

FCC

RF

TEST REPORT

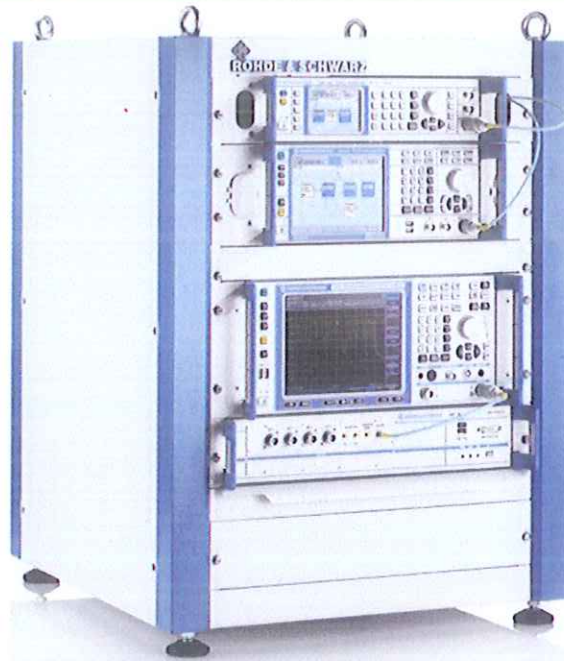
ISSUED BY  
Shenzhen BALUN Technology Co., Ltd.



FOR  
**AC1750 Wireless Dual Band Gigabit Ceiling  
Mount Access Point**

ISSUED TO  
TP-LINK TECHNOLOGIES CO., LTD.

Building 24 (floors 1,3,4,5) and 28 (floors1-4) Central Science and  
Technology Park, Shennan Rd, Nanshan, Shenzhen, China



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*Dec. 06, 2016*

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Date

*Dec. 06, 2016*

Report No.: BL-SZ1680250-602

EUT Type: AC1750 Wireless Dual Band Gigabit  
Ceiling Mount Access Point

Model Name: EAP245

Brand Name: TP-LINK

Test Standard: 47 CFR Part 15 Subpart E

FCC ID: TE7EAP245

Test conclusion: Pass

Test Date: Sep. 15, 2016 ~ Dec. 02, 2016

Date of Issue: Dec. 06, 2016

**Revision History**

Version	Issue Date	Revisions Content
<u>Rev. 01</u>	<u>Oct. 31, 2016</u>	<u>Initial Issue</u>
<u>Rev. 02</u>	<u>Dec. 06, 2016</u>	<u>Updating radiated spurious emission data.</u>

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# 1 ADMINISTRATIVE DATA (GENERAL INFORMATION)

## 1.1 Identification of the Testing Laboratory

Company Name	Shenzhen BALUN Technology Co., Ltd.
Address	Block B, 1st FL, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China
Phone Number	+86 755 6685 0100
Fax Number	+86 755 6182 4271

## 1.2 Identification of the Responsible Testing Location

Test Location	Shenzhen BALUN Technology Co., Ltd.
Address	Block B, 1st FL, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China
Accreditation Certificate	<p>The laboratory has been listed by Industry Canada to perform electromagnetic emission measurements. The recognition numbers of test site are 11524A-1.</p> <p>The laboratory has been listed by US Federal Communications Commission to perform electromagnetic emission measurements. The recognition numbers of test site are 832625.</p> <p>The laboratory is a testing organization accredited by China National Accreditation Service for Conformity Assessment (CNAS) according to ISO/IEC 17025. The accreditation certificate number is L6791.</p>
Description	All measurement facilities used to collect the measurement data are located at Block B, FL 1, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China 518055

## 1.3 Laboratory Condition

Ambient Temperature	20 to 25°C
Ambient Relative Humidity	45% - 55%
Ambient Pressure	100 kPa - 102 kPa

## 1.4 Announce

- (1) The test report reference to the report template version v1.6.
- (2) The test report is invalid if not marked with the signatures of the persons responsible for preparing and approving the test report.
- (3) The test report is invalid if there is any evidence and/or falsification.
- (4) The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein.
- (5) This document may not be altered or revised in any way unless done so by BALUN and all revisions are duly noted in the revisions section.
- (6) Content of the test report, in part or in full, cannot be used for publicity and/or promotional purposes without prior written approval from the laboratory.

## 2 PRODUCT INFORMATION

### 2.1 Applicant

Applicant	TP-LINK TECHNOLOGIES CO., LTD.
Address	Building 24 (floors 1,3,4,5) and 28 (floors1-4) Central Science and Technology Park, Shennan Rd, Nanshan, Shenzhen, China

### 2.2 Manufacturer

Manufacturer	TP-LINK TECHNOLOGIES CO., LTD.
Address	Building 24 (floors 1,3,4,5) and 28 (floors1-4) Central Science and Technology Park, Shennan Rd, Nanshan, Shenzhen, China

### 2.3 Factory

Factory	N/A
Address	N/A

### 2.4 General Description for Equipment under Test (EUT)

EUT Type	AC1750 Wireless Dual Band Gigabit Ceiling Mount Access Point
Model Name	EAP245
Hardware Version	N/A
Software Version	N/A
Network and Wireless connectivity	WIFI 802.11a, 802.11b, 802.11g, 802.11n(HT20/40) and 802.11ac

### 2.5 Ancillary Equipment

Ancillary Equipment 1	Charger 1	
	Brand Name	TP-LINK
	Model Name	T120150-2B1
	Rated Input	100-240 V ~, 50/60 Hz, 0.6 A
	Rated Output	12 V =, 1.5 A

## 2.6 Technical Information

Frequency Range	Band I: 5150 MHz to 5250 MHz, Band IV: 5725 MHz to 5850 MHz	
Modulation technology	OFDM	
Modulation Type	256QAM, 64QAM, 16QAM, BPSK, QPSK	
Product Type	Indoor for IC standard Indoor Access Point for FCC standard	
Transfer Rate (Mbps)	802.11a: 54/ 48/ 36 / 24 / 18 / 9/ 6 Mbps 802.11n: up to 450 Mbps 802.11ac: up to VHT MCS9	
Channel Bandwidth	802.11a: 20 MHz 802.11n: 20 MHz, 40 MHz 802.11ac: 20 MHz, 40 MHz, 80 MHz	
Maximum Output Power	Band I: 27.27 dBm Band IV: 29.42 dBm	
Antenna System (eg., MIMO, Smart Antenna)	Cyclic Delay Diversity (CDD)	
Categorization as Correlated or Completely Uncorrelated	Correlated	
Antenna Type	Antenna 0 (ANT 0)	PIFA Antenna
	Antenna 1 (ANT 1)	
	Antenna 2 (ANT 2)	
Antenna Gain	Antenna 0 (ANT 0)	Band I: 5150 MHz to 5250 MHz: 4.35 dBi Band IV: 5725 MHz to 5850 MHz: 4.50 dBi
	Antenna 1 (ANT 1)	Band I: 5150 MHz to 5250 MHz: 4.85 dBi Band IV: 5725 MHz to 5850 MHz: 4.23 dBi
	Antenna 2 (ANT 2)	Band I: 5150 MHz to 5250 MHz: 5.11 dBi Band IV: 5725 MHz to 5850 MHz: 4.42 dBi
Total directional gain	For power spectral density(PSD) measurements	Band I: 5150 MHz to 5250 MHz:9.88 dBi Band IV: 5725 MHz to 5850 MHz: 9.27 dBi Formulas: Directional gain = GANT + Array Gain, <i>Array Gain</i> = $10 \log(NANT/NSS)$ dB. <i>NSS</i> =1, GANT set equal to the gain of the antenna having the highest gain.
	For power measurements	Band I: 5150 MHz to 5250 MHz: 5.11 dBi Band IV: 5725 MHz to 5850 MHz: 4.50 dBi Formulas:Directional gain = GANT + Array Gain, <i>Array Gain</i> = 0.
About the Product	The equipment is AC1750 Wireless Daul Band Gigabit Ceiling Mount Access Point, intended for used with information technology equipment.	



## 2.7 Additional Instructions

Mode	<input checked="" type="checkbox"/> Special software is used. The software provided by client to enable the EUT under transmission condition continuously at specific channel frequencies individually.
------	--

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

EUT Software Settings:

Soft Set:

Band I (5150 - 5250 MHz ) Power level setup in software					
Test Software Version	Cart				
Mode	Channel	Frequency (MHz)	Soft Set		
			ANNT 0	ANNT 1	ANNT 2
11a	CH36	5180	19		
11a	CH44	5220	20		
11a	CH48	5240	20		
11n (HT20)	CH36	5180	20		
11n (HT20)	CH44	5220	20		
11n (HT20)	CH48	5240	20		
11n (HT40)	CH38	5190	20		
11n (HT40)	CH46	5230	24		
11ac (HT80)	CH42	5210	19		

Band IV (5725 - 5850 MHz ) Power level setup in software					
Test Software Version	Cart				
Mode	Channel	Frequency (MHz)	Soft Set		
			ANNT 0	ANNT 1	ANNT 2
11a	CH149	5745	28		
11a	CH157	5785	28		
11a	CH165	5825	28		
11n (HT20)	CH149	5745	28		
11n (HT20)	CH157	5785	30		
11n (HT20)	CH165	5825	30		
11n (HT40)	CH151	5755	30		
11n (HT40)	CH159	5795	30		
11ac (HT80)	CH155	5775	30		

## Run Software

```
CA cart
connect 192.168.0.254:2390
5007 ERROR Closed connection to nart[0].
5000 INFO Trying to connect to nart[0] on 192.168.0.254:2390.
5001 INFO Connected to nart[0] on 192.168.0.254:2390.
[0] 5109 INFO Accepted control connection from client 0.
load
[0] 6606 INFO Link control functions loaded for "Link" from "/tmp/liblinkAr9k.so".
[0] 6506 INFO Device control functions loaded for "Ar9287" from "/tmp/libar9287.so". Version "4.0" built on "110602124500".
[0] 6501 WARNING Unable to find device dll "ar946x".
[0] 6501 WARNING Unable to find device dll "ar956x".
[0] 6501 WARNING Unable to find device dll "AR9485".
[0] 6606 INFO Link control functions loaded for "Link" from "/tmp/liblinkAr9k.so".
[0] 6506 INFO Device control functions loaded for "Ar9300" from "/tmp/libar9300.so". Version "4.5.3" built on "120510170000".
[0] 6011 INFO Calibration information read from flash.
[0] 6024 INFO Free memory for initialization and calibration is 991 (1023 - 32) bytes.
[0] 6000 INFO Loaded card.
tx r=6;f=5180;pc=-1;pl=1500;tx99=1;ch=7;ht40=0;tp=20
2004 WARNING Transmit forever requires rate interleaving. pc<0 => ir=1.
[0] 1001 ERROR Bad value "5180" for parameter "f".
```



## 2.8 Channel List

20 MHz		40 MHz		80 MHz	
Channel Number	Frequency (MHz)	Channel Number	Frequency (MHz)	Channel Number	Frequency (MHz)
36	5180	38	5190	42	5210
40	5200	46	5230	155	5775
44	5220	151	5755	-	-
48	5240	159	5790	-	-
149	5745	-	-	-	-
153	5765	-	-	-	-
157	5785	-	-	-	-
161	5805	-	-	-	-
165	5825	-	-	-	-

Note: Until further notice, devices subject to this section shall not be capable of transmitting in the band 5600-5650 MHz. This restriction is for the protection of weather radars operating in this band.

The Lowest frequency, the middle frequency and the highest frequency of channel were selected to perform the test, and the selected channel see below:

For 802.11a/n(HT20)

Band I (5150 - 5250 MHz)			Band IV (5725 - 5850 MHz)		
Channel Number	Channel	Frequency (MHz)	Channel Number	Channel	Frequency (MHz)
36	Low	5180	149	Low	5745
44	Mid	5220	157	Mid	5785
48	High	5240	165	High	5825

For 802.11n (HT40)

Band I (5150 - 5250 MHz)			Band IV (5725 - 5850 MHz)		
Channel Number	Channel	Frequency (MHz)	Channel Number	Channel	Frequency (MHz)
38	Low	5190	151	Low	5755
46	High	5230	159	High	5795

For 802.11ac (HT80)

Band I (5150 - 5250 MHz)			Band IV (5470 - 5725 MHz)		
Channel Number	Channel	Frequency (MHz)	Channel Number	Channel	Frequency (MHz)
42	Low	5210	155	Low	5775

Note: Preliminary tests were performed in different data rate in above table to find the worst radiated emission. The data rate shown in the table below is the worst-case rate with respect to the specific test item. Investigation has been done on all the possible configurations for searching the worst cases. The following table is a list of the test modes shown in this test report.

Test Items	Mode	Data Rate	Modulation Technology	Modulation Type	Band I	Band IV
					Channel	Channel
RF Output Power	11a	6	OFDM	BPSK	48/44/36	165/157/149
	11n(20 MHz)	6.5	OFDM	BPSK	48/44/36	165/157/149
	11n(40 MHz)	13.5	OFDM	BPSK	46/38	159/151
	11ac(80 MHz)	V0	OFDM	BPSK	42	155
Emission Bandwidth & 99% Occupied Bandwidth	11a	6	OFDM	BPSK	48/44/36	165/157/149/144
	11n(20 MHz)	6.5	OFDM	BPSK	48/44/36	165/157/149
	11n(40 MHz)	13.5	OFDM	BPSK	46/38	159/151
	11ac(80 MHz)	V0	OFDM	BPSK	42	155
6 dB bandwidth	11a	6	OFDM	BPSK	N/A	165/157/149
	11n(20 MHz)	6.5	OFDM	BPSK	N/A	165/157/149
	11n(40 MHz)	13.5	OFDM	BPSK	N/A	159/151
	11ac(80 MHz)	V0	OFDM	BPSK	N/A	155
Power Spectral Density	11a	6	OFDM	BPSK	48/44/36	165/157/149
	11n(20 MHz)	6.5	OFDM	BPSK	48/44/36	165/157/149
	11n(40 MHz)	13.5	OFDM	BPSK	46/38	159/151
	11ac(80 MHz)	V0	OFDM	BPSK	42	155
Conducted Spurious Emissions	11a	6	OFDM	BPSK	48/44/36	165/157/149
	11n(20 MHz)	6.5	OFDM	BPSK	48/44/36	165/157/149
	11n(40 MHz)	13.5	OFDM	BPSK	46/38	159/151
	11ac(80 MHz)	V0	OFDM	BPSK	42	155
Radiated Spurious Emissions	11a	6	OFDM	BPSK	48/44/36	165/157/149
	11n(20 MHz)	6.5	OFDM	BPSK	48/44/36	165/157/149
	11n(40 MHz)	13.5	OFDM	BPSK	46/38	159/151
	11ac(80 MHz)	V0	OFDM	BPSK	42	155
Frequency Stability	11a	6	OFDM	BPSK	44	157
	11n(20 MHz)	6.5	OFDM	BPSK	44	157
	11n(40 MHz)	13.5	OFDM	BPSK	38	151
	11ac(80 MHz)	V0	OFDM	BPSK	42	155
Band Edge	11a	6	OFDM	BPSK	36	165/149
	11n(20 MHz)	6.5	OFDM	BPSK	36	165/149
	11n(40 MHz)	13.5	OFDM	BPSK	38	159/151
	11ac(80 MHz)	V0	OFDM	BPSK	42	155

### 3 SUMMARY OF TEST RESULTS

#### 3.1 Test Standards

No.	Identity	Document Title
1	47 CFR Part 15 Subpart E (10-1-15 Edition)	Unlicensed National Information Infrastructure Devices
2	KDB Publication 789033 D02v01r03	Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices Part 15, Subpart E
3	KDB Publication 662911 D01v02r01	Emissions Testing of Transmitters with Multiple Outputs in the Same Band (e.g., MIMO, Smart Antenna, etc)
4	ANSI C63.10-2013	American National Standard for Testing Unlicensed Wireless Devices

#### 3.2 Verdict

No.	Description	FCC Part No.	Test Result	Verdict
1	Antenna Requirement	15.203	--	Pass <sup>Note1</sup>
2	RF Output Power	15.407(a)	ANNEX A.1	Pass <sup>Note2</sup>
3	Emission Bandwidth & 99% Occupied Bandwidth	15.407(a)	ANNEX A.2	Pass <sup>Note2</sup>
4	6 dB bandwidth	15.407(e)	ANNEX A.3	Pass <sup>Note2</sup>
5	Power Spectral Density	15.407(a)	ANNEX A.4	Pass <sup>Note2</sup>
6	Conducted Emission	15.207	ANNEX A.5	Pass <sup>Note2</sup>
7	Conducted Spurious Emissions	15.407(b) 15.209	ANNEX A.6	Pass <sup>Note2</sup>
8	Radiated Spurious Emissions and Band Edge	15.407(b)	ANNEX A.7	Pass <sup>Note2</sup>
9	Frequency Stability	2.1055 90.213	ANNEX A.8	Pass <sup>Note2</sup>

Note 1: The EUT has a permanently and irreplaceable attached antenna, which complies with the requirement FCC 15.203.

Note 2: FCC certification test corresponding to the same test prototype, in addition to different power levels, the remaining parameters the same. In this report, except for the differences in power and limits for FCC items, these test items reflect the FCC certification of different data, all other test items only reflect the FCC power level of the maximum, which the maximum level is the FCC.

## 4 GENERAL TEST CONFIGURATIONS

### 4.1 Test Environments

During the measurement, the normal environmental conditions were within the listed ranges:

Note : The EUT is only powered by the adapter, and the voltage deviation supplied to the radio part (excluding power supply circuit ) of the EUT is kept within +/- 1% when input voltage from an external power supply deviates by +/- 10%.

Relative Humidity	45% - 55%	
Atmospheric Pressure	100 kPa - 102 kPa	
Temperature	NT (Normal Temperature)	+22°C to +25°C
	LT (Low Temperature)	-10°C
	HT (High Temperature)	+40°C
Working Voltage of the EUT	NV (Normal Voltage)	12 V

### 4.2 Test Equipment List

Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
Spectrum Analyzer	ROHDE&SCHWARZ	FSV-30	103118	2016.07.13	2017.07.12
Vector Signal Generator	ROHDE&SCHWARZ	SMBV100A	177746	2016.07.13	2017.07.12
Signal Generator	ROHDE&SCHWARZ	SMB100A	260592	2016.07.13	2017.07.12
Switch Unit with OSP-B157	ROHDE&SCHWARZ	OSP120	101270	2016.07.13	2017.07.12
Spectrum Analyzer	AGILENT	E4440A	MY45304434	2015.10.15	2016.10.14
EMI Receiver	ROHDE&SCHWARZ	ESRP	101036	2016.07.05	2017.07.04
LISN	SCHWARZBECK	NSLK 8127	8127-687	2016.07.05	2017.07.04
Bluetooth Tester	ROHDE&SCHWARZ	CBT	101005	2016.07.13	2017.07.12
Power Splitter	KMW	DCPD-LDC	1305003215	--	--
Power Sensor	ROHDE&SCHWARZ	NRP-Z21	103971	2016.07.13	2017.07.12
Attenuator (20 dB)	KMW	ZA-S1-201	110617091	--	--
Attenuator (6 dB)	KMW	ZA-S1-61	1305003189	--	--
DC Power Supply	ROHDE&SCHWARZ	HMP2020	018141664	2016.07.13	2017.07.12
Temperature Chamber	ANGELANTIONI SCIENCE	NTH64-40A	1310	2016.07.13	2017.07.12
Test Antenna-Loop(9 kHz-30 MHz)	SCHWARZBECK	FMZB 1519	1519-037	2015.07.22	2017.07.21
Test Antenna-Bi-Log(30 MHz-3 GHz)	SCHWARZBECK	VULB 9163	9163-624	2015.07.22	2017.07.21
Test Antenna-Horn(1-18 GHz)	SCHWARZBECK	BBHA 9120D	9120D-1148	2015.07.22	2017.07.21
Test Antenna-Horn(15-26.5 GHz)	SCHWARZBECK	BBHA 9170	9170-305	2015.07.22	2017.07.21
Anechoic Chamber	RAINFORD	9m*6m*6m	N/A	2015.02.28	2017.02.27
Shielded Enclosure	ChangNing	CN-130701	130703	--	--

### 4.3 MEASUREMENT UNCERTAINTY

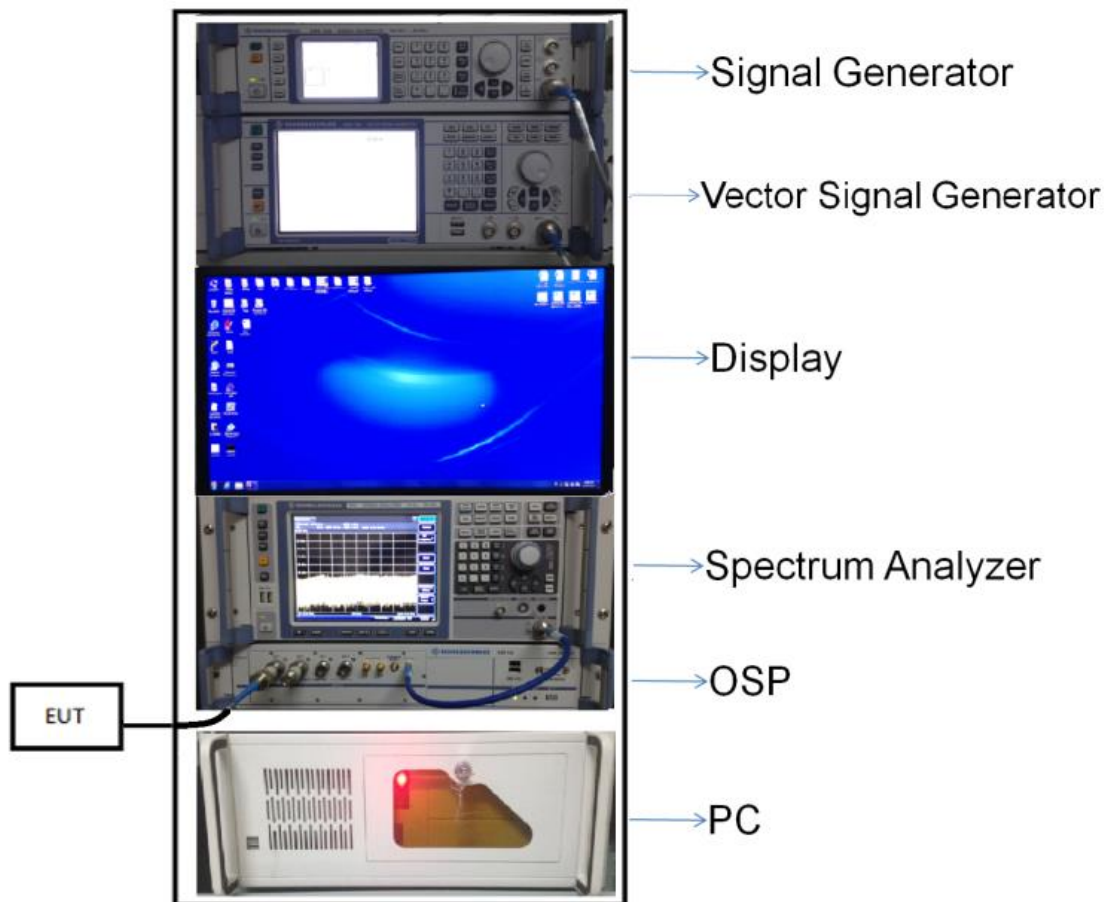
The following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2.

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of  $k=2$ .

Measurement	Value
Occupied Channel Bandwidth	$\pm 4\%$
RF output power, conducted	$\pm 1.4$ dB
Power Spectral Density, conducted	$\pm 2.5$ dB
Unwanted Emissions, conducted	$\pm 2.8$ dB
All emissions, radiated	$\pm 5.4$ dB
Temperature	$\pm 1^\circ\text{C}$
Humidity	$\pm 4\%$

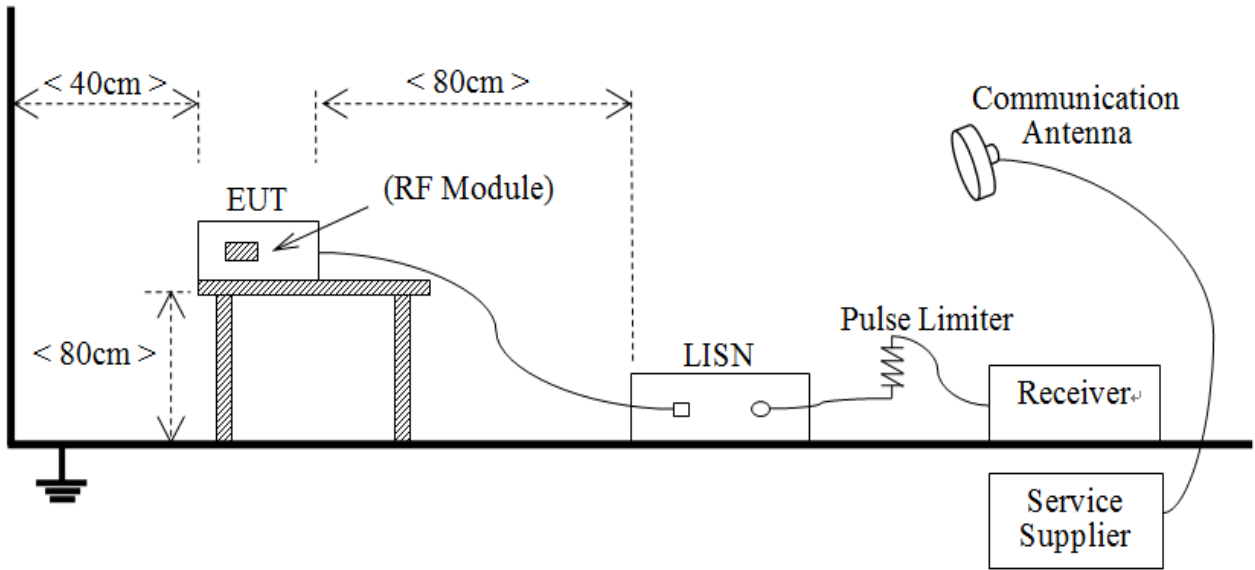
### 4.4 Description of Test Setup

#### 4.4.1 For Antenna Port Test



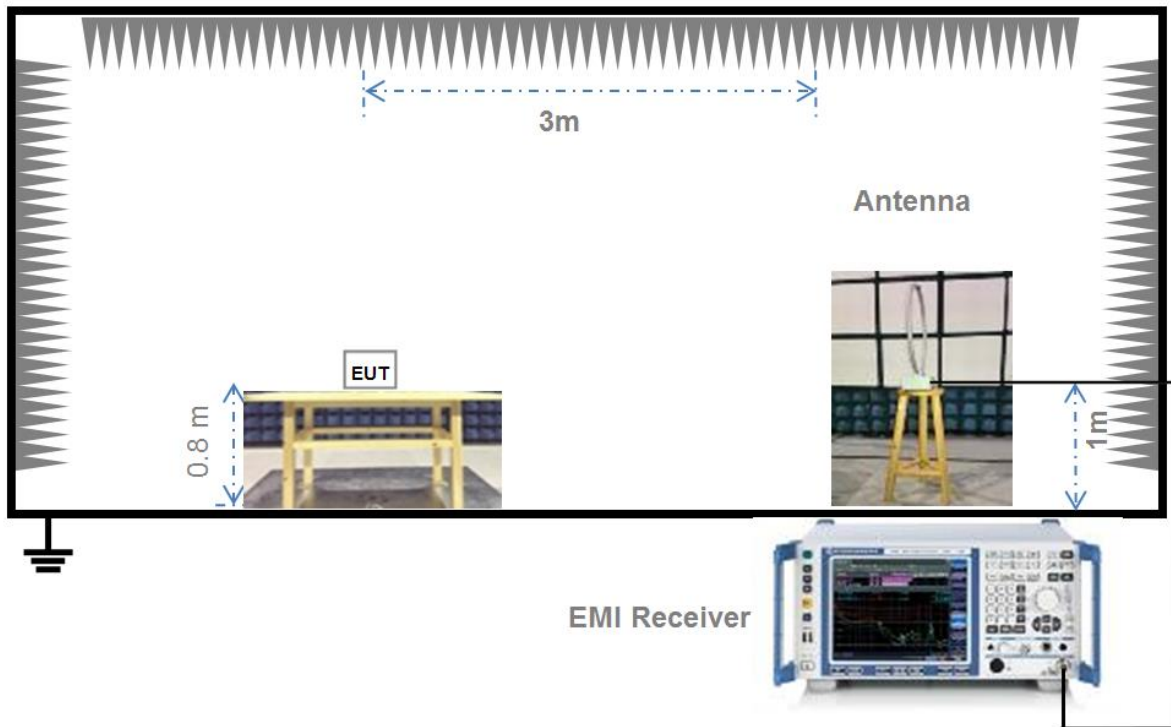
(Diagram 1)

4.4.2 For AC Power Supply Port Test



(Diagram 2)

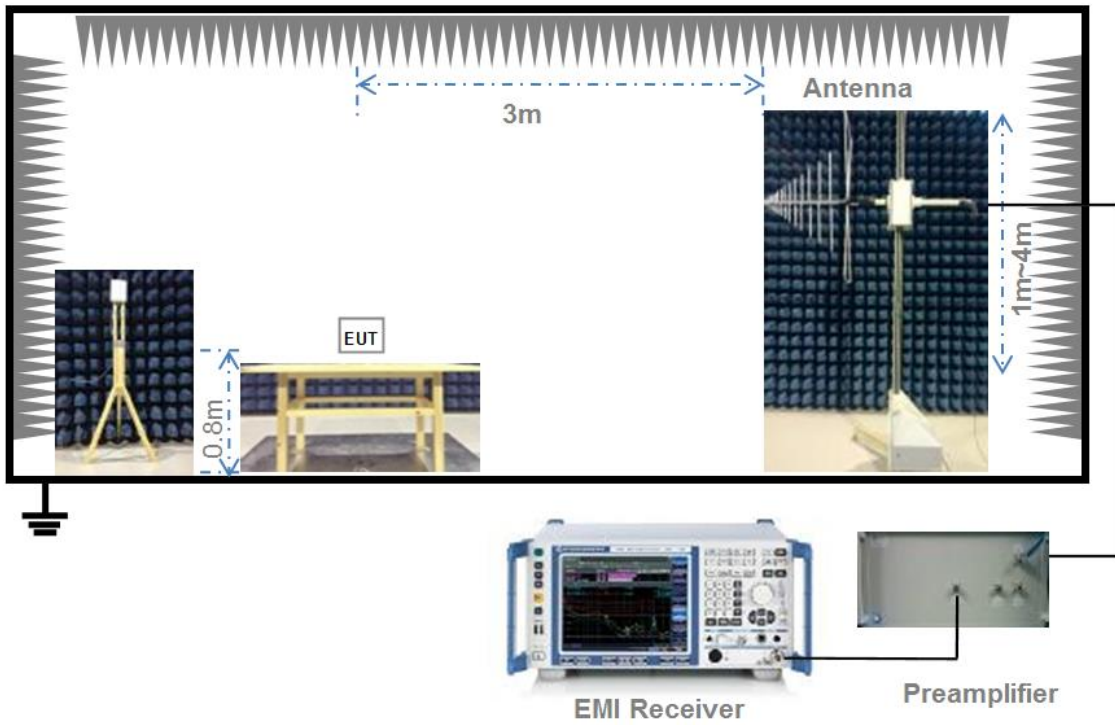
4.4.3 For Radiated Test (Below 30 MHz)



(Diagram 3)

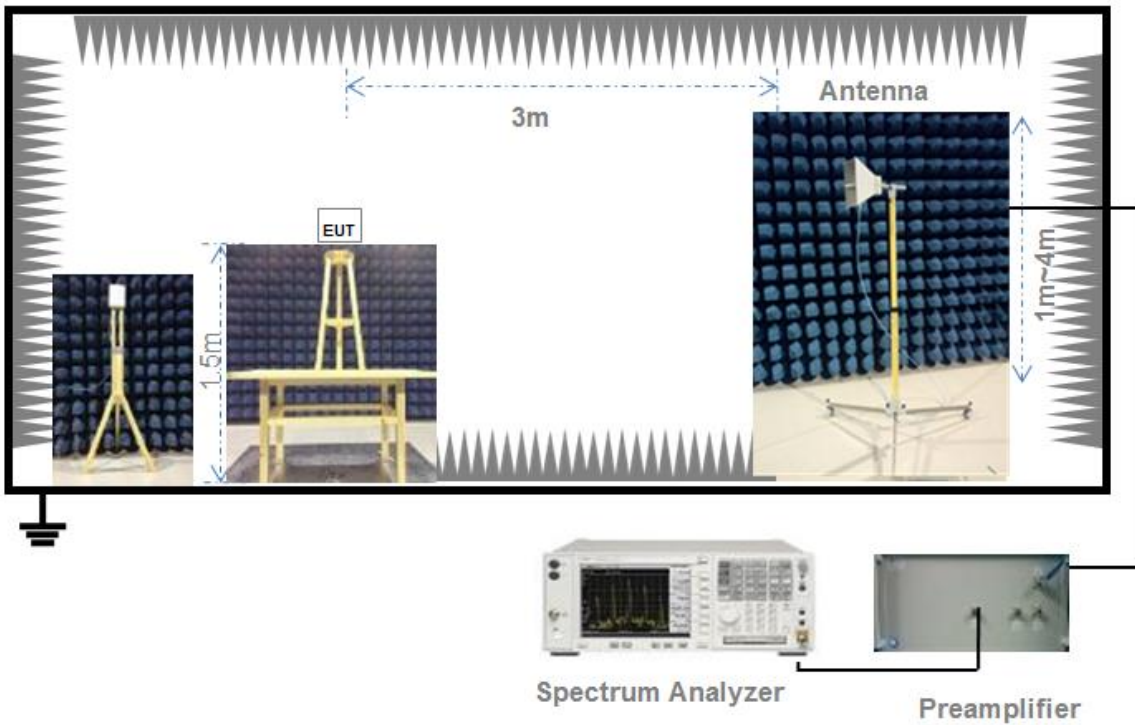


4.4.4 For Radiated Test (30 MHz-1 GHz)



(Diagram 4)

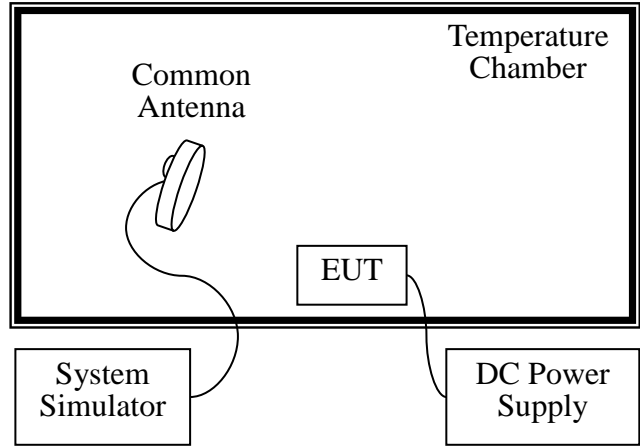
4.4.5 For Radiated Test (Above 1 GHz)



(Diagram 5)



4.4.6 For Frequency Stability Test



(Diagram 6)

## 5 TEST ITEMS

### 5.1 RF Output Power

#### 5.1.1 Test Limit

FCC §15.407(a)

The maximum conducted output power should not exceed:

Frequency Band (MHz)	Limit
5150-5250	1 W
5725-5850	1 W

Note 1 : For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W  
Note 2 :For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W

#### 5.1.2 Test Setup

The section 4.4.1 (Diagram 1) test setup description was used for this test. The photo of test setup please refer to ANNEX B.

#### 5.1.3 Test Procedure

The maximum peak conducted output power may be measured using a broadband Average RF power meter. The power meter shall have a video bandwidth that is greater than or equal to the emission bandwidth and utilize a fast-responding diode detector.

#### 5.1.4 Test Result

Please refer to ANNEX A.1.

## 5.2 Emission Bandwidth and 6 dB Bandwidth

### 5.2.1 Limit

FCC §15.407(a)

Within the 5.725-5.85 GHz band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

### 5.2.2 Test Setup

The test setup photo please refer to 4.4.1 (Diagram 1) test setup description was used for this test. The photo of test setup please refer to ANNEX B.

### 5.2.3 Test Procedure

#### Emission bandwidth

1. Set RBW = approximately 1% of the emission bandwidth.
2. Set VBW  $\geq 3 \times$  RBW,
3. Detector = Peak.
4. Trace mode = Max hold.
5. Measure the maximum width of the emission that is 26 dB down from the peak of the emission.

#### Occupied Bandwidth

1. Set Span = 1.5 times to 5.0 times the OBW
2. Set RBW = 1% to 5% of the OBW.
3. Set VBW  $\geq 3 \times$  RBW, Detector = Peak.
4. Trace mode = Max hold.
5. Use the 99% power bandwidth function of the instrument.

#### 6 dB bandwidth

1. Set RBW = 100 kHz, VBW = 300 kHz.
2. Detector = Peak. Trace mode = Max hold.
3. Allow the trace to stabilize.
4. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

### 5.2.4 Test Result

Please refer to ANNEX A.2 and ANNEX A.3.

## 5.3 Power Spectral density (PSD)

### 5.3.1 Limit

FCC §15.407(a)

The maximum power spectral density should not exceed:

Frequency Band (MHz)	Limit
5150-5250	17 dBm/MHz
5725-5850	30 dBm/500kHz

### 5.3.2 Test Setup

The section 4.4.1 (Diagram 1) test setup description was used for this test. The photo of test setup please refer to ANNEX B.

### 5.3.3 Test Procedure

Set the spectrum analyzer or EMI receiver span to view the entire emission bandwidth.

1. Set RBW = 500 kHz/1 MHz, VBW  $\geq 3 \times$  RBW, Sweep time = Auto, Detector = RMS.
2. Allow the sweeps to continue until the trace stabilizes.
3. Use the peak marker function to determine the maximum amplitude level.

### 5.3.4 Test Result

Please refer to ANNEX A.4.

## 5.4 Conducted Emission

### 5.4.1 Limit

FCC §15.207

For an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency within the band 150 kHz to 30 MHz shall not exceed the limits in the following table, as measured using a 50 $\mu$ H/50 $\Omega$  line impedance stabilization network (LISN).

Frequency range (MHz)	Conducted Limit (dB $\mu$ V)	
	Quai-peak	Average
0.15 - 0.50	66 to 56	56 to 46
0.50 - 5	56	46
0.50 - 30	60	50

### 5.4.2 Test Setup

The section 4.4.2 (Diagram 2) test setup description was used for this test. The photo of test setup please refer to ANNEX B.

### 5.4.3 Test Procedure

The maximum conducted interference is searched using Peak (PK), if the emission levels more than the AV and QP limits, and that have narrow margins from the AV and QP limits will be re-measured with AV and QP detectors. Tests for both L phase and N phase lines of the power mains connected to the EUT are performed. Refer to recorded points and plots below.

### 5.4.4 Test Result

Please refer to ANNEX A.5.

## 5.5 Conducted Spurious Emission and Band Edge (Authorized-band)

### 5.5.1 Limit

FCC §15.407(b)

Un-restricted band emissions	
Frequency Band (MHz)	Limit
5150 - 5250	Outside of the 5.15-5.35 GHz band: e.i.r.p. -27 dBm
5725 - 5850	<p>All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.</p> <p>The graph plots EIRP (dBm/MHz) on the y-axis (ranging from -40 to 70) against Frequency (MHz) on the x-axis (ranging from 5600 to 9500). A blue line represents the emission limit. It is constant at -27 dBm/MHz for frequencies below 5650 MHz and above 9450 MHz. Between 5650 MHz and 5725 MHz, the limit increases linearly from -27 dBm/MHz to 10 dBm/MHz. Between 5725 MHz and 5850 MHz, the limit increases linearly from 10 dBm/MHz to 27 dBm/MHz. Between 5850 MHz and 9450 MHz, the limit decreases linearly from 27 dBm/MHz to -27 dBm/MHz. A box highlights the U-NII-3 band (5725-5850 MHz) with a peak level of 27 dBm/MHz.</p>

### 5.5.2 Test Setup

See section 4.4.2 (Diagram 2) for test setup description for the antenna port. The photo of test setup please refer to ANNEX B.

### 5.5.3 Test Procedure

Use the following spectrum analyzer settings:

Span = wide enough to capture the peak level of the in-band emission and all spurious emissions (e.g., harmonics) from the lowest frequency generated in the EUT up through the 10th harmonic. Typically, several plots are required to cover this entire span.

RBW = 1 MHz for  $f \geq 1$  GHz, 100 kHz for  $f < 1$  GHz

VBW  $\geq$  RBW

Sweep = auto

Detector function = peak

Trace = max hold

Allow the trace to stabilize

#### 5.5.4 Test Result

Please refer to ANNEX A.6.



## 5.6 Radiated Spurious Emissions and Band Edge (Restricted-band)

### 5.6.1 Limit

FCC §15.209 & 15.407(b)

Frequency (MHz)	Field Strength ( $\mu\text{V}/\text{m}$ )	Measurement Distance (m)
0.009 - 0.490	2400/F(kHz)	300
0.490 - 1.705	24000/F(kHz)	30
1.705 - 30.0	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

Note 1: The Limit for radiated test was performed according to FCC Part 15C

Note 2: The tighter limit applies at the band edge.

Un-restricted band emissions	
Out Operating Band (MHz)	Limit
5150 - 5250	e.i.r.p. -27 dBm (68.2 dBuV/m@3m)
5250 - 5350	e.i.r.p. -27 dBm (68.2 dBuV/m@3m)
5470 - 5725	e.i.r.p. -27 dBm (68.2 dBuV/m@3m)
5725 - 5850	<p>All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.</p>

Note: The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength.

### 5.6.2 Test Setup

The section 4.4.3-4.4.5 (Diagram 3 - Diagram 5) test setup description was used for this test. The photo of test setup please refer to ANNEX B.

### 5.6.3 Test Procedure

The measurement frequency range is from 9 kHz to the 10th harmonic of the fundamental frequency. The Turn Table is actuated to turn from 0° to 360°, and both horizontal and vertical polarizations of the Test Antenna are used to find the maximum radiated power. Mid channels on all channel bandwidth verified. Only the worst RB size/offset presented. The power of the EUT transmitting frequency should be ignored.

All Spurious Emission tests were performed in X, Y, Z axis direction. And only the worst axis test condition was recorded in this test report.

Use the following spectrum analyzer settings:

Span = wide enough to fully capture the emission being measured

RBW = 1 MHz for  $f \geq 1$  GHz, 100 kHz for  $f < 1$  GHz

VBW  $\geq$  RBW

Sweep = auto

Detector function = peak

Trace = max hold

### 5.6.4 Test Result

Please refer to ANNEX A.7.1 and Please refer to ANNEX A.7.2

## 5.7 Frequency Stability

### 5.7.1 Limit

FCC §15.407(g)

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

### 5.7.2 Test Setup

The section 4.4.6 (Diagram 6) test setup description was used for this test. The photo of test setup please refer to ANNEX B.

### 5.7.3 Test Procedure

The EUT is installed in an environment test chamber with external power source.

Set the chamber to operate at 50 centigrade and external power source to output at nominal voltage of EUT.

A sufficient stabilization period at each temperatures is used prior to each frequency measurement.

When temperature is stabled, measure the frequency stability.

The test shall be performed under -30 to 50 centigrade and 85 to 115 percent of the nominal voltage.

Change setting of chamber and external power source to complete all conditions.

### 5.7.4 Test Result

Please refer to ANNEX A.8.

## ANNEX A TEST RESULT

### A.1 RF Output Power

Note 1: For FCC standard, if transmitting antennas of directional gain less than 6 dBi , all band maximum conducted output power shall not be reduced.

#### Conducted Power

Band I (5150 - 5250 MHz )									
Mode	Channel	Frequency (MHz)	Conducted Power (dBm)					Limit (mW)	Verdict
			ANT0 Power (dBm)	ANT1 Power (dBm)	ANT2 Power (dBm)	Power Total (dBm)	Power Total (mW)		
11a	CH36	5180	19.56	20.35	18.95	24.43	277.28	1000	Pass
11a	CH44	5220	20.32	20.46	20.02	25.04	319.28	1000	Pass
11a	CH48	5240	19.48	19.52	18.84	24.06	254.81	1000	Pass
11n (HT20)	CH36	5180	20.32	21.08	19.44	25.10	323.78	1000	Pass
11n (HT20)	CH44	5220	20.42	20.35	19.59	24.91	309.54	1000	Pass
11n (HT20)	CH48	5240	19.56	19.47	18.88	24.08	256.14	1000	Pass
11n (HT40)	CH38	5190	19.44	20.12	19.25	24.39	274.84	1000	Pass
11n (HT40)	CH46	5230	22.68	22.53	22.29	27.27	533.85	1000	Pass
11ac (HT80)	CH42	5210	17.56	18.21	17.43	22.52	178.57	1000	Pass

Band IV (5725 - 5850 MHz )									
Mode	Channel	Frequency (MHz)	Conducted Power					Limit (W)	Verdict
			ANT0 Power (dBm)	ANT1 Power (dBm)	ANT2 Power (dBm)	Power Total (dBm)	Power Total (mW)		
11a	CH149	5745	24.89	24.75	24.12	29.37	865.08	1000	Pass
11a	CH157	5785	24.85	24.85	24.22	29.42	875.23	1000	Pass
11a	CH165	5825	24.75	24.77	24.21	29.36	862.09	1000	Pass
11n (HT20)	CH149	5745	24.98	24.23	24.02	29.20	831.97	1000	Pass
11n (HT20)	CH157	5785	24.86	24.16	24.16	29.18	827.43	1000	Pass
11n (HT20)	CH165	5825	24.76	24.21	24.12	29.14	821.09	1000	Pass
11n (HT40)	CH151	5755	24.85	24.16	24.32	29.22	836.50	1000	Pass
11n (HT40)	CH159	5795	24.69	24.32	24.21	29.18	828.47	1000	Pass
11ac (HT80)	CH155	5775	24.76	24.61	24.44	29.38	866.27	1000	Pass

## A.2 Emission Bandwidth & 99% Bandwidth

Note: Test plots please refer to the document "Annex No.: BL-SZ1680250-602 Data Part 1.pdf".

### Test Data

Band I (5150 - 5250 MHz )					
Mode	Channel	Frequency (MHz)	99% Bandwidth (MHz)		
			ANT0	ANT1	ANT2
11a	CH36	5180	17.37	17.19	17.08
11a	CH44	5220	22.63	25.47	22.17
11a	CH48	5240	19.62	18.81	18.81
11n (HT20)	CH36	5180	25.30	18.35	18.29
11n (HT20)	CH44	5220	25.18	26.28	22.63
11n (HT20)	CH48	5240	19.80	19.28	20.03
11n (HT40)	CH38	5190	36.50	36.50	36.40
11n (HT40)	CH46	5230	37.97	37.97	38.90
11ac (HT80)	CH42	5210	76.00	76.00	75.80

Band IV (5725 - 5850 MHz )					
Mode	Channel	Frequency (MHz)	99% Bandwidth (MHz)		
			ANT0	ANT1	ANT2
11a	CH149	5745	19.97	17.54	18.00
11a	CH157	5785	20.90	18.00	20.14
11a	CH165	5825	24.14	18.40	21.30
11n (HT20)	CH149	5745	20.32	18.52	25.76
11n (HT20)	CH157	5785	20.09	18.70	21.48
11n (HT20)	CH165	5825	25.41	18.81	21.88
11n (HT40)	CH151	5755	40.90	36.80	36.80
11n (HT40)	CH159	5795	42.80	36.90	42.80
11ac (HT80)	CH155	5775	82.80	77.20	80.80

### A.3 6 dB Bandwidth

Note: Test plots please refer to the document "Annex No.: BL-SZ1680250-602 Data Part 2.pdf".

#### Test Data

Band IV (5725 - 5850 MHz )							
Mode	Channel	Frequency	6 dB Bandwidth (MHz)			Limit (MHz)	Verdict
			ANT0	ANT1	ANT2		
11a	CH149	5745	16.52	16.62	16.62	0.5	Pass
11a	CH157	5785	16.62	14.47	16.62	0.5	Pass
11a	CH165	5825	17.78	16.42	16.62	0.5	Pass
11n (HT20)	CH149	5745	17.47	17.82	17.42	0.5	Pass
11n (HT20)	CH157	5785	17.67	17.67	17.07	0.5	Pass
11n (HT20)	CH165	5825	17.67	17.72	17.67	0.5	Pass
11n (HT40)	CH151	5755	34.62	36.47	34.27	0.5	Pass
11n (HT40)	CH159	5795	36.52	36.47	36.37	0.5	Pass
11ac (HT80)	CH155	5775	72.62	72.67	73.27	0.5	Pass

## A.4 Power Spectral Density

Note 1: Test plots please refer to the document “Annex No.: BL-SZ1680250-602 Data Part 3.pdf”.

Note 2: For band 1 direction gain=9.88dBi < 6dBi, so limit=17 dBm/MHz – (9.88 – 6)=13.12dBm/MHz

Note 3: For band 4 direction gain=9.03dBi >6dBi, so limit=30 – (9.27 – 6)=26.73dBm/500kHz.

### Test Data

Band I (5150 - 5250 MHz)								
Mode	Channel	Frequency (MHz)	PSD (dBm/MHz)				FCC Limit (dBm/MHz)	Verdict
			ANT0	ANT1	ANT2	Total PSD		
11a	CH36	5180	8.23	8.11	7.28	12.66	13.12	Pass
11a	CH44	5220	8.17	8.12	8.14	12.91	13.12	Pass
11a	CH48	5240	8.00	8.00	8.19	12.84	13.12	Pass
11n (HT20)	CH36	5180	7.57	7.56	7.09	12.18	13.12	Pass
11n (HT20)	CH44	5220	8.16	8.17	8.22	12.95	13.12	Pass
11n (HT20)	CH48	5240	8.22	7.92	7.95	12.80	13.12	Pass
11n (HT40)	CH38	5190	4.56	4.79	4.54	9.40	13.12	Pass
11n (HT40)	CH46	5230	8.34	8.37	8.07	13.03	13.12	Pass
11ac (HT80)	CH42	5210	-1.20	-1.86	-1.32	3.32	13.12	Pass

Band IV (5725 - 5850 MHz)								
Mode	Channel	Frequency (MHz)	PSD(dBm/500kHz)				FCC Limit (30dBm/500kHz)	Verdict
			ANT0	ANT1	ANT2	Total PSD		
11a	CH149	5745	12.04	11.82	12.32	16.84	26.73	Pass
11a	CH157	5785	11.99	12.12	12.08	16.83	26.73	Pass
11a	CH165	5825	12.16	11.94	12.13	16.85	26.73	Pass
11n (HT20)	CH149	5745	11.82	11.70	12.05	16.63	26.73	Pass
11n (HT20)	CH157	5785	11.96	12.10	12.10	16.83	26.73	Pass
11n (HT20)	CH165	5825	12.07	12.31	12.38	17.03	26.73	Pass
11n (HT40)	CH151	5755	9.10	9.11	9.23	13.92	26.73	Pass
11n (HT40)	CH159	5795	9.04	9.32	9.24	13.97	26.73	Pass
11ac (HT80)	CH155	5775	5.79	5.67	6.08	10.62	26.73	Pass



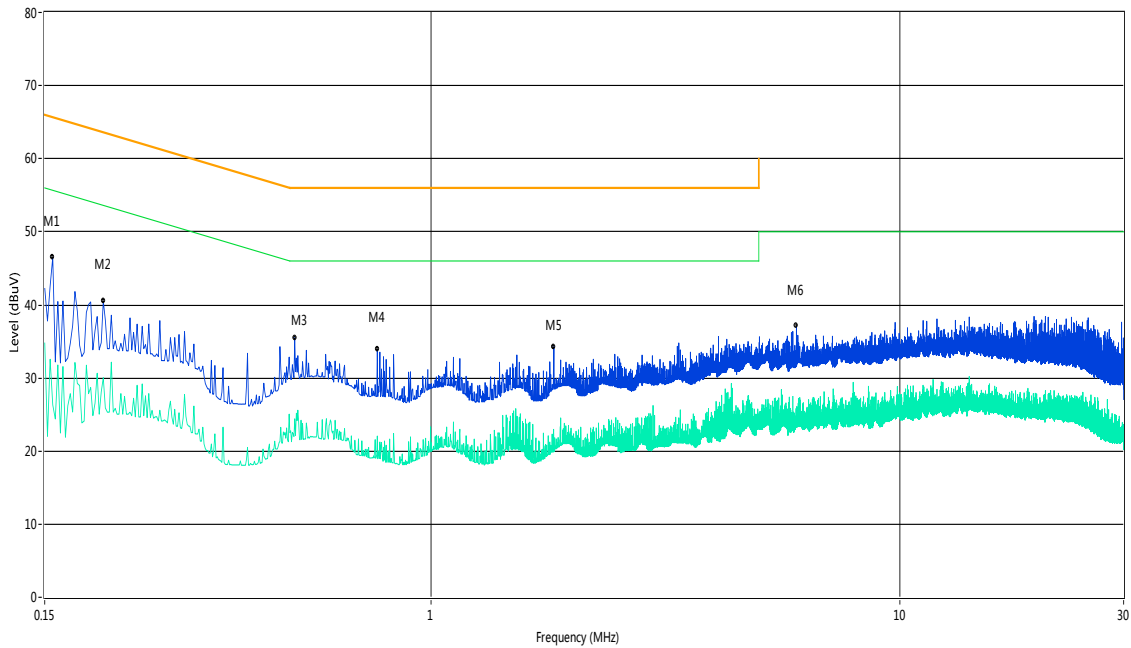
## A.5 Conducted Emissions

Note 1: The EUT is working in the Normal link mode.

Note 2: Devices subject to Part 15 must be tested for all available U.S. voltages and frequencies (such as a nominal 120 VAC, 60 Hz and 240 VAC, 50 Hz) for which the device is capable of operation. So, The configuration 120 VAC, 60 Hz and 240 VAC, 50 Hz were tested respectively, but only the worst configuration (120 VAC, 60 Hz) shown here.

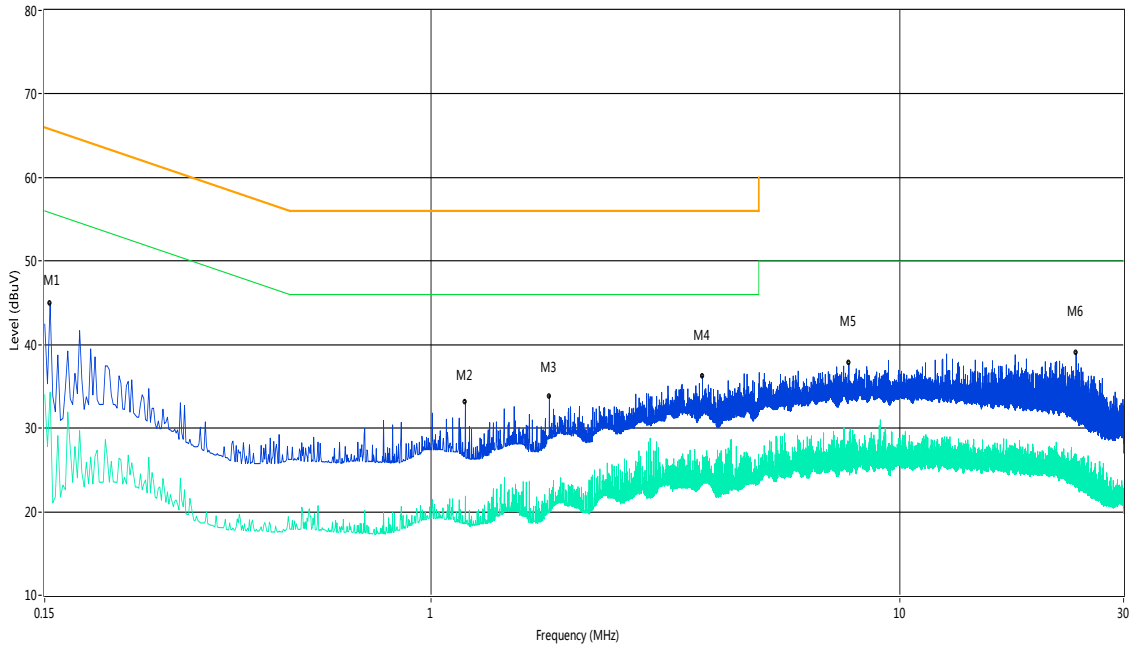
### Test Data and Plots

#### PHASE L



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.16	46.5	11.00	65.8	19.30	Peak	L Line	Pass
1**	0.16	26.3	11.00	55.8	29.50	AV	L Line	Pass
2	0.20	40.5	11.00	64.6	24.10	Peak	L Line	Pass
2**	0.20	30.1	11.00	54.6	24.50	AV	L Line	Pass
3	0.51	35.5	11.00	56.0	20.50	Peak	L Line	Pass
3**	0.51	24.4	11.00	46.0	21.60	AV	L Line	Pass
4	0.77	33.9	11.00	56.0	22.10	Peak	L Line	Pass
4**	0.77	22.1	11.00	46.0	23.90	AV	L Line	Pass
5	1.83	34.3	11.00	56.0	21.70	Peak	L Line	Pass
5**	1.83	21.0	11.00	46.0	25.00	AV	L Line	Pass
6	6.01	37.1	11.00	60.0	22.90	Peak	L Line	Pass
6**	6.01	24.7	11.00	50.0	25.30	AV	L Line	Pass

PHASE N



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.15	45.0	11.00	65.9	20.90	Peak	N Line	Pass
1**	0.15	34.3	11.00	55.9	21.60	AV	N Line	Pass
2	1.18	33.0	11.00	56.0	23.00	Peak	N Line	Pass
2**	1.18	21.9	11.00	46.0	24.10	AV	N Line	Pass
3	1.79	33.8	11.00	56.0	22.20	Peak	N Line	Pass
3**	1.79	22.8	11.00	46.0	23.20	AV	N Line	Pass
4	3.79	36.2	11.00	56.0	19.80	Peak	N Line	Pass
4**	3.79	26.8	11.00	46.0	19.20	AV	N Line	Pass
5	7.78	37.8	11.00	60.0	22.20	Peak	N Line	Pass
5**	7.78	28.3	11.00	50.0	21.70	AV	N Line	Pass
6	23.75	39.0	11.00	60.0	21.00	Peak	N Line	Pass
6**	23.75	26.9	11.00	50.0	23.10	AV	N Line	Pass

### A.7 Conducted Spurious Emission and Band Edge (Authorized-band)

Note 1: Test plots please refer to the document “Annex No.: BL-SZ1680250-602 Data Part 4.pdf”.

Note 2: The margin of all individual chains in the report is greater than 3 db, so the total value meets the limit requirement.

Test Band	Mode	Antenna			Verdict
		ANT0	ANT1	ANT2	
		Channel			
Band 1	802.11a	Low			Pass
		Middle			Pass
		High			Pass
	802.11n(HT20)	Low			Pass
		Middle			Pass
		High			Pass
	802.11n(HT40)	Low			Pass
High			Pass		
802.11ac(HT80)	Low			Pass	
Band 4	802.11a	Low			Pass
		Middle			Pass
		High			Pass
	802.11n(HT20)	Low			Pass
		Middle			Pass
		High			Pass
	802.11n(HT40)	Low			Pass
High			Pass		
802.11ac(HT80)	Low			Pass	

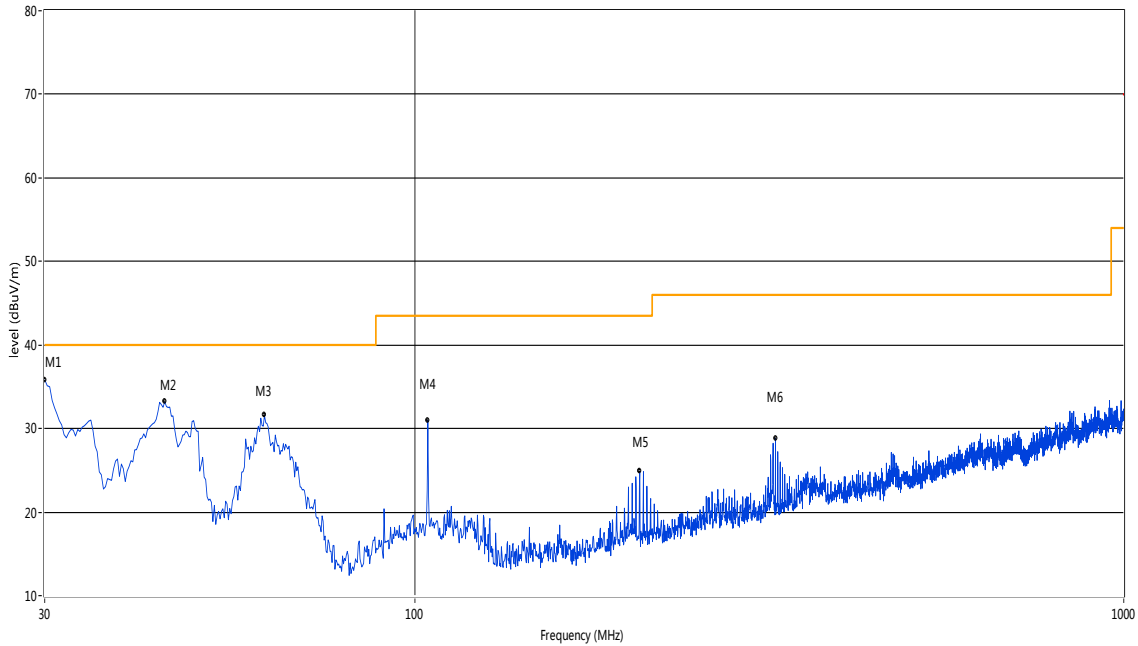
## A.8 Radiated Spurious Emissions and Band Edge (Restricted-band)

Note 1: The low frequency, which started from 9 kHz to 30 MHz, was pre-scanned and the result which was 20 dB lower than the limit line per 15.31(a) was not reported.

Note 2: The EUT is working in the Normal link mode below 1 GHz.

### 30 MHz to 1 GHz, ANT V

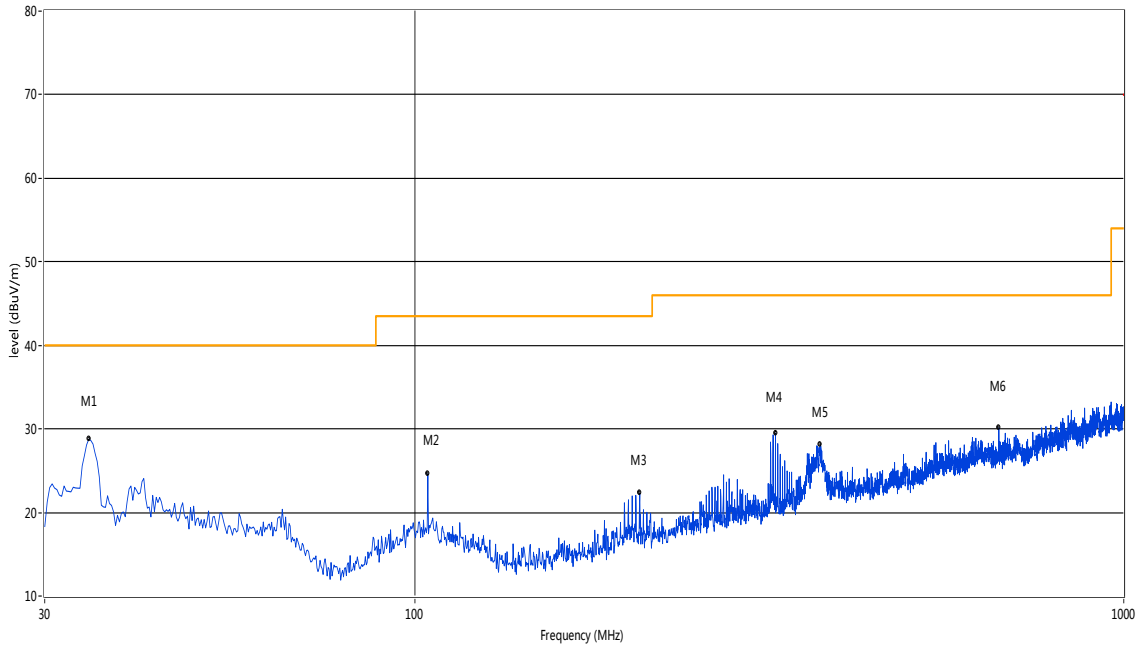
RE Test case\_FCC\_Part 15B\_FCC Part15B ClassB 30MHz-1GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	30.00	35.85	-21.72	40.0	4.15	Peak	73.40	100	Vertical	Pass
2	44.30	33.20	-18.82	40.0	6.80	Peak	73.40	100	Vertical	Pass
3	61.27	31.57	-20.32	40.0	8.43	Peak	360.00	100	Vertical	Pass
4	104.19	31.01	-20.30	43.5	12.49	Peak	235.10	100	Vertical	Pass
5	207.47	24.92	-20.03	43.5	18.58	Peak	359.90	100	Vertical	Pass
6	322.38	28.84	-16.94	46.0	17.16	Peak	0.30	100	Vertical	Pass

30 MHz to 1 GHz, ANT H

RE Test case\_FCC\_Part 15B\_FCC Part15B ClassB 30MHz-1GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	34.61	28.77	-21.38	40.0	11.23	Peak	360.00	100	Horizontal	Pass
2	104.19	24.63	-20.30	43.5	18.87	Peak	133.70	100	Horizontal	Pass
3	207.47	22.31	-20.03	43.5	21.19	Peak	324.90	100	Horizontal	Pass
4	322.38	29.50	-16.94	46.0	16.50	Peak	360.70	100	Horizontal	Pass
5	373.05	28.10	-15.91	46.0	17.90	Peak	279.40	100	Horizontal	Pass
6	666.40	30.14	-9.92	46.0	15.86	Peak	356.10	100	Horizontal	Pass

Test Data (1 GHz ~ 10th Harmonic)

Note 1: The marked spikes near (5150~5850) MHz is the fundamental signal.

Note 2: Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

Note 3: Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in §15.209, whichever is the lesser attenuation.

Note 4: Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin>20 dB from the applicable limit) and considered that's already beyond the background noise floor.

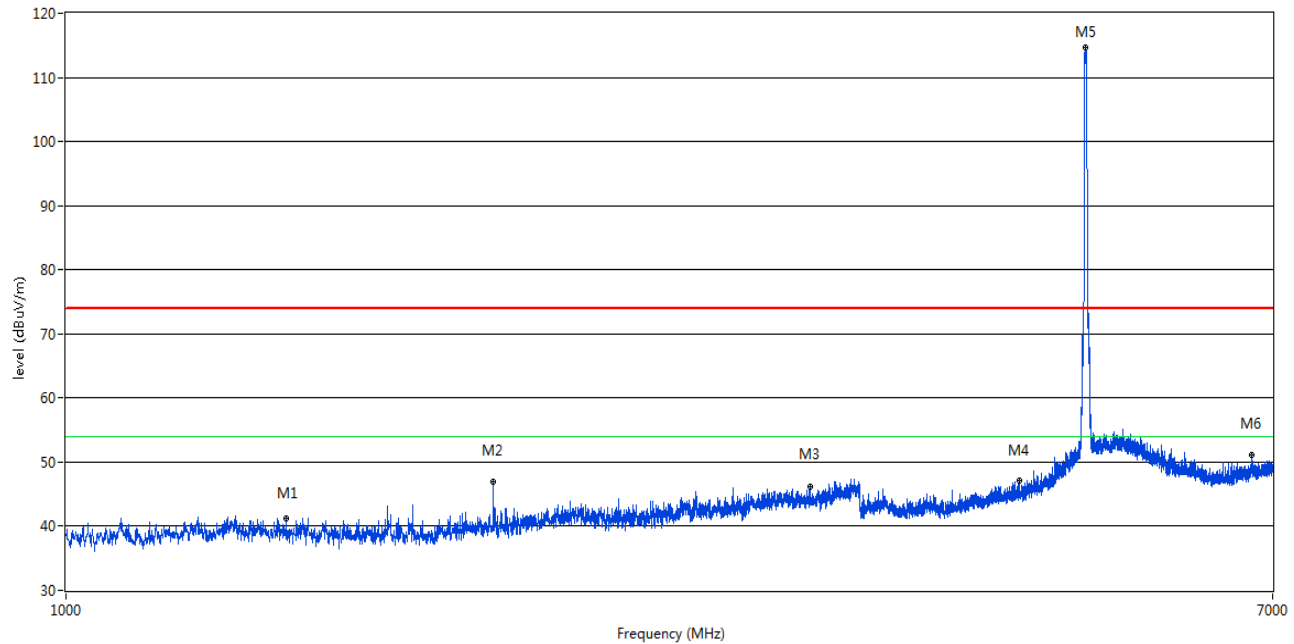
Note 5: Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.

Note 6: The High frequency, which started from 18 GHz to 40 GHz, was pre-scanned and the result which was background, so it was not reported.

**Band 1**

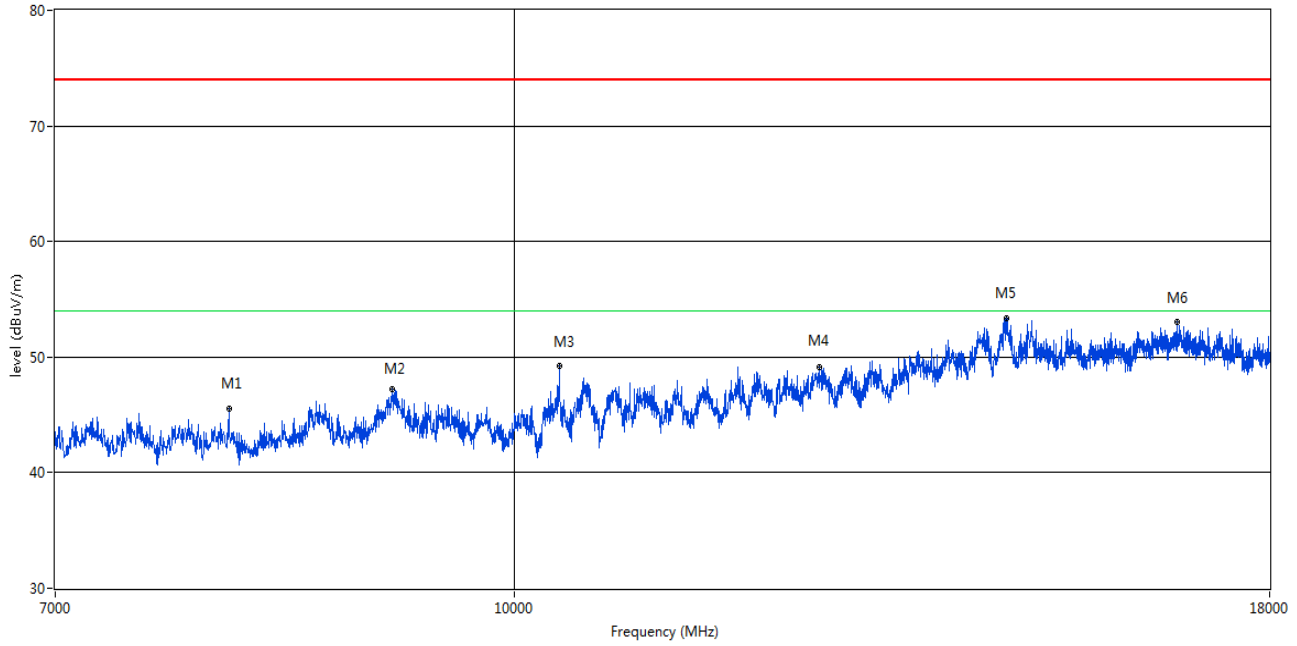
11a LOW CHANNEL 1 GHz to 18 GHz, ANT V

RE Test case\_FCC\_Part 15C\_FCC 15.247(5.8G)\_1GHz-7GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	1425.750	41.29	-3.29	74.0	32.71	Peak	31.20	100	Vertical	Pass
2	1992.550	46.90	-0.96	74.0	27.10	Peak	180.00	100	Vertical	Pass
3	3318.550	46.22	4.19	74.0	27.78	Peak	31.20	100	Vertical	Pass
4	4654.000	47.05	10.18	74.0	26.95	Peak	113.10	100	Vertical	Pass
5	5172.500	114.66	11.32	74.0	-40.66	Peak	93.70	100	Vertical	N/A
6	6773.050	51.12	13.04	74.0	22.88	Peak	190.10	100	Vertical	Pass

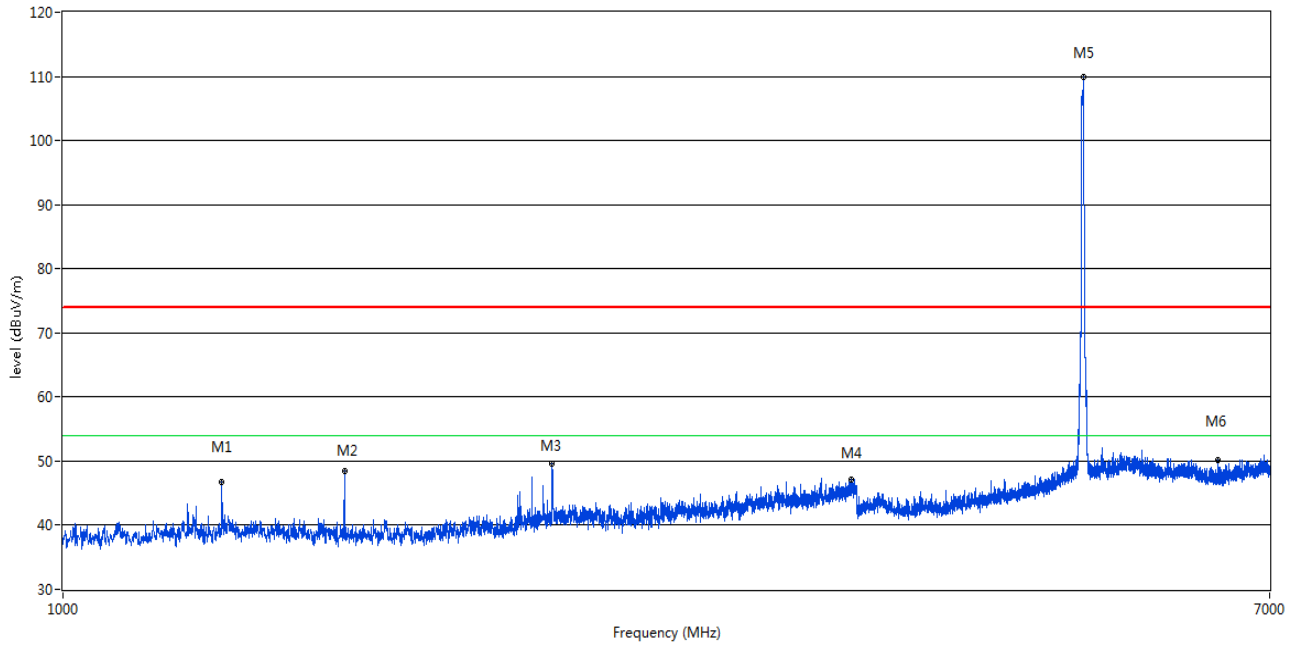
RE Test case\_FCC\_Part 15C\_FCC 15.247(5.8G)\_7GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	8012.000	45.51	14.39	74.0	28.49	Peak	87.40	100	Vertical	Pass
2	9098.250	47.23	17.96	74.0	26.77	Peak	105.50	100	Vertical	Pass
3	10360.500	49.28	16.65	74.0	24.72	Peak	96.30	100	Vertical	Pass
4	12684.250	49.08	19.28	74.0	24.92	Peak	105.50	100	Vertical	Pass
5	14667.000	53.41	23.13	74.0	20.59	Peak	24.10	100	Vertical	Pass
6	16746.000	53.06	21.00	74.0	20.94	Peak	159.70	100	Vertical	Pass

11a LOW CHANNEL 1 GHz to 18 GHz, ANT H

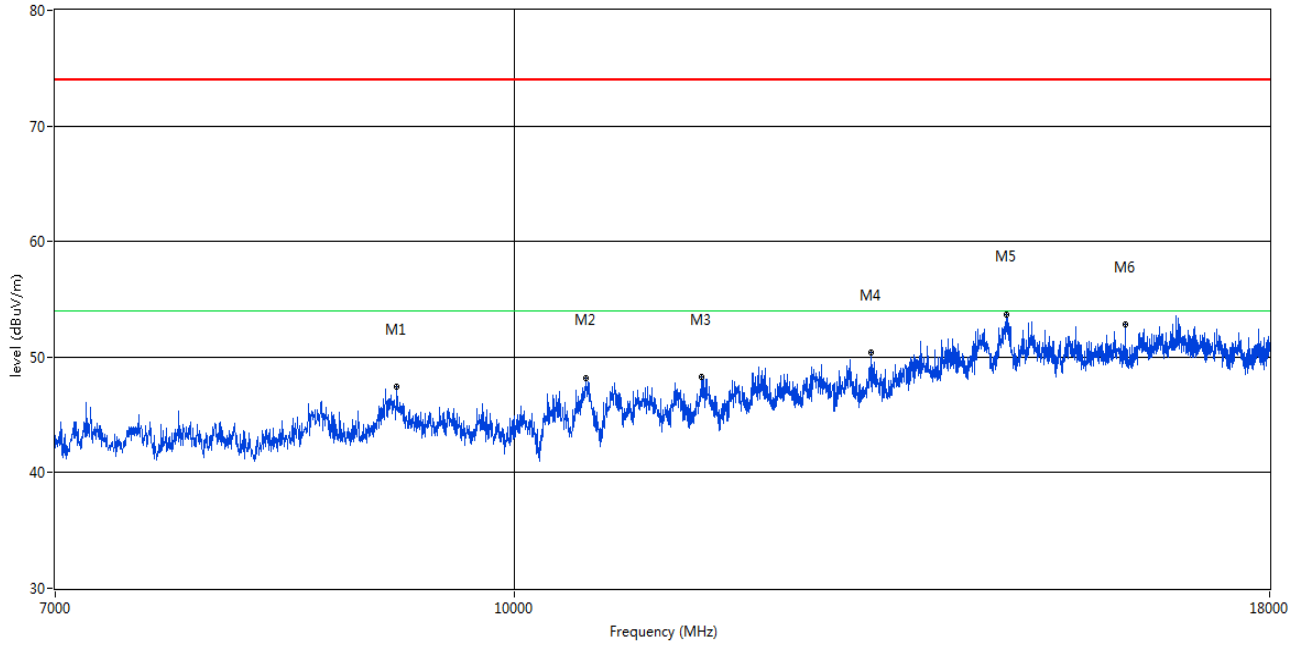
RE Test case\_FCC\_Part 15C\_FCC 15.247(5.8G)\_1GHz-7GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	1291.850	46.78	-1.79	74.0	27.22	Peak	310.80	100	Horizontal	Pass
2	1574.600	48.43	-2.12	74.0	25.57	Peak	0.00	100	Horizontal	Pass
3	2200.550	49.60	1.12	74.0	24.40	Peak	301.40	100	Horizontal	Pass
4	3562.300	47.20	5.35	74.0	26.80	Peak	0.00	100	Horizontal	Pass
5	5181.850	109.91	11.23	74.0	-35.91	Peak	218.80	100	Horizontal	N/A
6	6441.550	50.22	12.53	74.0	23.78	Peak	189.60	100	Horizontal	Pass



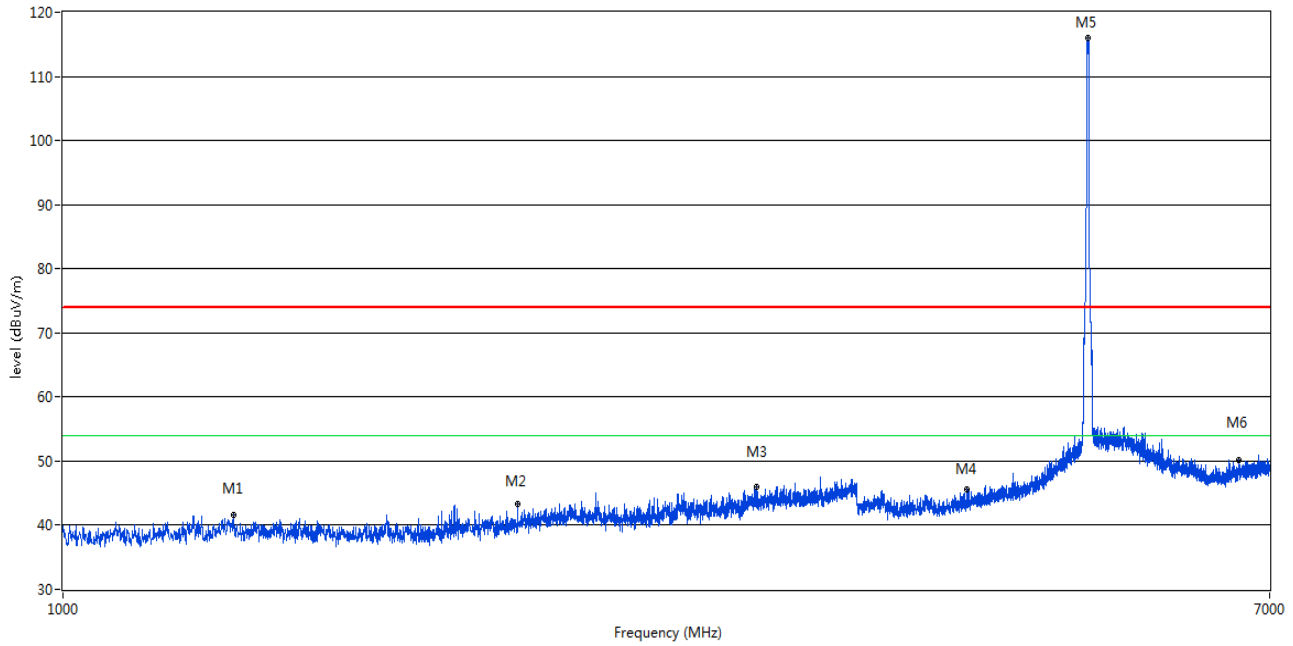
RE Test case\_FCC\_Part 15C\_FCC 15.247(5.8G)\_7GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	9131.250	47.44	17.88	74.0	26.56	Peak	57.00	100	Horizontal	Pass
2	10577.750	48.21	18.83	74.0	25.79	Peak	210.20	100	Horizontal	Pass
3	11567.750	48.29	18.30	74.0	25.71	Peak	320.40	100	Horizontal	Pass
4	13198.500	50.41	19.74	74.0	23.59	Peak	165.00	100	Horizontal	Pass
5	14667.000	53.71	23.13	74.0	20.29	Peak	359.10	100	Horizontal	Pass
6	16086.000	52.80	20.42	74.0	21.20	Peak	29.80	100	Horizontal	Pass

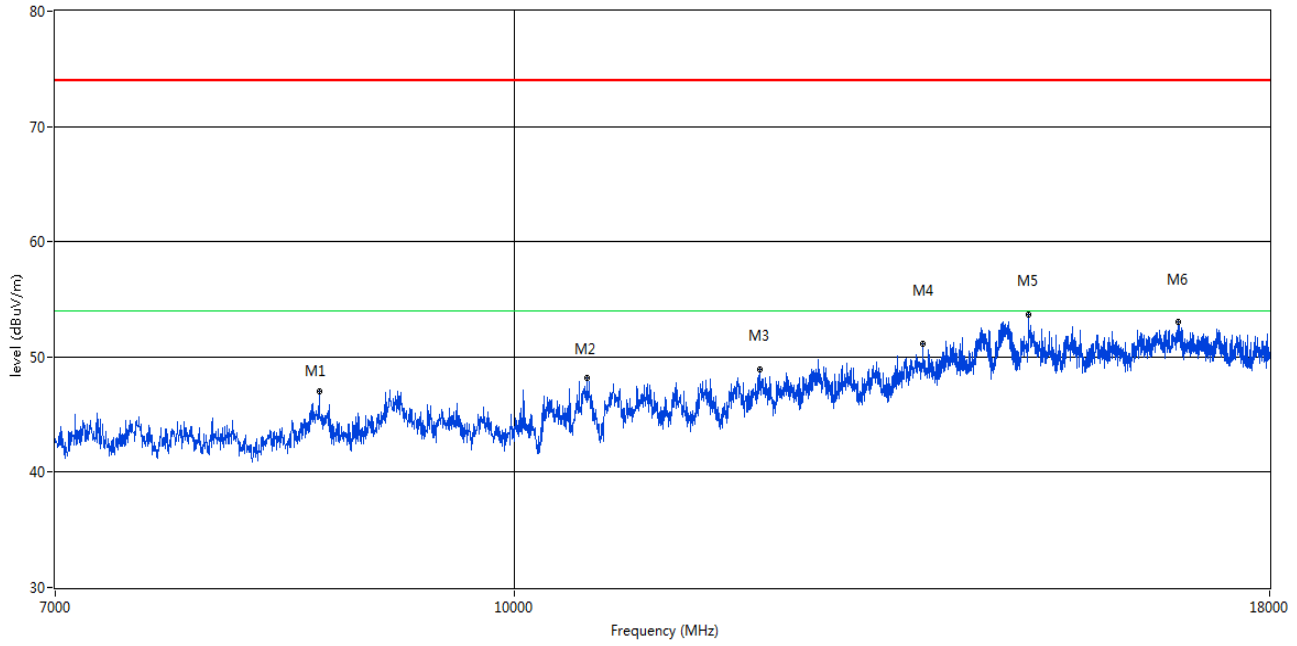
11a MIDDLE CHANNEL 1 GHz to 18 GHz, ANT V

RE Test case\_FCC\_Part 15C\_FCC 15.247(5.8G)\_1GHz-7GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	1317.850	41.59	-2.73	74.0	32.41	Peak	116.80	100	Vertical	Pass
2	2082.900	43.33	-0.53	74.0	30.67	Peak	134.70	100	Vertical	Pass
3	3059.200	46.04	4.82	74.0	27.96	Peak	134.70	100	Vertical	Pass
4	4296.150	45.65	9.11	74.0	28.35	Peak	150.30	100	Vertical	Pass
5	5218.400	116.01	11.21	74.0	-42.01	Peak	91.90	100	Vertical	N/A
6	6660.000	50.25	12.52	74.0	23.75	Peak	346.90	100	Vertical	Pass

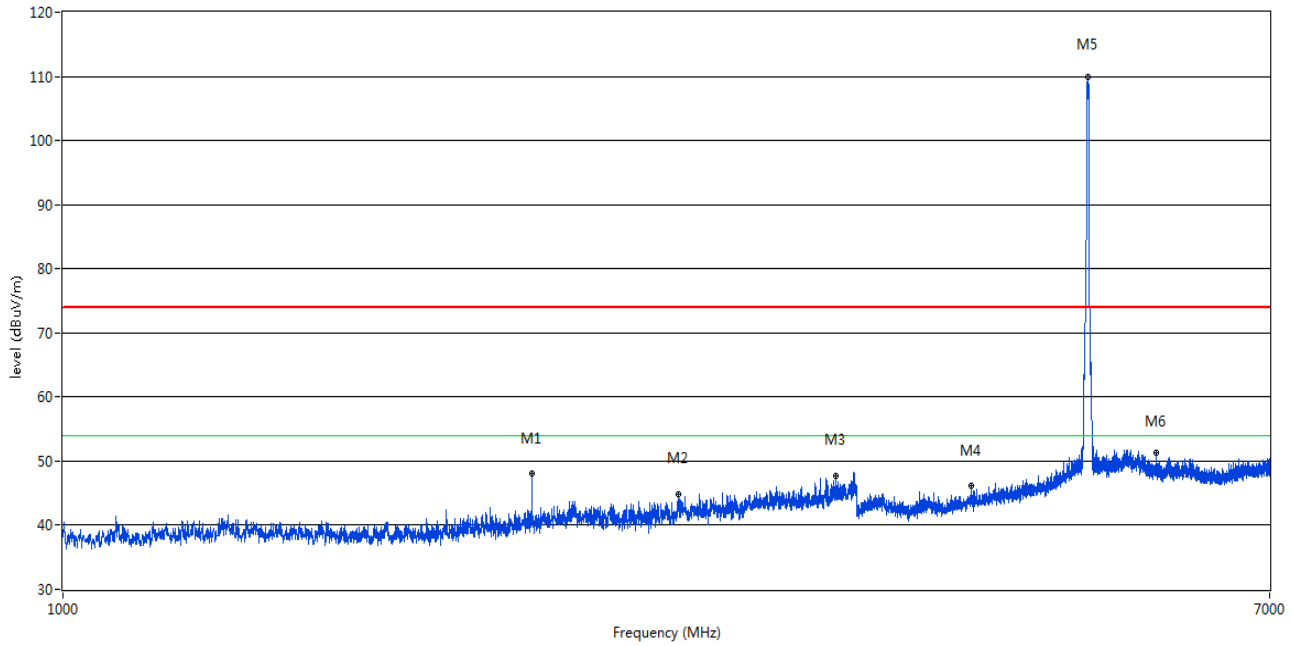
RE Test case\_FCC\_Part 15C\_FCC 15.247(5.8G)\_7GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	8597.750	46.99	16.72	74.0	27.01	Peak	85.50	100	Vertical	Pass
2	10586.000	48.23	18.77	74.0	25.77	Peak	150.30	100	Vertical	Pass
3	12103.999	48.95	18.47	74.0	25.05	Peak	294.70	100	Vertical	Pass
4	13743.000	51.15	20.45	74.0	22.85	Peak	195.80	100	Vertical	Pass
5	14919.999	53.67	21.90	74.0	20.33	Peak	11.40	100	Vertical	Pass
6	16768.000	53.03	21.03	74.0	20.97	Peak	76.40	100	Vertical	Pass

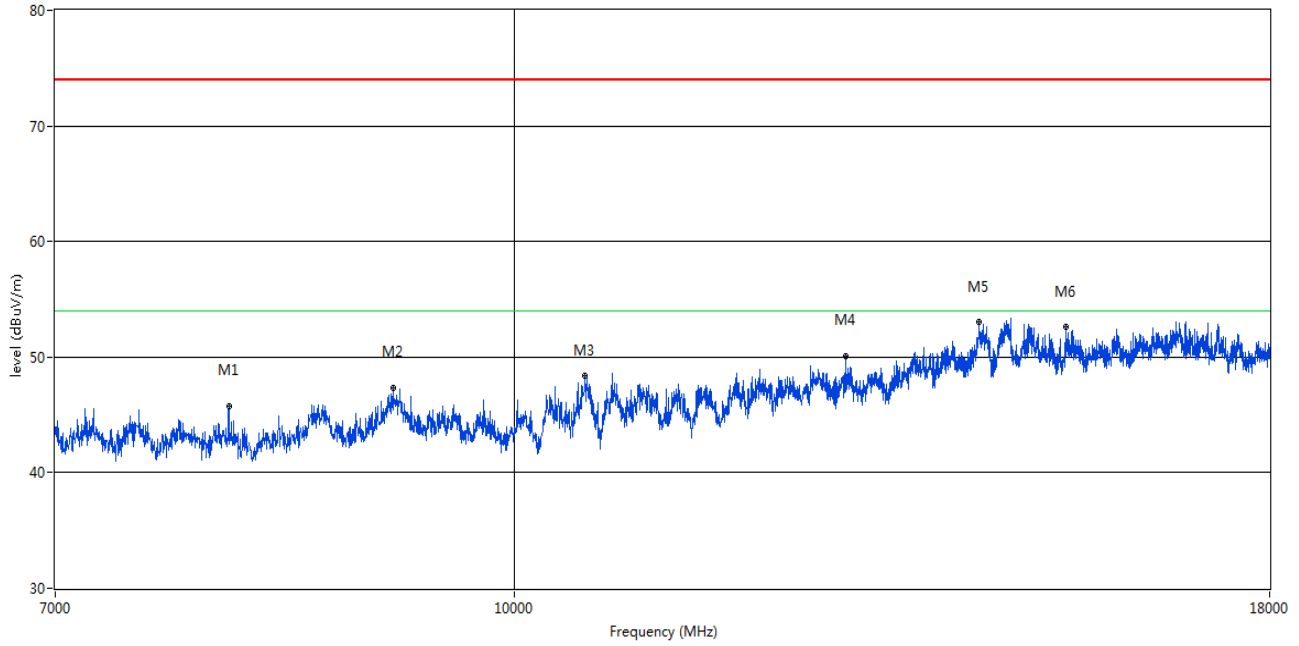
11a MIDDLE CHANNEL 1 GHz to 18 GHz, ANT H

RE Test case\_FCC\_Part 15C\_FCC 15.247(5.8G)\_1GHz-7GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	2129.700	48.06	0.11	74.0	25.94	Peak	338.70	100	Horizontal	Pass
2	2697.800	44.87	3.36	74.0	29.13	Peak	88.10	100	Horizontal	Pass
3	3477.800	47.65	5.10	74.0	26.35	Peak	134.10	100	Horizontal	Pass
4	4328.450	46.26	9.62	74.0	27.74	Peak	0.10	100	Horizontal	Pass
5	5220.950	109.96	11.29	74.0	-35.96	Peak	171.10	100	Horizontal	N/A
6	5832.100	51.29	11.83	74.0	22.71	Peak	358.90	100	Horizontal	Pass

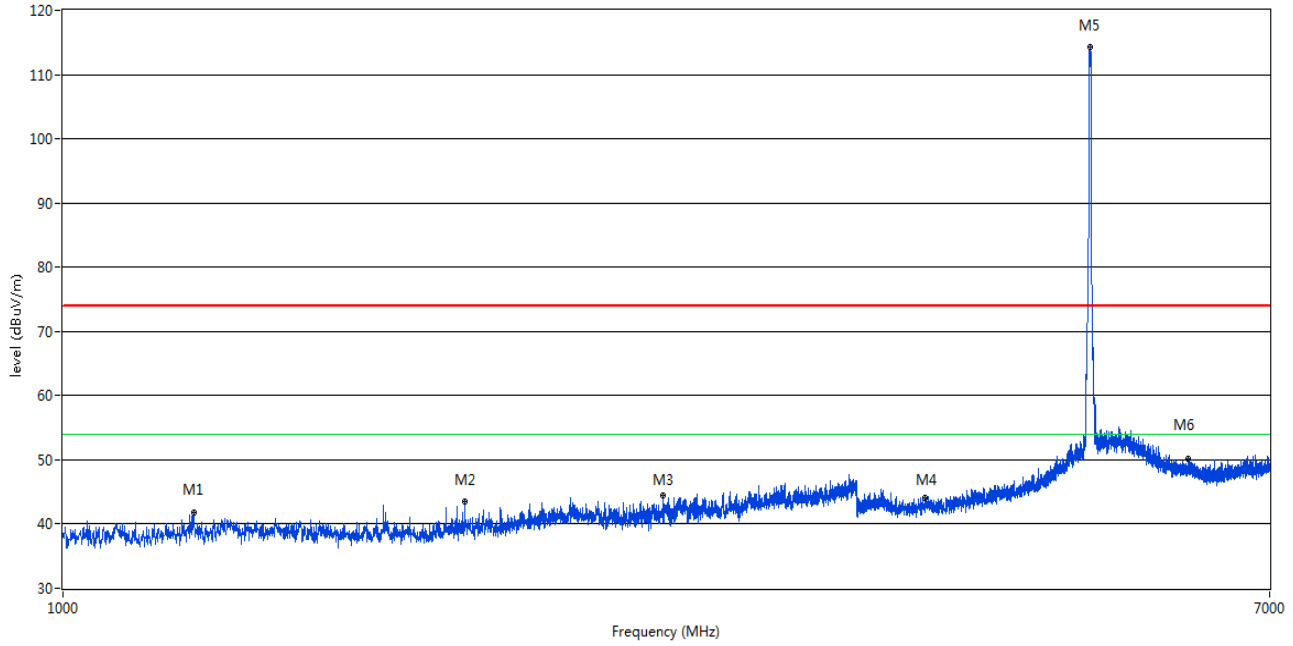
RE Test case\_FCC\_Part 15C\_FCC 15.247(5.8G)\_7GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	8012.000	45.72	14.39	74.0	28.28	Peak	32.50	100	Horizontal	Pass
2	9101.000	47.31	18.02	74.0	26.69	Peak	302.50	100	Horizontal	Pass
3	10566.750	48.44	18.57	74.0	25.56	Peak	204.30	100	Horizontal	Pass
4	12945.500	50.05	19.35	74.0	23.95	Peak	0.00	100	Horizontal	Pass
5	14356.250	53.05	23.19	74.0	20.95	Peak	0.10	100	Horizontal	Pass
6	15362.750	52.58	20.40	74.0	21.42	Peak	50.50	100	Horizontal	Pass

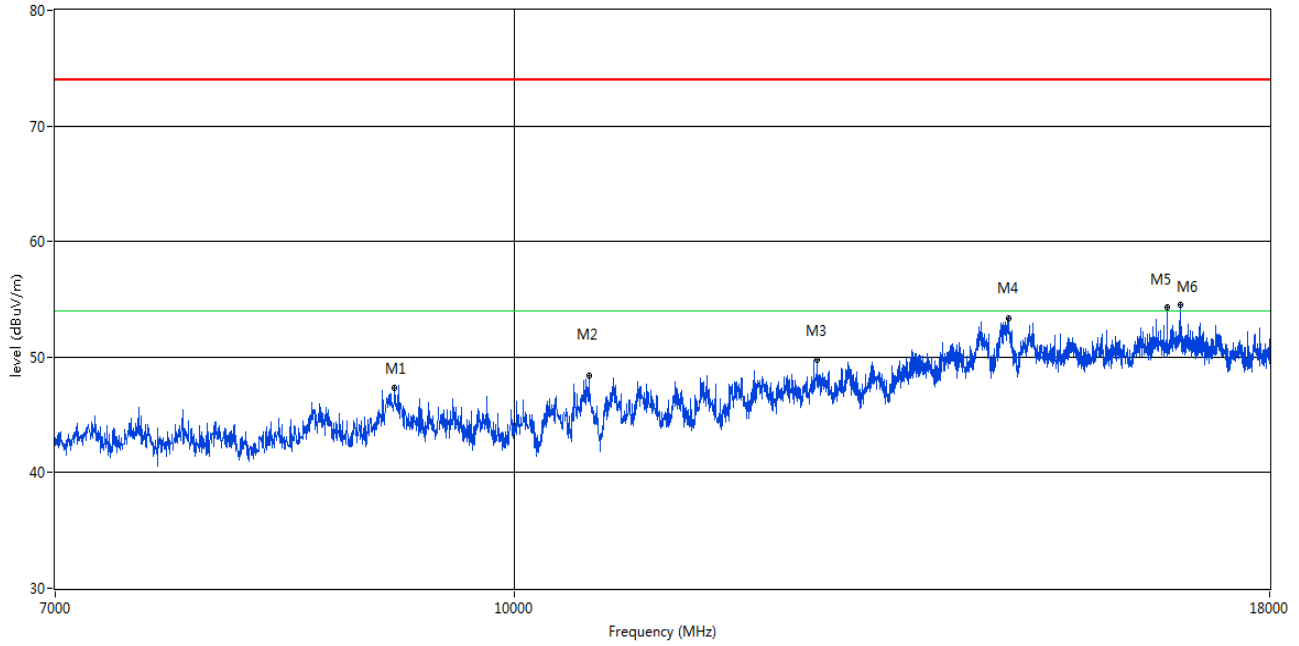
11a HIGH CHANNEL 1 GHz to 18 GHz, ANT V

RE Test case\_FCC\_Part 15C\_FCC 15.247(5.8G)\_1GHz-7GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	1235.300	41.80	-1.94	74.0	32.20	Peak	137.90	100	Vertical	Pass
2	1912.600	43.42	-0.56	74.0	30.58	Peak	119.70	100	Vertical	Pass
3	2630.200	44.39	2.47	74.0	29.61	Peak	201.90	100	Vertical	Pass
4	4019.050	44.07	8.83	74.0	29.93	Peak	226.90	100	Vertical	Pass
5	5245.600	114.35	11.17	74.0	-40.35	Peak	226.90	100	Vertical	N/A
6	6141.500	50.17	12.11	74.0	23.83	Peak	82.70	100	Vertical	Pass

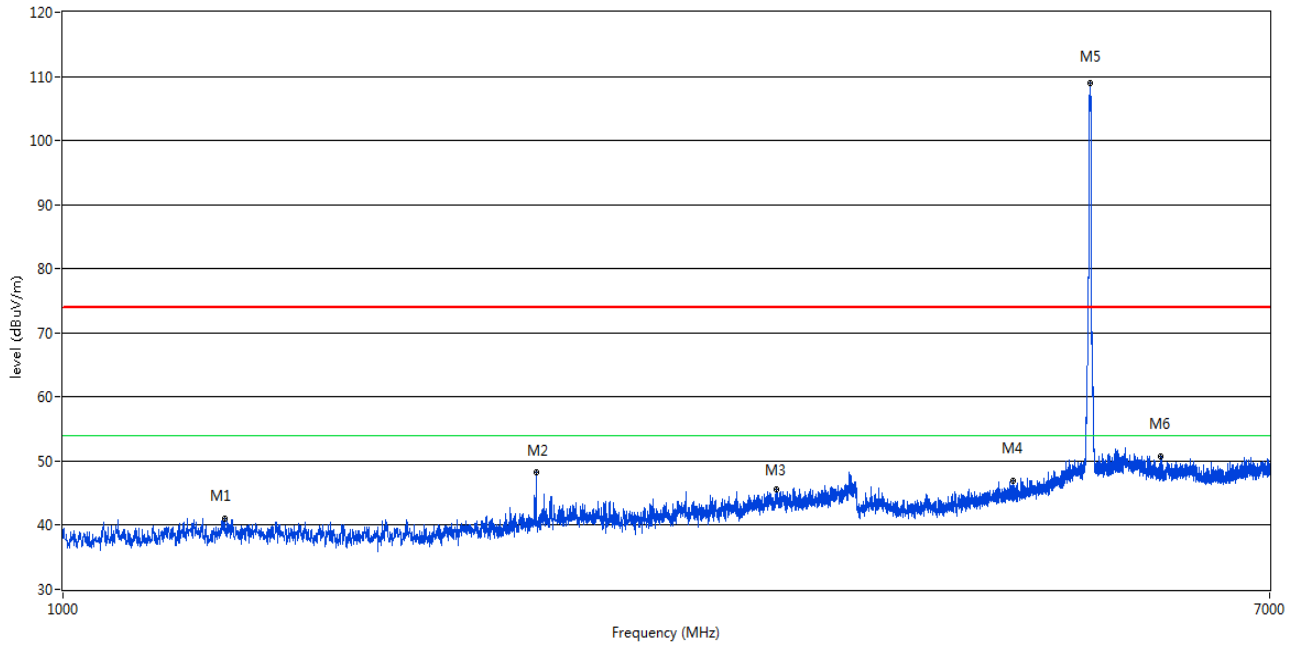
RE Test case\_FCC\_Part 15C\_FCC 15.247(5.8G)\_7GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	9112.001	47.38	18.25	74.0	26.62	Peak	93.70	100	Vertical	Pass
2	10599.750	48.35	18.38	74.0	25.65	Peak	139.00	100	Vertical	Pass
3	12662.250	49.79	19.28	74.0	24.21	Peak	39.30	100	Vertical	Pass
4	14697.250	53.39	22.60	74.0	20.61	Peak	66.30	100	Vertical	Pass
5	16622.250	54.27	20.80	74.0	19.73	Peak	66.30	100	Vertical	Pass
6	16795.500	54.54	21.07	74.0	19.46	Peak	120.90	100	Vertical	Pass

11a HIGH CHANNEL 1 GHz to 18 GHz, ANT H

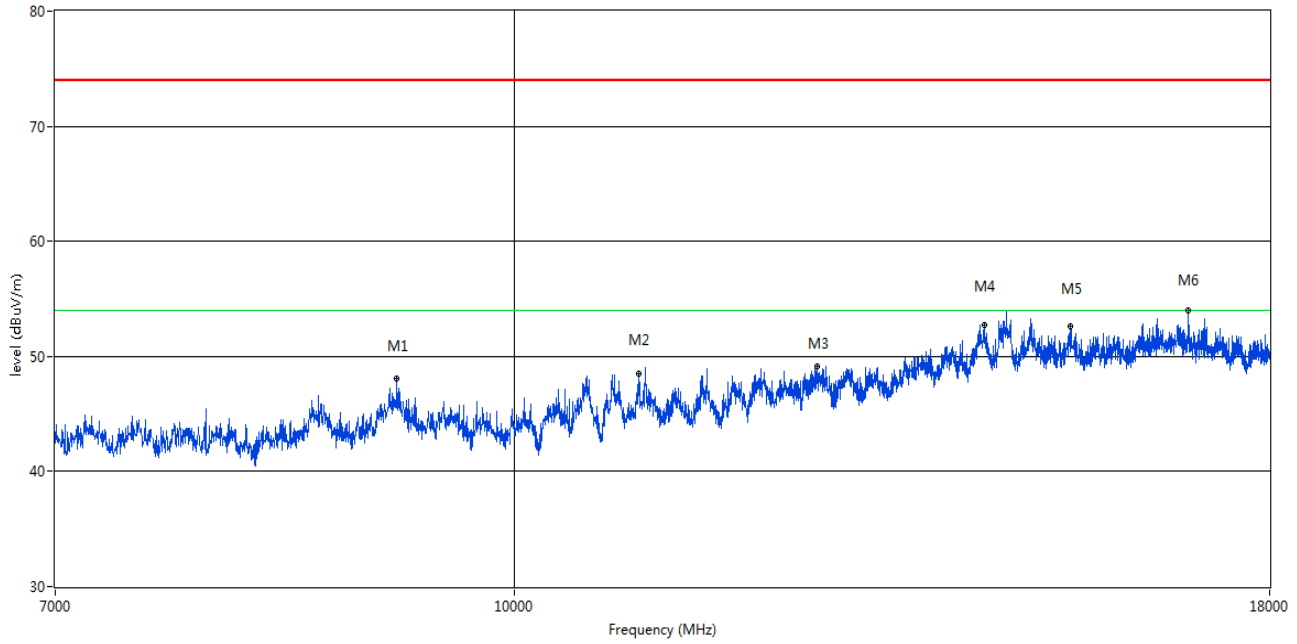
RE Test case\_FCC\_Part 15C\_FCC 15.247(5.8G)\_1GHz-7GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	1297.700	41.12	-2.15	74.0	32.88	Peak	41.30	100	Horizontal	Pass
2	2144.000	48.23	0.30	74.0	25.77	Peak	336.20	100	Horizontal	Pass
3	3159.950	45.65	4.99	74.0	28.35	Peak	1.00	100	Horizontal	Pass
4	4631.900	46.86	10.15	74.0	27.14	Peak	208.30	100	Horizontal	Pass
5	5241.350	109.04	11.06	74.0	-35.04	Peak	227.80	100	Horizontal	N/A
6	5873.750	50.81	11.82	74.0	23.19	Peak	160.10	100	Horizontal	Pass



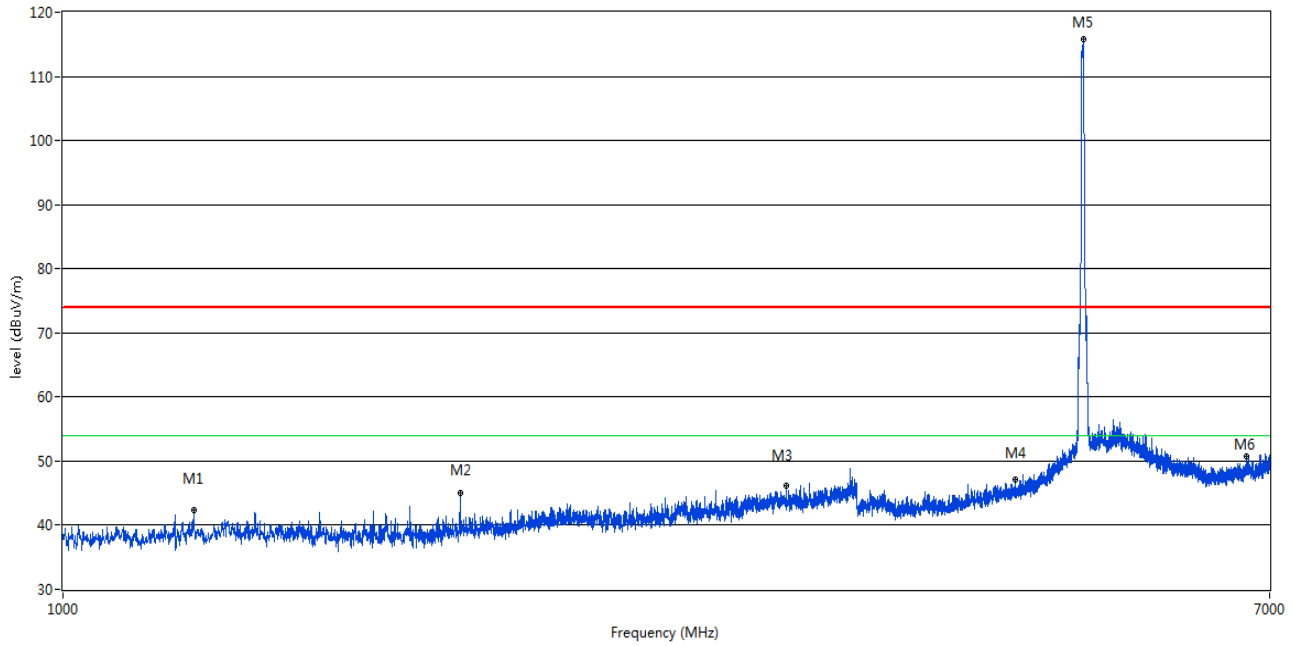
RE Test case\_FCC\_Part 15C\_FCC 15.247(5.8G)\_7GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	9131.250	48.05	17.88	74.0	25.95	Peak	311.00	100	Horizontal	Pass
2	11023.250	48.45	18.41	74.0	25.55	Peak	293.40	100	Horizontal	Pass
3	12656.750	49.15	19.28	74.0	24.85	Peak	275.20	100	Horizontal	Pass
4	14422.250	52.71	21.87	74.0	21.29	Peak	347.20	100	Horizontal	Pass
5	15415.000	52.64	20.58	74.0	21.36	Peak	266.10	100	Horizontal	Pass
6	16900.000	53.99	21.04	74.0	20.01	Peak	302.20	100	Horizontal	Pass

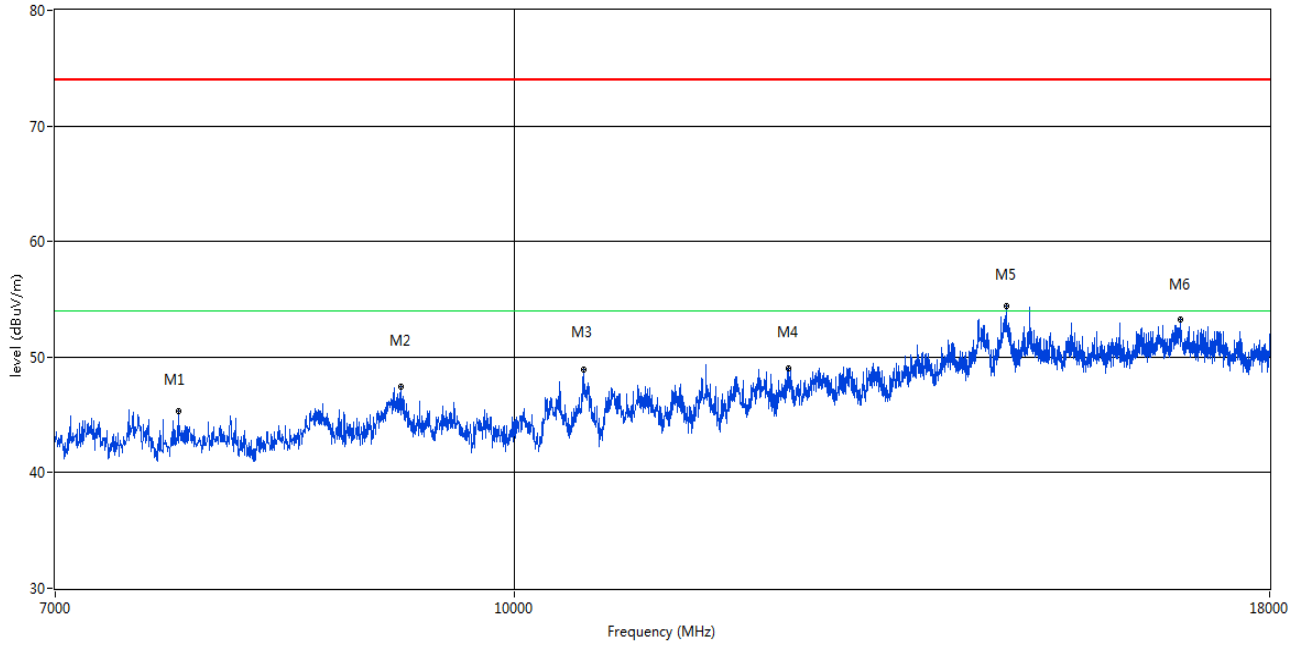
11n(HT20) LOW CHANNEL 1 GHz to 18 GHz, ANT V

RE Test case\_FCC\_Part 15C\_FCC 15.247(5.8G)\_1GHz-7GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	1234.650	42.34	-1.89	74.0	31.66	Peak	59.40	100	Vertical	Pass
2	1897.000	45.01	-1.49	74.0	28.99	Peak	116.00	100	Vertical	Pass
3	3209.350	46.26	4.61	74.0	27.74	Peak	235.20	100	Vertical	Pass
4	4648.050	47.17	9.88	74.0	26.83	Peak	35.00	100	Vertical	Pass
5	5186.100	115.73	11.20	74.0	-41.73	Peak	93.20	100	Vertical	N/A
6	6745.850	50.75	13.02	74.0	23.25	Peak	305.50	100	Vertical	Pass

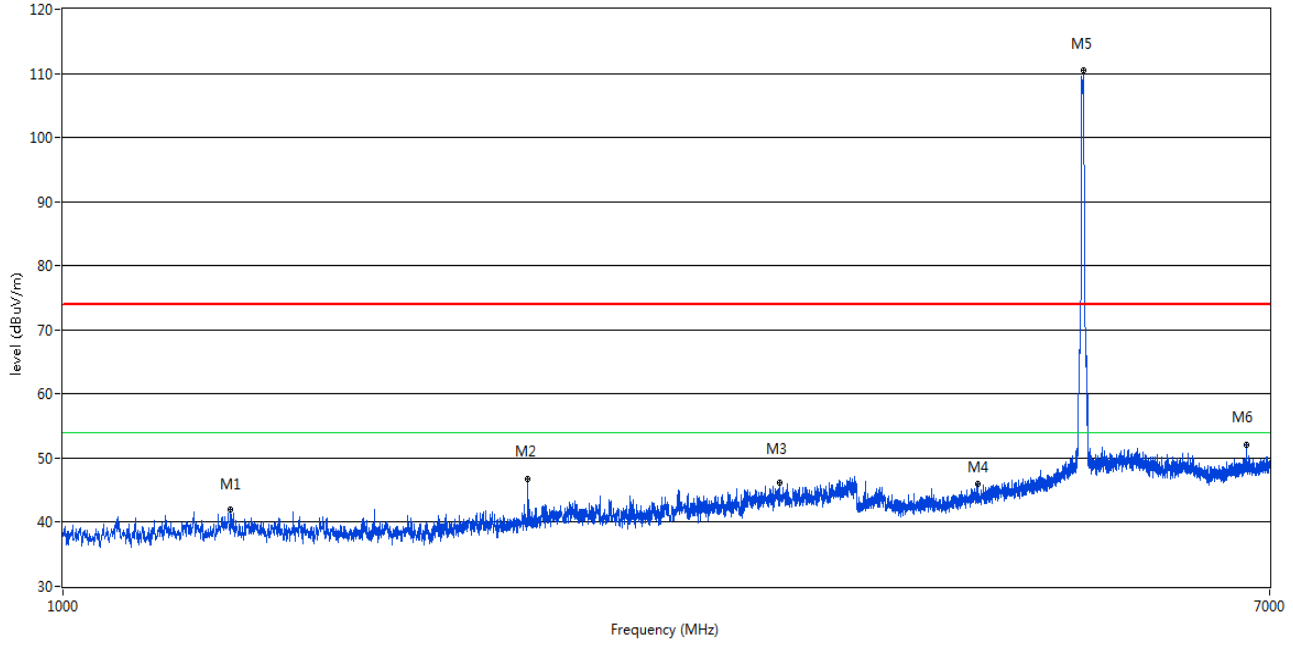
RE Test case\_FCC\_Part 15C\_FCC 15.247(5.8G)\_7GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	7704.000	45.35	14.41	74.0	28.65	Peak	212.30	100	Vertical	Pass
2	9156.000	47.40	17.41	74.0	26.60	Peak	58.50	100	Vertical	Pass
3	10561.250	48.92	18.43	74.0	25.08	Peak	94.40	100	Vertical	Pass
4	12384.500	49.00	18.75	74.0	25.00	Peak	40.30	100	Vertical	Pass
5	14664.250	54.40	23.18	74.0	19.60	Peak	212.30	100	Vertical	Pass
6	16795.500	53.26	21.07	74.0	20.74	Peak	284.90	100	Vertical	Pass

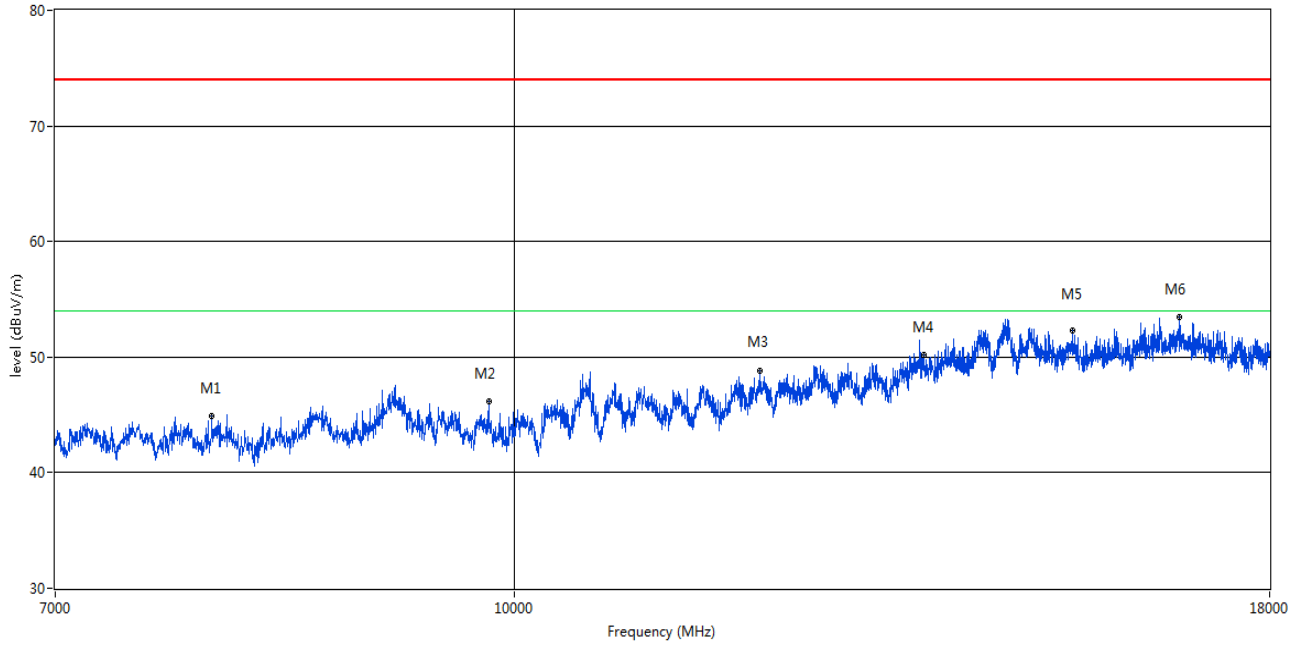
11n(HT20) LOW CHANNEL 1 GHz to 18 GHz, ANT H

RE Test case\_FCC\_Part 15C\_FCC 15.247(5.8G)\_1GHz-7GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	1310.700	42.03	-2.71	74.0	31.97	Peak	273.80	100	Horizontal	Pass
2	2116.700	46.81	0.18	74.0	27.19	Peak	191.60	100	Horizontal	Pass
3	3178.800	46.11	4.97	74.0	27.89	Peak	71.90	100	Horizontal	Pass
4	4369.250	45.91	9.17	74.0	28.09	Peak	121.70	100	Horizontal	Pass
5	5185.250	110.41	11.17	74.0	-36.41	Peak	44.40	100	Horizontal	N/A
6	6742.450	52.15	12.99	74.0	21.85	Peak	160.60	100	Horizontal	Pass

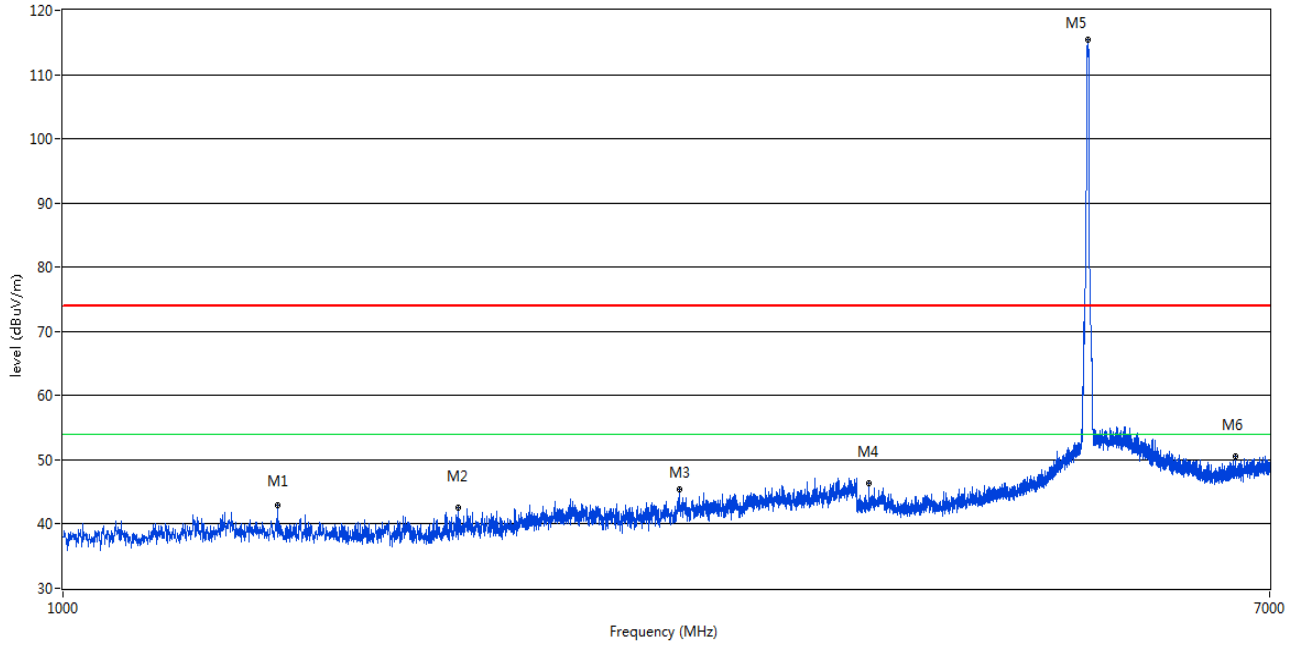
RE Test case\_FCC\_Part 15C\_FCC 15.247(5.8G)\_7GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	7907.500	44.88	13.95	74.0	29.12	Peak	165.40	100	Horizontal	Pass
2	9805.000	46.21	16.20	74.0	27.79	Peak	30.60	100	Horizontal	Pass
3	12106.750	48.82	18.46	74.0	25.18	Peak	183.50	100	Horizontal	Pass
4	13751.250	50.15	20.45	74.0	23.85	Peak	57.80	100	Horizontal	Pass
5	15445.250	52.33	20.48	74.0	21.67	Peak	247.40	100	Horizontal	Pass
6	16784.500	53.48	21.06	74.0	20.52	Peak	39.20	100	Horizontal	Pass

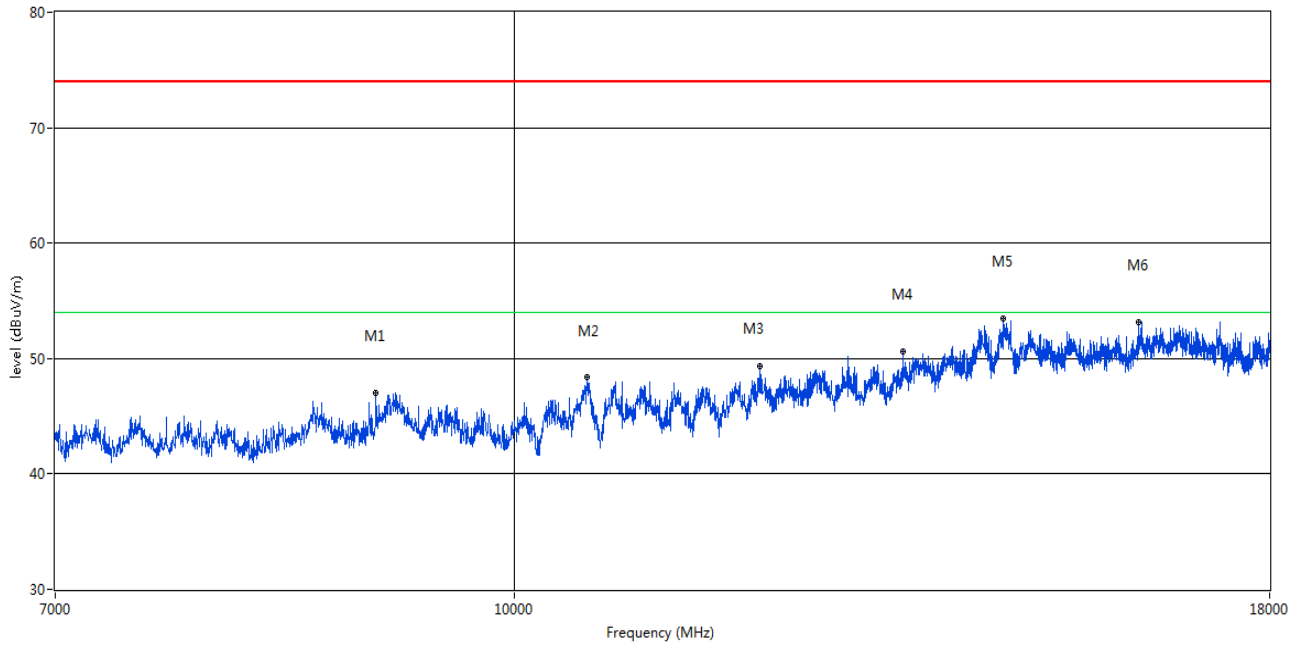
11n(HT20) MIDDLE CHANNEL 1 GHz to 18 GHz, ANT V

RE Test case\_FCC\_Part 15C\_FCC 15.247(5.8G)\_1GHz-7GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	1412.750	42.88	-2.52	74.0	31.12	Peak	118.30	100	Vertical	Pass
2	1893.100	42.61	-1.30	74.0	31.39	Peak	118.30	100	Vertical	Pass
3	2700.400	45.45	4.10	74.0	28.55	Peak	137.00	100	Vertical	Pass
4	3667.150	46.33	7.56	74.0	27.67	Peak	81.90	100	Vertical	Pass
5	5226.050	115.44	10.84	74.0	-41.44	Peak	91.70	100	Vertical	N/A
6	6621.750	50.52	12.40	74.0	23.48	Peak	25.10	100	Vertical	Pass

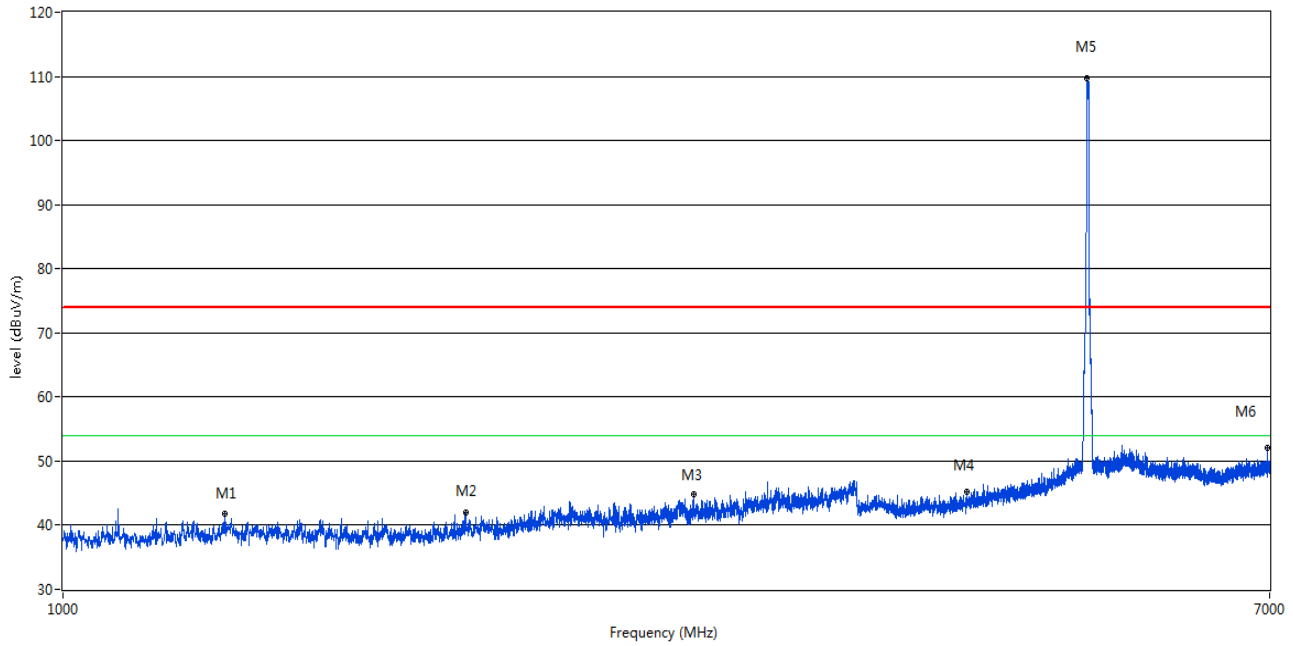
RE Test case\_FCC\_Part 15C\_FCC 15.247(5.8G)\_7GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	8982.750	47.00	15.94	74.0	27.00	Peak	311.00	100	Vertical	Pass
2	10588.750	48.40	18.69	74.0	25.60	Peak	165.80	100	Vertical	Pass
3	12109.500	49.37	18.46	74.0	24.63	Peak	4.10	100	Vertical	Pass
4	13531.250	50.63	20.55	74.0	23.37	Peak	360.00	100	Vertical	Pass
5	14636.750	53.45	23.52	74.0	20.55	Peak	111.90	100	Vertical	Pass
6	16253.750	53.11	20.66	74.0	20.89	Peak	319.80	100	Vertical	Pass

11n(HT20) MIDDLE CHANNEL 1 GHz to 18 GHz, ANT H

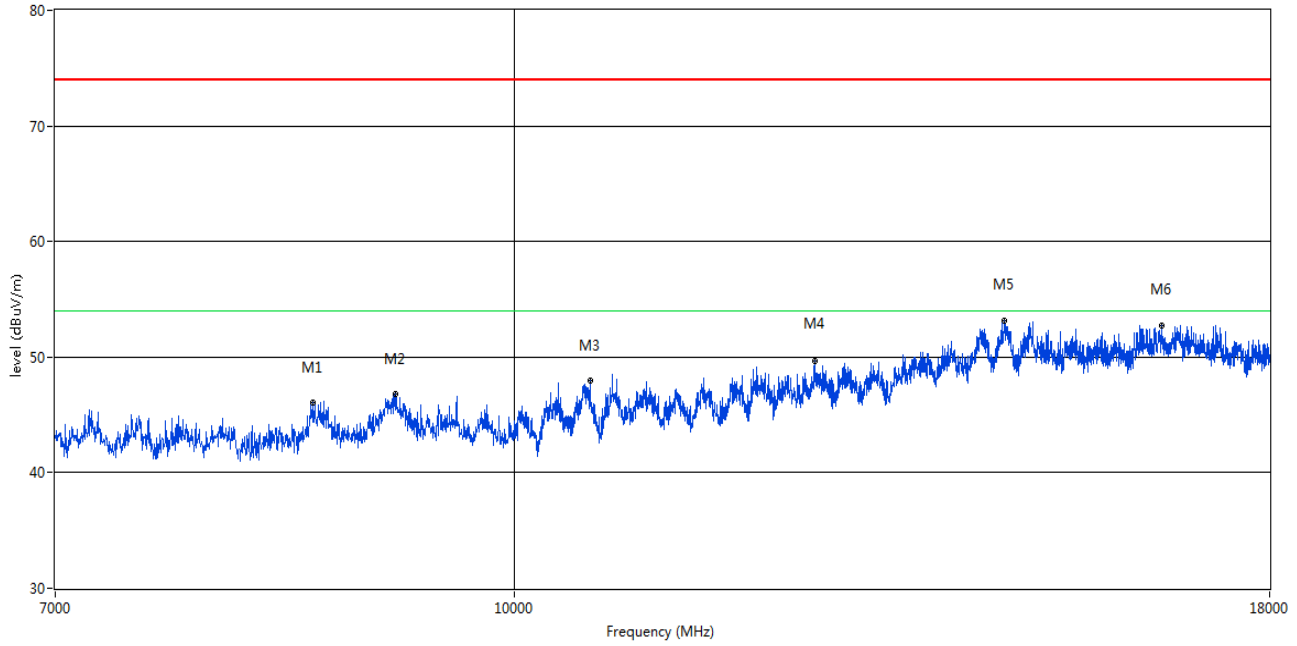
RE Test case\_FCC\_Part 15C\_FCC 15.247(5.8G)\_1GHz-7GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	1297.700	41.81	-2.15	74.0	32.19	Peak	89.90	100	Horizontal	Pass
2	1913.900	42.00	-0.61	74.0	32.00	Peak	190.90	100	Horizontal	Pass
3	2763.450	44.06	3.70	74.0	29.94	Peak	227.60	100	Horizontal	Pass
4	4297.000	45.27	9.13	74.0	28.73	Peak	63.60	100	Horizontal	Pass
5	5212.450	109.82	11.06	74.0	-35.82	Peak	179.70	100	Horizontal	N/A
6	6979.600	52.09	13.53	74.0	21.91	Peak	218.30	100	Horizontal	Pass



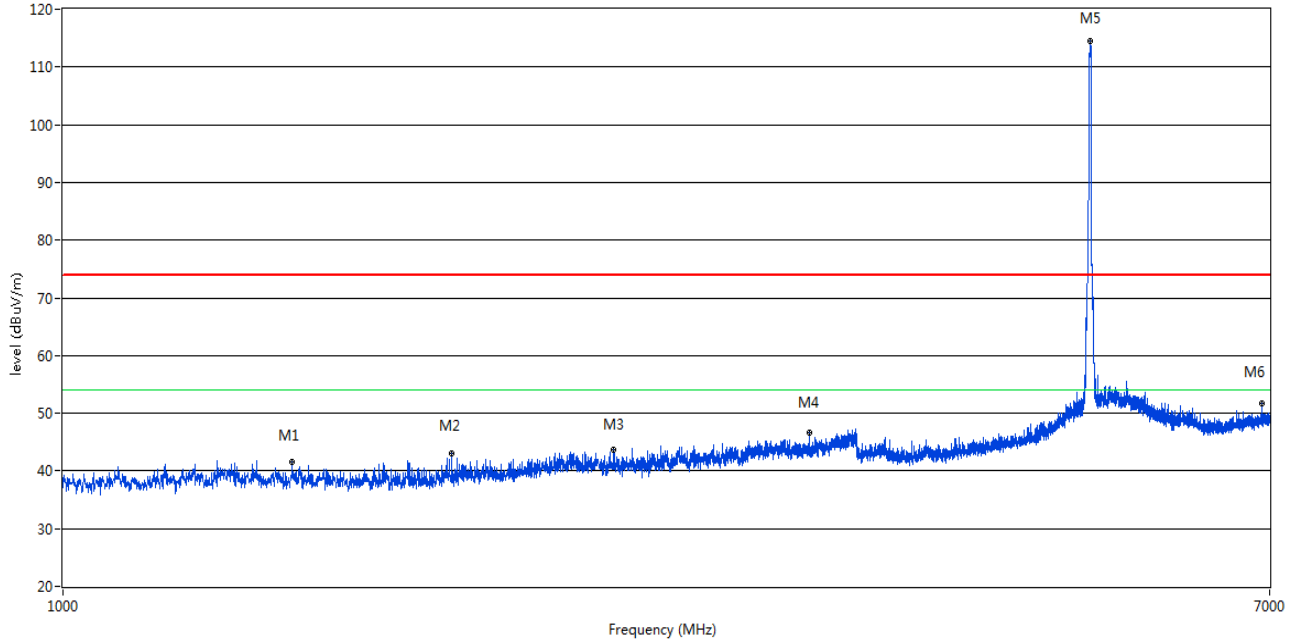
RE Test case\_FCC\_Part 15C\_FCC 15.247(5.8G)\_7GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	8553.750	46.10	16.35	74.0	27.90	Peak	110.90	100	Horizontal	Pass
2	9117.500	46.83	18.15	74.0	27.17	Peak	38.20	100	Horizontal	Pass
3	10610.750	48.01	18.07	74.0	25.99	Peak	329.50	100	Horizontal	Pass
4	12634.750	49.63	19.27	74.0	24.37	Peak	110.90	100	Horizontal	Pass
5	14642.250	53.17	23.56	74.0	20.83	Peak	0.00	100	Horizontal	Pass
6	16553.500	52.71	20.70	74.0	21.29	Peak	300.90	100	Horizontal	Pass

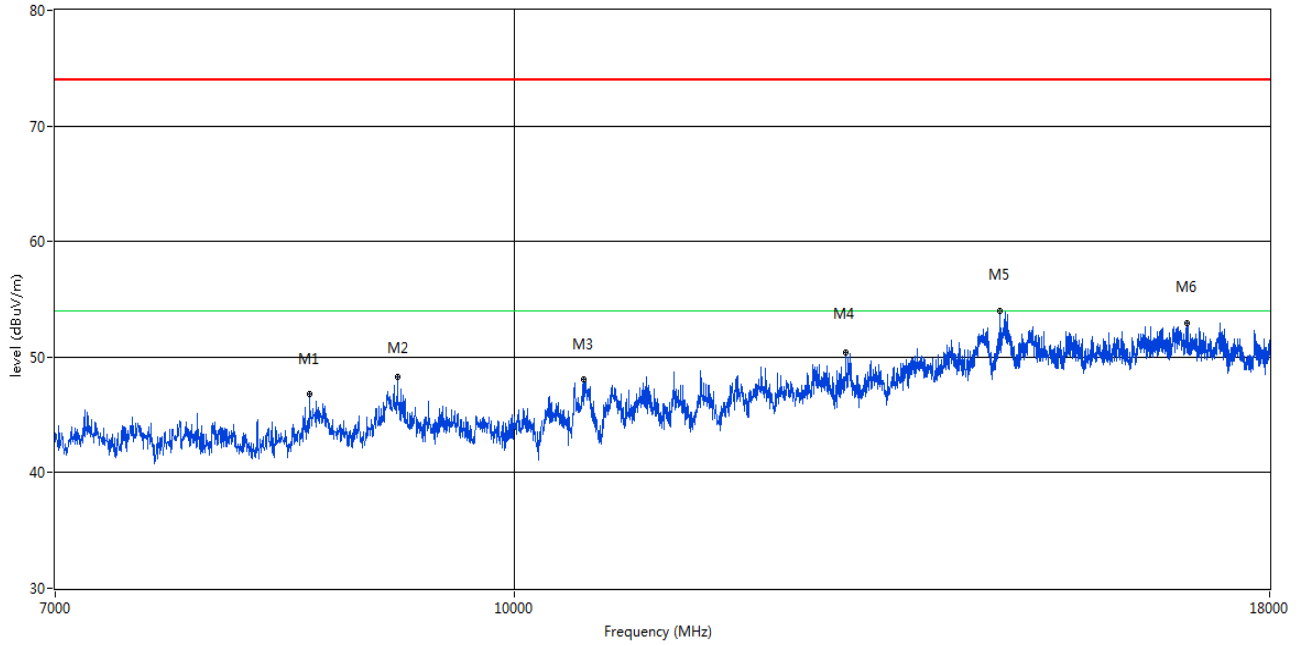
11n(HT20) HIGH CHANNEL 1 GHz to 18 GHz, ANT V

RE Test case\_FCC\_Part 15C\_FCC 15.247(5.8G)\_1GHz-7GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	1447.850	41.54	-2.94	74.0	32.46	Peak	17.80	100	Vertical	Pass
2	1871.650	43.04	-1.07	74.0	30.96	Peak	137.60	100	Vertical	Pass
3	2431.300	43.71	2.14	74.0	30.29	Peak	229.40	100	Vertical	Pass
4	3332.850	46.62	4.66	74.0	27.38	Peak	192.50	100	Vertical	Pass
5	5243.050	114.49	11.41	74.0	-40.49	Peak	246.50	100	Vertical	N/A
6	6915.850	51.80	13.41	74.0	22.20	Peak	130.50	100	Vertical	Pass

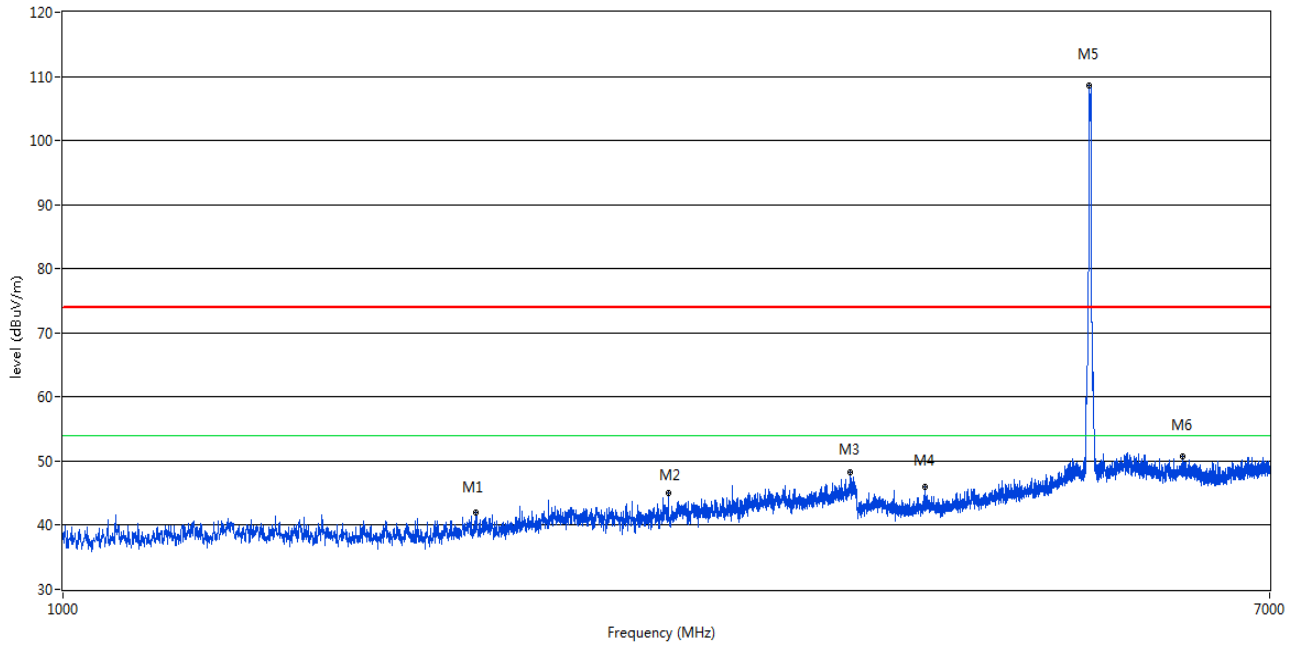
RE Test case\_FCC\_Part 15C\_FCC 15.247(5.8G)\_7GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	8531.750	46.81	15.91	74.0	27.19	Peak	221.40	100	Vertical	Pass
2	9136.750	48.28	17.78	74.0	25.72	Peak	111.00	100	Vertical	Pass
3	10558.500	48.12	18.37	74.0	25.88	Peak	284.40	100	Vertical	Pass
4	12945.500	50.41	19.35	74.0	23.59	Peak	102.10	100	Vertical	Pass
5	14595.500	53.99	22.63	74.0	20.01	Peak	221.40	100	Vertical	Pass
6	16875.250	52.96	21.05	74.0	21.04	Peak	11.60	100	Vertical	Pass

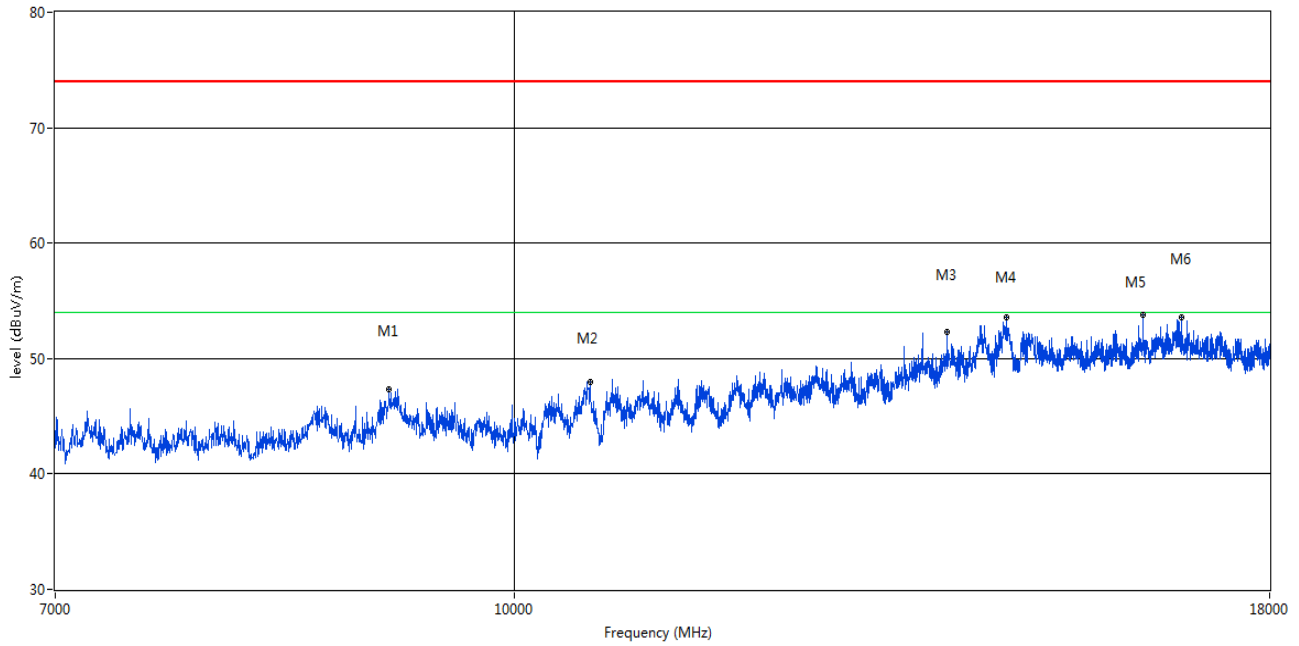
11n(HT20) HIGH CHANNEL 1 GHz to 18 GHz, ANT H

RE Test case\_FCC\_Part 15C\_FCC 15.247(5.8G)\_1GHz-7GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	1947.050	42.02	-0.32	74.0	31.98	Peak	108.60	100	Horizontal	Pass
2	2655.550	45.05	2.54	74.0	28.95	Peak	8.80	100	Horizontal	Pass
3	3560.350	48.22	5.68	74.0	25.78	Peak	301.50	100	Horizontal	Pass
4	4019.050	45.98	8.83	74.0	28.02	Peak	159.70	100	Horizontal	Pass
5	5232.850	108.50	10.96	74.0	-34.50	Peak	226.70	100	Horizontal	N/A
6	6087.950	50.68	12.00	74.0	23.32	Peak	1.60	100	Horizontal	Pass

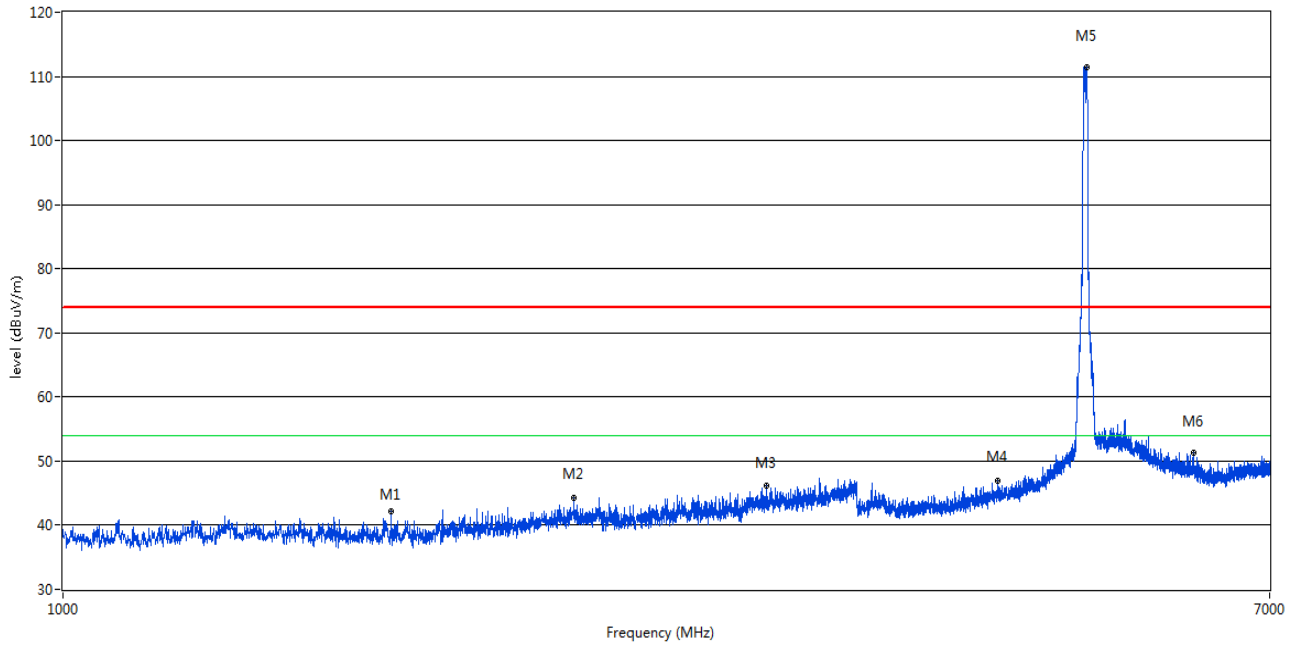
RE Test case\_FCC\_Part 15C\_FCC 15.247(5.8G)\_7GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	9073.500	47.36	17.40	74.0	26.64	Peak	75.30	100	Horizontal	Pass
2	10613.500	47.97	17.99	74.0	26.03	Peak	318.90	100	Horizontal	Pass
3	14009.750	52.31	21.21	74.0	21.69	Peak	346.10	100	Horizontal	Pass
4	14667.000	53.59	23.13	74.0	20.41	Peak	66.00	100	Horizontal	Pass
5	16311.500	53.81	20.82	74.0	20.19	Peak	75.30	100	Horizontal	Pass
6	16803.750	53.62	21.09	74.0	20.38	Peak	228.40	100	Horizontal	Pass

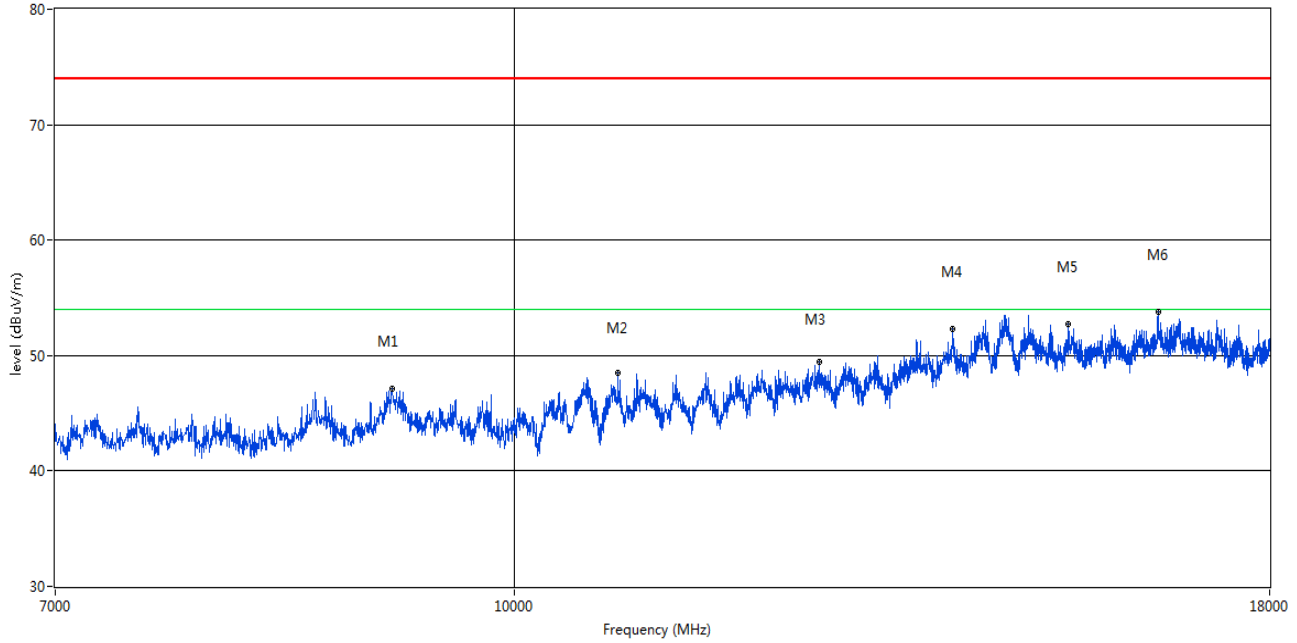
11n(HT40) LOW CHANNEL 1 GHz to 18 GHz, ANT V

RE Test case\_FCC\_Part 15C\_FCC 15.247(5.8G)\_1GHz-7GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	1698.750	42.27	-2.01	74.0	31.73	Peak	146.60	100	Vertical	Pass
2	2279.200	44.33	1.53	74.0	29.67	Peak	128.60	100	Vertical	Pass
3	3109.900	46.18	4.79	74.0	27.82	Peak	109.90	100	Vertical	Pass
4	4512.900	46.89	9.89	74.0	27.11	Peak	276.00	100	Vertical	Pass
5	5209.050	111.45	11.05	74.0	-37.45	Peak	82.20	100	Vertical	N/A
6	6194.200	51.24	12.18	74.0	22.76	Peak	140.90	100	Vertical	Pass

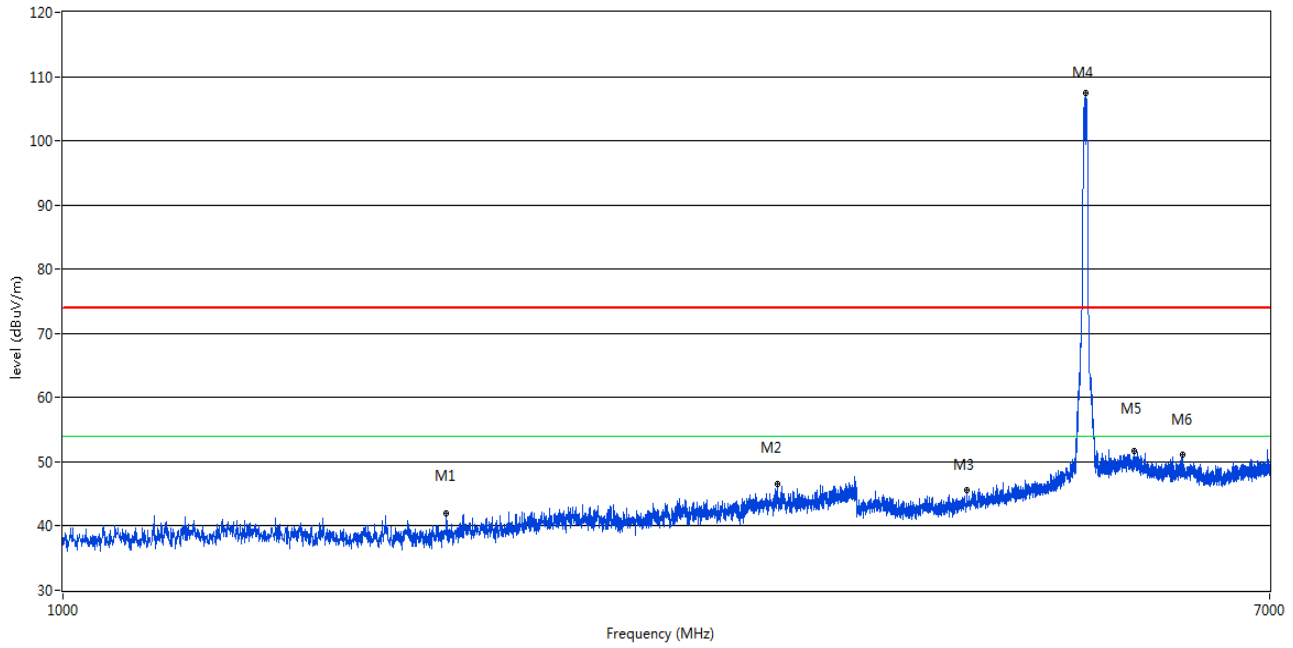
RE Test case\_FCC\_Part 15C\_FCC 15.247(5.8G)\_7GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	9098.250	47.12	17.96	74.0	26.88	Peak	313.90	100	Vertical	Pass
2	10841.750	48.53	17.86	74.0	25.47	Peak	120.00	100	Vertical	Pass
3	12681.500	49.40	19.28	74.0	24.60	Peak	20.60	100	Vertical	Pass
4	14070.250	52.28	22.28	74.0	21.72	Peak	357.00	100	Vertical	Pass
5	15395.750	52.68	20.64	74.0	21.32	Peak	349.60	100	Vertical	Pass
6	16512.250	53.76	20.64	74.0	20.24	Peak	29.60	100	Vertical	Pass

11n(HT40) LOW CHANNEL 1 GHz to 18 GHz, ANT H

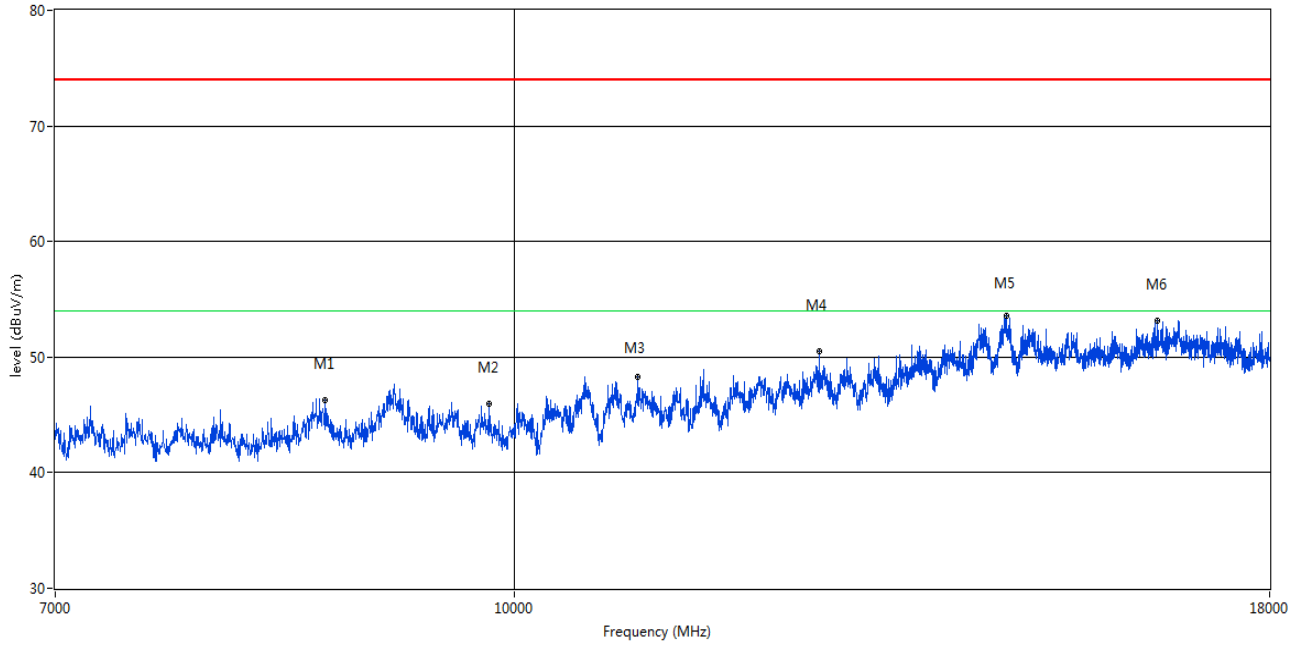
RE Test case\_FCC\_Part 15C\_FCC 15.247(5.8G)\_1GHz-7GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	1856.050	41.98	-0.20	74.0	32.02	Peak	24.60	100	Horizontal	Pass
2	3164.500	46.63	4.95	74.0	27.37	Peak	172.00	100	Horizontal	Pass
3	4294.450	45.54	8.93	74.0	28.46	Peak	45.90	100	Horizontal	Pass
4	5205.650	107.38	11.23	74.0	-33.38	Peak	219.20	100	Horizontal	N/A
5	5622.150	51.67	11.50	74.0	22.33	Peak	238.60	100	Horizontal	Pass
6	6081.150	51.11	12.00	74.0	22.89	Peak	238.60	100	Horizontal	Pass



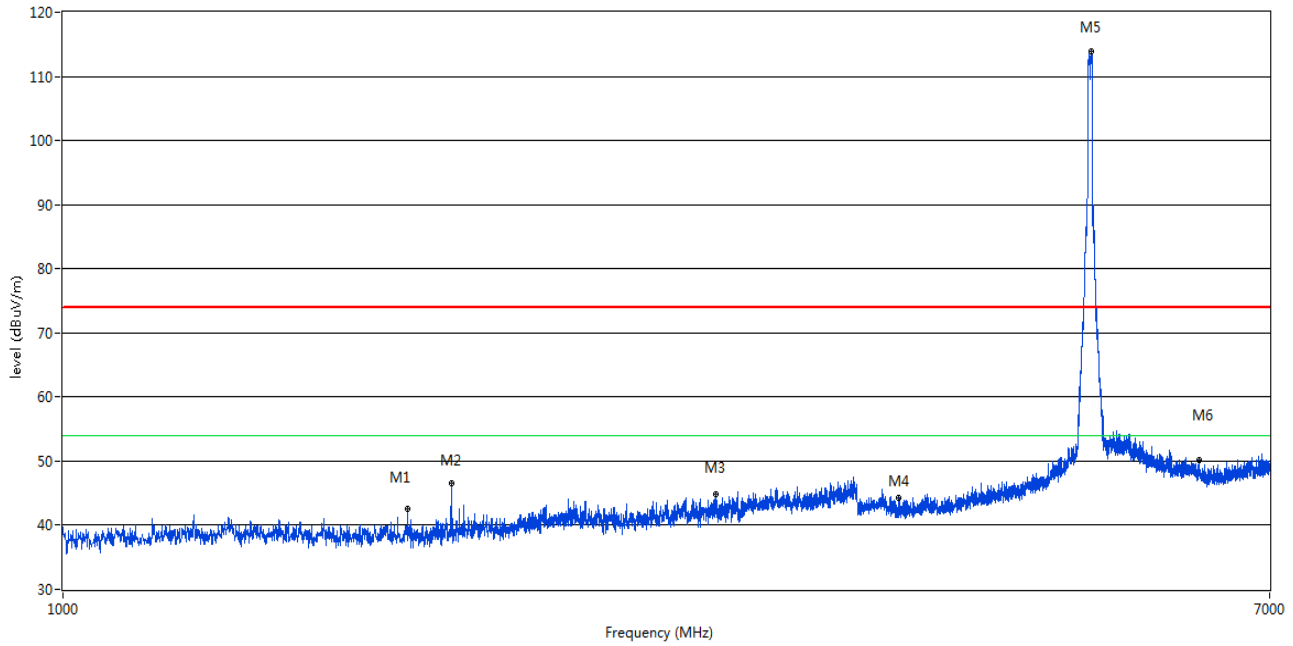
RE Test case\_FCC\_Part 15C\_FCC 15.247(5.8G)\_7GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	8636.250	46.23	16.15	74.0	27.77	Peak	168.50	100	Horizontal	Pass
2	9805.000	46.00	16.20	74.0	28.00	Peak	177.60	100	Horizontal	Pass
3	11009.500	48.26	18.56	74.0	25.74	Peak	159.40	100	Horizontal	Pass
4	12684.250	50.47	19.28	74.0	23.53	Peak	168.50	100	Horizontal	Pass
5	14667.000	53.61	23.13	74.0	20.39	Peak	51.60	100	Horizontal	Pass
6	16501.250	53.17	20.62	74.0	20.83	Peak	132.20	100	Horizontal	Pass

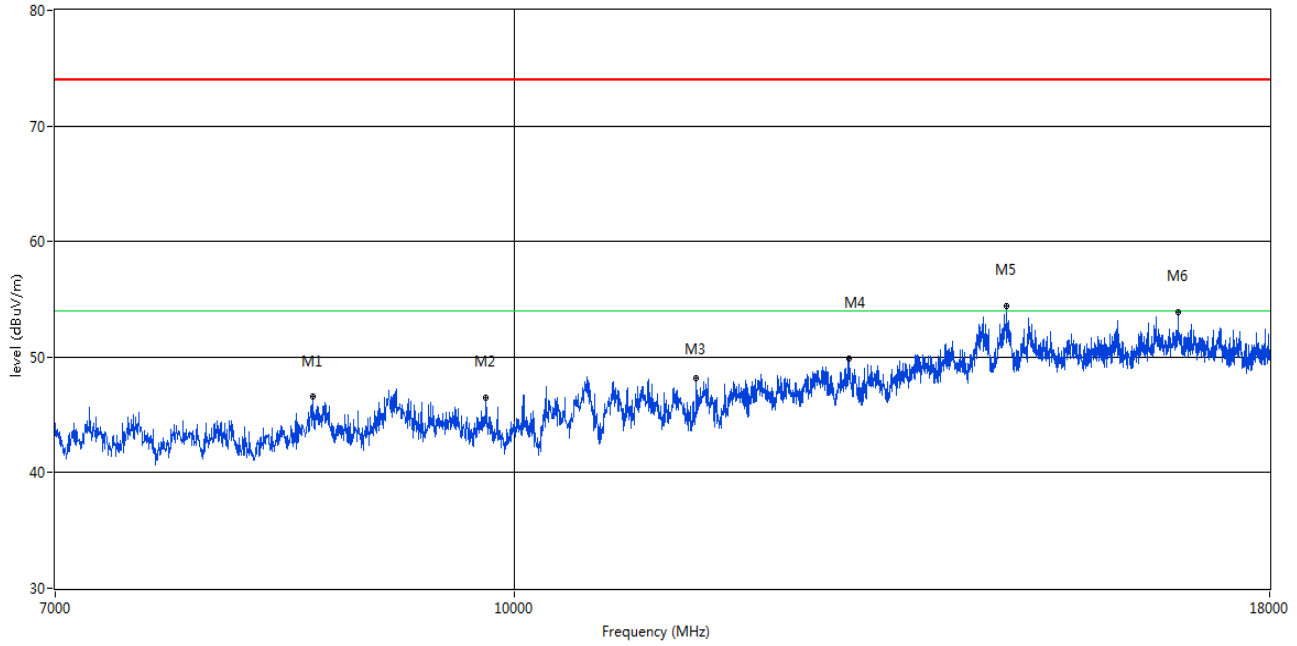
11n(HT40) HIGH CHANNEL 1 GHz to 18 GHz, ANT V

RE Test case\_FCC\_Part 15C\_FCC 15.247(5.8G)\_1GHz-7GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	1742.950	42.63	-1.15	74.0	31.37	Peak	171.60	100	Vertical	Pass
2	1870.350	46.64	-0.58	74.0	27.36	Peak	134.70	100	Vertical	Pass
3	2864.850	44.91	3.87	74.0	29.09	Peak	89.10	100	Vertical	Pass
4	3844.800	44.27	7.83	74.0	29.73	Peak	24.90	100	Vertical	Pass
5	5251.550	113.86	11.21	74.0	-39.86	Peak	237.20	100	Vertical	N/A
6	6246.050	50.12	11.94	74.0	23.88	Peak	140.40	100	Vertical	Pass

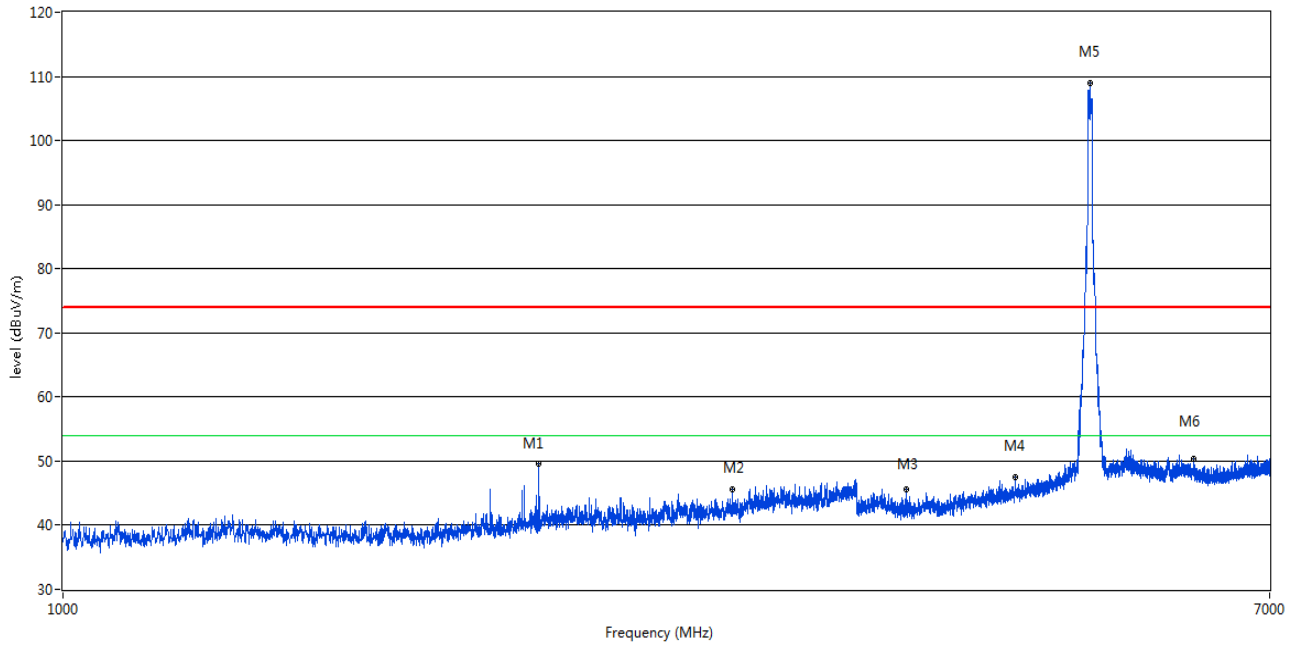
RE Test case\_FCC\_Part 15C\_FCC 15.247(5.8G)\_7GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	8551.000	46.63	16.30	74.0	27.37	Peak	238.60	100	Vertical	Pass
2	9785.750	46.53	16.29	74.0	27.47	Peak	84.30	100	Vertical	Pass
3	11526.500	48.19	17.77	74.0	25.81	Peak	319.10	100	Vertical	Pass
4	12973.000	49.87	19.65	74.0	24.13	Peak	193.00	100	Vertical	Pass
5	14667.000	54.37	23.13	74.0	19.63	Peak	256.60	100	Vertical	Pass
6	16473.750	53.47	20.58	74.0	20.53	Peak	48.20	100	Vertical	Pass

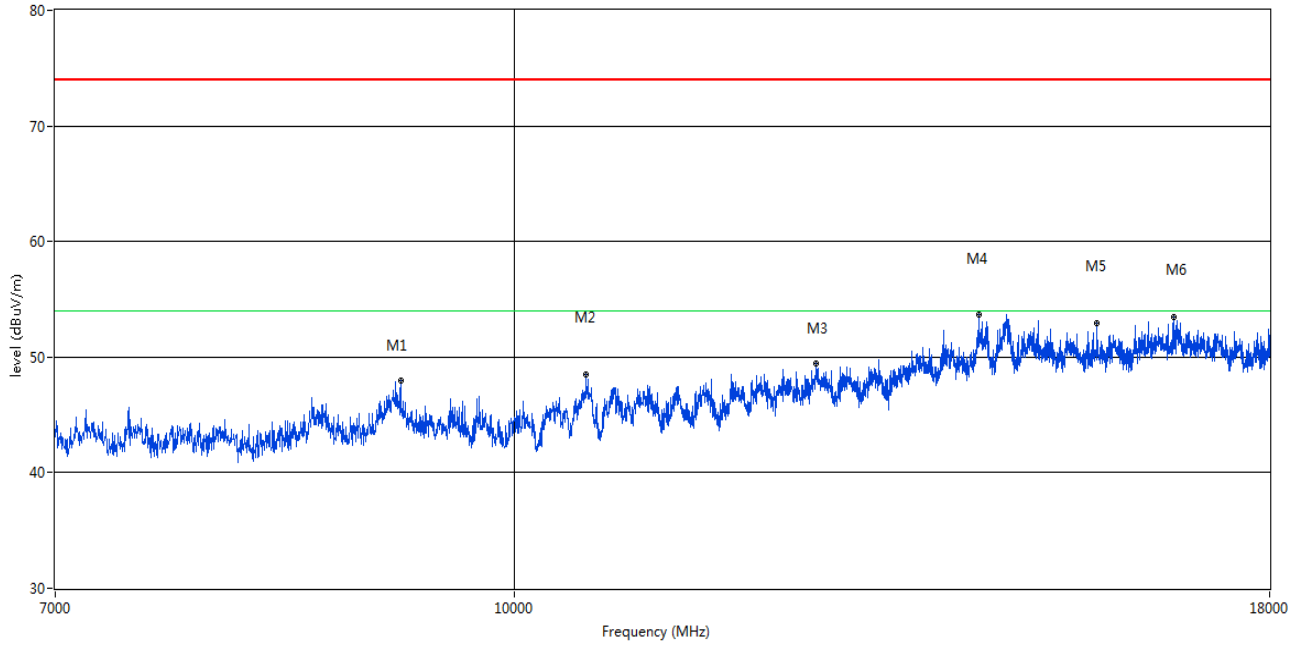
11n(HT40) HIGH CHANNEL 1 GHz to 18 GHz, ANT H

RE Test case\_FCC\_Part 15C\_FCC 15.247(5.8G)\_1GHz-7GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	2155.050	49.62	0.39	74.0	24.38	Peak	266.10	100	Horizontal	Pass
2	2944.800	45.51	4.15	74.0	28.49	Peak	284.50	100	Horizontal	Pass
3	3893.250	45.59	8.28	74.0	28.41	Peak	238.90	100	Horizontal	Pass
4	4646.350	47.59	10.29	74.0	26.41	Peak	229.30	100	Horizontal	Pass
5	5243.050	108.89	11.41	74.0	-34.89	Peak	219.50	100	Horizontal	N/A
6	6197.600	50.29	12.16	74.0	23.71	Peak	354.80	100	Horizontal	Pass

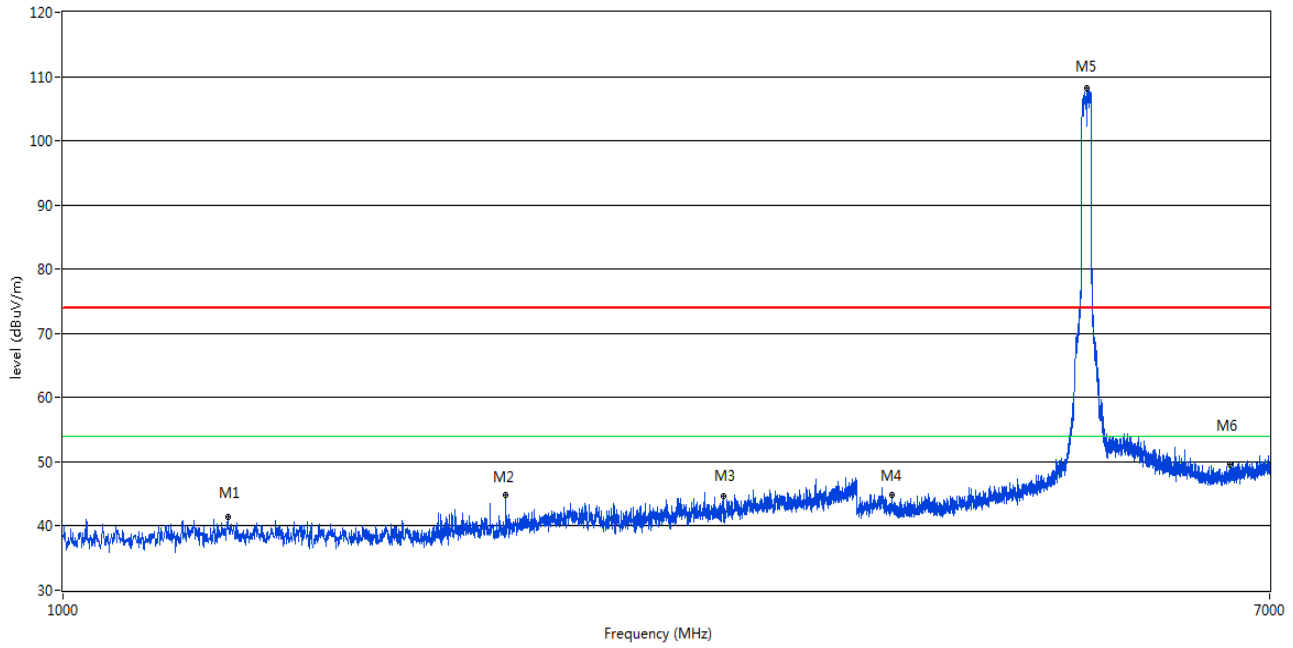
RE Test case\_FCC\_Part 15C\_FCC 15.247(5.8G)\_7GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	9156.000	47.92	17.41	74.0	26.08	Peak	360.00	100	Horizontal	Pass
2	10577.750	48.47	18.83	74.0	25.53	Peak	21.50	100	Horizontal	Pass
3	12654.000	49.46	19.27	74.0	24.54	Peak	1.10	100	Horizontal	Pass
4	14356.250	53.68	23.19	74.0	20.32	Peak	249.40	100	Horizontal	Pass
5	15742.250	52.91	20.31	74.0	21.09	Peak	131.20	100	Horizontal	Pass
6	16713.000	53.42	20.94	74.0	20.58	Peak	4.30	100	Horizontal	Pass

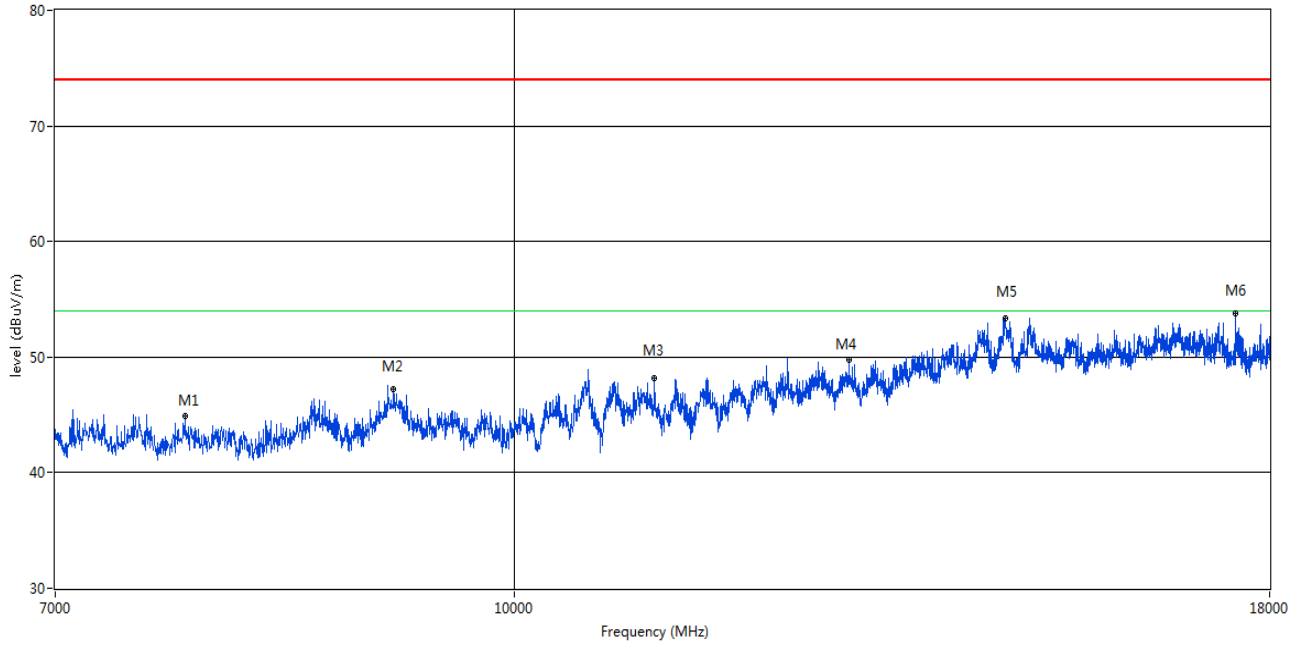
11ac(HT80) 1 GHz to 18 GHz, ANT V

RE Test case\_FCC\_Part 15C\_FCC 15.247(5.8G)\_1GHz-7GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	1305.500	41.48	-1.99	74.0	32.52	Peak	338.40	100	Vertical	Pass
2	2043.250	44.92	-0.49	74.0	29.08	Peak	135.50	100	Vertical	Pass
3	2899.300	44.68	4.05	74.0	29.32	Peak	173.10	100	Vertical	Pass
4	3804.850	44.75	7.97	74.0	29.25	Peak	15.40	100	Vertical	Pass
5	5217.550	108.18	10.95	74.0	-34.18	Peak	111.90	100	Vertical	N/A
6	6563.950	49.57	12.43	74.0	24.43	Peak	1.60	100	Vertical	Pass

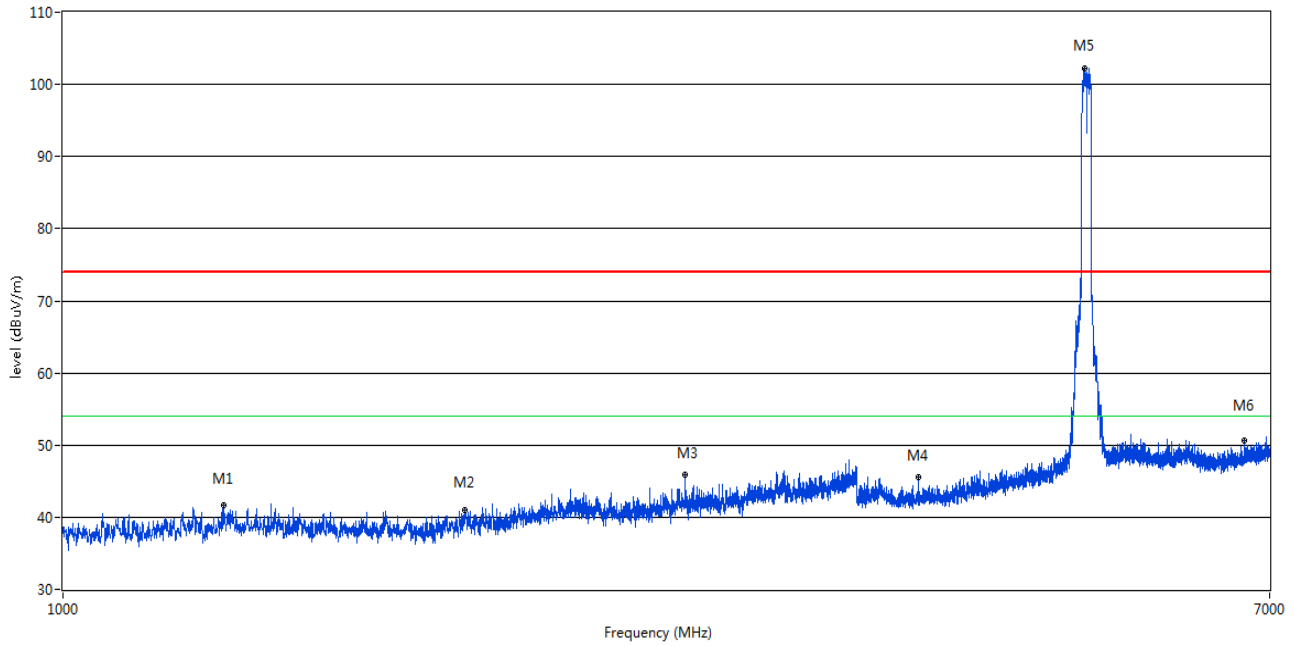
RE Test case\_FCC\_Part 15C\_FCC 15.247(5.8G)\_7GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	7742.500	44.86	14.62	74.0	29.14	Peak	228.90	100	Vertical	Pass
2	9106.500	47.20	18.14	74.0	26.80	Peak	202.00	100	Vertical	Pass
3	11155.250	48.21	17.84	74.0	25.79	Peak	255.90	100	Vertical	Pass
4	12978.500	49.78	19.70	74.0	24.22	Peak	147.40	100	Vertical	Pass
5	14653.250	53.34	23.37	74.0	20.66	Peak	47.60	100	Vertical	Pass
6	17535.250	53.78	21.32	74.0	20.22	Peak	74.40	100	Vertical	Pass

11ac(HT80) 1 GHz to 18 GHz, ANT H

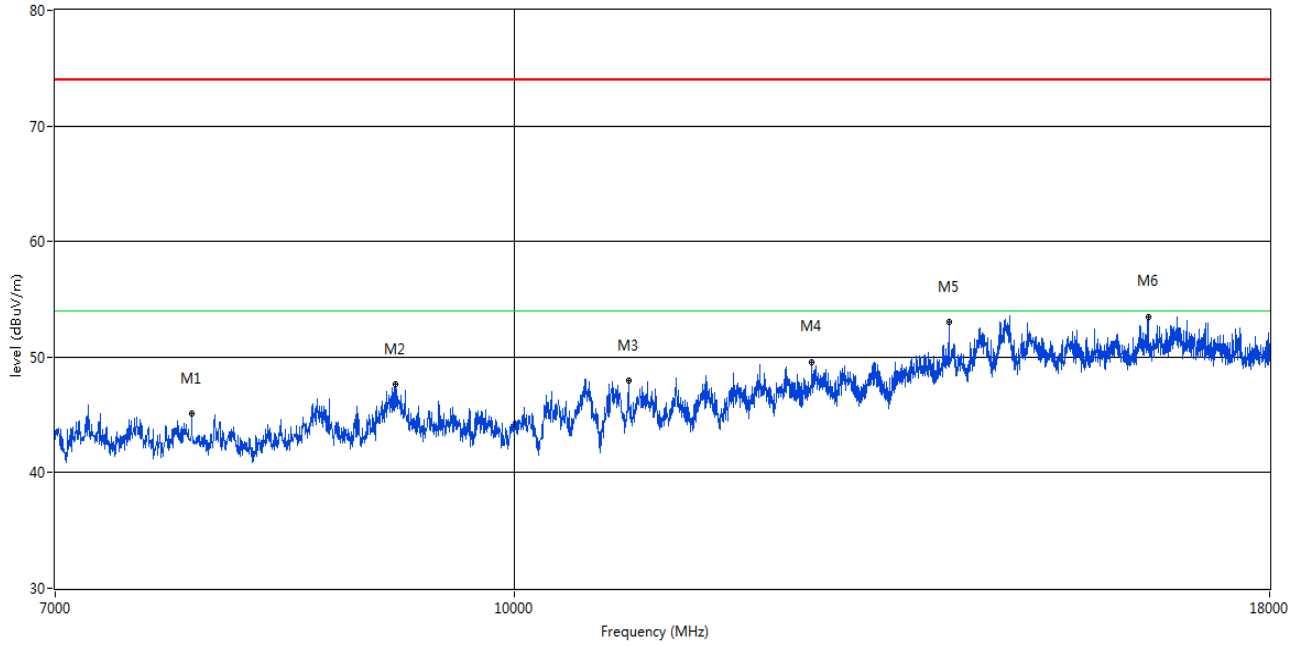
RE Test case\_FCC\_Part 15C\_FCC 15.247(5.8G)\_1GHz-7GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	1297.050	41.65	-2.66	74.0	32.35	Peak	0.00	100	Horizontal	Pass
2	1913.250	40.96	-0.56	74.0	33.04	Peak	1.20	100	Horizontal	Pass
3	2727.700	45.82	2.83	74.0	28.18	Peak	50.80	100	Horizontal	Pass
4	3970.600	45.59	8.34	74.0	28.41	Peak	355.20	100	Horizontal	Pass
5	5198.000	102.30	10.90	74.0	-28.30	Peak	228.20	100	Horizontal	N/A
6	6721.200	50.59	12.82	74.0	23.41	Peak	208.60	100	Horizontal	Pass



RE Test case\_FCC\_Part 15C\_FCC 15.247(5.8G)\_7GHz-18GHz

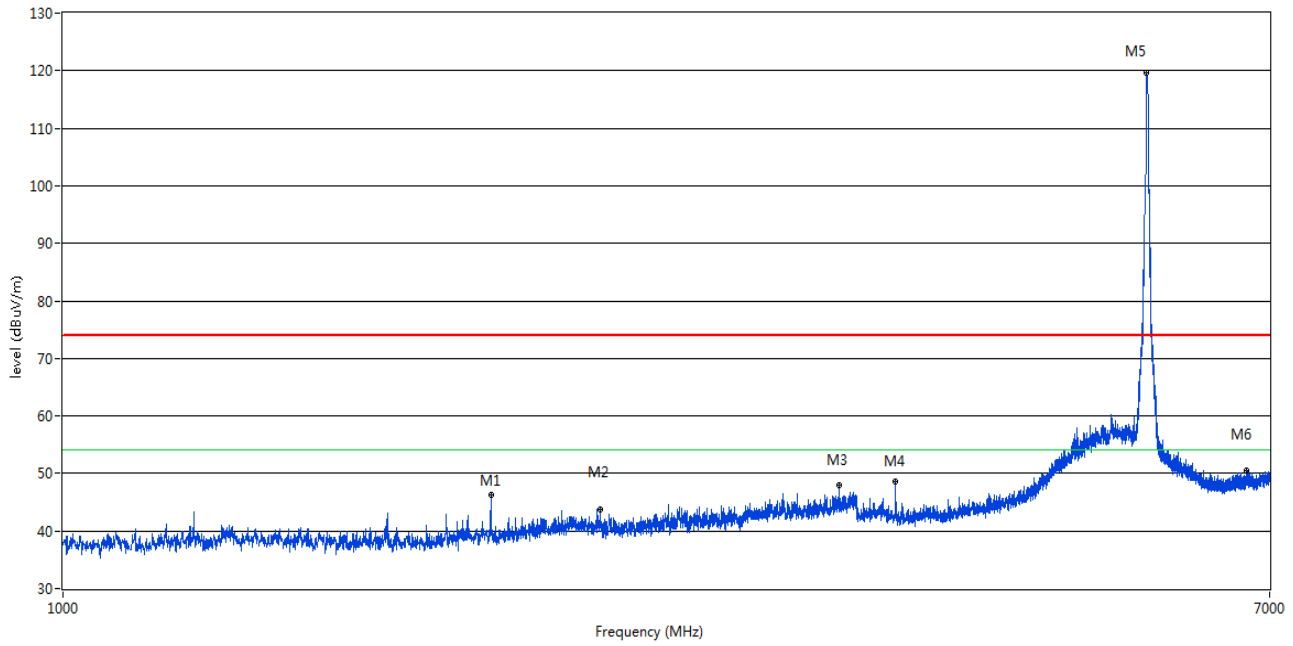


No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	7783.750	45.09	14.58	74.0	28.91	Peak	67.60	100	Horizontal	Pass
2	9123.000	47.68	18.04	74.0	26.32	Peak	330.00	100	Horizontal	Pass
3	10932.500	48.01	17.33	74.0	25.99	Peak	195.80	100	Horizontal	Pass
4	12604.500	49.57	19.26	74.0	24.43	Peak	158.90	100	Horizontal	Pass
5	14026.250	53.04	21.51	74.0	20.96	Peak	359.00	100	Horizontal	Pass
6	16377.500	53.50	20.72	74.0	20.50	Peak	312.10	100	Horizontal	Pass

**Band 4**

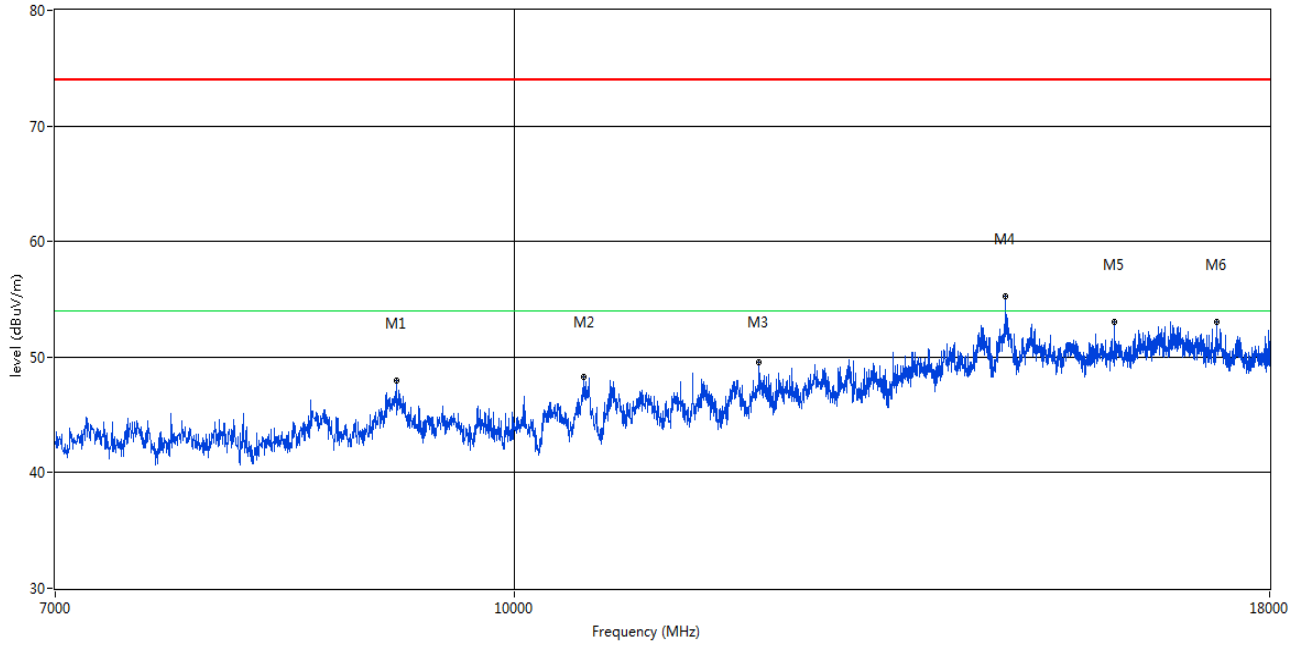
11a LOW CHANNEL 1 GHz to 18 GHz, ANT V

RE Test case\_FCC\_Part 15C\_FCC 15.247(5.8G)\_1GHz-7GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	1993.850	46.25	-0.57	74.0	27.75	Peak	186.70	100	Vertical	Pass
2	2378.000	43.65	1.41	74.0	30.35	Peak	324.10	100	Vertical	Pass
3	3497.950	47.96	5.08	74.0	26.04	Peak	324.10	100	Vertical	Pass
4	3829.500	48.68	7.74	74.0	25.32	Peak	334.90	100	Vertical	Pass
5	5740.300	119.64	11.42	74.0	-45.64	Peak	65.10	100	Vertical	N/A
6	6744.150	50.46	13.00	74.0	23.54	Peak	306.10	100	Vertical	Pass

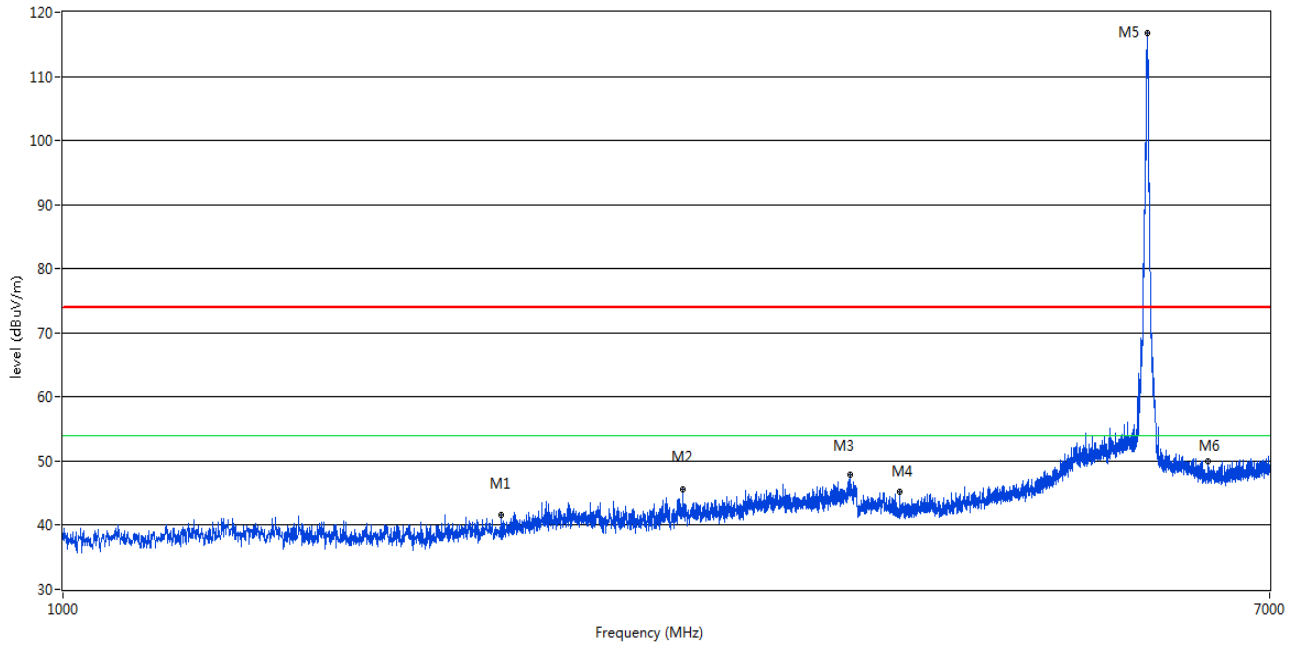
RE Test case\_FCC\_Part 15C\_FCC 15.247(5.8G)\_7GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	9125.750	47.94	17.99	74.0	26.06	Peak	360.00	100	Vertical	Pass
2	10555.750	48.33	18.30	74.0	25.67	Peak	249.90	100	Vertical	Pass
3	12101.250	49.56	18.47	74.0	24.44	Peak	330.90	100	Vertical	Pass
4	14661.500	55.28	23.23	74.0	18.72	Peak	30.10	100	Vertical	Pass
5	15956.750	53.00	20.43	74.0	21.00	Peak	249.90	100	Vertical	Pass
6	17282.251	53.01	21.32	74.0	20.99	Peak	330.90	100	Vertical	Pass

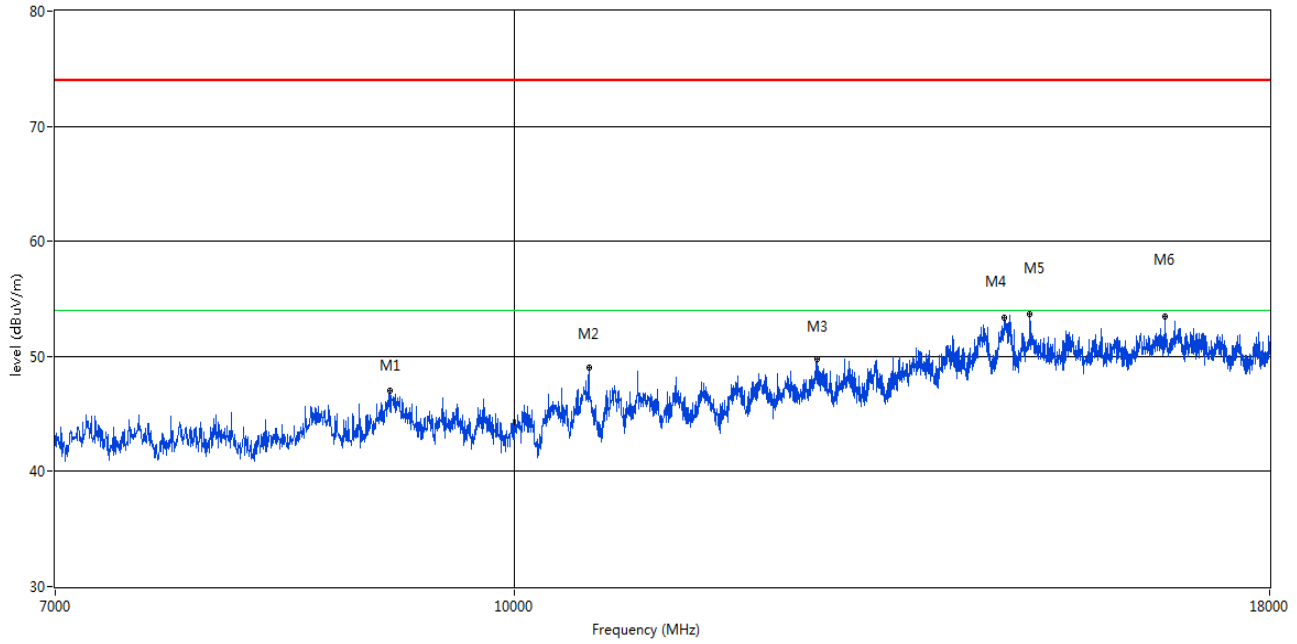
11a LOW CHANNEL 1 GHz to 18 GHz, ANT H

RE Test case\_FCC\_Part 15C\_FCC 15.247(5.8G)\_1GHz-7GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	2028.950	41.53	-1.23	74.0	32.47	Peak	58.20	100	Horizontal	Pass
2	2718.600	45.59	2.91	74.0	28.41	Peak	121.90	100	Horizontal	Pass
3	3559.050	47.82	5.31	74.0	26.18	Peak	85.60	100	Horizontal	Pass
4	3856.700	45.24	7.97	74.0	28.76	Peak	353.80	100	Horizontal	Pass
5	5749.650	116.79	11.73	74.0	-42.79	Peak	353.80	100	Horizontal	N/A
6	6340.400	49.91	12.41	74.0	24.09	Peak	294.10	100	Horizontal	Pass

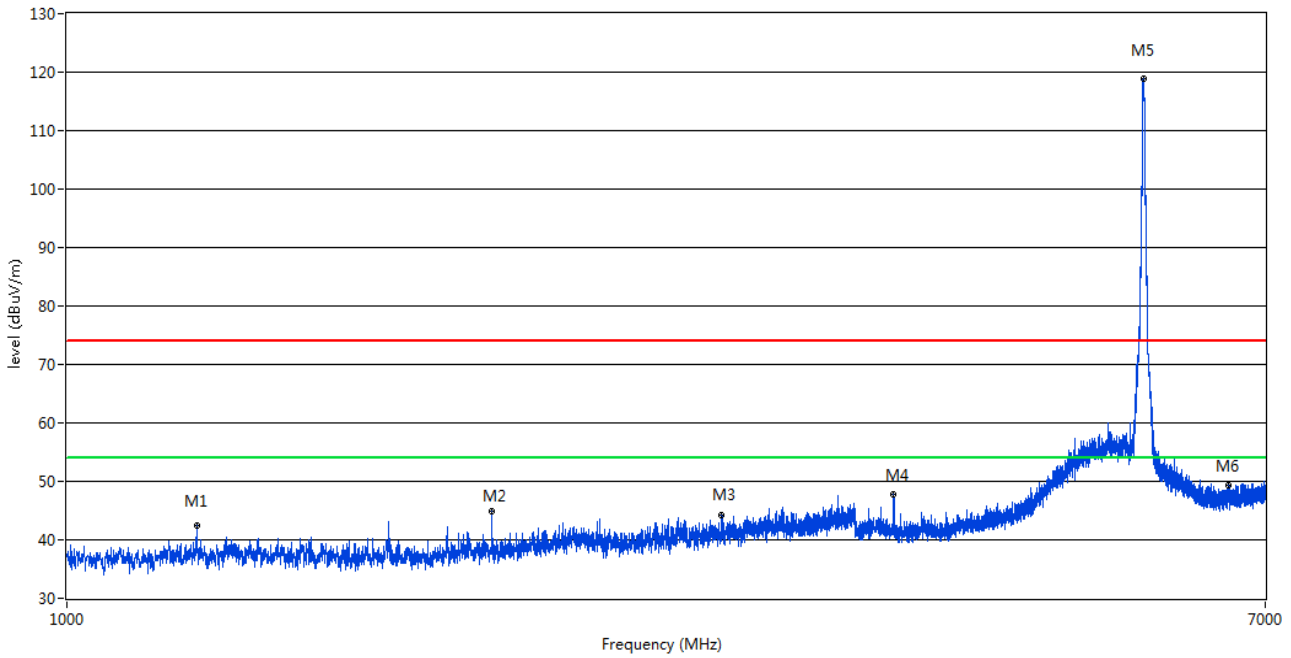
RE Test case\_FCC\_Part 15C\_FCC 15.247(5.8G)\_7GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	9079.000	47.06	17.53	74.0	26.94	Peak	67.20	100	Horizontal	Pass
2	10599.750	49.02	18.38	74.0	24.98	Peak	193.40	100	Horizontal	Pass
3	12656.750	49.76	19.28	74.0	24.24	Peak	360.00	100	Horizontal	Pass
4	14642.250	53.40	23.56	74.0	20.60	Peak	211.70	100	Horizontal	Pass
5	14939.250	53.70	22.04	74.0	20.30	Peak	166.40	100	Horizontal	Pass
6	16594.750	53.45	20.76	74.0	20.55	Peak	139.10	100	Horizontal	Pass

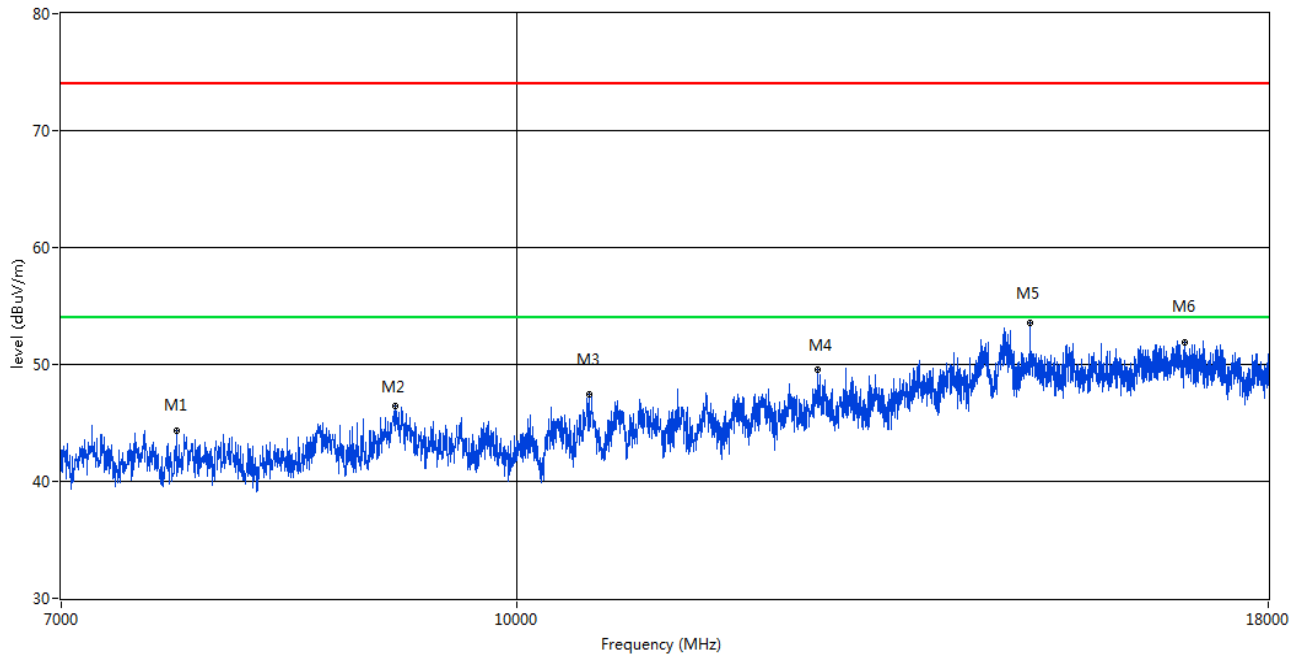
11a MIDDLE CHANNEL 1 GHz to 18 GHz, ANT V

RE Test case\_FCC 15C 1GHz-7GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	1235.30	42.52	-1.94	74.0	31.48	Peak	315.10	100	Vertical	Pass
2	1993.85	44.84	-0.57	74.0	29.16	Peak	186.70	100	Vertical	Pass
3	2892.80	44.21	3.25	74.0	29.79	Peak	360.00	100	Vertical	Pass
4	3829.50	47.78	7.74	74.0	26.22	Peak	334.90	100	Vertical	Pass
5	5725.65	118.95	11.86	74.0	-44.95	Peak	84.30	100	Vertical	N/A
6	6592.00	49.26	12.42	74.0	24.74	Peak	25.90	100	Vertical	Pass

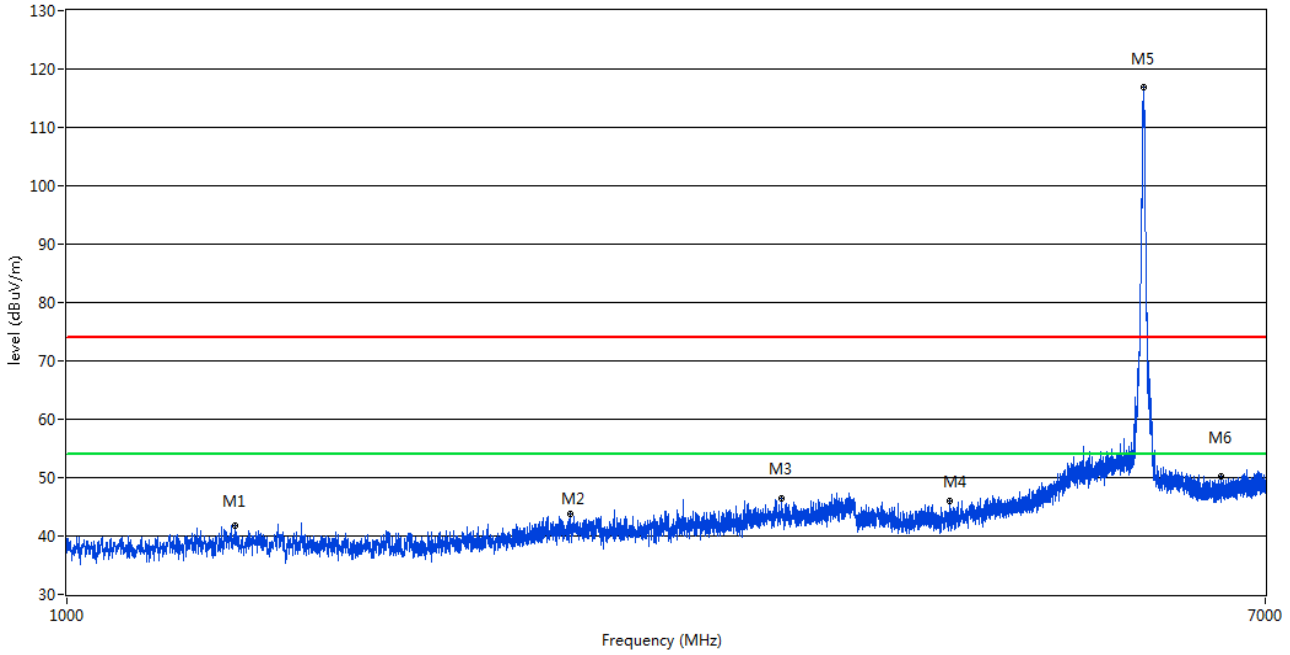
RE Test case\_FCC 15C 7GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	7660.00	44.29	13.91	74.0	29.71	Peak	0.00	100	Vertical	Pass
2	9092.75	46.48	17.84	74.0	27.52	Peak	166.40	100	Vertical	Pass
3	10577.75	47.49	18.83	74.0	26.51	Peak	49.10	100	Vertical	Pass
4	12656.75	49.56	19.28	74.0	24.44	Peak	360.00	100	Vertical	Pass
5	14939.25	53.60	22.04	74.0	20.40	Peak	166.40	100	Vertical	Pass
6	16864.25	51.84	21.06	74.0	22.16	Peak	166.40	100	Vertical	Pass

11a MIDDLE CHANNEL 1 GHz to 18 GHz, ANT H

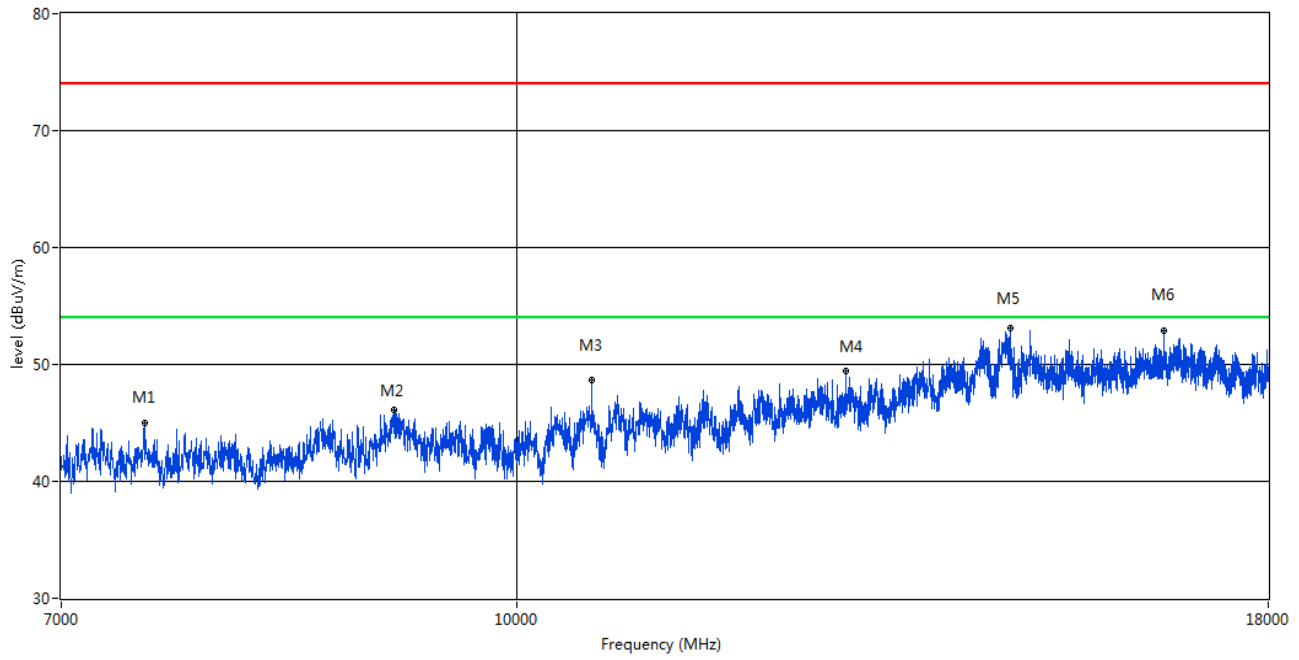
RE Test case\_FCC 15C 1GHz-7GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	1315.25	41.67	-2.31	74.0	32.33	Peak	286.10	100	Horizontal	Pass
2	2264.90	43.68	1.93	74.0	30.32	Peak	360.00	100	Horizontal	Pass
3	3193.10	46.53	4.85	74.0	27.47	Peak	267.70	100	Horizontal	Pass
4	4190.75	46.01	8.98	74.0	27.99	Peak	82.30	100	Horizontal	Pass
5	5775.65	116.89	11.73	74.0	-42.89	Peak	353.80	100	Horizontal	N/A
6	6508.70	50.20	12.26	74.0	23.80	Peak	264.70	100	Horizontal	Pass



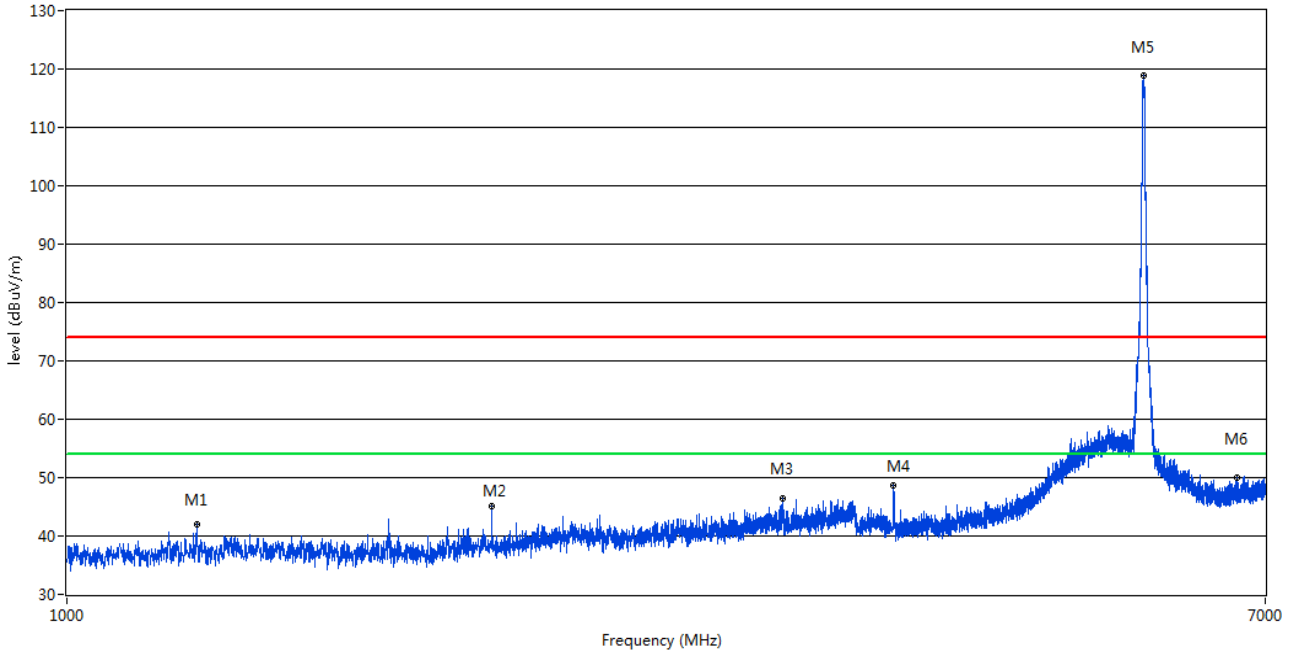
RE Test case\_FCC 15C 7GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	7470.25	44.95	14.81	74.0	29.05	Peak	302.60	100	Horizontal	Pass
2	9079.00	46.16	17.53	74.0	27.84	Peak	67.20	100	Horizontal	Pass
3	10599.75	48.62	18.38	74.0	25.38	Peak	193.40	100	Horizontal	Pass
4	12929.00	49.43	19.17	74.0	24.57	Peak	259.50	100	Horizontal	Pass
5	14708.25	53.14	22.41	74.0	20.86	Peak	58.10	100	Horizontal	Pass
6	16594.75	52.85	20.76	74.0	21.15	Peak	139.10	100	Horizontal	Pass

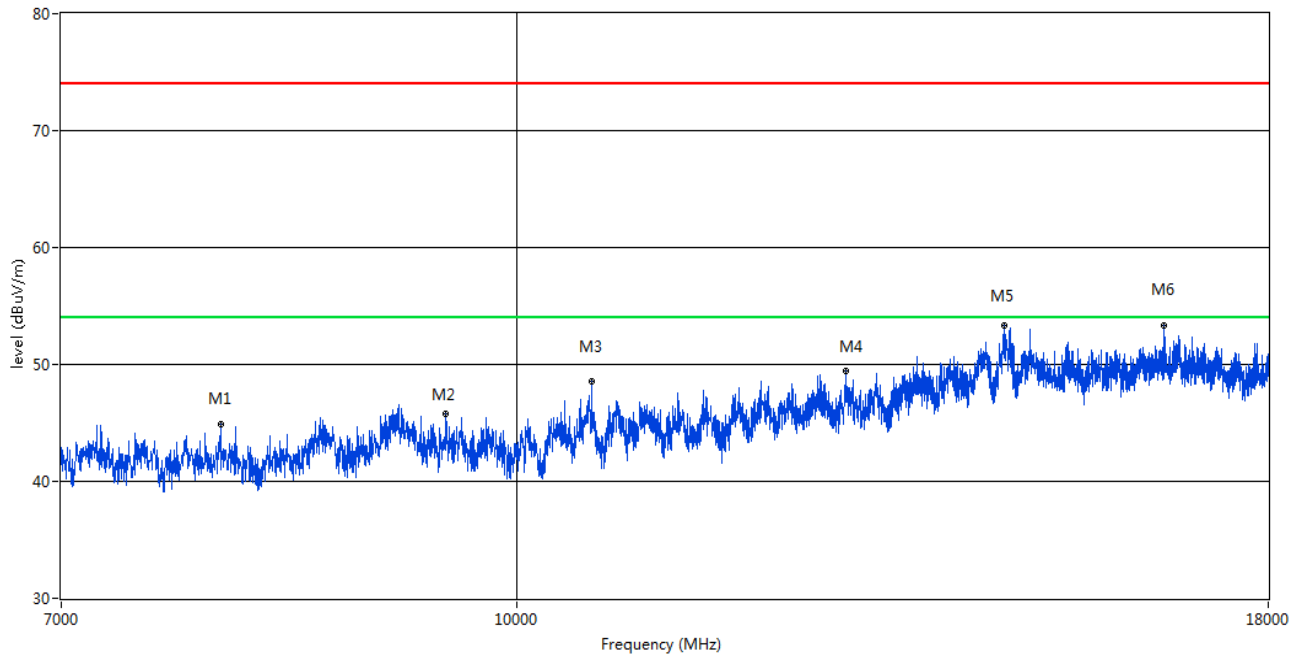
11a HIGH CHANNEL 1 GHz to 18 GHz, ANT V

RE Test case\_FCC 15C 1GHz-7GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	1235.30	41.92	-1.94	74.0	32.08	Peak	315.10	100	Vertical	Pass
2	1993.85	45.05	-0.57	74.0	28.95	Peak	186.70	100	Vertical	Pass
3	3194.40	46.52	4.75	74.0	27.48	Peak	140.50	100	Vertical	Pass
4	3829.50	48.68	7.74	74.0	25.32	Peak	334.90	100	Vertical	Pass
5	5775.65	118.86	11.84	74.0	-44.86	Peak	247.90	100	Vertical	N/A
6	6682.10	49.96	12.60	74.0	24.04	Peak	189.80	100	Vertical	Pass

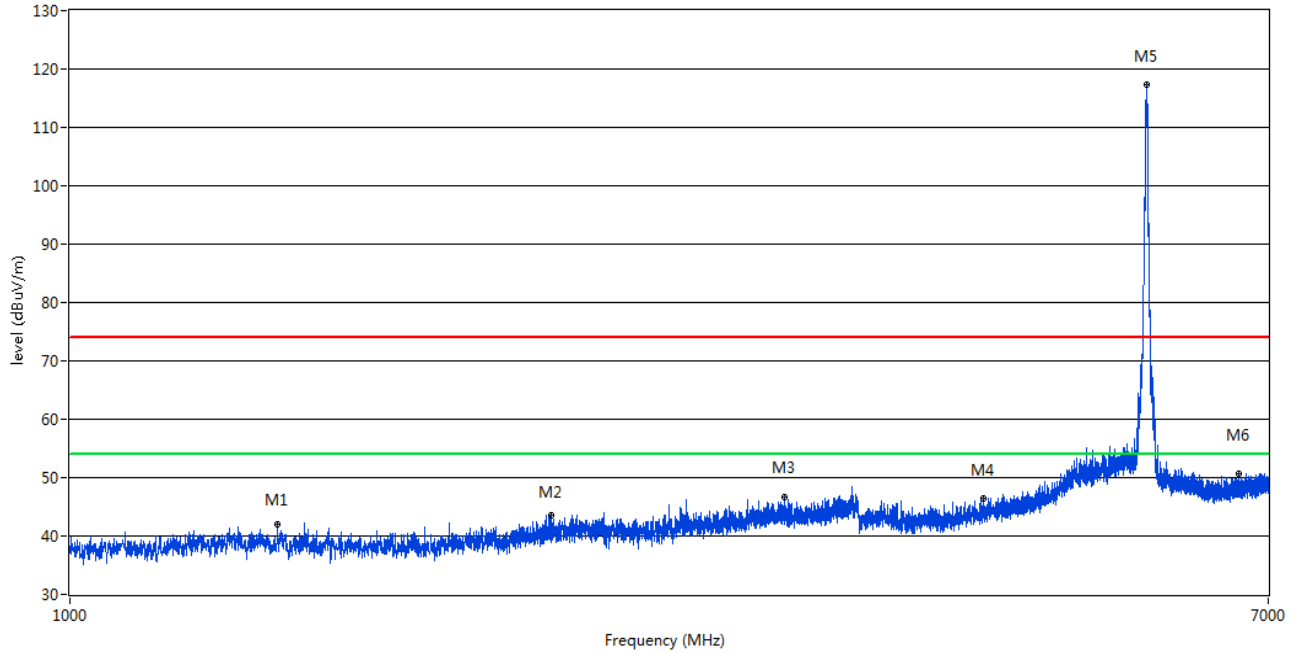
RE Test case\_FCC 15C 7GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	7929.50	44.88	14.12	74.0	29.12	Peak	355.50	100	Vertical	Pass
2	9458.50	45.73	15.88	74.0	28.27	Peak	112.20	100	Vertical	Pass
3	10599.75	48.52	18.38	74.0	25.48	Peak	193.40	100	Vertical	Pass
4	12929.00	49.43	19.17	74.0	24.57	Peak	259.50	100	Vertical	Pass
5	14642.25	53.30	23.57	74.0	20.70	Peak	211.70	100	Vertical	Pass
6	16594.75	53.35	20.76	74.0	20.65	Peak	139.10	100	Vertical	Pass

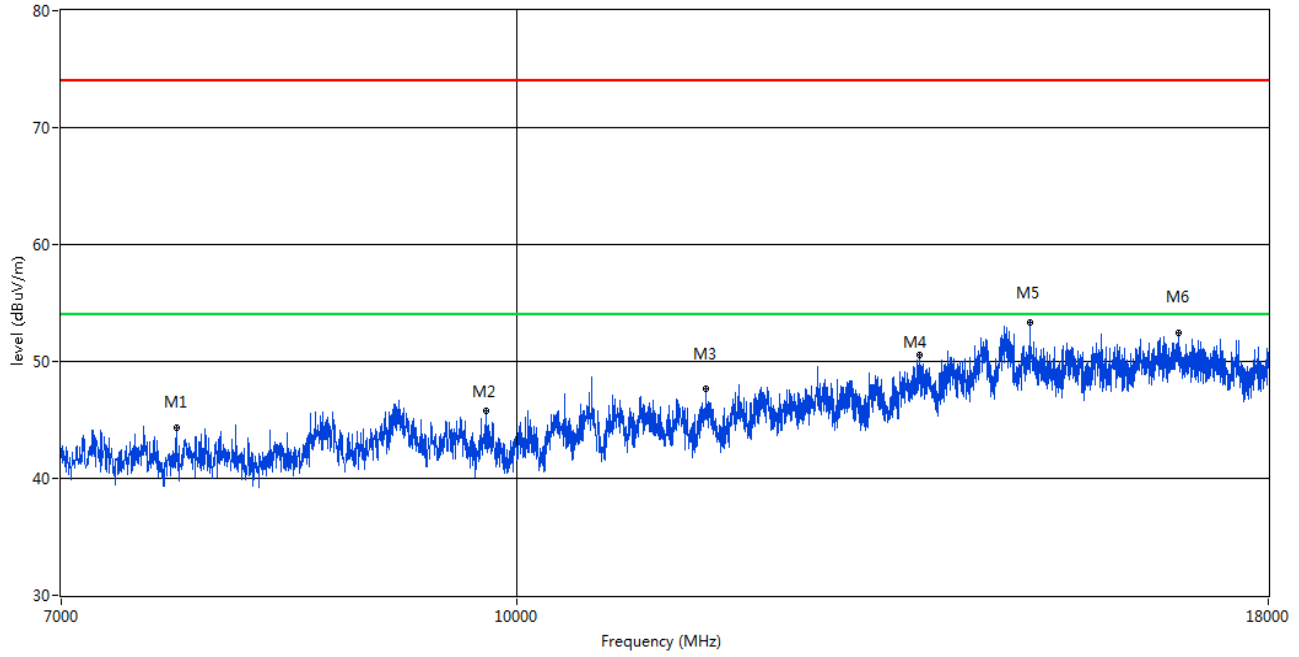
11a HIGH CHANNEL 1 GHz to 18 GHz, ANT H

RE Test case\_FCC 15C 1GHz-7GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	1401.05	41.98	-2.85	74.0	32.02	Peak	94.40	100	Horizontal	Pass
2	2186.25	43.66	1.05	74.0	30.34	Peak	149.30	100	Horizontal	Pass
3	3193.10	46.63	4.85	74.0	27.37	Peak	267.70	100	Horizontal	Pass
4	4408.35	46.40	9.18	74.0	27.60	Peak	226.10	100	Horizontal	Pass
5	5825.65	117.29	11.73	74.0	-43.29	Peak	353.80	100	Horizontal	N/A
6	6668.50	50.65	12.55	74.0	23.35	Peak	159.40	100	Horizontal	Pass

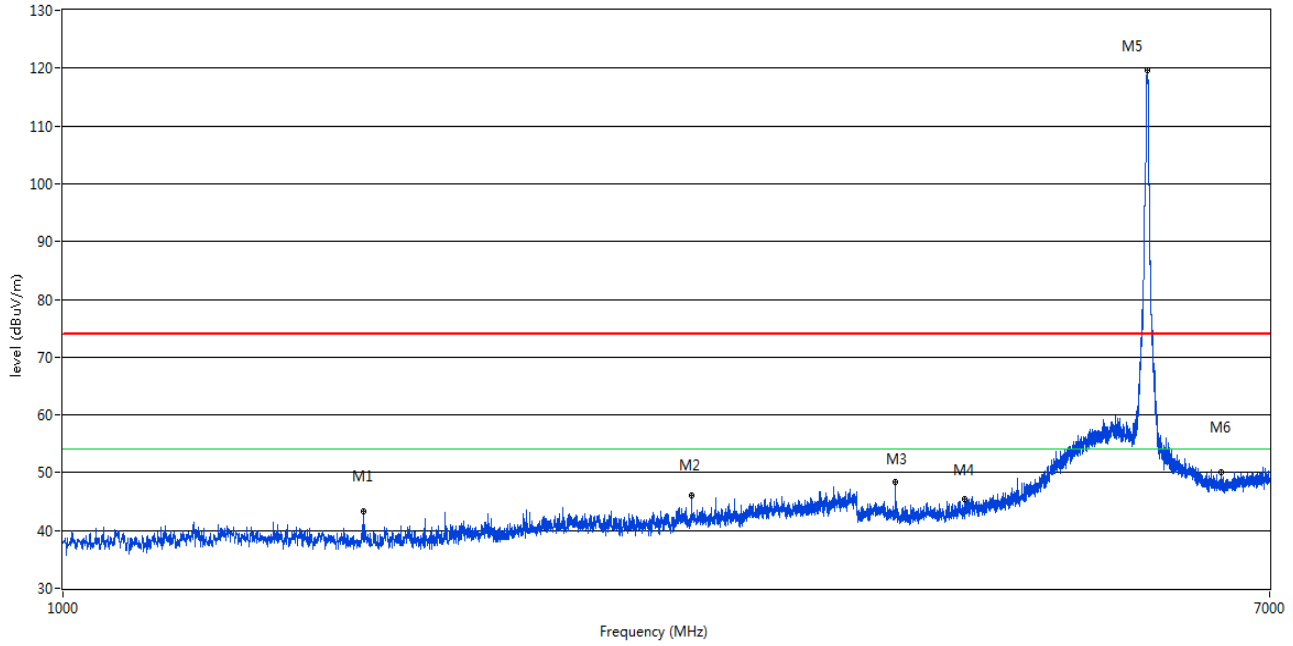
RE Test case\_FCC 15C 7GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	7660.00	44.29	13.91	74.0	29.71	Peak	0.00	100	Horizontal	Pass
2	9763.75	45.83	16.32	74.0	28.17	Peak	184.60	100	Horizontal	Pass
3	11589.75	47.63	18.28	74.0	26.37	Peak	112.20	100	Horizontal	Pass
4	13696.25	50.55	20.41	74.0	23.45	Peak	221.00	100	Horizontal	Pass
5	14939.25	53.30	22.04	74.0	20.70	Peak	166.40	100	Horizontal	Pass
6	16779.00	52.39	21.05	74.0	21.61	Peak	103.40	100	Horizontal	Pass

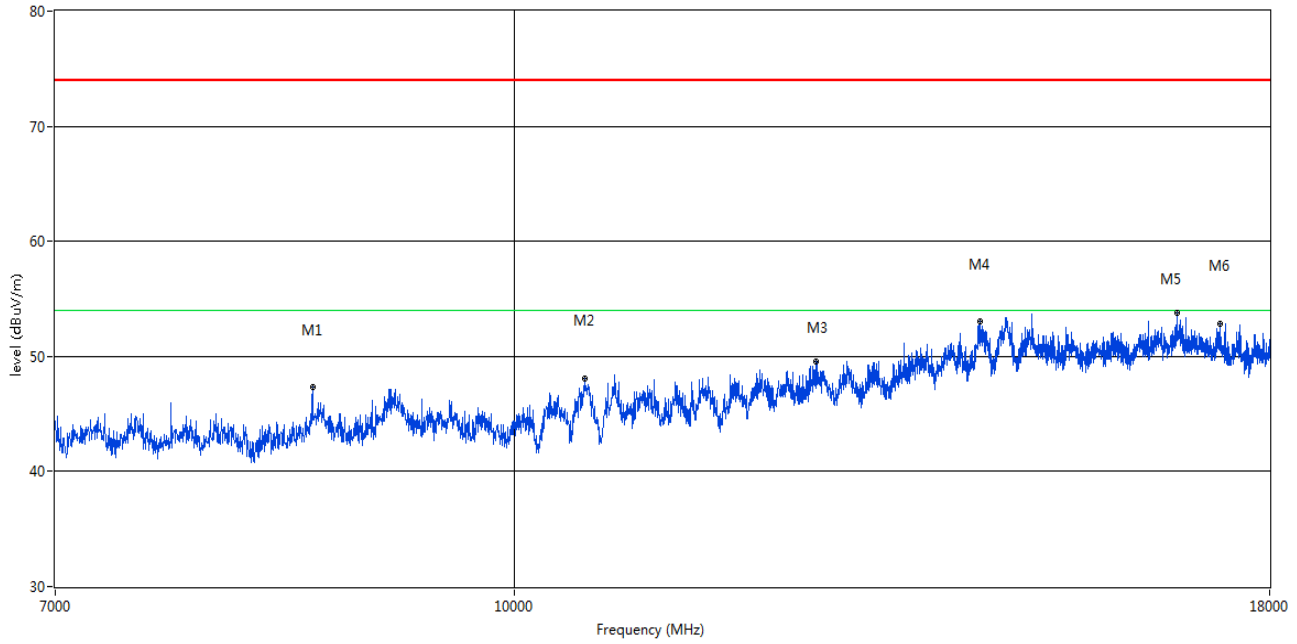
11n(HT20) LOW CHANNEL 1 GHz to 18 GHz, ANT V

RE Test case\_FCC\_Part 15C\_FCC 15.247(5.8G)\_1GHz-7GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	1622.700	43.34	-1.29	74.0	30.66	Peak	159.00	100	Vertical	Pass
2	2754.350	46.14	3.34	74.0	27.86	Peak	4.20	100	Vertical	Pass
3	3829.500	46.10	7.74	74.0	27.90	Peak	358.50	100	Vertical	Pass
4	4279.150	45.44	9.37	74.0	28.56	Peak	257.70	100	Vertical	Pass
5	5745.400	119.73	11.67	74.0	-45.73	Peak	64.80	100	Vertical	N/A
6	6473.000	50.09	12.34	74.0	23.91	Peak	325.20	100	Vertical	Pass

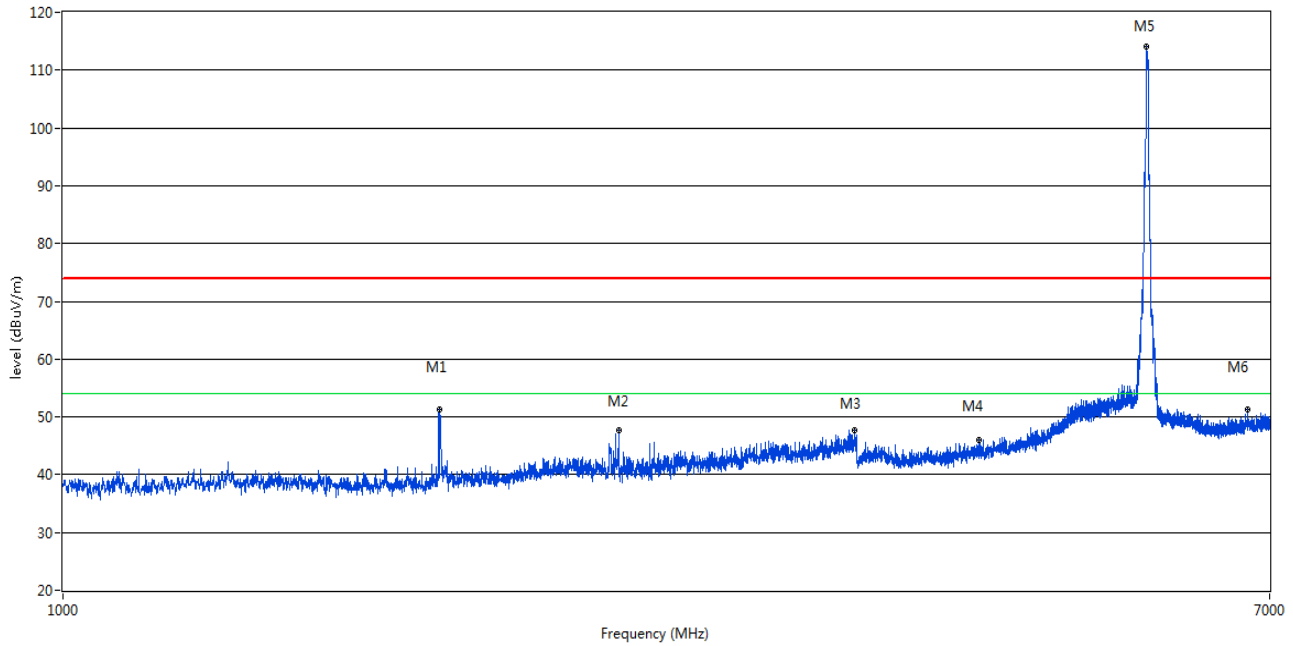
RE Test case\_FCC\_Part 15C\_FCC 15.247(5.8G)\_7GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	8551.000	47.36	16.30	74.0	26.64	Peak	13.70	100	Vertical	Pass
2	10564.000	48.05	18.50	74.0	25.95	Peak	167.60	100	Vertical	Pass
3	12648.500	49.58	19.27	74.0	24.42	Peak	348.70	100	Vertical	Pass
4	14364.500	53.06	23.02	74.0	20.94	Peak	330.30	100	Vertical	Pass
5	16746.000	53.74	21.00	74.0	20.26	Peak	0.00	100	Vertical	Pass
6	17323.500	52.86	21.25	74.0	21.14	Peak	339.60	100	Vertical	Pass

11n(HT20) LOW CHANNEL 1 GHz to 18 GHz, ANT H

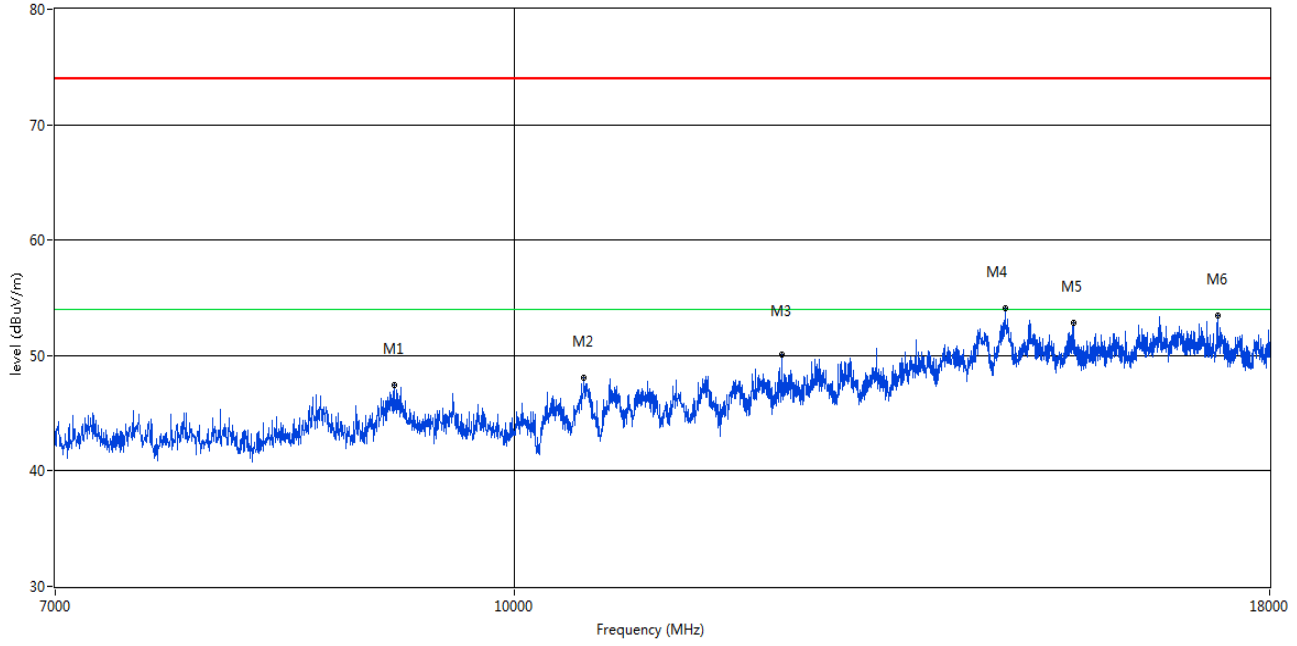
RE Test case\_FCC\_Part 15C\_FCC 15.247(5.8G)\_1GHz-7GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	1833.950	50.90	-1.70	74.0	23.10	Peak	39.80	100	Horizontal	Pass
2	2450.800	47.62	0.68	74.0	26.38	Peak	58.20	100	Horizontal	Pass
3	3585.700	47.80	5.52	74.0	26.20	Peak	205.30	100	Horizontal	Pass
4	4376.900	45.93	9.21	74.0	28.07	Peak	359.90	100	Horizontal	Pass
5	5740.300	114.16	11.42	74.0	-40.16	Peak	220.10	100	Horizontal	N/A
6	6757.750	51.25	13.09	74.0	22.75	Peak	200.90	100	Horizontal	Pass



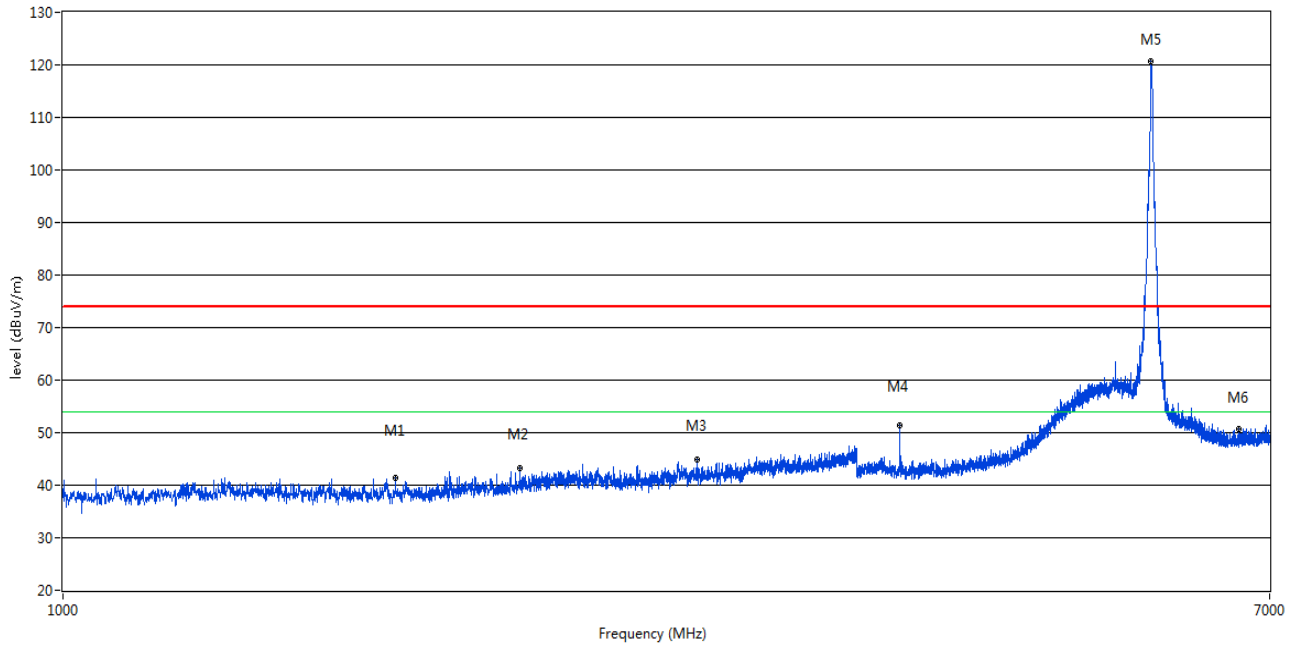
RE Test case\_FCC\_Part 15C\_FCC 15.247(5.8G)\_7GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	9109.250	47.42	18.21	74.0	26.58	Peak	165.40	100	Horizontal	Pass
2	10561.250	48.06	18.43	74.0	25.94	Peak	1.10	100	Horizontal	Pass
3	12318.500	50.06	18.73	74.0	23.94	Peak	281.90	100	Horizontal	Pass
4	14653.250	54.09	23.37	74.0	19.91	Peak	75.90	100	Horizontal	Pass
5	15450.750	52.85	20.46	74.0	21.15	Peak	39.10	100	Horizontal	Pass
6	17284.999	53.49	21.31	74.0	20.51	Peak	138.50	100	Horizontal	Pass

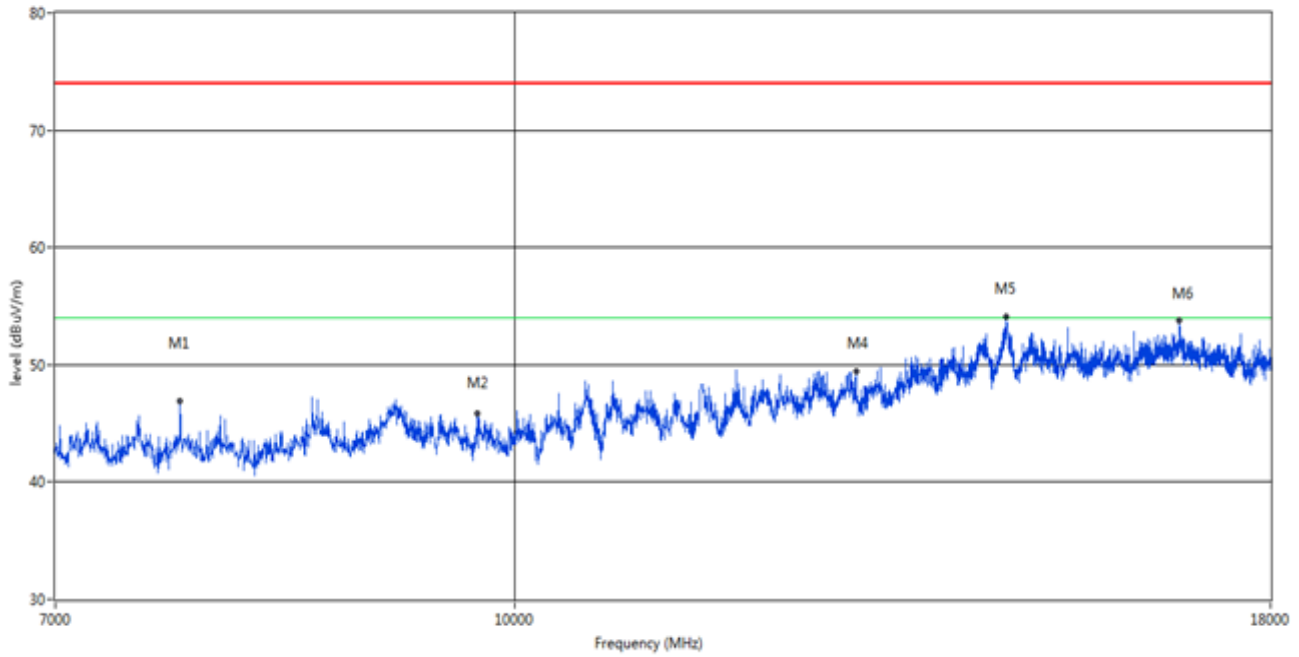
11n(HT20) MIDDLE CHANNEL 1 GHz to 18 GHz, ANT V

RE Test case\_FCC\_Part 15C\_FCC 15.247(5.8G)\_1GHz-7GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	1709.150	41.38	-1.49	74.0	32.62	Peak	140.10	100	Vertical	Pass
2	2088.750	43.33	-0.23	74.0	30.67	Peak	176.80	100	Vertical	Pass
3	2782.950	44.85	3.58	74.0	29.15	Peak	167.50	100	Vertical	Pass
4	3856.700	51.48	7.97	74.0	22.52	Peak	325.10	100	Vertical	Pass
5	5776.000	120.60	11.94	74.0	-46.60	Peak	83.00	100	Vertical	N/A
6	6657.450	50.76	12.51	74.0	23.24	Peak	63.60	100	Vertical	Pass

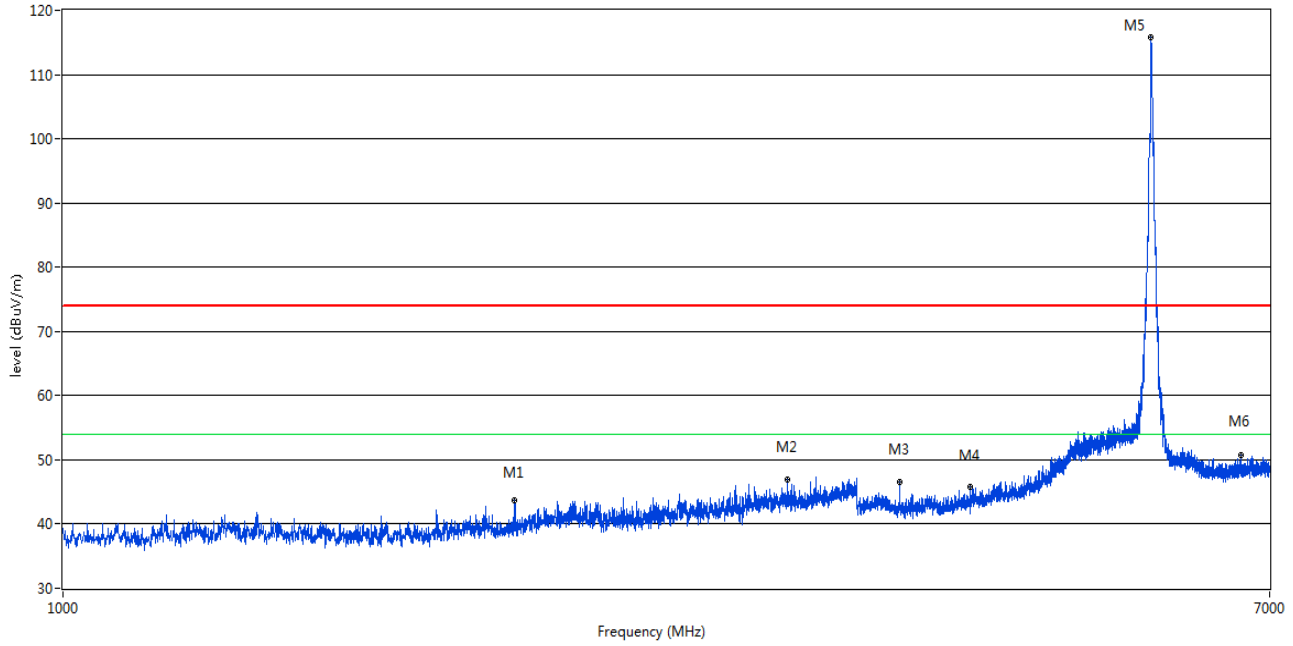
RE Test case\_FCC\_Part 15C\_FCC 15.247(5.8G)\_7GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	7712.250	46.89	14.46	74.0	27.11	Peak	305.60	100	Vertical	Pass
2	9714.250	45.86	15.99	74.0	28.14	Peak	224.30	100	Vertical	Pass
3**	11567.750	43.96	18.30	54.0	10.04	AV	76.10	100	Vertical	Pass
3	11567.750	57.18	18.30	74.0	16.82	Peak	76.10	100	Vertical	Pass
4	13044.500	49.46	19.25	74.0	24.54	Peak	131.80	100	Vertical	Pass
5	14656.000	54.08	23.32	74.0	19.92	Peak	114.00	100	Vertical	Pass
6	16765.250	53.75	21.03	74.0	20.25	Peak	150.20	100	Vertical	Pass

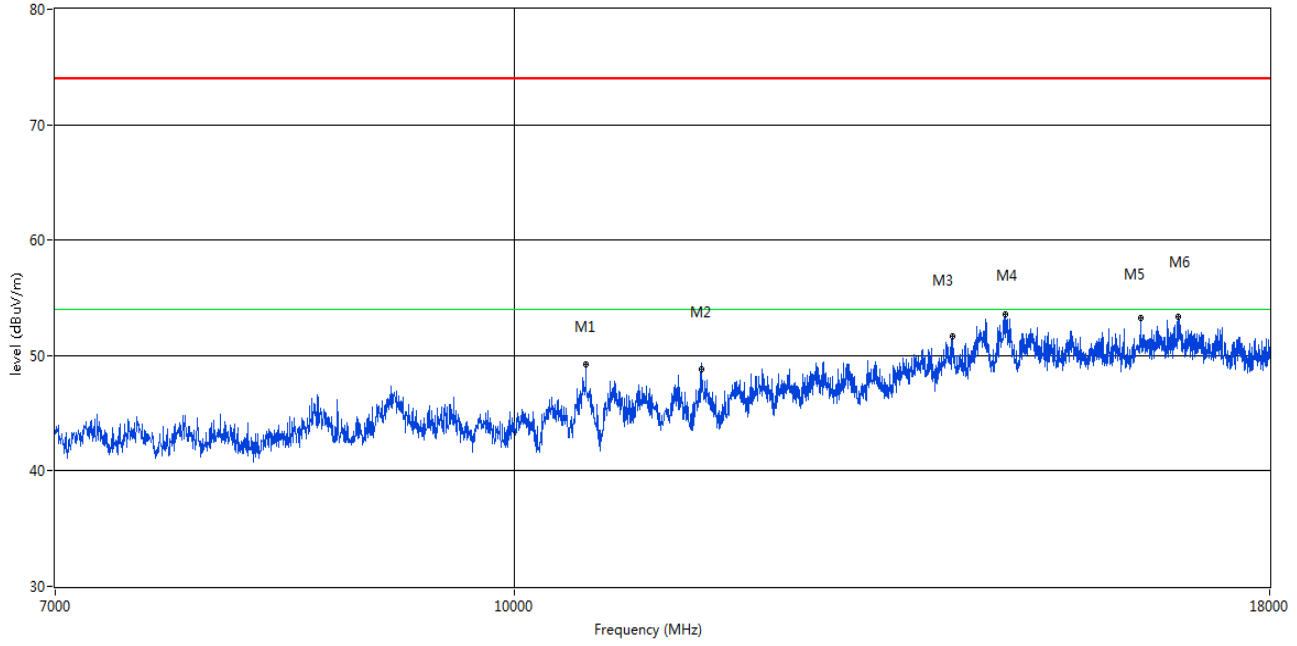
11n(HT20) MIDDLE CHANNEL 1 GHz to 18 GHz, ANT H

RE Test case\_FCC\_Part 15C\_FCC 15.247(5.8G)\_1GHz-7GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	2072.500	43.63	0.26	74.0	30.37	Peak	94.40	100	Horizontal	Pass
2	3215.850	46.87	4.74	74.0	27.13	Peak	277.20	100	Horizontal	Pass
3	3856.700	46.27	7.97	74.0	27.73	Peak	325.30	100	Horizontal	Pass
4	4320.800	45.71	9.26	74.0	28.29	Peak	360.00	100	Horizontal	Pass
5	5783.650	115.85	11.76	74.0	-41.85	Peak	354.00	100	Horizontal	N/A
6	6680.400	50.82	12.59	74.0	23.18	Peak	122.40	100	Horizontal	Pass

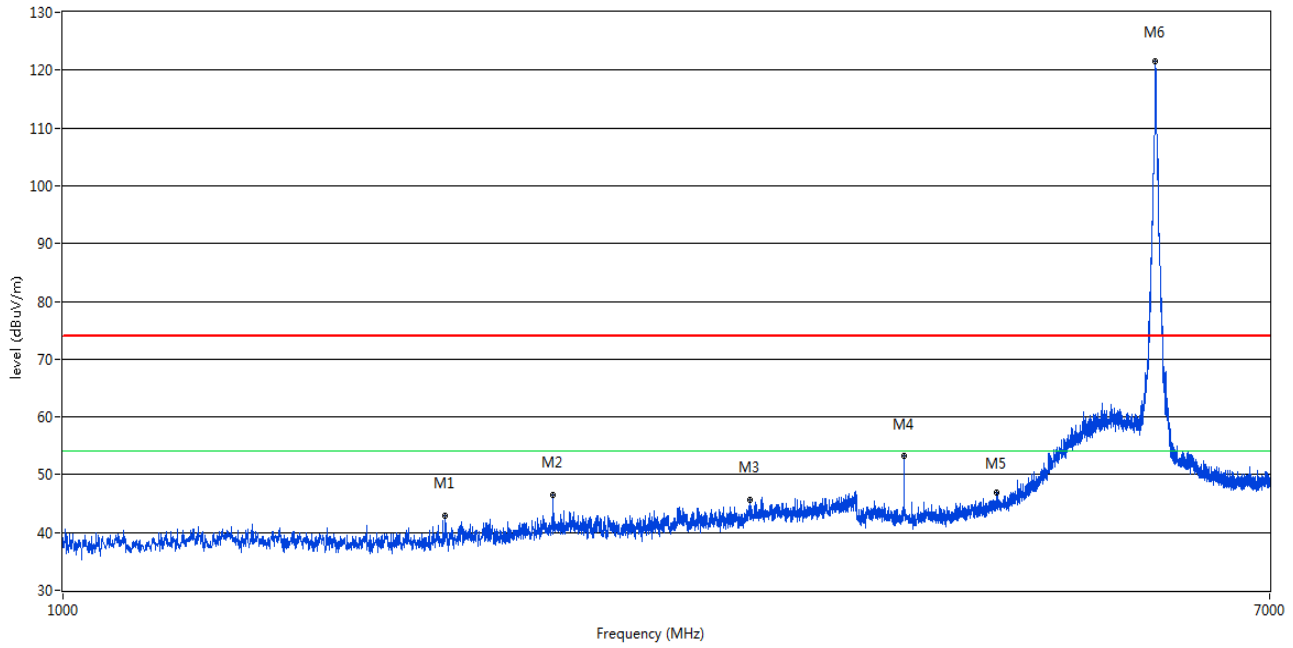
RE Test case\_FCC\_Part 15C\_FCC 15.247(5.8G)\_7GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	10577.750	49.20	18.83	74.0	24.80	Peak	238.10	100	Horizontal	Pass
2	11570.500	48.82	18.34	74.0	25.18	Peak	328.30	100	Horizontal	Pass
3	14062.000	51.62	22.15	74.0	22.38	Peak	273.90	100	Horizontal	Pass
4	14658.750	53.55	23.28	74.0	20.45	Peak	137.70	100	Horizontal	Pass
5	16286.750	53.24	20.76	74.0	20.76	Peak	328.30	100	Horizontal	Pass
6	16759.750	53.37	21.02	74.0	20.63	Peak	238.10	100	Horizontal	Pass

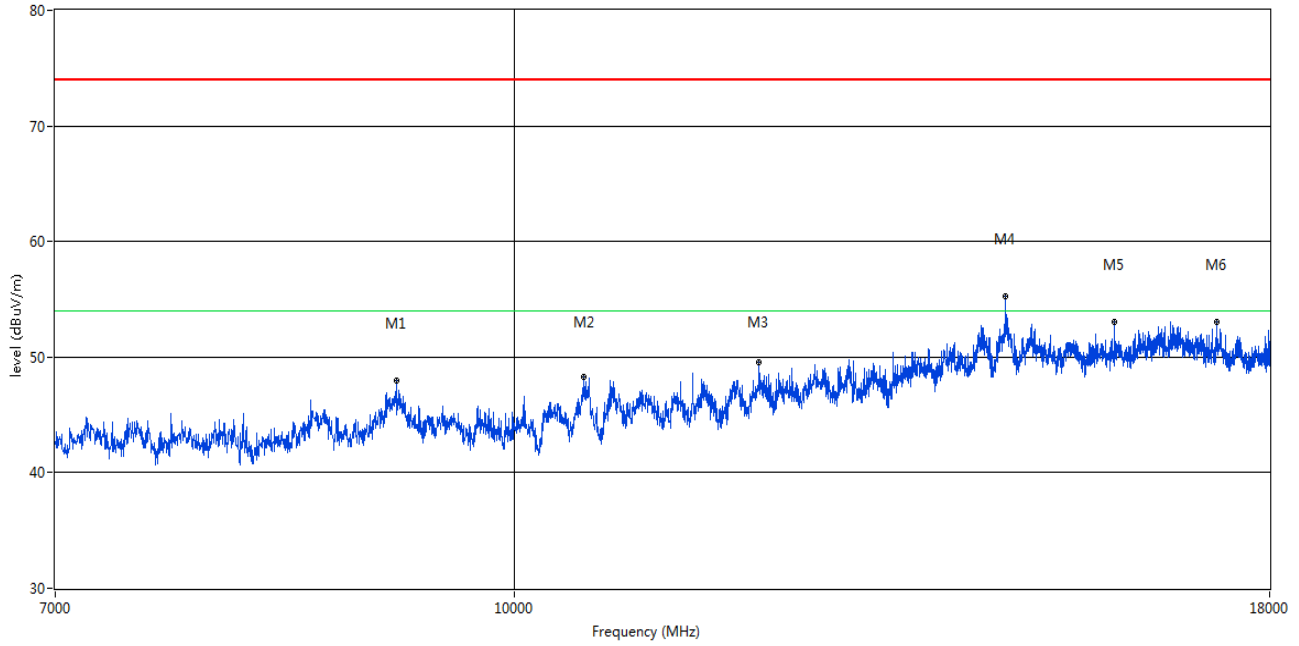
11n(HT20) HIGH CHANNEL 1 GHz to 18 GHz, ANT V

RE Test case\_FCC\_Part 15C\_FCC 15.247(5.8G)\_1GHz-7GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	1851.500	42.94	-0.12	74.0	31.06	Peak	177.60	100	Vertical	Pass
2	2205.100	46.44	0.74	74.0	27.56	Peak	104.60	100	Vertical	Pass
3	3029.950	45.54	4.94	74.0	28.46	Peak	39.80	100	Vertical	Pass
4	3883.050	53.27	8.04	74.0	20.73	Peak	314.80	100	Vertical	Pass
5	4510.350	46.96	9.66	74.0	27.04	Peak	286.00	100	Vertical	Pass
6	5823.600	121.49	11.80	74.0	-47.49	Peak	83.60	100	Vertical	N/A

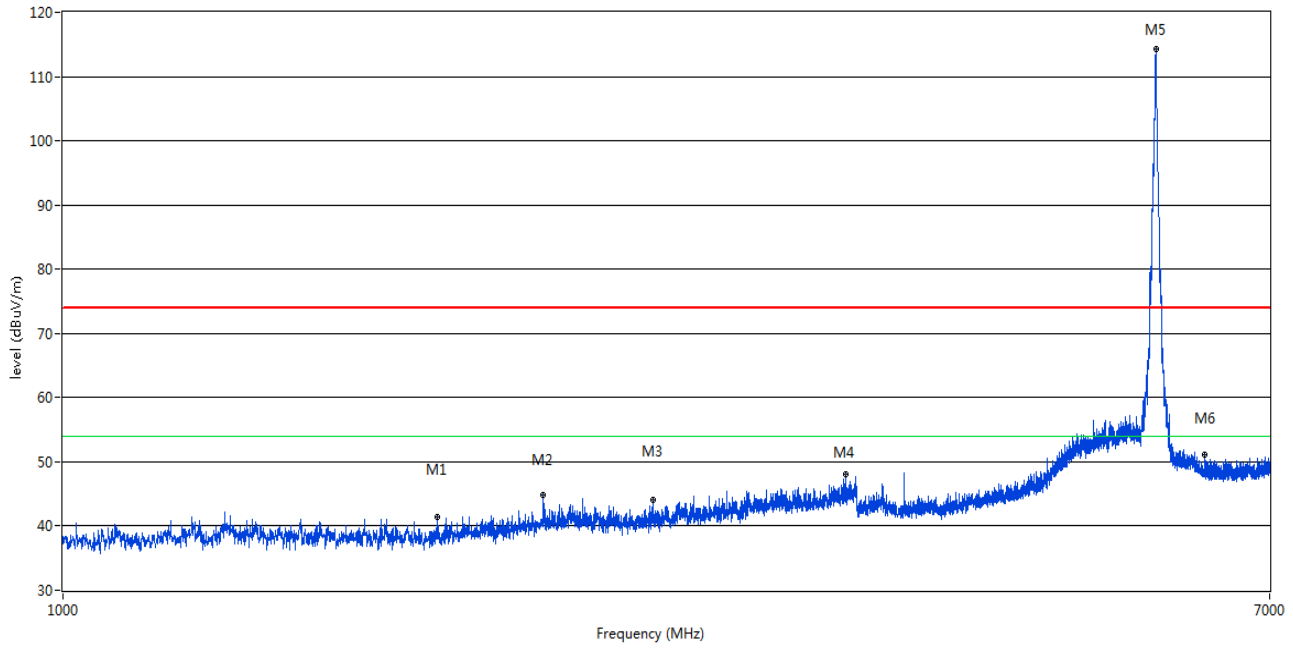
RE Test case\_FCC\_Part 15C\_FCC 15.247(5.8G)\_7GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	9125.750	47.94	17.99	74.0	26.06	Peak	360.00	100	Vertical	Pass
2	10555.750	48.33	18.30	74.0	25.67	Peak	249.90	100	Vertical	Pass
3	12101.250	49.56	18.47	74.0	24.44	Peak	330.90	100	Vertical	Pass
4	14661.500	55.28	23.23	74.0	18.72	Peak	30.10	100	Vertical	Pass
5	15956.750	53.00	20.43	74.0	21.00	Peak	249.90	100	Vertical	Pass
6	17282.251	53.01	21.32	74.0	20.99	Peak	330.90	100	Vertical	Pass

11n(HT20) HIGH CHANNEL 1 GHz to 18 GHz, ANT H

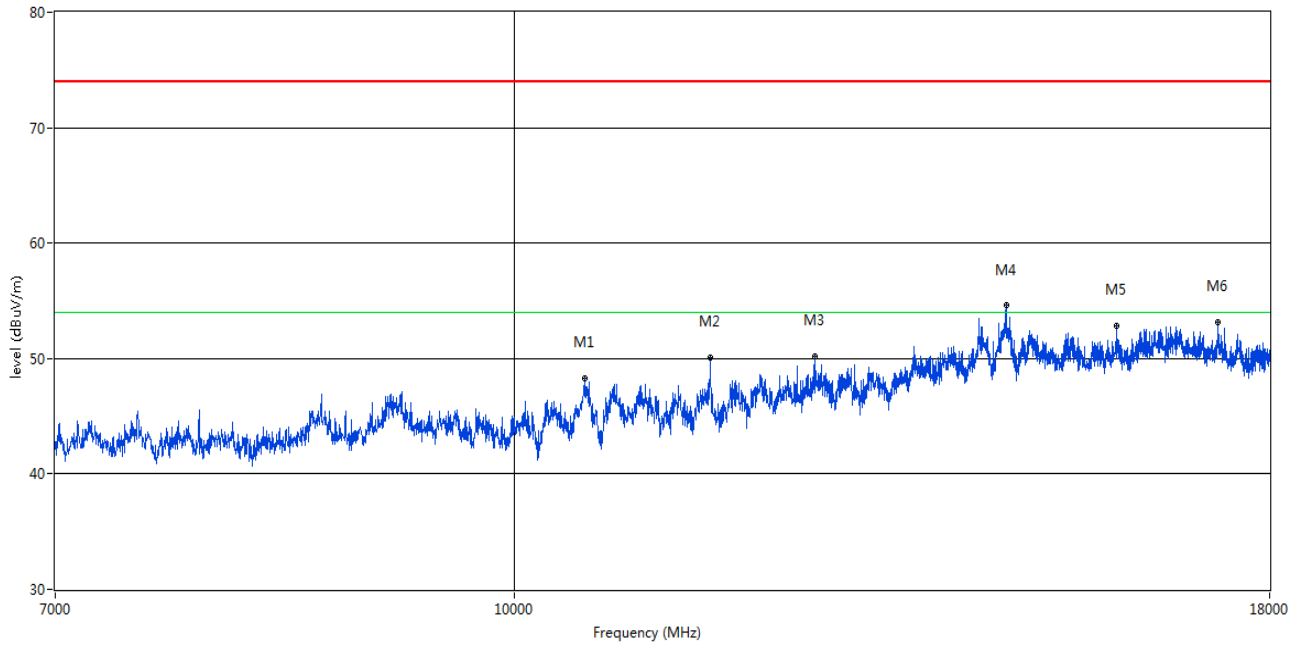
RE Test case\_FCC\_Part 15C\_FCC 15.247(5.8G)\_1GHz-7GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	1827.450	41.40	-0.43	74.0	32.60	Peak	104.00	100	Horizontal	Pass
2	2169.350	44.84	0.82	74.0	29.16	Peak	94.70	100	Horizontal	Pass
3	2591.200	44.13	2.15	74.0	29.87	Peak	49.00	100	Horizontal	Pass
4	3534.350	48.01	5.36	74.0	25.99	Peak	304.70	100	Horizontal	Pass
5	5832.100	114.27	11.83	74.0	-40.27	Peak	354.00	100	Horizontal	N/A
6	6308.950	51.03	12.08	74.0	22.97	Peak	238.50	100	Horizontal	Pass



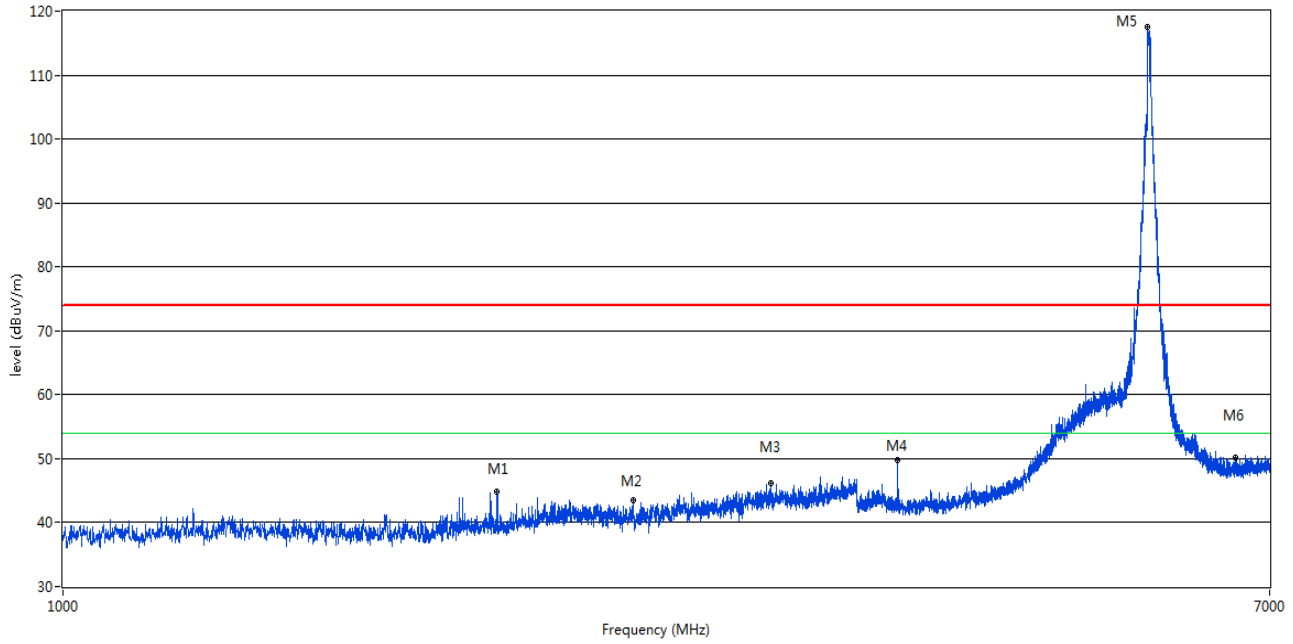
RE Test case\_FCC\_Part 15C\_FCC 15.247(5.8G)\_7GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	10564.000	48.26	18.50	74.0	25.74	Peak	291.10	100	Horizontal	Pass
2	11650.250	50.11	17.91	74.0	23.89	Peak	137.20	100	Horizontal	Pass
3	12640.250	50.19	19.27	74.0	23.81	Peak	299.90	100	Horizontal	Pass
4	14664.250	54.62	23.18	74.0	19.38	Peak	308.70	100	Horizontal	Pass
5	15984.250	52.82	20.45	74.0	21.18	Peak	360.00	100	Horizontal	Pass
6	17295.999	53.14	21.27	74.0	20.86	Peak	237.30	100	Horizontal	Pass

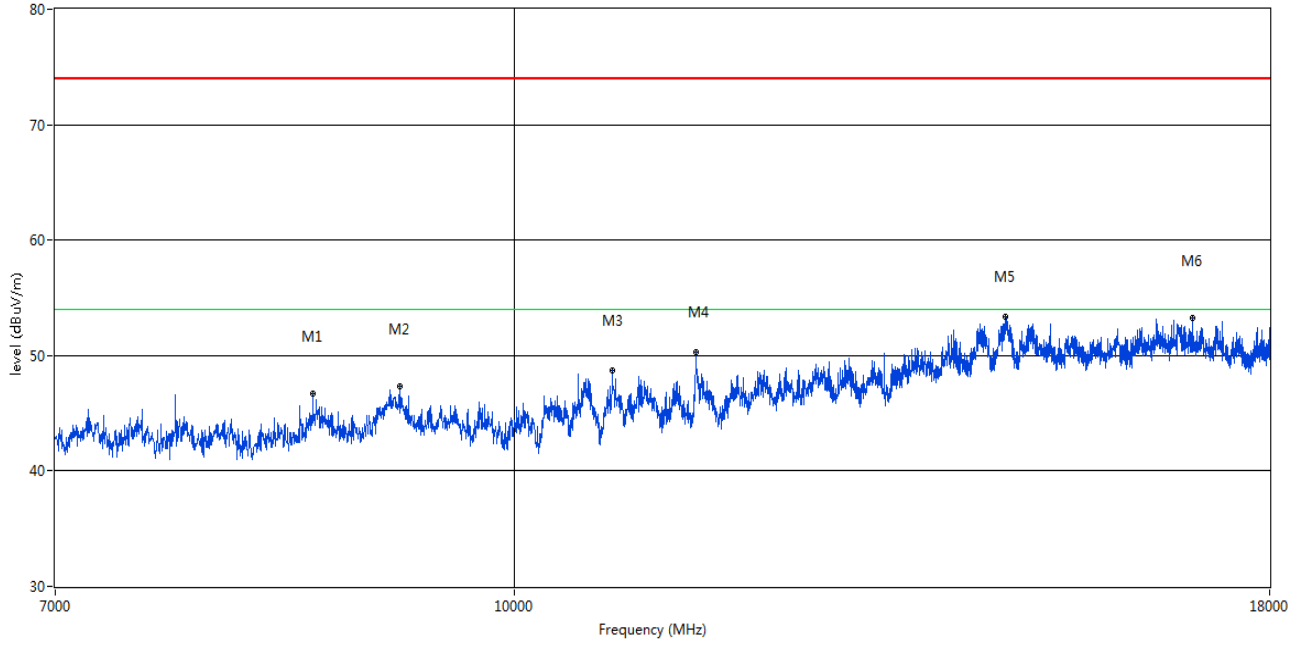
11n(HT40) LOW CHANNEL 1 GHz to 18 GHz, ANT V

RE Test case\_FCC\_Part 15C\_FCC 15.247(5.8G)\_1GHz-7GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	2014.000	44.88	-1.18	74.0	29.12	Peak	146.60	100	Vertical	Pass
2	2508.000	43.52	1.56	74.0	30.48	Peak	359.30	100	Vertical	Pass
3	3132.000	46.24	4.82	74.0	27.76	Peak	320.90	100	Vertical	Pass
4	3843.100	49.75	7.65	74.0	24.25	Peak	345.50	100	Vertical	Pass
5	5749.650	117.43	11.73	74.0	-43.43	Peak	94.70	100	Vertical	N/A
6	6626.850	50.23	12.41	74.0	23.77	Peak	47.10	100	Vertical	Pass

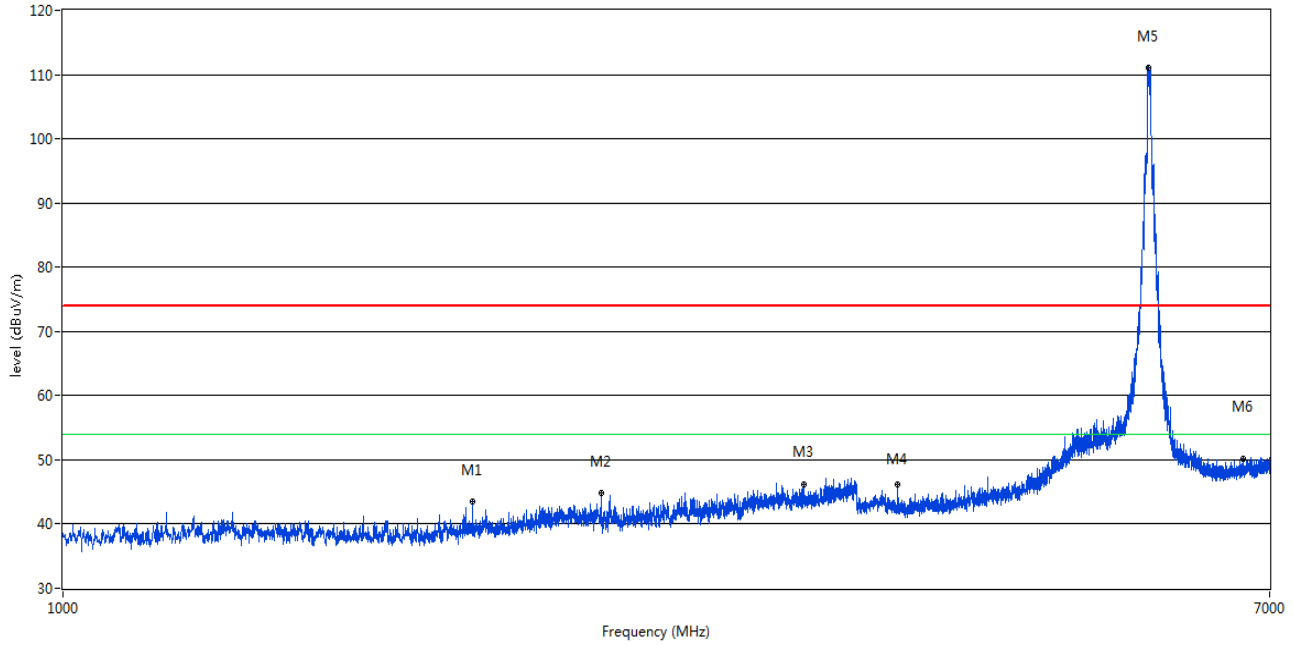
RE Test case\_FCC\_Part 15C\_FCC 15.247(5.8G)\_7GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	8553.750	46.67	16.35	74.0	27.33	Peak	209.30	100	Horizontal	Pass
2	9147.750	47.32	17.57	74.0	26.68	Peak	256.10	100	Horizontal	Pass
3	10795.000	48.68	18.92	74.0	25.32	Peak	355.80	100	Horizontal	Pass
4	11518.250	50.30	17.67	74.0	23.70	Peak	82.00	100	Horizontal	Pass
5	14661.500	53.36	23.23	74.0	20.64	Peak	137.40	100	Horizontal	Pass
6	16946.750	53.23	21.02	74.0	20.77	Peak	128.60	100	Horizontal	Pass

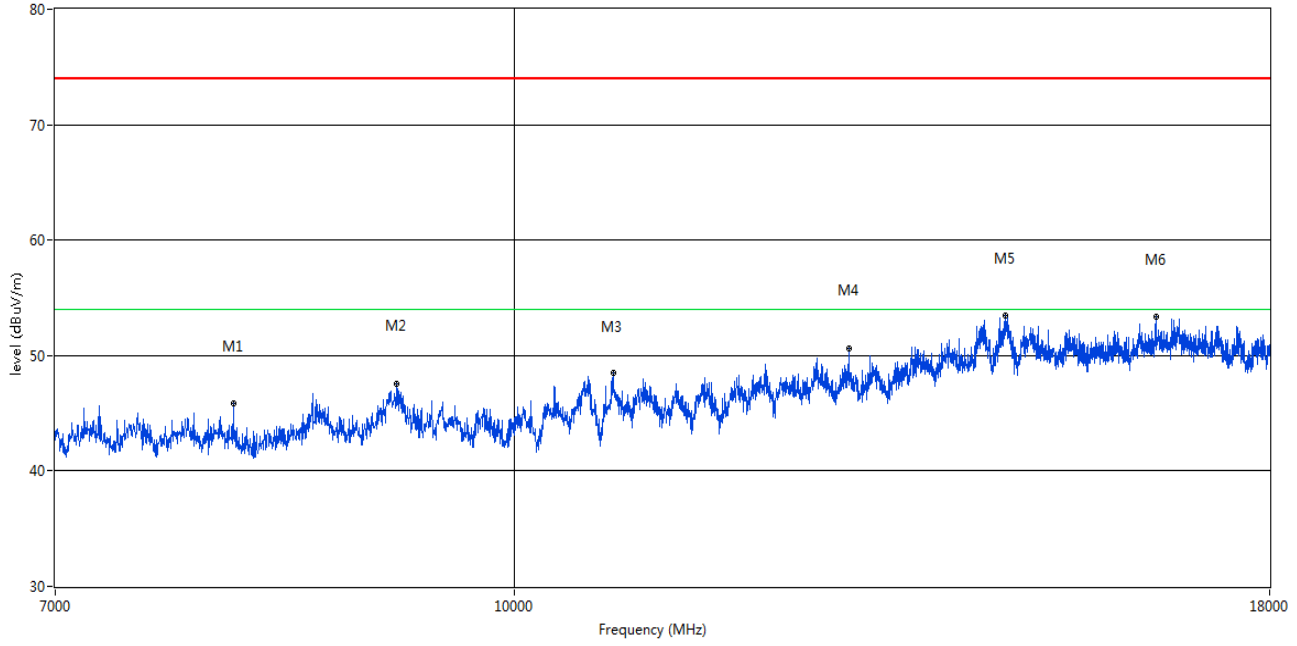
11n(HT40) LOW CHANNEL 1 GHz to 18 GHz, ANT H

RE Test case\_FCC\_Part 15C\_FCC 15.247(5.8G)\_1GHz-7GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	1936.000	43.53	-1.09	74.0	30.47	Peak	223.10	100	Horizontal	Pass
2	2381.900	44.76	1.16	74.0	29.24	Peak	360.00	100	Horizontal	Pass
3	3303.600	46.26	4.42	74.0	27.74	Peak	122.30	100	Horizontal	Pass
4	3843.100	46.18	7.65	74.0	27.82	Peak	297.00	100	Horizontal	Pass
5	5761.550	111.07	11.40	74.0	-37.07	Peak	171.70	100	Horizontal	N/A
6	6712.700	50.08	12.75	74.0	23.92	Peak	161.80	100	Horizontal	Pass

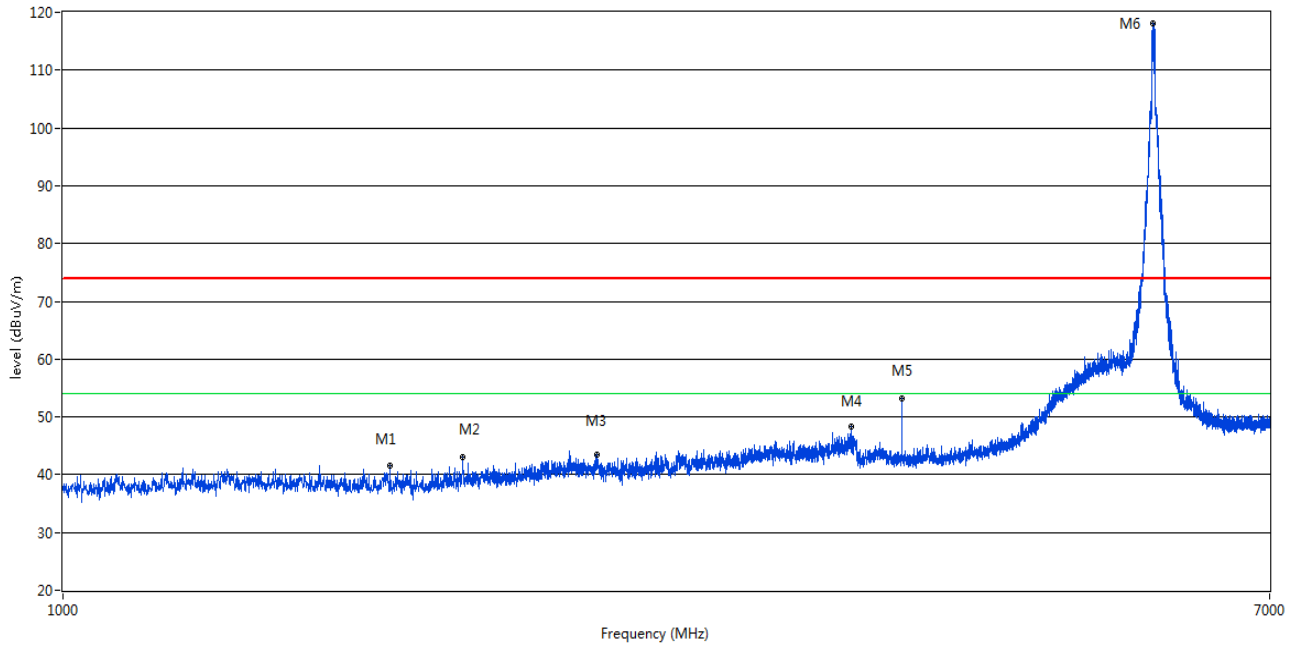
RE Test case\_FCC\_Part 15C\_FCC 15.247(5.8G)\_7GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	8039.500	45.87	14.38	74.0	28.13	Peak	111.50	100	Horizontal	Pass
2	9131.250	47.57	17.88	74.0	26.43	Peak	292.70	100	Horizontal	Pass
3	10803.250	48.55	18.73	74.0	25.45	Peak	20.20	100	Horizontal	Pass
4	12975.750	50.64	19.67	74.0	23.36	Peak	360.00	100	Horizontal	Pass
5	14661.500	53.44	23.23	74.0	20.56	Peak	111.50	100	Horizontal	Pass
6	16479.250	53.34	20.59	74.0	20.66	Peak	274.10	100	Horizontal	Pass

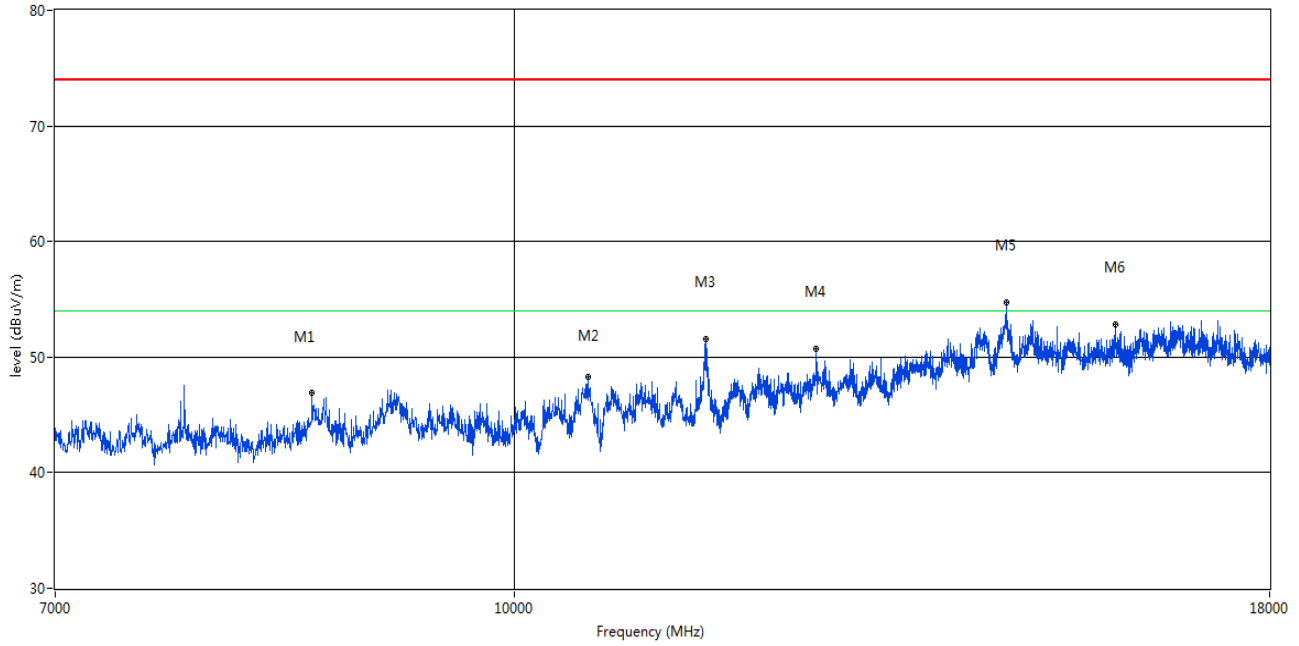
11n(HT40) HIGH CHANNEL 1 GHz to 18 GHz, ANT V

RE Test case\_FCC\_Part 15C\_FCC 15.247(5.8G)\_1GHz-7GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	1694.850	41.66	-2.75	74.0	32.34	Peak	140.50	100	Vertical	Pass
2	1904.800	43.01	-0.75	74.0	30.99	Peak	122.20	100	Vertical	Pass
3	2366.300	43.52	1.78	74.0	30.48	Peak	288.30	100	Vertical	Pass
4	3563.600	48.35	5.37	74.0	25.65	Peak	233.00	100	Vertical	Pass
5	3870.300	51.18	8.40	74.0	22.82	Peak	359.90	100	Vertical	Pass
6	5799.800	118.18	11.87	74.0	-44.18	Peak	73.80	100	Vertical	N/A

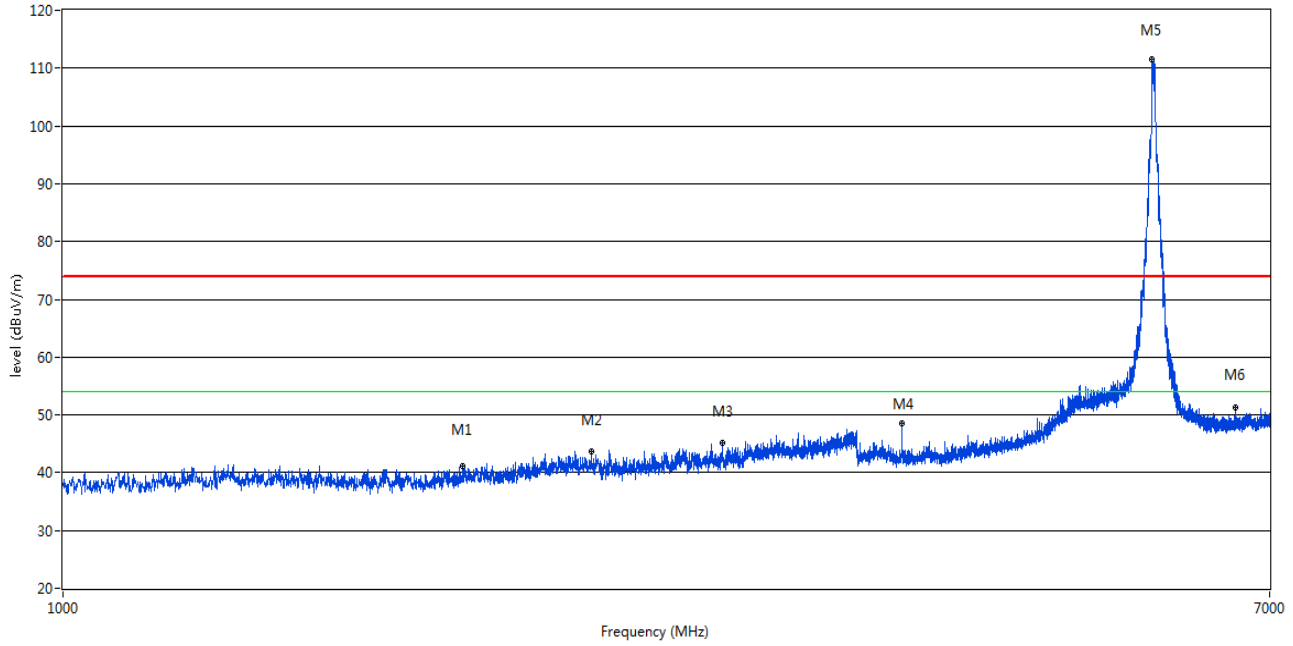
RE Test case\_FCC\_Part 15C\_FCC 15.247(5.8G)\_7GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	8545.500	46.92	16.20	74.0	27.08	Peak	182.20	100	Vertical	Pass
2	10594.250	48.31	18.53	74.0	25.69	Peak	263.60	100	Vertical	Pass
3	11611.750	51.57	18.15	74.0	22.43	Peak	47.90	100	Vertical	Pass
4	12654.000	50.71	19.27	74.0	23.29	Peak	4.20	100	Vertical	Pass
5	14672.500	54.72	23.03	74.0	19.28	Peak	155.60	100	Vertical	Pass
6	15967.750	52.85	20.44	74.0	21.15	Peak	254.80	100	Vertical	Pass

11n(HT40) HIGH CHANNEL 1 GHz to 18 GHz, ANT H

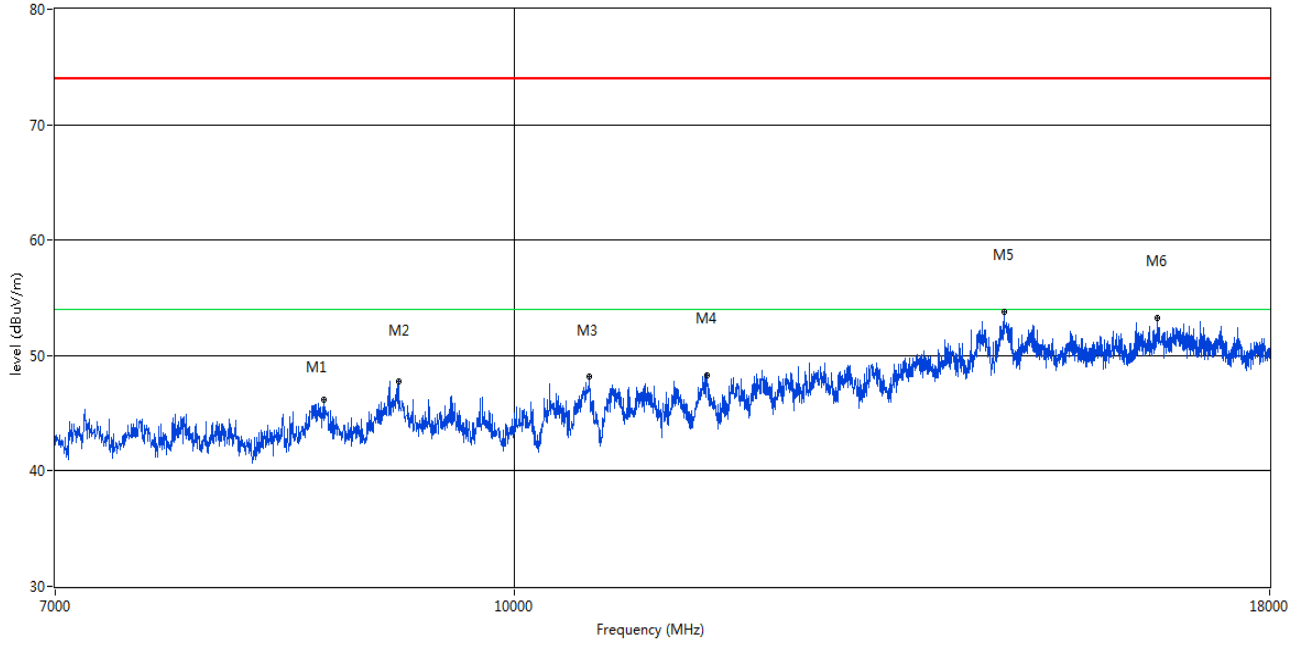
RE Test case\_FCC\_Part 15C\_FCC 15.247(5.8G)\_1GHz-7GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	1906.100	41.10	-0.36	74.0	32.90	Peak	270.10	100	Horizontal	Pass
2	2344.850	43.76	1.33	74.0	30.24	Peak	260.80	100	Horizontal	Pass
3	2898.000	45.11	4.84	74.0	28.89	Peak	360.00	100	Horizontal	Pass
4	3870.300	48.46	8.40	74.0	25.54	Peak	335.50	100	Horizontal	Pass
5	5788.750	111.47	11.71	74.0	-37.47	Peak	359.90	100	Horizontal	N/A
6	6620.900	51.28	12.40	74.0	22.72	Peak	141.70	100	Horizontal	Pass



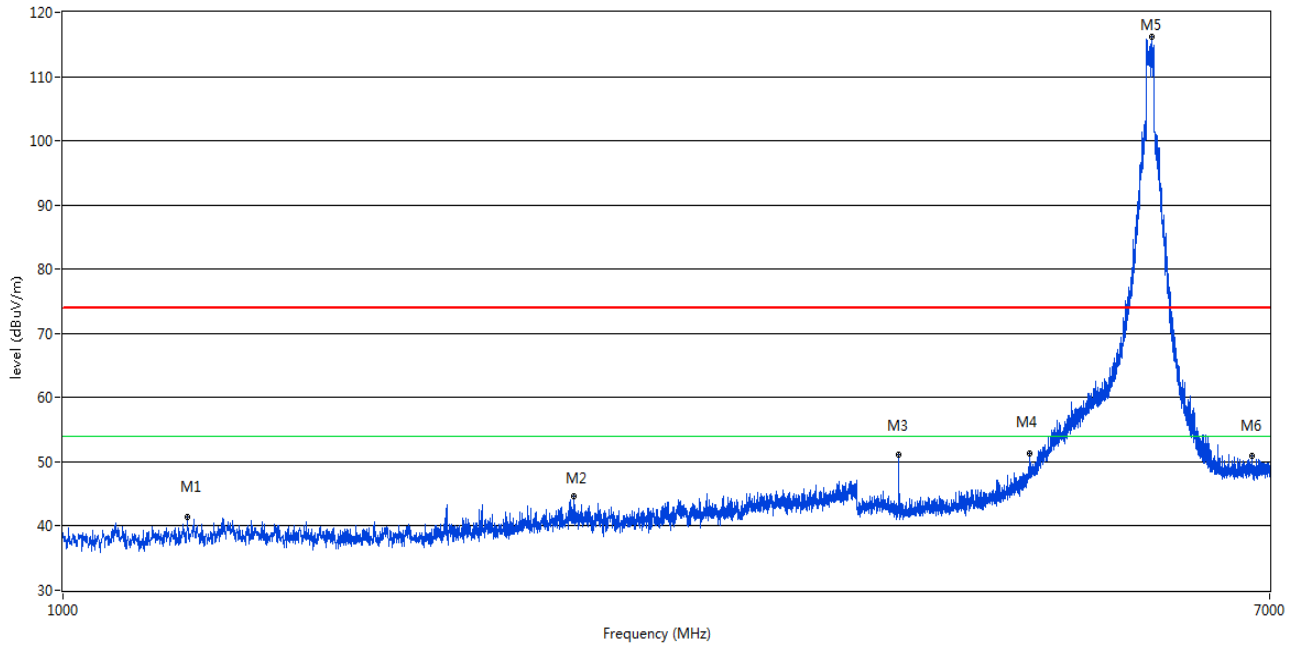
RE Test case\_FCC\_Part 15C\_FCC 15.247(5.8G)\_7GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	8625.250	46.21	16.30	74.0	27.79	Peak	329.80	100	Horizontal	Pass
2	9142.250	47.79	17.68	74.0	26.21	Peak	214.00	100	Horizontal	Pass
3	10608.000	48.21	18.14	74.0	25.79	Peak	178.50	100	Horizontal	Pass
4	11617.250	48.29	18.11	74.0	25.71	Peak	106.00	100	Horizontal	Pass
5	14645.000	53.80	23.52	74.0	20.20	Peak	347.80	100	Horizontal	Pass
6	16495.750	53.30	20.61	74.0	20.70	Peak	61.30	100	Horizontal	Pass

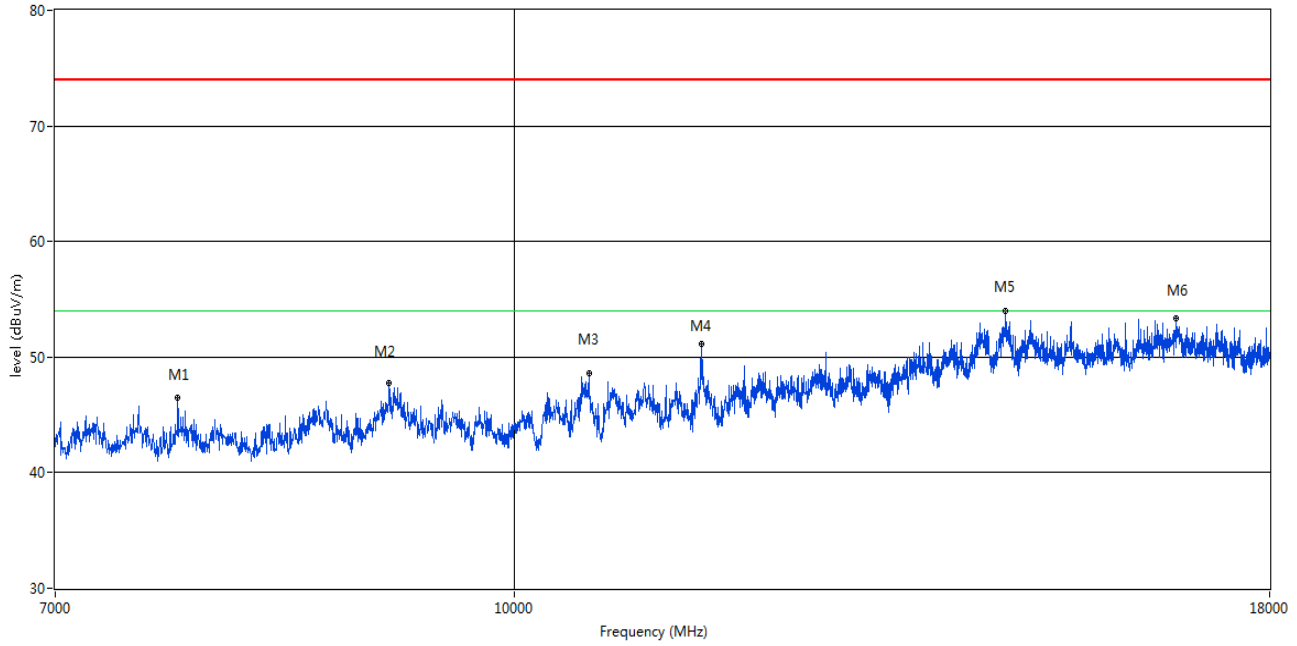
11ac(HT80) HIGH CHANNEL 1 GHz to 18 GHz, ANT V

RE Test case\_FCC\_Part 15C\_FCC 15.247(5.8G)\_1GHz-7GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	1222.300	41.44	-2.96	74.0	32.56	Peak	116.80	100	Vertical	Pass
2	2279.200	44.60	1.53	74.0	29.40	Peak	144.10	100	Vertical	Pass
3	3849.900	50.57	8.07	74.0	23.43	Peak	0.00	100	Vertical	Pass
4	4752.600	51.35	10.61	74.0	22.65	Peak	84.20	100	Vertical	Pass
5	5784.500	116.13	11.83	74.0	-42.13	Peak	93.70	100	Vertical	N/A
6	6799.400	51.03	12.91	74.0	22.97	Peak	84.20	100	Vertical	Pass

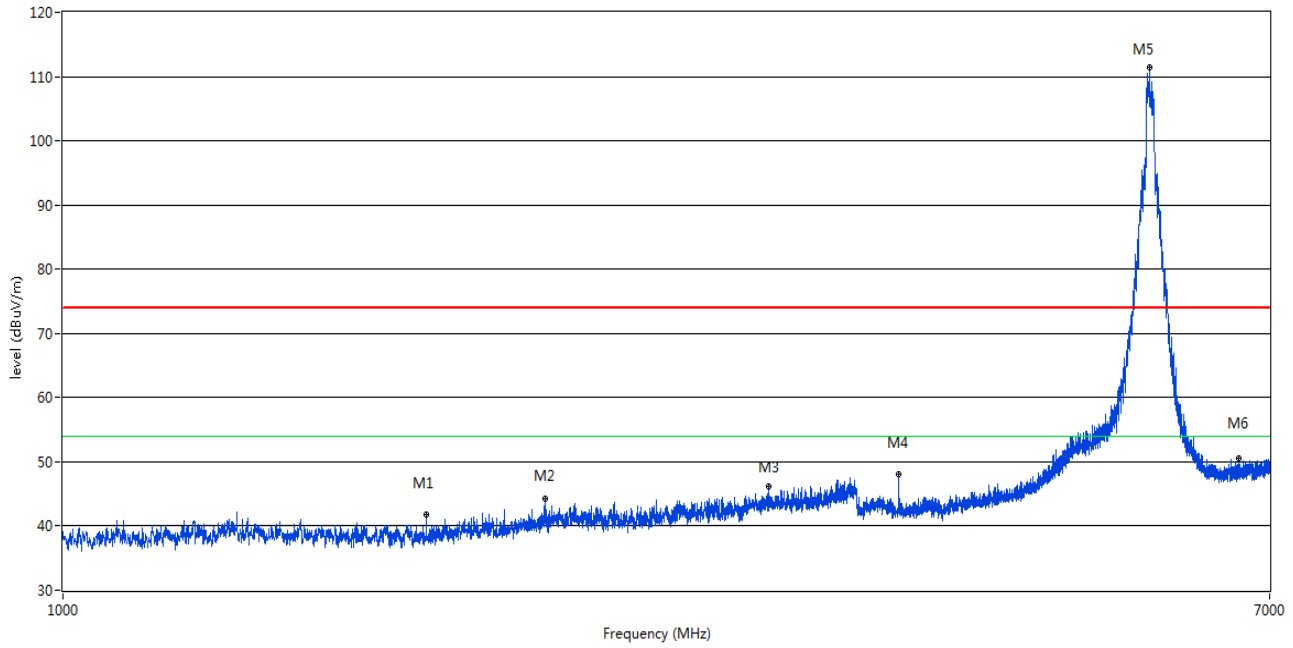
RE Test case\_FCC\_Part 15C\_FCC 15.247(5.8G)\_7GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	7701.250	46.54	14.39	74.0	27.46	Peak	177.40	100	Vertical	Pass
2	9076.250	47.75	17.47	74.0	26.25	Peak	87.10	100	Vertical	Pass
3	10602.500	48.58	18.30	74.0	25.42	Peak	96.20	100	Vertical	Pass
4	11567.750	51.11	18.30	74.0	22.89	Peak	32.50	100	Vertical	Pass
5	14656.000	54.00	23.32	74.0	20.00	Peak	267.50	100	Vertical	Pass
6	16740.500	53.39	20.99	74.0	20.61	Peak	0.00	100	Vertical	Pass

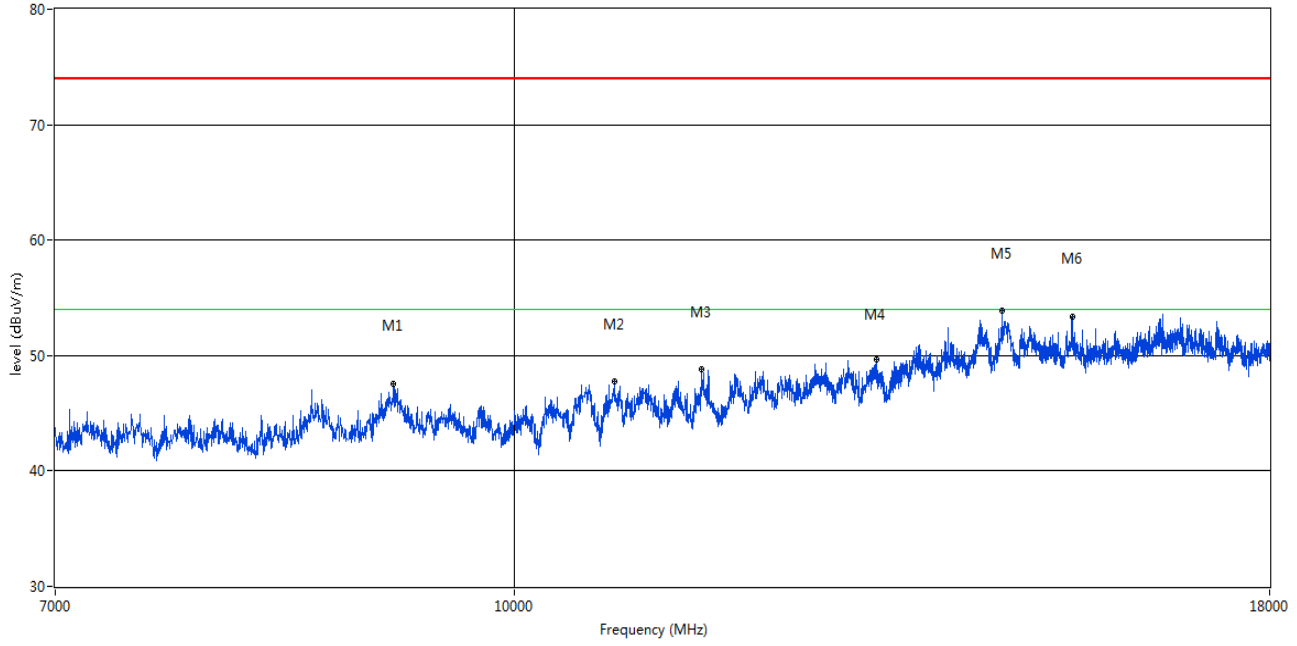
11ac(HT80) HIGH CHANNEL 1 GHz to 18 GHz, ANT H

RE Test case\_FCC\_Part 15C\_FCC 15.247(5.8G)\_1GHz-7GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	1797.550	41.71	-1.16	74.0	32.29	Peak	0.00	100	Horizontal	Pass
2	2174.550	44.21	1.26	74.0	29.79	Peak	35.60	100	Horizontal	Pass
3	3119.650	46.09	4.27	74.0	27.91	Peak	81.30	100	Horizontal	Pass
4	3849.900	48.16	8.07	74.0	25.84	Peak	53.60	100	Horizontal	Pass
5	5764.100	111.44	11.58	74.0	-37.44	Peak	360.00	100	Horizontal	N/A
6	6657.450	50.50	12.51	74.0	23.50	Peak	208.80	100	Horizontal	Pass

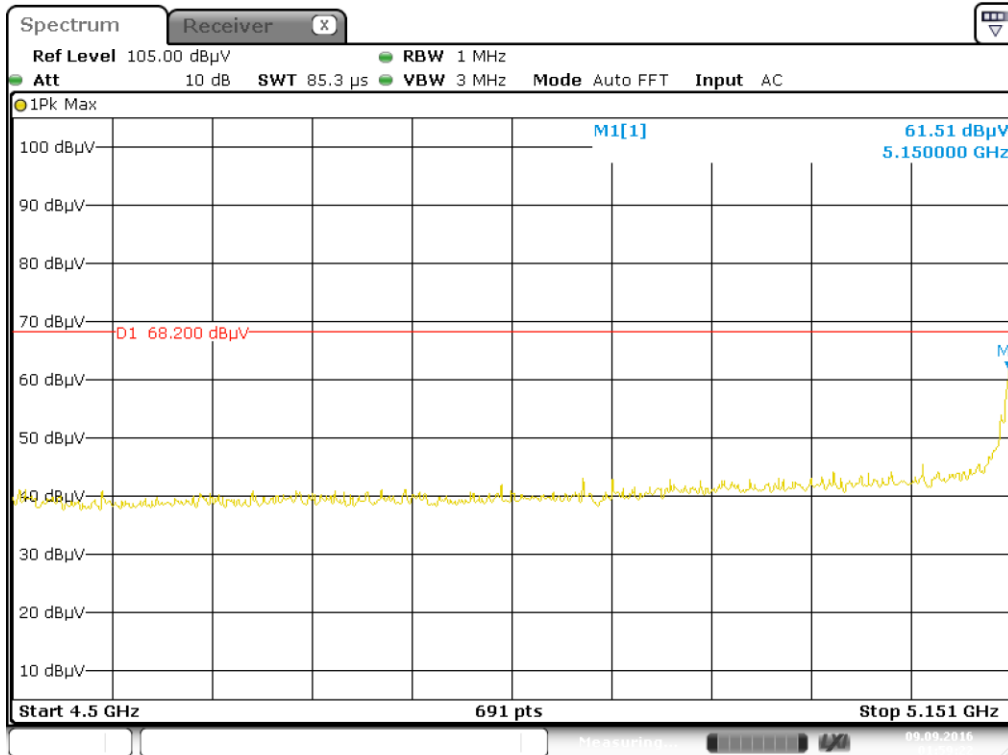
RE Test case\_FCC\_Part 15C\_FCC 15.247(5.8G)\_7GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	9103.750	47.57	18.08	74.0	26.43	Peak	267.20	100	Horizontal	Pass
2	10811.500	47.72	18.55	74.0	26.28	Peak	11.70	100	Horizontal	Pass
3	11576.001	48.77	18.35	74.0	25.23	Peak	340.00	100	Horizontal	Pass
4	13259.000	49.70	20.48	74.0	24.30	Peak	267.20	100	Horizontal	Pass
5	14617.500	53.85	23.13	74.0	20.15	Peak	137.40	100	Horizontal	Pass
6	15437.000	53.41	20.51	74.0	20.59	Peak	184.20	100	Horizontal	Pass

Band Edge  
For FCC Band I and Band IV

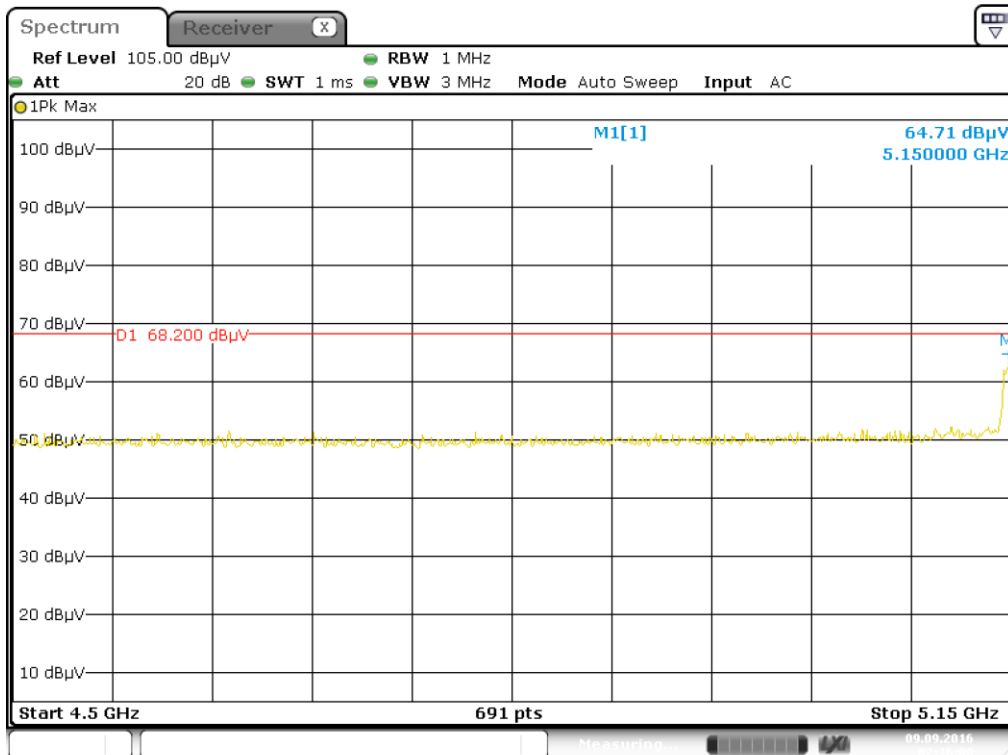
Band I 11a CH36



Date: 9.SEP.2016 01:59:22

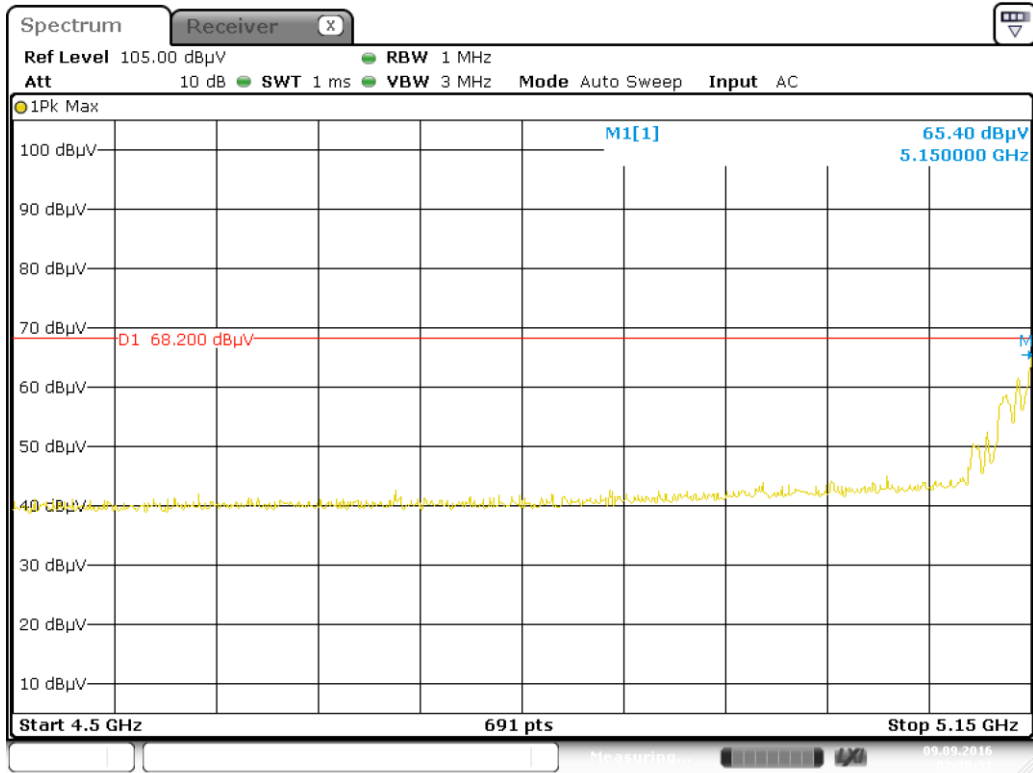
Test Data and Plots

Band I 11n(HT20) CH36



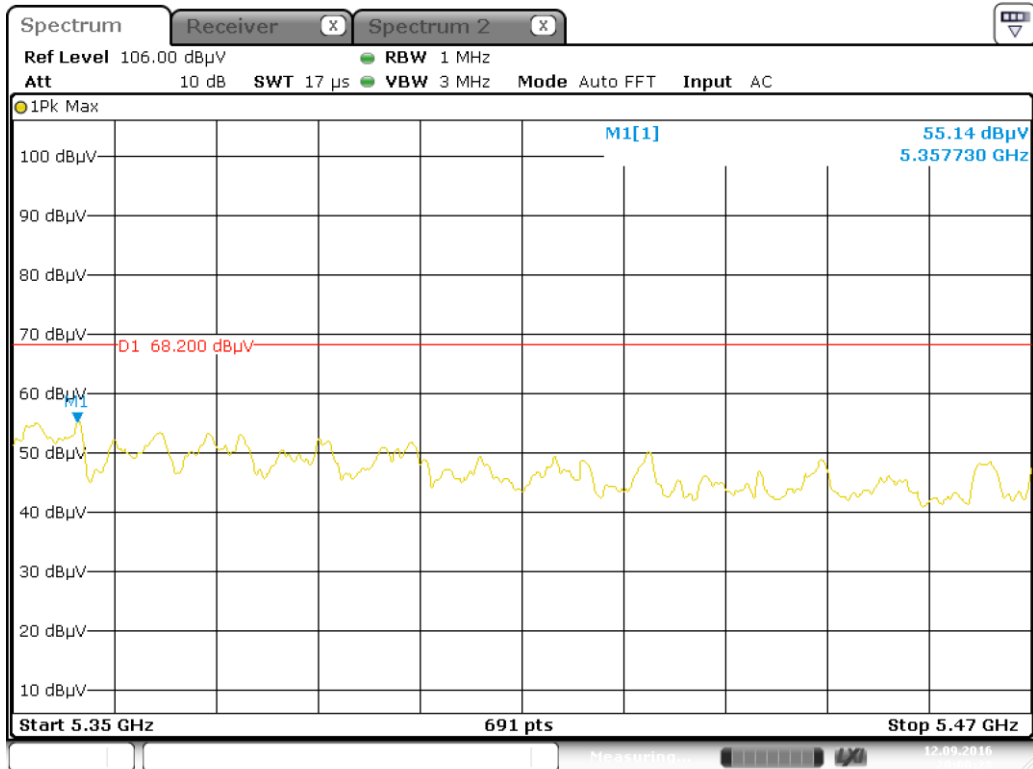
Date: 9.SEP.2016 02:16:01

Band I 11n(HT40) CH38



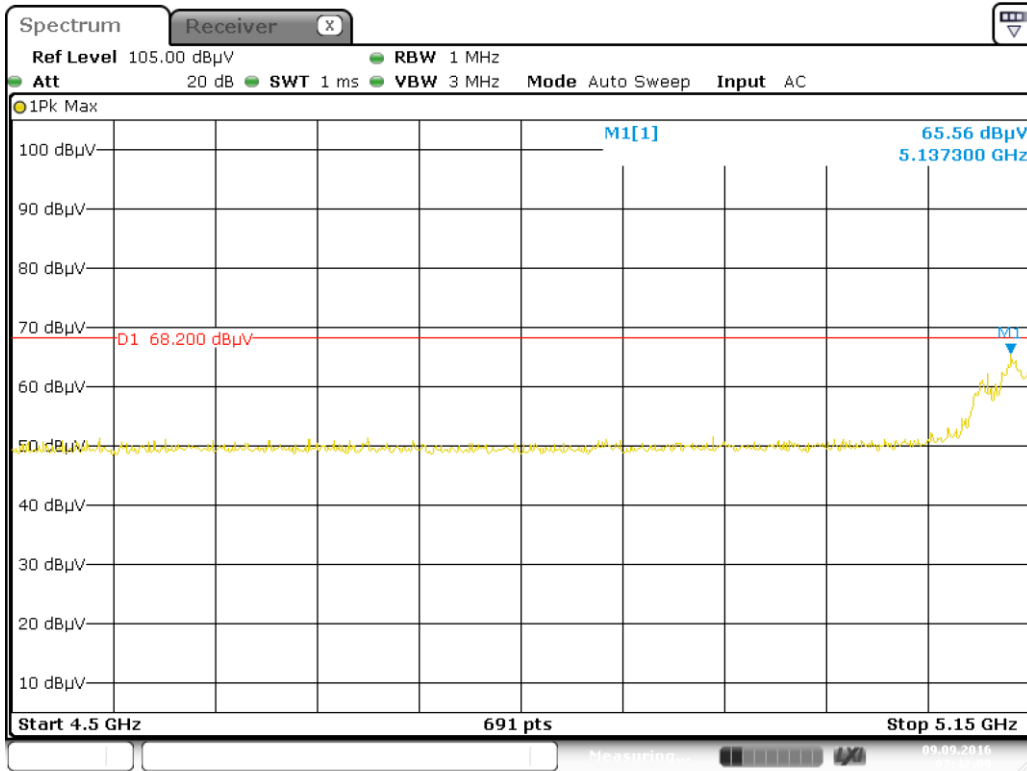
Date: 9.SEP.2016 02:30:32

Band I 11ac(HT40) CH38



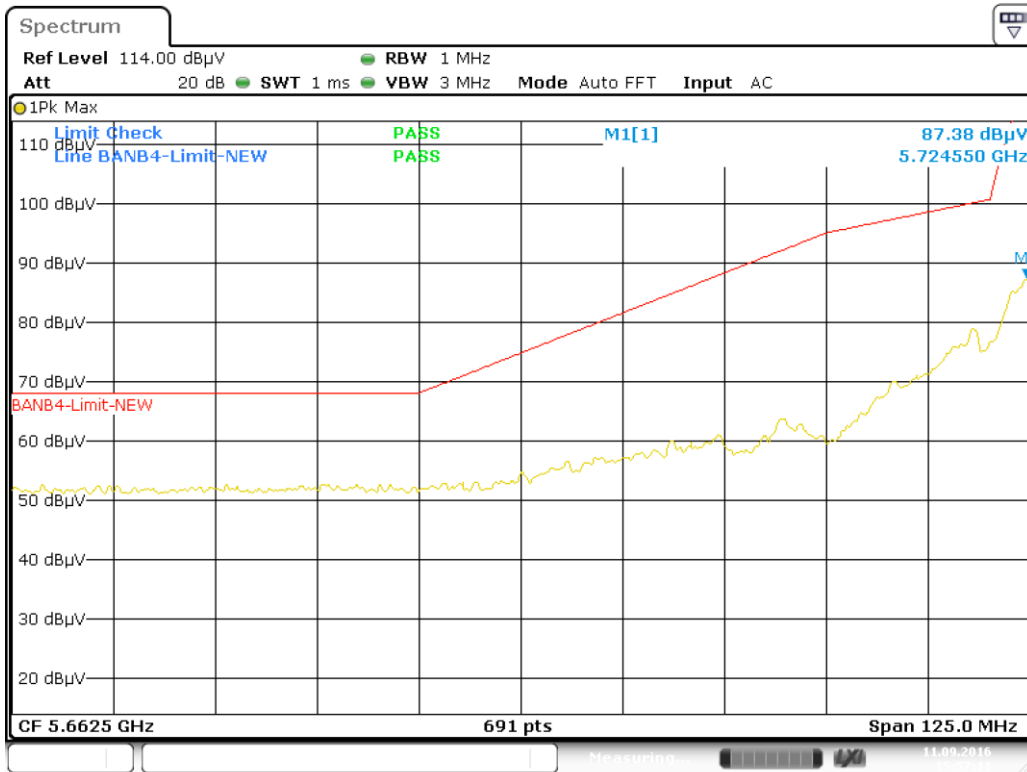
Date: 12.SEP.2016 20:00:28

Band I 11ac(HT80) CH42



Date: 9.SEP.2016 02:42:10

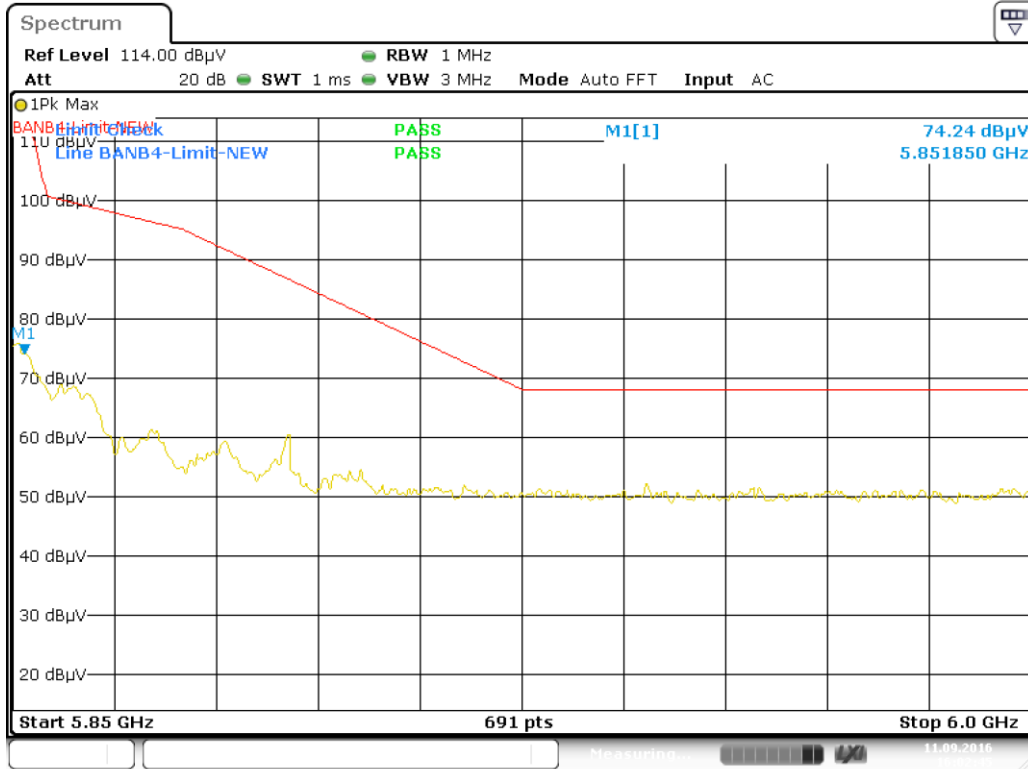
Band IV 11a CH149



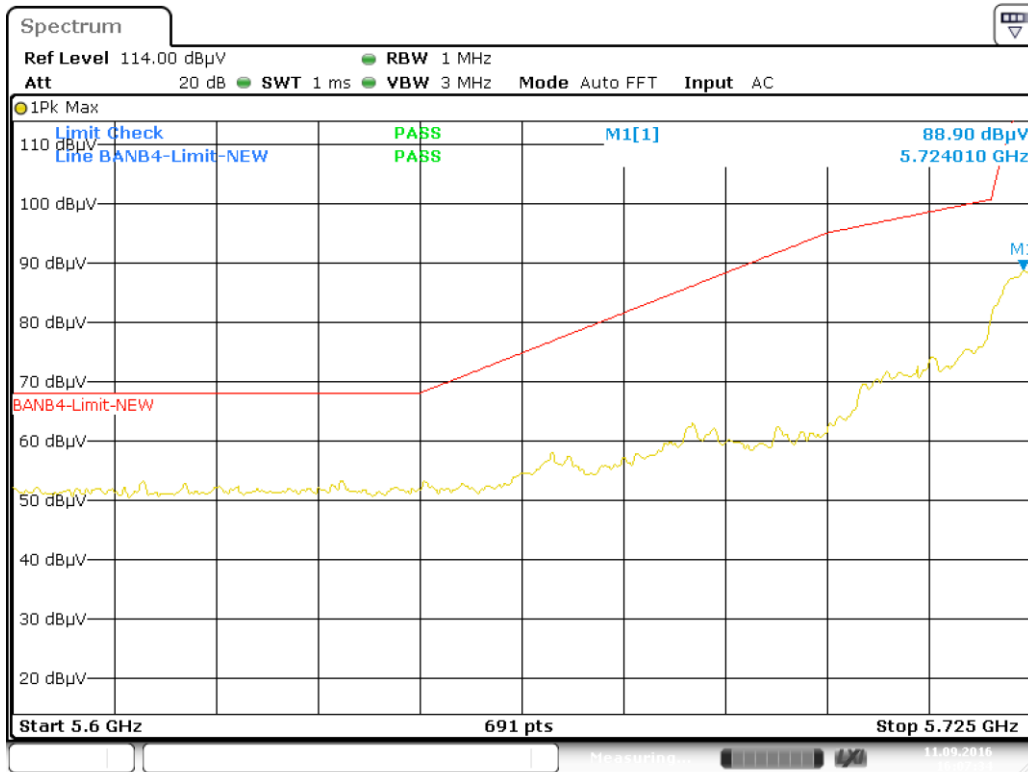
Date: 11.SEP.2016 15:57:11



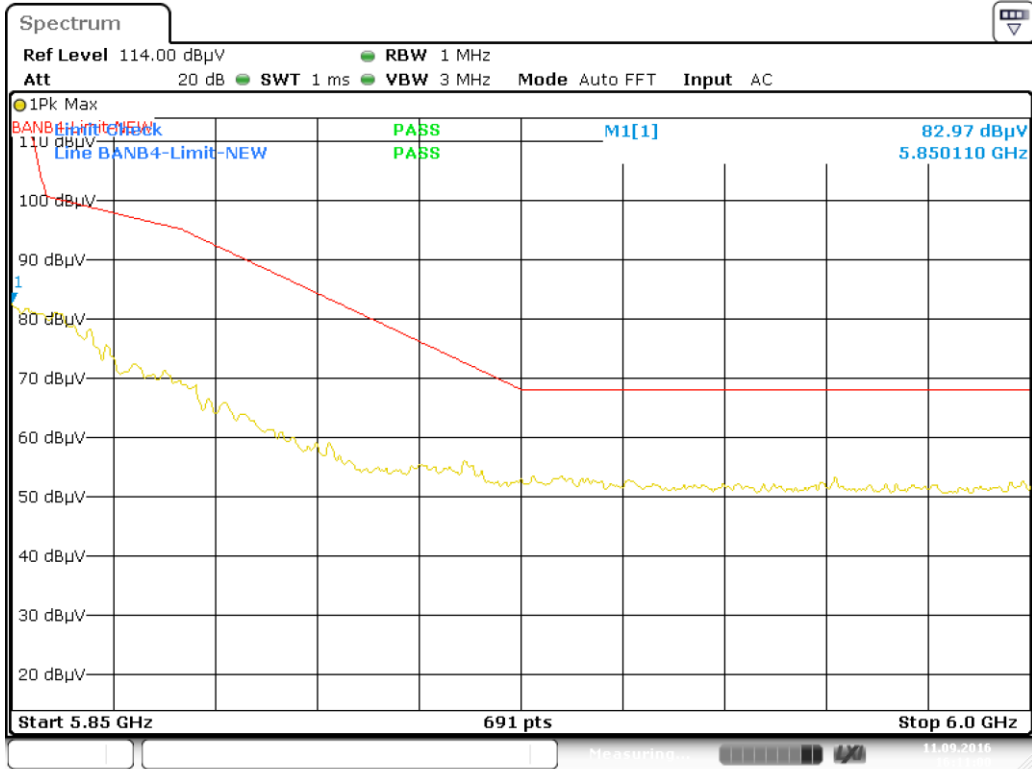
Band IV 11a CH165



Band IV 11n(HT20) CH149

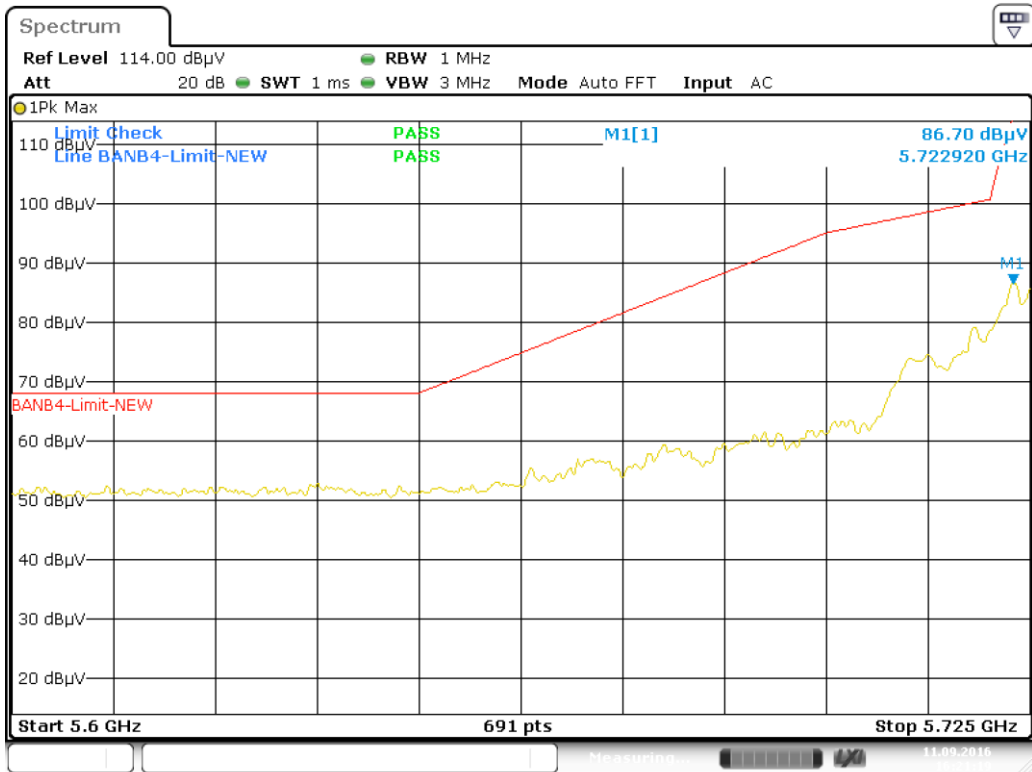


Band IV 11n(HT20) CH165



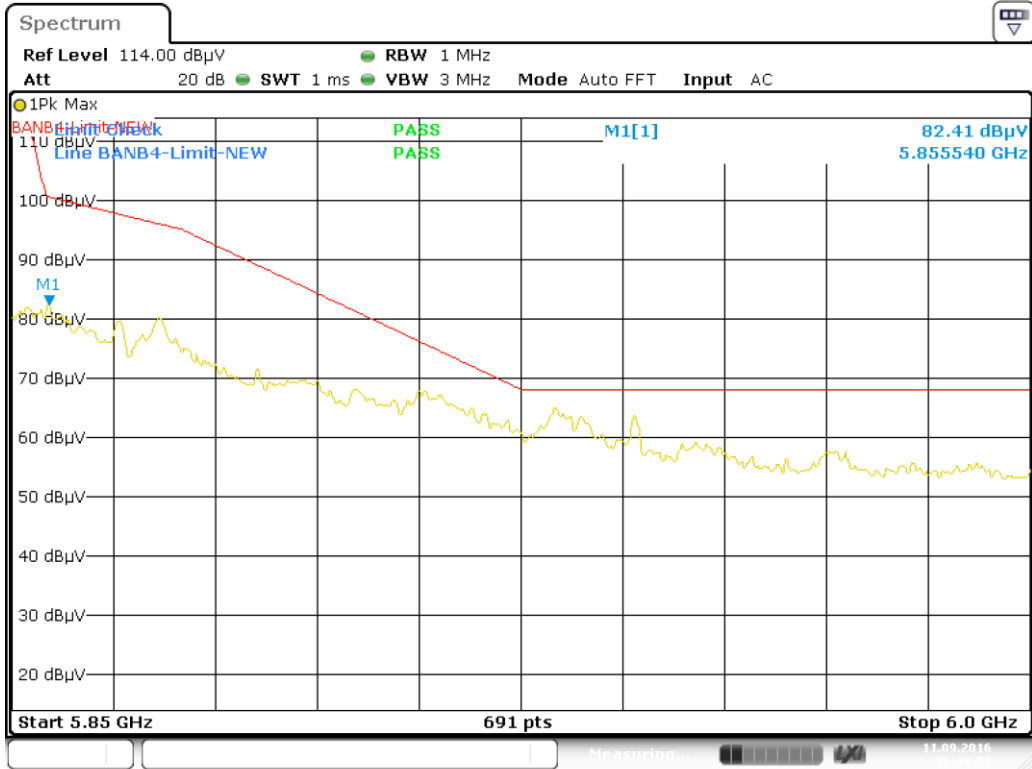
Date: 11.SEP.2016 16:11:00

Band IV 11nHT40) CH151



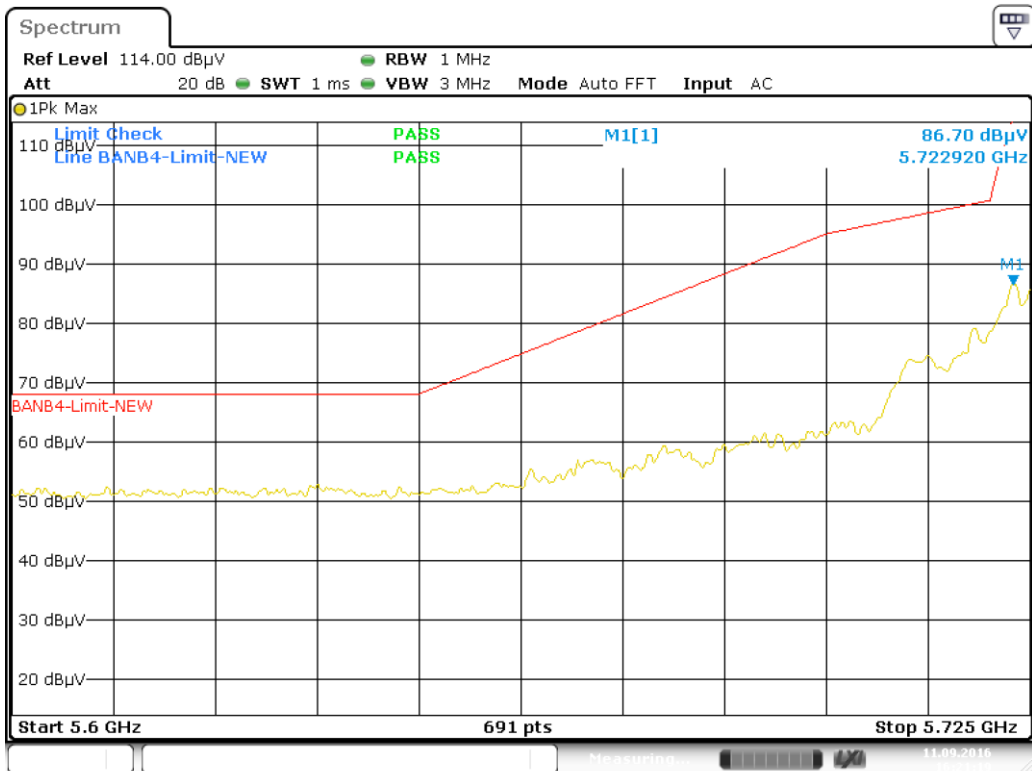
Date: 11.SEP.2016 16:21:20

Band IV 11n(HT40) CH159



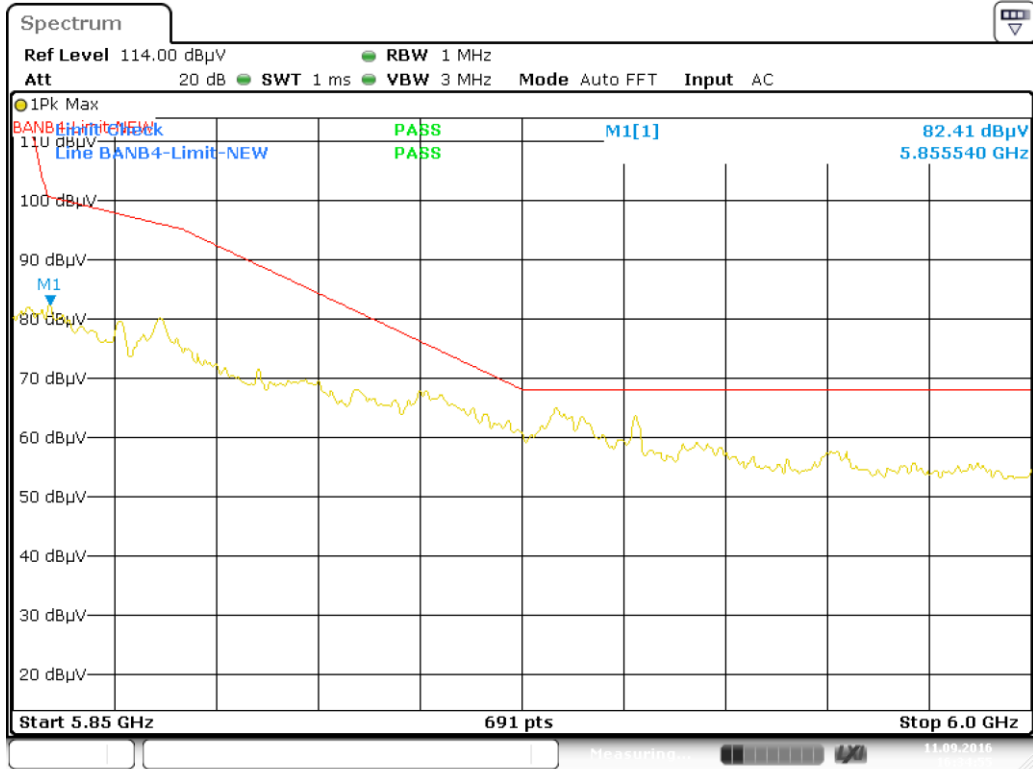
Date: 11.SEP.2016 16:34:55

Band IV 11ac(HT40) CH151

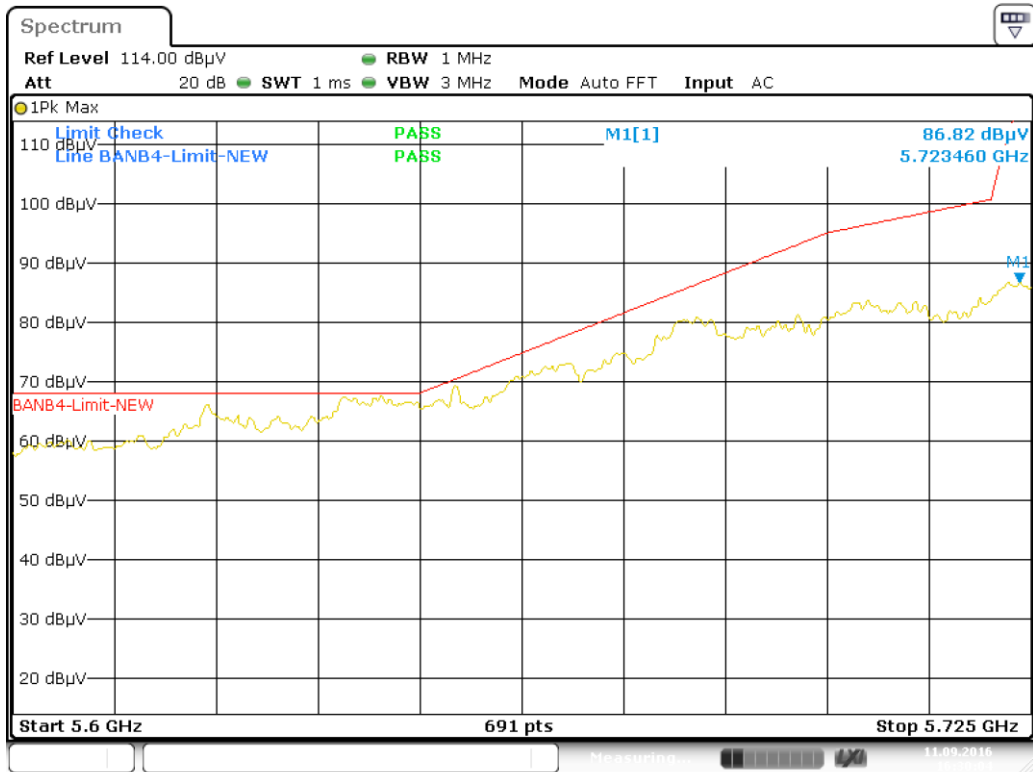


Date: 11.SEP.2016 16:21:20

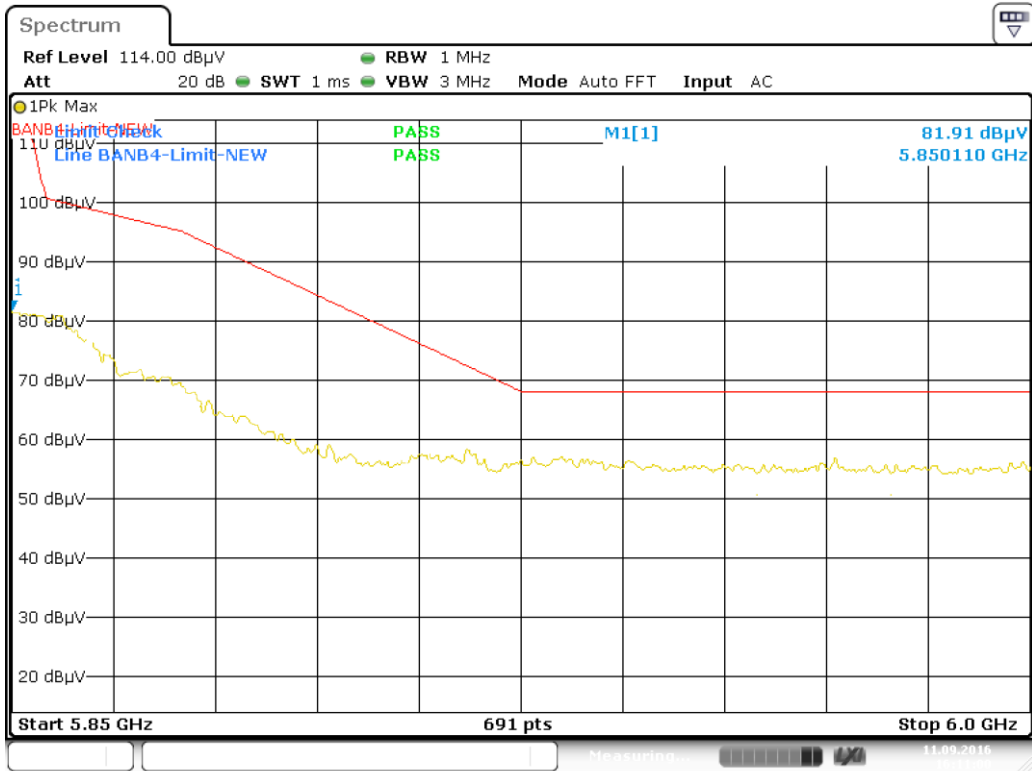
Band IV 11ac(HT40) CH159



Left Band IV11ac(HT80) CH155



Right Band IV11ac(HT80) CH155



Date: 11.SEP.2016 16:11:00

## A.9 Frequency Stability

Measurement Data (the worst channel)

ANT 0

Band I:

Temperature vs. Frequency Stability (11a CH44)

Test Conditions		Test Frequency (MHz)	Measurement Frequency (MHz)	Max. Deviation (ppm)
Voltage (VDC)	Temperature (°C)			
12	-10	5220	5219.960323	-7.60
	0	5220	5220.04634	8.88
	10	5220	5220.011727	2.25
	20	5220	5220.047436	9.09
	30	5220	5219.969099	-5.92
	35	5220	5220.030155	5.78
	40	5220	5220.007864	1.51

Temperature vs. Frequency Stability (11n(HT20) CH44)

Test Conditions		Test Frequency (MHz)	Measurement Frequency (MHz)	Max. Deviation (ppm)
Voltage (VDC)	Temperature (°C)			
12	-10	5220	5219.963779	-6.94
	0	5220	5220.001269	0.24
	10	5220	5220.028059	5.38
	20	5220	5220.033386	6.40
	30	5220	5219.99861	-0.27
	35	5220	5220.020137	3.86
	40	5220	5220.003002	0.58

Temperature vs. Frequency Stability (11n(HT40) CH38)

Test Conditions		Test Frequency (MHz)	Measurement Frequency (MHz)	Max. Deviation (ppm)
Voltage (VDC)	Temperature (°C)			
12	-10	5190	5190.014909	2.87
	0	5190	5190.002074	0.40
	10	5190	5190.031958	6.16
	20	5190	5189.994048	-1.15
	30	5190	5190.03707	7.14
	35	5190	5190.012656	2.44
	40	5190	5190.044001	8.48

**Temperature vs. Frequency Stability (11ac(HT80) CH42)**

Test Conditions		Test Frequency (MHz)	Measurement Frequency (MHz)	Max. Deviation (ppm)
Voltage (VDC)	Temperature (°C)			
12	-10	5210	5210.004984	0.96
	0	5210	5210.02214	4.25
	10	5210	5210.045101	8.66
	20	5210	5209.961668	-7.36
	30	5210	5210.043128	8.28
	35	5210	5210.031445	6.04
	40	5210	5210.005926	1.14

**Band IV:**
**Temperature vs. Frequency Stability (11a CH157)**

Test Conditions		Test Frequency (MHz)	Measurement Frequency (MHz)	Max. Deviation (ppm)
Voltage (VDC)	Temperature (°C)			
12	-10	5785	5784.952318	-8.24
	0	5785	5785.045174	7.81
	10	5785	5785.028669	4.96
	20	5785	5785.041925	7.25
	30	5785	5784.968416	-5.46
	35	5785	5785.023439	4.05
	40	5785	5785.004318	0.75

**Temperature vs. Frequency Stability (11n(HT20) CH157)**

Test Conditions		Test Frequency (MHz)	Measurement Frequency (MHz)	Max. Deviation (ppm)
Voltage (VDC)	Temperature (°C)			
12	-10	5785	5785.029372	5.08
	0	5785	5785.037654	6.51
	10	5785	5785.049115	8.49
	20	5785	5784.987748	-2.12
	30	5785	5785.043849	7.58
	35	5785	5785.025851	4.47
	40	5785	5785.024416	4.22

**Temperature vs. Frequency Stability (11n(HT40) CH151)**

Test Conditions		Test Frequency (MHz)	Measurement Frequency (MHz)	Max. Deviation (ppm)
Voltage (VDC)	Temperature (°C)			
12	-10	5755	5754.99709	-0.51
	0	5755	5755.000898	0.16
	10	5755	5755.035952	6.25
	20	5755	5755.04675	8.12
	30	5755	5754.983403	-2.88
	35	5755	5755.01044	1.81
	40	5755	5755.014597	2.54

## Temperature vs. Frequency Stability (11ac(HT80) CH155)

Test Conditions		Test Frequency (MHz)	Measurement Frequency (MHz)	Max. Deviation (ppm)
Voltage (VDC)	Temperature (°C)			
12	-10	5775	5775.008028	1.39
	0	5775	5775.031074	5.38
	10	5775	5775.020859	3.61
	20	5775	5774.971467	-4.94
	30	5775	5775.046472	8.05
	35	5775	5775.012663	2.19
	40	5775	5775.025431	4.40

## ANT 1

## Band I:

## Temperature vs. Frequency Stability (11a CH44)

Test Conditions		Test Frequency (MHz)	Measurement Frequency (MHz)	Max. Deviation (ppm)
Voltage (VDC)	Temperature (°C)			
12	-10	5220	5219.975702	-4.65
	0	5220	5220.002714	0.52
	10	5220	5220.002996	0.57
	20	5220	5220.001421	0.27
	30	5220	5219.97248	-5.27
	35	5220	5220.005519	1.06
	40	5220	5220.046569	8.92

## Temperature vs. Frequency Stability (11n(HT20) CH44)

Test Conditions		Test Frequency (MHz)	Measurement Frequency (MHz)	Max. Deviation (ppm)
Voltage (VDC)	Temperature (°C)			
12	-10	5220	5220.008922	1.71
	0	5220	5220.022788	4.37
	10	5220	5220.009199	1.76
	20	5220	5219.96658	-6.40
	30	5220	5220.023306	4.46
	35	5220	5220.007286	1.40
	40	5220	5220.005687	1.09

## Temperature vs. Frequency Stability (11n(HT40) CH38)

Test Conditions		Test Frequency (MHz)	Measurement Frequency (MHz)	Max. Deviation (ppm)
Voltage (VDC)	Temperature (°C)			
12	-10	5190	5190.043071	8.30
	0	5190	5190.014998	2.89
	10	5190	5190.001537	0.30
	20	5190	5189.9825	-3.37
	30	5190	5190.029403	5.67
	35	5190	5190.032725	6.31
	40	5190	5190.020495	3.95



**Temperature vs. Frequency Stability (11ac(HT80) CH42)**

Test Conditions		Test Frequency (MHz)	Measurement Frequency (MHz)	Max. Deviation (ppm)
Voltage (VDC)	Temperature (°C)			
12	-10	5210	5210.028422	5.46
	0	5210	5210.041199	7.91
	10	5210	5210.021609	4.15
	20	5210	5209.995847	-0.80
	30	5210	5210.011332	2.18
	35	5210	5210.040005	7.68
	40	5210	5210.007072	1.36

**Band IV:**
**Temperature vs. Frequency Stability (11a CH157)**

Test Conditions		Test Frequency (MHz)	Measurement Frequency (MHz)	Max. Deviation (ppm)
Voltage (VDC)	Temperature (°C)			
12	-10	5785	5785.024905	4.31
	0	5785	5785.009412	1.63
	10	5785	5785.010814	1.87
	20	5785	5784.979767	-3.50
	30	5785	5785.04457	7.70
	35	5785	5785.031435	5.43
	40	5785	5785.012424	2.15

**Temperature vs. Frequency Stability (11n(HT20) CH157)**

Test Conditions		Test Frequency (MHz)	Measurement Frequency (MHz)	Max. Deviation (ppm)
Voltage (VDC)	Temperature (°C)			
12	-10	5785	5784.993671	-1.09
	0	5785	5785.03659	6.32
	10	5785	5785.047042	8.13
	20	5785	5785.017885	3.09
	30	5785	5784.983354	-2.88
	35	5785	5785.02236	3.87
	40	5785	5785.022354	3.86

**Temperature vs. Frequency Stability (11n(HT40) CH151)**

Test Conditions		Test Frequency (MHz)	Measurement Frequency (MHz)	Max. Deviation (ppm)
Voltage (VDC)	Temperature (°C)			
12	-10	5755	5755.01157	2.01
	0	5755	5755.038623	6.71
	10	5755	5755.025297	4.40
	20	5755	5754.985519	-2.52
	30	5755	5755.032059	5.57
	35	5755	5755.012241	2.13
	40	5755	5755.010128	1.76

Temperature vs. Frequency Stability (11ac(HT80) CH155)

Test Conditions		Test Frequency (MHz)	Measurement Frequency (MHz)	Max. Deviation (ppm)
Voltage (VDC)	Temperature (°C)			
12	-10	5775	5774.955875	-7.64
	0	5775	5775.030739	5.32
	10	5775	5775.019131	3.31
	20	5775	5775.02263	3.92
	30	5775	5774.984572	-2.67
	35	5775	5775.018935	3.28
	40	5775	5775.046317	8.02

ANT 2
Band I:
Temperature vs. Frequency Stability (11a CH44)

Test Conditions		Test Frequency (MHz)	Measurement Frequency (MHz)	Max. Deviation (ppm)
Voltage (VDC)	Temperature (°C)			
12	-10	5220	5219.998938	-0.20
	0	5220	5220.001581	0.30
	10	5220	5220.025902	4.96
	20	5220	5220.040062	7.67
	30	5220	5219.968722	-5.99
	35	5220	5220.039879	7.64
	40	5220	5220.022228	4.26

Temperature vs. Frequency Stability (11n(HT20) CH44)

Test Conditions		Test Frequency (MHz)	Measurement Frequency (MHz)	Max. Deviation (ppm)
Voltage (VDC)	Temperature (°C)			
12	-10	5220	5220.033759	6.47
	0	5220	5220.047459	9.09
	10	5220	5220.040999	7.85
	20	5220	5219.973897	-5.00
	30	5220	5220.031889	6.11
	35	5220	5220.049882	9.56
	40	5220	5220.036947	7.08

## Temperature vs. Frequency Stability (11n(HT40) CH38)

Test Conditions		Test Frequency (MHz)	Measurement Frequency (MHz)	Max. Deviation (ppm)
Voltage (VDC)	Temperature (°C)			
12	-10	5190	5189.965696	-6.61
	0	5190	5190.033106	6.38
	10	5190	5190.044398	8.55
	20	5190	5190.047682	9.19
	30	5190	5189.973625	-5.08
	35	5190	5190.042731	8.23
	40	5190	5190.006039	1.16

## Temperature vs. Frequency Stability (11ac(HT80) CH42)

Test Conditions		Test Frequency (MHz)	Measurement Frequency (MHz)	Max. Deviation (ppm)
Voltage (VDC)	Temperature (°C)			
12	-10	5210	5209.988231	-2.26
	0	5210	5210.047868	9.19
	10	5210	5210.029089	5.58
	20	5210	5210.030431	5.84
	30	5210	5209.961152	-7.46
	35	5210	5210.020249	3.89
	40	5210	5210.008757	1.68

## Band IV:

## Temperature vs. Frequency Stability (11a CH157)

Test Conditions		Test Frequency (MHz)	Measurement Frequency (MHz)	Max. Deviation (ppm)
Voltage (VDC)	Temperature (°C)			
12	-10	5785	5784.994666	-0.92
	0	5785	5785.030778	5.32
	10	5785	5785.044691	7.73
	20	5785	5785.034909	6.03
	30	5785	5784.959204	-7.05
	35	5785	5785.011377	1.97
	40	5785	5785.007966	1.38

## Temperature vs. Frequency Stability (11n(HT20) CH157)

Test Conditions		Test Frequency (MHz)	Measurement Frequency (MHz)	Max. Deviation (ppm)
Voltage (VDC)	Temperature (°C)			
12	-10	5785	v	7.95
	0	5785	5785.037654	4.82
	10	5785	5785.049115	0.50
	20	5785	5784.987748	-2.83
	30	5785	5785.043849	6.25
	35	5785	5785.025851	3.24
	40	5785	5785.024416	5.72

## Temperature vs. Frequency Stability (11n(HT40) CH151)

Test Conditions		Test Frequency (MHz)	Measurement Frequency (MHz)	Max. Deviation (ppm)
Voltage (VDC)	Temperature (°C)			
12	-10	5755	5755.049608	8.62
	0	5755	5755.00211	0.37
	10	5755	5755.001753	0.30
	20	5755	5754.990919	-1.58
	30	5755	5755.019711	3.43
	35	5755	5755.0181	3.15
	40	5755	5755.036054	6.26

## Temperature vs. Frequency Stability (11ac(HT80) CH155)

Test Conditions		Test Frequency (MHz)	Measurement Frequency (MHz)	Max. Deviation (ppm)
Voltage (VDC)	Temperature (°C)			
12	-10	5775	5775.020955	3.63
	0	5775	5775.001964	0.34
	10	5775	5775.029867	5.17
	20	5775	5774.977565	-3.88
	30	5775	5775.012334	2.14
	35	5775	5775.004174	0.72
	40	5775	5775.038116	6.60

## **ANNEX B TEST SETUP PHOTOS**

Please refer the document "BL-SZ1680250-AR.PDF".

## **ANNEX C EUT EXTERNAL PHOTOS**

Please refer the document "BL- SZ1680250-AW.PDF".

## **ANNEX D EUT INTERNAL PHOTOS**

Please refer the document "BL- SZ1680250-AI.PDF".

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