47 CFR PART 15 SUBPART C TEST REPORT

for

GPS enabled cycling computer

Model No.: Rider S510

FCC ID: YDM-CA2404

of

Applicant: Bryton Inc.
Address: 3F-1., No.79-1, Zhouzi St., Neihu Dist., Taipei City 114, Taiwan

Tested and Prepared

by

Worldwide Testing Services (Taiwan) Co., Ltd.

FCC Registration No.: TW1072, TW1140, TW1146, TW1477, TW0037

Industry Canada filed test laboratory Reg. No.: 20037, 31634

Report No.: W6M22409-23710-C-1

6F, NO. 58, LANE 188, RUEY-KUANG RD., NEIHU TAIPEI 114, TAIWAN, R.O.C.
TEL: 886-2-66068877 FAX: 886-2-66068879 E-mail: wts@wts-lab.com

TABLE OF CONTENTS

1 General Information

1.1 Notes

The purpose of conformity testing is to increase the probability of adherence to the essential requirements or conformity specifications, as appropriate.
The complexity of the technical specifications, however, means that full and thorough testing is impractical for both technical and economic reasons.
Furthermore, there is no guarantee that a test sample which has passed all the relevant tests conforms to a specification.
Neither is there any guarantee that such a test sample will interwork with other genuinely open systems.
The existence of the tests nevertheless provides the confidence that the test sample possesses the qualities as maintained and that is performance generally conforms to representative cases of communications equipment.

Laboratory disclaimer-
1. The test results of this test report relate exclusively to the item tested as specified in 1.5.
2. The test report may only be reproduced or published in full.
3. Reproduction or publication of extracts from the report requires the prior written approval of the Worldwide Testing Services(Taiwan) Co., Ltd.
4. Antenna gain is provided by applicant and laboratory issue relevant data and results.

Tester:

Date	WTS-Lab.	Name	Signature
September 27, 2024		Sora Kuo	Sora

Technical responsibility for area of testing:

Date	WTS	Name	Signature
September 27, 2024		Kevin Wang	Kevin Wang

Registration number: W6M22409-23710-C-1
FCC ID: YDM-CA2404

1.2 Testing laboratory

1.2.1 Location

10m OATS
No.5-1, Lishui, Shuang Sing Village, Wanli Dist.,
New Taipei City 207, Taiwan (R.O.C.)

3 meter semi-anechoic chamber
No. 99, Sec. 1, Balian Rd., Xizhi Dist.,
New Taipei City 221032, Taiwan (R.O.C.)

Worldwide Testing Services (Taiwan) Co., Ltd.
6F., No. 58, Ln. 188, Ruiguang Rd., Neihu Dist.,
Taipei City 114 , Taiwan (R.O.C.)
Tel: 886-2-6606-8877

1.2.2 Details of accreditation status

Accredited testing laboratory
FCC filed test laboratory Reg. No.: TW1072, TW1140, TW1146, TW1477, TW0037
Industry Canada filed test laboratory Reg. No.: 20037, 31634

Test location, where different from Worldwide Testing Services (Taiwan) Co., Ltd. :

Name:	./.
Accredited no.:	./.
Street:	./.
Town:	./.
Country:	./.

1.3 Application details

Approval holder

Name:	Bryton Inc.
Street:	3F-1., No.79-1, Zhouzi St., Neihu Dist.,
Town:	Taipei City 114,
Country:	Taiwan

Manufacturer: (if applicable)

1.

Name:	Pan-international Precision Electronic Co.,Ltd
Street:	Xinlian Indl. Area , Hu-men , Dongguan ,
Town:	Guangdong ,
Country:	China

2.

Name:	Q.S.C INDUSTRY CO.LTD
Street:	5F., No. 193-2, Zhongxing N. St., Sanchong Dist.,
Town:	New Taipei City
Country:	Taiwan

Application details

Date of receipt of test item:	September 05, 2024
Date of test:	from September 06, 2024 to September 25, 2024

1.4 General information of Test item

Type of test item:	GPS enabled cycling computer
Model no.:	Rider S510
Multi-listing model no.:	./.
Brand name:	Bryton
Power supply:	USB 5Vd.c. Battery 3.7Vd.c., 1200mAh, 4.44Wh
Type of antenna:	PCB antenna
Antenna gain:	0 dBi

Technical data

Mode	Channel	Conducted Power (dBm)
BLE 1M	Ch 0 : 2402 MHz	1.02
	Ch 19 : 2440 MHz	0.61
	Ch 39 : 2480 MHz	-0.06
BLE 2M	Ch 0 : 2402 MHz	1.07
	Ch 19 : 2440 MHz	0.65
	Ch 39 : 2480 MHz	-0.02

Operation modes:	Duplex
Modulation type:	GFSK
Sample no.:	#02
Special statement:	./.

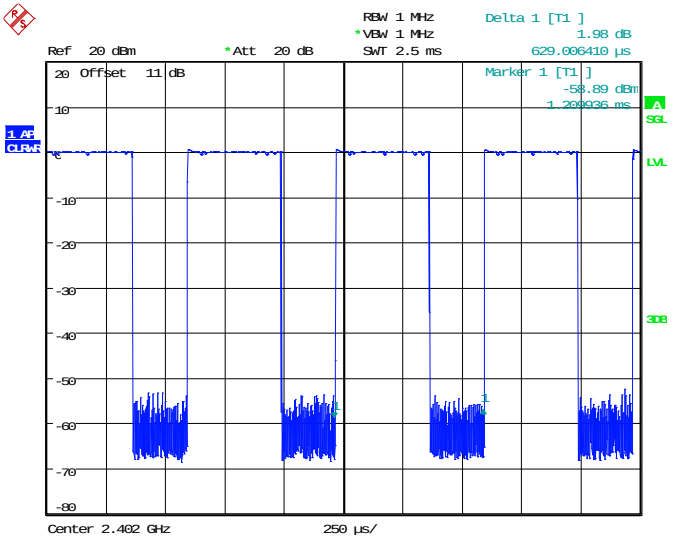
1.5 Duty cycle and factor

The duty factor is computed as [10 log (1 / D)], where D is the duty cycle.

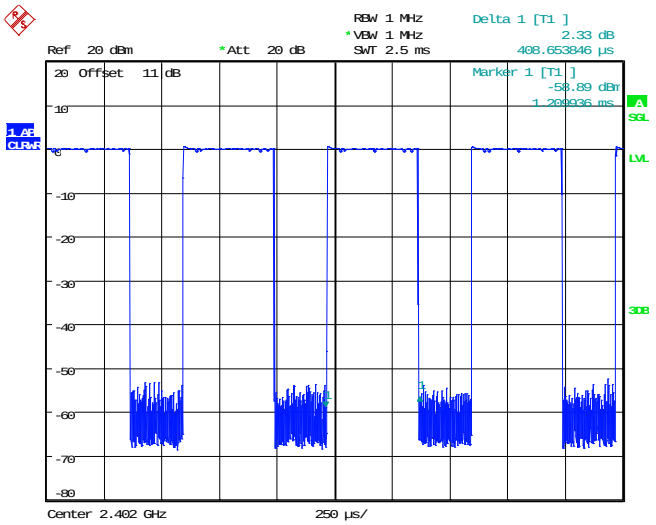
Registration number: W6M22409-23710-C-1
FCC ID: YDM-CA2404

Mode	T_{on} (ms)	$T_{on}+T_{off}$ (ms)	Duty cycle (%)	1/T - VBW (kHz)
BLE 1M	0.409	0.629	65.02%	2.44
BLE 2M	0.22	0.629	34.98%	4.55

Duty cycle plot
BLE
1M

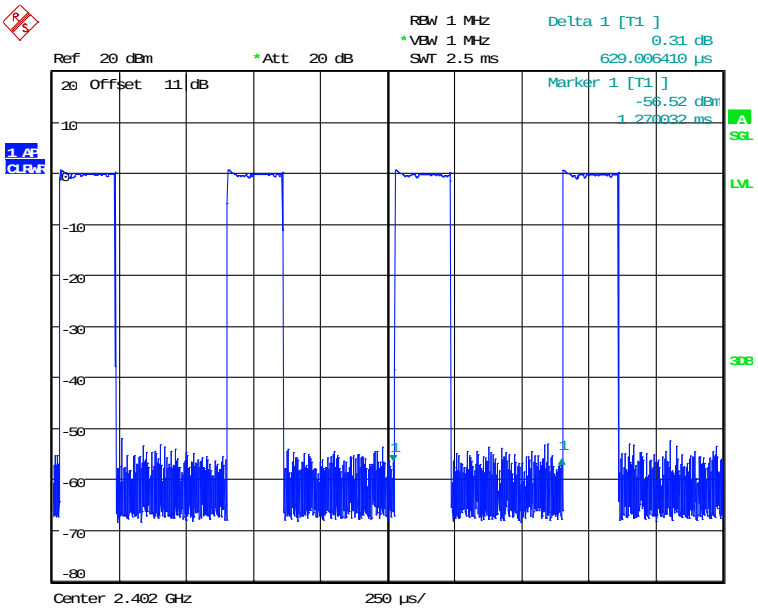


DUTY BLE 1M
Date: 7.SEP.2024 09:48:13

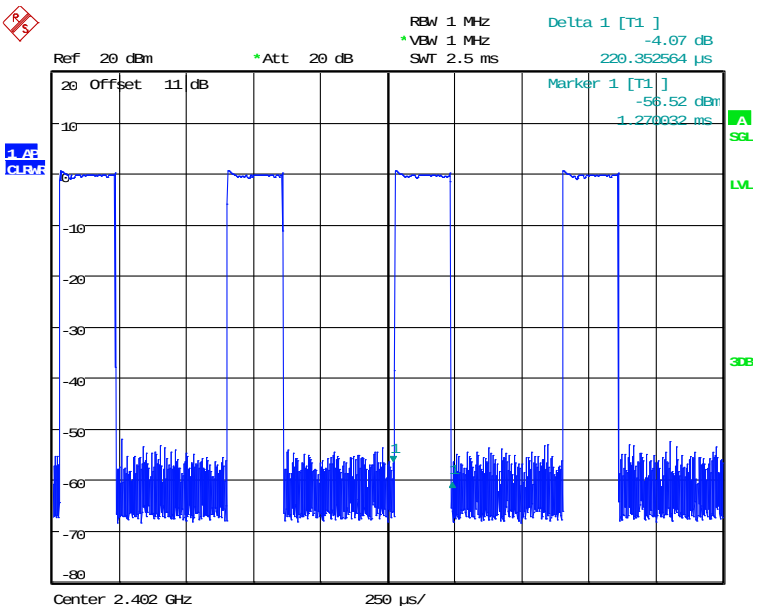


DUTY BLE 1M
Date: 7.SEP.2024 09:48:21

2M



DUTY BLE 2M
Date: 7.SEP.2024 09:47:31



DUTY BLE 2M
Date: 7.SEP.2024 09:47:39

1.6 Test standards

47 CFR PART 15 SUBPART C § 15.247 (2023-10)

2 Test configuration

2.1 Test environment

Relative humidity content: 20 ... 75 %

Air pressure: 86 ... 103 kPa

Extreme conditions parameters: ./.

2.2 Measurement uncertainty

Test item Name	Uncertainty
Estimation Result of Uncertainty of Conducted Emission (Power Line Conducted Emission)	Expanded Uncertainty： AMN：0.94 dB Voltage probe：0.96 dB Include Pulse Limiter：1.5 dB
Estimation Result of Uncertainty of Radiated Emission(3M-966A) (Spurious Emissions radiated – Transmitter operating)	Expanded Uncertainty： 0.009-30 MHz：1.88 dB 30-1000 MHz：3.20 dB 1-18 GHz：3.56 dB 18-40 GHz：2.94 dB
Estimation Result of Uncertainty of Bandwidth Measurement (Minimum 6 dB Bandwidth)	Expanded Uncertainty：0.45 kHz
Estimation Result of Uncertainty of Conducted Output Power Measurement (Peak Output Power (transmitter))	Expanded Uncertainty：1.64 dB
Estimation Result of Uncertainty of Power Density Measurement (Peak Power Spectral Density)	Expanded Uncertainty：1.64 dB
Estimation Result of Uncertainty of Band Edge Measurement (Emissions in nonrestricted frequency bands)	Expanded Uncertainty：0.67 dBc

The decision rule is: Measurement uncertainty is not included in the calculation of test results.

2.3 Test Equipment List

Max Output Power, 6DB Bandwidth, Band edge, Power Density, Duty

Code No.	Test equipment	Mode No.	Serial No.	Brand	Cal. Date	Next Cal. Date
ETSTW-RE 050	Attenuator 10dB	50HF-010-1	None	JFW	2024/2/16	2025/2/15
ETSTW-RE 055	SPECTRUM ANALYZER	FSU 26	200074	R&S	2024/3/7	2025/3/6
ETSTW-RE 099	DC Block	50DB-007-1	None	JFW	2024/2/16	2025/2/15
ETSTW-Cable 030	Microwave Cable	SUCOFLEX 104 （S_Cable 9）	279067	HUBER+SUHNER	2024/2/16	2025/2/15

Spurious Emission (966A)

Code No.	Test equipment	Mode No.	Serial No.	Brand	Cal. Date	Next Cal. Date
ETSTW-RE 153	Signal Analyzer	FSV40	101929	R&S	2023/9/20	2024/9/19
ETSTW-RE 154	EMI Test Receiver	ESR3	102829	R&S	2024/2/16	2025/4/9
ETSTW-RE 160	Amplifier Module	CHC 3	None	WTS	2024/7/12	2025/7/11
ETSTW-RE 177	TRILOG Broadband Antenna	VULB 9168&EMCI-N-6-06	01380&AT-06007	SCHWARZBECK&EMC	2024/3/4	2025/3/3
ETSTW-RE 178	Double Ridged Guide Horn Antenna	DRH18-E	210505A18ES	RFSPIN	2024/2/29	2025/2/28
ETSTW-Cable 077	SMA type cable (10m)	EMC104-SM-SM-10000	230511	EMCI	2024/7/12	2025/7/11
ETSTW-Cable 084	SMA type cable (1m)	SF104-11SMA-1000	816477/4	HONOVA	2024/7/12	2025/7/11
ETSTW-Cable 089	SMA type cable (2m)	SF104-11SMA-2000	SN 811889/4	HUBER+SUHNER	2024/7/12	2025/7/11
WTSTW-SW 002	EMI TEST SOFTWARE	EZ_EMC	None	Farad	Version ETS-03A1 Version EMEC-3A1+	

Conducted Emission

Code No.	Test equipment	Mode No.	Serial No.	Brand	Cal. Date	Next Cal. Date
ETSTW-CE 001	EMI TEST RECEIVER	ESHS10	842121/013	R&S	2024/6/13	2025/6/12
ETSTW-CE 003	AC POWER SOURCE	APS-9102	D161137	GW	Function Test	
ETSTW-CE 016	TWO-LINE V-NETWORK	ENV216	100050	R&S	2023/10/26	2024/10/25
ETSTW-RE 045	ESA-E SERIES SPECTRUM ANALYZER	E4404B	MY45111242	Agilent	Pre-test Use	
ETSTW-Cable 093	BNC Cable (3m)	EMCCFD-300-BM-BM-3000	240109	EMCI	2024/1/10	2025/1/9
WTSTW-SW 002	EMI TEST SOFTWARE	EZ_EMC	None	Farad	Version ETS-03A1 Version EMEC-3A1+	

3 Test results (enclosure)

TEST CASE	Para. Number	Required	Test passed	Test failed
Peak Output Power	15.247(b)(3)	☒	☒	☐
Spurious Emissions radiated – Transmitter operating	15.247(d), 15.205, 15.209	☒	☒	☐
Emissions in nonrestricted frequency bands	15.247(d)	☒	☒	☐
Minimum 6 dB Bandwidth	15.247(a)(2)	☒	☒	☐
Peak Power Spectral Density	15.247(e)	☒	☒	☐
Power Line Conducted Emission	15.207(a)	☒	☒	☐

The following is intentionally left blank.

3.1 Peak Output Power (transmitter)

3.1.1 Applicable Standard

FCC Rule: 15.247(b)(3)

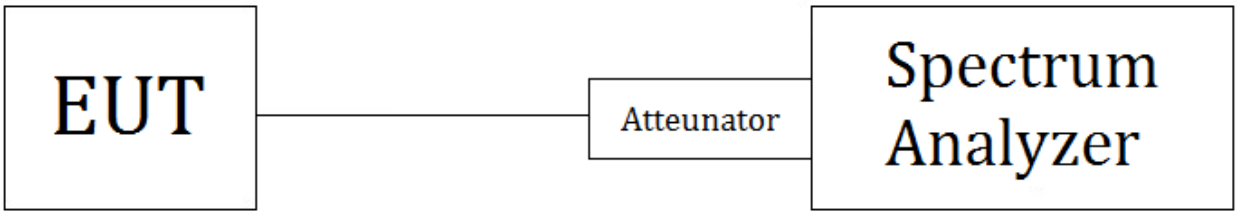
For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt. As an alternative to a peak power measurement, compliance with the one Watt limit can be based on a measurement of the maximum conducted output power. Maximum Conducted Output Power is defined as the total transmit power delivered to all antennas and antenna elements averaged across all symbols in the signaling alphabet when the transmitter is operating at its maximum power control level. Power must be summed across all antennas and antenna elements. The average must not include any time intervals during which the transmitter is off or is transmitting at a reduced power level. If multiple modes of operation are possible (e.g., alternative modulation methods), the maximum conducted output power is the highest total transmit power occurring in any mode.

3.1.2 Test procedure

Following Subclause 11.9.1.1 of ANSI C63.10

1. Set the RBW ≥ DTS bandwidth , VBW ≥ [3 × RBW] , span ≥ [3 × RBW].
2. Sweep time = auto couple , Detector = peak , Trace mode = max hold.
3. Allow trace to fully stabilize and determine the peak amplitude level.

3.1.3 Test Setup



3.1.4 Limits

Frequency (MHz)	Power (dBm)
902 - 928	30
2400 – 2483.5	30
5725 – 5850	30

In case of employing transmitter antennas having antenna gain ＞ 6 dBi and using fixed point-to point operation consider §15.247 (b)(4)

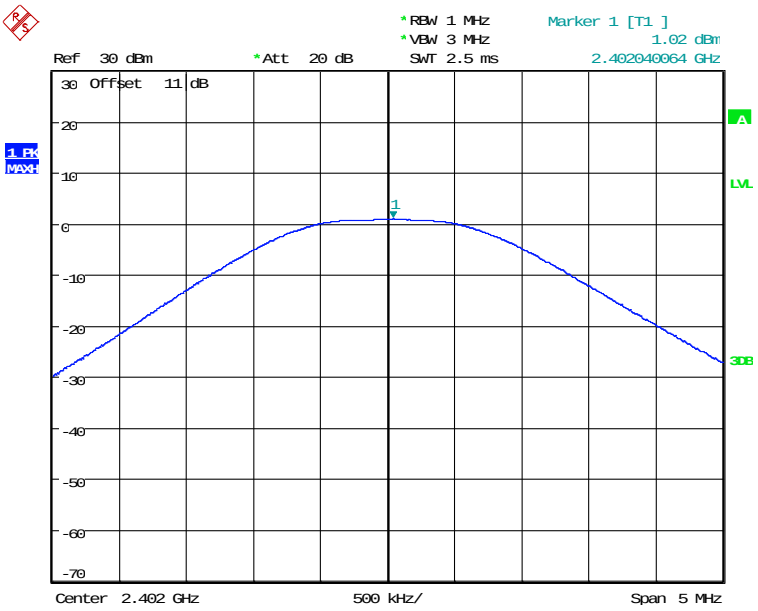
3.1.5 Test Environmental Conditions

Test date: 2024-09-07 Temperature: 25.5°C Humidity: 58.8% Tester: Sora

3.1.6 Test results

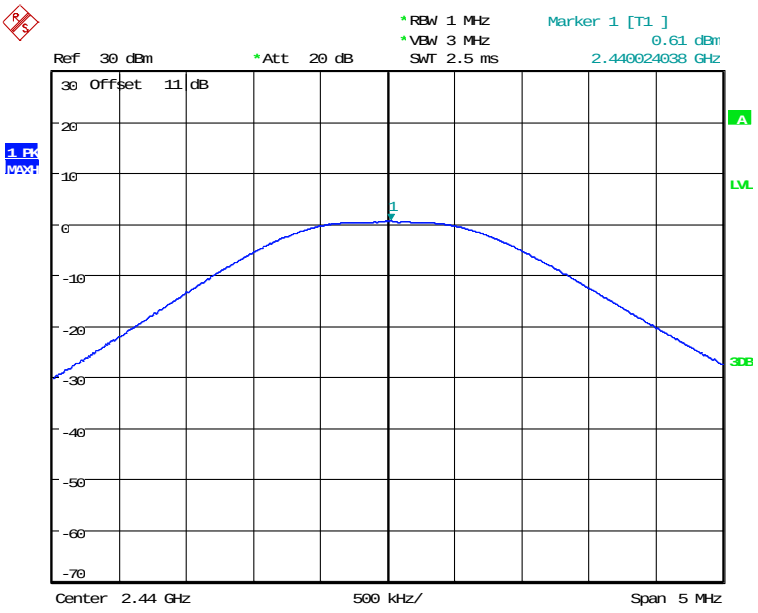
Mode	Channel	Power (dBm)	Limit (dBm)
BLE 1M	Ch 0 : 2402 MHz	1.02	30
	Ch 19 : 2440 MHz	0.61	30
	Ch 39 : 2480 MHz	-0.06	30
BLE 2M	Ch 0 : 2402 MHz	1.07	30
	Ch 19 : 2440 MHz	0.65	30
	Ch 39 : 2480 MHz	-0.02	30

BLE
1M

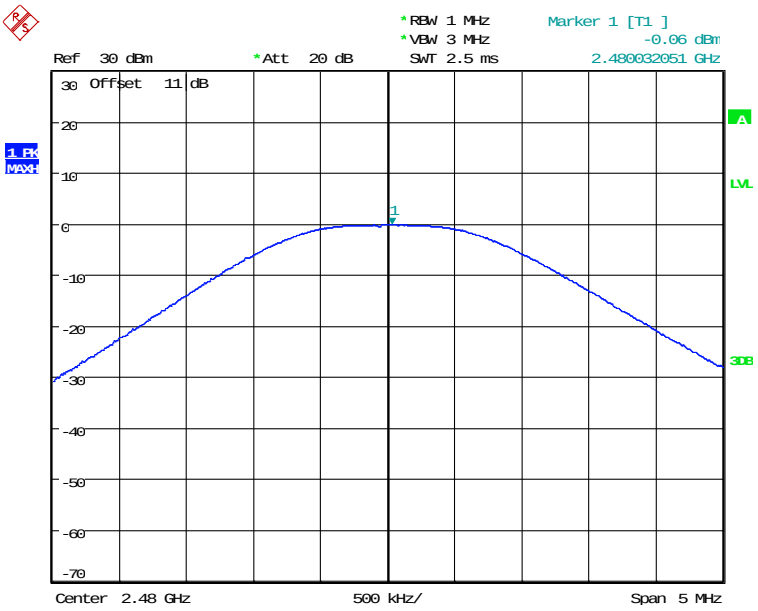


MAX OUTPUT POWER BLE 1M CH00
Date: 7.SEP.2024 15:56:09

Registration number: W6M22409-23710-C-1
FCC ID: YDM-CA2404



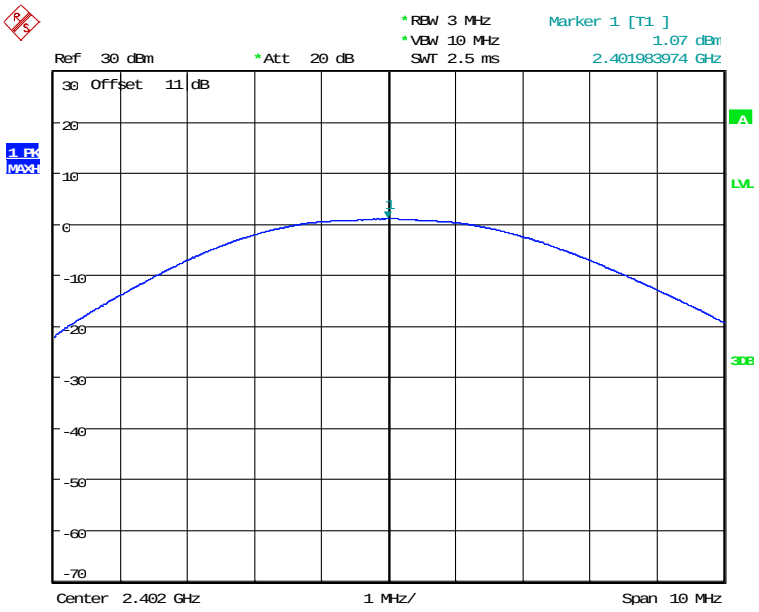
MAX OUTPUT POWER BLE 1M CH19
Date: 7.SEP.2024 15:56:53



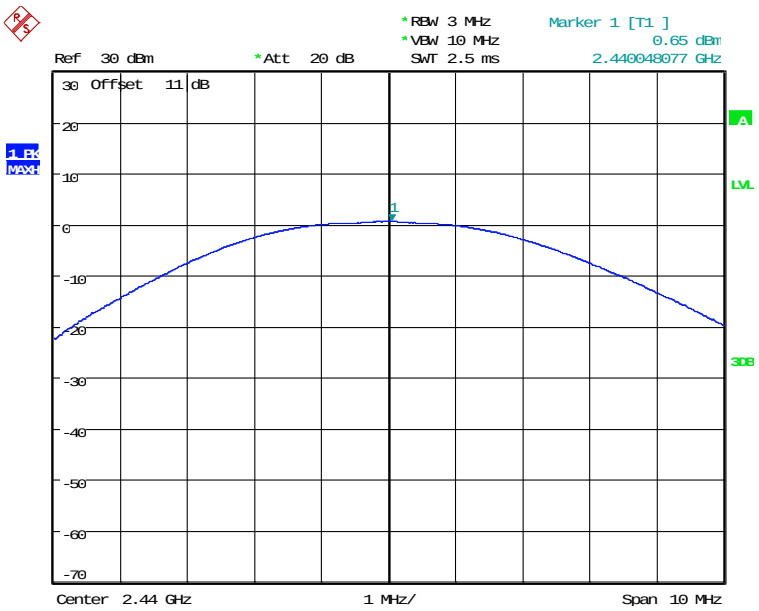
MAX OUTPUT POWER BLE 1M CH39
Date: 7.SEP.2024 15:57:27

Registration number: W6M22409-23710-C-1
FCC ID: YDM-CA2404

2M

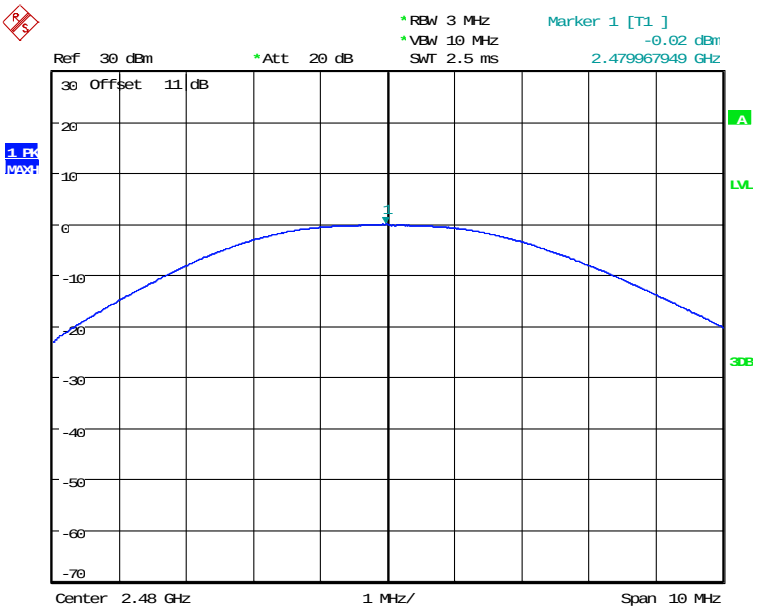


MAX OUTPUT POWER BLE 2M CH00
Date: 7.SEP.2024 15:58:33



MAX OUTPUT POWER BLE 2M CH19
Date: 7.SEP.2024 15:59:19

Registration number: W6M22409-23710-C-1
FCC ID: YDM-CA2404



MAX OUTPUT POWER BLE 2M CH39
Date: 7.SEP.2024 15:59:55

Test equipment used: Please see test equipment utilized (RF Conducted).

3.2 Spurious Emissions radiated – Transmitter operating

3.2.1 Applicable Standard

FCC Rules: 15.247 (d), 15.205, 15.209

Radiated emissions 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).

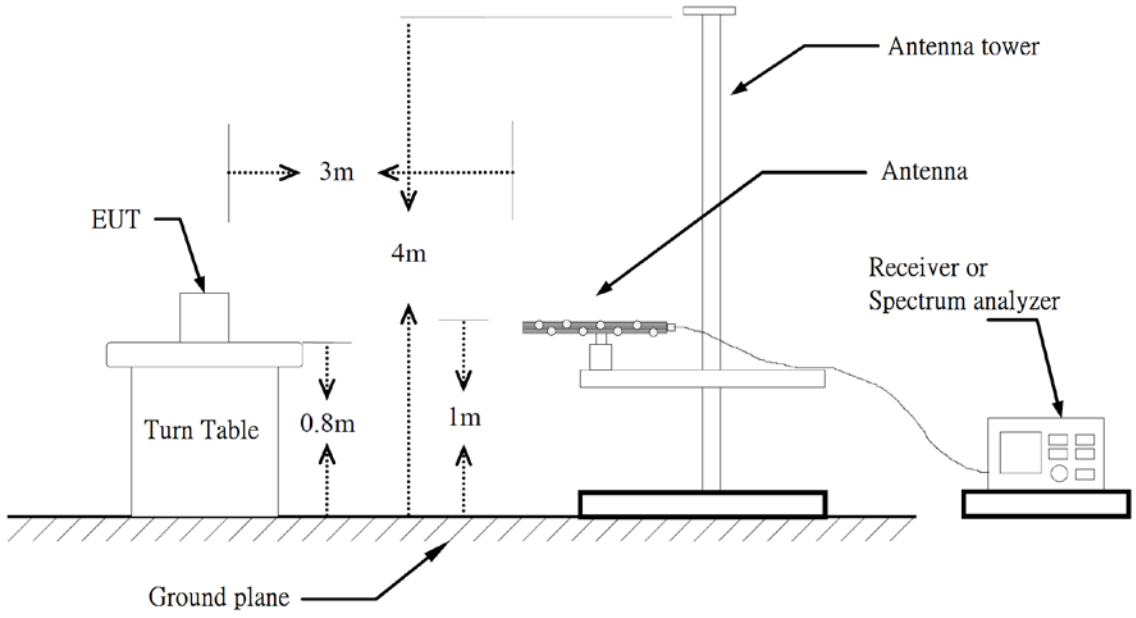
3.2.2 Test procedure

1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. Below 1GHz measurement the EUT is placed on turntable which is 0.8m above ground plane. And above 1GHz measurement EUT was placed on low permittivity and low tangent turn table which is 1.5m above ground plane.
2. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m height to find out the highest emissions.
3. Receiver or Spectrum analyzer configuration
   (a)120kHz measurement bandwidth of test receiver and Quasi-peak detector is for radiated emission below 1GHz.
   (b)RBW=1MHz, VBW=3MHz and Peak detector is for peak measured value of radiated emission above 1GHz.
   (c)RBW=1MHz, VBW=10Hz(1/T) and Peak detector is for average measured value of radiated emission above 1GHz.

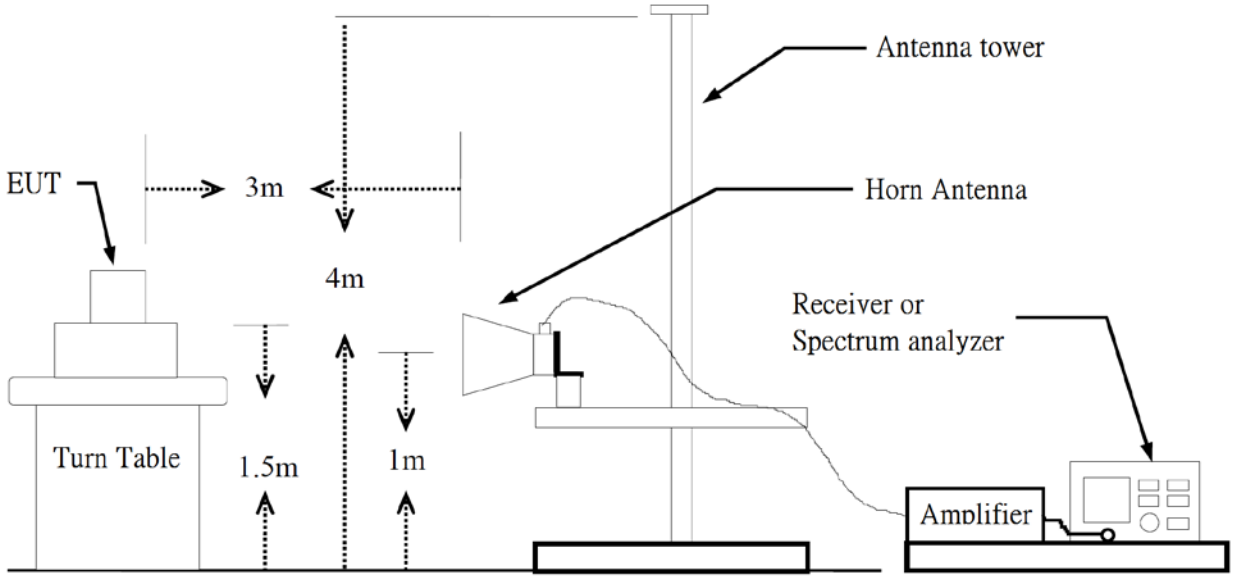
3.2.3 Limits

Frequency (MHz)	Field strength (uV/m)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

3.2.4 Test Setup



Below 1 GHz



Above 1 GHz

3.2.5 Test results (With Environmental Conditions)

Explanation: See attached diagrams in Appendix.

3.3 Emissions in nonrestricted frequency bands

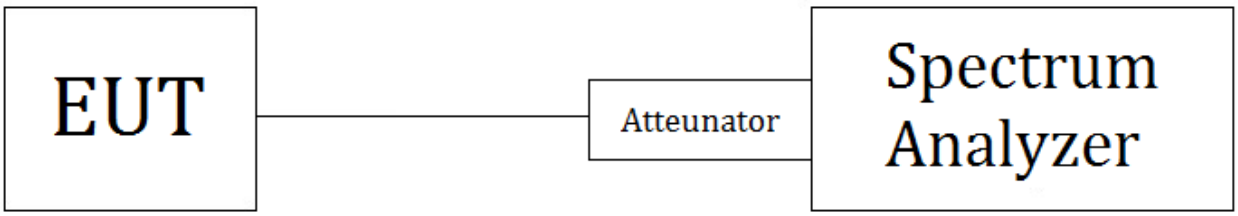
3.3.1 Applicable Standard

FCC Rules: 15.247(d)
In any 100 kHz bandwidth outside the frequency band in which the intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in § 15.209(a) is not required.
In addition radiated emission which fall in the restricted bands, as defined in section 15.205(a), must also with the radiated emission limits.

3.3.2 Test procedure

1. Set RBW = 100 kHz , VBW ≥ [3 × RBW]
2. Set Detector = peak , Sweep time = auto , Trace mode = max hold, and allow sweep to continue until the trace stabilizes
3. Measure the highest amplitude appearing on spectral display and set it as a reference level. Plot the graph with marking the highest point and edge frequency.

3.3.3 Test setup



3.3.4 Limits

See 3.3.1

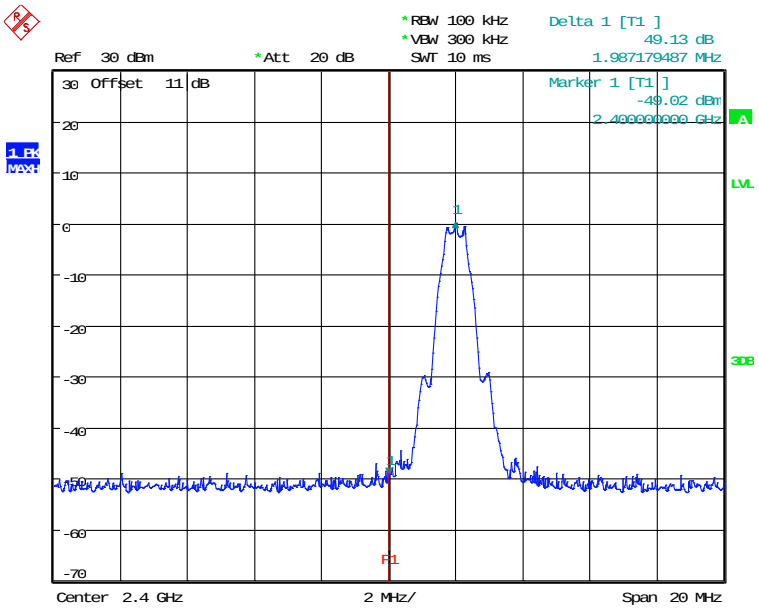
3.3.5 Test Environmental Conditions

Test date:	2024-09-07	Temperature:	25.5°C	Humidity:	58.8%	Tester:	Sora

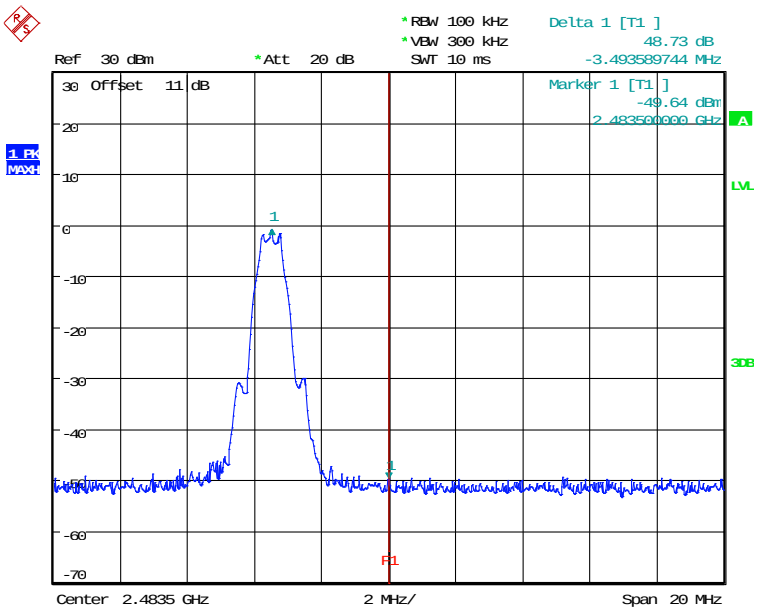
Registration number: W6M22409-23710-C-1
FCC ID: YDM-CA2404

3.3.6 Test results

BLE
1M



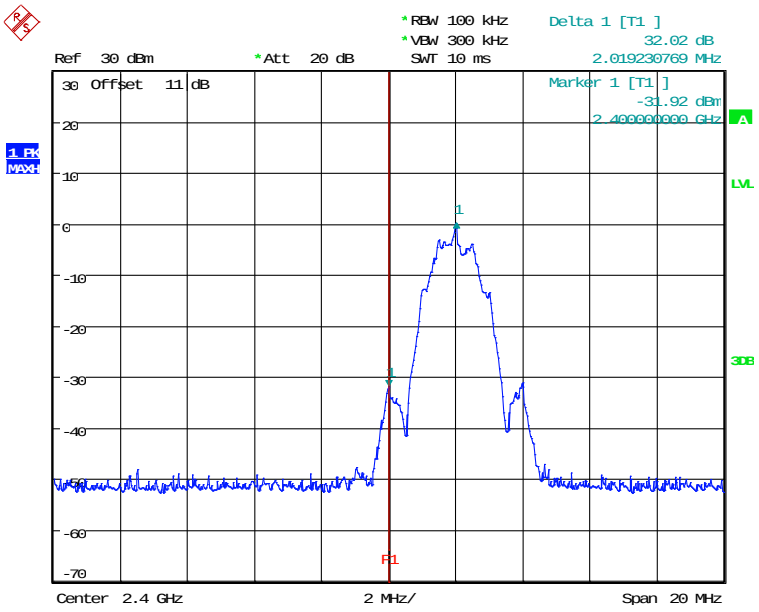
BANDEDGE BLE 1M CH00
Date: 7.SEP.2024 09:17:00



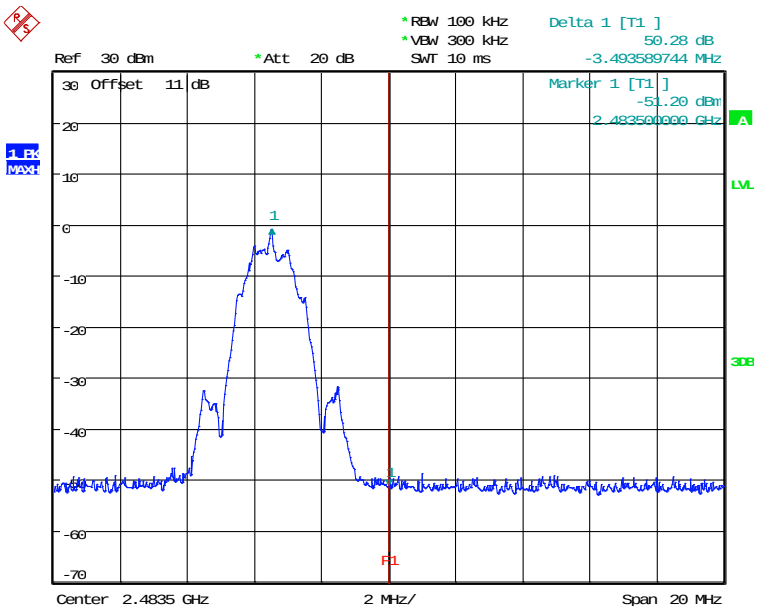
BANDEDGE BLE 1M CH39
Date: 7.SEP.2024 09:20:12

Registration number: W6M22409-23710-C-1
FCC ID: YDM-CA2404

2M



BANDEDGE BLE 2M CH00
Date: 7.SEP.2024 09:21:10



BANDEDGE BLE 2M CH39
Date: 7.SEP.2024 09:22:44

Test equipment used: Please see test equipment utilized (RF Conducted).

3.4 Minimum 6 dB Bandwidth

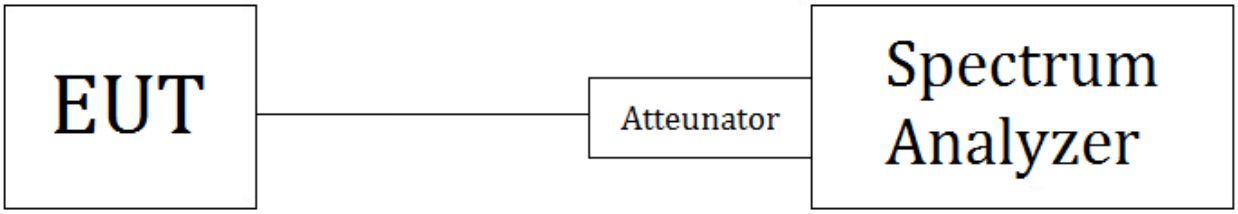
3.4.1 Applicable Standard

FCC Rules: 15.247(a)(2)
Systems using digital modulation techniques may operate in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.

3.4.2 Test procedure

1. Set RBW = 100 kHz , Set the VBW ≥ [3 × RBW].
2. Set Detector = peak , Trace mode = max hold , Sweep = auto couple and allow the trace to stabilize.
3. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

3.4.3 Test setup



3.4.4 Limits

Frequency Range (MHz)	Limits (kHz)
902-928	≧500
2400-2483.5	
5725-5850	

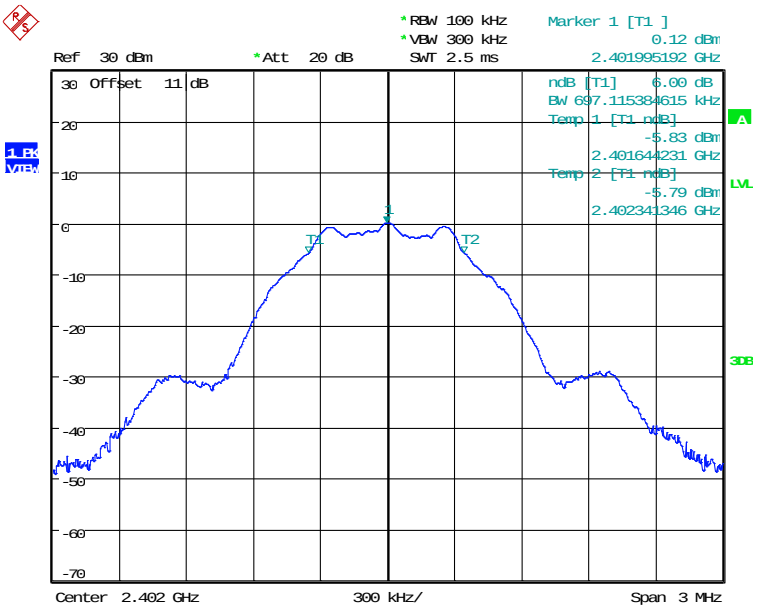
3.4.5 Test Environmental Conditions

Test date: 2024-09-07 Temperature: 25.5°C Humidity: 58.8% Tester: Sora

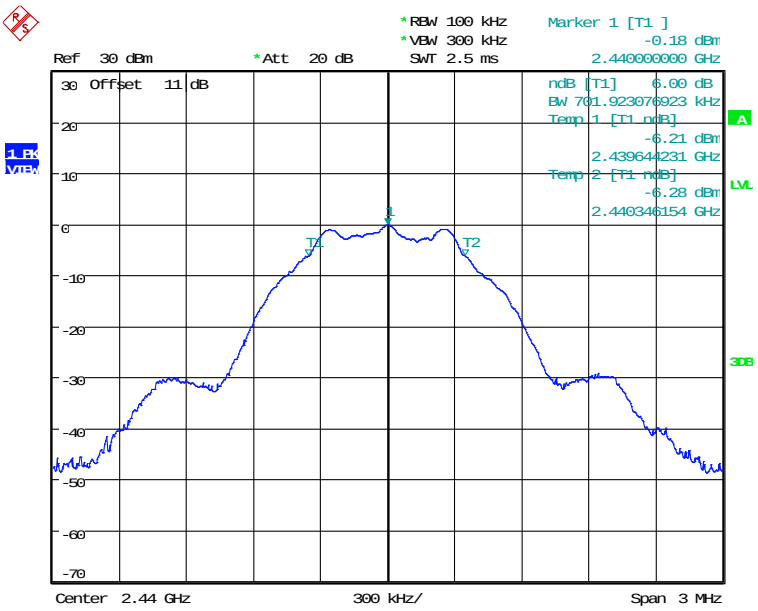
Registration number: W6M22409-23710-C-1
FCC ID: YDM-CA2404

3.4.6 Test results

BLE
1M

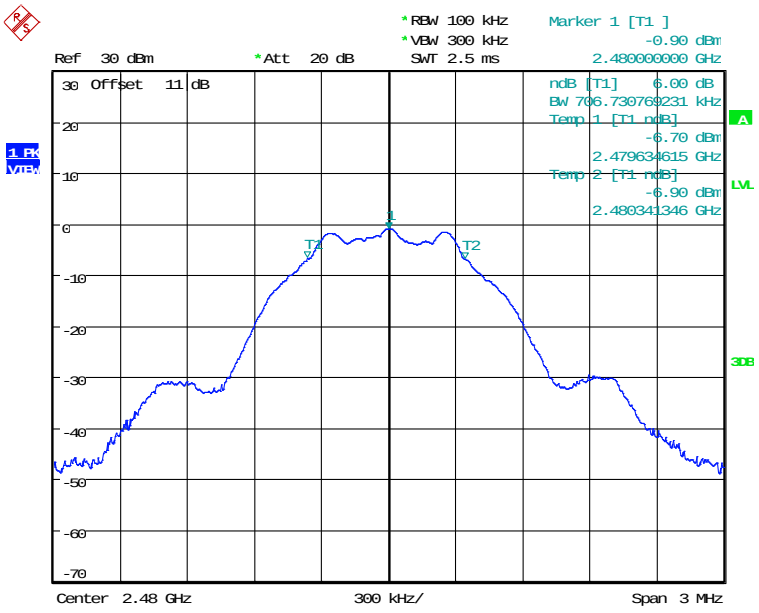


6DB BANDWIDTH BLE 1M CH00
Date: 7.SEP.2024 09:16:42



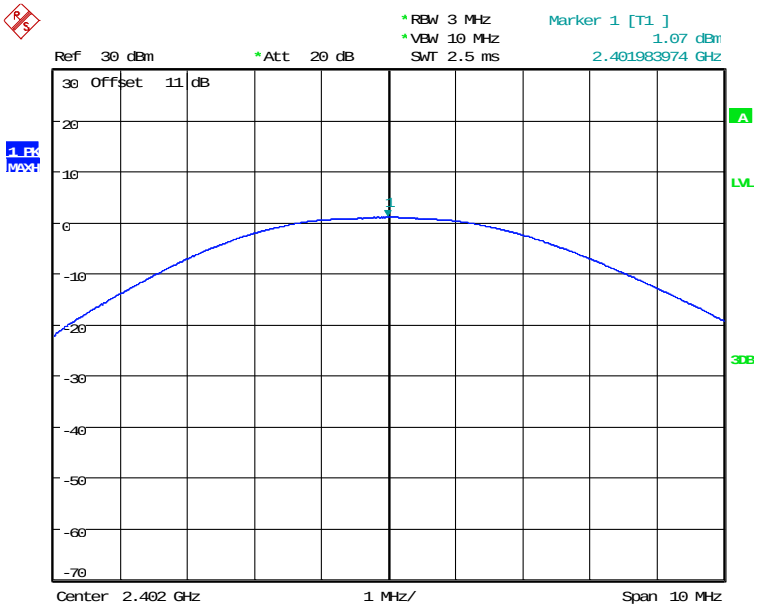
6DB BANDWIDTH BLE 1M CH19
Date: 7.SEP.2024 09:17:40

Registration number: W6M22409-23710-C-1
FCC ID: YDM-CA2404



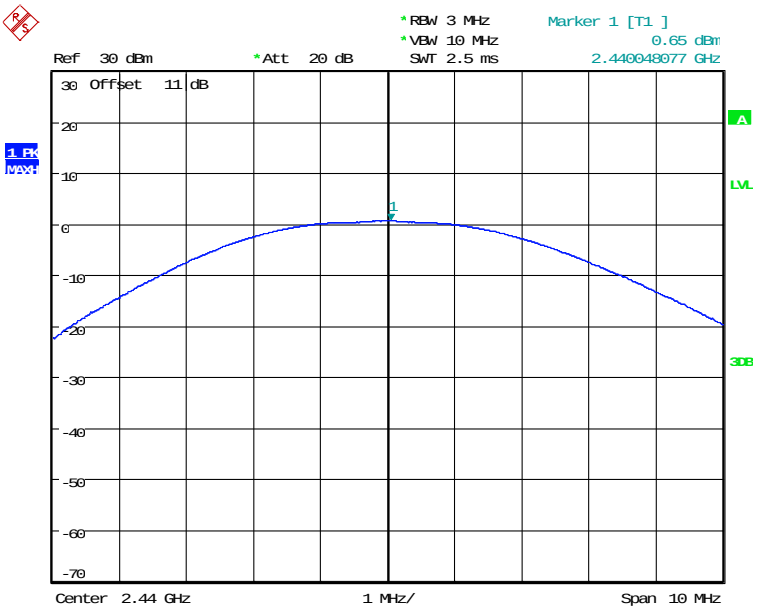
6DB BANDWIDTH BLE 1M CH39
Date: 7.SEP.2024 09:19:54

2M

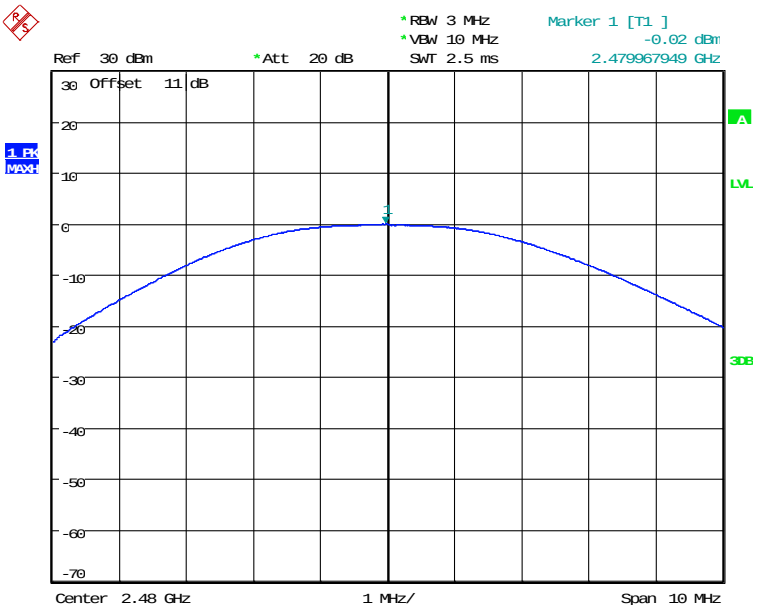


MAX OUTPUT POWER BLE 2M CH00
Date: 7.SEP.2024 15:58:33

Registration number: W6M22409-23710-C-1
FCC ID: YDM-CA2404



MAX OUTPUT POWER BLE 2M CH19
Date: 7.SEP.2024 15:59:19



MAX OUTPUT POWER BLE 2M CH39
Date: 7.SEP.2024 15:59:55

Test equipment used: Please see test equipment utilized (RF Conducted).

3.5 Peak Power Spectral Density

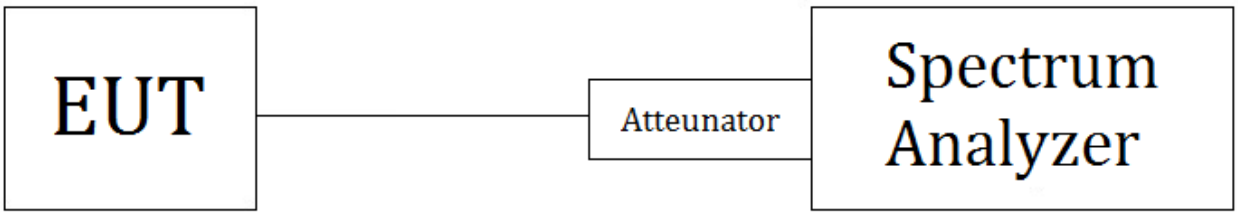
3.5.1 Applicable Standard

FCC Rules: 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. This power spectral density shall be determined in accordance with the provisions of paragraph (b) of this section. The same method of determining the conducted output power shall be used to determine the power spectral density.

3.5.2 Test procedure

1. Set the RBW to 3 kHz ≤ RBW ≤ 100 kHz , the VBW ≥ [3 × RBW].
2. Set Detector = peak , Sweep time = auto couple , Trace mode = max hold and allow trace to fully stabilize
3. Use the peak marker function to determine the maximum amplitude level within the RBW.

3.5.3 Test setup



3.5.4 Limits

Frequency Range (MHz)	Limits (dBm/3KHz)
902-928	8
2400-2483.5	
5725-5850	

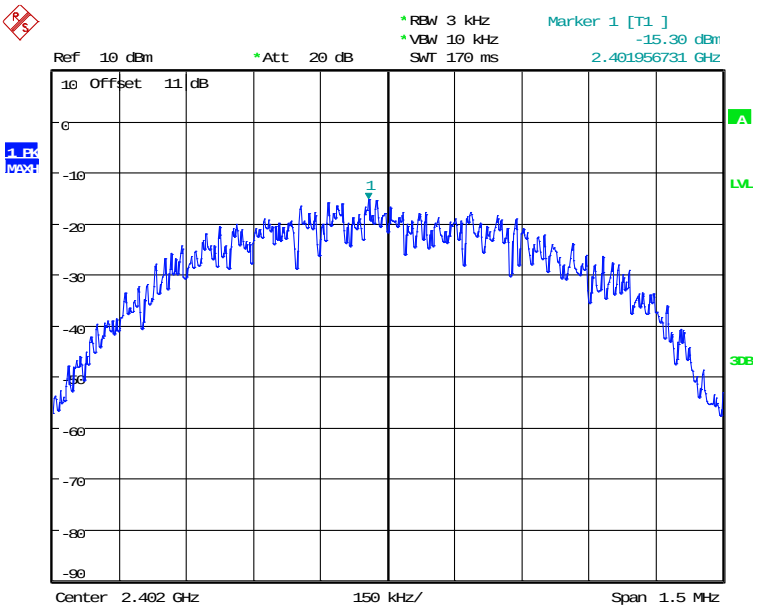
3.5.5 Test Environmental Conditions

Test date: 2024-09-07 Temperature: 25.5°C Humidity: 58.8% Tester: Sora

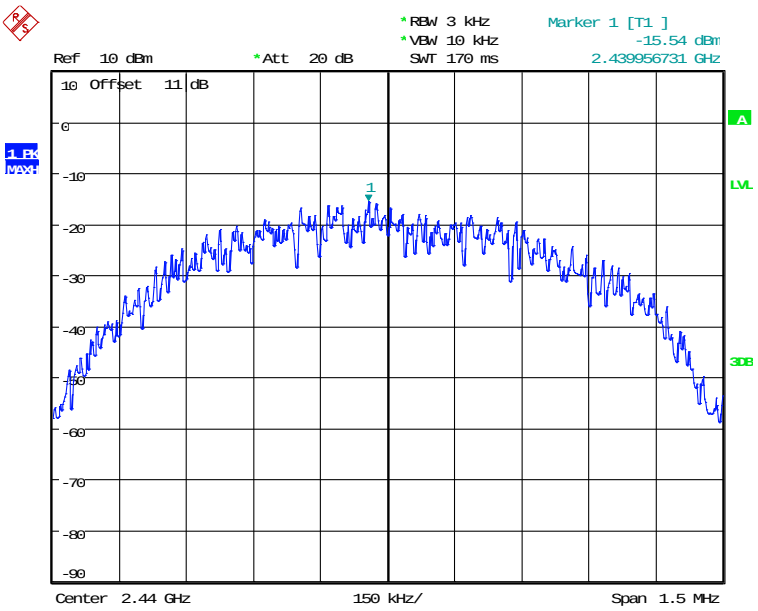
Registration number: W6M22409-23710-C-1
FCC ID: YDM-CA2404

3.5.6 Test results

BLE
1M

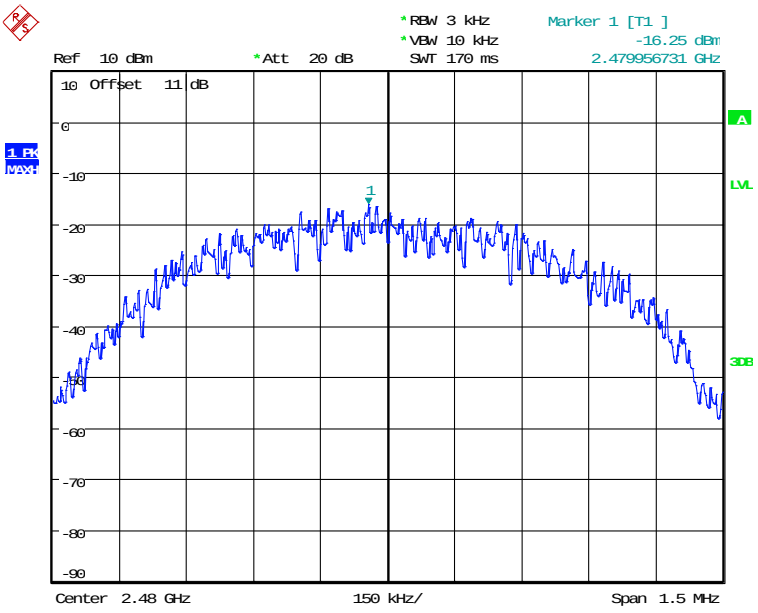


POWER DENSITY BLE 1M CH00
Date: 7.SEP.2024 09:16:52



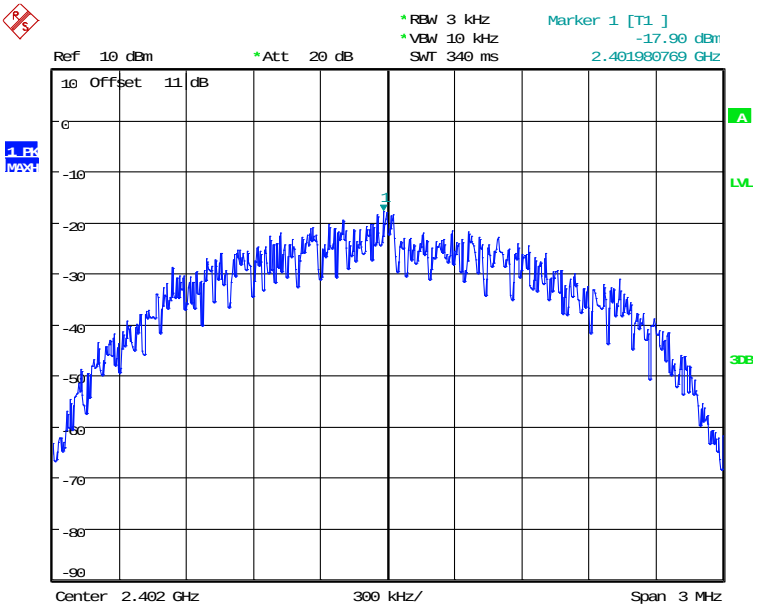
POWER DENSITY BLE 1M CH19
Date: 7.SEP.2024 09:17:50

Registration number: W6M22409-23710-C-1
FCC ID: YDM-CA2404



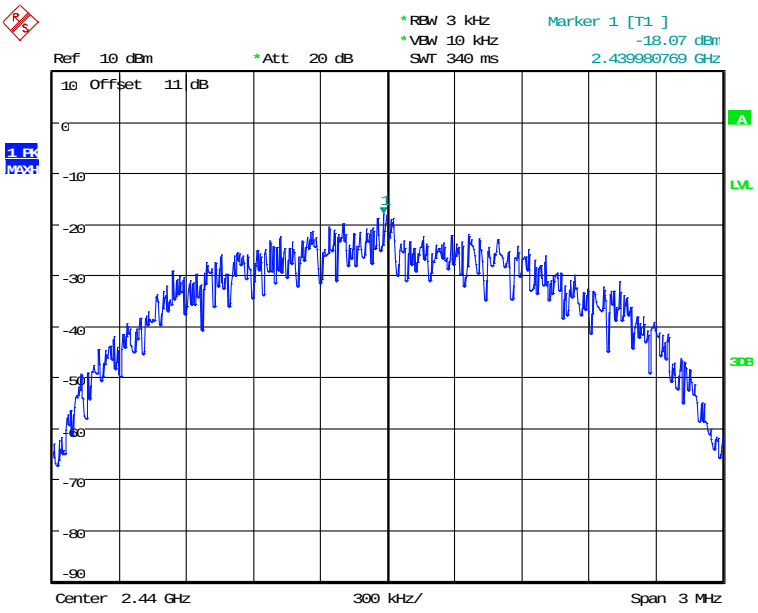
POWER DENSITY BLE 1M CH39
Date: 7.SEP.2024 09:20:04

2M

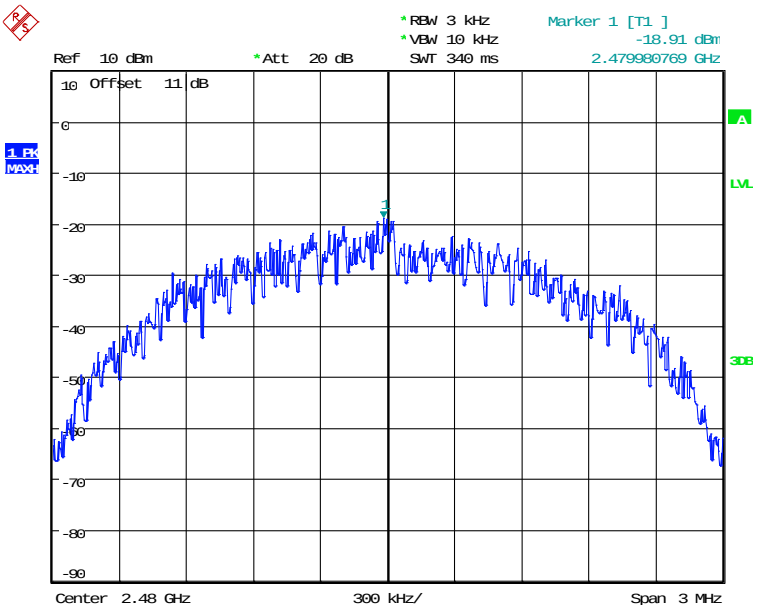


POWER DENSITY BLE 2M CH00
Date: 7.SEP.2024 09:21:02

Registration number: W6M22409-23710-C-1
FCC ID: YDM-CA2404



POWER DENSITY BLE 2M CH19
Date: 7.SEP.2024 09:21:50



POWER DENSITY BLE 2M CH39
Date: 7.SEP.2024 09:22:36

Test equipment used: Please see test equipment utilized (RF Conducted).

3.6 Power Line Conducted Emission

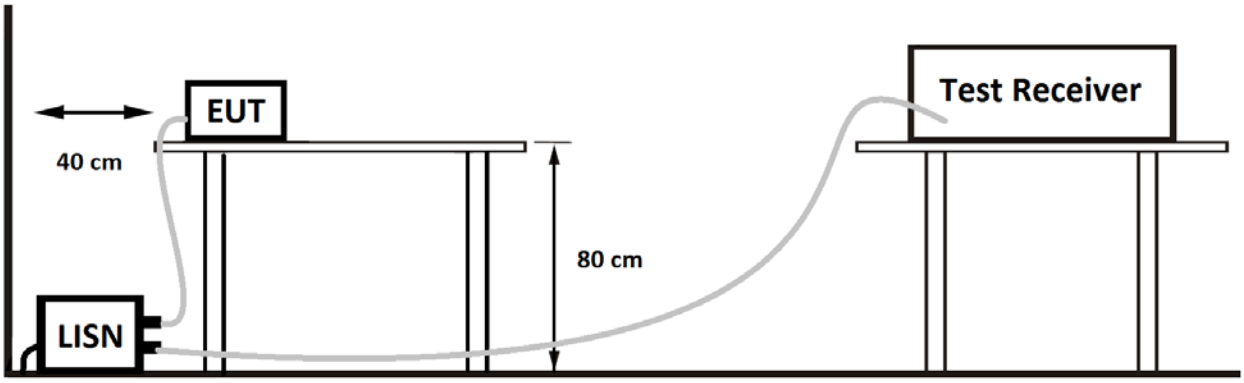
3.6.1 Applicable Standard

FCC Rules:15.207(a)
For an intentional radiator which is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the table bellows with this provision shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminals.

3.6.2 Test procedure

1. EUT is placed on a test table, raised 80 cm above the reference ground plane. The vertical conducting plane is located 40 cm to the rear of the device.
2. Connect EUT to a 50 μH/50 ohms line impedance stabilization network (LISN). AC input is 120V/60Hz
3. This measurement was transact first with instrumentation using an average and peak detector and a 10 kHz bandwidth. If the peak detector achieves a calculated level, the measurement is repeated by an instrumentation using a quasi-peak detector.

3.6.3 Test setup



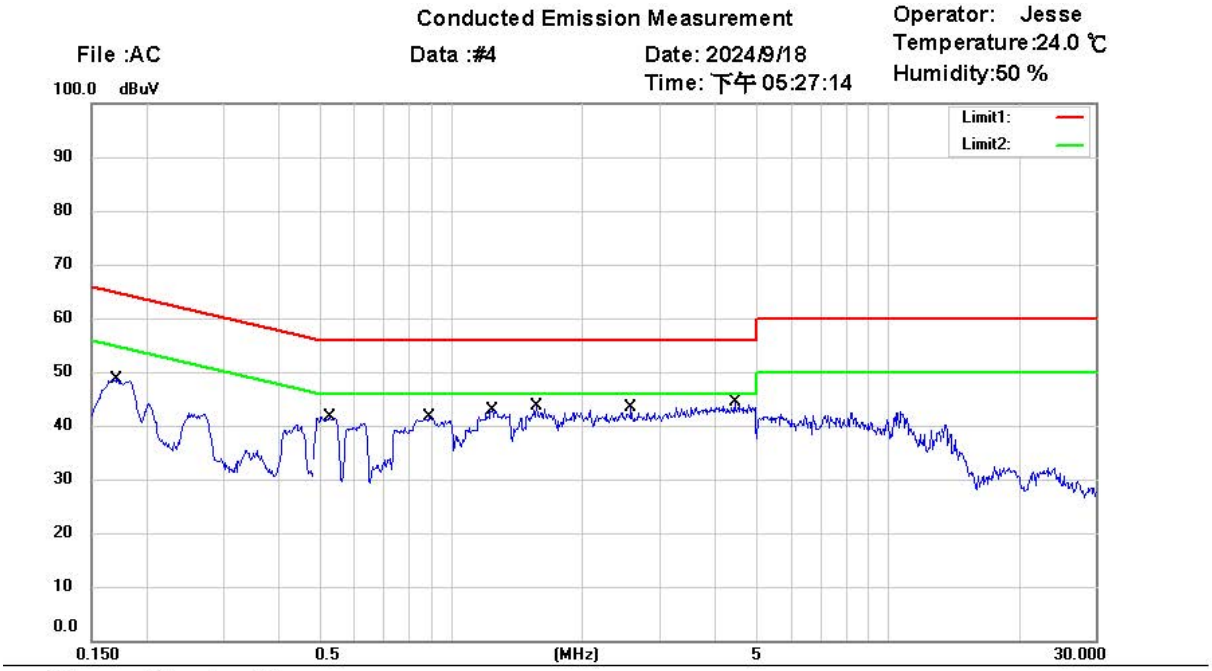
3.6.4 Limits

Frequency of emission (MHz)	Conducted limit (dBμV)	
	Quasi-peak	Average
0.15-0.5	66 to 56	56 to 46
0.5-5	56	46
5-30	60	50

Registration number: W6M22409-23710-C-1
FCC ID: YDM-CA2404

3.6.5 Test results (With Environmental Conditions)

Mode 1



Site : Chamber_03
Condition : FCC Part 15 Class B Conduction (QP)
Phase: N
EUT : W6M22409-23710
Power : 5Vd.c.(USB)
M/N:
Test Mode : Mode 1
Note :

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corrected factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Comment
	0.1707	36.20	QP	9.64	45.84	64.93	-19.09	
	0.1707	30.32	AVG	9.64	39.96	54.93	-14.97	
	0.5292	28.96	QP	9.66	38.62	56.00	-17.38	
	0.5292	16.71	AVG	9.66	26.37	46.00	-19.63	
	0.8892	29.57	QP	9.68	39.25	56.00	-16.75	
	0.8892	13.94	AVG	9.68	23.62	46.00	-22.38	
	1.2403	31.09	QP	9.68	40.77	56.00	-15.23	
	1.2403	16.56	AVG	9.68	26.24	46.00	-19.76	
	1.5642	28.49	QP	9.69	38.18	56.00	-17.82	
	1.5642	14.58	AVG	9.69	24.27	46.00	-21.73	
	2.5745	28.23	QP	9.72	37.95	56.00	-18.05	
	2.5745	20.17	AVG	9.72	29.89	46.00	-16.11	
*	4.4443	31.78	QP	9.74	41.52	56.00	-14.48	
	4.4443	18.15	AVG	9.74	27.89	46.00	-18.11	

Registration number: W6M22409-23710-C-1
FCC ID: YDM-CA2404

Site : Chamber_03
Condition : FCC Part 15 Class B Conduction (QP)
Phase: L1
EUT : W6M22409-23710
Power : 5Vd.c.(USB)
M/N:
Test Mode : Mode 1
Note :

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corrected factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Comment
	0.1815	29.48	QP	9.65	39.13	64.42	-25.29	
	0.1815	22.99	AVG	9.65	32.64	54.42	-21.78	
	0.5202	27.60	QP	9.66	37.26	56.00	-18.74	
	0.5202	15.75	AVG	9.66	25.41	46.00	-20.59	
	0.8892	26.92	QP	9.68	36.60	56.00	-19.40	
	0.8892	12.35	AVG	9.68	22.03	46.00	-23.97	
	1.2380	26.74	QP	9.68	36.42	56.00	-19.58	
	1.2380	14.23	AVG	9.68	23.91	46.00	-22.09	
	3.7963	24.74	QP	9.72	34.46	56.00	-21.54	
	3.7963	14.29	AVG	9.72	24.01	46.00	-21.99	
	10.6500	29.06	QP	9.82	38.88	60.00	-21.12	
*	10.6500	22.65	AVG	9.82	32.47	50.00	-17.53	

Test equipment used: Please see test equipment utilized (AC Conducted).

Appendix

Measurement diagrams

Radiated Emission

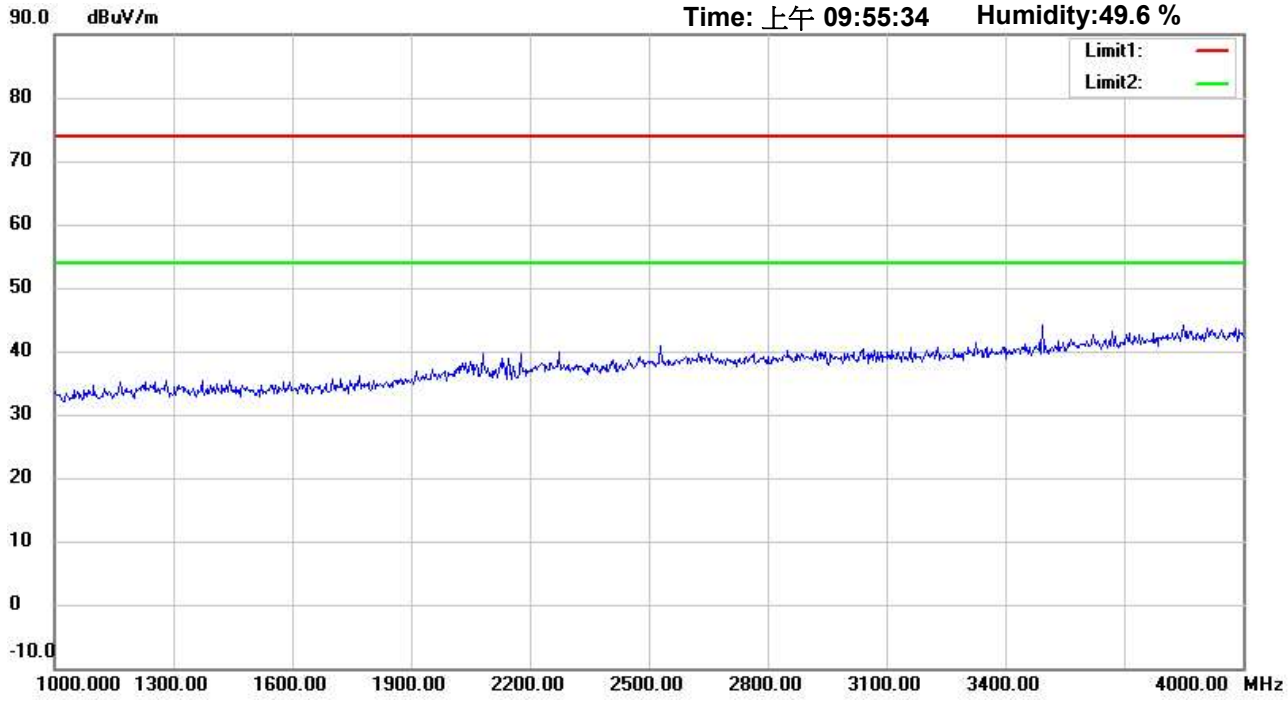
Address:No.99,Sec.1,Balian Rd.,Xizhi Dist.,New Taipei City
Tel:+886-2-2646-1508
Fax:+886-2-2646-1533

Radiated Emission Measurement

Operator: Kai

File :3 Data :#1 Date: 2024/9/6 Time: 上午 09:55:34

Temperature:24.9 ℃ Humidity:49.6 %



Site : 966A Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M22409-23710

M/N:

Test Mode : TX 2402MHz

Note :

Polarization: *Horizontal*

Power : 5 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment

*:Maximum data x:Over limit !:over margin

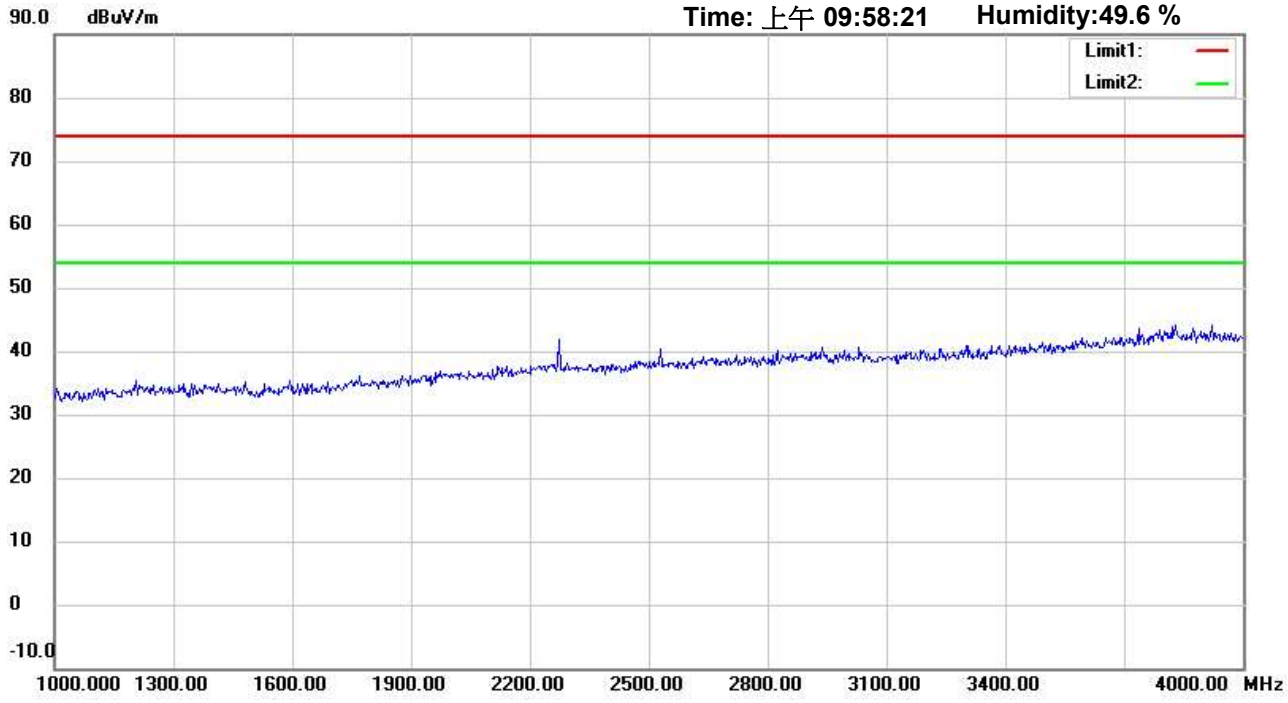
Address:No.99,Sec.1,Balian Rd.,Xizhi Dist.,New Taipei City
Tel:+886-2-2646-1508
Fax:+886-2-2646-1533

Radiated Emission Measurement

Operator: Kai

File :3 Data :#6 Date: 2024/9/6 Time: 上午 09:58:21

Temperature:24.9 ℃ Humidity:49.6 %



Site : 966A Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M22409-23710

M/N:

Test Mode : TX 2402MHz

Note :

Polarization: *Vertical*

Power : 5 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment

*:Maximum data x:Over limit !:over margin

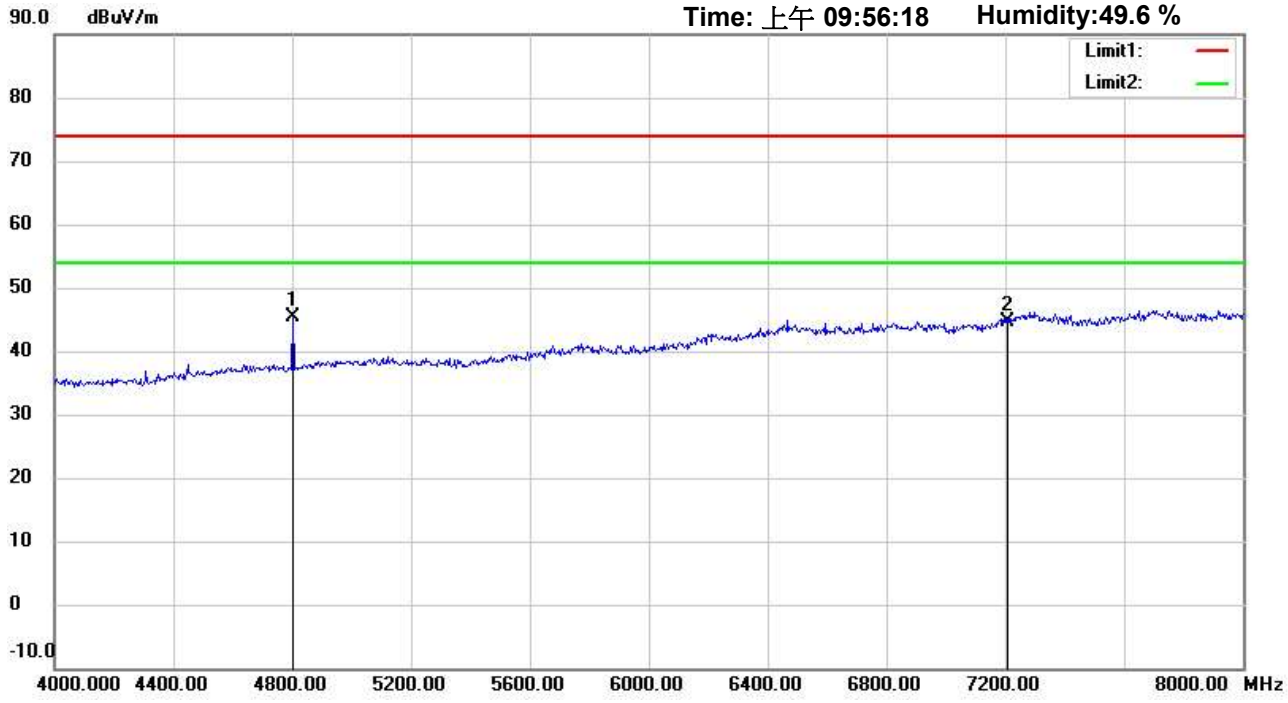
Address:No.99,Sec.1,Balian Rd.,Xizhi Dist.,New Taipei City
Tel:+886-2-2646-1508
Fax:+886-2-2646-1533

Radiated Emission Measurement

Operator: Kai

File :3 Data :#2 Date: 2024/9/6 Time: 上午 09:56:18

Temperature:24.9 ℃ Humidity:49.6 %



Site : 966A Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M22409-23710

M/N:

Test Mode : TX 2402MHz

Note :

Polarization: *Horizontal*

Power : 5 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	4804.000	40.87	peak	4.53	45.40	74.00	150	343	-28.60	
	7206.000	33.13	peak	11.50	44.63	74.00	150	34	-29.37	

*:Maximum data x:Over limit !:over margin

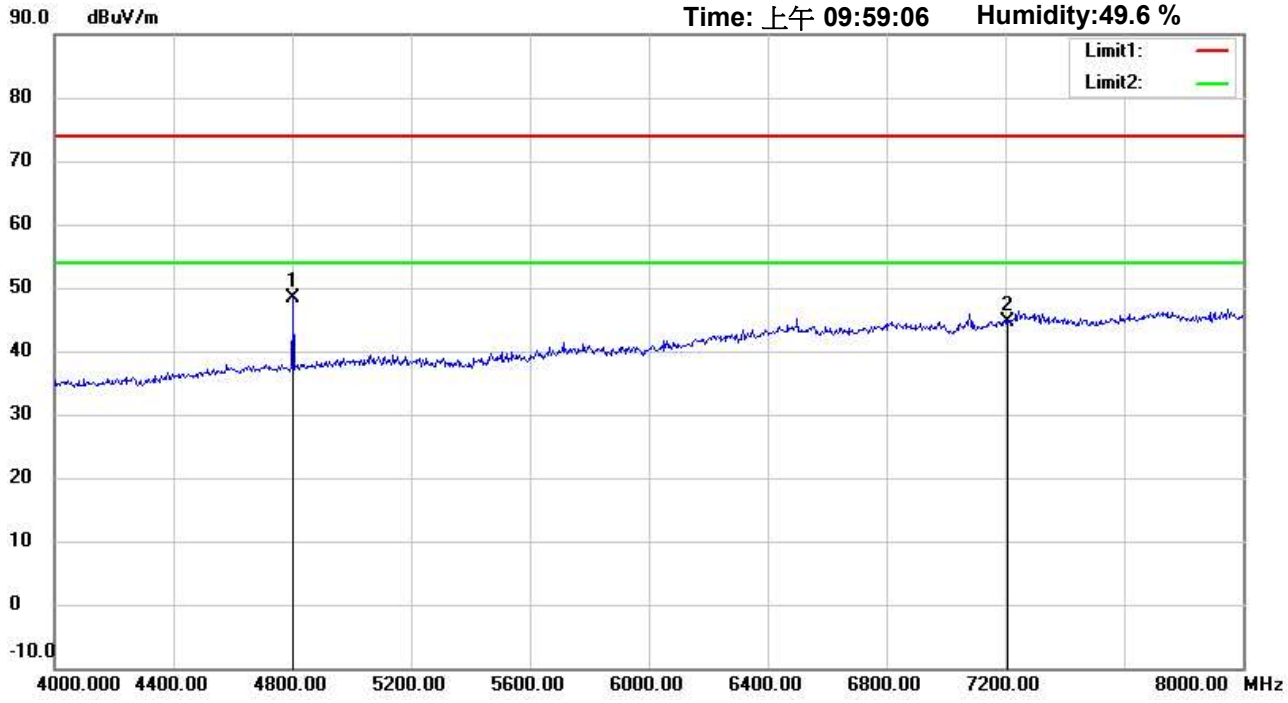
Address:No.99,Sec.1,Balian Rd.,Xizhi Dist.,New Taipei City
Tel:+886-2-2646-1508
Fax:+886-2-2646-1533

Radiated Emission Measurement

Operator: Kai

File :3 Data :#7 Date: 2024/9/6 Time: 上午 09:59:06

Temperature:24.9 ℃ Humidity:49.6 %



Site : 966A Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

Polarization: *Vertical*

EUT : W6M22409-23710

Power : 5 Vd.c.

M/N:

Distance: 3m

Test Mode : TX 2402MHz

Note :

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	4804.000	43.88	peak	4.53	48.41	74.00	150	225	-25.59	
	7206.000	33.09	peak	11.50	44.59	74.00	150	49	-29.41	

*:Maximum data x:Over limit !:over margin

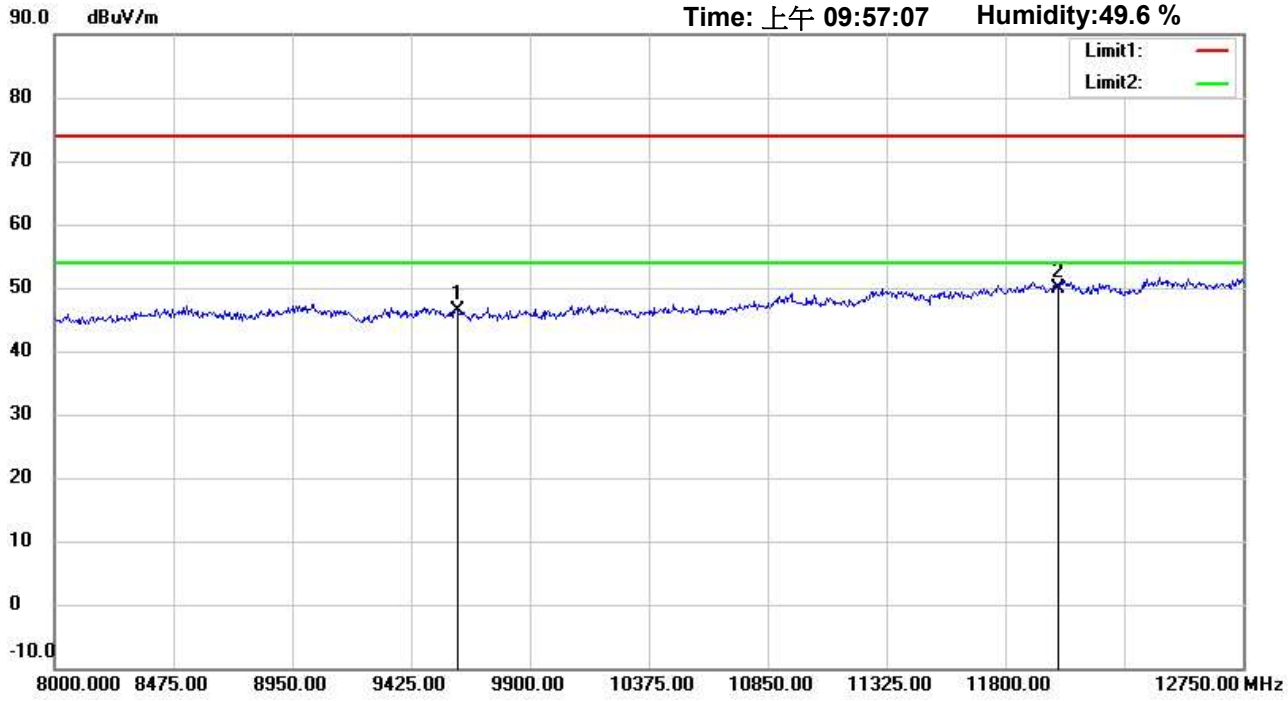
Address:No.99,Sec.1,Balian Rd.,Xizhi Dist.,New Taipei City
Tel:+886-2-2646-1508
Fax:+886-2-2646-1533

Radiated Emission Measurement

Operator: Kai

File :3 Data :#3 Date: 2024/9/6 Time: 上午 09:57:07

Temperature:24.9 ℃ Humidity:49.6 %



Site : 966A Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M22409-23710

M/N:

Test Mode : TX 2402MHz

Note :

Polarization: *Horizontal*

Power : 5 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	9608.000	33.26	peak	13.02	46.28	74.00	150	123	-27.72	
*	12010.000	32.83	peak	17.12	49.95	74.00	150	104	-24.05	

*:Maximum data x:Over limit !:over margin

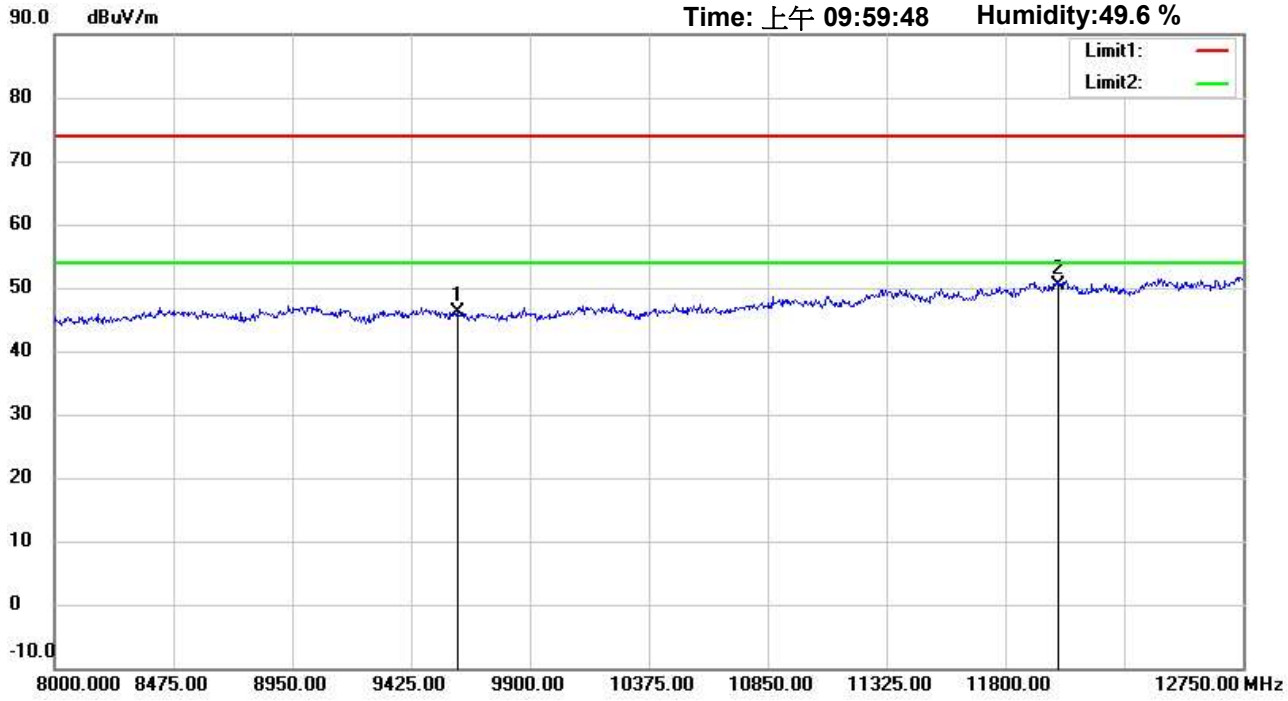
Address:No.99,Sec.1,Balian Rd.,Xizhi Dist.,New Taipei City
Tel:+886-2-2646-1508
Fax:+886-2-2646-1533

Radiated Emission Measurement

Operator: Kai

File :3 Data :#8 Date: 2024/9/6 Time: 上午 09:59:48

Temperature:24.9 ℃ Humidity:49.6 %



Site : 966A Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M22409-23710

M/N:

Test Mode : TX 2402MHz

Note :

Polarization: *Vertical*

Power : 5 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	9608.000	33.11	peak	13.02	46.13	74.00	150	126	-27.87	
*	12010.000	33.33	peak	17.12	50.45	74.00	150	97	-23.55	

*:Maximum data x:Over limit !:over margin

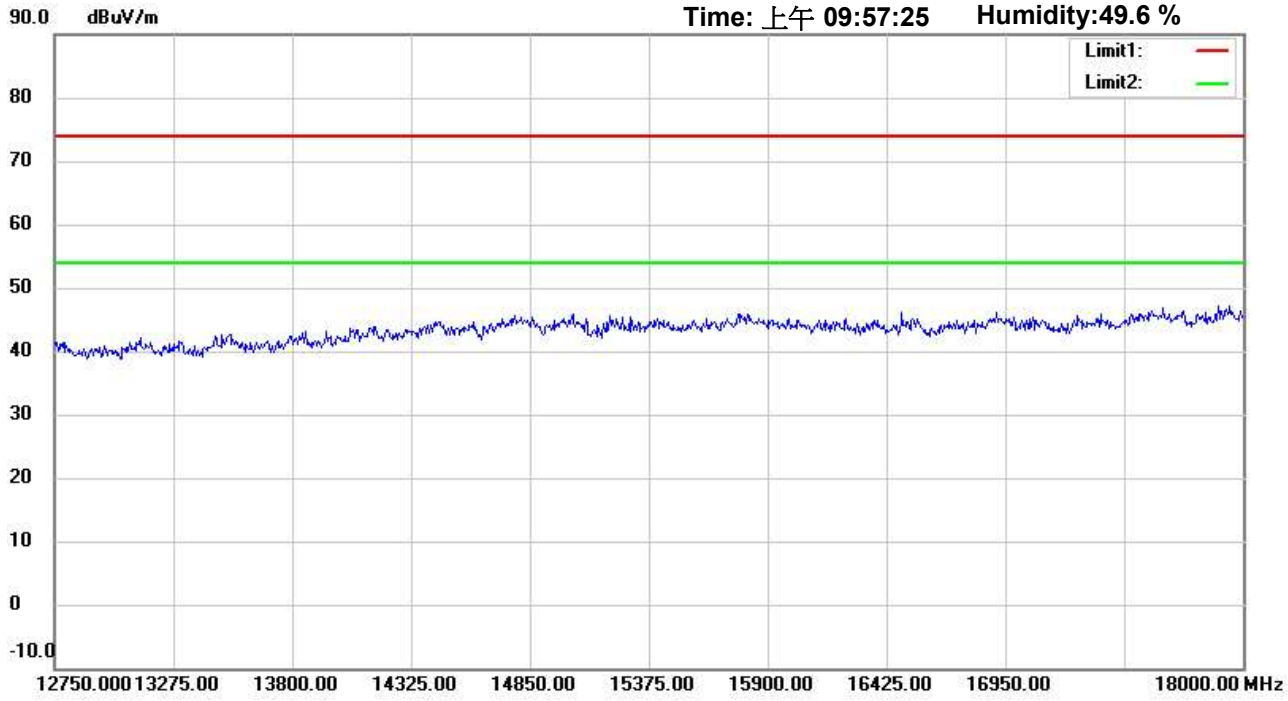
Address:No.99,Sec.1,Balian Rd.,Xizhi Dist.,New Taipei City
Tel:+886-2-2646-1508
Fax:+886-2-2646-1533

Radiated Emission Measurement

Operator: Kai

File :3 Data :#4 Date: 2024/9/6 Temperature:24.9 ℃

Time: 上午 09:57:25 Humidity:49.6 %



Site : 966A Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

Polarization: *Horizontal*

EUT : W6M22409-23710

Power : 5 Vd.c.

M/N:

Distance: 3m

Test Mode : TX 2402MHz

Note :

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment

*:Maximum data x:Over limit !:over margin

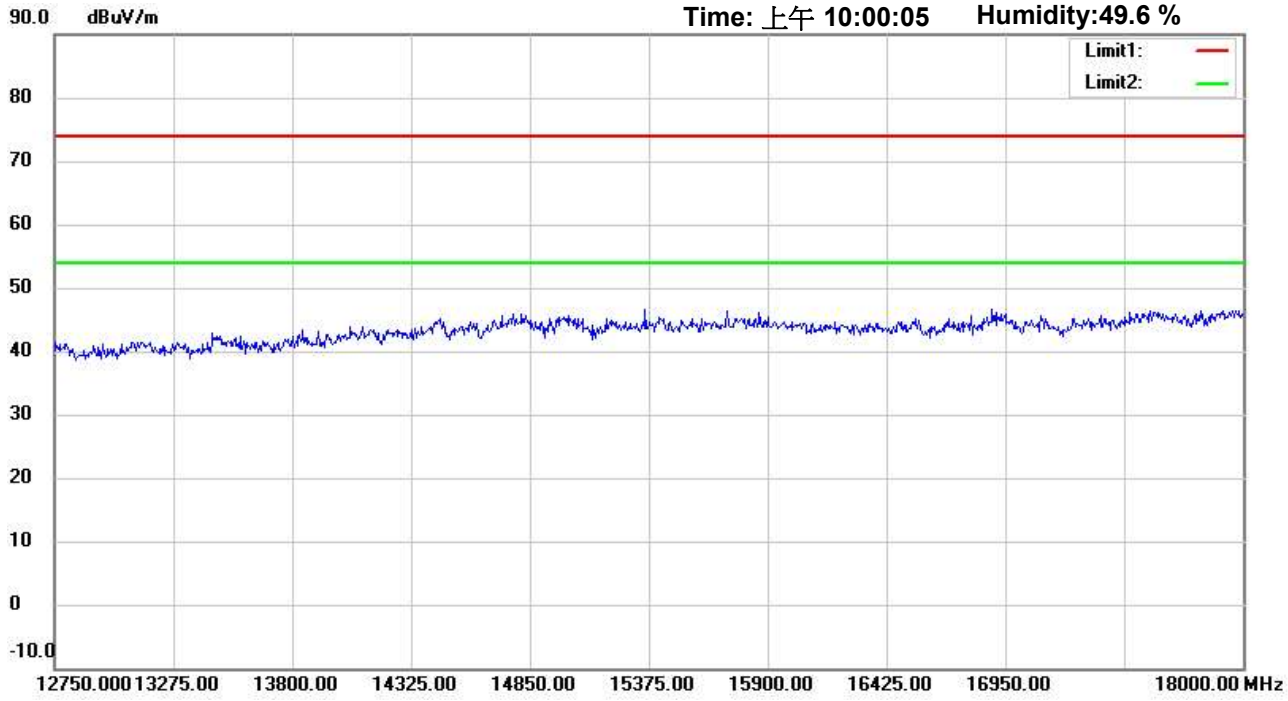
Address:No.99,Sec.1,Balian Rd.,Xizhi Dist.,New Taipei City
Tel:+886-2-2646-1508
Fax:+886-2-2646-1533

Radiated Emission Measurement

Operator: Kai

File :3 Data :#9 Date: 2024/9/6 Time: 上午 10:00:05

Temperature:24.9 ℃ Humidity:49.6 %



Site : 966A Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

Polarization: *Vertical*

EUT : W6M22409-23710

Power : 5 Vd.c.

M/N:

Distance: 3m

Test Mode : TX 2402MHz

Note :

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment

*:Maximum data x:Over limit !:over margin

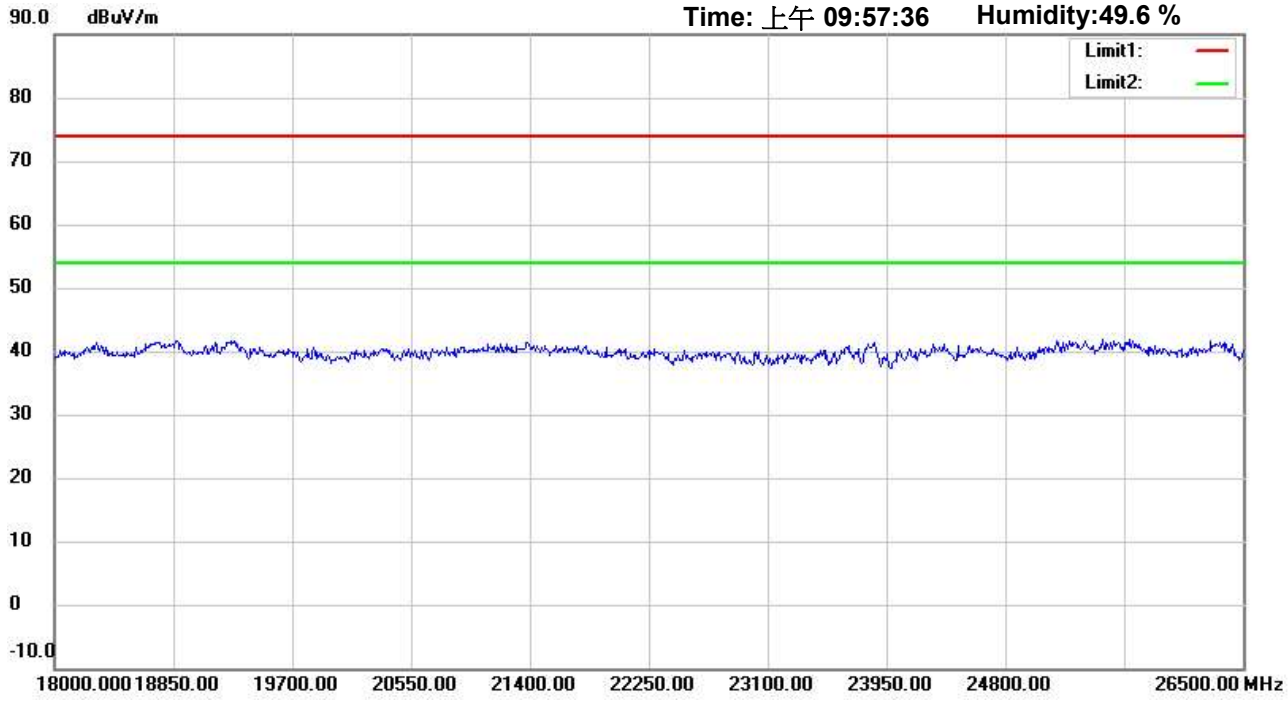
Address:No.99,Sec.1,Balian Rd.,Xizhi Dist.,New Taipei City
Tel:+886-2-2646-1508
Fax:+886-2-2646-1533

Radiated Emission Measurement

Operator: Kai

File :3 Data :#5 Date: 2024/9/6 Time: 上午 09:57:36

Temperature:24.9 ℃ Humidity:49.6 %



Site : 966A Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M22409-23710

M/N:

Test Mode : TX 2402MHz

Note :

Polarization: *Horizontal*

Power : 5 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment

*:Maximum data x:Over limit !:over margin

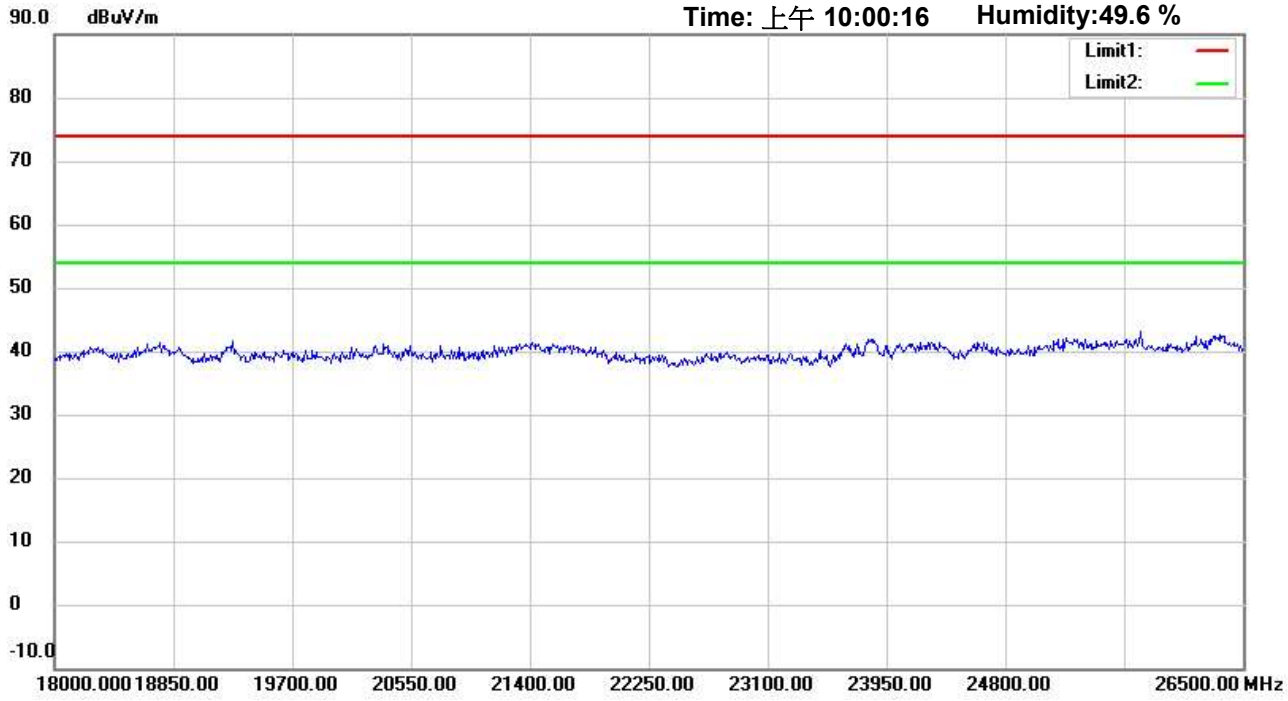
Address:No.99,Sec.1,Balian Rd.,Xizhi Dist.,New Taipei City
Tel:+886-2-2646-1508
Fax:+886-2-2646-1533

Radiated Emission Measurement

Operator: Kai

File :3 Data :#10 Date: 2024/9/6 Temperature:24.9 ℃

Time: 上午 10:00:16 Humidity:49.6 %



Site : 966A Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

Polarization: *Vertical*

EUT : W6M22409-23710

Power : 5 Vd.c.

M/N:

Distance: 3m

Test Mode : TX 2402MHz

Note :

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment

*:Maximum data x:Over limit !:over margin

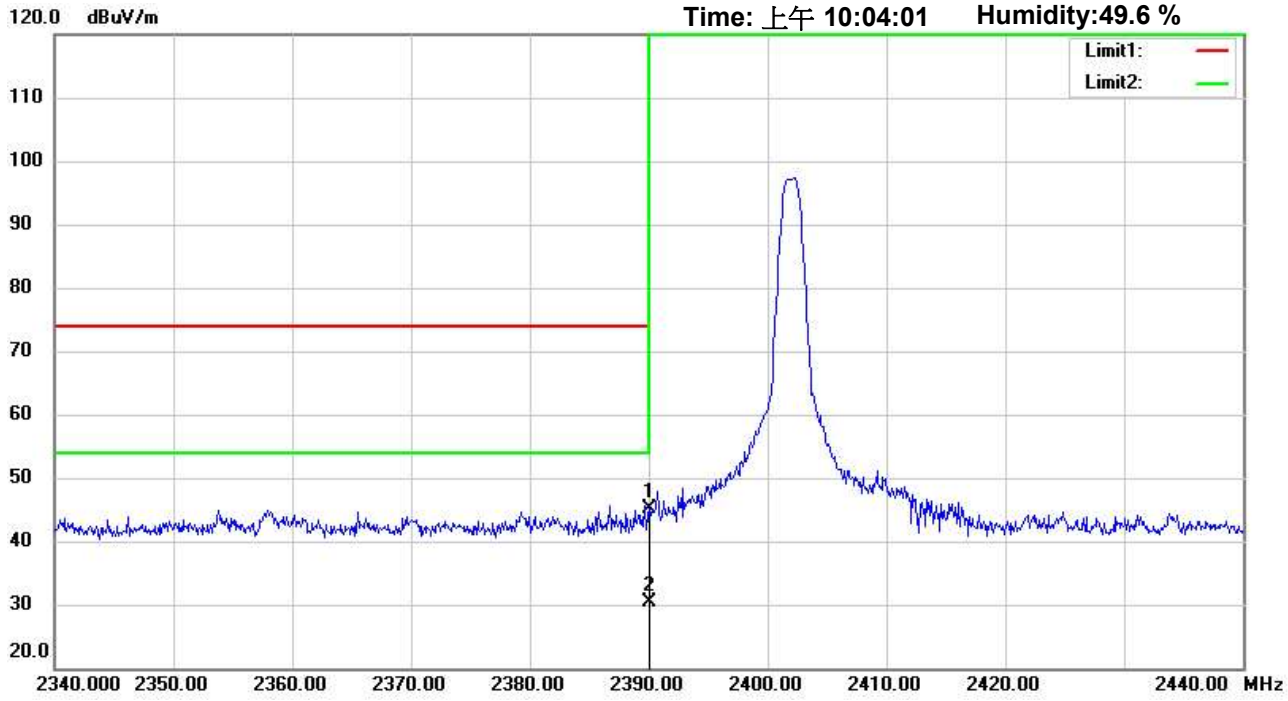
Address:No.99,Sec.1,Balian Rd.,Xizhi Dist.,New Taipei City
Tel:+886-2-2646-1508
Fax:+886-2-2646-1533

Radiated Emission Measurement

Operator: Kai

File :BandEdge Data :#1 Date: 2024/9/6 Time: 上午 10:04:01

Temperature:24.9 ℃ Humidity:49.6 %



Site : 966A Chamber

Condition : FCC 15.247 PK (Bandedge)

EUT : W6M22409-23710

M/N:

Test Mode : TX 2402MHz

Note :

Polarization: *Horizontal*

Power : 5 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	2390.000	49.69	peak	-4.45	45.24	74.00	150	20	-28.76	
*	2390.000	34.72	AVG	-4.45	30.27	54.00	150	20	-23.73	

*:Maximum data x:Over limit !:over margin

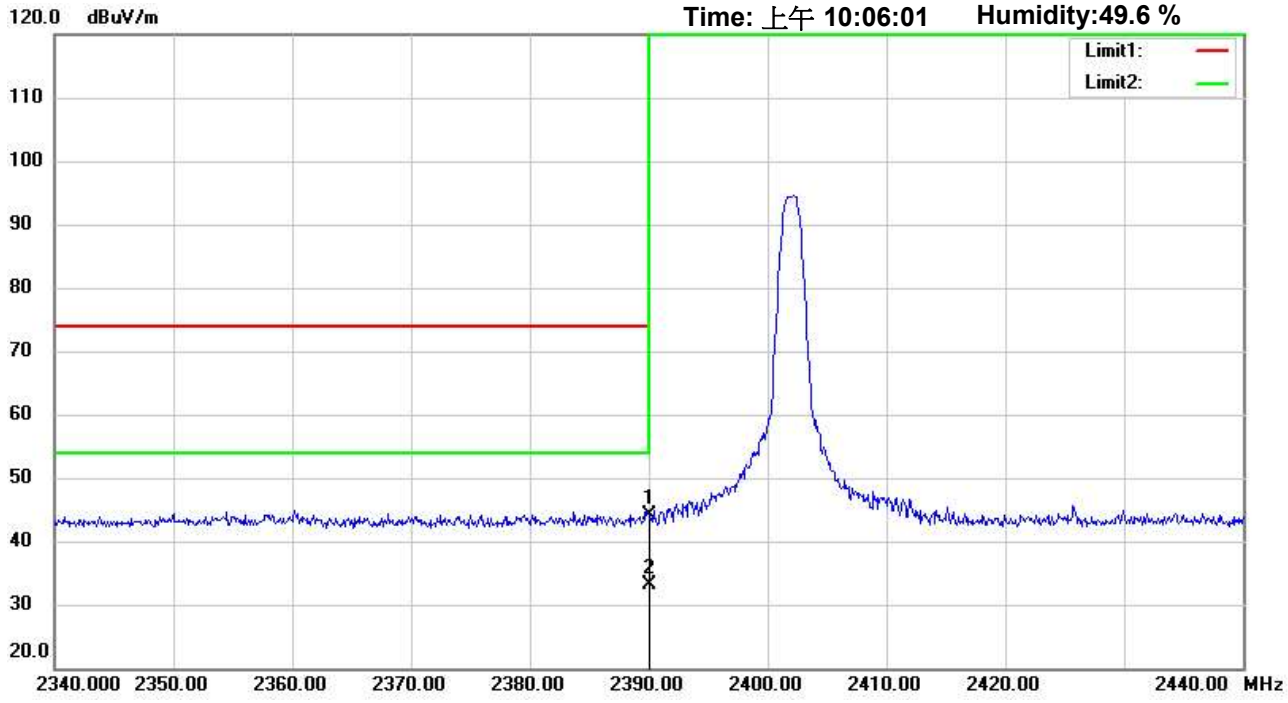
Address:No.99,Sec.1,Balian Rd.,Xizhi Dist.,New Taipei City
Tel:+886-2-2646-1508
Fax:+886-2-2646-1533

Radiated Emission Measurement

Operator: Kai

File :BandEdge Data :#2 Date: 2024/9/6 Time: 上午 10:06:01

Temperature:24.9 ℃ Humidity:49.6 %



Site : 966A Chamber

Condition : FCC 15.247 PK (Bandedge)

EUT : W6M22409-23710

M/N:

Test Mode : TX 2402MHz

Note :

Polarization: *Vertical*

Power : 5 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	2390.000	48.52	peak	-4.45	44.07	74.00	150	175	-29.93	
*	2390.000	37.52	AVG	-4.45	33.07	54.00	150	175	-20.93	

*:Maximum data x:Over limit !:over margin

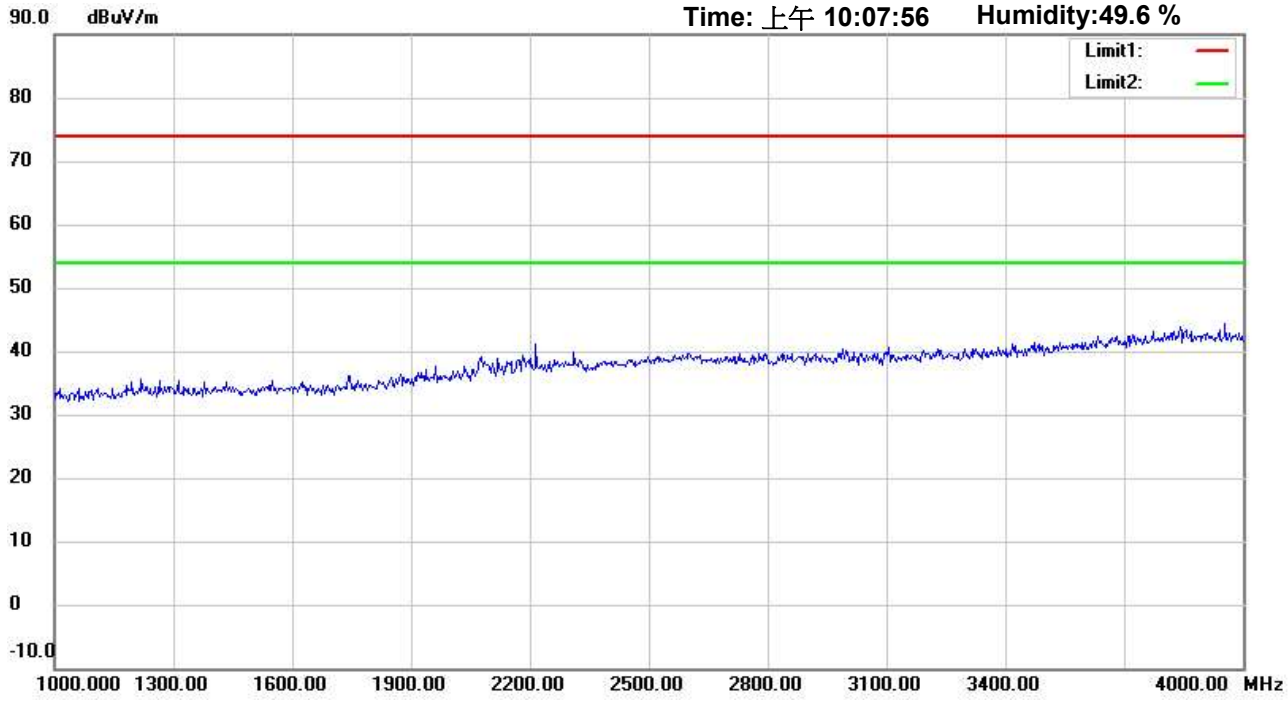
Address:No.99,Sec.1,Balian Rd.,Xizhi Dist.,New Taipei City
Tel:+886-2-2646-1508
Fax:+886-2-2646-1533

Radiated Emission Measurement

Operator: Kai

File :3 Data :#1 Date: 2024/9/6 Time: 上午 10:07:56

Temperature:24.9 ℃ Humidity:49.6 %



Site : 966A Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M22409-23710

M/N:

Test Mode : TX 2440MHz

Note :

Polarization: *Horizontal*

Power : 5 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment

*:Maximum data x:Over limit !:over margin

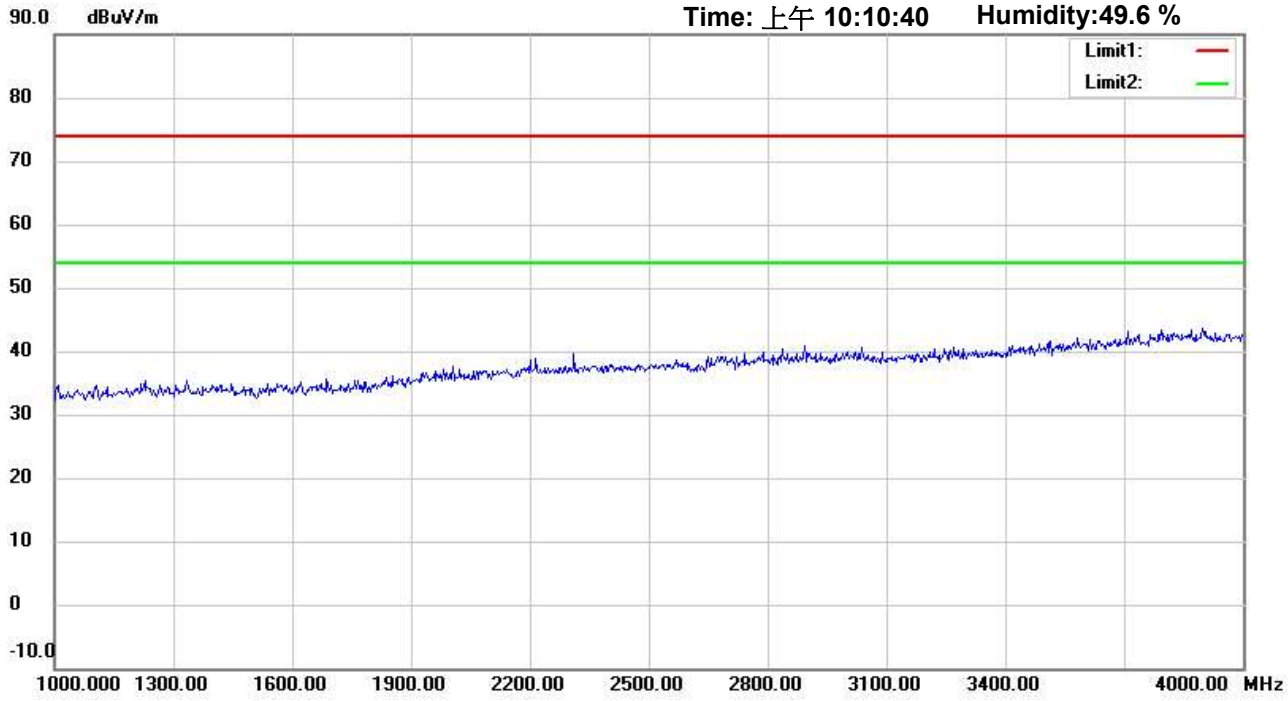
Address:No.99,Sec.1,Balian Rd.,Xizhi Dist.,New Taipei City
Tel:+886-2-2646-1508
Fax:+886-2-2646-1533

Radiated Emission Measurement

Operator: Kai

File :3 Data :#6 Date: 2024/9/6 Time: 上午 10:10:40

Temperature:24.9 ℃ Humidity:49.6 %



Site : 966A Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M22409-23710

M/N:

Test Mode : TX 2440MHz

Note :

Polarization: *Vertical*

Power : 5 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment

*:Maximum data x:Over limit !:over margin

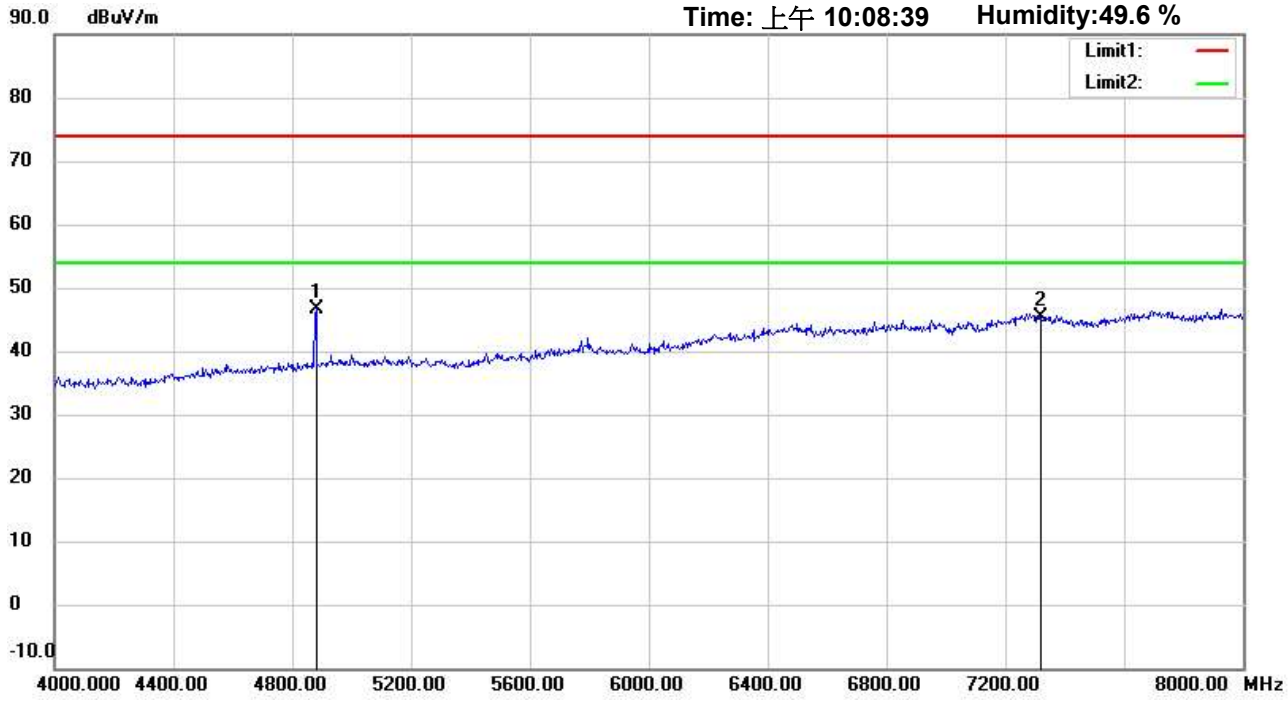
Address:No.99,Sec.1,Balian Rd.,Xizhi Dist.,New Taipei City
Tel:+886-2-2646-1508
Fax:+886-2-2646-1533

Radiated Emission Measurement

Operator: Kai

File :3 Data :#2 Date: 2024/9/6 Time: 上午 10:08:39

Temperature:24.9 ℃ Humidity:49.6 %



Site : 966A Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M22409-23710

M/N:

Test Mode : TX 2440MHz

Note :

Polarization: *Horizontal*

Power : 5 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	4880.000	41.79	peak	4.93	46.72	74.00	150	222	-27.28	
	7320.000	33.24	peak	12.18	45.42	74.00	150	235	-28.58	

*:Maximum data x:Over limit !:over margin

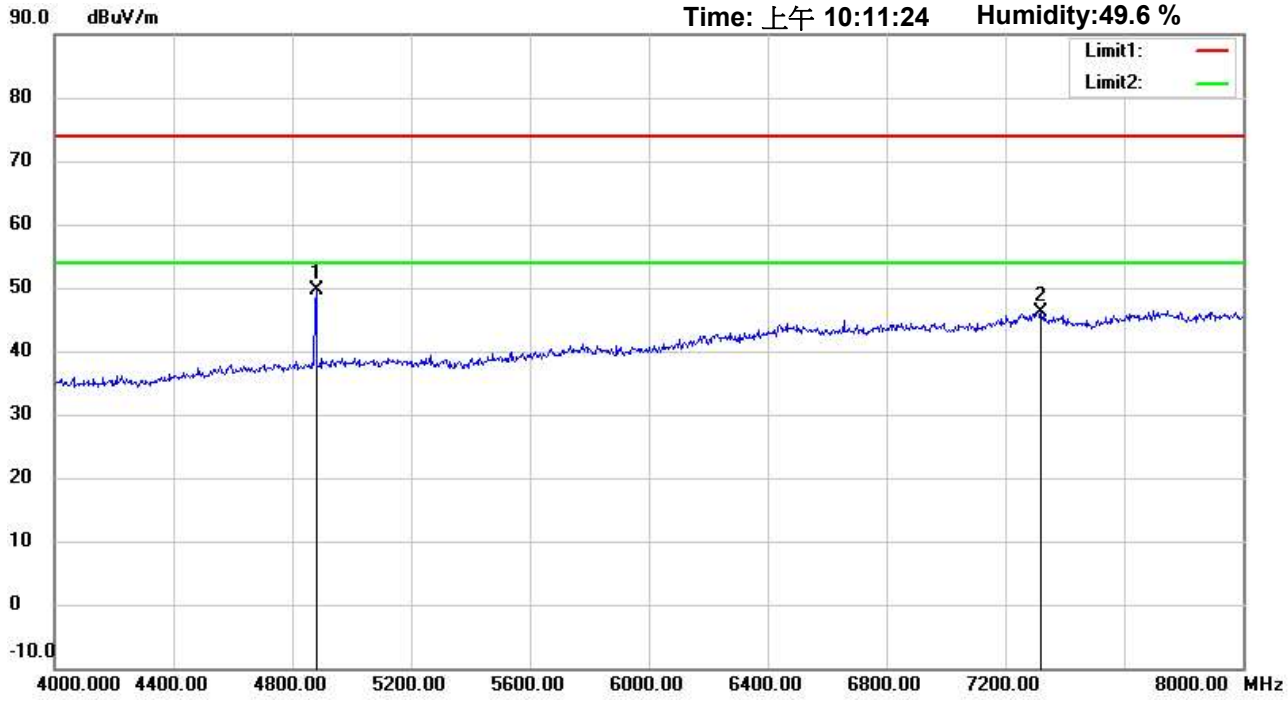
Address:No.99,Sec.1,Balian Rd.,Xizhi Dist.,New Taipei City
Tel:+886-2-2646-1508
Fax:+886-2-2646-1533

Radiated Emission Measurement

Operator: Kai

File :3 Data :#7 Date: 2024/9/6 Time: 上午 10:11:24

Temperature:24.9 ℃ Humidity:49.6 %



Site : 966A Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M22409-23710

M/N:

Test Mode : TX 2440MHz

Note :

Polarization: *Vertical*

Power : 5 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	4880.000	44.64	peak	4.93	49.57	74.00	150	266	-24.43	
	7320.000	33.92	peak	12.18	46.10	74.00	150	140	-27.90	

*:Maximum data x:Over limit !:over margin

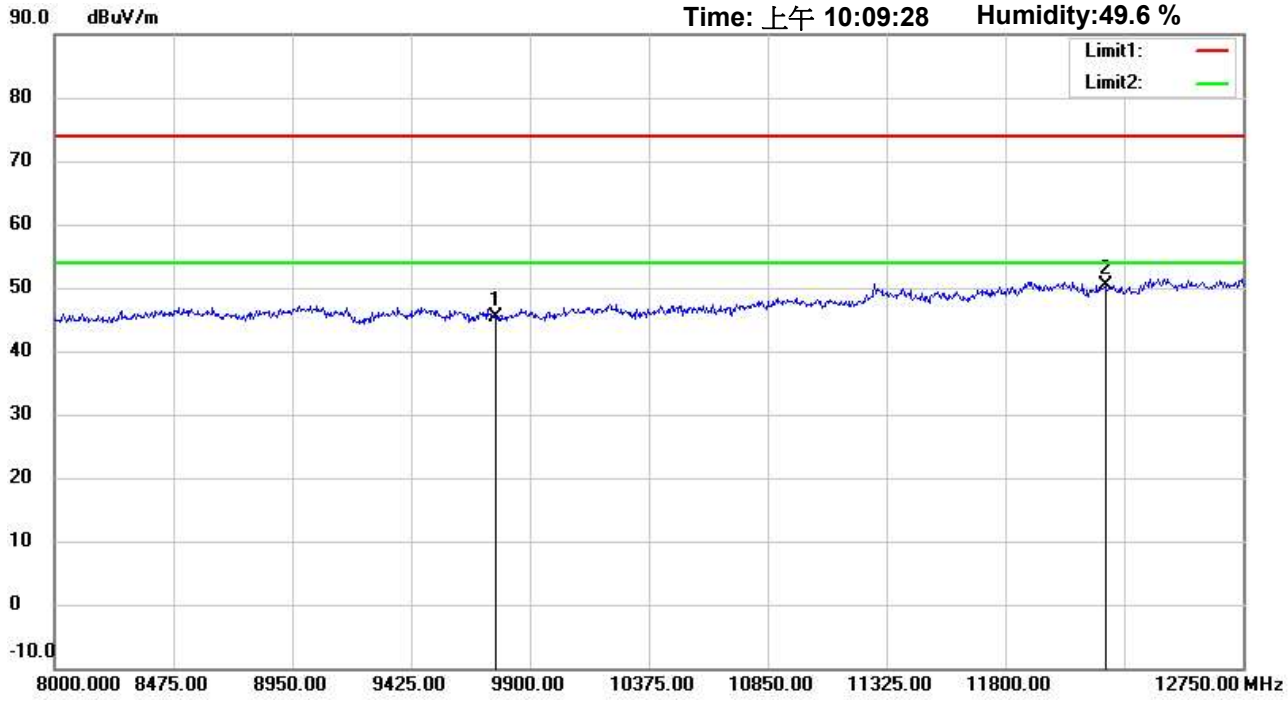
Address:No.99,Sec.1,Balian Rd.,Xizhi Dist.,New Taipei City
Tel:+886-2-2646-1508
Fax:+886-2-2646-1533

Radiated Emission Measurement

Operator: Kai

File :3 Data :#3 Date: 2024/9/6 Time: 上午 10:09:28

Temperature:24.9 ℃ Humidity:49.6 %



Site : 966A Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M22409-23710

M/N:

Test Mode : TX 2440MHz

Note :

Polarization: *Horizontal*

Power : 5 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	9760.000	32.06	peak	13.35	45.41	74.00	150	2	-28.59	
*	12200.000	33.17	peak	17.19	50.36	74.00	150	169	-23.64	

*:Maximum data x:Over limit !:over margin

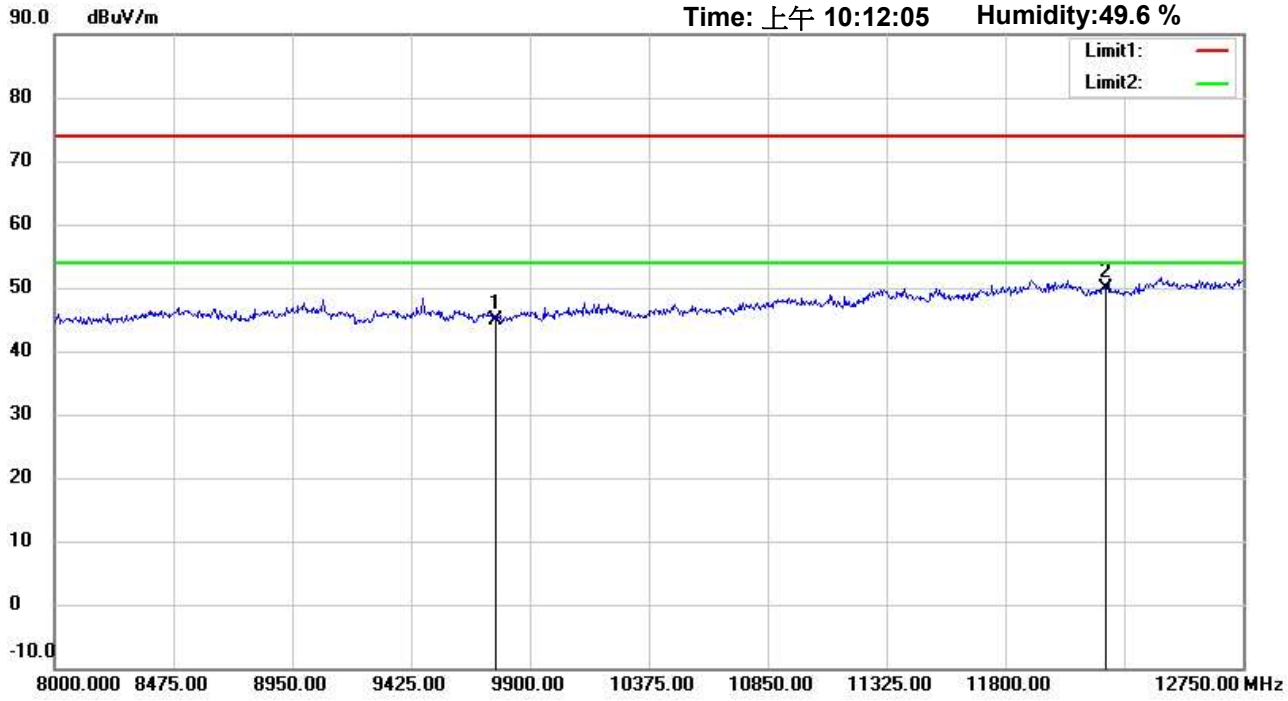
Address:No.99,Sec.1,Balian Rd.,Xizhi Dist.,New Taipei City
Tel:+886-2-2646-1508
Fax:+886-2-2646-1533

Radiated Emission Measurement

Operator: Kai

File :3 Data :#8 Date: 2024/9/6 Time: 上午 10:12:05

Temperature:24.9 ℃ Humidity:49.6 %



Site : 966A Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M22409-23710

M/N:

Test Mode : TX 2440MHz

Note :

Polarization: *Vertical*

Power : 5 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	9760.000	31.61	peak	13.35	44.96	74.00	150	146	-29.04	
*	12200.000	32.65	peak	17.19	49.84	74.00	150	180	-24.16	

*:Maximum data x:Over limit !:over margin

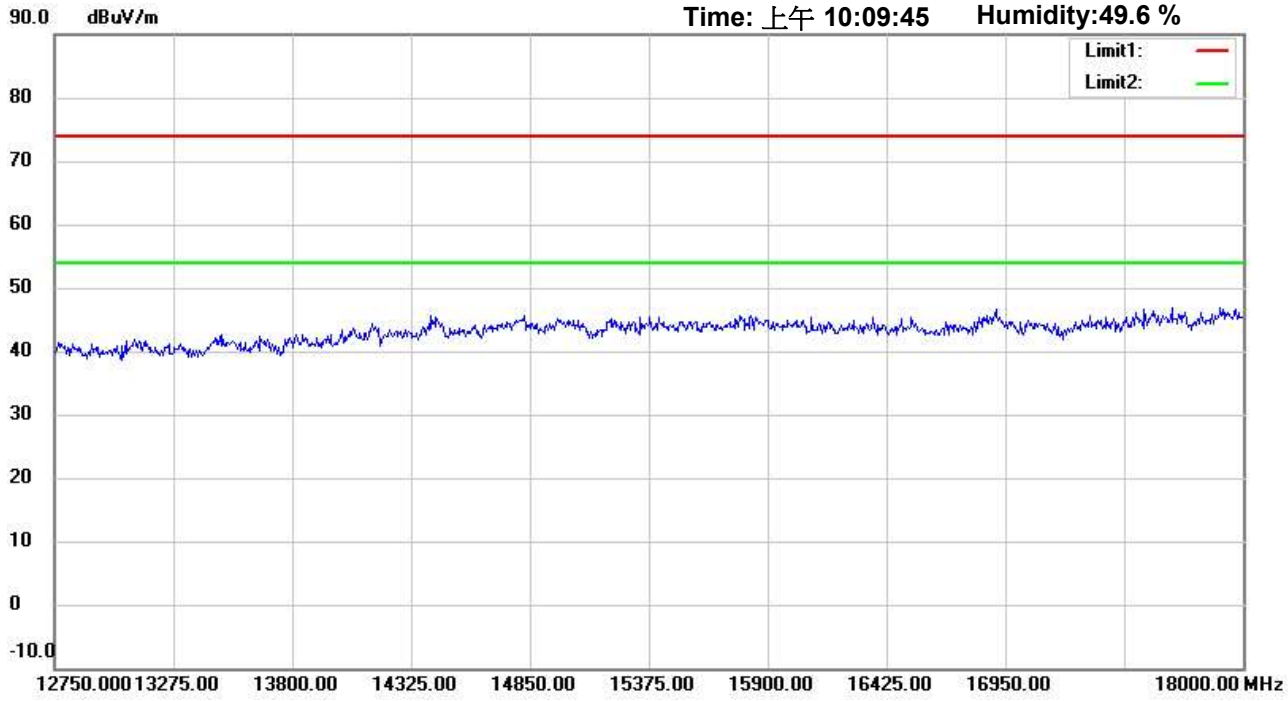
Address:No.99,Sec.1,Balian Rd.,Xizhi Dist.,New Taipei City
Tel:+886-2-2646-1508
Fax:+886-2-2646-1533

Radiated Emission Measurement

Operator: Kai

File :3 Data :#4 Date: 2024/9/6 Time: 上午 10:09:45

Temperature:24.9 ℃ Humidity:49.6 %



Site : 966A Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M22409-23710

M/N:

Test Mode : TX 2440MHz

Note :

Polarization: *Horizontal*

Power : 5 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment

*:Maximum data x:Over limit !:over margin

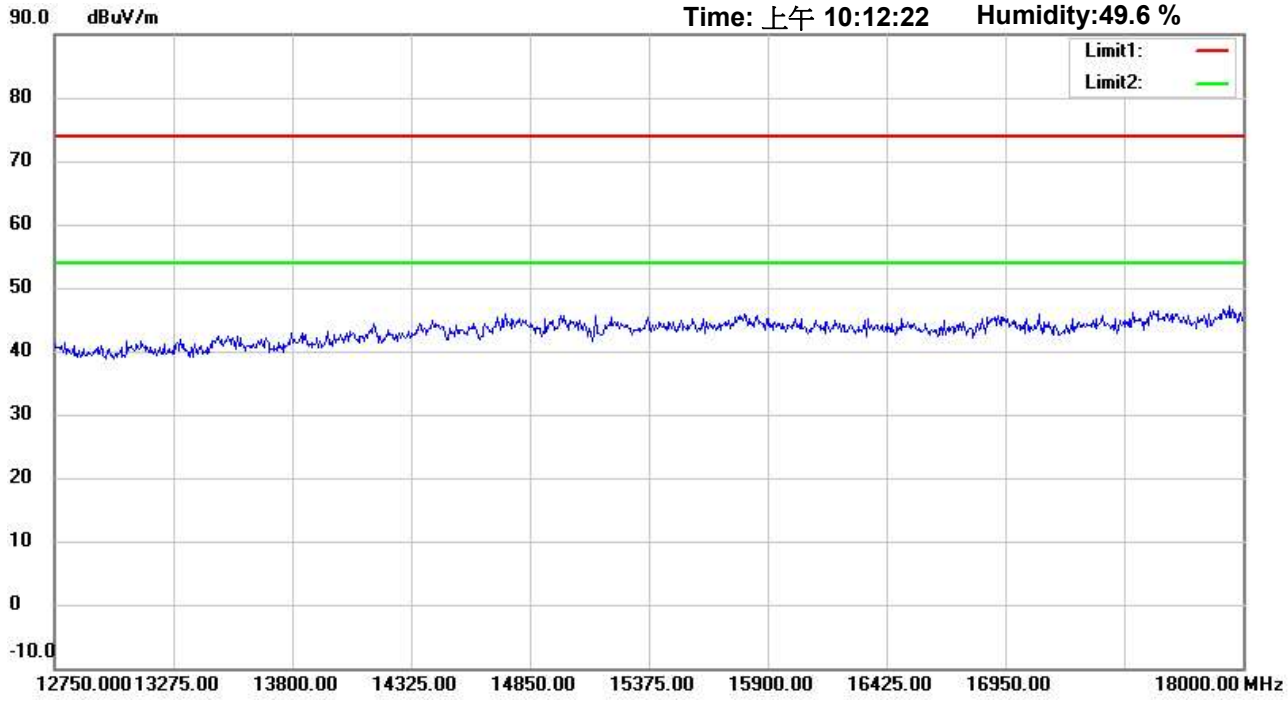
Address:No.99,Sec.1,Balian Rd.,Xizhi Dist.,New Taipei City
Tel:+886-2-2646-1508
Fax:+886-2-2646-1533

Radiated Emission Measurement

Operator: Kai

File :3 Data :#9 Date: 2024/9/6 Time: 上午 10:12:22

Temperature:24.9 ℃ Humidity:49.6 %



Site : 966A Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

Polarization: *Vertical*

EUT : W6M22409-23710

Power : 5 Vd.c.

M/N:

Distance: 3m

Test Mode : TX 2440MHz

Note :

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment

*:Maximum data x:Over limit !:over margin