FCC 47 CFR PART 15 SUBPART C
ISED RSS-247 ISSUE 2

CERTIFICATION TEST REPORT

For

IP Camera

MODEL NUMBER: IP3M-943B, IP3M-943W, IP3M-943S, IPM-723B, IPM-723W, IPM-723S

FCC ID: ZZ2AMC018AMC020
IC: 21923-AMC018020

REPORT NUMBER: 4788108769-2

ISSUE DATE: Nov. 14, 2017

Prepared for

Amcrest Technologies LLC
16727 Park Row Dr.Houston, TX 77084

Prepared by

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Revision History

Rev.	Issue Date	Revisions	Revised By
--	11/14/2017	Initial Issue	

Summary of Test Results			
Clause	**Test Items**	FCC/IC Rules	Test Results
1	6dB Bandwidth and 99% Bandwidth	FCC 15.247 (a) (2) RSS-247 Clause 5.2 (a)	Complied
2	Peak Conducted Output Power	FCC 15.247 (b) (3) RSS-247 Clause 5.4 (e)	Complied
3	Power Spectral Density	FCC 15.247 (e) RSS-247 Clause 5.2 (b)	Complied
4	Conducted Bandedge and Spurious Emission	FCC 15.247 (d) RSS-247 Clause 5.5	Complied
5	Radiated Bandedge and Spurious Emission	FCC 15.247 (d) FCC 15.209 FCC 15.205 RSS-247 Clause 5.5 RSS-GEN Clause 8.9	Complied
6	Conducted Emission Test For AC Power Port	FCC 15.207 RSS-GEN Clause 8.8	Complied
7	Antenna Requirement	FCC 15.203 RSS-GEN Clause 8.3	Complied
Remark: N/A is an abbreviation for Not Applicable, and means this item is not applicable for this device.			

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1. ATTESTATION OF TEST RESULTS

Applicant Information

Company Name: Amcrest Technologies LLC

Address: 16727 Park Row Dr.Houston, TX 77084

Manufacturer Information

Company Name: Amcrest Technologies LLC

Address: 16727 Park Row Dr.Houston, TX 77084

EUT Description

Product Name	IP Camera
Brand Name	AMCREST
Model Name	IP3M-943W
Serial Number	IP3M-943B;IP3M-943S;IPM-723B;IPM-723W;IPM-723S
Model Difference	Their electrical circuit design, layout, components used and internal wiring are identical, only the model name, color and selling area are different.
Sample Status:	Normal
Sample ID:	11604
Sample Received:	August 11, 2017
Date Tested	September 11, 2017 ~ September 22, 2017

APPLICABLE STANDARDS	
STANDARD	**TEST RESULTS**
CFR 47 Part 15 Subpart C	PASS
ISED RSS-247 Issue 2	PASS
ISED RSS-GEN Issue 4	PASS

Tested By : Miller Ma

Miller Ma
Engineer

Check By: Shawn Wen

Shawn Wen
Laboratory Leader

Approved By:

Stephen Guo

Laboratory Manager

2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with 558074 D01 DTS Meas Guidance v04, 414788 D01 Radiated Test Site v01, FCC CFR 47 Part 2, FCC CFR 47 Part 15, ANSI C63.10-2013, RSS-GEN Issue 4, and RSS-247 Issue 2.

3. FACILITIES AND ACCREDITATION

Test Location	UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch.
Address	Building 10, Innovation Technology Park, Song Shan Lake Hi tech Development Zone, Dongguan, 523808, China
Accreditation Certificate	UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. EMC Laboratory has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025: 2005 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing. The Certificate Registration Number is 4102.01. UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The Designation Number is CN1187. UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. EMC Laboratory has been registered and fully described in a report filed with Industry Canada. The Company Number is 21320.

Note: The test anechoic chamber in UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch had been calibrated and compared to the open field sites and the test anechoic chamber is shown to be equivalent to or worst case from the open field site.

4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations, and is traceable to recognize national standards.

4.2. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

Test Item	Uncertainty
Uncertainty for Conduction emission test	2.90dB
Uncertainty for Radiation Emission test(include Fundamental emission) (9KHz-30MHz)	2.00dB
Uncertainty for Radiation Emission test(include Fundamental emission) (30MHz-1GHz)	4.52dB
Uncertainty for Radiation Emission test (1GHz to 26GHz)(include Fundamental emission)	5.04dB(1-6GHz)
	5.30dB (6GHz-18Gz)
	5.23dB (18GHz-26Gz)
Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.	

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

Equipment	IP Camera
Model Name	IP3M-943W
Tested M/N	IP3M-943S
Series M/N	IP3M-943B, IP3M-943S, IPM-723B, IPM-723W, IPM-723S
Model Difference	Their electrical circuit design, layout, components used and internal wiring are identical, only the model name, color and selling area are different.
Radio Technology	IEEE802.11b/g/n HT20/n HT40
Operation frequency	IEEE 802.11b: 2412MHz—2462MHz IEEE 802.11g: 2412MHz—2462MHz IEEE 802.11n HT20: 2412MHz—2462MHz IEEE 802.11n HT40: 2422MHz—2452MHz
Modulation	IEEE 802.11b: DBPSK,DQPSK and CCK and DSSS IEEE 802.11g: BPSK,QPSK,16QAM,64QAM and OFDM IEEE 802.11n HT20: OFDM IEEE 802.11n HT40: OFDM
Power Adapter	Model:NBS24J120200HU
	INPUT:100-240V~,50/60Hz,0.6A OUTPUT:12.0V/2A

5.2. MAXIMUM OUTPUT POWER

Frequency Range (MHz)	Number of Transmit Chains (NTX)	IEE Std. 802.11	Frequency (MHz)	Channel Number	Max PK Conducted Power (dBm)
2412-2462	1	IEEE 802.11b	2412-2462	01-11[11]	18.67
2412-2462	1	IEEE 802.11g	2412-2462	01-11[11]	22.95
2412-2462	1	IEEE 802.11nHT20	2412-2462	01-11[11]	23.05
2422-2452	1	IEEE 802.11nHT40	2422-2452	03-09 [7]	21.90

5.3. CHANNEL LIST

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

5.4. TEST CHANNEL CONFIGURATION

Test Mode	Test Channel (MHz)
IEEE 802.11b	LCH :CH01 2412
	MCH: CH06 2437
	HCH: CH11 2462
IEEE 802.11g	LCH :CH01 2412
	MCH: CH06 2437
	HCH: CH11 2462
IEEE 802.11n HT20	LCH :CH01 2412
	MCH: CH06 2437
	HCH: CH11 2462
IEEE 802.11n HT40	LCH :CH03 2422
	MCH: CH06 2437
	HCH: CH09 2452

5.5. THE WORSE CASE CONFIGURATIONS

Test Software Version	SecureCRT	
Test Mode	Setting TX Power	Setting data rate (Mbps)
IEEE 802.11b	N/A	CCK_1Mbps
	N/A	CCK_1Mbps
	N/A	CCK_1Mbps
IEEE 802.11g	N/A	NO HT_6Mbps
	N/A	NO HT_6Mbps
	N/A	NO HT_6Mbps
IEEE 802.11n HT20	N/A	HT20_MCS_0
	N/A	HT20_MCS_0
	N/A	HT20_MCS_0
IEEE 802.11n HT40	N/A	HT40_MCS_0
	N/A	HT40_MCS_0
	N/A	HT40_MCS_0

Remark: N/A is an abbreviation for Not Applicable, and means this item is not applicable for this device.

5.6. DESCRIPTION OF AVAILABLE ANTENNAS

Ant.	Frequency (MHz)	Antenna Type	Antenna Gain (dBi)
1	2412-2462	Dipole Antenna	2

Test Mode	Transmit and Receive Mode	Description
IEEE 802.11b	☒1TX, 1RX	Chain 1 can be used as transmitting/receiving antenna.
IEEE 802.11g	☒1TX, 1RX	Chain 1 can be used as transmitting/receiving antenna.
IEEE 802.11n HT20	☒1TX, 1RX	Chain 1 can be used as transmitting/receiving antenna.
IEEE 802.11n HT40	☒1TX, 1RX	Chain 1 can be used as transmitting/receiving antenna.

5.7. TEST ENVIRONMENT

Environment Parameter	Selected Values During Tests	
Relative Humidity	55 ~ 65%	
Atmospheric Pressure:	1025Pa	
Temperature	TN	23 ~ 28°C
Voltage :	VL	N/A
	VN	AC120V/60Hz
	VH	N/A

Note: VL= Lower Extreme Test Voltage
VN= Nominal Voltage
VH= Upper Extreme Test Voltage
TN= Normal Temperature

5.8. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Item	Equipment	Brand Name	Model Name	P/N
1	Laptop	ThinkPad	T460S	SL10K24796 JS

I/O CABLES

Cable No	Port	Connector Type	Cable Type	Cable Length(m)	Remarks
1	RJ45	RJ45	NO	2	N/A
1	DC	DC	NO	3	N/A

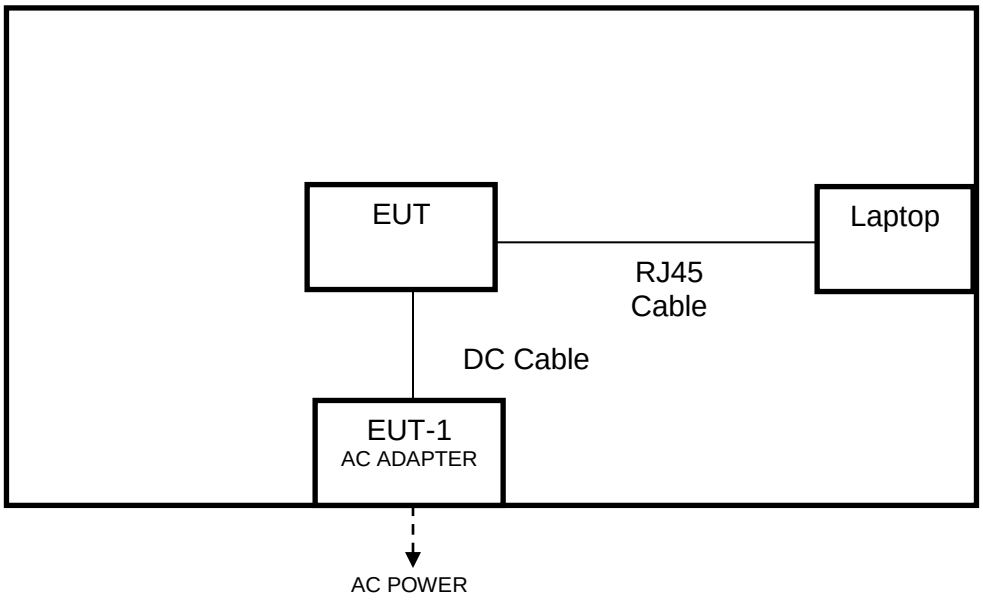
ACCESSORY

Item	Accessory	Brand Name	Model Name	Description
1	AC ADAPTER	ARCREST	NBS24J120200HU	INPUT:100-240V~,50/60Hz,0.6A OUTPUT:12.0V/2A

TEST SETUP

The EUT can work in engineering mode with firmware DutApiWiFiMW30XBrdigeUart through a Laptop.

SETUP DIAGRAM FOR TESTS



5.9. MEASURING INSTRUMENT AND SOFTWARE USED

Conducted Emissions						
Instrument						
Used	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
☑	EMI Test Receiver	R&S	ESR3	101961	Dec.20, 2016	Dec.19, 2017
☑	Two-Line V-Network	R&S	ENV216	101983	Dec.20, 2016	Dec.19, 2017
☑	Artificial Mains Networks	Schwarzbeck	NSLK 8126	8126465	Feb.10, 2017	Feb.10, 2018
Software						
Used	Description		Manufacturer	Name	Version	
☑	Test Software for Conducted disturbance		Farad	EZ-EMC	Ver. UL-3A1	
Radiated Emissions						
Instrument						
Used	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
☑	MXE EMI Receiver	KESIGHT	N9038A	MY56400036	Feb. 24, 2017	Feb. 24, 2018
☑	Hybrid Log Periodic Antenna	TDK	HLP-3003C	130960	Jan.09, 2016	Jan.09, 2019
☑	Preamplifier	HP	8447D	2944A09099	Feb. 13, 2017	Feb. 13, 2018
☑	EMI Measurement Receiver	R&S	ESR26	101377	Dec. 20, 2016	Dec. 20, 2017
☑	Horn Antenna	TDK	HRN-0118	130939	Jan. 09, 2016	Jan. 09, 2019
☑	High Gain Horn Antenna	Schwarzbeck	BBHA-9170	691	Jan.06, 2016	Jan.06, 2019
☑	Preamplifier	TDK	PA-02-0118	TRS-305-00066	Jan. 14, 2017	Jan. 14, 2018
☑	Preamplifier	TDK	PA-02-2	TRS-307-00003	Dec. 20, 2016	Dec. 20, 2017
☑	Loop antenna	Schwarzbeck	1519B	00008	Mar. 26, 2016	Mar. 25, 2019
Software						
Used	Description		Manufacturer	Name	Version	
☑	Test Software for Radiated disturbance		Farad	EZ-EMC	Ver. UL-3A1	
Other instruments						
Used	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
☑	Spectrum Analyzer	Keysight	N9030A	MY55410512	Dec. 20, 2016	Dec. 20, 2017
☑	Power Meter	Keysight	N1911A	MY55416024	Aug. 20, 2017	Aug. 20, 2018
☑	Power Sensor	Keysight	N1921A	MY51100041	Feb. 13, 2017	Feb. 13, 2018

☑	DC Supply	Keysight	E36103A	MY55350020	Feb. 10, 2017	Feb. 10, 2018

6. MEASUREMENT METHODS

Clause	Test Items	FCC/IC Rules	Test Results
1	6dB Bandwidth and 99% Bandwidth	FCC 15.247 (a) (2) RSS-247 Clause 5.2 (a)	Complied
2	Peak Conducted Output Power	FCC 15.247 (b) (3) RSS-247 Clause 5.4 (e)	Complied
3	Power Spectral Density	FCC 15.247 (e) RSS-247 Clause 5.2 (b)	Complied
4	Conducted Bandedge and Spurious Emission	FCC 15.247 (d) RSS-247 Clause 5.5	Complied
5	Radiated Bandedge and Spurious Emission	FCC 15.247 (d) FCC 15.209 FCC 15.205 RSS-247 Clause 5.5 RSS-GEN Clause 8.9	Complied
6	Conducted Emission Test For AC Power Port	FCC 15.207 RSS-GEN Clause 8.8	Complied
7	Antenna Requirement	FCC 15.203 RSS-GEN Clause 8.3	Complied
Remark: N/A is an abbreviation for Not Applicable, and means this item is not applicable for this device.			

7. ANTENNA PORT TEST RESULTS

7.1. ON TIME AND DUTY CYCLE

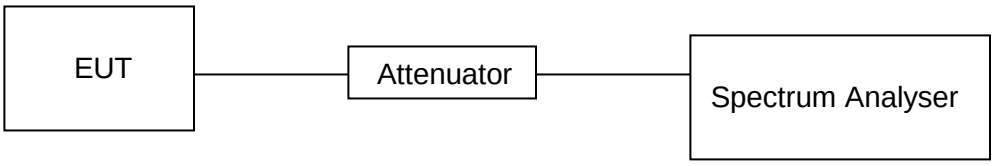
LIMITS

None; for reporting purposes only

PROCEDURE

KDB 558074 Zero-Span Spectrum Analyzer Method

TEST SETUP



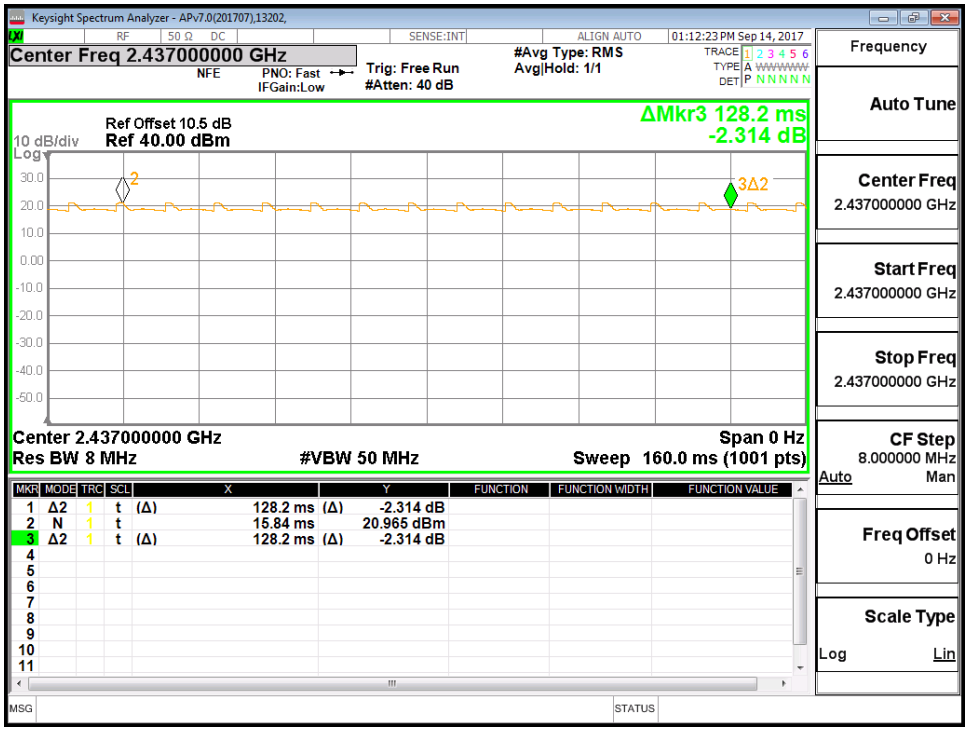
RESULTS

Mode	On Time (msec)	Period (msec)	Duty Cycle x (Linear)	Duty Cycle (%)	Duty Cycle Correction Factor (db)	1/B Minimum VBW (KHz)
11b	128.2	128.2	1	100	0	0.010
11g	128.2	128.2	1	100	0	0.010
11n20	128.2	128.2	1	100	0	0.010
11n40	128.2	128.2	1	100	0	0.010

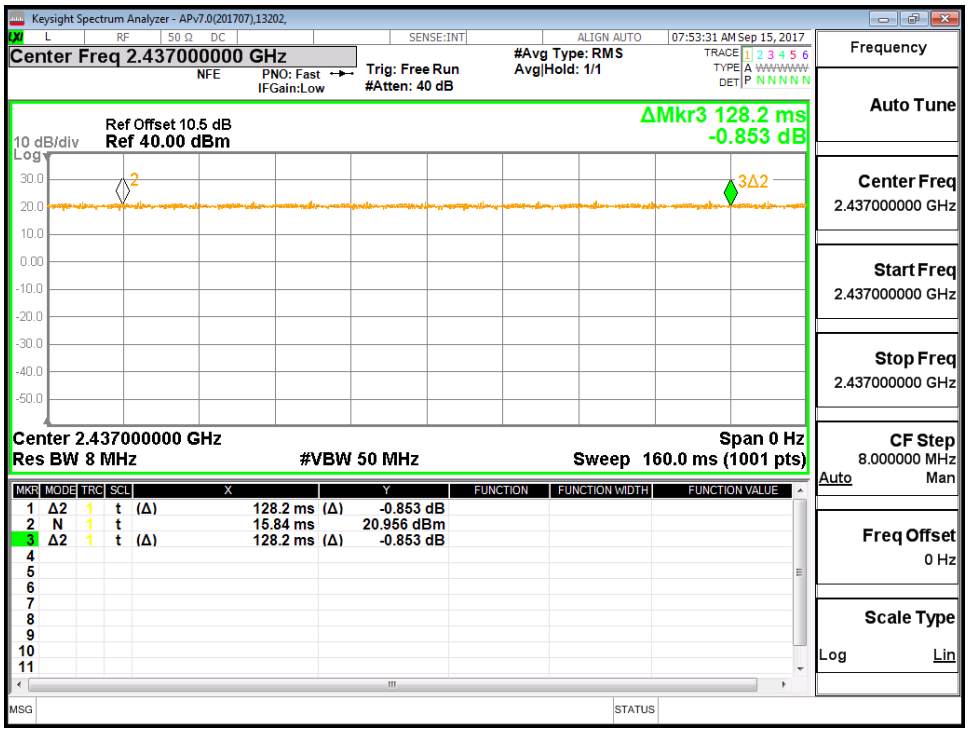
Note: Duty Cycle Correction Factor=10log(1/x).
Where: x is Duty Cycle(Linear)
Where: B is On Time

ON TIME AND DUTY CYCLE MID CH

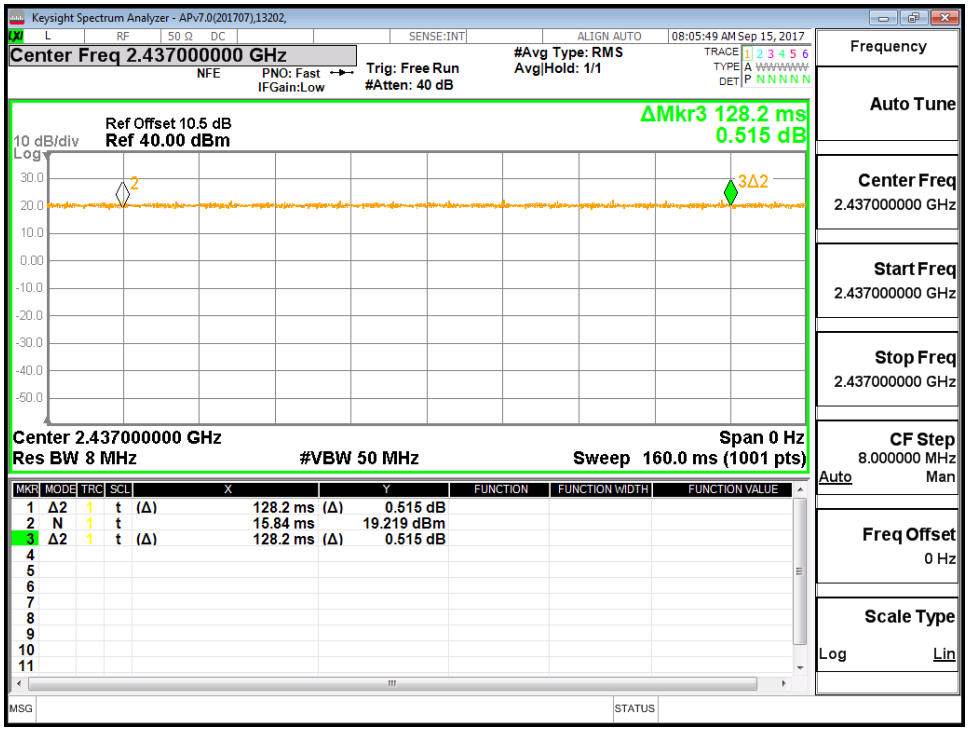
11b



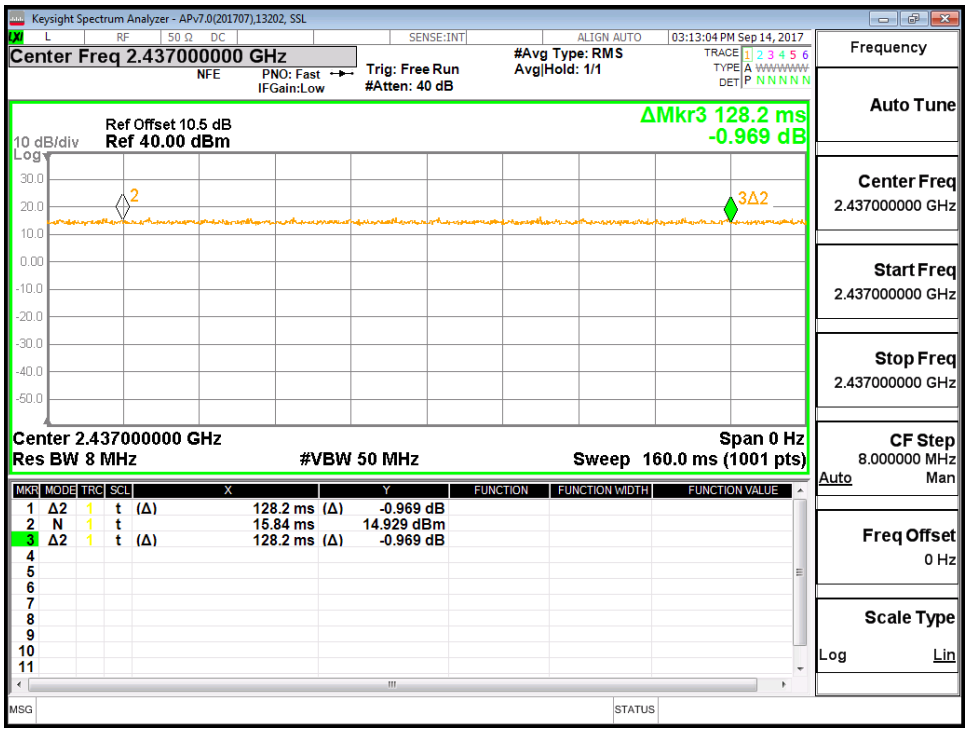
11g



11n/20



11n/40



7.2. 6 dB DTS BANDWIDTH AND 99% BANDWIDTH

LIMITS

FCC Part15 (15.247) Subpart C RSS-247 ISSUE 2			
Section	Test Item	Limit	Frequency Range (MHz)
FCC 15.247(a)(2) RSS-247 5.1 (a)	6 dB Bandwidth	>= 500KHz	2400-2483.5
RSS-Gen Clause 6.6	99% Bandwidth	For reporting purposes only.	2400-2483.5

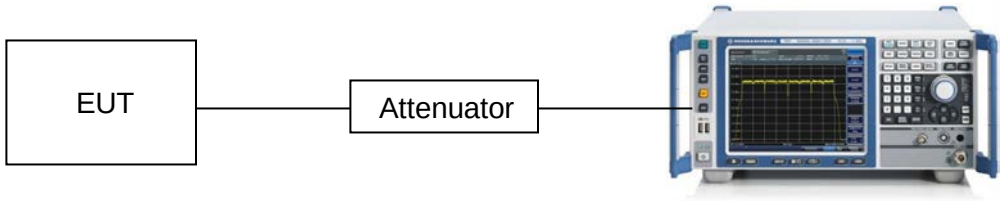
TEST PROCEDURE

Connect the UUT to the spectrum analyser and use the following settings:

Center Frequency	The centre frequency of the channel under test
Detector	Peak
RBW	For 6dB Bandwidth :100K For 99% Bandwidth :1% to 5% of the occupied bandwidth
VBW	For 6dB Bandwidth : ≥3 × RBW For 99% Bandwidth : approximately 3×RBW
Trace	Max hold
Sweep	Auto couple

Allow the trace to stabilize and 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 and 99% relative to the maximum level measured in the fundamental emission.

TEST SETUP



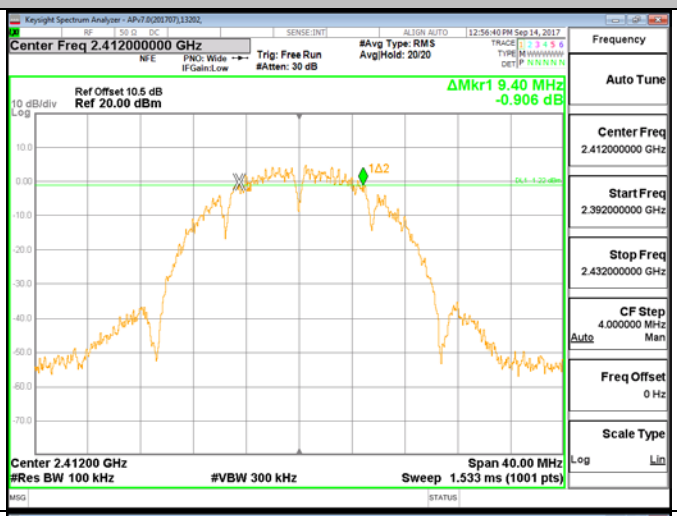
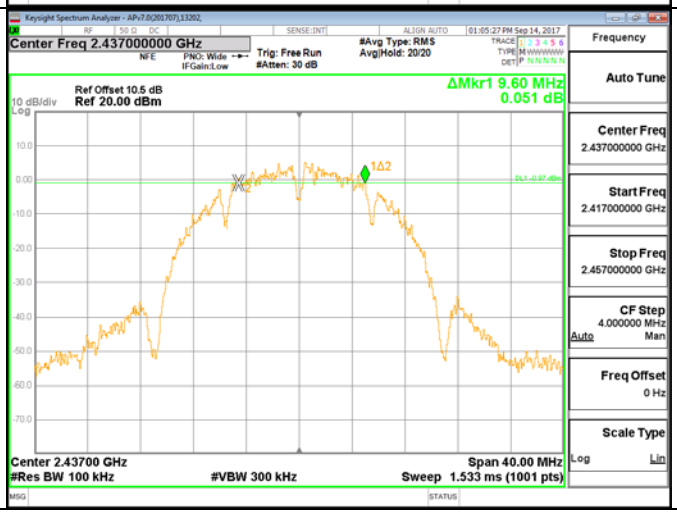
TEST CONDITIONS
Temperature: 26.6°C

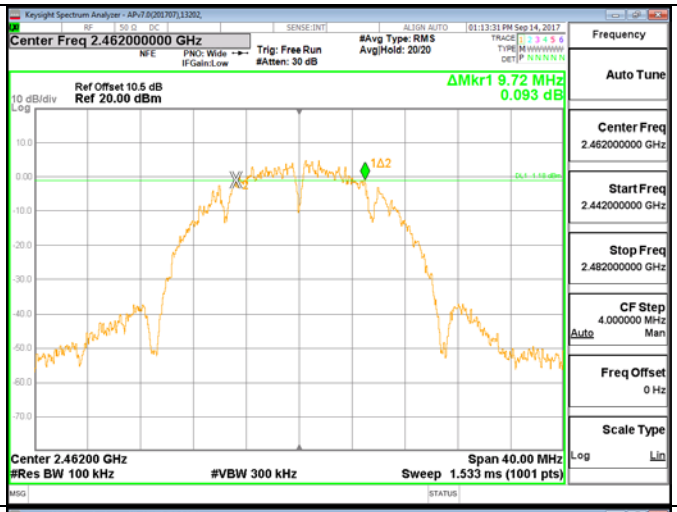
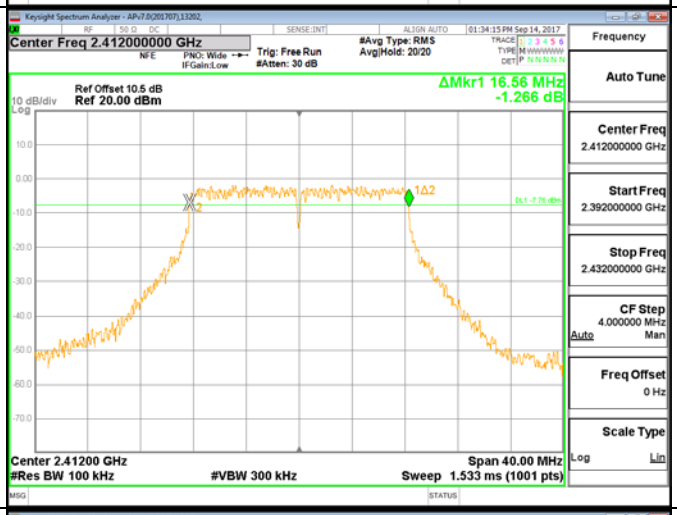
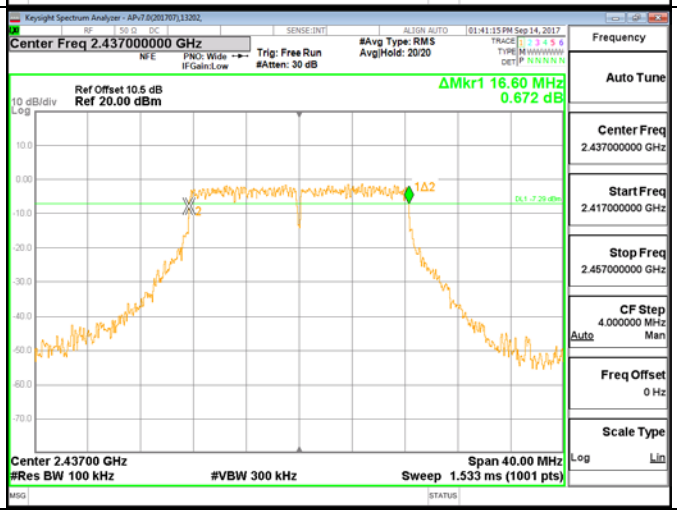
Relative Humidity: 58%
Test Voltage: AC 120V

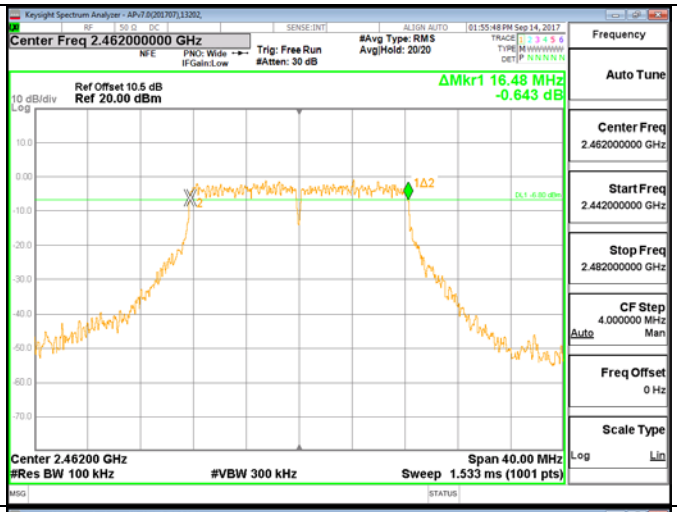
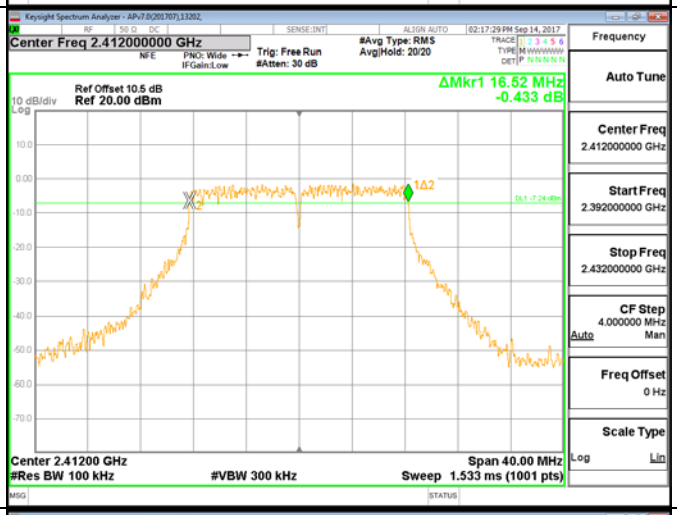
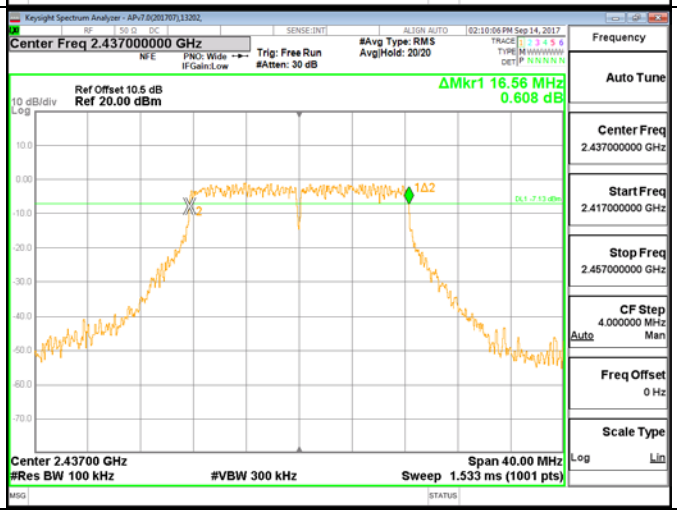
RESULTS

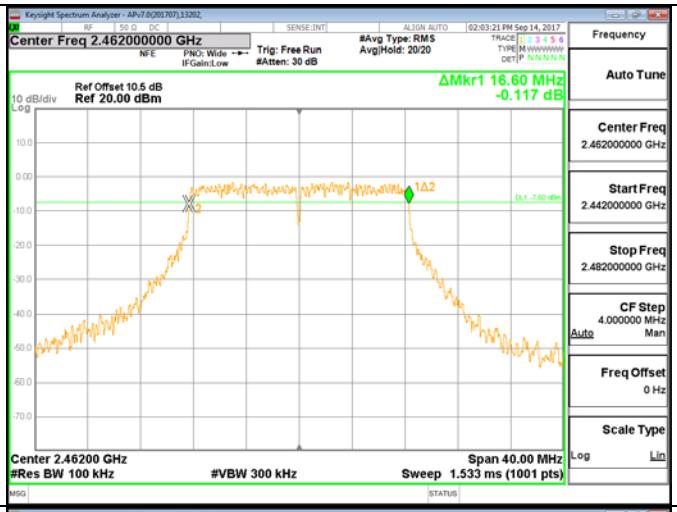
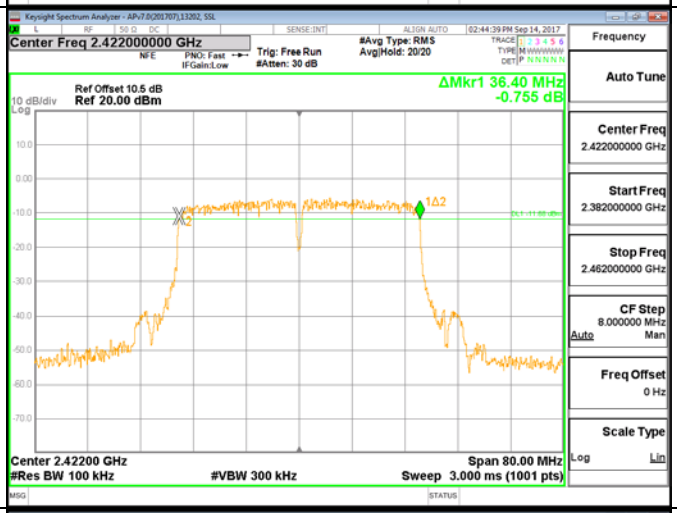
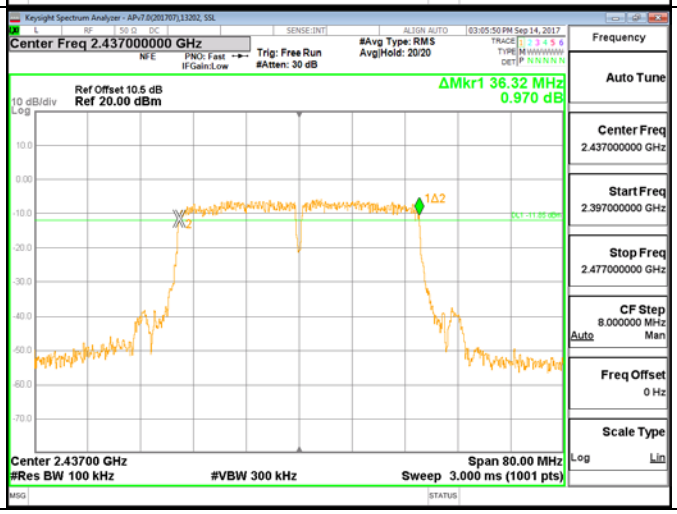
Mode	Channel	6dB Bandwidth [MHz]	99% OBW [MHz]	Verdict
11B	LCH	9.40	14.890	PASS
11B	MCH	9.60	14.909	PASS
11B	HCH	9.72	15.034	PASS
11G	LCH	16.560	16.593	PASS
11G	MCH	16.600	16.559	PASS
11G	HCH	16.480	16.529	PASS
11N20SISO	LCH	16.520	16.523	PASS
11N20SISO	MCH	16.560	16.507	PASS
11N20SISO	HCH	16.600	16.515	PASS
11N40SISO	LCH	36.400	35.997	PASS
11N40SISO	MCH	36.320	35.977	PASS
11N40SISO	HCH	36.480	35.934	PASS

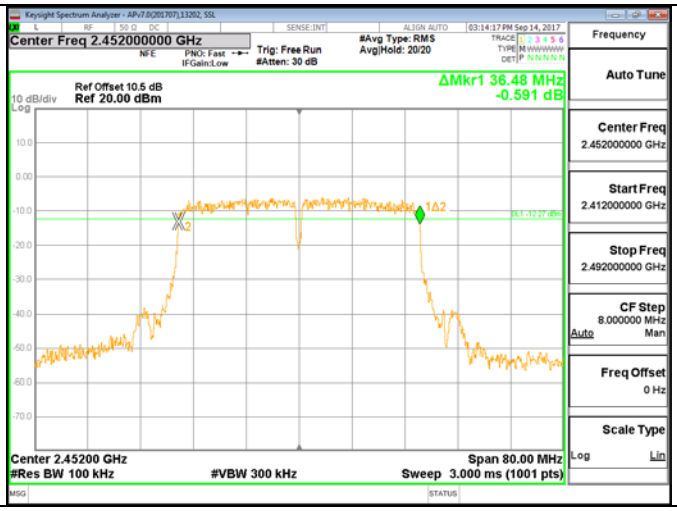
Test Graphs

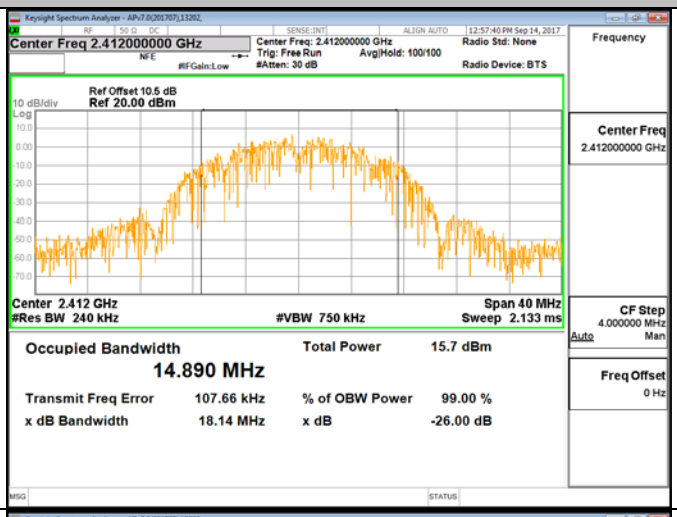
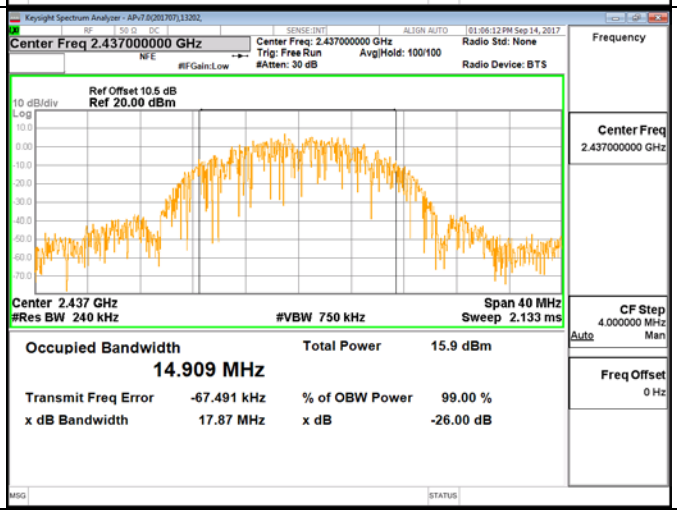
Graphs For 6dB Bandwidth		
11B/LCH		
11B/MCH		

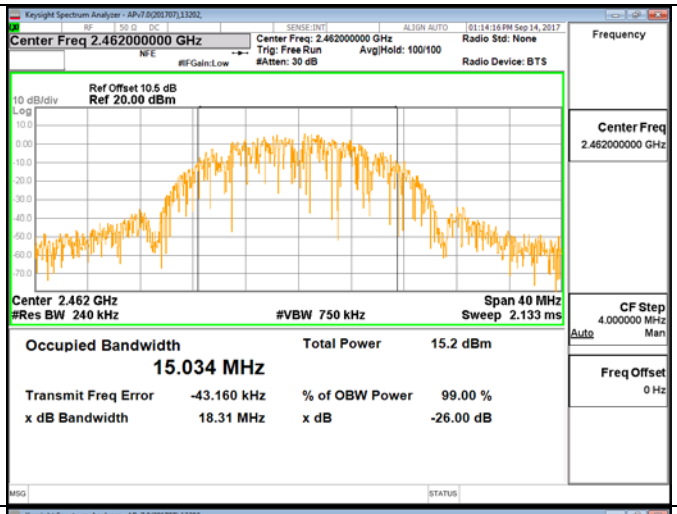
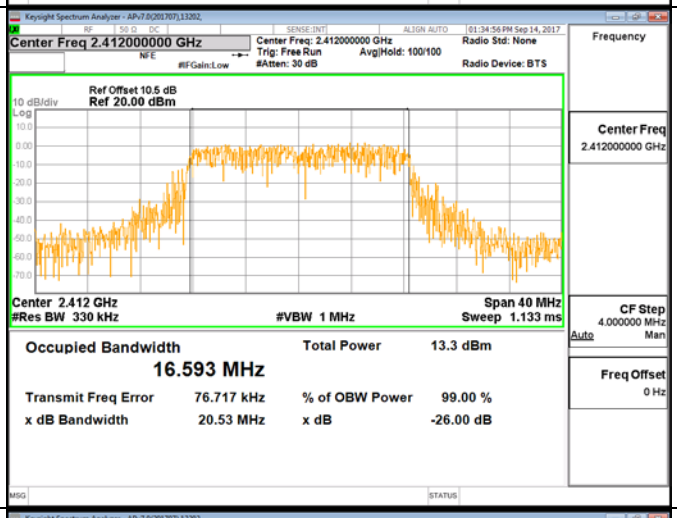
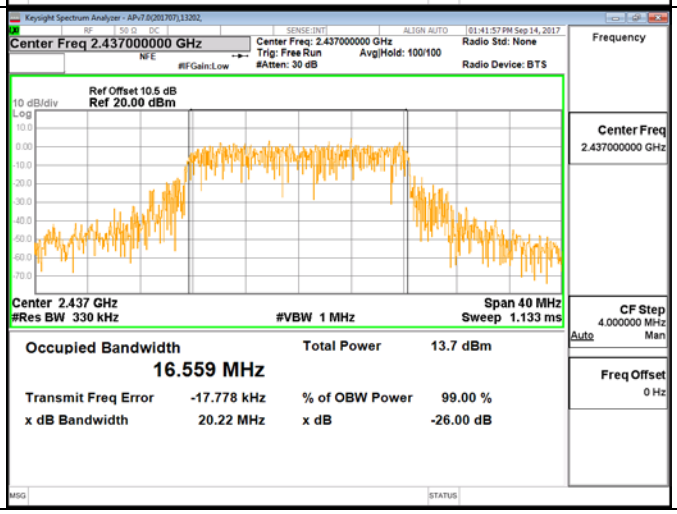
11B/HCH			
11G/LCH			
11G/MCH			

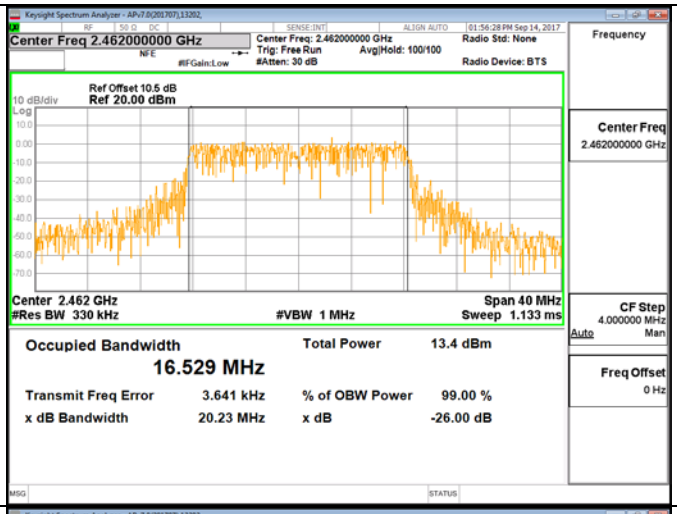
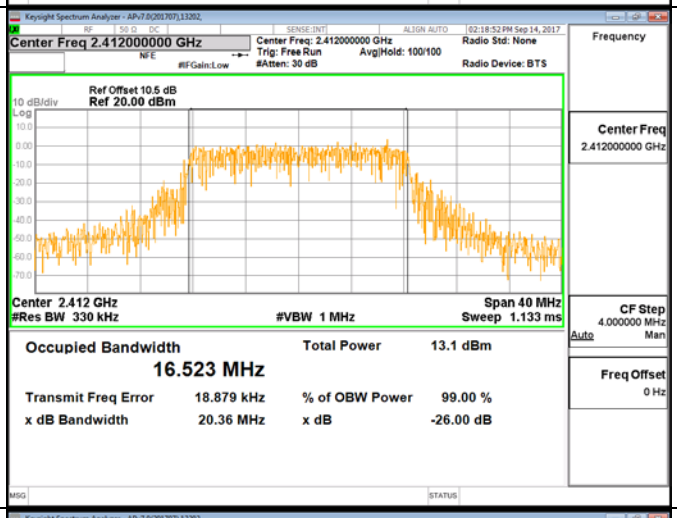
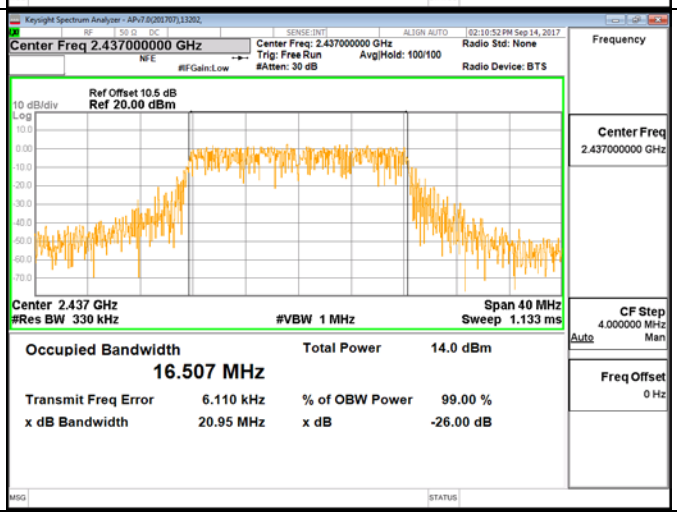
11G/HCH			
11N20SISO/LCH			
11N20SISO/MCH			

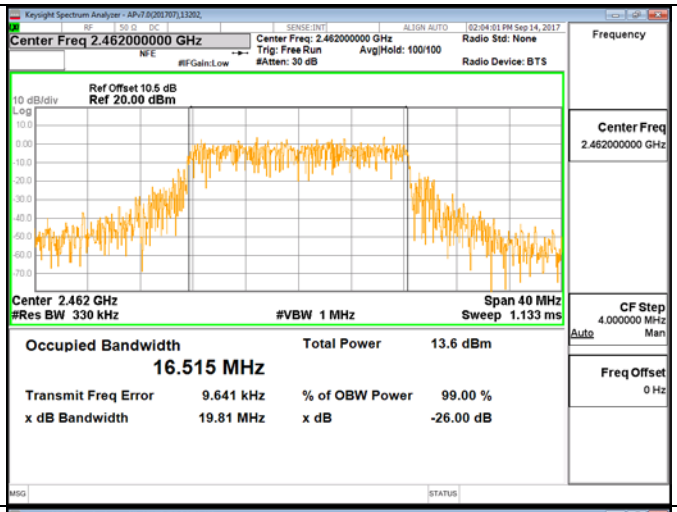
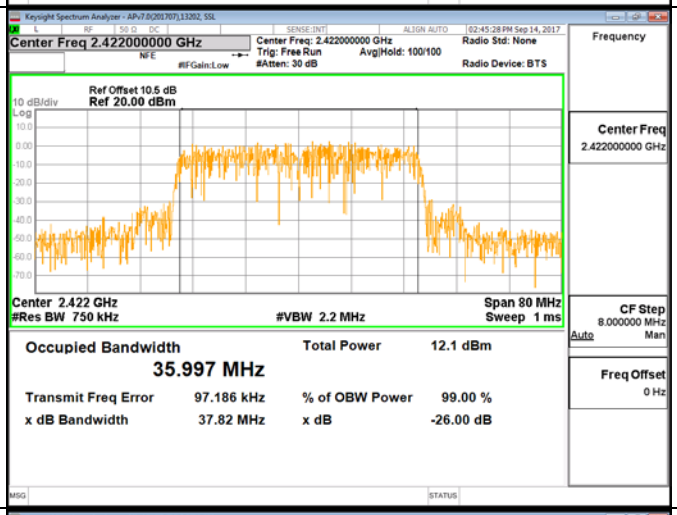
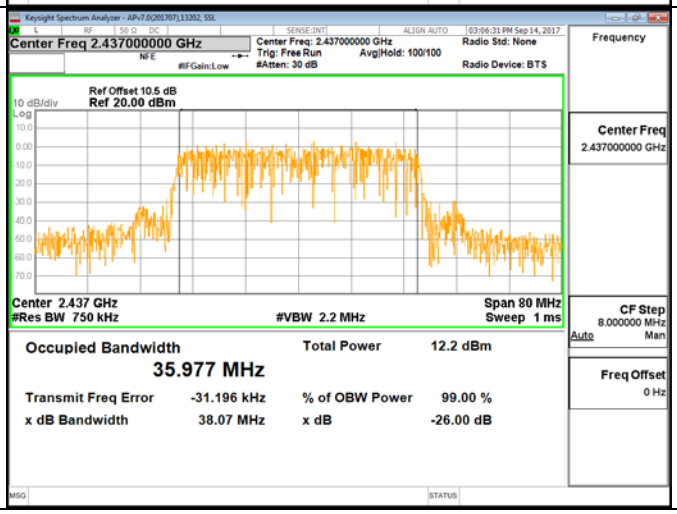
11N20SISO/HCH		
11N40SISO/LCH		
11N40SISO/MCH		

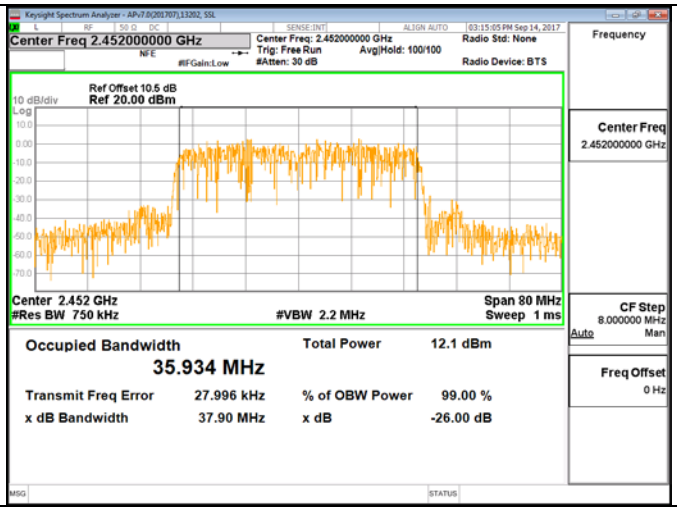
11N40SISO/HCH		

Graphs For 99% Bandwidth		
11B/LCH		
11B/MCH		

11B/HCH			
11G/LCH			
11G/MCH			

11G/HCH			
11N20SISO/LCH			
11N20SISO/MCH			

11N20SISO/HCH			
11N40SISO/LCH			
11N40SISO/MCH			

11N20SISO/HCH			

7.3. PEAK & AVRAGE CONDUCTED OUTPUT POWER

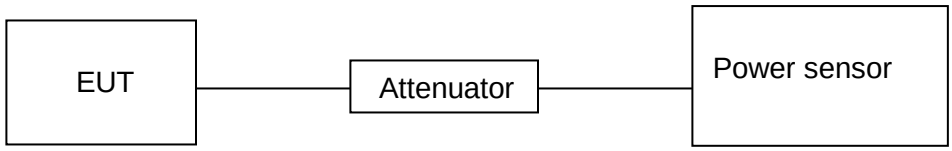
LIMITS

FCC Part15 (15.247) Subpart C RSS-247 ISSUE 2			
Section	Test Item	Limit	Frequency Range (MHz)
FCC 15.247(b)(3) RSS-247 5.4 (e)	Peak & Average Output Power	1 watt or 30dBm	2400-2483.5

TEST PROCEDURE

Place the EUT on the table and set it in the transmitting mode.
Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the Power sensor.
Measure peak power each channel.

TEST SETUP



RESULTS

Mode	Channel	Average. Power [dBm]	Peak. Power [dBm]	Verdict
11B	LCH	15.19	18.41	PASS
11B	MCH	15.59	18.67	PASS
11B	HCH	15.37	18.34	PASS
11G	LCH	13.91	22.95	PASS
11G	MCH	14.20	23.26	PASS
11G	HCH	13.85	22.89	PASS
11N20SISO	LCH	13.59	22.61	PASS
11N20SISO	MCH	14.03	23.05	PASS
11N20SISO	HCH	13.80	22.83	PASS
11N40SISO	LCH	11.91	21.77	PASS
11N40SISO	MCH	12.07	21.90	PASS
11N40SISO	HCH	11.79	21.65	PASS

7.4. POWER SPECTRAL DENSITY

LIMITS

FCC Part15 (15.247) Subpart C RSS-247 ISSUE 2			
Section	Test Item	Limit	Frequency Range (MHz)
FCC §15.247 (e) RSS-247 5.2 (b)	Power Spectral Density	8 dBm in any 3 kHz band	2400-2483.5

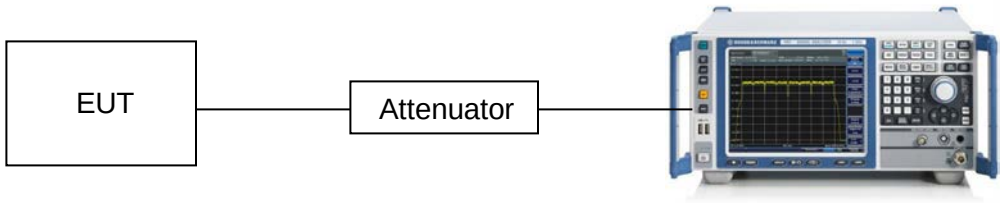
TEST PROCEDURE

Connect the UUT to the spectrum analyser and use the following settings:

Center Frequency	The centre frequency of the channel under test
Detector	Peak
RBW	3 kHz ≤ RBW 100 ≤ kHz
VBW	≥3 × RBW
Span	1.5 x DTS bandwidth
Trace	Max hold
Sweep time	Auto couple.

Allow trace to fully stabilize and use the peak marker function to determine the maximum amplitude level within the RBW.
If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

TEST SETUP



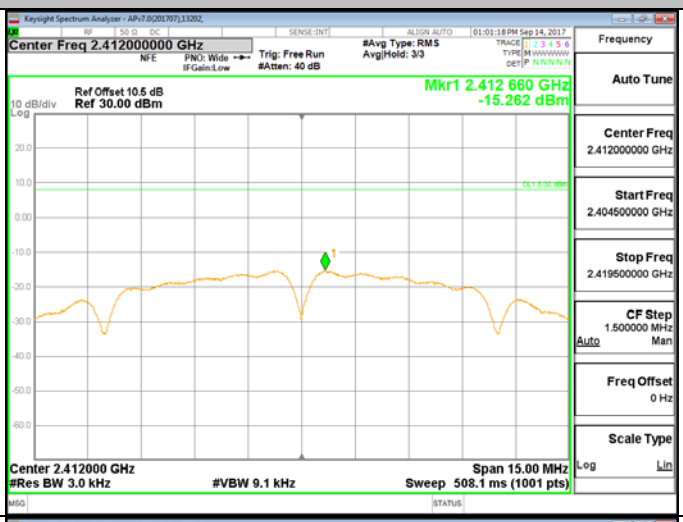
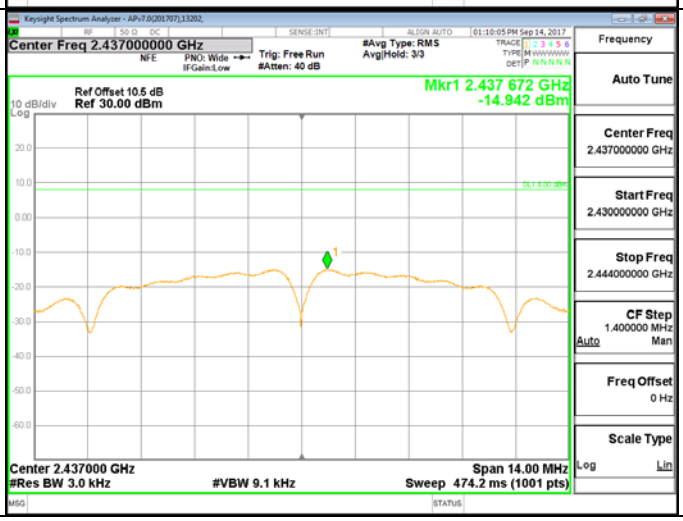
TEST CONDITIONS

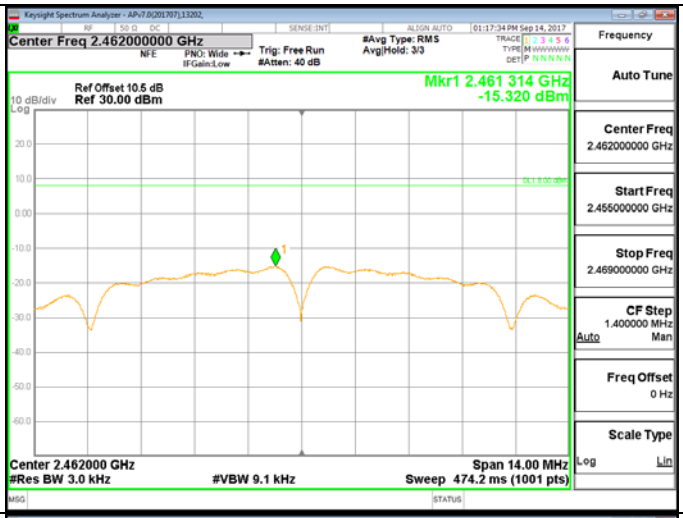
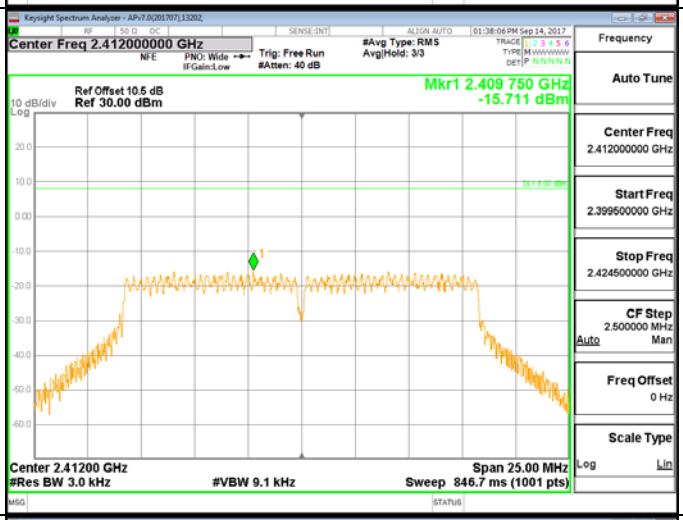
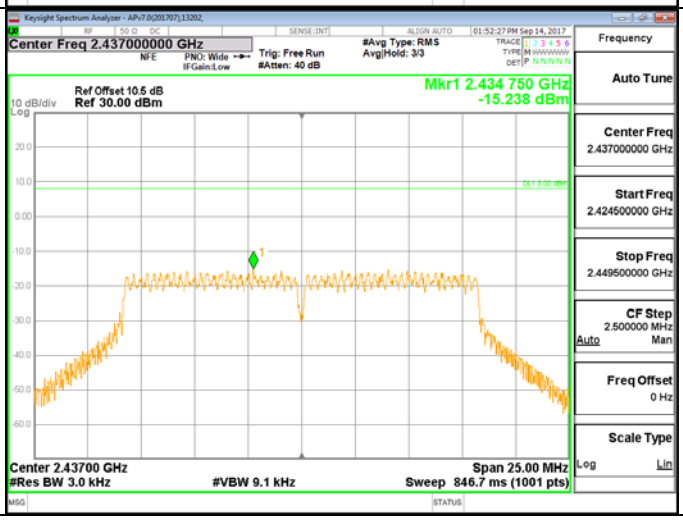
Temperature: 27°C
Relative Humidity: 60%
Test Voltage: 3.8Vdc

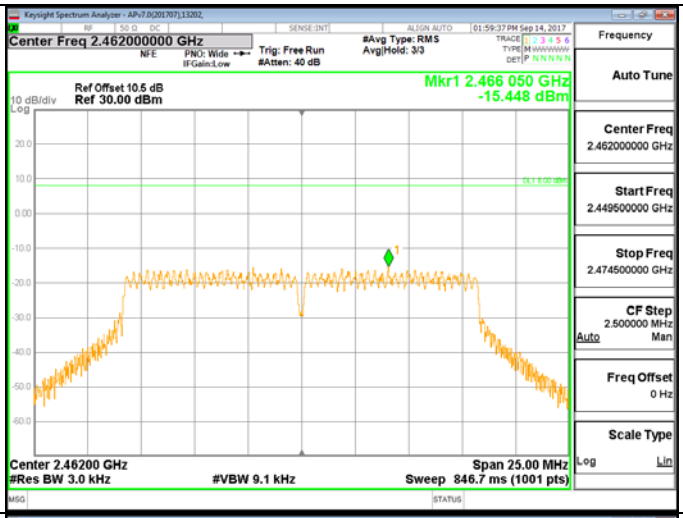
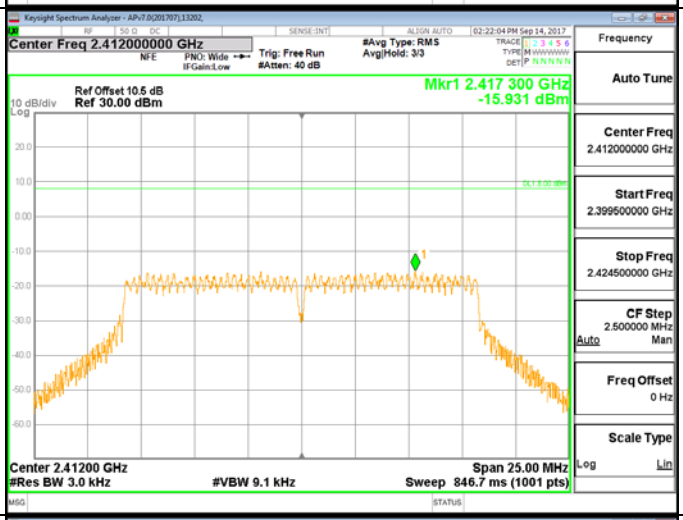
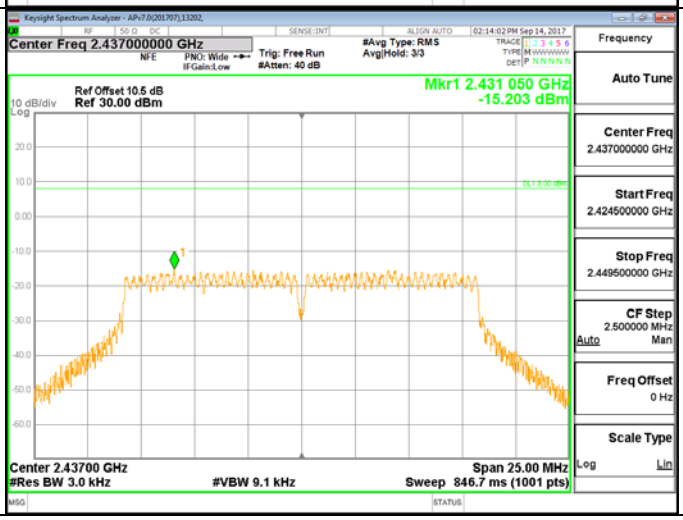
RESULTS

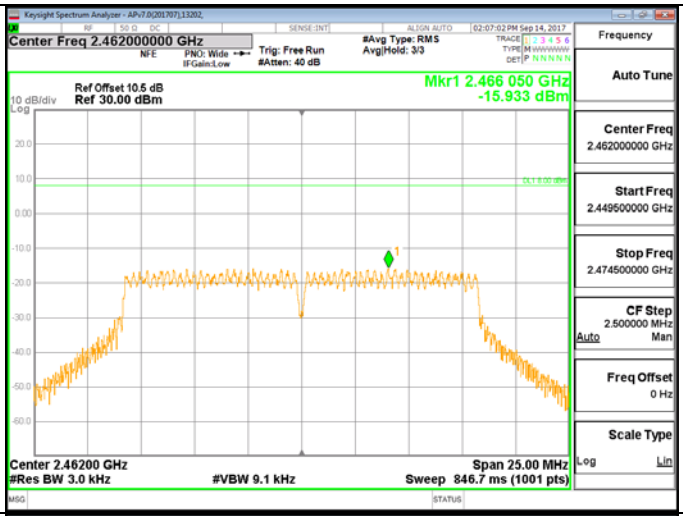
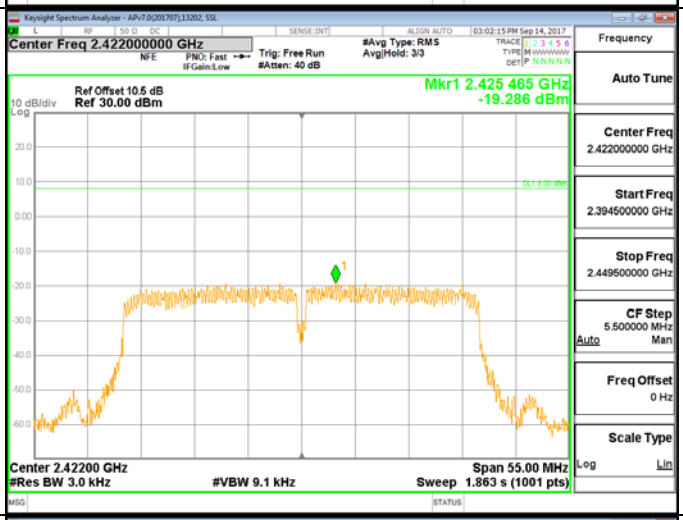
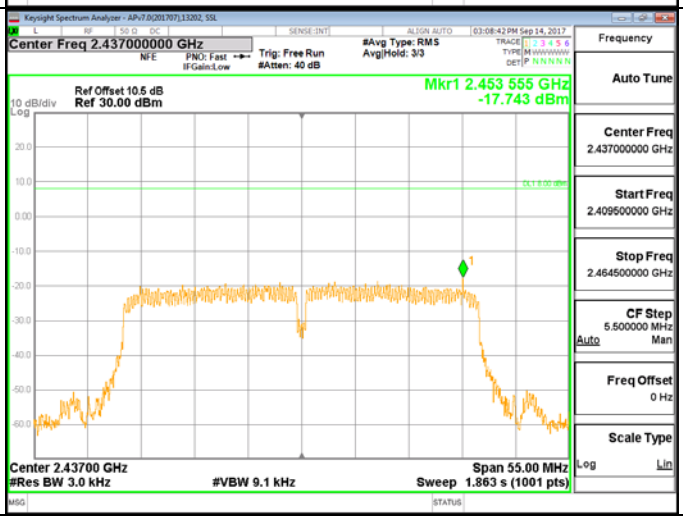
Mode	Channel	Meas.Level [dBm/30kHz]	Verdict
11B	LCH	-15.26	PASS
11B	MCH	-14.94	PASS
11B	HCH	-15.32	PASS
11G	LCH	-15.71	PASS
11G	MCH	-15.24	PASS
11G	HCH	-15.45	PASS
11N20SISO	LCH	-15.93	PASS
11N20SISO	MCH	-15.2	PASS
11N20SISO	HCH	-15.93	PASS
11N40SISO	LCH	-19.29	PASS
11N40SISO	MCH	-17.74	PASS
11N40SISO	HCH	-19.48	PASS

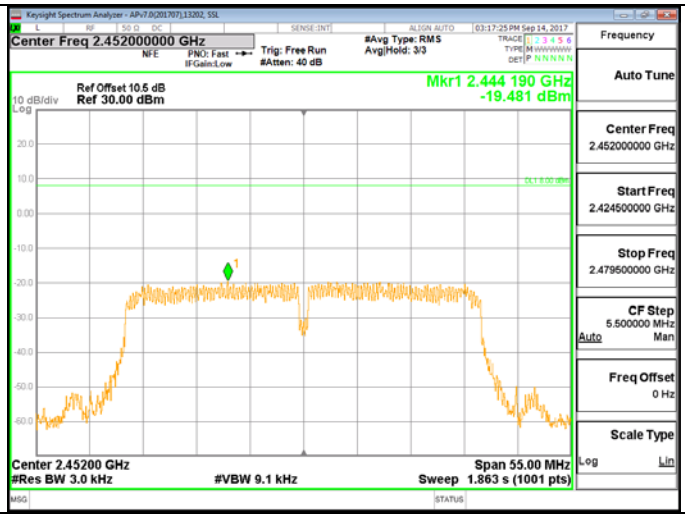
Test Graphs

Graphs			
11B/LCH			
11B/MCH			

11B/HCH			
11G/LCH			
11G/MCH			

11G/HCH			
11N20SISO/LCH			
11N20SISO/MCH			

11N20SISO/HCH			
11N40SISO/LCH			
11N40SISO/MCH			

11N40SISO/HCH			

7.5. CONDUCTED BANDEDGE AND SPURIOUS EMISSIONS

LIMITS

FCC Part15 (15.247) Subpart C RSS-2474 ISSUE 2		
Section	Test Item	Limit
FCC §15.247 (d) RSS-247 5.5	Conducted Bandedge and Spurious Emissions	at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power

TEST PROCEDURE

Connect the UUT to the spectrum analyser and use the following settings:

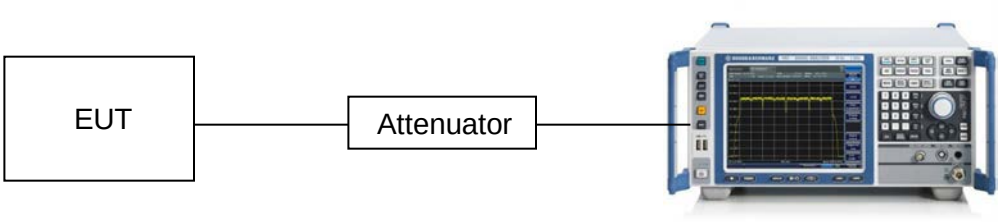
Center Frequency	The centre frequency of the channel under test
Detector	Peak
RBW	100K
VBW	≥3 × RBW
Span	1.5 x DTS bandwidth
Trace	Max hold
Sweep time	Auto couple.

Use the peak marker function to determine the maximum PSD level.

Span	Set the center frequency and span to encompass frequency range to be measured
Detector	Peak
RBW	100K
VBW	≥3 × RBW
measurement points	≥span/RBW
Trace	Max hold
Sweep time	Auto couple.

Use the peak marker function to determine the maximum amplitude level**.**

TEST SETUP

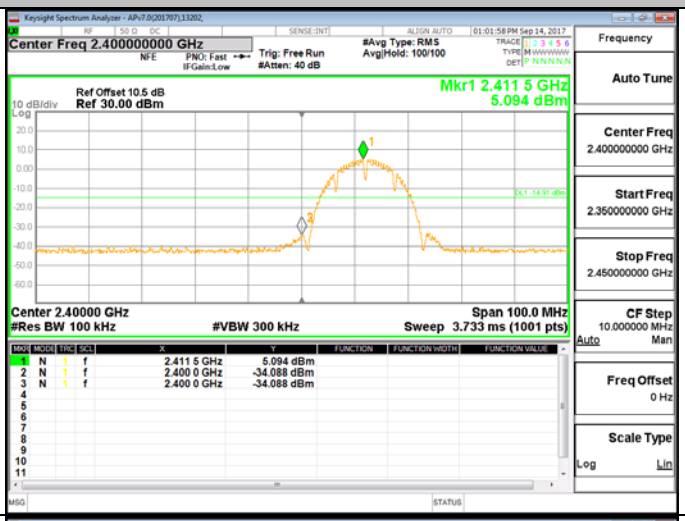
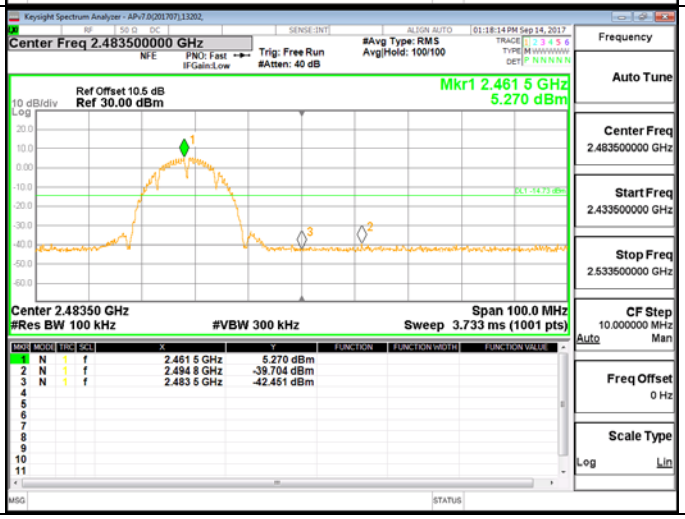


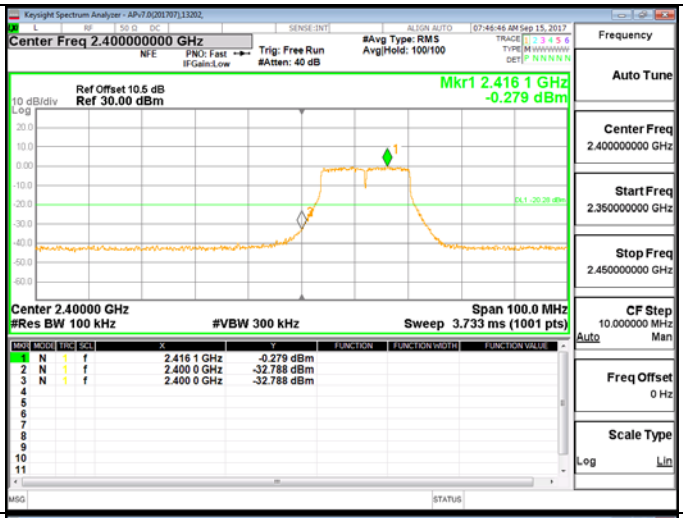
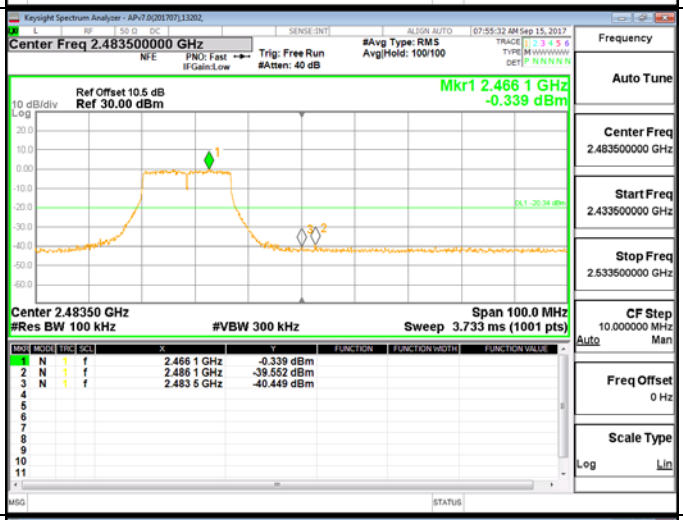
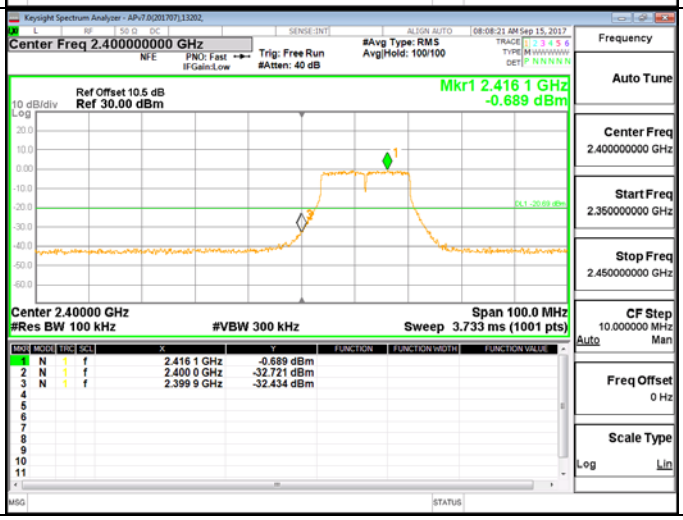
TEST CONDITIONS

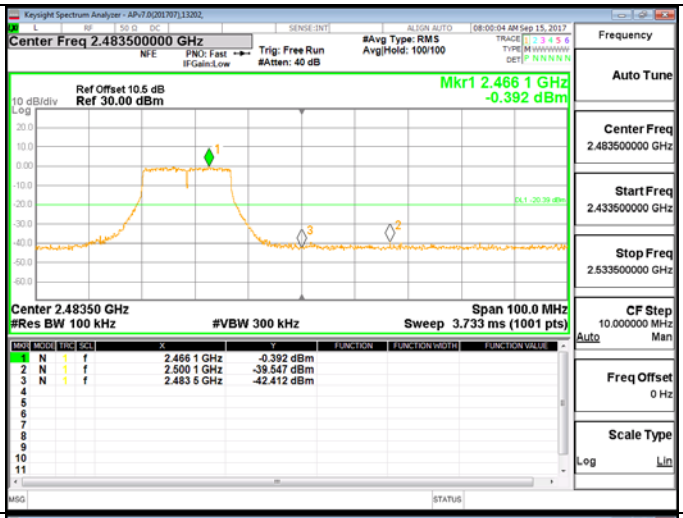
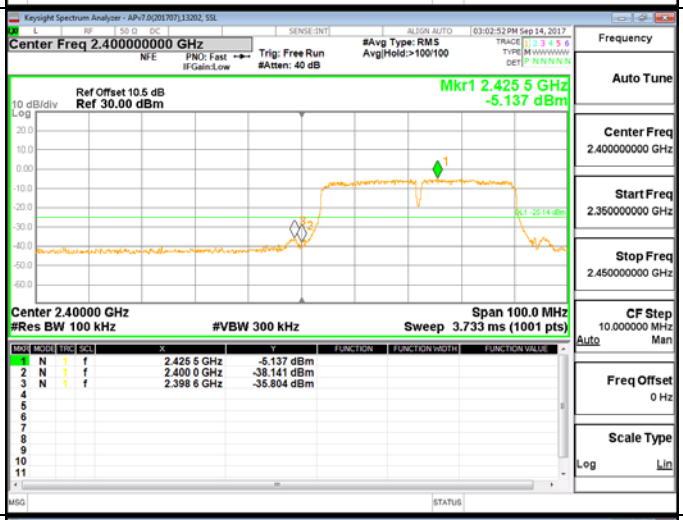
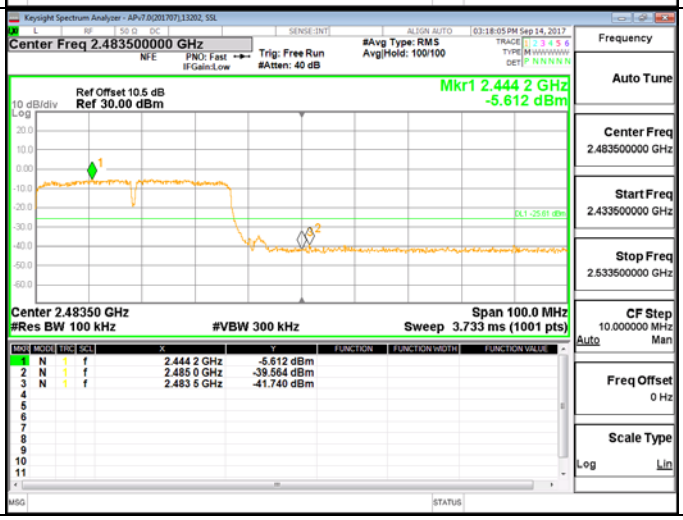
Temperature: 27°C
Relative Humidity: 60%
Test Voltage: 3.8Vdc

RESULTS

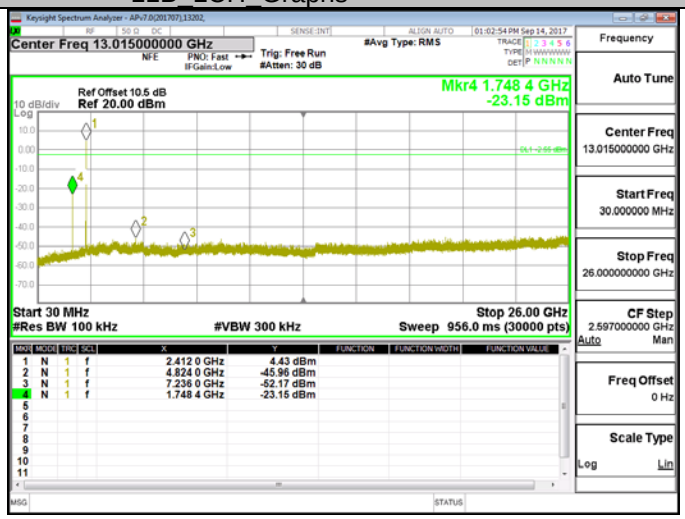
Band-edge:

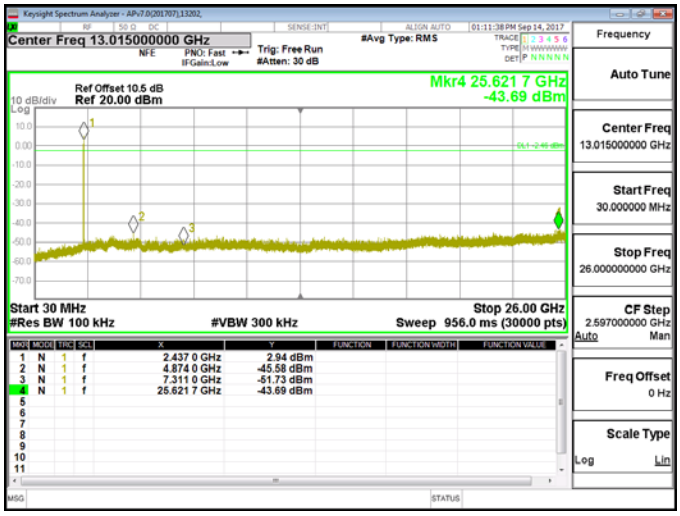
		Graphs	
11B/LCH			
11B/HCH			

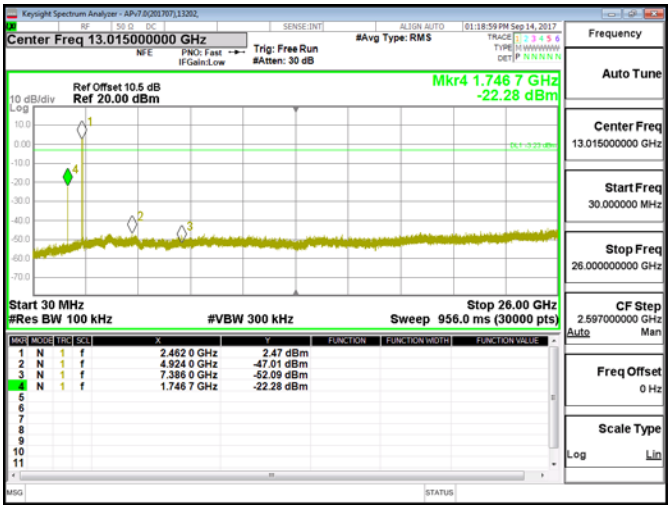
11G/LCH			
11G/HCH			
11N20SISO/LCH			

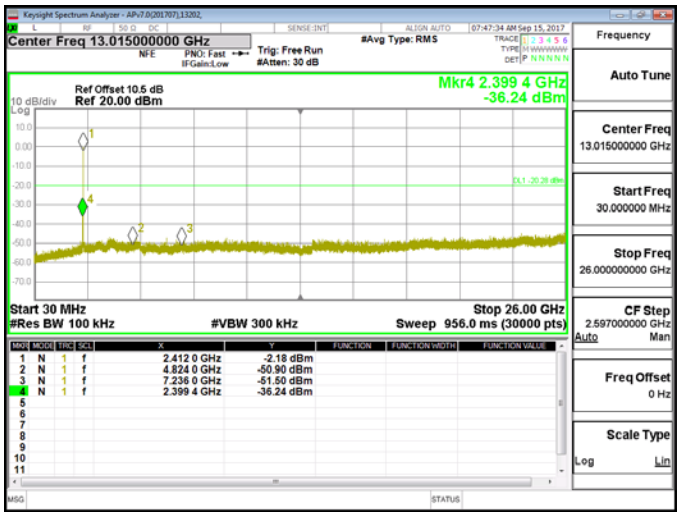
11N20SISO/HCH			
11N20SISO/LCH			
11N20SISO/HCH			

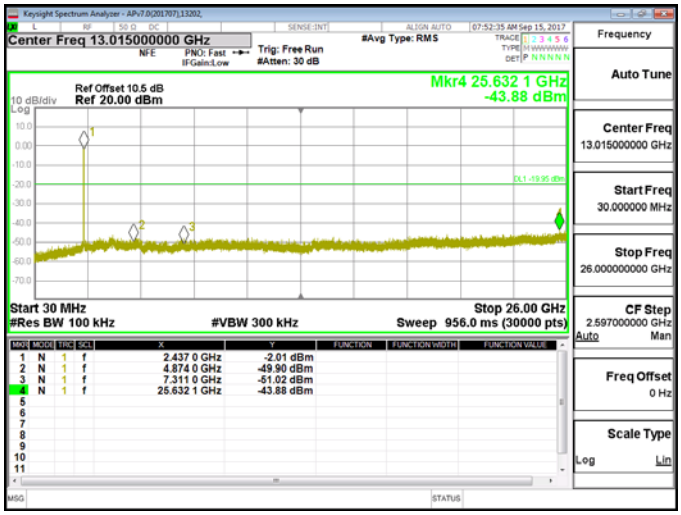
Spurious Emissions:

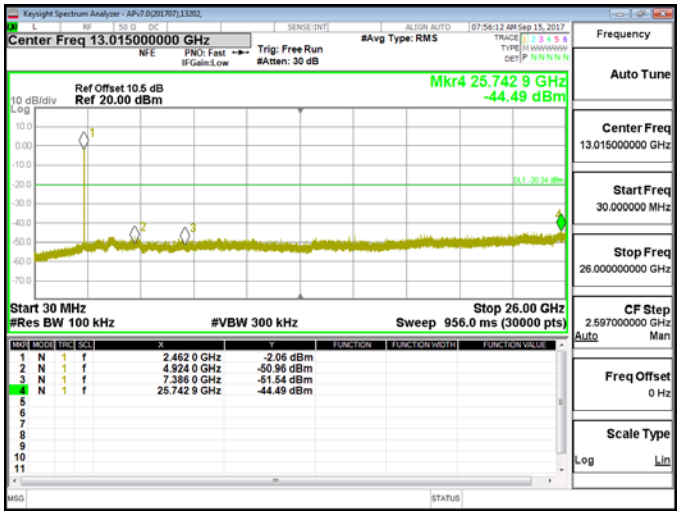
11B_LCH_Graphs	
Puw/11B/LCH	

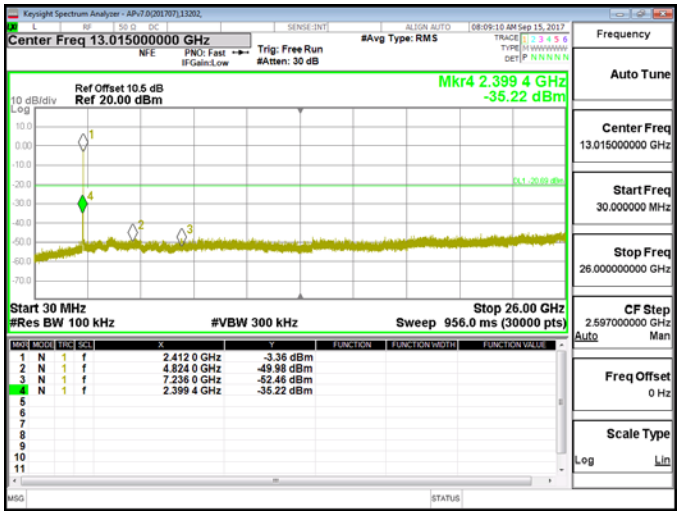
11B_MCH_Graphs	
Puw/11B/MCH	

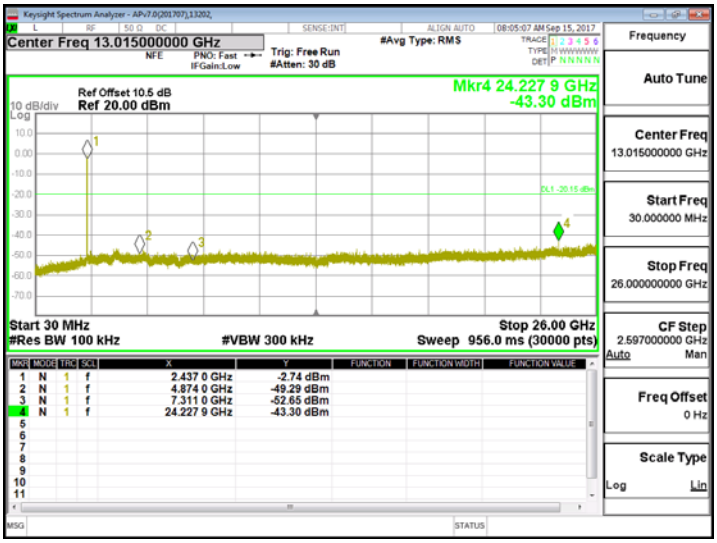
11B_HCH_Graphs	
Puw/11B/HCH	

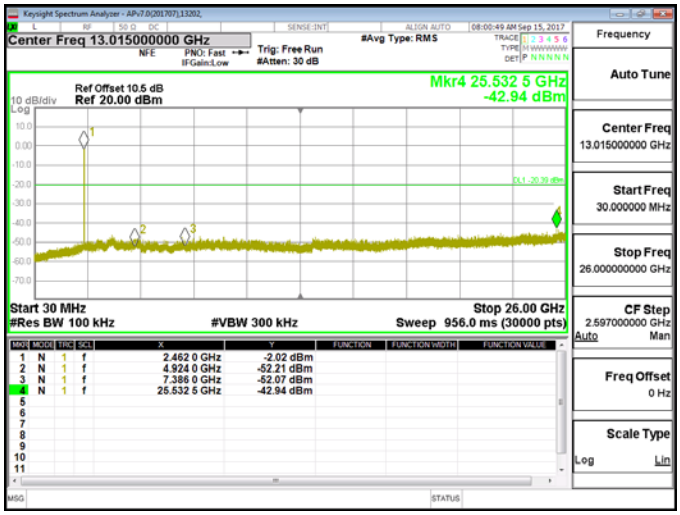
11G_LCH_Graphs	
Puw/11G/LCH	

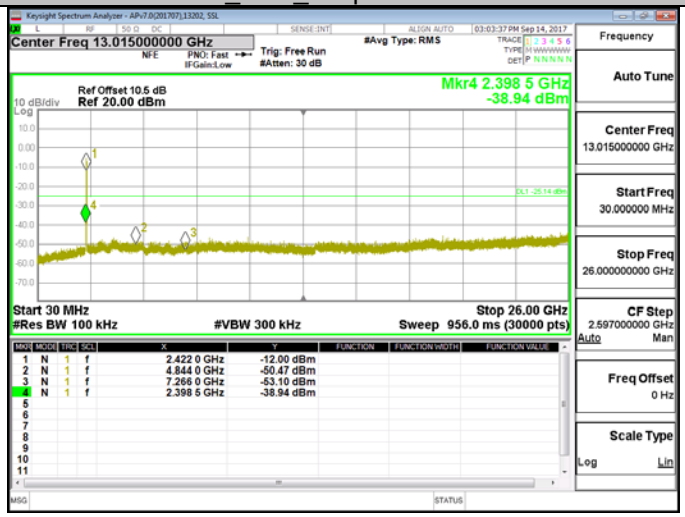
11G_MCH_Graphs	
Puw/11G/MCH	

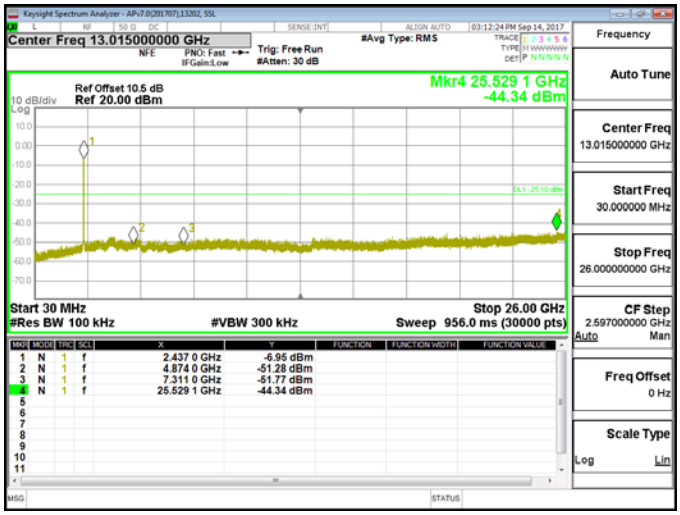
11G_HCH_Graphs	
Puw/11G/HCH	

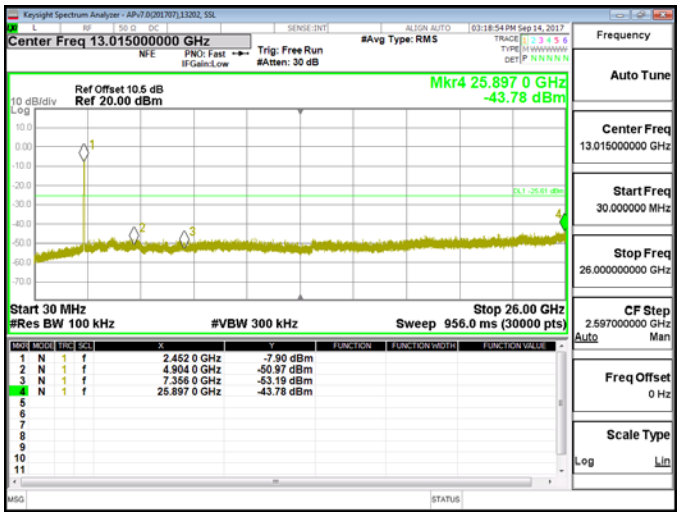
11N20SISO_LCH_Graphs	
Puw/11N20SISO/LCH	

11N20SISO_MCH_Graphs	
Puw/11N20SISO/MCH	

11N20SISO_HCH_Graphs	
Puw/11N20SISO/HCH	

11N40SISO_LCH_Graphs	
Puw/11N40SISO/LCH	

11N40SISO_MCH_Graphs	
Puw/11N40SISO/MCH	

11N40SISO_HCH_Graphs	
Puw/11N40SISO/HCH	

8. RADIATED TEST RESULTS

8.1. LIMITS AND PROCEDURE

LIMITS

Please refer to FCC §15.205 and §15.209

Please refer to RSS-GEN Clause 8.9 (Transmitter)

Radiation Disturbance Test Limit for FCC (Class B)(9KHz-1GHz)

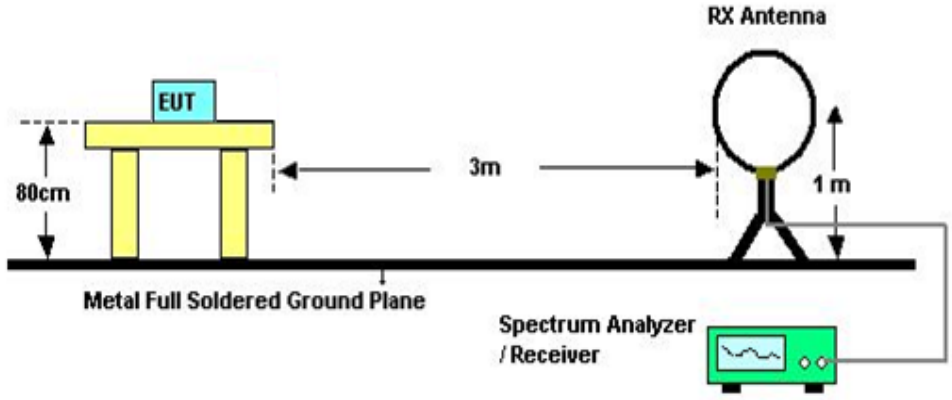
Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
960~1000	500	3

Radiation Disturbance Test Limit for FCC (Above 1G)

Frequency (MHz)	dB(uV/m) (at 3 meters)	
	Peak	Average
Above 1000	74	54

TEST SETUP AND PROCEDURE

Below 30MHz



The setting of the spectrum analyser

RBW	200Hz (From 9kHz to 0.15MHz)/ 9KHz (From 0.15MHz to 30MHz)
VBW	200Hz (From 9kHz to 0.15MHz)/ 9KHz (From 0.15MHz to 30MHz)
Sweep	Auto
Detector	Peak/QP/ Average
Trace	Max hold

1. The testing follows the guidelines in ANSI C63.10-2013

2. The EUT was arranged to its worst case and then 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. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

3. The EUT was placed on a turntable with 0.8 meter above ground.

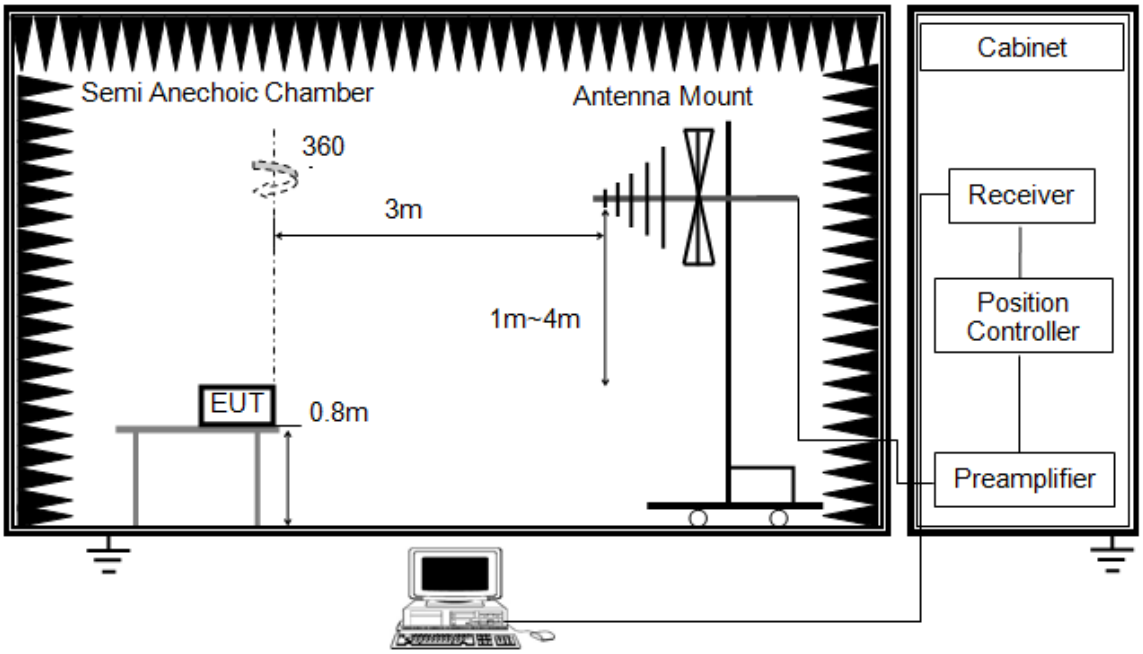
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.

5. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level

6. For measurement below 1GHz, 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. 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. For the actual test configuration, please refer to the related item in this test report (Photographs of the Test Configuration)

Below 1G



The setting of the spectrum analyser

RBW	120K
VBW	300K
Sweep	Auto
Detector	Peak/QP
Trace	Max hold

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. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

3. The EUT was placed on a turntable with 0.8 meter above ground.

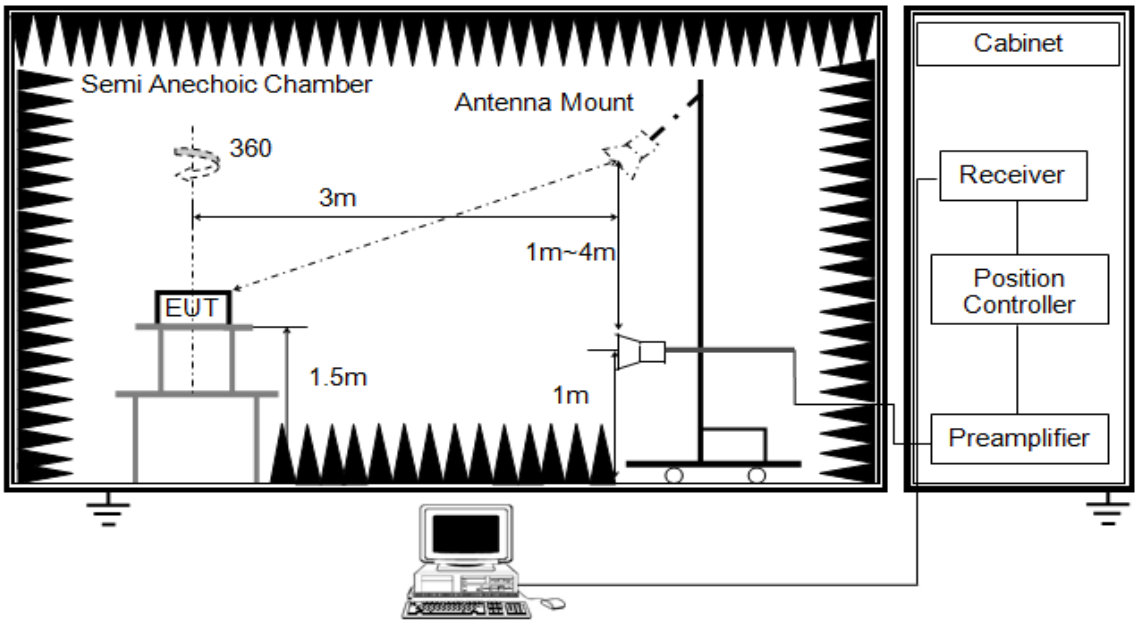
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.

5. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level

6. For measurement below 1GHz, 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. 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. For the actual test configuration, please refer to the related Item in this test report (Photographs of the Test Configuration)

ABOVE 1G



The setting of the spectrum analyser

RBW	1M
VBW	PEAK: 3M AVG: see note 6
Sweep	Auto
Detector	Peak
Trace	Max hold

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. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

3. The EUT was placed on a turntable with 1.5m 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. For measurement above 1GHz, the emission measurement will be measured by the peak detector. This peak level, once corrected, must comply with the limit specified in Section 15.209.

6. For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 3 MHz for peak measurements and 1 MHz resolution bandwidth with 1/T video bandwidth with peak detector，max hold to be run for at least 50 x (1/duty cycle) traces for average measurements.

8. For the actual test configuration, please refer to the related item in this test report (Photographs of the Test Configuration)

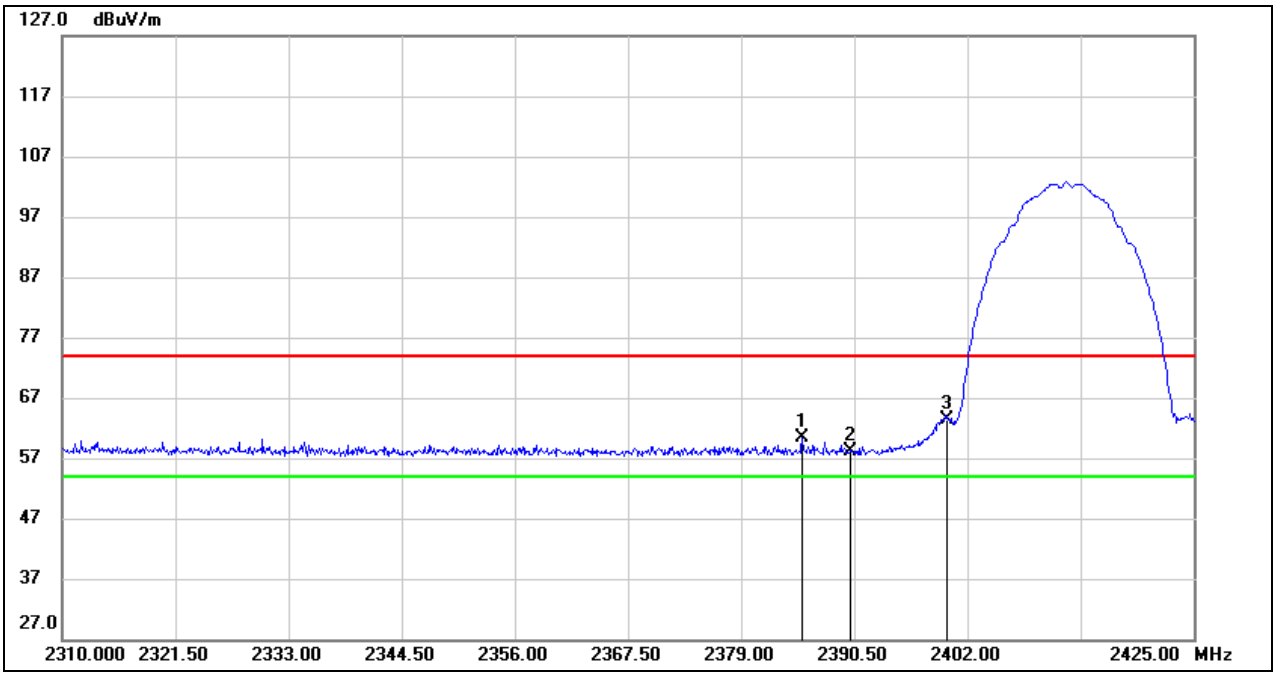
X axis, Y axis, Z axis positions: please refer to Setup Photo.

Note: For all radiated test, EUT in each of three orthogonal axis emissions had been tested, but only the worst case (X axis) data recorded in the report.

8.2. RESTRICTED BANDEDGE

RESTRICTED BANDEDGE (11b LOW CHANNEL, HORIZONTAL)

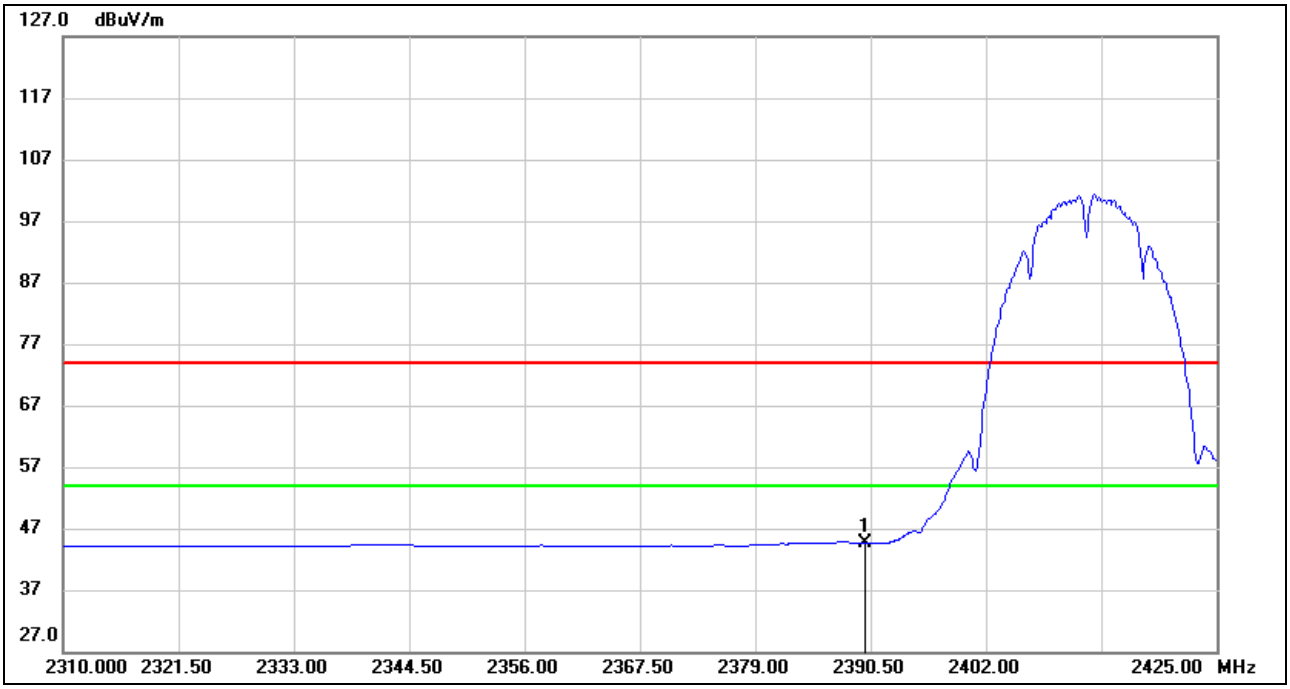
PEAK



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2385.210	27.04	33.28	60.32	74.00	-13.68	peak
2	2390.000	24.85	33.24	58.09	74.00	-15.91	peak
3	2400.000	30.33	33.17	63.50	74.00	-10.50	peak

Note:
1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

AVERAGE

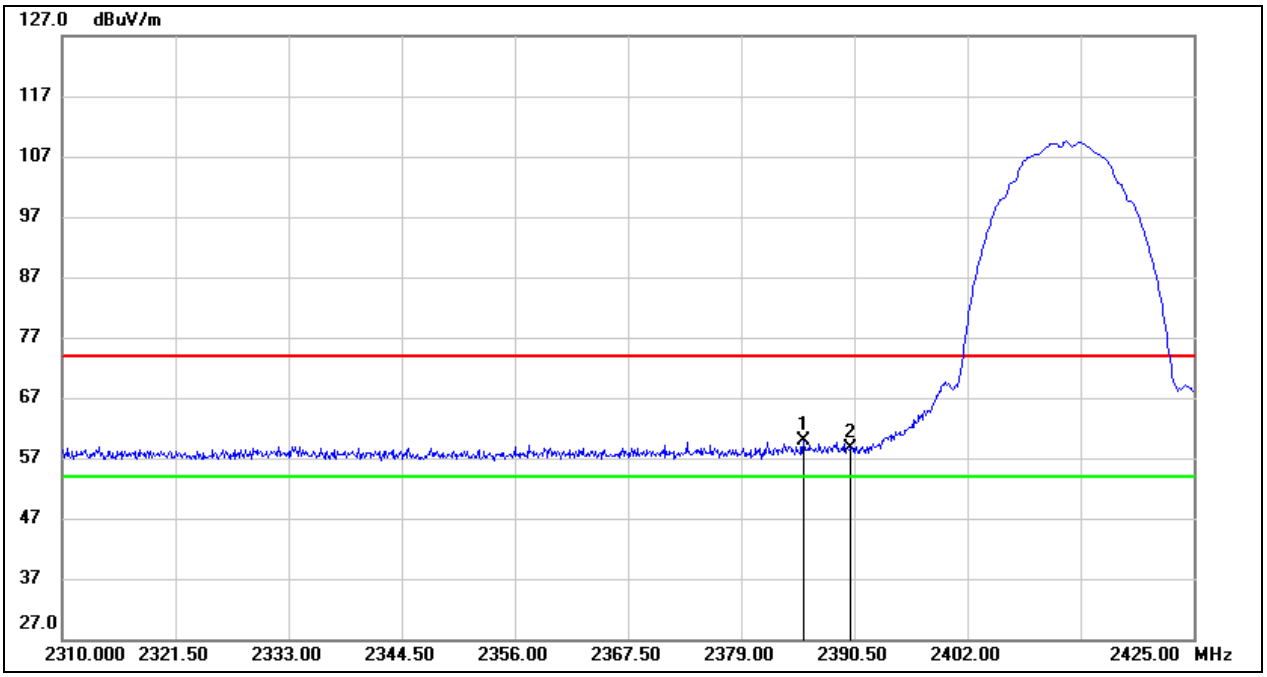


No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2390.000	11.54	33.14	44.68	54.00	-9.32	AVG

Note:
1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

RESTRICTED BANDEDGE (11b LOW CHANNEL, VERTICAL)

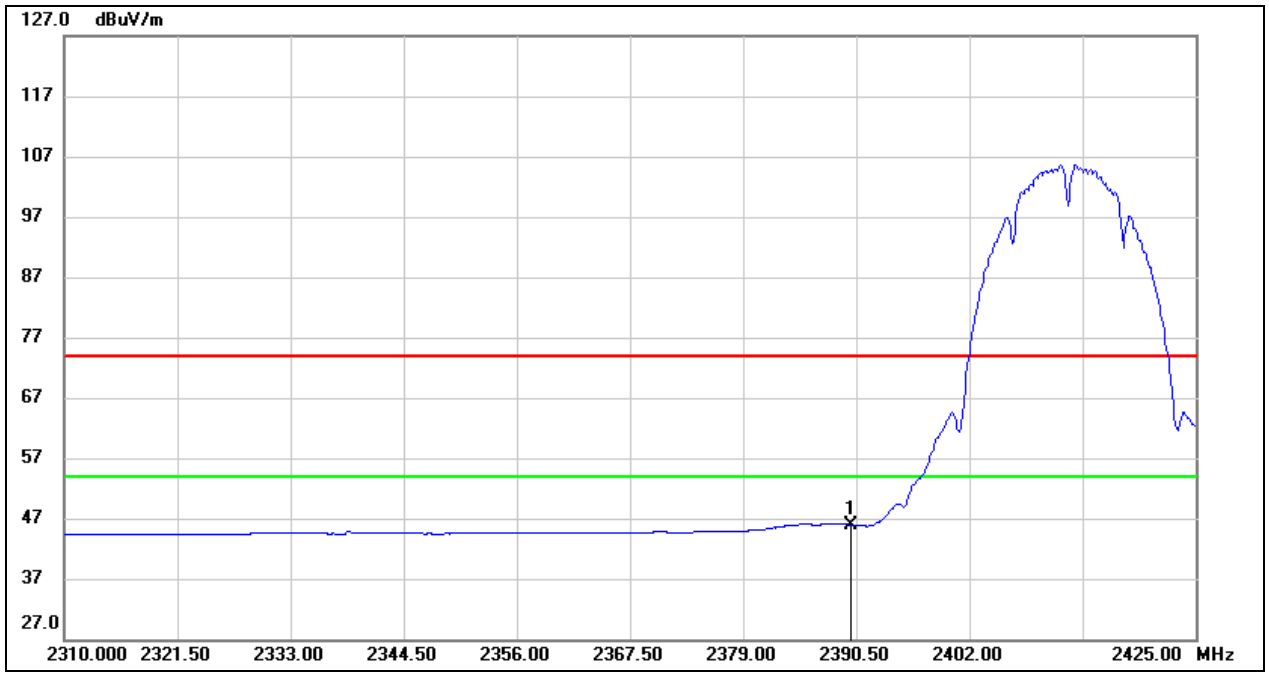
PEAK



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2385.325	26.70	33.18	59.88	74.00	-14.12	peak
2	2390.000	25.50	33.14	58.64	74.00	-15.36	peak

Note:
1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

AVERAGE

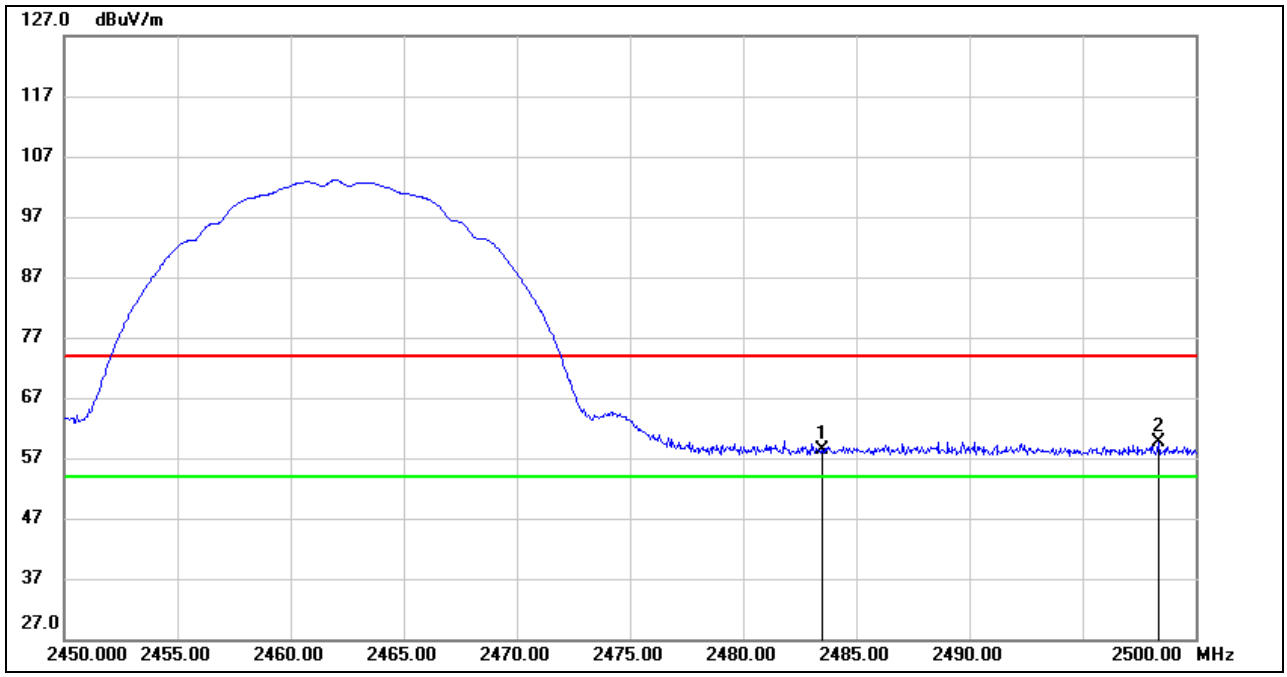


No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2390.000	12.71	33.24	45.95	54.00	-8.05	AVG

Note:
1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

RESTRICTED BANDEDGE (11b HIGH CHANNEL, HORIZONTAL)

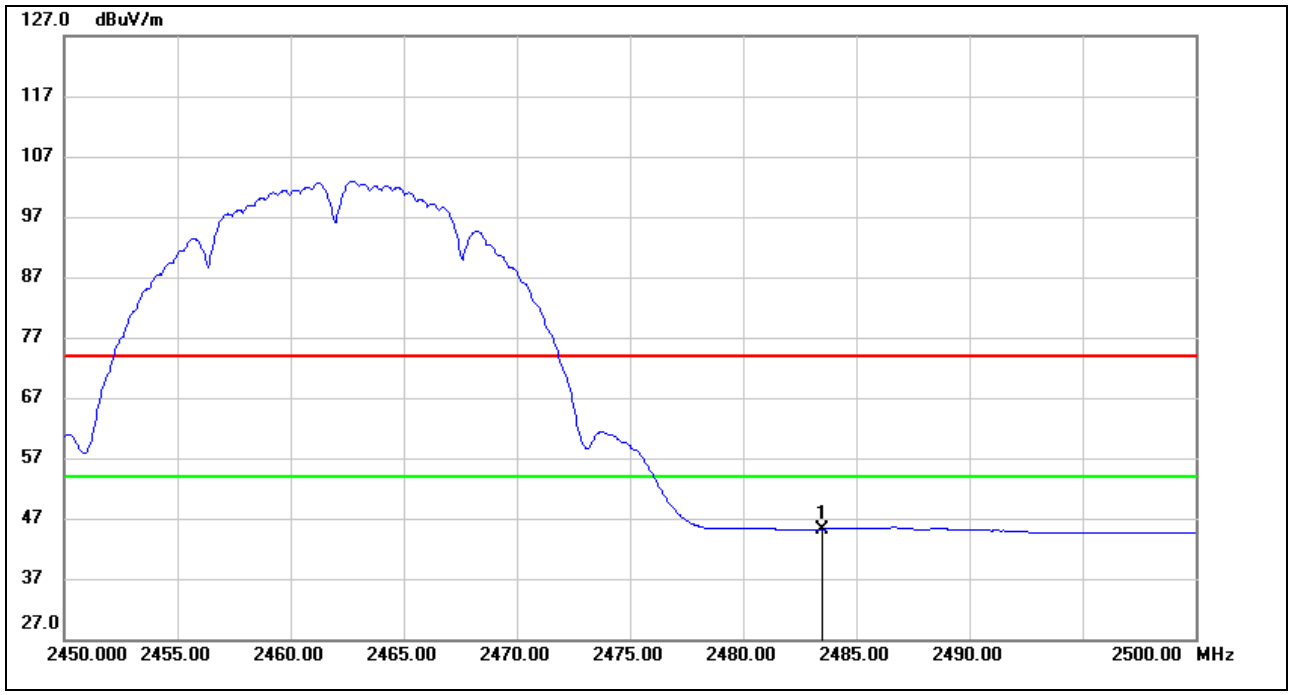
PEAK



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	25.61	32.88	58.49	74.00	-15.51	peak
2	2498.350	26.84	32.87	59.71	74.00	-14.29	peak

Note:
1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

AVERAGE

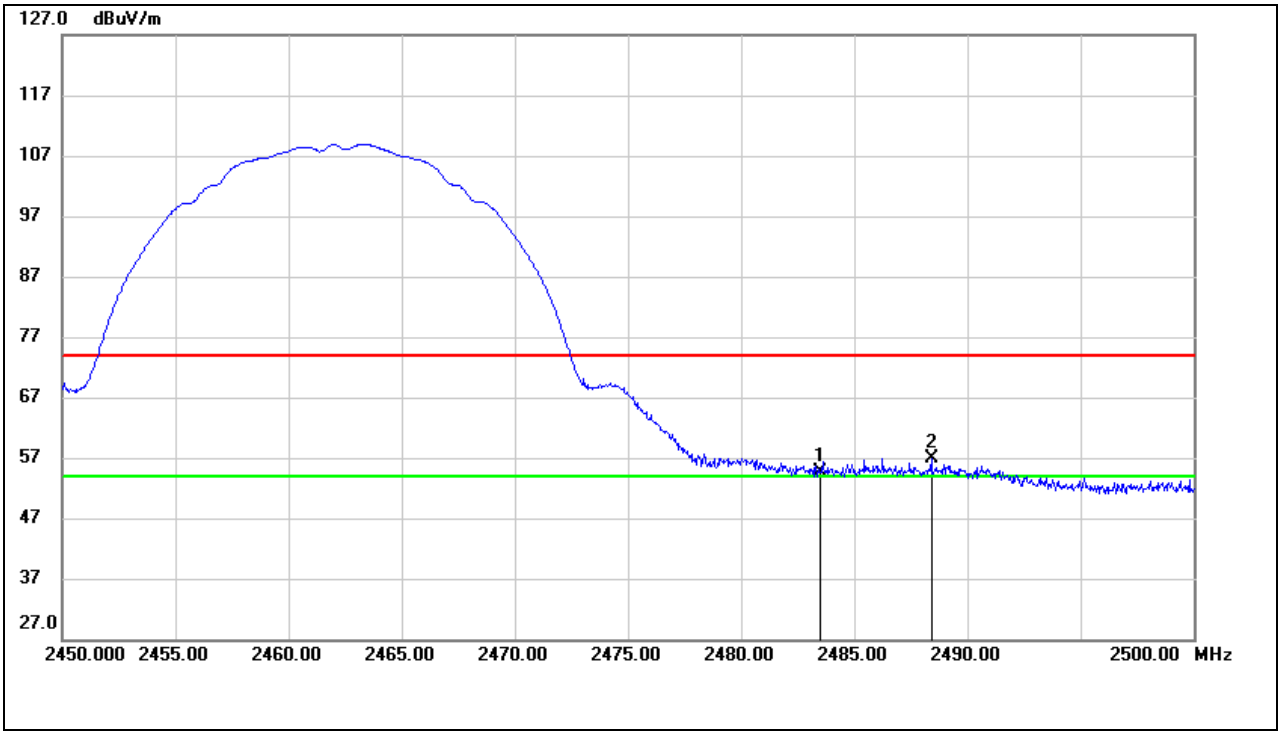


No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	12.45	32.78	45.23	54.00	-8.77	AVG

Note:
1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

RESTRICTED BANDEDGE (11b HIGH CHANNEL, VERTICAL)

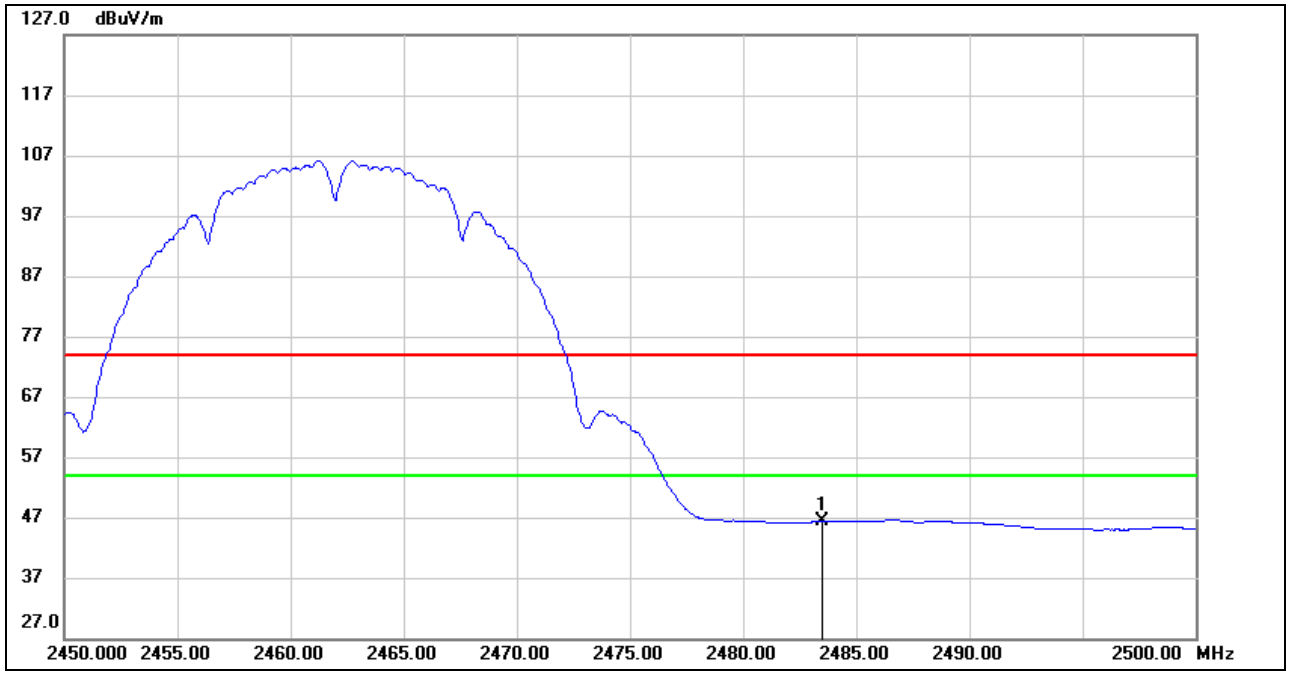
PEAK



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	21.96	32.78	54.74	74.00	-19.26	peak
2	2488.400	24.11	32.78	56.89	74.00	-17.11	peak

Note:
1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

AVERAGE

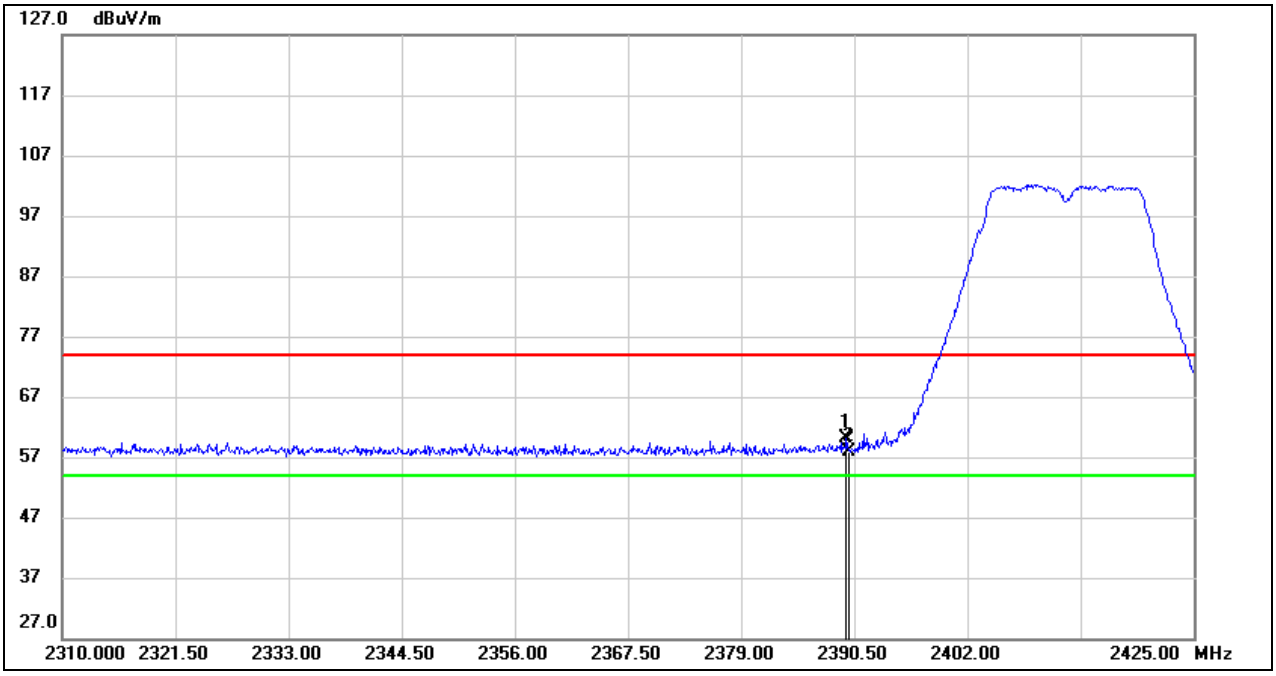


No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	13.38	32.88	46.26	54.00	-7.74	AVG

Note:
1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

RESTRICTED BANDEDGE (11g LOW CHANNEL, HORIZONTAL)

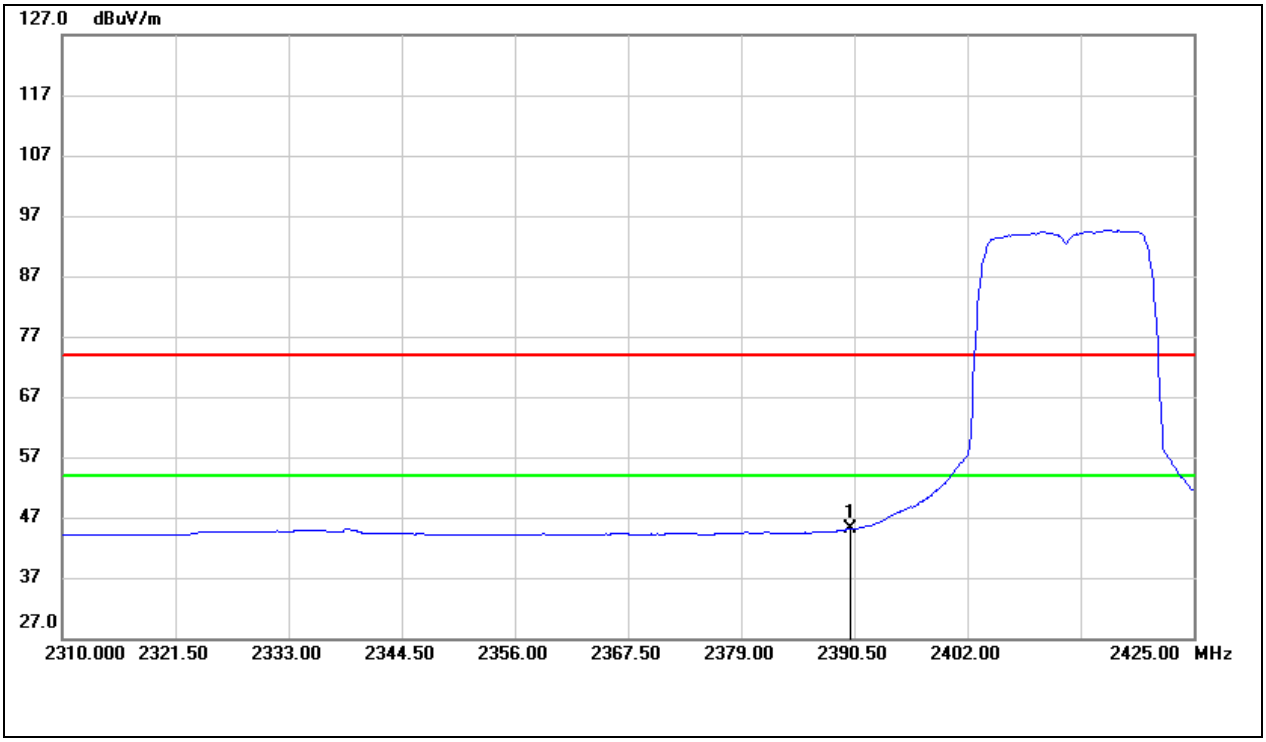
PEAK



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2389.695	26.88	33.24	60.12	74.00	-13.88	peak
2	2390.000	24.75	33.24	57.99	74.00	-16.01	peak

1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

AVERAGE

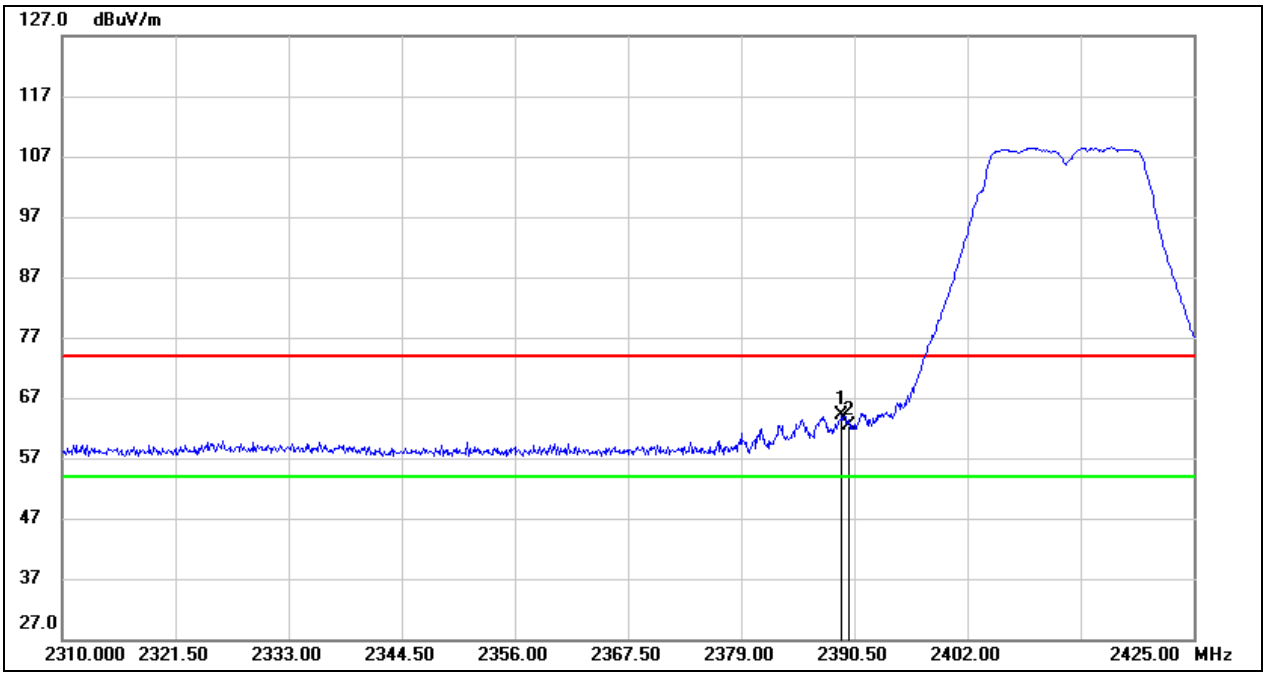


No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2390.000	11.94	33.14	45.08	54.00	-8.92	AVG

Note:
1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

RESTRICTED BANDEDGE (11g LOW CHANNEL, VERTICAL)

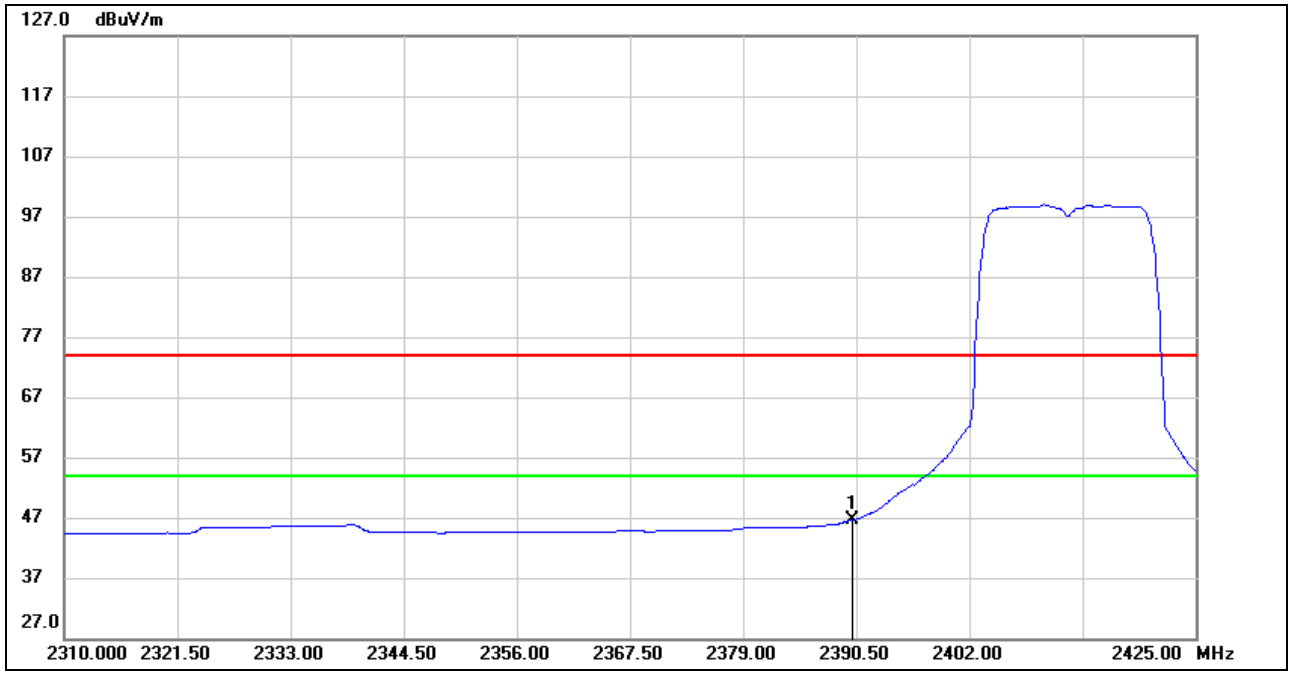
PEAK



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2389.235	30.88	33.15	64.03	74.00	-9.97	peak
2	2390.000	29.33	33.14	62.47	74.00	-11.53	peak

1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

AVERAGE

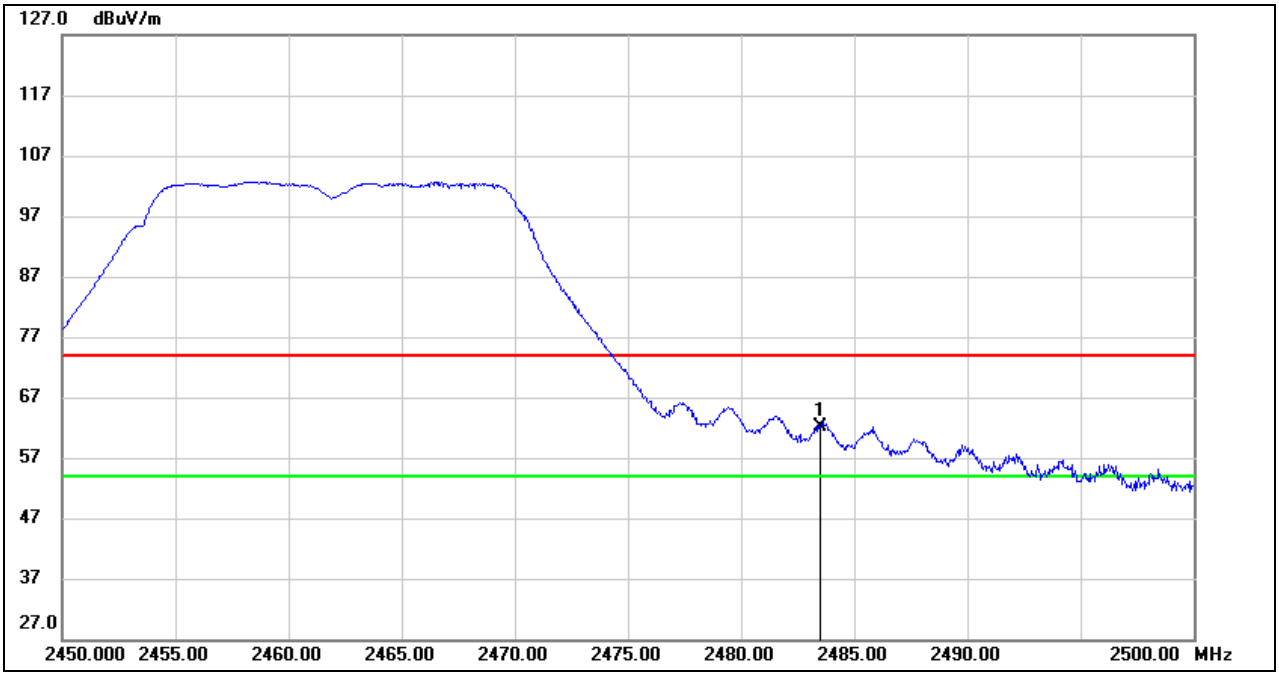


No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2390.000	13.36	33.24	46.60	54.00	-7.40	AVG

Note:
1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

RESTRICTED BANDEDGE (11g HIGH CHANNEL, HORIZONTAL)

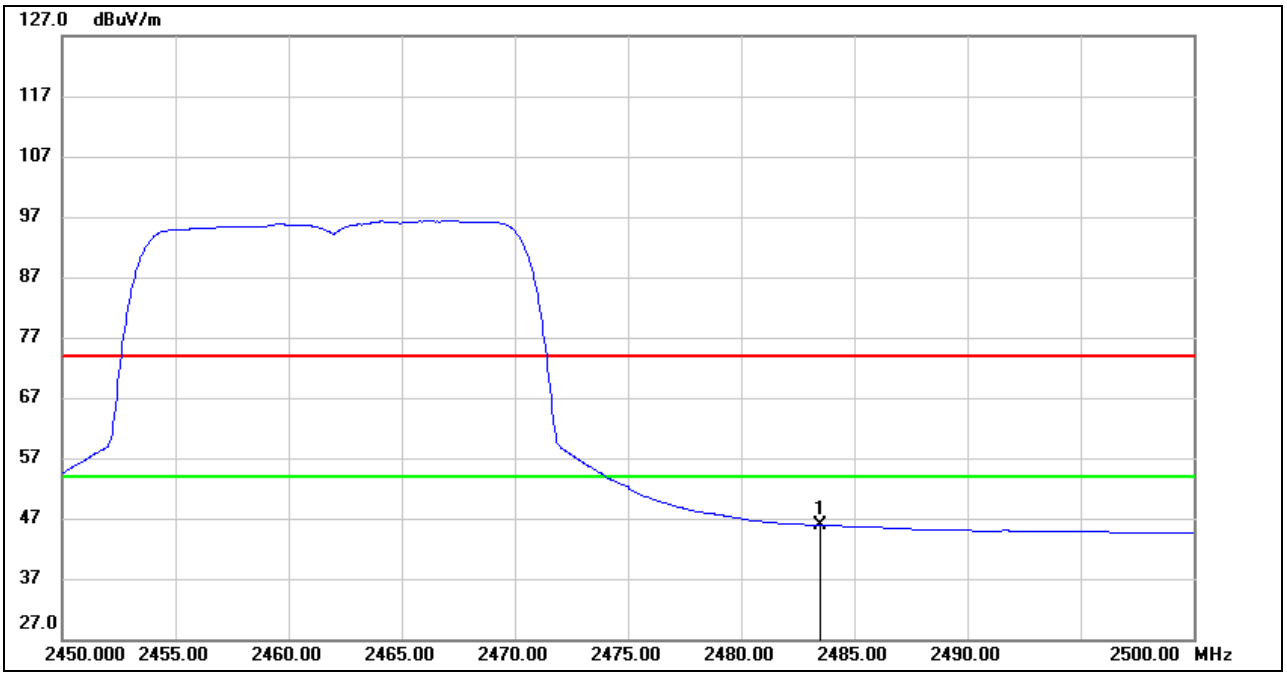
PEAK



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	29.34	32.88	62.22	74.00	-11.78	peak

1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

AVERAGE

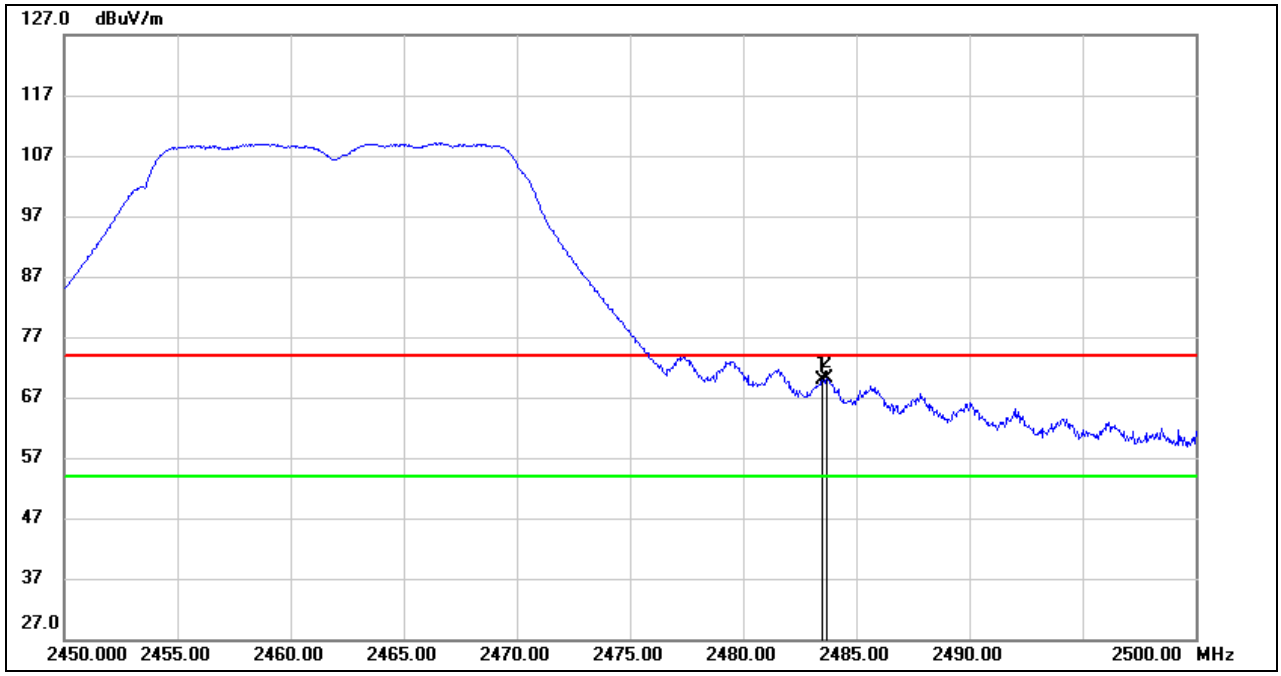


No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	13.12	32.78	45.90	54.00	-8.10	AVG

1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

RESTRICTED BANDEDGE (11g HIGH CHANNEL, VERTICAL)

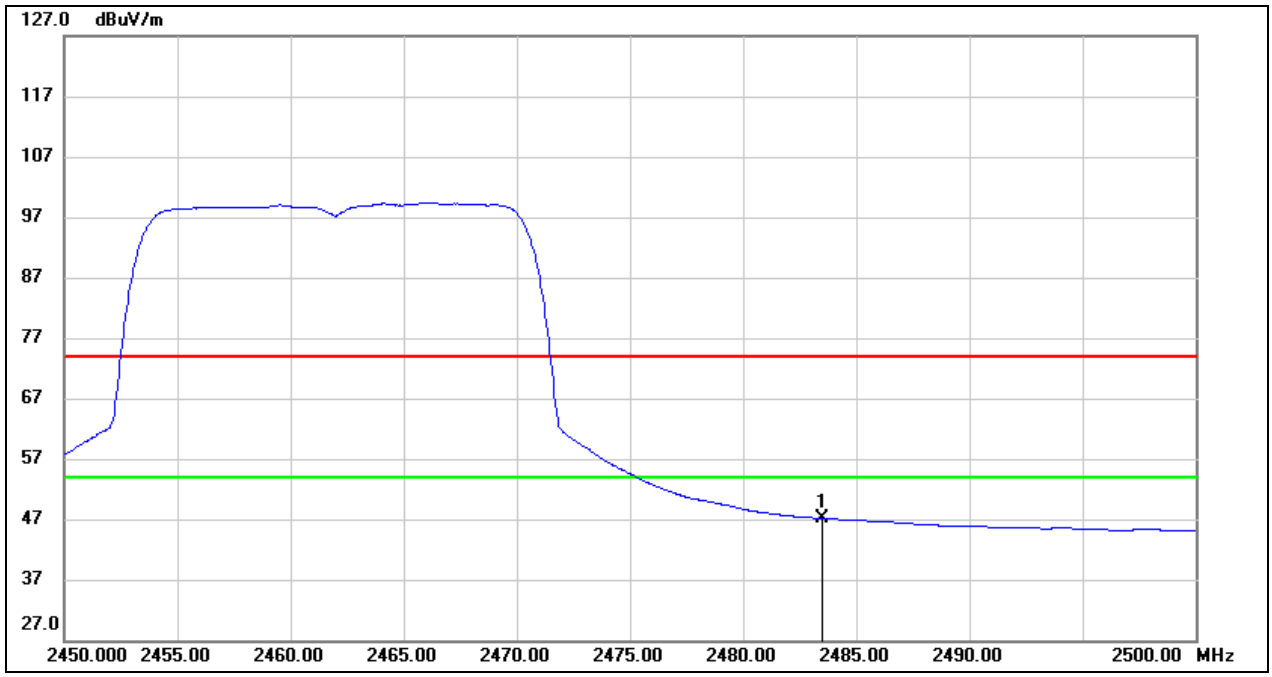
PEAK



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	37.13	32.78	69.91	74.00	-4.09	peak
2	2483.700	37.29	32.78	70.07	74.00	-3.93	peak

Note:
1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

AVERAGE

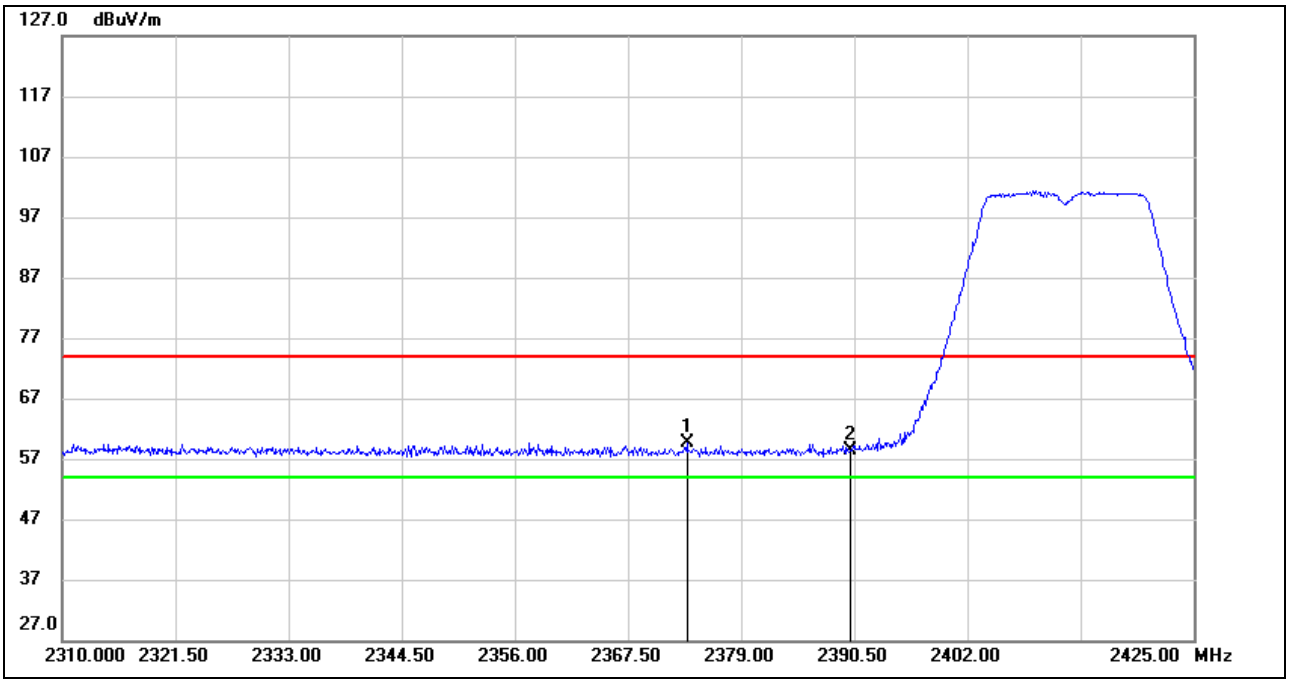


No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	14.23	32.88	47.11	54.00	-6.89	AVG

Note:
1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

RESTRICTED BANDEDGE (11n/20 LOW CHANNEL, HORIZONTAL)

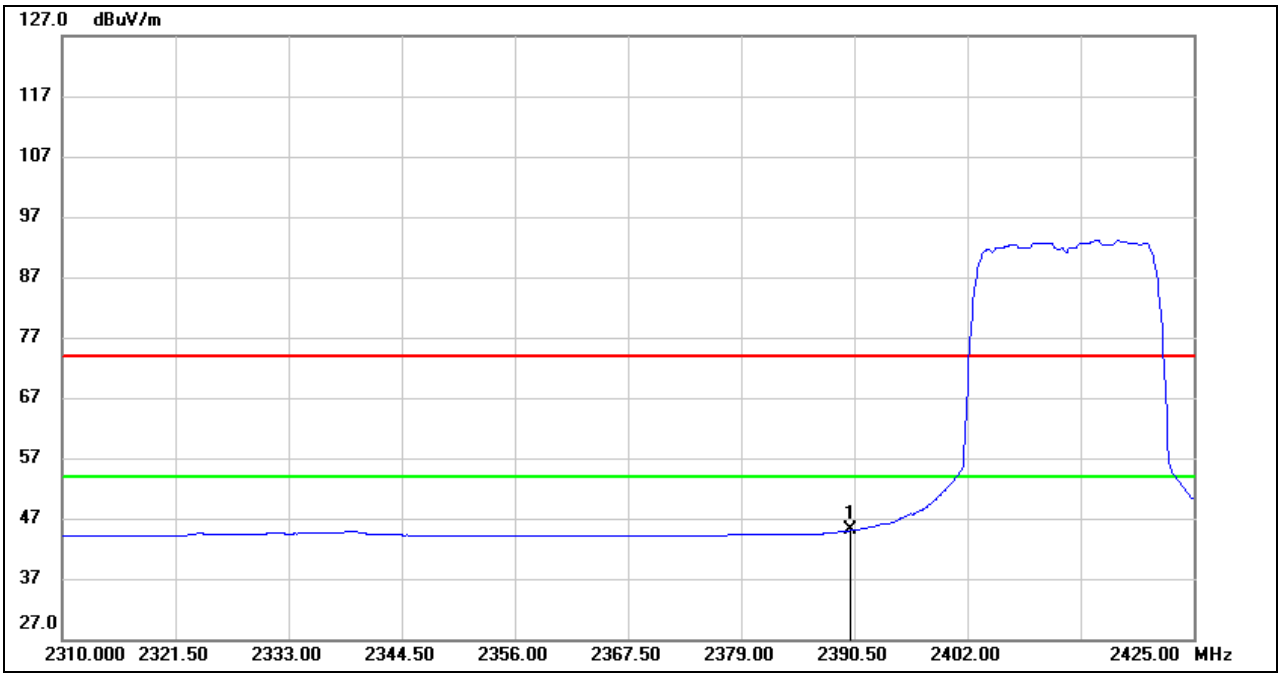
PEAK



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2373.480	26.16	33.36	59.52	74.00	-14.48	peak
2	2390.000	25.04	33.24	58.28	74.00	-15.72	peak

Note:
1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

AVERAGE

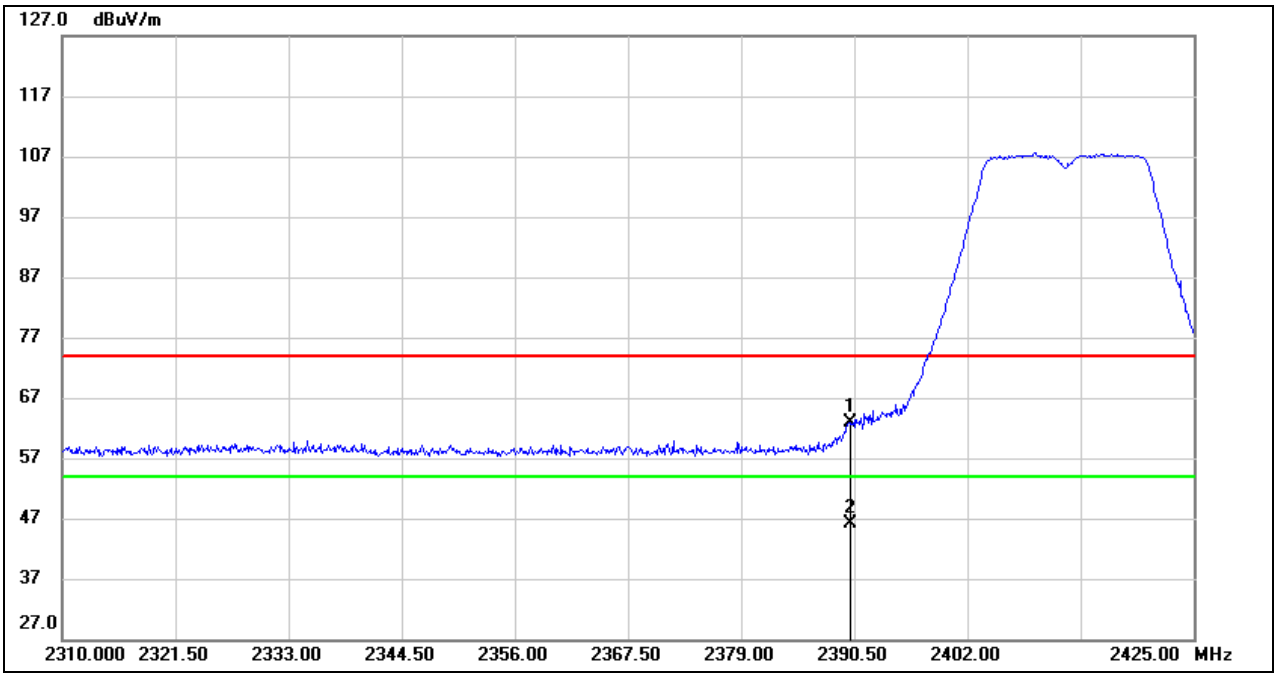


No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2390.000	11.88	33.14	45.02	54.00	-8.98	AVG

Note:
1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

RESTRICTED BANDEDGE (11n/20 LOW CHANNEL, VERTICAL)

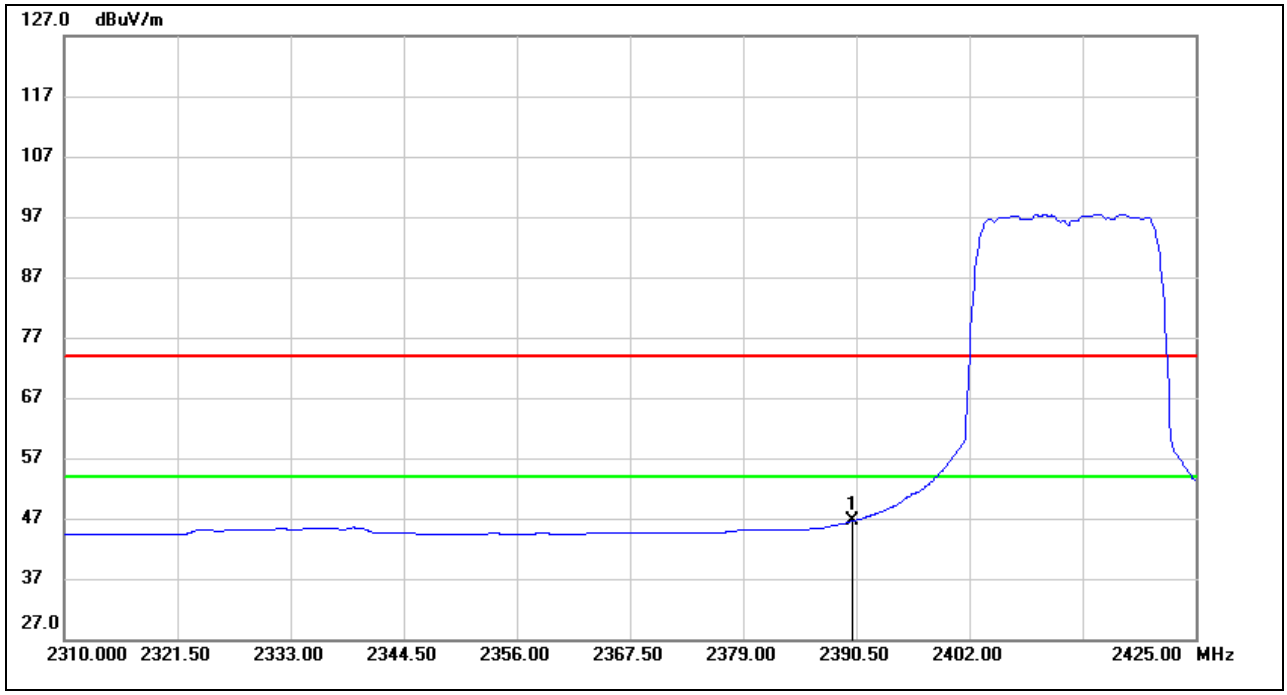
PEAK



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2390.000	29.68	33.14	62.82	74.00	-11.18	peak
2	2390.000	13.10	33.14	46.24	54.00	-7.76	AVG

Note:
1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

AVERAGE

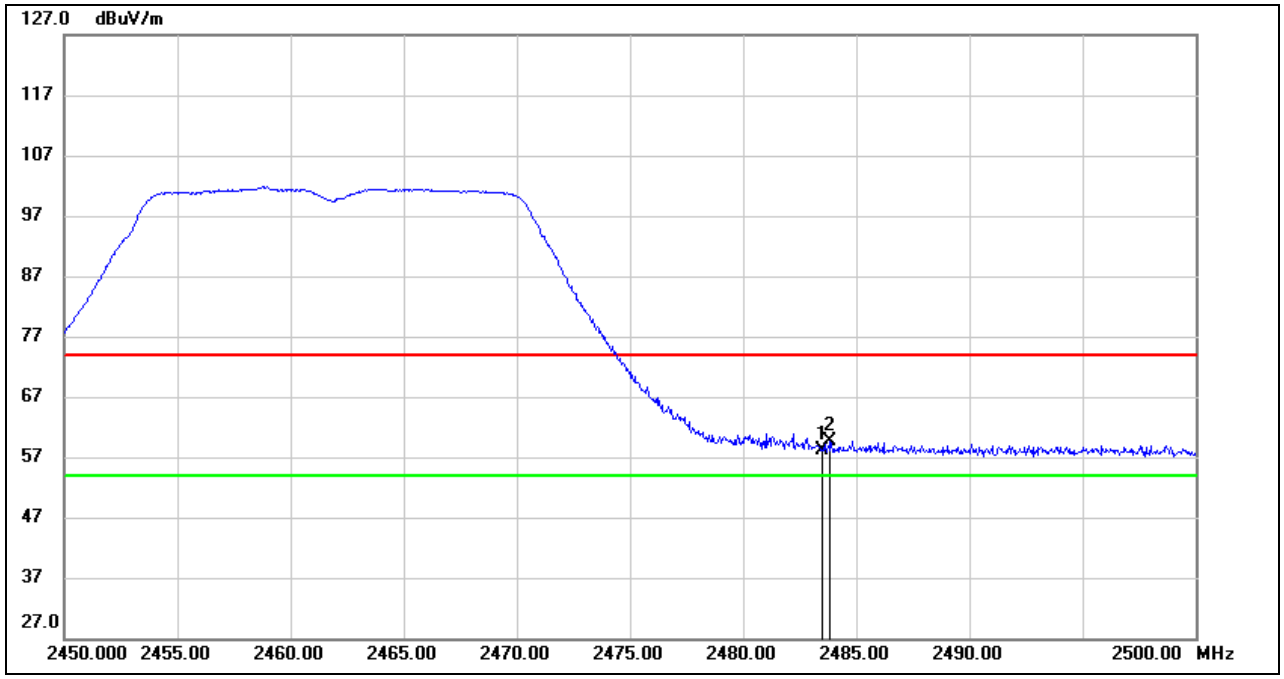


No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2390.000	13.33	33.24	46.57	54.00	-7.43	AVG

Note:
1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

RESTRICTED BANDEDGE (11n/20 HIGH CHANNEL, HORIZONTAL)

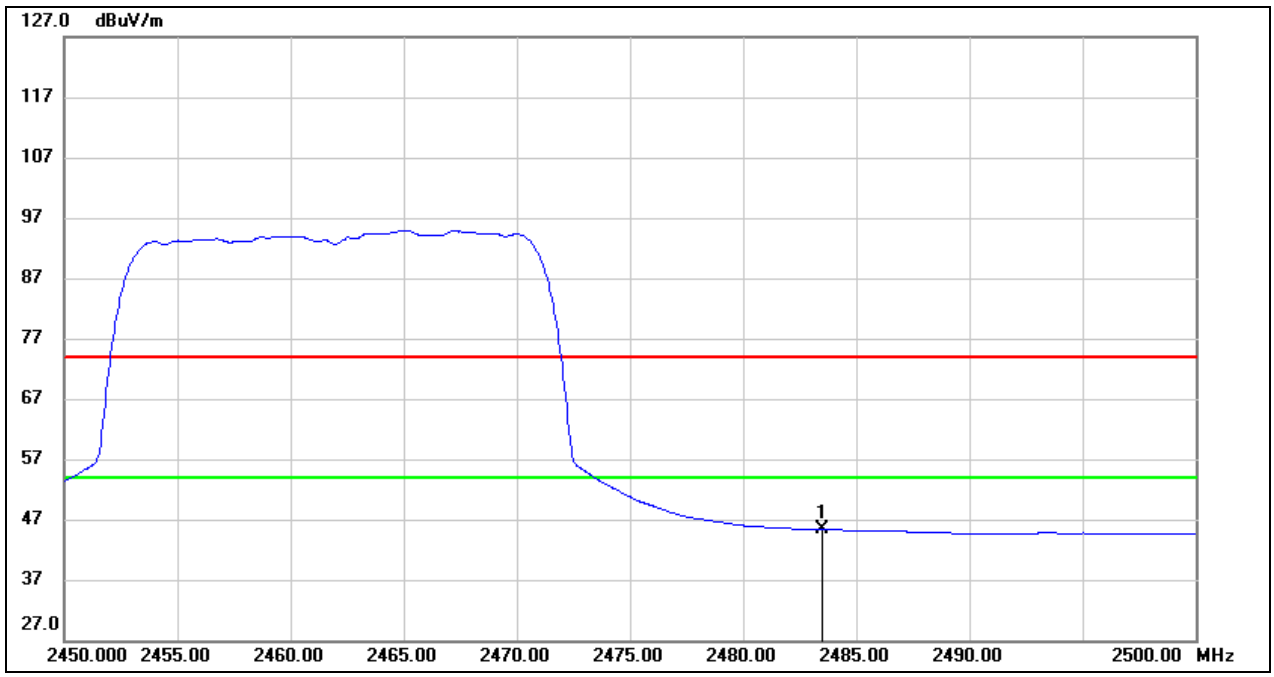
PEAK



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	25.17	32.88	58.05	74.00	-15.95	peak
2	2483.850	26.74	32.88	59.62	74.00	-14.38	peak

Note:
1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

AVERAGE

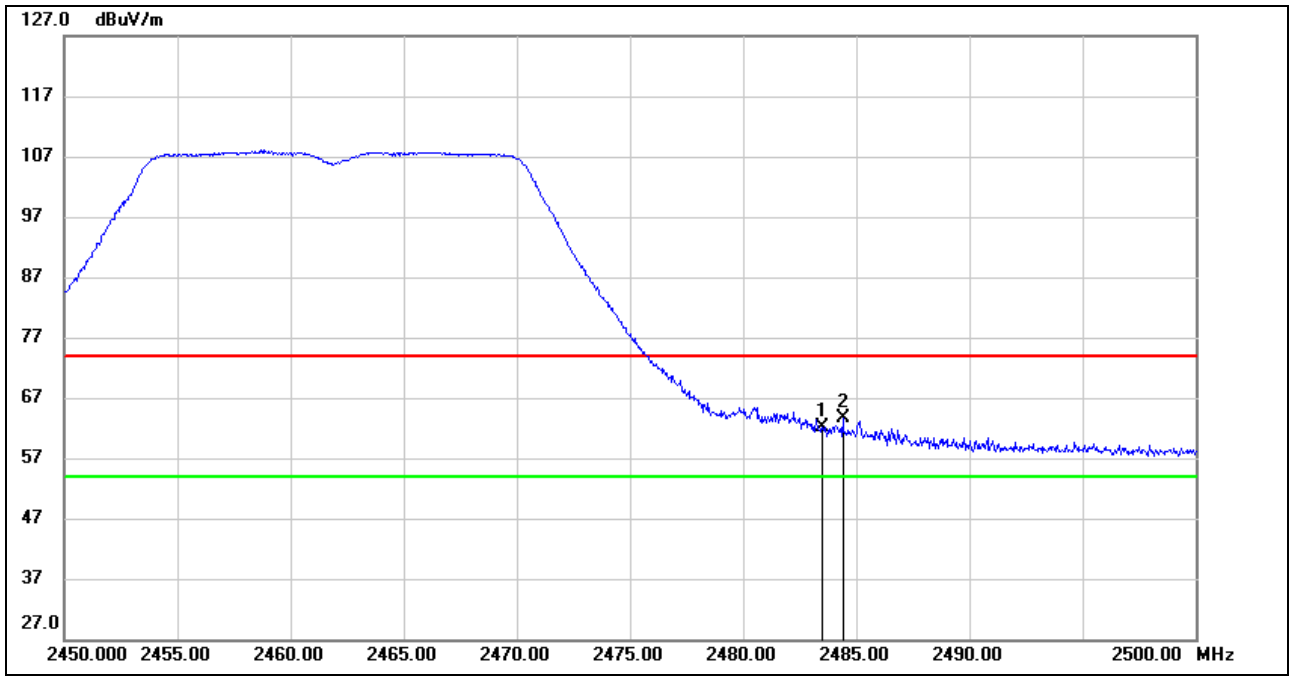


No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	12.55	32.78	45.33	54.00	-8.67	AVG

Note:
1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

RESTRICTED BANDEDGE (11n/20 HIGH CHANNEL, VERTICAL)

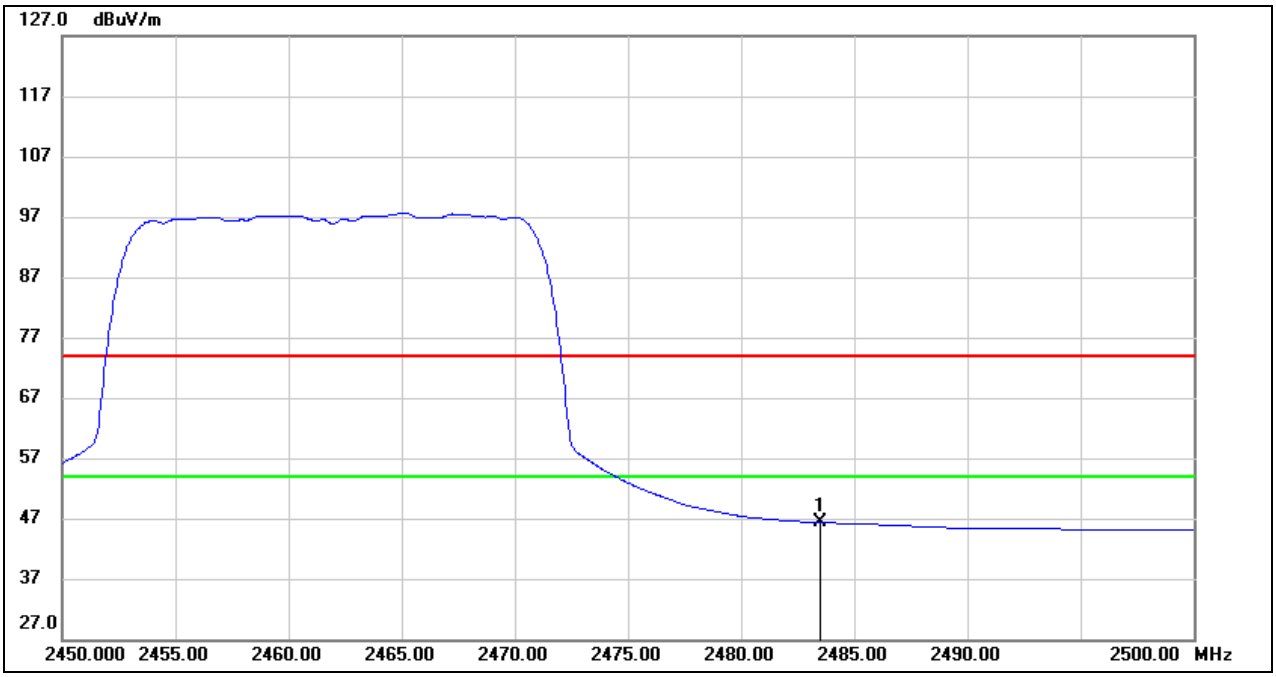
PEAK



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	29.45	32.78	62.23	74.00	-11.77	peak
2	2484.400	30.89	32.78	63.67	74.00	-10.33	peak

Note:
1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

AVERAGE

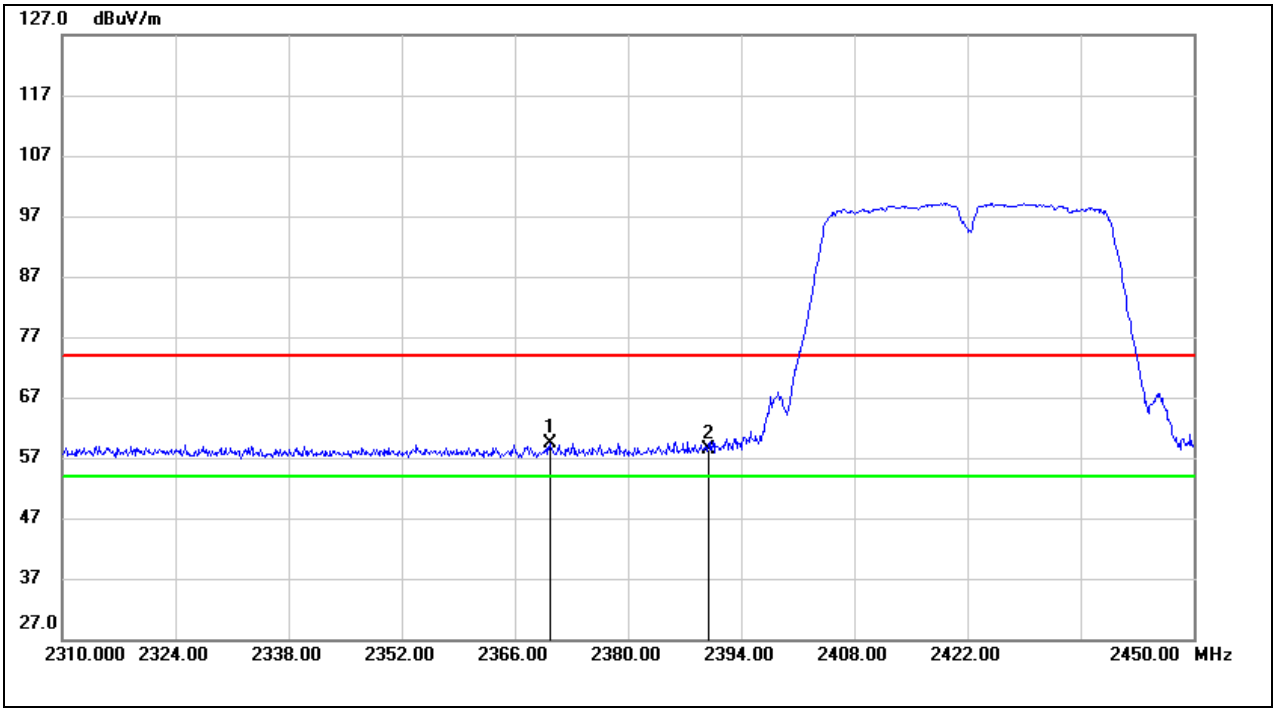


No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	13.39	32.88	46.27	54.00	-7.73	AVG

Note:
1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

RESTRICTED BANDEDGE (11n/40 LOW CHANNEL, HORIZONTAL)

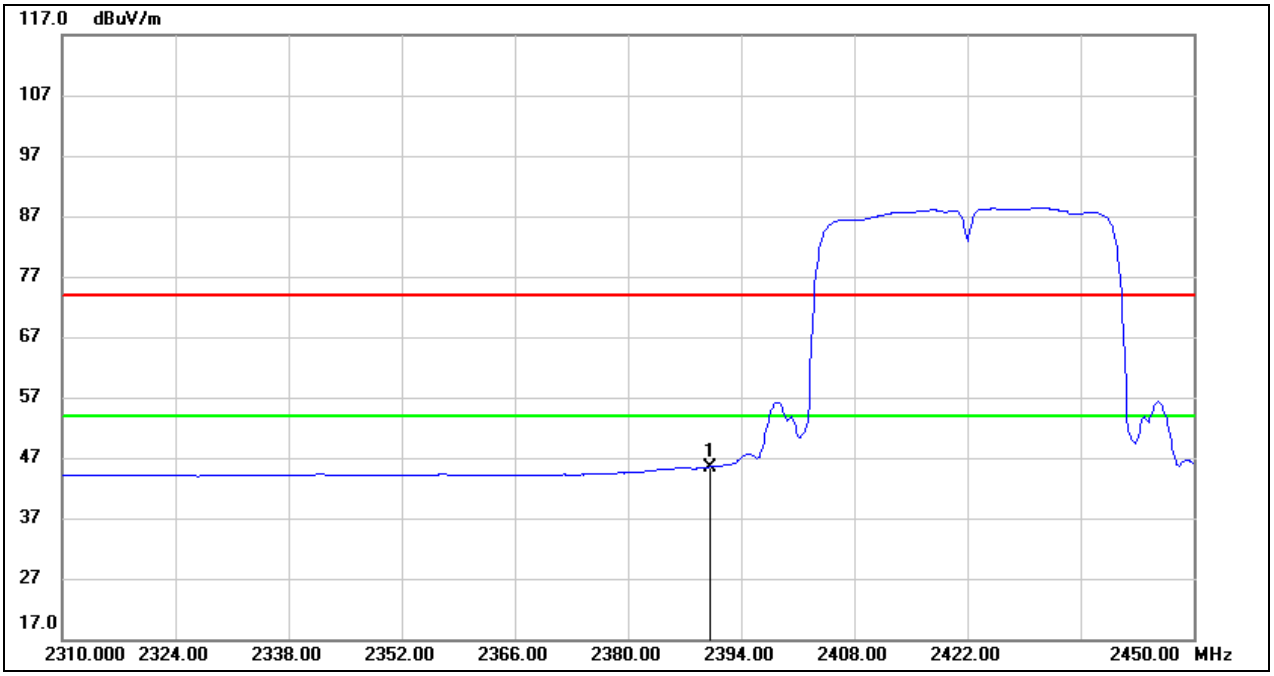
PEAK



No.	Frequency		Correct	Result	Limit	Margin	Remark
	(MHz)		dB/m	(dBuV/m)	(dBuV/m)	(dB)	
1	2370.340	**Reading**	33.29	59.40	74.00	-14.60	peak
2	2390.000	**(dBuV/m)**	33.14	58.30	74.00	-15.70	peak

Note:
1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

AVERAGE

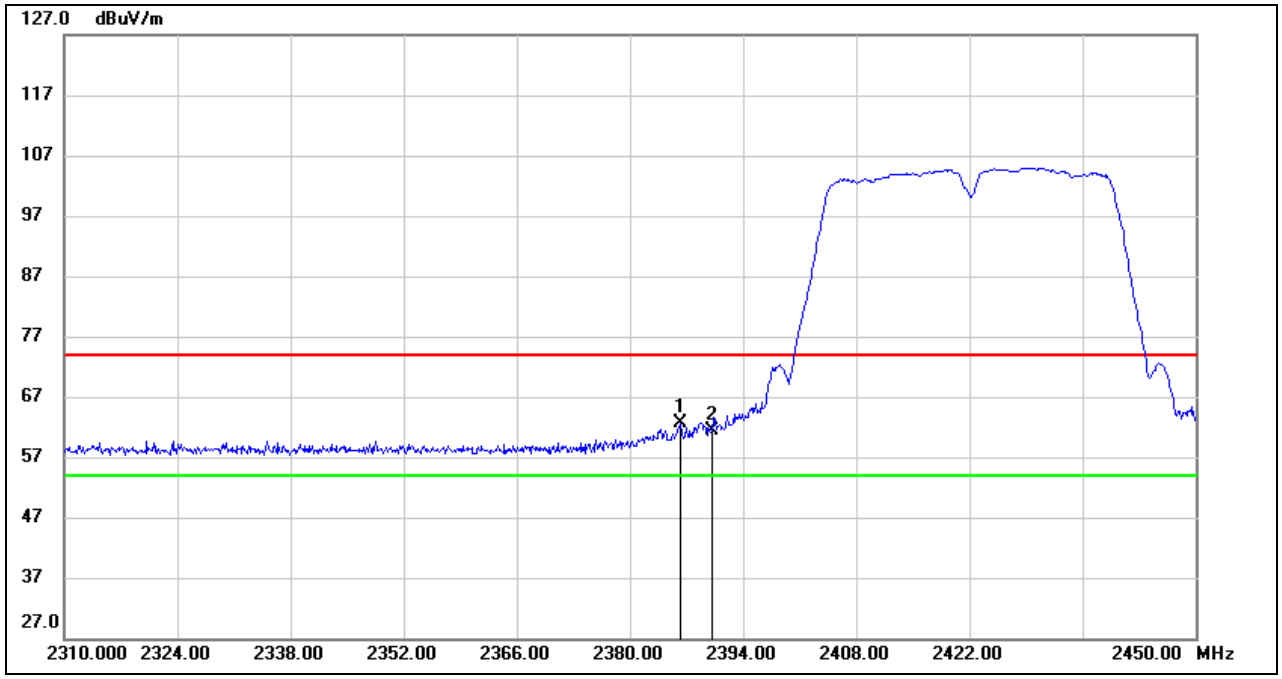


No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2390.000	12.36	33.14	45.50	54.00	-8.50	AVG

Note:
1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

RESTRICTED BANDEDGE (11n/40 LOW CHANNEL, VERTICAL)

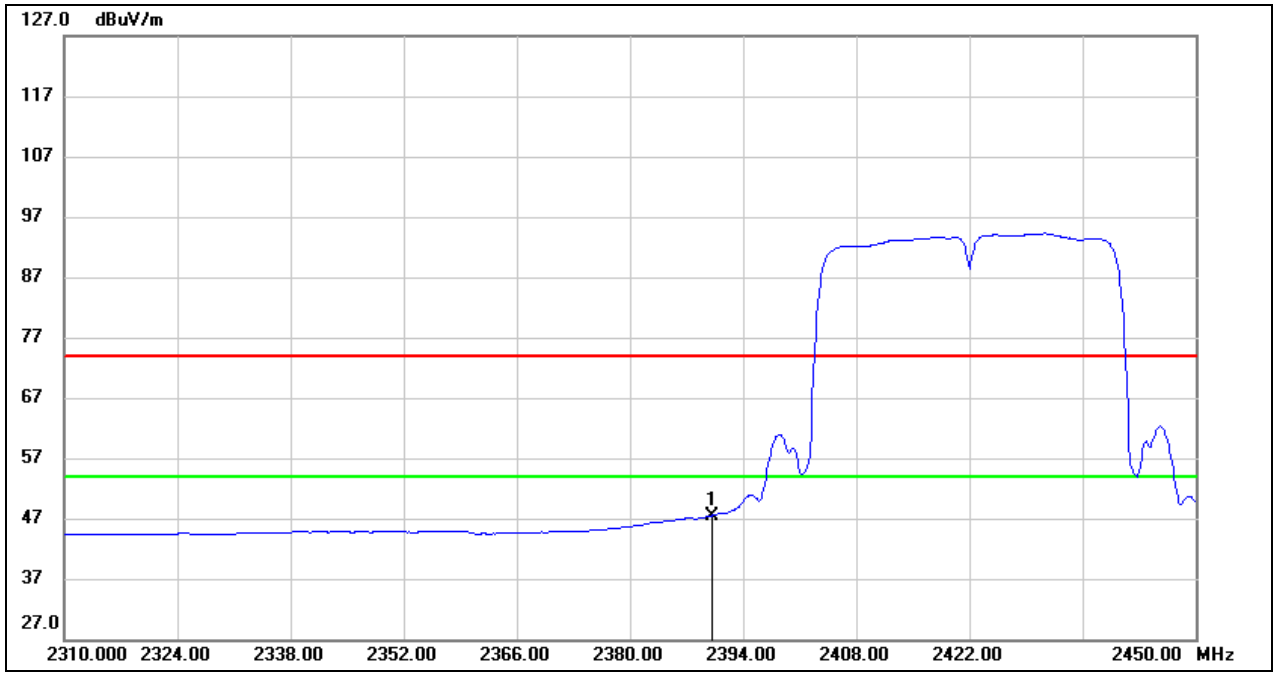
PEAK



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2386.300	29.41	33.27	62.68	74.00	-11.32	peak
2	2390.000	28.06	33.24	61.30	74.00	-12.70	peak

Note:
1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

AVERAGE

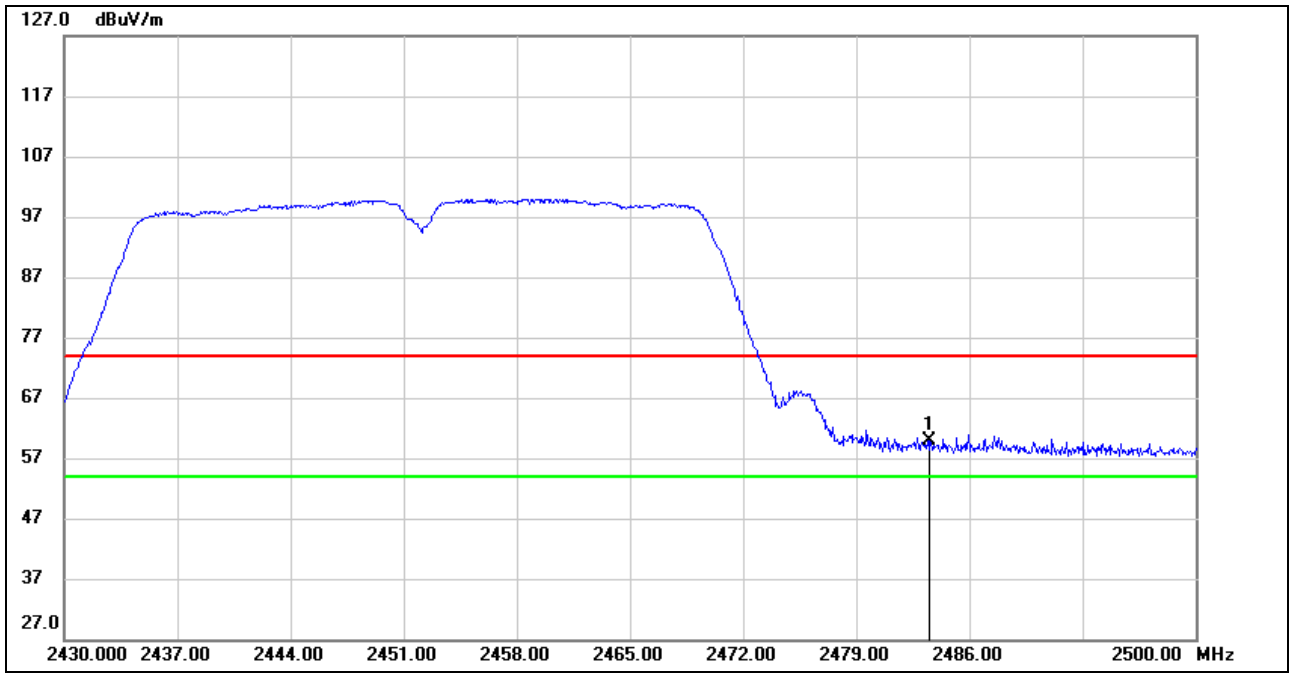


No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2390.000	14.26	33.24	47.50	54.00	-6.50	AVG

Note:
1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

RESTRICTED BANDEDGE (11n/40 HIGH CHANNEL, HORIZONTAL)

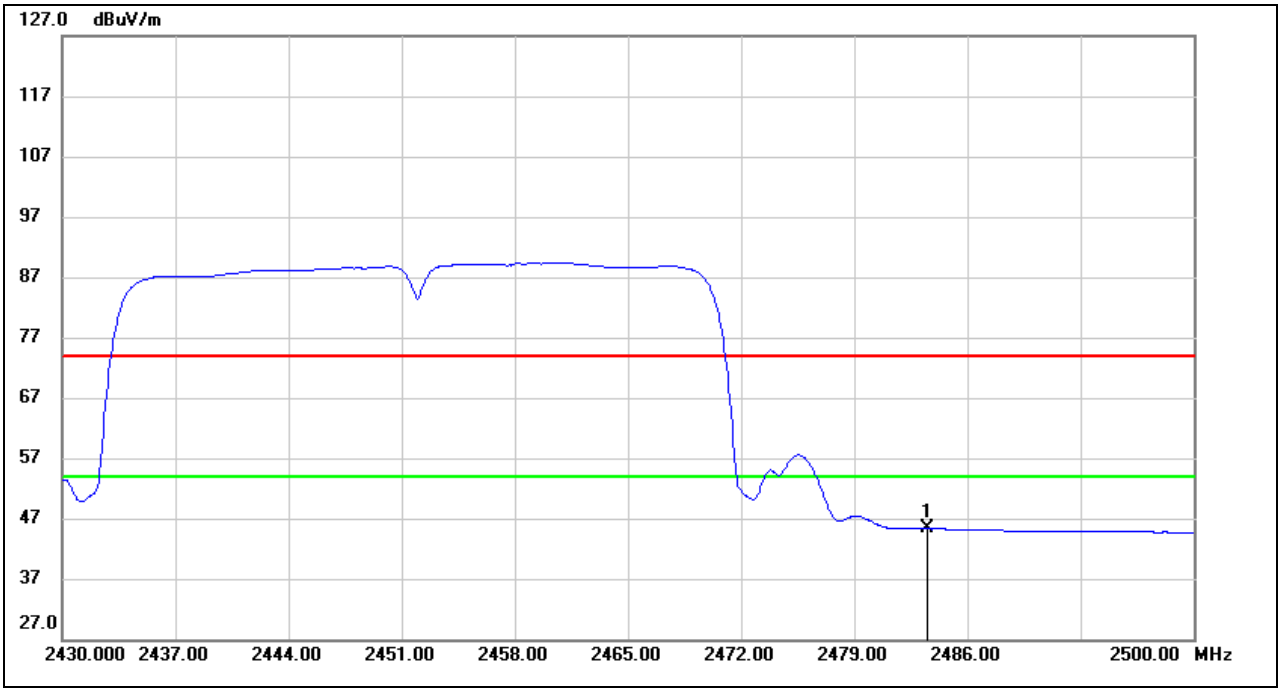
PEAK



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	27.00	32.78	59.78	74.00	-14.22	peak

Note:
1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

AVERAGE

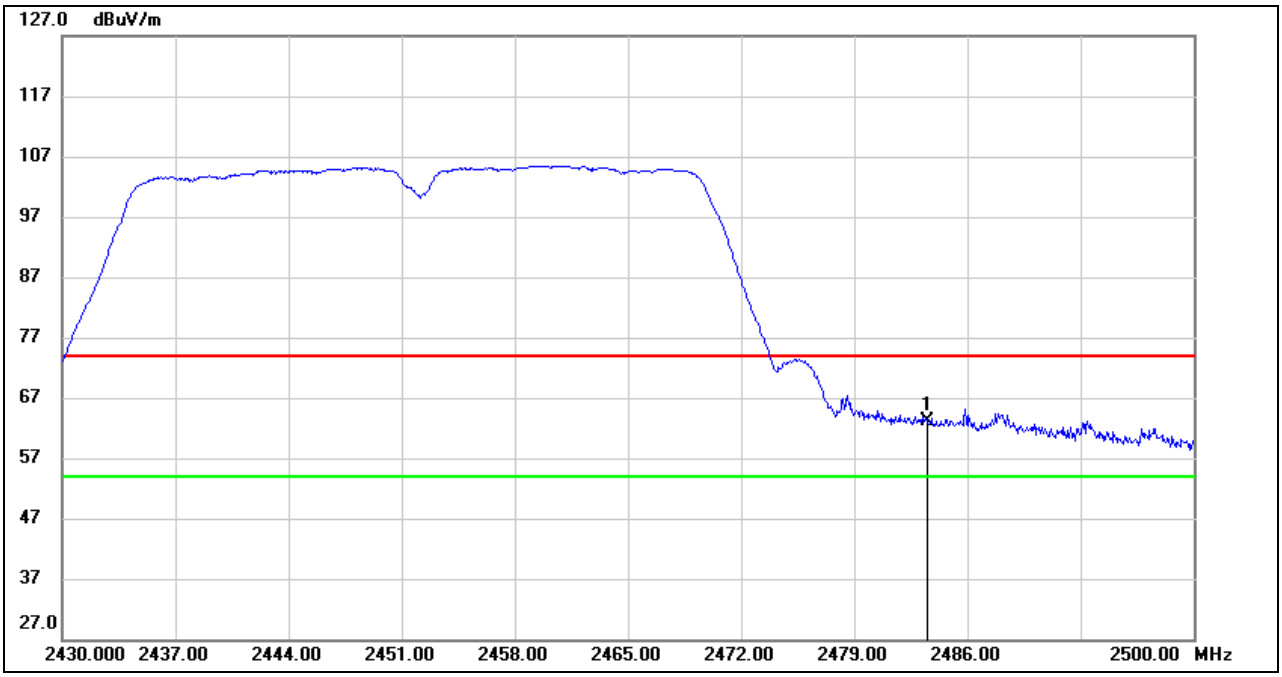


No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	12.52	32.78	45.30	54.00	-8.70	AVG

Note:
1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

RESTRICTED BANDEDGE (11n/40 HIGH CHANNEL, VERTICAL)

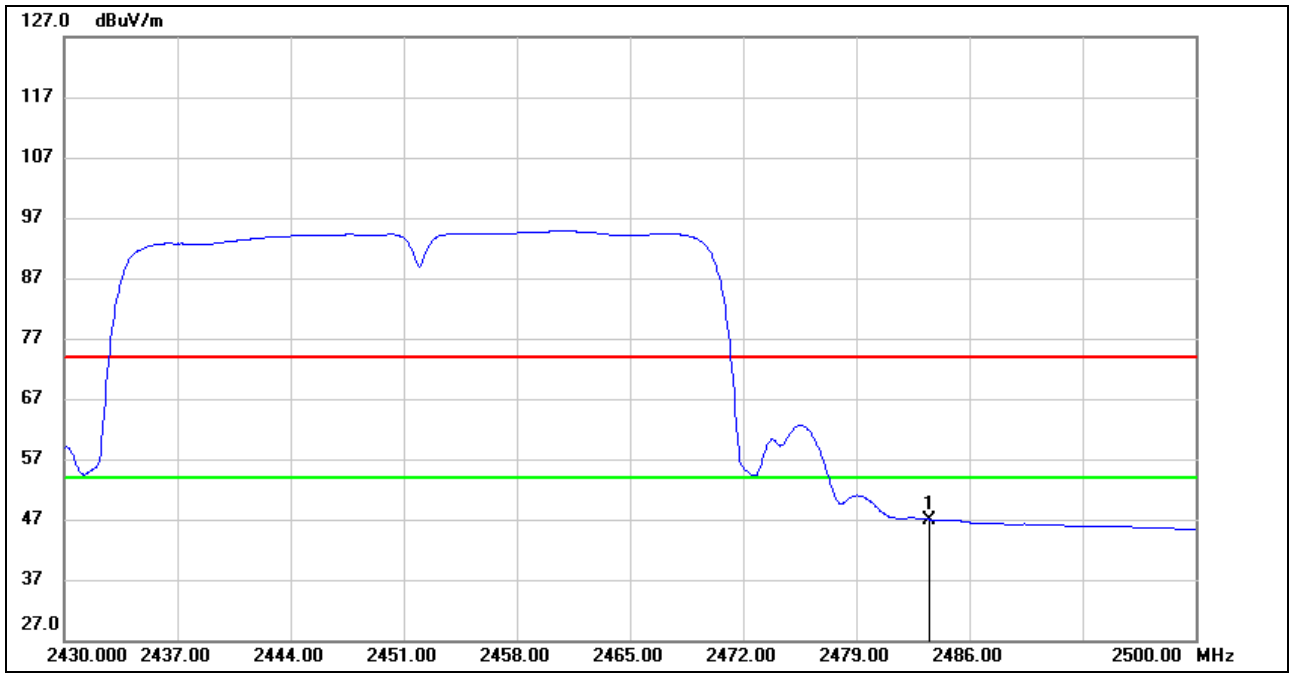
PEAK



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	30.24	32.88	63.12	74.00	-10.88	peak

Note:
1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

AVERAGE



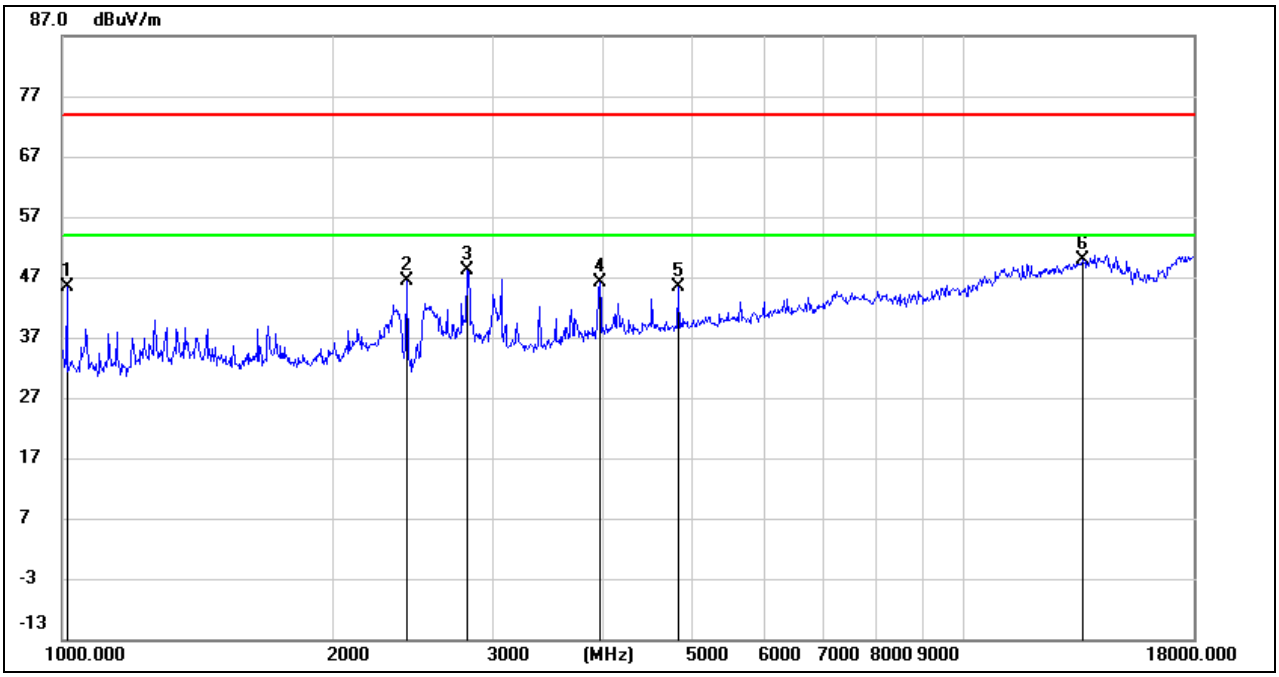
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	14.11	32.88	46.99	54.00	-7.01	AVG

1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

8.3. SPURIOUS EMISSIONS (1~18GHz)

HARMONICS AND SPURIOUS EMISSION

EUT:	IP Camera	Polarization :	Horizontal
Test Mode:	11b Low Chanel		



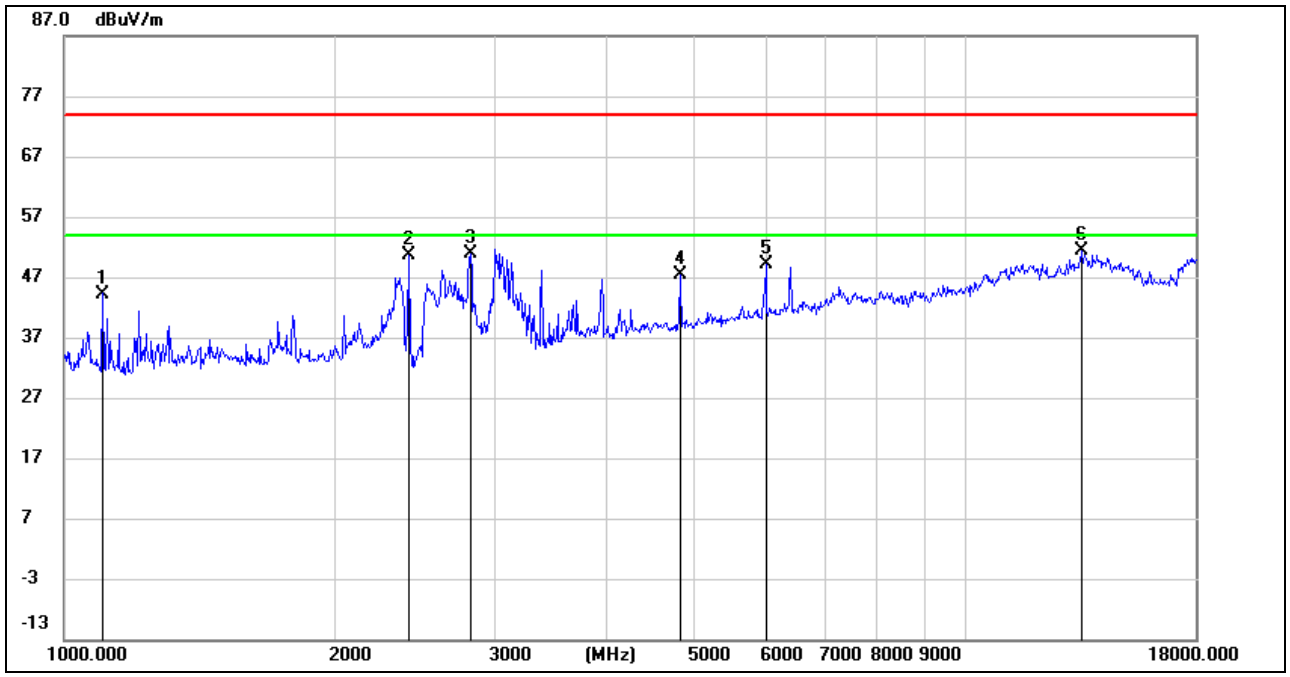
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1014.557	60.08	-14.58	45.50	74.00	-28.50	peak
2	2414.672	55.47	-9.06	46.41	74.00	-27.59	peak
3	2814.411	55.66	-7.52	48.14	74.00	-25.86	peak
4	3946.885	50.63	-4.43	46.20	74.00	-27.80	peak
5	4831.962	46.82	-1.44	45.38	74.00	-28.62	peak
6	13559.879	30.99	18.85	49.84	74.00	-24.16	peak

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

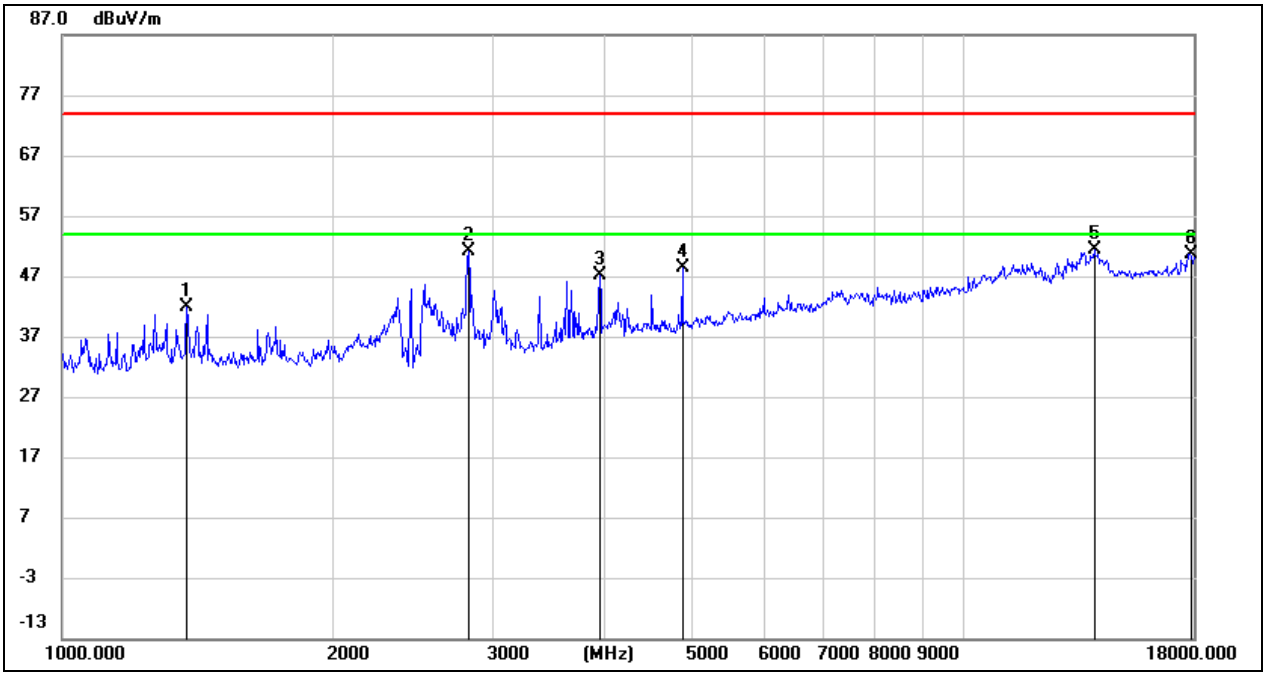
EUT:	IP Camera	Polarization :	Vertical
Test Mode:	11b Low Chanel		



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1103.264	58.49	-14.24	44.25	74.00	-29.75	peak
2	2414.672	59.71	-8.96	50.75	74.00	-23.25	peak
3	2822.558	58.33	-7.49	50.84	74.00	-23.16	peak
4	4831.962	48.73	-1.41	47.32	74.00	-26.68	peak
5	6001.626	46.94	2.10	49.04	74.00	-24.96	peak
6	13481.718	32.45	18.89	51.34	74.00	-22.66	peak

Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. AVG: VBW=1/Ton where: ton is transmit duration.

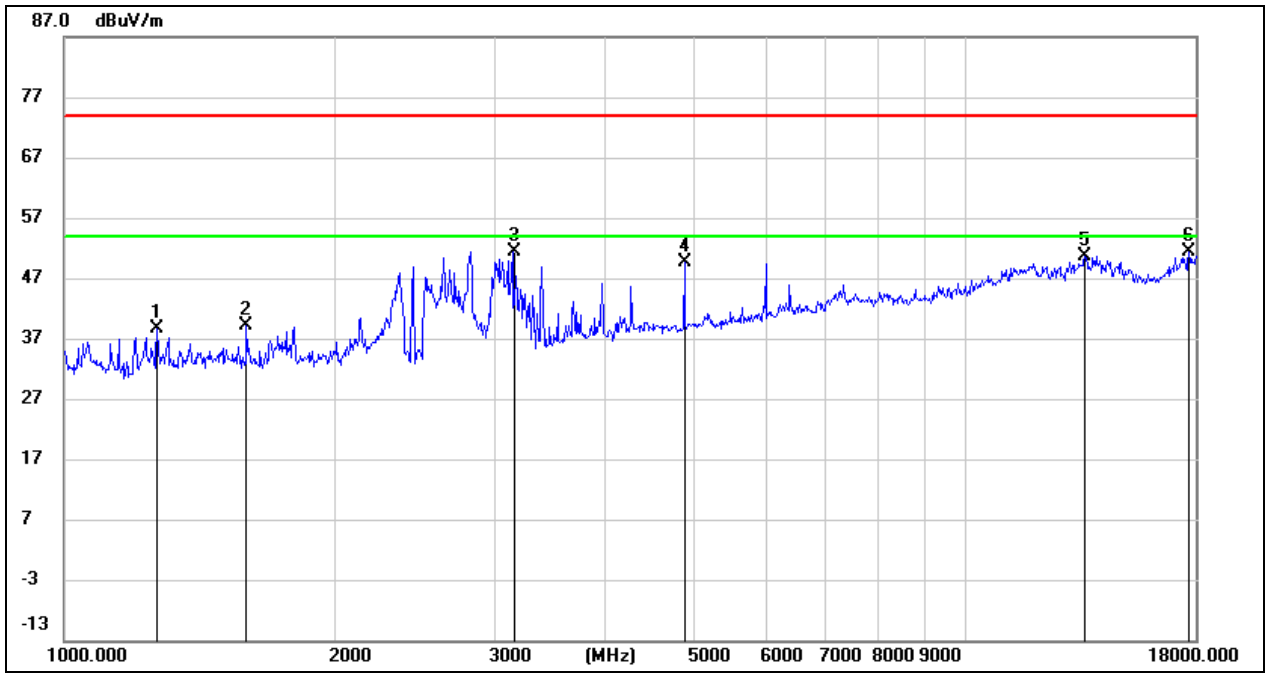
EUT:	IP Camera	Polarization :	Horizontal
Test Mode:	11b Middle Chanel		



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1374.295	54.65	-12.69	41.96	74.00	-32.04	peak
2	2822.558	58.64	-7.49	51.15	74.00	-22.85	peak
3	3946.885	51.60	-4.43	47.17	74.00	-26.83	peak
4	4874.043	49.30	-0.95	48.35	74.00	-25.65	peak
5	13957.529	32.32	18.95	51.27	74.00	-22.73	peak
6	17896.247	24.99	25.75	50.74	74.00	-23.26	peak

Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. AVG: VBW=1/Ton where: ton is transmit duration.

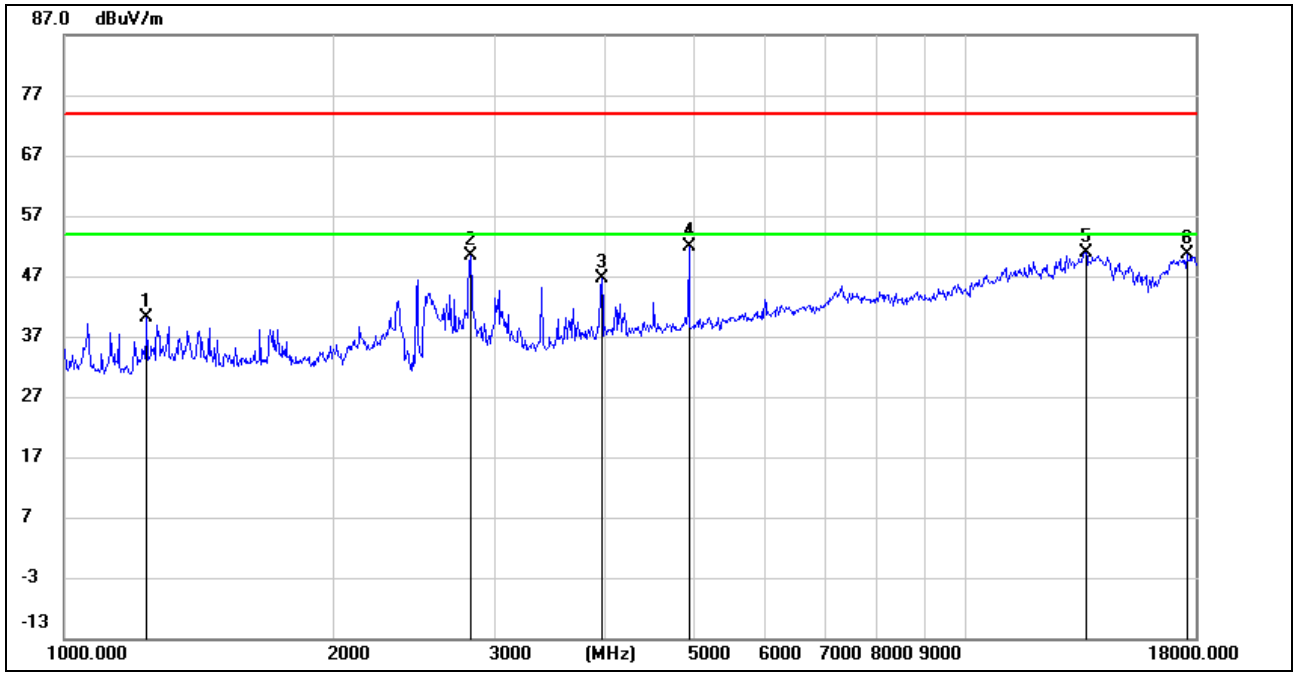
EUT:	IP Camera	Polarization :	Vertical
Test Mode:	11b Middle Chanel		



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1267.454	51.65	-13.08	38.57	74.00	-35.43	peak
2	1592.571	51.95	-12.71	39.24	74.00	-34.76	peak
3	3150.237	57.85	-6.48	51.37	74.00	-22.63	peak
4	4874.043	50.70	-1.00	49.70	74.00	-24.30	peak
5	13559.879	31.42	19.29	50.71	74.00	-23.29	peak
6	17690.531	26.49	24.78	51.27	74.00	-22.73	peak

Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. AVG: VBW=1/Ton where: ton is transmit duration.

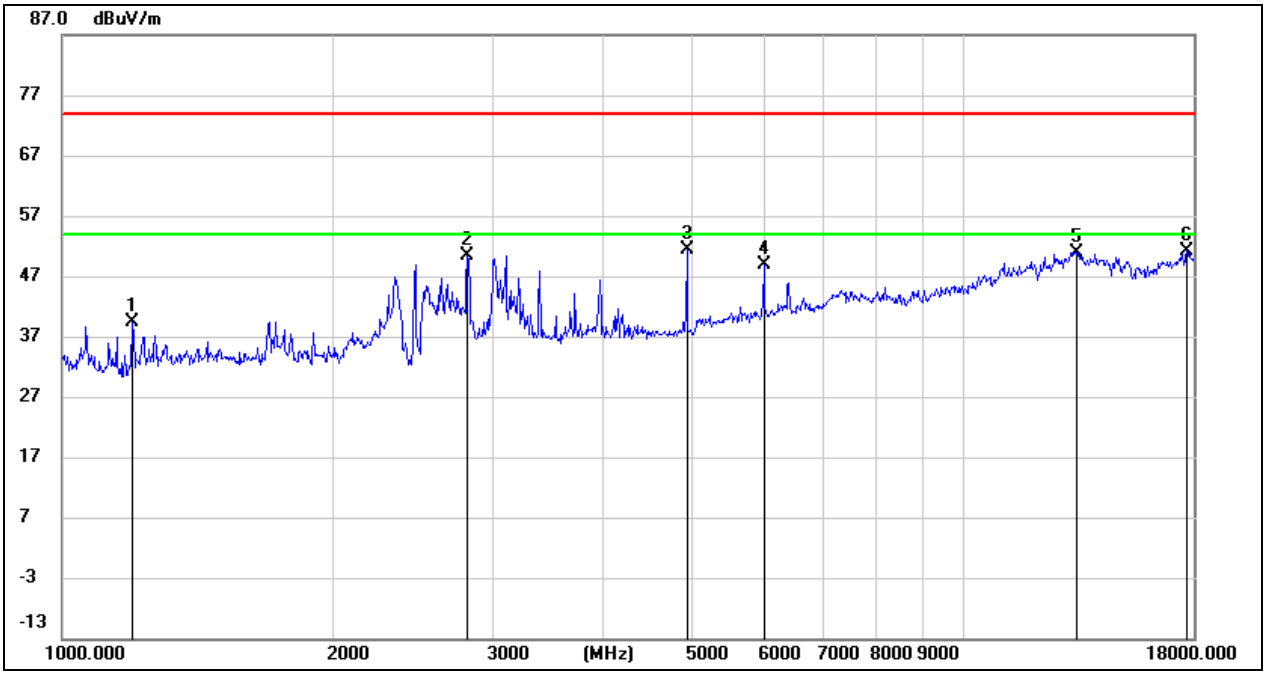
EUT:	IP Camera	Polarization :	Horizontal
Test Mode:	11b High Chanel		



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1234.909	53.39	-13.29	40.10	74.00	-33.90	peak
2	2822.558	57.81	-7.49	50.32	74.00	-23.68	peak
3	3946.885	50.99	-4.43	46.56	74.00	-27.44	peak
4	4930.721	52.63	-0.72	51.91	74.00	-22.09	peak
5	13599.128	31.79	19.04	50.83	74.00	-23.17	peak
6	17639.473	26.79	23.73	50.52	74.00	-23.48	peak

Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. AVG: VBW=1/Ton where: ton is transmit duration.

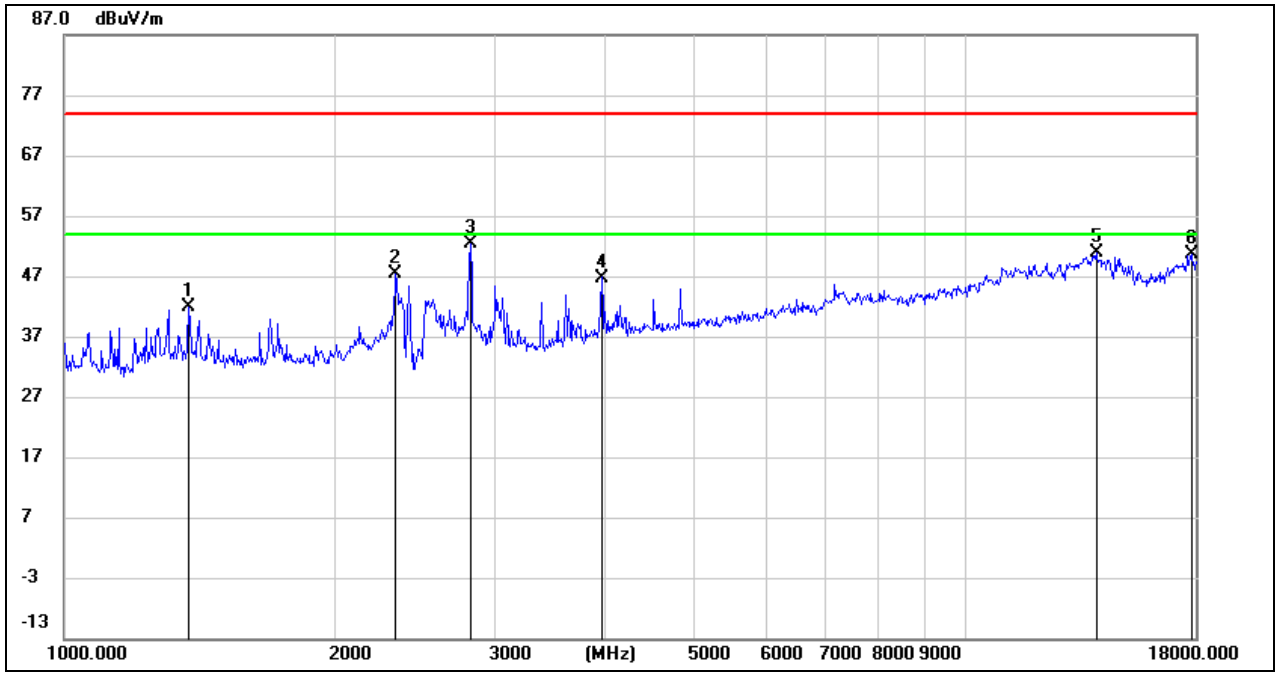
EUT:	IP Camera	Polarization :	Vertical
Test Mode:	11b High Chanel		



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1196.264	53.03	-13.61	39.42	74.00	-34.58	peak
2	2814.411	57.92	-7.52	50.40	74.00	-23.60	peak
3	4930.721	52.12	-0.76	51.36	74.00	-22.64	peak
4	6001.626	46.83	2.10	48.93	74.00	-25.07	peak
5	13365.322	32.68	18.20	50.88	74.00	-23.12	peak
6	17690.531	26.47	24.78	51.25	74.00	-22.75	peak

Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. AVG: VBW=1/Ton where: ton is transmit duration.

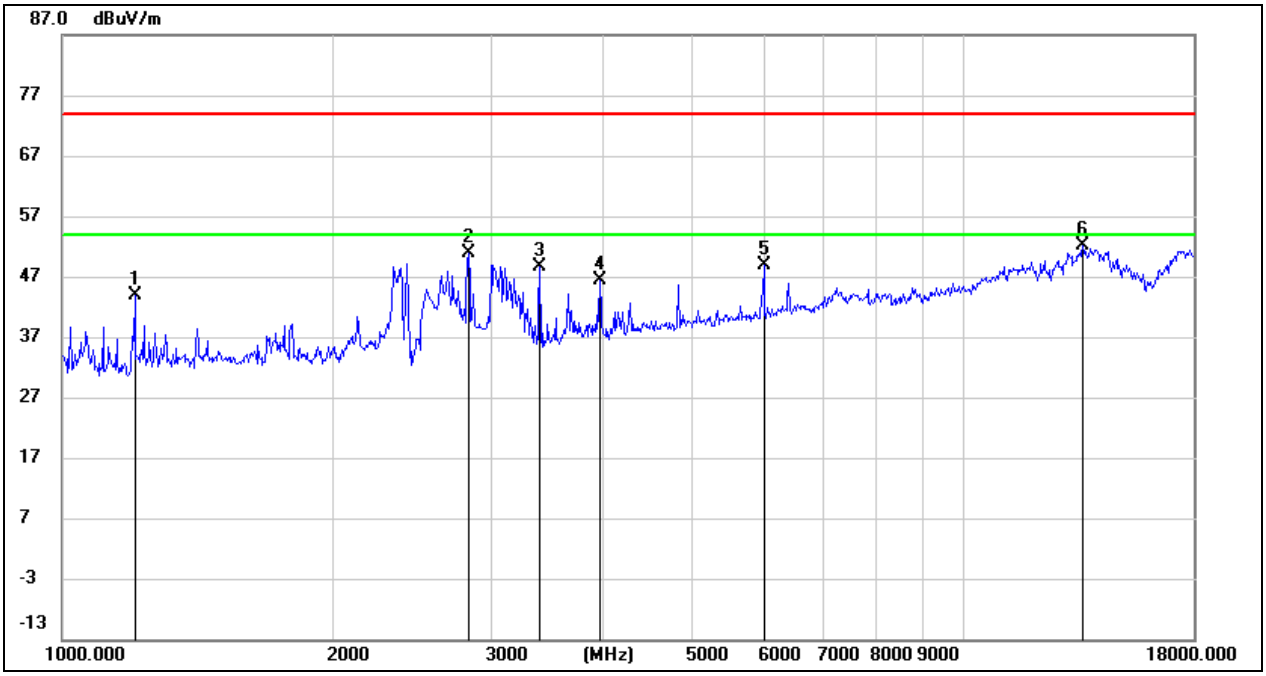
EUT:	IP Camera	Polarization :	Horizontal
Test Mode:	11g Low Chanel		



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1374.295	54.53	-12.69	41.84	74.00	-32.16	peak
2	2332.356	55.88	-8.54	47.34	74.00	-26.66	peak
3	2822.558	59.95	-7.49	52.46	74.00	-21.54	peak
4	3946.885	51.18	-4.43	46.75	74.00	-27.25	peak
5	13957.529	31.82	18.95	50.77	74.00	-23.23	peak
6	17844.595	24.58	25.96	50.54	74.00	-23.46	peak

Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. AVG: VBW=1/Ton where: ton is transmit duration.

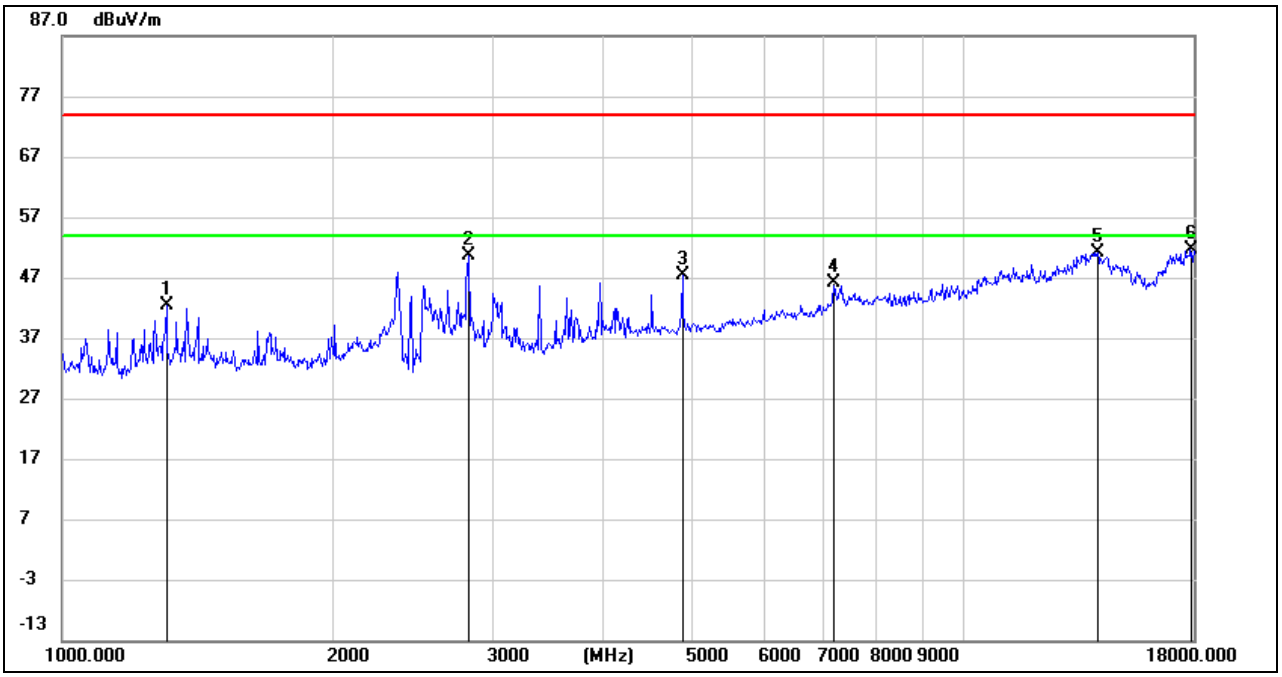
EUT:	IP Camera	Polarization :	Vertical
Test Mode:	11g Low Chanel		



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1203.199	57.32	-13.55	43.77	74.00	-30.23	peak
2	2822.558	58.46	-7.49	50.97	74.00	-23.03	peak
3	3386.297	55.14	-6.48	48.66	74.00	-25.34	peak
4	3946.885	50.77	-4.41	46.36	74.00	-27.64	peak
5	6001.626	46.89	2.10	48.99	74.00	-25.01	peak
6	13559.879	32.79	19.29	52.08	74.00	-21.92	peak

Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. AVG: VBW=1/Ton where: ton is transmit duration.

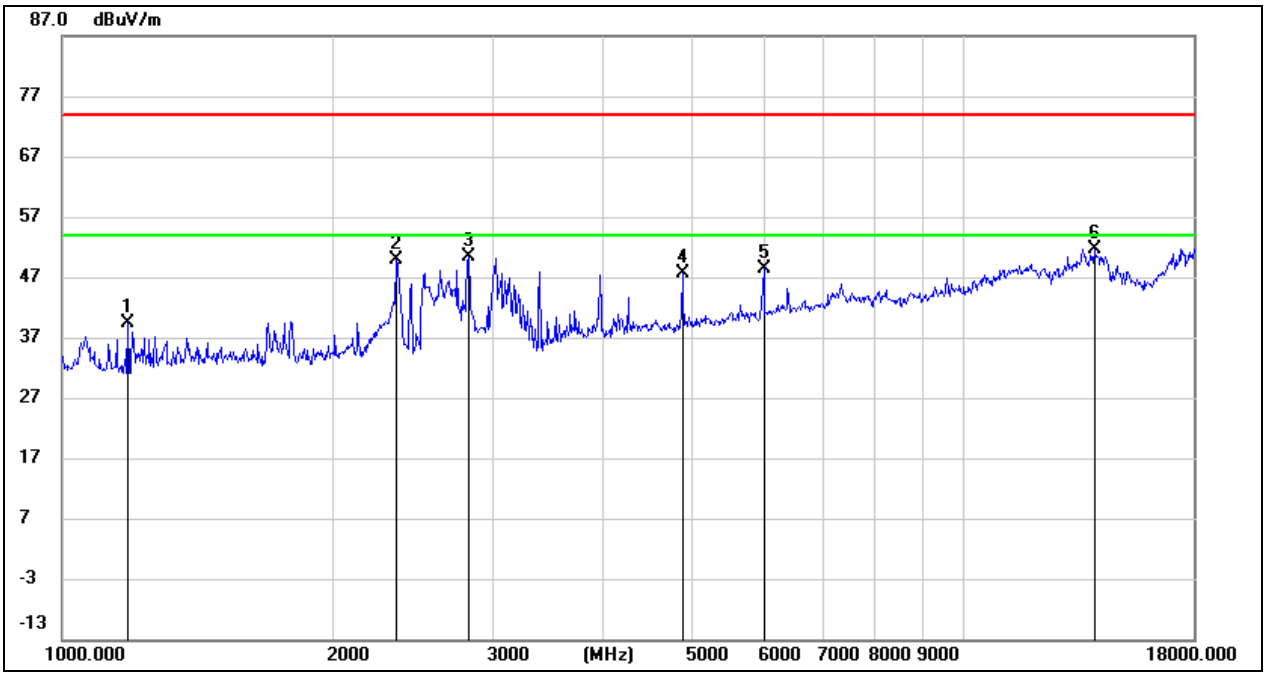
EUT:	IP Camera	Polarization :	Horizontal
Test Mode:	11g Middle Chanel		



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1304.623	55.00	-12.74	42.26	74.00	-31.74	peak
2	2822.558	58.16	-7.49	50.67	74.00	-23.33	peak
3	4874.043	48.22	-0.95	47.27	74.00	-26.73	peak
4	7200.309	40.20	5.81	46.01	74.00	-27.99	peak
5	14079.082	32.25	18.85	51.10	74.00	-22.90	peak
6	17896.247	25.94	25.75	51.69	74.00	-22.31	peak

Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. AVG: VBW=1/Ton where: ton is transmit duration.

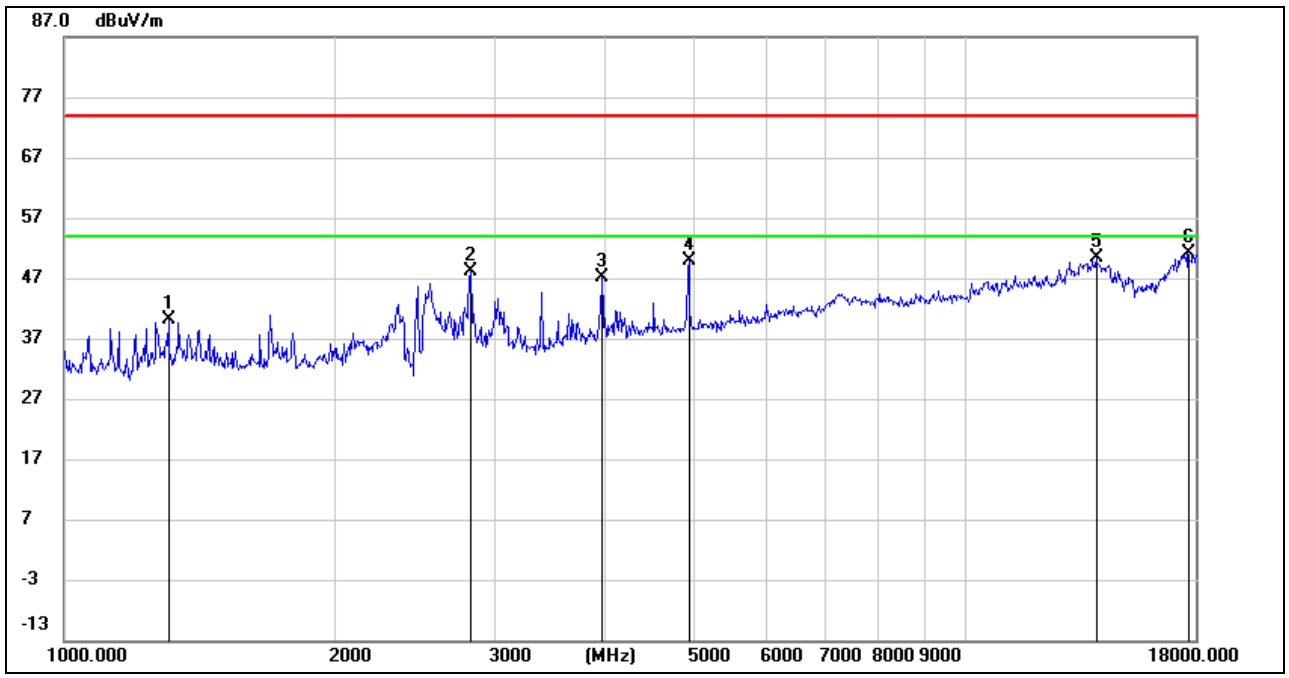
EUT:	IP Camera	Polarization :	Vertical
Test Mode:	11g Middle Chanel		



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1182.513	52.98	-13.71	39.27	74.00	-34.73	peak
2	2345.878	58.36	-8.52	49.84	74.00	-24.16	peak
3	2822.558	57.96	-7.49	50.47	74.00	-23.53	peak
4	4874.043	48.72	-1.00	47.72	74.00	-26.28	peak
5	6001.626	46.33	2.10	48.43	74.00	-25.57	peak
6	13957.529	32.61	19.05	51.66	74.00	-22.34	peak

Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. AVG: VBW=1/Ton where: ton is transmit duration.

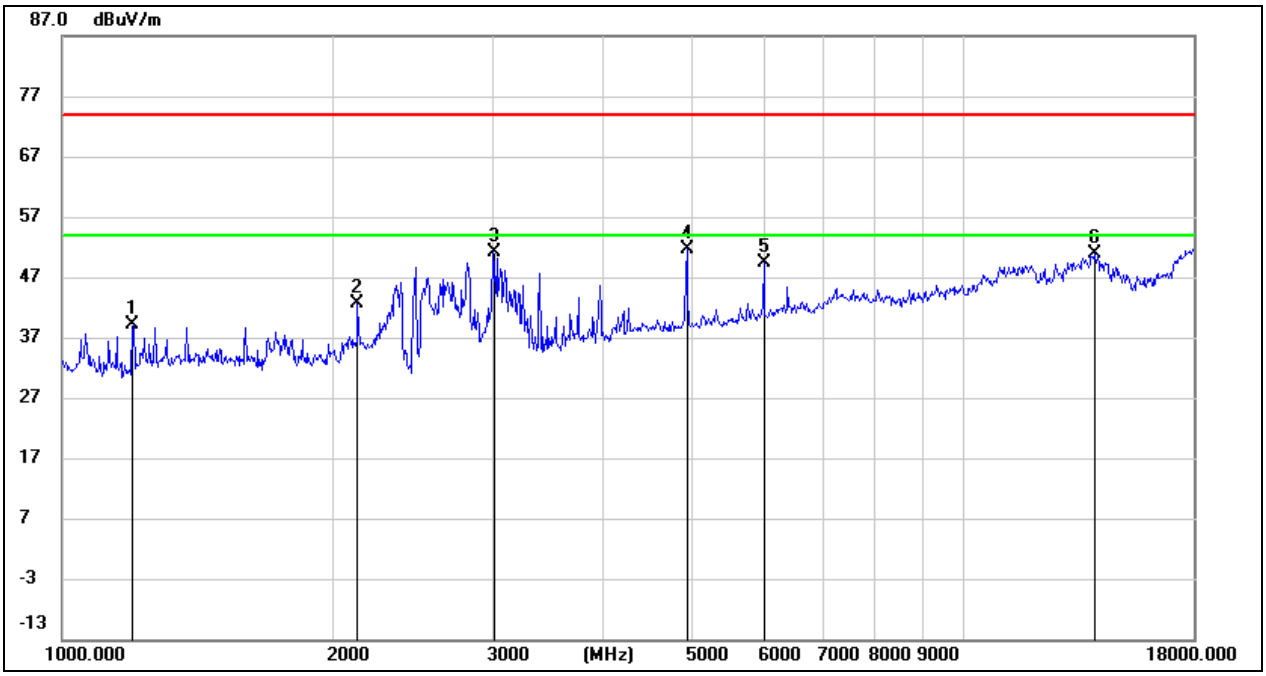
EUT:	IP Camera	Polarization :	Horizontal
Test Mode:	11g High Chanel		



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1304.623	52.85	-12.74	40.11	74.00	-33.89	peak
2	2822.558	55.58	-7.49	48.09	74.00	-25.91	peak
3	3946.885	51.58	-4.43	47.15	74.00	-26.85	peak
4	4930.721	50.61	-0.72	49.89	74.00	-24.11	peak
5	13957.529	31.49	18.95	50.44	74.00	-23.56	peak
6	17639.473	27.45	23.73	51.18	74.00	-22.82	peak

Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. AVG: VBW=1/Ton where: ton is transmit duration.

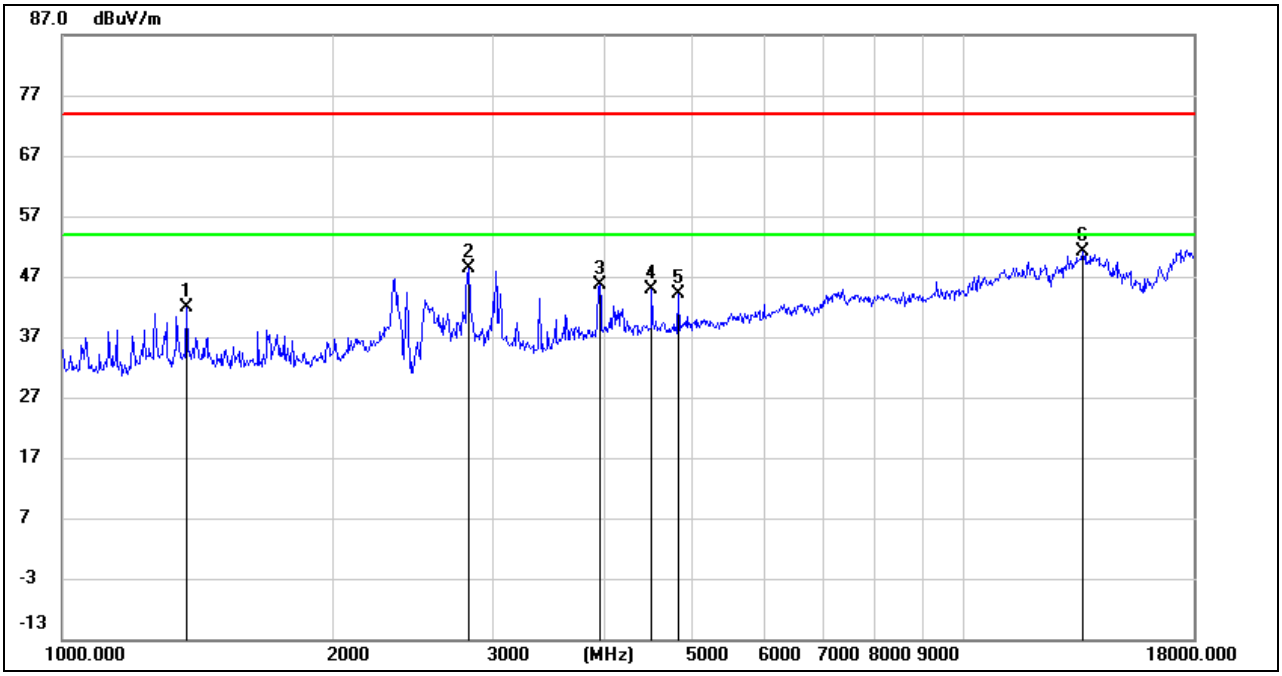
EUT:	IP Camera	Polarization :	Vertical
Test Mode:	11g High Chanel		



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1199.726	52.69	-13.58	39.11	74.00	-34.89	peak
2	2132.462	52.45	-9.88	42.57	74.00	-31.43	peak
3	3016.575	58.15	-7.10	51.05	74.00	-22.95	peak
4	4930.721	52.28	-0.76	51.52	74.00	-22.48	peak
5	6001.626	47.40	2.10	49.50	74.00	-24.50	peak
6	13997.929	32.02	18.97	50.99	74.00	-23.01	peak

Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. AVG: VBW=1/Ton where: ton is transmit duration.

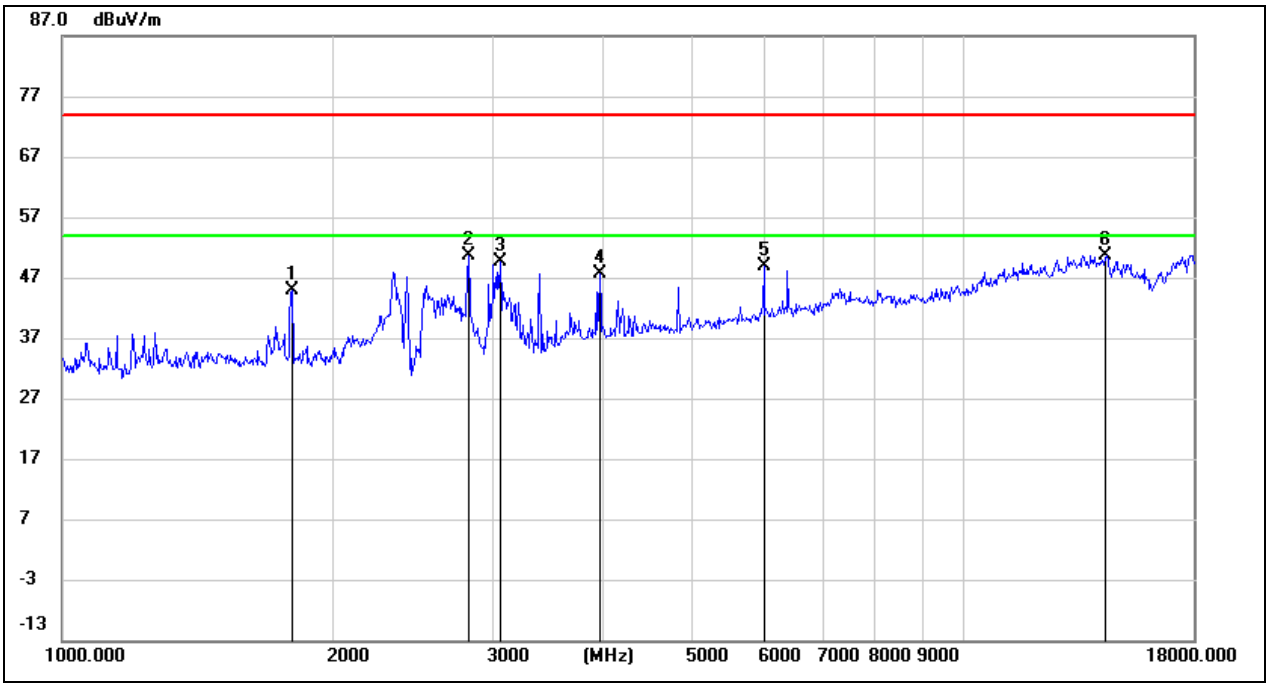
EUT:	IP Camera	Polarization :	Horizontal
Test Mode:	11n/20 Low Chanel		



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1374.295	54.66	-12.69	41.97	74.00	-32.03	peak
2	2822.558	55.90	-7.49	48.41	74.00	-25.59	peak
3	3946.885	50.05	-4.43	45.62	74.00	-28.38	peak
4	4508.136	46.95	-2.18	44.77	74.00	-29.23	peak
5	4831.962	45.62	-1.44	44.18	74.00	-29.82	peak
6	13559.879	32.22	18.85	51.07	74.00	-22.93	peak

Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. AVG: VBW=1/Ton where: ton is transmit duration.

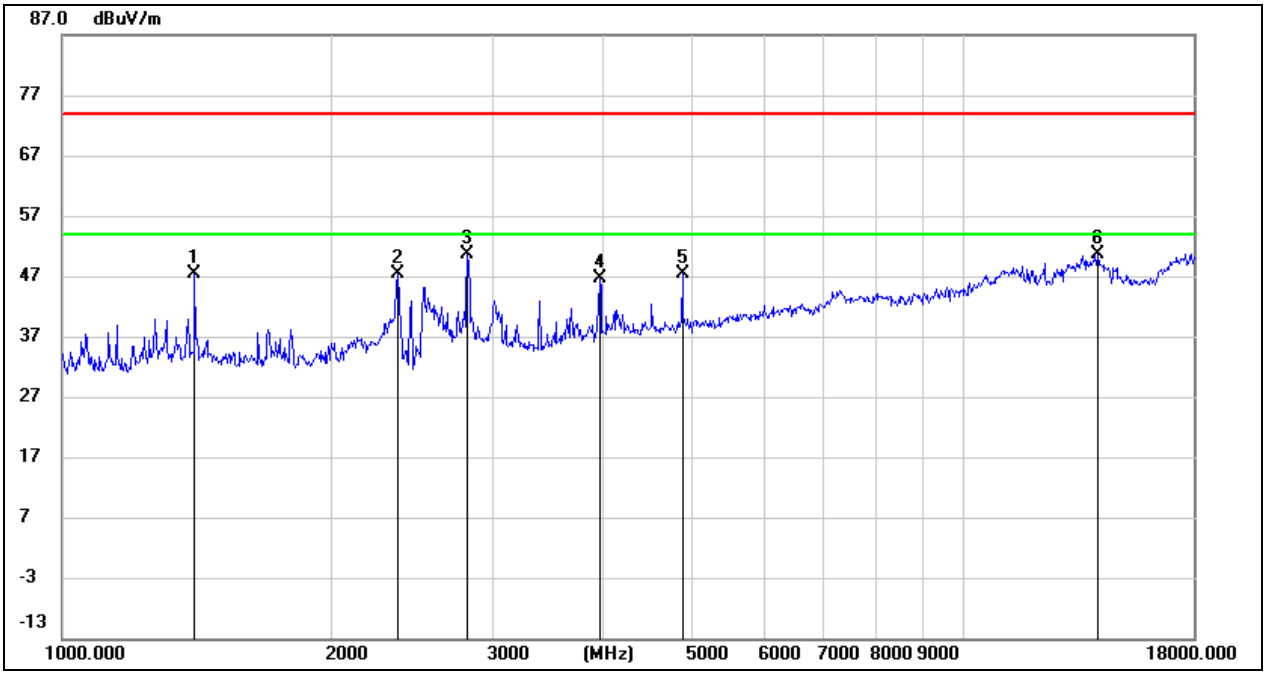
EUT:	IP Camera	Polarization :	Vertical
Test Mode:	11n/20 Low Chanel		



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1798.127	56.68	-11.77	44.91	74.00	-29.09	peak
2	2822.558	58.13	-7.48	50.65	74.00	-23.35	peak
3	3060.486	56.67	-6.94	49.73	74.00	-24.27	peak
4	3946.885	51.95	-4.41	47.54	74.00	-26.46	peak
5	6001.626	46.70	2.10	48.80	74.00	-25.20	peak
6	14408.425	32.21	18.47	50.68	74.00	-23.32	peak

Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. AVG: VBW=1/Ton where: ton is transmit duration.

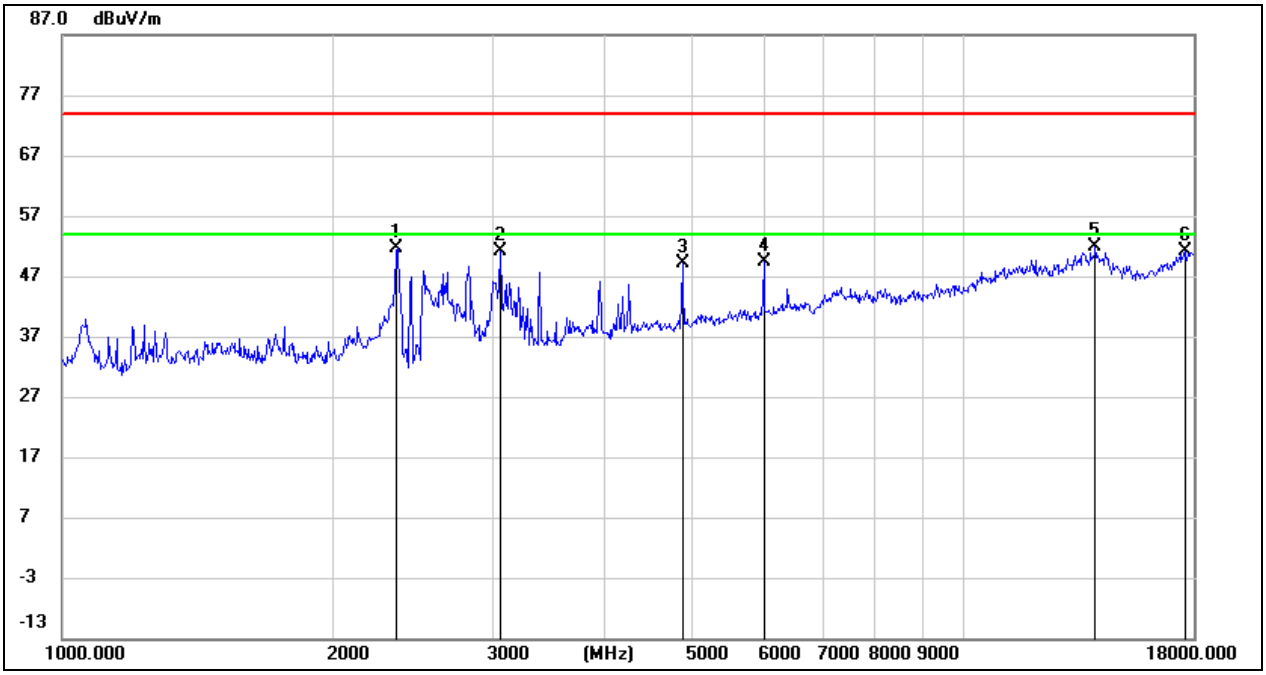
EUT:	IP Camera	Polarization :	Horizontal
Test Mode:	11n/20 Middle Chanel		



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1406.443	59.98	-12.61	47.37	74.00	-26.63	peak
2	2359.478	56.00	-8.72	47.28	74.00	-26.72	peak
3	2814.411	58.22	-7.52	50.70	74.00	-23.30	peak
4	3946.885	51.13	-4.43	46.70	74.00	-27.30	peak
5	4874.043	48.44	-0.95	47.49	74.00	-26.51	peak
6	14079.082	31.89	18.85	50.74	74.00	-23.26	peak

Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. AVG: VBW=1/Ton where: ton is transmit duration.

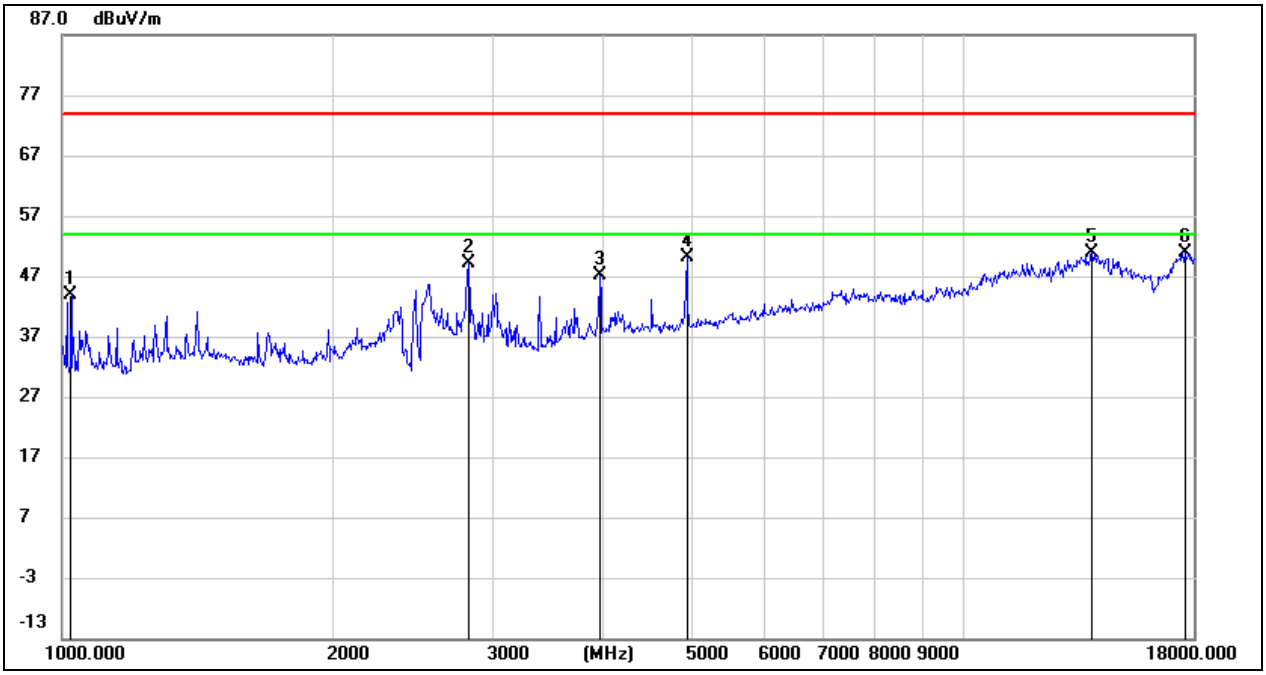
EUT:	IP Camera	Polarization :	Vertical
Test Mode:	11n/20 Middle Chanel		



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2352.668	60.22	-8.58	51.64	74.00	-22.36	peak
2	3060.486	58.02	-6.94	51.08	74.00	-22.92	peak
3	4874.043	50.22	-1.00	49.22	74.00	-24.78	peak
4	6001.626	47.18	2.10	49.28	74.00	-24.72	peak
5	13997.929	32.81	18.97	51.78	74.00	-22.22	peak
6	17639.473	26.92	24.24	51.16	74.00	-22.84	peak

Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. AVG: VBW=1/Ton where: ton is transmit duration.

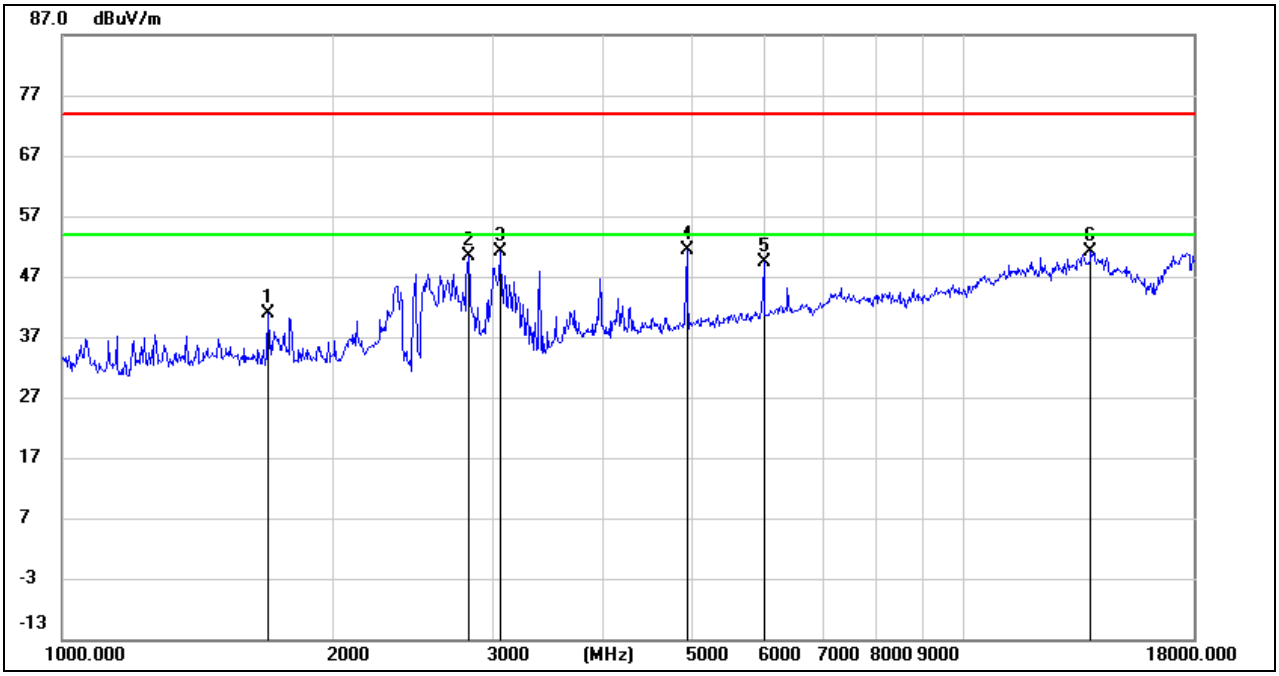
EUT:	IP Camera	Polarization :	Horizontal
Test Mode:	11n/20 High Chanel		



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1023.392	58.36	-14.46	43.90	74.00	-30.10	peak
2	2822.558	56.65	-7.49	49.16	74.00	-24.84	peak
3	3946.885	51.60	-4.43	47.17	74.00	-26.83	peak
4	4930.721	50.76	-0.72	50.04	74.00	-23.96	peak
5	13877.076	31.81	18.99	50.80	74.00	-23.20	peak
6	17639.473	27.17	23.73	50.90	74.00	-23.10	peak

Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. AVG: VBW=1/Ton where: ton is transmit duration.

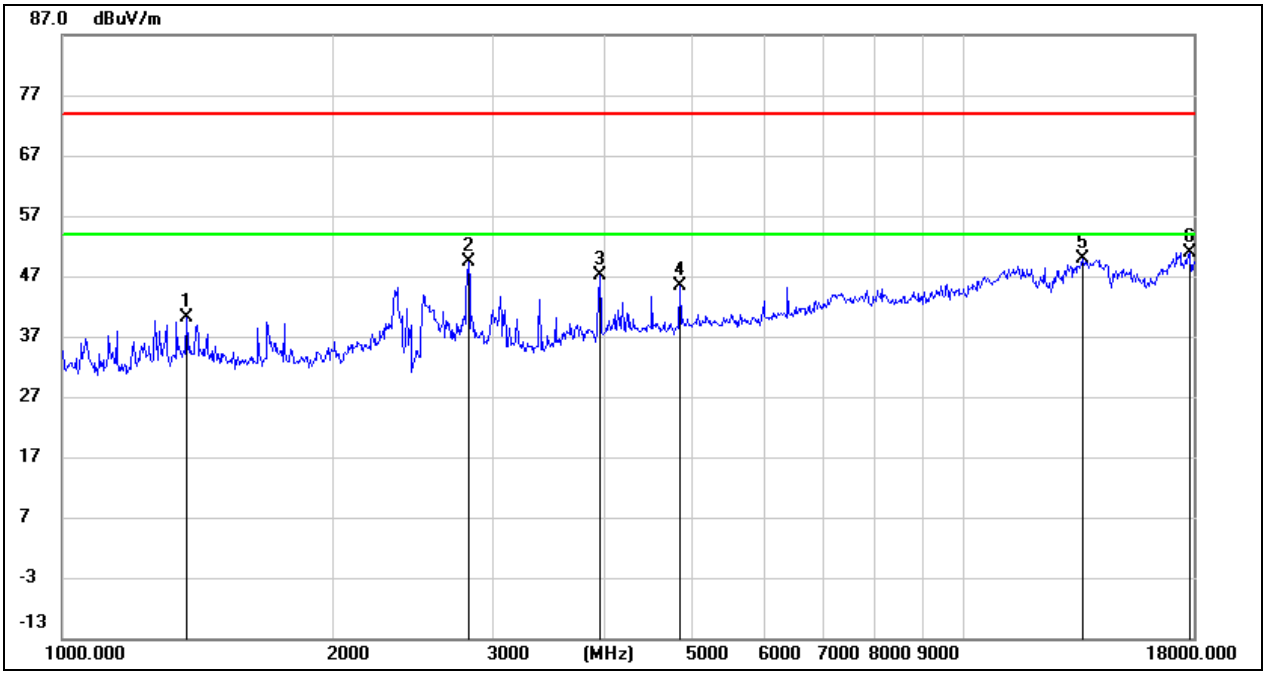
EUT:	IP Camera	Polarization :	Vertical
Test Mode:	11n/20 High Chanel		



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1692.231	53.01	-12.22	40.79	74.00	-33.21	peak
2	2822.558	57.95	-7.49	50.46	74.00	-23.54	peak
3	3060.486	58.08	-6.94	51.14	74.00	-22.86	peak
4	4930.721	52.10	-0.76	51.34	74.00	-22.66	peak
5	6001.626	47.30	2.10	49.40	74.00	-24.60	peak
6	13837.024	31.82	19.29	51.11	74.00	-22.89	peak

Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. AVG: VBW=1/Ton where: ton is transmit duration.

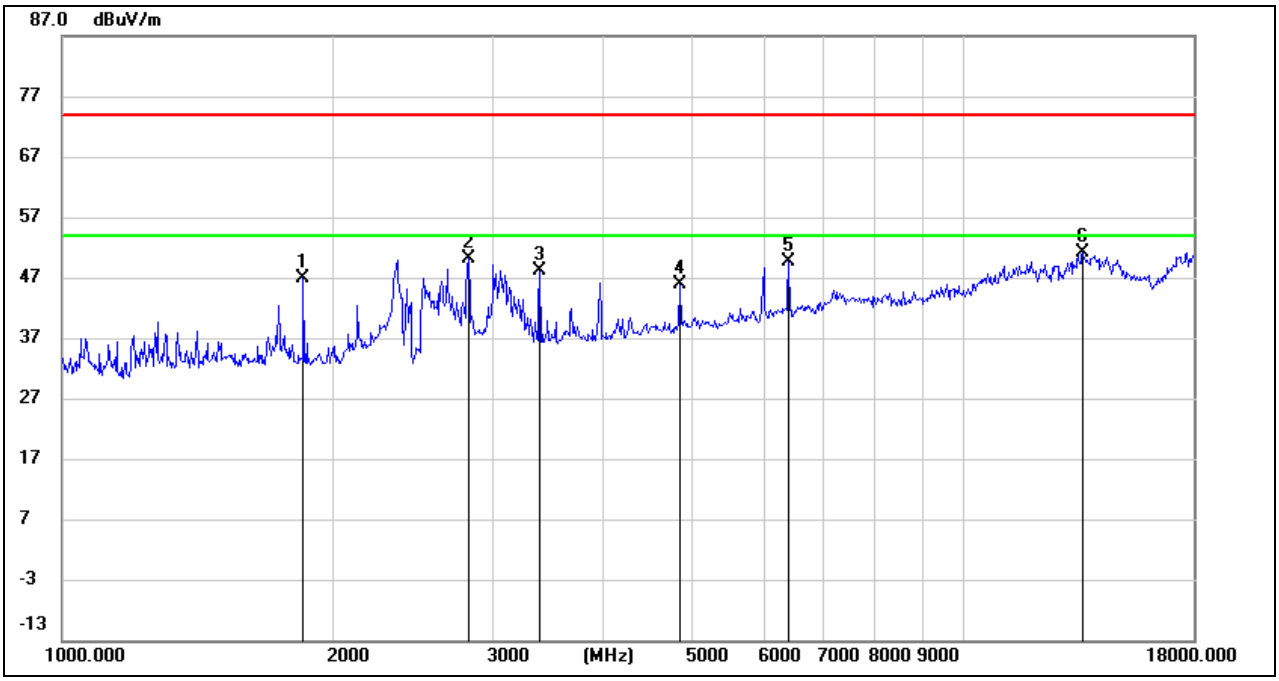
EUT:	IP Camera	Polarization :	Horizontal
Test Mode:	11n/40 Low Chanel		



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1374.295	52.86	-12.69	40.17	74.00	-33.83	peak
2	2822.558	56.82	-7.49	49.33	74.00	-24.67	peak
3	3946.885	51.65	-4.43	47.22	74.00	-26.78	peak
4	4845.948	46.63	-1.29	45.34	74.00	-28.66	peak
5	13559.879	30.94	18.85	49.79	74.00	-24.21	peak
6	17844.595	24.84	25.96	50.80	74.00	-23.20	peak

Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. AVG: VBW=1/Ton where: ton is transmit duration.

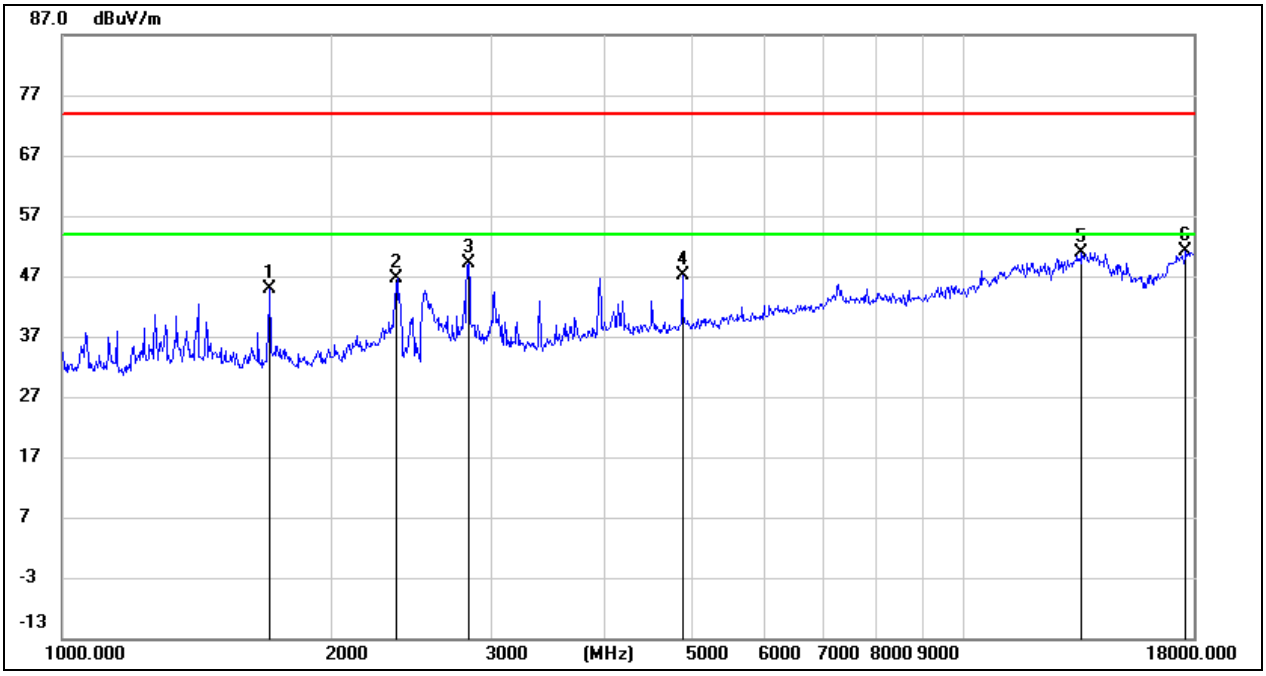
EUT:	IP Camera	Polarization :	Vertical
Test Mode:	11n/40 Low Chanel		



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1856.215	58.49	-11.57	46.92	74.00	-27.08	peak
2	2822.558	57.70	-7.49	50.21	74.00	-23.79	peak
3	3386.297	54.62	-6.48	48.14	74.00	-25.86	peak
4	4845.948	47.05	-1.28	45.77	74.00	-28.23	peak
5	6395.654	46.52	3.11	49.63	74.00	-24.37	peak
6	13559.879	31.78	19.29	51.07	74.00	-22.93	peak

Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. AVG: VBW=1/Ton where: ton is transmit duration.

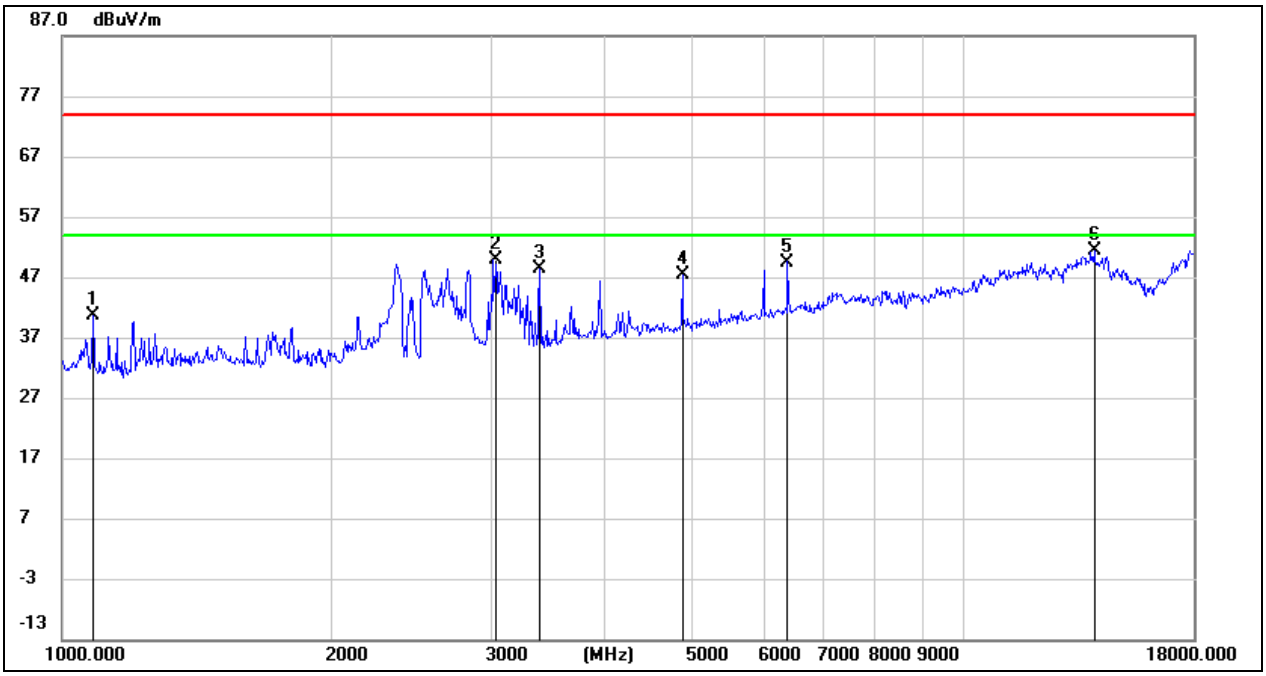
EUT:	IP Camera	Polarization :	Horizontal
Test Mode:	11n/40 Middle Chanel		



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1702.041	56.98	-12.17	44.81	74.00	-29.19	peak
2	2352.668	55.40	-8.68	46.72	74.00	-27.28	peak
3	2822.558	56.64	-7.49	49.15	74.00	-24.85	peak
4	4874.043	48.03	-0.95	47.08	74.00	-26.92	peak
5	13520.742	32.28	18.67	50.95	74.00	-23.05	peak
6	17639.473	27.46	23.73	51.19	74.00	-22.81	peak

Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. AVG: VBW=1/Ton where: ton is transmit duration.

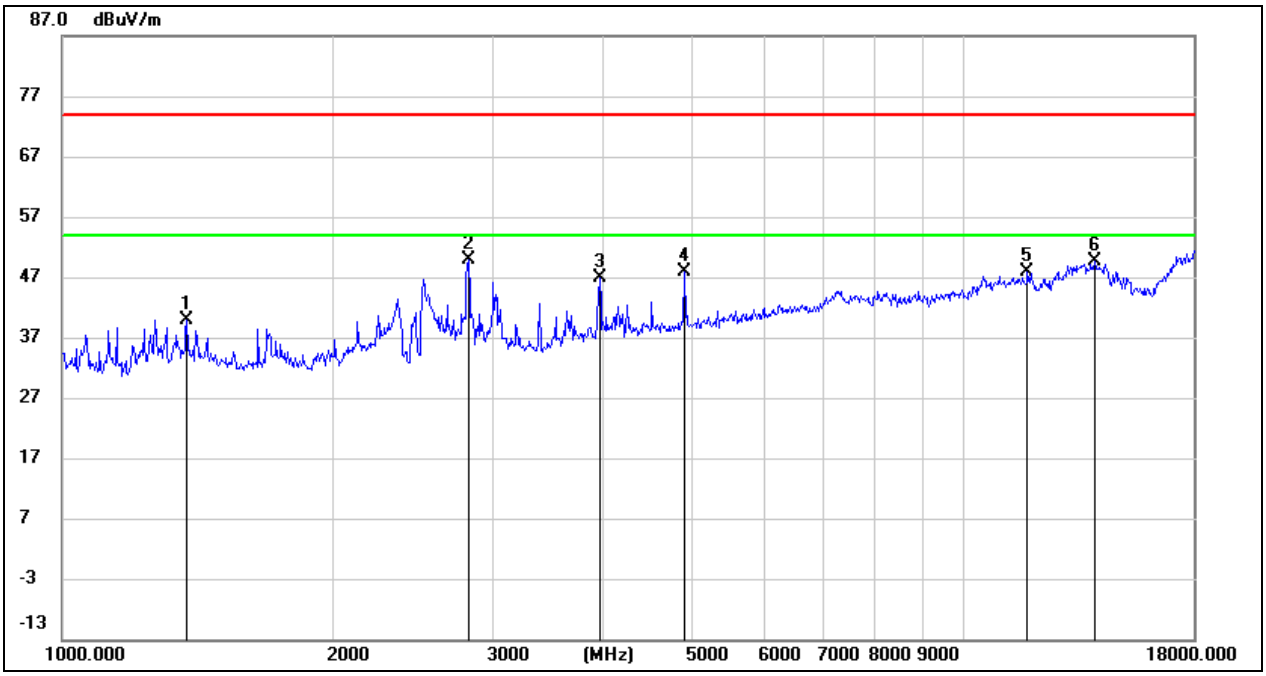
EUT:	IP Camera	Polarization :	Vertical
Test Mode:	11n/40 Middle Chanel		



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1081.166	54.87	-14.32	40.55	74.00	-33.45	peak
2	3016.575	57.07	-7.10	49.97	74.00	-24.03	peak
3	3386.297	54.94	-6.48	48.46	74.00	-25.54	peak
4	4874.043	48.46	-1.00	47.46	74.00	-26.54	peak
5	6377.195	46.42	3.08	49.50	74.00	-24.50	peak
6	13957.529	32.40	19.05	51.45	74.00	-22.55	peak

Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. AVG: VBW=1/Ton where: ton is transmit duration.

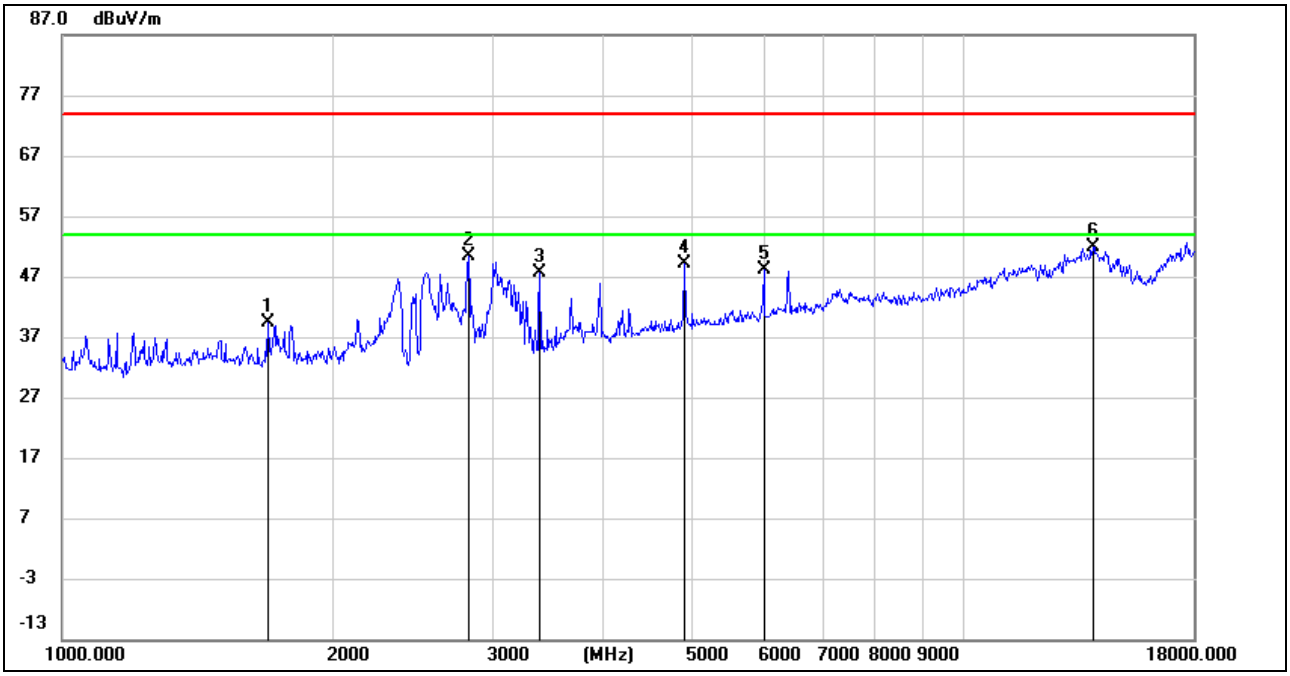
EUT:	IP Camera	Polarization :	Horizontal
Test Mode:	11n/40 High Chanel		



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1374.295	52.59	-12.69	39.90	74.00	-34.10	peak
2	2822.558	57.43	-7.49	49.94	74.00	-24.06	peak
3	3946.885	51.36	-4.43	46.93	74.00	-27.07	peak
4	4902.300	48.42	-0.66	47.76	74.00	-26.24	peak
5	11803.280	33.89	13.97	47.86	74.00	-26.14	peak
6	13997.929	30.82	18.87	49.69	74.00	-24.31	peak

Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. AVG: VBW=1/Ton where: ton is transmit duration.

EUT:	IP Camera	Polarization :	Vertical
Test Mode:	11n/40 High Chanel		



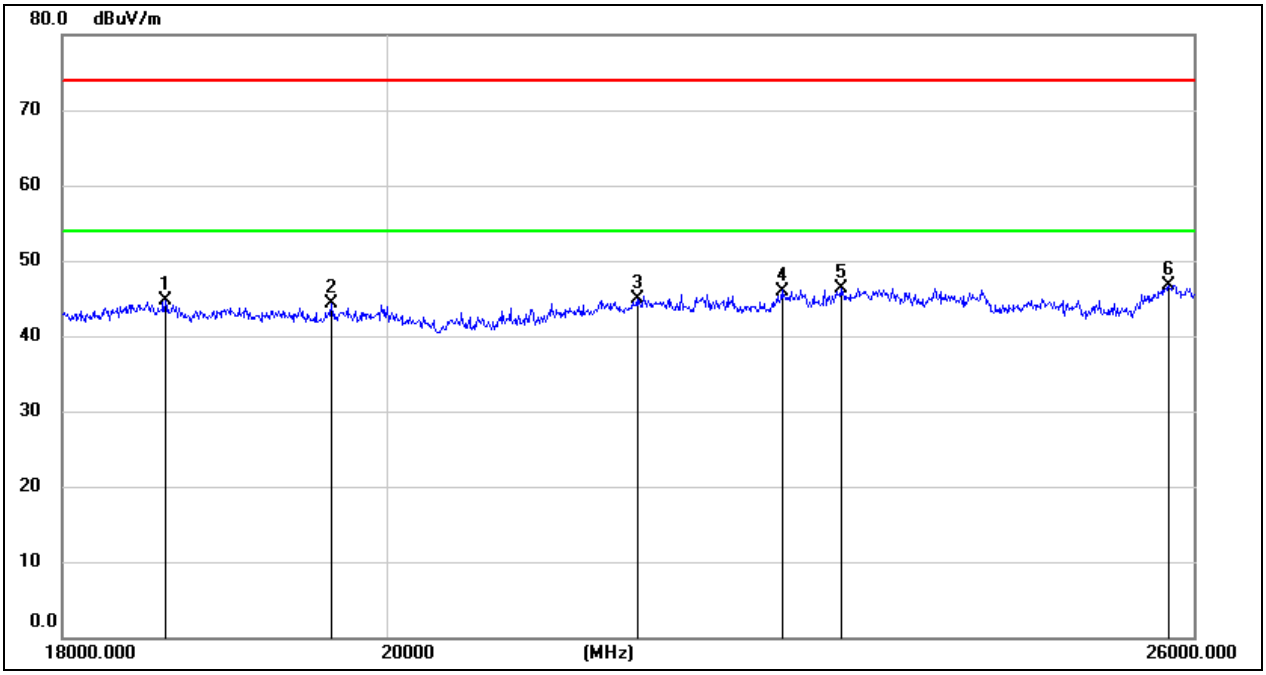
No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1692.231	51.54	-12.22	39.32	74.00	-34.68	peak
2	2822.558	57.83	-7.48	50.35	74.00	-23.65	peak
3	3386.297	54.23	-6.48	47.75	74.00	-26.25	peak
4	4902.300	49.80	-0.76	49.04	74.00	-24.96	peak
5	6001.626	46.13	2.10	48.23	74.00	-25.77	peak
6	13917.244	32.76	19.14	51.90	74.00	-22.10	peak

Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. AVG: VBW=1/Ton where: ton is transmit duration.

8.4. SPURIOUS EMISSIONS (18~25GHz)

HARMONICS AND SPURIOUS EMISSIONS

EUT:	IP Camera	Polarization :	Horizontal
Test Mode:	11b Middle Chanel		



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	18612.524	49.98	-5.34	44.64	74.00	-29.36	peak
2	19646.324	49.60	-5.38	44.22	74.00	-29.78	peak
3	21697.042	49.33	-4.40	44.93	74.00	-29.07	peak
4	22742.711	49.70	-3.70	46.00	74.00	-28.00	peak
5	23181.775	49.75	-3.39	46.36	74.00	-27.64	peak
6	25790.510	47.45	-0.68	46.77	74.00	-27.23	peak

Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. AVG: VBW=1/Ton where: ton is transmit duration.

Note: All the modulation and channels had been tested, but only the worst data recorded in the report.

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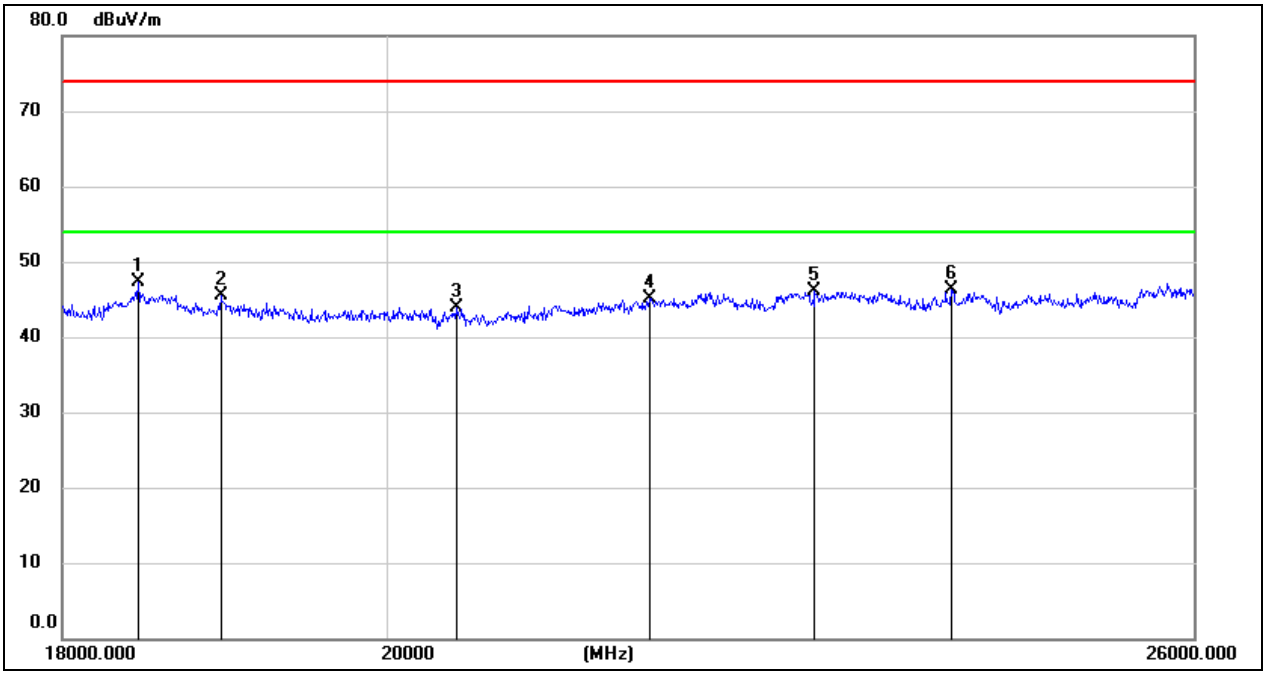
EUT:	IP Camera	Polarization :	Vertical
Test Mode:	11b Middle Chanel		



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	18448.984	52.61	-5.32	47.29	74.00	-26.71	peak
2	18950.934	50.83	-5.26	45.57	74.00	-28.43	peak
3	20457.304	49.39	-5.39	44.00	74.00	-30.00	peak
4	21784.984	49.51	-4.34	45.17	74.00	-28.83	peak
5	22986.538	49.46	-3.45	46.01	74.00	-27.99	peak
6	24032.412	48.96	-2.75	46.21	74.00	-27.79	peak

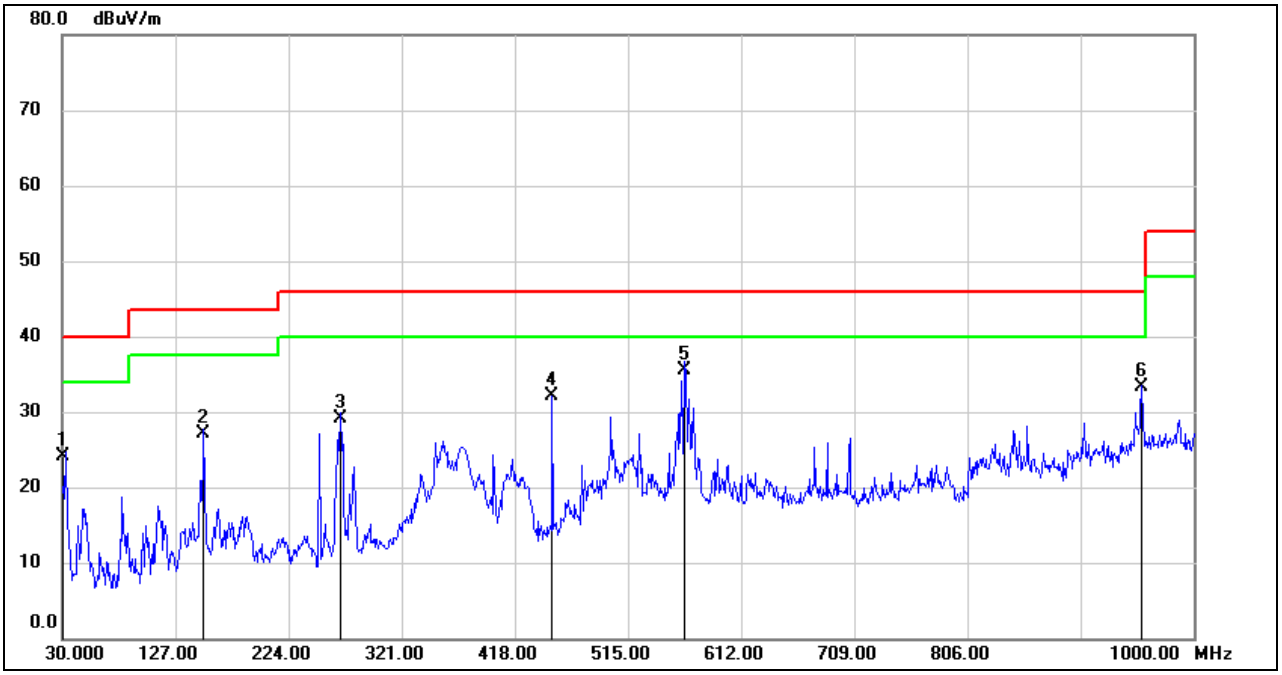
Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. AVG: VBW=1/Ton where: ton is transmit duration.

Note: All the modulation and channels had been tested, but only the worst data recorded in the report.

8.5. SPURIOUS EMISSIONS 30M ~ 1 GHz

SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION)

EUT:	IP Camera	Polarization :	Horizontal
Test Mode:	11b Middle Channel		

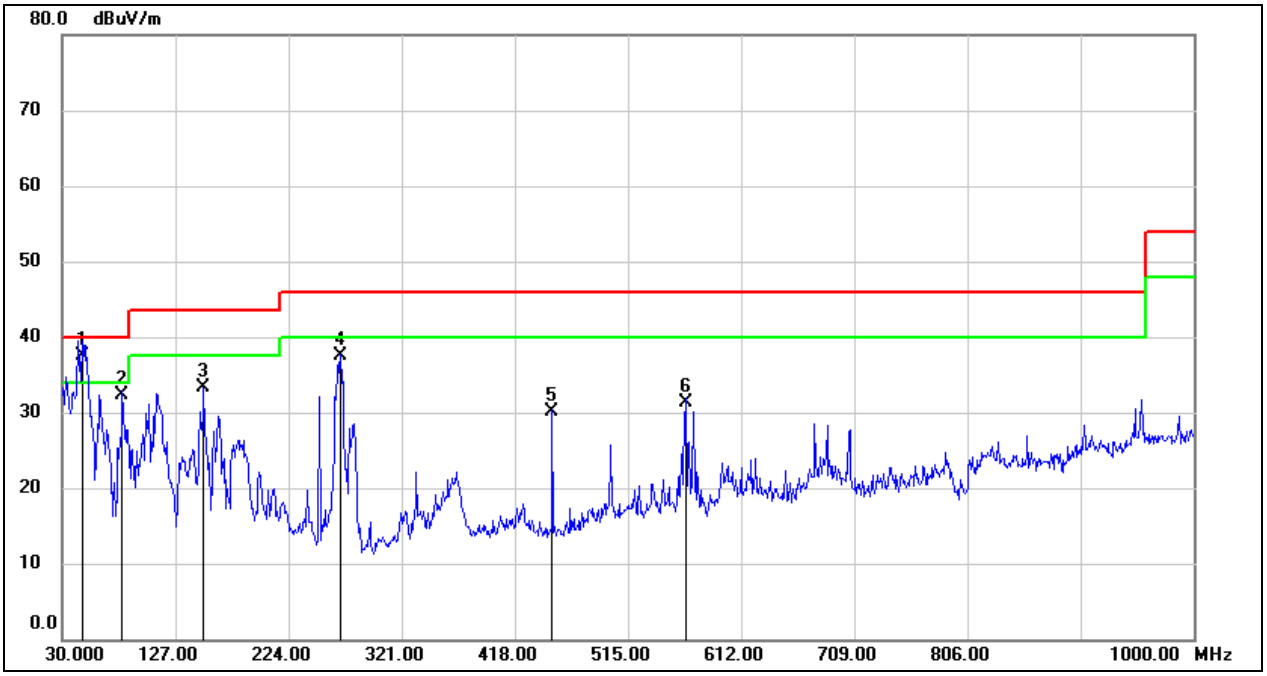


No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	30.0000	38.42	-14.33	24.09	40.00	-15.91	QP
2	151.2500	41.39	-14.25	27.14	43.50	-16.36	QP
3	268.6200	41.81	-12.74	29.07	46.00	-16.93	QP
4	450.0100	41.98	-9.80	32.18	46.00	-13.82	QP
5	563.5000	43.03	-7.43	35.60	46.00	-10.40	QP
6	955.3800	7.10	26.23	33.33	46.00	-12.67	QP

Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.
3. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto.

Note: All the modulation and channels had been tested, but only the worst data recorded in the report.

EUT:	IP Camera	Polarization :	Vertical
Test Mode:	11b Middle Channel		



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	47.4600	53.51	-16.00	37.51	40.00	-2.49	QP
2	81.4100	49.79	-17.55	32.24	40.00	-7.76	QP
3	151.2500	47.55	-14.25	33.30	43.50	-10.20	QP
4	268.6200	50.16	-12.74	37.42	46.00	-8.58	QP
5	450.0100	39.94	-9.80	30.14	46.00	-15.86	QP
6	564.4699	38.77	-7.41	31.36	46.00	-14.64	QP

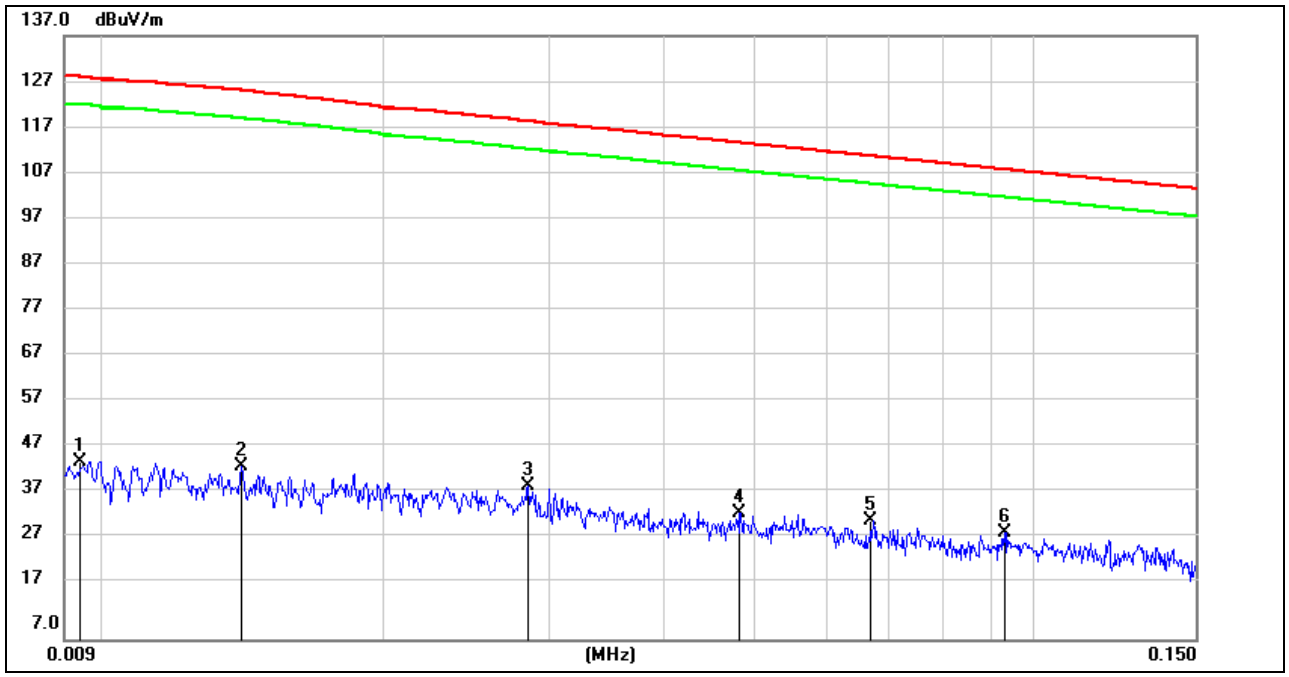
Note: 1. Result Level = Read Level +Correct.
2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.
3. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto

Note: All the modulation and channels had been tested, but only the worst data recorded in the report.

8.6. SPURIOUS EMISSIONS BELOW 30M

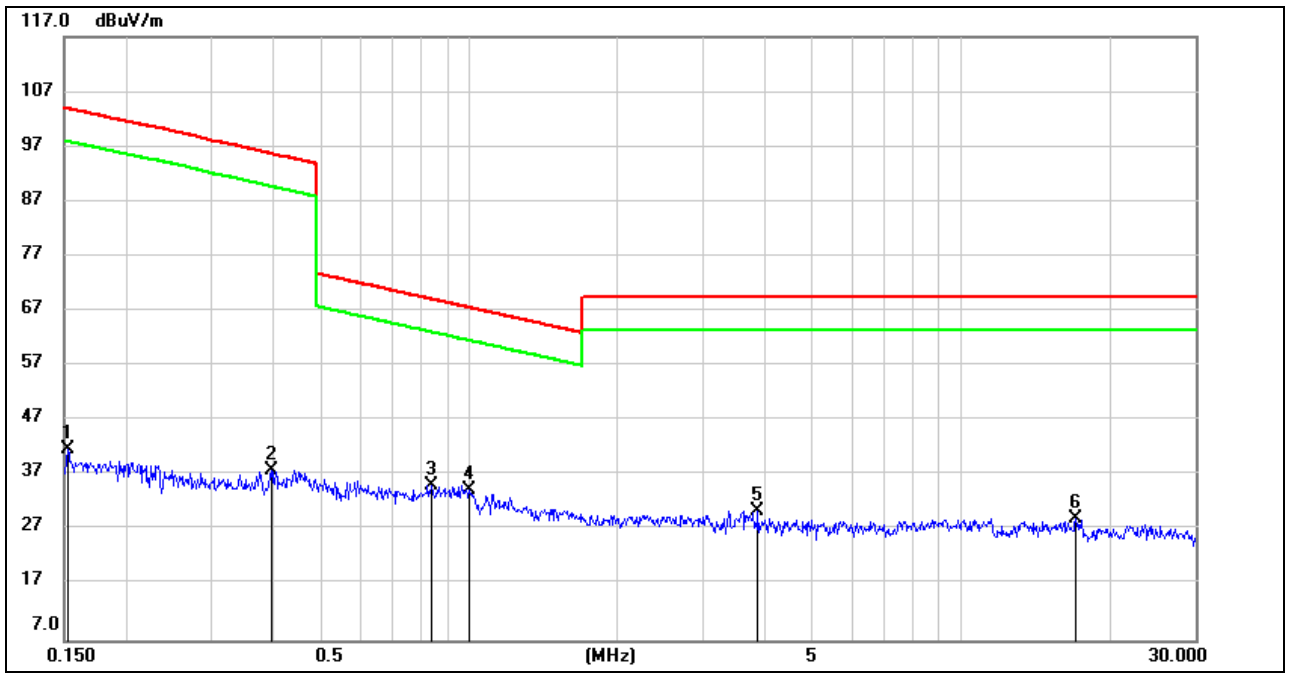
RIOUS EMISSIONS Below 30MHz (WORST-CASE CONFIGURATION)

EUT:	IP Camera	Polarization :	Horizontal
Test Mode:	11b Middle Channel		



No.	Frequency (KHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.0094	25.04	20.26	45.30	128.06	-82.76	QP
2	0.0140	24.02	20.25	44.27	125.19	-80.92	QP
3	0.0285	19.61	20.31	39.92	118.59	-78.67	QP
4	0.0483	13.95	20.31	34.26	113.95	-79.69	QP
5	0.0670	12.26	20.31	32.57	111.10	-78.53	QP
6	0.0932	9.78	20.25	30.03	108.23	-78.20	QP

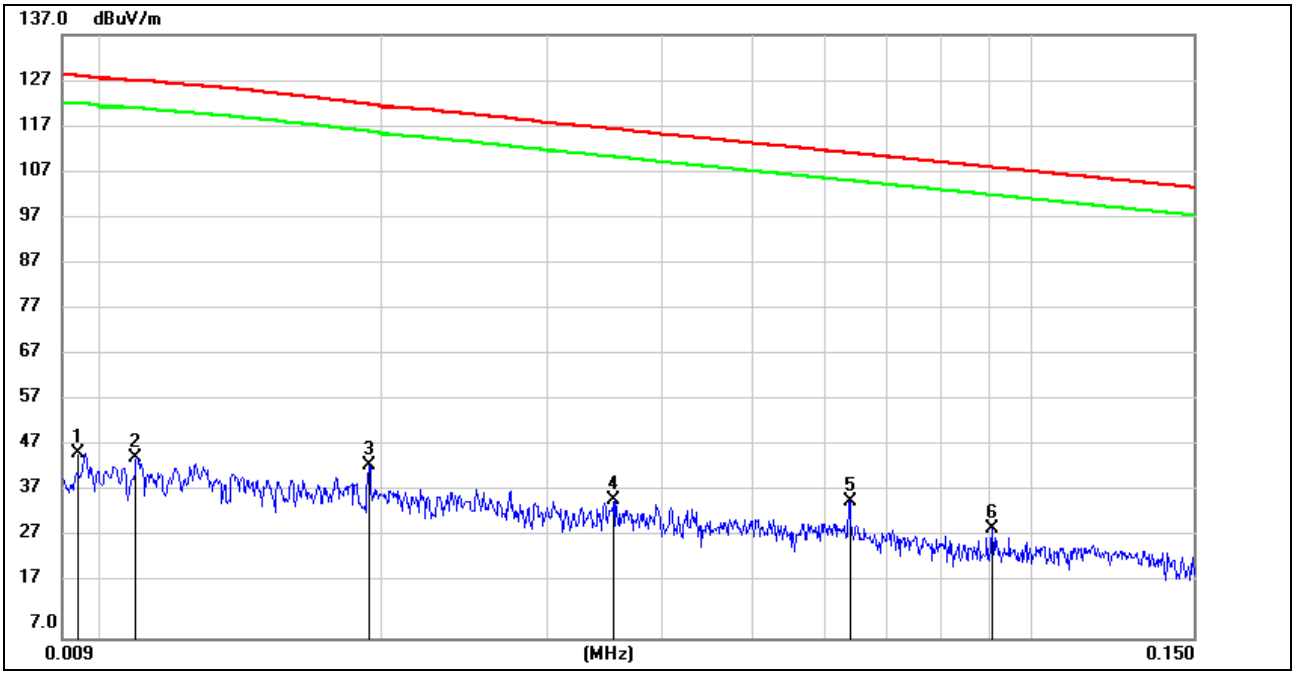
Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.1524	21.41	20.42	41.83	103.95	-62.12	QP
2	0.3955	17.74	20.27	38.01	95.67	-57.66	QP
3	0.8393	14.91	20.36	35.27	69.14	-33.87	QP
4	0.9997	14.00	20.37	34.37	67.60	-33.23	QP
5	3.8603	9.49	21.04	30.53	69.54	-39.01	QP
6	17.1082	8.08	20.98	29.06	69.54	-40.48	QP

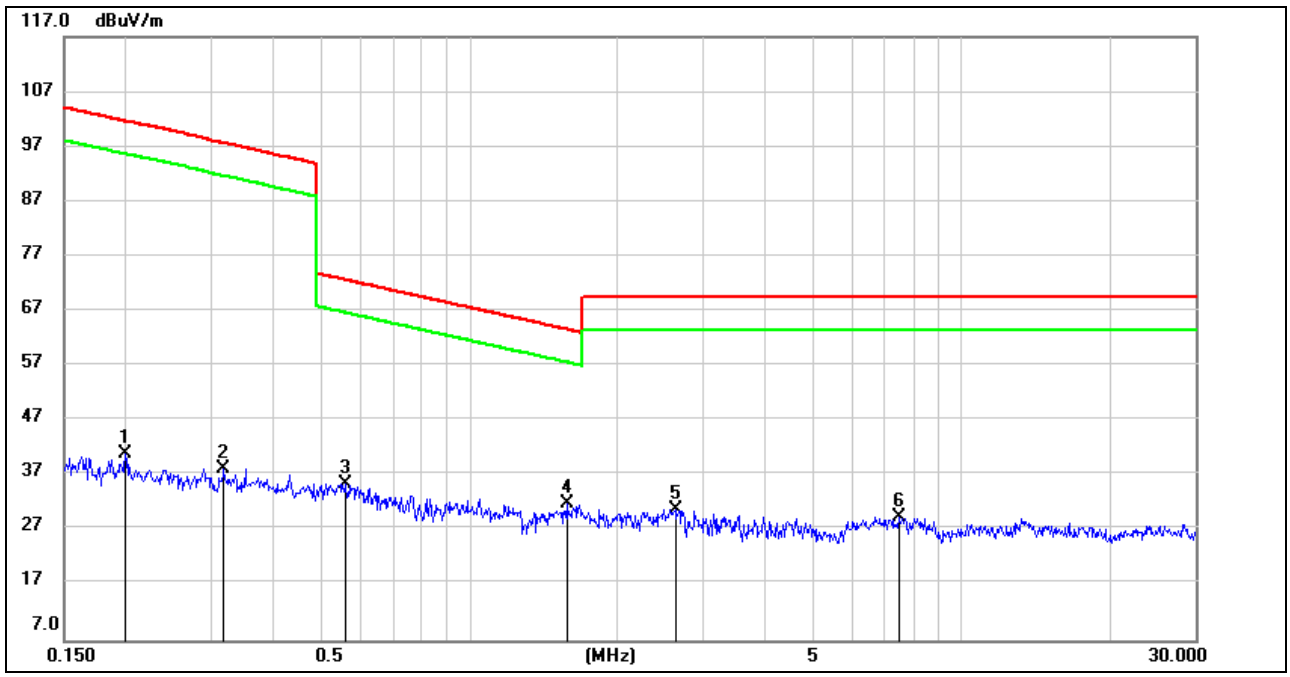
Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.

EUT:	IP Camera	Polarization :	Vertical
Test Mode:	11b Middle Channel		



No.	Frequency (KHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.0094	26.71	20.26	46.97	128.06	-81.09	QP
2	0.0108	25.55	20.22	45.77	127.12	-81.35	QP
3	0.0193	23.77	20.30	44.07	122.00	-77.93	QP
4	0.0354	16.28	20.31	36.59	116.71	-80.12	QP
5	0.0637	16.19	20.31	36.50	111.54	-75.04	QP
6	0.0908	10.16	20.26	30.42	108.45	-78.03	QP

Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.1995	20.67	20.37	41.04	101.60	-60.56	QP
2	0.3165	17.89	20.30	38.19	97.65	-59.46	QP
3	0.5581	15.12	20.26	35.38	72.71	-37.33	QP
4	1.5766	11.31	20.58	31.89	63.65	-31.76	QP
5	2.6221	9.95	20.83	30.78	69.54	-38.76	QP
6	7.4858	8.51	20.94	29.45	69.54	-40.09	QP

Note: 1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.

Note: All the modulation and channels had been tested, but only the worst data recorded in the report.

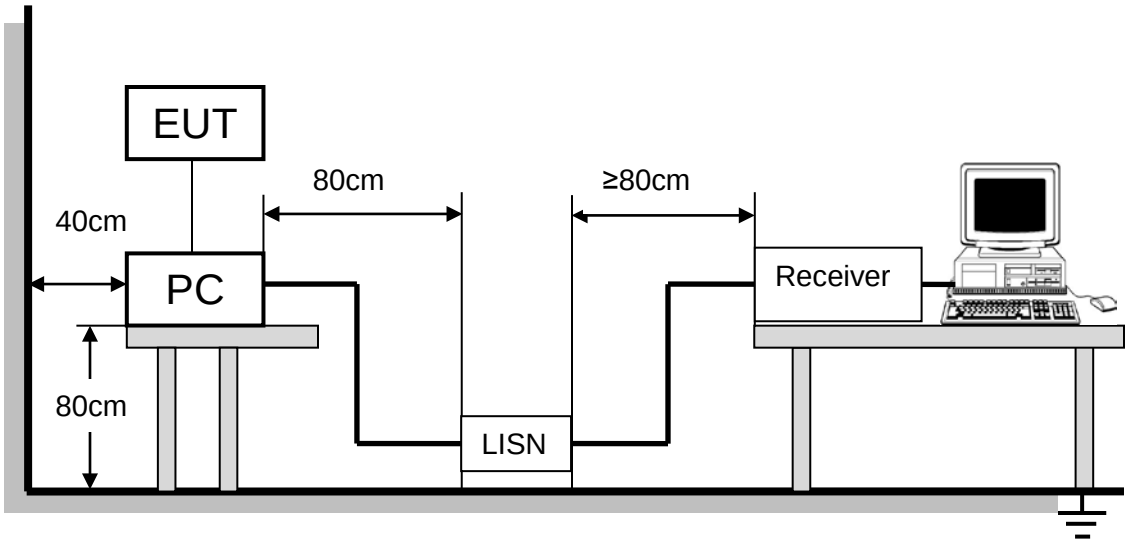
9. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

Please refer to FCC §15.207 (a) and RSS-Gen Clause 8.8

FREQUENCY (MHz)	Class A (dBuV)		Class B (dBuV)	
	Quasi-peak	Average	Quasi-peak	Average
0.15 -0.5	79.00	66.00	66 - 56 *	56 - 46 *
0.50 -5.0	73.00	60.00	56.00	46.00
5.0 -30.0	73.00	60.00	60.00	50.00

TEST SETUP AND PROCEDURE

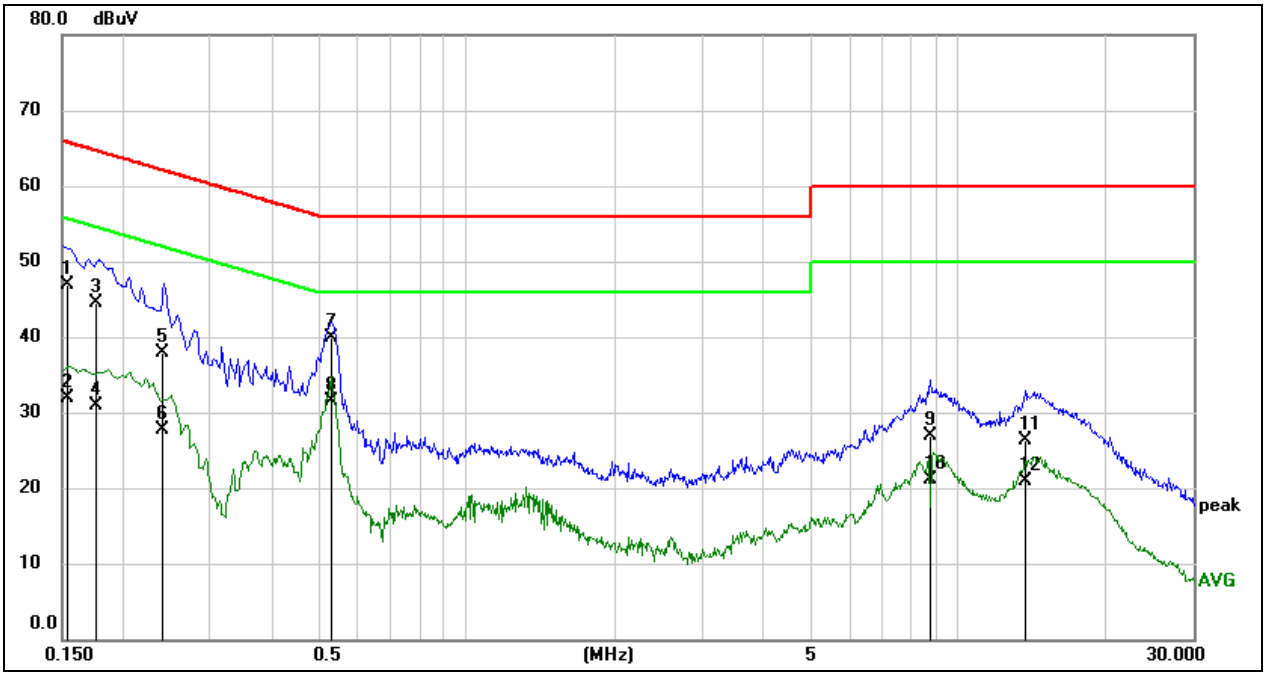


The EUT is put on a table of non-conducting material that is 80cm high. The vertical conducting wall of shielding is located 40cm to the rear of the EUT. The power line of the EUT is connected to the AC mains through a Artificial Mains Network (A.M.N.). A EMI Measurement Receiver (R&S Test Receiver ESR3) is used to test the emissions from both sides of AC line. According to the requirements in Section 6.2 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.

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.

TEST RESULTS

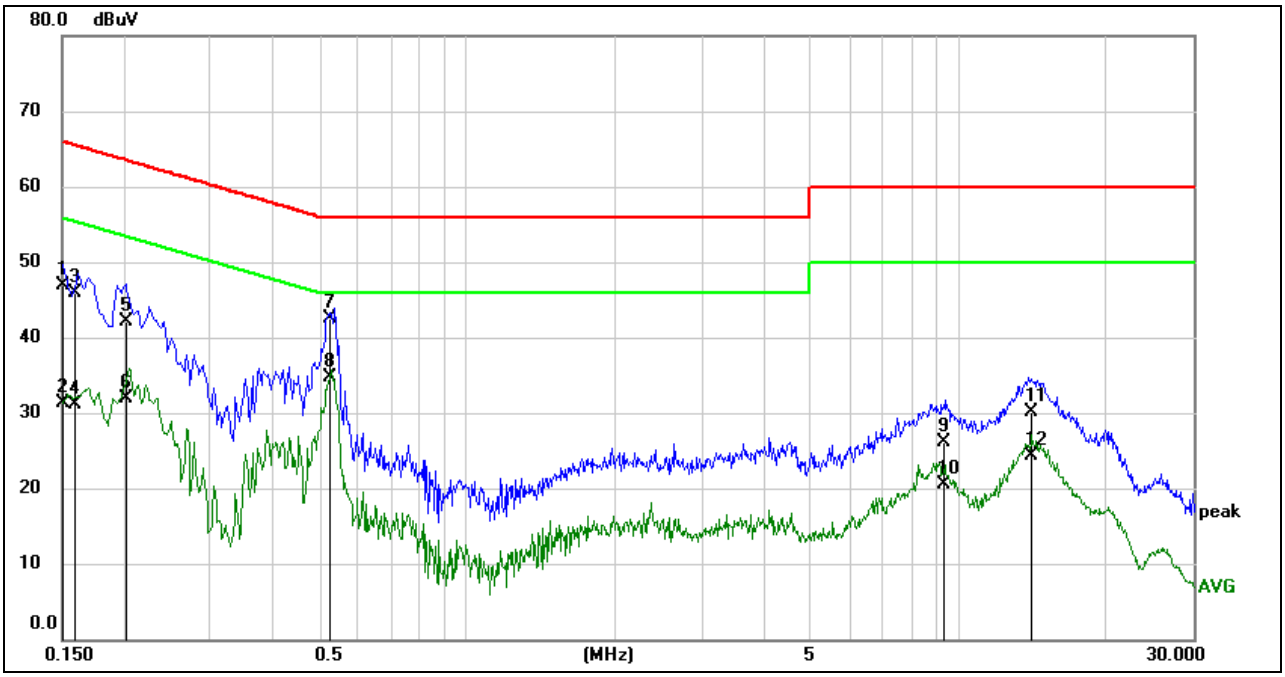
Temperature:	24.5°C	Relative Humidity:	55%
Pressure:	1012 hPa	Test Voltage:	AC 120V/60Hz
Test Mode:	Tx Mode	Phase :	L
Remark:	N/A		



No.	Frequency (MHz)	Reading (dBuV)	Correct dB	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1535	37.24	9.66	46.90	65.81	-18.91	QP
2	0.1535	22.21	9.66	31.87	55.81	-23.94	AVG
3	0.1754	34.78	9.66	44.44	64.70	-20.26	QP
4	0.1754	21.23	9.66	30.89	54.70	-23.81	AVG
5	0.2380	28.23	9.65	37.88	62.17	-24.29	QP
6	0.2380	18.07	9.65	27.72	52.17	-24.45	AVG
7	0.5292	30.29	9.65	39.94	56.00	-16.06	QP
8	0.5292	21.80	9.65	31.45	46.00	-14.55	AVG
9	8.7534	17.16	9.77	26.93	60.00	-33.07	QP
10	8.7534	11.37	9.77	21.14	50.00	-28.86	AVG
11	13.6892	16.57	9.81	26.38	60.00	-33.62	QP
12	13.6892	11.05	9.81	20.86	50.00	-29.14	AVG

Note: 1. Result = Reading +Correct Factor.
2. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 200 Hz (9 kHz—150 kHz), 9 kHz (150 kHz—30 MHz).
4. Step size: 80Hz (0.009MHz-0.15MHz), 4 kHz (0.15MHz-30MHz), Scan time: auto.

Temperature:	24.5°C	Relative Humidity:	55%
Pressure:	1012 hPa	Test Voltage:	AC 120V/60Hz
Test Mode:	Tx Mode	Phase :	N
Remark:	N/A		



No.	Frequency (MHz)	Reading (dBuV)	Correct dB	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1507	37.16	9.66	46.82	65.96	-19.14	QP
2	0.1507	21.55	9.66	31.21	55.96	-24.75	AVG
3	0.1587	36.24	9.66	45.90	65.53	-19.63	QP
4	0.1587	21.52	9.66	31.18	55.53	-24.35	AVG
5	0.2017	32.55	9.65	42.20	63.54	-21.34	QP
6	0.2017	22.25	9.65	31.90	53.54	-21.64	AVG
7	0.5284	32.83	9.65	42.48	56.00	-13.52	QP
8	0.5284	25.03	9.65	34.68	46.00	-11.32	AVG
9	9.3086	16.43	9.77	26.20	60.00	-33.80	QP
10	9.3086	10.79	9.77	20.56	50.00	-29.44	AVG
11	13.9434	20.19	9.82	30.01	60.00	-29.99	QP
12	13.9434	14.58	9.82	24.40	50.00	-25.60	AVG

Note: 1. Result = Reading +Correct Factor.
2. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 200 Hz (9 kHz—150 kHz), 9 kHz (150 kHz—30 MHz).
4. Step size: 80Hz (0.009MHz-0.15MHz), 4 kHz (0.15MHz-30MHz), Scan time: auto.

Note: All the modulation and channels had been tested, but only the worst data recorded in the report.

10. ANTENNA REQUIREMENTS

APPLICABLE REQUIREMENTS

Please refer to FCC §15.203
An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. 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.

Please refer to FCC §15.247(b)(4)
The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

ANTENNA CONNECTOR

EUT has a Dipole Antenna with RP-SMA antenna connector.

ANTENNA GAIN

The antenna gain of EUT is less than 6 dBi.

END OF REPORT