



FCC ID: GKR402550  
Report No.: T200521W01-RP3

IC: 2533B-402550

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# **RADIO TEST REPORT**

## **FCC 47 CFR PART 15 SUBPART C**

### **INDUSTRY CANADA RSS-247**

<b>Test Standard</b>	<b>FCC Part 15.247 IC RSS-247 issue 2 and IC RSS-GEN issue 5</b>
<b>Product name</b>	<b>Tablet</b>
<b>Brand Name</b>	<b>ICON/iFit</b>
<b>Model No.</b>	<b>MP21-ARGON-C</b>
<b>Test Result</b>	<b>Pass</b>
<b>Statements of Conformity</b>	<b>Determination of compliance is based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.</b>

The test Result was tested by Compliance Certification Services Inc. The test data, data evaluation, test procedures, and equipment configurations shown in this report were given in ANSI C63.10: 2013 and compliance standards.

The test results of this report relate only to the tested sample (EUT) identified in this report.

The test Report of full or partial shall not copy. Without written approval of Compliance Certification Services Inc. (Wugu Laboratory).

*Approved by:*

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Kevin Tsai  
Deputy Manager



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## Revision History

Rev.	Issue Date	Revisions	Effect Page	Revised By
00	July 8, 2020	Initial Issue	ALL	Allison Chen
01	July 10, 2020	See the following note Rev.(01)	P.67	Allison Chen

### **Rev.(01)**

1. Revised description for summary of spot check.



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## 1. GENERAL INFORMATION

### 1.1 EUT INFORMATION

FCC Applicant	Compal Electronics Inc No.581 & 581-1, Ruiguang Rd., Neihu District, Taipei city, 11492 Taiwan
IC Applicant	COMPAL ELECTRONICS INC. No. 581 & 581-1, Ruiguang Rd, Neihu District Taipei R.O.C. 114 Taiwan
Manufacturer	Compal Electronics Inc No.581 & 581-1, Ruiguang Rd., Neihu District, Taipei city, 11492 Taiwan
Equipment	Tablet
Model No.	MP21-ARGON-C
Model Discrepancy	N/A
Trade Name	ICON/iFit
Received Date	May 21, 2020
Date of Test	June 2 ~ July 7, 2020
Power Supply	EUT Power from Host device (DC12V)
HW Version	LA-J301P
SW Version	Android 8

## 1.2 EUT CHANNEL INFORMATION

Frequency Range	802.11b/g/n HT 20: 2412MHz ~ 2462MHz 802.11n HT 40: 2422MHz ~ 2452MHz
Modulation Type	1. IEEE 802.11b mode: CCK 2. IEEE 802.11g mode: OFDM 3. IEEE 802.11n HT 20 MHz mode : OFDM 4. IEEE 802.11n HT 40 MHz mode : OFDM
Number of channel	1. IEEE 802.11b mode: 11 Channels 2. IEEE 802.11g mode: 11 Channels 3. IEEE 802.11n HT 20 MHz mode : 11 Channels 4. IEEE 802.11n HT 40 MHz mode : 7 Channels

### Remark:

Refer as ANSI C63.10: 2013 clause 5.6.1 Table 4 and RSS-GEN Table A1 for test channels

Number of frequencies to be tested		
Frequency range in which device operates	Number of frequencies	Location in frequency range of operation
<input type="checkbox"/> 1 MHz or less	1	Middle
<input type="checkbox"/> 1 MHz to 10 MHz	2	1 near top and 1 near bottom
<input checked="" type="checkbox"/> More than 10 MHz	3	1 near top, 1 near middle, and 1 near bottom

## 1.3 ANTENNA INFORMATION

Antenna Type	<input checked="" type="checkbox"/> PIFA <input type="checkbox"/> PCB <input type="checkbox"/> Dipole <input type="checkbox"/> Coils
Antenna Gain	1.37 dBi
Antenna Connector	IPEX

## 1.4 MEASUREMENT UNCERTAINTY

PARAMETER	UNCERTAINTY
AC Powerline Conducted Emission	+/- 1.2575
Emission bandwidth, 20dB bandwidth	+/- 0.0014
RF output power, conducted	+/- 1.14
Power density, conducted	+/- 1.40
3M Semi Anechoic Chamber / 30M~200M	+/- 4.12
3M Semi Anechoic Chamber / 200M~1000M	+/- 4.68
3M Semi Anechoic Chamber / 1G~8G	+/- 5.18
3M Semi Anechoic Chamber / 8G~18G	+/- 5.47
3M Semi Anechoic Chamber / 18G~26G	+/- 3.81
3M Semi Anechoic Chamber / 26G~40G	+/- 3.87

**Remark:**

1. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of  $k=2$
2. ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report.

## 1.5 FACILITIES AND TEST LOCATION

All measurement facilities used to collect the measurement data are located at

No.11, Wugong 6th Rd., Wugu Dist., New Taipei City, Taiwan. (R.O.C.)

Test site	Test Engineer	Remark
AC Conduction Room	Dally Hong	-
Radiation	Jerry Chang	-
RF Conducted	Jane Wang	-

**Remark:** The sites are constructed in conformance with the requirements of ANSI C63.7, ANSI C63.4 and CISPR Publication 22.

## 1.6 INSTRUMENT CALIBRATION

Conducted Emission Room # B					
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due
CABLE	EMCI	CFD300-NL	CERF	06/27/2019	06/26/2020
EMI Test Receiver	R&S	ESCI	100064	07/26/2019	07/25/2020
LISN	SCHAFFNER	NNB 41	03/10013	02/13/2020	02/12/2021
Software	EZ-EMC(CCS-3A1-CE)				

3M 966 Chamber Test Site					
Equipment	Manufacturer	Model	S/N	Cal Date	Cal Due
Band Reject Filters	MICRO TRONICS	BRM 50702	120	02/25/2020	02/24/2021
Bilog Antenna	Sunol Sciences	JB3	A030105	07/26/2019	07/25/2020
Coaxial Cable	HUBER SUHNER	SUCOFLEX 104PEA	20995	02/25/2020	02/24/2021
Coaxial Cable	EMCI	EMC105	190914+25111	09/20/2019	09/19/2020
Digital Thermo-Hygro Meter	WISEWIND	1206	D07	01/15/2020	01/14/2021
double Ridged Guide Horn Antenna	ETC	MCTD 1209	DRH13M02003	10/04/2019	10/03/2020
Loop Ant	COM-POWER	AL-130	121051	03/27/2020	03/26/2021
Pre-Amplifier	EMEC	EM330	060609	02/25/2020	02/24/2021
Pre-Amplifier	HP	8449B	3008A00965	02/25/2020	02/24/2021
Signal Analyzer	R&S	FSV 40	101073	09/25/2019	09/24/2020
Antenna Tower	CCS	CC-A-1F	N/A	N.C.R	N.C.R
Controller	CCS	CC-C-1F	N/A	N.C.R	N.C.R
Turn Table	CCS	CC-T-1F	N/A	N.C.R	N.C.R
Software	e3 6.11-20180413				

**Remark:** Each piece of equipment is scheduled for calibration once a year.

RF Conducted Test Site					
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due
Coaxial Cable	Woken	WC12	CC001	06/28/2019	06/27/2020
Signal Analyzer	R&S	FSV 40	101073	09/25/2019	09/24/2020
Power Meter	Anritsu	ML2487A	6K00003260	05/21/2020	05/20/2021
Power Sensor	Anritsu	MA2490A	032910	05/21/2020	05/20/2021
Software	N/A				

#### For Section 5.4: Test data re-use summary

RF Conducted Test Site					
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due
Coaxial Cable	Woken	WC12	CC001	06/29/2020	06/28/2021
Signal Analyzer	R&S	FSV 40	101073	09/25/2019	09/24/2020
Power Meter	Anritsu	ML2487A	6K00003260	05/21/2020	05/20/2021
Power Sensor	Anritsu	MA2490A	32910	05/21/2020	05/20/2021
Software	N/A				

**Remark:** Each piece of equipment is scheduled for calibration once a year.

## 1.7 SUPPORT AND EUT ACCESSORIES EQUIPMENT

EUT Accessories Equipment					
No.	Equipment	Brand	Model	Series No.	FCC ID
	N/A				

Support Equipment					
No.	Equipment	Brand	Model	Series No.	FCC ID
1.	Adapter	WEIHAI POWER	HAS060123-EA	N/A	N/A

## 1.8 TEST METHODOLOGY AND APPLIED STANDARDS

The test methodology, setups and results comply with all requirements in accordance with ANSI C63.10:2013, FCC Part 2, FCC Part 15.247, KDB 558074 D01, RSS-247 Issue 2 and RSS-GEN Issue 5.





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## 2. TEST SUMMERY

FCC Standard Section	IC Standard Section	Report Section	Test Item	Result
15.203	-	1.3	Antenna Requirement	Pass
15.207(a)	RSS-GEN 8.8	5.1	AC Conducted Emission	Pass
15.247(b)(3)	RSS-247(5.4)(d)	5.2	Output Power Measurement	Pass
15.247(d)	RSS-GEN 8.9, 8.10	5.3	Radiation Band Edge	Pass
15.247(d)	RSS-GEN 8.9, 8.10	5.3	Radiation Spurious Emission	Pass

### 3. DESCRIPTION OF TEST MODES

#### 3.1 THE WORST MODE OF OPERATING CONDITION

Operation mode	IEEE 802.11b mode :1Mbps IEEE 802.11g mode :6Mbps IEEE 802.11n HT20 mode :MCS0 IEEE 802.11n HT40 mode :MCS0
Test Channel Frequencies	<b>IEEE 802.11b mode :</b> 1. Lowest Channel : 2412MHz 2. Middle Channel : 2437MHz 3. Highest Channel : 2462MHz <b>IEEE 802.11g mode :</b> 1. Lowest Channel : 2412MHz 2. Middle Channel : 2437MHz 3. Highest Channel : 2462MHz <b>IEEE 802.11n HT20 mode :</b> 1. Lowest Channel : 2412MHz 2. Middle Channel : 2437MHz 3. Highest Channel : 2462MHz <b>IEEE 802.11n HT40 mode :</b> 1. Lowest Channel : 2422MHz 2. Middle Channel : 2437MHz 3. Highest Channel : 2452MHz
Operation Transmitter	IEEE 802.11b mode :1T1R IEEE 802.11g mode :1T1R IEEE 802.11n HT20 mode : 1T1R IEEE 802.11n HT40 mode : 1T1R

**Remark:**

1. EUT pre-scanned data rate of output power for each mode, the worst data rate were recorded in this report.

### 3.2 THE WORST MODE OF MEASUREMENT

AC Power Line Conducted Emission	
Test Condition	AC Power line conducted emission for line and neutral
Power supply Mode	Mode 1: EUT power by Host Device.
Worst Mode	<input checked="" type="checkbox"/> Mode 1 <input type="checkbox"/> Mode 2 <input type="checkbox"/> Mode 3 <input type="checkbox"/> Mode 4

Radiated Emission Measurement Below 1G	
Test Condition	Radiated Emission Below 1G
Power supply Mode	Mode 1: EUT power by Host Device.
Worst Mode	<input checked="" type="checkbox"/> Mode 1 <input type="checkbox"/> Mode 2 <input type="checkbox"/> Mode 3 <input type="checkbox"/> Mode 4

Radiated Emission Measurement Above 1G	
Test Condition	Radiated Emission Above 1G
Power supply Mode	Mode 1: EUT power by Host Device.
Worst Mode	<input checked="" type="checkbox"/> Mode 1 <input type="checkbox"/> Mode 2 <input type="checkbox"/> Mode 3 <input type="checkbox"/> Mode 4
Worst Position	<input type="checkbox"/> Placed in fixed position. <input type="checkbox"/> Placed in fixed position at X-Plane (E2-Plane) <input checked="" type="checkbox"/> Placed in fixed position at Y-Plane (E1-Plane) <input type="checkbox"/> Placed in fixed position at Z-Plane (H-Plane)

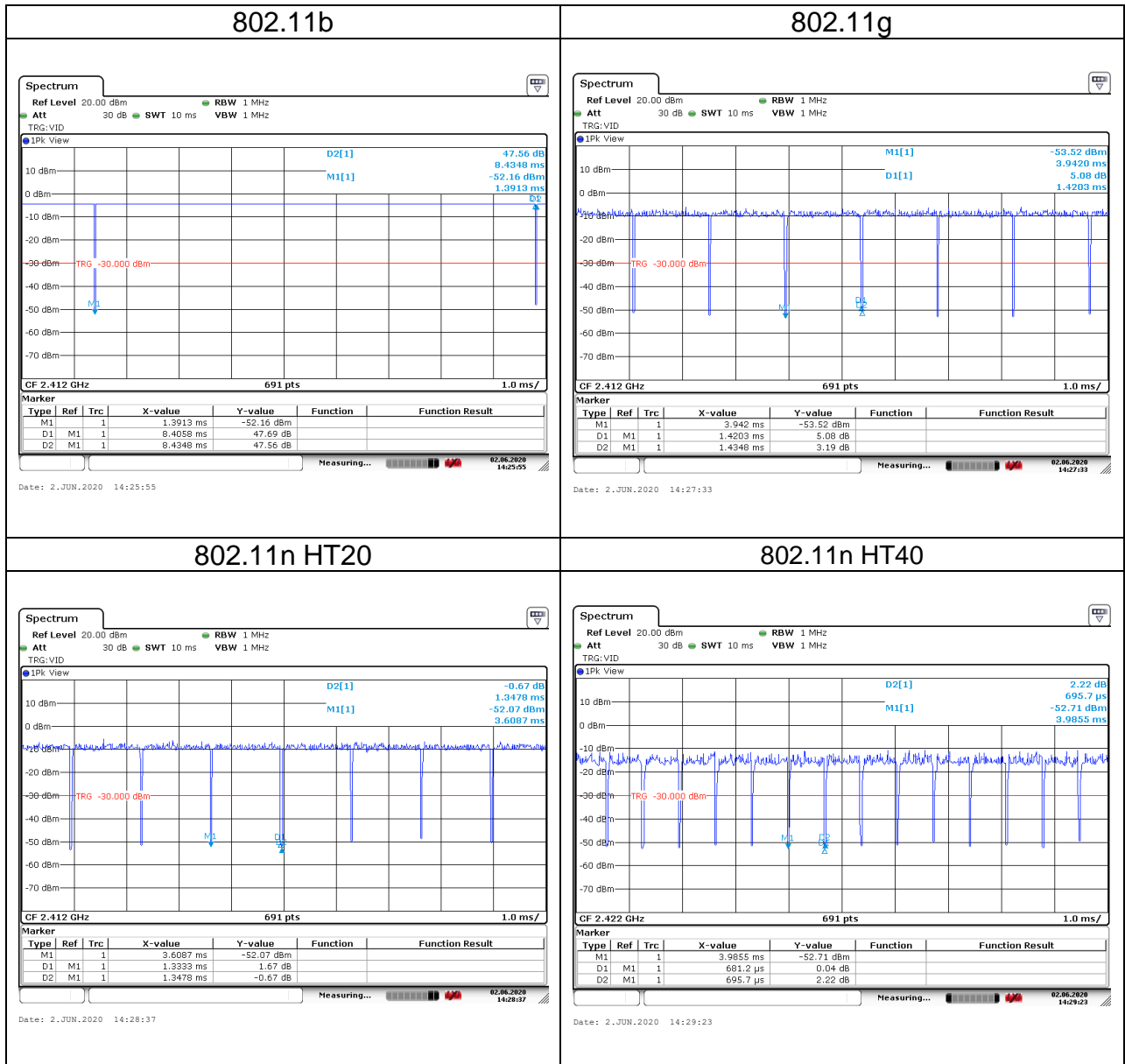
Remark:

1. The worst mode was record in this test report.
2. EUT pre-scanned in three axis ,X,Y, Z and two polarity, for radiated measurement. The worst case(Y-Plane) were recorded in this report
3. AC power line conducted emission and for below 1G radiation emission were performed the EUT transmit at the highest output power channel as worse case.

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## 4. EUT DUTY CYCLE

Duty Cycle				
Configuration	Duty Cycle (%)	Duty Factor (dB) =10*log (1/Duty Cycle)	1/T (kHz)	VBW setting (kHz)
802.11b	99.66	0.01	N/A	0.01
802.11g	98.99	0.04	N/A	0.01
802.11n HT20	98.92	0.05	N/A	0.01
802.11n HT40	97.92	0.09	1.47	2.00



## 5. TEST RESULT

### 5.1 AC POWER LINE CONDUCTED EMISSION

#### 5.1.1 Test Limit

According to §15.207(a) and RSS-GEN section 8.8,

Frequency Range (MHz)	Limits(dBμV)	
	Quasi-peak	Average
0.15 to 0.50	66 to 56*	56 to 46*
0.50 to 5	56	46
5 to 30	60	50

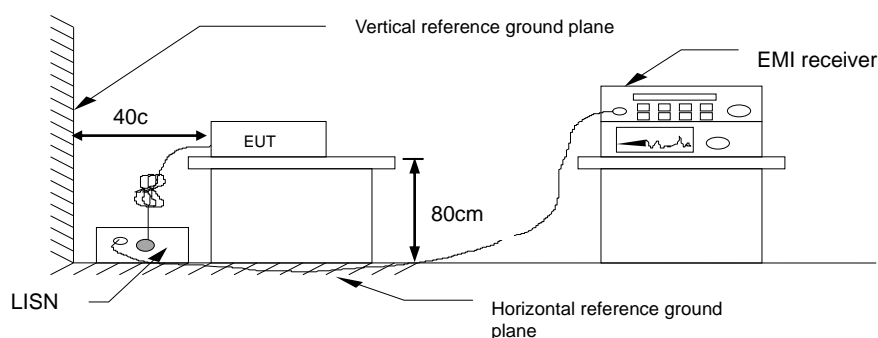
\* Decreases with the logarithm of the frequency.

#### 5.1.2 Test Procedure

Test method Refer as ANSI C63.10: 2013 clause 6.2,

1. The EUT was placed on a non-conducted table, which is 0.8m above horizontal ground plane and 0.4m above vertical ground plane.
2. EUT connected to the line impedance stabilization network (LISN)
3. Receiver set RBW of 9kHz and Detector Peak, and note as quasi-peak and average.
4. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
5. Recorded Line for Neutral and Line.

#### 5.1.3 Test Setup

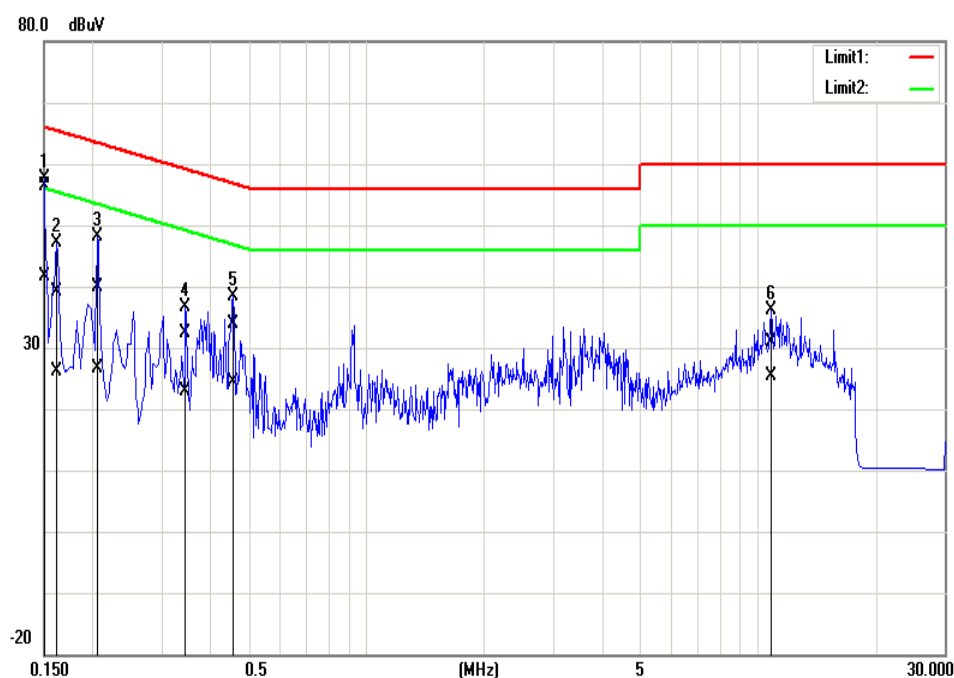


#### 5.1.4 Test Result

**Pass.**

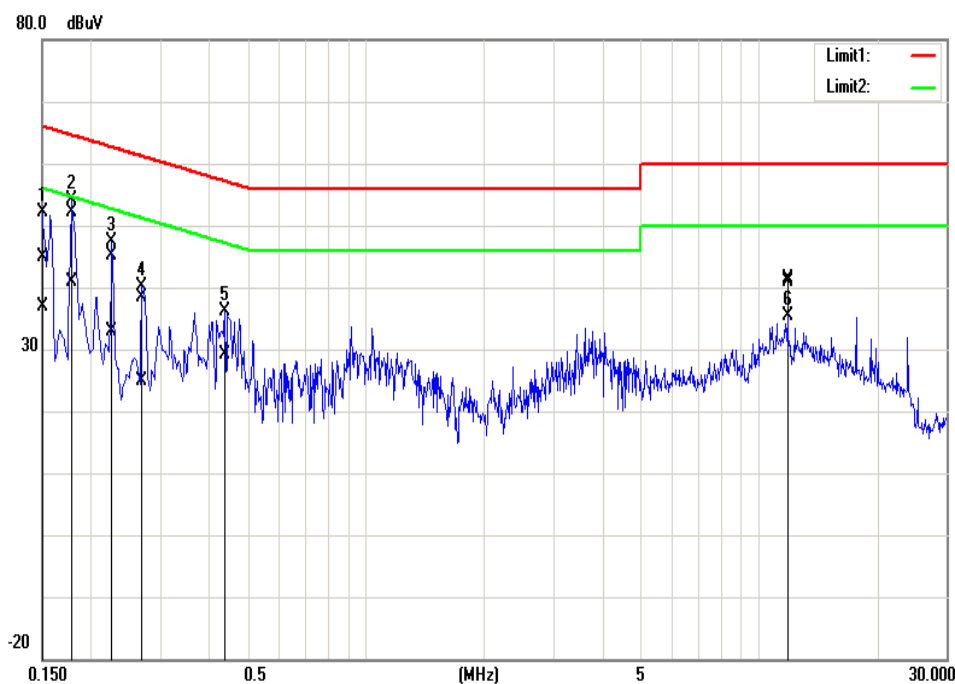
## Test Data

Test Mode:	Mode 1	Temp/Hum	24(°C)/ 50%RH
Phase:	Line	Test Date	June 15, 2020
		Test Engineer	Dally Hong



Frequency (MHz)	Quasi Peak reading (dBuV)	Average reading (dBuV)	Correction factor (dB)	Quasi Peak result (dBuV)	Average result (dBuV)	Quasi Peak limit (dBuV)	Average limit (dBuV)	Quasi Peak margin (dB)	Average margin (dB)	Remark
0.1500	46.15	31.53	10.22	56.37	41.75	66.00	56.00	-9.63	-14.25	Pass
0.1620	28.84	15.94	10.22	39.06	26.16	65.36	55.36	-26.30	-29.20	Pass
0.2060	29.73	16.54	10.21	39.94	26.75	63.37	53.37	-23.43	-26.62	Pass
0.3460	22.04	12.62	10.22	32.26	22.84	59.06	49.06	-26.80	-26.22	Pass
0.4580	23.69	14.07	10.22	33.91	24.29	56.73	46.73	-22.82	-22.44	Pass
10.8180	20.51	15.08	10.42	30.93	25.50	60.00	50.00	-29.07	-24.50	Pass

Test Mode:	Mode 1	Temp/Hum	24(°C)/ 50%RH
Phase:	Neutral	Test Date	June 15, 2020
		Test Engineer	Dally Hong



Frequency (MHz)	Quasi Peak reading (dBuV)	Average reading (dBuV)	Correction factor (dB)	Quasi Peak result (dBuV)	Average result (dBuV)	Quasi Peak limit (dBuV)	Average limit (dBuV)	Quasi Peak margin (dB)	Average margin (dB)	Remark
0.1500	34.58	26.64	10.19	44.77	36.83	65.99	56.00	-21.22	-19.17	Pass
0.1780	41.84	30.80	10.19	52.03	40.99	64.57	54.58	-12.54	-13.59	Pass
0.2260	34.88	22.64	10.19	45.07	32.83	62.59	52.60	-17.52	-19.77	Pass
0.2700	28.15	14.80	10.19	38.34	24.99	61.12	51.12	-22.78	-26.13	Pass
0.4380	25.90	18.96	10.19	36.09	29.15	57.10	47.10	-21.01	-17.95	Pass
11.8420	31.01	30.47	10.39	41.40	40.86	60.00	50.00	-18.60	-9.14	Pass

## 5.2 OUTPUT POWER MEASUREMENT

### 5.2.1 Test Limit

According to §15.247(b) (3) and RSS-247 section 5.4(d),

#### Peak output power :

For systems using digital modulation in the 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt(30 dBm) and the e.i.r.p. shall not exceed 4Watt(36 dBm), base on the use of antennas with directional gain not exceed 6 dBi If transmitting antennas of directional gain greater than 6dBi are used the peak output power the conducted output power from the intentional radiator shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. In case of point-to-point operation, the limit has to be reduced by 1dB for every 3 dB that the directional gain of the antenna exceeds 6 dBi.

Limit	<input checked="" type="checkbox"/> Antenna not exceed 6 dBi : 30dBm <input type="checkbox"/> Antenna with DG greater than 6 dBi : [Limit = 30 – (DG – 6)] <input type="checkbox"/> Point-to-point operation :
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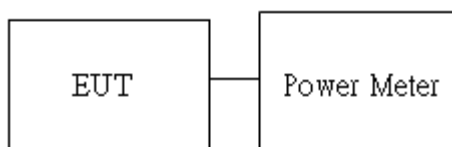
Average output power : For reporting purposes only.

### 5.2.2 Test Procedure

Test method Refer as KDB 558074 D01.

1. The EUT RF output connected to the power meter by RF cable.
2. Setting maximum power transmit of EUT.
3. The path loss was compensated to the results for each measurement.
4. Measure and record the result of Peak output power and Average output power. in the test report.

### 5.2.3 Test Setup





## 5.2.4 Test Result

### Peak output power :

Wifi 2.4G										
Config	CH	Freq. (MHz)	Power Setting	PK Power (dBm)	PK Power (W)	EIRP PK Power (dBm)	EIRP PK Power (W)	DG (dBi)	Limit (dBm)	EIRP Limit (dBm)
IEEE 802.11b Data rate: 1Mbps	Low	2412	19.0	<b>21.04</b>	0.1271	22.41	0.1742	1.37	30	36
	Mid	2437	19.0	21.01	0.1262	22.38	0.1730			
	High	2462	19.0	20.67	0.1167	22.04	0.1600			
IEEE 802.11g Data rate: 6Mbps	Low	2412	17.0	22.54	0.1795	23.91	0.2460			
	Mid	2437	17.0	<b>23.31</b>	0.2143	24.68	0.2938			
	High	2462	17.0	23.24	0.2109	24.61	0.2891			
IEEE 802.11n HT20 Data rate: MCS0	Low	2412	19.0	22.91	0.1954	24.28	0.2679			
	Mid	2437	19.0	<b>24.12</b>	0.2582	25.49	0.3540			
	High	2462	19.0	23.89	0.2449	25.26	0.3357			
IEEE 802.11n HT40 Data rate: MCS0	Low	2422	15.0	23.12	0.2051	24.49	0.2812			
	Mid	2437	20.0	<b>24.11</b>	0.2576	25.48	0.3532			
	High	2452	15.0	22.63	0.1832	24.00	0.2512			



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**Average output power :**

Wifi 2.4G			
Config	CH	Freq. (MHz)	AV Power (dBm)
IEEE 802.11b Data rate: 1Mbps	Low	2412	18.17
	Mid	2437	18.22
	High	2462	18.17
IEEE 802.11g Data rate: 6Mbps	Low	2412	14.31
	Mid	2437	16.05
	High	2462	16.02
IEEE 802.11n HT20 Data rate: MCS0	Low	2412	14.31
	Mid	2437	17.76
	High	2462	17.87
IEEE 802.11n HT40 Data rate: MCS0	Low	2422	13.85
	Mid	2437	18.54
	High	2452	13.95

## 5.3 RADIATION BANDEDGE AND SPURIOUS EMISSION

### 5.3.1 Test Limit

FCC according to §15.247(d), §15.209 and §15.205,

IC according to RSS-247 section 5.5, RSS-Gen, Section 8.9 and 8.10

In any 100 kHz bandwidth outside the authorized frequency band, all harmonic and spurious must be least 20 dB below the highest emission level with the authorized frequency band. Radiation emission which fall in the restricted bands must also follow the FCC section 15.209 as below limit in table.

#### Below 30 MHz

Frequency	Field Strength (microvolts/m)	Magnetic H-Field (microamperes/m)	Measurement Distance (metres)
9-490 kHz	2,400/F (F in kHz)	2,400/F (F in kHz)	300
490-1,705 kHz	24,000/F (F in kHz)	24,000/F (F in kHz)	30
1.705-30 MHz	30	N/A	30

#### Above 30 MHz

Frequency	Field Strength (microvolts/m)	Measurement Distance (metres)
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

#### Remark:

Although these tests were performed other than open area test site, adequate comparison measurements were confirmed against 30 m open area test site. Therefore sufficient tests were made to demonstrate that the alternative site produces results that correlate with the ones of tests made in an open field based on KDB 414788.

IC according to RSS-247 section 5.5, RSS-Gen, Section 8.9 and 8.10

**RSS-Gen Table 3 and Table 5 – General Field Strength Limits for Transmitters and Receivers at Frequencies Above 30 MHz** <sup>(Note)</sup>

Frequency (MHz)	Field Strength microvolts/m at 3 metres (watts, e.i.r.p.)	
	Transmitters	Receivers
30-88	100 (3 nW)	100 (3 nW)
88-216	150 (6.8 nW)	150 (6.8 nW)
216-960	200 (12 nW)	200 (12 nW)
Above 960	500 (75 nW)	500 (75 nW)

**Note:** Measurements for compliance with the limits in table 3 may be performed at distances other than 3 metres, in accordance with Section 6.6.

**RSS-Gen Table 6: General Field Strength Limits for Transmitters at Frequencies Below 30 MHz (Transmit)**

Frequency	Magnetic field strength (H-Field) (μA/m)	Measurement Distance (m)
9-490 kHz <sup>Note</sup>	6.37/F (F in kHz)	300
490-1,705 kHz	63.7/F (F in kHz)	30
1.705-30 MHz	0.08	30

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

### 5.3.2 Test Procedure

Test method Refer as KDB 558074 D01.

1. The EUT is placed on a turntable, Above 1 GHz is 1.5m and below 1 GHz is 0.8m above ground plane. The EUT Configured un accordance with ANSI C63.10: 2013, and the EUT set in a continuous mode.

2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level. And EUT is set 3m away from the receiving antenna, which is scanned from 1m to 4m above the ground plane to find out the highest emissions. Measurement are made polarized in both the vertical and the horizontal positions with antenna.

3. Span shall wide enough to full capture the emission measured. The SA from 9kHz to 26.5GHz set to the low, Mid and High channels with the EUT transmit.

Note: No emission found between lowest internal used/generated frequency to 30MHz (9KHz~30MHz)

Remark:

Although these tests were performed other than open area test site, adequate comparison measurements were confirmed against 30 m open are test site. Therefore sufficient tests were made to demonstrate that the alternative site produces results that correlate with the ones of tests made in an open field based on KDB 414788.

4. The SA setting following :

(1) Below 1G : RBW = 100kHz, VBW  $\geq$  3 RBW, Sweep = Auto, Detector = Peak, Trace = Max hold.

(2) Above 1G :

(2.1) For Peak measurement : RBW = 1MHz, VBW  $\geq$  3 RBW, Sweep = Auto, Detector = Peak, Trace = Max hold.

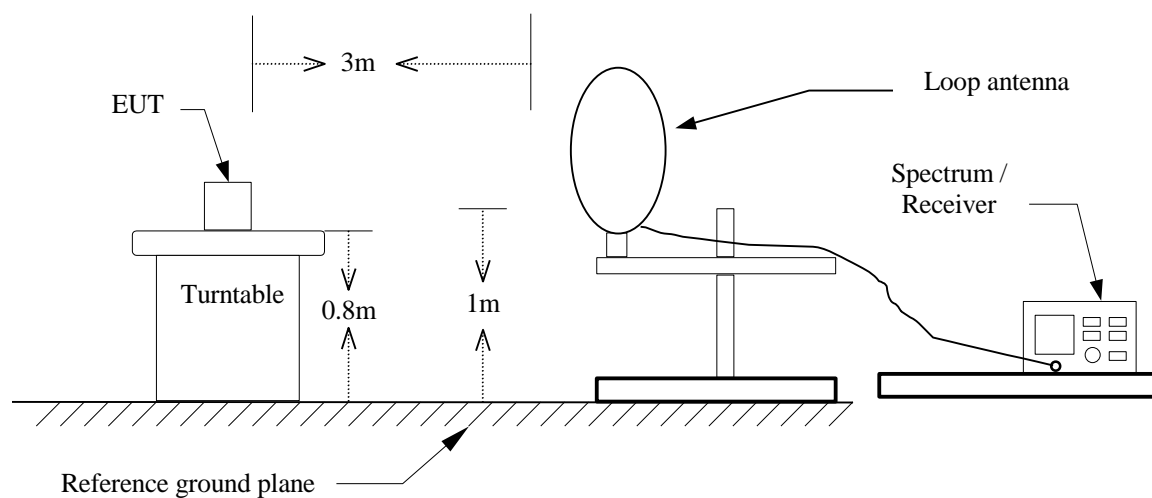
(2.2) For Average measurement : RBW = 1MHz, VBW

·If Duty Cycle  $\geq$  98%, VBW=10Hz.

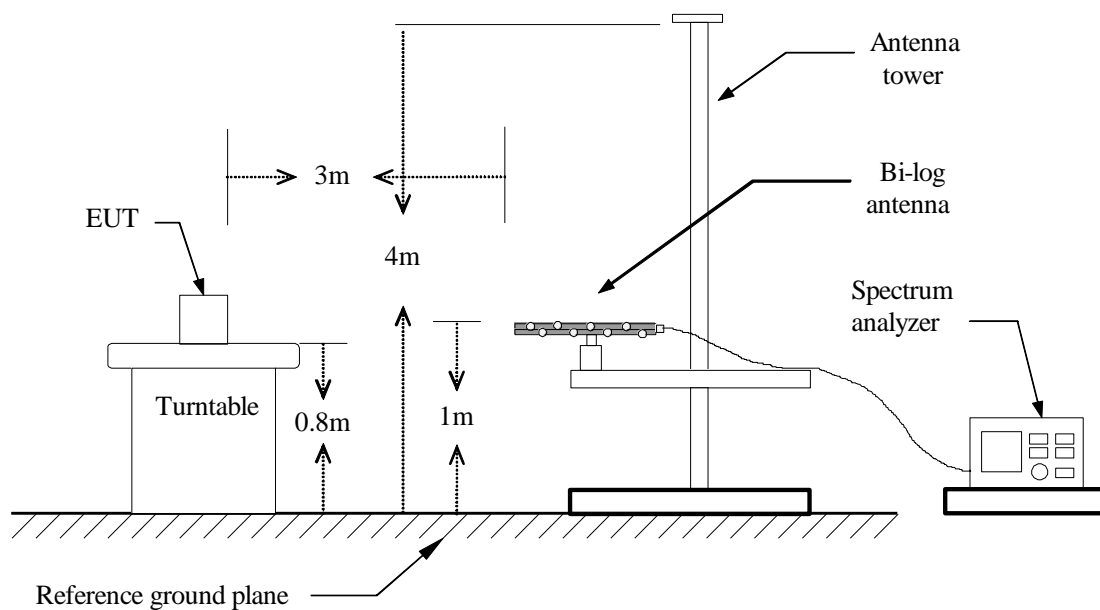
·If Duty Cycle < 98%, VBW=1/T.

### 5.3.3 Test Setup

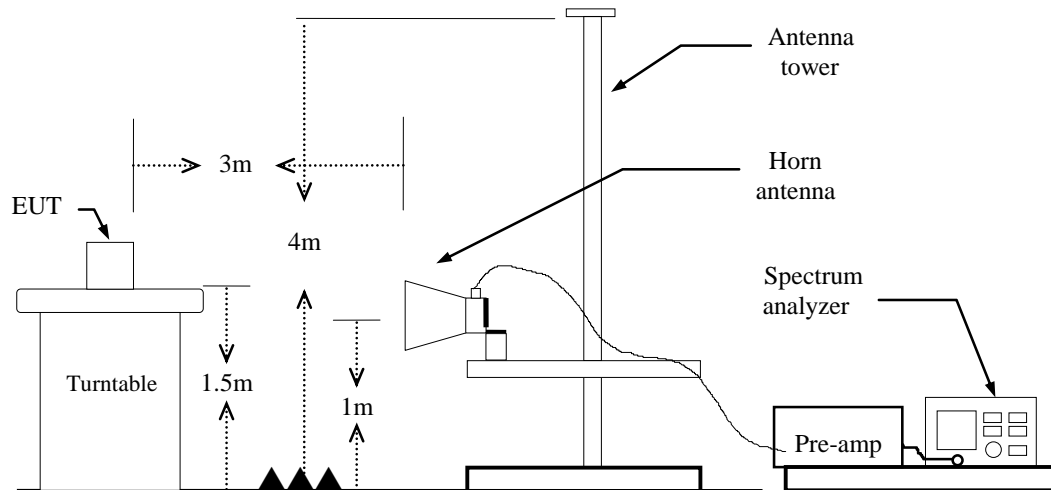
#### 9kHz ~ 30MHz



#### 30MHz ~ 1GHz



### Above 1 GHz



### 5.3.4 Test Result

#### Band Edge Test Data

Test Mode	IEEE 802.11b Low CH 2412MHz	Temp/Hum	24.6(°C)/ 51%RH
Test Item	Band Edge	Test Date	June 02, 2020
Polarize	Vertical	Test Engineer	Jerry Chang
Detector	Peak / Average		

Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
2390.00	Average	43.38	-3.17	40.21	54.00	-13.79
2390.00	Peak	54.89	-3.17	51.72	74.00	-22.28



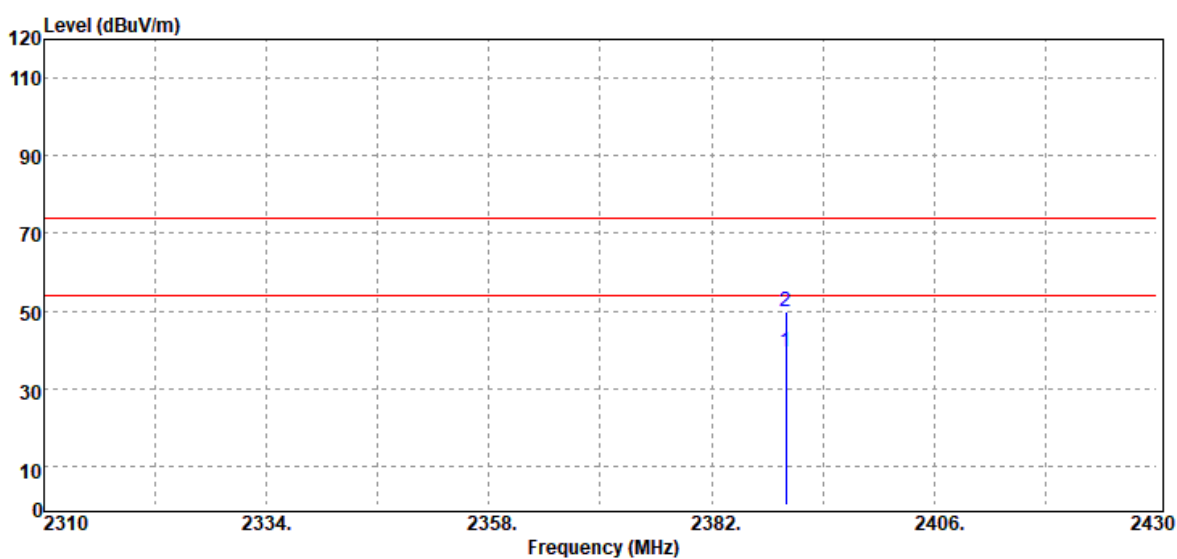


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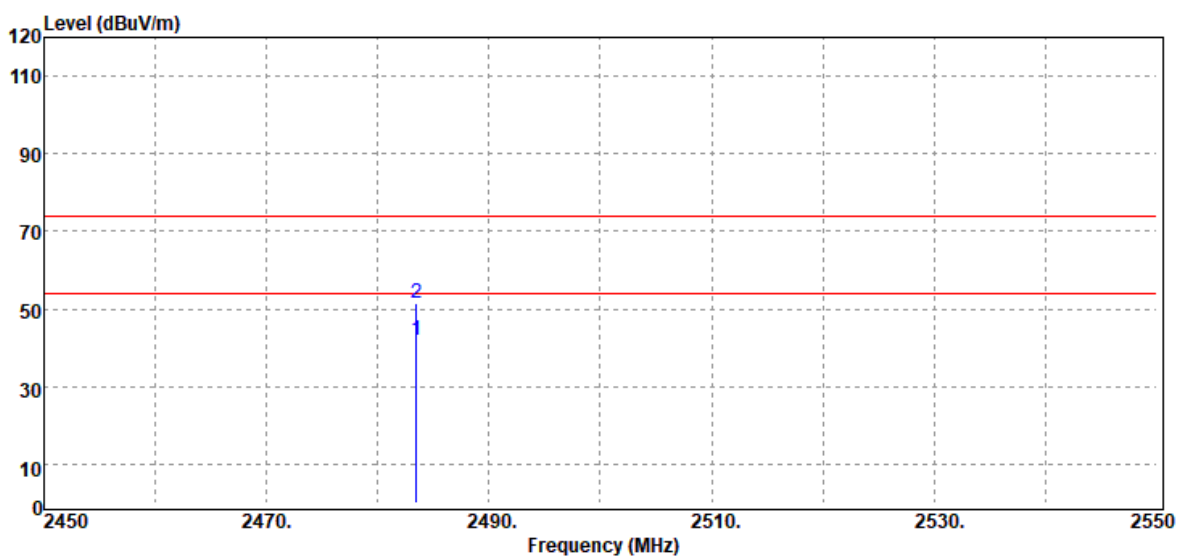
Rev.: 01

Test Mode	IEEE 802.11b Low CH 2412MHz	Temp/Hum	24.6(°C)/ 51%RH
Test Item	Band Edge	Test Date	June 02, 2020
Polarize	Horizontal	Test Engineer	Jerry Chang
Detector	Peak & Average		



Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dB $\mu$ V)	Factor (dB)	Actual FS (dB $\mu$ V/m)	Limit @3m (dB $\mu$ V/m)	Margin (dB)
2390.00	Average	42.80	-3.17	39.63	54.00	-14.37
2390.00	Peak	53.12	-3.17	49.95	74.00	-24.05

Test Mode	IEEE 802.11b High CH 2462MHz	Temp/Hum	24.6(°C)/ 51%RH
Test Item	Band Edge	Test Date	June 02, 2020
Polarize	Vertical	Test Engineer	Jerry Chang
Detector	Peak / Average		



Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBuV)	Factor (dB)	Actual FS (dBuV/m)	Limit @3m (dBuV/m)	Margin (dB)
2483.50	Average	44.68	-2.71	41.97	54.00	-12.03
2483.50	Peak	54.30	-2.71	51.59	74.00	-22.41

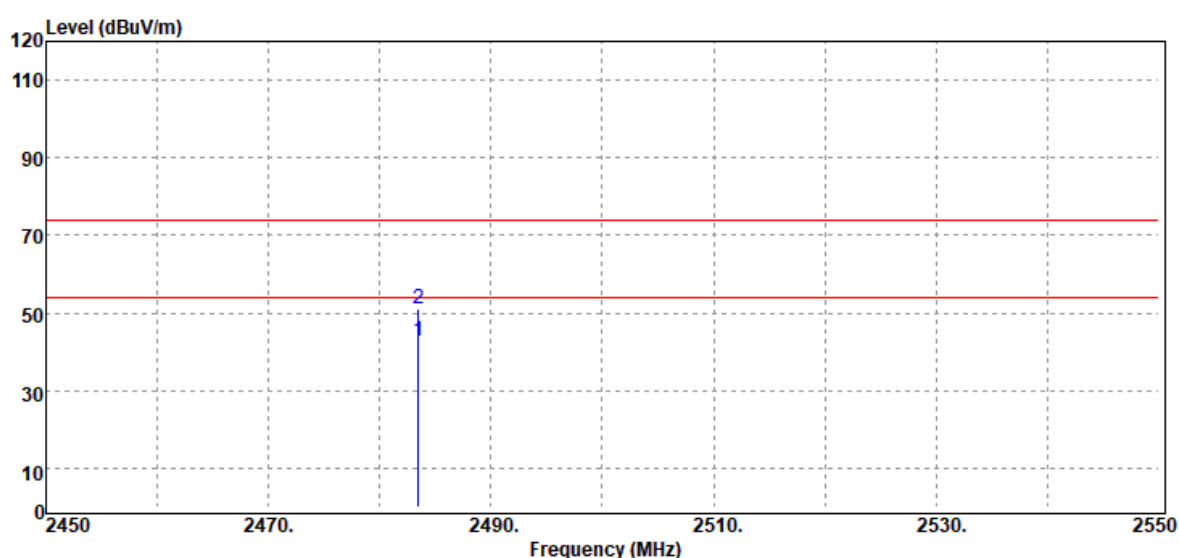


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Test Mode	IEEE 802.11b High CH 2462MHz	Temp/Hum	24.6(°C)/ 51%RH
Test Item	Band Edge	Test Date	June 02, 2020
Polarize	Horizontal	Test Engineer	Jerry Chang
Detector	Peak & Average		



Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dB $\mu$ V)	Factor (dB)	Actual FS (dB $\mu$ V/m)	Limit @3m (dB $\mu$ V/m)	Margin (dB)
2483.50	Average	45.35	-2.71	42.64	54.00	-11.36
2483.50	Peak	53.76	-2.71	51.05	74.00	-22.95

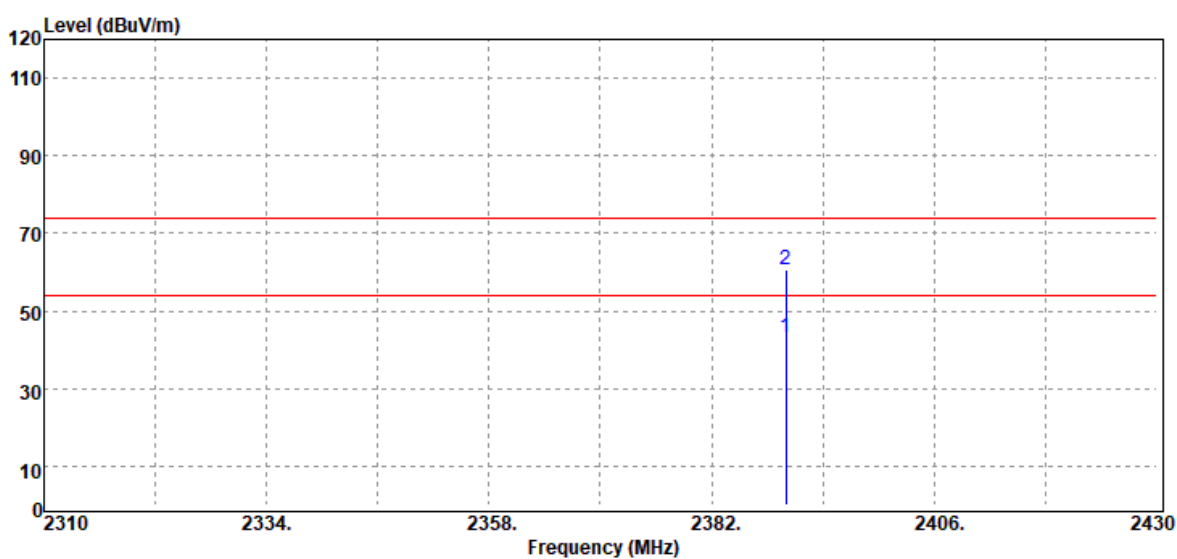


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Test Mode	IEEE 802.11g Low CH 2412MHz	Temp/Hum	24.6(°C)/ 51%RH
Test Item	Band Edge	Test Date	June 02, 2020
Polarize	Vertical	Test Engineer	Jerry Chang
Detector	Peak / Average		



Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
2390.00	Average	46.56	-3.17	43.39	54.00	-10.61
2390.00	Peak	63.85	-3.17	60.68	74.00	-13.32

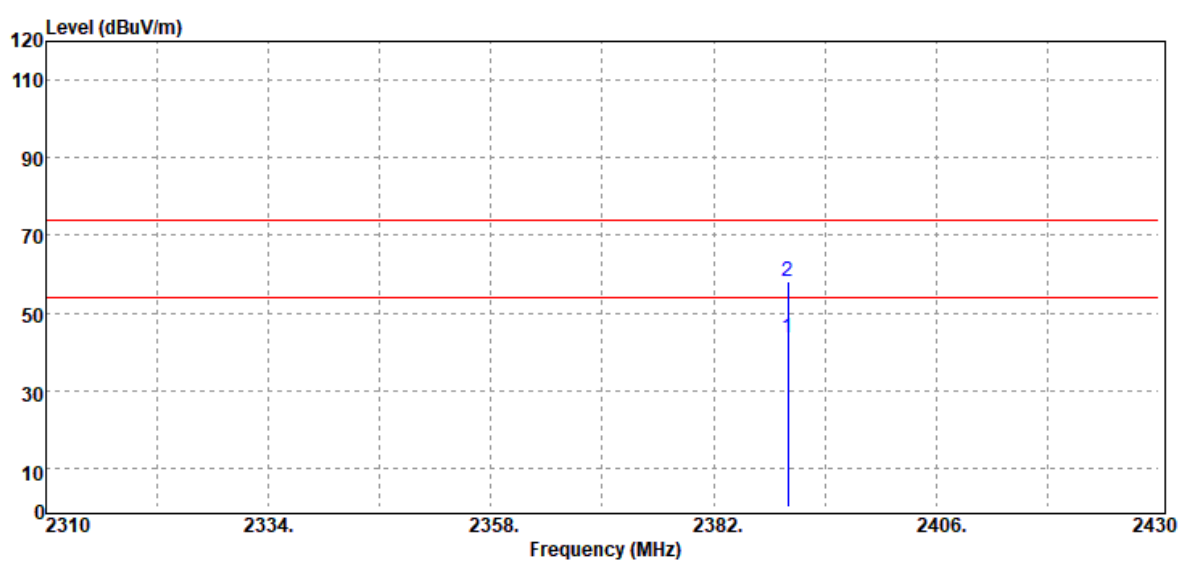


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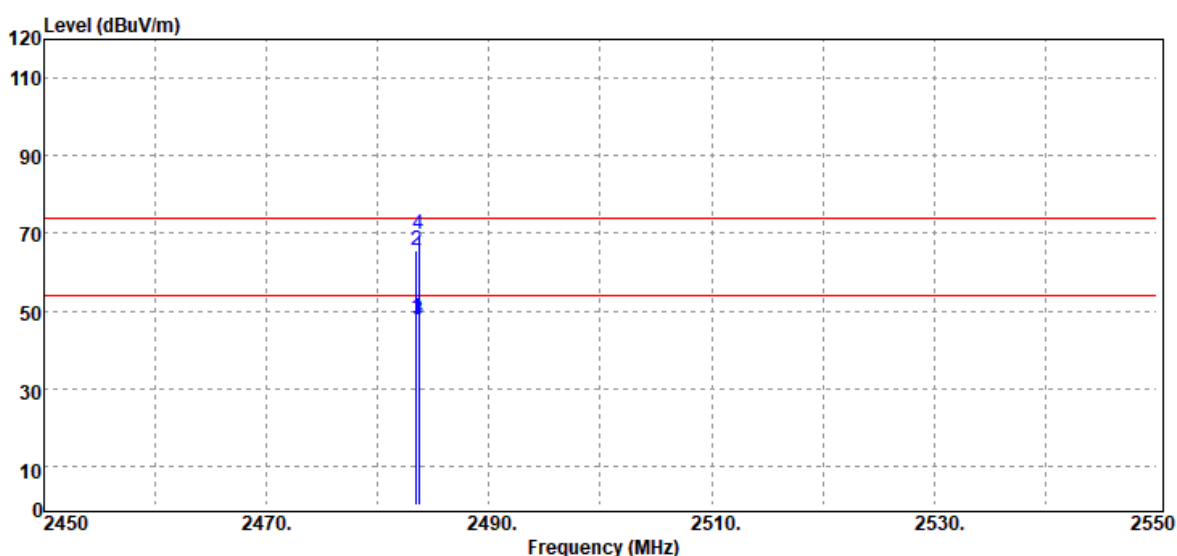
Rev.: 01

Test Mode	IEEE 802.11g Low CH 2412MHz	Temp/Hum	24.6(°C)/ 51%RH
Test Item	Band Edge	Test Date	June 02, 2020
Polarize	Horizontal	Test Engineer	Jerry Chang
Detector	Peak & Average		



Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
2390.00	Average	46.56	-3.17	43.39	54.00	-10.61
2390.00	Peak	61.45	-3.17	58.28	74.00	-15.72

Test Mode	IEEE 802.11g High CH 2462MHz	Temp/Hum	24.6(°C)/ 51%RH
Test Item	Band Edge	Test Date	June 02, 2020
Polarize	Vertical	Test Engineer	Jerry Chang
Detector	Peak / Average		



Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
2483.50	Average	50.86	-2.71	48.15	54.00	-5.85
2483.50	Peak	68.25	-2.71	65.54	74.00	-8.46
2483.70	Average	50.45	-2.71	47.74	54.00	-6.26
2483.70	Peak	72.39	-2.71	69.68	74.00	-4.32

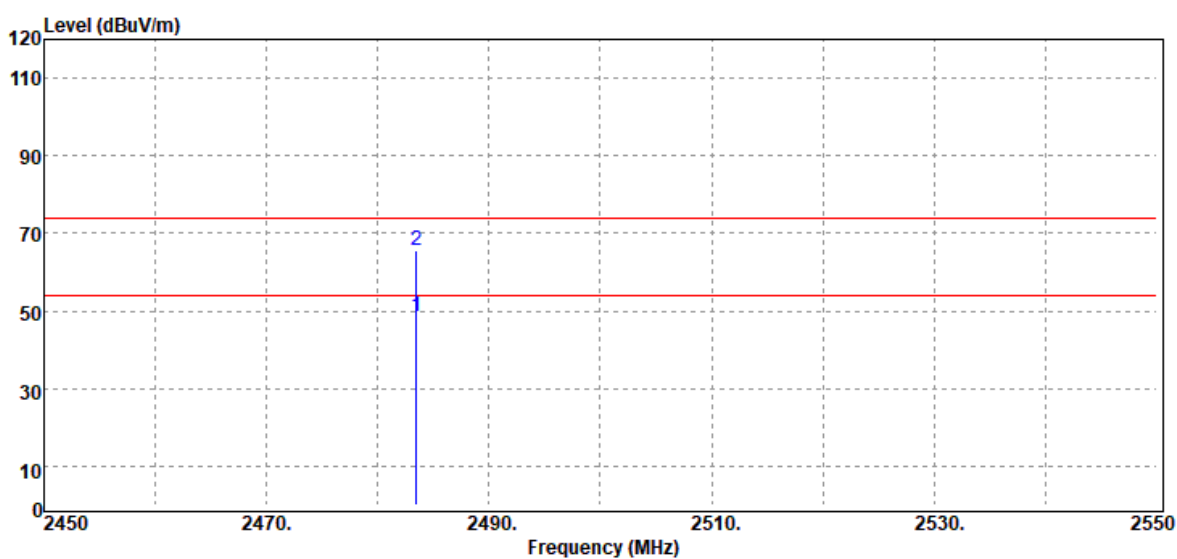


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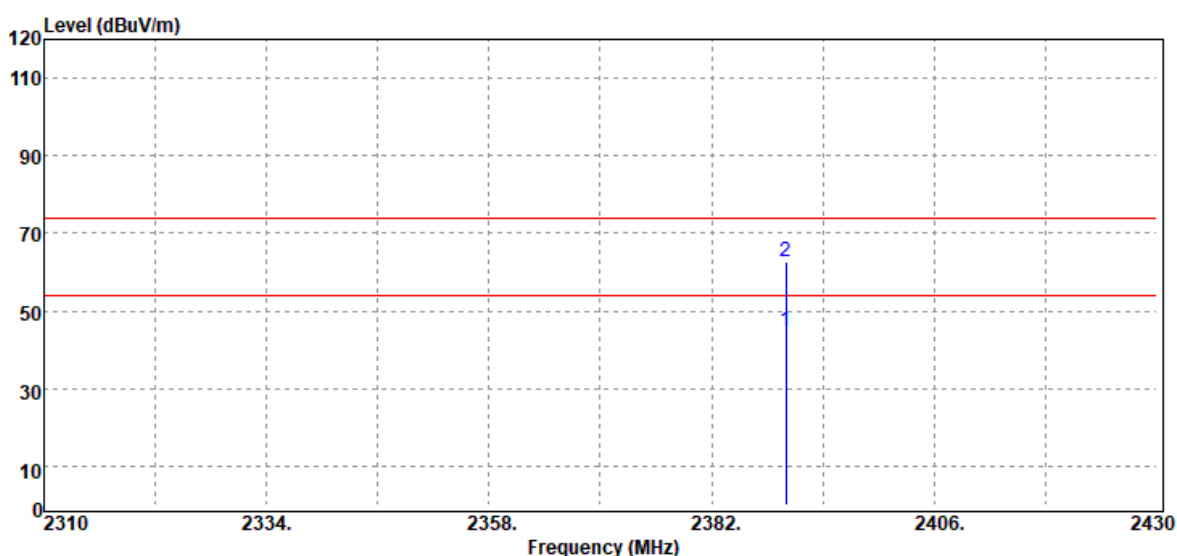
Rev.: 01

Test Mode	IEEE 802.11g High CH 2462MHz	Temp/Hum	24.6(°C)/ 51%RH
Test Item	Band Edge	Test Date	June 02, 2020
Polarize	Horizontal	Test Engineer	Jerry Chang
Detector	Peak & Average		



Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dB $\mu$ V)	Factor (dB)	Actual FS (dB $\mu$ V/m)	Limit @3m (dB $\mu$ V/m)	Margin (dB)
2483.50	Average	51.47	-2.71	48.76	54.00	-5.24
2483.50	Peak	68.32	-2.71	65.61	74.00	-8.39

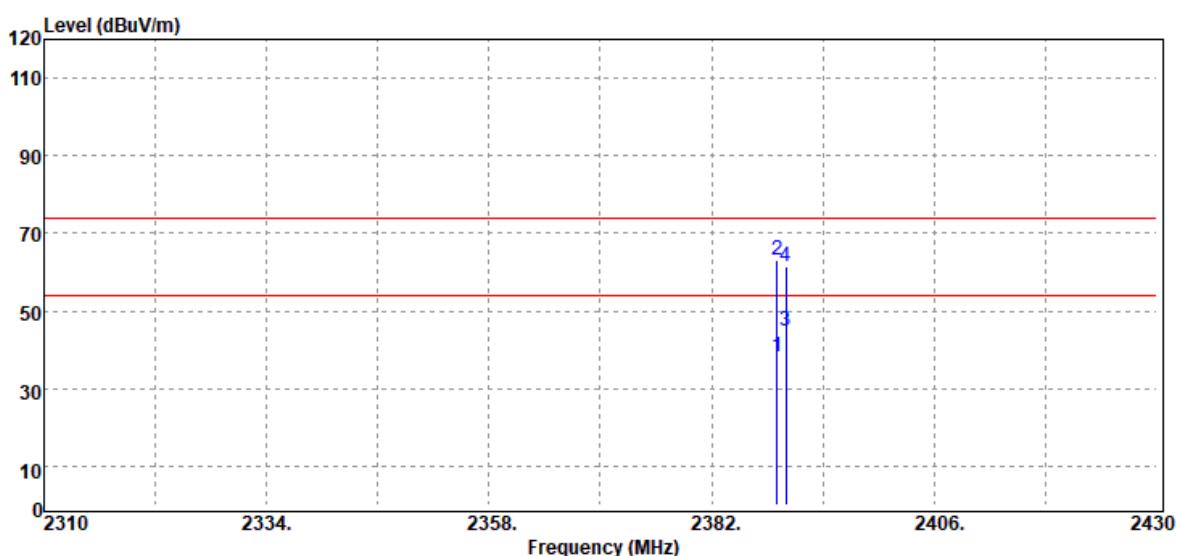
Test Mode	IEEE 802.11n HT20 Low CH 2412MHz	Temp/Hum	24.6(°C)/ 51%RH
Test Item	Band Edge	Test Date	June 02, 2020
Polarize	Vertical	Test Engineer	Jerry Chang
Detector	Peak / Average		



Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
2390.00	Average	47.81	-3.17	44.64	54.00	-9.36
2390.00	Peak	65.88	-3.17	62.71	74.00	-11.29

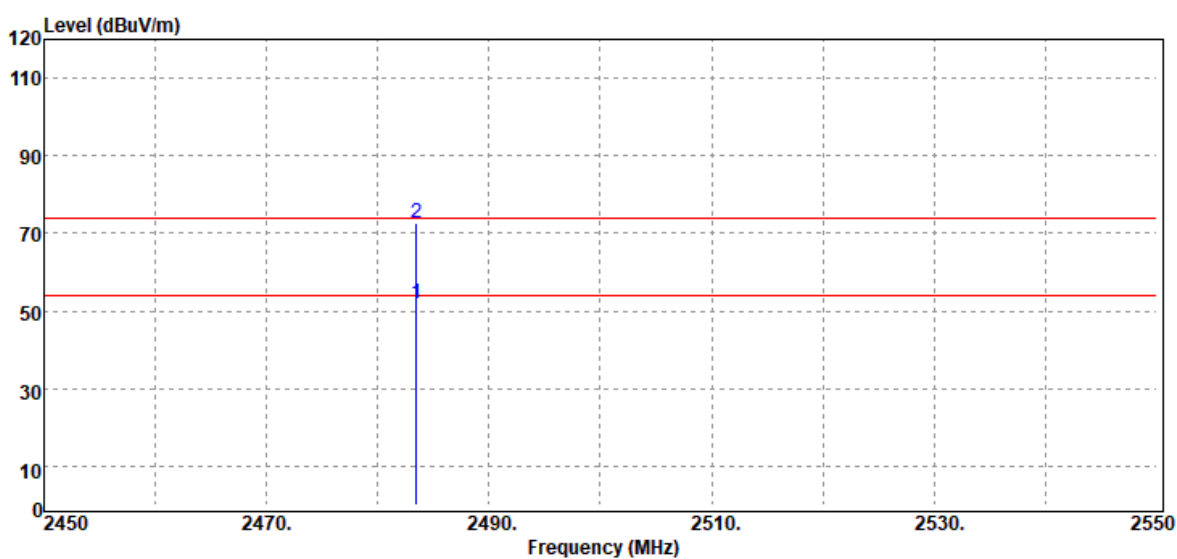


Test Mode	IEEE 802.11 n20 Low CH 2412MHz	Temp/Hum	24.6(°C)/ 51%RH
Test Item	Band Edge	Test Date	June 02, 2020
Polarize	Horizontal	Test Engineer	Jerry Chang
Detector	Peak & Average		



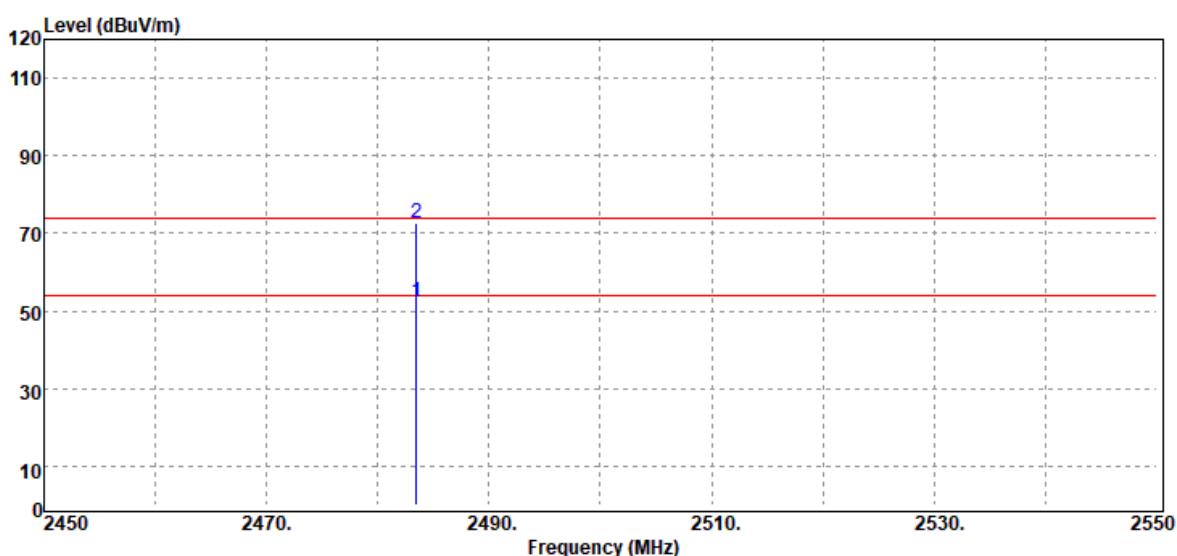
Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
2389.08	Average	41.42	-3.18	38.24	54.00	-15.76
2389.08	Peak	66.22	-3.18	63.04	74.00	-10.96
2390.00	Average	47.92	-3.17	44.75	54.00	-9.25
2390.00	Peak	64.76	-3.17	61.59	74.00	-12.41

Test Mode	IEEE 802.11n HT20 High CH 2462MHz	Temp/Hum	24.6(°C)/ 51%RH
Test Item	Band Edge	Test Date	June 02, 2020
Polarize	Vertical	Test Engineer	Jerry Chang
Detector	Peak / Average		



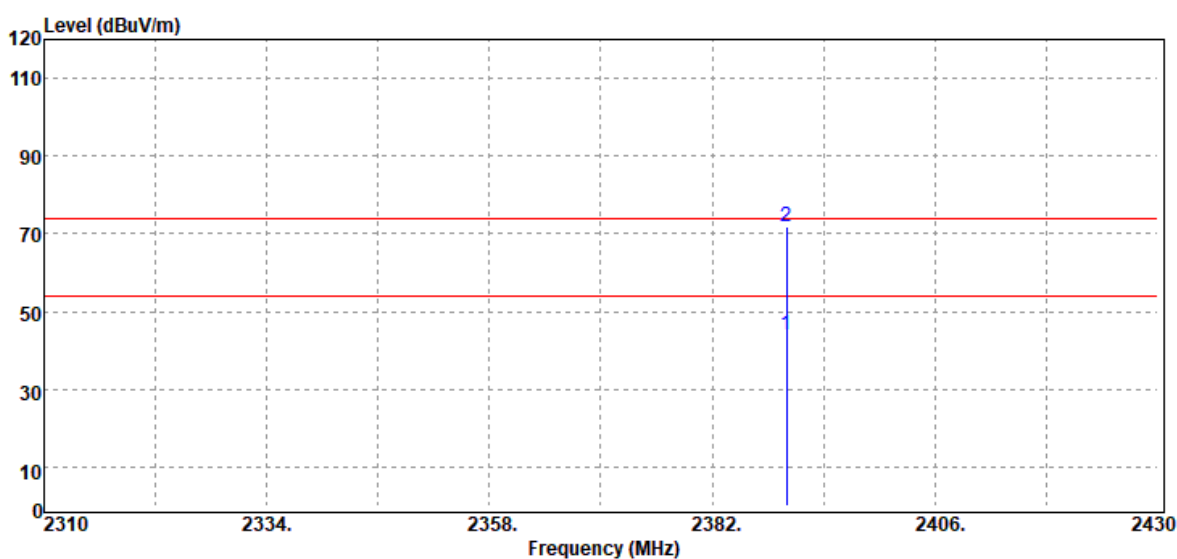
Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
2483.50	Average	54.52	-2.71	51.81	54.00	-2.19
2483.50	Peak	75.24	-2.71	72.53	74.00	-1.47

Test Mode	IEEE 802.11n20 High CH 2462MHz	Temp/Hum	24.6(°C)/ 51%RH
Test Item	Band Edge	Test Date	June 02, 2020
Polarize	Horizontal	Test Engineer	Jerry Chang
Detector	Peak & Average		



Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
2483.50	Average	54.99	-2.71	52.28	54.00	-1.72
2483.50	Peak	75.51	-2.71	72.80	74.00	-1.20

Test Mode	IEEE 802.11n HT40 Low CH 2422MHz	Temp/Hum	24.6(°C)/ 51%RH
Test Item	Band Edge	Test Date	June 02, 2020
Polarize	Vertical	Test Engineer	Jerry Chang
Detector	Peak / Average	Test Voltage	



Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
2390.00	Average	47.07	-3.17	43.90	54.00	-10.10
2390.00	Peak	74.80	-3.17	71.63	74.00	-2.37

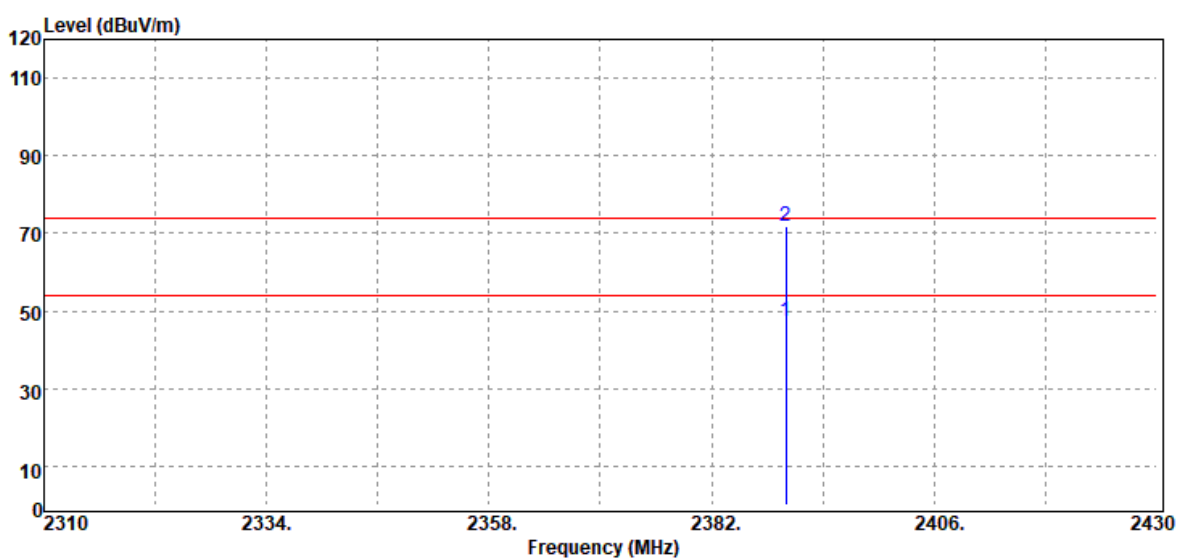


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Test Mode	IEEE 802.11n HT40 Low CH 2422MHz	Temp/Hum	24.6(°C)/ 51%RH
Test Item	Band Edge	Test Date	June 02, 2020
Polarize	Horizontal	Test Engineer	Jerry Chang
Detector	Peak / Average	Test Voltage	



Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
2390.00	Average	50.55	-3.17	47.38	54.00	-6.62
2390.00	Peak	75.10	-3.17	71.93	74.00	-2.07

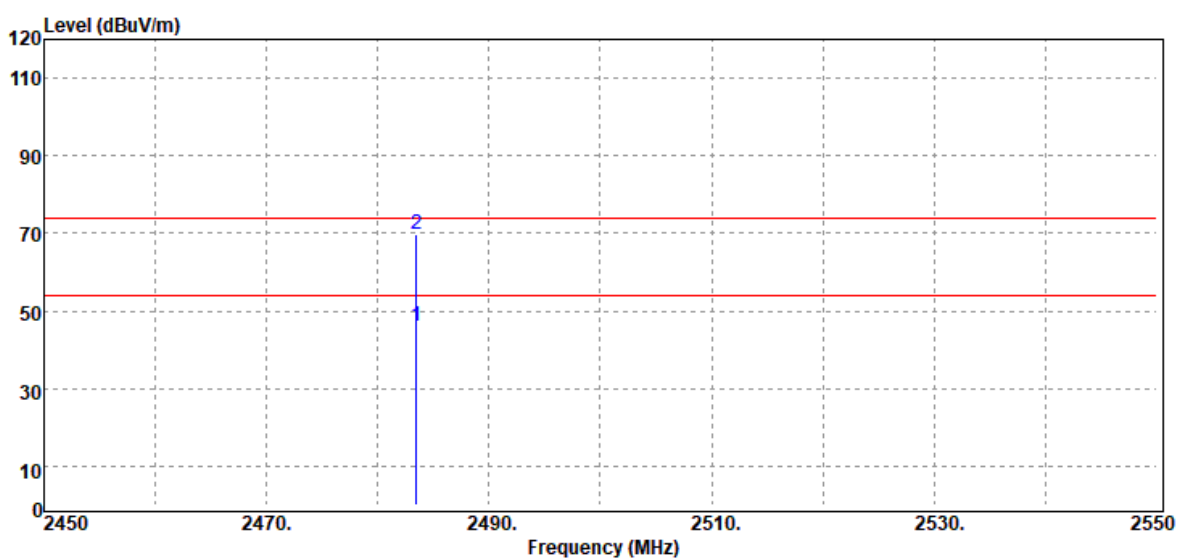


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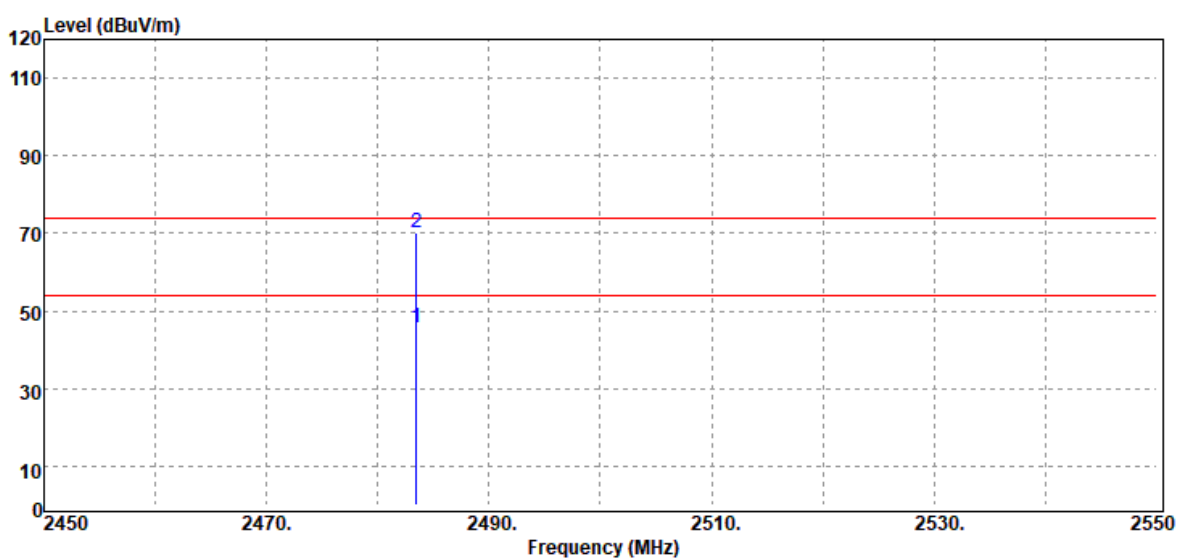
Rev.: 01

Test Mode	IEEE 802.11n HT40 High CH 2452MHz	Temp/Hum	24.6(°C)/ 51%RH
Test Item	Band Edge	Test Date	June 02, 2020
Polarize	Vertical	Test Engineer	Jerry Chang
Detector	Peak / Average	Test Voltage	



Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
2483.50	Average	48.79	-2.71	46.08	54.00	-7.92
2483.50	Peak	72.39	-2.71	69.68	74.00	-4.32

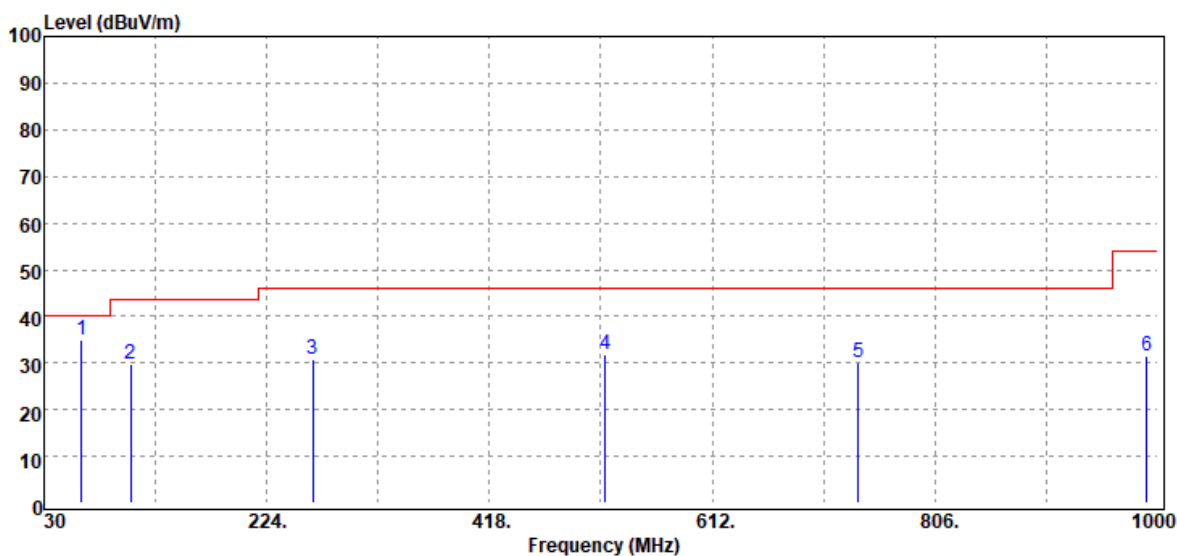
Test Mode	IEEE 802.11n HT40 High CH 2452MHz	Temp/Hum	24.6(°C)/ 51%RH
Test Item	Band Edge	Test Date	June 02, 2020
Polarize	Horizontal	Test Engineer	Jerry Chang
Detector	Peak / Average	Test Voltage	



Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
2483.50	Average	48.22	-2.71	45.51	54.00	-8.49
2483.50	Peak	73.06	-2.71	70.35	74.00	-3.65

### Below 1G Test Data

Test Mode	Mode 1	Temp/Hum	24.6(°C)/ 51%RH
Test Item	30MHz-1GHz	Test Date	June 03, 2020
Polarize	Vertical	Test Engineer	Jerry Chang
Detector	Peak	Test Voltage	

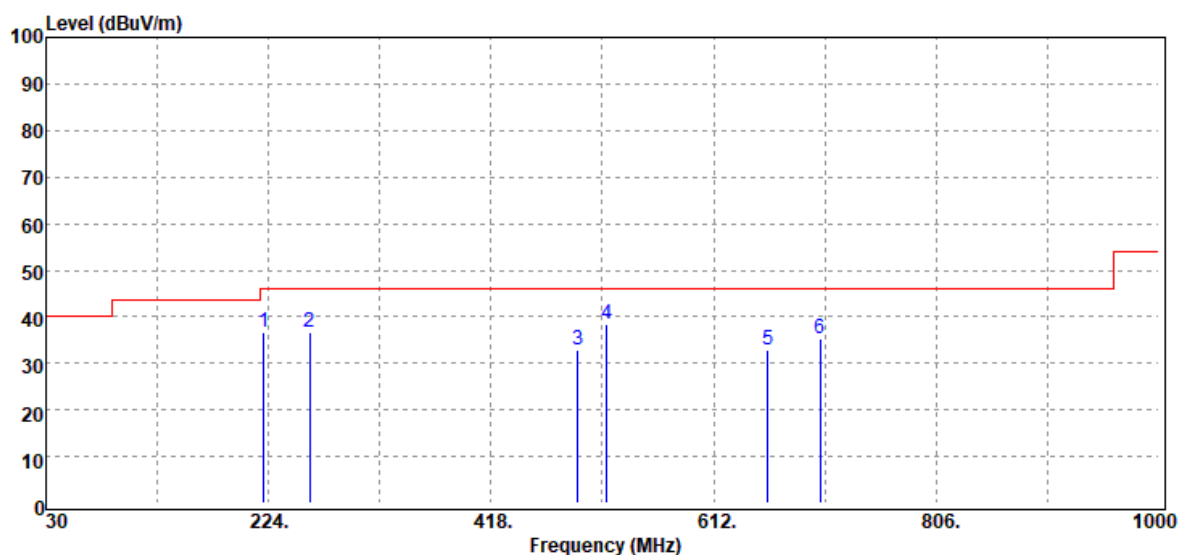


Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
62.98	Peak	50.63	-15.67	34.96	40.00	-5.04
105.66	Peak	40.94	-11.23	29.71	43.50	-13.79
263.77	Peak	40.11	-9.40	30.71	46.00	-15.29
518.88	Peak	34.90	-3.06	31.84	46.00	-14.16
739.07	Peak	29.32	0.69	30.01	46.00	-15.99
990.30	Peak	26.68	4.87	31.55	54.00	-22.45

Note: No emission found between lowest internal used/generated frequency to 30MHz(9KHz~30MHz)



Test Mode	Mode 1	Temp/Hum	24.6(°C)/ 51%RH
Test Item	30MHz-1GHz	Test Date	June 03, 2020
Polarize	Horizontal	Test Engineer	Jerry Chang
Detector	Peak	Test Voltage	

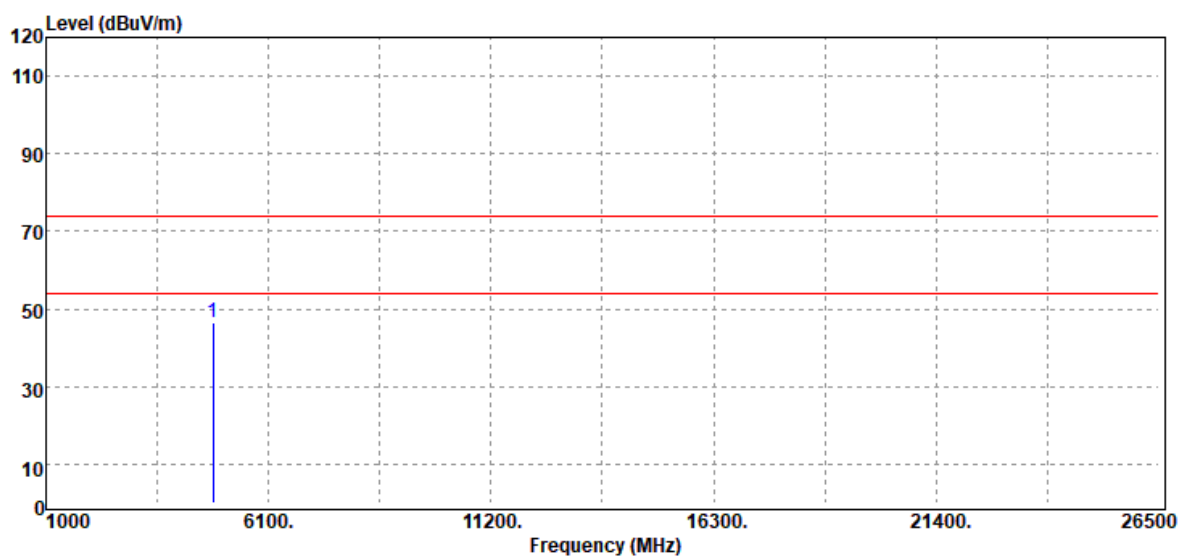


Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
220.12	Peak	48.35	-11.74	36.61	46.00	-9.39
259.89	Peak	46.68	-10.03	36.65	46.00	-9.35
493.66	Peak	36.04	-3.20	32.84	46.00	-13.16
518.88	Peak	41.45	-3.06	38.39	46.00	-7.61
659.53	Peak	33.38	-0.54	32.84	46.00	-13.16
705.12	Peak	34.95	0.26	35.21	46.00	-10.79

Note: No emission found between lowest internal used/generated frequency to 30MHz(9KHz~30MHz)

### Above 1G Test Data

Test Mode	IEEE 802.11b Low CH	Temp/Hum	24.6(°C)/ 51%RH
Test Item	Harmonic	Test Date	June 02, 2020
Polarize	Vertical	Test Engineer	Jerry Chang
Detector	Peak		

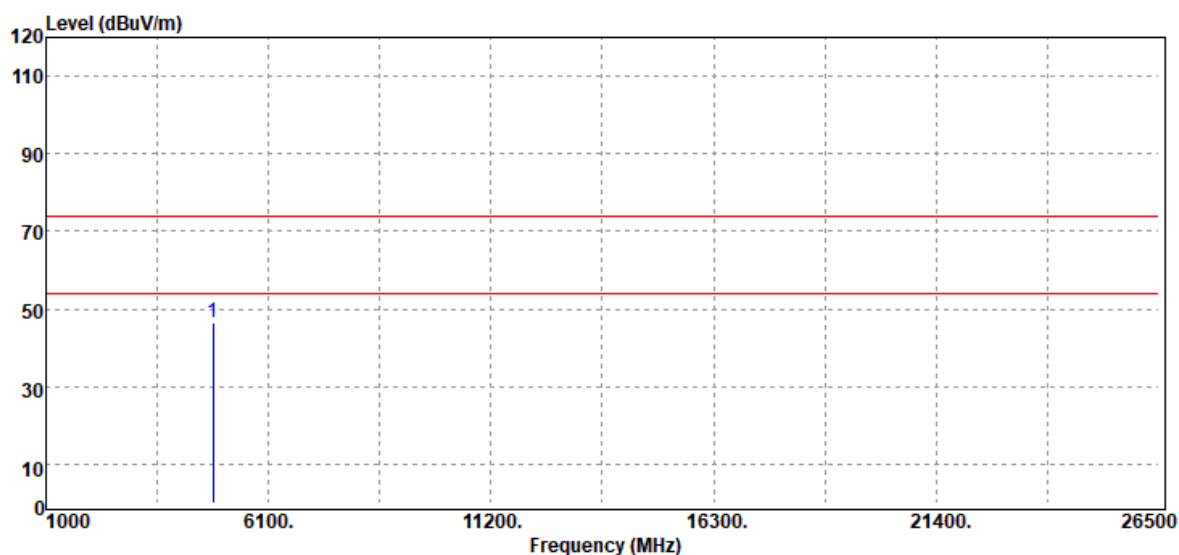


Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
4824.00	Peak	42.95	3.35	46.30	74.00	-27.70
N/A						

#### Remark:

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11b Low CH	Temp/Hum	24.6(°C)/ 51%RH
Test Item	Harmonic	Test Date	June 02, 2020
Polarize	Horizontal	Test Engineer	Jerry Chang
Detector	Peak		

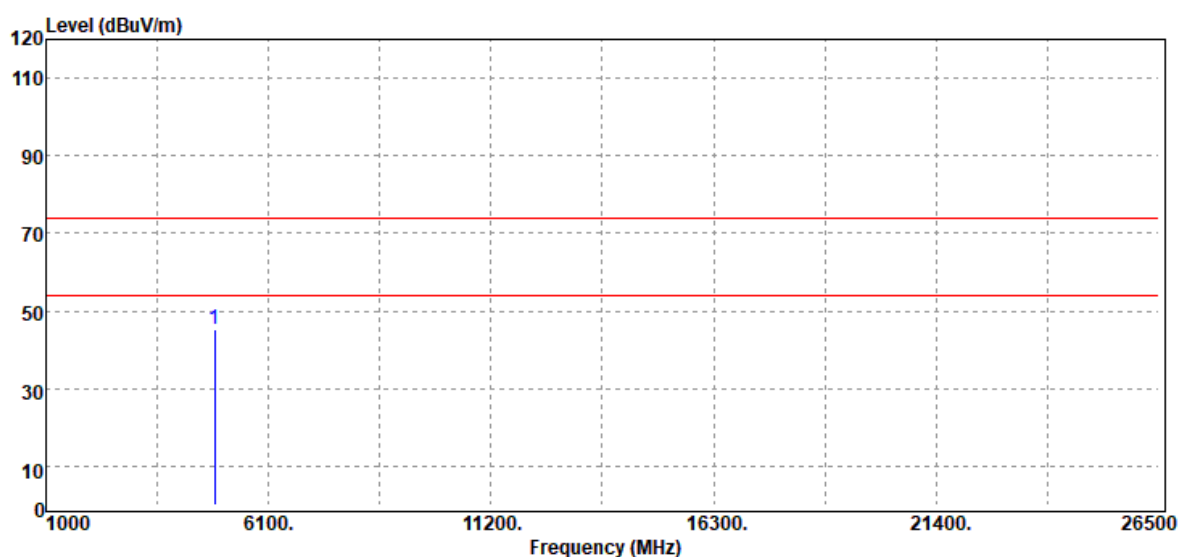


Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
4824.00	Peak	43.00	3.35	46.35	74.00	-27.65
N/A						

**Remark:**

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11b Mid CH	Temp/Hum	24.6(°C)/ 51%RH
Test Item	Harmonic	Test Date	June 02, 2020
Polarize	Vertical	Test Engineer	Jerry Chang
Detector	Peak		

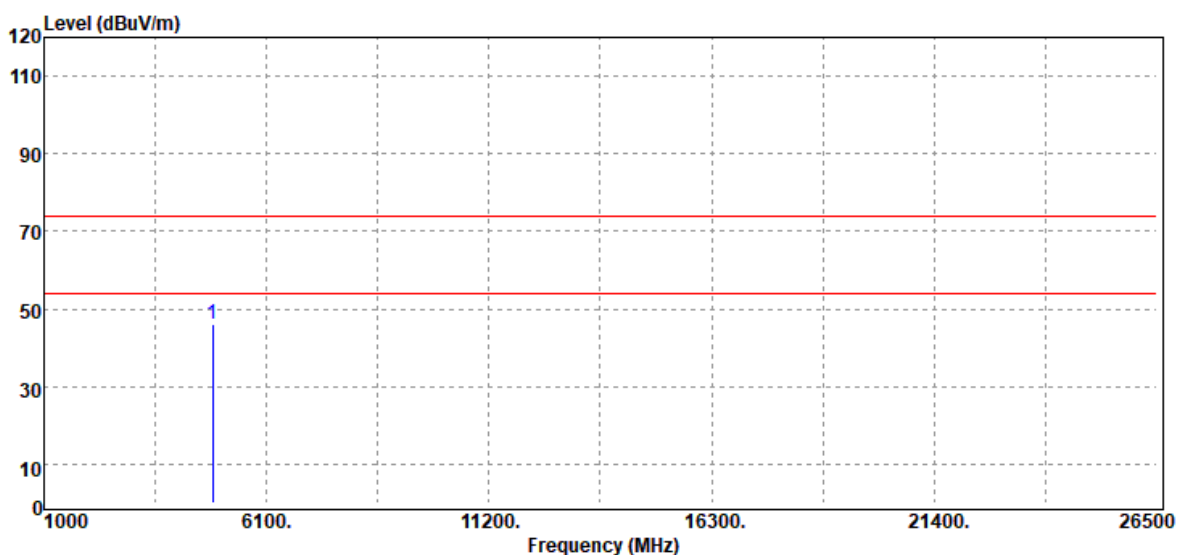


Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
4874.00	Peak	41.79	3.48	45.27	74.00	-28.73
N/A						

**Remark:**

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11b Mid CH	Temp/Hum	24.6(°C)/ 51%RH
Test Item	Harmonic	Test Date	June 02, 2020
Polarize	Horizontal	Test Engineer	Jerry Chang
Detector	Peak		

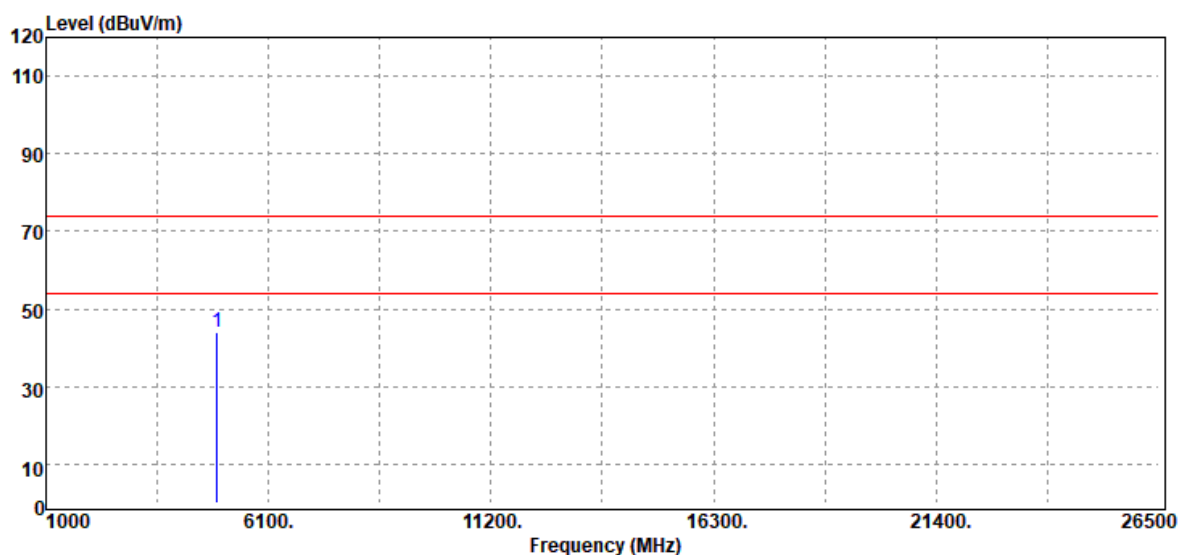


Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
4874.00	Peak	42.52	3.48	46.00	74.00	-28.00
N/A						

**Remark:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11b High CH	Temp/Hum	24.6(°C)/ 51%RH
Test Item	Harmonic	Test Date	June 02, 2020
Polarize	Vertical	Test Engineer	Jerry Chang
Detector	Peak		

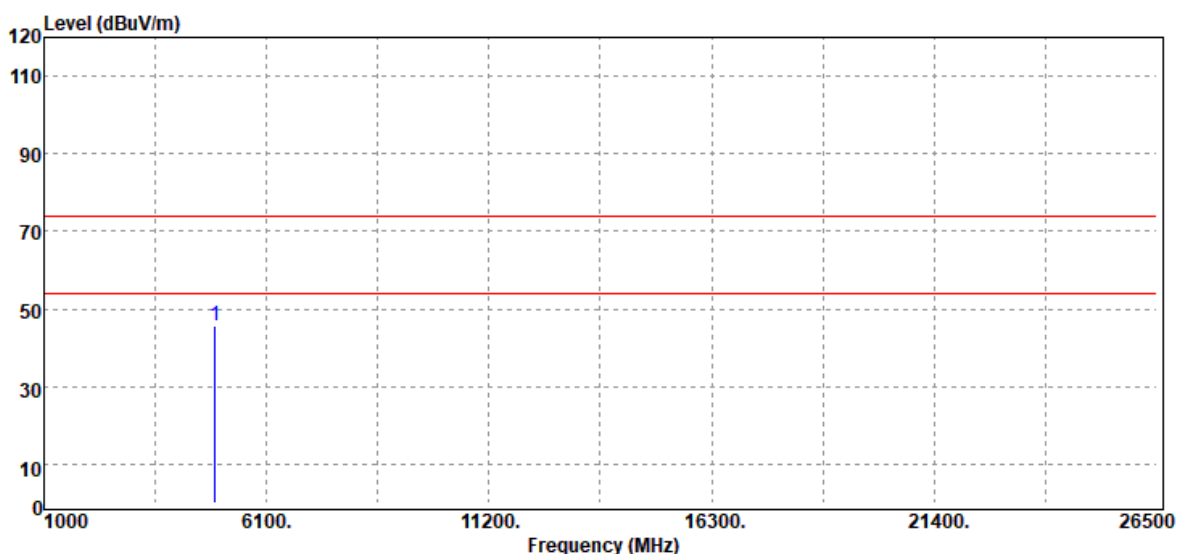


Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
4924.00	Peak	40.21	4.01	44.22	74.00	-29.78
N/A						

**Remark:**

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11b High CH	Temp/Hum	24.6(°C)/ 51%RH
Test Item	Harmonic	Test Date	June 02, 2020
Polarize	Horizontal	Test Engineer	Jerry Chang
Detector	Peak		

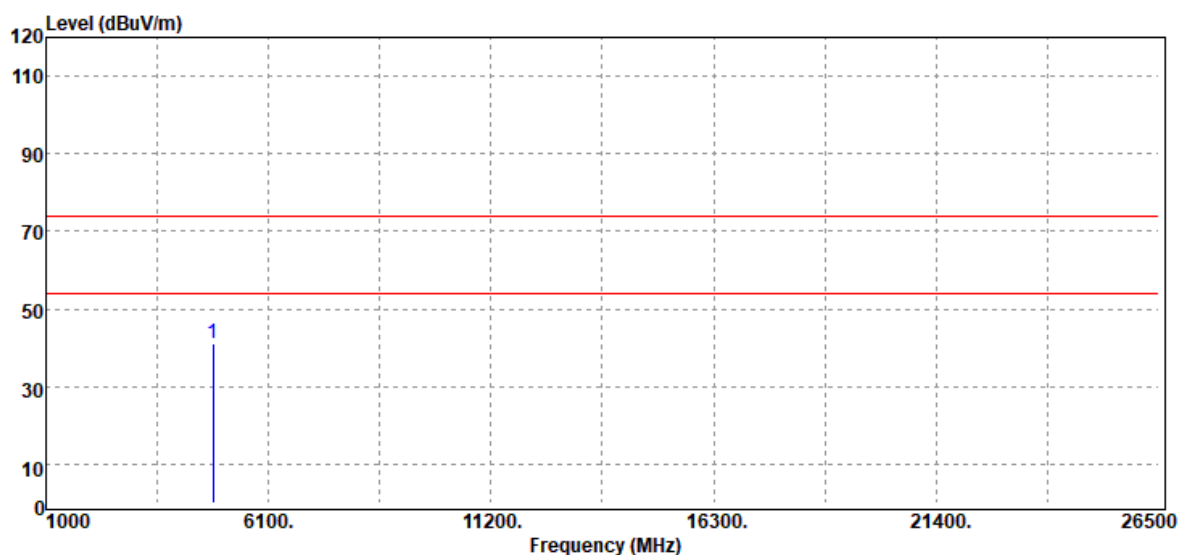


Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
4924.00	Peak	41.58	4.01	45.59	74.00	-28.41
N/A						

**Remark:**

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11g Low CH	Temp/Hum	24.6(°C)/ 51%RH
Test Item	Harmonic	Test Date	June 02, 2020
Polarize	Vertical	Test Engineer	Jerry Chang
Detector	Peak		



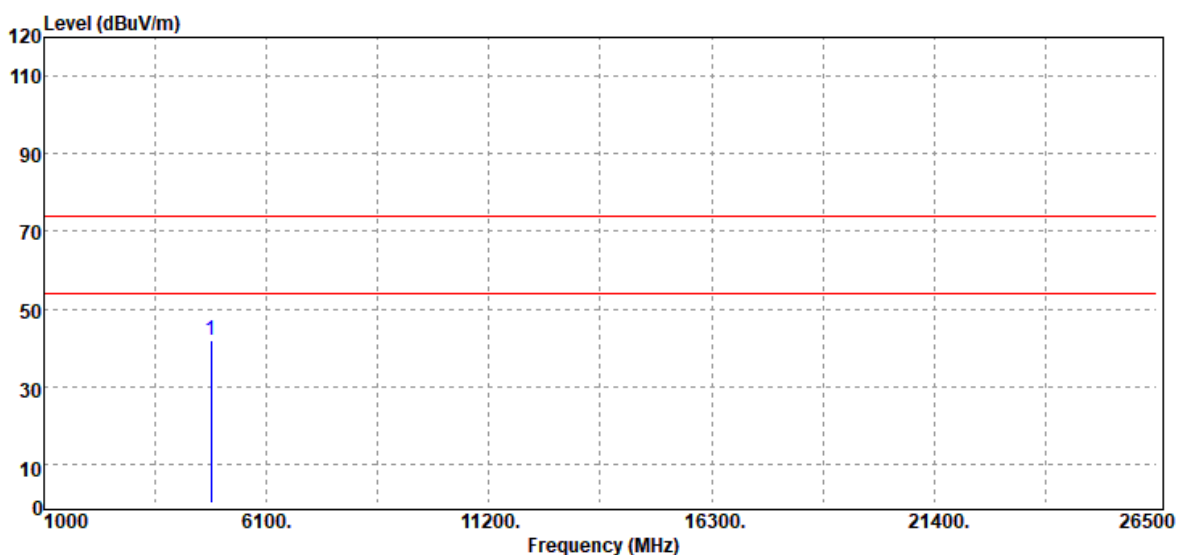
Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
4824.00	Peak	37.89	3.35	41.24	74.00	-32.76
N/A						

**Remark:**

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit



Test Mode	IEEE 802.11g Low CH	Temp/Hum	24.6(°C)/ 51%RH
Test Item	Harmonic	Test Date	June 02, 2020
Polarize	Horizontal	Test Engineer	Jerry Chang
Detector	Peak		

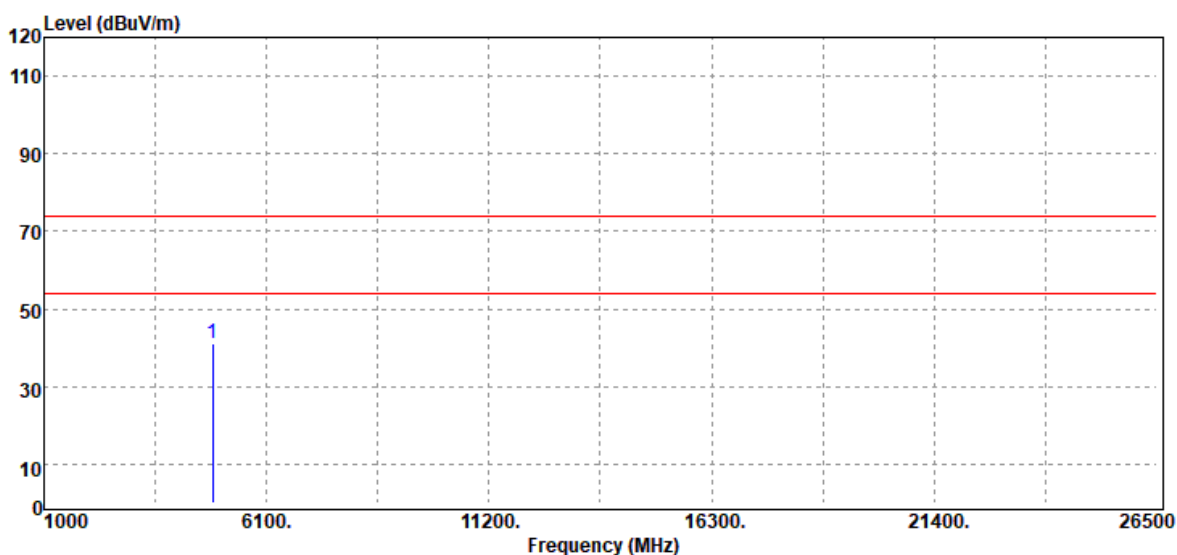


Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
4824.00	Peak	38.40	3.35	41.75	74.00	-32.25
N/A						

**Remark:**

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11g Mid CH	Temp/Hum	24.6(°C)/ 51%RH
Test Item	Harmonic	Test Date	June 02, 2020
Polarize	Vertical	Test Engineer	Jerry Chang
Detector	Peak		

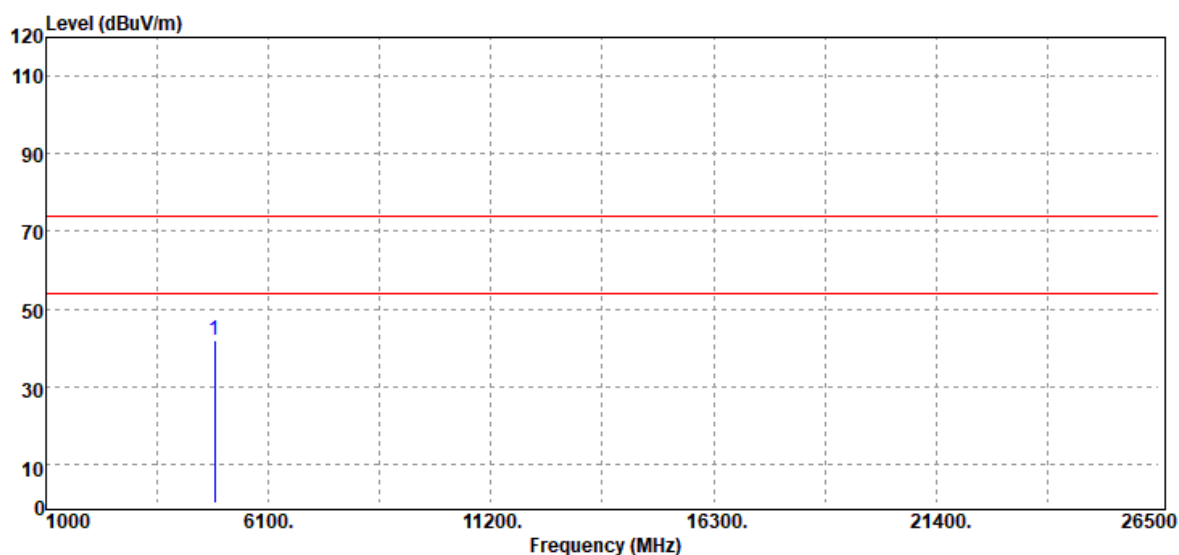


Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
4874.00	Peak	37.58	3.48	41.06	74.00	-32.94
N/A						

**Remark:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11g Mid CH	Temp/Hum	24.6(°C)/ 51%RH
Test Item	Harmonic	Test Date	June 02, 2020
Polarize	Horizontal	Test Engineer	Jerry Chang
Detector	Peak		

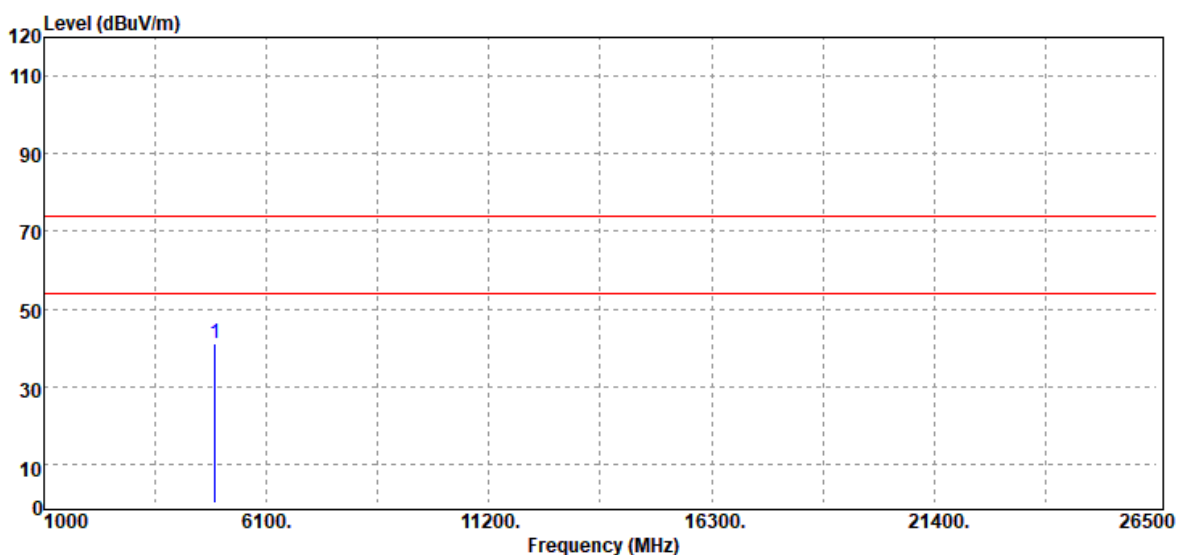


Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
4874.00	Peak	38.45	3.48	41.93	74.00	-32.07
N/A						

**Remark:**

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11g High CH	Temp/Hum	24.6(°C)/ 51%RH
Test Item	Harmonic	Test Date	June 02, 2020
Polarize	Vertical	Test Engineer	Jerry Chang
Detector	Peak		

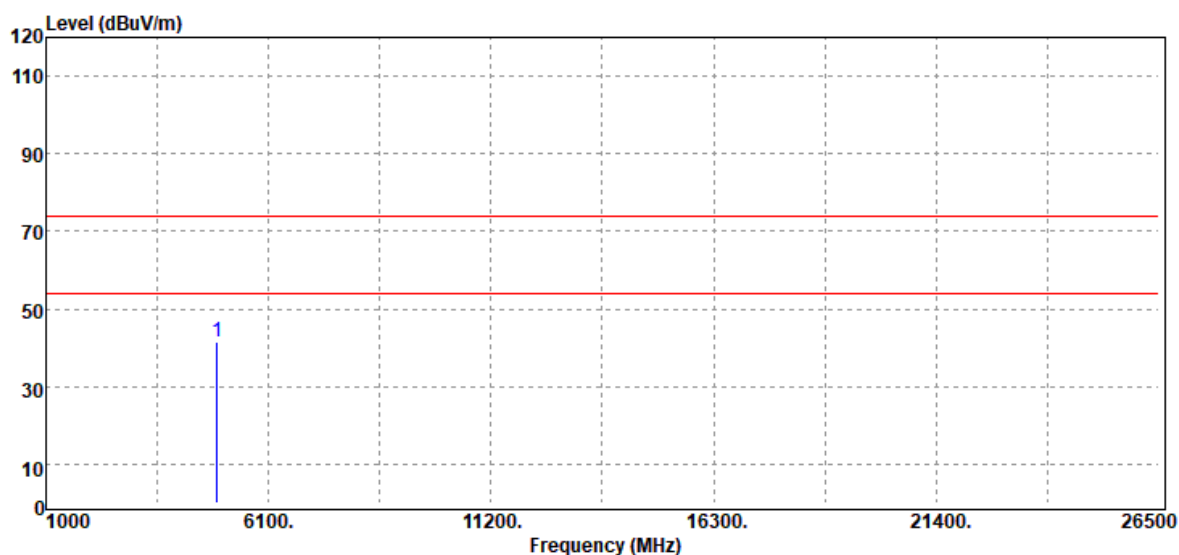


Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
4924.00	Peak	36.95	4.01	40.96	74.00	-33.04
N/A						

**Remark:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11g High CH	Temp/Hum	24.6(°C)/ 51%RH
Test Item	Harmonic	Test Date	June 02, 2020
Polarize	Horizontal	Test Engineer	Jerry Chang
Detector	Peak		

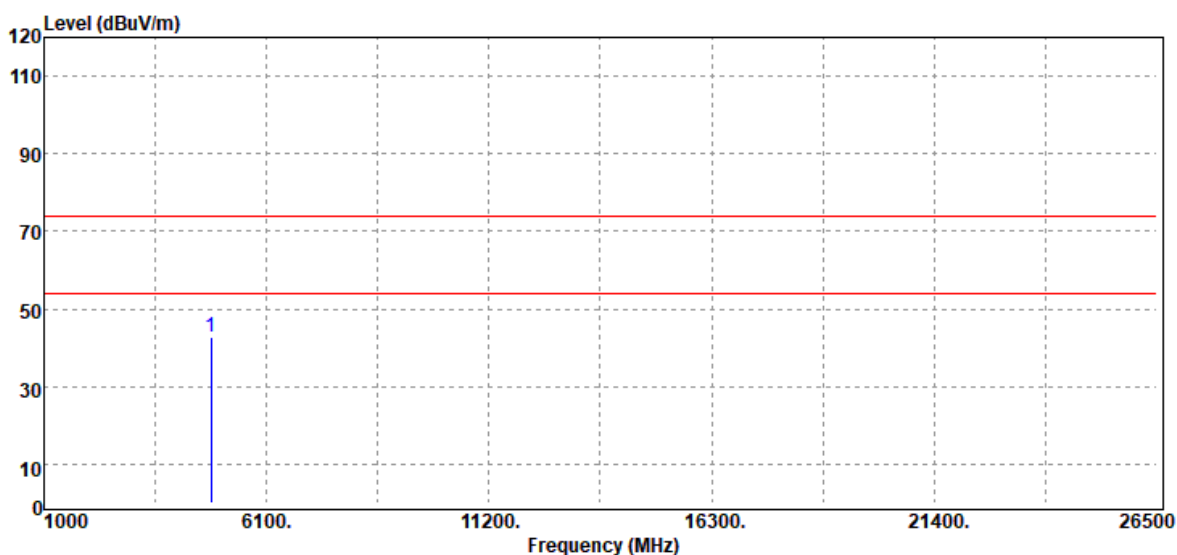


Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
4924.00	Peak	37.65	4.01	41.66	74.00	-32.34
N/A						

**Remark:**

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT20 Low CH	Temp/Hum	24.6(°C)/ 51%RH
Test Item	Harmonic	Test Date	June 03, 2020
Polarize	Vertical	Test Engineer	Jerry Chang
Detector	Peak		

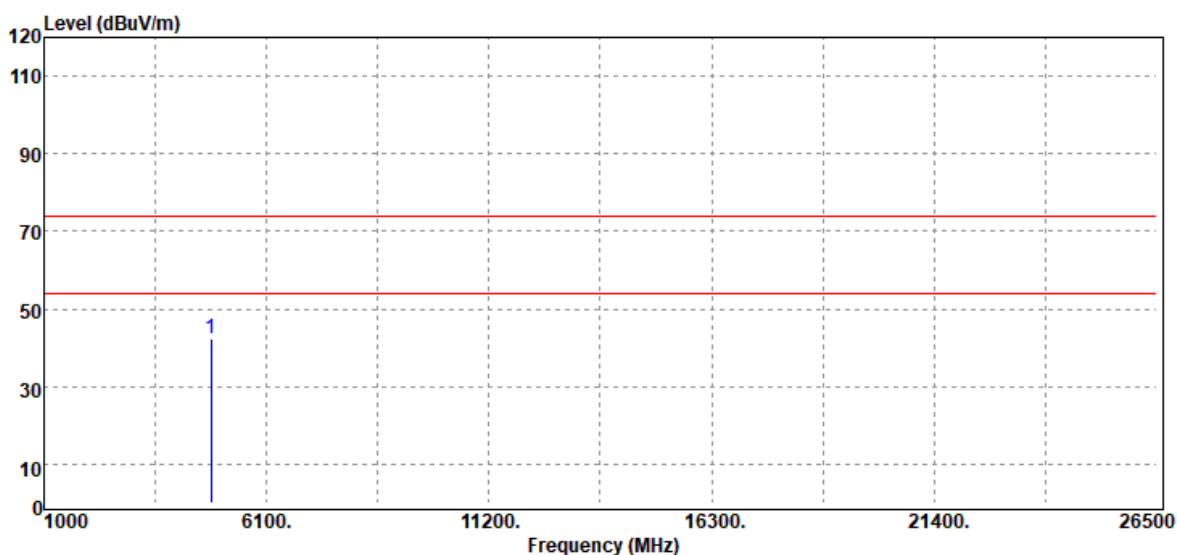


Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
4824.00	Peak	39.53	3.35	42.88	74.00	-31.12
N/A						

**Remark:**

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT20 Low CH	Temp/Hum	24.6(°C)/ 51%RH
Test Item	Harmonic	Test Date	June 03, 2020
Polarize	Horizontal	Test Engineer	Jerry Chang
Detector	Peak		

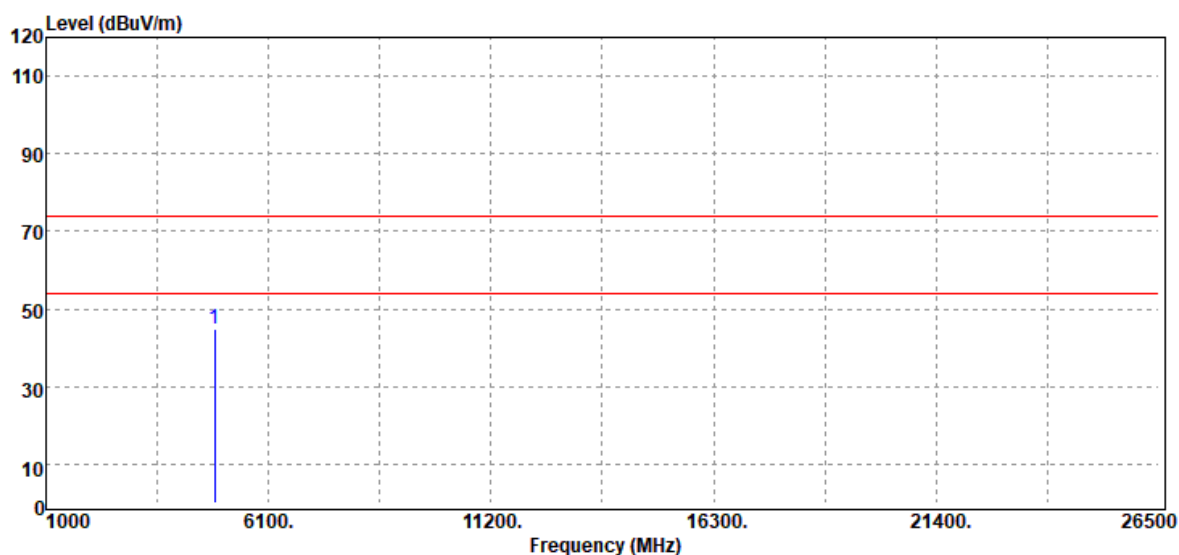


Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
4824.00	Peak	38.82	3.35	42.17	74.00	-31.83
N/A						

**Remark:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT20 Mid CH	Temp/Hum	24.6(°C)/ 51%RH
Test Item	Harmonic	Test Date	June 03, 2020
Polarize	Vertical	Test Engineer	Jerry Chang
Detector	Peak		



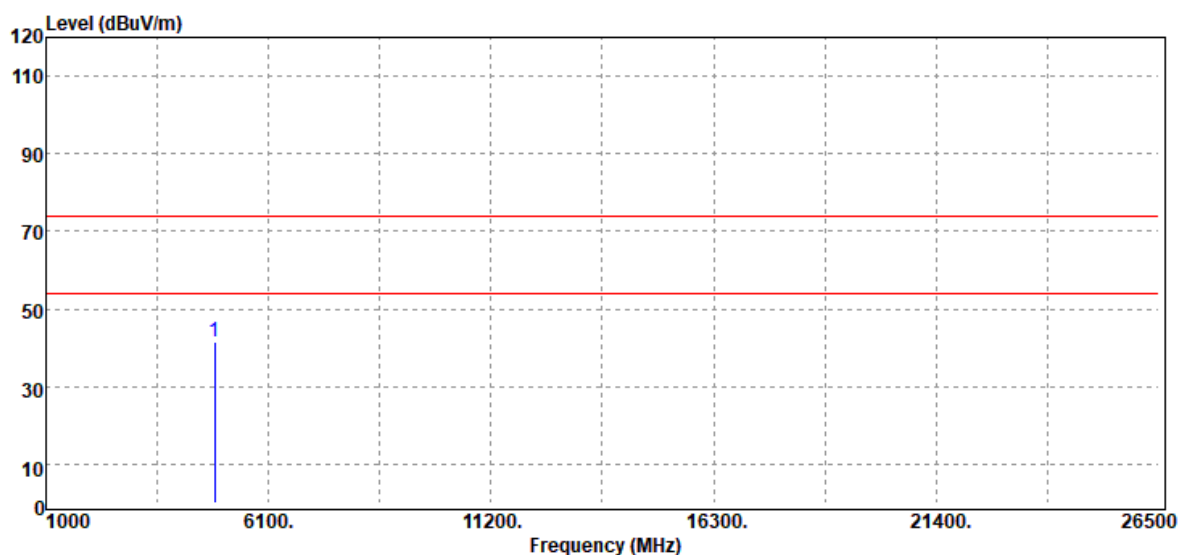
Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
4874.00	Peak	41.22	3.48	44.70	74.00	-29.30
N/A						

**Remark:**

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit



Test Mode	IEEE 802.11n HT20 Mid CH	Temp/Hum	24.6(°C)/ 51%RH
Test Item	Harmonic	Test Date	June 03, 2020
Polarize	Horizontal	Test Engineer	Jerry Chang
Detector	Peak		

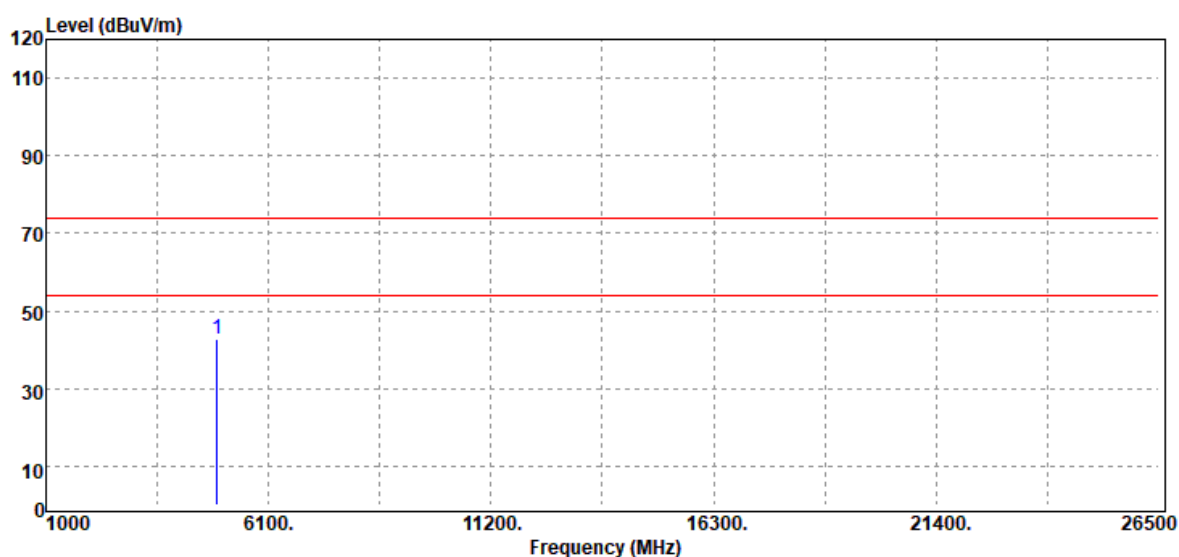


Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
4874.00	Peak	37.93	3.48	41.41	74.00	-32.59
N/A						

**Remark:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT20 High CH	Temp/Hum	24.6(°C)/ 51%RH
Test Item	Harmonic	Test Date	June 03, 2020
Polarize	Vertical	Test Engineer	Jerry Chang
Detector	Peak		

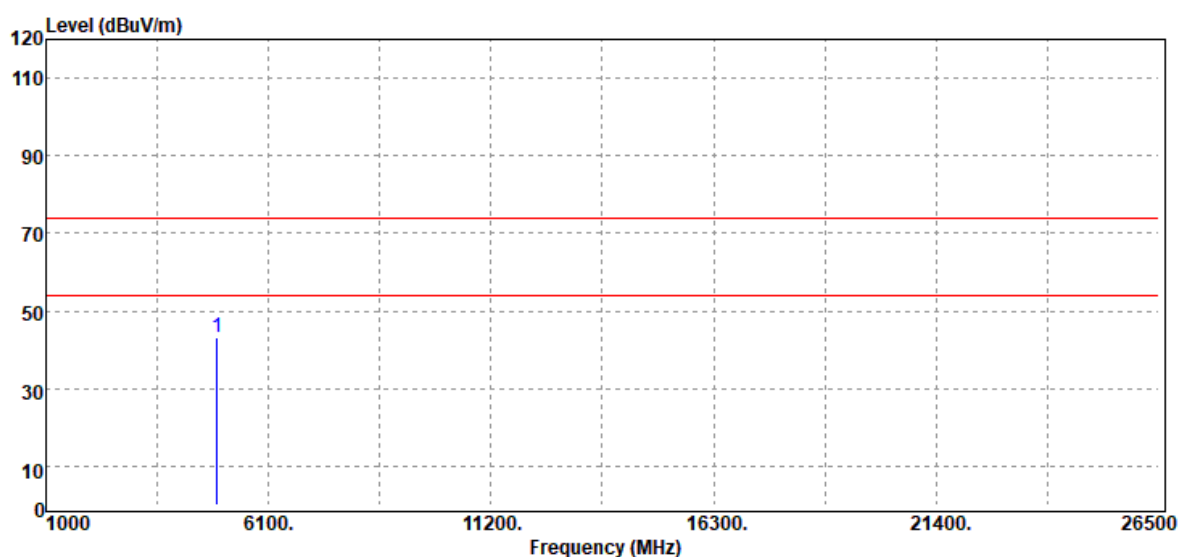


Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
4924.00	Peak	38.85	4.01	42.86	74.00	-31.14
N/A						

**Remark:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT20 High CH	Temp/Hum	24.6(°C)/ 51%RH
Test Item	Harmonic	Test Date	June 03, 2020
Polarize	Horizontal	Test Engineer	Jerry Chang
Detector	Peak		

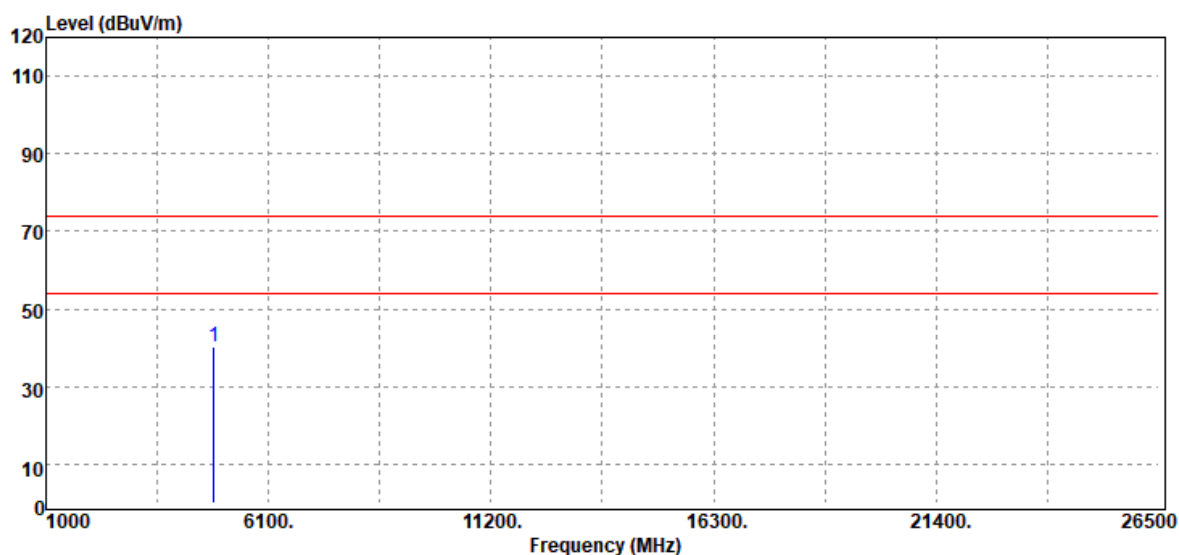


Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
4924.00	Peak	39.35	4.01	43.36	74.00	-30.64
N/A						

**Remark:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT40 Low CH	Temp/Hum	24.6(°C)/ 51%RH
Test Item	Harmonic	Test Date	June 03, 2020
Polarize	Vertical	Test Engineer	Jerry Chang
Detector	Peak		

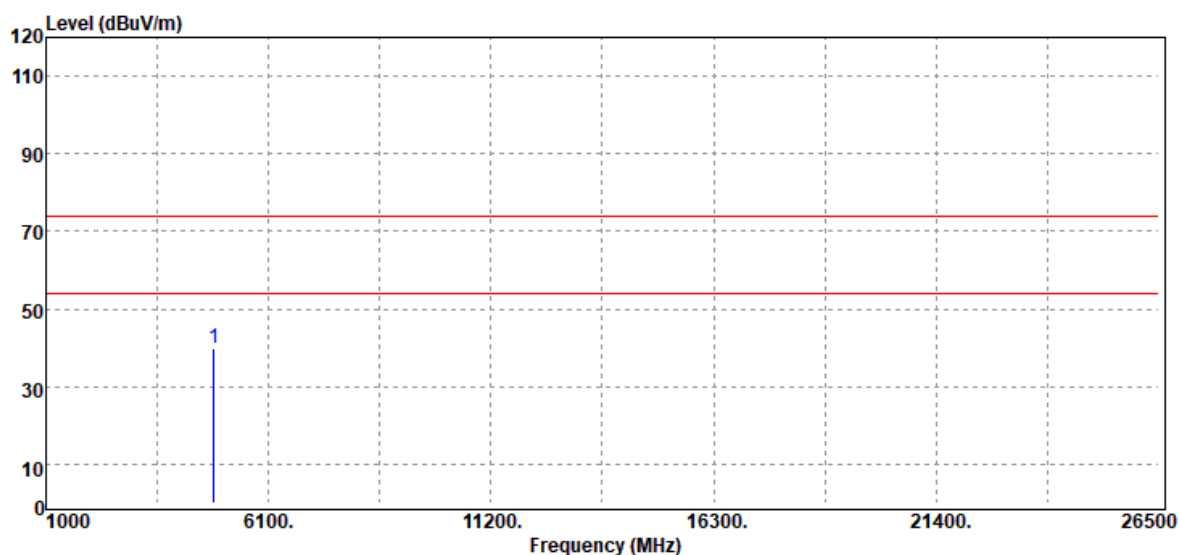


Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
4844.00	Peak	36.74	3.35	40.09	74.00	-33.91
N/A						

**Remark:**

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT40 Low CH	Temp/Hum	24.6(°C)/ 51%RH
Test Item	Harmonic	Test Date	June 03, 2020
Polarize	Horizontal	Test Engineer	Jerry Chang
Detector	Peak		

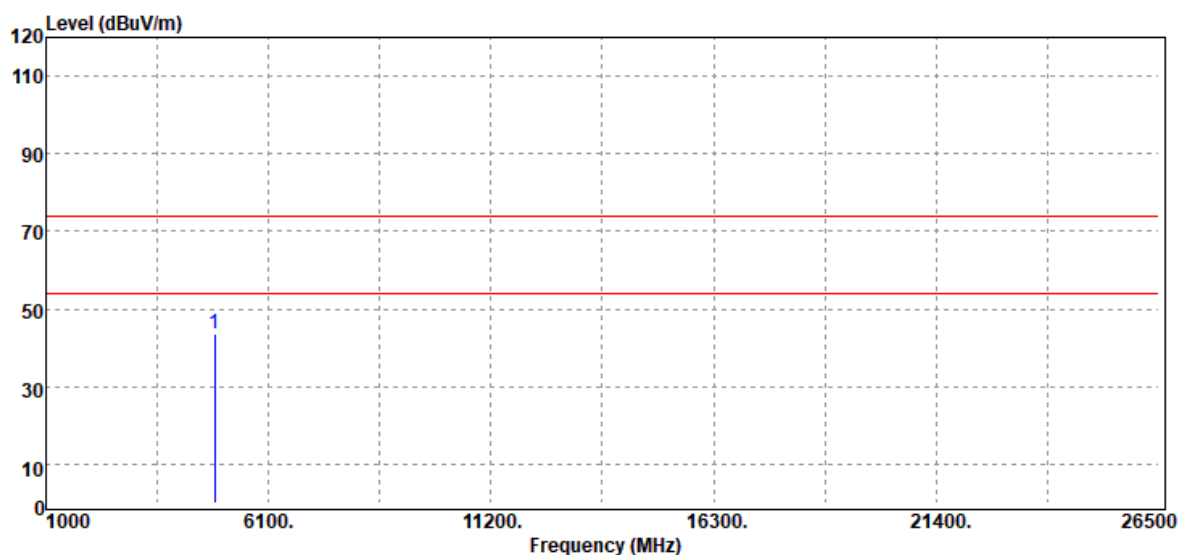


Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
4844.00	Peak	36.63	3.35	39.98	74.00	-34.02
N/A						

**Remark:**

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT40 Mid CH	Temp/Hum	24.6(°C)/ 51%RH
Test Item	Harmonic	Test Date	June 03, 2020
Polarize	Vertical	Test Engineer	Jerry Chang
Detector	Peak		

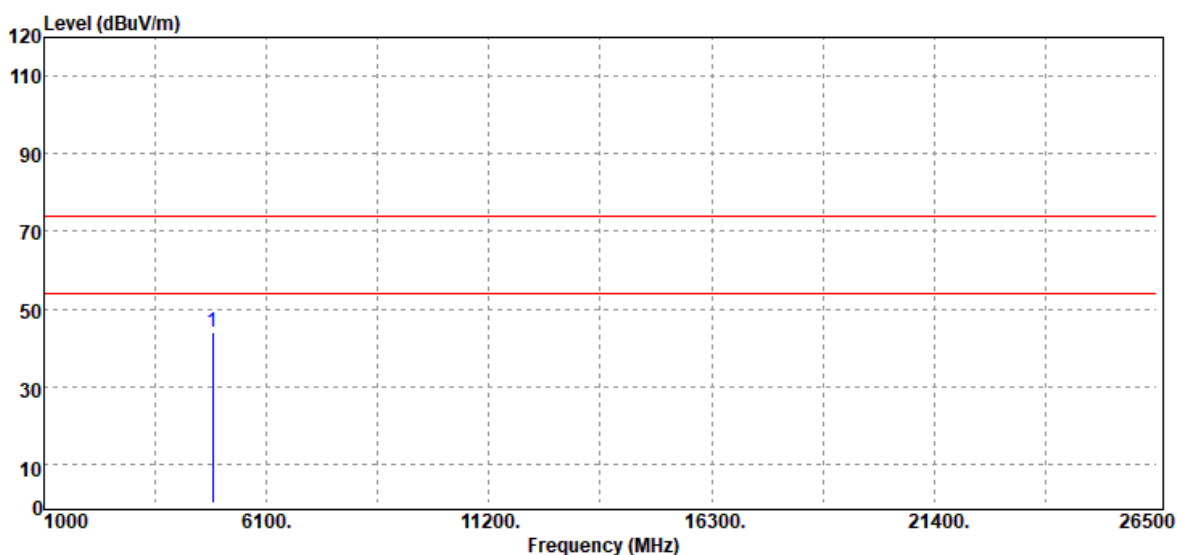


Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
4874.00	Peak	40.06	3.48	43.54	74.00	-30.46
N/A						

**Remark:**

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT40 Mid CH	Temp/Hum	24.6(°C)/ 51%RH
Test Item	Harmonic	Test Date	June 03, 2020
Polarize	Horizontal	Test Engineer	Jerry Chang
Detector	Peak		

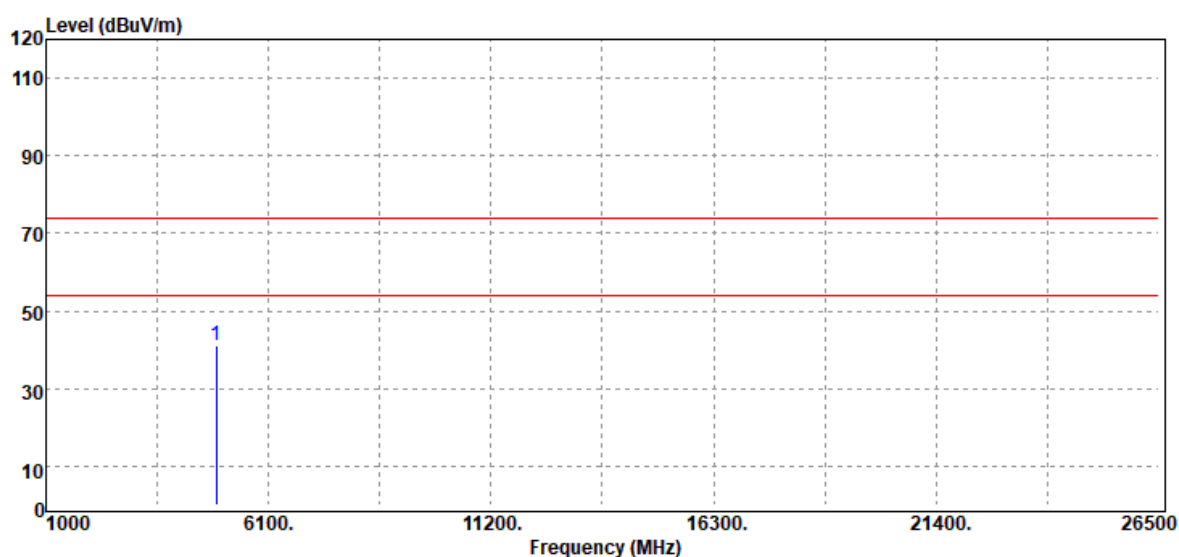


Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
4874.00	Peak	40.64	3.48	44.12	74.00	-29.88
N/A						

**Remark:**

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT40 High CH	Temp/Hum	24.6(°C)/ 51%RH
Test Item	Harmonic	Test Date	June 03, 2020
Polarize	Vertical	Test Engineer	Jerry Chang
Detector	Peak		



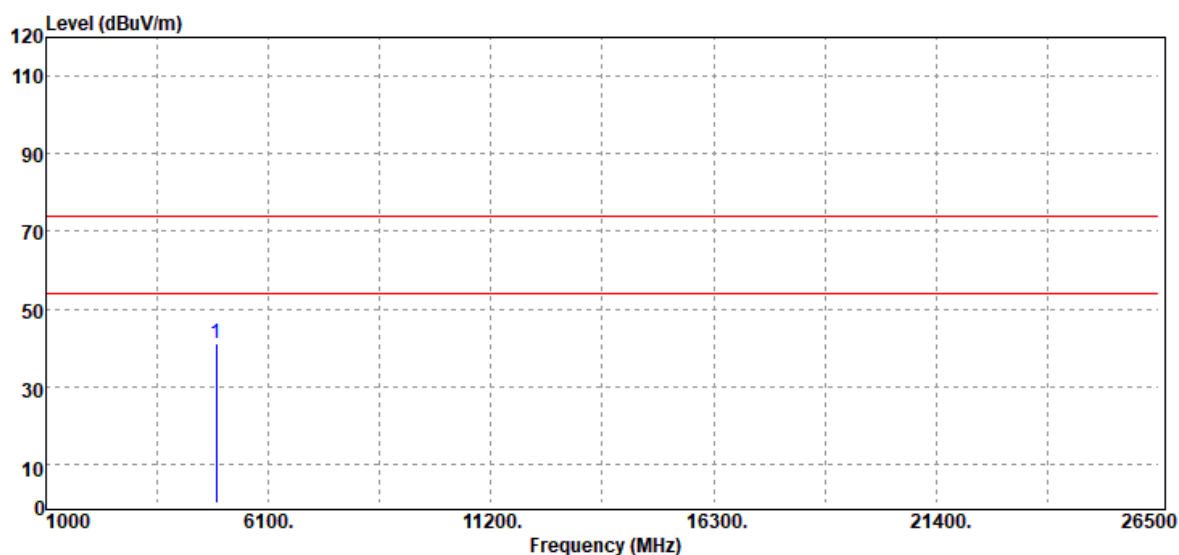
Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
4904.00	Peak	37.30	3.69	40.99	74.00	-33.01
N/A						

**Remark:**

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit



Test Mode	IEEE 802.11n HT40 High CH	Temp/Hum	24.6(°C)/ 51%RH
Test Item	Harmonic	Test Date	June 03, 2020
Polarize	Horizontal	Test Engineer	Jerry Chang
Detector	Peak		



Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
4904.00	Peak	37.31	3.69	41.00	74.00	-33.00
N/A						

**Remark:**

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit



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## 5.4 TEST DATA RE-USE SUMMARY

### Introduction Section:

The application re-uses data collected on a similar device. The subject device of this application (Model: MP21-ARGON-C, FCC ID: GKR402550, IC: 2533B-402550) is electrically identical to the reference device (Model: MP10-ARGON-C, FCC ID: GKR402547, IC: 2533B-402547) for the portions of the circuitry corresponding to the data being re-used, as treated by KDB Publication 484596 D01.

### Differences Brief Description:

The WLAN, and BT hardware of this device are identical to the implementation in FCC ID: GKR402550.

IC: 2533B-402550

The Product Equality Declaration document includes detailed information about the changes between the devices. The data from that application has been verified through appropriate spot checks to demonstrate compliance for this device as shown in the summary table below.



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## Spot Check Verification Result Summary

Equipment Class	Reference FCC ID / IC No.	Folder Test	Report Title/ Section
DTS-WLAN	GKR402547 / 2533B-402547	T200505W01-RP3	All Section (Except for <i>AC Conducted Emission, Output Power Measurement, Radiation Band Edge, Radiation Spurious Emission</i> )

## Summary of the spot check for Unlicensed bands and Licensed bands

In order to confirm hardware similarity of the subject device with the reference device, we used same setting power to conducted measurement were performed on the subject device for the conducted band edge and conducted emission, the test result were similar with FCC ID: GKR402547 / IC: 2533B-402547.

### WLAN

Report	Test Item	Mode	CH.	GKR402547 / 2533B-402547	GKR402550 / 2533B-402550	Gap (dB)
DTS (WLAN)	Conducted Bandedge	B	Low	-57.41	-55.64	-1.77
		G	Low	-56.84	-55.16	-1.68
		N20	Low	-55.33	-53.7	-1.63
		N40	High	-44.03	-42.33	-1.7
	Conducted Emission	B	Low	-46.69	-44.72	-1.97
		G	Low	-43.76	-41.88	-1.88
		N20	Low	-44.76	-43.41	-1.35
		N40	High	-46.43	-45.27	-1.16

- End of Test Report -