

Project No: TM-2402000232P
Report No.: TMWK2405001547KR

FCC ID: W5O-BT2400PRO

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Rev.: 00

RADIO TEST REPORT

FCC 47 CFR PART 15 SUBPART C

Test Standard	FCC Part 15.247
Product name	BATTERY TESTER
Brand Name	DHC
Model No.	BT2400PRO
Test Result	Pass
Statements of Conformity	Determination of compliance is based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

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:



Shawn Wu
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	July 11, 2024	Initial Issue	ALL	Peggy Tsai

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APPENDIX A - PHOTOGRAPHS OF EUT		

1. GENERAL INFORMATION

1.1 EUT INFORMATION

Applicant	DHC Specialty Corp. 7F1, No. 83, Chou Tzu St. Nei Hu, Taipei 114, Taiwan
Manufacturer	DHC Specialty Corp. 7F., NO. 308, Sec. 1, Datong Rd, Xizhi Dist., NEW TAIPEI CITY 22146, TAIWAN
Equipment	BATTERY TESTER
Model No.	BT2400PRO
Model Discrepancy	N/A
Trade Name	DHC
Received Date	February 27, 2024
Date of Test	May 20 ~ 23, 2024
Power Operation	Powered from Battery: DC 12V

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.

1.2 EUT CHANNEL INFORMATION

Frequency Range	802.11b/g/n HT 20: 2412MHz ~ 2462MHz
Modulation Type	1. IEEE 802.11b mode: CCK 2. IEEE 802.11g mode: OFDM 3. IEEE 802.11n HT 20 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

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
☐ 1 MHz or less	1	Middle
☐ 1 MHz to 10 MHz	2	1 near top and 1 near bottom
☒ More than 10 MHz	3	1 near top, 1 near middle, and 1 near bottom

1.3 ANTENNA INFORMATION

Antenna Type	☐ PIFA ☐ PCB ☐ Dipole ☒ MIFA Antenna
Antenna Gain	Gain: 2 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	± 2.213 dB
Channel Bandwidth	± 2.7 %
RF output power (Power Meter + Power sensor)	± 0.243 dB
Power Spectral density	± 2.739 dB
Conducted Bandedge	± 2.739 dB
Conducted Spurious Emission	± 2.742 dB
Radiated Emission_9kHz-30MHz	± 3.761 dB
Radiated Emission_30MHz-200MHz	± 3.473 dB
Radiated Emission_200MHz-1GHz	± 3.946 dB
Radiated Emission_1GHz-6GHz	± 4.797 dB
Radiated Emission_6GHz-18GHz	± 4.803 dB
Radiated Emission_18GHz-26GHz	± 3.459 dB
Radiated Emission_26GHz-40GHz	± 3.297 dB

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.

CAB identifier: TW1309

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

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

1.6 INSTRUMENT CALIBRATION

Conducted_FCC/IC/NCC (All)					
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due
Power Sensor	Anritsu	MA2411B	1911387	2023-07-25	2024-07-24
Power Meter	Anritsu	ML2496A	2136002	2023-11-16	2024-11-15
EXA Signal Analyzer	Keysight	N9030B	MY62291089	2023-10-13	2024-10-12
Software	Radio Test Software Ver. 21				

966A_Radiated Wi-Fi 2.4GHz					
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due
Signal Analyzer	KEYSIGHT	N9010A	MY52220817	2024-03-15	2025-03-14
Thermo-Hygro Meter	WISEWIND	1206	D07	2023-12-08	2024-12-07
Loop Antenna	COM-POWER	AL-130	121051	2023-05-23	2024-05-22
Bi-Log Antenna	Sunol Sciences	JB3	A030105	2023-08-08	2024-08-07
Preamplifier	EMEC	EM330	060609	2024-02-21	2025-02-20
Cable	Huber+Suhner	104PEA	20995+21000+182330	2024-02-21	2025-02-20
Horn Antenna	ETC	MCTD 1209	DRH13M02003	2023-12-28	2024-12-27
Preamplifier	HP	8449B	3008A00965	2023-12-22	2024-12-21
Cable	EMCI	EMC101G	221213+221011+221012	2023-10-17	2024-10-16
Attenuator	Mini-Circuits	BW-S9W5	BWS9W5-09-966A-01	2024-02-07	2025-02-06
High Pass Filters	Titan Microwave	T04H30001800070S01	22011402-4	2023-06-17	2024-06-16
Horn Antenna	SCHWARZBECK	BBHA9170	1047	2023-12-13	2024-12-12
Pre-Amplifier	EMCI	EMC184045SE	980860	2023-12-12	2024-12-11
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
Site Validation	CCS	966A	N/A	2023-07-10	2024-07-09
Software	e3 V9-210616c				

Remark:

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

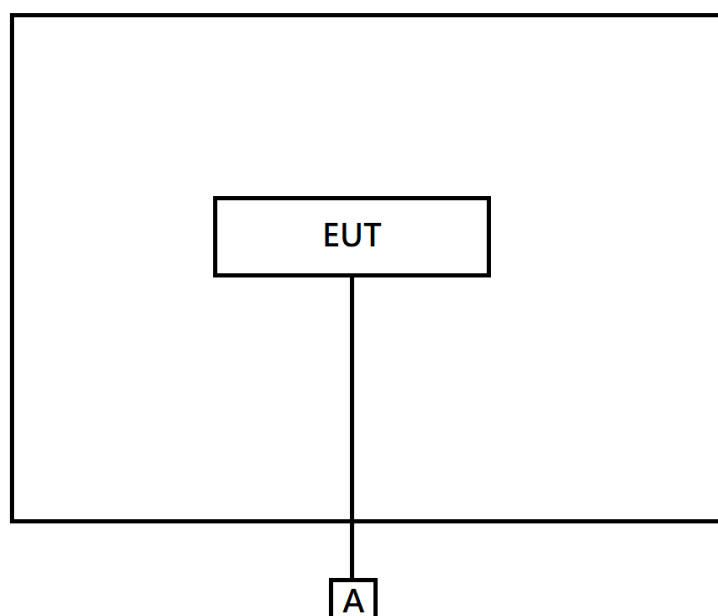
1.7 SUPPORT AND EUT ACCESSORIES EQUIPMENT

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

Support Equipment (Conducted)					
No.	Equipment	Brand	Model	Series No.	FCC ID
	N/A				

Support Equipment (RSE)					
No.	Equipment	Brand	Model	Series No.	FCC ID
A	Battery	YUASA	38B19R-MF	N/A	N/A

1.8 TEST SET UP DIAGRAM



1.9 TEST PROGRAM

The EUT connection corresponds to the surrounding fixture control board.

This EUT uses control panel setting parameters to set the frequency, modulation, and power to allow the sample to continuously transmit.

1.10 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.

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)(3)	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 Emission	Pass
15.247(d) 15.205, 15.209	4.6	Radiation Band Edge	Pass
15.247(d) 15.205, 15.209	4.6	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
Test Channel Frequencies	IEEE 802.11b mode : 1. Lowest Channel : 2412MHz 2. Middle Channel : 2437MHz 3. Highest Channel : 2462MHz IEEE 802.11g mode : 1. Lowest Channel : 2412MHz 2. Middle Channel : 2437MHz 3. Highest Channel : 2462MHz IEEE 802.11n HT20 mode : 1. Lowest Channel : 2412MHz 2. Middle Channel : 2437MHz 3. Highest Channel : 2462MHz
Operation Transmitter	IEEE 802.11b mode :1T1R IEEE 802.11g mode :1T1R IEEE 802.11n HT20 mode : 1T1R

Remark:

1. EUT pre-scanned data rate of output power for each mode, the worst data rate were recorded in this report.
2. Based on FCC Part 15.31(m), the laboratory conducts a comprehensive evaluation of ch low, ch middle, and ch high. Other additional channels only evaluate the radiated restricted bands of operation and powers.

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	☒ Mode 1 ☐ Mode 2 ☐ Mode 3 ☐ Mode 4
Worst Position	☐ Placed in fixed position. ☐ Placed in fixed position at X-Plane (E2-Plane) ☒ Placed in fixed position at Y-Plane (E1-Plane) ☐ 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	☒ Mode 1 ☐ Mode 2 ☐ Mode 3 ☐ 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(Y-Plane) were recorded in this report

3.3 EUT DUTY CYCLE

Temperature: 22.1 ~ 23.8°C

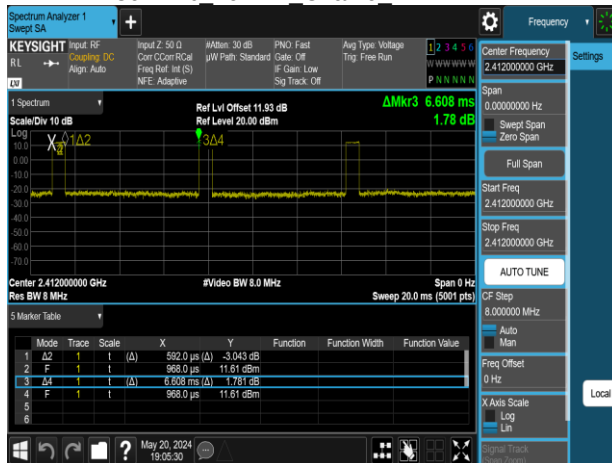
Test date: May 20 ~ 23, 2024

Humidity: 57 ~ 64% RH

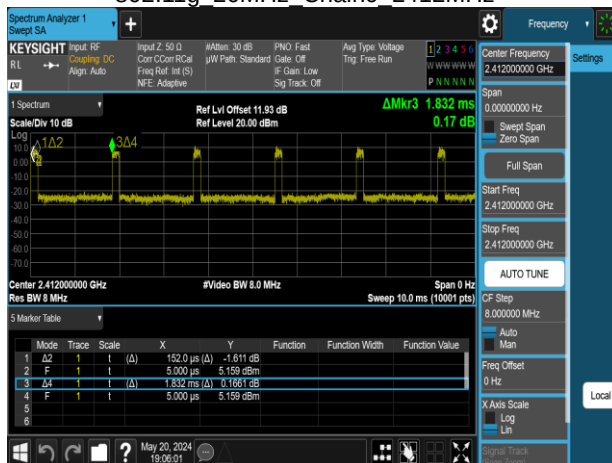
Tested by: Jerry Chang

Mode	Duty Cycle (%) = Ton / (Ton+Toff)	Duty Factor (dB) =10*log (1/Duty Cycle)	1/T (kHz)	VBW setting (kHz)
802.11b	8.96	10.48	1.69	2.00
802.11g	8.30	10.81	6.58	7.00
802.11n_20	8.50	10.71	6.41	7.00

802.11b 20MHz Chain0 2412MHz



802.11g 20MHz Chain0 2412MHz



802.11n 20MHz Chain0 2412MHz



4. TEST RESULT

4.1 AC POWER LINE CONDUCTED EMISSION

4.1.1 Test Limit

According to §15.207(a),

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

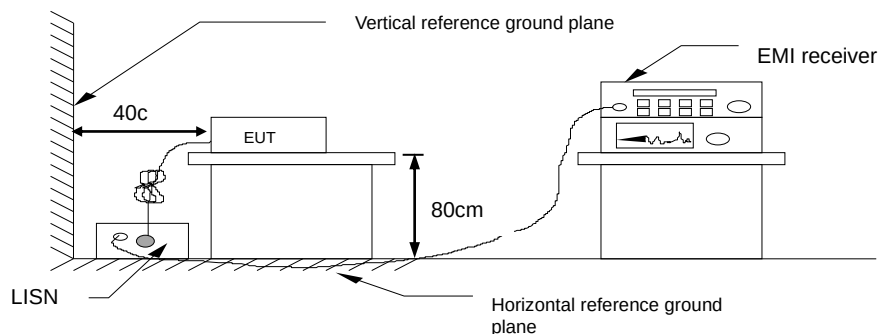
* Decreases with the logarithm of the frequency.

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.

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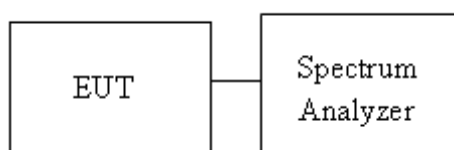
Occupied Bandwidth(99%) : For reporting purposes only.

4.2.2 Test Procedure

Test method Refer as KDB 558074 D01 and ANSI C63.10: 2013 clause 6.9.2,

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



4.2.4 Test Result

Temperature: 22.1 ~ 23.8°C

Test date: May 20 ~ 23, 2024

Humidity: 57 ~ 64% RH

Tested by: Jerry Chang

6dB BANDWIDTH

802.11b Ch0

Freq. (MHz)	6dB BW (kHz)	Limit (kHz)	Result
2412	8127.00	≥ 500	PASS
2437	8593.00	≥ 500	PASS
2462	8098.00	≥ 500	PASS

802.11g Ch0

Freq. (MHz)	6dB BW (kHz)	Limit (kHz)	Result
2412	16360.00	≥ 500	PASS
2437	16380.00	≥ 500	PASS
2462	16370.00	≥ 500	PASS

802.11n_HT_20M Ch0

Freq. (MHz)	6dB BW (kHz)	Limit (kHz)	Result
2412	17590.00	≥ 500	PASS
2437	17590.00	≥ 500	PASS
2462	16940.00	≥ 500	PASS

BANDWIDTH 99%

802.11b Ch0

Freq. (MHz)	99% BW (MHz)
2412	11.002
2437	10.939
2462	11.003

802.11g Ch0

Freq. (MHz)	99% BW (MHz)
2412	17.285
2437	17.207
2462	17.116

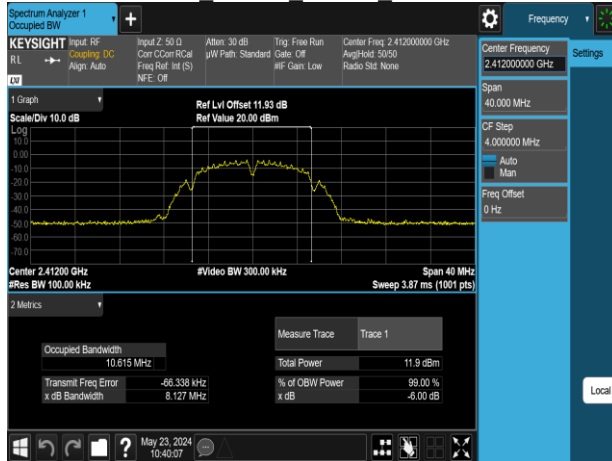
802.11n_HT20M Ch0

Freq. (MHz)	99% BW (MHz)
2412	18.348
2437	18.254
2462	18.246

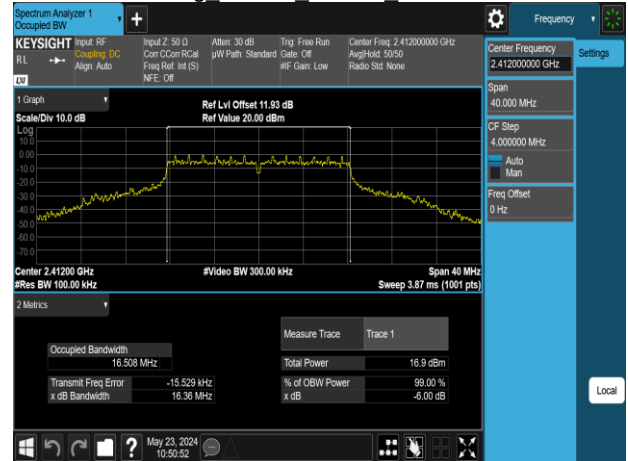
Test Data

6dB BANDWIDTH

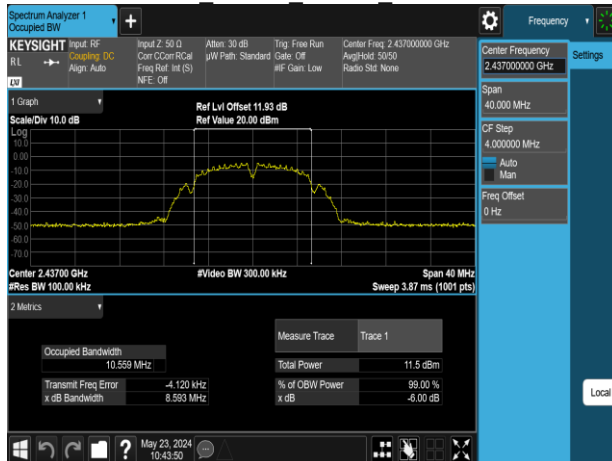
802.11b 20MHz Chain0 2412MHz



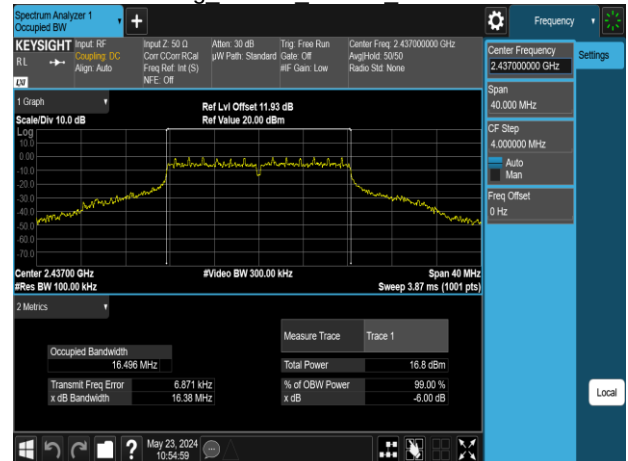
802.11g 20MHz Chain0 2412MHz



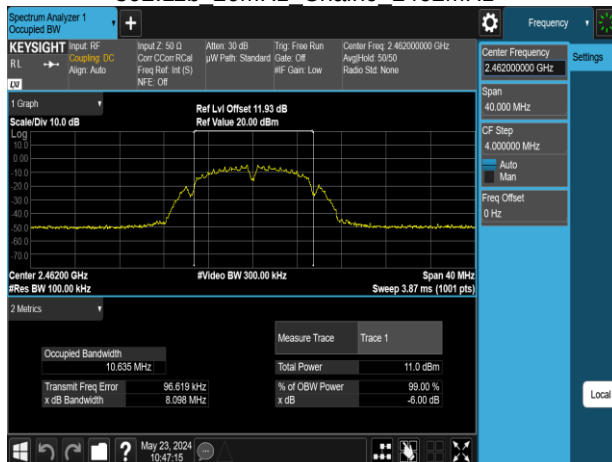
802.11b 20MHz Chain0 2437MHz



802.11g 20MHz Chain0 2437MHz



802.11b 20MHz Chain0 2462MHz



802.11g 20MHz Chain0 2462MHz

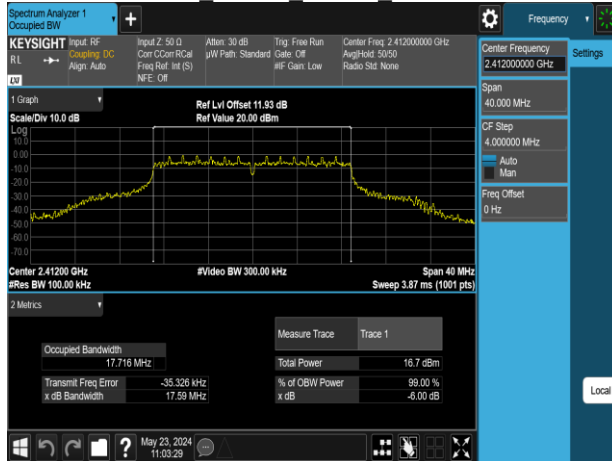


Report No.: TMWK2405001547KR

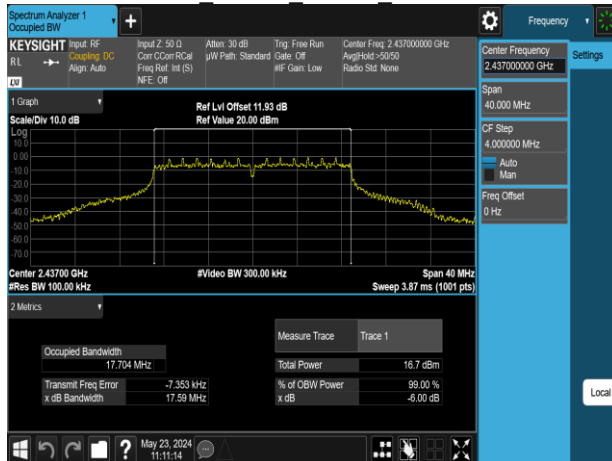
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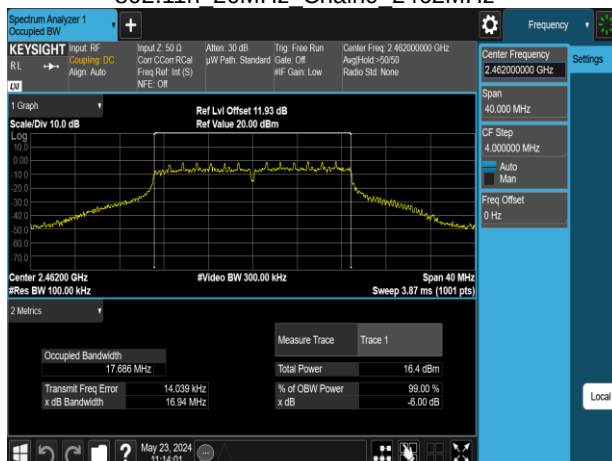
802.11n 20MHz Chain0 2412MHz



802.11n 20MHz Chain0 2437MHz

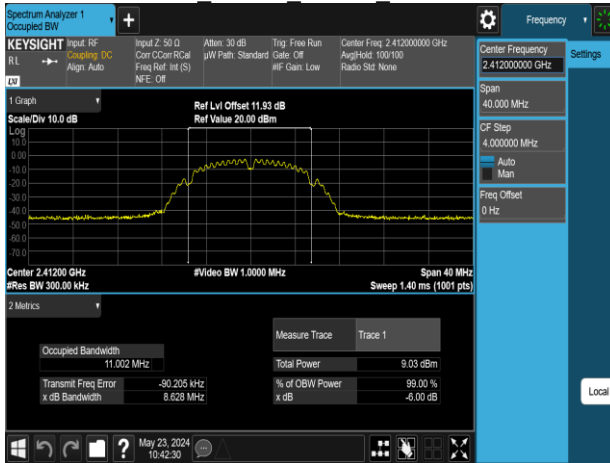


802.11n 20MHz Chain0 2462MHz

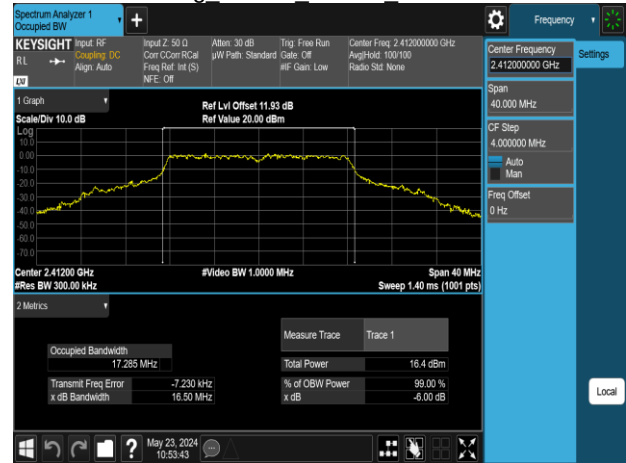


BANDWIDTH 99%

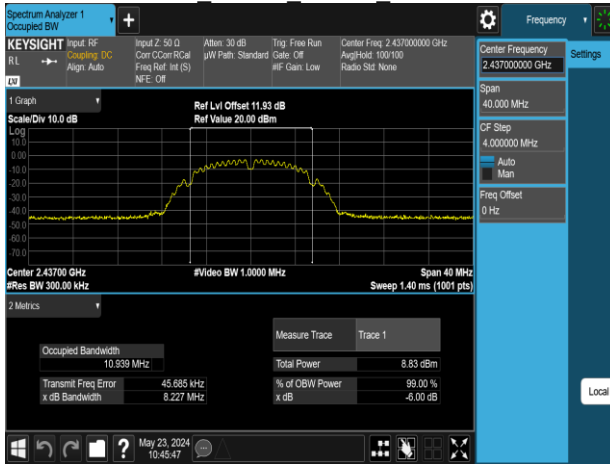
802.11b 20MHz Chain0 2412MHz



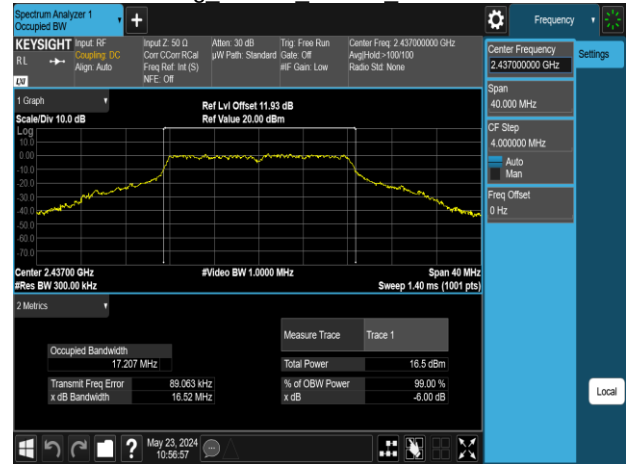
802.11g 20MHz Chain0 2412MHz



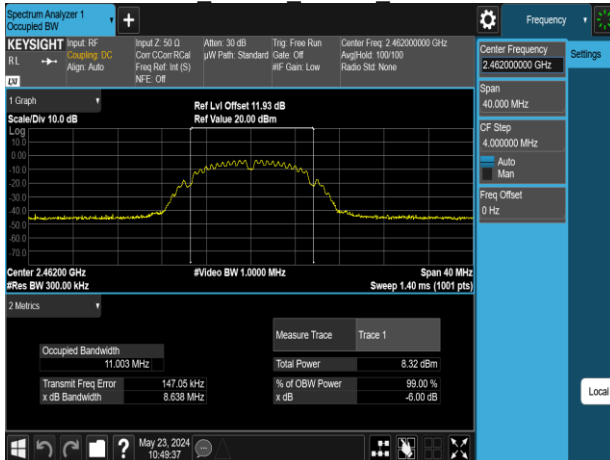
802.11b 20MHz Chain0 2437MHz



802.11g 20MHz Chain0 2437MHz



802.11b 20MHz Chain0 2462MHz



802.11g 20MHz Chain0 2462MHz

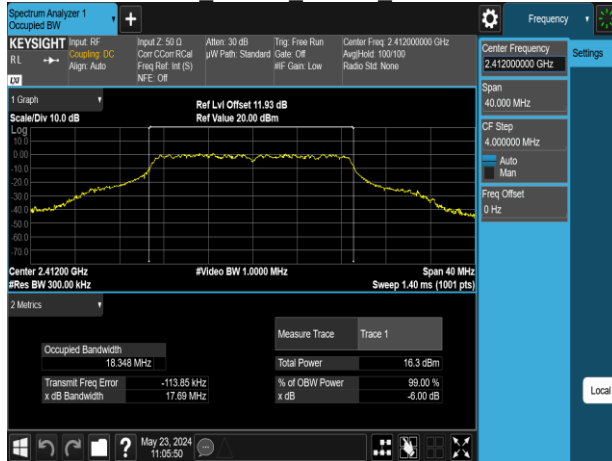


Report No.: TMWK2405001547KR

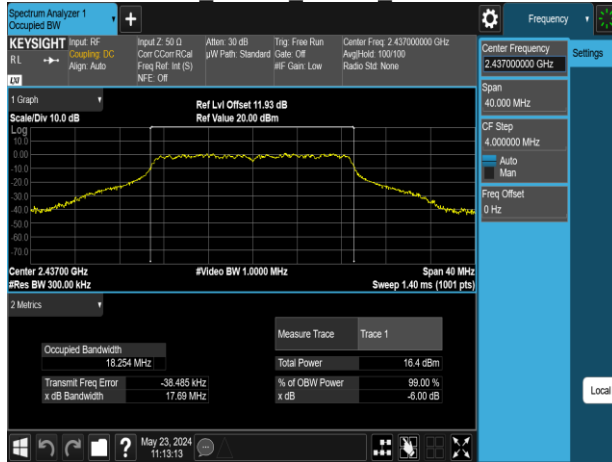
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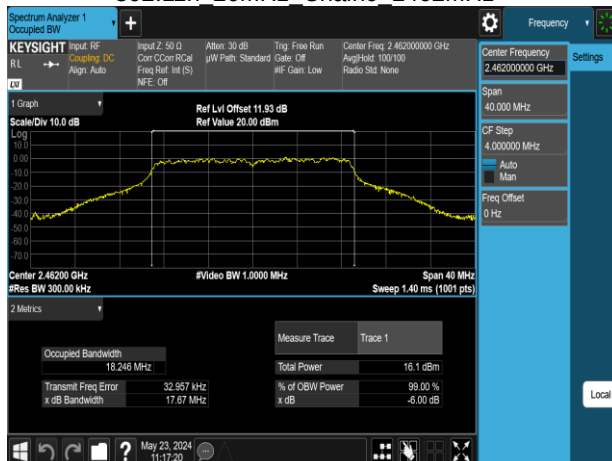
802.11n 20MHz Chain0 2412MHz



802.11n 20MHz Chain0 2437MHz



802.11n 20MHz Chain0 2462MHz



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	☒ Antenna not exceed 6 dBi : 30dBm ☐ Antenna with DG greater than 6 dBi : [Limit = 30 – (DG – 6)] ☐ Point-to-point operation :
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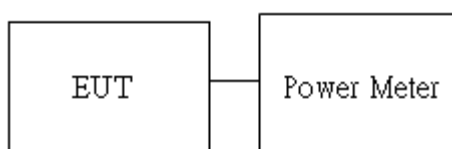
Average output power : For reporting purposes only.

4.3.2 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.

4.3.3 Test Setup



4.3.4 Test Result

Temperature: 22.1 ~ 23.8°C

Test date: May 20 ~ 23, 2024

Humidity: 57 ~ 64% RH

Tested by: Jerry Chang

Peak & Average output power :

802.11b Ch0							
CH	Freq. (MHz)	Data Rate	Power Setting	Peak Output Power (mW)	Peak Output Power (dBm)	Limit (dBm)	RESULT
1	2412	1	10.75	7.11	8.52	30.00	PASS
6	2437	1	9.5	7.26	8.61	30.00	PASS
11	2462	1	10	6.73	8.28	30.00	PASS
802.11b Ch0							
CH	Freq. (MHz)	Data Rate	Power Setting	Avg. Output Power (mW)	Avg. Output Power (dBm)	Limit (dBm)	RESULT
1	2412	1	10.75	3.56	5.52	30.00	PASS
6	2437	1	9.5	3.60	5.57	30.00	PASS
11	2462	1	10	3.36	5.27	30.00	PASS
802.11g Ch0							
CH	Freq. (MHz)	Data Rate	Power Setting	Peak Output Power (mW)	Peak Output Power (dBm)	Limit (dBm)	RESULT
1	2412	6	5	58.21	17.65	30.00	PASS
6	2437	6	3.5	63.97	18.06	30.00	PASS
11	2462	6	4	71.45	18.54	30.00	PASS
802.11g Ch0							
CH	Freq. (MHz)	Data Rate	Power Setting	Avg. Output Power (mW)	Avg. Output Power (dBm)	Limit (dBm)	RESULT
1	2412	6	5	10.89	10.37	30.00	PASS
6	2437	6	3.5	11.04	10.43	30.00	PASS
11	2462	6	4	9.70	9.87	30.00	PASS

Note: Measured by power meter, cable loss + Duty cycle factor has been offsetted to the power meter for Avg. power and cable loss has been offsetted for Peak power measurement.

802.11n_HT_20M Ch0							
CH	Freq. (MHz)	Data Rate	Power Setting	Peak Output Power (mW)	Peak Output Power (dBm)	Limit (dBm)	RESULT
1	2412	MCS0	5	70.15	18.46	30.00	PASS
6	2437	MCS0	3.5	69.82	18.44	30.00	PASS
11	2462	MCS0	4	71.94	18.57	30.00	PASS
802.11n_HT_20M Ch0							
CH	Freq. (MHz)	Data Rate	Power Setting	Avg. Output Power (mW)	Avg. Output Power (dBm)	Limit (dBm)	RESULT
1	2412	MCS0	5	11.03	10.43	30.00	PASS
6	2437	MCS0	3.5	11.21	10.50	30.00	PASS
11	2462	MCS0	4	11.60	10.65	30.00	PASS

Note: Measured by power meter, cable loss + Duty cycle factor has been offsetted to the power meter for Avg. power and cable loss has been offsetted for Peak power measurement.

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.

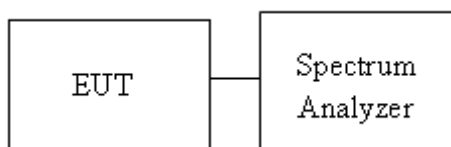
Limit	☒ Antenna not exceed 6 dBi : 8dBm ☐ Antenna with DG greater than 6 dBi : [Limit = 8 – (DG – 6)] ☐ Point-to-point operation :
-------	---

4.4.2 Test Procedure

Test method Refer as KDB 558074 D01

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 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



4.4.4 Test Result

Temperature: 22.1 ~ 23.8°C

Test date: May 20 ~ 23, 2024

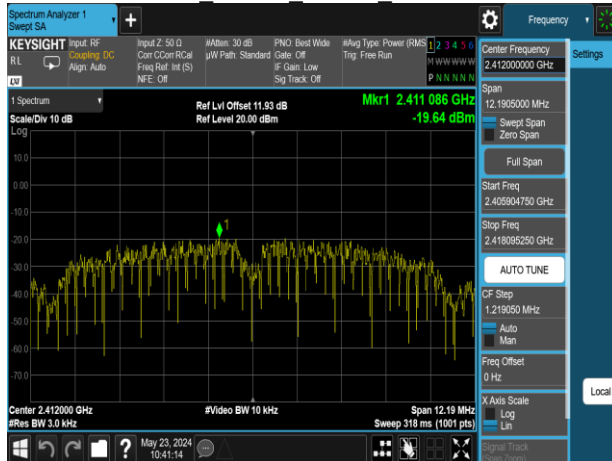
Humidity: 57 ~ 64% RH

Tested by: Jerry Chang

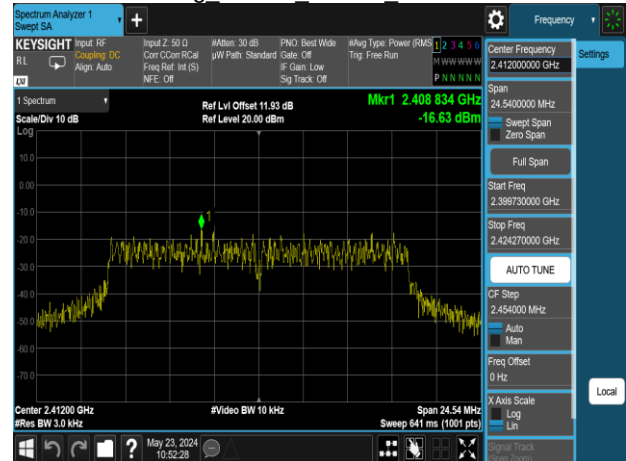
POWER DENSITY 802.11b				
Freq. (MHz)	Ch0 PSD	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
2412	-19.64	-19.64	8.00	PASS
2437	-19.47	-19.47	8.00	PASS
2462	-20.00	-20.00	8.00	PASS
POWER DENSITY 802.11g				
Freq. (MHz)	Ch0 PSD	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
2412	-16.63	-16.63	8.00	PASS
2437	-16.18	-16.18	8.00	PASS
2462	-16.31	-16.31	8.00	PASS
POWER DENSITY 802.11n HT20				
Freq. (MHz)	Ch0 PSD	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
2412	-18.44	-18.44	8.00	PASS
2437	-17.55	-17.55	8.00	PASS
2462	-18	-18.00	8.00	PASS

Test Data

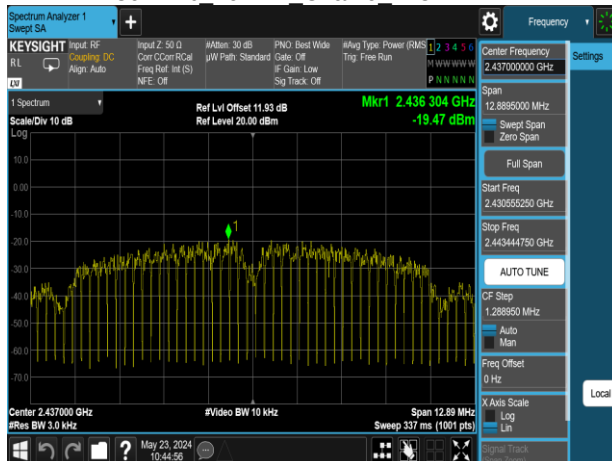
802.11b 20MHz Chain0 2412MHz



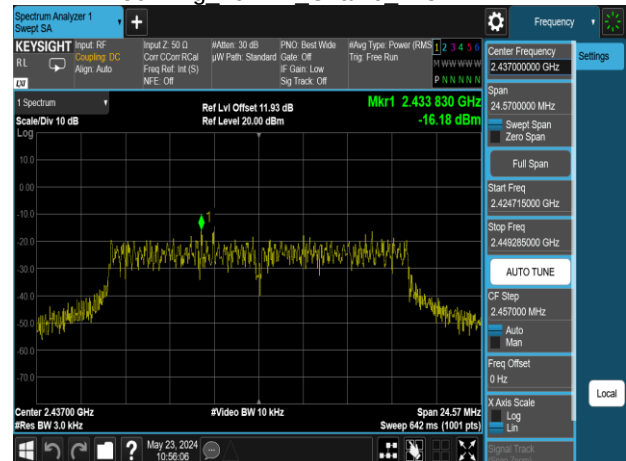
802.11g 20MHz Chain0 2412MHz



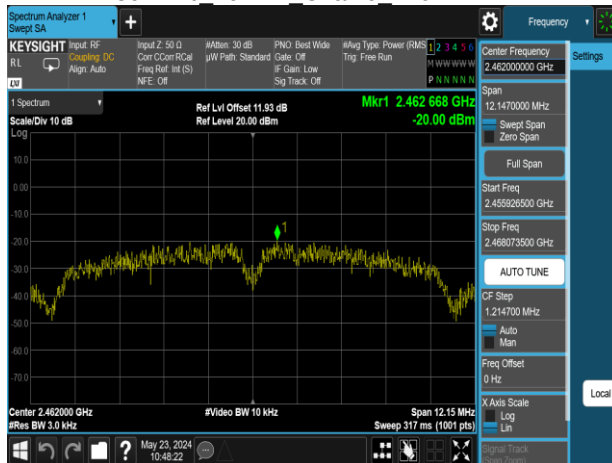
802.11b 20MHz Chain0 2437MHz



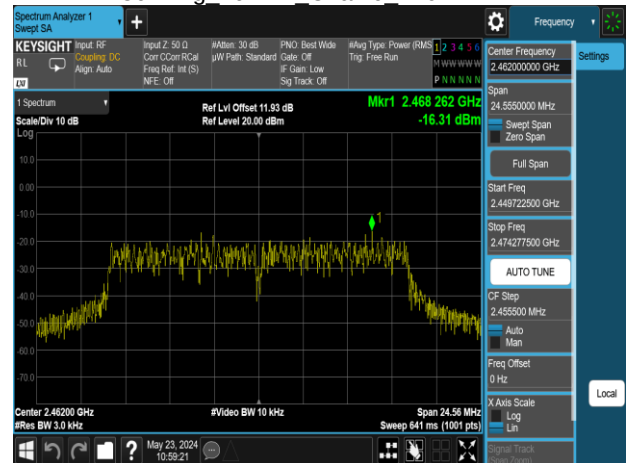
802.11g 20MHz Chain0 2437MHz



802.11b 20MHz Chain0 2462MHz



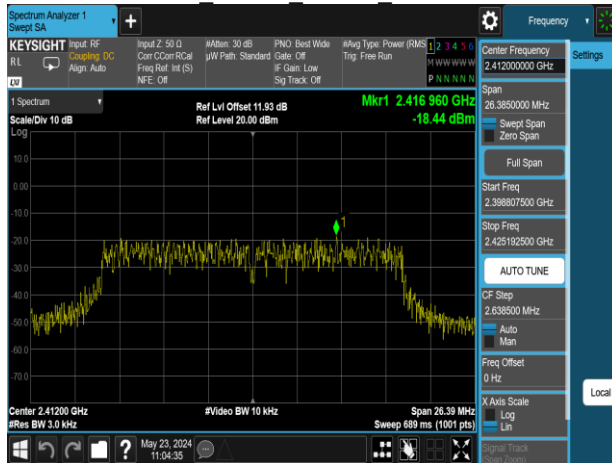
802.11g 20MHz Chain0 2462MHz



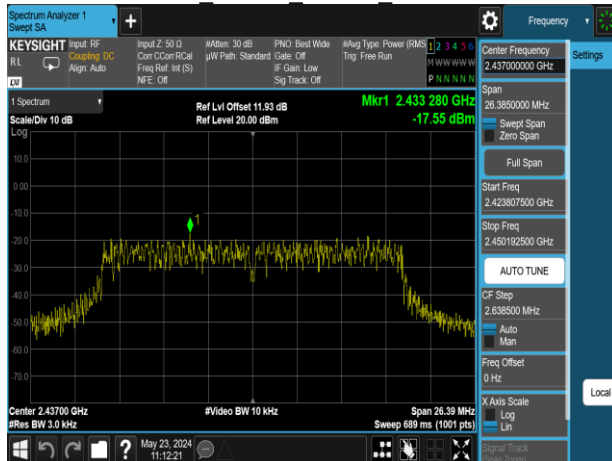
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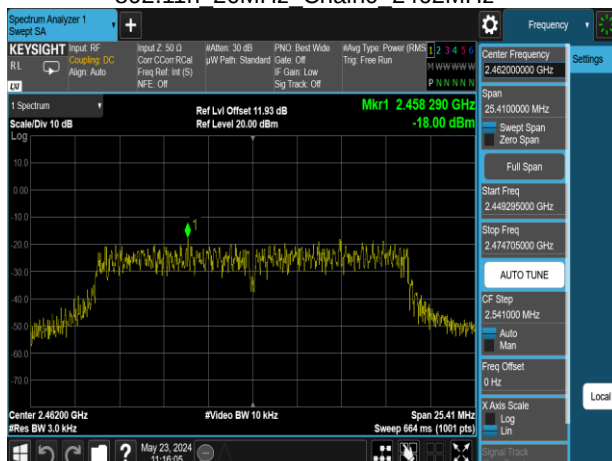
802.11n 20MHz Chain0 2412MHz



802.11n 20MHz Chain0 2437MHz



802.11n 20MHz Chain0 2462MHz



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,

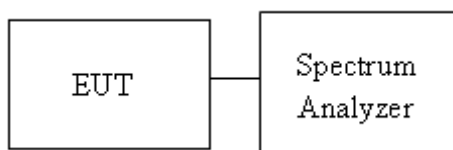
Non-restricted bands shall be attenuated at least 20 dB/30 dB relative to the maximum PSD level in 100 kHz by RF conducted or a radiated measurement which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a).

4.5.2 Test Procedure

Test method Refer as KDB 662911 D01, KDB 558074 D01.

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



4.5.4 Test Result

Test Data

Temperature: 22.1 ~ 23.8°C

Humidity: 57 ~ 64% RH

Test date: May 20 ~ 23, 2024

Tested by: Jerry Chang



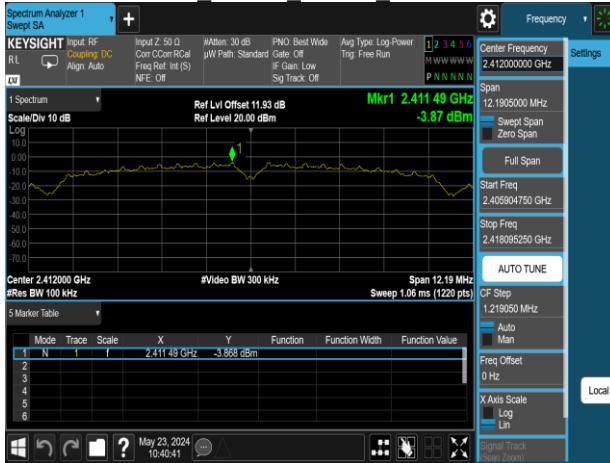
Report No.: TMWK2405001547KR

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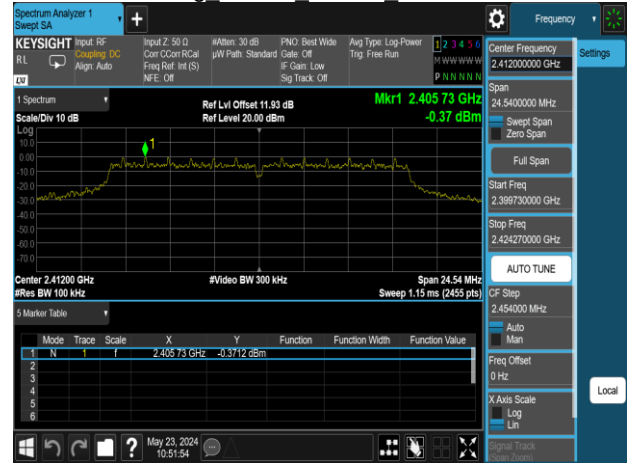
Rev.: 00

Reference Level

802.11b 20MHz Chain0 2412MHz



802.11g 20MHz Chain0 2412MHz



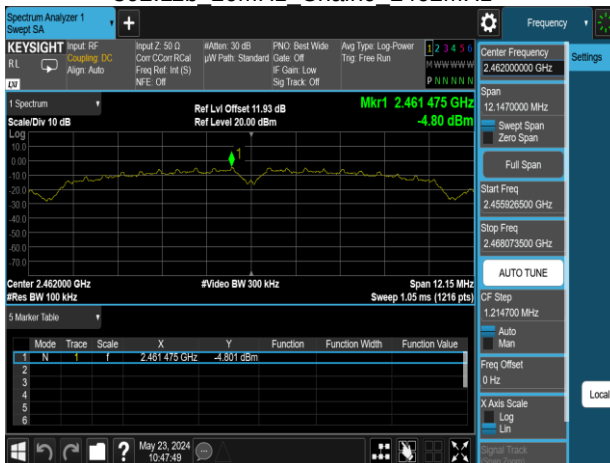
802.11b 20MHz Chain0 2437MHz



802.11g 20MHz Chain0 2437MHz



802.11b 20MHz Chain0 2462MHz



802.11g 20MHz Chain0 2462MHz



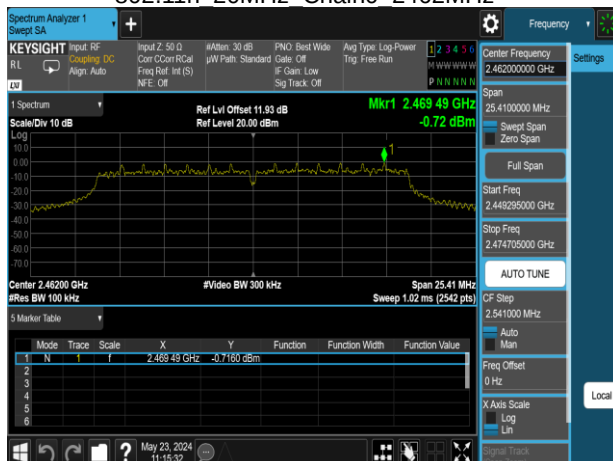
802.11n 20MHz Chain0 2412MHz



802.11n 20MHz Chain0 2437MHz



802.11n 20MHz Chain0 2462MHz



Band Edge

802.11b 20MHz Chain0 2412MHz



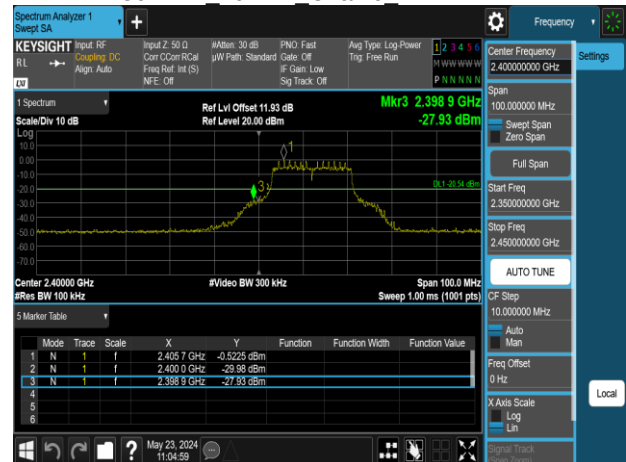
802.11g 20MHz Chain0 2462MHz



802.11b 20MHz Chain0 2462MHz



802.11n 20MHz Chain0 2412MHz



802.11g 20MHz Chain0 2412MHz



802.11n 20MHz Chain0 2462MHz

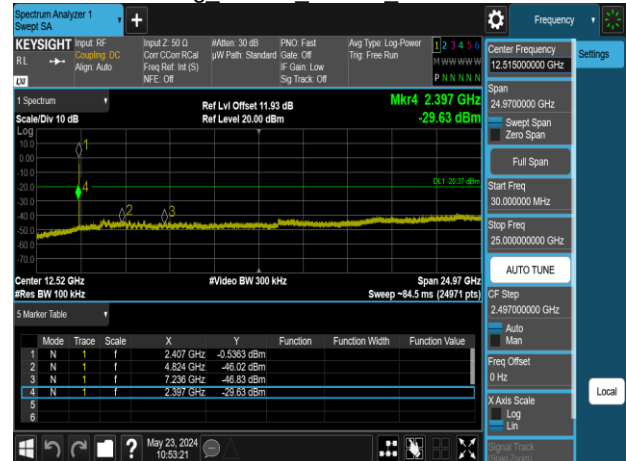


Spurious Emission

802.11b 20MHz Chain0 2412MHz



802.11g 20MHz Chain0 2412MHz



802.11b 20MHz Chain0 2437MHz



802.11g 20MHz Chain0 2437MHz



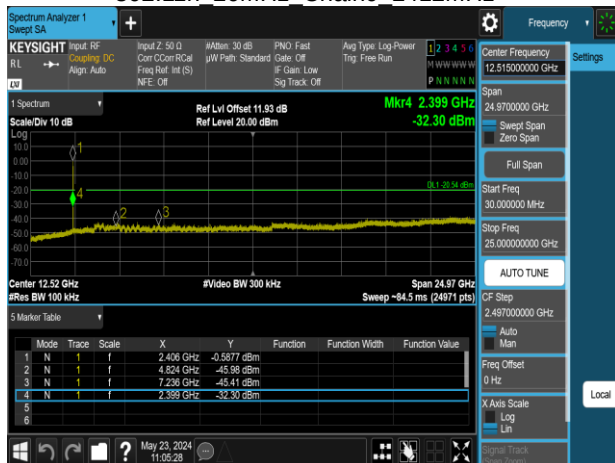
802.11b 20MHz Chain0 2462MHz



802.11g 20MHz Chain0 2462MHz



802.11n 20MHz Chain0 2412MHz



802.11n 20MHz Chain0 2437MHz



802.11n 20MHz Chain0 2462MHz



4.6 RADIATION BANDEDGE 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

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.

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.

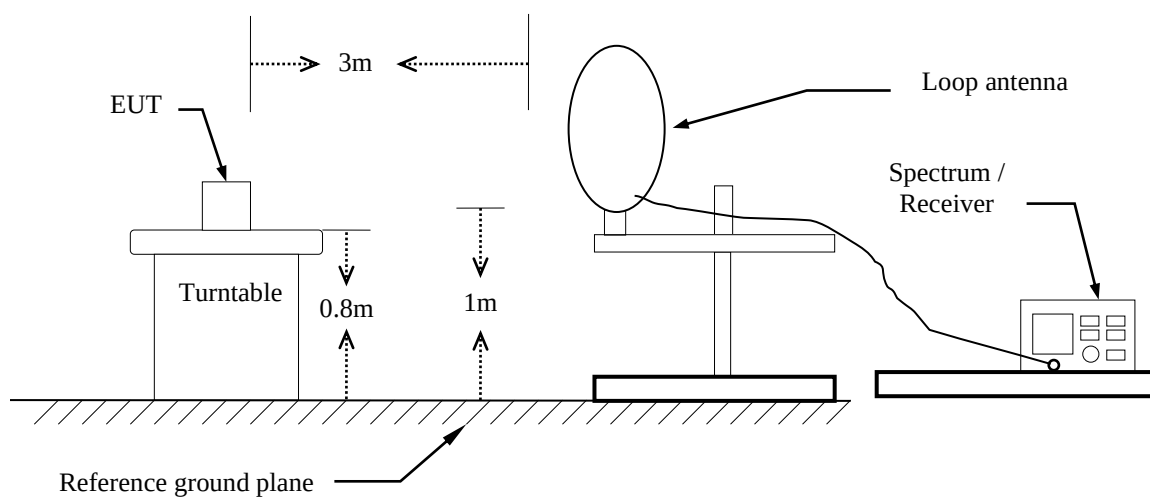
5. Data result :

Actual FS=Spectrum Reading Level + Factor

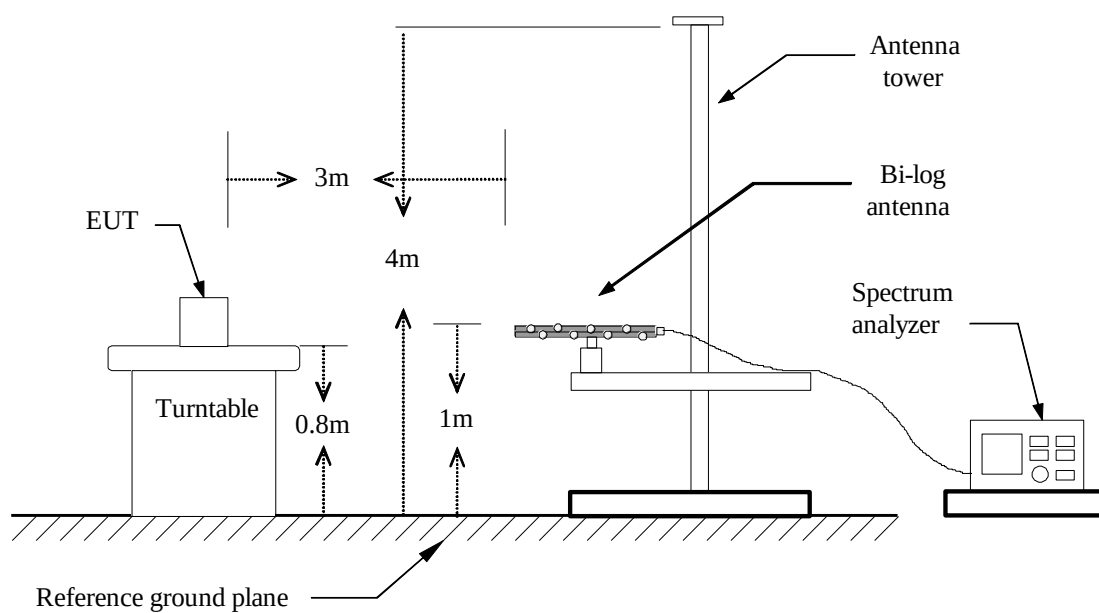
Margin=Actual FS- Limit

4.6.3 Test Setup

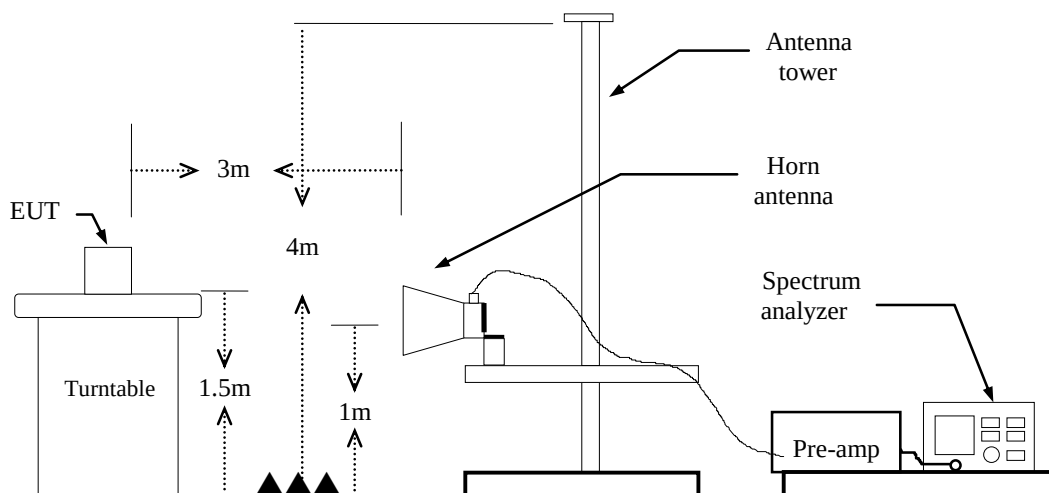
9kHz ~ 30MHz



30MHz ~ 1GHz



Above 1 GHz

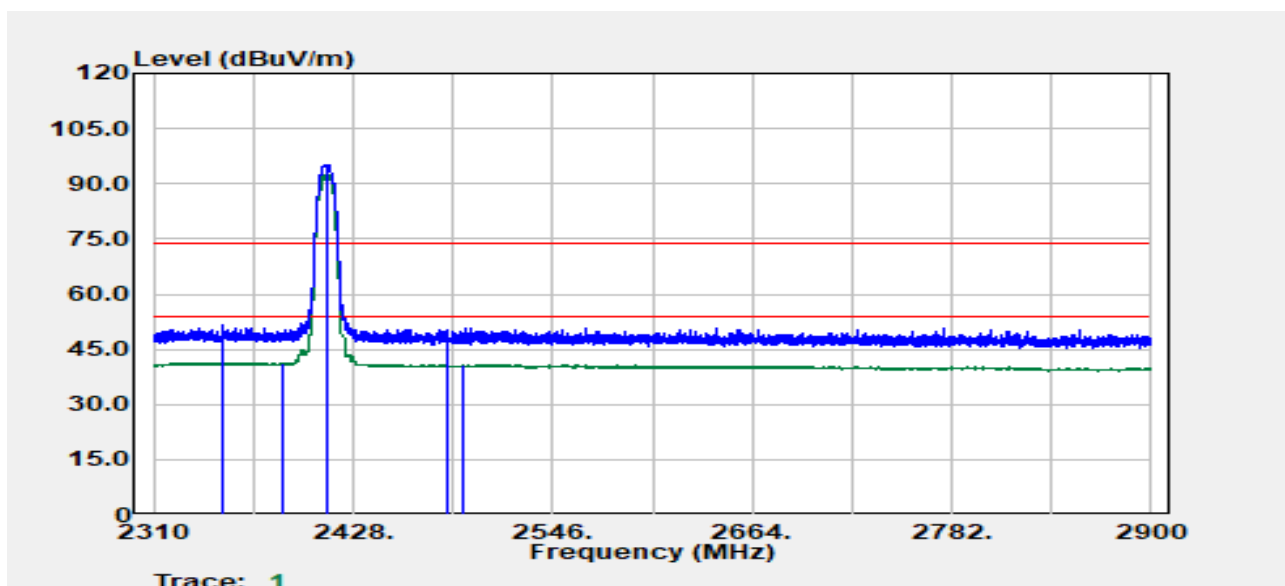


4.6.4 Test Result

Band Edge Test Data

Project No : TM-2402000232P
Operation Band : 802.11b
Frequency : 2412 MHz
Operation Mode : Bandedge
EUT Pol : E1
Setting : 10.75

Test Date : 2024-05-22
Temp./Humi. : 24.4/58
Antenna Pol. : VERTICAL
Engineer : Tony Chao
Test Chamber : 966A



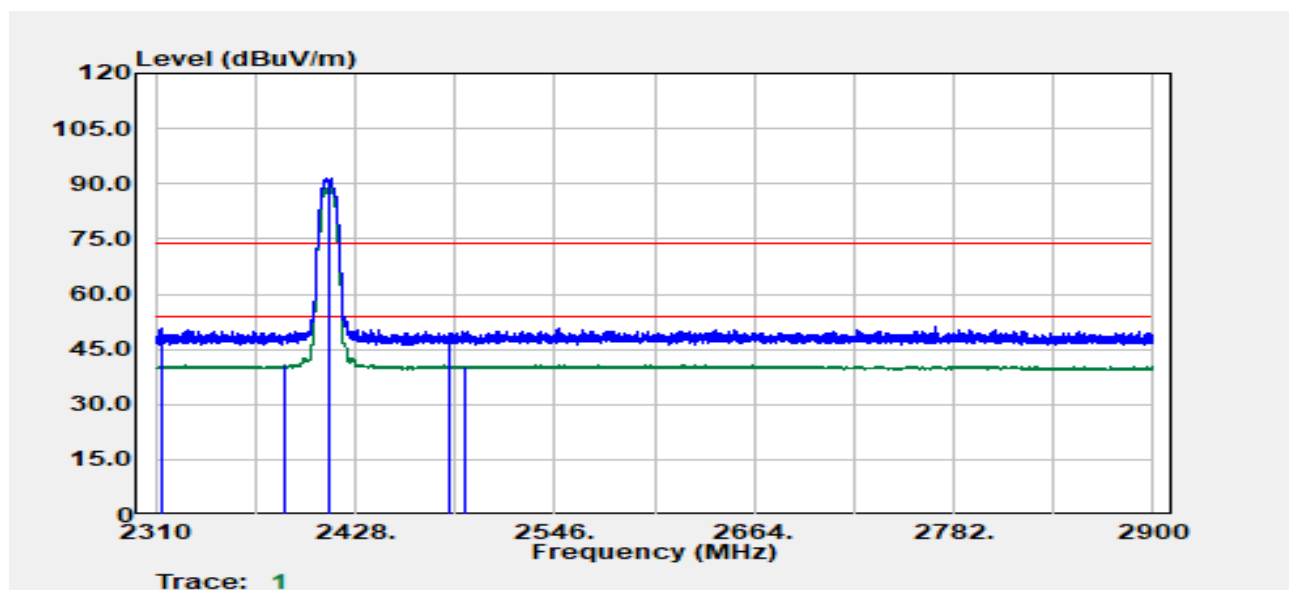
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
2350.21	Peak	45.52	6.24	51.76	74.00	-22.24
2386.21	Average	35.23	6.20	41.43	54.00	-12.57
2412.00	Peak	88.99	6.31	95.29	--	--
2412.00	Average	86.18	6.31	92.48	--	--
2483.50	Peak	44.00	6.71	50.72	74.00	-23.28
2493.69	Average	33.79	6.82	40.60	54.00	-13.40

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Rev.: 00

Project No :TM-2402000232P
Operation Band :802.11b
Frequency :2412 MHz
Operation Mode :Bandedge
EUT Pol :E1
Setting :10.75

Test Date :2024-05-22
Temp./Humi. :24.4/58
Antenna Pol. :HORIZONTAL
Engineer :Tony Chao
Test Chamber : 966A



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
2312.92	Peak	44.36	6.14	50.49	74.00	-23.51
2385.61	Average	34.40	6.19	40.58	54.00	-13.42
2412.00	Peak	85.06	6.31	91.37	--	--
2412.00	Average	82.44	6.31	88.75	--	--
2483.50	Peak	43.29	6.71	50.01	74.00	-23.99
2493.63	Average	33.64	6.82	40.46	54.00	-13.54

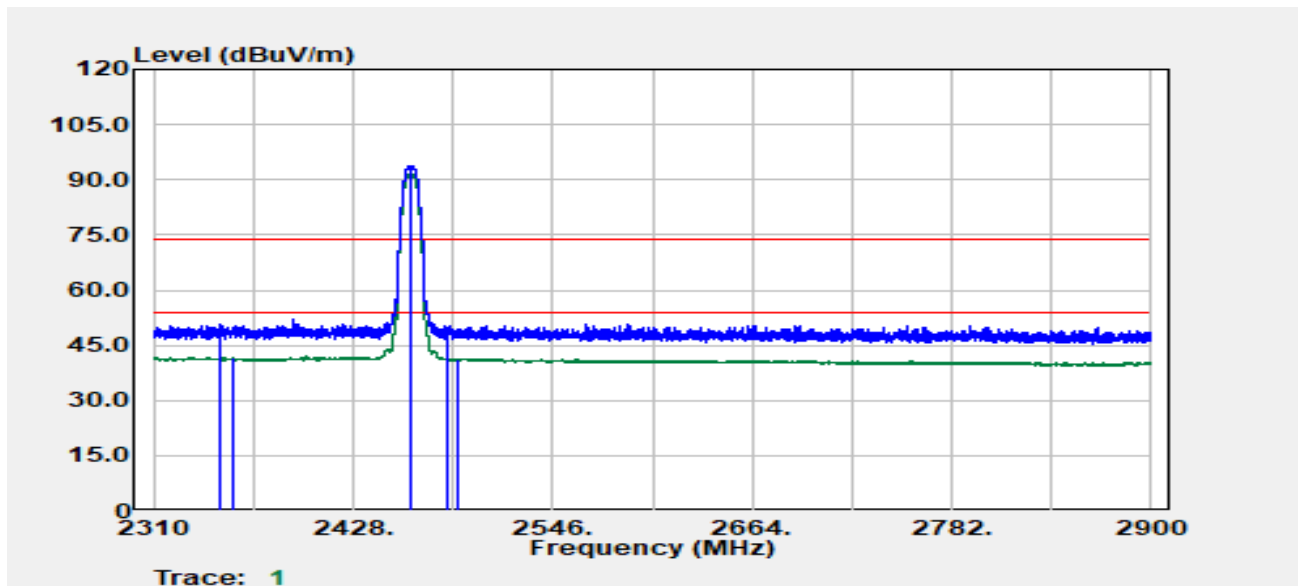
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Project No :TM-2402000232P
 Operation Band :802.11b
 Frequency :2462 MHz
 Operation Mode :Bandedge
 EUT Pol :E1
 Setting :10

Test Date :2024-05-22
 Temp./Humi. :24.4/58
 Antenna Pol. :VERTICAL
 Engineer :Tony Chao
 Test Chamber : 966A



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
2348.93	Peak	44.53	6.23	50.76	74.00	-23.24
2356.35	Average	35.36	6.25	41.60	54.00	-12.40
2462.00	Peak	87.58	6.32	93.89	--	--
2462.00	Average	85.00	6.32	91.31	--	--
2483.50	Peak	43.48	6.71	50.20	74.00	-23.80
2489.56	Average	34.63	6.80	41.43	54.00	-12.57

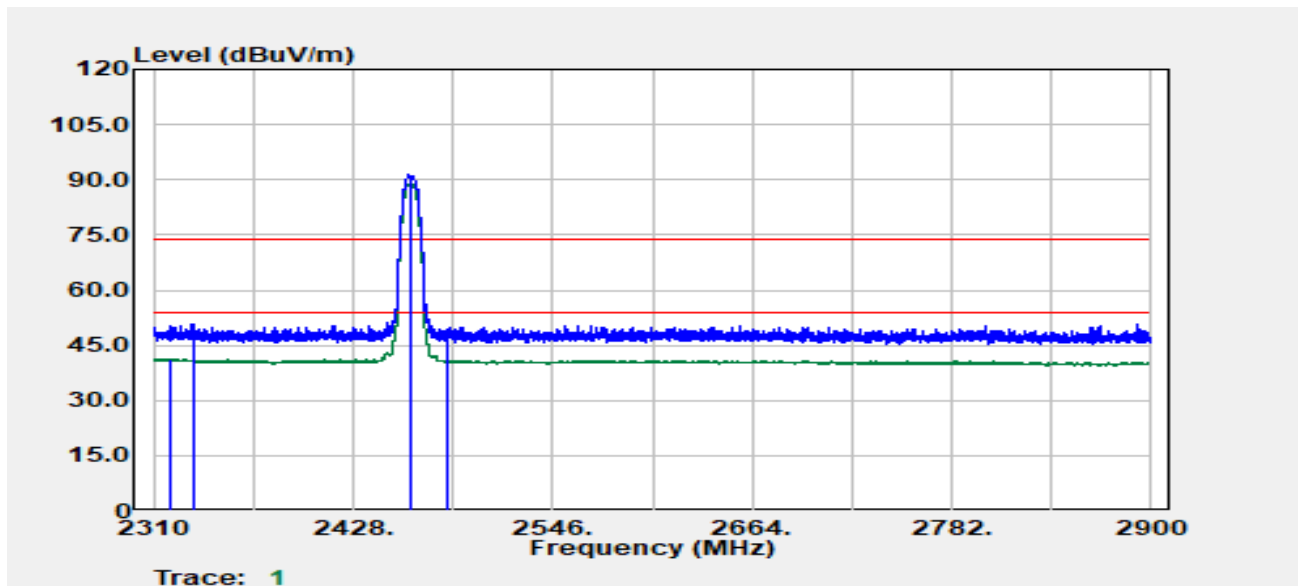
Report No.: TMWK2405001547KR

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Rev.: 00

Project No :TM-2402000232P
 Operation Band :802.11b
 Frequency :2462 MHz
 Operation Mode :Bandedge
 EUT Pol :E1
 Setting :10

Test Date :2024-05-22
 Temp./Humi. :24.4/58
 Antenna Pol. :HORIZONTAL
 Engineer :Tony Chao
 Test Chamber : 966A



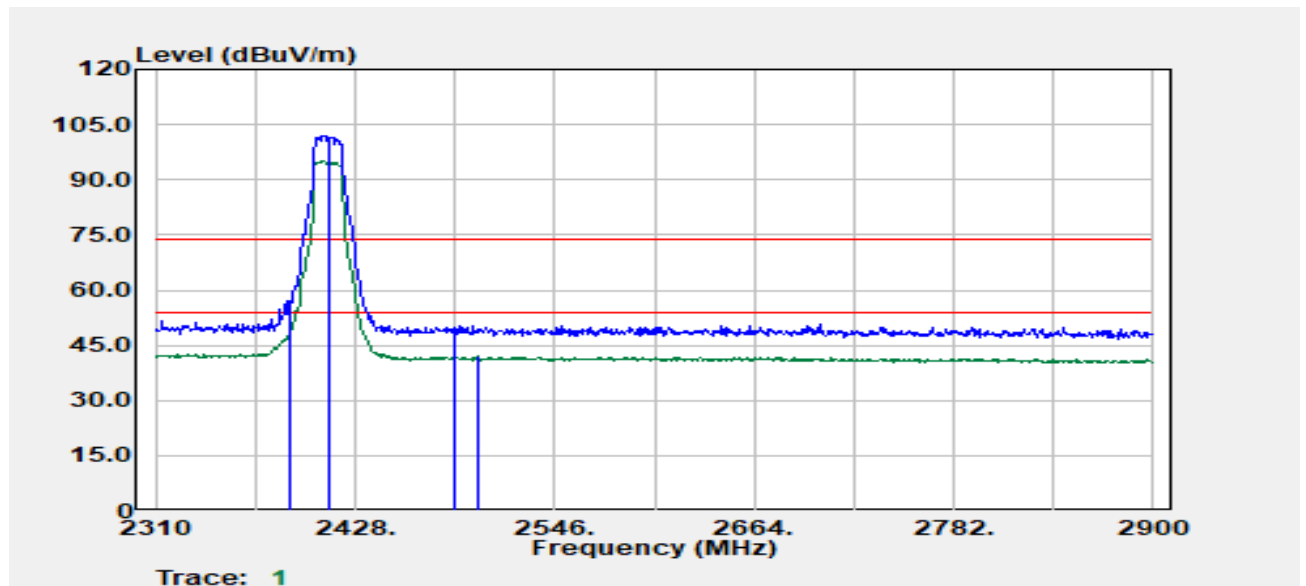
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
2319.61	Average	35.05	6.15	41.20	54.00	-12.80
2332.99	Peak	44.71	6.16	50.87	74.00	-23.13
2462.00	Peak	85.03	6.32	91.35	--	--
2462.00	Average	82.43	6.32	88.75	--	--
2483.50	Peak	43.22	6.71	49.93	74.00	-24.07
2483.50	Average	34.12	6.71	40.83	54.00	-13.17

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Project No :TM-2402000232P
Operation Band :802.11g
Frequency :2412 MHz
Operation Mode :Bandedge
EUT Pol :E1
Setting :5

Test Date :2024-05-22
Temp./Humi. :24.4/58
Antenna Pol. :VERTICAL
Engineer :Tony Chao
Test Chamber : 966A

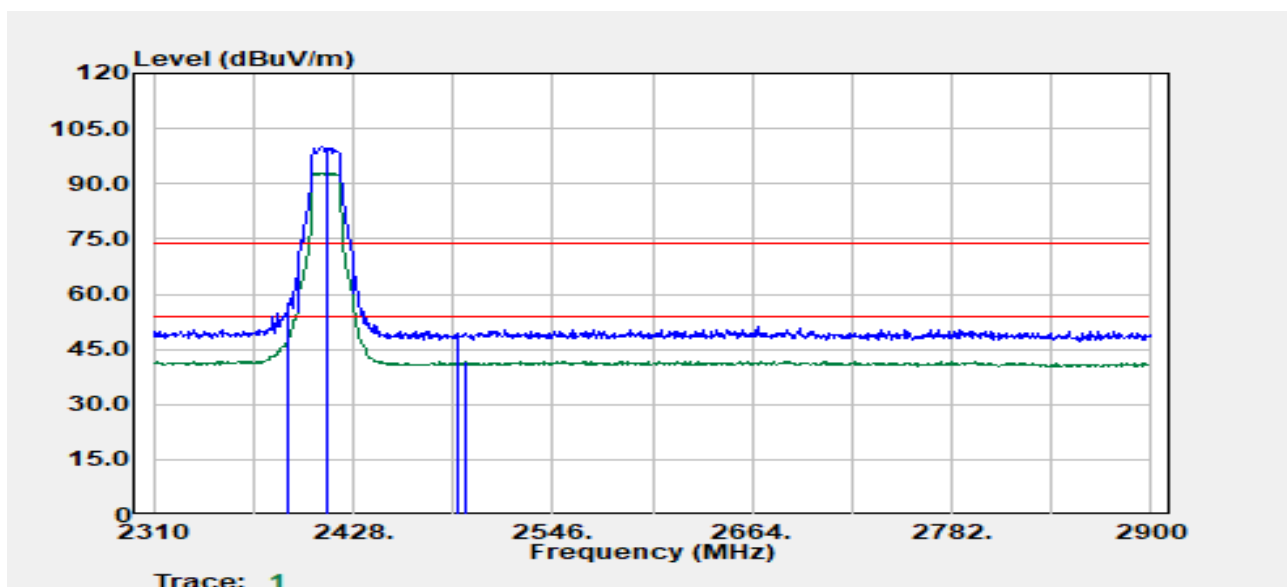


Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
2390.00	Peak	50.78	6.28	57.06	74.00	-16.94
2390.00	Average	43.03	6.28	49.31	54.00	-4.69
2412.00	Peak	95.70	6.31	102.01	--	--
2412.00	Average	88.73	6.31	95.04	--	--
2487.00	Peak	43.31	6.76	50.07	74.00	-23.93
2499.98	Average	35.27	6.84	42.11	54.00	-11.89

Report No.: TMWK2405001547KR

Project No :TM-2402000232P
Operation Band :802.11g
Frequency :2412 MHz
Operation Mode :Bandedge
EUT Pol :E1
Setting :5

Test Date :2024-05-22
Temp./Humi. :24.4/58
Antenna Pol. :HORIZONTAL
Engineer :Tony Chao
Test Chamber : 966A

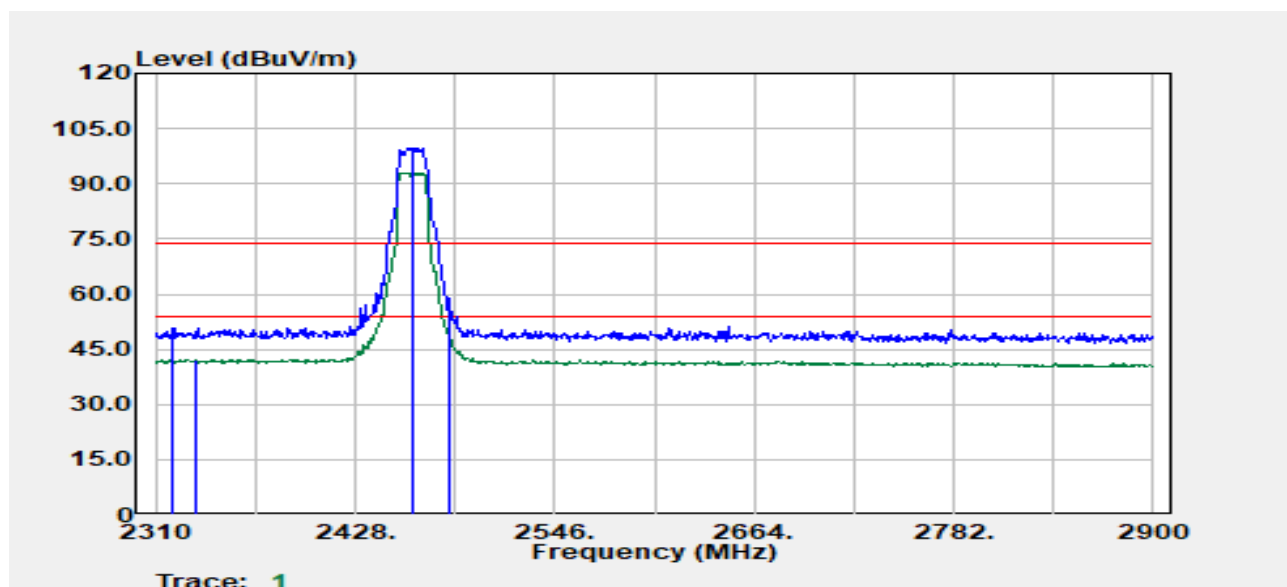


Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
2390.00	Peak	51.53	6.28	57.81	74.00	-16.19
2390.00	Average	42.17	6.28	48.45	54.00	-5.55
2412.00	Peak	93.63	6.31	99.94	--	--
2412.00	Average	86.65	6.31	92.96	--	--
2489.95	Peak	42.45	6.80	49.25	74.00	-24.75
2495.26	Average	34.62	6.82	41.44	54.00	-12.56

Report No.: TMWK2405001547KR

Project No :TM-2402000232P
Operation Band :802.11g
Frequency :2462 MHz
Operation Mode :Bandedge
EUT Pol :E1
Setting :4

Test Date :2024-05-22
Temp./Humi. :24.4/58
Antenna Pol. :VERTICAL
Engineer :Tony Chao
Test Chamber : 966A



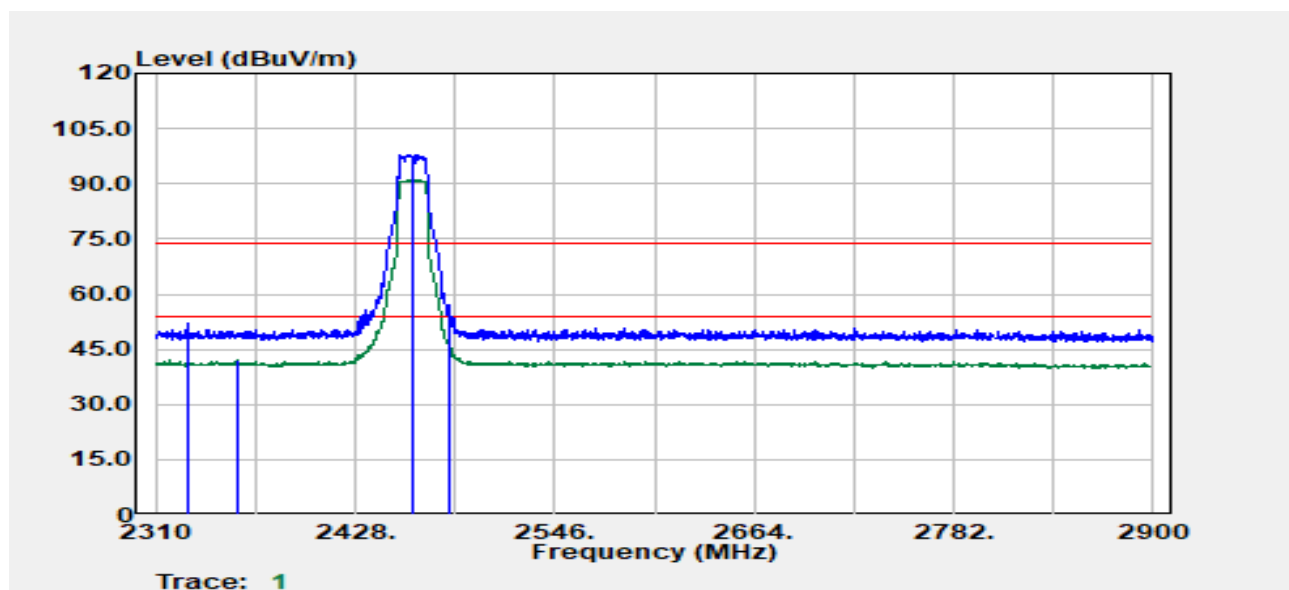
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBUV/m	Limit dBUV/m	Margin dB
2319.44	Peak	45.19	6.15	51.34	74.00	-22.66
2333.01	Average	36.05	6.16	42.21	54.00	-11.79
2462.00	Peak	93.54	6.32	99.86	--	--
2462.00	Average	86.65	6.32	92.97	--	--
2483.50	Peak	52.56	6.71	59.28	74.00	-14.72
2483.50	Average	42.32	6.71	49.03	54.00	-4.97

Report No.: TMWK2405001547KR

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Rev.: 00

Project No :TM-2402000232P
Operation Band :802.11g
Frequency :2462 MHz
Operation Mode :Bandedge
EUT Pol :E1
Setting :4

Test Date :2024-05-22
Temp./Humi. :24.4/58
Antenna Pol. :HORIZONTAL
Engineer :Tony Chao
Test Chamber : 966A



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
2328.48	Peak	45.95	6.18	52.13	74.00	-21.87
2357.94	Average	35.68	6.25	41.92	54.00	-12.08
2462.00	Peak	91.65	6.32	97.97	--	--
2462.00	Average	84.73	6.32	91.05	--	--
2483.53	Average	39.44	6.71	46.15	54.00	-7.85
2484.03	Peak	50.29	6.72	57.01	74.00	-16.99

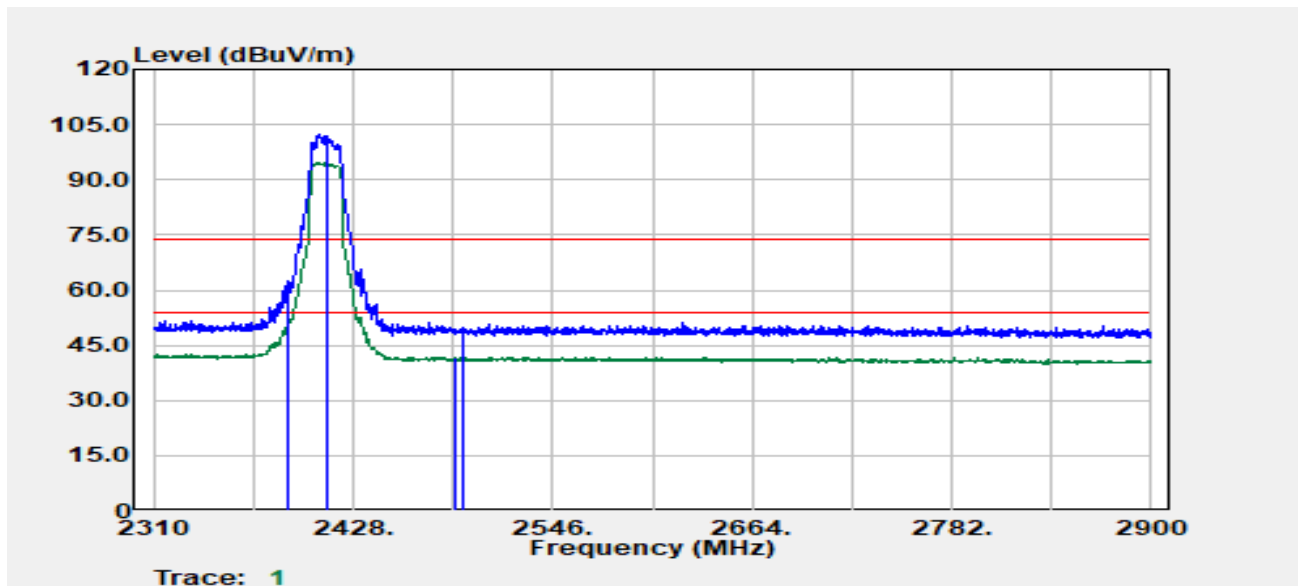
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Project No :TM-2402000232P
Operation Band :802.11n20
Frequency :2412 MHz
Operation Mode :Bandedge
EUT Pol :E1
Setting :5

Test Date :2024-05-22
Temp./Humi. :24.4/58
Antenna Pol. :VERTICAL
Engineer :Tony Chao
Test Chamber : 966A



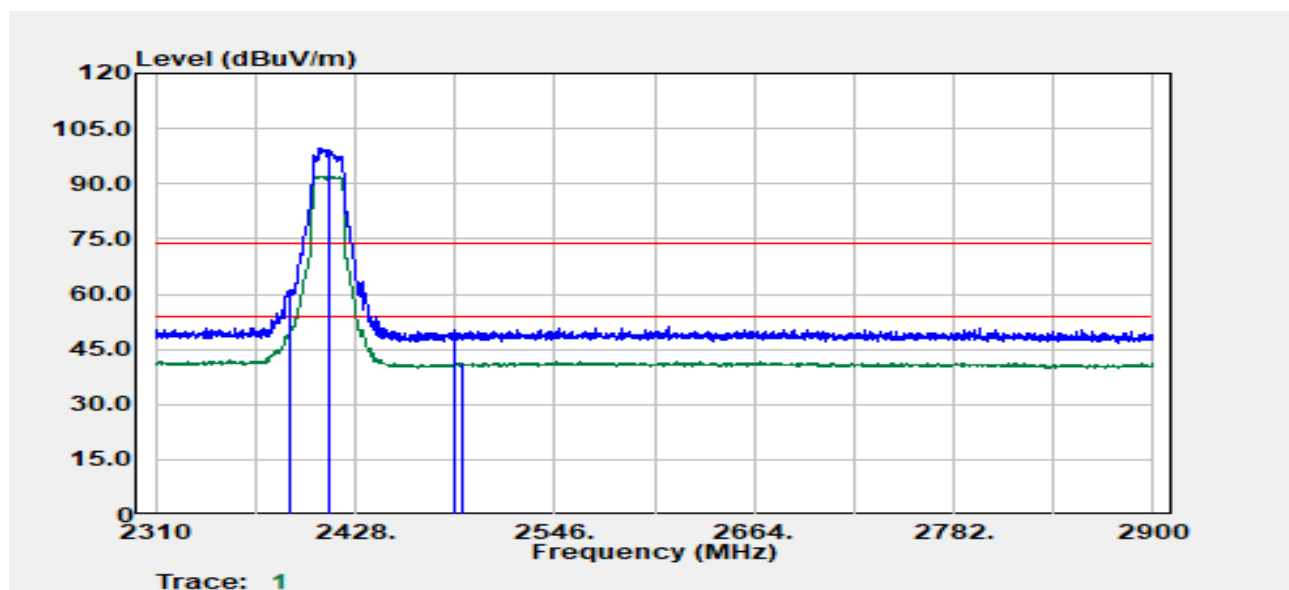
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBUV/m	Limit dBUV/m	Margin dB
2389.90	Peak	56.13	6.28	62.41	74.00	-11.59
2389.90	Average	44.93	6.28	51.21	54.00	-2.79
2412.00	Peak	95.95	6.31	102.25	--	--
2412.00	Average	88.31	6.31	94.61	--	--
2488.52	Average	34.84	6.78	41.62	54.00	-12.38
2492.27	Peak	43.17	6.81	49.98	74.00	-24.02

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Rev.: 00

Project No :TM-2402000232P
Operation Band :802.11n20
Frequency :2412 MHz
Operation Mode :Bandedge
EUT Pol :E1
Setting :5

Test Date :2024-05-22
Temp./Humi. :24.4/58
Antenna Pol. :HORIZONTAL
Engineer :Tony Chao
Test Chamber : 966A



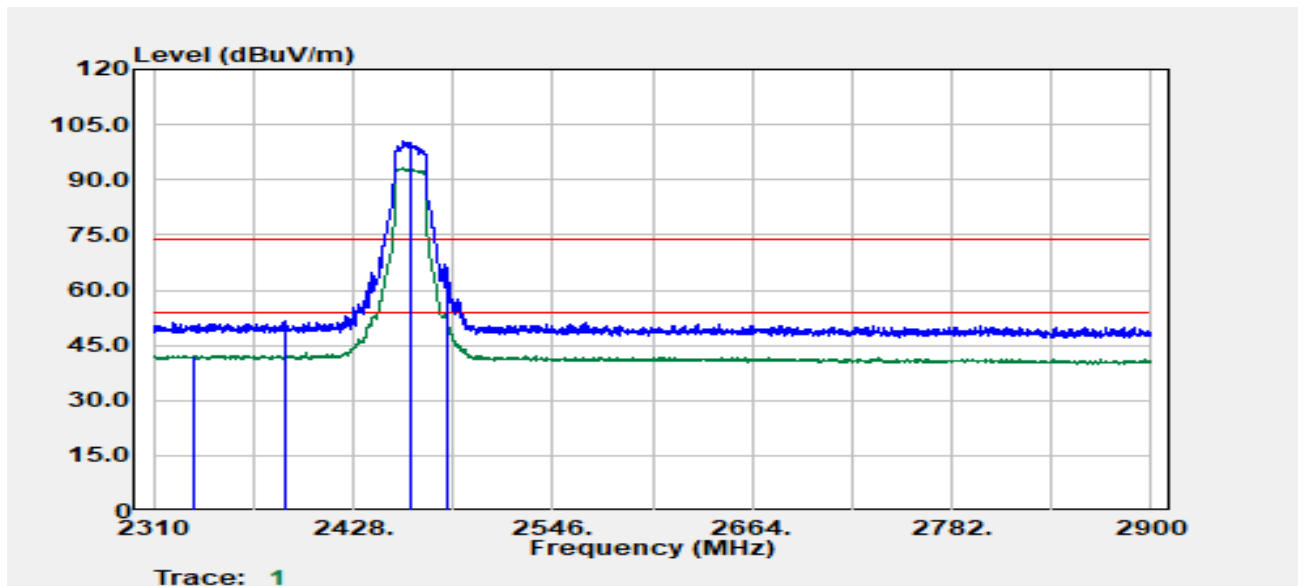
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
2389.65	Peak	54.87	6.27	61.14	74.00	-12.86
2389.65	Average	44.17	6.27	50.44	54.00	-3.56
2412.00	Peak	93.32	6.31	99.63	--	--
2412.00	Average	85.80	6.31	92.11	--	--
2487.52	Peak	43.31	6.77	50.08	74.00	-23.92
2490.77	Average	34.54	6.81	41.35	54.00	-12.65

Report No.: TMWK2405001547KR

Rev.: 00

Project No :TM-2402000232P
Operation Band :802.11n20
Frequency :2462 MHz
Operation Mode :Bandedge
EUT Pol :E1
Setting :4

Test Date :2024-05-22
Temp./Humi. :24.4/58
Antenna Pol. :VERTICAL
Engineer :Tony Chao
Test Chamber : 966A



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
2333.22	Average	36.12	6.16	42.28	54.00	-11.72
2387.90	Peak	45.20	6.24	51.44	74.00	-22.56
2462.00	Peak	94.38	6.32	100.70	--	--
2462.00	Average	86.83	6.32	93.15	--	--
2483.53	Average	44.19	6.71	50.91	54.00	-3.09
2483.78	Peak	56.23	6.72	62.95	74.00	-11.05

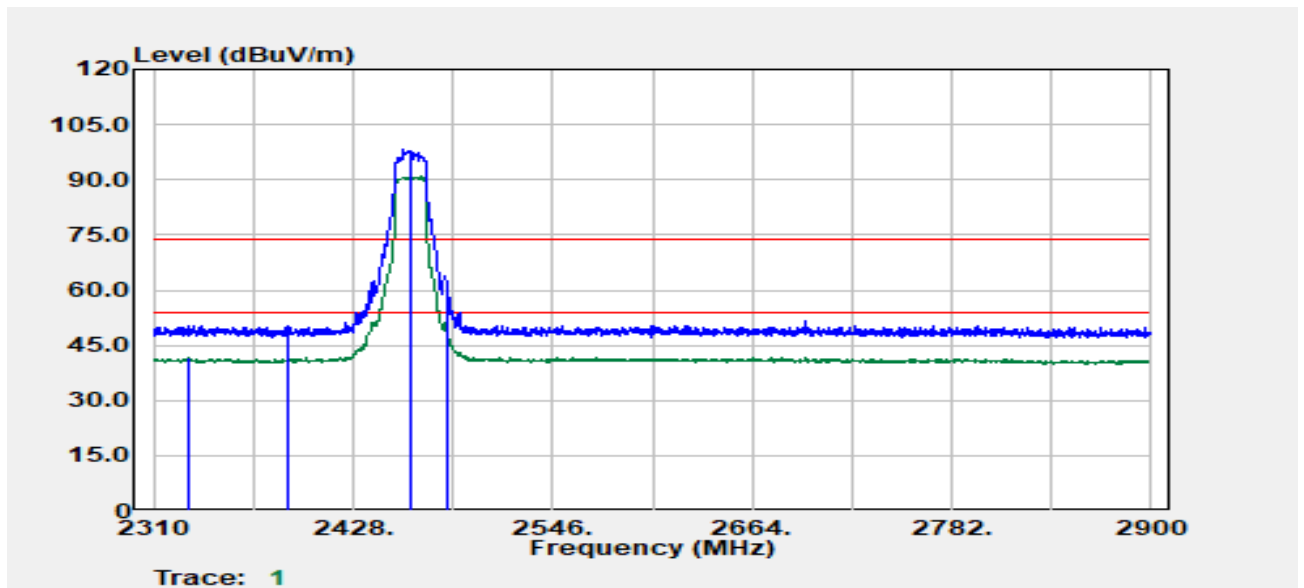
Report No.: TMWK2405001547KR

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Rev.: 00

Project No :TM-2402000232P
 Operation Band :802.11n20
 Frequency :2462 MHz
 Operation Mode :Bandedge
 EUT Pol :E1
 Setting :4

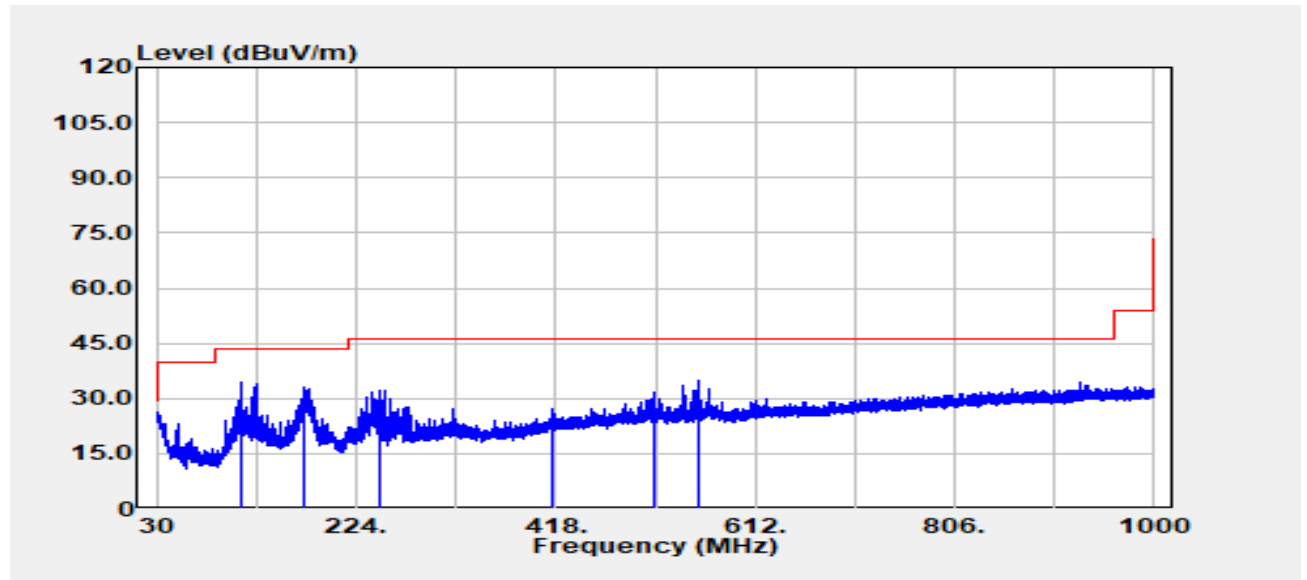
Test Date :2024-05-22
 Temp./Humi. :24.4/58
 Antenna Pol. :HORIZONTAL
 Engineer :Tony Chao
 Test Chamber : 966A



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
2330.97	Average	35.31	6.18	41.49	54.00	-12.51
2388.65	Peak	44.16	6.25	50.41	74.00	-23.59
2462.00	Peak	91.91	6.32	98.23	--	--
2462.00	Average	84.48	6.32	90.80	--	--
2483.53	Average	41.66	6.71	48.38	54.00	-5.62
2483.78	Peak	54.23	6.72	60.95	74.00	-13.05

TX Test Data

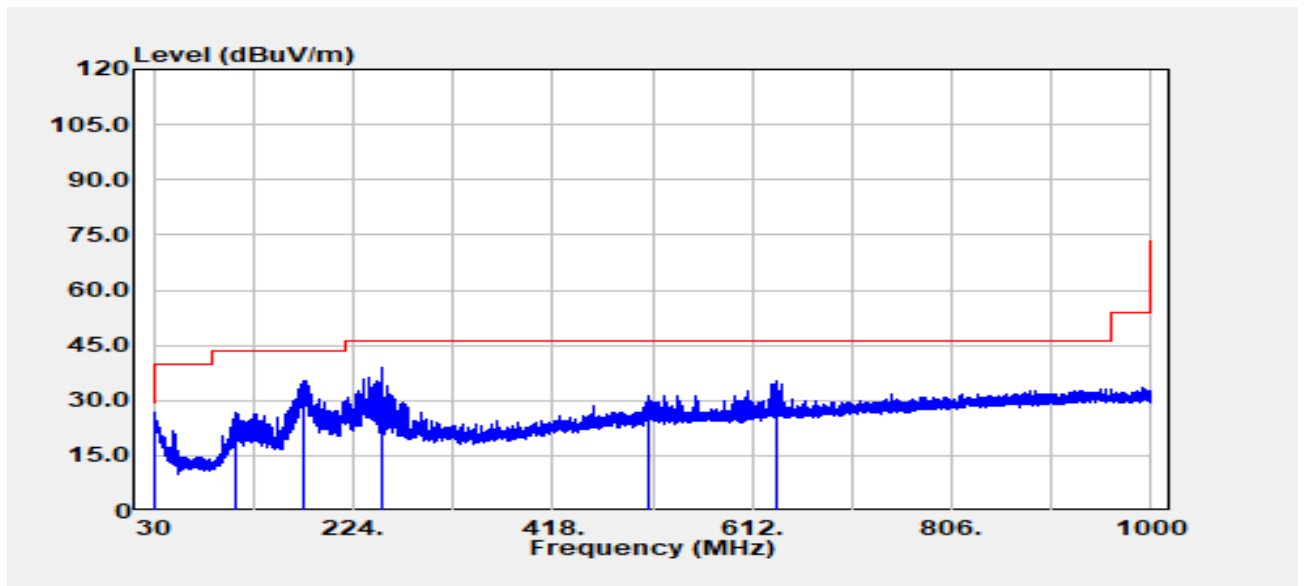
Project No	:TM-2402000232P	Test Date	:2024-05-22
Operation Band	:802.11g	Temp./Humi.	:24.4/58
Frequency	:2462 MHz	Antenna Pol.	:Vertical
Operation Mode	:TX	Engineer	:Ray Li
EUT Pol	:E1	Test Chamber	: 966A
Setting	:4		



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
111.80	Peak	44.09	-9.83	34.26	43.50	-9.24
174.20	Peak	44.47	-11.28	33.19	43.50	-10.31
247.60	Peak	43.01	-10.67	32.35	46.00	-13.65
415.60	Peak	32.45	-5.32	27.13	46.00	-18.87
514.10	Peak	35.09	-3.26	31.83	46.00	-14.17
555.70	Peak	37.25	-2.53	34.73	46.00	-11.27

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Project No	:TM-2402000232P	Test Date	:2024-05-22
Operation Band	:802.11g	Temp./Humi.	:24.4/58
Frequency	:2462 MHz	Antenna Pol.	:Horizontal
Operation Mode	:TX	Engineer	:Ray Li
EUT Pol	:E1	Test Chamber	: 966A
Setting	:4		



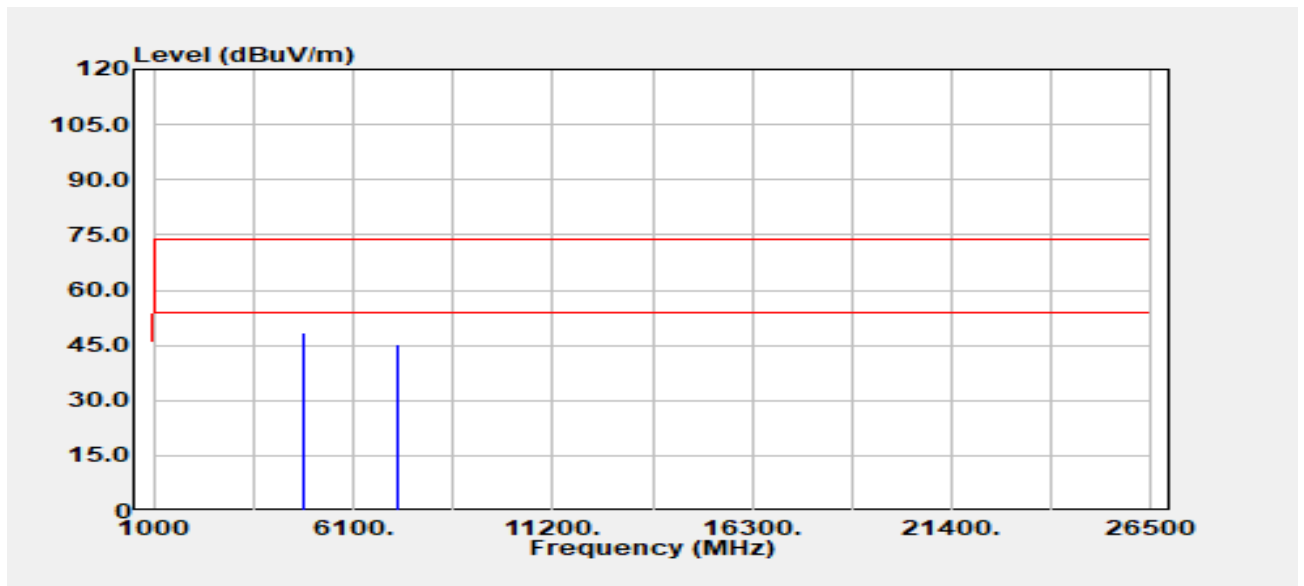
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBUV/m	Limit dBUV/m	Margin dB
31.50	Peak	29.92	-3.31	26.61	40.00	-13.39
108.50	Peak	37.31	-10.62	26.68	43.50	-16.82
175.70	Peak	46.80	-11.34	35.46	43.50	-8.04
252.30	Peak	49.80	-10.68	39.12	46.00	-6.88
510.30	Peak	34.82	-3.35	31.47	46.00	-14.53
636.80	Peak	35.92	-0.79	35.13	46.00	-10.87

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Project No :TM-2402000232P
Operation Band :802.11b
Frequency :2412 MHz
Operation Mode :TX
EUT Pol :E1
Setting :10.75

Test Date :2024-05-22
Temp./Humi. :24.4/58
Antenna Pol. :Vertical
Engineer :Ray Li
Test Chamber : 966A



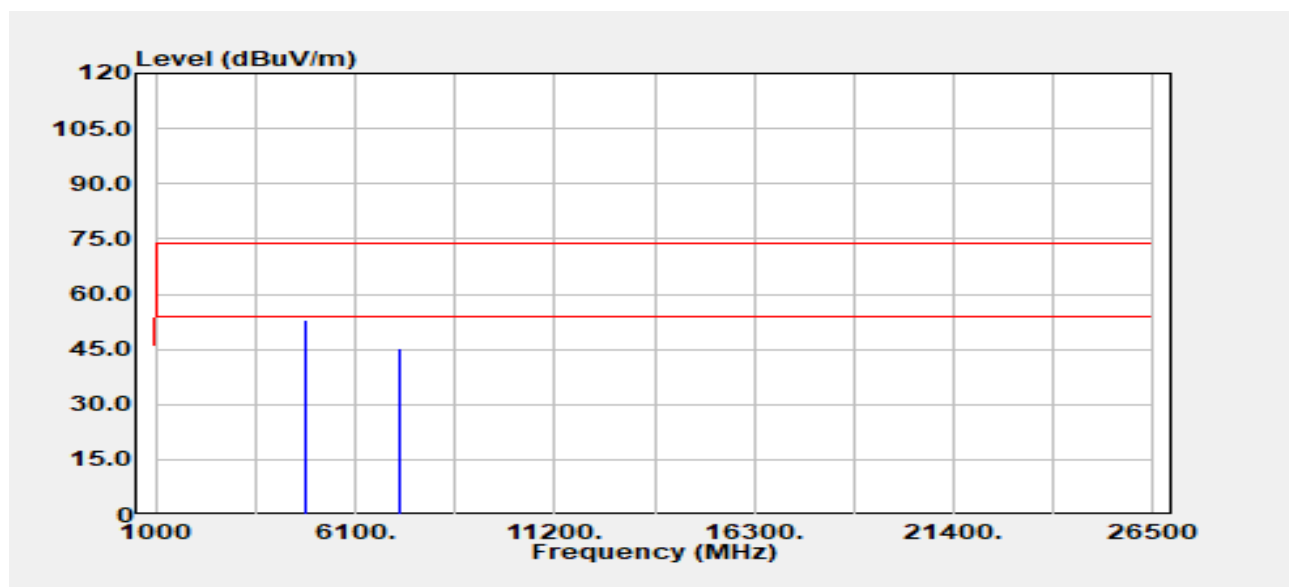
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
4824.00	Peak	46.06	2.25	48.31	74.00	-25.69
4824.00	Average	45.51	2.25	47.76	54.00	-6.24
7236.00	Peak	36.14	9.17	45.31	74.00	-28.69
7236.00	Average	32.38	9.17	41.55	54.00	-12.45

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Project No :TM-2402000232P
Operation Band :802.11b
Frequency :2412 MHz
Operation Mode :TX
EUT Pol :E1
Setting :10.75

Test Date :2024-05-22
Temp./Humi. :24.4/58
Antenna Pol. :Horizontal
Engineer :Ray Li
Test Chamber : 966A



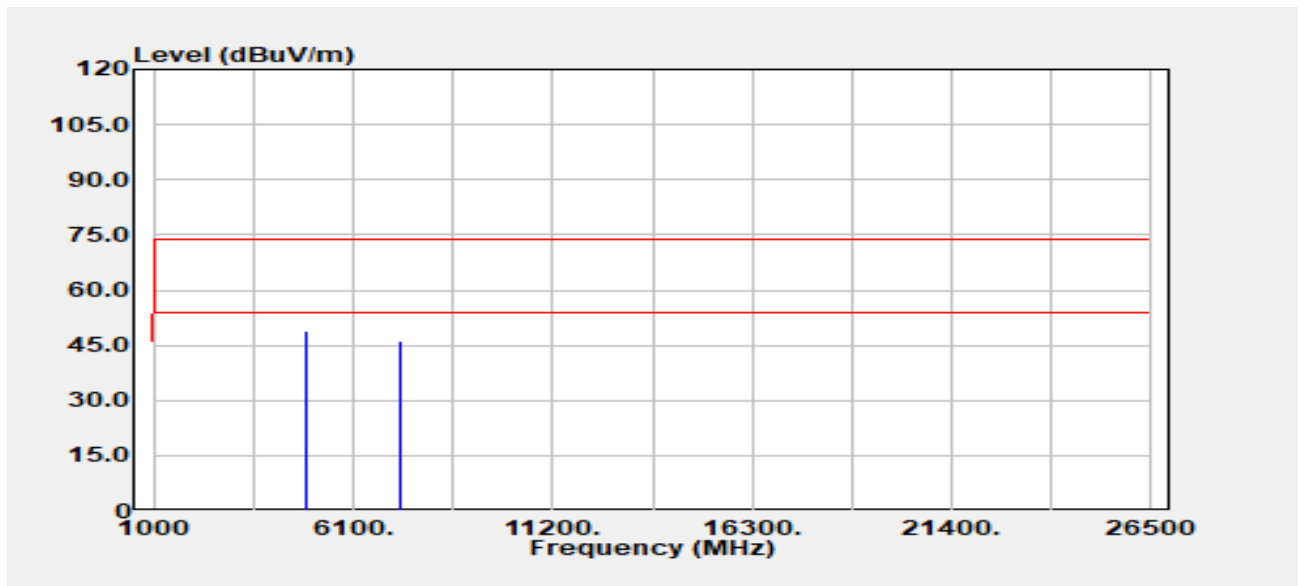
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
4824.00	Peak	50.83	2.25	53.08	74.00	-20.92
4824.00	Average	50.47	2.25	52.72	54.00	-1.28
7236.00	Peak	36.26	9.17	45.43	74.00	-28.57
7236.00	Average	32.80	9.17	41.96	54.00	-12.04

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Project No :TM-2402000232P
Operation Band :802.11b
Frequency :2437 MHz
Operation Mode :TX
EUT Pol :E1
Setting :9.5

Test Date :2024-05-22
Temp./Humi. :24.4/58
Antenna Pol. :Vertical
Engineer :Ray Li
Test Chamber : 966A



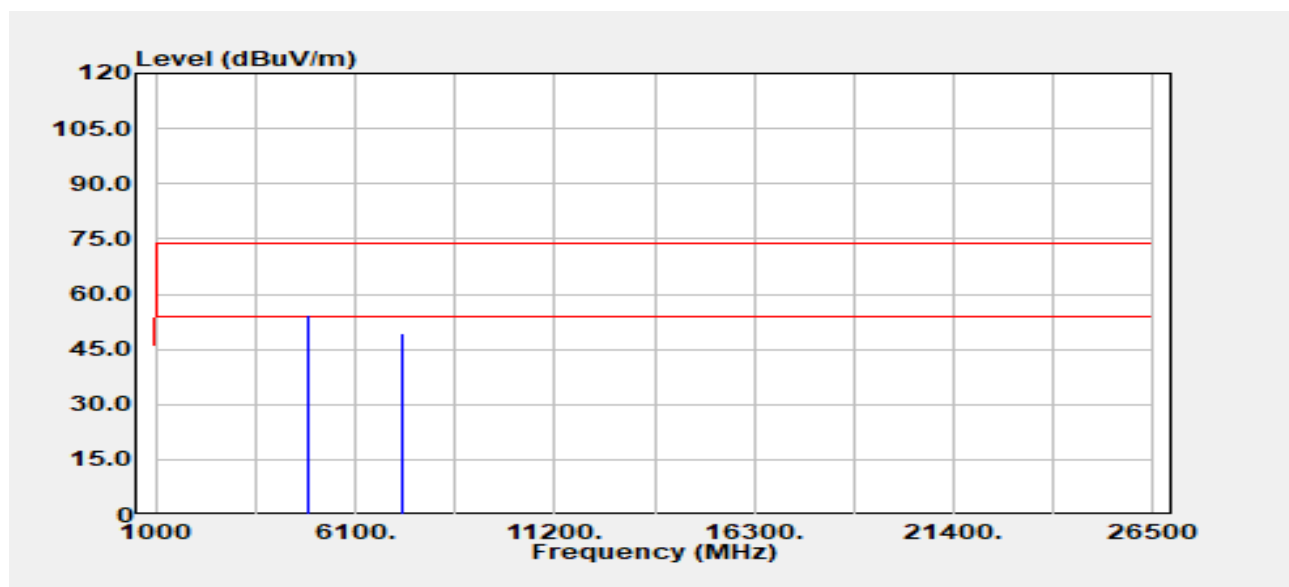
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
4874.00	Peak	46.56	2.49	49.06	74.00	-24.94
4874.00	Average	44.92	2.49	47.42	54.00	-6.58
7311.00	Peak	37.34	8.96	46.31	74.00	-27.69
7311.00	Average	35.89	8.96	44.86	54.00	-9.14

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Project No :TM-2402000232P
Operation Band :802.11b
Frequency :2437 MHz
Operation Mode :TX
EUT Pol :E1
Setting :9.5

Test Date :2024-05-22
Temp./Humi. :24.4/58
Antenna Pol. :Horizontal
Engineer :Ray Li
Test Chamber : 966A



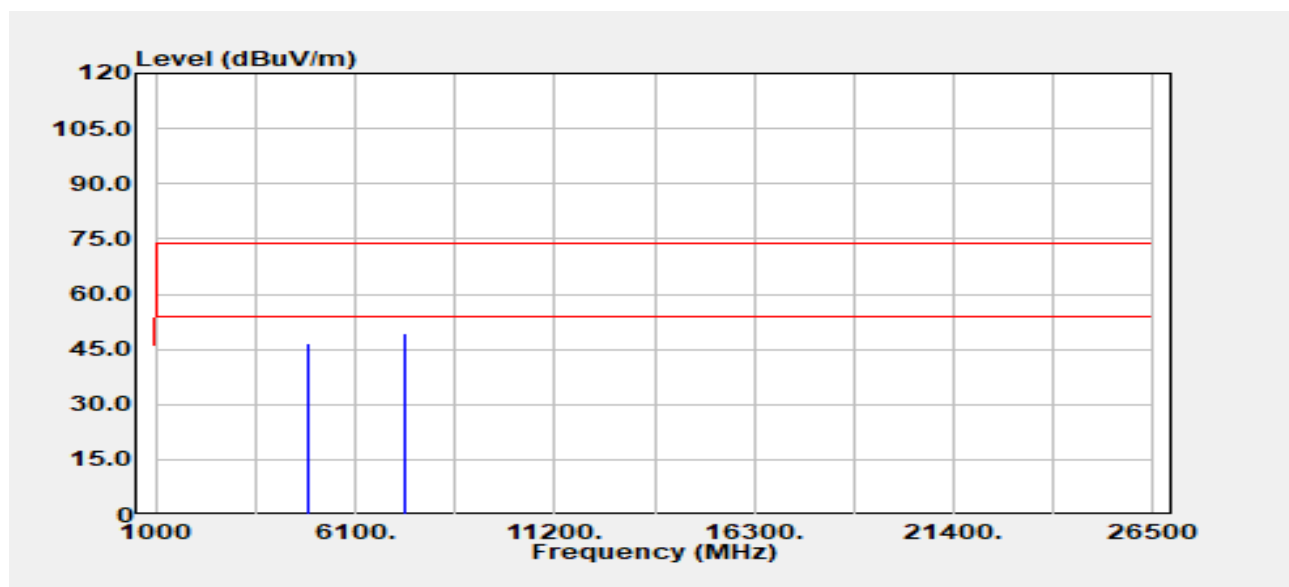
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
4874.00	Peak	51.71	2.49	54.20	74.00	-19.80
4874.00	Average	50.40	2.49	52.89	54.00	-1.11
7311.00	Peak	40.20	8.96	49.17	74.00	-24.83
7311.00	Average	35.86	8.96	44.83	54.00	-9.17

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Project No :TM-2402000232P
Operation Band :802.11b
Frequency :2462 MHz
Operation Mode :TX
EUT Pol :E1
Setting :10

Test Date :2024-05-22
Temp./Humi. :24.4/58
Antenna Pol. :Vertical
Engineer :Ray Li
Test Chamber : 966A



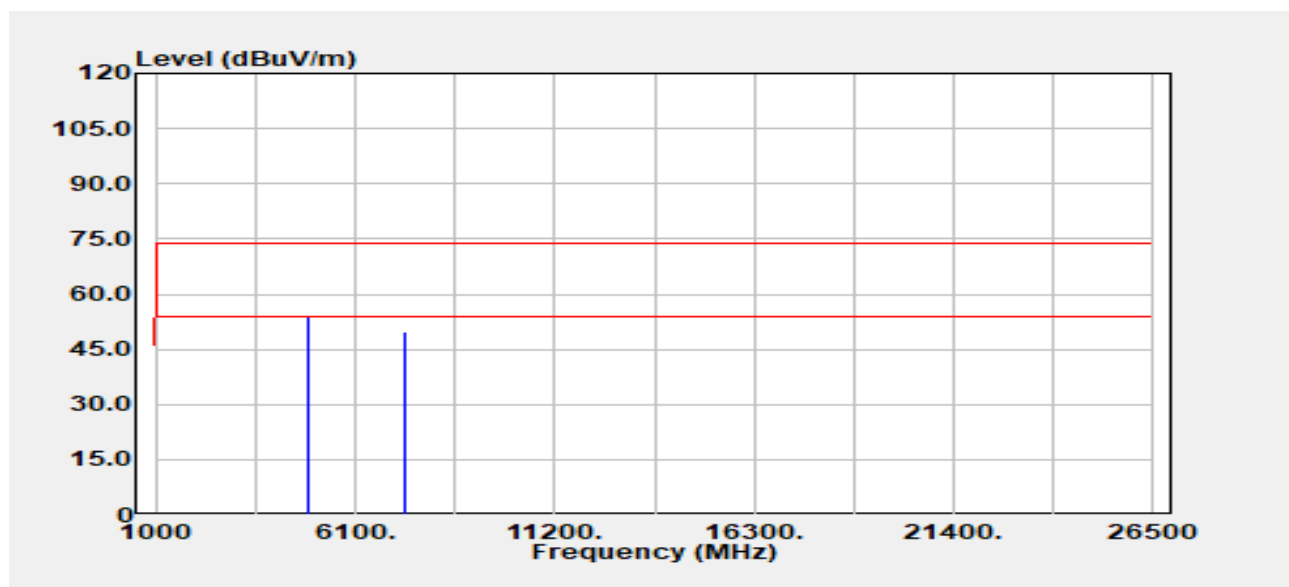
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
4924.00	Peak	43.55	2.93	46.48	74.00	-27.52
4924.00	Average	41.99	2.93	44.91	54.00	-9.09
7386.00	Peak	40.16	9.01	49.17	74.00	-24.83
7386.00	Average	36.99	9.01	46.00	54.00	-8.00

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Project No :TM-2402000232P
Operation Band :802.11b
Frequency :2462 MHz
Operation Mode :TX
EUT Pol :E1
Setting :10

Test Date :2024-05-22
Temp./Humi. :24.4/58
Antenna Pol. :Horizontal
Engineer :Ray Li
Test Chamber : 966A



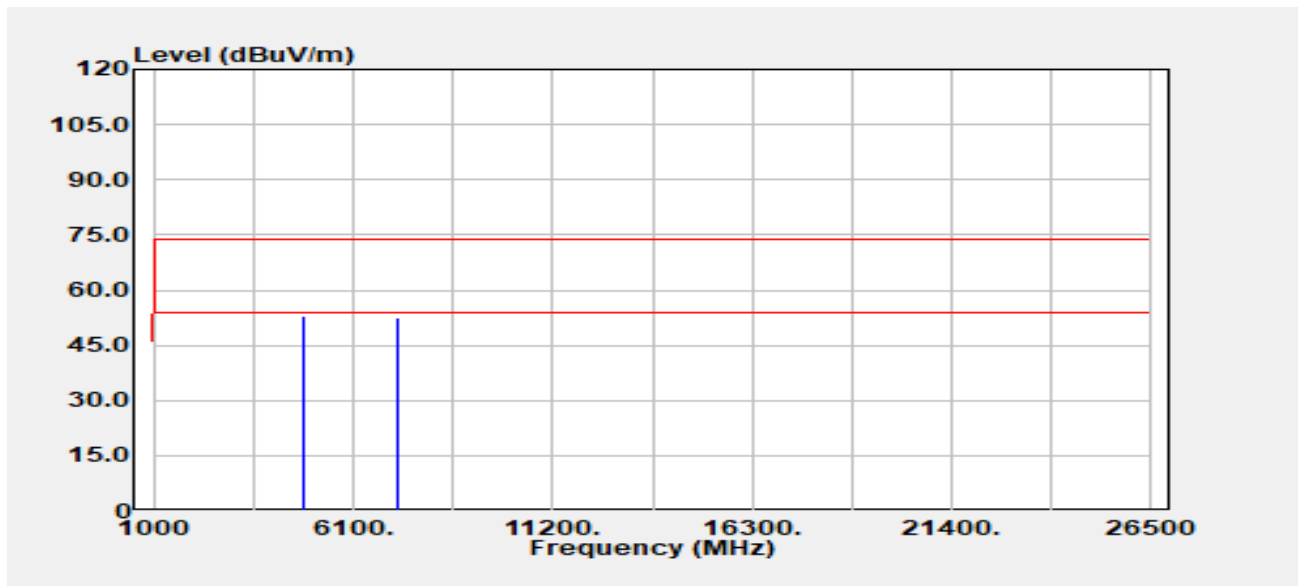
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
4924.00	Peak	51.06	2.93	53.98	74.00	-20.02
4924.00	Average	50.03	2.93	52.95	54.00	-1.05
7386.00	Peak	41.02	9.01	50.03	74.00	-23.97
7386.00	Average	38.22	9.01	47.23	54.00	-6.77

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Project No :TM-2402000232P
Operation Band :802.11g
Frequency :2412 MHz
Operation Mode :TX
EUT Pol :E1
Setting :5

Test Date :2024-05-22
Temp./Humi. :24.4/58
Antenna Pol. :Vertical
Engineer :Ray Li
Test Chamber : 966A



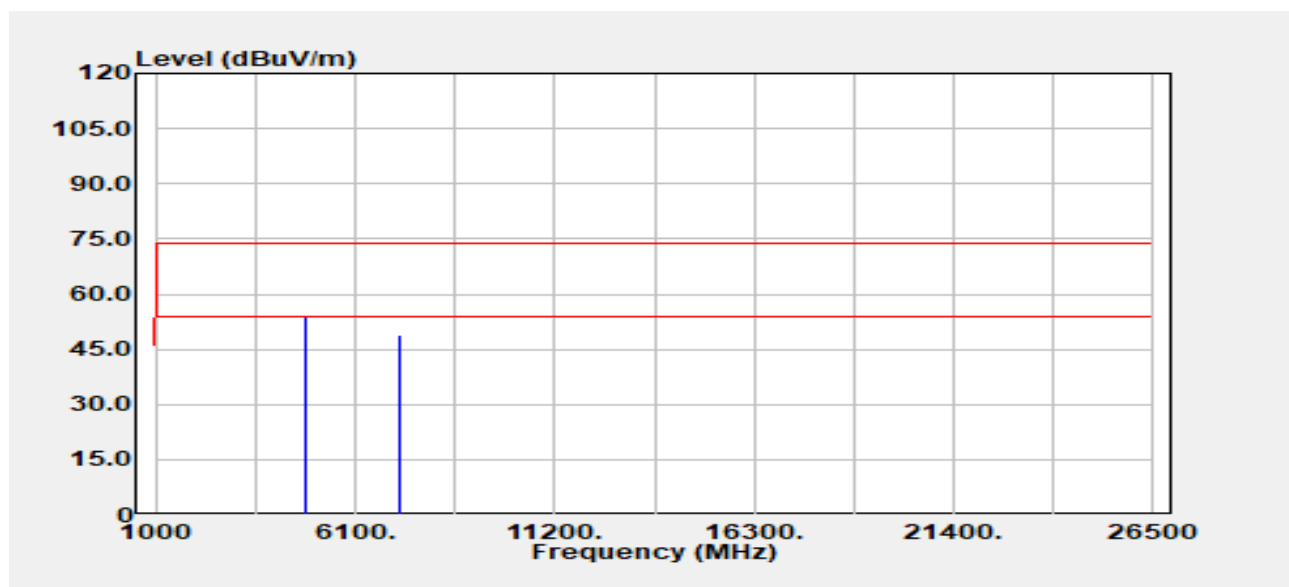
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
4824.00	Peak	50.76	2.25	53.01	74.00	-20.99
4824.00	Average	45.43	2.25	47.69	54.00	-6.31
7236.00	Peak	43.47	9.17	52.64	74.00	-21.36
7236.00	Average	35.16	9.17	44.33	54.00	-9.67

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Project No :TM-2402000232P
Operation Band :802.11g
Frequency :2412 MHz
Operation Mode :TX
EUT Pol :E1
Setting :5

Test Date :2024-05-22
Temp./Humi. :24.4/58
Antenna Pol. :Horizontal
Engineer :Ray Li
Test Chamber : 966A



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
4824.00	Peak	51.45	2.25	53.70	74.00	-20.30
4824.00	Average	46.02	2.25	48.27	54.00	-5.73
7236.00	Peak	39.95	9.17	49.11	74.00	-24.89
7236.00	Average	34.87	9.17	44.04	54.00	-9.96

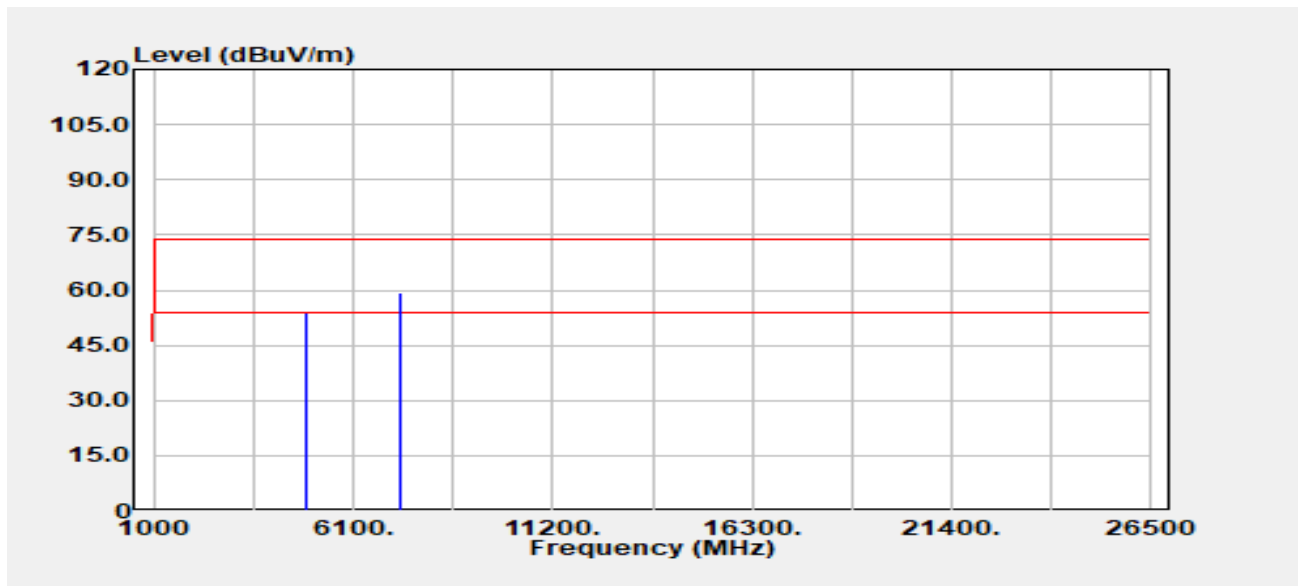
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Rev.: 00

Project No :TM-2402000232P
 Operation Band :802.11g
 Frequency :2437 MHz
 Operation Mode :TX
 EUT Pol :E1
 Setting :3.5

Test Date :2024-05-22
 Temp./Humi. :24.4/58
 Antenna Pol. :Vertical
 Engineer :Ray Li
 Test Chamber : 966A



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
4874.00	Peak	51.22	2.49	53.71	74.00	-20.29
4874.00	Average	43.31	2.49	45.80	54.00	-8.20
7311.00	Peak	50.43	8.96	59.40	74.00	-14.60
7311.00	Average	42.76	8.96	51.72	54.00	-2.28

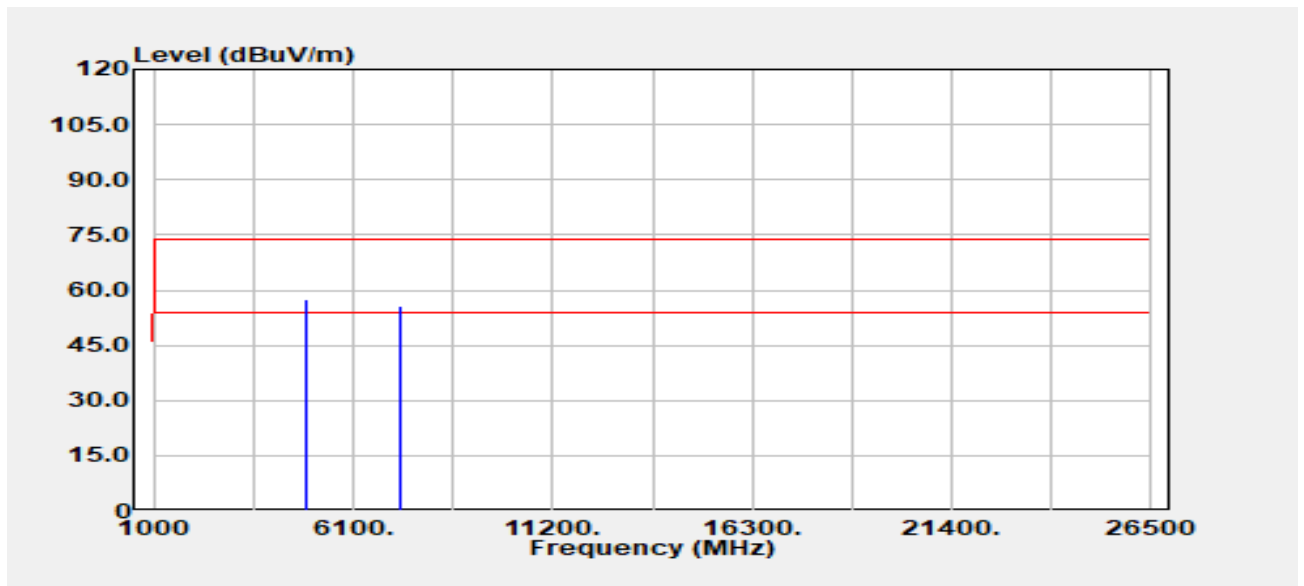
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Rev.: 00

Project No :TM-2402000232P
 Operation Band :802.11g
 Frequency :2437 MHz
 Operation Mode :TX
 EUT Pol :E1
 Setting :3.5

Test Date :2024-05-22
 Temp./Humi. :24.4/58
 Antenna Pol. :Horizontal
 Engineer :Ray Li
 Test Chamber : 966A



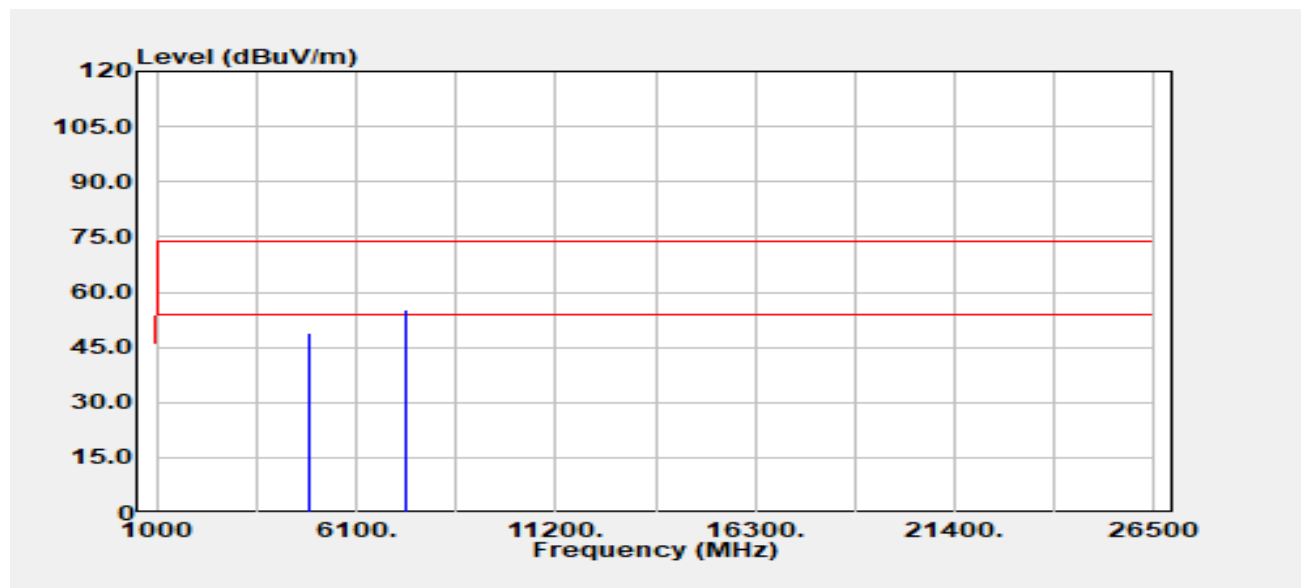
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
4874.00	Peak	54.84	2.49	57.34	74.00	-16.66
4874.00	Average	48.55	2.49	51.05	54.00	-2.95
7311.00	Peak	46.63	8.96	55.60	74.00	-18.40
7311.00	Average	42.66	8.96	51.62	54.00	-2.38

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Project No :TM-2402000232P
Operation Band :802.11g
Frequency :2462 MHz
Operation Mode :TX
EUT Pol :E1
Setting :4

Test Date :2024-05-22
Temp./Humi. :24.4/58
Antenna Pol. :Vertical
Engineer :Ray Li
Test Chamber : 966A



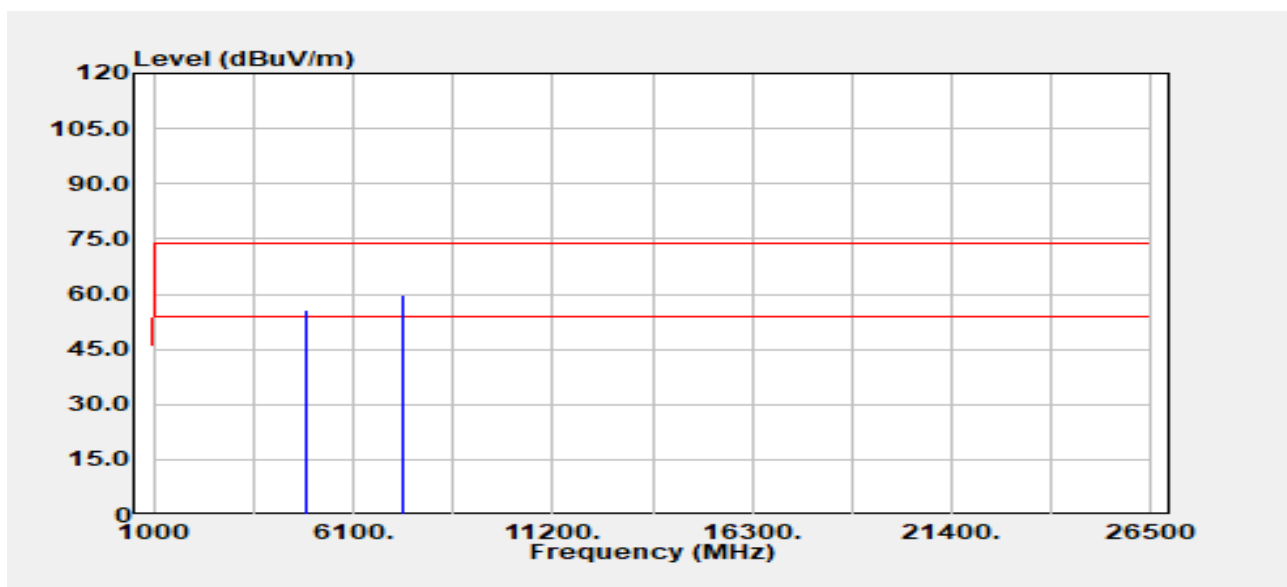
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4924.00	Peak	45.89	2.93	48.81	74.00	-25.19
4924.00	Average	41.60	2.93	44.53	54.00	-9.47
7386.00	Peak	46.44	9.01	55.45	74.00	-18.55
7386.00	Average	43.47	9.01	52.49	54.00	-1.51

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Project No :TM-2402000232P
Operation Band :802.11g
Frequency :2462 MHz
Operation Mode :TX
EUT Pol :E1
Setting :4

Test Date :2024-05-22
Temp./Humi. :24.4/58
Antenna Pol. :Horizontal
Engineer :Ray Li
Test Chamber : 966A



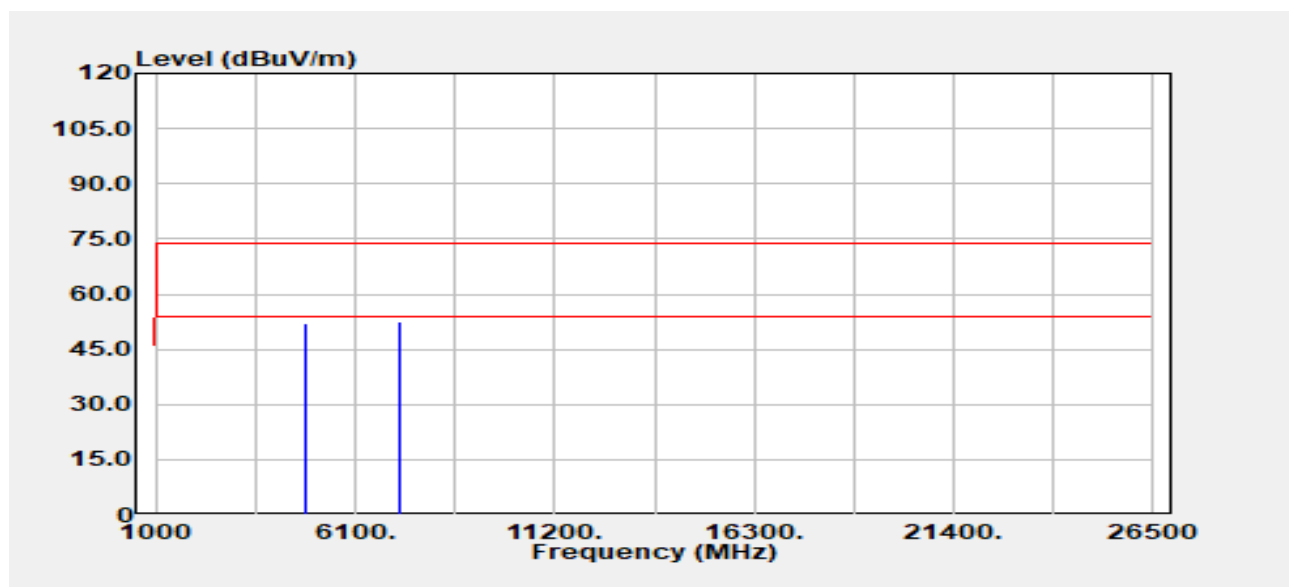
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
4924.00	Peak	52.94	2.93	55.87	74.00	-18.13
4924.00	Average	48.64	2.93	51.56	54.00	-2.44
7386.00	Peak	50.75	9.01	59.76	74.00	-14.24
7386.00	Average	44.15	9.01	53.16	54.00	-0.84

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Rev.: 00

Project No :TM-2402000232P
Operation Band :802.11n20
Frequency :2412 MHz
Operation Mode :TX
EUT Pol :E1
Setting :5

Test Date :2024-05-22
Temp./Humi. :24.4/58
Antenna Pol. :Vertical
Engineer :Ray Li
Test Chamber : 966A



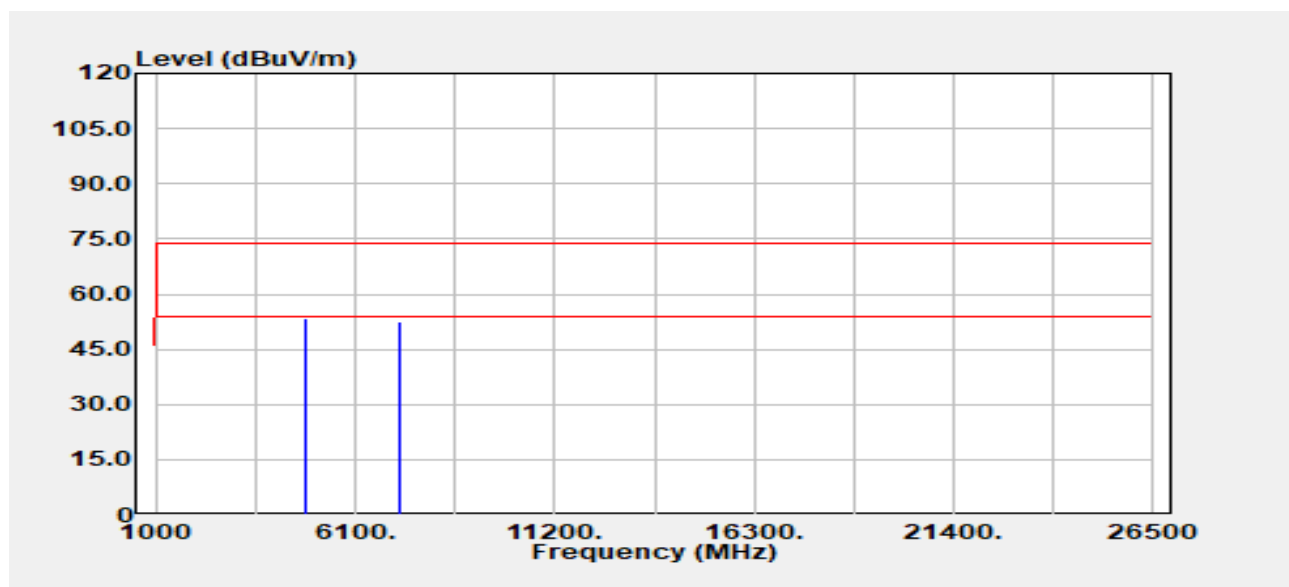
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
4824.00	Peak	49.66	2.25	51.91	74.00	-22.09
4824.00	Average	45.06	2.25	47.31	54.00	-6.69
7236.00	Peak	43.34	9.17	52.51	74.00	-21.49
7236.00	Average	35.86	9.17	45.03	54.00	-8.97

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Project No :TM-2402000232P
Operation Band :802.11n20
Frequency :2412 MHz
Operation Mode :TX
EUT Pol :E1
Setting :5

Test Date :2024-05-22
Temp./Humi. :24.4/58
Antenna Pol. :Horizontal
Engineer :Ray Li
Test Chamber : 966A



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
4824.00	Peak	51.06	2.25	53.31	74.00	-20.69
4824.00	Average	46.67	2.25	48.92	54.00	-5.08
7236.00	Peak	43.22	9.17	52.39	74.00	-21.61
7236.00	Average	35.71	9.17	44.88	54.00	-9.12

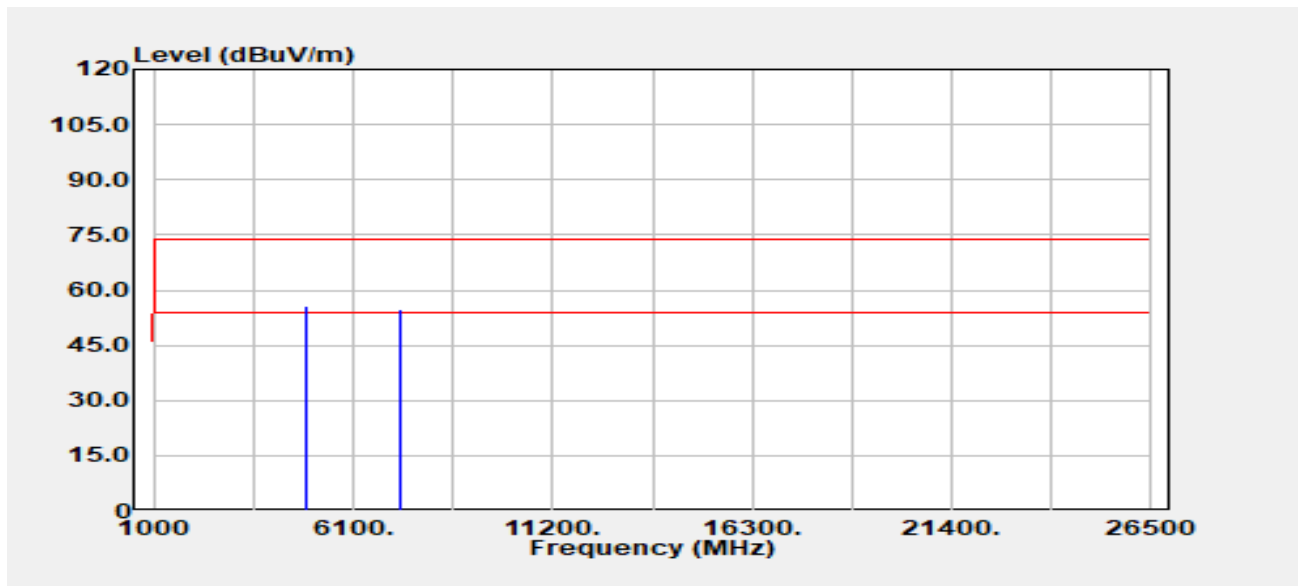
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Rev.: 00

Project No :TM-2402000232P
 Operation Band :802.11n20
 Frequency :2437 MHz
 Operation Mode :TX
 EUT Pol :E1
 Setting :3.5

Test Date :2024-05-22
 Temp./Humi. :24.4/58
 Antenna Pol. :Vertical
 Engineer :Ray Li
 Test Chamber : 966A



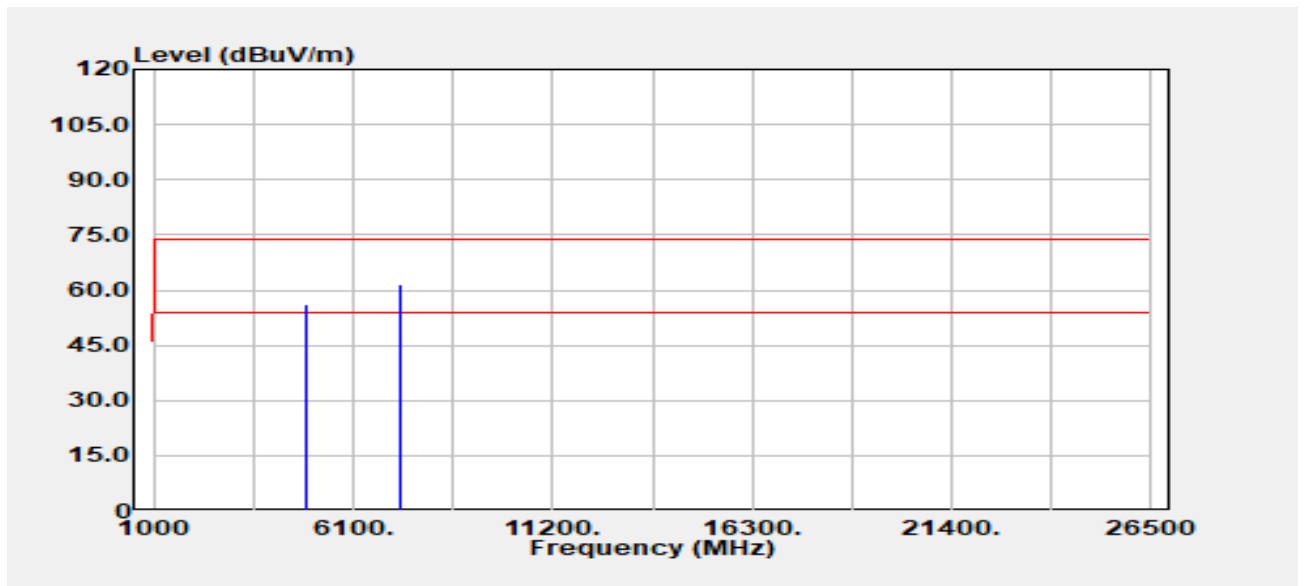
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
4874.00	Peak	53.34	2.49	55.83	74.00	-18.17
4874.00	Average	44.51	2.49	47.00	54.00	-7.00
7311.00	Peak	45.84	8.96	54.81	74.00	-19.19
7311.00	Average	43.08	8.96	52.04	54.00	-1.96

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Project No :TM-2402000232P
Operation Band :802.11n20
Frequency :2437 MHz
Operation Mode :TX
EUT Pol :E1
Setting :3.5

Test Date :2024-05-22
Temp./Humi. :24.4/58
Antenna Pol. :Horizontal
Engineer :Ray Li
Test Chamber : 966A



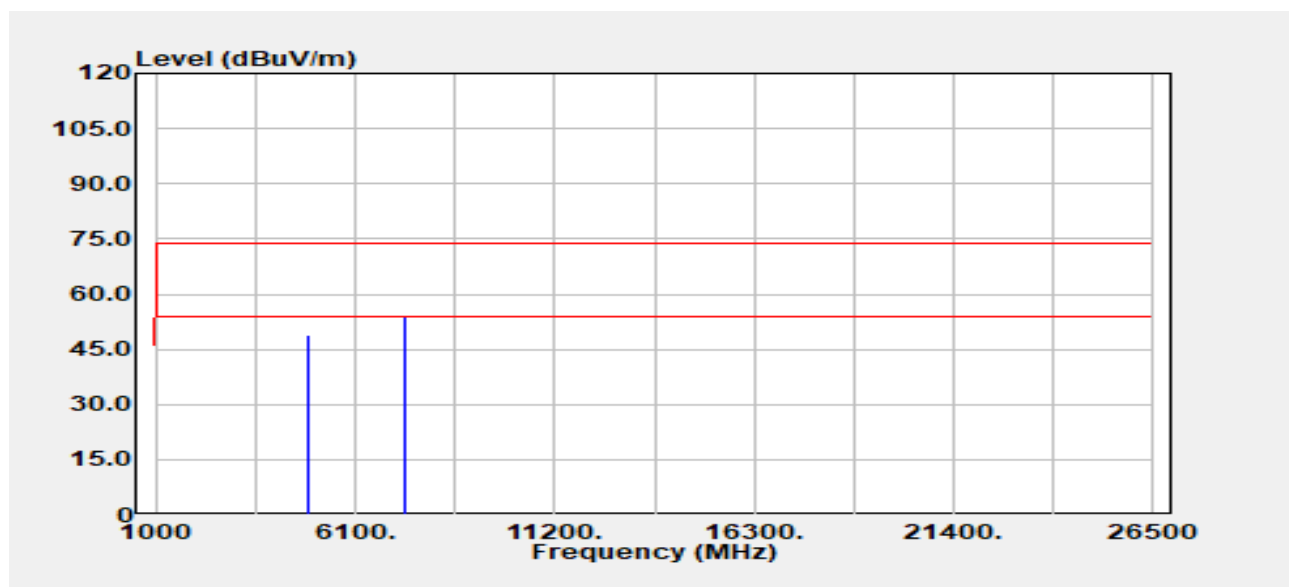
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
4874.00	Peak	53.54	2.49	56.04	74.00	-17.96
4874.00	Average	48.51	2.49	51.01	54.00	-2.99
7311.00	Peak	52.79	8.96	61.75	74.00	-12.25
7311.00	Average	43.77	8.96	52.74	54.00	-1.26

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Project No :TM-2402000232P
Operation Band :802.11n20
Frequency :2462 MHz
Operation Mode :TX
EUT Pol :E1
Setting :4

Test Date :2024-05-22
Temp./Humi. :24.4/58
Antenna Pol. :Vertical
Engineer :Ray Li
Test Chamber : 966A



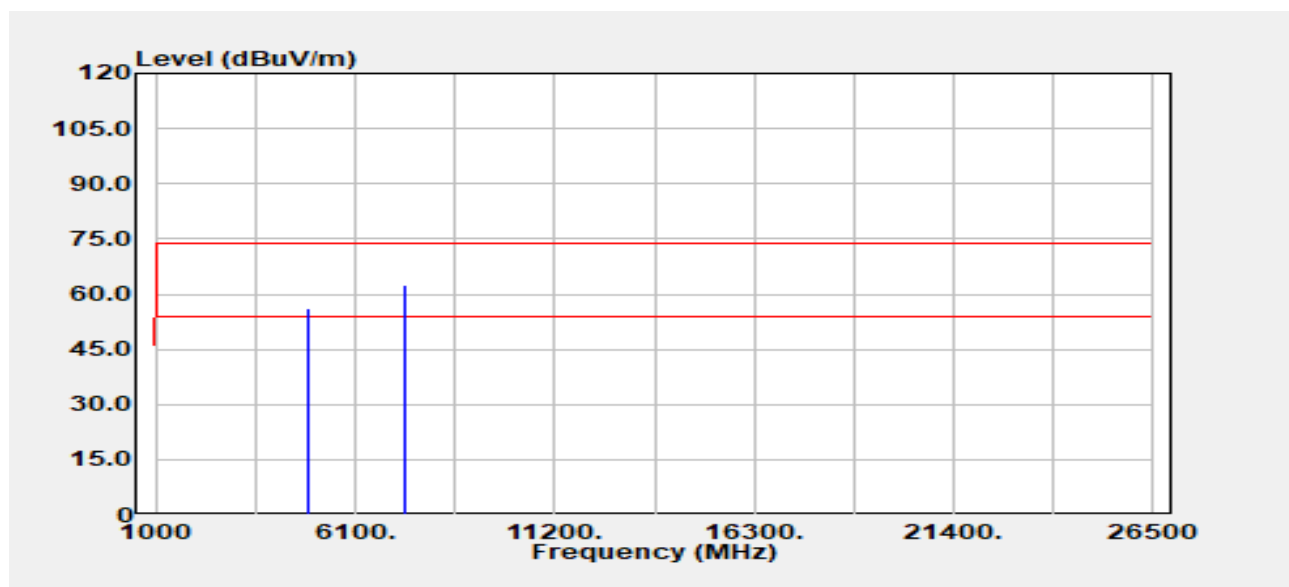
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
4924.00	Peak	46.01	2.93	48.93	74.00	-25.07
4924.00	Average	41.59	2.93	44.52	54.00	-9.48
7386.00	Peak	44.93	9.01	53.94	74.00	-20.06
7386.00	Average	43.17	9.01	52.18	54.00	-1.82

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Rev.: 00

Project No :TM-2402000232P
Operation Band :802.11n20
Frequency :2462 MHz
Operation Mode :TX
EUT Pol :E1
Setting :4

Test Date :2024-05-22
Temp./Humi. :24.4/58
Antenna Pol. :Horizontal
Engineer :Ray Li
Test Chamber : 966A



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
4924.00	Peak	53.01	2.93	55.94	74.00	-18.06
4924.00	Average	48.06	2.93	50.99	54.00	-3.01
7386.00	Peak	53.57	9.01	62.58	74.00	-11.42
7386.00	Average	43.58	9.01	52.59	54.00	-1.41

- End of Test Report -