TEST REPORT

For

ActivConnect G Series Android PC

Model Number: PRM-X6PRO-01

FCC ID: QAM018

IC: 5459A-018

Report Number : WT168001787

Test Laboratory : Shenzhen Academy of Metrology and Quality

Inspection

National Digital Electronic Product Testing Center

Site Location : NETC Building, No.4 Tongfa Rd., Xili, Nanshan,

Shenzhen, China

Tel : 0086-755-86928965

Fax : 0086-755-86009898-31396

Web : www.smq.com.cn E-mail : emcrf@smq.com.cn

TEST REPORT DECLARATION

Applicant : PROMETHEAN LIMITED

Address : PROMETHEAN HOUSE, LOWER PHILIPS RD WHITEBIRK

BLACKBURN, BB1 5TH UNITED KINGDOM

Manufacturer : PROMETHEAN LIMITED

Address : PROMETHEAN HOUSE, LOWER PHILIPS RD WHITEBIRK

BLACKBURN, BB1 5TH UNITED KINGDOM

EUT Description : ActivConnect G Series Android PC

Model No : PRM-X6PRO-01

Trade mark : Promethean

Serial Number : /

FCC ID : QAM018

IC : 5459A-018

Test Standards:

FCC Part 15 15.207, 15.209, 15.247(2015)

RSS-247 Issue 1(2015-05) RSS-Gen Issue 4(2014-11)

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 and IC Rules RSS-247 Issue 1(2015-05), RSS-Gen Issue 4(2014-11)

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:	族了林	Date:	May.13, 2016
	(Chen Silin 陈司林)		
Checked by:	相直胸	Date:	May.13, 2016
	(Lin Yixiang 林奕翔)		
Approved by:	李和	Date:	May.13, 2016
	(Lin Bin 林斌)		

Report No.:WT168001787 Page 2 of 106

TABLE OF CONTENTS

TES	T REP	ORT DECLARATION	2
1.	TES	T RESULTS SUMMARY	5
2.	GEN	ERAL INFORMATION	6
	2.1.	Report information	6
	2.2.	Laboratory Accreditation and Relationship to Customer	6
	2.3.	Measurement Uncertainty	7
3.	PRO	DUCT DESCRIPTION	8
	3.1.	EUT Description	8
	3.2.	Related Submittal(s) / Grant (s)	8
	3.3.	Block Diagram of EUT Configuration	8
	3.4.	Operating Condition of EUT	9
	3.5.	Directional Antenna Gain	9
	3.6.	Support Equipment List	10
	3.7.	Test Conditions	10
	3.8.	Special Accessories	10
	3.9.	Equipment Modifications	10
4.	TES	T EQUIPMENT USED	11
5.	6DB	BANDWIDTH MEASUREMENT	14
	5.1.	LIMITS OF 6dB BANDWIDTH MEASUREMENT	14
	5.2.	TEST PROCEDURE	14
	5.3.	TEST SETUP	14
6.	MAX	IMUM CONDUCTED OUTPUT POWER MEASUREMENT	18
	6.1.	LIMITS OF Maximum Conducted Output Power Measurement	18
	6.2.	TEST PROCEDURE	18
	6.3.	TEST DATA	18
7.	MAX	IMUM POWER SPECTRAL DENSITY LEVEL MEASUREMENT	20
	7.1.	LIMITS OF Maximum Power Spectral Density Level Measurement	20
	7.2.	TEST PROCEDURE	20
	7.3.	TEST DATA	20
8.	CON	DUCTED BANDEDGE AND SPURIOUS MEASURMENT	24

	8.1.	LIMITS OF Conducted Bandedge and Spurious Measurement	24
	8.2.	TEST PROCEDURE	24
	8.3.	TEST DATA	25
9.	RADI	ATED BANDEDGE AND SPURIOUS MEASUREMENT	34
	9.1.	LIMITS OF Radiated Bandedge and Spurious Measurement	34
	9.2.	TEST PROCEDURE	34
	9.3.	TEST DATA	35
10.	CON	DUCTED EMISSION TEST FOR AC POWER PORT MEASUREMENT	98
	10.1.	Test Standard and Limit	98
	10.2.	Test Procedure	98
	10.3.	Test Arrangement	98
	10.4.	Test Data	98
11.	ANTE	ENNA REQUIREMENTS	102
	11.1.	Applicable requirements	102
	11.2.	Antenna Connector	102
	11.3.	Antenna Gain	102

1. TEST RESULTS SUMMARY

Table 1 Test Results Summary

	ot recount Carrina	<i>}</i>	
Test Items	FCC Rules	IC Rules	Test Results
6dB DTS bandwidth measurement	15.247 (a) (2)	RSS-247 Clause 5.2(1)	Pass
Maximum Peak Conducted Power	15.247 (b) (3)	RSS-247 Clause 5.4(4)	Pass
Maximum Power Spectral Density Level	15.247 (3)	RSS-247 Clause 5.2(2)	Pass
Conducted Bandedge and Spurious	15.247 (d)	RSS-247 Clause 5.5	Pass
Radiated Bandedge and Spurious	15.247 (d) 15.209 15.205	RSS-247 Clause 5.5	Pass
Conducted emission test for AC power port	15.207	RSS-Gen Section8.8	Pass
Antenna Requirment	15.203	RSS-Gen Section8.1.3	Pass
99% Occupied bandwidth	N/A	RSS-Gen Clause 6.6	Pass

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

Report No.:WT168001787 Page 5 of 106

2. GENERAL INFORMATION

2.1.Report information

- 2.1.1.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.
- 2.1.2. 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.
- 2.1.3.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 quality Inspection EMC Laboratory (Guangdong EMC compliance testing center), in their facilities located at Bldg. of Metrology & Quality Inspection, Longzhu Road, Nanshan District, Shenzhen, Guangdong, 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 are 446246 806614 994606(semi anechoic chamber).

The Laboratory is listed in Voluntary Control Council for Interference by Information Technology Equipment (VCCI), and the registration number are R-1974(open area test site), R-1966(semi anechoic chamber),C-2117(mains ports conducted interference measurement) and T-180(telecommunication ports conducted interference measurement).

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

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

Report No.:WT168001787 Page 6 of 106

2.3. Measurement Uncertainty

Conducted Emission 9kHz~30MHz 3.5dB

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

Report No.:WT168001787 Page 7 of 106

3. PRODUCT DESCRIPTION

3.1.EUT Description

Description : ActivConnect G Series Android PC

Manufacturer : PROMETHEAN LIMITED

Model Number : PRM-X6PRO-01

Operate : 0.4000LL 0.400

Frequency 2.402GHz~2.480GHz

Antenna :

Designation WLAN/BT: PIFA Antenna 2dBi

Remark: /

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		

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

This submittal(s) (test report) is intended for FCC ID: **QAM018** and IC: **5459A-018** filing to comply with Section 15.207, 15.209, 15.247 of the FCC Part 15, Subpart C and RSS-247 Issue 1(2015-05), RSS-Gen Issue 4(2014-11) Rules.

3.3. Block Diagram of EUT Configuration

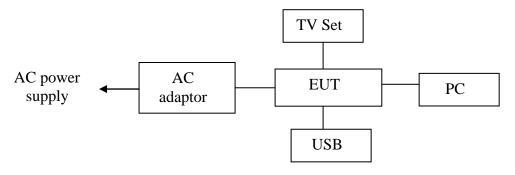


Figure 1 EUT setup

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

802.11b 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.

Report No.:WT168001787

Page 9 of 106

3.6. Support Equipment List

Table 3 Support Equipment List

Name	Model No	S/N	Manufacturer		
Adaptor for EUT	ICP12-050-2000D		Shenzhen Shi Yingyuan Electronics Co., Ltd.		
Computer	9439	L3BDF2K	Lenovo		
Keyboard (USB)	SK-8825 (L)	02553778	Lenovo		
Mouse (USB)	MO28UOL	4418011108	Lenovo		
Monitor	9227-AE1	V1TDB38	Lenovo		
TV	KV-J21TF8		Sony		
LCD TV	26L16SW	R145567	Skyworth		

3.7. Test Conditions

Date of test: Apr.15,2016- May.10, 2016 Date of EUT Receive: Apr.11,2016

Temperature: -30-50 °C Relative Humidity:48-56%

3.8. Special Accessories

Not available for this EUT intended for grant.

3.9. Equipment Modifications

Not available for this EUT intended for grant.

Report No.:WT168001787 Page 10 of 106

4. TEST EQUIPMENT USED

Table 4 Test Equipment

No.	Equipment	Manufacturer	Model No.	Last Cal.	Cal. Interval
SB2603	EMI Test Receiver	Rohde & Schwarz	ESCS30	Dec.18, 2015	1 Year
SB3321	AMN	Rohde & Schwarz	ESH2-Z5	Jan.17, 2016	1 Year
SB2604	AMN	Rohde & Schwarz	ESH3-Z5	Nov.18, 2015	1 Year
SB8501/09	EMI Test Receiver	Rohde & Schwarz	ESU40	Mar.18, 2016	1 Year
SB8501/04	Bilog Antenna	Schwarzbeck	VULB9163	Mar.18, 2016	1 Year
SB5472/02	Trilog Broadband Antenna(30M-3GHz)	Schwarzbeck	VULB9163	Jan.07 ,2016	1 Year
SB3435	Horn Antenna	Rohde & Schwarz	HF906	Jan.18, 2016	1 Year
SB8501/01	Double-Ridged Waveguide Horn Antenna(1G~18GHz)	Rohde & Schwarz	HF907	Mar.21, 2016	1 Year
SB3345	Loop Antenna	Schwarzbeck	FMZB1516	Jan.20, 2015	2 Years
SB8501/17	Preamplifier	Rohde & Schwarz	SCU-18	Mar.26, 2016	1 Year
SB8501/16	Preamplifier	Rohde & Schwarz	SCU-26	Mar.26, 2016	1 Year
SB8501/11	Horn Antenna	ETS-Lindgren	3160-09	Mar.28,2016	1 Year
SB9721/05	Power Meter	Agilent	N1913A	Dec.28, 2015	1 Year
SB9721/06	Power Sensor	Agilent	E9304A	Dec.28, 2015	1 Year
SB9060	Signal Analyzer	Rohde & Schwarz	FSQ	Apr.25,2016	1 Year

Report No.:WT168001787 Page 11 of 106

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



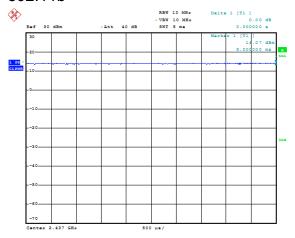
5.4.TEST DATA

Table 5 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	1.395	96.68%	0.15	1
802.11n HT20	1.310	96.45%	0.16	1

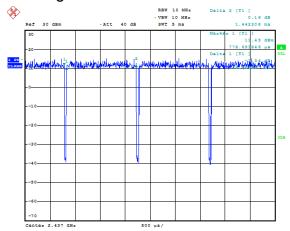
Report No.:WT168001787 Page 12 of 106

802.11b



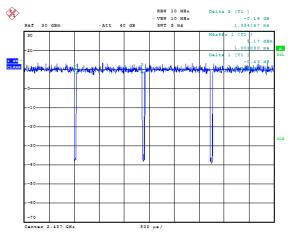
Date: 10.MAY.2016 11:58:36

802.11g



Date: 10.MAY.2016 14:15:57

802.11n HT20



Date: 10.MAY.2016 14:23:11

Report No.:WT168001787 Page 13 of 106

6. 6DB BANDWIDTH MEASUREMENT

6.1.LIMITS OF 6dB BANDWIDTH MEASUREMENT

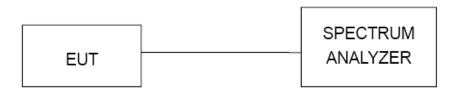
CFR 47 (FCC) part 15.247 (a) (2) , 558074 D01 DTS Meas Guidance v03r05 RSS-247 Clause 5.2(1)

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

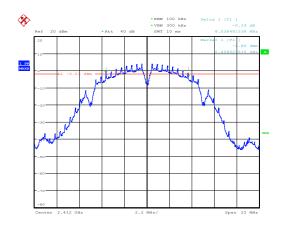


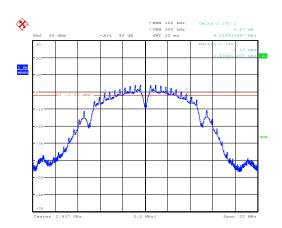
Report No.:WT168001787 Page 14 of 106

Test Data

Table 6 6dB Bandwidth Test Data 802.11b

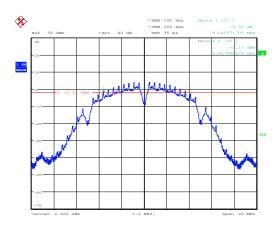
rabio o dab barramani root bata dobir rb				
CHANNEL	6dB			
FREQUENCY	BANDWIDTH	results		
(MHz)	(MHz)			
2412	8.038	Pass		
2437	8.018	Pass		
2462	8.045	Pass		





Date: 10.MAY.2016 11:55:25

Date: 10.MAY.2016 13:57:42

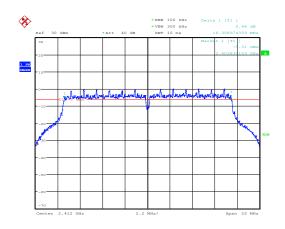


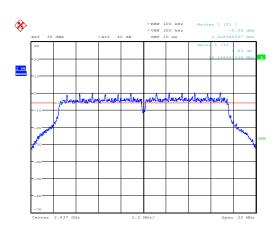
Date: 10.MAY.2016 14:00:00

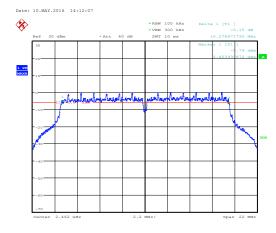
Report No.:WT168001787 Page 15 of 106

Table 7 6dB Bandwidth Test Data 802.11g

Table 1 cab bandwidth 1 cot bata cc2.1 1g					
CHANNEL	6dB				
FREQUENCY	BANDWIDTH	results			
(MHz)	(MHz)				
2412	16.359	Pass			
2437	16.266	Pass			
2462	16.279	Pass			





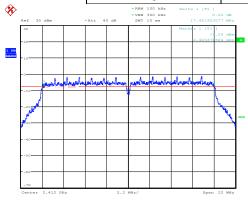


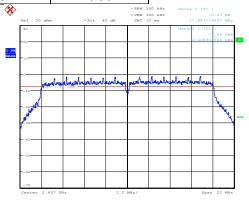
Date: 10.MAY.2016 14:14:15

Date: 10.MAY.2016 14:18:02

Table 8 6dB Bandwidth Test Data 802.11n HT20

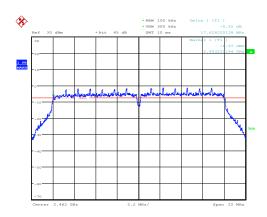
Table 6 642 Ballamatil 166t Bata 66211 1111126					
CHANNEL	6dB				
FREQUENCY	BANDWIDTH	results			
(MHz)	(MHz)				
2412	17.452	Pass			
2437	17.487	Pass			
2462	17.628	Pass			





Date: 10.MAY.2016 14:19:42

Date: 10.MAY.2016 14:21:48



Date: 10.MAY.2016 14:34:08

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 RSS-247Clause 5.4(4)

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

Report No.:WT168001787 Page 18 of 106

Table 9 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	15.24	0	15.24	< 30	Pass
2437	15.32	0	15.32	< 30	Pass
2462	15.47	0	15.47	< 30	Pass

Table 10 Maximum Conducted Output Power Test Data 802.11g

Center Freq.[MHz]	Meas. Level (Cond.) [dBm]	Duty	Maximum Conducted Output Power(Average) [dBm]	Limit [dBm]	Result
2412	15.09	0.15	15.24	< 30	Pass
2437	15.31	0.15	15.46	< 30	Pass
2462	15.34	0.15	15.49	< 30	Pass

Table 11 Maximum Conducted Output Power Test Data 802.11n HT20

Center Freq.[MHz]	Meas. Level (Cond.) [dBm]	Duty	Maximum Conducted Output Power(Average) [dBm]	Limit [dBm]	Result
2412	13.83	0.16	13.89	< 30	Pass
2437	13.89	0.16	14.05	< 30	Pass
2462	13.92	0.16	14.08	< 30	Pass

Report No.:WT168001787 Page 19 of 106

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 RSS-247 Clause 5.2(2)

8.2.TEST PROCEDURE

The transmitter output was connected to the spectrum analyzer.

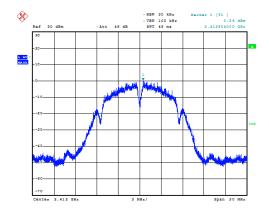
- a)Set analyzer center frequency to DTS channel center frequency.
- b) Set span to at least 1.5 times the OBW.
- c) Set RBW = 1-5% of the OBW, not to exceed 1 MHz
- d) Set VBW \geq 3 x RBW.
- e)Detector = power averaging (RMS) or sample detector
- f) Number of points in sweep ≥ 2 span / RBW. (This gives bin-to-bin spacing \leq RBW/2, so that narrowband signals are not lost between frequency bins.)
- g)Sweep time = auto couple.
- 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.

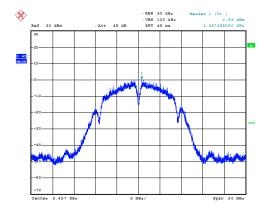
8.3.TEST DATA

Report No.:WT168001787 Page 20 of 106

Table 12 Maximum Power Spectral Density Level Test Data 802.11b

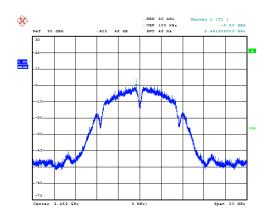
Center Freq.[MHz]	Meas.Level [dBm]	Duty Factor	Snoctral	l imit	Result
2412	0.36	0	0.36	8	Pass
2437	0.58	0	0.58	8	Pass
2462	-0.60	0	-0.60	8	Pass





Date: 10.MAY.2016 15:06:43

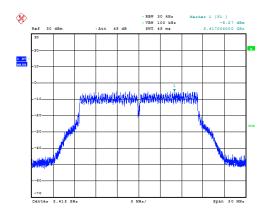
Date: 10.MAY.2016 15:07:35

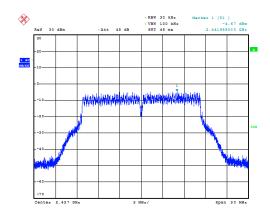


Date: 10.MAY.2016 15:08:39

Table 13 Maximum Power Spectral Density Level Test Data 802.11g

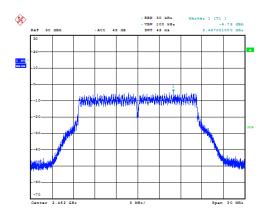
Center Freq.[MHz]	Meas.Level [dBm]	Duty Factor	Shootral	l imit	Result
2412	-5.27	0.15	-5.12	8	Pass
2437	-4.67	0.15	-4.52	8	Pass
2462	-4.78	0.15	-4.63	8	Pass





Date: 10.MAY.2016 15:09:58

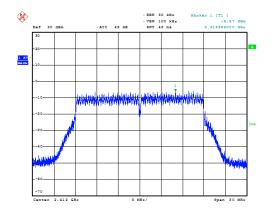
Date: 10.MAY.2016 15:10:25

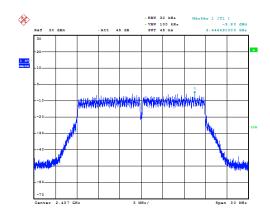


Date: 10.MAY.2016 15:10:55

Table 14 Maximum Power Spectral Density Level Test Data 802.11n HT20

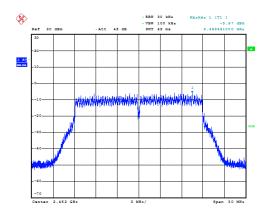
Center Freq.[MHz]	Meas.Level [dBm]	Duty	Shootral	l imit	Result
2412	-5.97	0.16	-5.81	8	Pass
2437	-5.80	0.16	-5.64	8	Pass
2462	-5.97	0.16	-5.81	8	Pass





Date: 10.MAY.2016 15:11:26

Date: 10.MAY.2016 15:12:45



Date: 10.MAY.2016 15:13:28

Report No.:WT168001787 Page 23 of 106

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 RSS-247 Clause 5.5

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

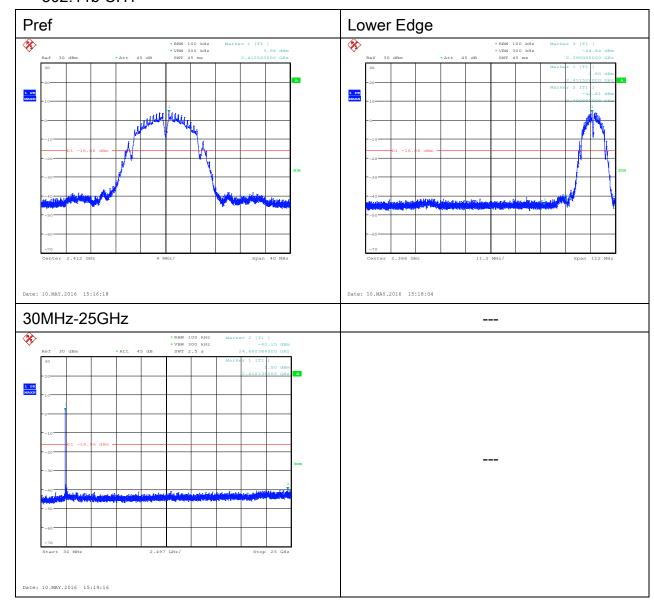
- a)Set the center frequency and span to encompass frequency range to be measured.
- b)Set the RBW = 100 kHz.
- c)Set the VBW \geq 3 x RBW.
- d)Detector = peak.
- e)Ensure that the number of measurement points ≥ span/RBW
- f)Sweep time = auto couple.
- g)Trace mode = max hold.
- h)Allow trace to fully 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 30dB than fundamental frequency.

Report No.:WT168001787 Page 24 of 106

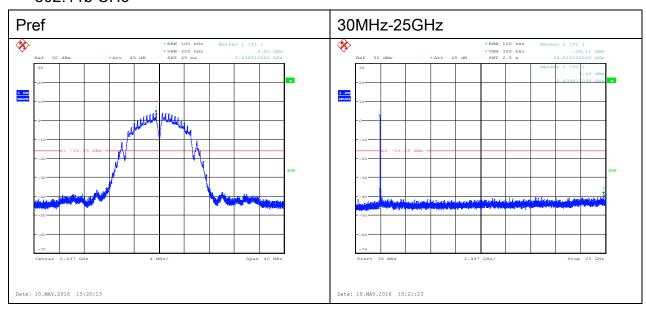
9.3.TEST DATA

802.11b CH1

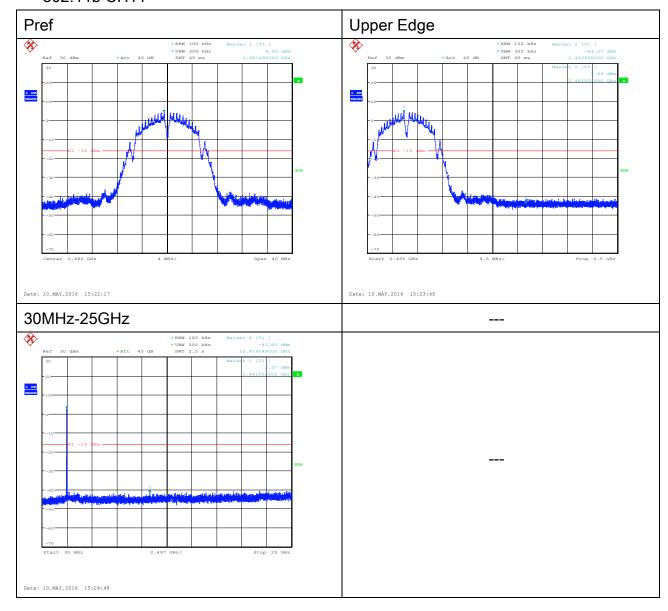


Report No.:WT168001787 Page 25 of 106

802.11b CH6

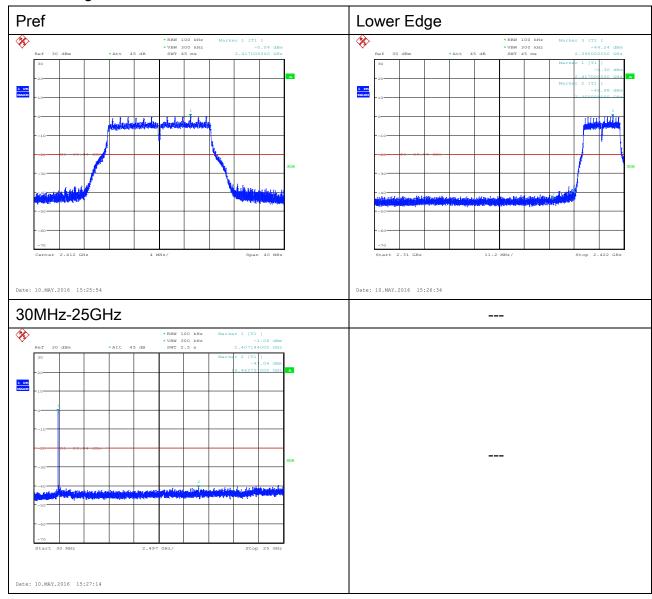


802.11b CH11



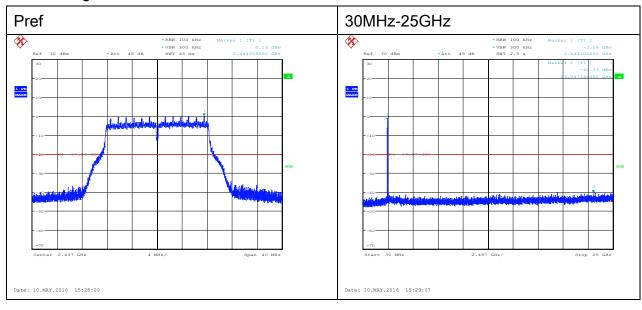
Report No.:WT168001787 Page 27 of 106

802.11g CH1



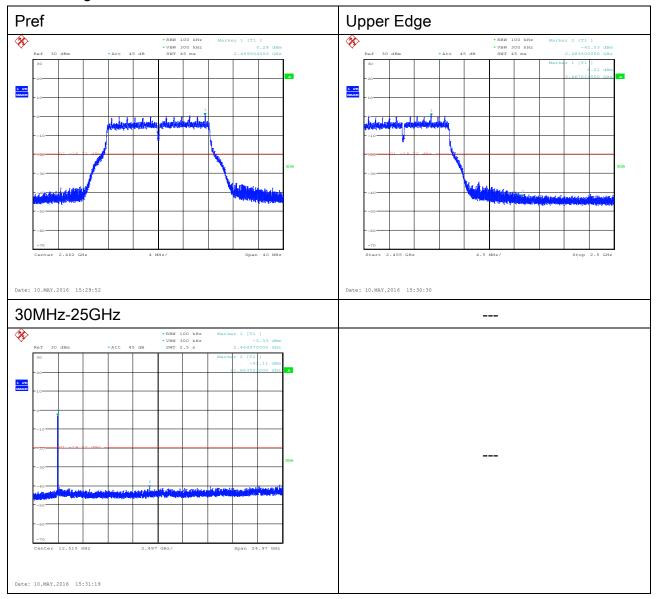
Report No.:WT168001787 Page 28 of 106

802.11g CH6



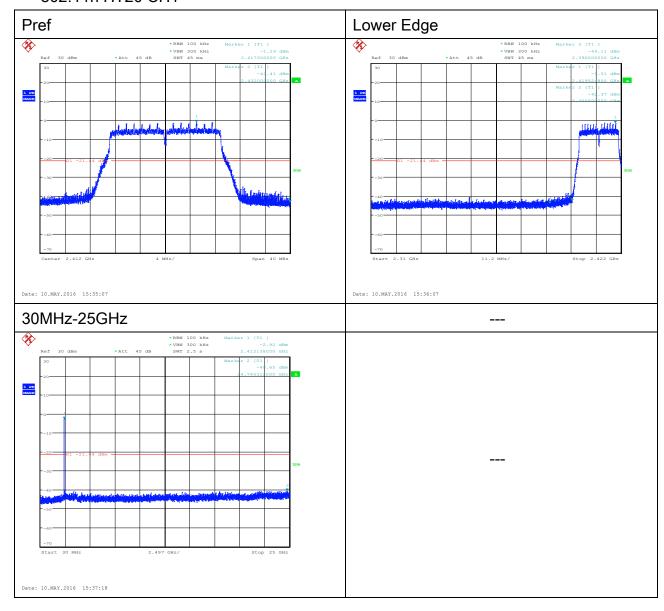
Report No.:WT168001787 Page 29 of 106

802.11g CH11



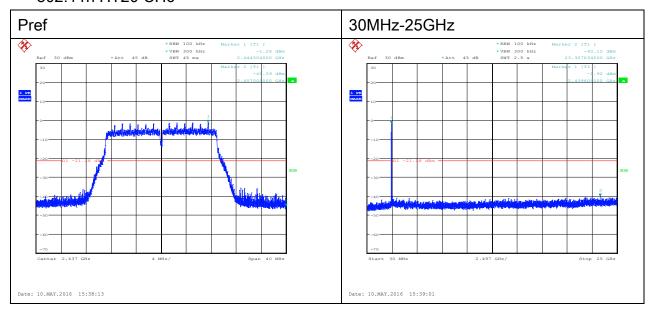
Report No.:WT168001787 Page 30 of 106

802.11n HT20 CH1



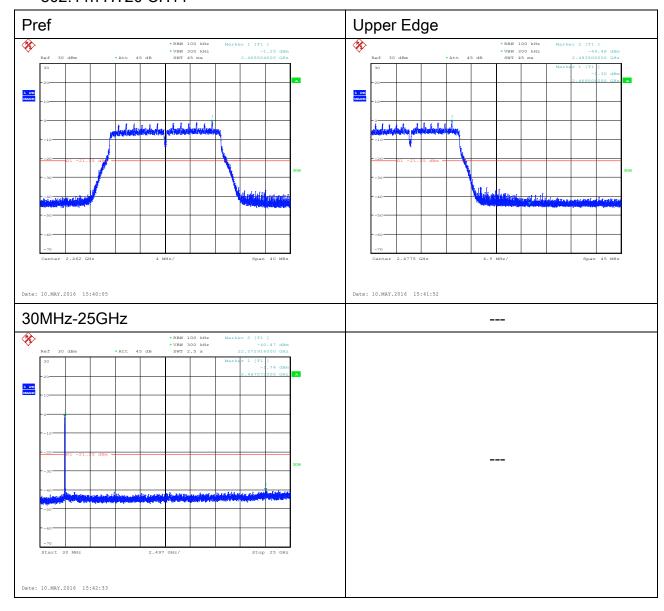
Report No.:WT168001787 Page 31 of 106

802.11n HT20 CH6



Report No.:WT168001787 Page 32 of 106

802.11n HT20 CH11



Report No.:WT168001787 Page 33 of 106

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 RSS-247 Clause 5.5

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.

Report No.:WT168001787 Page 34 of 106

10.3.TEST DATA

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 15 Radiated Emission Test Data 9k Hz-30MHz

Loss(dB	Antenna Factor(d B)	Readings(d BµV/m)	Level(dBµ V/m)	1)	Turntable Angle(de g)	Antenna Height(m)	Limits(dBµV/m)	Margin(d B)
 			ŀ					
 			ŀ					
 			-					

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 16 Radiated Emission Test Data 30MHz-1GHz

Frequency MHz	Loss(dB		Readings(d BµV/m)	Level(dBµ V/m)	Polarity(H/V)	Turntable Angle(de g)	Antenna Height(m)	Limits(dBµV/m)	Margin(d B)
581.251	3.0	16.6	23.1	42.7	V	20	1。5	46	3.3
625.095	3.2	18.5	22.6	44.3	V	0	2.0	46	1.7
750.031	3.5	18.8	19.5	41.8	V	30	1.2	46	4.2
166.188	1.5	8.7	25.0	35.2	Н	38	1.2	43.5	8.3
375.029	2.3	14.3	28.5	45.1	Н	0	1.0	46	0.9
625.095	3.2	18.5	22.2	43.9	Н	20	1.0	46	2.1

Report No.:WT168001787 Page 35 of 106

Radiated Emission

EUT Information

EUT Model Name: PRM-X6PRO-01
Operation mode: Transmitting

Test Voltage: Comment:

Common Information

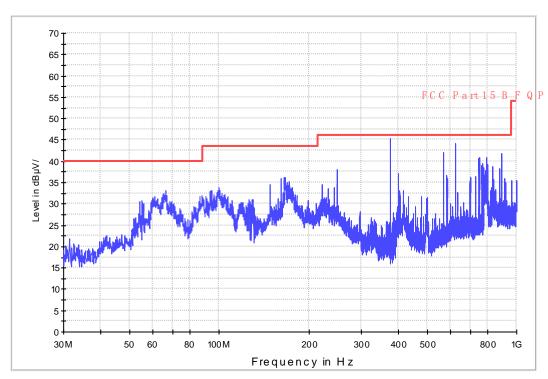
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Horizontal

Operator Name: Comment:

Field strength 30M-1GHz 1F 3m chamber



Report No.:WT168001787 Page 36 of 106

EUT Information

EUT Model Name: PRM-X6PRO-01
Operation mode: Transmitting

Test Voltage: Comment:

Common Information

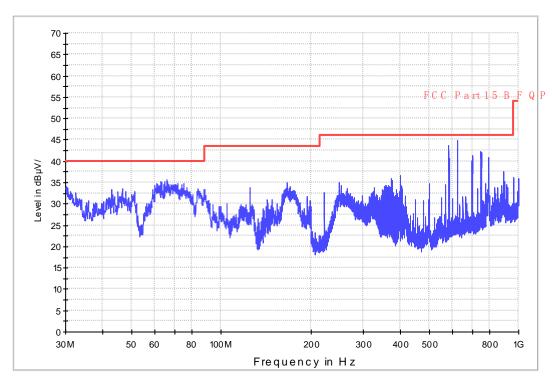
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Vertical

Operator Name: Comment:

Field strength 30M-1GHz 1F 3m chamber



Report No.:WT168001787 Page 37 of 106

1-18G

11b

Ch1

Radiated Emission

EUT Information

EUT Model Name: PRM-X6PRO-01 Operation mode: Wifi 11b CH1

Test Voltage: Comment:

Common Information

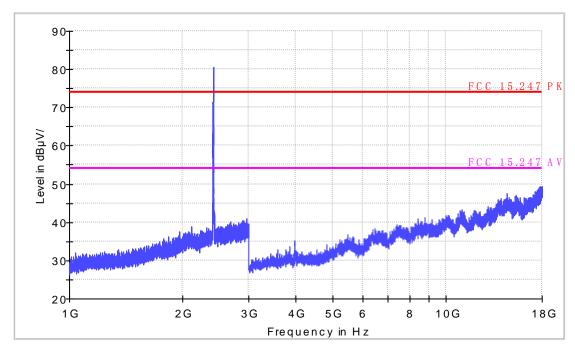
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Horizontal

Operator Name: Comment:

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



Report No.:WT168001787 Page 38 of 106

EUT Information

EUT Model Name: PRM-X6PRO-01 Operation mode: Wifi 11b CH1

Test Voltage: Comment:

Common Information

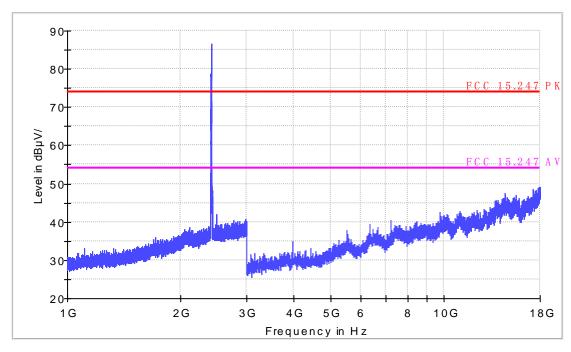
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Vertical

Operator Name: Comment:

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



Report No.:WT168001787 Page 39 of 106

1-18G

11b

CH6

Radiated Emission

EUT Information

EUT Model Name: PRM-X6PRO-01 Operation mode: Wifi 11b CH6

Test Voltage: Comment:

Common Information

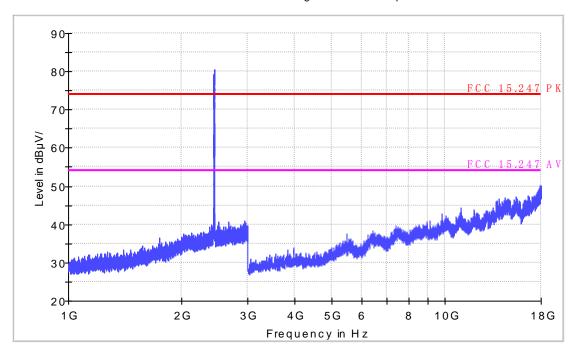
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Horizontal

Operator Name: Comment:

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



Report No.:WT168001787 Page 40 of 106

EUT Information

EUT Model Name: PRM-X6PRO-01 Operation mode: Wifi 11b CH6

Test Voltage: Comment:

Common Information

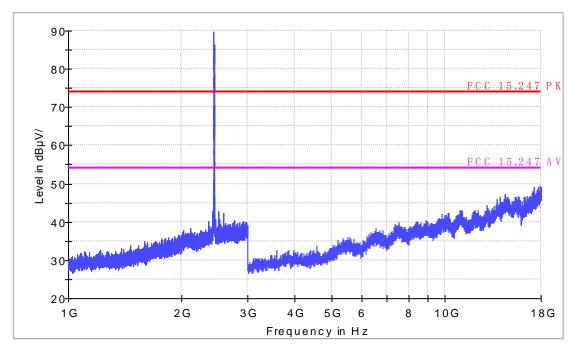
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Vertical

Operator Name: Comment:

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



Report No.:WT168001787 Page 41 of 106

1-18G

11b

CH11

Radiated Emission

EUT Information

EUT Model Name: PRM-X6PRO-01 Operation mode: Wifi 11b CH11

Test Voltage: Comment:

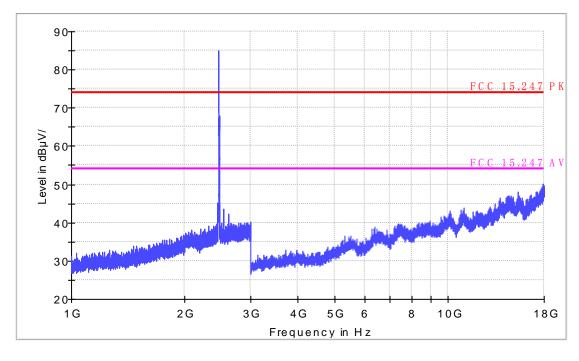
Common Information

Test Site: SMQ EMC Lab.

Environment
Antenna Polarization: Horizontal

Operator Name: Comment:

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



Report No.:WT168001787 Page 42 of 106

EUT Information

EUT Model Name: PRM-X6PRO-01 Operation mode: Wifi 11b CH11

Test Voltage: Comment:

Common Information

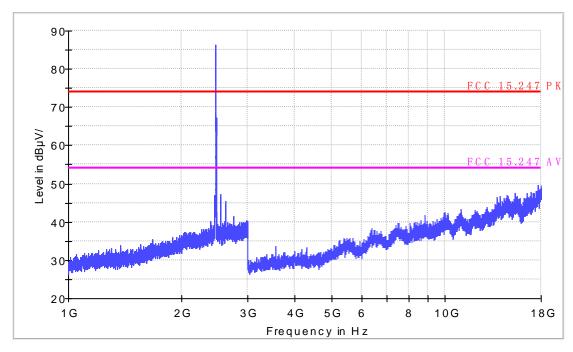
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Vertical

Operator Name: Comment:

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



Report No.:WT168001787 Page 43 of 106

1-18G

11g

CH1

Radiated Emission

EUT Information

EUT Model Name: PRM-X6PRO-01 Operation mode: Wifi 11g CH1

Test Voltage: Comment:

Common Information

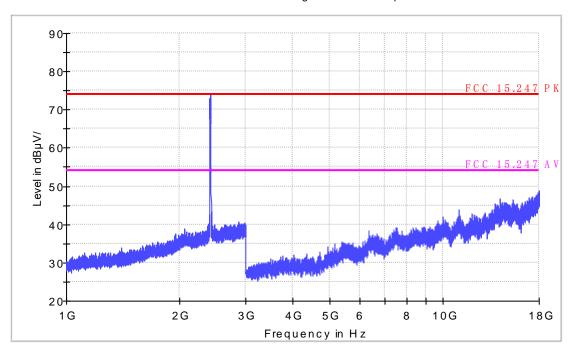
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Horizontal

Operator Name: Comment:

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



Report No.:WT168001787 Page 44 of 106

EUT Information

EUT Model Name: PRM-X6PRO-01 Operation mode: Wifi 11g CH1

Test Voltage: Comment:

Common Information

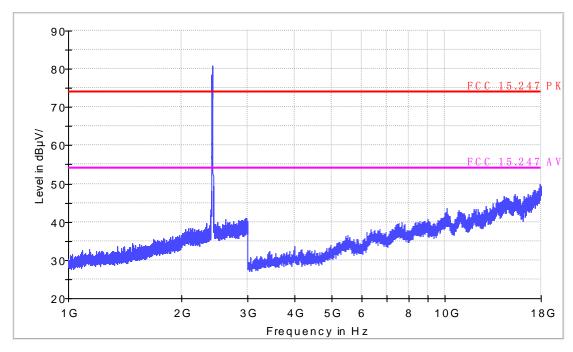
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Vertical

Operator Name: Comment:

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



Report No.:WT168001787 Page 45 of 106

1-18G

11g

CH6

Radiated Emission

EUT Information

EUT Model Name: PRM-X6PRO-01 Operation mode: Wifi 11g CH6

Test Voltage: Comment:

Common Information

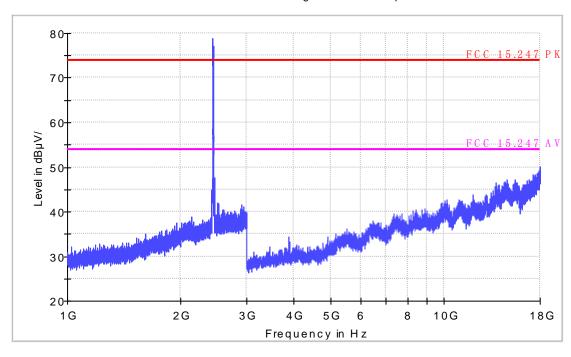
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Horizontal

Operator Name: Comment:

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



Report No.:WT168001787 Page 46 of 106

EUT Information

EUT Model Name: PRM-X6PRO-01 Operation mode: Wifi 11g CH6

Test Voltage: Comment:

Common Information

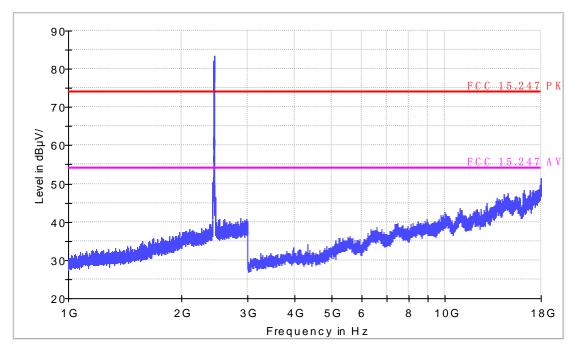
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Vertical

Operator Name: Comment:

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



Report No.:WT168001787 Page 47 of 106

1-18G

11g

CH11

Radiated Emission

EUT Information

EUT Model Name: PRM-X6PRO-01 Operation mode: Wifi 11g CH11

Test Voltage: Comment:

Common Information

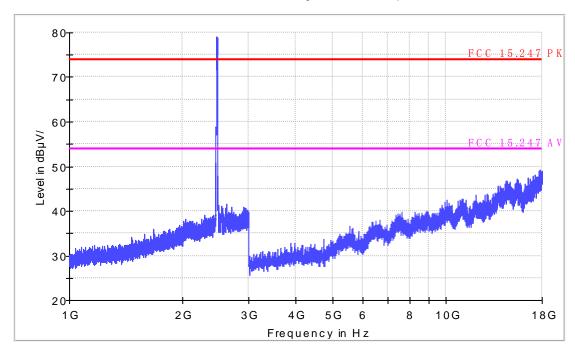
Test Site: SMQ EMC Lab. Environment

Antenna Polarization: Horizontal

Operator Name:

Comment:

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



Report No.:WT168001787 Page 48 of 106

EUT Information

EUT Model Name: PRM-X6PRO-01 Operation mode: Wifi 11g CH11

Test Voltage: Comment:

Common Information

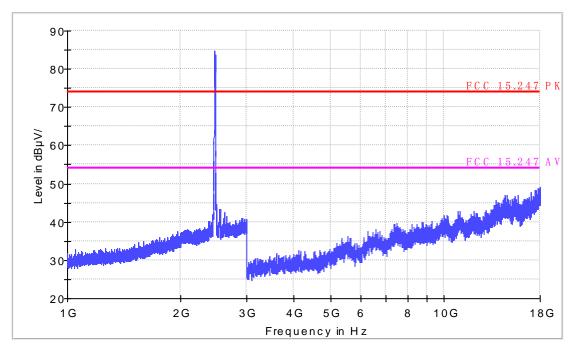
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Vertical

Operator Name: Comment:

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



Report No.:WT168001787 Page 49 of 106

1-18G 11n-HT20 CH1

Radiated Emission

EUT Information

EUT Model Name: PRM-X6PRO-01
Operation mode: Wifi 11n HT20 CH1

Test Voltage: Comment:

Common Information

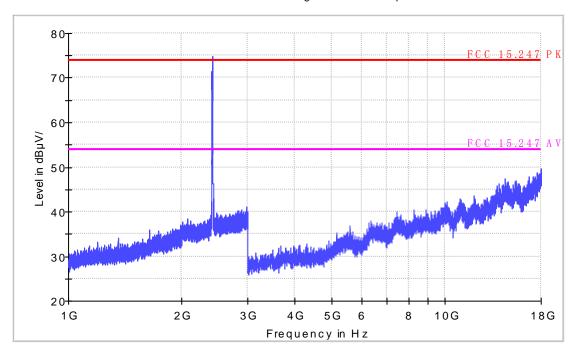
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Horizontal

Operator Name: Comment:

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



Report No.:WT168001787 Page 50 of 106

EUT Information

EUT Model Name: PRM-X6PRO-01
Operation mode: Wifi 11n HT20 CH1

Test Voltage: Comment:

Common Information

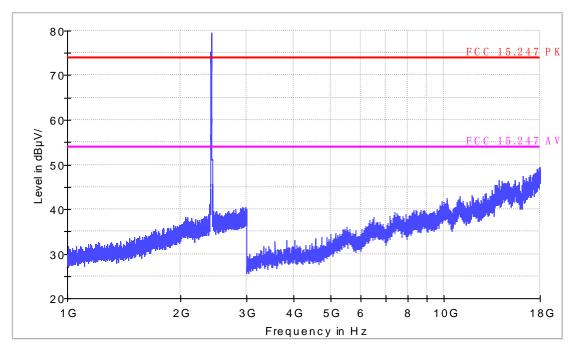
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Vertical

Operator Name: Comment:

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



Report No.:WT168001787 Page 51 of 106

1-18G 11n-HT20 CH6

Radiated Emission

EUT Information

EUT Model Name: PRM-X6PRO-01
Operation mode: Wifi 11n HT20 CH6

Test Voltage: Comment:

Common Information

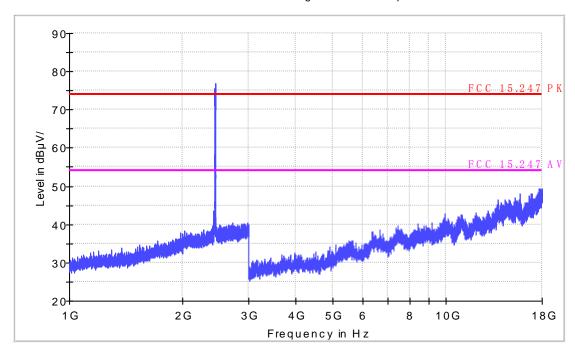
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Horizontal

Operator Name: Comment:

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



Report No.:WT168001787 Page 52 of 106

EUT Information

EUT Model Name: PRM-X6PRO-01
Operation mode: Wifi 11n HT20 CH6

Test Voltage: Comment:

Common Information

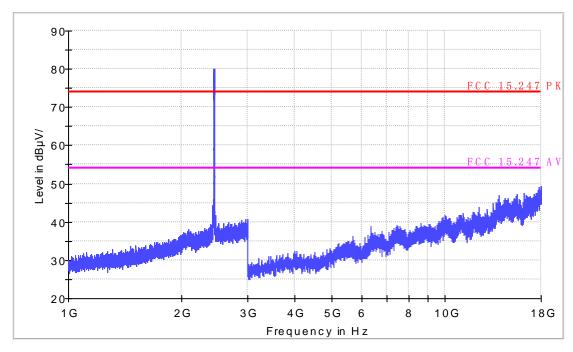
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Vertical

Operator Name: Comment:

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



Report No.:WT168001787 Page 53 of 106

1-18G 11n-HT20 CH11

Radiated Emission

EUT Information

EUT Model Name: PRM-X6PRO-01
Operation mode: Wifi 11n HT20 CH11

Test Voltage: Comment:

Common Information

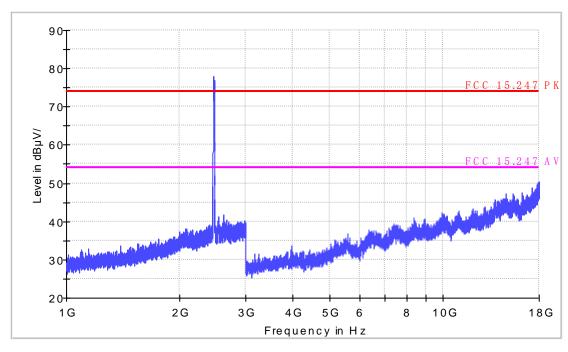
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Horizontal

Operator Name: Comment:

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



Report No.:WT168001787 Page 54 of 106

EUT Information

EUT Model Name: PRM-X6PRO-01
Operation mode: Wifi 11n HT20 CH11

Test Voltage: Comment:

Common Information

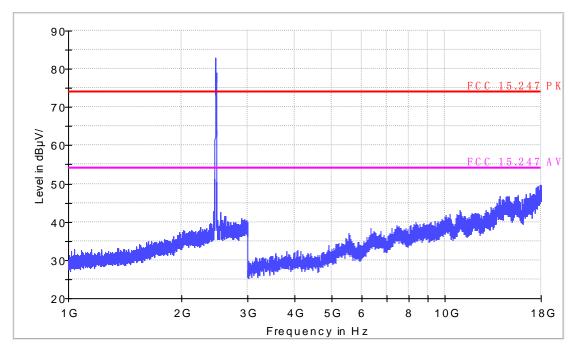
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Vertical

Operator Name: Comment:

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



Report No.:WT168001787 Page 55 of 106

EUT Information

EUT Model Name: PRM-X6PRO-01 Operation mode: 11b CH1

Test Voltage: Comment:

Common Information

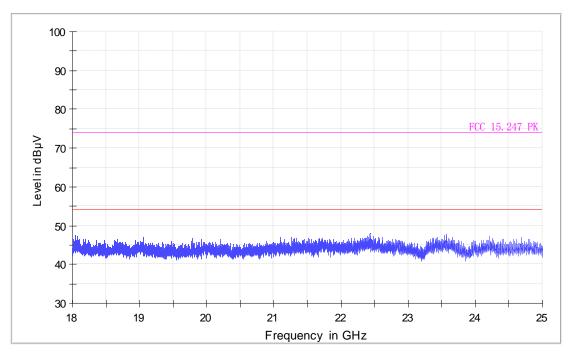
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Horizontal

Operator Name: Comment:

FCC Electric Field Strength 18-26.5GHz



Report No.:WT168001787 Page 56 of 106

EUT Information

EUT Model Name: PRM-X6PRO-01 Operation mode: 11b CH1

Test Voltage: Comment:

Common Information

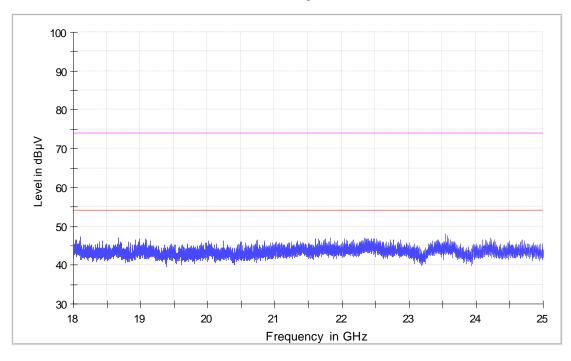
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Vertical

Operator Name: Comment:

FCC Electric Field Strength 18-26.5GHz



Report No.:WT168001787 Page 57 of 106

EUT Information

EUT Model Name: PRM-X6PRO-01 Operation mode: 11b CH6

Test Voltage: Comment:

Common Information

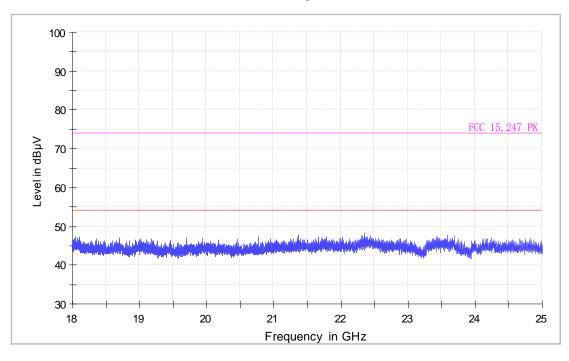
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Horizontal

Operator Name: Comment:

FCC Electric Field Strength 18-26.5GHz



Report No.:WT168001787 Page 58 of 106

EUT Information

EUT Model Name: PRM-X6PRO-01 Operation mode: 11b CH6

Test Voltage: Comment:

Common Information

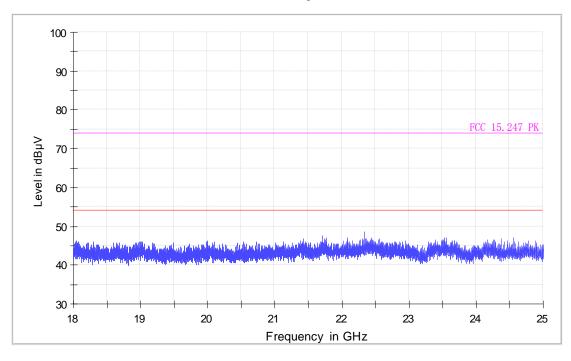
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Vertical

Operator Name: Comment:

FCC Electric Field Strength 18-26.5GHz



Report No.:WT168001787 Page 59 of 106

EUT Information

EUT Model Name: PRM-X6PRO-01 Operation mode: 11b CH11

Test Voltage: Comment:

Common Information

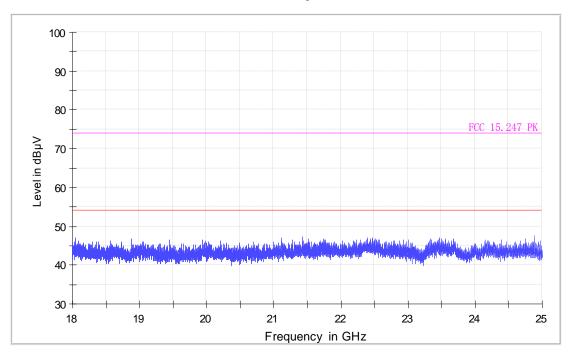
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Horizontal

Operator Name: Comment:

FCC Electric Field Strength 18-26.5GHz



Report No.:WT168001787 Page 60 of 106

EUT Information

EUT Model Name: PRM-X6PRO-01 Operation mode: 11b CH11

Test Voltage: Comment:

Common Information

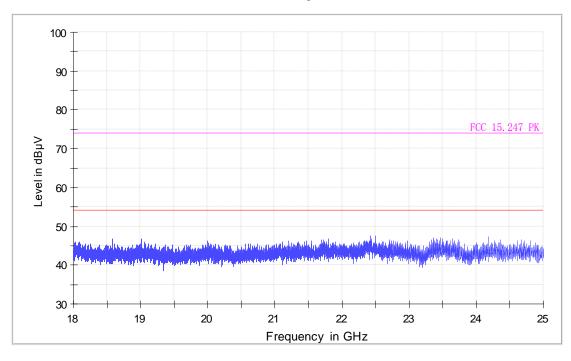
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Vertical

Operator Name: Comment:

FCC Electric Field Strength 18-26.5GHz



Report No.:WT168001787 Page 61 of 106

EUT Information

EUT Model Name: PRM-X6PRO-01 Operation mode: 11g CH1

Test Voltage: Comment:

Common Information

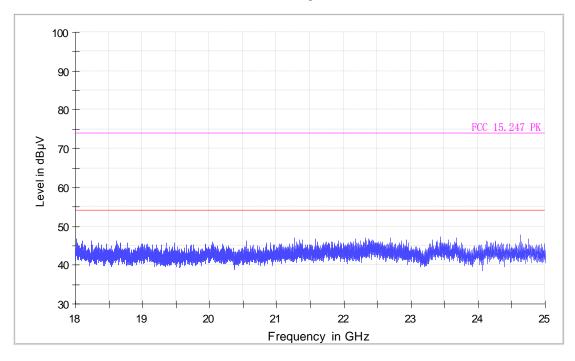
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Horizontal

Operator Name: Comment:

FCC Electric Field Strength 18-26.5GHz



Report No.:WT168001787 Page 62 of 106

EUT Information

EUT Model Name: PRM-X6PRO-01 Operation mode: 11g CH1

Test Voltage: Comment:

Common Information

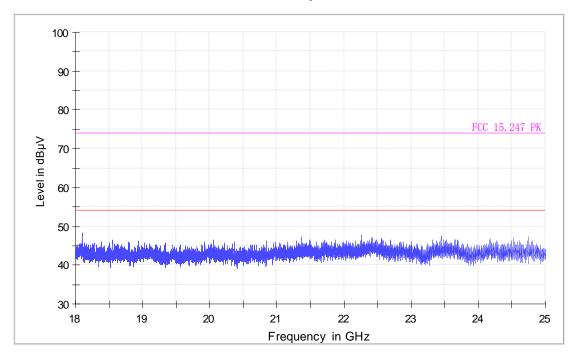
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Vertical

Operator Name: Comment:

FCC Electric Field Strength 18-26.5GHz



Report No.:WT168001787 Page 63 of 106

EUT Information

EUT Model Name: PRM-X6PRO-01 Operation mode: 11gCH6

Test Voltage: Comment:

Common Information

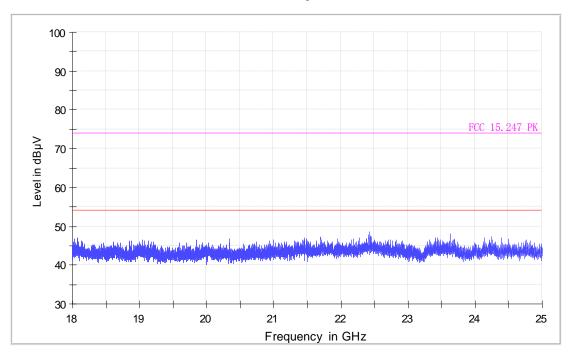
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Horizontal

Operator Name: Comment:

FCC Electric Field Strength 18-26.5GHz



Report No.:WT168001787 Page 64 of 106

EUT Information

EUT Model Name: PRM-X6PRO-01 Operation mode: 11gCH6

Test Voltage: Comment:

Common Information

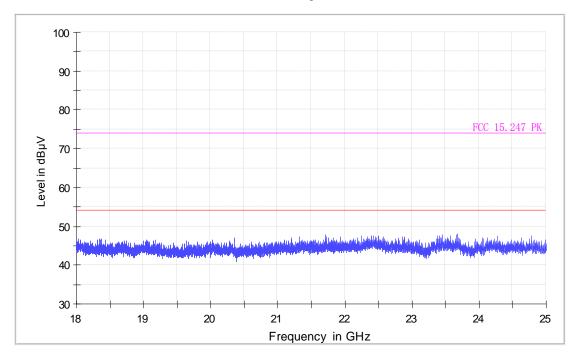
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Vertical

Operator Name: Comment:

FCC Electric Field Strength 18-26.5GHz



Report No.:WT168001787 Page 65 of 106

EUT Information

EUT Model Name: PRM-X6PRO-01 Operation mode: 11g CH11

Test Voltage: Comment:

Common Information

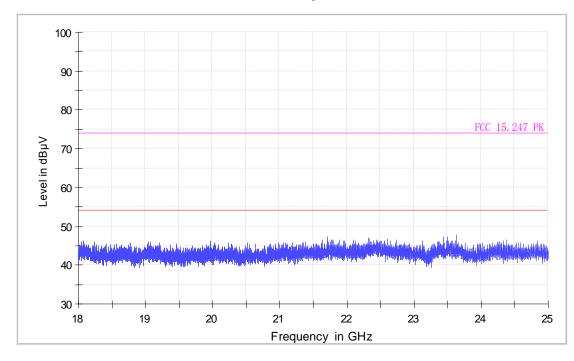
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Horizontal

Operator Name: Comment:

FCC Electric Field Strength 18-26.5GHz



Report No.:WT168001787 Page 66 of 106

EUT Information

EUT Model Name: PRM-X6PRO-01 Operation mode: 11g CH11

Test Voltage: Comment:

Common Information

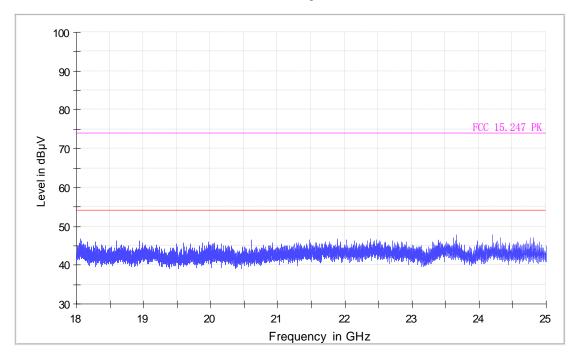
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Vertical

Operator Name: Comment:

FCC Electric Field Strength 18-26.5GHz



Report No.:WT168001787 Page 67 of 106

EUT Information

EUT Model Name: PRM-X6PRO-01 Operation mode: 11n-HT20 CH1

Test Voltage: Comment:

Common Information

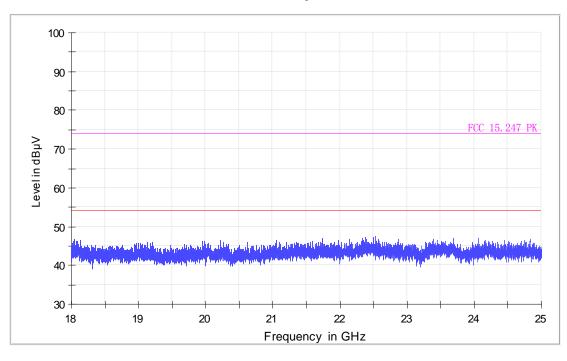
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Horizontal

Operator Name: Comment:

FCC Electric Field Strength 18-26.5GHz



Report No.:WT168001787 Page 68 of 106

EUT Information

EUT Model Name: PRM-X6PRO-01 Operation mode: 11n-HT20 CH1

Test Voltage: Comment:

Common Information

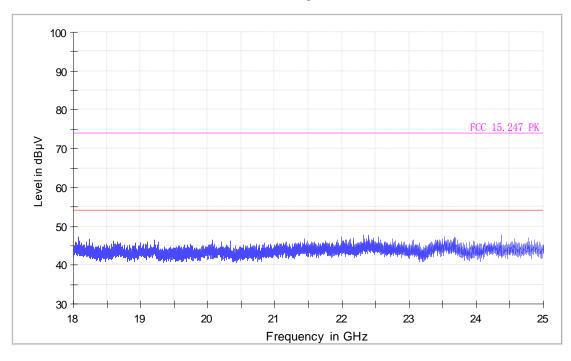
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Vertical

Operator Name: Comment:

FCC Electric Field Strength 18-26.5GHz



Report No.:WT168001787 Page 69 of 106

EUT Information

EUT Model Name: PRM-X6PRO-01 Operation mode: 11n-HT20 CH6

Test Voltage: Comment:

Common Information

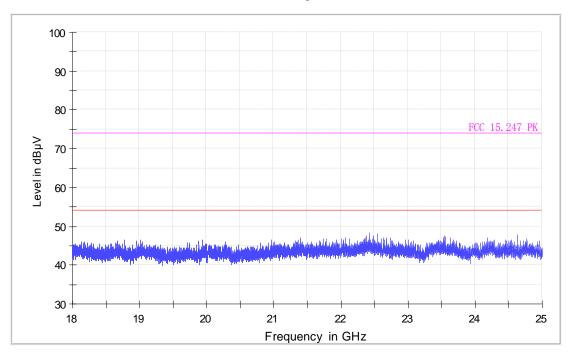
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Horizontal

Operator Name: Comment:

FCC Electric Field Strength 18-26.5GHz



Report No.:WT168001787 Page 70 of 106

EUT Information

EUT Model Name: PRM-X6PRO-01 Operation mode: 11n-HT20 CH6

Test Voltage: Comment:

Common Information

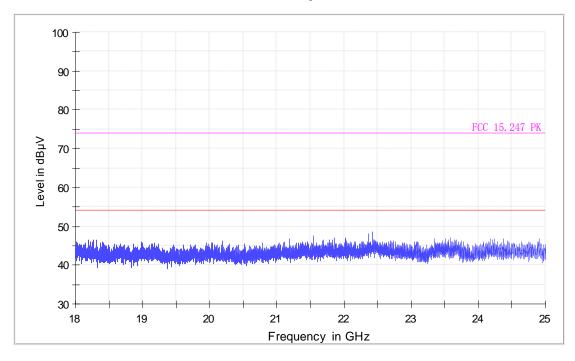
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Vertical

Operator Name: Comment:

FCC Electric Field Strength 18-26.5GHz



Report No.:WT168001787 Page 71 of 106

EUT Information

EUT Model Name: PRM-X6PRO-01 Operation mode: 11n-HT20 CH11

Test Voltage: Comment:

Common Information

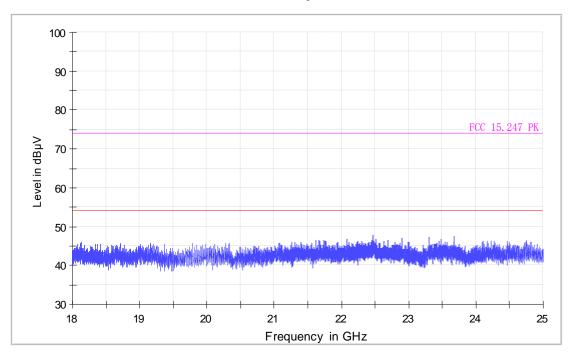
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Horizontal

Operator Name: Comment:

FCC Electric Field Strength 18-26.5GHz



Report No.:WT168001787 Page 72 of 106

EUT Information

EUT Model Name: PRM-X6PRO-01 Operation mode: 11n-HT20 CH11

Test Voltage: Comment:

Common Information

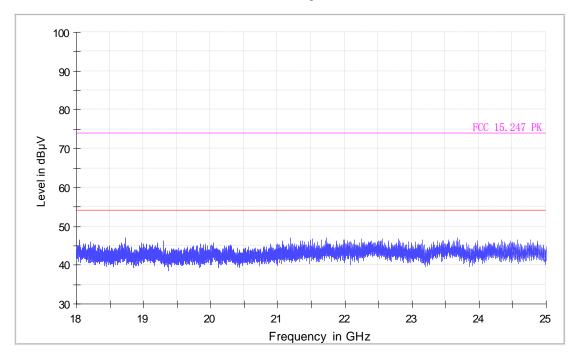
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Vertical

Operator Name: Comment:

FCC Electric Field Strength 18-26.5GHz



Report No.:WT168001787 Page 73 of 106

Band edge

11b

CH1

Radiated Emission

EUT Information

EUT Model Name: PRM-X6PRO-01 Operation mode: Wifi 11b CH1

Test Voltage: Comment:

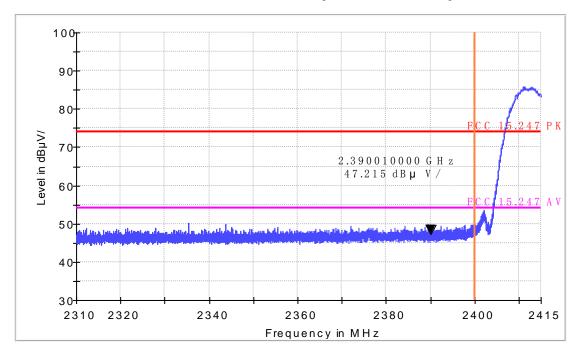
Common Information

Test Site: SMQ EMC Lab.

Environment
Antenna Polarization: Horizontal

Operator Name: Comment:

FCC Electric Field Strength 2.4GHz Bandedge-PK



Report No.:WT168001787 Page 74 of 106

EUT Information

EUT Model Name: PRM-X6PRO-01 Operation mode: Wifi 11b CH1

Test Voltage: Comment:

Common Information

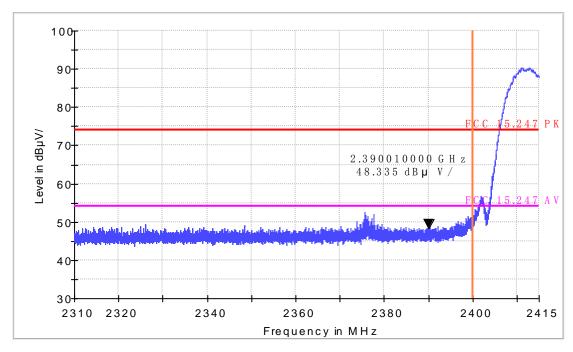
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Vertical

Operator Name: Comment:

FCC Electric Field Strength 2.4GHz Bandedge-PK



Report No.:WT168001787 Page 75 of 106

EUT Information

EUT Model Name: PRM-X6PRO-01 Operation mode: Wifi 11b CH1

Test Voltage: Comment:

Common Information

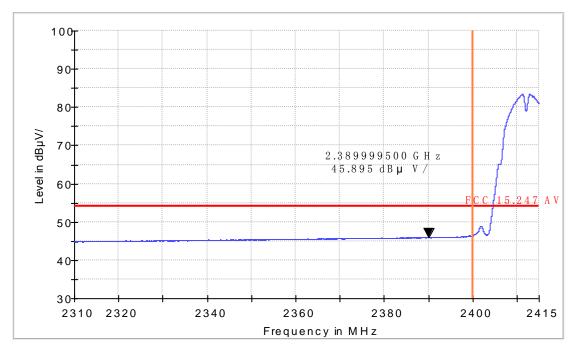
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Horizontal

Operator Name: Comment:

FCC Electric Field Strength 2.4GHz Bandedge-AV



Report No.:WT168001787 Page 76 of 106

EUT Information

EUT Model Name: PRM-X6PRO-01 Operation mode: Wifi 11b CH1

Test Voltage: Comment:

Common Information

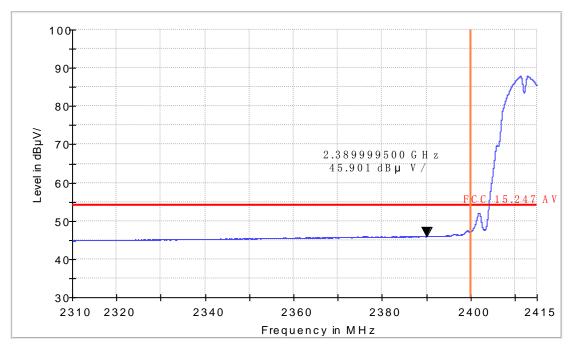
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Vertical

Operator Name: Comment:

FCC Electric Field Strength 2.4GHz Bandedge-AV



Report No.:WT168001787 Page 77 of 106

Band edge

11g

CH1

Radiated Emission

EUT Information

EUT Model Name: PRM-X6PRO-01 Operation mode: Wifi 11g CH1

Test Voltage: Comment:

Common Information

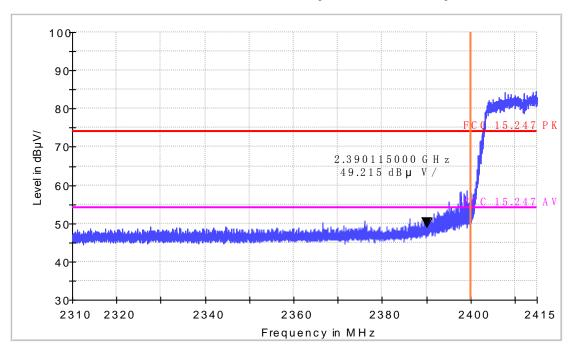
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Horizontal

Operator Name: Comment:

FCC Electric Field Strength 2.4GHz Bandedge-PK



Report No.:WT168001787 Page 78 of 106

EUT Information

EUT Model Name: PRM-X6PRO-01 Operation mode: Wifi 11g CH1

Test Voltage: Comment:

Common Information

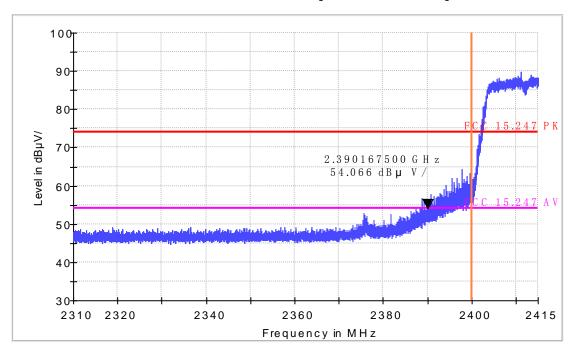
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Vertical

Operator Name: Comment:

FCC Electric Field Strength 2.4GHz Bandedge-PK



Report No.:WT168001787 Page 79 of 106

EUT Information

EUT Model Name: PRM-X6PRO-01 Operation mode: Wifi 11g CH1

Test Voltage: Comment:

Common Information

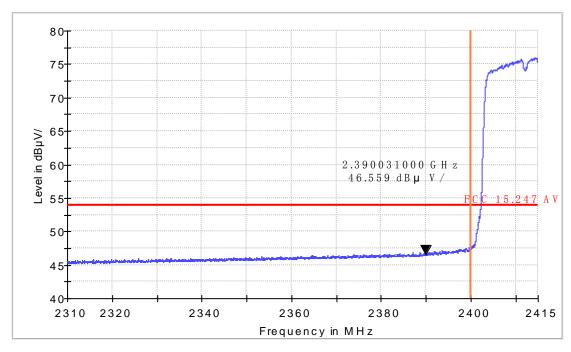
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Horizontal

Operator Name: Comment:

FCC Electric Field Strength 2.4GHz Bandedge-AV



Report No.:WT168001787 Page 80 of 106

EUT Information

EUT Model Name: PRM-X6PRO-01
Operation mode: Wifi 11q CH1

Test Voltage: Comment:

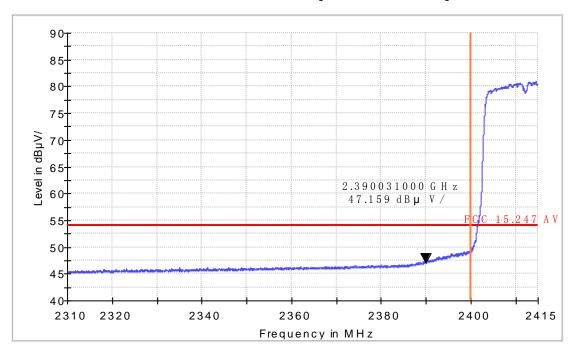
Common Information

Test Site: SMQ EMC Lab.

Environment
Antenna Polarization: Vertical

Operator Name: Comment:

FCC Electric Field Strength 2.4GHz Bandedge-AV



Report No.:WT168001787 Page 81 of 106

Band edge 11n-HT20 CH1

Radiated Emission

EUT Information

EUT Model Name: PRM-X6PRO-01 Operation mode: Wifi 11n20 CH1

Test Voltage: Comment:

Common Information

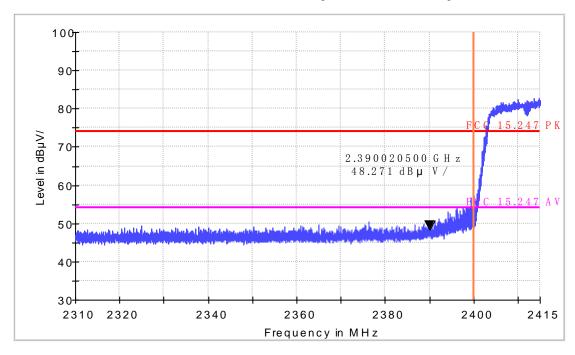
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Horizontal

Operator Name: Comment:

FCC Electric Field Strength 2.4GHz Bandedge-PK



Report No.:WT168001787 Page 82 of 106

EUT Information

EUT Model Name: PRM-X6PRO-01 Operation mode: Wifi 11n20 CH1

Test Voltage: Comment:

Common Information

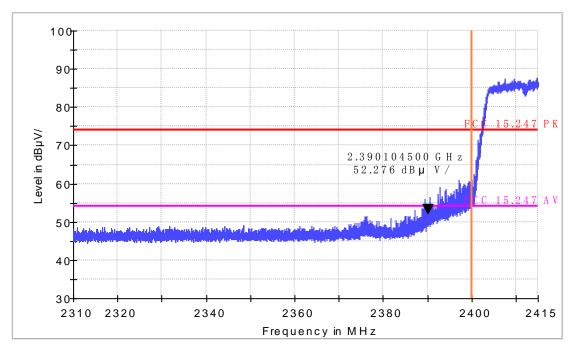
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Vertical

Operator Name: Comment:

FCC Electric Field Strength 2.4GHz Bandedge-PK



Report No.:WT168001787 Page 83 of 106

EUT Information

EUT Model Name: PRM-X6PRO-01 Operation mode: Wifi 11n20 CH1

Test Voltage: Comment:

Common Information

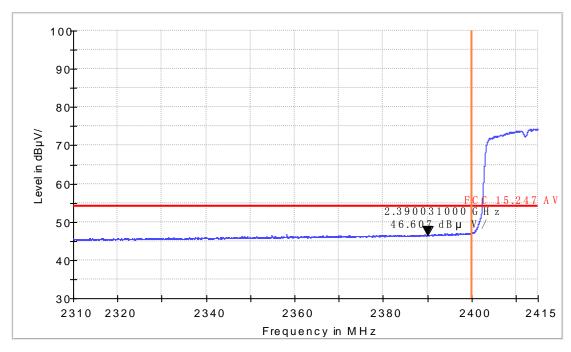
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Horizontal

Operator Name: Comment:

FCC Electric Field Strength 2.4GHz Bandedge-AV



Report No.:WT168001787 Page 84 of 106

EUT Information

EUT Model Name: PRM-X6PRO-01 Operation mode: Wifi 11n20 CH1

Test Voltage: Comment:

Common Information

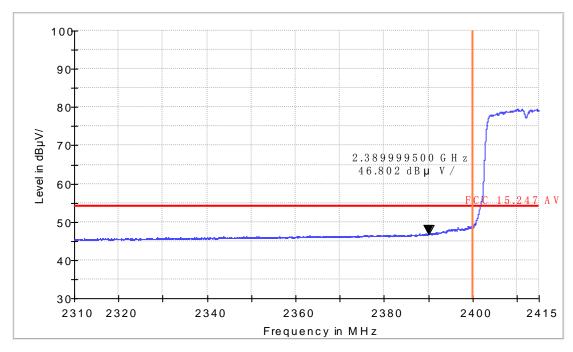
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Vertical

Operator Name: Comment:

FCC Electric Field Strength 2.4GHz Bandedge-AV



Report No.:WT168001787 Page 85 of 106

Band edge

11b

CH11

Radiated Emission

EUT Information

EUT Model Name: PRM-X6PRO-01 Operation mode: Wifi 11b CH11

Test Voltage: Comment:

Common Information

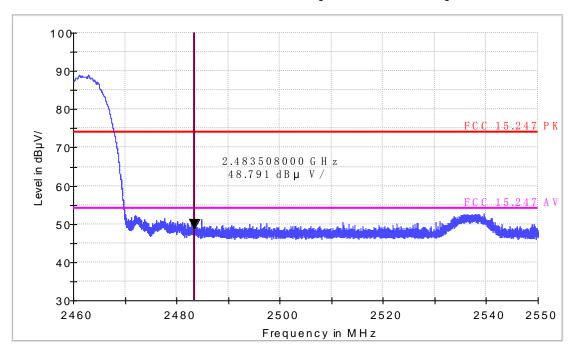
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Horizontal

Operator Name: Comment:

FCC Electric Field Strength 2.4GHz Bandedge-PK



Report No.:WT168001787 Page 86 of 106

EUT Information

EUT Model Name: PRM-X6PRO-01 Operation mode: Wifi 11b CH11

Test Voltage: Comment:

Common Information

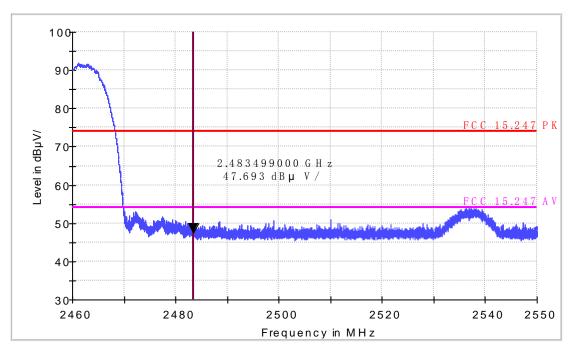
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Vertical

Operator Name: Comment:

FCC Electric Field Strength 2.4GHz Bandedge-PK



Report No.:WT168001787 Page 87 of 106

EUT Information

EUT Model Name: PRM-X6PRO-01 Operation mode: Wifi 11b CH11

Test Voltage: Comment:

Common Information

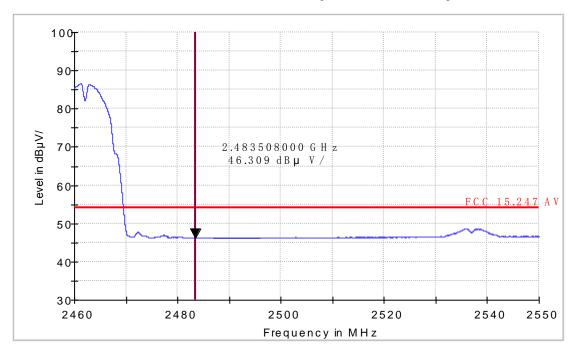
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Horizontal

Operator Name: Comment:

FCC Electric Field Strength 2.4GHz Bandedge-AV



Report No.:WT168001787 Page 88 of 106

EUT Information

EUT Model Name: PRM-X6PRO-01 Operation mode: Wifi 11b CH11

Test Voltage: Comment:

Common Information

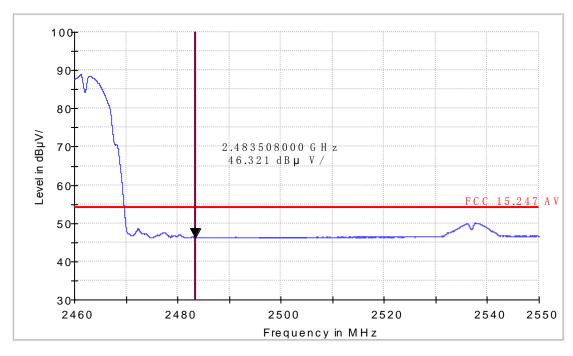
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Vertical

Operator Name: Comment:

FCC Electric Field Strength 2.4GHz Bandedge-AV



Report No.:WT168001787 Page 89 of 106

Band edge

11g

CH11

Radiated Emission

EUT Information

EUT Model Name: PRM-X6PRO-01 Operation mode: Wifi 11g CH11

Test Voltage: Comment:

Common Information

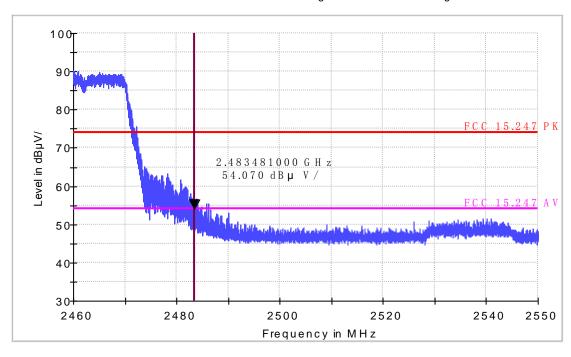
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Horizontal

Operator Name: Comment:

FCC Electric Field Strength 2.4GHz Bandedge-PK



Report No.:WT168001787 Page 90 of 106

EUT Information

EUT Model Name: PRM-X6PRO-01 Operation mode: Wifi 11g CH11

Test Voltage: Comment:

Common Information

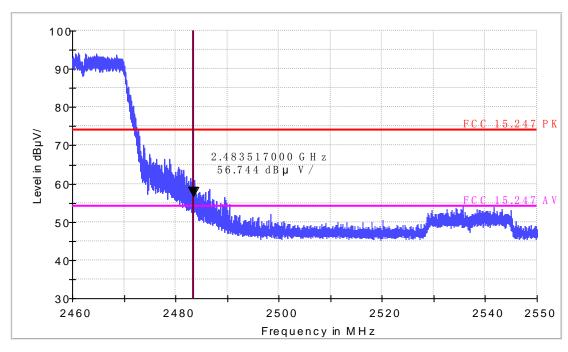
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Vertical

Operator Name: Comment:

FCC Electric Field Strength 2.4GHz Bandedge-PK



Report No.:WT168001787 Page 91 of 106

EUT Information

EUT Model Name: PRM-X6PRO-01 Operation mode: Wifi 11g CH11

Test Voltage: Comment:

Common Information

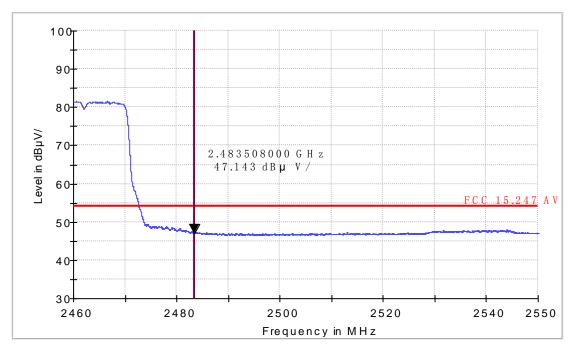
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Horizontal

Operator Name: Comment:

FCC Electric Field Strength 2.4GHz Bandedge-AV



Report No.:WT168001787 Page 92 of 106

EUT Information

EUT Model Name: PRM-X6PRO-01 Operation mode: Wifi 11g CH11

Test Voltage: Comment:

Common Information

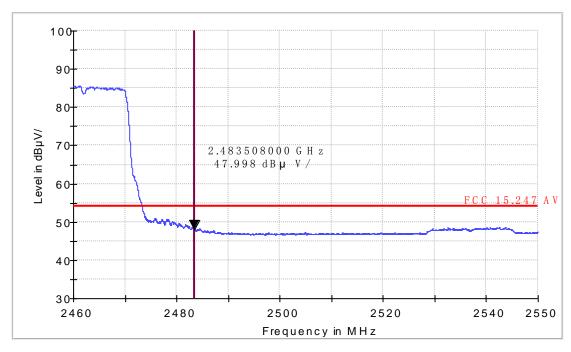
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Vertical

Operator Name: Comment:

FCC Electric Field Strength 2.4GHz Bandedge-AV



Report No.:WT168001787 Page 93 of 106

Band edge 11n-HT20 CH11

Radiated Emission

EUT Information

EUT Model Name: PRM-X6PRO-01 Operation mode: Wifi 11n20 CH11

Test Voltage: Comment:

Common Information

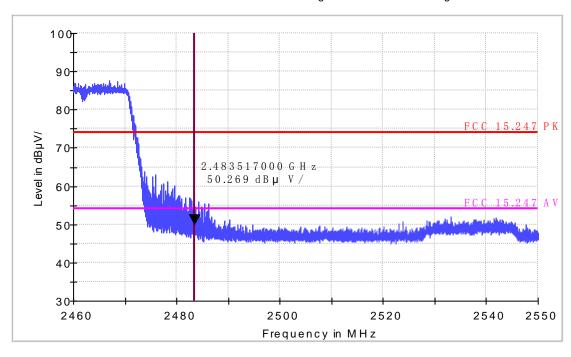
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Horizontal

Operator Name: Comment:

FCC Electric Field Strength 2.4GHz Bandedge-PK



Report No.:WT168001787 Page 94 of 106

EUT Information

EUT Model Name: PRM-X6PRO-01
Operation mode: Wifi 11n20 CH11

Test Voltage: Comment:

Common Information

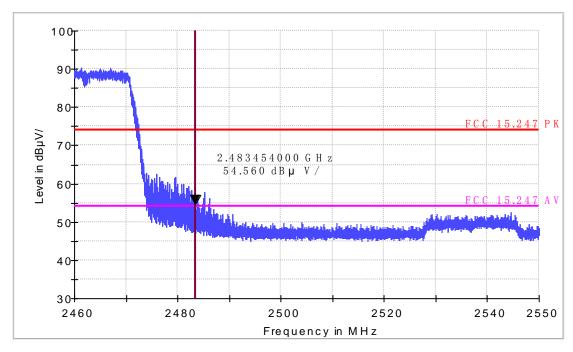
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Vertical

Operator Name: Comment:

FCC Electric Field Strength 2.4GHz Bandedge-PK



Report No.:WT168001787 Page 95 of 106

EUT Information

EUT Model Name: PRM-X6PRO-01 Operation mode: Wifi 11n20 CH11

Test Voltage: Comment:

Common Information

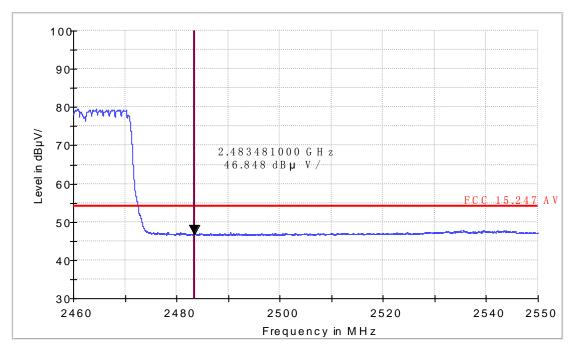
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Horizontal

Operator Name: Comment:

FCC Electric Field Strength 2.4GHz Bandedge-AV



Report No.:WT168001787 Page 96 of 106

EUT Information

EUT Model Name: PRM-X6PRO-01 Operation mode: Wifi 11n20 CH11

Test Voltage: Comment:

Common Information

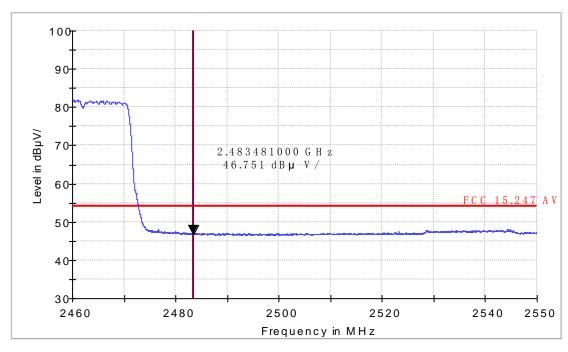
Test Site: SMQ EMC Lab.

Environment

Antenna Polarization: Vertical

Operator Name: Comment:

FCC Electric Field Strength 2.4GHz Bandedge-AV



Report No.:WT168001787 Page 97 of 106

11.CONDUCTED EMISSION TEST FOR AC POWER PORT

MEASUREMENT

11.1.Test Standard and Limit

11.1.1.Test Standard

FCC Part 15 15.207 RSS-Gen Section8.8

11.1.2.Test Limit

Table 17 Conducted Disturbance Test Limit

	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	

^{*} 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.

Report No.:WT168001787 Page 98 of 106

^{*} The lower limit shall apply at the transition frequency.

Table 18 Conducted Disturbance Test Data

Model No.: PRM-X6PRO-01

Test mode: Transmitting

	Frequency	Correction	Quasi-Peak			Average		
	(MHz)	Factor (dB)	Reading (dBμV)	Emission Level (dBµV)	Limits (dBμV)	Reading (dBμV)	Emission Level (dBµV)	Limits (dBμV)
	0.15	9.7	42.3	49.5	66	28.8	38.5	56
	0.186	9.7	39.8	45.3	64.2	25.9	35.6	54.2
Lima	0.214	9.7	35.6	42.4	63.0	23.6	33.3	53.0
Line	0.246	9.7	32.7	37.1	61.9	20.8	30.5	51.9
	0.29	9.7	27.4	42.5	60.5	14.2	23.9	50.5
	0.526	9.8	32.7	49.5	56	27.3	37.1	46
	0.15	9.7	43.8	53.5	66	34.2	43.9	56
	0.186	9.7	40.7	50.4	64.2	30.4	40.1	54.2
Neutral	0.214	9.7	37.0	46.7	63.0	28.7	38.4	53.0
	0.242	9.7	35.6	45.3	62.0	22.7	32.4	52.0
	0.414	9.7	28.7	38.4	57.6	21.5	31.2	47.6
	0.514	9.8	36.0	45.8	56	30.7	40.5	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.

Report No.:WT168001787 Page 99 of 106

EUT: PRM-X6PRO-01

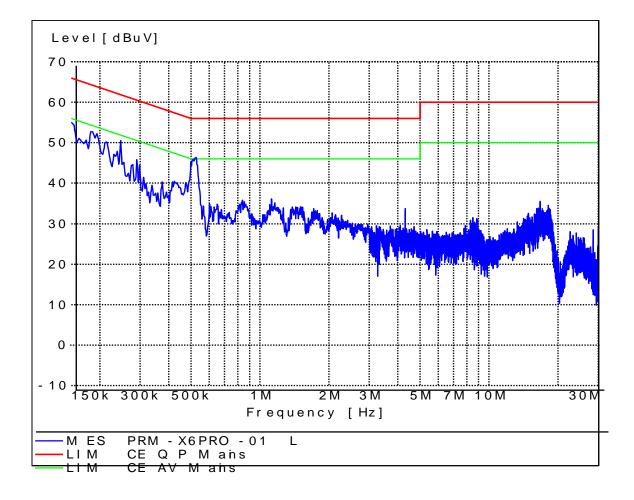
Manufacturer:

Operating Condition: Transmitting

Test Site: Operator:

Test Specification: L

Comment: AC 120V/60Hz



Report No.:WT168001787 Page 100 of 106

EUT: PRM-X6PRO-01

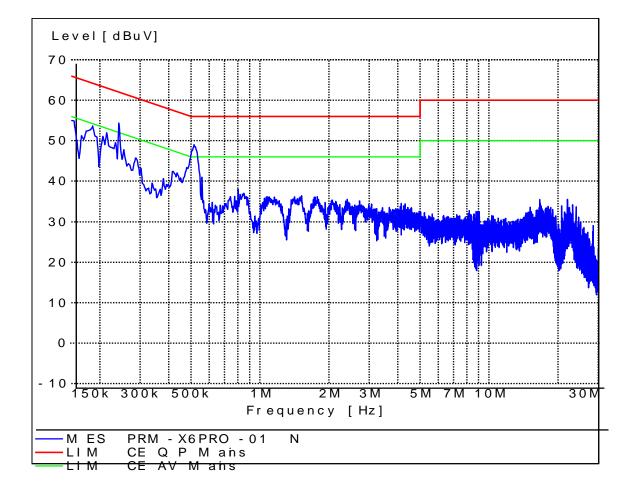
Manufacturer:

Operating Condition: Transmitting

Test Site: Operator:

Test Specification: N

Comment: AC 120V/60Hz



Report No.:WT168001787 Page 101 of 106

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.

Report No.:WT168001787 Page 102 of 106

13.99% OCCUPIED BANDWIDTH

13.1.LIMITS OF 99%Occupied Bandwidth

None; for reporting purposes only

13.2.TEST PROCEDURE

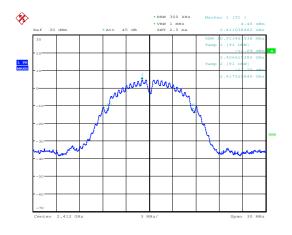
The transmitter output was connected to the spectrum analyzer. The transmitter output is connected to a spectrum analyzer. The RBW is set to \geq 1% of the 20 dB bandwidth. The VBW is set to \geq RBW. The sweep time is coupled

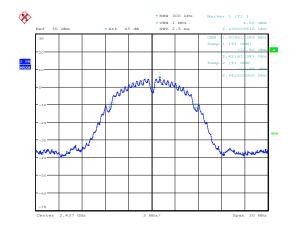
13.3.TEST DATA

Report No.:WT168001787 Page 103 of 106

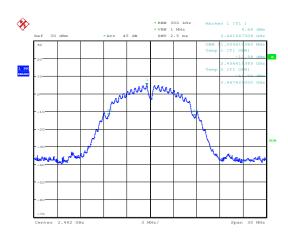
Table 19 99%Occupied Bandwidth Test Data 802.11b

Conton	99%Occupied
Freq.[MHz]	Bandwidth [MHz]
2412	10.913
2437	11.096
2462	11.096





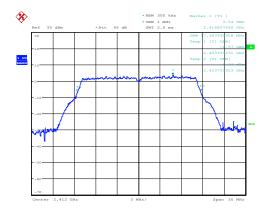
Date: 10.MAY.2016 14:46:07 Date: 10.MAY.2016 14:46:27

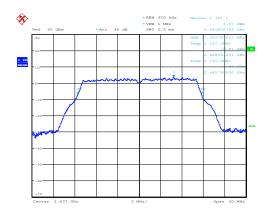


Date: 10.MAY.2016 14:46:53

Table 20 99%Occupied Bandwidth Test Data 802.11g

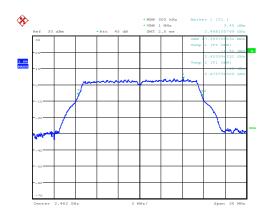
COLICO	99%Occupied
Freq.[MHz]	Bandwidth [MHz]
2412	17.308
2437	17.356
2462	17.356





Date: 10.MAY.2016 14:47:29

Date: 10.MAY.2016 14:48:18

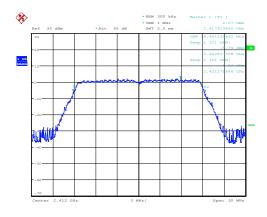


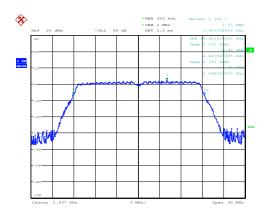
Date: 10.MAY.2016 14:48:56

Report No.:WT168001787 Page 105 of 106

Table 21 99%Occupied Bandwidth Test Data 802.11n HT20

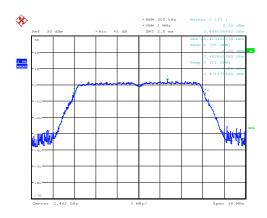
Conton	99%Occupied
Freq.[MHz]	Bandwidth [MHz]
2412	18.462
2437	18.462
2462	18.413





Date: 10.MAY.2016 14:49:46

Date: 10.MAY.2016 14:50:35



Date: 10.MAY.2016 14:51:17

Report No.:WT168001787 Page 106 of 106