FCC Radio Test Report

FCC ID: 2AEP6XM-JPK1S

Original Grant

Report No.	:	TB-FCC145117
Applicant	:	HangZhou XiongMai Technology CO., LTD
Equipment Under Test (EUT)		
EUT Name	:	Smart Socket
Model No.	:	XM-JPK1S
Series No.	:	XM-JPK1, XM-JPK2, XM-JPK2S
Brand Name	:	XM
Receipt Date	:	2015-08-14
Test Date	:	2015-08-14 to 2015-08-25
Issue Date	:	2015-08-26
Standards	:	FCC Part 15, Subpart C (15.247:2014)
Test Method	:	ANSI C63.10: 2013
Conclusions	:	**PASS**

In the configuration tested, the EUT complied with the standards specified above,
The EUT technically complies with the FCC and IC requirements

Test/Witness Engineer : WAN SU

Approved& Authorized :

This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in the report.

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Contents

1. General Information about EUT

1.1 Client Information

Applicant	:	HangZhou XiongMai Technology CO., LTD
Address	:	9th Floor, Building 9, Yinhu Innovation Center, No.9 FuXian Road, YinHu Street, Hangzhou, China
Manufacturer	:	HangZhou XiongMai Technology CO., LTD
Address	:	9th Floor, Building 9, Yinhu Innovation Center, No.9 FuXian Road, YinHu Street, Hangzhou, China

1.2 General Description of EUT (Equipment Under Test)

EUT Name	:	Smart Socket	
Models No.	:	XM-JPK1S, XM-JPK1, XM-JPK2, XM-JPK2S	
Model Difference	:	All these models are identical in the same PCB, layout and electrical circuit, the only difference is model name for commercial.	
Product Description	:	Operation Frequency: 802.11b/g/n(HT20): 2412MHz~2462MHz 802.11n(HT40): 2422MHz~2452MHz	
		Number of Channel:	802.11b/g/n(HT20):11 channels **see note(3)** 802.11n(HT40): 7 channels **see note(3)**
		RF Output Power:	802.11b: 12.28 dBm 802.11g: 12.11 dBm 802.11n (HT20): 11.98 dBm 802.11n (HT40): 11.35 dBm
		Antenna Gain:	-0.5 dBi Chip Antenna
		Modulation Type:	802.11b: CCK, DQPSK, DBPSK 802.11g: 64-QAM,QPSK,BPSK 802.11n: 64-QAM,16-QAM,QPSK,BPSK
		Bit Rate of Transmitter:	802.11b:11/5.5/2/1 Mbps 802.11g:54/48/36/24/18/12/9/6 Mbps 802.11n:up to 150Mbps
Power Supply	:	AC Voltage supplied	
Power Rating	:	Input: AC 90~240V Output: AC 90~240V, DC 5V Max Load: 240V, 10A USB 5V 1A	
Connecting I/O Port(S)	:	Please refer to the User's Manual	

Note:

(1) This Test Report is FCC Part 15.247 for 802.11b/g/n, the test procedure follows the FCC KDB 558074 D01 DTS Meas Guidance v03r03.

(2) For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

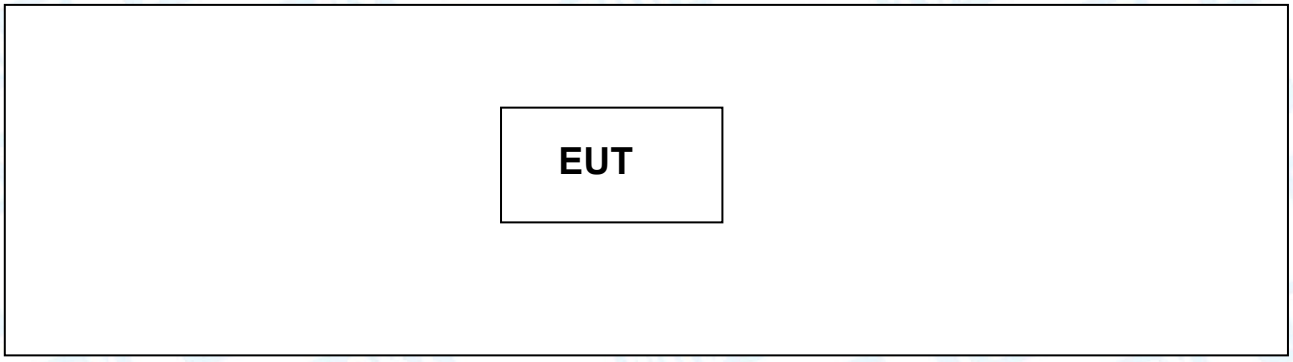
(3) Channel List:

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
01	**2412**	05	2432	09	2452
02	2417	**06**	**2437**	10	2457
03	2422	07	2442	**11**	**2462**
04	2427	08	2447		
Note:CH 01~CH 11 for 802.11b/g/n(HT20) CH 03~CH 09 for 802.11n(HT40)					

(4) The Antenna information about the equipment is provided by the applicant.

1.3 Block Diagram Showing the Configuration of System Tested

TX Mode



1.4 Description of Support Units

Equipment Information				
Name	**Model**	**S/N**	**Manufacturer**	**Used "√"**
Cable Information				
Number	**Shielded Type**	**Ferrite Core**	**Length**	**Note**

1.5 Description of Test Mode

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned follow was evaluated respectively.

For Conducted Test	
Final Test Mode	**Description**
Mode 1	TX B Mode

For Radiated Test	
Final Test Mode	**Description**
Mode 3	TX Mode B Mode Channel 01/06/11
Mode 4	TX Mode G Mode Channel 01/06/11
Mode 5	TX Mode N(HT20) Mode Channel 01/06/11
Mode 6	TX Mode N(HT40) Mode Channel 03/06/09

Note:

(1) For all test, we have verified the construction and function in typical operation. And all the test modes were carried out with the EUT in transmitting operation in maximum power with all kinds of data rate.

According to ANSI C63.10 standards, the measurements are performed at the highest, middle, lowest available channels, and the worst case data rate as follows:

802.11b Mode: CCK (1 Mbps)
802.11g Mode: OFDM (6 Mbps)
802.11n (HT20) Mode: MCS 0 (6.5 Mbps)
802.11n (HT40) Mode: MCS 0 (13 Mbps)

(2) During the testing procedure, the continuously transmitting with the maximum power mode was programmed by the customer.

(3) The EUT is considered a mobile unit; in normal use it was positioned on X-plane. The worst case was found positioned on X-plane. Therefore only the test data of this X-plane was used for radiated emission measurement test.

1.6 Description of Test Software Setting

During testing channel& Power controlling software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product power parameters of WLAN.

Test Software Version	N/A		
Channel	**CH 01**	**CH 06**	**CH 11**
IEEE 802.11b DSSS	DEF	DEF	DEF
IEEE 802.11g OFDM	DEF	DEF	DEF
IEEE 802.11n (HT20)	DEF	DEF	DEF
	CH 03	**CH 06**	**CH 09**
IEEE 802.11n (HT40)	DEF	DEF	DEF

1.7 Measurement Uncertainty

The reported uncertainty of measurement y ± U，where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of k=2，providing a level of confidence of approximately 95 %.

Test Item	Parameters	Expanded Uncertainty (U_{Lab})
Conducted Emission	Level Accuracy: 9kHz~150kHz 150kHz to 30MHz	 ±3.42 dB ±3.42 dB
Radiated Emission	Level Accuracy: 9kHz to 30 MHz	±4.60 dB
Radiated Emission	Level Accuracy: 30MHz to 1000 MHz	±4.40 dB
Radiated Emission	Level Accuracy: Above 1000MHz	±4.20 dB

1.7 Test Facility

The testing report were performed by the Shenzhen Toby Technology Co., Ltd., in their facilities located at 1A/F., Bldg.6, Yusheng Industrial Zone, The National Road No.107 Xixiang Section 467, Xixiang, Bao'an, Shenzhen, Guangdong, China. At the time of testing, the following bodies accredited the Laboratory:

CNAS (L5813)

The Laboratory has been accredited by CNAS to ISO/IEC 17025: 2005 General Requirements for the Competence of Testing and Calibration Laboratories for the competence in the field of testing. And the Registration No.: CNAS L5813.

FCC List No.: (811562)

The Laboratory is listed in the United States of American Federal Communications Commission (FCC), and the registration number is 811562.

IC Registration No.: (11950A-1)

The Laboratory has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing. The site registration: Site# 11950A-1.

May 22, 2014 certificated by TUV Rheinland(China) Co., Ltd. with TUV certificate No.: UA 50282953 0001 and report No.: 17026822 002. The certificate is valid until the next scheduled audit or up to 18 months, at the discretion of TUV Rhineland.

2. Test Summary

FCC Part 15 Subpart C(15.247)/ RSS 247 Issue 1				
Standard Section		Test Item	Judgment	Remark
FCC	IC			
15.203	/	Antenna Requirement	PASS	N/A
15.207	RSS-GEN 7.2.4	Conducted Emission	PASS	N/A
15.205	RSS-GEN 7.2.2	Restricted Bands	PASS	N/A
15.247(a)(2)	RSS 247 5.2 (1)	6dB Bandwidth	PASS	N/A
15.247(b)	RSS 247 5.4 (4)	Peak Output Power	PASS	N/A
15.247(e)	RSS 247 5.2 (2)	Power Spectral Density	PASS	N/A
15.247(d)	RSS 247 5.5	Transmitter Radiated Spurious Emission	PASS	N/A
Note: "/" for no requirement for this test item. N/A is an abbreviation for Not Applicable.				

3. Test Equipment

Conducted Emission Test					
Equipment	**Manufacturer**	**Model No.**	**Serial No.**	**Last Cal.**	**Cal. Due Date**
EMI Test Receiver	Rohde & Schwarz	ESCI	100321	Aug. 07, 2015	Aug. 06, 2016
RF Switching Unit	Compliance Direction Systems Inc	RSU-A4	34403	Aug. 07, 2015	Aug. 06, 2016
AMN	SCHWARZBECK	NNBL 8226-2	8226-2/164	Aug. 07, 2015	Aug. 06, 2016
LISN	Rohde & Schwarz	ENV216	101131	Aug. 07, 2015	Aug. 06, 2016
Radiation Emission Test					
Equipment	**Manufacturer**	**Model No.**	**Serial No.**	**Last Cal.**	**Cal. Due Date**
Spectrum Analyzer	Agilent	E4407B	MY45106456	Sep. 01, 2014	Aug. 31, 2015
EMI Test Receiver	Rohde & Schwarz	ESCI	100010/007	Aug. 07, 2015	Aug. 06, 2016
Bilog Antenna	ETS-LINDGREN	3142E	00117537	Mar. 28, 2015	Mar. 27, 2016
Bilog Antenna	ETS-LINDGREN	3142E	00117542	Mar. 28, 2015	Mar. 27, 2016
Horn Antenna	ETS-LINDGREN	3117	00143207	Mar. 28, 2015	Mar. 27, 2016
Horn Antenna	ETS-LINDGREN	3117	00143209	Mar. 28, 2015	Mar. 27, 2016
Pre-amplifier	Sonoma	310N	185903	Mar. 28, 2015	Mar. 27, 2016
Pre-amplifier	HP	8447B	3008A00849	Mar. 28, 2015	Mar. 27, 2016
Cable	HUBER+SUHNER	100	SUCOFLEX	Mar. 28, 2015	Mar. 27, 2016
Positioning Controller	ETS-LINDGREN	2090	N/A	N/A	N/A

4. Conducted Emission Test

4.1 Test Standard and Limit

4.1.1Test Standard

FCC Part 15.207

4.1.2 Test Limit

Conducted Emission Test Limit

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

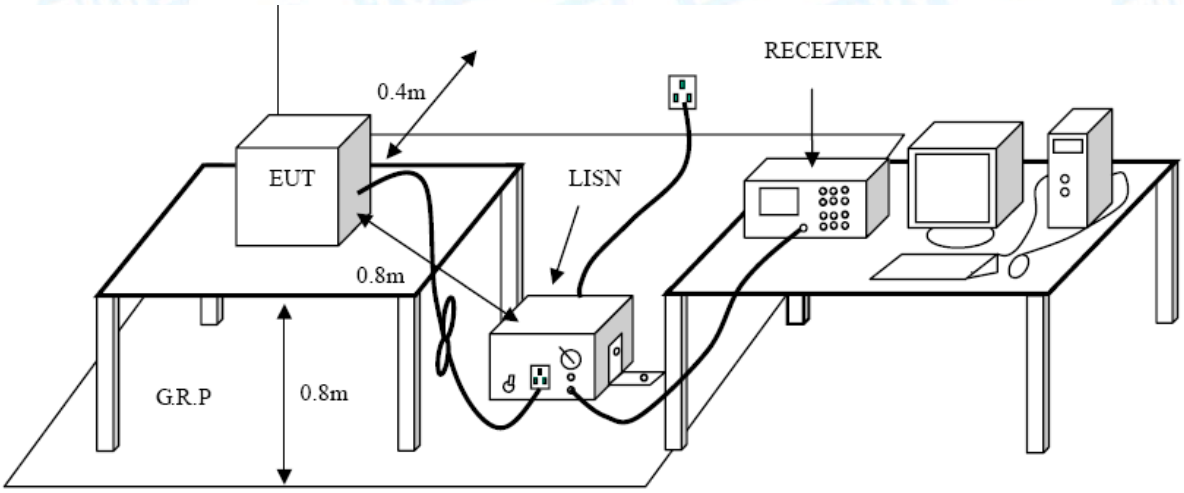
Notes:

(1) *Decreasing linearly with logarithm of the frequency.

(2) The lower limit shall apply at the transition frequencies.

(3) The limit decrease in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

4.2 Test Setup



4.3 Test Procedure

The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.

Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.

I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.

LISN at least 80 cm from nearest part of EUT chassis.

The bandwidth of EMI test receiver is set at 9kHz, and the test frequency band is from 0.15MHz to 30MHz.

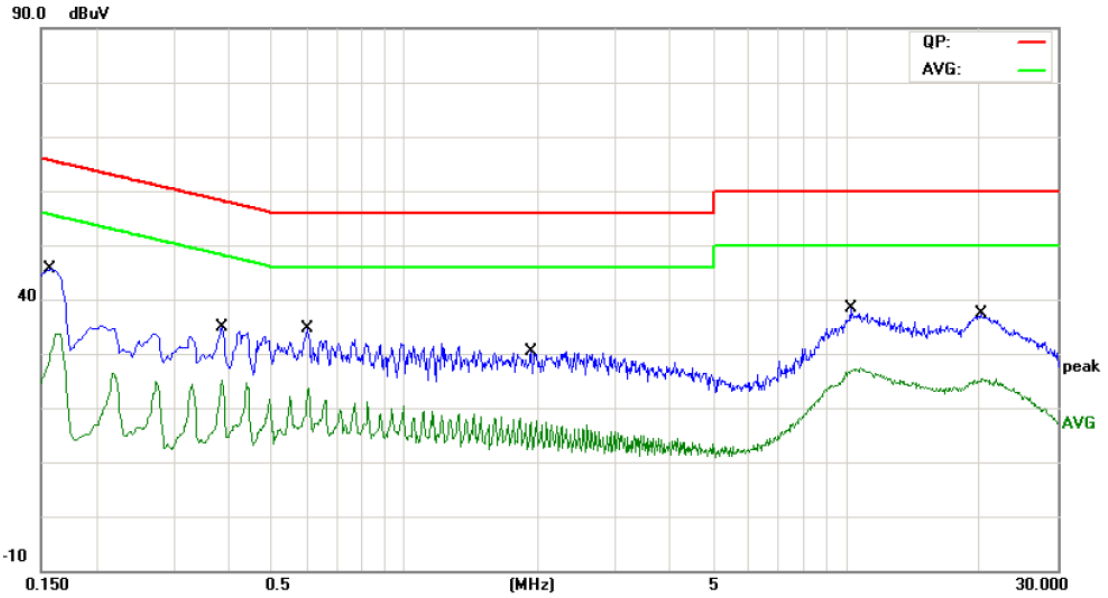
4.4 EUT Operating Mode

Please refer to the description of test mode.

4.5 Test Data

Please see the next page.

EUT:	Smart Socket	Model Name :	XM-JPK1S
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Terminal:	Line		
Test Mode:	TX B Mode		
Remark:	Only worse case is reported		

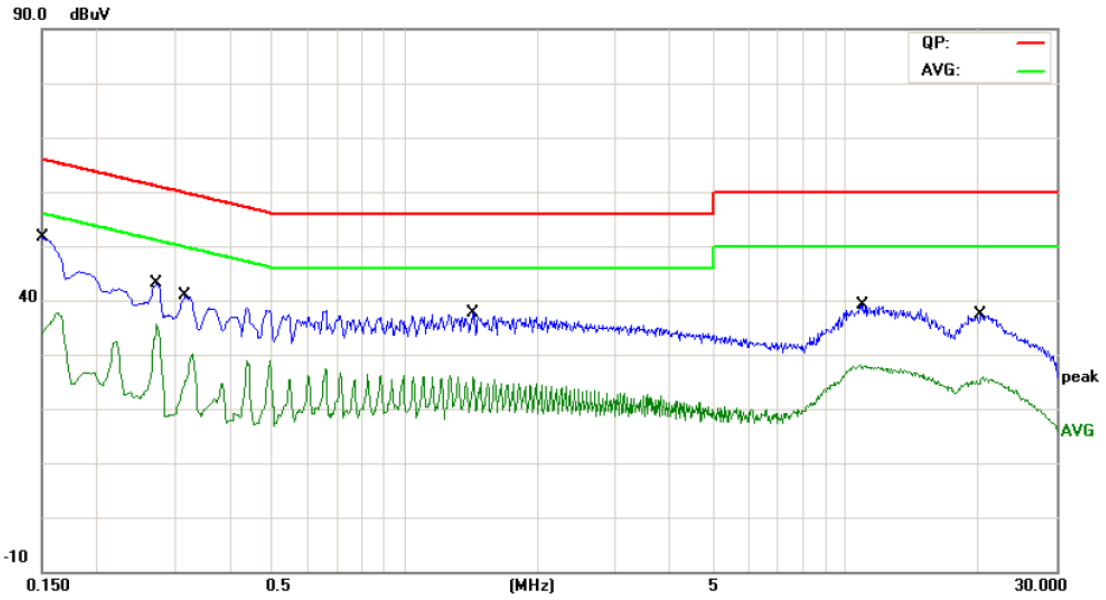


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1	*	0.1580	33.32	10.12	43.44	65.56	-22.12	QP
2		0.1580	20.20	10.12	30.32	55.56	-25.24	AVG
3		0.3860	22.69	10.06	32.75	58.15	-25.40	QP
4		0.3860	13.91	10.06	23.97	48.15	-24.18	AVG
5		0.6020	21.12	10.02	31.14	56.00	-24.86	QP
6		0.6020	12.35	10.02	22.37	46.00	-23.63	AVG
7		1.9300	17.43	10.07	27.50	56.00	-28.50	QP
8		1.9300	6.91	10.07	16.98	46.00	-29.02	AVG
9		10.1899	21.55	10.16	31.71	60.00	-28.29	QP
10		10.1899	16.13	10.16	26.29	50.00	-23.71	AVG
11		20.0740	21.63	10.06	31.69	60.00	-28.31	QP
12		20.0740	14.24	10.06	24.30	50.00	-25.70	AVG

*:Maximum data x:Over limit !:over margin

Emission Level= Read Level+ Correct Factor

EUT:	Smart Socket	Model Name :	XM-JPK1S
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Terminal:	Neutral		
Test Mode:	TX B Mode		
Remark:	Only worse case is reported		

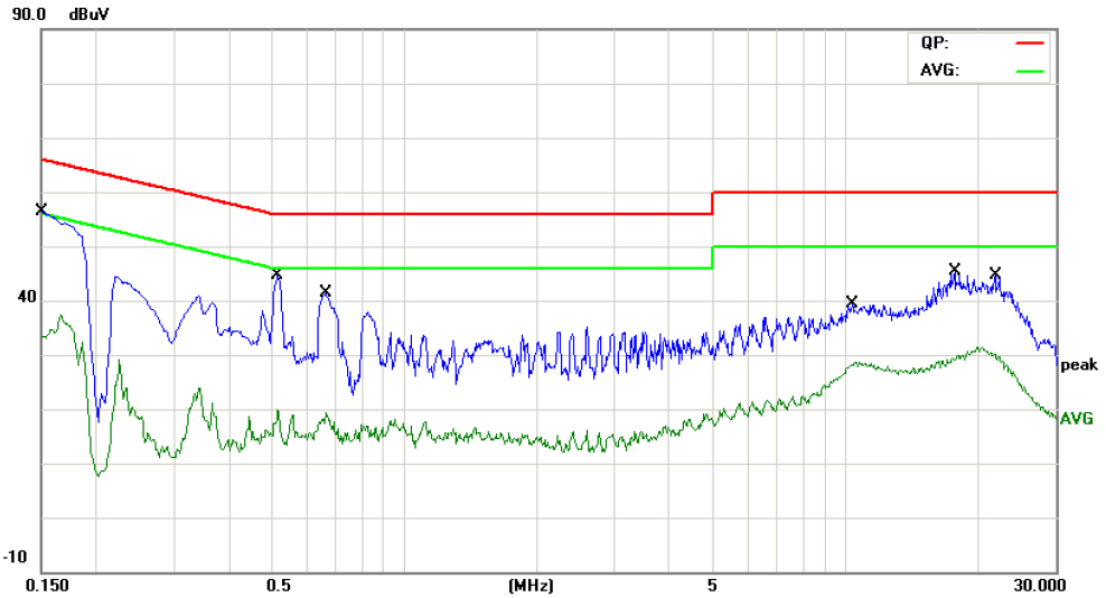


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1		0.1500	39.57	9.92	49.49	65.99	-16.50	QP
2		0.1500	23.57	9.92	33.49	55.99	-22.50	AVG
3		0.2740	31.89	10.02	41.91	60.99	-19.08	QP
4	*	0.2740	24.93	10.02	34.95	50.99	-16.04	AVG
5		0.3180	28.66	10.02	38.68	59.76	-21.08	QP
6		0.3180	14.95	10.02	24.97	49.76	-24.79	AVG
7		1.4299	25.09	10.06	35.15	56.00	-20.85	QP
8		1.4299	15.22	10.06	25.28	46.00	-20.72	AVG
9		10.9379	22.91	10.18	33.09	60.00	-26.91	QP
10		10.9379	17.08	10.18	27.26	50.00	-22.74	AVG
11		20.2220	21.30	10.16	31.46	60.00	-28.54	QP
12		20.2220	14.41	10.16	24.57	50.00	-25.43	AVG

*:Maximum data x:Over limit !:over margin

Emission Level= Read Level+ Correct Factor

EUT:	Smart Socket	Model Name :	XM-JPK1S
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 240V/60Hz		
Terminal:	Line		
Test Mode:	TX B Mode		
Remark:	Only worse case is reported		

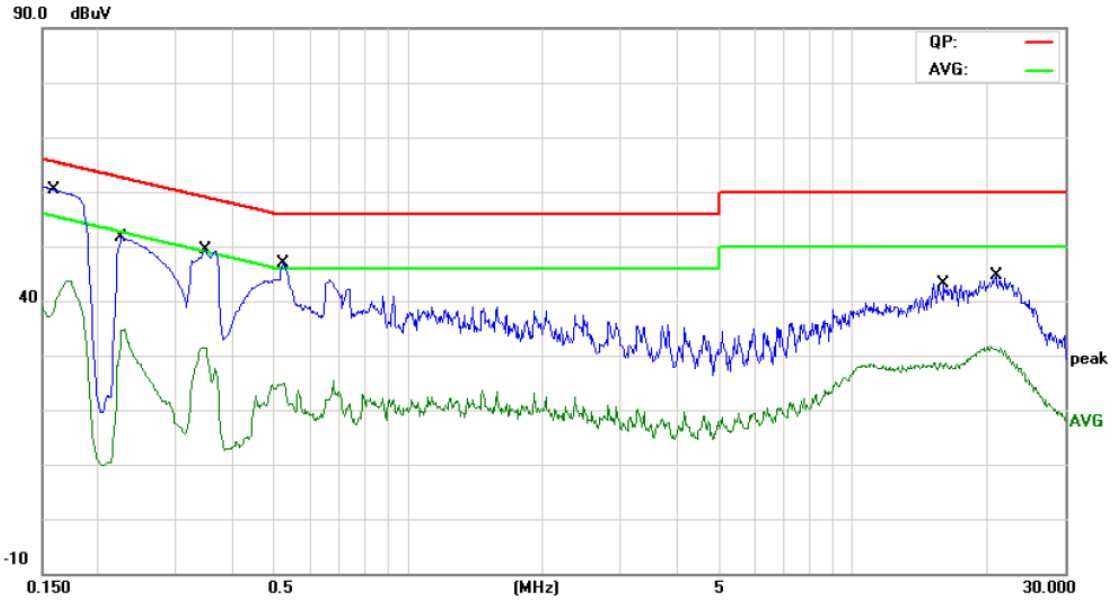


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1	*	0.1516	50.58	9.92	60.50	65.91	-5.41	QP
2		0.1516	29.65	9.92	39.57	55.91	-16.34	AVG
3		0.3460	39.08	10.02	49.10	59.06	-9.96	QP
4		0.3460	21.80	10.02	31.82	49.06	-17.24	AVG
5		0.5220	32.38	10.03	42.41	56.00	-13.59	QP
6		0.5220	13.92	10.03	23.95	46.00	-22.05	AVG
7		10.3340	23.19	10.17	33.36	60.00	-26.64	QP
8		10.3340	17.59	10.17	27.76	50.00	-22.24	AVG
9		16.3100	24.38	10.23	34.61	60.00	-25.39	QP
10		16.3100	17.01	10.23	27.24	50.00	-22.76	AVG
11		20.9300	27.26	10.16	37.42	60.00	-22.58	QP
12		20.9300	20.30	10.16	30.46	50.00	-19.54	AVG

*:Maximum data x:Over limit !:over margin

Emission Level= Read Level+ Correct Factor

EUT:	Smart Socket	Model Name :	XM-JPK1S
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 240V/60Hz		
Terminal:	Neutral		
Test Mode:	TX B Mode		
Remark:	Only worse case is reported		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1	*	0.1607	48.33	9.94	58.27	65.42	-7.15	QP
2		0.1607	29.77	9.94	39.71	55.42	-15.71	AVG
3		0.2260	40.64	10.02	50.66	62.59	-11.93	QP
4		0.2260	24.08	10.02	34.10	52.59	-18.49	AVG
5		0.3500	37.91	10.02	47.93	58.96	-11.03	QP
6		0.3500	20.88	10.02	30.90	48.96	-18.06	AVG
7		0.5220	31.97	10.03	42.00	56.00	-14.00	QP
8		0.5220	14.65	10.03	24.68	46.00	-21.32	AVG
9		16.0260	24.34	10.24	34.58	60.00	-25.42	QP
10		16.0260	16.55	10.24	26.79	50.00	-23.21	AVG
11		20.9500	26.93	10.16	37.09	60.00	-22.91	QP
12		20.9500	20.28	10.16	30.44	50.00	-19.56	AVG

*:Maximum data x:Over limit !:over margin

Emission Level= Read Level+ Correct Factor

5. Radiated Emission Test

5.1 Test Standard and Limit

5.1.1 Test Standard

FCC Part 15.209

5.1.2 Test Limit

Radiated Emission Limits (9kHz~1000MHz)

Frequency (MHz	Field Strength (microvolt/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

Radiated Emission Limit (Above 1000MHz)

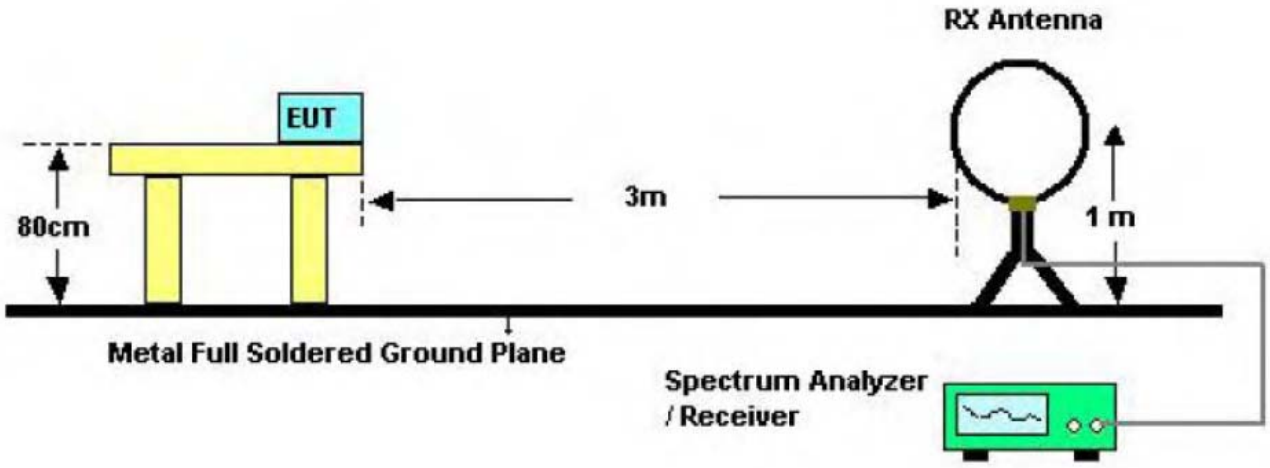
Frequency (MHz)	Class A (dBuV/m)(at 3 M)		Class B (dBuV/m)(at 3 M)	
	Peak	Average	Peak	Average
Above 1000	80	60	74	54

Note:

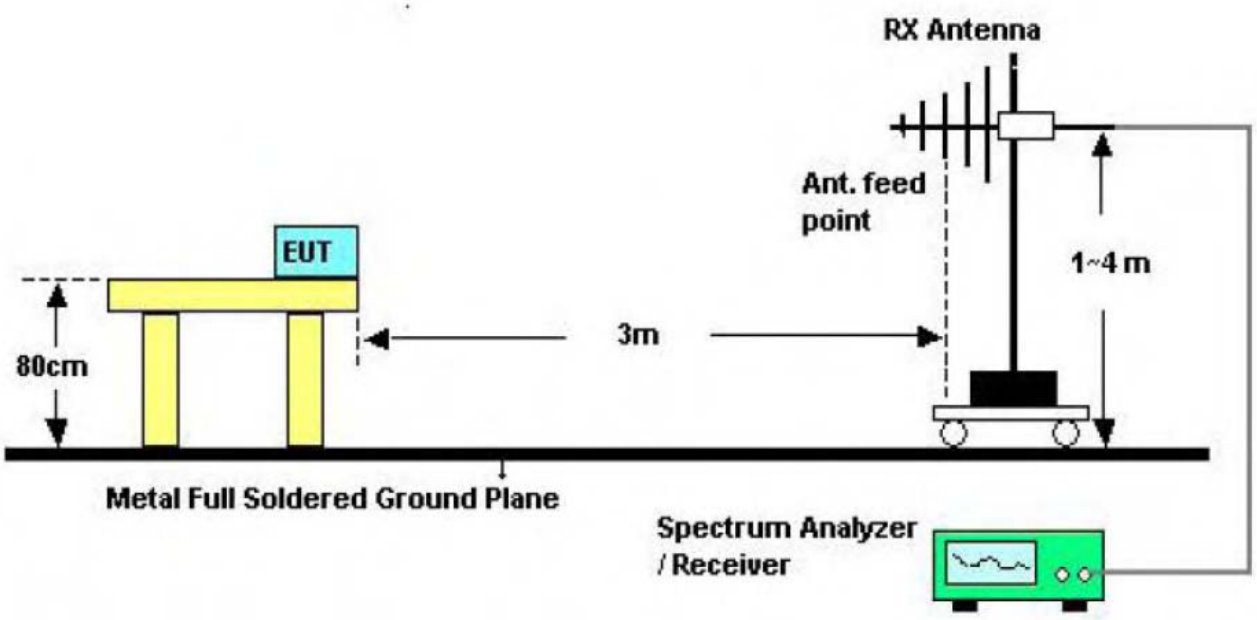
(1) The tighter limit applies at the band edges.

(2) Emission Level(dBuV/m)=20log Emission Level(uV/m)

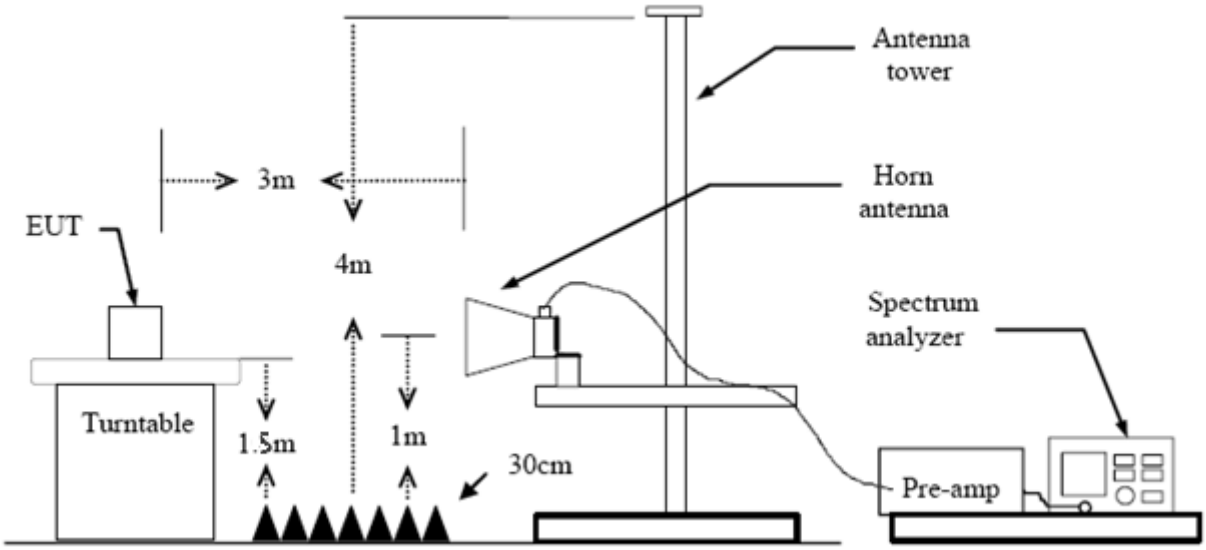
5.2 Test Setup



Below 30MHz Test Setup



Below 1000MHz Test Setup



Above 1GHz Test Setup

5.3 Test Procedure

(1) Measurements at frequency above 1GHz. The EUT was placed on a rotating 1.5m high above the ground. RF absorbers covered the ground plane with a minimum area of 3.0m by 3.0m between the EUT and measurement receiver antenna. The RF absorber shall not exceed 30cm in high above the conducting floor. The table was rotated 360 degrees to determine the position of the highest radiation.

(2) The Test antenna shall vary between 1m and 4m, Both Horizontal and Vertical antenna are set to make measurement.

(3) The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.

(4) If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit Bellow 1 GHz, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed. But the Peak Value and average value both need to comply with applicable limit above 1 GHz.

(5) Testing frequency range below 1GHz the measuring instrument use VBW=120 kHz with Quasi-peak detection.

(6) Testing frequency range above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with Peak Detector for Peak Values, and use RBW=1 MHz and VBW=10 Hz with Peak Detector for Average Values.

(7) For the actual test configuration, please see the test setup photo.

5.4 EUT Operating Condition

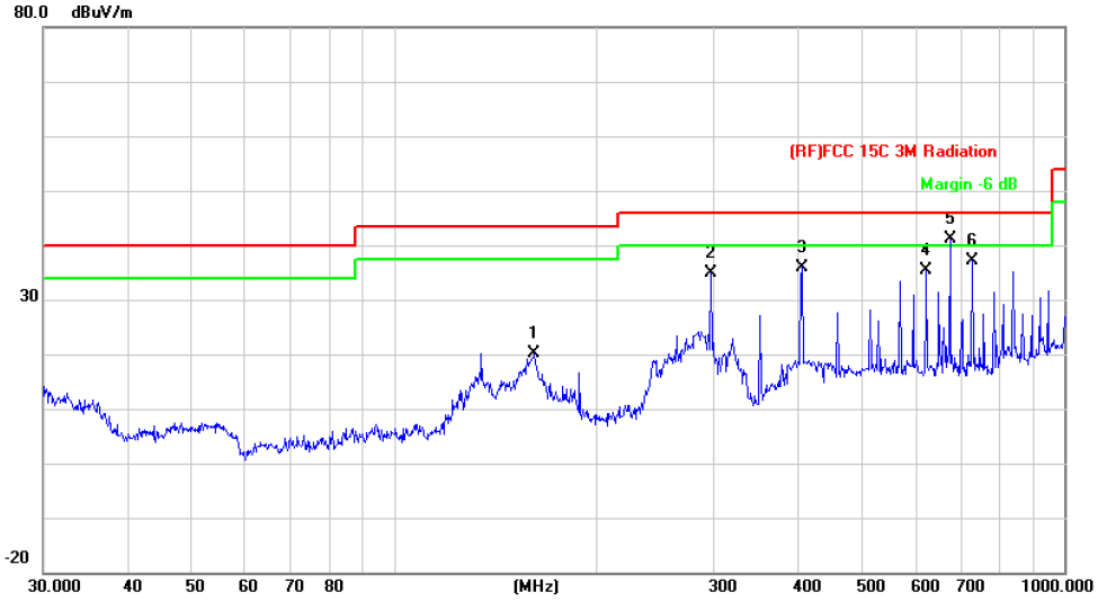
The Equipment Under Test was set to Continual Transmitting in maximum power.

5.5 Test Data

Remark: During testing above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with Peak Detector for Peak Values, and use RBW=1 MHz and VBW=10 Hz with Peak Detector for Average Values.

Test data please refer the following pages.

EUT:	Smart Socket	Model:	XM-JPK1S
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX B Mode 2412MHz		
Remark:	Only worse case is reported		

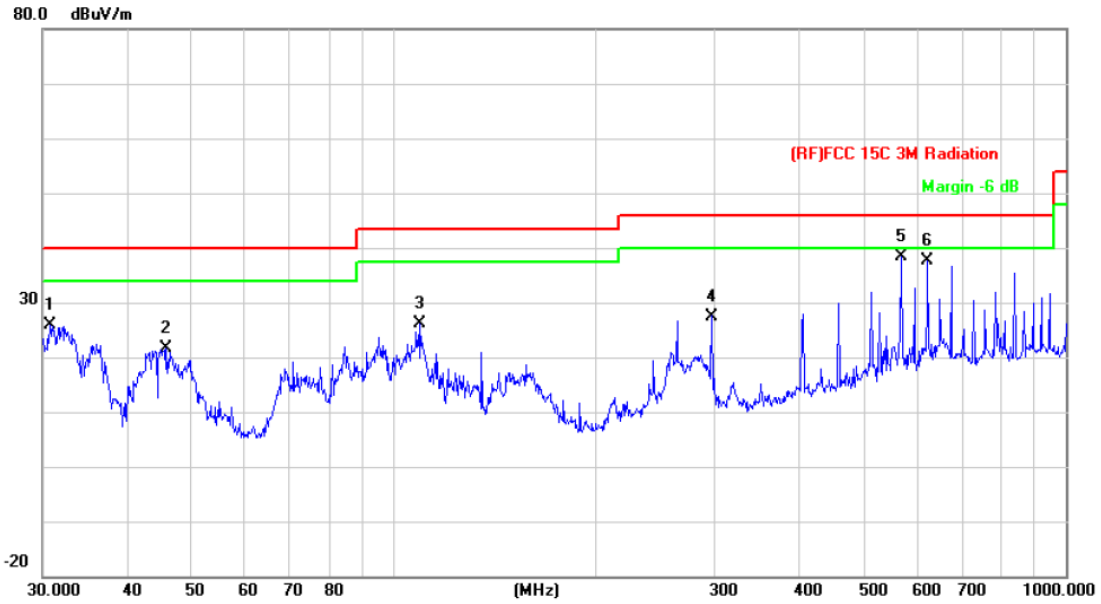


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		162.0414	40.83	-20.65	20.18	43.50	-23.32	peak
2		297.2241	51.90	-17.14	34.76	46.00	-11.24	peak
3		406.0880	48.63	-12.83	35.80	46.00	-10.20	peak
4		622.8899	44.03	-8.60	35.43	46.00	-10.57	peak
5	*	675.2078	48.75	-7.54	41.21	46.00	-4.79	peak
6		729.3582	44.35	-7.13	37.22	46.00	-8.78	peak

*:Maximum data x:Over limit !:over margin

Emission Level= Read Level+ Correct Factor

EUT:	Smart Socket	Model:	XM-JPK1S
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX B Mode 2412MHz		
Remark:	Only worse case is reported		

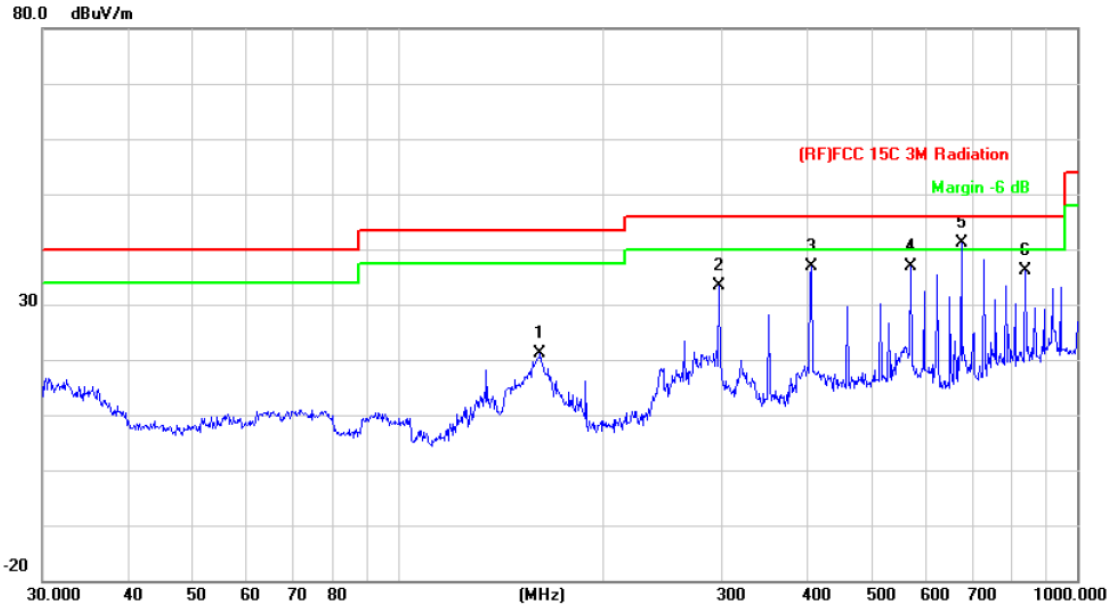


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		30.7454	40.41	-14.42	25.99	40.00	-14.01	peak
2		45.8551	44.16	-22.64	21.52	40.00	-18.48	peak
3		109.0284	47.91	-21.86	26.05	43.50	-17.45	peak
4		297.2241	44.64	-17.14	27.50	46.00	-18.50	peak
5	*	568.6127	48.59	-10.13	38.46	46.00	-7.54	peak
6		622.8899	46.11	-8.60	37.51	46.00	-8.49	peak

*:Maximum data x:Over limit !:over margin

Emission Level= Read Level+ Correct Factor

EUT:	Smart Socket	Model:	XM-JPK1S
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX B Mode 2437MHz		
Remark:	Only worse case is reported		

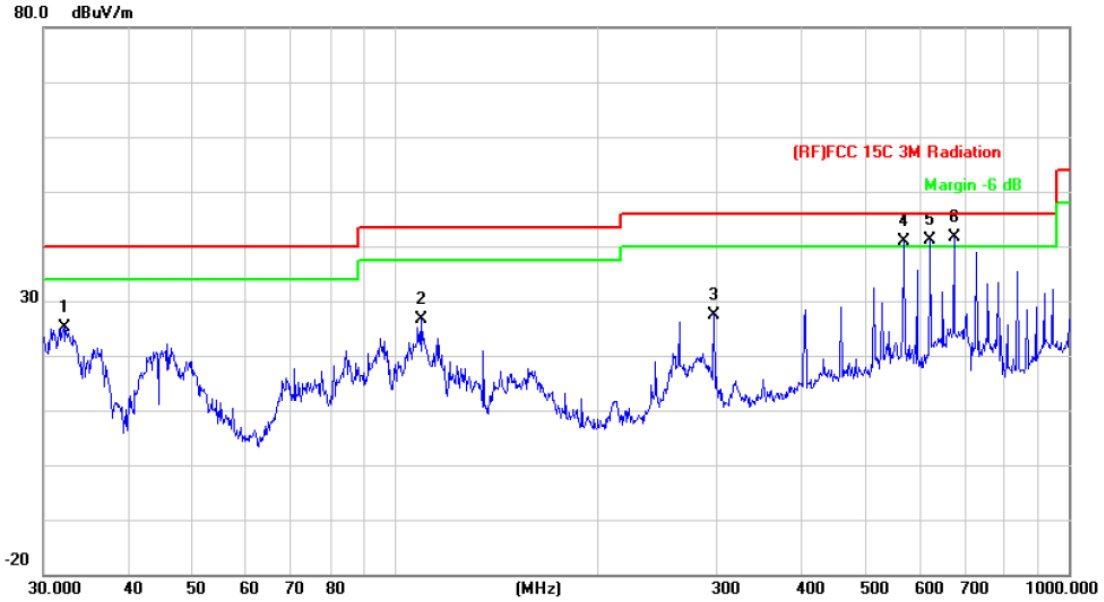


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		162.0414	41.83	-20.65	21.18	43.50	-22.32	peak
2		297.2241	50.40	-17.14	33.26	46.00	-12.74	peak
3		406.0880	49.63	-12.83	36.80	46.00	-9.20	peak
4		568.6127	47.09	-10.13	36.96	46.00	-9.04	peak
5	*	675.2078	48.75	-7.54	41.21	46.00	-4.79	peak
6		839.1816	42.73	-6.51	36.22	46.00	-9.78	peak

*:Maximum data x:Over limit !:over margin

Emission Level= Read Level+ Correct Factor

EUT:	Smart Socket	Model:	XM-JPK1S
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX B Mode 2437MHz		
Remark:	Only worse case is reported		

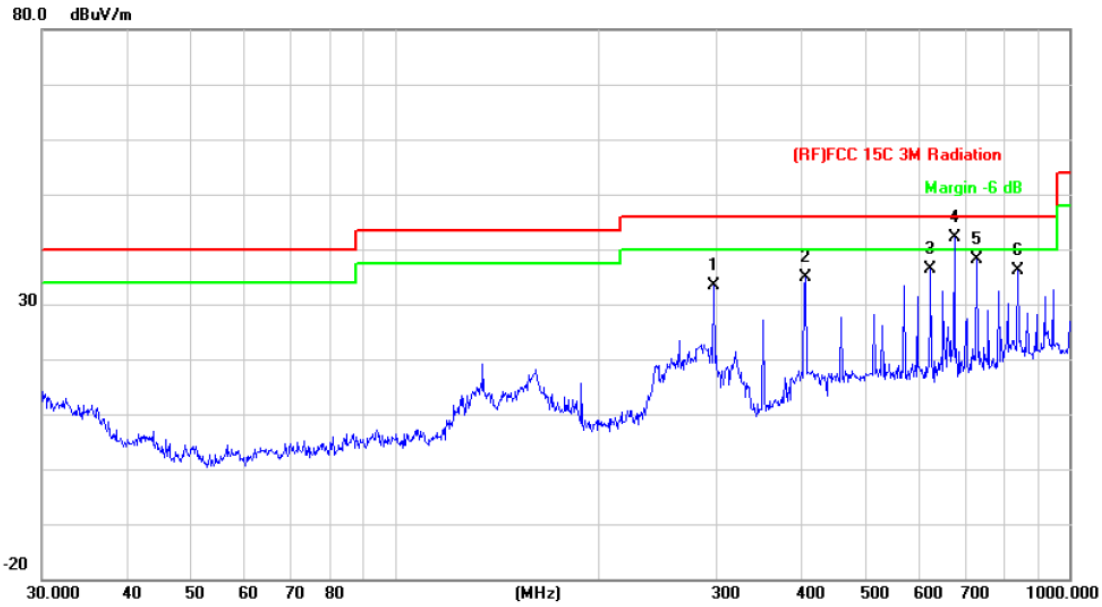


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		32.1794	40.55	-15.31	25.24	40.00	-14.76	peak
2		109.0284	48.41	-21.86	26.55	43.50	-16.95	peak
3		297.2241	44.64	-17.14	27.50	46.00	-18.50	peak
4	!	568.6127	51.09	-10.13	40.96	46.00	-5.04	peak
5	!	622.8899	49.61	-8.60	41.01	46.00	-4.99	peak
6	*	675.2078	49.21	-7.54	41.67	46.00	-4.33	peak

*:Maximum data x:Over limit !:over margin

Emission Level= Read Level+ Correct Factor

EUT:	Smart Socket	Model:	XM-JPK1S
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX B Mode 2462MHz		
Remark:	Only worse case is reported		

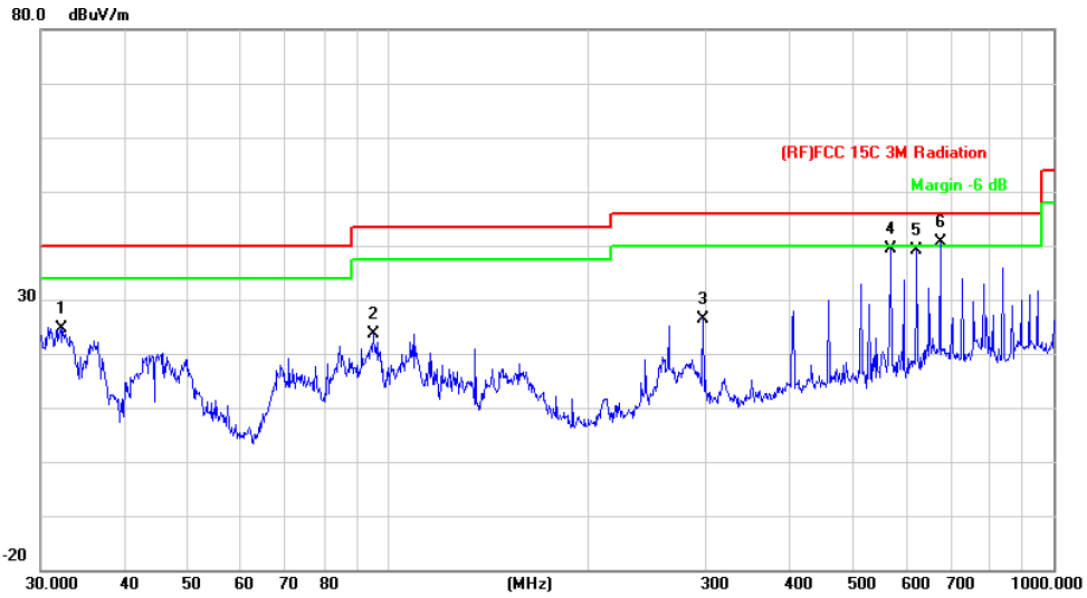


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		297.2241	50.40	-17.14	33.26	46.00	-12.74	peak
2		406.0880	47.63	-12.83	34.80	46.00	-11.20	peak
3		622.8899	45.03	-8.60	36.43	46.00	-9.57	peak
4	*	675.2078	49.75	-7.54	42.21	46.00	-3.79	peak
5		729.3582	45.35	-7.13	38.22	46.00	-7.78	peak
6		839.1817	42.73	-6.51	36.22	46.00	-9.78	peak

*:Maximum data x:Over limit !:over margin

Emission Level= Read Level+ Correct Factor

EUT:	Smart Socket	Model:	XM-JPK1S
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX B Mode 2462MHz		
Remark:	Only worse case is reported		

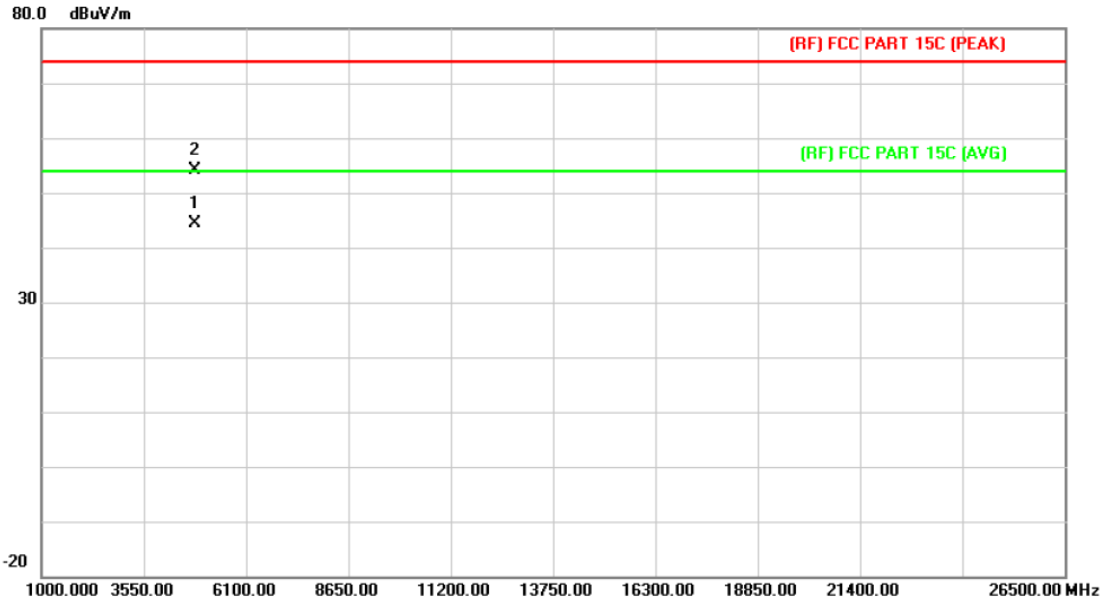


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		32.1794	40.05	-15.31	24.74	40.00	-15.26	peak
2		94.7600	46.03	-22.28	23.75	43.50	-19.75	peak
3		297.2241	43.64	-17.14	26.50	46.00	-19.50	peak
4		568.6127	49.59	-10.13	39.46	46.00	-6.54	peak
5		622.8899	47.61	-8.60	39.01	46.00	-6.99	peak
6	*	675.2078	48.21	-7.54	40.67	46.00	-5.33	peak

*:Maximum data x:Over limit !:over margin

Emission Level= Read Level+ Correct Factor

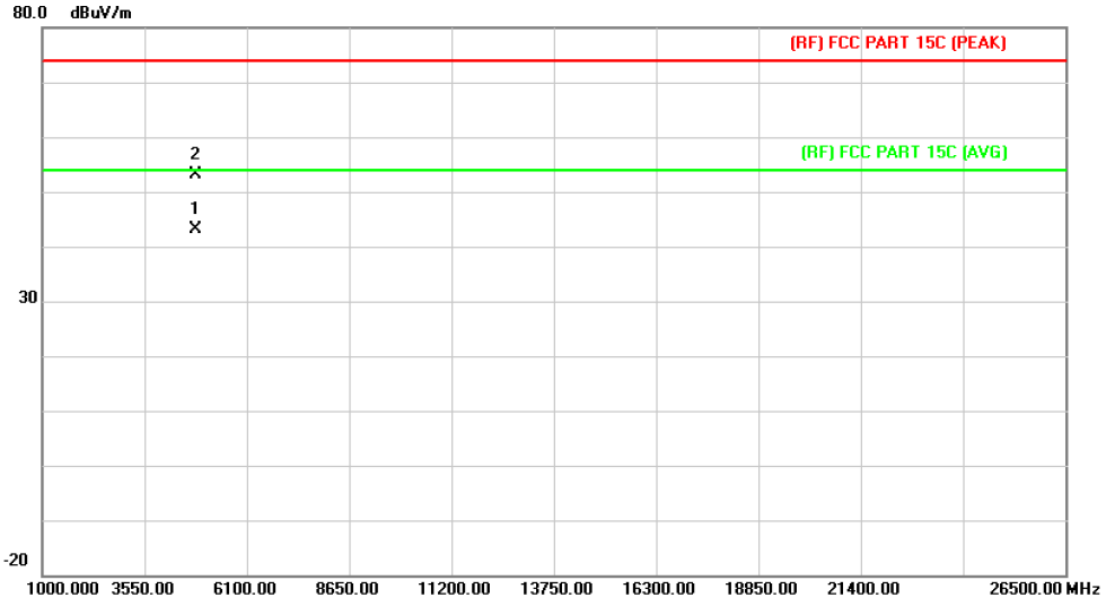
EUT:	Smart Socket	**Model:**	XM-JPK1S
Temperature:	25 ℃	**Relative Humidity:**	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX B Mode 2412MHz		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4823.352	36.12	8.19	44.31	54.00	-9.69	AVG
2		4823.841	46.05	8.19	54.24	74.00	-19.76	peak

Emission Level= Read Level+ Correct Factor

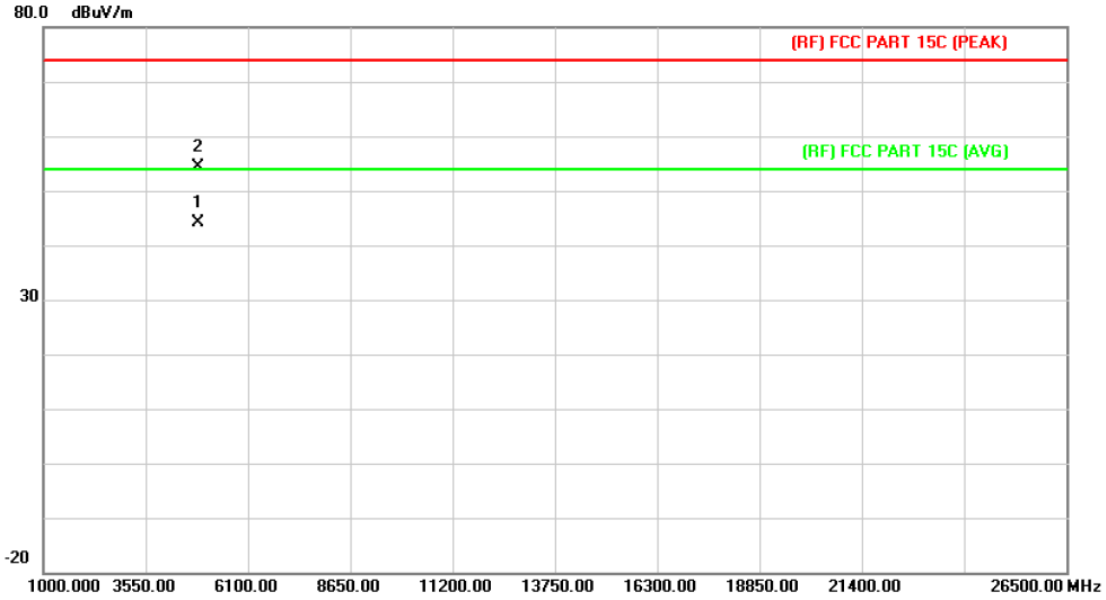
EUT:	Smart Socket	Model:	XM-JPK1S
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX B Mode 2412MHz		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4823.781	34.95	8.19	43.14	54.00	-10.86	AVG
2		4823.854	44.82	8.19	53.01	74.00	-20.99	peak

Emission Level= Read Level+ Correct Factor

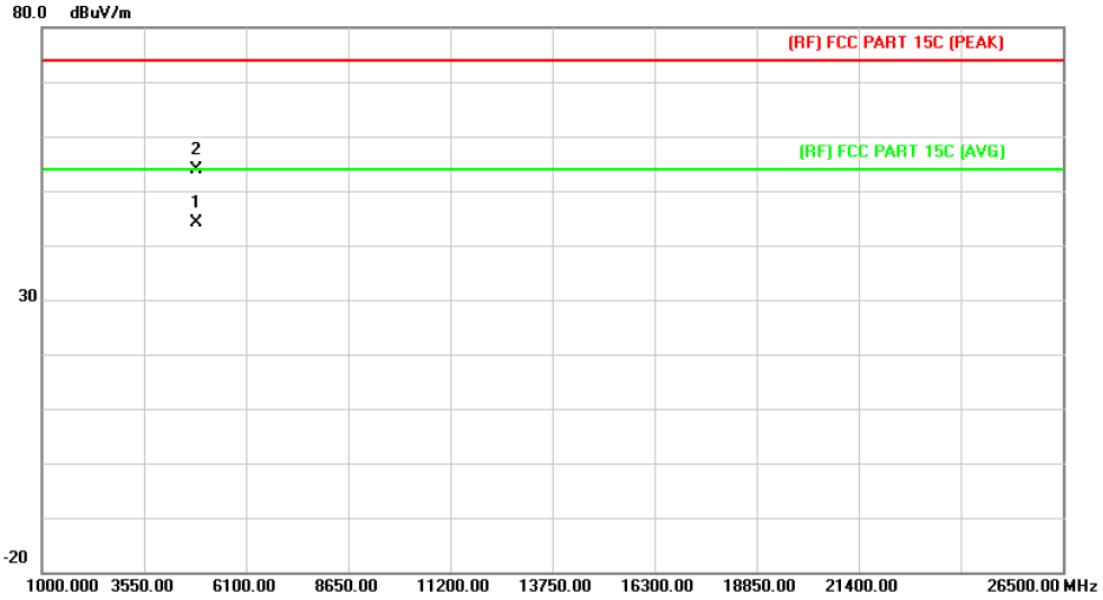
EUT:	Smart Socket	Model:	XM-JPK1S
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX B Mode 2437MHz		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4873.321	36.00	8.21	44.21	54.00	-9.79	AVG
2		4873.844	46.21	8.21	54.42	74.00	-19.58	peak

Emission Level= Read Level+ Correct Factor

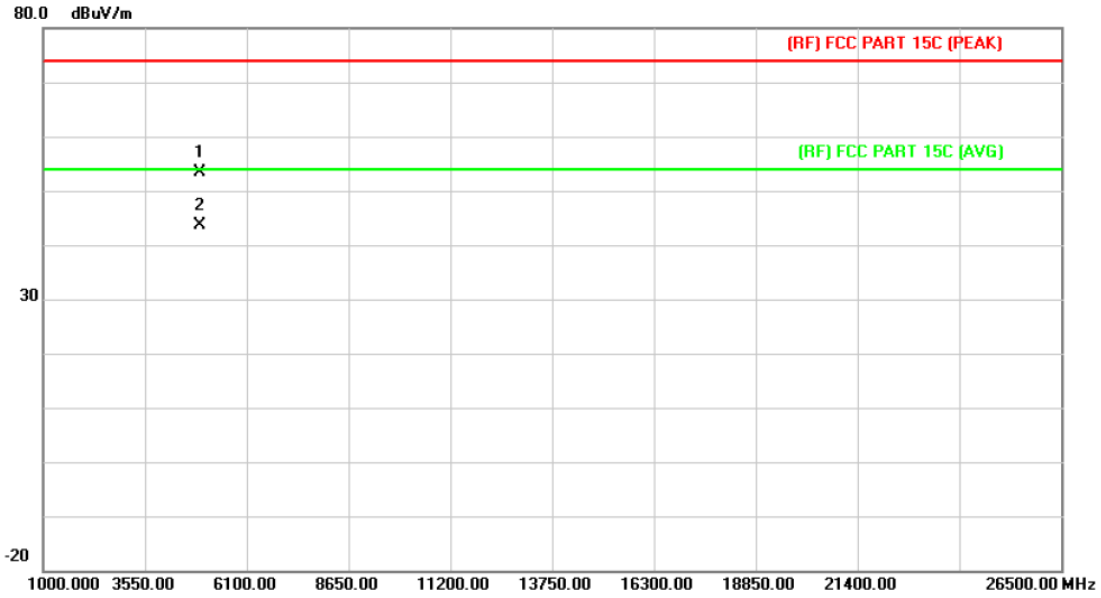
EUT:	Smart Socket	Model:	XM-JPK1S
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX B Mode 2437MHz		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4873.311	35.89	8.21	44.10	54.00	-9.90	AVG
2		4873.747	45.63	8.21	53.84	74.00	-20.16	peak

Emission Level= Read Level+ Correct Factor

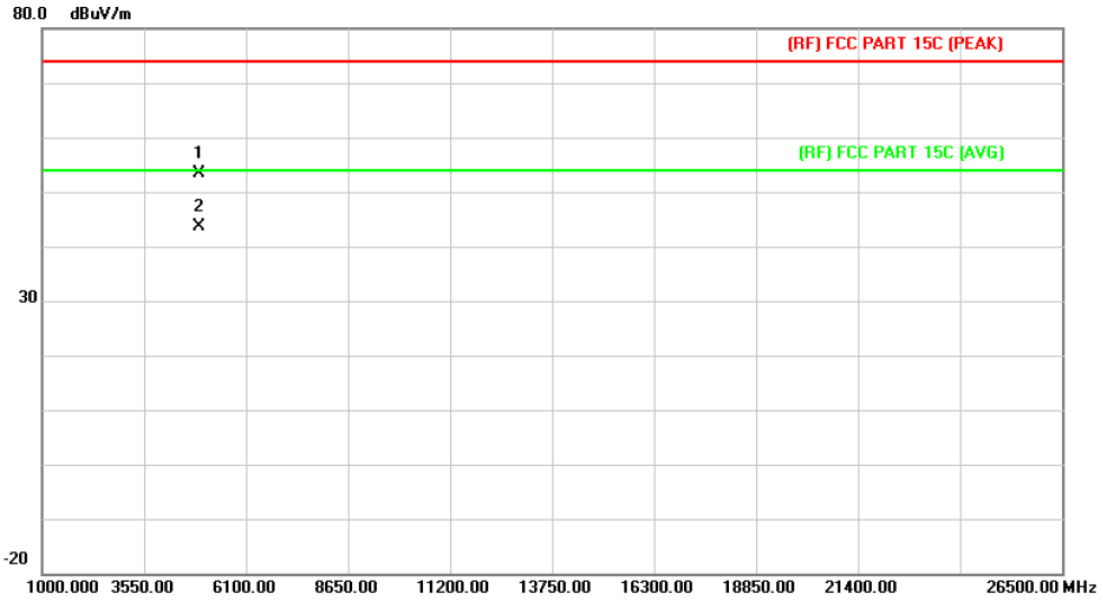
EUT:	Smart Socket	**Model:**	XM-JPK1S
Temperature:	25 ℃	**Relative Humidity:**	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX B Mode 2462MHz		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4923.748	45.15	8.22	53.37	74.00	-20.63	peak
2	*	4923.875	35.29	8.22	43.51	54.00	-10.49	AVG

Emission Level= Read Level+ Correct Factor

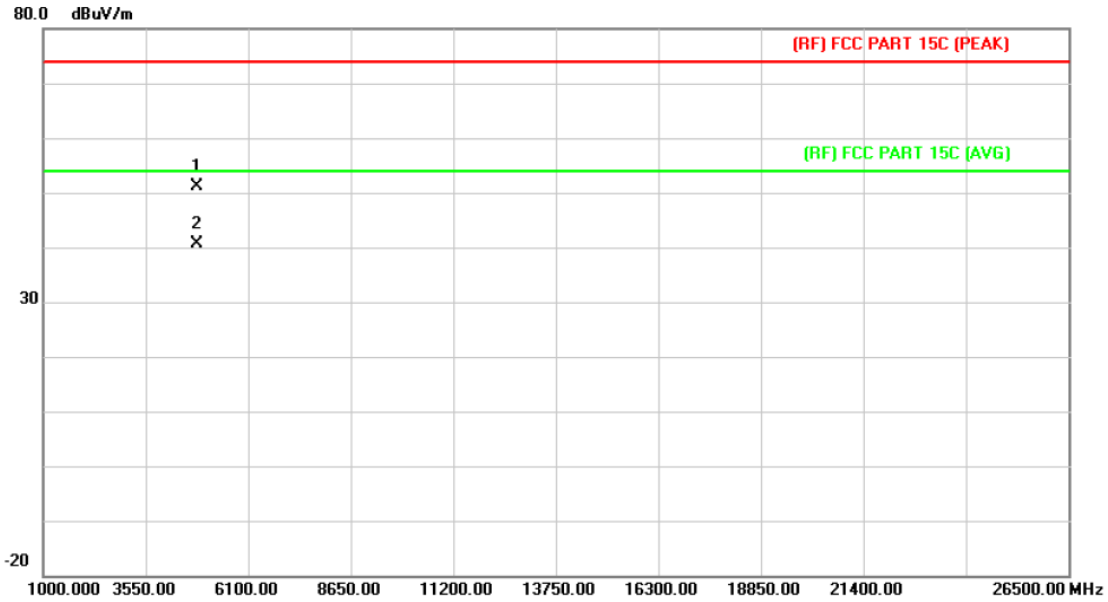
EUT:	Smart Socket	Model:	XM-JPK1S
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX B Mode 2462MHz		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4923.814	45.17	8.22	53.39	74.00	-20.61	peak
2	*	4923.847	35.43	8.22	43.65	54.00	-10.35	AVG

Emission Level= Read Level+ Correct Factor

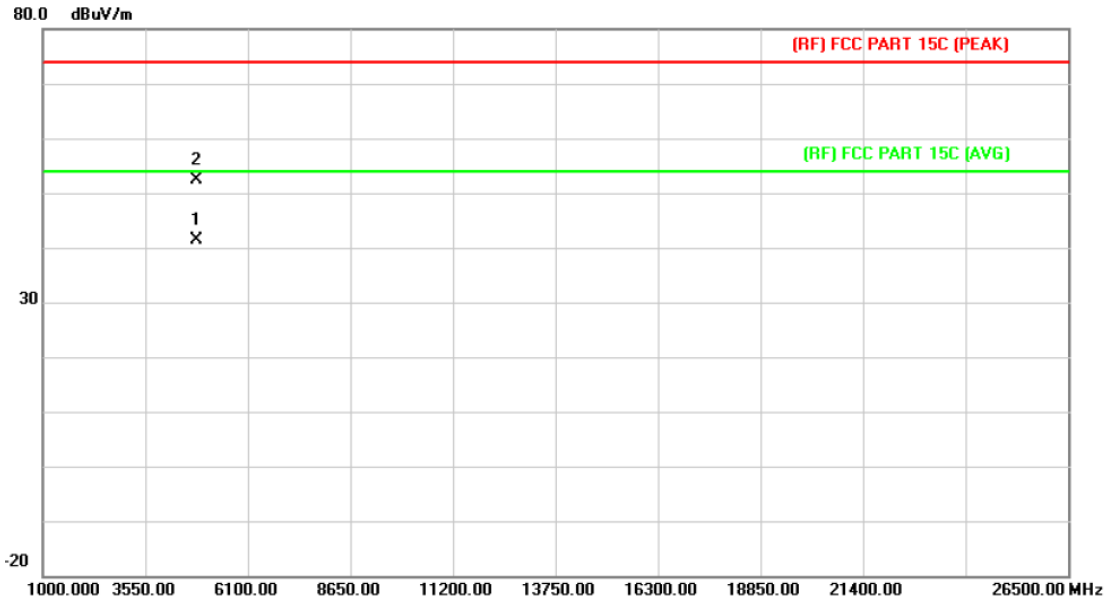
EUT:	Smart Socket	**Model:**	XM-JPK1S
Temperature:	25 ℃	**Relative Humidity:**	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX G Mode 2412MHz		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4823.577	42.95	8.19	51.14	74.00	-22.86	peak
2	*	4823.651	32.48	8.19	40.67	54.00	-13.33	AVG

Emission Level= Read Level+ Correct Factor

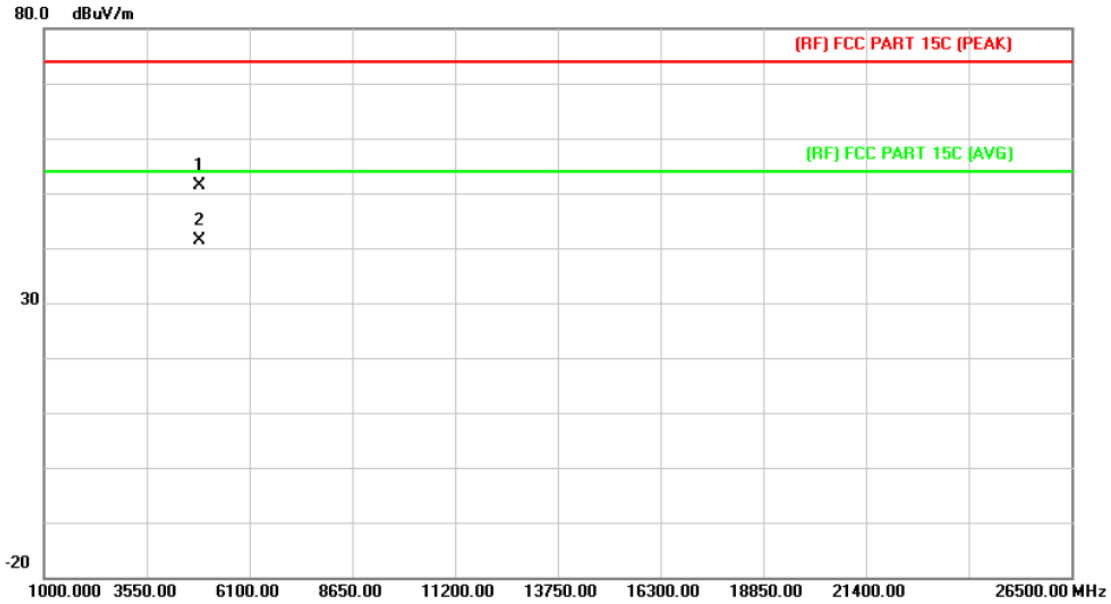
EUT:	Smart Socket	**Model:**	XM-JPK1S
Temperature:	25 ℃	**Relative Humidity:**	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX G Mode 2412MHz		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4823.476	33.18	8.19	41.37	54.00	-12.63	AVG
2		4823.961	44.15	8.19	52.34	74.00	-21.66	peak

Emission Level= Read Level+ Correct Factor

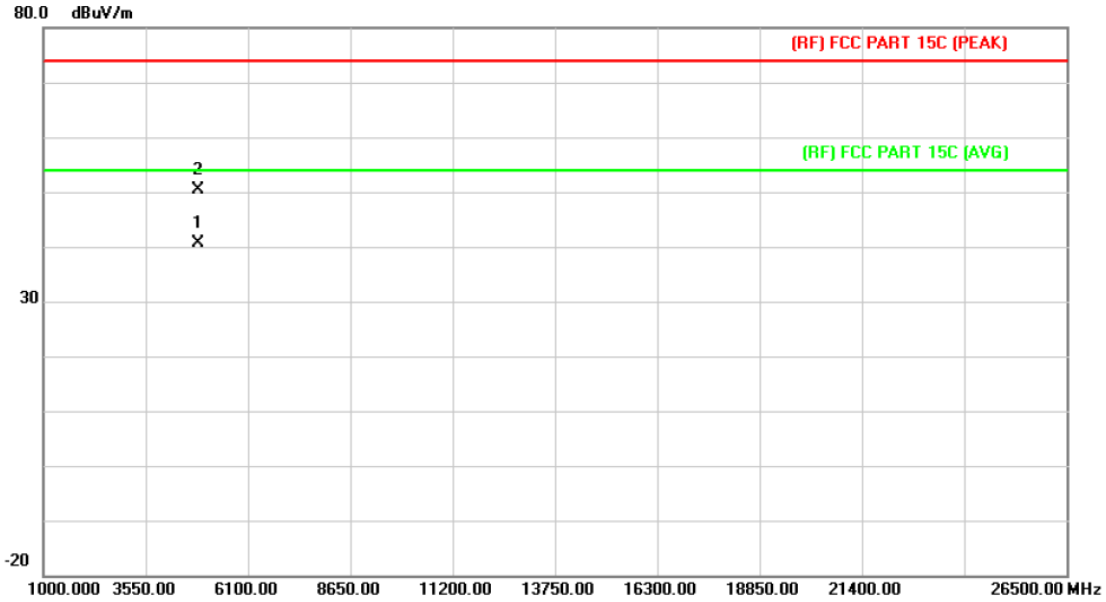
EUT:	Smart Socket	Model:	XM-JPK1S
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX G Mode 2437MHz		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4873.584	43.13	8.21	51.34	74.00	-22.66	peak
2	*	4873.649	33.06	8.21	41.27	54.00	-12.73	AVG

Emission Level= Read Level+ Correct Factor

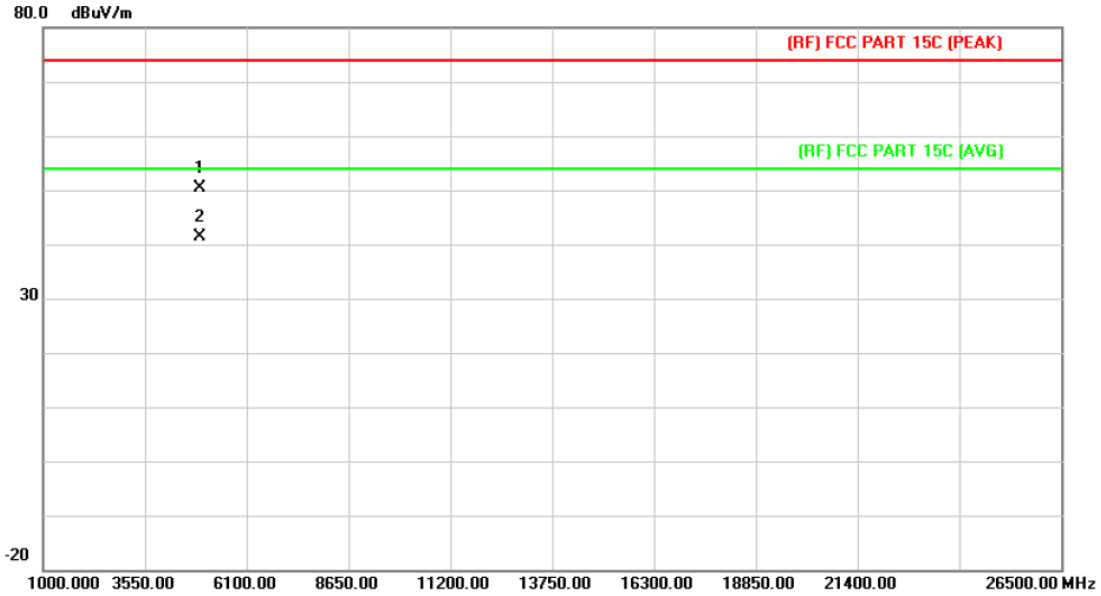
EUT:	Smart Socket	Model:	XM-JPK1S
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX G Mode 2437MHz		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4873.367	32.44	8.21	40.65	54.00	-13.35	AVG
2		4873.621	42.16	8.21	50.37	74.00	-23.63	peak

Emission Level= Read Level+ Correct Factor

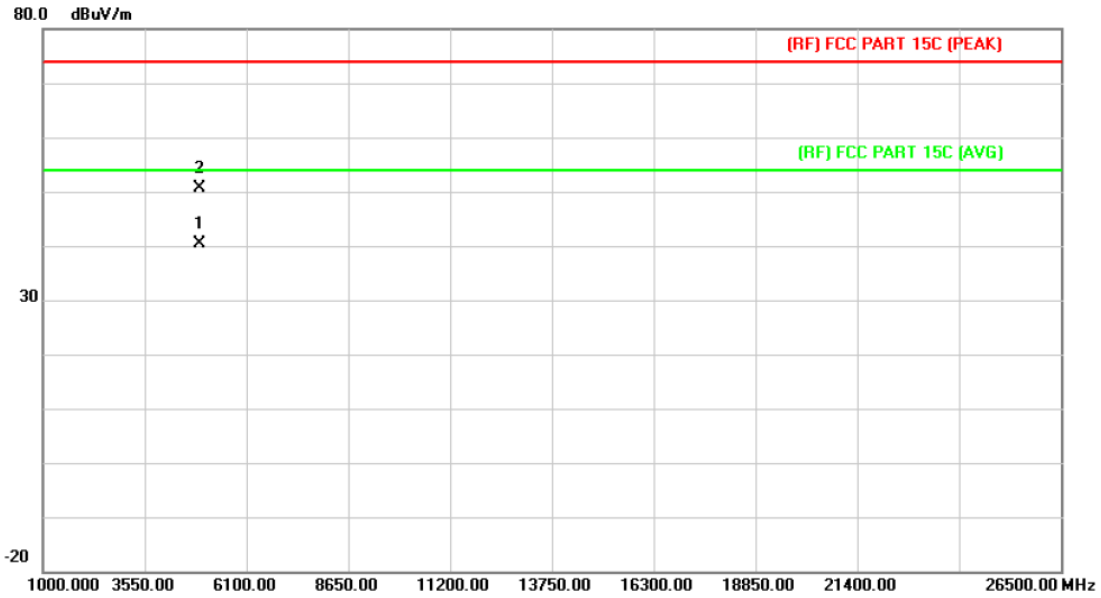
EUT:	Smart Socket	Model:	XM-JPK1S
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX G Mode 2462MHz		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4923.367	42.12	8.22	50.34	74.00	-23.66	peak
2	*	4923.649	33.06	8.22	41.28	54.00	-12.72	AVG

Emission Level= Read Level+ Correct Factor

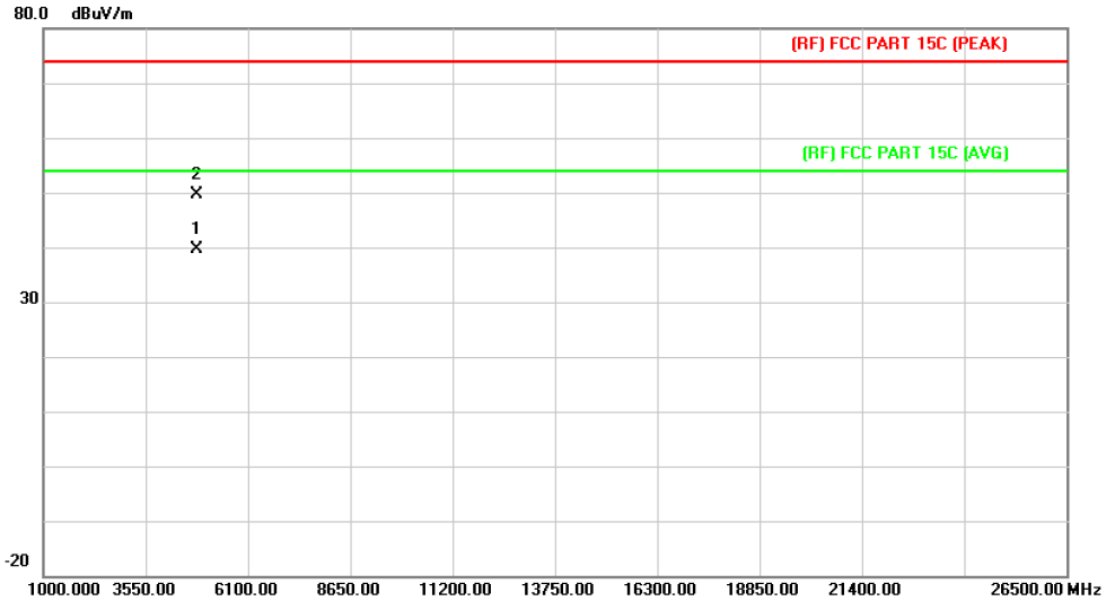
EUT:	Smart Socket	Model:	XM-JPK1S
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX G Mode 2462MHz		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4923.643	32.11	8.22	40.33	54.00	-13.67	AVG
2		4923.755	42.45	8.22	50.67	74.00	-23.33	peak

Emission Level= Read Level+ Correct Factor

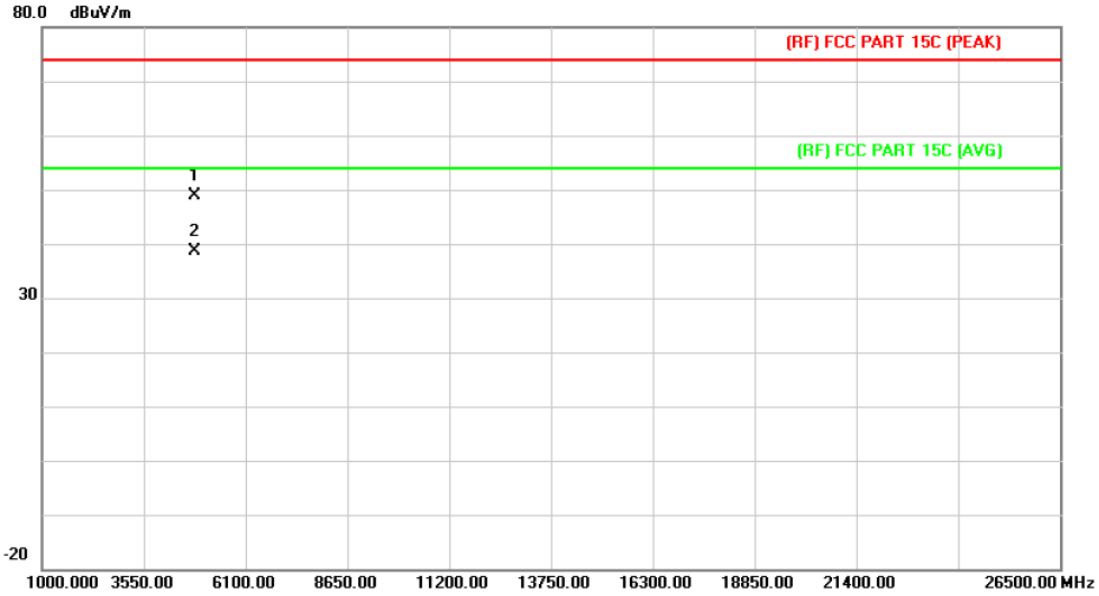
EUT:	Smart Socket	**Model:**	XM-JPK1S
Temperature:	25 ℃	**Relative Humidity:**	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX N(HT20) Mode 2412MHz		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4823.145	31.48	8.19	39.67	54.00	-14.33	AVG
2		4823.336	41.42	8.19	49.61	74.00	-24.39	peak

Emission Level= Read Level+ Correct Factor

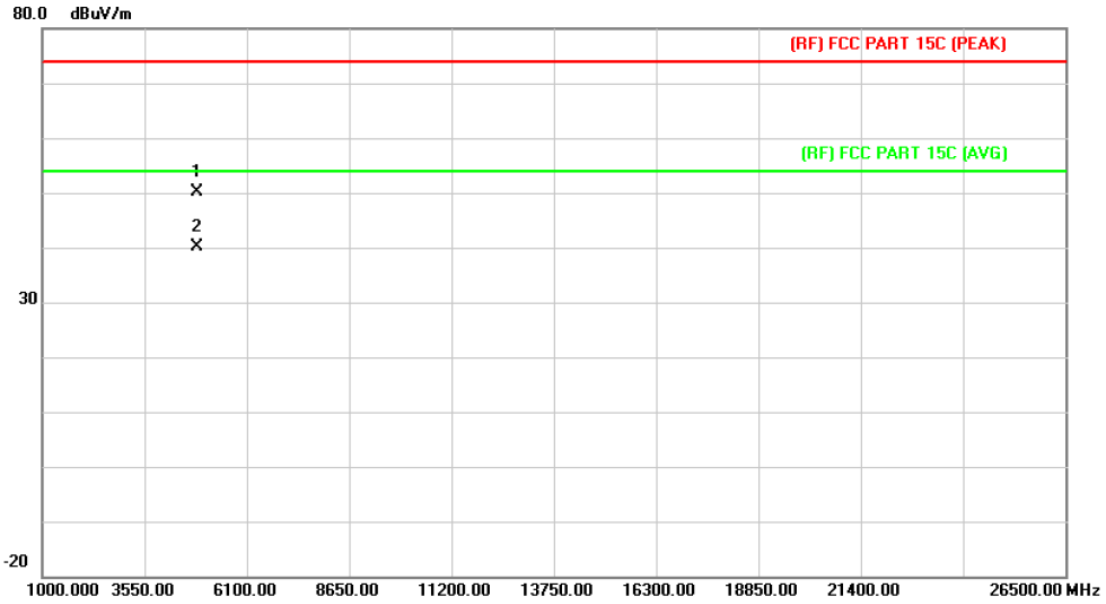
EUT:	Smart Socket	**Model:**	XM-JPK1S
Temperature:	25 ℃	**Relative Humidity:**	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX N(HT20) Mode 2412MHz		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4823.614	40.70	8.19	48.89	74.00	-25.11	peak
2	*	4823.812	30.55	8.19	38.74	54.00	-15.26	AVG

Emission Level= Read Level+ Correct Factor

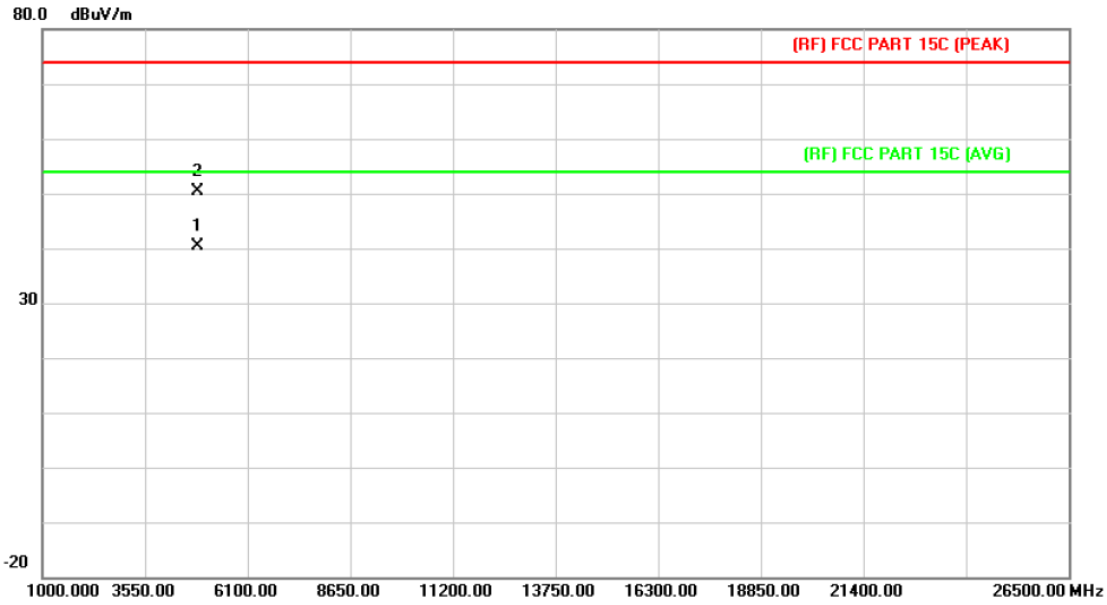
EUT:	Smart Socket	Model:	XM-JPK1S
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX N(HT20) Mode 2437MHz		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4873.347	41.91	8.21	50.12	74.00	-23.88	peak
2	*	4873.479	32.00	8.21	40.21	54.00	-13.79	AVG

Emission Level= Read Level+ Correct Factor

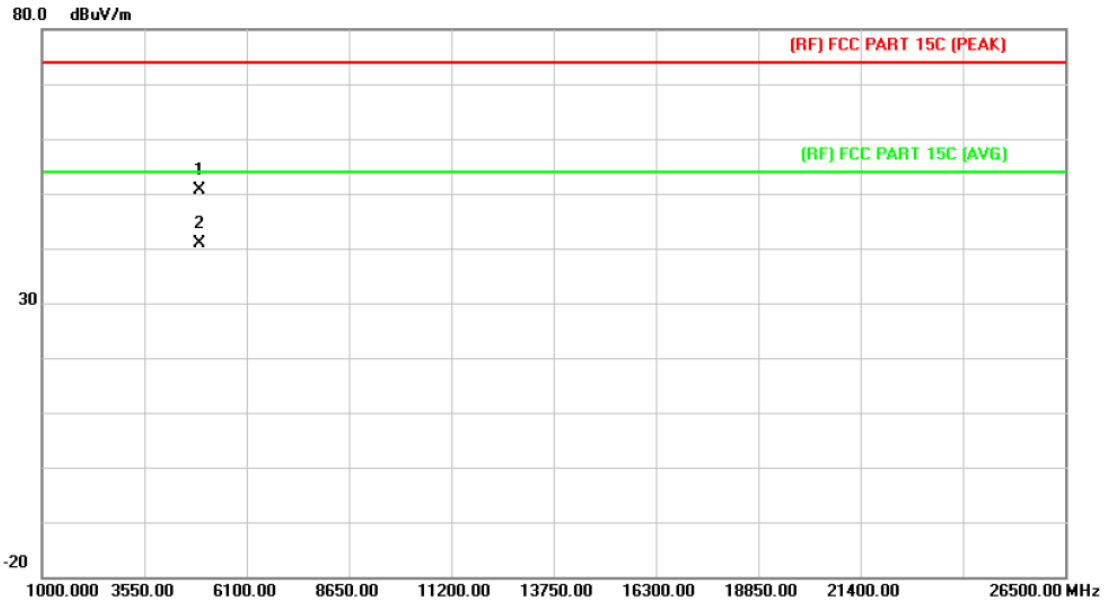
EUT:	Smart Socket	**Model:**	XM-JPK1S
Temperature:	25 ℃	**Relative Humidity:**	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX N(HT20) Mode 2437MHz		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4873.314	32.14	8.21	40.35	54.00	-13.65	AVG
2		4873.418	42.06	8.21	50.27	74.00	-23.73	peak

Emission Level= Read Level+ Correct Factor

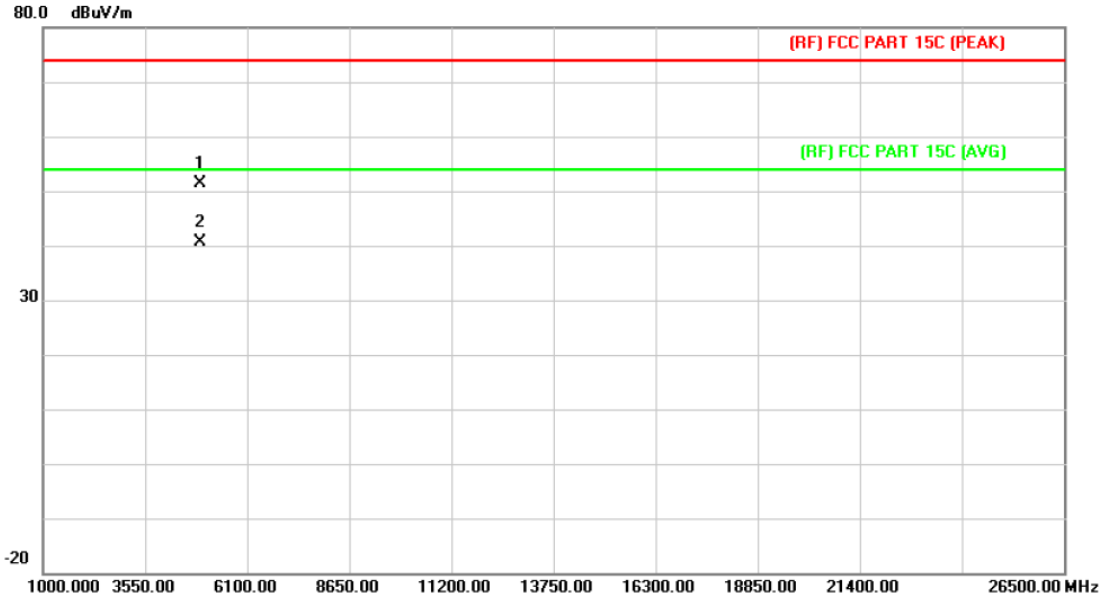
EUT:	Smart Socket	Model:	XM-JPK1S
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX N(HT20) Mode 2462MHz		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4923.649	42.42	8.22	50.64	74.00	-23.36	peak
2	*	4923.843	32.59	8.22	40.81	54.00	-13.19	AVG

Emission Level= Read Level+ Correct Factor

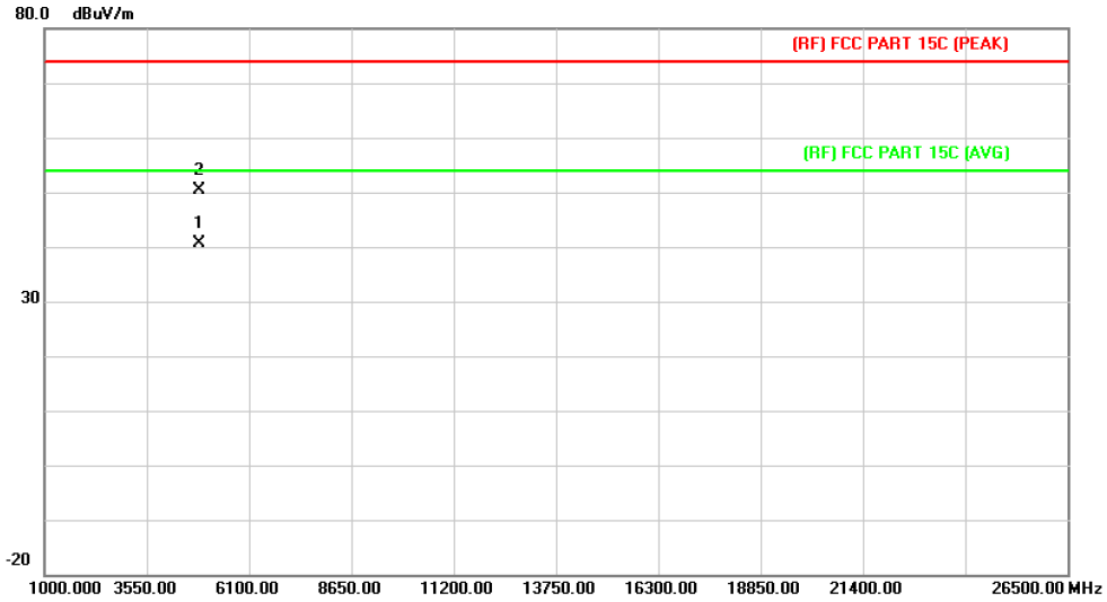
EUT:	Smart Socket	**Model:**	XM-JPK1S
Temperature:	25 ℃	**Relative Humidity:**	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX N(HT20) Mode 2462MHz		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4923.614	43.15	8.22	51.37	74.00	-22.63	peak
2	*	4923.637	32.37	8.22	40.59	54.00	-13.41	AVG

Emission Level= Read Level+ Correct Factor

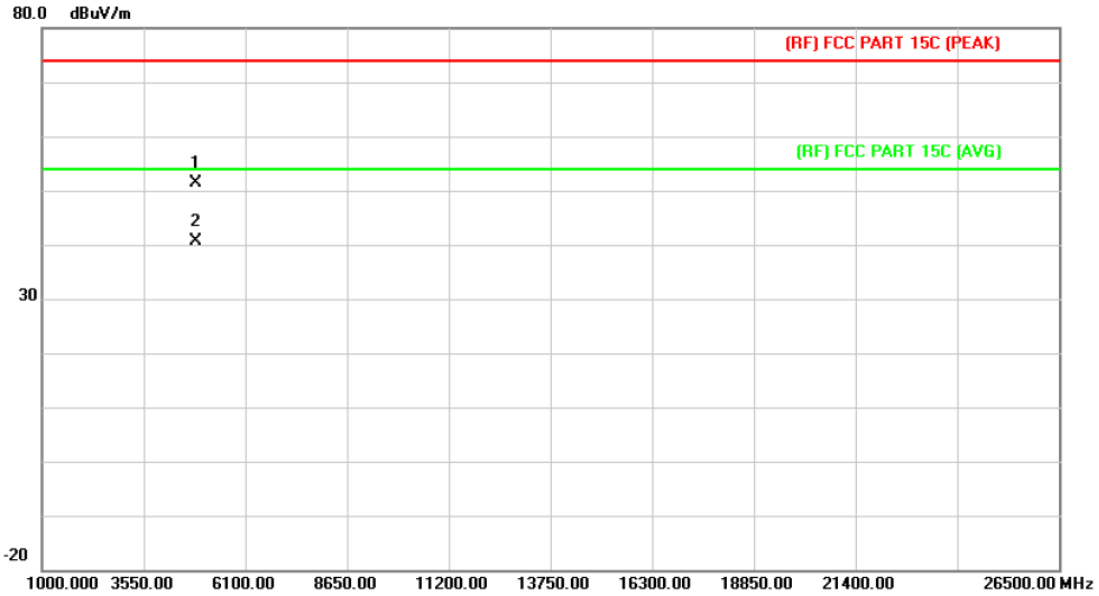
EUT:	Smart Socket	Model:	XM-JPK1S
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX N(HT40) Mode 2422MHz		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4843.458	32.46	8.20	40.66	54.00	-13.34	AVG
2		4843.617	42.28	8.20	50.48	74.00	-23.52	peak

Emission Level= Read Level+ Correct Factor

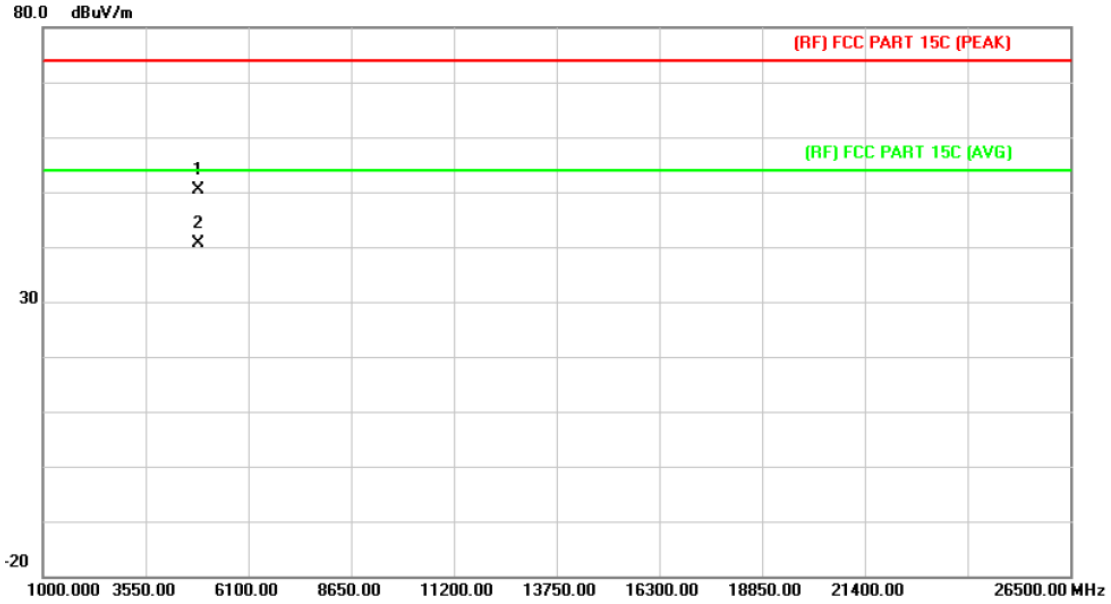
EUT:	Smart Socket	Model:	XM-JPK1S
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX N(HT40) Mode 2422MHz		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4843.337	43.29	8.20	51.49	74.00	-22.51	peak
2	*	4843.449	32.37	8.20	40.57	54.00	-13.43	AVG

Emission Level= Read Level+ Correct Factor

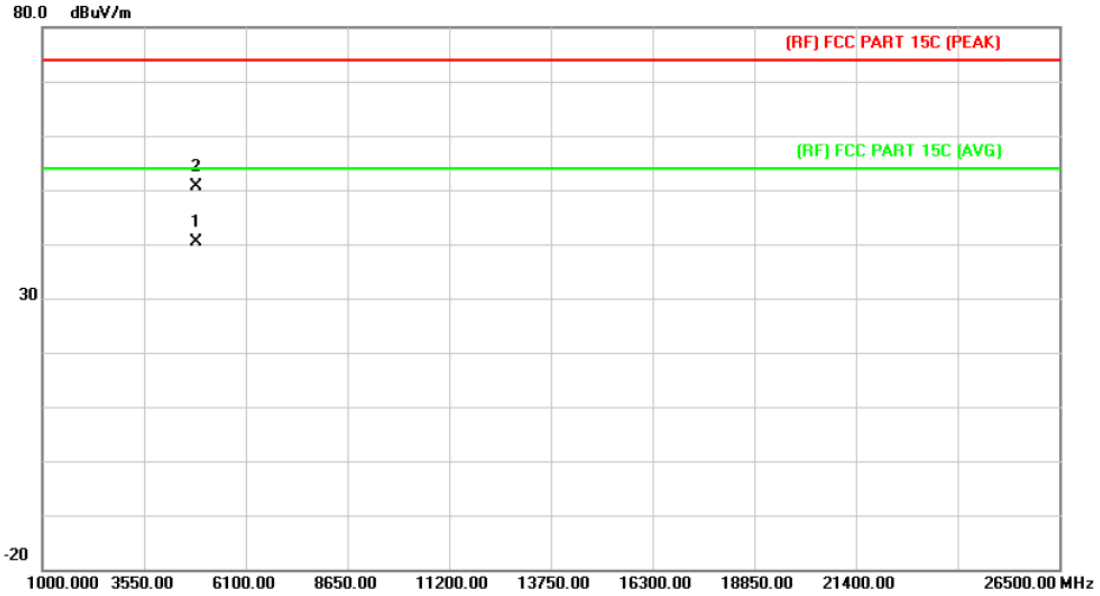
EUT:	Smart Socket	Model:	XM-JPK1S
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX N(HT40) Mode 2437MHz		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4873.496	42.27	8.21	50.48	74.00	-23.52	peak
2	*	4873.547	32.45	8.21	40.66	54.00	-13.34	AVG

Emission Level= Read Level+ Correct Factor

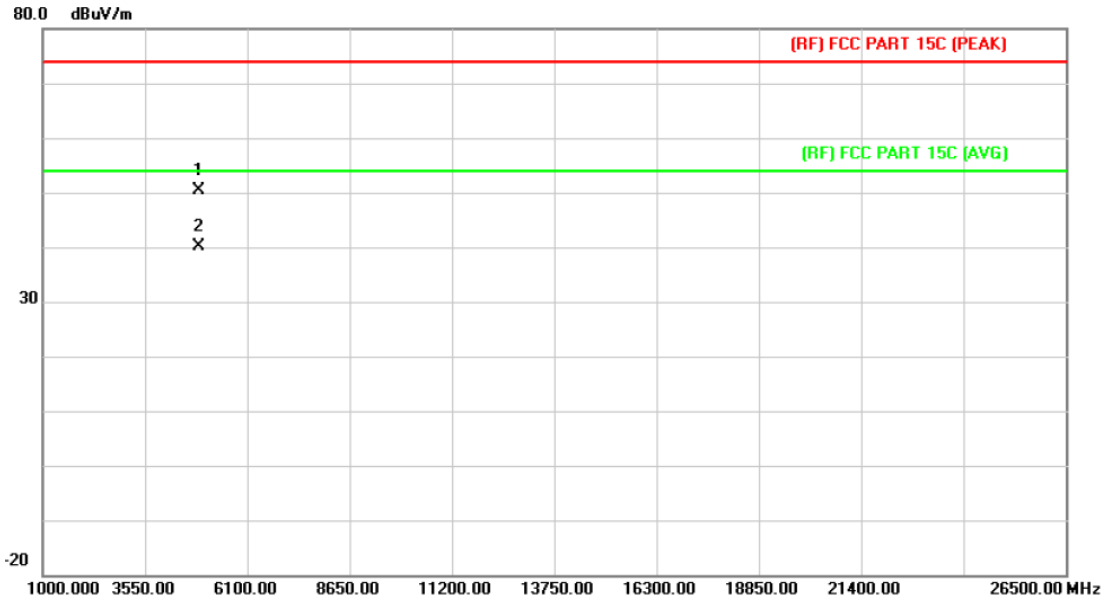
EUT:	Smart Socket	Model:	XM-JPK1S
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX N(HT40) Mode 2437MHz		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4873.368	32.15	8.21	40.36	54.00	-13.64	AVG
2		4873.597	42.46	8.21	50.67	74.00	-23.33	peak

Emission Level= Read Level+ Correct Factor

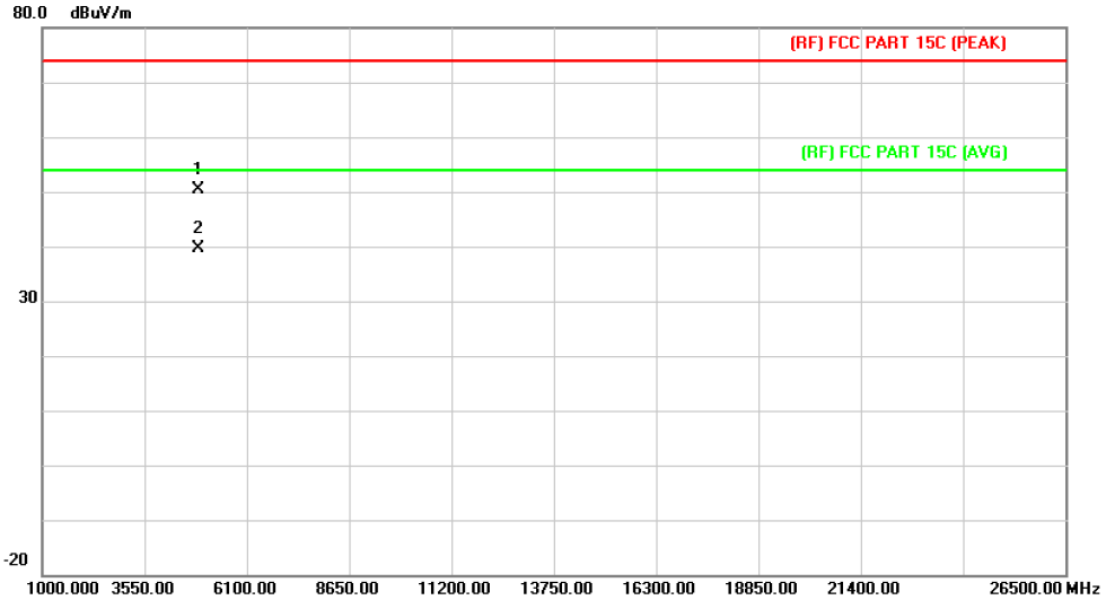
EUT:	Smart Socket	Model:	XM-JPK1S
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX N(HT40) Mode 2452MHz		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4903.551	42.16	8.21	50.37	74.00	-23.63	peak
2	*	4903.649	31.97	8.21	40.18	54.00	-13.82	AVG

Emission Level= Read Level+ Correct Factor

EUT:	Smart Socket	**Model:**	XM-JPK1S
Temperature:	25 ℃	**Relative Humidity:**	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX N(HT40) Mode 2452MHz		
Remark:	No report for the emission which more than 10 dB below the prescribed limit.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4903.367	42.27	8.21	50.48	74.00	-23.52	peak
2	*	4903.579	31.43	8.21	39.64	54.00	-14.36	AVG

Emission Level= Read Level+ Correct Factor

6. Restricted Bands Requirement

6.1 Test Standard and Limit

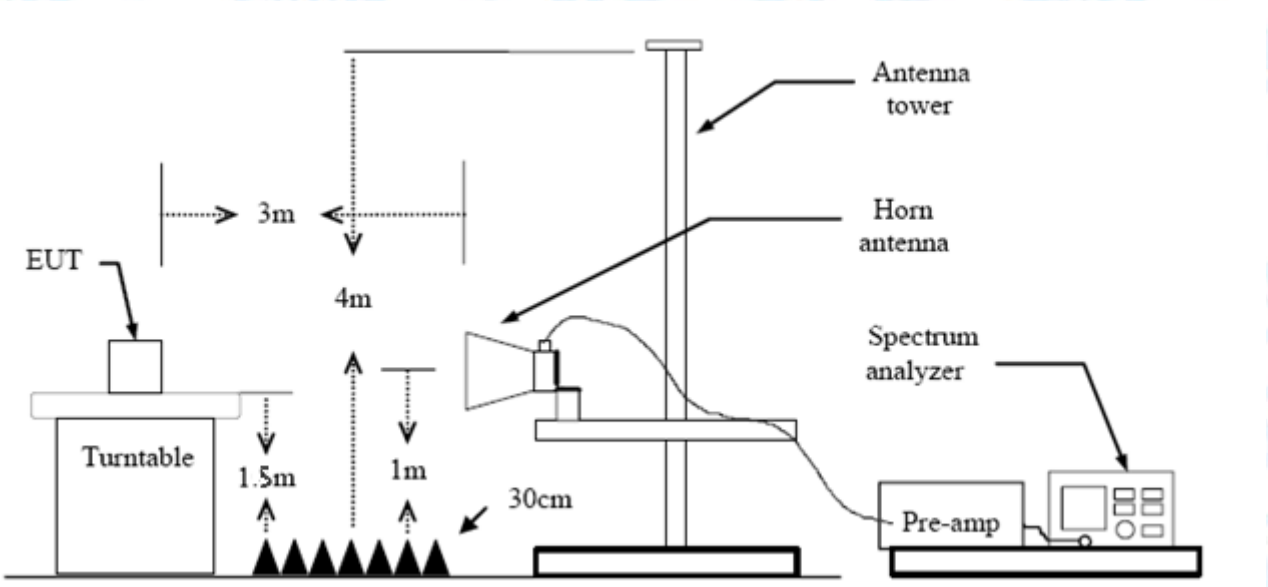
6.1.1 Test Standard

FCC Part 15.209 FCC Part 15.205

6.1.2 Test Limit

Restricted Frequency Band (MHz)	Class B (dBuV/m)(at 3 M)	
	Peak	Average
2310 ~2390	74	54
2483.5 ~2500	74	54

6.2 Test Setup



6.3 Test Procedure

(1) The measuring distance of 3m shall be used for measurements at frequency up to 1GHz and above 1 GHz. The EUT was placed on a rotating 0.8m high above ground, the table was rotated 360 degrees to determine the position of the highest radiation.

(2) Measurements at frequency above 1GHz. The EUT was placed on a rotating 1.5m high above the ground. RF absorbers covered the ground plane with a minimum area of 3.0m by 3.0m between the EUT and measurement receiver antenna. The RF absorber shall not exceed 30cm in high above the conducting floor. The table was rotated 360 degrees to determine the position of the highest radiation.

(3) The Test antenna shall vary between 1m and 4m, Both Horizontal and Vertical antenna are set to make measurement.

(4) The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
(5) If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit Bellow 1 GHz, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed. But the Peak Value and average value both need to comply with applicable limit above 1 GHz.
(6) Testing frequency range below 1GHz the measuring instrument use VBW=120 kHz with Quasi-peak detection.
(7) Testing frequency range above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with Peak Detector for Peak Values, and use RBW=1 MHz and VBW=10 Hz with Peak Detector for Average Values.
(8) For the actual test configuration, please see the test setup photo.

6.4 EUT Operating Condition

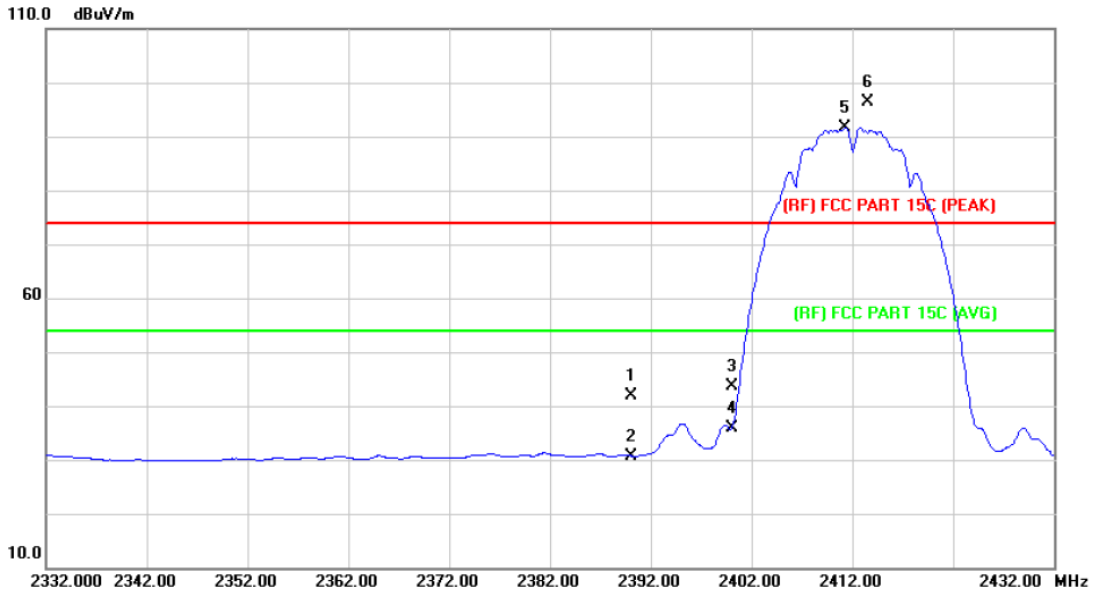
The Equipment Under Test was set to Continual Transmitting in maximum power.

6.5 Test Data

Please see the next page.

(1) Radiation Test

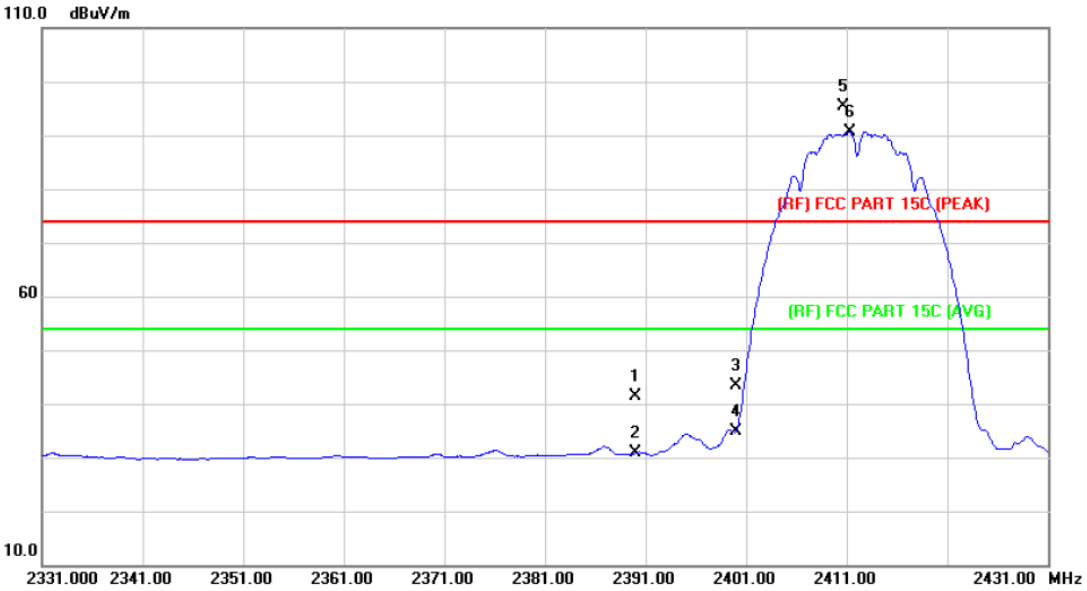
EUT:	Smart Socket	Model:	XM-JPK1S
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX B Mode 2412MHz		
Remark:	N/A		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		2390.000	41.14	0.77	41.91	74.00	-32.09	peak
2		2390.000	29.98	0.77	30.75	54.00	-23.25	AVG
3		2400.000	42.73	0.81	43.54	Fundamental Frequency		peak
4		2400.000	34.98	0.81	35.79	Fundamental Frequency		AVG
5	*	2411.300	90.80	0.86	91.66	54.00	37.66	AVG
6	X	2413.500	95.55	0.86	96.41	74.00	22.41	peak

Emission Level= Read Level+ Correct Factor

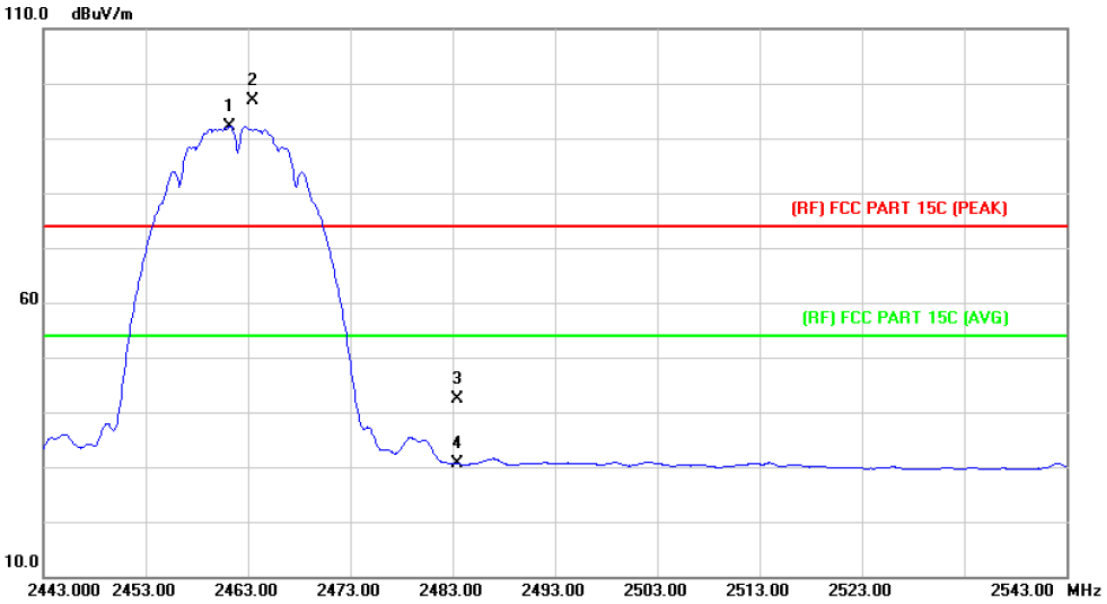
EUT:	Smart Socket	Model:	XM-JPK1S
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX B Mode 2412MHz		
Remark:	N/A		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		2390.000	40.69	0.77	41.46	74.00	-32.54	peak
2		2390.000	30.04	0.77	30.81	54.00	-23.19	AVG
3		2400.000	42.66	0.81	43.47	Fundamental Frequency		peak
4		2400.000	34.02	0.81	34.83	Fundamental Frequency		AVG
5	X	2410.700	94.60	0.86	95.46	74.00	21.46	peak
6	*	2411.300	89.88	0.86	90.74	54.00	36.74	AVG

Emission Level= Read Level+ Correct Factor

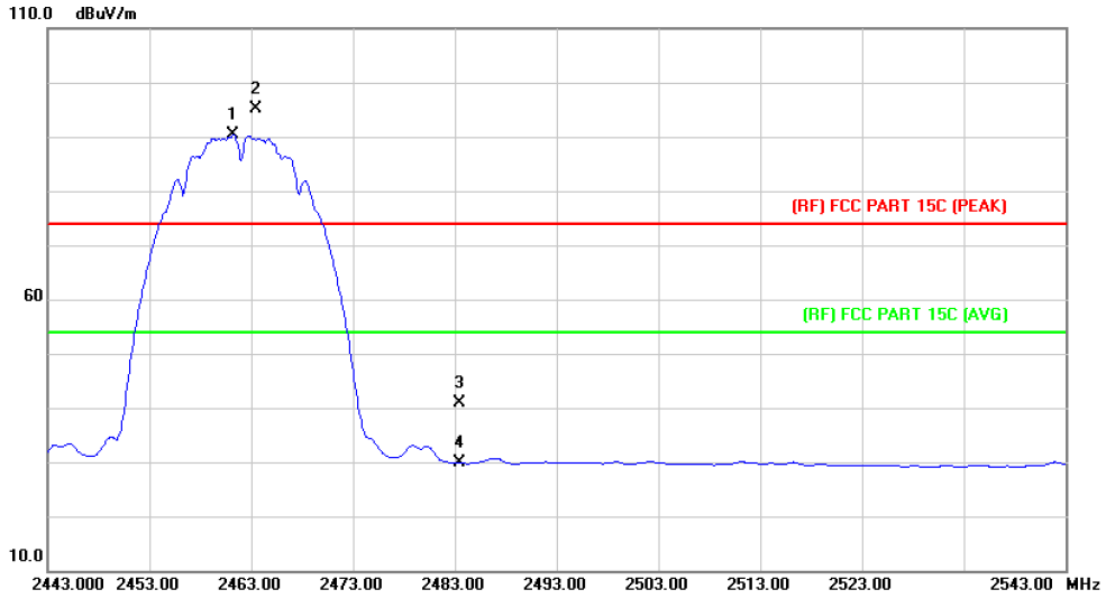
EUT:	Smart Socket	Model:	XM-JPK1S
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX B Mode 2462MHz		
Remark:	N/A		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	2461.200	91.15	1.07	92.22	Fundamental Frequency		AVG
2	X	2463.500	95.83	1.08	96.91	Fundamental Frequency		peak
3		2483.500	41.33	1.17	42.50	74.00	-31.50	peak
4		2483.500	29.40	1.17	30.57	54.00	-23.43	AVG

Emission Level= Read Level+ Correct Factor

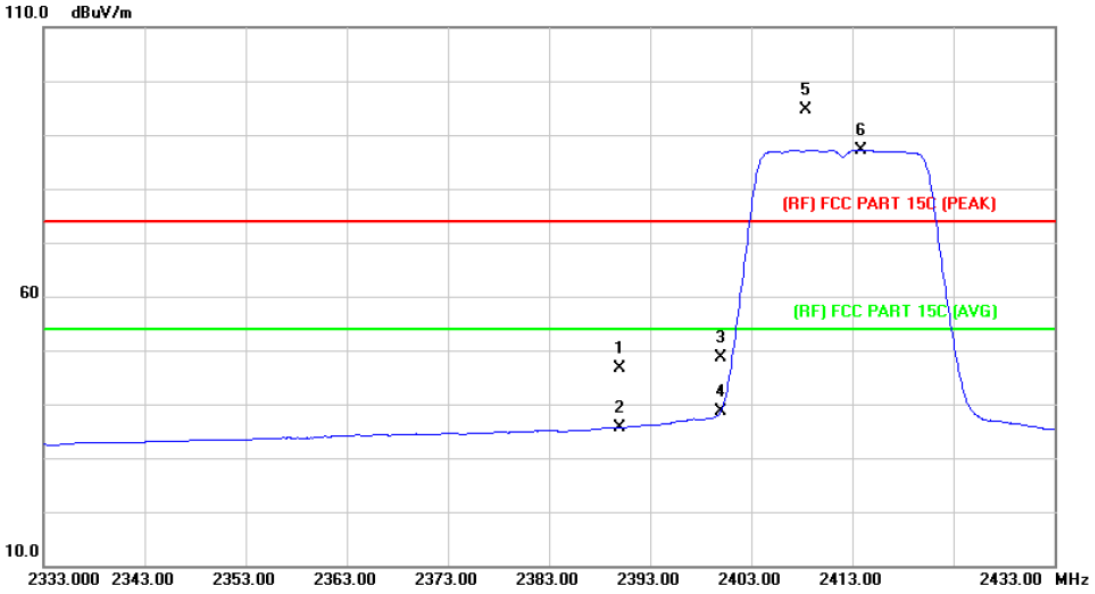
EUT:	Smart Socket	Model:	XM-JPK1S
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX B Mode 2462MHz		
Remark:	N/A		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	2461.200	89.19	1.07	90.26	Fundamental Frequency		AVG
2	X	2463.400	93.93	1.08	95.01	Fundamental Frequency		peak
3		2483.500	39.67	1.17	40.84	74.00	-33.16	peak
4		2483.500	28.69	1.17	29.86	54.00	-24.14	AVG

Emission Level= Read Level+ Correct Factor

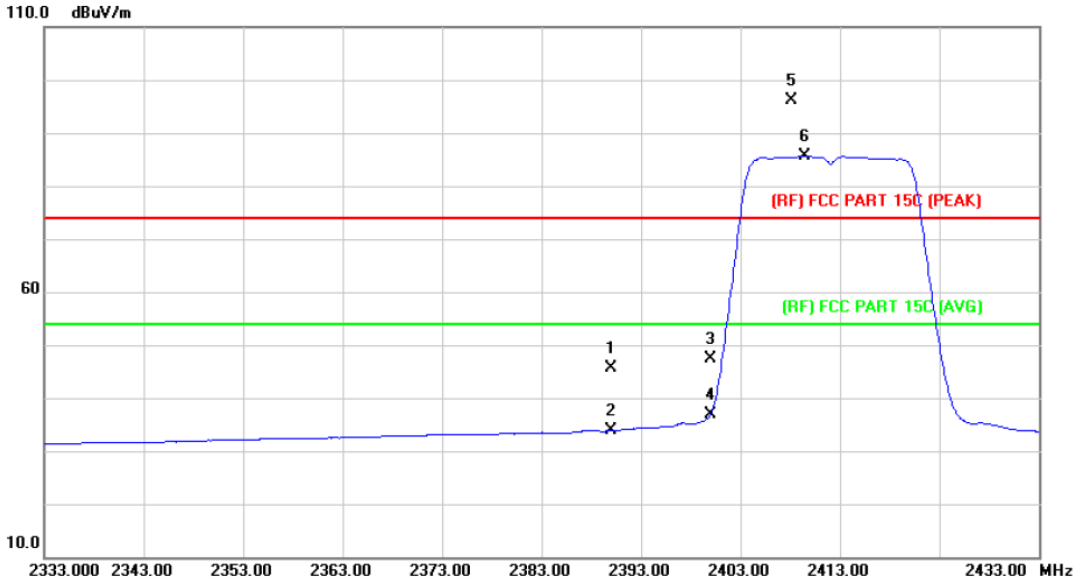
EUT:	Smart Socket	Model:	XM-JPK1S
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX G Mode 2412MHz		
Remark:	N/A		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		2390.000	45.96	0.77	46.73	74.00	-27.27	peak
2		2390.000	34.88	0.77	35.65	54.00	-18.35	AVG
3		2400.000	47.85	0.81	48.66	Fundamental Frequency		peak
4		2400.000	37.87	0.81	38.68	Fundamental Frequency		AVG
5	X	2408.400	93.83	0.85	94.68	74.00	20.68	peak
6	*	2413.800	86.37	0.86	87.23	54.00	33.23	AVG

Emission Level= Read Level+ Correct Factor

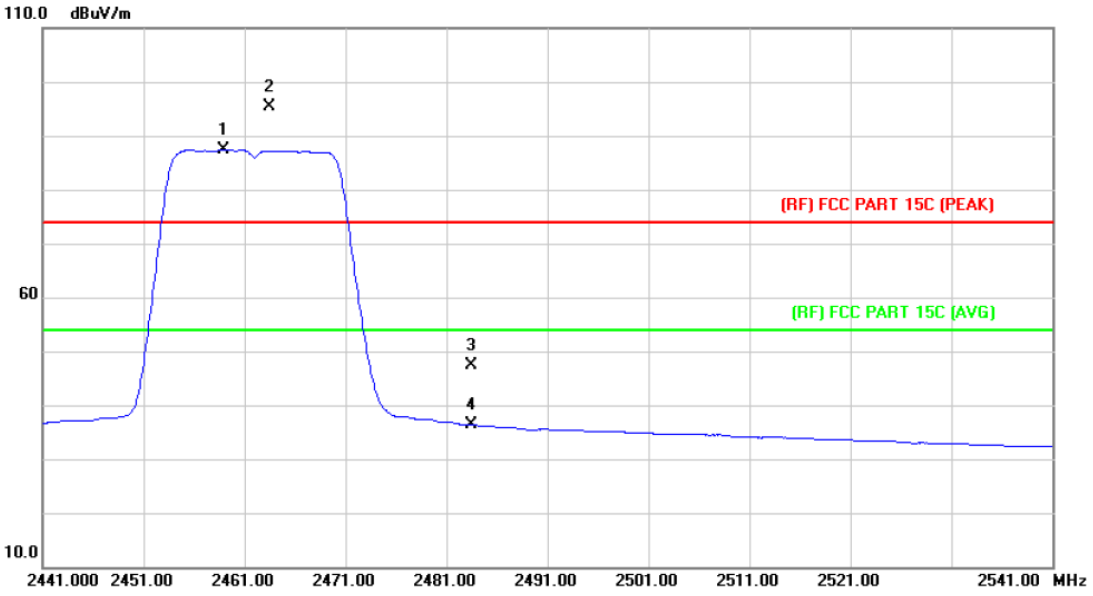
EUT:	Smart Socket	Model:	XM-JPK1S
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX G Mode 2412MHz		
Remark:	N/A		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		2390.000	44.86	0.77	45.63	74.00	-28.37	peak
2		2390.000	33.14	0.77	33.91	54.00	-20.09	AVG
3		2400.000	46.64	0.81	47.45	Fundamental Frequency		peak
4		2400.000	36.15	0.81	36.96	Fundamental Frequency		AVG
5	X	2408.200	95.17	0.85	96.02	74.00	22.02	peak
6	*	2409.400	84.77	0.85	85.62	54.00	31.62	AVG

Emission Level= Read Level+ Correct Factor

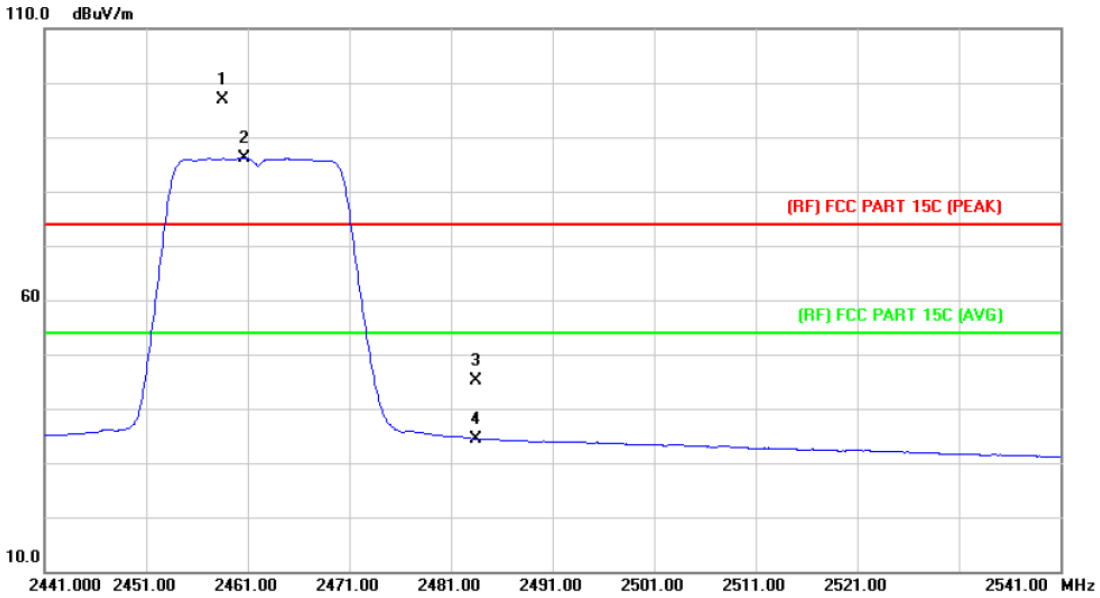
EUT:	Smart Socket	Model:	XM-JPK1S
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX G Mode 2462MHz		
Remark:	N/A		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	2458.900	86.33	1.06	87.39	Fundamental Frequency		AVG
2	X	2463.400	94.23	1.08	95.31	Fundamental Frequency		peak
3		2483.500	46.29	1.17	47.46	74.00	-26.54	peak
4		2483.500	35.14	1.17	36.31	54.00	-17.69	AVG

Emission Level= Read Level+ Correct Factor

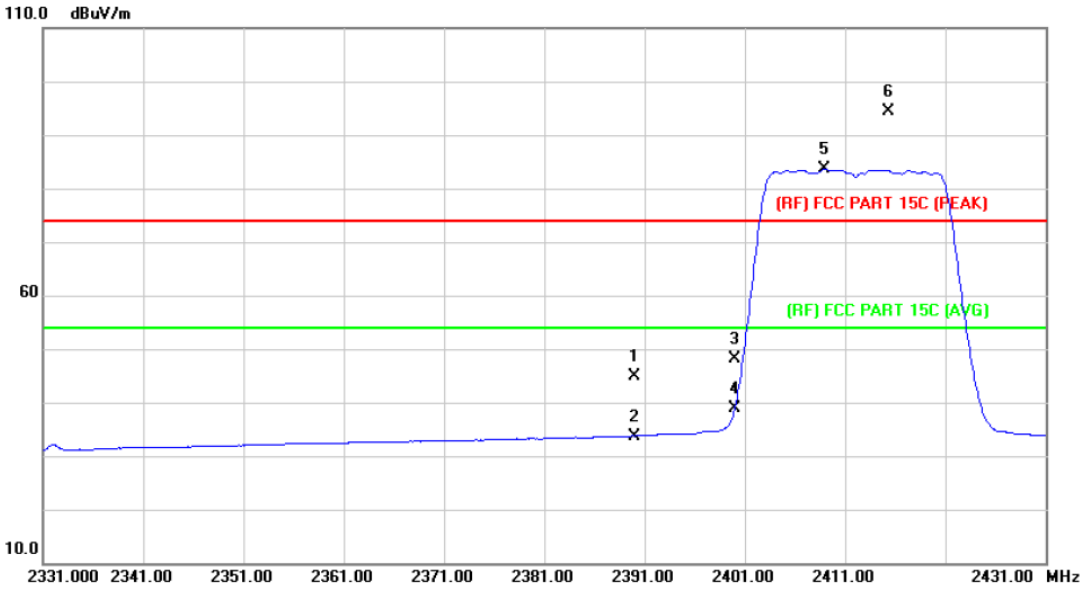
EUT:	Smart Socket	Model:	XM-JPK1S
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX G Mode 2462MHz		
Remark:	N/A		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	X	2458.600	95.77	1.06	96.83	Fundamental Frequency		peak
2	*	2460.700	85.11	1.06	86.17	Fundamental Frequency		AVG
3		2483.500	43.87	1.17	45.04	74.00	-28.96	peak
4		2483.500	33.23	1.17	34.40	54.00	-19.60	AVG

Emission Level= Read Level+ Correct Factor

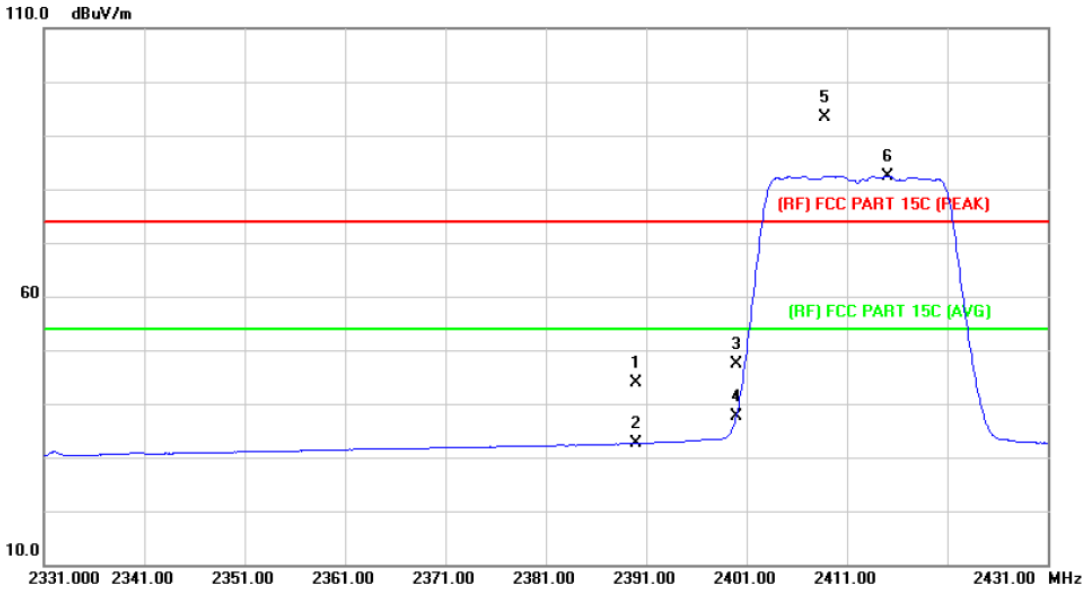
EUT:	Smart Socket	Model:	XM-JPK1S
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX N(HT20) Mode 2412MHz		
Remark:	N/A		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		2390.000	44.05	0.77	44.82	74.00	-29.18	peak
2		2390.000	32.98	0.77	33.75	54.00	-20.25	AVG
3		2400.000	47.21	0.81	48.02	Fundamental Frequency		peak
4		2400.000	38.06	0.81	38.87	Fundamental Frequency		AVG
5	*	2408.900	82.69	0.85	83.54	54.00	29.54	AVG
6	X	2415.300	93.56	0.88	94.44	74.00	20.44	peak

Emission Level= Read Level+ Correct Factor

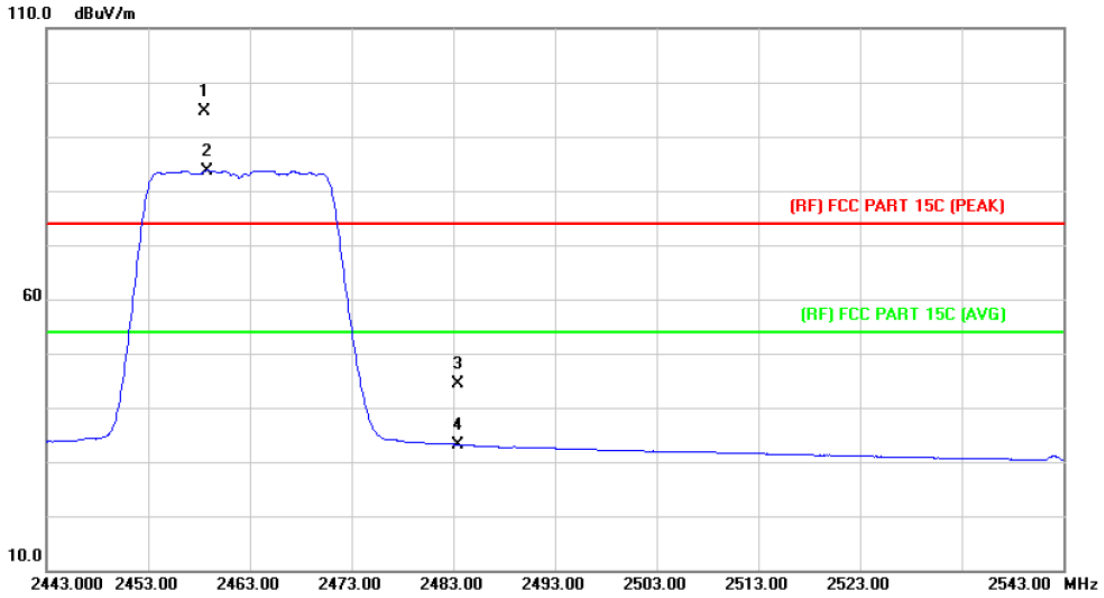
EUT:	Smart Socket	Model:	XM-JPK1S
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX N(HT20) Mode 2412MHz		
Remark:	N/A		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		2390.000	43.02	0.77	43.79	74.00	-30.21	peak
2		2390.000	31.86	0.77	32.63	54.00	-21.37	AVG
3		2400.000	46.55	0.81	47.36	Fundamental Frequency		peak
4		2400.000	36.94	0.81	37.75	Fundamental Frequency		AVG
5	X	2408.800	92.52	0.85	93.37	74.00	19.37	peak
6	*	2415.000	81.55	0.88	82.43	54.00	28.43	AVG

Emission Level= Read Level+ Correct Factor

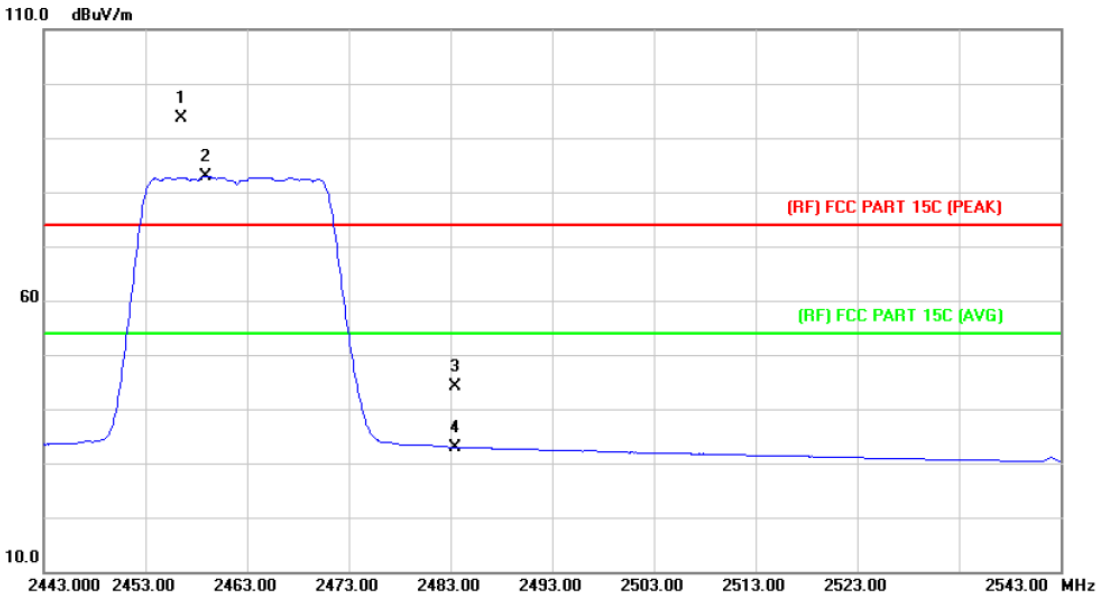
EUT:	Smart Socket	Model:	XM-JPK1S
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX N(HT20) Mode 2462MHz		
Remark:	N/A		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	X	2458.600	93.52	1.06	94.58	Fundamental Frequency		peak
2	*	2458.800	82.69	1.06	83.75	Fundamental Frequency		AVG
3		2483.500	43.17	1.17	44.34	74.00	-29.66	peak
4		2483.500	32.02	1.17	33.19	54.00	-20.81	AVG

Emission Level= Read Level+ Correct Factor

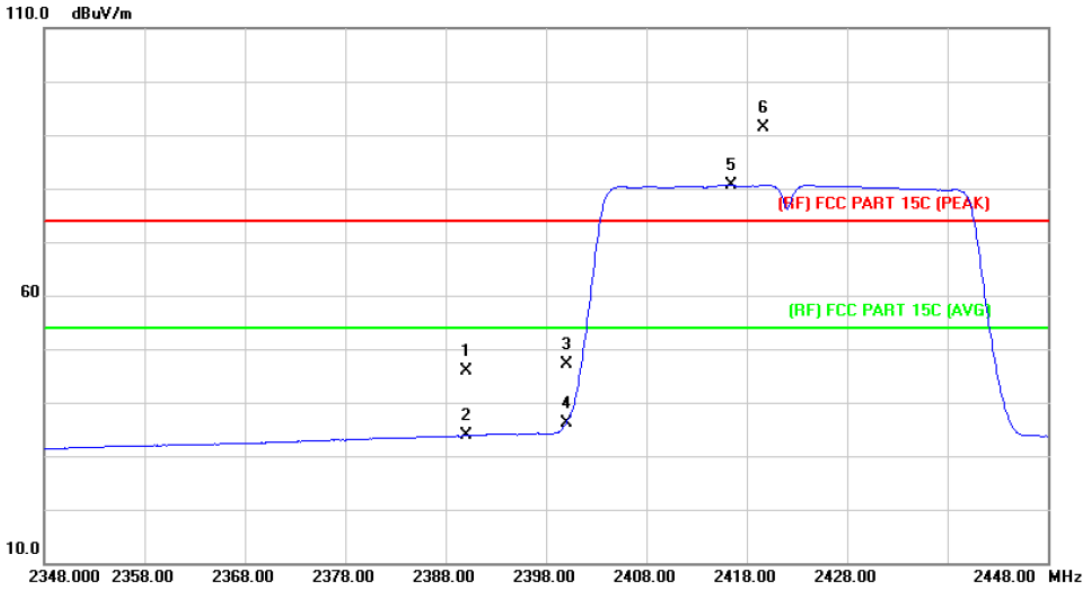
EUT:	Smart Socket	Model:	XM-JPK1S
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX N(HT20) Mode 2462MHz		
Remark:	N/A		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	X	2456.600	92.56	1.05	93.61	Fundamental Frequency		peak
2	*	2458.900	81.82	1.06	82.88	Fundamental Frequency		AVG
3		2483.500	43.04	1.17	44.21	74.00	-29.79	peak
4		2483.500	31.80	1.17	32.97	54.00	-21.03	AVG

Emission Level= Read Level+ Correct Factor

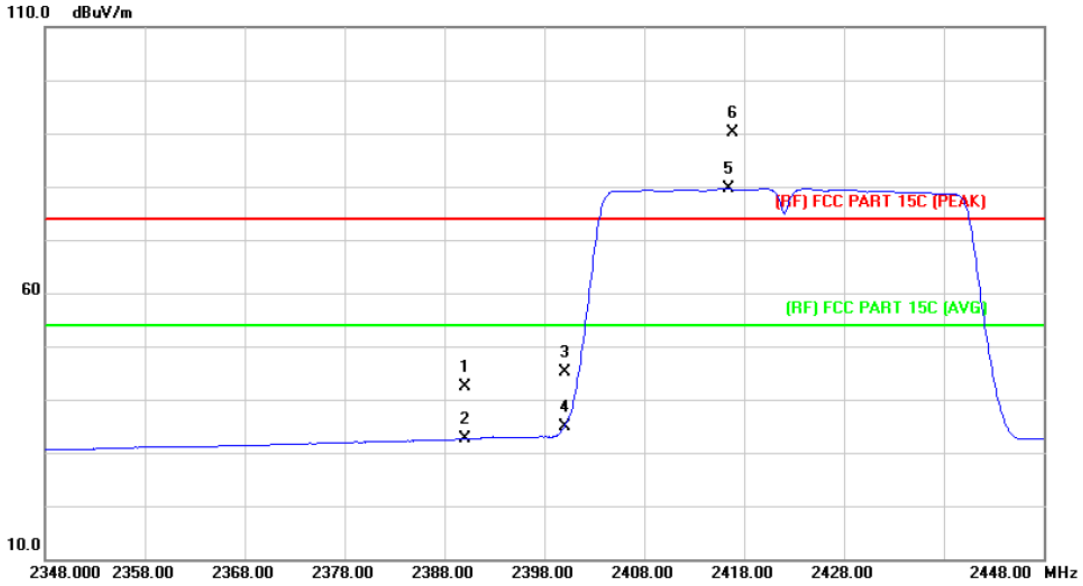
EUT:	Smart Socket	Model:	XM-JPK1S
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX N(HT40) Mode 2422MHz		
Remark:	N/A		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		2390.000	45.01	0.77	45.78	74.00	-28.22	peak
2		2390.000	33.04	0.77	33.81	54.00	-20.19	AVG
3		2400.000	46.43	0.81	47.24	Fundamental Frequency		peak
4		2400.000	35.34	0.81	36.15	Fundamental Frequency		AVG
5	*	2416.500	79.79	0.88	80.67	54.00	26.67	AVG
6	X	2419.700	90.61	0.89	91.50	74.00	17.50	peak

Emission Level= Read Level+ Correct Factor

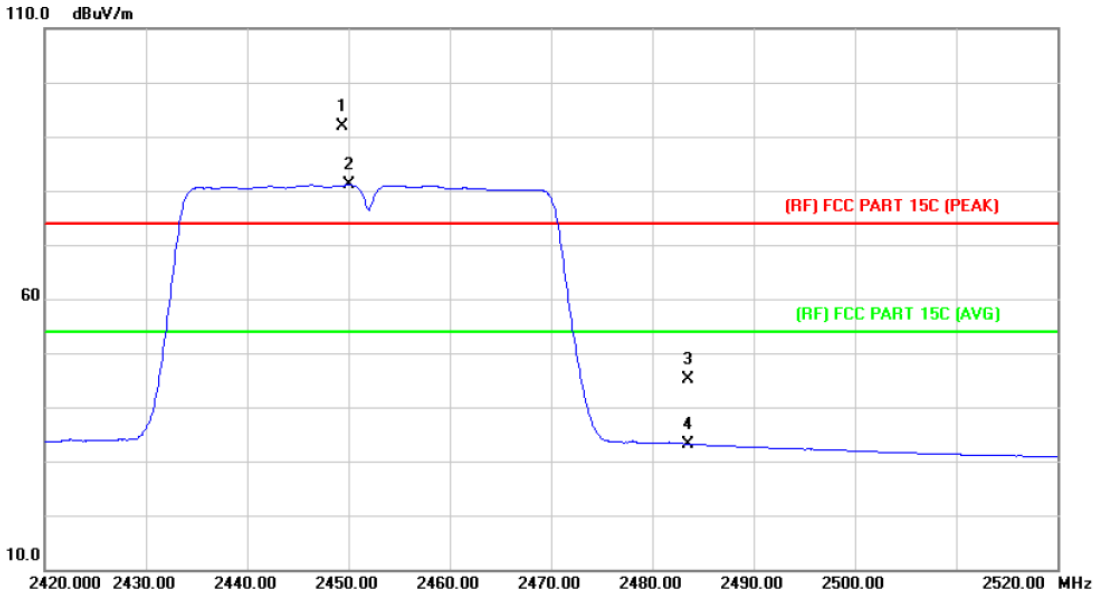
EUT:	Smart Socket	Model:	XM-JPK1S
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX N(HT40) Mode 2422MHz		
Remark:	N/A		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		2390.000	41.57	0.77	42.34	74.00	-31.66	peak
2		2390.000	31.86	0.77	32.63	54.00	-21.37	AVG
3		2400.000	44.24	0.81	45.05	Fundamental Frequency		peak
4		2400.000	34.14	0.81	34.95	Fundamental Frequency		AVG
5	*	2416.500	78.75	0.88	79.63	54.00	25.63	AVG
6	X	2416.800	89.32	0.88	90.20	74.00	16.20	peak

Emission Level= Read Level+ Correct Factor

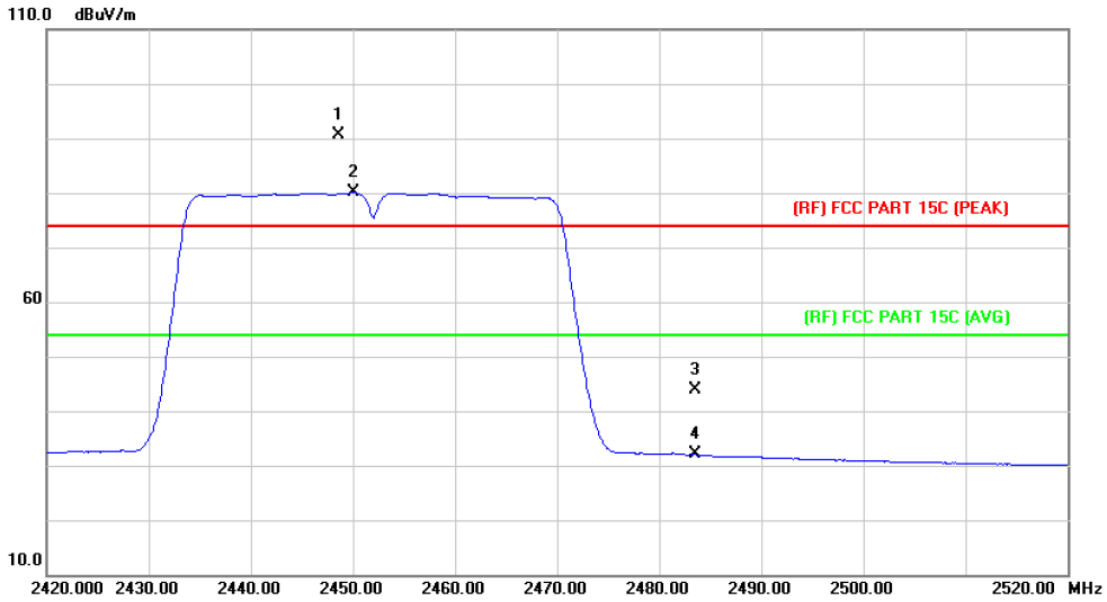
EUT:	Smart Socket	Model:	XM-JPK1S
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX N(HT40) Mode 2452MHz		
Remark:	N/A		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	X	2449.400	90.77	1.02	91.79	Fundamental Frequency		peak
2	*	2450.000	80.05	1.02	81.07	Fundamental Frequency		AVG
3		2483.500	44.00	1.17	45.17	74.00	-28.83	peak
4		2483.500	32.07	1.17	33.24	54.00	-20.76	AVG

Emission Level= Read Level+ Correct Factor

EUT:	Smart Socket	Model:	XM-JPK1S
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX N(HT40) Mode 2452MHz		
Remark:	N/A		

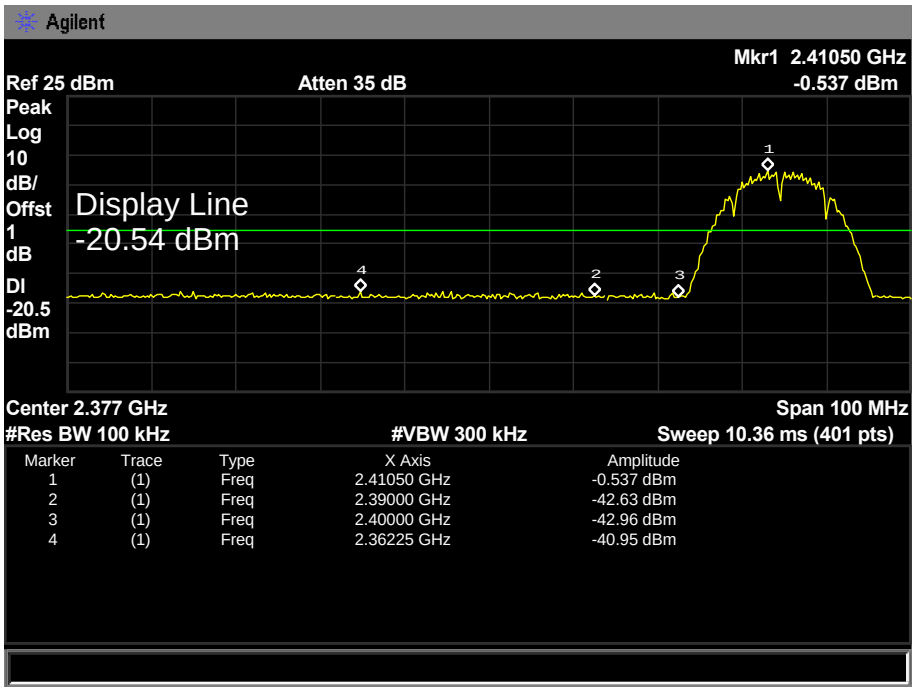


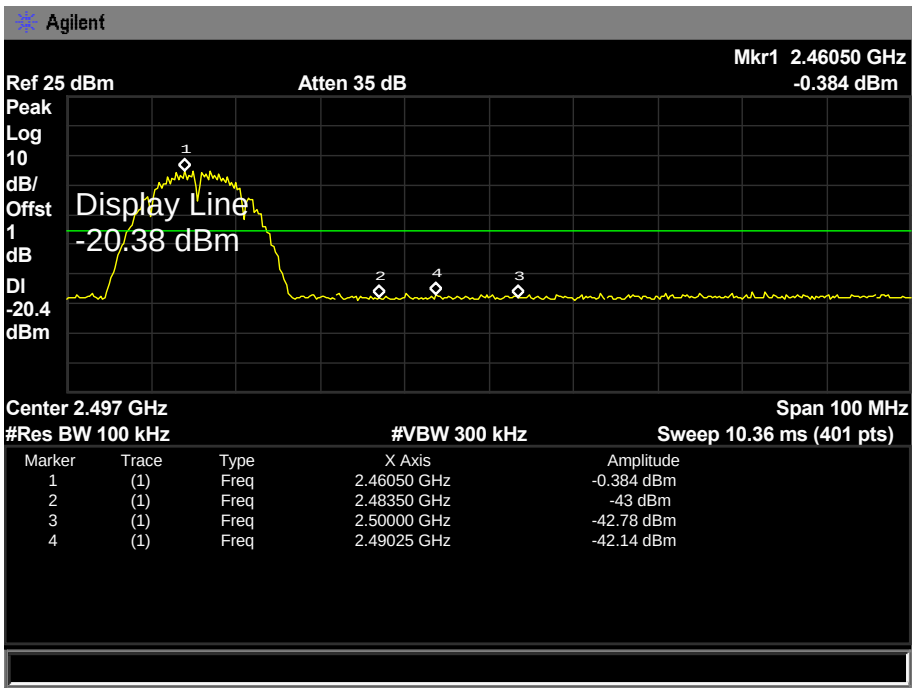
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	X	2448.600	89.73	1.02	90.75	Fundamental Frequency		peak
2	*	2450.000	79.03	1.02	80.05	Fundamental Frequency		AVG
3		2483.500	42.66	1.17	43.83	74.00	-30.17	peak
4		2483.500	30.84	1.17	32.01	54.00	-21.99	AVG

Emission Level= Read Level+ Correct Factor

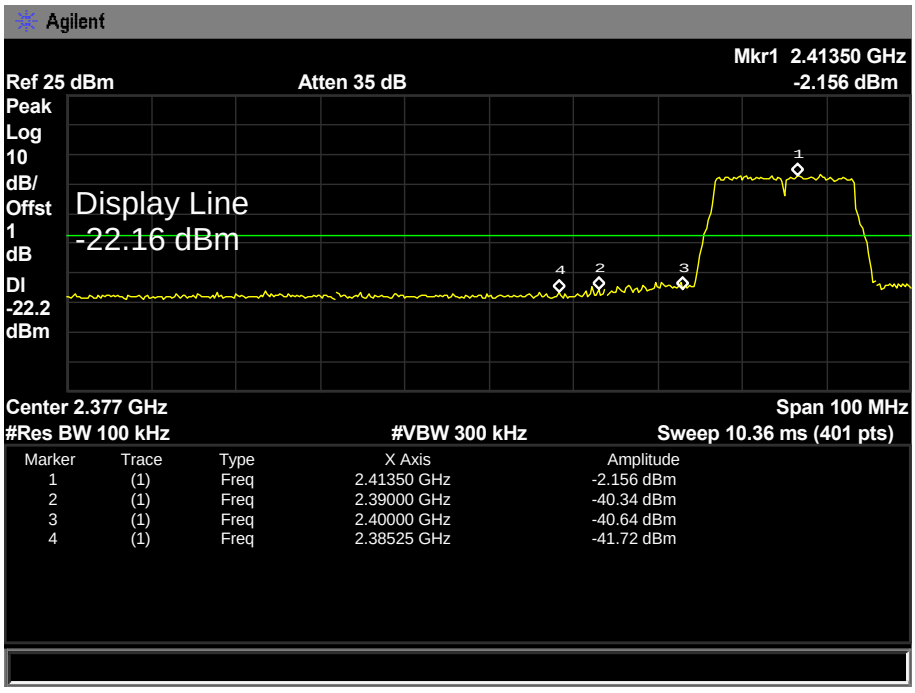
(2) Conducted Test

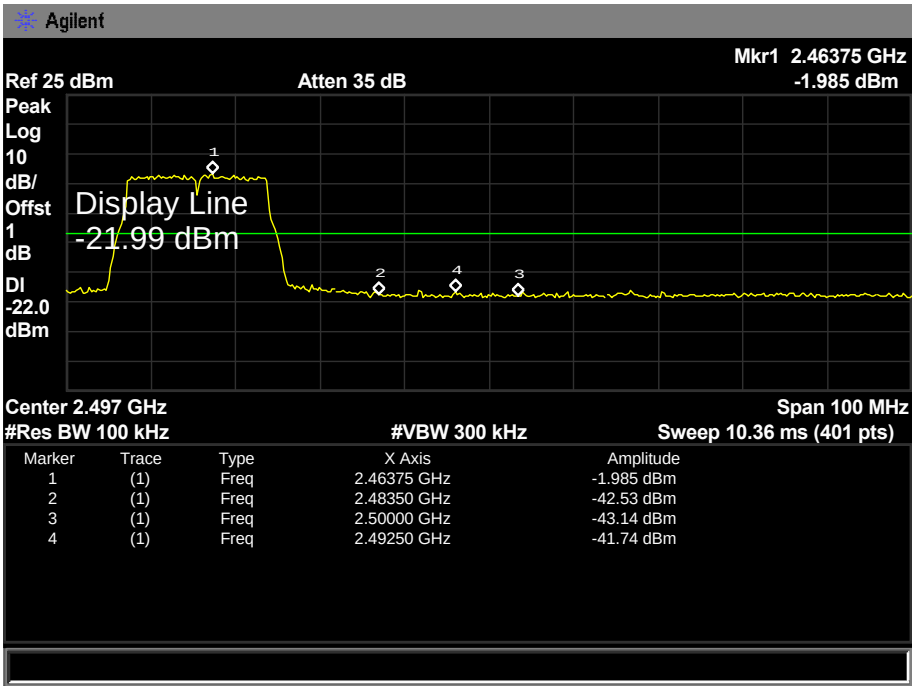
EUT:	Smart Socket	Model:	XM-JPK1S
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Test Mode:	TX B Mode 2412MHz / TX B Mode 2462MHz		
Remark:	The EUT is programed in continuously transmitting mode		



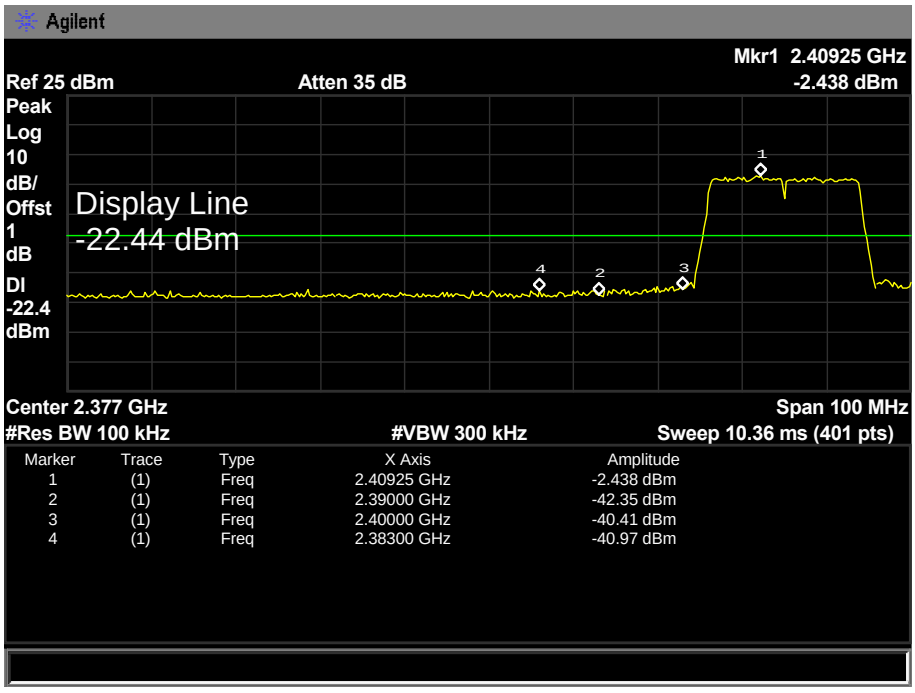


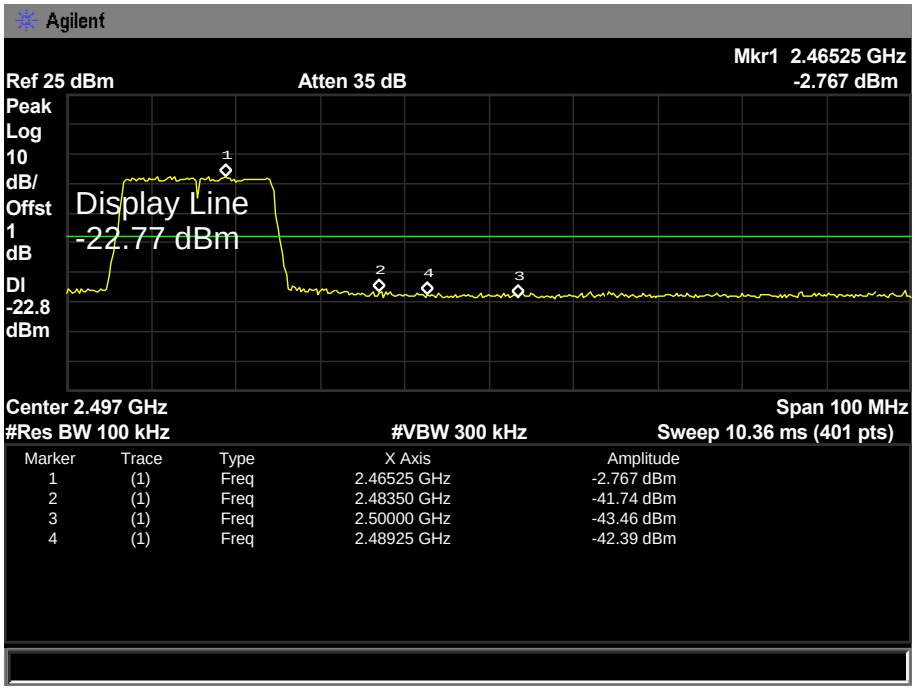
EUT:	Smart Socket	Model:	XM-JPK1S
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Test Mode:	TX G Mode 2412MHz / TX G Mode 2462MHz		
Remark:	The EUT is programed in continuously transmitting mode		



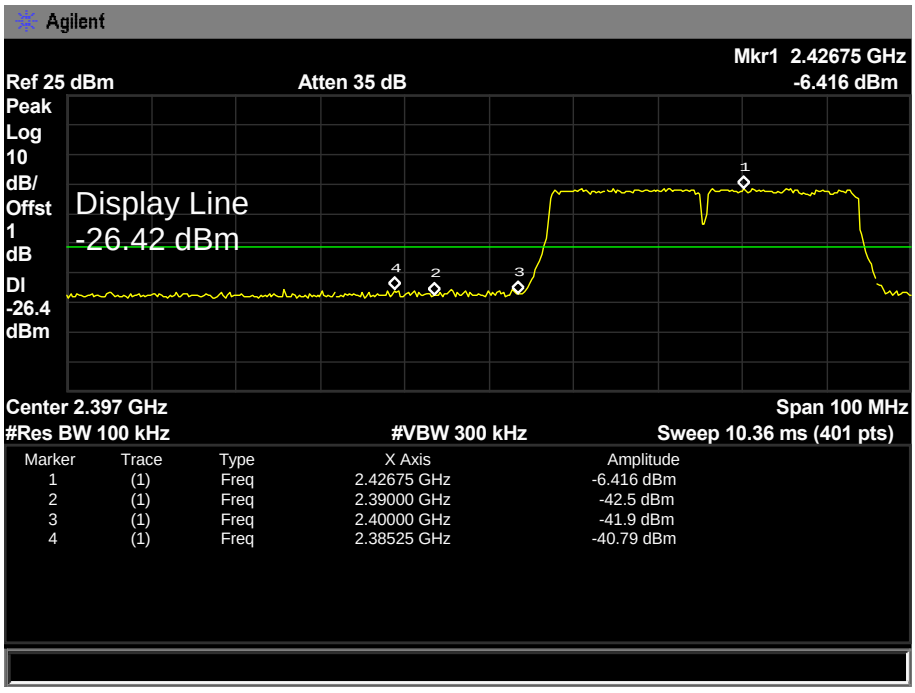


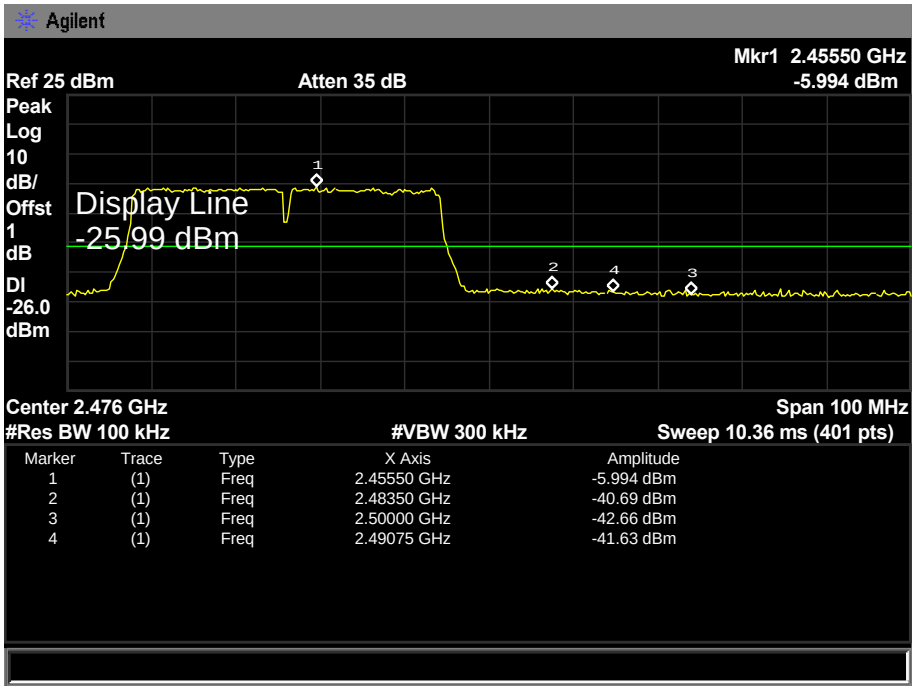
EUT:	Smart Socket	Model:	XM-JPK1S
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Test Mode:	TX N(HT20) Mode 2412MHz / TX N(HT20) Mode 2462MHz		
Remark:	The EUT is programed in continuously transmitting mode		





EUT:	Smart Socket	Model:	XM-JPK1S
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Test Mode:	TX N(HT40) Mode 2422MHz / TX N(HT40) Mode 2452MHz		
Remark:	The EUT is programed in continuously transmitting mode		





7. Bandwidth Test

7.1 Test Standard and Limit

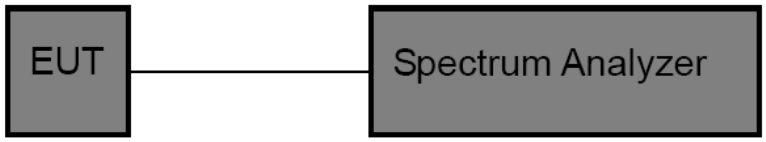
7.1.1 Test Standard

FCC Part 15.247 (a)(2)

7.1.2 Test Limit

FCC Part 15 Subpart C(15.247)/RSS-210		
Test Item	**Limit**	**Frequency Range(MHz)**
Bandwidth	>=500 KHz (6dB bandwidth)	2400~2483.5

7.2 Test Setup



7.3 Test Procedure

(1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.

(2) The bandwidth is measured at an amplitude level reduced 6dB from the reference level. The reference level is the level of the highest amplitude signal observed from the transmitter at the fundamental frequency. Once the reference level is established, the equipment is conditioned with typical modulating signal to produce the worst –case (i.e the widest) bandwidth.

(3)Measure the channel separation the spectrum analyzer was set to Resolution Bandwidth:100 kHz, and Video Bandwidth:300 kHz, Detector: Peak, Sweep Time set auto.

7.4 EUT Operating Condition

The EUT was set to continuously transmitting in each mode and low, middle and high channel for the test.

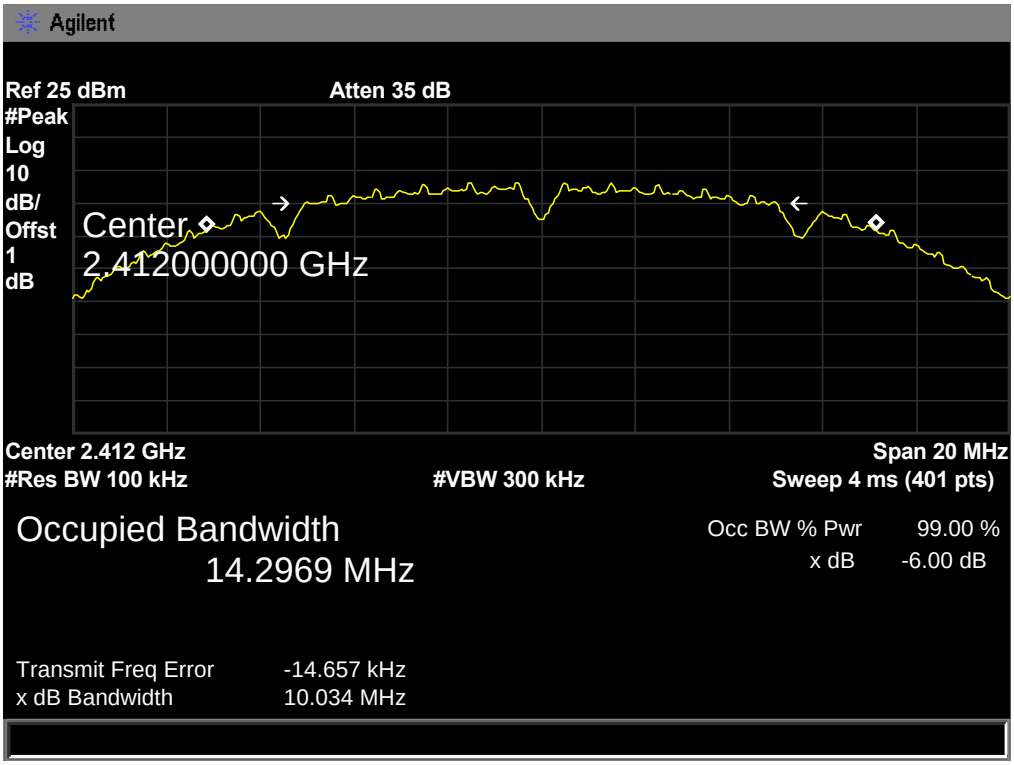
7.5 Test Data

EUT:	Smart Socket	Model:	XM-JPK1S
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Test Mode:	TX 802.11B Mode		

Channel frequency (MHz)	6dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)
2412	10.034	14.2969	>=0.5
2437	10.023	14.3016	
2462	10.033	14.2873	

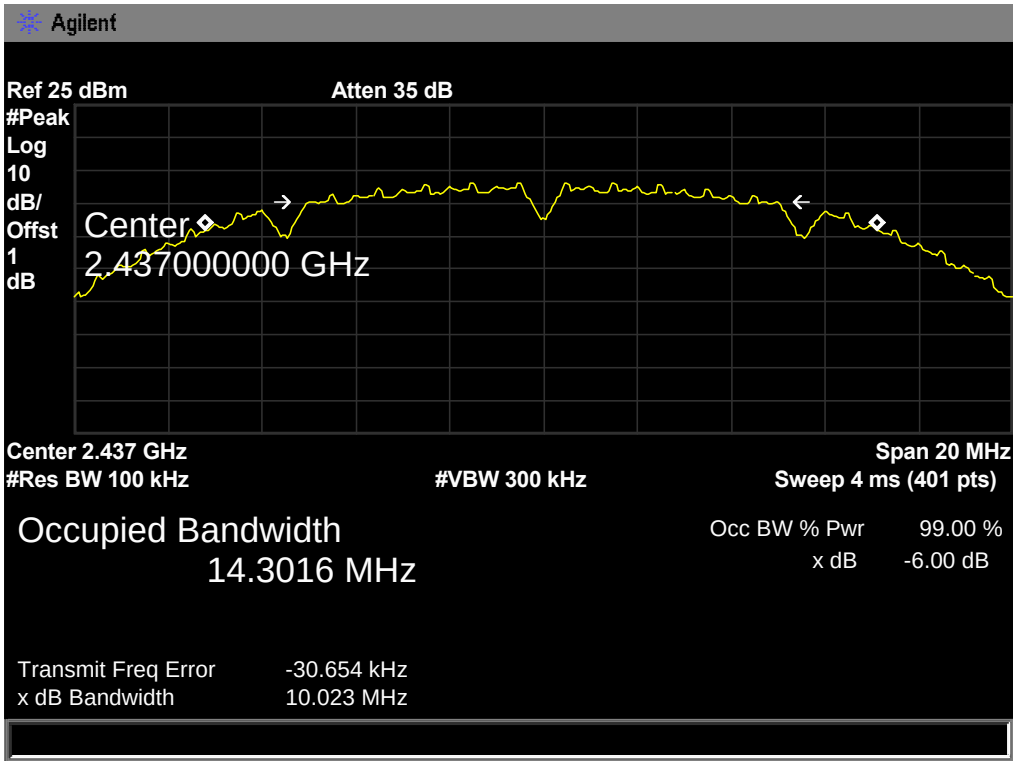
802.11B Mode

2412 MHz



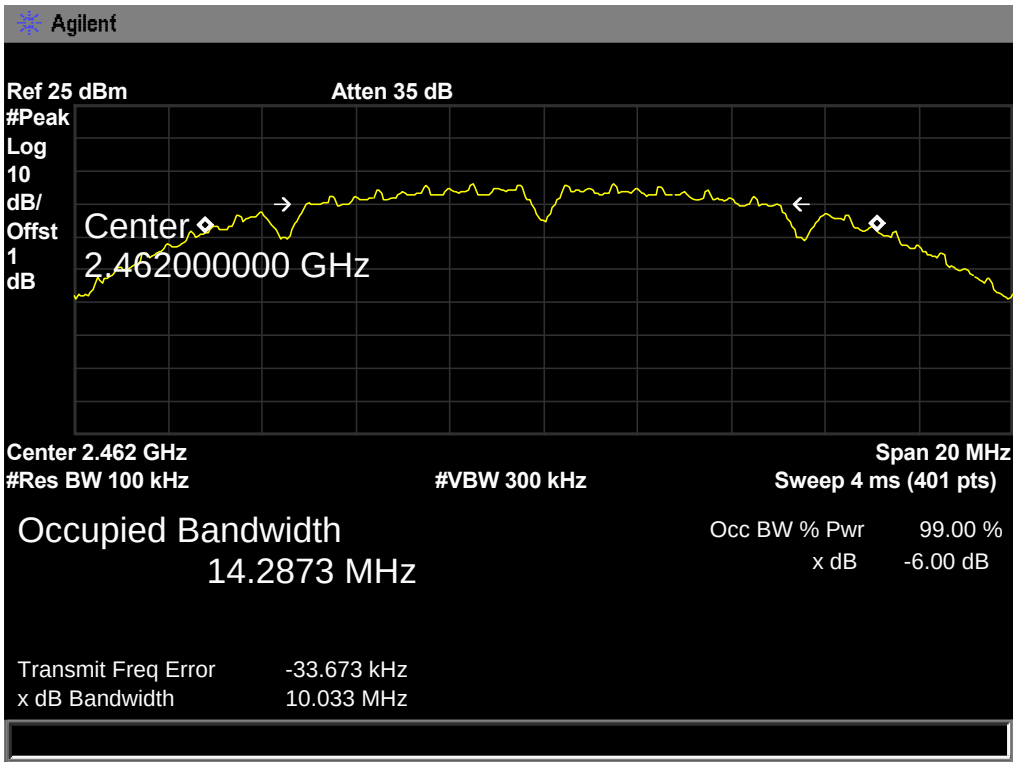
802.11B Mode

2437 MHz



802.11B Mode

2462 MHz

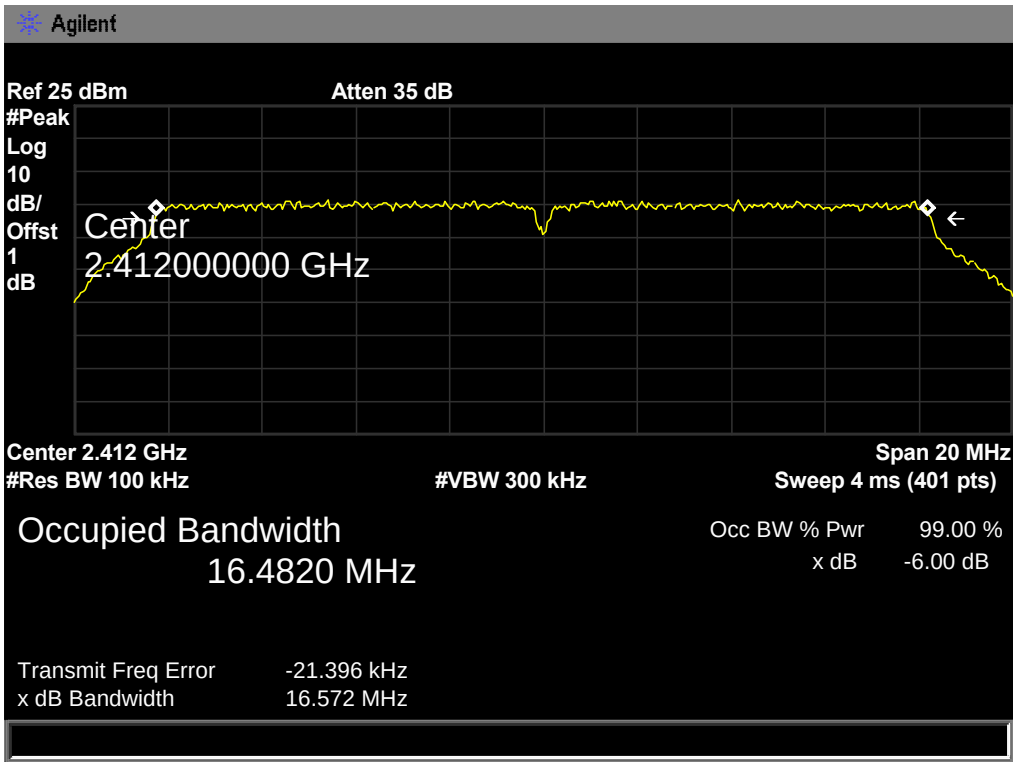


EUT:	Smart Socket	Model:	XM-JPK1S
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Test Mode:	TX 802.11G Mode		

Channel frequency (MHz)	6dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)
2412	16.572	16.4820	>=0.5
2437	16.590	16.5407	
2462	16.577	16.5355	

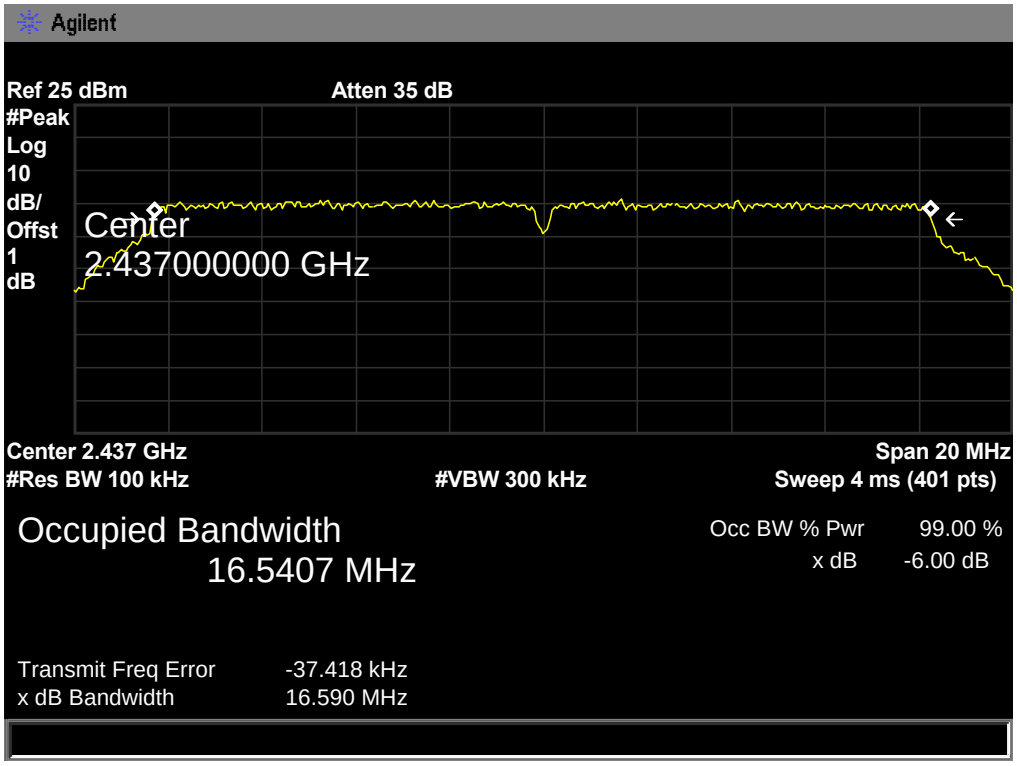
802.11G Mode

2412 MHz



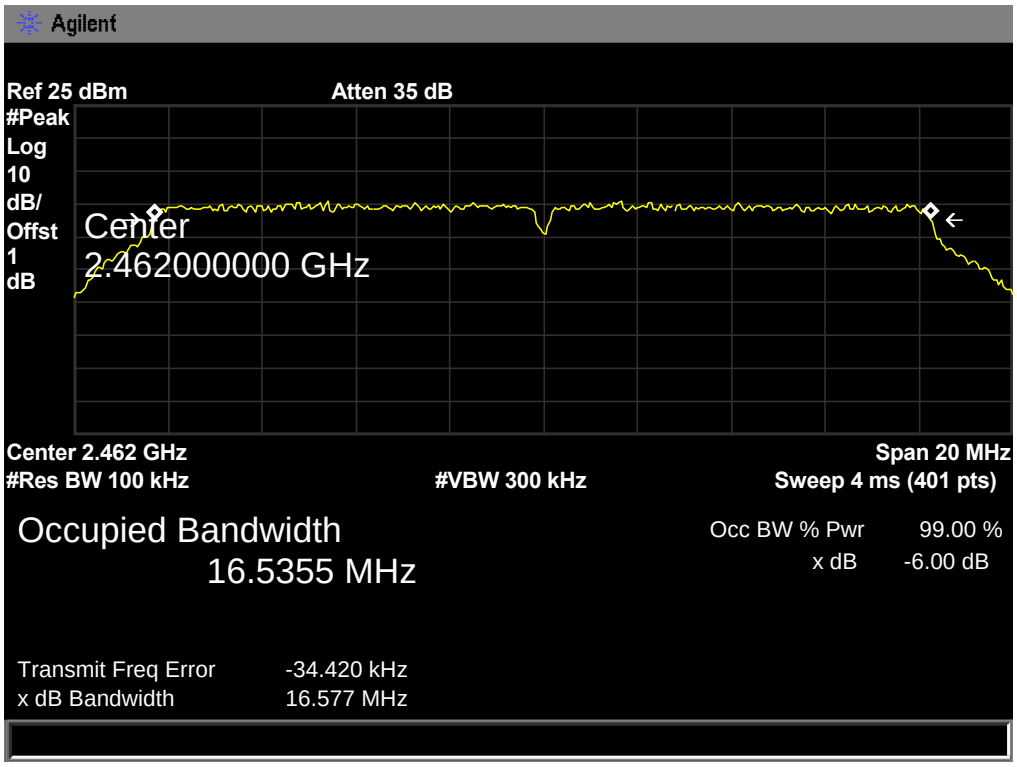
802.11G Mode

2437 MHz



802.11G Mode

2462 MHz

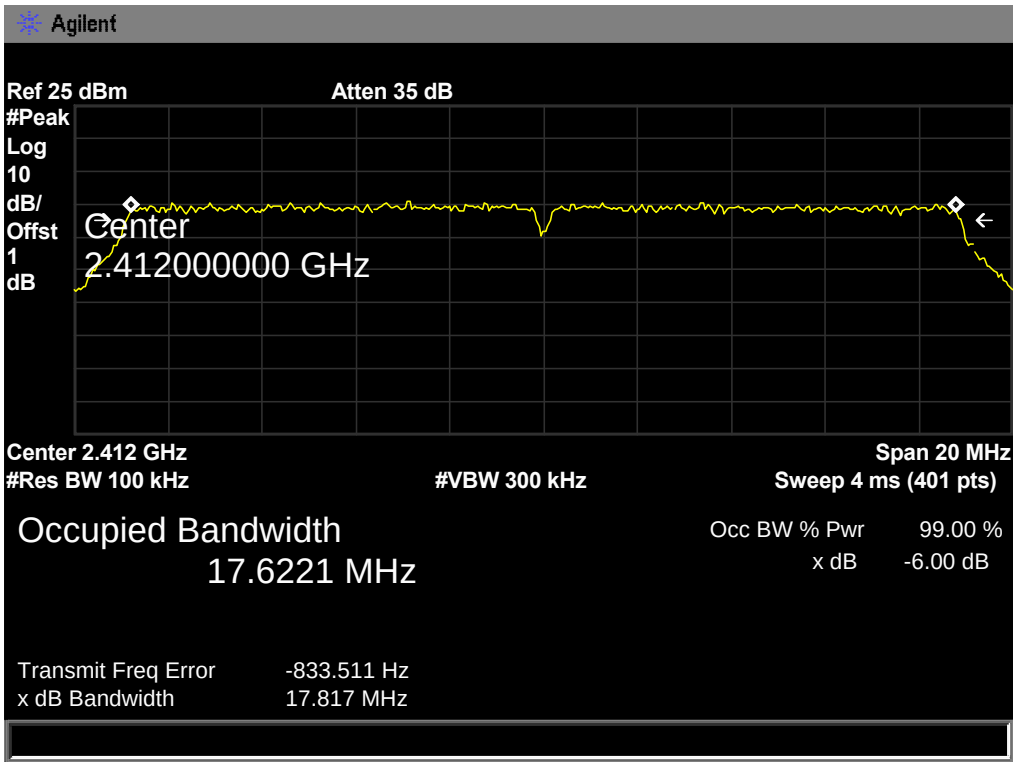


EUT:	Smart Socket	Model:	XM-JPK1S
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Test Mode:	TX 802.11N(HT20) Mode		

Channel frequency (MHz)	6dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)
2412	17.817	17.6221	>=0.5
2437	17.822	17.6326	
2462	17.827	17.6364	

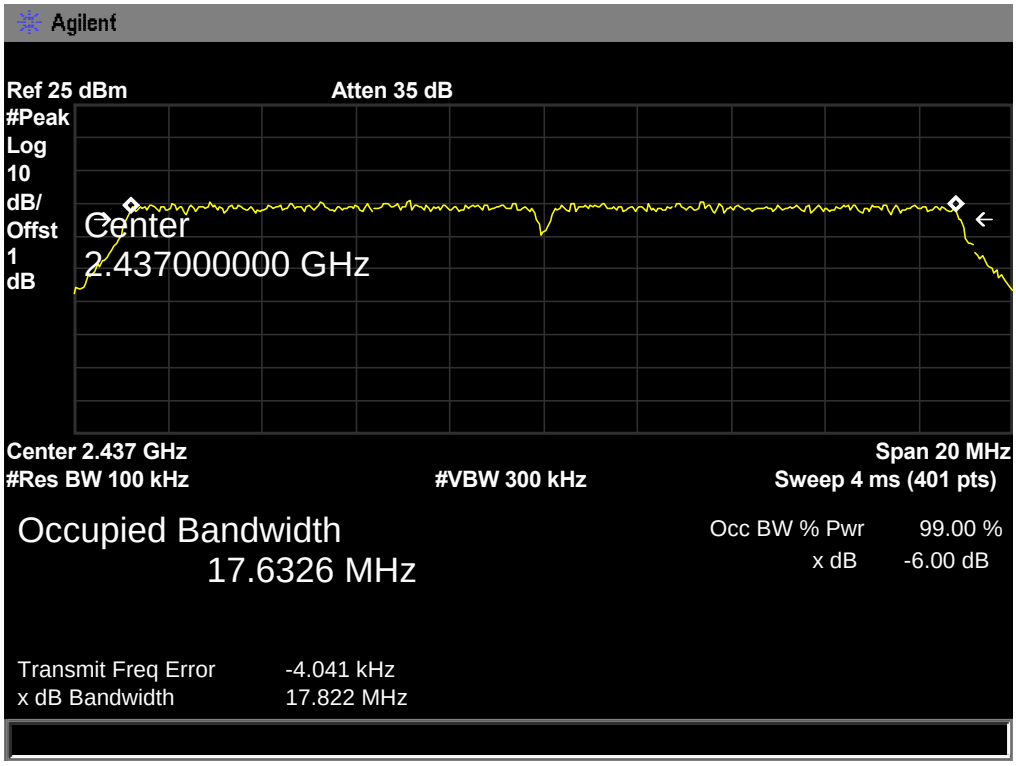
802.11N(HT20) Mode

2412 MHz



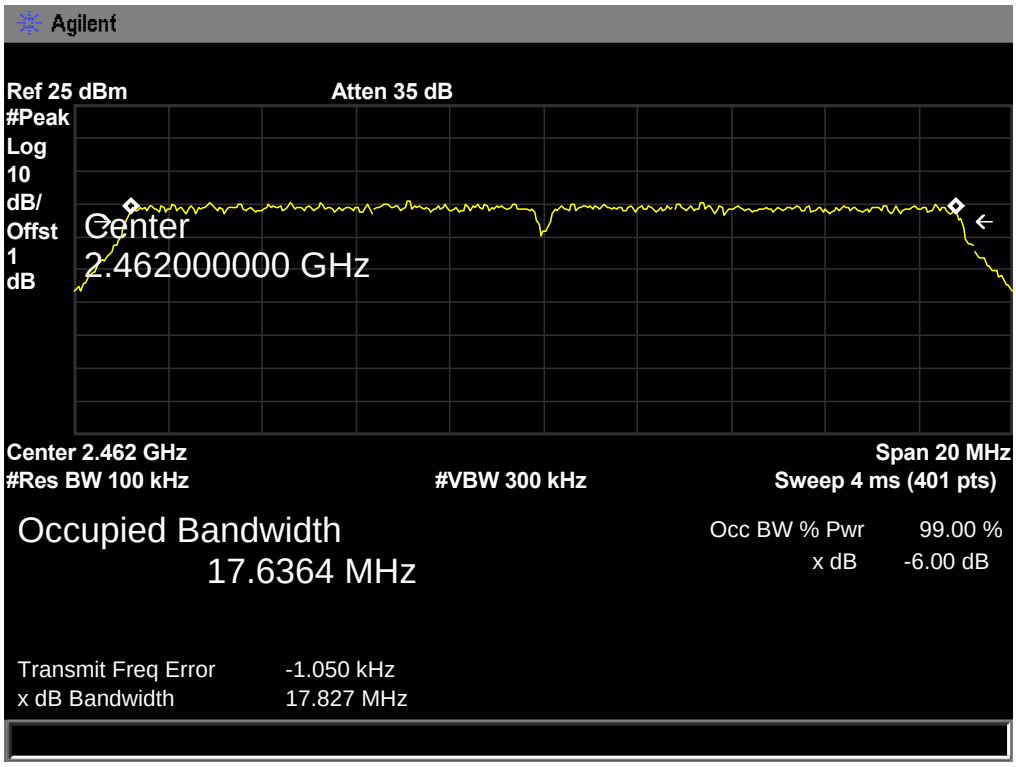
802.11N(HT20) Mode

2437 MHz



802.11N(HT20) Mode

2462 MHz

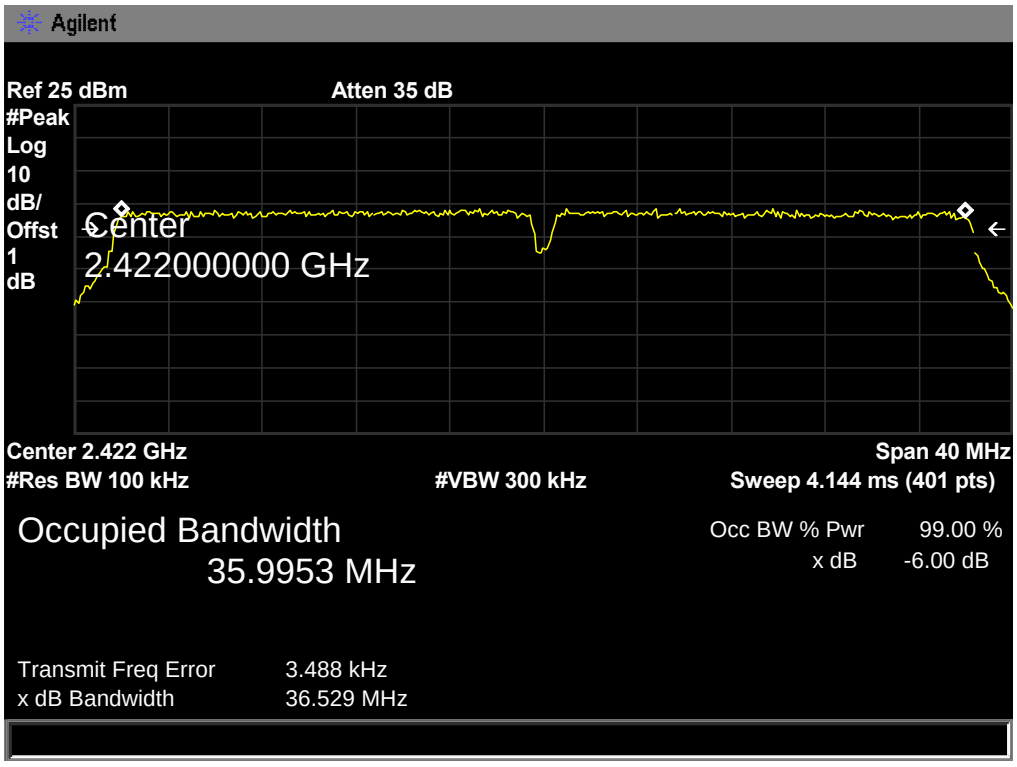


EUT:	Smart Socket	Model:	XM-JPK1S
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Test Mode:	TX 802.11N(HT40) Mode		

Channel frequency (MHz)	6dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)
2412	36.529	35.9953	>=0.5
2437	36.551	36.0314	
2462	36.527	36.0194	

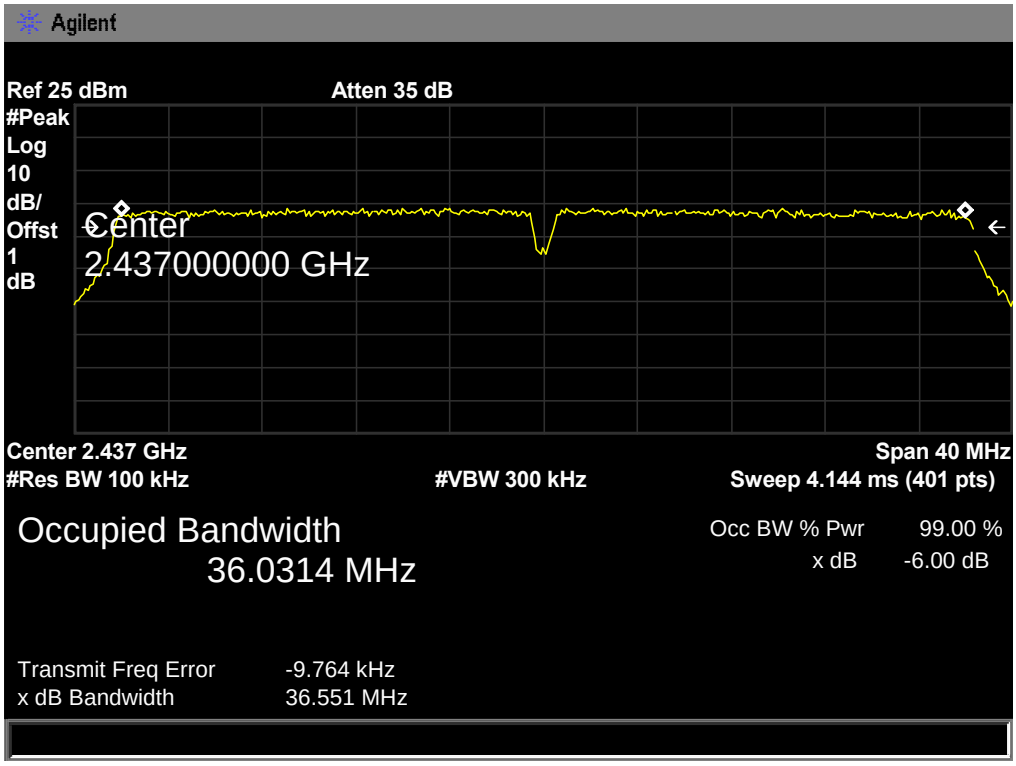
802.11N(HT40) Mode

2422 MHz



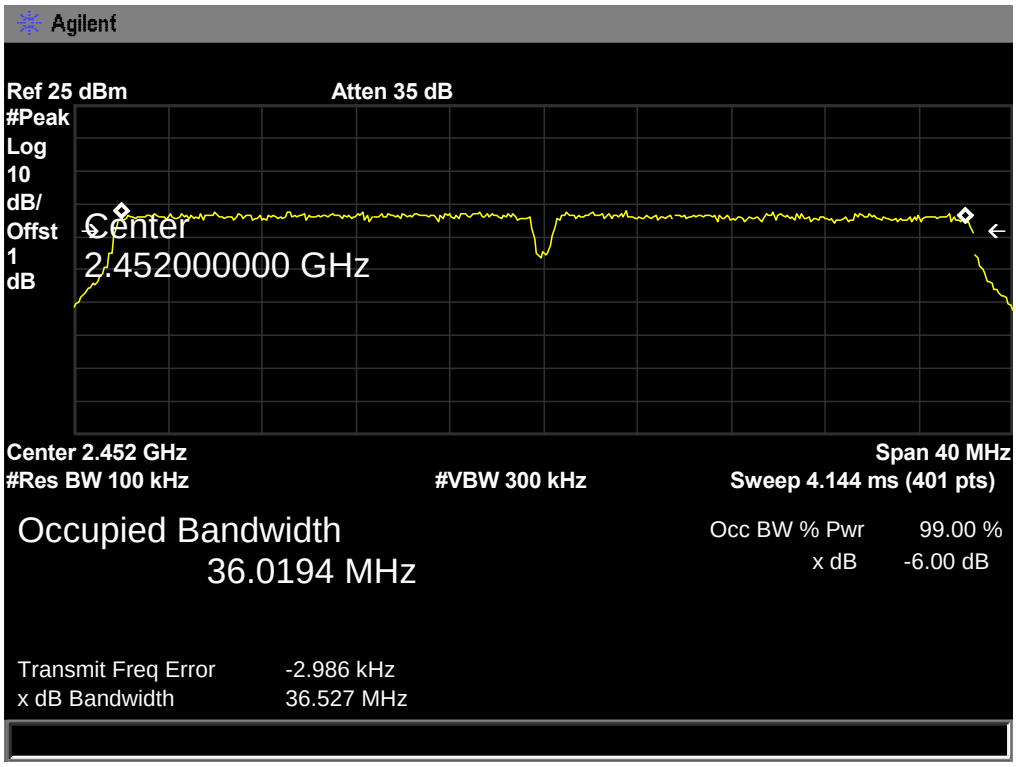
802.11N(HT40) Mode

2437 MHz



802.11N(HT40) Mode

2452 MHz



8. Peak Output Power Test

8.1 Test Standard and Limit

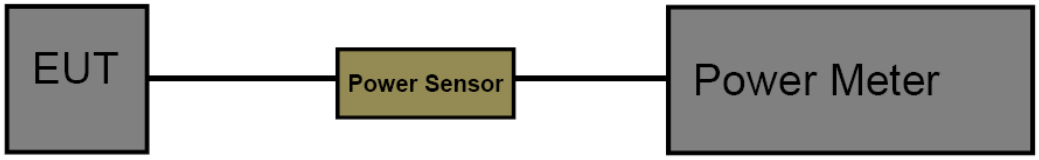
8.1.1 Test Standard

FCC Part 15.247 (b)

8.1.2 Test Limit

FCC Part 15 Subpart C(15.247)/RSS-210		
Test Item	**Limit**	**Frequency Range(MHz)**
Peak Output Power	1 Watt or 30 dBm	2400~2483.5

8.2 Test Setup



8.3 Test Procedure

The measurement is according to section 9.1.2 of KDB 558074 D01 DTS Meas Guidance v03r03.
The EUT was connected to RF power meter via a broadband power sensor as show the block above. The power sensor video bandwidth is greater than or equal to the DTS bandwidth of the equipment.

8.4 EUT Operating Condition

The EUT was set to continuously transmitting in the max power during the test.

8.5 Test Data

EUT:	Smart Socket	Model Name :	XM-JPK1S
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		

Mode	Channel frequency (MHz)	Test Result (dBm)	Limit (dBm)
802.11b	2412	12.24	30
	2437	12.28	
	2462	12.22	
802.11g	2412	12.03	
	2437	12.11	
	2462	12.08	
802.11n (HT20)	2412	11.89	
	2437	11.69	
	2462	11.98	
802.11n (HT40)	2422	11.02	
	2437	11.12	
	2452	11.35	
Result： PASS			

9. Power Spectral Density Test

9.1 Test Standard and Limit

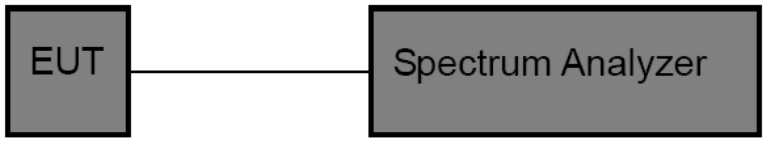
9.1.1 Test Standard

FCC Part 15.247 (e)

9.1.2 Test Limit

FCC Part 15 Subpart C(15.247)		
Test Item	**Limit**	**Frequency Range(MHz)**
Power Spectral Density	8dBm(in any 3 kHz)	2400~2483.5

9.2 Test Setup



9.3 Test Procedure

The EUT was directly connected to the Spectrum Analyzer and antenna output port as show in the block diagram above. The measurement according to section 10.2 of KDB 558074 D01 DTS Meas Guidance v03r03.

(1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.
(2) Set analyser center frequency to DTS channel center frequency.
(3) Set the span to 1.5 times the DTS bandwidth.
(4) Set the RBW to: 3 kHz
(5) Set the VBW to: 10 kHz
(6) Detector: peak
(7) Sweep time: auto
(8) Allow trace to fully stabilize. Then use the peak marker function to determine the maximum amplitude level.

9.4 EUT Operating Condition

The EUT was set to continuously transmitting in each mode and low, middle and high channel for the test.

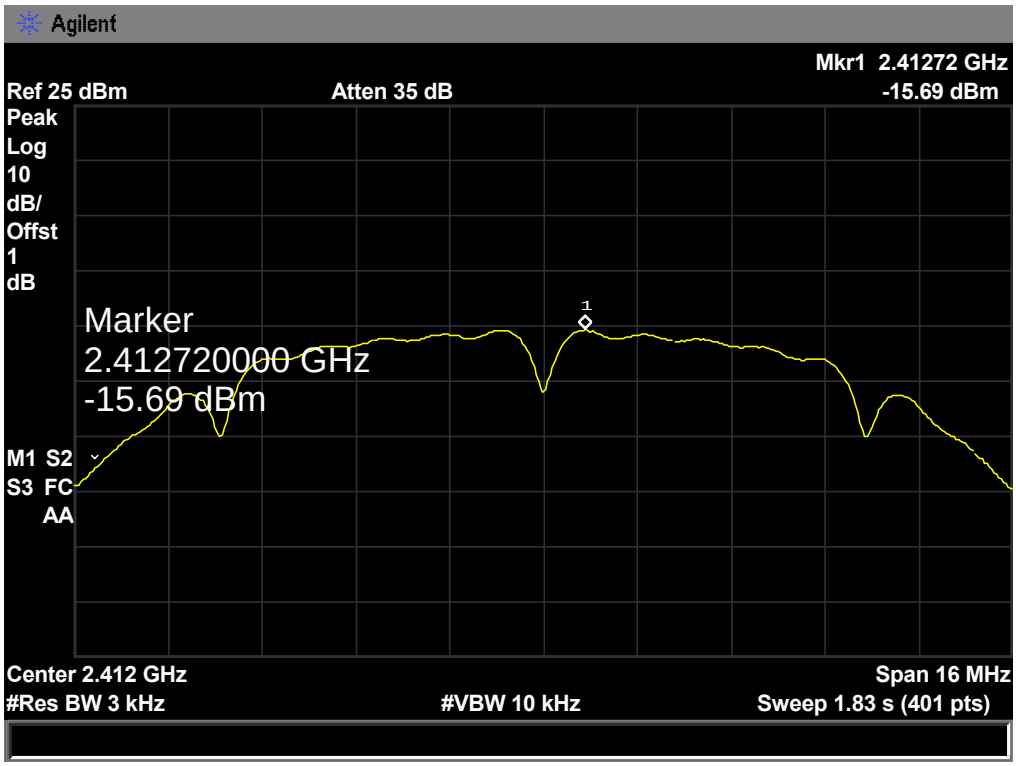
9.5 Test Data

EUT:	Smart Socket	Model:	XM-JPK1S
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Test Mode:	TX 802.11B Mode		

Channel Frequency (MHz)	Power Density (3 kHz/dBm)	Limit (dBm)
2412	-15.69	8
2437	-15.68	
2462	-15.38	

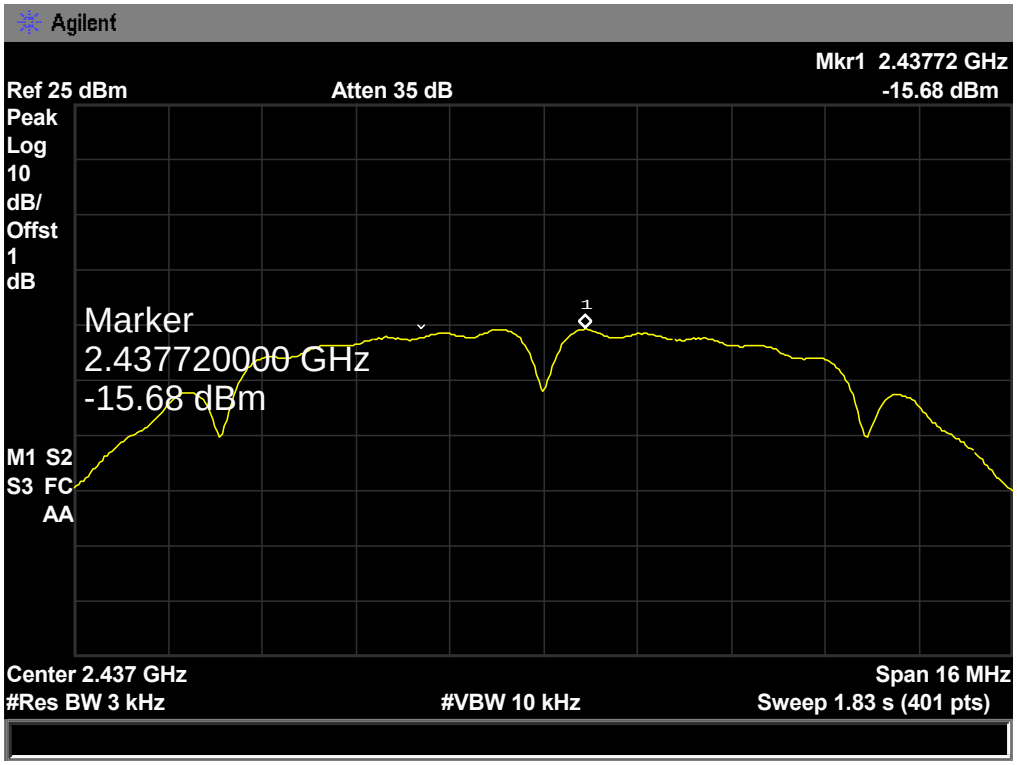
802.11B Mode

2412 MHz



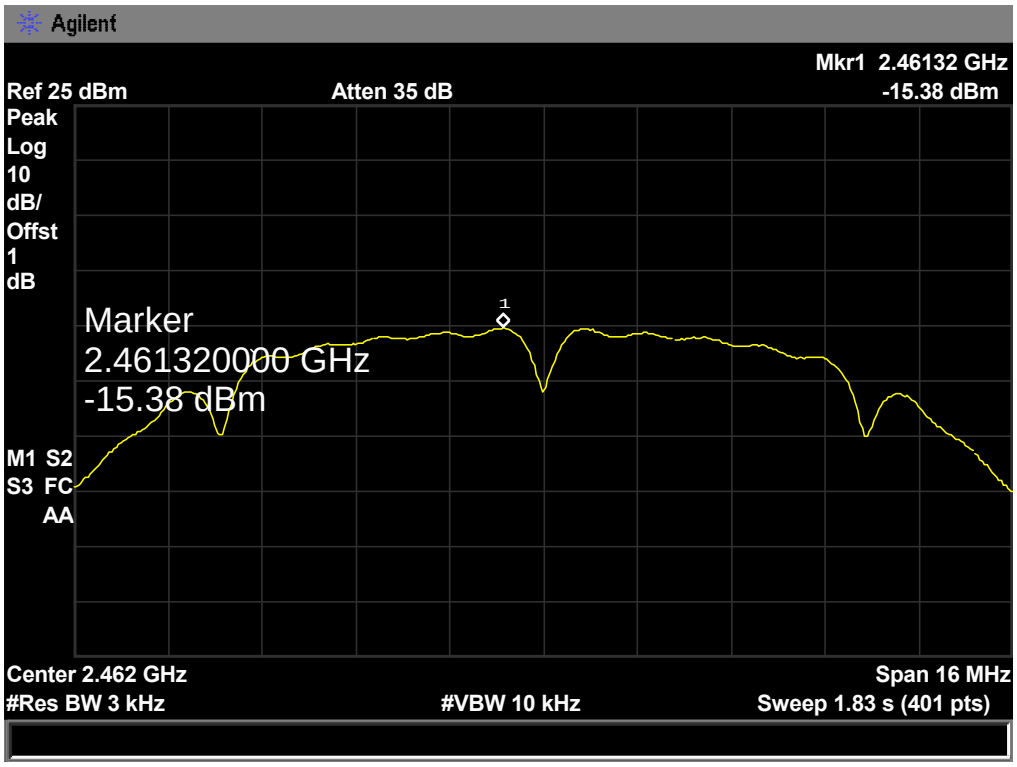
802.11B Mode

2437 MHz



802.11B Mode

2462 MHz

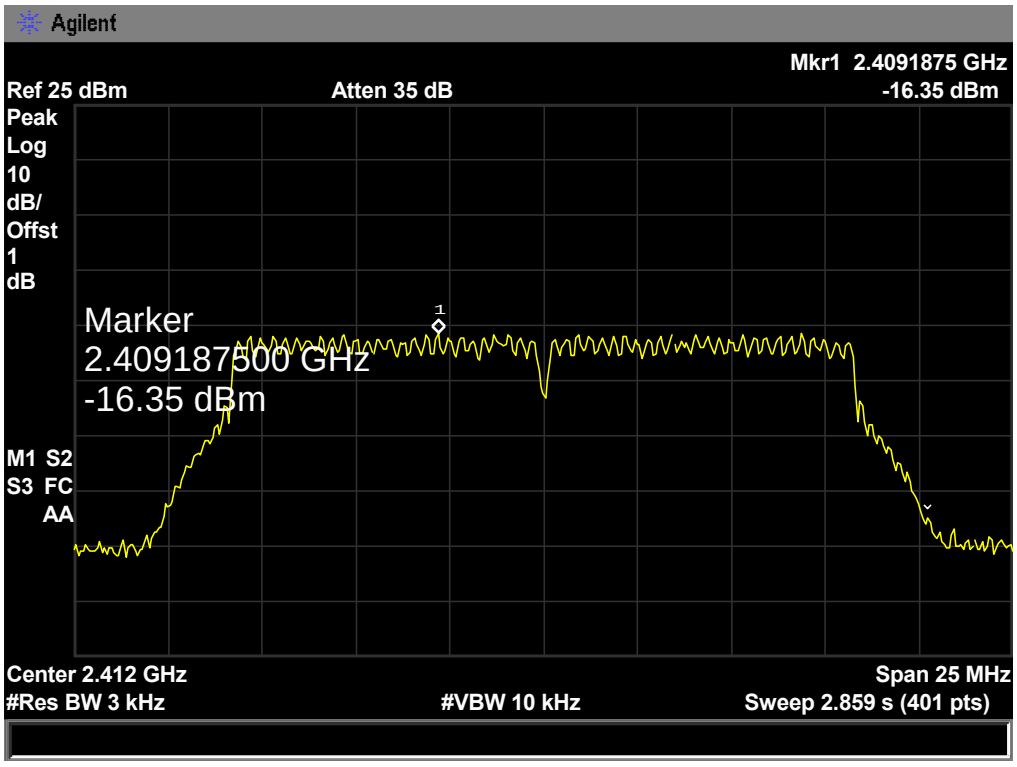


EUT:	Smart Socket	Model:	XM-JPK1S
Temperature:	25 ℃	Temperature:	25 ℃
Test Voltage:	AC 120V/60Hz		
Test Mode:	TX 802.11G Mode		

Channel Frequency (MHz)	Power Density (3 kHz/dBm)	Limit (dBm)
2412	-16.35	8
2437	-16.15	
2462	-16.93	

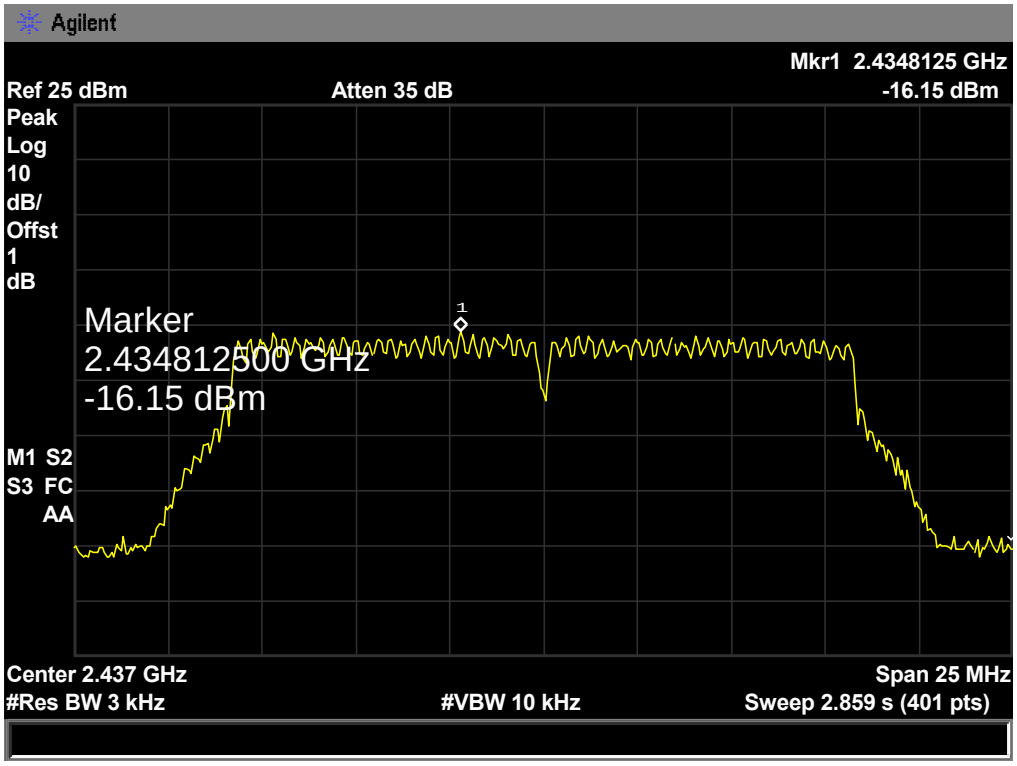
802.11G Mode

2412 MHz



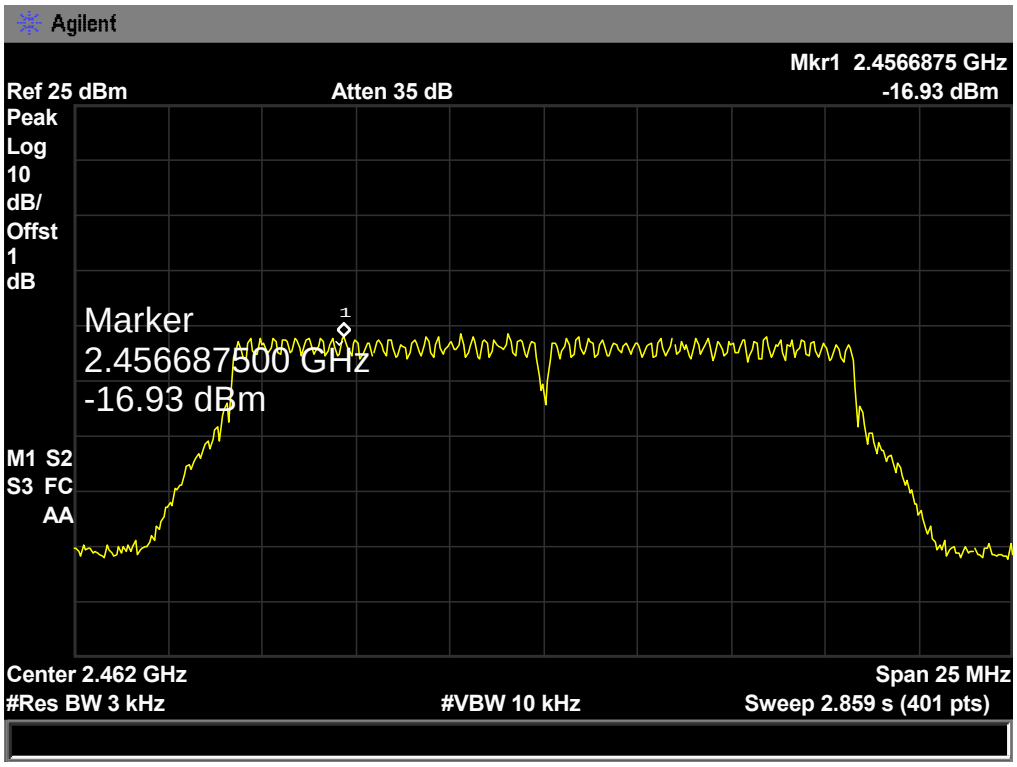
802.11G Mode

2437 MHz



802.11G Mode

2462 MHz

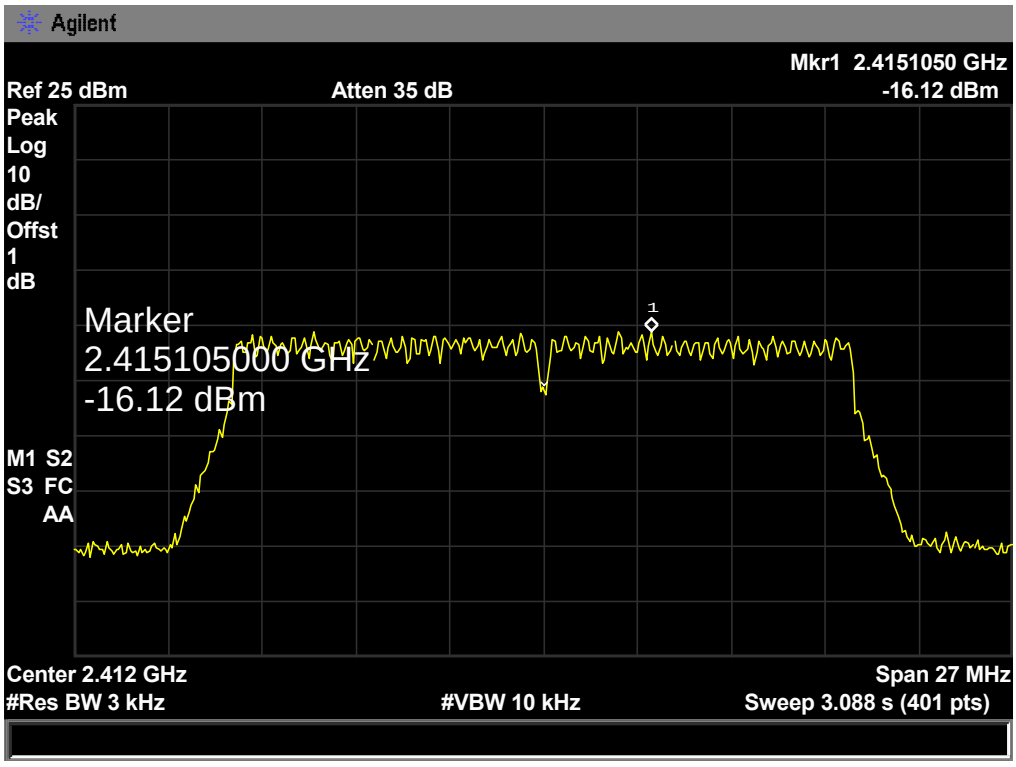


EUT:	Smart Socket	Model:	XM-JPK1S
Temperature:	25 ℃	Temperature:	25 ℃
Test Voltage:	AC 120V/60Hz		
Test Mode:	TX 802.11N(HT20) Mode		

Channel Frequency (MHz)	Power Density (3 kHz/dBm)	Limit (dBm)
2412	-16.12	8
2437	-16.21	
2462	-16.51	

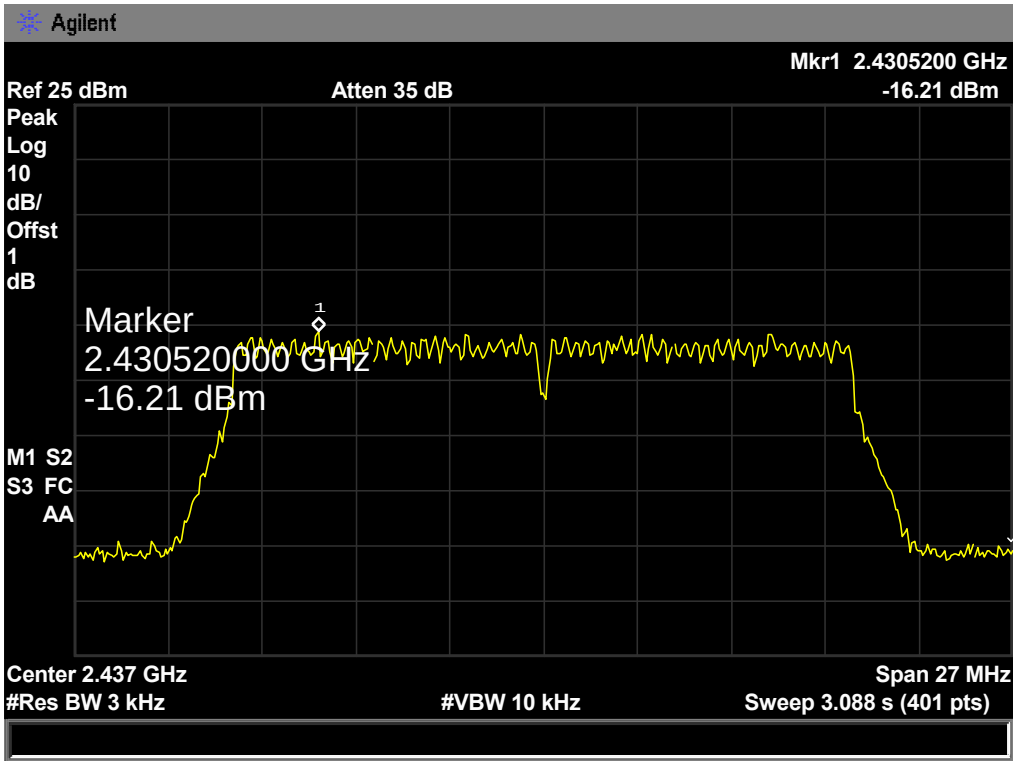
802.11N(HT20) Mode

2412 MHz



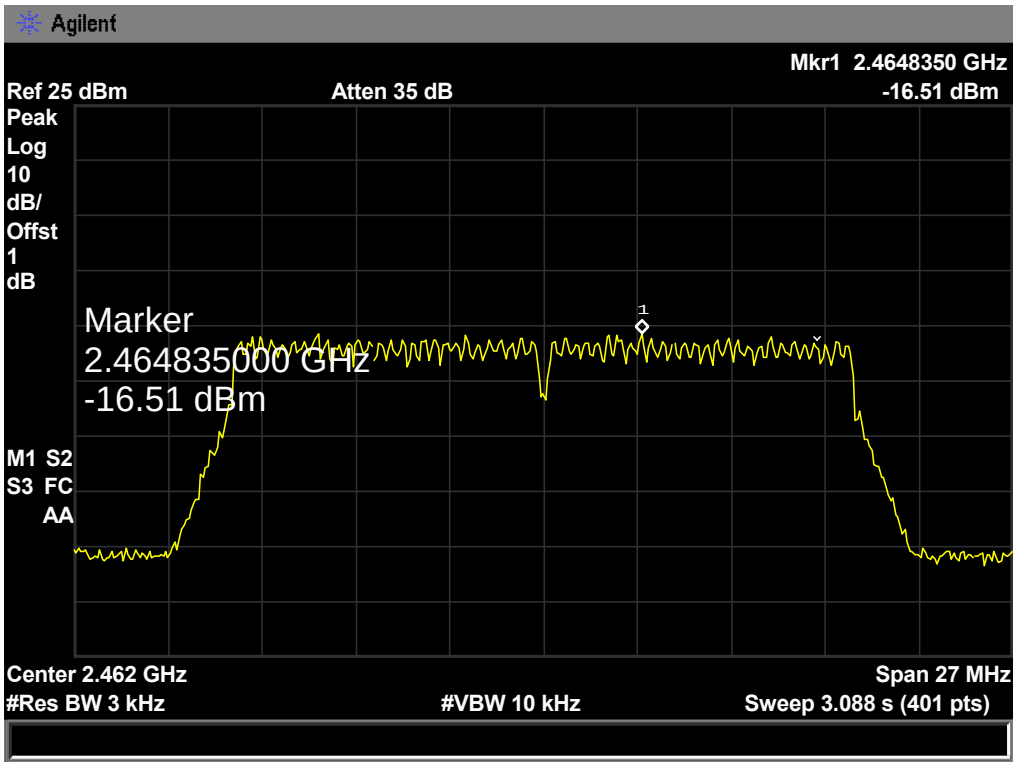
802.11N(HT20) Mode

2437 MHz



802.11N(HT20) Mode

2462 MHz

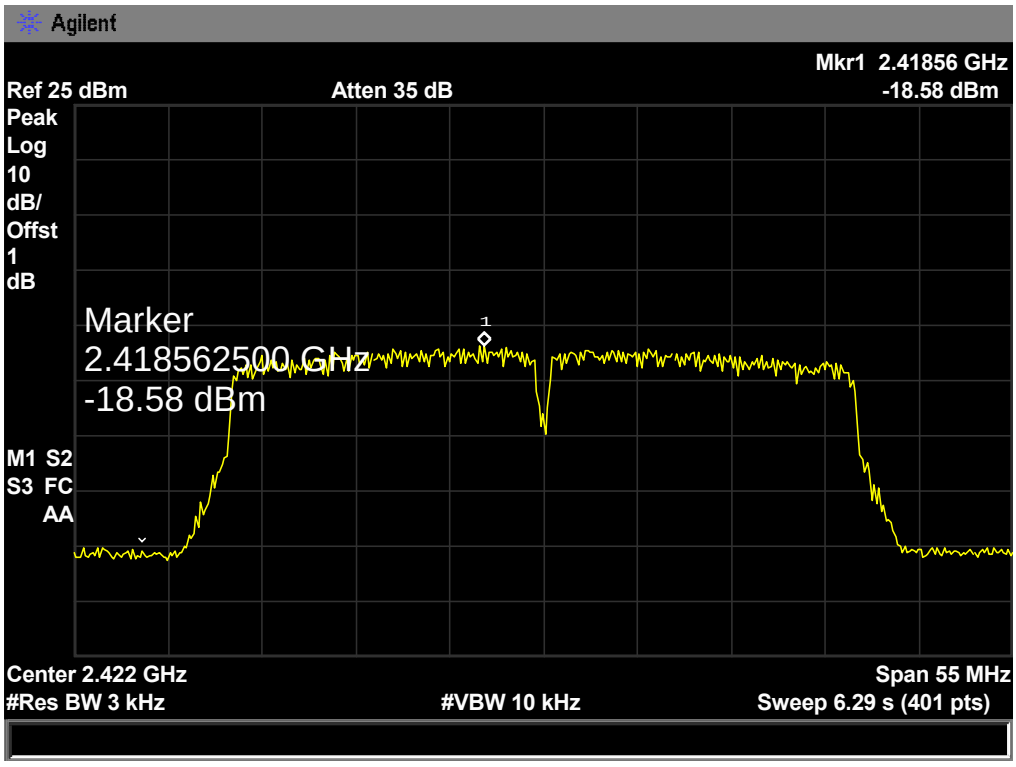


EUT:	Smart Socket	Model:	XM-JPK1S
Temperature:	25 ℃	Temperature:	25 ℃
Test Voltage:	AC 120V/60Hz		
Test Mode:	TX 802.11N(HT40) Mode		

Channel Frequency (MHz)	Power Density (3 kHz/dBm)	Limit (dBm)
2422	-18.58	8
2437	-17.85	
2452	-18.19	

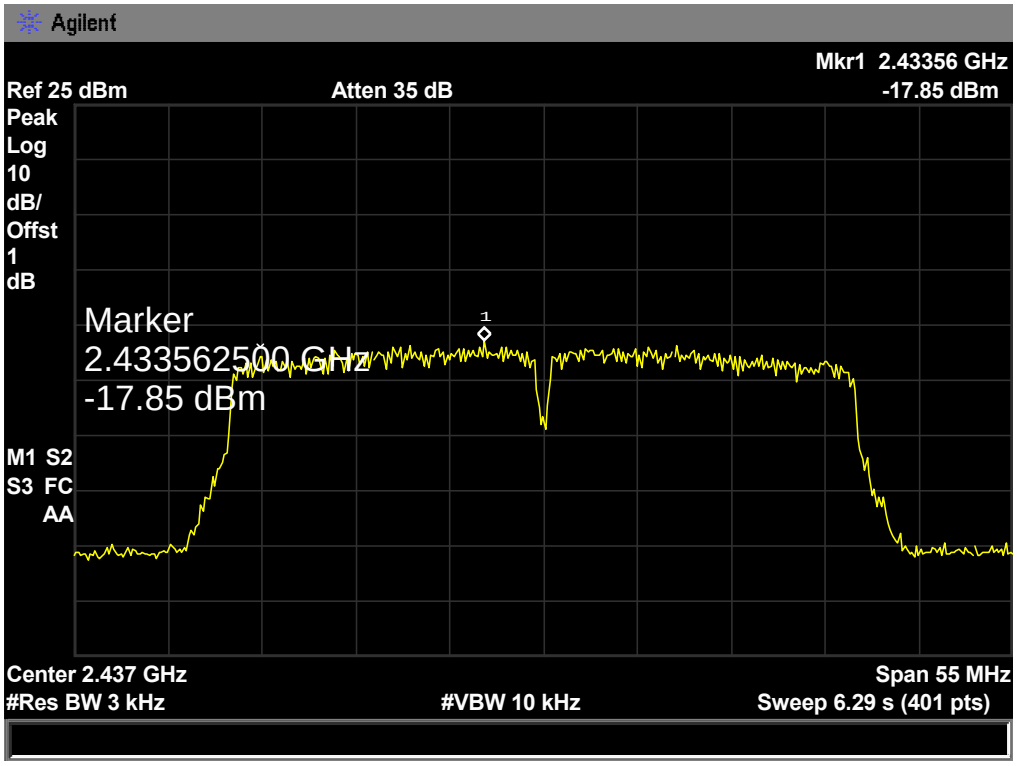
802.11N(HT40) Mode

2422 MHz



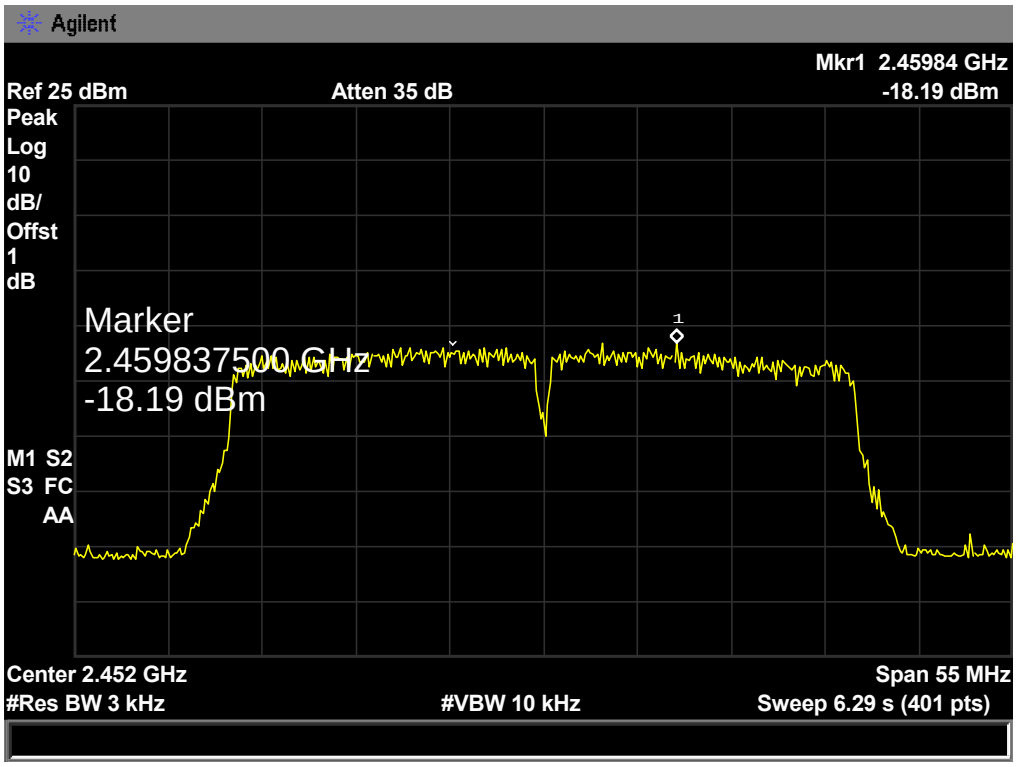
802.11N(HT40) Mode

2437 MHz



802.11N(HT40) Mode

2452 MHz



10. Antenna Requirement

10.1 Standard Requirement

10.1.1 Standard

FCC Part 15.203

10.1.2 Requirement

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. 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 provisions of this Section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

10.2 Antenna Connected Construction

The directional gains of the antenna used for transmitting is -0.5 dBi, and the antenna de-signed with permanent attachment and no consideration of replacement. Please see the EUT photo for details.

Result

The EUT antenna is a Chip Antenna. It complies with the standard requirement.

Antenna Type
☑ Permanent attached antenna
☐ Unique connector antenna
☐ Professional installation antenna