

RADIO TEST REPORT FCC 47 CFR PART 15 SUBPART C

Test Standard	FCC Part 15.247
Product name	Human Presence Sensor
Brand Name	GOOD WAY
Model No.	SD42000N1
Test Result	Pass
Statements of Conformity	Determination of compliance is based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

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

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

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

Approved by:



Shawn Wu
Supervisor

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

除非另有說明，此報告結果僅對測試之樣品負責，同時此樣品僅保留90天。本報告未經本公司書面許可，不可部份複製。

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Revision History

Rev.	Issue Date	Revisions	Effect Page	Revised By
00	January 23, 2024	Initial Issue	ALL	Peggy Tsai
01	February 1, 2024	See the following Note Rev. (01)	P.8, 10, 11, 19, 27	Peggy Tsai
02	February 23, 2024	See the following Note Rev. (02)	P.8	Peggy Tsai
03	March 1, 2024	See the following Note Rev. (03)	P.5	Peggy Tsai
04	March 13, 2024	See the following Note Rev. (04)	P.8, 9, A-1	Peggy Tsai

Rev. (01):

1. Modify Instrument Calibration in section 1.6.
2. Modify Support and EUT Accessories Equipment in section 1.7.
3. Modify Test Summary in section 2.
4. Modify Test Procedure in section 4.2.2 and 4.4.2.

Rev. (02):

1. Modify Instrument Calibration in section 1.6.

Rev. (03):

1. Modify Antenna Type in section 1.3.

Rev. (04):

1. Modify Instrument Calibration in section 1.6.
2. Modify Radiation test photo in Appendix-A.

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1. GENERAL INFORMATION

1.1 EUT INFORMATION

Applicant	GOOD WAY TECHNOLOGY CO., LTD. 3F, No. 135, Ln. 235, Baociao Rd., Sindian Dist., New Taipei City 231, Taiwan
Manufacturer	GOOD WAY TECHNOLOGY CO., LTD. 3F, No. 135, Ln. 235, Baociao Rd., Sindian Dist., New Taipei City 231, Taiwan
Equipment	Human Presence Sensor
Model No.	SD42000N1
Model Discrepancy	N/A
Trade Name	GOOD WAY
Received Date	November 9, 2023
Date of Test	November 23 ~ December 5, 2023
Power Operation	1. Power from host system. (DC 5V) 2. Power from Adapter. I/P: 100-240Vac, 50/60Hz, 0.6A O/P: 5Vdc / 3A, 9Vdc / 2A, 12Vdc / 1.5A
HW Version	A11
SW Version	V1.8

Remark:

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

1.2 EUT CHANNEL INFORMATION

Frequency Range	2402MHz-2480MHz
Modulation Type	GFSK for BLE 1 Mbps GFSK for BLE 2 Mbps
Number of channel	40 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 Type	<input checked="" type="checkbox"/> PIFA <input type="checkbox"/> PCB <input type="checkbox"/> Dipole <input type="checkbox"/> Coils
Antenna Gain	ESPRESSIF / ESP-ANT E Gain: 2.7 dBi
Antenna Connector	N/A

Notes:

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

1.4 MEASUREMENT UNCERTAINTY

PARAMETER	UNCERTAINTY
AC Powerline Conducted Emission	± 2.213 dB
Channel Bandwidth	± 2.7 %
RF output power (Power Meter + Power sensor)	± 0.243 dB
Power Spectral density	± 2.739 dB
Conducted Bandedge	± 2.739 dB
Conducted Spurious Emission	± 2.742 dB
Radiated Emission_9kHz-30MHz	± 3.761 dB
Radiated Emission_30MHz-200MHz	± 3.473 dB
Radiated Emission_200MHz-1GHz	± 3.946 dB
Radiated Emission_1GHz-6GHz	± 4.797 dB
Radiated Emission_6GHz-18GHz	± 4.803 dB
Radiated Emission_18GHz-26GHz	± 3.459 dB
Radiated Emission_26GHz-40GHz	± 3.297 dB

Remark:

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

1.5 FACILITIES AND TEST LOCATION

All measurement facilities used to collect the measurement data are located at No.11, Wugong 6th Rd., Wugu Dist., New Taipei City, Taiwan.

CAB identifier: TW1309

Test site	Test Engineer	Remark
AC Conduction Room	Czerny Lin	-
Radiation	Tony Chao · Ray Li	-
RF Conducted	Allen Shen	-

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	1911386	2023-07-25	2024-07-24
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	N9010B	MY60242460	2023-02-02	2024-02-01
Software	Radio Test Software Ver. 21				

966A_Radiated BLE					
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due
Loop Antenna	COM-POWER	AL-130	121051	2023-05-23	2024-05-22
Preamplifier	EMEC	EM330	060609	2023-02-22	2024-02-21
Thermo-Hygro Meter	WISEWIND	1206	D07	2022-12-19	2023-12-18
Signal Analyzer	KEYSIGHT	N9010A	MY54200716	2023-10-13	2024-10-12
Preamplifier	HP	8449B	3008A00965	2022-12-23	2023-12-22
Bi-Log Antenna	Sunol Sciences	JB3	A030105	2023-08-08	2024-08-07
Cable	Huber+Suhner	104PEA	20995+21000+18 2330	2023-02-22	2024-02-21
Horn Antenna	ETC	MCTD 1209	DRH13M02003	2023-01-12	2024-01-11
High Pass Filters	Titan Microwave	T04H3000180007 0S01	22011402-4	2023-06-17	2024-06-16
Horn Antenna	SCHWARZBECK	BBHA9170	1047	2022-12-30	2023-12-29
Pre-Amplifier	EMCI	EMC184045SE	980860	2022-12-27	2023-12-26
Cable	EMCI	EMC101G	221213+211011+ 211012	2023-10-17	2024-10-16
Turn Table	CCS	CC-T-1F	N/A	N.C.R	N.C.R
Controller	CCS	CC-C-1F	N/A	N.C.R	N.C.R
Antenna Tower	CCS	CC-A-1F	N/A	N.C.R	N.C.R
Site Validation	CCS	966A	N/A	2023-07-10	2024-07-09
Software	e3 V9-210616c				

Remark:

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	2023-03-08	2024-03-07
Cable	EMCI	CFD300-NL	CERF	2023-06-27	2024-06-26
Software	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.	Calibration Date	Calibration Due
	N/A					

Support Equipment						
No.	Equipment	Brand	Model	Series No.	Calibration Date	Calibration Due
1	NB(E)	Lenovo	T460	N/A	N/A	N/A
2	Cable	SP	Type C Cable	N/A	N/A	N/A
3	NB	Lenovo	IBM 7663	N/A	N/A	N/A
4	NB(D)	Lenovo	ThinkPad X260	N/A	N/A	N/A
5	Test Fixture	ONEPING TECHNOLOGIES CO., LTD.	PL2303GC	N/A	N/A	N/A

1.8 TEST METHODOLOGY AND APPLIED STANDARDS

Test Mode:

1. After the EUT is connected to the fixture and power supply, open EspRFTestTool_v3.6_Manual.exe and open COM PORT.
2. Select the BT industry according to the test requirements and select the required modulation, CH, MODE and transmit signals according to the requirements.

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

2. TEST SUMMERY

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)(3)	4.3	Output Power Measurement	Pass
15.247(e)	4.4	Power Spectral Density	Pass
15.247(d)	4.5	Conducted Band Edge	Pass
15.247(d)	4.5	Conducted Spurious Emission	Pass
15.247(d) 15.205 15.209	4.6	Radiation Band Edge	Pass
15.247(d) 15.205 15.209	4.6	Radiation Spurious Emission	Pass

3. DESCRIPTION OF TEST MODES

3.1 THE WORST MODE OF OPERATING CONDITION

Operation mode	BLE Mode (1Mbps) BLE Mode (2Mbps)
Test Channel Frequencies	1.Lowest Channel : 2402MHz 2.Middle Channel : 2442MHz 3.Highest Channel : 2480MHz

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 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 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 type="checkbox"/> Placed in fixed position at Y-Plane (E1-Plane) <input checked="" 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(Z-Plane) were recorded in this report*

3.3 EUT DUTY CYCLE

Temperature: 22.6°C

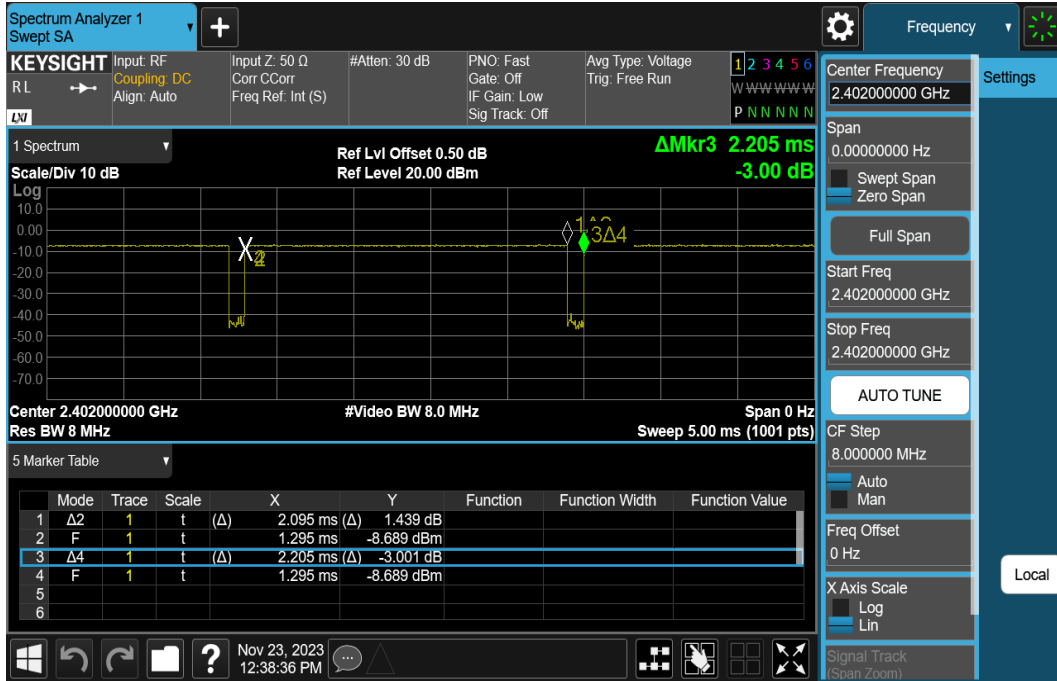
Test date: November 23, 2023

Humidity: 53% RH

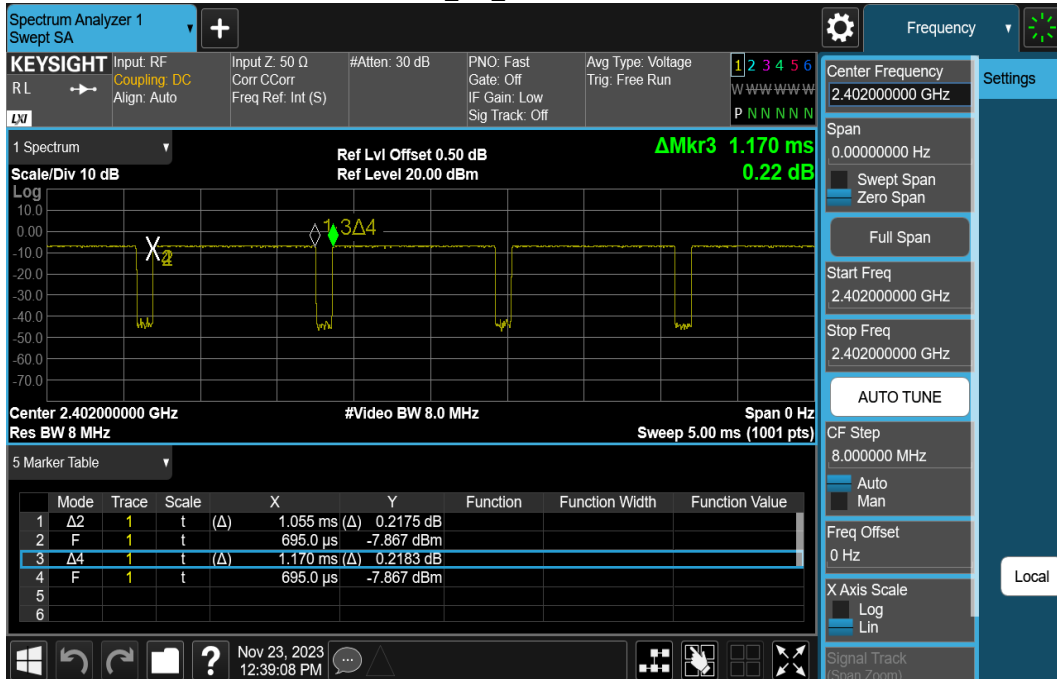
Tested by: Allen Shen

	Duty Cycle (%) = Ton / (Ton+Toff)	Duty Factor (dB) =10*log (1/Duty Cycle)	1/T (kHz)	VBW setting (kHz)
BLE 1M	95.01	0.22	0.48	1.00
BLE 2M	90.17	0.45	0.95	1.00

BLE_1M_LowCH00-2402



BLE_2M_LowCH00-2402



4. TEST RESULT

4.1 AC POWER LINE CONDUCTED EMISSION

4.1.1 Test Limit

According to §15.207(a),

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

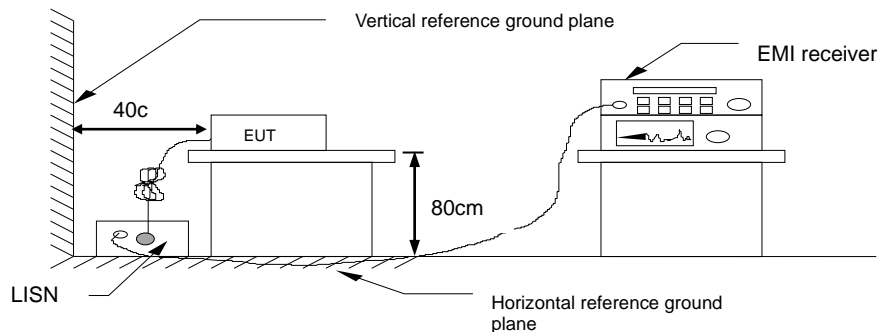
* Decreases with the logarithm of the frequency.

4.1.2 Test Procedure

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

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

4.1.3 Test Setup

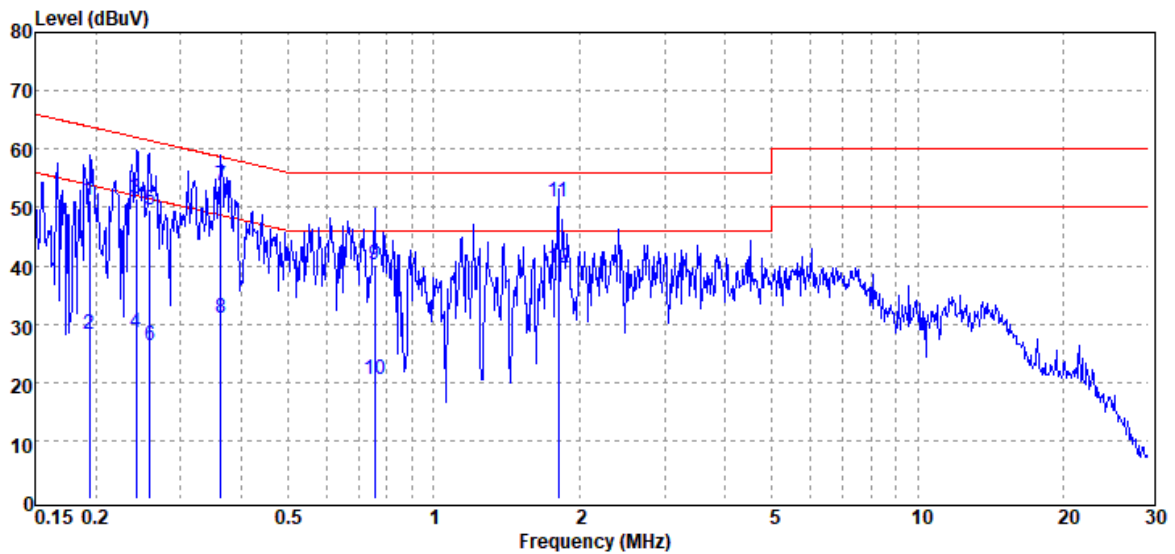


4.1.4 Test Result

Pass

Test Data

Project No	: TM-2311000089P	Test Date	: 2023-12-05
Operation Mode	: BLE	Temp./Humi.	: 23.6°C / 55%
Test Chamber	: Conduction	Engineer	: Czerny Lin
Probe	: LINE	Test Voltage	: AC 120V/60Hz
Note	:		



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV	Limit dBμV	Margin dB
0.194	QP	51.08	0.15	51.23	63.84	-12.61
0.194	Average	27.97	0.15	28.12	53.84	-25.72
0.243	QP	51.28	0.15	51.43	62.00	-10.57
0.243	Average	28.41	0.15	28.56	52.00	-23.44
0.259	QP	49.52	0.15	49.67	61.47	-11.80
0.259	Average	26.11	0.15	26.26	51.47	-25.21
0.363	QP	53.43	0.15	53.58	58.65	-5.07
0.363	Average	30.97	0.15	31.12	48.65	-17.53
0.755	QP	39.89	0.16	40.05	56.00	-15.95
0.755	Average	20.46	0.16	20.62	46.00	-25.38
1.810	QP	50.62	0.21	50.83	56.00	-5.17
1.810	Average	39.28	0.21	39.49	46.00	-6.51

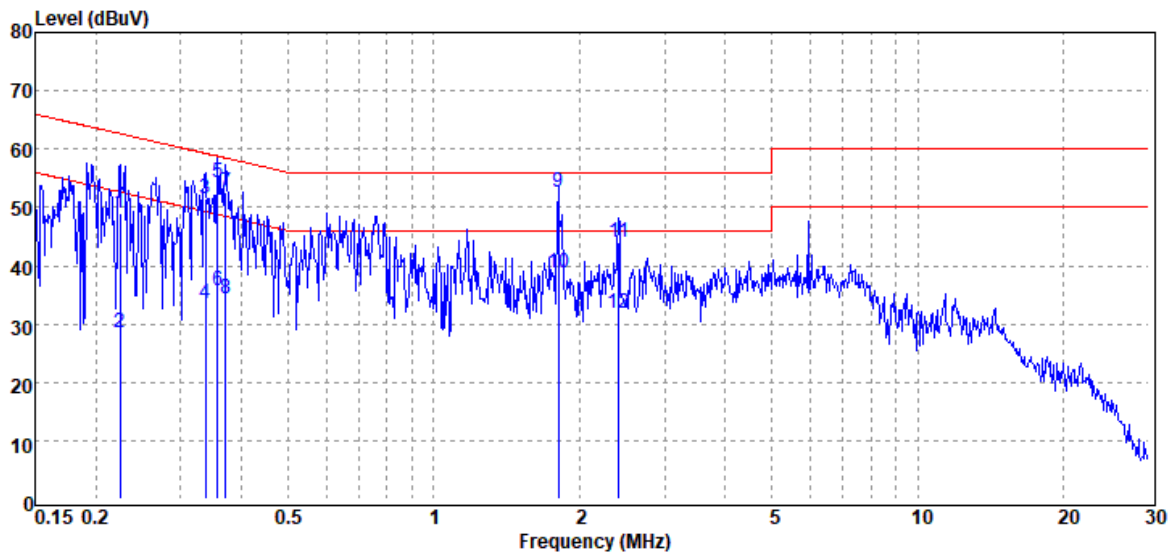
Note: 1. Actual FS= Spectrum Read Level + Factor

Note: 2. Margin= Actual FS - Limit

Report No.: TMWK2311004151KR

Project No : TM-2311000089P
 Operation Mode : BLE
 Test Chamber : Conduction
 Probe : NEUTRAL
 Note :

Test Date : 2023-12-05
 Temp./Humi. : 23.6°C / 55%
 Engineer : Czerny Lin
 Test Voltage : AC 120V/60Hz



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dB μ V	Factor dB	Actual FS dB μ V	Limit dB μ V	Margin dB
0.224	QP	48.91	0.19	49.10	62.66	-13.56
0.224	Average	28.37	0.19	28.56	52.66	-24.10
0.337	QP	51.40	0.19	51.59	59.27	-7.68
0.337	Average	33.33	0.19	33.52	49.27	-15.75
0.358	QP	54.09	0.19	54.28	58.78	-4.50
0.358	Average	35.42	0.19	35.61	48.78	-13.17
0.371	QP	52.47	0.19	52.66	58.47	-5.81
0.371	Average	34.13	0.19	34.32	48.47	-14.15
1.810	QP	52.22	0.25	52.47	56.00	-3.53
1.810	Average	38.41	0.25	38.66	46.00	-7.34
2.409	QP	43.61	0.28	43.89	56.00	-12.11
2.409	Average	31.44	0.28	31.72	46.00	-14.28

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

Note: 2. Margin= Actual FS - Limit

4.2 6dB BANDWIDTH AND OCCUPIED BANDWIDTH(99%)

4.2.1 Test Limit

According to §15.247(a)(2)

6 dB Bandwidth :

Limit	Shall be at least 500kHz
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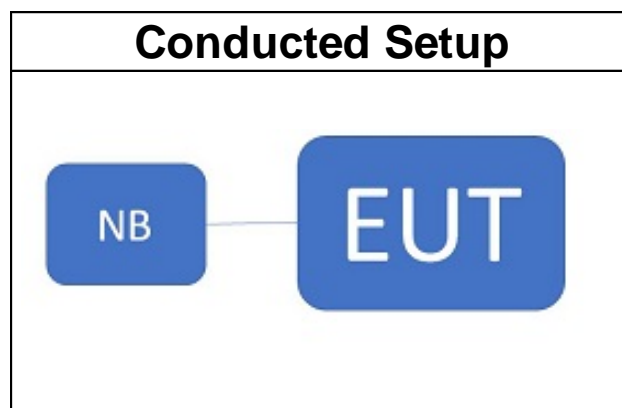
Occupied Bandwidth(99%) : For reporting purposes only.

4.2.2 Test Procedure

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

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

4.2.3 Test Setup



4.2.4 Test Result

Temperature: 22.6°C

Test date: November 23, 2023

Humidity: 53% RH

Tested by: Allen Shen

BLE 1M mode

Frequency (MHz)	6dB BW (MHz)	Required BW (MHz)	Result
2402	0.6640	≥ 0.5	PASS
2442	0.6607	≥ 0.5	PASS
2480	0.6624	≥ 0.5	PASS

BLE 2M mode

Frequency (MHz)	6dB BW (MHz)	Required BW (MHz)	Result
2402	1.119	≥ 0.5	PASS
2442	1.118	≥ 0.5	PASS
2480	1.117	≥ 0.5	PASS

BLE 1M mode

Frequency (MHz)	99%Bandwidth (MHz)
2402	1.0826
2442	1.0847
2480	1.0827

BLE 2M mode

Frequency (MHz)	99%Bandwidth (MHz)
2402	2.0838
2442	2.0849
2480	2.0850

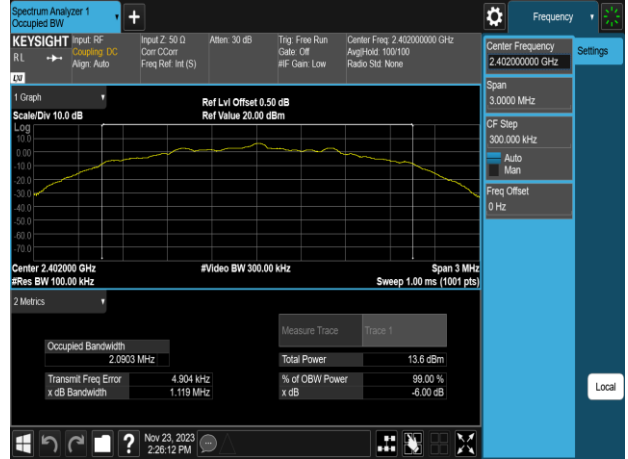
Report No.: TMWK2311004151KR

Test Data (6dB BANDWIDTH)

OBW_BLE 1M_LowCH00-2402MHz



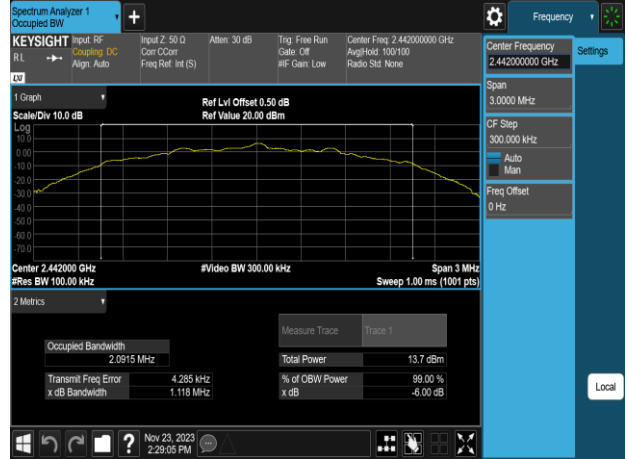
OBW_BLE 2M_LowCH00-2402MHz



OBW_BLE 1M_MidCH20-2442MHz



OBW_BLE 2M_MidCH20-2442MHz



OBW_BLE 1M_HighCH39-2480MHz



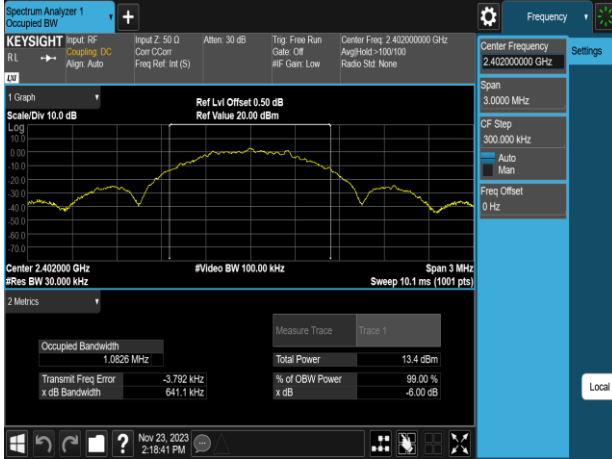
OBW_BLE 2M_HighCH39-2480MHz



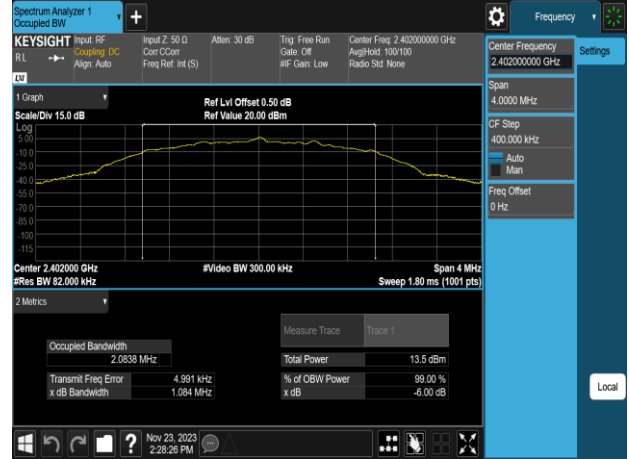
Report No.: TMWK2311004151KR

Test Data (BANDWIDTH 99%)

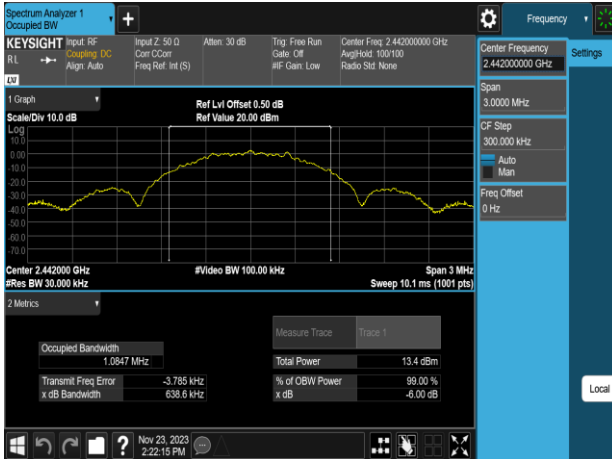
IC OBW_BLE 1M_LowCH00-2402MHz



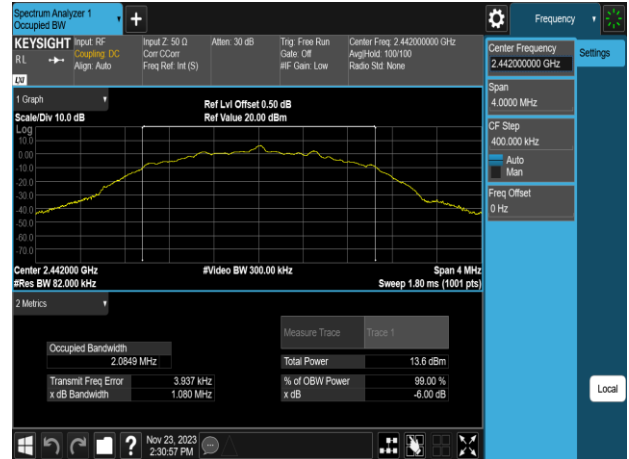
IC OBW_BLE 2M_LowCH00-2402MHz



IC OBW_BLE 1M_MidCH20-2442MHz



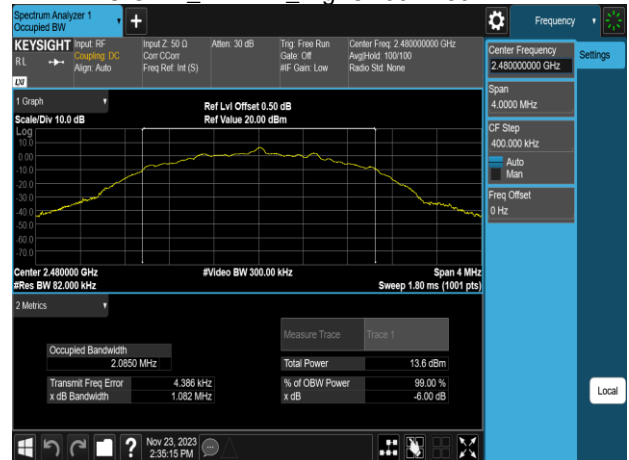
IC OBW_BLE 2M_MidCH20-2442MHz



IC OBW_BLE 1M_HighCH39-2480MHz



IC OBW_BLE 2M_HighCH39-2480MHz



4.3 OUTPUT POWER MEASUREMENT

4.3.1 Test Limit

According to §15.247(b)(3)

Peak output power :

FCC

Alternatively, frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW.

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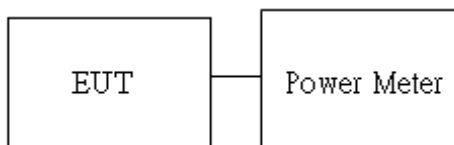
Average output power : For reporting purposes only.

4.3.2 Test Procedure

Test method Refer as KDB 558074 D01

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

4.3.3 Test Setup



4.3.4 Test Result

Temperature: 22.6°C

Test date: November 23, 2023

Humidity: 53% RH

Tested by: Allen Shen

Peak & Average output power :

BLE 1M mode:

CH	Frequency (MHz)	Power set	Peak Output Power (dBm)	Required Limit (dBm)
Low	2402	10	7.12	30
Mid	2442	10	7.16	30
High	2480	10	7.21	30
CH	Frequency (MHz)	Power set	Avg. Output Power (dBm)	Required Limit (dBm)
Low	2402	10	6.34	30
Mid	2442	10	6.36	30
High	2480	10	6.50	30

***Note:**

1. Measured by power meter, cable loss 0.5 dB + Duty cycle factor has been offsetted to the power meter for Avg. power and cable loss has been offsetted for Peak power measurement.

BLE 2M mode:

CH	Frequency (MHz)	Power set	Peak Output Power (dBm)	Required Limit (dBm)
Low	2402	10	7.48	30
Mid	2442	10	7.45	30
High	2480	10	7.60	30
CH	Frequency (MHz)	Power set	Avg. Output Power (dBm)	Required Limit (dBm)
Low	2402	10	6.23	30
Mid	2442	10	6.12	30
High	2480	10	6.26	30

***Note:**

1. Measured by power meter, cable loss 0.5 dB + Duty cycle factor has been offsetted to the power meter for Avg. power and cable loss has been offsetted for Peak power measurement.

4.4 POWER SPECTRAL DENSITY

4.4.1 Test Limit

According to §15.247(e)

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

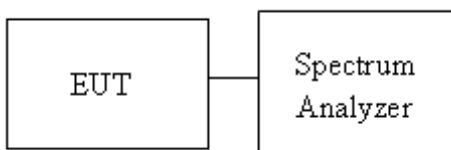
Limit	<input checked="" type="checkbox"/> Antenna not exceed 6 dBi : 8dBm <input type="checkbox"/> Antenna with DG greater than 6 dBi [Limit = 8 – (DG – 6)] <input type="checkbox"/> Point-to-point operation :
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4.4.2 Test Procedure

Test method Refer as KDB 558074 D01

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

4.4.3 Test Setup



4.4.4 Test Result

Temperature: 22.6°C

Test date: November 23, 2023

Humidity: 53% RH

Tested by: Allen Shen

BLE 1M mode

Frequency (MHz)	RF Power Density (dBm/3kHz)	Maximum Limit (dBm/3kHz)	Result
2402	-6.69	8	PASS
2442	-6.57	8	PASS
2480	-6.54	8	PASS

***Note:**

1.cable loss as 0.5dB that offsets in the spectrum

BLE 2M mode

Frequency (MHz)	RF Power Density (dBm/3kHz)	Maximum Limit (dBm/3kHz)	Result
2402	-8.94	8	PASS
2442	-8.85	8	PASS
2480	-8.84	8	PASS

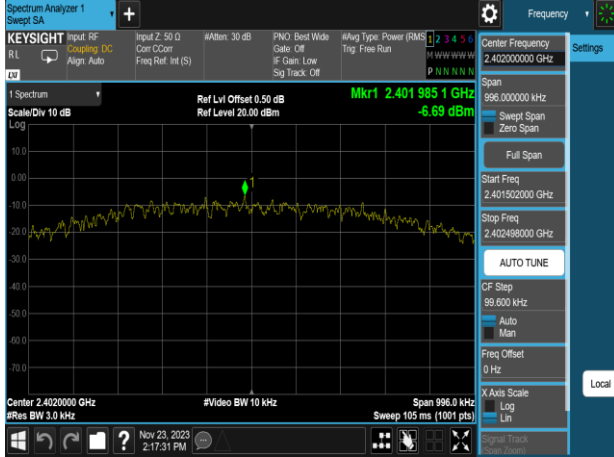
***Note:**

1.cable loss as 0.5dB that offsets in the spectrum

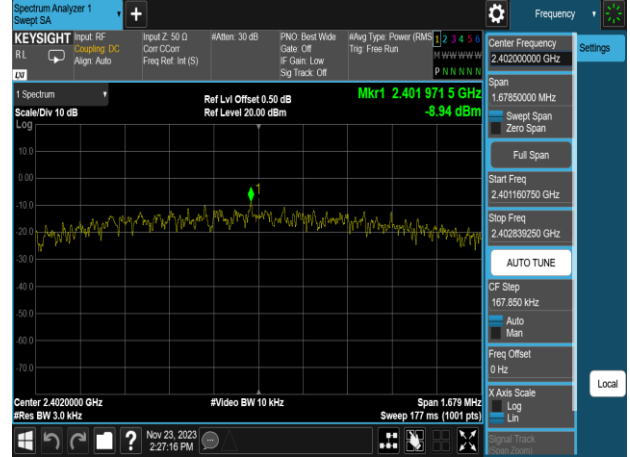
Report No.: TMWK2311004151KR

Test Data

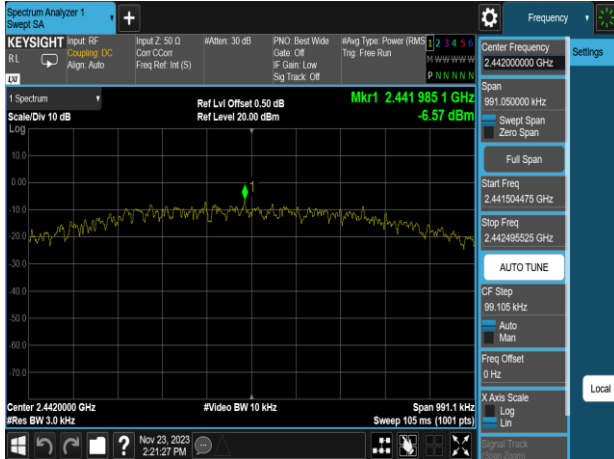
PSD_BLE 1M_LowCH00-2402MHz



PSD_BLE 2M_LowCH00-2402MHz



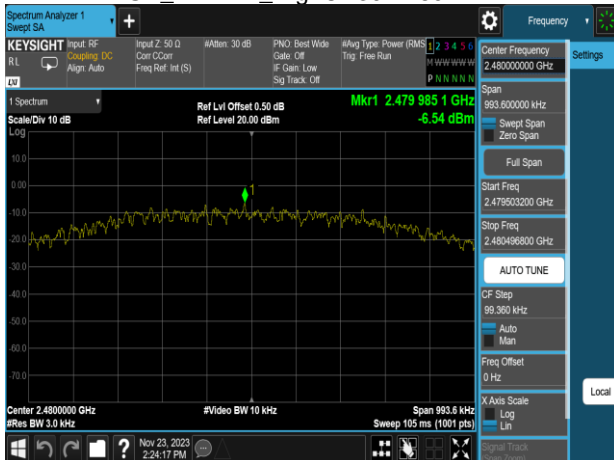
PSD_BLE 1M_MidCH20-2442MHz



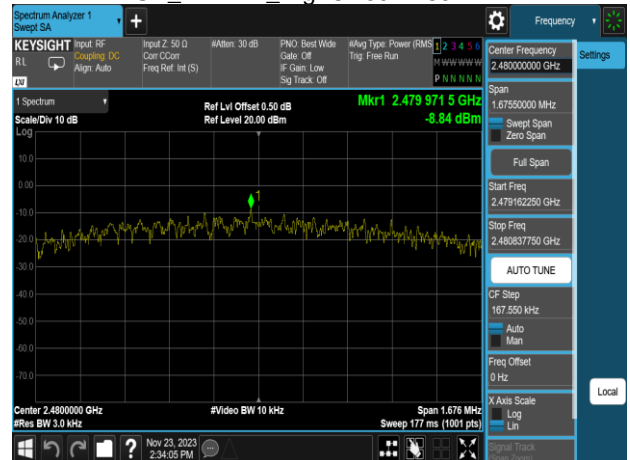
PSD_BLE 2M_MidCH20-2442MHz



PSD_BLE 1M_HighCH39-2480MHz



PSD_BLE 2M_HighCH39-2480MHz



4.5 CONDUCTED BAND EDGE AND SPURIOUS EMISSION

4.5.1 Test Limit

According to §15.247(d)

FCC: In any 100 kHz bandwidth outside the authorized frequency band,

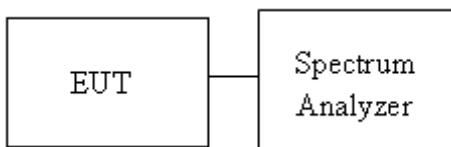
Non-restricted bands shall be attenuated at least 20 dB/30 dB relative to the maximum PSD level in 100 kHz by RF conducted or a radiated measurement which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a).

4.5.2 Test Procedure

Test method Refer as KDB 558074 D01

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

4.5.3 Test Setup



4.5.4 Test Result

Temperature: 22.6°C

Test date: November 23, 2023

Humidity: 53% RH

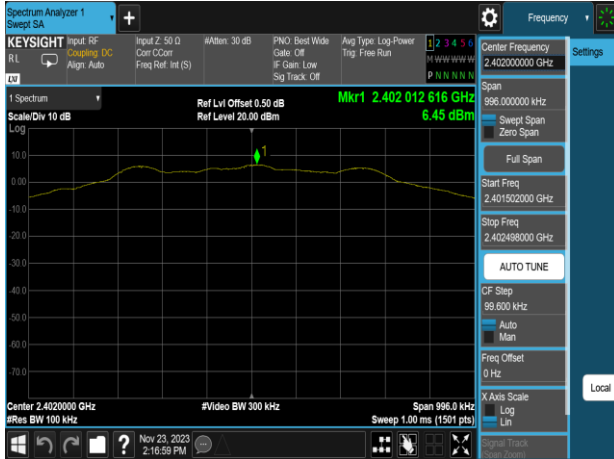
Tested by: Allen Shen

Report No.: TMWK2311004151KR

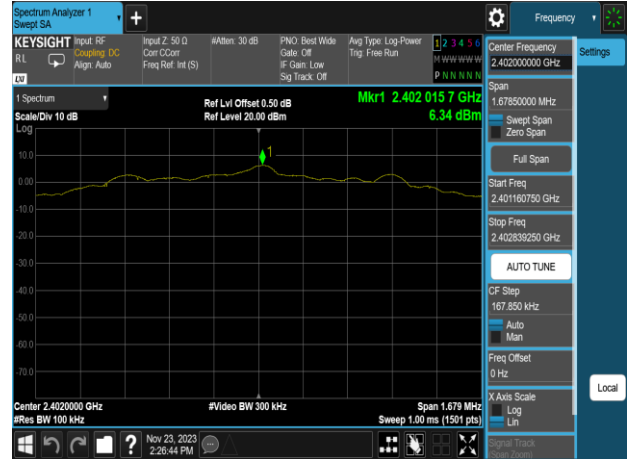
Test Data

Reference Level

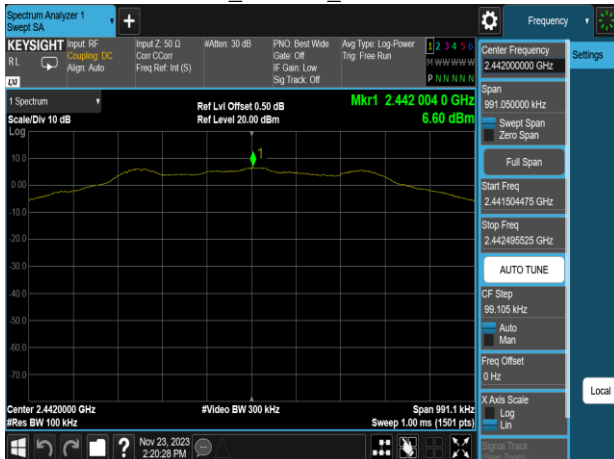
Reference Level_BLE 1M_LowCH00-2402MHz



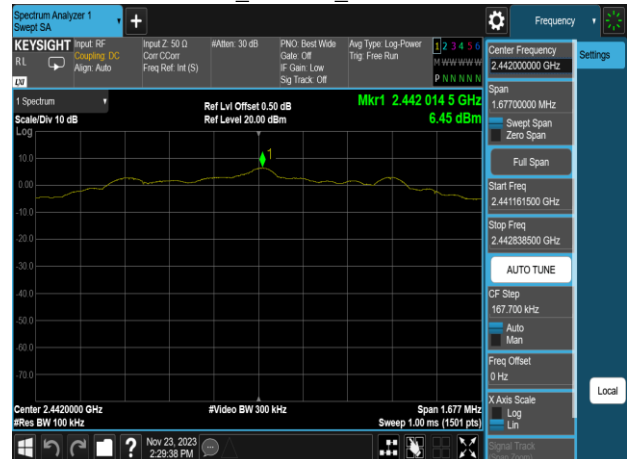
Reference Level_BLE 2M_LowCH00-2402MHz



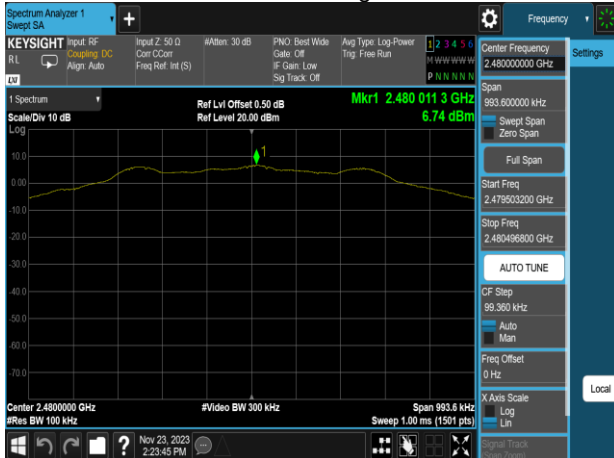
Reference Level_BLE 1M_MidCH20-2442MHz



Reference Level_BLE 2M_MidCH20-2442MHz



Reference Level_BLE 1M_HighCH39-2480MHz



Reference Level_BLE 2M_HighCH39-2480MHz



Report No.: TMWK2311004151KR

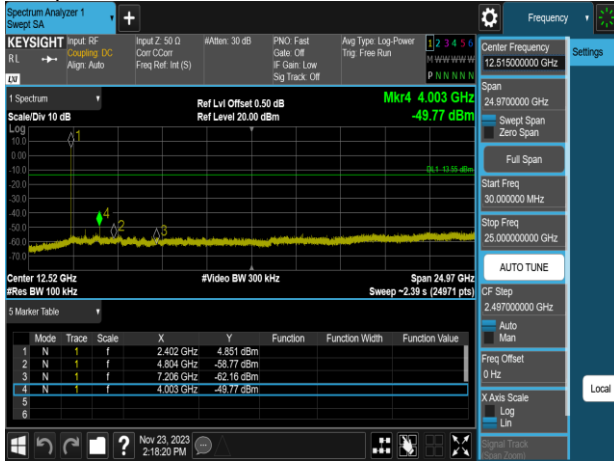
Band Edge



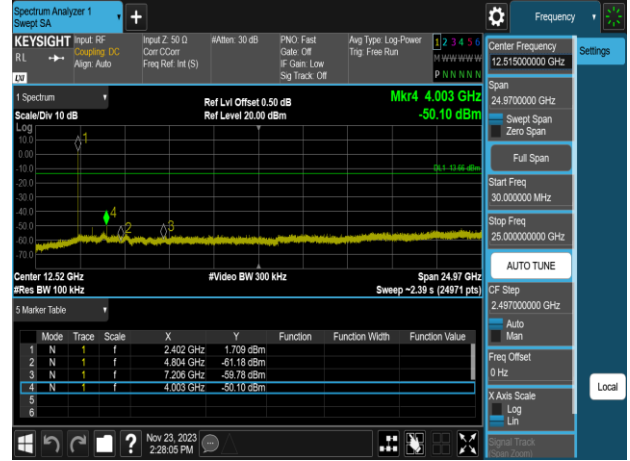
Report No.: TMWK2311004151KR

Spurious Emission

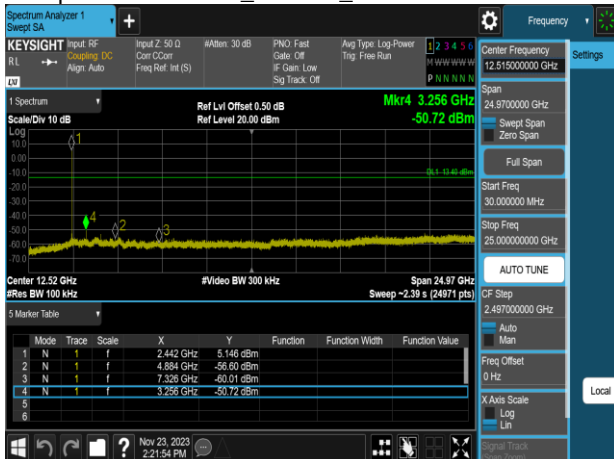
Spurious Emission_BLE 1M_LowCH00-2402MHz



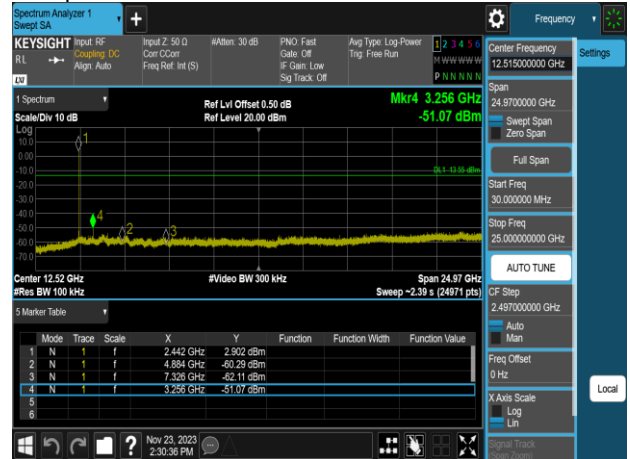
Spurious Emission_BLE 2M_LowCH00-2402MHz



Spurious Emission_BLE 1M_MidCH20-2442MHz



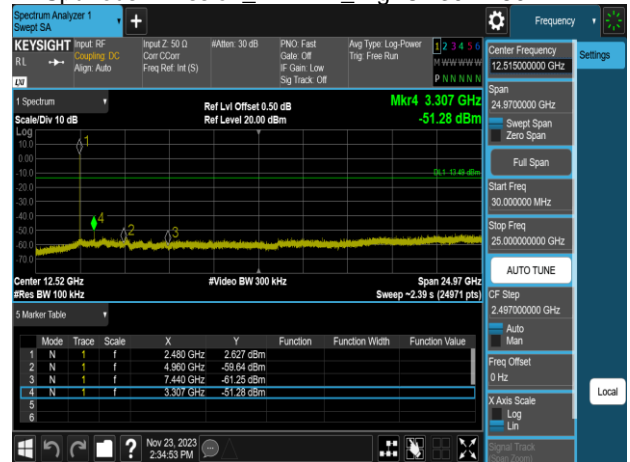
Spurious Emission_BLE 2M_MidCH20-2442MHz



Spurious Emission_BLE 1M_HighCH39-2480MHz



Spurious Emission_BLE 2M_HighCH39-2480MHz



4.6 RADIATION BANDEDGE AND SPURIOUS EMISSION

4.6.1 Test Limit

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

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

Below 30 MHz

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

Above 30 MHz

Frequency (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)

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.

4.6.2 Test Procedure

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.

Remark:

1. 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.
 2. No emission found between lowest internal used/generated frequency to 30MHz (9kHz~30MHz).
3. 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.

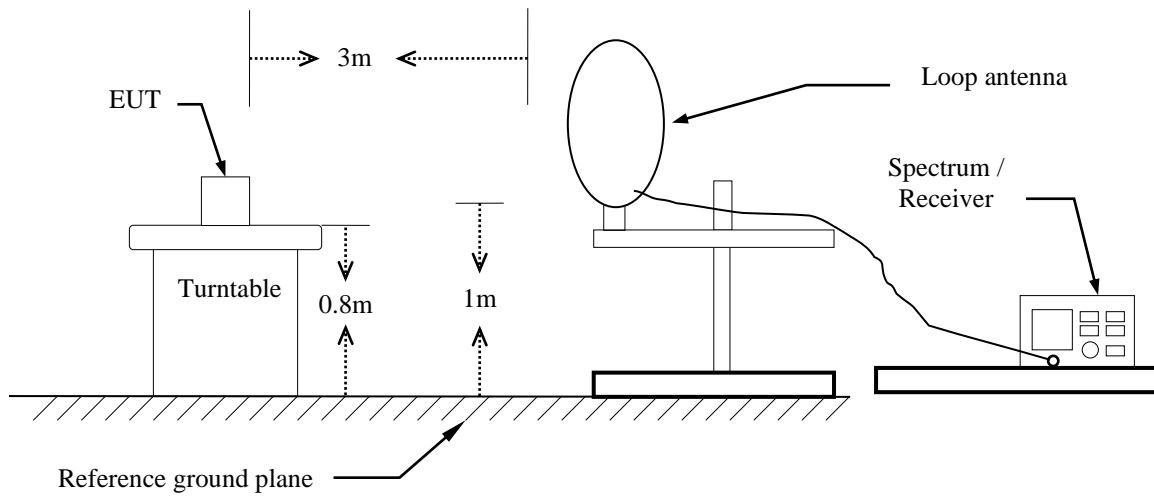
4. Data result

Actual FS=Spectrum Reading Level+Factor

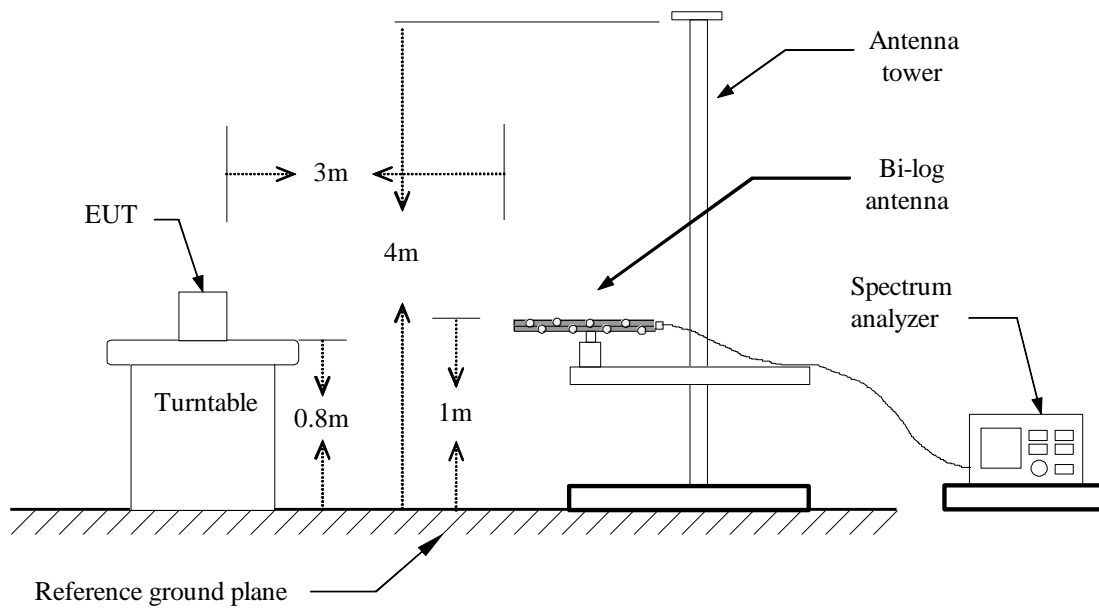
Margin=Actual FS- Limit

4.6.3 Test Setup

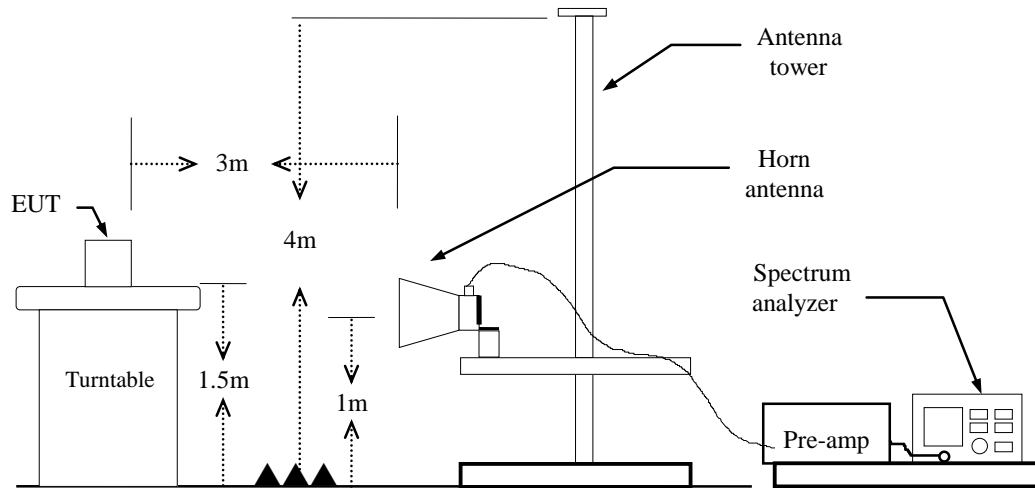
9kHz ~ 30MHz



30MHz ~ 1GHz



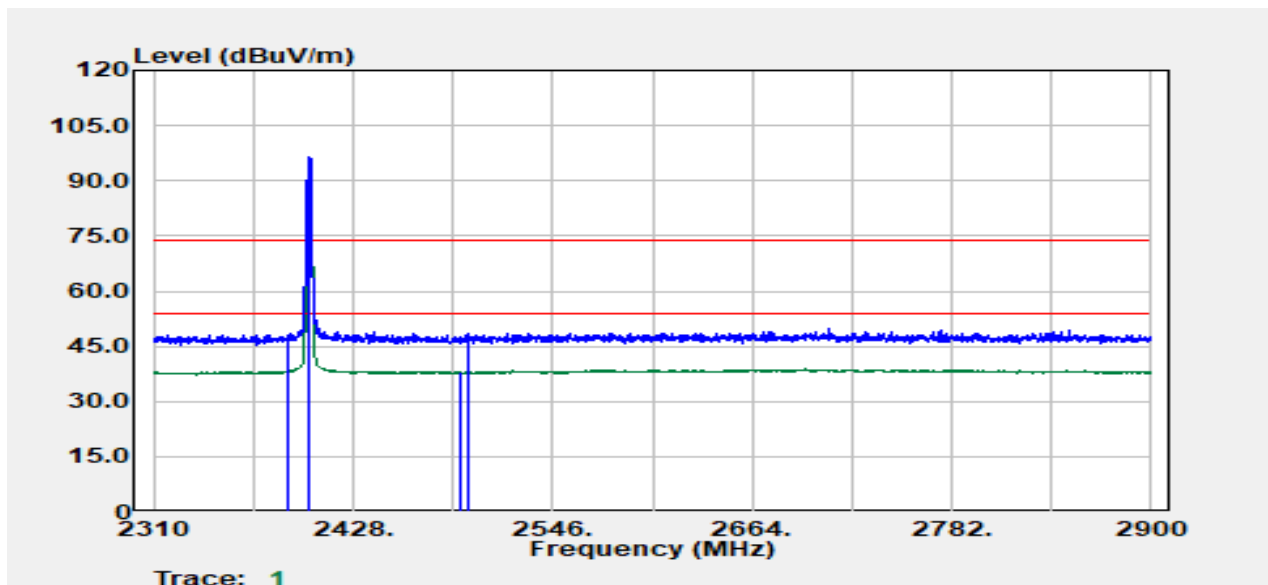
Above 1 GHz



4.6.4 Test Result

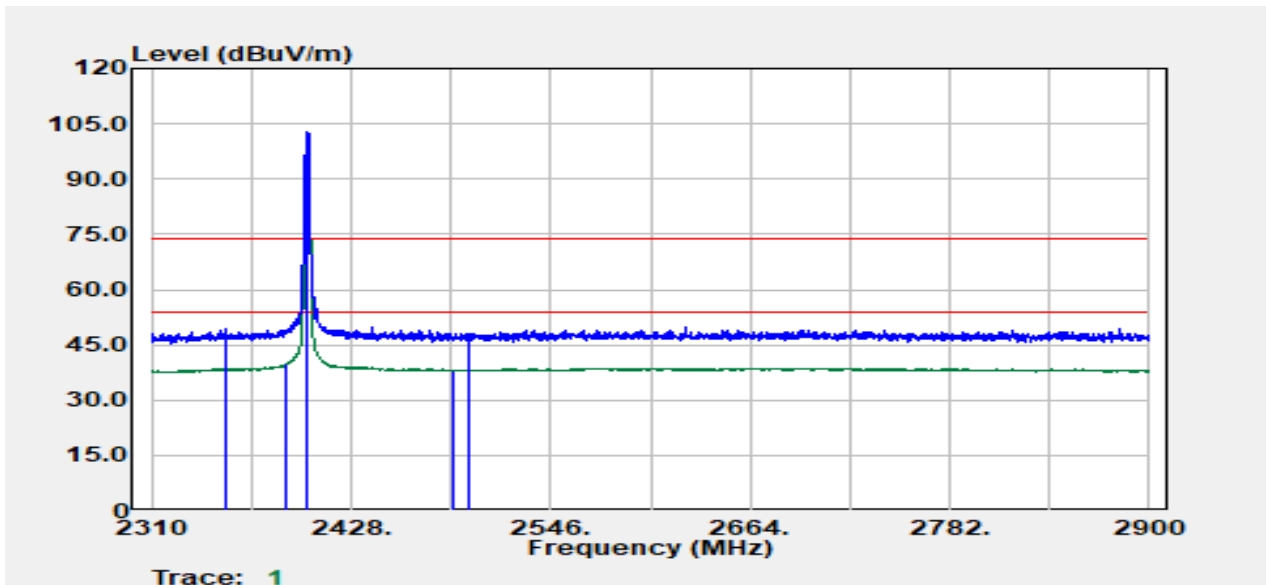
Band Edge Test Data

Project No	:TM-2311000089P	Test Date	:2023-11-24
Operation Band	:BLE_1M	Temp./Humi.	:24.5/57
Frequency	:2402 MHz	Antenna Pol.	:VERTICAL
Operation Mode	:Bandedge	Engineer	:Tony Chao
EUT Pol	:H	Test Chamber	: 966A
Setting	:10		



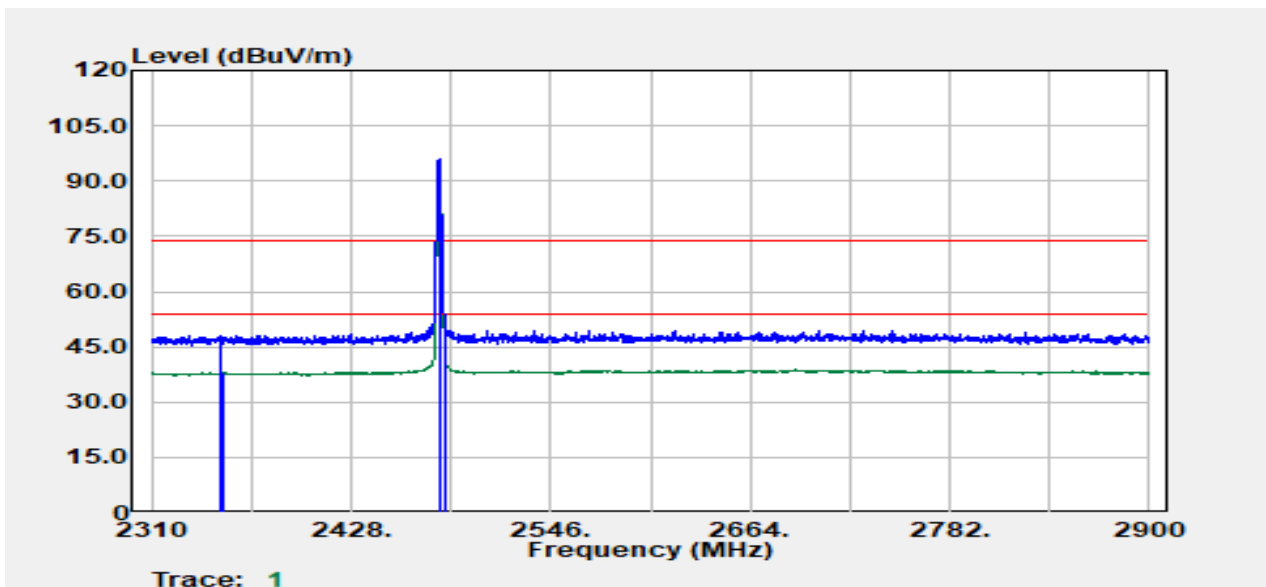
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dB μ V	Factor dB	Actual FS dB μ V/m	Limit dB μ V/m	Margin dB
2389.78	Average	33.10	5.21	38.31	54.00	-15.69
2390.00	Peak	43.01	5.21	48.22	74.00	-25.78
2402.00	Peak	91.43	5.03	96.46	--	--
2402.00	Average	90.91	5.03	95.93	--	--
2490.83	Average	32.57	5.52	38.09	54.00	-15.91
2496.08	Peak	43.09	5.53	48.62	74.00	-25.38

Project No	:TM-2311000089P	Test Date	:2023-11-24
Operation Band	:BLE_1M	Temp./Humi.	:24.5/57
Frequency	:2402 MHz	Antenna Pol.	:HORIZONTAL
Operation Mode	:Bandedge	Engineer	:Tony Chao
EUT Pol	:H	Test Chamber	: 966A
Setting	:10		



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
2353.52	Peak	44.30	5.16	49.46	74.00	-24.54
2390.00	Average	34.58	5.21	39.79	54.00	-14.21
2402.00	Peak	97.94	5.03	102.97	--	--
2402.00	Average	97.29	5.03	102.32	--	--
2487.83	Average	32.72	5.52	38.23	54.00	-15.77
2497.83	Peak	42.61	5.53	48.14	74.00	-25.86

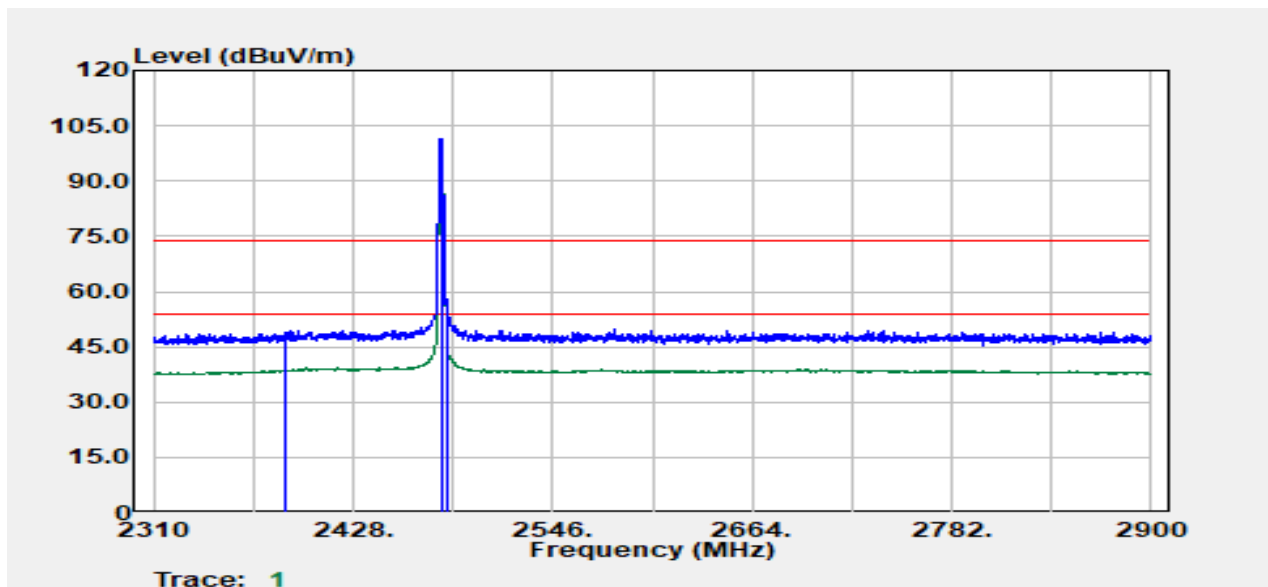
Project No	:TM-2311000089P	Test Date	:2023-11-24
Operation Band	:BLE_1M	Temp./Humi.	:24.5/57
Frequency	:2480 MHz	Antenna Pol.	:VERTICAL
Operation Mode	:Bandedge	Engineer	:Tony Chao
EUT Pol	:H	Test Chamber	: 966A
Setting	:10		



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level d μ V	Factor dB	Actual FS d μ V/m	Limit d μ V/m	Margin dB
2350.02	Peak	42.95	5.19	48.14	74.00	-25.86
2352.27	Average	32.78	5.17	37.95	54.00	-16.05
2480.00	Peak	90.33	5.51	95.84	--	--
2480.00	Average	89.72	5.51	95.23	--	--
2483.57	Peak	45.64	5.51	51.15	74.00	-22.85
2483.57	Average	36.30	5.51	41.81	54.00	-12.19

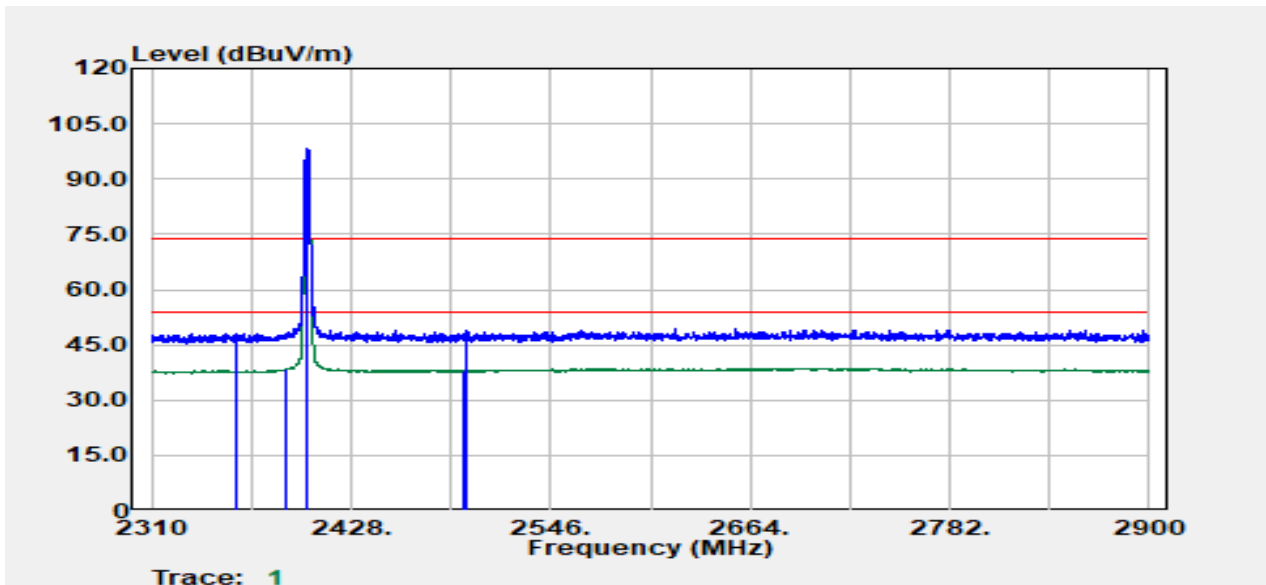
Report No.: TMWK2311004151KR

Project No	:TM-2311000089P	Test Date	:2023-11-24
Operation Band	:BLE_1M	Temp./Humi.	:24.5/57
Frequency	:2480 MHz	Antenna Pol.	:HORIZONTAL
Operation Mode	:Bandedge	Engineer	:Tony Chao
EUT Pol	:H	Test Chamber	: 966A
Setting	:10		



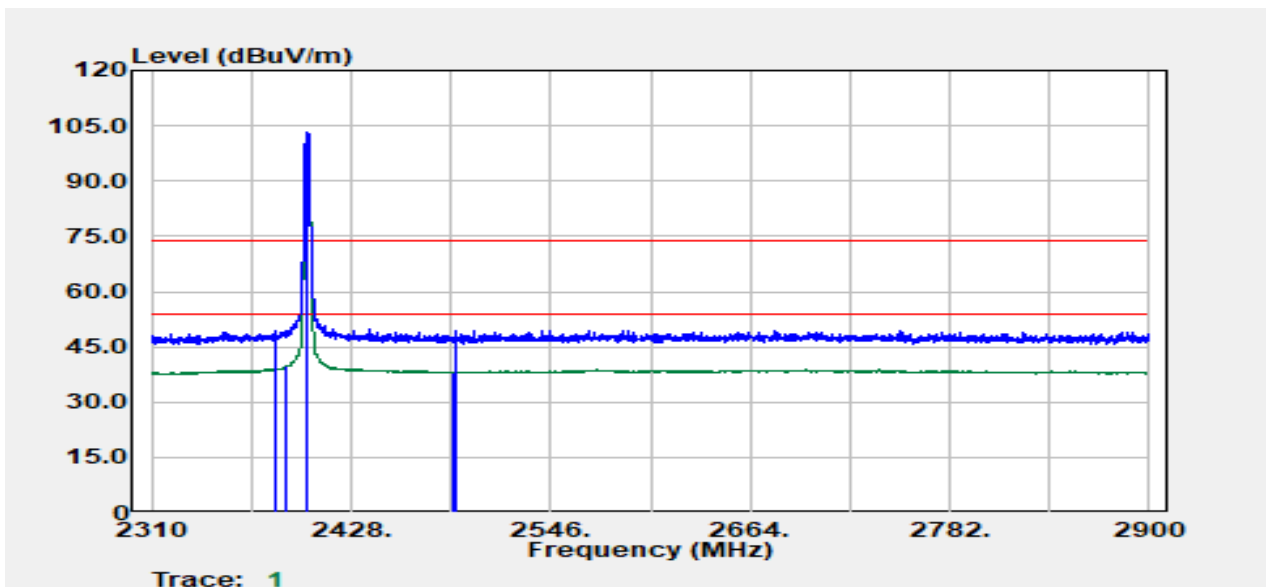
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level d μ V	Factor dB	Actual FS d $B\mu$ V/m	Limit d $B\mu$ V/m	Margin dB
2387.53	Peak	43.55	5.19	48.74	74.00	-25.26
2388.53	Average	33.46	5.20	38.66	54.00	-15.34
2480.00	Peak	95.97	5.51	101.48	--	--
2480.00	Average	95.28	5.51	100.79	--	--
2483.57	Average	40.76	5.51	46.27	54.00	-7.73
2483.82	Peak	49.78	5.51	55.29	74.00	-18.71

Project No	:TM-2311000089P	Test Date	:2023-11-24
Operation Band	:BLE_2M	Temp./Humi.	:24.5/57
Frequency	:2402 MHz	Antenna Pol.	:VERTICAL
Operation Mode	:Bandedge	Engineer	:Tony Chao
EUT Pol	:H	Test Chamber	: 966A
Setting	:10		



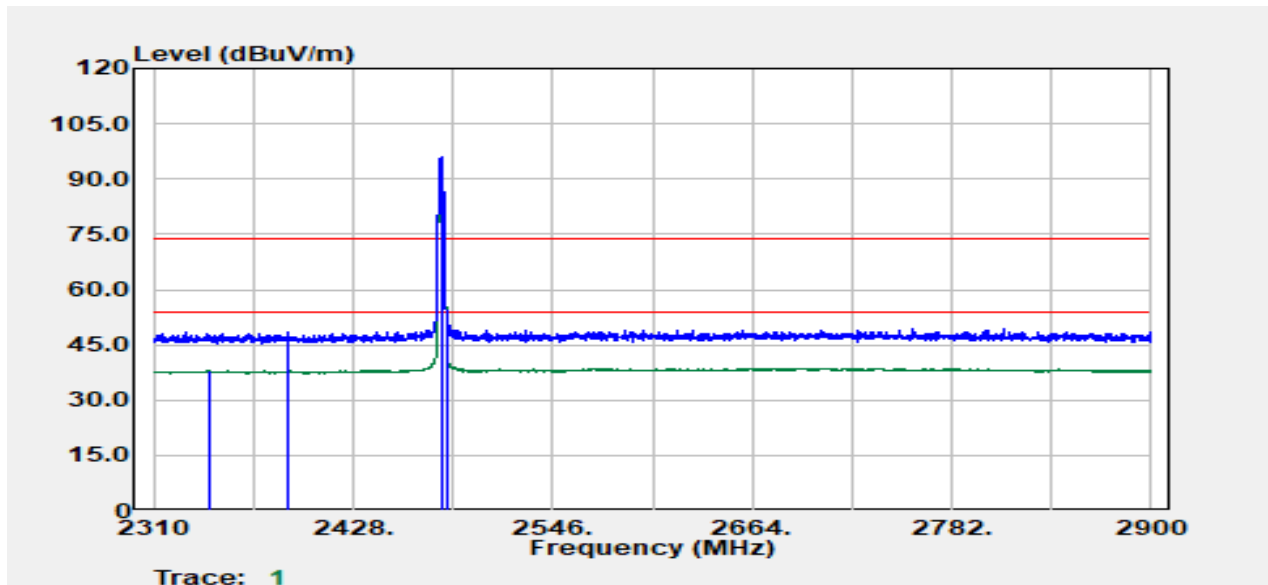
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dB μ V	Factor dB	Actual FS dB μ V/m	Limit dB μ V/m	Margin dB
2359.52	Peak	43.05	5.10	48.15	74.00	-25.85
2389.53	Average	33.22	5.21	38.43	54.00	-15.57
2402.00	Peak	93.33	5.03	98.35	--	--
2402.00	Average	91.71	5.03	96.74	--	--
2494.33	Average	32.47	5.52	37.99	54.00	-16.01
2496.08	Peak	43.21	5.53	48.74	74.00	-25.26

Project No	:TM-2311000089P	Test Date	:2023-11-24
Operation Band	:BLE_2M	Temp./Humi.	:24.5/57
Frequency	:2402 MHz	Antenna Pol.	:HORIZONTAL
Operation Mode	:Bandedge	Engineer	:Tony Chao
EUT Pol	:H	Test Chamber	: 966A
Setting	:10		



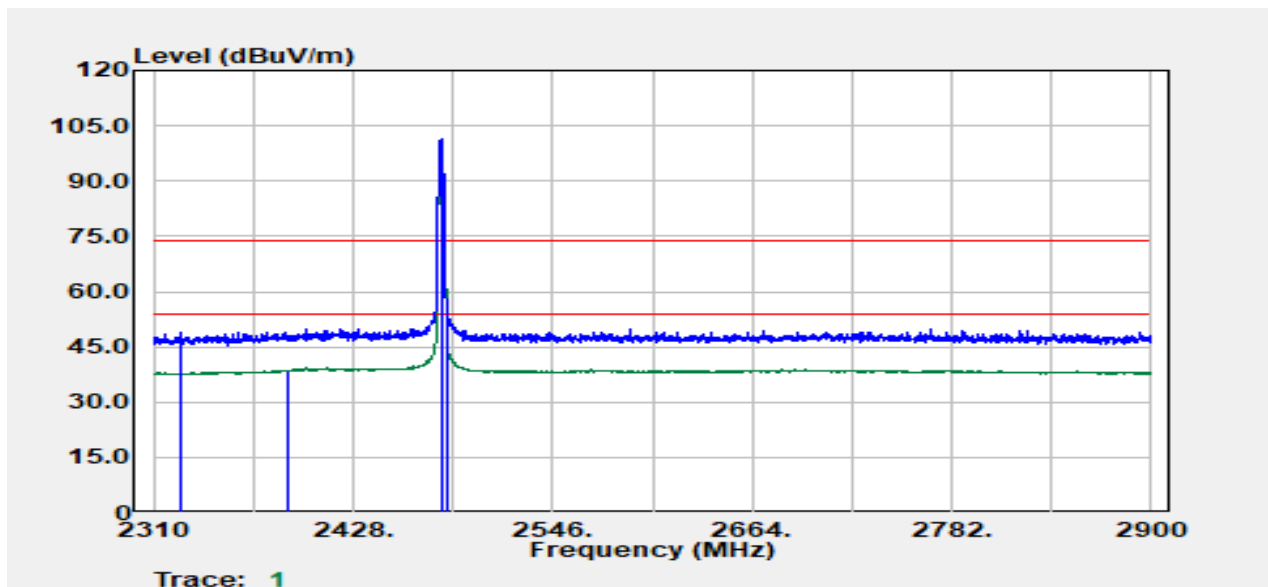
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dB μ V	Factor dB	Actual FS dB μ V/m	Limit dB μ V/m	Margin dB
2383.03	Peak	44.37	5.14	49.51	74.00	-24.49
2390.00	Average	34.50	5.21	39.71	54.00	-14.29
2402.00	Peak	98.03	5.03	103.05	--	--
2402.00	Average	96.33	5.03	101.36	--	--
2489.08	Average	32.74	5.52	38.25	54.00	-15.75
2490.08	Peak	43.70	5.52	49.22	74.00	-24.78

Project No	:TM-2311000089P	Test Date	:2023-11-24
Operation Band	:BLE_2M	Temp./Humi.	:24.5/57
Frequency	:2480 MHz	Antenna Pol.	:VERTICAL
Operation Mode	:Bandedge	Engineer	:Tony Chao
EUT Pol	:H	Test Chamber	: 966A
Setting	:10		



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dB μ V	Factor dB	Actual FS dB μ V/m	Limit dB μ V/m	Margin dB
2342.76	Average	32.75	5.10	37.85	54.00	-16.15
2389.78	Peak	43.37	5.21	48.59	74.00	-25.41
2480.00	Peak	90.49	5.51	96.00	--	--
2480.00	Average	88.83	5.51	94.33	--	--
2483.57	Average	38.63	5.51	44.14	54.00	-9.86
2483.82	Peak	45.61	5.51	51.12	74.00	-22.88

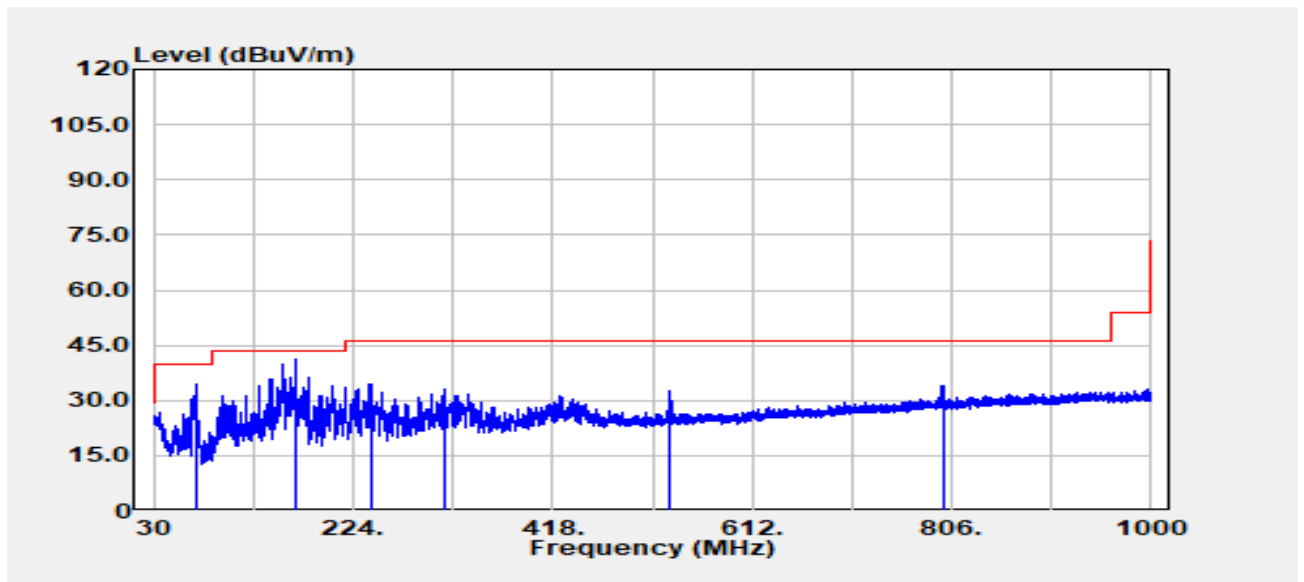
Project No	:TM-2311000089P	Test Date	:2023-11-24
Operation Band	:BLE_2M	Temp./Humi.	:24.5/57
Frequency	:2480 MHz	Antenna Pol.	:HORIZONTAL
Operation Mode	:Bandedge	Engineer	:Tony Chao
EUT Pol	:H	Test Chamber	: 966A
Setting	:10		



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dB μ V	Factor dB	Actual FS dB μ V/m	Limit dB μ V/m	Margin dB
2325.76	Peak	43.87	4.95	48.82	74.00	-25.18
2388.78	Average	33.49	5.20	38.70	54.00	-15.30
2480.00	Peak	95.94	5.51	101.45	--	--
2480.00	Average	94.32	5.51	99.83	--	--
2483.57	Average	43.40	5.51	48.91	54.00	-5.09
2483.82	Peak	50.55	5.51	56.07	74.00	-17.93

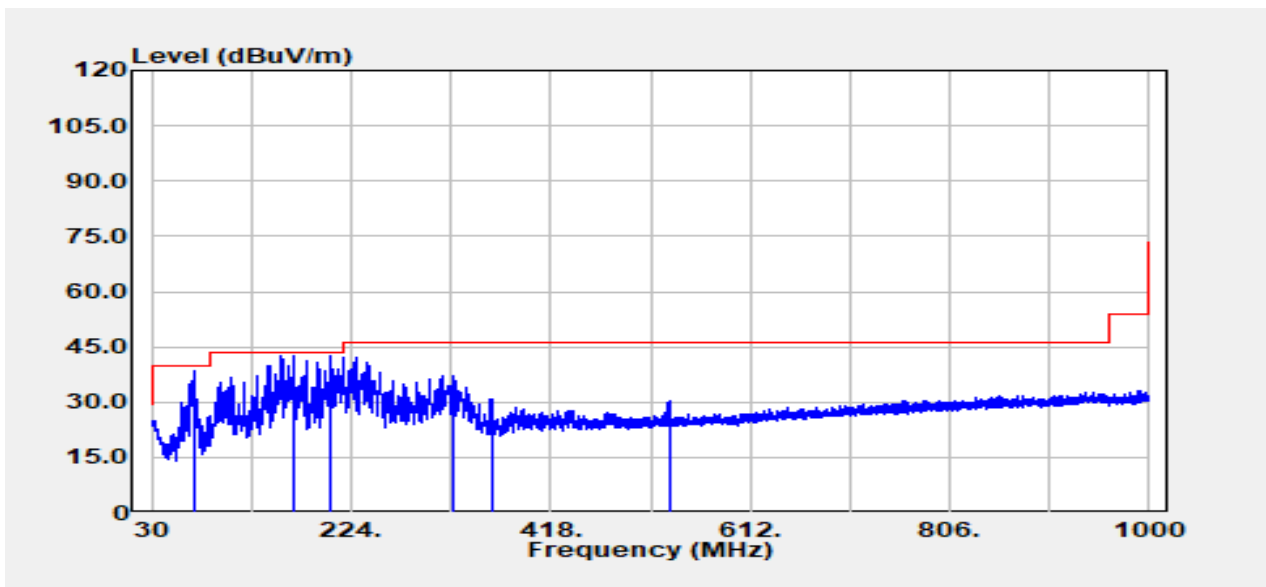
TX Test Data

Project No	:TM-2311000089P	Test Date	:2023-11-27
Operation Band	:BLE_2M	Temp./Humi.	:24.6/58
Frequency	:2480 MHz	Antenna Pol.	:VERTICAL
Operation Mode	:TX	Engineer	:Tony Chao
EUT Pol	:H	Test Chamber	: 966A
Setting	:		



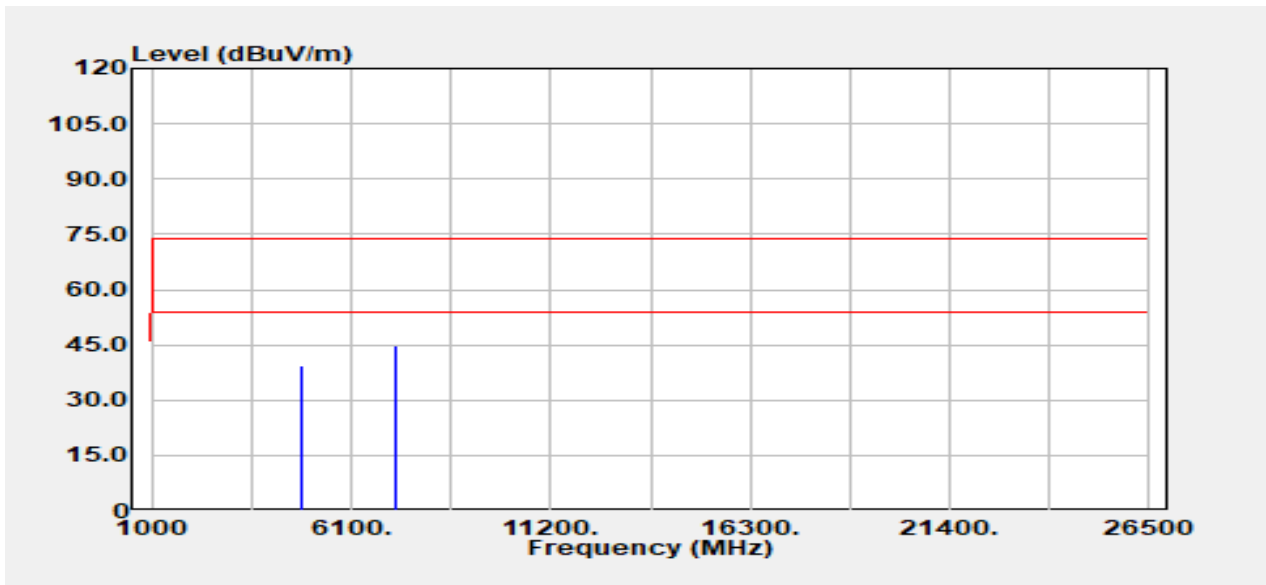
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level d μ V	Factor dB	Actual FS d μ V/m	Limit d μ V/m	Margin dB
71.95	Peak	49.87	-15.24	34.63	40.00	-5.37
167.98	Peak	52.16	-10.99	41.17	43.50	-2.33
240.61	Peak	45.15	-10.84	34.31	46.00	-11.69
312.03	Peak	41.34	-8.35	33.00	46.00	-13.00
532.70	Peak	35.76	-3.13	32.64	46.00	-13.36
797.39	Peak	32.61	1.31	33.92	46.00	-12.08

Project No	:TM-2311000089P	Test Date	:2023-11-27
Operation Band	:BLE_2M	Temp./Humi.	:24.6/58
Frequency	:2480 MHz	Antenna Pol.	:HORIZONTAL
Operation Mode	:TX	Engineer	:Tony Chao
EUT Pol	:H	Test Chamber	: 966A
Setting	:		



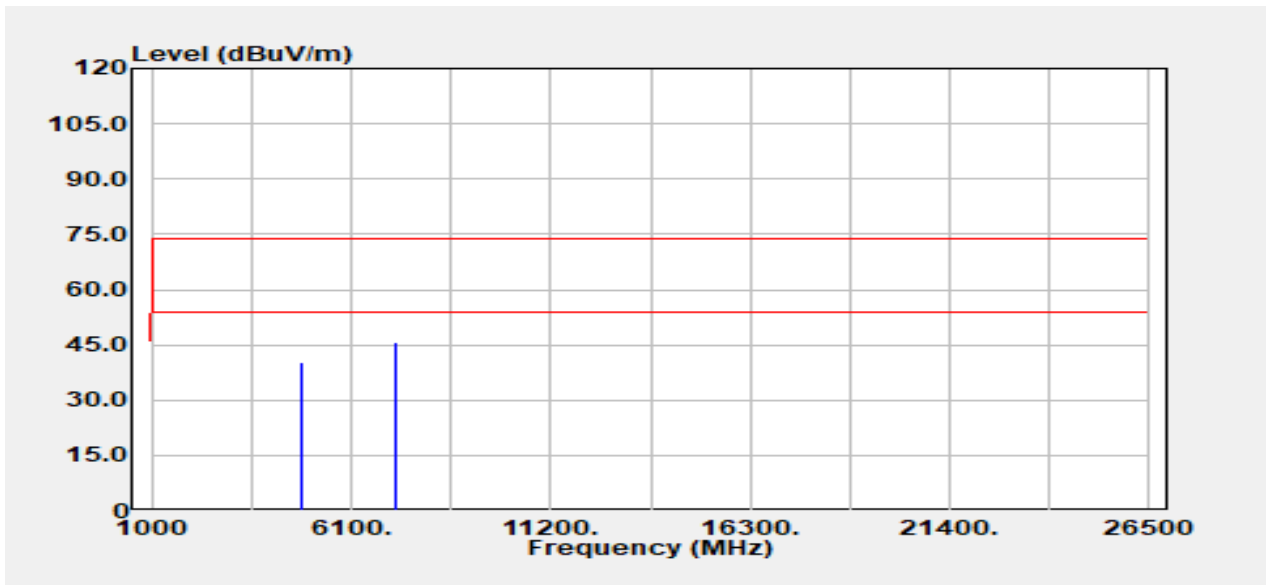
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level d μ V	Factor dB	Actual FS d $B\mu$ V/m	Limit d $B\mu$ V/m	Margin dB
72.07	Peak	53.60	-15.26	38.35	40.00	-1.65
167.98	QP	51.40	-10.99	40.41	43.50	-3.09
203.63	QP	47.80	-11.31	36.49	43.50	-7.01
324.03	Peak	45.41	-8.13	37.28	46.00	-8.72
360.04	Peak	38.16	-7.18	30.98	46.00	-15.02
533.19	Peak	33.30	-3.12	30.18	46.00	-15.82

Project No	:TM-2311000089P	Test Date	:2023-11-24
Operation Band	:BLE_1M	Temp./Humi.	:24.5/57
Frequency	:2402 MHz	Antenna Pol.	:Vertical
Operation Mode	:TX	Engineer	:Ray Li
EUT Pol	:H	Test Chamber	: 966A
Setting	:10		



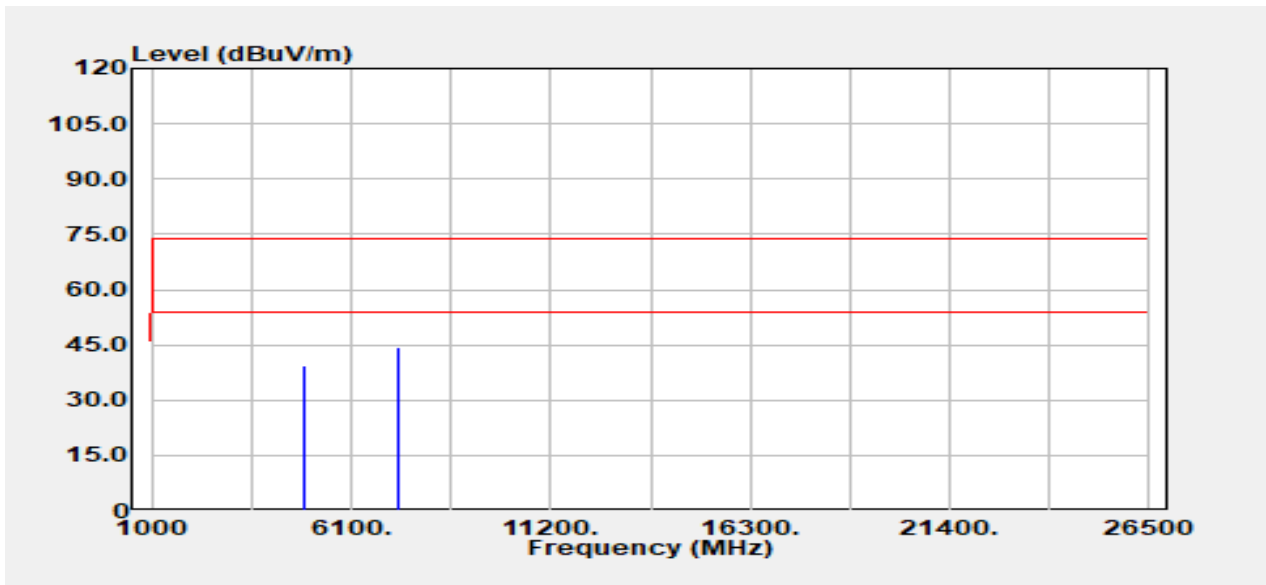
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dB μ V	Factor dB	Actual FS dB μ V/m	Limit dB μ V/m	Margin dB
4804.00	Peak	37.56	1.95	39.51	74.00	-34.49
4804.00	Average	30.52	1.95	32.47	54.00	-21.53
7206.00	Peak	35.90	8.72	44.62	74.00	-29.38
7206.00	Average	26.63	8.72	35.35	54.00	-18.65

Project No	:TM-2311000089P	Test Date	:2023-11-24
Operation Band	:BLE_1M	Temp./Humi.	:24.5/57
Frequency	:2402 MHz	Antenna Pol.	:Horizontal
Operation Mode	:TX	Engineer	:Ray Li
EUT Pol	:H	Test Chamber	: 966A
Setting	:10		



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dB μ V	Factor dB	Actual FS dB μ V/m	Limit dB μ V/m	Margin dB
4804.00	Peak	38.21	1.95	40.15	74.00	-33.85
4804.00	Average	31.42	1.95	33.37	54.00	-20.63
7206.00	Peak	36.82	8.72	45.54	74.00	-28.46
7206.00	Average	26.76	8.72	35.47	54.00	-18.53

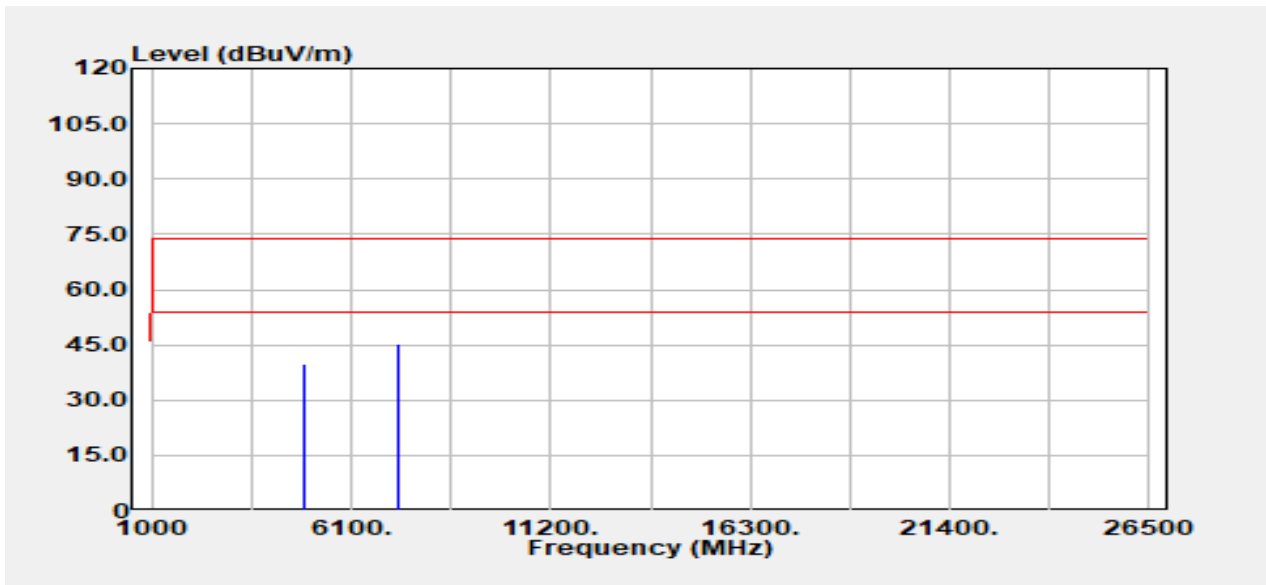
Project No	:TM-2311000089P	Test Date	:2023-11-24
Operation Band	:BLE_1M	Temp./Humi.	:24.5/57
Frequency	:2442 MHz	Antenna Pol.	:Vertical
Operation Mode	:TX	Engineer	:Ray Li
EUT Pol	:H	Test Chamber	: 966A
Setting	:10		



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
4884.00	Peak	37.24	2.25	39.50	74.00	-34.50
4884.00	Average	31.47	2.25	33.73	54.00	-20.27
7326.00	Peak	35.63	8.60	44.23	74.00	-29.77
7326.00	Average	26.75	8.60	35.35	54.00	-18.65

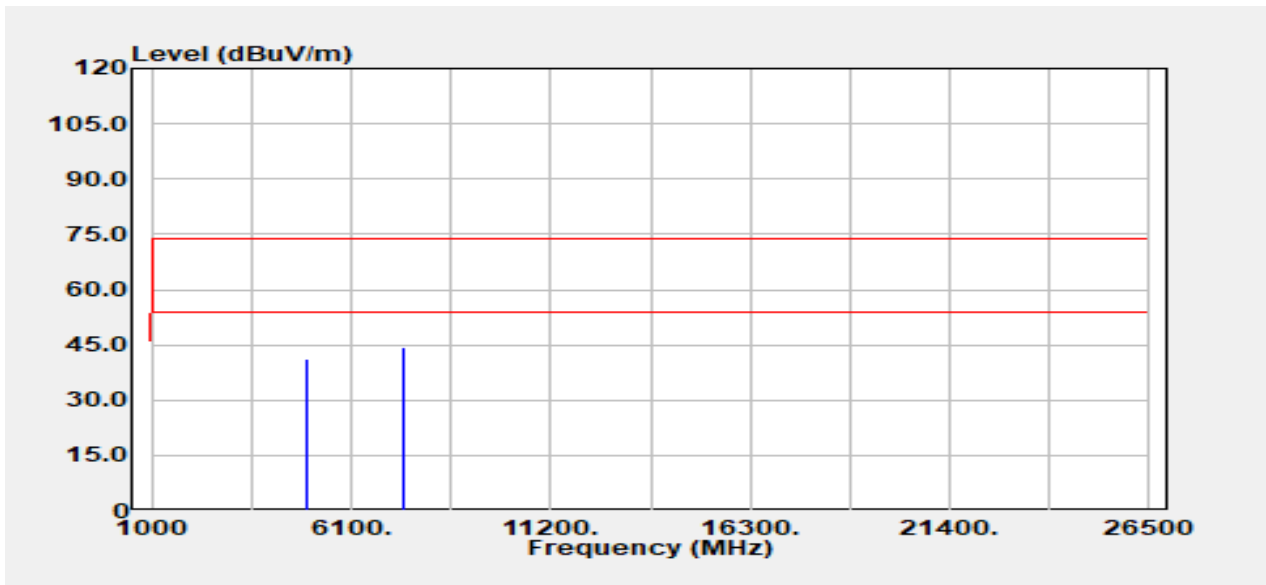
Report No.: TMWK2311004151KR

Project No	:TM-2311000089P	Test Date	:2023-11-24
Operation Band	:BLE_1M	Temp./Humi.	:24.5/57
Frequency	:2442 MHz	Antenna Pol.	:Horizontal
Operation Mode	:TX	Engineer	:Ray Li
EUT Pol	:H	Test Chamber	: 966A
Setting	:10		



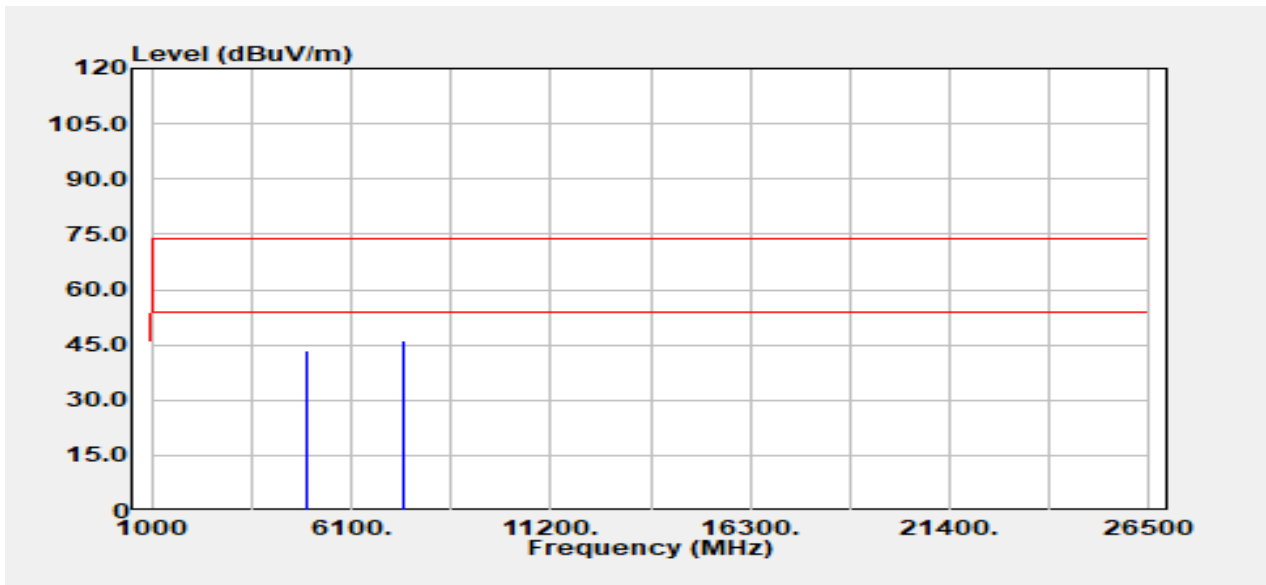
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dB μ V	Factor dB	Actual FS dB μ V/m	Limit dB μ V/m	Margin dB
4884.00	Peak	37.77	2.25	40.02	74.00	-33.98
4884.00	Average	34.24	2.25	36.49	54.00	-17.51
7326.00	Peak	36.70	8.60	45.30	74.00	-28.70
7326.00	Average	26.69	8.60	35.29	54.00	-18.71

Project No	:TM-2311000089P	Test Date	:2023-11-24
Operation Band	:BLE_1M	Temp./Humi.	:24.5/57
Frequency	:2480 MHz	Antenna Pol.	:Vertical
Operation Mode	:TX	Engineer	:Ray Li
EUT Pol	:H	Test Chamber	: 966A
Setting	:10		



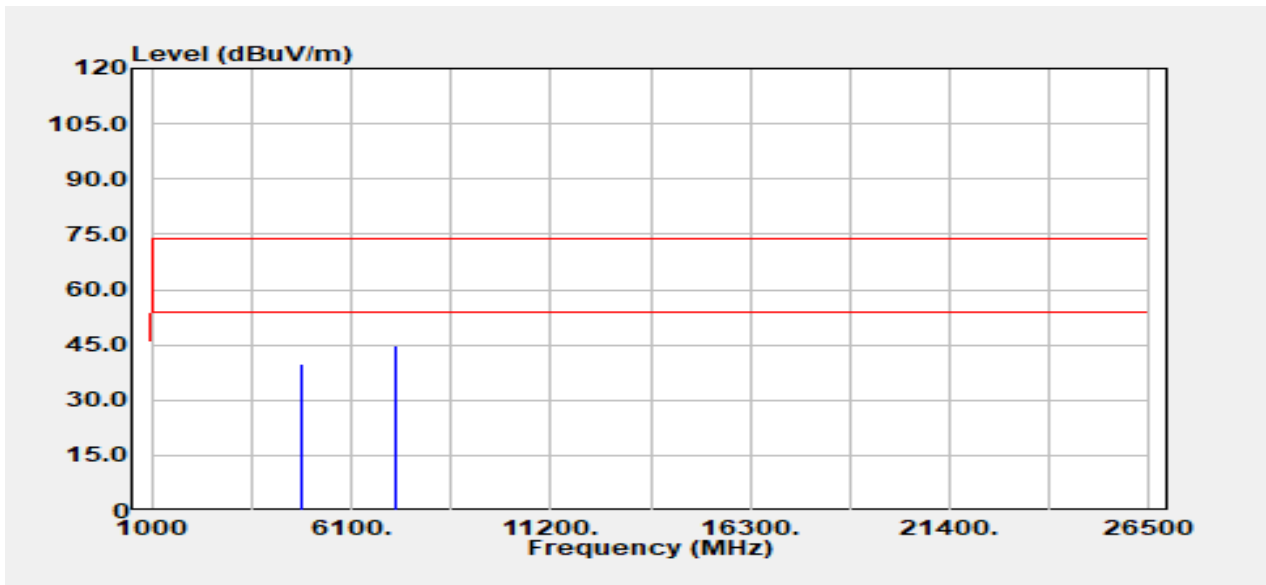
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dB μ V	Factor dB	Actual FS dB μ V/m	Limit dB μ V/m	Margin dB
4960.00	Peak	38.35	2.83	41.18	74.00	-32.82
4960.00	Average	32.18	2.83	35.01	54.00	-18.99
7440.00	Peak	35.81	8.60	44.41	74.00	-29.59
7440.00	Average	26.70	8.60	35.30	54.00	-18.70

Project No	:TM-2311000089P	Test Date	:2023-11-24
Operation Band	:BLE_1M	Temp./Humi.	:24.5/57
Frequency	:2480 MHz	Antenna Pol.	:Horizontal
Operation Mode	:TX	Engineer	:Ray Li
EUT Pol	:H	Test Chamber	: 966A
Setting	:10		



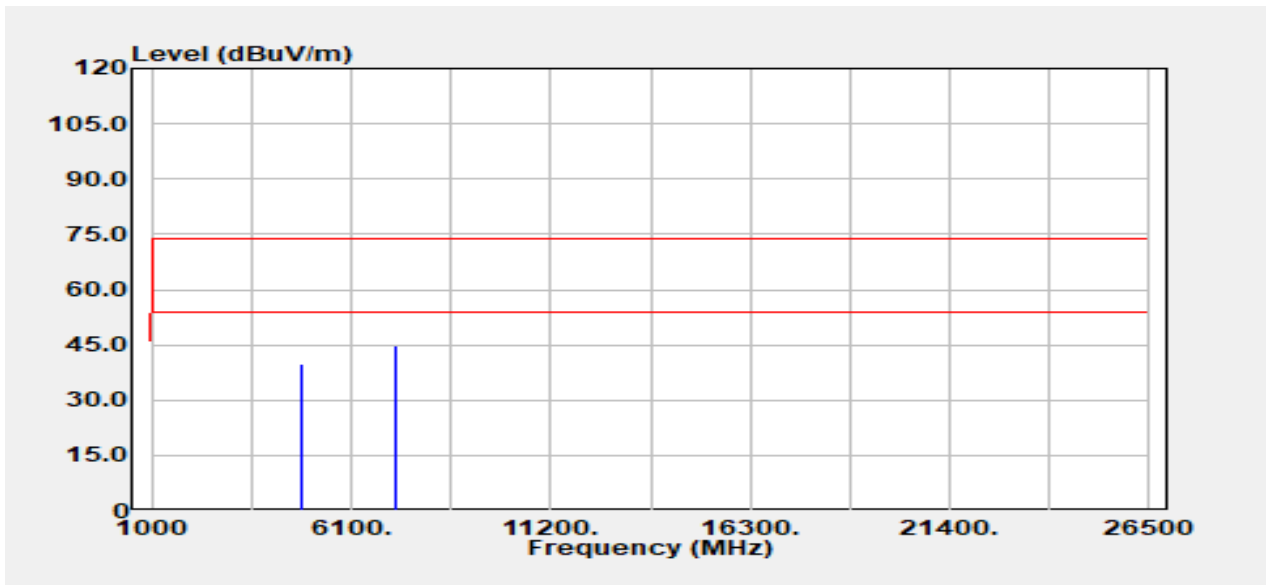
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dB μ V	Factor dB	Actual FS dB μ V/m	Limit dB μ V/m	Margin dB
4960.00	Peak	40.73	2.83	43.56	74.00	-30.44
4960.00	Average	33.68	2.83	36.51	54.00	-17.49
7440.00	Peak	37.59	8.60	46.19	74.00	-27.81
7440.00	Average	26.79	8.60	35.39	54.00	-18.61

Project No	:TM-2311000089P	Test Date	:2023-11-24
Operation Band	:BLE_2M	Temp./Humi.	:24.5/57
Frequency	:2402 MHz	Antenna Pol.	:Vertical
Operation Mode	:TX	Engineer	:Ray Li
EUT Pol	:H	Test Chamber	: 966A
Setting	:10		



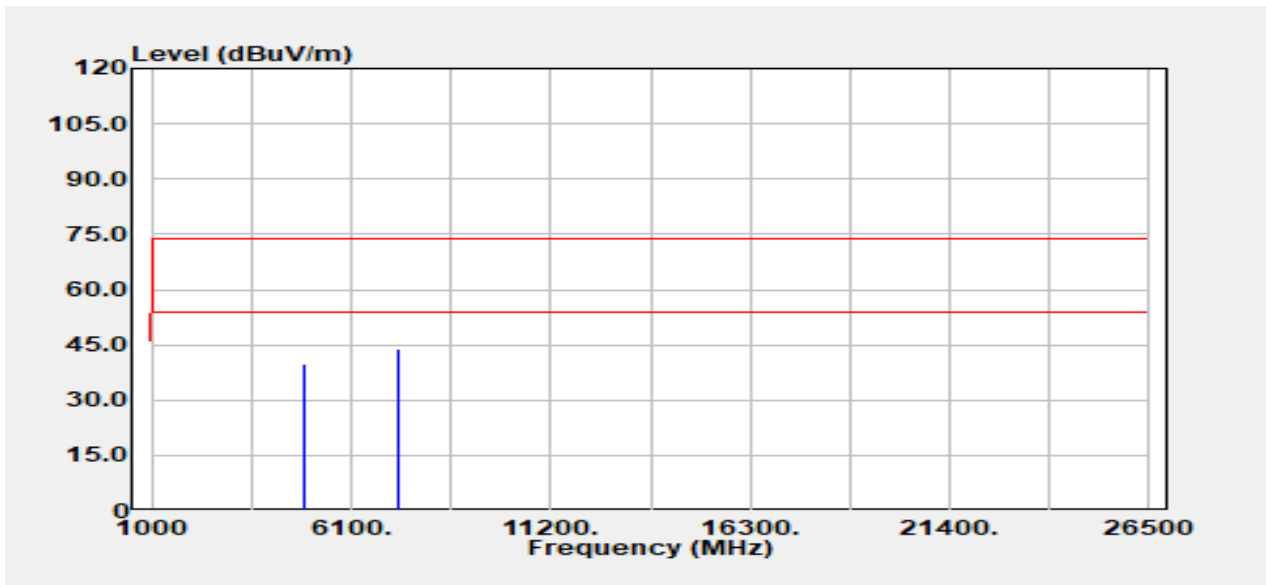
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level d μ V	Factor dB	Actual FS d $B\mu$ V/m	Limit d $B\mu$ V/m	Margin dB
4804.00	Peak	37.99	1.95	39.94	74.00	-34.06
4804.00	Average	29.39	1.95	31.34	54.00	-22.66
7206.00	Peak	35.91	8.72	44.63	74.00	-29.37
7206.00	Average	26.51	8.72	35.23	54.00	-18.77

Project No	:TM-2311000089P	Test Date	:2023-11-24
Operation Band	:BLE_2M	Temp./Humi.	:24.5/57
Frequency	:2402 MHz	Antenna Pol.	:Horizontal
Operation Mode	:TX	Engineer	:Ray Li
EUT Pol	:H	Test Chamber	: 966A
Setting	:10		



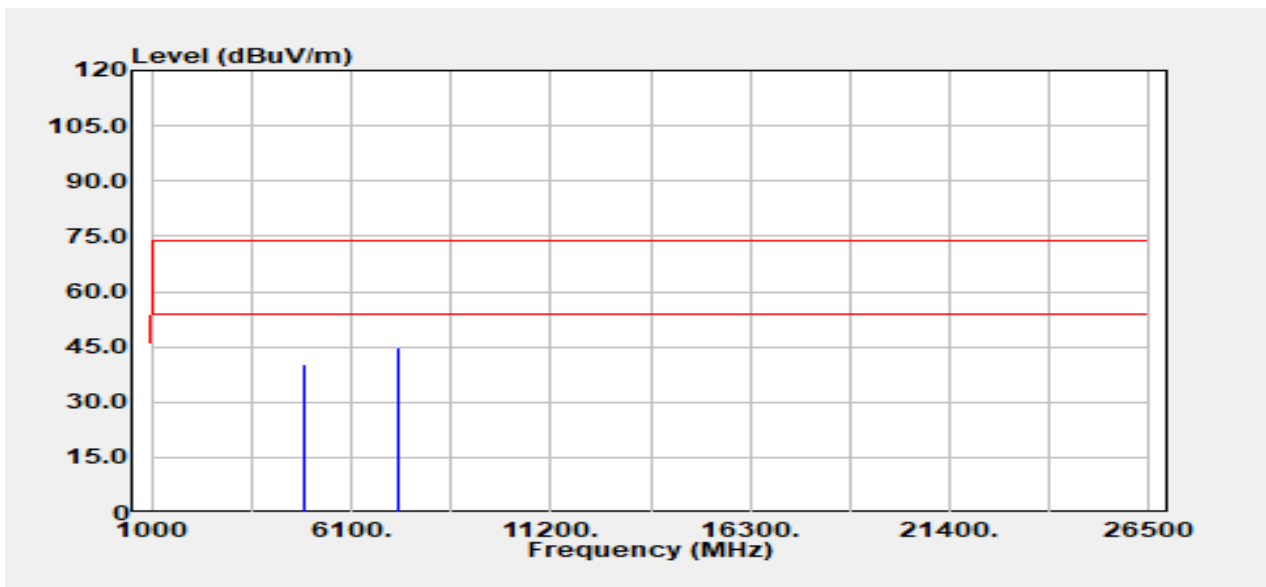
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dB μ V	Factor dB	Actual FS dB μ V/m	Limit dB μ V/m	Margin dB
4804.00	Peak	37.81	1.95	39.75	74.00	-34.25
4804.00	Average	30.42	1.95	32.37	54.00	-21.63
7206.00	Peak	36.31	8.72	45.03	74.00	-28.97
7206.00	Average	26.65	8.72	35.36	54.00	-18.64

Project No	:TM-2311000089P	Test Date	:2023-11-24
Operation Band	:BLE_2M	Temp./Humi.	:24.5/57
Frequency	:2442 MHz	Antenna Pol.	:Vertical
Operation Mode	:TX	Engineer	:Ray Li
EUT Pol	:H	Test Chamber	: 966A
Setting	:10		



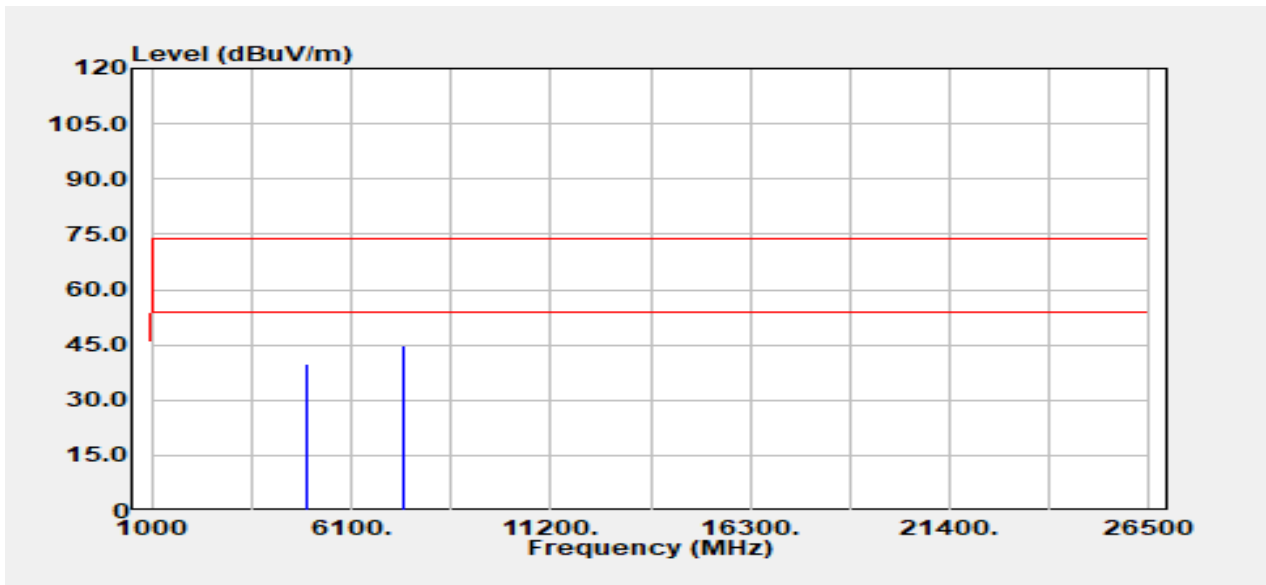
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dB μ V	Factor dB	Actual FS dB μ V/m	Limit dB μ V/m	Margin dB
4884.00	Peak	37.55	2.25	39.81	74.00	-34.19
4884.00	Average	29.87	2.25	32.13	54.00	-21.87
7326.00	Peak	35.54	8.60	44.14	74.00	-29.86
7326.00	Average	26.70	8.60	35.30	54.00	-18.70

Project No	:TM-2311000089P	Test Date	:2023-11-24
Operation Band	:BLE_2M	Temp./Humi.	:24.5/57
Frequency	:2442 MHz	Antenna Pol.	:Horizontal
Operation Mode	:TX	Engineer	:Ray Li
EUT Pol	:H	Test Chamber	: 966A
Setting	:10		



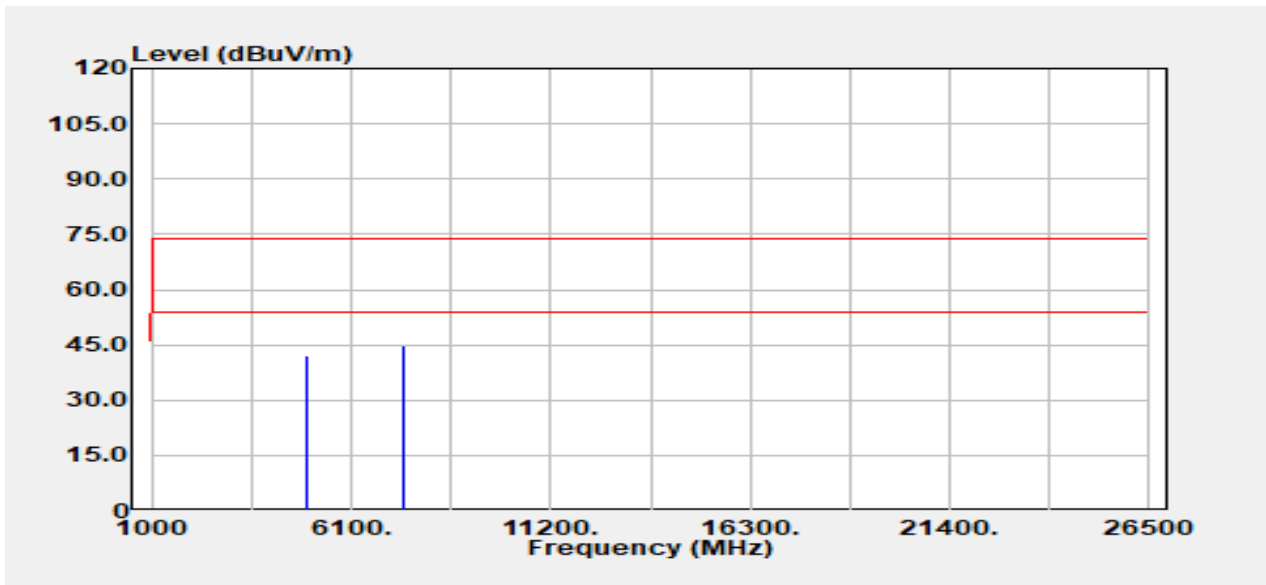
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level d μ V	Factor dB	Actual FS d $B\mu$ V/m	Limit d $B\mu$ V/m	Margin dB
4884.00	Peak	38.07	2.25	40.33	74.00	-33.67
4884.00	Average	31.79	2.25	34.04	54.00	-19.96
7326.00	Peak	36.11	8.60	44.71	74.00	-29.29
7326.00	Average	26.67	8.60	35.27	54.00	-18.73

Project No	:TM-2311000089P	Test Date	:2023-11-24
Operation Band	:BLE_2M	Temp./Humi.	:24.5/57
Frequency	:2480 MHz	Antenna Pol.	:Vertical
Operation Mode	:TX	Engineer	:Ray Li
EUT Pol	:H	Test Chamber	: 966A
Setting	:10		



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dB μ V	Factor dB	Actual FS dB μ V/m	Limit dB μ V/m	Margin dB
4960.00	Peak	37.20	2.83	40.04	74.00	-33.96
4960.00	Average	30.39	2.83	33.22	54.00	-20.78
7440.00	Peak	36.08	8.60	44.68	74.00	-29.32
7440.00	Average	26.67	8.60	35.27	54.00	-18.73

Project No	:TM-2311000089P	Test Date	:2023-11-24
Operation Band	:BLE_2M	Temp./Humi.	:24.5/57
Frequency	:2480 MHz	Antenna Pol.	:Horizontal
Operation Mode	:TX	Engineer	:Ray Li
EUT Pol	:H	Test Chamber	: 966A
Setting	:10		



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dB μ V	Factor dB	Actual FS dB μ V/m	Limit dB μ V/m	Margin dB
4960.00	Peak	39.22	2.83	42.05	74.00	-31.95
4960.00	Average	31.80	2.83	34.63	54.00	-19.37
7440.00	Peak	36.12	8.60	44.72	74.00	-29.28
7440.00	Average	26.79	8.60	35.39	54.00	-18.61

- End of Test Report -