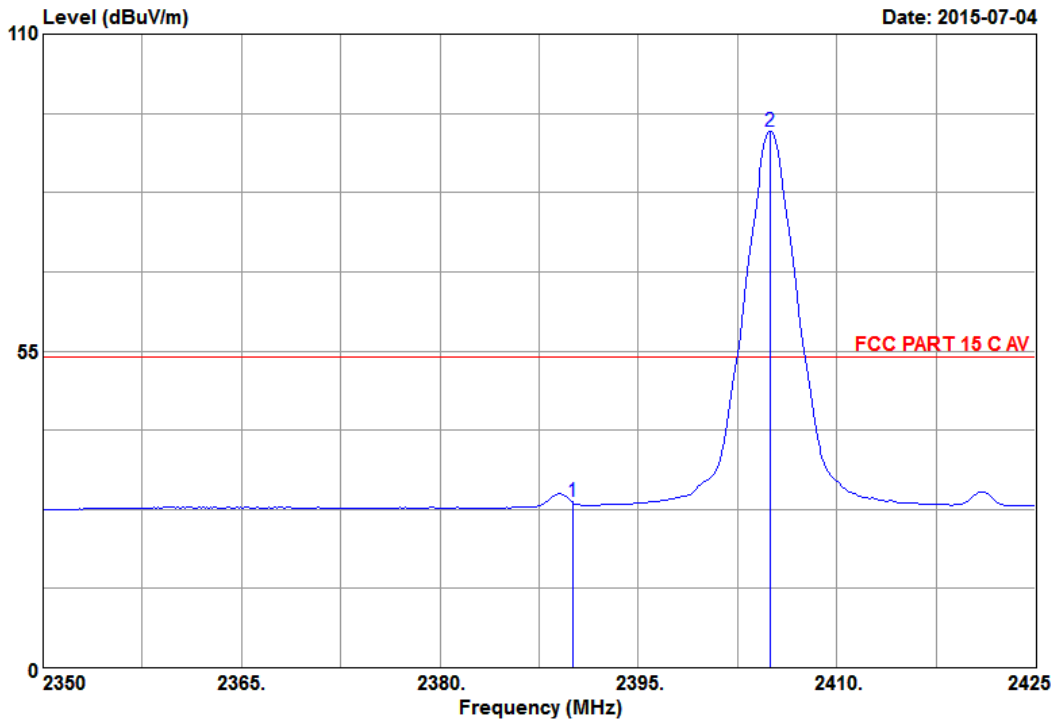
	Freq. (MHz)	Ant. Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.00	28.15	4.38	43.02	34.94	40.61	74.00	33.39	Peak
2	2404.60	28.19	4.38	99.96	34.94	97.59	74.00	-23.59	Peak

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



Audix Technology(Wujiang)Co.,Ltd.
 No.1289,Jiang Xing East Road,The Eastern Part of Wu Jiang
 Economic Development Zone,JiangSu,China
 Tel: (0512) 63403993 Fax: (0512) 63403993

Data: 19 File: G:\Test Data\2015\Reports\04\G1504018.EM6 (30)



Site NO. : 3m Semi-Anechoic Chamber Data NO. : 19
 Dis. / Ant. : 3m 3115-62961-140903 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15 C AV
 Env. / Ins. : 20.6*CS&42%/N9030A Engineer : Mickey
 EUT : LED Lamp
 M/N : 9290002579A
 Power Rating: 120Vac/60Hz
 Test Mode : TX CH11 2405MHz
 Memo :

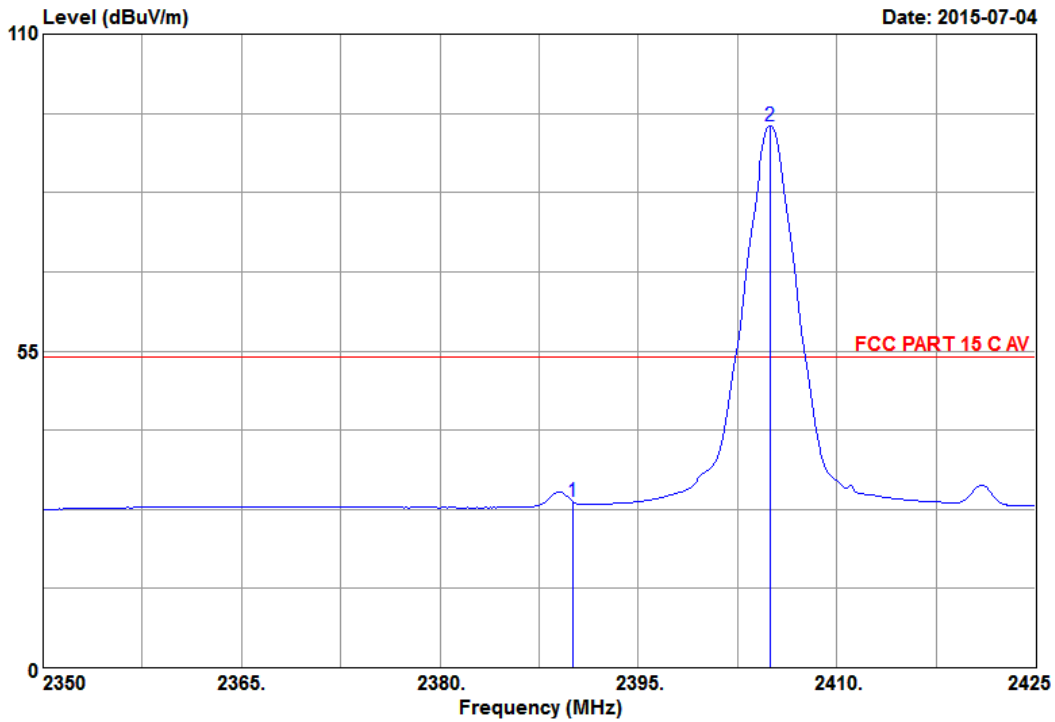
	Freq. (MHz)	Ant. Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.00	28.15	4.38	31.16	34.94	28.75	54.00	25.25	Average
2	2405.00	28.19	4.38	95.41	34.94	93.04	54.00	-39.04	Average

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



Audix Technology(Wujiang)Co.,Ltd.
 No.1289,Jiang Xing East Road,The Eastern Part of Wu Jiang
 Economic Development Zone,JiangSu,China
 Tel: (0512) 63403993 Fax: (0512) 63403993

Data: 20 File: G:\Test Data\2015\Reports\04\G1504018.EM6 (30)



Site NO. : 3m Semi-Anechoic Chamber Data NO. : 20
 Dis. / Ant. : 3m 3115-62961-140903 Ant. pol. : VERTICAL
 Limit : FCC PART 15 C AV
 Env. / Ins. : 20.6*CS&42%/N9030A Engineer : Mickey
 EUT : LED Lamp
 M/N : 9290002579A
 Power Rating: 120Vac/60Hz
 Test Mode : TX CH11 2405MHz
 Memo :

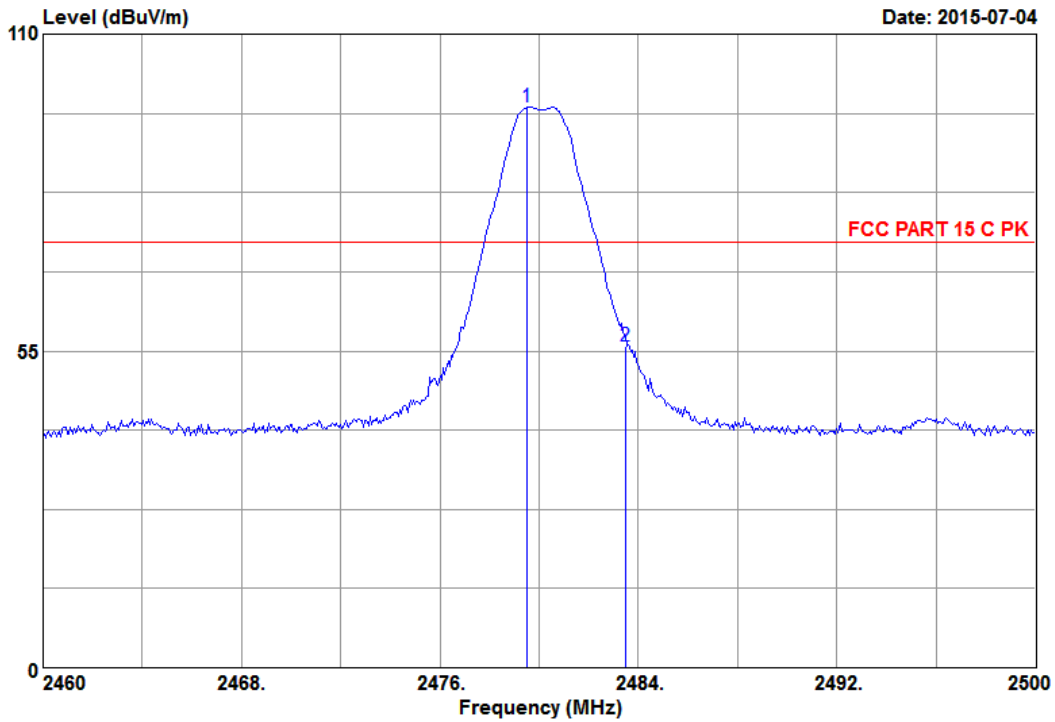
	Freq. (MHz)	Ant. Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.00	28.15	4.38	31.32	34.94	28.91	54.00	25.09	Average
2	2405.00	28.19	4.38	96.46	34.94	94.09	54.00	-40.09	Average

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



Audix Technology(Wujiang)Co.,Ltd.
 No.1289,Jiang Xing East Road,The Eastern Part of Wu Jiang
 Economic Development Zone,JiangSu,China
 Tel: (0512) 63403993 Fax: (0512) 63403993

Data: 21 File: G:\Test Data\2015\Reports\04\G1504018.EM6 (30)



Site NO. : 3m Semi-Anechoic Chamber
 Dis. / Ant. : 3m 3115-62961-140903
 Limit : FCC PART 15 C PK
 Env. / Ins. : 20.6*CS&42%/N9030A
 EUT : LED Lamp
 M/N : 9290002579A
 Power Rating: 120Vac/60Hz
 Test Mode : TX CH26 2480MHz
 Memo :
 Data NO. : 21
 Ant. pol. : HORIZONTAL
 Engineer : Mickey

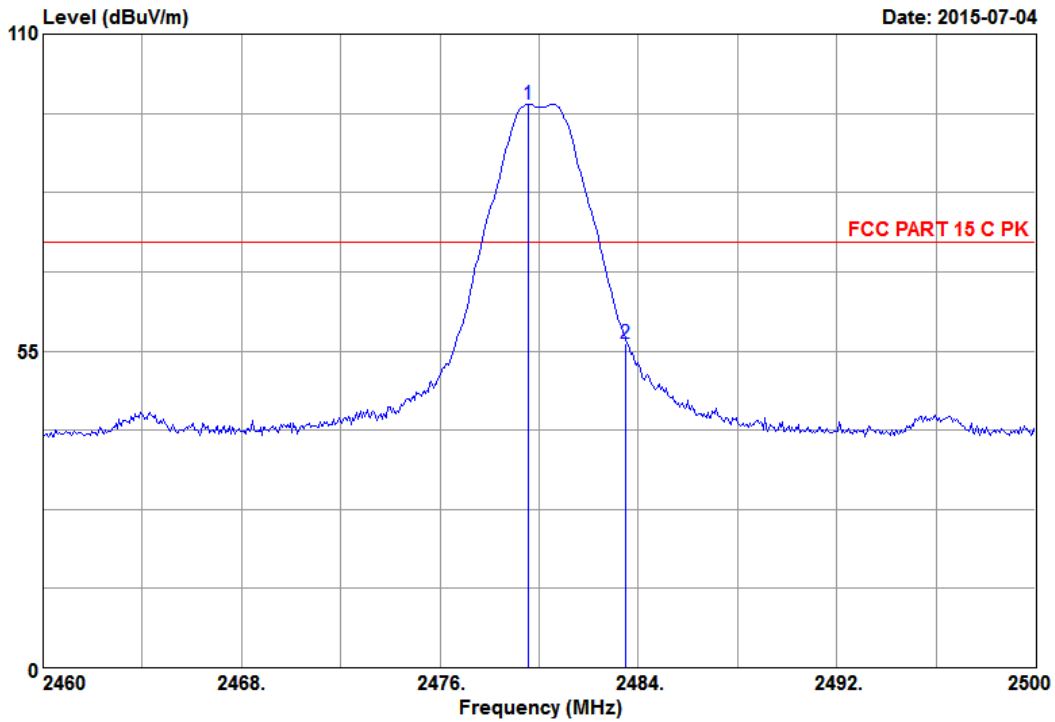
	Freq. (MHz)	Ant. Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2479.50	28.36	4.44	99.54	34.96	97.38	74.00	-23.38	Peak
2	2483.50	28.36	4.44	57.91	34.96	55.75	74.00	18.25	Peak

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



Audix Technology(Wujiang)Co.,Ltd.
 No.1289,Jiang Xing East Road,The Eastern Part of Wu Jiang
 Economic Development Zone,JiangSu,China
 Tel: (0512) 63403993 Fax: (0512) 63403993

Data: 22 File: G:\Test Data\2015\Reports\04\G1504018.EM6 (30)



Site NO. : 3m Semi-Anechoic Chamber Data NO. : 22
 Dis. / Ant. : 3m 3115-62961-140903 Ant. pol. : VERTICAL
 Limit : FCC PART 15 C PK
 Env. / Ins. : 20.6*CS&42%/N9030A Engineer : Mickey
 EUT : LED Lamp
 M/N : 9290002579A
 Power Rating: 120Vac/60Hz
 Test Mode : TX CH26 2480MHz
 Memo :

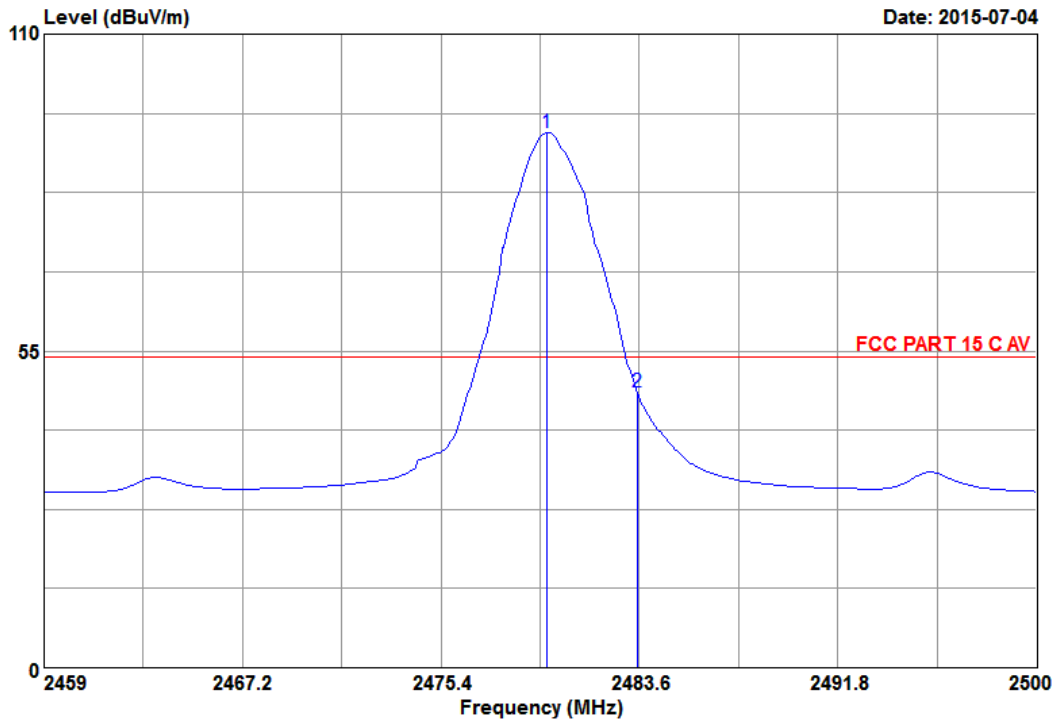
	Freq. (MHz)	Ant. Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2479.56	28.36	4.44	100.09	34.96	97.93	74.00	-23.93	Peak
2	2483.50	28.36	4.44	58.44	34.96	56.28	74.00	17.72	Peak

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



Audix Technology(Wujiang)Co.,Ltd.
 No.1289,Jiang Xing East Road,The Eastern Part of Wu Jiang
 Economic Development Zone,JiangSu,China
 Tel: (0512) 63403993 Fax: (0512) 63403993

Data: 23 File: G:\Test Data\2015\Reports\04\G1504018.EM6 (30)



Site NO. : 3m Semi-Anechoic Chamber Data NO. : 23
 Dis. / Ant. : 3m 3115-62593-140618 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15 C AV
 Env. / Ins. : 20.6*CS&42%/N9030A Engineer : Mickey
 EUT : LED Lamp
 M/N : 9290002579A
 Power Rating: 120Vac/60Hz
 Test Mode : TX CH26 2480MHz
 Memo :

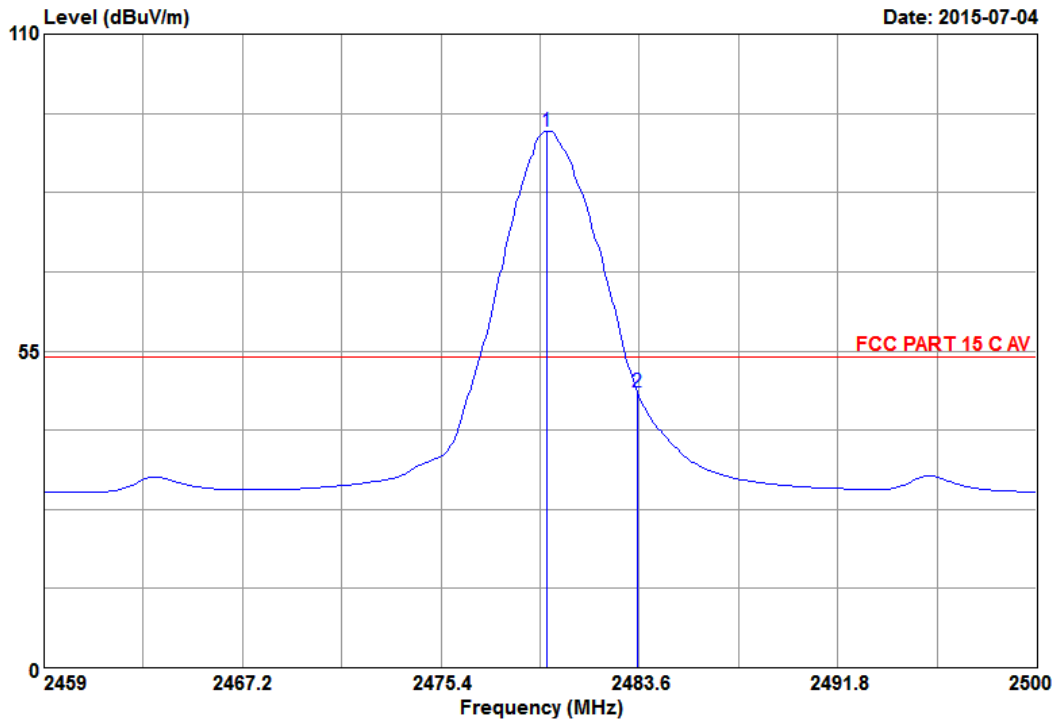
	Freq. (MHz)	Ant. Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2479.80	28.46	4.44	94.89	34.96	92.83	54.00	-38.83	Average
2	2483.50	28.47	4.44	49.84	34.96	47.79	54.00	6.21	Average

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



Audix Technology(Wujiang)Co.,Ltd.
 No.1289,Jiang Xing East Road,The Eastern Part of Wu Jiang
 Economic Development Zone,JiangSu,China
 Tel: (0512) 63403993 Fax: (0512) 63403993

Data: 24 File: G:\Test Data\2015\Reports\04\G1504018.EM6 (30)



Site NO. : 3m Semi-Anechoic Chamber Data NO. : 24
 Dis. / Ant. : 3m 3115-62593-140618 Ant. pol. : VERTICAL
 Limit : FCC PART 15 C AV
 Env. / Ins. : 20.6*CS&42%/N9030A Engineer : Mickey
 EUT : LED Lamp
 M/N : 9290002579A
 Power Rating: 120Vac/60Hz
 Test Mode : TX CH26 2480MHz
 Memo :

	Freq. (MHz)	Ant. Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2479.80	28.46	4.44	95.26	34.96	93.20	54.00	-39.20	Average
2	2483.50	28.47	4.44	49.95	34.96	47.90	54.00	6.10	Average

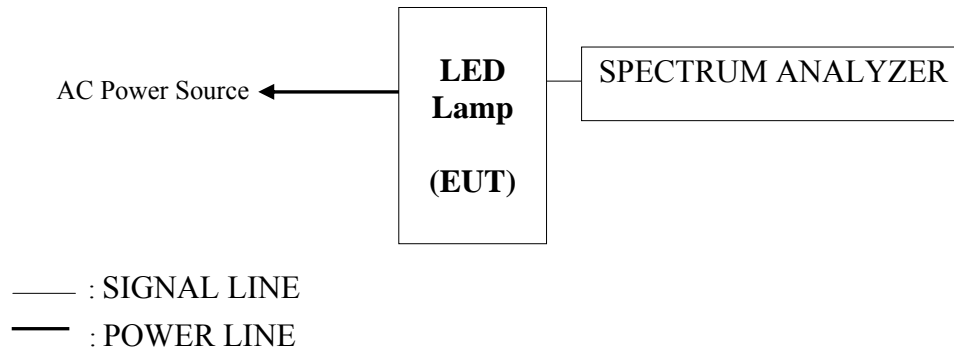
Remarks: 1. Emission Level= Ant.Factor + Cable Loss + Reading - Preamp.Factor.
 2. The emission levels that are 20dB below the official limit are not reported.

5. 6 dB BANDWIDTH MEASUREMENT

5.1. Test Equipment

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	PXA Signal Analyzer	Agilent	N9030A	MY53120367	2014-06-23	2015-06-22

5.2. Block Diagram of Test Setup



5.3. Specification Limits (§15.247(a)(2))

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

5.4. Test Procedure

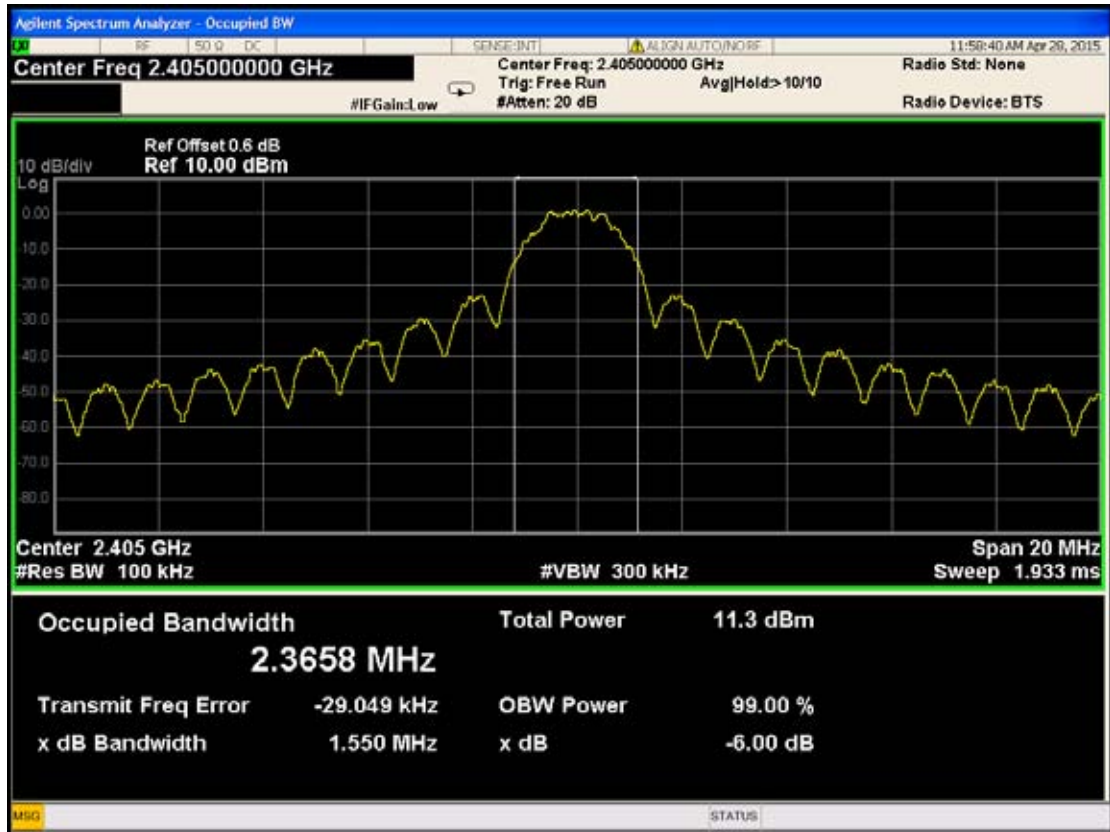
The transmitter output was connected to the test receiver / spectrum analyzer. The bandwidth of the fundamental frequency was measure by spectrum analyzer. The 6 dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6 dB. The measurement guideline was according to KDB558074 v03r02.

5.5. Test Results

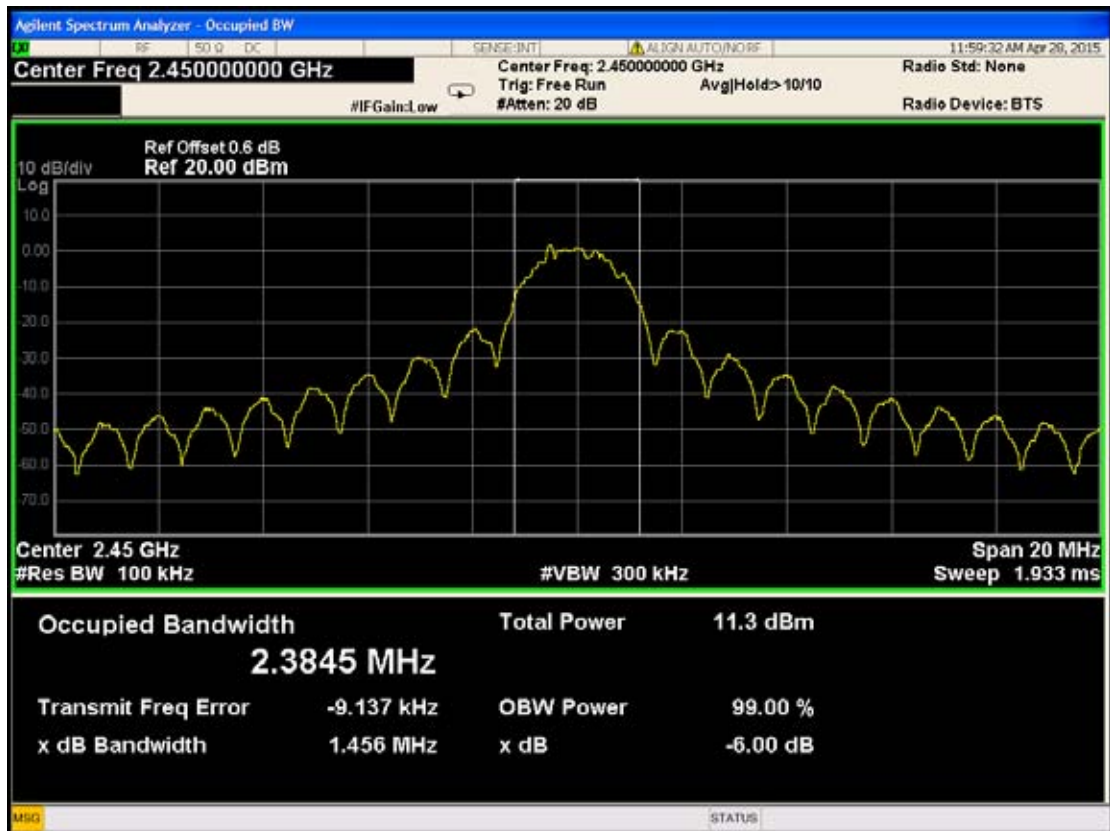
PASSED. All the test results are attached in next pages.

Channel	Center Frequency(MHz)	6 dB Bandwidth(MHz)
11	2405	1.550
20	2450	1.456
26	2480	1.657

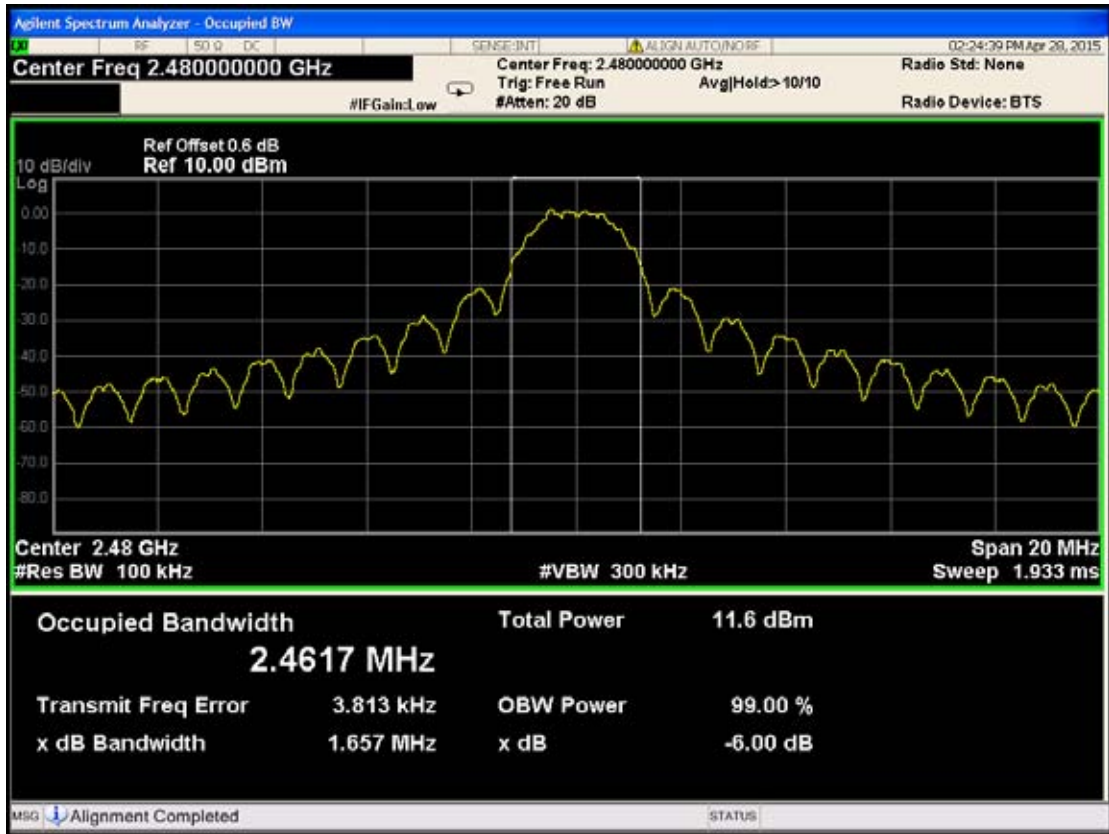
CH 11



CH 20



CH 26

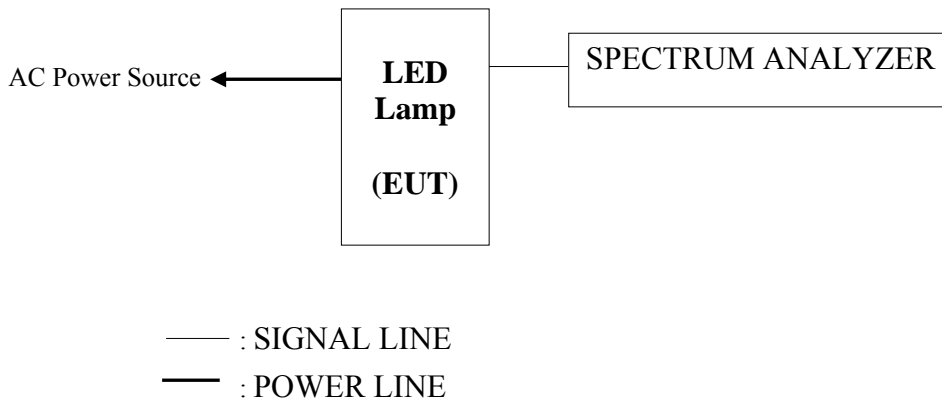


6. OUTPUT POWER MEASUREMENT

6.1. Test Equipment

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	PXA Signal Analyzer	Agilent	N9030A	MY53120367	2015-06-23	2016-06-22

6.2. Block Diagram of Test Setup



6.3. Specification Limits (§15.247(b)(3))

For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt. As an alternative to a peak power measurement, compliance with the one Watt limit can be based on a measurement of the maximum conducted output power. Maximum Conducted Output Power is defined as the total transmit power delivered to all antennas and antenna elements averaged across all symbols in the signaling alphabet when the transmitter is operating at its maximum power control level. Power must be summed across all antennas and antenna elements. The average must not include any time intervals during which the transmitter is off or is transmitting at a reduced power level. If multiple modes of operation are possible (e.g., alternative modulation methods), the maximum conducted output power is the highest total transmit power occurring in any mode.

6.4. Test Procedure

- a) Set span to at least 1.5 times the OBW.
- b) Set RBW = 1-5% of the OBW, not to exceed 1 MHz.
- c) Set VBW $\geq 3 \times$ RBW.
- d) Number of points in sweep $\geq 2 \times$ span / RBW. (This gives bin-to-bin spacing \leq RBW/2, so that narrowband signals are not lost between frequency bins.)
- e) Sweep time = auto.
- f) Detector = RMS (*i.e.*, power averaging), if available. Otherwise, use sample detector mode.
- g) If transmit duty cycle $< 98 \%$, use a sweep trigger with the level set to enable triggering only on full power pulses. The transmitter shall operate at maximum power control level for the entire duration of every sweep. If the EUT transmits continuously (*i.e.*, with no off intervals) or at duty cycle $\geq 98 \%$, and if each transmission is entirely at the maximum power control level, then the trigger shall be set to “free run”.
- h) Trace average at least 100 traces in power averaging (*i.e.*, RMS) mode.
- i) Compute power by integrating the spectrum across the OBW of the signal using the instrument’s band power measurement function, with band limits set equal to the OBW band edges. If the instrument does not have a band power function, sum the spectrum levels (in power units) at intervals equal to the RBW extending across the entire OBW of the spectrum.

6.5. Test Results

PASSED.

Channel	Frequency	Power(dBm)	Limit(dBm)
11	2405	3.48	30
20	2450	3.30	30
26	2480	3.45	30

7. BAND EDGES MEASUREMENT

7.1. Test Equipment

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	PXA Signal Analyzer	Agilent	N9030A	MY53120367	2015-06-23	2016-06-22

7.2. Block Diagram of Test Setup

The same as section 5.2.

7.3. Specification Limits (§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) (see Section 15.205(c)).

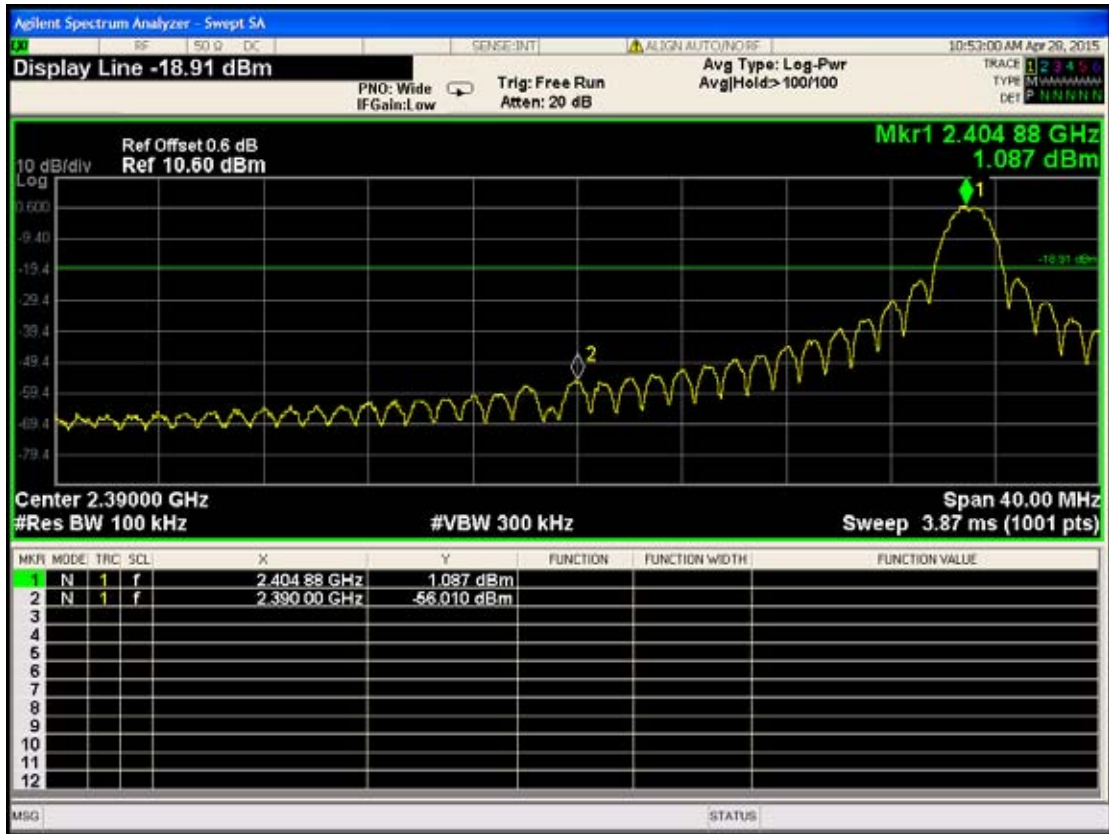
7.4. Test Procedure

The transmitter output was connected to the test receiver / spectrum analyzer. Set RBW of spectrum analyzer to 100kHz and VBW to 300kHz with suitable frequency span including 100kHz bandwidth from band edge.

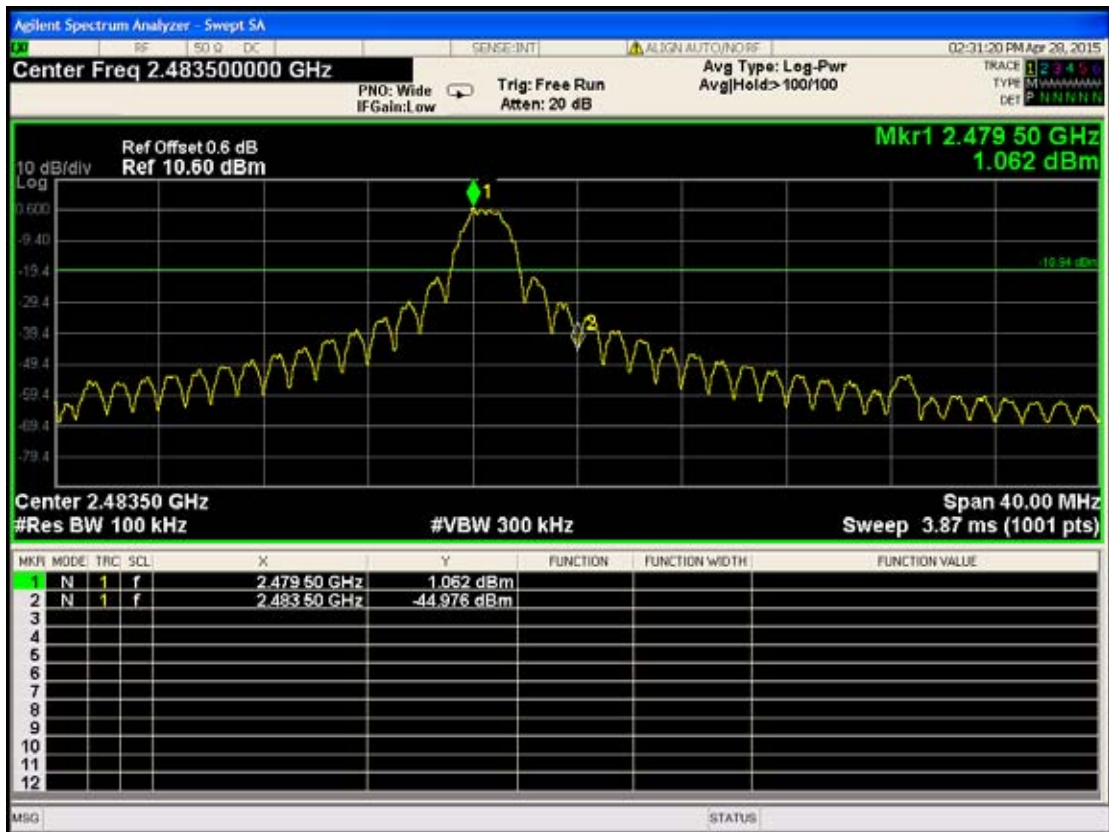
7.5. Test Results

PASSED. The testing data was attached in the next pages.

CH11



CH26



8. POWER SPECTRAL DENSITY MEASUREMENT

8.1. Test Equipment

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	PXA Signal Analyzer	Agilent	N9030A	MY53120367	2015-06-23	2016-06-22

8.2. Block Diagram of Test Setup

The same as section 5.2.

8.3. Specification Limits (§15.247(e))

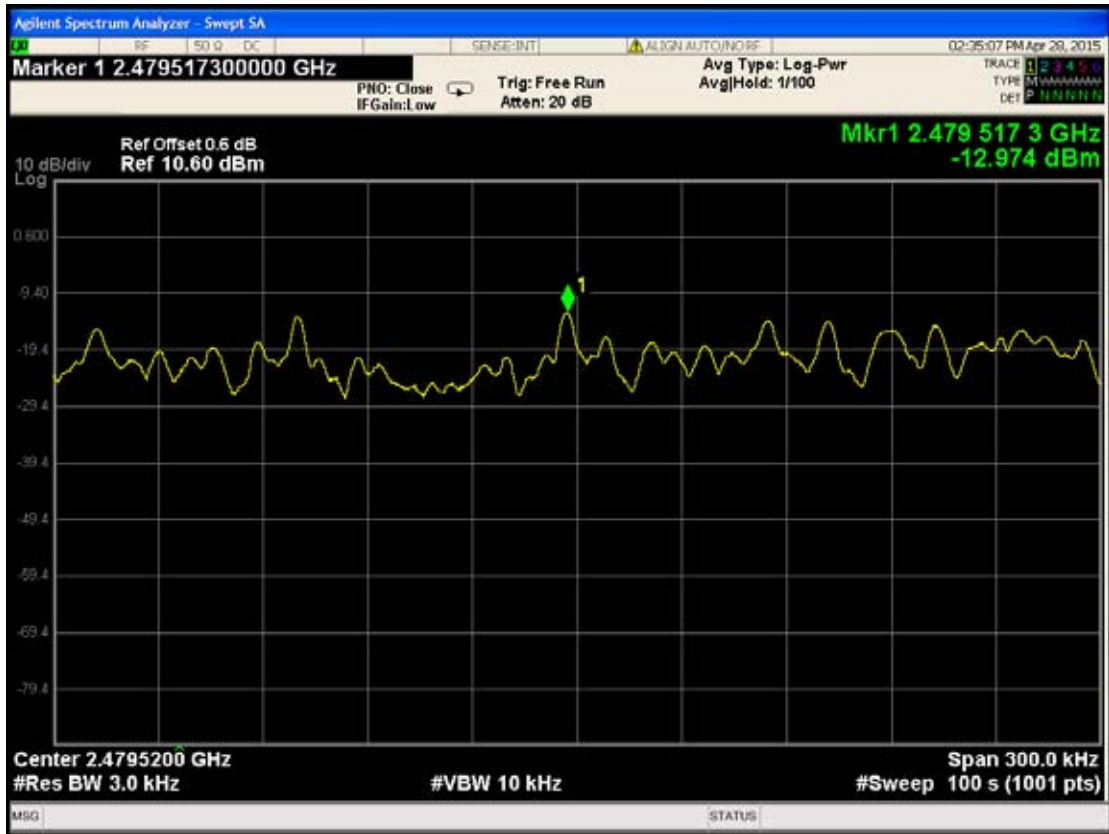
For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

8.4. Test Results

PASSED. All the test results are attached in next page.

Channel	Frequency(GHz)	Value(dBm/3kHz)
11	2.405	-13.885
20	2.450	-14.357
26	2.480	-12.974

CH 26



9. EMISSION LIMITATIONS MEASUREMENT

9.1. Test Equipment

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	PXA Signal Analyzer	Agilent	N9030A	MY53120367	2014-06-23	2015-06-22

9.2. Block Diagram of Test Setup

The same as section 5.2.

9.3. Specification Limits (§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) (see Section 15.205(c)).

9.4. Test Procedure

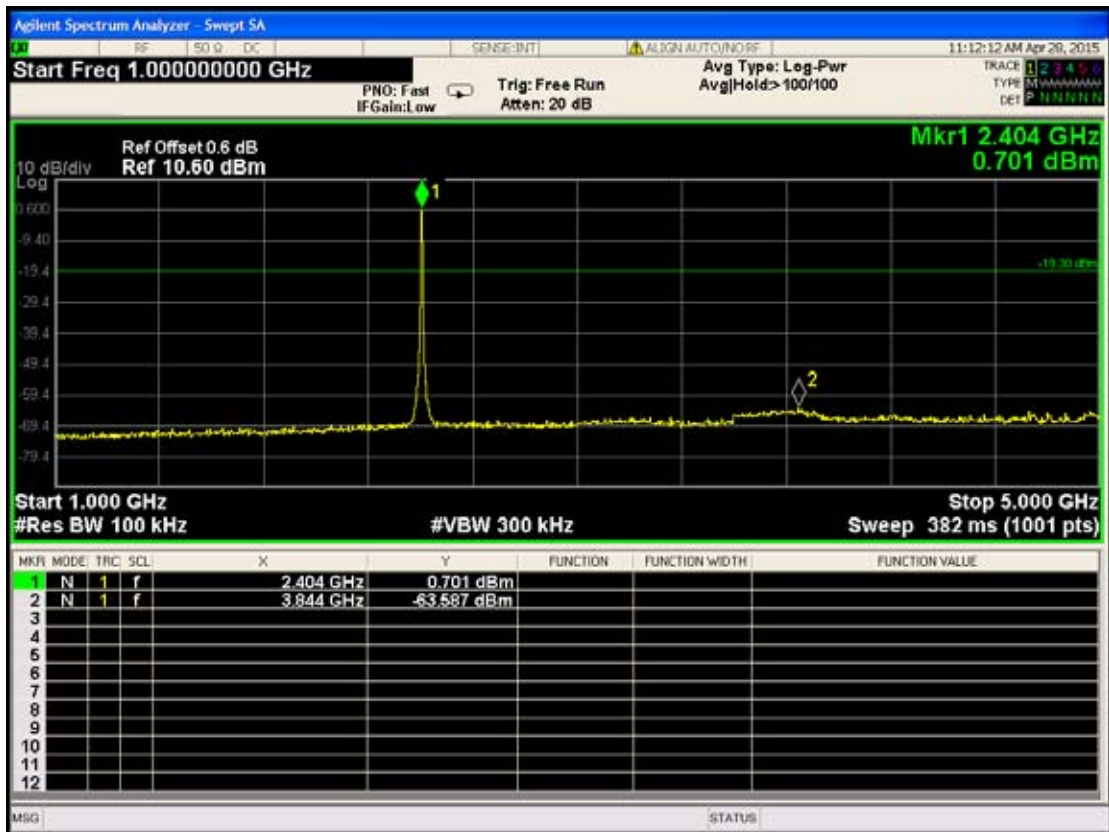
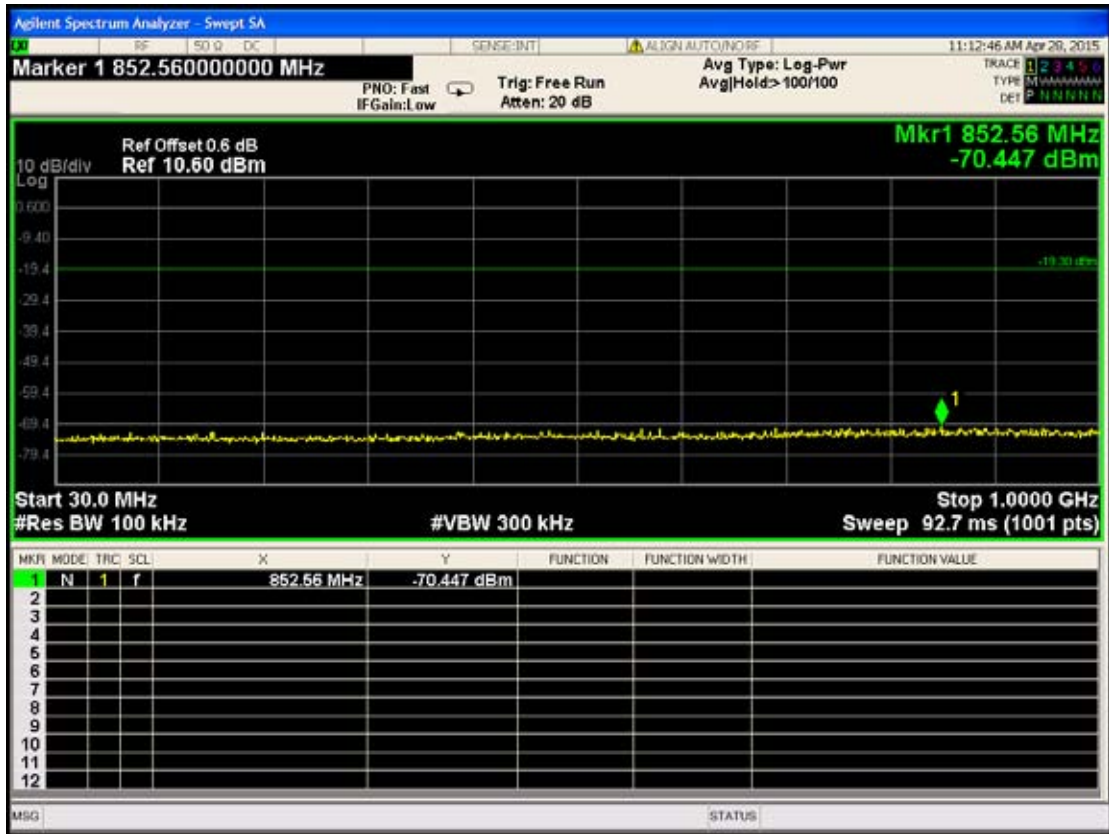
The transmitter output was connected to the spectrum analyzer. Set RBW = 100kHz, VBW \geq 300 kHz, scan up through 10th harmonic. All harmonics/spurs must be at least 20 dB down from the highest emission level within the authorized band as measured with a 100 kHz RBW. The measurement guideline was according to KDB558074 v03r02.

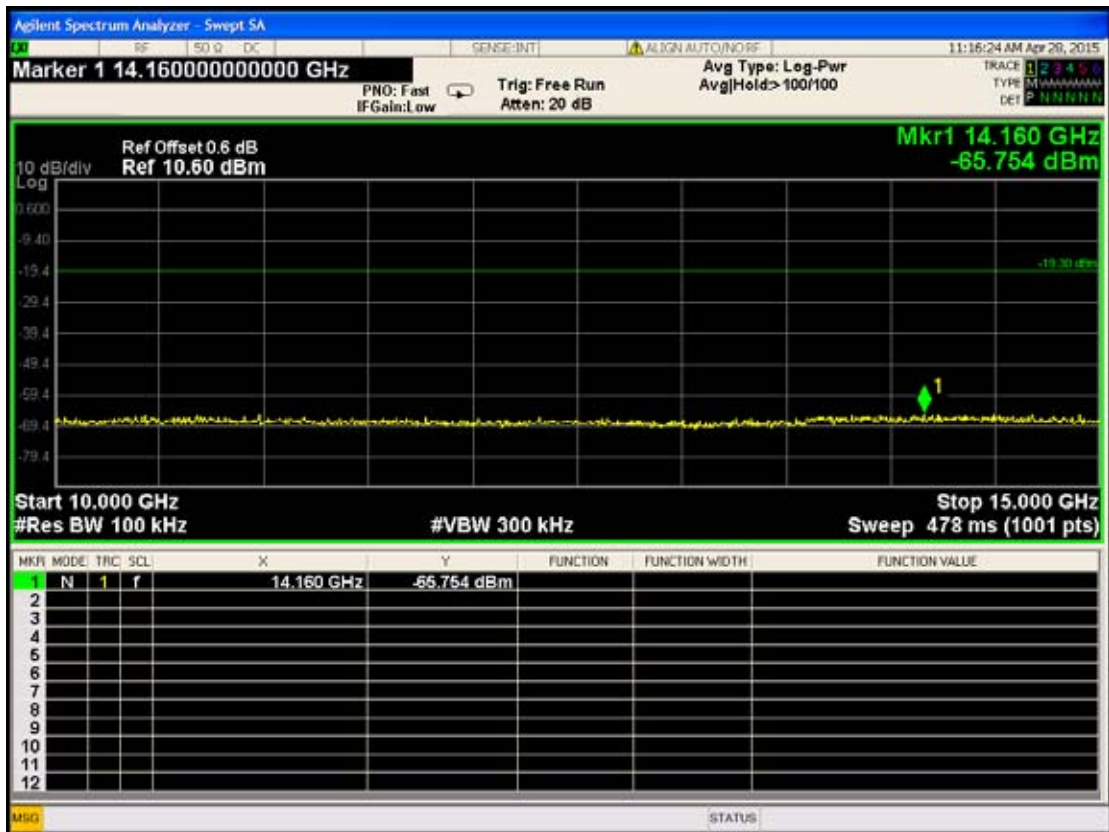
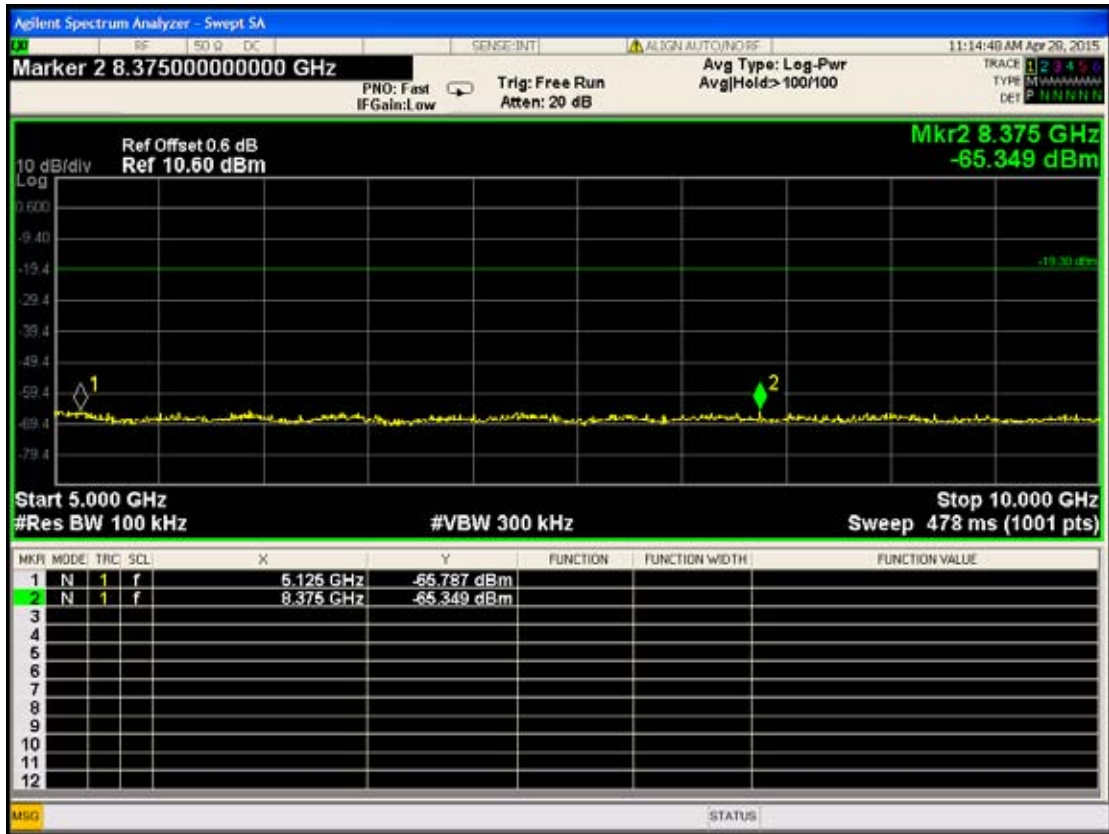
9.5. Test Results

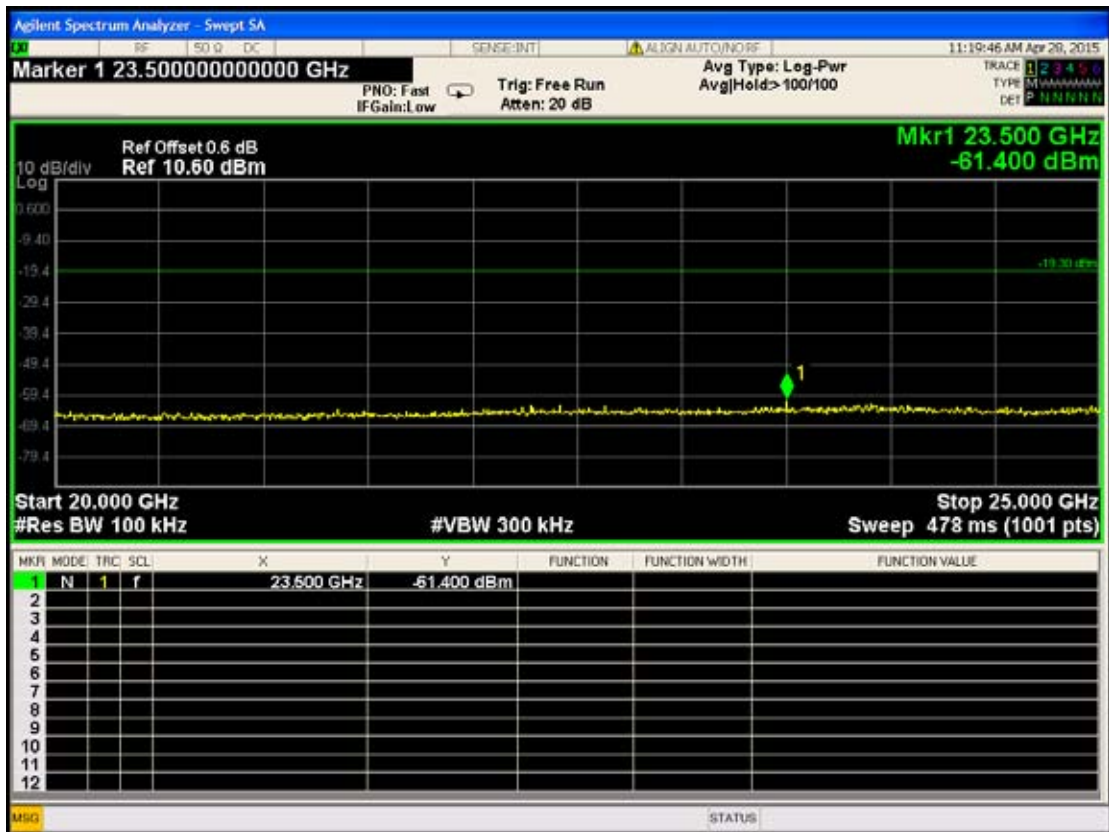
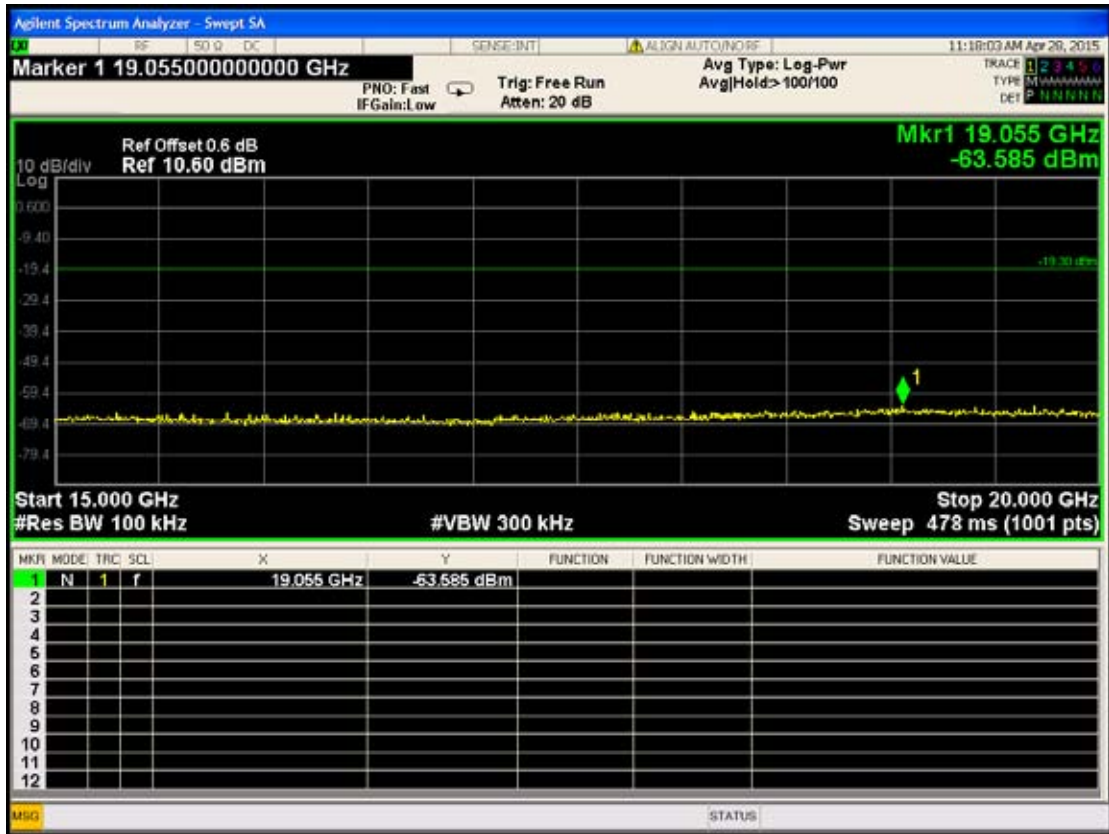
PASSED. All the test results are attached in next pages.

Channel	Frequency(MHz)	Amplitude(dBm)
11	852.56	-70.447
	2404	0.701
	3844	-63.587
	5125	-65.787
	8375	-65.349
	14160	-65.754
	19055	-63.585
	23500	-61.400
20	809.88	-70.333
	2448	0.628
	3820	-65.722
	5095	-65.534
	10315	-65.252
	18935	-64.306
	22850	-63.214
26	960.23	-69.741
	2480	0.646
	4800	-65.282
	5060	-66.311
	14300	-65.942
	19895	-64.592
	23800	-62.350

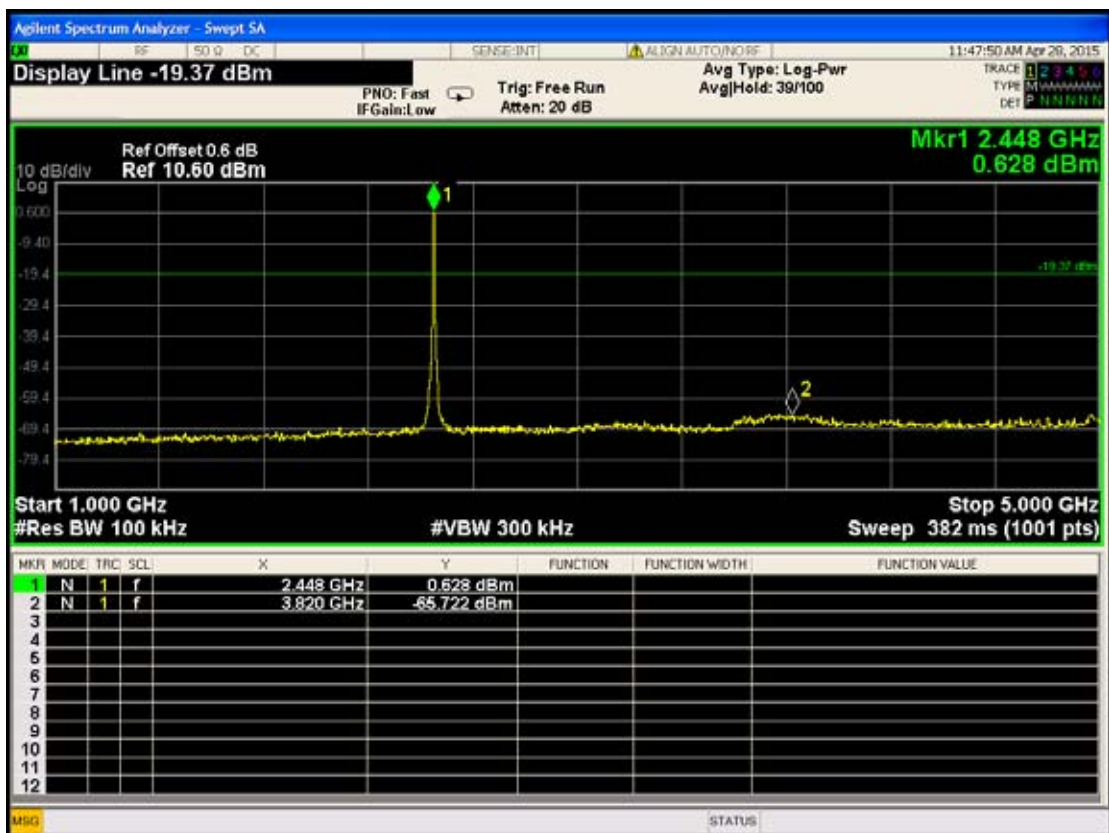
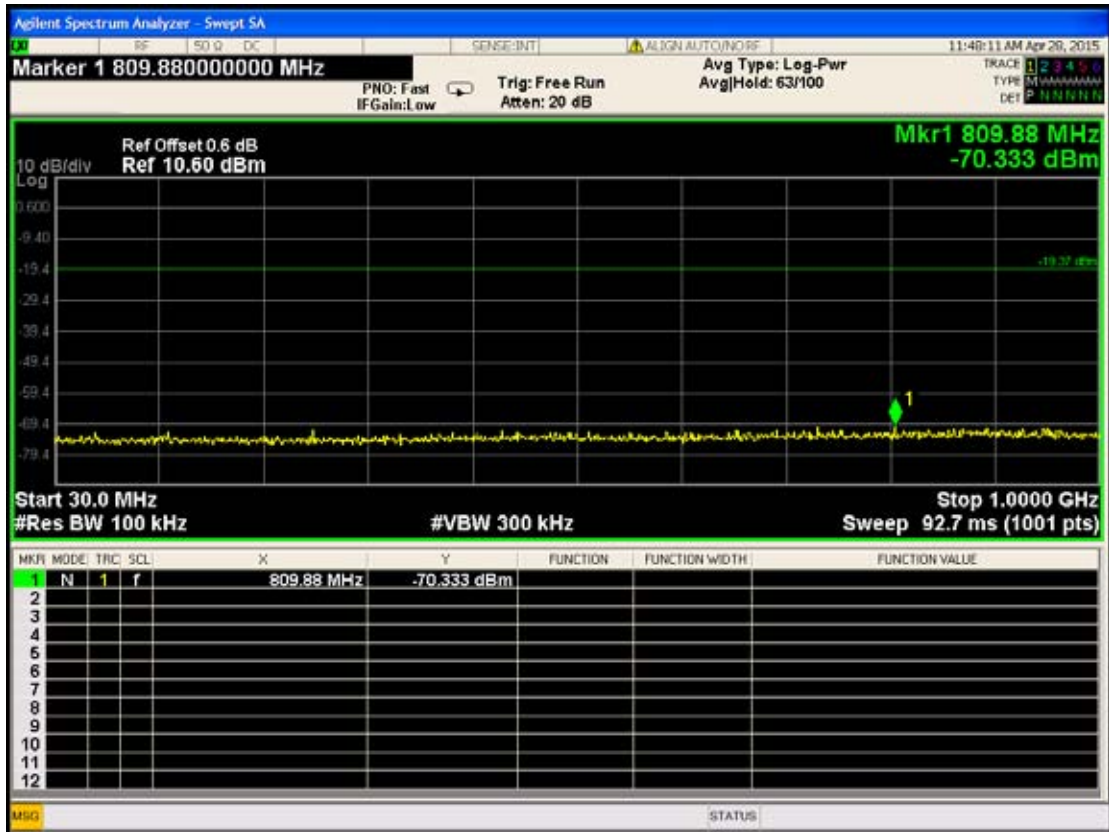
CH 11

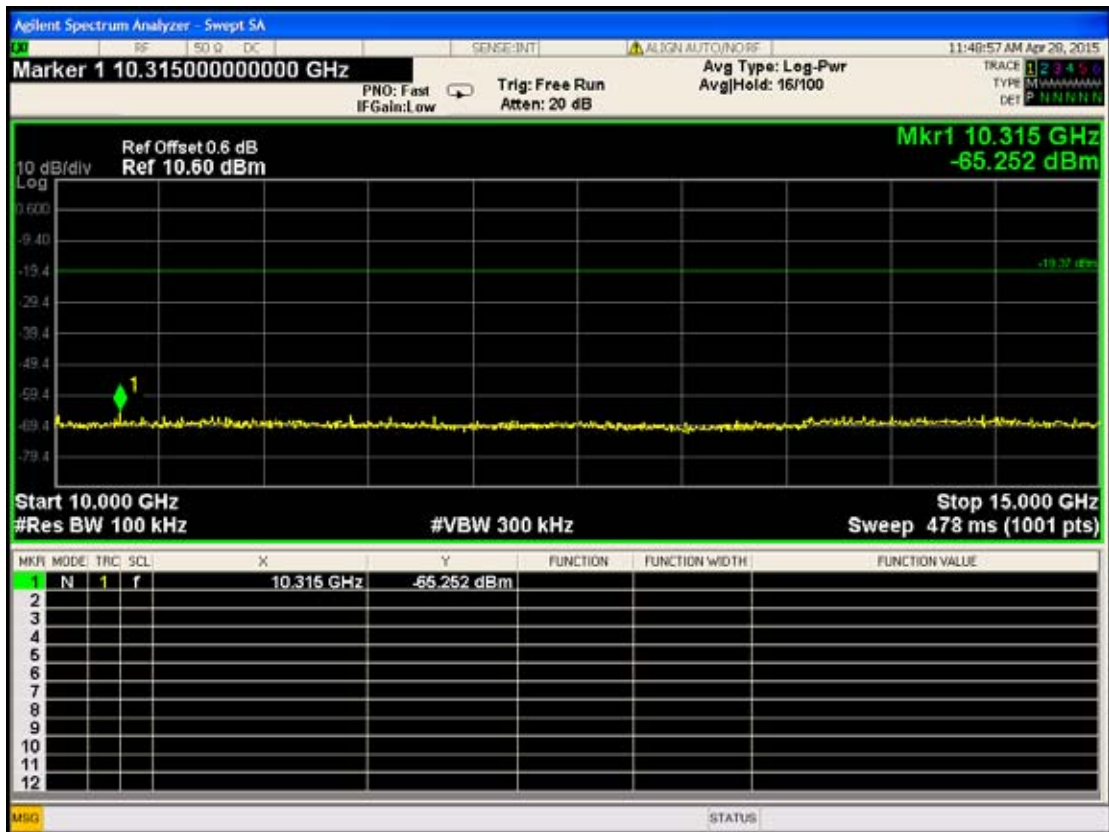
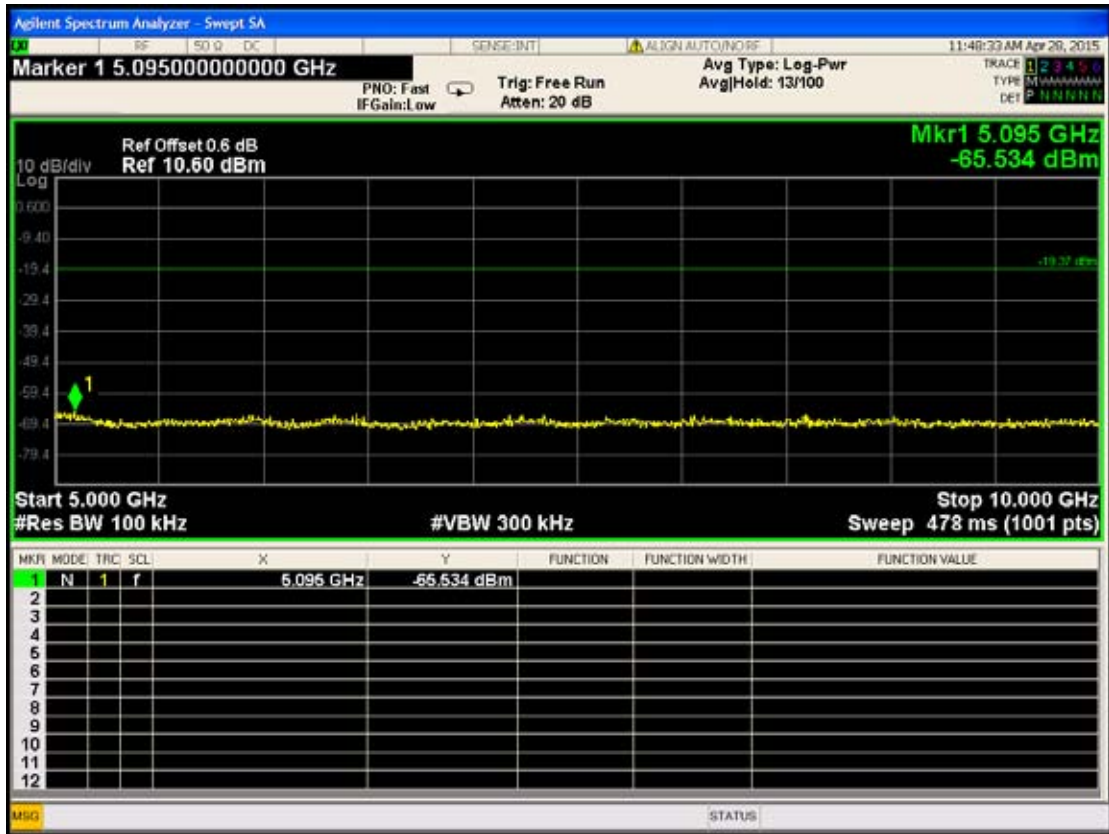


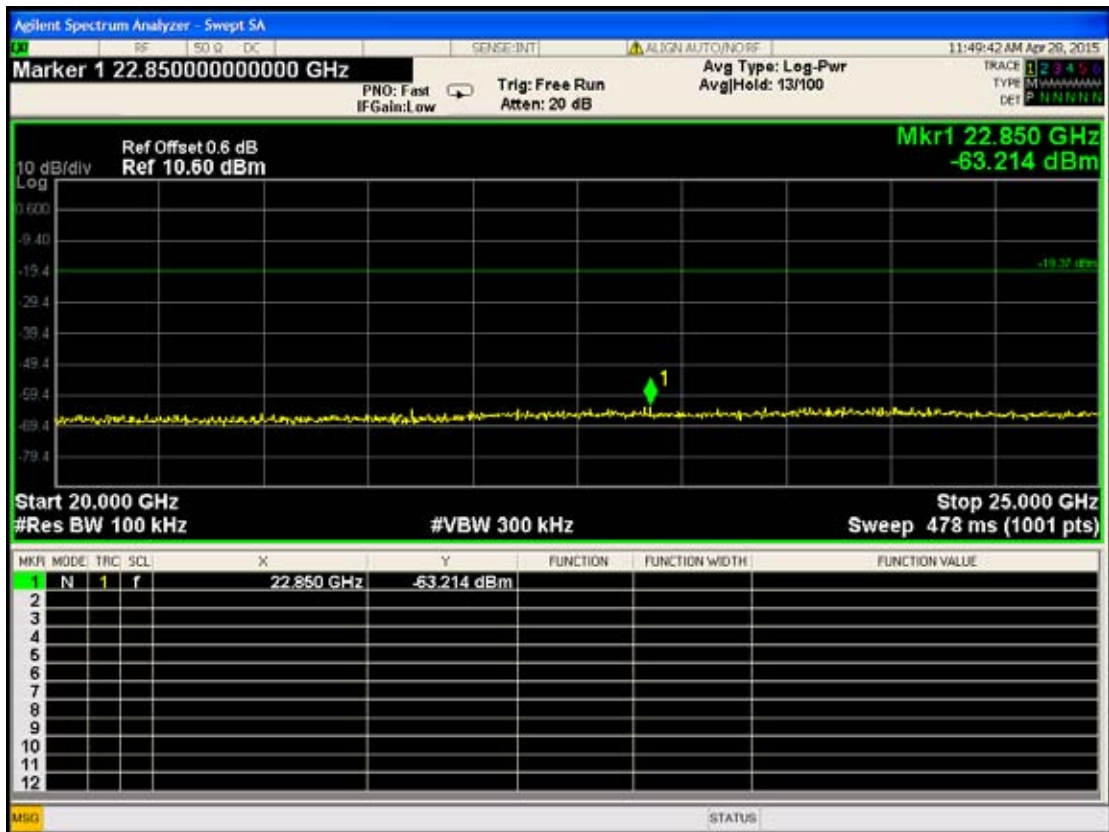
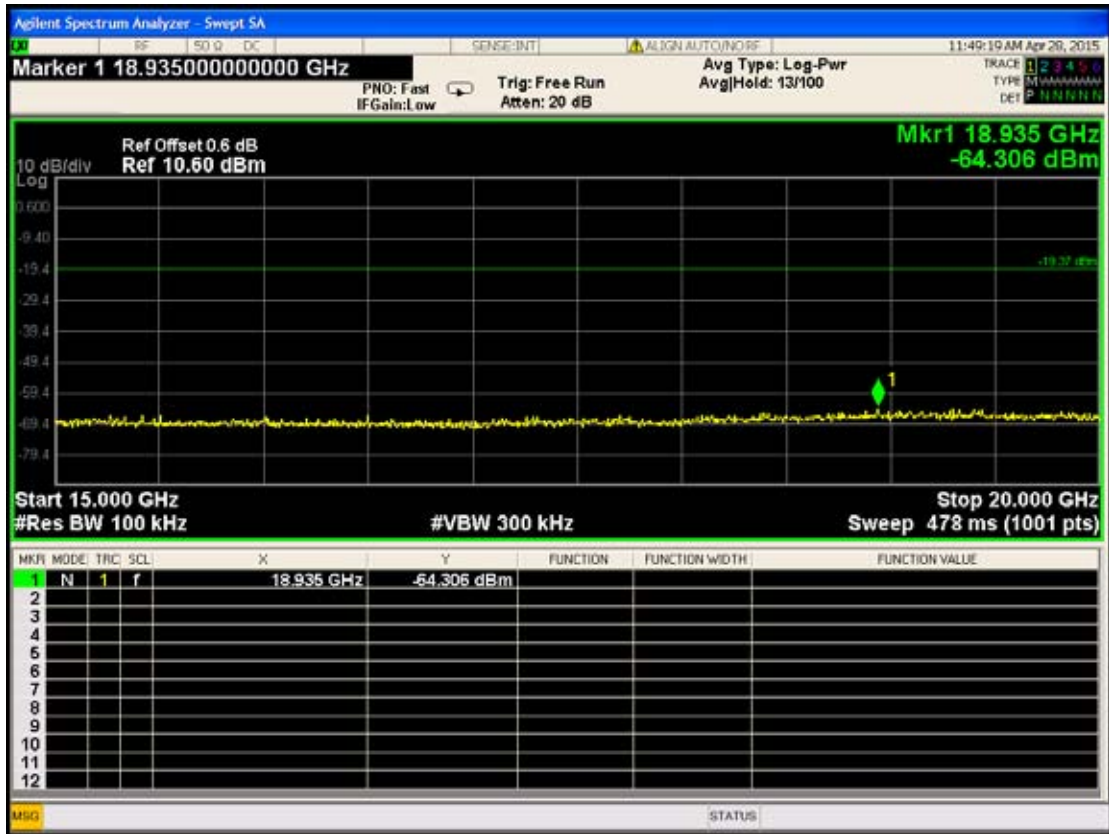




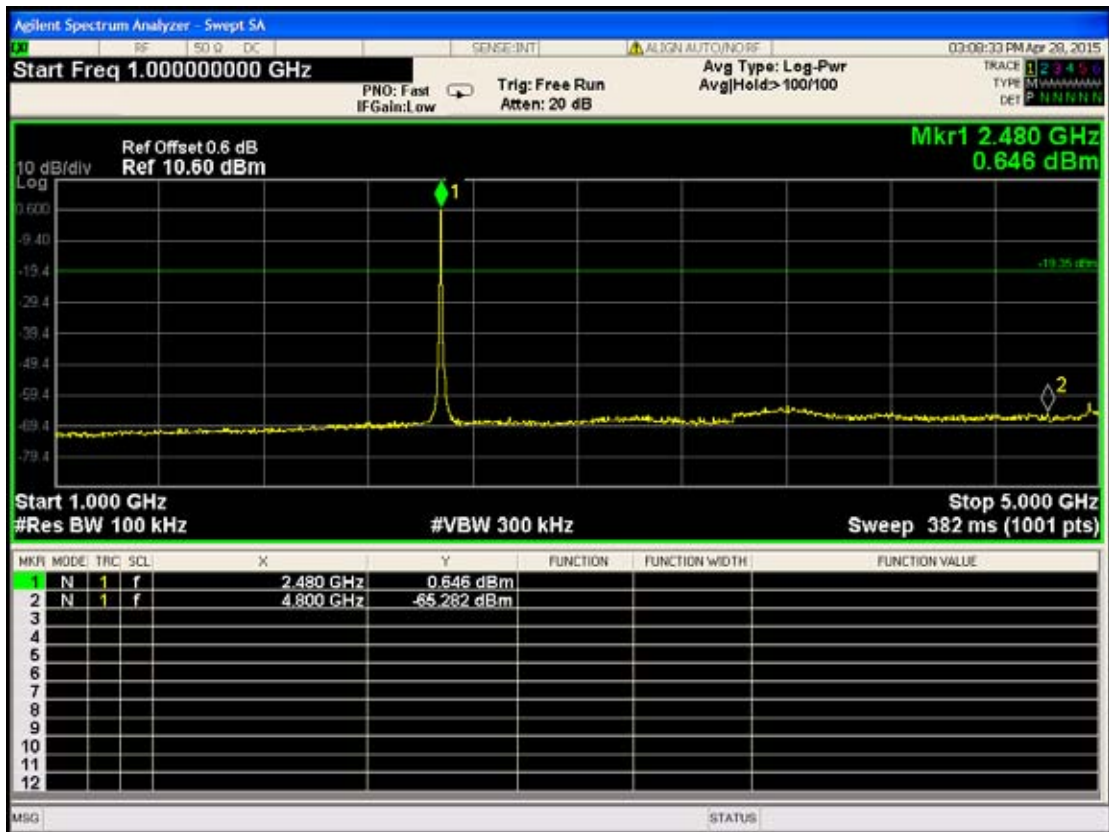
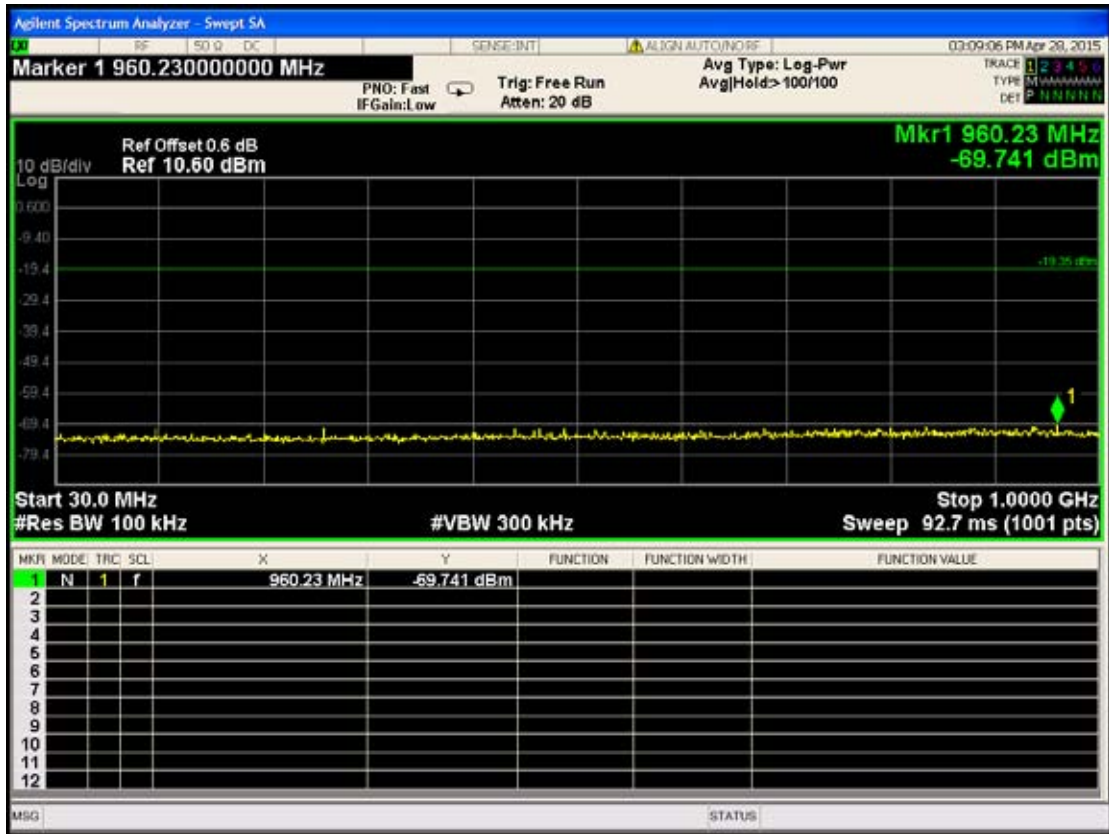
CH 20

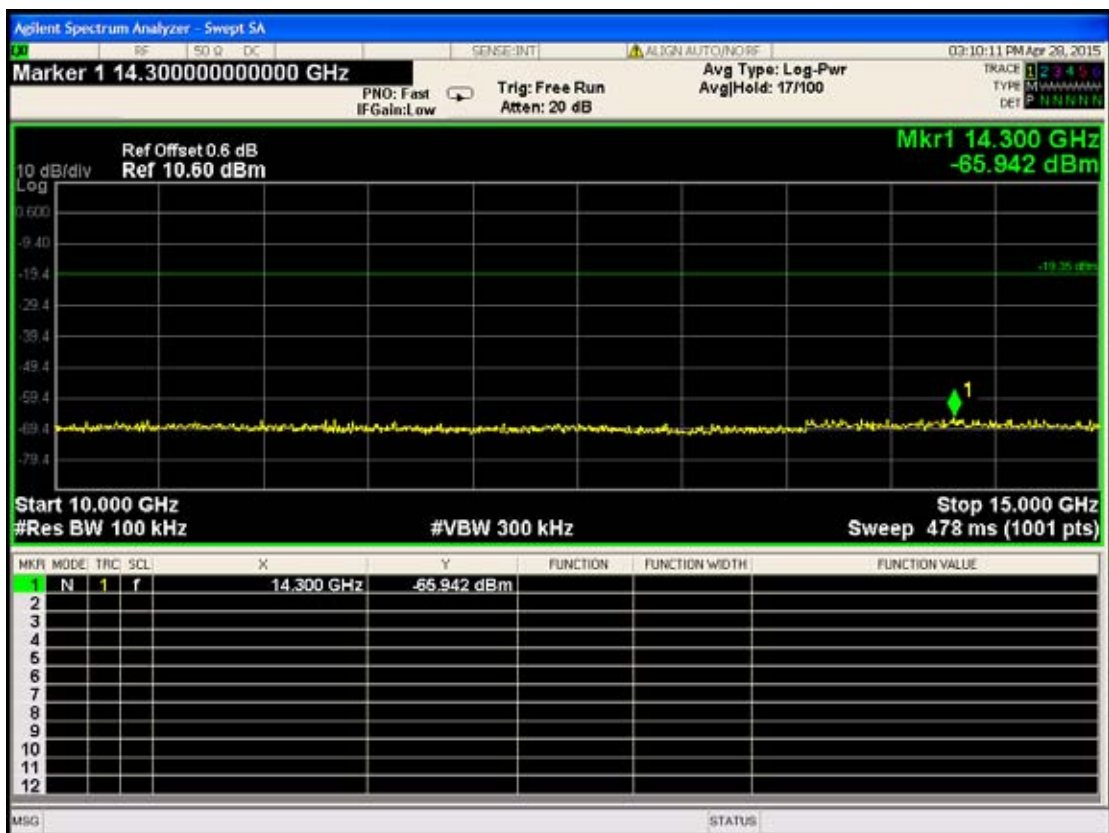
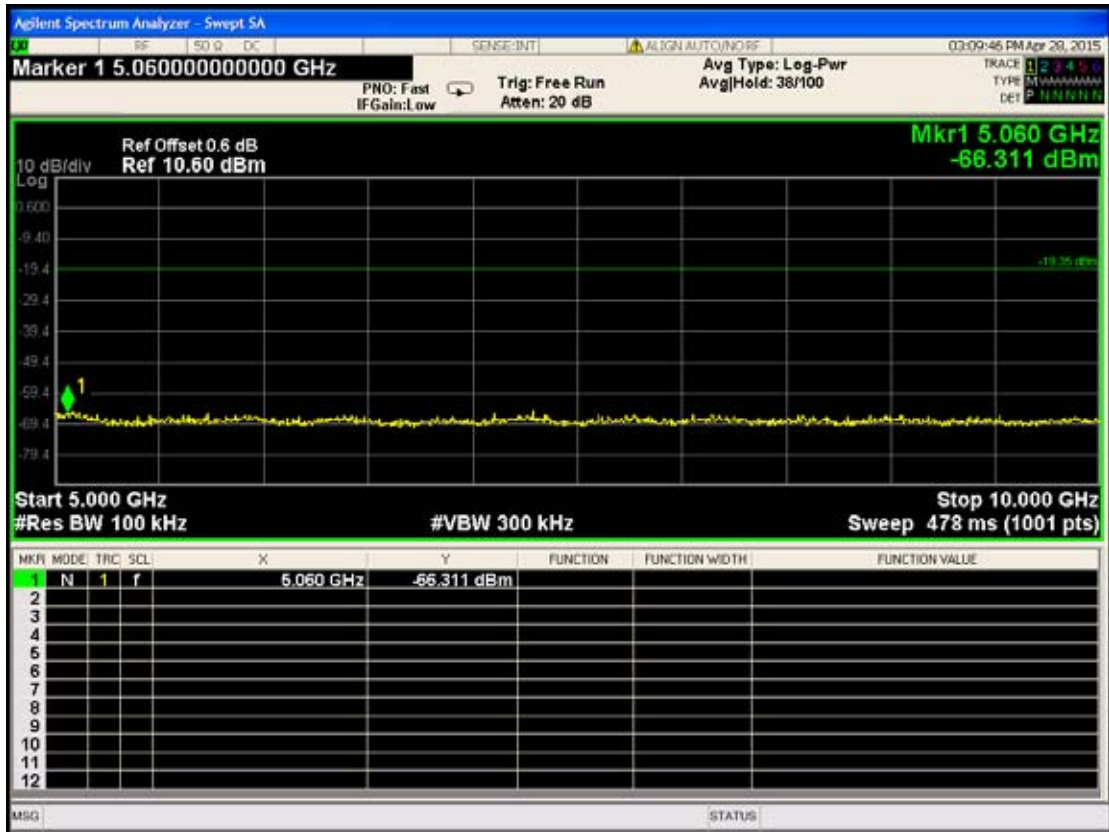


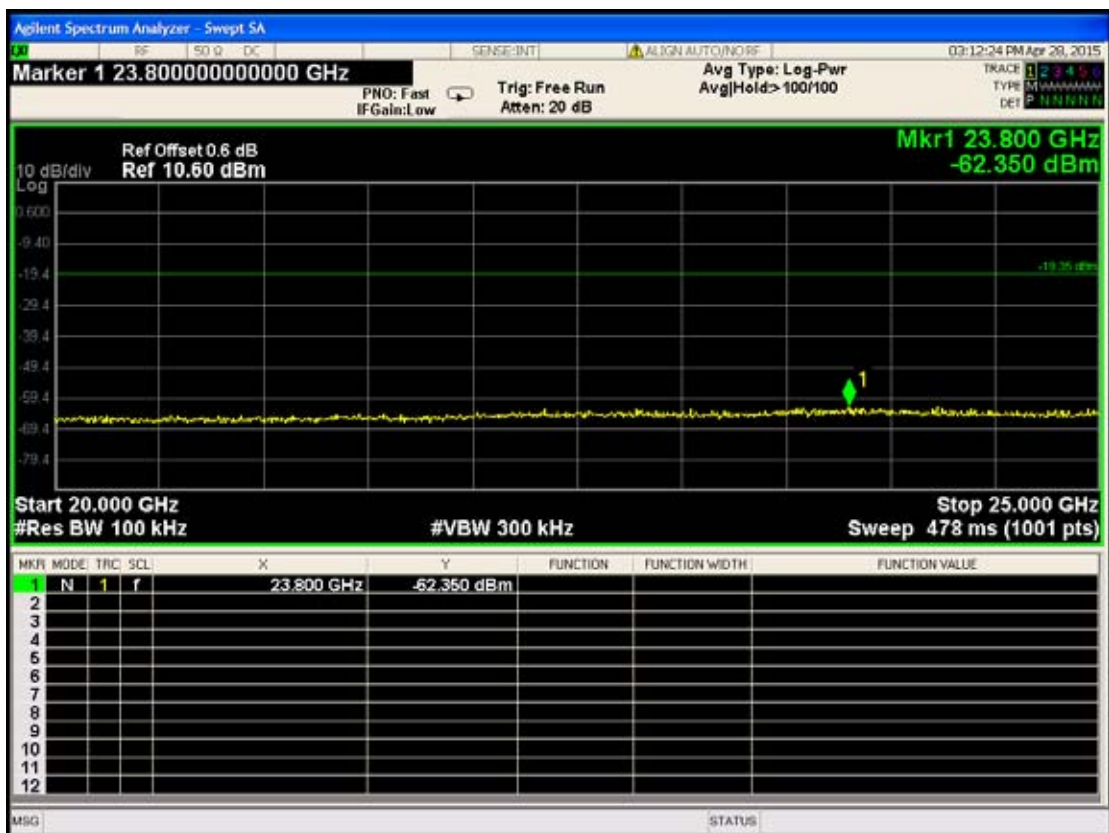
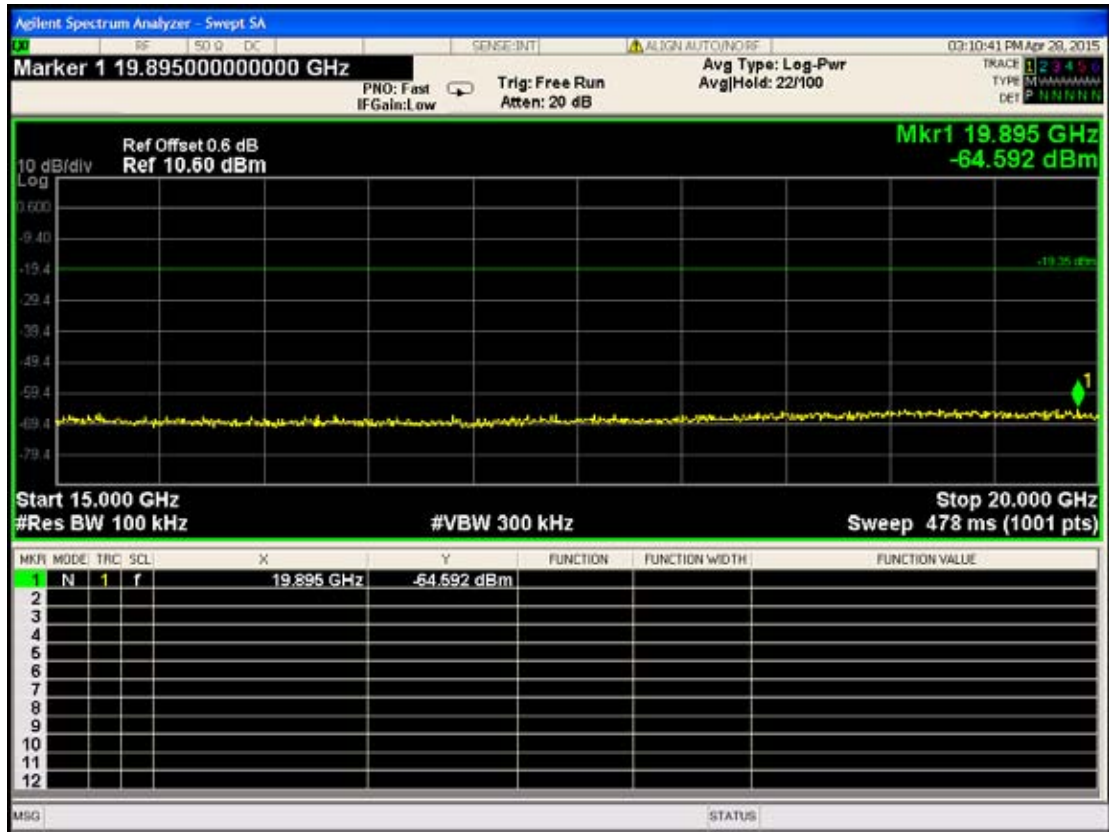




CH 26







10.DUTY CYCLE

10.1. Test Equipment

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1.	PXA Signal Analyzer	Agilent	N9030A	MY53120367	2014-06-23	2015-06-22

10.2. Test Results

The measurement of duty cycle is 100%.

CH 20



11.DEVIATION TO TEST SPECIFICATIONS

【NONE】