

47 CFR PART 15 SUBPART C TEST REPORT

for

Stages Bike

Model No.: SBSB1

FCC ID: ZBM-SBSB1

of

Applicant: **Foundation Fitness LLC**

Address: **606 SE 9th Ave, Portland, Oregon 97214, United States**

Tested and Prepared

by

Worldwide Testing Services (Taiwan) Co., Ltd.

FCC Registration No.: TW1477, TW0020, TW1072

Industry Canada filed test laboratory Reg. No.: 20037

A2LA Accredited No.: 2732.01



Report No.: W6M21910-19425-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



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Worldwide Testing Services(Taiwan) Co., Ltd.

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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 its performance generally conforms to representative cases of communications equipment.

The test results of this test report relate exclusively to the item tested as specified in 1.5.

The test report may only be reproduced or published in full.

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Tester:

May 21, 2020

Kent Lin

Date

WTS-Lab.

Name

Signature

Technical responsibility for area of testing:

May 21, 2020

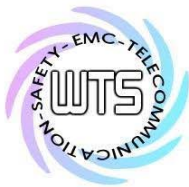
Kevin Wang

Date

WTS

Name

Signature



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1.2 Testing laboratory

1.2.1 Location

OATS

No.5-1, Lishui, Shuang Sing Village,

Wanli Dist., New Taipei City 207,

Taiwan (R.O.C.)

3 meter semi-anechoic chamber

No.35, Aly. 21, Ln. 228, Ankang Rd., Neihu Dist., Taipei City 114, Taiwan (R.O.C.)

TEL:886-2-6613-0228

FAX:886-2-2791-5046

Company

Worldwide Testing Services(Taiwan) Co., Ltd.

6F, NO. 58, LANE 188, RUEY-KUANG RD.

NEIHU, TAIPEI 114, TAIWAN R.O.C.

Tel : 886-2-66068877

Fax : 886-2-66068879

1.2.2 Details of accreditation status

Accredited testing laboratory

A2LA accredited number: 2732.01

FCC filed test laboratory Reg. No. TW1477, TW0020, TW1072

Industry Canada filed test laboratory Reg. No. 20037

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

Name: ./.

Accredited number: ./.

Street: ./.

Town: ./.

Country: ./.

Telephone: ./.

Fax: ./.

1.3 Details of approval holder

Name: Foundation Fitness LLC

Street: 606 SE 9th Ave,

City: Portland, Oregon 97214,

Country: United States

Telephone: +1.303.953.4754

Fax: ./.



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1.4 Application details

Date of receipt of test item: December 24, 2019
Date of test: from December 25, 2019 to May 05, 2020

1.5 General information of Test item

Type of test item: Stages Bike
Model Number: SBSB1
Brand Name: Stages Cycling
Multi-listing model number: ./.
Photos: see Appendix

Technical data

Frequency band: 2402 MHz – 2480 MHz (BLE), 2457 MHz (ANT+)
BLE
Frequency (ch 0 or A): 2402 MHz
Frequency (ch 19 or B): 2440 MHz
Frequency (ch 39 or C): 2480 MHz
Number of Channels: 40
ANT+
Frequency (ch D): 2457 MHz
Operation modes: Duplex (BLE), Simplex (ANT+)
Modulation Type: GFSK
Fixed point-to-point operation: ☐ Yes / ☒ No
Type of Antenna: Chip Antenna
Antenna gain: 3.45 dBi
Power supply: Adaptor: I/P: 100-240V~50/60Hz 2.5A MAX
O/P: 24.0V, 6.24A, 149.76W
Emission designator: BLE: 1M35G1D, ANT+: 2M02G1D
Host device: none
Classification:

Fixed Device	☐
Mobile Device (Human Body distance > 20cm) (FCC rule part 2.1091)	☐
Portable Device (Human Body distance < 20cm) (FCC rule part 2.1093)	☒



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Transmitter

Unom

BLE

Power (ch A): Conducted: 1.26 dBm

Power (ch B): Conducted: 1.24 dBm

Power (ch C): Conducted: 1.22 dBm

ANT+

Power (ch D): Conducted: 0.40 dBm

Manufacturer: (if applicable)

Name: GIANT MANUFACTURING CO., LTD
Street: 19, SHUN FARN ROAD, TACHIA,
Town: TAICHUNG HSIEN,
Country: TAIWAN

Additional information: ./.

1.6 Test standards

Technical standard : 47 CFR PART 15 SUBPART C § 15.247 (2019-10)



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2 Technical test

2.1 Summary of test results

No deviations from the technical specification(s) were ascertained in the course of the tests performed.



or

The deviations were ascertained in the course of the tests performed.



2.2 Test environment

Relative humidity content: 20 ... 75 %

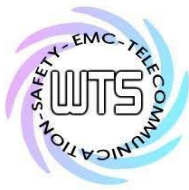
Air pressure: 86 ... 103 kPa

Power supply: Adaptor: I/P: 100-240V~50/60Hz 2.5A MAX
O/P: 24.0V, 6.24A, 149.76W

Extreme conditions parameters: ./.

Test item Name	Uncertainty
Estimation Result of Uncertainty of Conducted Emission	Expanded Uncertainty : AMN : 1.06 dB Voltage probe : 1.12 dB
Estimation Result of Uncertainty of Radiated Emission(3M)	Expanded Uncertainty : 0.009-30 MHz : 1.88 dB 30-1000 MHz : 2.79 dB 1-18 GHz : 2.36 dB 18-40 GHz : 1.55 dB
Estimation Result of Uncertainty of Bandwidth Measurement 20 dB Bandwidth, Occupied bandwidth, Channel bandwidth, Necessary Bandwidth	Expanded Uncertainty : 0.45 kHz
Estimation Result of Uncertainty of Conducted Output Power Measurement Output power	Expanded Uncertainty : 1.14 dB
Estimation Result of Uncertainty of Power Density Measurement Power density	Expanded Uncertainty : 1.45 dB
Estimation Result of Uncertainty of Band Edge Measurement	Expanded Uncertainty : 1.01 dBc

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



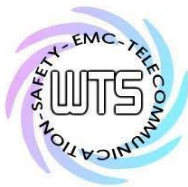
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2.3 Test Equipment List

No.	Test equipment	Type	Serial No.	Manufacturer	Cal. Date	Next Cal. Date
ETSTW-CE 001	EMI TEST RECEIVER	ESHS10	842121/013	R&S	2019/6/4	2020/6/3
ETSTW-CE 003	AC POWER SOURCE	APS-9102	D161137	GW	Function Test	
ETSTW-CE 004	ZWEILEITER-V-NETZNACHBILDUNG TWO-LINE V-NETWORK	ESH3-Z5	840731/011	R&S	2019/11/1	2020/10/31
ETSTW-CE 006	IMPULSBEGRENZER PULSE LIMITER	ESH3-Z2	100226	R&S	2019/9/24	2020/9/23
ETSTW-CE 008	HF-EICHLLEITUNG RF STEP ATTENUATOR 139dB DPSP	334.6010.02	844581/024	R&S	Function Test	
ETSTW-CE 009	TEMP.&HUMIDITY CHAMBER	GTH-225-40-1P-U	MAA0305-009	GIANT FORCE	2019/7/23	2020/7/22
ETSTW-CE 016	TWO-LINE V-NETWORK	ENV216	100050	R&S	2019/10/3	2020/10/2
ETSTW-CE 028	MXE EMI Receiver	N9038A	MY53220110	Agilent	2019/7/18	2020/7/17
ETSTW-RE 003	EMI TEST RECEIVER	ESI 26	831438/001	R&S	2019/6/4	2020/6/3
ETSTW-RE 004	EMI TEST RECEIVER	ESI 40	832427/004	R&S	2019/5/29	2020/5/28
ETSTW-RE 012	TUNABLE BANDREJECT FILTER	D.C 0309	146	K&L	Function Test	
ETSTW-RE 013	TUNABLE BANDREJECT FILTER	D.C 0336	397	K&L	Function Test	
ETSTW-RE 018	MICROWAVE HORN ANTENNA	AT4560	27212	AR	2019/7/25	2020/7/24
ETSTW-RE 027	Passive Loop Antenna	6512	00034563	ETS-Lindgren	2019/7/22	2020/7/21
ETSTW-RE 030	Double-Ridged Guide Horn Antenna	3117	00035224	ETS-Lindgren	2020/3/25	2021/3/24
ETSTW-RE 042	Biconical Antenna	HK116	100172	R&S	2020/2/18	2021/2/17
ETSTW-RE 043	Log-Periodic Dipole Antenna	HL223	100166	R&S	2020/4/22	2021/4/21
ETSTW-RE 044	Log-Periodic Antenna	HL050	100094	R&S	2019/5/13	2020/5/12
ETSTW-RE 045	ESA-E SERIES SPECTRUM ANALYZER	E4404B	MY45111242	Agilent	Pre-test Use	
ETSTW-RE 050	Attenuator 10dB	50HF-010-1	None	JFW	2020/2/20	2021/2/19
ETSTW-RE 051	Attenuator 6dB	50HF-006-1	None	JFW	2020/2/20	2021/2/19
ETSTW-RE 053	Attenuator 3dB	50HF-003-1	None	JFW	2020/2/20	2021/2/19
ETSTW-RE 055	SPECTRUM ANALYZER	FSU 26	200074	R&S	2020/3/6	2021/3/5
ETSTW-RE 060	Attenuator 30dB	5015-30	F651012z-01	ATM	2020/2/20	2021/2/19
ETSTW-RE 062	Amplifier Module	CHC 2	None	KMIC	2019/5/16	2020/5/15
ETSTW-RE 064	Bluetooth Test Set	MT8852B-042	6K00005709	Anritsu	Function Test	
ETSTW-RE 069	Double-Ridged Guide Horn Antenna	3117	00069377	ETS-Lindgren	Function Test	
ETSTW-RE 072	CELL SITE TEST SET	8921A	3339A00375	HP	2019/9/23	2020/9/22
ETSTW-RE 088	SOLID STATE AMPLIFIER	KMA180265A01	99057	KMIC	2019/9/18	2020/9/17
ETSTW-RE 091	Match Pad	MDCS1500	None	WOKEN	2019/5/9	2020/5/8
ETSTW-RE 099	DC Block	50DB-007-1	None	JFW	2020/2/20	2021/2/19
ETSTW-RE 112	AC POWER SOURCE	TFC-1005	T-0A023536	T-Power	Function test	
ETSTW-RE 115	2.4GHz Notch Filter	N0124411	473874	MICROWAVE CIRCUITS	2020/1/13	2021/1/12

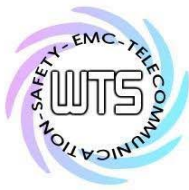


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ETSTW-RE 120	RF Player	MP9200	MP9210-111022	ADIVIC	Function test	
ETSTW-RE 122	SIGNAL GENERATOR	SMF100A	102149	R&S	2019/6/3	2020/6/2
ETSTW-RE 125	5GHz Notch filter	5NSL11-5200/E221.3-O/O	1	K&L Microwave	2019/8/8	2020/8/7
ETSTW-RE 126	5GHz Notch filter	5NSL12-5800/E221.3-O/O	1	K&L Microwave	2019/8/8	2020/8/7
ETSTW-RE 127	RF Switch Box	RFS-01	None	WTS	2020/2/20	2021/2/19
ETSTW-RE 128	5.3GHz Notch filter	N0153001	SN487233	Microwave Circuits	2019/8/8	2020/8/7
ETSTW-RE 129	5.5GHz Notch filter	N0555984	SN487234	Microwave Circuits	2019/8/8	2020/8/7
ETSTW-RE 130	Handheld RF Spectrum Analyzer	N9340A	CN0147000204	Agilent	Pre-test Use	
ETSTW-RE 142	Amplifier	8447D	2805A03378	Agilent	2019/5/16	2020/5/15
ETSTW-RE 147	Bi-log Hybrid Antenna	MCTD 2786B	BLB16M04005	ETC	2020/4/9	2021/4/8
ETSTW-RF 002	Electromagnetic field probe	LF-30	K-0007	STT	2019/5/27	2020/5/26
ETSTW-EMI 011	USB Compact Modulator	SFC-U	101689	R&S	2019/5/16	2020/5/15
ETSTW-GSM 002	Universal Radio Communication Tester	CMU 200	109439	R&S	2020/3/9	2021/3/8
ETSTW-GSM 003	Radio Communication Analyzer	MT8820C	6201342073	Anritsu	2020/3/25	2021/3/24
ETSTW-GSM 004	Wideband Radio Communication Tester	CMW500	128092	R&S	2019/10/25	2020/10/24
ETSTW-GSM 019	Band Reject Filter	WRCTF824/849-822/851-40 /12+9SS	3	WI	2020/1/13	2021/1/12
ETSTW-GSM 020	Band Reject Filter	WRCD1747/1748-1743/1752-32/5SS	1	WI	2020/1/13	2021/1/12
ETSTW-GSM 021	Band Reject Filter	WRCD1879.5/1880.5-1875.5/1884.5-32/5SS	3	WI	2020/1/13	2021/1/12
ETSTW-GSM 022	Band Reject Filter	WRCT901.9/903.1-904.25-50/8SS	1	WI	2020/1/13	2021/1/12
ETSTW-GSM 023	Power Divider	4901.19.A	None	SUHNER	2019/9/12	2020/9/11
ETSTW-GSM 024	Radio Communication Analyzer	MT8821C	None	Anritsu	2020/3/27	2021/3/26
ETSTW-GSM 025	Band Reject Filter	BRM19835	001	Micro-Tronics	2019/8/9	2020/8/8
ETSTW-Cable 011	SMA to N type Cable	RGU-400	None	THERMAX	Pre-test Use NCR	
ETSTW-Cable 016	BNC Cable	Switch Box	B Cable 1	Schwarz beck	2020/2/20	2021/2/19
ETSTW-Cable 017	BNC Cable	X Cable	B Cable 2	Schwarz beck	2020/2/20	2021/2/19
ETSTW-Cable 018	BNC Cable	Y Cable	B Cable 3	Schwarz beck	2020/2/20	2021/2/19
ETSTW-Cable 019	BNC Cable	Z Cable	B Cable 4	Schwarz beck	2020/2/20	2021/2/19
ETSTW-Cable 020	N TYPE Cable	OATS Cable 1	N30N30-L335-15M	JYE BAO CO.,LTD.	2019/7/2	2020/7/1
ETSTW-Cable 027	Microwave Cable	SUCOFLEX 104	279083	HUBER+SUHNER	2019/5/14	2020/5/13
ETSTW-Cable 028	Microwave Cable	FA147A0015M2020	30064-2	UTIFLEX	2019/9/18	2020/9/17
ETSTW-Cable 029	Microwave Cable	FA147A0015M2020	30064-3	UTIFLEX	2019/9/18	2020/9/17
ETSTW-Cable 030	Microwave Cable	SUCOFLEX 104 (S Cable 9)	279067	HUBER+SUHNER	2020/2/20	2021/2/19
ETSTW-Cable 043	Microwave Cable	SUCOFLEX 104	317576	HUBER+SUHNER	2019/5/16	2020/5/15
ETSTW-Cable 058	Microwave Cable	SUCOFLEX 104	none	HUBER+SUHNER	2019/6/6	2020/6/5
ETSTW-Cable 064	Microwave Cable	SUCOFLEX 104	MY28891	HUBER+SUHNER	2019/5/16	2020/5/15
ETSTW-Cable 066	SMA type cable	32022	None	ASTROLAB	2019/9/24	2020/9/23

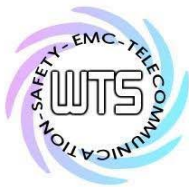


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ETSTW-Cable 071	N TYPE CABLE	EMCCFD400-NM-NM-25000	170239	EMCI	2019/6/6	2020/6/5
ETSTW-Cable 072	SMA type cable (8m)	SUCOFLEX 104	805800/4	HUBER+SUHNER	2019/5/16	2020/5/15
ETSTW-Cable 074	SMA type cable (2m)	SUCOFLEX 104	802563/4	HUBER+SUHNER	2019/5/16	2020/5/15
WTSTW-SW 002	EMI TEST SOFTWARE	EZ EMC	None	Farad	Version ETS-03A1	
WTSTW-SW 006	EMI TEST SOFTWARE	e3	None	AUDIX	Version 9.161014	
WTSTW-SW 008	Signal studio	Agilent	None	AUDIX	Version 2.0.0.1	
ETSTW-TH 001	Thermohygrometer	608-H1	45204316	Testo	2019/9/9	2020/9/8
ETSTW-TH 002	Thermohygrometer	608-H1	45204317	Testo	2019/9/9	2020/9/8



2.4 General Test Procedure

POWER LINE CONDUCTED INTERFERENCE: The procedure used was ANSI STANDARD C63.10-2013 5.2 using a 50 μ H LISN (if necessary). Both lines were observed. The bandwidth of the spectrum analyzer was 10 kHz with an appropriate sweep speed.

RADIATION INTERFERENCE: The test procedure used was according to ANSI STANDARD C63.10-2013 6.4 employing a spectrum analyzer. For investigated frequency is equal to or below 1GHz, the RBW and VBW of the spectrum analyzer was 100 kHz and 100kHz respectively with an appropriate sweep speed. For investigated frequency is above 1GHz, both of RBW and VBW of the spectrum analyzer were 1 MHz with an appropriate sweep speed. The analyzer was calibrated in dB above a microvolt at the output of the antenna.

FORMULA OF CONVERSION FACTORS: The Field Strength at 3m was established by adding the meter reading of the spectrum analyzer (which is set to read in units of dB μ V) to the antenna correction factor supplied by the antenna manufacturer. The antenna correction factors are stated in terms of dB.

Example:

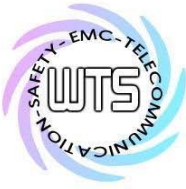
Freq (MHz)	METER READING + ACF + CABLE LOSS (to the receiver) = FS
33	20 dB μ V + 10.36 dB + 6 dB = 36.36 dB μ V/m @3m

The EUT was placed on a table 80 cm high and with dimensions of 1m by 1.5m (non metallic table) and arranged according to ANSI C63.10-2013 6.3.1. The table used for radiated measurements is capable of continuous rotation. The spectrum was scanned from 30 MHz to the frequency specified as follows:

- (1) If the intentional radiator operates below 10 GHz: to the tenth harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower.
- (2) If the intentional radiator operates at or above 10 GHz and below 30 GHz: to the fifth harmonic of the highest fundamental frequency or to 100 GHz, whichever is lower.
- (3) If the intentional radiator operates at or above 30 GHz: to the fifth harmonic of the highest fundamental frequency or to 200 GHz, whichever is lower, unless specified otherwise elsewhere in the rules.
- (4) If the intentional radiator contains a digital device, regardless of whether this digital device controls the functions of the intentional radiator or the digital device is used for additional control or function purposes other than to enable the operation of the intentional radiator, the frequency range shall be investigated up to the range specified in paragraphs (a)(1)-(a)(3) of this section or the range applicable to the digital device, as shown in paragraph (b)(1) of this Section, whichever is the higher frequency range of investigation.

For hand-held devices, a exploratory test was performed with three (3) orthogonal planes to determine the highest emissions.

When an emission was found, the table was rotated to produce the maximum signal strength. At this point, the antenna was raised and lowered from 1m to 4m. The antenna was placed in both the horizontal and vertical planes.



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When the radiated emission limits are expressed in terms of the average value of the emission, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum value.

The formula is as follows:

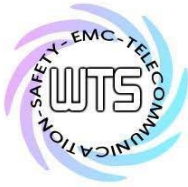
Average = Peak + Duty Factor

Duty Factor = $20 \log (\text{dwell time}/T)$

T = 100ms when the pulse train period is over 100 ms or the period of the pulse train.

Modified Limits for peak according to 15.35 (b) = Max Permitted average Limits + 20dB

ANSI STANDARD C63.10-2013 10.2.7: Any measurements that utilize special test software shall be indicated and referenced in the test report. During testing, test software 'EZ EMC' was used for setting up different operation modes.



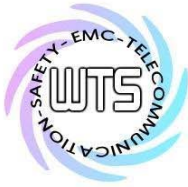
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3 Test results (enclosure)

TEST CASE	Para. Number	Required	Test passed	Test failed
Peak Output Power	15.247(b)	☒	☒	☐
Equivalent isotropically radiated Power	15.247(b)	☒	☒	☐
Spurious Emissions radiated – Transmitter operating	15.247(d): 15.209	☒	☒	☐
Band Edge Measurement	15.247(d)	☒	☒	☐
Minimum 6 dB Bandwidth	15.247(a)(2)	☒	☒	☐
Peak Power Spectral Density	15.247(e)	☒	☒	☐
Radiated Emission from Receiver part	15.109	☐	☐	☐
Power Line Conducted Emission	15.207	☒	☒	☐

The following is intentionally left blank.



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3.1 Peak Output Power (transmitter)

FCC Rule: 15.247(b)(3)

This measurement applies to equipment with an integral antenna and to equipment with an antenna connector and equipped with an antenna as declared by the applicant.

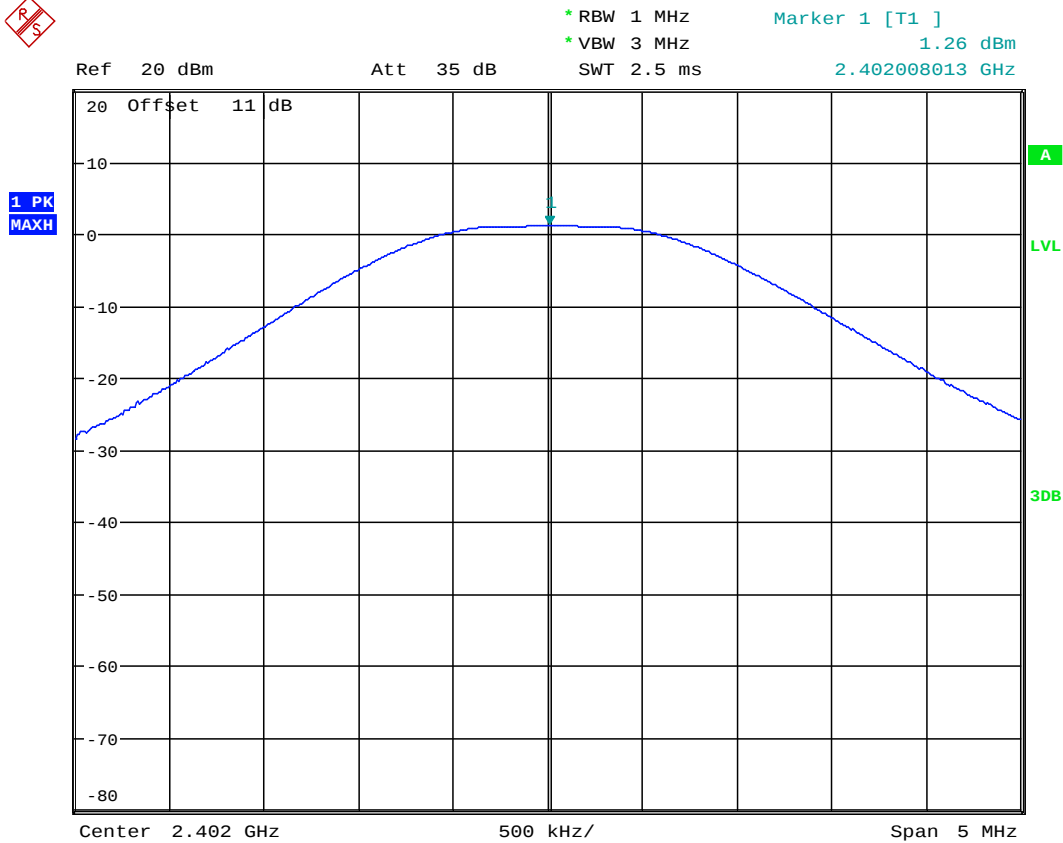
Test date: December 27, 2019

Temperature: 22.8°C

Humidity: 56.7 %

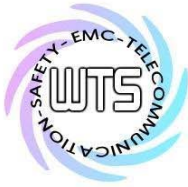
Tester: Kent Lin

BLE

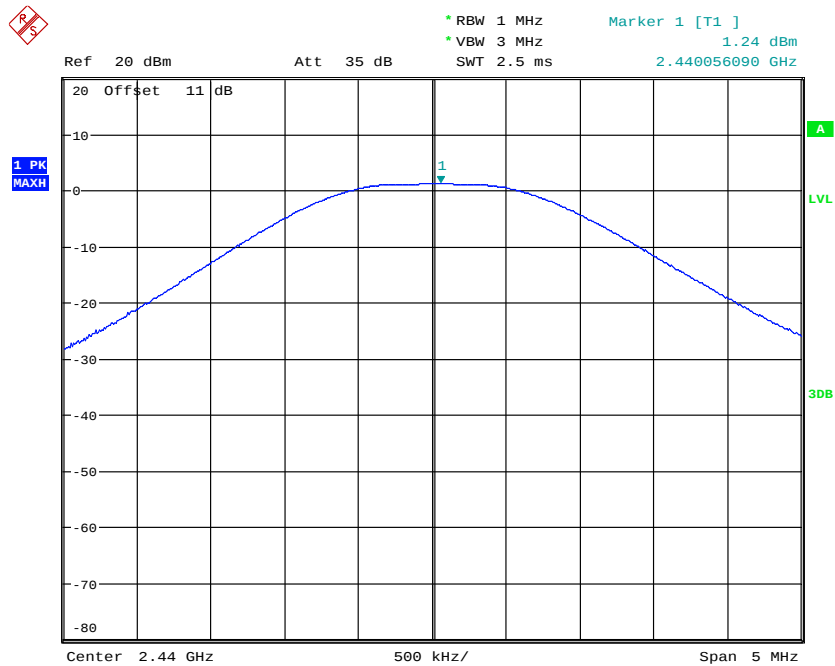


MAX OUTPUT POWER BT4.0 CH00

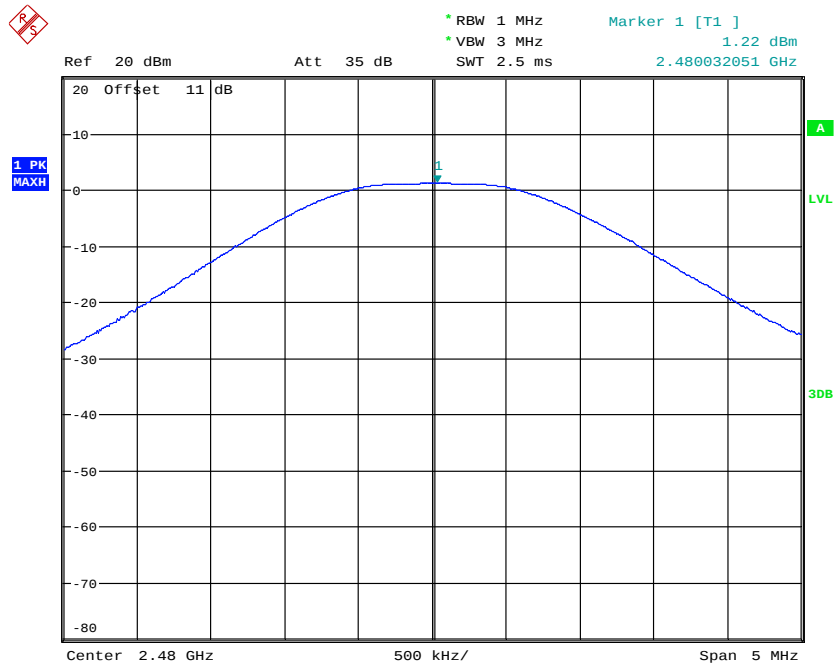
Date: 27.DEC.2019 14:45:21



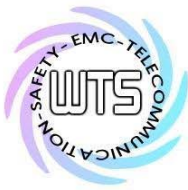
Registration number: W6M21910-19425-C-1
FCC ID: ZBM-SBSB1



MAX OUTPUT POWER BT4.0 CH19
Date: 27.DEC.2019 14:45:58



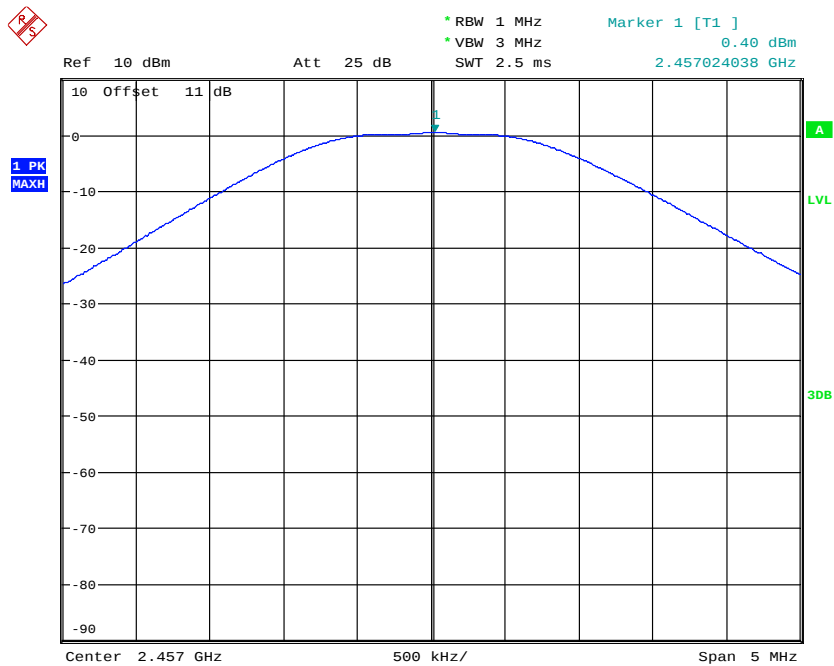
MAX OUTPUT POWER BT4.0 CH39
Date: 27.DEC.2019 14:46:22



Registration number: W6M21910-19425-C-1

FCC ID: ZBM-SBSB1

ANT+



MAX OUTPUT POWER ANT+ 2457MHZ

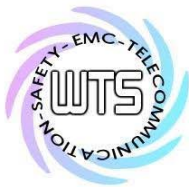
Date: 6.JAN.2020 14:42:49

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)

Test equipment used: ETSTW-RE 055, ETSTW-RE 050



Registration number: W6M21910-19425-C-1

FCC ID: ZBM-SBSB1

3.2 Equivalent isotropic radiated power

FCC Rule: 15.247(b)(3)

EIRP = max. conducted output power + antenna gain

BLE

EIRP = 1.26 dBm + (3.45 dBi [antenna gain claimed by manufacturer]) = 4.71 dBm = 2.96 mW

ANT+

EIRP = 0.40 dBm + (3.45 dBi [antenna gain claimed by manufacturer]) = 3.85 dBm = 2.43 mW

3.3 Exemption Limits for Routine Evaluation according to FCC KDB Publication

RESULT:

Test standard : FCC KDB Publication
447498 D01 General RF Exposure Guidance v06

According to 447498 D01 General RF Exposure Guidance v06:

SAR evaluation, by measurement or numerical simulation, is not required when the corresponding SAR Exclusion Threshold condition, listed below, is satisfied.

3.3.1 Exemption Limits for Routine Evaluation – SAR Evaluation

SAR evaluation is required if the separation distance between the user and/or bystander and the antenna and/or radiating element of the device is less than or equal to 20 cm, except when the device operates at or below the applicable output power level (adjusted for tune-up tolerance) for the specified separation distance defined in Table .

Table: SAR evaluation — Exemption limits for routine evaluation based on frequency and separation distance

BLE

MHz	5	10	15	20	25	mm
2402	10.09	19.26	29.35	38.52	48.52	SAR Test Exclusion Threshold (mW)

MHz	30	35	40	45	50	mm
2402	57.70	67.79	77.87	87.05	97.13	SAR Test Exclusion Threshold (mW)

Output power level shall be the higher of the maximum conducted or equivalent isotropically radiated power (e.i.r.p.) source-based, time-averaged output power.

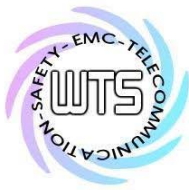
Established separation distance is 5 mm.

BLE

Operating frequency band : 2402-2480 MHz

Max. output power level at 5 mm separation distance at 2402 MHz
according to table is: 10.09 mW

The product is exempt from SAR Evaluation/Testing because the output power of 2.96 mW is below the exemption limit of 10.09 mW.



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MHz	5	10	15	20	25	mm
2457	9.99	18.98	28.97	37.96	47.95	SAR Test Exclusion Threshold (mW)

MHz	30	35	40	45	50	mm
2457	56.94	66.93	76.91	85.91	95.90	SAR Test Exclusion Threshold (mW)

Output power level shall be the higher of the maximum conducted or equivalent isotropically radiated power (e.i.r.p.) source-based, time-averaged output power.

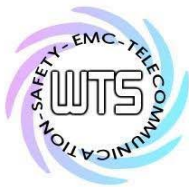
Established separation distance is 5 mm.

ANT+

Operating frequency band : 2457 MHz

Max. output power level at 5 mm separation distance at 2457 MHz
according to table is: 9.99 mW

The product is exempt from SAR Evaluation/Testing because the output power of 2.43 mW is below the exemption limit of 9.99 mW.



Registration number: W6M21910-19425-C-1

FCC ID: ZBM-SBSB1

3.4 Transmitter Radiated Emissions in Restricted Bands

FCC Rules: 15.247 (d), 15.205, 15.209, 15.35

Radiated emission measurements were performed from 30 MHz to 26500 MHz.

For radiated emission tests, the analyzer setting was as followings:

Frequency $\leq$ 1 GHz, RBW:100 kHz, VBW: 100 kHz (Peak measurements)

Frequency $>$ 1 GHz, RBW: 1 MHz, VBW: 1 MHz (Peak measurements)

Frequency $>$ 1 GHz , RBW:1 MHz , VBW: 10 Hz (Average measurements)

Limits.

For frequencies below 1GHz:

Frequency of Emission (MHz)	Field strength (microvolts/meter)	Field Strength (dB microvolts/meter)
30 - 88	100	40.0
88 - 216	150	43.5
216 - 960	200	46.0
Above	500	54.0

For frequencies above 1GHz (Average measurements).

Guidance on Measurement of Digit Transmission Systems:

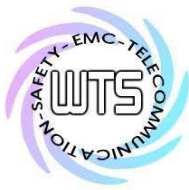
“If the emission is pulsed, modify the unit for continuous operation, use the setting shown above, then correct the reading by subtracting the peak-average correction factor, derived from the appropriate duty cycle calculation.”

The correction factor, based on the total channel dwell time in a 100 ms period, may be mathematically applied to a measurement made with an average detector, to further reduce the value.

Duty cycle correction = $20 \log (\text{dwell time} / 100\text{ms})$

Note: No duty cycle correction was added to the reading of this EUT.

Explanation: See attached diagrams in Appendix.



Registration number: W6M21910-19425-C-1

FCC ID: ZBM-SBSB1

3.5 Spurious Emissions (tx)

Spurious emission was measured with modulation (declared by manufacturer).

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 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) (see § 15.205(c))

FCC Rule: 15.247(d), 15.35

For out of band emissions that are close to or that exceed the 20 dB attenuation requirement described in the specification, radiated measurements were performed at a 3 m separation distance to determine whether these emissions complied with the general radiated emission requirement.

Limits:

For frequencies above 1GHz (Peak measurements).

Modified Limit for peak according to 15.35 (b) = Max Permitted average Limits + 20dB

For frequencies above 1GHz (Average measurements).

Max. reading – 20dB

Max. reading – 20 dB

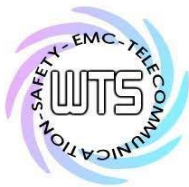
Guidance on Measurement of Digit Transmission Systems:

“If the emission is pulsed, modify the unit for continuous operation, use the settings shown above, then correct the reading by subtracting the peak-average correction factor, derived from the appropriate duty cycle calculation.”

The correction factor, based on the total channel dwell time in a 100 ms period, may be mathematically applied to a measurement made with an average detector, to further reduce the value.

Duty Cycle correction = $20 \log (\text{dwell time}/100\text{ms})$

Note: No duty cycle correction was added to the reading of EUT.



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SAMPLE CALCULATION OF LIMIT. All results will be updated by an automatic measuring system in accordance with point 2.3.

Calculation of test results:

Such factors like antenna correction, cable loss, external attenuation etc. are already included in the provided measurement results. This is done by using validated test software and calibrated test system according the accreditation requirements.

The peak and average spurious emission plots was measured with the average limits.

In the Table being listed the critical peak and average value and exhibit the compliance with the above calculated Limits.

If in the column's correction factor states a value then the max. Field strength in the same row is corrected by a value gained from the "Correction Factor".

Summary table with radiated data of the test plots

Model: SBSB1 Date: --
 Mode: -- Temperature: -- °C Engineer: --
 Polarization: -- Humidity: -- %

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--

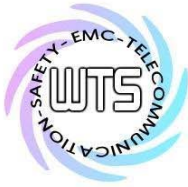
Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result (dBuV/m)		Limit (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (m)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--

Note

1. **Correction Factor = Antenna factor + Cable loss - Preamplifier**
2. **The formula of measured value as: Test Result = Reading + Correction Factor**
3. **Detector function in the form : PK = Peak, QP = Quasi Peak, AV = Average**
4. **All not in the table noted test results are more than 20 dB below the relevant limits.**
5. **After evaluated, the test result in this report adopt the worst case to measure, please see attached diagrams in appendix.**

TEST RESULT (Transmitter): The unit DOES meet the FCC requirements.

Test equipment used: ETSTW-RE 004, ETSTW-RE 030, ETSTW-RE 111,
 ETSTW-RE 088, ETSTW-RE 018



Registration number: W6M21910-19425-C-1
FCC ID: ZBM-SBSB1

3.6 Radiated Emission on the band edge

According to FCC rules part 15 subpart C §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.

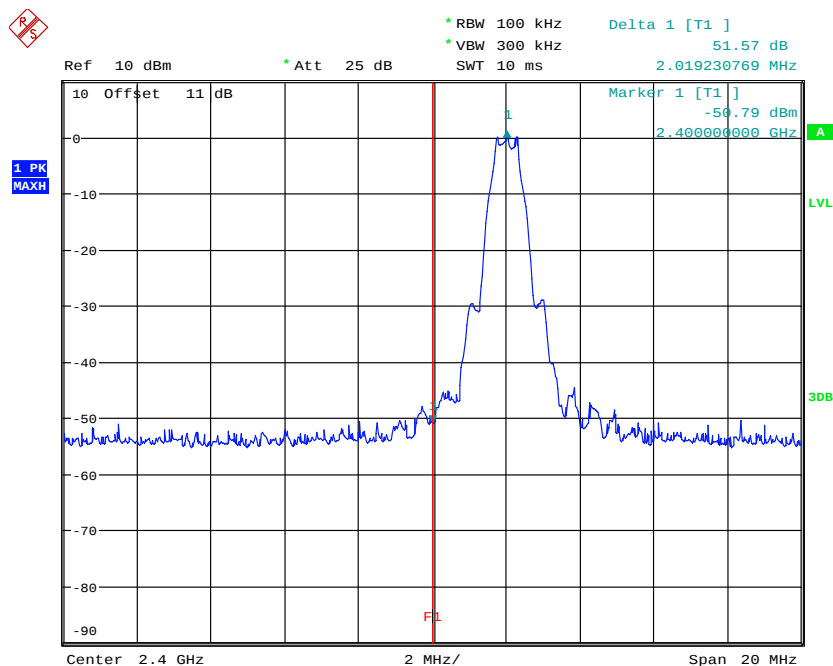
Test date: December 27, 2019-January 06, 2020

Temperature: 21.1°C

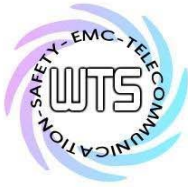
Humidity: 59.2 %

Tester: Kent Lin

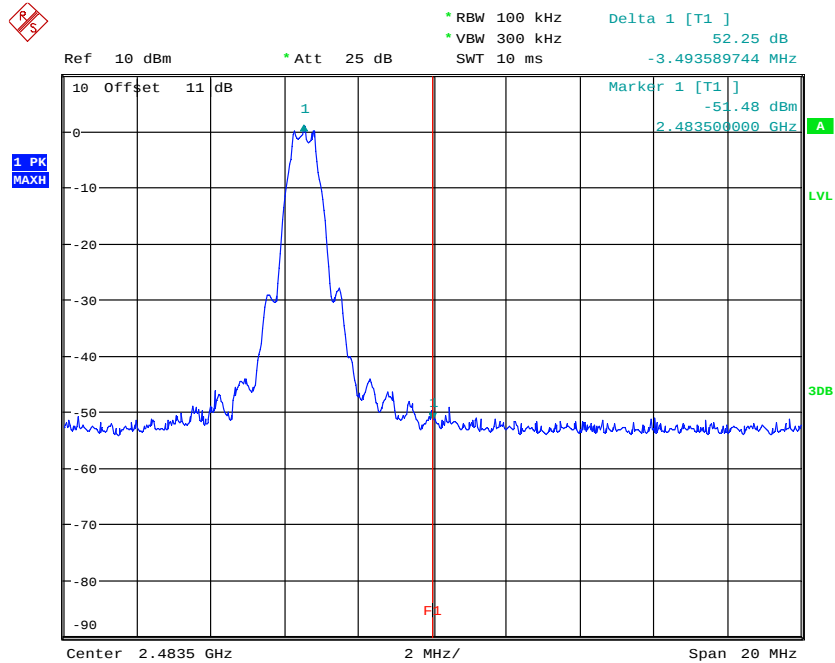
BLE



BANDEDGE BT4.0 CH00
Date: 27.DEC.2019 14:52:17

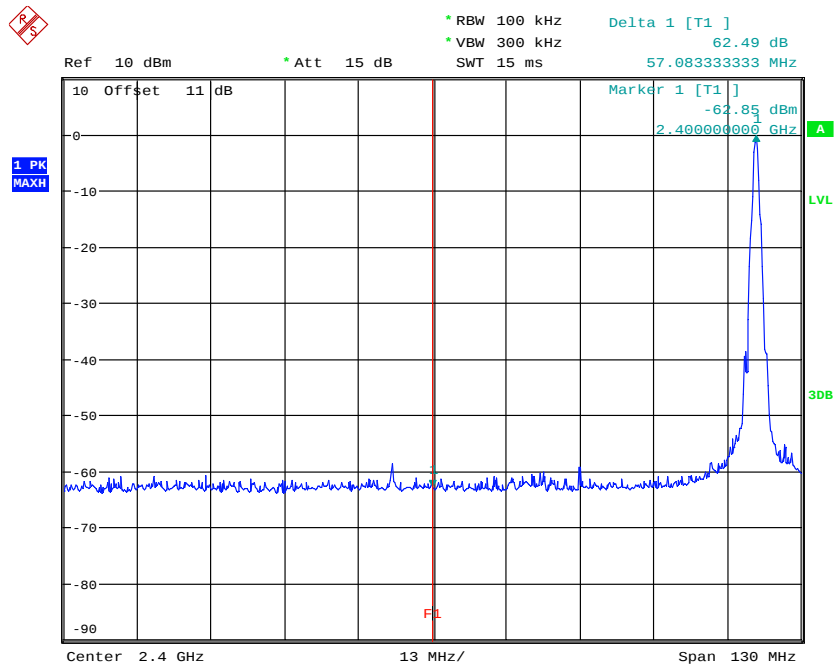


Registration number: W6M21910-19425-C-1
FCC ID: ZBM-SBSB1

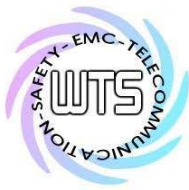


BANDEDGE BT4.0 CH39
Date: 27.DEC.2019 14:51:39

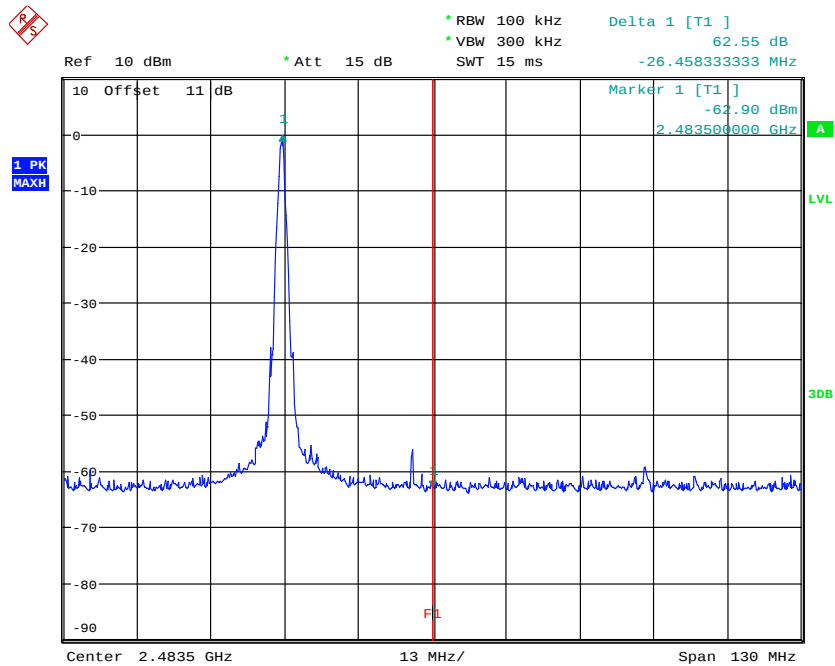
ANT+



BANDEDGE ANT+ 2457MHZ
Date: 6.JAN.2020 14:44:43



Registration number: W6M21910-19425-C-1
FCC ID: ZBM-SBSB1

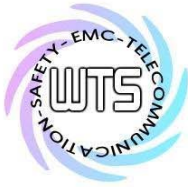


BANDEDGE ANT+ 2457MHZ
Date: 6.JAN.2020 14:45:16

Limit:

Frequency Range / MHz	Limit
902 – 928	- 20 dB
2400 – 2483.5	
5725 - 5850	

Test equipment used: ETSTW-RE 055, ETSTW-RE 050



Registration number: W6M21910-19425-C-1
FCC ID: ZBM-SBSB1

3.7 Minimum 6 dB Bandwidth

The analyzer ResBW was set to 100 kHz. For each RF output channel investigated, the spectrum analyzer center frequency was set to the channel carrier. A PEAK reading was taken, two markers were set 6 dB below the maximum level on the right and the left side of the emission.
The 6 dB bandwidth is the frequency difference between the two markers.

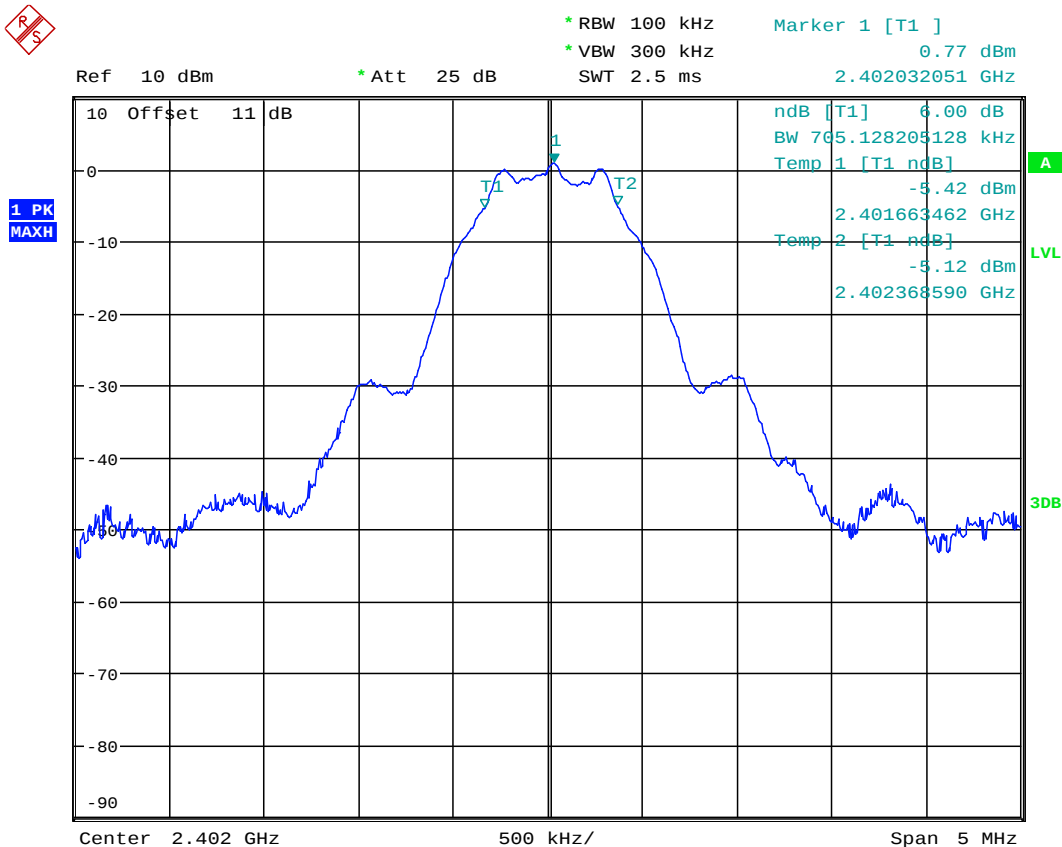
Test date: December 27, 2019-January 06, 2020

Temperature: 21.1°C

Humidity: 59.2 %

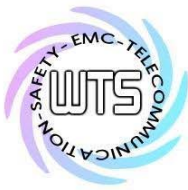
Tester: Kent Lin

BLE



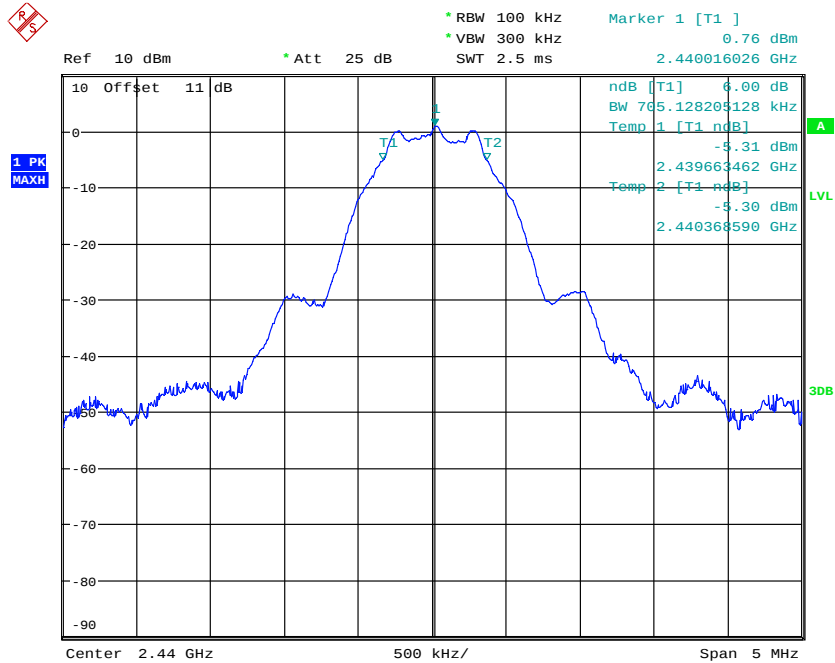
6DB BANDWIDTH BT4.0 CH00

Date: 27.DEC.2019 14:48:25

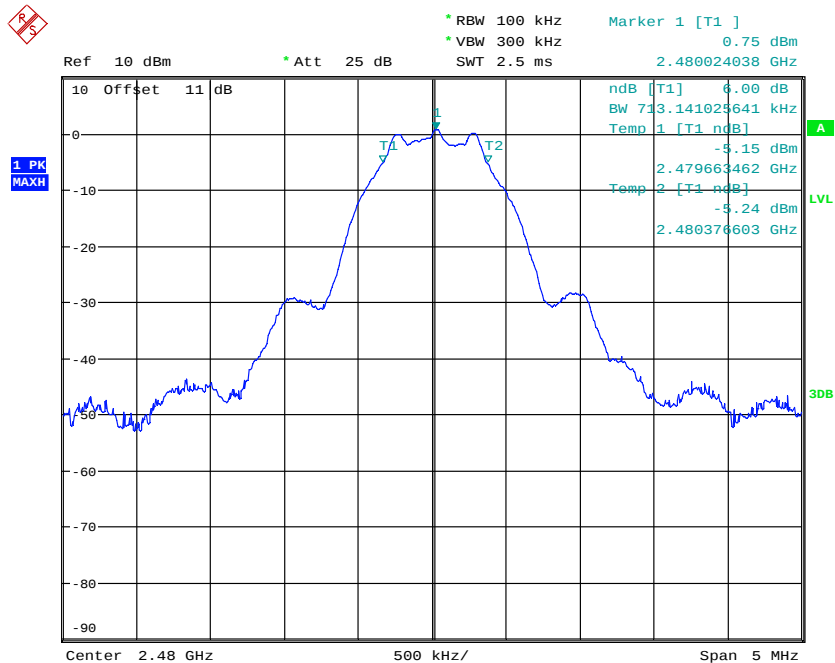


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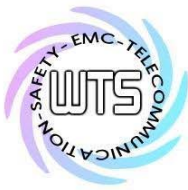
Registration number: W6M21910-19425-C-1
FCC ID: ZBM-SBSB1



6DB BANDWIDTH BT4.0 CH19
Date: 27.DEC.2019 14:48:01

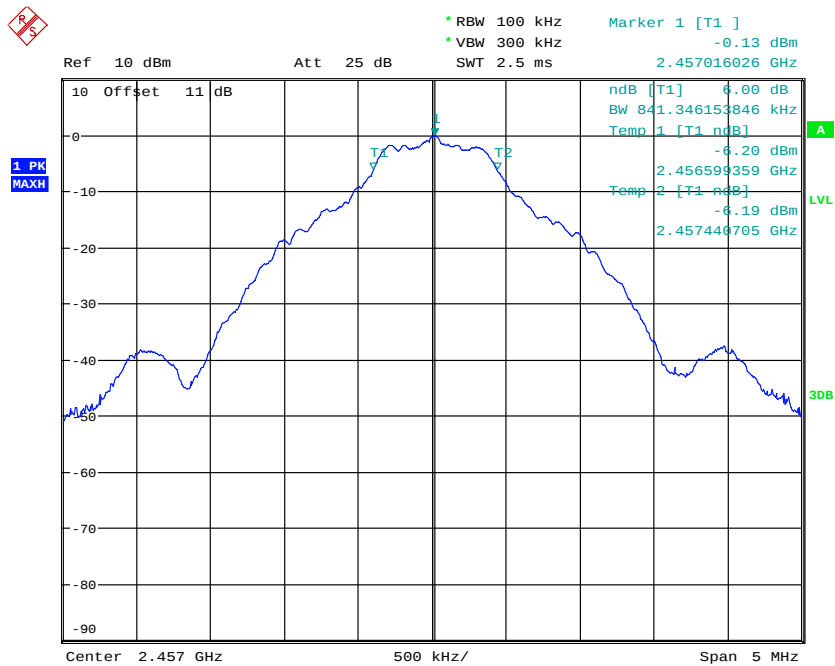


6DB BANDWIDTH BT4.0 CH39
Date: 27.DEC.2019 14:47:29



Registration number: W6M21910-19425-C-1
FCC ID: ZBM-SBSB1

ANT+

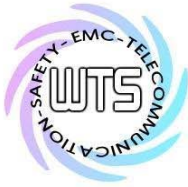


6DB BANDWIDTH ANT+ 2457MHZ
Date: 6.JAN.2020 14:41:07

Limits:

Frequency Range MHz	Limits
902-928	min 500 kHz
2400-2483.5	min 500 kHz
5725-5850	min 500 kHz

Test equipment used: ETSTW-RE 055, ETSTW-RE 050



Registration number: W6M21910-19425-C-1
FCC ID: ZBM-SBSB1

3.8 Peak Power Spectral Density

Peak Power Spectral density is a measured at low, middle and high channel.
The peak output power is measured with a measurement bandwidth of 10 MHz and displayed on diagram together with Peak Power Spectral Density result which was measured with a bandwidth of 3 kHz, appreciate frequency span and sweep time.

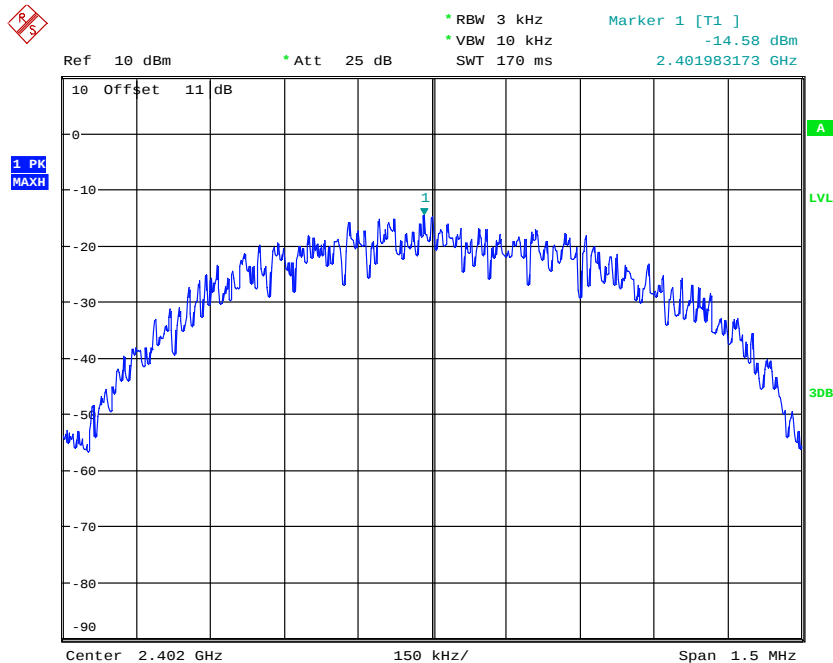
Test date: December 27, 2019-January 06, 2020

Temperature: 21.1°C

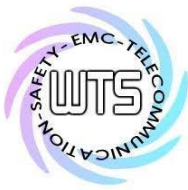
Humidity: 59.2 %

Tester: Kent Lin

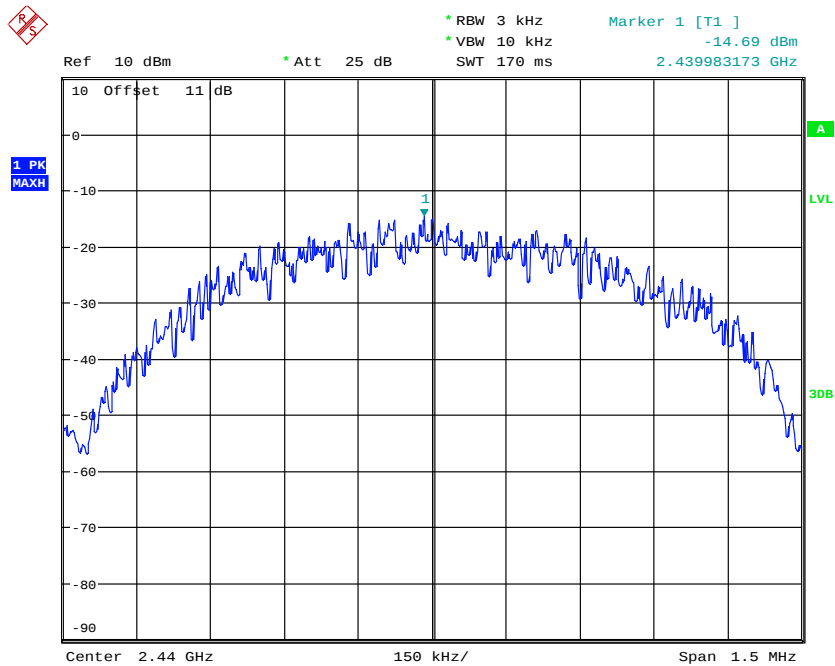
BLE



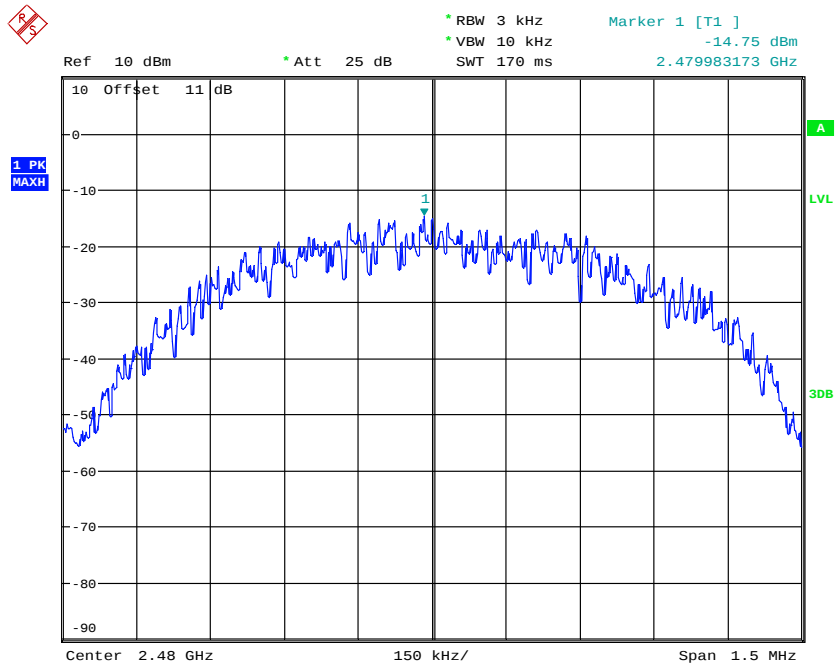
POWER DENSITY BT4.0 CH00
Date: 27.DEC.2019 14:49:09



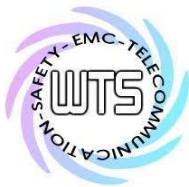
Registration number: W6M21910-19425-C-1
FCC ID: ZBM-SBSB1



POWER DENSITY BT4.0 CH19
Date: 27.DEC.2019 14:49:33



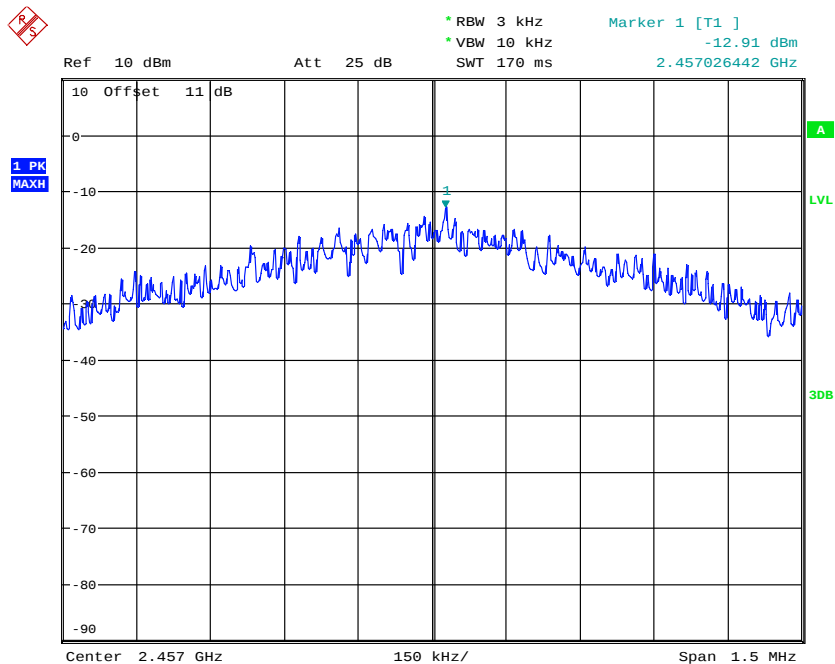
POWER DENSITY BT4.0 CH39
Date: 27.DEC.2019 14:49:56



Registration number: W6M21910-19425-C-1

FCC ID: ZBM-SBSB1

ANT+

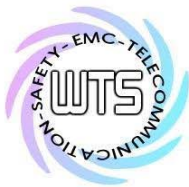


POWER DENSITY ANT+ 2457MHZ
Date: 6.JAN.2020 14:43:35

Limits:

Frequency Range MHz	dBm
902-928	8
2400-2483.5	8
5725-5850	8

Test equipment used: ETSTW-RE 055, ETSTW-RE 050



Registration number: W6M21910-19425-C-1

FCC ID: ZBM-SBSB1

3.9 Radiated Emission from Receiver Part

Model: SBSB1

Date: --

Mode: --

Temperature: -- °C Engineer: --

Polarization: --

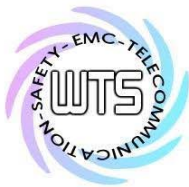
Humidity: -- %

Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--

Frequency (MHz)	Reading (dBuV)		Factor (dB) Corr.	Result (dBuV/m)		Limit (dBuV/m)		Margin (dB)	Table Degree (Deg.)	Ant. High (m)
	Peak	Ave.		Peak	Ave.	Peak	Ave.			
--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--

Note

1. Correction Factor = Antenna factor + Cable loss - Preamplifier
2. The formula of measured value as: Test Result = Reading + Correction Factor
3. Detector function in the form : PK = Peak, QP = Quasi Peak, AV = Average
4. All not in the table noted test results are more than 20 dB below the relevant limits.
5. Please refer to the test report number W6M21910-19425-P-15B.



Registration number: W6M21910-19425-C-1

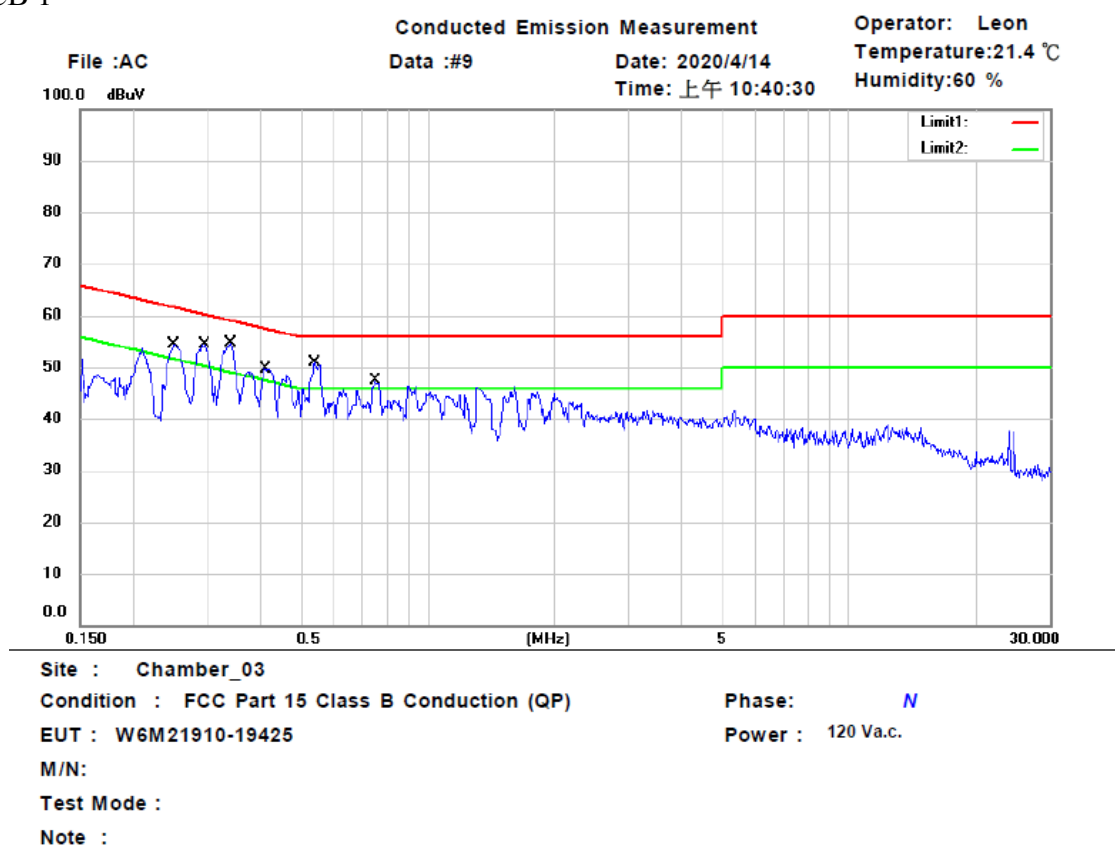
FCC ID: ZBM-SBSB1

3.10 Power Line Conducted Emission

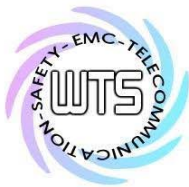
For an intentional radiator which is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the table bellows with this provision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

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.

USB PCB 1



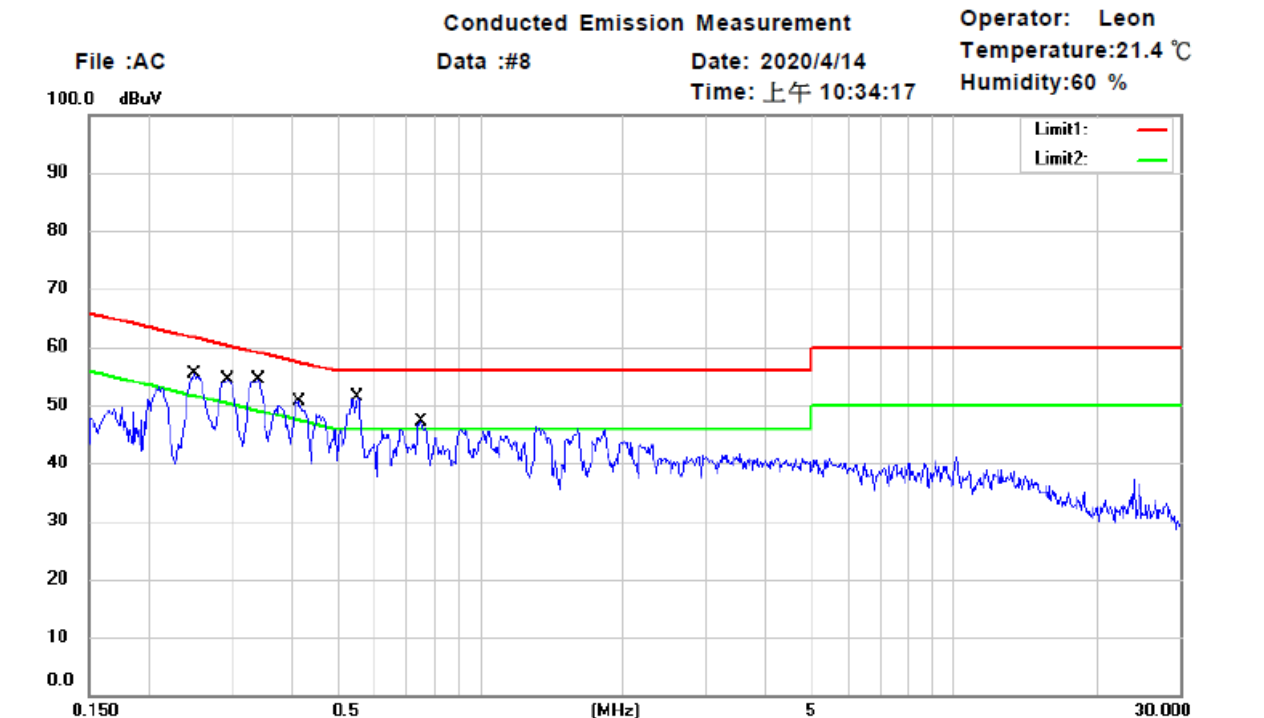
Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corrected factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Comment
	0.2506	42.35	QP	9.72	52.07	61.74	-9.67	
	0.2506	39.43	AVG	9.72	49.15	51.74	-2.59	
	0.2957	42.40	QP	9.71	52.11	60.36	-8.25	
	0.2957	38.36	AVG	9.71	48.07	50.36	-2.29	
	0.3373	42.32	QP	9.70	52.02	59.27	-7.25	
*	0.3373	37.84	AVG	9.70	47.54	49.27	-1.73	
	0.4164	38.65	QP	9.69	48.34	57.52	-9.18	
	0.4164	32.95	AVG	9.69	42.64	47.52	-4.88	
	0.5365	38.02	QP	9.68	47.70	56.00	-8.30	
	0.5365	29.58	AVG	9.68	39.26	46.00	-6.74	
	0.7550	34.52	QP	9.65	44.17	56.00	-11.83	
	0.7550	26.09	AVG	9.65	35.74	46.00	-10.26	



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M21910-19425-C-1

FCC ID: ZBM-SBSB1



Site : Chamber_03

Condition : FCC Part 15 Class B Conduction (QP)

EUT : W6M21910-19425

M/N:

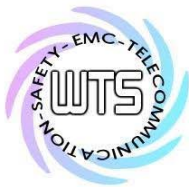
Test Mode :

Note :

Phase: L1

Power : 120 Va.c.

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corrected factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Comment
	0.2533	42.89	QP	9.74	52.63	61.65	-9.02	
	0.2533	39.18	AVG	9.74	48.92	51.65	-2.73	
	0.2950	42.64	QP	9.73	52.37	60.38	-8.01	
	0.2950	38.36	AVG	9.73	48.09	50.38	-2.29	
	0.3368	42.40	QP	9.72	52.12	59.28	-7.16	
*	0.3368	38.19	AVG	9.72	47.91	49.28	-1.37	
	0.4171	37.69	QP	9.71	47.40	57.51	-10.11	
	0.4171	32.18	AVG	9.71	41.89	47.51	-5.62	
	0.5493	37.44	QP	9.70	47.14	56.00	-8.86	
	0.5493	30.82	AVG	9.70	40.52	46.00	-5.48	
	0.7615	34.88	QP	9.67	44.55	56.00	-11.45	
	0.7615	26.71	AVG	9.67	36.38	46.00	-9.62	

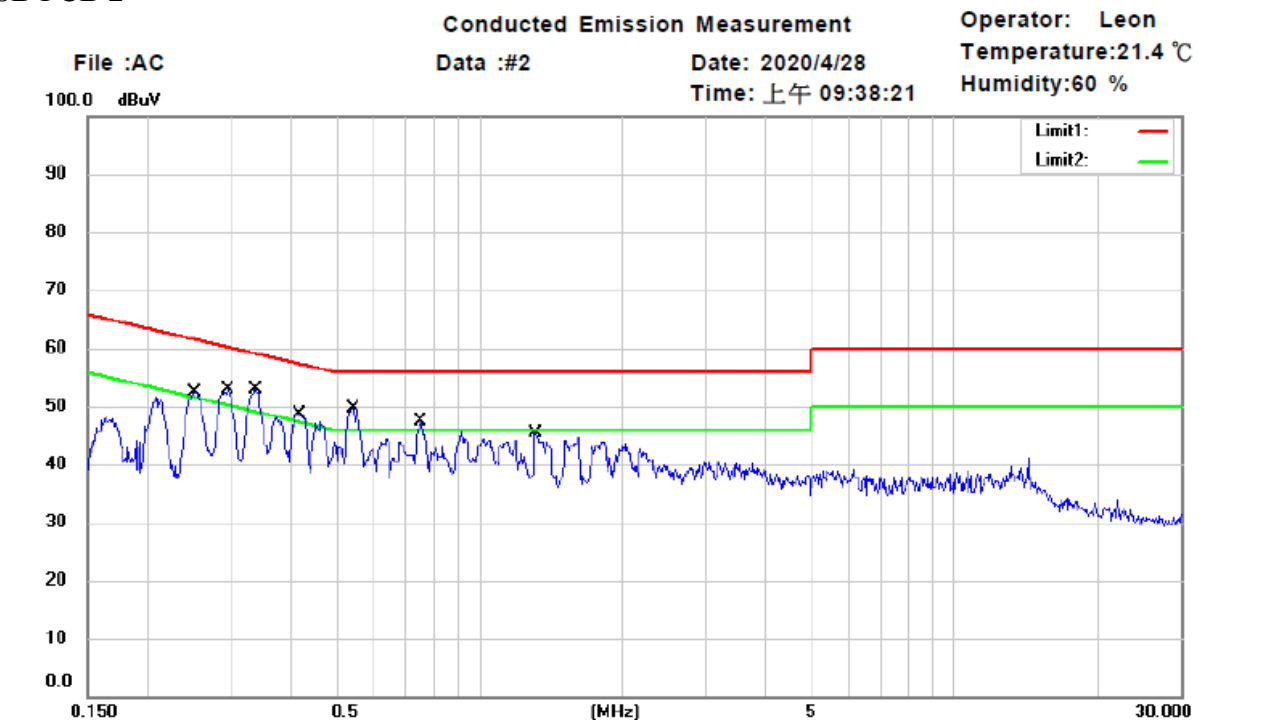


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Registration number: W6M21910-19425-C-1

FCC ID: ZBM-SBSB1

USB PCB 2



Site : Chamber_03

Condition : FCC Part 15 Class B Conduction (QP)

EUT : W6M21910-19425

M/N:

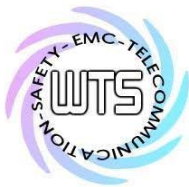
Test Mode :

Note :

Phase: N

Power : 120 V.a.c.

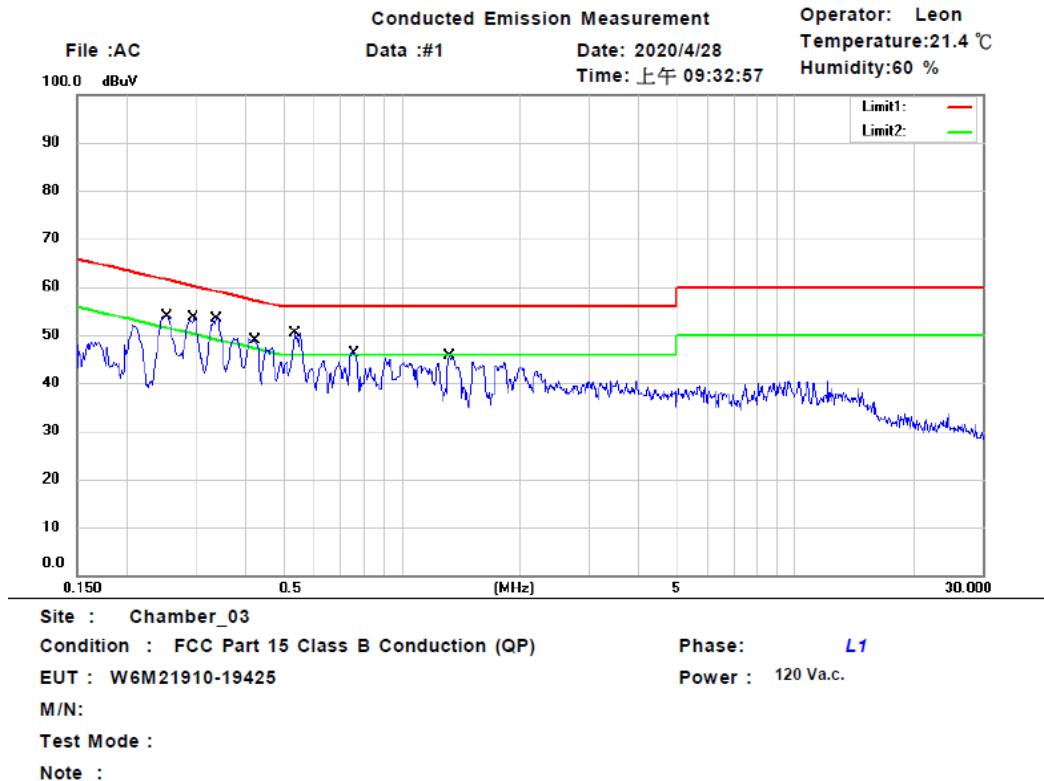
Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corrected factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Comment
	0.2492	40.96	QP	9.72	50.68	61.78	-11.10	
	0.2492	37.20	AVG	9.72	46.92	51.78	-4.86	
	0.2928	41.33	QP	9.71	51.04	60.44	-9.40	
*	0.2928	38.01	AVG	9.71	47.72	50.44	-2.72	
	0.3384	41.10	QP	9.70	50.80	59.24	-8.44	
	0.3384	36.03	AVG	9.70	45.73	49.24	-3.51	
	0.4200	37.37	QP	9.69	47.06	57.45	-10.39	
	0.4200	31.65	AVG	9.69	41.34	47.45	-6.11	
	0.5486	36.49	QP	9.68	46.17	56.00	-9.83	
	0.5486	29.74	AVG	9.68	39.42	46.00	-6.58	
	0.7613	34.26	QP	9.65	43.91	56.00	-12.09	
	0.7613	26.09	AVG	9.65	35.74	46.00	-10.26	
	1.3136	32.85	QP	9.60	42.45	56.00	-13.55	
	1.3136	22.60	AVG	9.60	32.20	46.00	-13.80	



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M21910-19425-C-1

FCC ID: ZBM-SBSB1



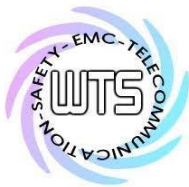
Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corrected factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Comment
	0.2535	41.97	QP	9.74	51.71	61.64	-9.93	
	0.2535	38.07	AVG	9.74	47.81	51.64	-3.83	
	0.2935	41.69	QP	9.73	51.42	60.42	-9.00	
*	0.2935	38.35	AVG	9.73	48.08	50.42	-2.34	
	0.3361	41.16	QP	9.72	50.88	59.30	-8.42	
	0.3361	37.08	AVG	9.72	46.80	49.30	-2.50	
	0.4210	37.39	QP	9.71	47.10	57.43	-10.33	
	0.4210	31.40	AVG	9.71	41.11	47.43	-6.32	
	0.5355	36.92	QP	9.70	46.62	56.00	-9.38	
	0.5355	27.70	AVG	9.70	37.40	46.00	-8.60	
	0.7642	34.76	QP	9.67	44.43	56.00	-11.57	
	0.7642	26.44	AVG	9.67	36.11	46.00	-9.89	
	1.3213	32.61	QP	9.62	42.23	56.00	-13.77	
	1.3213	23.42	AVG	9.62	33.04	46.00	-12.96	

- Note: 1. The formula of measured value as: Test Result = Reading + Correction Factor
 2. The Correction Factor = Cable Loss + LISN Insertion Loss + Pulse Limit Loss
 3. Detector function in the form : PK = Peak, QP = Quasi Peak, AV = Average
 4. All not in the table noted test results are more than 20 dB below the relevant limits.
 5. Up Line: QP Limit Line, Down Line: Ave Limit Line.

Limits:

Frequency of Emission (MHz)	Conducted Limit (dBuV)	
	Quasi Peak	Average
0.15-0.5	66 to 56	56 to 46
0.5-5	56	46
5-30	60	50

Test equipment used: ETSTW-CE 001, ETSTW-CE 016, ETSTW-RE 045



Registration number: W6M21910-19425-C-1
FCC ID: ZBM-SBSB1

Appendix

Measurement diagrams

Radiated Emission



Radiated Emission Measurement

Operator: Allen

File : 1_BLE_TX

Data : #1

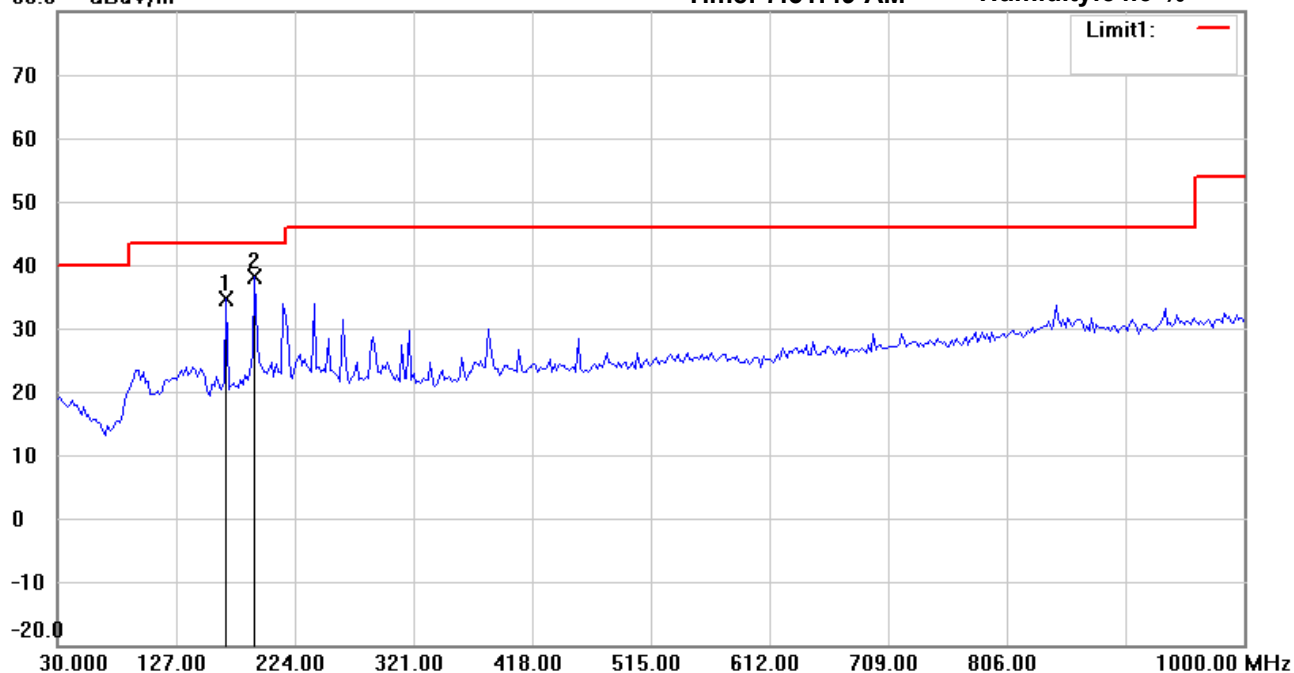
Date: 1/18/2020

Temperature: 21.3 °C

80.0 dBuV/m

Time: 7:31:49 AM

Humidity: 54.6 %



Site : Chamber

Condition : FCC_part 15 RE-Class C_30-1000MHz

EUT : W6M21910-19425

M/N:

Test Mode : TX 2402MHz

Note :

Polarization: *Horizontal*

Power : 120 Va.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
	168.0160	44.22	peak	-9.71	34.51	43.50	100	115	-8.99	
*	191.3427	49.33	peak	-11.20	38.13	43.50	100	190	-5.37	



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Radiated Emission Measurement

Operator: Allen

File : 1_BLE_TX

Data : #2

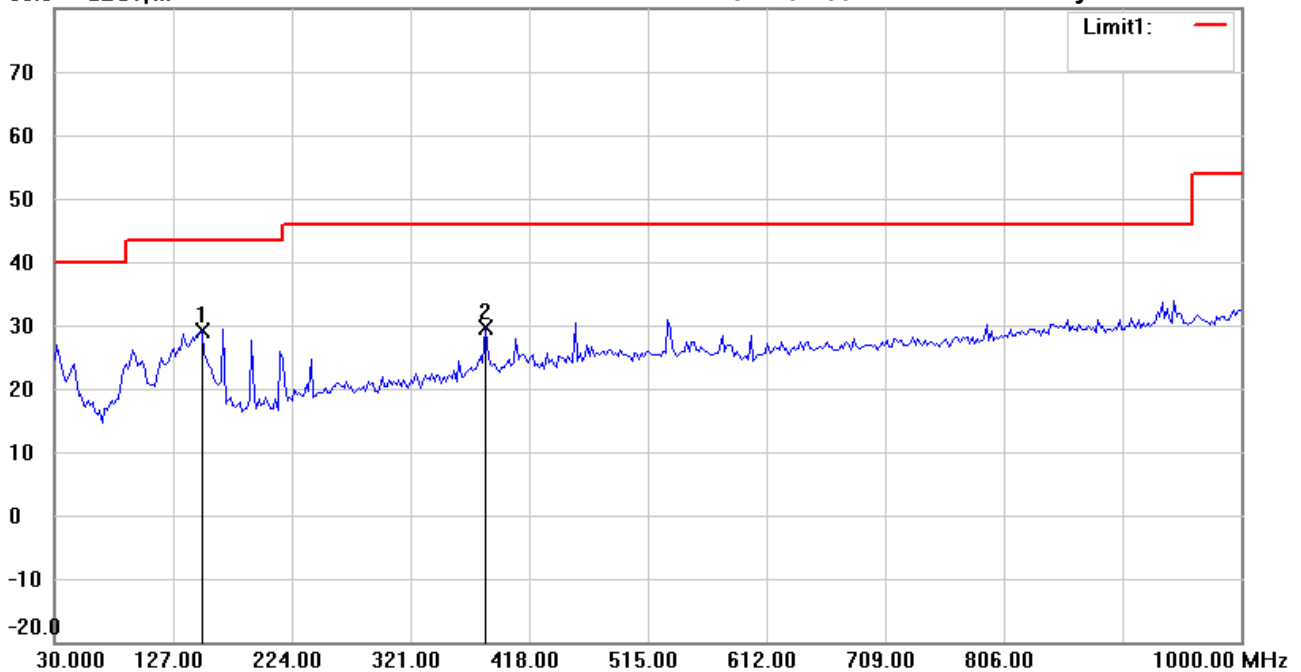
Date: 1/18/2020

Temperature: 21.3 °C

80.0 dBuV/m

Time: 7:32:50 AM

Humidity: 54.6 %



Site : Chamber

Condition : FCC_part 15 RE-Class C_30-1000MHz

EUT : W6M21910-19425

M/N:

Test Mode : TX 2402MHz

Note :

Polarization: **Vertical**

Power : 120 Va.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
*	150.5210	36.49	peak	-7.41	29.08	43.50	100	75	-14.42	
	381.8437	33.97	peak	-4.25	29.72	46.00	100	250	-16.28	

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



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Radiated Emission Measurement

Operator: Allen

File : 3

Data : #1

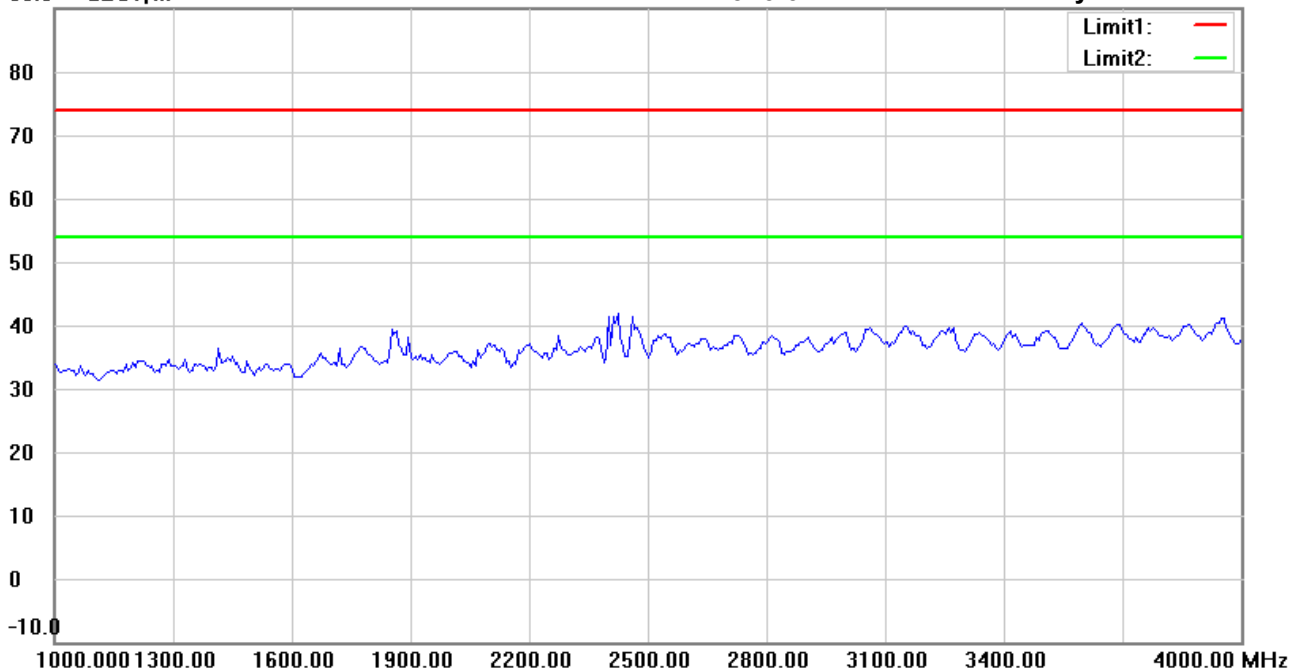
Date: 1/18/2020

Temperature: 21.3 °C

90.0 dBuV/m

Time: 5:52:47 AM

Humidity: 54.6 %



Site : Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M21910-19425

M/N:

Test Mode : TX 2402MHz

Note :

Polarization: *Horizontal*

Power : 120 Va.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
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*:Maximum data x:Over limit !:over margin



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Radiated Emission Measurement

Operator: Allen

File : 3

Data : #6

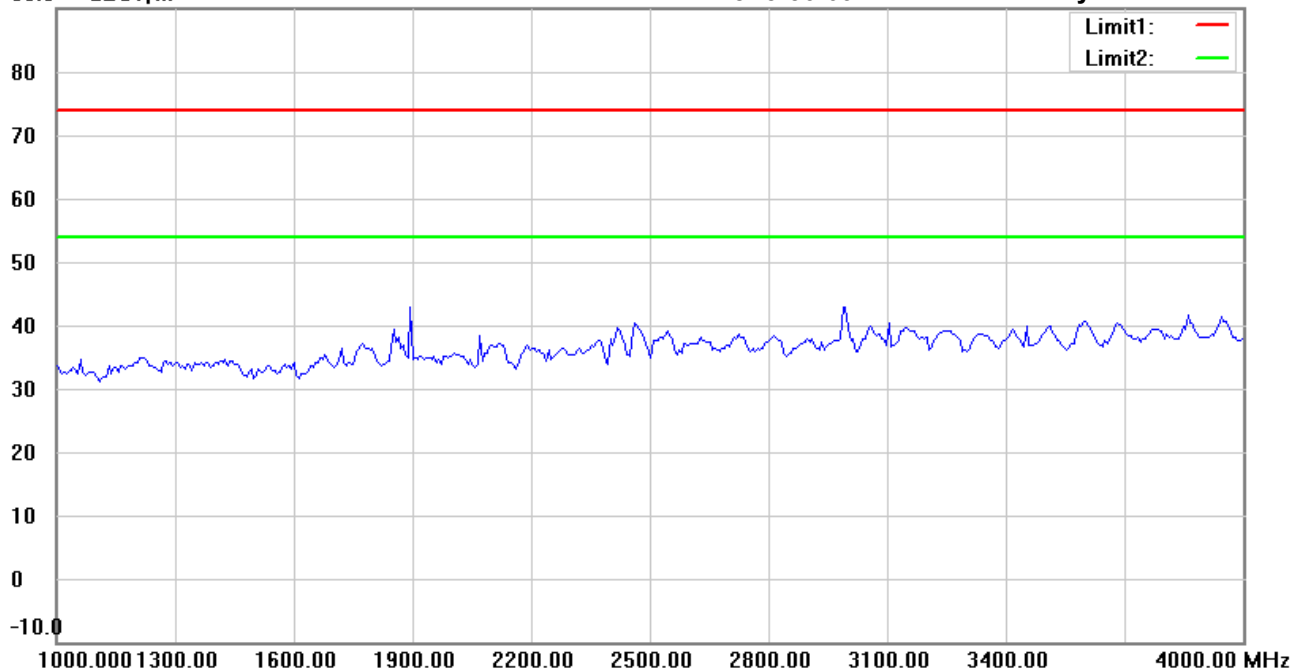
Date: 1/18/2020

Temperature: 21.3 °C

90.0 dBuV/m

Time: 5:56:09 AM

Humidity: 54.6 %



Site : Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M21910-19425

M/N:

Test Mode : TX 2402MHz

Note :

Polarization: **Vertical**

Power : 120 Va.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



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Radiated Emission Measurement

Operator: Allen

File :3

Data :#2

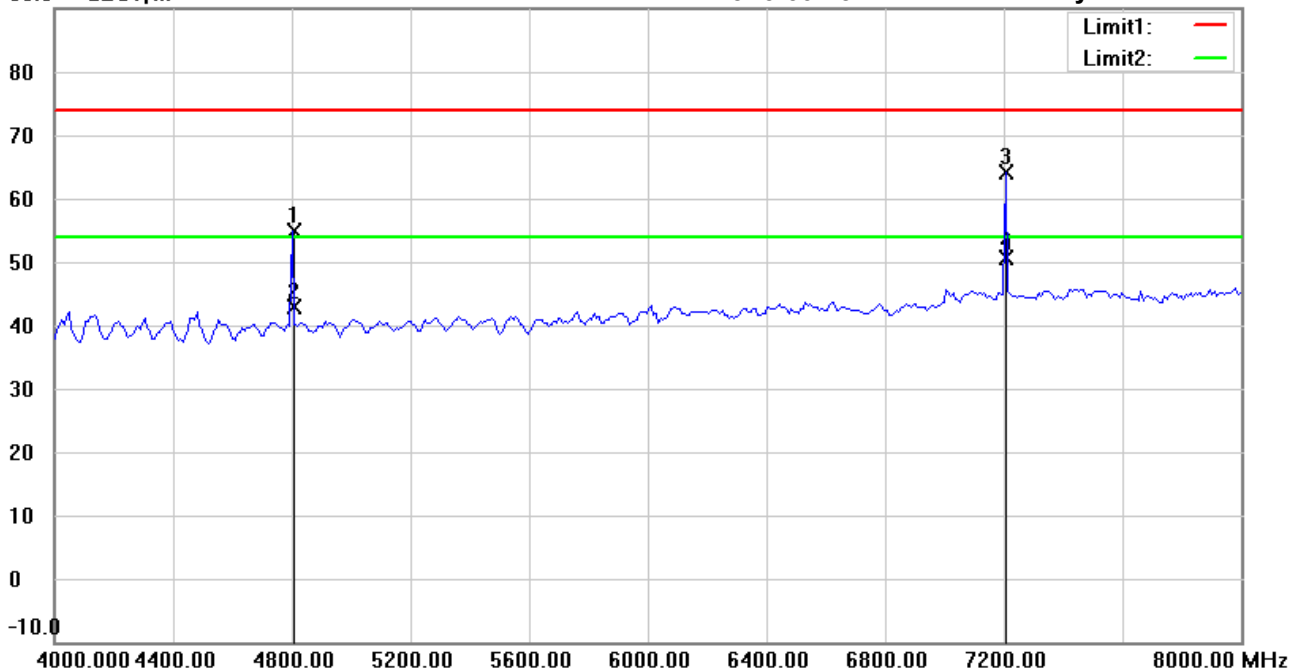
Date: 1/18/2020

Temperature: 21.3 °C

90.0 dBuV/m

Time: 5:53:48 AM

Humidity: 54.6 %



Site : Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M21910-19425

M/N:

Test Mode : TX 2402MHz

Note :

Polarization: *Horizontal*

Power : 120 Va.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
	4804.704	56.82	peak	-1.94	54.88	74.00	150	60	-19.12	
	4804.704	44.74	AVG	-1.94	42.80	54.00	150	60	-11.20	
	7205.231	60.85	peak	3.24	64.09	74.00	150	190	-9.91	
*	7205.231	47.49	AVG	3.24	50.73	54.00	150	190	-3.27	

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



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Radiated Emission Measurement

Operator: Allen

File :3

Data :#7

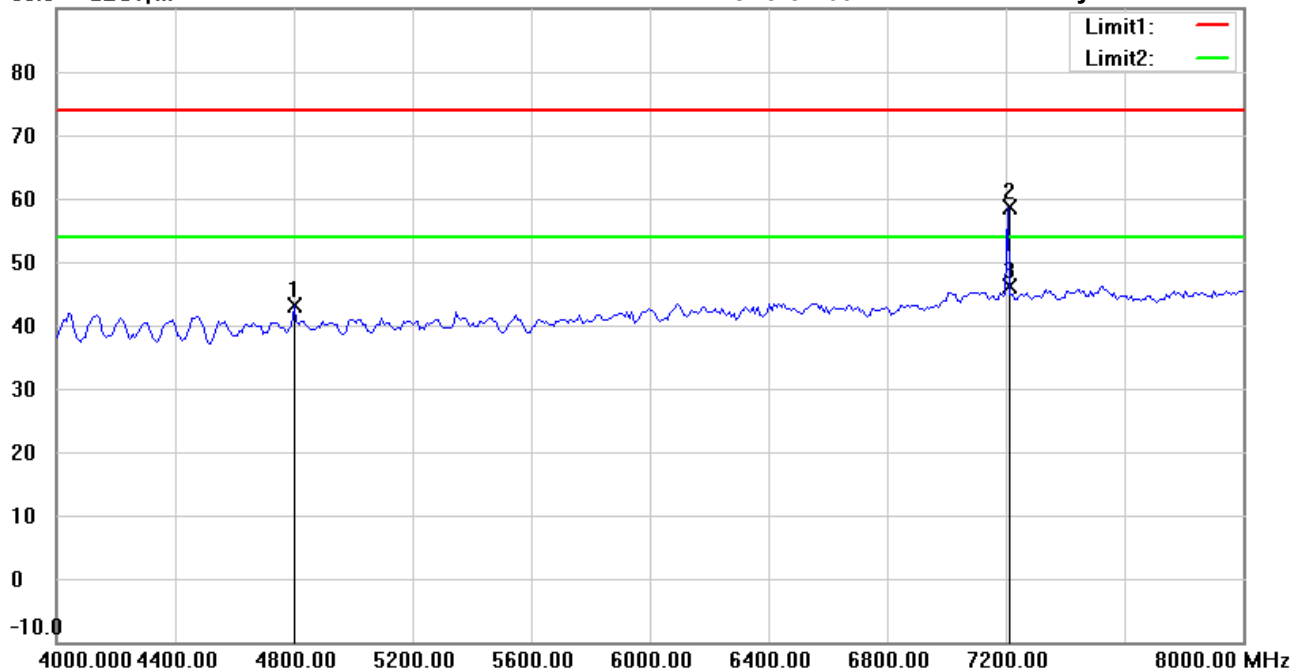
Date: 1/18/2020

Temperature: 21.3 °C

90.0 dBuV/m

Time: 5:57:09 AM

Humidity: 54.6 %



Site : Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M21910-19425

M/N:

Test Mode : TX 2402MHz

Note :

Polarization: **Vertical**

Power : 120 Va.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
	4801.603	44.96	peak	-1.95	43.01	74.00	150	215	-30.99	
	7206.413	55.37	peak	3.24	58.61	74.00	150	120	-15.39	
*	7206.413	42.85	AVG	3.24	46.09	54.00	150	120	-7.91	

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



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Radiated Emission Measurement

Operator: Allen

File :3

Data :#3

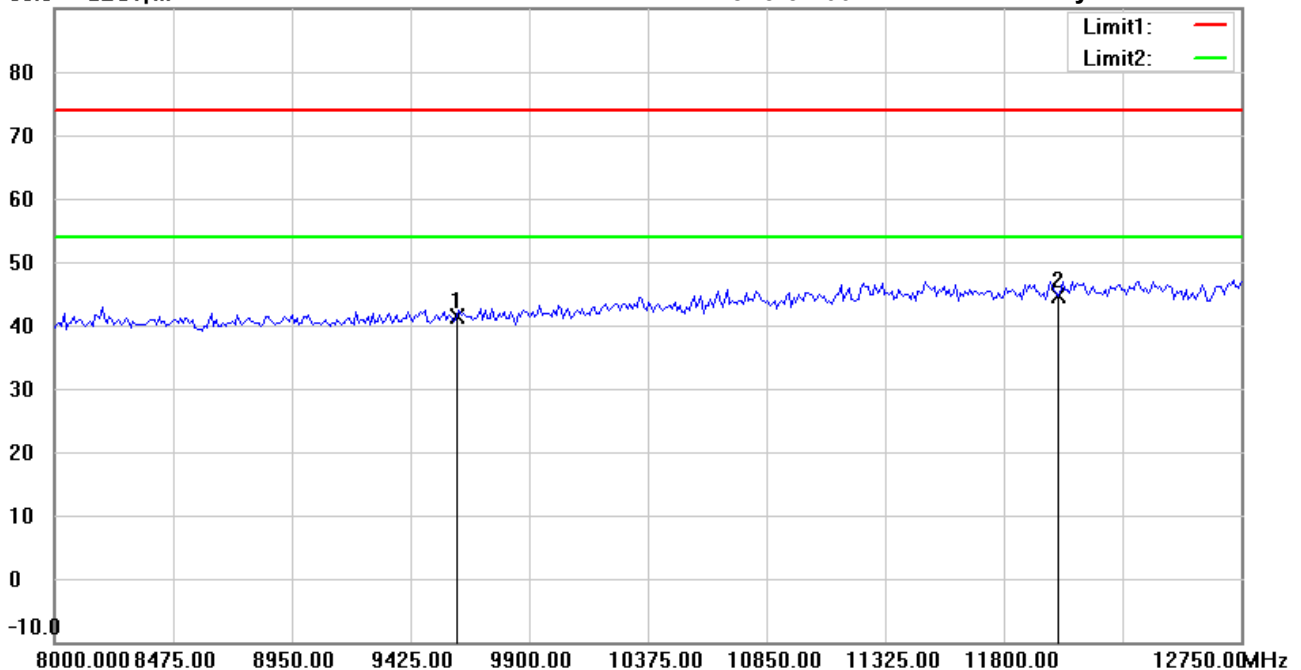
Date: 1/18/2020

Temperature: 21.3 °C

90.0 dBuV/m

Time: 5:54:00 AM

Humidity: 54.6 %



Site : Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M21910-19425

M/N:

Test Mode : TX 2402MHz

Note :

Polarization: **Horizontal**

Power : 120 Va.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	34.94	peak	6.53	41.47	74.00	150	210	-32.53	
*	12010.000	33.10	peak	11.62	44.72	74.00	150	75	-29.28	

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



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Radiated Emission Measurement

Operator: Allen

File :3

Data :#8

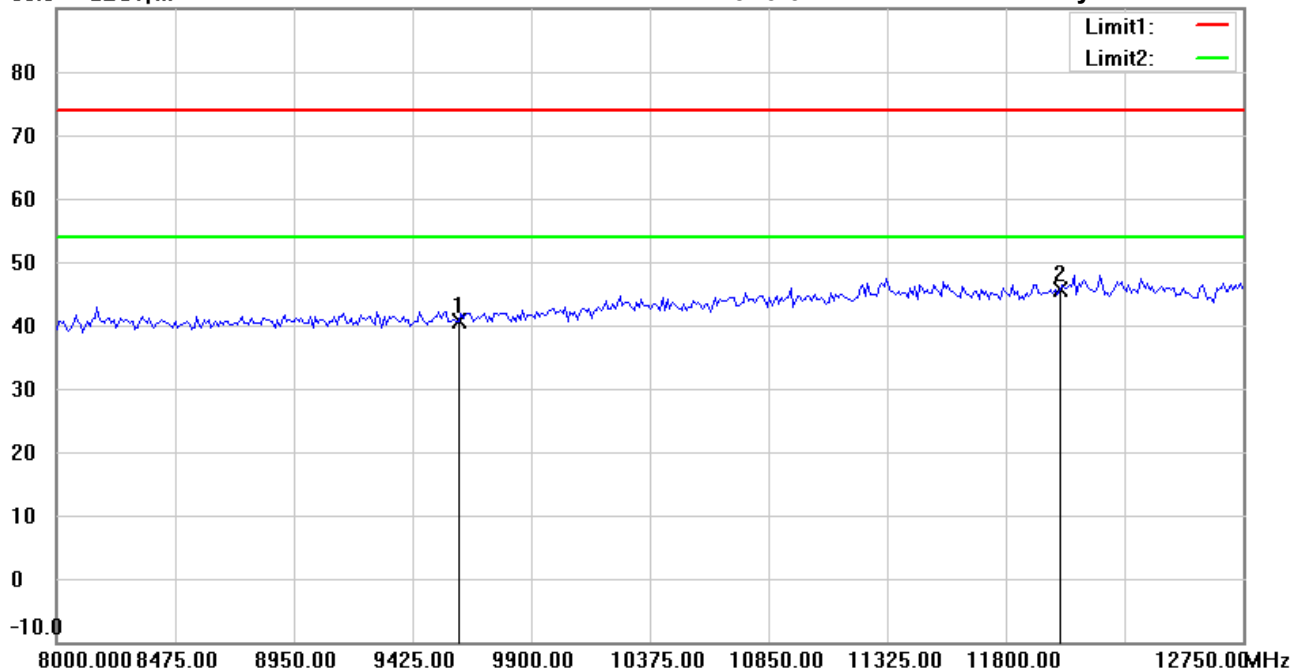
Date: 1/18/2020

Temperature: 21.3 °C

90.0 dBuV/m

Time: 5:57:22 AM

Humidity: 54.6 %



Site : Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M21910-19425

M/N:

Test Mode : TX 2402MHz

Note :

Polarization: Vertical

Power : 120 Va.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	33.99	peak	6.53	40.52	74.00	150	30	-33.48	
*	12010.000	34.08	peak	11.62	45.70	74.00	150	265	-28.30	

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



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Radiated Emission Measurement

Operator: Allen

File :3

Data :#4

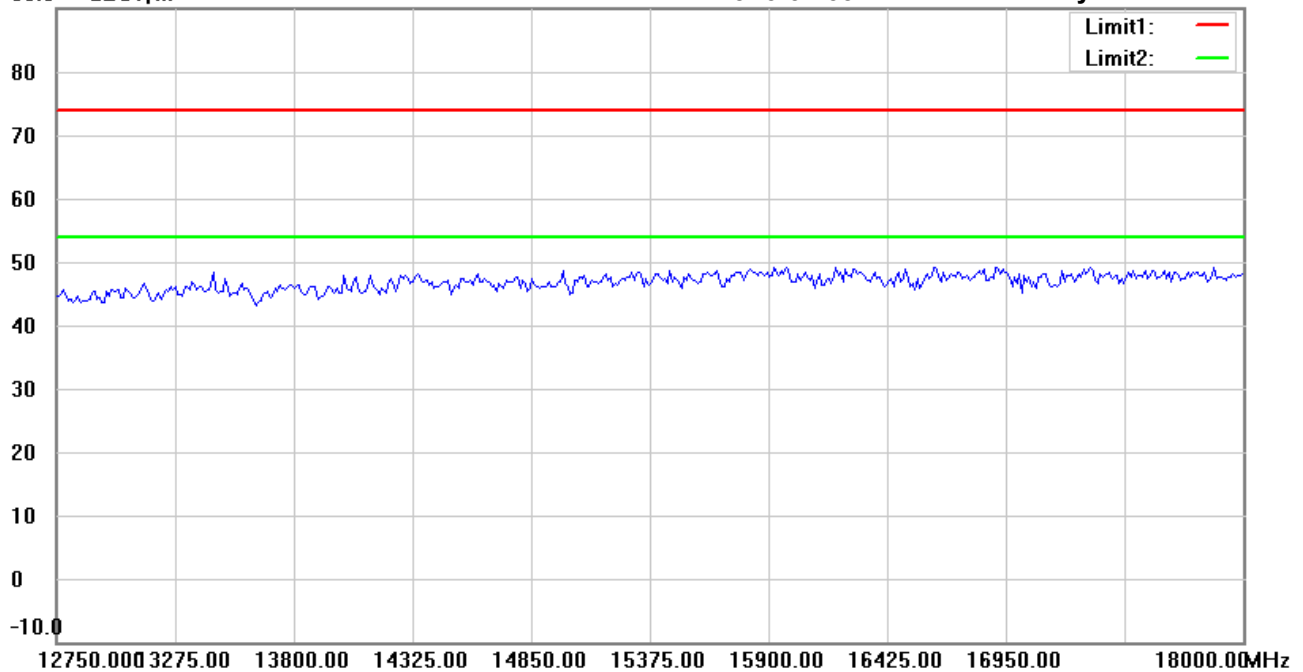
Date: 1/18/2020

Temperature: 21.3 °C

90.0 dBuV/m

Time: 5:54:58 AM

Humidity: 54.6 %



Site : Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M21910-19425

M/N:

Test Mode : TX 2402MHz

Note :

Polarization: Horizontal

Power : 120 Va.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



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Radiated Emission Measurement

Operator: Allen

File :3

Data :#9

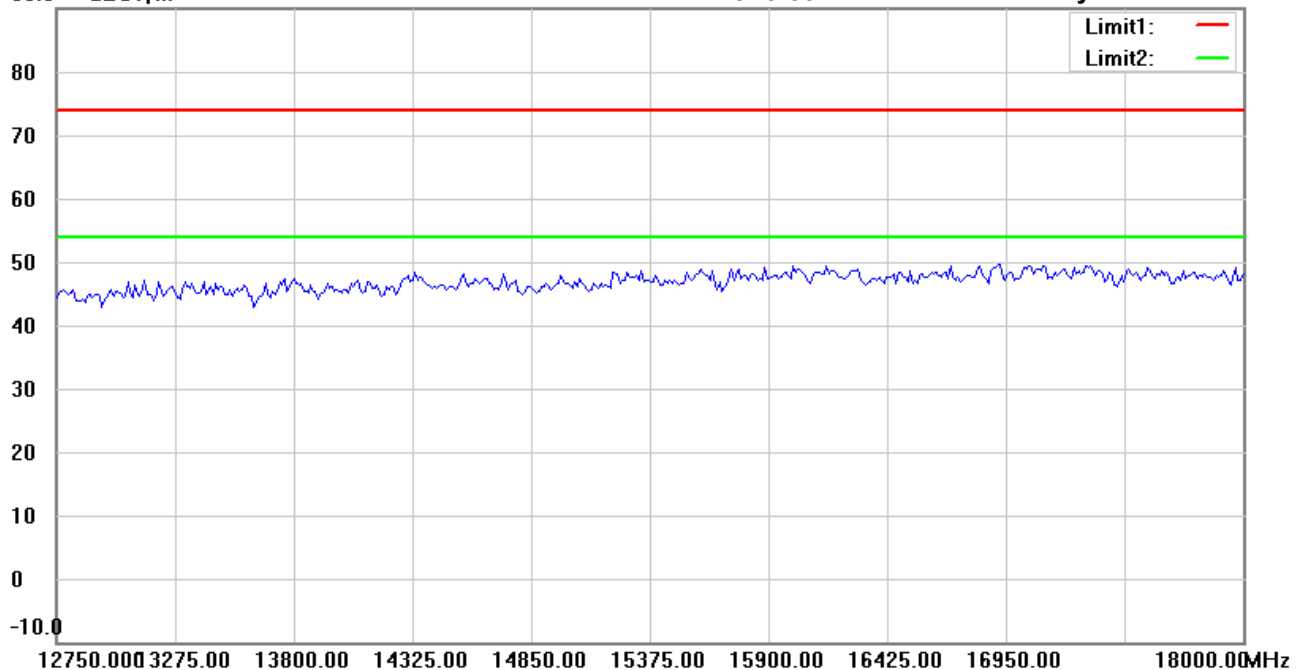
Date: 1/18/2020

Temperature: 21.3 °C

90.0 dBuV/m

Time: 5:58:24 AM

Humidity: 54.6 %



Site : Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M21910-19425

M/N:

Test Mode : TX 2402MHz

Note :

Polarization: **Vertical**

Power : 120 Va.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



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Radiated Emission Measurement

Operator: Allen

File :3

Data :#5

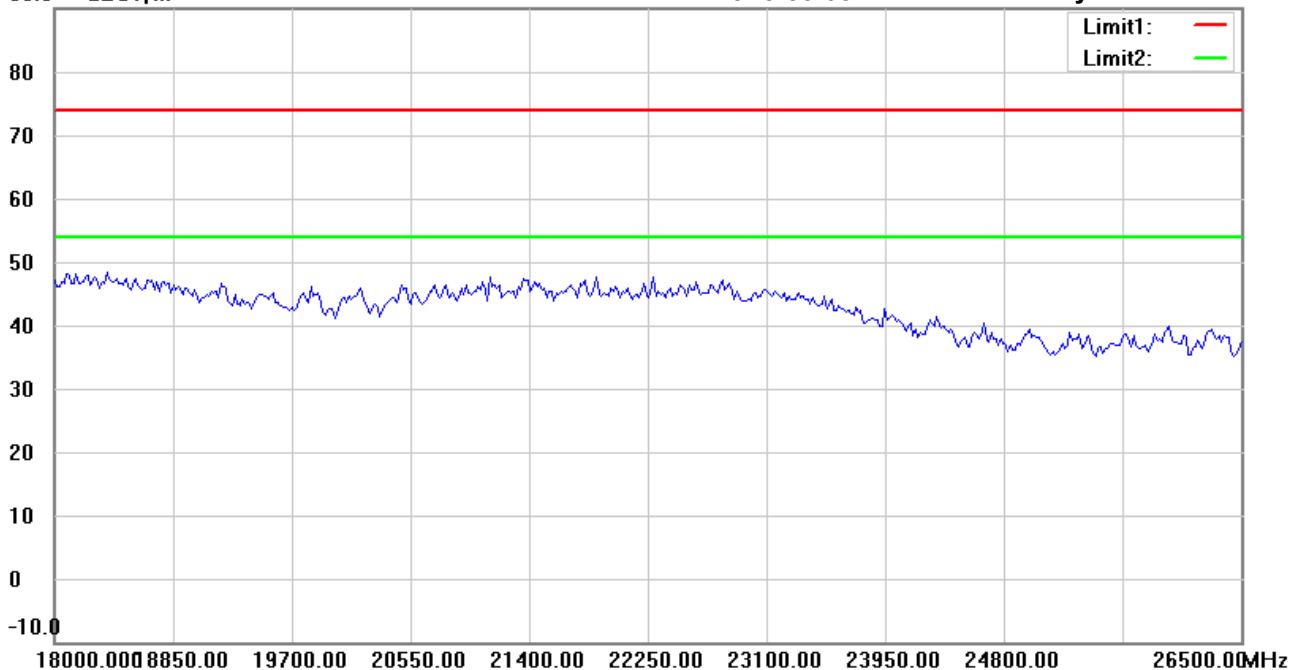
Date: 1/18/2020

Temperature:21.3 °C

90.0 dBuV/m

Time: 5:55:08 AM

Humidity:54.6 %



Site : Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M21910-19425

M/N:

Test Mode : TX 2402MHz

Note :

Polarization: Horizontal

Power : 120 Va.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



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Radiated Emission Measurement

Operator: Allen

File : 3

Data : #10

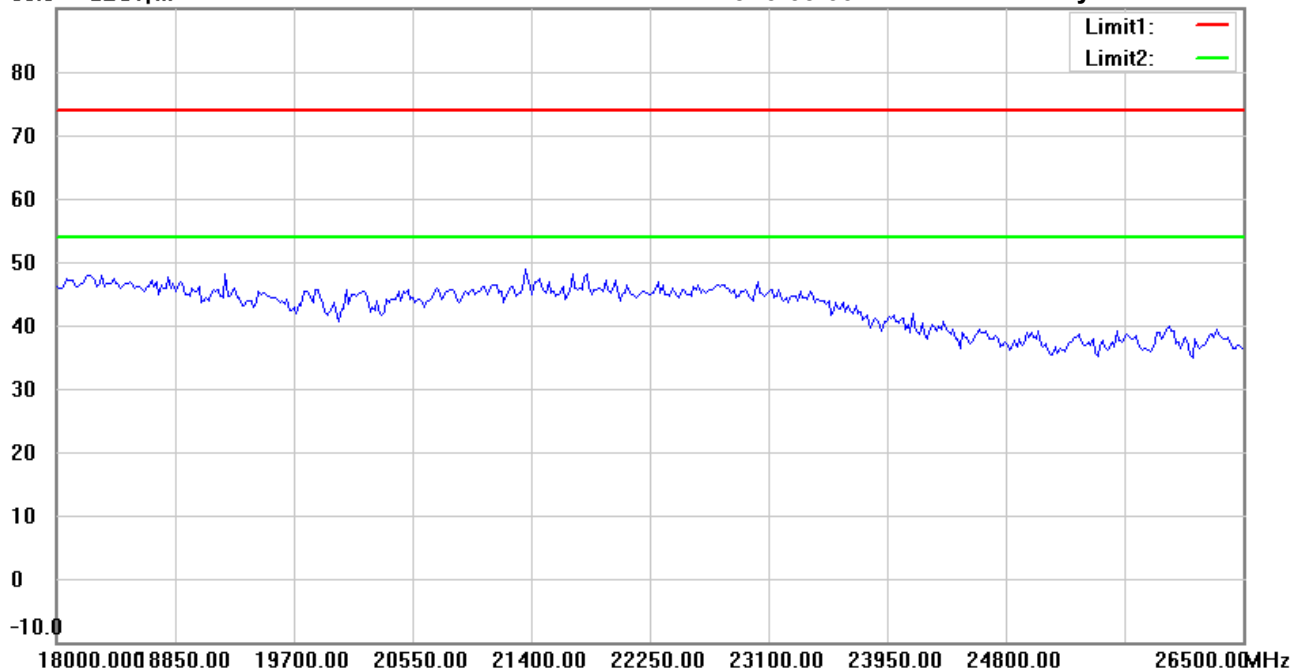
Date: 1/18/2020

Temperature: 21.3 °C

90.0 dBuV/m

Time: 5:58:33 AM

Humidity: 54.6 %



Site : Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M21910-19425

M/N:

Test Mode : TX 2402MHz

Note :

Polarization: **Vertical**

Power : 120 Va.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



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Radiated Emission Measurement

Operator: Allen

File : 3

Data : #1

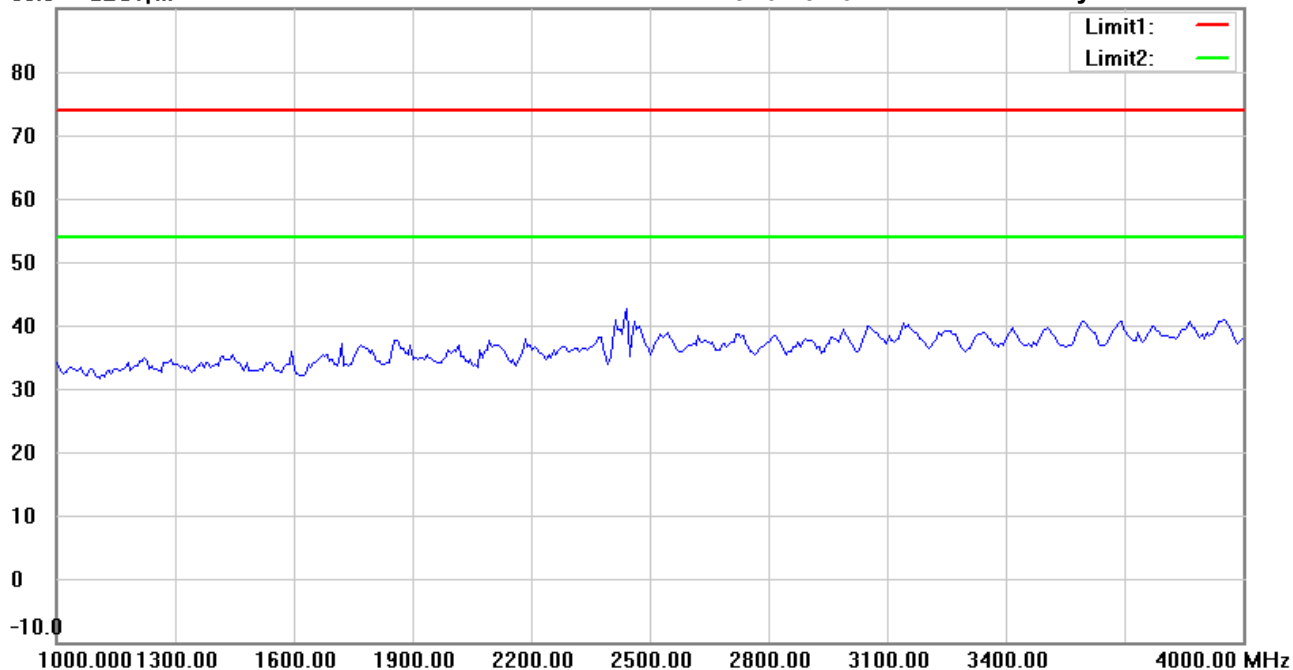
Date: 1/18/2020

Temperature: 21.3 °C

90.0 dBuV/m

Time: 6:25:49 AM

Humidity: 54.6 %



Site : Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M21910-19425

M/N:

Test Mode : TX 2440MHz

Note :

Polarization: **Horizontal**

Power : 120 Va.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



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Radiated Emission Measurement

Operator: Allen

File : 3

Data : #6

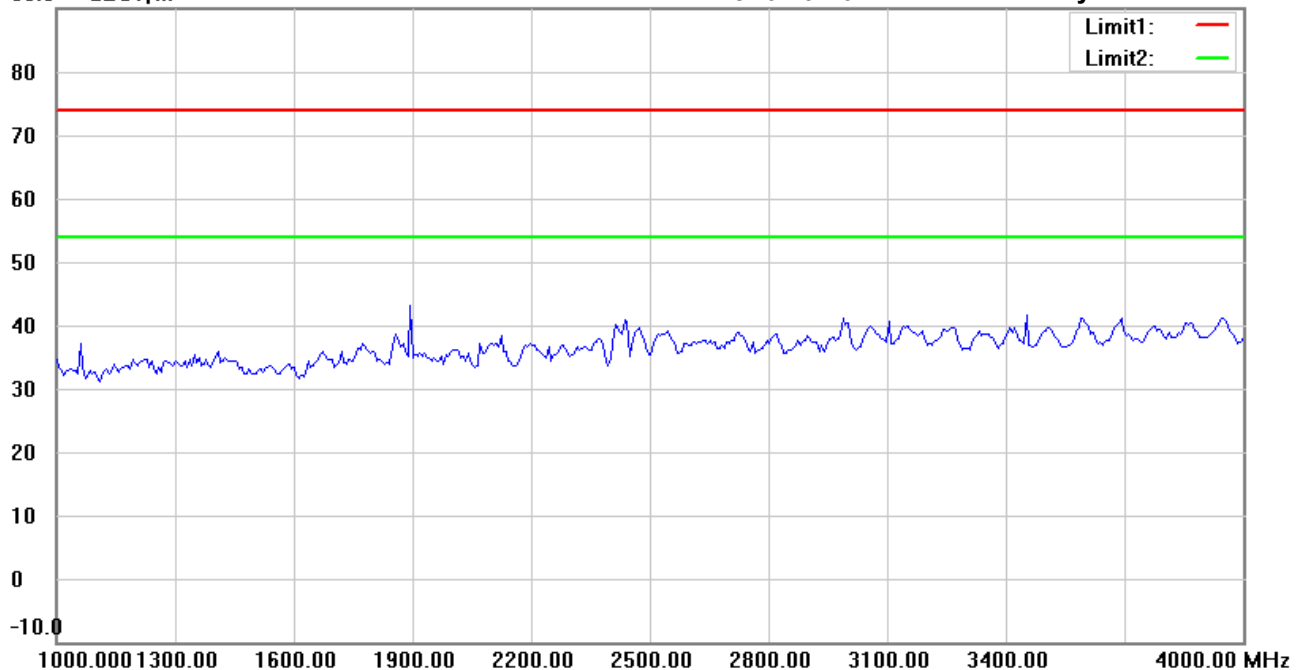
Date: 1/18/2020

Temperature: 21.3 °C

90.0 dBuV/m

Time: 6:29:10 AM

Humidity: 54.6 %



Site : Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M21910-19425

M/N:

Test Mode : TX 2440MHz

Note :

Polarization: Vertical

Power : 120 Va.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
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*:Maximum data x:Over limit !:over margin



Address: 6F., No. 58, Ln 188, Ruey Kuang Rd, NeiHu, Taipei
Tel: +886-2-6606-8877
Fax: +886-2-6606-8879

Radiated Emission Measurement

Operator: Allen

File : 3

Data : #2

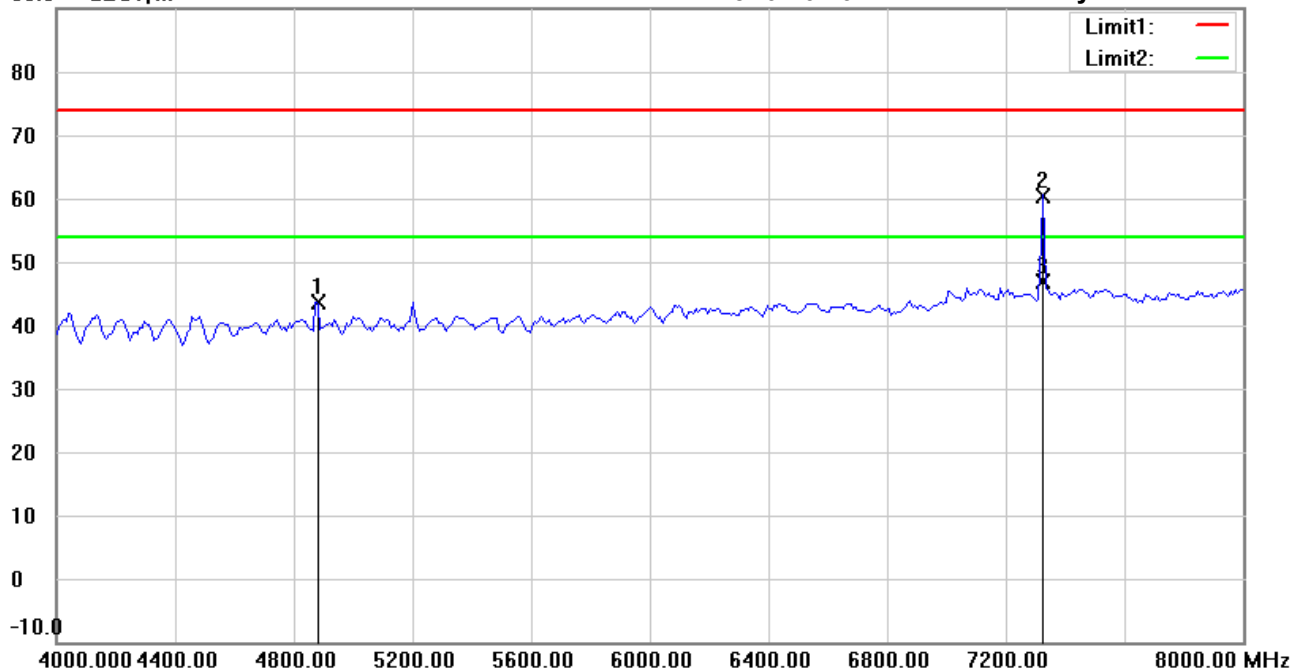
Date: 1/18/2020

Temperature: 21.3 °C

90.0 dBuV/m

Time: 6:26:49 AM

Humidity: 54.6 %



Site : Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M21910-19425

M/N:

Test Mode : TX 2440MHz

Note :

Polarization: **Horizontal**

Power : 120 Va.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
	4873.748	45.31	peak	-1.70	43.61	74.00	150	220	-30.39	
	7326.653	56.94	peak	3.48	60.42	74.00	150	175	-13.58	
*	7326.653	43.38	AVG	3.48	46.86	54.00	150	175	-7.14	

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



Address: 6F., No. 58, Ln 188, Ruey Kuang Rd, NeiHu, Taipei
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Radiated Emission Measurement

Operator: Allen

File :3

Data :#7

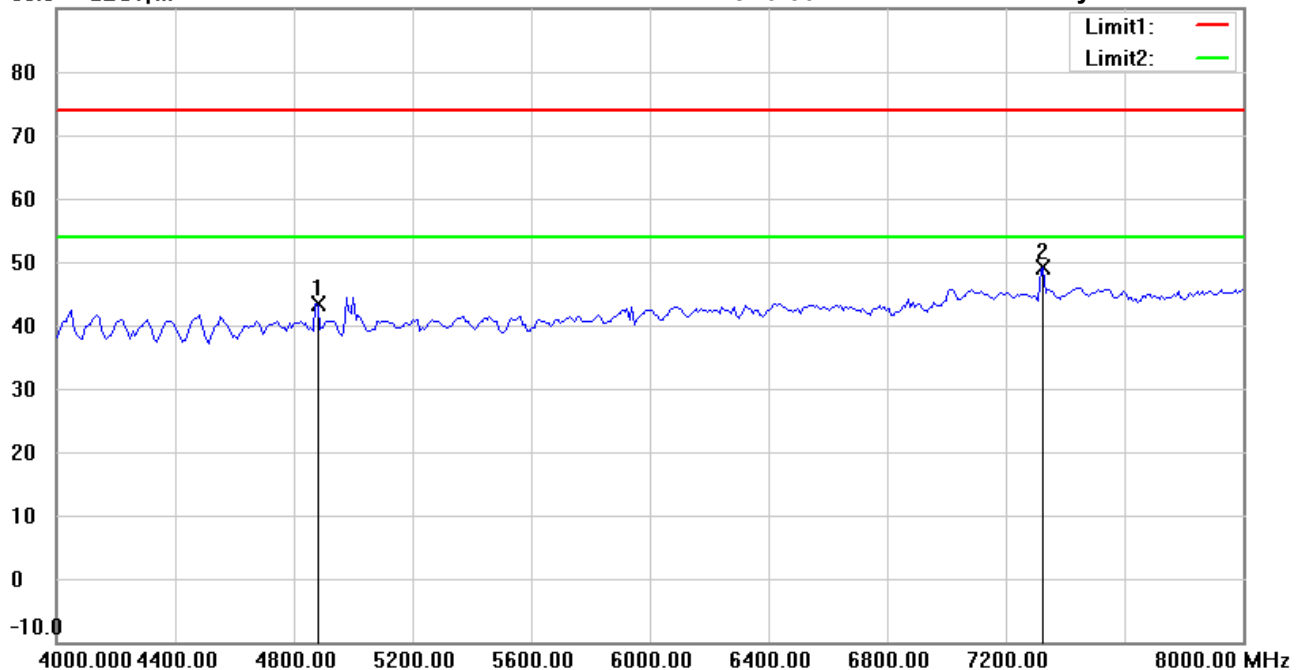
Date: 1/18/2020

Temperature: 21.3 °C

90.0 dBuV/m

Time: 6:30:11 AM

Humidity: 54.6 %



Site : Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M21910-19425

M/N:

Test Mode : TX 2440MHz

Note :

Polarization: **Vertical**

Power : 120 Va.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
	4873.748	45.07	peak	-1.70	43.37	74.00	150	140	-30.63	
*	7326.653	45.63	peak	3.48	49.11	74.00	150	205	-24.89	

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



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Tel: +886-2-6606-8877
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Radiated Emission Measurement

Operator: Allen

File :3

Data :#3

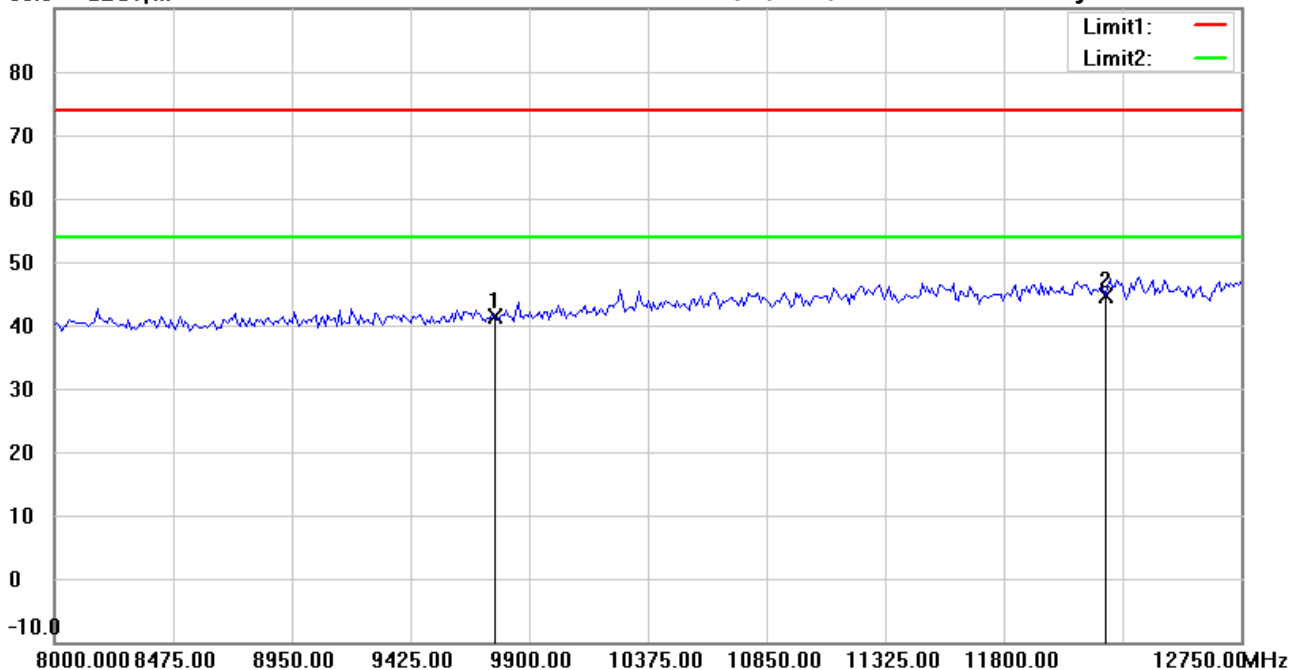
Date: 1/18/2020

Temperature: 21.3 °C

90.0 dBuV/m

Time: 6:27:02 AM

Humidity: 54.6 %



Site : Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M21910-19425

M/N:

Test Mode : TX 2440MHz

Note :

Polarization: **Horizontal**

Power : 120 Va.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	34.58	peak	6.76	41.34	74.00	150	10	-32.66	
*	12200.000	31.79	peak	12.85	44.64	74.00	150	95	-29.36	

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



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Tel: +886-2-6606-8877
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Radiated Emission Measurement

Operator: Allen

File :3

Data :#8

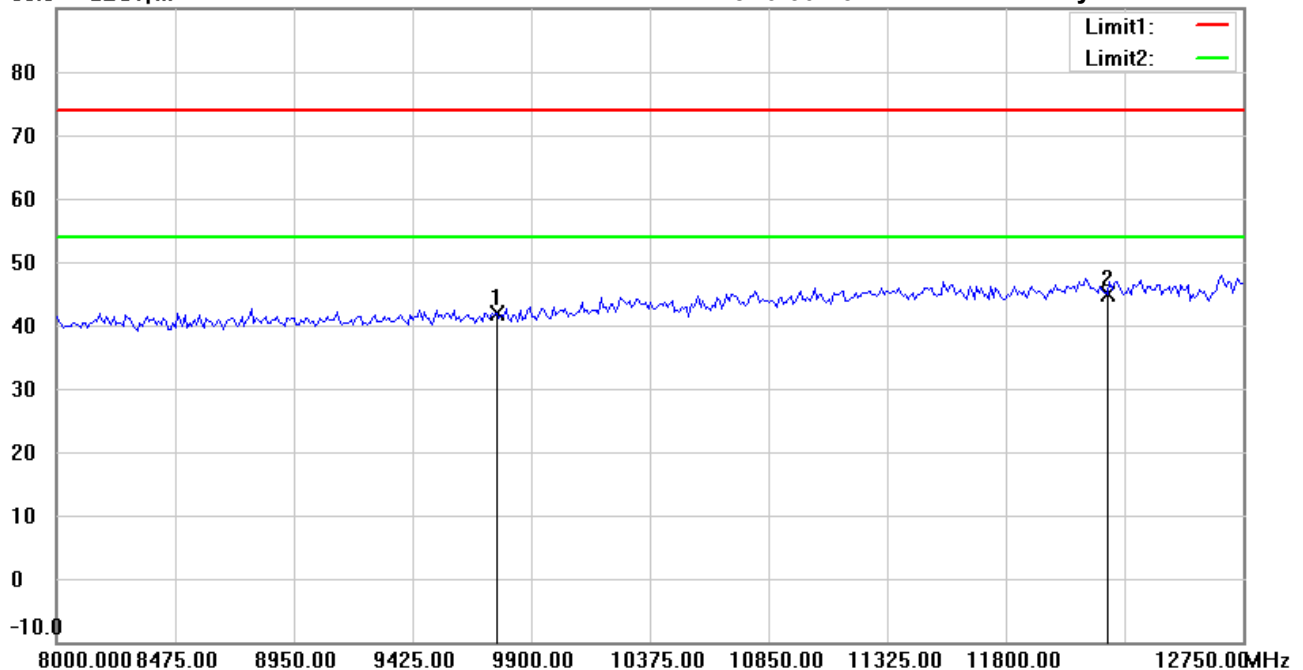
Date: 1/18/2020

Temperature: 21.3 °C

90.0 dBuV/m

Time: 6:30:23 AM

Humidity: 54.6 %



Site : Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M21910-19425

M/N:

Test Mode : TX 2440MHz

Note :

Polarization: **Vertical**

Power : 120 Va.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	35.11	peak	6.76	41.87	74.00	150	65	-32.13	
*	12200.000	32.14	peak	12.85	44.99	74.00	150	350	-29.01	

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



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Radiated Emission Measurement

Operator: Allen

File :3

Data :#4

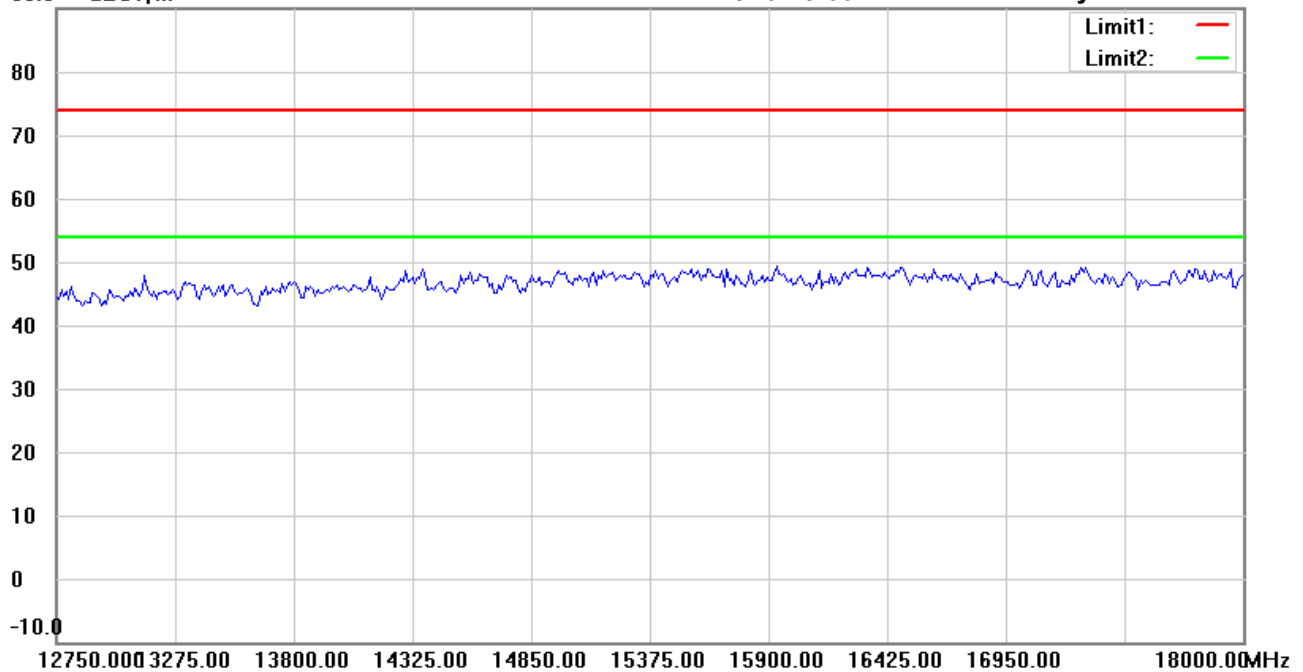
Date: 1/18/2020

Temperature: 21.3 °C

90.0 dBuV/m

Time: 6:28:00 AM

Humidity: 54.6 %



Site : Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M21910-19425

M/N:

Test Mode : TX 2440MHz

Note :

Polarization: *Horizontal*

Power : 120 Va.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
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*:Maximum data x:Over limit !:over margin



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Tel: +886-2-6606-8877
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Radiated Emission Measurement

Operator: Allen

File : 3

Data : #9

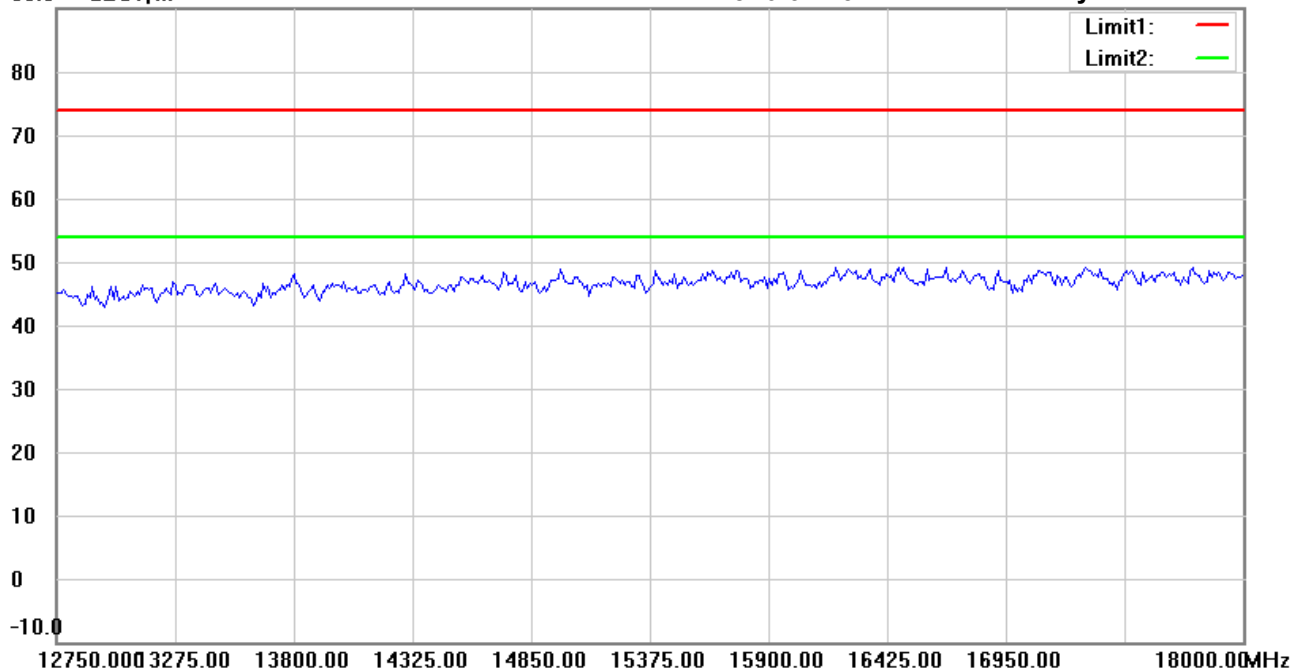
Date: 1/18/2020

Temperature: 21.3 °C

90.0 dBuV/m

Time: 6:31:25 AM

Humidity: 54.6 %



Site : Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M21910-19425

M/N:

Test Mode : TX 2440MHz

Note :

Polarization: *Vertical*

Power : 120 Va.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
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*:Maximum data x:Over limit !:over margin



Address: 6F., No. 58, Ln 188, Ruey Kuang Rd, Neihsu, Taipei
Tel: +886-2-6606-8877
Fax: +886-2-6606-8879

Radiated Emission Measurement

Operator: Allen

File :3

Data :#5

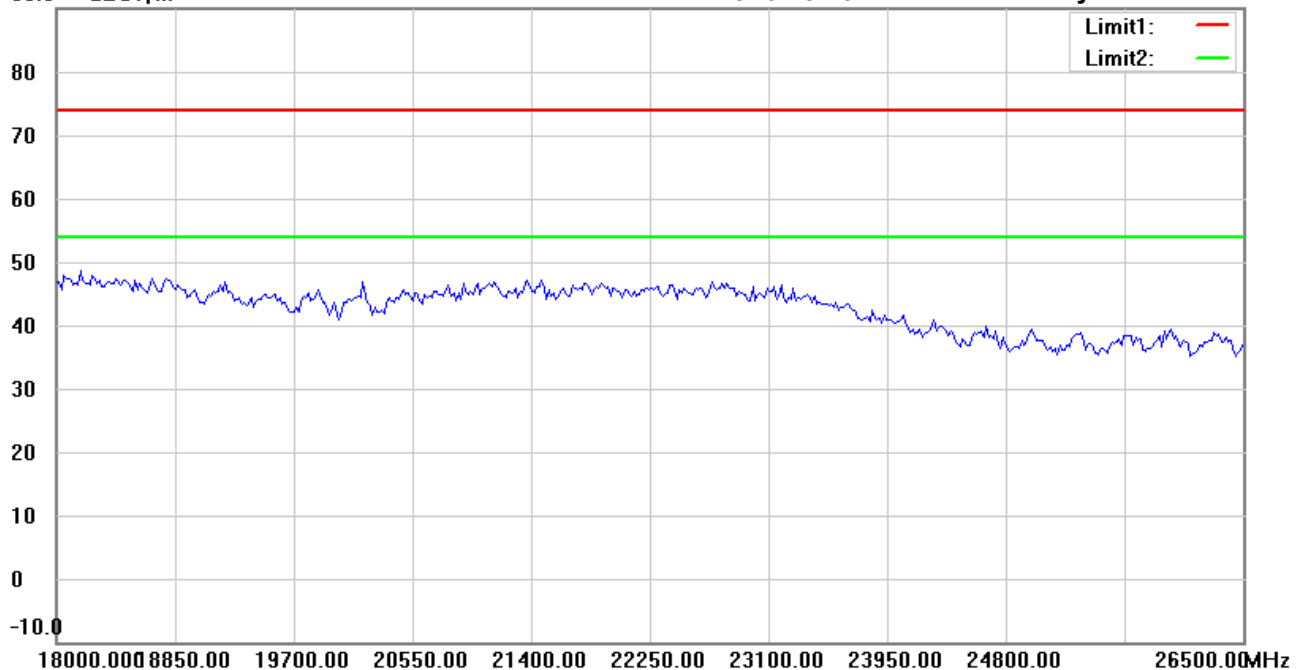
Date: 1/18/2020

Temperature: 21.3 °C

90.0 dBuV/m

Time: 6:28:10 AM

Humidity: 54.6 %



Site : Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M21910-19425

M/N:

Test Mode : TX 2440MHz

Note :

Polarization: *Horizontal*

Power : 120 Va.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
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*:Maximum data x:Over limit !:over margin



Address: 6F., No. 58, Ln 188, Ruey Kuang Rd, NeiHu, Taipei
Tel: +886-2-6606-8877
Fax: +886-2-6606-8879

Radiated Emission Measurement

Operator: Allen

File :3

Data :#10

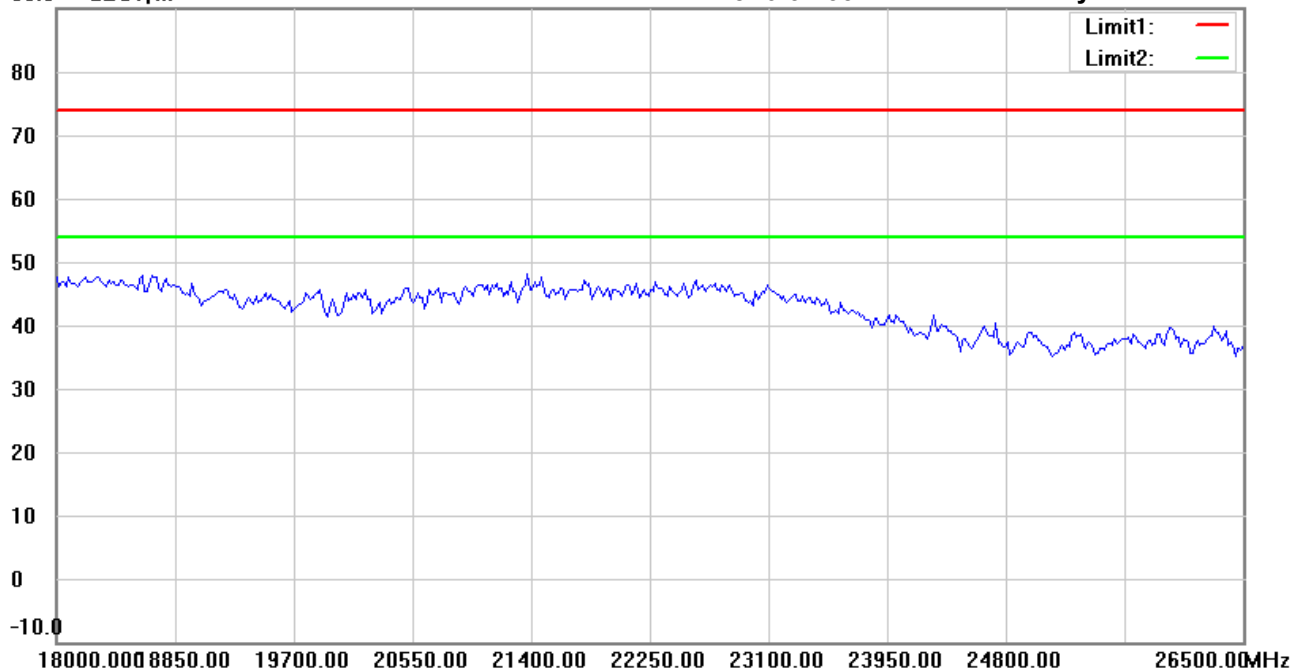
Date: 1/18/2020

Temperature: 21.3 °C

90.0 dBuV/m

Time: 6:31:35 AM

Humidity: 54.6 %



Site : Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M21910-19425

M/N:

Test Mode : TX 2440MHz

Note :

Polarization: *Vertical*

Power : 120 Va.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
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*:Maximum data x:Over limit !:over margin



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Tel: +886-2-6606-8877
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Radiated Emission Measurement

Operator: Allen

File : 3

Data : #1

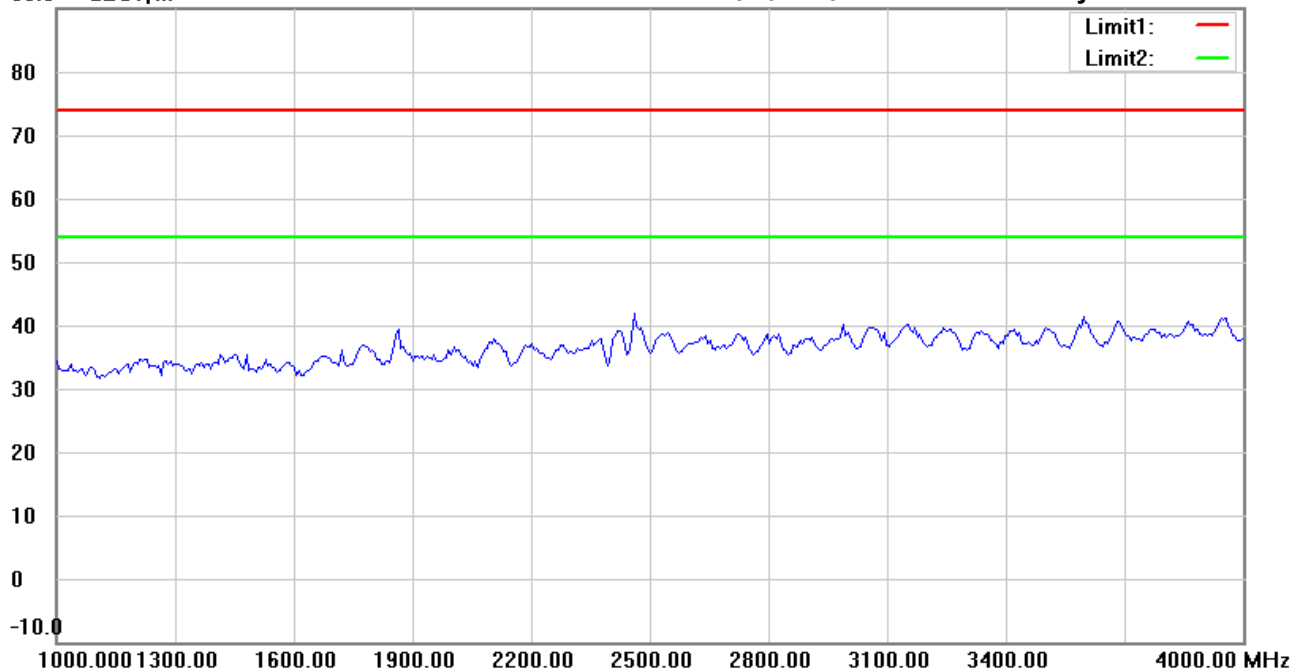
Date: 1/18/2020

Temperature: 21.3 °C

90.0 dBuV/m

Time: 6:44:31 AM

Humidity: 54.6 %



Site : Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M21910-19425

M/N:

Test Mode : TX 2480MHz

Note :

Polarization: *Horizontal*

Power : 120 Va.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
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*:Maximum data x:Over limit !:over margin



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Radiated Emission Measurement

Operator: Allen

File : 3

Data : #6

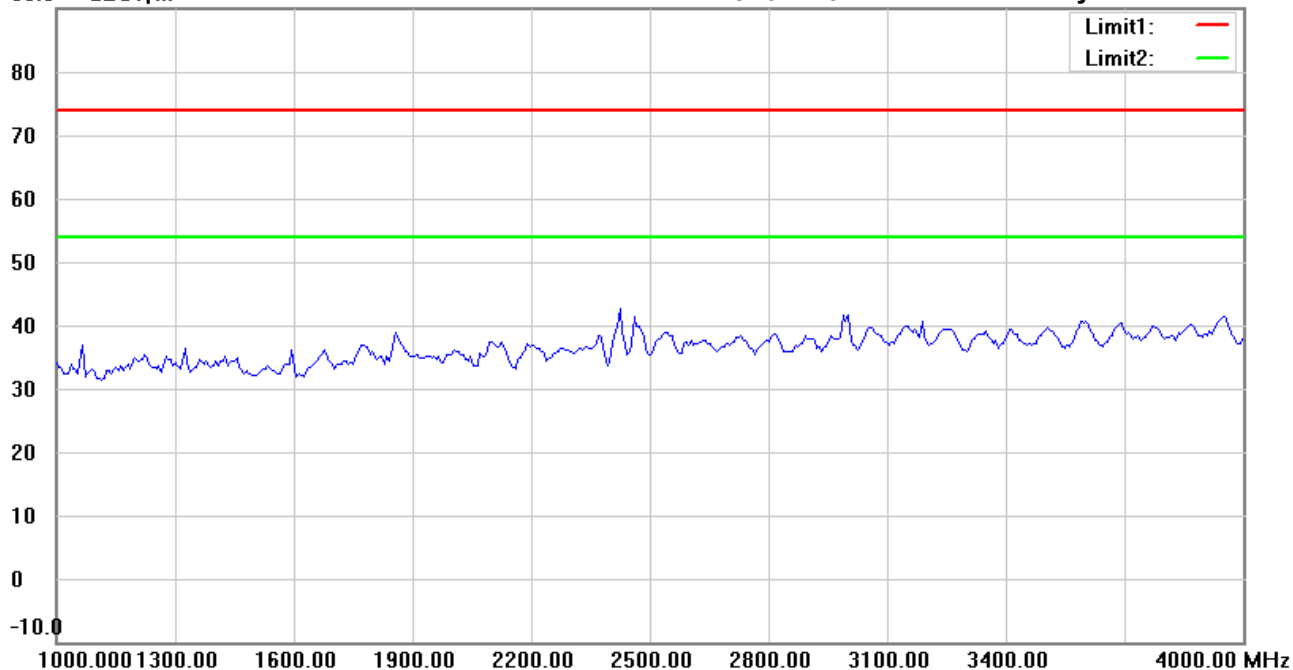
Date: 1/18/2020

Temperature: 21.3 °C

90.0 dBuV/m

Time: 6:47:52 AM

Humidity: 54.6 %



Site : Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M21910-19425

M/N:

Test Mode : TX 2480MHz

Note :

Polarization: **Vertical**

Power : 120 Va.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
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*:Maximum data x:Over limit !:over margin



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Tel: +886-2-6606-8877
Fax: +886-2-6606-8879

Radiated Emission Measurement

Operator: Allen

File : 3

Data : #2

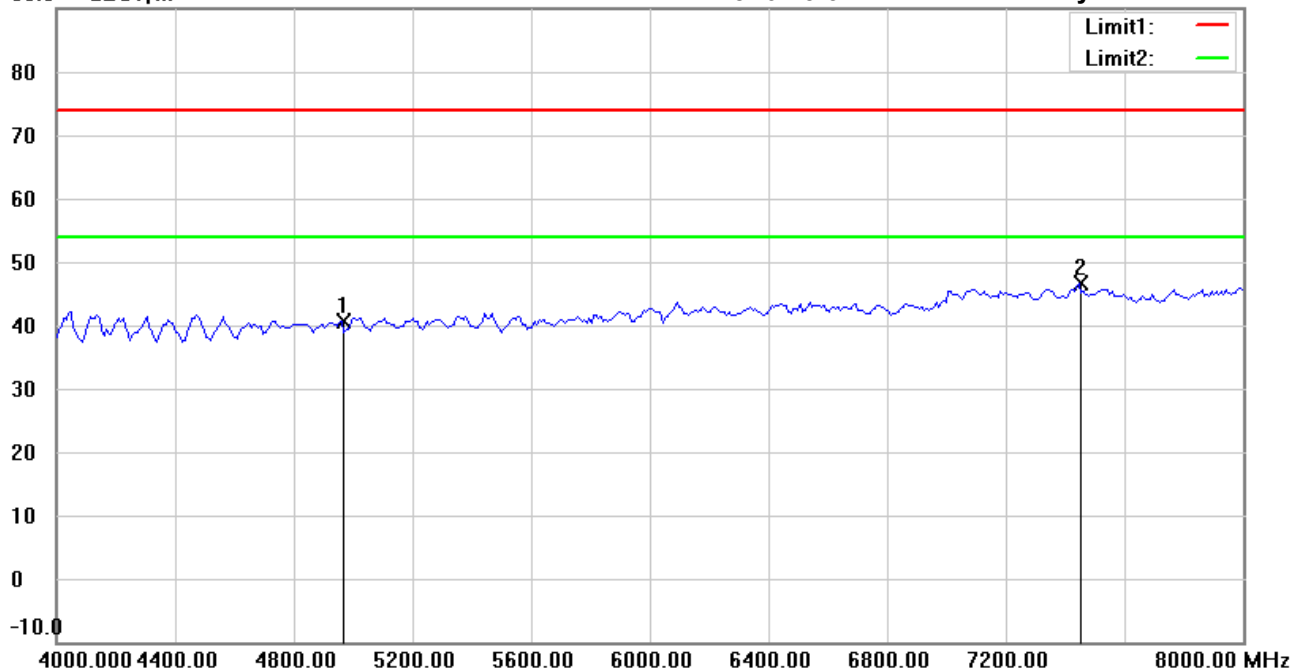
Date: 1/18/2020

Temperature: 21.3 °C

90.0 dBuV/m

Time: 6:45:31 AM

Humidity: 54.6 %



Site : Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M21910-19425

M/N:

Test Mode : TX 2480MHz

Note :

Polarization: **Horizontal**

Power : 120 Va.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
	4961.924	41.97	peak	-1.34	40.63	74.00	150	300	-33.37	
*	7446.894	42.84	peak	3.71	46.55	74.00	150	285	-27.45	

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



Address: 6F., No. 58, Ln 188, Ruey Kuang Rd, NeiHu, Taipei
Tel: +886-2-6606-8877
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Radiated Emission Measurement

Operator: Allen

File : 3

Data : #7

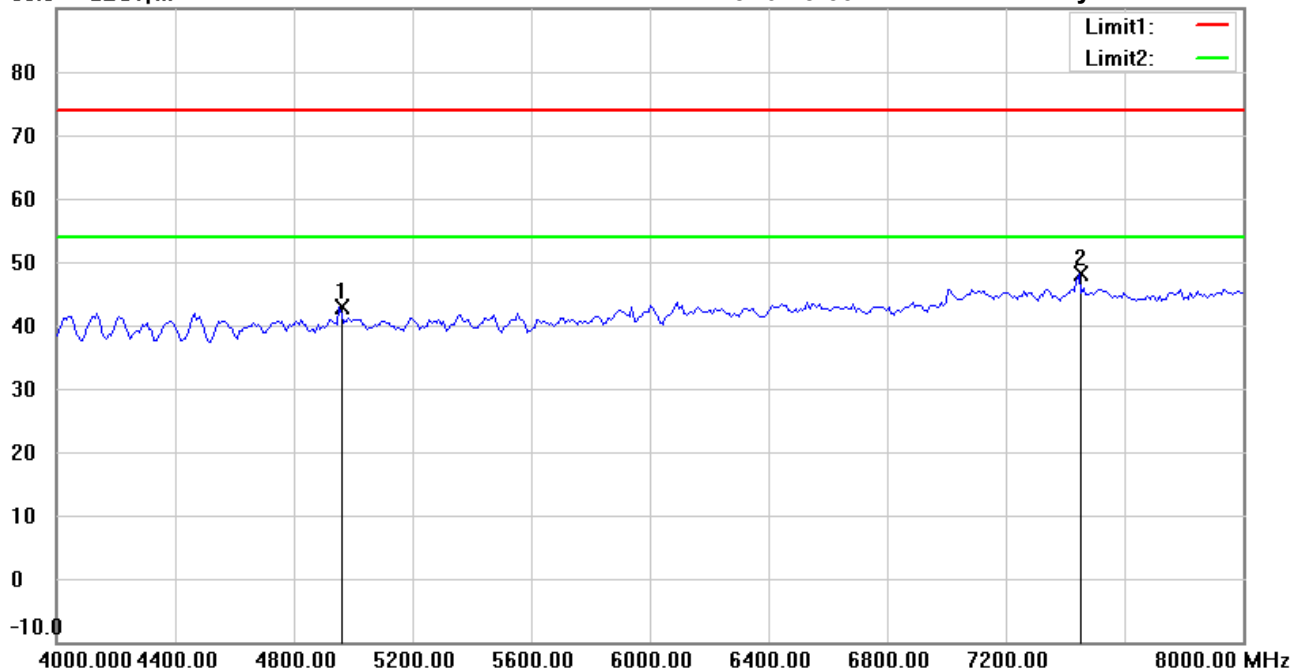
Date: 1/18/2020

Temperature: 21.3 °C

90.0 dBuV/m

Time: 6:48:53 AM

Humidity: 54.6 %



Site : Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M21910-19425

M/N:

Test Mode : TX 2480MHz

Note :

Polarization: **Vertical**

Power : 120 Va.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
	4953.908	44.28	peak	-1.38	42.90	74.00	150	220	-31.10	
*	7446.894	44.52	peak	3.71	48.23	74.00	150	55	-25.77	

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



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Tel: +886-2-6606-8877
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Radiated Emission Measurement

Operator: Allen

File :3

Data :#3

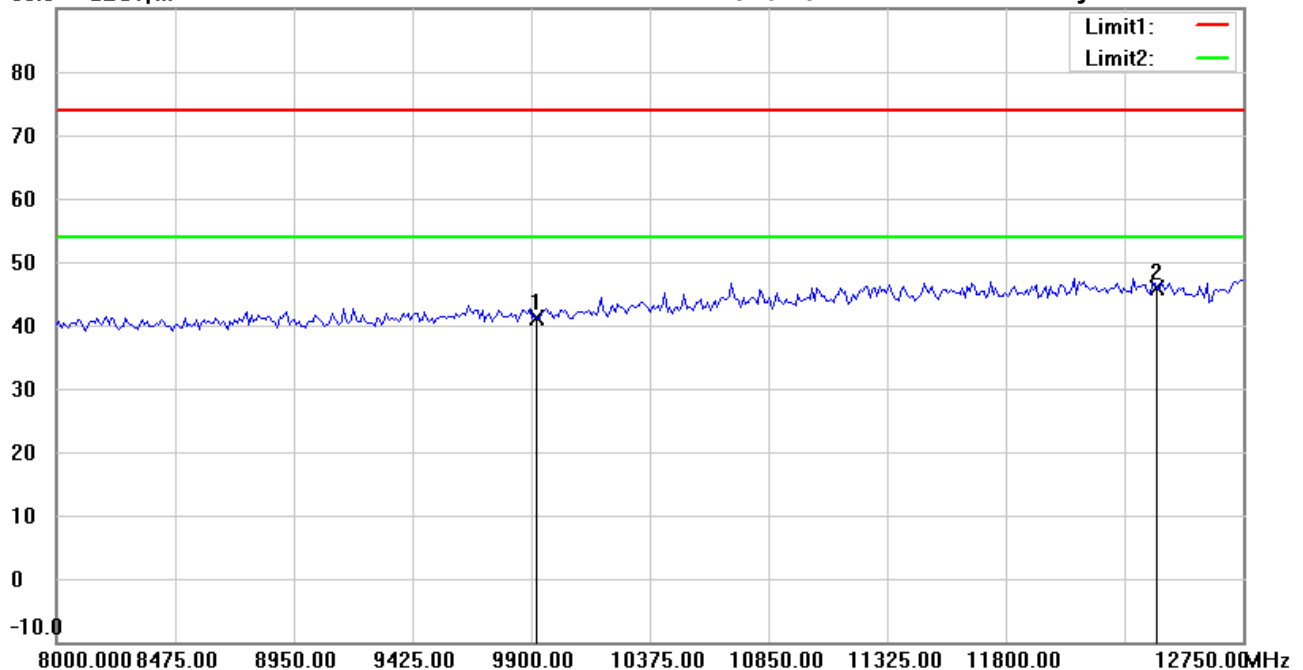
Date: 1/18/2020

Temperature: 21.3 °C

90.0 dBuV/m

Time: 6:45:44 AM

Humidity: 54.6 %



Site : Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M21910-19425

M/N:

Test Mode : TX 2480MHz

Note :

Polarization: *Horizontal*

Power : 120 Va.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
	9920.000	33.87	peak	7.16	41.03	74.00	150	360	-32.97	
*	12400.000	33.24	peak	12.75	45.99	74.00	150	70	-28.01	

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



Address: 6F., No. 58, Ln 188, Ruey Kuang Rd, NeiHu, Taipei
Tel: +886-2-6606-8877
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Radiated Emission Measurement

Operator: Allen

File :3

Data :#8

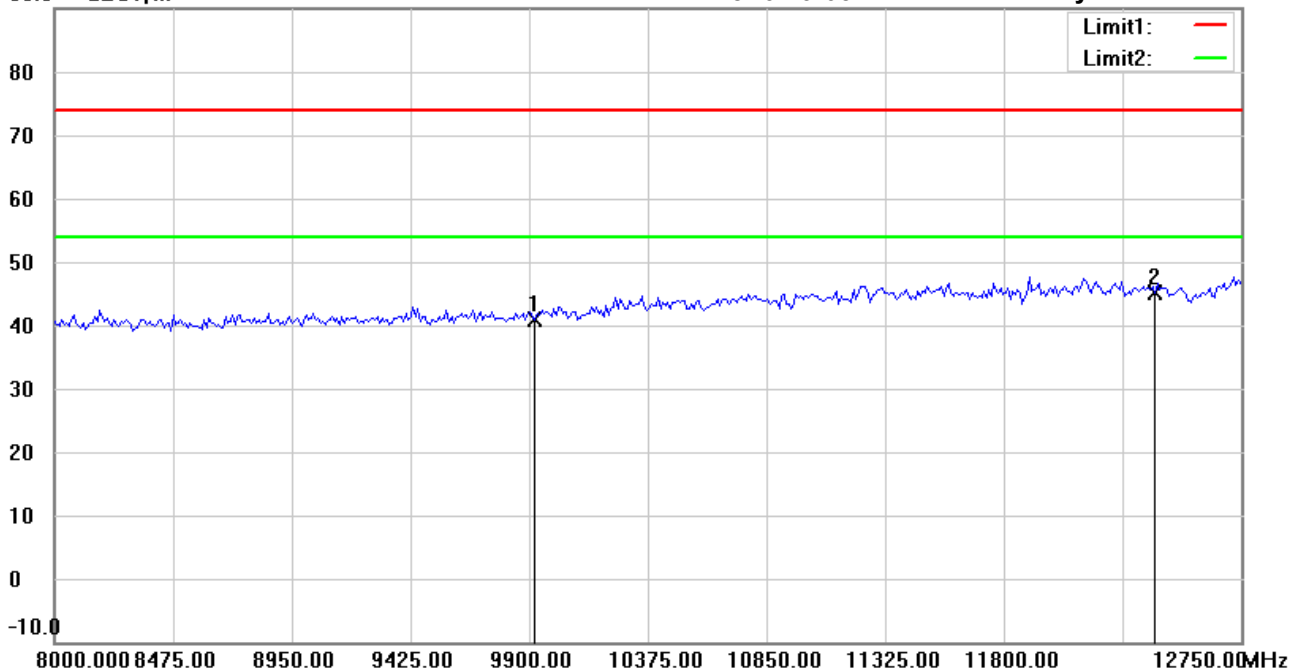
Date: 1/18/2020

Temperature: 21.3 °C

90.0 dBuV/m

Time: 6:49:05 AM

Humidity: 54.6 %



Site : Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M21910-19425

M/N:

Test Mode : TX 2480MHz

Note :

Polarization: **Vertical**

Power : 120 Va.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
	9920.000	33.73	peak	7.16	40.89	74.00	150	350	-33.11	
*	12400.000	32.46	peak	12.75	45.21	74.00	150	15	-28.79	

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



Address: 6F., No. 58, Ln 188, Ruey Kuang Rd, NeiHu, Taipei
Tel: +886-2-6606-8877
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Radiated Emission Measurement

Operator: Allen

File :3

Data :#4

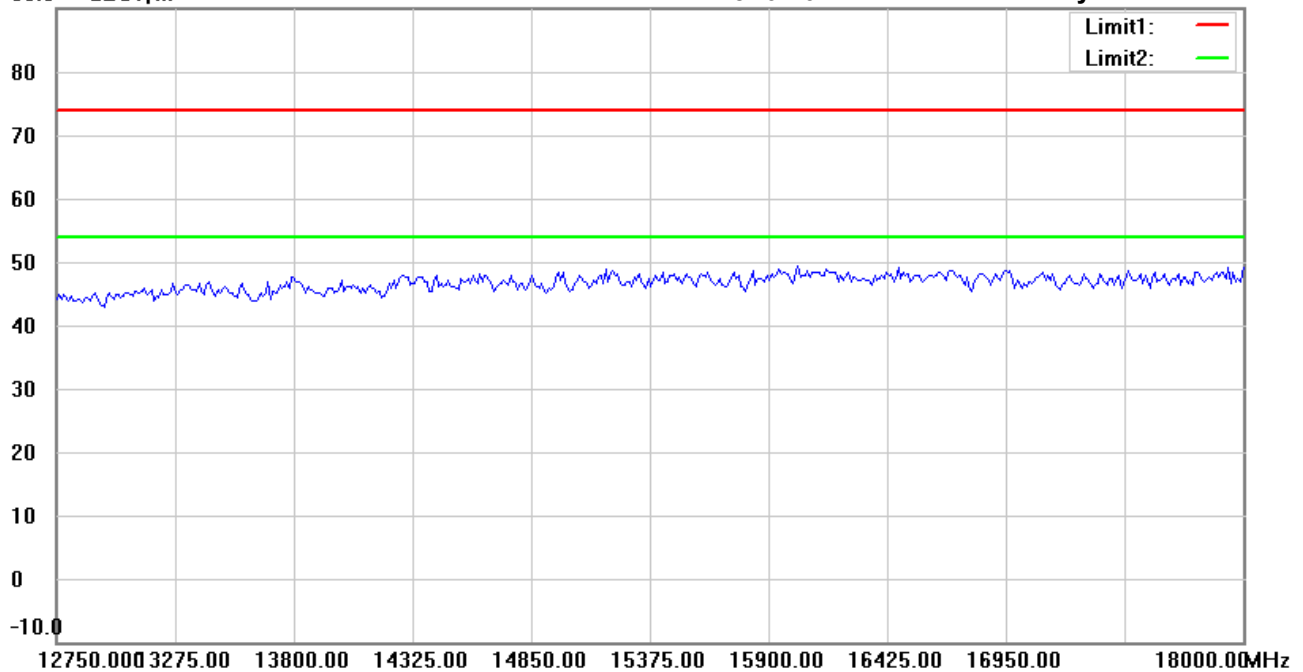
Date: 1/18/2020

Temperature: 21.3 °C

90.0 dBuV/m

Time: 6:46:42 AM

Humidity: 54.6 %



Site : Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M21910-19425

M/N:

Test Mode : TX 2480MHz

Note :

Polarization: Horizontal

Power : 120 Va.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
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*:Maximum data x:Over limit !:over margin



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Radiated Emission Measurement

Operator: Allen

File : 3

Data : #9

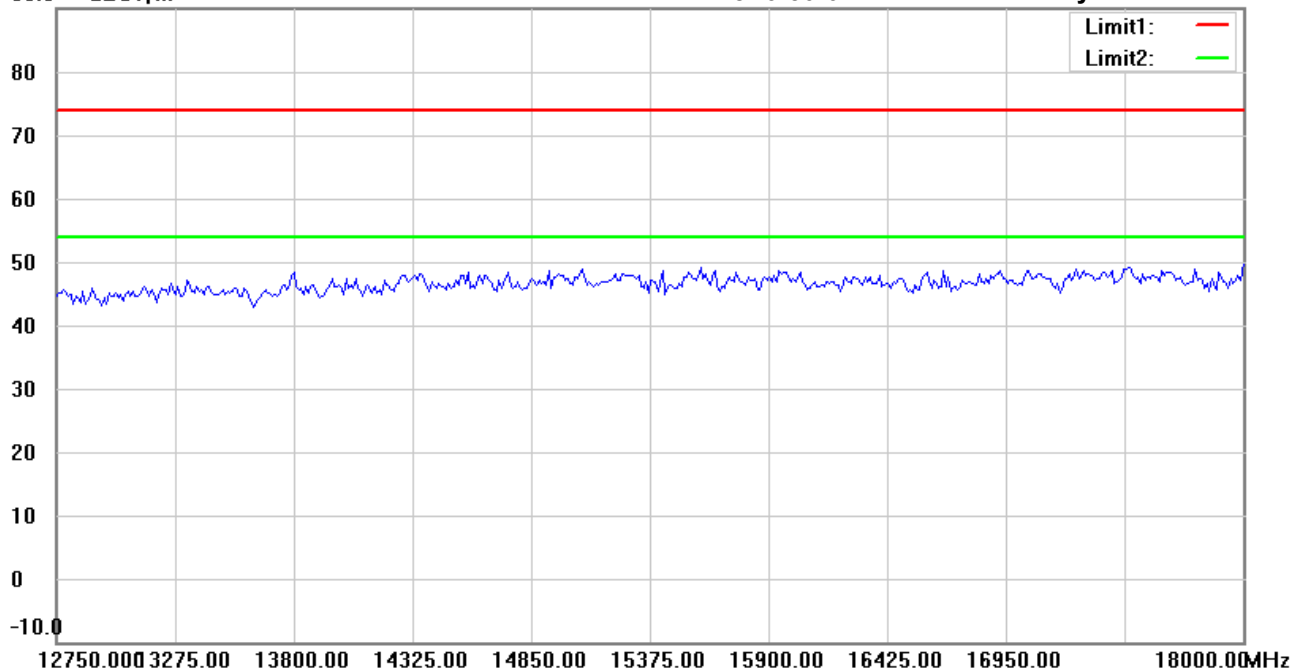
Date: 1/18/2020

Temperature: 21.3 °C

90.0 dBuV/m

Time: 6:50:07 AM

Humidity: 54.6 %



Site : Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M21910-19425

M/N:

Test Mode : TX 2480MHz

Note :

Polarization: Vertical

Power : 120 Va.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
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*:Maximum data x:Over limit !:over margin



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Radiated Emission Measurement

Operator: Allen

File :3

Data :#5

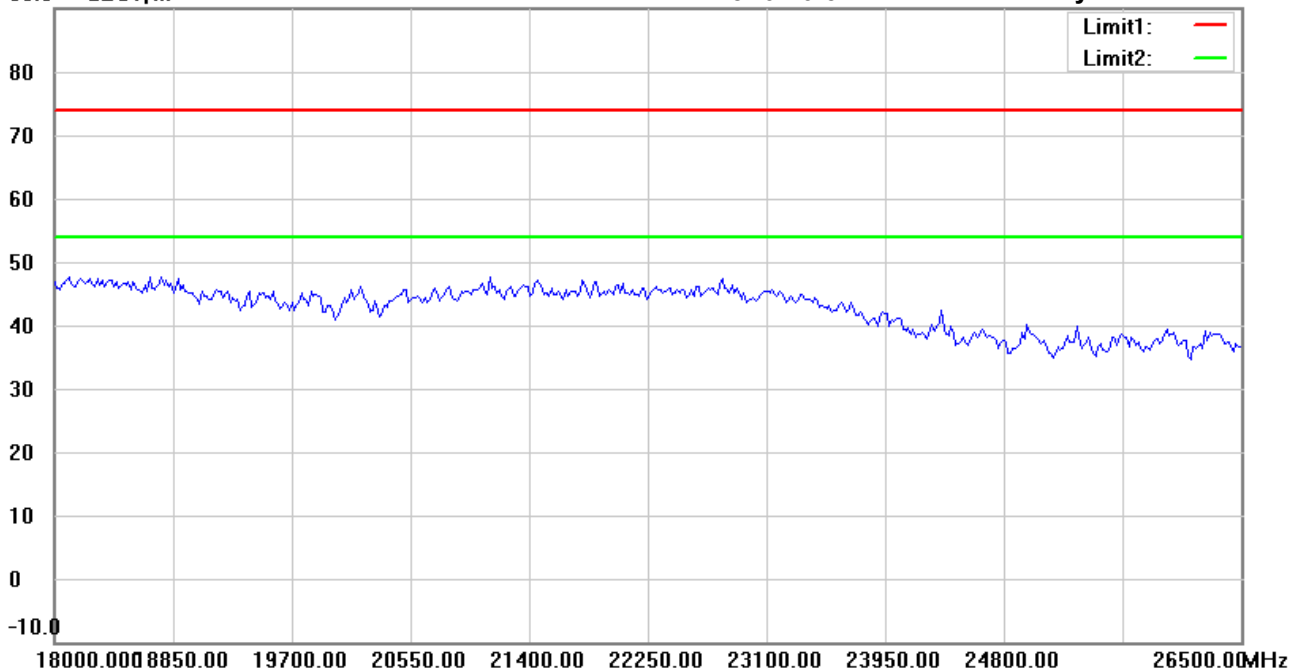
Date: 1/18/2020

Temperature: 21.3 °C

90.0 dBuV/m

Time: 6:46:52 AM

Humidity: 54.6 %



Site : Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M21910-19425

M/N:

Test Mode : TX 2480MHz

Note :

Polarization: *Horizontal*

Power : 120 Va.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
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*:Maximum data x:Over limit !:over margin



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Radiated Emission Measurement

Operator: Allen

File : 3

Data : #10

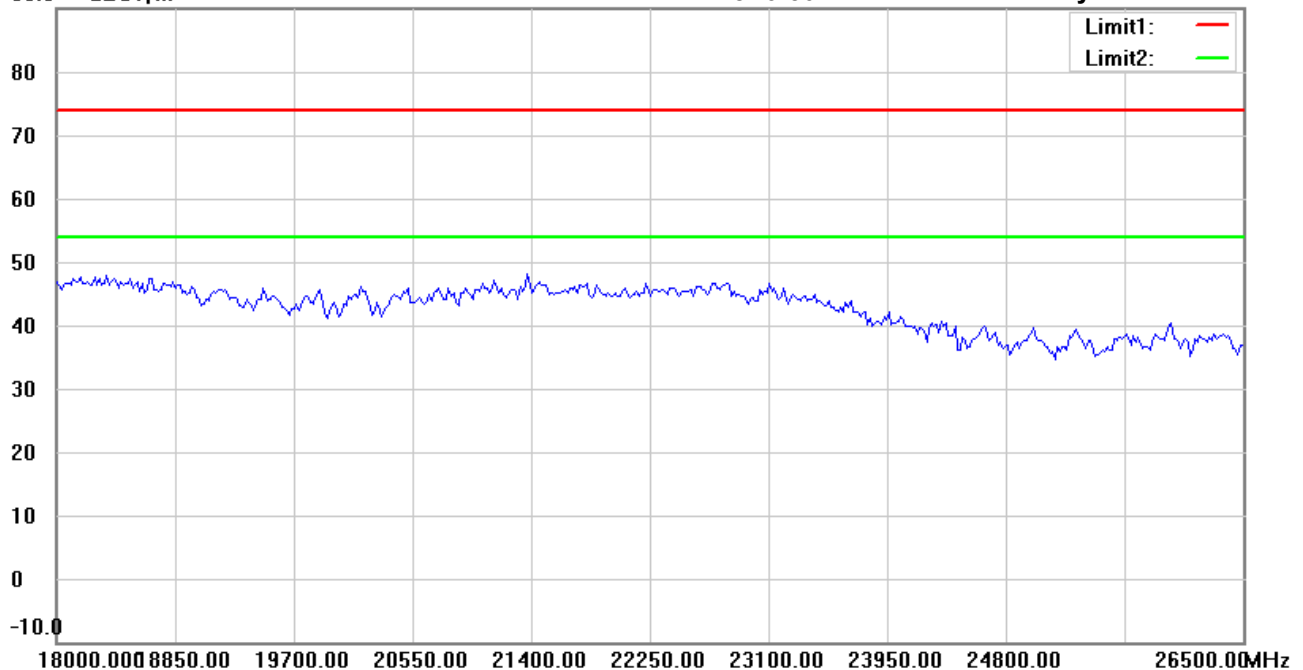
Date: 1/18/2020

Temperature: 21.3 °C

90.0 dBuV/m

Time: 6:50:17 AM

Humidity: 54.6 %



Site : Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M21910-19425

M/N:

Test Mode : TX 2480MHz

Note :

Polarization: *Vertical*

Power : 120 Va.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



Radiated Emission Measurement

Operator: Sky

File : 1_ANT+_2457_Below

Data : #1

Date: 1/30/2020

Temperature: 21.0 °C

80.0 dBuV/m

Time: 1:13:11 PM

Humidity: 59.0 %



Site : Chamber

Condition : FCC_part 15 RE-Class C_30-1000MHz

EUT : W6M21910-19425

M/N:

Test Mode : TX 2457MHz

Note :

Polarization: *Horizontal*

Power : 120 Va.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
*	228.2766	50.51	peak	-9.26	41.25	46.00	100	210	-4.75	
	945.5711	33.06	peak	4.13	37.19	46.00	100	60	-8.81	



Address: 6F., No. 58, Ln 188, Ruey Kuang Rd, Neihu, Taipei
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Radiated Emission Measurement

Operator: Sky

File : 1_ANT+_2457_Below

Data : #2

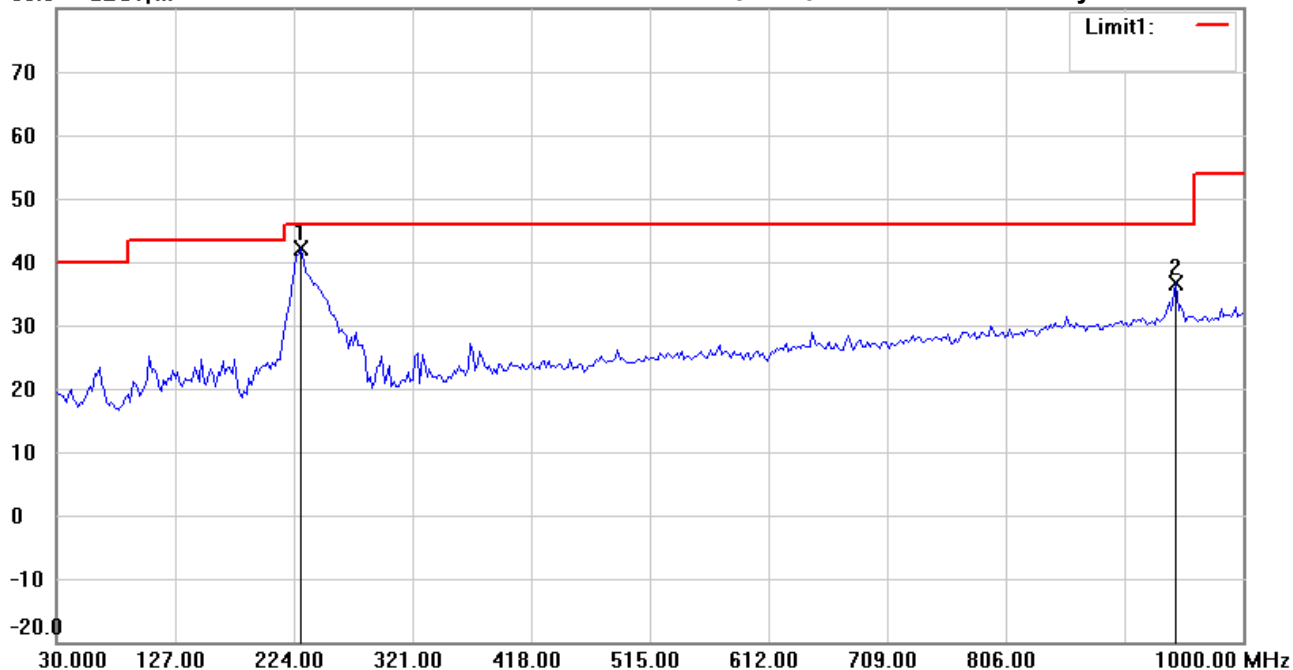
Date: 1/30/2020

Temperature: 21.0 °C

80.0 dBuV/m

Time: 1:18:42 PM

Humidity: 59.0 %



Site : Chamber

Condition : FCC_part 15 RE-Class C_30-1000MHz

EUT : W6M21910-19425

M/N:

Test Mode : TX 2457MHz

Note :

Polarization: Vertical

Power : 120 Va.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
*	230.2204	51.11	peak	-9.06	42.05	46.00	100	310	-3.95	
	945.5711	32.42	peak	4.13	36.55	46.00	100	15	-9.45	

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



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Radiated Emission Measurement

Operator: Sky

File : 3

Data : #1

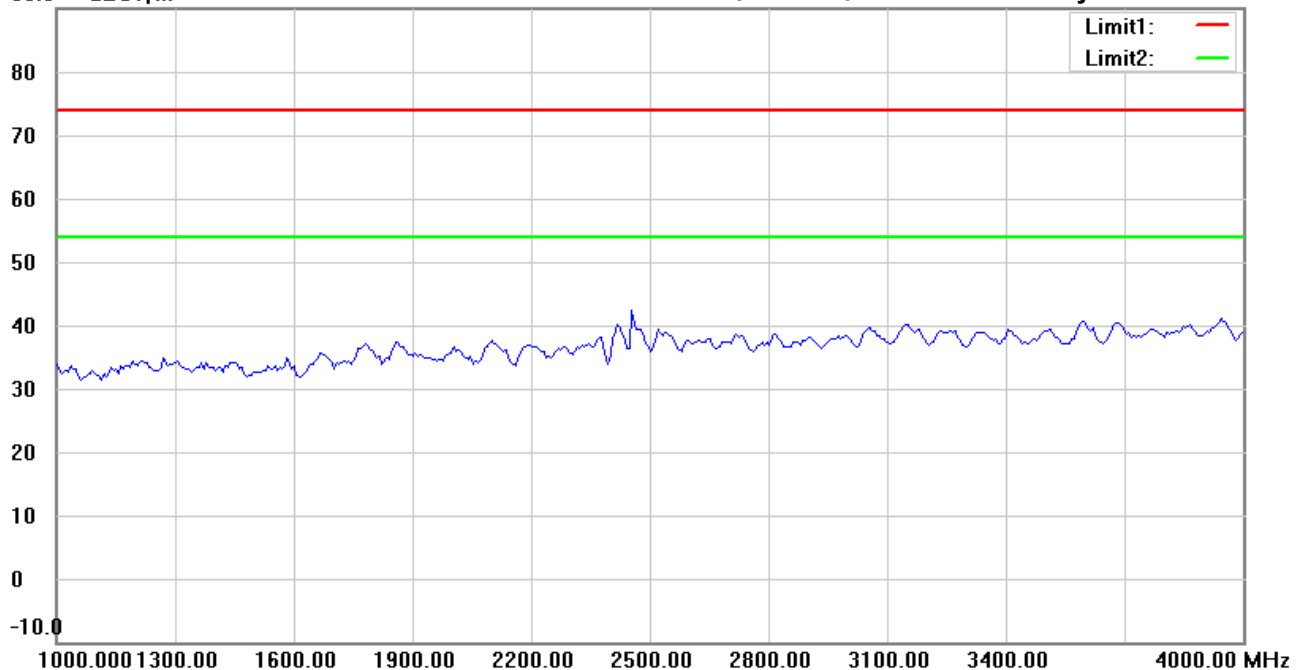
Date: 1/15/2020

Temperature: 21.7 °C

90.0 dBuV/m

Time: 11:42:37 AM

Humidity: 57.0 %



Site : Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M21910-19425

M/N:

Test Mode : TX 2457MHz

Note :

Polarization: **Horizontal**

Power : 120 Va.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
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*:Maximum data x:Over limit !:over margin



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Radiated Emission Measurement

Operator: Sky

File : 3

Data : #6

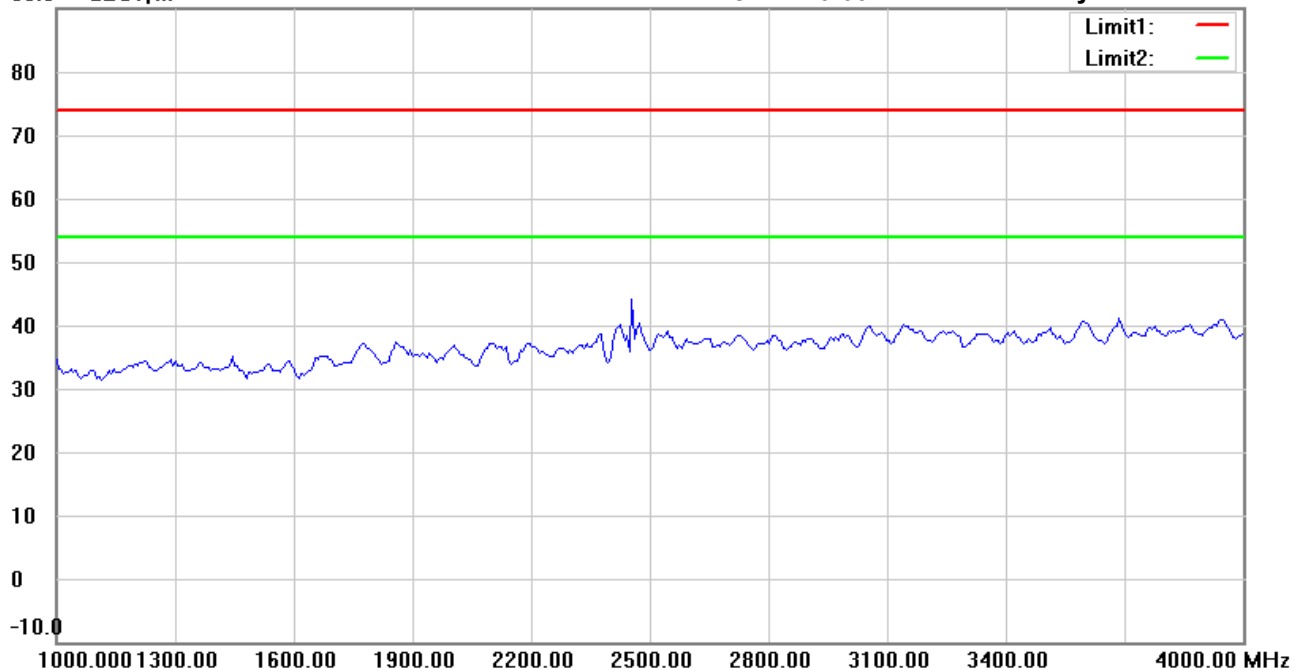
Date: 1/15/2020

Temperature: 21.7 °C

90.0 dBuV/m

Time: 11:46:09 AM

Humidity: 57.0 %



Site : Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M21910-19425

M/N:

Test Mode : TX 2457MHz

Note :

Polarization: Vertical

Power : 120 Va.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
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*:Maximum data x:Over limit !:over margin



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Radiated Emission Measurement

Operator: Sky

File : 3

Data : #2

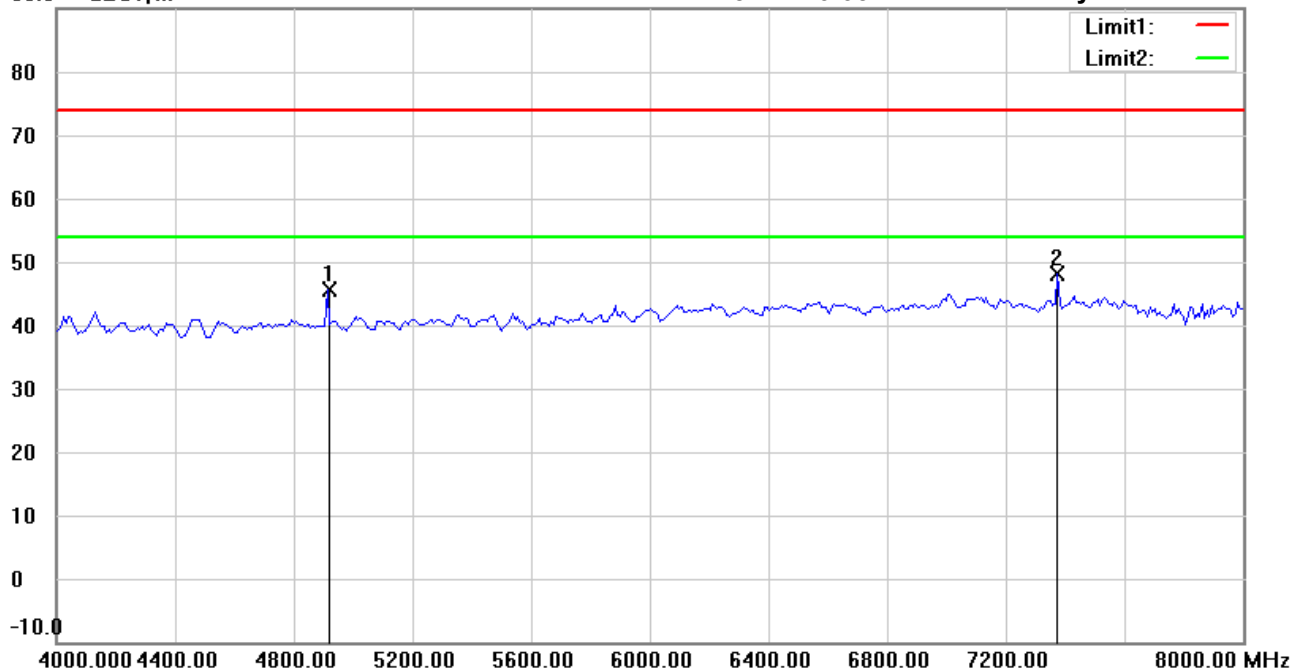
Date: 1/15/2020

Temperature: 21.7 °C

90.0 dBuV/m

Time: 11:43:38 AM

Humidity: 57.0 %



Site : Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M21910-19425

M/N:

Test Mode : TX 2457MHz

Note :

Polarization: **Horizontal**

Power : 120 Va.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
	4913.828	47.11	peak	-1.55	45.56	74.00	150	255	-28.44	
*	7374.749	44.33	peak	3.68	48.01	74.00	150	65	-25.99	

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



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Radiated Emission Measurement

Operator: Sky

File :3

Data :#7

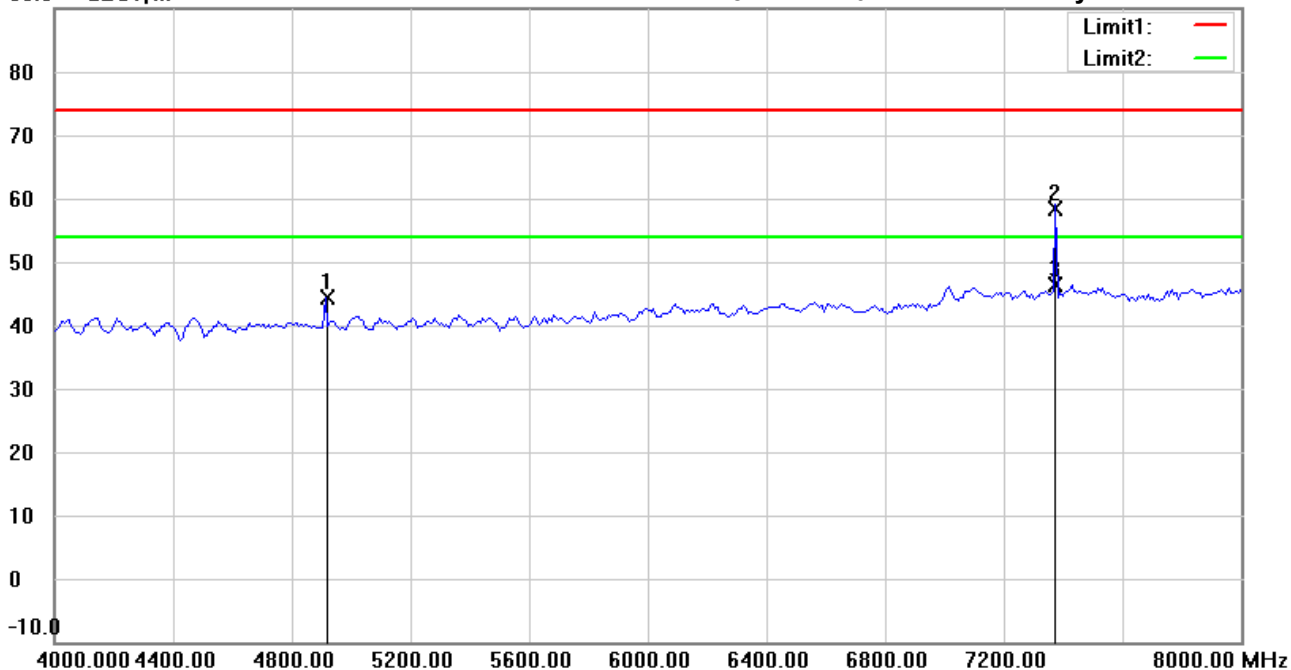
Date: 1/15/2020

Temperature: 21.7 °C

90.0 dBuV/m

Time: 11:47:10 AM

Humidity: 57.0 %



Site : Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M21910-19425

M/N:

Test Mode : TX 2457MHz

Note :

Polarization: **Vertical**

Power : 120 Va.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
	4913.828	45.86	peak	-1.55	44.31	74.00	150	190	-29.69	
	7369.934	54.84	peak	3.66	58.50	74.00	150	90	-15.50	
*	7369.934	42.70	AVG	3.66	46.36	54.00	150	90	-7.64	

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



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Radiated Emission Measurement

Operator: Sky

File : 3

Data : #3

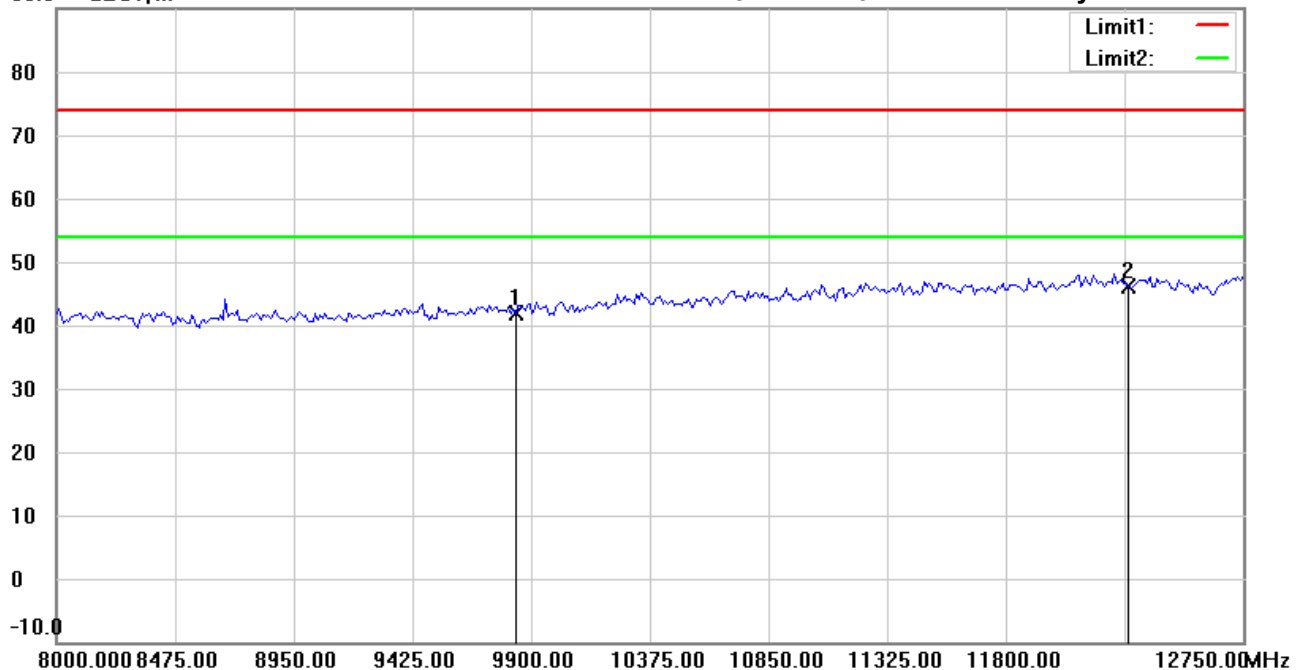
Date: 1/15/2020

Temperature: 21.7 °C

90.0 dBuV/m

Time: 11:44:45 AM

Humidity: 57.0 %



Site : Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M21910-19425

M/N:

Test Mode : TX 2457MHz

Note :

Polarization: **Horizontal**

Power : 120 Va.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
	9828.000	34.90	peak	6.90	41.80	74.00	150	315	-32.20	
*	12285.000	33.83	peak	12.23	46.06	74.00	150	10	-27.94	

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



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Radiated Emission Measurement

Operator: Sky

File : 3

Data : #8

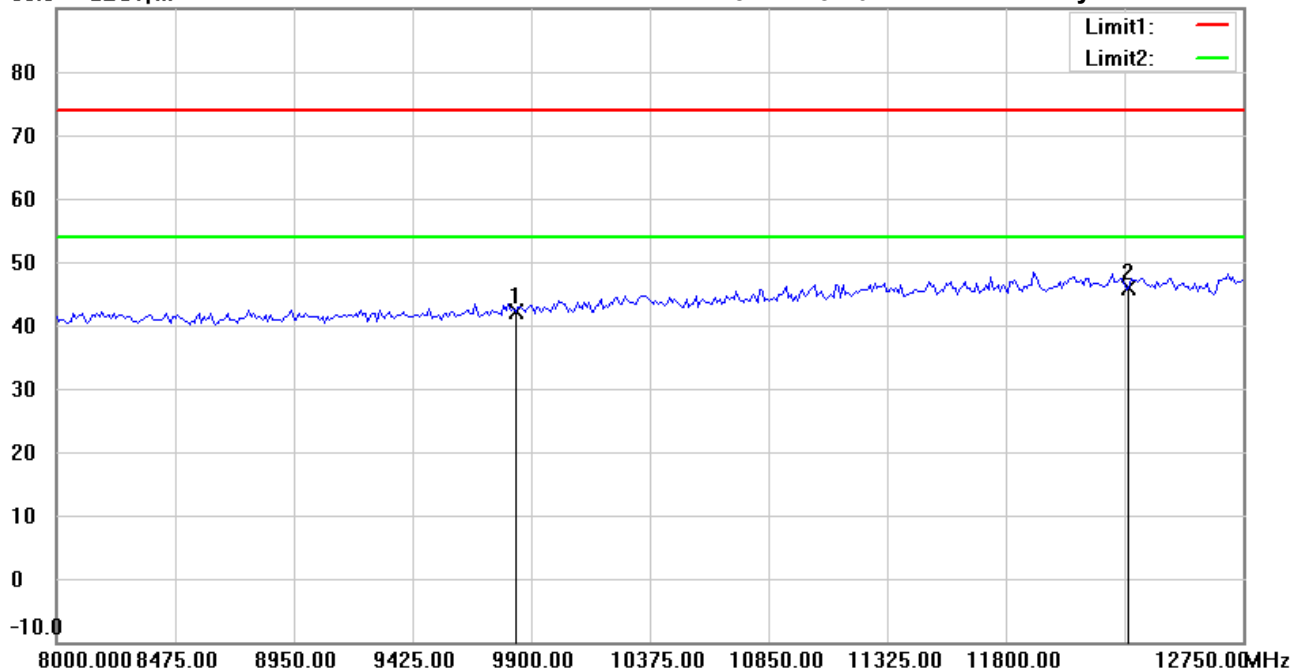
Date: 1/15/2020

Temperature: 21.7 °C

90.0 dBuV/m

Time: 11:48:10 AM

Humidity: 57.0 %



Site : Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M21910-19425

M/N:

Test Mode : TX 2457MHz

Note :

Polarization: Vertical

Power : 120 Va.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
	9828.000	35.28	peak	6.90	42.18	74.00	150	225	-31.82	
*	12285.000	33.71	peak	12.23	45.94	74.00	150	315	-28.06	

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



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Radiated Emission Measurement

Operator: Sky

File :3

Data :#4

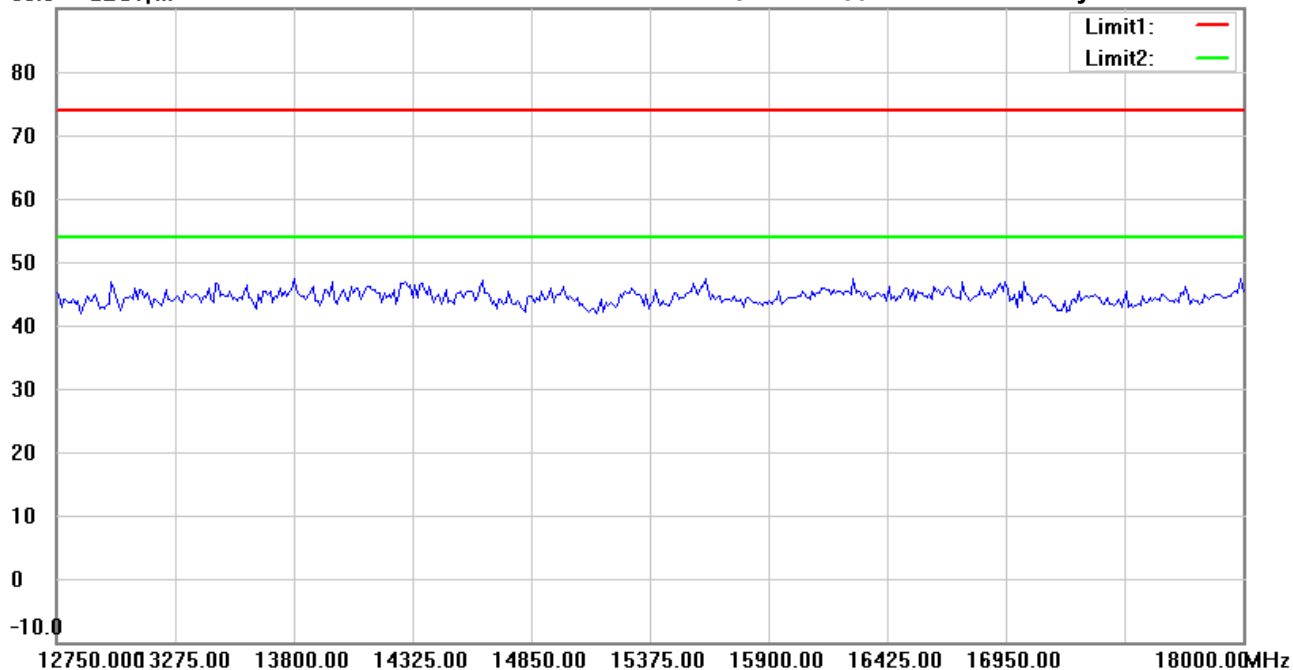
Date: 1/15/2020

Temperature: 21.7 °C

90.0 dBuV/m

Time: 11:44:59 AM

Humidity: 57.0 %



Site : Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M21910-19425

M/N:

Test Mode : TX 2457MHz

Note :

Polarization: Horizontal

Power : 120 Va.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
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*:Maximum data x:Over limit !:over margin



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Radiated Emission Measurement

Operator: Sky

File :3

Data :#9

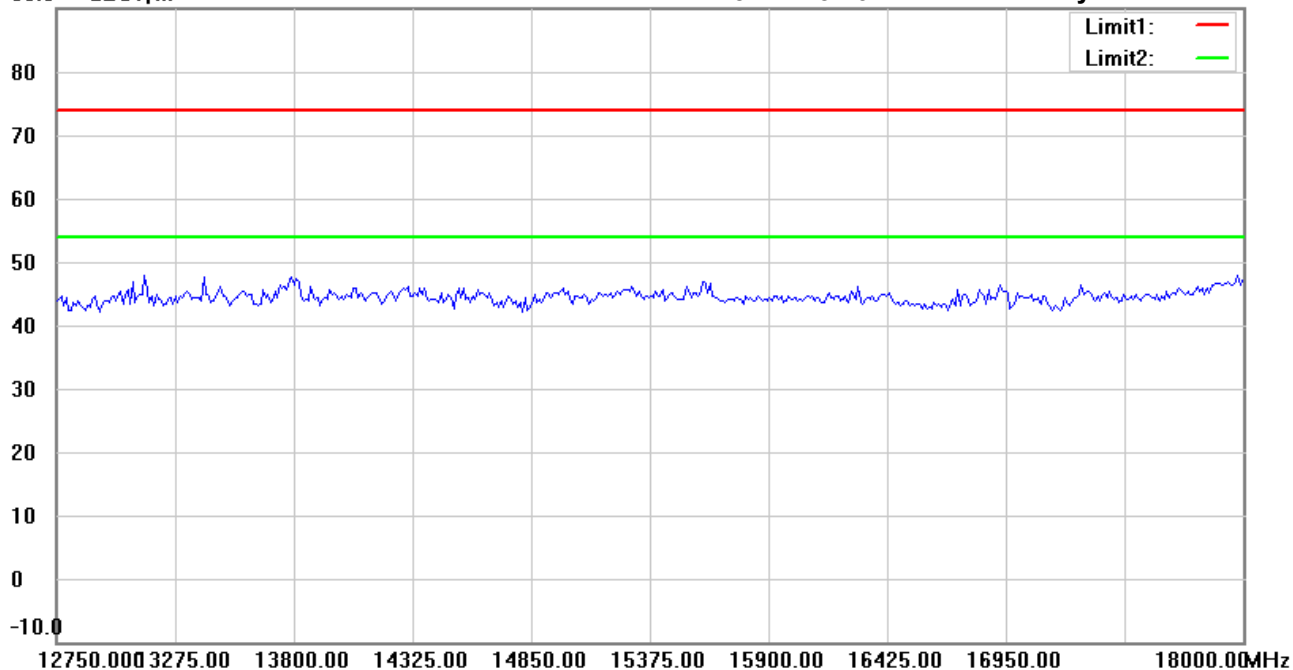
Date: 1/15/2020

Temperature: 21.7 °C

90.0 dBuV/m

Time: 11:48:23 AM

Humidity: 57.0 %



Site : Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M21910-19425

M/N:

Test Mode : TX 2457MHz

Note :

Polarization: Vertical

Power : 120 Va.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
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*:Maximum data x:Over limit !:over margin



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Radiated Emission Measurement

Operator: Sky

File :3

Data :#5

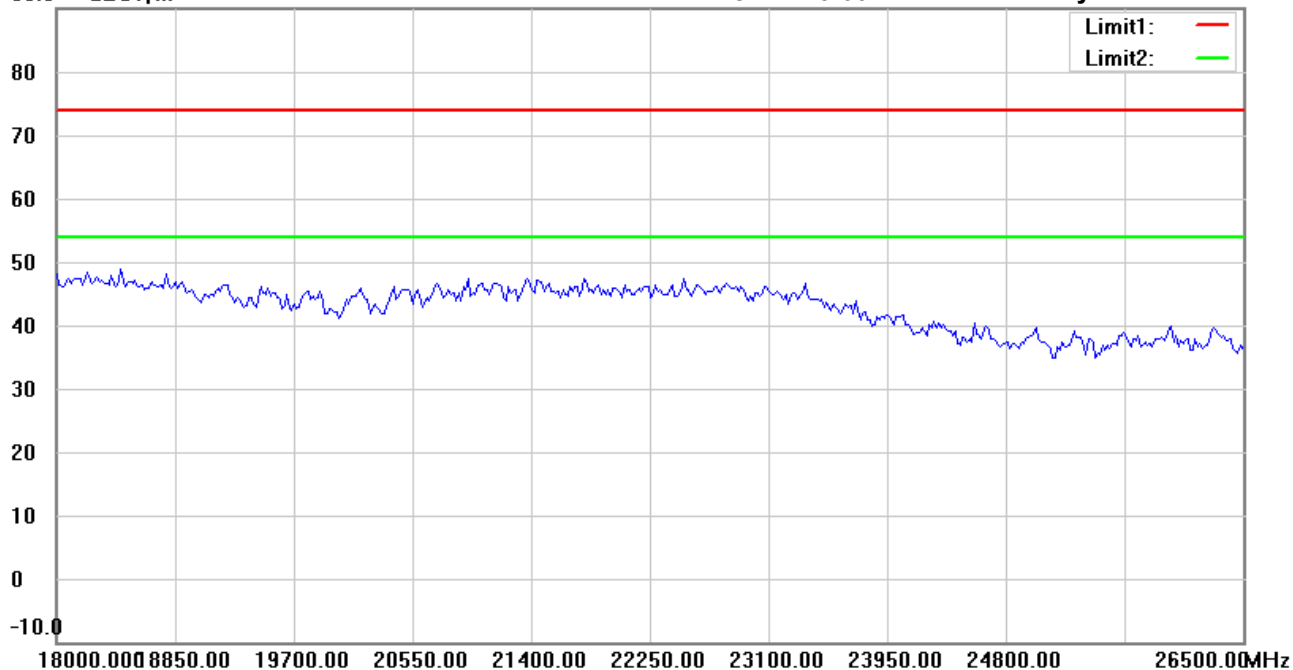
Date: 1/15/2020

Temperature: 21.7 °C

90.0 dBuV/m

Time: 11:45:09 AM

Humidity: 57.0 %



Site : Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M21910-19425

M/N:

Test Mode : TX 2457MHz

Note :

Polarization: Horizontal

Power : 120 Va.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
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*:Maximum data x:Over limit !:over margin



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Radiated Emission Measurement

Operator: Sky

File : 3

Data : #10

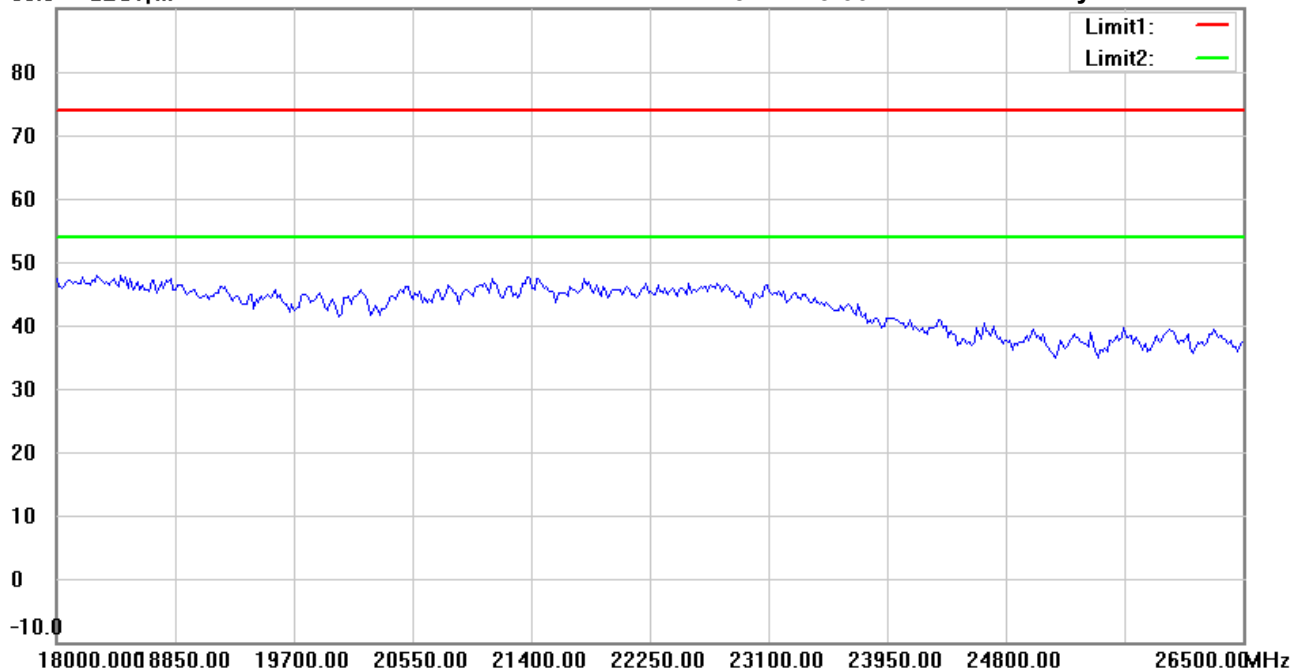
Date: 1/15/2020

Temperature: 21.7 °C

90.0 dBuV/m

Time: 11:48:33 AM

Humidity: 57.0 %



Site : Chamber

Condition : FCC_part 15 RE-Class C_Above 1GHz_PK

EUT : W6M21910-19425

M/N:

Test Mode : TX 2457MHz

Note :

Polarization: *Vertical*

Power : 120 Va.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
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*:Maximum data x:Over limit !:over margin