

Project No: TM-2209000404P
 Report No.: TMWK2209003924KR

Page: 1 / 103
 Rev.: 00

RADIO TEST REPORT

FCC 47 CFR PART 15 SUBPART C

Test Standard	FCC Part 15.247
FCC ID	2AGBW9290032636
Product name	WiZ Indoor Camera
Brand Name	WiZ
Model No.	9290032636
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。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com.tw/Terms-and-Conditions> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Revision History

Rev.	Issue Date	Revisions	Effect Page	Revised By
00	November 11, 2022	Initial Issue	ALL	Allison Chen

Table of contents

1. GENERAL INFORMATION.....	4
1.1 EUT INFORMATION.....	4
1.2 EUT CHANNEL INFORMATION.....	5
1.3 ANTENNA INFORMATION.....	5
1.4 MEASUREMENT UNCERTAINTY.....	6
1.5 FACILITIES AND TEST LOCATION.....	7
1.6 INSTRUMENT CALIBRATION.....	8
1.7 SUPPORT AND EUT ACCESSORIES EQUIPMENT.....	10
1.8 TEST METHODOLOGY AND APPLIED STANDARDS.....	10
2. TEST SUMMARY.....	11
3. DESCRIPTION OF TEST MODES.....	12
3.1 THE WORST MODE OF OPERATING CONDITION.....	12
3.2 THE WORST MODE OF MEASUREMENT.....	13
3.3 EUT DUTY CYCLE.....	14
4. TEST RESULT.....	15
4.1 AC POWER LINE CONDUCTED EMISSION.....	15
4.2 6DB BANDWIDTH AND OCCUPIED BANDWIDTH (99%).....	18
4.3 OUTPUT POWER MEASUREMENT.....	30
4.4 POWER SPECTRAL DENSITY.....	35
4.5 CONDUCTED BANDEDGE AND SPURIOUS EMISSION.....	42
4.6 RADIATION BANDEDGE AND SPURIOUS EMISSION.....	58
APPENDIX 1 - PHOTOGRAPHS OF EUT.....	A-1

Report No.: TMWK2209003924KR

1. GENERAL INFORMATION

1.1 EUT INFORMATION

Applicant	Signify (China) Investment Co., Ltd. Building no.9, Lane 888, Tianlin Road, Minhang District , Shanghai, 200233, China
Manufacturer	Sercomm Corporation 8F, No. 3-1, YuanQu St., NanKang, Taipei 115, Taiwan
Equipment	WiZ Indoor Camera
Model Name	9290032636
Model Discrepancy	N/A
Brand Name	WiZ
Received Date	September 23, 2022
Date of Test	October 4~7, 2022
Power Supply	Power from Adapter. MASS POWER / NBS05B050100VEU I/P: 100-240Vac, 50/60Hz, 0.2A O/P: 5.0Vdc, 1.0A, 5.0W

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.

Report No.: TMWK2209003924KR

1.2 EUT CHANNEL INFORMATION

Frequency Range	802.11b/g/n HT20: 2412MHz ~ 2462MHz 802.11n HT40: 2422MHz ~ 2452MHz
Modulation Type	1. IEEE 802.11b mode: CCK 2. IEEE 802.11g mode: OFDM 3. IEEE 802.11n HT20 Mode: OFDM 4. IEEE 802.11n HT40 mode: OFDM
Number of channel	1. IEEE 802.11b mode: 11 Channels 2. IEEE 802.11g mode: 11 Channels 3. IEEE 802.11n HT20 Mode : 11 Channels 4. IEEE 802.11n HT40 mode: 7 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 type="checkbox"/> PCB <input checked="" type="checkbox"/> Dipole <input type="checkbox"/> Coils
Antenna Gain	Ant 1, Gain: 3.83 dBi Ant 2, Gain: 4.33 dBi Power Directional Gain: 7.09 dBi
Brand / Model	SERCOMM / WiZ Antenna

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.
2. Power Directional Gain = $10 \cdot \log \{ [10^{(Ant1/20)} + 10^{(Ant2/20)} + \dots + 10^{(Ant N /20)}]^2 / N \text{ ANT} \}$ dBi

Report No.: TMWK2209003924KR

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.

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.

CAB identifier: TW1309

Test site	Test Engineer	Remark
AC Conduction Room	Tony Chao	-
Radiation	Ray Li	-
RF Conducted	Jack Chen	-

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

Report No.: TMWK2209003924KR

1.6 INSTRUMENT CALIBRATION

RF Conducted Test Site					
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due
Power Meter	Anritsu	ML2496A	2136002	2021-12-06	2022-12-05
EXA Signal Analyzer	Keysight	N9010B	MY55460167	2022-09-07	2023-09-06
Power Sensor	Anritsu	MA2411B	1911386	2022-08-08	2023-08-07
Power Sensor	Anritsu	MA2411B	1911387	2022-08-08	2023-08-07
Software	Radio Test Software Ver. 21				

AC Power-line Conducted Test Room					
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due
CABLE	EMCI	CFD300-NL	CERF	2022-06-27	2023-06-26
EMI Test Receiver	R&S	ESCI	100064	2022-06-17	2023-06-16
LISN	SCHAFFNER	NNB 41	03/10013	2022-02-15	2023-02-14
Software	EZ-EMC(CCS-3A1-CE-wugu)				

Remark:

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

3M 966A Chamber					
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due
K-Type Cable	Huber+Suhner	SUCOFLEX 102	29406/2	2021-12-05	2022-12-04
Bi-Log Antenna	Sunol Sciences	JB3	A030105	2022-08-03	2023-08-02
Spectrum Analyzer	Agilent	E4446A	MY46180323	2021-12-06	2022-12-05
Thermo-Hygro Meter	WISEWIND	1206	D07	2021-12-28	2022-12-27
Loop Antenna	COM-POWER	AL-130	121051	2022-04-13	2023-04-12
Horn Antenna	SCHWARZBECK	BBHA9170	1047	2022-01-11	2023-01-10
Coaxial Cable	EMCI	EMC101G-KM-KM-500	211041	2021-12-23	2022-12-22
Coaxial Cable	EMC	EMC101G-KM-KM-9000	211042	2021-12-23	2022-12-22
Pre-Amplifier	EMCI	EMC184045SE	980860	2021-12-28	2022-12-27
Horn Antenna	ETS LINDGREN	3116	00026370	2021-11-30	2022-11-29
Cable	Woken	J-1099	201709090004	2021-12-23	2022-12-22
Preamplifier	EMEC	EM330	060609	2022-02-23	2023-02-22
Preamplifier	HP	8449B	3008A00965	2021-12-24	2022-12-23
Band Reject Filter	MICRO TRONICS	BRM 50702	112	2021-11-23	2022-11-22
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	2022-01-25	2023-01-24
Turn Table	CCS	CC-T-1F	N/A	N.C.R	N.C.R
Software	e3 6.11-20180419c				

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(C)	Lenovo	T470	N/A	N/A	N/A
2	NB(G)	Lenovo	IBM 1951	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 and KDB 558074 D01.

Report No.: TMWK2209003924KR

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	Pass
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

Report No.: TMWK2209003924KR

3. DESCRIPTION OF TEST MODES

3.1 THE WORST MODE OF OPERATING CONDITION

Operation mode	IEEE 802.11b mode :1Mbps IEEE 802.11g mode :6Mbps IEEE 802.11n HT20 mode :MCS0 IEEE 802.11n HT40 mode: MCS8
Test Channel Frequencies	IEEE 802.11b mode : Low CH: 2412 MHz Mid CH: 2437 MHz High CH: 2462 MHz IEEE 802.11g mode : Low CH: 2412 MHz Mid CH: 2437 MHz High CH: 2462 MHz IEEE 802.11n HT20 mode : Low CH: 2412 MHz Mid CH: 2437 MHz High CH: 2462 MHz IEEE 802.11n HT40 mode : Low CH: 2422 MHz Mid CH: 2437 MHz High CH: 2452 MHz
Operation Transmitter	IEEE 802.11b mode : 1T1R IEEE 802.11g mode : 1T1R IEEE 802.11n HT20 mode : 1T1R IEEE 802.11n HT40 mode : 2T2R

Remark:

1. EUT pre-scanned data rate of output power for each mode, the worst data rate were recorded in this report.
2. 802.11 b/g use chain0 to transmit only; 802.11 n20 use chain0 and chain1 to transmit, but support SISO only, the worst case was in chain0; 802.11 n40 support MIMO.

Report No.: TMWK2209003924KR

3.2 THE WORST MODE OF MEASUREMENT

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

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

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

Remark:

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

Report No.: TMWK2209003924KR

3.3 EUT DUTY CYCLE

Temperature: 25.3°C

Test date: October 4, 2022

Humidity: 50% RH

Tested by: Jack Chen

Duty Cycle					
Configuration	Duty Cycle (%)	Duty Factor (dB) =10*log (1/Duty Cycle)	1/T (kHz)	VBW setting (kHz)	
802.11b	99.07	0.04	0.08	0.01	
802.11g	95.51	0.20	0.48	1.00	
802.11n_20	96.00	0.18	0.52	1.00	
802.11n_40	75.49	1.22	2.02	3.00	



Report No.: TMWK2209003924KR

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(dB μ V)	
	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

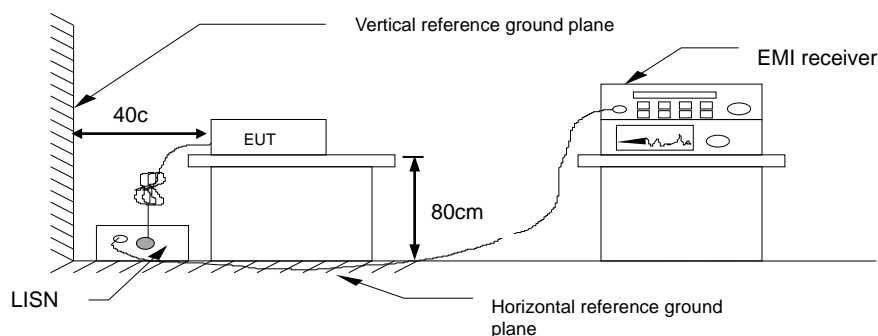
* Decreases with the logarithm of the frequency.

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



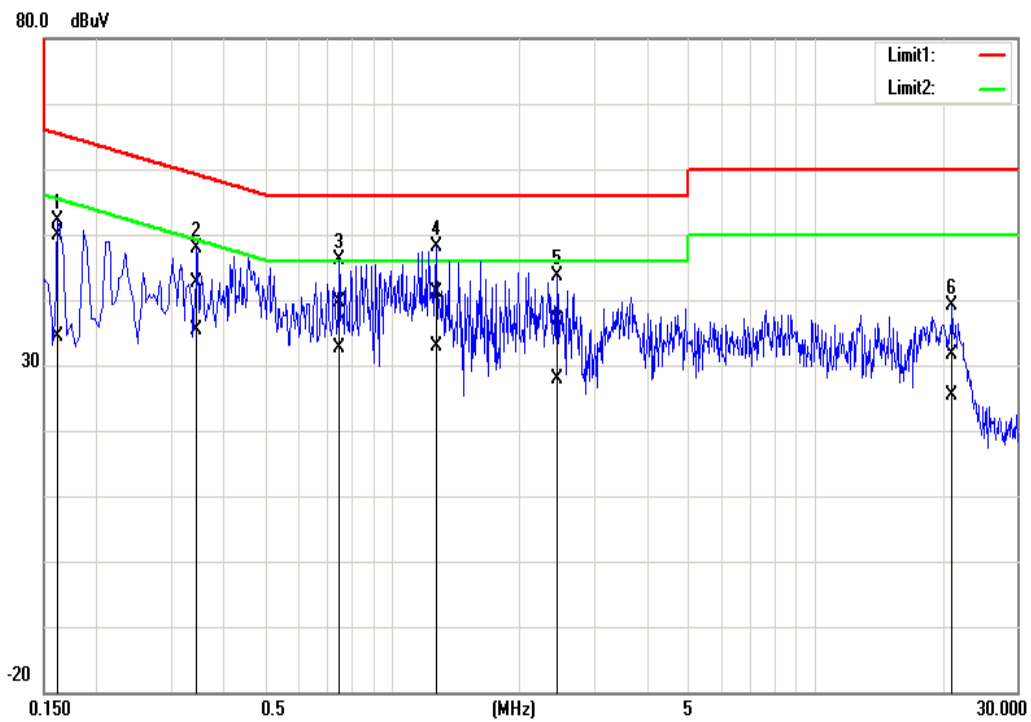
4.1.4 Test Result

PASS.

Report No.: TMWK2209003924KR

Test Data

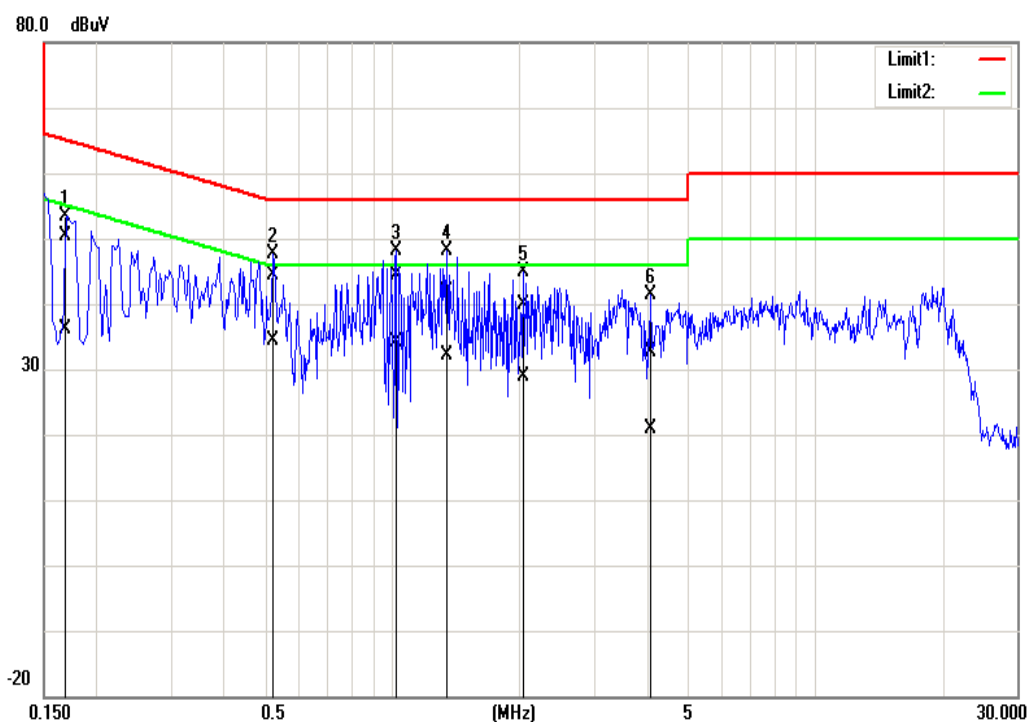
Test Mode:	Mode 1	Temp/Hum	25.2(°C)/ 51%RH
Phase:	Line	Test Date	October 7, 2022
Test Voltage:	120Vac, 60Hz	Test Engineer	Tony Chao



Frequency (MHz)	Quasi Peak reading (dBuV)	Average reading (dBuV)	Correction factor (dB)	Quasi Peak result (dBuV)	Average result (dBuV)	Quasi Peak limit (dBuV)	Average limit (dBuV)	Quasi Peak margin (dB)	Average margin (dB)	Remark
0.1620	39.61	24.12	10.17	49.78	34.29	65.36	55.36	-15.58	-21.07	Pass
0.3460	32.54	25.19	10.19	42.73	35.38	59.06	49.06	-16.33	-13.68	Pass
0.7500	29.36	22.45	10.21	39.57	32.66	56.00	46.00	-16.43	-13.34	Pass
1.2740	30.87	22.68	10.23	41.10	32.91	56.00	46.00	-14.90	-13.09	Pass
2.4500	26.56	17.64	10.26	36.82	27.90	56.00	46.00	-19.18	-18.10	Pass
21.1020	21.35	14.98	10.33	31.68	25.31	60.00	50.00	-28.32	-24.69	Pass

Note: Correction factor = LISN loss + Cable loss.

Test Mode:	Mode 1	Temp/Hum	25.2(°C)/ 51%RH
Phase:	Neutral	Test Date	October 7, 2022
Test Voltage:	120Vac, 60Hz	Test Engineer	Tony Chao



Frequency (MHz)	Quasi Peak reading (dBuV)	Average reading (dBuV)	Correction factor (dB)	Quasi Peak result (dBuV)	Average result (dBuV)	Quasi Peak limit (dBuV)	Average limit (dBuV)	Quasi Peak margin (dB)	Average margin (dB)	Remark
0.1700	40.27	26.05	10.17	50.44	36.22	64.96	54.96	-14.52	-18.74	Pass
0.5220	34.26	24.13	10.18	44.44	34.31	56.00	46.00	-11.56	-11.69	Pass
1.0220	34.15	24.05	10.20	44.35	34.25	56.00	46.00	-11.65	-11.75	Pass
1.3500	31.64	22.03	10.21	41.85	32.24	56.00	46.00	-14.15	-13.76	Pass
2.0340	29.68	18.61	10.24	39.92	28.85	56.00	46.00	-16.08	-17.15	Pass
4.0900	22.40	10.52	10.28	32.68	20.80	56.00	46.00	-23.32	-25.20	Pass

Note: Correction factor = LISN loss + Cable loss.

Report No.: TMWK2209003924KR

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



Report No.: TMWK2209003924KR

4.2.4 Test Result

Temperature: 25.3°C Test date: October 4, 2022
Humidity: 50% RH Tested by: Jack Chen

Test mode: IEEE 802.11b mode / 2412-2462 MHz

Channel	Frequency (MHz)	Chain 0 OBW(99%) (MHz)	Chain 0 6dB BW (kHz)	6dB limit (kHz)
Low	2412	14.962	10080.00	≥500
Mid	2437	14.976	10080.00	
High	2462	14.964	10090.00	

Test mode: IEEE 802.11g mode / 2412-2462 MHz

Channel	Frequency (MHz)	Chain 0 OBW(99%) (MHz)	Chain 0 6dB BW (kHz)	6dB limit (kHz)
Low	2412	16.738	16380.00	≥500
Mid	2437	16.802	16350.00	
High	2462	16.781	16350.00	

Test mode: IEEE 802.11n HT20 mode / 2412-2462 MHz

Channel	Frequency (MHz)	Chain 0 OBW(99%) (MHz)	Chain 0 6dB BW (kHz)	6dB limit (kHz)
Low	2412	17.682	17170.00	≥500
Mid	2437	17.697	17310.00	
High	2462	17.788	17040.00	

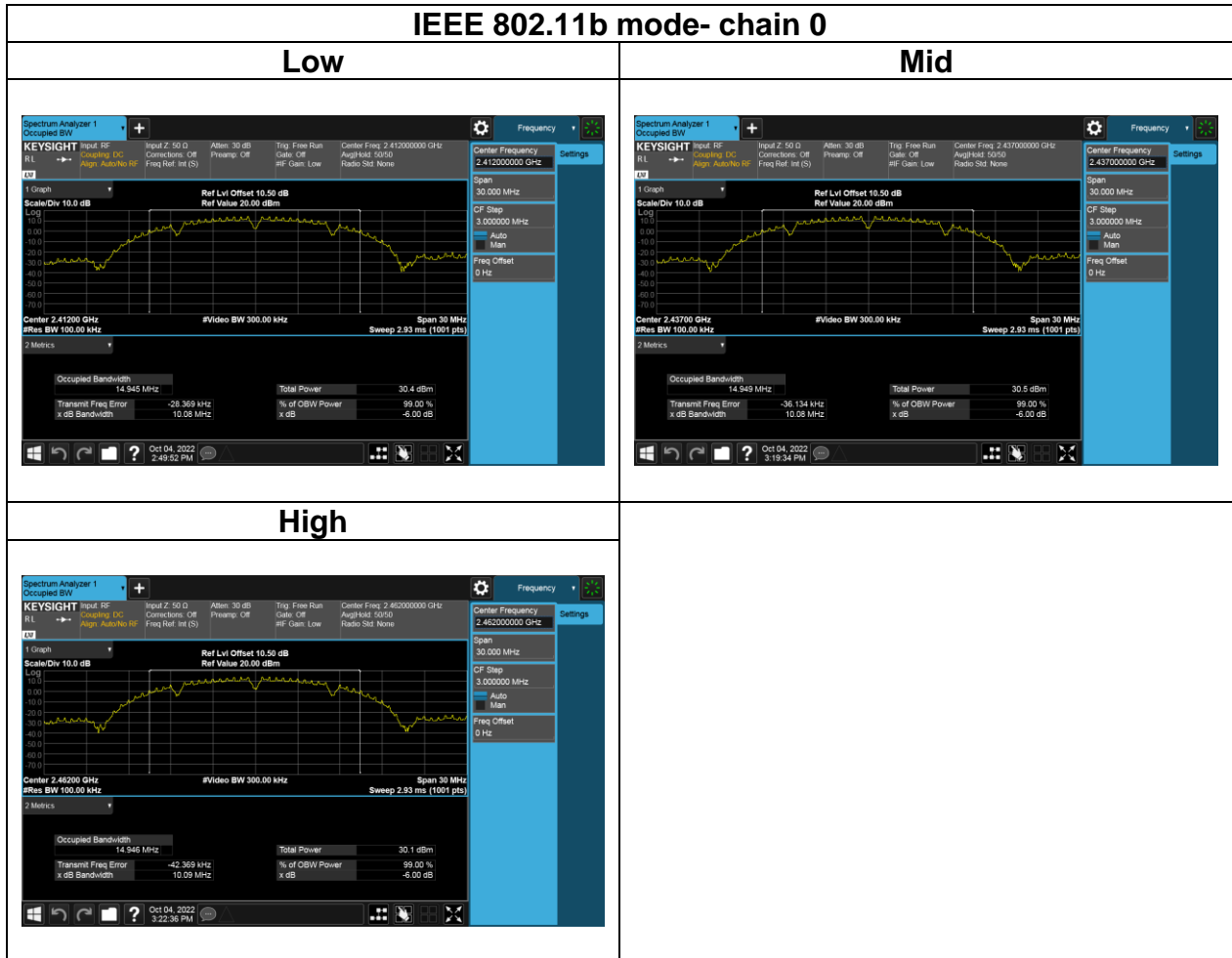
Test mode: IEEE 802.11n HT40 mode / 2422-2452 MHz

Channel	Frequency (MHz)	Chain 0 OBW(99%) (MHz)	Chain 1 OBW(99%) (MHz)	Chain 0 6dB BW (kHz)	Chain 1 6dB BW (kHz)	6dB limit (kHz)
Low	2422	35.862	35.857	35370.00	35870.00	≥500
Mid	2437	35.829	35.768	35410.00	35620.00	
High	2452	35.96	35.817	35400.00	35390.00	

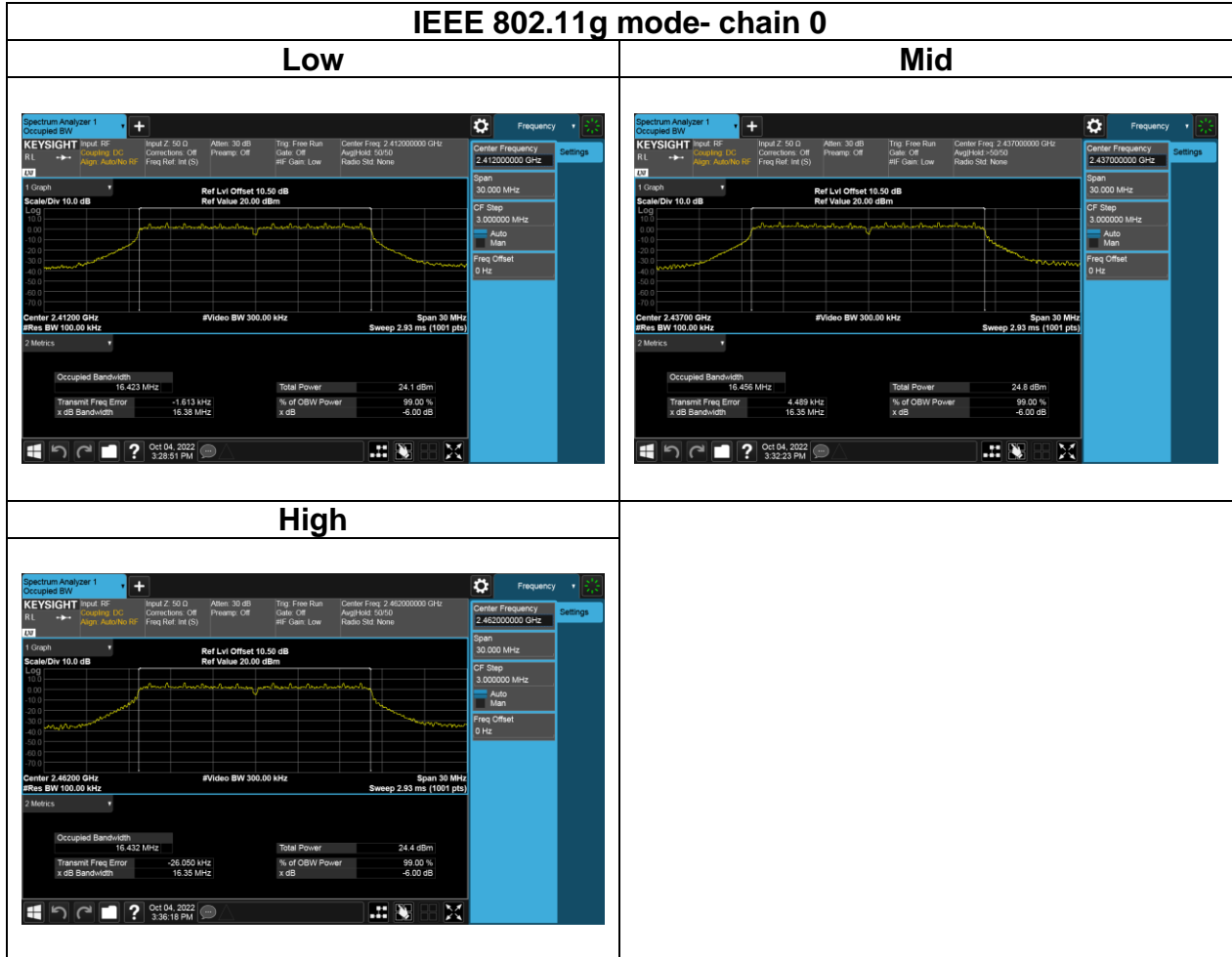
Report No.: TMWK2209003924KR

Test Data

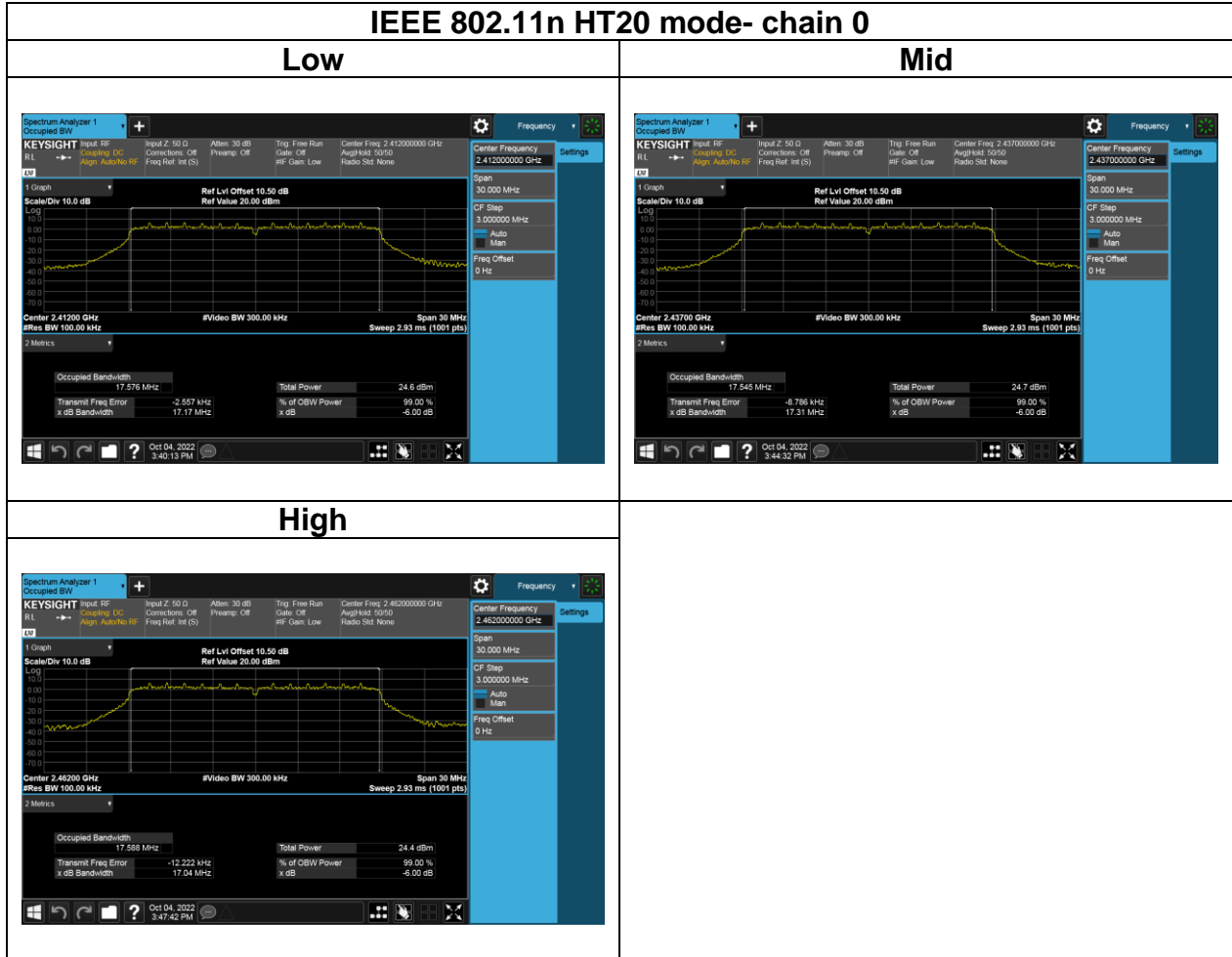
6dB BANDWIDTH



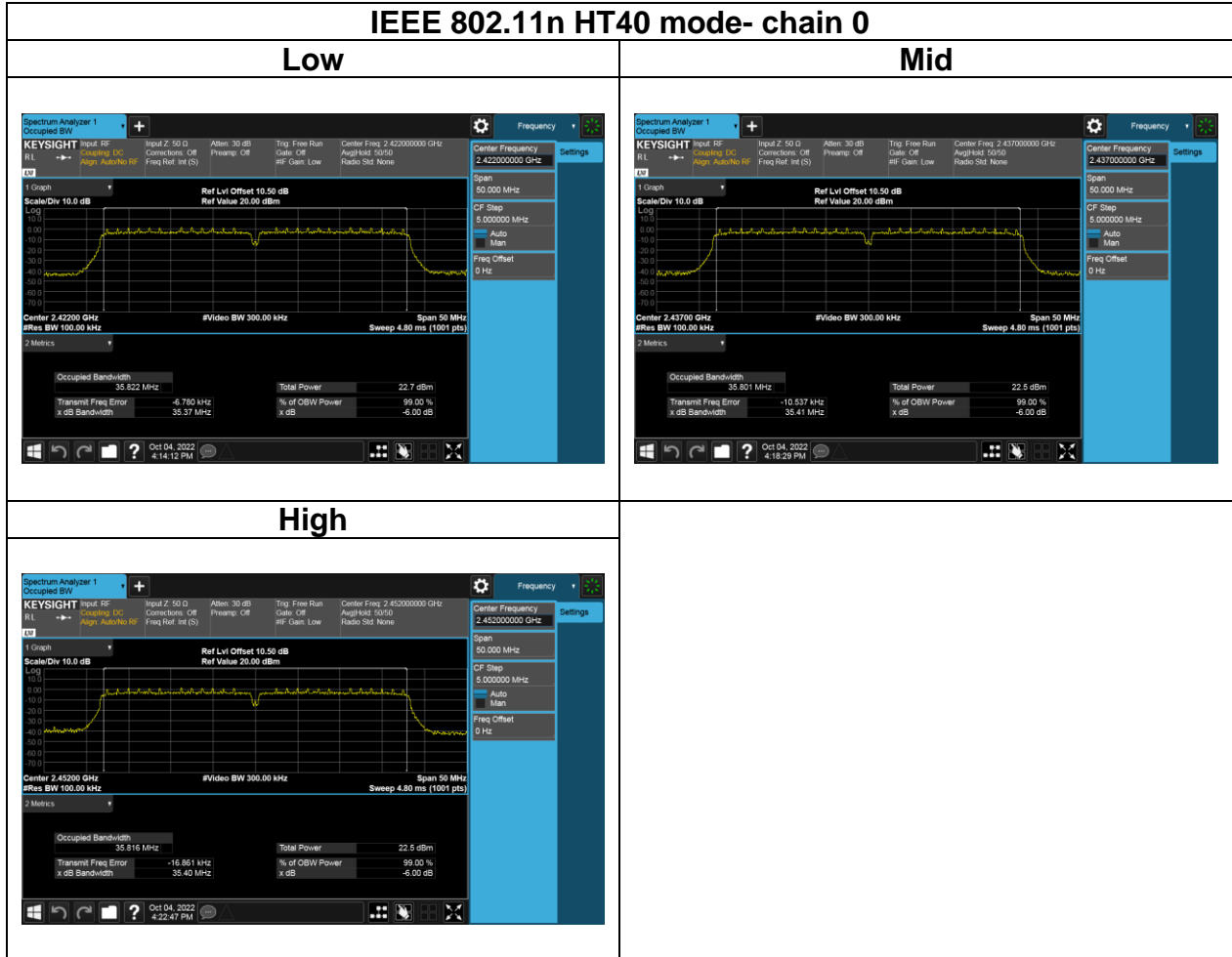
Report No.: TMWK2209003924KR



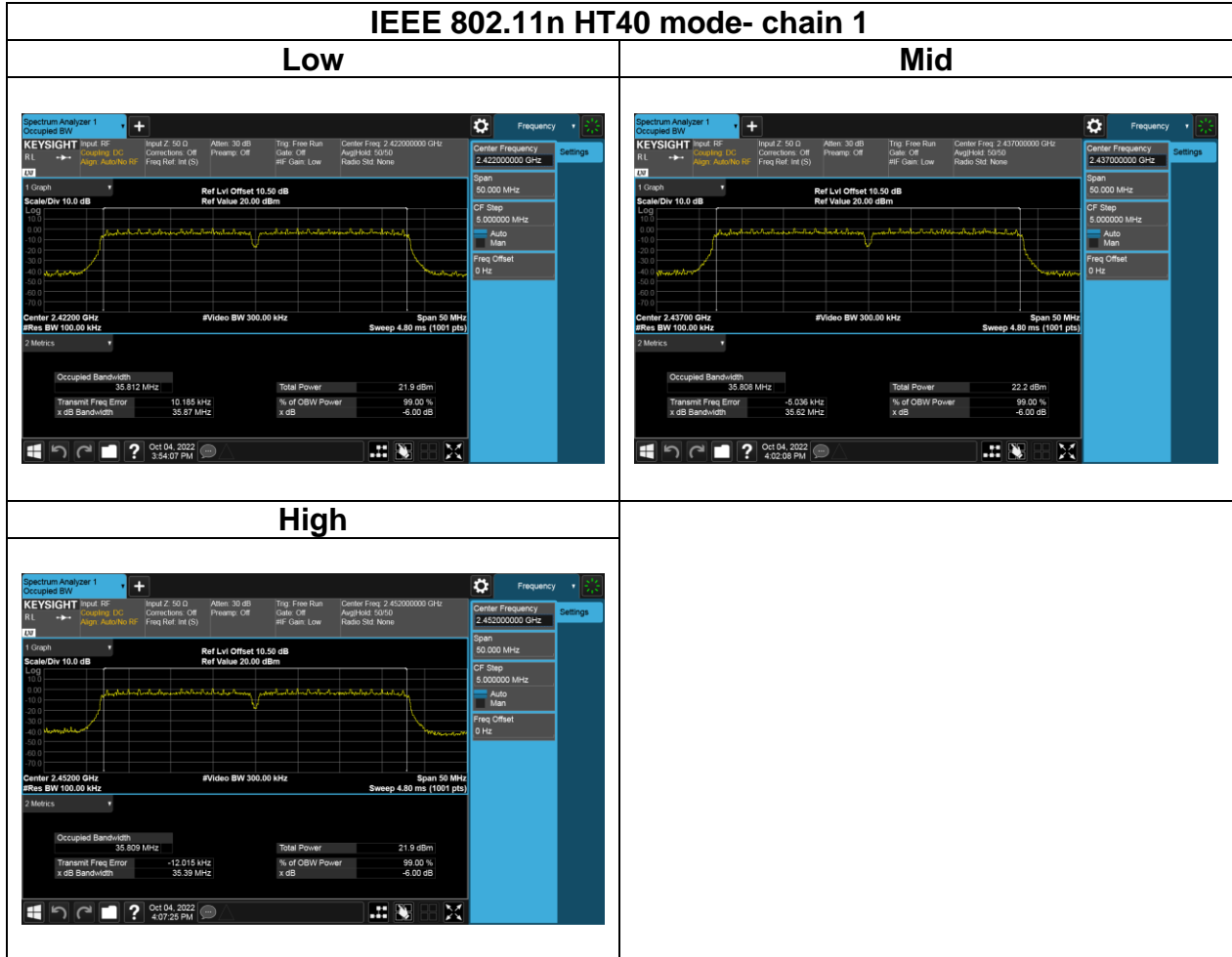
Report No.: TMWK2209003924KR



Report No.: TMWK2209003924KR



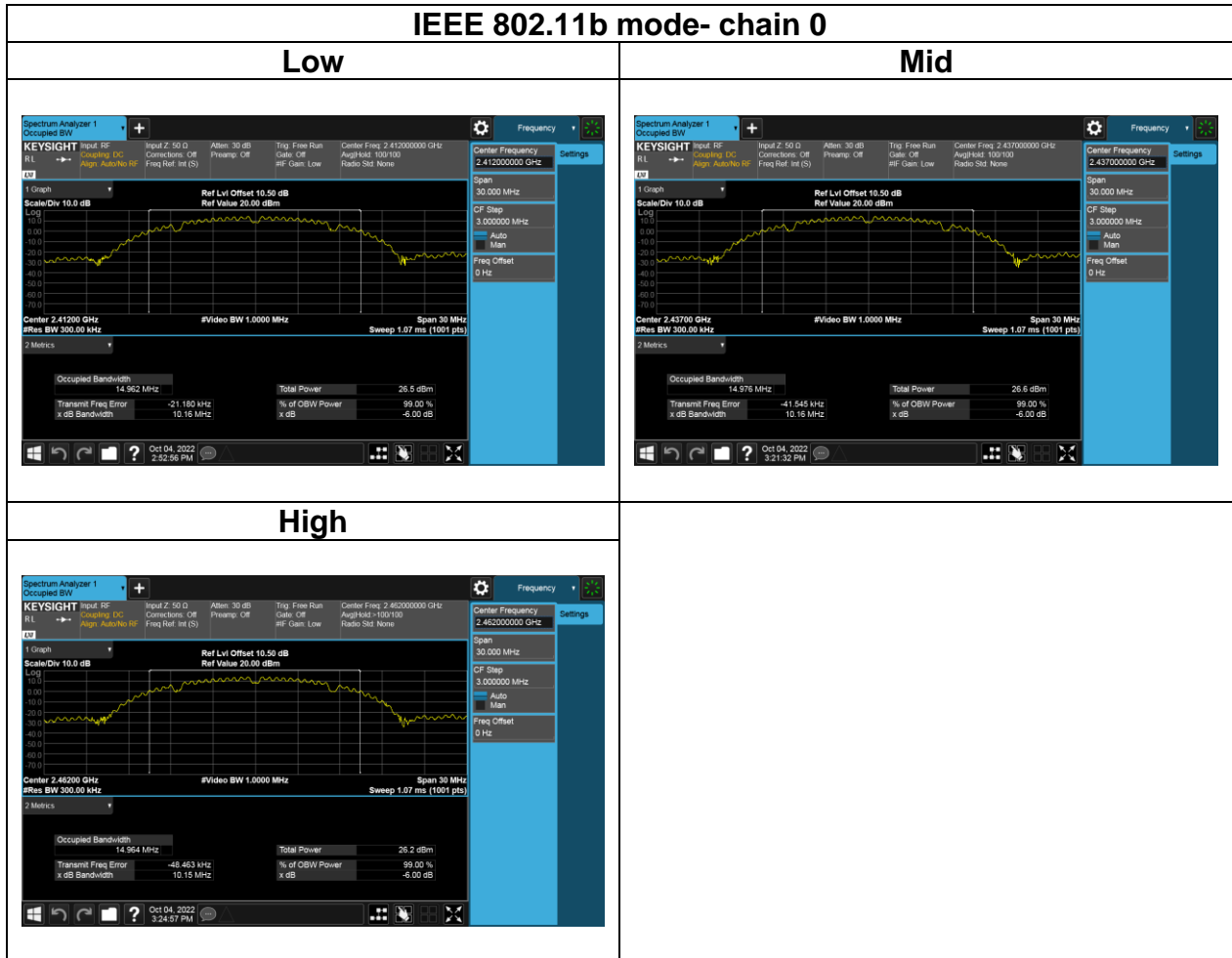
Report No.: TMWK2209003924KR



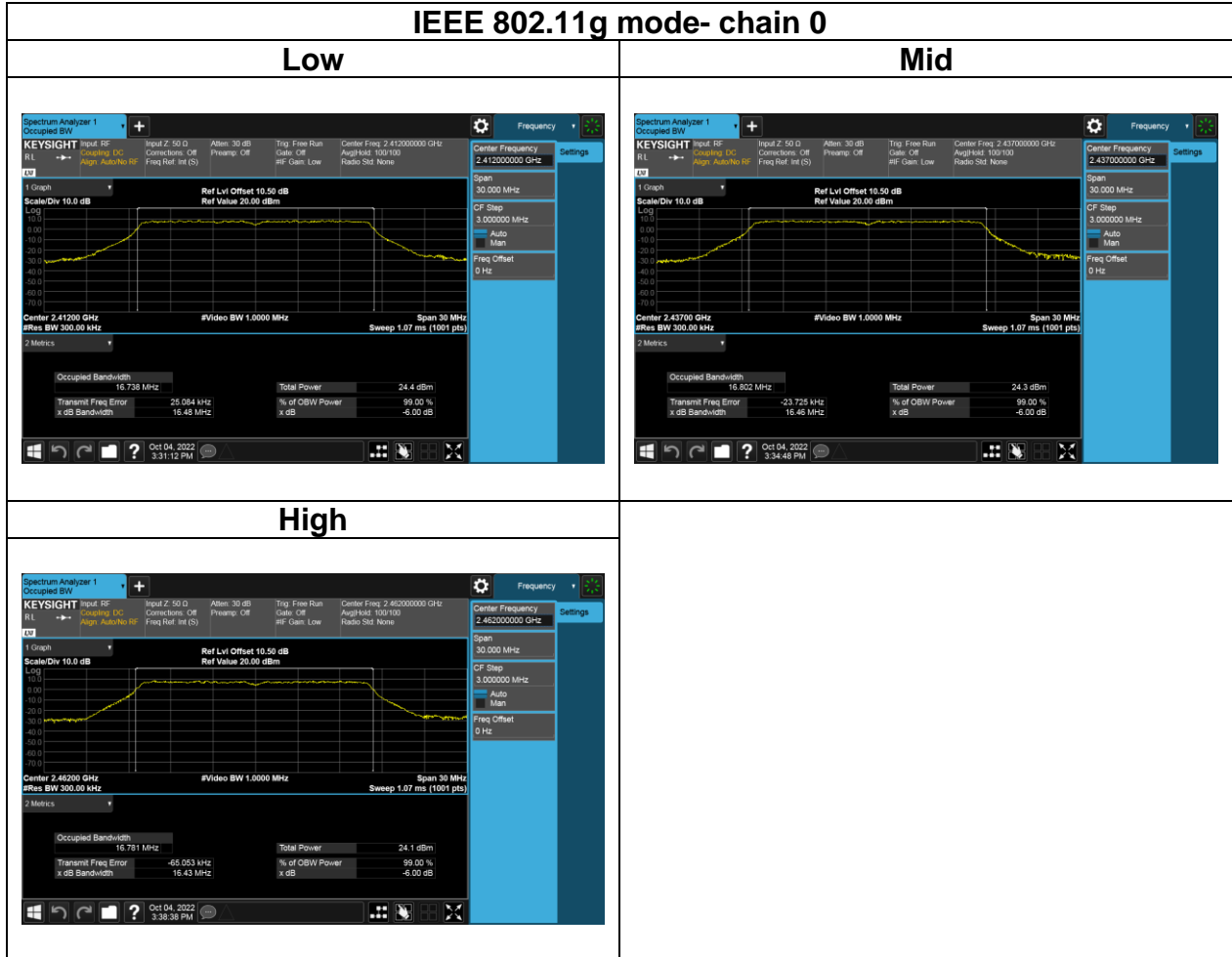
Report No.: TMWK2209003924KR

Test Data

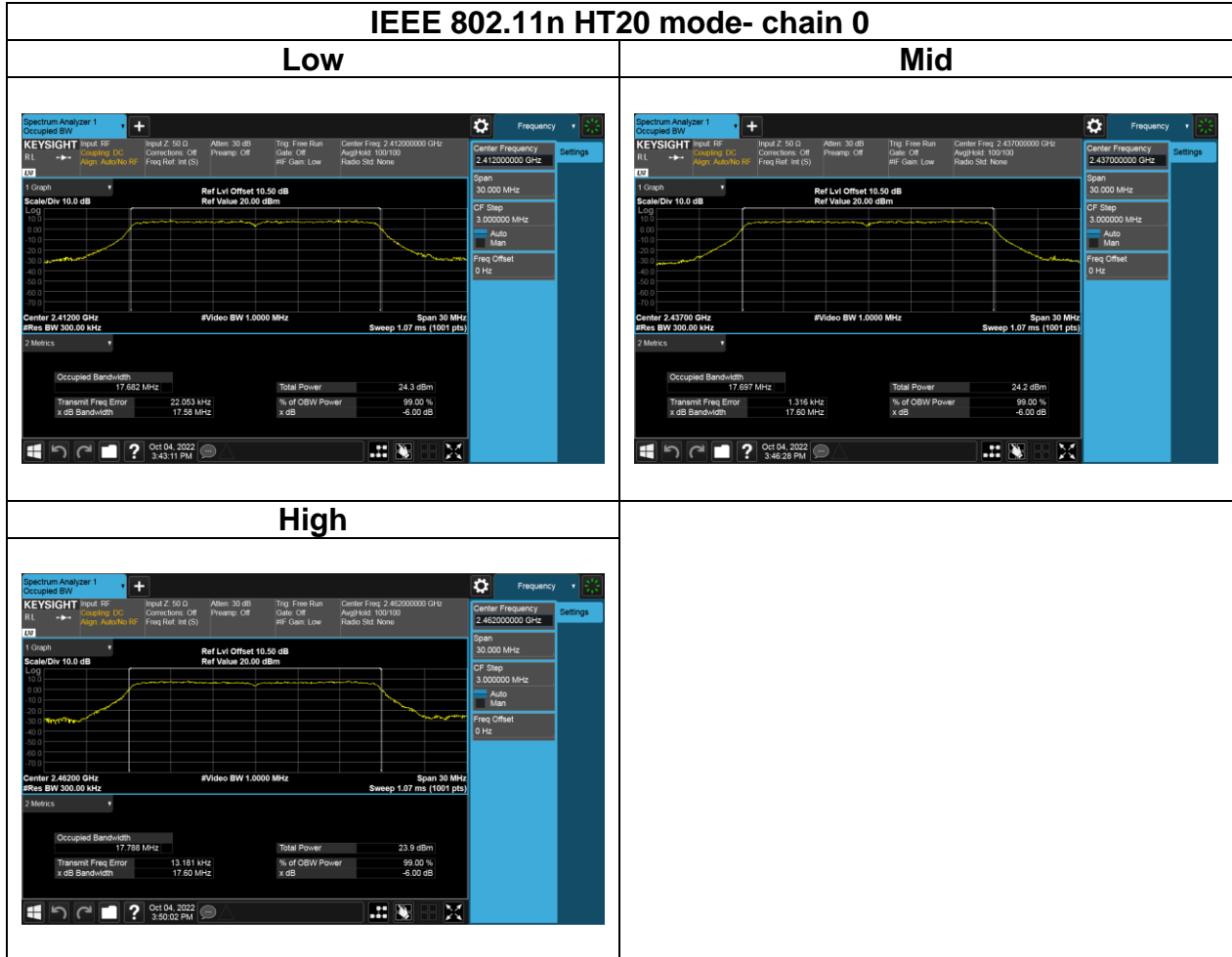
BANDWIDTH 99%



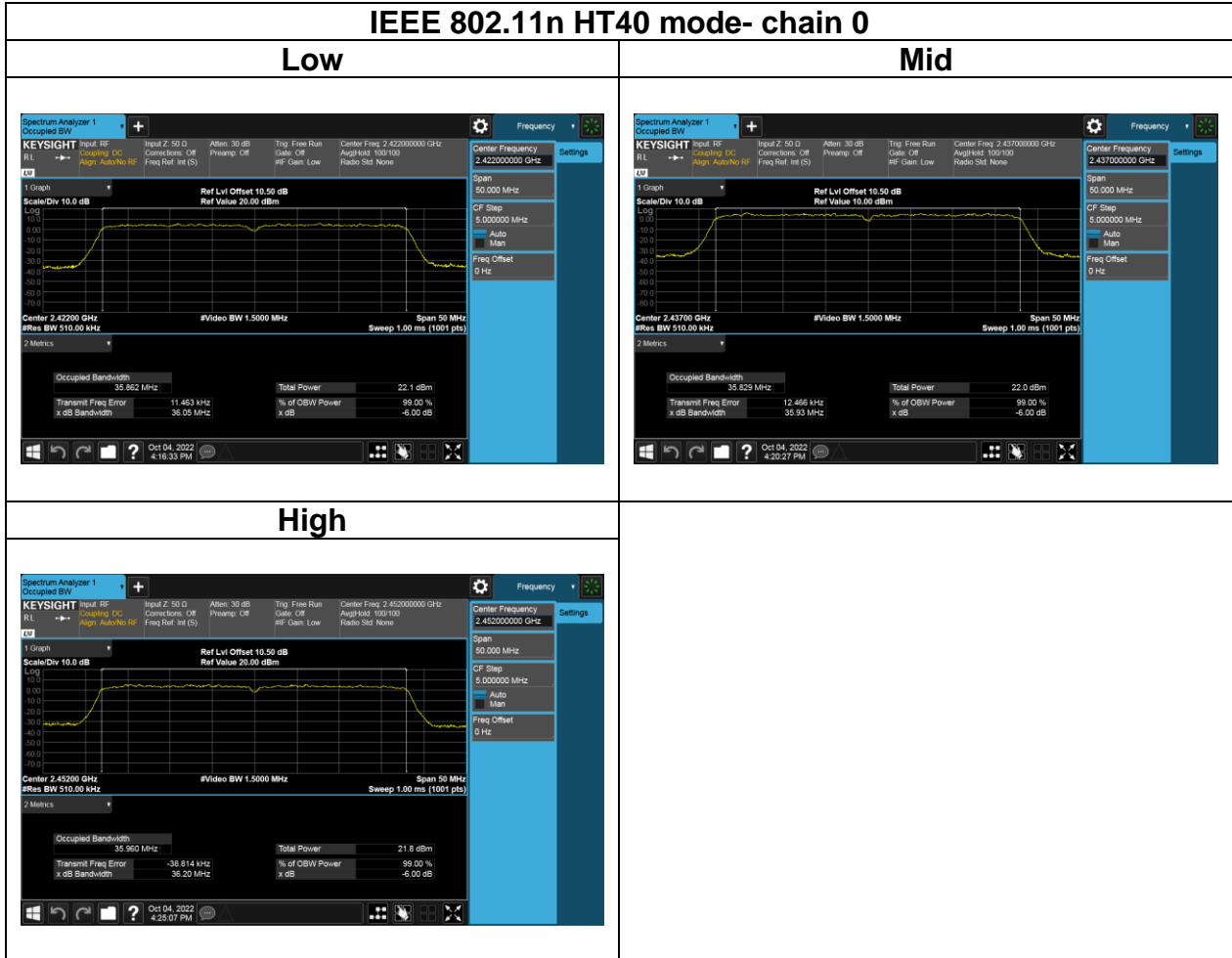
Report No.: TMWK2209003924KR



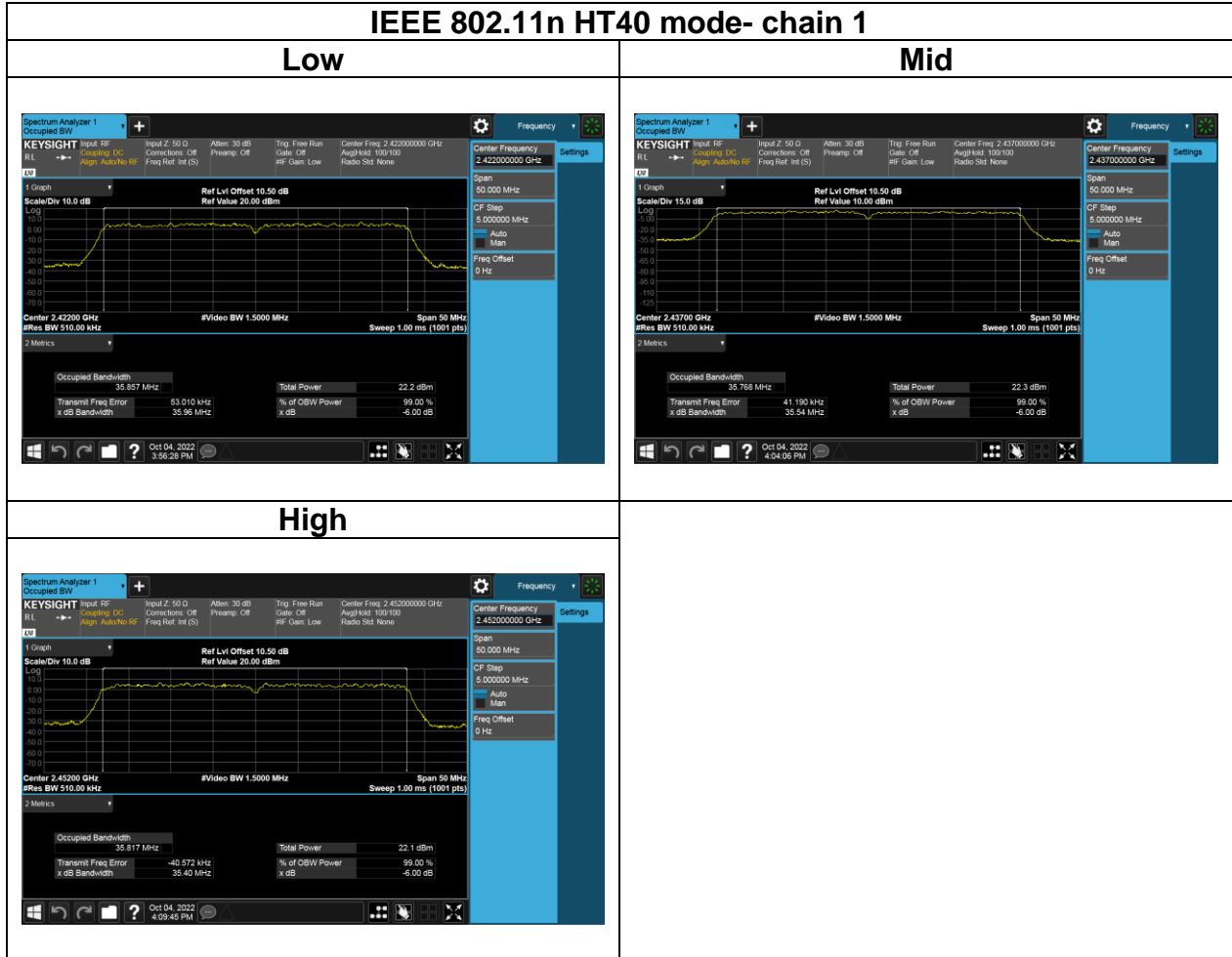
Report No.: TMWK2209003924KR



Report No.: TMWK2209003924KR



Report No.: TMWK2209003924KR



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	<p>For 802.11b/g/n HT20 mode</p> <p><input checked="" type="checkbox"/> Antenna not exceed 6 dBi : 30dBm</p> <p>For 802.11n HT40 mode</p> <p><input checked="" type="checkbox"/> Antenna with DG greater than 6 dBi :</p> <p>[Limit = 30 – (DG – 6)]</p> <p><input type="checkbox"/> Point-to-point operation :</p>
-------	---

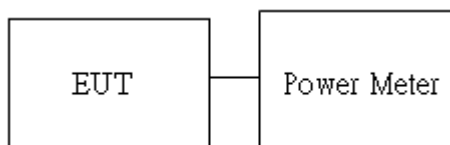
Average output power : For reporting purposes only.

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



Report No.: TMWK2209003924KR

4.3.4 Test Result

Temperature: 25.3°C Test date: October 4, 2022
Humidity: 50% RH Tested by: Jack Chen

Peak output power :

Test Mode: IEEE 802.11b Mode

802.11b Ch0						
CH	Freq. (MHz)	Data Rate	Power set	Peak Output Power (dBm)	Limit (dBm)	RESULT
1	2412	1	40	23.77	30.00	PASS
6	2437	1	39	23.96	30.00	PASS
11	2462	1	39	23.74	30.00	PASS

Test Mode: IEEE 802.11g Mode

802.11g Ch0						
CH	Freq. (MHz)	Data Rate	Power set	Peak Output Power (dBm)	Limit (dBm)	RESULT
1	2412	6	40	25.56	30.00	PASS
6	2437	6	40	25.13	30.00	PASS
11	2462	6	40	25.35	30.00	PASS

Test Mode: IEEE 802.11n HT20 Mode

802.11n_HT_20M Ch0						
CH	Freq. (MHz)	Data Rate	Power set	Peak Output Power (dBm)	Limit (dBm)	RESULT
1	2412	MCS0	40	25.02	30.00	PASS
6	2437	MCS0	40	25.22	30.00	PASS
11	2462	MCS0	40	25.88	30.00	PASS

Test Mode: IEEE 802.11n HT20 Mode

802.11n_HT_20M Ch1						
CH	Freq. (MHz)	Data Rate	Power set	Peak Output Power (dBm)	Limit (dBm)	RESULT
1	2412	MCS0	40	24.96	30.00	PASS
6	2437	MCS0	40	25.04	30.00	PASS
11	2462	MCS0	40	25.43	30.00	PASS

Report No.: TMWK2209003924KR

Test Mode: IEEE 802.11n HT40 Mode

802.11n_HT40M_2TX								
CH	Freq. (MHz)	Data Rate	Power set	Peak Output Power (dBm)		Total Peak Output Power (dBm)	Limit (dBm)	RESULT
				Ch0	Ch1			
3	2422	MCS8	35	23.29	22.37	25.86	28.91	PASS
6	2437	MCS8	35	23.25	22.64	25.97	28.91	PASS
9	2452	MCS8	35	22.94	22.33	25.66	28.91	PASS

Remark: Limit = 30 – (DG – 6) = 30-(7.09-6) = 28.91

Report No.: TMWK2209003924KR

Average output power :

Test Mode: IEEE 802.11b Mode

802.11b Ch0				
CH	Freq. (MHz)	Data Rate	Power set	Max. Avg. Output Power (dBm)
1	2412	1	40	21.34
6	2437	1	39	21.18
11	2462	1	39	21.15

Test Mode: IEEE 802.11g Mode

802.11g Ch0				
CH	Freq. (MHz)	Data Rate	Power set	Max. Avg. Output Power (dBm)
1	2412	6	40	15.76
6	2437	6	40	15.85
11	2462	6	40	15.65

Test Mode: IEEE 802.11n HT20 Mode

802.11n_HT_20M Ch0				
CH	Freq. (MHz)	Data Rate	Power set	Max. Avg. Output Power (dBm)
1	2412	MCS0	40	15.86
6	2437	MCS0	40	15.75
11	2462	MCS0	40	15.59

Test Mode: IEEE 802.11n HT20 Mode

802.11n_HT_20M Ch1				
CH	Freq. (MHz)	Data Rate	Power set	Max. Avg. Output Power (dBm)
1	2412	MCS0	40	15.49
6	2437	MCS0	40	15.63
11	2462	MCS0	40	15.51

Report No.: TMWK2209003924KR

Test Mode: IEEE 802.11n HT40 Mode

802.11n_HT40M_2TX						
CH	Freq. (MHz)	Data Rate	Power set	Avg. Output Power (dBm)		Max. Avg. Output Power (dBm)
				Ch0	Ch1	
3	2422	MCS8	35	12.03	11.34	15.93
6	2437	MCS8	35	12.04	11.27	15.90
9	2452	MCS8	35	11.97	11.38	15.92

Report No.: TMWK2209003924KR

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.

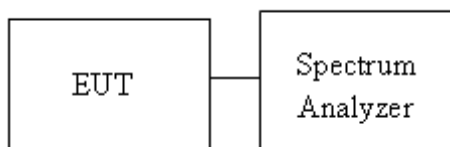
Limit	<p>For 802.11b/g/n HT20 mode</p> <p><input checked="" type="checkbox"/> Antenna not exceed 6 dBi : 8dBm</p> <p>For 802.11n HT40 mode</p> <p><input checked="" type="checkbox"/> Antenna with DG greater than 6 dBi :</p> <p>[Limit = 8 – (DG – 6)]</p> <p><input type="checkbox"/> Point-to-point operation :</p>
-------	---

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



Report No.: TMWK2209003924KR

4.4.4 Test Result

Temperature: 25.3°C Test date: October 4, 2022
Humidity: 50% RH Tested by: Jack Chen

Test mode: IEEE 802.11b mode / 2412-2462 MHz

Channel	Frequency (MHz)	Chain 0 PPSD (dBm)	Total PPSD (dBm/3kHz)	Limit (dBm/3kHz)
Low	2412	0.14	0.14	8.00
Mid	2437	-0.44	-0.44	
High	2462	-0.49	-0.49	

Test mode: IEEE 802.11g mode / 2412-2462 MHz

Channel	Frequency (MHz)	Chain 0 PPSD (dBm)	Total PPSD (dBm/3kHz)	Limit (dBm/3kHz)
Low	2412	-7.69	-7.69	8.00
Mid	2437	-8.30	-8.30	
High	2462	-6.30	-6.30	

Test mode: IEEE 802.11n HT20 mode / 2412-2462 MHz

Channel	Frequency (MHz)	Chain 0 PPSD (dBm)	Total PPSD (dBm/3kHz)	Limit (dBm/3kHz)
Low	2412	-8.01	-8.01	8.00
Mid	2437	-6.51	-6.51	
High	2462	-7.93	-7.93	

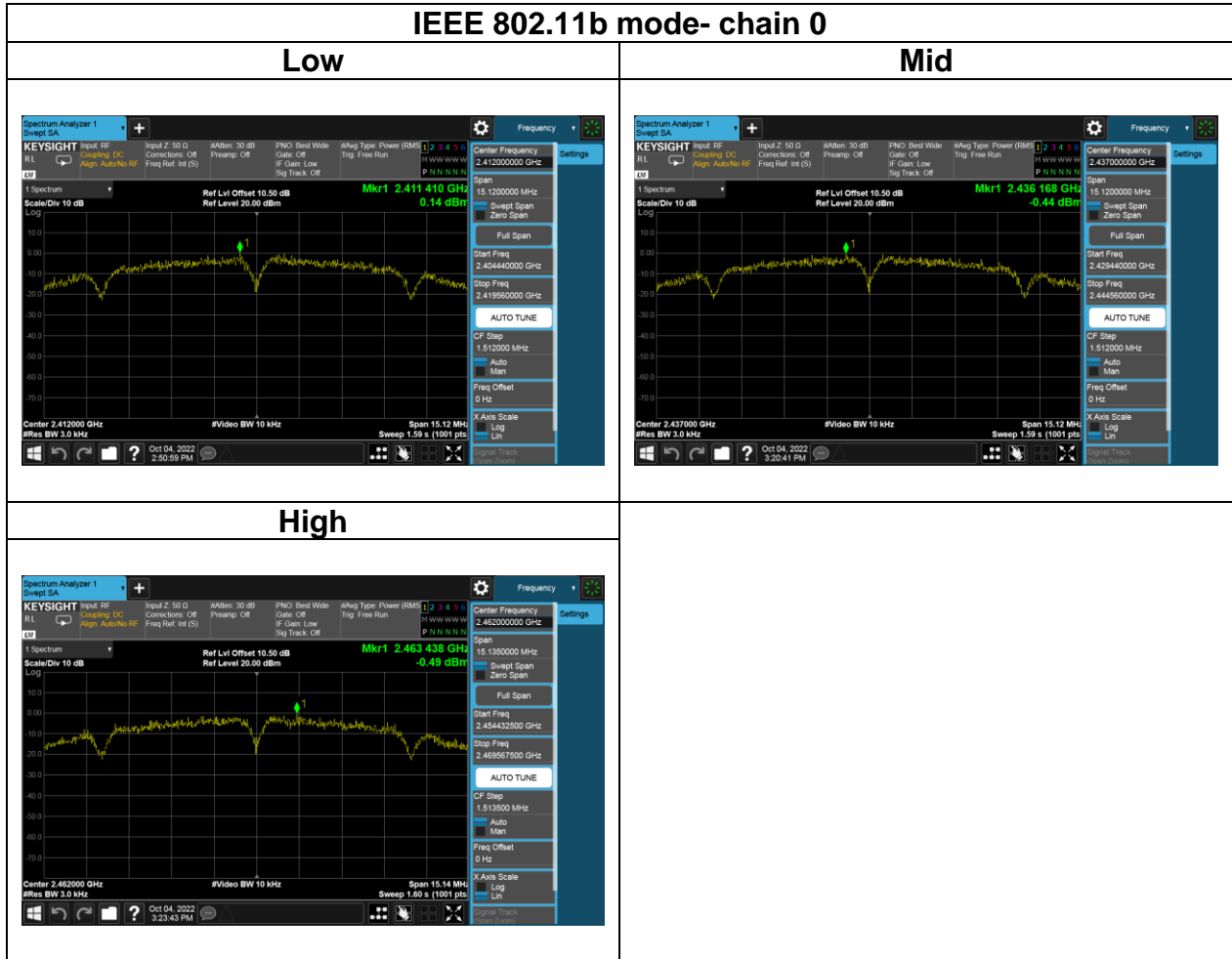
Test mode: IEEE 802.11n HT40 mode / 2422-2452 MHz

Channel	Frequency (MHz)	Chain 0 PPSD (dBm)	Chain 1 PPSD (dBm)	Total PPSD (dBm/3kHz)	Limit (dBm/3kHz)
Low	2412	-12.42	-14.19	-10.21	6.91
Mid	2437	-14.21	-13.17	-10.65	
High	2462	-13.96	-14.24	-11.09	

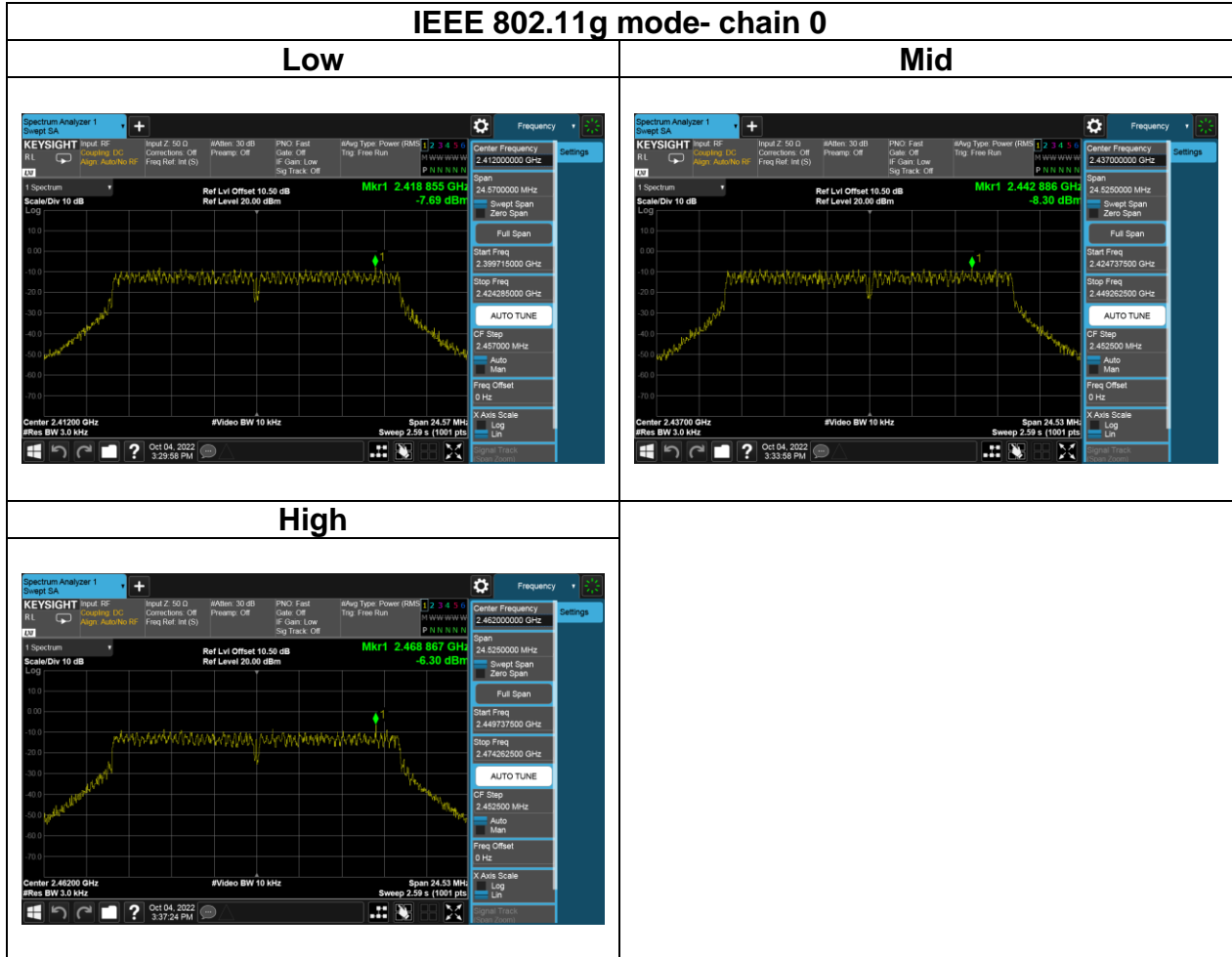
Remark: Limit = 8 - (DG - 6) = 8 - (7.09 - 6) = 6.91

Report No.: TMWK2209003924KR

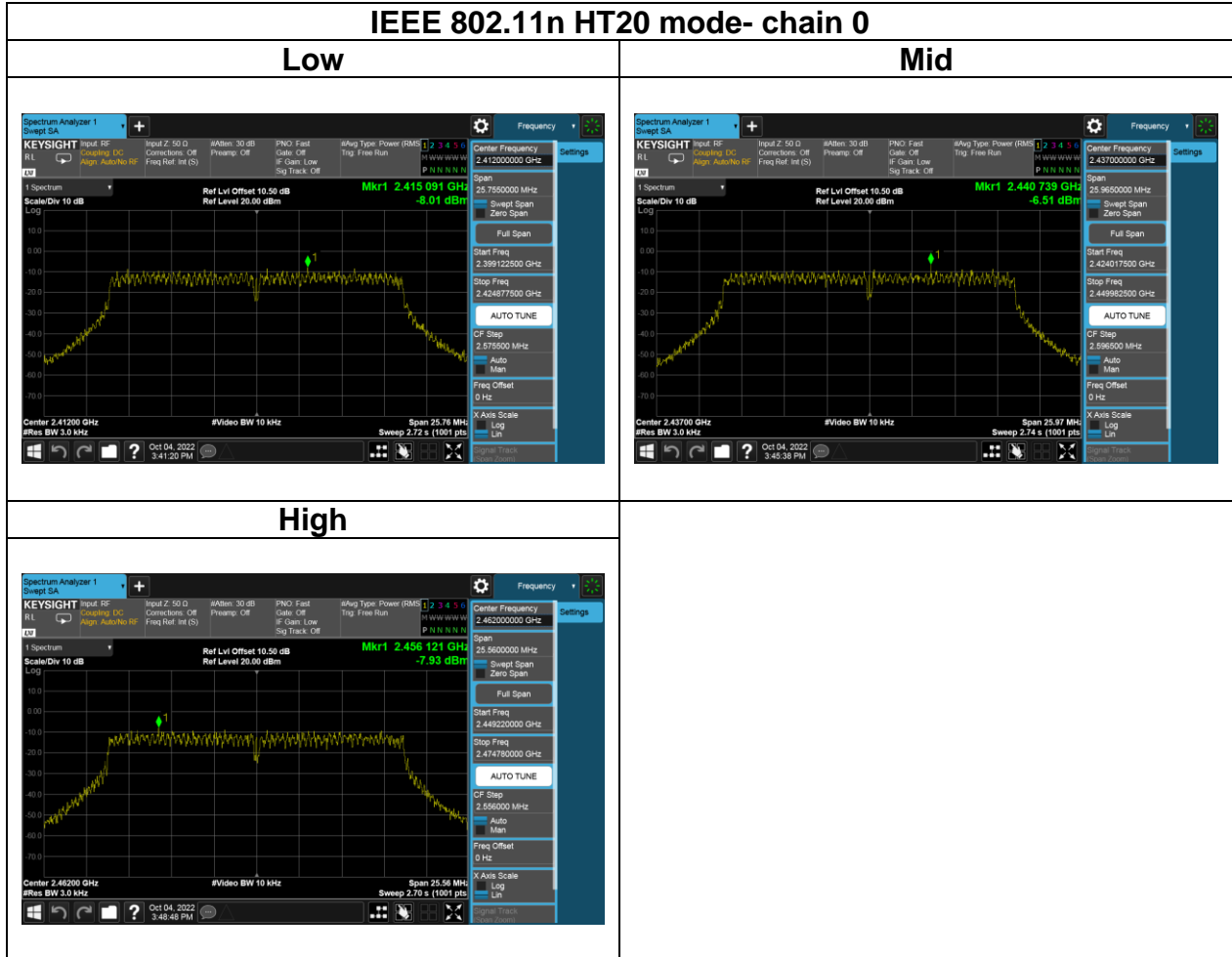
Test Data



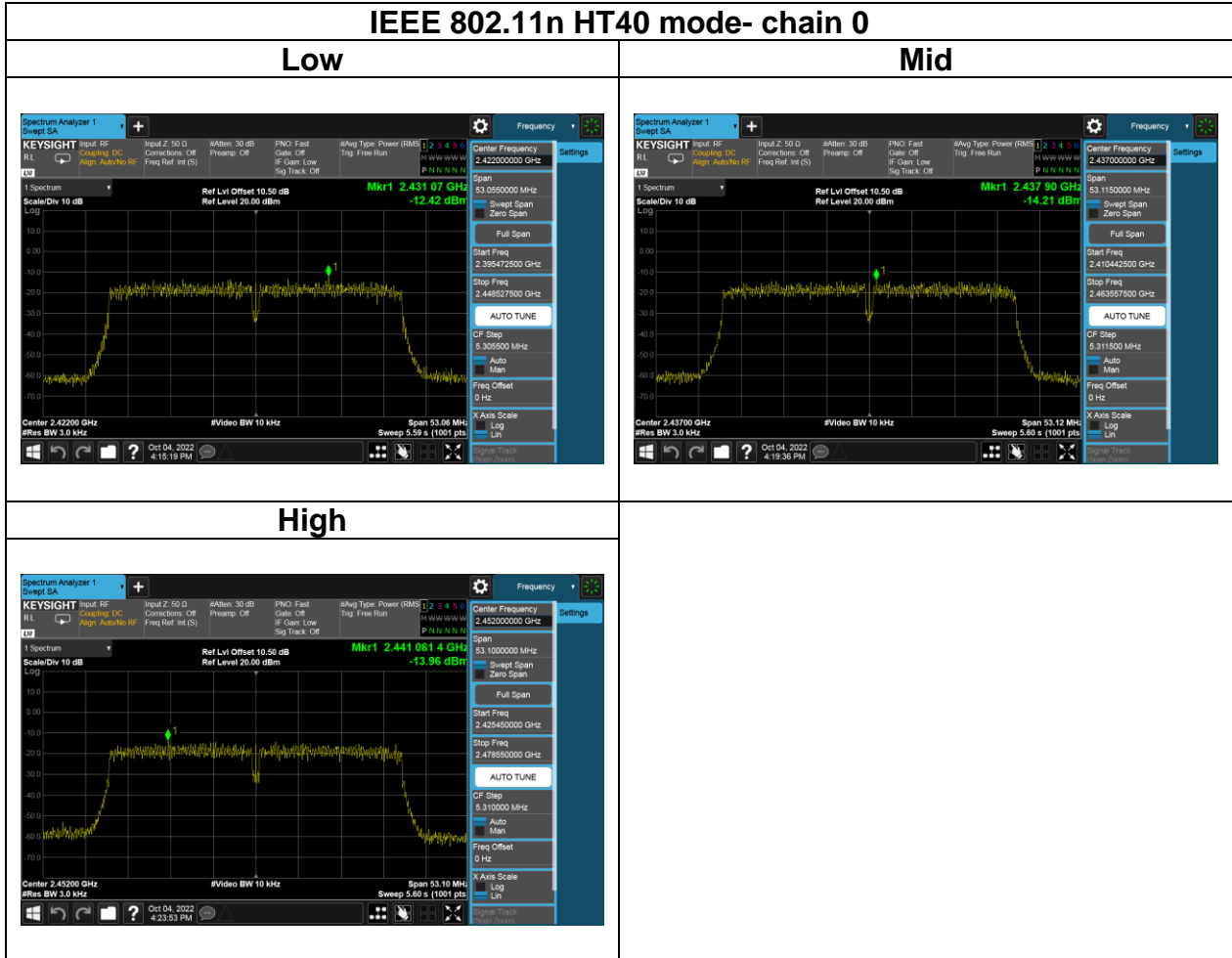
Report No.: TMWK2209003924KR



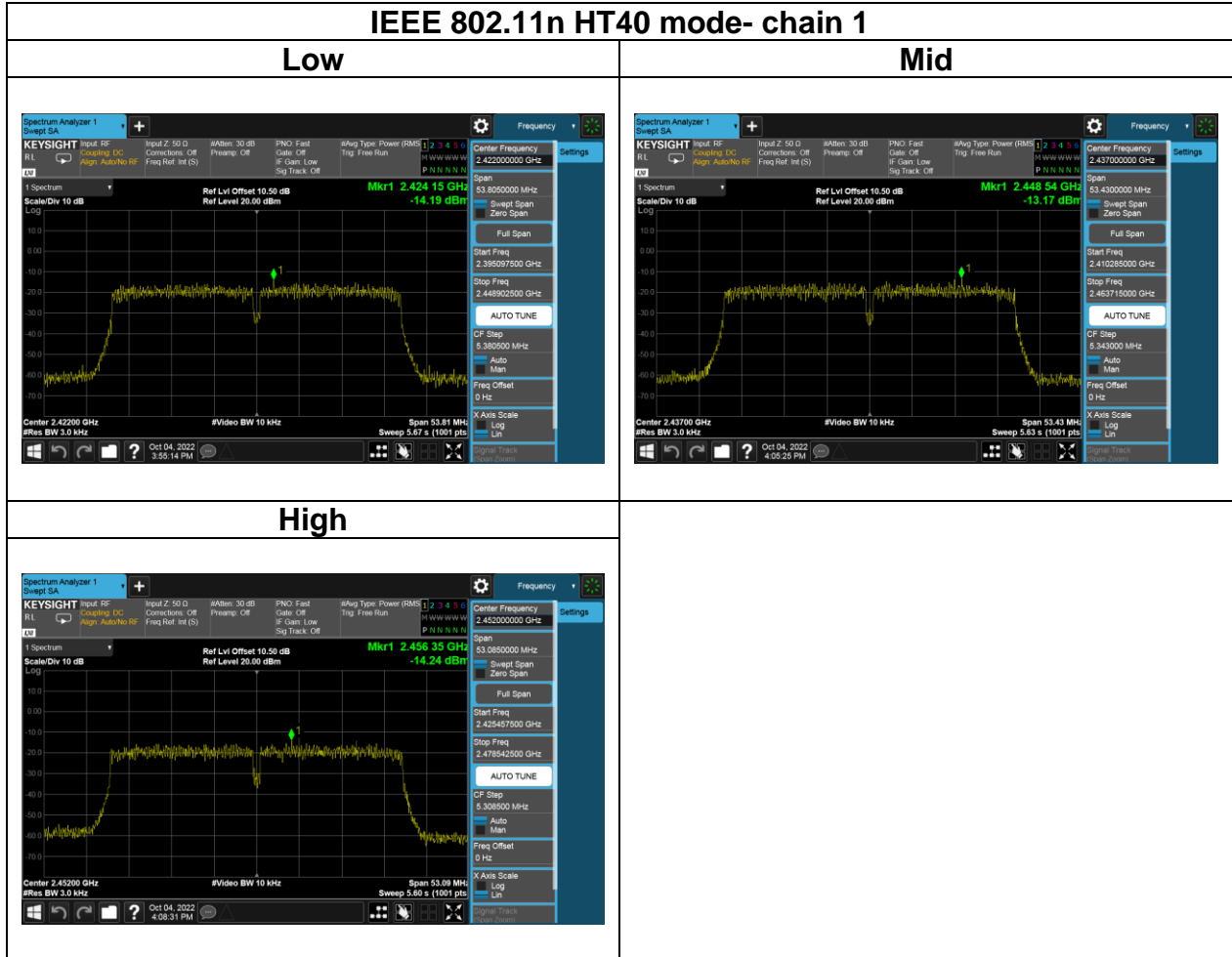
Report No.: TMWK2209003924KR



Report No.: TMWK2209003924KR



Report No.: TMWK2209003924KR



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,

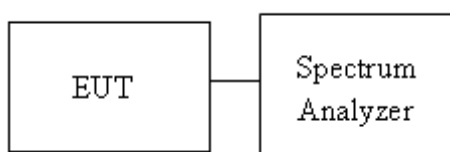
Non-restricted bands shall be attenuated at least 20 dB/30 dB relative to the maximum PSD level in 100 kHz by RF conducted or a radiated measurement which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a).

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



4.5.4 Test Result

Temperature: 25.3°C

Test date: October 4, 2022

Humidity: 50% RH

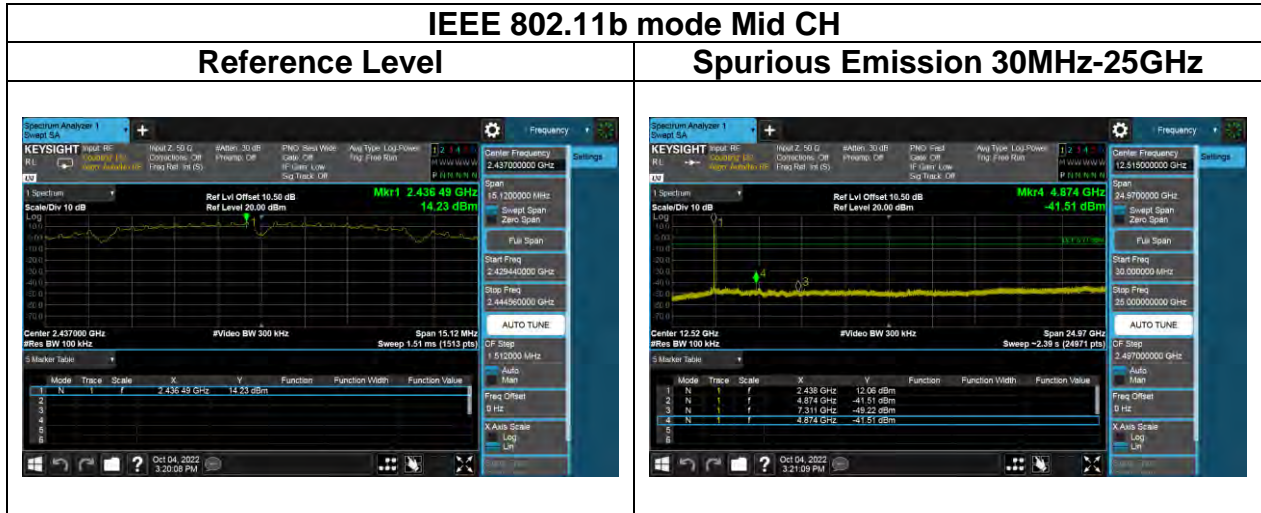
Tested by: Jack Chen

Report No.: TMWK2209003924KR

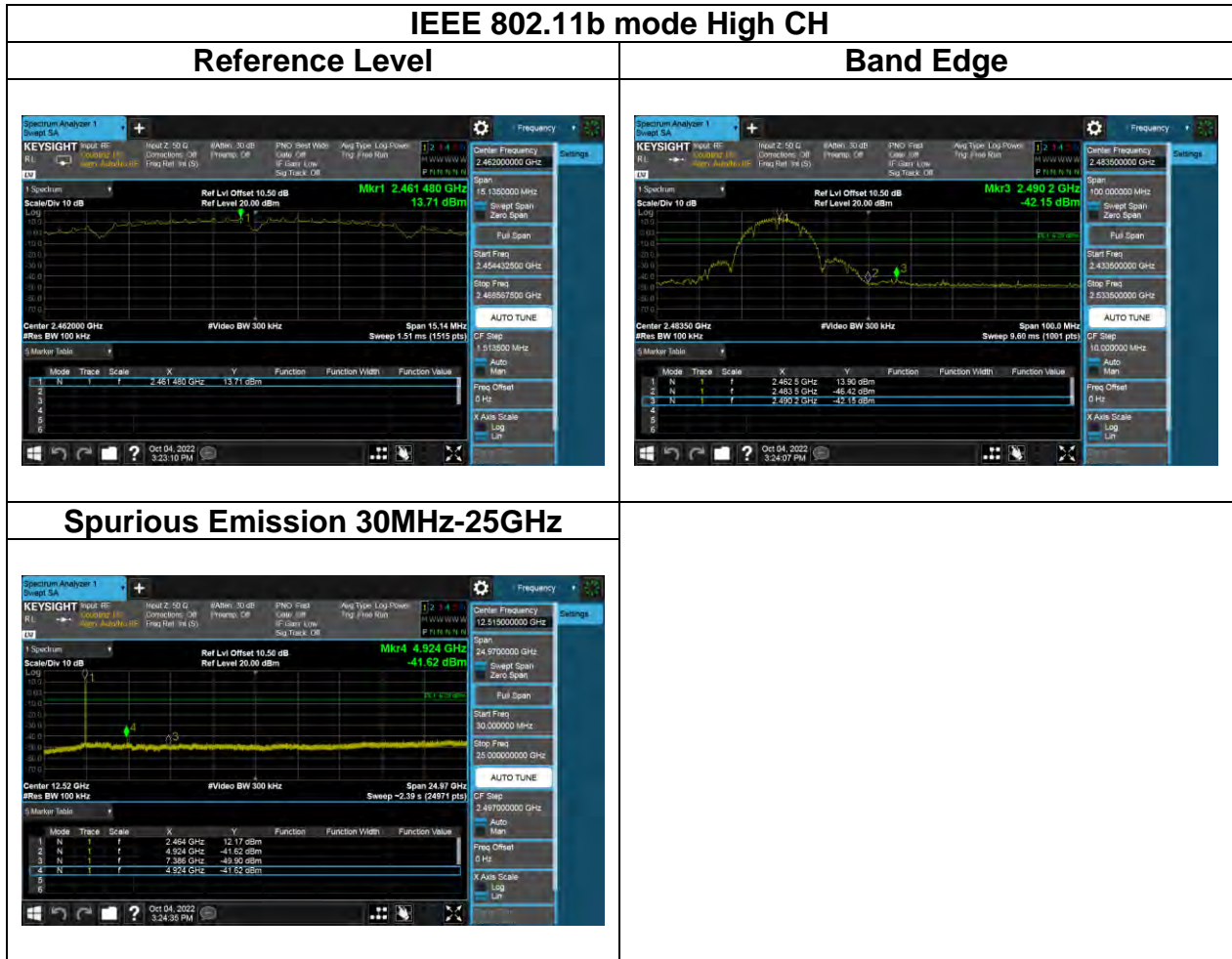
Test Data
Chain 0



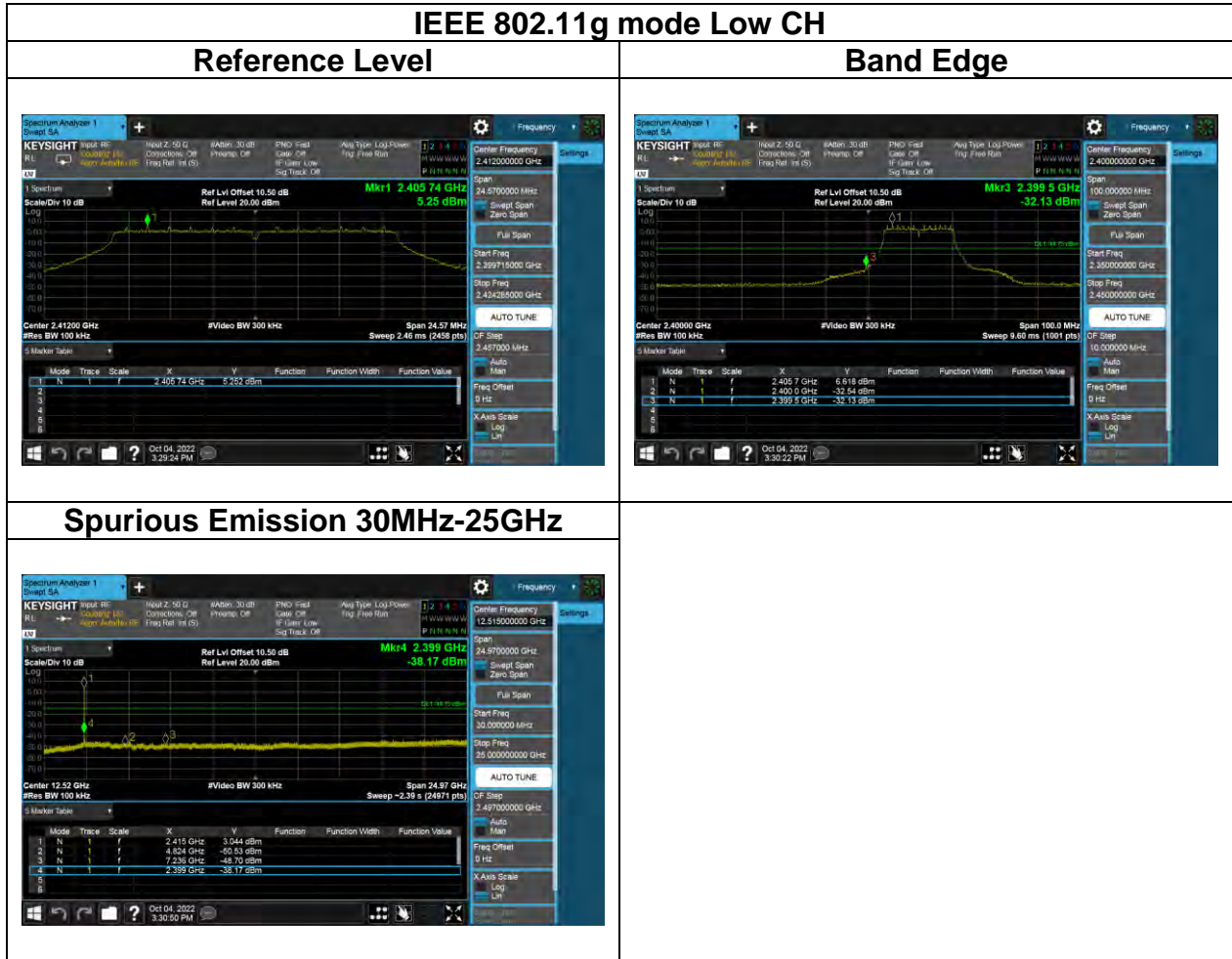
Report No.: TMWK2209003924KR



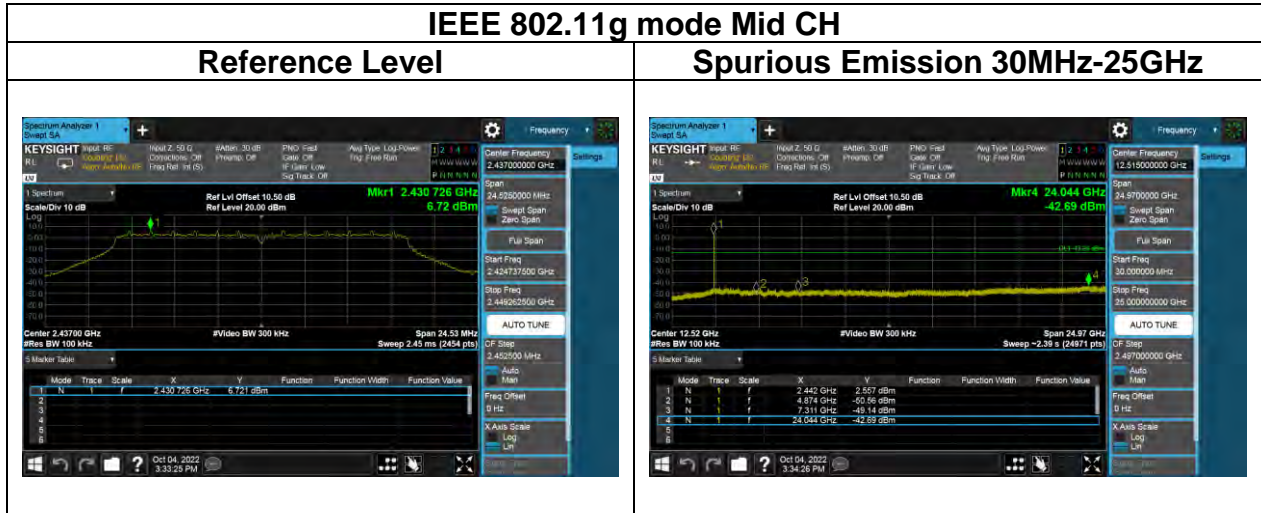
Report No.: TMWK2209003924KR



Report No.: TMWK2209003924KR

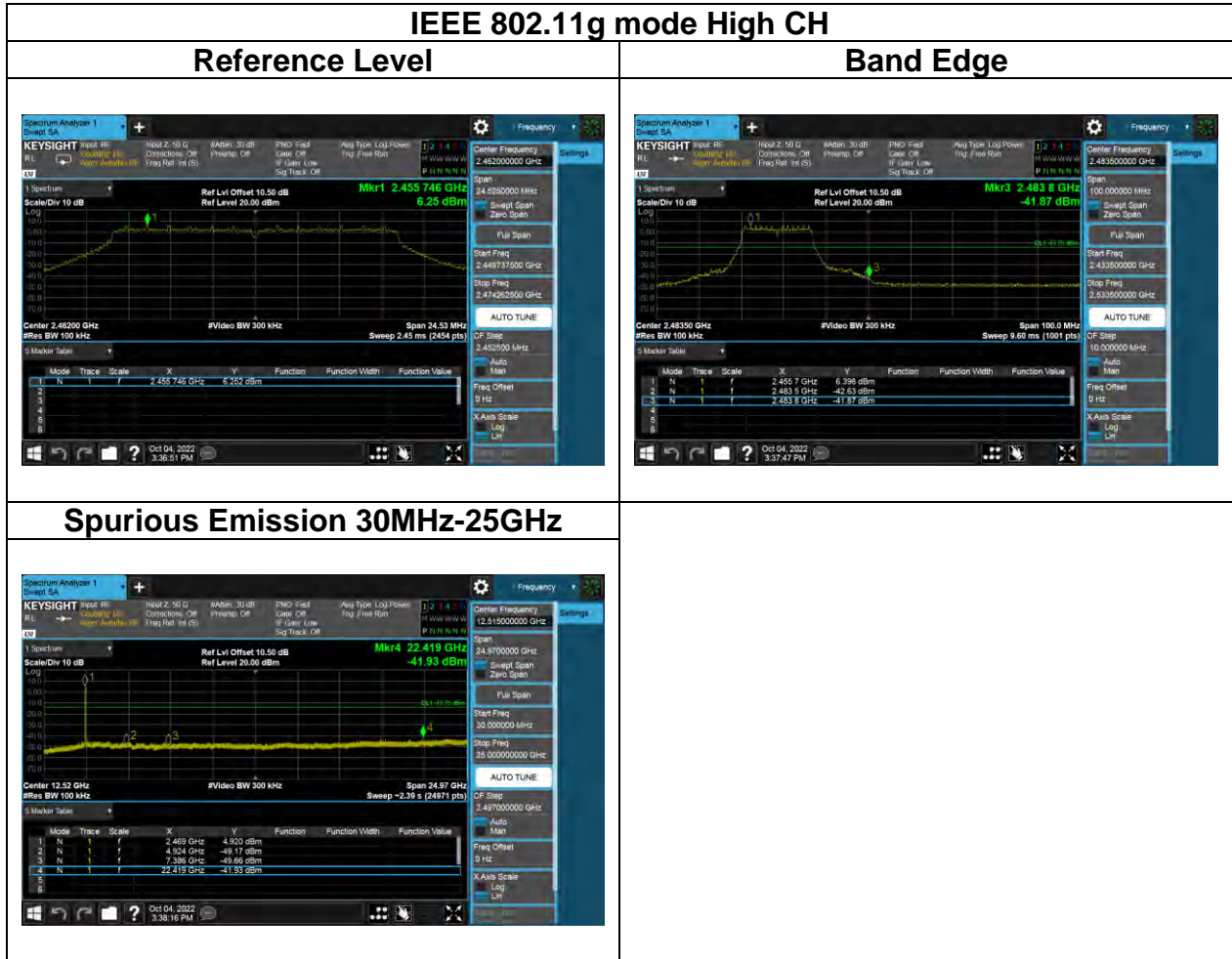


Report No.: TMWK2209003924KR

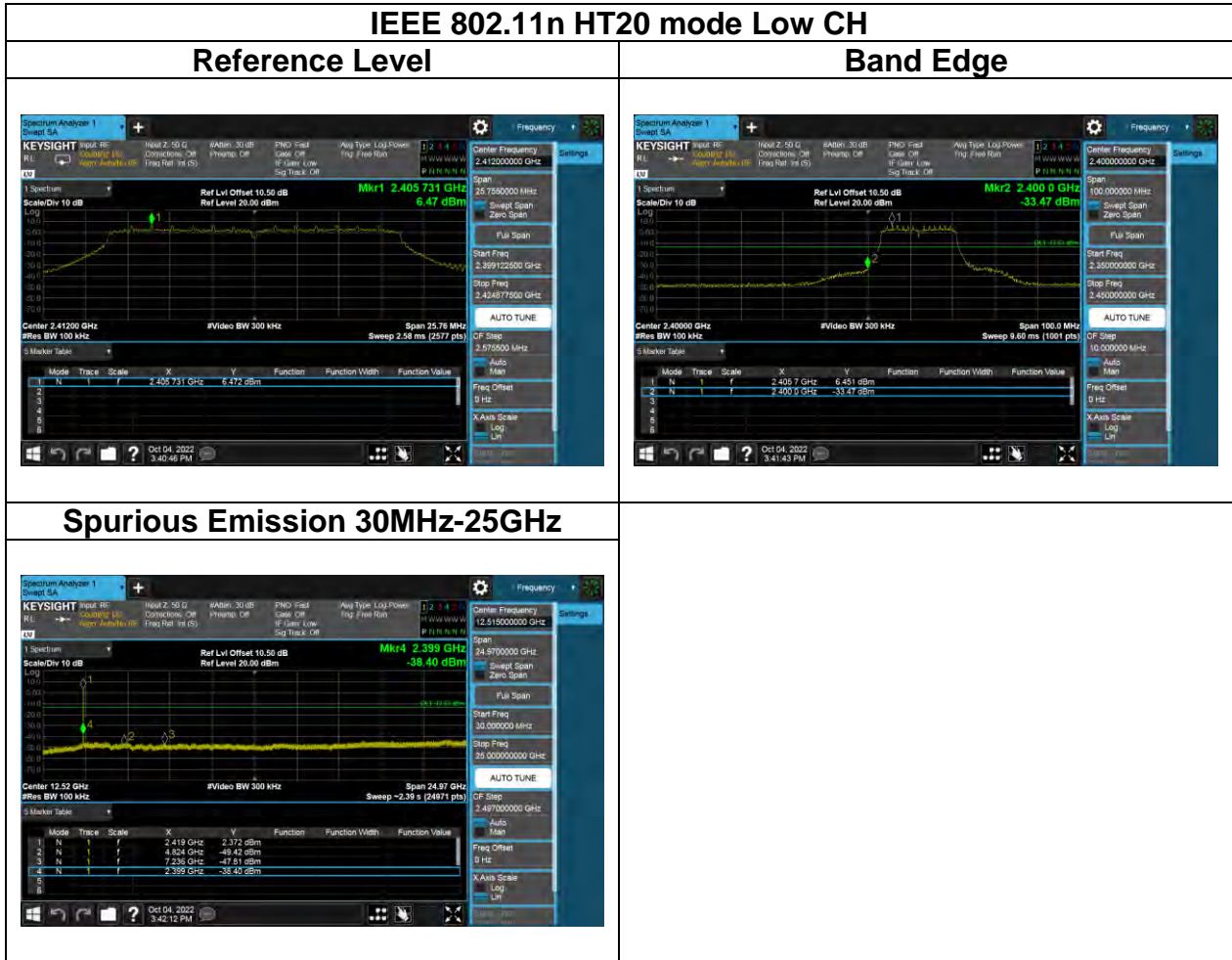




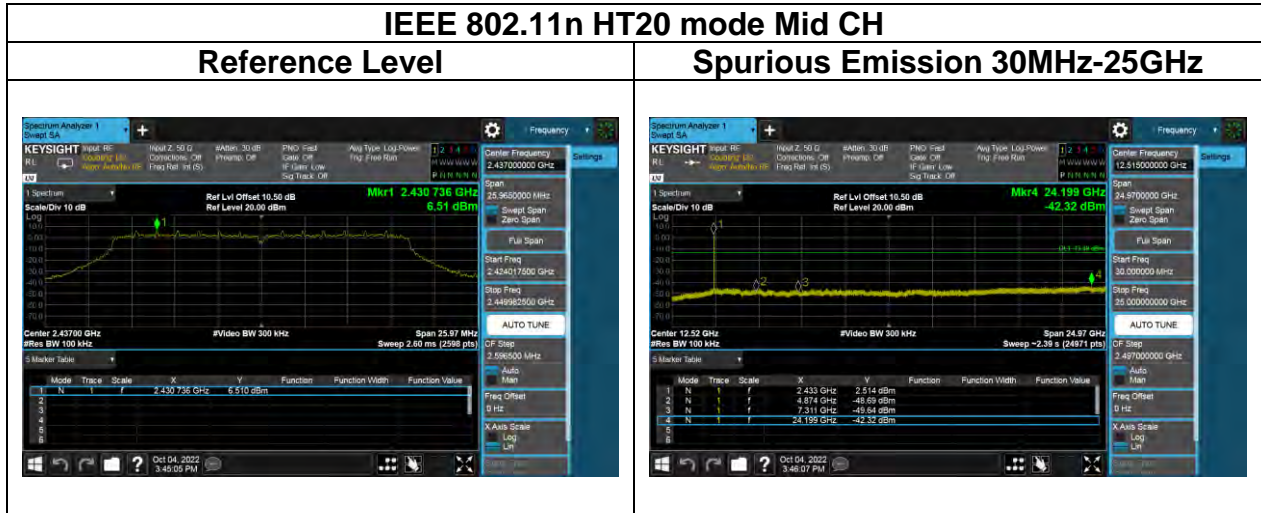
Report No.: TMWK2209003924KR



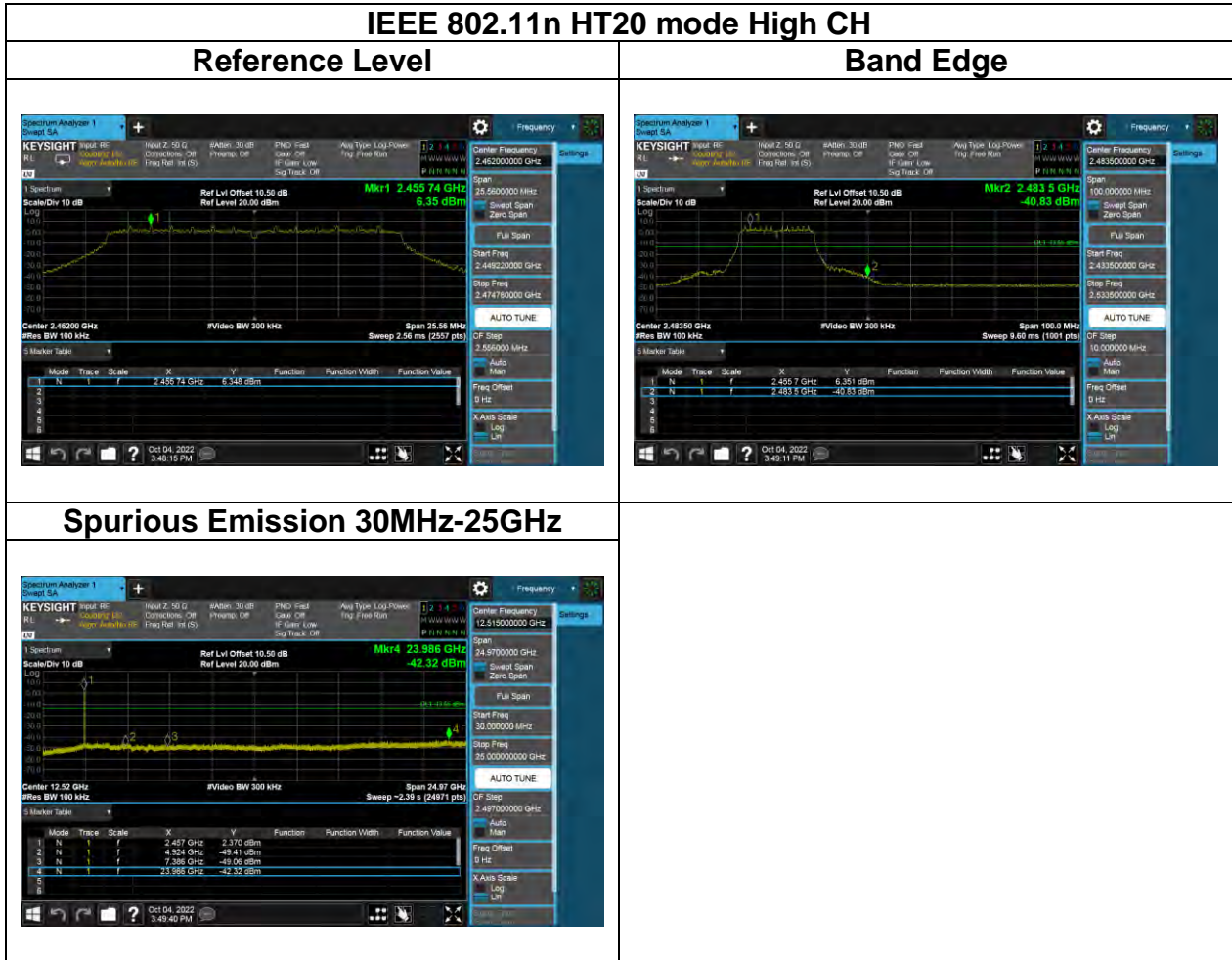
Report No.: TMWK2209003924KR



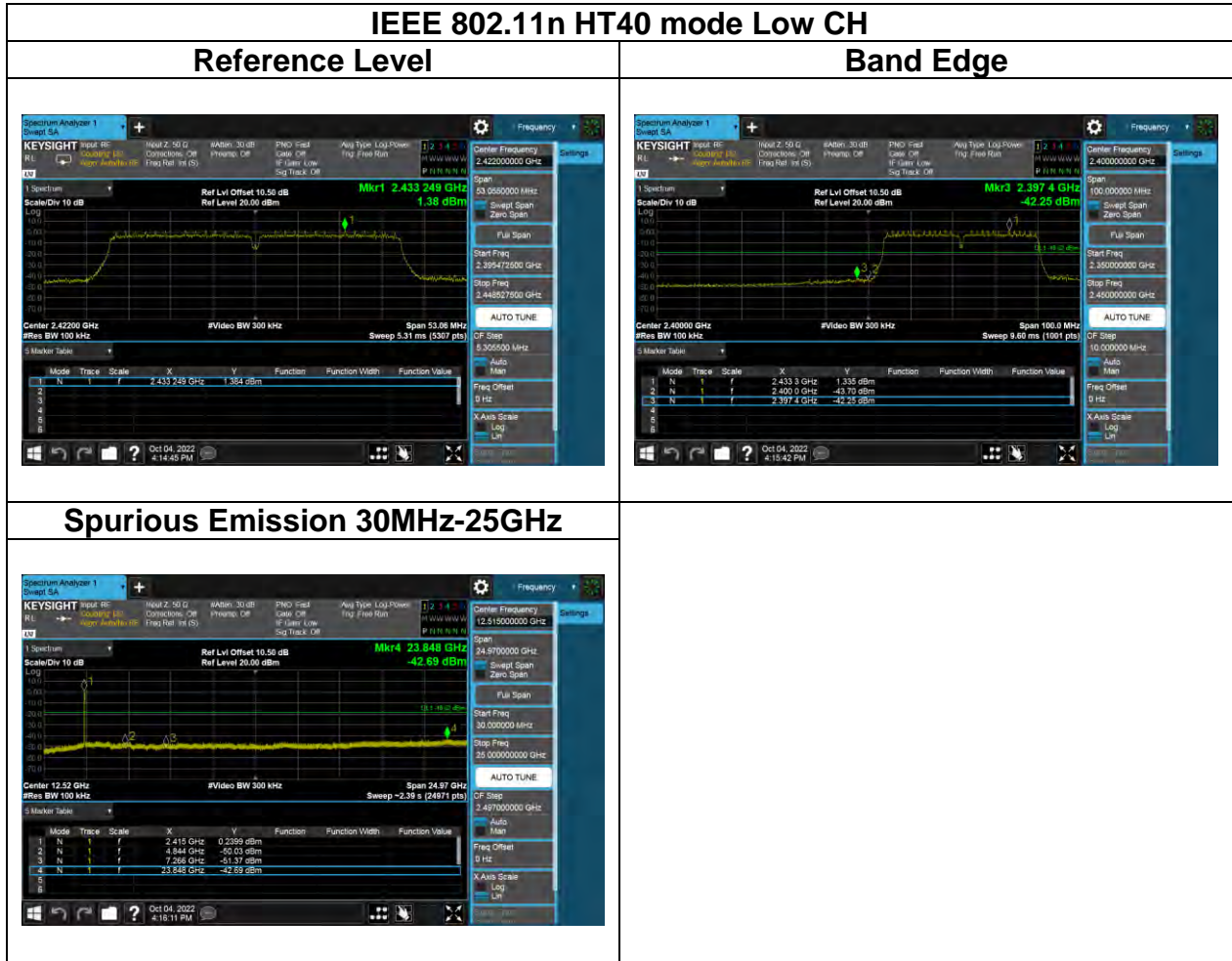
Report No.: TMWK2209003924KR



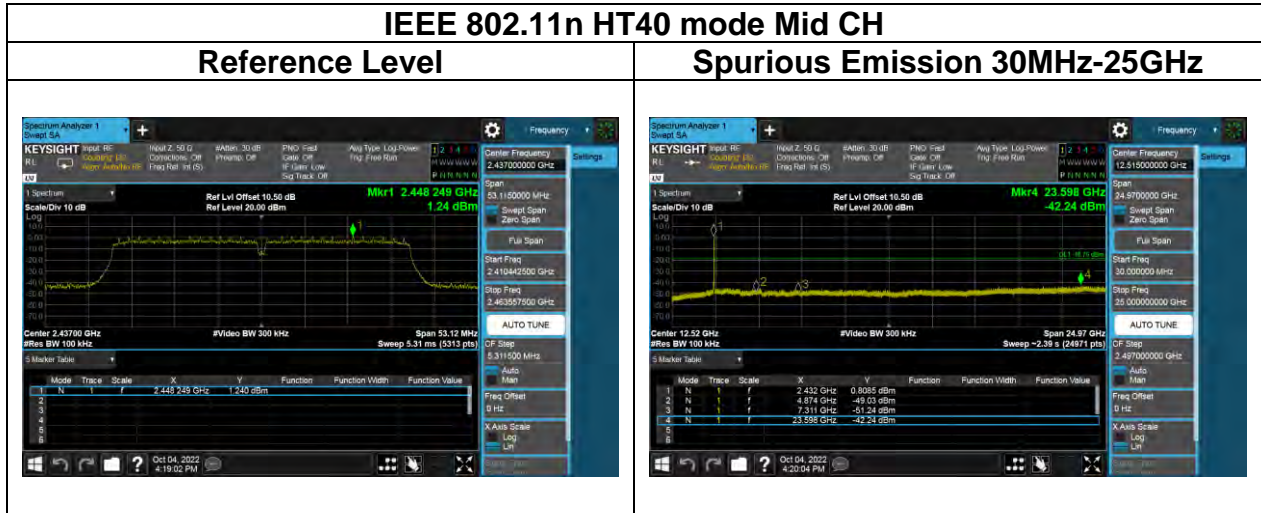
Report No.: TMWK2209003924KR



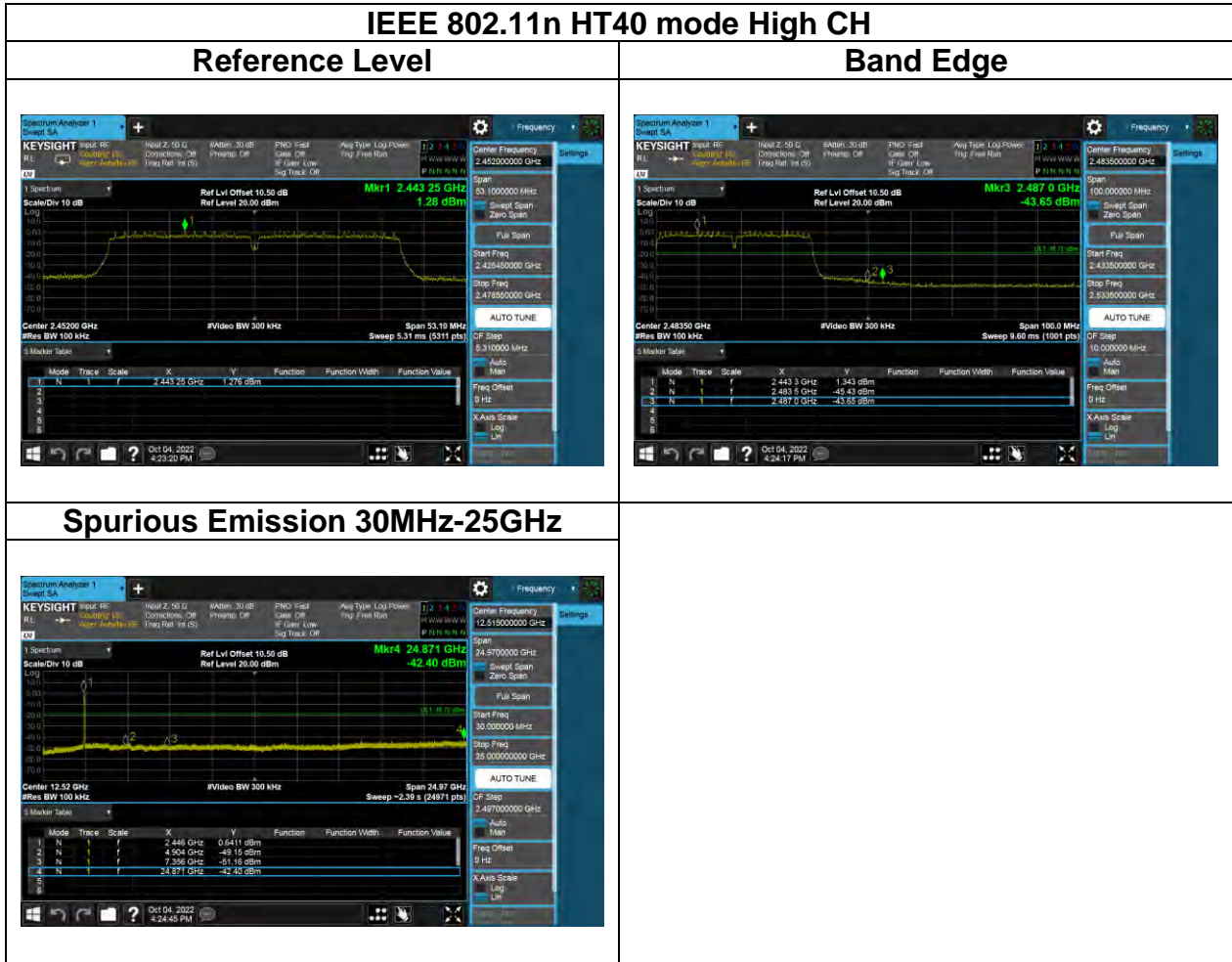
Report No.: TMWK2209003924KR



Report No.: TMWK2209003924KR



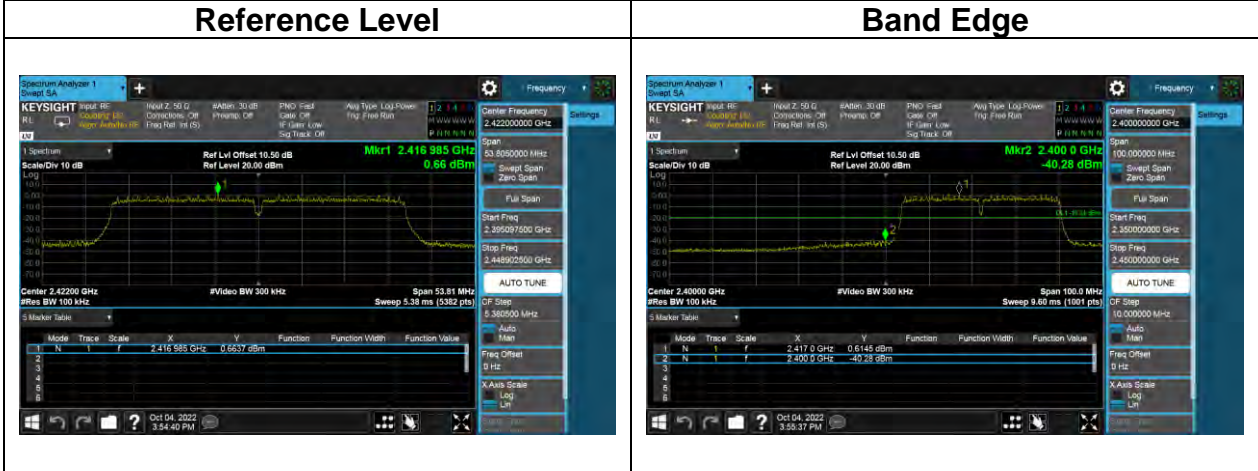
Report No.: TMWK2209003924KR



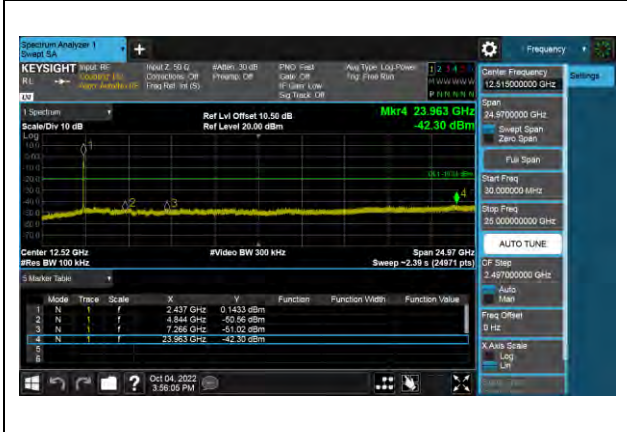
Report No.: TMWK2209003924KR

Chain 1

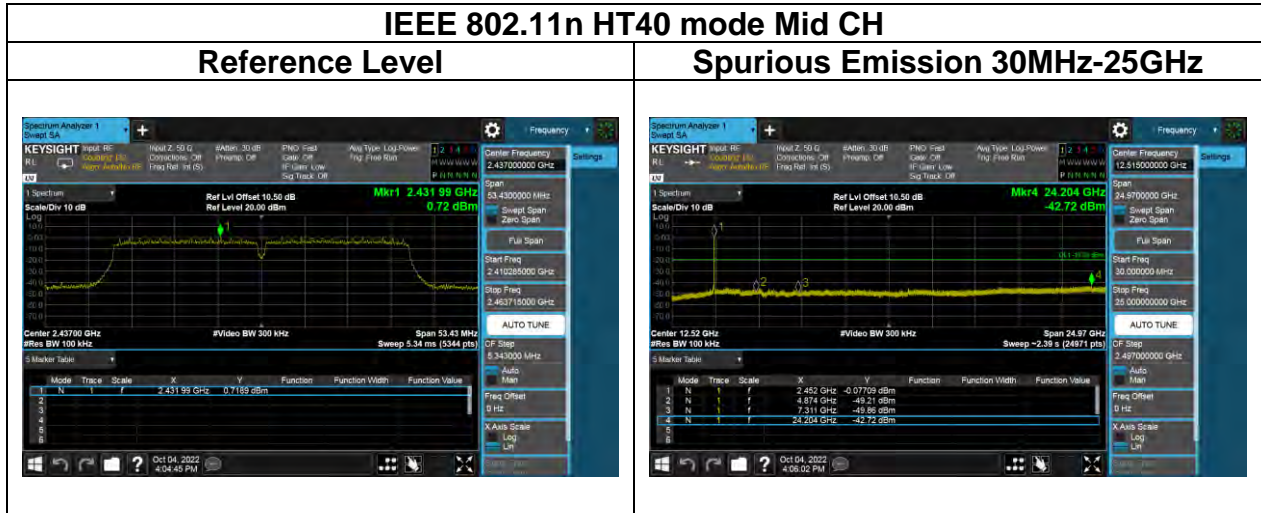
IEEE 802.11n HT40 mode Low CH



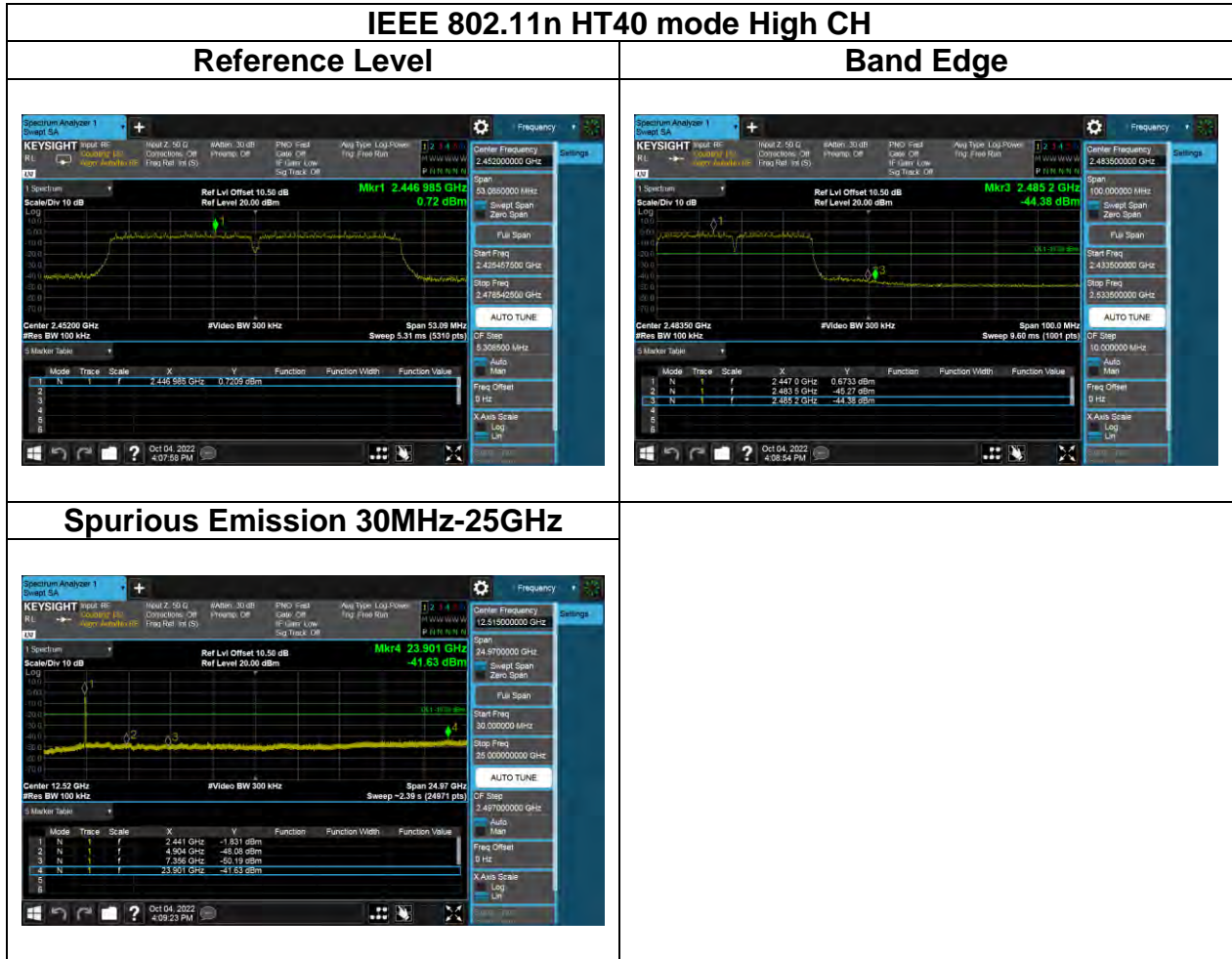
Spurious Emission 30MHz-25GHz



Report No.: TMWK2209003924KR



Report No.: TMWK2209003924KR



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

Report No.: TMWK2209003924KR

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 :

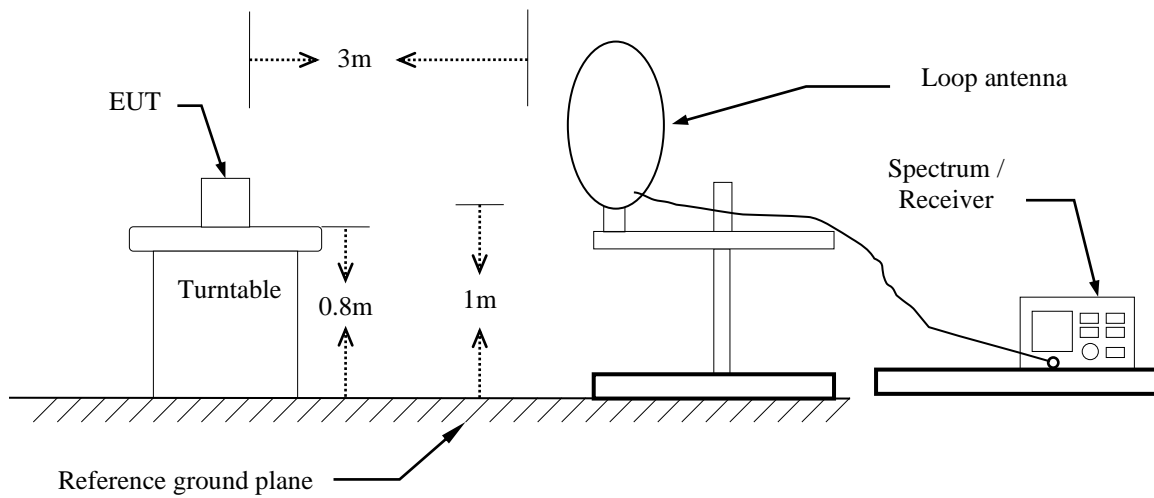
Actual FS=Spectrum Reading Level + Factor

Margin=Actual FS- Limit

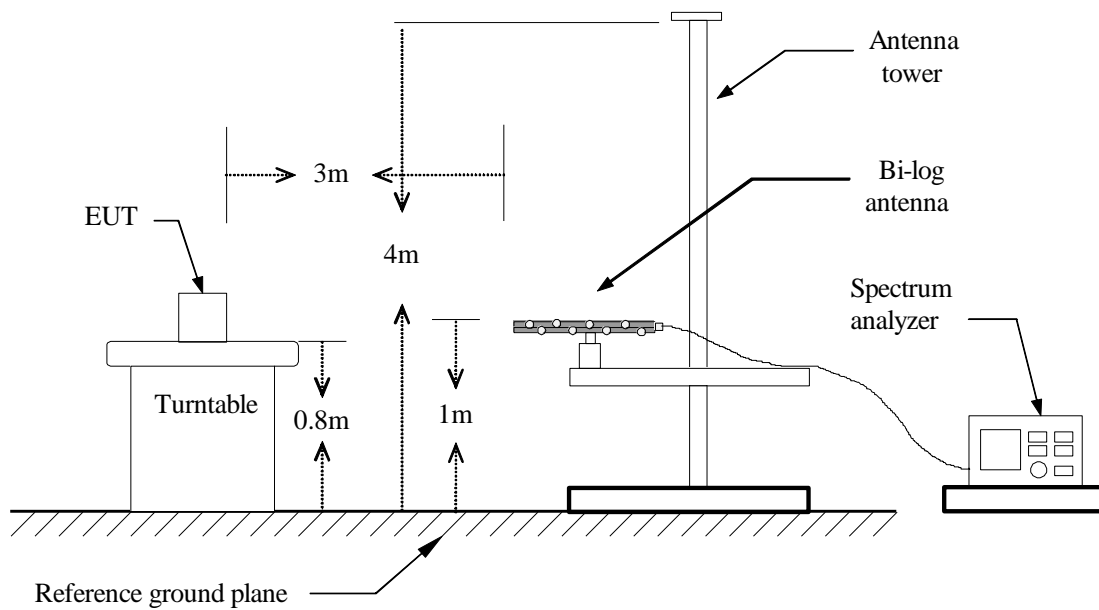
Report No.: TMWK2209003924KR

4.6.3 Test Setup

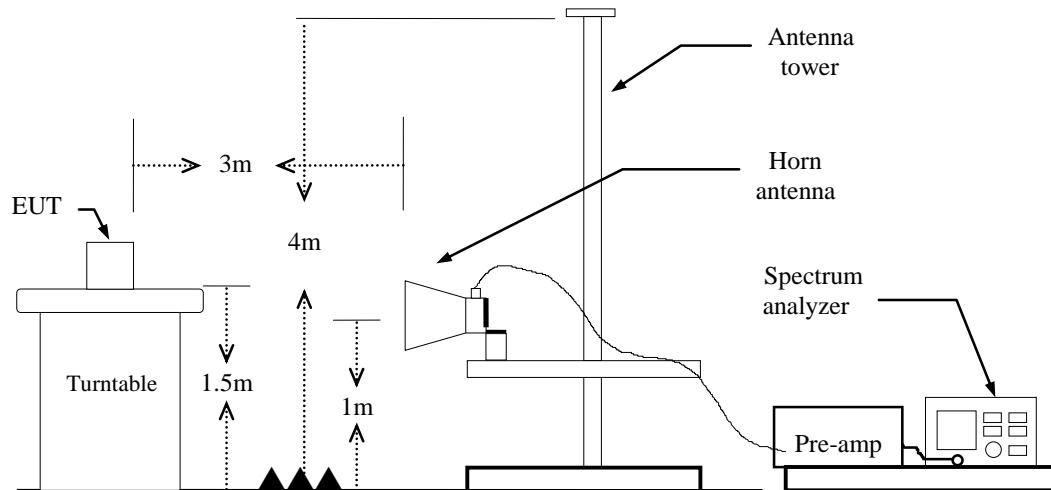
9kHz ~ 30MHz



30MHz ~ 1GHz



Above 1 GHz

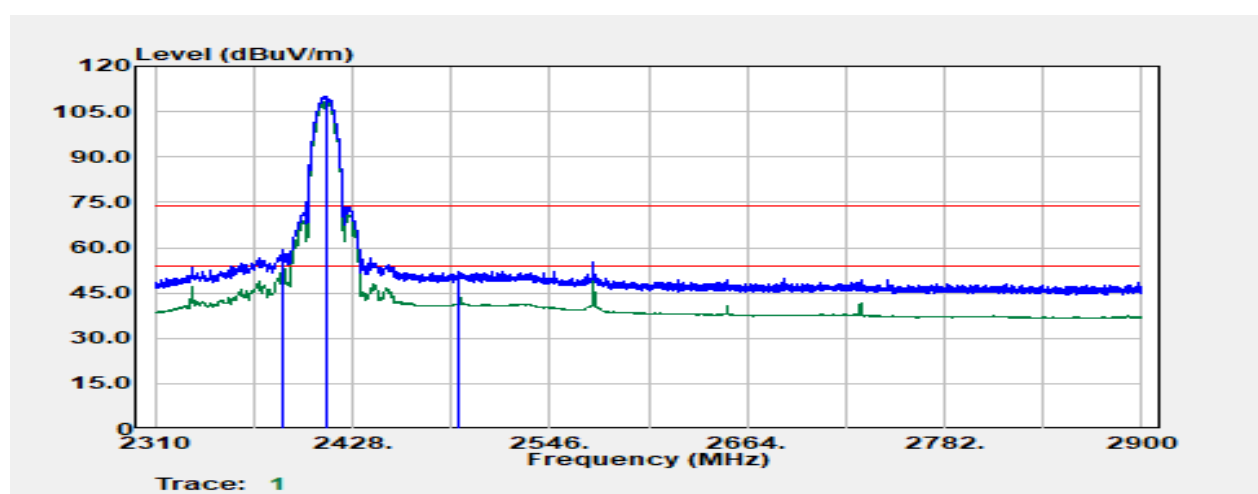


Report No.: TMWK2209003924KR

4.6.4 Test Result

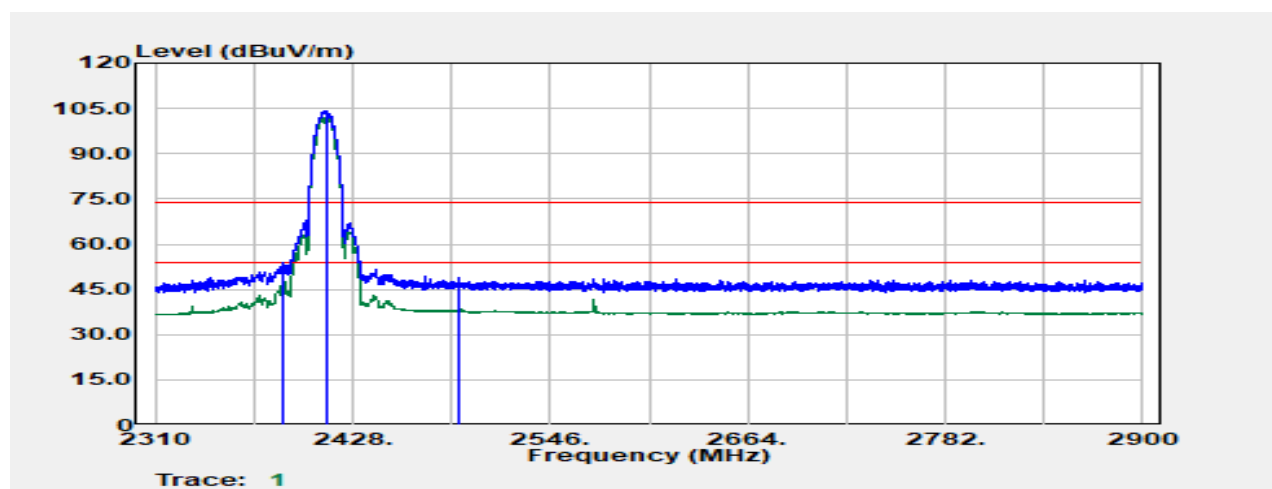
Band Edge Test Data

Test Mode	IEEE 802.11b 2412 MHz	Temp/Hum	22.9(°C)/ 65%RH
Test Item	Band Edge	Test Date	October 5, 2022
Polarize	Vertical	Test Engineer	Ray Li
Detector	Peak / Average		



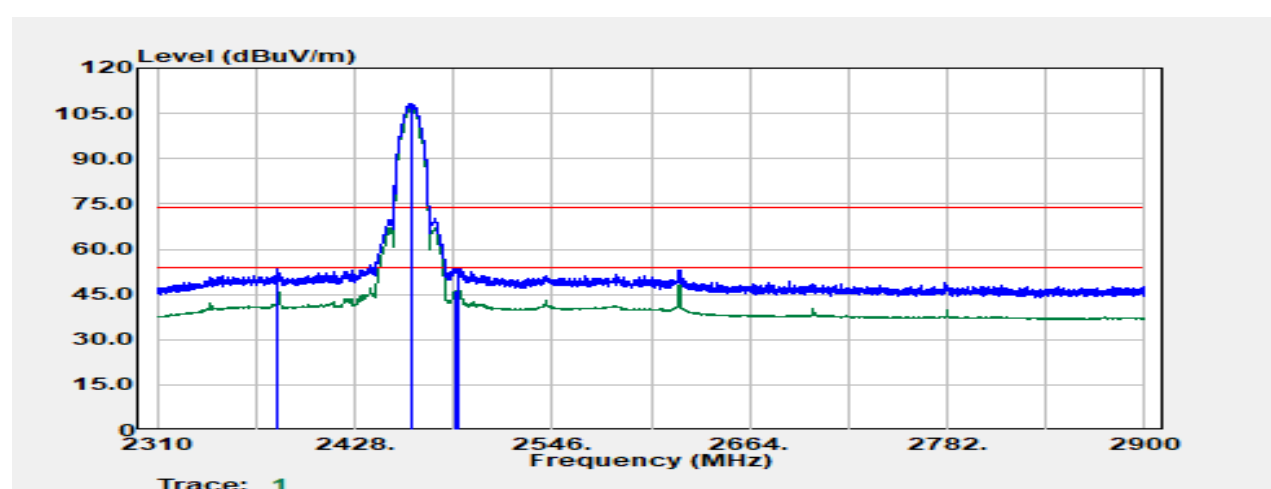
Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dB μ V)	Factor (dB)	Actual FS (dB μ V/m)	Limit @3m (dB μ V/m)	Margin (dB)
2386.70	Peak	51.71	7.74	59.46	74.00	-14.54
2386.94	Average	45.28	7.74	53.02	54.00	-0.98
2412.00	Peak	102.38	7.86	110.24	--	--
2412.00	Average	100.25	7.86	108.11	--	--
2491.96	Peak	43.81	8.30	52.11	74.00	-21.89
2492.07	Average	35.29	8.30	43.60	54.00	-10.40

Test Mode	IEEE 802.11b 2412 MHz	Temp/Hum	22.9(°C)/ 65%RH
Test Item	Band Edge	Test Date	October 5, 2022
Polarize	Horizontal	Test Engineer	Ray Li
Detector	Peak / Average		



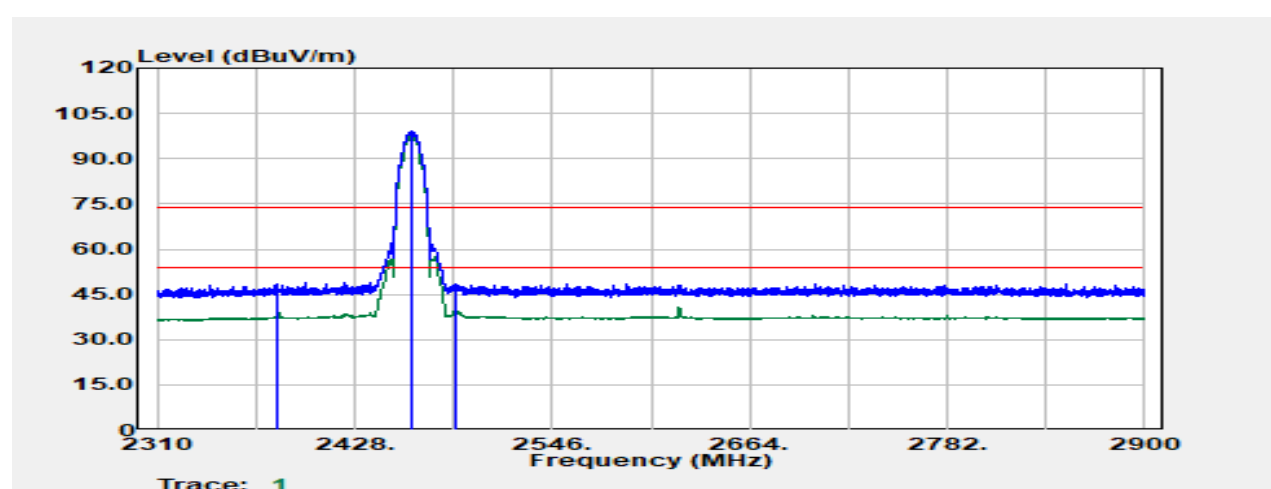
Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
2386.94	Average	39.97	7.74	47.71	54.00	-6.29
2387.05	Peak	46.34	7.74	54.09	74.00	-19.91
2412.00	Peak	96.23	7.86	104.08	--	--
2412.00	Average	94.25	7.86	102.11	--	--
2491.48	Peak	40.60	8.30	48.90	74.00	-25.10
2491.96	Average	30.37	8.30	38.67	54.00	-15.33

Test Mode	IEEE 802.11b 2462 MHz	Temp/Hum	22.9(°C)/ 65%RH
Test Item	Band Edge	Test Date	October 5, 2022
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)
2381.98	Average	39.79	7.73	47.52	54.00	-6.48
2382.10	Peak	45.65	7.73	53.38	74.00	-20.62
2462.00	Peak	100.15	8.16	108.31	--	--
2462.00	Average	98.19	8.16	106.34	--	--
2488.89	Average	37.99	8.29	46.28	54.00	-7.72
2489.95	Peak	45.36	8.29	53.65	74.00	-20.35

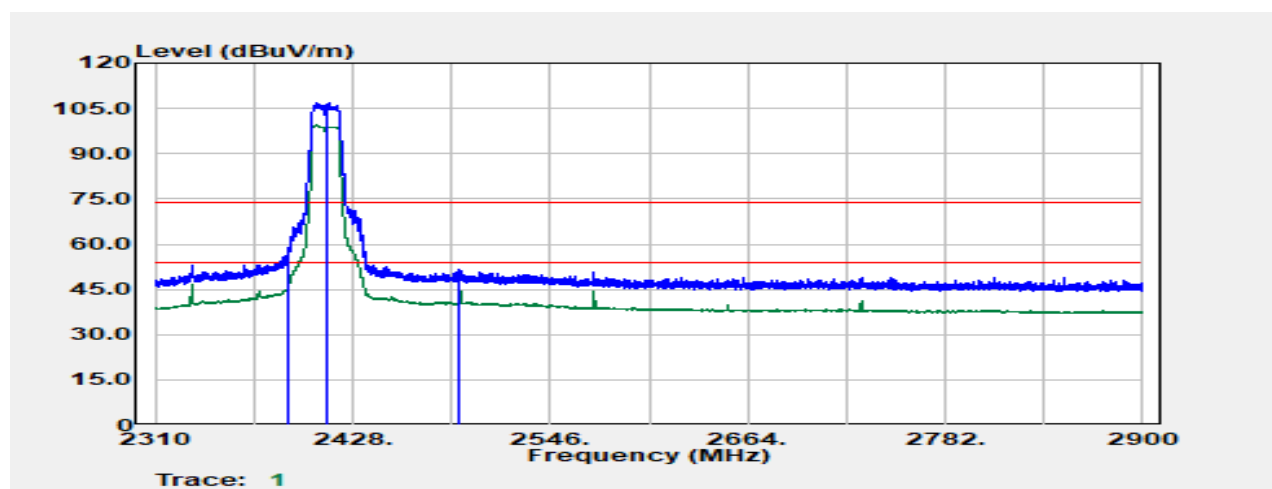
Test Mode	IEEE 802.11b 2462 MHz	Temp/Hum	22.9(°C)/ 65%RH
Test Item	Band Edge	Test Date	October 5, 2022
Polarize	Horizontal	Test Engineer	Ray Li
Detector	Peak / Average		



Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
2381.86	Peak	40.74	7.73	48.47	74.00	-25.53
2381.98	Average	32.48	7.73	40.21	54.00	-13.79
2462.00	Peak	91.18	8.16	99.34	--	--
2462.00	Average	89.01	8.16	97.17	--	--
2487.59	Peak	40.28	8.28	48.56	74.00	-25.44
2488.89	Average	31.30	8.29	39.59	54.00	-14.41

Report No.: TMWK2209003924KR

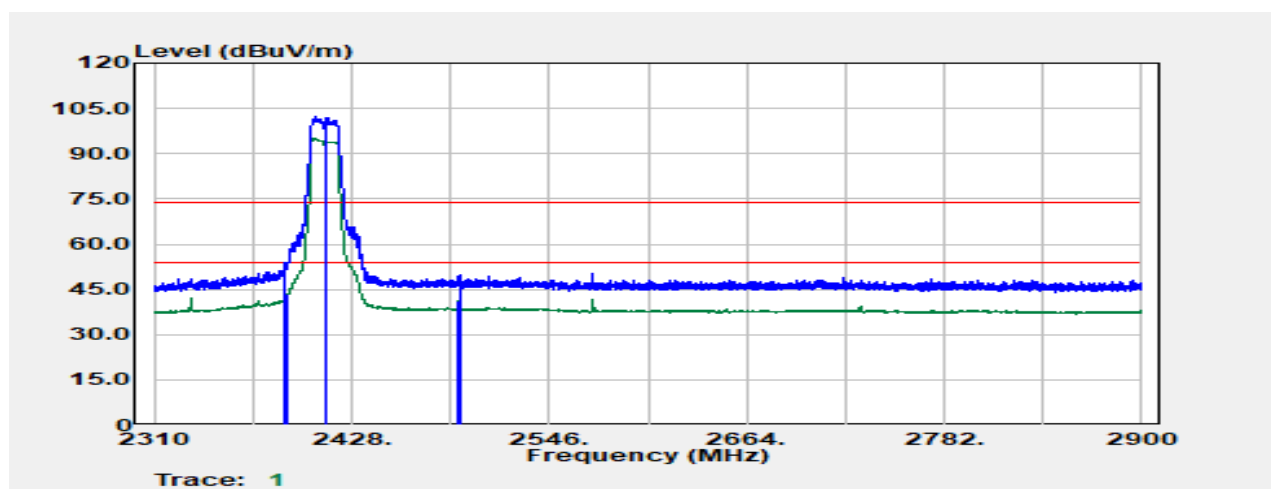
Test Mode	IEEE 802.11g 2412 MHz	Temp/Hum	22.9(°C)/ 65%RH
Test Item	Band Edge	Test Date	October 5, 2022
Polarize	Vertical	Test Engineer	Ray Li
Detector	Peak / Average		



Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
2389.77	Peak	51.30	7.75	59.06	74.00	-14.94
2389.89	Average	39.31	7.75	47.06	54.00	-6.94
2412.00	Peak	99.05	7.86	106.91	--	--
2412.00	Average	91.63	7.86	99.49	--	--
2491.84	Peak	43.47	8.30	51.77	74.00	-22.23
2492.07	Average	36.50	8.30	44.81	54.00	-9.19

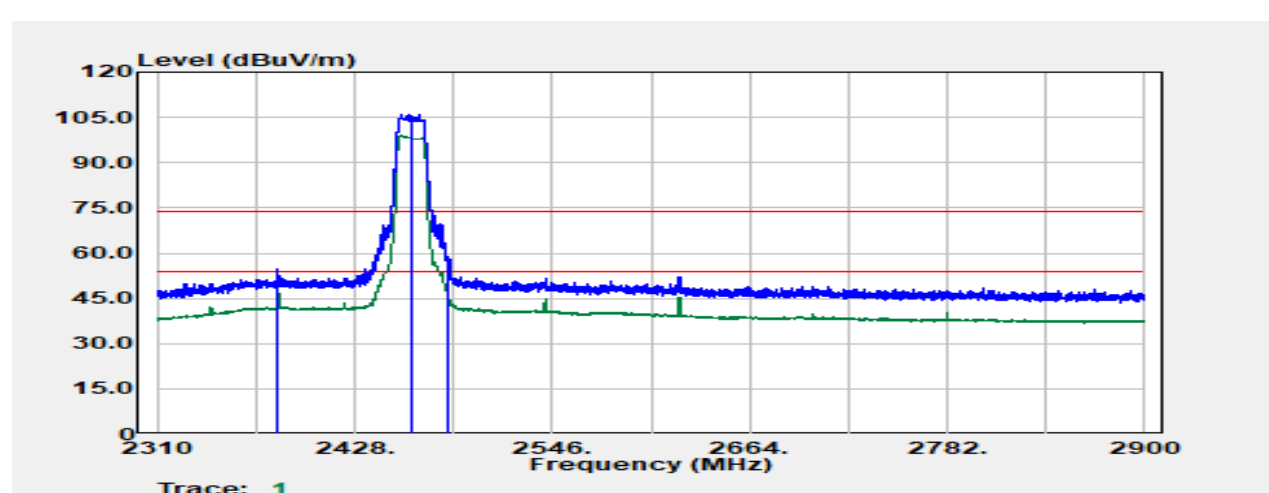
Report No.: TMWK2209003924KR

Test Mode	IEEE 802.11g 2412 MHz	Temp/Hum	22.9(°C)/ 65%RH
Test Item	Band Edge	Test Date	October 5, 2022
Polarize	Horizontal	Test Engineer	Ray Li
Detector	Peak / Average		



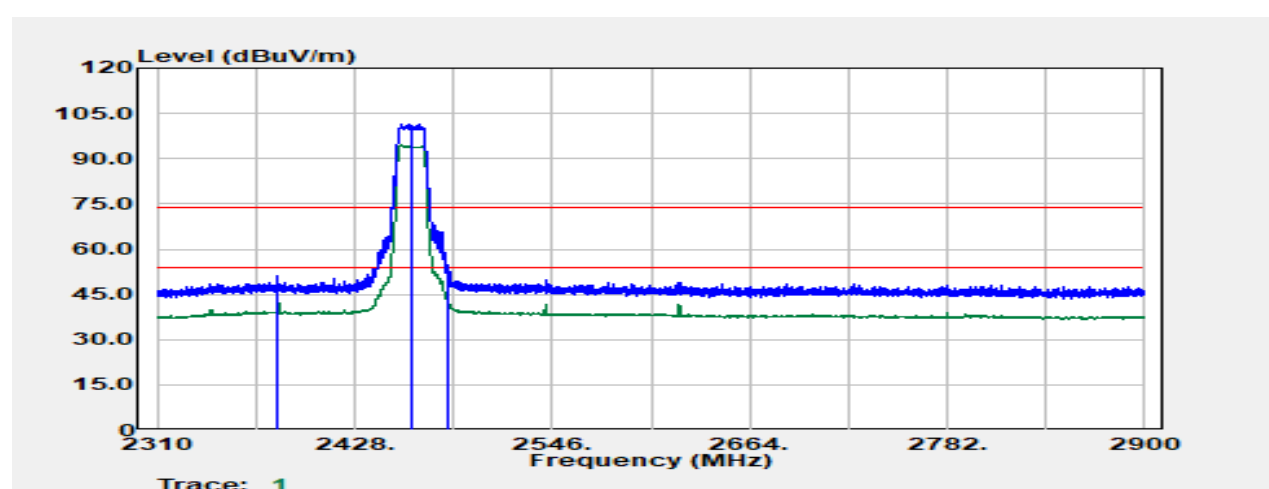
Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
2388.47	Peak	46.15	7.75	53.90	74.00	-20.10
2390.00	Average	35.76	7.75	43.51	54.00	-10.49
2412.00	Peak	94.49	7.86	102.35	--	--
2412.00	Average	87.17	7.86	95.03	--	--
2491.84	Average	32.95	8.30	41.25	54.00	-12.75
2492.19	Peak	41.67	8.30	49.97	74.00	-24.03

Test Mode	IEEE 802.11g 2462 MHz	Temp/Hum	22.9(°C)/ 65%RH
Test Item	Band Edge	Test Date	October 5, 2022
Polarize	Vertical	Test Engineer	Ray Li
Detector	Peak / Average		



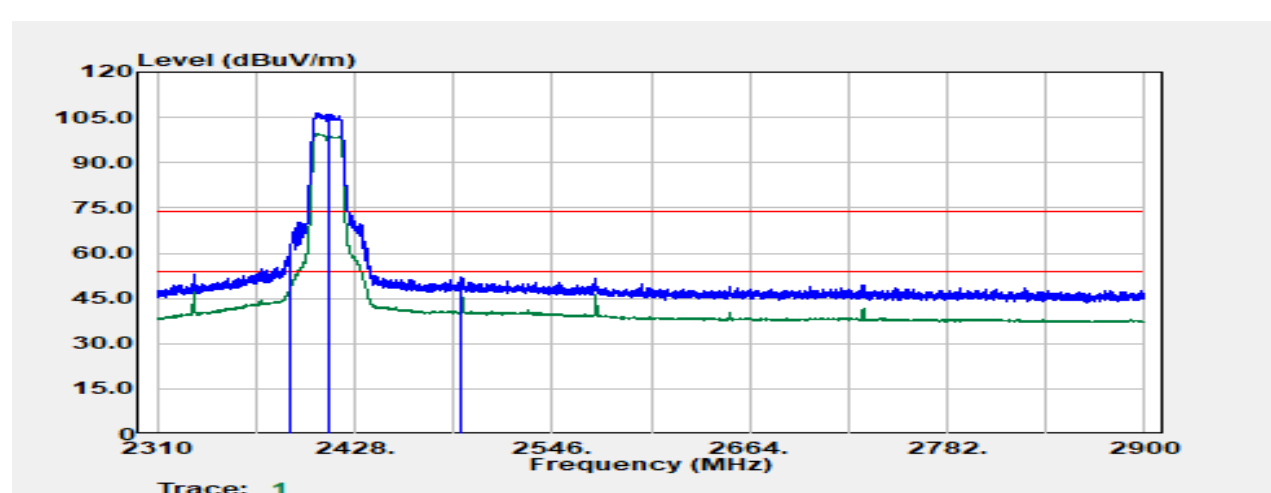
Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
2381.98	Average	41.39	7.73	49.12	54.00	-4.88
2382.22	Peak	47.08	7.73	54.81	74.00	-19.19
2462.00	Peak	97.98	8.16	106.14	--	--
2462.00	Average	90.86	8.16	99.01	--	--
2483.50	Average	38.37	8.26	46.63	54.00	-7.37
2484.17	Peak	50.60	8.26	58.86	74.00	-15.14

Test Mode	IEEE 802.11g 2462 MHz	Temp/Hum	22.9(°C)/ 65%RH
Test Item	Band Edge	Test Date	October 5, 2022
Polarize	Horizontal	Test Engineer	Ray Li
Detector	Peak / Average		



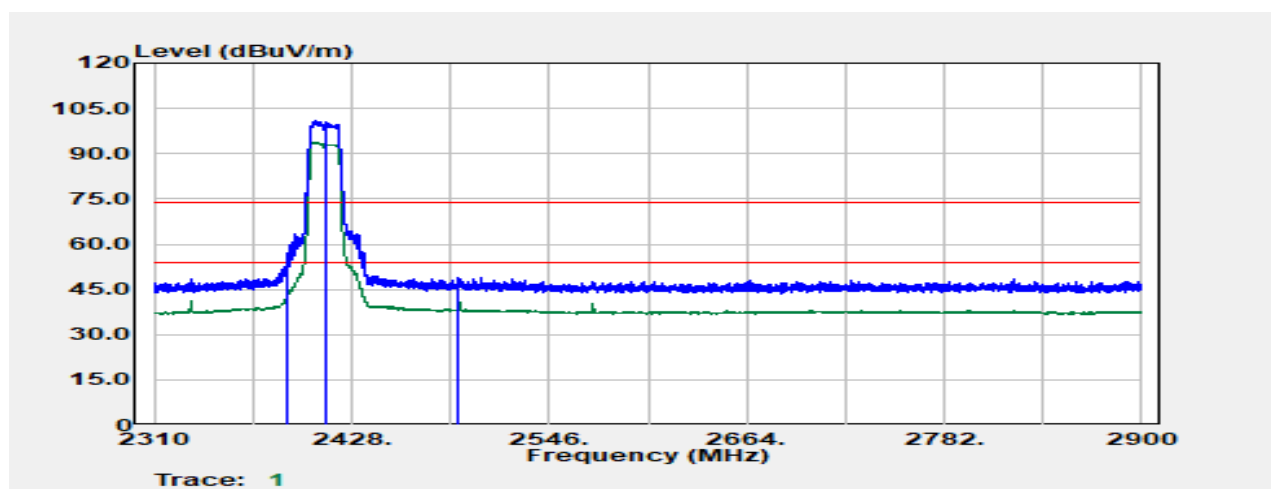
Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
2381.74	Peak	43.66	7.73	51.39	74.00	-22.61
2381.98	Average	37.02	7.73	44.75	54.00	-9.25
2462.00	Peak	93.22	8.16	101.38	--	--
2462.00	Average	86.28	8.16	94.44	--	--
2483.93	Average	34.18	8.26	42.44	54.00	-11.56
2484.05	Peak	46.36	8.26	54.62	74.00	-19.38

Test Mode	IEEE 802.11n HT20 2412 MHz	Temp/Hum	22.9(°C)/ 65%RH
Test Item	Band Edge	Test Date	October 5, 2022
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)
2389.53	Peak	55.04	7.75	62.80	74.00	-11.20
2390.00	Average	41.49	7.75	49.24	54.00	-4.76
2412.00	Peak	98.63	7.86	106.49	--	--
2412.00	Average	91.71	7.86	99.57	--	--
2491.96	Peak	43.57	8.30	51.87	74.00	-22.13
2491.96	Average	37.29	8.30	45.59	54.00	-8.41

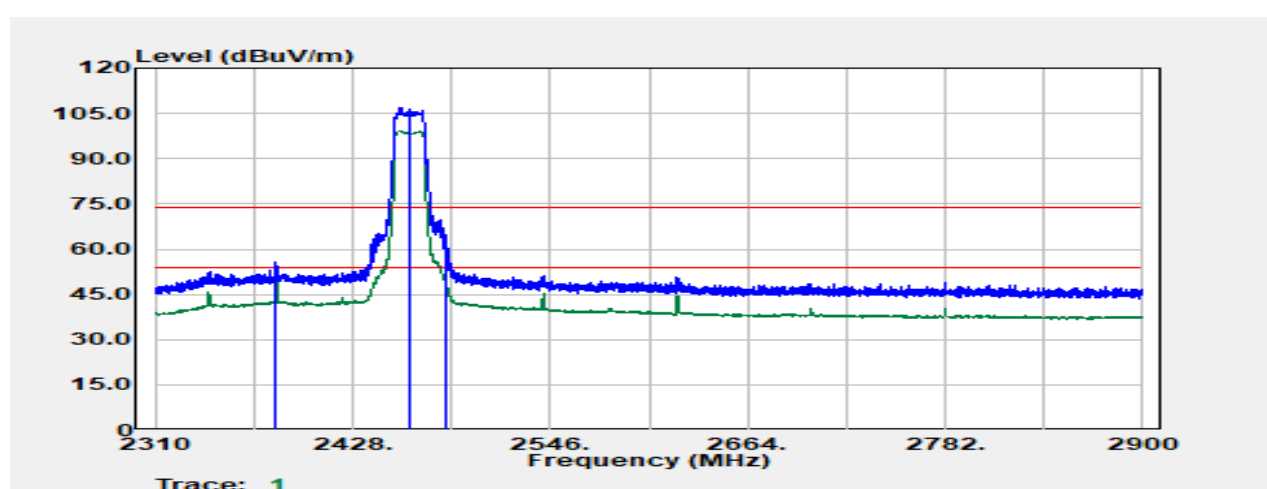
Test Mode	IEEE 802.11n HT20 2412 MHz	Temp/Hum	22.9(°C)/ 65%RH
Test Item	Band Edge	Test Date	October 5, 2022
Polarize	Horizontal	Test Engineer	Ray Li
Detector	Peak / Average		



Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
2389.77	Peak	49.39	7.75	57.14	74.00	-16.86
2390.00	Average	35.11	7.75	42.86	54.00	-11.14
2412.00	Peak	92.91	7.86	100.77	--	--
2412.00	Average	86.00	7.86	93.86	--	--
2491.60	Peak	40.66	8.30	48.96	74.00	-25.04
2492.07	Average	33.02	8.30	41.32	54.00	-12.68

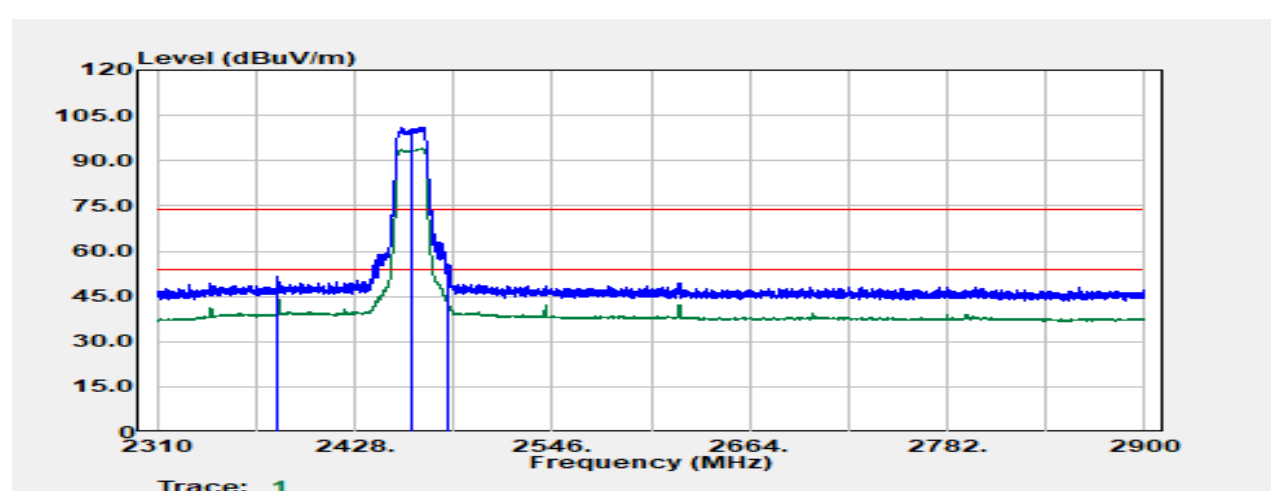
Report No.: TMWK2209003924KR

Test Mode	IEEE 802.11n HT20 2462 MHz	Temp/Hum	22.9(°C)/ 65%RH
Test Item	Band Edge	Test Date	October 5, 2022
Polarize	Vertical	Test Engineer	Ray Li
Detector	Peak / Average		



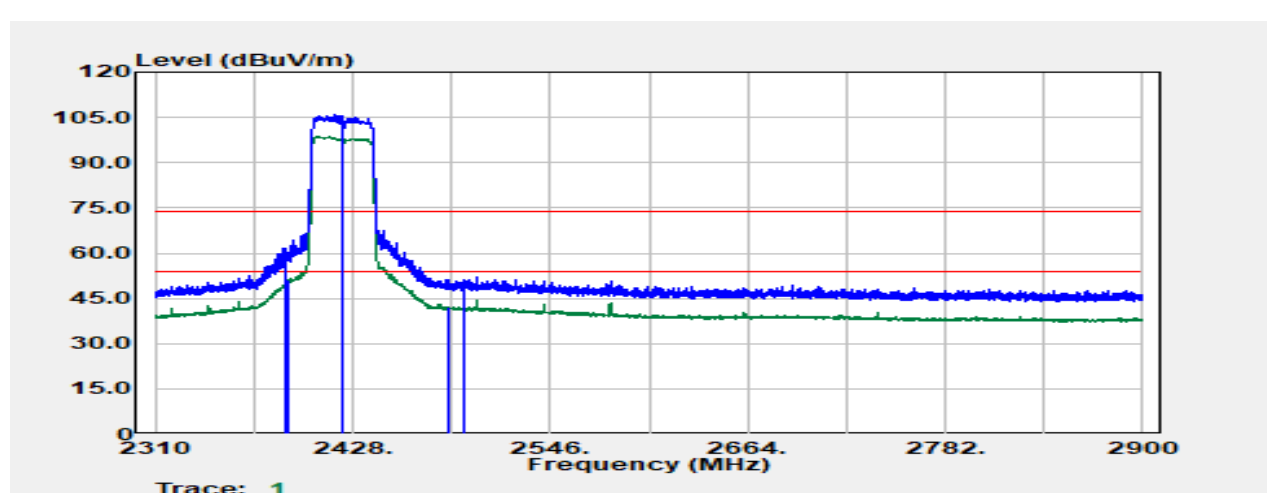
Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
2381.86	Peak	48.16	7.73	55.89	74.00	-18.11
2381.98	Average	43.70	7.73	51.43	54.00	-2.57
2462.00	Peak	98.91	8.16	107.07	--	--
2462.00	Average	91.01	8.16	99.17	--	--
2483.70	Peak	54.74	8.26	63.00	74.00	-11.00
2483.70	Average	40.41	8.26	48.67	54.00	-5.33

Test Mode	IEEE 802.11n HT20 2462 MHz	Temp/Hum	22.9(°C)/ 65%RH
Test Item	Band Edge	Test Date	October 5, 2022
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)
2381.98	Peak	43.79	7.73	51.52	74.00	-22.48
2381.98	Average	38.52	7.73	46.25	54.00	-7.75
2462.00	Peak	92.95	8.16	101.11	--	--
2462.00	Average	85.82	8.16	93.98	--	--
2483.58	Peak	47.62	8.26	55.88	74.00	-18.12
2483.70	Average	34.53	8.26	42.79	54.00	-11.21

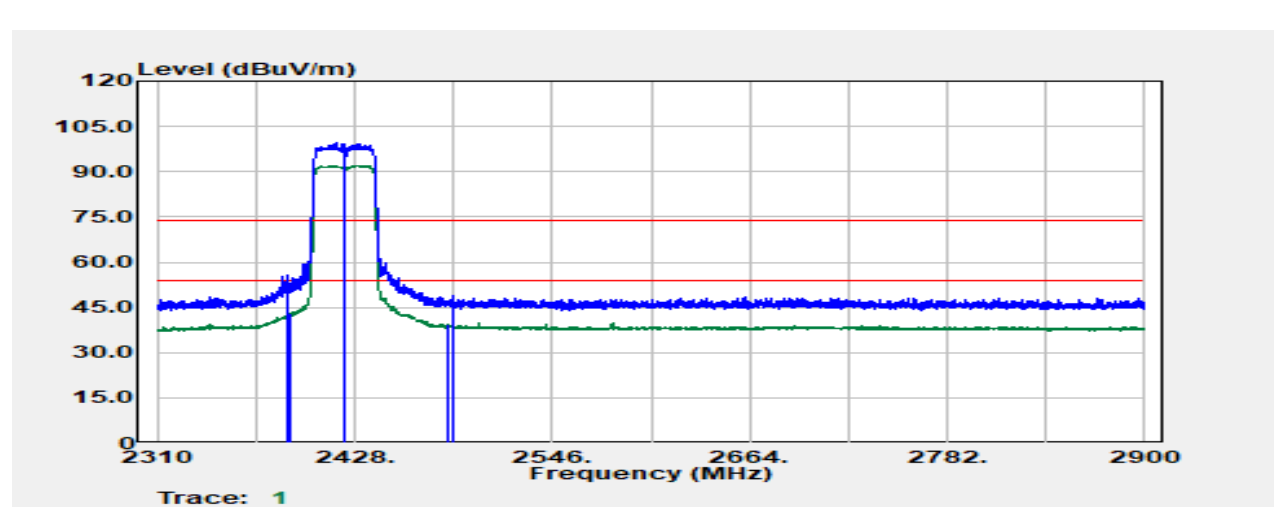
Test Mode	IEEE 802.11n HT40 2422 MHz	Temp/Hum	22.9(°C)/ 65%RH
Test Item	Band Edge	Test Date	October 5, 2022
Polarize	Vertical	Test Engineer	Ray Li
Detector	Peak / Average		



Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
2387.29	Peak	53.91	7.74	61.65	74.00	-12.35
2389.06	Average	43.28	7.75	51.03	54.00	-2.97
2422.00	Peak	97.86	7.92	105.78	--	--
2422.00	Average	90.85	7.92	98.77	--	--
2484.88	Average	33.88	8.27	42.15	54.00	-11.85
2493.73	Peak	42.92	8.31	51.23	74.00	-22.77

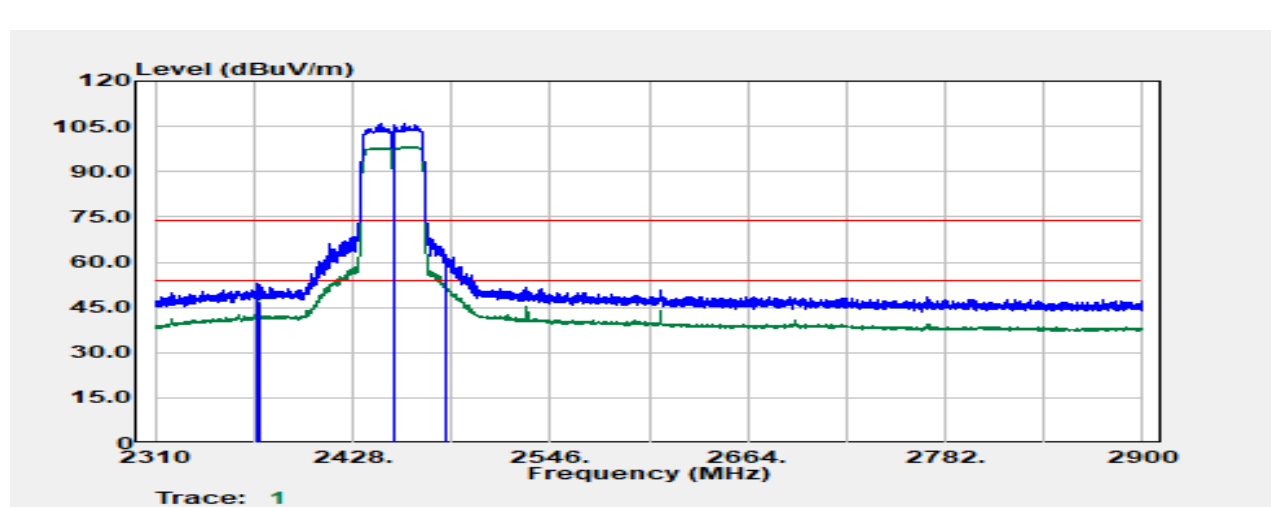
Report No.: TMWK2209003924KR

Test Mode	IEEE 802.11n HT40 2422 MHz	Temp/Hum	22.9(°C)/ 65%RH
Test Item	Band Edge	Test Date	October 5, 2022
Polarize	Horizontal	Test Engineer	Ray Li
Detector	Peak / Average		



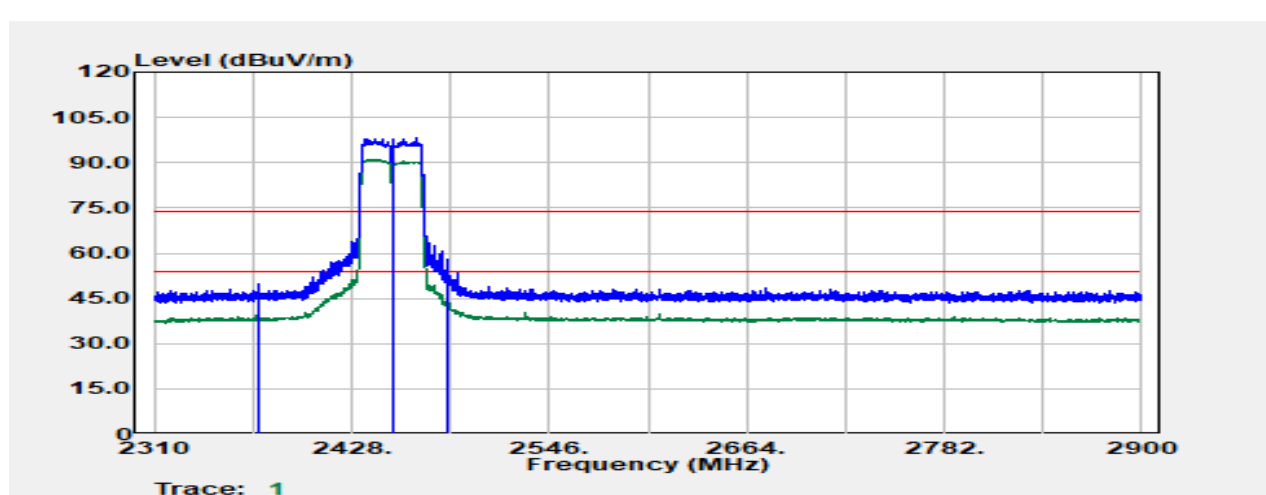
Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
2388.12	Peak	48.08	7.75	55.82	74.00	-18.18
2390.00	Average	35.09	7.75	42.84	54.00	-11.16
2422.00	Peak	91.50	7.92	99.42	--	--
2422.00	Average	84.16	7.92	92.08	--	--
2484.29	Average	31.10	8.26	39.37	54.00	-14.63
2486.06	Peak	40.57	8.27	48.84	74.00	-25.16

Test Mode	IEEE 802.11n HT40 2452 MHz	Temp/Hum	22.9(°C)/ 65%RH
Test Item	Band Edge	Test Date	October 5, 2022
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)
2371.60	Peak	45.19	7.70	52.89	74.00	-21.11
2371.95	Average	38.87	7.70	46.57	54.00	-7.43
2452.00	Peak	97.90	8.11	106.01	--	--
2452.00	Average	90.28	8.11	98.39	--	--
2483.58	Average	43.87	8.26	52.13	54.00	-1.87
2484.05	Peak	54.26	8.26	62.53	74.00	-11.47

Test Mode	IEEE 802.11n HT40 2452 MHz	Temp/Hum	22.9(°C)/ 65%RH
Test Item	Band Edge	Test Date	October 5, 2022
Polarize	Horizontal	Test Engineer	Ray Li
Detector	Peak / Average		

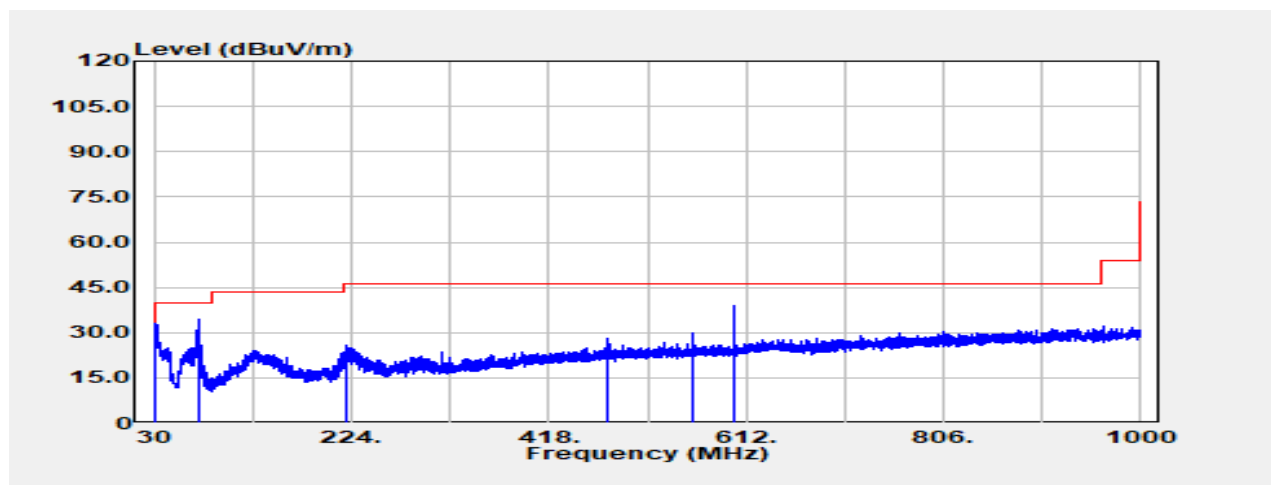


Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
2372.07	Average	33.30	7.70	41.01	54.00	-12.99
2372.19	Peak	42.05	7.70	49.76	74.00	-24.24
2452.00	Peak	90.06	8.11	98.17	--	--
2452.00	Average	83.06	8.11	91.17	--	--
2485.35	Average	35.69	8.27	43.96	54.00	-10.04
2485.58	Peak	49.64	8.27	57.91	74.00	-16.09

Report No.: TMWK2209003924KR

Below 1G Test Data

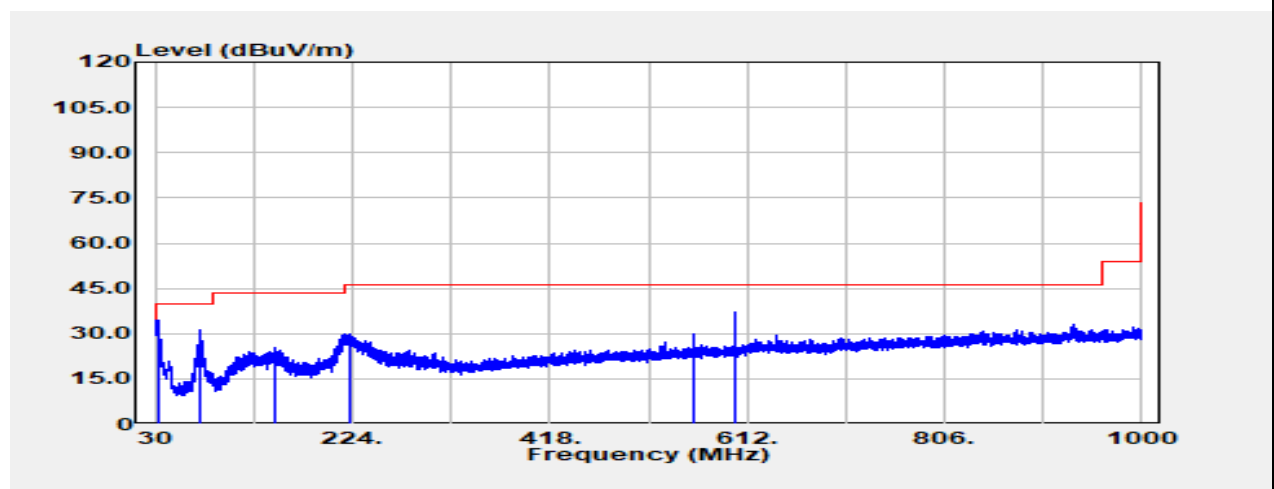
Test Mode	IEEE 802.11b 2412 MHz	Temp/Hum	22.9(°C)/ 65%RH
Test Item	30MHz-1GHz	Test Date	October 5, 2022
Polarize	Vertical	Test Engineer	Ray Li
Detector	Peak		



Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBUV)	Factor (dB)	Actual FS (dBUV/m)	Limit @3m (dBUV/m)	Margin (dB)
30.00	Peak	36.41	-3.22	33.19	29.54	3.65
74.14	Peak	50.09	-15.72	34.37	40.00	-5.63
219.64	Peak	37.61	-12.00	25.60	46.00	-20.40
476.32	Peak	31.78	-3.90	27.87	46.00	-18.13
559.98	Peak	32.77	-2.82	29.95	46.00	-16.05
600.00	Peak	41.40	-2.66	38.74	46.00	-7.26

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

Test Mode	IEEE 802.11b 2412 MHz	Temp/Hum	22.9(°C)/ 65%RH
Test Item	30MHz-1GHz	Test Date	October 5, 2022
Polarize	Horizontal	Test Engineer	Ray Li
Detector	Peak		

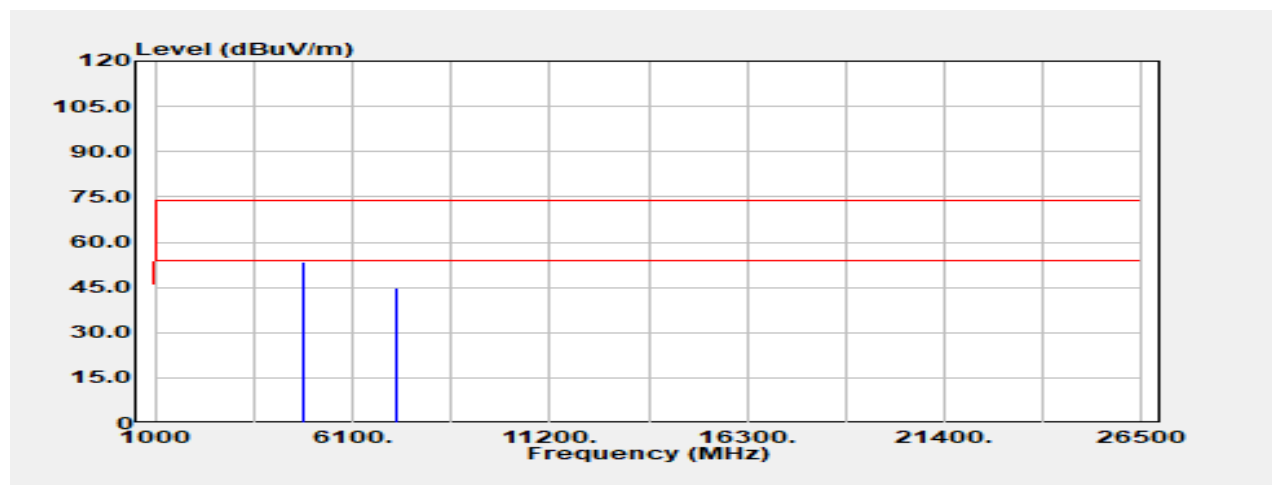


Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
32.55	Peak	38.46	-4.22	34.25	40.00	-5.75
74.14	Peak	47.14	-15.72	31.42	40.00	-8.58
146.89	Peak	35.75	-10.37	25.38	43.50	-18.12
220.48	Peak	41.75	-11.99	29.76	46.00	-16.24
559.98	Peak	32.64	-2.82	29.82	46.00	-16.18
600.00	Peak	39.85	-2.66	37.19	46.00	-8.81

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

Above 1G Test Data

Test Mode	IEEE 802.11b 2412 MHz	Temp/Hum	22.9(°C)/ 65%RH
Test Item	Harmonic	Test Date	October 5, 2022
Polarize	Vertical	Test Engineer	Ray Li
Detector	Peak / Average		

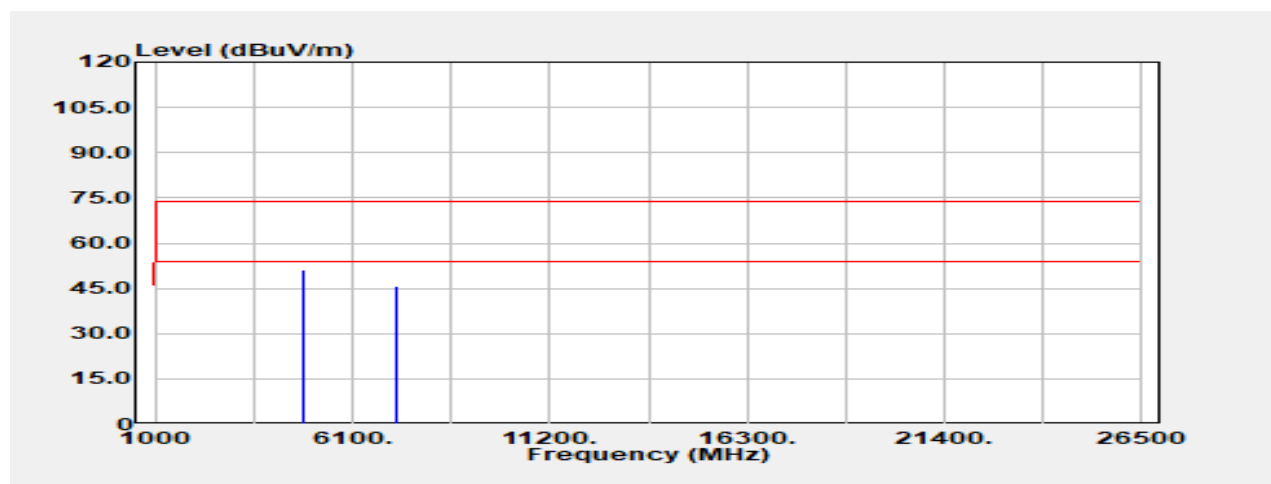


Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBµV)	Factor (dB)	Actual FS (dBµV/m)	Limit @3m (dBµV/m)	Margin (dB)
4824.00	Peak	47.59	5.90	53.49	74.00	-20.51
4824.00	Average	47.37	5.90	53.26	54.00	-0.74
7236.00	Peak	31.65	13.31	44.96	74.00	-29.04
7236.00	Average	24.81	13.31	38.12	54.00	-15.88
N/A						

Remark:

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

Test Mode	IEEE 802.11b 2412 MHz	Temp/Hum	22.9(°C)/ 65%RH
Test Item	Harmonic	Test Date	October 5, 2022
Polarize	Horizontal	Test Engineer	Ray Li
Detector	Peak / Average		

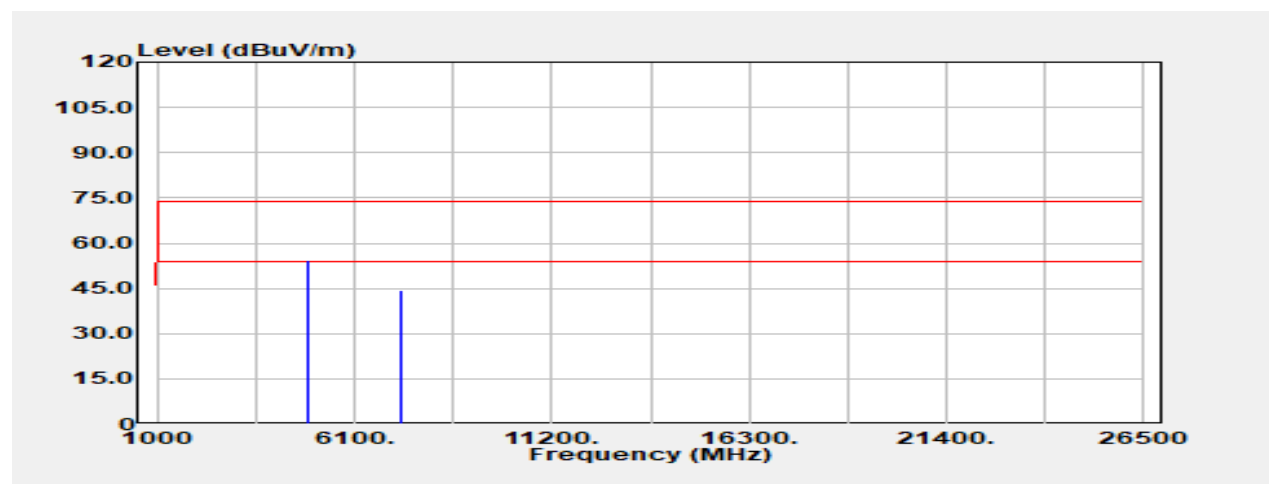


Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBµV)	Factor (dB)	Actual FS (dBµV/m)	Limit @3m (dBµV/m)	Margin (dB)
4824.00	Peak	45.10	5.90	51.00	74.00	-23.00
4824.00	Average	44.98	5.90	50.88	54.00	-3.12
7236.00	Peak	32.23	13.31	45.54	74.00	-28.46
7236.00	Average	24.59	13.31	37.90	54.00	-16.10
N/A						

Remark:

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

Test Mode	IEEE 802.11b 2437 MHz	Temp/Hum	22.9(°C)/ 65%RH
Test Item	Harmonic	Test Date	October 5, 2022
Polarize	Vertical	Test Engineer	Ray Li
Detector	Peak / Average		



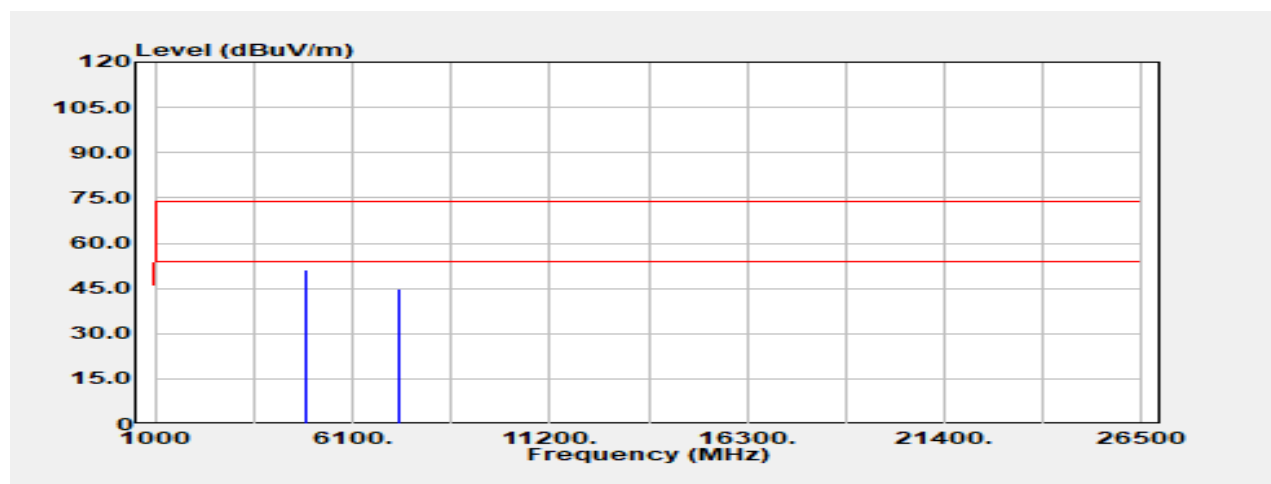
Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
4874.00	Peak	48.29	6.09	54.38	74.00	-19.62
4874.00	Average	47.06	6.09	53.15	54.00	-0.85
7311.00	Peak	31.09	13.33	44.42	74.00	-29.58
7311.00	Average	24.04	13.33	37.37	54.00	-16.63
N/A						

Remark:

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

Report No.: TMWK2209003924KR

Test Mode	IEEE 802.11b 2437 MHz	Temp/Hum	22.9(°C)/ 65%RH
Test Item	Harmonic	Test Date	October 5, 2022
Polarize	Horizontal	Test Engineer	Ray Li
Detector	Peak / Average		



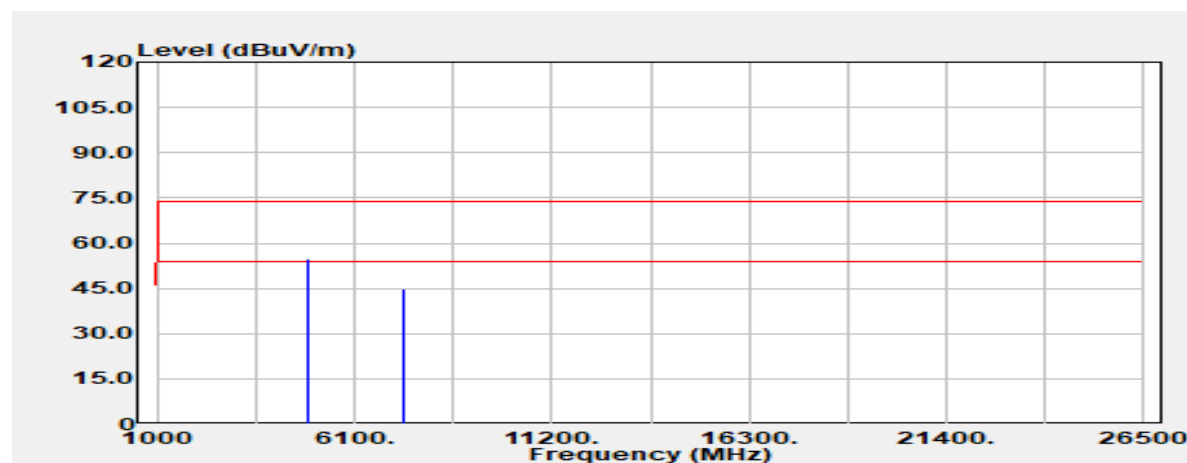
Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBUV)	Factor (dB)	Actual FS (dBUV/m)	Limit @3m (dBUV/m)	Margin (dB)
4874.00	Peak	44.87	6.09	50.96	74.00	-23.04
4874.00	Average	43.55	6.09	49.63	54.00	-4.37
7311.00	Peak	31.71	13.33	45.04	74.00	-28.96
7311.00	Average	24.10	13.33	37.43	54.00	-16.57
N/A						

Remark:

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

Report No.: TMWK2209003924KR

Test Mode	IEEE 802.11b 2462 MHz	Temp/Hum	22.9(°C)/ 65%RH
Test Item	Harmonic	Test Date	October 5, 2022
Polarize	Vertical	Test Engineer	Ray Li
Detector	Peak / Average		

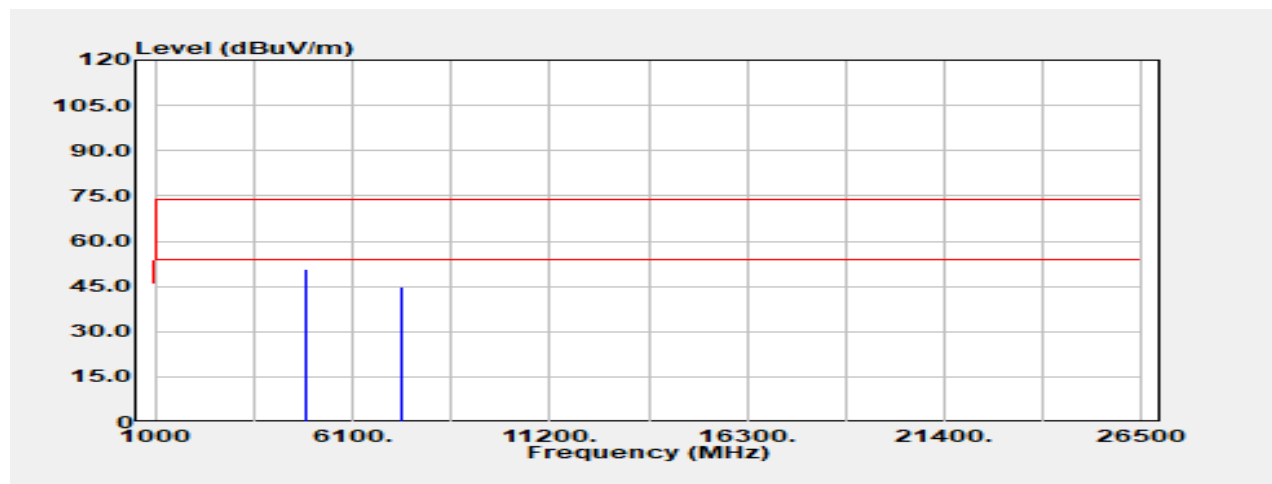


Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBUV)	Factor (dB)	Actual FS (dBUV/m)	Limit @3m (dBUV/m)	Margin (dB)
4924.00	Peak	48.33	6.53	54.86	74.00	-19.14
4924.00	Average	46.61	6.53	53.14	54.00	-0.86
7386.00	Peak	31.67	13.33	45.00	74.00	-29.00
7386.00	Average	24.43	13.33	37.76	54.00	-16.24
N/A						

Remark:

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

Test Mode	IEEE 802.11b 2462 MHz	Temp/Hum	22.9(°C)/ 65%RH
Test Item	Harmonic	Test Date	October 5, 2022
Polarize	Horizontal	Test Engineer	Ray Li
Detector	Peak / Average		



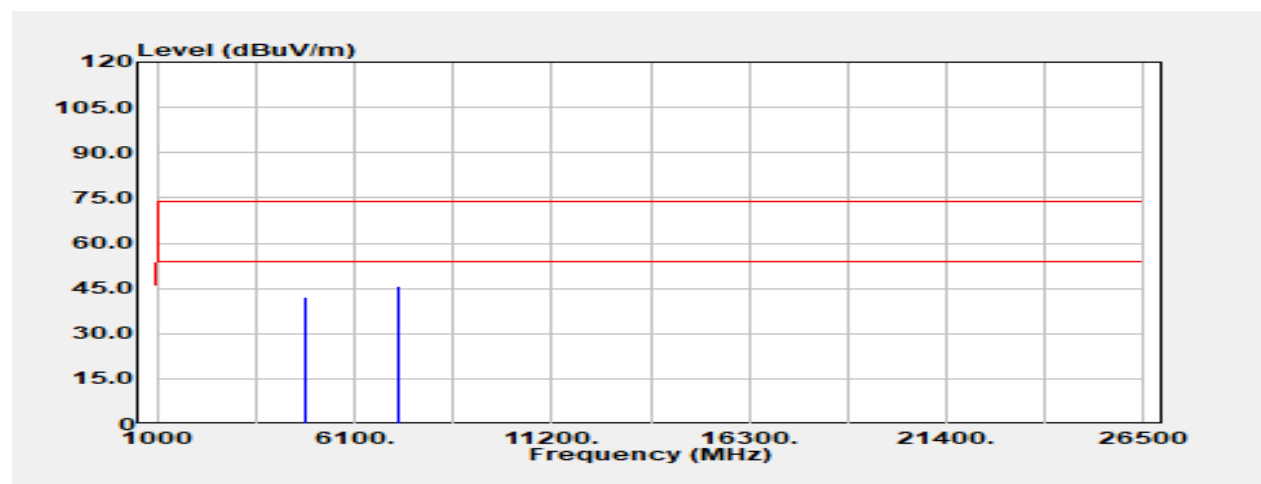
Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
4924.00	Peak	44.37	6.53	50.90	74.00	-23.10
4924.00	Average	42.60	6.53	49.13	54.00	-4.87
7386.00	Peak	31.52	13.33	44.85	74.00	-29.15
7386.00	Average	24.43	13.33	37.76	54.00	-16.24
N/A						

Remark:

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

Report No.: TMWK2209003924KR

Test Mode	IEEE 802.11g 2412 MHz	Temp/Hum	22.9(°C)/ 65%RH
Test Item	Harmonic	Test Date	October 5, 2022
Polarize	Vertical	Test Engineer	Ray Li
Detector	Peak / Average		

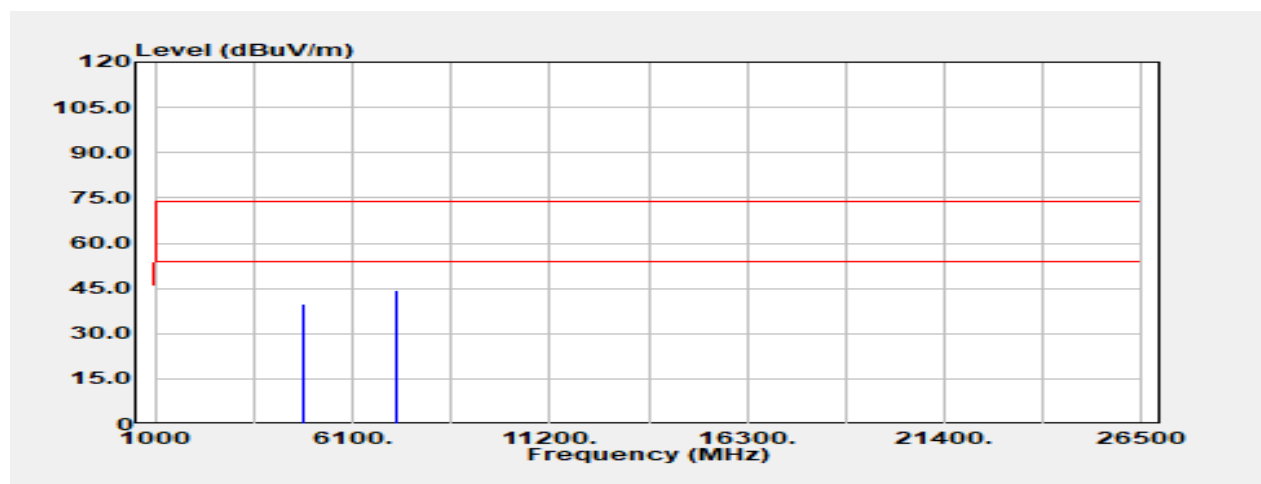


Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
4824.00	Peak	36.37	5.90	42.27	74.00	-31.73
4824.00	Average	28.88	5.90	34.78	54.00	-19.22
7236.00	Peak	32.20	13.31	45.51	74.00	-28.49
7236.00	Average	22.89	13.31	36.20	54.00	-17.80
N/A						

Remark:

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

Test Mode	IEEE 802.11g 2412 MHz	Temp/Hum	22.9(°C)/ 65%RH
Test Item	Harmonic	Test Date	October 5, 2022
Polarize	Horizontal	Test Engineer	Ray Li
Detector	Peak / Average		



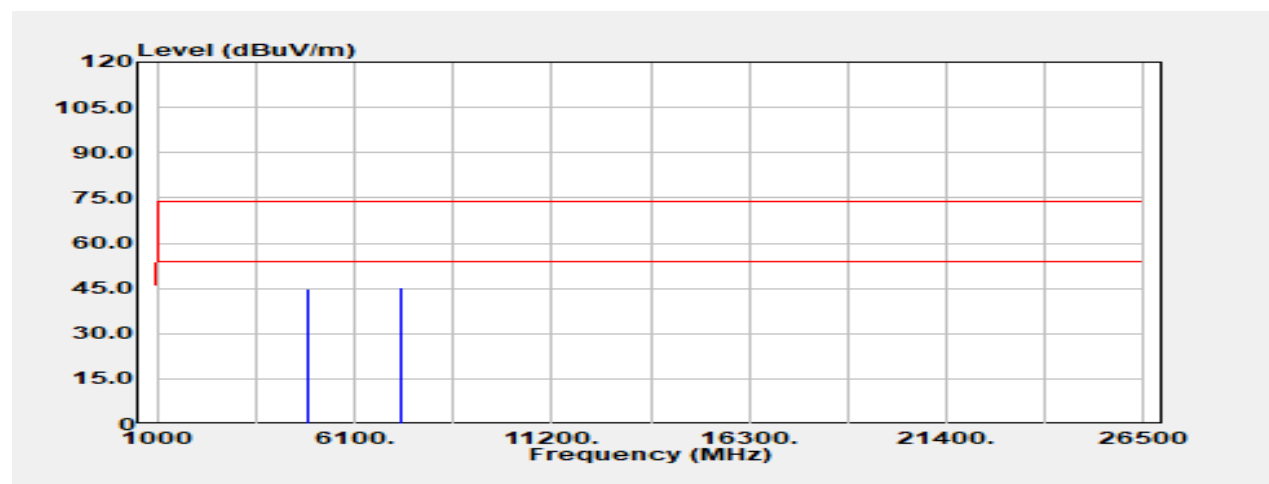
Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBµV)	Factor (dB)	Actual FS (dBµV/m)	Limit @3m (dBµV/m)	Margin (dB)
4824.00	Peak	34.02	5.90	39.92	74.00	-34.08
4824.00	Average	26.36	5.90	32.26	54.00	-21.74
7236.00	Peak	31.13	13.31	44.45	74.00	-29.55
7236.00	Average	22.86	13.31	36.17	54.00	-17.83
N/A						

Remark:

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

Report No.: TMWK2209003924KR

Test Mode	IEEE 802.11g 2437 MHz	Temp/Hum	22.9(°C)/ 65%RH
Test Item	Harmonic	Test Date	October 5, 2022
Polarize	Vertical	Test Engineer	Ray Li
Detector	Peak / Average		

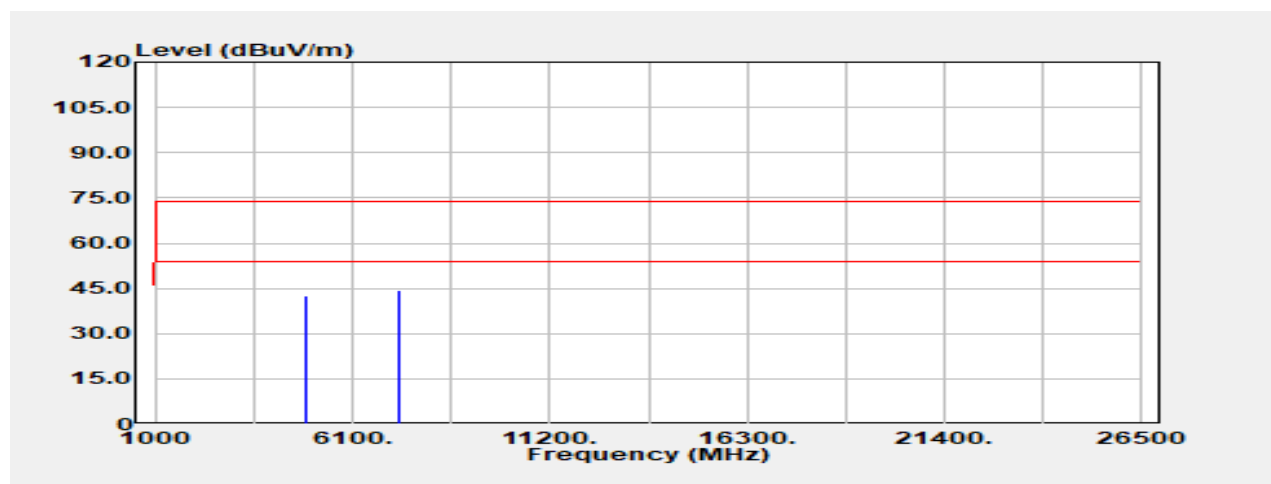


Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
4874.00	Peak	38.83	6.09	44.92	74.00	-29.08
4874.00	Average	38.15	6.09	44.24	54.00	-9.76
7311.00	Peak	31.87	13.33	45.21	74.00	-28.79
7311.00	Average	22.65	13.33	35.99	54.00	-18.01
N/A						

Remark:

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

Test Mode	IEEE 802.11g 2437 MHz	Temp/Hum	22.9(°C)/ 65%RH
Test Item	Harmonic	Test Date	October 5, 2022
Polarize	Horizontal	Test Engineer	Ray Li
Detector	Peak / Average		



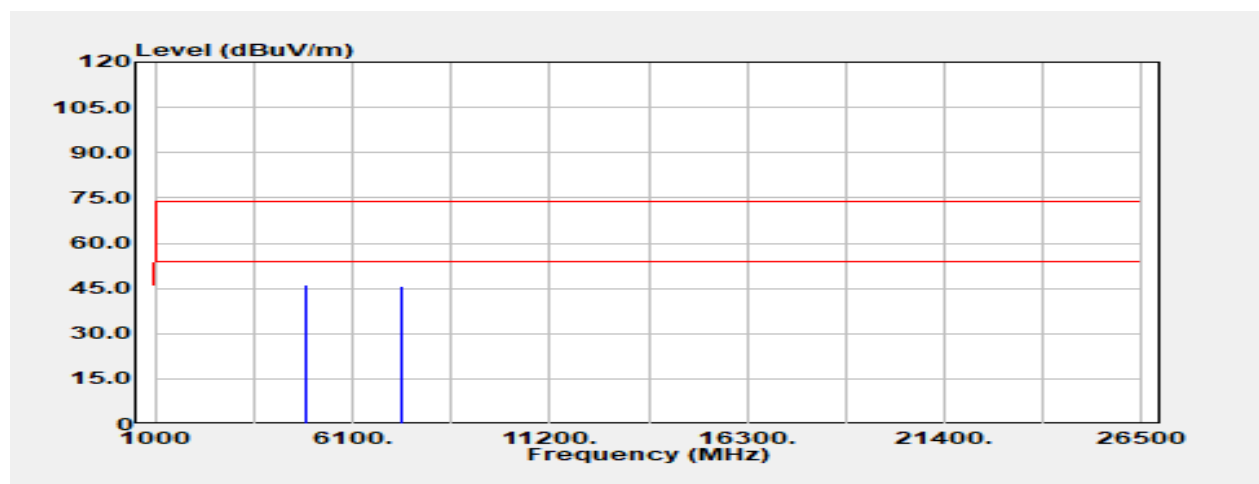
Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
4874.00	Peak	36.65	6.09	42.74	74.00	-31.26
4874.00	Average	35.60	6.09	41.69	54.00	-12.31
7311.00	Peak	31.25	13.33	44.58	74.00	-29.42
7311.00	Average	22.65	13.33	35.98	54.00	-18.02
N/A						

Remark:

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

Report No.: TMWK2209003924KR

Test Mode	IEEE 802.11g 2462 MHz	Temp/Hum	22.9(°C)/ 65%RH
Test Item	Harmonic	Test Date	October 5, 2022
Polarize	Vertical	Test Engineer	Ray Li
Detector	Peak / Average		

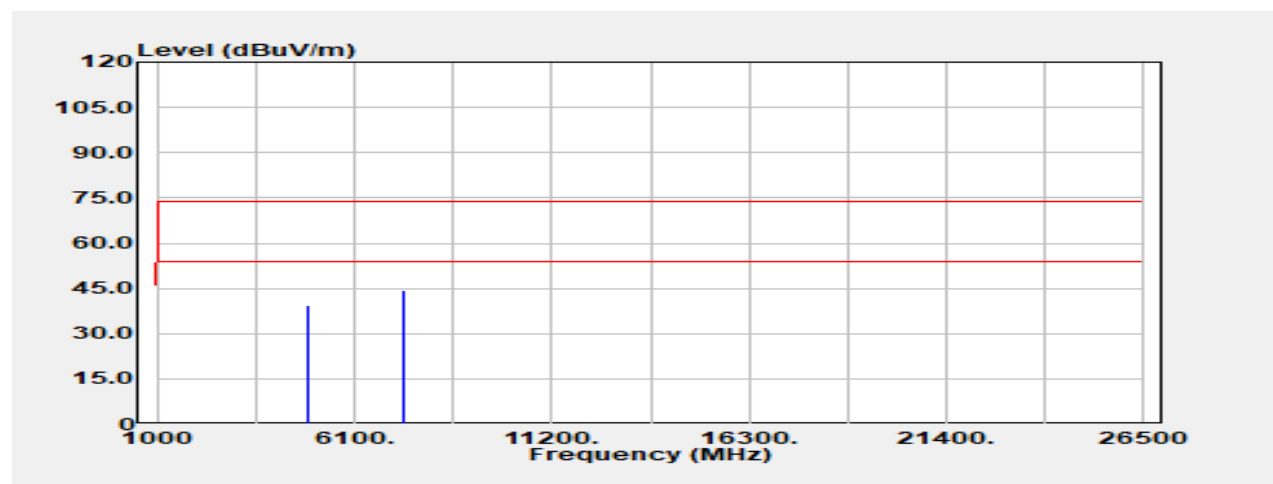


Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
4924.00	Peak	39.86	6.53	46.39	74.00	-27.61
4924.00	Average	30.03	6.53	36.56	54.00	-17.44
7386.00	Peak	32.38	13.33	45.71	74.00	-28.29
7386.00	Average	22.71	13.33	36.04	54.00	-17.96
N/A						

Remark:

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

Test Mode	IEEE 802.11g 2462 MHz	Temp/Hum	22.9(°C)/ 65%RH
Test Item	Harmonic	Test Date	October 5, 2022
Polarize	Horizontal	Test Engineer	Ray Li
Detector	Peak / Average		

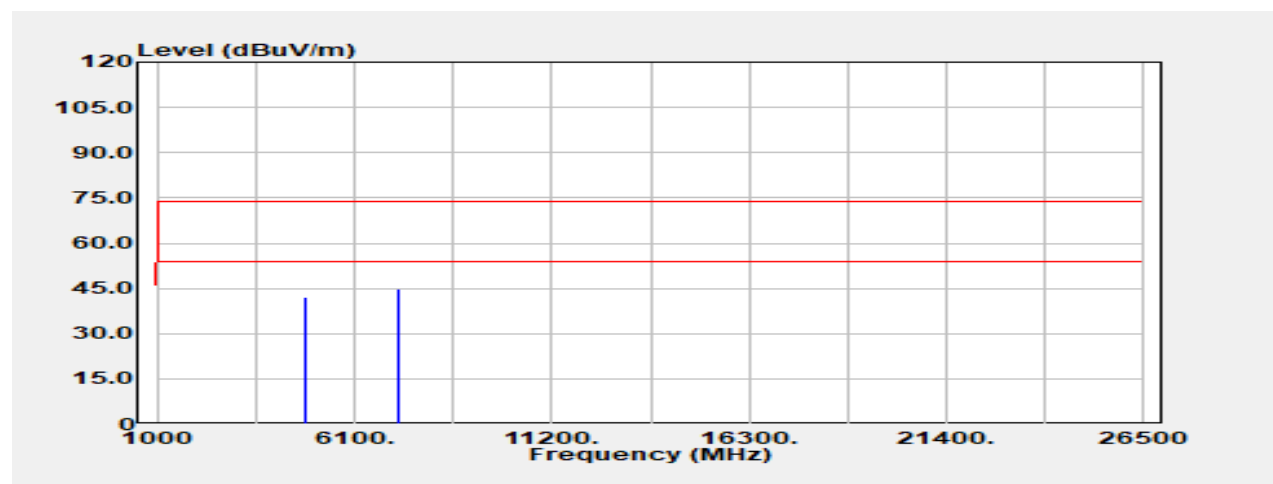


Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
4924.00	Peak	32.92	6.53	39.45	74.00	-34.55
4924.00	Average	26.73	6.53	33.26	54.00	-20.74
7386.00	Peak	31.27	13.33	44.60	74.00	-29.40
7386.00	Average	22.91	13.33	36.25	54.00	-17.75
N/A						

Remark:

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

Test Mode	IEEE 802.11n HT20 2412 MHz	Temp/Hum	22.9(°C)/ 65%RH
Test Item	Harmonic	Test Date	October 5, 2022
Polarize	Vertical	Test Engineer	Ray Li
Detector	Peak / Average		



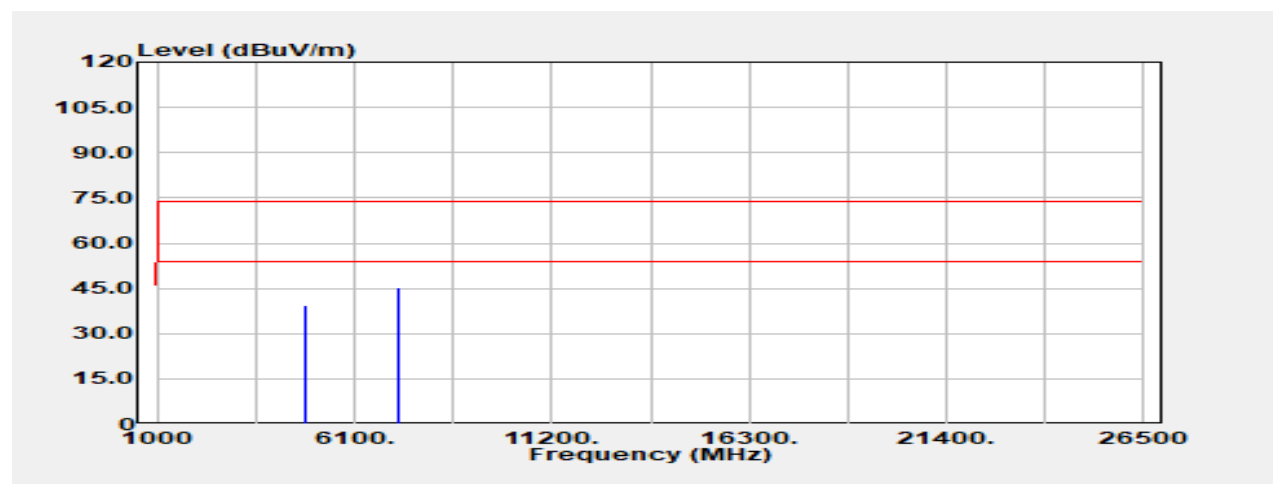
Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
4824.00	Peak	36.09	5.90	41.99	74.00	-32.01
4824.00	Average	28.47	5.90	34.36	54.00	-19.64
7236.00	Peak	31.45	13.31	44.76	74.00	-29.24
7236.00	Average	22.79	13.31	36.10	54.00	-17.90
N/A						

Remark:

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

Report No.: TMWK2209003924KR

Test Mode	IEEE 802.11n HT20 2412 MHz	Temp/Hum	22.9(°C)/ 65%RH
Test Item	Harmonic	Test Date	October 5, 2022
Polarize	Horizontal	Test Engineer	Ray Li
Detector	Peak / Average		

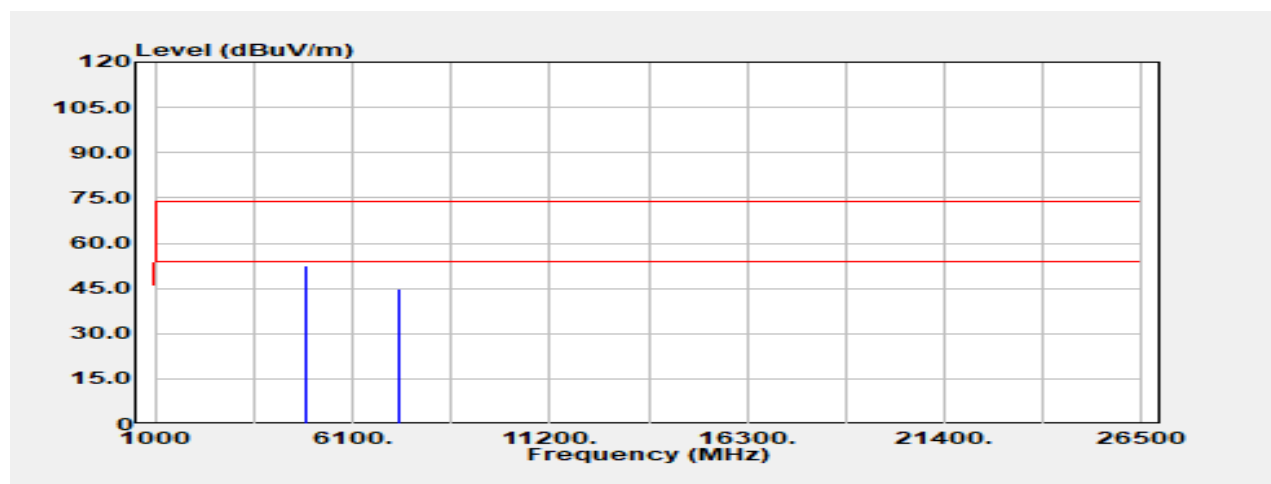


Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
4824.00	Peak	33.39	5.90	39.28	74.00	-34.72
4824.00	Average	26.93	5.90	32.83	54.00	-21.17
7236.00	Peak	31.78	13.31	45.09	74.00	-28.91
7236.00	Average	22.91	13.31	36.22	54.00	-17.78
N/A						

Remark:

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

Test Mode	IEEE 802.11n HT20 2437 MHz	Temp/Hum	22.9(°C)/ 65%RH
Test Item	Harmonic	Test Date	October 5, 2022
Polarize	Vertical	Test Engineer	Ray Li
Detector	Peak / Average		

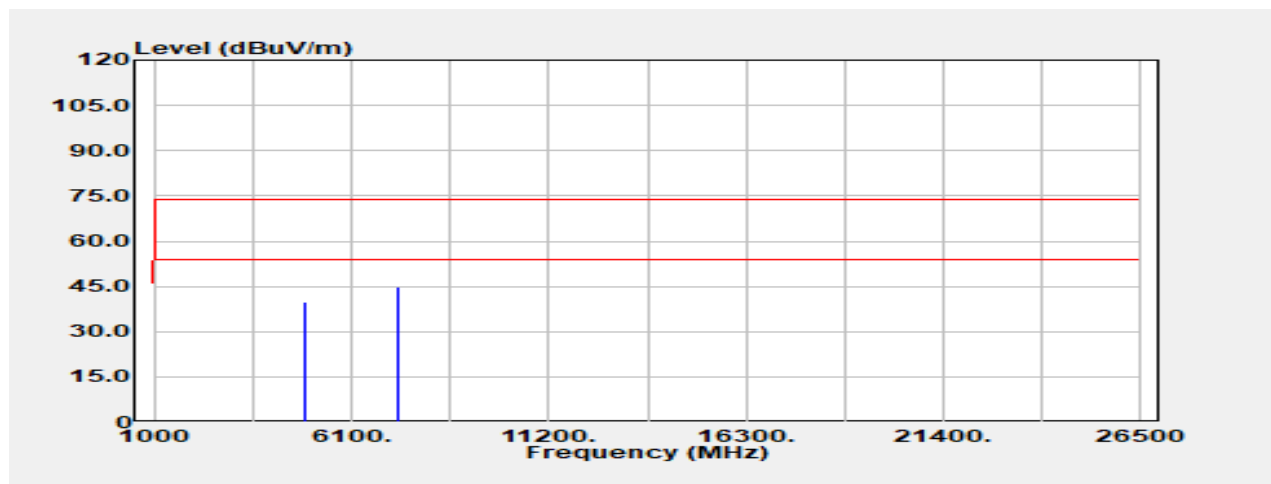


Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
4874.00	Peak	46.44	6.09	52.53	74.00	-21.47
4874.00	Average	44.70	6.09	50.79	54.00	-3.21
7311.00	Peak	31.68	13.33	45.01	74.00	-28.99
7311.00	Average	22.81	13.33	36.14	54.00	-17.86
N/A						

Remark:

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

Test Mode	IEEE 802.11n HT20 2437 MHz	Temp/Hum	22.9(°C)/ 65%RH
Test Item	Harmonic	Test Date	October 5, 2022
Polarize	Horizontal	Test Engineer	Ray Li
Detector	Peak / Average		



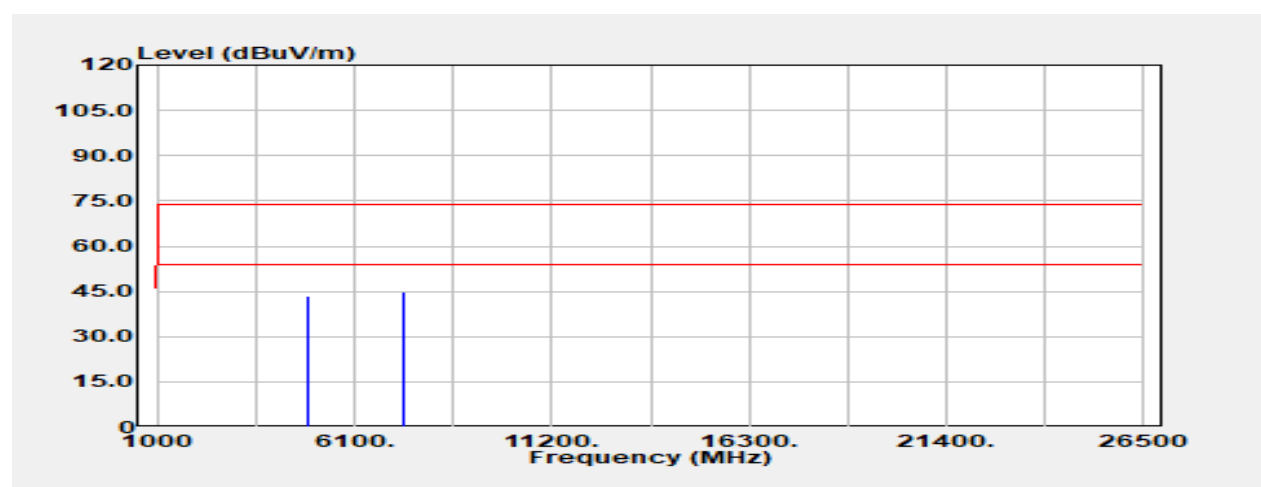
Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
4874.00	Peak	33.57	6.09	39.66	74.00	-34.34
4874.00	Average	26.15	6.09	32.24	54.00	-21.76
7311.00	Peak	31.59	13.33	44.92	74.00	-29.08
7311.00	Average	22.66	13.33	35.99	54.00	-18.01
N/A						

Remark:

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

Report No.: TMWK2209003924KR

Test Mode	IEEE 802.11n HT20 2462 MHz	Temp/Hum	22.9(°C)/ 65%RH
Test Item	Harmonic	Test Date	October 5, 2022
Polarize	Vertical	Test Engineer	Ray Li
Detector	Peak / Average		

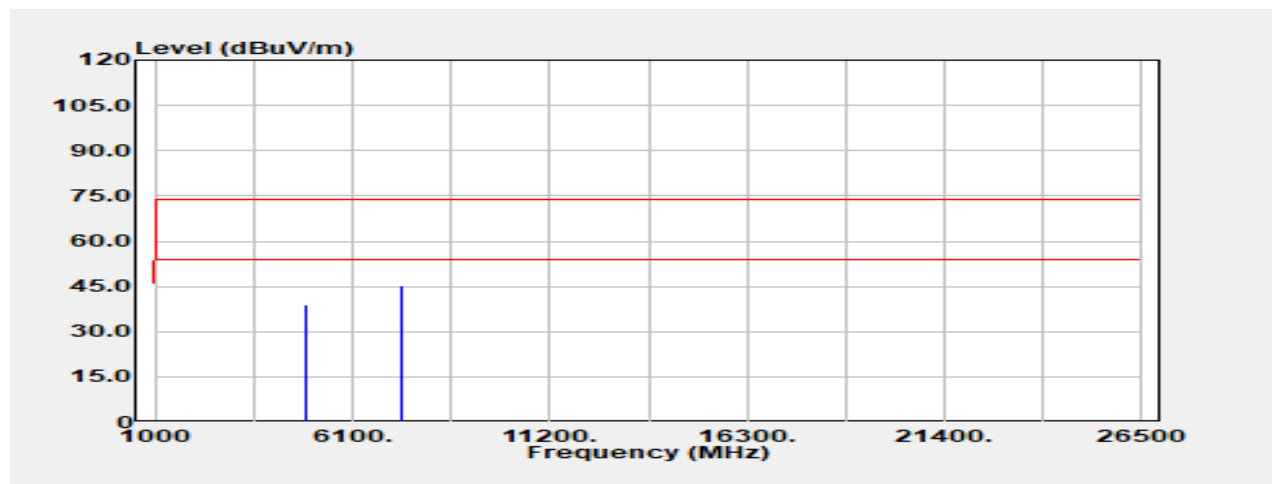


Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
4924.00	Peak	37.03	6.53	43.56	74.00	-30.44
4924.00	Average	28.91	6.53	35.43	54.00	-18.57
7386.00	Peak	31.30	13.33	44.63	74.00	-29.37
7386.00	Average	23.08	13.33	36.41	54.00	-17.59
N/A						

Remark:

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

Test Mode	IEEE 802.11n HT20 2462 MHz	Temp/Hum	22.9(°C)/ 65%RH
Test Item	Harmonic	Test Date	October 5, 2022
Polarize	Horizontal	Test Engineer	Ray Li
Detector	Peak / Average		

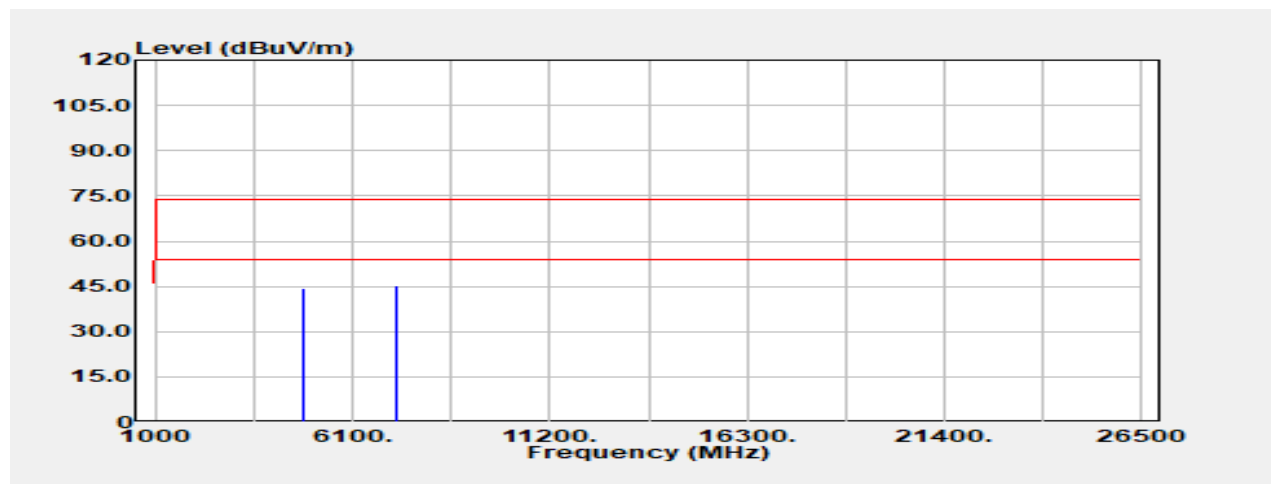


Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
4924.00	Peak	32.49	6.53	39.02	74.00	-34.98
4924.00	Average	24.08	6.53	30.61	54.00	-23.39
7386.00	Peak	31.91	13.33	45.24	74.00	-28.76
7386.00	Average	22.90	13.33	36.23	54.00	-17.77
N/A						

Remark:

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

Test Mode	IEEE 802.11n HT40 2422 MHz	Temp/Hum	22.9(°C)/ 65%RH
Test Item	Harmonic	Test Date	October 5, 2022
Polarize	Vertical	Test Engineer	Ray Li
Detector	Peak / Average		

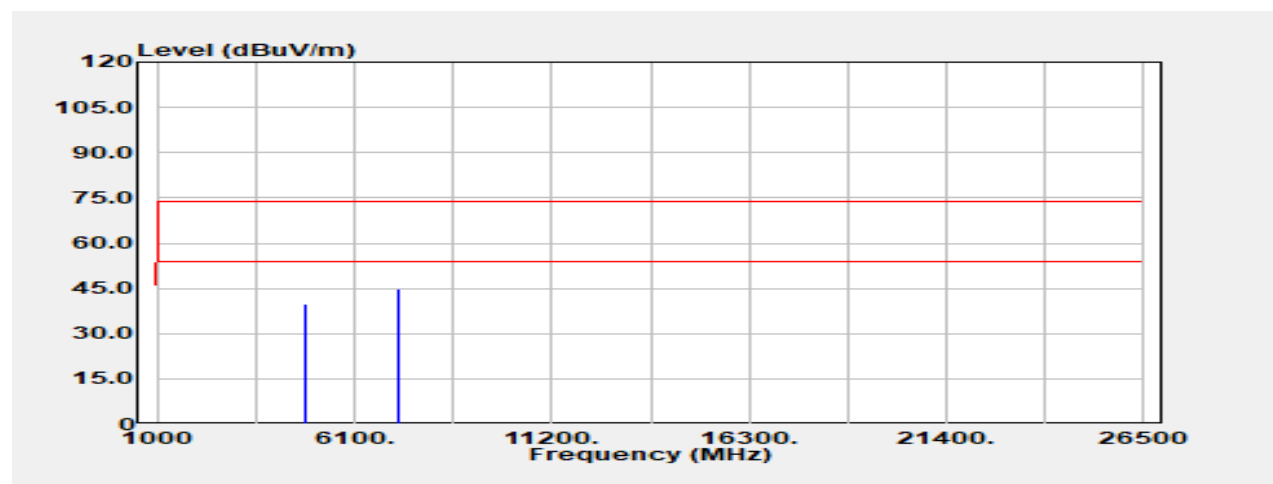


Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
4844.00	Peak	38.26	5.93	44.19	74.00	-29.81
4844.00	Average	37.00	5.93	42.93	54.00	-11.07
7266.00	Peak	31.78	13.33	45.11	74.00	-28.89
7266.00	Average	23.49	13.33	36.82	54.00	-17.18
N/A						

Remark:

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

Test Mode	IEEE 802.11n HT40 2422 MHz	Temp/Hum	22.9(°C)/ 65%RH
Test Item	Harmonic	Test Date	October 5, 2022
Polarize	Horizontal	Test Engineer	Ray Li
Detector	Peak / Average		



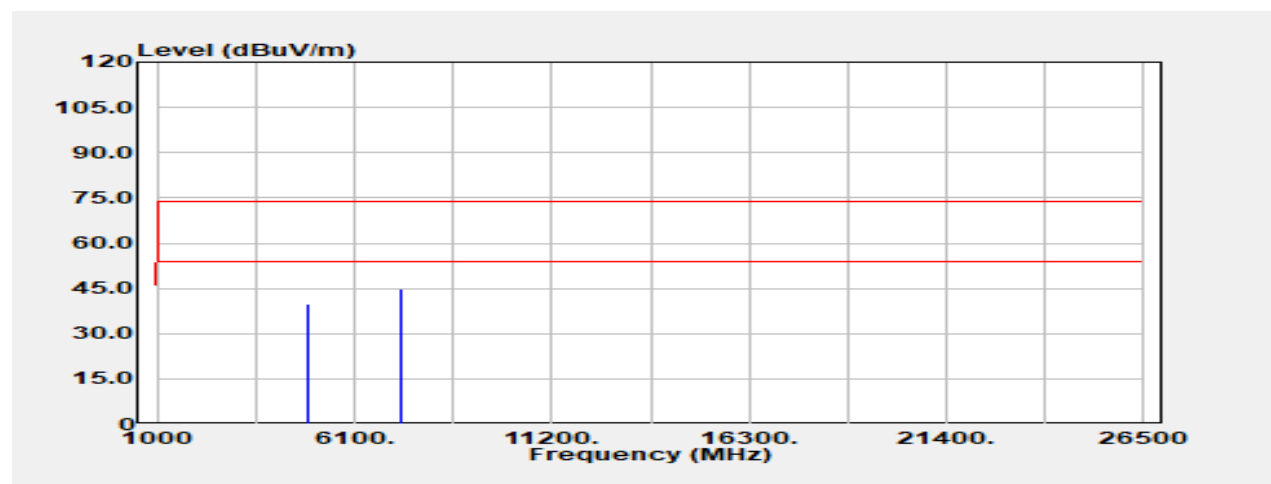
Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
4844.00	Peak	33.74	5.93	39.67	74.00	-34.33
4844.00	Average	27.73	5.93	33.66	54.00	-20.34
7266.00	Peak	31.42	13.33	44.76	74.00	-29.24
7266.00	Average	23.48	13.33	36.81	54.00	-17.19
N/A						

Remark:

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

Report No.: TMWK2209003924KR

Test Mode	IEEE 802.11n HT40 2437 MHz	Temp/Hum	22.9(°C)/ 65%RH
Test Item	Harmonic	Test Date	October 5, 2022
Polarize	Vertical	Test Engineer	Ray Li
Detector	Peak / Average		

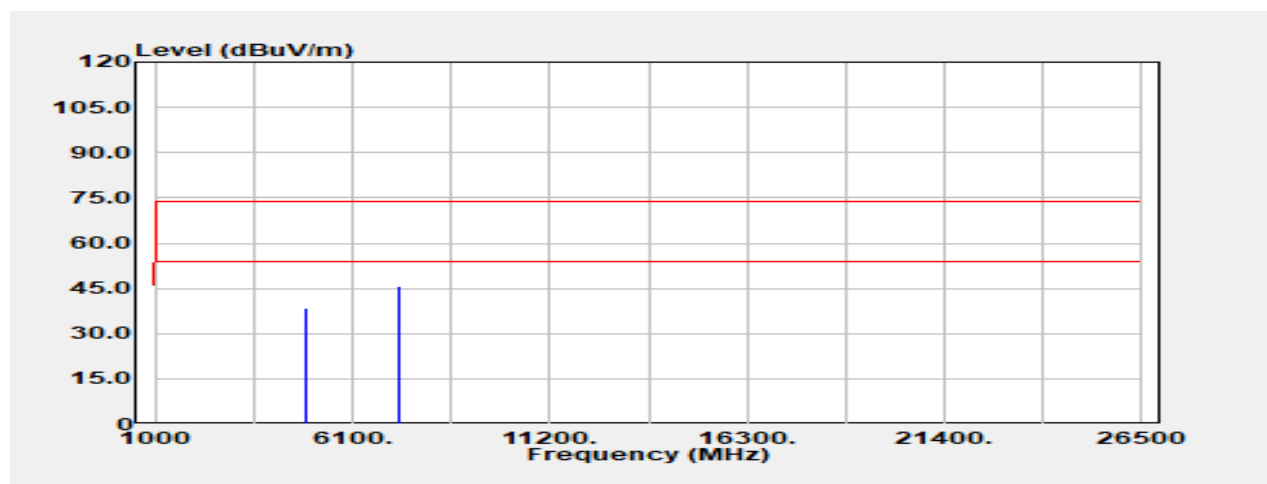


Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dB μ V)	Factor (dB)	Actual FS (dB μ V/m)	Limit @3m (dB μ V/m)	Margin (dB)
4874.00	Peak	33.83	6.09	39.92	74.00	-34.08
4874.00	Average	28.26	6.09	34.35	54.00	-19.65
7311.00	Peak	31.37	13.33	44.70	74.00	-29.30
7311.00	Average	23.35	13.33	36.68	54.00	-17.32
N/A						

Remark:

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

Test Mode	IEEE 802.11n HT40 2437 MHz	Temp/Hum	22.9(°C)/ 65%RH
Test Item	Harmonic	Test Date	October 5, 2022
Polarize	Horizontal	Test Engineer	Ray Li
Detector	Peak / Average		

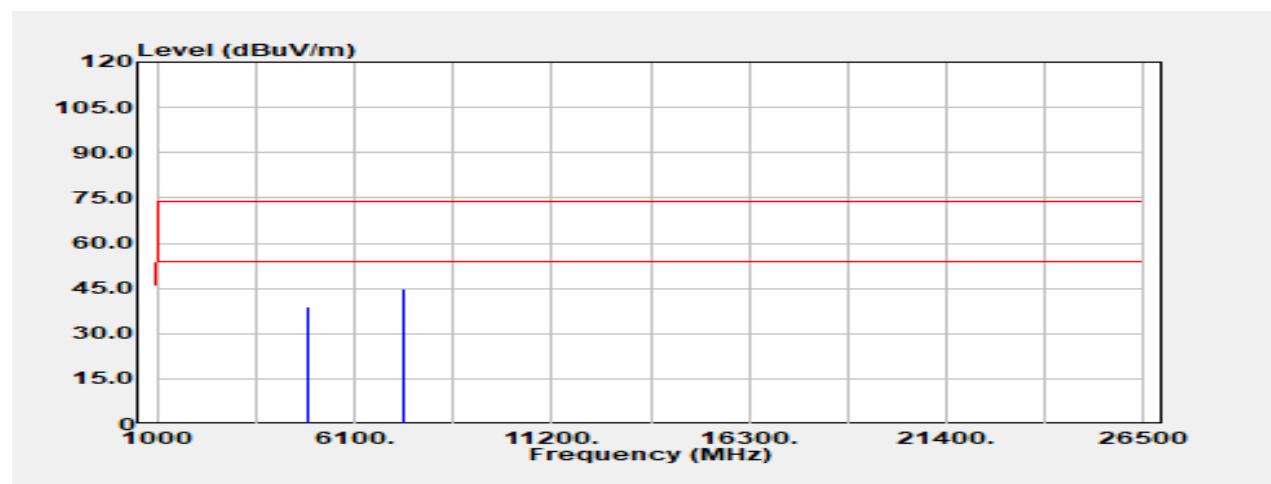


Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
4874.00	Peak	32.55	6.09	38.63	74.00	-35.37
4874.00	Average	24.99	6.09	31.08	54.00	-22.92
7311.00	Peak	32.32	13.33	45.65	74.00	-28.35
7311.00	Average	23.39	13.33	36.72	54.00	-17.28
N/A						

Remark:

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

Test Mode	IEEE 802.11n HT40 2452 MHz	Temp/Hum	22.9(°C)/ 65%RH
Test Item	Harmonic	Test Date	October 5, 2022
Polarize	Vertical	Test Engineer	Ray Li
Detector	Peak / Average		

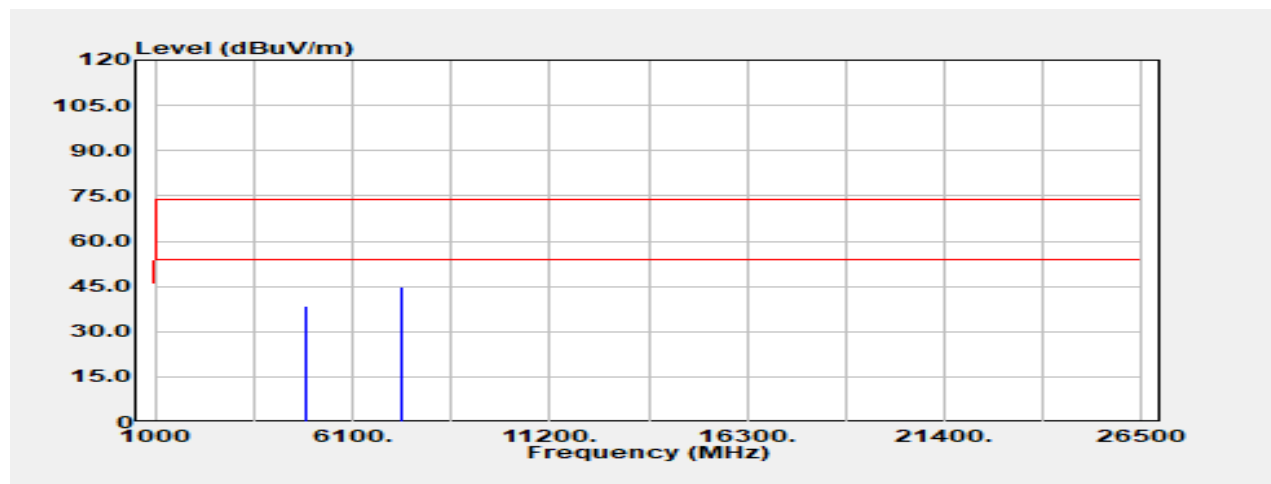


Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBμV)	Factor (dB)	Actual FS (dBμV/m)	Limit @3m (dBμV/m)	Margin (dB)
4904.00	Peak	32.59	6.30	38.89	74.00	-35.11
4904.00	Average	27.95	6.30	34.25	54.00	-19.75
7356.00	Peak	31.49	13.40	44.88	74.00	-29.12
7356.00	Average	23.37	13.40	36.77	54.00	-17.23
N/A						

Remark:

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

Test Mode	IEEE 802.11n HT40 2452 MHz	Temp/Hum	22.9(°C)/ 65%RH
Test Item	Harmonic	Test Date	October 5, 2022
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)
4904.00	Peak	32.15	6.30	38.44	74.00	-35.56
4904.00	Average	24.74	6.30	31.04	54.00	-22.96
7356.00	Peak	31.28	13.40	44.68	74.00	-29.32
7356.00	Average	23.21	13.40	36.60	54.00	-17.40
N/A						

Remark:

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

- End of Test Report -