

### CFR 47 FCC PART 15 SUBPART C

### **TEST REPORT**

For

### FLEX 2.0 Compact Folding Drone with HD Camera/SWITCH / Morph+ / Snap2.0

MODEL NUMBER: CT-6168, 1422629, NV-3850, NV-3851, OA-6119, 1372095

FCC ID: 2ASK3CT-6168R

### REPORT NUMBER: 4789468201.1-6

**ISSUE DATE: May 27, 2020** 

Prepared for

### AMAX INDUSTRIAL GROUP CHINA CO.,LTD OFFICE NO.3 10/F WITTY COMMERCIAL BUILDING 1A-1L TUNG CHOI STREET MONGKOK KOWLOON HONG KONG

Prepared by

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The results reported herein have been performed in accordance with the laboratory's terms of accreditation. This report shall not be reproduced except in full without the written approval of the Laboratory. The results in this report apply to the test sample(s) mentioned above at the time of the testing period only and are not to be used to indicate applicability to other similar products. This report does not imply that the product(s) has met the criteria for certification.



#### **Revision History**

Rev.	Issue Date	Revisions	Revised By
V0	05/27/2020	Initial Issue	



Summary of Test Results					
Clause	Test Items	FCC Rules	Test Results		
1	6dB Bandwidth and 99% Occupied Bandwidth	FCC Part 15.247 (a) (2)	Pass		
2	Peak Conducted Output Power	FCC Part 15.247 (b) (3)	Pass		
3	Power Spectral Density	FCC Part 15.247 (e)	Pass		
4	Conducted Bandedge and Spurious Emission	FCC Part 15.247 (d)	Pass		
5	Radiated Bandedge and Spurious Emission	FCC Part 15.247 (d) FCC Part 15.209 FCC Part 15.205	Pass		
6	Conducted Emission Test For AC Power Port	FCC Part 15.207	Not Applicable		
7	Antenna Requirement	FCC Part 15.203	Pass		
Note:			,		

1. This test report is only published to and used by the applicant, and it is not for evidence purpose in China.

2. The measurement result for the sample received is <Pass> according to < CFR 47 FCC PART 15 SUBPART C> when <Accuracy Method> decision rule is applied.

3. The EUT only employ battery power for operation and which do not operate from the AC power lines.



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# **1. ATTESTATION OF TEST RESULTS**

#### **Applicant Information**

AMAX INDUSTRIAL GROUP CHINA CO.,LTD OFFICE NO.3 10/F WITTY COMMERCIAL BUILDING 1A-1L TUNG CHOI STREET MONGKOK KOWLOON HONG KONG
AMAX INDUSTRIAL GROUP CHINA CO., LTD
OFFICE NO.3 10/F WITTY COMMERCIAL BUILDING 1A-1L
TUNG CHOI STREET MONGKOK KOWLOON HONG KONG
FLEX 2.0 Compact Folding Drone with HD Camera/SWITCH /
Morph+ / Snap2.0
Morph+ / Snap2.0
Morph+ / Snap2.0 CT-6168, 1422629, NV-3850, NV-3851, OA-6119, 1372095
Morph+ / Snap2.0 CT-6168, 1422629, NV-3850, NV-3851, OA-6119, 1372095 3051860

APPLICABLE STANDARDS STANDARD TEST RESULTS				
				CFR 47 FCC PART 15 SUBPART C PASS

#### Prepared By:

Bucare Verry

Checked By:

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Denny Huang Project Engineer Approved By:

ephentus

Stephen Guo Laboratory Manager Shawn Wen

Laboratory Leader



# 2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with KDB 558074 D01 15.247 Meas Guidance v05r02, 414788 D01 Radiated Test Site v01r01, KDB 662911 D01 Multiple Transmitter Output v02r01, CFR 47 FCC Part 2, CFR 47 FCC Part 15, ANSI C63.10-2013, ISED RSS-247 Issue 2 and ISED RSS-GEN Issue 5.

# 3. FACILITIES AND ACCREDITATION

	<ul> <li>A2LA (Certificate No.: 4102.01)</li> <li>UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with A2LA.</li> <li>FCC (FCC Designation No.: CN1187)</li> <li>UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. Has been recognized to perform compliance testing on equipment subject</li> </ul>
Accreditation Certificate	to the Commission's Delcaration of Conformity (DoC) and Certification rules <b>ISED(Company No.: 21320)</b> 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. <b>VCCI (Registration No.: G-20019, R-20004, C-20012 and T-20011)</b> 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

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

Note 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.

Note 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 OFS.



# 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		
Conduction emission	3.62dB		
Radiation Emission test(include Fundamental emission) (9KHz-30MHz)	2.2dB		
Radiation Emission test(include Fundamental emission) (30MHz-1GHz)	4.00dB		
Radiation Emission test (1GHz to 26GHz)( include Fundamental emission)	5.78dB (1GHz-18GHz)		
	5.23dB (18GHz-26GHz)		
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

EUT Name	FLEX 2.0 Compact Folding Drone with HD Camera/SWITCH / Morph+ / Snap2.0		
Model	CT-6168, 1422629, NV-3850, NV-3851, OA-6119, 1372095		
Model Difference	All the same except for the model name and color.		
Radio Technology	IEEE802.11b/g/n HT20		
Operation frequency	IEEE 802.11b: 2412MHz ~ 2462MHz IEEE 802.11g: 2412MHz ~ 2462MHz IEEE 802.11n HT20: 2412MHz ~ 2462MHz		
Modulation	IEEE 802.11b: DSSS(CCK) IEEE 802.11g: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n HT20: OFDM (64QAM, 16QAM, QPSK, BPSK)		
Battery	DC 3.7V		

## 5.2. MAXIMUM OUTPUT POWER

Number of Transmit Chains (NTX)	IEE Std. 802.11	Frequency (MHz)	Channel Number	Max AV Conducted Power (dBm)
1	IEEE 802.11b	2412-2462	1-11[11]	8.79
1	IEEE 802.11g	2412-2462	1-11[11]	8.92
1	IEEE 802.11nHT20	2412-2462	1-11[11]	8.94

## 5.3. CHANNEL LIST

	Channel List for 802.11b/g/n (20 MHz)						
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	2412	4	2427	7	2442	10	2457
2	2417	5	2432	8	2447	11	2462
3	2422	6	2437	9	2452	/	/

# 5.4. TEST CHANNEL CONFIGURATION

Test Mode	Test Channel Number	Test Channel
WiFi TX (802.11b)	CH 1, CH 6, CH 11	Low Channel, MID Channel, High Channel
WiFi TX (802.11g)	CH 1, CH 6, CH 11	Low Channel, MID Channel, High Channel
WiFi TX (802.11n HT20)	CH 1, CH 6, CH 11	Low Channel, MID Channel, High Channel

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### 5.5. THE WORSE CASE CONFIGURATIONS

Worst-case data rates as provided by the client were:

802.11b mode: 1 Mbps 802.11g mode: 6 Mbps 802.11n HT20 mode: MCS0

## 5.6. DESCRIPTION OF AVAILABLE ANTENNAS

Antenna	Frequency (MHz)	Antenna Type	MAX Antenna Gain (dBi)	
1	2412-2462	Wire Antenna	1.97	

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

Note: The value of the antenna gain was declared by customer.

## 5.7. TEST ENVIRONMENT

Environment Parameter	Selected Values During Tests				
Relative Humidity	45 ~ 70%				
Atmospheric Pressure:	1025Pa				
Temperature	TN	22 ~ 28°C			
	VL	/			
Voltage:	VN	DC 3.7V			
	VH	/			

Note: VL= Lower Extreme Test Voltage

VN= Nominal Voltage

VH= Upper Extreme Test Voltage

**TN= Normal Temperature** 



## 5.8. DESCRIPTION OF TEST SETUP

#### SUPPORT EQUIPMENT

Item	Equipment	Brand Name	Model Name	P/N
1	Laptop	Laptop Lenovo		PF0WRQQN
2	USB to serial cable	/	/	/

#### I/O CABLES

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

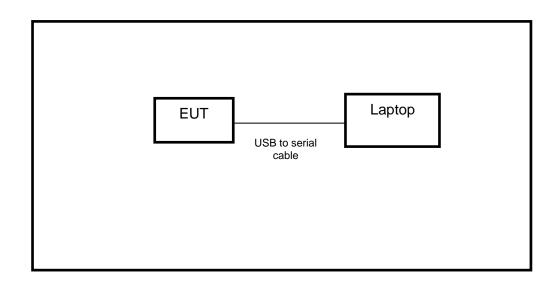
#### ACCESSORIES

Item	Accessory	Brand Name	Model Name	Description
/	/	/	/	/

#### TEST SETUP

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

#### SETUP DIAGRAM FOR TESTS



# 6. MEASURING INSTRUMENT AND SOFTWARE USED

	Radiated Emissions									
Instrument										
Used	Equipment	Manufacturer		Mode	el No.		Seria	l No.	Last Cal.	Next Cal.
$\checkmark$	MXE EMI Receiver	KESIGHT		N90	)38A		MY564	00036	Dec.06,2019	Dec.05,2020
	Hybrid Log Periodic Antenna	TDK	ŀ	HLP-(	3003C		130	960	Sep.17,2018	Sep.17,2021
$\checkmark$	Preamplifier	HP		844	47D		2944A	09099	Dec.05,2019	Dec.05,2020
	EMI Measurement Receiver	R&S		ES	R26		101	377	Dec.05,2019	Dec.05,2020
$\checkmark$	Horn Antenna	TDK		HRN	-0118		130	939	Sep.17,2018	Sep.17,2021
	High Gain Horn Antenna	Schwarzbeck	BBHA-9170			691		Aug.11,2018	Aug.11,2021	
$\checkmark$	Preamplifier	TDK	PA-02-0118			TRS-305- 00067		Dec.05,2019	Dec.05,2020	
$\checkmark$	Preamplifier	TDK	PA-02-2				TRS- 000		Dec.05,2019	Dec.05,2020
$\checkmark$	Loop antenna	Schwarzbeck		15 <sup>-</sup>	19B		000	800	Jan.07,2019	Jan.07,2022
	Band Reject Filter	Wainwright			2350-24 33.5-40		2	1	Dec.05,2019	Dec.05,2020
	High Pass Filter	Wi			2700-30 )-40SS	00-	2	3	Dec.05,2019	Dec.05,2020
				Sof	ftware					
Used	De	scription			Man	ufact	turer		Name	Version
$\checkmark$	Test Software for	Test Software for Radiated disturbance Fara				arac	k	I	EZ-EMC	Ver. UL-3A1
			Oth	ner in	strume	ents				
Usec	Equipment	Manufac	turer	Mod	lel No.	S	erial No	<b>)</b> .	Last Cal.	Next Cal.
$\checkmark$	Spectrum Analyz	zer Keysię	ght	N9	030A	MY	MY55410512		ec.06,2019	Dec.05,2020
V	Power sensor, Power Sensor, Power	wer R&S	5	OS	P120		100921	C	Dec.06,2019	Dec.06,2020



# 7. ANTENNA PORT TEST RESULTS

# 7.1. ON TIME AND DUTY CYCLE

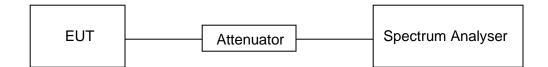
### <u>LIMITS</u>

None; for reporting purposes only

### PROCEDURE

KDB 558074 Zero-Span Spectrum Analyzer Method

#### TEST SETUP



#### TEST ENVIRONMENT

Temperature	25.5°C	Relative Humidity	66%
Atmosphere Pressure	101kPa	Test Voltage	DC 3.7V

#### **RESULTS**

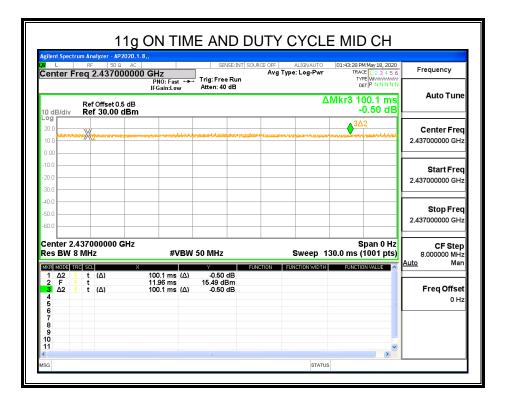
Mode	On Time (msec)	Period (msec)	Duty Cycle x (Linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/T Minimum VBW (KHz)	Final setting For VBW (KHz)
11b	100	100	1.0	100	0.0	0.01	0.01
11g	100	100	1.0	100	0.0	0.01	0.01
11n HT20	100	100	1.0	100	0.0	0.01	0.01

Note:

Duty Cycle Correction Factor=10log (1/x). Where: x is Duty Cycle (Linear) Where: T is On Time If that calculated VBW is not available on the analyzer then the next higher value should be used.



ilent Spect	rum Analyzer - AP	2020.1.8,, AC		SENS	E:INT SOURCE OFF	ALIGNAUTO	11:26:39 AM May 1	3, 2020
enter F	req 2.4370	00000 GI	Hz 'NO: Fast ↔		#Av	g Type: RMS  Hold: 1/1	TRACE 1 2	Hrequency
			Gain:Low	#Atten: 40	dB		DET P N I	Auto Turo
0 dB/div	Ref 30.00	dBm				4	Mkr3 100.5- 0.188-	ms
<sup>og</sup>							▲ 3∆2	
0.0	Mann	mm	mm	mm	man	mmm	min	2.437000000 GH
0.0								Start Free
0.0								2.437000000 GH
80.0								
10.0								Stop Free
50.0								2.437000000 GH
.0.0								
enter 2 es BW	.437000000 (	GHz	#\(B)	V 50 MHz		Swoon 1	Span 30.0 ms (1001	
			#VBV		FUNCTION	· · ·	· ·	Auto Mo
kr mode 1 Δ2	1 t (Δ)		0.5 ms (Δ)			FUNCTION WIDTH	FUNCTION VALU	
2 F 3 Δ2	1 t 1 t (Δ)		.70 ms 0.5 ms (∆)	13.354 dB -0.188 d				Freq Offse
4 5								он
6 7								
8 9								
0								
1								>





Agilent Spectrum Analyzer - AP202 L RF 50 Q	20.1.8,, AC			CLE MID C	Frequency
Center Freq 2.437000 Ref Offset 0.5 d 10 dB/div Ref 30.00 dE	PNO: Fast ↔→ IFGain:Low	Trig: Free Run Atten: 40 dB		Mkr3 100.1 ms -1.05 dB	Auto Tune
20.0 10.0 0.00	unter-analoust-interpretive-transmitter	ondraathek-paitien lakekaanteely	ralsedt-bradiest-brandelpadestic-bra	3∆2 http://www.co.html/ten/ten/ten/ten/ten/ten/ten/ten/ten/ten	Center Freq 2.437000000 GHz
-10.0					Start Freq 2.437000000 GHz
-40.0					<b>Stop Freq</b> 2.437000000 GHz
Center 2.437000000 GH Res BW 8 MHz		50 MHz	Sweep 1	Span 0 Hz 30.0 ms (1001 pts)	CF Step 8.000000 MHz <u>Auto</u> Man
1 Δ2 1 t (Δ) 2 F 1 t 3 Δ2 1 t (Δ) 4 5 6 7	100.1 ms (Δ) 17.16 ms 100.1 ms (Δ)	-1.05 dB 15.71 dBm -1.05 dB			Freq Offset 0 Hz
8 9 10 11			STATU	s	



# 7.2. 6 dB DTS BANDWIDTH AND 99% OCCUPIED BANDWIDTH

#### <u>LIMITS</u>

ISED RSS-247 ISSUE 2							
Section	Test Item	Limit	Frequency Range (MHz)				
CFR 47 FCC 15.247(a)(2)	6 dB Bandwidth	≥ 500KHz	2400-2483.5				

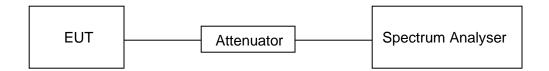
#### TEST PROCEDURE

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

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

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

#### TEST SETUP





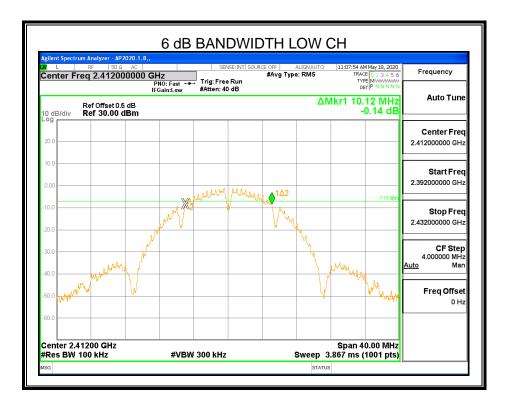
#### **TEST ENVIRONMENT**

Temperature	25.5°C	Relative Humidity	66%
Atmosphere Pressure	101kPa	Test Voltage	DC 3.7V

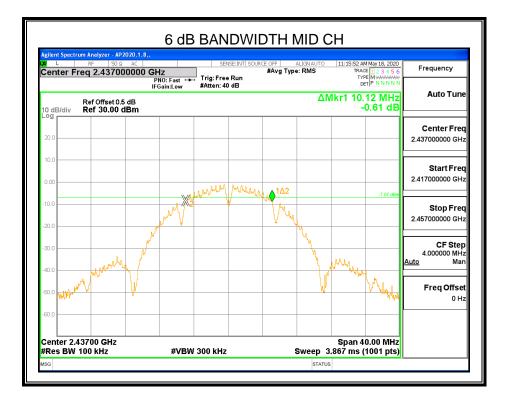
#### **RESULTS**

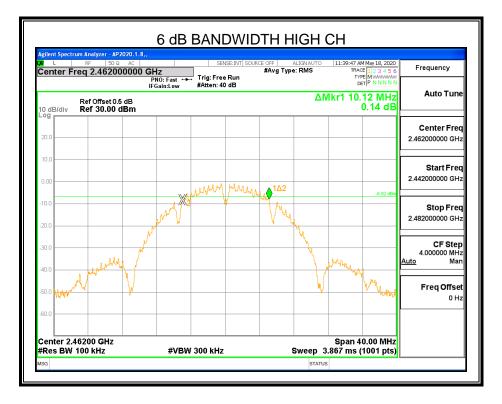
### 7.2.1. 802.11b MODE

Channel	6dB bandwidth (MHz)	99% bandwidth (MHz)	Limit (kHz)	Result
Low	10.12	15.027	≥500	Pass
Middle	10.12	15.004	≥500	Pass
High	10.12	15.017	≥500	Pass

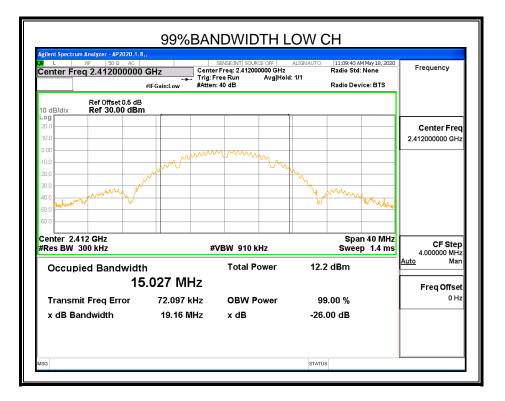


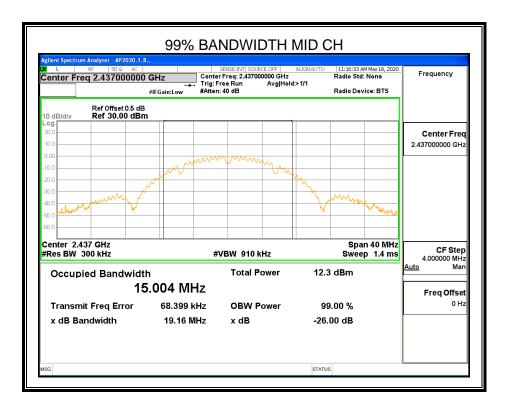




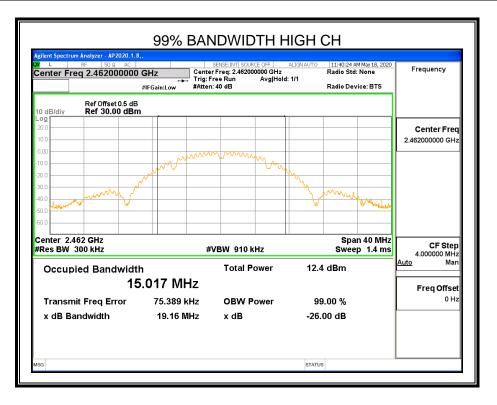








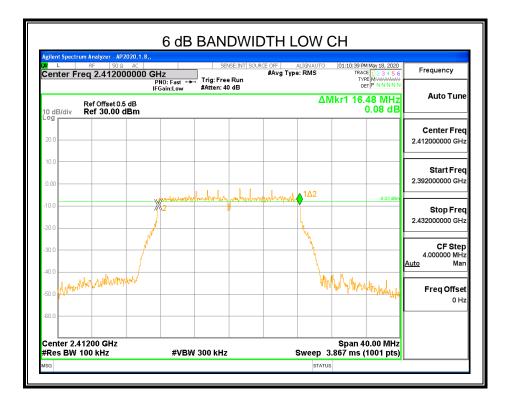




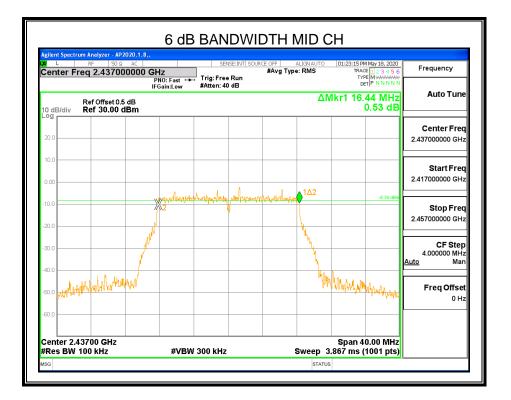


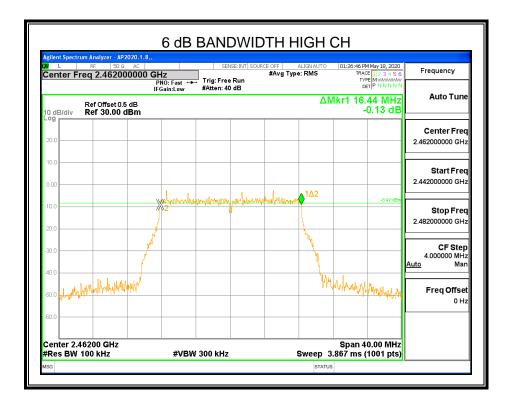
### 7.2.2. 802.11g MODE

Channel	6dB bandwidth (MHz)	99% bandwidth (MHz)	Limit (kHz)	Result
Low	16.48	16.973	≥500	Pass
Middle	16.44	16.965	≥500	Pass
High	16.44	16.937	≥500	Pass

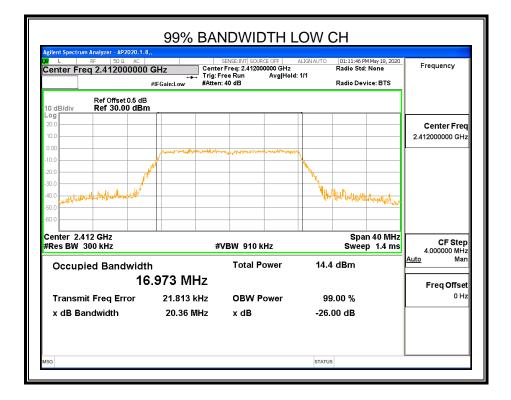


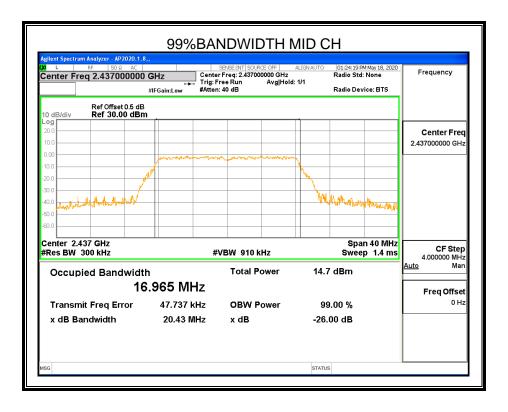




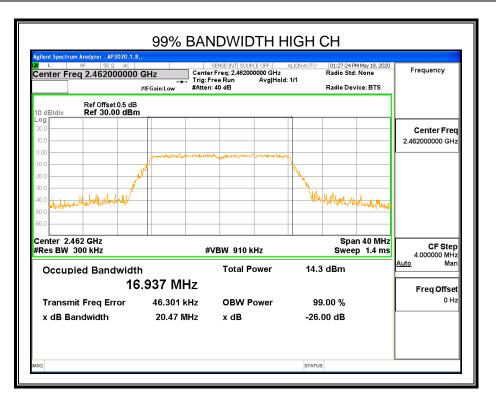






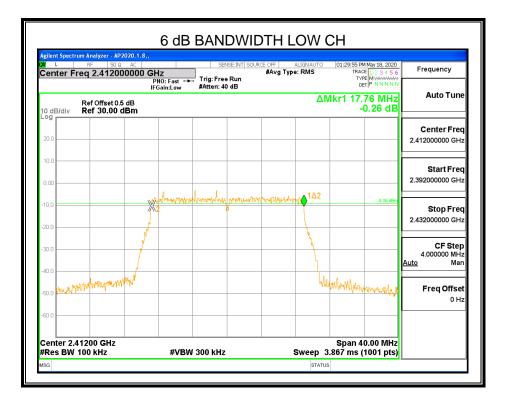




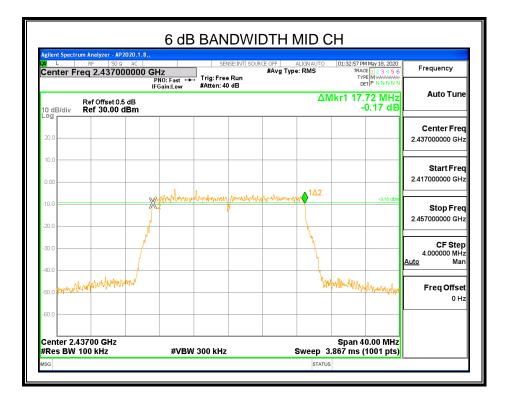


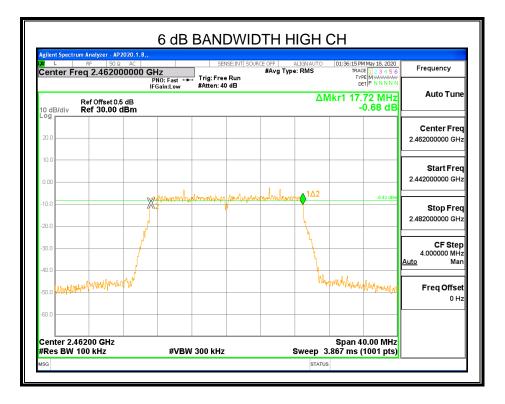
### 7.2.3. 802.11n HT20 MODE

Channel	6dB bandwidth (MHz)	99% bandwidth (MHz)	Limit (kHz)	Result
Low	17.76	17.946	≥500	Pass
Middle	17.72	17.952	≥500	Pass
High	17.72	17.951	≥500	Pass

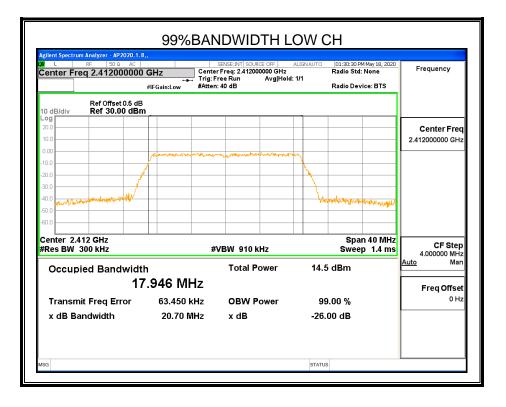


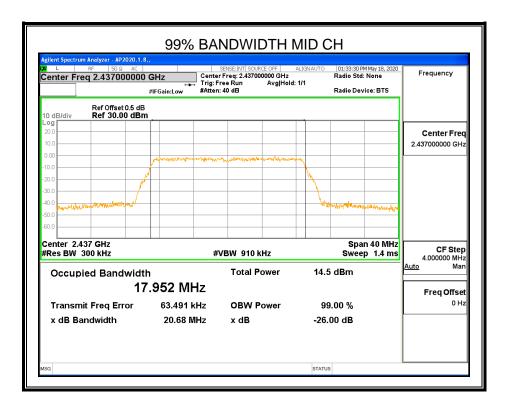




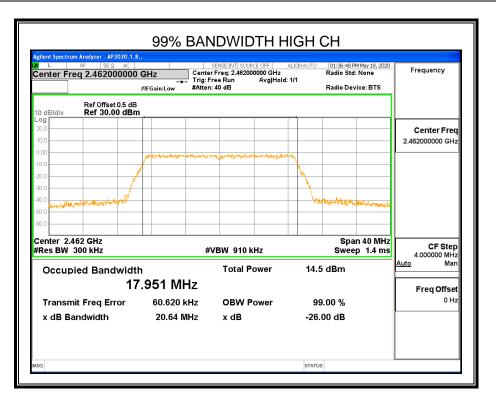














## 7.3. CONDUCTED OUTPUT POWER

#### LIMITS

ISED RSS-247 ISSUE 2			
Section	Test Item	Limit	Frequency Range (MHz)
CFR 47 FCC 15.247(b)(3)	Peak Output Power	1 watt or 30dBm	2400-2483.5

#### TEST PROCEDURE

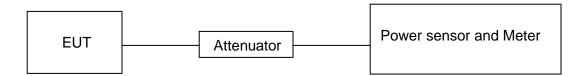
Place the EUT on the table and set it in the transmitting mode.

Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the Power sensor.

Measure peak power each channel.

AVG Detector use for AVG result.

#### TEST SETUP



#### TEST ENVIRONMENT

Temperature	25.5°C	Relative Humidity	66%
Atmosphere Pressure	101kPa	Test Voltage	DC 3.7V



#### **RESULTS**

### 7.3.1. 802.11b MODE

Test Channel	Maximum Conducted Output Power(AV)	LIMIT
rest onarmer	(dBm)	dBm
Low	8.48	30
Middle	8.62	30
High	8.79	30

### 7.3.2. 802.11g MODE

Test Channel	Maximum Conducted Output Power(AV)	LIMIT
rest onamici	(dBm)	dBm
Low	8.59	30
Middle	8.75	30
High	8.92	30

#### 7.3.3. 802.11n HT20 MODE

Test Channel	Maximum Conducted Output Power(AV)	LIMIT
rest Channer	(dBm)	dBm
Low	8.63	30
Middle	8.78	30
High	8.94	30



## 7.4. POWER SPECTRAL DENSITY

#### LIMITS

	ISED RSS-247 I	SSUE 2	
Section	Test Item	Limit	Frequency Range (MHz)
CFR 47 FCC §15.247 (e)	Power Spectral Density	8 dBm/3 kHz	2400-2483.5

#### TEST PROCEDURE

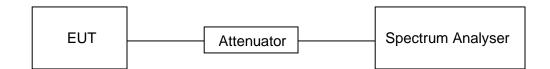
Connect the UUT to the spectrum analyser and use the following settings:

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

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

If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

#### TEST SETUP



#### TEST ENVIRONMENT

Temperature	25.5°C	Relative Humidity	66%
Atmosphere Pressure	101kPa	Test Voltage	DC 3.7V



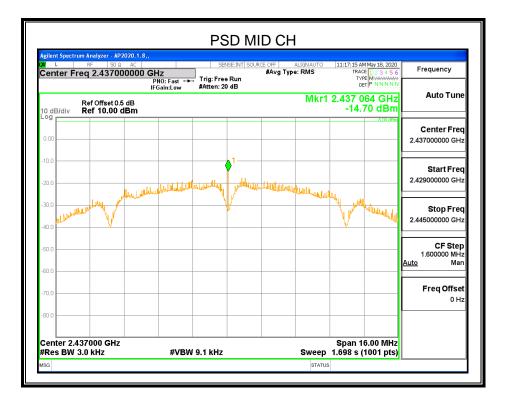
#### **RESULTS**

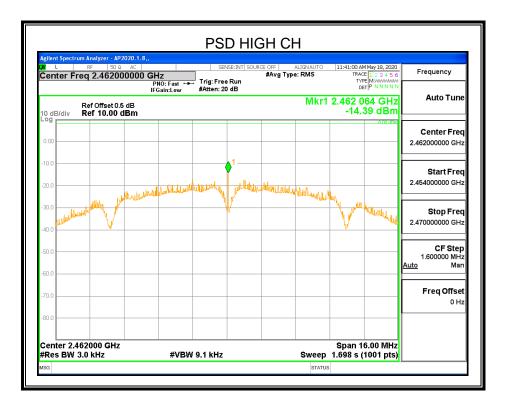
### 7.4.1. 802.11b MODE

Test Channel	Power Spectral Density (dBm/3kHz)	Limit (dBm/3kHz)	Result
Low	-15.01	8	PASS
Middle	-14.70	8	PASS
High	-14.39	8	PASS



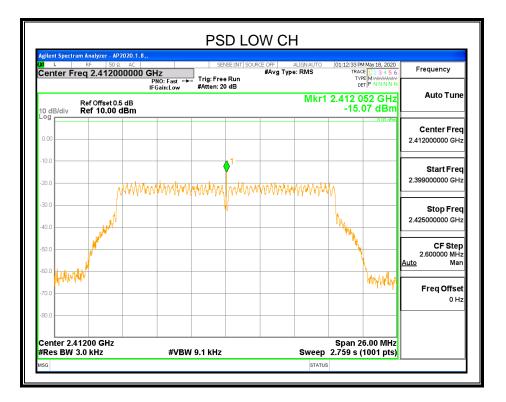




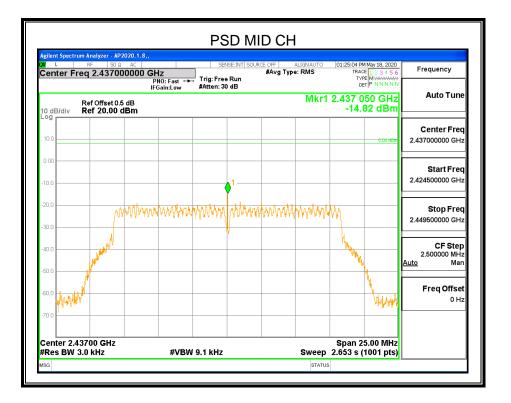


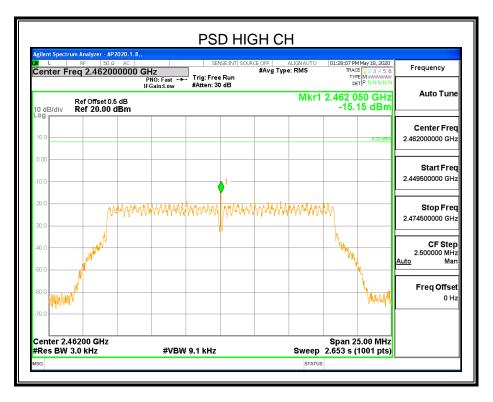
### 7.4.2. 802.11g MODE

Test Channel	Power Spectral Density (dBm/3kHz)	Limit (dBm/3kHz)	Result
Low	-15.07	8	PASS
Middle	-14.82	8	PASS
High	-15.15	8	PASS



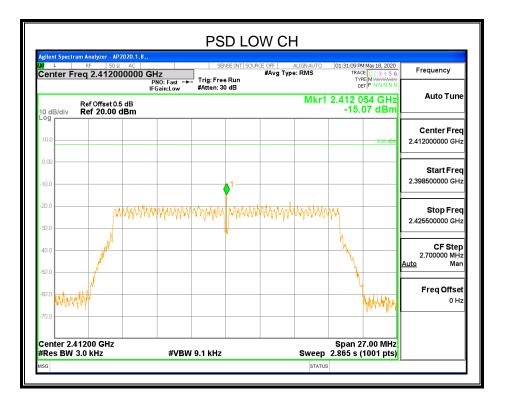




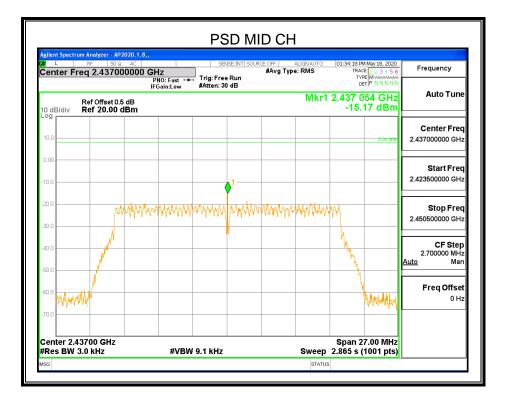


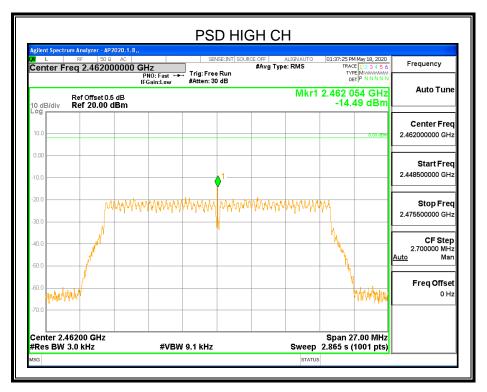
### 7.4.3. 802.11n HT20 MODE

Test Channel	Power Spectral Density (dBm/3kHz)	Limit (dBm/3kHz)	Result
Low	-15.07	8	PASS
Middle	-15.17	8	PASS
High	-14.49	8	PASS











# 7.5. CONDUCTED BANDEDGE AND SPURIOUS EMISSIONS

#### <u>LIMITS</u>

ISED RSS-247 ISSUE 2		
Section	Test Item	Limit
CFR 47 FCC §15.247 (d)	Conducted Bandedge and Spurious Emissions	at least 30 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power

#### TEST PROCEDURE

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

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

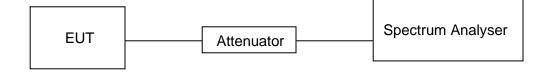
Use the peak marker function to determine the maximum PSD level.

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

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



#### TEST SETUP

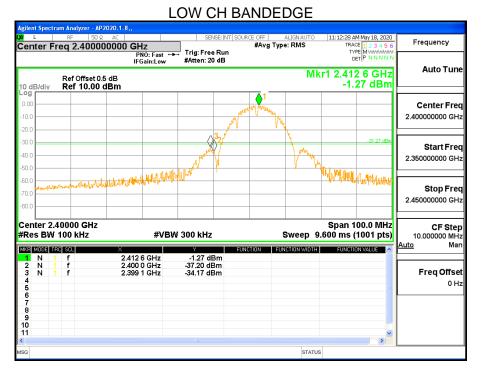


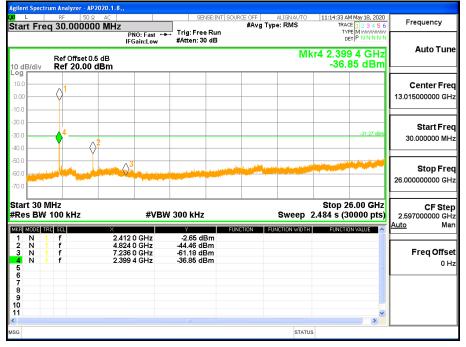
#### **TEST ENVIRONMENT**

Temperature	25.5°C	Relative Humidity	66%
Atmosphere Pressure	101kPa	Test Voltage	DC 3.7V

#### **RESULTS**

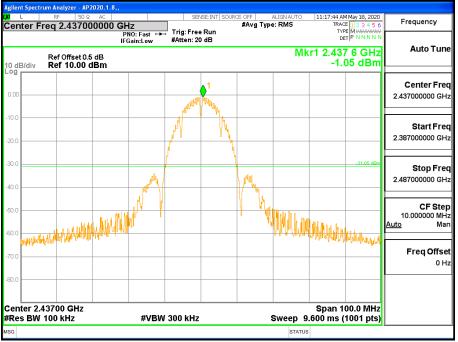
#### 7.5.1. 802.11b MODE

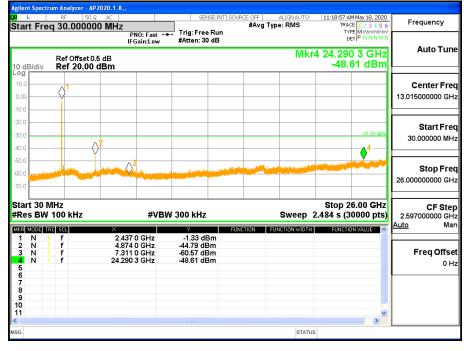




## LOW CH SPURIOUS EMISSIONS 30M-26G

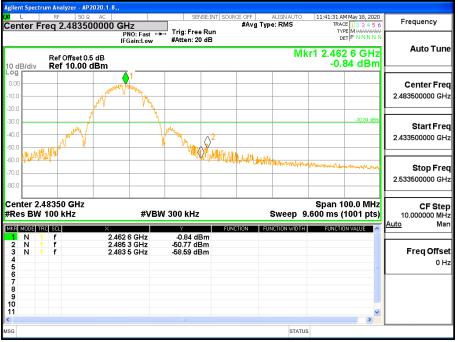
## MID CH SPURIOUS EMISSIONS REFERENCE

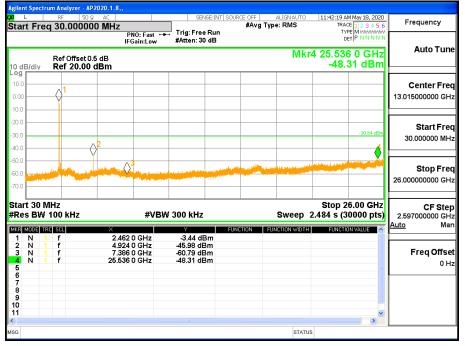




## MID CH SPURIOUS EMISSIONS 30M-26G

## HIGH CH BANDEDGE





## HIGH CH SPURIOUS EMISSIONS 30M-26G

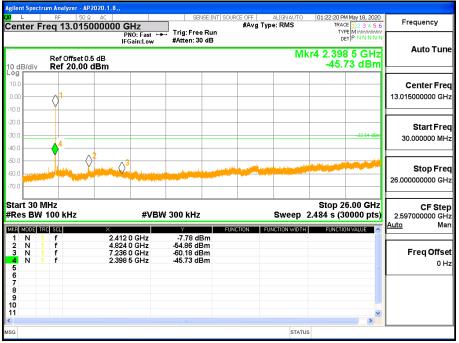


# 7.5.2. 802.11g MODE

		LDOL			L				
					.8,,	zer - AP2020.1.	rum Analy	it Speci	Agilen
Frequency	01:21:41 PM May 18, 2020 TRACE 1 2 3 4 5 6 TYPE M WWWW DET P N N N N N	ALIGNAUTO Type: RMS		1	0 GHz PNO: Fast ↔ IFGain:Low	50 Ω AC 400000000	req 2.	ter F	zen Cen
Auto Tune	1 2.413 3 GHz -2.54 dBm	Mk			ii Gain.cow	ffset 0.5 dB  0.00 dBm		B/div	
Center Freq 2.400000000 GHz		ruhdy	John Jake Kay Jakawa						Log 0.00 -10.0 -20.0
<b>Start Fred</b> 2.350000000 GH;	-32.54 dBm	many		- 37					30.0 -40.0 -50.0
<b>Stop Fred</b> 2.450000000 GH:					an state from the state of the state	Mar and Martin and Andrews	ly af Mary my Mary	<u>}</u> ,	-60.0 -70.0 -80.0
CF Step 10.000000 MH	Span 100.0 MHz 600 ms (1001 pts)	Sweep 9.		300 kHz	#VB)		.40000 / 100 kl		
Auto Mar Freq Offse 0 H:	FUNCTION VALUE	FUNCTION WIDTH	FUNCTION	-2.54 dBm -43.96 dBm -41.22 dBm	2.413 3 GHz 2.400 0 GHz 2.397 7 GHz	2	TRC SCL 1 f 1 f 1 f	N N N	1 2 3 4 5 6 7 8
	×	STATUS		110					9 10 11 <

## LOW CH BANDEDGE

#### LOW CH SPURIOUS EMISSIONS 30M-26G

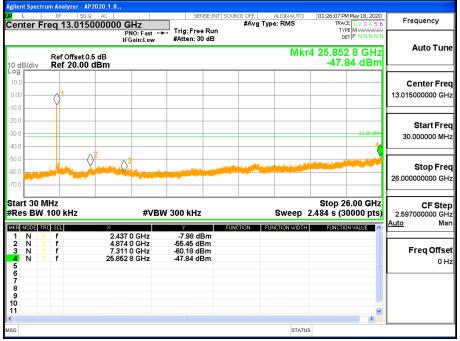


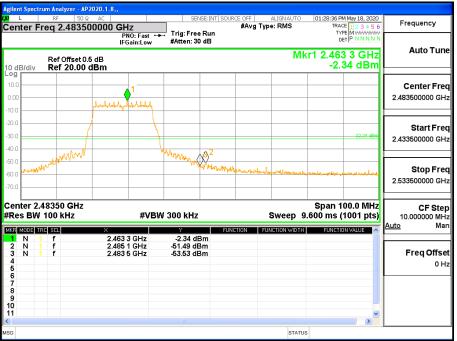




### MID CH SPURIOUS EMISSIONS REFERENCE

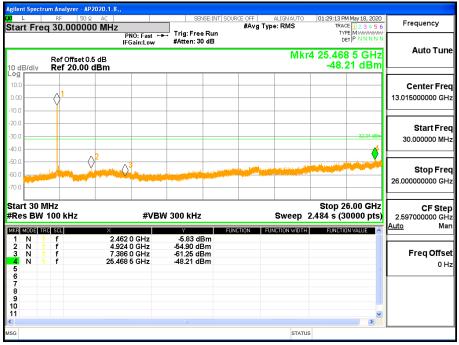
#### MID CH SPURIOUS EMISSIONS 30M-26G





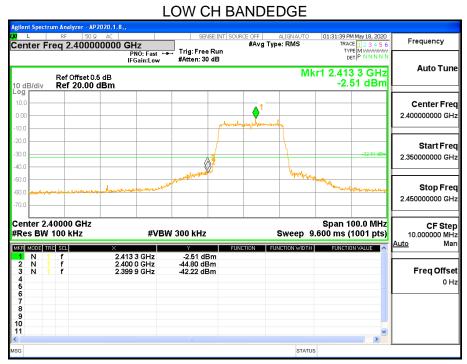
#### HIGH CH BANDEDGE

#### HIGH CH SPURIOUS EMISSIONS 30M-26G





# 7.5.3. 802.11n HT20 MODE



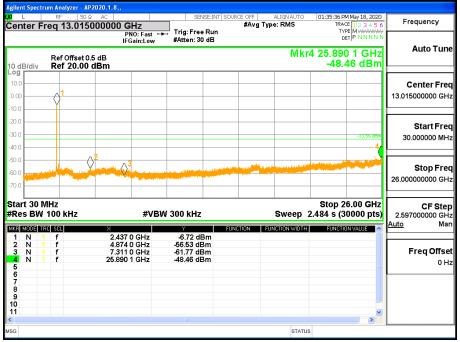
### LOW CH SPURIOUS EMISSIONS 30M-26G





## MID CH SPURIOUS EMISSIONS REFERENCE

#### MID CH SPURIOUS EMISSIONS 30M-26G





## HIGH CH BANDEDGE

Agilent Spectrum Analyzer - AP2020.1.8,,				
<b>L</b> RF 50Ω AC	SENSE:INT SOURCE		01:37:54 PM May 18, 2020	Frequency
Center Freq 2.483500000 GHz		#Avg Type: RMS	TRACE 1 2 3 4 5 6	Frequency
PNO: Fast ← IFGain:Low Ref Offset 0.5 dB	, Trig: Free Run #Atten: 30 dB	Mk	r1 2.457 1 GHz -2.46 dBm	Auto Tune
10 dB/div Ref 20.00 dBm			-2.40 0.011	
10.0 0.00 -10.0 -10.0				Center Freq 2.483500000 GHz
-20.0				<b>Start Freq</b> 2.433500000 GHz
-50.0 -60.0 -70.0	Menteries 23	manamet Warmon publican	อไปสาริเมษ์รู้และรับส่วานอาวุษณะเพราะ	<b>Stop Freq</b> 2.533500000 GHz
	W 300 kHz	•	Span 100.0 MHz .600 ms (1001 pts)	CF Step 10.000000 MHz Auto Man
IMSE Mode         THC         SQL         X           1         N         1         f         2.457 1 GHz           2         N         1         f         2.483 7 GHz           3         N         1         f         2.483 7 GHz           4         5         5         6	Y FUNCT -2.46 dBm -51.46 dBm -52.63 dBm	ION FUNCTION WIDTH	FUNCTION VALUE 🛆	Freq Offset 0 Hz
4 5 6 7 8 9 9 10 11			×	
MSG		STATUS	5	

#### HIGH CH SPURIOUS EMISSIONS 30M-26G





# 8. RADIATED TEST RESULTS

### LIMITS

Please refer to CFR 47 FCC §15.205 and §15.209

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.

Radiation Disturbance Test Limit for FCC (Above 1G)

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



#### FCC Restricted bands of operation:

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
<sup>1</sup> 0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	( <sup>2</sup> )
13.36-13.41			

Note: <sup>1</sup>Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz. <sup>2</sup>Above 38.6c

Please refer to ISED RSS-GEN Clause 8.9 (Transmitter)

Emissions radiated outside of the specified frequency bands above 30MHz				
Frequency Range	Field Strength Limit	Field Stre	ngth Limit	
(MHz)	(uV/m) at 3 m	(dBuV/m	n) at 3 m	
(11112)		Quasi	-Peak	
30 - 88	100	4	0	
88 - 216	150	43	3.5	
216 - 960	200	4	6	
Above 960	500	5	4	
Above 1000	500	Peak	Average	
Above 1000	500	74	54	

#### ISED General field strength limits at frequencies below 30 MHz

Table 6 – General field strength limits at frequencies below 30 MHz		
Frequency	Magnetic field strength (H-Field) (µA/m)	Measurement distance (m)
9 - 490 kHz <sup>Note 1</sup>	6.37/F (F in kHz)	300
490 - 1705 kHz	63.7/F (F in kHz)	30
1.705 - 30 MHz	0.08	30

**Note 1:** The emission limits for the ranges 9-90 kHz and 110-490 kHz are based on measurements employing a linear average detector.



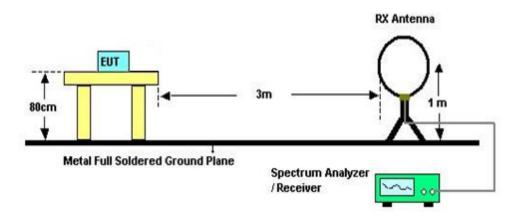
## ISED Restricted bands please refer to ISED RSS-GEN Clause 8.10

MHz MHz GHz		
MHz	MHz	
0.090 - 0.110	149.9 - 150.05	9.0 - 9.2
0.495 - 0.505	156.52475 - 156.52525	9.3 - 9.5
2.1735 - 2.1905	156.7 - 156.9	10.6 - 12.7
3.020 - 3.026	162.0125 - 167.17	13.25 - 13.4
4.125 - 4.128	167.72 - 173.2	14.47 - 14.5
4.17725 - 4.17775	240 - 285	15.35 - 16.2
4.20725 - 4.20775	322 - 335.4	17.7 - 21.4
5.677 - 5.683	399.9 - 410	22.01 - 23.12
6.215 - 6.218	008 - 614	23.6 - 24.0
6.26775 - 6.26825	960 - 1427	31.2 - 31.8
6.31175 - 6.31225	1435 - 1626.5	36.43 - 36.5
8.291 - 8.294	1645.5 - 1646.5	Above 38.6
8.362 - 8.366	1660 - 1710	
8.37625 - 8.38675	1718.8 - 1722.2	
8.41425 - 8.41475	2200 - 2300	
12.29 - 12.293	2310 - 2390	
12.51975 - 12.52025	2483.5 - 2500	
12.57675 - 12.57725	2655 - 2900	
13.36 - 13.41	3260 - 3267	
16.42 - 16.423	3332 - 3339	
16.69475 - 16.69525	3345.8 - 3358	
16.80425 - 16.80475	3500 - 4400	
25.5 - 25.67	4500 - 5150	
37.5 - 38.25	5350 - 5460	
73 - 74.6	7250 - 7750	
74.8 - 75.2	8025 - 8500	
108 - 138		

Note 1: Certain frequency bands listed in table 7 and in bands above 38.6 GHz are designated for licence-exempt applications. These frequency bands and the requirements that apply to related devices are set out in the 200 and 300 series of RSSs.

## TEST SETUP AND PROCEDURE

### Below 30MHz



The setting of the spectrum analyser

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

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

2. The EUT was arranged to its worst case and then turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both Horizontal, Face-on and Face-off 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 1 meter 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.

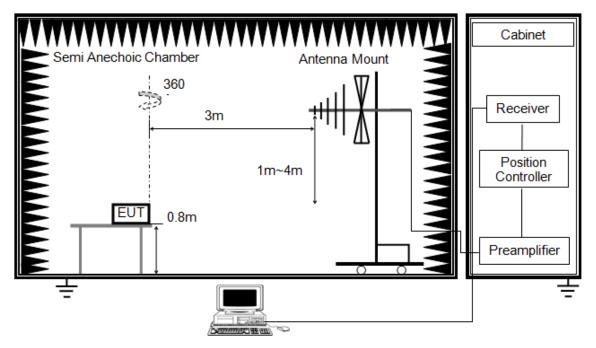
6. For the actual test configuration, please refer to the related item in this test report (Photographs of the Test Configuration)

7. Although these tests were performed other than open field site, adequate comparison measurements were confirmed against 30m open field 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 site based on KDB 414788.

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## Below 1G



The setting of the spectrum analyser

RBW	120kHz
VBW	300kHz
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.

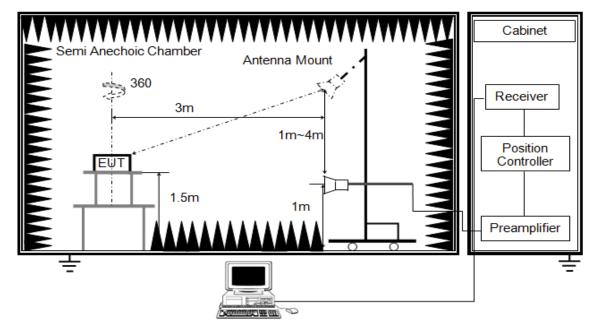
3. The EUT was placed on a turntable with 0.8 meter above ground.

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	1MHz
IV BVV	PEAK: 3MHz 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.

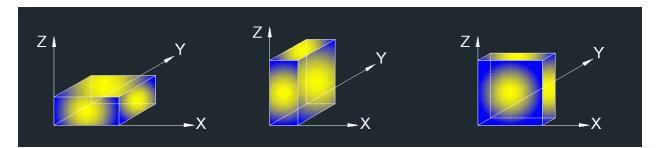
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.

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 average measurements. For the Duty Cycle please refer to clause 7.1.ON TIME AND DUTY CYCLE.



## X axis, Y axis, Z axis positions:



Note 1: 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: The EUT does not support simultaneous transmission.

Note 3: The EUT was fully exercised with external accessories during the test. In the case of multiple accessory external ports, an external accessory shall be connected to one of each type of port.

#### TEST ENVIRONMENT

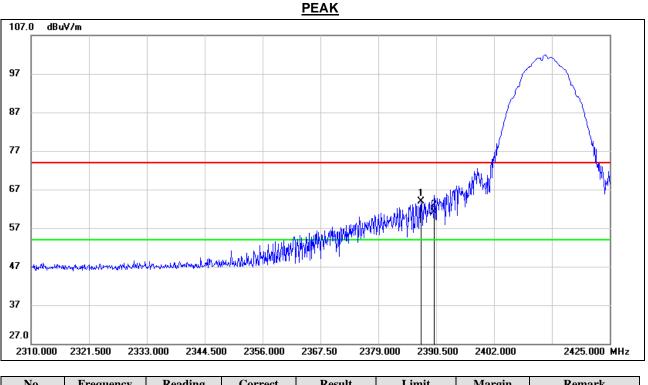
Temperature	23.2°C	Relative Humidity	57%
Atmosphere Pressure	101kPa	Test Voltage	DC 3.7V



# 8.1. RESTRICTED BANDEDGE

## 8.1.1. 802.11b MODE





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	( <b>dB</b> / <b>m</b> )	(dBuV/m)	(dBuV/m)	( <b>dB</b> )	
1	2387.510	31.02	32.94	63.96	74.00	-10.04	peak
2	2390.000	28.24	32.94	61.18	74.00	-12.82	peak

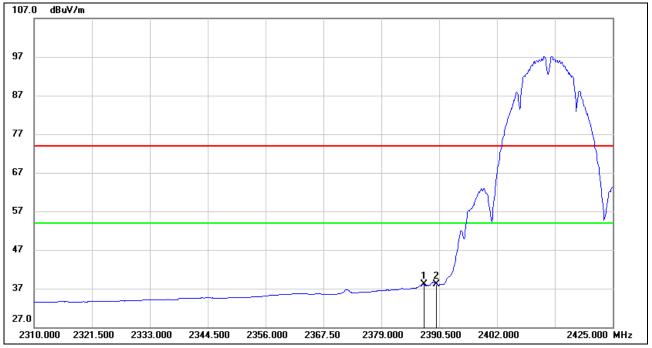
Note: 1. Measurement = Reading Level + Correct Factor.

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

3. Peak: Peak detector.



#### AVG



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	( <b>dB</b> / <b>m</b> )	(dBuV/m)	(dBuV/m)	( <b>dB</b> )	
1	2387.510	5.07	32.94	38.01	54.00	-15.99	AVG
2	2390.000	5.14	32.94	38.08	54.00	-15.92	AVG

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

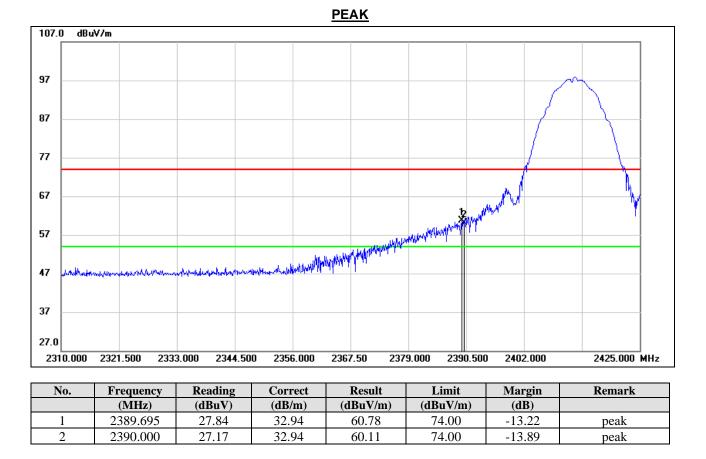
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

- 4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 5. For the transmitting duration, please refer to clause 7.1.



#### **RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)**



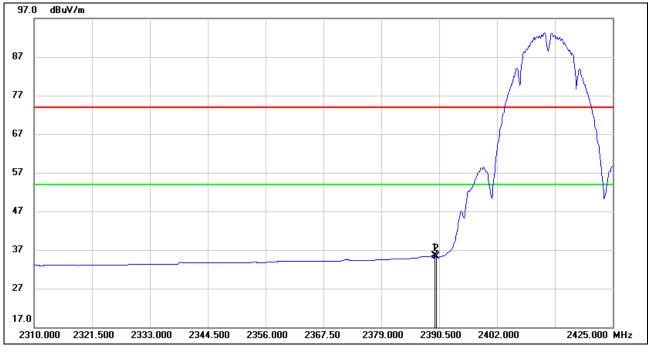
Note: 1. Measurement = Reading Level + Correct Factor.

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

3. Peak: Peak detector.



AVG



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	( <b>dB</b> / <b>m</b> )	(dBuV/m)	(dBuV/m)	( <b>dB</b> )	
1	2389.695	2.50	32.94	35.44	54.00	-18.56	AVG
2	2390.000	2.31	32.94	35.25	54.00	-18.75	AVG

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

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

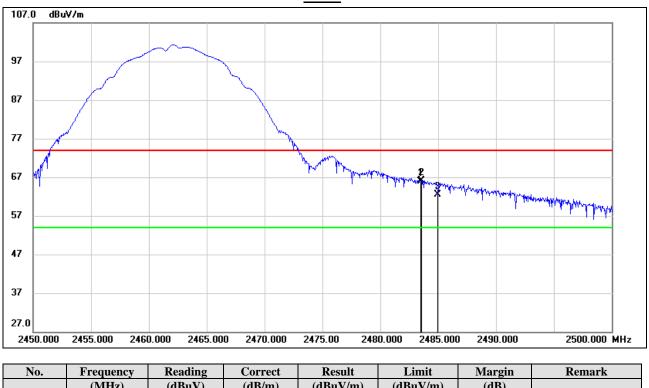
3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.



### **RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)**



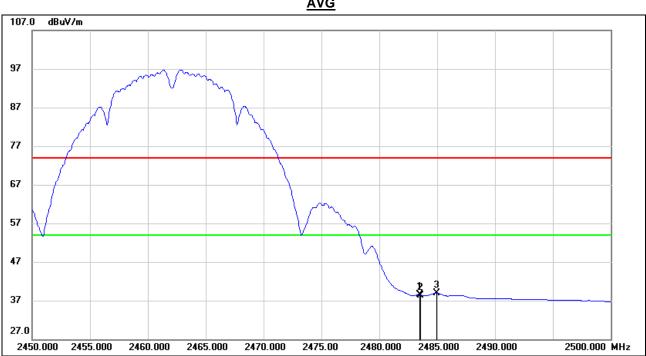
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	( <b>dB</b> / <b>m</b> )	(dBuV/m)	(dBuV/m)	( <b>dB</b> )	
1	2483.500	32.25	33.58	65.83	74.00	-8.17	peak
2	2483.550	32.58	33.58	66.16	74.00	-7.84	peak
3	2484.950	28.92	33.59	62.51	74.00	-11.49	peak

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

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

3. Peak: Peak detector.





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	( <b>dB</b> / <b>m</b> )	(dBuV/m)	(dBuV/m)	( <b>dB</b> )	
1	2483.500	4.83	33.58	38.41	54.00	-15.59	AVG
2	2483.550	4.78	33.58	38.36	54.00	-15.64	AVG
3	2484.950	5.37	33.59	38.96	54.00	-15.04	AVG

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

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

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

AVG

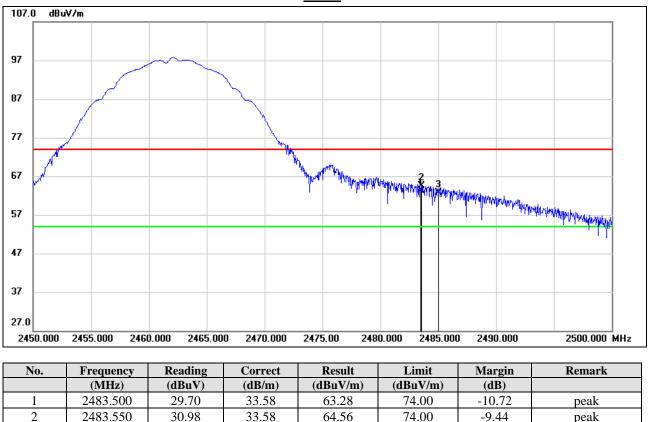


3

peak

peak

### **RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)**



PEAK

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

29.08

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

62.67

74.00

-11.33

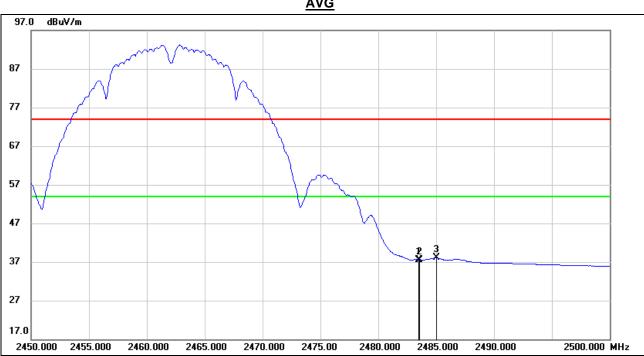
3. Peak: Peak detector.

2485.000

4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

33.59





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	( <b>dB</b> / <b>m</b> )	(dBuV/m)	(dBuV/m)	( <b>dB</b> )	
1	2483.500	4.01	33.58	37.59	54.00	-16.41	AVG
2	2483.550	4.01	33.58	37.59	54.00	-16.41	AVG
3	2485.000	4.47	33.59	38.06	54.00	-15.94	AVG

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

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

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

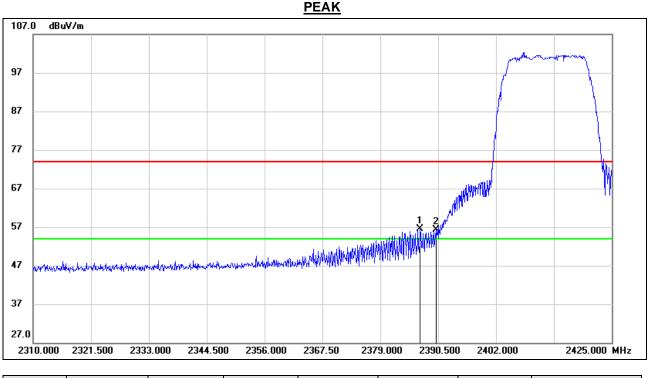
5. For the transmitting duration, please refer to clause 7.1.

6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

AVG



# 8.1.2. 802.11g MODE



#### **RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)**

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	( <b>dB</b> / <b>m</b> )	(dBuV/m)	(dBuV/m)	( <b>dB</b> )	
1	2386.935	23.54	32.94	56.48	74.00	-17.52	peak
2	2390.000	23.38	32.94	56.32	74.00	-17.68	peak

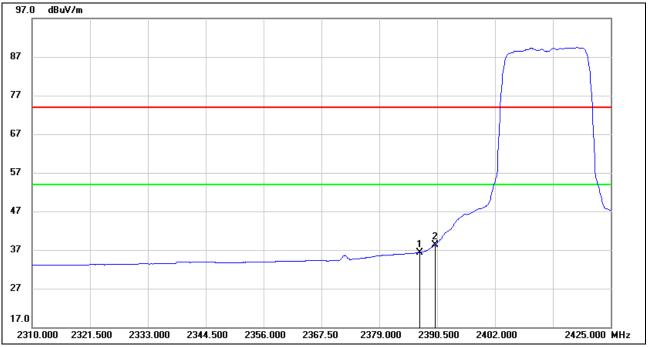
Note: 1. Measurement = Reading Level + Correct Factor.

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

3. Peak: Peak detector.



AVG



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	( <b>dB</b> / <b>m</b> )	(dBuV/m)	(dBuV/m)	( <b>dB</b> )	
1	2386.935	3.39	32.94	36.33	54.00	-17.67	AVG
2	2390.000	5.37	32.94	38.31	54.00	-15.69	AVG

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

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

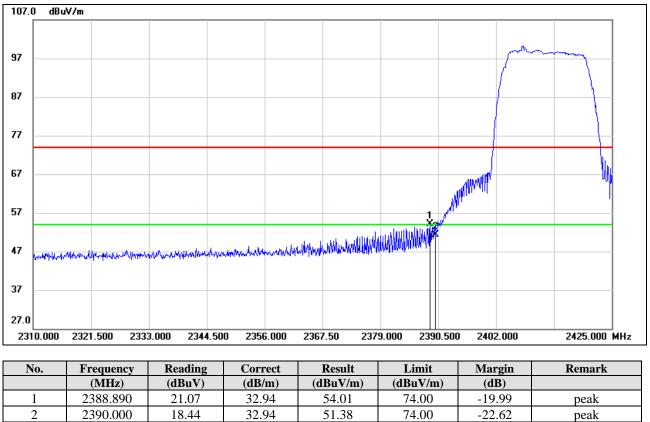
3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.



### **RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)**



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

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

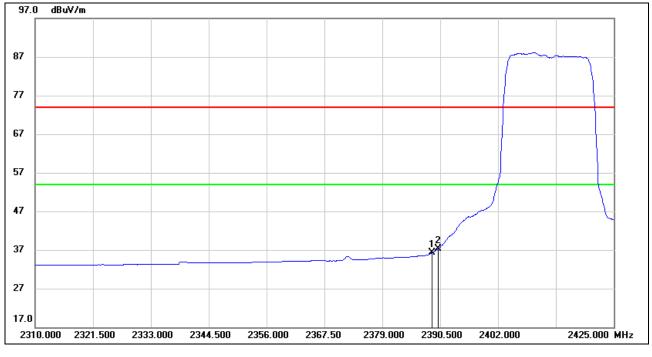
3. Peak: Peak detector.

4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

<u>PEAK</u>



AVG



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	( <b>dB</b> / <b>m</b> )	(dBuV/m)	(dBuV/m)	( <b>dB</b> )	
1	2388.890	3.35	32.94	36.29	54.00	-17.71	AVG
2	2390.000	4.27	32.94	37.21	54.00	-16.79	AVG

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

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

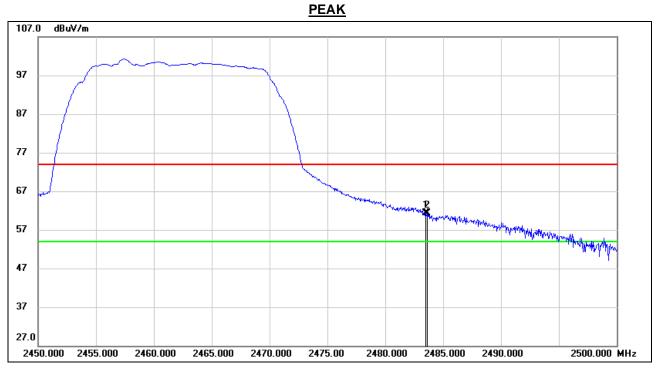
3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.



#### **RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)**



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	( <b>dB</b> / <b>m</b> )	(dBuV/m)	(dBuV/m)	( <b>dB</b> )	
1	2483.500	27.82	33.58	61.40	74.00	-12.60	peak
2	2483.600	27.74	33.58	61.32	74.00	-12.68	peak

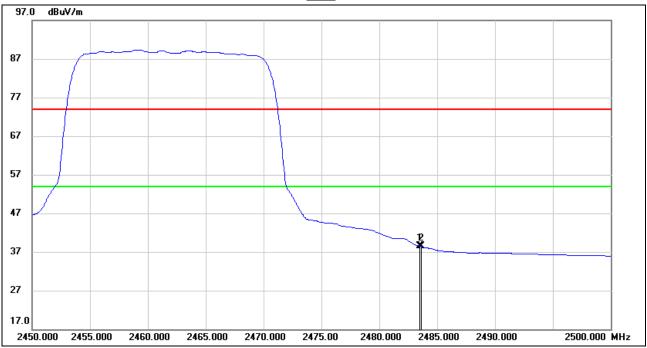
Note: 1. Measurement = Reading Level + Correct Factor.

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

3. Peak: Peak detector.







No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	( <b>dB</b> / <b>m</b> )	(dBuV/m)	(dBuV/m)	( <b>dB</b> )	
1	2483.500	4.90	33.58	38.48	54.00	-15.52	AVG
2	2483.600	4.83	33.58	38.41	54.00	-15.59	AVG

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

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

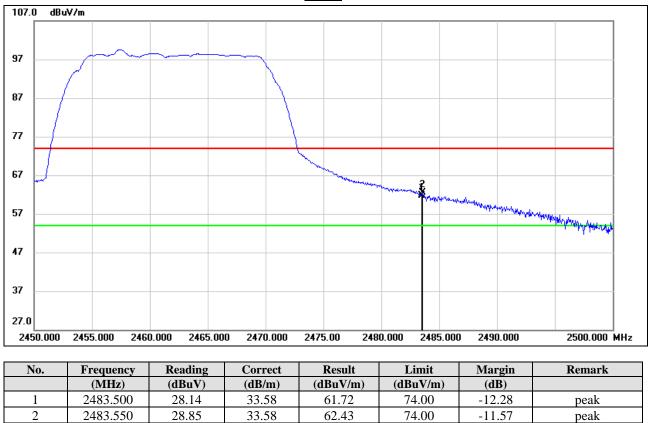
3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.



### **RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)**



<u>PEAK</u>

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

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

3. Peak: Peak detector.



97.0

87

77

67

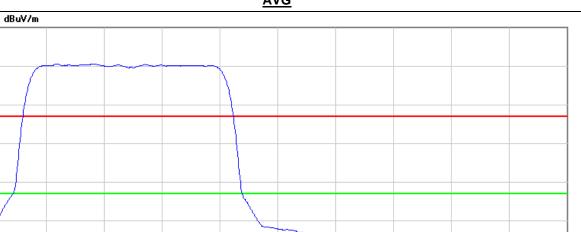
57

47

37

27

17.0 2450.000



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	( <b>dB</b> / <b>m</b> )	(dBuV/m)	(dBuV/m)	( <b>dB</b> )	
1	2483.500	5.36	33.58	38.94	54.00	-15.06	AVG
2	2483.550	5.33	33.58	38.91	54.00	-15.09	AVG

2475.00

2480.000

2485.000

2490.000

2500.000 MHz

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

2465.000

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

3. Peak: Peak detector.

2460.000

2455.000

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

2470.000

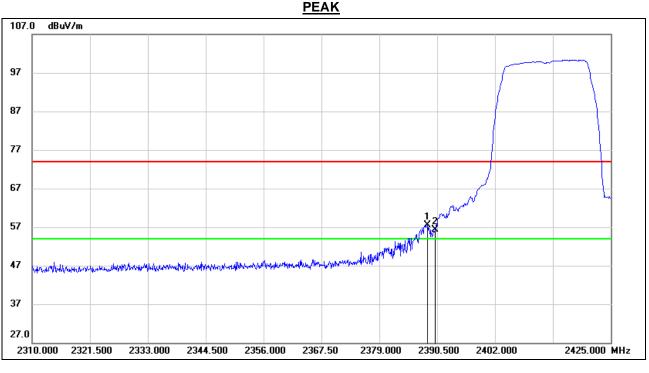
5. For the transmitting duration, please refer to clause 7.1.

6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

AVG



## 8.1.3. 802.11n HT20 MODE



#### **RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)**

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	( <b>dB</b> / <b>m</b> )	(dBuV/m)	(dBuV/m)	( <b>dB</b> )	
1	2388.545	24.61	32.94	57.55	74.00	-16.45	peak
2	2390.000	23.28	32.94	56.22	74.00	-17.78	peak

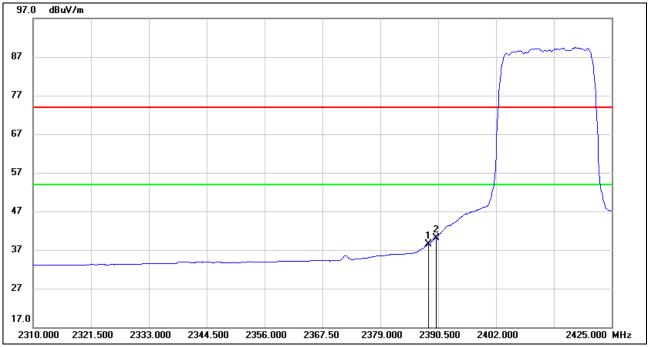
Note: 1. Measurement = Reading Level + Correct Factor.

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

3. Peak: Peak detector.



AVG



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	( <b>dB</b> / <b>m</b> )	(dBuV/m)	(dBuV/m)	( <b>dB</b> )	
1	2388.545	5.57	32.94	38.51	54.00	-15.49	AVG
2	2390.000	7.24	32.94	40.18	54.00	-13.82	AVG

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

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

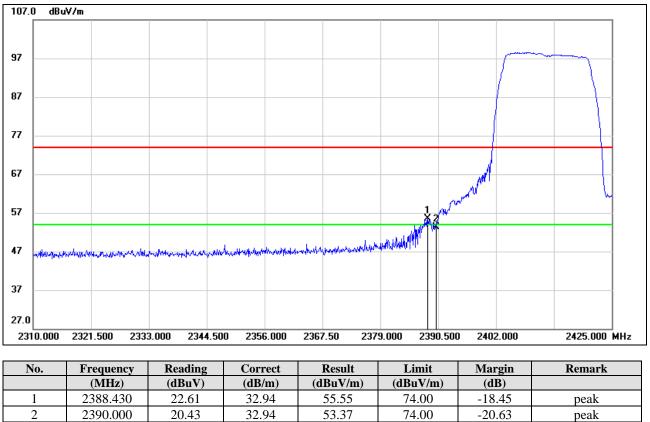
3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.



#### **RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)**



<u>PEAK</u>

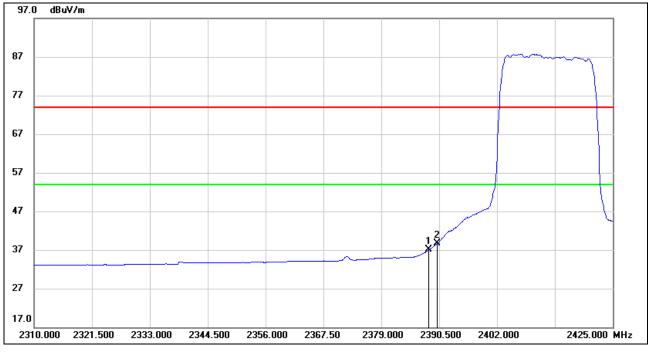
Note: 1. Measurement = Reading Level + Correct Factor.

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

3. Peak: Peak detector.



AVG



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	( <b>dB</b> / <b>m</b> )	(dBuV/m)	(dBuV/m)	( <b>dB</b> )	
1	2388.430	4.13	32.94	37.07	54.00	-16.93	AVG
2	2390.000	5.67	32.94	38.61	54.00	-15.39	AVG

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

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

3. Peak: Peak detector.

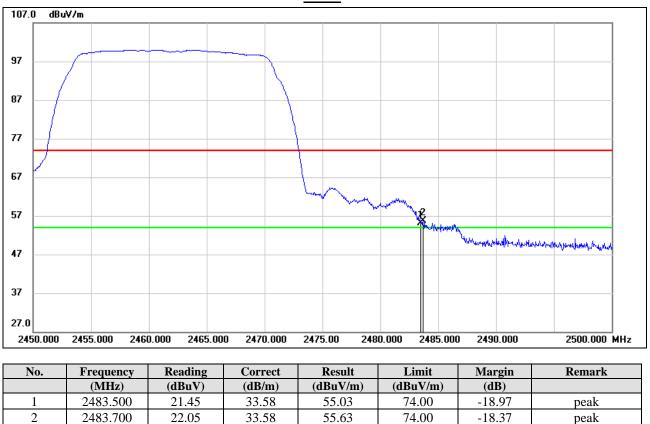
4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.



2

#### **RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)**



PEAK

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

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

55.63

74.00

-18.37

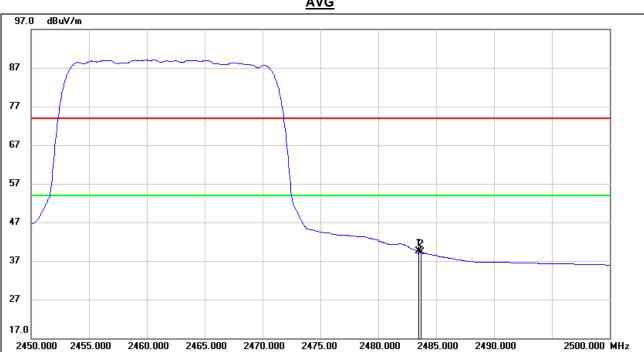
peak

3. Peak: Peak detector.

4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

33.58





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	( <b>dB</b> / <b>m</b> )	(dBuV/m)	(dBuV/m)	( <b>dB</b> )	
1	2483.500	5.92	33.58	39.50	54.00	-14.50	AVG
2	2483.700	5.69	33.58	39.27	54.00	-14.73	AVG

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

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

3. Peak: Peak detector.

4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

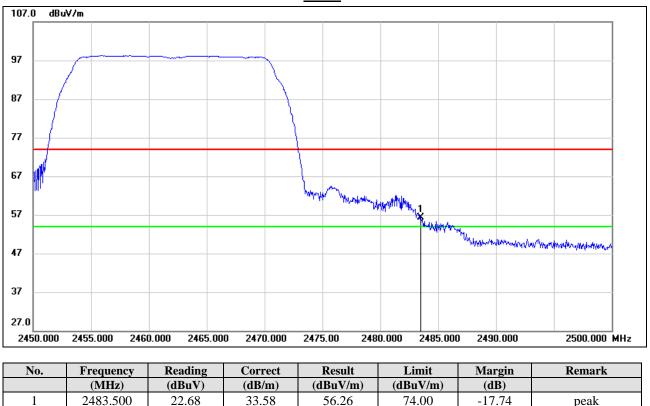
5. For the transmitting duration, please refer to clause 7.1.

6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

AVG



#### **RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)**



<u>PEAK</u>

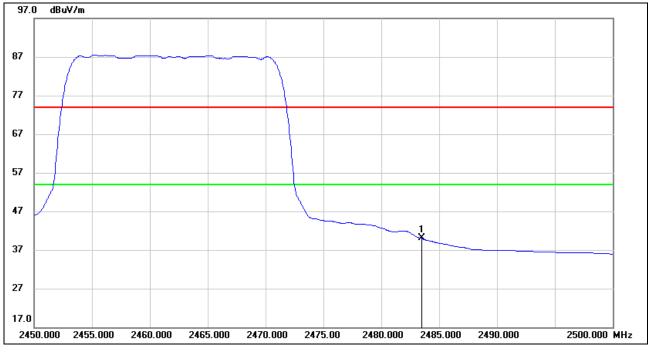
Note: 1. Measurement = Reading Level + Correct Factor.

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

3. Peak: Peak detector.



<u>AVG</u>



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	( <b>dB</b> / <b>m</b> )	(dBuV/m)	(dBuV/m)	( <b>dB</b> )	
1	2483.500	6.45	33.58	40.03	54.00	-13.97	AVG

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

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

3. Peak: Peak detector.

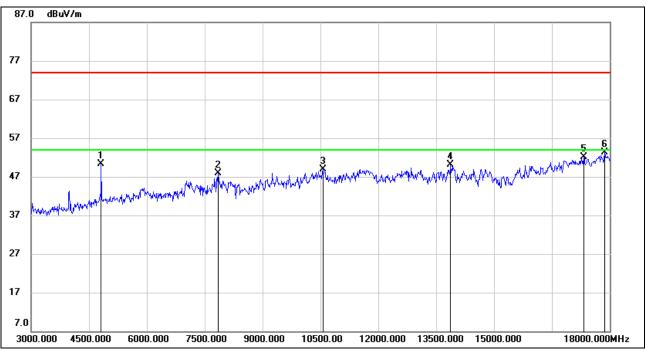
- 4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 5. For the transmitting duration, please refer to clause 7.1.



# 8.2. SPURIOUS EMISSIONS (3~18GHz)

## 8.2.1. 802.11b MODE

#### HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	( <b>dB</b> / <b>m</b> )	(dBuV/m)	(dBuV/m)	( <b>dB</b> )	
1	4815.000	49.84	0.51	50.35	74.00	-23.65	peak
2	7845.000	40.24	7.62	47.86	74.00	-26.14	peak
3	10560.000	37.10	11.73	48.83	74.00	-25.17	peak
4	13875.000	33.69	16.44	50.13	74.00	-23.87	peak
5	17325.000	30.38	21.67	52.05	74.00	-21.95	peak
6	17865.000	30.07	23.33	53.40	74.00	-20.60	peak

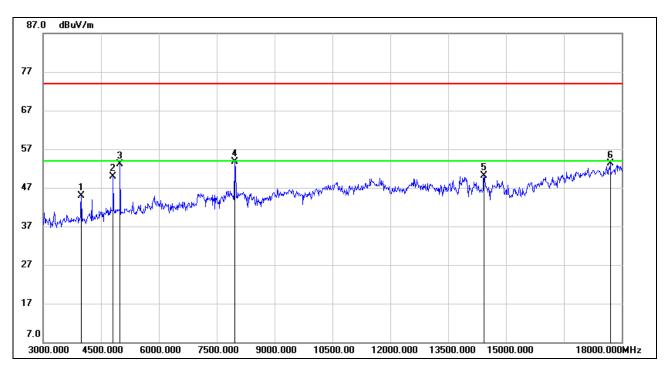
Note: 1. Measurement = Reading Level + Correct Factor.

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

3. Peak: Peak detector.

4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.





#### HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	( <b>dB</b> / <b>m</b> )	(dBuV/m)	(dBuV/m)	( <b>dB</b> )	
1	3990.000	47.75	-2.89	44.86	74.00	-29.14	peak
2	4815.000	49.48	0.51	49.99	74.00	-24.01	peak
3	4995.000	51.76	1.37	53.13	74.00	-20.87	peak
4	7965.000	46.63	7.00	53.63	74.00	-20.37	peak
5	14430.000	33.75	16.35	50.10	74.00	-23.90	peak
6	17700.000	30.94	22.43	53.37	74.00	-20.63	peak

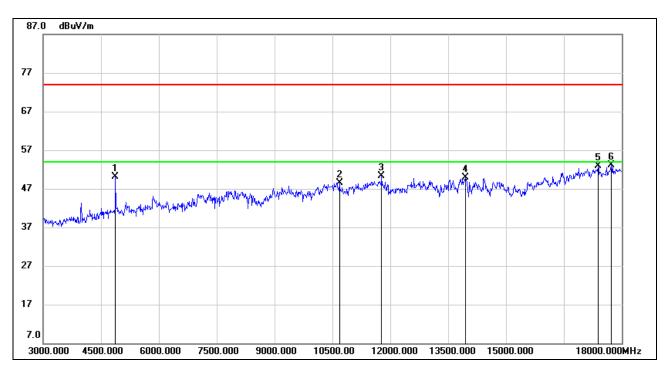
Note: 1. Measurement = Reading Level + Correct Factor.

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

3. Peak: Peak detector.

4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.





### HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, HORIZONTAL)

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	( <b>dB</b> / <b>m</b> )	(dBuV/m)	(dBuV/m)	( <b>dB</b> )	
1	4875.000	49.25	0.76	50.01	74.00	-23.99	peak
2	10680.000	36.82	11.71	48.53	74.00	-25.47	peak
3	11775.000	37.24	13.13	50.37	74.00	-23.63	peak
4	13950.000	33.75	16.11	49.86	74.00	-24.14	peak
5	17385.000	31.45	21.46	52.91	74.00	-21.09	peak
6	17730.000	30.34	22.70	53.04	74.00	-20.96	peak

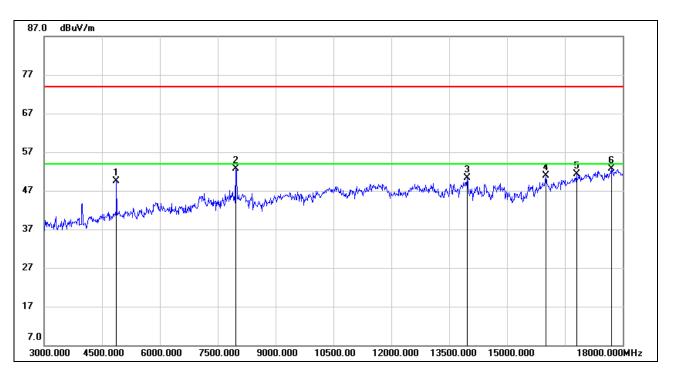
Note: 1. Measurement = Reading Level + Correct Factor.

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

3. Peak: Peak detector.

4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.





### HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, VERTICAL)

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	( <b>dB</b> / <b>m</b> )	(dBuV/m)	(dBuV/m)	( <b>dB</b> )	
1	4875.000	48.70	0.76	49.46	74.00	-24.54	peak
2	7965.000	45.80	7.00	52.80	74.00	-21.20	peak
3	13965.000	34.14	16.09	50.23	74.00	-23.77	peak
4	16005.000	33.13	17.71	50.84	74.00	-23.16	peak
5	16800.000	31.39	19.95	51.34	74.00	-22.66	peak
6	17700.000	30.35	22.43	52.78	74.00	-21.22	peak

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

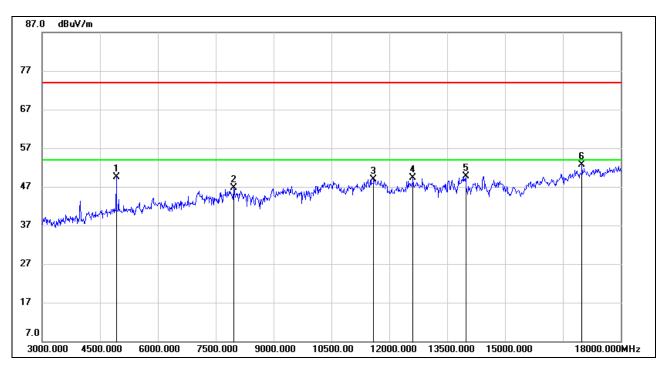
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.



#### HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	( <b>dB</b> / <b>m</b> )	(dBuV/m)	(dBuV/m)	( <b>dB</b> )	
1	4920.000	48.63	0.96	49.59	74.00	-24.41	peak
2	7965.000	39.78	7.00	46.78	74.00	-27.22	peak
3	11595.000	35.78	13.19	48.97	74.00	-25.03	peak
4	12615.000	35.27	14.03	49.30	74.00	-24.70	peak
5	13980.000	33.60	16.07	49.67	74.00	-24.33	peak
6	16995.000	32.23	20.38	52.61	74.00	-21.39	peak

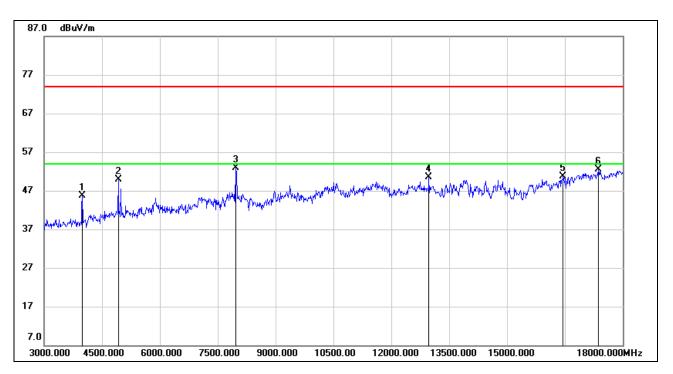
Note: 1. Measurement = Reading Level + Correct Factor.

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

3. Peak: Peak detector.

4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.





#### HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	( <b>dB</b> / <b>m</b> )	(dBuV/m)	(dBuV/m)	( <b>dB</b> )	
1	3990.000	48.56	-2.89	45.67	74.00	-28.33	peak
2	4920.000	48.92	0.96	49.88	74.00	-24.12	peak
3	7965.000	45.84	7.00	52.84	74.00	-21.16	peak
4	12975.000	35.65	14.93	50.58	74.00	-23.42	peak
5	16455.000	31.74	19.00	50.74	74.00	-23.26	peak
6	17370.000	30.90	21.52	52.42	74.00	-21.58	peak

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

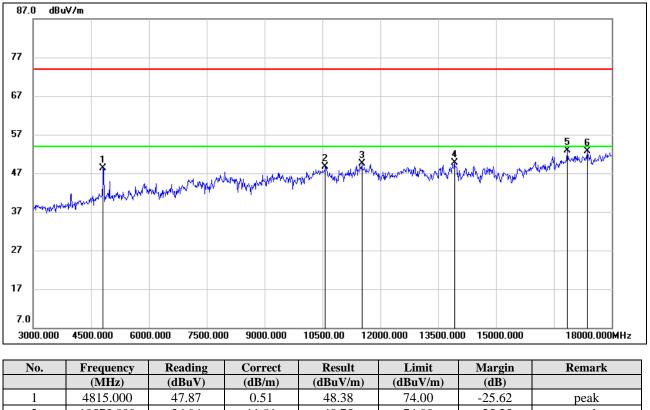
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.



# 8.2.2. 802.11g MODE



#### HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	( <b>dB</b> / <b>m</b> )	(dBuV/m)	(dBuV/m)	( <b>dB</b> )	
1	4815.000	47.87	0.51	48.38	74.00	-25.62	peak
2	10575.000	36.94	11.81	48.75	74.00	-25.25	peak
3	11520.000	36.21	13.38	49.59	74.00	-24.41	peak
4	13920.000	33.51	16.17	49.68	74.00	-24.32	peak
5	16845.000	33.01	19.96	52.97	74.00	-21.03	peak
6	17370.000	31.18	21.52	52.70	74.00	-21.30	peak

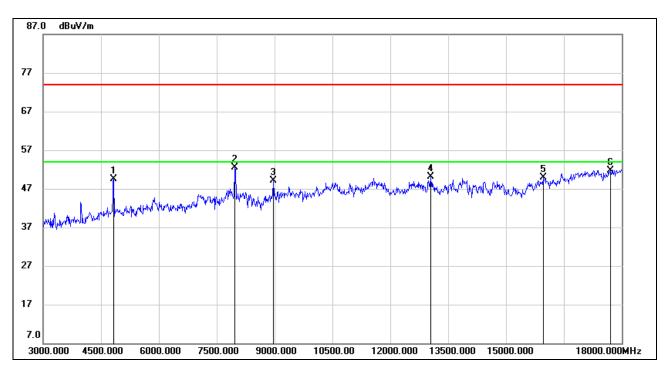
Note: 1. Measurement = Reading Level + Correct Factor.

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

3. Peak: Peak detector.

4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.





#### HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	( <b>dB</b> / <b>m</b> )	(dBuV/m)	(dBuV/m)	( <b>dB</b> )	
1	4830.000	48.92	0.59	49.51	74.00	-24.49	peak
2	7965.000	45.41	7.00	52.41	74.00	-21.59	peak
3	8970.000	40.01	9.00	49.01	74.00	-24.99	peak
4	13050.000	34.98	15.07	50.05	74.00	-23.95	peak
5	15960.000	32.19	17.63	49.82	74.00	-24.18	peak
6	17715.000	29.20	22.56	51.76	74.00	-22.24	peak

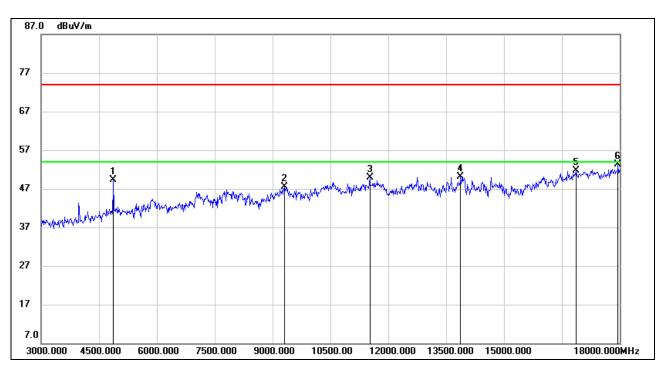
Note: 1. Measurement = Reading Level + Correct Factor.

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

3. Peak: Peak detector.

4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.





### HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, HORIZONTAL)

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	( <b>dB</b> / <b>m</b> )	(dBuV/m)	(dBuV/m)	( <b>dB</b> )	
1	4875.000	48.49	0.76	49.25	74.00	-24.75	peak
2	9315.000	38.35	9.08	47.43	74.00	-26.57	peak
3	11520.000	36.60	13.38	49.98	74.00	-24.02	peak
4	13875.000	33.59	16.44	50.03	74.00	-23.97	peak
5	16860.000	31.67	19.95	51.62	74.00	-22.38	peak
6	17955.000	29.83	23.41	53.24	74.00	-20.76	peak

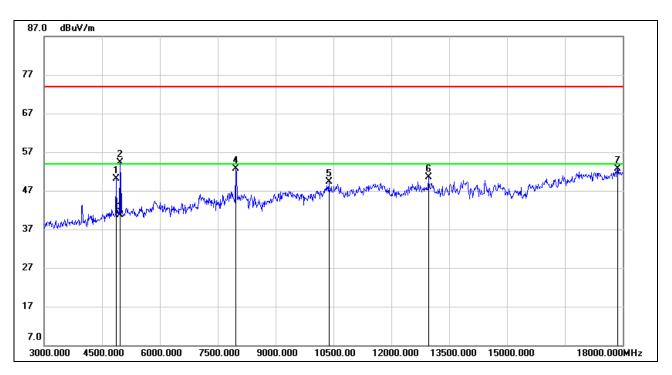
Note: 1. Measurement = Reading Level + Correct Factor.

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

3. Peak: Peak detector.

4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.





### HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, VERTICAL)

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	( <b>dB</b> / <b>m</b> )	(dBuV/m)	(dBuV/m)	( <b>dB</b> )	
1	4860.000	49.48	0.70	50.18	74.00	-23.82	peak
2	4965.000	53.07	1.21	54.28	74.00	-19.72	peak
3	4965.000	39.45	1.21	40.66	54.00	-13.34	AVG
4	7965.000	45.63	7.00	52.63	74.00	-21.37	peak
5	10380.000	38.34	11.00	49.34	74.00	-24.66	peak
6	12960.000	35.60	14.92	50.52	74.00	-23.48	peak
7	17865.000	29.33	23.33	52.66	74.00	-21.34	peak

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

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

3. Peak: Peak detector.

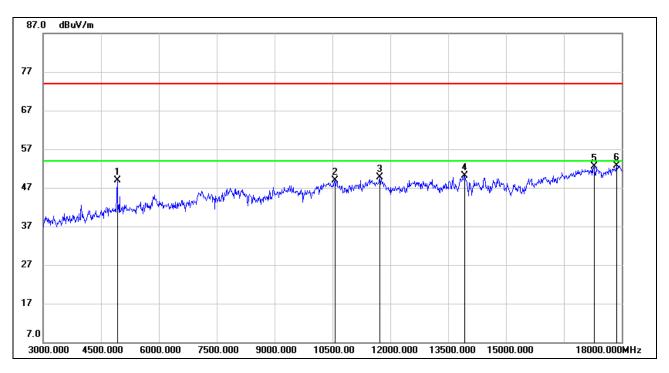
4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.

5. For the transmitting duration, please refer to clause 7.1.

6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.



#### HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	( <b>dB</b> / <b>m</b> )	(dBuV/m)	(dBuV/m)	( <b>dB</b> )	
1	4920.000	47.94	0.96	48.90	74.00	-25.10	peak
2	10560.000	37.26	11.73	48.99	74.00	-25.01	peak
3	11730.000	36.77	13.02	49.79	74.00	-24.21	peak
4	13920.000	33.97	16.17	50.14	74.00	-23.86	peak
5	17280.000	30.89	21.59	52.48	74.00	-21.52	peak
6	17865.000	29.39	23.33	52.72	74.00	-21.28	peak

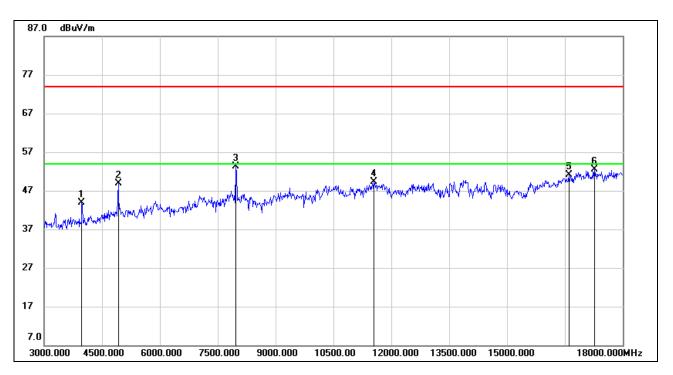
Note: 1. Measurement = Reading Level + Correct Factor.

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

3. Peak: Peak detector.

4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.





### HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	( <b>dB</b> / <b>m</b> )	(dBuV/m)	(dBuV/m)	( <b>dB</b> )	
1	3975.000	46.85	-2.90	43.95	74.00	-30.05	peak
2	4920.000	48.01	0.96	48.97	74.00	-25.03	peak
3	7965.000	46.37	7.00	53.37	74.00	-20.63	peak
4	11550.000	35.97	13.30	49.27	74.00	-24.73	peak
5	16605.000	31.66	19.49	51.15	74.00	-22.85	peak
6	17265.000	31.14	21.46	52.60	74.00	-21.40	peak

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

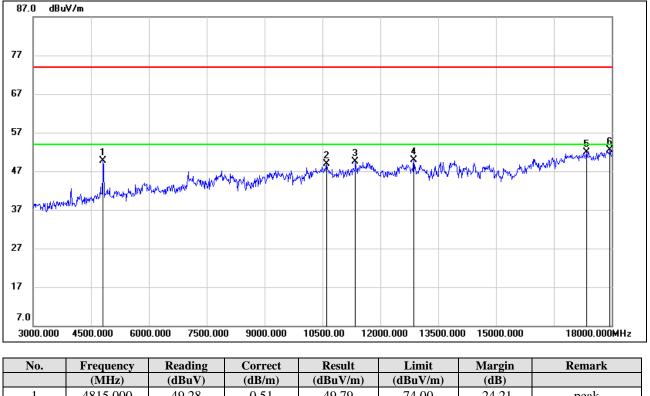
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.



# 8.2.3. 802.11n HT20 MODE



#### HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	( <b>dB</b> / <b>m</b> )	(dBuV/m)	(dBuV/m)	( <b>dB</b> )	
1	4815.000	49.28	0.51	49.79	74.00	-24.21	peak
2	10605.000	36.96	11.93	48.89	74.00	-25.11	peak
3	11355.000	37.07	12.48	49.55	74.00	-24.45	peak
4	12870.000	34.79	15.13	49.92	74.00	-24.08	peak
5	17340.000	30.33	21.61	51.94	74.00	-22.06	peak
6	17955.000	29.19	23.41	52.60	74.00	-21.40	peak

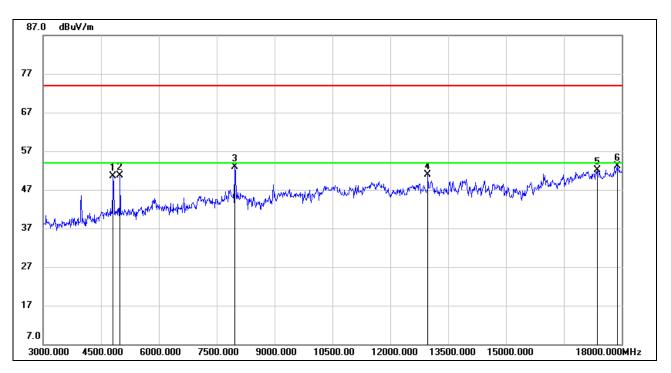
Note: 1. Measurement = Reading Level + Correct Factor.

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

3. Peak: Peak detector.

4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.





#### HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	( <b>dB</b> / <b>m</b> )	(dBuV/m)	(dBuV/m)	( <b>dB</b> )	
1	4815.000	49.99	0.51	50.50	74.00	-23.50	peak
2	4995.000	49.31	1.37	50.68	74.00	-23.32	peak
3	7965.000	45.96	7.00	52.96	74.00	-21.04	peak
4	12975.000	35.98	14.93	50.91	74.00	-23.09	peak
5	17370.000	30.59	21.52	52.11	74.00	-21.89	peak
6	17880.000	29.71	23.34	53.05	74.00	-20.95	peak

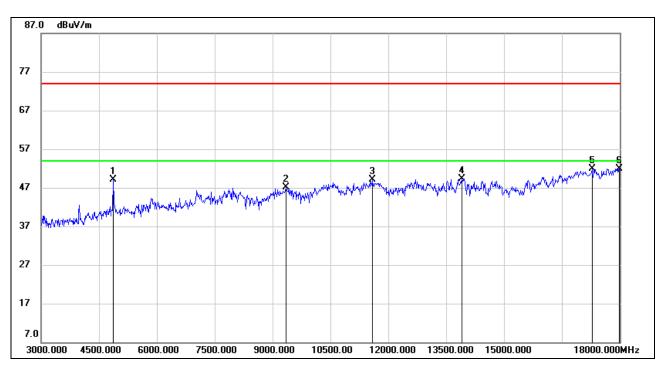
Note: 1. Measurement = Reading Level + Correct Factor.

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

3. Peak: Peak detector.

4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.





### HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, HORIZONTAL)

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	( <b>dB</b> / <b>m</b> )	(dBuV/m)	(dBuV/m)	( <b>dB</b> )	
1	4860.000	48.38	0.70	49.08	74.00	-24.92	peak
2	9345.000	37.78	9.26	47.04	74.00	-26.96	peak
3	11595.000	35.93	13.19	49.12	74.00	-24.88	peak
4	13905.000	33.07	16.20	49.27	74.00	-24.73	peak
5	17280.000	30.31	21.59	51.90	74.00	-22.10	peak
6	17985.000	28.56	23.44	52.00	74.00	-22.00	peak

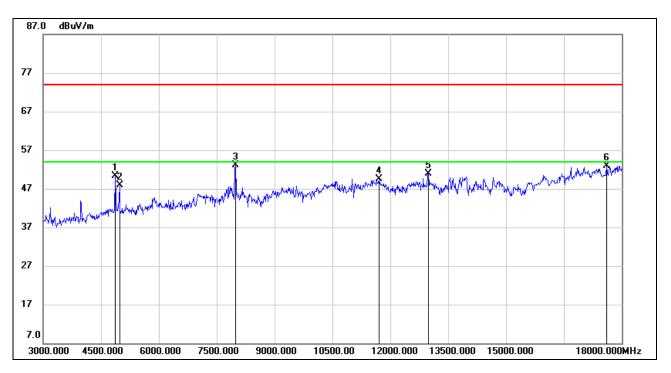
Note: 1. Measurement = Reading Level + Correct Factor.

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

3. Peak: Peak detector.

4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.





### HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, VERTICAL)

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	( <b>dB</b> / <b>m</b> )	(dBuV/m)	(dBuV/m)	( <b>dB</b> )	
1	4875.000	49.62	0.76	50.38	74.00	-23.62	peak
2	4980.000	46.53	1.29	47.82	74.00	-26.18	peak
3	7995.000	46.12	6.89	53.01	74.00	-20.99	peak
4	11700.000	36.62	12.95	49.57	74.00	-24.43	peak
5	12990.000	36.08	14.92	51.00	74.00	-23.00	peak
6	17610.000	31.04	21.86	52.90	74.00	-21.10	peak

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

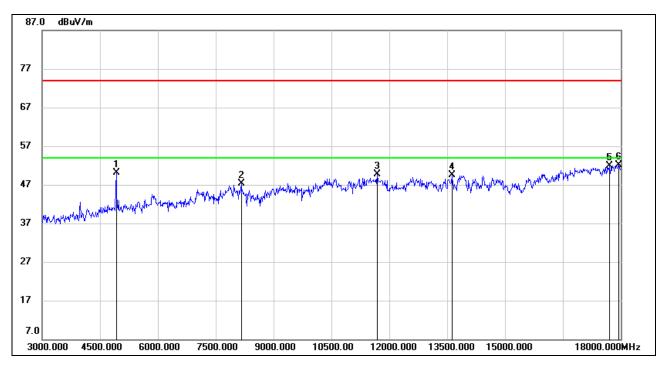
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.



#### HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	( <b>dB</b> / <b>m</b> )	(dBuV/m)	(dBuV/m)	( <b>dB</b> )	
1	4920.000	49.22	0.96	50.18	74.00	-23.82	peak
2	8160.000	39.16	8.18	47.34	74.00	-26.66	peak
3	11685.000	36.70	12.98	49.68	74.00	-24.32	peak
4	13620.000	33.54	15.99	49.53	74.00	-24.47	peak
5	17715.000	29.38	22.56	51.94	74.00	-22.06	peak
6	17955.000	28.66	23.41	52.07	74.00	-21.93	peak

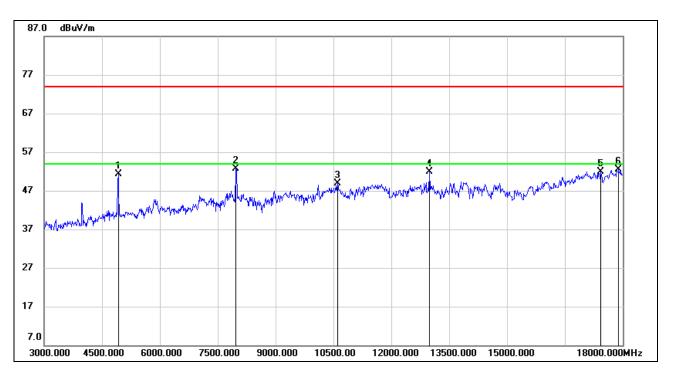
Note: 1. Measurement = Reading Level + Correct Factor.

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

3. Peak: Peak detector.

4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.





#### HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	( <b>dB</b> / <b>m</b> )	(dBuV/m)	(dBuV/m)	( <b>dB</b> )	
1	4920.000	50.31	0.96	51.27	74.00	-22.73	peak
2	7965.000	45.78	7.00	52.78	74.00	-21.22	peak
3	10605.000	37.04	11.93	48.97	74.00	-25.03	peak
4	12990.000	37.00	14.92	51.92	74.00	-22.08	peak
5	17430.000	30.57	21.38	51.95	74.00	-22.05	peak
6	17895.000	29.22	23.34	52.56	74.00	-21.44	peak

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

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

3. Peak: Peak detector.

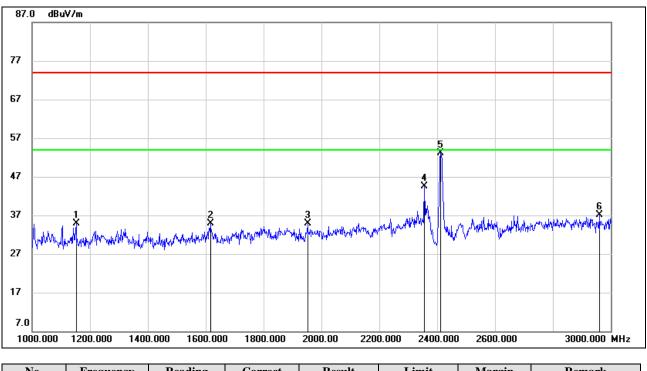
4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.



# 8.3. SPURIOUS EMISSIONS (1~3GHz)

## 8.3.1. 802.11b MODE

#### HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	( <b>dB</b> / <b>m</b> )	(dBuV/m)	(dBuV/m)	( <b>dB</b> )	
1	1152.000	48.07	-13.09	34.98	74.00	-39.02	peak
2	1616.000	46.18	-11.32	34.86	74.00	-39.14	peak
3	1952.000	44.84	-9.88	34.96	74.00	-39.04	peak
4	2356.000	52.44	-8.00	44.44	74.00	-29.56	peak
5	2412.000	60.85	-7.77	53.08	/	/	fundamental
6	2960.000	42.40	-5.38	37.02	74.00	-36.98	peak

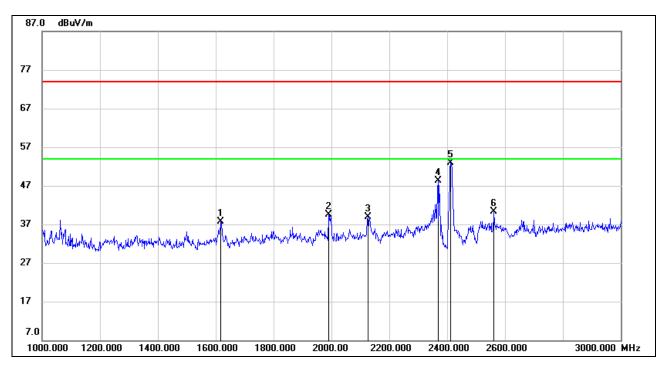
Note: 1. Measurement = Reading Level + Correct Factor.

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

3. Peak: Peak detector.

4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.





#### HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	( <b>dB</b> / <b>m</b> )	(dBuV/m)	(dBuV/m)	( <b>dB</b> )	
1	1618.000	49.07	-11.31	37.76	74.00	-36.24	peak
2	1990.000	49.31	-9.84	39.47	74.00	-34.53	peak
3	2126.000	47.96	-9.02	38.94	74.00	-35.06	peak
4	2368.000	56.19	-7.96	48.23	74.00	-25.77	peak
5	2412.000	60.77	-7.77	53.00	/	/	fundamental
6	2562.000	47.87	-7.50	40.37	74.00	-33.63	peak

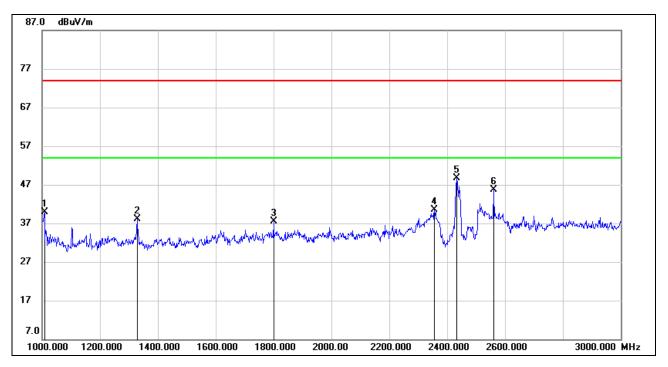
Note: 1. Measurement = Reading Level + Correct Factor.

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

3. Peak: Peak detector.

4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.





### HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, HORIZONTAL)

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	( <b>dB</b> / <b>m</b> )	(dBuV/m)	(dBuV/m)	( <b>dB</b> )	
1	1008.000	53.41	-13.59	39.82	74.00	-34.18	peak
2	1328.000	50.55	-12.36	38.19	74.00	-35.81	peak
3	1800.000	47.43	-9.91	37.52	74.00	-36.48	peak
4	2356.000	48.53	-8.00	40.53	74.00	-33.47	peak
5	2434.000	56.40	-7.62	48.78	74.00	-25.22	peak
6	2560.000	53.19	-7.48	45.71	74.00	-28.29	peak

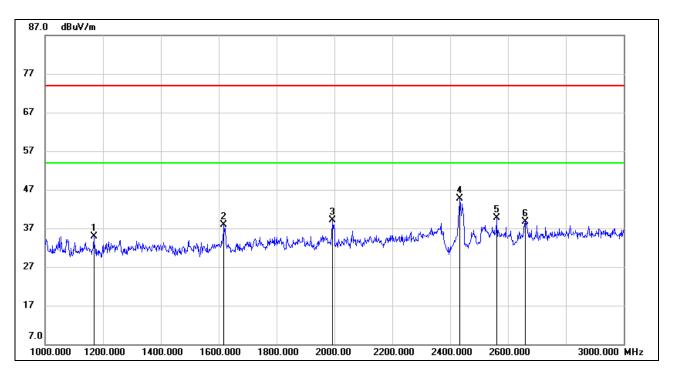
Note: 1. Measurement = Reading Level + Correct Factor.

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

3. Peak: Peak detector.

4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.





#### HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, VERTICAL)

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	( <b>dB</b> / <b>m</b> )	(dBuV/m)	(dBuV/m)	( <b>dB</b> )	
1	1168.000	47.77	-12.95	34.82	74.00	-39.18	peak
2	1618.000	49.19	-11.31	37.88	74.00	-36.12	peak
3	1994.000	49.01	-9.83	39.18	74.00	-34.82	peak
4	2434.000	52.40	-7.62	44.78	74.00	-29.22	peak
5	2560.000	47.11	-7.48	39.63	74.00	-34.37	peak
6	2660.000	46.00	-7.35	38.65	74.00	-35.35	peak

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

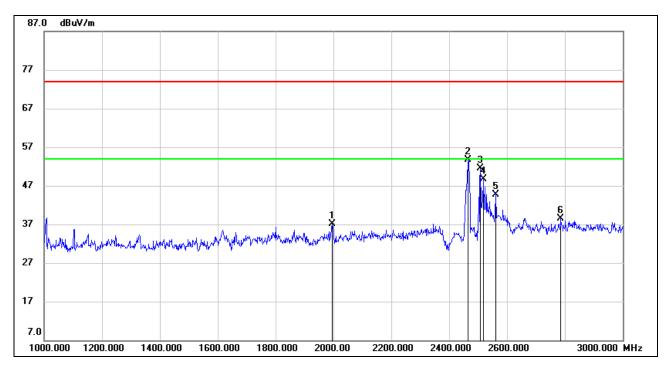
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.







No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	( <b>dB</b> / <b>m</b> )	(dBuV/m)	(dBuV/m)	( <b>dB</b> )	
1	1996.000	47.00	-9.83	37.17	74.00	-36.83	peak
2	2466.000	61.16	-7.40	53.76	74.00	-20.24	peak
3	2508.000	58.76	-7.21	51.55	74.00	-22.45	peak
4	2518.000	56.06	-7.27	48.79	74.00	-25.21	peak
5	2562.000	52.13	-7.50	44.63	74.00	-29.37	peak
6	2786.000	44.77	-6.20	38.57	74.00	-35.43	peak

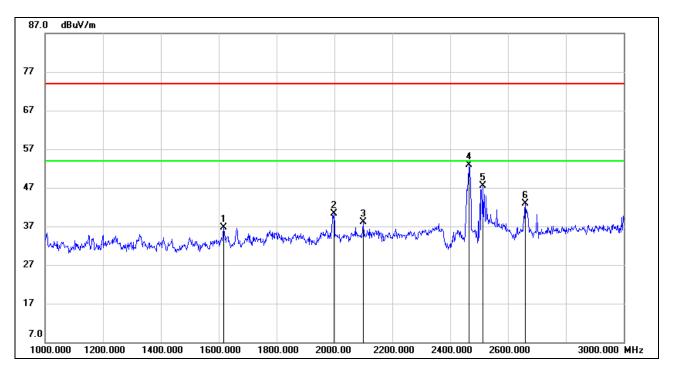
Note: 1. Measurement = Reading Level + Correct Factor.

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

3. Peak: Peak detector.

4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.





#### HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	( <b>dB</b> / <b>m</b> )	(dBuV/m)	(dBuV/m)	( <b>dB</b> )	
1	1616.000	48.00	-11.32	36.68	74.00	-37.32	peak
2	1998.000	50.13	-9.83	40.30	74.00	-33.70	peak
3	2100.000	47.22	-9.16	38.06	74.00	-35.94	peak
4	2466.000	60.22	-7.40	52.82	74.00	-21.18	peak
5	2514.000	54.78	-7.24	47.54	74.00	-26.46	peak
6	2660.000	50.29	-7.35	42.94	74.00	-31.06	peak

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

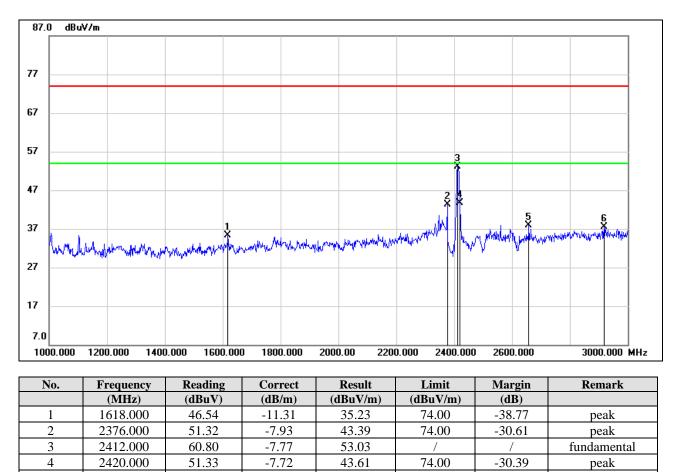
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.



# 8.3.2. 802.11g MODE



#### HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)

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

45.32

42.97

-7.37

-5.48

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

37.95

37.49

74.00

74.00

-36.05

-36.51

peak

peak

3. Peak: Peak detector.

2658.000

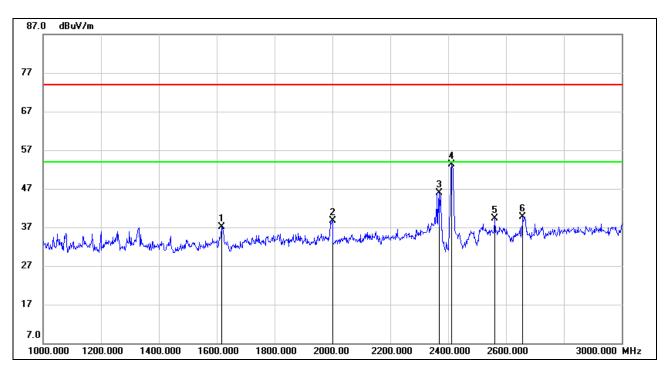
2918.000

5

6

4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.





#### HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	( <b>dB</b> / <b>m</b> )	(dBuV/m)	(dBuV/m)	( <b>dB</b> )	
1	1616.000	48.47	-11.32	37.15	74.00	-36.85	peak
2	2000.000	48.60	-9.82	38.78	74.00	-35.22	peak
3	2370.000	53.84	-7.95	45.89	74.00	-28.11	peak
4	2412.000	61.08	-7.77	53.31	/	/	fundamental
5	2560.000	46.87	-7.48	39.39	74.00	-34.61	peak
6	2658.000	47.13	-7.37	39.76	74.00	-34.24	peak

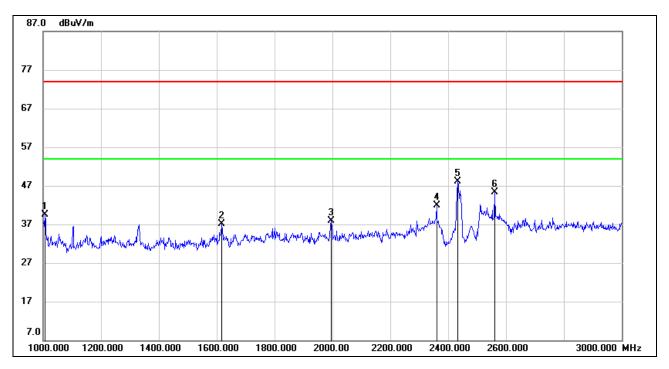
Note: 1. Measurement = Reading Level + Correct Factor.

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

3. Peak: Peak detector.

4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.





## HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, HORIZONTAL)

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	( <b>dB</b> / <b>m</b> )	(dBuV/m)	(dBuV/m)	( <b>dB</b> )	
1	1006.000	53.06	-13.59	39.47	74.00	-34.53	peak
2	1618.000	48.46	-11.31	37.15	74.00	-36.85	peak
3	1996.000	47.74	-9.83	37.91	74.00	-36.09	peak
4	2360.000	49.81	-7.99	41.82	74.00	-32.18	peak
5	2434.000	55.82	-7.62	48.20	74.00	-25.80	peak
6	2560.000	52.72	-7.48	45.24	74.00	-28.76	peak

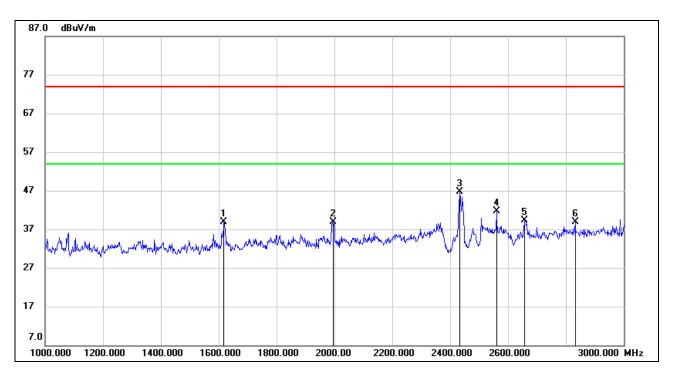
Note: 1. Measurement = Reading Level + Correct Factor.

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

3. Peak: Peak detector.

4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.





### HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, VERTICAL)

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	( <b>dB</b> / <b>m</b> )	(dBuV/m)	(dBuV/m)	( <b>dB</b> )	
1	1618.000	50.31	-11.31	39.00	74.00	-35.00	peak
2	1996.000	48.74	-9.83	38.91	74.00	-35.09	peak
3	2434.000	54.25	-7.62	46.63	74.00	-27.37	peak
4	2560.000	49.13	-7.48	41.65	74.00	-32.35	peak
5	2658.000	46.77	-7.37	39.40	74.00	-34.60	peak
6	2832.000	44.77	-5.88	38.89	74.00	-35.11	peak

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

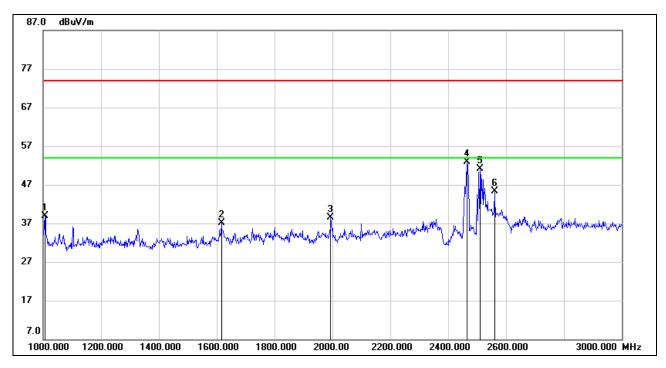
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.







No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	( <b>dB</b> / <b>m</b> )	(dBuV/m)	(dBuV/m)	( <b>dB</b> )	
1	1006.000	52.49	-13.59	38.90	74.00	-35.10	peak
2	1616.000	48.37	-11.32	37.05	74.00	-36.95	peak
3	1994.000	48.31	-9.83	38.48	74.00	-35.52	peak
4	2466.000	60.33	-7.40	52.93	74.00	-21.07	peak
5	2510.000	58.24	-7.21	51.03	74.00	-22.97	peak
6	2560.000	52.87	-7.48	45.39	74.00	-28.61	peak

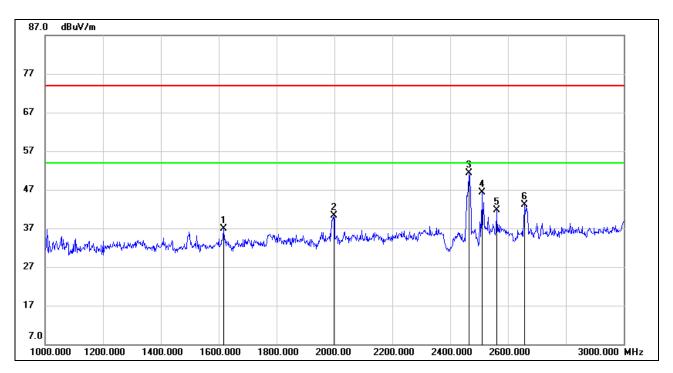
Note: 1. Measurement = Reading Level + Correct Factor.

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

3. Peak: Peak detector.

4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.





## HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	( <b>dB</b> / <b>m</b> )	(dBuV/m)	(dBuV/m)	( <b>dB</b> )	
1	1618.000	48.26	-11.31	36.95	74.00	-37.05	peak
2	1998.000	50.05	-9.83	40.22	74.00	-33.78	peak
3	2466.000	58.65	-7.40	51.25	74.00	-22.75	peak
4	2510.000	53.45	-7.21	46.24	74.00	-27.76	peak
5	2560.000	49.21	-7.48	41.73	74.00	-32.27	peak
6	2658.000	50.55	-7.37	43.18	74.00	-30.82	peak

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

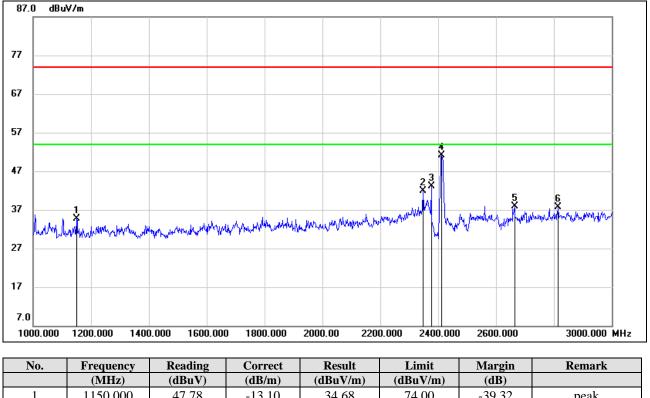
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.



## 8.3.3. 802.11n HT20 MODE



#### HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	( <b>dB</b> / <b>m</b> )	(dBuV/m)	(dBuV/m)	( <b>dB</b> )	
1	1150.000	47.78	-13.10	34.68	74.00	-39.32	peak
2	2348.000	49.92	-8.03	41.89	74.00	-32.11	peak
3	2376.000	51.05	-7.93	43.12	74.00	-30.88	peak
4	2412.000	58.94	-7.77	51.17	/	/	fundamental
5	2664.000	45.26	-7.34	37.92	74.00	-36.08	peak
6	2814.000	43.66	-5.98	37.68	74.00	-36.32	peak

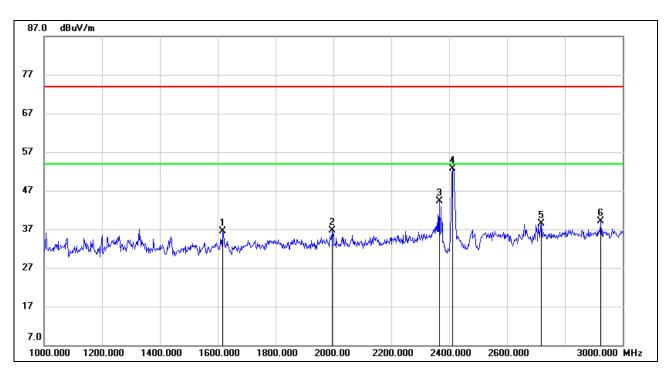
Note: 1. Measurement = Reading Level + Correct Factor.

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

3. Peak: Peak detector.

4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.





### HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	( <b>dB</b> / <b>m</b> )	(dBuV/m)	(dBuV/m)	( <b>dB</b> )	
1	1618.000	47.73	-11.31	36.42	74.00	-37.58	peak
2	1996.000	46.44	-9.83	36.61	74.00	-37.39	peak
3	2366.000	52.32	-7.97	44.35	74.00	-29.65	peak
4	2412.000	60.51	-7.77	52.74	/	/	fundamental
5	2718.000	45.43	-6.94	38.49	74.00	-35.51	peak
6	2924.000	44.63	-5.47	39.16	74.00	-34.84	peak

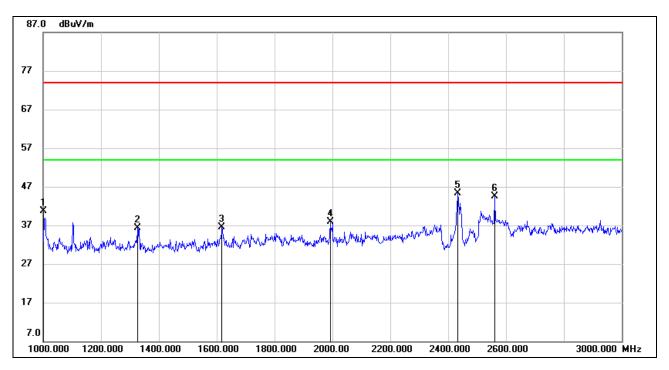
Note: 1. Measurement = Reading Level + Correct Factor.

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

3. Peak: Peak detector.

4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.





## HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, HORIZONTAL)

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	( <b>dB</b> / <b>m</b> )	(dBuV/m)	(dBuV/m)	( <b>dB</b> )	
1	1000.0000	54.32	-13.59	40.73	74.00	-33.27	peak
2	1326.000	48.73	-12.35	36.38	74.00	-37.62	peak
3	1618.000	47.87	-11.31	36.56	74.00	-37.44	peak
4	1992.000	47.74	-9.83	37.91	74.00	-36.09	peak
5	2434.000	53.01	-7.62	45.39	74.00	-28.61	peak
6	2560.000	51.91	-7.48	44.43	74.00	-29.57	peak

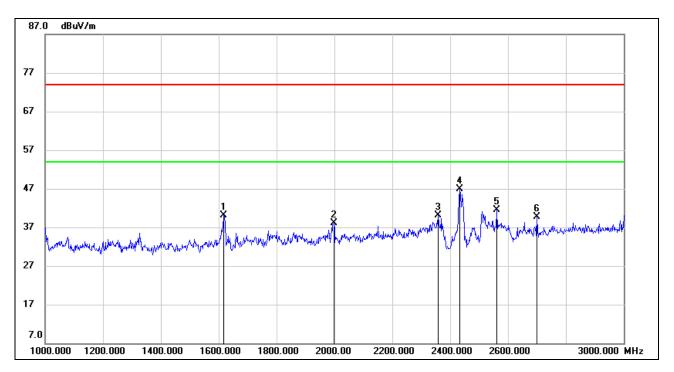
Note: 1. Measurement = Reading Level + Correct Factor.

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

3. Peak: Peak detector.

4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.





## HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, VERTICAL)

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	( <b>dB</b> / <b>m</b> )	(dBuV/m)	(dBuV/m)	( <b>dB</b> )	
1	1618.000	51.41	-11.31	40.10	74.00	-33.90	peak
2	1998.000	47.90	-9.83	38.07	74.00	-35.93	peak
3	2358.000	48.02	-8.00	40.02	74.00	-33.98	peak
4	2434.000	54.54	-7.62	46.92	74.00	-27.08	peak
5	2562.000	49.01	-7.50	41.51	74.00	-32.49	peak
6	2700.000	46.93	-7.13	39.80	74.00	-34.20	peak

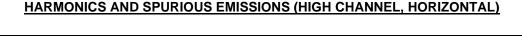
Note: 1. Measurement = Reading Level + Correct Factor.

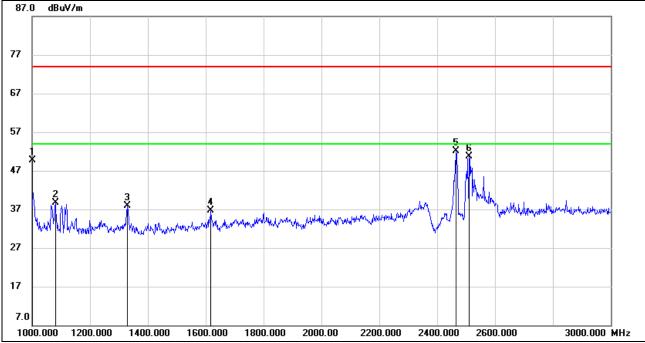
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.







No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	( <b>dB</b> / <b>m</b> )	(dBuV/m)	(dBuV/m)	( <b>dB</b> )	
1	1000.0000	63.37	-13.59	49.78	74.00	-24.22	peak
2	1080.000	52.26	-13.53	38.73	74.00	-35.27	peak
3	1330.000	50.22	-12.36	37.86	74.00	-36.14	peak
4	1618.000	48.00	-11.31	36.69	74.00	-37.31	peak
5	2466.000	59.43	-7.40	52.03	74.00	-21.97	peak
6	2510.000	57.93	-7.21	50.72	74.00	-23.28	peak

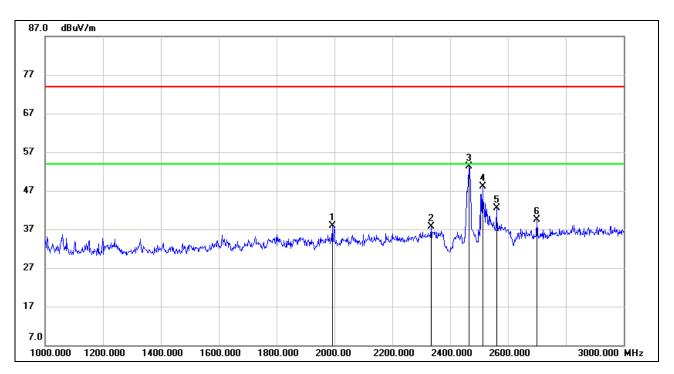
Note: 1. Measurement = Reading Level + Correct Factor.

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

3. Peak: Peak detector.

4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.





## HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	( <b>dB</b> / <b>m</b> )	(dBuV/m)	(dBuV/m)	( <b>dB</b> )	
1	1992.000	47.68	-9.83	37.85	74.00	-36.15	peak
2	2334.000	45.78	-8.08	37.70	74.00	-36.30	peak
3	2466.000	60.78	-7.40	53.38	74.00	-20.62	peak
4	2512.000	55.42	-7.23	48.19	74.00	-25.81	peak
5	2560.000	50.04	-7.48	42.56	74.00	-31.44	peak
6	2700.000	46.69	-7.13	39.56	74.00	-34.44	peak

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

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

3. Peak: Peak detector.

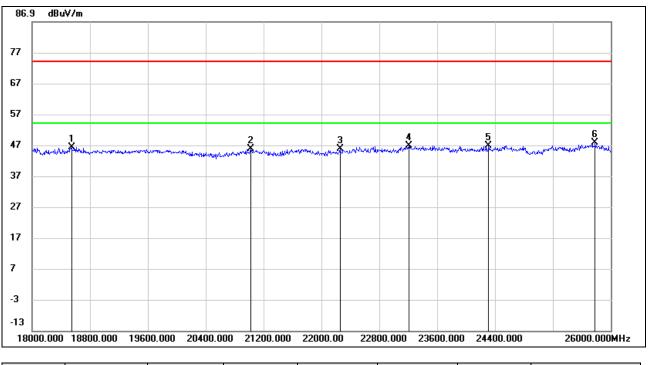
4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.



## 8.4. SPURIOUS EMISSIONS (18~26GHz)

## 8.4.1. 802.11g MODE

## SPURIOUS EMISSIONS (MID CHANNEL, WORST-CASE CONFIGURATION, HORIZONTAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	( <b>dB</b> / <b>m</b> )	(dBuV/m)	(dBuV/m)	( <b>dB</b> )	
1	18544.000	50.76	-4.46	46.30	74.00	-27.70	peak
2	21024.000	51.12	-5.30	45.82	74.00	-28.18	peak
3	22256.000	51.95	-6.06	45.89	74.00	-28.11	peak
4	23208.000	52.08	-5.32	46.76	74.00	-27.24	peak
5	24312.000	50.10	-3.35	46.75	74.00	-27.25	peak
6	25784.000	49.23	-1.49	47.74	74.00	-26.26	peak

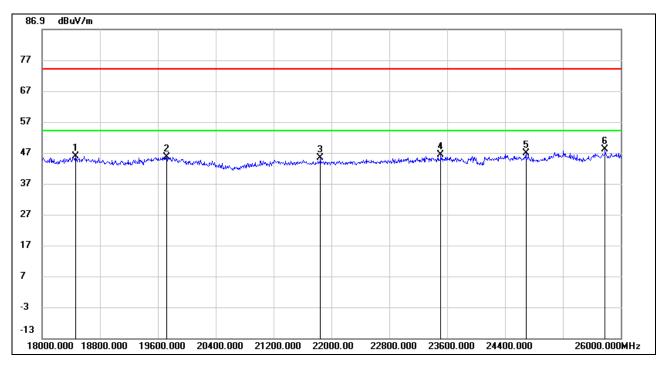
Note: 1. Measurement = Reading Level + Correct Factor.

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

3. Peak: Peak detector.

4. The preamplifier only effect to the above 18GHz signal and no filter added to the measurement chain.





## SPURIOUS EMISSIONS (MID CHANNEL, WORST-CASE CONFIGURATION, VERTICAL)

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	( <b>dB</b> / <b>m</b> )	(dBuV/m)	(dBuV/m)	( <b>dB</b> )	
1	18464.000	50.20	-4.39	45.81	74.00	-28.19	peak
2	19720.000	50.00	-4.39	45.61	74.00	-28.39	peak
3	21848.000	51.26	-5.95	45.31	74.00	-28.69	peak
4	23512.000	51.01	-4.76	46.25	74.00	-27.75	peak
5	24688.000	48.89	-2.11	46.78	74.00	-27.22	peak
6	25784.000	49.58	-1.49	48.09	74.00	-25.91	peak

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

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

3. Peak: Peak detector.

4. The preamplifier only effect to the above 18GHz signal and no filter added to the measurement chain.

Note: All the test modes have been tested, only the worst data record in the report.



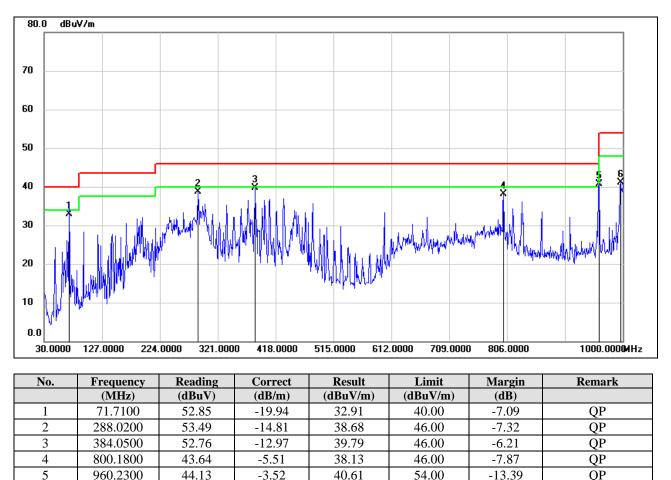
6

996.1200

## 8.5. SPURIOUS EMISSIONS (0.03 ~ 1 GHz)

## 8.5.1. 802.11g MODE

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



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

44.31

-3.29

If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.
 Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto.

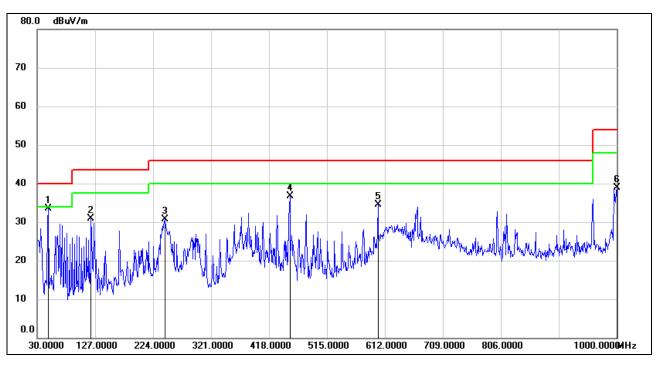
41.02

54.00

-12.98

QP





#### SPURIOUS EMISSIONS (MID CHANNEL, WORST-CASE CONFIGURATION, VERTICAL)

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	( <b>dB</b> / <b>m</b> )	(dBuV/m)	(dBuV/m)	( <b>dB</b> )	
1	48.4300	51.83	-18.34	33.49	40.00	-6.51	QP
2	120.2100	51.67	-20.74	30.93	43.50	-12.57	QP
3	244.3700	47.62	-16.84	30.78	46.00	-15.22	QP
4	452.9200	48.61	-11.82	36.79	46.00	-9.21	QP
5	600.3600	43.34	-8.80	34.54	46.00	-11.46	QP
6	1000.0000	42.05	-3.24	38.81	54.00	-15.19	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

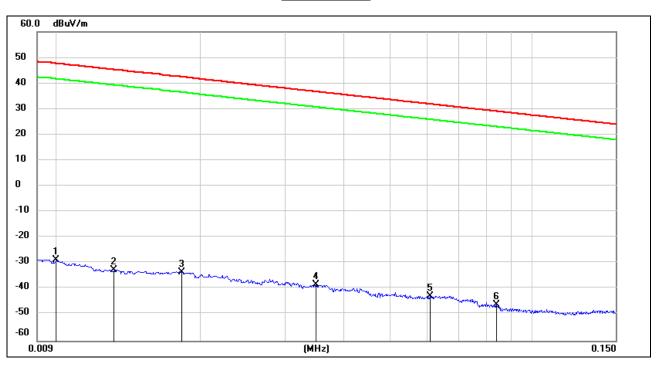
Note: All the test modes have been tested, only the worst data record in the report.



## 8.6. SPURIOUS EMISSIONS BELOW 30M

## 8.6.1. 802.11g MODE

#### SPURIOUS EMISSIONS (MID CHANNEL, LOOP ANTENNA FACE ON TO THE EUT, WORST-CASE CONFIGURATION)



9kHz~ 150kHz

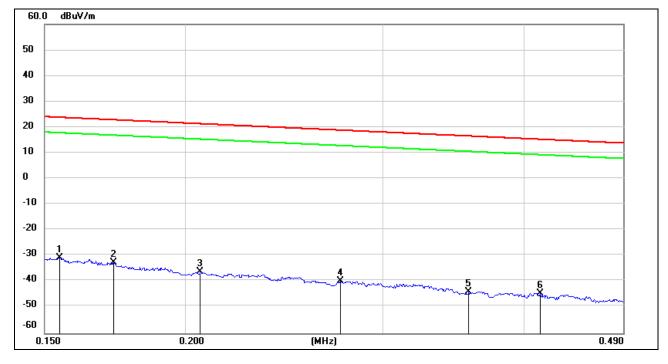
No.	Frequency	Reading	Correct	FCC Result	FCC Limit	Margin	Remark
	(MHz)	(dBuV)	( <b>dB</b> / <b>m</b> )	(dBuV/m)	(dBuV/m)	( <b>dB</b> )	
1	0.0100	72.72	-101.40	-28.68	47.60	-76.28	peak
2	0.0131	68.97	-101.38	-32.41	45.25	-77.66	peak
3	0.0182	67.85	-101.36	-33.51	42.40	-75.91	peak
4	0.0349	63.03	-101.41	-38.38	36.75	-75.13	peak
5	0.0609	58.83	-101.53	-42.70	31.91	-74.61	peak
6	0.0840	55.51	-101.67	-46.16	29.12	-75.28	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.

3. All 3 polarizations(Horizontal, Face-on and Face-off) of the loop antenna had been tested, but only the worst data recorded in the report.

#### <u>150kHz ~ 490kHz</u>



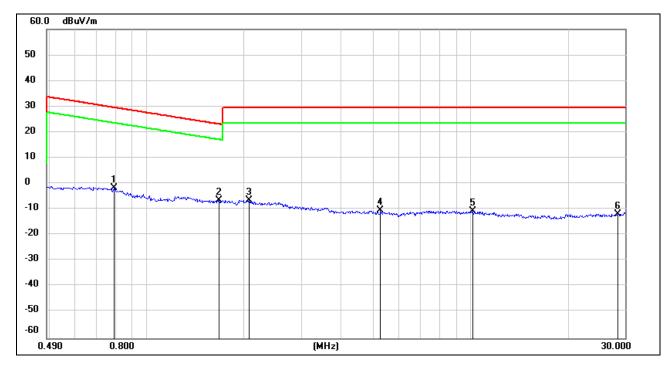
No.	Frequency	Reading	Correct	FCC Result	FCC Limit	Margin	Remark
	(MHz)	(dBuV)	( <b>dB</b> / <b>m</b> )	(dBuV/m)	(dBuV/m)	( <b>dB</b> )	
1	0.1547	70.81	-101.65	-30.84	23.81	-54.65	peak
2	0.1728	69.00	-101.67	-32.67	22.86	-55.53	peak
3	0.2064	65.58	-101.73	-36.15	21.31	-57.46	peak
4	0.2746	61.96	-101.83	-39.87	18.83	-58.70	peak
5	0.3573	58.08	-101.91	-43.83	16.54	-60.37	peak
6	0.4132	57.55	-101.98	-44.43	15.28	-59.71	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.

3. All 3 polarizations(Horizontal, Face-on and Face-off) of the loop antenna had been tested, but only the worst data recorded in the report.

#### <u>490kHz ~ 30MHz</u>



No.	Frequency	Reading	Correct	FCC Result	FCC Limit	Margin	Remark
	(MHz)	(dBuV)	( <b>dB</b> / <b>m</b> )	(dBuV/m)	(dBuV/m)	( <b>dB</b> )	
1	0.7929	60.52	-62.14	-1.62	29.62	-31.24	peak
2	1.6704	55.56	-61.97	-6.41	23.15	-29.56	peak
3	2.0682	55.35	-61.81	-6.46	29.54	-36.00	peak
4	5.2705	51.04	-61.45	-10.41	29.54	-39.95	peak
5	10.1393	50.28	-60.81	-10.53	29.54	-40.07	peak
6	28.4649	48.37	-60.11	-11.74	29.54	-41.28	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.

3. All 3 polarizations(Horizontal, Face-on and Face-off) of the loop antenna had been tested, but only the worst data recorded in the report.

Note: All the test modes have been tested, only the worst data record in the report.



# 9. 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.

#### RESULTS Complies

**END OF REPORT**