



FCC 47 CFR PART 15 SUBPART E

CERTIFICATION TEST REPORT

For

UAV Remote Controller

MODEL NUMBER: DHI-UAV-R1S-RH

FCC ID: SVNUAV-R1

REPORT NUMBER: 4788322398-4-5

ISSUE DATE: July 19, 2018

Prepared for

**Zhejiang Dahua Vision Technology Co., Ltd.
No.1199, Bin'an Road, Binjiang District, Hangzhou, P.R. China**

Prepared by

**UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch
Room 101, Building 10, Innovation Technology Park,
Song Shan Lake Hi tech Development Zone, Dongguan, 523808, China
Tel: +86 769 33817100
Fax: +86 769 33244054
Website: www.ul.com**

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Revision History

Rev.	Issue Date	Revisions	Revised By
--	07/19/2018	Initial Issue	



Summary of Test Results			
Clause	Test Items	FCC/IC Rules	Test Results
1	6/26db Bandwidth	FCC 15.407 (a)&(e)	PASS
3	Maximum Conducted Output Power	FCC 15.407 (a)	PASS
4	Power Spectral Density	FCC 15.407 (a)	PASS
5	Antenna Conducted Spurious Emission	FCC 15.407 (b)	PASS
6	Radiated Bandedge and Spurious Emission	FCC 15.407 (a) FCC 15.209 FCC 15.205	PASS
7	Conducted Emission Test For AC Power Port	FCC 15.207	PASS
8	Antenna Requirement	FCC 15.203	PASS
9	Frequency Stability	FCC 15.407 (g)	PASS



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1. ATTESTATION OF TEST RESULTS

Applicant Information


Company Name: Zhejiang Dahua Vision Technology Co., Ltd.
Address: No.1199, Bin'an Road, Binjiang District, Hangzhou, P.R. China

Manufacturer Information

Company Name: Zhejiang Dahua Vision Technology Co., Ltd.
Address: No.1199, Bin'an Road, Binjiang District, Hangzhou, P.R. China

Factory Information

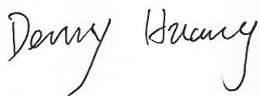
Company Name: Zhejiang Dahua Vision Technology Co., Ltd.
Address: No.1199, Bin'an Road, Binjiang District, Hangzhou, P.R. China

EUT Name: UAV Remote Controller
Brand: 
Model: DHI-UAV-R1S-RH
Serial Model: See chapter 5.1
Sample Received Date: November 20, 2017
Date of Tested: April 10, 2018 ~ June 26, 2018

APPLICABLE STANDARDS

STANDARD	TEST RESULTS
CFR 47 Part 15 Subpart E	Pass

Prepared By:



Denny Huang
Engineer Project Associate
Approved By:



Stephen Guo
Laboratory Manager

Checked By:



Shawn Wen
Laboratory Leader



2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.10-2013, FCC CFR 47 Part 2, FCC CFR 47 Part 15, KDB 789033 D02 v02r01, KDB 662911 D01 v02r01, and KDB414788 D01 Radiated Test Site v01.

3. FACILITIES AND ACCREDITATION

Accreditation Certificate	<p>A2LA (Certificate No.: 4102.01) UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with A2LA.</p> <p>IAS (Lab Code: TL-702) UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has demonstrated compliance with ISO/IEC Standard 17025:2005, General requirements for the competence of testing and calibration laboratories</p> <p>FCC (FCC Designation No.: CN1187) UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. Has been recognized to perform compliance testing on equipment subject to the Commission's Declaration of Conformity (DoC) and Certification rules</p> <p>IC(Company No.: 21320) UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been registered and fully described in a report filed with ISED. The Company Number is 21320.</p> <p>VCCI (Registration No.: G-20019, R-20004, C-20012 and T-20011) UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with VCCI, the Membership No. is 3793. Facility Name: Chamber D, the VCCI registration No. is G-20019 and R-20004 Shielding Room B, the VCCI registration No. is C-20012 and T-20011</p>
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Note:

1. All tests measurement facilities use to collect the measurement data are located at Building 10, Innovation Technology Park, Song Shan Lake Hi tech Development Zone, Dongguan, 523808, China
2. The test anechoic chamber in UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch had been calibrated and compared to the open field sites and the test anechoic chamber is shown to be equivalent to or worst case from the open field site.
3. For below 30MHz, lab had performed measurements at test anechoic chamber and comparing to measurements obtained on an open field site. And these measurements below 30MHz had been correlated to measurements performed on an OATS.



4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

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

4.2. MEASUREMENT UNCERTAINTY

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

Test Item	Uncertainty
Uncertainty for Conduction emission test	2.90dB
Uncertainty for Radiation Emission test(include Fundamental emission) (9KHz-30MHz)	2.2dB
Uncertainty for Radiation Emission test(include Fundamental emission) (30MHz-1GHz)	4.52dB
Uncertainty for Radiation Emission test (1GHz to 40GHz)(include Fundamental emission)	5.04dB(1-6GHz)
	5.30dB (6GHz-18Gz)
	5.23dB (18GHz-26Gz)
	5.64dB (26GHz-40Gz)
Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.	



5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

Equipment	UAV Remote Controller	
Product Description	The EUT is a remote controller used for UAV.	
Model Name	DHI-UAV-R1S-RH	
Series Model	UAV-R1S-RH,DH-UAV-R1S-RH,OEM-UAV-R1S-RH,DHI-UAV-R1123,DHI-UAV-R1133,UAV-R1123,UAV-R1133,DH-UAV-R1123,DH-UAV-R1133,OEM-UAV-R1123,OEM-UAV-R1133,DH-UAV-R1S-11,DHI-UAV-R1S-23,DHI-UAV-R1S-33,OEM-UAV-R1S-11,UAV-R1S-23,UAV-R1S-33,DH-UAV-R1S-11-C,DHI-UAV-R1S-23-C,DHI-UAV-R1S-33-C,OEM-UAV-R1S-11-C,UAV-R1S-23-C,UAV-R1S-33-C,DH-UAV-R1S-11CH,OEM-UAV-R1S-11CH,DH-UAV-R1S-11CH-C,OEM-UAV-R1S-11CH-C,DH-UAV-R1S-S-11CH,OEM-UAV-R1S-S-11CH,DH-UAV-R1S-S-11CH-C,OEM-UAV-R1S-S-11CH-C,DHI-UAV-R1S-33CH,UAV-R1S-33CH,DHI-UAV-R1S-33CH-C,UAV-R1S-33CH-C,DHI-UAV-R1S-S-33CH,UAV-R1S-S-33CH,DHI-UAV-R1S-S-33CH-C,UAV-R1S-S-33CH-C,DHI-UAV-R1S-23CH,UAV-R1S-23CH,UAV-R1S-23CH-C,HI-UAV-R1S-23CH-C,DHI-UAV-R1S-S-23CH,UAV-R1S-S-23CH,DHI-UAV-R1S-S-23CH-C,UAV-R1S-S-23CH-C.	
Model Difference	All the same except for the appearance of the different color and graphic pattern.	
Product Description	Operation Frequency	5150 MHz ~ 5250 MHz
Rated Power Input	100-240V~,50Hz/60Hz,1.5A max	
Battery	7.4V, 7800mAh	

5.2. MAXIMUM OUTPUT POWER

Frequency Range (MHz)	IEE Std. 802.11	Frequency (MHz)	Max Power (dBm)	Max EIRP (dBm)
UNII-1	a	5150-5250	13.98	17.60
UNII-1	n(HT20)	5150-5250	13.78	17.40
UNII-1	n(HT40)	5150-5250	11.62	15.24
UNII-1	ac(HT20)	5150-5250	13.52	17.14
UNII-1	ac(HT40)	5150-5250	12.02	15.64
UNII-1	ac(HT80)	5150-5250	11.89	15.51

Note: The EUT only support UNII-1.



5.3. CHANNEL LIST

UNII-1		UNII-1		UNII-1	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
36	5180	38	5190	42	5210
40	5200	46	5230		
44	5220				
48	5240				

5.4. TEST CHANNEL CONFIGURATION

Pretest Test Mode	Description
Mode 1	TX A Mode / CH36, CH40, CH48 (UNII-1)
Mode 2	TX N20 Mode / CH36, CH40, CH48 (UNII-1)
Mode 3	TX N40 Mode / CH38, CH46 (UNII-1)
Mode 4	TX AC20 Mode / CH36, CH40, CH48 (UNII-1)
Mode 5	TX AC40 Mode / CH38, CH46 (UNII-1)
Mode 6	TX AC80 Mode / CH42 (UNII-1)



5.5. THE WORSE CASE POWER SETTING PARAMETER

The Worse Case Power Setting Parameter under UNII-1	
Test Software	/

Band	Mode	Rate	Channel	Setting Parameter
UNII-1	11a	6M	36	14
			40	14
			48	14

Band	Mode	Rate	Channel	Setting Parameter	
UNII-1	11n (20M)	MCS0	36	14	
			40	14	
			48	14	
	11n(40M)		38	12	
			46	12	

Band	Mode	Rate	Channel	Setting Parameter	
UNII-1	11ac (20M)	MCS0	36	14	
			40	14	
			48	14	
	11ac (40M)		38	12	
			46	12	
	11ac (80M)		42	12	



5.6. DESCRIPTION OF AVAILABLE ANTENNAS

Antenna	Frequency (MHz)	Antenna Type	Antenna Gain (dBi)
Antenna 1	5150-5250	FPCB Antenna	3.62

IEEE Std. 802.11	Transmit and Receive Mode	Description
a	☒1TX, 1RX	Chain 1 can be used as transmitting/receiving antenna.
n(MCS0-7)	☒1TX, 1RX	Chain 1 can be used as transmitting/receiving antenna.
ac(MCS0-7)	☒1TX, 1RX	Chain 1 can be used as transmitting/receiving antenna.

5.7. TEST ENVIRONMENT

Environment Parameter	Selected Values During Tests	
Relative Humidity	55 ~ 65%	
Atmospheric Pressure:	1025Pa	
Temperature	TN	23 ~ 28°C
Voltage :	VL	N/A
	VN	DC 7.4V
	VH	N/A

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



5.8. WORST-CASE CONFIGURATIONS

IEE Std. 802.11	Modulation Technology	Modulation Type	Data Rate (Mbps)	Worst Case (Mbps)
a	OFDM	BPSK, QPSK, 16QAM, 64QAM	54/48/36/24/18/12/9/6	6

802.11n HT20/HT40							
Antenna	MCS	Modulation	HT20 Data Rate(Mbps)		HT40 Data Rate(Mbps)		Worst Case (Mbps)
			GI=800ns	GI=400ns	GI=800ns	GI=400ns	
1x1	0	BPSK	6.5	7.2	13.5	15.0	MCS0
	1	QPSK	13.0	14.2	27.0	30.0	MCS0
	2	QPSK	19.5	21.7	40.5	45.0	MCS0
	3	16-QAM	26.0	28.9	54.0	60.0	MCS0
	4	16-QAM	39.0	43.3	81.0	90.0	MCS0
	5	64-QAM	52.0	57.8	108.0	120.0	MCS0
	6	64-QAM	58.5	65.0	121.5	135.0	MCS0
	7	64-QAM	65.0	72.2	135.0	150.0	MCS0

802.11ac HT20/HT40/HT80									
Antenna	MCS	Modulation	HT20 Data Rate (Mbps)		HT40 Data Rate (Mbps)		HT80 Data Rate (Mbps)		Worst Case (Mbps)
			GI=800ns	GI=400ns	GI=800ns	GI=400ns	GI=800ns	GI=400ns	
1x1	0	BPSK	6.5	7.2	13.5	15	29.3	32.5	MCS0
	1	QPSK	13	14.4	27	30	58.5	65	MCS0
	2	QPSK	19.5	21.7	40.5	45	87.8	97.5	MCS0
	3	16-QAM	26	28.9	54	60	117	130	MCS0
	4	16-QAM	39	43.3	81	90	175.5	195	MCS0
	5	64-QAM	52	57.8	108	120	234	260	MCS0
	6	64-QAM	58.5	65	121.5	135	263.3	292.5	MCS0
	7	64-QAM	65	72.2	135	150	292.5	325	MCS0
	8	256-QAM	78	86.7	162	180	351	390	MCS0
	9	256-QAM	N/A	N/A	180	200	390	433.3	MCS0



5.9. DESCRIPTION OF TEST SETUP


SUPPORT EQUIPMENT

Item	Equipment	Brand Name	Model Name	P/N
1	Laptop	ThinkPad	T460S	SL10K24796 JS
2	USB to Serial board	/	/	/

I/O CABLES

Cable No	Port	Connector Type	Cable Type	Cable Length(m)	Remarks
1	/	/	/	/	/

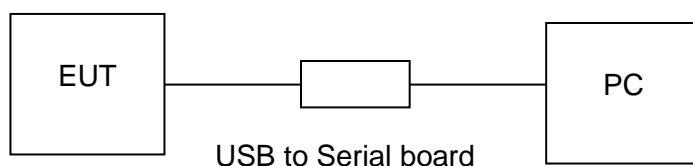
ACCESSORY

Item	Accessory	Brand Name	Model Name	Description
1	LiPo Charger for Drones		ADS-65HI-12N-1 12048E	AC Input: 100 ~ 240V, 1.5A DC Output: 12V, 4A

TEST SETUP

The EUT can work in engineering mode with the inside software.

SETUP DIAGRAM FOR TESTS





5.10. MEASURING INSTRUMENT AND SOFTWARE USED

Conducted Emissions						
Instrument						
Used	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
<input checked="" type="checkbox"/>	EMI Test Receiver	R&S	ESR3	101961	Dec.12,2017	Dec.11,2018
<input checked="" type="checkbox"/>	Two-Line V-Network	R&S	ENV216	101983	Dec.12,2017	Dec.11,2018
<input checked="" type="checkbox"/>	Artificial Mains Networks	Schwarzbeck	NSLK 8126	8126465	Dec.12,2017	Dec.11,2018
Software						
Used	Description		Manufacturer	Name		Version
<input checked="" type="checkbox"/>	Test Software for Conducted disturbance		Farad	EZ-EMC		Ver. UL-3A1
Radiated Emissions						
Instrument						
Used	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
<input checked="" type="checkbox"/>	MXE EMI Receiver	KESIGHT	N9038A	MY56400036	Dec.12,2017	Dec.11,2018
<input checked="" type="checkbox"/>	Hybrid Log Periodic Antenna	TDK	HLP-3003C	130960	Jan.09, 2016	Jan.09, 2019
<input checked="" type="checkbox"/>	Preamplifier	HP	8447D	2944A09099	Dec.12,2017	Dec.11,2018
<input checked="" type="checkbox"/>	EMI Measurement Receiver	R&S	ESR26	101377	Dec.12,2017	Dec.11,2018
<input checked="" type="checkbox"/>	Horn Antenna	TDK	HRN-0118	130939	Jan. 09, 2016	Jan. 09, 2019
<input checked="" type="checkbox"/>	High Gain Horn Antenna	Schwarzbeck	BBHA-9170	691	Jan.06, 2016	Jan.06, 2019
<input checked="" type="checkbox"/>	Preamplifier	TDK	PA-02-0118	TRS-305-00066	Dec.12,2017	Dec.11,2018
<input checked="" type="checkbox"/>	Preamplifier	TDK	PA-02-2	TRS-307-00003	Dec.12,2017	Dec.11,2018
<input checked="" type="checkbox"/>	Loop antenna	Schwarzbeck	1519B	00008	Mar. 26, 2016	Mar. 25, 2019
Software						
Used	Description		Manufacturer	Name		Version
<input checked="" type="checkbox"/>	Test Software for Radiated disturbance		Farad	EZ-EMC		Ver. UL-3A1
Other instruments						
Used	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
<input checked="" type="checkbox"/>	Spectrum Analyzer	Keysight	N9030A	MY55410512	Dec.12,2017	Dec.11,2018
<input checked="" type="checkbox"/>	Power Meter	Keysight	N1911A	MY55416024	Dec.12,2017	Dec.11,2018
<input checked="" type="checkbox"/>	Power Sensor	Keysight	N1921A	MY51100041	Dec.12,2017	Dec.11,2018



6. ANTENNA PORT TEST RESULTS

6.1. ON TIME AND DUTY CYCLE

LIMITS

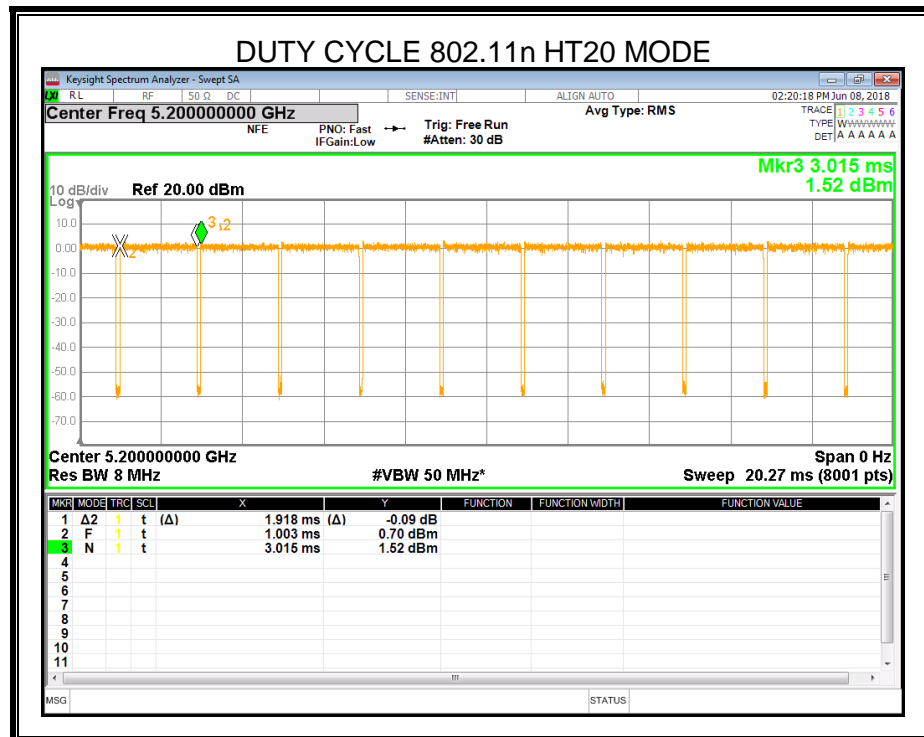
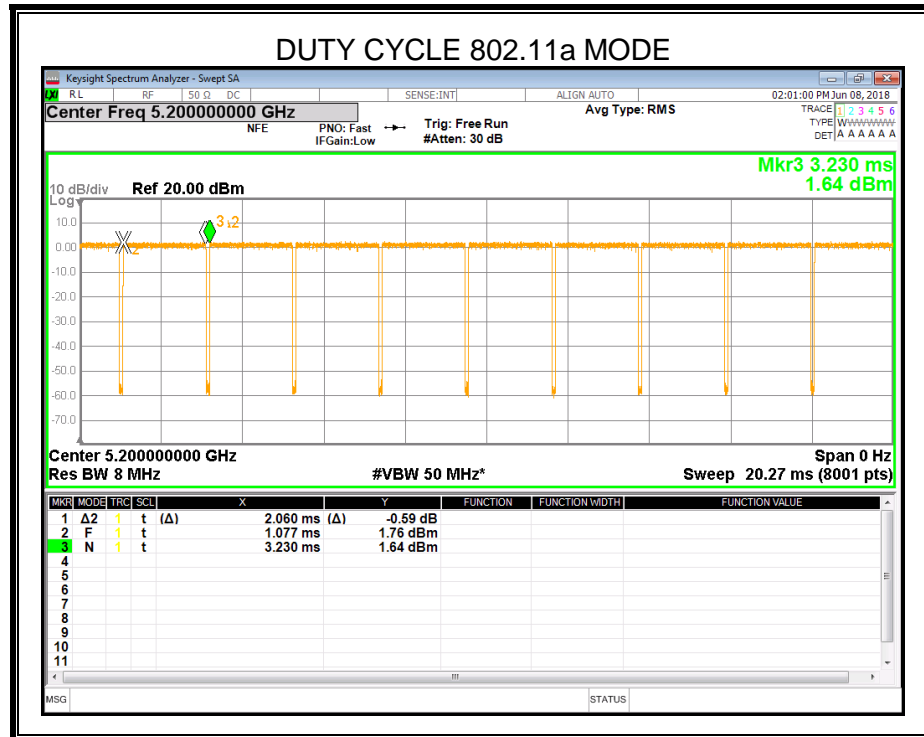
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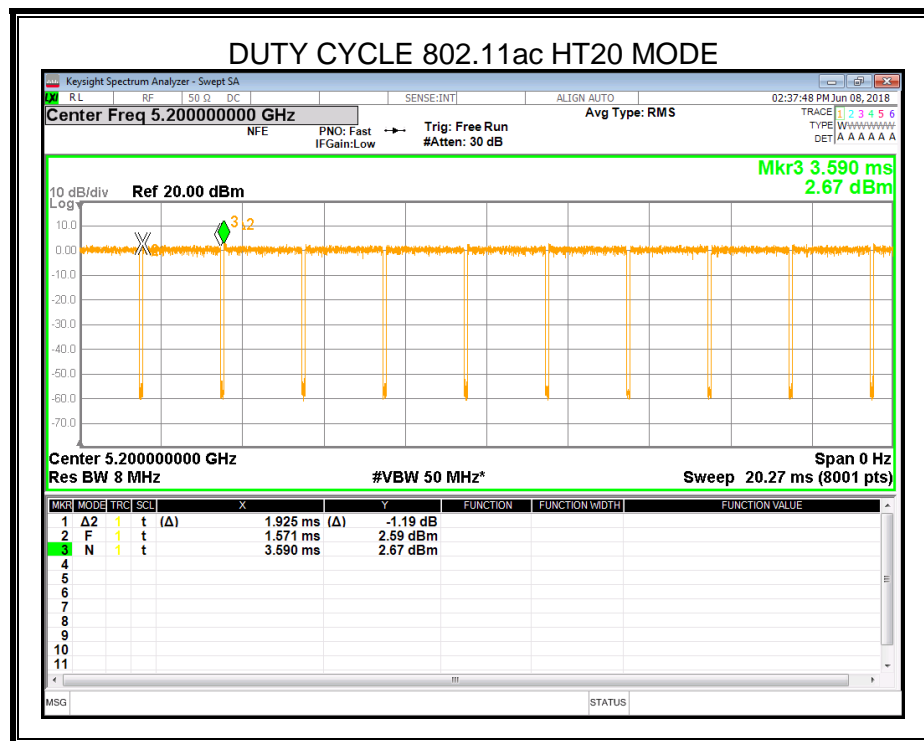
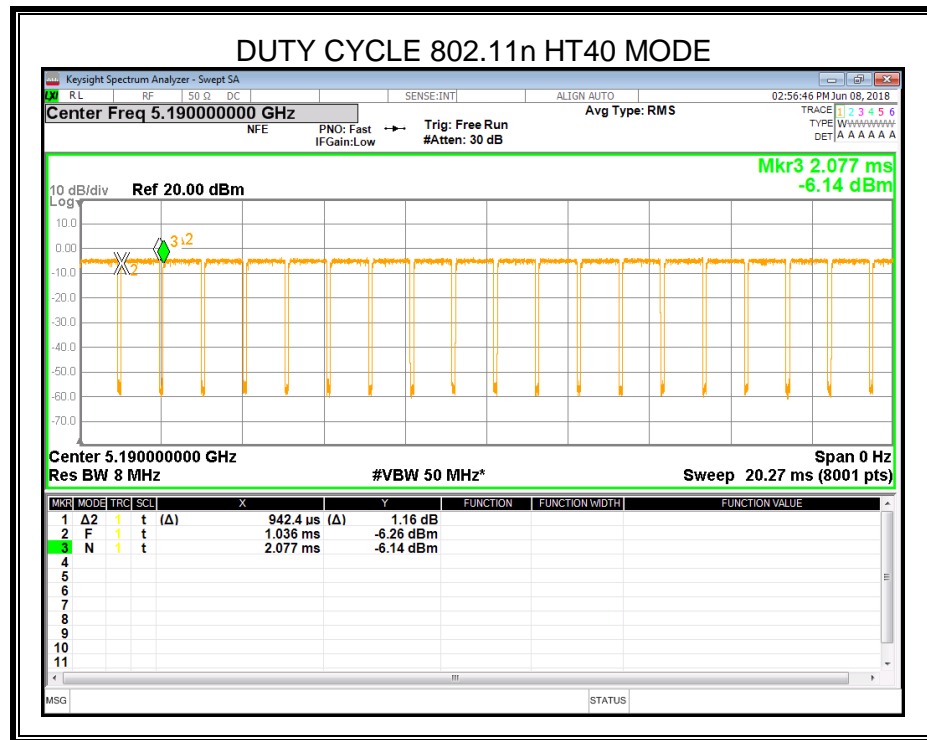
RESULTS

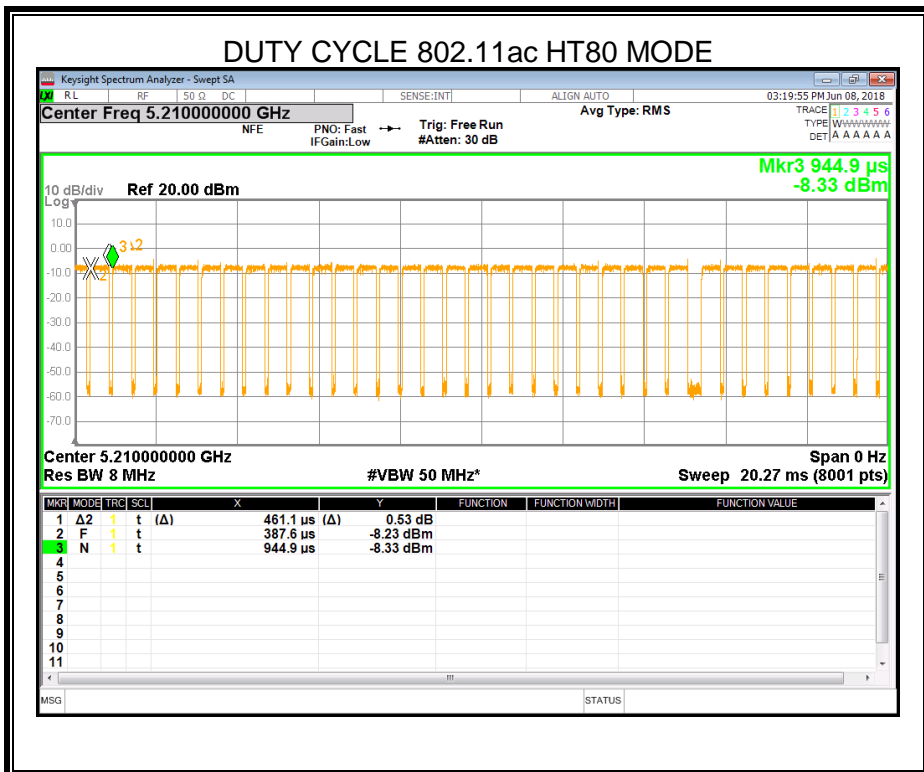
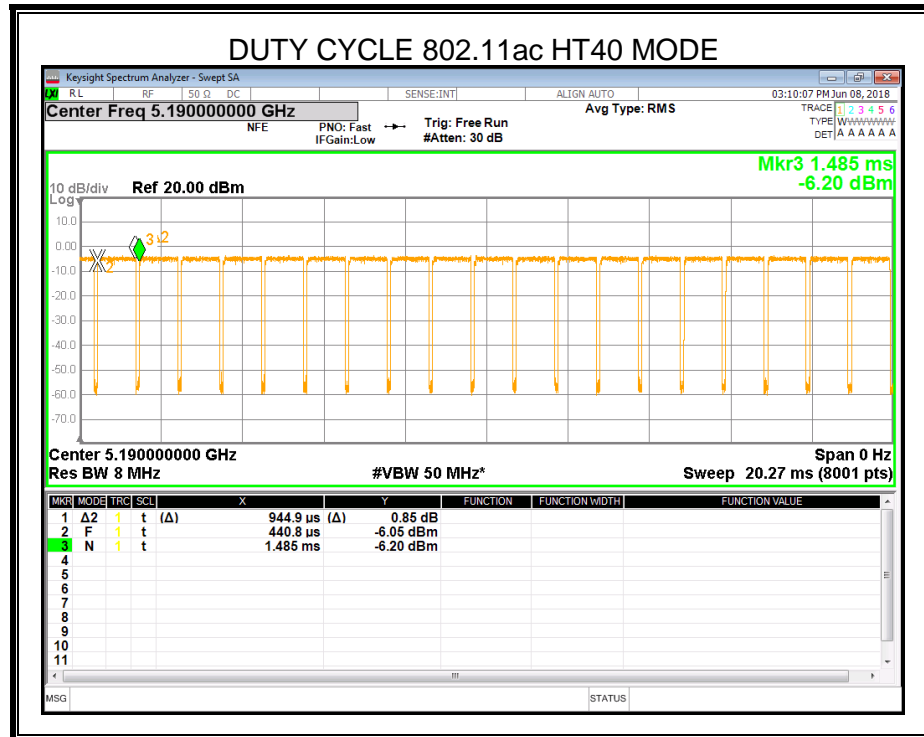
ANTENNA1

Mode	ON Time (ms)	Period (ms)	Duty Cycle x (Linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/B Minimum VBW (KHz)
11a 1TX	2.0600	2.1530	0.9568	95.68	0.19	0.5
11n HT20	1.9180	2.0120	0.9533	95.33	0.21	1
11n HT40	0.9424	1.0410	0.9053	90.53	0.43	2
11ac HT20	1.9250	2.0190	0.9534	95.34	0.21	1
11ac HT40	0.9449	1.0442	0.9049	90.49	0.43	2
11ac HT80	0.4611	0.5573	0.8274	82.74	0.82	3

Note: Duty Cycle Correction Factor= $10\log(1/x)$.
Where: x is Duty Cycle (Linear)
Where: T is On Time (transmit duration)









6.2. 26/99% dB BANDWIDTH

LIMITS

FCC Part15, Subpart E		
Test Item	Limit	Frequency Range (MHz)
Bandwidth	26 dB Bandwidth	5150-5250

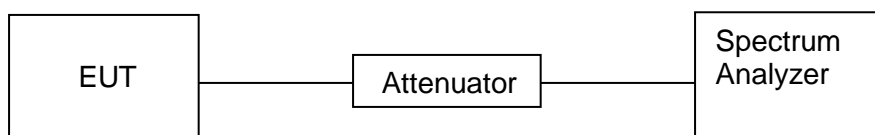
TEST PROCEDURE

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

Center Frequency	The center frequency of the channel under test
Detector	Peak
RBW	For 6dB Bandwidth: RBW=100kHz For 26dB Bandwidth: approximately 1% of the emission bandwidth. For 99dB Bandwidth: approximately 1%~5% of the emission bandwidth.
VBW	For 6dB Bandwidth : VBW=300kHz For 26dB Bandwidth : >3RBW For 99%dB Bandwidth : >3RBW
Trace	Max hold
Sweep	Auto couple

Allow the trace to stabilize and measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6/26/99% dB relative to the maximum level measured in the fundamental emission.

TEST SETUP



RESULTS

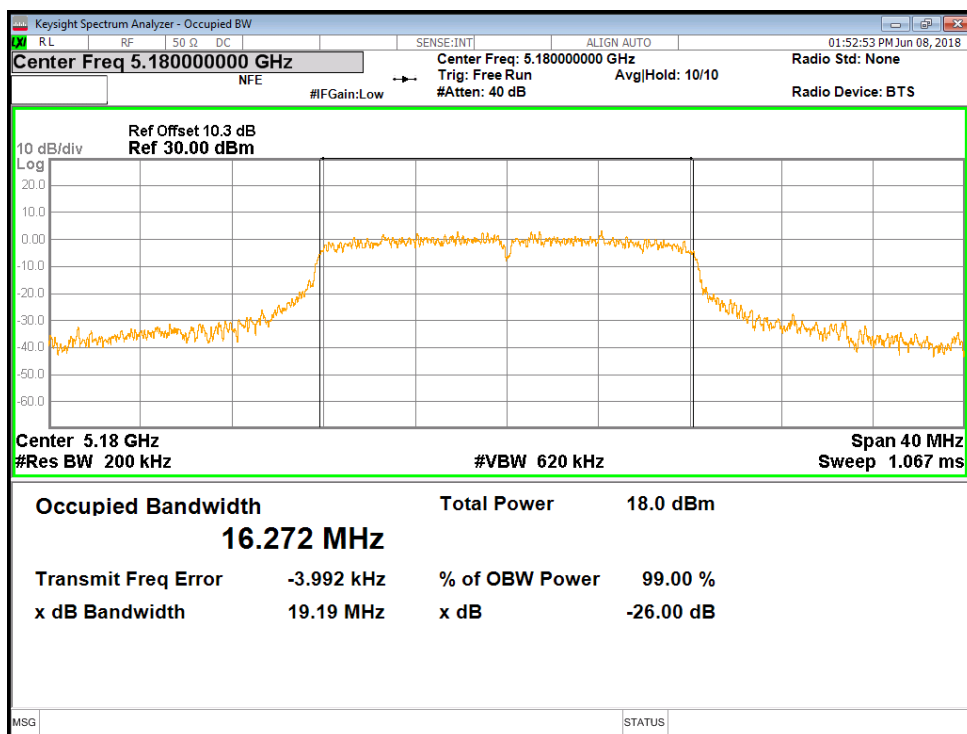


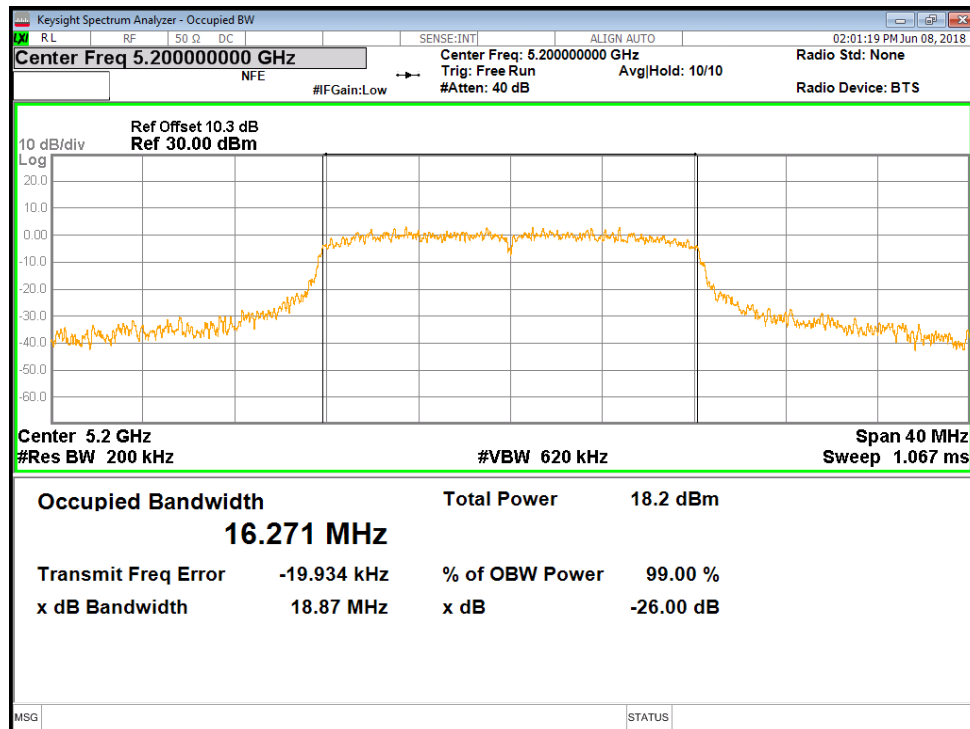
6.2.1. 802.11a MODE

6.2.1.1. UNII-1 BAND

Channel	Frequency (MHz)	26 dB BW
Low	5180	19.19
Mid	5200	18.87
High	5240	18.99

Channel	Frequency (MHz)	99% BW
Low	5180	16.272
Mid	5200	16.271
High	5240	16.304





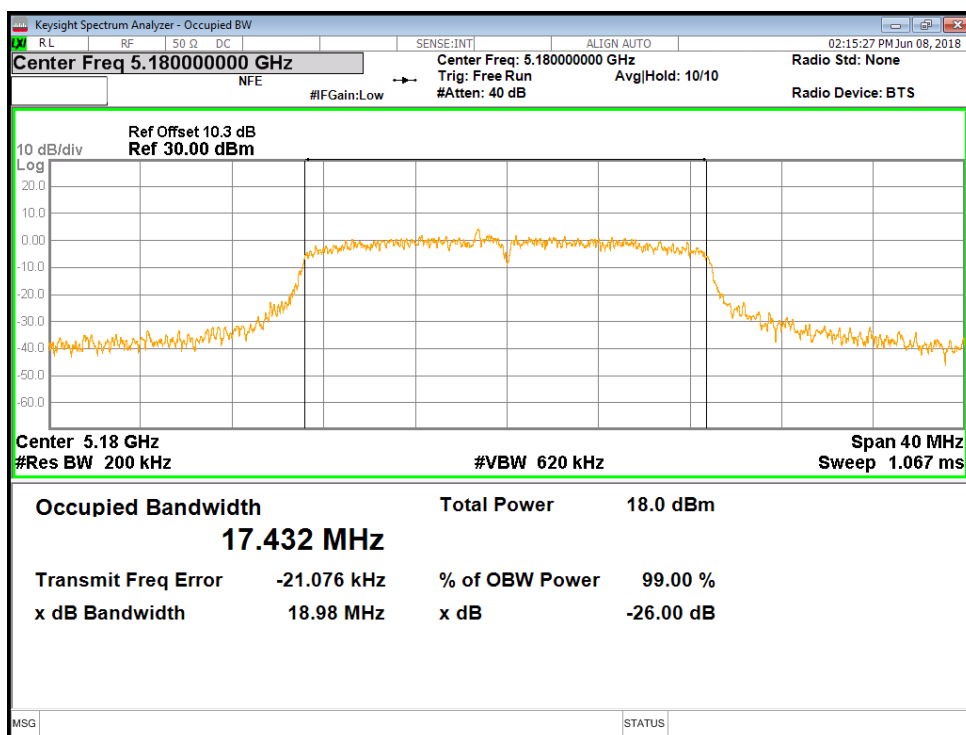


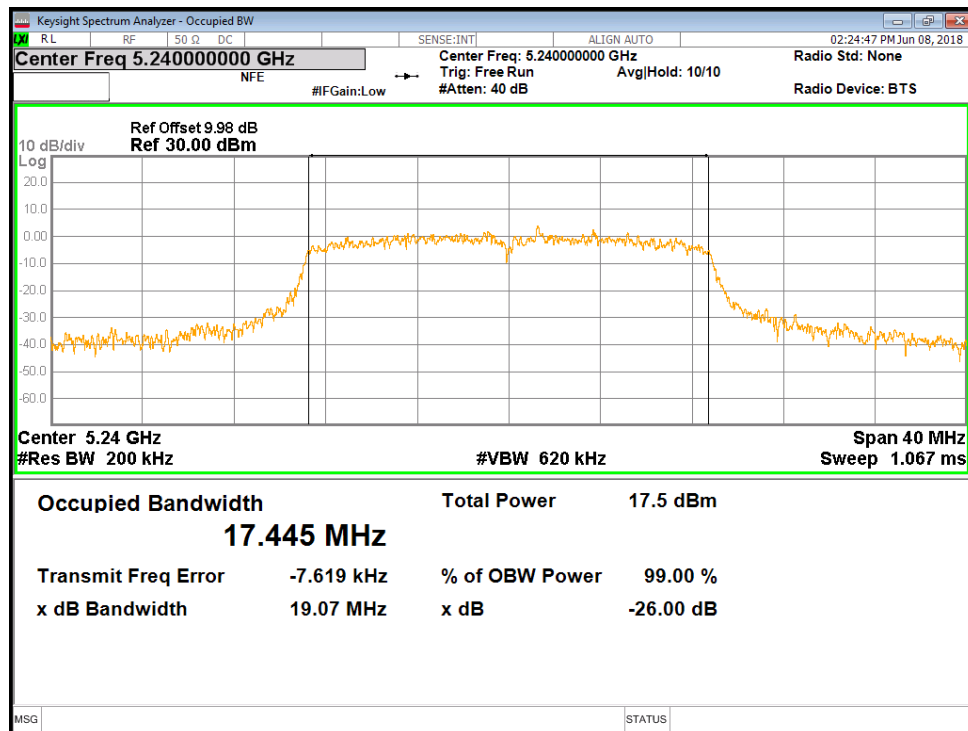
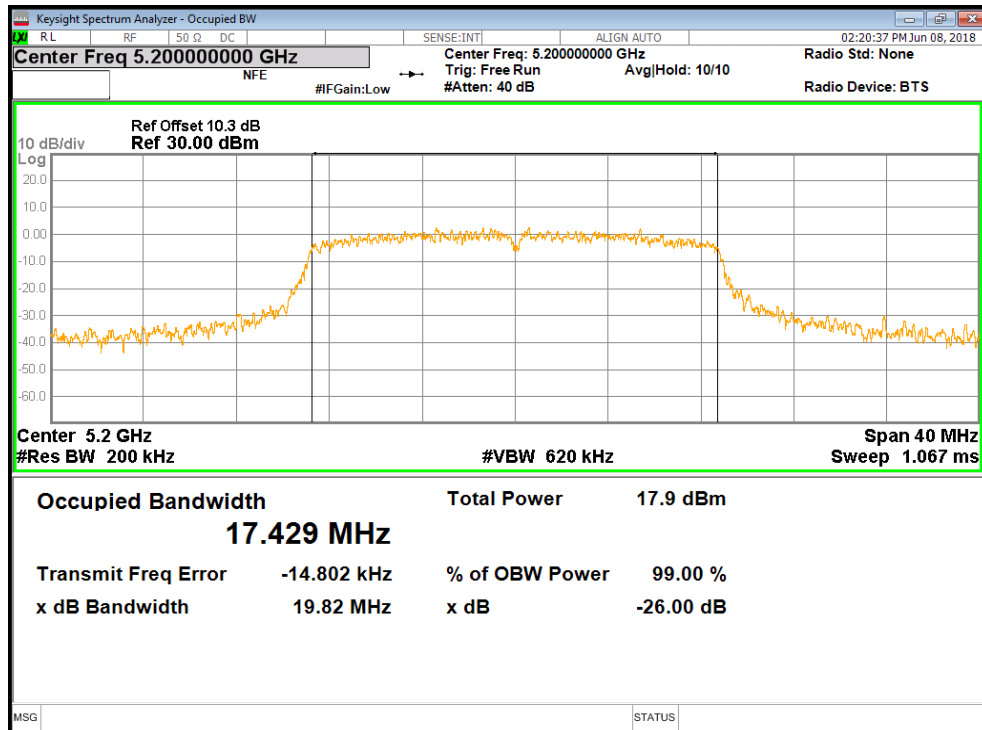
6.2.2. 802.11n HT20 MODE

6.2.2.1. UNII-1 BAND

Channel	Frequency (MHz)	26 dB BW
Low	5180	18.98
Mid	5200	19.82
High	5240	19.07

Channel	Frequency (MHz)	99% dB BW
Low	5180	17.432
Mid	5200	17.429
High	5240	17.445





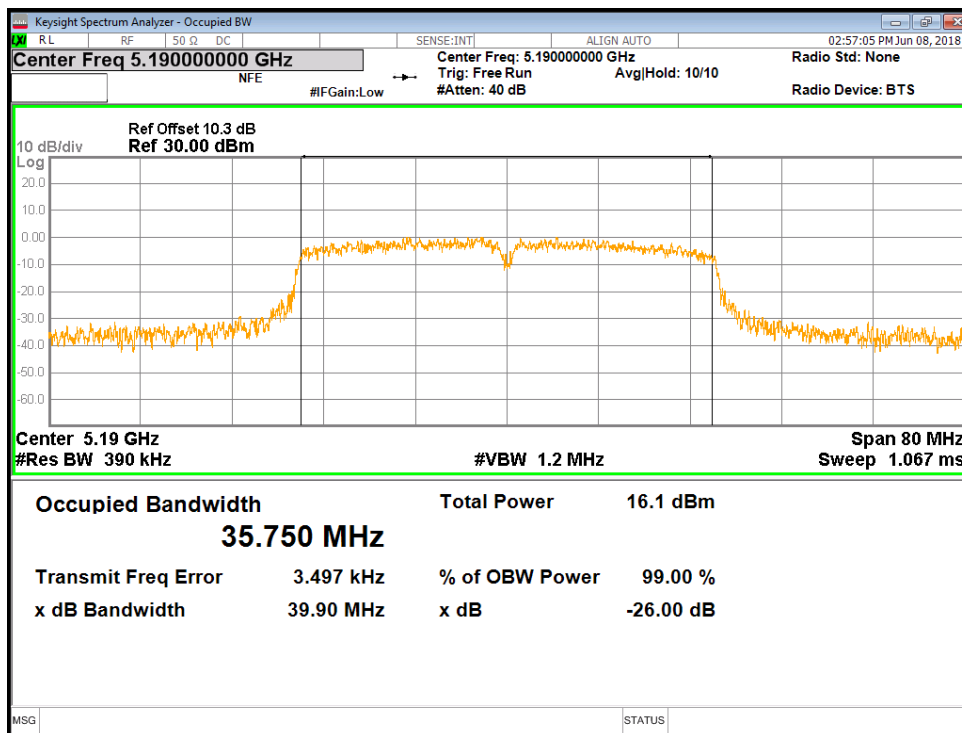


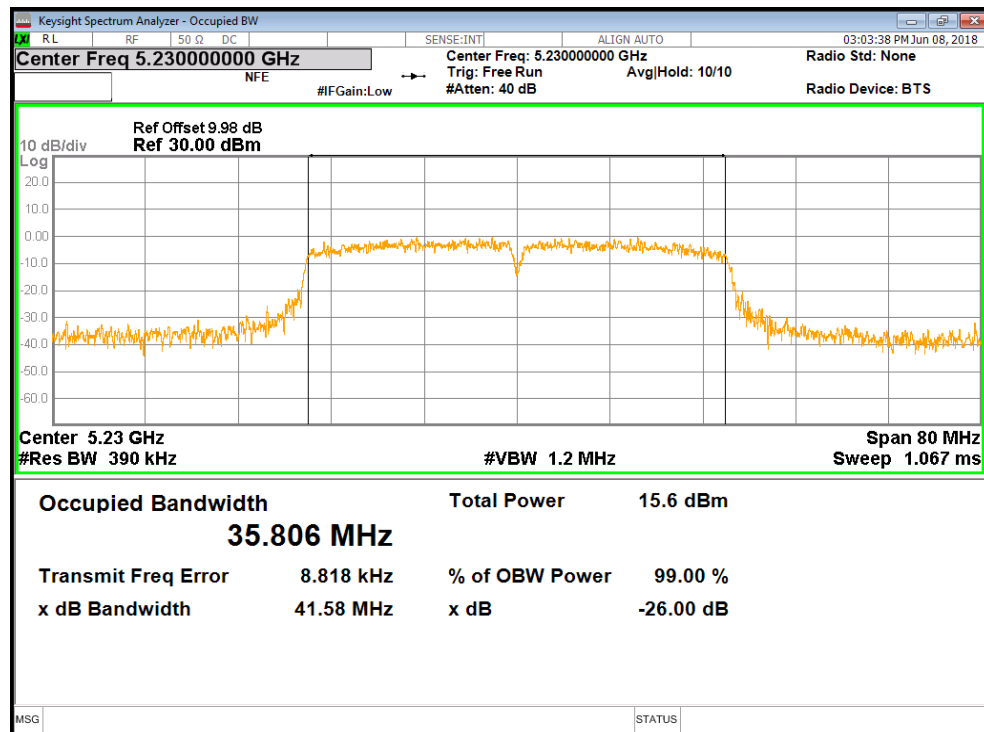
6.2.3. 802.11n HT40 MODE

6.2.3.1. UNII-1 BAND

Channel	Frequency (MHz)	26 dB BW
Low	5190	39.90
High	5230	41.58

Channel	Frequency (MHz)	99% dB BW
Low	5190	35.750
High	5230	35.806



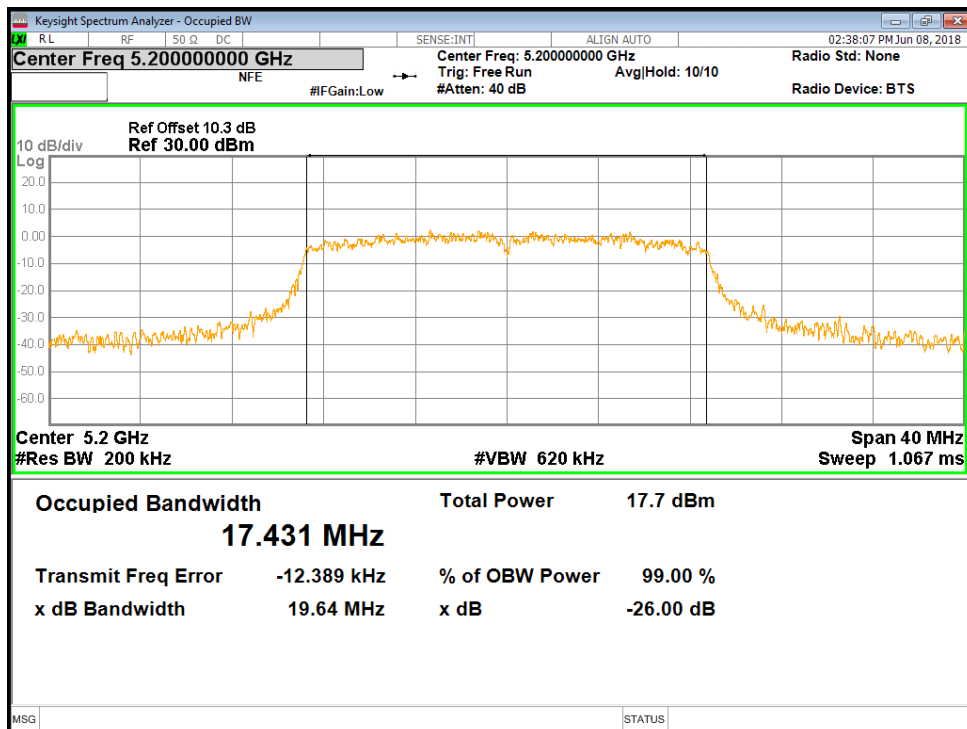
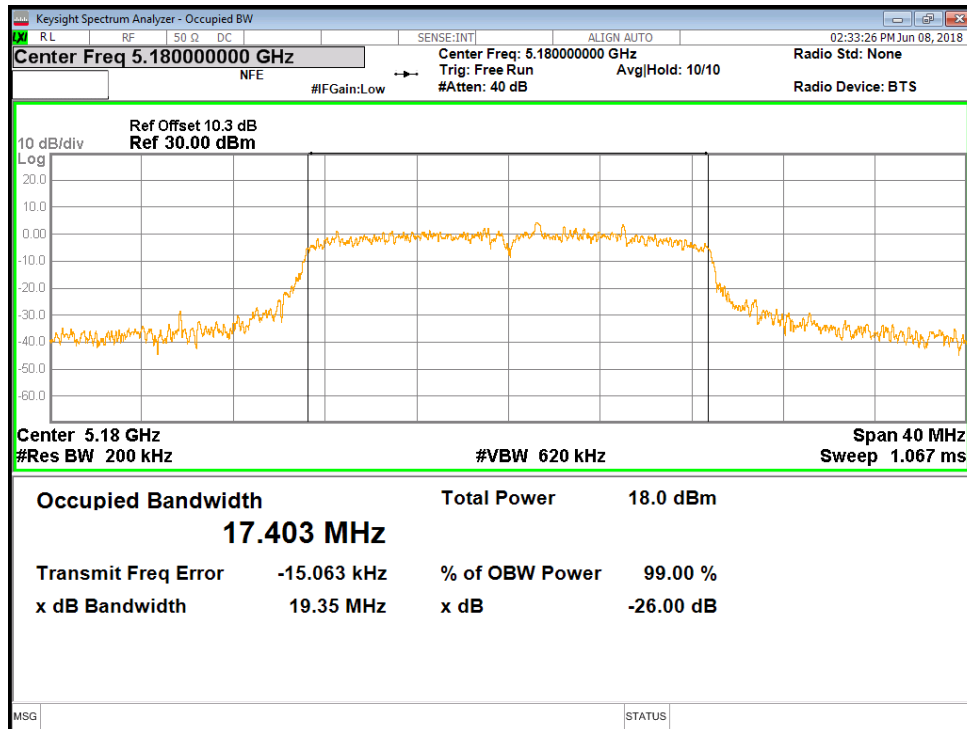


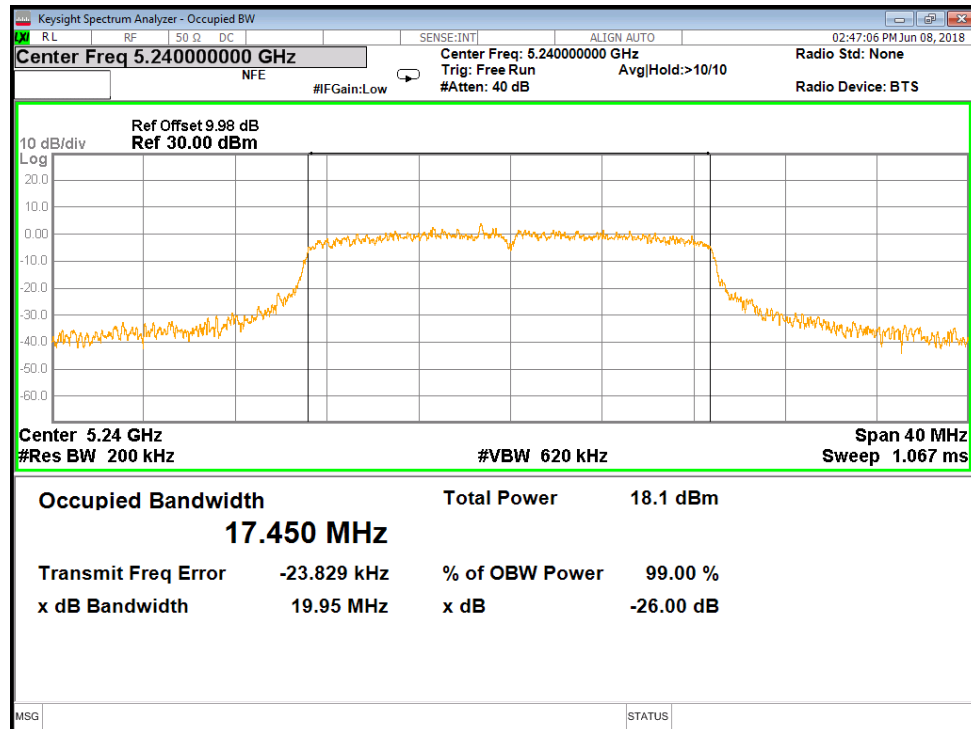
6.2.4. 802.11ac HT20 MODE

6.2.4.1. UNII-1 BAND

Channel	Frequency (MHz)	26 dB BW
Low	5180	19.35
Mid	5200	19.64
High	5240	19.95

Channel	Frequency (MHz)	99% dB BW
Low	5180	17.403
Mid	5200	17.431
High	5240	17.450





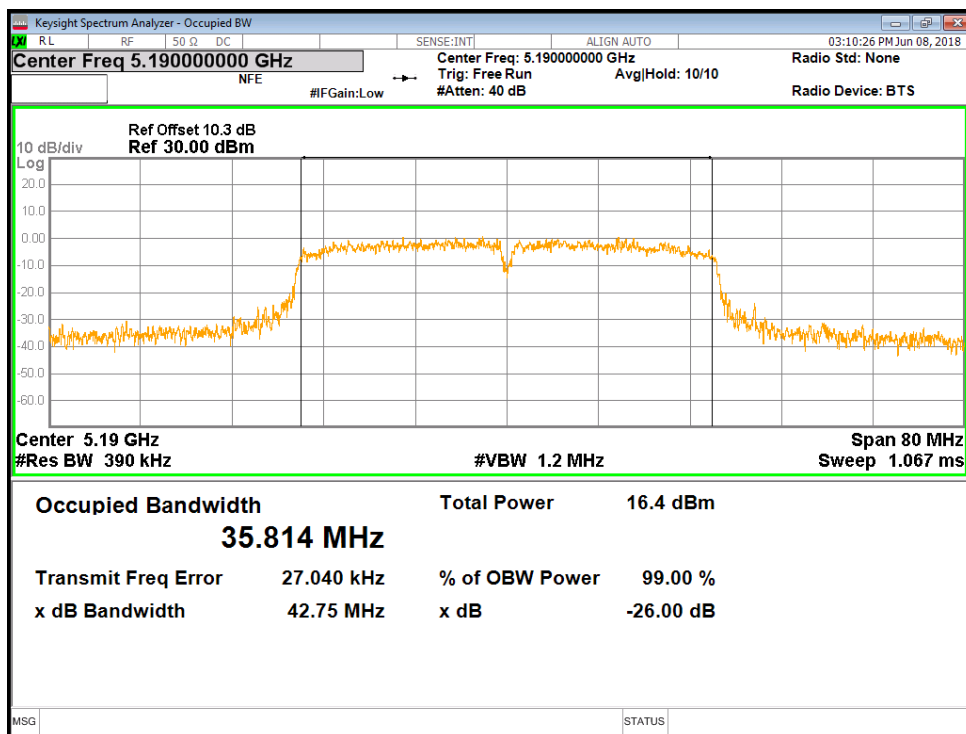


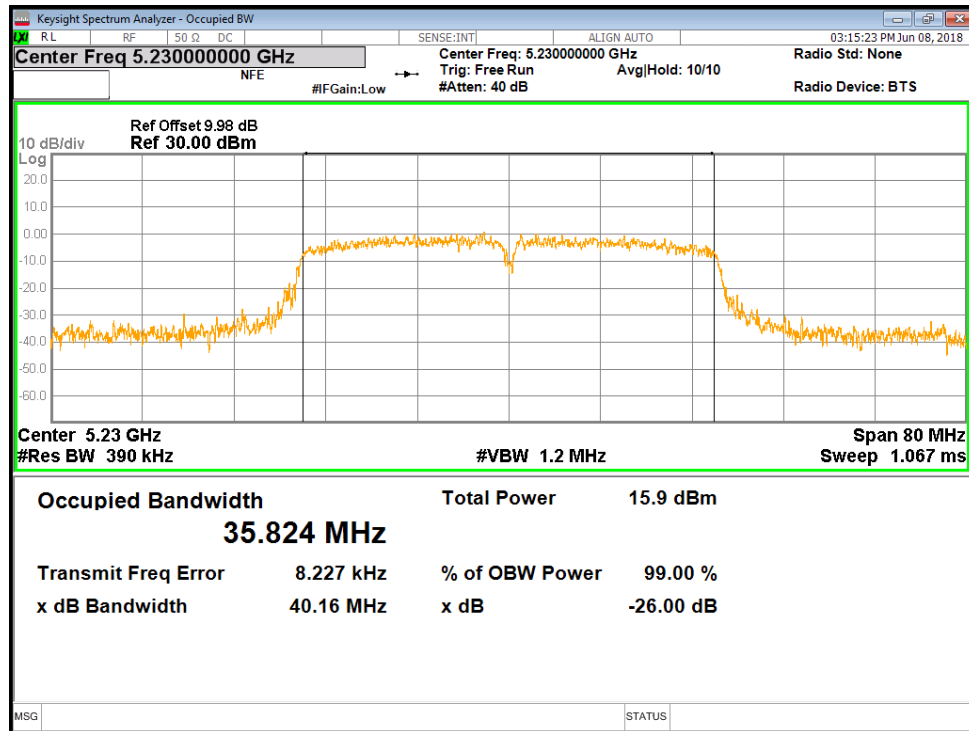
6.2.5. 802.11ac HT40 MODE

6.2.5.1. UNII-1 BAND

Channel	Frequency (MHz)	26 dB BW
Low	5190	42.75
High	5230	40.16

Channel	Frequency (MHz)	99% dB BW
Low	5190	35.814
High	5230	35.824





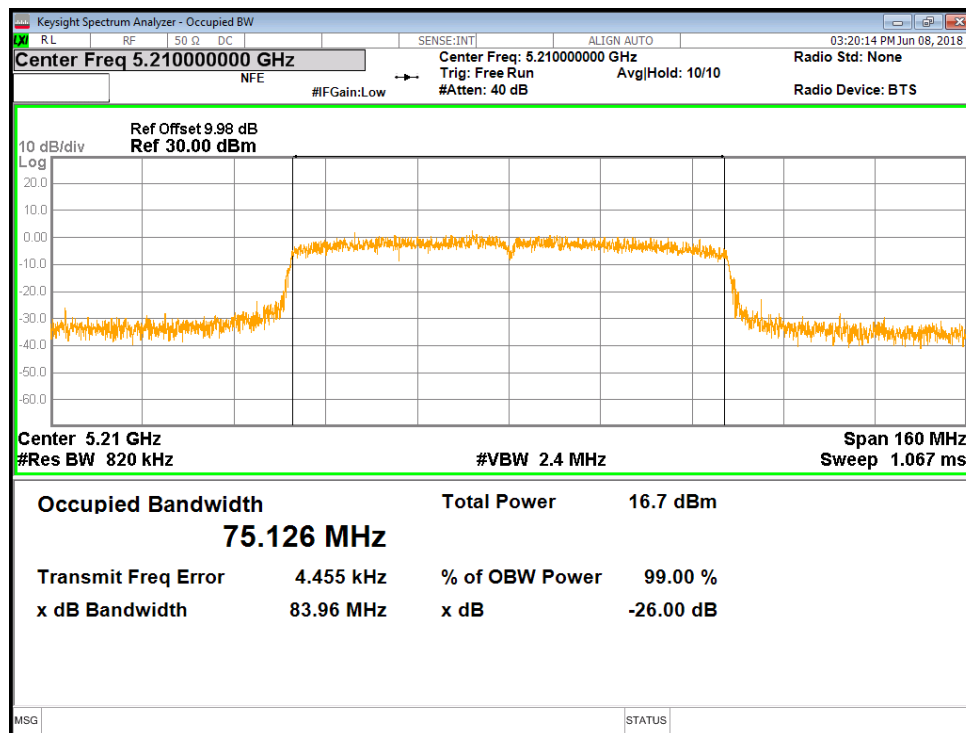


6.2.6. 802.11ac HT80 MODE

6.2.6.1. UNII-1 BAND

Channel	Frequency (MHz)	26 dB BW
Low	5210	83.96

Channel	Frequency (MHz)	99% dB BW
Low	5210	75.126



Note: Because 99% OBW for all channels and bandwidths are stays completely within the 5150-5250MHz band, so DFS test is not required.



6.3. MAXIMUM CONDUCTED OUTPUT POWER

LIMITS

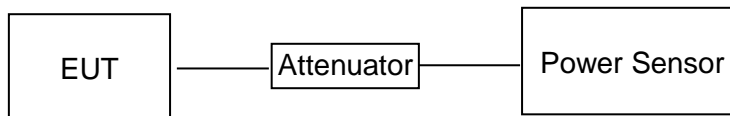
FCC Part15, Subpart E		
Test Item	Limit	Frequency Range (MHz)
Conducted Output Power	FCC client devices :250mW (24dBm)	5150-5250

TEST PROCEDURE

Refer to KDB 789033 D02 General UNII Test Procedures New Rules v02r01

Connect the EUT to the a broadband peak RF power meter, the power meter shall have a video bandwidth that is greater than or equal to the bandwidth and shall utilize a fast-responding diode detector.

TEST SETUP



RESULTS



6.3.1. 802.11a MODE

6.3.1.1. UNII-1 BAND

Test Channel	Frequency (MHz)	ANT	Maximum AVG Conducted Output Power (dBm)		FCC Limit (dBm)
			Single	Total	
Low	5180	1	13.79	/	24
Middle	5200	1	13.98		
High	5240	1	13.59		

6.3.2. 802.11n HT20 MODE

6.3.2.1. UNII-1 BAND

Test Channel	Frequency (MHz)	ANT	Maximum AVG Conducted Output Power (dBm)		FCC Limit (dBm)
			Single	Total	
Low	5180	1	13.46	/	24
Middle	5200	1	13.78		
High	5240	1	13.19		

6.3.3. 802.11n HT40 MODE

6.3.3.1. UNII-1 BAND

Test Channel	Frequency (MHz)	ANT	Maximum AVG Conducted Output Power (dBm)		FCC Limit (dBm)
			Single	Total	
Low	5190	1	11.62	/	24
High	5230	1	11.39		



6.3.4. 802.11ac HT20 MODE

6.3.4.1. UNII-1 BAND

Test Channel	Frequency (MHz)	ANT	Maximum AVG Conducted Output Power (dBm)		FCC Limit (dBm)
			Single	Total	
Low	5180	1	13.52	/	24
Middle	5200	1	13.48		
High	5240	1	13.40		

6.3.5. 802.11ac HT40 MODE

6.3.5.1. UNII-1 BAND

Test Channel	Frequency (MHz)	ANT	Maximum AVG Conducted Output Power (dBm)		FCC Limit (dBm)
			Single	Total	
Low	5190	1	12.02	/	24
High	5230	1	11.53		

6.3.6. 802.11ac HT80 CDD MODE

6.3.6.1. UNII-1 BAND

Test Channel	Frequency (MHz)	ANT	Maximum AVG Conducted Output Power (dBm)		FCC Limit (dBm)
			Single	Total	
Low	5210	1	11.89	/	24

Note: Because the maximum power is below 500mW, so TPC is not required.



6.4. POWER SPECTRAL DENSITY

LIMITS

FCC Part15, Subpart E		
Test Item	Limit	Frequency Range (MHz)
Power Spectral Density	FCC: Other than Mobile and portable:17dBm/MHz Mobile and portable:11dBm/MHz	5150-5250

TEST PROCEDURE

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

For U-NII-1, U-NII-2A and U-NII-2C band:

Center Frequency	The center frequency of the channel under test
Detector	RMS
RBW	1MHz
VBW	$\geq 3 \times \text{RBW}$
Span	Encompass the entire emissions bandwidth (EBW) of the signal
Trace	Max hold
Sweep time	Auto

For U-NII-3:

Center Frequency	The center frequency of the channel under test
Detector	RMS
RBW	500KHz
VBW	$\geq 3 \times \text{RBW}$
Span	Encompass the entire emissions bandwidth (EBW) of the signal
Trace	Max hold
Sweep time	Auto

Note:

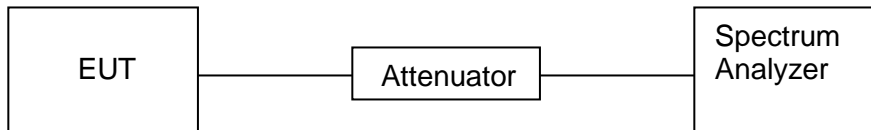
1. For UNII-3, according to KDB publication 789033 D02 General UNII Test Procedures New Rules v01, section II.F.5., it is acceptable to set RBW at 1MHz and VBW at 3MHz if the spectrum analyzer does not have 500kHz RBW.



2. The value measured with RBW=1MHz is to be added with $10\log(500\text{kHz}/1\text{MHz})$ which is - 3dB. For example, if the measured value is +10dBm using RBW=1MHz (that is +10dBm/MHz), then the converted value will be +7dBm/500kHz.

Allow trace to fully stabilize and use the peak marker function to determine the maximum amplitude level within the RBW.

TEST SETUP



RESULTS

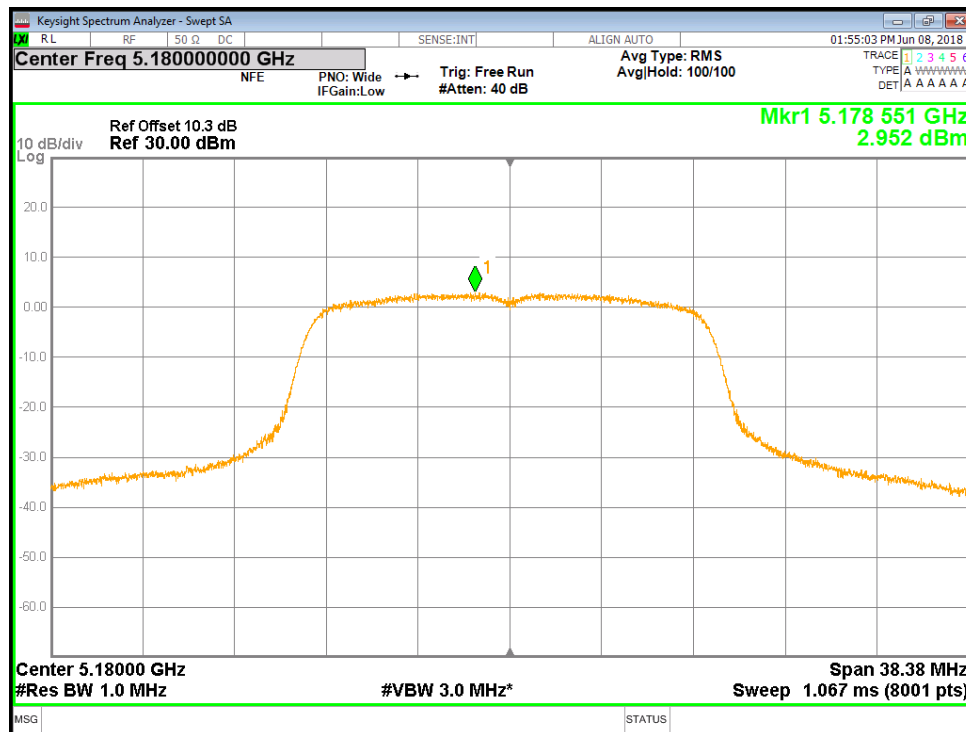


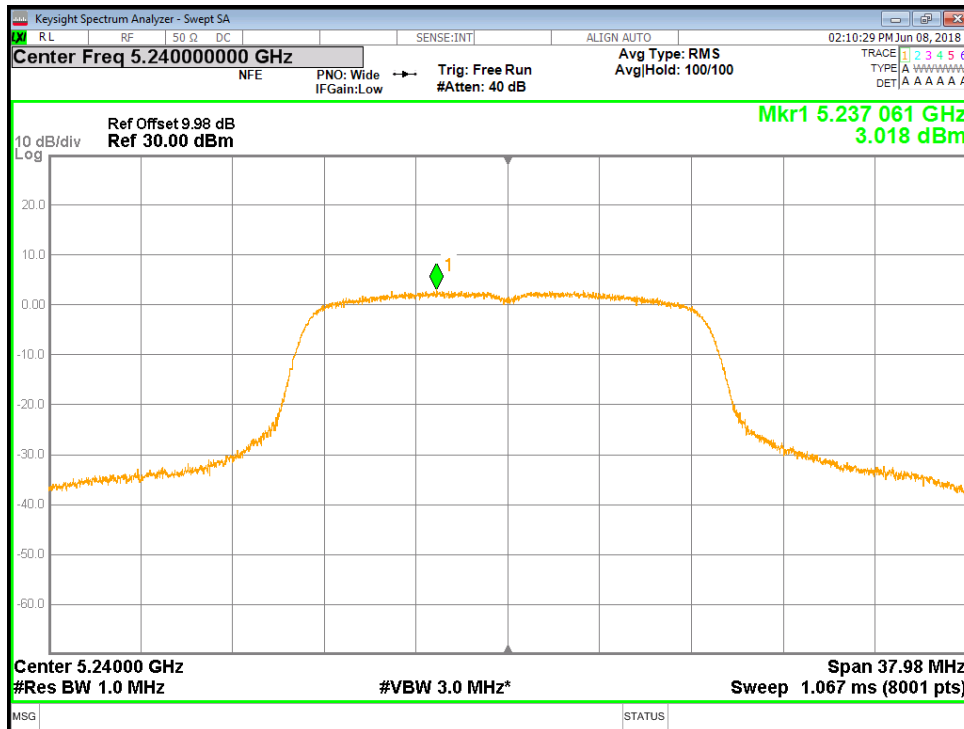
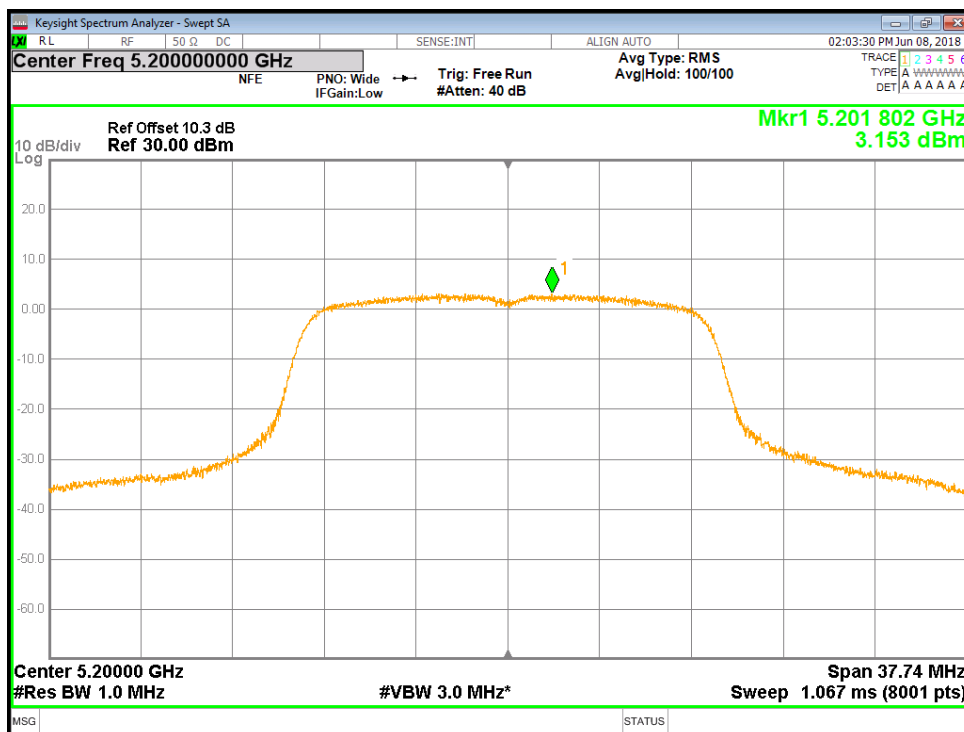
6.4.1. 802.11a MODE

6.4.1.1. UNII-1 BAND

Test Channel	Frequency (MHz)	ANT	Meas. Level (dBm/MHz)		FCC Limit (dBm/MHz)
			Single	Total	
Low	5180	1	3.142	/	11
Middle	5200	1	3.343		
High	5240	1	3.208		

Note: 1.PSD=Meas. Level+ Correction Factor
2. About correction Factor please refer to section 6.1





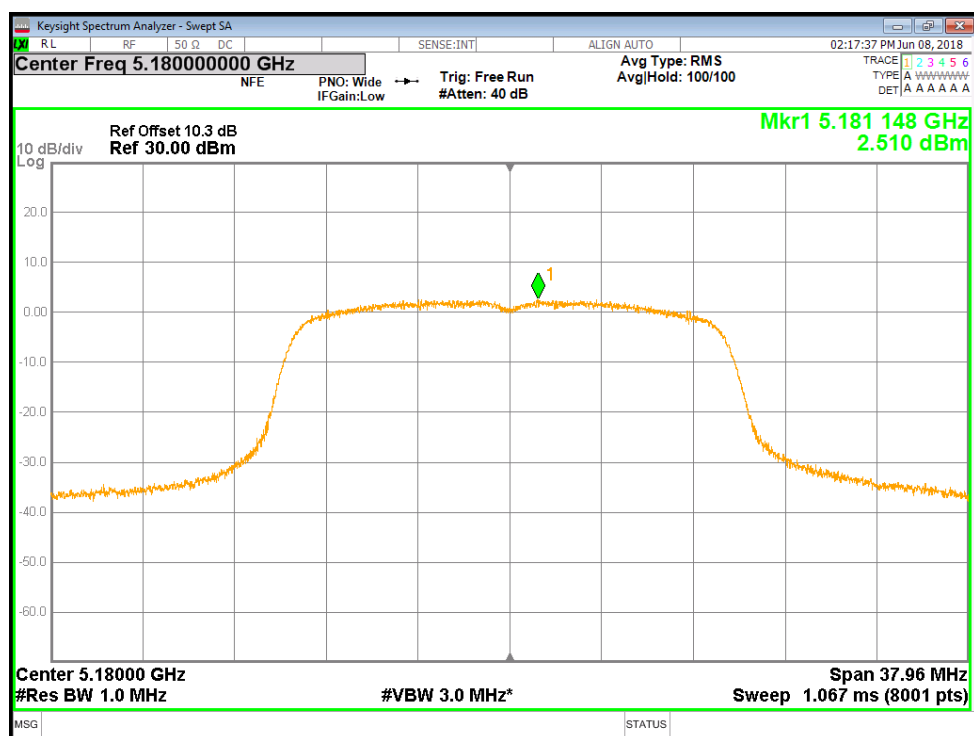


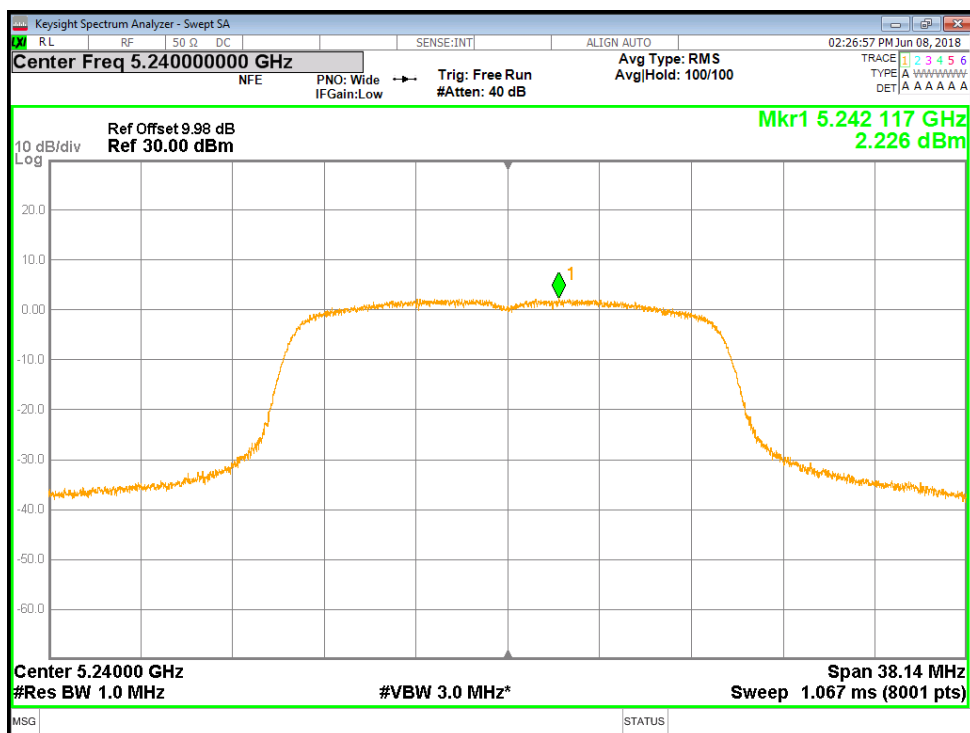
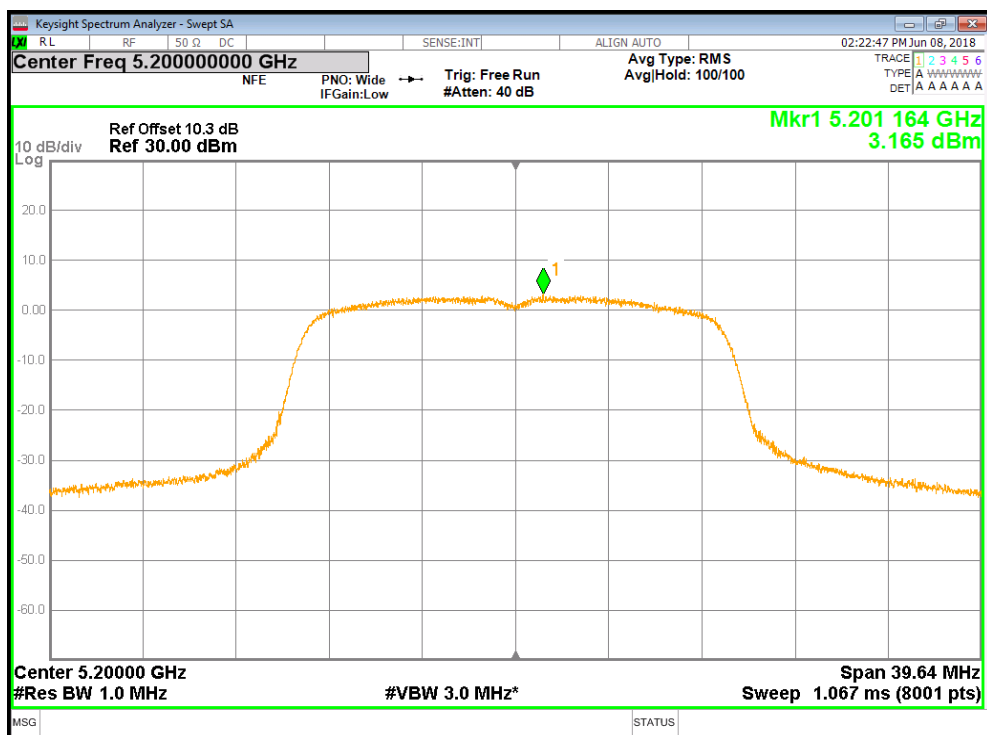
6.4.2. 802.11n HT20 MODE

6.4.2.1. UNII-1 BAND

Test Channel	Frequency (MHz)	ANTEN NA	Meas. Level (dBm/MHz)		FCC Limit (dBm/MHz)
			Single	Total	
Low	5180	1	2.720	/	11
Middle	5200	1	3.375	/	
High	5240	1	2.436	/	

Note: 1. PSD=Meas. Level+ Correction Factor
2. About correction Factor please refer to section 6.1





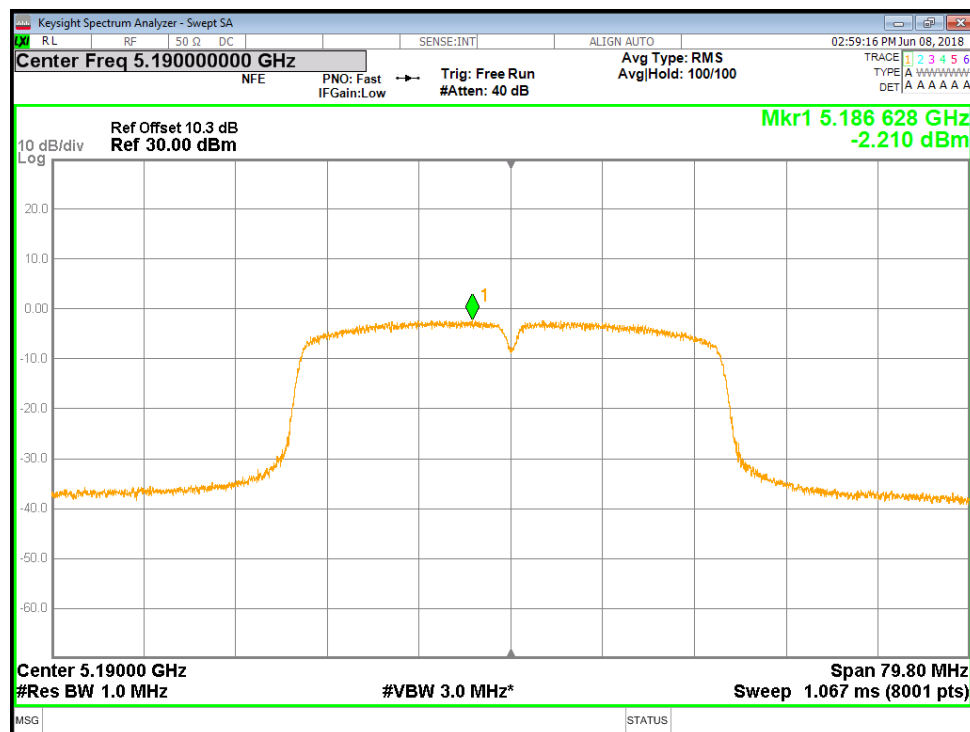


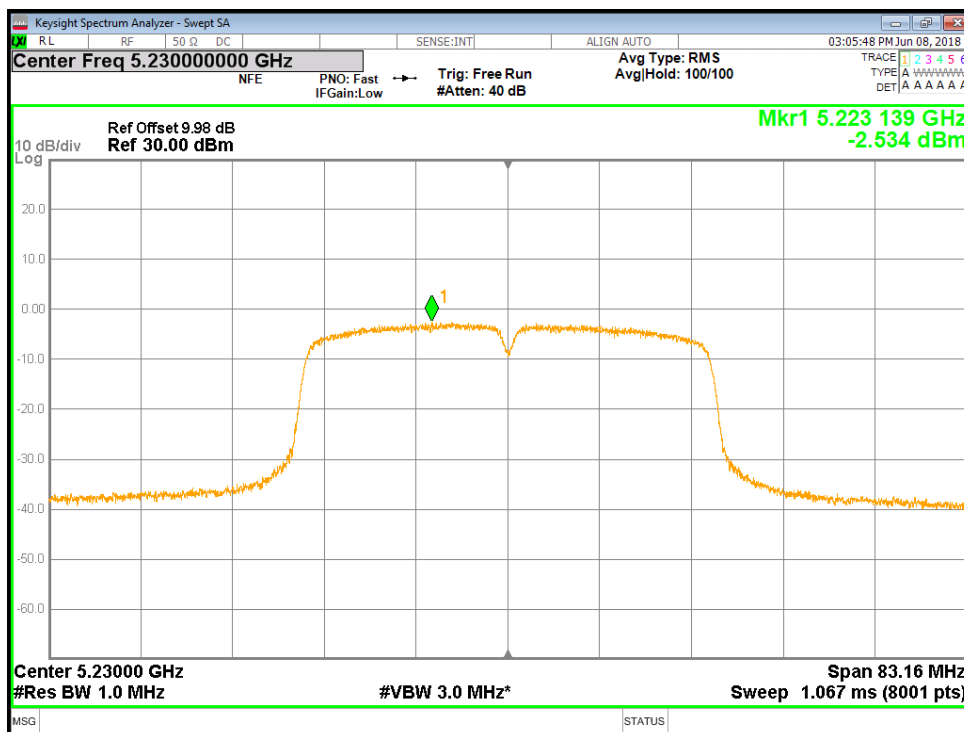
6.4.3. 802.11n HT40 MODE

6.4.3.1. UNII-1 BAND

Test Channel	Frequency (MHz)	ANTEN NA	Meas. Level (dBm/MHz)		FCC Limit (dBm/MHz)
			Single	Total	
Low	5190	1	-1.780	/	11
High	5230	1	-2.104	/	

Note: 1.PSD=Meas. Level+ Correction Factor
2. About correction Factor please refer to section 6.1





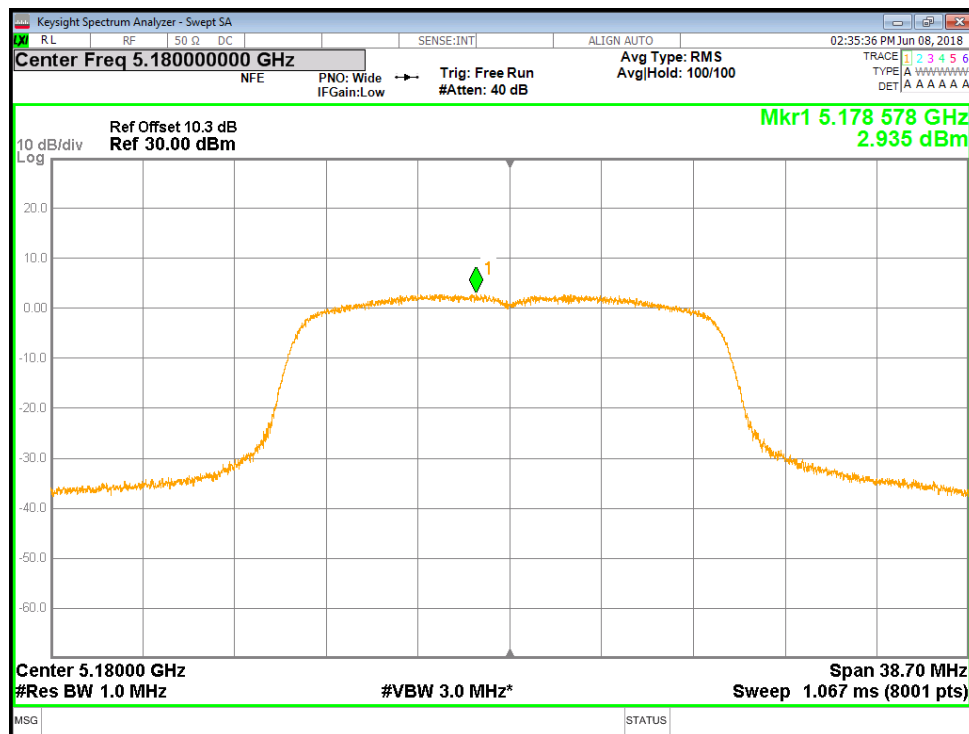


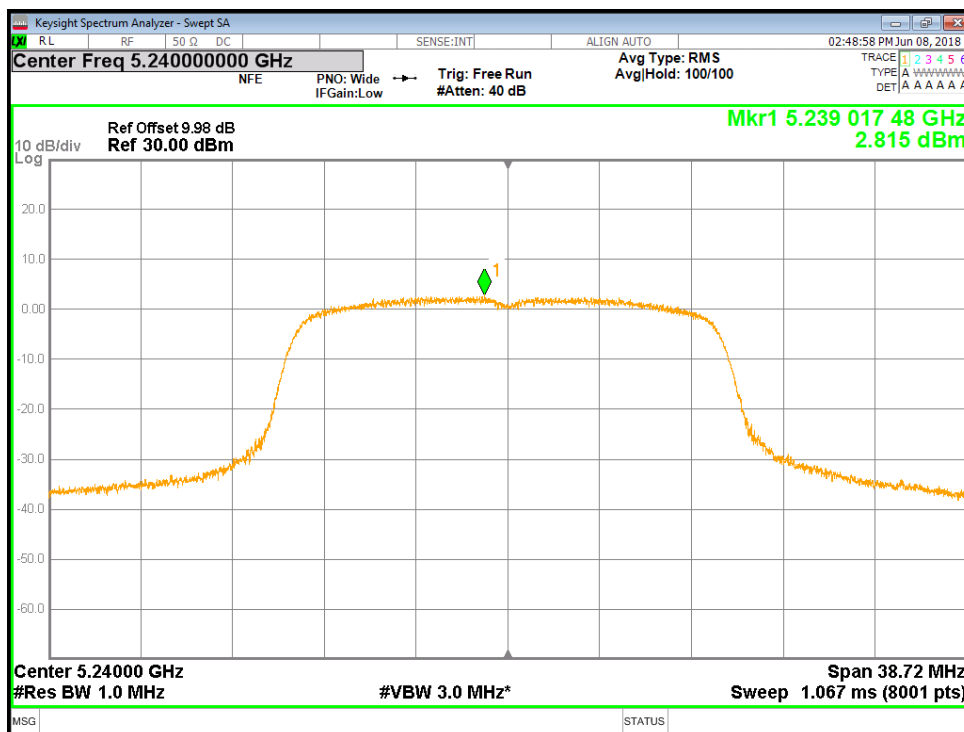
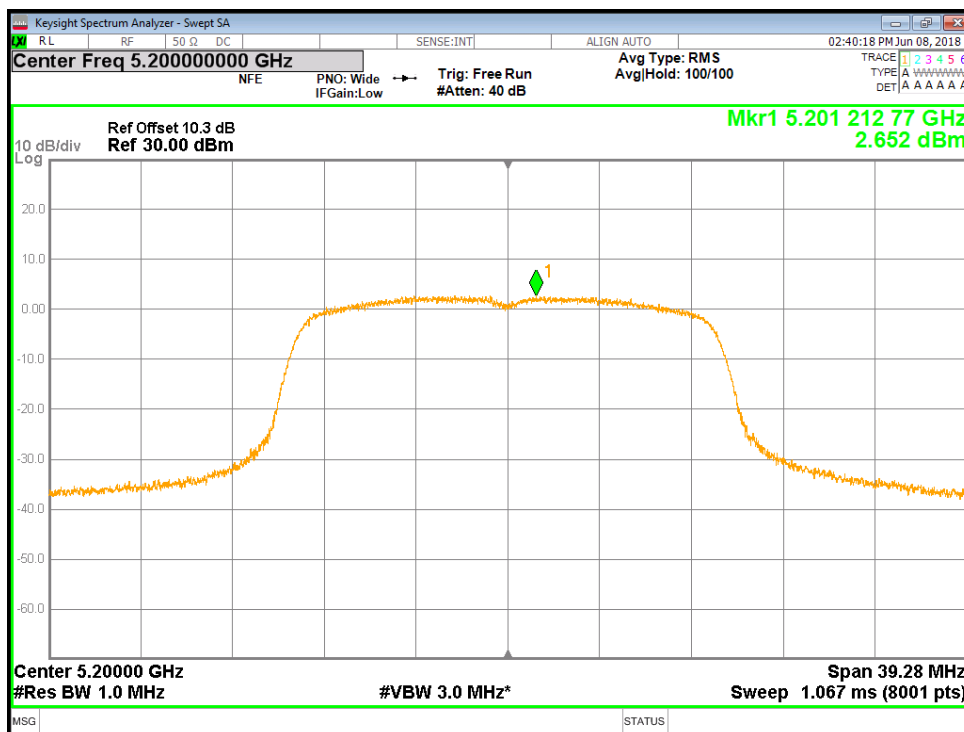
6.4.4. 802.11ac HT20 MODE

6.4.4.1. UNII-1 BAND

Test Channel	Frequency (MHz)	ANTEN NA	Meas. Level (dBm/MHz)		FCC Limit (dBm/MHz)
			Single	Total	
Low	5180	1	3.145	/	11
Middle	5200	1	2.862	/	
High	5240	1	3.025	/	

Note: 1. PSD=Meas. Level+ Correction Factor
2. About correction Factor please refer to section 6.1





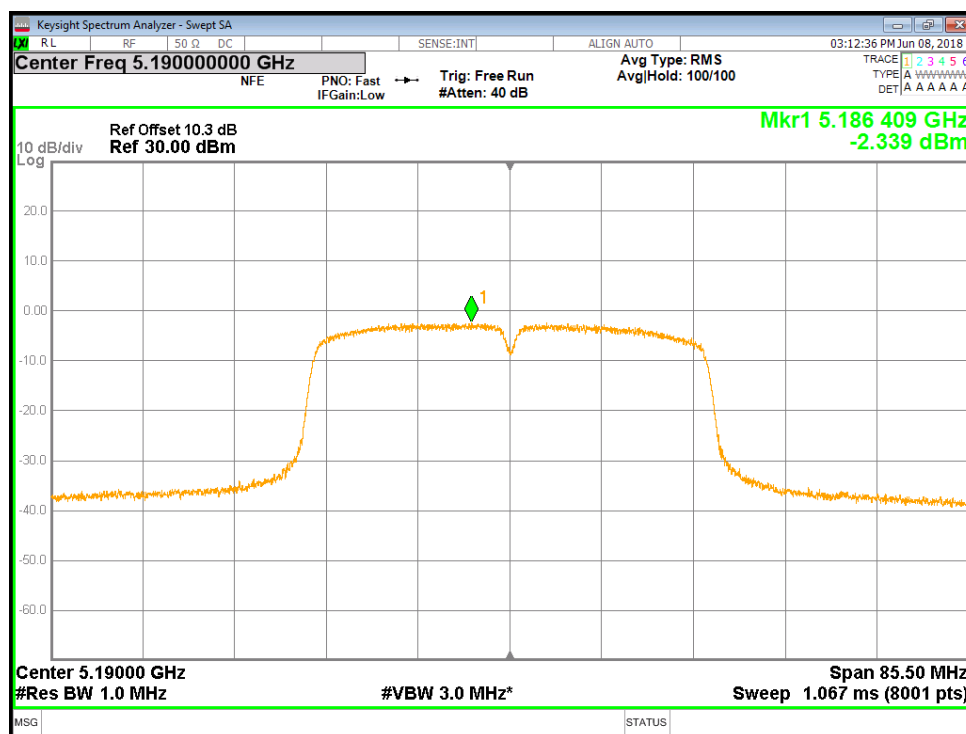


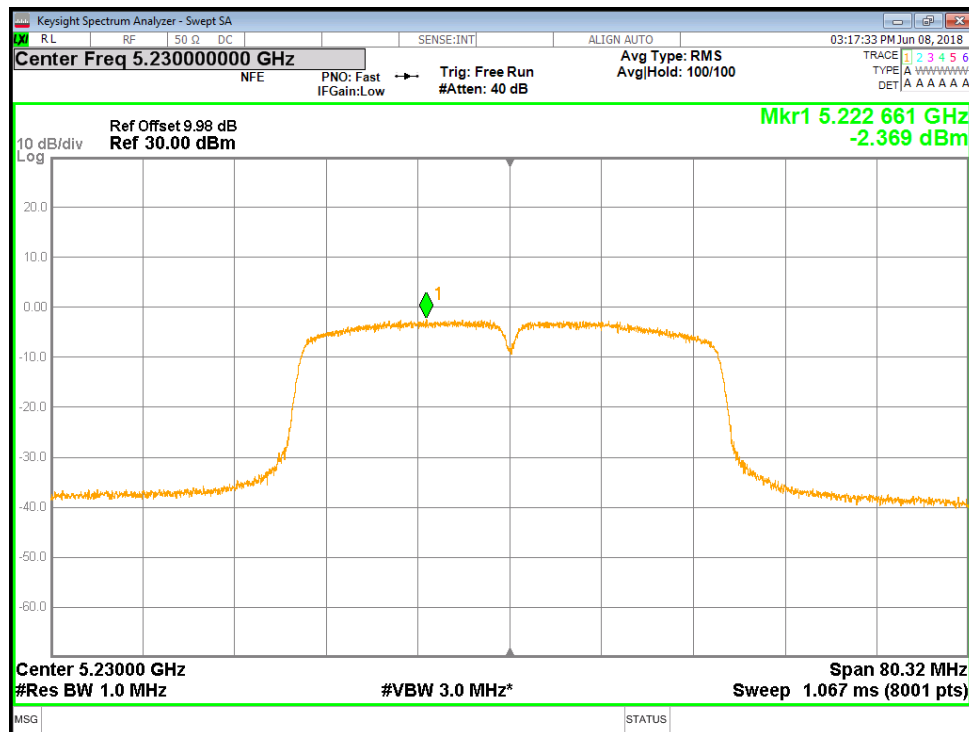
6.4.5. 802.11ac HT40 MODE

6.4.5.1. UNII-1 BAND

Test Channel	Frequency (MHz)	ANTEN NA	Meas. Level (dBm/MHz)		FCC Limit (dBm/MHz)
			Single	Total	
Low	5190	1	-1.909	/	11
High	5230	1	-1.939	/	

Note: 1.PSD=Meas. Level+ Correction Factor
2. About correction Factor please refer to section 6.1





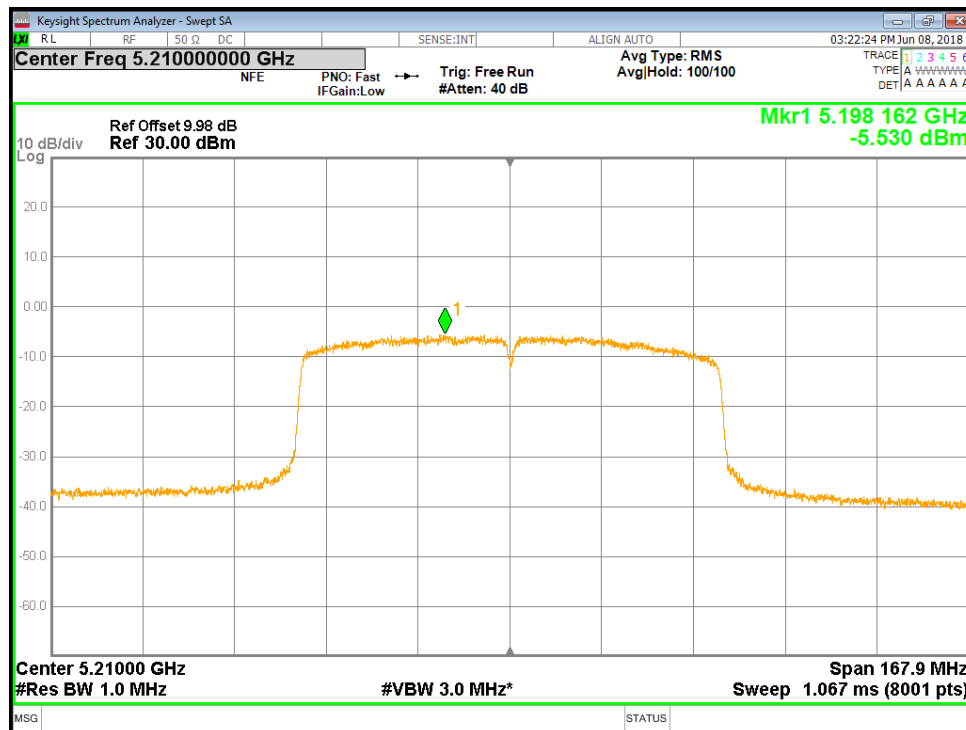


6.4.6. 802.11ac HT80 MODE

6.4.6.1. UNII-1 BAND

Test Channel	Frequency (MHz)	ANTEN NA	Meas. Level (dBm/MHz)		FCC Limit (dBm/MHz)
			Single	Total	
Low	5210	1	-4.71	/	11

Note: 1.PSD=Meas. Level+ Correction Factor
2. About correction Factor please refer to section 6.1





7. RADIATED TEST RESULTS

LIMITS

Please refer to FCC §15.205, §15.209 and §15.407(b) (4)

Please refer to RSS-GEN Clause 8.9 (Transmitter)

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

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

Note: 1) At frequencies at or above 30 MHz, measurements may be performed at a distance other than what is specified provided: measurements are not made in the near field except where it can be shown that near field measurements are appropriate due to the characteristics of the device; and it can be demonstrated that the signal levels needed to be measured at the distance employed can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 meters unless it can be further demonstrated that measurements at a distance of 30 meters or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse linear-distance for field strength measurements; inverse-linear-distance-squared for power density measurements).

(2) At frequencies below 30 MHz, measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field. Pending the development of an appropriate measurement procedure for measurements performed below 30 MHz, when performing measurements at a closer distance than specified, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade). This paragraph (f) shall not apply to Access BPL devices operating below 30 MHz.



Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table.

LIMITS OF RADIATED EMISSION MEASUREMENT (Below 1GHz)			
Frequency Range (MHz)	Field Strength Limit (uV/m) at 3 m	Field Strength Limit (dBuV/m) at 3 m	
		Quasi-Peak	
30 - 88	100	40	
88 - 216	150	43.5	
216 - 960	200	46	
Above 960	500	54	
Above 1000	500	Peak	Average
		74	54

Limits of unwanted emission out of the restricted bands

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1GHz)		
Frequency Range (MHz)	EIRP Limit	Field Strength Limit (dBuV/m) at 3 m
30 - 88		
5150~5250 MHz	PK:-27 (dBm/MHz)	PK:68.2(dBμV/m)
5250~5350 MHz		
5470~5725 MHz		
5725~5850 MHz	PK:-27 (dBm/MHz) *1 PK:10 (dBm/MHz) *2 PK:15.6 (dBm/MHz) *3 PK:27 (dBm/MHz) *4	PK: 68.2(dBμV/m) *1 PK:105.2 (dBμV/m) *2 PK: 110.8(dBμV/m) *3 PK:122.2 (dBμV/m) *4

Note:

*1 beyond 75 MHz or more above of the band edge.

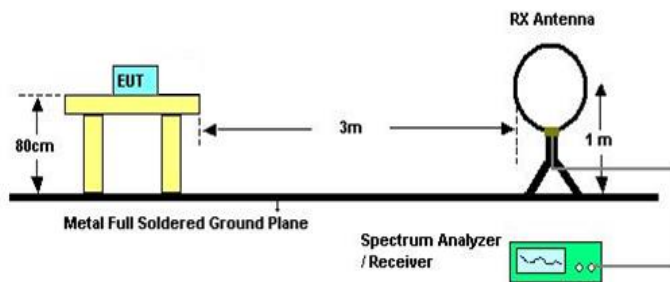
*2 below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above.

*3 below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above.

*4 from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

TEST SETUP AND PROCEDURE

Below 30MHz

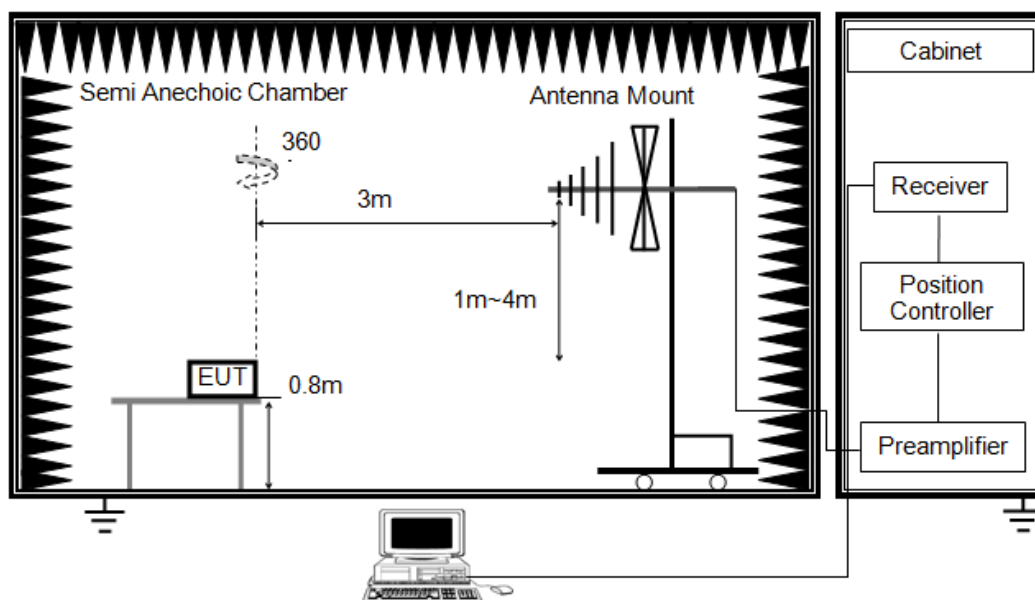


The setting of the spectrum analyser

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

1. The testing follows the guidelines in ANSI C63.10-2013 and 414788 D01 Radiated Test Site v01.
2. The EUT was arranged to its worst case and then turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
3. The EUT was placed on a turntable with 80cm meter above ground.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
5. The radiated emission limits are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.
6. For measurement below 1GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured. If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.
7. Although these tests were performed other than open area test site, adequate comparison measurements were confirmed against 30m open area test site. Therefore sufficient tests were made to demonstrate that the alternative site produces results that correlate with the ones of tests made in an open field based on KDB 414788.

Below 1G

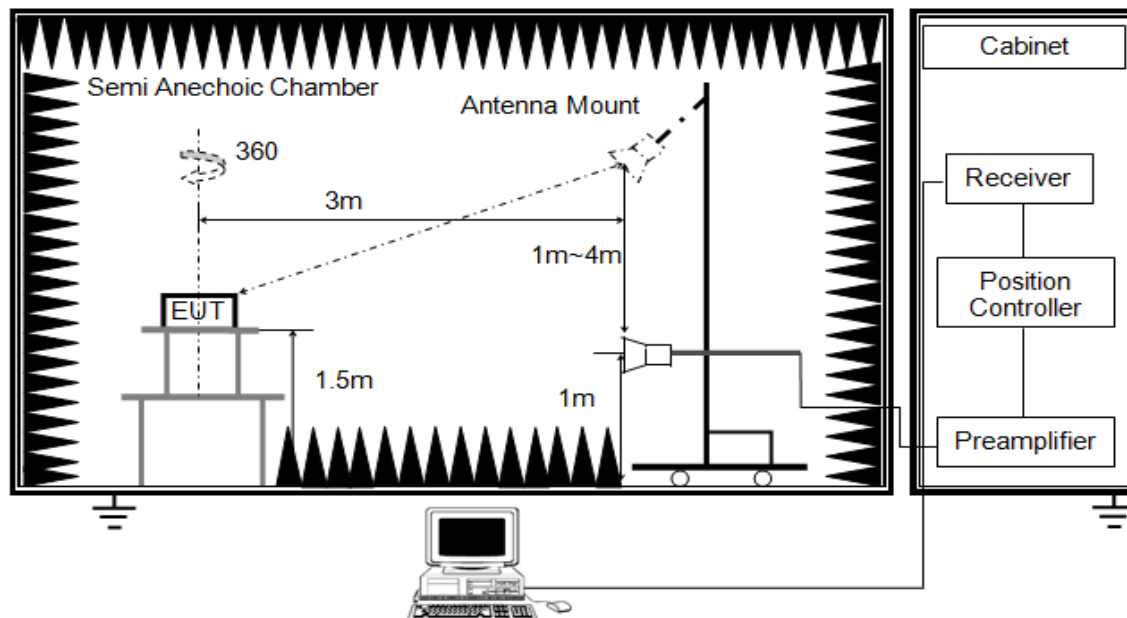


The setting of the spectrum analyser

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

1. The testing follows the guidelines in ANSI C63.10-2013.
2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
3. The EUT was placed on a turntable with 0.8 meter above ground.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
5. For measurement below 1GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured. If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.

ABOVE 1G

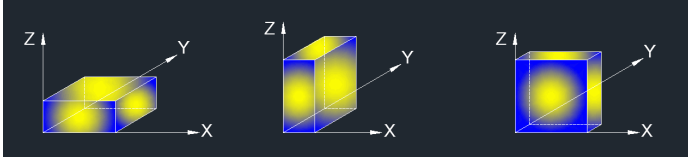


The setting of the spectrum analyser

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

1. The testing follows the guidelines in ANSI C63.10-2013.
2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
3. The EUT was placed on a turntable with 1.5m above ground.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
5. For measurement above 1GHz, the emission measurement will be measured by the peak detector. This peak level, once corrected, must comply with the limit specified in Section 15.209.
6. For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 3 MHz for peak measurements and 1 MHz resolution bandwidth with 1/T video bandwidth with peak detector. For the Duty Cycle please refer to clause 6.1.ON TIME AND DUTY CYCLE.

X axis, Y axis, Z axis positions:



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

Note 2: All the EUT's emissions had been evaluated for simultaneous transmission with the other 2.4GHz(2.4G SRD and 2.4G WiFi) and 915MHz transmitter and there were no any additional or worse emissions found.

Note 3: For all radiated measurements, EUT was worked in stand-alone mode but it can simulated the communication between PC and the accessories through software.



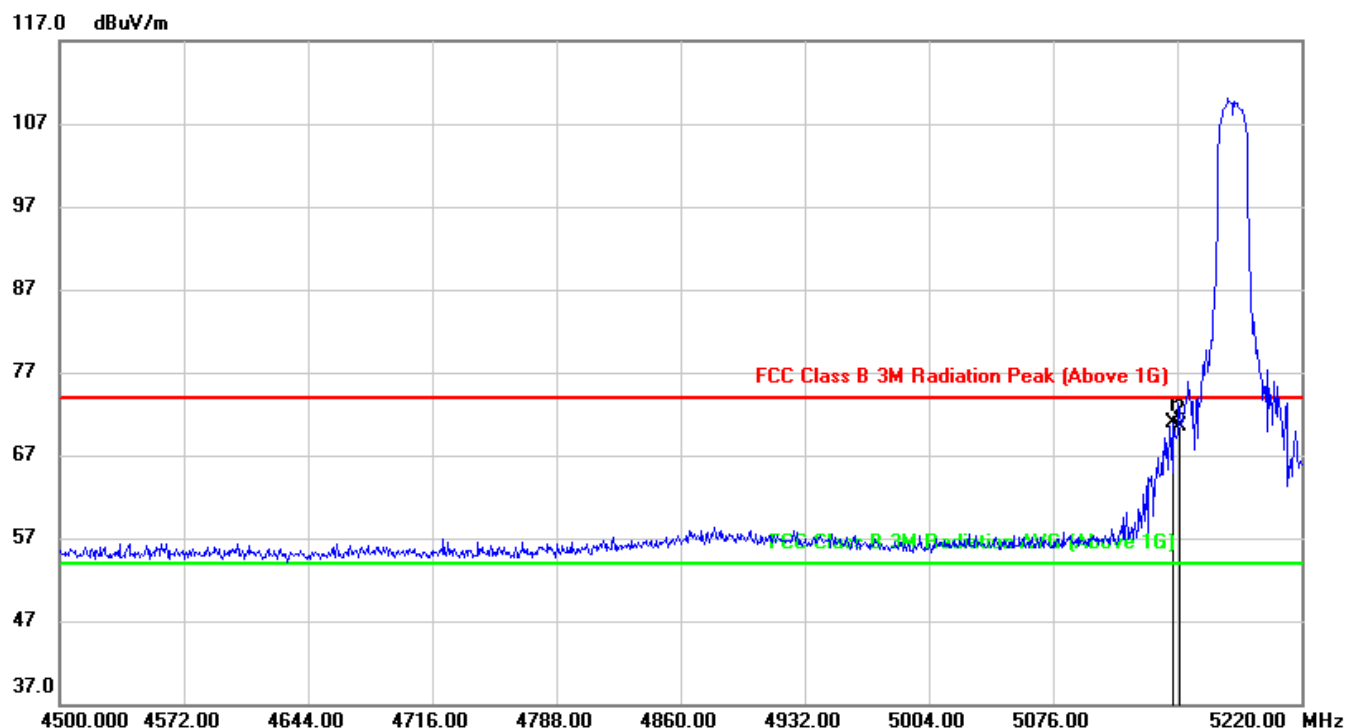
7.1. 802.11a MODE

7.1.1. UNII-1 BAND

RESTRICTED BANDEDGE LOW CHANNEL

HORIZONTAL RESULTS

PEAK



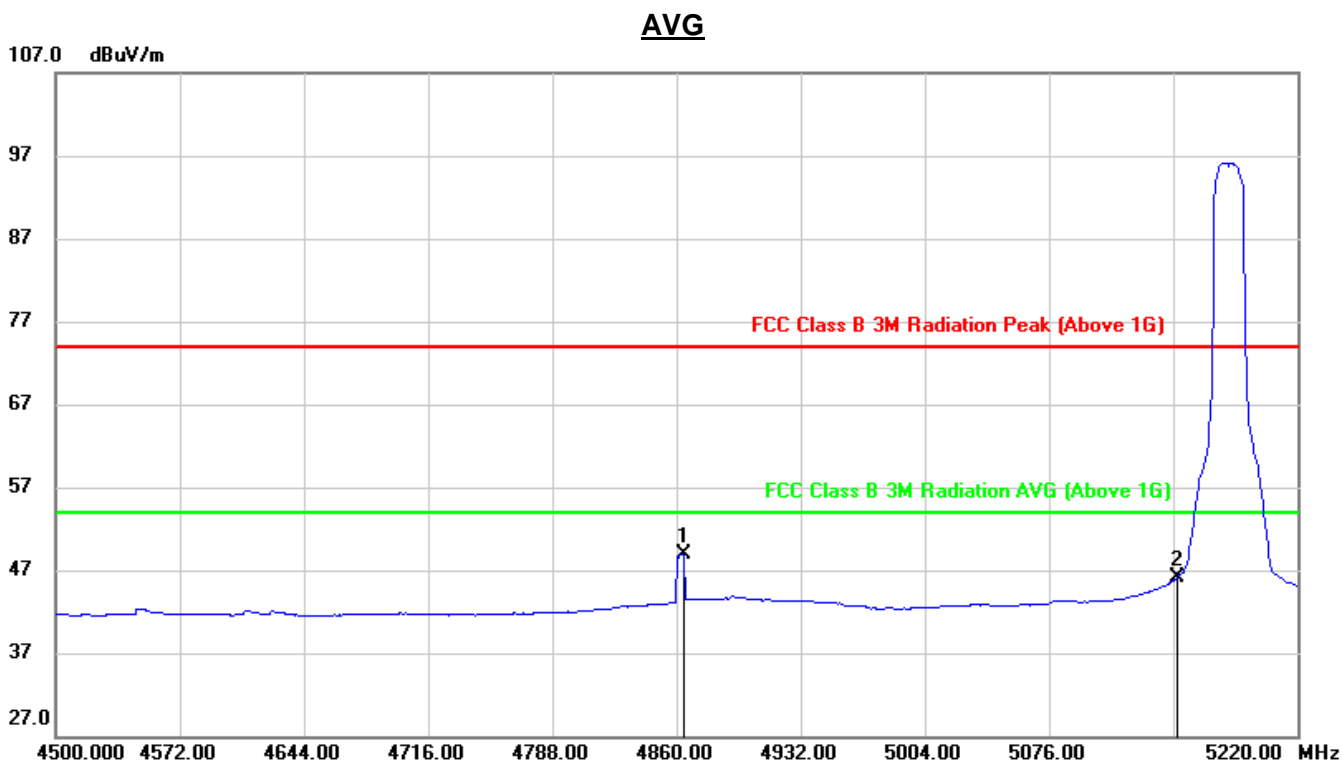
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5145.840	30.44	40.38	70.82	74.00	-3.18	peak
2	5150.000	30.02	40.40	70.42	74.00	-3.58	peak

Note: 1. Measurement = Reading Level + Correct Factor.

Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4864.320	9.13	39.75	48.88	54.00	-5.12	AVG
2	5150.000	5.70	40.40	46.10	54.00	-7.90	AVG

Note: 1. Measurement = Reading Level + Correct Factor.

Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: $VBW=1/Ton=0.5K$, where: Ton is transmit duration.

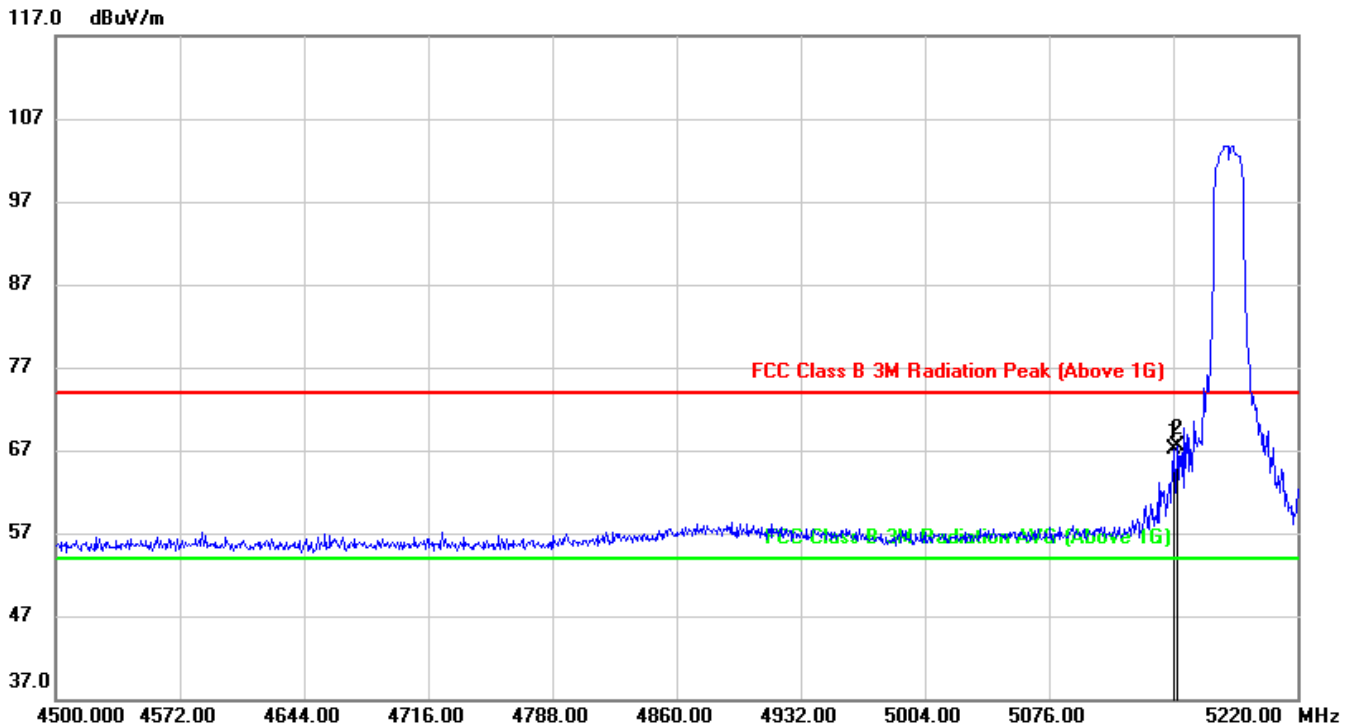
5. For transmit duration, please refer to clause 6.1.

6. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



VERTICAL RESULTS

PEAK



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5148.720	26.46	40.60	67.06	74.00	-6.94	peak
2	5150.000	26.92	40.60	67.52	74.00	-6.48	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

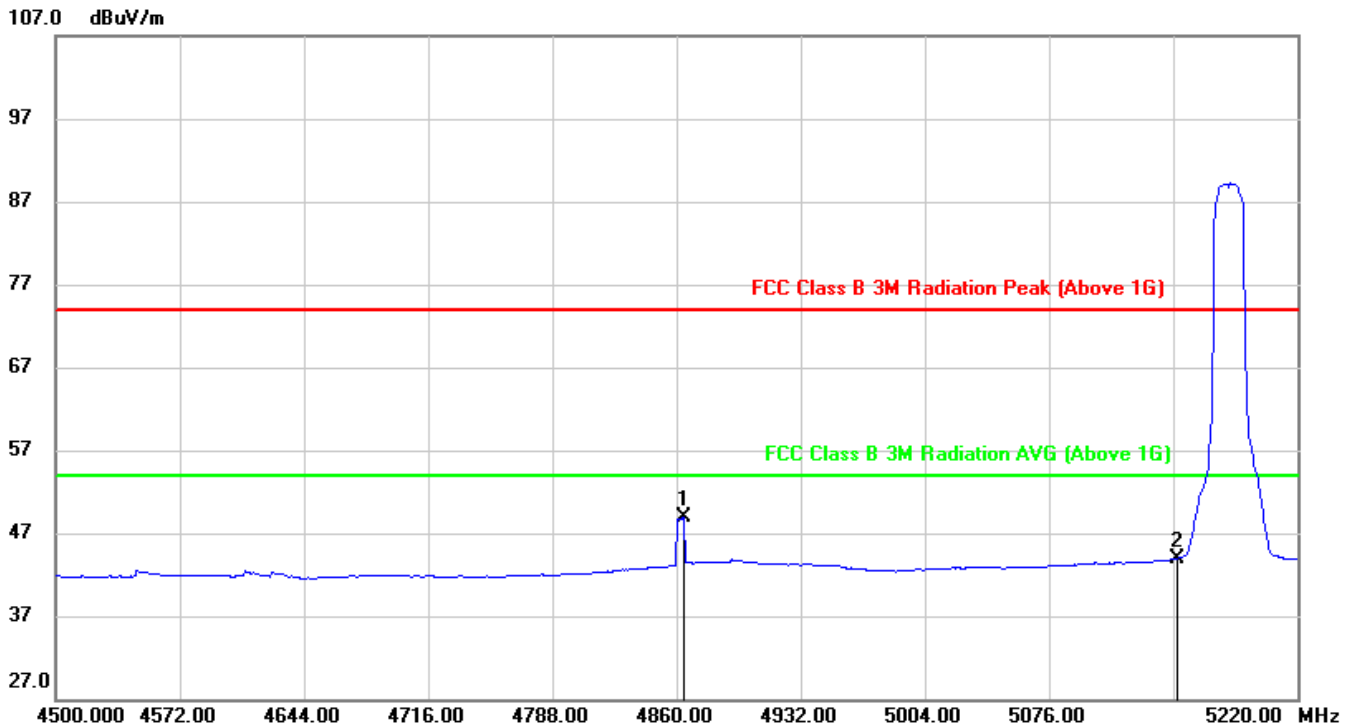
3. Peak: Peak detector.

4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.

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AVG



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4864.320	9.15	39.72	48.87	54.00	-5.13	AVG
2	5150.000	3.39	40.60	43.99	54.00	-10.01	AVG

Note: 1. Measurement = Reading Level + Correct Factor.

Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: $VBW=1/Ton=0.5K$, where: Ton is transmit duration.

5. For transmit duration, please refer to clause 6.1.

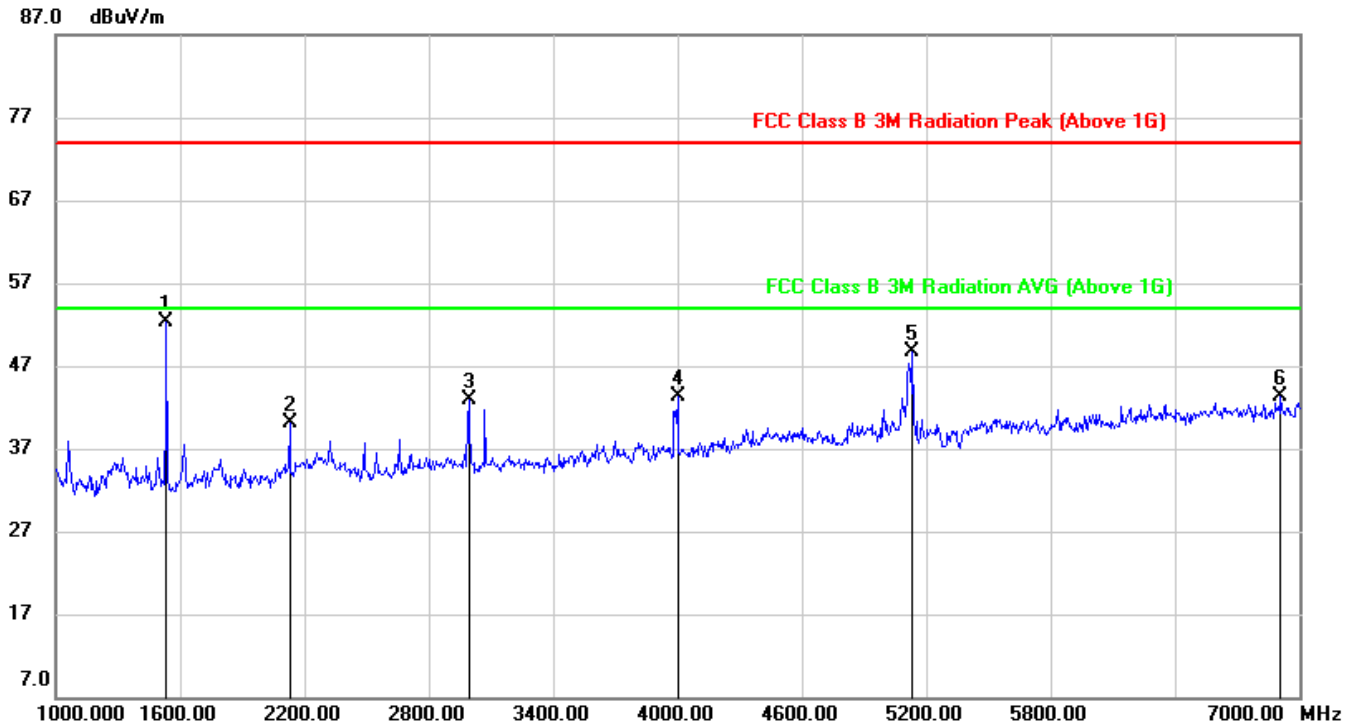
6. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



HARMONICS AND SPURIOUS EMISSIONS LOW CHANNEL

HORIZONTAL RESULTS

1-7G



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1534.000	65.14	-12.79	52.35	74.00	-21.65	peak
2	2128.000	50.02	-9.84	40.18	74.00	-33.82	peak
3	2992.000	50.17	-7.29	42.88	74.00	-31.12	peak
4	4000.000	47.81	-4.54	43.27	74.00	-30.73	peak
5	5134.000	49.11	-0.32	48.79	74.00	-25.21	peak
6	6910.000	38.19	5.06	43.25	74.00	-30.75	peak

Note: 1. Measurement = Reading Level + Correct Factor.

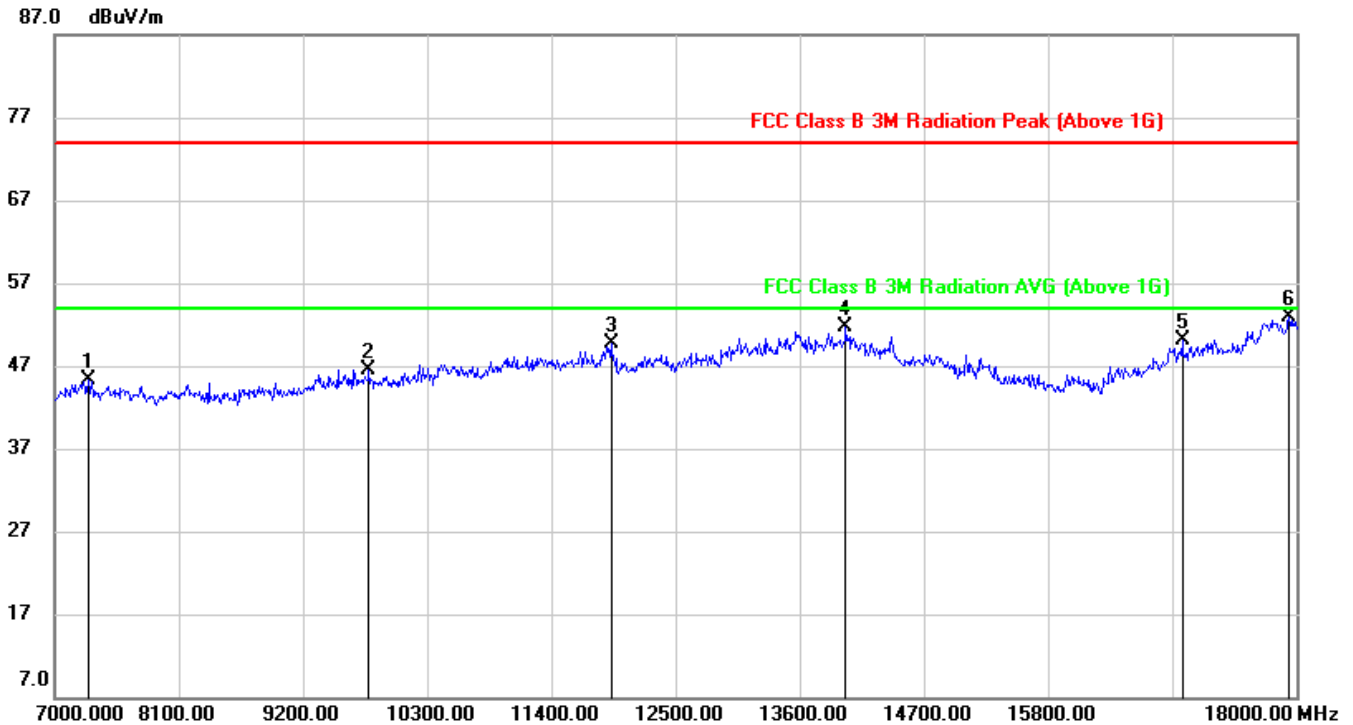
2. Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



7-18G



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7297.000	38.76	6.46	45.22	74.00	-28.78	peak
2	9783.000	36.44	10.11	46.55	74.00	-27.45	peak
3	11928.000	34.96	14.80	49.76	74.00	-24.24	peak
4	14007.000	33.17	18.47	51.64	74.00	-22.36	peak
5	16988.000	30.50	19.58	50.08	74.00	-23.92	peak
6	17934.000	28.30	24.54	52.84	74.00	-21.16	peak

Note: 1. Measurement = Reading Level + Correct Factor.

Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

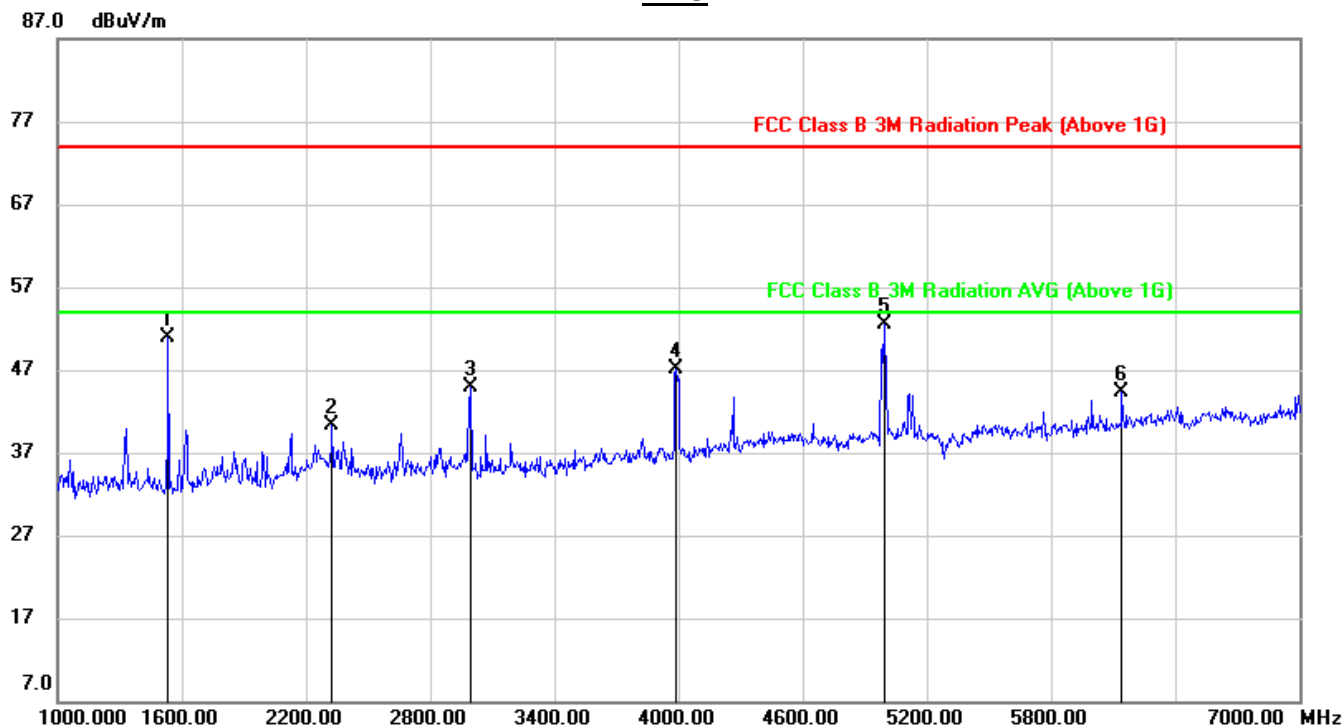
3. Peak: Peak detector.

4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



VERTICAL RESULTS

1-7G



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1534.000	63.64	-12.76	50.88	74.00	-23.12	peak
2	2326.000	48.66	-8.39	40.27	74.00	-33.73	peak
3	2998.000	52.13	-7.29	44.84	74.00	-29.16	peak
4	3988.000	51.58	-4.54	47.04	74.00	-26.96	peak
5	4996.000	53.25	-0.78	52.47	74.00	-21.53	peak
6	6142.000	41.71	2.52	44.23	74.00	-29.77	peak

Note: 1. Measurement = Reading Level + Correct Factor.

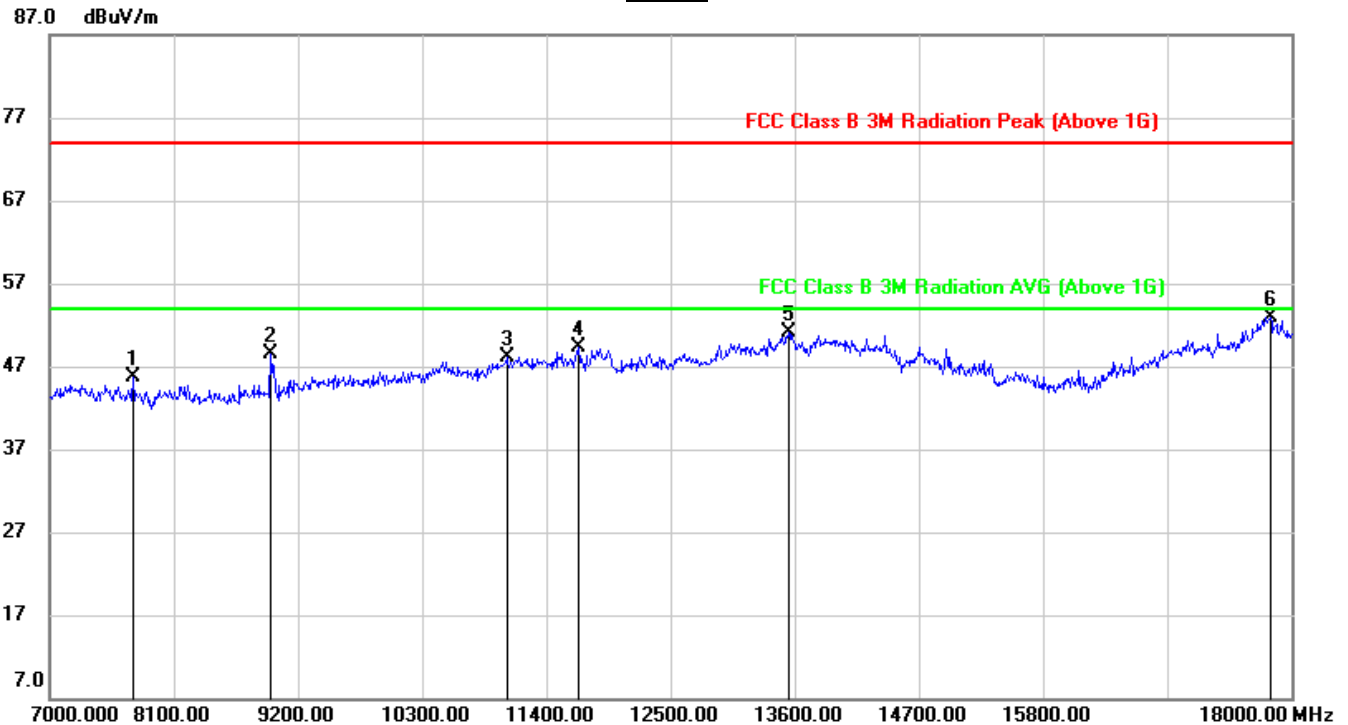
Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



7-18G



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7737.000	39.28	6.51	45.79	74.00	-28.21	peak
2	8958.000	40.51	8.00	48.51	74.00	-25.49	peak
3	11048.000	35.24	12.92	48.16	74.00	-25.84	peak
4	11686.000	34.62	14.71	49.33	74.00	-24.67	peak
5	13545.000	32.30	18.86	51.16	74.00	-22.84	peak
6	17813.000	28.53	24.44	52.97	74.00	-21.03	peak

Note: 1. Measurement = Reading Level + Correct Factor.

Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

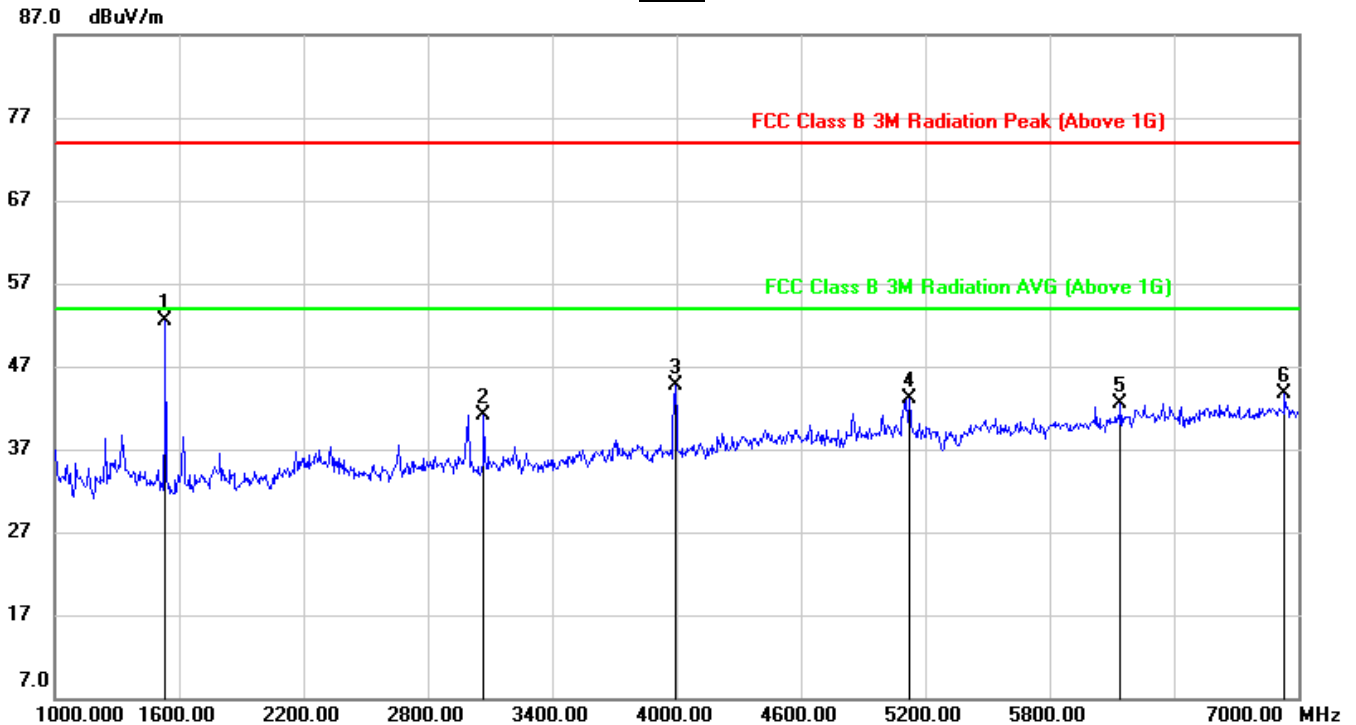
4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



HARMONICS AND SPURIOUS EMISSIONS MID CHANNEL

HORIZONTAL RESULTS

1-7G



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1534.000	65.25	-12.79	52.46	74.00	-21.54	peak
2	3070.000	48.11	-7.02	41.09	74.00	-32.91	peak
3	3994.000	49.15	-4.54	44.61	74.00	-29.39	peak
4	5122.000	43.53	-0.38	43.15	74.00	-30.85	peak
5	6142.000	40.15	2.41	42.56	74.00	-31.44	peak
6	6934.000	38.53	5.15	43.68	74.00	-30.32	peak

Note: 1. Measurement = Reading Level + Correct Factor.

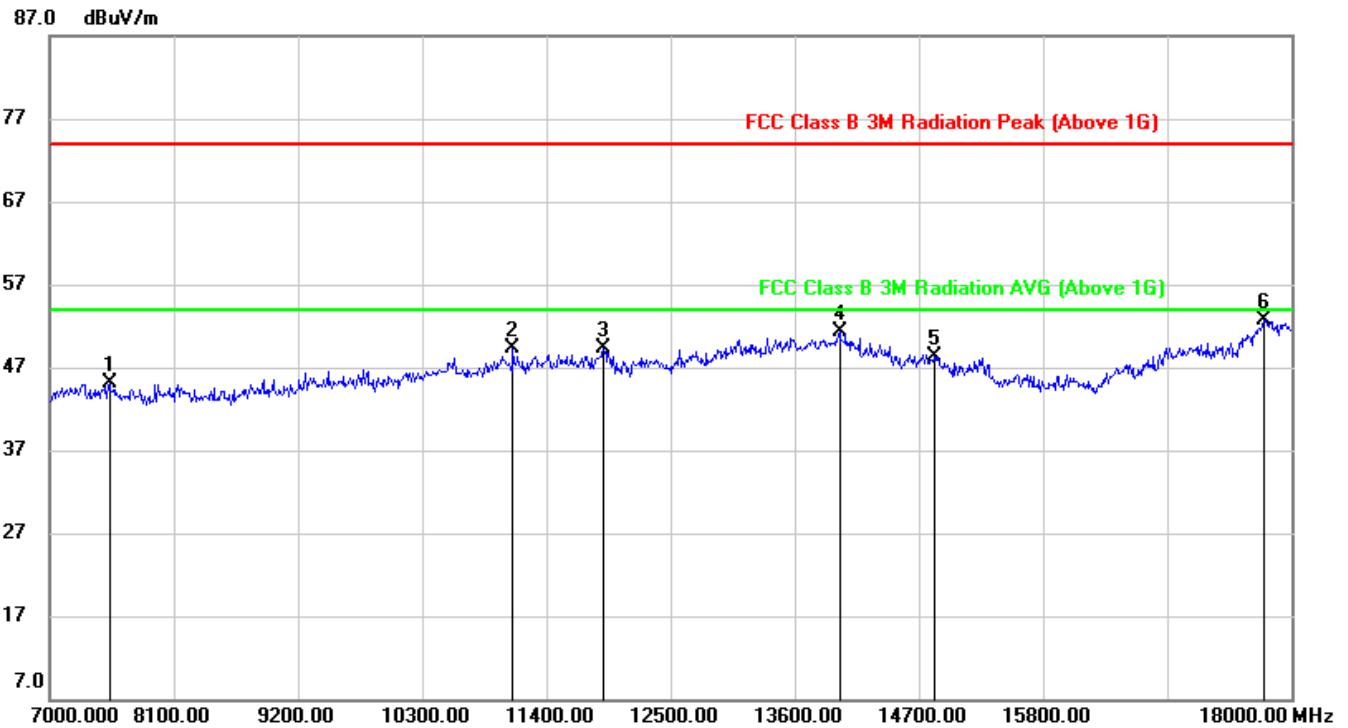
Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



7-18G



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7528.000	38.33	6.71	45.04	74.00	-28.96	peak
2	11103.000	36.50	12.84	49.34	74.00	-24.66	peak
3	11906.000	34.14	15.16	49.30	74.00	-24.70	peak
4	13996.000	32.79	18.48	51.27	74.00	-22.73	peak
5	14832.000	32.49	15.90	48.39	74.00	-25.61	peak
6	17758.000	29.09	23.68	52.77	74.00	-21.23	peak

Note: 1. Measurement = Reading Level + Correct Factor.

Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

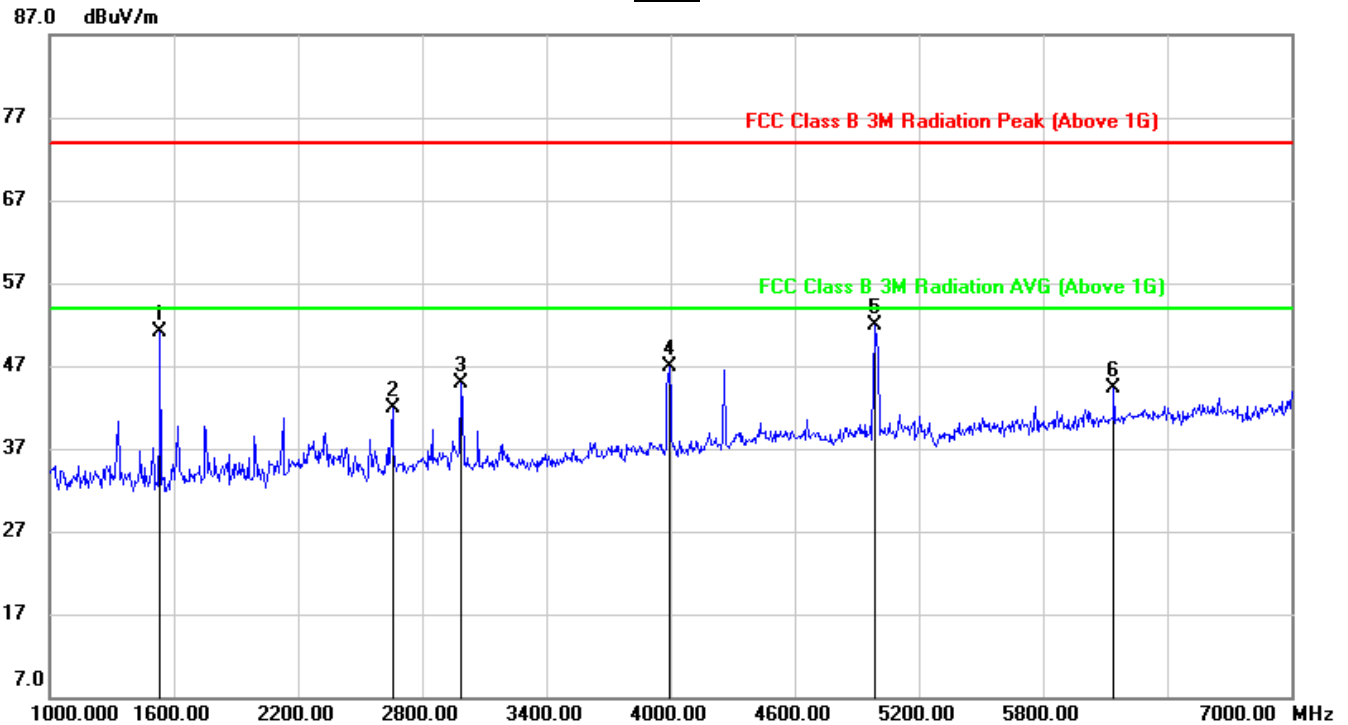
3. Peak: Peak detector.

4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



VERTICAL RESULTS

1-7G



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1534.000	63.88	-12.76	51.12	74.00	-22.88	peak
2	2656.000	50.52	-8.63	41.89	74.00	-32.11	peak
3	2986.000	52.20	-7.29	44.91	74.00	-29.09	peak
4	3994.000	51.50	-4.54	46.96	74.00	-27.04	peak
5	4984.000	52.64	-0.78	51.86	74.00	-22.14	peak
6	6142.000	41.71	2.52	44.23	74.00	-29.77	peak

Note: 1. Measurement = Reading Level + Correct Factor.

Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

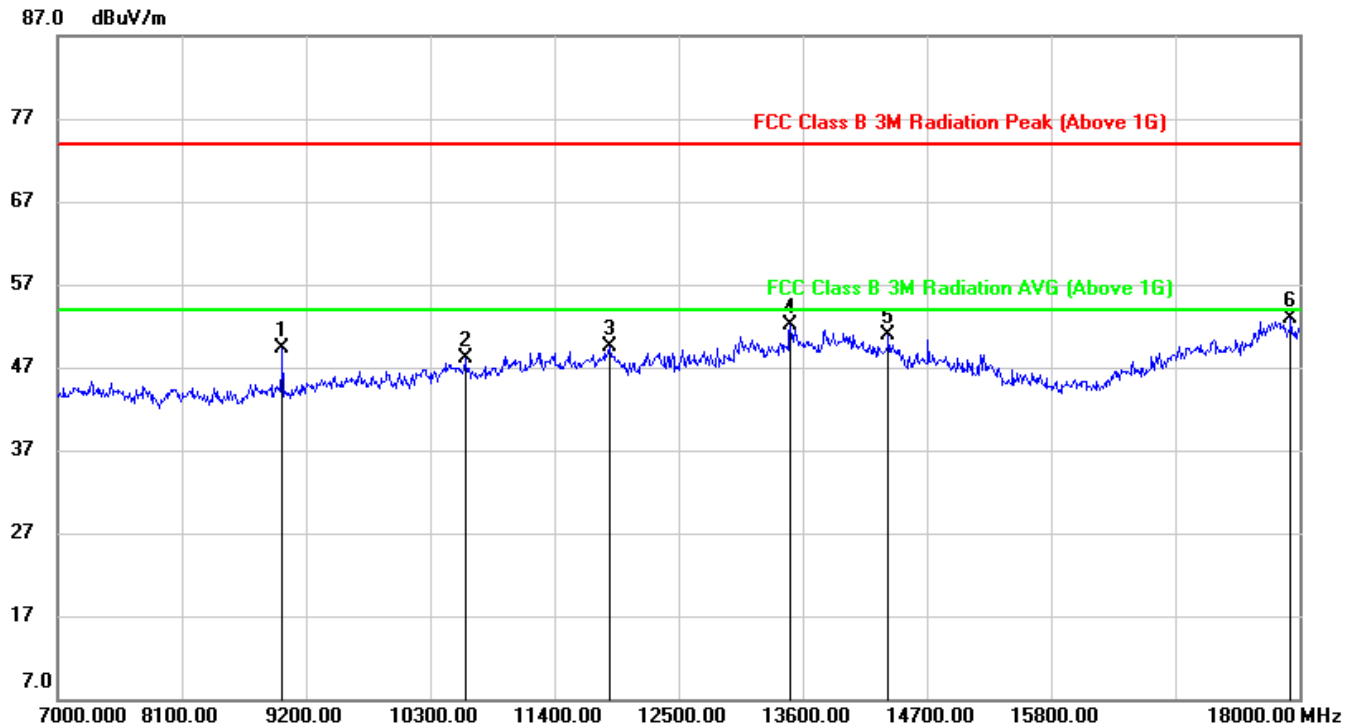
3. Peak: Peak detector.

4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.

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7-18G



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	8991.000	41.37	7.95	49.32	74.00	-24.68	peak
2	10608.000	36.05	11.98	48.03	74.00	-25.97	peak
3	11884.000	34.73	14.75	49.48	74.00	-24.52	peak
4	13490.000	33.57	18.45	52.02	74.00	-21.98	peak
5	14359.000	32.59	18.25	50.84	74.00	-23.16	peak
6	17923.000	29.02	23.97	52.99	74.00	-21.01	peak

Note: 1. Measurement = Reading Level + Correct Factor.

Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

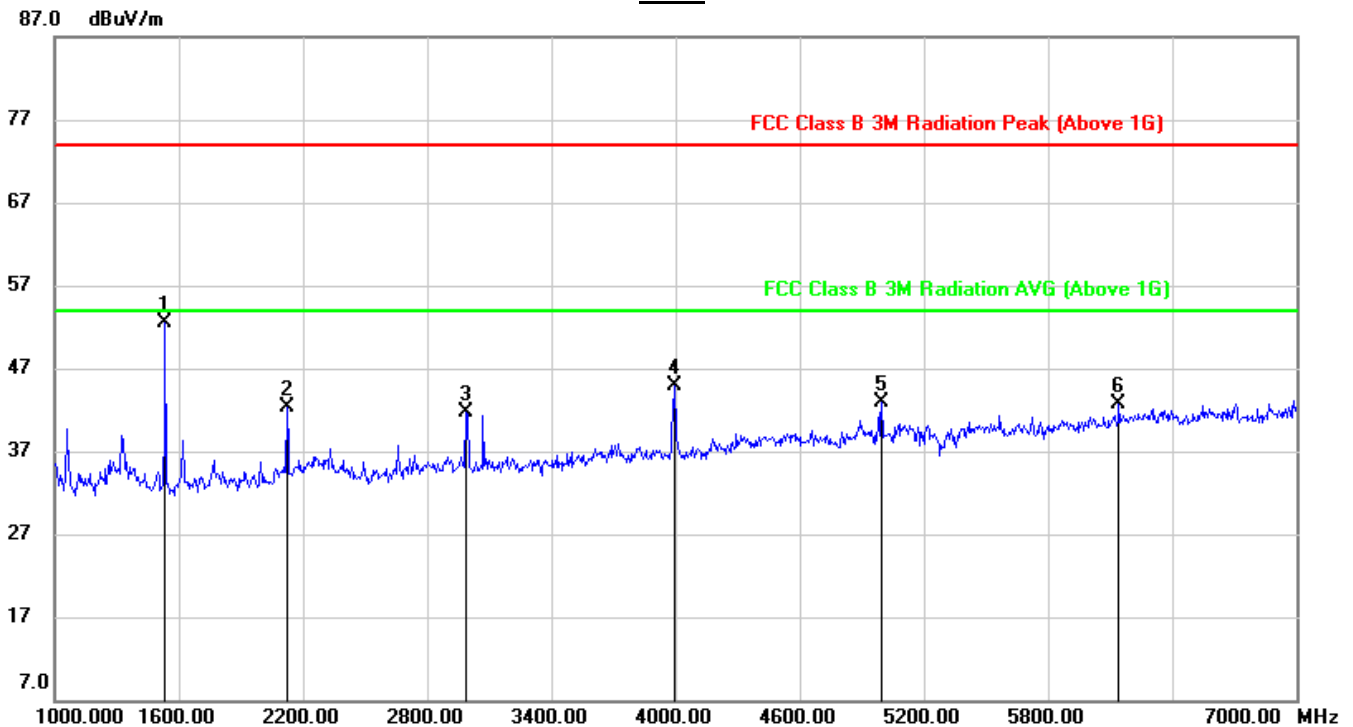
4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



HARMONICS AND SPURIOUS EMISSIONS HIGH CHANNEL

HORIZONTAL RESULTS

1-7G



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1534.000	65.21	-12.79	52.42	74.00	-21.58	peak
2	2122.000	52.21	-9.93	42.28	74.00	-31.72	peak
3	2986.000	49.02	-7.29	41.73	74.00	-32.27	peak
4	3994.000	49.46	-4.54	44.92	74.00	-29.08	peak
5	4996.000	43.85	-0.87	42.98	74.00	-31.02	peak
6	6142.000	40.38	2.41	42.79	74.00	-31.21	peak

Note: 1. Measurement = Reading Level + Correct Factor.

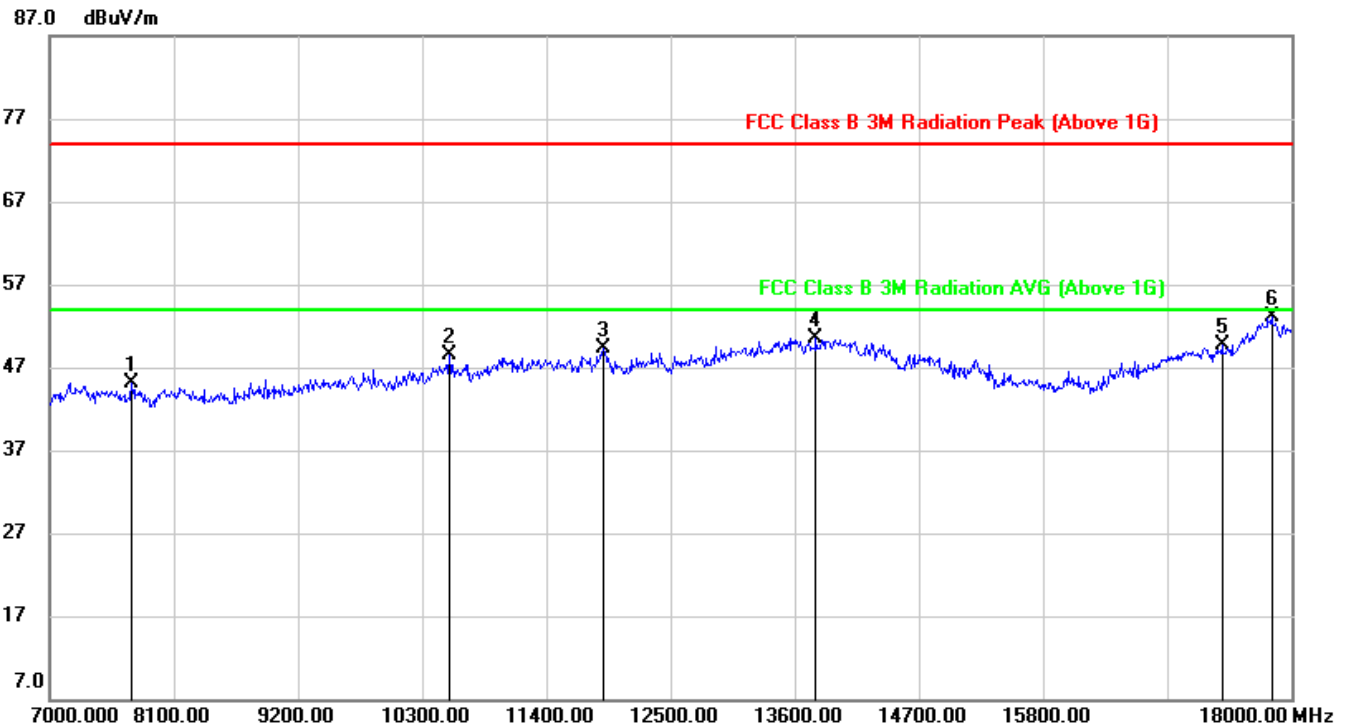
Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



7-18G



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7726.000	38.69	6.42	45.11	74.00	-28.89	peak
2	10542.000	36.62	11.97	48.59	74.00	-25.41	peak
3	11906.000	34.07	15.16	49.23	74.00	-24.77	peak
4	13787.000	31.86	18.59	50.45	74.00	-23.55	peak
5	17384.000	28.83	20.79	49.62	74.00	-24.38	peak
6	17824.000	28.86	24.25	53.11	74.00	-20.89	peak

Note: 1. Measurement = Reading Level + Correct Factor.

Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

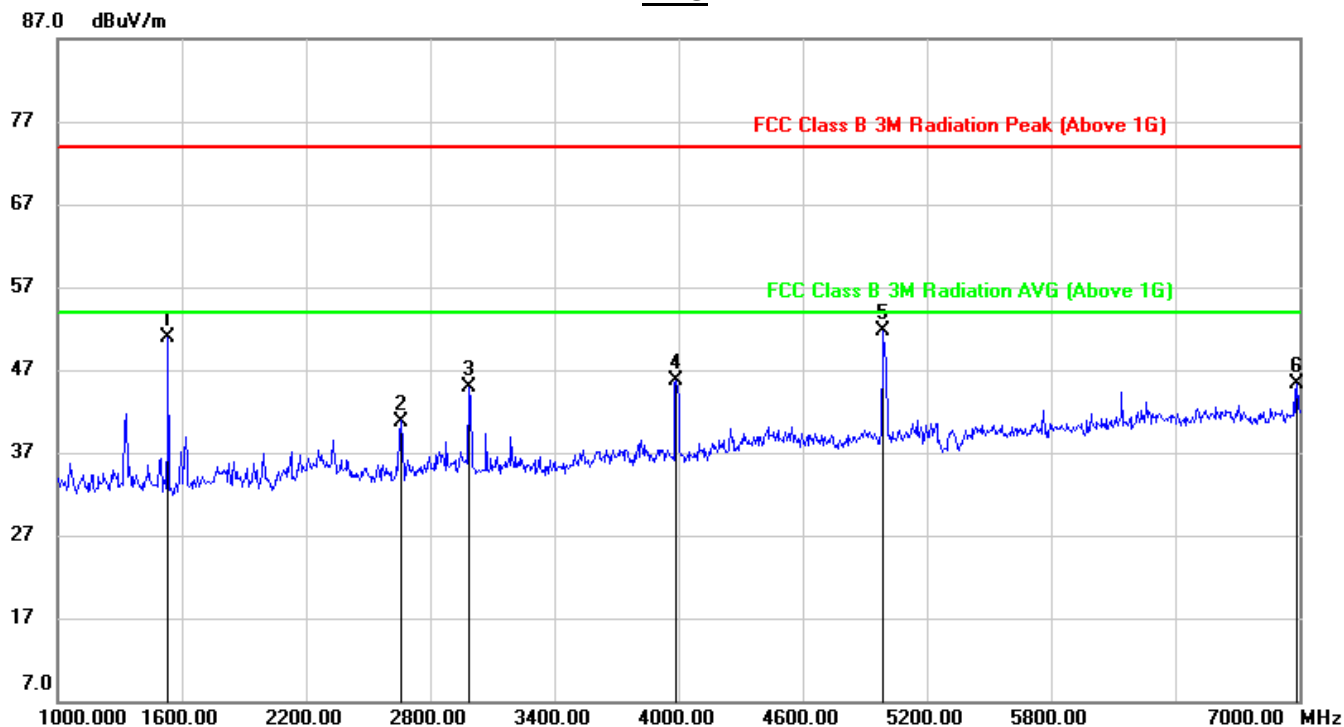
3. Peak: Peak detector.

4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



VERTICAL RESULTS

1-7G



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1534.000	63.60	-12.76	50.84	74.00	-23.16	peak
2	2662.000	49.39	-8.59	40.80	74.00	-33.20	peak
3	2986.000	52.16	-7.29	44.87	74.00	-29.13	peak
4	3988.000	50.27	-4.54	45.73	74.00	-28.27	peak
5	4990.000	52.46	-0.78	51.68	74.00	-22.32	peak
6	6988.000	40.02	5.35	45.37	74.00	-28.63	peak

Note: 1. Measurement = Reading Level + Correct Factor.

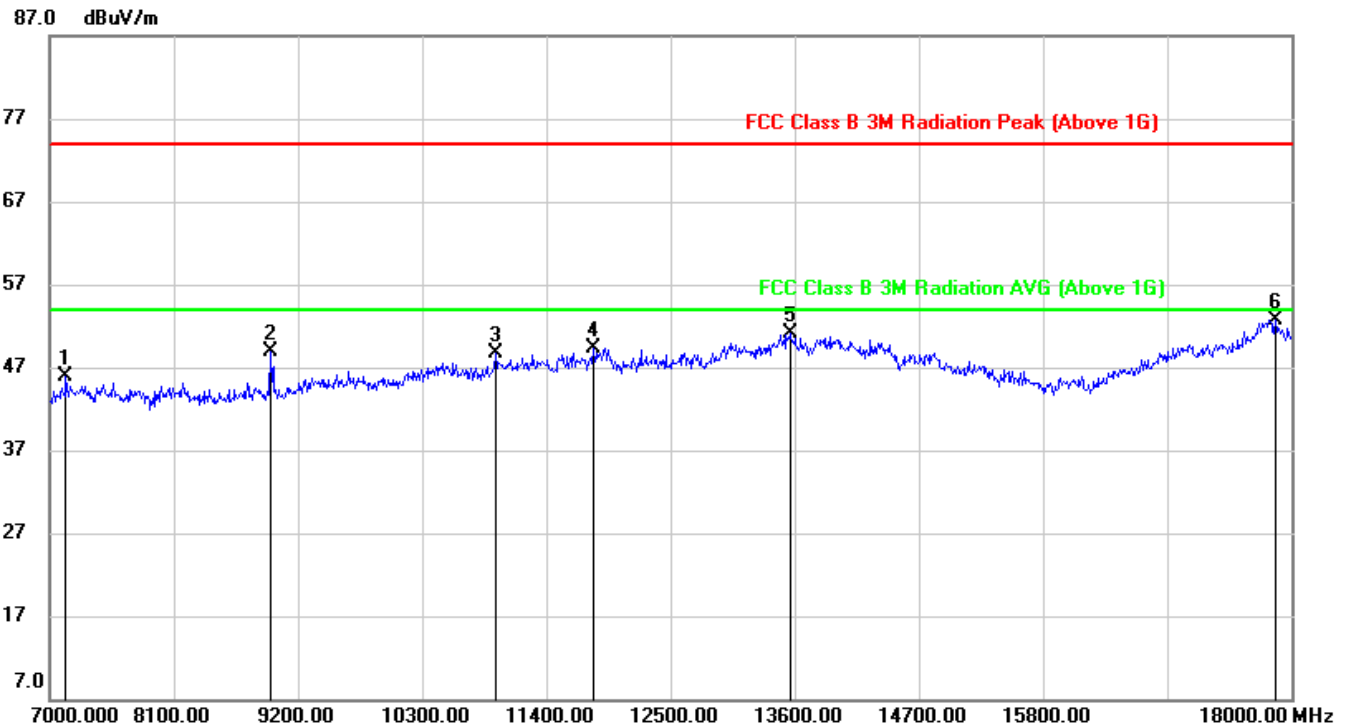
Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



7-18G



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7143.000	39.48	6.43	45.91	74.00	-28.09	peak
2	8958.000	40.90	8.00	48.90	74.00	-25.10	peak
3	10949.000	36.10	12.52	48.62	74.00	-25.38	peak
4	11818.000	34.72	14.65	49.37	74.00	-24.63	peak
5	13556.000	32.33	18.84	51.17	74.00	-22.83	peak
6	17857.000	28.77	23.92	52.69	74.00	-21.31	peak

Note: 1. Measurement = Reading Level + Correct Factor.

Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



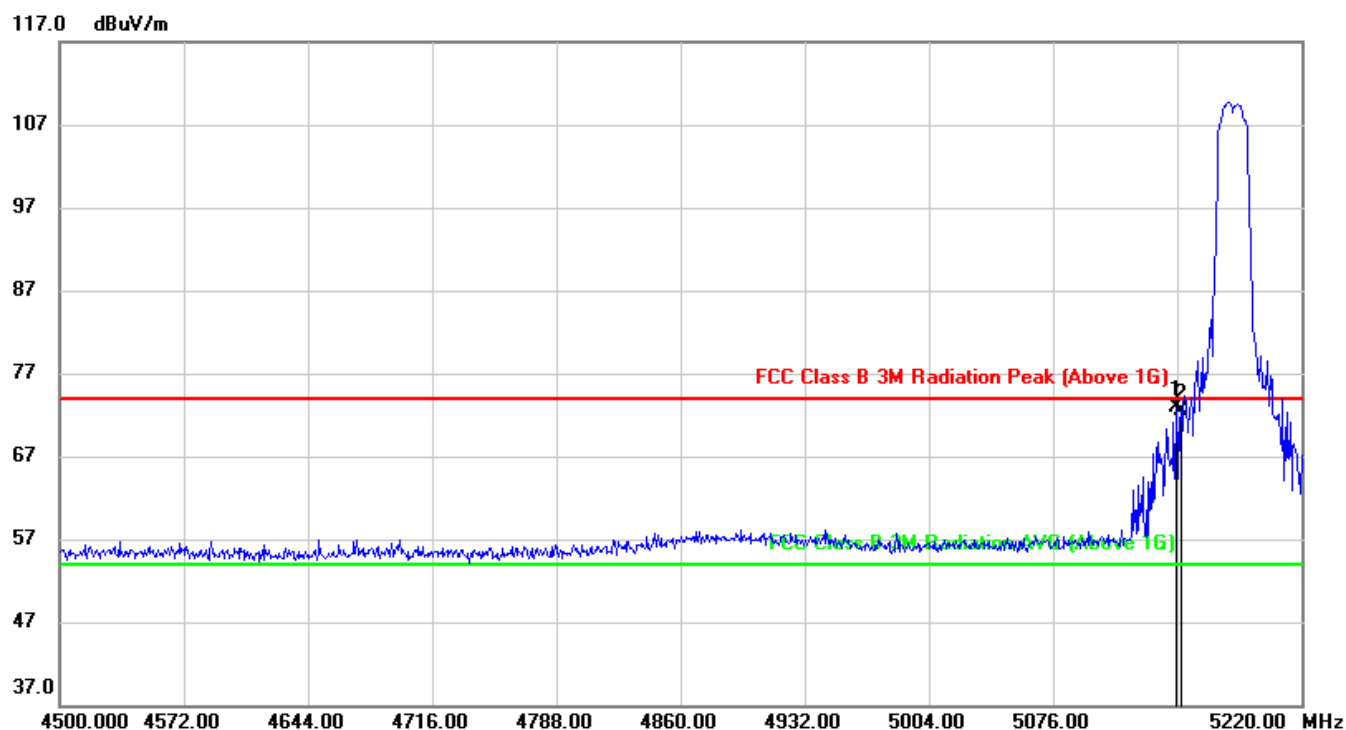
7.1. 802.11n HT20 MODE

7.1.1. UNII-1 BAND

RESTRICTED BANDEDGE LOW CHANNEL

HORIZONTAL RESULTS

PEAK



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5147.280	32.42	40.39	72.81	74.00	-1.19	peak
2	5150.000	32.08	40.40	72.48	74.00	-1.52	peak

Note: 1. Measurement = Reading Level + Correct Factor.

Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

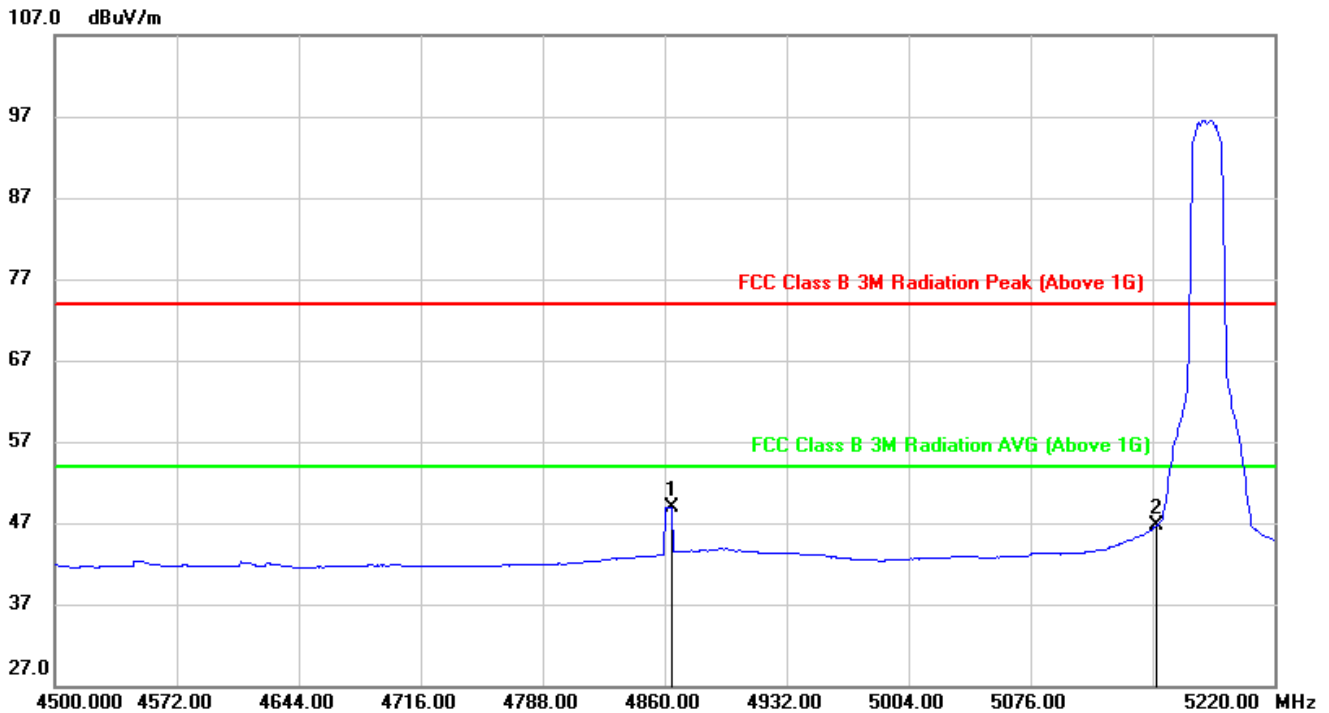
3. Peak: Peak detector.

4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.





AVG



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4864.320	9.20	39.75	48.95	54.00	-5.05	AVG
2	5150.000	6.32	40.40	46.72	54.00	-7.28	AVG

Note: 1. Measurement = Reading Level + Correct Factor.

Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: $VBW=1/Ton=1K$, where: Ton is transmit duration.

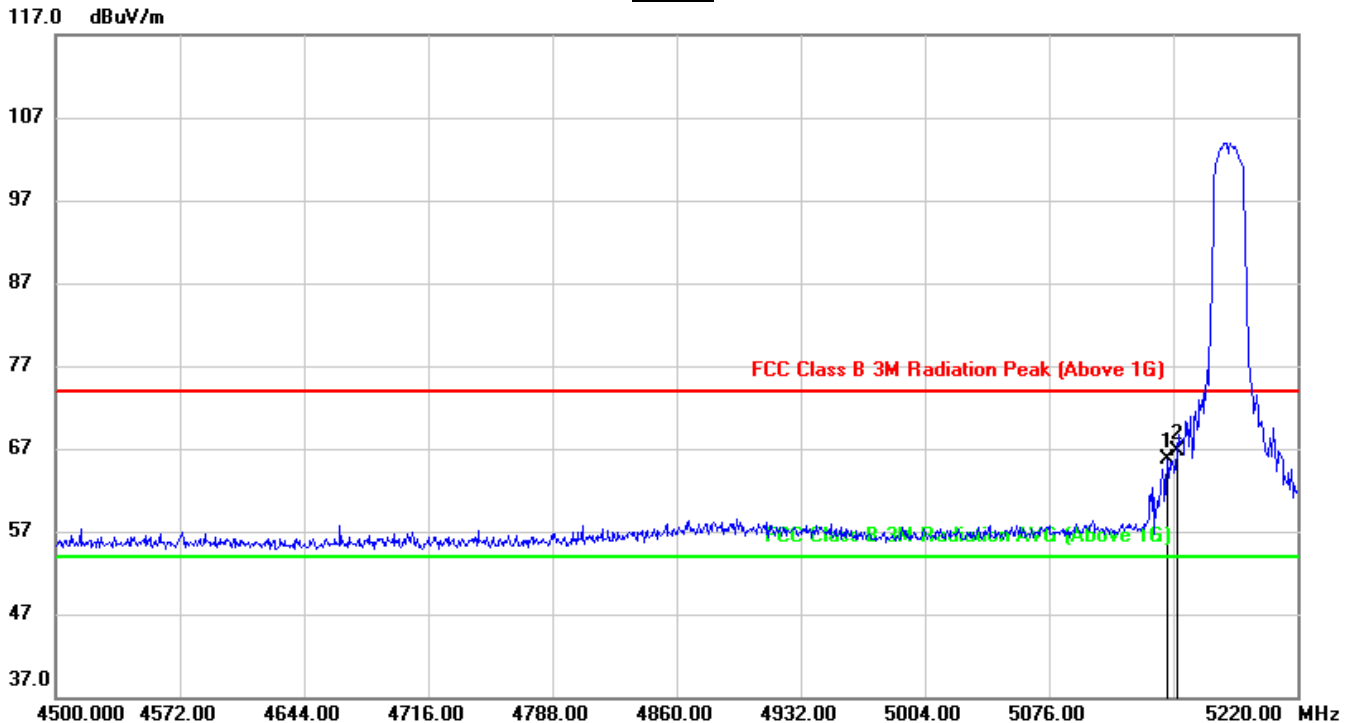
5. For transmit duration, please refer to clause 6.1.

6. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



VERTICAL RESULTS

PEAK



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5144.400	25.15	40.58	65.73	74.00	-8.27	peak
2	5150.000	26.09	40.60	66.69	74.00	-7.31	peak

Note: 1. Measurement = Reading Level + Correct Factor.

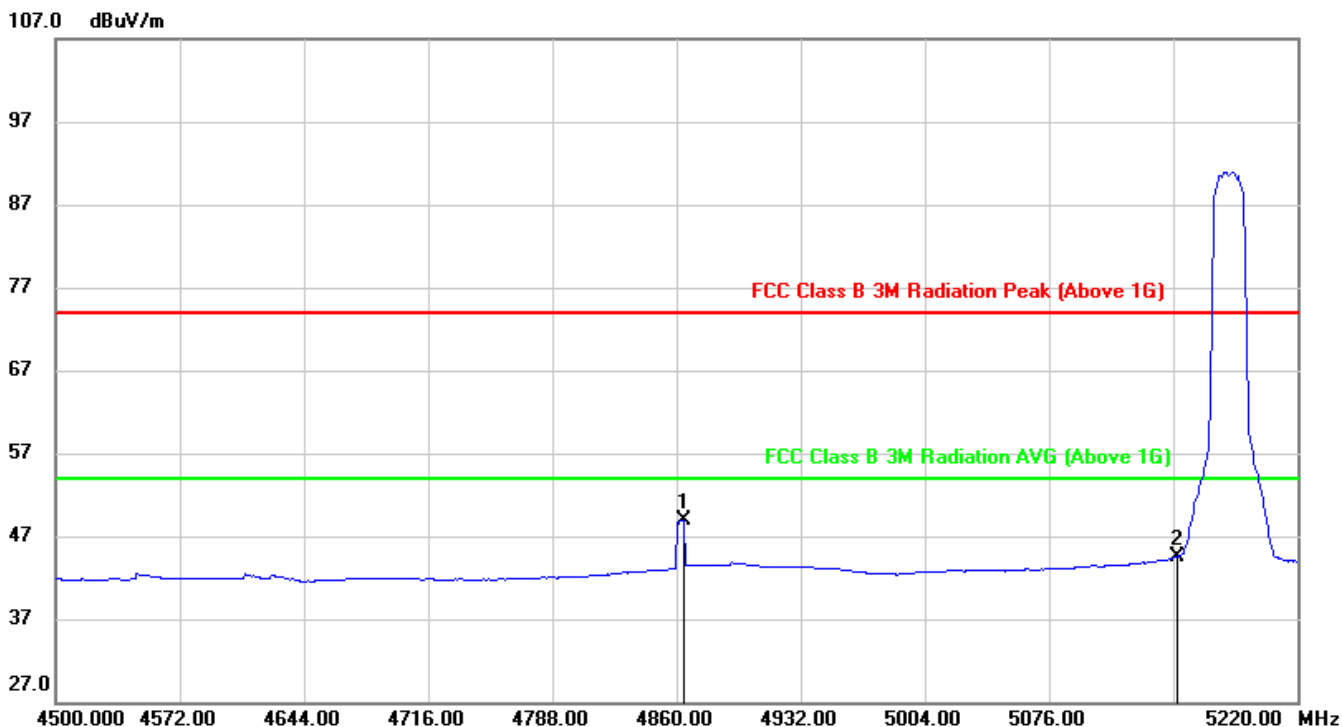
Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



AVG



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4864.320	9.17	39.72	48.89	54.00	-5.11	AVG
2	5150.000	3.94	40.60	44.54	54.00	-9.46	AVG

Note: 1. Measurement = Reading Level + Correct Factor.

Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: $VBW=1/Ton=1K$, where: Ton is transmit duration.

5. For transmit duration, please refer to clause 6.1.

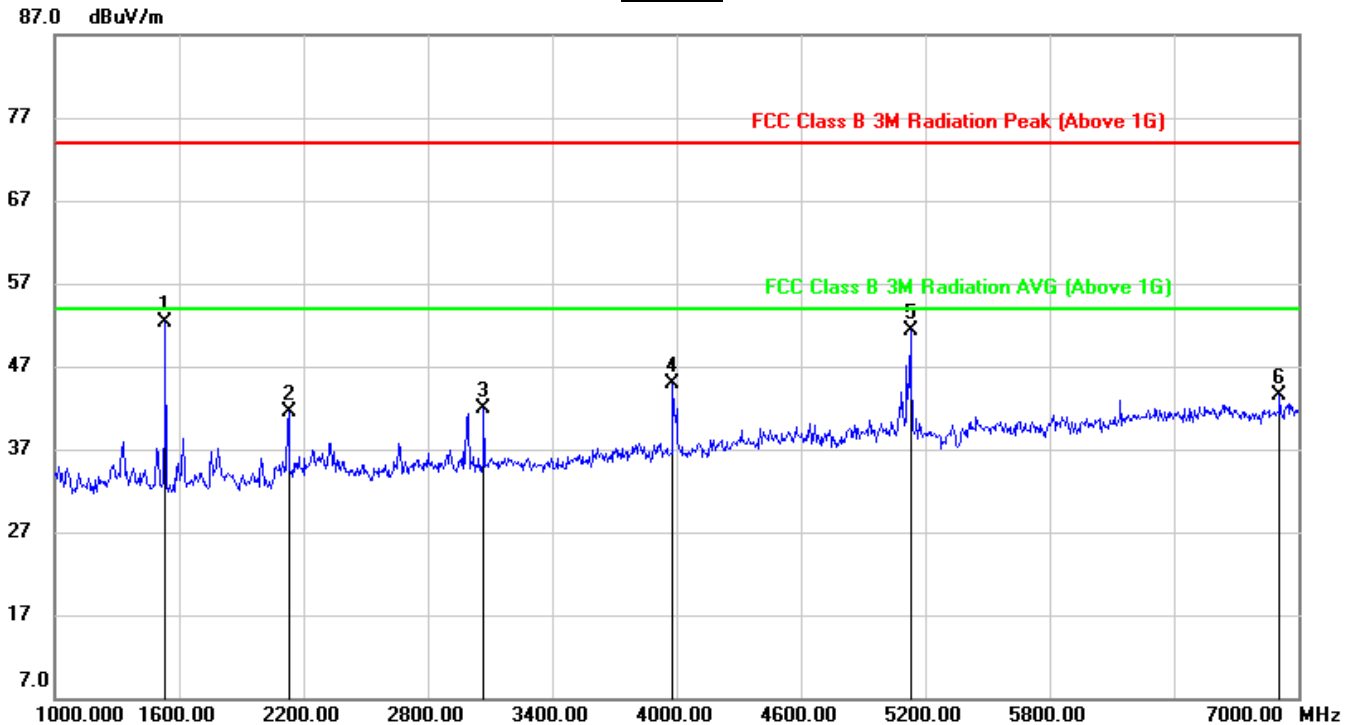
6. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



HARMONICS AND SPURIOUS EMISSIONS LOW CHANNEL

HORIZONTAL RESULTS

1-7GHz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1534.000	65.07	-12.79	52.28	74.00	-21.72	peak
2	2128.000	51.29	-9.84	41.45	74.00	-32.55	peak
3	3070.000	48.93	-7.02	41.91	74.00	-32.09	peak
4	3982.000	49.53	-4.54	44.99	74.00	-29.01	peak
5	5128.000	51.72	-0.34	51.38	74.00	-22.62	peak
6	6910.000	38.53	5.06	43.59	74.00	-30.41	peak

Note: 1. Measurement = Reading Level + Correct Factor.

Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

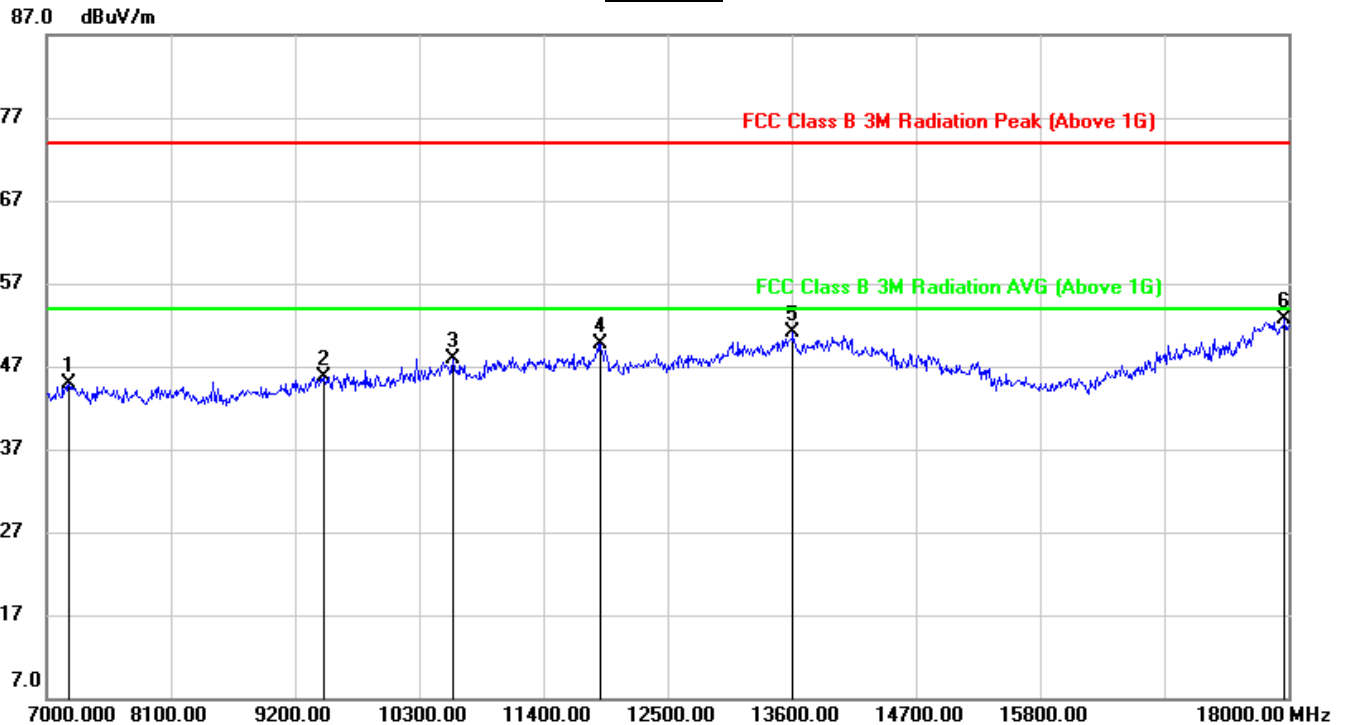
3. Peak: Peak detector.

4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.





7-18GHz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7198.000	38.53	6.34	44.87	74.00	-29.13	peak
2	9453.000	36.22	9.49	45.71	74.00	-28.29	peak
3	10597.000	36.12	11.76	47.88	74.00	-26.12	peak
4	11906.000	34.62	15.16	49.78	74.00	-24.22	peak
5	13611.000	32.65	18.50	51.15	74.00	-22.85	peak
6	17967.000	27.86	24.80	52.66	74.00	-21.34	peak

Note: 1. Measurement = Reading Level + Correct Factor.

Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

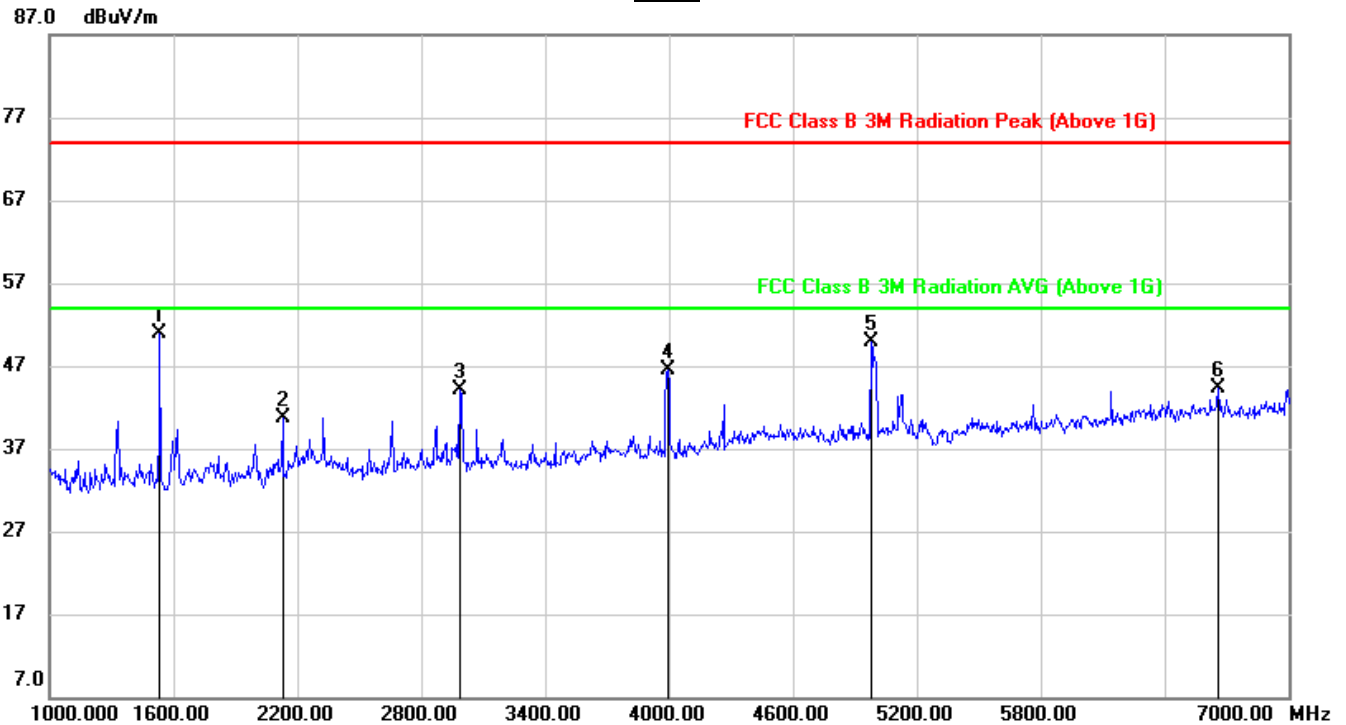
3. Peak: Peak detector.

4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



VERTICAL RESULTS

1-7G



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1534.000	63.73	-12.76	50.97	74.00	-23.03	peak
2	2128.000	50.60	-9.94	40.66	74.00	-33.34	peak
3	2986.000	51.38	-7.29	44.09	74.00	-29.91	peak
4	3994.000	51.01	-4.54	46.47	74.00	-27.53	peak
5	4978.000	50.76	-0.77	49.99	74.00	-24.01	peak
6	6658.000	39.96	4.34	44.30	74.00	-29.70	peak

Note: 1. Measurement = Reading Level + Correct Factor.

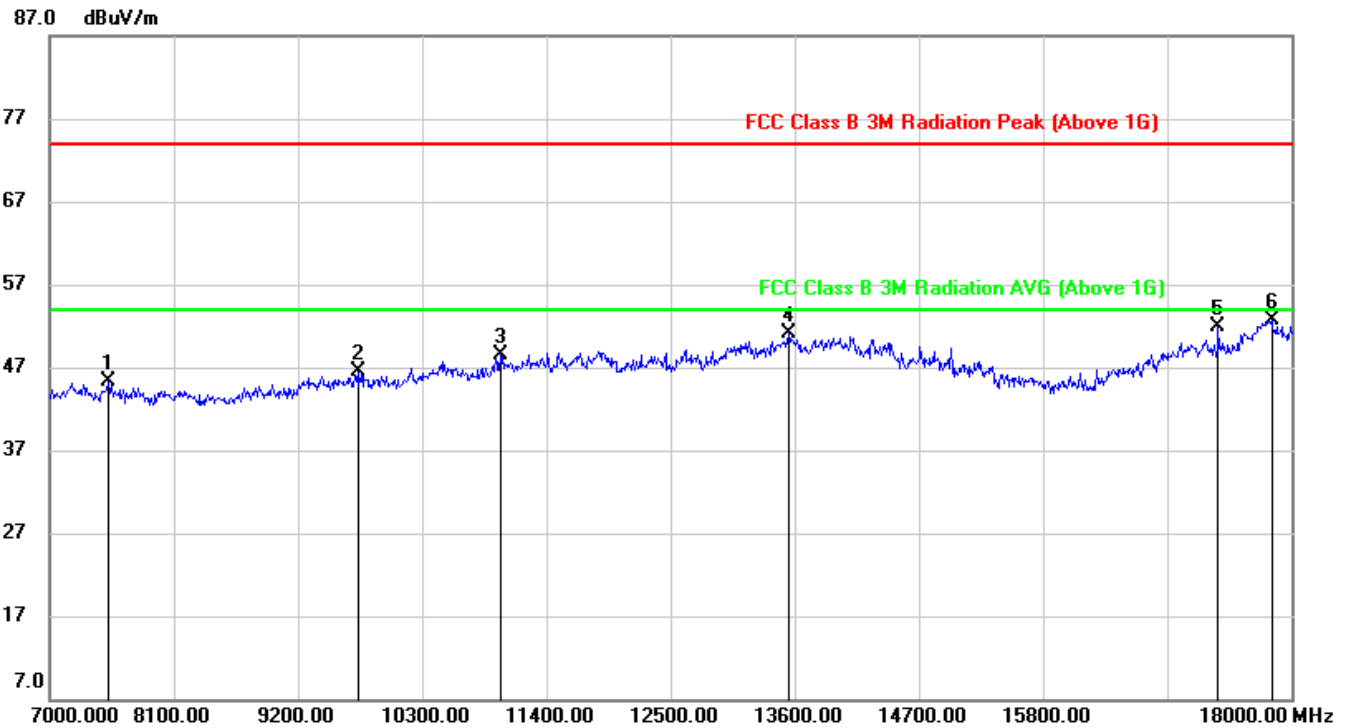
Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



7-18G



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7517.000	38.42	6.83	45.25	74.00	-28.75	peak
2	9728.000	36.55	10.00	46.55	74.00	-27.45	peak
3	10993.000	35.65	12.78	48.43	74.00	-25.57	peak
4	13545.000	32.21	18.86	51.07	74.00	-22.93	peak
5	17351.000	30.68	21.16	51.84	74.00	-22.16	peak
6	17824.000	28.52	24.26	52.78	74.00	-21.22	peak

Note: 1. Measurement = Reading Level + Correct Factor.

Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

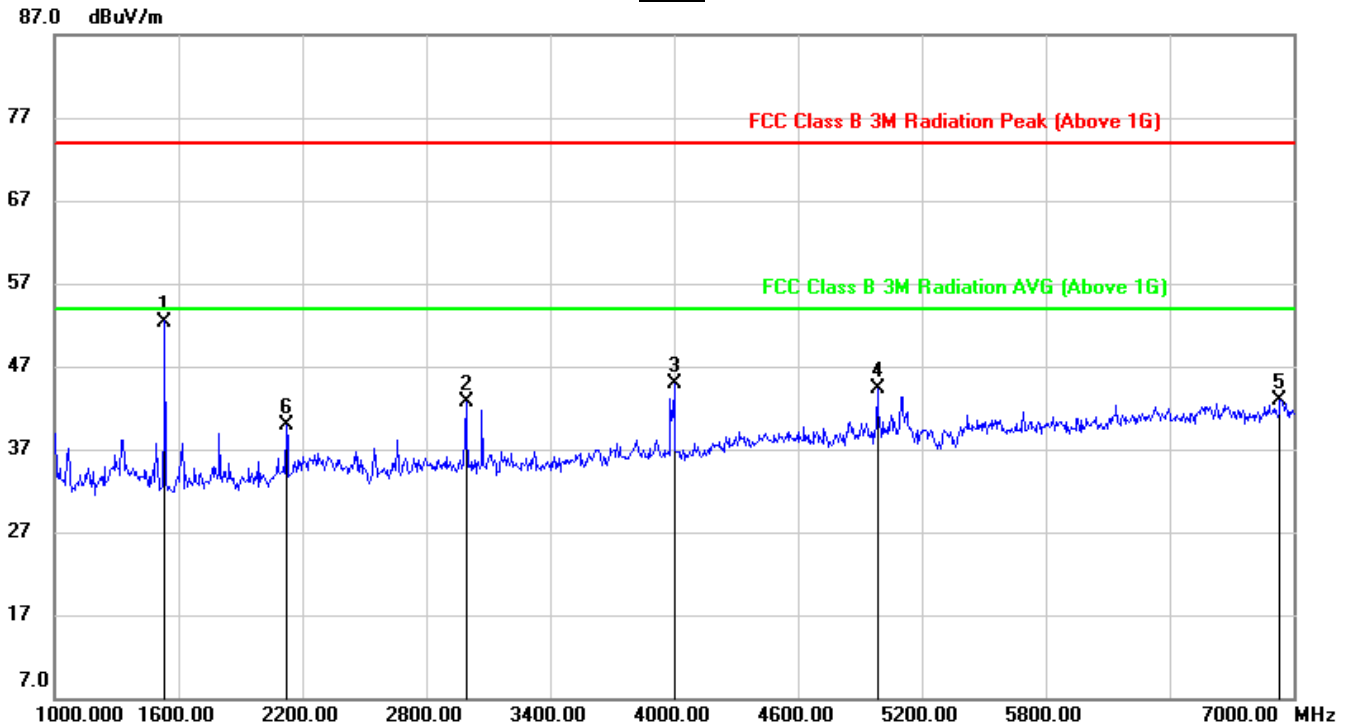
4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



HARMONICS AND SPURIOUS EMISSIONS MID CHANNEL

HORIZONTAL RESULTS

1-7G



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1534.000	65.19	-12.79	52.40	74.00	-21.60	peak
2	2992.000	49.92	-7.29	42.63	74.00	-31.37	peak
3	4000.000	49.35	-4.54	44.81	74.00	-29.19	peak
4	4984.000	45.06	-0.85	44.21	74.00	-29.79	peak
5	6934.000	37.73	5.15	42.88	74.00	-31.12	peak
6	2122.000	49.84	-9.93	39.91	74.00	-34.09	peak

Note: 1. Measurement = Reading Level + Correct Factor.

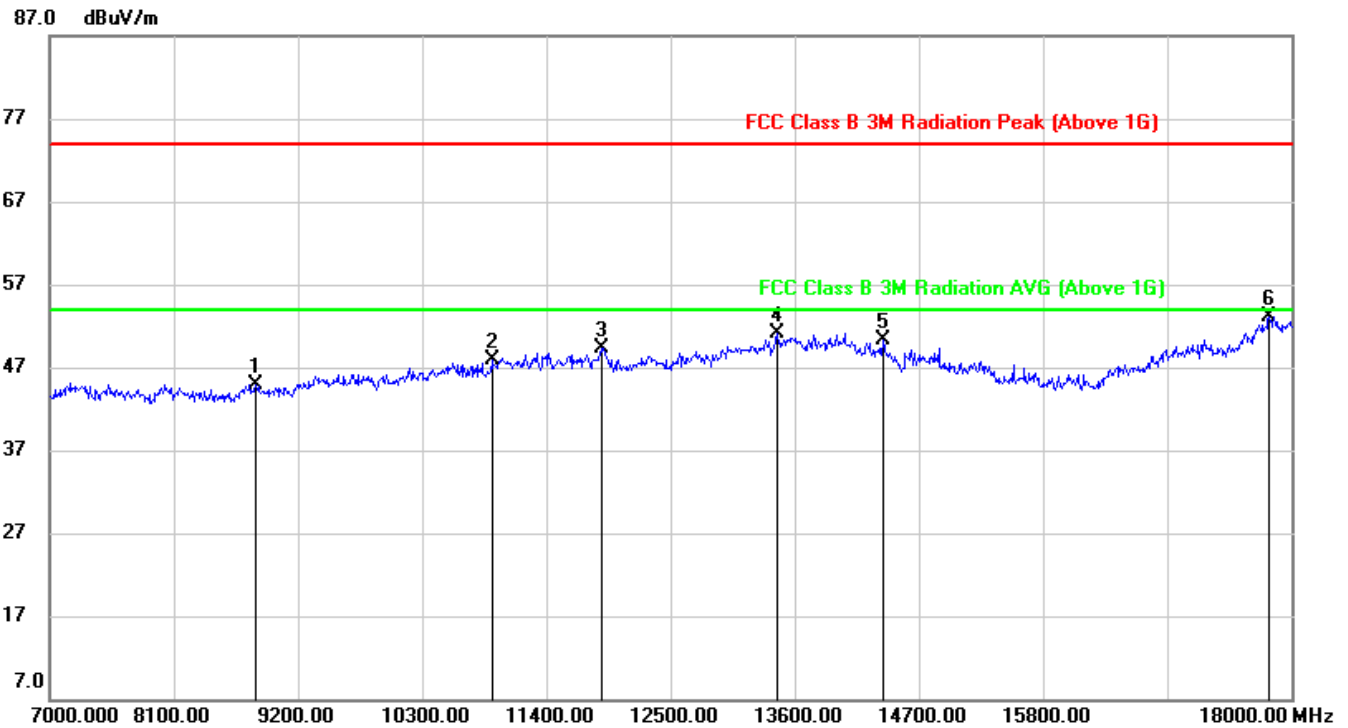
Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



7-18G



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	8826.000	36.91	8.01	44.92	74.00	-29.08	peak
2	10916.000	35.63	12.27	47.90	74.00	-26.10	peak
3	11884.000	34.45	14.93	49.38	74.00	-24.62	peak
4	13446.000	33.10	18.05	51.15	74.00	-22.85	peak
5	14381.000	32.38	17.91	50.29	74.00	-23.71	peak
6	17802.000	28.95	24.24	53.19	74.00	-20.81	peak

Note: 1. Measurement = Reading Level + Correct Factor.

Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

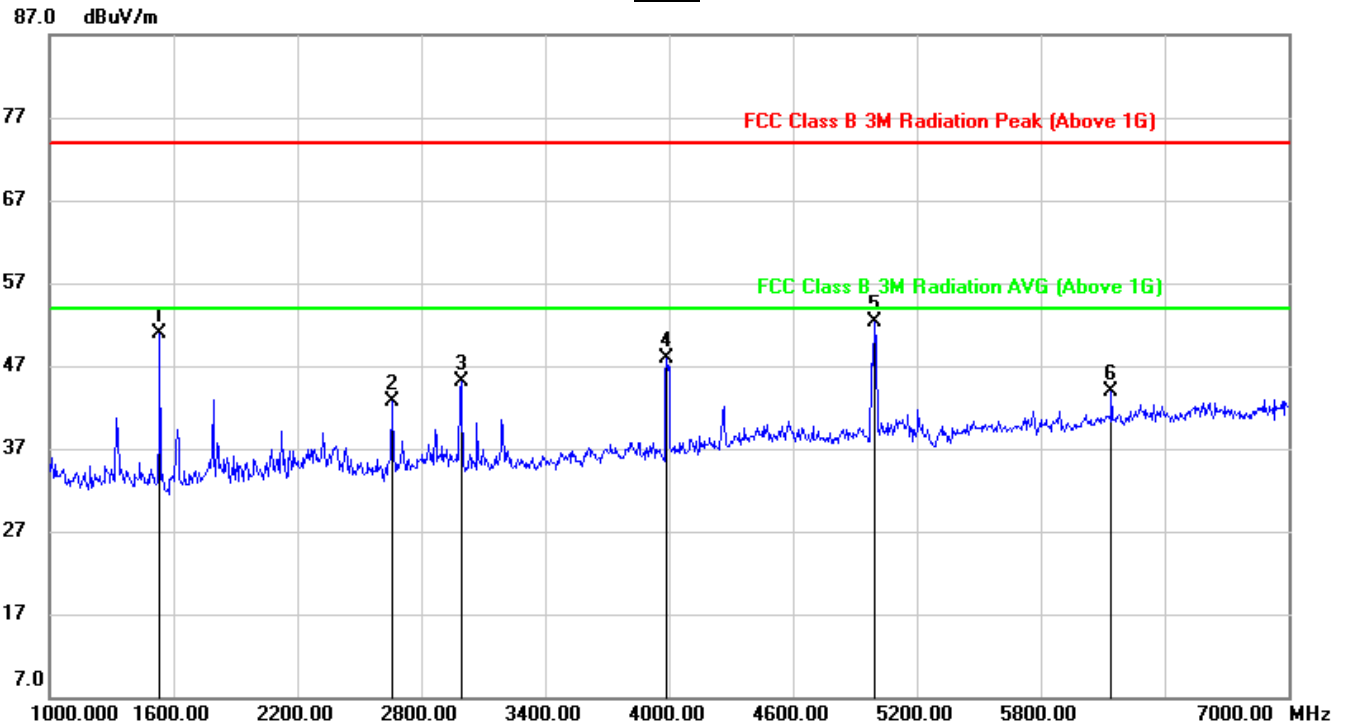
3. Peak: Peak detector.

4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



VERTICAL RESULTS

1-7G



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1534.000	63.58	-12.76	50.82	74.00	-23.18	peak
2	2656.000	51.30	-8.63	42.67	74.00	-31.33	peak
3	2992.000	52.32	-7.29	45.03	74.00	-28.97	peak
4	3988.000	52.35	-4.54	47.81	74.00	-26.19	peak
5	4996.000	53.00	-0.78	52.22	74.00	-21.78	peak
6	6142.000	41.40	2.52	43.92	74.00	-30.08	peak

Note: 1. Measurement = Reading Level + Correct Factor.

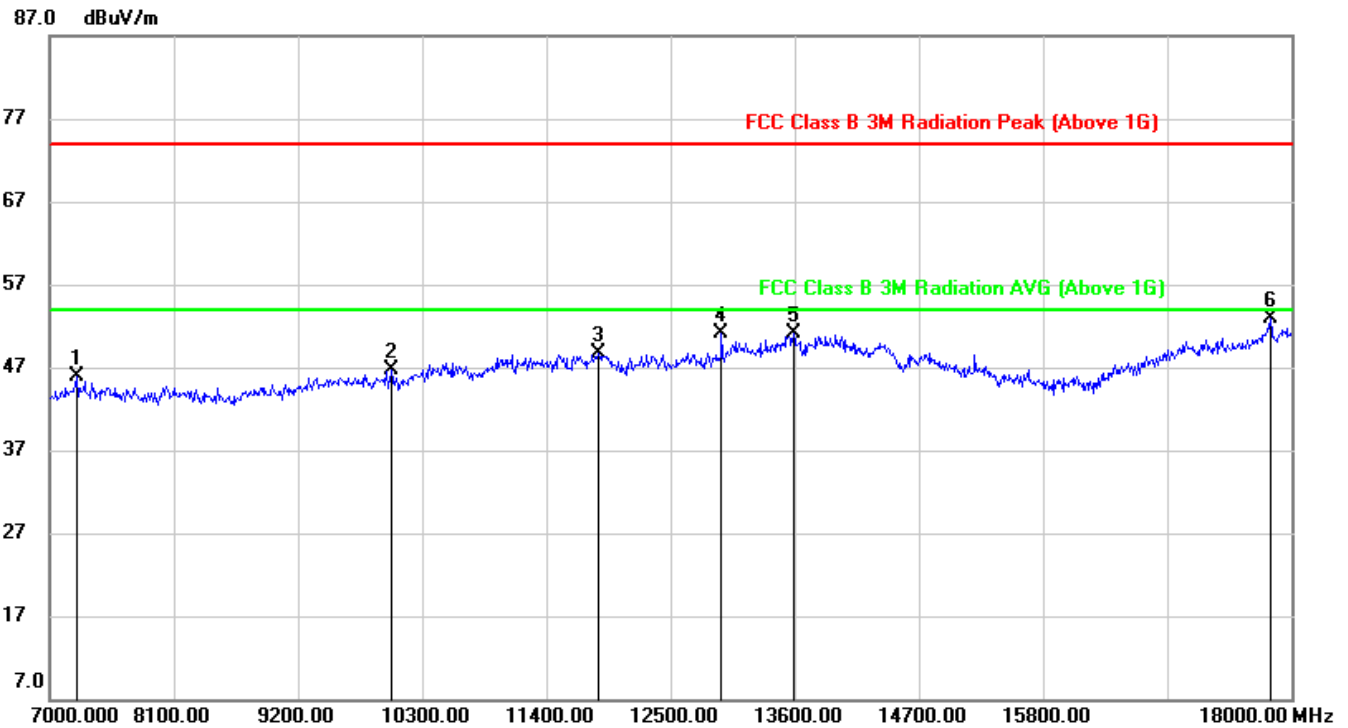
Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



7-18G



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7242.000	39.52	6.36	45.88	74.00	-28.12	peak
2	10025.000	36.15	10.48	46.63	74.00	-27.37	peak
3	11862.000	34.06	14.73	48.79	74.00	-25.21	peak
4	12951.000	34.40	16.61	51.01	74.00	-22.99	peak
5	13589.000	32.70	18.46	51.16	74.00	-22.84	peak
6	17813.000	28.50	24.44	52.94	74.00	-21.06	peak

Note: 1. Measurement = Reading Level + Correct Factor.

Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

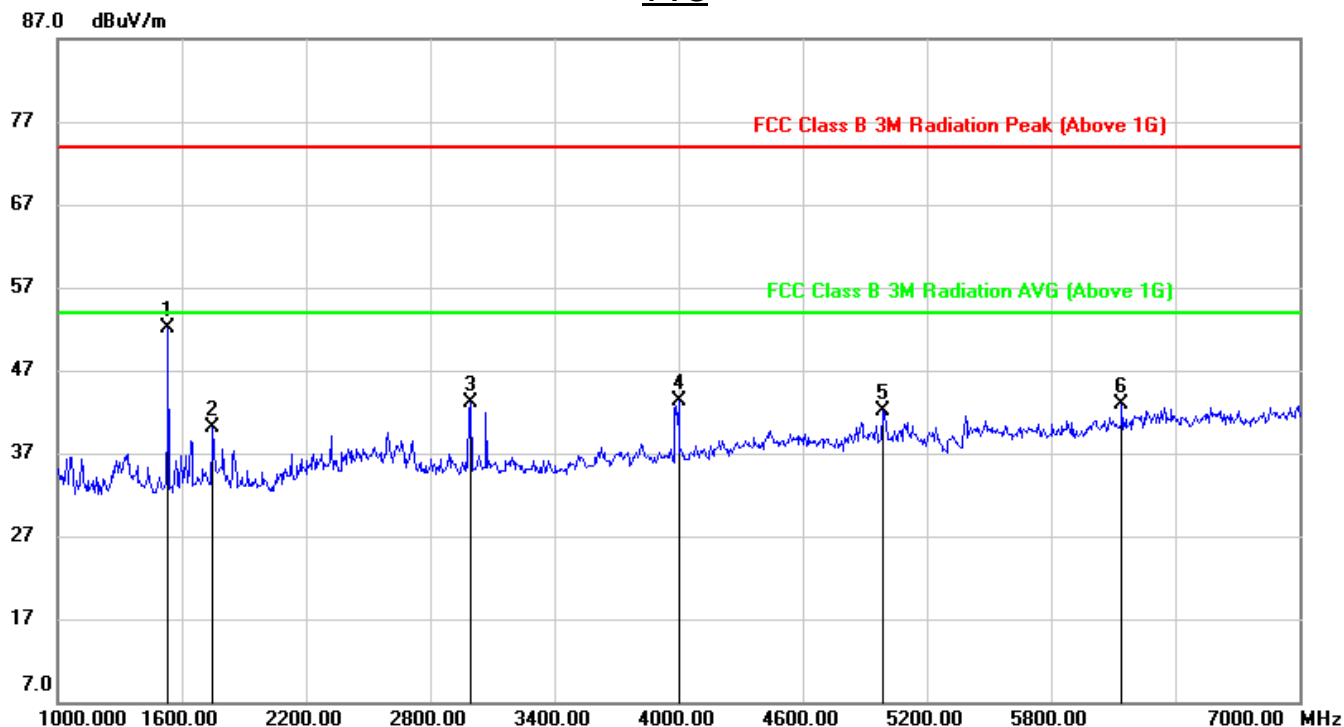
4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



HARMONICS AND SPURIOUS EMISSIONS HIGH CHANNEL

HORIZONTAL RESULTS

1-7G



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1534.000	64.92	-12.79	52.13	74.00	-21.87	peak
2	1750.000	52.07	-11.89	40.18	74.00	-33.82	peak
3	2998.000	50.48	-7.29	43.19	74.00	-30.81	peak
4	4000.000	47.79	-4.54	43.25	74.00	-30.75	peak
5	4984.000	42.98	-0.85	42.13	74.00	-31.87	peak
6	6142.000	40.50	2.41	42.91	74.00	-31.09	peak

Note: 1. Measurement = Reading Level + Correct Factor.

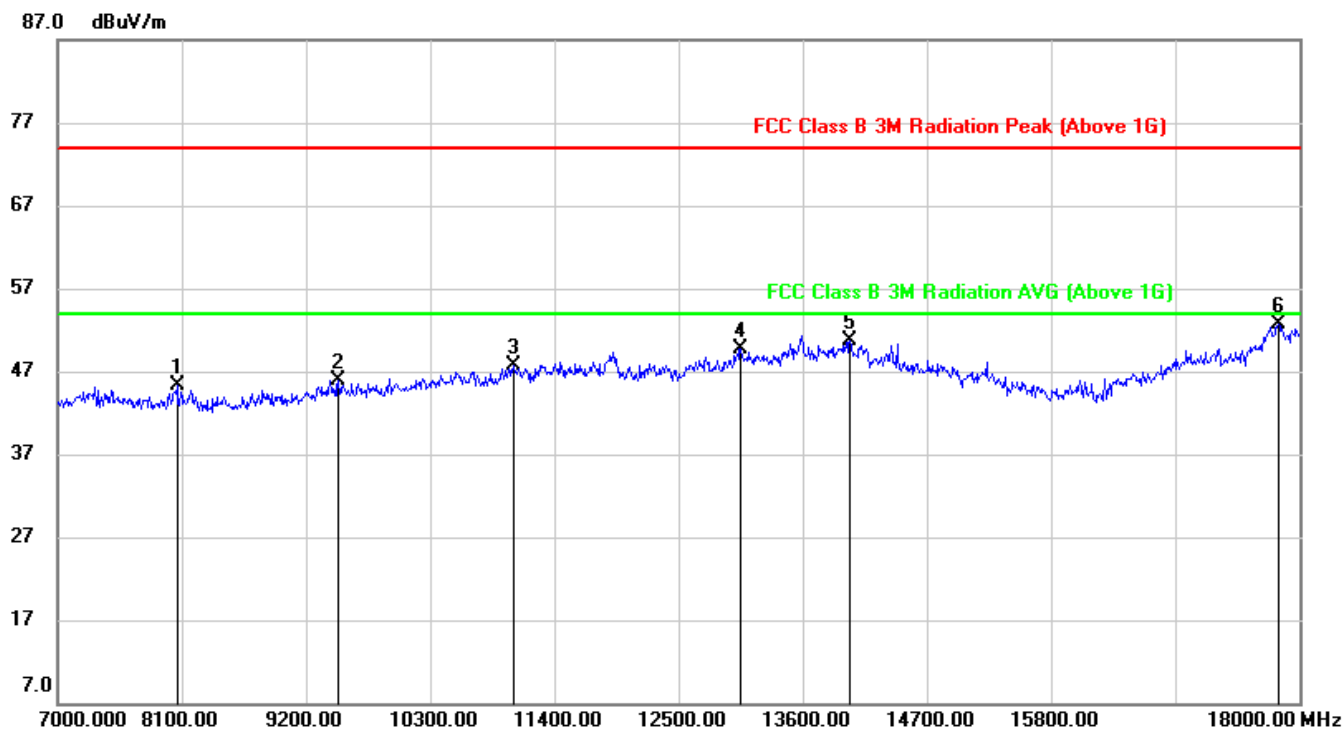
Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



7-18G



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	8056.000	38.44	6.79	45.23	74.00	-28.77	peak
2	9486.000	36.34	9.64	45.98	74.00	-28.02	peak
3	11037.000	35.00	12.78	47.78	74.00	-26.22	peak
4	13050.000	33.26	16.46	49.72	74.00	-24.28	peak
5	14018.000	32.15	18.47	50.62	74.00	-23.38	peak
6	17813.000	28.37	24.25	52.62	74.00	-21.38	peak

Note: 1. Measurement = Reading Level + Correct Factor.

Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

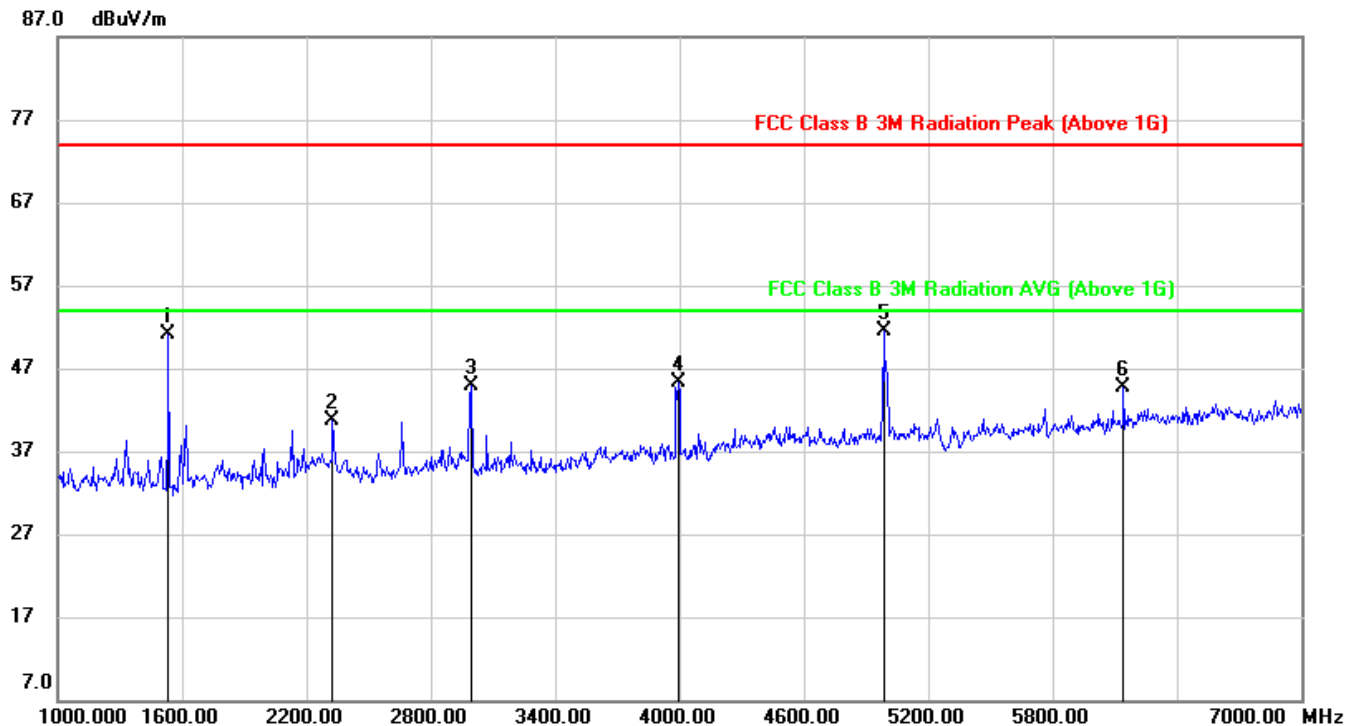
3. Peak: Peak detector.

4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



VERTICAL RESULTS

1-7G



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1534.000	63.80	-12.76	51.04	74.00	-22.96	peak
2	2326.000	49.06	-8.39	40.67	74.00	-33.33	peak
3	2992.000	52.19	-7.29	44.90	74.00	-29.10	peak
4	3994.000	49.81	-4.54	45.27	74.00	-28.73	peak
5	4984.000	52.27	-0.78	51.49	74.00	-22.51	peak
6	6142.000	42.09	2.52	44.61	74.00	-29.39	peak

Note: 1. Measurement = Reading Level + Correct Factor.

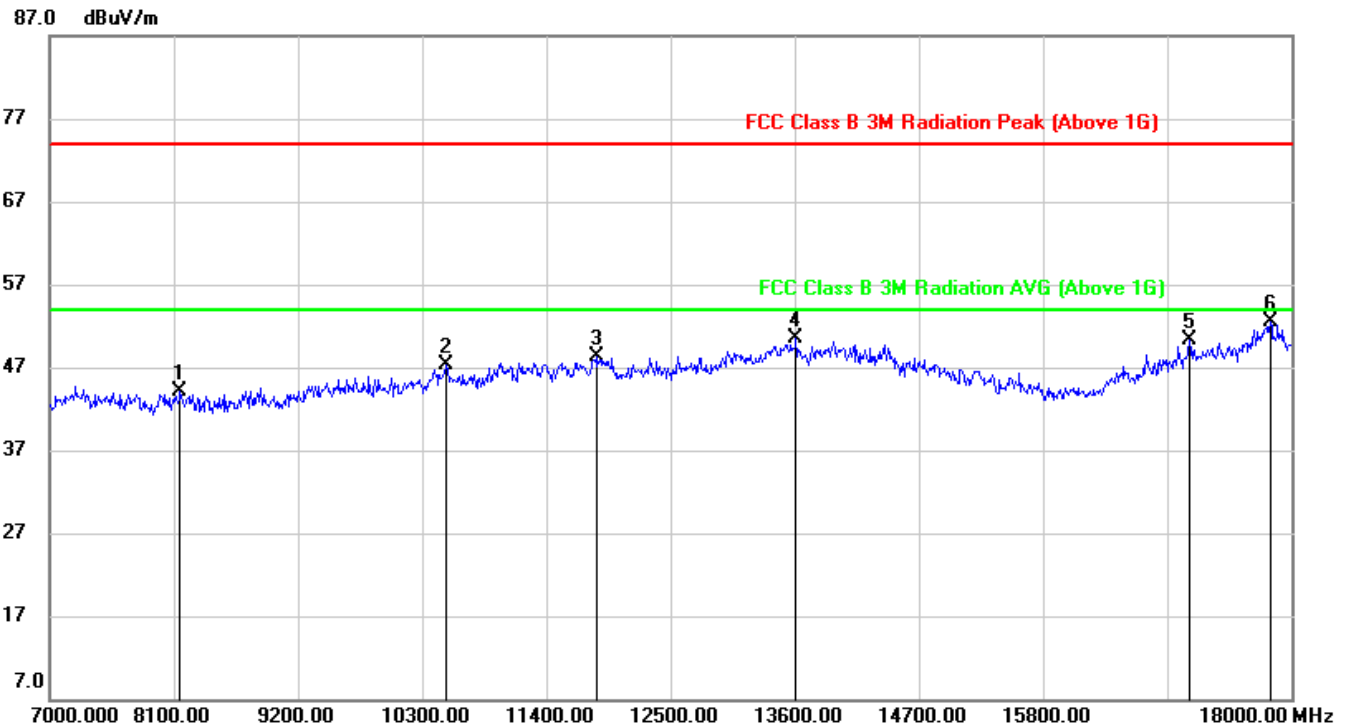
Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



7-18G



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	8155.000	37.02	7.00	44.02	74.00	-29.98	peak
2	10509.000	35.34	11.99	47.33	74.00	-26.67	peak
3	11840.000	33.53	14.70	48.23	74.00	-25.77	peak
4	13611.000	32.11	18.41	50.52	74.00	-23.48	peak
5	17098.000	29.70	20.65	50.35	74.00	-23.65	peak
6	17813.000	28.05	24.44	52.49	74.00	-21.51	peak

Note: 1. Measurement = Reading Level + Correct Factor.

Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



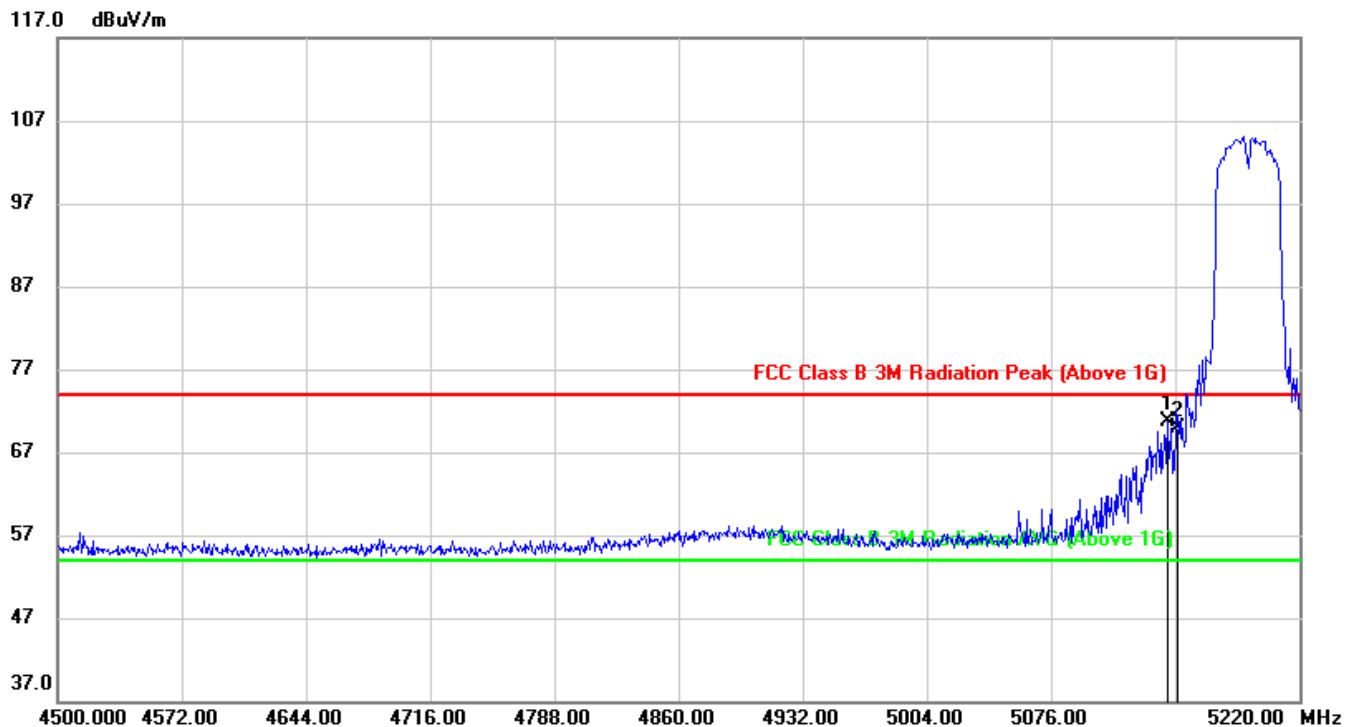
7.2. 802.11n HT40 MODE

7.2.1. UNII-1 BAND

RESTRICTED BANDEDGE LOW CHANNEL

HORIZONTAL RESULTS

PEAK



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5143.680	30.32	40.38	70.70	74.00	-3.30	peak
2	5150.000	29.60	40.40	70.00	74.00	-4.00	peak

Note: 1. Measurement = Reading Level + Correct Factor.

Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

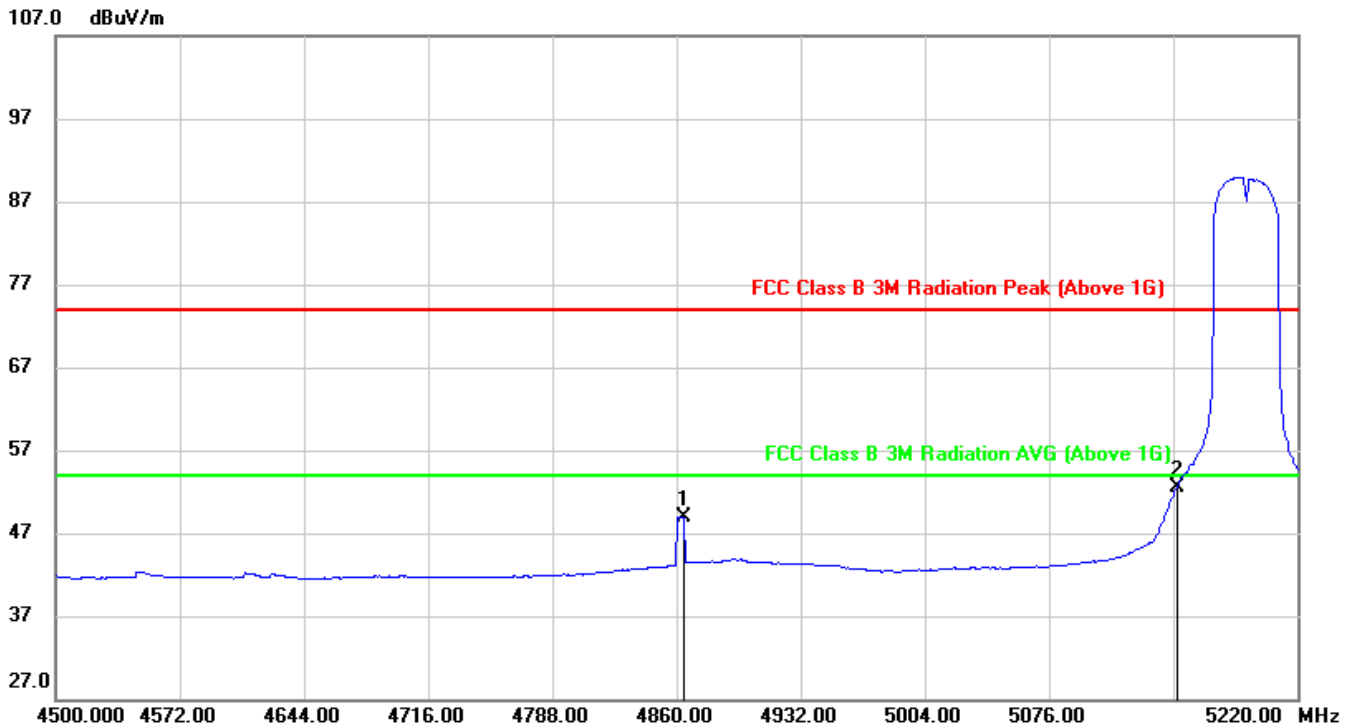
3. Peak: Peak detector.



4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



AVG



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4864.320	9.19	39.75	48.94	54.00	-5.06	AVG
2	5150.000	12.17	40.40	52.57	54.00	-1.43	AVG

Note: 1. Measurement = Reading Level + Correct Factor.

Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: $VBW=1/Ton=2K$, where: Ton is transmit duration.

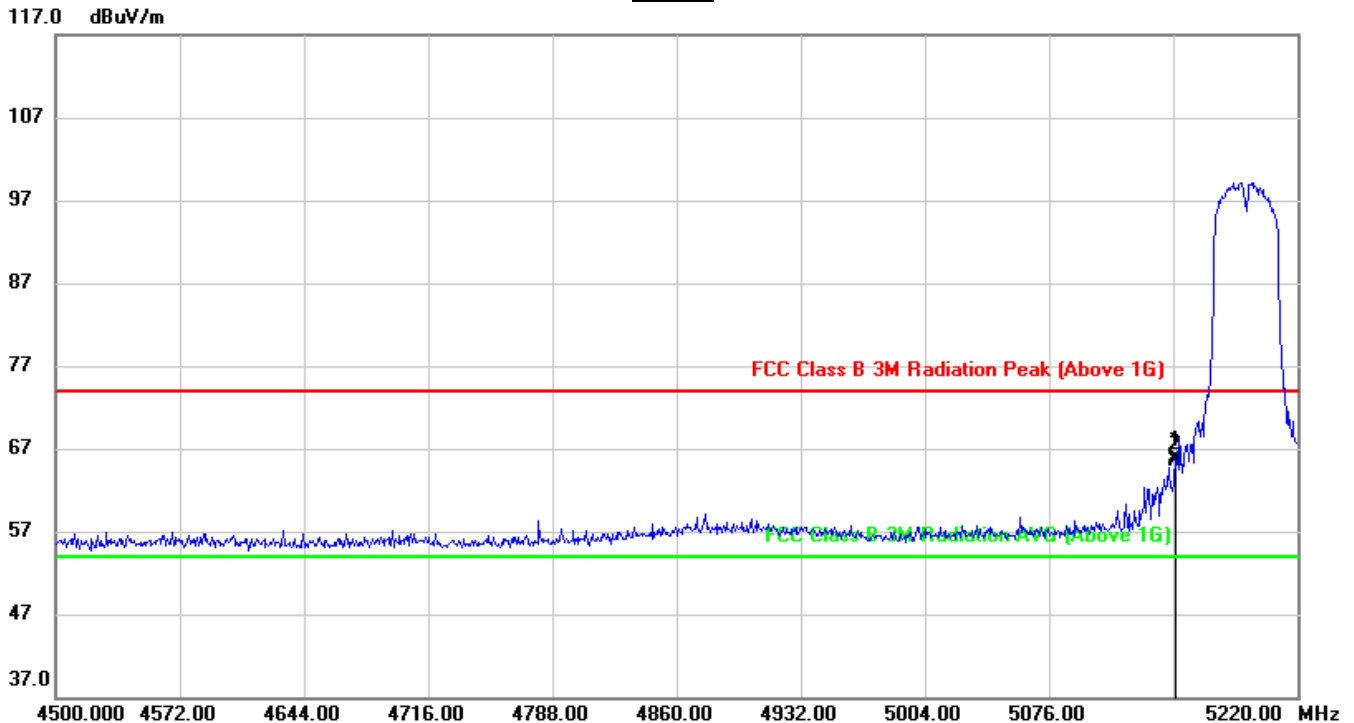
5. For transmit duration, please refer to clause 6.1.

6. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



VERTICAL RESULTS

PEAK



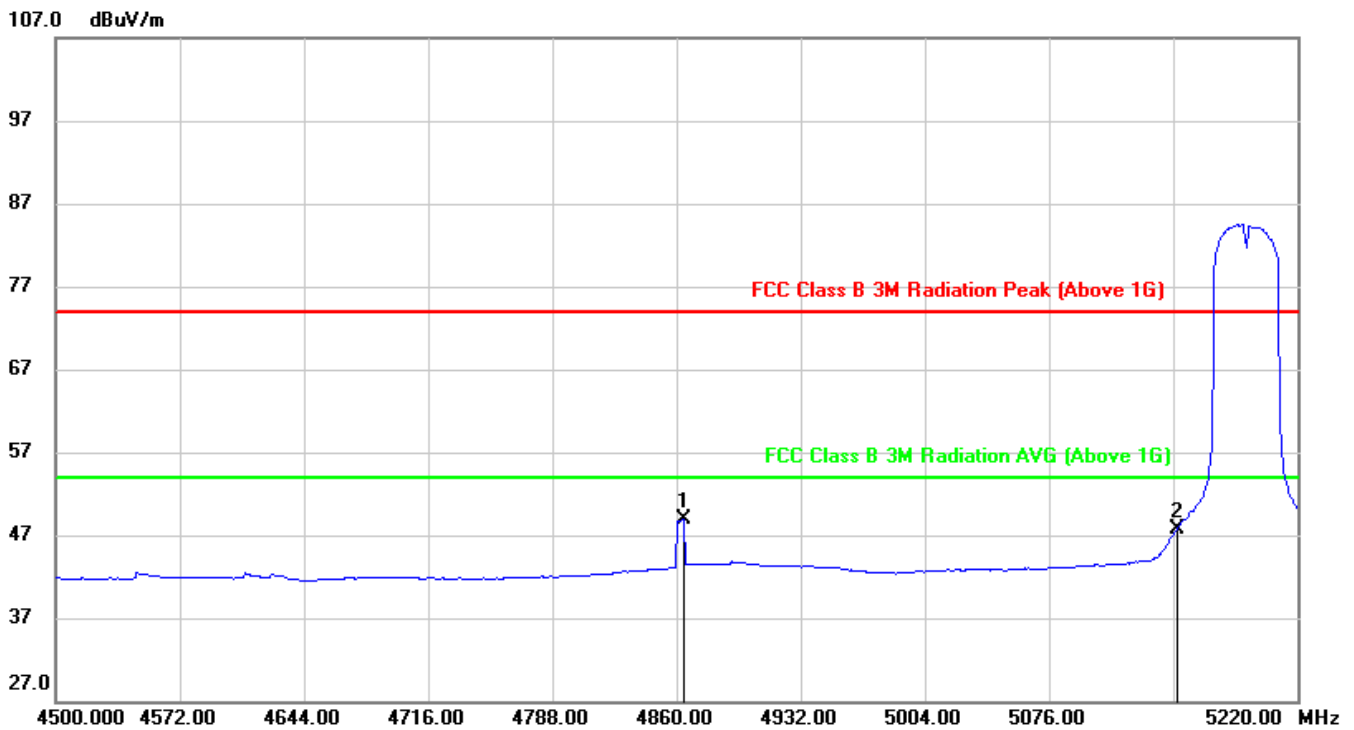
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5149.440	25.33	40.60	65.93	74.00	-8.07	peak
2	5150.000	24.98	40.60	65.58	74.00	-8.42	peak

Note: 1. Measurement = Reading Level + Correct Factor.

Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.

**AVG**

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4864.320	9.14	39.72	48.86	54.00	-5.14	AVG
2	5150.000	7.19	40.60	47.79	54.00	-6.21	AVG

Note: 1. Measurement = Reading Level + Correct Factor.

Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: $VBW=1/Ton=2K$, where: Ton is transmit duration.

5. For transmit duration, please refer to clause 6.1.

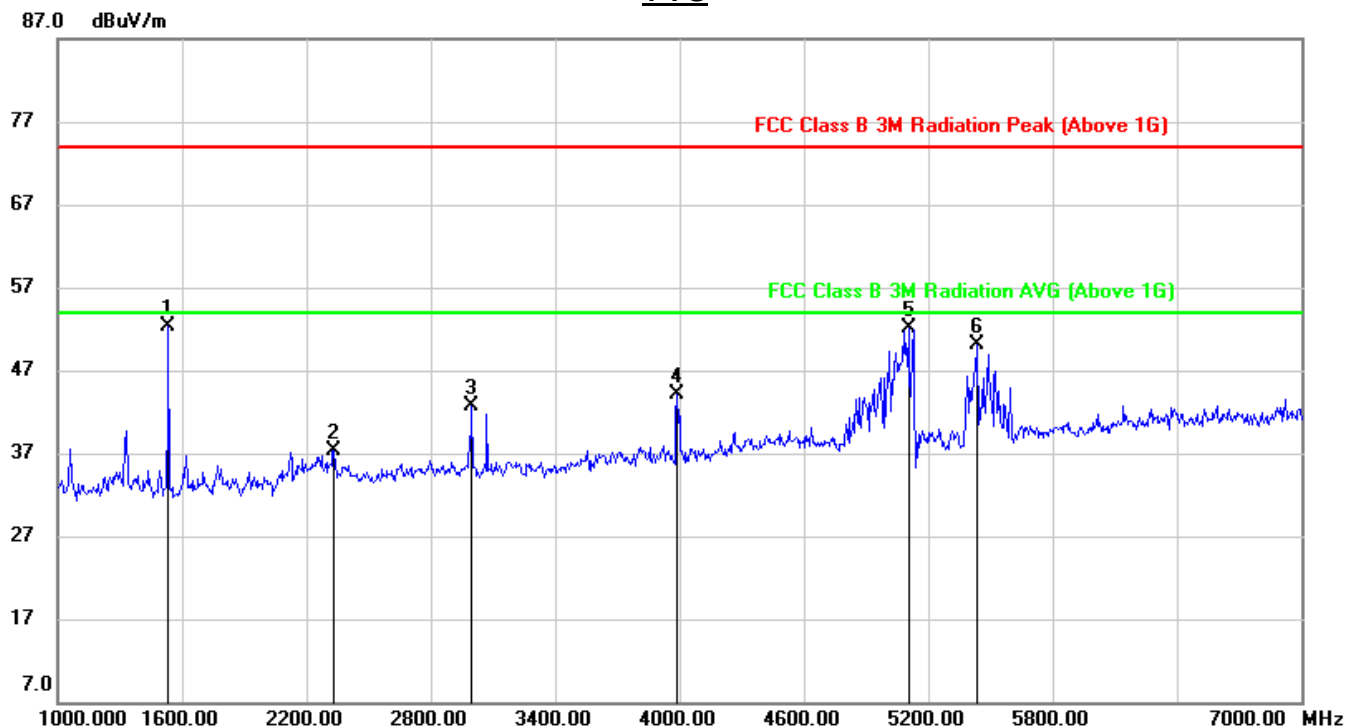
6. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



HARMONICS AND SPURIOUS EMISSIONS LOW CHANNEL

HORIZONTAL RESULTS

1-7G



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1534.000	65.11	-12.79	52.32	74.00	-21.68	peak
2	2332.000	45.97	-8.57	37.40	74.00	-36.60	peak
3	2998.000	49.90	-7.29	42.61	74.00	-31.39	peak
4	3988.000	48.71	-4.54	44.17	74.00	-29.83	peak
5	5104.000	52.60	-0.47	52.13	74.00	-21.87	peak
6	5434.000	49.58	0.56	50.14	74.00	-23.86	peak

Note: 1. Measurement = Reading Level + Correct Factor.

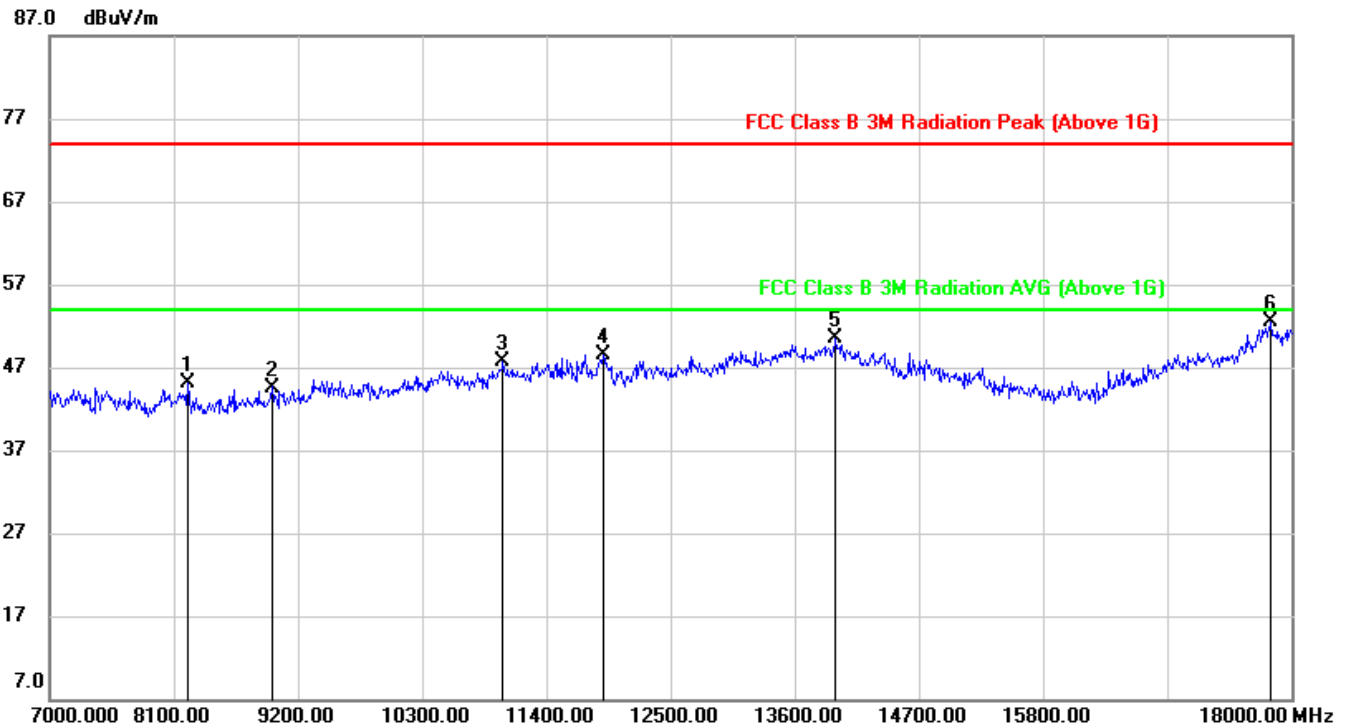
Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



7-18G



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	8221.000	38.03	7.10	45.13	74.00	-28.87	peak
2	8969.000	36.62	7.98	44.60	74.00	-29.40	peak
3	11015.000	34.81	12.87	47.68	74.00	-26.32	peak
4	11906.000	33.36	15.16	48.52	74.00	-25.48	peak
5	13963.000	31.96	18.53	50.49	74.00	-23.51	peak
6	17813.000	28.26	24.25	52.51	74.00	-21.49	peak

Note: 1. Measurement = Reading Level + Correct Factor.

Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

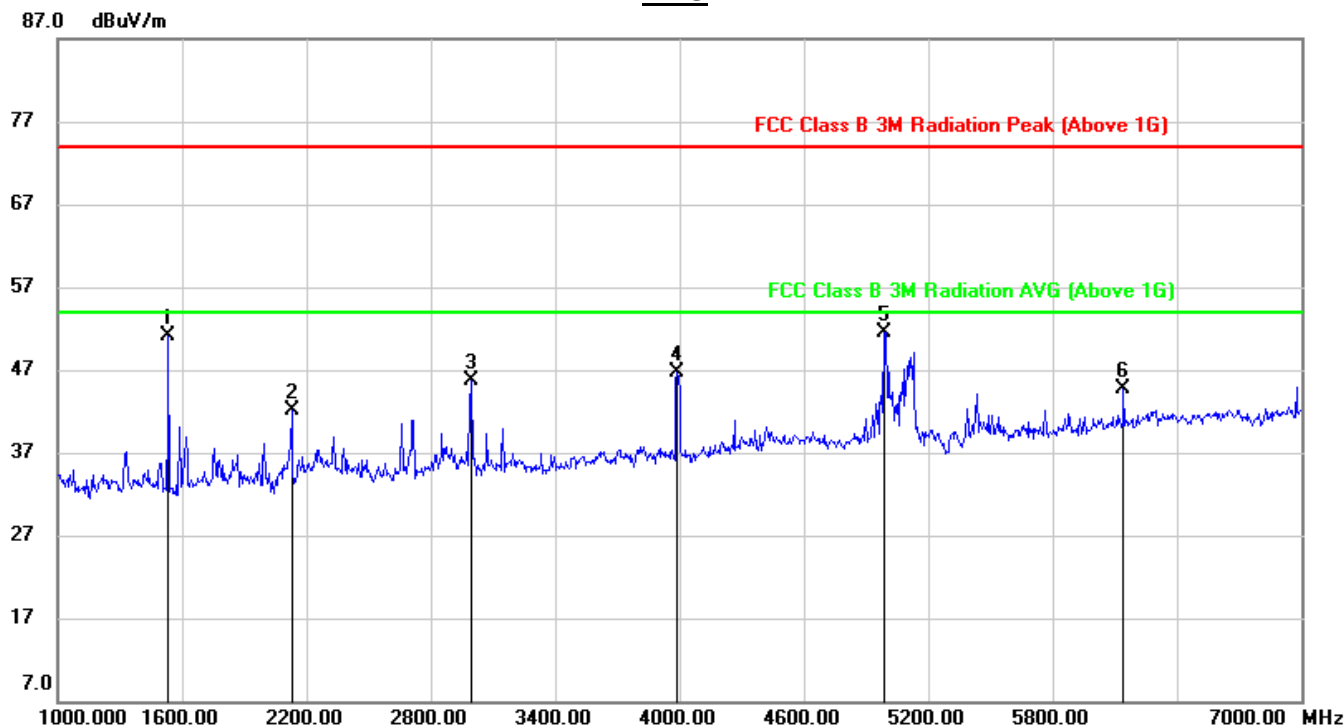
3. Peak: Peak detector.

4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



VERTICAL RESULTS

1-7G



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1534.000	63.77	-12.76	51.01	74.00	-22.99	peak
2	2128.000	51.97	-9.94	42.03	74.00	-31.97	peak
3	2998.000	52.99	-7.29	45.70	74.00	-28.30	peak
4	3988.000	51.20	-4.54	46.66	74.00	-27.34	peak
5	4984.000	52.33	-0.78	51.55	74.00	-22.45	peak
6	6142.000	42.11	2.52	44.63	74.00	-29.37	peak

Note: 1. Measurement = Reading Level + Correct Factor.

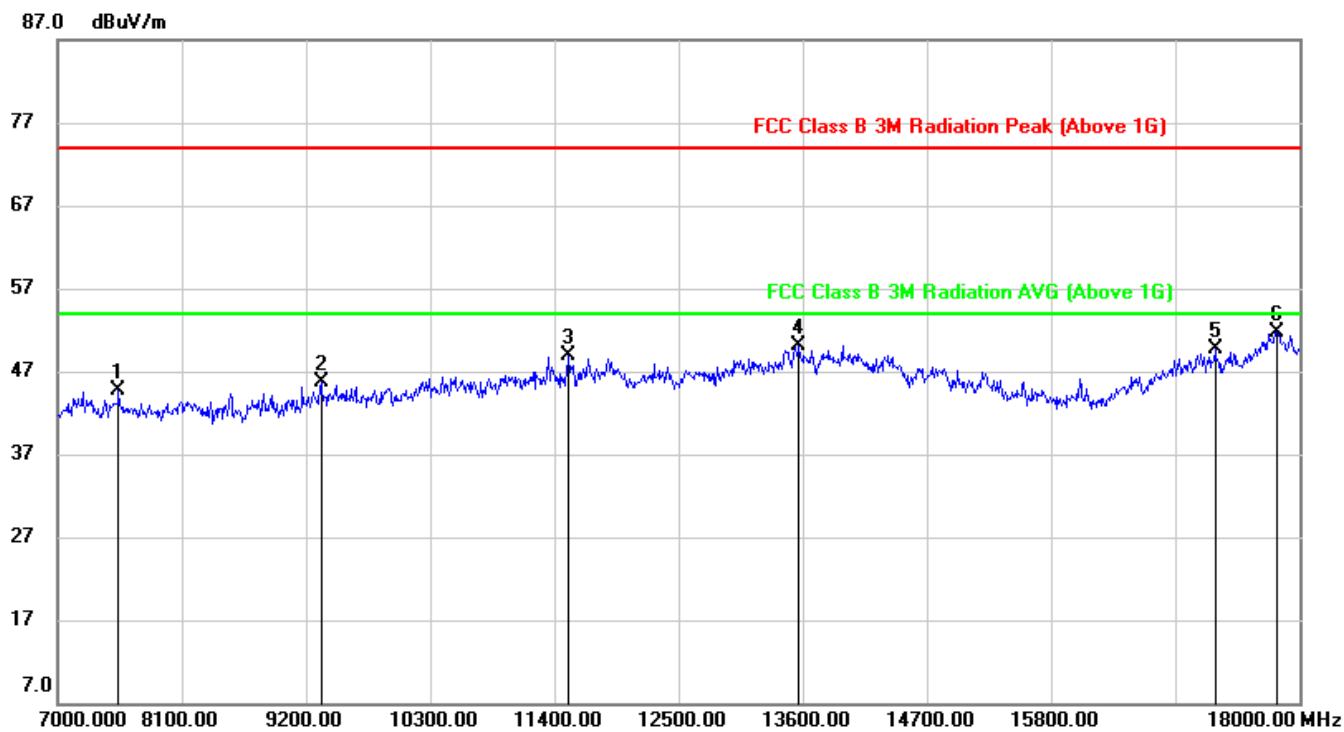
Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



7-18G



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7539.000	37.82	6.79	44.61	74.00	-29.39	peak
2	9332.000	36.25	9.40	45.65	74.00	-28.35	peak
3	11521.000	34.77	14.14	48.91	74.00	-25.09	peak
4	13567.000	31.34	18.71	50.05	74.00	-23.95	peak
5	17252.000	28.62	21.00	49.62	74.00	-24.38	peak
6	17802.000	27.18	24.61	51.79	74.00	-22.21	peak

Note: 1. Measurement = Reading Level + Correct Factor.

Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

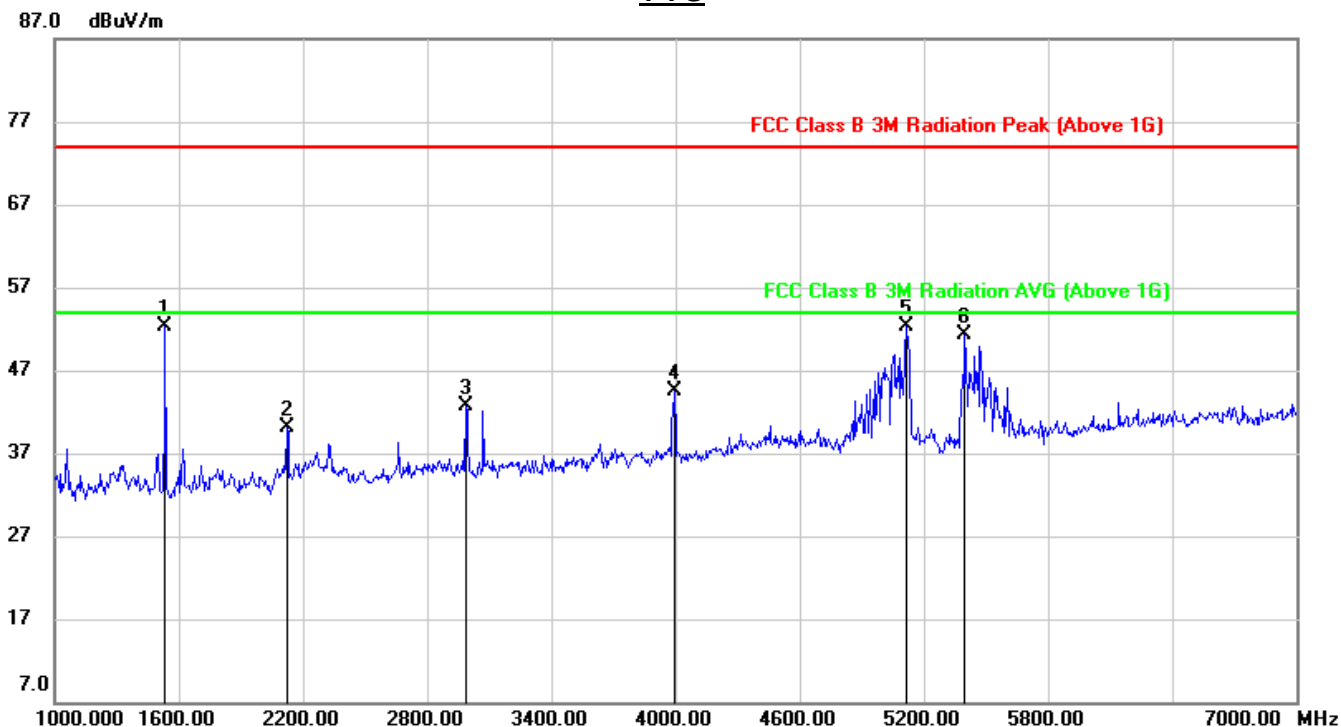
4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



HARMONICS AND SPURIOUS EMISSIONS HIGH CHANNEL

HORIZONTAL RESULTS

1-7G



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1534.000	65.07	-12.79	52.28	74.00	-21.72	peak
2	2122.000	50.01	-9.93	40.08	74.00	-33.92	peak
3	2986.000	49.97	-7.29	42.68	74.00	-31.32	peak
4	3994.000	49.03	-4.54	44.49	74.00	-29.51	peak
5	5116.000	52.72	-0.41	52.31	74.00	-21.69	peak
6	5398.000	51.09	0.30	51.39	74.00	-22.61	peak

Note: 1. Measurement = Reading Level + Correct Factor.

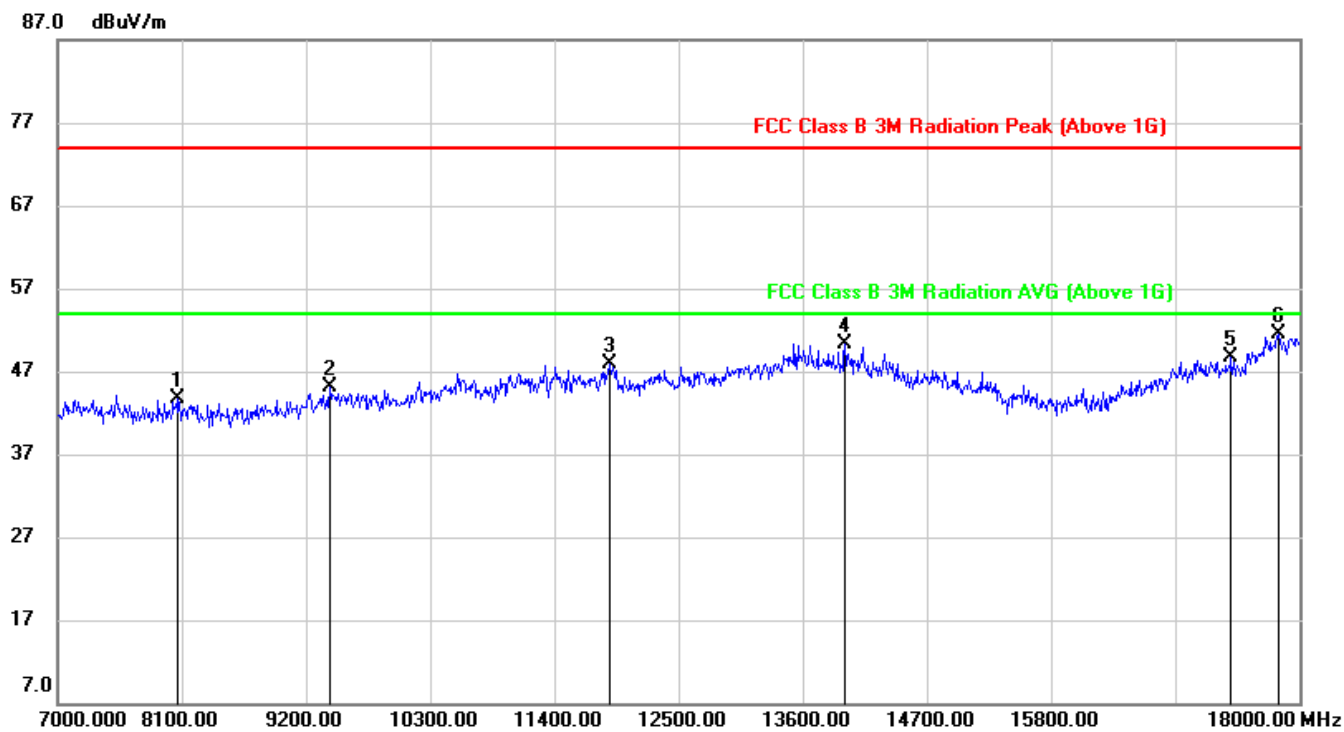
Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



7-18G



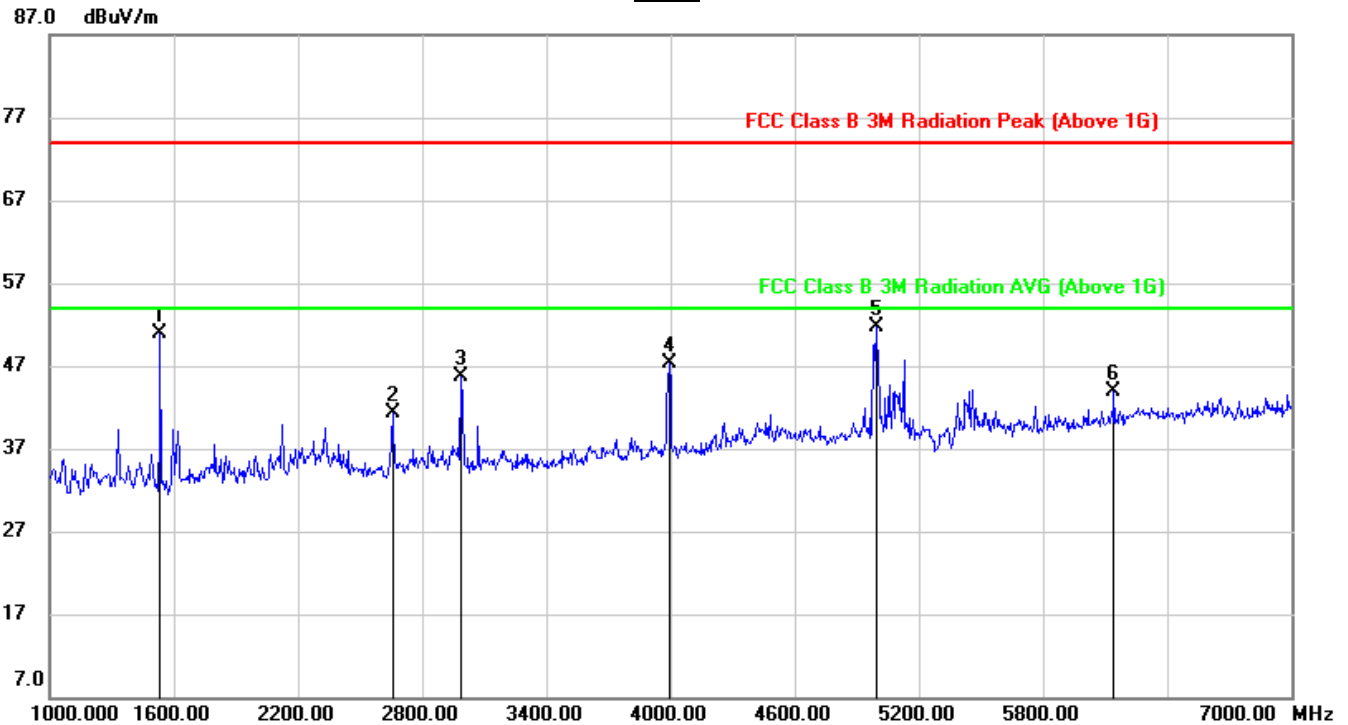
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	8056.000	37.01	6.79	43.80	74.00	-30.20	peak
2	9409.000	35.60	9.53	45.13	74.00	-28.87	peak
3	11895.000	32.77	15.15	47.92	74.00	-26.08	peak
4	13974.000	31.77	18.51	50.28	74.00	-23.72	peak
5	17395.000	27.86	20.80	48.66	74.00	-25.34	peak
6	17813.000	27.22	24.25	51.47	74.00	-22.53	peak

Note: 1. Measurement = Reading Level + Correct Factor.
Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



VERTICAL RESULTS

1-7G



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1534.000	63.57	-12.76	50.81	74.00	-23.19	peak
2	2656.000	49.99	-8.63	41.36	74.00	-32.64	peak
3	2986.000	53.00	-7.29	45.71	74.00	-28.29	peak
4	3994.000	51.93	-4.54	47.39	74.00	-26.61	peak
5	4996.000	52.51	-0.78	51.73	74.00	-22.27	peak
6	6142.000	41.47	2.52	43.99	74.00	-30.01	peak

Note: 1. Measurement = Reading Level + Correct Factor.

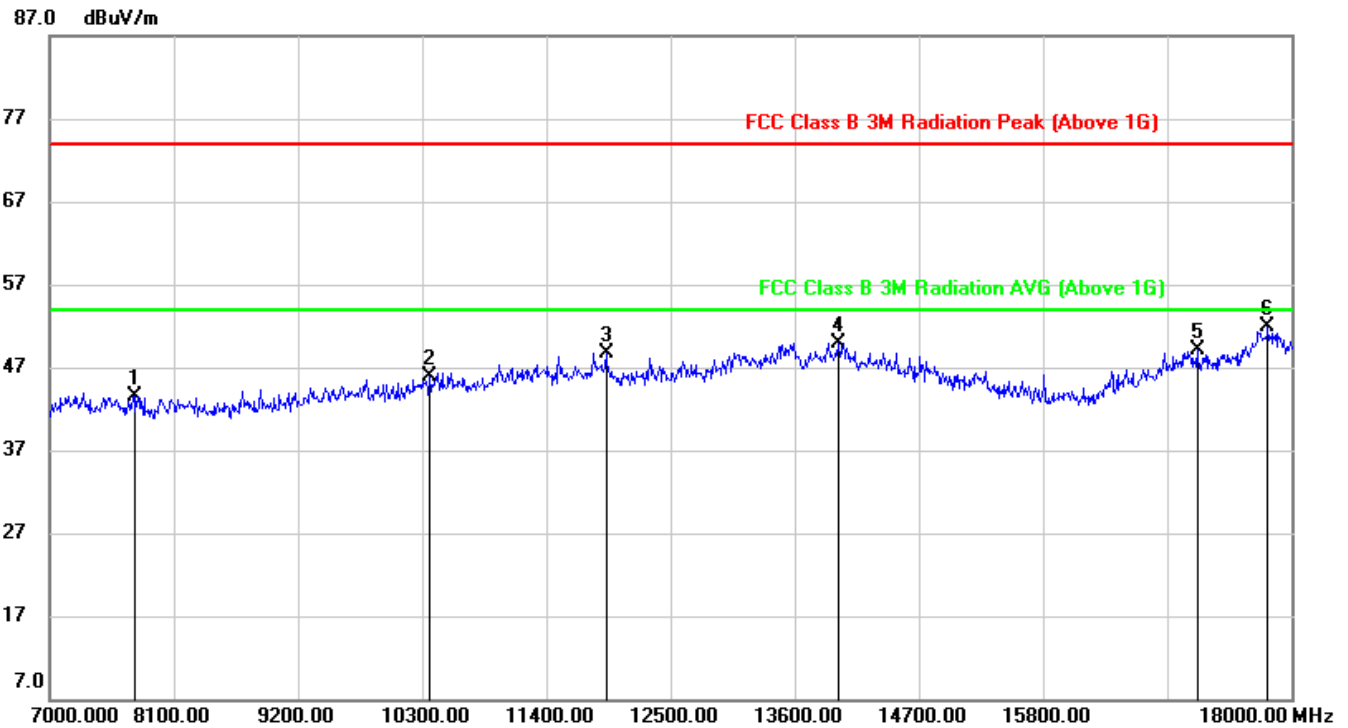
Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



7-18G



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7748.000	36.99	6.55	43.54	74.00	-30.46	peak
2	10366.000	34.57	11.27	45.84	74.00	-28.16	peak
3	11928.000	33.97	14.75	48.72	74.00	-25.28	peak
4	13985.000	31.40	18.60	50.00	74.00	-24.00	peak
5	17164.000	28.47	20.68	49.15	74.00	-24.85	peak
6	17791.000	27.29	24.52	51.81	74.00	-22.19	peak

Note: 1. Measurement = Reading Level + Correct Factor.

Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



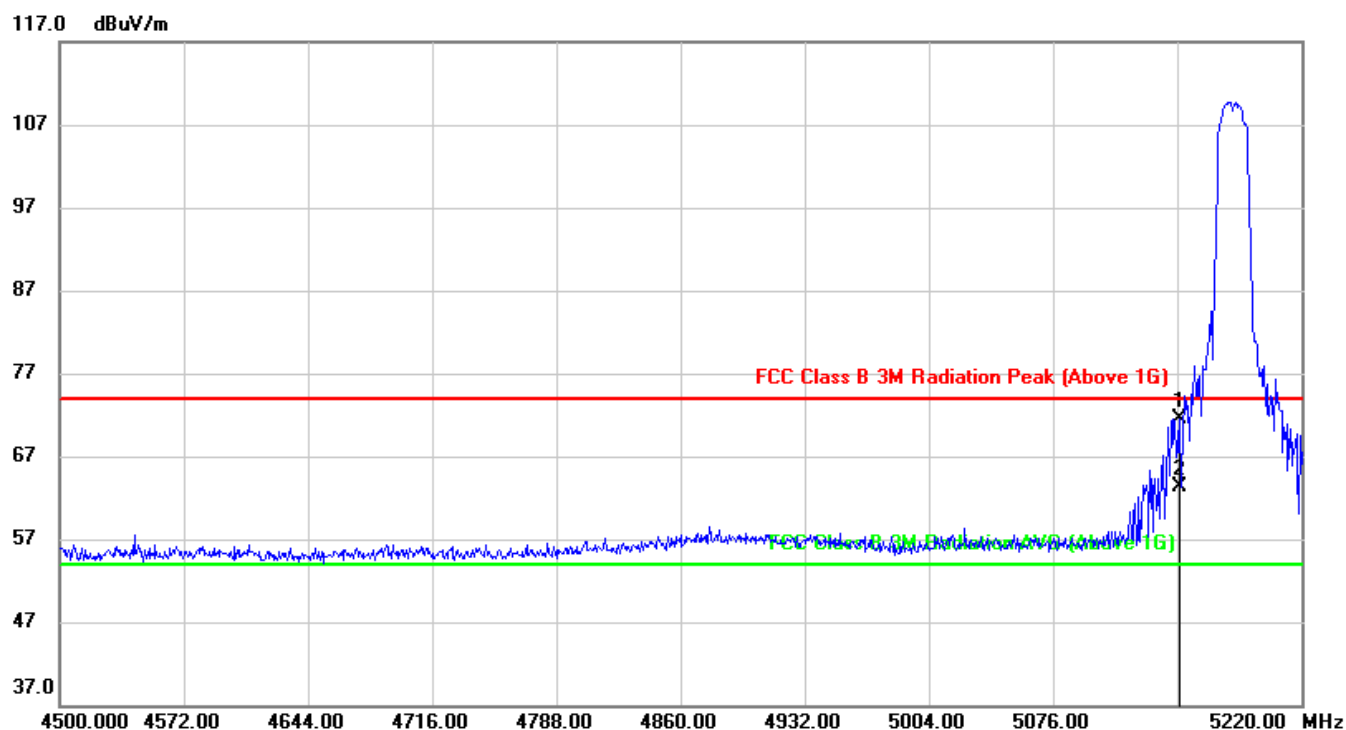
7.3. 802.11ac HT20 MODE

7.3.1. UNII-1 BAND

RESTRICTED BANDEDGE LOW CHANNEL

HORIZONTAL RESULTS

PEAK



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5149.440	31.15	40.40	71.55	74.00	-2.45	peak
2	5150.000	22.85	40.40	63.25	74.00	-10.75	peak

Note: 1. Measurement = Reading Level + Correct Factor.

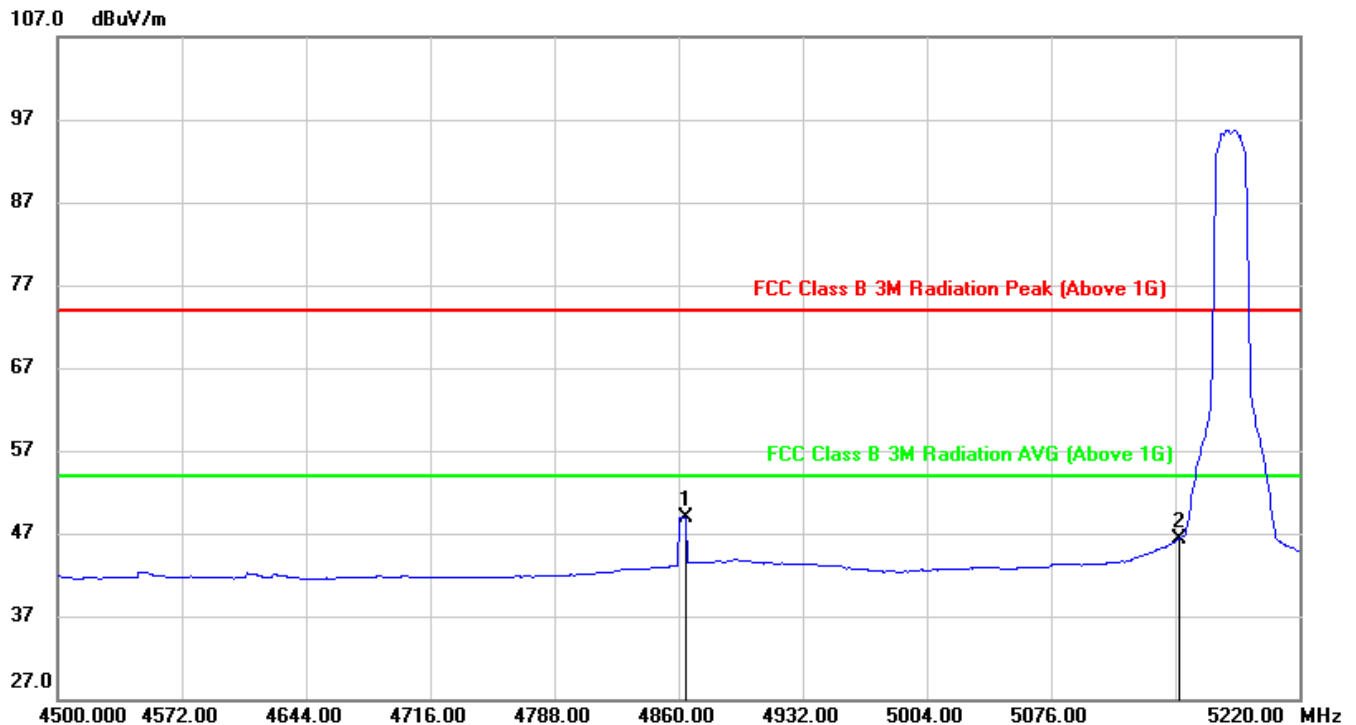
Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



AVG



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4864.320	9.16	39.75	48.91	54.00	-5.09	AVG
2	5150.000	5.98	40.40	46.38	54.00	-7.62	AVG

Note: 1. Measurement = Reading Level + Correct Factor.

Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton=1K, where: Ton is transmit duration.

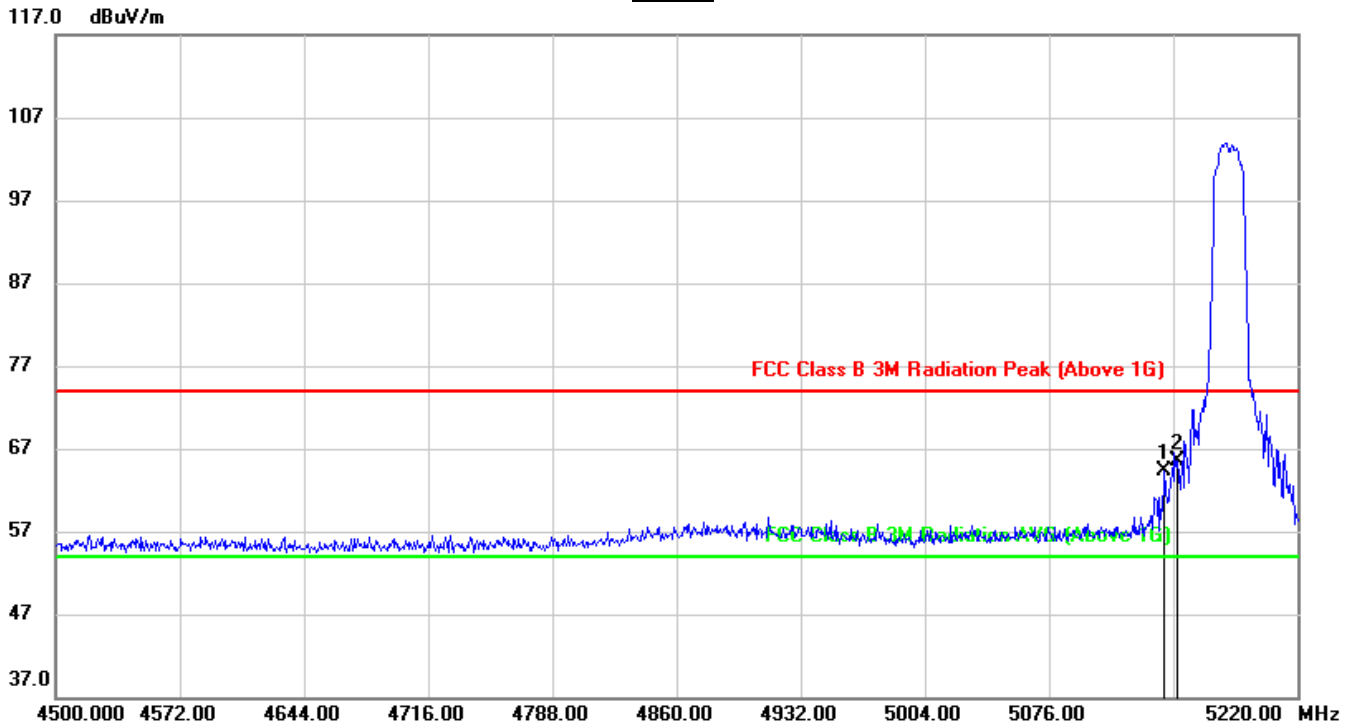
5. For transmit duration, please refer to clause 6.1.

6. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



VERTICAL RESULTS

PEAK



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5142.960	23.69	40.58	64.27	74.00	-9.73	peak
2	5150.000	25.00	40.60	65.60	74.00	-8.40	peak

Note: 1. Measurement = Reading Level + Correct Factor.

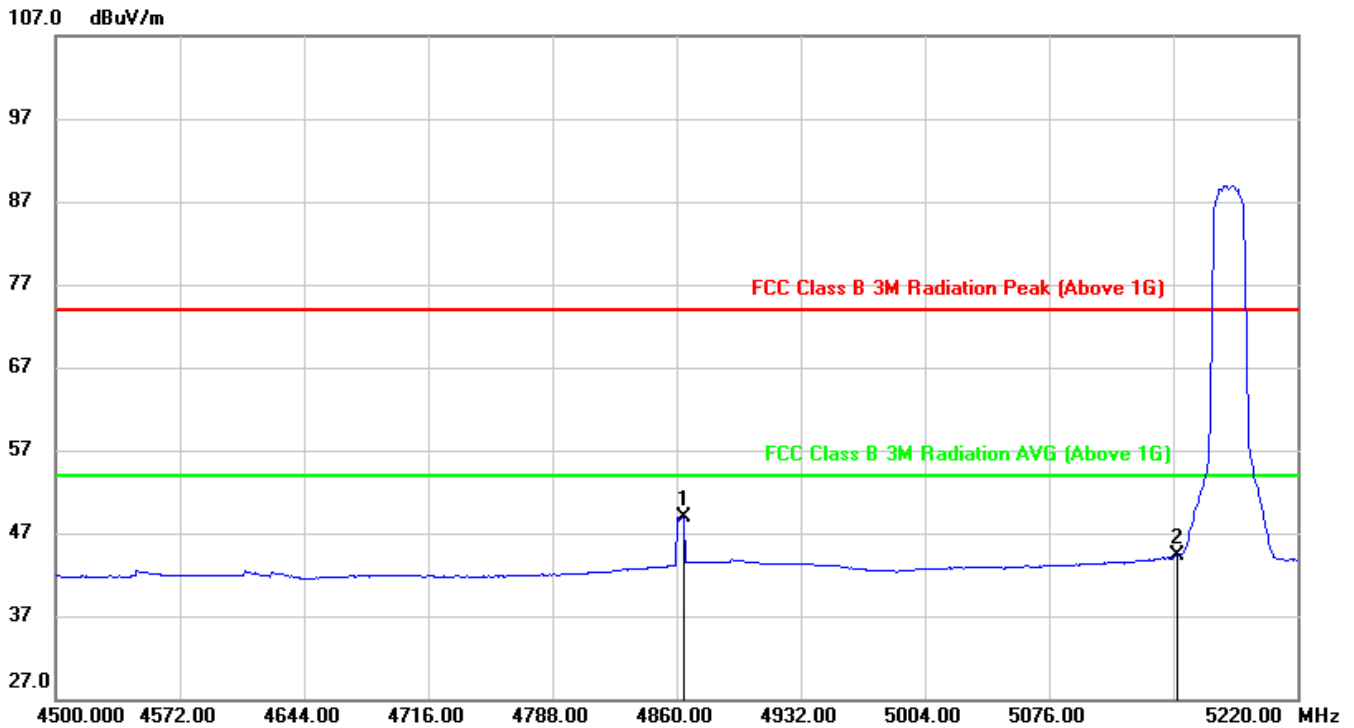
Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



AVG



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4864.320	9.14	39.72	48.86	54.00	-5.14	AVG
2	5150.000	3.65	40.60	44.25	54.00	-9.75	AVG

Note: 1. Measurement = Reading Level + Correct Factor.

Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton=1K, where: Ton is transmit duration.

5. For transmit duration, please refer to clause 6.1.

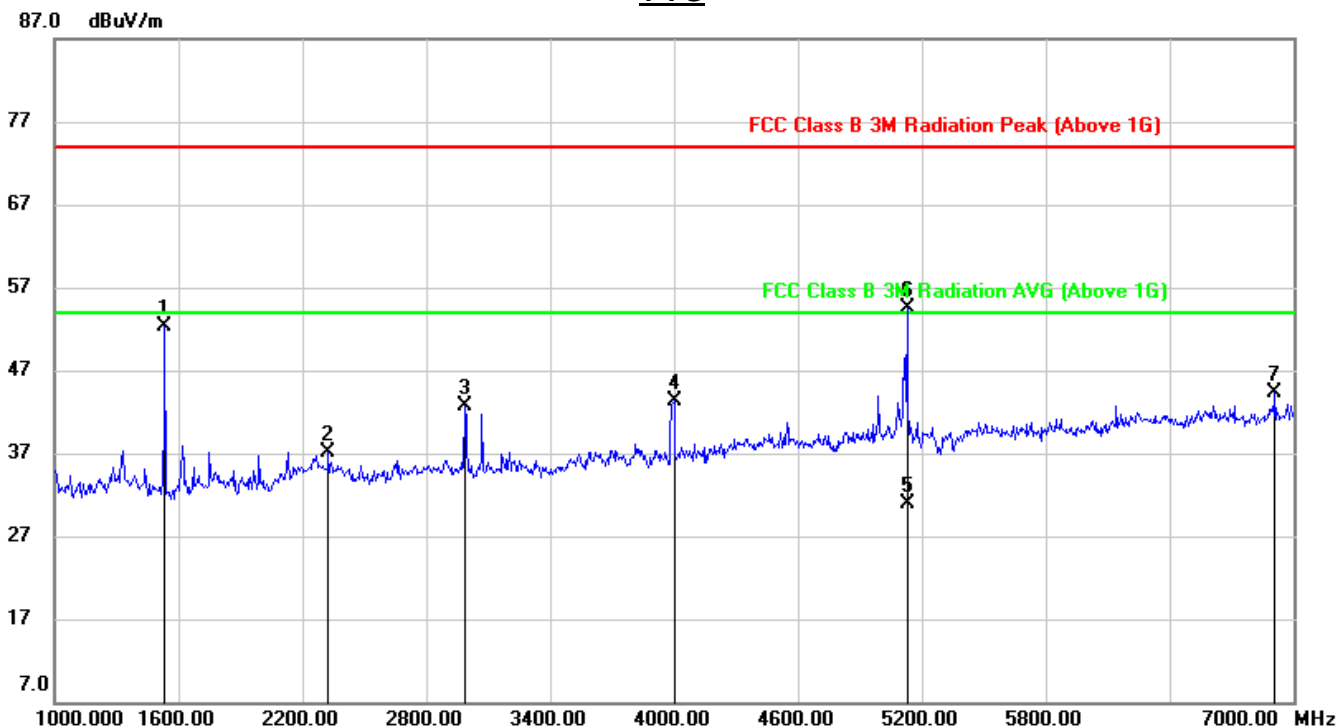
6. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



HARMONICS AND SPURIOUS EMISSIONS LOW CHANNEL

HORIZONTAL RESULTS

1-7G



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1534.000	65.13	-12.79	52.34	74.00	-21.66	peak
2	2326.000	45.69	-8.54	37.15	74.00	-36.85	peak
3	2986.000	50.05	-7.29	42.76	74.00	-31.24	peak
4	4000.000	47.86	-4.54	43.32	74.00	-30.68	peak
5	5125.143	31.20	-0.36	30.84	54.00	-23.16	AVG
6	5128.000	54.79	-0.34	54.45	74.00	-19.55	peak
7	6910.000	39.17	5.06	44.23	74.00	-29.77	peak

Note: 1. Measurement = Reading Level + Correct Factor.

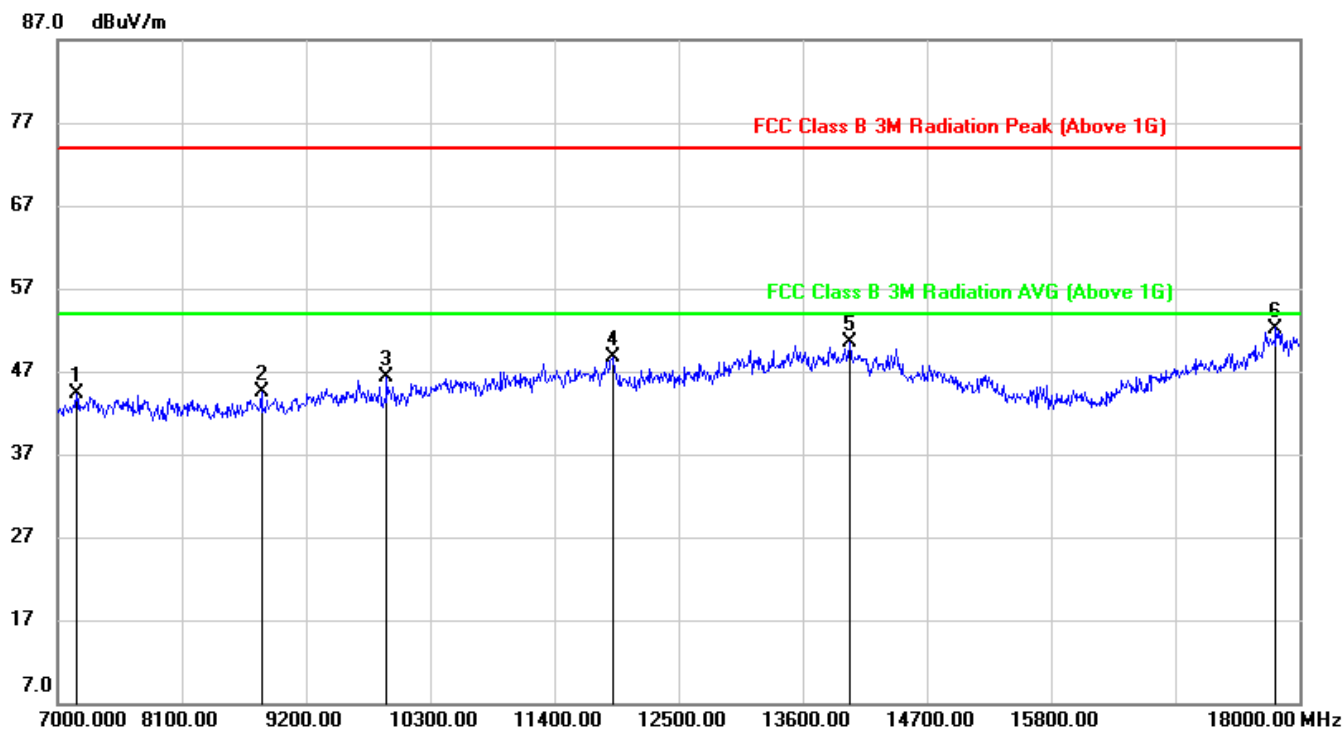
Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



7-18G



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7165.000	38.02	6.36	44.38	74.00	-29.62	peak
2	8804.000	36.53	8.06	44.59	74.00	-29.41	peak
3	9915.000	36.02	10.21	46.23	74.00	-27.77	peak
4	11917.000	33.80	14.98	48.78	74.00	-25.22	peak
5	14018.000	32.11	18.47	50.58	74.00	-23.42	peak
6	17791.000	28.08	24.12	52.20	74.00	-21.80	peak

Note: 1. Measurement = Reading Level + Correct Factor.

Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

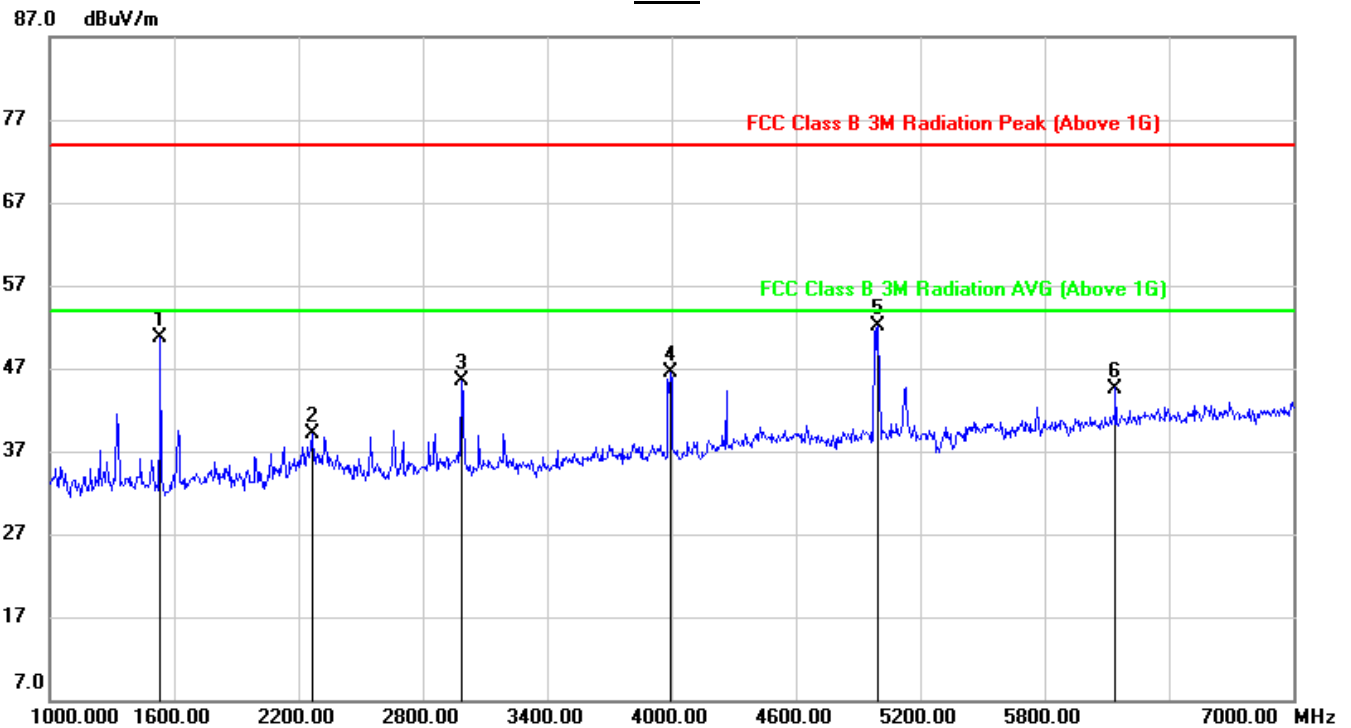
3. Peak: Peak detector.

4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



VERTICAL RESULTS

1-7G



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1534.000	63.54	-12.76	50.78	74.00	-23.22	peak
2	2266.000	47.39	-8.31	39.08	74.00	-34.92	peak
3	2986.000	52.70	-7.29	45.41	74.00	-28.59	peak
4	3994.000	51.05	-4.54	46.51	74.00	-27.49	peak
5	4996.000	52.93	-0.78	52.15	74.00	-21.85	peak
6	6142.000	42.08	2.52	44.60	74.00	-29.40	peak

Note: 1. Measurement = Reading Level + Correct Factor.

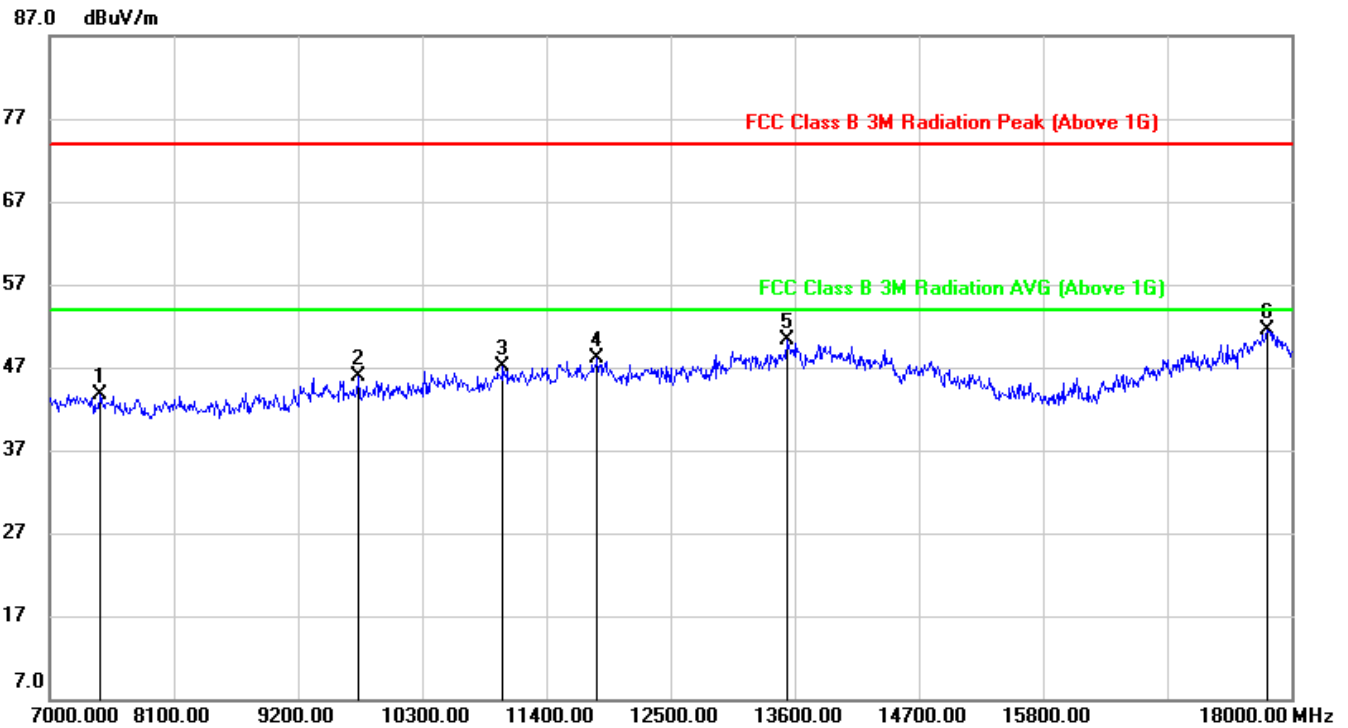
Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



7-18G



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7451.000	37.46	6.27	43.73	74.00	-30.27	peak
2	9739.000	35.78	10.04	45.82	74.00	-28.18	peak
3	11015.000	34.19	12.86	47.05	74.00	-26.95	peak
4	11851.000	33.38	14.72	48.10	74.00	-25.90	peak
5	13534.000	31.42	18.79	50.21	74.00	-23.79	peak
6	17780.000	27.04	24.38	51.42	74.00	-22.58	peak

Note: 1. Measurement = Reading Level + Correct Factor.

Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

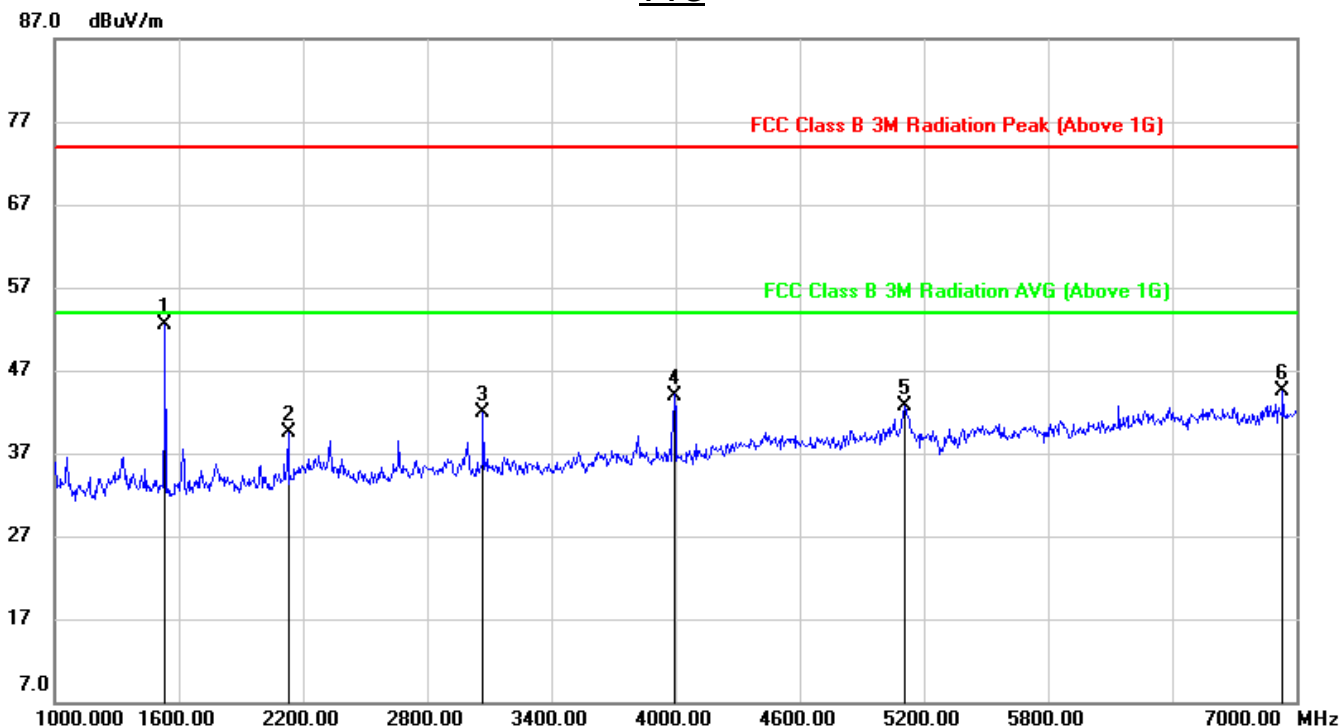
4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



HARMONICS AND SPURIOUS EMISSIONS MID CHANNEL

HORIZONTAL RESULTS

1-7G



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1534.000	65.24	-12.79	52.45	74.00	-21.55	peak
2	2128.000	49.44	-9.84	39.60	74.00	-34.40	peak
3	3070.000	48.86	-7.02	41.84	74.00	-32.16	peak
4	3994.000	48.54	-4.54	44.00	74.00	-30.00	peak
5	5110.000	43.12	-0.44	42.68	74.00	-31.32	peak
6	6934.000	39.31	5.15	44.46	74.00	-29.54	peak

Note: 1. Measurement = Reading Level + Correct Factor.

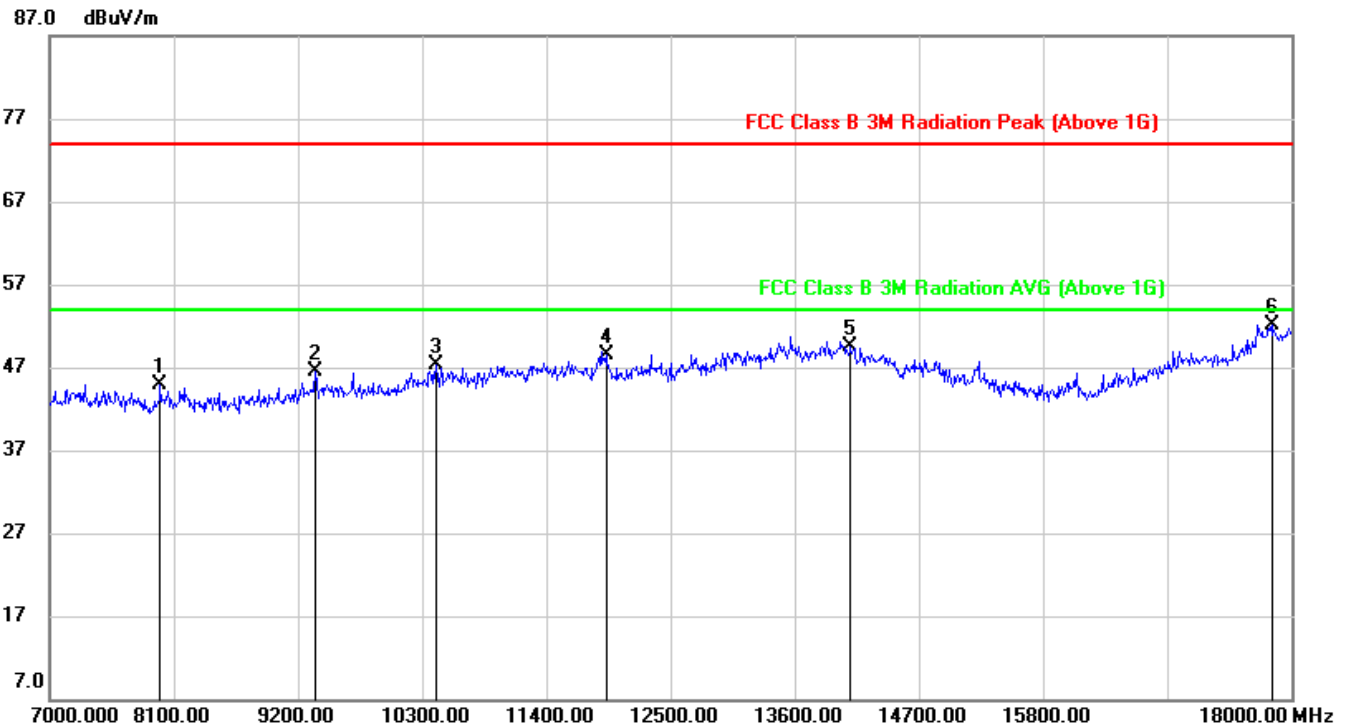
Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



7-18G



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7979.000	38.09	6.72	44.81	74.00	-29.19	peak
2	9354.000	37.04	9.41	46.45	74.00	-27.55	peak
3	10421.000	35.70	11.51	47.21	74.00	-26.79	peak
4	11928.000	33.74	14.80	48.54	74.00	-25.46	peak
5	14095.000	30.96	18.48	49.44	74.00	-24.56	peak
6	17835.000	27.86	24.25	52.11	74.00	-21.89	peak

Note: 1. Measurement = Reading Level + Correct Factor.

Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

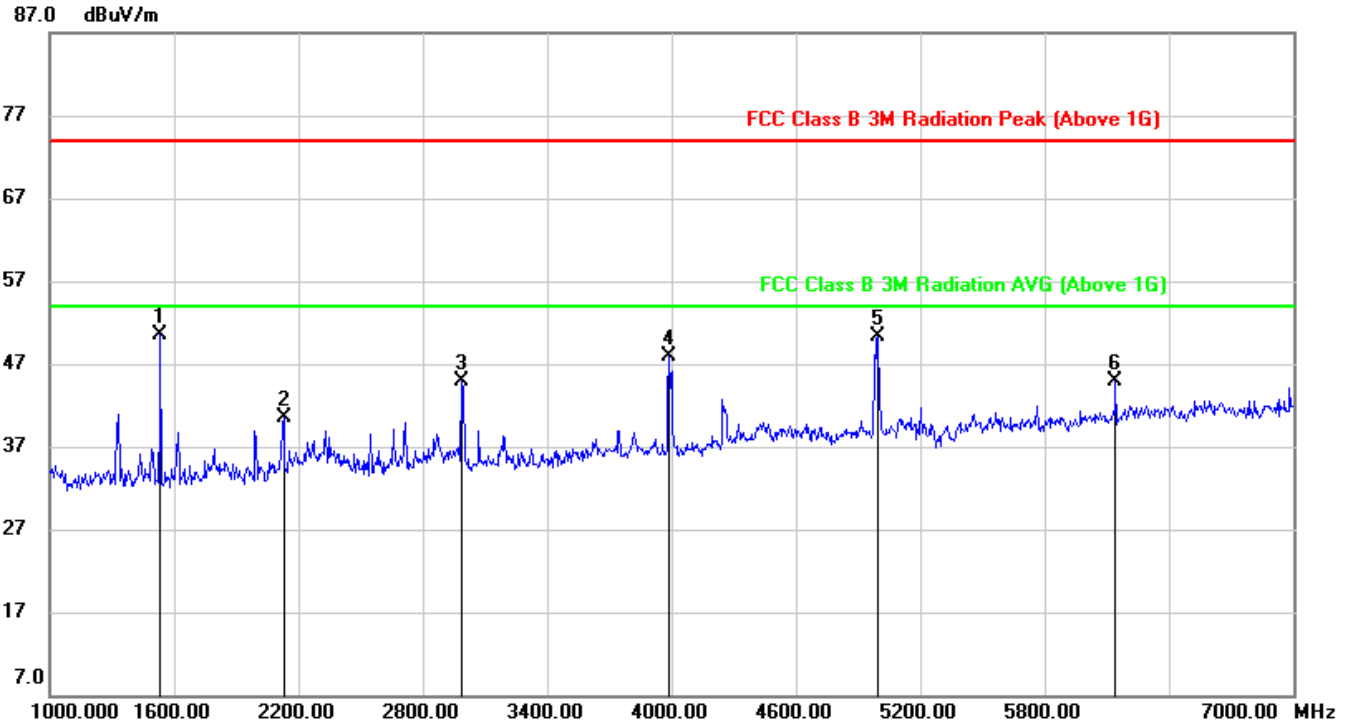
3. Peak: Peak detector.

4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



VERTICAL RESULTS

1-7G



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1534.000	63.36	-12.76	50.60	74.00	-23.40	peak
2	2128.000	50.36	-9.94	40.42	74.00	-33.58	peak
3	2986.000	52.24	-7.29	44.95	74.00	-29.05	peak
4	3988.000	52.52	-4.54	47.98	74.00	-26.02	peak
5	4996.000	50.99	-0.78	50.21	74.00	-23.79	peak
6	6142.000	42.41	2.52	44.93	74.00	-29.07	peak

Note: 1. Measurement = Reading Level + Correct Factor.

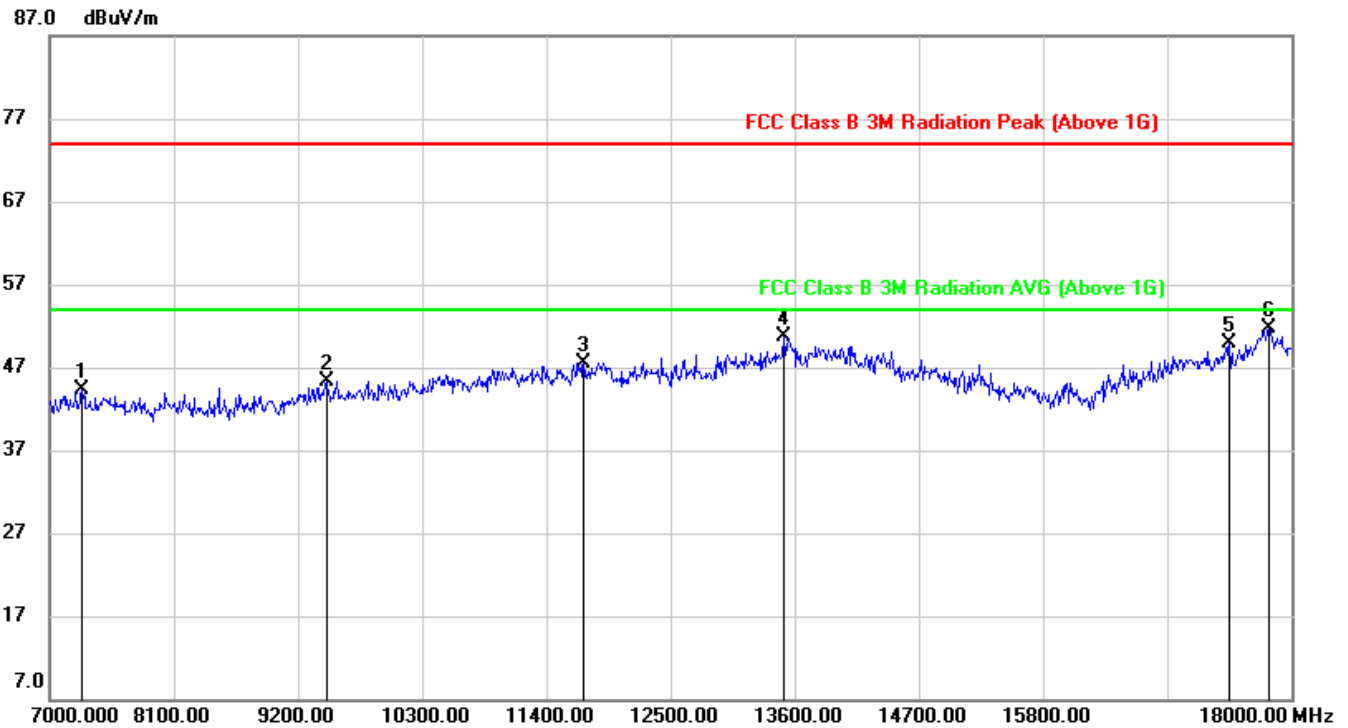
Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



7-18G



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7286.000	37.88	6.43	44.31	74.00	-29.69	peak
2	9453.000	35.57	9.68	45.25	74.00	-28.75	peak
3	11730.000	33.16	14.30	47.46	74.00	-26.54	peak
4	13501.000	32.07	18.57	50.64	74.00	-23.36	peak
5	17450.000	28.28	21.56	49.84	74.00	-24.16	peak
6	17802.000	27.04	24.61	51.65	74.00	-22.35	peak

Note: 1. Measurement = Reading Level + Correct Factor.

Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

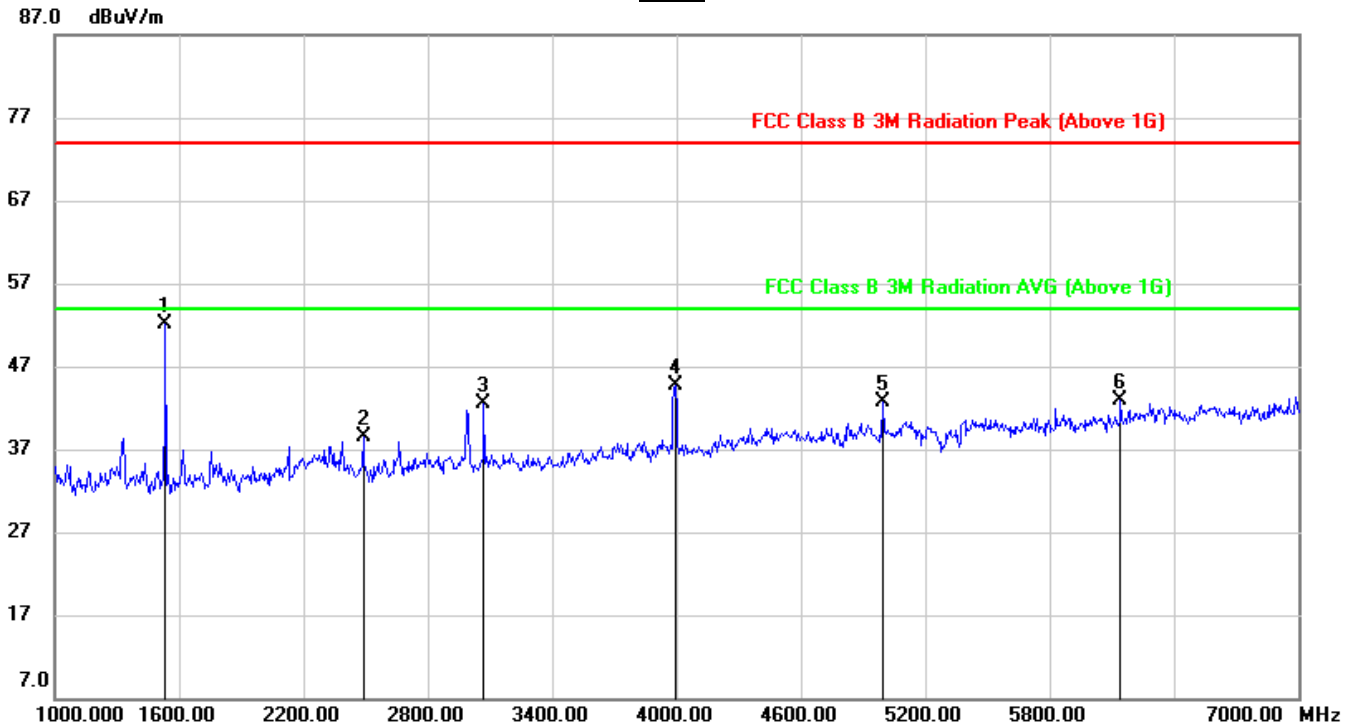
4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



HARMONICS AND SPURIOUS EMISSIONS HIGH CHANNEL

HORIZONTAL RESULTS

1-7G



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1534.000	64.98	-12.79	52.19	74.00	-21.81	peak
2	2488.000	47.79	-9.28	38.51	74.00	-35.49	peak
3	3070.000	49.46	-7.02	42.44	74.00	-31.56	peak
4	3994.000	49.15	-4.54	44.61	74.00	-29.39	peak
5	4996.000	43.67	-0.87	42.80	74.00	-31.20	peak
6	6142.000	40.56	2.41	42.97	74.00	-31.03	peak

Note: 1. Measurement = Reading Level + Correct Factor.

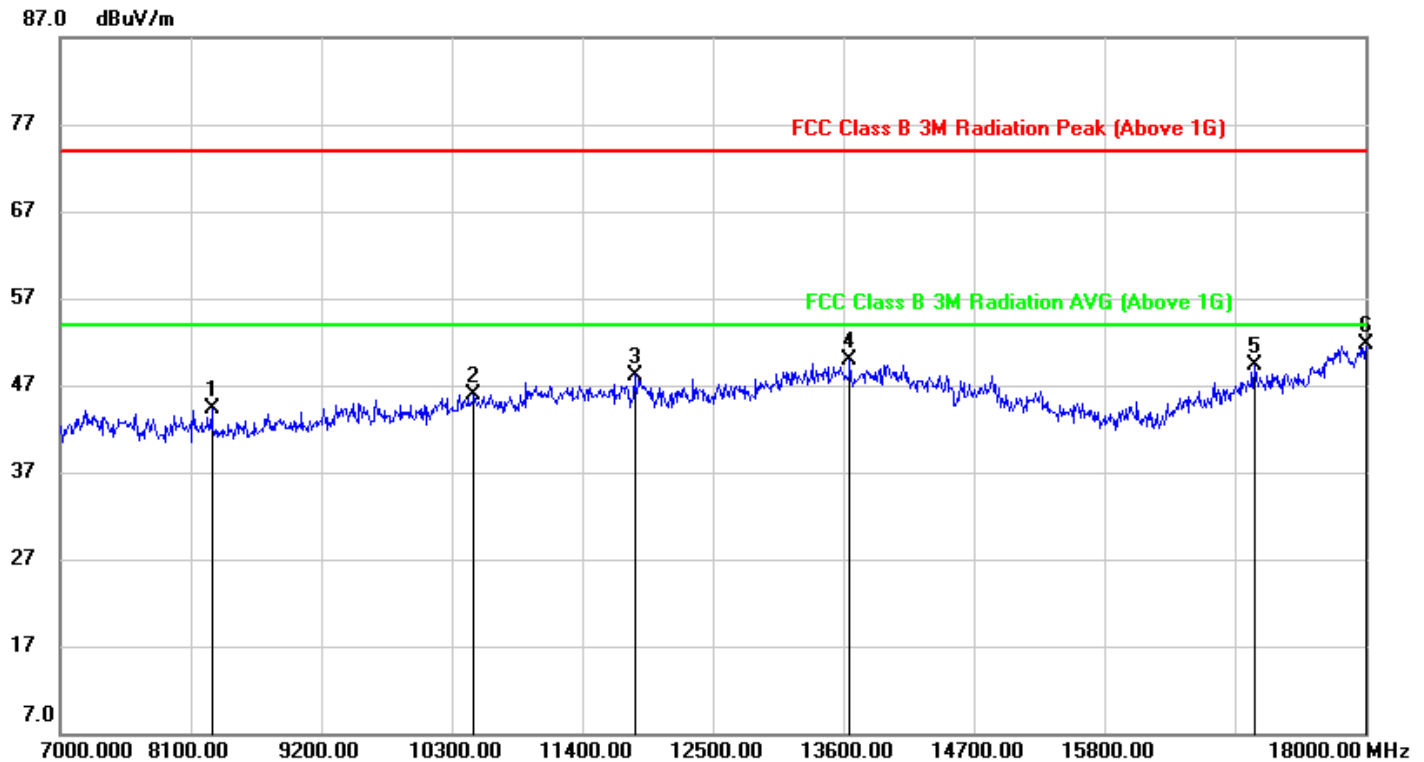
Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



7-18G



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	8276.000	37.34	6.90	44.24	74.00	-29.76	peak
2	10487.000	34.13	11.85	45.98	74.00	-28.02	peak
3	11840.000	34.10	14.10	48.20	74.00	-25.80	peak
4	13655.000	31.56	18.40	49.96	74.00	-24.04	peak
5	17065.000	29.32	19.99	49.31	74.00	-24.69	peak
6	18000.000	26.96	24.81	51.77	74.00	-22.23	peak

Note: 1. Measurement = Reading Level + Correct Factor.

Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

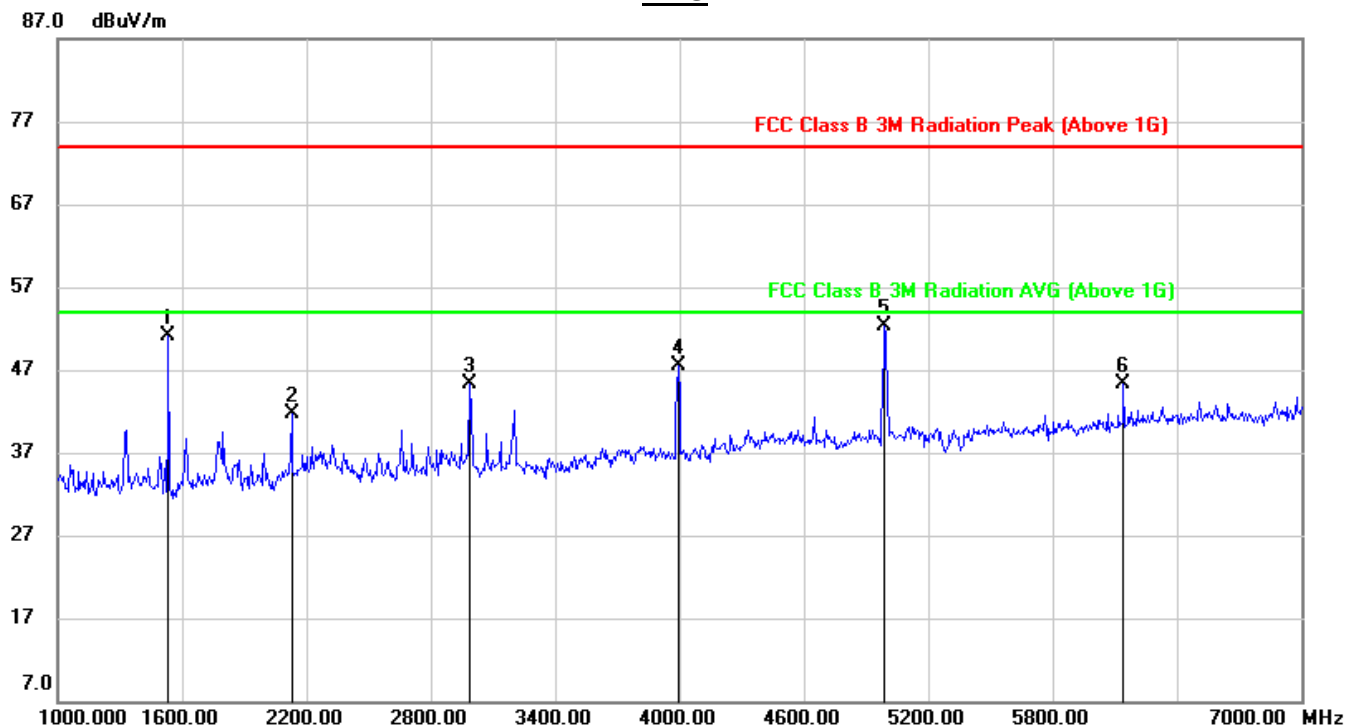
3. Peak: Peak detector.

4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



VERTICAL RESULTS

1-7G



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1534.000	63.82	-12.76	51.06	74.00	-22.94	peak
2	2128.000	51.61	-9.94	41.67	74.00	-32.33	peak
3	2986.000	52.51	-7.29	45.22	74.00	-28.78	peak
4	3994.000	51.95	-4.54	47.41	74.00	-26.59	peak
5	4990.000	53.05	-0.78	52.27	74.00	-21.73	peak
6	6142.000	42.70	2.52	45.22	74.00	-28.78	peak

Note: 1. Measurement = Reading Level + Correct Factor.

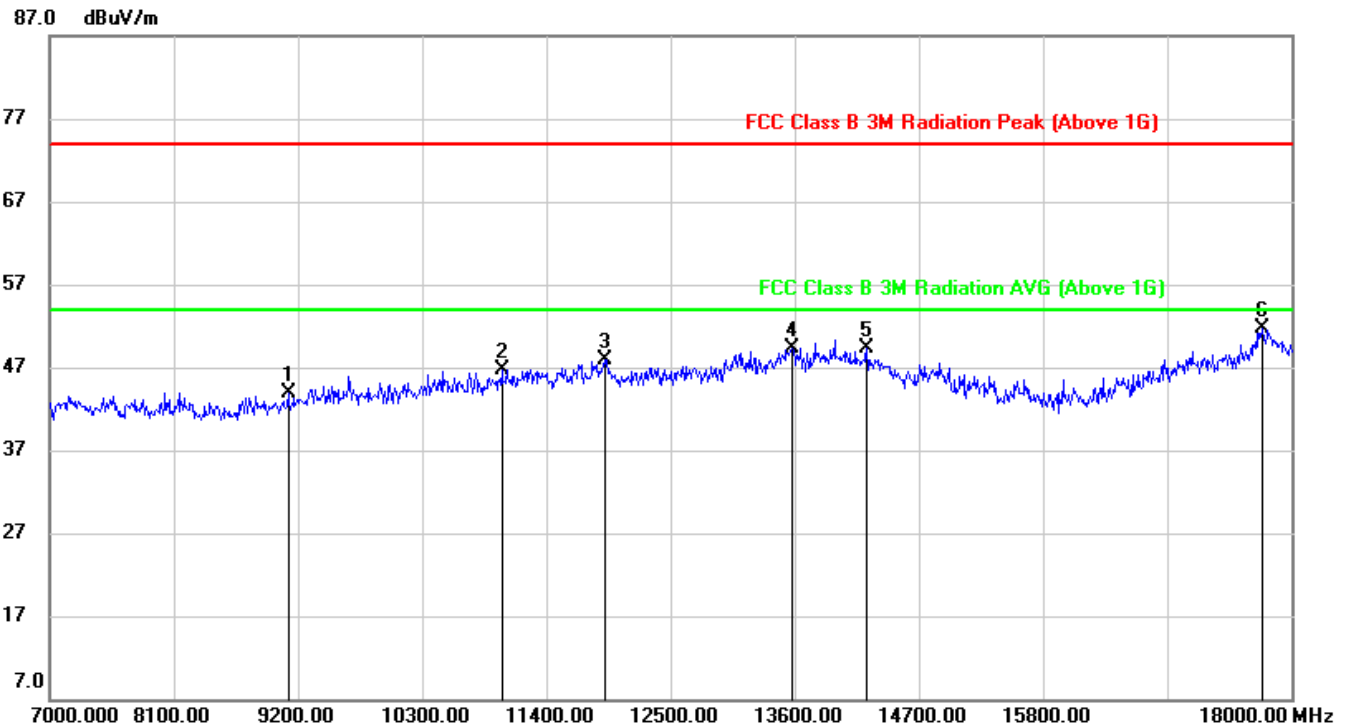
Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



7-18G



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	9112.000	35.75	8.20	43.95	74.00	-30.05	peak
2	11004.000	33.86	12.84	46.70	74.00	-27.30	peak
3	11917.000	33.13	14.75	47.88	74.00	-26.12	peak
4	13578.000	30.72	18.58	49.30	74.00	-24.70	peak
5	14238.000	31.40	17.87	49.27	74.00	-24.73	peak
6	17736.000	27.99	23.80	51.79	74.00	-22.21	peak

Note: 1. Measurement = Reading Level + Correct Factor.

Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



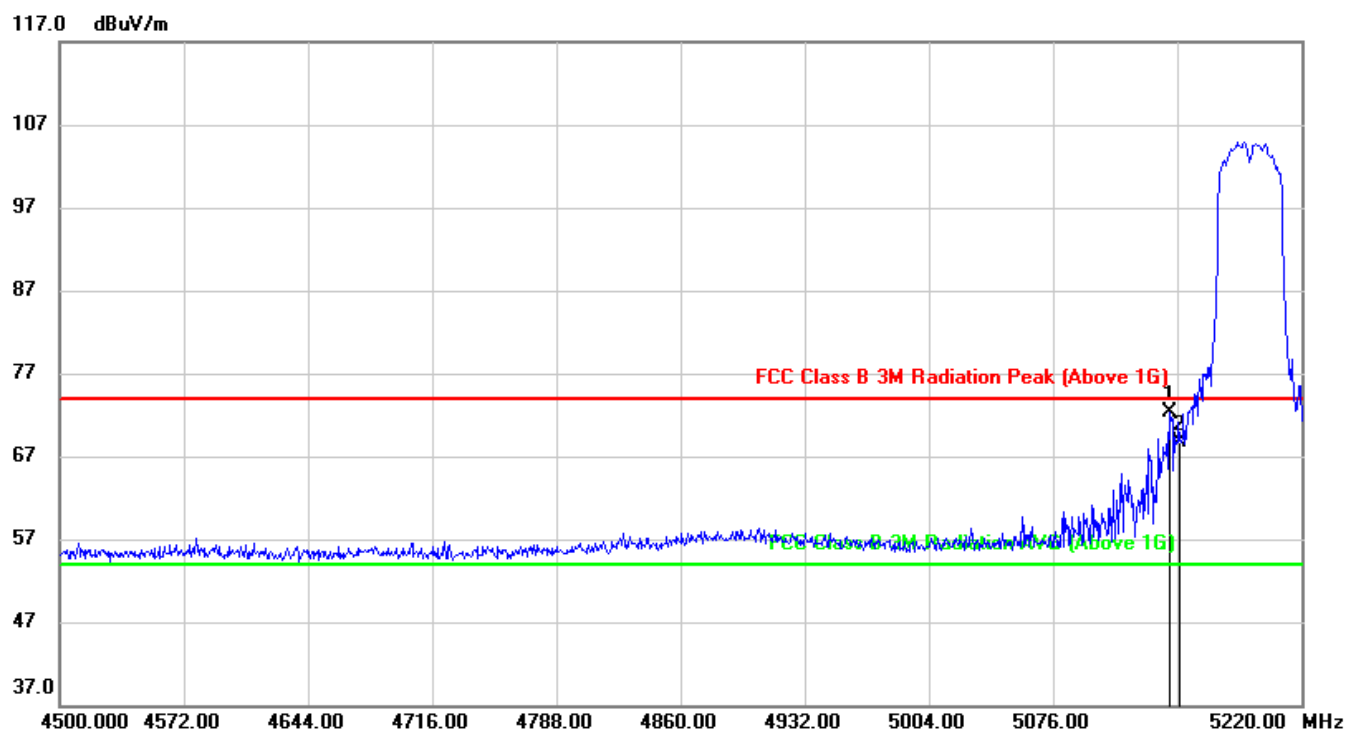
7.4. 802.11ac HT40 MODE

7.4.1. UNII-1 BAND

RESTRICTED BANDEDGE LOW CHANNEL

HORIZONTAL RESULTS

PEAK



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5143.680	32.01	40.38	72.39	74.00	-1.61	peak
2	5150.000	28.33	40.40	68.73	74.00	-5.27	peak

Note: 1. Measurement = Reading Level + Correct Factor.

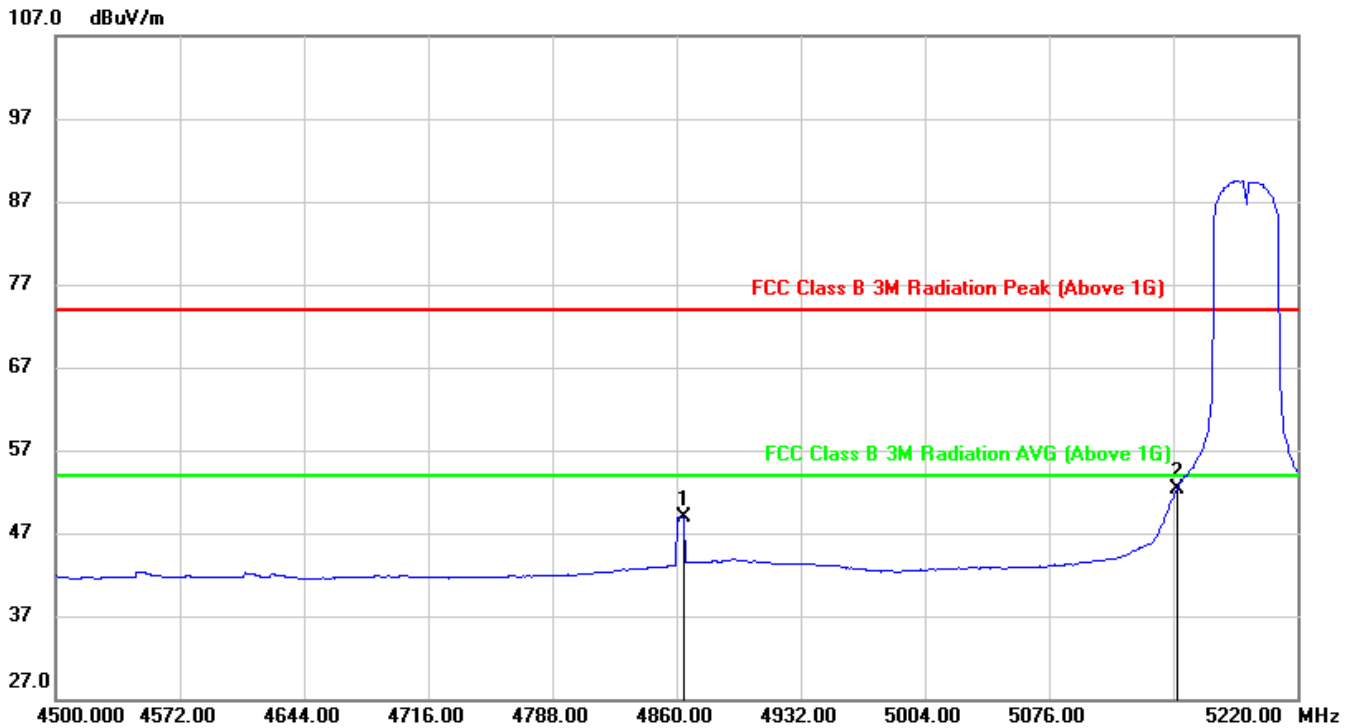
Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



AVG



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4864.320	9.17	39.75	48.92	54.00	-5.08	AVG
2	5150.000	11.85	40.40	52.25	54.00	-1.75	AVG

Note: 1. Measurement = Reading Level + Correct Factor.

Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: $VBW=1/Ton=2K$, where: Ton is transmit duration.

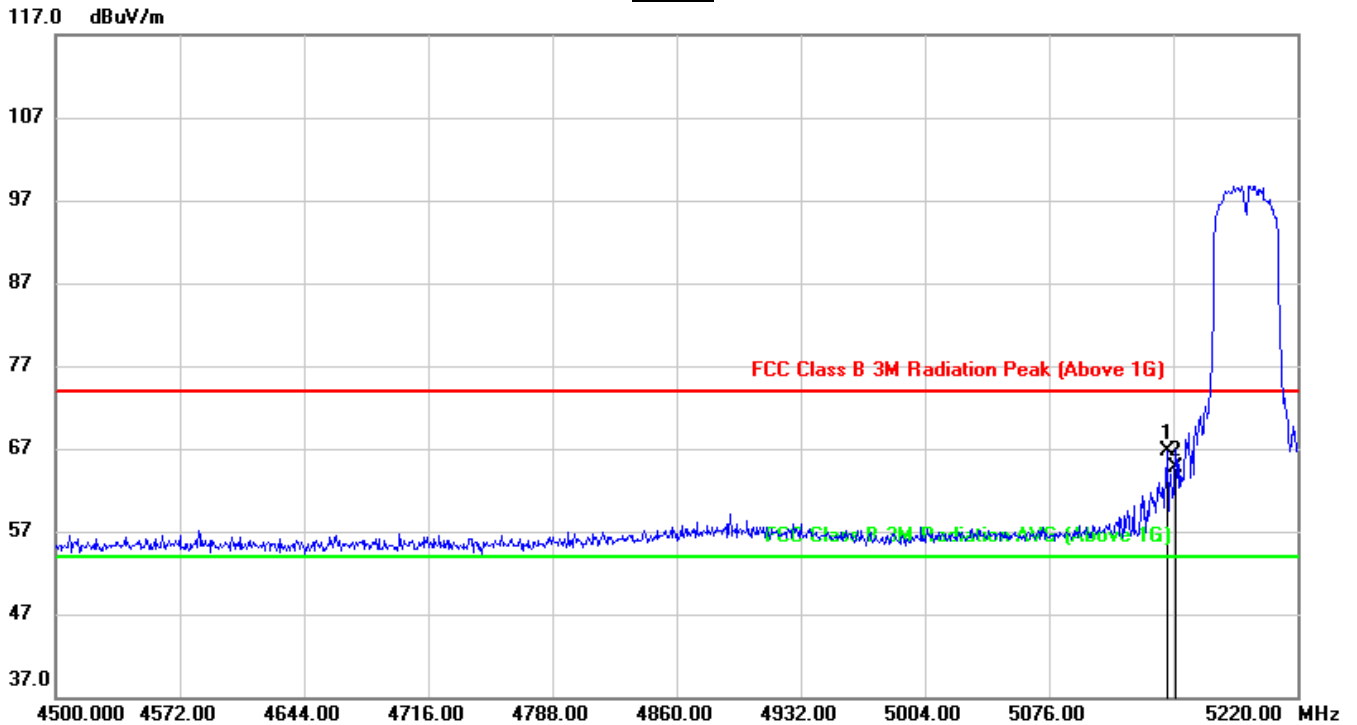
5. For transmit duration, please refer to clause 6.1.

6. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



VERTICAL RESULTS

PEAK



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5144.400	26.14	40.58	66.72	74.00	-7.28	peak
2	5150.000	24.05	40.60	64.65	74.00	-9.35	peak

Note: 1. Measurement = Reading Level + Correct Factor.

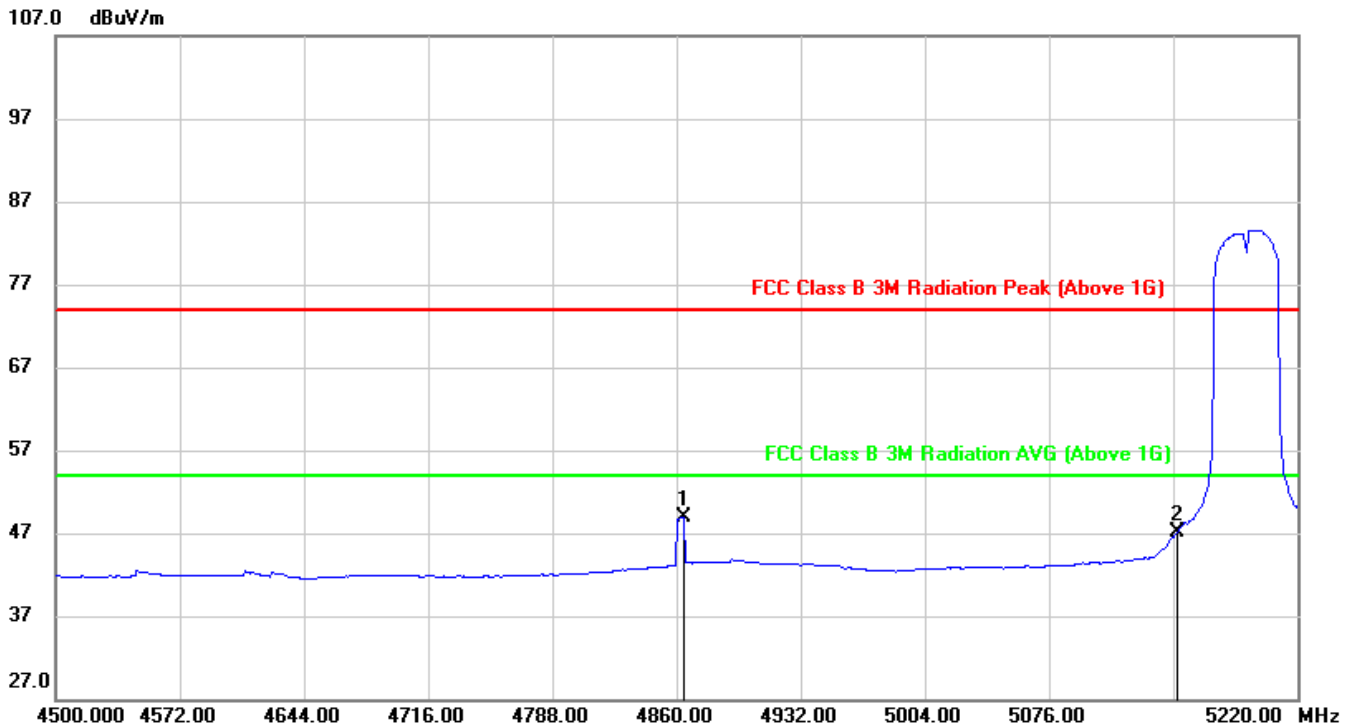
Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



AVG



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4864.320	9.15	39.72	48.87	54.00	-5.13	AVG
2	5150.000	6.59	40.60	47.19	54.00	-6.81	AVG

Note: 1. Measurement = Reading Level + Correct Factor.

Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: $VBW=1/Ton=2K$, where: Ton is transmit duration.

5. For transmit duration, please refer to clause 6.1.

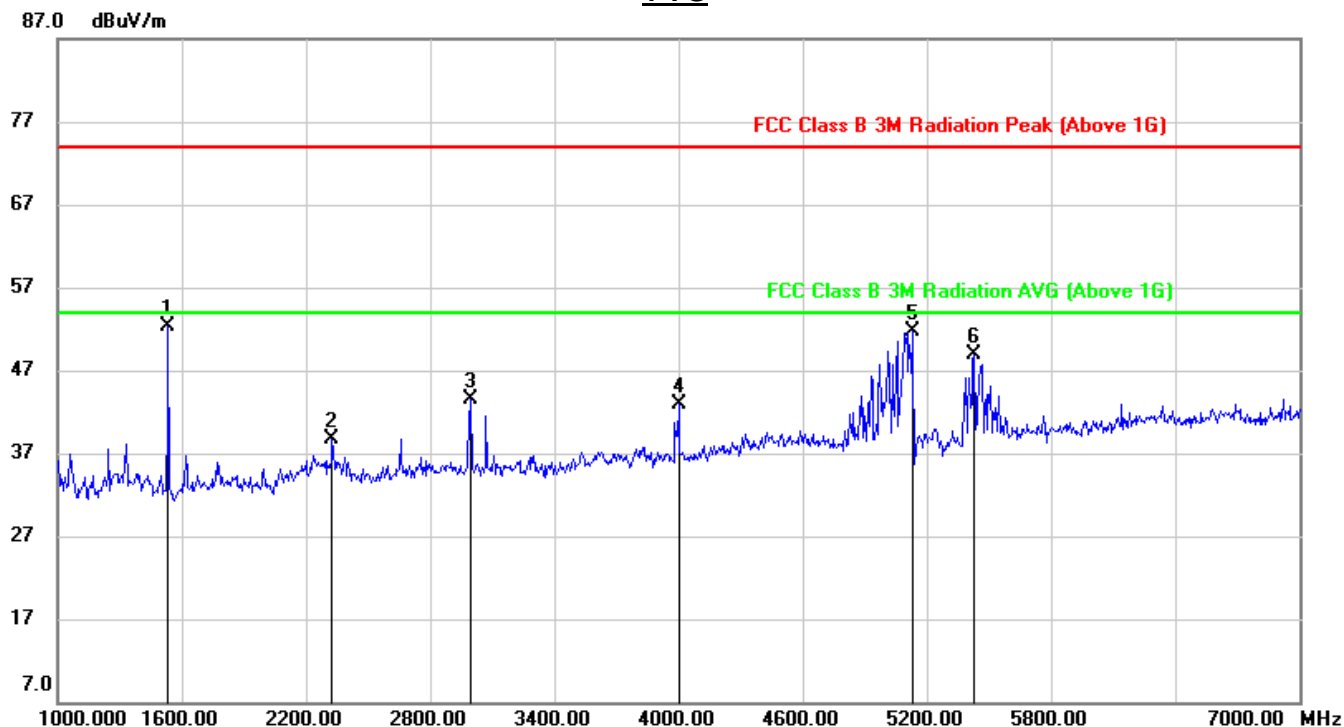
6. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



HARMONICS AND SPURIOUS EMISSIONS LOW CHANNEL

HORIZONTAL RESULTS

1-7G



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1534.000	65.11	-12.79	52.32	74.00	-21.68	peak
2	2326.000	47.32	-8.54	38.78	74.00	-35.22	peak
3	2998.000	50.80	-7.29	43.51	74.00	-30.49	peak
4	4000.000	47.53	-4.54	42.99	74.00	-31.01	peak
5	5128.000	52.07	-0.34	51.73	74.00	-22.27	peak
6	5428.000	48.40	0.52	48.92	74.00	-25.08	peak

Note: 1. Measurement = Reading Level + Correct Factor.

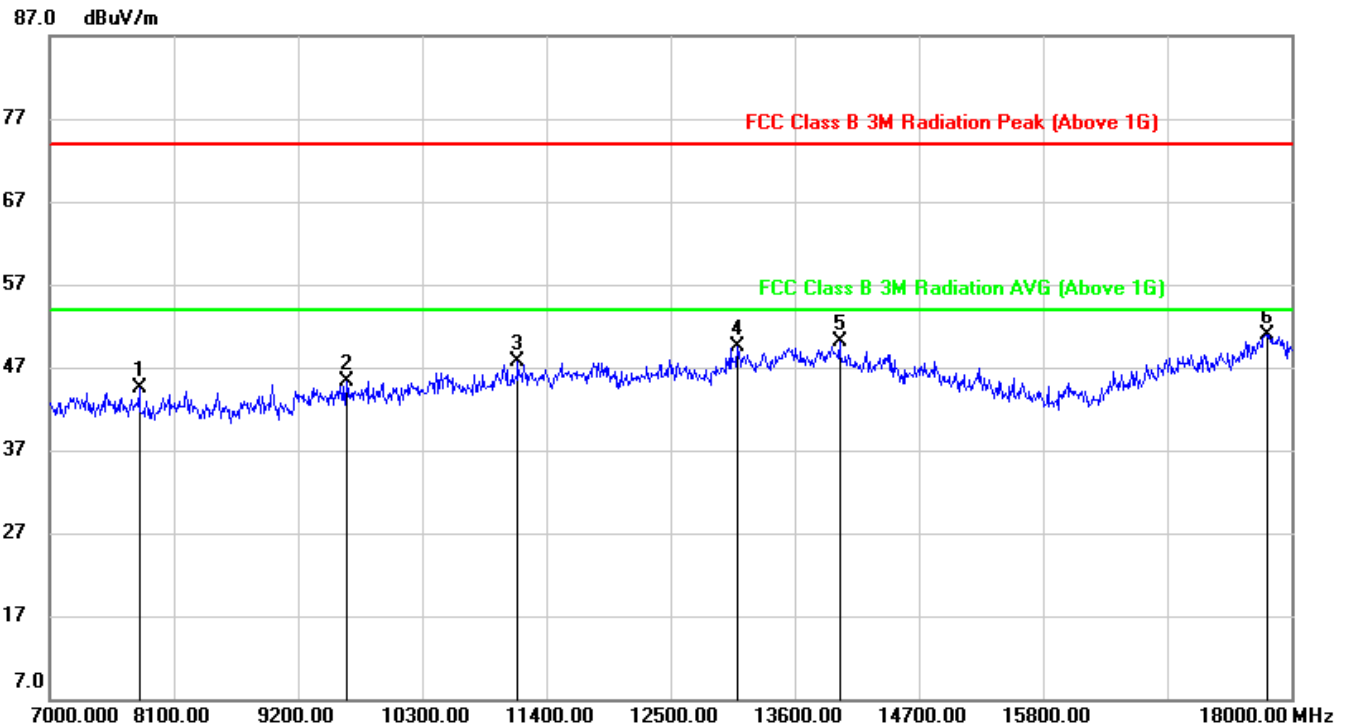
Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



7-18G



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7792.000	37.84	6.70	44.54	74.00	-29.46	peak
2	9629.000	35.63	9.76	45.39	74.00	-28.61	peak
3	11147.000	34.73	13.02	47.75	74.00	-26.25	peak
4	13094.000	33.00	16.47	49.47	74.00	-24.53	peak
5	13996.000	31.49	18.58	50.07	74.00	-23.93	peak
6	17780.000	26.56	24.38	50.94	74.00	-23.06	peak

Note: 1. Measurement = Reading Level + Correct Factor.

Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

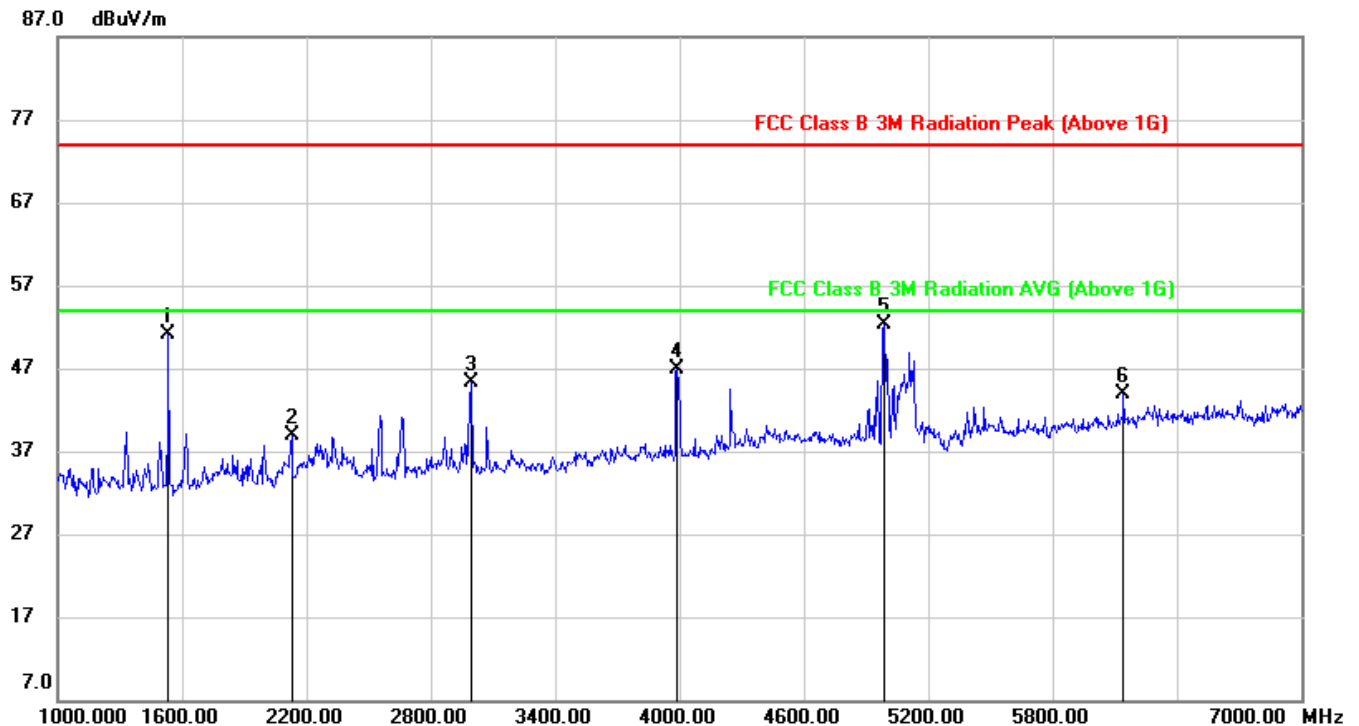
3. Peak: Peak detector.

4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



VERTICAL RESULTS

1-7G



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1534.000	63.79	-12.76	51.03	74.00	-22.97	peak
2	2128.000	48.93	-9.94	38.99	74.00	-35.01	peak
3	2998.000	52.52	-7.29	45.23	74.00	-28.77	peak
4	3988.000	51.38	-4.54	46.84	74.00	-27.16	peak
5	4990.000	53.01	-0.78	52.23	74.00	-21.77	peak
6	6142.000	41.44	2.52	43.96	74.00	-30.04	peak

Note: 1. Measurement = Reading Level + Correct Factor.

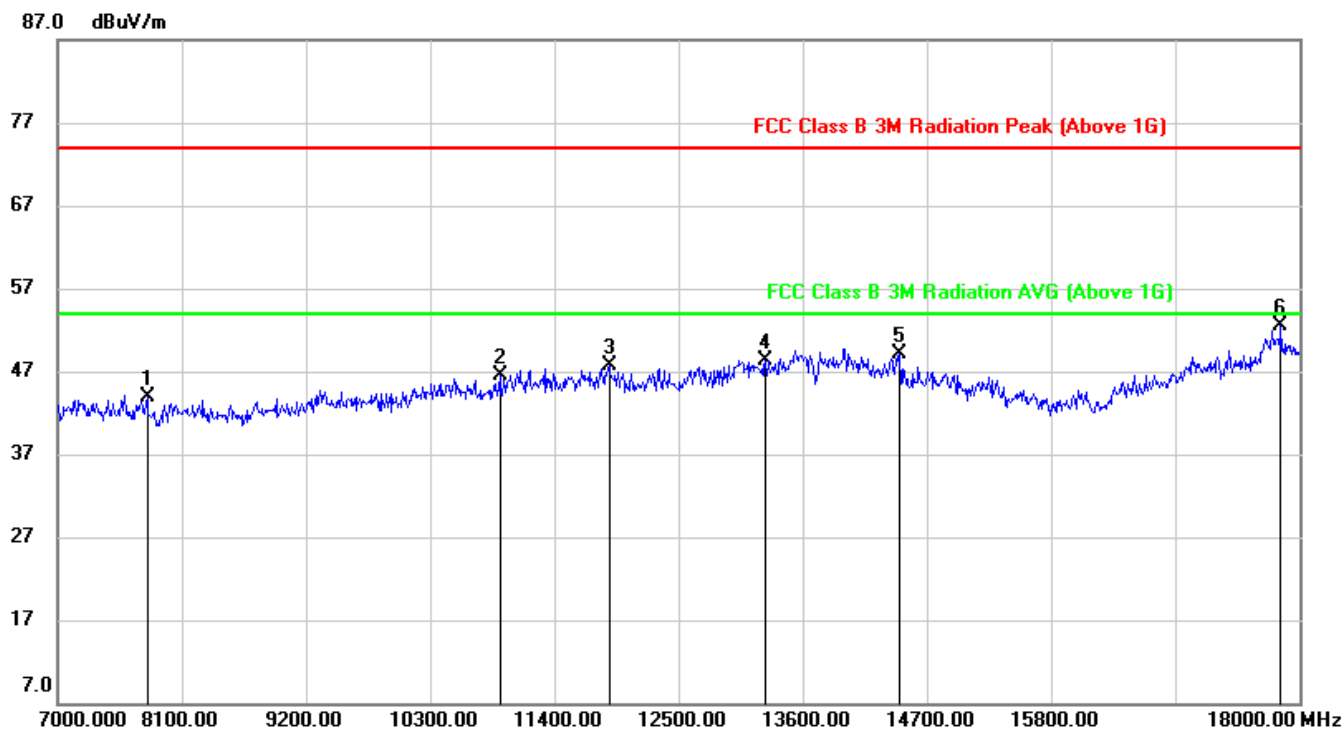
Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



7-18G



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7792.000	37.25	6.70	43.95	74.00	-30.05	peak
2	10916.000	34.13	12.30	46.43	74.00	-27.57	peak
3	11884.000	32.99	14.75	47.74	74.00	-26.26	peak
4	13270.000	30.93	17.47	48.40	74.00	-25.60	peak
5	14458.000	31.65	17.53	49.18	74.00	-24.82	peak
6	17835.000	28.46	24.09	52.55	74.00	-21.45	peak

Note: 1. Measurement = Reading Level + Correct Factor.

Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

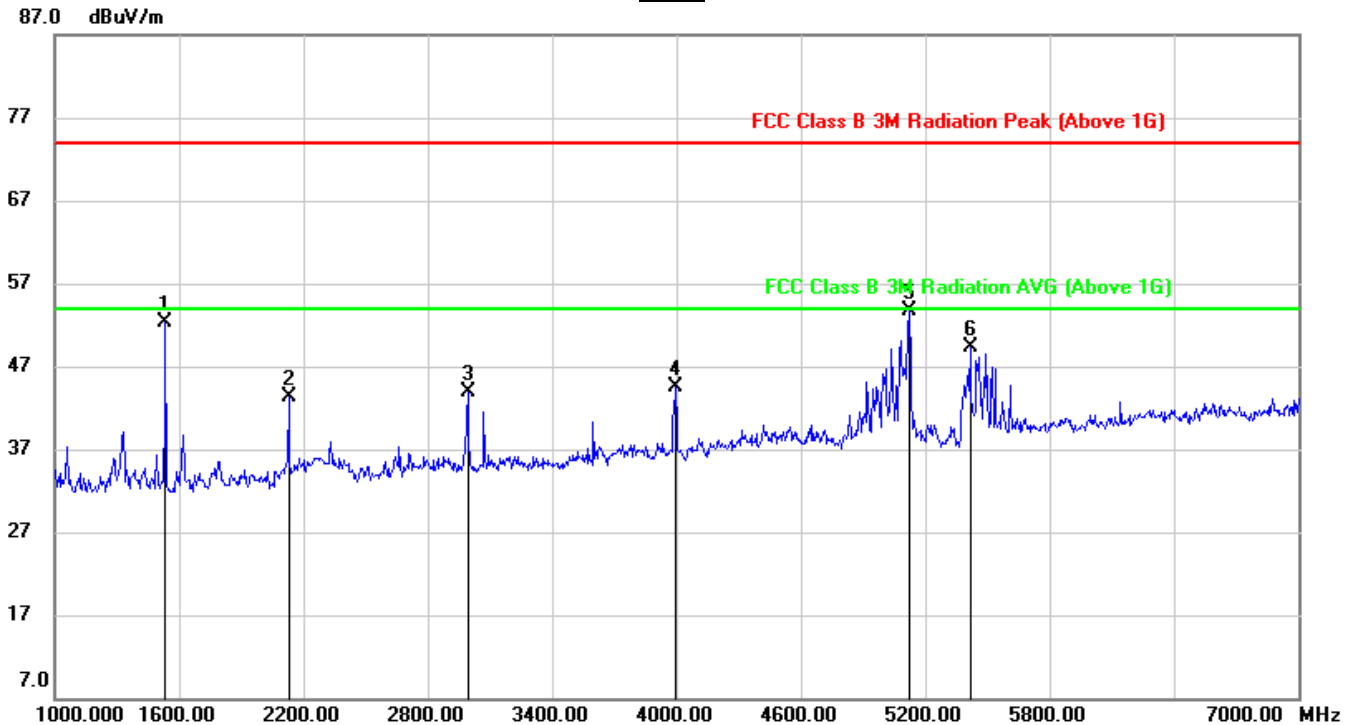
4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



HARMONICS AND SPURIOUS EMISSIONS HIGH CHANNEL

HORIZONTAL RESULTS

1-7G



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1534.000	65.14	-12.79	52.35	74.00	-21.65	peak
2	2128.000	53.19	-9.84	43.35	74.00	-30.65	peak
3	2992.000	51.20	-7.29	43.91	74.00	-30.09	peak
4	3994.000	48.98	-4.54	44.44	74.00	-29.56	peak
5	5122.000	54.14	-0.38	53.76	74.00	-20.24	peak
6	5416.000	48.93	0.43	49.36	74.00	-24.64	peak

Note: 1. Measurement = Reading Level + Correct Factor.

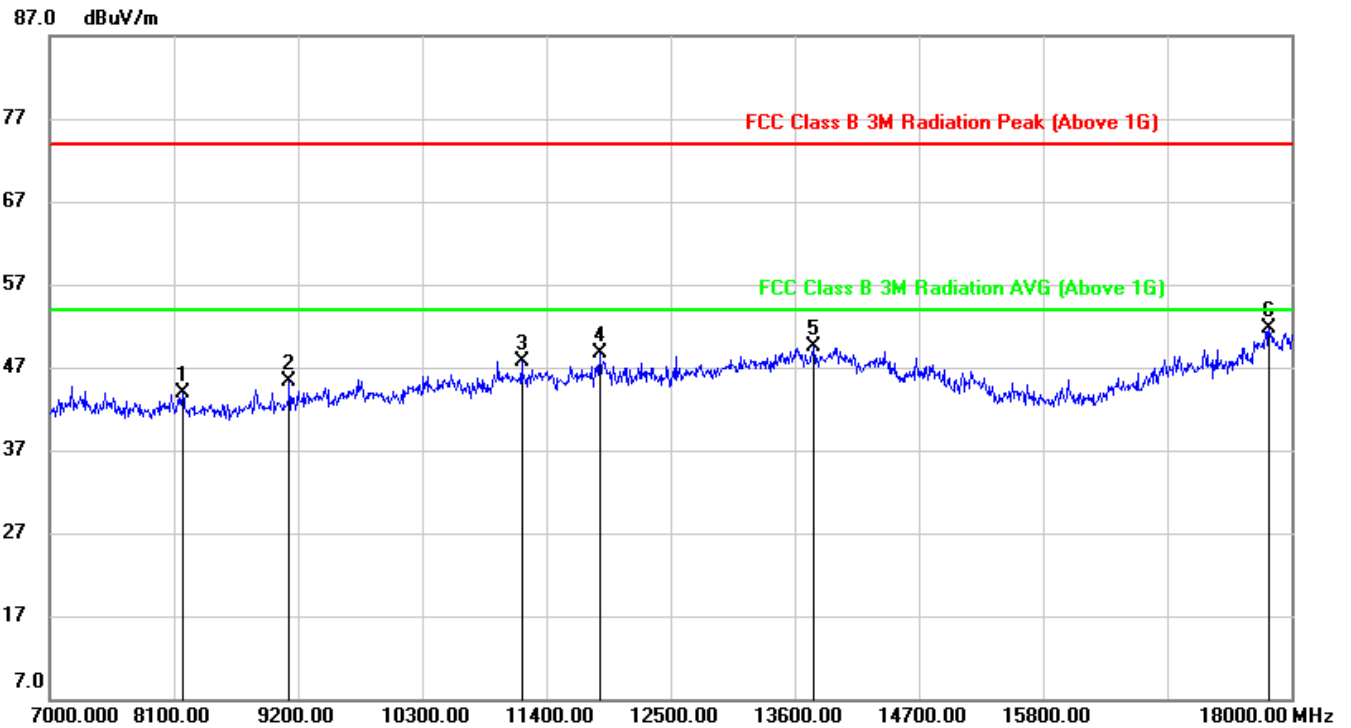
Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



7-18G



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	8177.000	36.78	7.12	43.90	74.00	-30.10	peak
2	9123.000	37.10	8.28	45.38	74.00	-28.62	peak
3	11180.000	34.73	13.00	47.73	74.00	-26.27	peak
4	11873.000	34.11	14.69	48.80	74.00	-25.20	peak
5	13765.000	30.81	18.67	49.48	74.00	-24.52	peak
6	17802.000	27.53	24.24	51.77	74.00	-22.23	peak

Note: 1. Measurement = Reading Level + Correct Factor.

Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

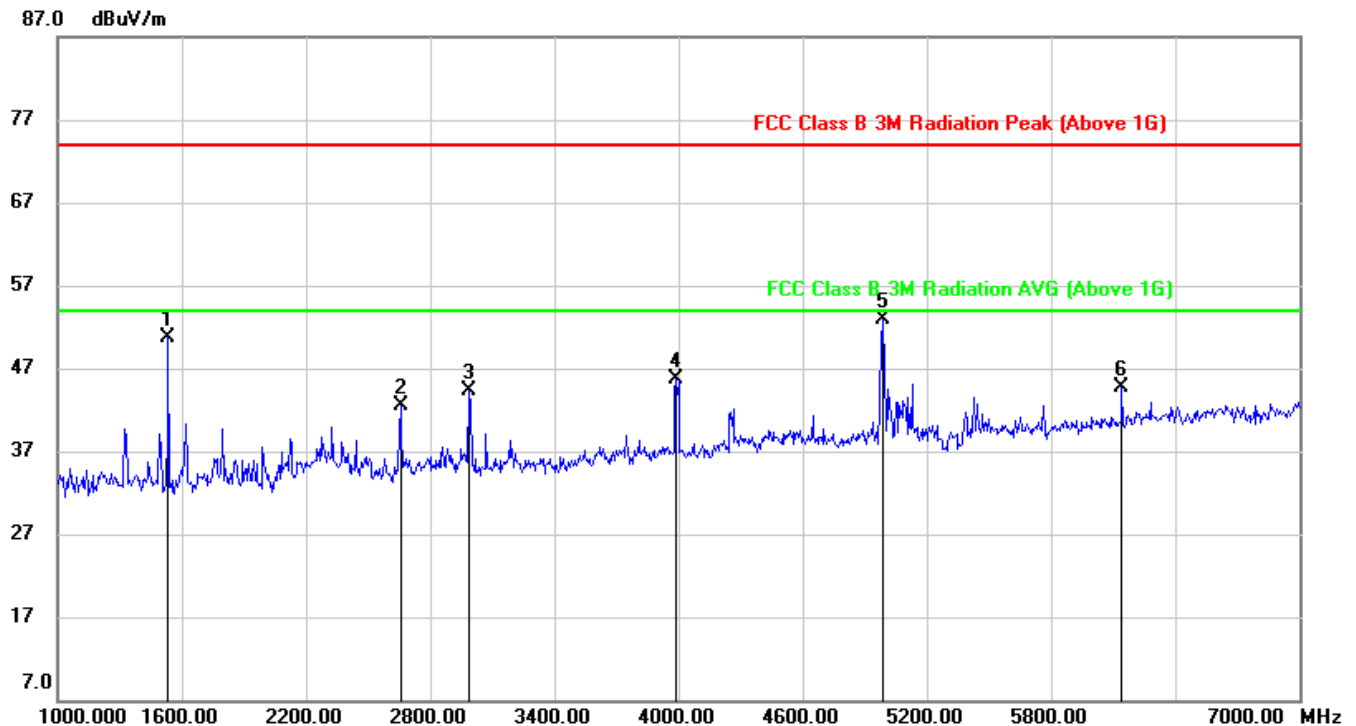
3. Peak: Peak detector.

4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



VERTICAL RESULTS

1-7G



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1534.000	63.55	-12.76	50.79	74.00	-23.21	peak
2	2656.000	51.10	-8.63	42.47	74.00	-31.53	peak
3	2986.000	51.65	-7.29	44.36	74.00	-29.64	peak
4	3988.000	50.24	-4.54	45.70	74.00	-28.30	peak
5	4990.000	53.72	-0.78	52.94	74.00	-21.06	peak
6	6142.000	42.10	2.52	44.62	74.00	-29.38	peak

Note: 1. Measurement = Reading Level + Correct Factor.

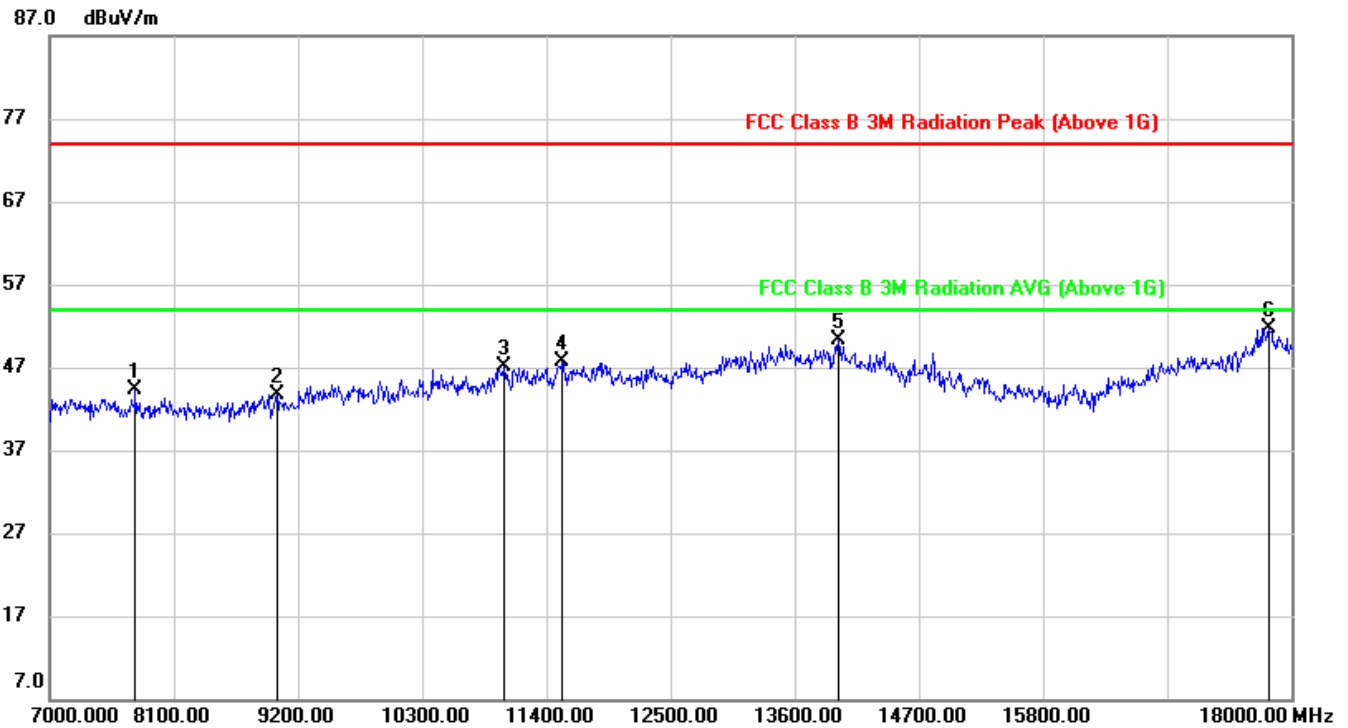
Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



7-18G



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7759.000	37.69	6.59	44.28	74.00	-29.72	peak
2	9013.000	35.66	7.95	43.61	74.00	-30.39	peak
3	11026.000	34.25	12.88	47.13	74.00	-26.87	peak
4	11543.000	33.49	14.21	47.70	74.00	-26.30	peak
5	13985.000	31.74	18.60	50.34	74.00	-23.66	peak
6	17802.000	27.08	24.61	51.69	74.00	-22.31	peak

Note: 1. Measurement = Reading Level + Correct Factor.

Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



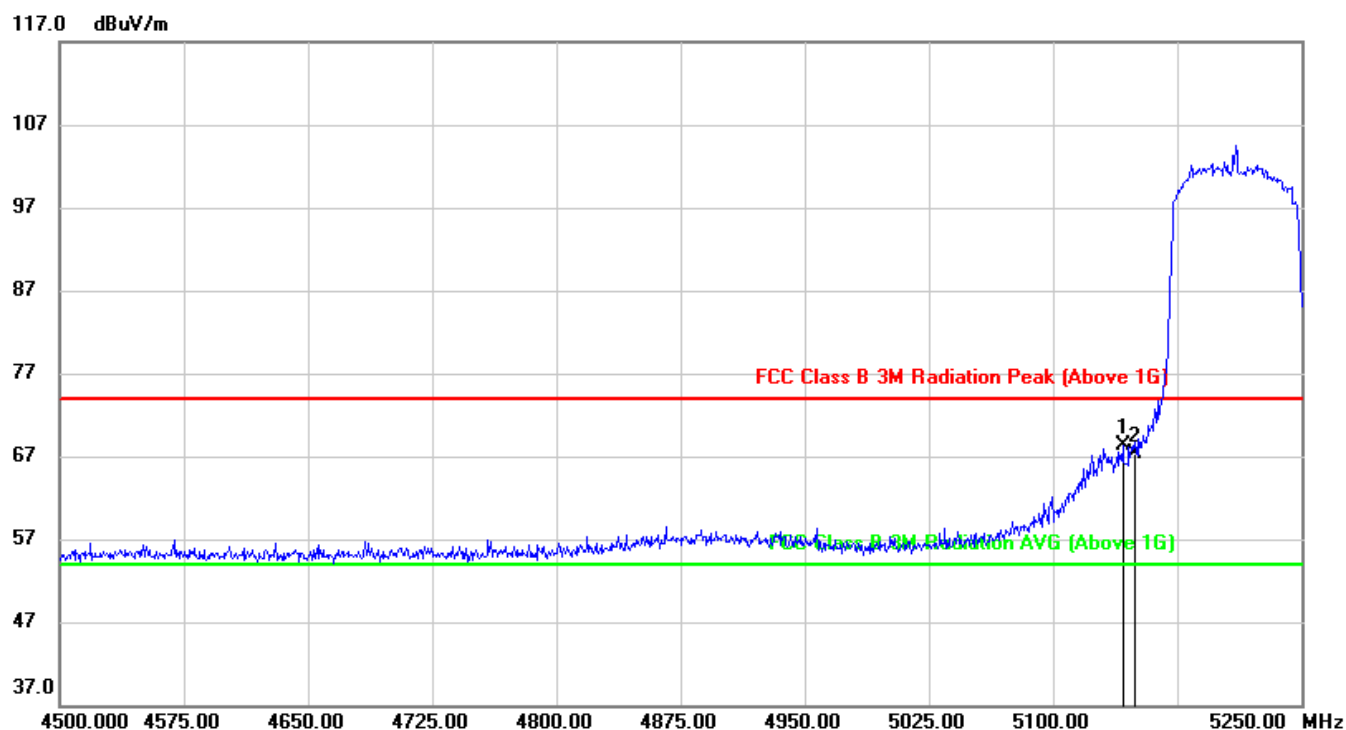
7.5. 802.11ac HT80 MODE

7.5.1. UNII-1 BAND

RESTRICTED BANDEDGE LOW CHANNEL

HORIZONTAL RESULTS

PEAK



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5142.000	27.97	40.36	68.33	74.00	-5.67	peak
2	5150.000	26.93	40.40	67.33	74.00	-6.67	peak

Note: 1. Measurement = Reading Level + Correct Factor.

Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

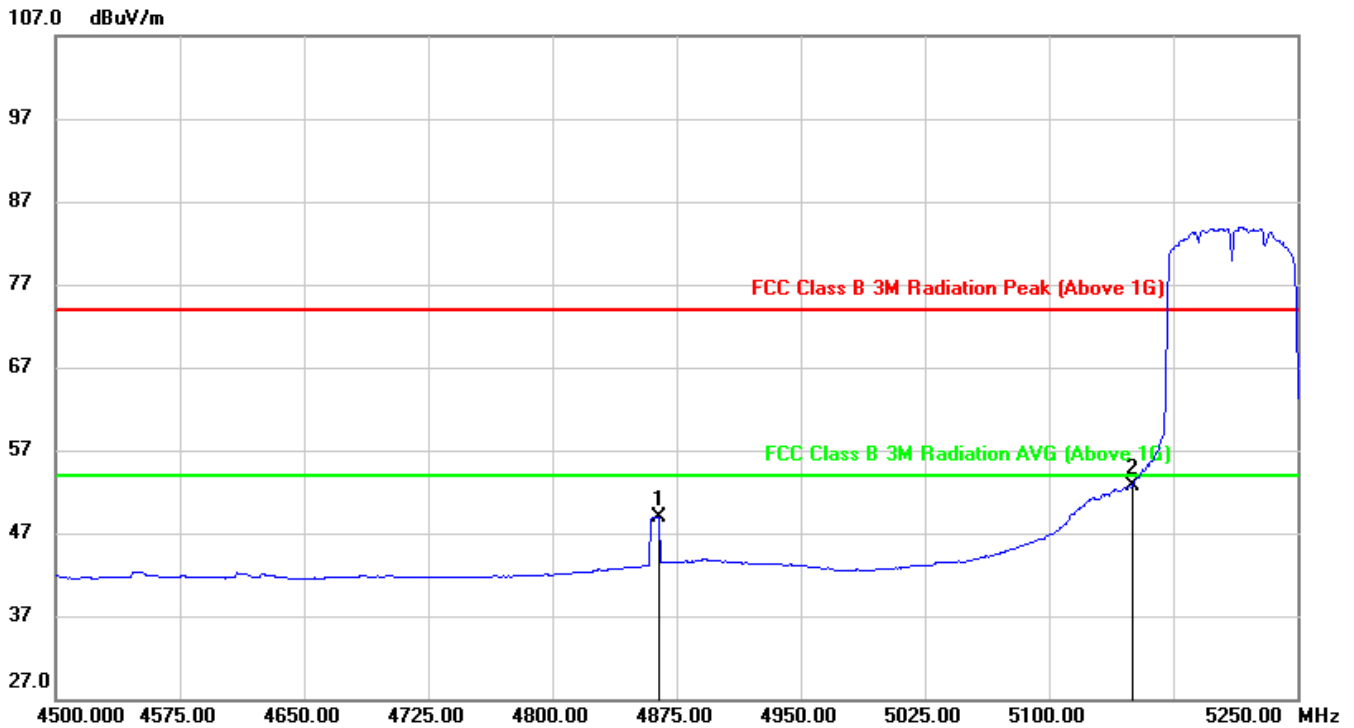
3. Peak: Peak detector.

4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.

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AVG



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4864.500	9.17	39.75	48.92	54.00	-5.08	AVG
2	5150.000	12.25	40.40	52.65	54.00	-1.35	AVG

Note: 1. Measurement = Reading Level + Correct Factor.

Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: VBW=1/Ton=3K, where: Ton is transmit duration.

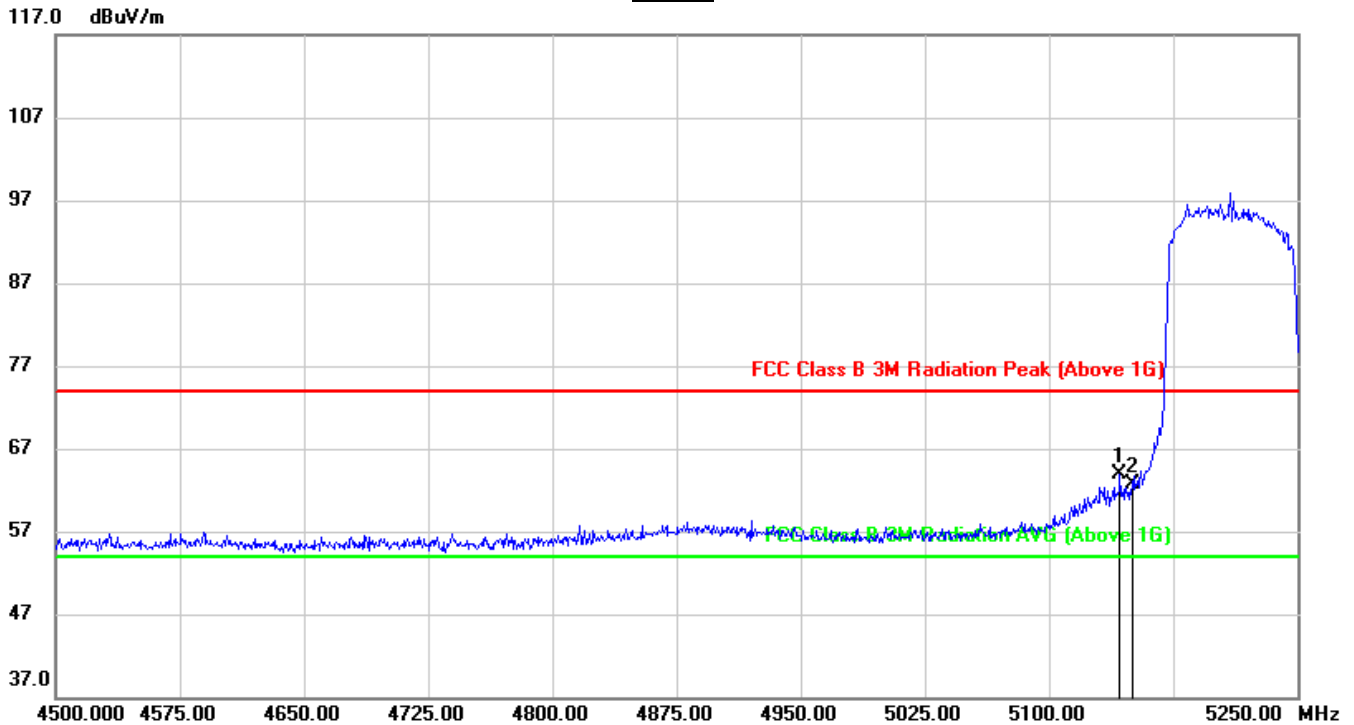
5. For transmit duration, please refer to clause 6.1.

6. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



VERTICAL RESULTS

PEAK



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5142.750	23.23	40.58	63.81	74.00	-10.19	peak
2	5150.000	22.07	40.60	62.67	74.00	-11.33	peak

Note: 1. Measurement = Reading Level + Correct Factor.

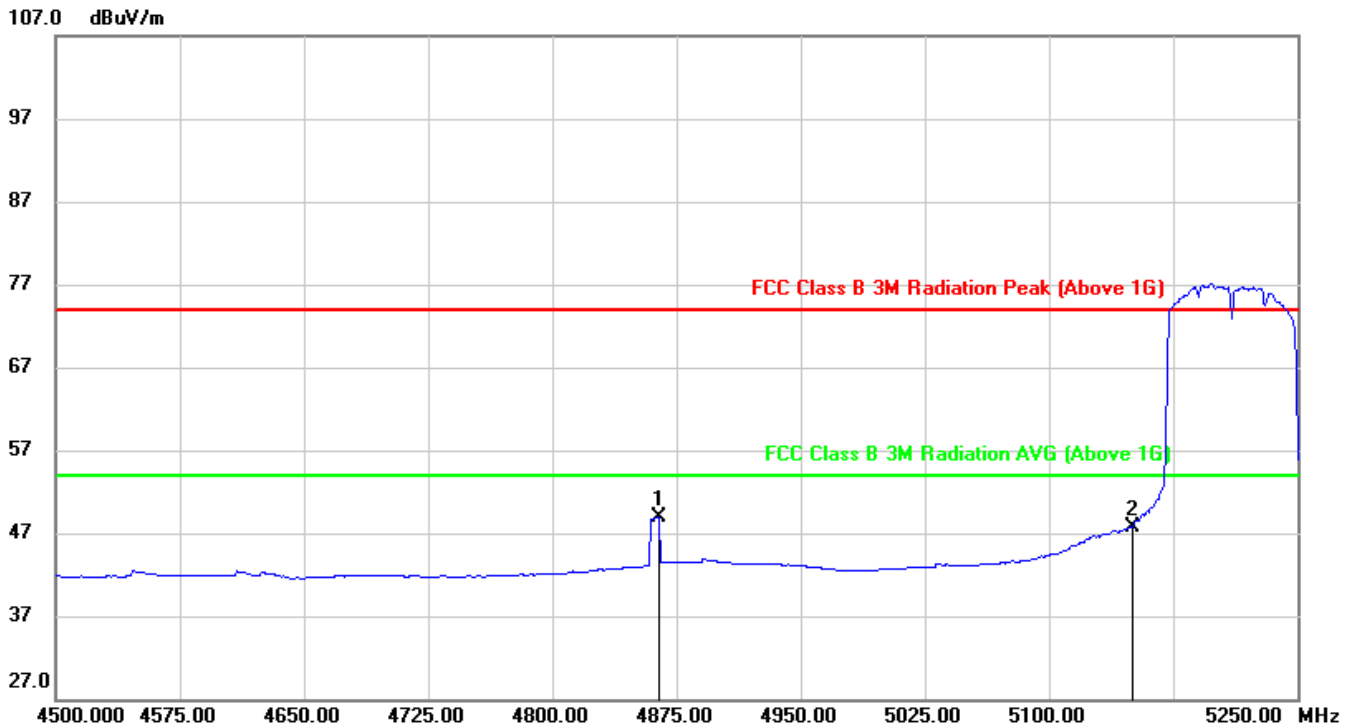
2. Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



AVG



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4864.500	9.19	39.72	48.91	54.00	-5.09	AVG
2	5150.000	7.20	40.60	47.80	54.00	-6.20	AVG

Note: 1. Measurement = Reading Level + Correct Factor.

Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. AVG: $VBW=1/Ton=3K$, where: Ton is transmit duration.

5. For transmit duration, please refer to clause 6.1.

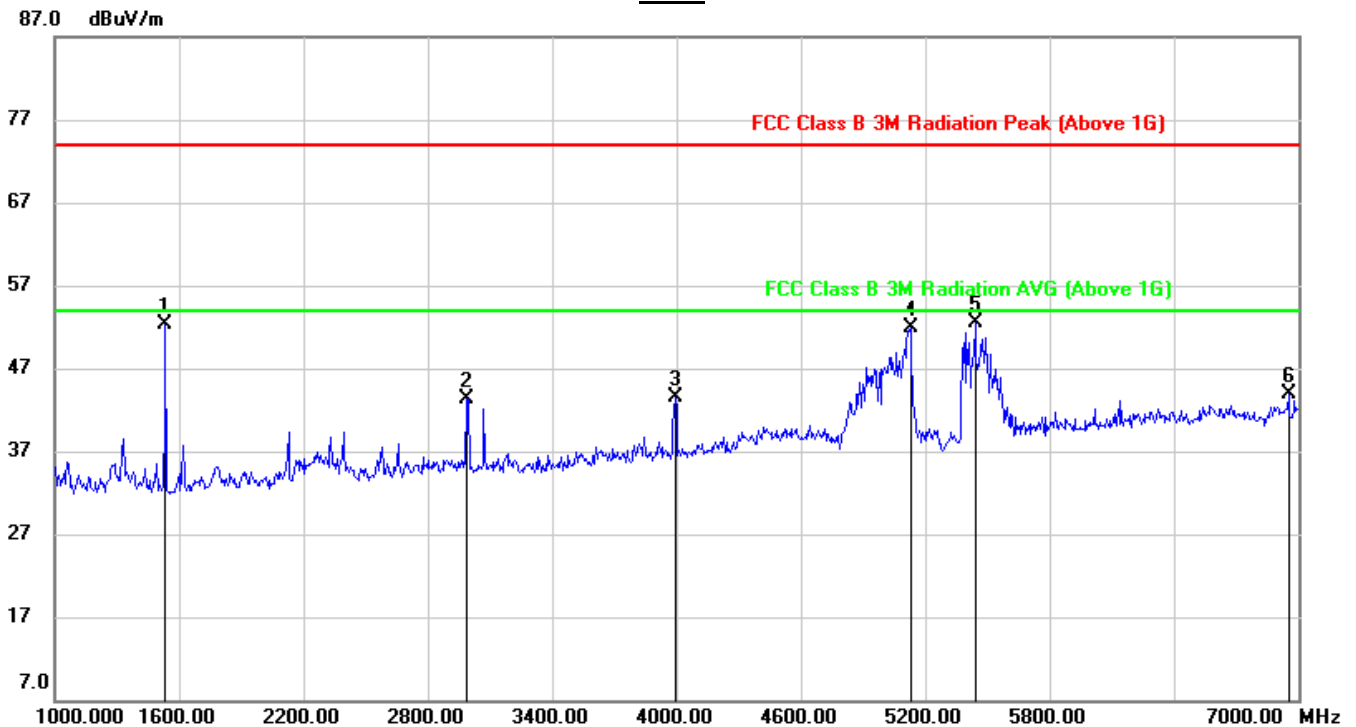
6. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



HARMONICS AND SPURIOUS EMISSIONS LOW CHANNEL

HORIZONTAL RESULTS

1-7G



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1534.000	65.11	-12.79	52.32	74.00	-21.68	peak
2	2986.000	50.66	-7.29	43.37	74.00	-30.63	peak
3	3994.000	48.09	-4.54	43.55	74.00	-30.45	peak
4	5128.000	52.21	-0.34	51.87	74.00	-22.13	peak
5	5440.000	51.99	0.61	52.60	74.00	-21.40	peak
6	6952.000	38.60	5.21	43.81	74.00	-30.19	peak

Note: 1. Measurement = Reading Level + Correct Factor.

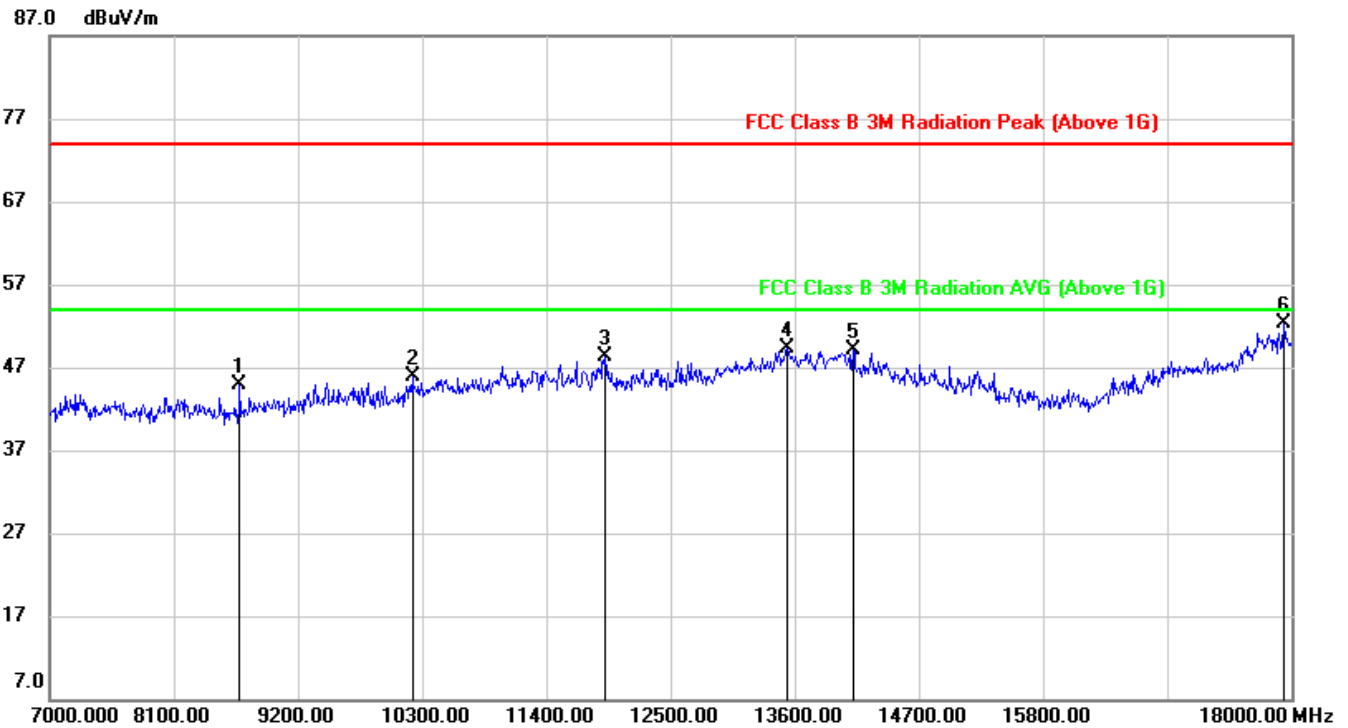
Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



7-18G



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	8683.000	37.23	7.65	44.88	74.00	-29.12	peak
2	10212.000	35.08	10.85	45.93	74.00	-28.07	peak
3	11917.000	33.39	14.98	48.37	74.00	-25.63	peak
4	13534.000	30.98	18.23	49.21	74.00	-24.79	peak
5	14117.000	30.67	18.43	49.10	74.00	-24.90	peak
6	17934.000	27.84	24.54	52.38	74.00	-21.62	peak

Note: 1. Measurement = Reading Level + Correct Factor.

Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

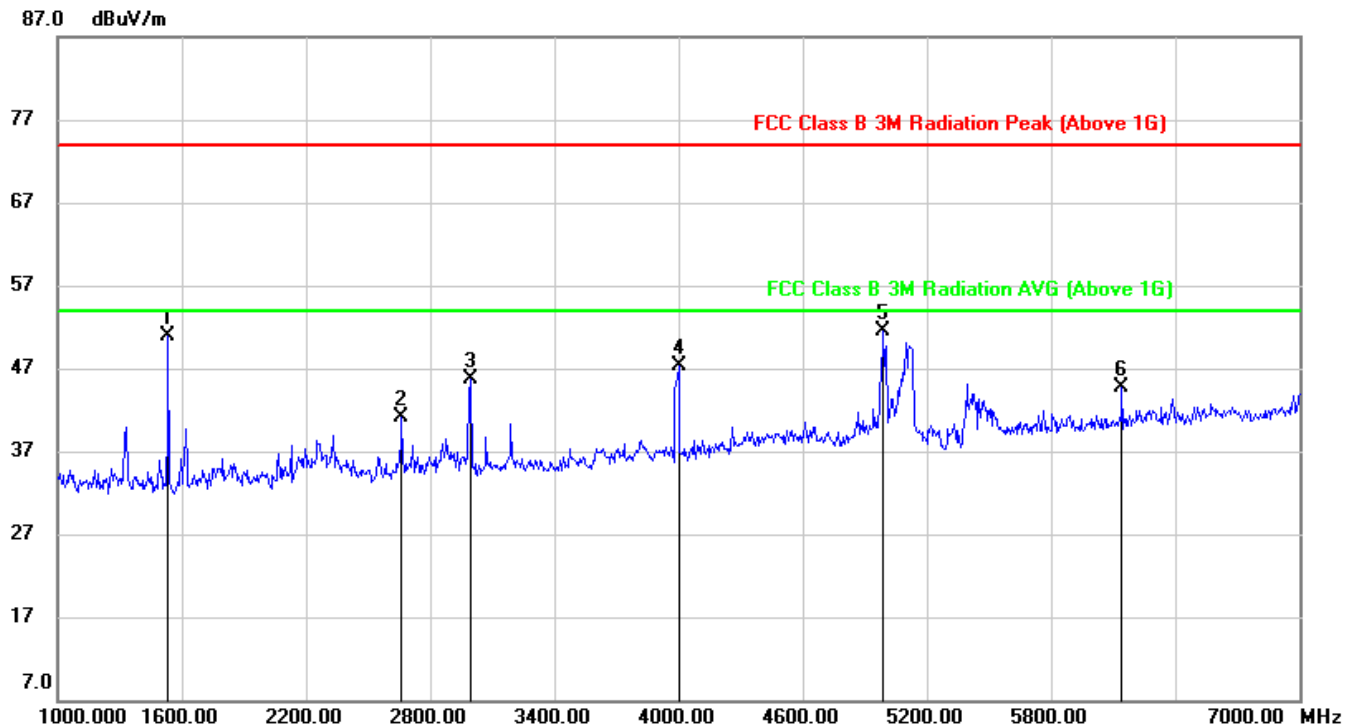
3. Peak: Peak detector.

4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



VERTICAL RESULTS

1-7G



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1534.000	63.61	-12.76	50.85	74.00	-23.15	peak
2	2662.000	49.61	-8.59	41.02	74.00	-32.98	peak
3	2998.000	52.98	-7.29	45.69	74.00	-28.31	peak
4	4000.000	51.88	-4.54	47.34	74.00	-26.66	peak
5	4990.000	52.31	-0.78	51.53	74.00	-22.47	peak
6	6142.000	42.27	2.52	44.79	74.00	-29.21	peak

Note: 1. Measurement = Reading Level + Correct Factor.

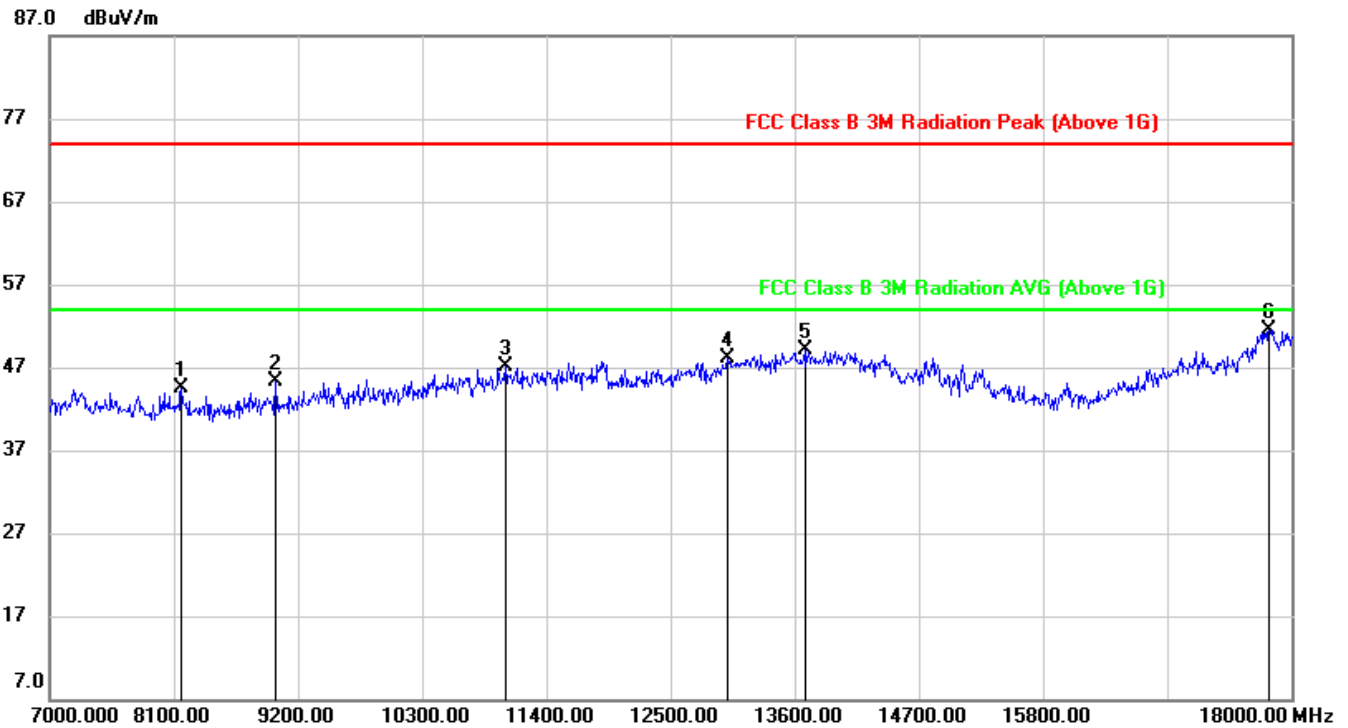
Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



7-18G



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	8166.000	37.44	7.05	44.49	74.00	-29.51	peak
2	9002.000	37.32	7.93	45.25	74.00	-28.75	peak
3	11037.000	34.24	12.78	47.02	74.00	-26.98	peak
4	13006.000	31.40	16.62	48.02	74.00	-25.98	peak
5	13688.000	30.61	18.55	49.16	74.00	-24.84	peak
6	17802.000	27.31	24.24	51.55	74.00	-22.45	peak

Note: 1. Measurement = Reading Level + Correct Factor.

Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

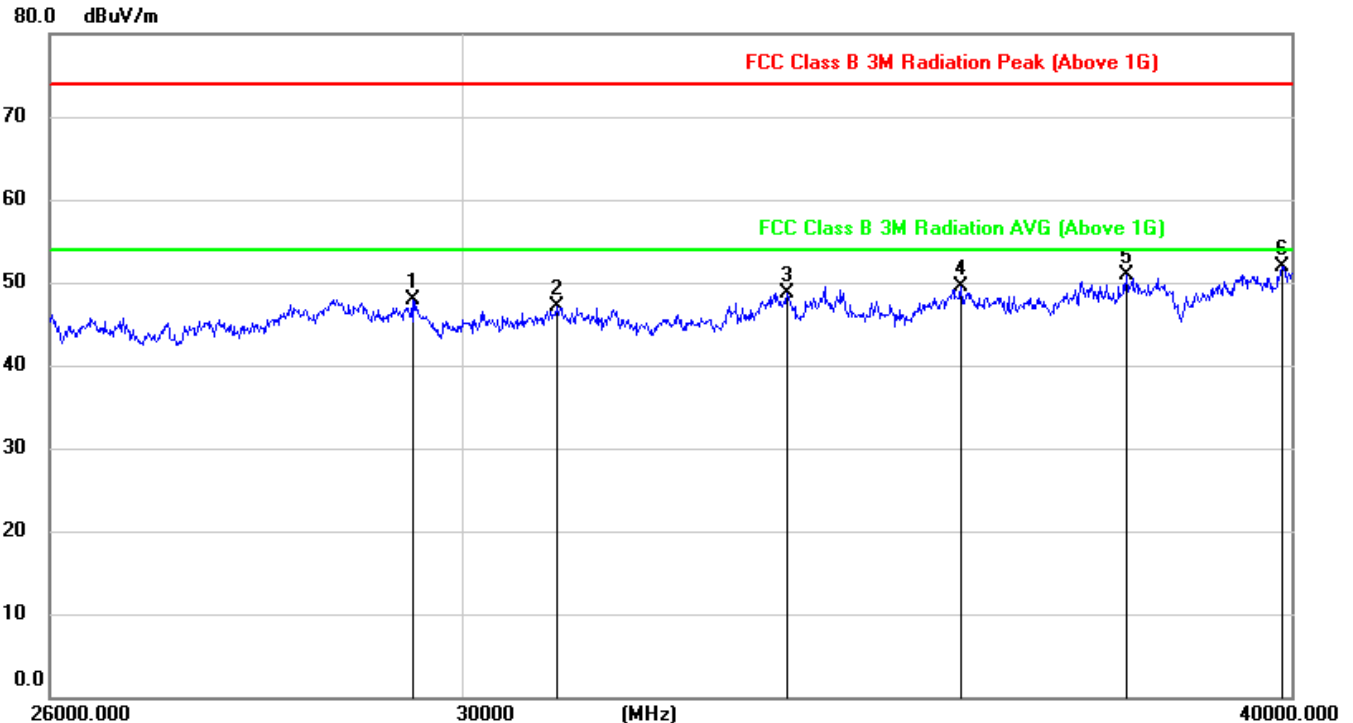
4. Owing to the highest peak level complies with the lowest limit of unwanted emission out of the restricted bands (Please refer to page 49), so all the test point were deemed to comply with the limits list in the standard.



7.6. SPURIOUS EMISSIONS 26~40GHz

7.6.1. 802.11a MODE

SPURIOUS EMISSIONS (MIDDLE CHANNEL, WORST-CASE CONFIGURATION, HORIZONTAL)



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	29485.103	47.19	0.73	47.92	74.00	-26.08	peak
2	30995.932	48.32	-1.15	47.17	74.00	-26.83	peak
3	33581.711	46.22	2.48	48.70	74.00	-25.30	peak
4	35669.329	46.48	3.03	49.51	74.00	-24.49	peak
5	37772.651	46.05	4.90	50.95	74.00	-23.05	peak
6	39862.387	45.17	6.80	51.97	74.00	-22.03	peak

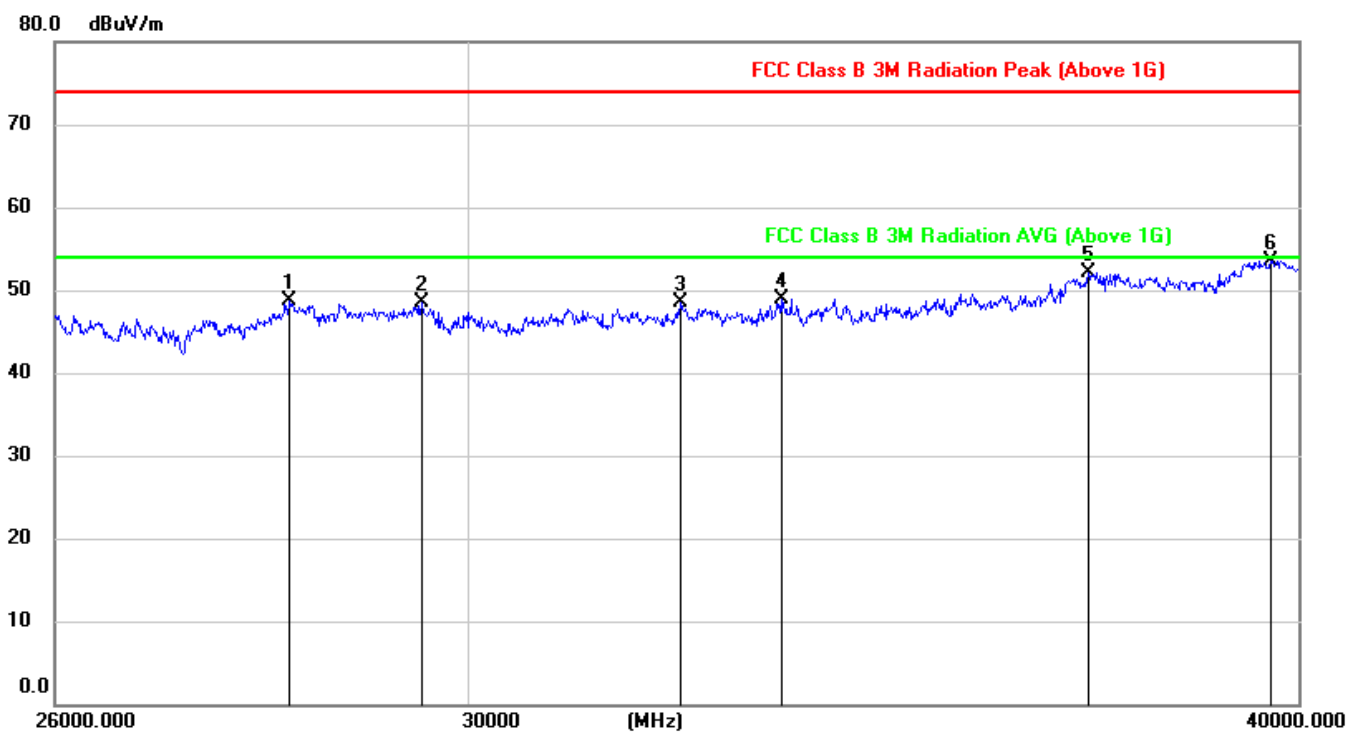
Note: 1. Measurement = Reading Level + Correct Factor.

Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.



SPURIOUS EMISSIONS (MIDDLE CHANNEL, WORST-CASE CONFIGURATION, VERTICAL)



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	26326.848	50.96	-5.06	45.90	74.00	-28.10	peak
2	28695.658	47.69	1.18	48.87	74.00	-25.13	peak
3	31049.388	48.46	-1.19	47.27	74.00	-26.73	peak
4	33437.357	47.50	2.39	49.89	74.00	-24.11	peak
5	35577.254	46.69	2.80	49.49	74.00	-24.51	peak
6	38231.021	45.70	4.79	50.49	74.00	-23.51	peak

Note: 1. Measurement = Reading Level + Correct Factor.

Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

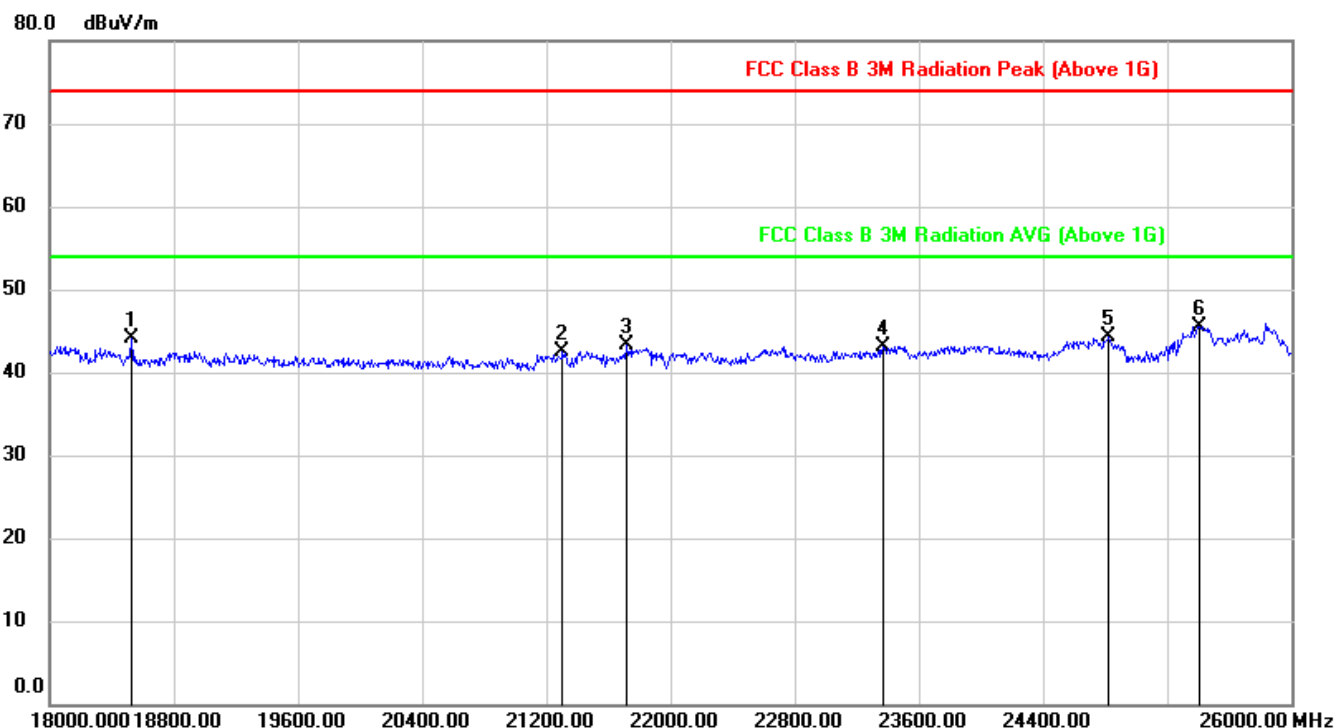
Note: EUT in each of three orthogonal axis emissions had been tested, but only the worst case (X axis) data recorded in the report.



7.7. SPURIOUS EMISSIONS 18~26GHz

7.7.1. 802.11a MODE

SPURIOUS EMISSIONS (MIDDLE CHANNEL, WORST-CASE CONFIGURATION, HORIZONTAL)



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	18528.000	49.41	-5.26	44.15	74.00	-29.85	peak
2	21304.000	47.26	-4.75	42.51	74.00	-31.49	peak
3	21720.000	47.61	-4.37	43.24	74.00	-30.76	peak
4	23368.000	46.45	-3.26	43.19	74.00	-30.81	peak
5	24824.000	46.47	-2.26	44.21	74.00	-29.79	peak
6	25408.000	47.20	-1.73	45.47	74.00	-28.53	peak

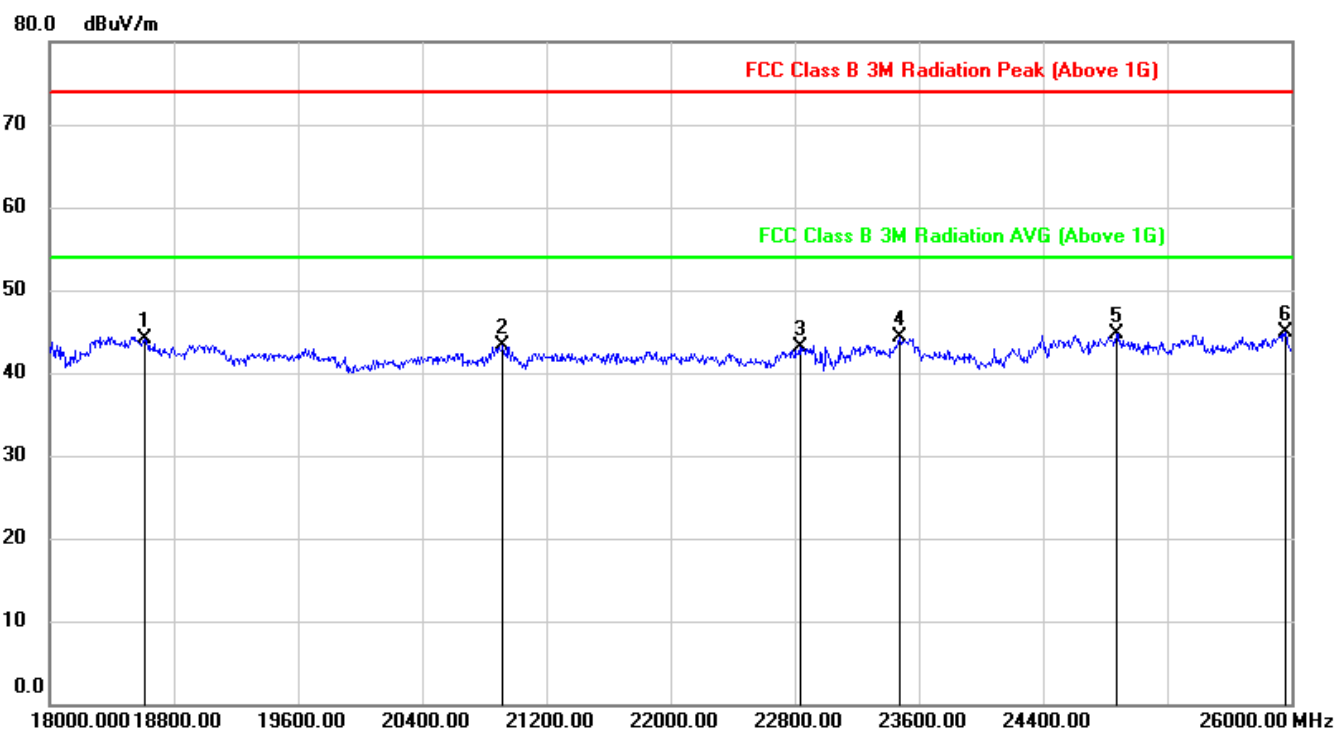
Note: 1. Measurement = Reading Level + Correct Factor.

Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.



SPURIOUS EMISSIONS (MIDDLE CHANNEL, WORST-CASE CONFIGURATION, VERTICAL)



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	18616.000	49.39	-5.34	44.05	74.00	-29.95	peak
2	20920.000	48.22	-4.95	43.27	74.00	-30.73	peak
3	22832.000	46.72	-3.60	43.12	74.00	-30.88	peak
4	23472.000	47.48	-3.17	44.31	74.00	-29.69	peak
5	24872.000	46.94	-2.22	44.72	74.00	-29.28	peak
6	25960.000	45.86	-0.99	44.87	74.00	-29.13	peak

Note: 1. Measurement = Reading Level + Correct Factor.

Only the worst case emission recorded in the report, if Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

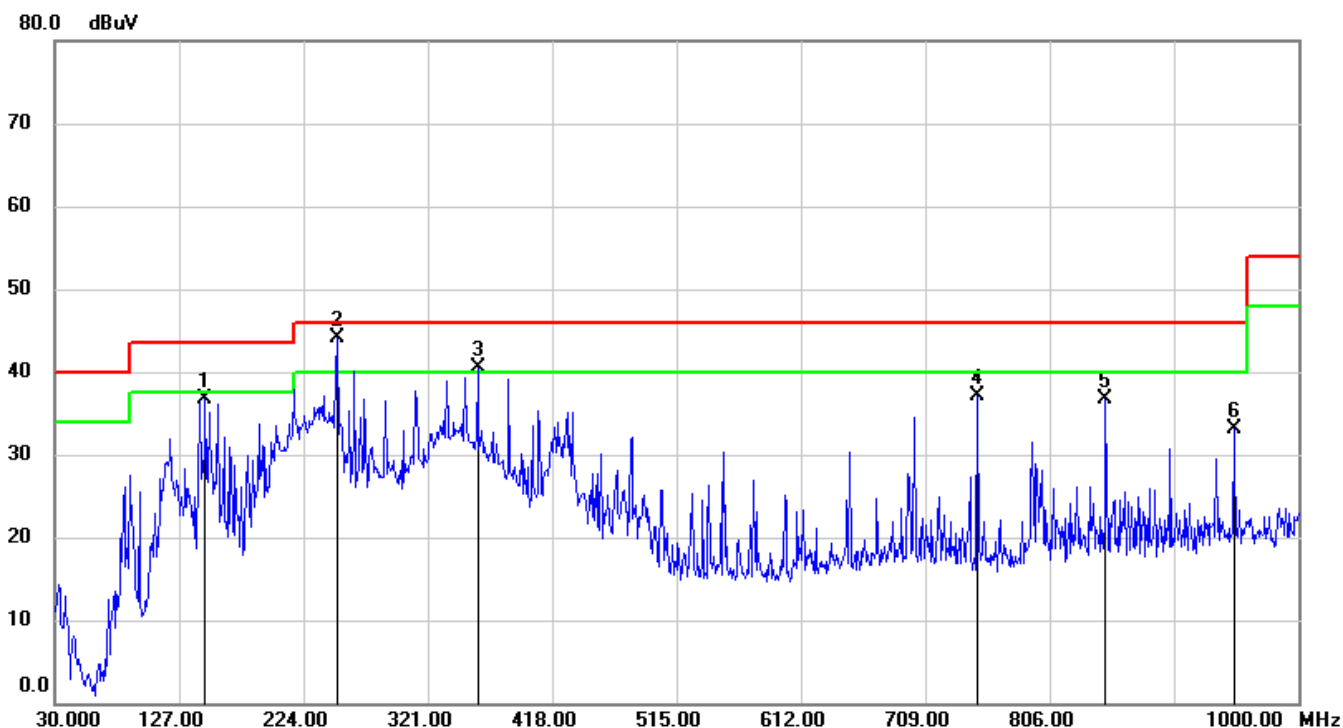
Note: EUT in each of three orthogonal axis emissions had been tested, but only the worst case (X axis) data recorded in the report.



7.8. SPURIOUS EMISSIONS 30M ~ 1 GHz

7.8.1. 802.11a MODE

SPURIOUS EMISSIONS (MIDDLE CHANNEL, WORST-CASE CONFIGURATION, HORIZONTAL)

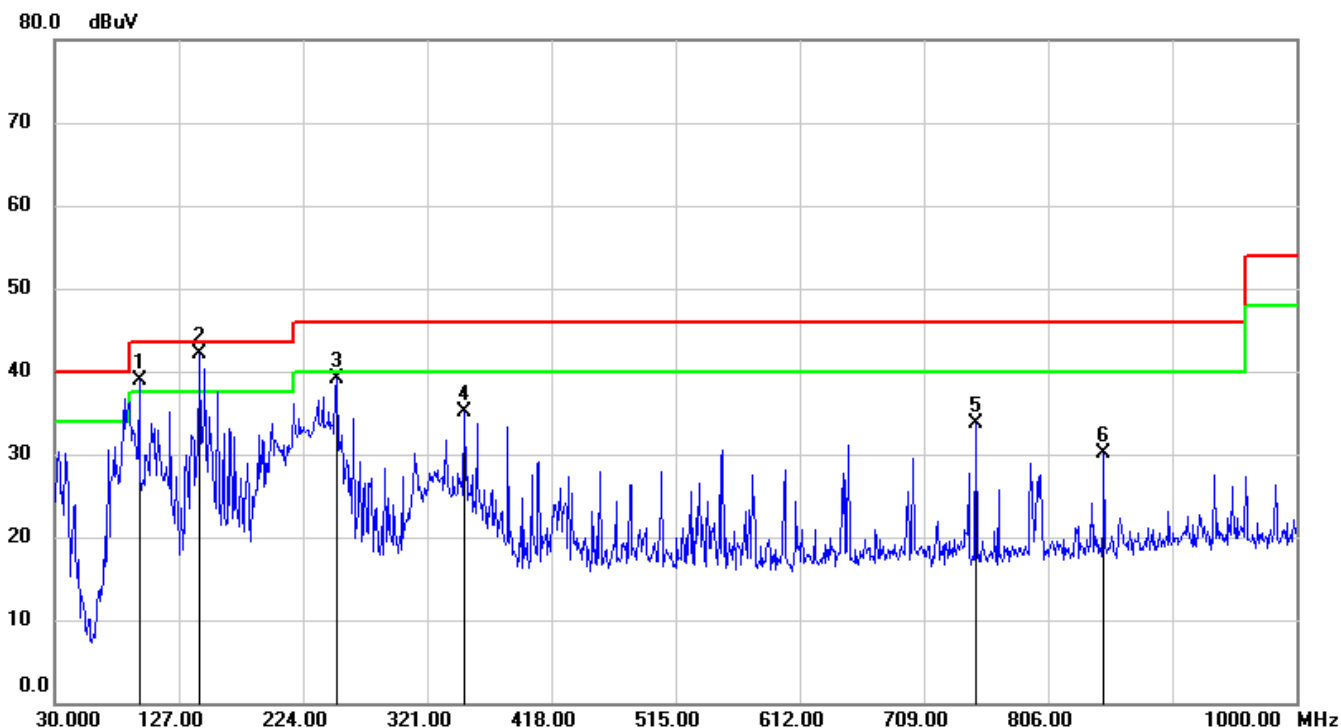


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	147.3700	54.41	-17.61	36.80	43.50	-6.70	QP
2	250.1900	61.82	-17.70	44.12	46.00	-1.88	QP
3	359.8000	54.01	-13.52	40.49	46.00	-5.51	QP
4	749.7400	44.63	-7.52	37.11	46.00	-8.89	QP
5	849.6500	42.98	-6.21	36.77	46.00	-9.23	QP
6	949.5600	37.87	-4.75	33.12	46.00	-12.88	QP

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



SPURIOUS EMISSIONS (MIDDLE CHANNEL, WORST-CASE CONFIGURATION, VERTICAL)



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	95.9600	60.84	-21.93	38.91	43.50	-4.59	QP
2	143.4900	59.98	-17.97	42.01	43.50	-1.49	QP
3	250.1900	56.78	-17.70	39.08	46.00	-6.92	QP
4	350.1000	48.84	-13.83	35.01	46.00	-10.99	QP
5	749.7400	41.27	-7.52	33.75	46.00	-12.25	QP
6	849.6500	36.26	-6.21	30.05	46.00	-15.95	QP

Note: 1. Result Level = Read Level + Correct Factor.

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

3. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto

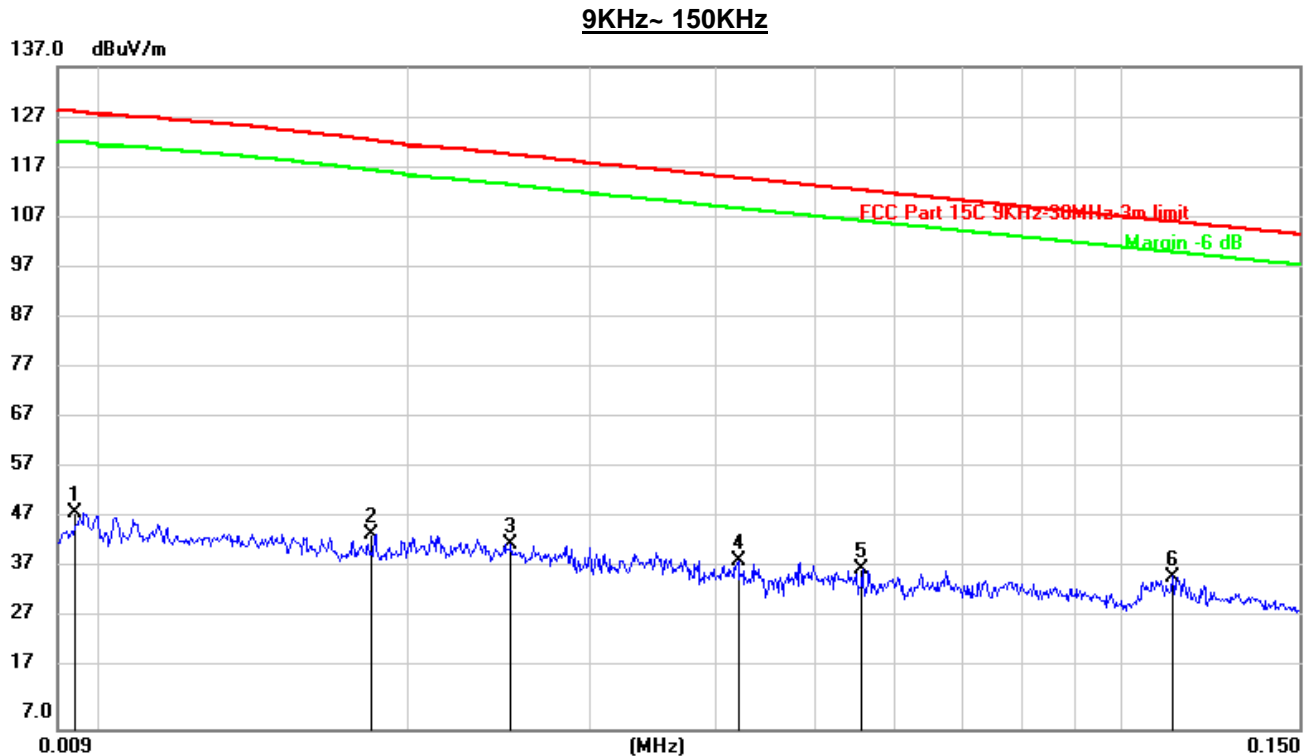
Note: EUT in each of three orthogonal axis emissions had been tested, but only the worst case (X axis) data recorded in the report.



7.9. SPURIOUS EMISSIONS BELOW 30M

7.9.1. 802.11a MODE

SPURIOUS EMISSIONS (MIDDLE CHANNEL, WORST-CASE CONFIGURATION, HORIZONTAL



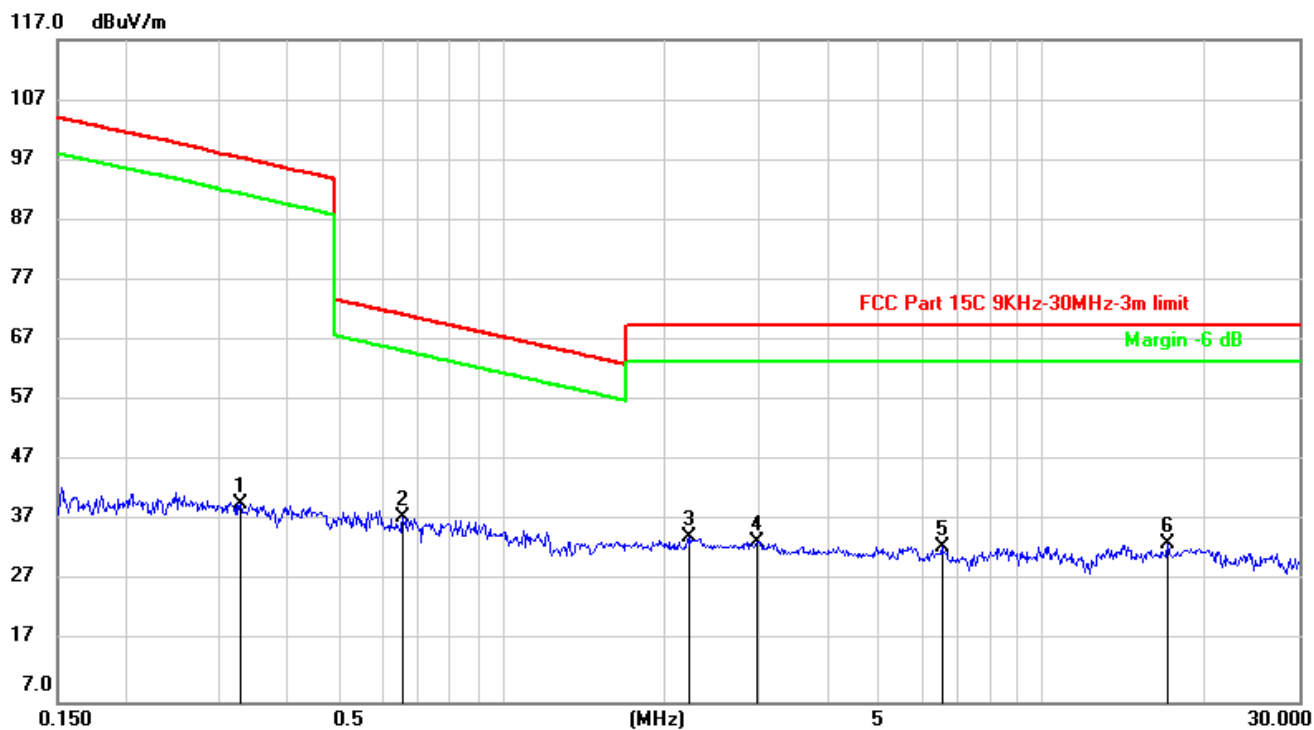
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.0094	29.01	20.26	49.27	128.06	-78.79	peak
2	0.0183	24.89	20.29	45.18	122.60	-77.42	peak
3	0.0251	23.08	20.31	43.39	119.78	-76.39	peak
4	0.0420	19.59	20.31	39.90	115.17	-75.27	peak
5	0.0555	17.89	20.31	38.20	112.75	-74.55	peak
6	0.1126	16.63	20.27	36.90	106.58	-69.68	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV and QP limit, AV and QP Result are deemed to comply with AV limit.



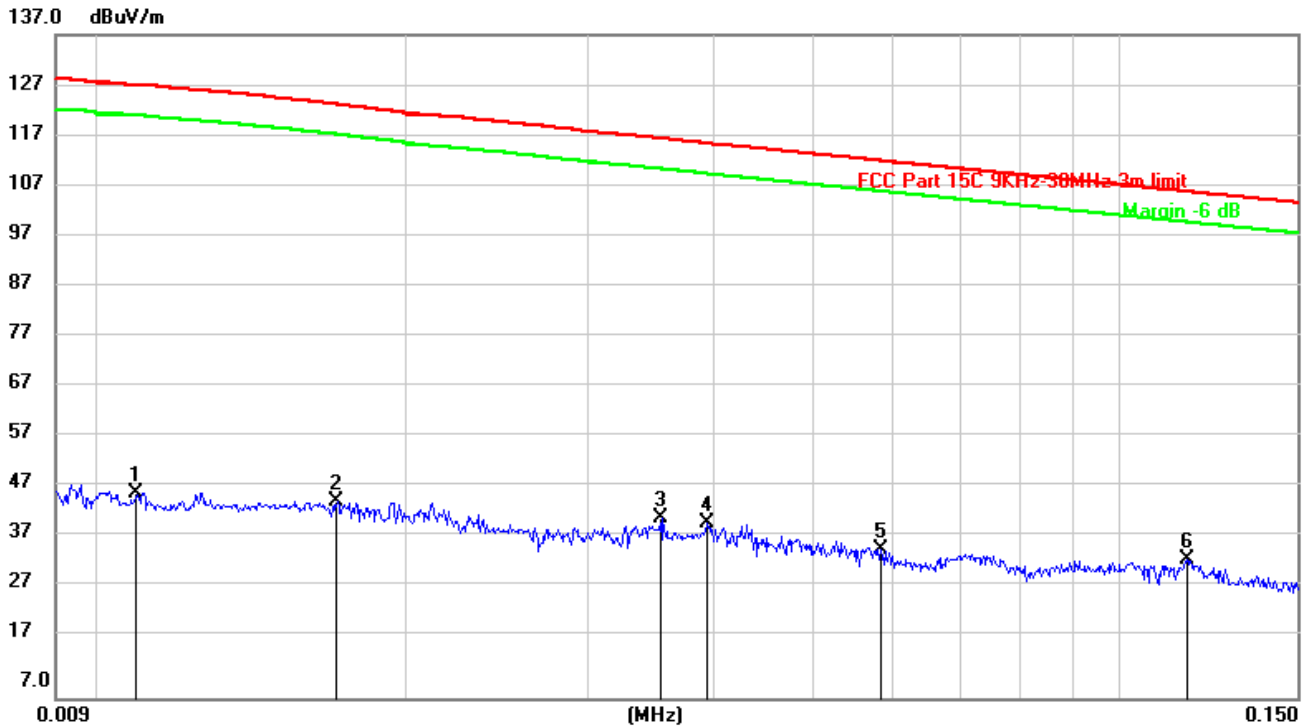
150KHz ~ 30M



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.3266	19.60	20.30	39.90	97.39	-57.49	peak
2	0.6542	17.31	20.31	37.62	71.31	-33.69	peak
3	2.2132	13.48	20.77	34.25	69.54	-35.29	peak
4	2.9618	12.77	20.89	33.66	69.54	-35.88	peak
5	6.5227	11.89	20.89	32.78	69.54	-36.76	peak
6	17.1082	12.33	20.98	33.31	69.54	-36.23	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV and QP limit, AV and QP Result are deemed to comply with AV limit.

**SPURIOUS EMISSIONS (MIDDLE CHANNEL, WORST-CASE CONFIGURATION, VERTICAL)****9KHz~ 150KHz**

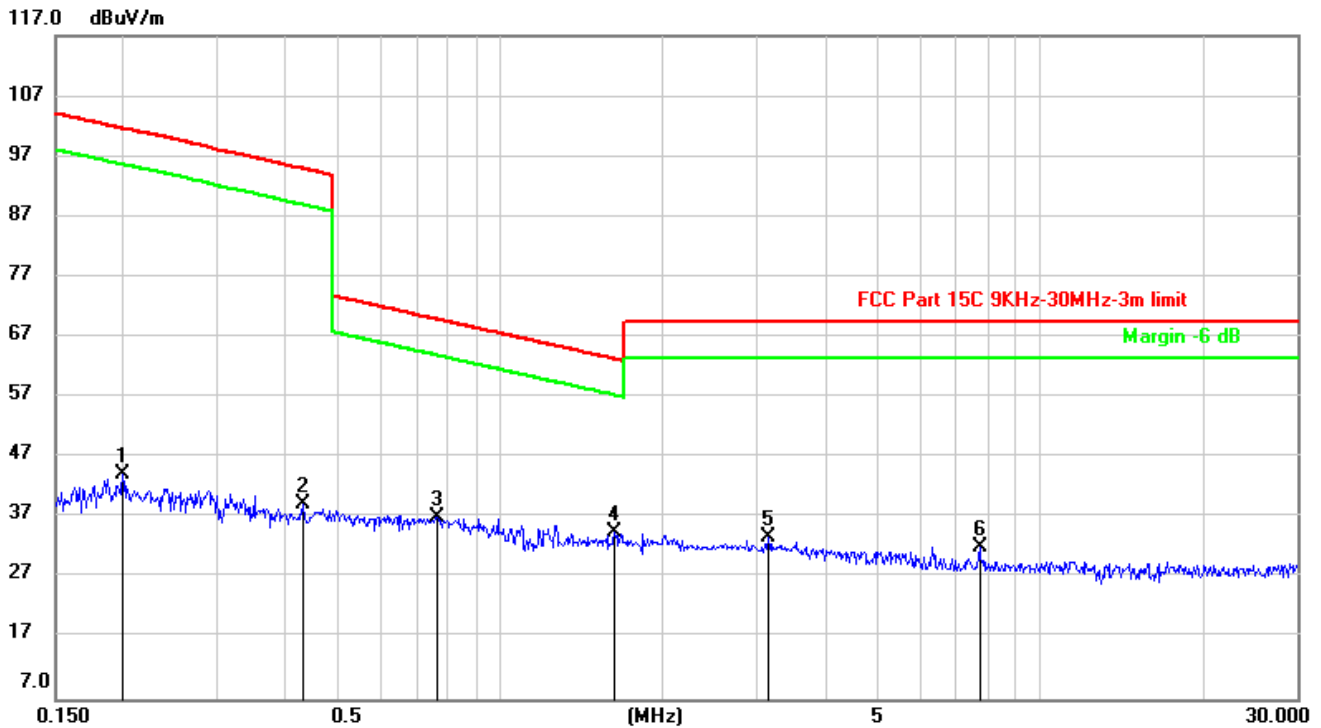
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.0108	27.08	20.22	47.30	127.12	-79.82	peak
2	0.0170	25.12	20.28	45.40	123.39	-77.99	peak
3	0.0354	21.97	20.31	42.28	116.71	-74.43	peak
4	0.0393	21.01	20.31	41.32	115.73	-74.41	peak
5	0.0582	15.71	20.31	36.02	112.32	-76.30	peak
6	0.1168	13.74	20.29	34.03	106.26	-72.23	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV and QP limit, AV and QP Result are deemed to comply with AV limit.



150KHz ~ 30M



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.1995	23.85	20.37	44.22	101.60	-57.38	peak
2	0.4304	18.93	20.27	39.20	94.97	-55.77	peak
3	0.7630	16.66	20.36	37.02	69.97	-32.95	peak
4	1.6270	14.01	20.60	34.61	63.38	-28.77	peak
5	3.1396	12.82	20.91	33.73	69.54	-35.81	peak
6	7.7278	11.17	20.95	32.12	69.54	-37.42	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV and QP limit, AV and QP Result are deemed to comply with AV limit.

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

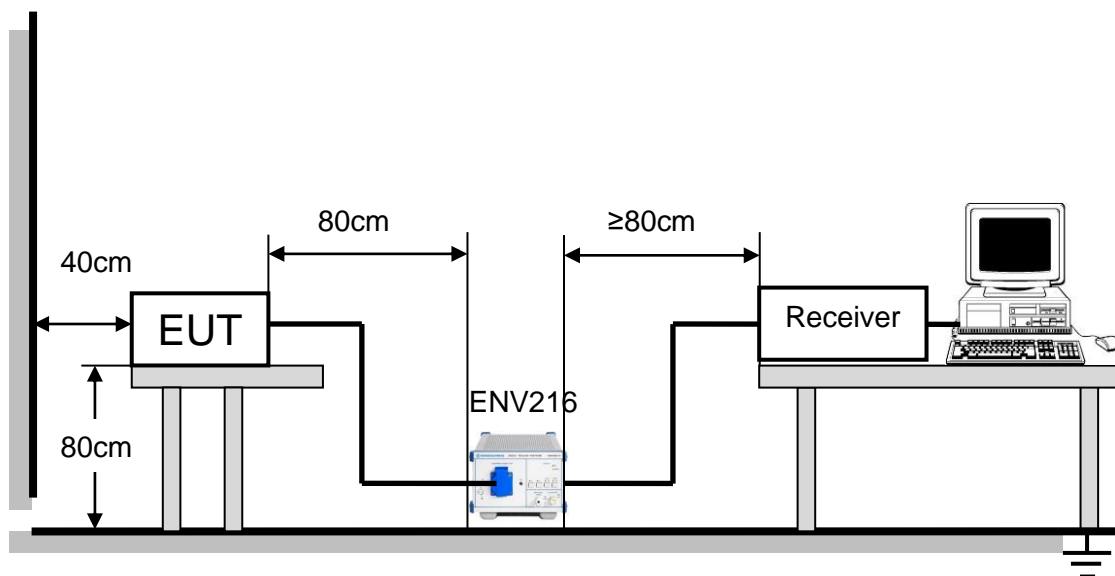
8. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

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

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

TEST SETUP AND PROCEDURE



The EUT is put on a table of non-conducting material that is 80cm high. The vertical conducting wall of shielding is located 40cm to the rear of the EUT. The power line of the EUT is connected to the AC mains through a Artificial Mains Network (A.M.N.). A EMI Measurement Receiver (R&S Test Receiver ESR3) is used to test the emissions from both sides of AC line. According to the requirements in Section 7 and 13 of ANSI C63.10-2013. Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz using CISPR Quasi-Peak and average detector mode. The bandwidth of EMI test receiver is set at 9kHz.

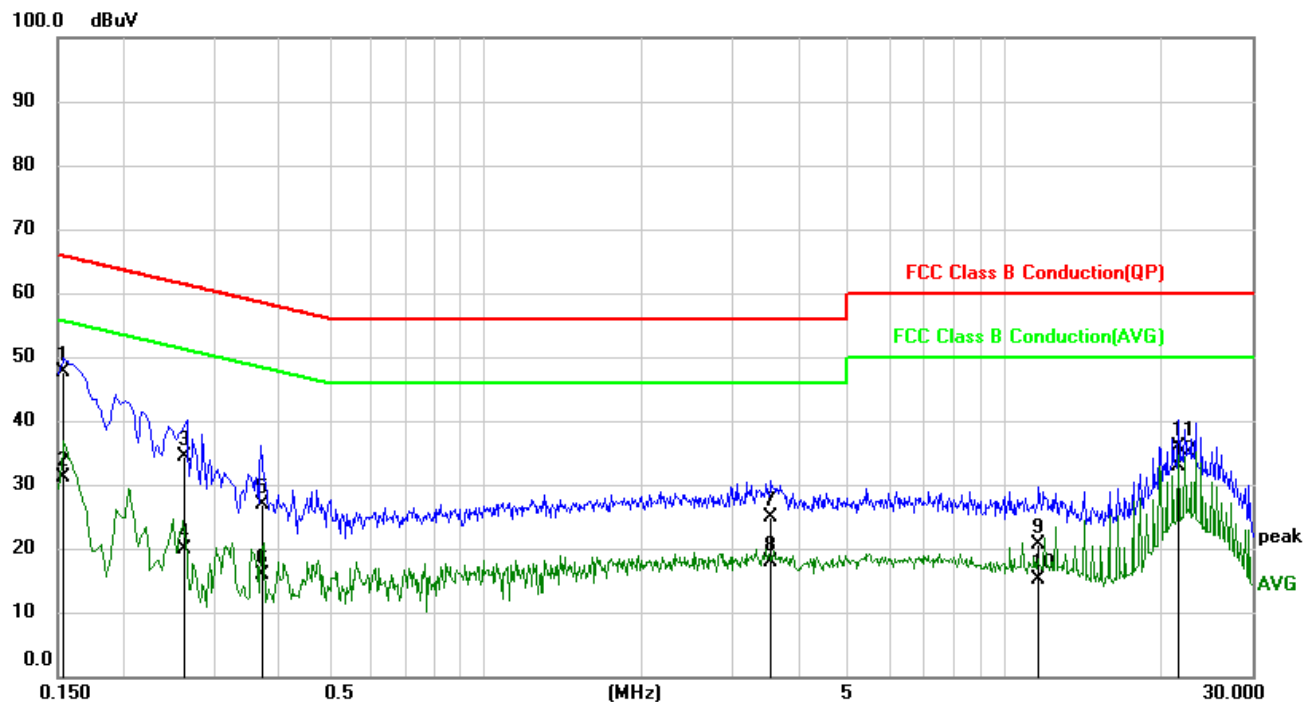
The arrangement of the equipment is installed to meet the standards and operating in a manner, which tends to maximize its emission characteristics in a normal application.

TEST RESULT



8.1. 802.11a MODE

LINE N RESULTS (MIDDLE CHANNEL, WORST-CASE CONFIGURATION)



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1533	38.09	9.46	47.55	65.82	-18.27	QP
2	0.1533	21.64	9.46	31.10	55.82	-24.72	AVG
3	0.2623	24.96	9.43	34.39	61.36	-26.97	QP
4	0.2623	10.38	9.43	19.81	51.36	-31.55	AVG
5	0.3716	17.44	9.43	26.87	58.47	-31.60	QP
6	0.3716	6.49	9.43	15.92	48.47	-32.55	AVG
7	3.5621	15.46	9.47	24.93	56.00	-31.07	QP
8	3.5621	8.35	9.47	17.82	46.00	-28.18	AVG
9	11.6432	11.15	9.60	20.75	60.00	-39.25	QP
10	11.6432	5.60	9.60	15.20	50.00	-34.80	AVG
11	21.6596	26.16	9.63	35.79	60.00	-24.21	QP
12	21.6596	23.26	9.63	32.89	50.00	-17.11	AVG

Note: 1. Result = Reading +Correct Factor.

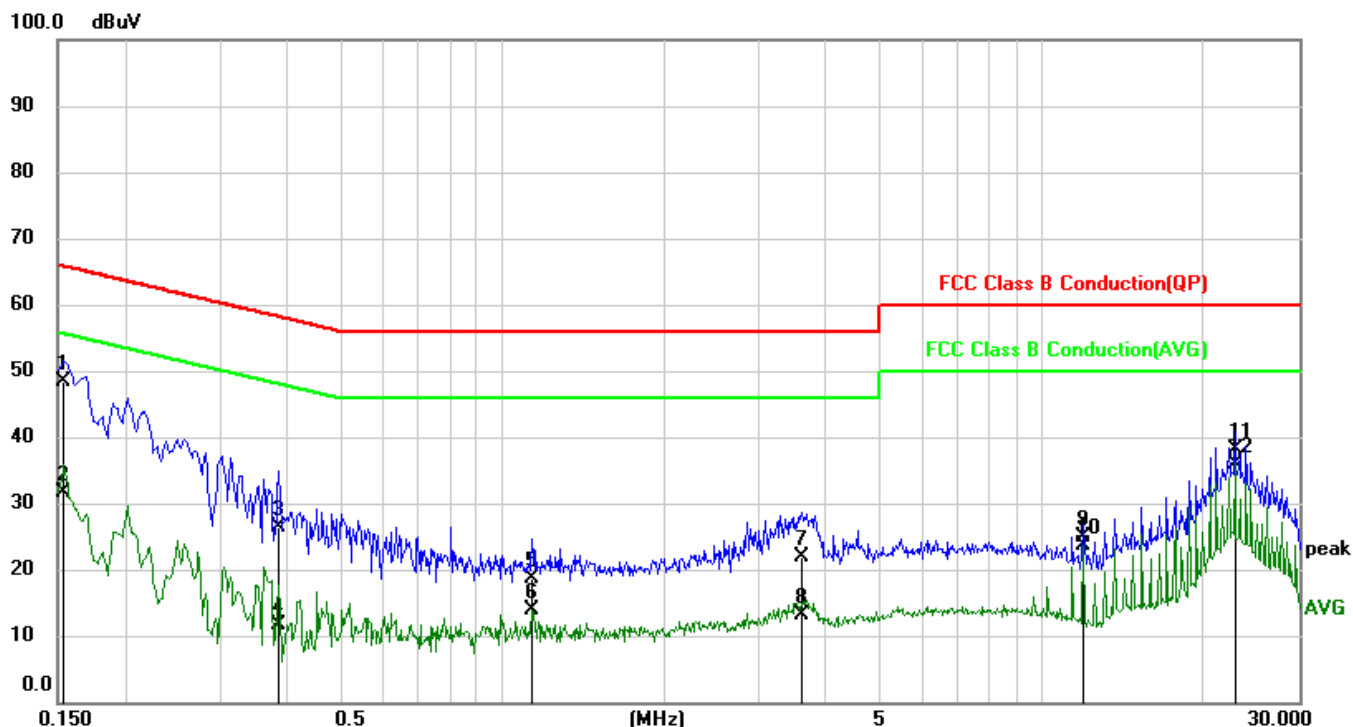
2. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 200 Hz (9 kHz—150 kHz), 9 kHz (150 kHz—30 MHz).

4. Step size: 80Hz (0.009MHz-0.15MHz), 4 kHz (0.15MHz-30MHz), Scan time: auto.



LINE L RESULTS (MIDDLE CHANNEL, WORST-CASE CONFIGURATION)



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1533	38.80	9.46	48.26	65.82	-17.56	QP
2	0.1533	22.21	9.46	31.67	55.82	-24.15	AVG
3	0.3855	16.90	9.42	26.32	58.16	-31.84	QP
4	0.3855	2.10	9.42	11.52	48.16	-36.64	AVG
5	1.1395	9.08	9.43	18.51	56.00	-37.49	QP
6	1.1395	4.43	9.43	13.86	46.00	-32.14	AVG
7	3.6077	12.39	9.47	21.86	56.00	-34.14	QP
8	3.6077	3.73	9.47	13.20	46.00	-32.80	AVG
9	11.9655	15.17	9.61	24.78	60.00	-35.22	QP
10	11.9655	14.02	9.61	23.63	50.00	-26.37	AVG
11	22.7893	28.51	9.62	38.13	60.00	-21.87	QP
12	22.7893	26.31	9.62	35.93	50.00	-14.07	AVG

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



9. FREQUENCY STABILITY

LIMITS

The frequency of the carrier signal shall be maintained within band of operation

TEST SETUP AND PROCEDURE

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

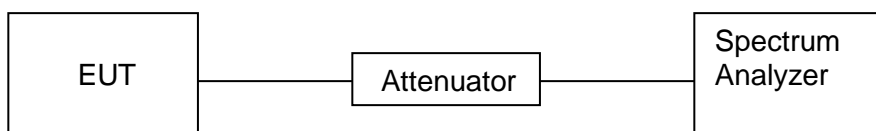
Center Frequency	The center frequency of the channel under test
Detector	PEAK
RBW	10KHz
VBW	$\geq 3 \times \text{RBW}$
Span	Encompass the entire emissions bandwidth (EBW) of the signal
Trace	Max hold
Sweep time	Auto

Allow the trace to stabilize, find the peak value of the power envelope and record the frequency, then calculated the frequency drift.

The test extreme voltage is to change the primary supply voltage from 85 to 115 percent of the nominal value.

User manual temperature is -20°C~60°C.

TEST SETUP





TEST RESULTS (WORST-CASE CONFIGURATION)

Test Mode: 802.11a MODE

Frequency Error vs. Voltage:

Test Mode	Antenna	Channel	Temp.	Volt.	Freq.Error(MHz)	Freq.vs.rated(ppm)	Verdict
11A	Ant1	5180	TN	VL	5180.0155	2.99	PASS
			TN	VN	5180.0145	2.80	PASS
			TN	VH	5180.0152	2.93	PASS

Frequency Error vs. Temperature:

Test Mode	Antenna	Channel	Temp.	Volt.	Freq.Error(MHz)	Freq.vs.rated(ppm)	Verdict
11A	Ant1	5180	60	VN	5180.0148	2.86	PASS
			50	VN	5180.0144	2.78	PASS
			40	VN	5180.0141	2.72	PASS
			30	VN	5180.0146	2.82	PASS
			20	VN	5180.0142	2.74	PASS
			10	VN	5180.0147	2.84	PASS
			0	VN	5180.0151	2.92	PASS
			-10	VN	5180.0150	2.91	PASS
			-20	VN	5180.0152	2.92	PASS



10. ANTENNA REQUIREMENTS

APPLICABLE REQUIREMENTS

Please refer to FCC §15.203

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

Please refer to FCC §15.247(b)(4)

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

ANTENNA CONNECTOR

EUT has a FPCB antenna without antenna connector.

ANTENNA GAIN

The antenna gain of EUT is less than 6 dBi.

END OF REPORT