

Project No.: TM-2404000279P  
Report No.: TMWK2404001248KR

FCC ID: SW8NDW6020Z1  
IC: 11748A-NDW6020Z1

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Rev.: 00

## RADIO TEST REPORT

### FCC 47 CFR PART 15 SUBPART E

### INDUSTRY CANADA RSS-247

<b>Test Standard</b>	<b>FCC Part 15.407</b> <b>IC RSS-247 issue 3 and IC RSS-GEN issue 5</b>
<b>Product name</b>	<b>Wireless Display RX Dongle</b>
<b>Brand Name</b>	<b>GOOD WAY</b>
<b>Model</b>	<b>NDW6020Z1</b>
<b>Test Result</b>	<b>Pass</b>
<b>Statements of Conformity</b>	<b>Determination of compliance is based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.</b>

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

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

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

Approved by:



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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 12, 2024	Initial Issue	ALL	Allison Chen

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## 1. GENERAL INFORMATION

### 1.1 EUT INFORMATION

<b>FCC Applicant &amp; Manufacturer</b>	Good Way Technology Co., Ltd. 3F, No. 135, Ln. 235, Baociao Rd., Sindian Dist., New Taipei City 231, Taiwan
<b>IC Applicant &amp; Manufacturer</b>	GOOD WAY TECHNOLOGY CO., LTD. 3F, No. 135, Ln. 235, Baociao Rd., Sindian Dist., New Taipei City 231, Taiwan
<b>Equipment</b>	Wireless Display RX Dongle
<b>Model</b>	NDW6020Z1
<b>Model Discrepancy</b>	N/A
<b>Brand Name</b>	GOOD WAY
<b>Received Date</b>	April 23, 2024
<b>Date of Test</b>	May 15~30, 2024
<b>Power Supply</b>	Power from host system. (DC 5V)
<b>H/W Version</b>	V3.21
<b>S/W Version</b>	22495041
<b>Serial number</b>	CO0309094

**Remark:**

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

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## 1.2 EUT CHANNEL INFORMATION

Frequency Range	<b>UNII-1</b>	
	IEEE 802.11a	5180 ~ 5240 MHz
	IEEE 802.11n HT 20	5180 ~ 5240 MHz
Modulation Type	1. IEEE 802.11a mode: OFDM 2. IEEE 802.11n HT 20 mode: OFDM	

**Remark:**

1. Refer as ANSI C63.10: 2013 clause 5.6.1 Table 4 for test channels
2. For Canada the EUT Frequency Range 5600~5650MHz will be disabled.

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

## 1.3 ANTENNA INFORMATION

Antenna Specification	<input type="checkbox"/> PIFA <input checked="" type="checkbox"/> PCB <input type="checkbox"/> Dipole <input type="checkbox"/> Coils
Antenna Gain	Brand: RedbirdTek Model: ANT000087 Gain: 2 dBi
Antenna connector	N/A

**Notes:**

1. Antenna must use a unique type of connector to attach to the EUT. So the EUT complies with the requirements of §15.203 and RSS-GEN 6.8.

## 1.4 MEASUREMENT UNCERTAINTY

PARAMETER	UNCERTAINTY
AC Powerline Conducted Emission	± 2.213 dB
Channel Bandwidth	± 2.7 %
RF output power (Spectrum)	± 2.440 dB
Power Spectral density	± 2.739 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.

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

CAB identifier: TW1309

Test site	Test Engineer	Remark
AC Conduction Room	Tony Chao	-
Radiation	Ray Li	-
RF Conducted	Marco Chan	-

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

## 1.6 INSTRUMENT CALIBRATION

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
EXA Signal Analyzer	Keysight	N9010A	MY54200716	2023-10-13	2024-10-12
<b>Software</b>	Radio Test Software Ver. 21				

966A_Radiated Wi-Fi 5GHz					
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
Active Loop Antenna	SCHWARZBEC K	FMZB 1513-60	1513-60-028	2023-12-13	2024-12-12
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	MICRO TRONICS	HPM13195	3	2024-01-23	2025-01-22
Horn Antenna	SCHWARZBEC K	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
<b>Software</b>	e3 V9-210616c				

**Remark:**

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

AC Mains Conduction					
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due
EMI Test Receiver	R&S	ESCI	100064	2023-06-07	2024-06-06
LISN	TESEQ	LN2-16N	22012	2024-02-29	2025-02-27
Cable	EMCI	CFD300-NL	CERF	2023-06-27	2024-06-26
<b>Software</b>	e3 V6-110812				

**Remark:**

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

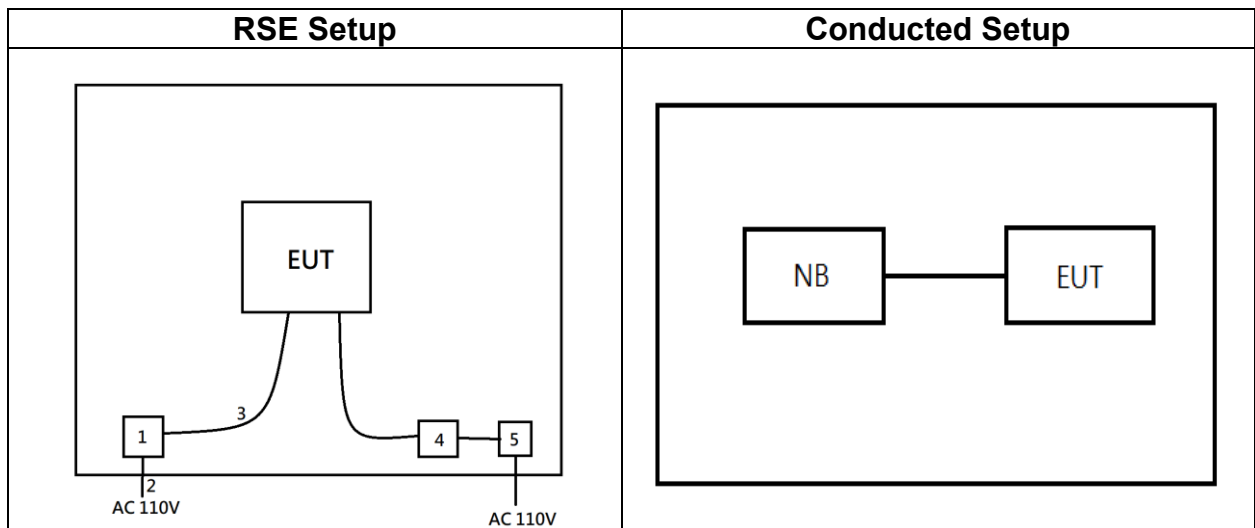


## 1.7 SUPPORT AND EUT ACCESSORIES EQUIPMENT

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(D)	Lenovo	ThinkPad X260	N/A	N/A	N/A
2	Adapter	Lenovo	ADLX45DLC3A	N/A	N/A	N/A
3	USB Cable	N/A	N/A	N/A	N/A	N/A
4	Monitor	CHICHIAU	1302	N/A	N/A	N/A
5	Adapter	deevan	DSA-24PFS-12L FUS 120200	N/A	N/A	N/A
6	NB(B)	Lenovo	T470	N/A	N/A	N/A
7	Screen	ASUS	VE278	N/A	N/A	N/A

## 1.8 TEST SETUP DIAGRAM



## 1.9 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 15.407, KDB 789033 D02, RSS-247 Issue 3 and RSS-GEN Issue 6.

## 2. TEST SUMMARY

FCC Standard Sec.	IC Standard Sec.	Chapter	Test Item	Result
15.203	RSS-Gen (6.8)	1.3	Antenna Requirement	Pass
15.207	RSS-Gen (8.8)	4.1	AC Conducted Emission	Pass
15.407(a)	-	4.2	26dB Bandwidth	Pass
15.407(e)	RSS-247(6.2.4.1)	4.2	6dB Bandwidth	Pass
2.1049	RSS-Gen (6.7)	4.2	Occupied Bandwidth (99%)	Pass
15.407(a)	RSS-247(6.2.1.1)	4.3	Output Power Measurement	Pass
15.407(a)	RSS-247(6.2.1.1)	4.4	Power Spectral Density	Pass
15.407(b) 15.205	RSS-247(6.2.1.2)	4.5	Radiation Band Edge	Pass
15.407(b) 15.205	RSS-247(6.2.1.2)	4.5	Radiation Spurious Emission	Pass

### 3. DESCRIPTION OF TEST MODES

#### 3.1 THE WORST MODE OF OPERATING CONDITION

<p>Operation mode</p>	<p>1. IEEE 802.11a mode: 6Mbps 2. IEEE 802.11n HT 20 mode: MCS0</p>								
<p>Operating Frequency Range &amp; Number of Channels</p>	<table border="1"> <thead> <tr> <th></th> <th>Mode</th> <th>Frequency Range (MHz)</th> </tr> </thead> <tbody> <tr> <td rowspan="2">U-NII-1</td> <td>IEEE 802.11a</td> <td>5180, 5220, 5240</td> </tr> <tr> <td>IEEE 802.11n HT 20</td> <td>5180, 5220, 5240</td> </tr> </tbody> </table>		Mode	Frequency Range (MHz)	U-NII-1	IEEE 802.11a	5180, 5220, 5240	IEEE 802.11n HT 20	5180, 5220, 5240
	Mode	Frequency Range (MHz)							
U-NII-1	IEEE 802.11a	5180, 5220, 5240							
	IEEE 802.11n HT 20	5180, 5220, 5240							

**Remark:**

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

### 3.2 THE WORST MODE OF MEASUREMENT

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

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

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

Remark:

1. The worst mode was record in this test report.
2. 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.
3. 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

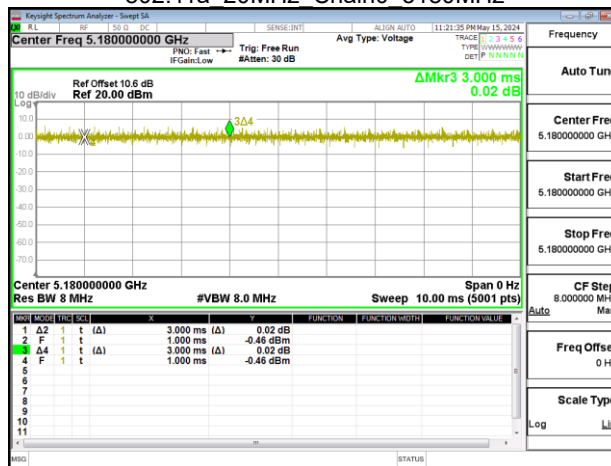
Report No.: TMWK2404001248KR

### 3.3 EUT DUTY CYCLE

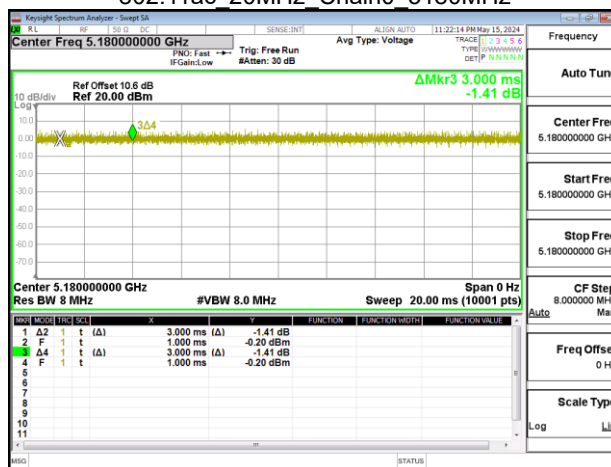
Temperature: 20.3 ~ 24°C      Test date: May 15~30, 2024  
Humidity: 56 ~ 64% RH      Tested by: Marco Chan

Mode	Duty Cycle (%) =Ton / (Ton+Toff)	Duty Factor (dB) =10*log ( 1/Duty Cycle )	1/T (kHz)	VBW setting (kHz)
802.11a	100.00	0.00	0.00	0.01
802.11n_20	100.00	0.00	0.00	0.01

802.11a 20MHz Chain0 5180MHz



802.11ac 20MHz Chain0 5180MHz



## 4. TEST RESULT

### 4.1 AC POWER LINE CONDUCTED EMISSION

#### 4.1.1 Test Limit

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

Frequency Range (MHz)	Limits(dB $\mu$ 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

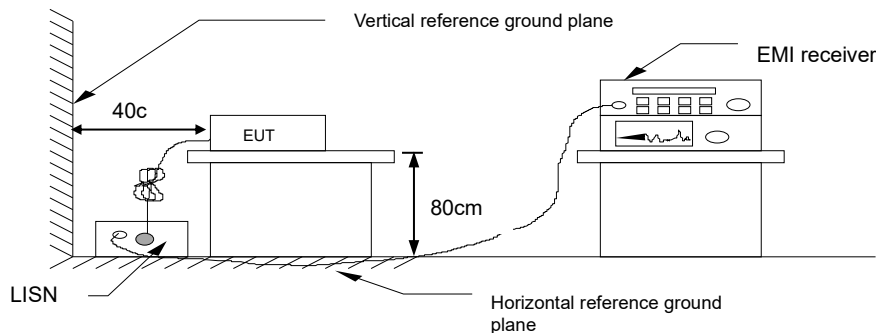
\* Decreases with the logarithm of the frequency.

#### 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



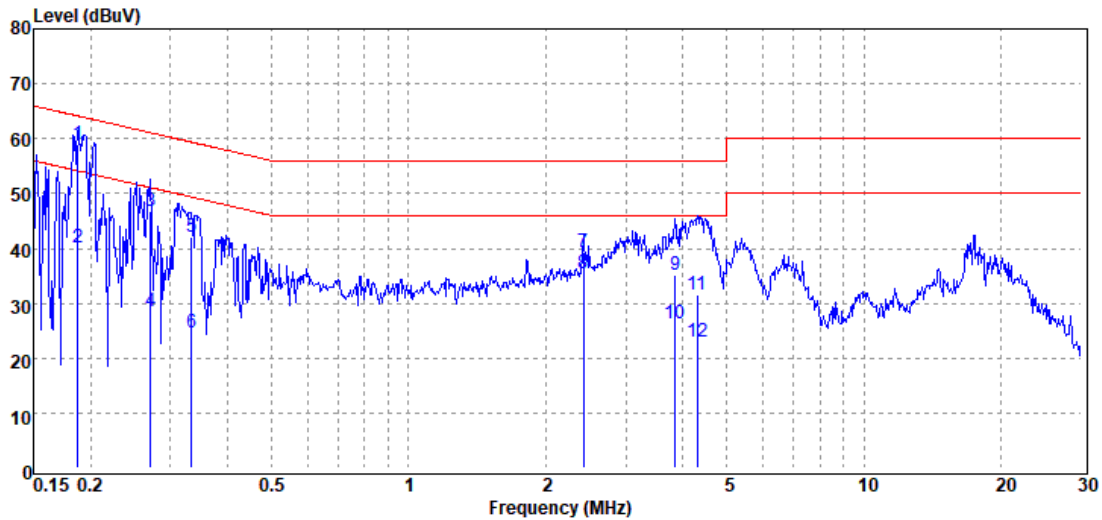
#### 4.1.4 Test Result

**Pass.**

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## Test Data

Project No	: TM-2404000279P	Test Date	: 2024-05-22
Operation Mode	: 5G	Temp./Humi.	: 24.3°C / 54%
Test Chamber	: Conduction	Engineer	: Tony.Chao
Probe	: LINE	Test Voltage	: AC 120V/60Hz
Note	:		



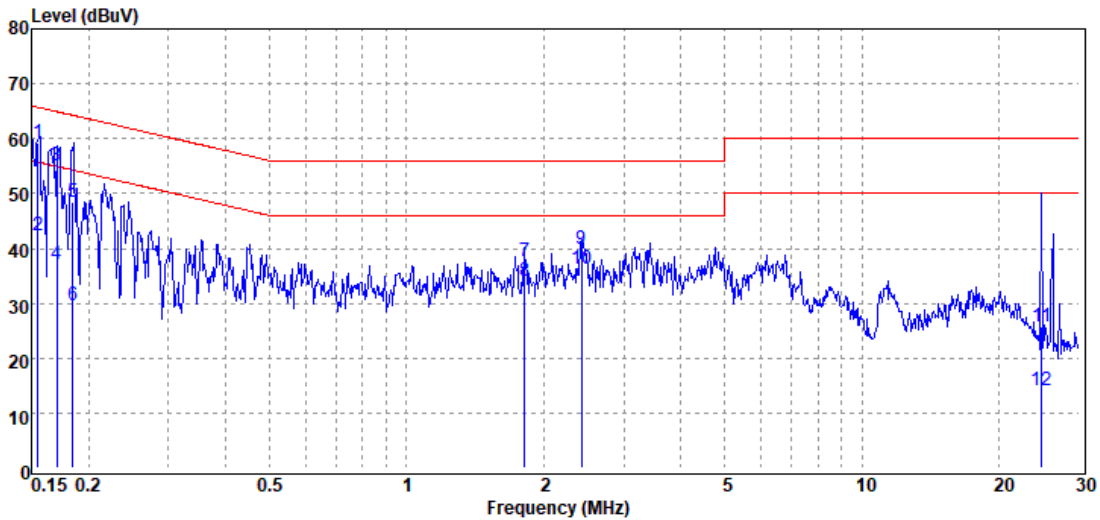
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dB $\mu$ V	Factor dB	Actual FS dB $\mu$ V	Limit dB $\mu$ V	Margin dB
0.188	QP	58.79	0.15	58.94	64.14	-5.20
0.188	Average	40.12	0.15	40.27	54.14	-13.87
0.271	QP	46.72	0.15	46.87	61.09	-14.22
0.271	Average	28.31	0.15	28.46	51.09	-22.63
0.334	QP	41.94	0.15	42.09	59.36	-17.27
0.334	Average	24.45	0.15	24.60	49.36	-24.76
2.420	QP	38.96	0.24	39.20	56.00	-16.80
2.420	Average	35.29	0.24	35.53	46.00	-10.47
3.853	QP	34.91	0.26	35.17	56.00	-20.83
3.853	Average	25.95	0.26	26.21	46.00	-19.79
4.310	QP	31.23	0.27	31.50	56.00	-24.50
4.310	Average	22.63	0.27	22.90	46.00	-23.10

Note: 1. Actual FS= Spectrum Read Level + Factor

Note: 2. Margin= Actual FS - Limit

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Project No	: TM-2404000279P	Test Date	: 2024-05-22
Operation Mode	: 5G	Temp./Humi.	: 24.3°C / 54%
Test Chamber	: Conduction	Engineer	: Tony.Chao
Probe	: NEUTRAL	Test Voltage	: AC 120V/60Hz
Note	:		



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBuV	Factor dB	Actual FS dBuV	Limit dBuV	Margin dB
0.155	QP	58.91	0.20	59.11	65.72	-6.61
0.155	Average	42.14	0.20	42.34	55.72	-13.38
0.171	QP	54.95	0.19	55.14	64.92	-9.78
0.171	Average	36.95	0.19	37.14	54.92	-17.78
0.185	QP	48.37	0.20	48.57	64.28	-15.71
0.185	Average	29.52	0.20	29.72	54.28	-24.56
1.817	QP	37.29	0.25	37.54	56.00	-18.46
1.817	Average	33.86	0.25	34.11	46.00	-11.89
2.425	QP	39.58	0.28	39.86	56.00	-16.14
2.425	Average	36.11	0.28	36.39	46.00	-9.61
24.859	QP	25.19	0.57	25.76	60.00	-34.24
24.859	Average	13.50	0.57	14.07	50.00	-35.93

Note: 1. Actual FS= Spectrum Read Level + Factor

Note: 2. Margin= Actual FS - Limit



## 4.2 26DB BANDWIDTH AND OCCUPIED BANDWIDTH(99%)

### 4.2.1 Test Limit

**26 dB Bandwidth** : For reporting purposes only.

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

### 4.2.2 Test Procedure

#### 26dB

1. This measurement setting are specified in section D of KDB 789033 D02 General UNII Test Procedures New Rules v02r01.
2. Set RBW: approximately 1% of the emission bandwidth.
3. Set the VBW>RBW.
4. Detector = Peak.
5. Trace mode = max hold.
6. Measure the maximum width of the emission that is 26dB down from the peak of the emission. Compare this with the RBW setting of the analyser. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

#### 99%

1. This measurement setting are specified in section D of KDB 789033 D02 General UNII Test Procedures New Rules v02r01.
2. Set center frequency to the nominal EUT channel center frequency.
3. Set span = 1.5 times to 5.0 times the OBW.
4. Set RBW = 1 % to 5% of the OBW.
5. Set VBW  $\geq$  3 xRBW

### 4.2.3 Test Setup

Please refer to section 1.8.

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#### 4.2.4 Test Result

Temperature: 20.3 ~ 24°C      Test date: May 15~30, 2024  
Humidity: 56 ~ 64% RH      Tested by: Marco Chan

##### Occupied Bandwidth(99%)

###### 802.11a\_Ch0

Frequency (MHz)	99% BW (MHz)	10 Log (B) (dB)
5180	16.806	12.250
5220	17.964	12.540
5240	18.016	12.560

###### 802.11n\_HT20\_Ch0

Frequency (MHz)	99% BW (MHz)	10 Log (B) (dB)
5180	19.181	12.830
5220	18.556	12.680
5240	18.268	12.620

**26 dB Bandwidth**

**802.11a\_Ch0**

Freq. (MHz)	26dB BW (MHz)	10 Log (B) (dB)
5180	25.69	14.100
5220	29.62	14.720
5240	29.97	14.770

**802.11a\_Ch0**

Freq. (MHz)	Measured Freq. (MHz)	Limit (MHz)
5240	5248.3182	< 5250

**802.11n\_HT20\_Ch0**

Freq. (MHz)	26dB BW (MHz)	10 Log (B) (dB)
5180	29.82	14.750
5220	29.37	14.680
5240	29.76	14.740

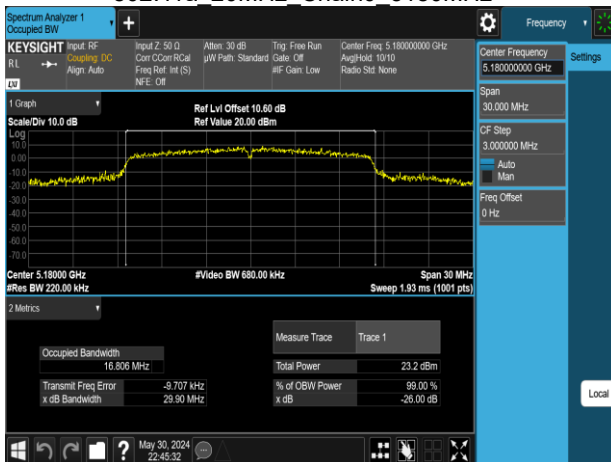
**802.11n\_HT20\_Ch0**

Freq. (MHz)	Measured Freq. (MHz)	Limit (MHz)
5240	5248.8481	< 5250

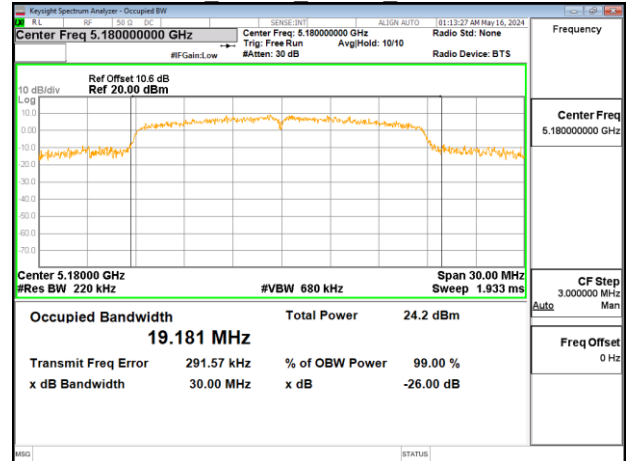
Report No.: TMWK2404001248KR

## Test Data Occupied Bandwidth(99%)

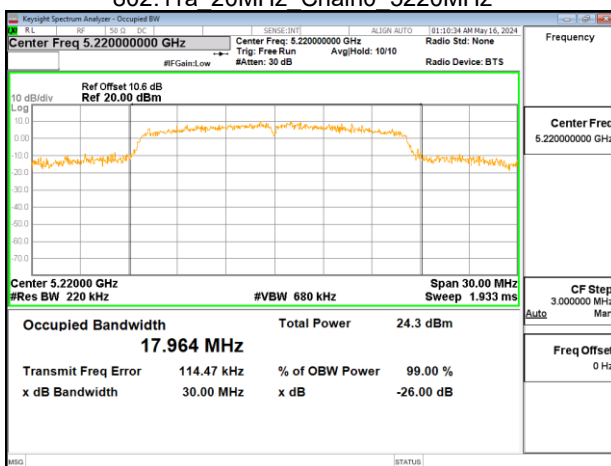
802.11a 20MHz Chain0 5180MHz



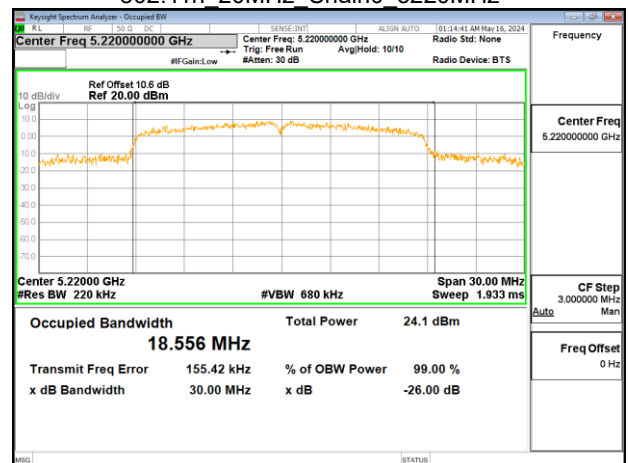
802.11n 20MHz Chain0 5180MHz



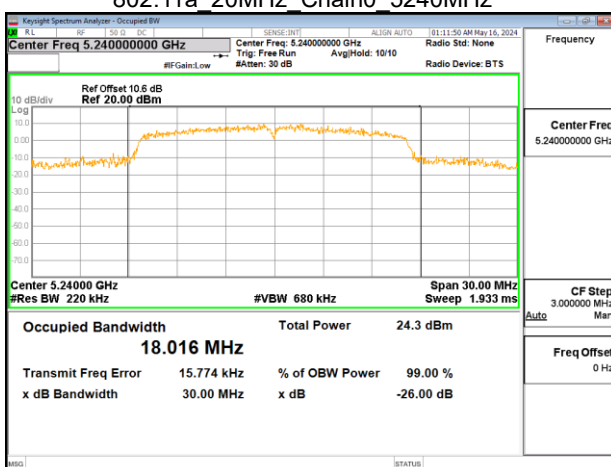
802.11a 20MHz Chain0 5220MHz



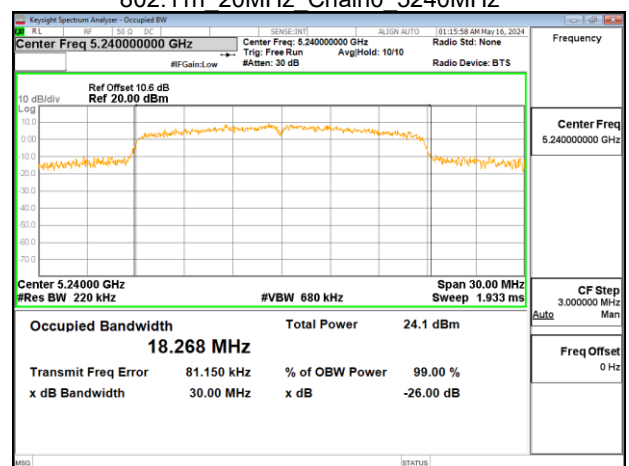
802.11n 20MHz Chain0 5220MHz



802.11a 20MHz Chain0 5240MHz



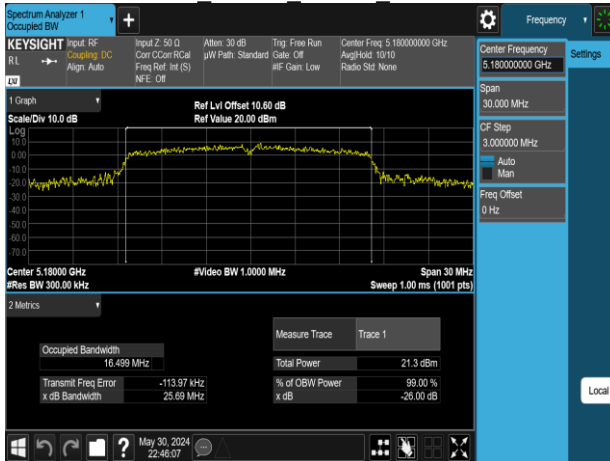
802.11n 20MHz Chain0 5240MHz



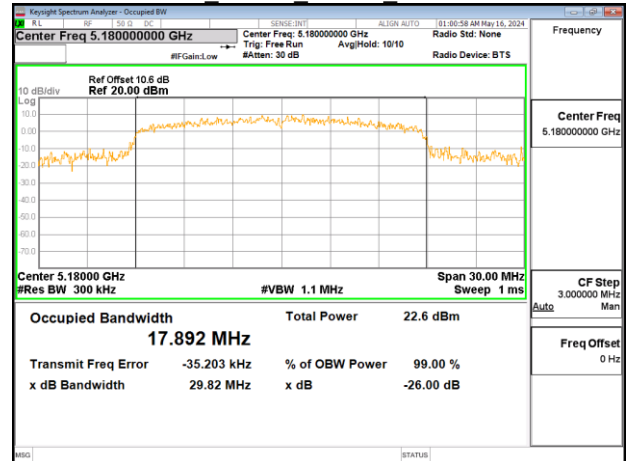
Report No.: TMWK2404001248KR

## Test Data 26 dB Bandwidth

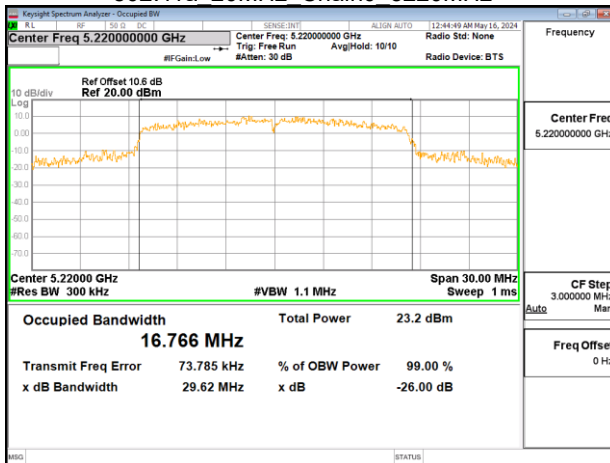
802.11a 20MHz Chain0 5180MHz



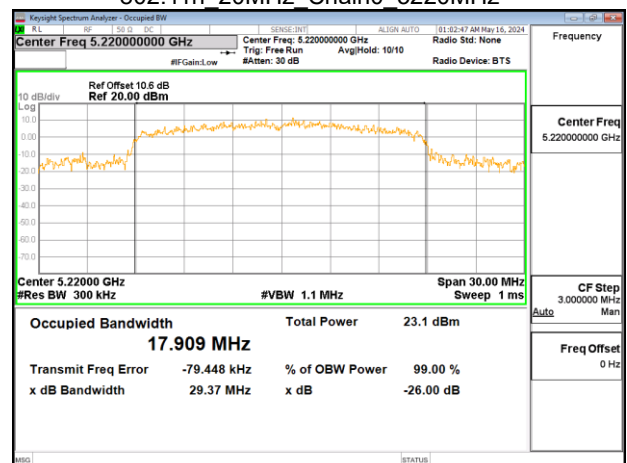
802.11n 20MHz Chain0 5180MHz



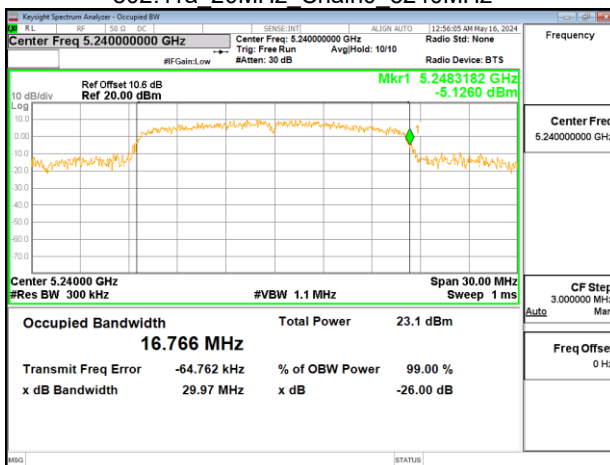
802.11a 20MHz Chain0 5220MHz



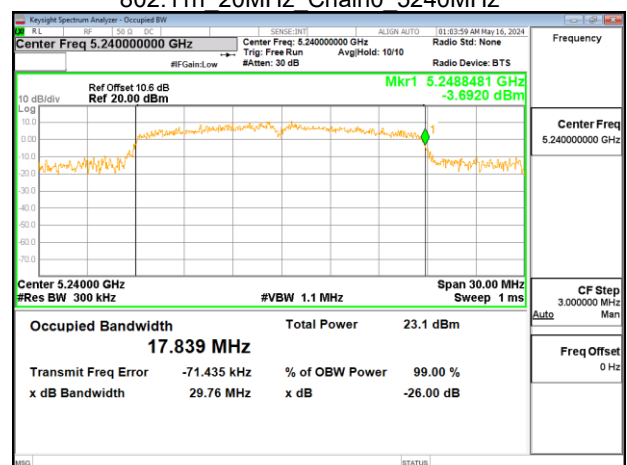
802.11n 20MHz Chain0 5220MHz



802.11a 20MHz Chain0 5240MHz



802.11n 20MHz Chain0 5240MHz



Report No.: TMWK2404001248KR

## 4.3 OUTPUT POWER MEASUREMENT

### 4.3.1 Test Limit

According to §15.407 (a)(1),

**FCC:**

#### UNII-1 :

(iv) For client devices, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

UNII-1 Limit	<input checked="" type="checkbox"/> Antenna not exceed 6 dBi : 24dBm <input type="checkbox"/> Antenna with DG greater than 6 dBi : [Limit = 24 – (DG – 6)]
--------------	--

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According to RSS-247 section 6.2.1.1

**UNII-1 :**

For OEM devices installed in vehicles, the maximum e.i.r.p. shall not exceed 30 mW or  $1.76 + 10 \log_{10}B$ , dBm, whichever is less. Devices shall implement transmitter power control (TPC) in order to have the capability to operate at least 3 dB below the maximum permitted e.i.r.p. of 30 mW.

For other devices, the maximum e.i.r.p. shall not exceed 200 mW or  $10 + 10 \log_{10}B$ , dBm, whichever power is less. B is the 99% emission bandwidth in megahertz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

UNII-1 Limit	<input checked="" type="checkbox"/> 200mW or $10 + 10 \log_{10}B$ for IC <input type="checkbox"/> Antenna with DG greater than 6 dBi : [Limit = $30 - (DG - 6)$ ]
--------------	---

**4.3.2 Test Procedure**

Test method Refer as KDB 789033 D02, Section E.3.b for BW 20MHz, 40MHz and 80MHz, E.2.b for BW 160MHz.

1. The EUT RF output connected to the power meter or spectrum 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 Average output power. in the test report.

**4.3.3 Test Setup**

Please refer to section 1.8.

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### 4.3.4 Test Result

Temperature: 20.3 ~ 24°C      Test date: May 15~30, 2024  
Humidity: 56 ~ 64% RH      Tested by: Marco Chan

#### Conducted output power :

##### For FCC:

802.11a\_Ch0

CH	Frequency (MHz)	Data Rate	Power Setting	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
36	5180	6	109	79.616	19.01	23.98	PASS
44	5220	6	112	92.257	19.65	23.98	PASS
48	5240	6	113	94.842	<b>19.77</b>	23.98	PASS

802.11n\_HT20\_Ch0

CH	Frequency (MHz)	Data Rate	Power Setting	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
36	5180	MCS0	112	85.310	19.31	23.98	PASS
44	5220	MCS0	113	95.940	<b>19.82</b>	23.98	PASS
48	5240	MCS0	113	94.189	19.74	23.98	PASS



**For IC:**

802.11a\_Ch0

CH	Frequency (MHz)	Data Rate	Power Setting	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
36	5180	6	109	79.616	19.01	23.98	PASS
44	5220	6	104	56.754	17.54	23.98	PASS
48	5240	6	104	46.559	16.68	23.98	PASS

802.11n\_HT20\_Ch0

CH	Frequency (MHz)	Data Rate	Power Setting	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
36	5180	MCS0	107	57.412	17.59	23.98	PASS
44	5220	MCS0	107	54.828	17.39	23.98	PASS
48	5240	MCS0	107	55.081	17.41	23.98	PASS

**EIRP Power:**

802.11a\_Ch0

CH	Frequency (MHz)	TOTAL POWER (dBm)	Antenna Gain (dBi)	EIRP (mW)	EIRP (dBm)	REQUIRED LIMIT (dBm)	RESULT
36	5180	19.01	2.00	126.183	21.01	22.25	PASS
44	5220	17.54	2.00	89.950	19.54	22.17	PASS
48	5240	16.68	2.00	73.790	18.68	22.13	PASS

802.11n\_HT20\_Ch0

CH	Frequency (MHz)	TOTAL POWER (dBm)	Antenna Gain (dBi)	EIRP (mW)	EIRP (dBm)	REQUIRED LIMIT (dBm)	RESULT
36	5180	17.59	2.00	90.991	19.59	22.45	PASS
44	5220	17.39	2.00	86.896	19.39	22.45	PASS
48	5240	17.41	2.00	87.297	19.41	22.44	PASS

## 4.4 POWER SPECTRAL DENSITY

### 4.4.1 Test Limit

According to §15.407 (a)(1) and RSS-247 section 6.2.1(1)

**UNII-1 :**

**FCC:**

The maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band.

**IC:**

The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

UNII-1 Limit	<input checked="" type="checkbox"/> Antenna not exceed 6 dBi : 11 dBm <input checked="" type="checkbox"/> IC: 10dB/MHz <input type="checkbox"/> Antenna with DG greater than 6 dBi : [Limit = 11 – (DG – 6)]
--------------	---

#### **4.4.2 Test Procedure**

Test method Refer as KDB 789033 D02

1. The EUT RF output connected to the spectrum analyzer by RF cable.
2. Setting maximum power transmit of EUT
3. UNII-1, UNII-2a and UNII-2c, SA set RBW = 1MHz, VBW = 3MHz and Detector = RMS, to measurement Power Density.
4. UNII-3, SA set RBW = 500kHz, VBW = 2MHz and Detector = RMS, to measurement Power Density
5. The path loss and Duty Factor were compensated to the results for each measurement by SA.
6. Mark the maximum level.
7. Measure and record the result of power spectral density. in the test report.

#### **4.4.3 Test Setup**

Please refer to section 1.8.

Report No.: TMWK2404001248KR

#### 4.4.4 Test Result

Temperature: 20.3 ~ 24°C      Test date: May 15~30, 2024  
Humidity: 56 ~ 64% RH      Tested by: Marco Chan

#### Power Density:

POWER DENSITY 802.11a MODE					
Frequency (MHz)	Ch0 meas PSD (dBm/MHz)	Duty Factor (dB)	Maxum Corr'd PSD(dBm/MHz)	Limit	Margin (dB)
5180	7.157	0.00	7.16	11.00 dBm/MHz	-3.84
5220	9.300	0.00	9.30	11.00 dBm/MHz	-1.70
5240	9.153	0.00	9.15	11.00 dBm/MHz	-1.85

POWER DENSITY 802.11n HT20 MODE					
Frequency (MHz)	Ch0 meas PSD (dBm/MHz)	Duty Factor (dB)	Maxum Corr'd PSD(dBm/MHz)	Limit	Margin (dB)
5180	9.58	0.00	9.58	11.00 dBm/MHz	-1.42
5220	9.535	0.00	9.54	11.00 dBm/MHz	-1.47
5240	8.80	0.00	8.80	11.00 dBm/MHz	-2.20

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**Power Density (EIRP):**

EIRP spectral density 802.11a MODE					
Freq. (MHz)	PSD (dBm)	Ant. Gain (dBi)	EIRP PSD (dBm)	Limit (dBm)	Margin (dB)
5180	7.157	2.00	9.16	10	-0.84
5220	7.941	2.00	9.94	10	-0.06
5240	7.623	2.00	9.62	10	-0.38

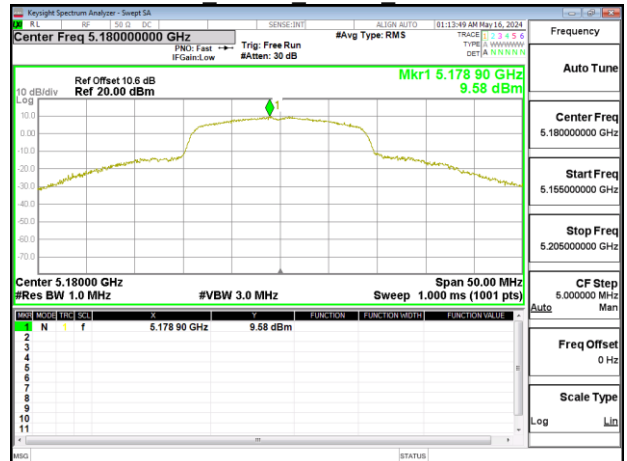
EIRP spectral density 802.11n HT20 MODE					
Freq. (MHz)	PSD (dBm)	Ant. Gain (dBi)	EIRP PSD (dBm)	Limit (dBm)	Margin (dB)
5180	7.880	2.00	9.88	10	-0.12
5220	7.701	2.00	9.70	10	-0.30
5240	7.980	2.00	9.98	10	-0.02

## Test Data

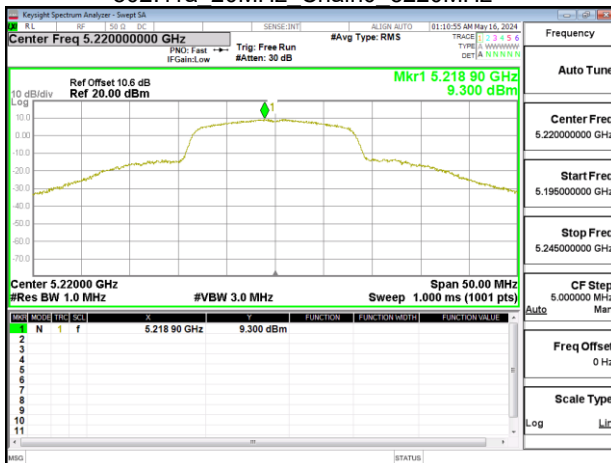
802.11a 20MHz Chain0 5180MHz



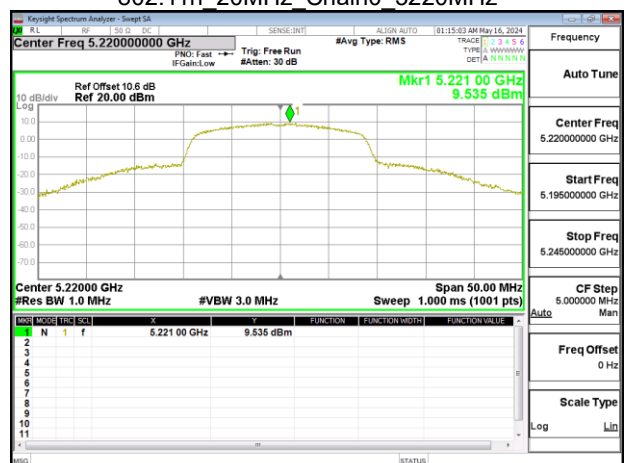
802.11n 20MHz Chain0 5180MHz



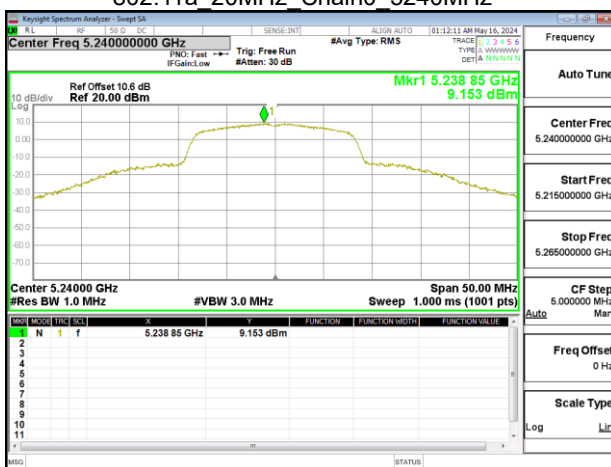
802.11a 20MHz Chain0 5220MHz



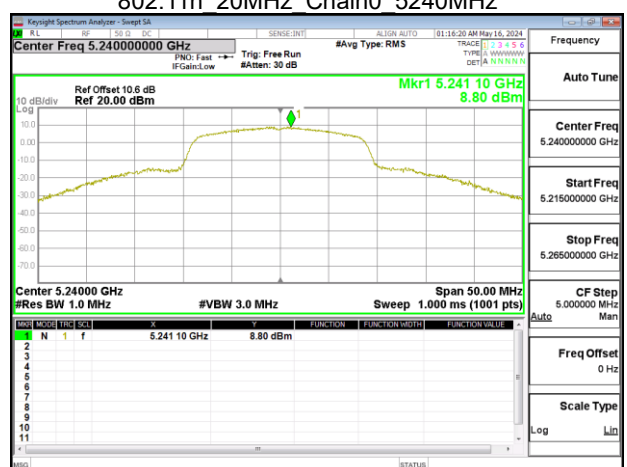
802.11n 20MHz Chain0 5220MHz



802.11a 20MHz Chain0 5240MHz



802.11n 20MHz Chain0 5240MHz



## 4.5 RADIATION BANDEDGE AND SPURIOUS EMISSION

### 4.5.1 Test Limit

FCC according to §15.407, §15.209 and §15.205,

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

#### UNII-1 :

For transmitters operating in the band 5150-5250 MHz, all emissions outside the band 5150-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p. However, any unwanted emissions that fall into the band 5250-5350 MHz must be 26 dBc, when measured using a resolution bandwidth between 1 and 5% of the occupied bandwidth, above 5.25 GHz. Otherwise, the transmission is considered as intentional and the devices shall implement dynamic frequency selection (DFS) and transmitter power control (TPC) as per the requirements for the band 5250-5350 MHz

Report No.: TMWK2404001248KR

According to RSS-247 section 6.2.1.2,

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

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

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

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



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

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

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

**UNII-1 :**

For transmitters operating in the band 5150-5250 MHz, all emissions outside the band 5150-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p. However, any unwanted emissions that fall into the band 5250-5350 MHz must be 26 dBc, when measured using a resolution bandwidth between 1 and 5% of the occupied bandwidth, above 5.25 GHz. Otherwise, the transmission is considered as intentional and the devices shall implement dynamic frequency selection (DFS) and transmitter power control (TPC) as per the requirements for the band 5250-5350 MHz

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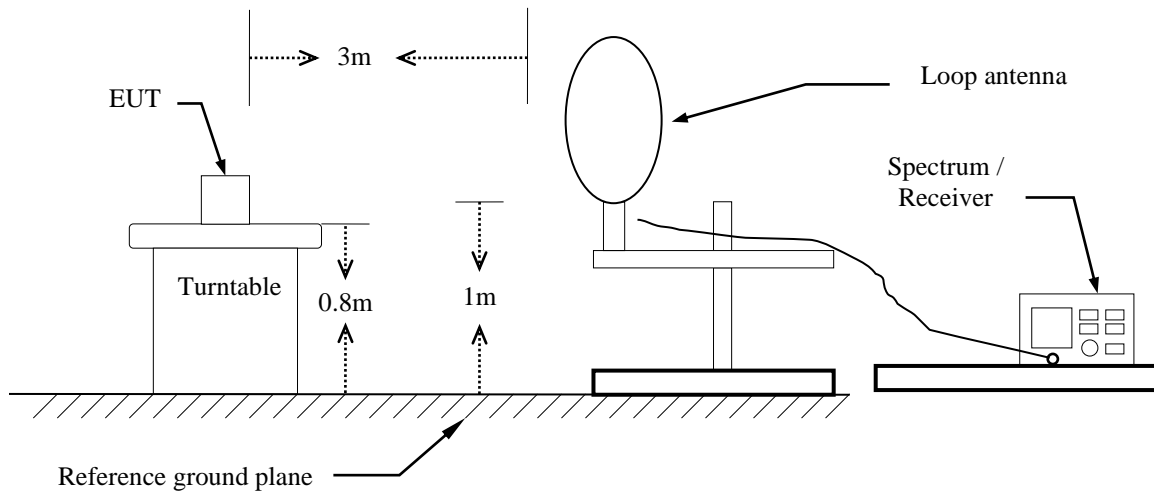
## 4.5.2 Test Procedure

Test method Refer as KDB 789033 D02.

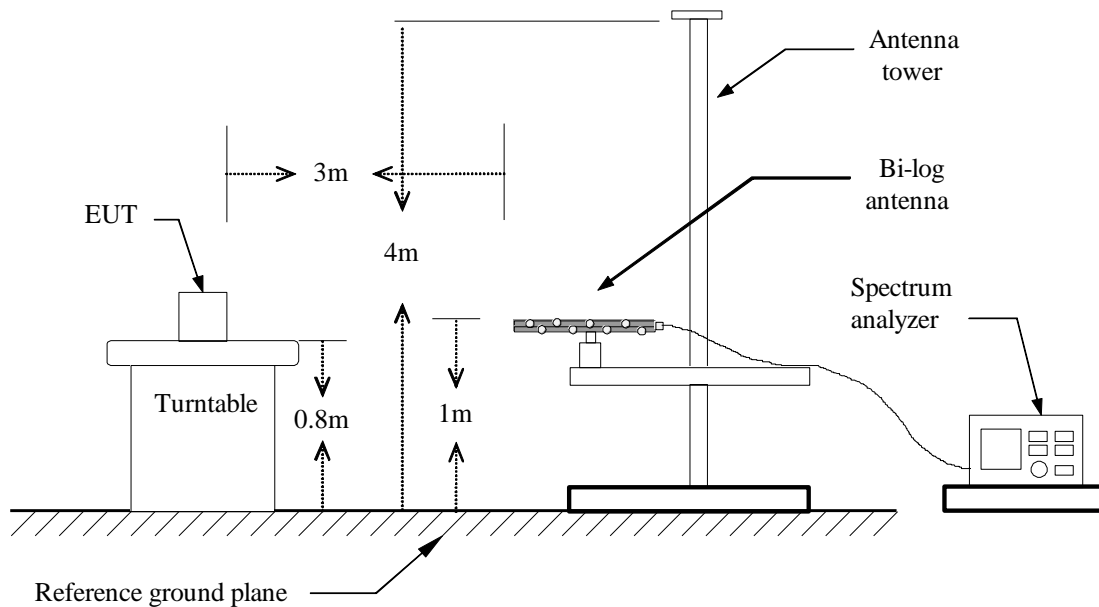
1. The EUT is placed on a turntable, Above 1 GHz is 1.5m and below 1 GHz is 0.8m above ground plane. The EUT Configured un accordance with ANSI C63.10: 2013, and the EUT set in a continuous mode.
2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level. And 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 40GHz set to the low, Mid and High channels with the EUT transmit.
4. No emission found between lowest internal used/generated frequency to 30MHz (9KHz~30MHz)
5. The SA setting following :
  - (1) Below 1G : RBW = 100kHz, VBW  $\geq 3 \times$  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.

## 4.5.3 Test Setup

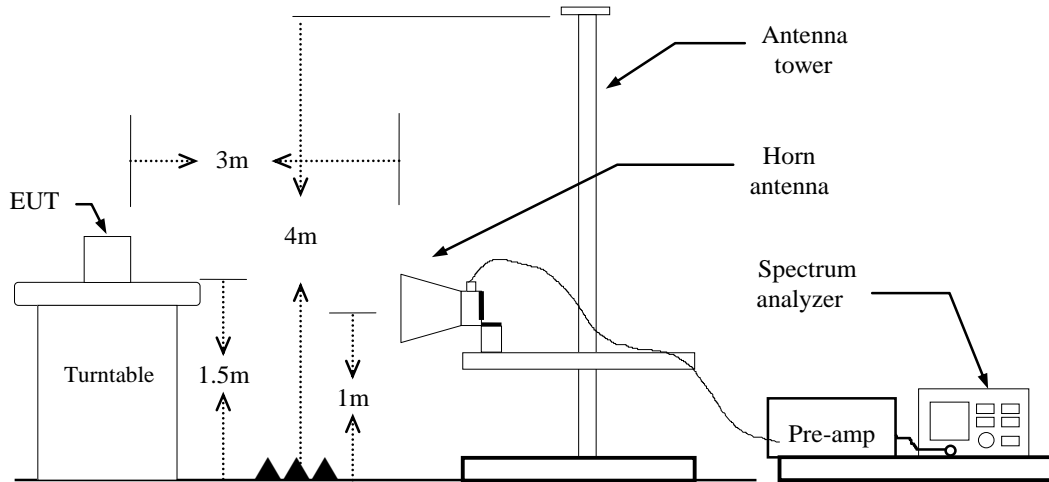
### 9kHz ~ 30MHz



### 30MHz ~ 1GHz



## Above 1 GHz



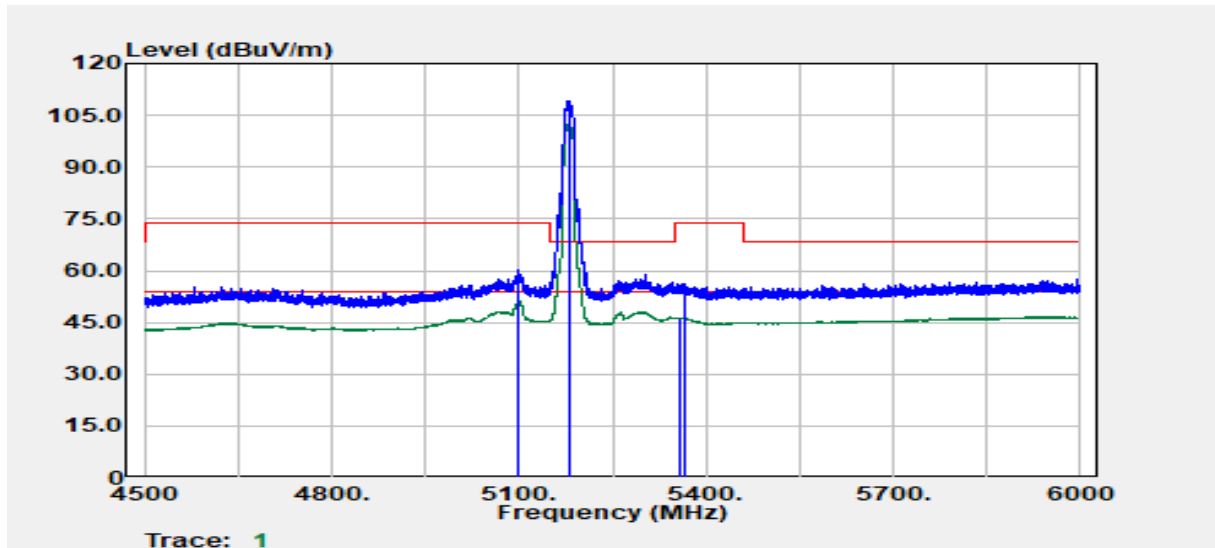
Report No.: TMWK2404001248KR

## 4.5.4 Test Result

### Test Data

#### Band Edge

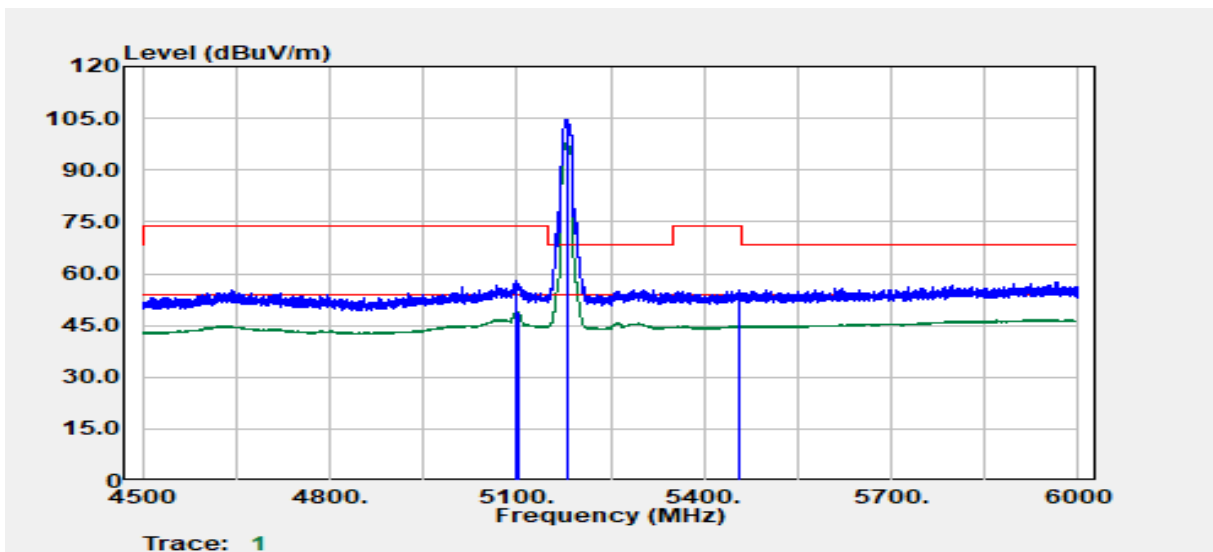
Project No	:TM-2404000279P	Test Date	:2024-05-17
Operation Band	:802.11a/Band1	Temp./Humi.	:24.6/57
Frequency	:5180 MHz	Antenna Pol.	:VERTICAL
Operation Mode	:Bandedge	Engineer	:Ray.Li
EUT Pol	:E1	Test Chamber	: 966A
Setting	:109		



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBuV	Factor dB	Actual FS dBuV/m	Limit dBuV/m	Margin dB
5098.95	Peak	46.30	13.75	60.04	74.00	-13.96
5098.95	Average	37.37	13.75	51.12	54.00	-2.88
5180.00	Peak	95.25	13.81	109.06	--	--
5180.00	Average	88.68	13.81	102.49	--	--
5356.82	Average	32.45	13.93	46.38	54.00	-7.62
5364.07	Peak	42.36	13.95	56.31	74.00	-17.69

Report No.: TMWK2404001248KR

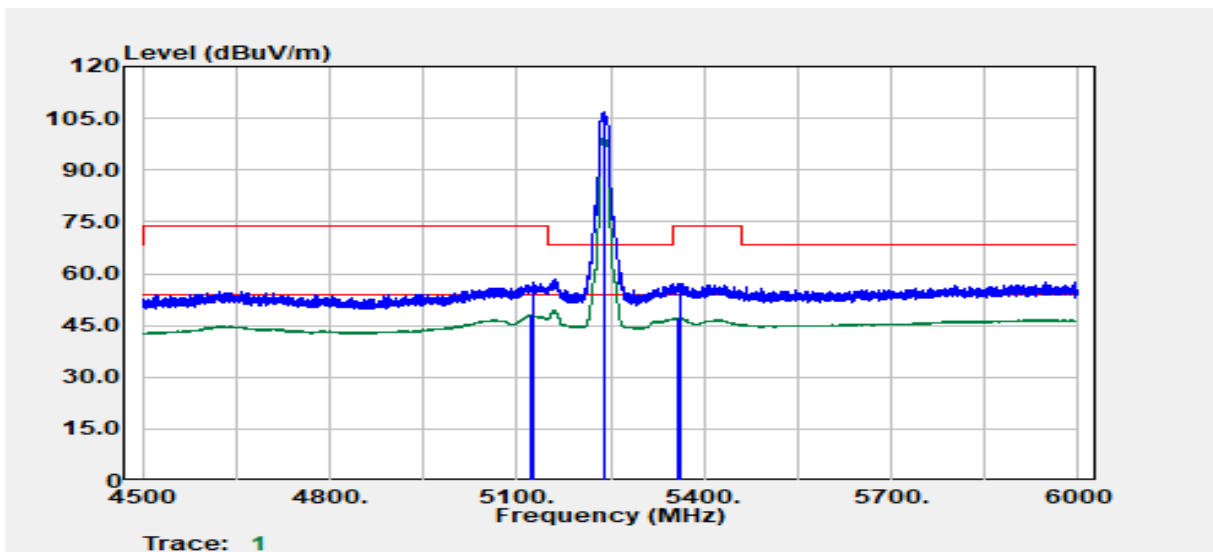
Project No	:TM-2404000279P	Test Date	:2024-05-17
Operation Band	:802.11a/Band1	Temp./Humi.	:24.6/57
Frequency	:5180 MHz	Antenna Pol.	:HORIZONTAL
Operation Mode	:Bandedge	Engineer	:Ray.Li
EUT Pol	:E1	Test Chamber	: 966A
Setting	:109		



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBuV	Factor dB	Actual FS dBuV/m	Limit dBuV/m	Margin dB
5099.20	Peak	44.11	13.75	57.86	74.00	-16.14
5100.70	Average	34.98	13.75	48.73	54.00	-5.27
5180.00	Peak	90.72	13.81	104.53	--	--
5180.00	Average	84.03	13.81	97.84	--	--
5456.27	Peak	40.67	14.40	55.07	74.00	-18.93
5457.27	Average	30.36	14.39	44.75	54.00	-9.25

Report No.: TMWK2404001248KR

Project No	:TM-2404000279P	Test Date	:2024-05-17
Operation Band	:802.11a/Band1	Temp./Humi.	:24.6/57
Frequency	:5240 MHz	Antenna Pol.	:VERTICAL
Operation Mode	:Bandedge	Engineer	:Ray.Li
EUT Pol	:E1	Test Chamber	: 966A
Setting	:113		

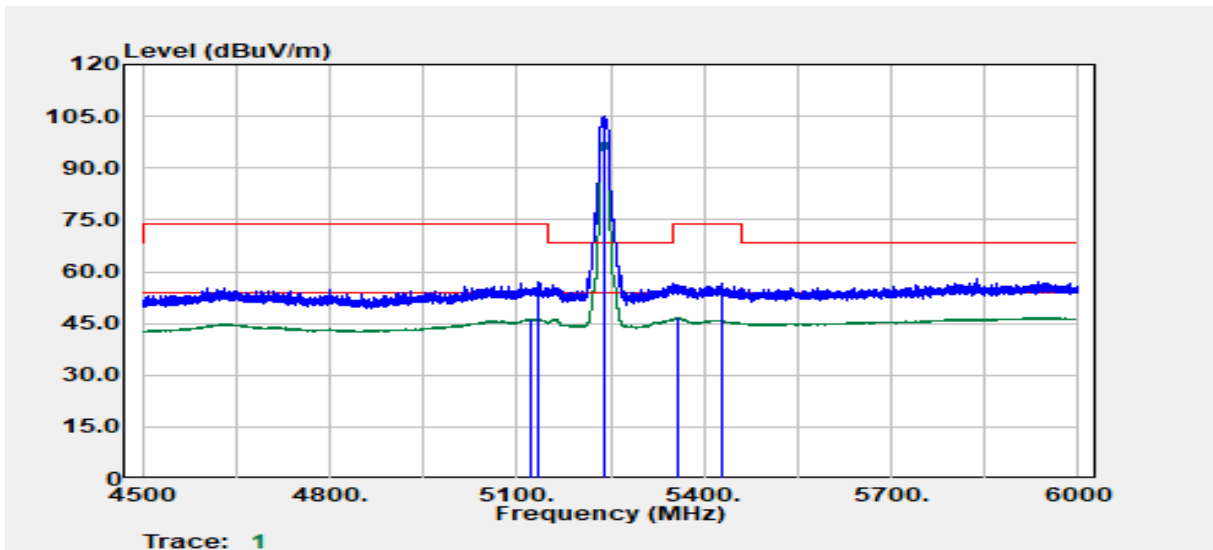


Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBuV	Factor dB	Actual FS dBuV/m	Limit dBuV/m	Margin dB
5121.60	Average	34.28	13.74	48.02	54.00	-5.98
5126.10	Peak	43.95	13.74	57.69	74.00	-16.31
5240.00	Peak	92.73	13.91	106.65	--	--
5240.00	Average	85.70	13.91	99.62	--	--
5357.39	Average	33.32	13.93	47.26	54.00	-6.74
5361.39	Peak	43.18	13.94	57.13	74.00	-16.87

Report No.: TMWK2404001248KR

Project No :TM-2404000279P  
 Operation Band :802.11a/Band1  
 Frequency :5240 MHz  
 Operation Mode :Bandedge  
 EUT Pol :E1  
 Setting :113

Test Date :2024-05-17  
 Temp./Humi. :24.6/57  
 Antenna Pol. :HORIZONTAL  
 Engineer :Ray.Li  
 Test Chamber : 966A

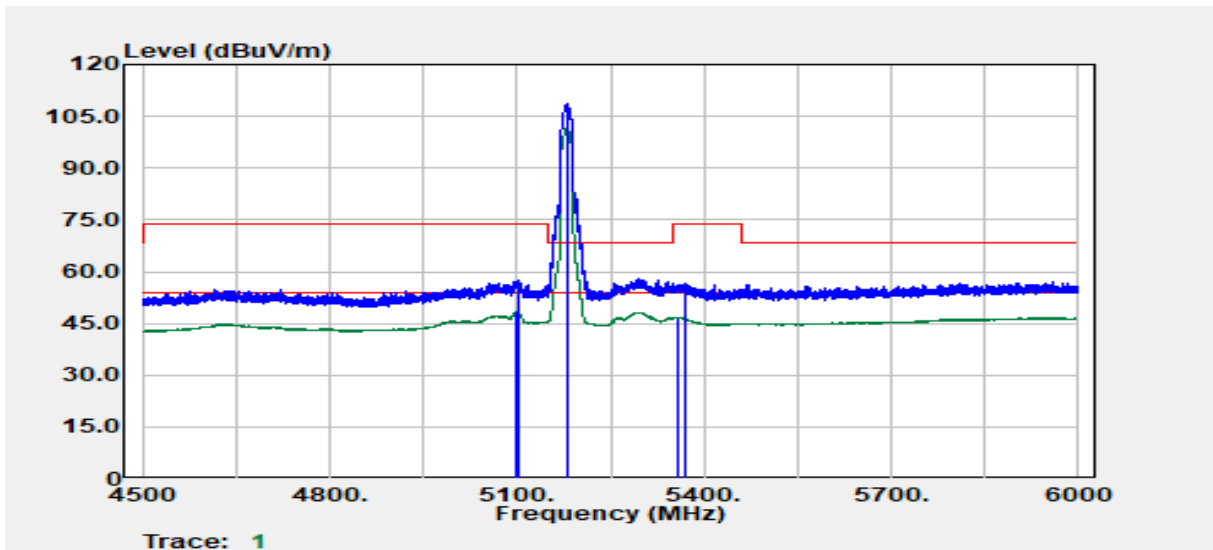


Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBuV	Factor dB	Actual FS dBuV/m	Limit dBuV/m	Margin dB
5122.60	Average	32.50	13.74	46.24	54.00	-7.76
5132.36	Peak	43.41	13.74	57.14	74.00	-16.86
5240.00	Peak	91.05	13.91	104.97	--	--
5240.00	Average	84.15	13.91	98.06	--	--
5356.14	Average	32.64	13.93	46.57	54.00	-7.43
5430.66	Peak	42.43	14.27	56.70	74.00	-17.30



Report No.: TMWK2404001248KR

Project No	:TM-2404000279P	Test Date	:2024-05-17
Operation Band	:802.11n20/Band1	Temp./Humi.	:24.6/57
Frequency	:5180 MHz	Antenna Pol.	:VERTICAL
Operation Mode	:Bandedge	Engineer	:Ray.Li
EUT Pol	:E1	Test Chamber	: 966A
Setting	:112		

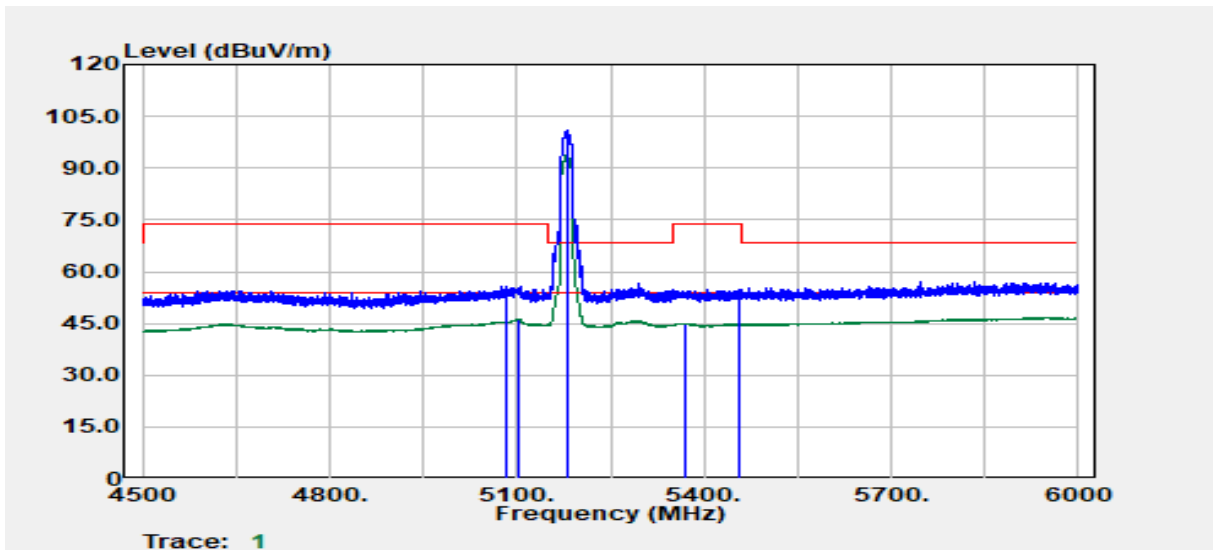


Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBuV	Factor dB	Actual FS dBuV/m	Limit dBuV/m	Margin dB
5099.10	Average	34.83	13.75	48.58	54.00	-5.42
5101.10	Peak	43.74	13.75	57.49	74.00	-16.51
5180.00	Peak	94.77	13.81	108.58	--	--
5180.00	Average	87.74	13.81	101.55	--	--
5357.14	Average	32.87	13.93	46.80	54.00	-7.20
5369.15	Peak	42.62	13.96	56.58	74.00	-17.42

Report No.: TMWK2404001248KR

Project No :TM-2404000279P  
 Operation Band :802.11n20/Band1  
 Frequency :5180 MHz  
 Operation Mode :Bandedge  
 EUT Pol :E1  
 Setting :112

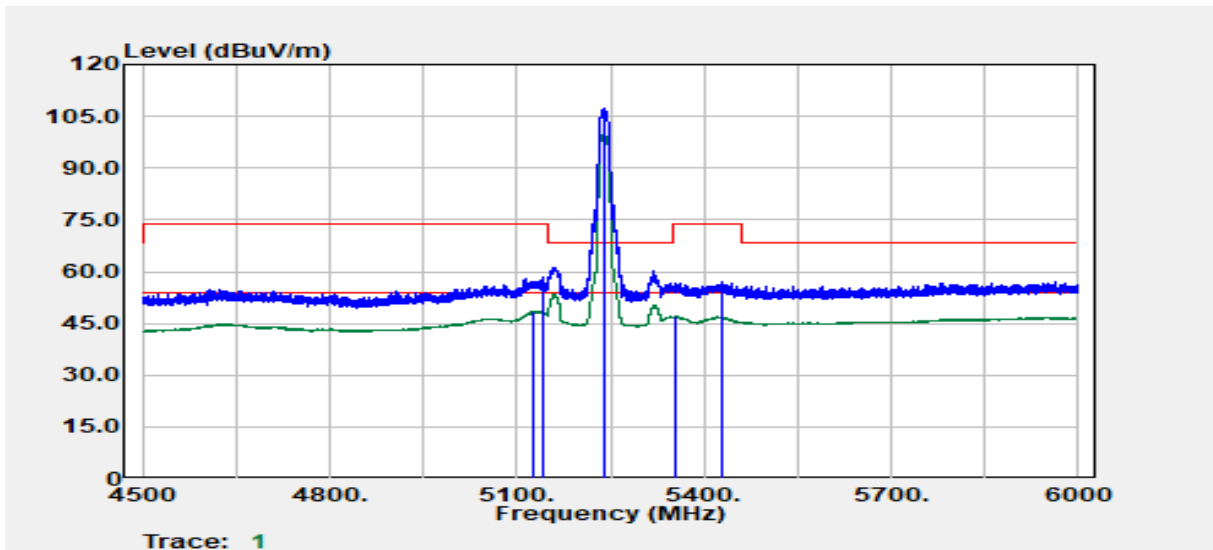
Test Date :2024-05-17  
 Temp./Humi. :24.6/57  
 Antenna Pol. :HORIZONTAL  
 Engineer :Ray.Li  
 Test Chamber : 966A



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBuV	Factor dB	Actual FS dBuV/m	Limit dBuV/m	Margin dB
5081.10	Peak	42.18	13.72	55.89	74.00	-18.11
5100.85	Average	32.65	13.75	46.40	54.00	-7.60
5180.00	Peak	87.08	13.81	100.89	--	--
5180.00	Average	80.04	13.81	93.85	--	--
5368.65	Average	31.05	13.96	45.01	54.00	-8.99
5457.16	Peak	40.45	14.39	54.84	74.00	-19.16

Report No.: TMWK2404001248KR

Project No	:TM-2404000279P	Test Date	:2024-05-17
Operation Band	:802.11n20/Band1	Temp./Humi.	:24.6/57
Frequency	:5240 MHz	Antenna Pol.	:VERTICAL
Operation Mode	:Bandedge	Engineer	:Ray.Li
EUT Pol	:E1	Test Chamber	: 966A
Setting	:113		

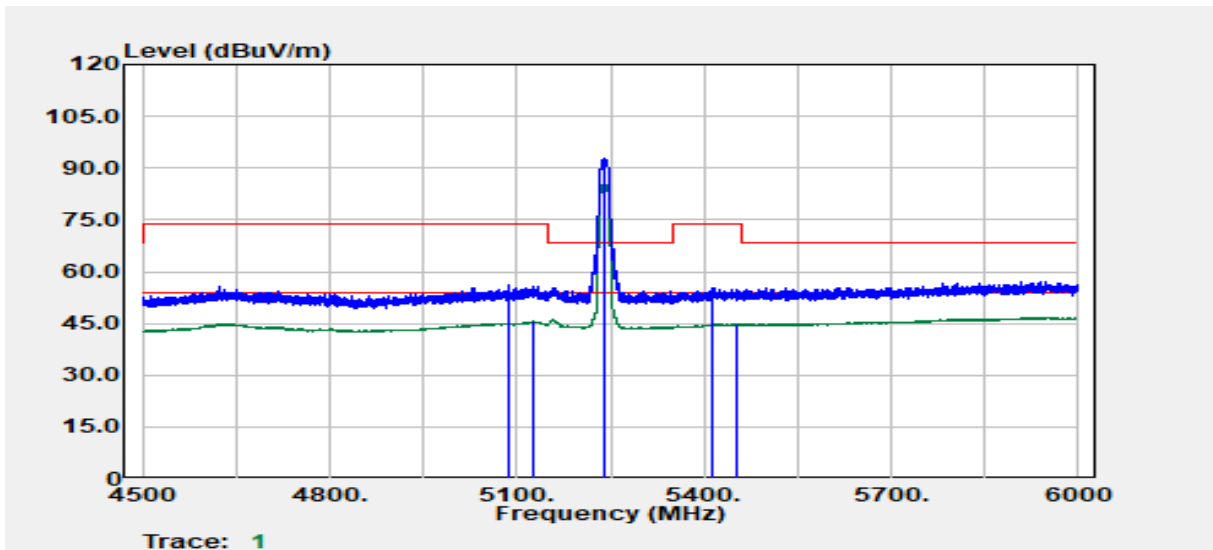


Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBuV	Factor dB	Actual FS dBuV/m	Limit dBuV/m	Margin dB
5125.10	Average	34.68	13.74	48.42	54.00	-5.58
5143.61	Peak	44.66	13.73	58.39	74.00	-15.61
5240.00	Peak	93.29	13.91	107.20	--	--
5240.00	Average	86.33	13.91	100.24	--	--
5355.89	Average	33.08	13.93	47.01	54.00	-6.99
5429.16	Peak	42.71	14.26	56.97	74.00	-17.03

Report No.: TMWK2404001248KR

Project No :TM-2404000279P  
 Operation Band :802.11n20/Band1  
 Frequency :5240 MHz  
 Operation Mode :Bandedge  
 EUT Pol :E1  
 Setting :113

Test Date :2024-05-17  
 Temp./Humi. :24.6/57  
 Antenna Pol. :HORIZONTAL  
 Engineer :Ray.Li  
 Test Chamber :966A

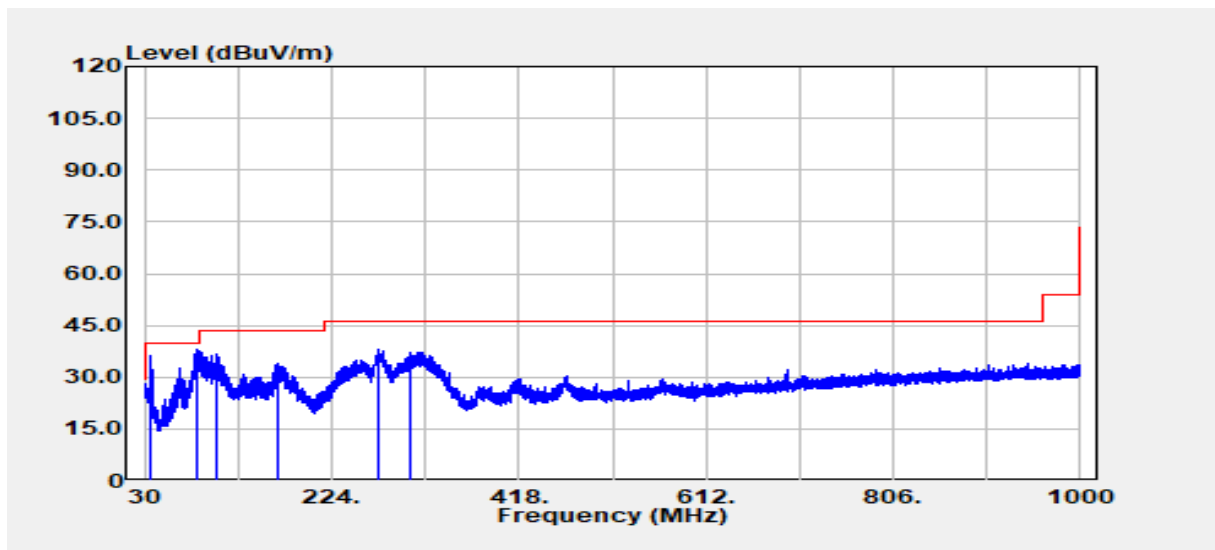


Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBuV	Factor dB	Actual FS dBuV/m	Limit dBuV/m	Margin dB
5085.60	Peak	42.44	13.72	56.17	74.00	-17.83
5125.60	Average	31.77	13.74	45.51	54.00	-8.49
5240.00	Peak	78.94	13.91	92.85	--	--
5240.00	Average	71.76	13.91	85.67	--	--
5413.65	Peak	41.07	14.14	55.21	74.00	-18.79
5451.91	Average	30.41	14.41	44.82	54.00	-9.18

Report No.: TMWK2404001248KR

## TX

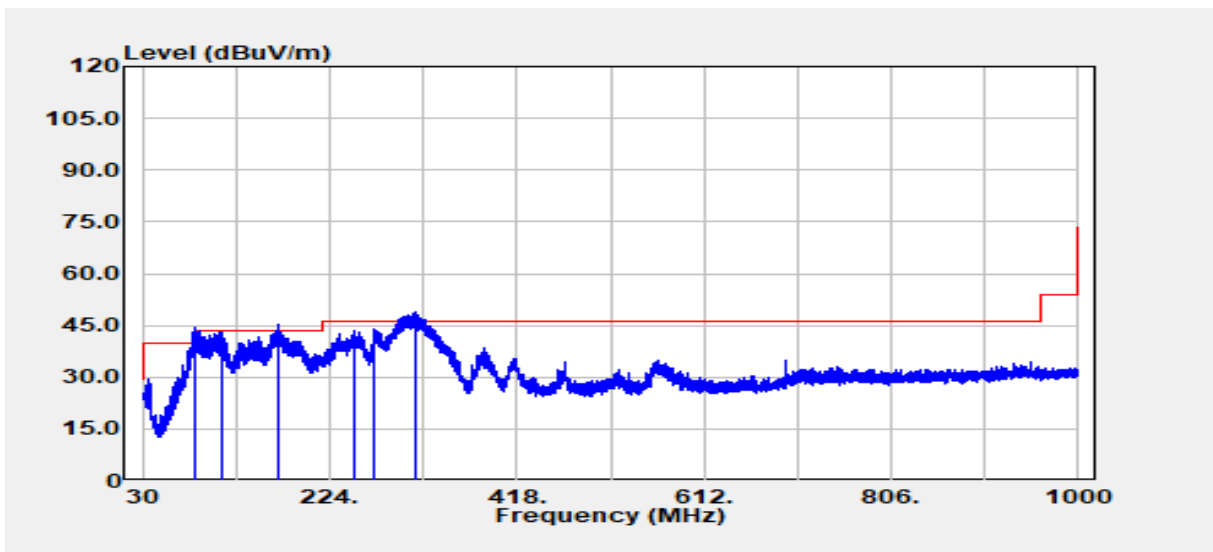
Project No	:TM-2404000279P	Test Date	:2024-05-20
Operation Band	:802.11n20/Band1	Temp./Humi.	:24.6/57
Frequency	:5220 MHz	Antenna Pol.	:Vertical
Operation Mode	:TX	Engineer	:Ray.Li
EUT Pol	:E1	Test Chamber	: 966A
Setting	:		



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBuV	Factor dB	Actual FS dBuV/m	Limit dBuV/m	Margin dB
37.10	Peak	43.58	-7.22	36.36	40.00	-3.64
85.00	Peak	53.41	-15.54	37.87	40.00	-2.13
105.30	Peak	47.82	-11.22	36.60	43.50	-6.90
168.30	Peak	44.73	-10.94	33.79	43.50	-9.71
272.00	Peak	46.91	-8.92	37.99	46.00	-8.01
306.10	Peak	45.69	-8.43	37.26	46.00	-8.74

Report No.: TMWK2404001248KR

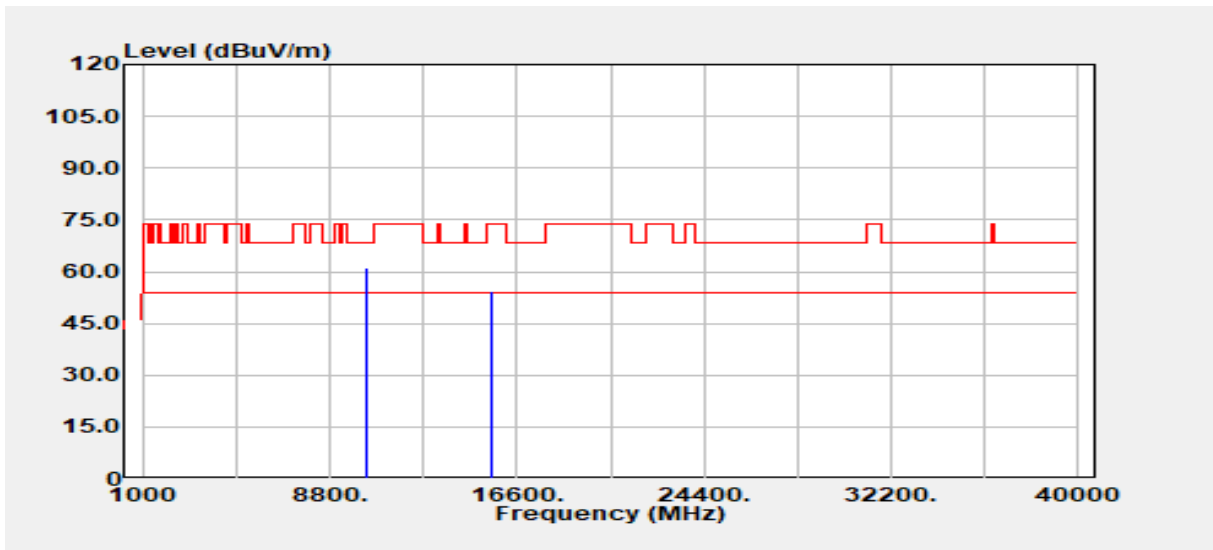
Project No	:TM-2404000279P	Test Date	:2024-05-20
Operation Band	:802.11n20/Band1	Temp./Humi.	:24.6/57
Frequency	:5220 MHz	Antenna Pol.	:Horizontal
Operation Mode	:TX	Engineer	:Ray.Li
EUT Pol	:E1	Test Chamber	: 966A
Setting	:		



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBuV	Factor dB	Actual FS dBuV/m	Limit dBuV/m	Margin dB
83.70	QP	52.89	-15.68	37.21	40.00	-2.79
111.50	QP	47.22	-9.99	37.23	43.50	-6.27
170.10	QP	52.12	-11.09	41.03	43.50	-2.47
249.10	Peak	54.07	-10.68	43.39	46.00	-2.61
270.50	Peak	52.80	-8.99	43.81	46.00	-2.19
313.90	QP	52.97	-8.18	44.79	46.00	-1.21

Report No.: TMWK2404001248KR

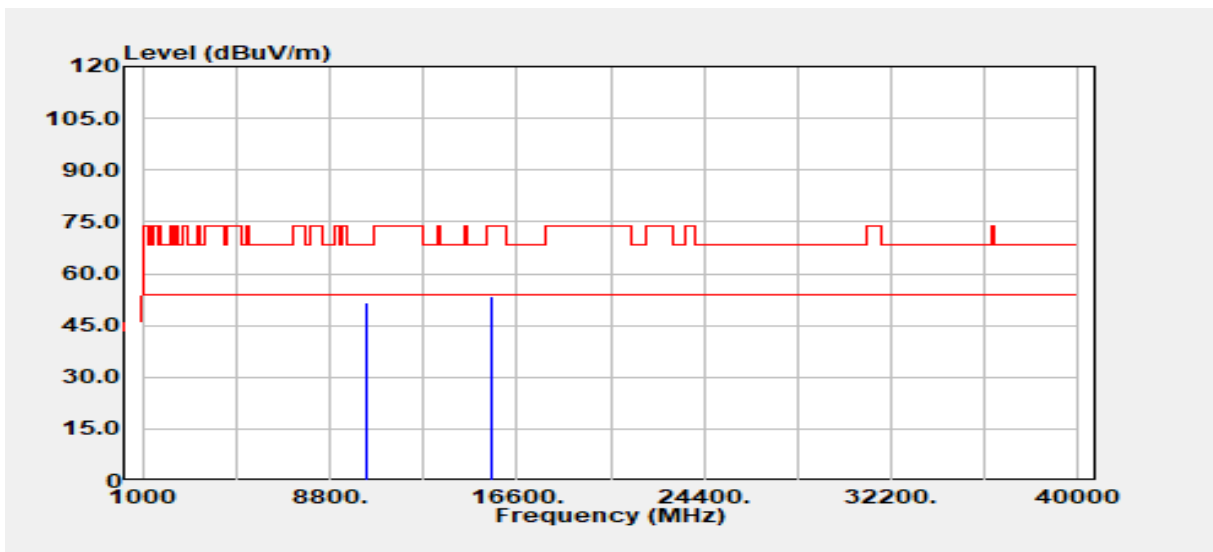
Project No	:TM-2404000279P	Test Date	:2024-05-20
Operation Band	:802.11a/Band1	Temp./Humi.	:24.6/57
Frequency	:5180 MHz	Antenna Pol.	:Vertical
Operation Mode	:TX	Engineer	:Ray.Li
EUT Pol	:E1	Test Chamber	: 966A
Setting	:		



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dB $\mu$ V	Factor dB	Actual FS dB $\mu$ V/m	Limit dB $\mu$ V/m	Margin dB
10360.00	Peak	48.23	12.85	61.08	68.20	-7.12
15540.00	Peak	39.51	14.87	54.38	74.00	-19.62
15540.00	Average	31.66	14.87	46.54	54.00	-7.46

Report No.: TMWK2404001248KR

Project No	:TM-2404000279P	Test Date	:2024-05-20
Operation Band	:802.11a/Band1	Temp./Humi.	:24.6/57
Frequency	:5180 MHz	Antenna Pol.	:Horizontal
Operation Mode	:TX	Engineer	:Ray.Li
EUT Pol	:E1	Test Chamber	: 966A
Setting	:		

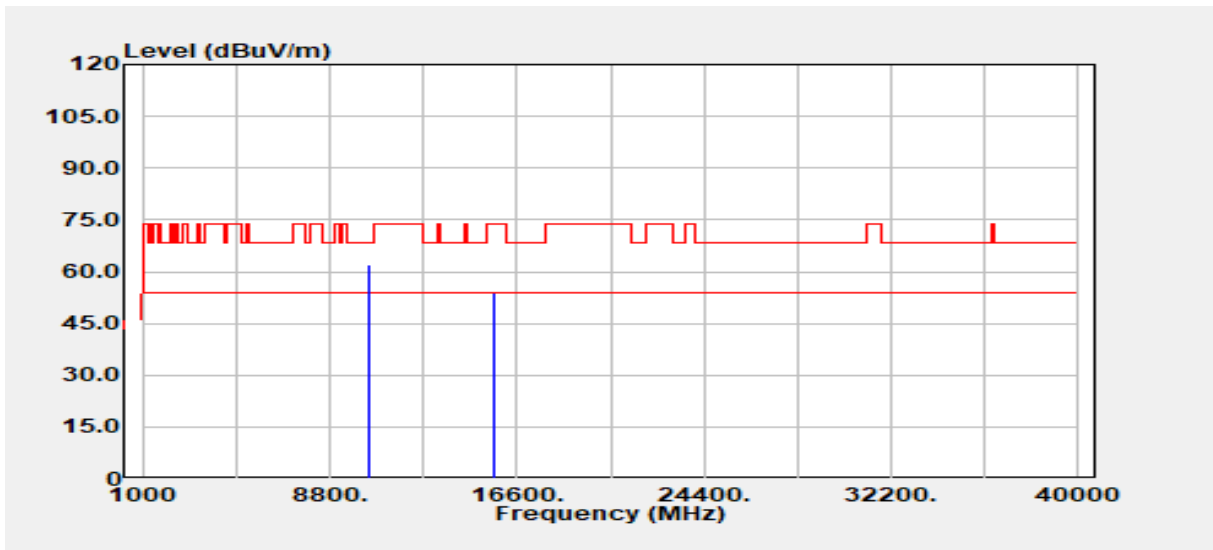


Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dB $\mu$ V	Factor dB	Actual FS dB $\mu$ V/m	Limit dB $\mu$ V/m	Margin dB
10360.00	Peak	38.78	12.85	51.63	68.20	-16.57
15540.00	Peak	38.73	14.87	53.60	74.00	-20.40
15540.00	Average	31.95	14.87	46.82	54.00	-7.18



Report No.: TMWK2404001248KR

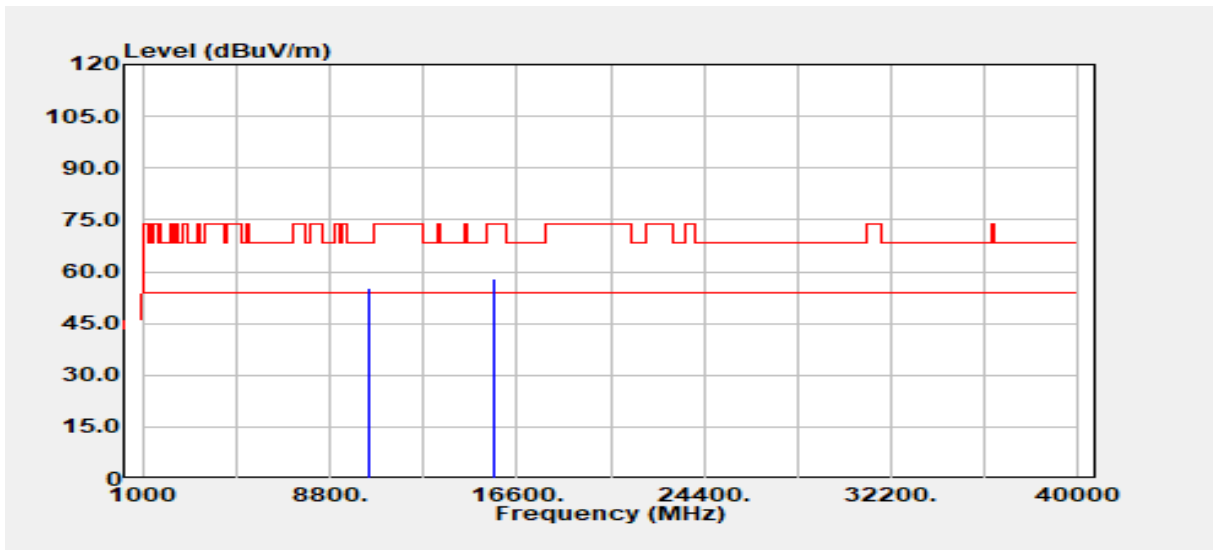
Project No	:TM-2404000279P	Test Date	:2024-05-20
Operation Band	:802.11a/Band1	Temp./Humi.	:24.6/57
Frequency	:5220 MHz	Antenna Pol.	:Vertical
Operation Mode	:TX	Engineer	:Ray.Li
EUT Pol	:E1	Test Chamber	: 966A
Setting	:		



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBuV	Factor dB	Actual FS dBuV/m	Limit dBuV/m	Margin dB
10440.00	Peak	49.36	12.85	62.21	68.20	-5.99
15660.00	Peak	38.65	15.46	54.11	74.00	-19.89
15660.00	Average	32.04	15.46	47.50	54.00	-6.50

Report No.: TMWK2404001248KR

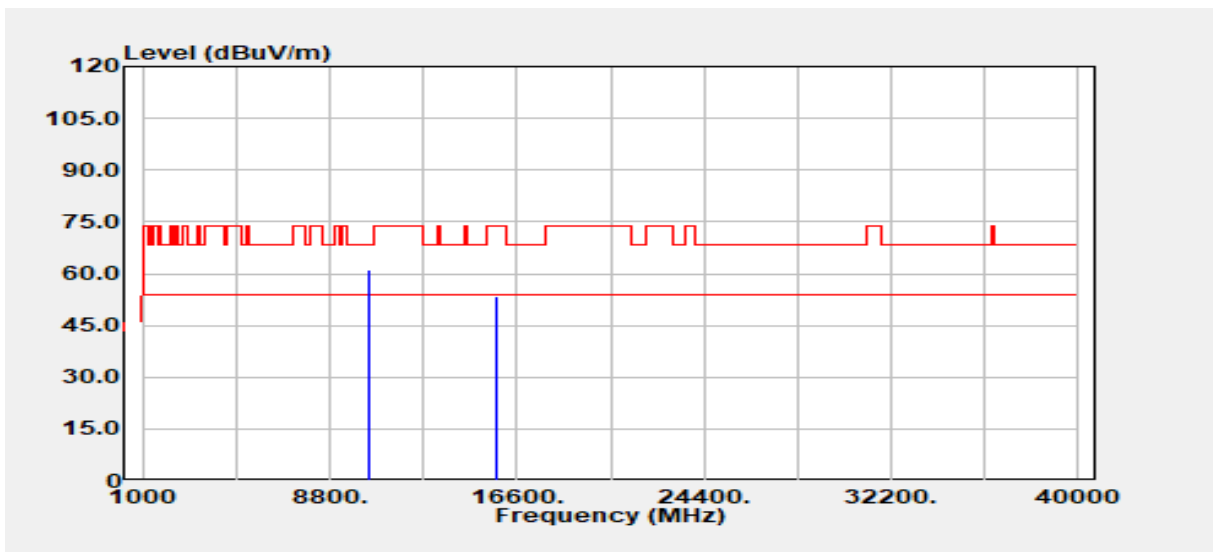
Project No	:TM-2404000279P	Test Date	:2024-05-20
Operation Band	:802.11a/Band1	Temp./Humi.	:24.6/57
Frequency	:5220 MHz	Antenna Pol.	:Horizontal
Operation Mode	:TX	Engineer	:Ray.Li
EUT Pol	:E1	Test Chamber	: 966A
Setting	:		



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBuV	Factor dB	Actual FS dBuV/m	Limit dBuV/m	Margin dB
10440.00	Peak	42.41	12.85	55.26	68.20	-12.94
15660.00	Peak	42.56	15.46	58.02	74.00	-15.98
15660.00	Average	32.77	15.46	48.23	54.00	-5.77

Report No.: TMWK2404001248KR

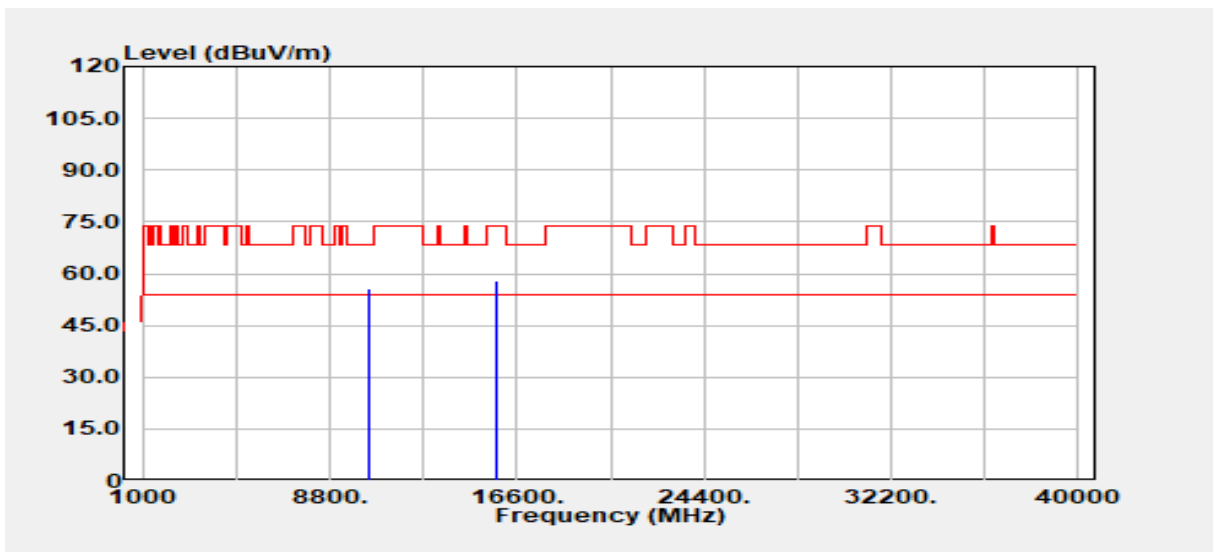
Project No	:TM-2404000279P	Test Date	:2024-05-20
Operation Band	:802.11a/Band1	Temp./Humi.	:24.6/57
Frequency	:5240 MHz	Antenna Pol.	:Vertical
Operation Mode	:TX	Engineer	:Ray.Li
EUT Pol	:E1	Test Chamber	: 966A
Setting	:		



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBuV	Factor dB	Actual FS dBuV/m	Limit dBuV/m	Margin dB
10480.00	Peak	48.35	12.72	61.07	68.20	-7.13
15720.00	Peak	37.66	15.73	53.39	74.00	-20.61
15720.00	Average	33.50	15.73	49.23	54.00	-4.77

Report No.: TMWK2404001248KR

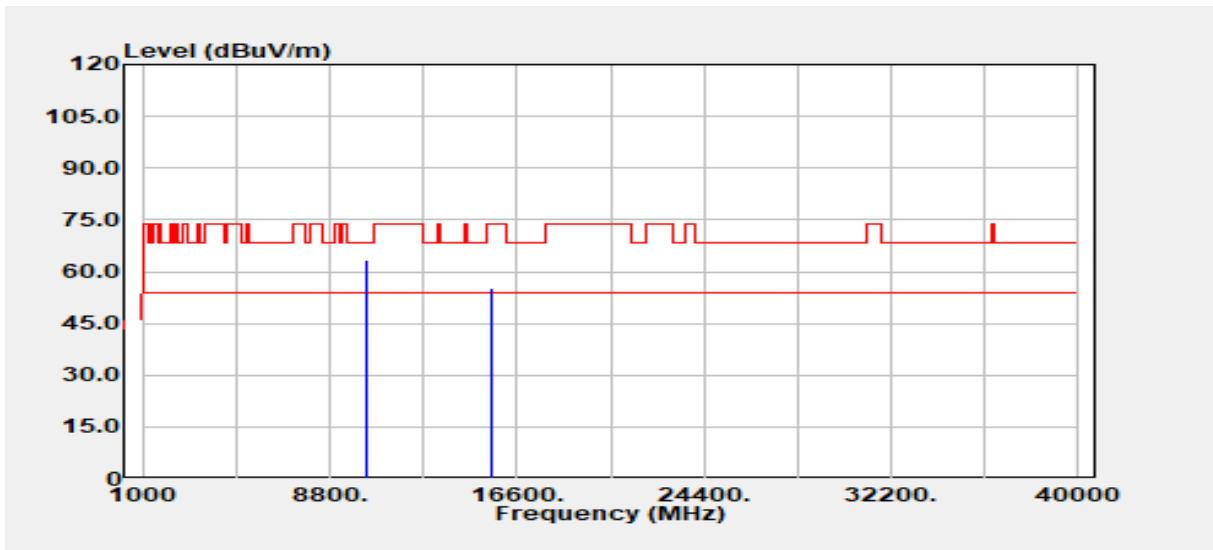
Project No	:TM-2404000279P	Test Date	:2024-05-20
Operation Band	:802.11a/Band1	Temp./Humi.	:24.6/57
Frequency	:5240 MHz	Antenna Pol.	:Horizontal
Operation Mode	:TX	Engineer	:Ray.Li
EUT Pol	:E1	Test Chamber	: 966A
Setting	:		



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dB $\mu$ V	Factor dB	Actual FS dB $\mu$ V/m	Limit dB $\mu$ V/m	Margin dB
10480.00	Peak	42.81	12.72	55.54	68.20	-12.66
15720.00	Peak	42.07	15.73	57.80	74.00	-16.20
15720.00	Average	33.17	15.73	48.90	54.00	-5.10

Report No.: TMWK2404001248KR

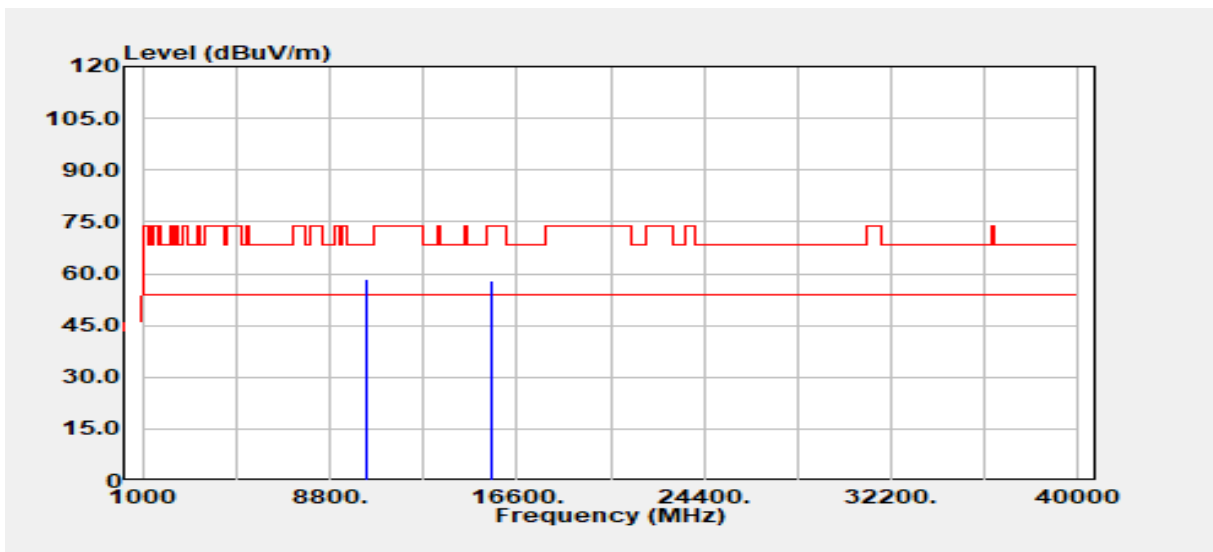
Project No	:TM-2404000279P	Test Date	:2024-05-20
Operation Band	:802.11n20/Band1	Temp./Humi.	:24.6/57
Frequency	:5180 MHz	Antenna Pol.	:Vertical
Operation Mode	:TX	Engineer	:Ray.Li
EUT Pol	:E1	Test Chamber	: 966A
Setting	:		



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBuV	Factor dB	Actual FS dBuV/m	Limit dBuV/m	Margin dB
10360.00	Peak	50.69	12.85	63.54	68.20	-4.66
15540.00	Peak	40.33	14.87	55.20	74.00	-18.80
15540.00	Average	33.21	14.87	48.08	54.00	-5.92

Report No.: TMWK2404001248KR

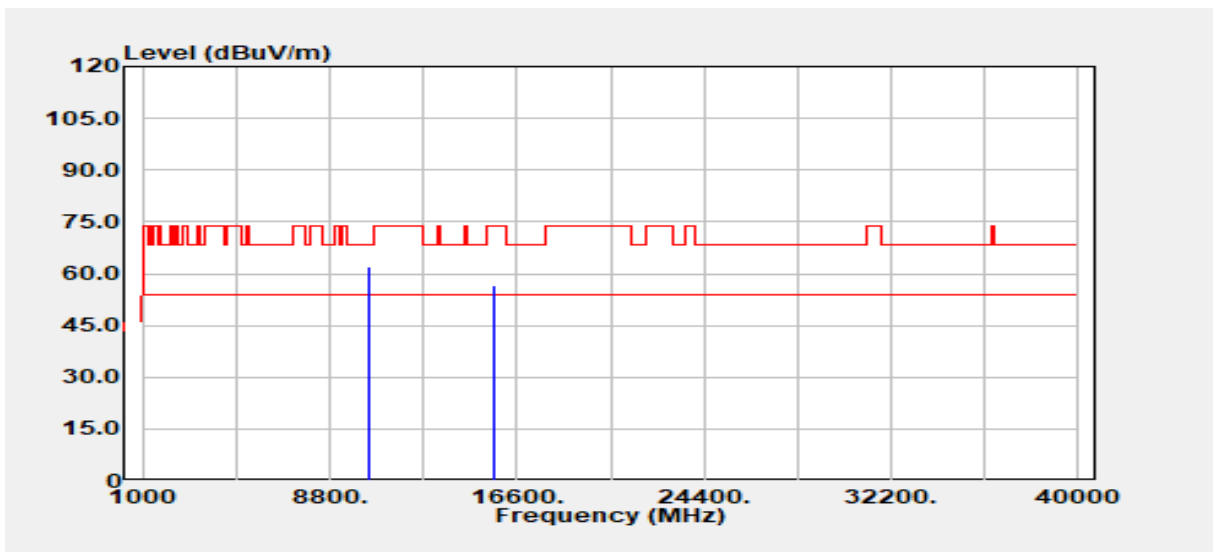
Project No	:TM-2404000279P	Test Date	:2024-05-20
Operation Band	:802.11n20/Band1	Temp./Humi.	:24.6/57
Frequency	:5180 MHz	Antenna Pol.	:Horizontal
Operation Mode	:TX	Engineer	:Ray.Li
EUT Pol	:E1	Test Chamber	: 966A
Setting	:		



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBuV	Factor dB	Actual FS dBuV/m	Limit dBuV/m	Margin dB
10360.00	Peak	45.50	12.85	58.35	68.20	-9.85
15540.00	Peak	43.07	14.87	57.95	74.00	-16.05
15540.00	Average	33.77	14.87	48.65	54.00	-5.35

Report No.: TMWK2404001248KR

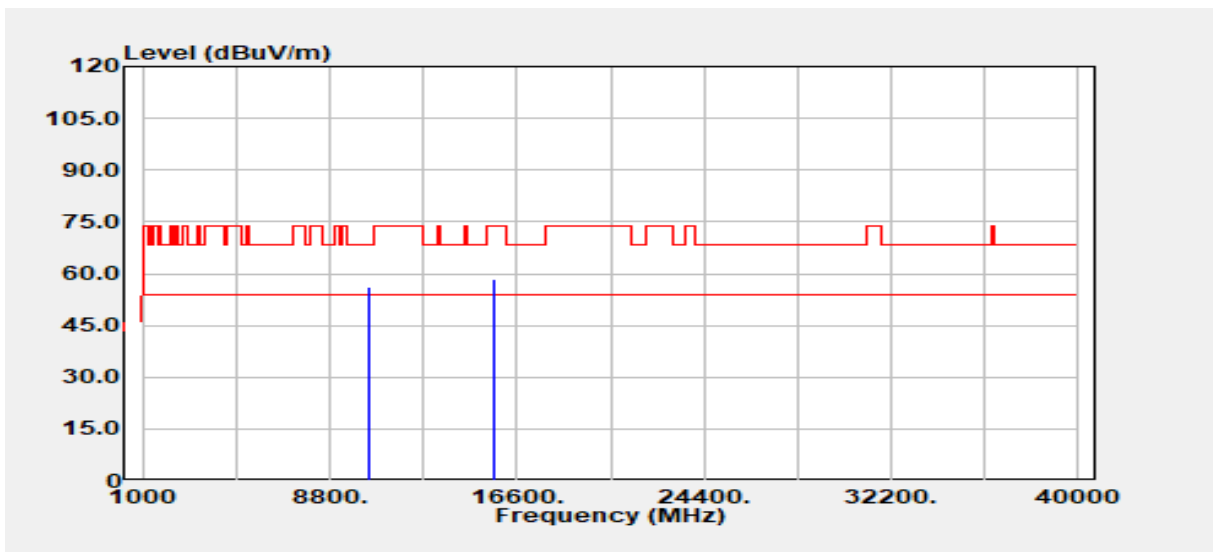
Project No	:TM-2404000279P	Test Date	:2024-05-20
Operation Band	:802.11n20/Band1	Temp./Humi.	:24.6/57
Frequency	:5220 MHz	Antenna Pol.	:Vertical
Operation Mode	:TX	Engineer	:Ray.Li
EUT Pol	:E1	Test Chamber	: 966A
Setting	:		



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBuV	Factor dB	Actual FS dBuV/m	Limit dBuV/m	Margin dB
10440.00	Peak	49.10	12.85	61.94	68.20	-6.26
15660.00	Peak	41.20	15.46	56.66	74.00	-17.34
15660.00	Average	32.51	15.46	47.97	54.00	-6.03

Report No.: TMWK2404001248KR

Project No	:TM-2404000279P	Test Date	:2024-05-20
Operation Band	:802.11n20/Band1	Temp./Humi.	:24.6/57
Frequency	:5220 MHz	Antenna Pol.	:Horizontal
Operation Mode	:TX	Engineer	:Ray.Li
EUT Pol	:E1	Test Chamber	: 966A
Setting	:		

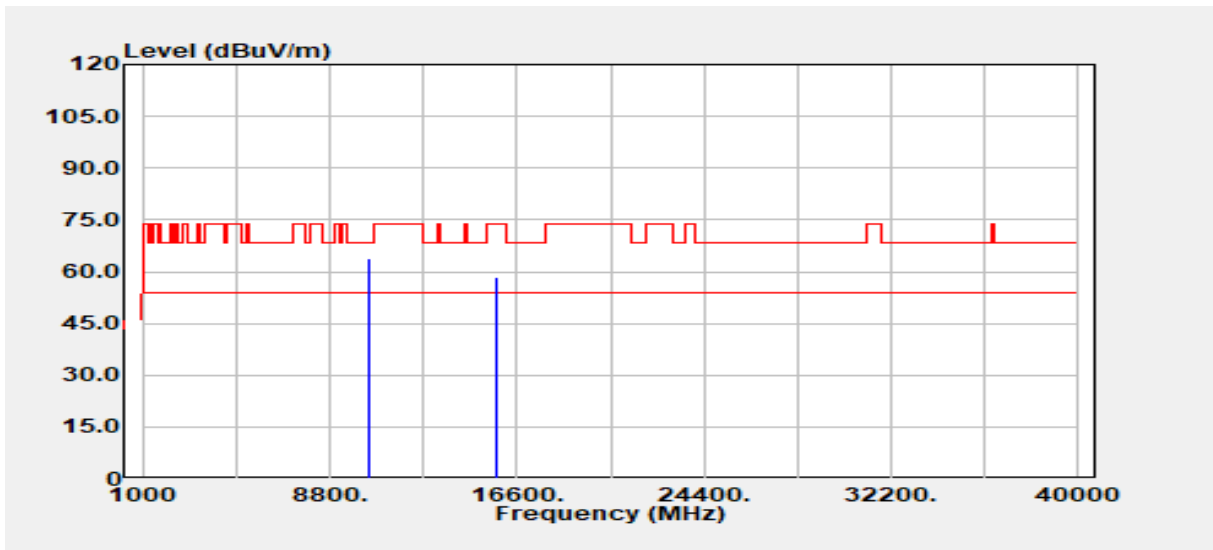


Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBuV	Factor dB	Actual FS dBuV/m	Limit dBuV/m	Margin dB
10440.00	Peak	43.46	12.85	56.31	68.20	-11.89
15660.00	Peak	43.17	15.46	58.63	74.00	-15.37
15660.00	Average	32.55	15.46	48.01	54.00	-5.99



Report No.: TMWK2404001248KR

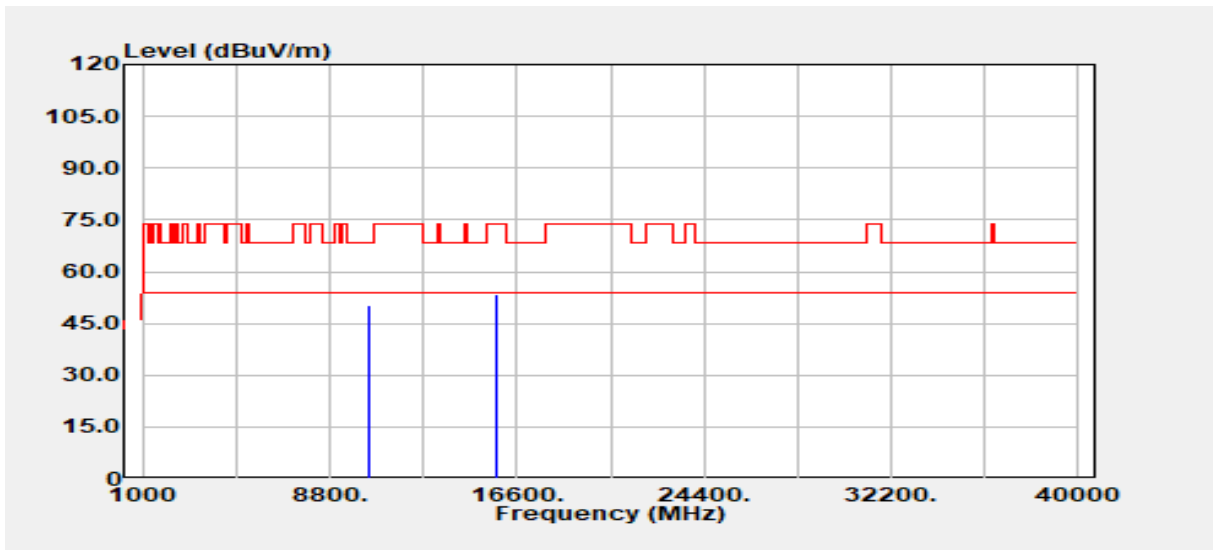
Project No	:TM-2404000279P	Test Date	:2024-05-20
Operation Band	:802.11n20/Band1	Temp./Humi.	:24.6/57
Frequency	:5240 MHz	Antenna Pol.	:Vertical
Operation Mode	:TX	Engineer	:Ray.Li
EUT Pol	:E1	Test Chamber	: 966A
Setting	:		



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBuV	Factor dB	Actual FS dBuV/m	Limit dBuV/m	Margin dB
10480.00	Peak	51.21	12.72	63.93	68.20	-4.27
15720.00	Peak	42.83	15.73	58.56	74.00	-15.44
15720.00	Average	32.87	15.73	48.60	54.00	-5.40

Report No.: TMWK2404001248KR

Project No	:TM-2404000279P	Test Date	:2024-05-20
Operation Band	:802.11n20/Band1	Temp./Humi.	:24.6/57
Frequency	:5240 MHz	Antenna Pol.	:Horizontal
Operation Mode	:TX	Engineer	:Ray.Li
EUT Pol	:E1	Test Chamber	: 966A
Setting	:		



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBuV	Factor dB	Actual FS dBuV/m	Limit dBuV/m	Margin dB
10480.00	Peak	37.50	12.72	50.22	68.20	-17.98
15720.00	Peak	37.57	15.73	53.29	74.00	-20.71
15720.00	Average	30.46	15.73	46.19	54.00	-7.81

**- End of Test Report -**