

Project No.: TM-2302000083P  
Report No.: TMWK2302000261KR

FCC ID: 2AQ8A-EKSLNP5C Page: 1 / 76  
Rev.: 00

# RADIO TEST REPORT

## FCC 47 CFR PART 15 SUBPART C

<b>Test Standard</b>	<b>FCC Part 15.247</b>
<b>Product name</b>	<b>Enkore Smart Leverset</b>
<b>Brand Name</b>	<b>Pamex</b>
<b>Model No.</b>	<b>EKS-LNP5C</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:

*Sehni, Hu*

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Sehni Hu  
Supervisor

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.  
除非另有說明，此報告結果僅對測試之樣品負責，同時此樣品僅保留90天。本報告未經本公司書面許可，不可部份複製。

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### **Revision History**

Rev.	Issue Date	Revisions	Effect Page	Revised By
00	March 6, 2023	Initial Issue	ALL	Doris Chu

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## 1. GENERAL INFORMATION

### 1.1 EUT INFORMATION

<b>Applicant</b>	Pamex Inc. 4680 Vinita Court, Chino, CA, 91710, United States
<b>Manufacturer</b>	ALZK Co., Ltd. 9F., No. 36, Sec. 3, Bade Rd., Songshan Dist., Taipei City, Taiwan
<b>Equipment</b>	Enkore Smart Leverset
<b>Model Name</b>	EKS-LNP5C
<b>Model Discrepancy</b>	N/A
<b>Brand Name</b>	Pamex
<b>Received Date</b>	February 4, 2023
<b>Date of Test</b>	February 7 ~ 9, 2023
<b>Power Supply</b>	Power from Battery. (DC 1.5*4V)
<b>HW Version</b>	V0.0.3
<b>SW Version</b>	V000002

**Remark:**

1. For more details, please refer to the User's manual of the EUT.
2. Disclaimer: Antenna information is provided by the applicant, test results of this report are applicable to the sample EUT received.

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## 1.2 EUT CHANNEL INFORMATION

Frequency Range	802.11b/g/n HT20: 2412MHz ~ 2462MHz
Modulation Type	1. IEEE 802.11b mode: CCK 2. IEEE 802.11g mode: OFDM 3. IEEE 802.11n HT 20 mode: OFDM
Number of channels	1. IEEE 802.11b mode: 11 Channels 2. IEEE 802.11g mode: 11 Channels 3. IEEE 802.11n HT 20 Mode : 11 Channels

### Remark:

Refer as ANSI C63.10: 2013 clause 5.6.1 Table 4 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 Specification	<input type="checkbox"/> PIFA <input checked="" type="checkbox"/> Chip <input type="checkbox"/> Dipole <input type="checkbox"/> Coils
Antenna Gain	Gain: 1.33 dBi
Antenna connector	N/A

### Notes:

1. The antenna(s) of the EUT are permanently attached and there are no provisions for connection to an external antenna. So the EUT complies with the requirements of §15.203.

## 1.4 MEASUREMENT UNCERTAINTY

PARAMETER	UNCERTAINTY
AC Powerline Conducted Emission	± 2.1183
Channel Bandwidth	± 2.1863
RF output power (Power Meter + Power sensor)	± 1.2688
Power Spectral density	± 2.1855
Conducted Bandedge	± 2.1866
Conducted Spurious Emission	± 2.1859
Radiated Emission_9kHz-30MHz	± 3.814
Radiated Emission_30MHz-200MHz	± 4.272
Radiated Emission_200MHz-1GHz	± 4.619
Radiated Emission_1GHz-6GHz	± 5.522
Radiated Emission_6GHz-18GHz	± 5.228
Radiated Emission_18GHz-26GHz	± 4.089
Radiated Emission_26GHz-40GHz	± 4.019

**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.

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## 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.

No. 12, Ln. 116, Wugong 3rd Rd., Wugu Dist., New Taipei City, Taiwan 24803

CAB identifier: TW1309

Test site	Test Engineer	Remark
AC Conduction Room	-	Not applicable, because EUT not connect to AC Main Source direct.
Radiation	Ray Li, Tony Chao	-
RF Conducted	David Li	-

**Remark:** The lab has been recognized as the FCC accredited lab. under the KDB 974614 D01 and is listed in the FCC public Access Link (PAL) database, FCC Registration No. :444940, the FCC Designation No.:TW1309.

## 1.6 INSTRUMENT CALIBRATION

RF Conducted Test Site					
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due
Power Meter	Anritsu	ML2496A	2136002	2022-11-24	2023-11-23
EXA Signal Analyzer	Keysight	N9010B	MY60242460	2023-02-02	2024-02-01
Power Sensor	Anritsu	MA2411B	1911386	2022-08-08	2023-08-07
Power Sensor	Anritsu	MA2411B	1911387	2022-08-08	2023-08-07
<b>Software</b>	Radio Test Software Ver. 21				

3M 966 Chamber Test Site					
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due
Loop Antenna	COM-POWER	AL-130	121051	2022-04-13	2023-04-12
Preamplifier	EMEC	EM330	060609	2022-02-23	2023-02-22
Thermo-Hygro Meter	WISEWIND	1206	D07	2022-12-19	2023-12-18
PXA Signal Analyzer	Keysight Technologies	N9030B	MY62291089	2022-10-14	2023-10-13
Preamplifier	HP	8449B	3008A00965	2022-12-23	2023-12-22
Bi-Log Antenna	Sunol Sciences	JB3	A030105	2022-08-03	2023-08-02
Cable	Huber+Suhner	104PEA	20995+11112+182330	2022-02-23	2023-02-22
Coaxial Cable	EMCI	EMC105	190914+33953	2022-06-15	2023-06-14
Horn Antenna	ETC	MCTD 1209	DRH13M02003	2023-01-12	2024-01-11
High Pass Filters	Titan Microwave	T04H30001800070S01	22011402-4	2022-06-29	2023-06-28
Horn Antenna	SCHWARZBECK	BBHA9170	1047	2022-12-30	2023-12-29
Pre-Amplifier	EMCI	EMC184045SE	980860	2022-12-27	2023-12-26
Cable	EMCI	EMC101G	211010+211011+211012	2022-12-12	2023-12-11
Turn Table	CCS	CC-T-1F	N/A	N.C.R	N.C.R
Controller	CCS	CC-C-1F	N/A	N.C.R	N.C.R
Antenna Tower	CCS	CC-A-1F	N/A	N.C.R	N.C.R
<b>Software</b>	e3 6.11-20180419c				

AC Conducted Emissions Test Site					
Equipment	Manufacturer	Model	S/N	Cal Date	Cal Due
N/A					

**Remark:**

1. Each piece of equipment is scheduled for calibration once a year.
2. N.C.R. = No Calibration Required.



## 1.7 SUPPORT AND EUT ACCESSORIES EQUIPMENT

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

Support Equipment						
No.	Equipment	Brand	Model	Series No.	FCC ID	IC
1	NB(E)	Lenovo	IBM 7663	N/A	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 662911 and KDB 558074.

## 2. TEST SUMMARY

FCC Standard Section	Report Section	Test Item	Result
15.203	1.3	Antenna Requirement	Pass
15.207(a)	4.1	AC Conducted Emission	N/A
15.247(a)(2)	4.2	6 dB Bandwidth	Pass
-	4.2	Occupied Bandwidth (99%)	Pass
15.247(b)	4.3	Output Power Measurement	Pass
15.247(e)	4.4	Power Spectral Density	Pass
15.247(d)	4.5	Conducted Band Edge	Pass
15.247(d)	4.5	Conducted Spurious Emission	Pass
15.247(d)	4.6	Radiation Band Edge	Pass
15.247(d)	4.6	Radiation Spurious Emission	Pass

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### 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
Operation Transmitter	IEEE 802.11b mode: 1T1R IEEE 802.11g mode: 1T1R IEEE 802.11n HT20 mode: 1T1R
Test Channel Frequencies	<p><b>IEEE 802.11b mode:</b></p> <ol style="list-style-type: none"> <li>1. Lowest Channel: 2412MHz</li> <li>2. Middle Channel: 2437MHz</li> <li>3. Highest Channel: 2462MHz</li> </ol> <p><b>IEEE 802.11g mode:</b></p> <ol style="list-style-type: none"> <li>1. Lowest Channel: 2412MHz</li> <li>2. Middle Channel: 2437MHz</li> <li>3. Highest Channel: 2462MHz</li> </ol> <p><b>IEEE 802.11n HT20 mode:</b></p> <ol style="list-style-type: none"> <li>1. Lowest Channel: 2412MHz</li> <li>2. Middle Channel: 2437MHz</li> <li>3. Highest Channel: 2462MHz</li> </ol>

**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

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

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

*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(Z -Plane) were recorded in this report*

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### 3.3 EUT DUTY CYCLE

Temperature: 21.8 ~ 22°C

Test date: February 7 ~ 9, 2023

Humidity: 67 ~ 69% RH

Tested by: David Li

Duty Cycle				
Configuration	Duty Cycle (%)	Duty Factor (dB) =10*log (1/Duty Cycle)	1/T (kHz)	VBW setting (kHz)
802.11b	96.05	0.18	0.09	1.00
802.11g	89.07	0.50	0.53	1.00
802.11n HT20	90.42	0.44	0.57	1.00



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## 4. TEST RESULT

### 4.1 AC POWER LINE CONDUCTED EMISSION

#### 4.1.1 Test Limit

According to §15.207(a)(2)

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

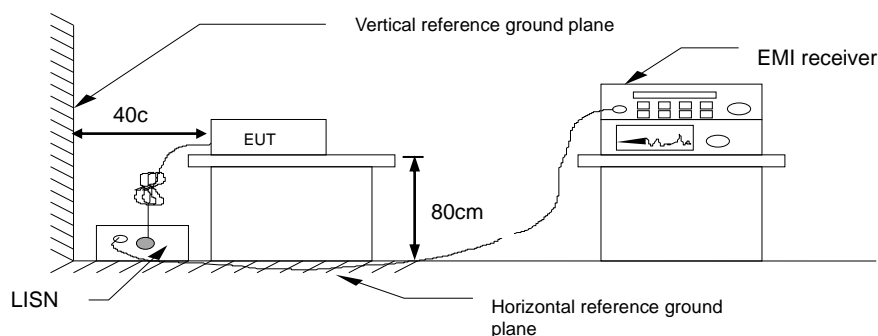
\* Decreases with the logarithm of the frequency.

#### 4.1.2 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.

#### 4.1.3 Test Setup



#### 4.1.4 Test Result

**Not applicable, because EUT not connect to AC Main Source direct.**

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## 4.2 6dB BANDWIDTH AND OCCUPIED BANDWIDTH (99%)

### 4.2.1 Test Limit

According to §15.247(a)(2)

#### 6 dB Bandwidth :

Limit	Shall be at least 500kHz
-------	--------------------------

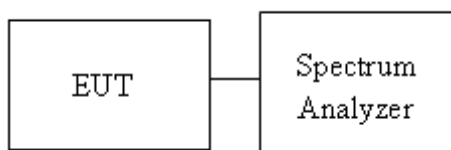
Occupied Bandwidth(99%) : For reporting purposes only.

### 4.2.2 Test Procedure

Test method Refer as ANSI C63.10: 2013,

1. The EUT RF output connected to the spectrum analyzer by RF cable.
2. Setting maximum power transmit of EUT
3. SA set RBW = 100kHz, VBW = 300kHz and Detector = Peak, to measurement 6 dB Bandwidth.
4. SA set RBW = 1% ~ 5% OBW, VBW = three times the RBW and Detector = Peak, to measurement 99% Bandwidth
5. Measure and record the result of 6 dB Bandwidth and 99% Bandwidth. in the test report.

### 4.2.3 Test Setup



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#### 4.2.4 Test Result

Temperature: 21.8 ~ 22°C

Test date: February 7 ~ 9, 2023

Humidity: 67 ~ 69% RH

Tested by: David Li

Test mode: IEEE 802.11b mode / 2412-2462 MHz				
Channel	Frequency (MHz)	OBW(99%) (MHz)	6dB BW (kHz)	6dB limit (kHz)
Low	2412	14.144	<b>9136.00</b>	≥500
Mid	2437	14.195	<b>9136.00</b>	
High	2462	<b>14.326</b>	9131.00	

Test mode: IEEE 802.11g mode / 2412-2462 MHz				
Channel	Frequency (MHz)	OBW(99%) (MHz)	6dB BW (kHz)	6dB limit (kHz)
Low	2412	16.639	<b>15130.00</b>	≥500
Mid	2437	<b>16.882</b>	<b>15130.00</b>	
High	2462	16.684	<b>15130.00</b>	

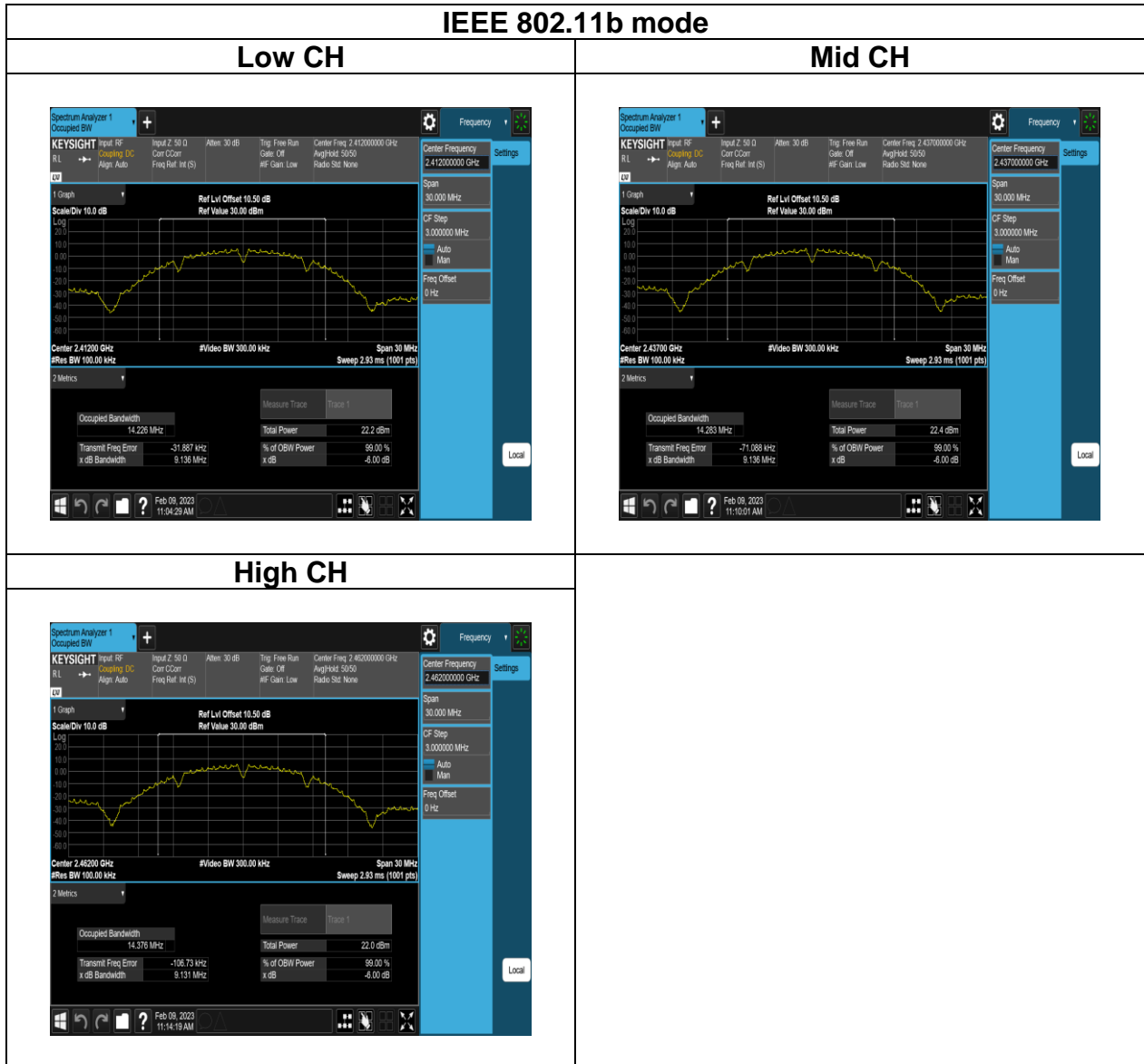
Test mode: IEEE 802.11n HT 20 mode / 2412-2462 MHz				
Channel	Frequency (MHz)	OBW(99%) (MHz)	6dB BW (kHz)	6dB limit (kHz)
Low	2412	17.576	<b>15130.00</b>	≥500
Mid	2437	<b>17.759</b>	15110.00	
High	2462	17.632	<b>15130.00</b>	



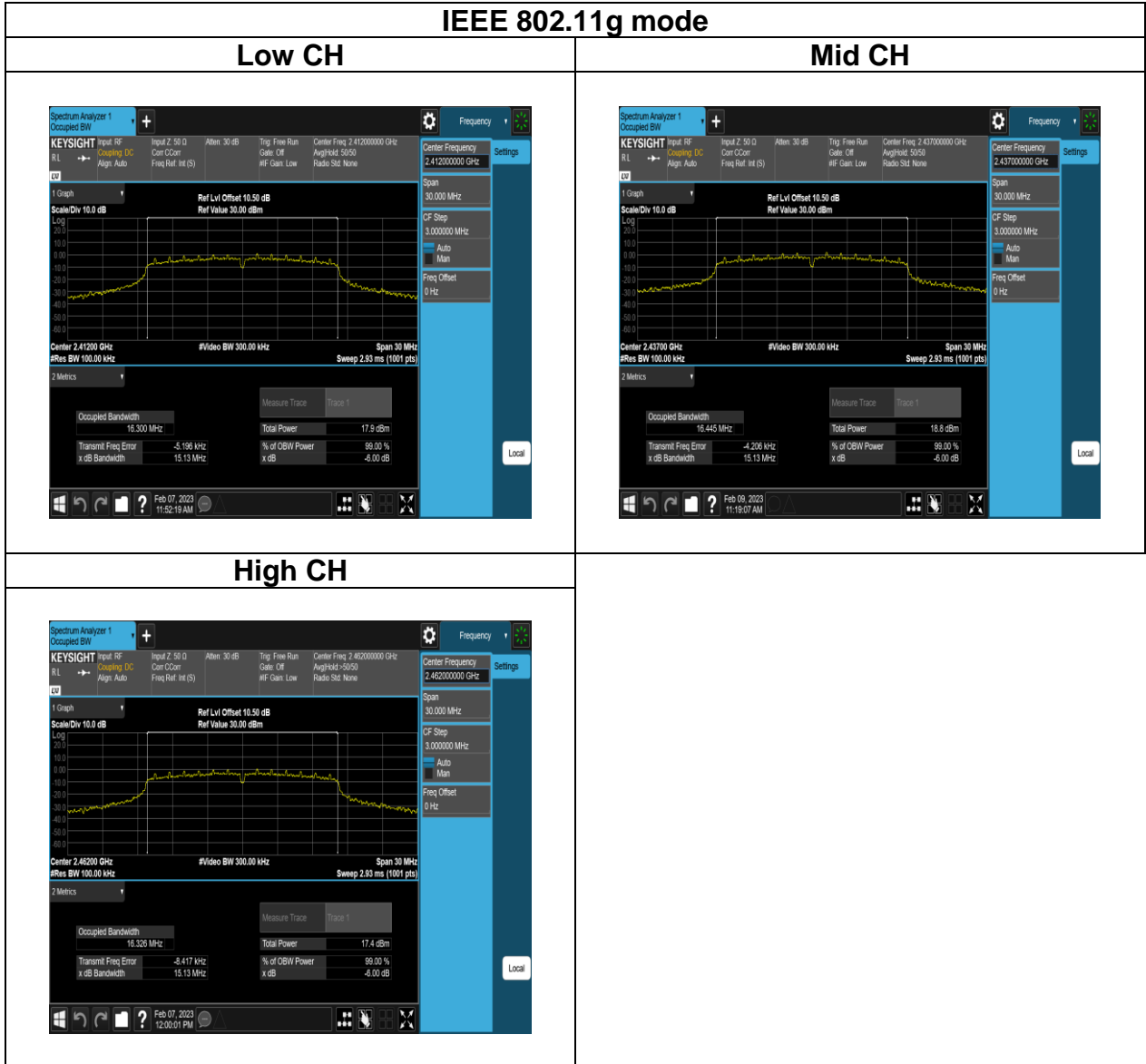
Report No.: TMWK2302000261KR

## Test Data

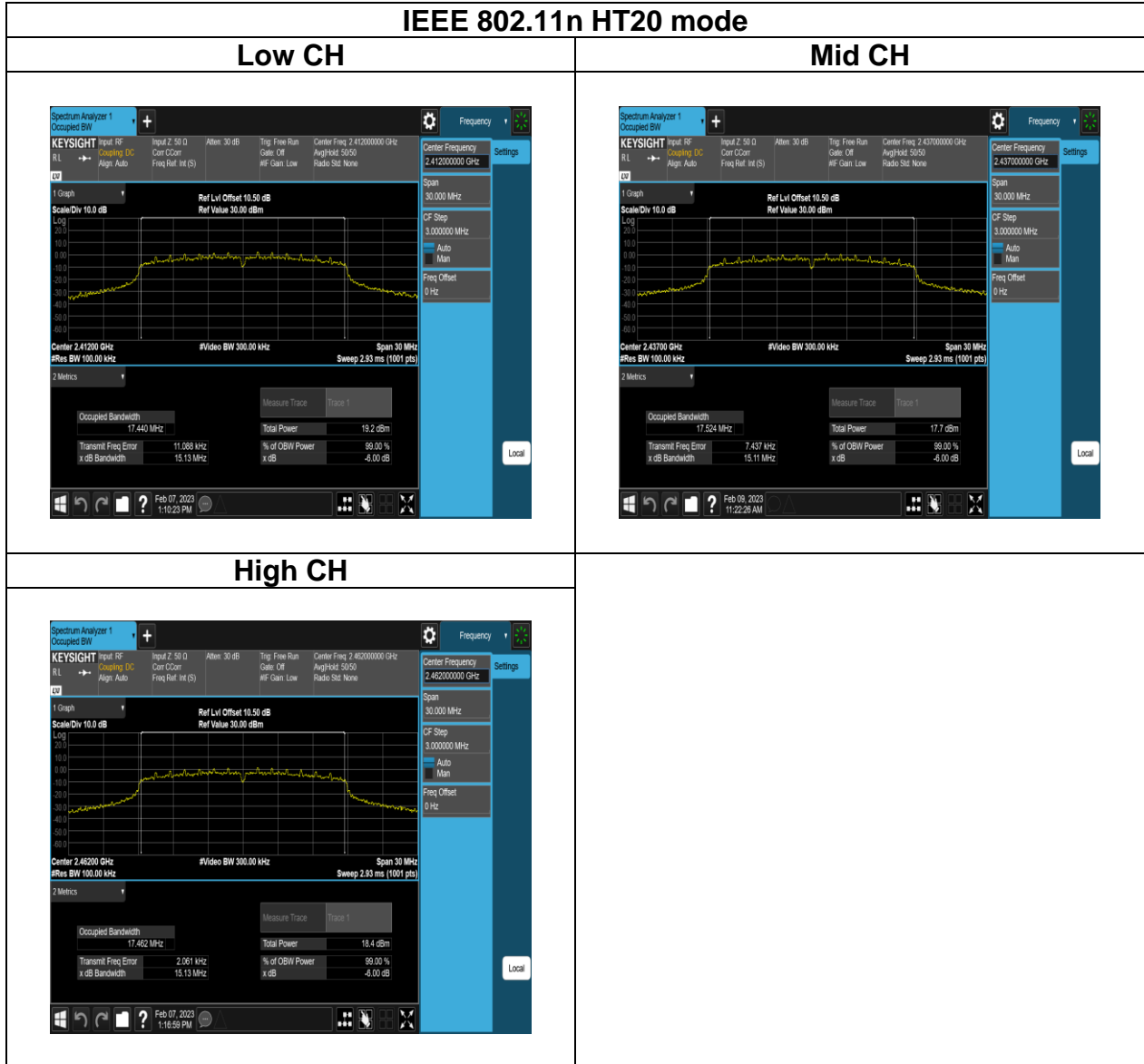
### 6dB BANDWIDTH



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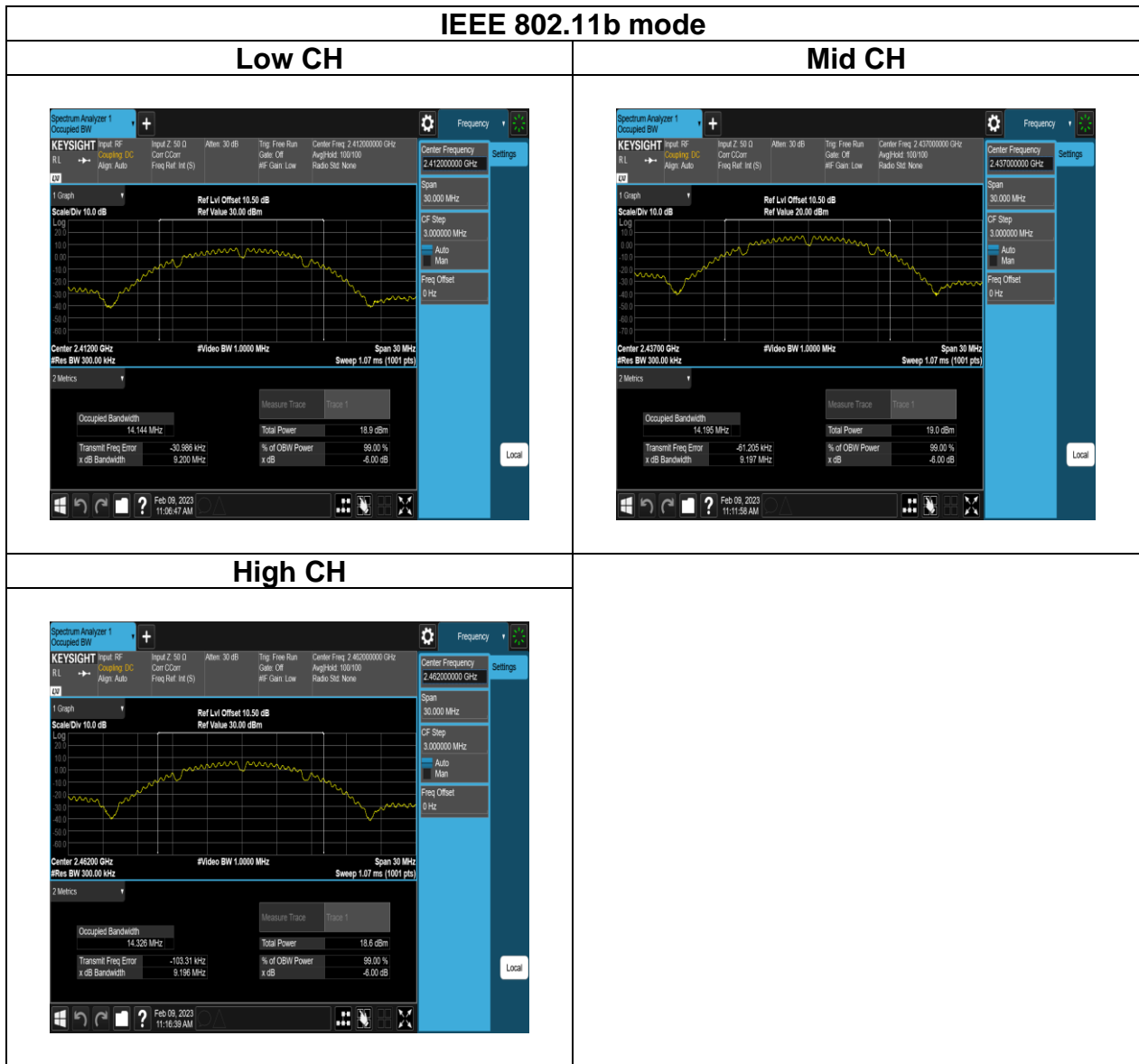
Report No.: TMWK2302000261KR



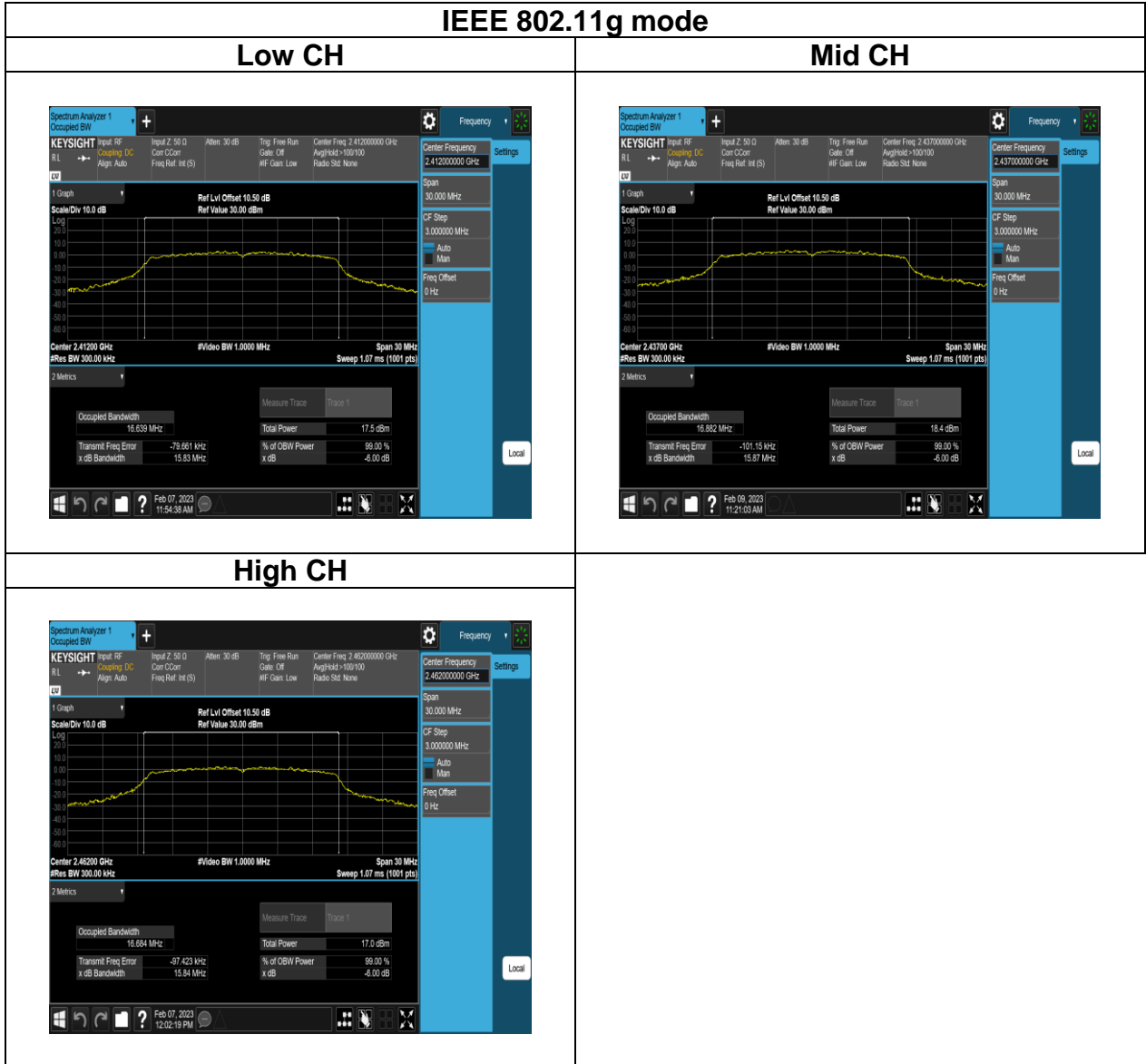
Report No.: TMWK2302000261KR

## Test Data

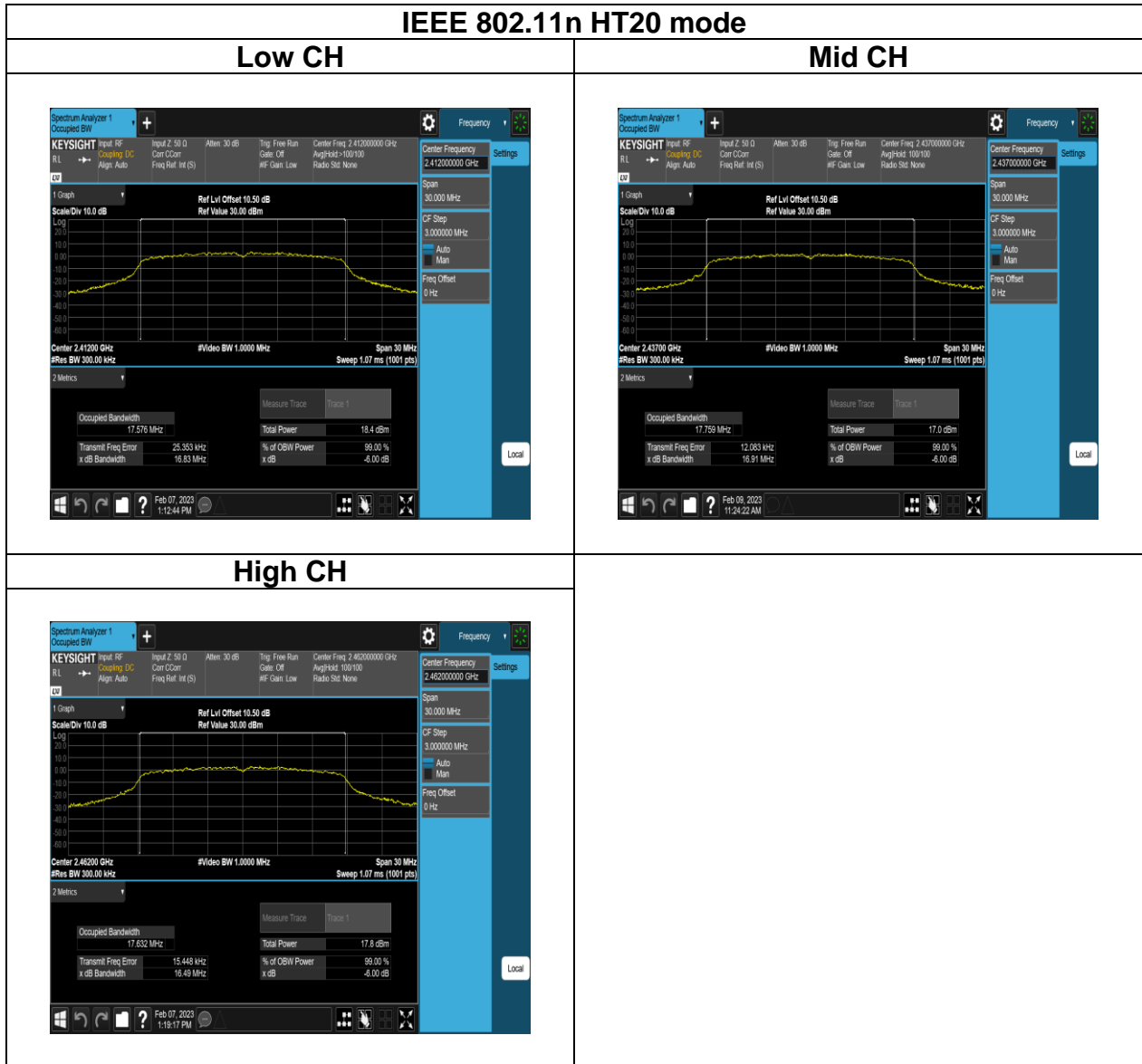
### BANDWIDTH 99%



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## 4.3 OUTPUT POWER MEASUREMENT

### 4.3.1 Test Limit

According to §15.247(b)

#### **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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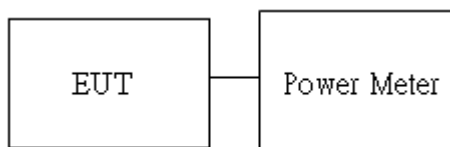
**Average output power** : For reporting purposes only.

### 4.3.2 Test Procedure

Test method Refer as ANSI C63.10:2013.

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.

### 4.3.3 Test Setup



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### 4.3.4 Test Result

Temperature: 21.8 ~ 22°C

Test date: February 7 ~ 9, 2023

Humidity: 67 ~ 69% RH

Tested by: David Li

#### Peak output power :

802.11b Ch0						
CH	Freq. (MHz)	Data Rate	Power set	Peak Output Power (dBm)	Limit (dBm)	RESULT
1	2412	1	4	<b>14.23</b>	30.00	PASS
6	2437	1	4	14.15	30.00	PASS
11	2462	1	6	12.43	30.00	PASS

802.11g Ch0						
CH	Freq. (MHz)	Data Rate	Power set	Peak Output Power (dBm)	Limit (dBm)	RESULT
1	2412	6	0	18.69	30.00	PASS
6	2437	6	3	<b>18.89</b>	30.00	PASS
11	2462	6	0	18.34	30.00	PASS

802.11n_HT_20M Ch0						
CH	Freq. (MHz)	Data Rate	Power set	Peak Output Power (dBm)	Limit (dBm)	RESULT
1	2412	MCS0	0	18.55	30.00	PASS
6	2437	MCS0	3	<b>18.77</b>	30.00	PASS
11	2462	MCS0	0	18.22	30.00	PASS



**Average output power :**

802.11b Ch0						
CH	Freq. (MHz)	Data Rate	Power set	Avg. Output Power (dBm)	Limit (dBm)	RESULT
1	2412	1	4	12.46	30.00	PASS
6	2437	1	4	12.34	30.00	PASS
11	2462	1	6	10.63	30.00	PASS

802.11g Ch0						
CH	Freq. (MHz)	Data Rate	Power set	Avg. Output Power (dBm)	Limit (dBm)	RESULT
1	2412	6	0	10.92	30.00	PASS
6	2437	6	3	12.29	30.00	PASS
11	2462	6	0	10.22	30.00	PASS

802.11n_HT_20M Ch0						
CH	Freq. (MHz)	Data Rate	Power set	Avg. Output Power (dBm)	Limit (dBm)	RESULT
1	2412	MCS0	0	10.62	30.00	PASS
6	2437	MCS0	3	11.98	30.00	PASS
11	2462	MCS0	0	9.81	30.00	PASS

## 4.4 POWER SPECTRAL DENSITY

### 4.4.1 Test Limit

According to §15.247(e)

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

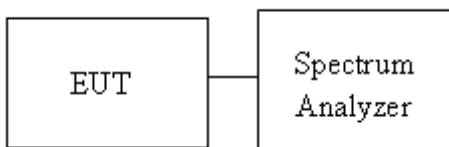
Limit	<input checked="" type="checkbox"/> Antenna not exceed 6 dBi : 8dBm <input type="checkbox"/> Antenna with DG greater than 6 dBi : [ Limit = 8 – (DG – 6) ] <input type="checkbox"/> Point-to-point operation :
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### 4.4.2 Test Procedure

Test method Refer as ANSI C63.10:2013,

1. The EUT RF output connected to the spectrum analyzer by RF cable.
2. Setting maximum power transmit of EUT
3. SA set RBW = 3kHz, VBW = 10kHz, Span = 1.5 times DTS Bandwidth (6 dB BW), Detector = Peak, Sweep Time = Auto and Trace = Max hold.
4. The path loss and Duty Factor were compensated to the results for each measurement by SA.
5. Mark the maximum level.
6. Measure and record the result of power spectral density. in the test report.

### 4.4.3 Test Setup



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#### 4.4.4 Test Result

Temperature: 21.8 ~ 22°C

Test date: February 7 ~ 9, 2023

Humidity: 67 ~ 69% RH

Tested by: David Li

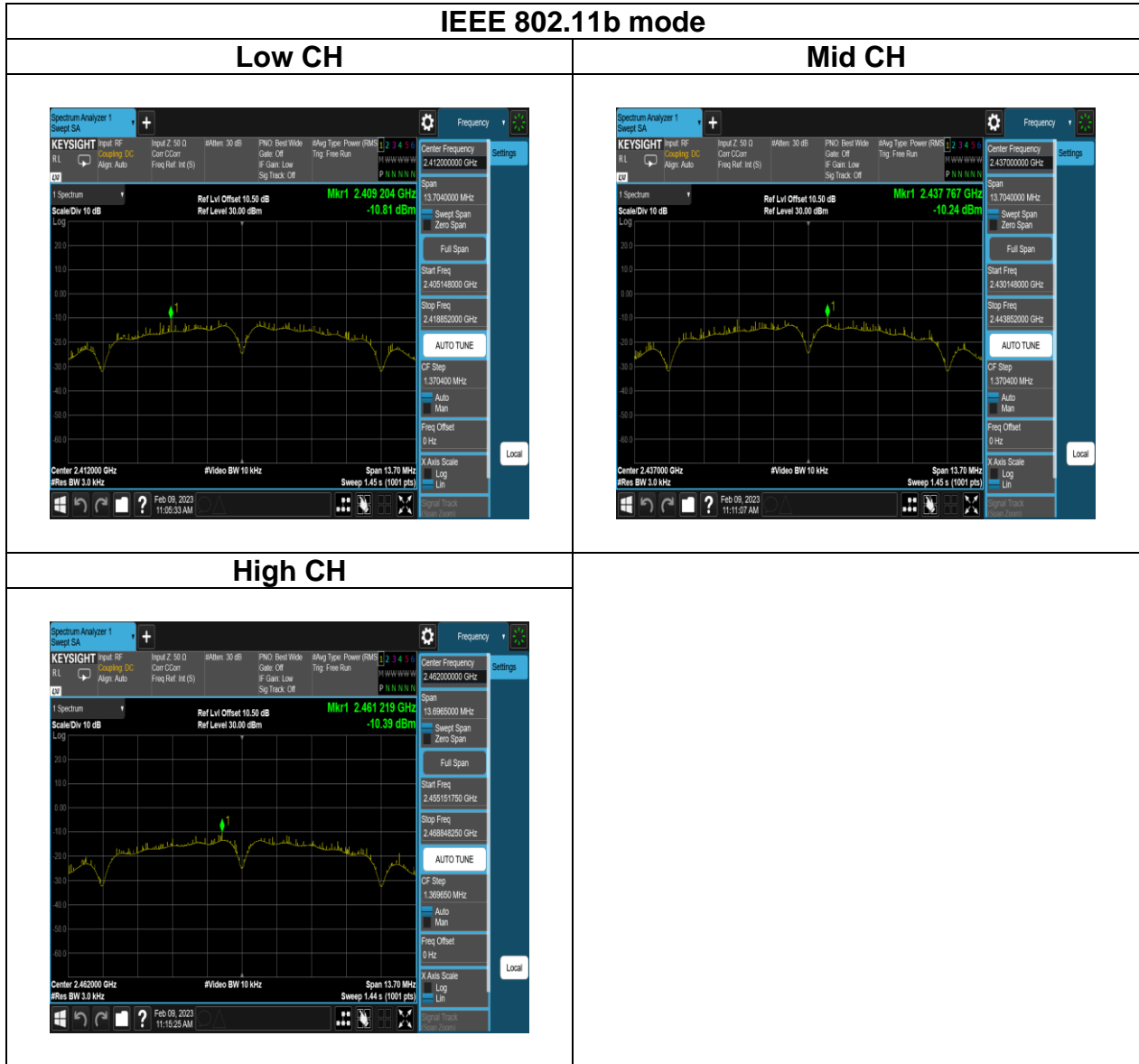
POWER DENSITY 802.11b				
Freq. (MHz)	Ch0 PSD	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
2412	-10.81	-10.81	8.00	PASS
2437	-10.24	-10.24	8.00	PASS
2462	-10.39	-10.39	8.00	PASS

POWER DENSITY 802.11g				
Freq. (MHz)	Ch0 PSD	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
2412	-15.95	-15.95	8.00	PASS
2437	-15.43	-15.43	8.00	PASS
2462	-16.32	-16.32	8.00	PASS

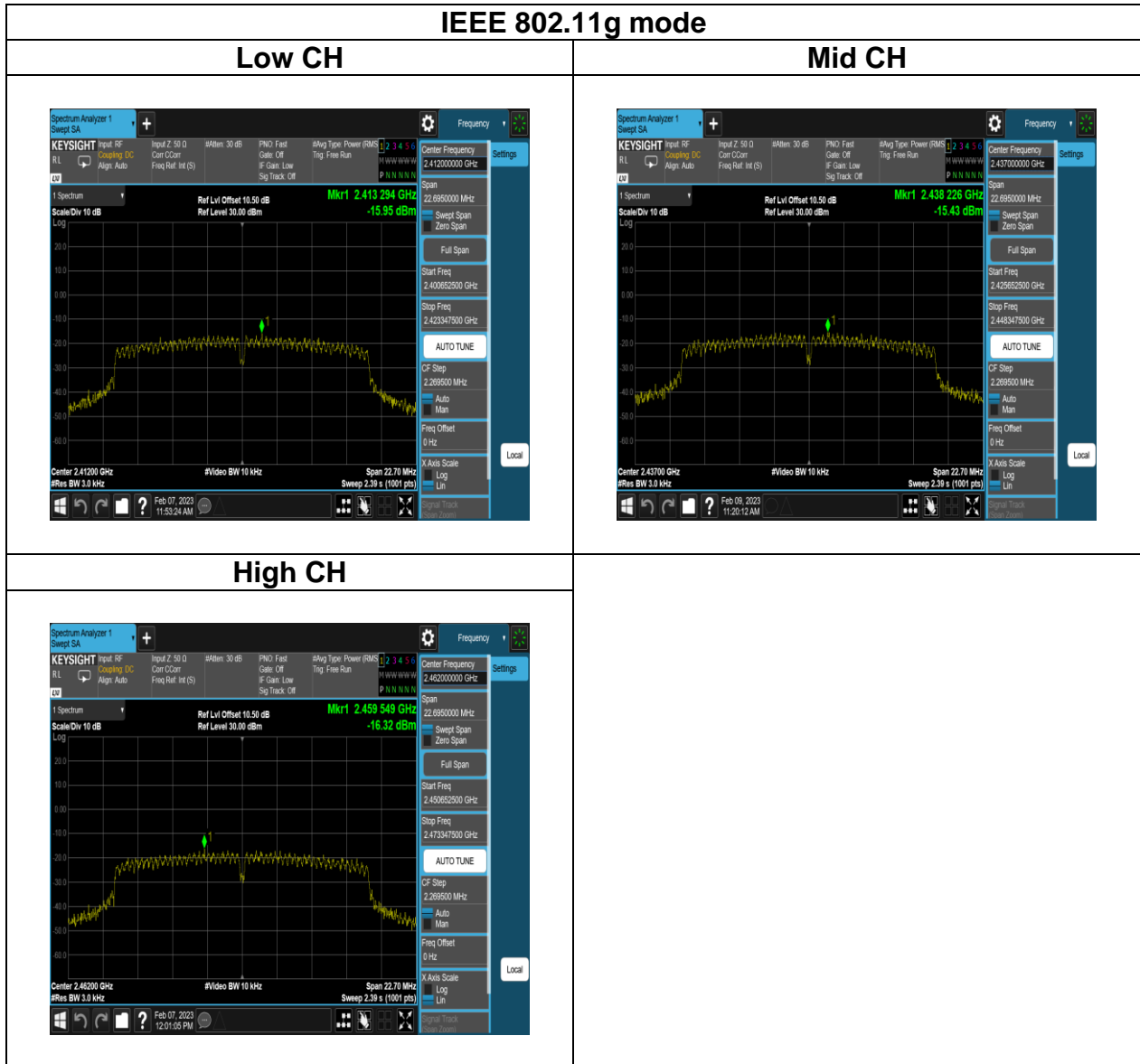
POWER DENSITY 802.11n HT20				
Freq. (MHz)	Ch0 PSD	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
2412	-15.22	-15.22	8.00	PASS
2437	-15.7	-15.70	8.00	PASS
2462	-14.8	-14.80	8.00	PASS

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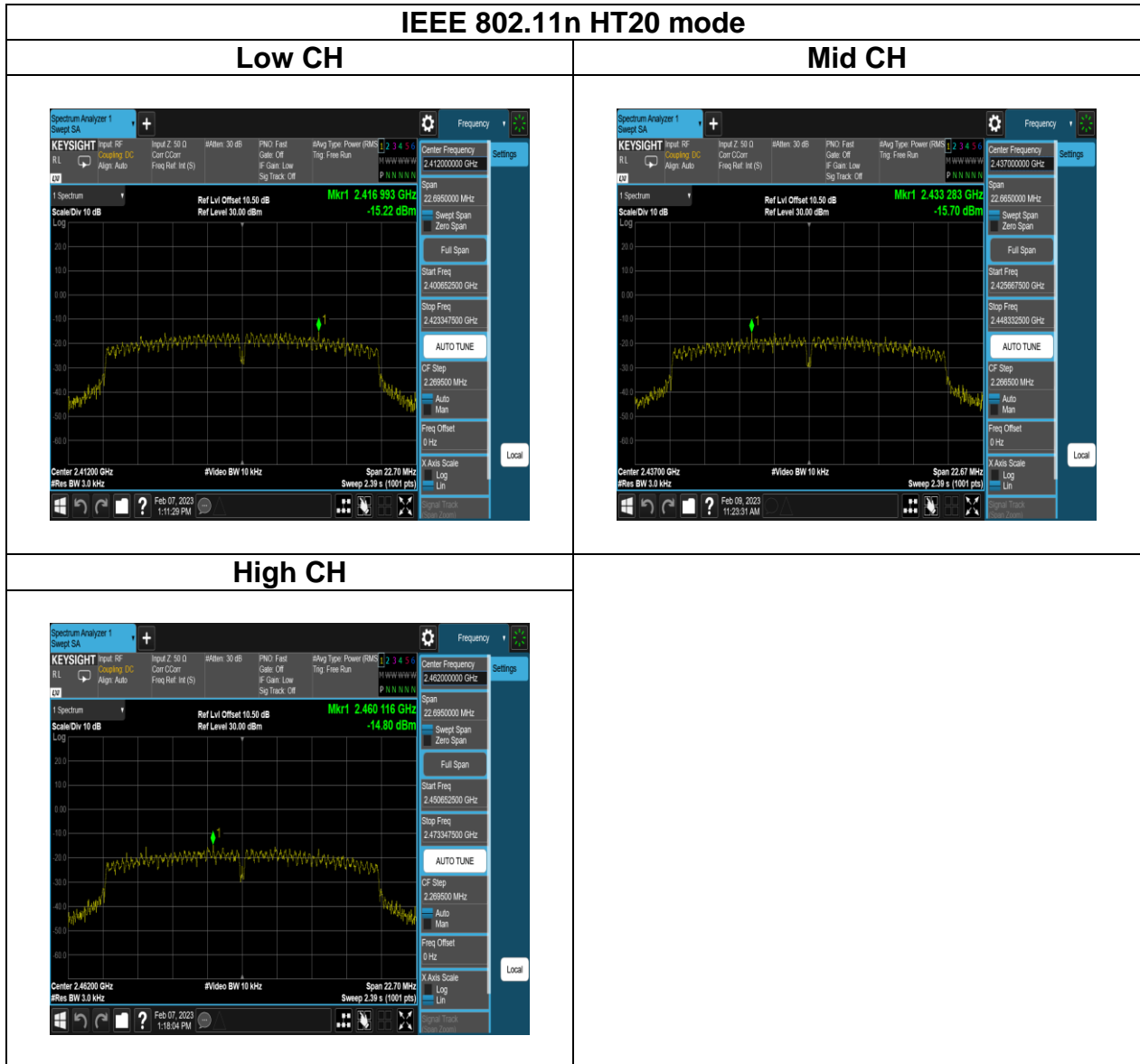
## Test Data



Report No.: TMWK2302000261KR



Report No.: TMWK2302000261KR



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## 4.5 CONDUCTED BANDEDGE AND SPURIOUS EMISSION

### 4.5.1 Test Limit

According to §15.247(d),

In any 100 kHz bandwidth outside the authorized frequency band,

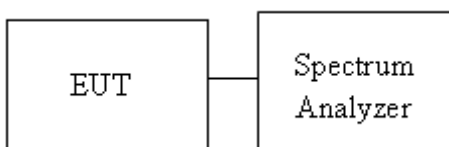
Non-restricted bands shall be attenuated at least 20 dB/30 dB relative to the maximum PSD level in 100 kHz by RF conducted or a radiated measurement which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a).

### 4.5.2 Test Procedure

Test method Refer as ANSI C63.10:2013.

1. EUT RF output port connected to the SA by RF cable, and the path loss was compensated to result.
2. SA setting, RBW=100kHz, VBW=300kHz, Detector=Peak, Trace mode = max hold, SWT = Auto.
3. In any 100 kHz bandwidth outside the authorized frequency band, shall be attenuated at least 20 dB relative to the maximum in-band peak PSD level in 100 kHz when conducted power procedure is used. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, the attenuation required under this paragraph shall be 30 dB instead of 20 dB.

### 4.5.3 Test Setup



Report No.: TMWK2302000261KR

## 4.5.4 Test Result

Temperature: 21.8 ~ 22°C

Test date: February 7 ~ 9, 2023

Humidity: 67 ~ 69% RH

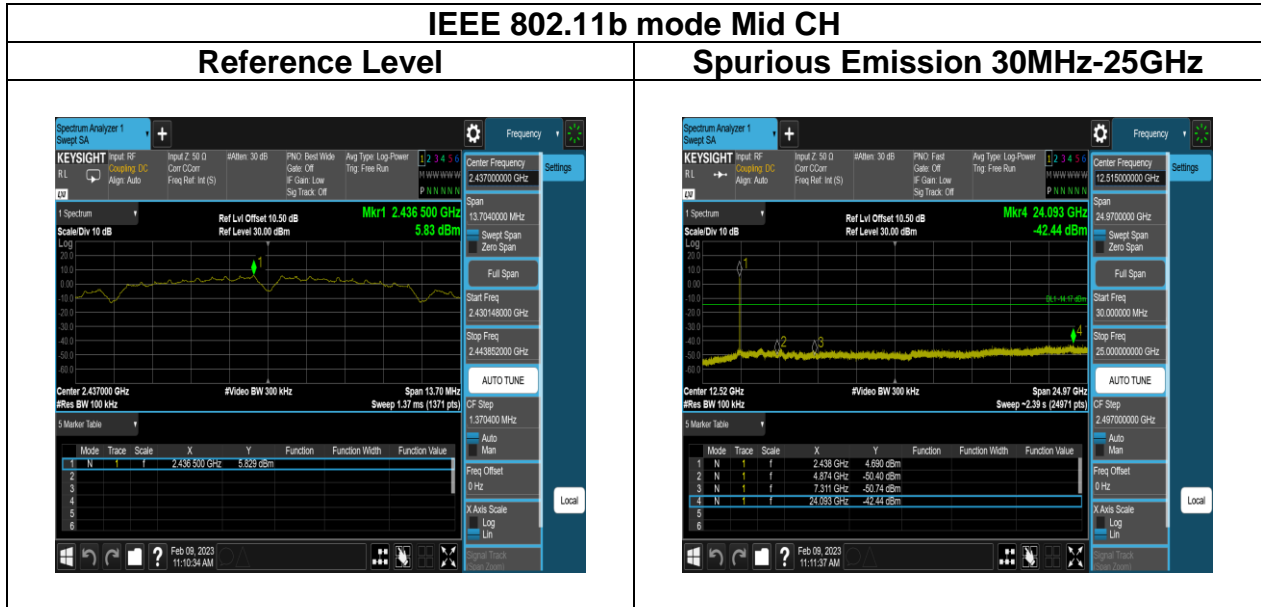
Tested by: David Li

## Test Data

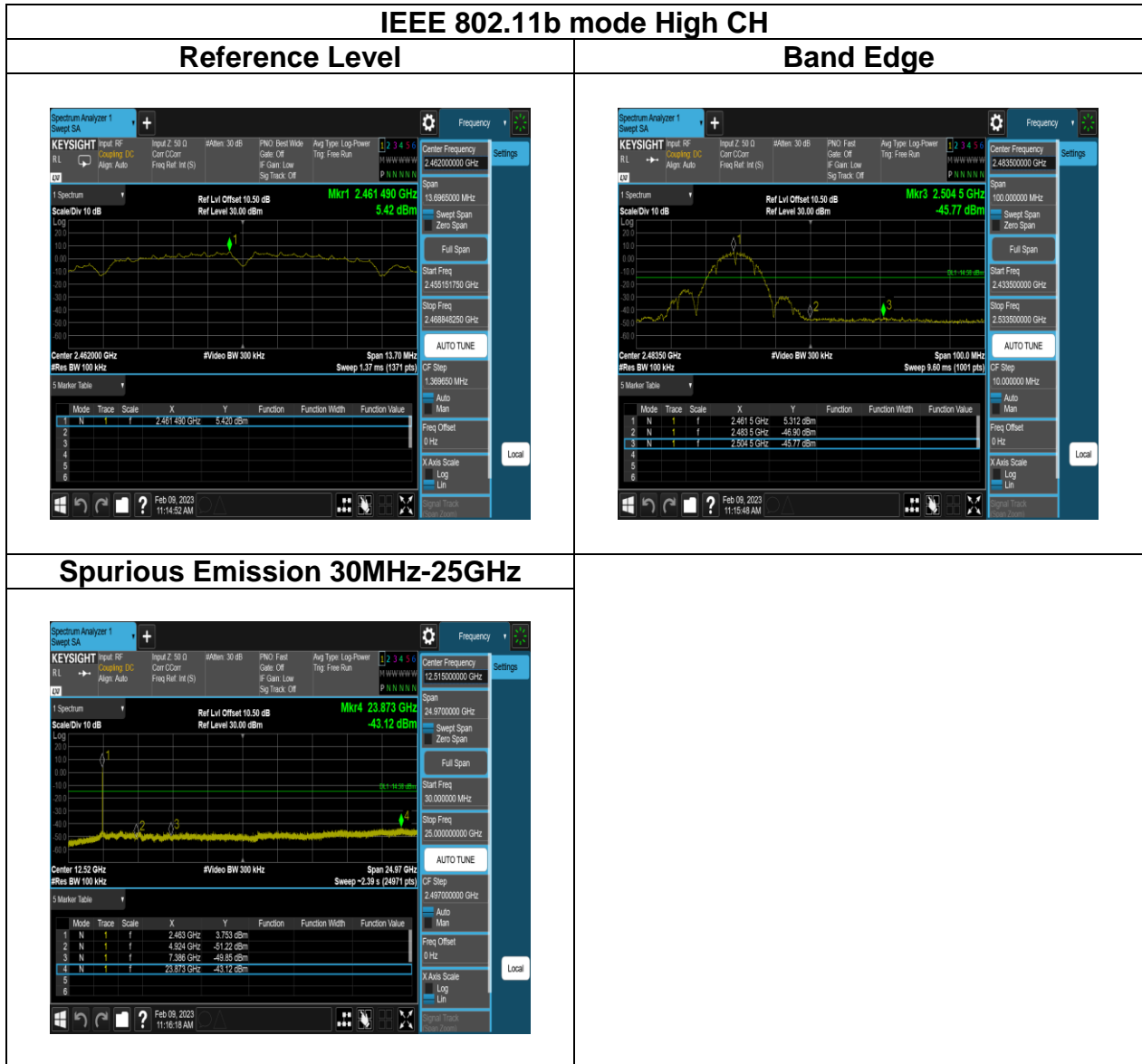




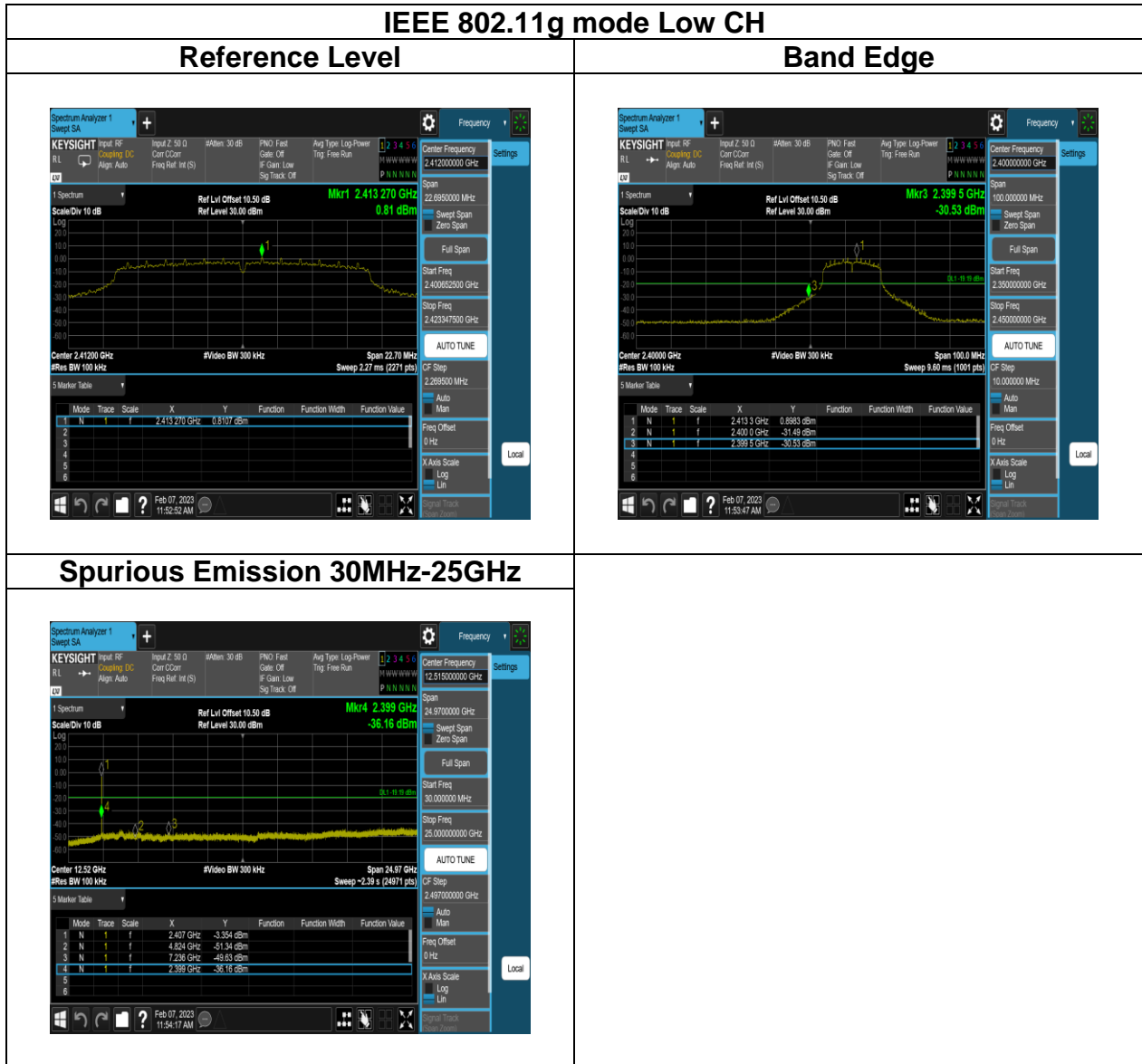
Report No.: TMWK2302000261KR



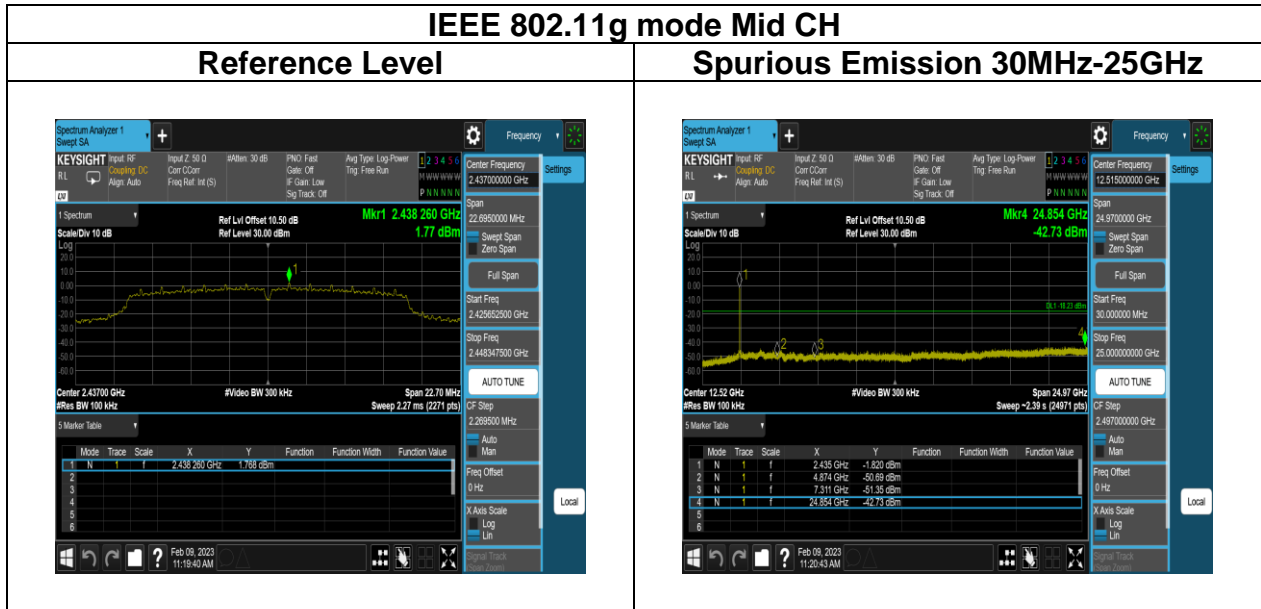
Report No.: TMWK2302000261KR



Report No.: TMWK2302000261KR



Report No.: TMWK2302000261KR



Report No.: TMWK2302000261KR

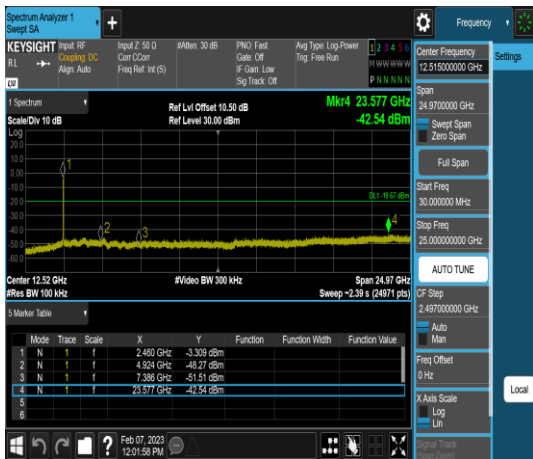
**IEEE 802.11g mode High CH**

**Reference Level**

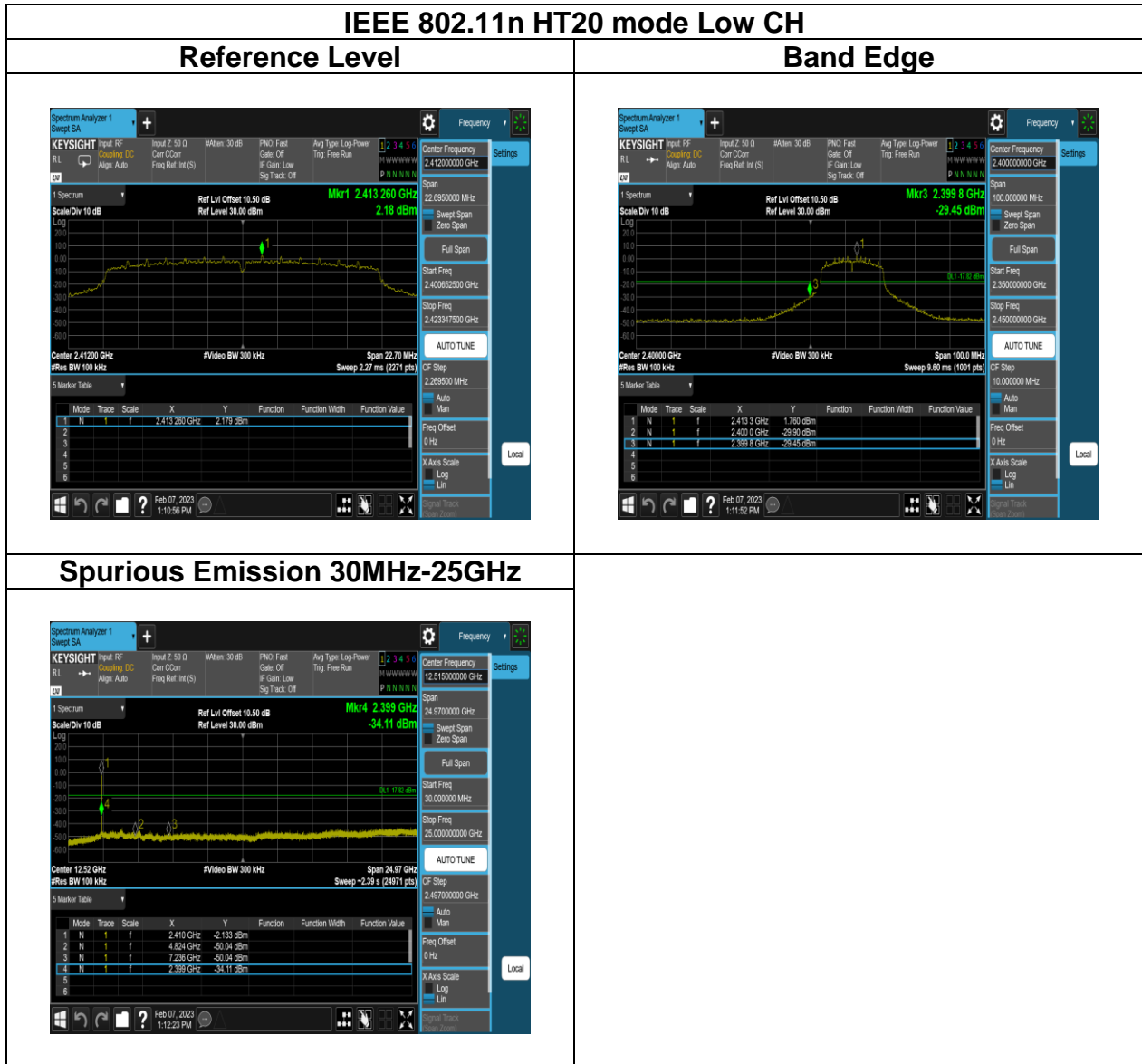
**Band Edge**



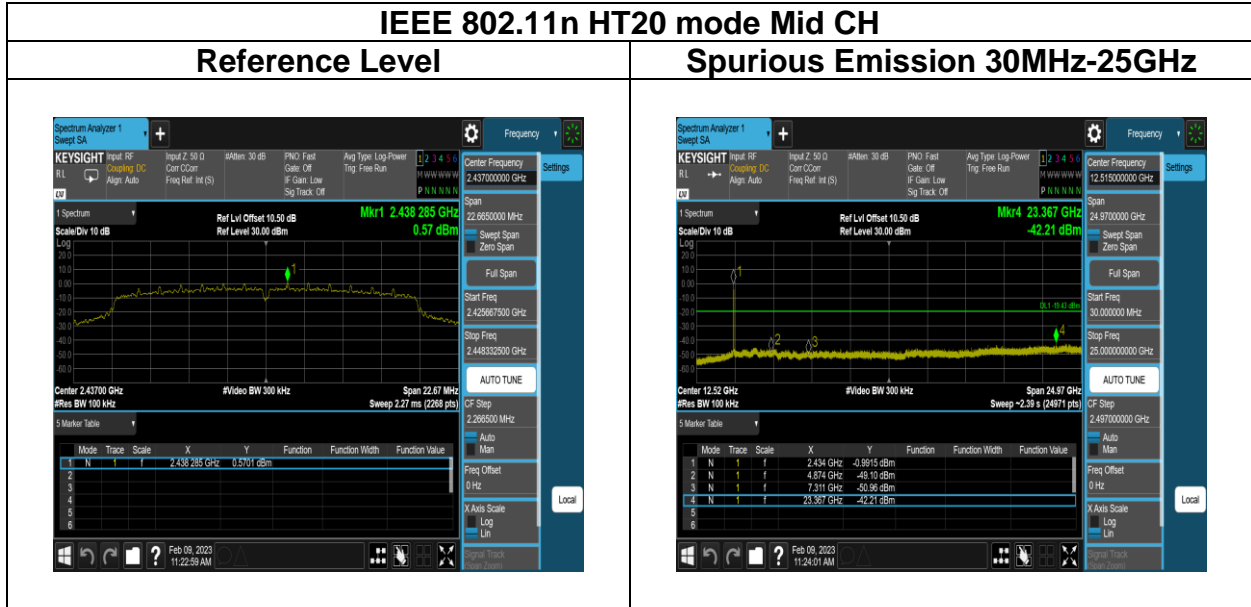
**Spurious Emission 30MHz-25GHz**



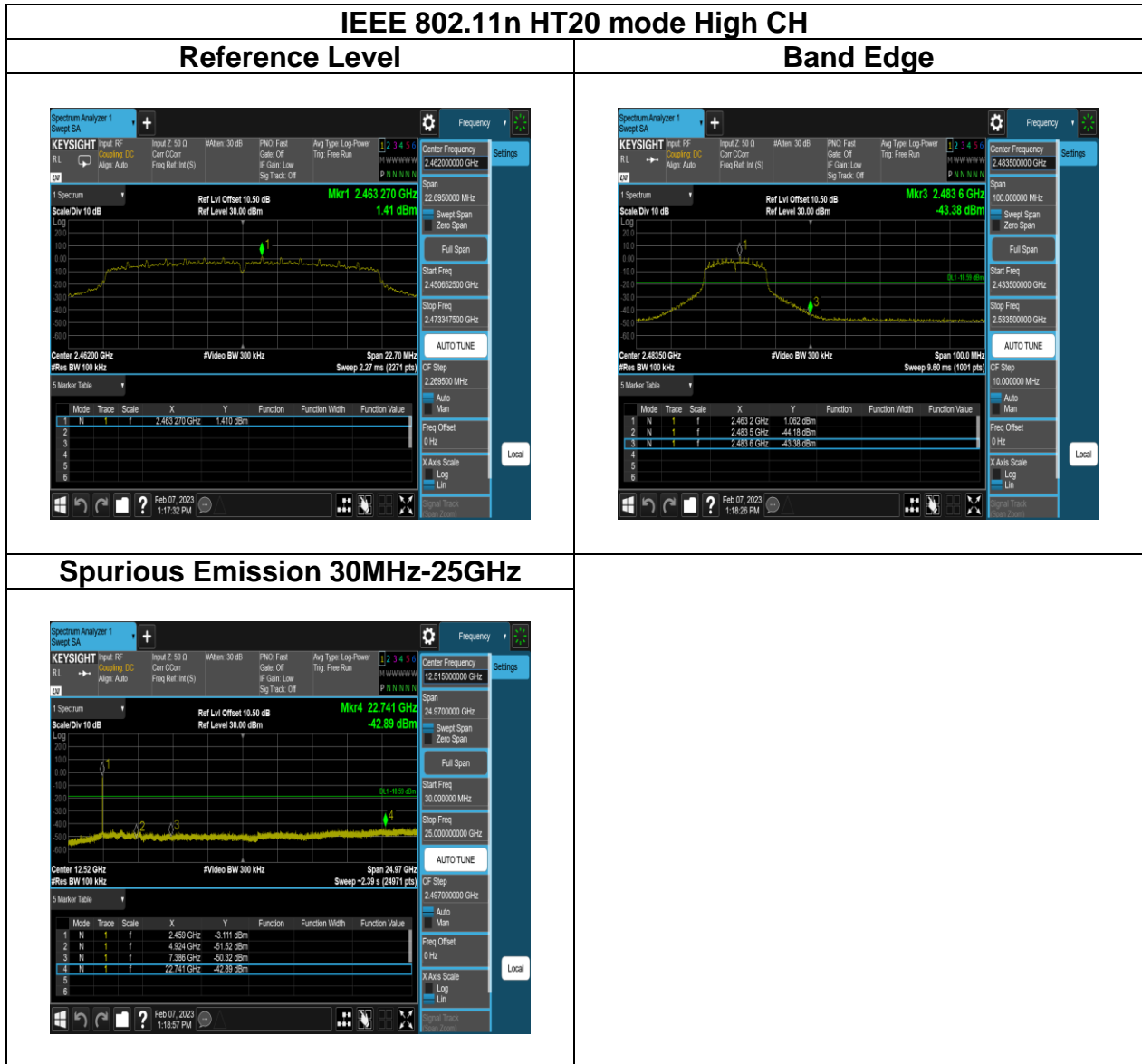
Report No.: TMWK2302000261KR



Report No.: TMWK2302000261KR



Report No.: TMWK2302000261KR





## 4.6 RADIATION BANDEGE AND SPURIOUS EMISSION

### 4.6.1 Test Limit

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

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

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## 4.6.2 Test Procedure

Test method Refer as ANSI C63.10:2013.

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. Data result :

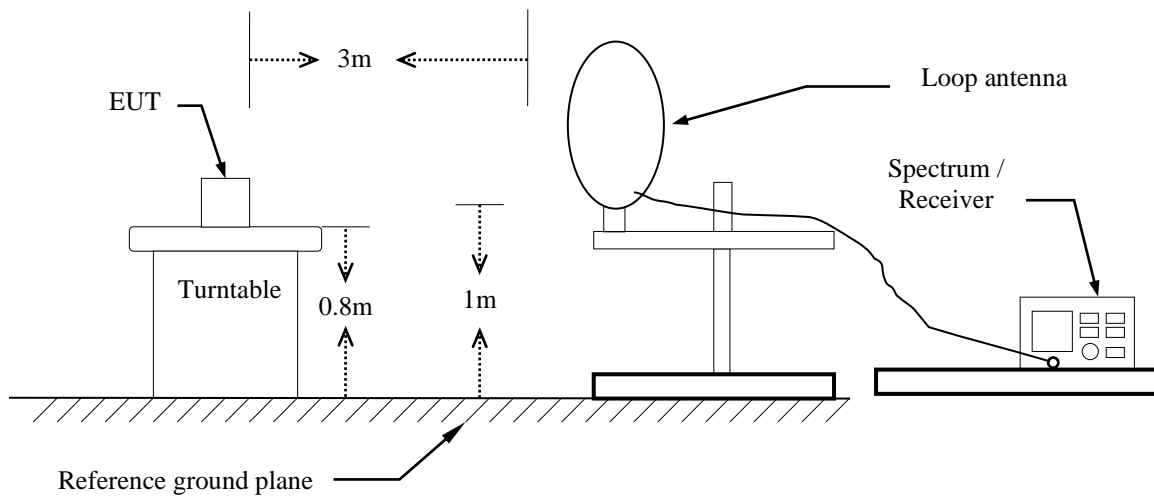
Actual FS=Spectrum Reading Level + Factor

Margin=Actual FS- Limit

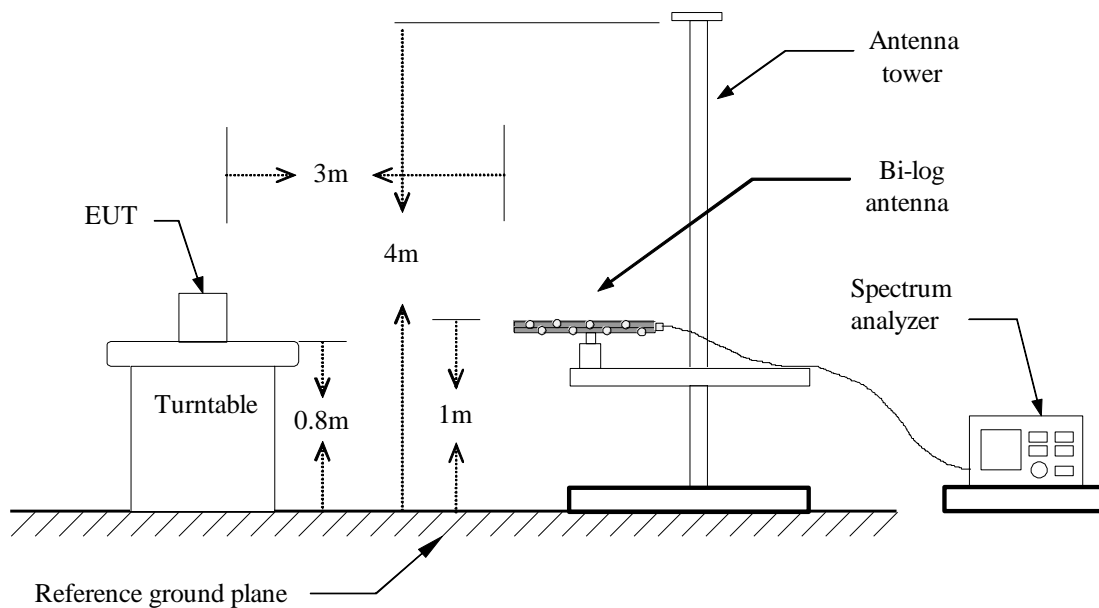
Report No.: TMWK2302000261KR

## 4.6.3 Test Setup

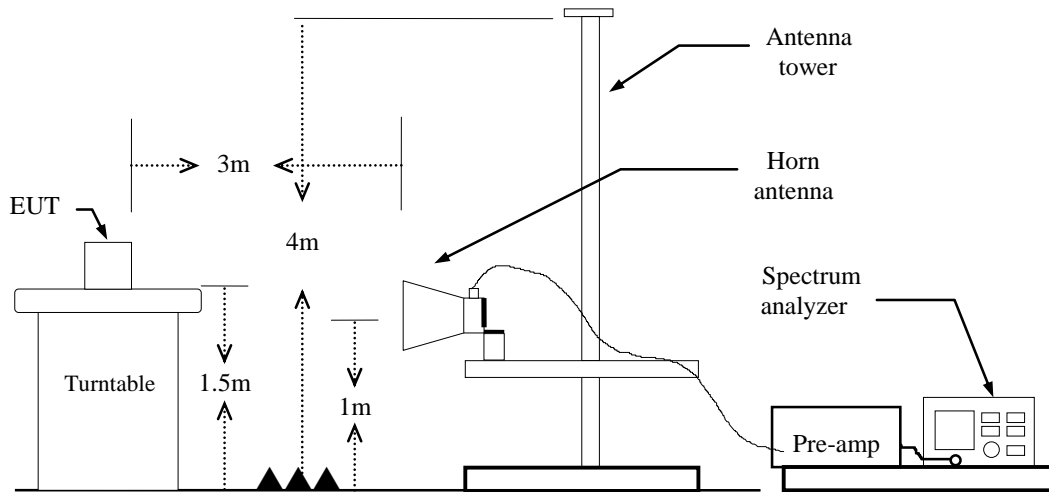
### 9kHz ~ 30MHz



### 30MHz ~ 1GHz



## Above 1 GHz

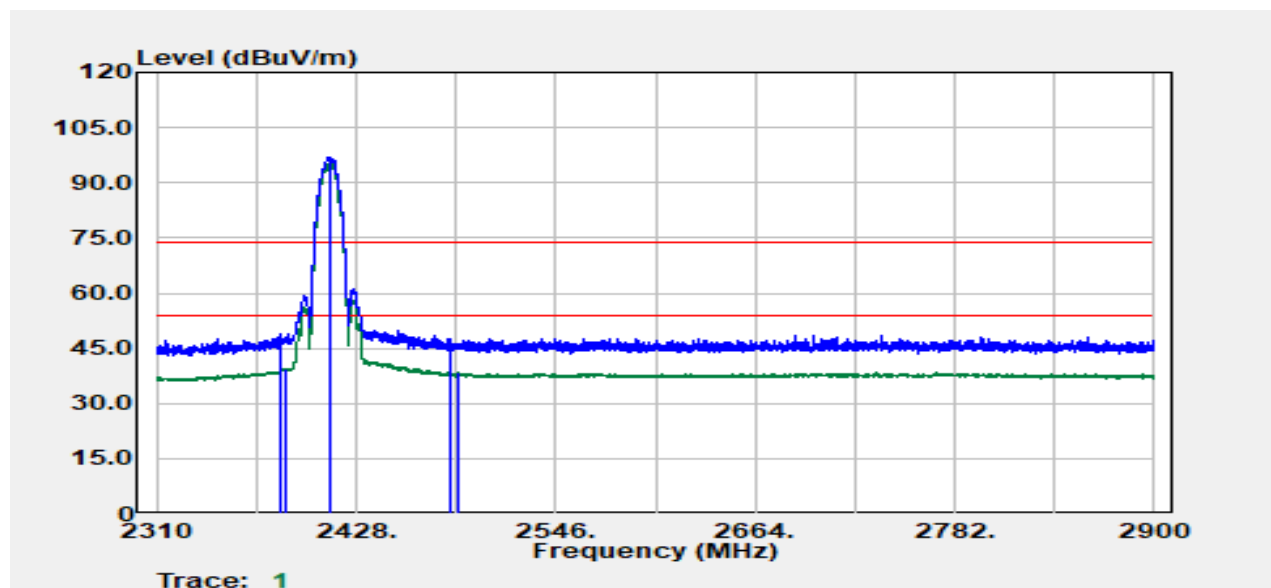


Report No.: TMWK2302000261KR

### 4.6.4 Test Result

#### Band Edge Test Data

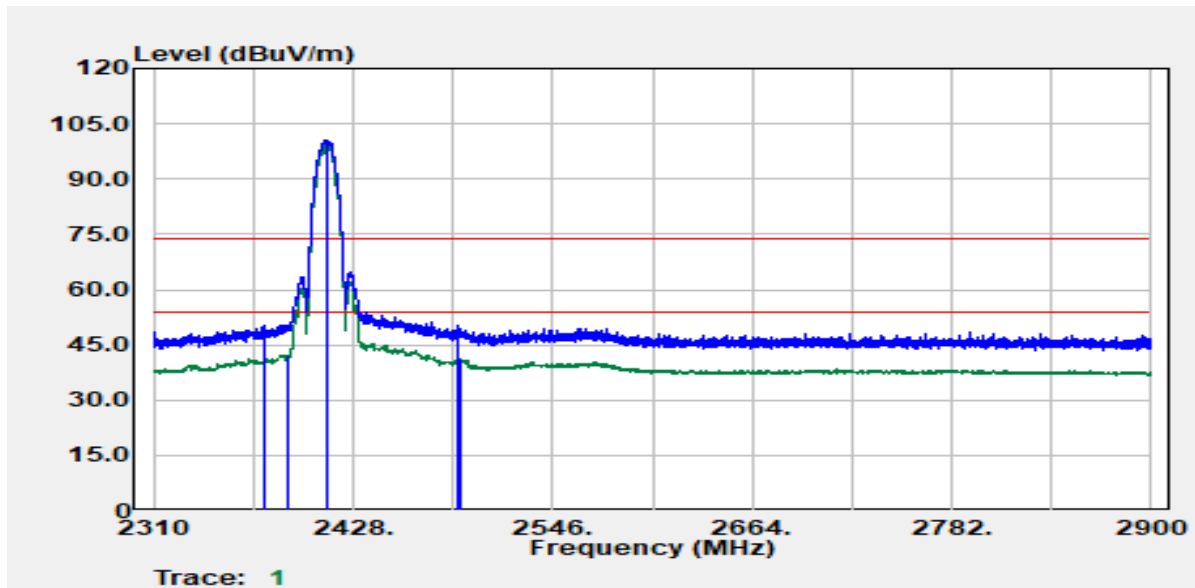
Test Mode	IEEE 802.11b Low CH 2412MHz	Temp/Hum	22.8(°C)/ 61%RH
Test Item	Band Edge	Test Date	February 7, 2023
Polarize	Vertical	Test Engineer	Ray Li
Detector	Peak / Average		



Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
2383.28	Peak	41.52	7.37	48.89	74.00	-25.11
2386.23	Average	32.11	7.40	39.51	54.00	-14.49
2412.00	Peak	89.62	7.32	96.93	--	--
2412.00	Average	87.90	7.32	95.22	--	--
2483.70	Peak	39.80	7.80	47.61	74.00	-26.39
2488.77	Average	30.60	7.81	38.41	54.00	-15.59

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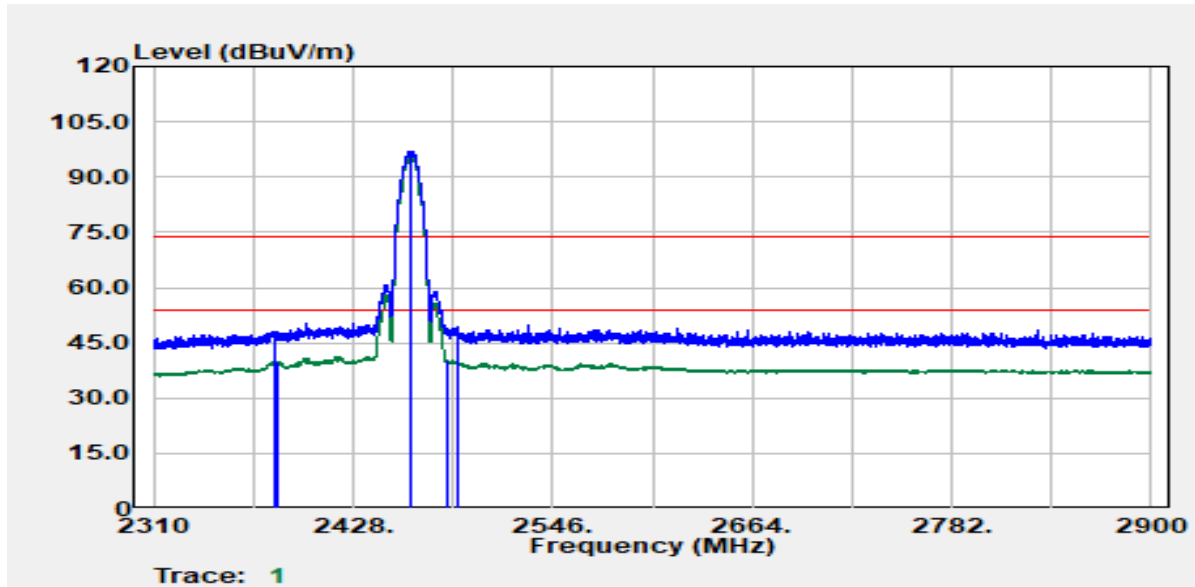
Test Mode	IEEE 802.11b Low CH 2412MHz	Temp/Hum	22.8(°C)/ 61%RH
Test Item	Band Edge	Test Date	February 7, 2023
Polarize	Horizontal	Test Engineer	Ray Li
Detector	Peak / Average		



Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBµV)	Factor (dB)	Actual FS (dBUV/m)	Limit @3m (dBUV/m)	Margin (dB)
2374.90	Peak	43.19	7.28	50.47	74.00	-23.53
2389.41	Average	34.63	7.44	42.07	54.00	-11.93
2412.00	Peak	93.40	7.32	100.71	--	--
2412.00	Average	91.64	7.32	98.96	--	--
2490.19	Peak	42.27	7.81	50.08	74.00	-23.92
2491.25	Average	33.25	7.81	41.07	54.00	-12.93

Report No.: TMWK2302000261KR

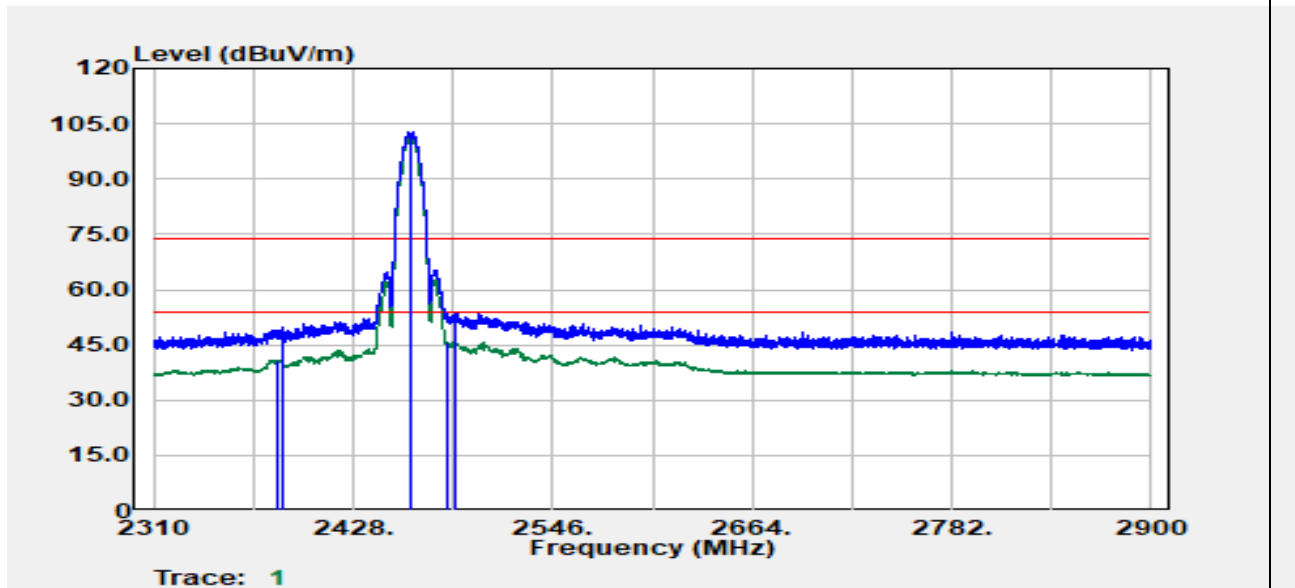
Test Mode	IEEE 802.11b High CH 2462MHz	Temp/Hum	22.8(°C)/ 61%RH
Test Item	Band Edge	Test Date	February 7, 2023
Polarize	Vertical	Test Engineer	Ray Li
Detector	Peak / Average		



Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBUV)	Factor (dB)	Actual FS (dBUV/m)	Limit @3m (dBUV/m)	Margin (dB)
2381.27	Peak	40.83	7.35	48.18	74.00	-25.82
2383.16	Average	32.54	7.37	39.91	54.00	-14.09
2462.00	Peak	89.19	7.68	96.87	--	--
2462.00	Average	87.37	7.68	95.05	--	--
2483.58	Average	32.67	7.80	40.47	54.00	-13.53
2490.42	Peak	41.70	7.81	49.51	74.00	-24.49

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Test Mode	IEEE 802.11b High CH 2462MHz	Temp/Hum	22.8(°C)/ 61%RH
Test Item	Band Edge	Test Date	February 7, 2023
Polarize	Horizontal	Test Engineer	Ray Li
Detector	Peak / Average		

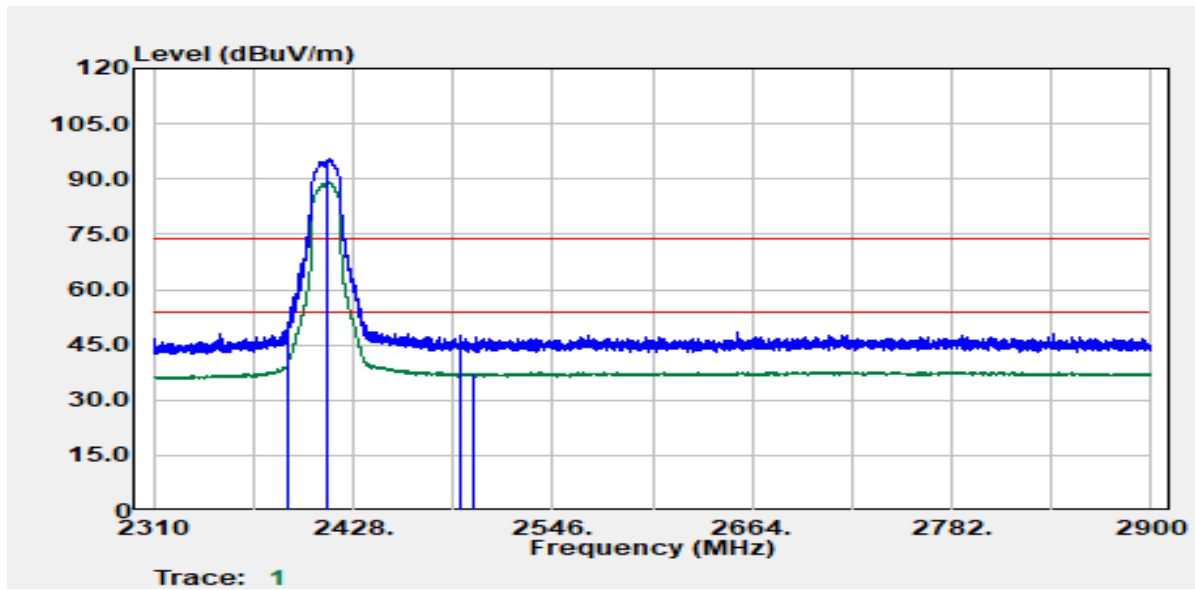


Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBµV)	Factor (dB)	Actual FS (dBµV/m)	Limit @3m (dBµV/m)	Margin (dB)
2382.81	Average	33.57	7.36	40.93	54.00	-13.07
2385.64	Peak	42.58	7.39	49.98	74.00	-24.02
2462.00	Peak	95.01	7.68	102.69	--	--
2462.00	Average	93.17	7.68	100.85	--	--
2483.50	Average	38.11	7.80	45.91	54.00	-8.09
2488.18	Peak	45.71	7.81	53.52	74.00	-20.48



Report No.: TMWK2302000261KR

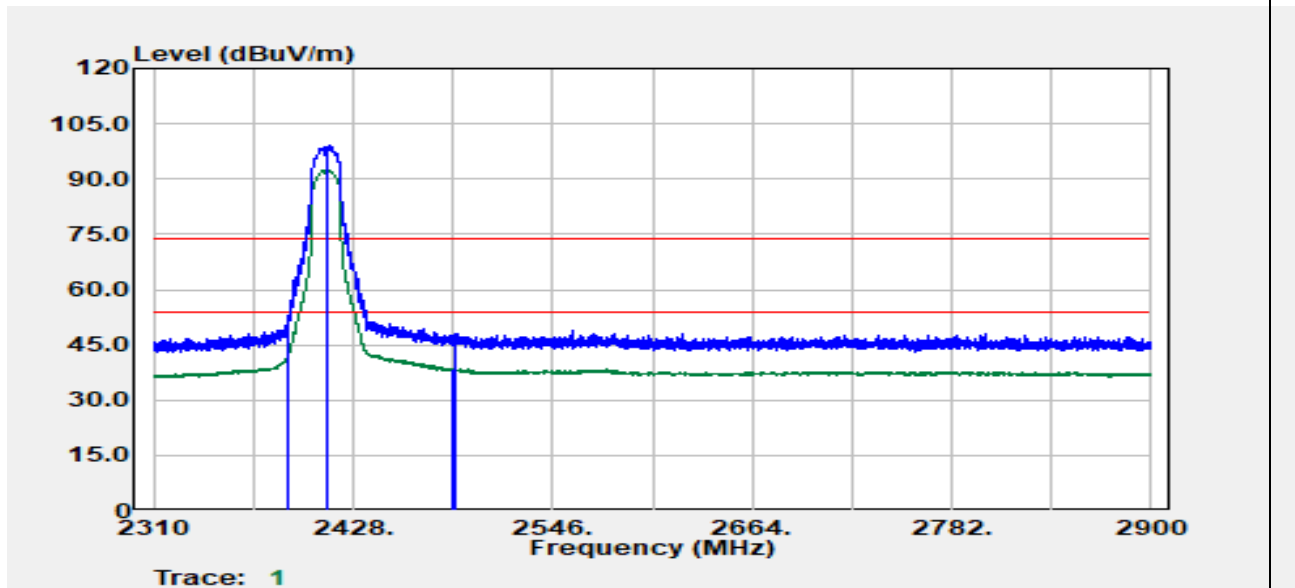
Test Mode	IEEE 802.11g Low CH 2412MHz	Temp/Hum	22.8(°C)/ 61%RH
Test Item	Band Edge	Test Date	February 7, 2023
Polarize	Vertical	Test Engineer	Ray Li
Detector	Peak / Average		



Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBµV)	Factor (dB)	Actual FS (dBUV/m)	Limit @3m (dBUV/m)	Margin (dB)
2389.89	Peak	41.80	7.44	49.24	74.00	-24.76
2390.00	Average	33.04	7.44	40.48	54.00	-13.52
2412.00	Peak	88.41	7.32	95.72	--	--
2412.00	Average	81.72	7.32	89.04	--	--
2492.07	Peak	39.53	7.82	47.35	74.00	-26.65
2498.68	Average	29.40	7.83	37.23	54.00	-16.77

Report No.: TMWK2302000261KR

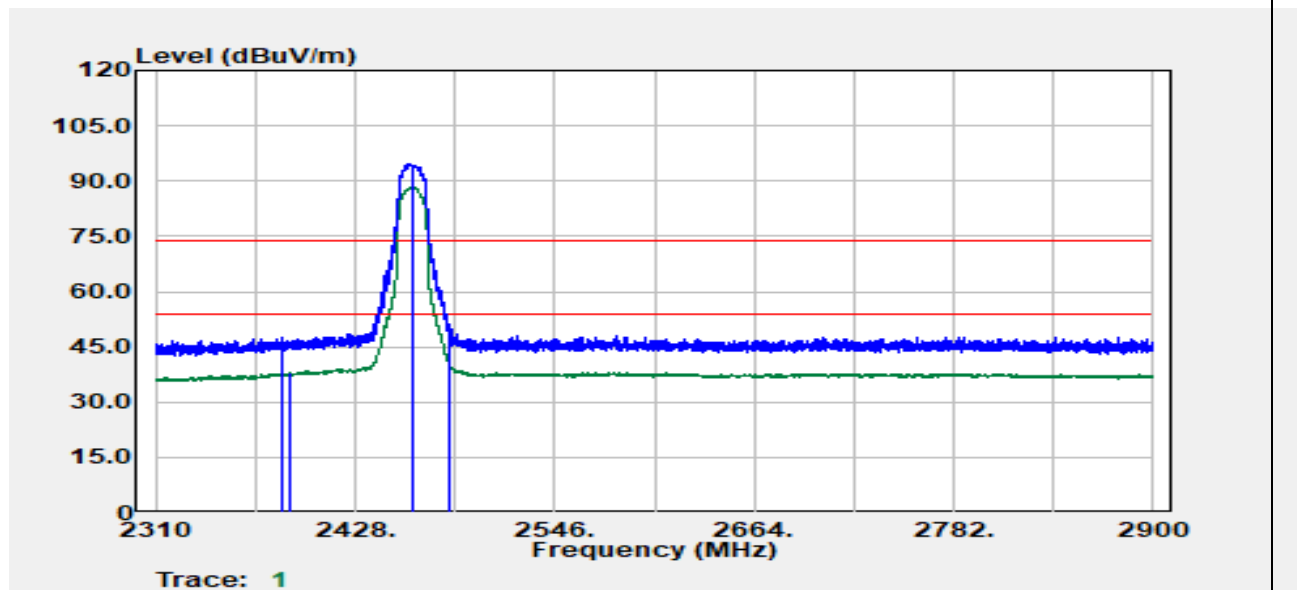
Test Mode	IEEE 802.11g Low CH 2412MHz	Temp/Hum	22.8(°C)/ 61%RH
Test Item	Band Edge	Test Date	February 7, 2023
Polarize	Horizontal	Test Engineer	Ray Li
Detector	Peak / Average		



Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBµV)	Factor (dB)	Actual FS (dBµV/m)	Limit @3m (dBµV/m)	Margin (dB)
2389.53	Peak	44.98	7.44	52.42	74.00	-21.58
2390.00	Average	35.27	7.44	42.71	54.00	-11.29
2412.00	Peak	91.88	7.32	99.19	--	--
2412.00	Average	85.21	7.32	92.53	--	--
2486.65	Average	30.84	7.81	38.64	54.00	-15.36
2488.18	Peak	40.40	7.81	48.21	74.00	-25.79

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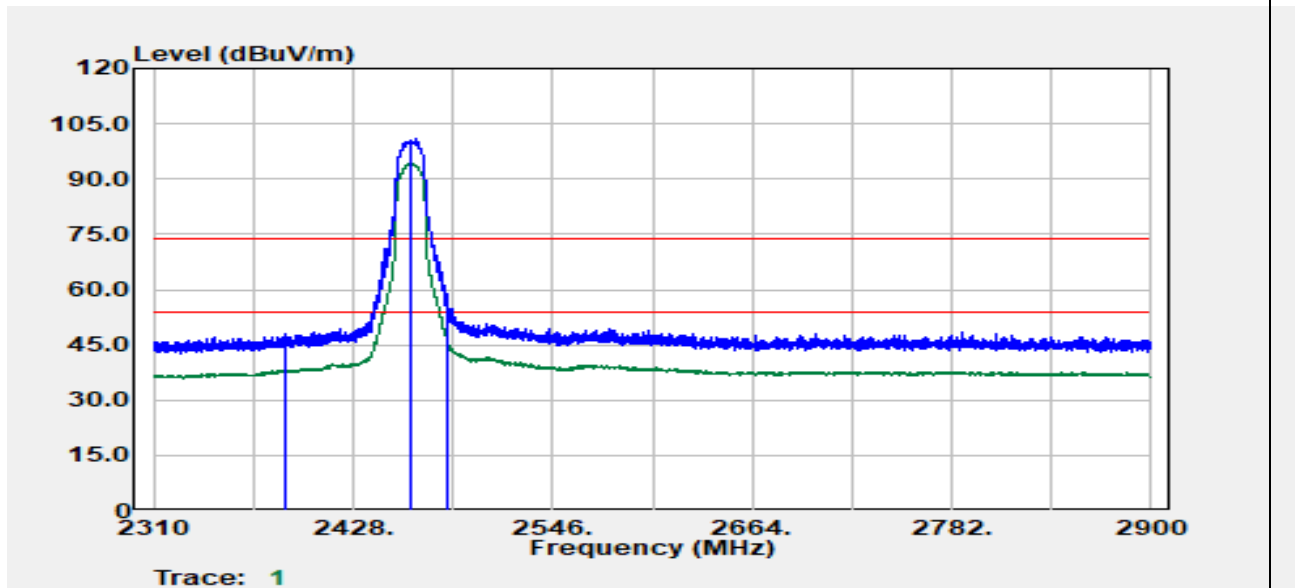
Test Mode	IEEE 802.11g High CH 2462MHz	Temp/Hum	22.8(°C)/ 61%RH
Test Item	Band Edge	Test Date	February 7, 2023
Polarize	Vertical	Test Engineer	Ray Li
Detector	Peak / Average		



Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
2384.93	Peak	40.38	7.39	47.76	74.00	-26.24
2388.82	Average	30.76	7.43	38.19	54.00	-15.81
2462.00	Peak	87.11	7.68	94.79	--	--
2462.00	Average	80.65	7.68	88.33	--	--
2483.50	Average	33.07	7.80	40.87	54.00	-13.13
2483.70	Peak	42.04	7.80	49.84	74.00	-24.16

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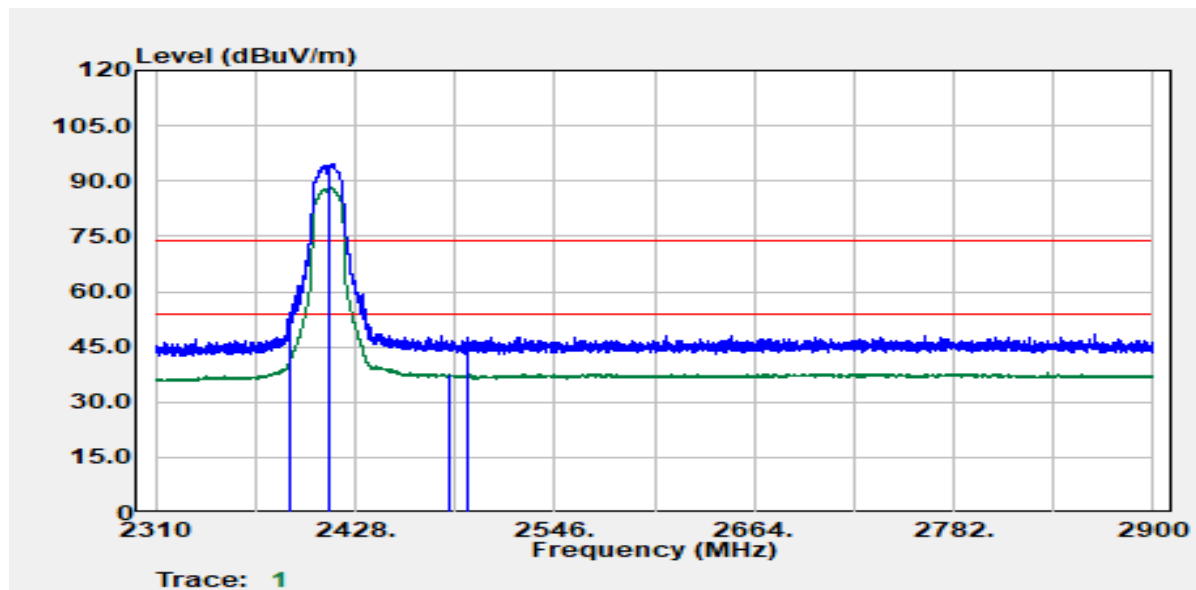
Test Mode	IEEE 802.11g High CH 2462MHz	Temp/Hum	22.8(°C)/ 61%RH
Test Item	Band Edge	Test Date	February 7, 2023
Polarize	Horizontal	Test Engineer	Ray Li
Detector	Peak & Average		



Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBµV)	Factor (dB)	Actual FS (dBµV/m)	Limit @3m (dBµV/m)	Margin (dB)
2387.53	Average	30.70	7.42	38.12	54.00	-15.88
2388.00	Peak	40.47	7.42	47.89	74.00	-26.11
2462.00	Peak	93.36	7.68	101.04	--	--
2462.00	Average	86.45	7.68	94.13	--	--
2483.58	Average	38.35	7.80	46.15	54.00	-7.85
2483.70	Peak	48.98	7.80	56.79	74.00	-17.21

Report No.: TMWK2302000261KR

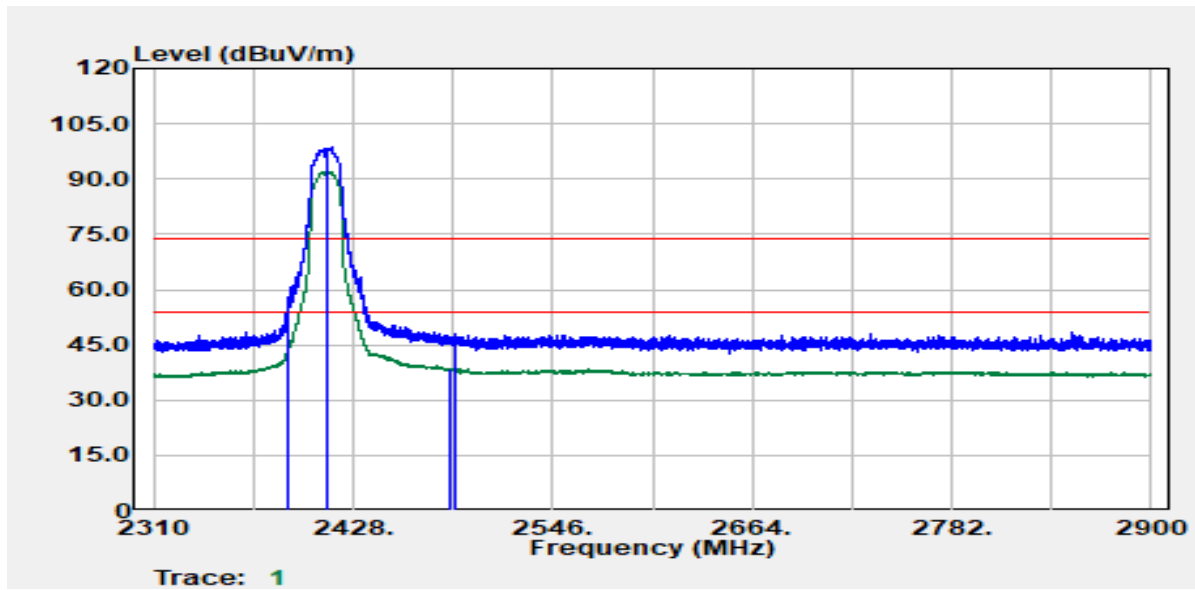
Test Mode	IEEE 802.11n HT20 Low CH 2412MHz	Temp/Hum	22.8(°C)/ 61%RH
Test Item	Band Edge	Test Date	February 7, 2023
Polarize	Vertical	Test Engineer	Ray Li
Detector	Peak / Average		



Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
2389.65	Peak	46.90	7.44	54.33	74.00	-19.67
2390.00	Average	34.46	7.44	41.91	54.00	-12.09
2412.00	Peak	87.17	7.32	94.49	--	--
2412.00	Average	80.82	7.32	88.14	--	--
2484.17	Average	29.69	7.80	37.50	54.00	-16.50
2494.43	Peak	39.92	7.82	47.74	74.00	-26.26

Report No.: TMWK2302000261KR

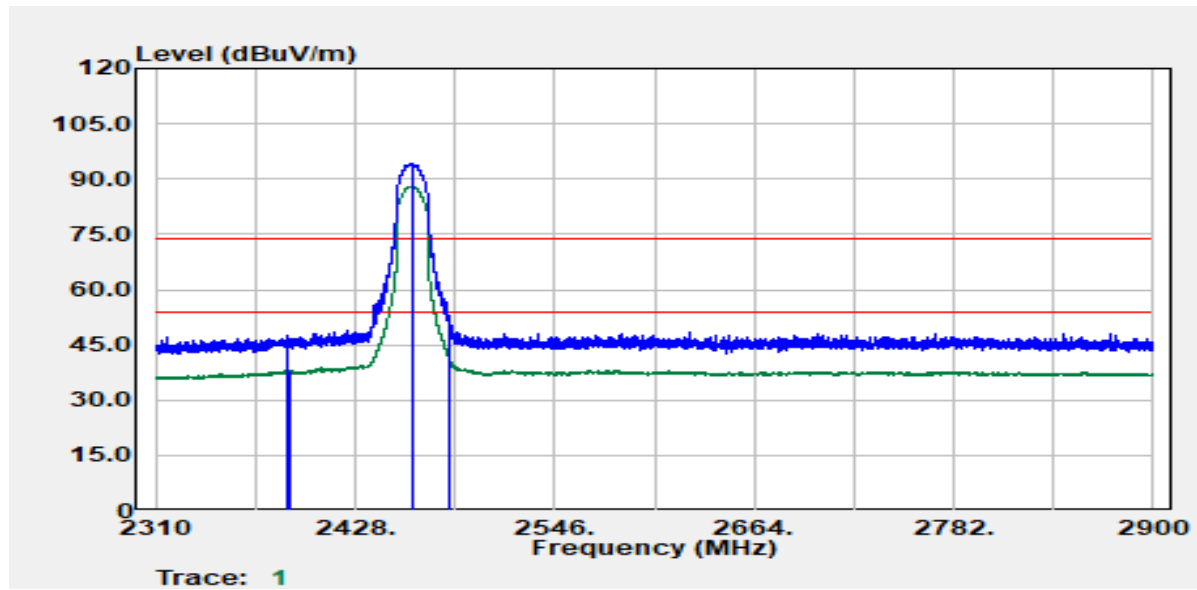
Test Mode	IEEE 802.11n HT20 Low CH 2412MHz	Temp/Hum	22.8(°C)/ 61%RH
Test Item	Band Edge	Test Date	February 7, 2023
Polarize	Horizontal	Test Engineer	Ray Li
Detector	Peak / Average		



Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBµV)	Factor (dB)	Actual FS (dBUV/m)	Limit @3m (dBUV/m)	Margin (dB)
2389.77	Peak	50.35	7.44	57.79	74.00	-16.21
2390.00	Average	36.22	7.44	43.66	54.00	-10.34
2412.00	Peak	91.36	7.32	98.67	--	--
2412.00	Average	84.75	7.32	92.07	--	--
2485.11	Average	30.85	7.80	38.65	54.00	-15.35
2488.06	Peak	40.37	7.81	48.18	74.00	-25.82

Report No.: TMWK2302000261KR

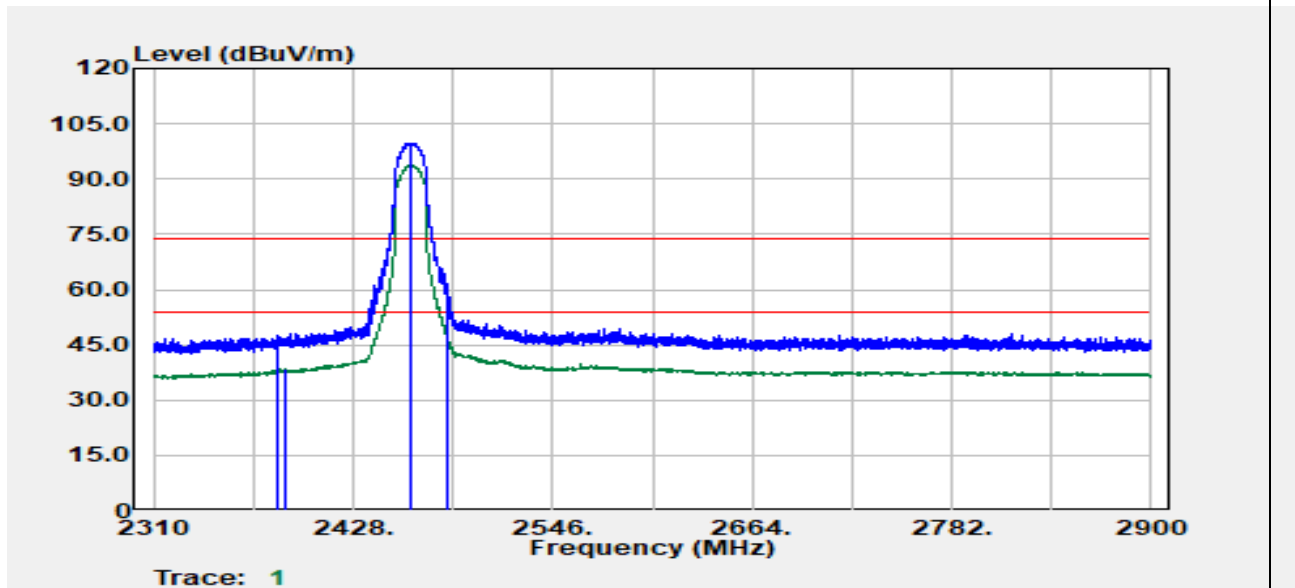
Test Mode	IEEE 802.11n HT20 High CH 2462MHz	Temp/Hum	22.8(°C)/ 61%RH
Test Item	Band Edge	Test Date	February 7, 2023
Polarize	Vertical	Test Engineer	Ray Li
Detector	Peak / Average		



Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
2387.41	Peak	40.21	7.41	47.62	74.00	-26.38
2389.53	Average	30.54	7.44	37.98	54.00	-16.02
2462.00	Peak	86.43	7.68	94.11	--	--
2462.00	Average	80.32	7.68	88.00	--	--
2483.50	Peak	43.42	7.80	51.22	74.00	-22.78
2483.50	Average	33.74	7.80	41.54	54.00	-12.46

Report No.: TMWK2302000261KR

Test Mode	IEEE 802.11n HT20 High CH 2462MHz	Temp/Hum	22.8(°C)/ 61%RH
Test Item	Band Edge	Test Date	February 7, 2023
Polarize	Horizontal	Test Engineer	Ray Li
Detector	Peak / Average		



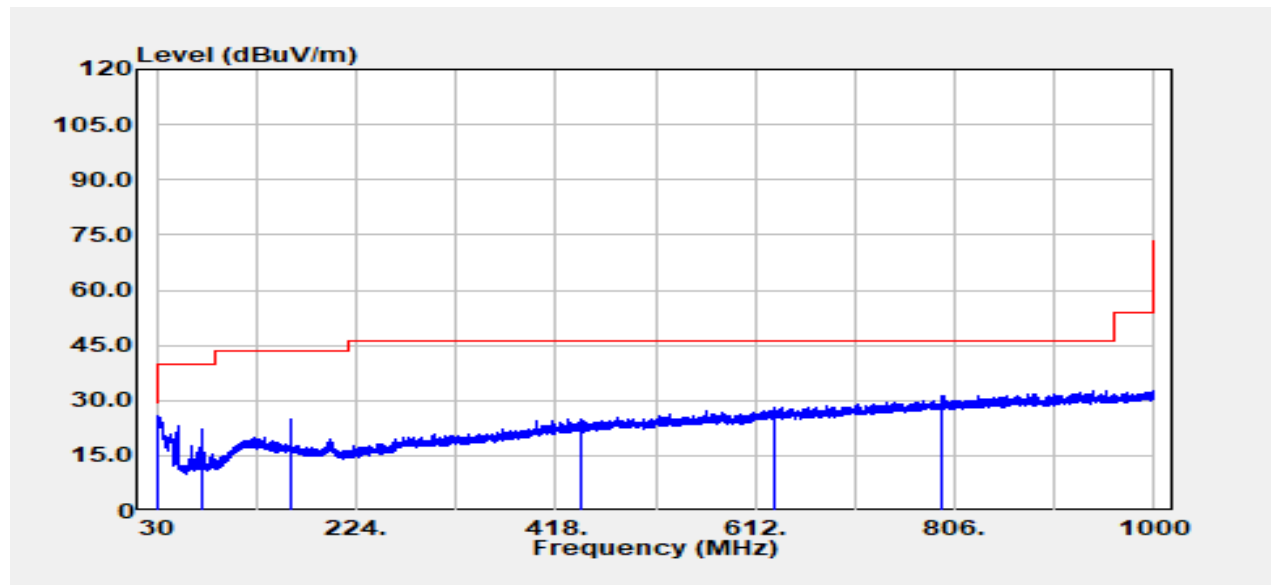
Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBµV)	Factor (dB)	Actual FS (dBµV/m)	Limit @3m (dBµV/m)	Margin (dB)
2383.87	Peak	40.28	7.38	47.66	74.00	-26.34
2387.76	Average	30.91	7.42	38.33	54.00	-15.67
2462.00	Peak	92.15	7.68	99.83	--	--
2462.00	Average	86.02	7.68	93.71	--	--
2483.50	Peak	51.66	7.80	59.46	74.00	-14.54
2483.50	Average	39.42	7.80	47.22	54.00	-6.78



Report No.: TMWK2302000261KR

**Below 1G Test Data**

Test Mode	IEEE 802.11g High CH	Temp/Hum	22.8(°C)/ 61%RH
Test Item	30MHz-1GHz	Test Date	February 8, 2023
Polarize	Vertical	Test Engineer	Ray Li
Detector	Peak		

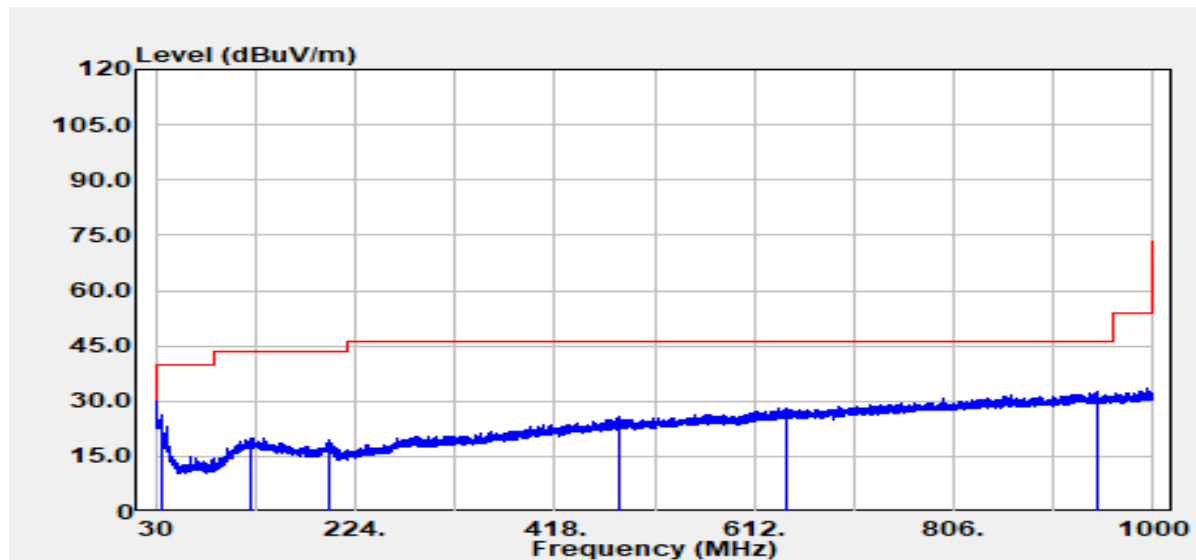


Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBµV)	Factor (dB)	Actual FS (dBµV/m)	Limit @3m (dBµV/m)	Margin (dB)
30.49	Peak	29.21	-3.56	25.65	40.00	-14.35
74.14	Peak	37.86	-15.72	22.14	40.00	-17.86
159.98	Peak	35.76	-10.83	24.93	43.50	-18.57
443.83	Peak	30.07	-5.01	25.05	46.00	-20.95
630.67	Peak	29.09	-1.27	27.82	46.00	-18.18
794.48	Peak	30.41	1.04	31.45	46.00	-14.55

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

Report No.: TMWK2302000261KR

Test Mode	IEEE 802.11g High CH	Temp/Hum	22.8(°C)/ 61%RH
Test Item	30MHz-1GHz	Test Date	February 8, 2023
Polarize	Horizontal	Test Engineer	Ray Li
Detector	Peak		



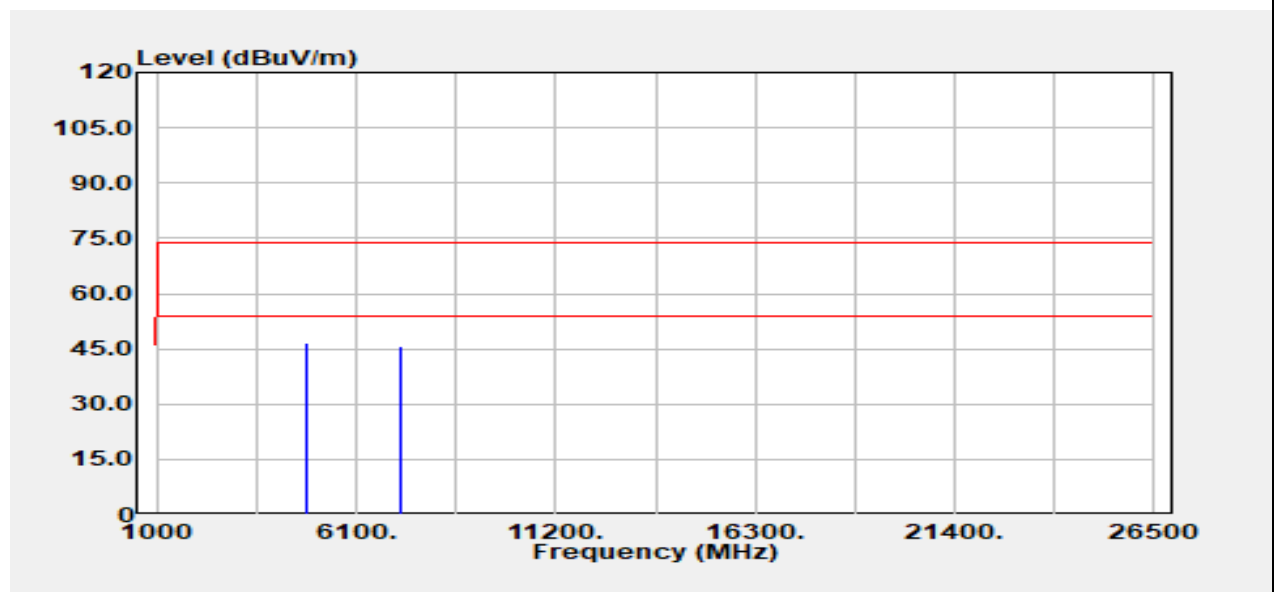
Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
34.97	Peak	32.13	-6.02	26.12	40.00	-13.88
123.24	Peak	29.26	-9.27	19.99	43.50	-23.51
199.87	Peak	29.16	-9.90	19.26	43.50	-24.24
480.08	Peak	29.50	-3.83	25.67	46.00	-20.33
643.77	Peak	28.98	-0.97	28.01	46.00	-17.99
945.32	Peak	29.23	3.23	32.45	46.00	-13.55

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

Report No.: TMWK2302000261KR

**Above 1G Test Data**

Test Mode	IEEE 802.11b Low CH	Temp/Hum	22.8(°C)/ 61%RH
Test Item	Harmonic	Test Date	February 7, 2023
Polarize	Vertical	Test Engineer	Ray Li
Detector	Peak / Average		



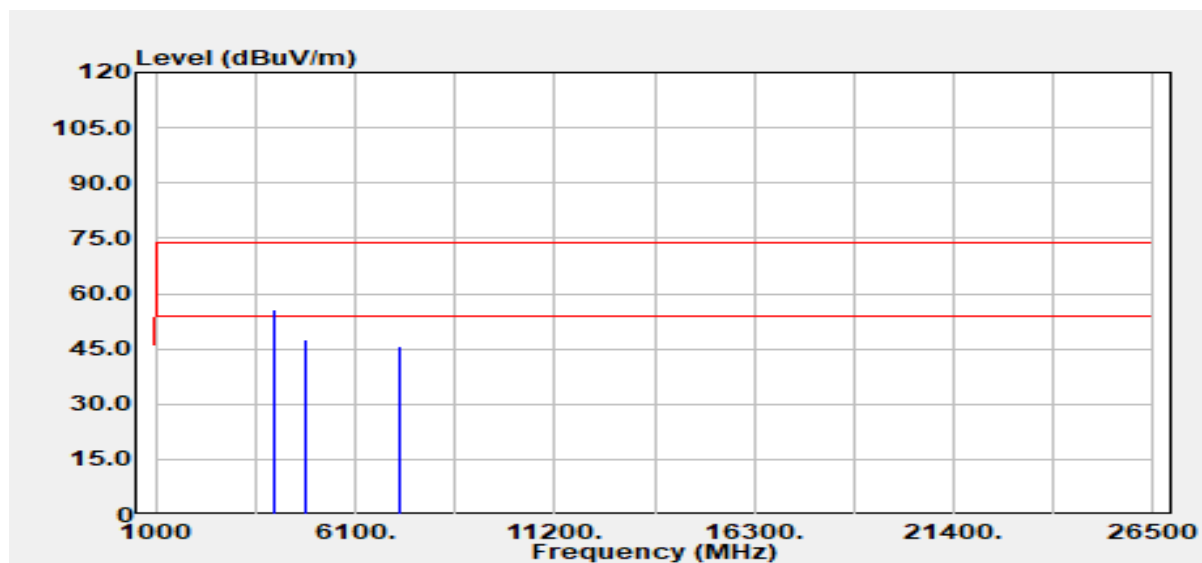
Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBµV)	Factor (dB)	Actual FS (dBµV/m)	Limit @3m (dBµV/m)	Margin (dB)
4824.00	Peak	41.56	5.22	46.79	74.00	-27.21
4824.00	Average	39.20	5.22	44.42	54.00	-9.58
7236.00	Peak	32.81	12.73	45.53	74.00	-28.47
7236.00	Average	24.80	12.73	37.53	54.00	-16.47

**Remark:**

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

Report No.: TMWK2302000261KR

Test Mode	IEEE 802.11b Low CH	Temp/Hum	22.8(°C)/ 61%RH
Test Item	Harmonic	Test Date	February 7, 2023
Polarize	Horizontal	Test Engineer	Ray Li
Detector	Peak / Average		



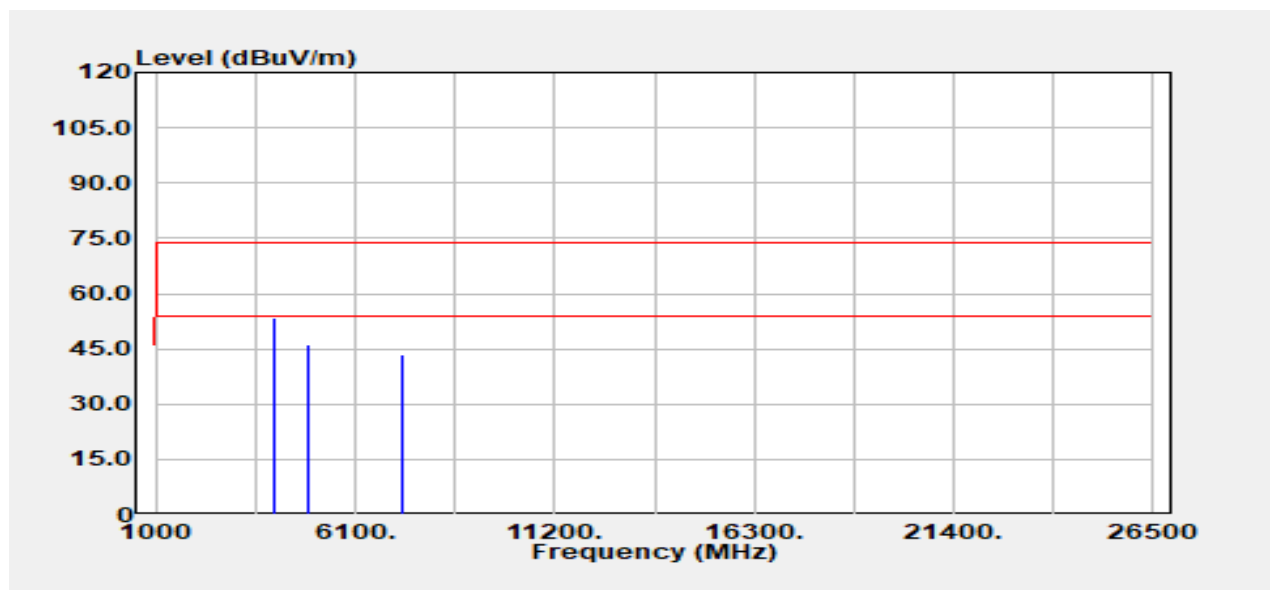
Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dB $\mu$ V)	Factor (dB)	Actual FS (dB $\mu$ V/m)	Limit @3m (dB $\mu$ V/m)	Margin (dB)
4019.00	Peak	52.36	3.52	55.88	74.00	-18.12
4019.00	Average	47.88	3.52	51.40	54.00	-2.60
4824.00	Peak	42.11	5.22	47.34	74.00	-26.66
4824.00	Average	40.74	5.22	45.96	54.00	-8.04
7236.00	Peak	33.09	12.73	45.81	74.00	-28.19
7236.00	Average	23.79	12.73	36.52	54.00	-17.48

**Remark:**

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

Report No.: TMWK2302000261KR

Test Mode	IEEE 802.11b Mid CH	Temp/Hum	23.1(°C)/ 60%RH
Test Item	Harmonic	Test Date	February 8, 2023
Polarize	Vertical	Test Engineer	Tony Chao
Detector	Peak / Average		



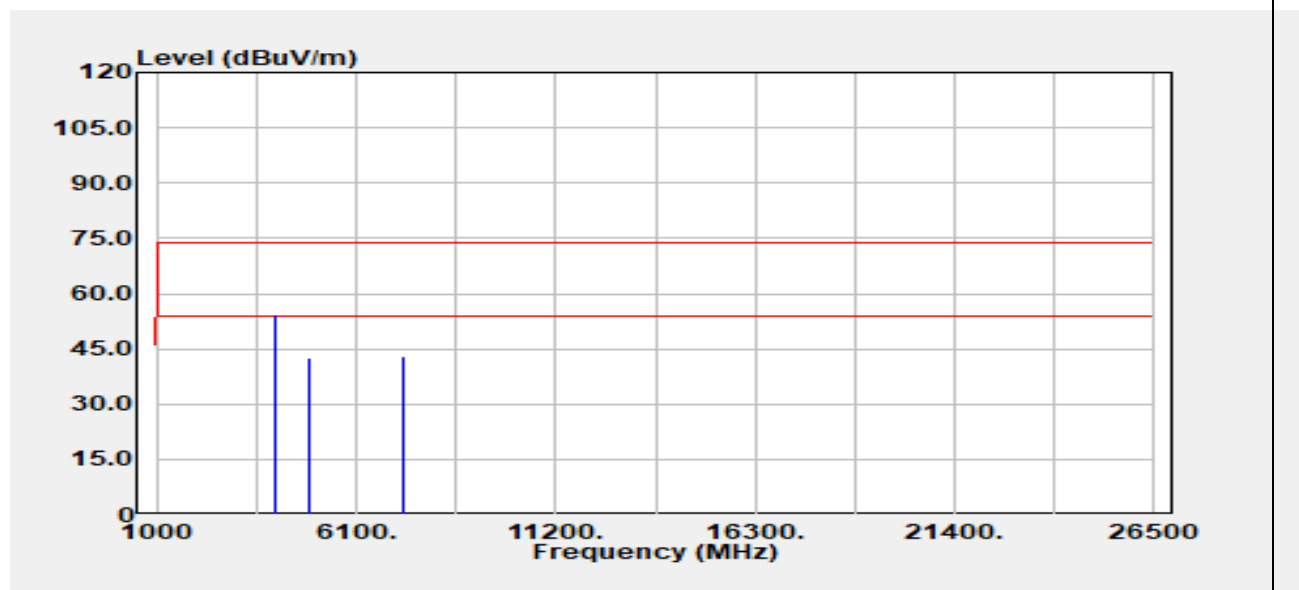
Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
4063.00	Peak	49.66	3.60	53.26	74.00	-20.74
4063.00	Average	47.22	3.60	50.82	54.00	-3.18
4874.00	Peak	40.59	5.52	46.11	74.00	-27.89
4874.00	Average	38.90	5.52	44.42	54.00	-9.58
7311.00	Peak	30.71	12.70	43.42	74.00	-30.58
7311.00	Average	23.80	12.70	36.50	54.00	-17.50

**Remark:**

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

Report No.: TMWK2302000261KR

Test Mode	IEEE 802.11b Mid CH	Temp/Hum	23.1(°C)/ 60%RH
Test Item	Harmonic	Test Date	February 8, 2023
Polarize	Horizontal	Test Engineer	Tony Chao
Detector	Peak / Average		



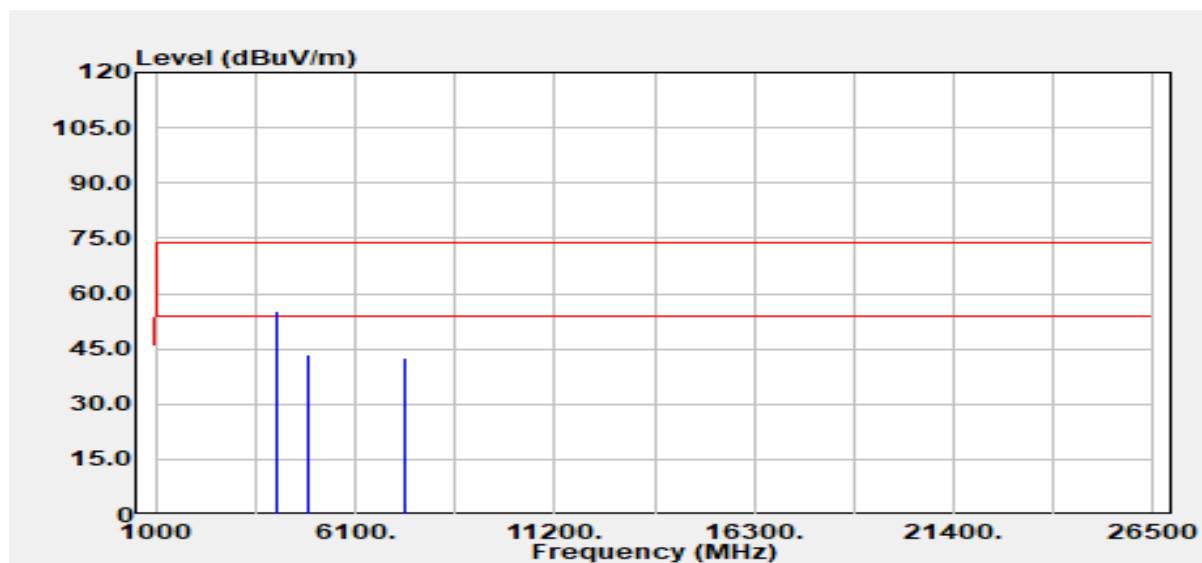
Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBµV)	Factor (dB)	Actual FS (dBµV/m)	Limit @3m (dBµV/m)	Margin (dB)
4063.00	Peak	50.75	3.60	54.35	74.00	-19.65
4063.00	Average	48.73	3.60	52.33	54.00	-1.67
4874.00	Peak	36.95	5.52	42.47	74.00	-31.53
4874.00	Average	35.01	5.52	40.53	54.00	-13.47
7311.00	Peak	30.41	12.70	43.11	74.00	-30.89
7311.00	Average	25.03	12.70	37.73	54.00	-16.27

**Remark:**

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

Report No.: TMWK2302000261KR

Test Mode	IEEE 802.11b High CH	Temp/Hum	23.1(°C)/ 60%RH
Test Item	Harmonic	Test Date	February 8, 2023
Polarize	Vertical	Test Engineer	Tony Chao
Detector	Peak / Average		



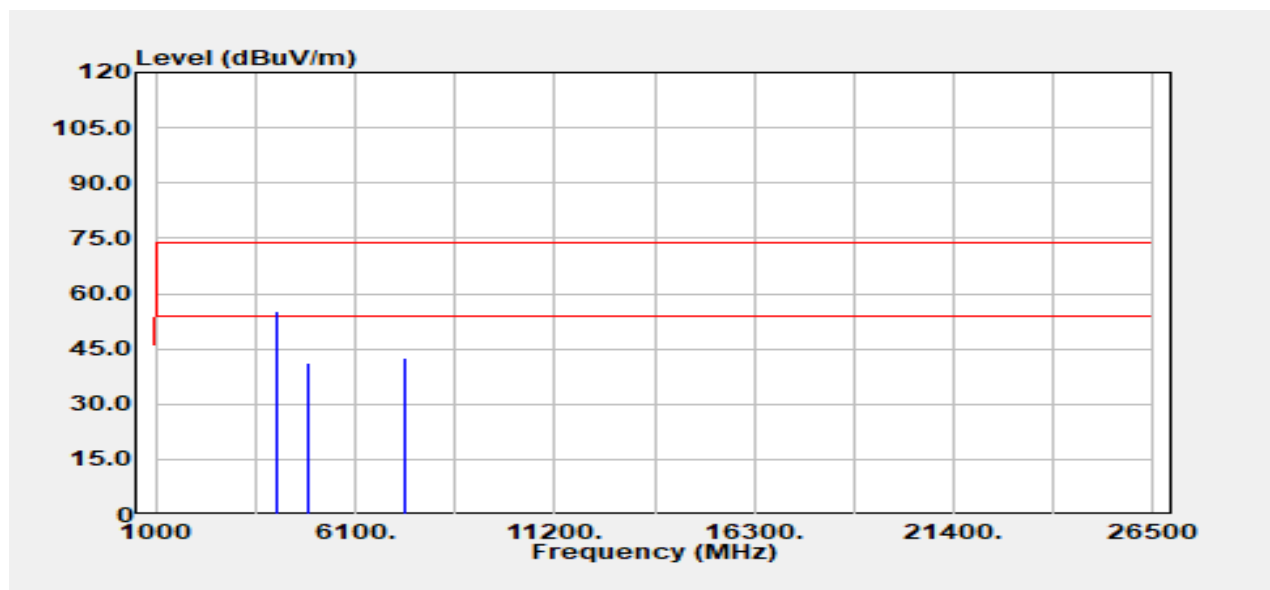
Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
4102.00	Peak	51.70	3.63	55.33	74.00	-18.67
4102.00	Average	49.22	3.63	52.85	54.00	-1.15
4924.00	Peak	37.42	5.94	43.36	74.00	-30.64
4924.00	Average	34.91	5.94	40.85	54.00	-13.15
7386.00	Peak	30.11	12.67	42.78	74.00	-31.22
7386.00	Average	22.74	12.67	35.41	54.00	-18.59

**Remark:**

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

Report No.: TMWK2302000261KR

Test Mode	IEEE 802.11b High CH	Temp/Hum	23.1(°C)/ 60%RH
Test Item	Harmonic	Test Date	February 8, 2023
Polarize	Horizontal	Test Engineer	Tony Chao
Detector	Peak / Average		



Freq. (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)
4102.00	Peak	51.83	3.63	55.46	74.00	-18.54
4102.00	Average	49.17	3.63	52.80	54.00	-1.20
4924.00	Peak	35.16	5.94	41.10	74.00	-32.90
4924.00	Average	31.14	5.94	37.08	54.00	-16.92
7386.00	Peak	29.91	12.67	42.58	74.00	-31.42
7386.00	Average	22.24	12.67	34.91	54.00	-19.09

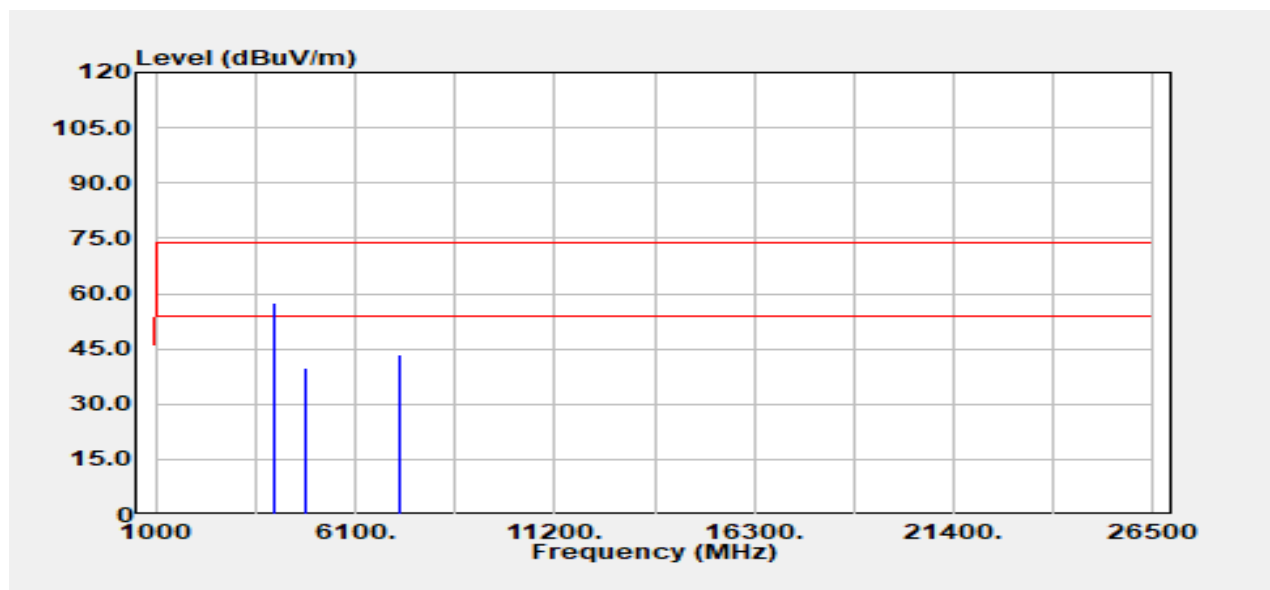
**Remark:**

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



Report No.: TMWK2302000261KR

Test Mode	IEEE 802.11g Low CH	Temp/Hum	23.1(°C)/ 60%RH
Test Item	Harmonic	Test Date	February 8, 2023
Polarize	Vertical	Test Engineer	Tony Chao
Detector	Peak / Average		



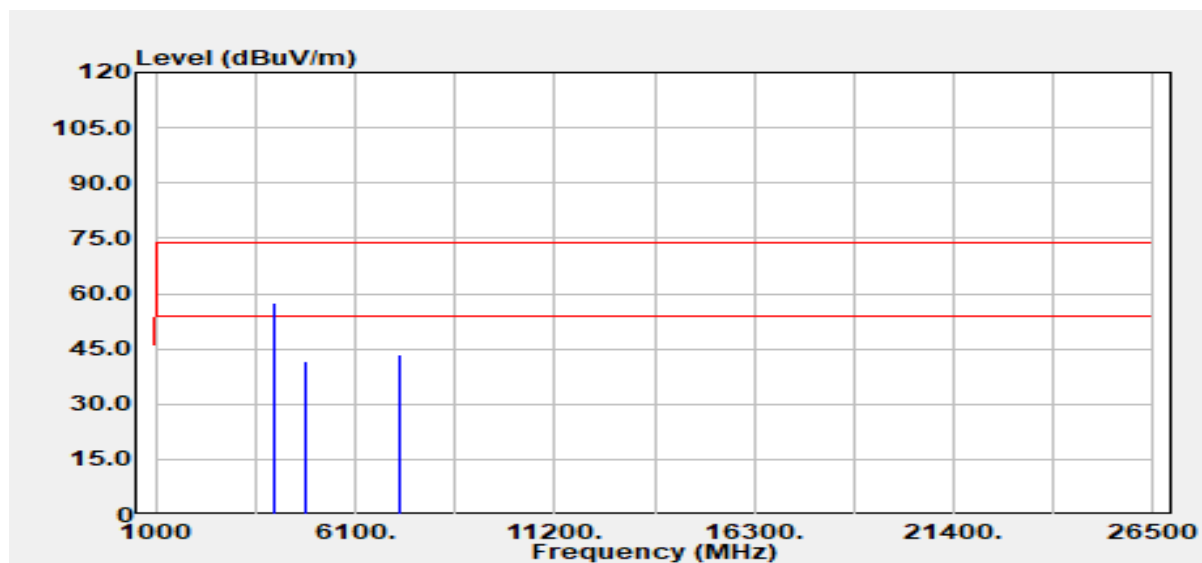
Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBµV)	Factor (dB)	Actual FS (dBµV/m)	Limit @3m (dBµV/m)	Margin (dB)
4021.00	Peak	53.81	3.52	57.33	74.00	-16.67
4021.00	Average	47.79	3.52	51.31	54.00	-2.69
4824.00	Peak	34.55	5.22	39.78	74.00	-34.22
4824.00	Average	25.31	5.22	30.53	54.00	-23.47
7236.00	Peak	30.94	12.73	43.67	74.00	-30.33
7236.00	Average	22.70	12.73	35.43	54.00	-18.57

**Remark:**

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

Report No.: TMWK2302000261KR

Test Mode	IEEE 802.11g Low CH	Temp/Hum	23.1(°C)/ 60%RH
Test Item	Harmonic	Test Date	February 8, 2023
Polarize	Horizontal	Test Engineer	Tony Chao
Detector	Peak / Average		



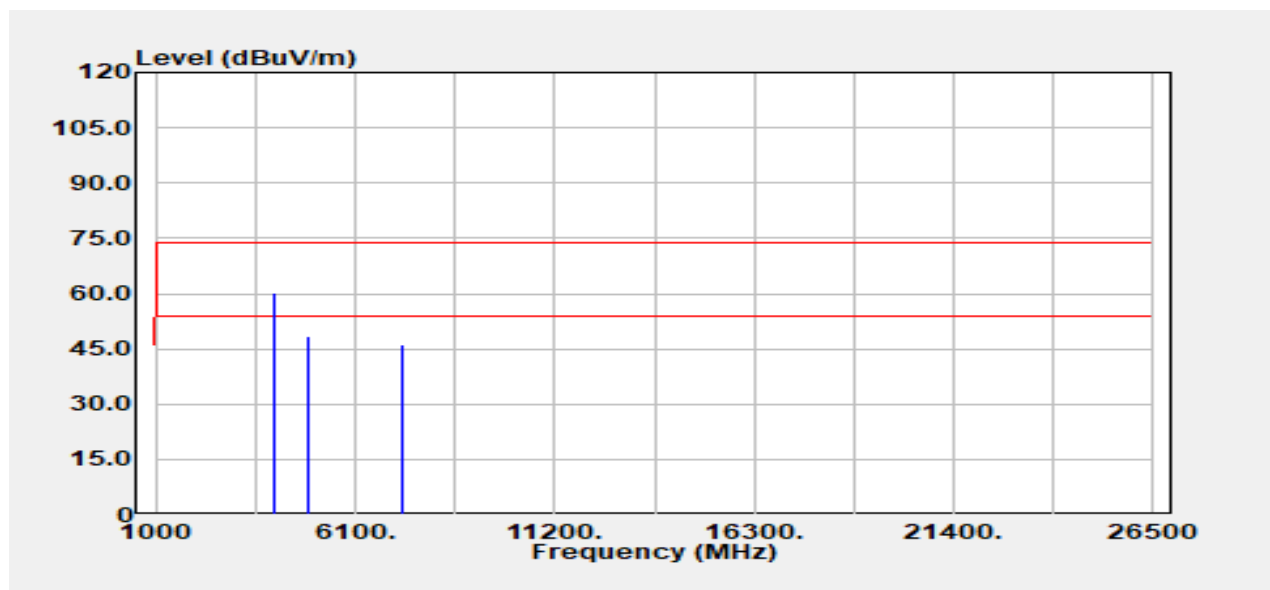
Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBµV)	Factor (dB)	Actual FS (dBµV/m)	Limit @3m (dBµV/m)	Margin (dB)
4017.00	Peak	53.83	3.51	57.34	74.00	-16.66
4017.00	Average	47.74	3.51	51.25	54.00	-2.75
4824.00	Peak	36.22	5.22	41.44	74.00	-32.56
4824.00	Average	27.72	5.22	32.94	54.00	-21.06
7236.00	Peak	30.93	12.73	43.66	74.00	-30.34
7236.00	Average	22.66	12.73	35.39	54.00	-18.61

**Remark:**

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

Report No.: TMWK2302000261KR

Test Mode	IEEE 802.11g Mid CH	Temp/Hum	23.1(°C)/ 60%RH
Test Item	Harmonic	Test Date	February 8, 2023
Polarize	Vertical	Test Engineer	Tony Chao
Detector	Peak / Average		



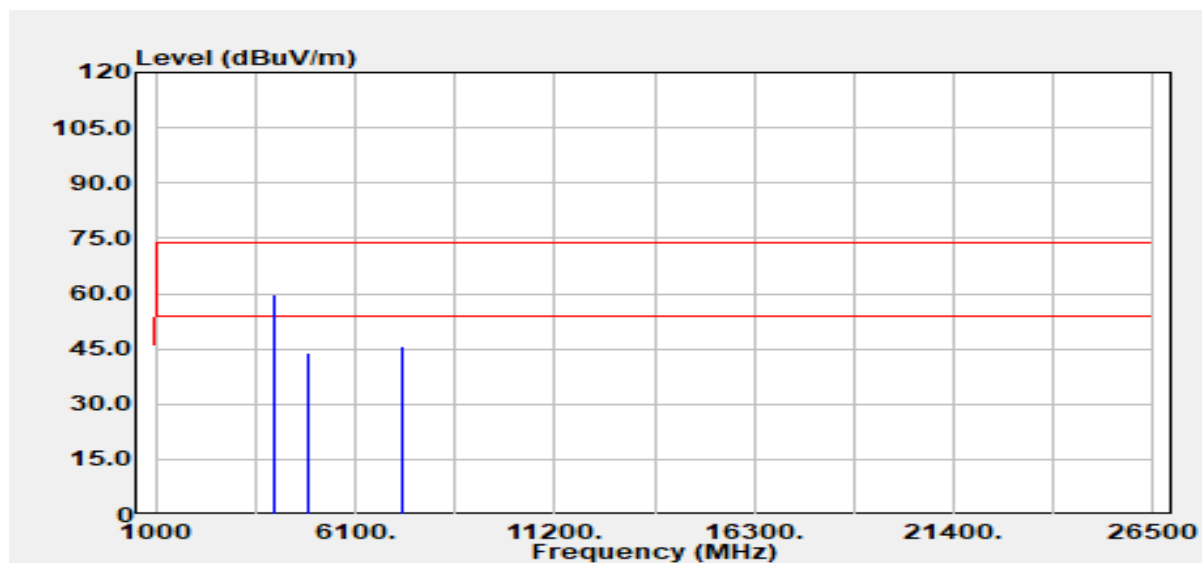
Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBµV)	Factor (dB)	Actual FS (dBµV/m)	Limit @3m (dBµV/m)	Margin (dB)
4060.00	Peak	56.78	3.60	60.37	74.00	-13.63
4060.00	Average	49.30	3.60	52.90	54.00	-1.10
4874.00	Peak	43.07	5.52	48.59	74.00	-25.41
4874.00	Average	32.59	5.52	38.10	54.00	-15.90
7311.00	Peak	33.41	12.70	46.11	74.00	-27.89
7311.00	Average	23.17	12.70	35.87	54.00	-18.13

**Remark:**

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

Report No.: TMWK2302000261KR

Test Mode	IEEE 802.11g Mid CH	Temp/Hum	23.1(°C)/ 60%RH
Test Item	Harmonic	Test Date	February 8, 2023
Polarize	Horizontal	Test Engineer	Tony Chao
Detector	Peak / Average		



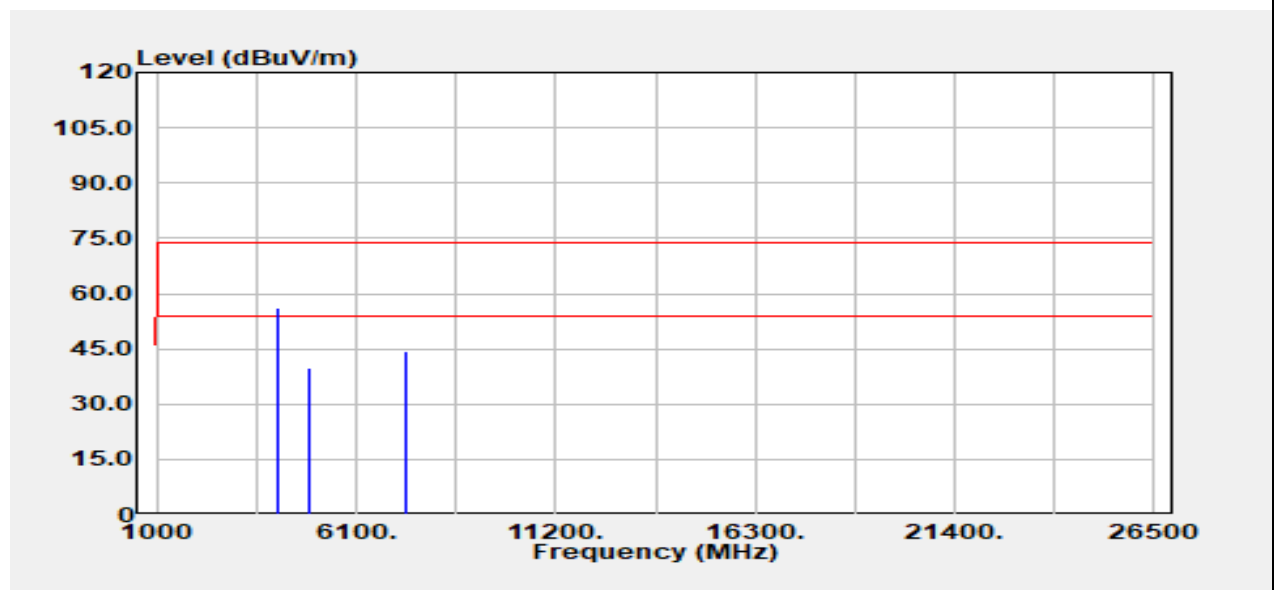
Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
4059.00	Peak	56.24	3.60	59.84	74.00	-14.16
4059.00	Average	49.12	3.60	52.72	54.00	-1.28
4874.00	Peak	38.56	5.52	44.08	74.00	-29.92
4874.00	Average	27.26	5.52	32.78	54.00	-21.22
7311.00	Peak	33.20	12.70	45.90	74.00	-28.10
7311.00	Average	22.12	12.70	34.82	54.00	-19.18

**Remark:**

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

Report No.: TMWK2302000261KR

Test Mode	IEEE 802.11g High CH	Temp/Hum	23.1(°C)/ 60%RH
Test Item	Harmonic	Test Date	February 8, 2023
Polarize	Vertical	Test Engineer	Tony Chao
Detector	Peak / Average		



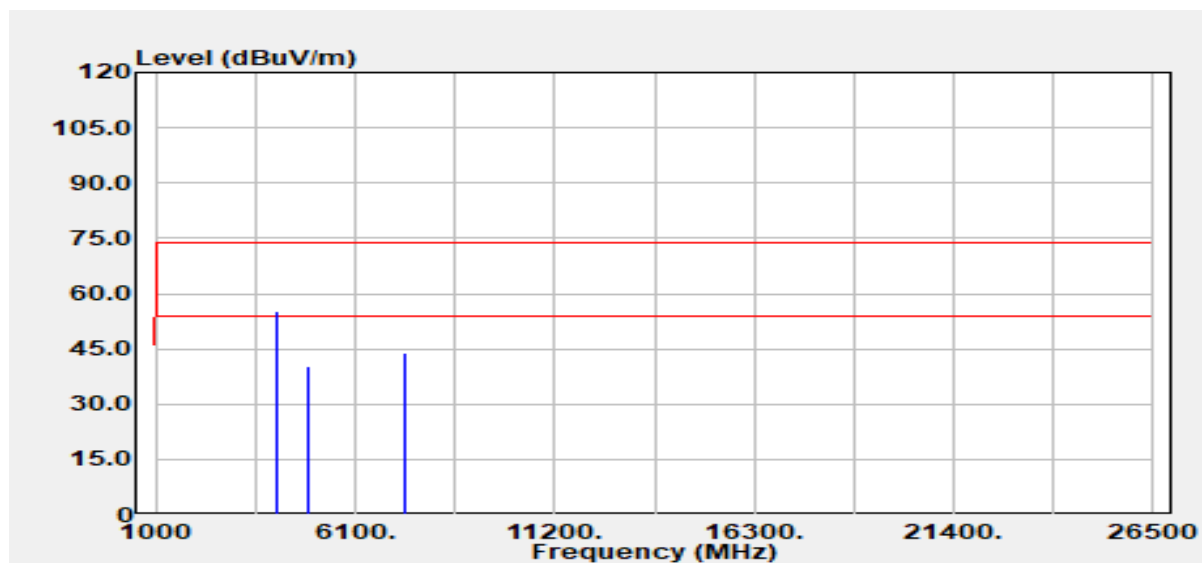
Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dB $\mu$ V)	Factor (dB)	Actual FS (dB $\mu$ V/m)	Limit @3m (dB $\mu$ V/m)	Margin (dB)
4102.00	Peak	52.32	3.63	55.96	74.00	-18.04
4102.00	Average	49.40	3.63	53.03	54.00	-0.97
4924.00	Peak	33.98	5.94	39.92	74.00	-34.08
4924.00	Average	24.92	5.94	30.86	54.00	-23.14
7386.00	Peak	31.61	12.67	44.28	74.00	-29.72
7386.00	Average	22.45	12.67	35.12	54.00	-18.88

**Remark:**

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

Report No.: TMWK2302000261KR

Test Mode	IEEE 802.11g High CH	Temp/Hum	23.1(°C)/ 60%RH
Test Item	Harmonic	Test Date	February 8, 2023
Polarize	Horizontal	Test Engineer	Tony Chao
Detector	Peak / Average		



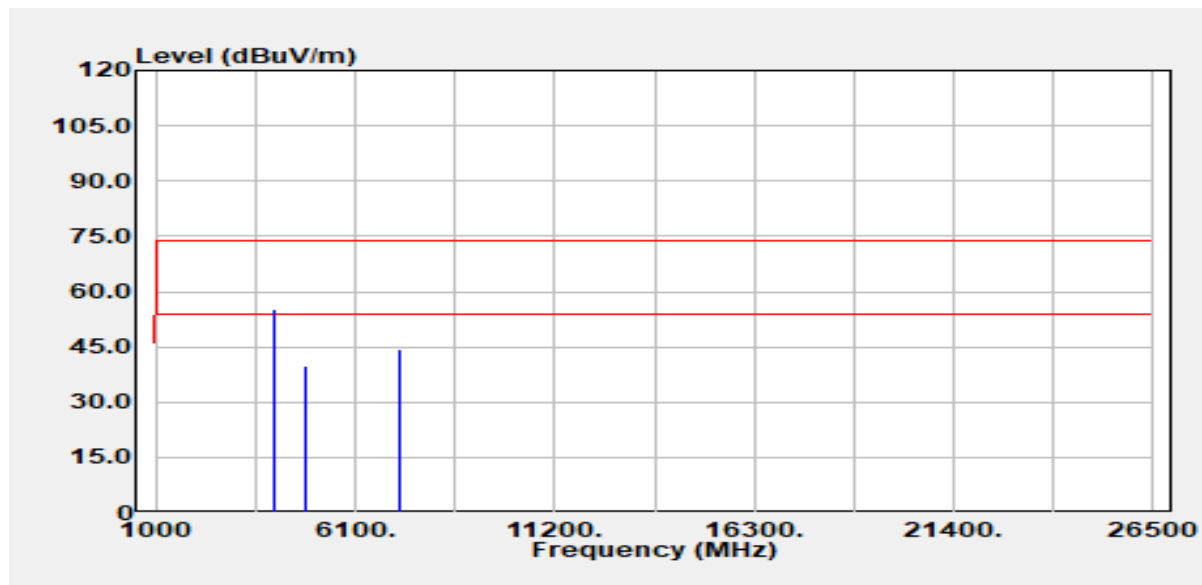
Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dB $\mu$ V)	Factor (dB)	Actual FS (dB $\mu$ V/m)	Limit @3m (dB $\mu$ V/m)	Margin (dB)
4106.00	Peak	51.42	3.64	55.05	74.00	-18.95
4106.00	Average	49.69	3.64	53.33	54.00	-0.67
4924.00	Peak	34.28	5.94	40.22	74.00	-33.78
4924.00	Average	24.80	5.94	30.73	54.00	-23.27
7386.00	Peak	31.45	12.67	44.12	74.00	-29.88
7386.00	Average	22.65	12.67	35.32	54.00	-18.68

**Remark:**

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

Report No.: TMWK2302000261KR

Test Mode	IEEE 802.11n HT20 Low CH	Temp/Hum	23.1(°C)/ 60%RH
Test Item	Harmonic	Test Date	February 8, 2023
Polarize	Vertical	Test Engineer	Ray Li
Detector	Peak / Average		



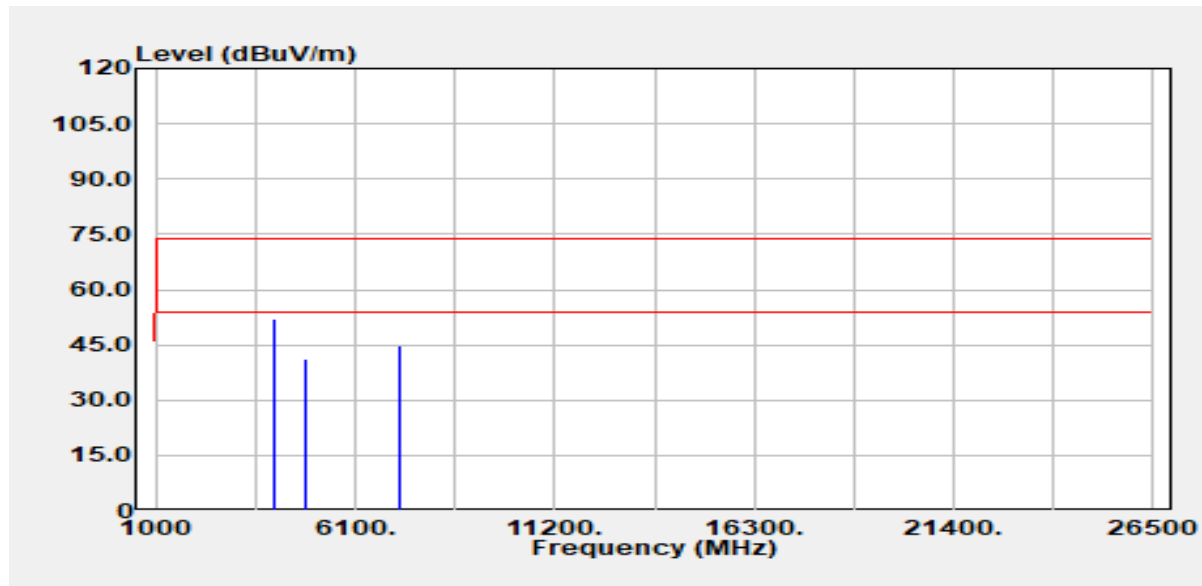
Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dB $\mu$ V)	Factor (dB)	Actual FS (dB $\mu$ V/m)	Limit @3m (dB $\mu$ V/m)	Margin (dB)
4018.00	Peak	51.80	3.51	55.31	74.00	-18.69
4018.00	Average	48.80	3.51	52.31	54.00	-1.69
4824.00	Peak	34.56	5.22	39.79	74.00	-34.21
4824.00	Average	26.29	5.22	31.52	54.00	-22.48
7236.00	Peak	31.79	12.73	44.52	74.00	-29.48
7236.00	Average	22.90	12.73	35.63	54.00	-18.37

**Remark:**

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

Report No.: TMWK2302000261KR

Test Mode	IEEE 802.11n HT20 Low CH	Temp/Hum	23.1(°C)/ 60%RH
Test Item	Harmonic	Test Date	February 8, 2023
Polarize	Horizontal	Test Engineer	Ray Li
Detector	Peak / Average		



Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBµV)	Factor (dB)	Actual FS (dBµV/m)	Limit @3m (dBµV/m)	Margin (dB)
4022.00	Peak	48.68	3.52	52.20	74.00	-21.80
4022.00	Average	48.22	3.52	51.74	54.00	-2.26
4824.00	Peak	35.76	5.22	40.99	74.00	-33.01
4824.00	Average	26.14	5.22	31.36	54.00	-22.64
7236.00	Peak	32.20	12.73	44.92	74.00	-29.08
7236.00	Average	22.97	12.73	35.70	54.00	-18.30

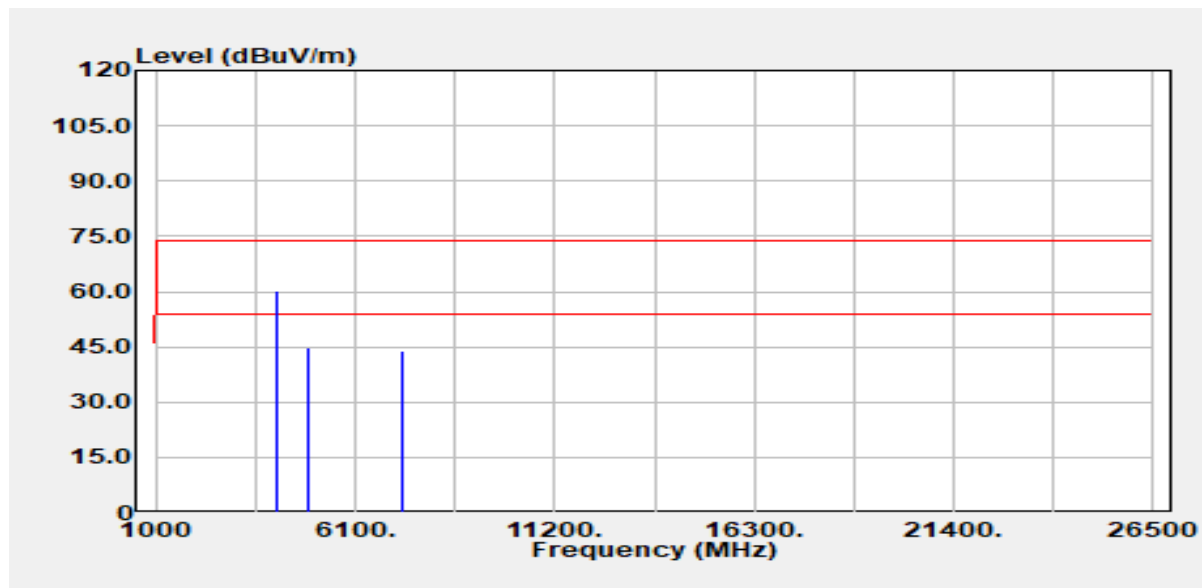
**Remark:**

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



Report No.: TMWK2302000261KR

Test Mode	IEEE 802.11n HT20 Mid CH	Temp/Hum	23.1(°C)/ 60%RH
Test Item	Harmonic	Test Date	February 8, 2023
Polarize	Vertical	Test Engineer	Ray Li
Detector	Peak / Average		



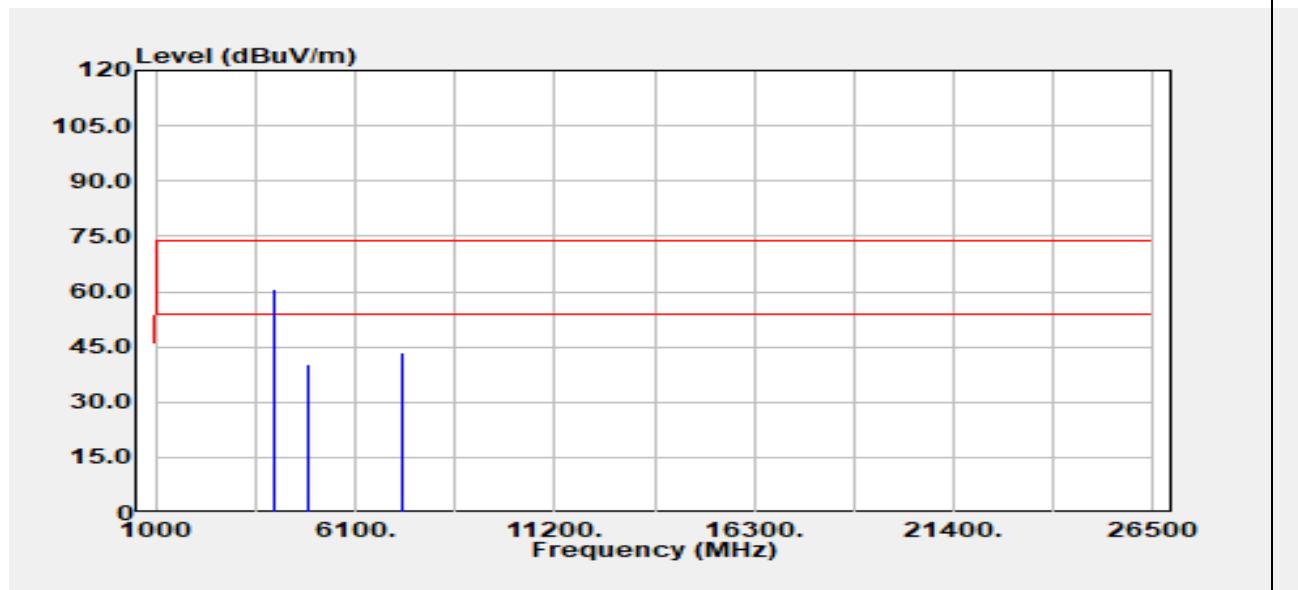
Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBµV)	Factor (dB)	Actual FS (dBµV/m)	Limit @3m (dBµV/m)	Margin (dB)
4066.00	Peak	56.64	3.60	60.24	74.00	-13.76
4066.00	Average	49.74	3.60	53.34	54.00	-0.66
4874.00	Peak	39.25	5.52	44.77	74.00	-29.23
4874.00	Average	27.57	5.52	33.09	54.00	-20.91
7311.00	Peak	31.43	12.70	44.13	74.00	-29.87
7311.00	Average	23.23	12.70	35.93	54.00	-18.07

**Remark:**

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

Report No.: TMWK2302000261KR

Test Mode	IEEE 802.11n HT20 Mid CH	Temp/Hum	23.1(°C)/ 60%RH
Test Item	Harmonic	Test Date	February 8, 2023
Polarize	Horizontal	Test Engineer	Ray Li
Detector	Peak / Average		



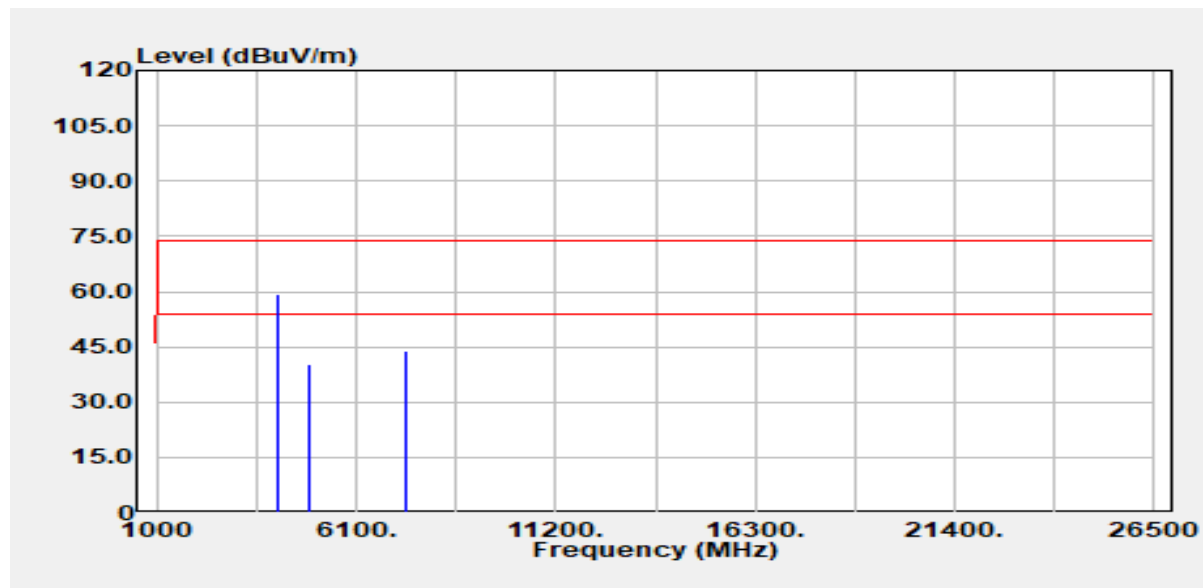
Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBµV)	Factor (dB)	Actual FS (dBµV/m)	Limit @3m (dBµV/m)	Margin (dB)
4063.00	Peak	56.87	3.60	60.47	74.00	-13.53
4063.00	Average	49.94	3.60	53.54	54.00	-0.46
4874.00	Peak	34.87	5.52	40.38	74.00	-33.62
4874.00	Average	27.58	5.52	33.09	54.00	-20.91
7311.00	Peak	30.95	12.70	43.65	74.00	-30.35
7311.00	Average	22.94	12.70	35.64	54.00	-18.36

**Remark:**

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

Report No.: TMWK2302000261KR

Test Mode	IEEE 802.11n HT20 High CH	Temp/Hum	23.1(°C)/ 60%RH
Test Item	Harmonic	Test Date	February 8, 2023
Polarize	Vertical	Test Engineer	Ray Li
Detector	Peak / Average		



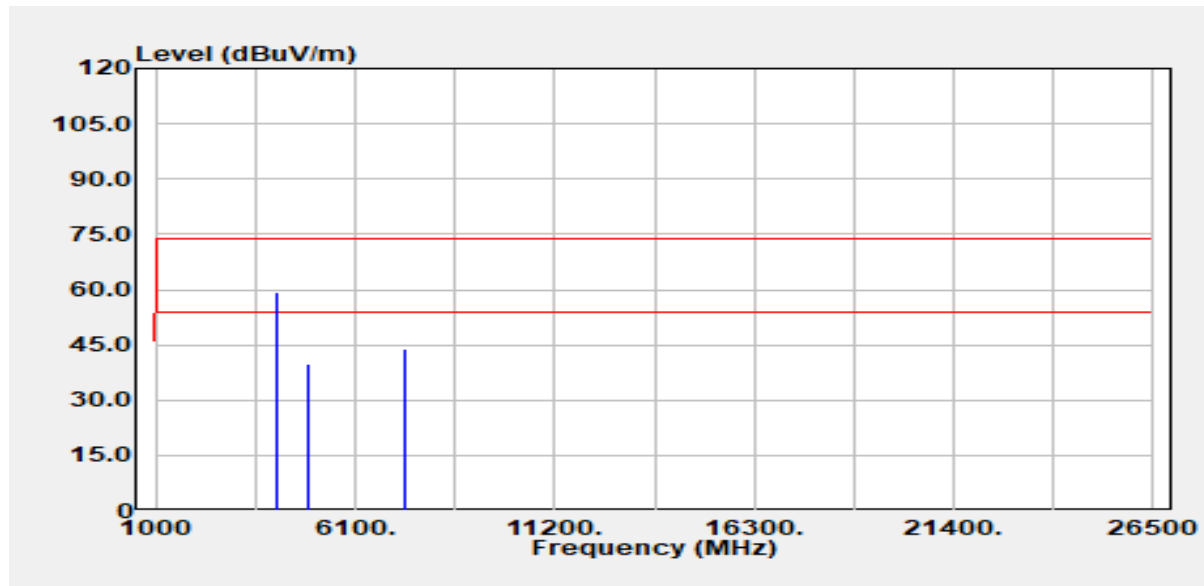
Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dB $\mu$ V)	Factor (dB)	Actual FS (dB $\mu$ V/m)	Limit @3m (dB $\mu$ V/m)	Margin (dB)
4104.00	Peak	55.47	3.64	59.11	74.00	-14.89
4104.00	Average	49.01	3.64	52.65	54.00	-1.35
4924.00	Peak	34.52	5.94	40.46	74.00	-33.54
4924.00	Average	24.98	5.94	30.92	54.00	-23.08
7386.00	Peak	31.29	12.67	43.96	74.00	-30.04
7386.00	Average	22.74	12.67	35.41	54.00	-18.59

**Remark:**

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

Report No.: TMWK2302000261KR

Test Mode	IEEE 802.11n HT20 High CH	Temp/Hum	23.1(°C)/ 60%RH
Test Item	Harmonic	Test Date	February 8, 2023
Polarize	Horizontal	Test Engineer	Ray Li
Detector	Peak / Average		



Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
4100.00	Peak	55.64	3.63	59.27	74.00	-14.73
4100.00	Average	49.24	3.63	52.87	54.00	-1.13
4924.00	Peak	34.00	5.94	39.94	74.00	-34.06
4924.00	Average	25.19	5.94	31.12	54.00	-22.88
7386.00	Peak	31.10	12.67	43.77	74.00	-30.23
7386.00	Average	22.71	12.67	35.38	54.00	-18.62

**Remark:**

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

- End of Test Report -