# FCC TEST REPORT

### For

#### **Mobile Phone**

Model Number: 7071A

FCC ID: 2ACCJBT06

Report Number : WT178004538

Test Laboratory : Shenzhen Academy of Metrology and Quality

Inspection

National Digital Electronic Product Testing Center

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#### **TEST REPORT DECLARATION**

Applicant : TCL Communication Ltd

Address : 5F, C-Tower, No.232, Liangjing Road, Zhangjiang High-tech

Park, Pudong, Shanghai, China

Manufacturer : TCL Communication Ltd

Address : 5F, C-Tower, No.232, Liangiing Road, Zhangjiang High-tech

Park, Pudong, Shanghai, China

EUT Description : Mobile Phone

Model No : 7071A

Trade mark : alcatel

Serial Number : /

FCC ID : 2ACCJBT06

Test Standards:

FCC Part 15 15.207, 15.209, 15.247(2016)

The EUT described above is tested by Shenzhen Academy of Metrology and Quality Inspection EMC Laboratory to determine the maximum emissions from the EUT. Shenzhen Academy of Metrology and Quality Inspection EMC Laboratory is assumed full responsibility for the accuracy of the test results. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.10 (2013) and the energy emitted by the sample EUT tested as described in this report is in compliance with FCC Rules Part 15.207, 15.209, 15.247.

The test report is valid for above tested sample only and shall not be reproduced in part without written approval of the laboratory.

Project Engineer:	林了林	Date:	Aug.28, 2017
	(Chen Silin 陈司林)		
Checked by:	村主狗	Date:	Aug.28, 2017
	(Lin Yixiang 林奕翔)		
Approved by:	种人	Date:	_Aug.28, 2017
	(Lin Bin 林斌)		

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# 1. TEST RESULTS SUMMARY

Table 1 Test Results Summary

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Test Items	FCC Rules	Test Results
6dB DTS bandwidth measurement	15.247 (a) (2)	Pass
Maximum Peak Conducted Power	15.247 (b) (3)	Pass
Maximum Power Spectral Density Level	15.247 (3)	Pass
Conducted Bandedge and Spurious	15.247 (d)	Pass
Radiated Bandedge and Spurious	15.247 (d) 15.209 15.205	Pass
Conducted emission test for AC power port	15.207	Pass
Antenna Requirment	15.203	Pass

Remark: "N/A" means "Not applicable."

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#### 2. GENERAL INFORMATION

#### 2.1.Report information

This report is not a certificate of quality; it only applies to the sample of the specific product/equipment given at the time of its testing. The results are not used to indicate or imply that they are application to the similar items. In addition, such results must not be used to indicate or imply that SMQ approves recommends or endorses the manufacture, supplier or use of such product/equipment, or that SMQ in any way guarantees the later performance of the product/equipment.

The sample/s mentioned in this report is/are supplied by Applicant, SMQ therefore assumes no responsibility for the accuracy of information on the brand name, model number, origin of manufacture or any information supplied.

Additional copies of the report are available to the Applicant at an additional fee. No third part can obtain a copy of this report through SMQ, unless the applicant has authorized SMQ in writing to do so.

#### 2.2. Laboratory Accreditation and Relationship to Customer

The testing report were performed by the Shenzhen Academy of Metrology and The testing report were performed by the Shenzhen Academy of Metrology and quality Inspection EMC Laboratory (Guangdong EMC compliance testing center), in their facilities located at NETC Building, No.4 Tongfa Rd., Xili, Nanshan, Shenzhen, China. At the time of testing, Laboratory is accredited by the following organizations:

China National Accreditation Service for Conformity Assessment (CNAS) accredits the Laboratory for conformance to FCC standards, EMC international standards and EN standards. The Registration Number is CNAS L0579.

The Laboratory is listed in the United States of American Federal Communications Commission (FCC), and the registration number is 582918.

The Laboratory is registered to perform emission tests with Industry Canada (IC), and the registration number is 11177A-1 11177A-2.

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TUV Rhineland accredits the Laboratory for conformance to IEC and EN standards, the registration number is E2024086Z02.

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# 2.3. Measurement Uncertainty

Conducted Emission 9kHz~30MHz 3.5dB

Radiated Emission 30MHz~1000MHz 4.5dB 1GHz~26.5GHz 4.6dB

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#### 3. PRODUCT DESCRIPTION

#### 3.1.EUT Description

Description : Mobile Phone

Manufacturer : TCL Communication Ltd

Model Number : 7071A

Operate : 2.412GHz~2.462GHz

Antenna

Designation Dipole Antenna 1.7dBi,

Remark: The modes of adaptor QC11US (1#), QC11RU (4#), QC11EU (5#), QC11ART (6#), QC11UK(7#) are identical in circuit design and PCB layout, the only difference is the plug type. The modes of adaptor QC11US (2#), QC11EU(8#), QC11UK (9#)are identical in circuit design and PCB layout, the only difference is the plug type. EMC tests were performed on the type QC11US (1#) and QC11US (2#).

- Two models of batteries provided, TLp038B1 and TLp038B7 respectively, Full tests were performed on model TLp038B1, and the worst case results are recorded in this report.
- 3. Two models of Earphones provided, 1# (Superb) and 2# (JUWEI) respectively, Full tests were performed on model 1# (Superb), and the worst case results are recorded in this report.
- 4. Two models of USB provided, 1# (PUAN) and 2# (JUWEI) respectively, Full tests were performed on model 1# (PUAN), and the worst case results are recorded in this report.

#### WLAN:

Table 2 Working Frequency List(802.11b, 802.11g,802.11n HT20)

Channel	Frequency	Channel	Frequency
1	2412MHz	8	2447MHz
2	2417MHz	9	2452MHz
3	2422MHz	10	2457MHz
4	2427MHz	11	2462MHz
5	2432MHz		
6	2437MHz		
7	2442MHz		

Table 3 Working Frequency List(802.11n HT40)

Channel	Frequency	Channel	Frequency
3	2422MHz	8	2447MHz
4	2427MHz	9	2452MHz
5	2432MHz		
6	2437MHz		
7	2442MHz		

#### 3.2. Related Submittal(s) / Grant (s)

This submittal(s) (test report) is intended for FCC ID: **2ACCJBT06** filing to comply with Section 15.207, 15.209, 15.247 of the FCC Part 15, Subpart C Rules.

### 3.3. Block Diagram of EUT Configuration



Figure 1 EUT setup

### 3.4. Operating Condition of EUT

The Radiated spurious emission measurements were carried out in semi-anechoic chamber with 3-meter test range, and EUT is rotated on three test planes to find out the worst emission (X plane).

Worst-case mode and channel used for 30-1000 MHz radiated and power line conducted emissions was the mode and channel with the highest output power.

Worst-case data rates as provided by the client were:

802.11b mode: 1 Mbps 802.11g mode: 6 Mbps 802.11n HT20 mode: MCS0 802.11n HT40 mode: MCS0

802.11b and 802.11g operates in SISO mode. For SISO conducted

measurements, the modes tested in this report will be considered as a worst case mode.

802.11n operate in SISO mode. For SISO conducted

measurements, the modes tested in this report will be considered as a worst case mode.

#### 3.5. Directional Antenna Gain

The EUT does NOT support a WIFI MIMO function. Directional gain need NOT to be considered.

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# 3.6. Support Equipment List

Table 4 Support Equipment List

Name	Model No	S/N	Manufacturer
Adaptor 1# for EUT	QC11US		Ten Pao Industrial Co.,Ltd.
Adaptor 2# for EUT	QC11US		Huizhou BYD Electronic Co.,Ltd.
Adaptor 3# for EUT	UC13EU		Huizhou BYD Electronic Co.,Ltd.
Adaptor 4# for EUT	QC11RU		Ten Pao Industrial Co.
Adaptor 5# for EUT	QC11EU		Ten Pao Industrial Co.
Adaptor 6# for EUT	QC11ART		Ten Pao Industrial Co.
Adaptor 7# for EUT	QC11UK		Ten Pao Industrial Co.
Adaptor 8# for EUT	QC11EU		Huizhou BYD Electronic Co.,Ltd.
Adaptor 9# for EUT	QC11UK		Huizhou BYD Electronic Co.,Ltd.
USB 1# for EUT			PUAN
USB 2# for EUT			JUWEI
Battery 1# for EUT	TLp038B1		Shenzhen BYD Lithium Battery Company Limited
Battery 2# for EUT	TLp038B7		Ningbo Veken Battery Co.,Ltd.
Earphone 1# for EUT			Dong Guan Superb electronic Co.,Ltd.
Earphone 2# for EUT			HUIZHOU JUWEI ELECTRONICS CO.,LTD

#### 3.7. Test Conditions

Date of test: Aug.01,2017- Aug.25, 2017 Date of EUT Receive: Aug.01,2017

Temperature: 18 ~ 24 °C Relative Humidity: 39-61%

#### 3.8. Special Accessories

Not available for this EUT intended for grant.

### 3.9. Equipment Modifications

Not available for this EUT intended for grant.

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# 4. TEST EQUIPMENT USED

Table 5 Test Equipment

No.	Equipment	Manufacturer	Model No.	Last Cal.	Cal.
					Interval
SB3319	EMI Test Receiver	Rohde & Schwarz	ESCS30	Nov.29, 2016	1 Year
SB4357	AMN	Rohde & Schwarz	ESH2-Z5	Sep.29, 2016	1 Year
SB3436	EMI Test Receiver	Rohde & Schwarz	ESI26	Nov.29, 2016	1 Year
SB8501/09	EMI Test Receiver	Rohde & Schwarz	ESU40	Mar.21, 2017	1 Year
SB8501/04	Bilog Antenna	Schwarzbeck	VULB9163	Mar.21, 2017	1 Year
SB3955	Bilog Antenna	Schwarzbeck	VULB9163	Mar.22 ,2017	1 Year
SB3435	Horn Antenna	Rohde & Schwarz	HF906	Jan.03, 2017	1 Year
SB8501/01	Horn Antenna	Rohde & Schwarz	HF907	Mar.22, 2017	1 Year
SB8501/11	Horn Antenna	ETS-Lindgren	3160-09	Mar.1,2017	1 Year
SB3345	Loop Antenna	Schwarzbeck	FMZB1516	Mar.22, 2017	2 Years
SB8501/14	Preamplifier	Rohde & Schwarz	SCU-03	Mar.19, 2017	1 Year
SB8501/16	Preamplifier	Rohde & Schwarz	SCU-26	Mar.06, 2017	1 Year
SB8501/17	Preamplifier	Rohde & Schwarz	SCU-18	Mar.06, 2017	1 Year
SB12827/01	Power Sensor	Rohde & Schwarz	NRP-Z22	Jun.19, 2017	1 Year
SB11873/01	Power Sensor	Rohde & Schwarz	OSP120+OSP- B157	Mar.13, 2017	1 Year
	Test Software	Rohde & Schwarz	Power Viewer Plus		
SB7941/02	Signal Analyzer	Rohde & Schwarz	FSU26	Jun.19,2017	1 Year

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# 5. DUTY CYCLE

#### **5.1.LIMITS OF DUTY CYCLE**

None; for reporting purposes only

# **5.2.TEST PROCEDURE**

- 1. Set span = Zero
- 2. RBW = 10MHz
- 3. VBW = 10MHz,
- 4. Detector = Peak

#### 5.3.TEST SETUP



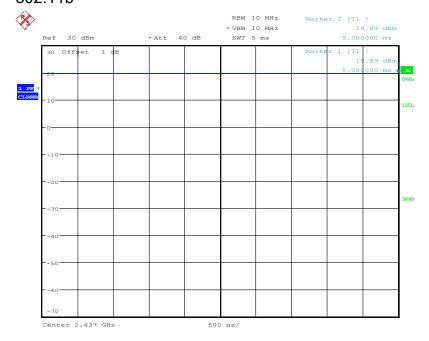
#### 5.4.TEST DATA

Table 6 Duty Cycle Test Data

Mode	On Time (ms)	Duty Cycle(%)	Duty Factor	1/T Minimum VBW (kHz)
802.11b	5	100	0	0.01
802.11g	1.394	96.9%	0.14	1
802.11n HT20	1.306	96.7%	0.15	1
802.11N HT40	0.551	94.8%	0.23	1

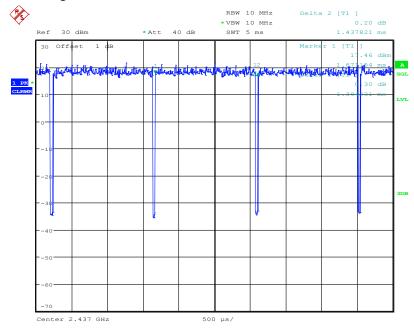
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# 802.11b



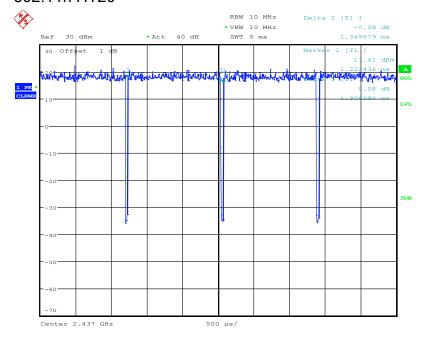
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# 802.11g



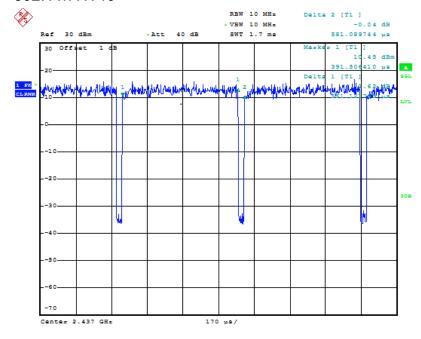
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#### 802.11n HT20



Date: 4.JAN.2003 02:42:59

#### 802.11n HT40



Date: 4.JAN.2003 02:44:20

#### 6. 6DB BANDWIDTH MEASUREMENT

#### 6.1.LIMITS OF 6dB BANDWIDTH MEASUREMENT

CFR 47 (FCC) part 15.247 (a) (2), 558074 D01 DTS Meas Guidance v03r05

#### **6.2.TEST PROCEDURE**

The transmitter output was connected to the spectrum analyzer.

- a) Set RBW = 100 kHz.
- b) Set the video bandwidth (VBW)  $\geq 3 \times RBW$ .
- c)Detector = Peak.
- d)Trace mode = max hold.
- e)Sweep = auto couple.
- f)Allow the trace to stabilize.
- g)Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

#### 6.3. TEST SETUP

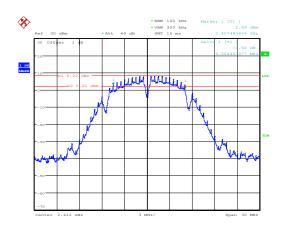


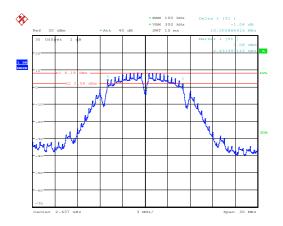
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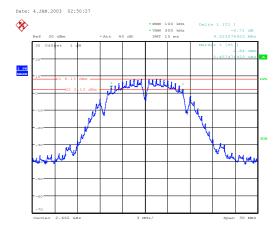
# Test Data

Table 7 6dB Bandwidth Test Data 802.11b

rable read barraman reer barra cellino				
CHANNEL	6dB			
FREQUENCY	BANDWIDTH	results		
(MHz)	(MHz)			
2412	9.564	Pass		
2437	10.003	Pass		
2462	9.523	Pass		







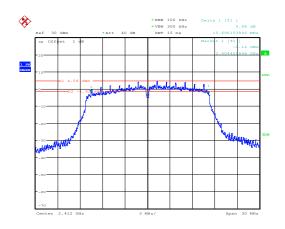
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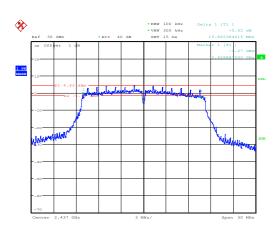
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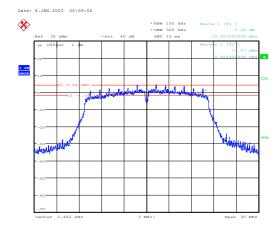
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Table 8 6dB Bandwidth Test Data 802.11g

Table e cab ballamatil Teet bata cezil ig				
CHANNEL	6dB			
<b>FREQUENCY</b>	BANDWIDTH	results		
(MHz)	(MHz)			
2412	15.696	Pass		
2437	15.865	Pass		
2462	15.458	Pass		





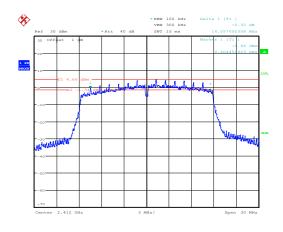


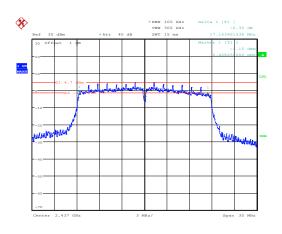
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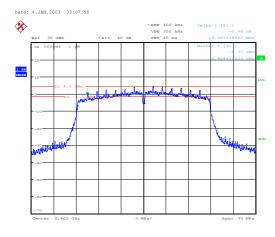
Date: 4.JAN.2003 03:03:41

Table 9 6dB Bandwidth Test Data 802.11n HT20

Table C cab Ballawidth Tool Bala Coz. 1 11111120				
CHANNEL	6dB			
FREQUENCY	BANDWIDTH	results		
(MHz)	(MHz)			
2412	16.058	Pass		
2437	17.163	Pass		
2462	15.961	Pass		





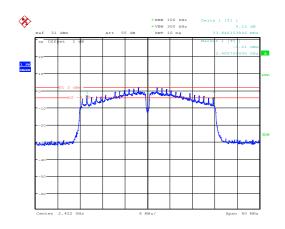


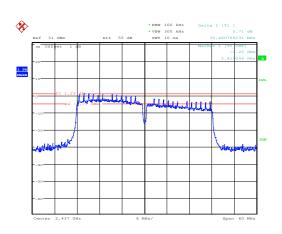
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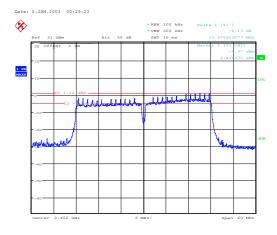
Date: 4.JAN.2003 03:34:27

Table 10 6dB Bandwidth Test Data 802.11n HT40

Table 10 cas saliamani 1000 sala cosili ili 10					
CHANNEL	6dB				
FREQUENCY	BANDWIDTH	results			
(MHz)	(MHz)				
2422	33.846	Pass			
2437	35.481	Pass			
2452	35.577	Pass			







Date: 5.JAN.2003 00:28:50

Date: 5.JAN.2003 00:32:54

#### 7. MAXIMUM CONDUCTED OUTPUT POWER MEASUREMENT

#### 7.1.LIMITS OF Maximum Conducted Output Power Measurement

CFR 47 (FCC) part 15.247 (b) (3), 558074 D01 DTS Meas Guidance v03r05

#### 7.2. TEST PROCEDURE

The transmitter output was connected to the RF power meter.

- a) Using a wideband RF power meter with a thermocouple detector or equivalent if all of the conditions listed below are satisfied.
- 1) The EUT is configured to transmit continuously, or to transmit with a constant duty factor.
- 2) At all times when the EUT is transmitting, it shall be transmitting at its maximum power control level.
- 3) The integration period of the power meter exceeds the repetition period of the transmitted signal by at least a factor of five.
- b) If the transmitter does not transmit continuously, measure the duty cycle (x) of the transmitter output signal as described in Section 6.0.
- c) Measure the average power of the transmitter. This measurement is an average over both the on and off periods of the transmitter.
- d) Adjust the measurement in dBm by adding 10log (1/x), where x is the duty cycle to the measurement result.

#### 7.3. TEST SETUP



#### 7.4. TEST DATA

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Table 11 Maximum Conducted Output Power Test Data 802.11b

Center Freq.[MHz]	Meas. Level (Cond.) [dBm]	Duty	Maximum Conducted Output Power(Average) [dBm]	Limit [dBm]	Result
2412	16.74	0	16.74	< 30	Pass
2437	17.09	0	17.09	< 30	Pass
2462	16.83	0	16.83	< 30	Pass

Table 12 Maximum Conducted Output Power Test Data 802.11g

able 12 maximum conducted output 1 one 1 oct bata coz.1119							
Center Freq.[MHz]	Meas. Level (Cond.) [dBm]	Duty	Maximum Conducted Output Power(Average) [dBm]	Limit [dBm]	Result		
2412	15.1	0.14	15.24	< 30	Pass		
2437	14.89	0.14	15.03	< 30	Pass		
2462	14.62	0.14	14.76	< 30	Pass		

Table 13 Maximum Conducted Output Power Test Data 802.11n HT20

able 15 Maximum Conducted Output I ower Test Data 602.1111111120						
Center Freq.[MHz]	Meas. Level (Cond.) [dBm]	Duty Factor	Maximum Conducted Output Power(Average) [dBm]	Limit [dBm]	Result	
2412	14.09	0.15	14.24	< 30	Pass	
2437	14.9	0.15	15.05	< 30	Pass	
2462	15.15	0.15	15.30	< 30	Pass	

Table 14 Maximum Conducted Output Power Test Data 802.11n HT40

Center Freq.[MHz]	Meas. Level (Cond.) [dBm]	Duty Factor	I/ Nuthout	Limit [dBm]	Result
2422	14.04	0.23	14.27	< 30	Pass
2437	14.09	0.23	14.32	< 30	Pass
2452	14.05	0.23	14.28	< 30	Pass

# 8. MAXIMUM POWER SPECTRAL DENSITY LEVEL MEASUREMENT

#### 8.1.LIMITS OF Maximum Power Spectral Density Level Measurement

CFR 47 (FCC) part 15.247 (e), 558074 D01 DTS Meas Guidance v03r05

#### **8.2.TEST PROCEDURE**

The transmitter output was connected to the spectrum analyzer.

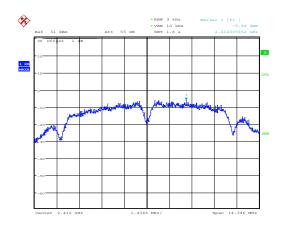
- a)Set analyzer center frequency to DTS channel center frequency.
- b) Set the span to 1.5 times the DTS bandwidth.
- c) Set RBW to: 3kHz≤RBW≤100 kHz.
- d) Set VBW  $\geq$  3 x RBW.
- e) Detector = peak.
- f) Sweep time = auto couple.
- g) Trace mode = max hold.
- h)Allow trace to fully stabilize.
- i)Use the peak marker function to determine the maximum amplitude level within the RBW.
- j)If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

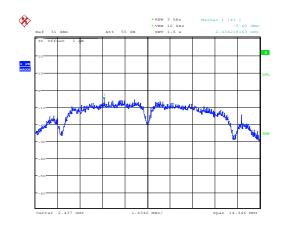
#### 8.3. TEST DATA

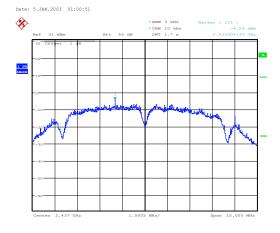
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Table 15 Maximum Power Spectral Density Level Test Data 802.11b

Center Freq.[MHz]		Duty Factor	Maximum Power Spectral Density [dBm]	l imit	Result
2412	-5.84	0	-5.84	8	Pass
2437	-5.60	0	-5.60	8	Pass
2462	-4.24	0	-4.24	8	Pass





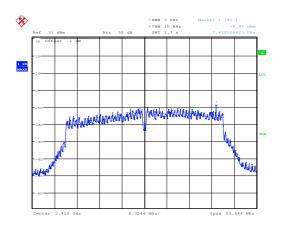


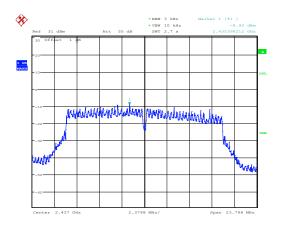
Date: 5.JAN.2003 01:01:42

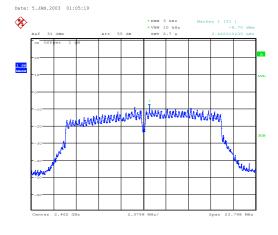
Date: 5.JAN.2003 01:03:29

Table 16 Maximum Power Spectral Density Level Test Data 802.11g

Center Freq.[MHz]	Meas.Level [dBm]	Duty Factor	Shootral	l imit	Result
2412	-9.87	0.14	-9.73	8	Pass
2437	-8.93	0.14	-8.79	8	Pass
2462	-8.70	0.14	-8.56	8	Pass





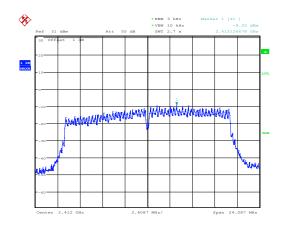


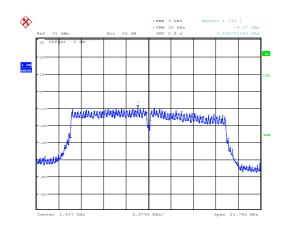
Date: 5.JAN.2003 01:06:06

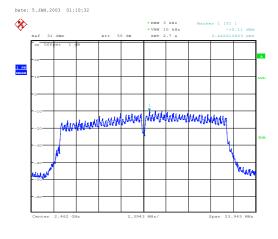
Date: 5.JAN.2003 01:07:46

Table 17 Maximum Power Spectral Density Level Test Data 802.11n HT20

Center Freq.[MHz]	Meas.Level [dBm]	Duty	Shootral	l imit	Result
2412	-9.00	0.15	-8.85	8	Pass
2437	-9.37	0.15	-9.22	8	Pass
2462	-10.11	0.15	-9.96	8	Pass





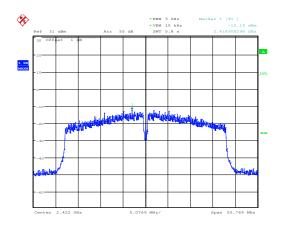


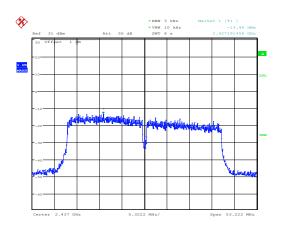
Date: 5.JAN.2003 01:13:44

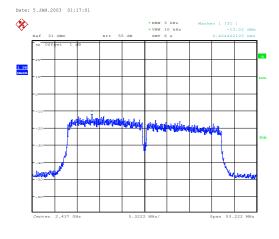
Date: 5.JAN.2003 01:15:21

Table 18 Maximum Power Spectral Density Level Test Data 802.11n HT40

Center Freq.[MHz]	Meas.Level [dBm]	Duty	Maximum Power Spectral Density [dBm]	l imit	Result
2422	-12.19	0.15	-12.01	8	Pass
2437	-13.44	0.15	-13.29	8	Pass
2452	-13.22	0.15	-13.07	8	Pass







Date: 5.JAN.2003 01:18:36

Date: 5.JAN.2003 01:18:42

#### 9. CONDUCTED BANDEDGE AND SPURIOUS MEASURMENT

#### 9.1.LIMITS OF Conducted Bandedge and Spurious Measurement

CFR 47 (FCC) part 15.247 (d) and 558074 D01 DTS Meas Guidance v03r05

#### 9.2. TEST PROCEDURE

The transmitter output was connected to the spectrum analyzer.

Establish a reference level by using the following procedure:

- a)Set instrument center frequency to DTS channel center frequency.
- b)Set the span to  $\geq$  1.5 times the DTS bandwidth.
- c)Set the RBW = 100 kHz.
- d)Set the VBW  $\geq$  3 x RBW.
- e)Detector = peak.
- f)Sweep time = auto couple.
- g)Trace mode = max hold.
- h)Allow trace to fully stabilize.
- i)Use the peak marker function to determine the maximum PSD level.

Emission level measurement

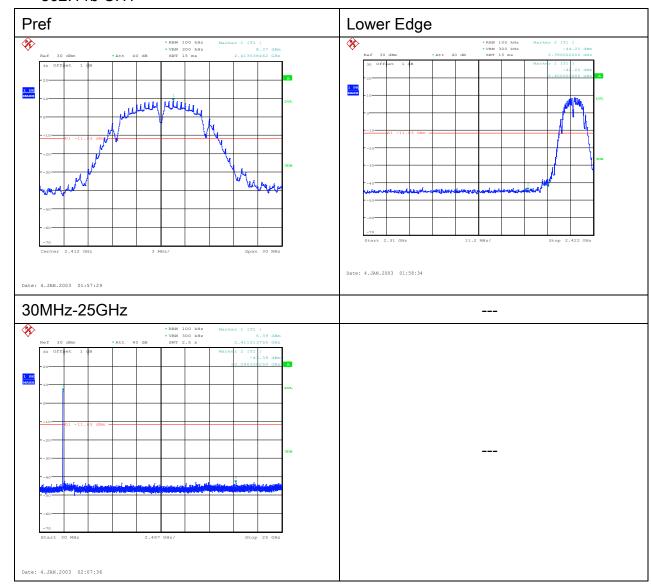
- a)Set the center frequency and span to encompass frequency range to be measured.
- b)Set the RBW = 100 kHz.
- c)Set the VBW  $\geq$  3 x RBW.
- d)Detector = peak.
- e)Ensure that the number of measurement points ≥ span/RBW
- f)Sweep time = auto couple.
- g)Trace mode = max hold.
- h)Allow trace to fully stabilize.
- i)Use the peak marker function to determine the maximum amplitude level.

Test Result : ALL emission outside of 2400-2483.5 are lower at least 20dB than fundamental frequency.

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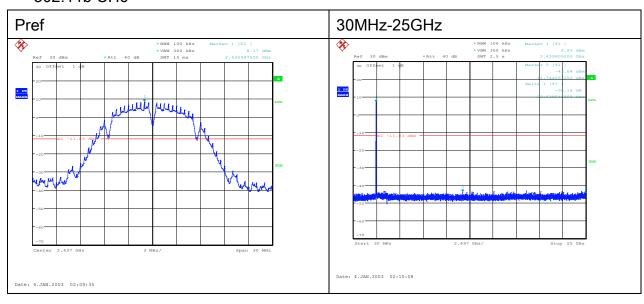
# 9.3.TEST DATA

#### 802.11b CH1



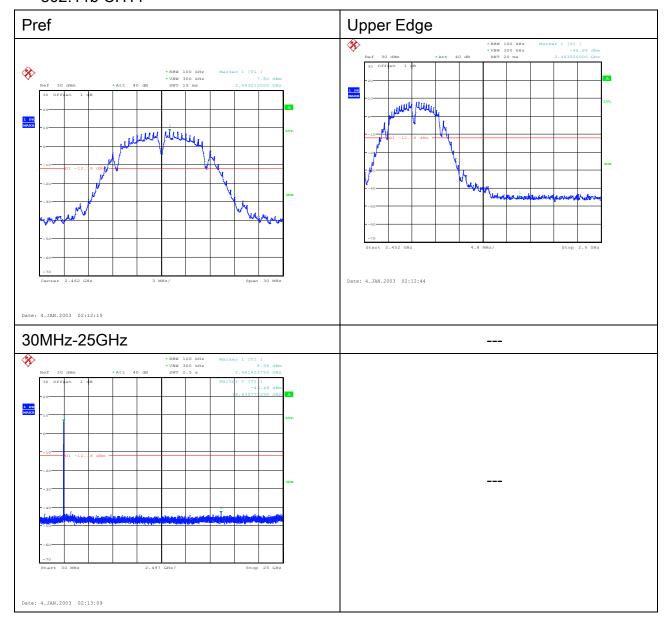
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# 802.11b CH6



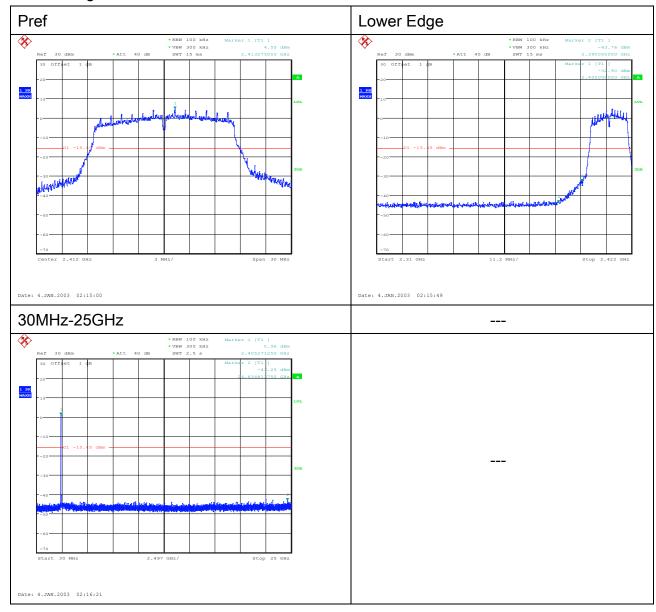
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# 802.11b CH11



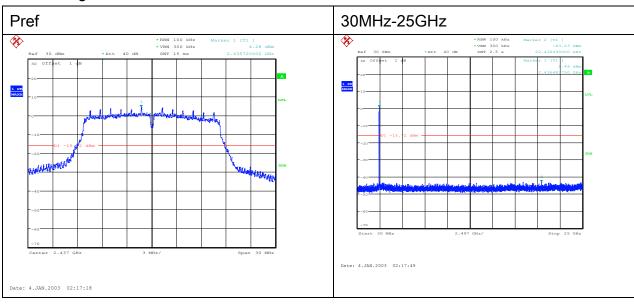
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# 802.11g CH1

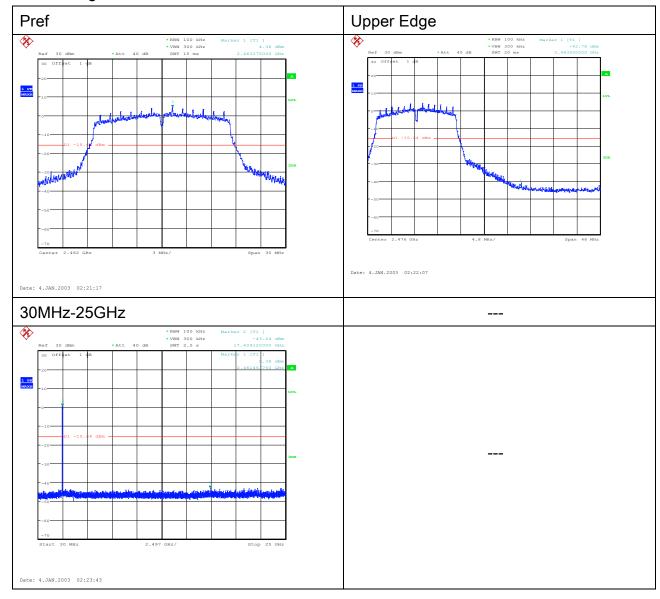


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# 802.11g CH6

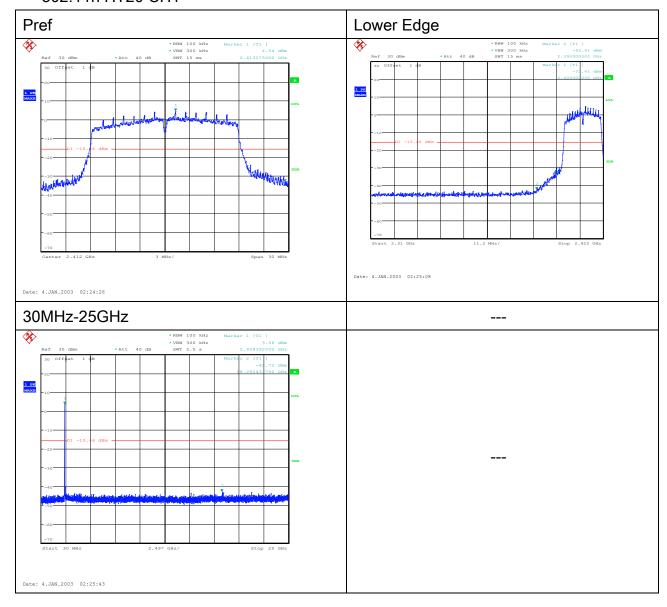


# 802.11g CH11



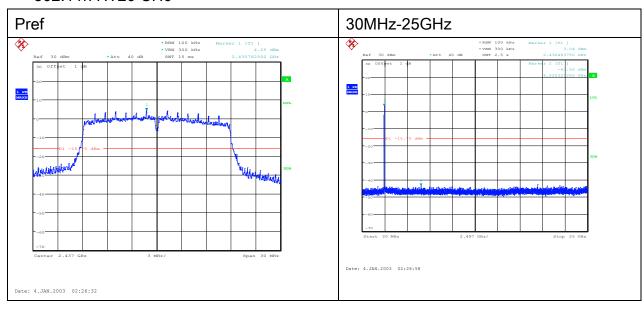
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# 802.11n HT20 CH1

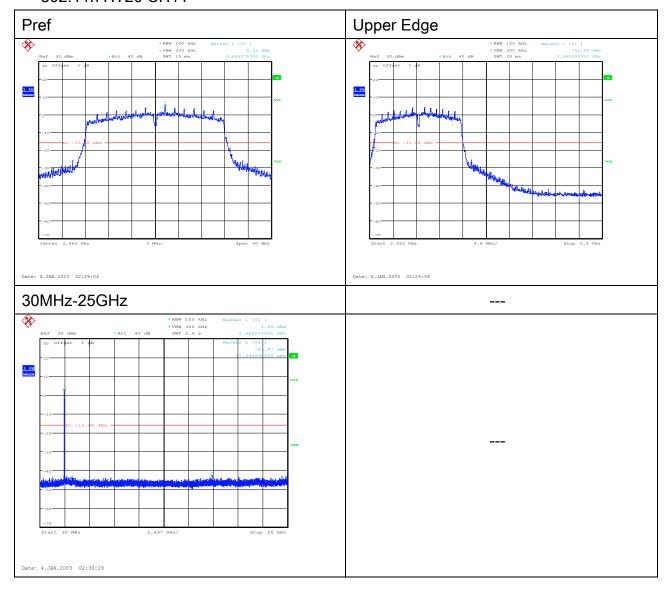


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# 802.11n HT20 CH6

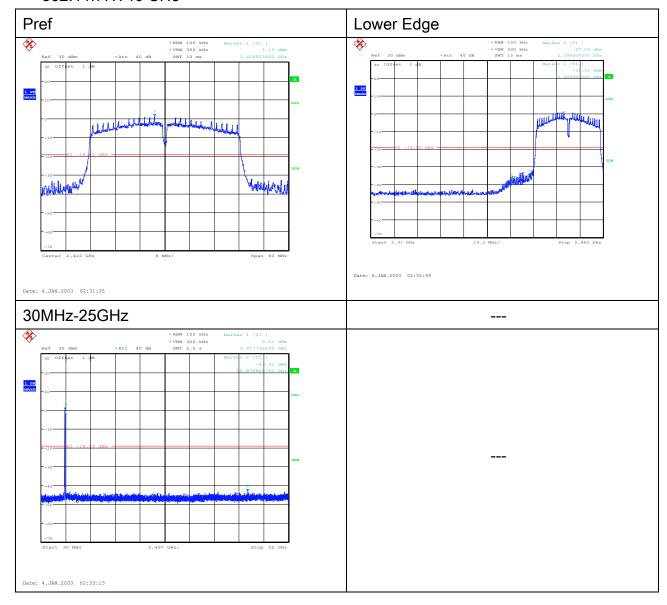


# 802.11n HT20 CH11



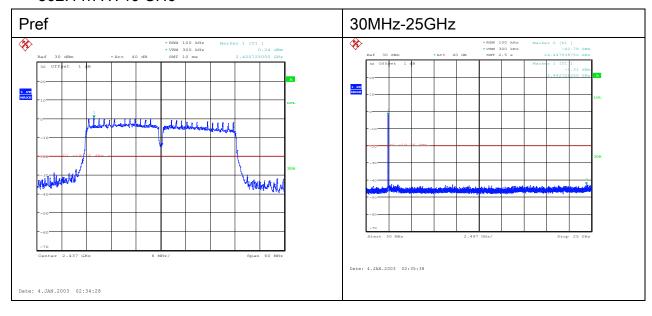
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# 802.11n HT40 CH3



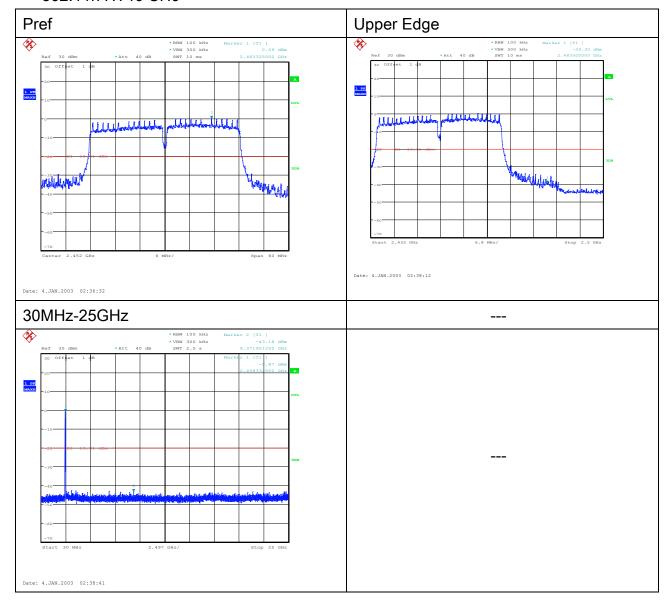
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# 802.11n HT40 CH6



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### 802.11n HT40 CH9



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#### 10. RADIATED BANDEDGE AND SPURIOUS MEASUREMENT

#### 10.1.LIMITS OF Radiated Bandedge and Spurious Measurement

CFR 47 (FCC) part 15.247 (d) and 558074 D01 DTS Meas Guidance v03r05

#### 10.2.TEST PROCEDURE

- 1. The testing follows the guidelines in ANSI C63.10-2013.
- 2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level.
- 3. For measurement below 1GHz, the EUT was placed on a turntable with 0.8 meter, above ground. For measurement above 1 GHz, test at FAR, the EUT is placed on a non-conductive table, which is 1.5 meter above ground.
- 4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
- 5. Corrected Reading: Antenna Factor + Cable Loss + Read Level Preamp Factor = Level
- 6. For measurement below 1GHz, If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.
- 7. Use the following spectrum analyzer settings:
- (1) Span shall wide enough to fully capture the emission being measured;
- (2) Set RBW=100 kHz for f < 1 GHz; VBW >= RBW; Sweep = auto; Detector function = peak; Trace = max hold;
- (3) Set RBW = 1 MHz, VBW= 3MHz for f > 1 GHz for peak measurement. Set RBW = 1 MHz, and 1/T (on time) for average measurement.

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#### 10.3.TEST DATA

Adaptor 1# for EUT: UC11US TENPAO

#### 9KHz-30MHz

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line per 15.31(o) was not reported.

Table 19 Radiated Emission Test Data 9k Hz-30MHz

Table 19 Radiated Emission 1 est Bata SK 112 COM 12									
	Loss(dB		Readings(d BµV/m)	Level(dBµ V/m)	Polanty(n/v )	Turntable Angle(de g)	Antenna Height(m )	Limits( dBµV/m)	Margin(d B)

#### 30MHz-1GHz

Worst case is shown below for 30MHz-1GHz only.

The emissions don't show in following result tables are more than 20dB below the limits.

Table 20 Radiated Emission Test Data 30MHz-1GHz

Frequency MHz				Level(dBµ V/m)	1)	Turntable Angle(de g)	Antenna Height(m )	Limits( dBµV/m)	Margin(d B)
32.271	0.7	12.3	6.7	19.7	Н	10	2.0	40	20.3
47.496	0.8	13.6	-2.6	11.8	Н	0	1.0	40	28.2
76.651	1.0	7.8	4.7	13.5	Н	10	1.0	40	26.5
96.171	1.1	12.8	0.4	14.3	Н	40	1.0	43.5	29.2
173.855	1.5	9.0	8.4	18.9	Н	30	2.0	43.5	24.6
211.353	1.8	10.6	19.2	31.6	Н	60	2.0	43.5	11.9
31.211	0.6	12.3	12.2	25.1	V	10	1.0	40	14.9
37.991	0.7	12.3	18.8	31.8	V	30	1.0	40	8.2
45.589	0.8	13.6	12.2	26.6	V	330	1.0	40	13.4
86.371	1.1	10.3	8.4	19.8	V	10	1.0	40	20.2
105.160	1.2	13.2	7.2	21.6	V	30	1.0	43.5	21.9
211.553	1.8	10.6	20.8	33.2	V	70	1.0	43.5	10.3

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### Adaptor for 2# EUT: UC11US BYD

#### 9KHz-30MHz

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line per 15.31(o) was not reported.

Table 21 Radiated Emission Test Data 9k Hz-30MHz

Loss(dB	Antenna Factor(d B)	Readings(d BµV/m)	Level(dBµ V/m)	)	Turntable Angle(de g)	Antenna Height(m )	Limits( dBµV/m)	Margin(d B)
 				-				

#### 30MHz-1GHz

Worst case is shown below for 30MHz-1GHz only.

The emissions don't show in following result tables are more than 20dB below the limits.

Table 22 Radiated Emission Test Data 30MHz-1GHz

Frequency MHz			<b>O</b> (	Level(dBµ V/m)	Polarity(H/V	Turntable Angle(de g)	Antenna Height(m )	Limits( dBµV/m)	Margin(d B)
30.020	0.6	12.3	23.8	36.7	V	10	1.0	40	3.3
35.511	0.6	12.3	18.7	31.6	V	30	1.0	40	8.4
43.376	0.7	13.6	3.0	17.3	V	30	1.0	40	22.7
100.443	1.1	13.2	1.7	16.0	V	340	1.0	43.5	27.5
161.314	1.5	8.7	3.4	13.6	V	10	1.0	43.5	29.9
209.923	1.7	10.6	19.2	31.5	V	30	1.0	43.5	12.0
30.020	0.6	12.3	10.5	23.4	Н	10	2.0	40	16.6
35.310	0.6	12.3	2.7	15.6	Н	40	2.0	40	24.4
53.890	0.8	13.3	-0.7	13.4	Н	10	2.0	40	26.6
94.148	1.1	11.9	3.7	16.7	Н	0	1.0	43.5	26.8
161.521	1.5	8.7	3.4	13.6	Н	310	1.0	43.5	29.9
209.898	1.7	10.6	16.8	29.1	Н	40	2.0	43.5	14.4

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### Adaptor 3# for EUT: UC13EU BYD

#### 9KHz-30MHz

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line per 15.31(o) was not reported.

Table 23 Radiated Emission Test Data 9k Hz-30MHz

Loss(dB	Antenna Factor(d B)	Readings(d BµV/m)	Level(dBµ V/m)	Polanty(H/V )	Turntable Angle(de g)	Antenna Height(m )	Limits( dBµV/m)	Margin(d B)

#### 30MHz-1GHz

Worst case is shown below for 30MHz-1GHz only.

The emissions don't show in following result tables are more than 20dB below the limits.

Table 24 Radiated Emission Test Data 30MHz-1GHz

Frequency MHz				Level(dBµ V/m)	Polarity(H/V )	Turntable Angle(de g)	Antenna Height(m )	Limits( dBµV/m)	Margin(d B)
50.952	0.8	13.3	9.0	23.1	Н	30	1.0	40	16.9
86.648	1.1	10.3	16.1	27.5	Н	20	1.0	40	12.5
91.207	1.2	11.9	16.9	30.0	Н	30	2.0	43.5	13.5
150.571	1.4	8.3	16.9	26.6	Н	10	2.0	43.5	16.9
199.168	1.6	10.6	14.0	26.2	Н	20	2.0	43.5	17.3
269.299	2.0	12.1	20.0	34.1	Н	10	2.0	46	11.9
30.185	0.6	12.3	19.8	32.7	V	20	1.0	40	7.3
34.947	0.6	12.3	19.0	31.9	V	10	1.0	40	8.1
90.431	1.2	11.9	15.4	28.5	V	30	1.0	43.5	15.0
205.376	1.6	10.6	16.5	28.7	V	20	1.0	43.5	14.8
208.577	1.7	10.6	16.8	29.1	V	10	1.0	43.5	14.4
267.747	2.0	12.1	15.2	29.3	V	20	1.0	46	16.7

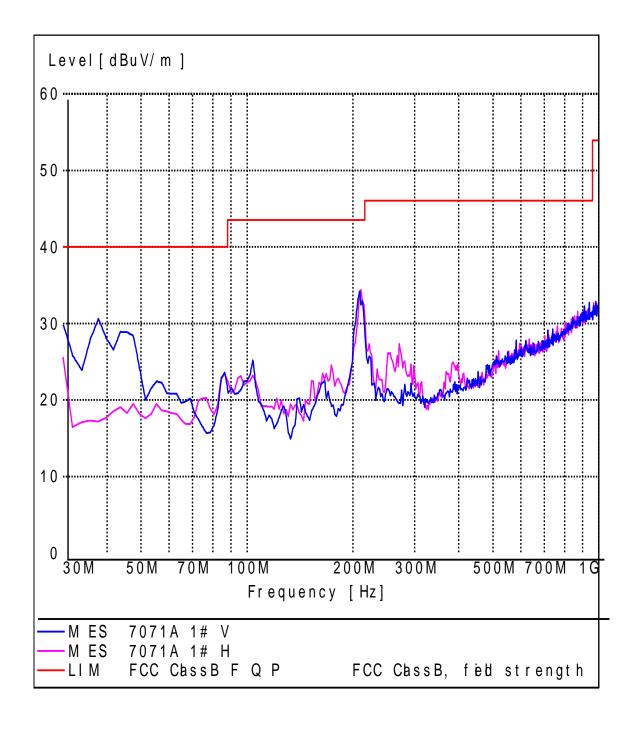
REMARK: Emission level(dBuV)=Read Value(dBuV/m) + Antenna Factor(dB)+ Cable Loss +preamp(dB)

EUT Name: 7071A

Operating Condition: Charging and Transmitting

Test site: SMQ NETC EMC Lab. Antenna Position: Vertical & Horizontal

Comment: 120V/60Hz Comment: Adaptor: 1#



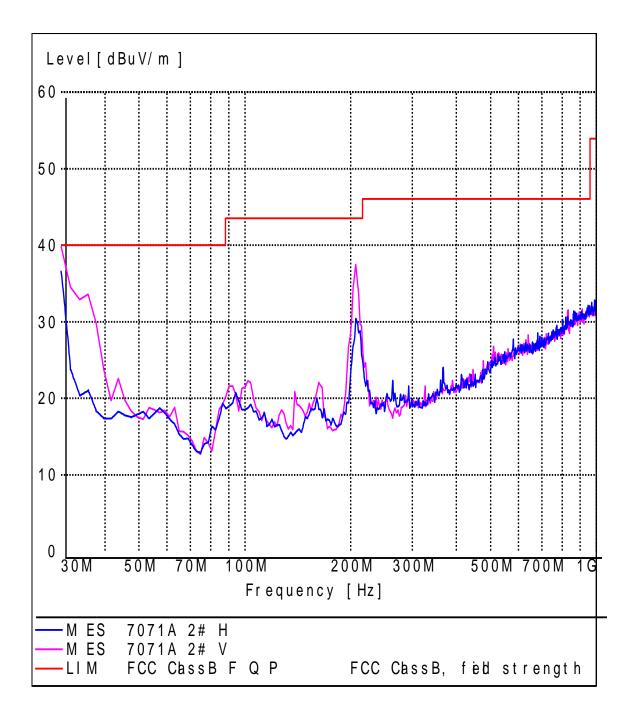
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EUT Name: 7071A

Operating Condition: Charging and Transmitting

Test site: SMQ NETC EMC Lab. Antenna Position: Vertical & Horizontal

Comment: 120V/60Hz Comment: Adaptor: 2#



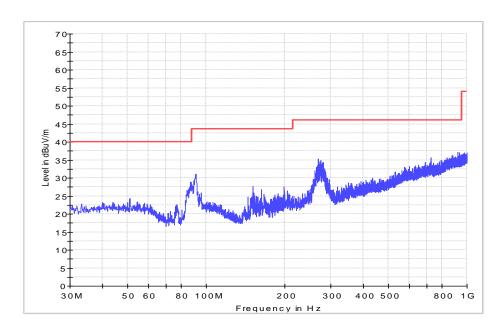
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EUT Name: 7071A

Operating Condition: Charging and Transmitting

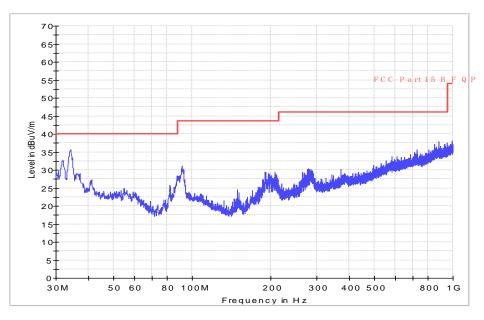
Test site: SMQ NETC EMC Lab. Antenna Position: Vertical & Horizontal

Comment: 120V/60Hz Comment: Adaptor: 3#



(Horizontal

)



(Vertical)

1-18G

11b

Ch1

# **Radiated Emission**

# **EUT Information**

EUT Model Name: 7071A
Operation mode: Wifi 11b CH1

Test Voltage: Comment:

# **Common Information**

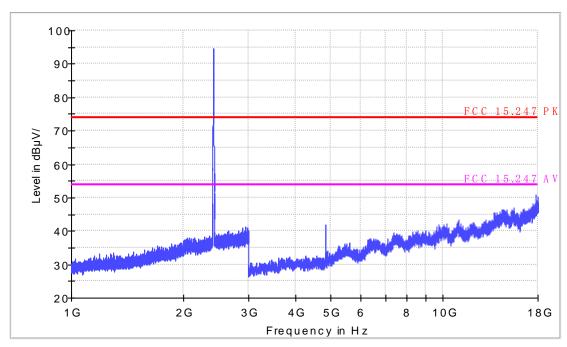
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Horizontal

Operator Name: Comment:

FCC Electric Field Strength 1-18GHz operate on 2.4GHz



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### **EUT Information**

EUT Model Name: 7071A
Operation mode: Wifi 11b CH1

Test Voltage: Comment:

### **Common Information**

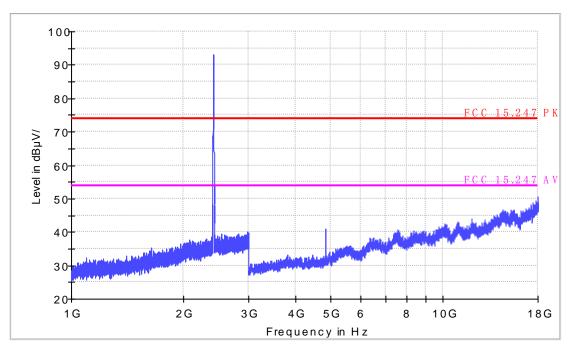
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Vertical

Operator Name: Comment:

FCC Electric Field Strength 1-18GHz operate on 2.4GHz



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1-18G

11b

CH6

# **Radiated Emission**

# **EUT Information**

EUT Model Name: 7071A Operation mode: Wifi 11b CH6

Test Voltage: Comment:

# **Common Information**

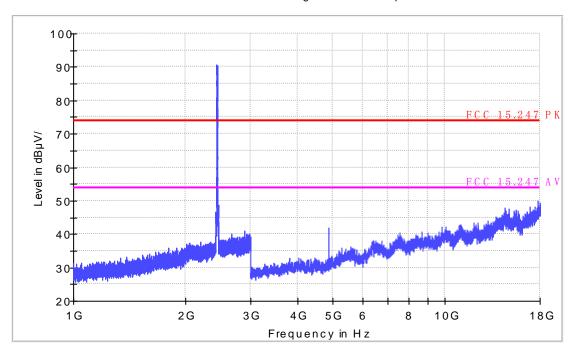
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Horizontal

Operator Name: Comment:

FCC Electric Field Strength 1-18GHz operate on 2.4GHz



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### **EUT Information**

EUT Model Name: 7071A
Operation mode: Wifi 11b CH6

Test Voltage: Comment:

### **Common Information**

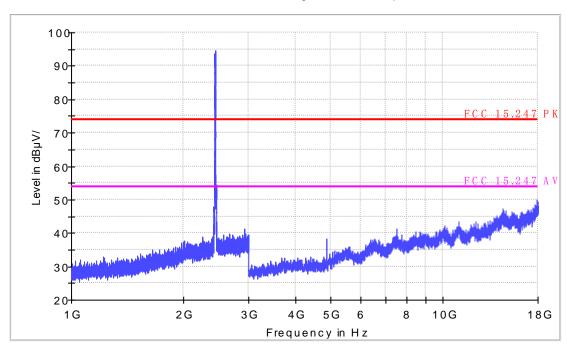
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Vertical

Operator Name: Comment:

FCC Electric Field Strength 1-18GHz operate on 2.4GHz



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1-18G

11b

CH11

# **Radiated Emission**

# **EUT Information**

EUT Model Name: 7071A
Operation mode: Wifi 11b CH11

Test Voltage: Comment:

# **Common Information**

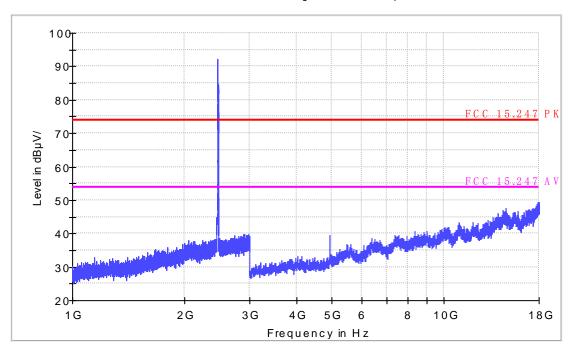
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Horizontal

Operator Name: Comment:

FCC Electric Field Strength 1-18GHz operate on 2.4GHz



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# **EUT Information**

EUT Model Name: 7071A

Operation mode: Wifi 11b CH11

Test Voltage: Comment:

### **Common Information**

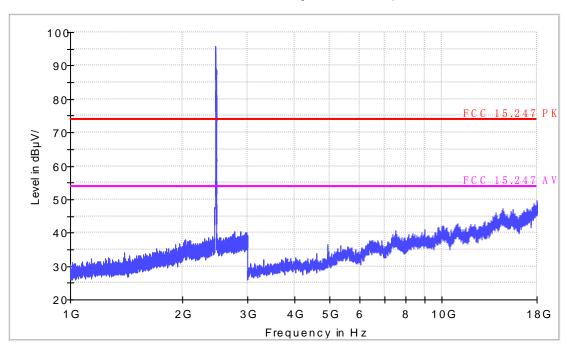
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Vertical

Operator Name: Comment:

FCC Electric Field Strength 1-18GHz operate on 2.4GHz



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1-18G

11g

CH1

# **Radiated Emission**

### **EUT Information**

EUT Model Name: 7071A
Operation mode: Wifi 11g CH1

Test Voltage: Comment:

# **Common Information**

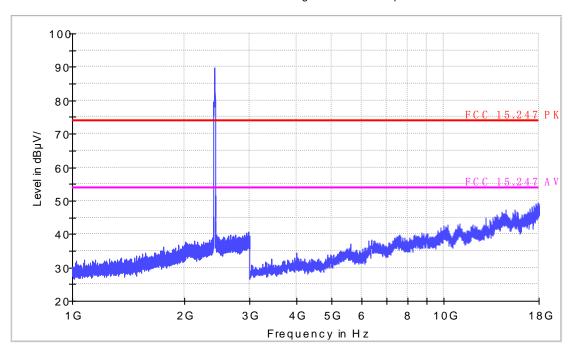
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Horizontal

Operator Name: Comment:

FCC Electric Field Strength 1-18GHz operate on 2.4GHz



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### **EUT Information**

EUT Model Name: 7071A
Operation mode: Wifi 11q CH1

Test Voltage: Comment:

### **Common Information**

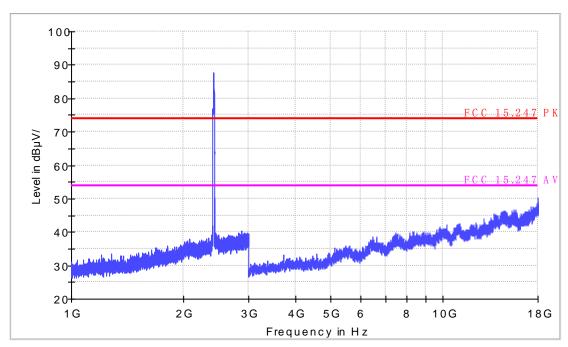
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Vertical

Operator Name: Comment:

FCC Electric Field Strength 1-18GHz operate on 2.4GHz



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1-18G

11g

CH6

# **Radiated Emission**

# **EUT Information**

EUT Model Name: 7071A
Operation mode: Wifi 11g CH6

Test Voltage: Comment:

# **Common Information**

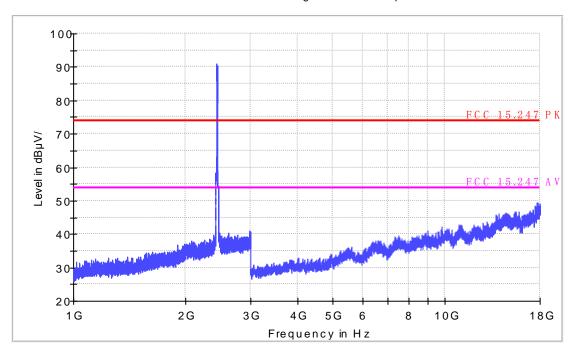
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Horizontal

Operator Name: Comment:

FCC Electric Field Strength 1-18GHz operate on 2.4GHz



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# **EUT Information**

EUT Model Name: 7071A
Operation mode: Wifi 11g CH6

Test Voltage: Comment:

### **Common Information**

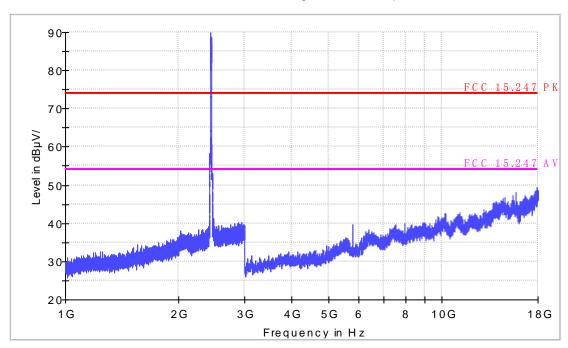
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Vertical

Operator Name: Comment:

FCC Electric Field Strength 1-18GHz operate on 2.4GHz



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1-18G

11g

CH11

# **Radiated Emission**

# **EUT Information**

EUT Model Name: 7071A
Operation mode: Wifi 11g CH11

Test Voltage: Comment:

# **Common Information**

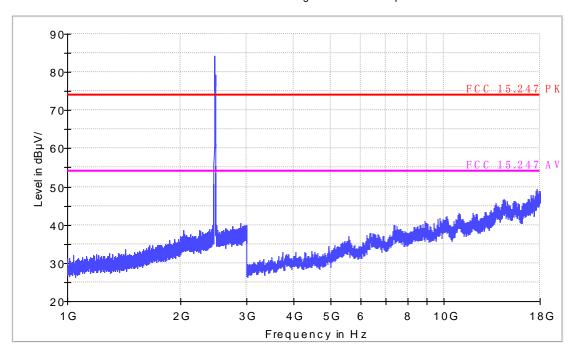
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Horizontal

Operator Name: Comment:

FCC Electric Field Strength 1-18GHz operate on 2.4GHz



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# **EUT Information**

EUT Model Name: M 7071A
Operation mode: Wifi 11g CH11

Test Voltage: Comment:

### **Common Information**

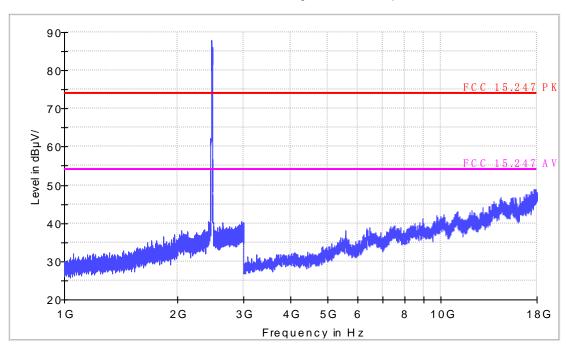
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Vertical

Operator Name: Comment:

FCC Electric Field Strength 1-18GHz operate on 2.4GHz



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1-18G 11n-HT20 CH1

# **Radiated Emission**

### **EUT Information**

EUT Model Name: 7071A

Operation mode: Wifi 11n HT20 CH1

Test Voltage: Comment:

# **Common Information**

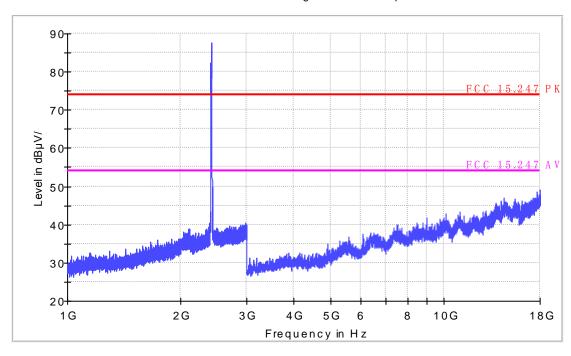
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Horizontal

Operator Name: Comment:

FCC Electric Field Strength 1-18GHz operate on 2.4GHz



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# **EUT Information**

EUT Model Name: 7071A

Operation mode: Wifi 11n HT20 CH1

Test Voltage: Comment:

### **Common Information**

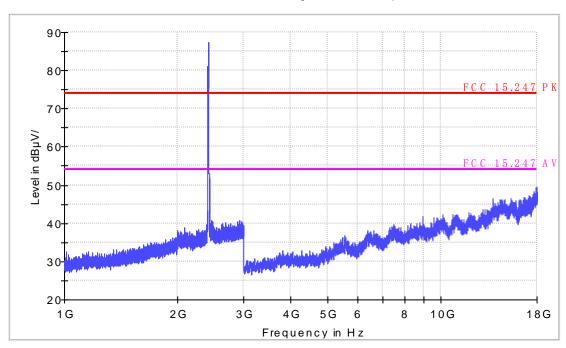
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Vertical

Operator Name: Comment:

#### FCC Electric Field Strength 1-18GHz operate on 2.4GHz



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1-18G 11n-HT20 CH6

# **Radiated Emission**

# **EUT Information**

EUT Model Name: 7071A

Operation mode: Wifi 11n HT20 CH6

Test Voltage: Comment:

# **Common Information**

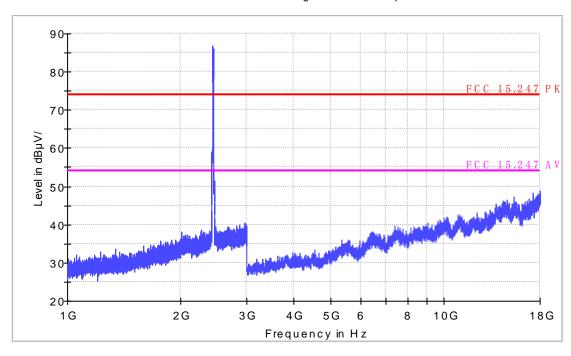
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Horizontal

Operator Name: Comment:

FCC Electric Field Strength 1-18GHz operate on 2.4GHz



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# **EUT Information**

EUT Model Name: 7071A

Operation mode: Wifi 11n HT20 CH6

Test Voltage: Comment:

### **Common Information**

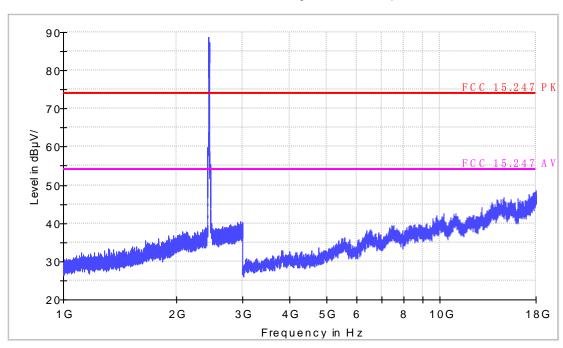
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Vertical

Operator Name: Comment:

#### FCC Electric Field Strength 1-18GHz operate on 2.4GHz



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1-18G 11n-HT20 CH11

# **Radiated Emission**

### **EUT Information**

EUT Model Name: 7071A

Operation mode: Wifi 11n HT20 CH11

Test Voltage: Comment:

# **Common Information**

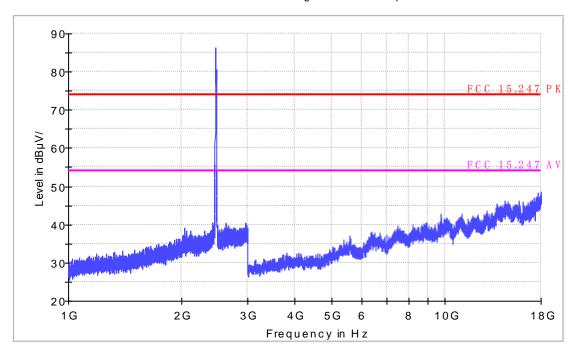
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Horizontal

Operator Name: Comment:

FCC Electric Field Strength 1-18GHz operate on 2.4GHz



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# **EUT Information**

EUT Model Name: 7071A

Operation mode: Wifi 11n HT20 CH11

Test Voltage: Comment:

### **Common Information**

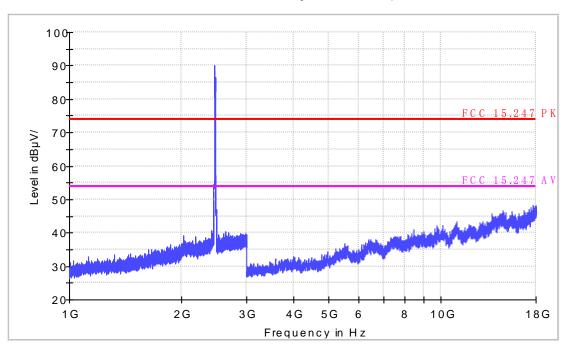
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Vertical

Operator Name: Comment:

FCC Electric Field Strength 1-18GHz operate on 2.4GHz



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1-18G

11n-HT40

CH3

# **Radiated Emission**

# **EUT Information**

EUT Model Name: 7071A

Operation mode: Wifi 11n HT40 CH3

Test Voltage: Comment:

### **Common Information**

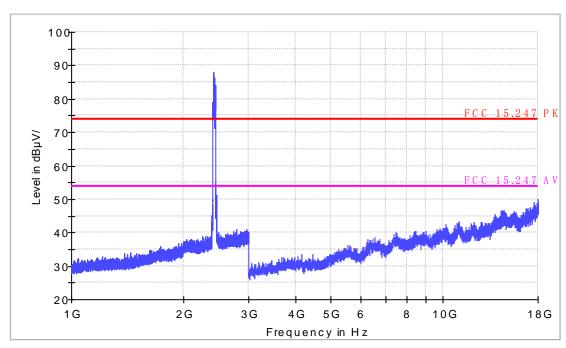
Test Site: SMQ EMC Lab.

Environment
Antenna Polarization: Horizontal

Operator Name:

Comment:

#### FCC Electric Field Strength 1-18GHz operate on 2.4GHz



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# **EUT Information**

EUT Model Name: 7071A

Operation mode: Wifi 11n HT40 CH3

Test Voltage: Comment:

### **Common Information**

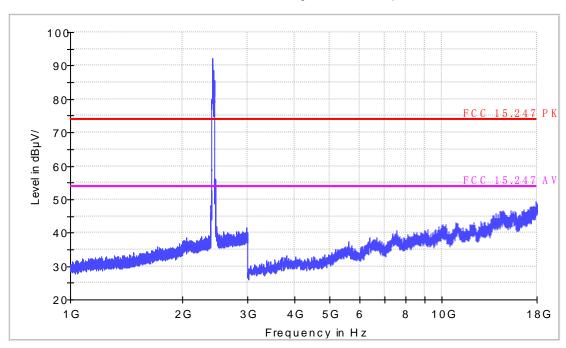
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Vertical

Operator Name: Comment:

FCC Electric Field Strength 1-18GHz operate on 2.4GHz



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1-18G 11n-HT40 CH6

# **Radiated Emission**

### **EUT Information**

EUT Model Name: 7071A

Operation mode: Wifi 11n HT40 CH6

Test Voltage: Comment:

# **Common Information**

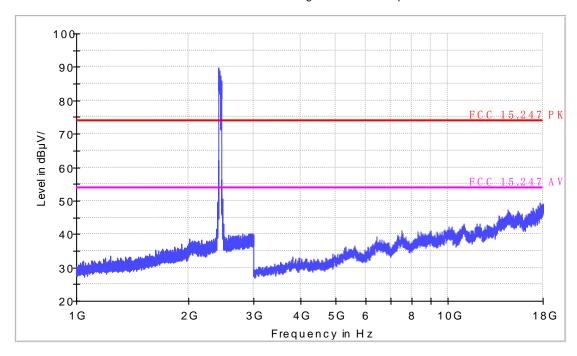
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Horizontal

Operator Name: Comment:

#### FCC Electric Field Strength 1-18GHz operate on 2.4GHz



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# **EUT Information**

EUT Model Name: 7071A

Operation mode: Wifi 11n HT40 CH6

Test Voltage: Comment:

# **Common Information**

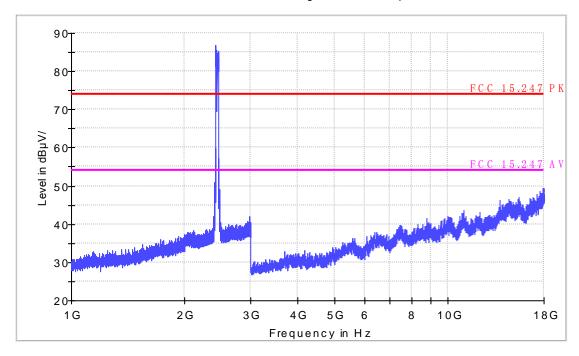
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Vertical

Operator Name: Comment:

#### FCC Electric Field Strength 1-18GHz operate on 2.4GHz



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1-18G 11n-HT40 CH9

# **Radiated Emission**

### **EUT Information**

EUT Model Name: 7071A

Operation mode: Wifi 11n HT40 CH9

Test Voltage: Comment:

# **Common Information**

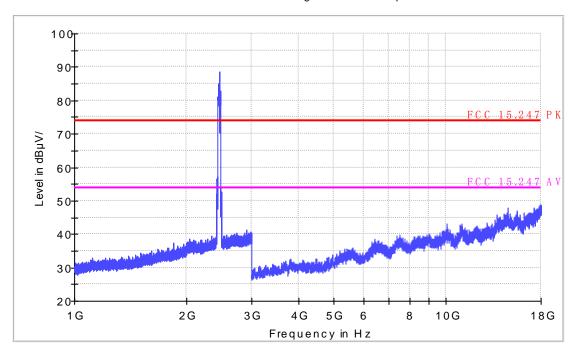
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Horizontal

Operator Name: Comment:

FCC Electric Field Strength 1-18GHz operate on 2.4GHz



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### **EUT Information**

EUT Model Name: 7071A

Operation mode: Wifi 11n HT40 CH9

Test Voltage: Comment:

### **Common Information**

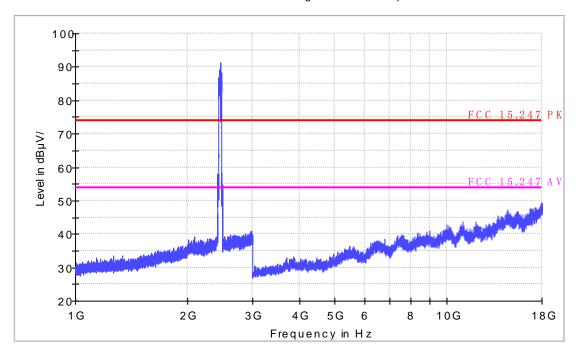
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Vertical

Operator Name: Comment:

FCC Electric Field Strength 1-18GHz operate on 2.4GHz



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#### 18-25G

(Worst Case at 802.11b CH6)

# **Radiated Emission**

# **EUT Information**

EUT Model Name: 7071A
Operation mode: Wifi 11b CH6

Test Voltage: Comment:

### **Common Information**

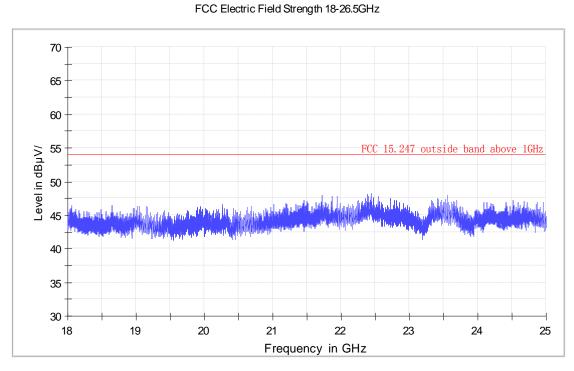
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Horizontal

Operator Name: Comment:

#### \_\_\_\_\_



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# **EUT Information**

EUT Model Name: 7071A
Operation mode: Wifi 11b CH6

Test Voltage: Comment:

# **Common Information**

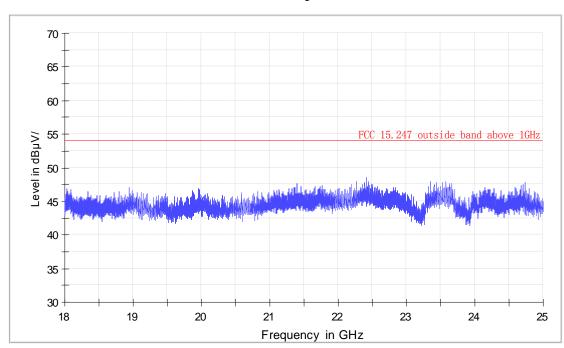
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Vertical

Operator Name: Comment:

#### FCC Electric Field Strength 18-26.5GHz



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Band edge

11b

CH1

# **Radiated Emission**

### **EUT Information**

EUT Model Name: 7071A
Operation mode: Wifi 11b CH1

Test Voltage: Comment:

### **Common Information**

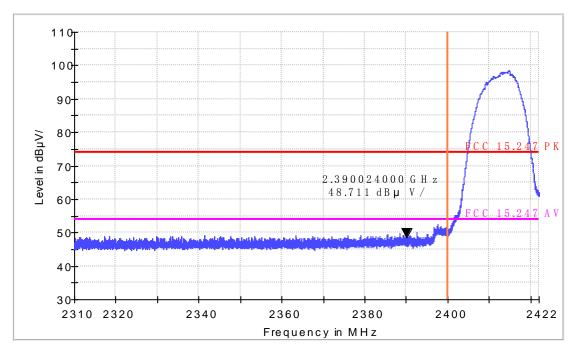
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Horizontal

Operator Name: Comment:

#### FCC Electric Field Strength 2.4GHz Bandedge-PK



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## **EUT Information**

EUT Model Name: 7071A
Operation mode: Wifi 11b CH1

Test Voltage: Comment:

## **Common Information**

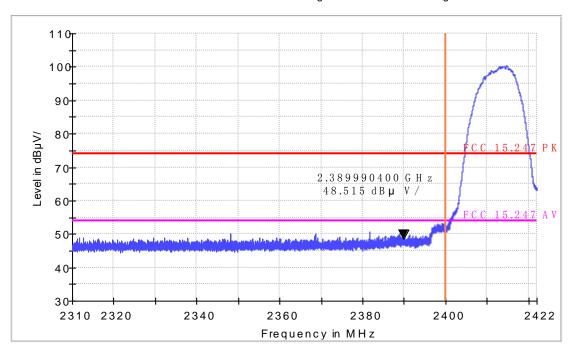
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Vertical

Operator Name: Comment:

FCC Electric Field Strength 2.4GHz Bandedge-PK



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## **EUT Information**

EUT Model Name: 7071A
Operation mode: Wifi 11b CH1

Test Voltage: Comment:

## **Common Information**

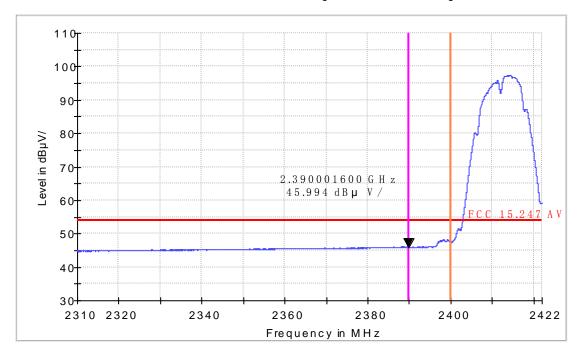
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Horizontal

Operator Name: Comment:

#### FCC Electric Field Strength 2.4GHz Bandedge-AV



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## **EUT Information**

EUT Model Name: 7071A
Operation mode: Wifi 11b CH1

Test Voltage: Comment:

## **Common Information**

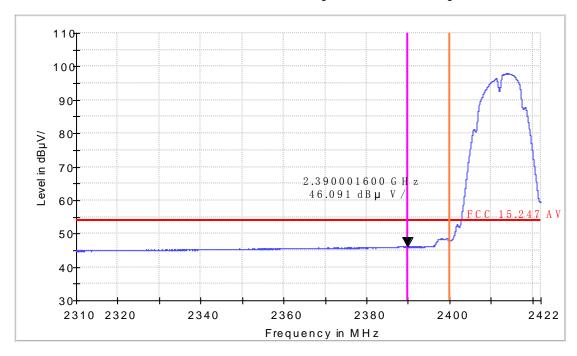
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Vertical

Operator Name: Comment:

#### FCC Electric Field Strength 2.4GHz Bandedge-AV



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Band edge

11g

CH1

## **Radiated Emission**

### **EUT Information**

EUT Model Name: 7071A
Operation mode: Wifi 11g CH1

Test Voltage: Comment:

## **Common Information**

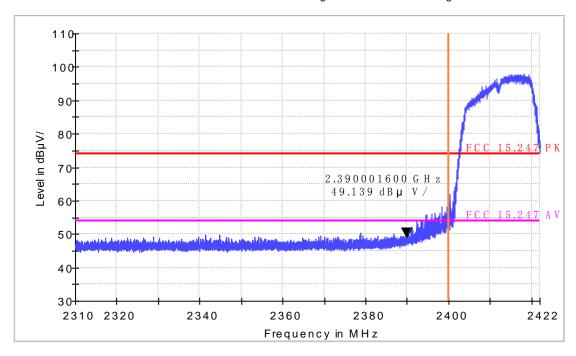
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Horizontal

Operator Name: Comment:

#### FCC Electric Field Strength 2.4GHz Bandedge-PK



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## **EUT Information**

EUT Model Name: 7071A
Operation mode: Wifi 11q CH1

Test Voltage: Comment:

## **Common Information**

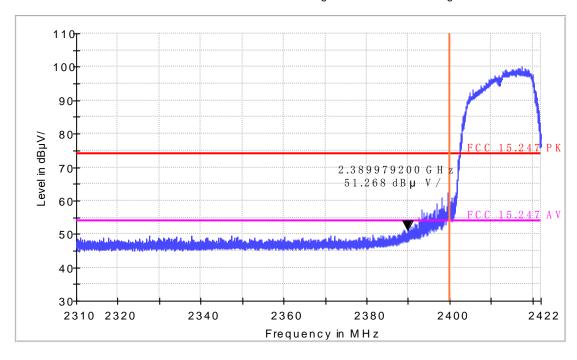
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Vertical

Operator Name: Comment:

FCC Electric Field Strength 2.4GHz Bandedge-PK



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## **EUT Information**

EUT Model Name: 7071A
Operation mode: Wifi 11q CH1

Test Voltage: Comment:

## **Common Information**

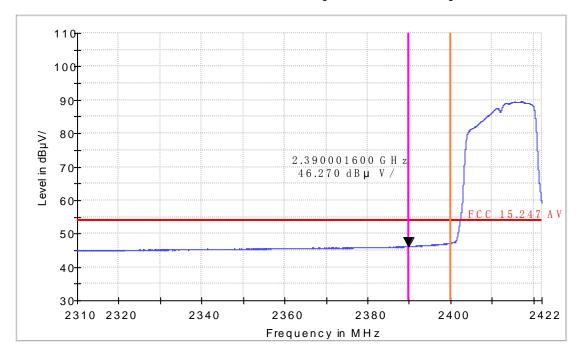
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Horizontal

Operator Name: Comment:

#### FCC Electric Field Strength 2.4GHz Bandedge-AV



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## **EUT Information**

EUT Model Name: 7071A
Operation mode: Wifi 11q CH1

Test Voltage: Comment:

## **Common Information**

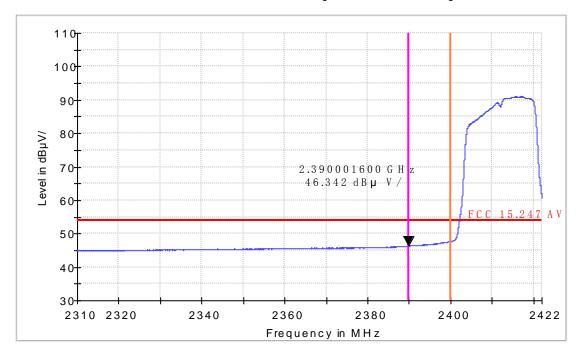
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Vertical

Operator Name: Comment:

#### FCC Electric Field Strength 2.4GHz Bandedge-AV



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Band edge 11n-HT20 CH1

## **Radiated Emission**

### **EUT Information**

EUT Model Name: 7071A

Operation mode: Wifi 11n20 CH1

Test Voltage: Comment:

## **Common Information**

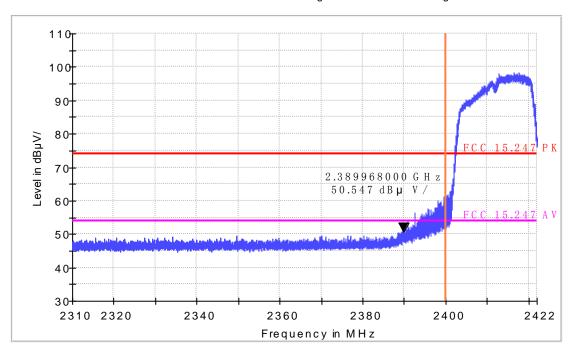
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Horizontal

Operator Name: Comment:

#### FCC Electric Field Strength 2.4GHz Bandedge-PK



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## **EUT Information**

EUT Model Name: 7071A

Operation mode: Wifi 11n20 CH1

Test Voltage: Comment:

## **Common Information**

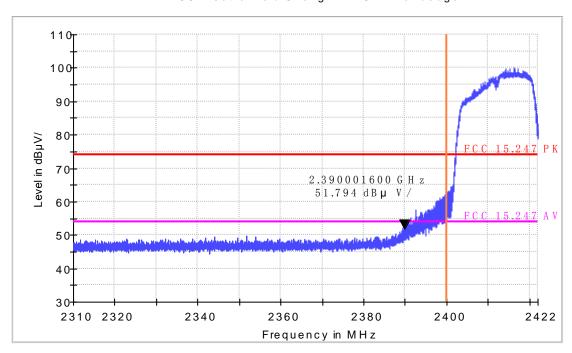
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Vertical

Operator Name: Comment:

FCC Electric Field Strength 2.4GHz Bandedge-PK



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## **EUT Information**

EUT Model Name: 7071A

Operation mode: Wifi 11n20 CH1

Test Voltage: Comment:

## **Common Information**

Test Site: SMQ EMC Lab.

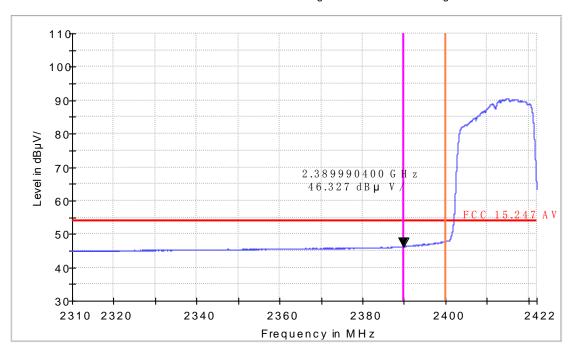
Environment

Antenna Polarization: Horizontal

Operator Name:

Comment:

FCC Electric Field Strength 2.4GHz Bandedge-AV



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## **EUT Information**

EUT Model Name: 7071A

Operation mode: Wifi 11n20 CH1

Test Voltage: Comment:

## **Common Information**

Test Site: SMQ EMC Lab.

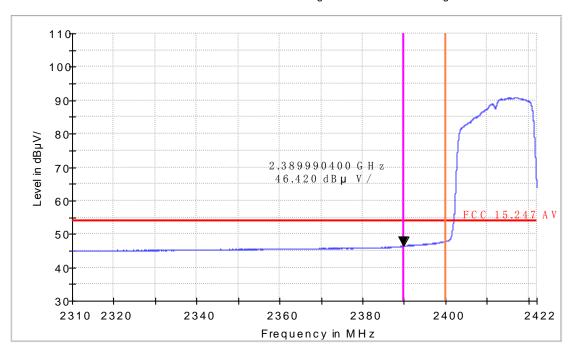
Environment

Antenna Polarization: Vertical

Operator Name:

Comment:

FCC Electric Field Strength 2.4GHz Bandedge-AV



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Band edge 11n-HT40 CH3

# **Radiated Emission**

### **EUT Information**

EUT Model Name: 7071A

Operation mode: Wifi 11n40 CH3

Test Voltage: Comment:

### **Common Information**

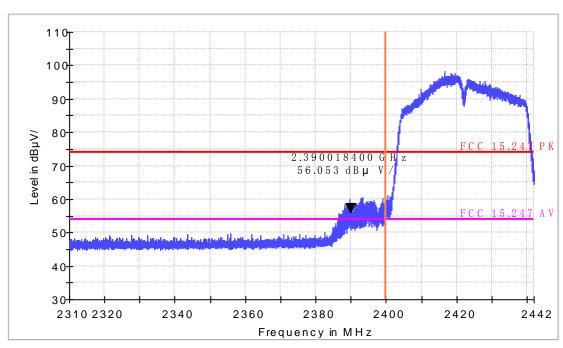
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Horizontal

Operator Name: Comment:

#### FCC Electric Field Strength 2.4GHz Bandedge-PK



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## **EUT Information**

EUT Model Name: 7071A

Operation mode: Wifi 11n40 CH3

Test Voltage: Comment:

## **Common Information**

Test Site: SMQ EMC Lab.

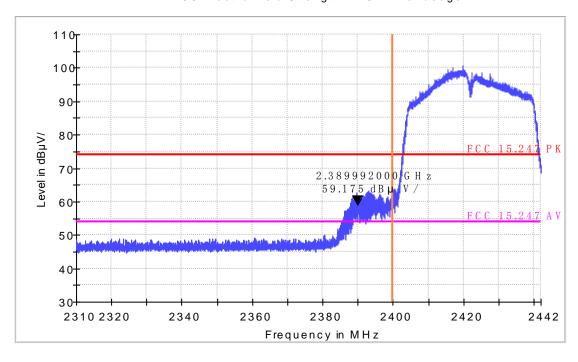
Environment

Antenna Polarization: Vertical

Operator Name:

Comment:

FCC Electric Field Strength 2.4GHz Bandedge-PK



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## **EUT Information**

EUT Model Name: 7071A

Operation mode: Wifi 11n40 CH3

Test Voltage: Comment:

## **Common Information**

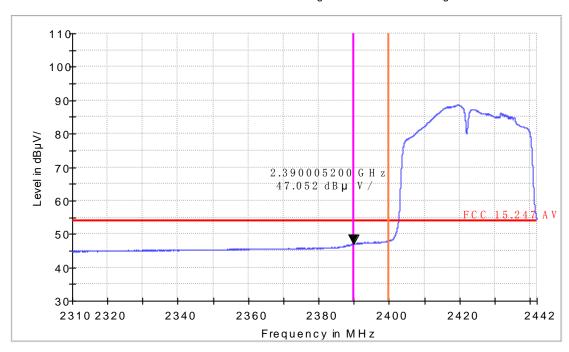
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Horizontal

Operator Name: Comment:

#### FCC Electric Field Strength 2.4GHz Bandedge-AV



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## **EUT Information**

EUT Model Name: 7071A

Operation mode: Wifi 11n40 CH3

Test Voltage: Comment:

## **Common Information**

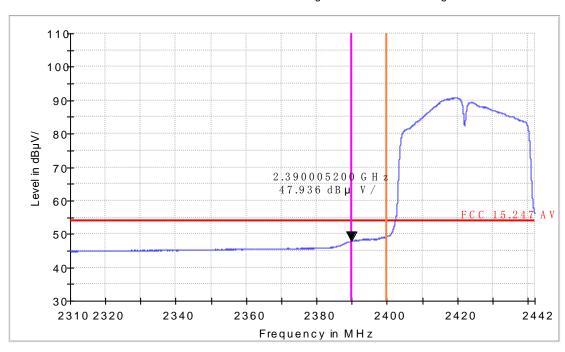
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Vertical

Operator Name: Comment:

#### FCC Electric Field Strength 2.4GHz Bandedge-AV



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Band edge

11b

CH11

# **Radiated Emission**

### **EUT Information**

EUT Model Name: 7071A
Operation mode: Wifi 11b CH11

Test Voltage: Comment:

### **Common Information**

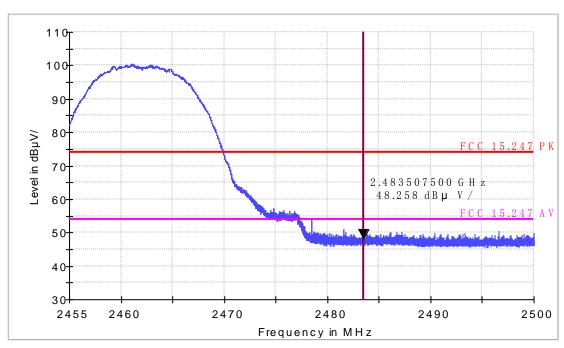
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Horizontal

Operator Name: Comment:

#### FCC Electric Field Strength 2.4GHz Bandedge-PK



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## **EUT Information**

EUT Model Name: 7071A
Operation mode: Wifi 11b CH11

Test Voltage: Comment:

## **Common Information**

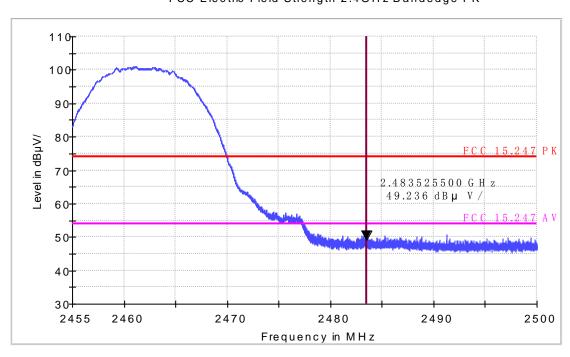
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Vertical

Operator Name: Comment:

FCC Electric Field Strength 2.4GHz Bandedge-PK



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## **EUT Information**

EUT Model Name: 7071A

Operation mode: Wifi 11b CH11
Test Voltage:
Comment:

## **Common Information**

Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Horizontal

Operator Name: Comment:

#### FCC Electric Field Strength 2.4GHz Bandedge-AV



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## **EUT Information**

EUT Model Name: 7071A

Operation mode: Wifi 11b CH11

Test Voltage: Comment:

## **Common Information**

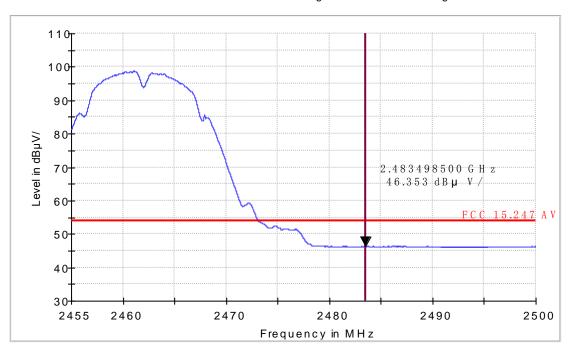
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Vertical

Operator Name: Comment:

FCC Electric Field Strength 2.4GHz Bandedge-AV



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Band edge

11g

CH11

## **Radiated Emission**

### **EUT Information**

EUT Model Name: 7071A

Operation mode: Wifi 11g CH11

Test Voltage: Comment:

## **Common Information**

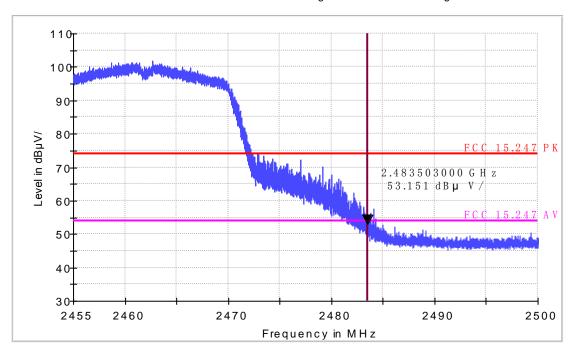
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Horizontal

Operator Name: Comment:

#### FCC Electric Field Strength 2.4GHz Bandedge-PK



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## **EUT Information**

EUT Model Name: 7071A

Operation mode: Wifi 11q CH11 Test Voltage:

Comment:

## **Common Information**

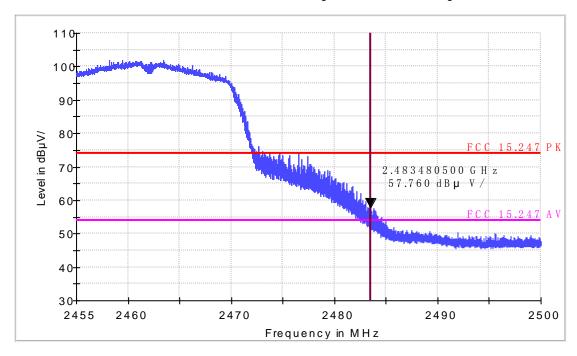
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Vertical

Operator Name: Comment:

#### FCC Electric Field Strength 2.4GHz Bandedge-PK



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## **EUT Information**

EUT Model Name: 7071A

Operation mode: Wifi 11g CH11

Test Voltage: Comment:

## **Common Information**

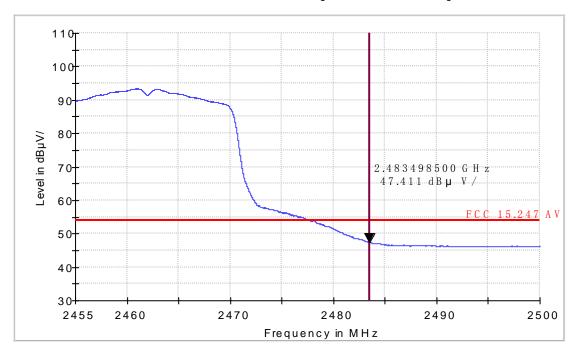
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Horizontal

Operator Name: Comment:

#### FCC Electric Field Strength 2.4GHz Bandedge-AV



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## **EUT Information**

EUT Model Name: 7071A

Operation mode: Wifi 11g CH11

Test Voltage: Comment:

## **Common Information**

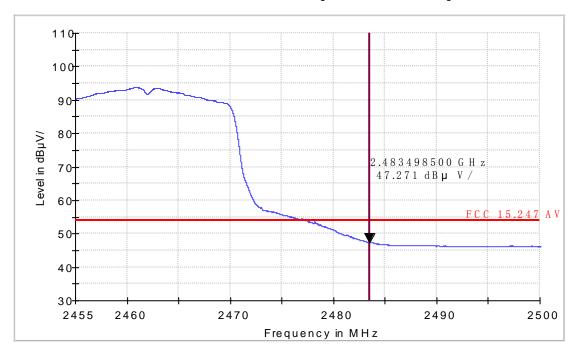
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Vertical

Operator Name: Comment:

#### FCC Electric Field Strength 2.4GHz Bandedge-AV



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Band edge 11n-HT20 CH11

# **Radiated Emission**

### **EUT Information**

EUT Model Name: 7071A

Operation mode: Wifi 11n20 CH11

Test Voltage: Comment:

### **Common Information**

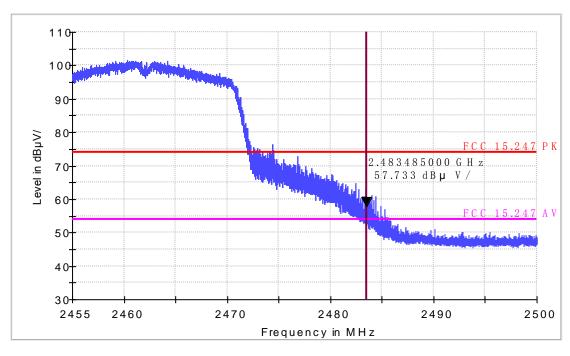
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Horizontal

Operator Name: Comment:

FCC Electric Field Strength 2.4GHz Bandedge-PK



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## **EUT Information**

EUT Model Name: 7071A

Operation mode: Wifi 11n20 CH11

Test Voltage: Comment:

## **Common Information**

Test Site: SMQ EMC Lab.

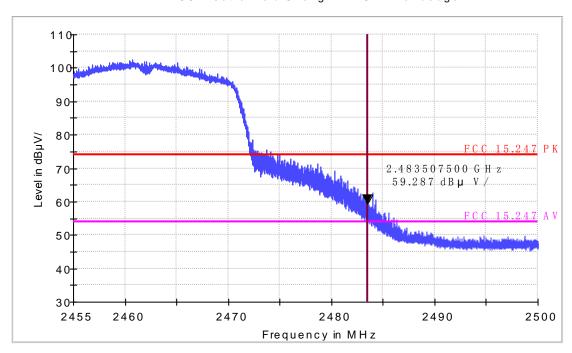
Environment

Antenna Polarization: Vertical

Operator Name:

Comment:

FCC Electric Field Strength 2.4GHz Bandedge-PK



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## **EUT Information**

EUT Model Name: 7071A

Operation mode: Wifi 11n20 CH11

Test Voltage: Comment:

## **Common Information**

Test Site: SMQ EMC Lab.

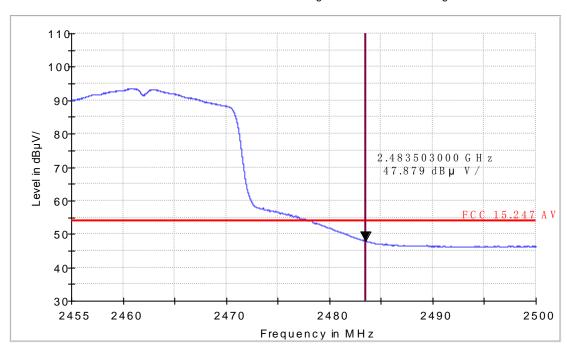
Environment

Antenna Polarization: Horizontal

Operator Name:

Comment:

#### FCC Electric Field Strength 2.4GHz Bandedge-AV



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## **EUT Information**

EUT Model Name: 7071A

Operation mode: Wifi 11n20 CH11

Test Voltage: Comment:

## **Common Information**

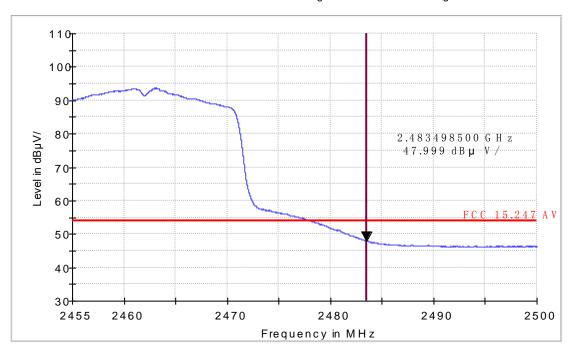
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Vertical

Operator Name: Comment:

#### FCC Electric Field Strength 2.4GHz Bandedge-AV



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Band edge 11n-HT40 CH9

## **Radiated Emission**

### **EUT Information**

EUT Model Name: 7071A

Operation mode: Wifi 11n40 CH9

Test Voltage: Comment:

## **Common Information**

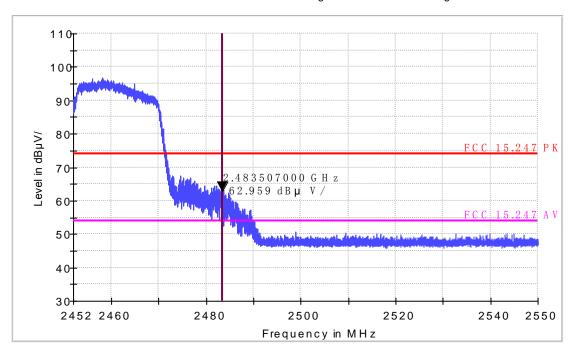
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Horizontal

Operator Name: Comment:

#### FCC Electric Field Strength 2.4GHz Bandedge-PK



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## **EUT Information**

EUT Model Name: 7071A

Operation mode: Wifi 11n40 CH9

Test Voltage: Comment:

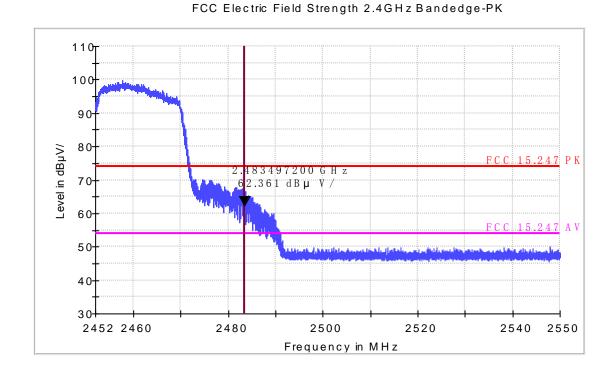
### **Common Information**

Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Vertical

Operator Name: Comment:



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## **EUT Information**

EUT Model Name: 7071A

Operation mode: Wifi 11n40 CH9

Test Voltage: Comment:

## **Common Information**

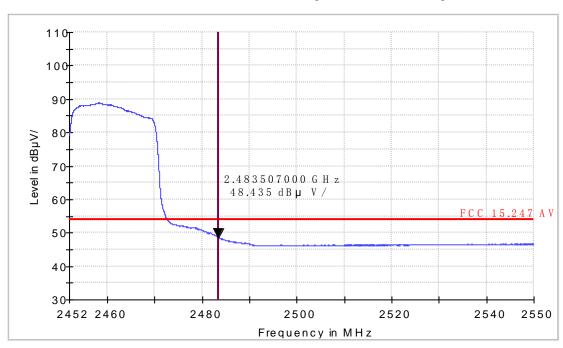
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Horizontal

Operator Name: Comment:

#### FCC Electric Field Strength 2.4GHz Bandedge-AV



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## **EUT Information**

EUT Model Name: 7071A

Operation mode: Wifi 11n40 CH9

Test Voltage: Comment:

## **Common Information**

Test Site: SMQ EMC Lab.

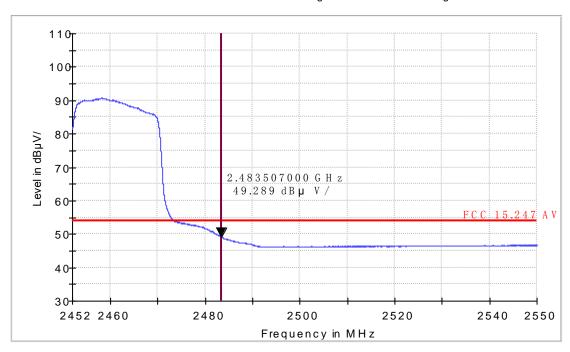
Environment

Antenna Polarization: Vertical

Operator Name:

Comment:

FCC Electric Field Strength 2.4GHz Bandedge-AV



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#### 11. CONDUCTED EMISSION TEST FOR AC POWER PORT

#### **MEASUREMENT**

### 11.1.Test Standard and Limit

11.1.1.Test Standard FCC Part 15.207

#### 11.1.2.Test Limit

Table 25 Conducted Disturbance Test Limit

Fragueray	Maximum RF Line Voltage (dBμV)			
Frequency	Quasi-peak Level	Average Level		
150kHz~500kHz	66 ~ 56 *	56 ~ 46 *		
500kHz~5MHz	56	46		
5MHz~30MHz	60	50		

<sup>\*</sup> Decreasing linearly with logarithm of the frequency

#### 11.2.Test Procedure

The EUT is put on a table of non-conducting material that is 80cm high. The vertical conducting wall of shielding is located 40cm to the rear of the EUT. The power line of the EUT is connected to the AC mains through a Artificial Mains Network (A.M.N.). A EMI test receiver (R&S Test Receiver ESCS30) is used to test the emissions form both sides of AC line. According to the requirements of ANSI C63.10-2013. Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz using CISPR Quasi-Peak and average detector mode.

The bandwidth of EMI test receiver is set at 9kHz.

#### 11.3.Test Arrangement

The arrangement of the equipment is installed to meet the standards and operating in a manner, which tends to maximize its emission characteristics in a normal application. The detailed information refers to test picture.

#### 11.4.Test Data

The emissions don't show in below are too low against the limits. Refer to the test curves.

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<sup>\*</sup> The lower limit shall apply at the transition frequency.

Table 26 Conducted Disturbance Test Data

Model No.: 7071A

Test mode: Charging and Transmitting

Adaptor:1#

	Frequency	Correction	Quasi-Peak			Average			
	(MHz)	Factor (dB)	Reading (dBμV)	Emission Level (dB <sub>µ</sub> V)	Limits (dBμV)	Reading (dBμV)	Emission Level (dBµV)	Limits (dBμV)	
Line	0.186	9.7	40.1	49.8	64.2	24.2	33.9	54.2	
	0.242	9.7	33.4	43.1	62.0	19.8	29.5	52.0	
	0.418	9.7	33.1	42.8	57.5	22.7	32.4	47.5	
	0.542	9.8	33.3	43.1	56	22.7	32.5	46	
	0.590	9.8	34.0	43.8	56	23.5	33.3	46	
	22.620	10.2	30.1	40.3	60	18.1	28.3	50	
Neutral	0.198	9.7	40.4	50.1	63.7	24.2	33.9	53.7	
	0.250	9.7	34.0	43.7	61.8	19.1	28.8	51.8	
	0.418	9.7	32.0	41.7	57.5	21.5	31.2	47.5	
	0.550	9.8	30.4	40.2	56	21.7	31.5	46	
	0.662	9.8	29.7	39.5	56	21.4	31.2	46	
	23.228	10.2	28.5	38.7	60	16.5	26.7	50	

Table 27 Conducted Disturbance Test Data

Model No.: 7071A

Test mode: Charging and Transmitting

Adaptor:2#

Adaptor:2#									
	Frequency	Correction	ction Quasi-Peak			Average			
	(MHz)	Factor (dB)	Reading (dBμV)	Emission Level (dBµV)	Limits (dBμV)	Reading (dBμV)	Emission Level (dBµV)	Limits (dBμV)	
Line	0.170	9.7	34.1	43.8	65.0	21.1	30.8	55.0	
	0.542	9.8	37.7	47.5	56	25.9	35.7	46	
	0.654	9.8	36.1	45.9	56	21.2	31.0	46	
	2.558	9.9	27.9	37.8	56	14.2	24.1	46	
	17.000	9.9	37.7	47.6	60	23.6	33.5	50	
	24.844	10.2	40.5	50.7	60	24.1	34.3	50	
Neutral	0.162	9.7	32.8	42.5	65.4	23.4	33.1	55.4	
	0.582	9.8	32.8	42.6	56	26.7	36.5	46	
	0.646	9.8	39.6	49.4	56	34.8	44.6	46	
	1.290	9.8	26.1	35.9	56	19.1	28.9	46	
	15.152	9.9	35.9	45.8	60	27.5	37.4	50	
	25.236	10.2	43.1	53.3	60	21.9	32.1	50	

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Table 28 Conducted Disturbance Test Data

Model No.: 7071A

Test mode: Charging and Transmitting

Adaptor:3#

	Frequency	Correction	Quasi-Peak			Average			
	(MHz)	Factor (dB)	Reading (dBμV)	Emission Level (dBµV)	Limits (dBμV)	Reading (dBμV)	Emission Level (dBµV)	Limits (dBμV)	
	0.150	9.7	32.1	41.8	66	18.7	28.4	56	
	0.562	9.8	32.1	41.9	56	25.6	35.4	46	
Line	0.602	9.8	31.0	40.8	56	24.4	34.2	46	
Line	1.542	9.8	30.7	40.5	56	24.6	34.4	46	
	1.742	9.8	31.4	41.2	56	25.5	35.3	46	
	1.890	9.8	31.5	41.3	56	24.9	34.7	46	
Neutral	0.154	9.7	33.0	42.7	65.8	8.7	18.4	55.8	
	0.562	9.8	28.9	38.7	56	19.3	29.1	46	
	0.622	9.8	23.0	32.8	56	11.3	21.1	46	
	0.858	9.8	20.3	30.1	56	8.3	18.1	46	
	1.670	9.8	27.0	36.8	56	13.7	23.5	46	
	1.898	9.8	26.3	36.1	56	12.8	22.6	46	

REMARKS: 1. Emission level(dBuV)=Read Value(dBuV) + Correction Factor(dB)

- 2. Correction Factor(dB) =LISN Factor (dB) + Cable Factor (dB)+Limiter Factor(dB)
- 3. The other emission levels were very low against the limit.

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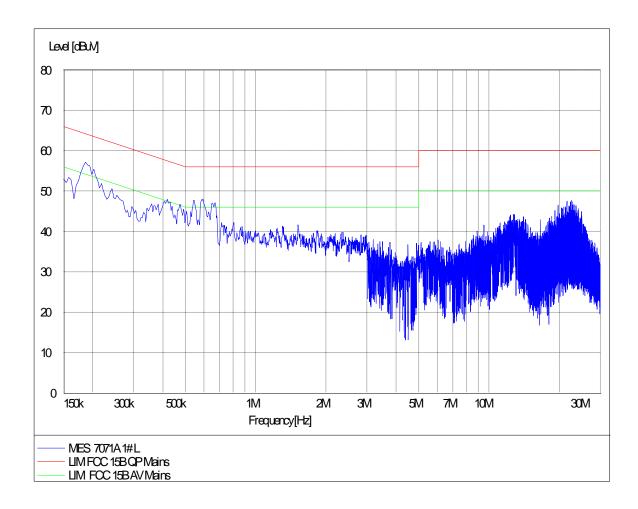
Manufacturer:

Operating Condition: Charging and Transmitting

Test Site: Operator:

Test Specification: L

Comment: AC 120V/60Hz
Comment: Adaptor: 1#



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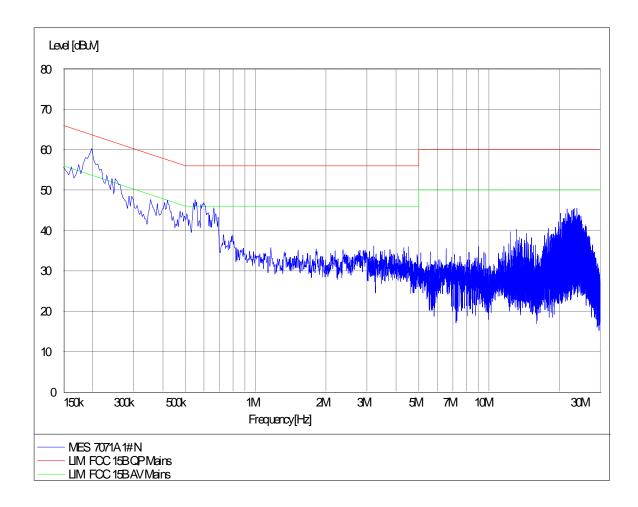
Manufacturer:

Operating Condition: Charging and Transmitting

Test Site: Operator:

Test Specification: N

Comment: AC 120V/60Hz
Comment: Adaptor: 1#



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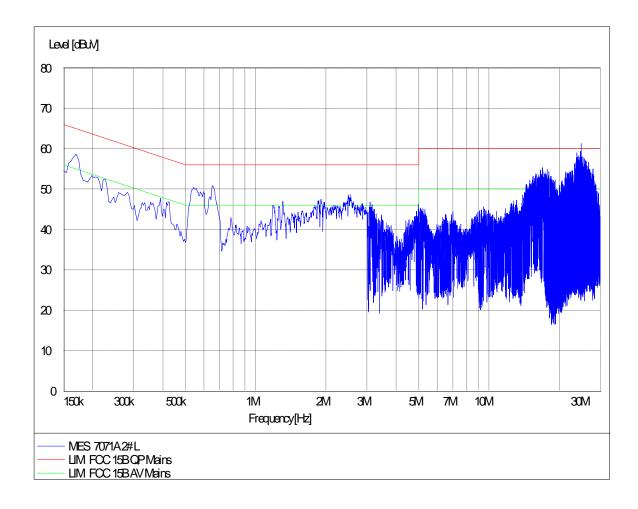
Manufacturer:

Operating Condition: Charging and Transmitting

Test Site: Operator:

Test Specification: L

Comment: AC 120V/60Hz Comment: Adaptor: 2#



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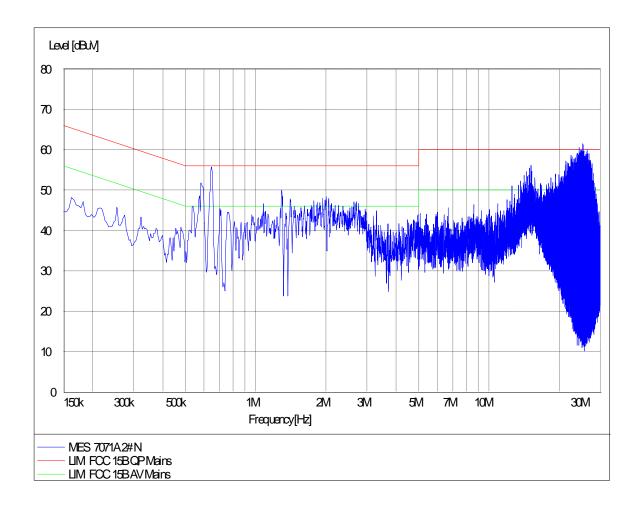
Manufacturer:

Operating Condition: Charging and Transmitting

Test Site: Operator:

Test Specification: N

Comment: AC 120V/60Hz
Comment: Adaptor: 2#



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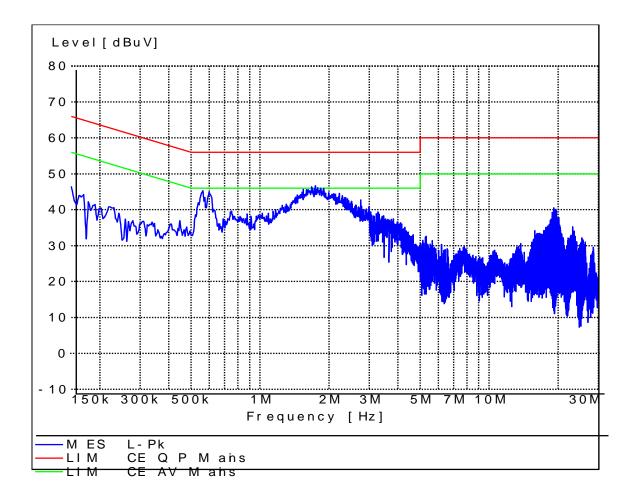
Manufacturer:

Operating Condition: Charging and Transmitting

Test Site: Operator:

Test Specification: L

Comment: AC 120V/60Hz Comment: Adaptor: 3#



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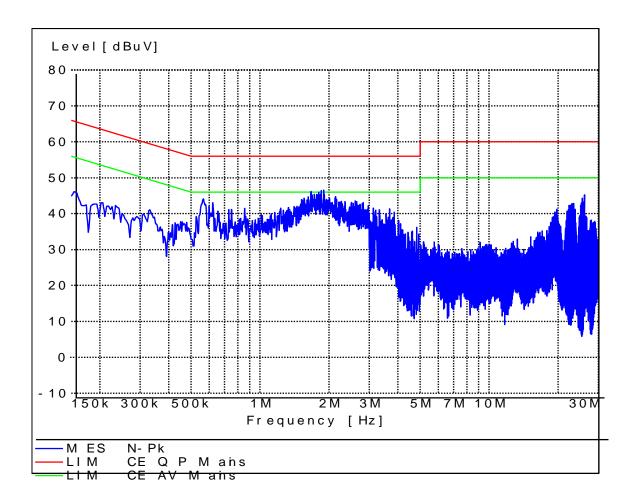
Manufacturer:

Operating Condition: Charging and Transmitting

Test Site: Operator:

Test Specification: N

Comment: AC 120V/60Hz
Comment: Adaptor: 3#



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#### 12. ANTENNA REQUIREMENTS

### 12.1.Applicable requirements

If directional gain of transmitting antennas is greater than 6dBi, the power shall be reduced by the same level in dB comparing to gain minus 6dBi. For the fixed point-to-point operation, the power shall be reduced by one dB for every 3 dB that the directional gain of the antenna exceeds 6 dBi. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the FCC rule.

#### 12.2.Antenna Connector

Antenna Connector is on the PCB within enclosure and not accessible to user.

#### 12.3.Antenna Gain

The antenna gain of EUT is less than 6 dBi.

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