

**FCC PART 90 TEST REPORT**

**for**

**RF DATA RADIO**

**Model No.: 52-7085UE5**

**FCC ID: L9N-7085NUE5**

**of**

Applicant: **AES Corporation**

Address: **285 Newbury Street, Peabody, MA01960 USA**

Tested and Prepared

by

**Worldwide Testing Services (Taiwan) Co., Ltd.**

**FCC Registration No.: TW1477, TW0020, TW1072**

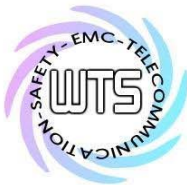
**Industry Canada filed test laboratory Reg. No. IC 5679A-1, IC 5107A-1**

**A2LA Accredited No.: 2732.01**



**Report No.: W6M21808-18343-C-1**

6F, NO. 58, LANE 188, RUEY-KUANG RD., NEIHU TAIPEI 114, TAIWAN, R.O.C.  
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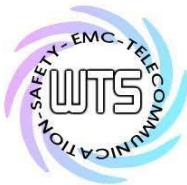
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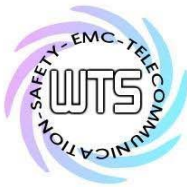
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**1. General Information**

**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.

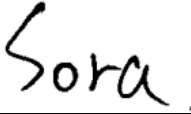
Neither is there any guarantee that such a test sample will interwork with other genuinely open systems. The existence of the tests nevertheless provides the confidence that the test sample possesses the qualities as maintained and that its performance generally conforms to representative cases of communications equipment.

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

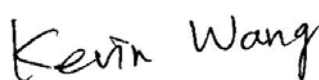
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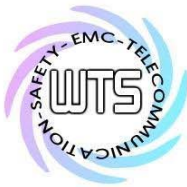
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**Tester:**

September 12, 2018	Sora Kuo	
_____	_____	_____
Date	WTS-Lab.	Name
		Signature

**Technical responsibility for area of testing:**

September 12, 2018	Kevin Wang	
_____	_____	_____
Date	WTS	Name
		Signature



# **Worldwide Testing Services(Taiwan) Co., Ltd.**

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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.)  
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. IC 5679A-1, IC 5107A-1

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

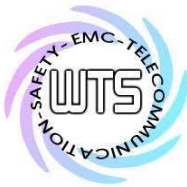
Name: ./.  
Accredited number: ./.  
Street: ./.  
Town: ./.  
Country: ./.  
Telephone: ./.  
Fax: ./.

### **1.3 Details of approval holder**

Name: AES Corporation  
Street: 285 Newbury Street, Peabody,  
City: MA01960  
Country: USA  
Telephone: 978-5357310  
Fax: 978-5357313

### **1.4 Application details**

Date of receipt of test item: August 27, 2018  
Date of test: from August 28, 2018 to September 11, 2018



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**1.5 General information of Test item**

Type of test item: RF DATA RADIO  
Model Number: 52-7085UE5  
Brand Name: ./.  
Multi-listing model number: ./.  
Photos: See appendix

**Technical data**

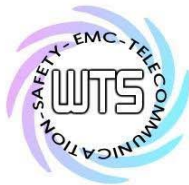
Operating frequency band: 406-430 MHz, 440-450 MHz  
Sample tested frequency: 406 MHz, 418MHz, 430 MHz  
440 MHz, 445 MHz, 450 MHz  
Channel spacing: 12.5 kHz, 25 kHz  
Type of modulation: FM  
Designation of emission: 16K0F3E / 11K0F3E  
(406MHZ~430MHZ , 440MHZ~450MHZ)  
Antenna Type / Gain: Dipole antenna / 3 dBi  
Connection of Antenna:  detachable       not detachable  
Power Rating: 13.6 Vd.c., 2A  
Operation modes: Simplex

**Manufacturer: (if applicable)**

Name: Hermes Electronics Co., Ltd  
Street: No 185-1, 4FL, 38th Road, Taichung Industrial Park,  
Town: Taichung (407)  
Country: Taiwan

**1.6 Test standards**

Technical standard: FCC RULES PART 90 (2017-10)



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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 as specified in 3 were ascertained in the course of the tests performed.

**2.2 Test environment**

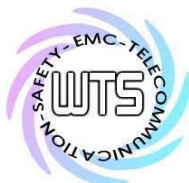
Relative humidity content: 20 ... 75 %  
 Air pressure: 86-103 KPa

Test item Name	Uncertainty
Estimation Result of Uncertainty of Conducted Emission	Expanded Uncertainty : 1.54 dB
Estimation Result of Uncertainty of Radiated Emission(3M)	Expanded Uncertainty : 0.009-30 MHz : 2.17 dB 30-1000 MHz : 3.57 dB 1-18 GHz : 2.60 dB 18-40 GHz : 2.58 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 : 1.01 dB
Estimation Result of Uncertainty of Conducted Spurious Emission Measurement Conducted spurious emission 、 Spectrum emission mask	Expanded Uncertainty : 1.01 dB
Estimation Result of Uncertainty of Conducted Spurious Emission Measurement Conducted spurious emission	Expanded Uncertainty : 1.01 dB
Estimation Result of Uncertainty of EIRP Measurement EIRP 、 ERP 、 Output power(dBm) 、 Radiated spurious emission(dBm), Receiver spurious radiations (≥30 MHz)	Expanded Uncertainty : 30-200MHz : 2.32 dB 200-1000MHz : 2.30 dB 1-18GHz : 3.25 dB 18-40GHz : 2.89 dB

**2.3 Description of Tested System**

The EUT was tested with the Accessories or Peripherals Listed below:

Equipment	Model No.	Series No.	Software	Cable information	Note
--	--	--	--	--	--
--	--	--	--	--	--



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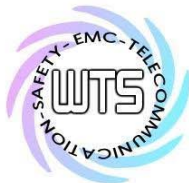
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Explanation: The EUT was configured as stand-alone device, and there are no accessories or peripherals during the test.

## 2.4 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	2018/5/30	2019/5/29
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	2017/10/26	2018/10/25
ETSTW-CE 006	IMPULSBEGRENZER PULSE LIMITER	ESH3-Z2	100226	R&S	2018/8/21	2019/8/20
ETSTW-CE 008	HF-EICHLITUNG 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	2018/7/13	2019/7/12
ETSTW-CE 016	TWO-LINE V-NETWORK	ENV216	100050	R&S	2018/8/21	2019/8/20
ETSTW-CE 028	MXE EMI Receiver	N9038A	MY53220110	Agilent	2018/7/16	2019/7/15
ETSTW-RE 003	EMI TEST RECEIVER	ESI 26	831438/001	R&S	2018/5/30	2019/5/29
ETSTW-RE 004	EMI TEST RECEIVER	ESI 40	832427/004	R&S	2018/5/21	2019/5/20
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	2018/7/13	2019/7/12
ETSTW-RE 027	Passive Loop Antenna	6512	00034563	ETS-Lindgren	2018/7/12	2019/7/11
ETSTW-RE 030	Double-Ridged Guide Horn Antenna	3117	00035224	ETS-Lindgren	2018/3/26	2019/3/25
ETSTW-RE 042	Biconical Antenna	HK116	100172	R&S	2018/1/23	2019/1/22
ETSTW-RE 043	Log-Periodic Dipole Antenna	HL223	100166	R&S	2018/4/13	2019/4/12
ETSTW-RE 044	Log-Periodic Antenna	HL050	100094	R&S	2018/4/26	2019/4/25
ETSTW-RE 045	ESA-E SERIES SPECTRUM ANALYZER	E4404B	MY45111242	Agilent	Pre-test Use	
ETSTW-RE 050	Attenuator 10dB	50HF-010-1	None	JFW	2018/3/1	2019/2/28
ETSTW-RE 051	Attenuator 6dB	50HF-006-1	None	JFW	2018/3/1	2019/2/28
ETSTW-RE 053	Attenuator 3dB	50HF-003-1	None	JFW	2018/3/1	2019/2/28
ETSTW-RE 055	SPECTRUM ANALYZER	FSU 26	200074	R&S	2018/3/6	2019/3/5
ETSTW-RE 060	Attenuator 30dB	5015-30	F651012z-01	ATM	2018/3/1	2019/2/28
ETSTW-RE 062	Amplifier Module	CHC 2	None	KMIC	2018/3/30	2019/3/29
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	2018/9/7	2019/9/6
ETSTW-RE 088	SOLID STATE AMPLIFIER	KMA180265A01	99057	KMIC	2017/9/19	2018/9/18
ETSTW-RE 091	Match Pad	MDCS1500	None	WOKEN	2018/4/16	2019/4/15
ETSTW-RE 099	DC Block	50DB-007-1	None	JFW	2018/2/23	2019/2/22

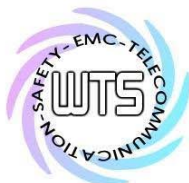




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ETSTW-RE 112	AC POWER SOURCE	TFC-1005	T-0A023536	T-Power	Function test	
ETSTW-RE 115	2.4GHz Notch Filter	N0124411	473874	MICROWAVE CIRCUITS	2018/1/15	2019/1/14
ETSTW-RE 120	RF Player	MP9200	MP9210-111022	ADIVIC	Function test	
ETSTW-RE 122	SIGNAL GENERATOR	SMF100A	102149	R&S	2018/5/29	2019/5/28
ETSTW-RE 125	5GHz Notch filter	5NSL11-5200/E221.3-O/O	1	K&L Microwave	2018/8/8	2019/8/7
ETSTW-RE 126	5GHz Notch filter	5NSL12-5800/E221.3-O/O	1	K&L Microwave	2018/8/8	2019/8/7
ETSTW-RE 127	RF Switch Box	RFS-01	None	WTS	2018/2/27	2019/2/26
ETSTW-RE 128	5.3GHz Notch filter	N0153001	SN487233	Microwave Circuits	2018/8/8	2019/8/7
ETSTW-RE 129	5.5GHz Notch filter	N0555984	SN487234	Microwave Circuits	2018/8/8	2019/8/7
ETSTW-RE 130	Handheld RF Spectrum Analyzer	N9340A	CN0147000204	Agilent	Pre-test Use	
ETSTW-RE 142	Amplifier	8447D	2805A03378	Agilent	2018/3/30	2019/3/29
ETSTW-RE 147	Bi-log Hybrid Antenna	MCTD 2786B	BLB16M04005	ETC	2018/3/23	2019/3/22
ETSTW-RE 151	Thermohygrometer	608-h1	45104376	TESTO	2018/8/17	2019/8/16
ETSTW-EMI 011	USB Compact Modulator	SFC-U	101689	R&S	2018/5/10	2019/5/9
ETSTW-EMS 008	Exposure Level Tester	ELT-400	G-0009	Narda	2018/7/17	2019/7/16
ETSTW-GSM 002	Universal Radio Communication Tester	CMU 200	109439	R&S	2018/2/27	2019/2/26
ETSTW-GSM 003	Radio Communication Analyzer	MT8820C	6201342073	Anritsu	2018/3/2	2019/3/1
ETSTW-GSM 004	Wideband Radio Communication Tester	CMW500	128092	R&S	2017/10/16	2018/10/15
ETSTW-GSM 019	Band Reject Filter	WRCTF824/849-822/851-40 /12+9SS	3	WI	2018/1/11	2019/1/10
ETSTW-GSM 020	Band Reject Filter	WRCD1747/1748-1743/1752-32/5SS	1	WI	2018/1/11	2019/1/10
ETSTW-GSM 021	Band Reject Filter	WRCD1879.5/1880.5-1875.5/1884.5-32/5SS	3	WI	2018/1/11	2019/1/10
ETSTW-GSM 022	Band Reject Filter	WRCT901.9/903.1-904.25-50/8SS	1	WI	2018/1/11	2019/1/10
ETSTW-GSM 023	Power Divider	4901.19.A	None	SUHNER	2018/9/7	2019/9/6
ETSTW-GSM 024	Radio Communication Analyzer	MT8821C	None	Anritsu	2018/3/7	2019/3/6
ETSTW-GSM 025	Band Reject Filter	BRM19835	001	Micro-Tronics	2018/8/9	2019/8/8
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	2018/2/22	2019/2/21
ETSTW-Cable 017	BNC Cable	X Cable	B Cable 2	Schwarz beck	2018/2/22	2019/2/21
ETSTW-Cable 018	BNC Cable	Y Cable	B Cable 3	Schwarz beck	2018/2/22	2019/2/21
ETSTW-Cable 019	BNC Cable	Z Cable	B Cable 4	Schwarz beck	2018/2/22	2019/2/21
ETSTW-Cable 020	N TYPE Cable	OATS Cable 1	N30N30-L335-15M	JYE BAO CO.,LTD.	2018/7/2	2019/7/1
ETSTW-Cable 026	Microwave Cable	SUCOFLEX 104	279075	HUBER+SUHNER	2018/2/27	2019/2/26
ETSTW-Cable 027	Microwave Cable	SUCOFLEX 104	279083	HUBER+SUHNER	2018/5/14	2019/5/13
ETSTW-Cable 028	Microwave Cable	FA147A0015M2020	30064-2	UTIFLEX	2017/9/19	2018/9/18
ETSTW-Cable 029	Microwave Cable	FA147A0015M2020	30064-3	UTIFLEX	2017/9/19	2018/9/18

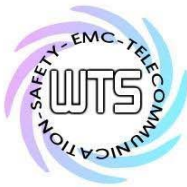


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ETSTW-Cable 030	Microwave Cable	SUCOFLEX 104 (S_Cable 9)	279067	HUBER+SUHNER	2018/2/27	2019/2/26
ETSTW-Cable 031	Microwave Cable	SUCOFLEX 104 (S_Cable 10)	238092	HUBER+SUHNER	2018/3/30	2019/3/29
ETSTW-Cable 043	Microwave Cable	SUCOFLEX 104	317576	HUBER+SUHNER	2018/3/30	2019/3/29
ETSTW-Cable 048	Microwave Cable	SUCOFLEX 104	325519	HUBER+SUHNER	2018/3/30	2019/3/29
ETSTW-Cable 058	Microwave Cable	SUCOFLEX 104	none	HUBER+SUHNER	2018/6/9	2019/6/8
ETSTW-Cable 064	Microwave Cable	SUCOFLEX 104	MY28891	HUBER+SUHNER	2018/3/30	2019/3/29
ETSTW-Cable 066	SMA type cable	32022	None	ASTROLAB	2018/8/21	2019/8/20
ETSTW-Cable 071	N TYPE CABLE	EMCCFD400-NM- NM-25000	170239	EMCI	2018/6/9	2019/6/8
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	

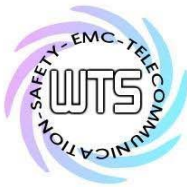


## **2.5 General Test Procedure**

**POWER LINE CONDUCTED INTERFERENCE:** The procedure used was ANSI STANDARD C63.10-2013 using a 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 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 100 kHz 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.

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

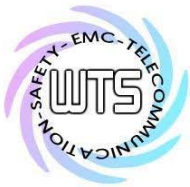


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**3. Test results (enclosure)**

TEST CASE	Para. Number	Required	Test passed	Test failed
Modulation Characteristics	2.1047(a) (b); 2.1033(c)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Necessary Bandwidth	90.209	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Frequency stability.	90.213	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Transmitter Output Power	90.205	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Emission masks	90.210	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Transmitter Spurious Radiated Emission	90.210	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Transmitter Spurious Conducted Emission	90.210	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Transient frequency behavior	90.214	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Receiver Radiated Spurious Emission	FCC part 15B	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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FCC ID: L9N-7085NUE5

#### **4. Modulation Characteristics**

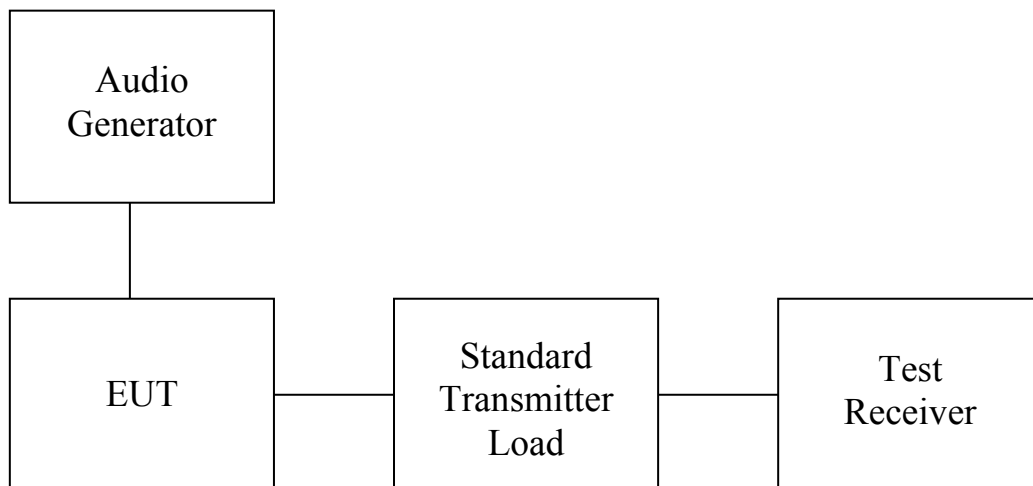
##### 4.1 Test procedure

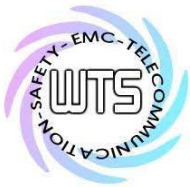
Modulation limiting is the transmitter circuit's ability to limit the transmitter from producing deviations in excess of rated system deviation.

The audio signal generator is connected to the audio input of the EUT with its full rating.

The modulation response is measured at certain modulation frequencies, related to 1000Hz reference signal. Tests are performed for positive and negative modulation.

##### 4.2 Test Setup





Registration number: W6M21808-18343-C-1  
FCC ID: L9N-7085NUE5

4.3 Test results

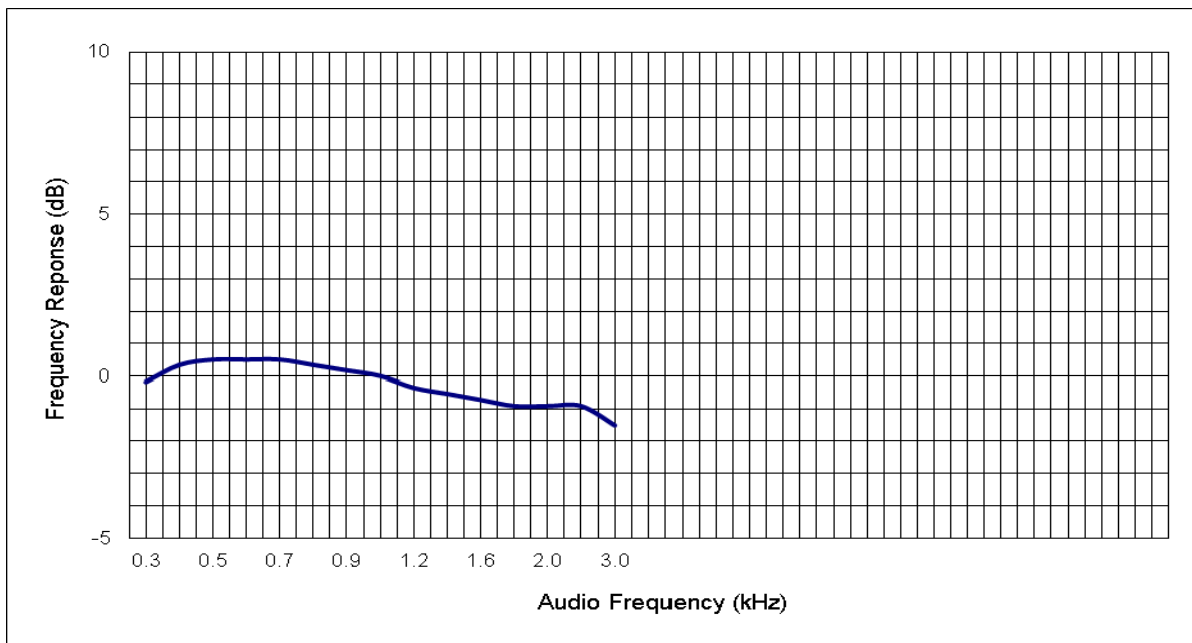
4.3.1 Audio Frequency Response

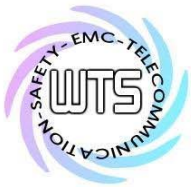
Rule Part No.: Part 2.1047(a)(b) Method of Measurement: The audio frequency response was measured in accordance with TIA/EIA Specification 603 with no exception. A curve or equivalent data showing the frequency response of the audio modulating circuit over a range of 300 – 3000Hz shall be submitted. The audio frequency response curve is shown below.

Test Audio level 20mV

406 MHz

Audio Frequency (kHz)	A.R (dB)	F.D.
0.3	-0.175	0.49
0.4	0.341	0.52
0.5	0.506	0.53
0.6	0.506	0.53
0.7	0.506	0.53
0.8	0.341	0.52
0.9	0.172	0.51
1.0	0.000	0.50
1.2	-0.355	0.48
1.4	-0.537	0.47
1.6	-0.724	0.46
1.8	-0.915	0.45
2.0	-0.915	0.45
2.5	-0.915	0.45
3.0	-1.514	0.42



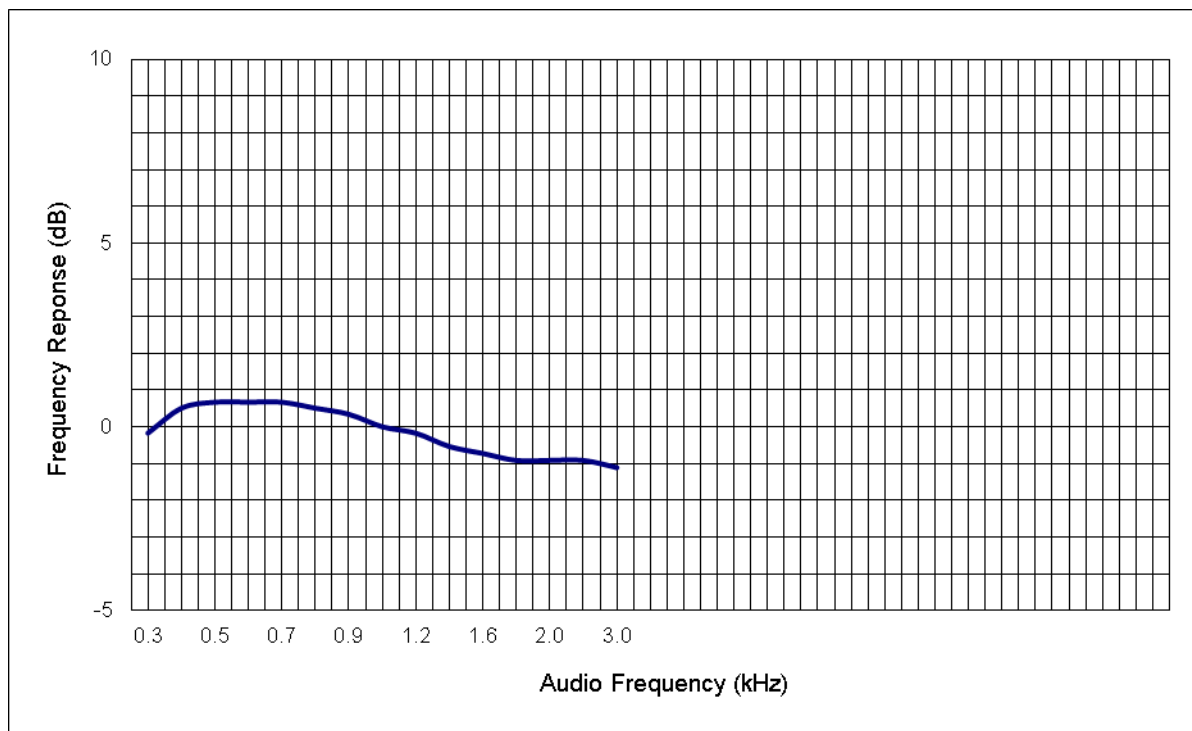


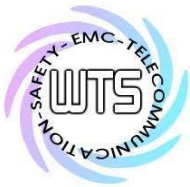
# Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M21808-18343-C-1  
FCC ID: L9N-7085NUE5

418 MHz

Audio Frequency (kHz)	A.R (dB)	F.D.
0.3	-0.175	0.49
0.4	0.506	0.53
0.5	0.668	0.54
0.6	0.668	0.54
0.7	0.668	0.54
0.8	0.506	0.53
0.9	0.341	0.52
1.0	0.000	0.50
1.2	-0.175	0.49
1.4	-0.537	0.47
1.6	-0.724	0.46
1.8	-0.915	0.45
2.0	-0.915	0.45
2.5	-0.915	0.45
3.0	-1.110	0.44





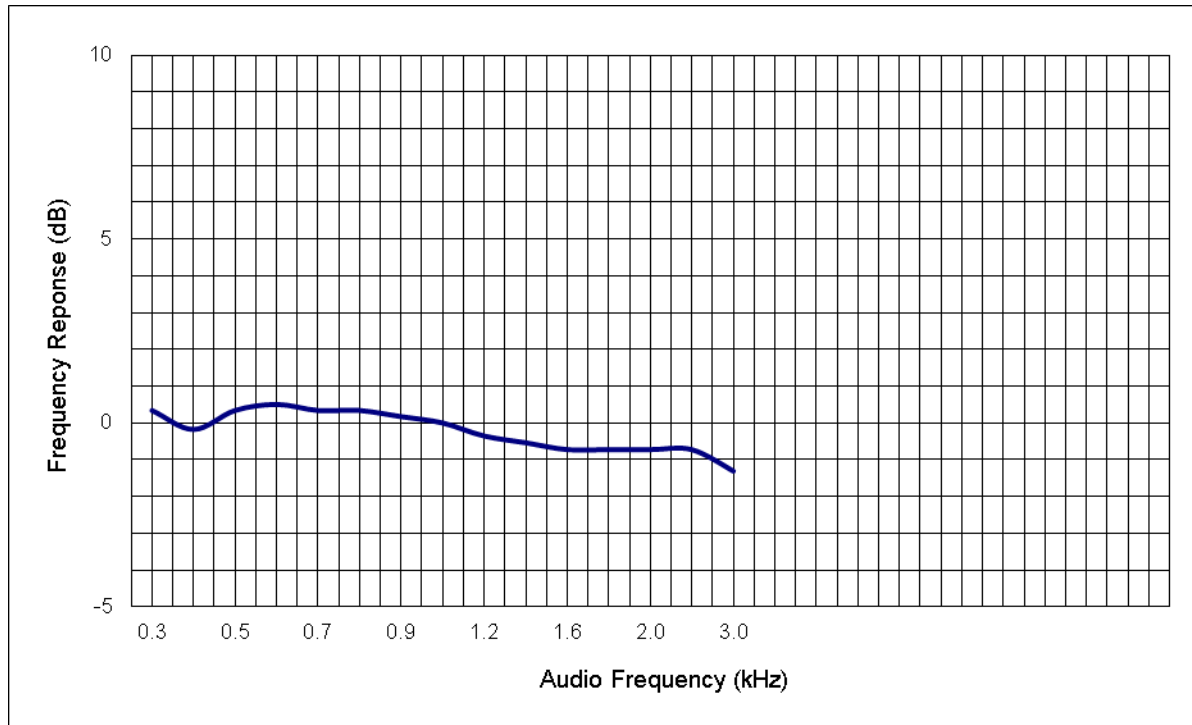
# Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M21808-18343-C-1

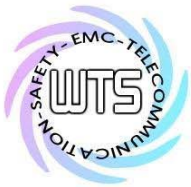
FCC ID: L9N-7085NUE5

430 MHz

Audio Frequency (kHz)	A.R (dB)	F.D.
0.3	0.341	0.52
0.4	-0.175	0.49
0.5	0.341	0.52
0.6	0.506	0.53
0.7	0.341	0.52
0.8	0.341	0.52
0.9	0.172	0.51
1.0	0.000	0.50
1.2	-0.355	0.48
1.4	-0.537	0.47
1.6	-0.724	0.46
1.8	-0.724	0.46
2.0	-0.724	0.46
2.5	-0.724	0.46
3.0	-1.310	0.43





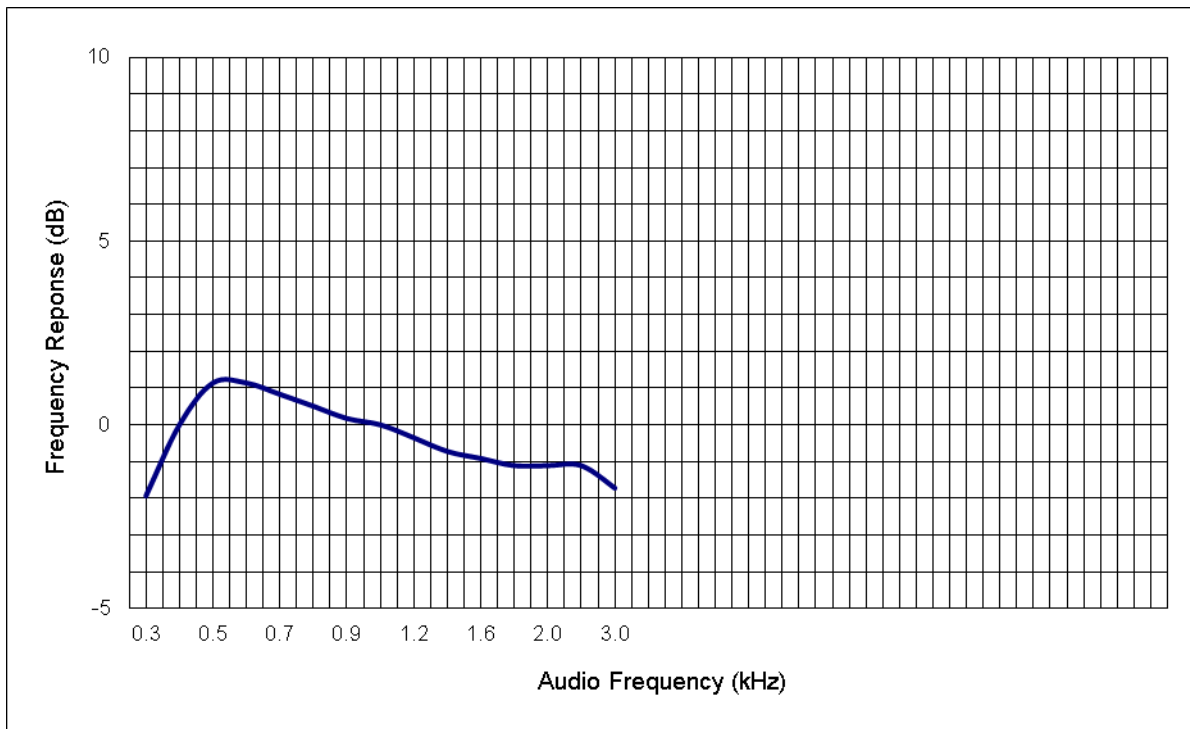


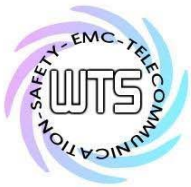
# Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M21808-18343-C-1  
 FCC ID: L9N-7085NUE5

440 MHz

Audio Frequency (kHz)	A.R (dB)	F.D.
0.3	-1.938	0.40
0.4	0.000	0.50
0.5	1.138	0.57
0.6	1.138	0.57
0.7	0.828	0.55
0.8	0.506	0.53
0.9	0.172	0.51
1.0	0.000	0.50
1.2	-0.355	0.48
1.4	-0.724	0.46
1.6	-0.915	0.45
1.8	-1.110	0.44
2.0	-1.110	0.44
2.5	-1.110	0.44
3.0	-1.724	0.41



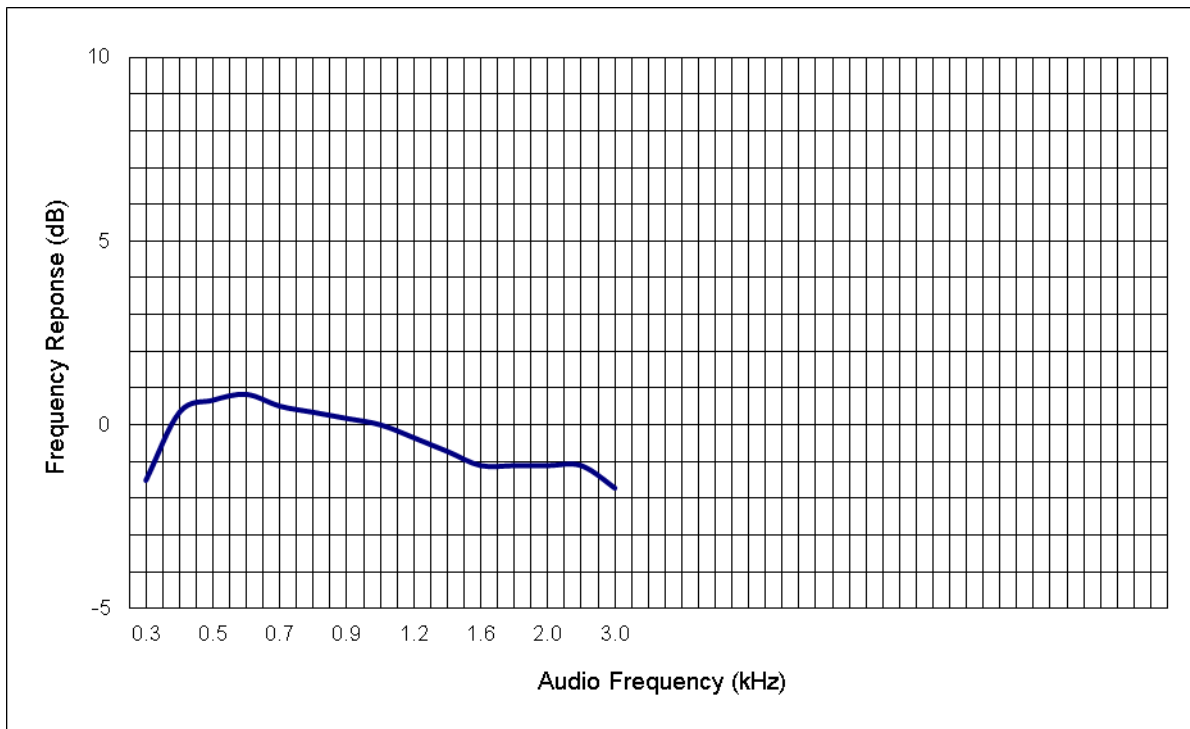


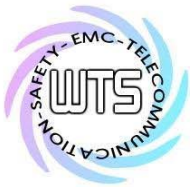
# Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M21808-18343-C-1  
 FCC ID: L9N-7085NUE5

445 MHz

Audio Frequency (kHz)	A.R (dB)	F.D.
0.3	-1.514	0.42
0.4	0.341	0.52
0.5	0.668	0.54
0.6	0.828	0.55
0.7	0.506	0.53
0.8	0.341	0.52
0.9	0.172	0.51
1.0	0.000	0.50
1.2	-0.355	0.48
1.4	-0.724	0.46
1.6	-1.110	0.44
1.8	-1.110	0.44
2.0	-1.110	0.44
2.5	-1.110	0.44
3.0	-1.724	0.41



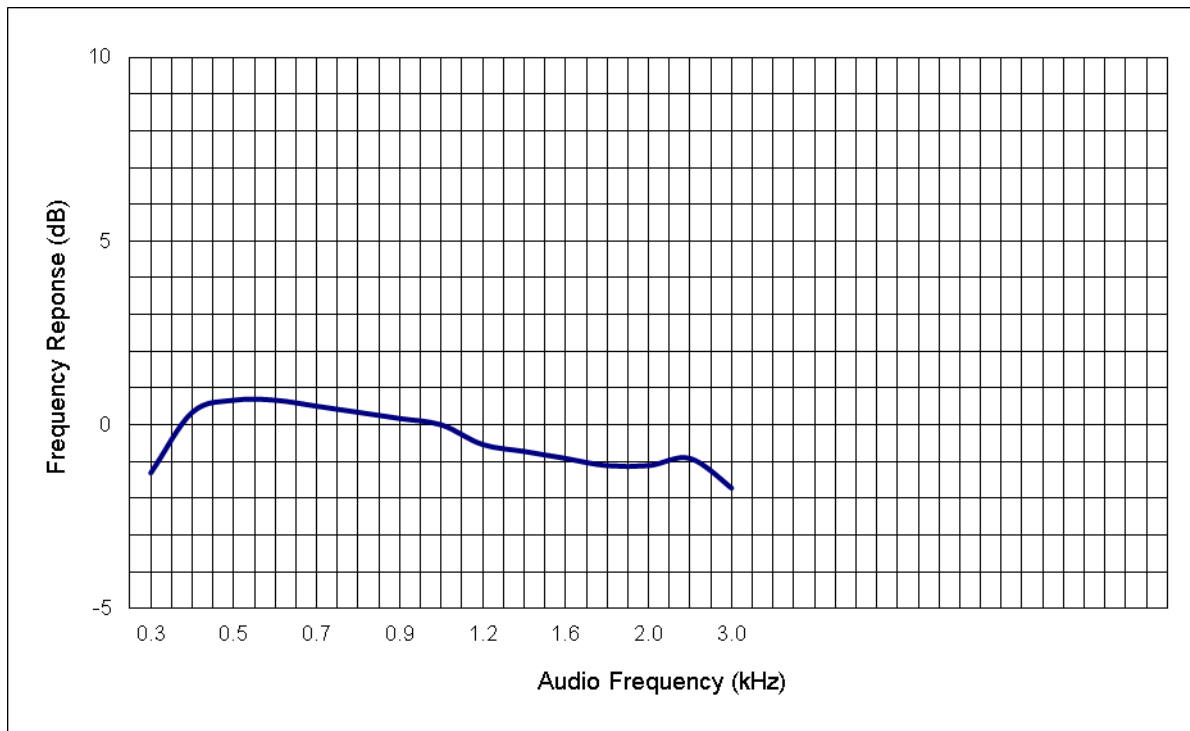


# Worldwide Testing Services(Taiwan) Co., Ltd.

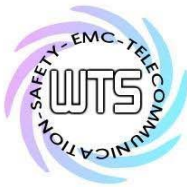
Registration number: W6M21808-18343-C-1  
FCC ID: L9N-7085NUE5

450 MHz

Audio Frequency (kHz)	A.R (dB)	F.D.
0.3	-1.310	0.43
0.4	0.341	0.52
0.5	0.668	0.54
0.6	0.668	0.54
0.7	0.506	0.53
0.8	0.341	0.52
0.9	0.172	0.51
1.0	0.000	0.50
1.2	-0.537	0.47
1.4	-0.724	0.46
1.6	-0.915	0.45
1.8	-1.110	0.44
2.0	-1.110	0.44
2.5	-0.915	0.45
3.0	-1.724	0.41



Test equipment used: ETSTW-RE 072



Registration number: W6M21808-18343-C-1  
 FCC ID: L9N-7085NUE5

4.3.2 AUDIO INPUT VERSUS MODULATION

Rule Part No.: Part 2.1047(b) & 90

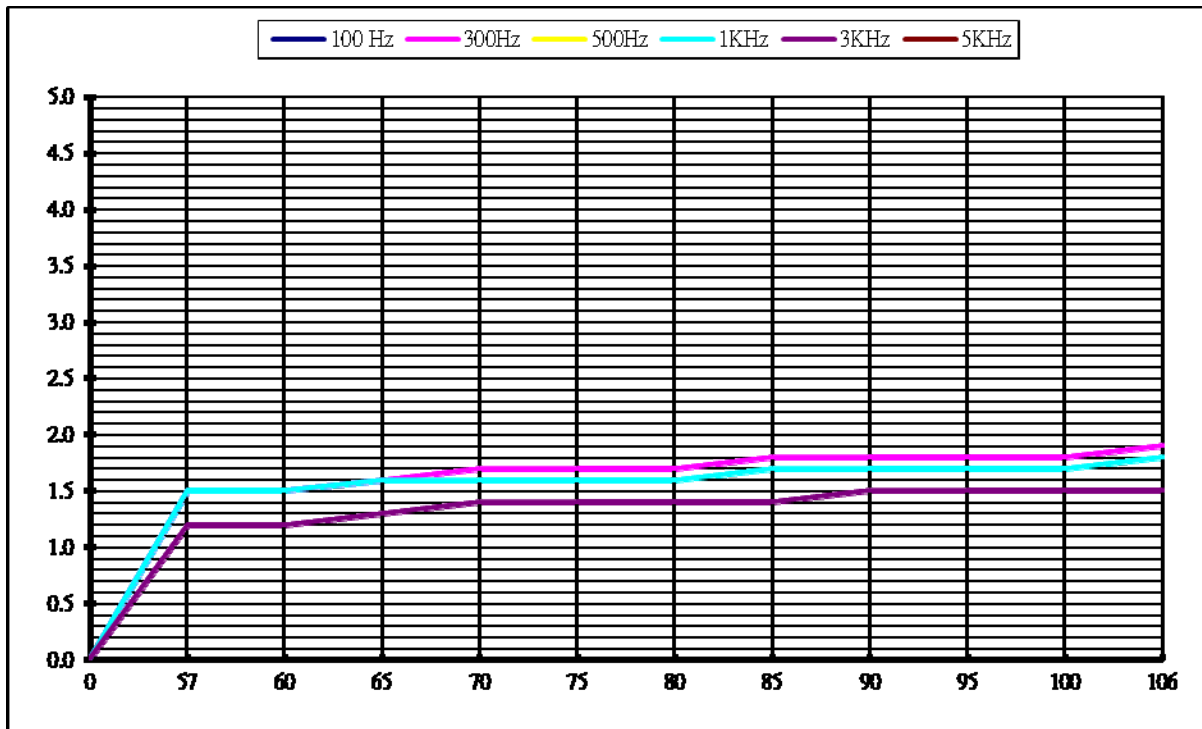
Test Requirements: Modulation cannot exceed 100%

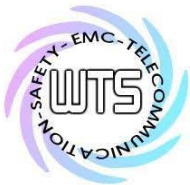
Method of Measurement: The audio input level needed for a particular percentage of modulation was measured in accordance with TIA/EIA Specification 603. The audio input curves versus modulation are shown below. Curves are provided for audio input frequencies of 300, 1000, and 3000 Hz.

EUT Max deviation: 2.5kHz 60% EUT Max deviation: 1.5kHz

406 MHz

Input Audio Level (mV)	100 Hz	300Hz	500Hz	1kHz	3kHz	5kHz
0	--	0.0	--	0.0	0.0	--
57	--	1.5	--	1.5	1.2	--
60	--	1.5	--	1.5	1.2	--
65	--	1.6	--	1.6	1.3	--
70	--	1.7	--	1.6	1.4	--
75	--	1.7	--	1.6	1.4	--
80	--	1.7	--	1.6	1.4	--
85	--	1.8	--	1.7	1.4	--
90	--	1.8	--	1.7	1.5	--
95	--	1.8	--	1.7	1.5	--
100	--	1.8	--	1.7	1.5	--
106	--	1.9	--	1.8	1.5	--



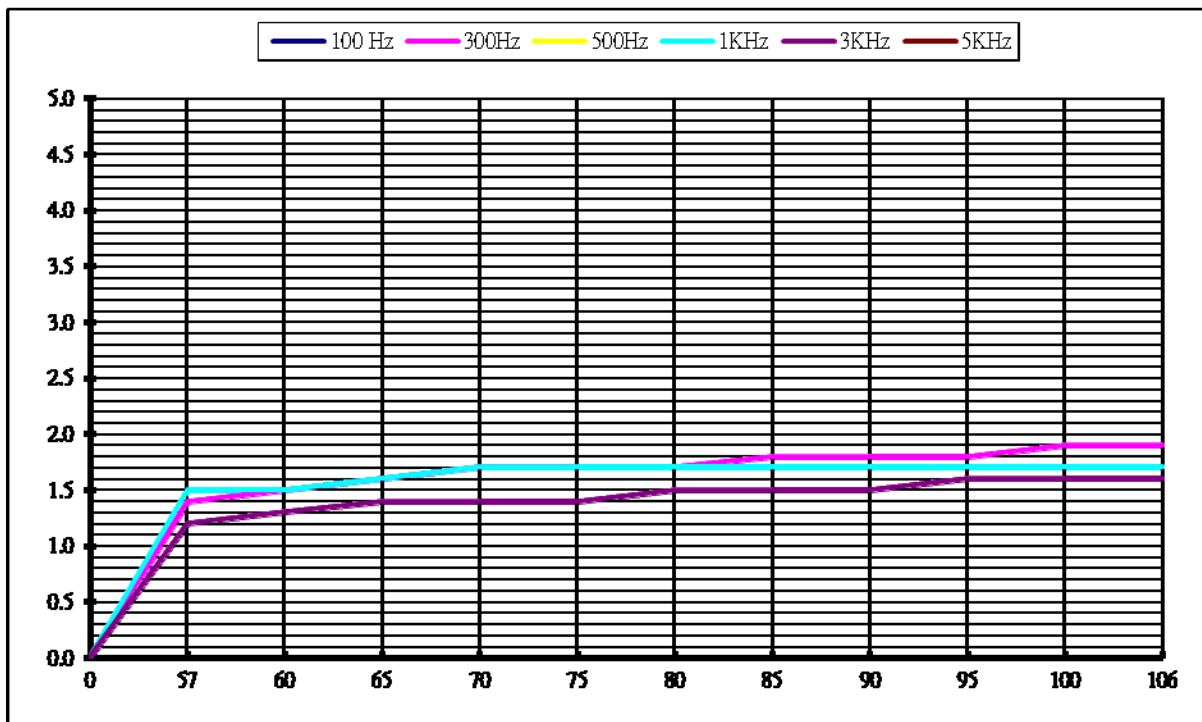


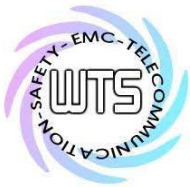
# Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M21808-18343-C-1  
 FCC ID: L9N-7085NUE5

418 MHz

Input Audio Level (mV)	100 Hz	300Hz	500Hz	1kHz	3kHz	5kHz
0	--	0.0	--	0.0	0.0	--
57	--	1.4	--	1.5	1.2	--
60	--	1.5	--	1.5	1.3	--
65	--	1.6	--	1.6	1.4	--
70	--	1.7	--	1.7	1.4	--
75	--	1.7	--	1.7	1.4	--
80	--	1.7	--	1.7	1.5	--
85	--	1.8	--	1.7	1.5	--
90	--	1.8	--	1.7	1.5	--
95	--	1.8	--	1.7	1.6	--
100	--	1.9	--	1.7	1.6	--
106	--	1.9	--	1.7	1.6	--



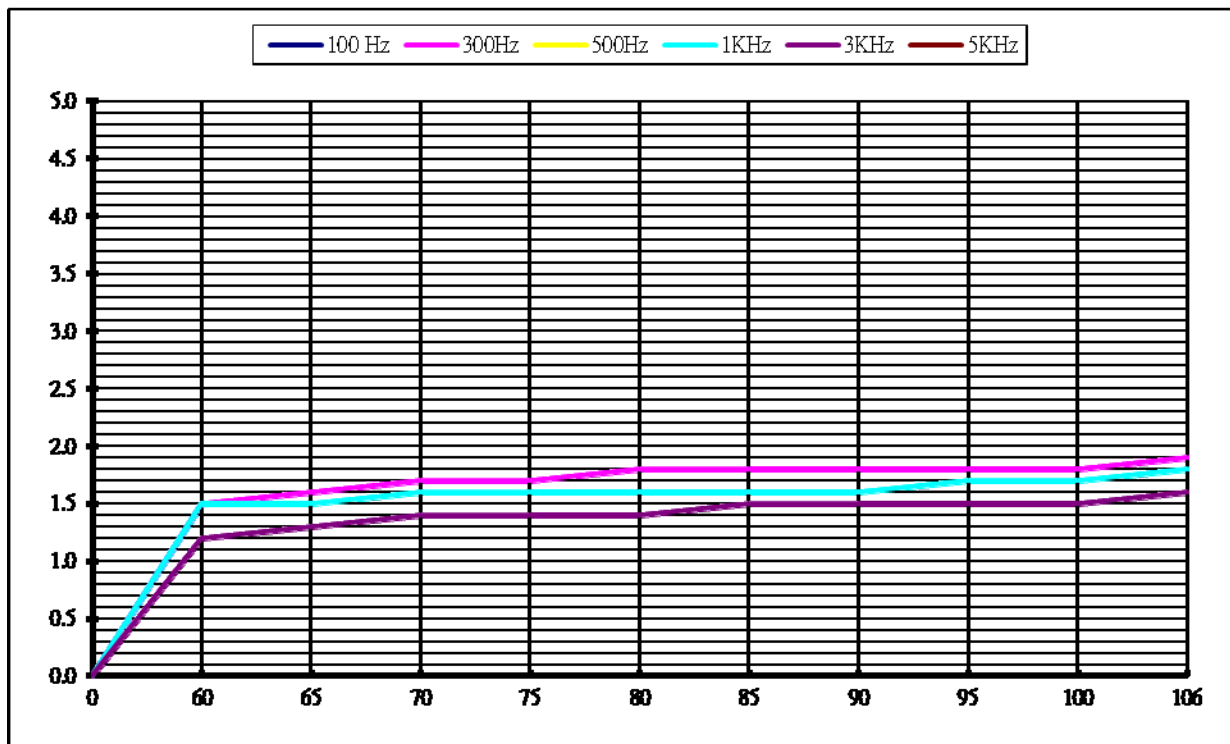


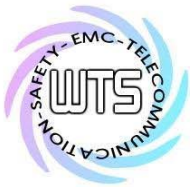
# Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M21808-18343-C-1  
 FCC ID: L9N-7085NUE5

430 MHz

Input Audio Level (mV)	100 Hz	300Hz	500Hz	1kHz	3kHz	5kHz
0	--	0.0	--	0.0	0.0	--
60	--	1.5	--	1.5	1.2	--
65	--	1.6	--	1.5	1.3	--
70	--	1.7	--	1.6	1.4	--
75	--	1.7	--	1.6	1.4	--
80	--	1.8	--	1.6	1.4	--
85	--	1.8	--	1.6	1.5	--
90	--	1.8	--	1.6	1.5	--
95	--	1.8	--	1.7	1.5	--
100	--	1.8	--	1.7	1.5	--
106	--	1.9	--	1.8	1.6	--



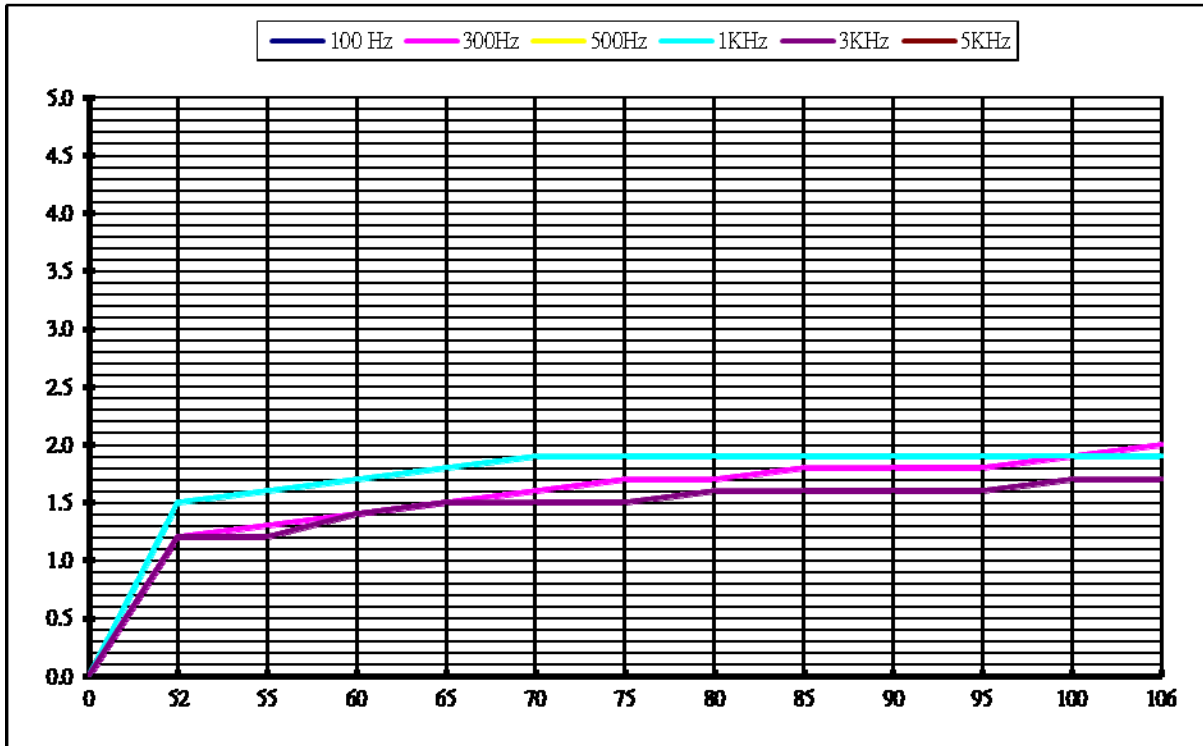


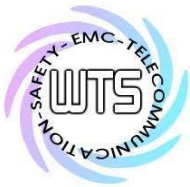
# Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M21808-18343-C-1  
 FCC ID: L9N-7085NUE5

440 MHz

Input Audio Level (mV)	100 Hz	300Hz	500Hz	1kHz	3kHz	5kHz
0	--	0.0	--	0.0	0.0	--
52	--	1.2	--	1.5	1.2	--
55	--	1.3	--	1.6	1.2	--
60	--	1.4	--	1.7	1.4	--
65	--	1.5	--	1.8	1.5	--
70	--	1.6	--	1.9	1.5	--
75	--	1.7	--	1.9	1.5	--
80	--	1.7	--	1.9	1.6	--
85	--	1.8	--	1.9	1.6	--
90	--	1.8	--	1.9	1.6	--
95	--	1.8	--	1.9	1.6	--
100	--	1.9	--	1.9	1.7	--
106	--	2.0	--	1.9	1.7	--



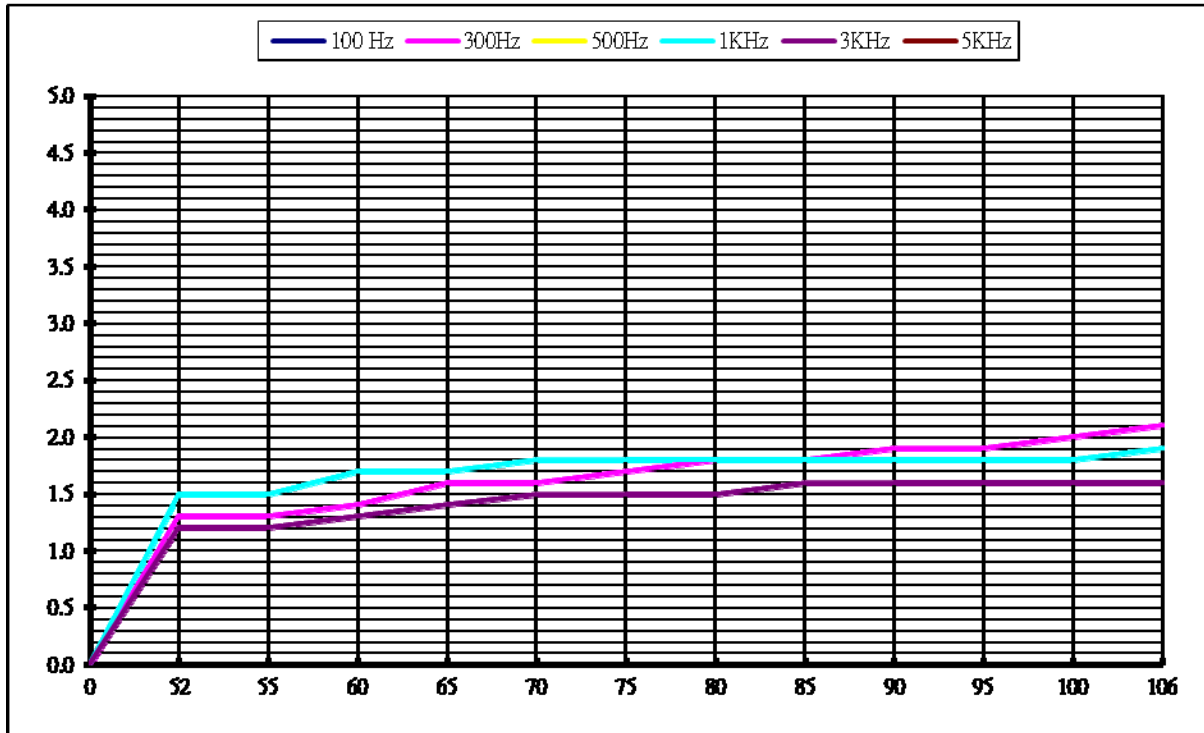


# Worldwide Testing Services(Taiwan) Co., Ltd.

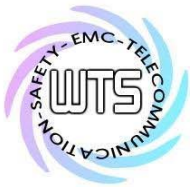
Registration number: W6M21808-18343-C-1  
 FCC ID: L9N-7085NUE5

445 MHz

Input Audio Level (mV)	100 Hz	300Hz	500Hz	1kHz	3kHz	5kHz
0	--	0.0	--	0.0	0.0	--
52	--	1.3	--	1.5	1.2	--
55	--	1.3	--	1.5	1.2	--
60	--	1.4	--	1.7	1.3	--
65	--	1.6	--	1.7	1.4	--
70	--	1.6	--	1.8	1.5	--
75	--	1.7	--	1.8	1.5	--
80	--	1.8	--	1.8	1.5	--
85	--	1.8	--	1.8	1.6	--
90	--	1.9	--	1.8	1.6	--
95	--	1.9	--	1.8	1.6	--
100	--	2.0	--	1.8	1.6	--
106	--	2.1	--	1.9	1.6	--





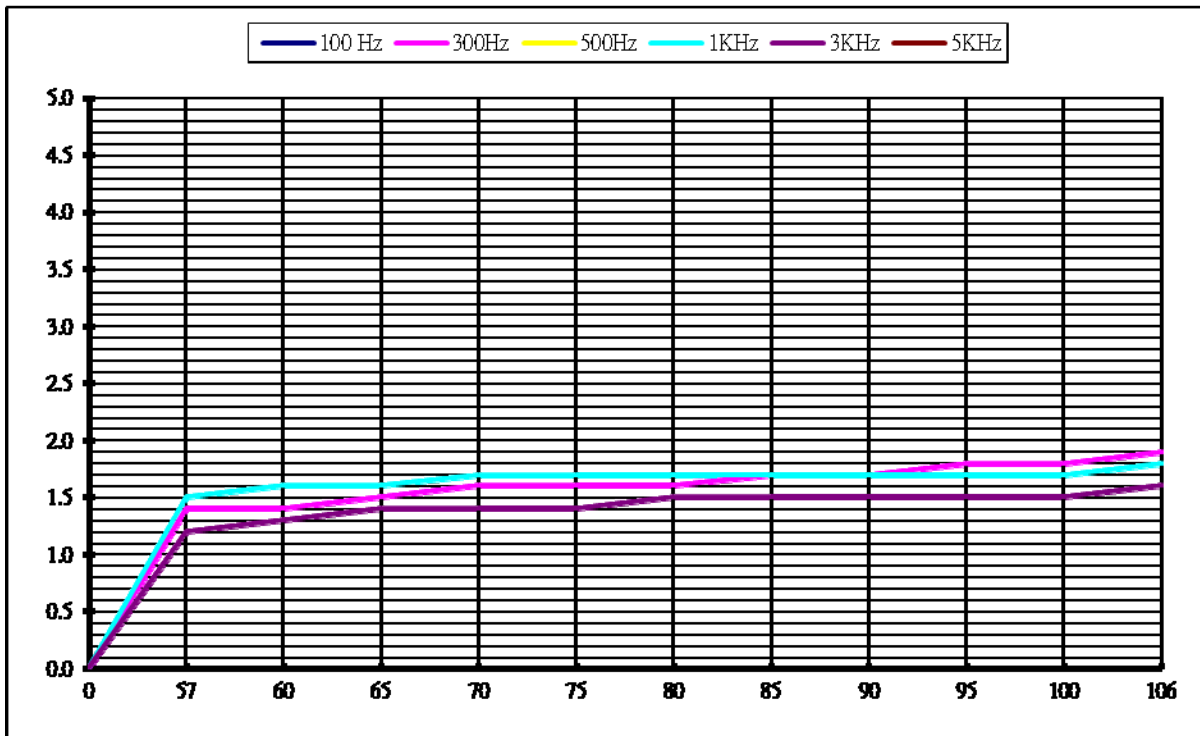


# Worldwide Testing Services(Taiwan) Co., Ltd.

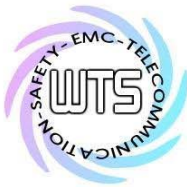
Registration number: W6M21808-18343-C-1  
 FCC ID: L9N-7085NUE5

450 MHz

Input Audio Level (mV)	100 Hz	300Hz	500Hz	1kHz	3kHz	5kHz
0	--	0.0	--	0.0	0.0	--
57	--	1.4	--	1.5	1.2	--
60	--	1.4	--	1.6	1.3	--
65	--	1.5	--	1.6	1.4	--
70	--	1.6	--	1.7	1.4	--
75	--	1.6	--	1.7	1.4	--
80	--	1.6	--	1.7	1.5	--
85	--	1.7	--	1.7	1.5	--
90	--	1.7	--	1.7	1.5	--
95	--	1.8	--	1.7	1.5	--
100	--	1.8	--	1.7	1.5	--
106	--	1.9	--	1.8	1.6	--



Test equipment used: ETSTW-RE 072



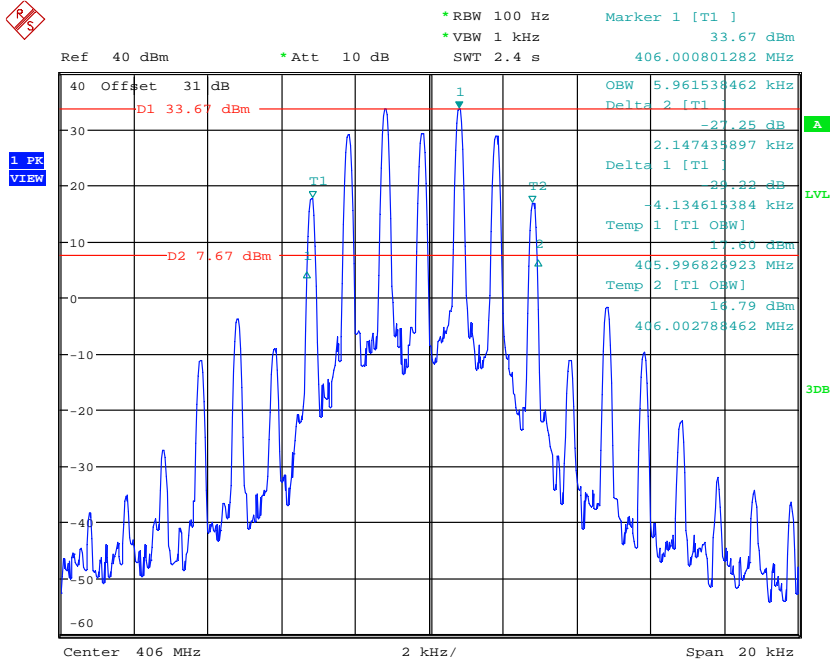
Registration number: W6M21808-18343-C-1  
 FCC ID: L9N-7085NUE5

### 4.3.3 Necessary Bandwidth

12.5 kHz

Frequency (MHz)	26dB Bandwidth (kHz)	99% Occupied Bandwidth (kHz)	Max. Limit (kHz)
406	6.282051281	5.961538462	11.25
418	6.314102563	5.961538462	11.25
430	6.249999999	5.897435897	11.25
440	6.282050614	6.089743590	11.25
445	6.282051284	6.057692308	11.25
450	6.249999999	5.993589744	11.25

406 MHz

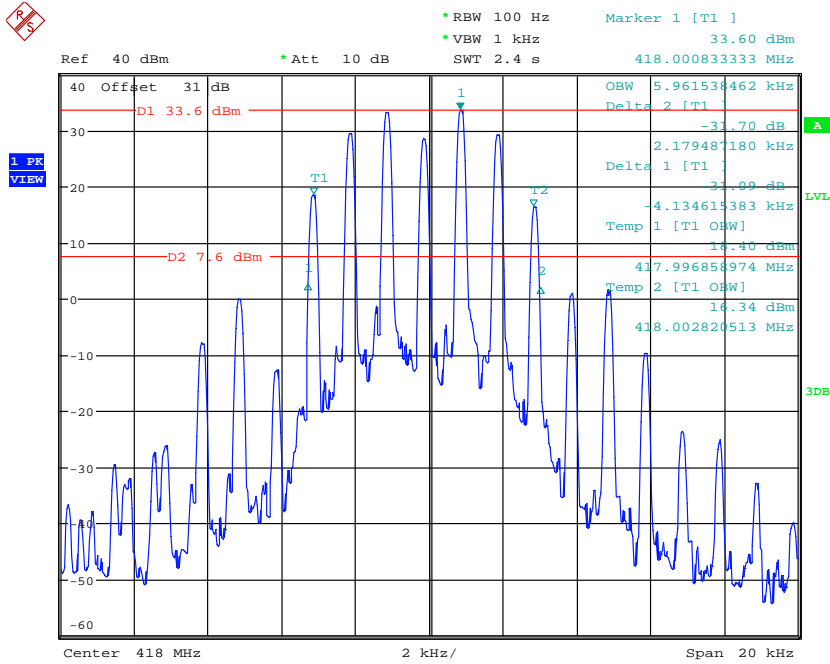


NECESSARY BANDWIDTH 12.5K 406MHz  
 Date: 29.AUG.2018 13:53:21



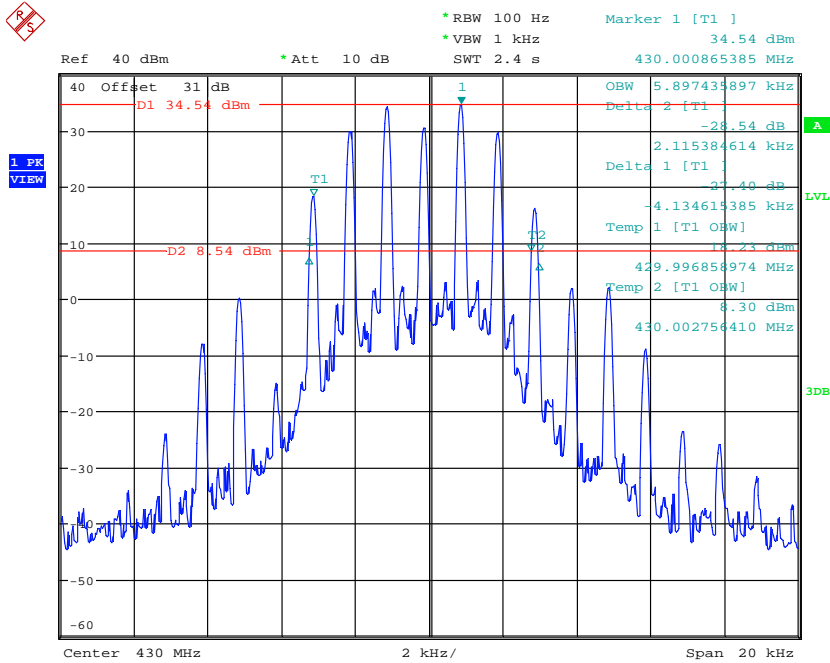
Registration number: W6M21808-18343-C-1  
 FCC ID: L9N-7085NUE5

418 MHz

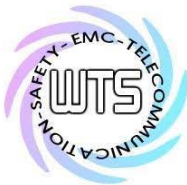


NECESSARY BANDWIDTH 12.5K 418MHz  
 Date: 29.AUG.2018 14:37:32

430 MHz



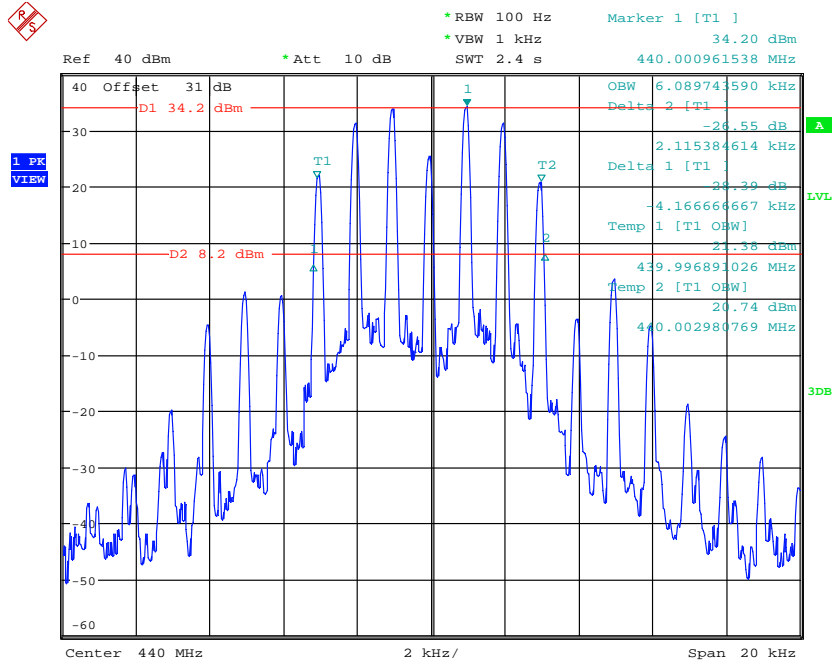
NECESSARY BANDWIDTH 12.5K 430MHz  
 Date: 29.AUG.2018 14:17:43



# Worldwide Testing Services(Taiwan) Co., Ltd.

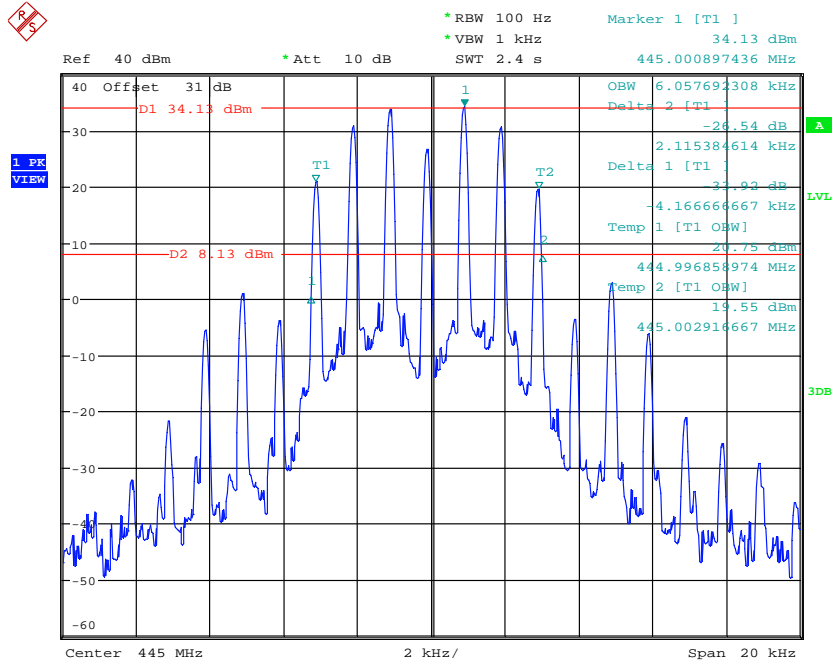
Registration number: W6M21808-18343-C-1  
 FCC ID: L9N-7085NUE5

440 MHz

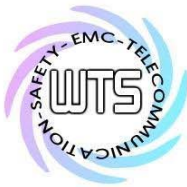


NECESSARY BANDWIDTH 12.5K 440MHz  
 Date: 29.AUG.2018 14:35:48

445 MHz



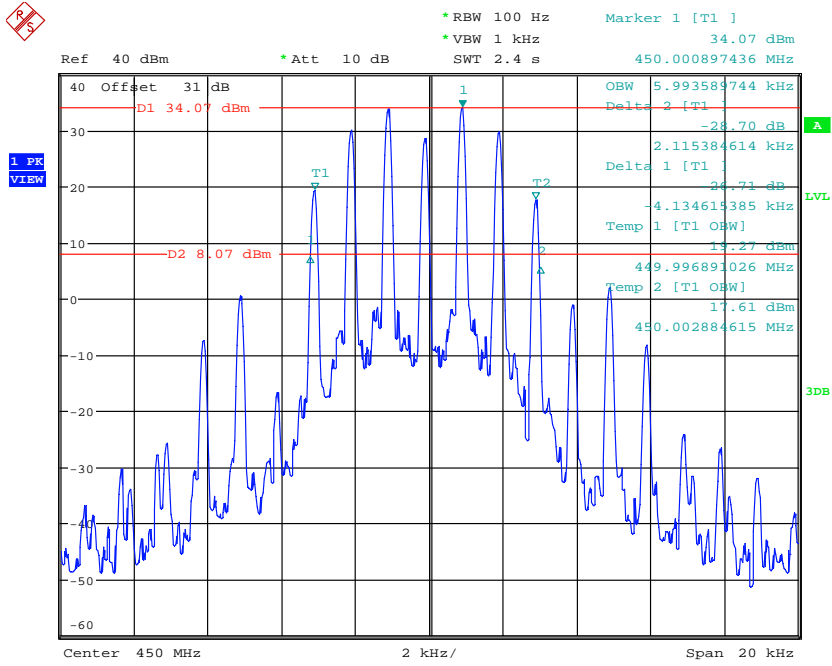
NECESSARY BANDWIDTH 12.5K 445MHz  
 Date: 29.AUG.2018 14:44:20



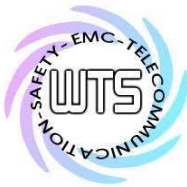
# Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M21808-18343-C-1  
 FCC ID: L9N-7085NUE5

450 MHz



NECESSARY BANDWIDTH 12.5K 450MHz  
 Date: 29.AUG.2018 14:46:45



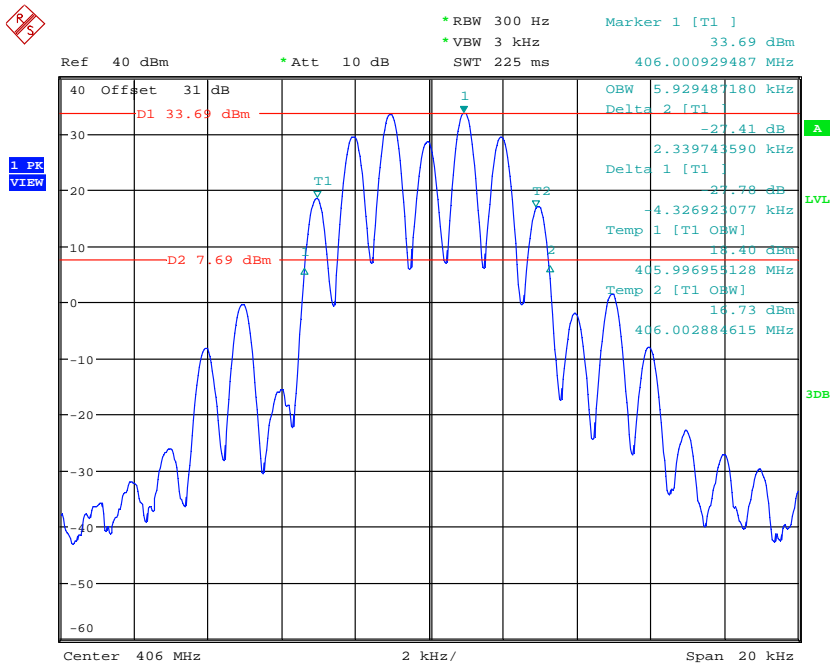
# Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M21808-18343-C-1  
 FCC ID: L9N-7085NUE5

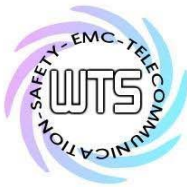
25 kHz

Frequency (MHz)	26dB Bandwidth (kHz)	99% Occupied Bandwidth (kHz)	Max. Limit (kHz)
406	6.666666667	5.929487180	20
418	6.634615384	5.929487180	20
430	6.634615383	5.737179487	20
440	6.730769230	6.185897436	20
445	6.666666666	6.121794872	20
450	6.666666667	5.993589744	20

406 MHz

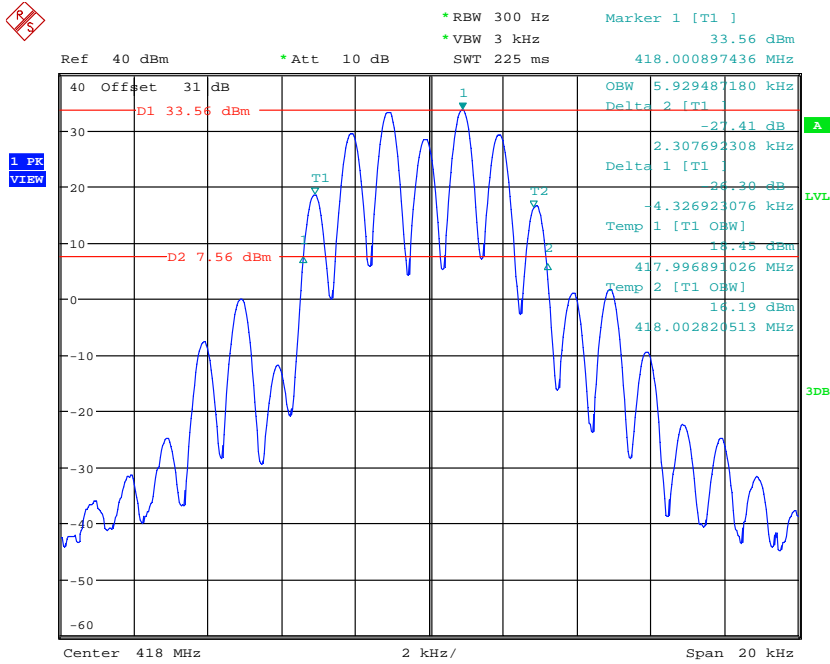


NECESSARY BANDWIDTH 25K 406MHz  
 Date: 29.AUG.2018 14:00:18



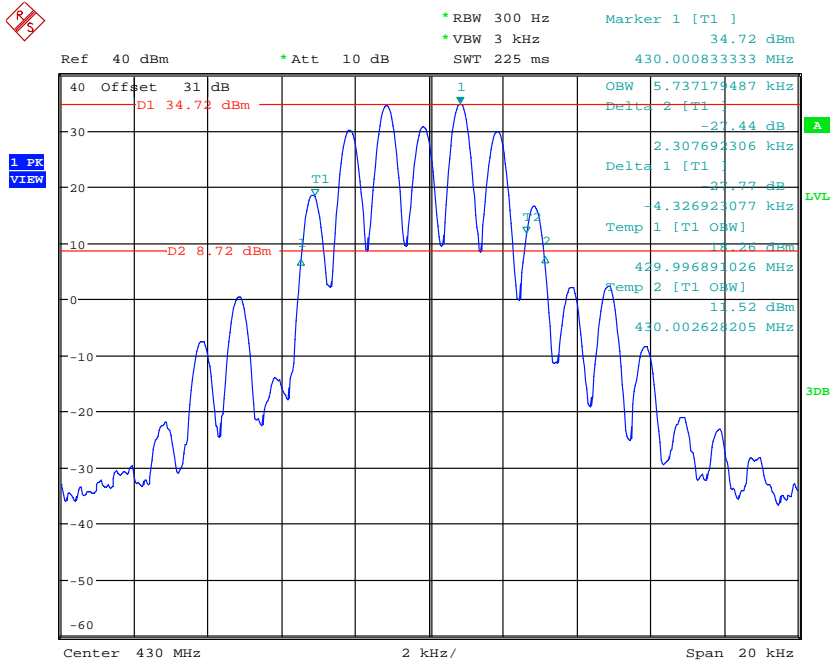
Registration number: W6M21808-18343-C-1  
 FCC ID: L9N-7085NUE5

418 MHz

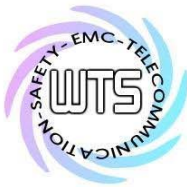


NECESSARY BANDWIDTH 25K 418MHz  
 Date: 29.AUG.2018 14:38:38

430 MHz

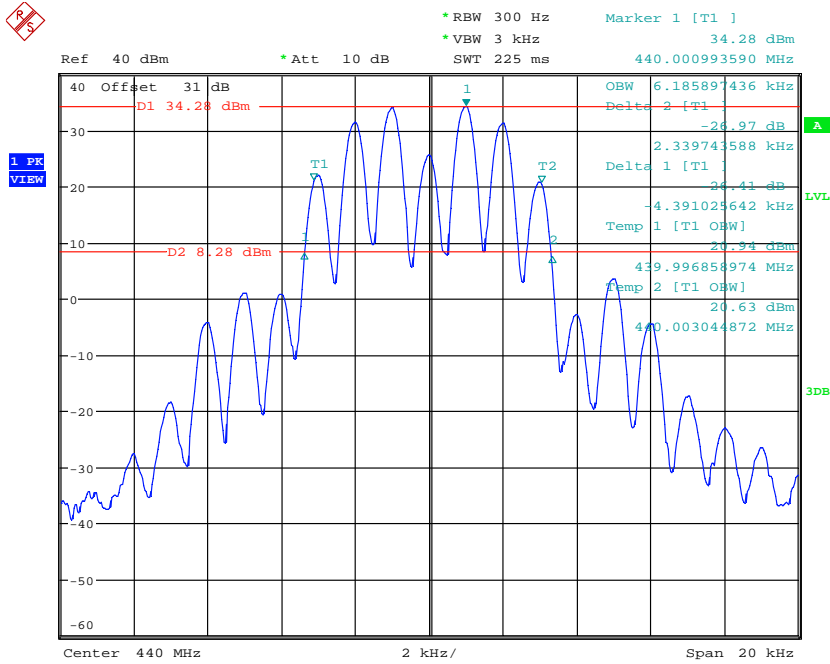


NECESSARY BANDWIDTH 25K 430MHz  
 Date: 29.AUG.2018 14:31:02



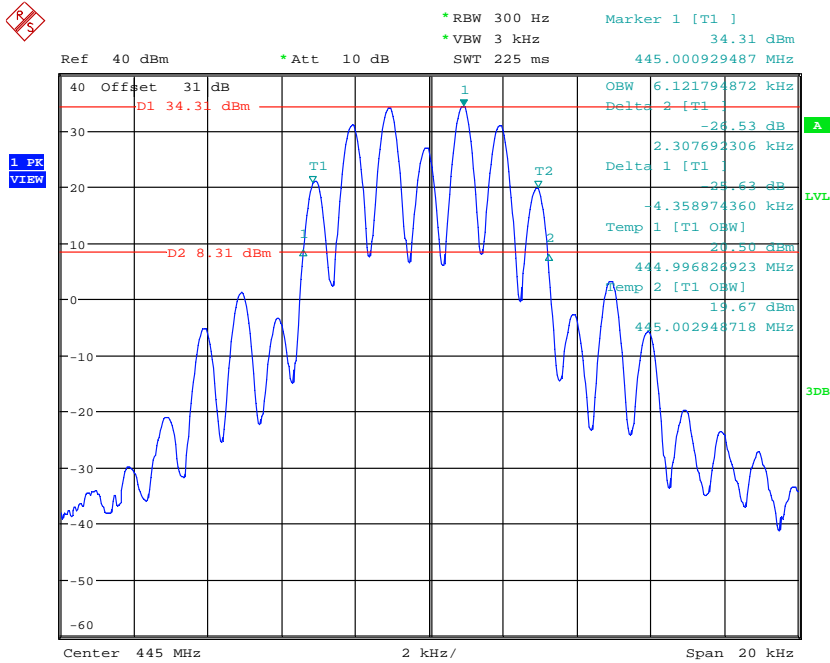
Registration number: W6M21808-18343-C-1  
 FCC ID: L9N-7085NUE5

440 MHz



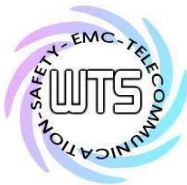
NECESSARY BANDWIDTH 25K 440MHz  
 Date: 29.AUG.2018 14:34:35

445 MHz



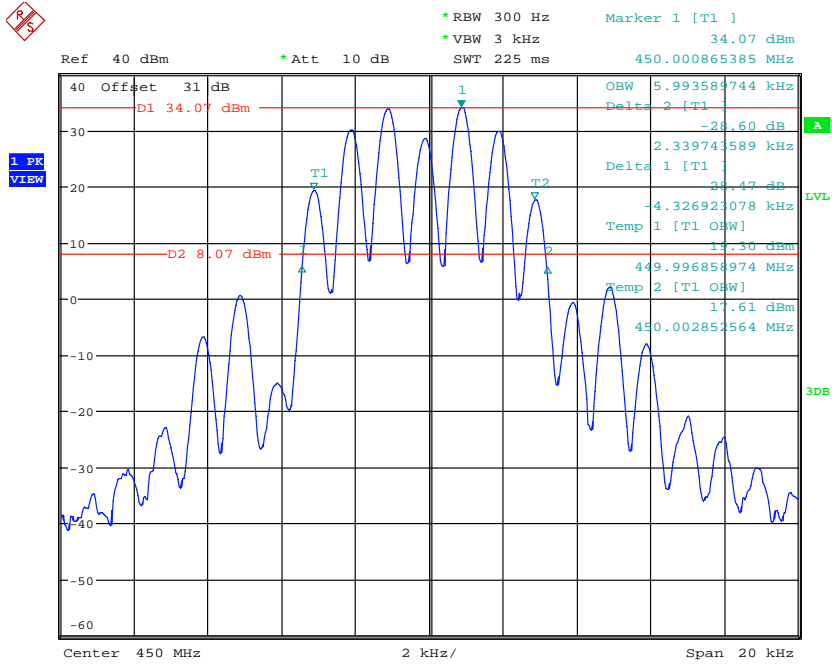
NECESSARY BANDWIDTH 25K 445MHz  
 Date: 29.AUG.2018 14:41:18





Registration number: W6M21808-18343-C-1  
 FCC ID: L9N-7085NUE5

450 MHz



NECESSARY BANDWIDTH 25K 450MHz  
 Date: 29.AUG.2018 14:47:50

Test equipment used: ETSTW-RE 055, ETSTW-RE072

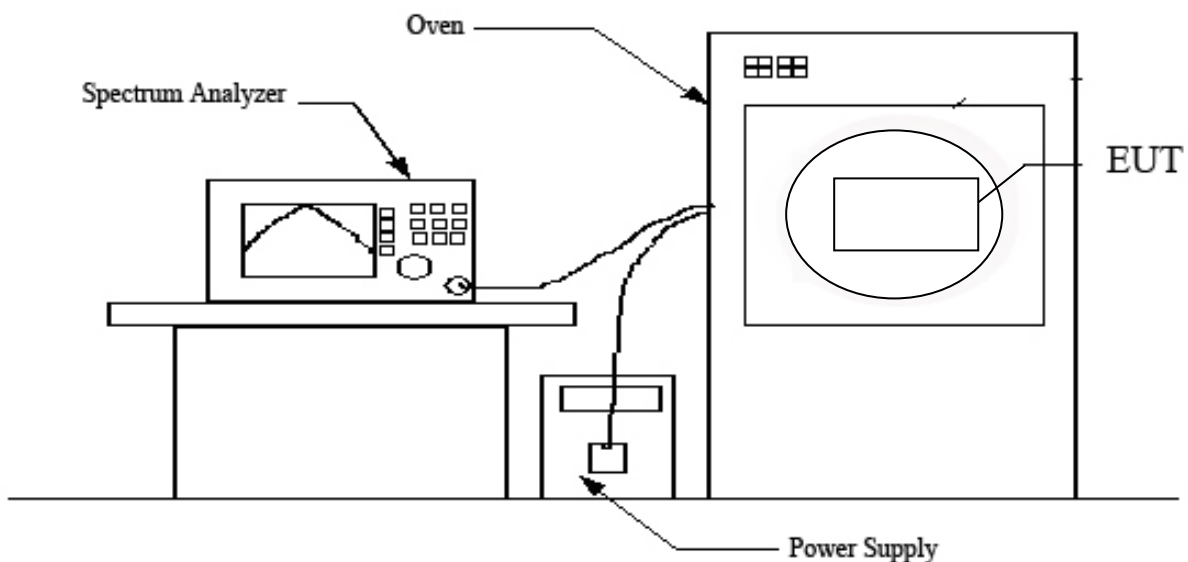
Registration number: W6M21808-18343-C-1  
FCC ID: L9N-7085NUE5

## 5. Frequency stability

### 5.1 Test Procedures

1. The transmitter output is connected to the spectrum analyzer through an attenuator.
2. Set RBW of spectrum analyzer to 1kHz and VBW to 1kHz.
3. Use peak detector mode, Max-hold and search the peak of trace 1.
4. According to the part 2.1055(d)(1), the supply voltage has to be changed from 85 to 115 percent of the nominal value.
5. According to the part 2.1055(a)(1), extreme temperature has to be changed from  $-20^{\circ}\text{C}$  to  $50^{\circ}\text{C}$ .
6. Read the frequency of the carrier and calculate the deviation.

### 5.2 Test Setup



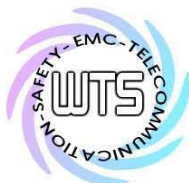


# Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M21808-18343-C-1  
 FCC ID: L9N-7085NUE5

## 5.3 Test Result

Nominal Frequency : 406MHz		Nominal Frequency : 418MHz		Nominal Frequency : 430MHz	
Voltage V.S Frequency Stability		Voltage V.S Frequency Stability		Voltage V.S Frequency Stability	
Voltage	Measurement Frequency	Voltage	Measurement Frequency	Voltage	Measurement Frequency
13.6 V	405.9996795	13.6 V	417.9998077	13.6 V	429.9998077
14.96 V	405.9996474	14.96 V	417.9998397	14.96 V	429.999808
12.24 V	405.9997115	12.24 V	417.9998077	12.24 V	429.999840
Max Deviation (MHz)	-0.00035256	Max Deviation (MHz)	-0.00019231	Max Deviation (MHz)	-0.00019231
Max Deviation (ppm)	-0.86837438	Max Deviation (ppm)	-0.46007177	Max Deviation (ppm)	-0.44723256
Limit (ppm)	2.5	Limit (ppm)	2.5	Limit (ppm)	2.5
Temperature V.S Frequency Stability		Temperature V.S Frequency Stability		Temperature V.S Frequency Stability	
Temperature	Measurement Frequency	Temperature	Measurement Frequency	Temperature	Measurement Frequency
-20	405.9996154	-20	417.9997436	-20	429.9998718
-10	405.999659	-10	417.9996474	-10	429.9995513
0	405.9996269	0	417.9996795	0	429.9996154
10	405.9996154	10	417.9998077	10	429.9997466
20	405.9996795	20	417.9998077	20	429.9998077
30	405.9997756	30	417.9999038	30	429.9998718
40	405.9999679	40	417.9999679	40	429.9999359
50	406.0000321	50	417.9999359	50	429.9999679
60	405.9999359	60	417.9999359	60	429.9998397
Max Deviation (MHz)	-0.000385	Max Deviation (MHz)	-0.000353	Max Deviation (MHz)	-0.000449
Max Deviation (ppm)	-0.94827586	Max Deviation (ppm)	-0.84449761	Max Deviation (ppm)	-1.04418605
Limit (ppm)	2.5	Limit (ppm)	2.5	Limit (ppm)	2.5



# Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M21808-18343-C-1

FCC ID: L9N-7085NUE5

Nominal Frequency : 440MHz		Nominal Frequency : 445MHz		Nominal Frequency : 450MHz	
Voltage V.S Frequency Stability		Voltage V.S Frequency Stability		Voltage V.S Frequency Stability	
Voltage	Measurement Frequency	Voltage	Measurement Frequency	Voltage	Measurement Frequency
13.6 V	439.9998397	13.6 V	444.9997756	13.6 V	449.9998077
14.96 V	439.9998397	14.96 V	444.9997756	14.96 V	449.9998397
12.24 V	439.9997756	12.24 V	444.9997436	12.24 V	449.9998397
Max Deviation (MHz)	-0.00022436	Max Deviation (MHz)	-0.00025641	Max Deviation (MHz)	-0.00019231
Max Deviation (ppm)	-0.50990909	Max Deviation (ppm)	-0.57620225	Max Deviation (ppm)	-0.42735556
Limit (ppm)	2.5	Limit (ppm)	2.5	Limit (ppm)	2.5
Temperature V.S Frequency Stability		Temperature V.S Frequency Stability		Temperature V.S Frequency Stability	
Temperature	Measurement Frequency	Temperature	Measurement Frequency	Temperature	Measurement Frequency
-20	439.9997756	-20	444.9997756	-20	449.9997115
-10	439.9999359	-10	444.9999359	-10	450.0000321
0	440.0000641	0	445.0000641	0	450.0000321
10	439.9999038	10	444.9998718	10	449.9999038
20	439.9998397	20	444.9997756	20	449.9998077
30	439.9998077	30	444.9997756	30	449.9997756
40	440.0000962	40	445	40	449.9998077
50	439.9999038	50	445.0004487	50	450.0001603
60	439.9999038	60	445.0000641	60	450.0003205
Max Deviation (MHz)	-0.000192	Max Deviation (MHz)	0.000449	Max Deviation (MHz)	0.000321
Max Deviation (ppm)	-0.4729064	Max Deviation (ppm)	1.074162679	Max Deviation (ppm)	0.746511628
Limit (ppm)	2.5	Limit (ppm)	2.5	Limit (ppm)	2.5

Test equipment used: ETSTW-RE 055

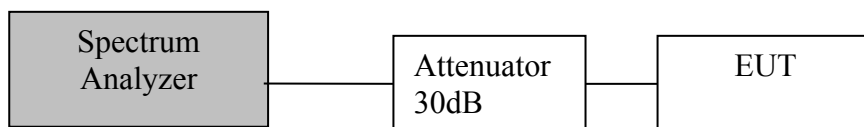
Registration number: W6M21808-18343-C-1  
 FCC ID: L9N-7085NUE5

## 6. Transmitter Output Power

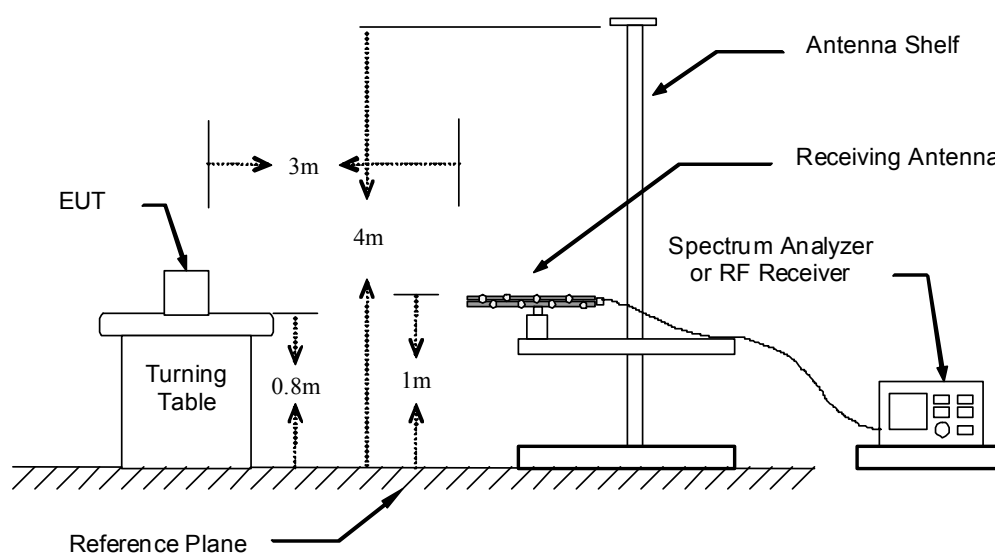
### 6.1 Test Procedures

1. The EUT was placed on the top of the turntable in semi-anechoic chamber.
2. The test shall be made in the transmitting mode. Antenna tower was scan (from 1 M to 4 M) and the turn table was rotated by 360 degrees to determine the position of the highest radiation.
3. The receiving Horn antenna was placed 0.5 meters far away from the turntable.
4. The receiving antenna was fixed on the same height with the EUT to find maximum suspected emissions. Recorded suspected value is indicated as Read Level (Raw).
5. Replace the EUT by standard antenna and feed the RF port by signal generator.
6. Adjust the frequency of the signal generator to the suspected emission and slightly rotate the turntable to locate the position with maximum reading.
7. Adjust the power level of the signal generator to reach the same reading with Read Level (Raw).
8. The level of the spurious emission is the power level of (7) plus the gain of the standard antenna in dB and minus the loss of the cable used between the signal generator and the standard antenna.

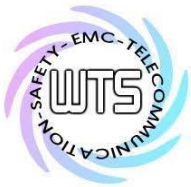
### 6.2 Test Setup



Setup for Conducted Power



Setup for Radiated Power

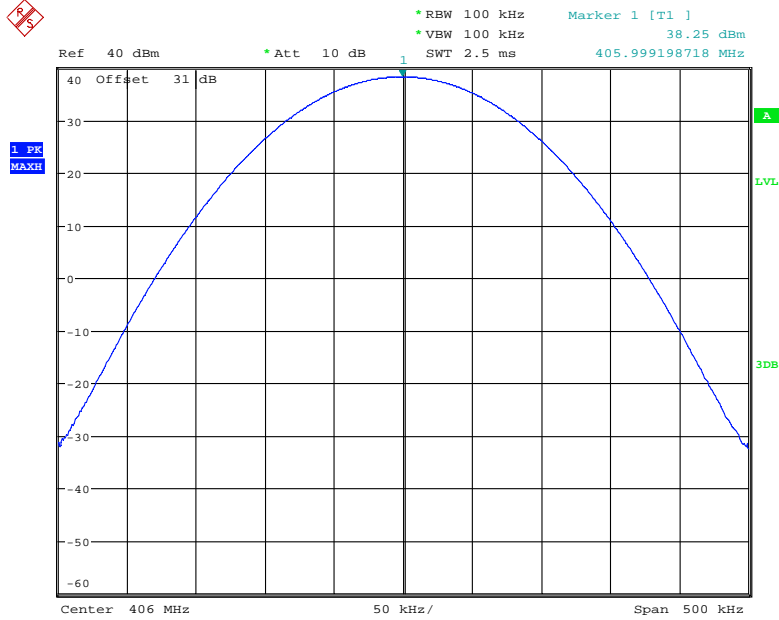


Registration number: W6M21808-18343-C-1  
FCC ID: L9N-7085NUE5

## 6.3 Test Result

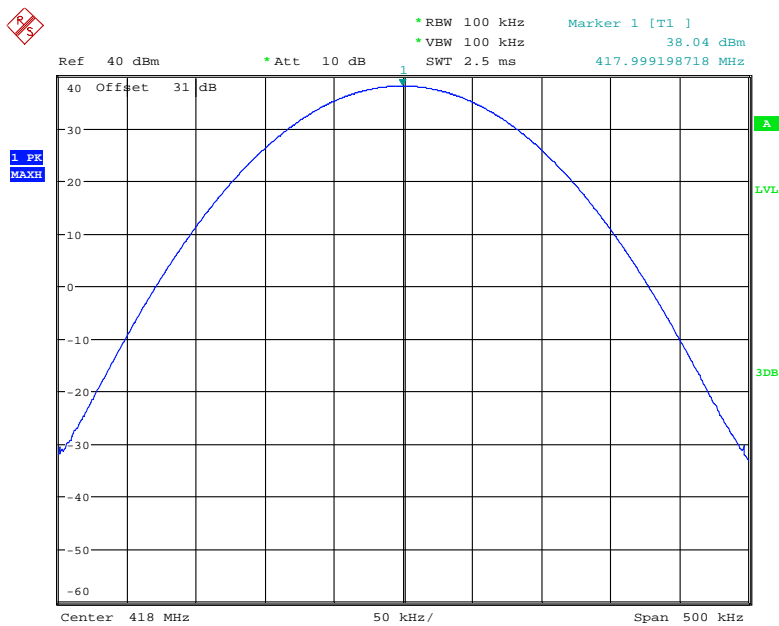
### 6.3.1 Conducted Power

#### 406 MHz

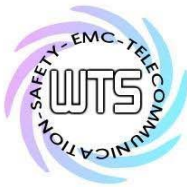


MAX OUTPUT POWER 406MHz  
Date: 29.AUG.2018 11:08:23

#### 418 MHz

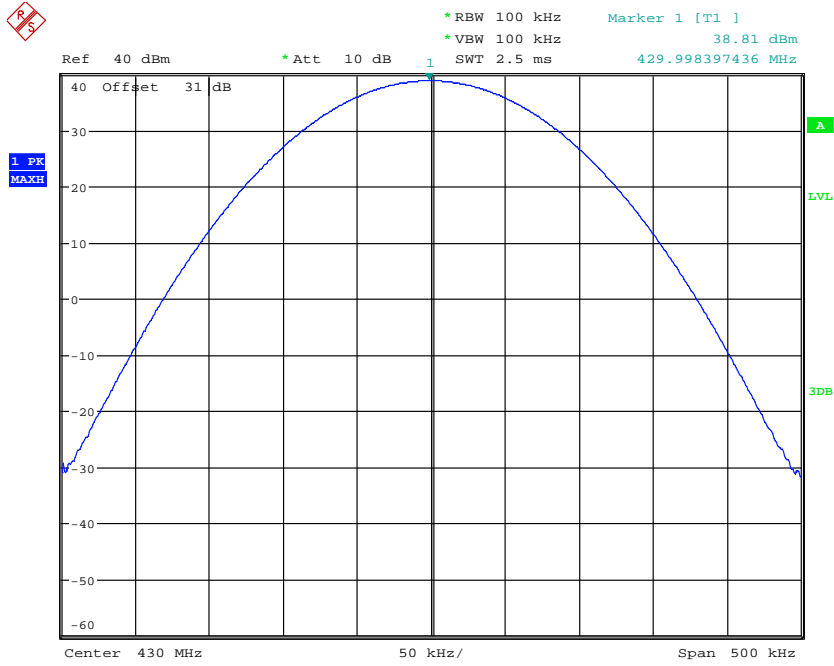


MAX OUTPUT POWER 418MHz  
Date: 29.AUG.2018 11:09:12



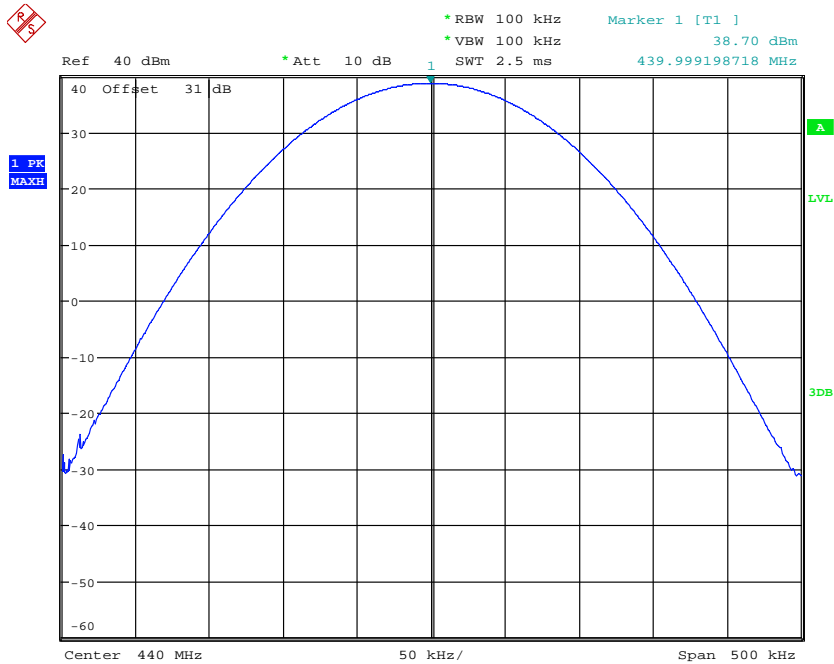
Registration number: W6M21808-18343-C-1  
FCC ID: L9N-7085NUE5

430 MHz

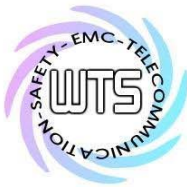


MAX OUTPUT POWER 430MHz  
Date: 29.AUG.2018 11:07:42

440 MHz

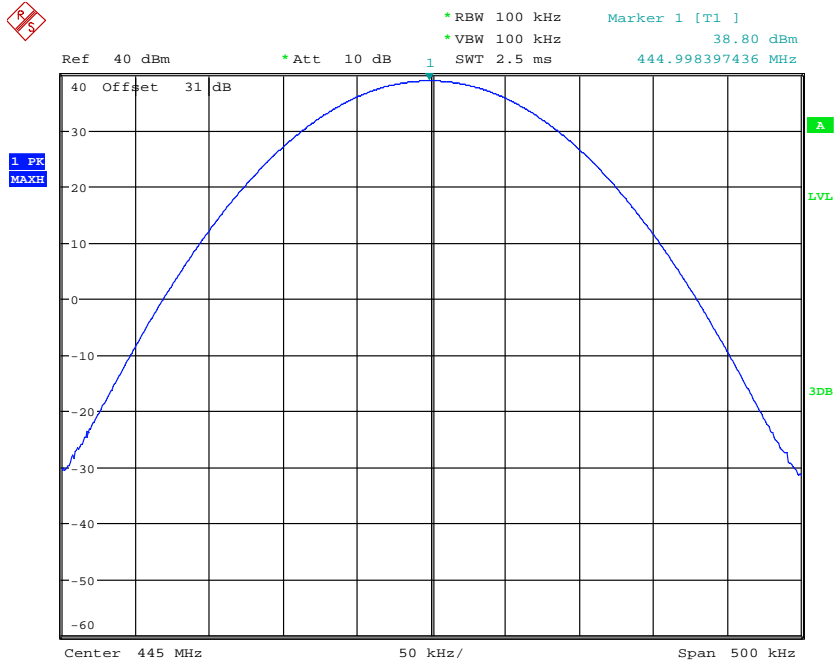


MAX OUTPUT POWER 440MHz  
Date: 29.AUG.2018 11:05:11



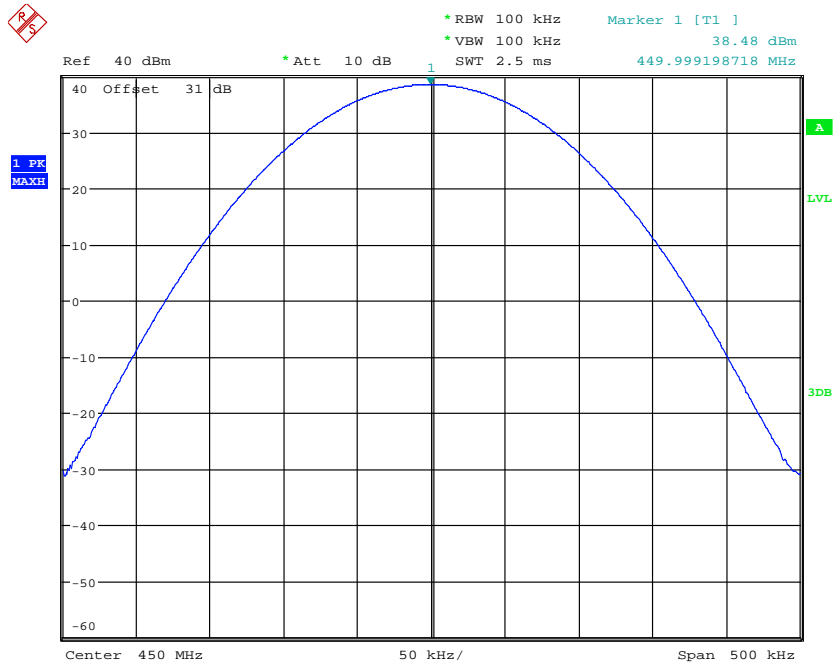
Registration number: W6M21808-18343-C-1  
FCC ID: L9N-7085NUE5

445 MHz



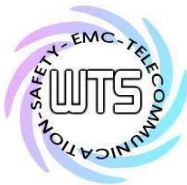
MAX OUTPUT POWER 445MHz  
Date: 29.AUG.2018 11:03:42

450 MHz



MAX OUTPUT POWER 450MHz  
Date: 29.AUG.2018 11:01:45

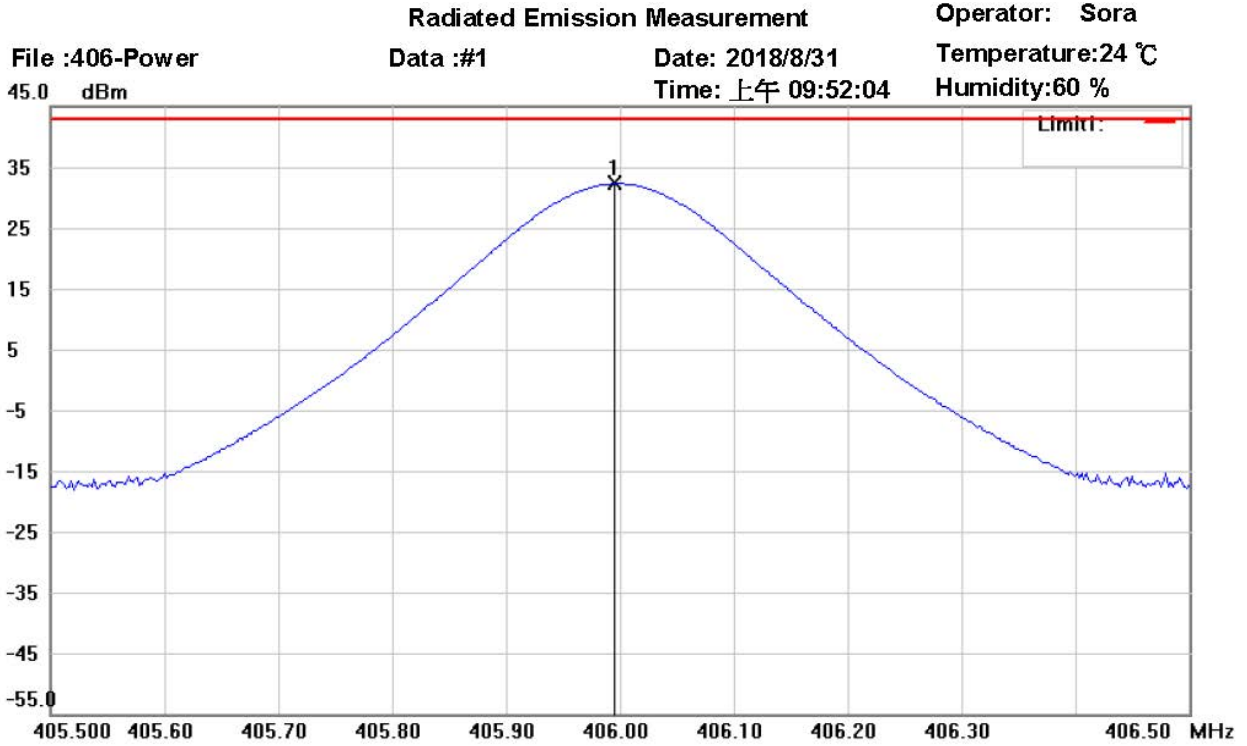




Registration number: W6M21808-18343-C-1  
 FCC ID: L9N-7085NUE5

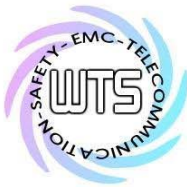
## 6.3.2 Radiated Power

406 MHz



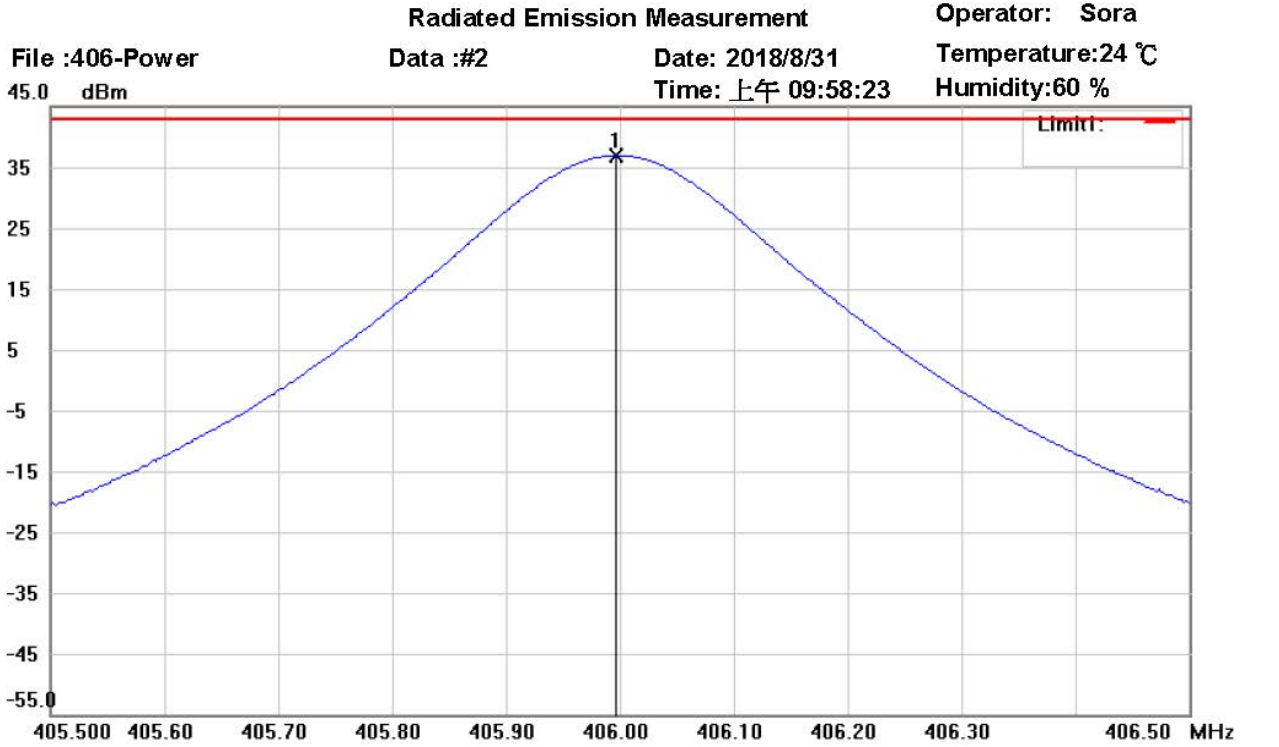
Site : Chamber  
 Condition : FCC\_part 90 POWER      Polarization: *Horizontal*  
 EUT : W6M21808-18343      Power : 13.6 Vd.c.  
 M/N:  
 Test Mode : Tx 406MHz      Distance: 3m  
 Note :

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	405.9950	-0.84	peak	33.13	32.29	43.00	150	210	-10.71	



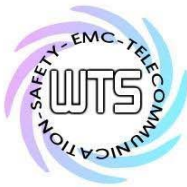
# Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M21808-18343-C-1  
 FCC ID: L9N-7085NUE5



Site : Chamber  
 Condition : FCC\_part 90 POWER      Polarization: *Vertical*  
 EUT : W6M21808-18343      Power : 13.6 Vd.c.  
 M/N:      Distance: 3m  
 Test Mode : Tx 406MHz  
 Note :

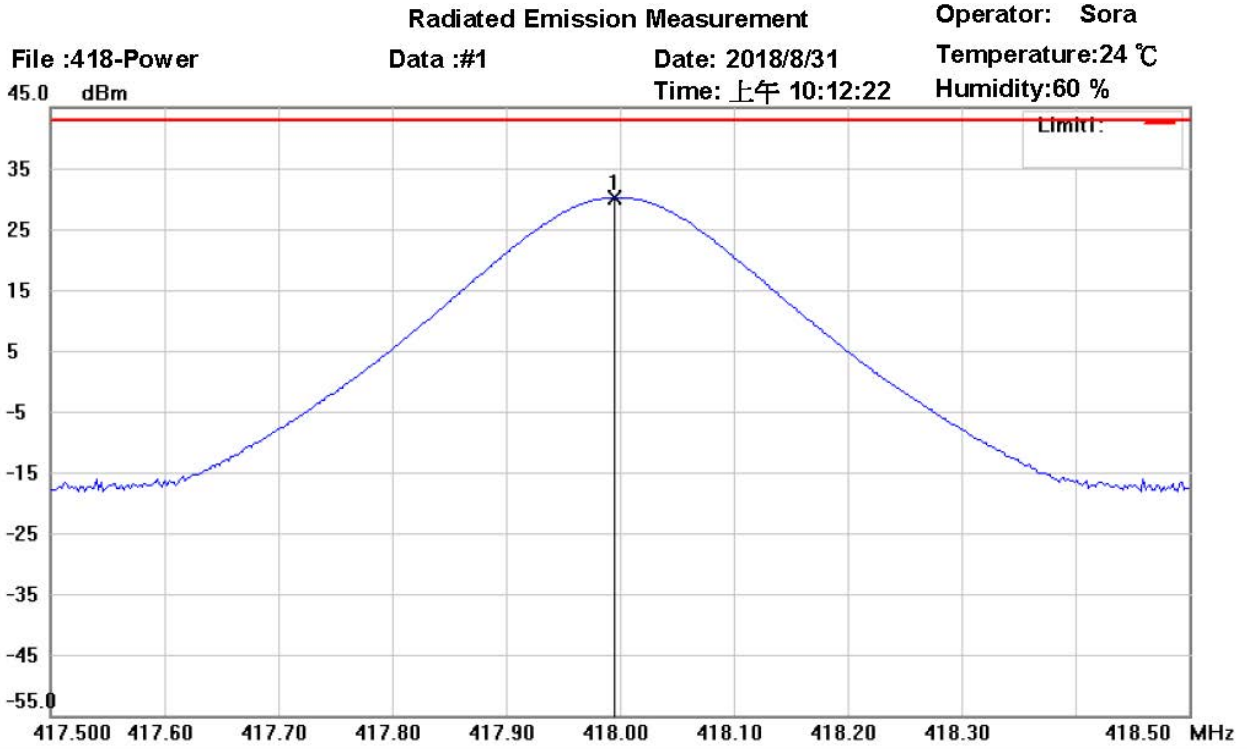
Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	405.9970	8.42	peak	28.56	36.98	43.00	150	105	-6.02	



# Worldwide Testing Services(Taiwan) Co., Ltd.

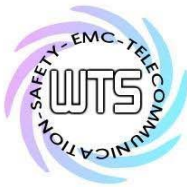
Registration number: W6M21808-18343-C-1  
 FCC ID: L9N-7085NUE5

418 MHz



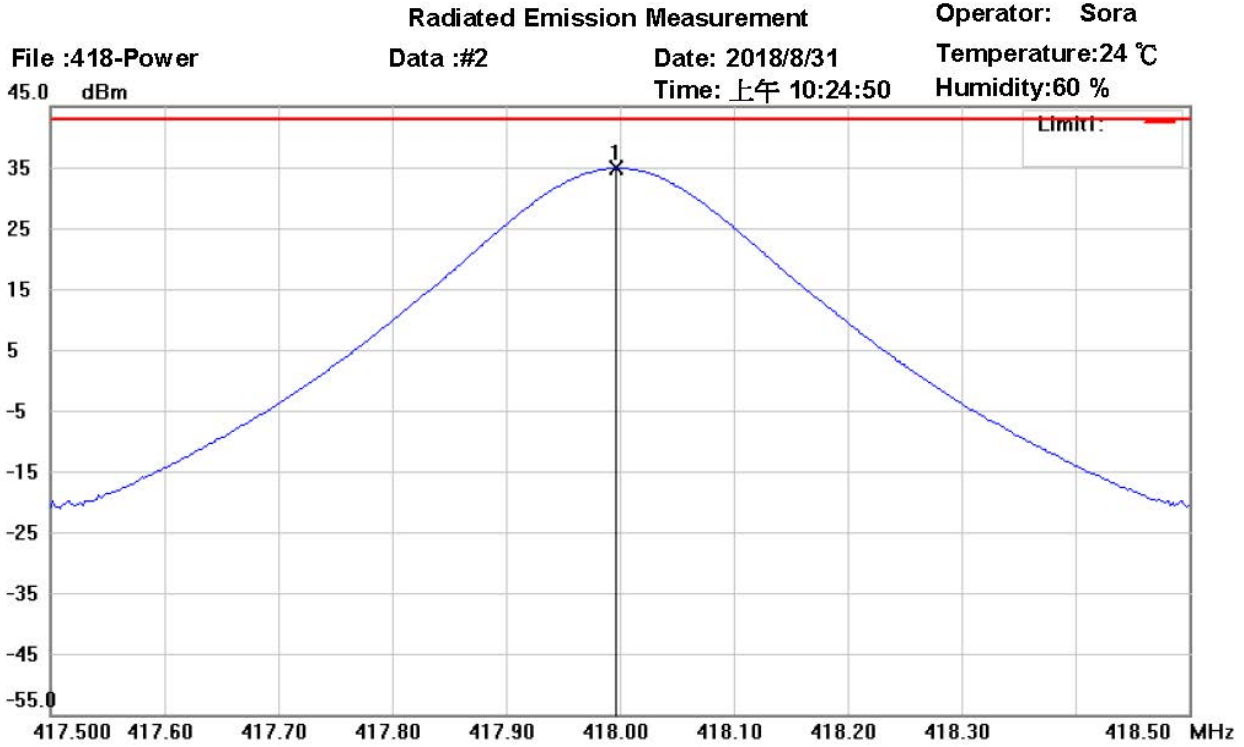
Site : Chamber  
 Condition : FCC\_part 90 POWER      Polarization: *Horizontal*  
 EUT : W6M21808-18343      Power : 13.6 Vd.c.  
 M/N:      Distance: 3m  
 Test Mode : Tx 418MHz  
 Note :

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	417.9950	-2.89	peak	33.11	30.22	43.00	150	240	-12.78	



# Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M21808-18343-C-1  
 FCC ID: L9N-7085NUE5



Site : Chamber  
 Condition : FCC\_part 90 POWER      Polarization: *Vertical*  
 EUT : W6M21808-18343      Power : 13.6 Vd.c.  
 M/N:      Distance: 3m  
 Test Mode : Tx 418MHz  
 Note :

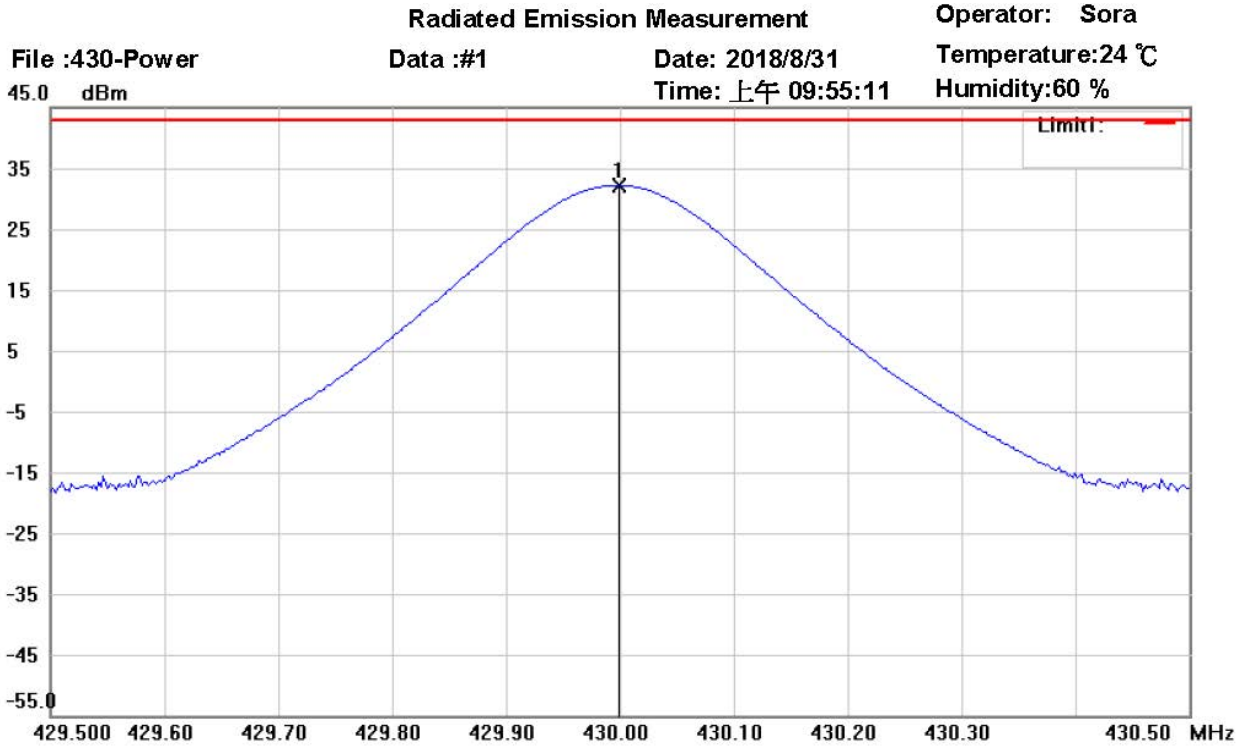
Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	417.9970	5.75	peak	29.10	34.85	43.00	150	160	-8.15	



# Worldwide Testing Services(Taiwan) Co., Ltd.

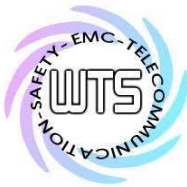
Registration number: W6M21808-18343-C-1  
 FCC ID: L9N-7085NUE5

430 MHz



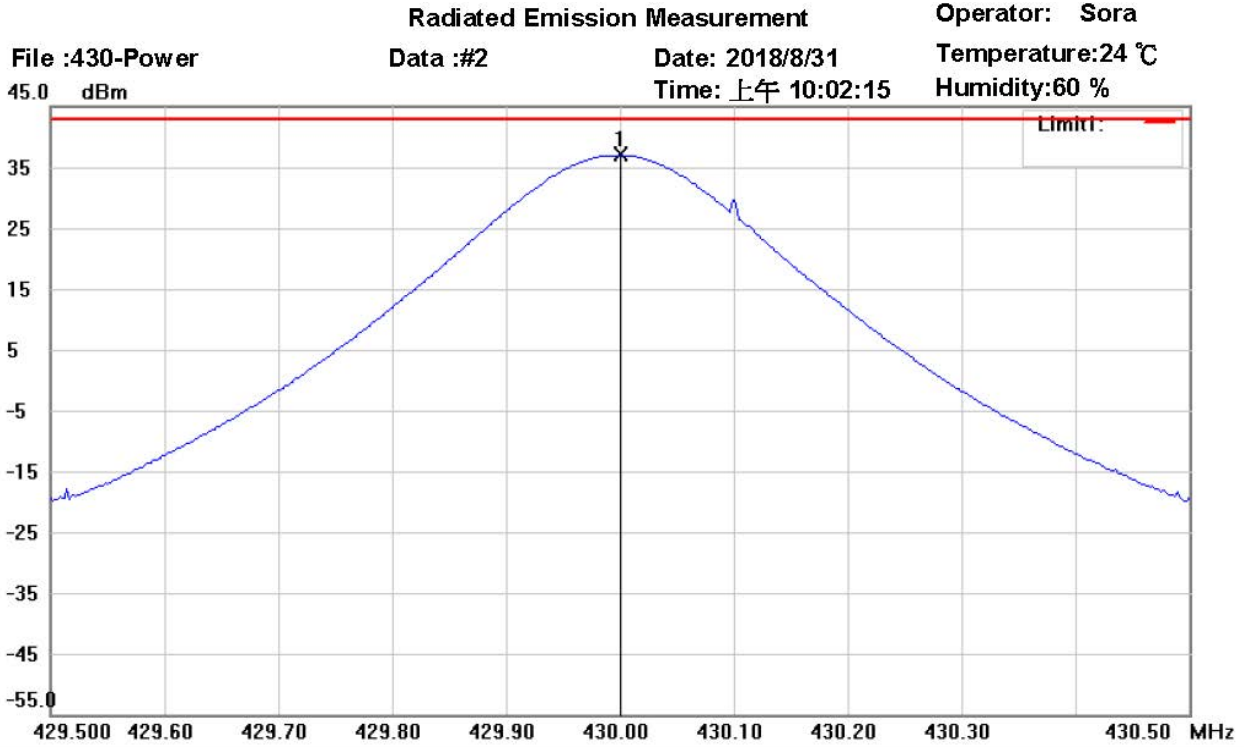
Site : Chamber  
 Condition : FCC\_part 90 POWER      Polarization: *Horizontal*  
 EUT : W6M21808-18343      Power : 13.6 Vd.c.  
 M/N:      Distance: 3m  
 Test Mode : Tx 430MHz  
 Note :

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	429.9990	-0.91	peak	33.09	32.18	43.00	150	225	-10.82	



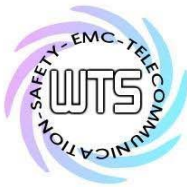
# Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M21808-18343-C-1  
 FCC ID: L9N-7085NUE5



Site : Chamber  
 Condition : FCC\_part 90 POWER      Polarization: *Vertical*  
 EUT : W6M21808-18343      Power : 13.6 Vd.c.  
 M/N:      Distance: 3m  
 Test Mode : Tx 430MHz  
 Note :

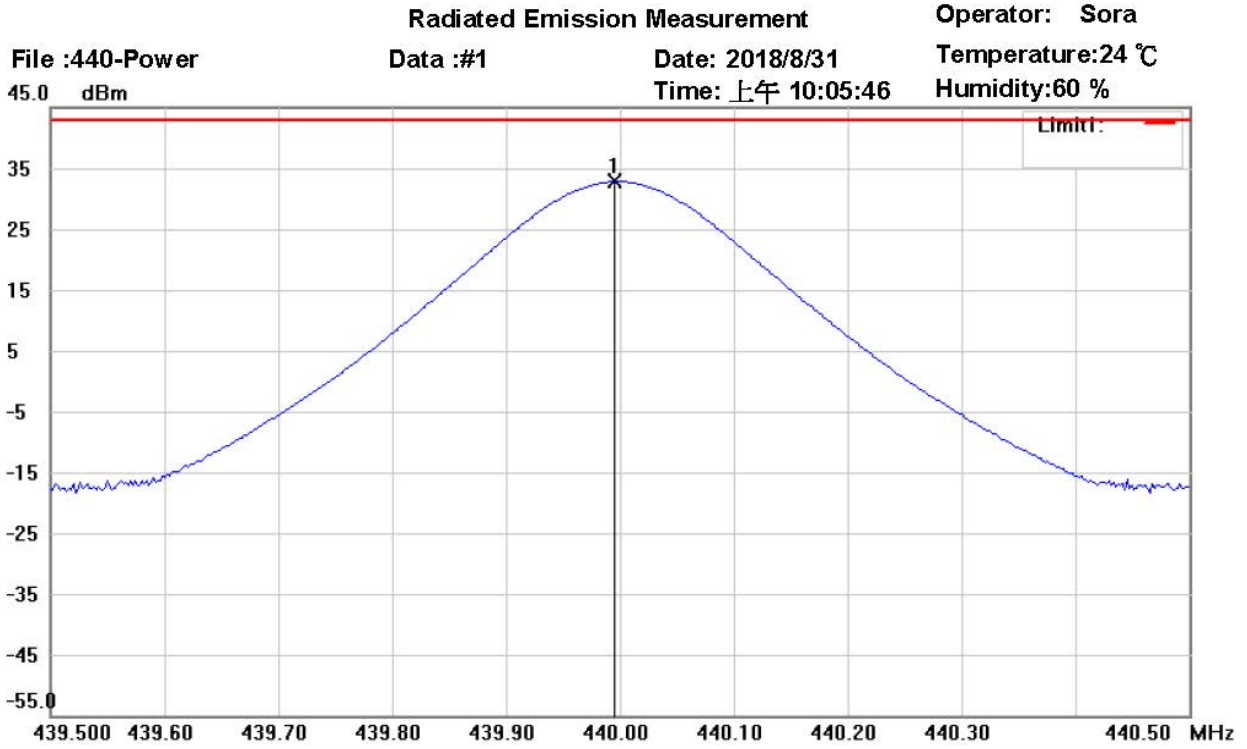
Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	430.0010	7.38	peak	29.63	37.01	43.00	150	175	-5.99	



# Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M21808-18343-C-1  
 FCC ID: L9N-7085NUE5

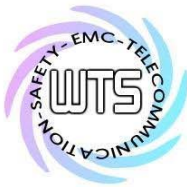
440 MHz



Site : Chamber  
 Condition : FCC\_part 90 POWER  
 EUT : W6M21808-18343  
 M/N:  
 Test Mode : Tx 440MHz  
 Note :

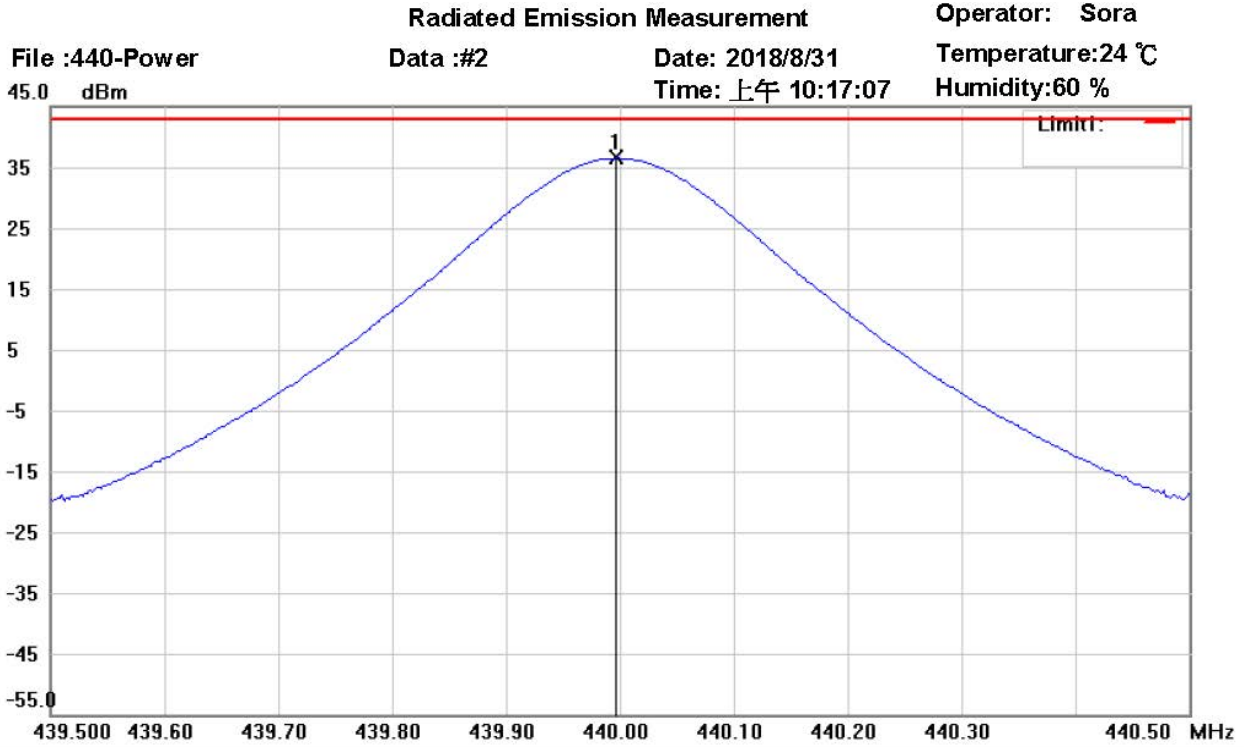
Polarization: *Horizontal*  
 Power : 13.6 Vd.c.  
 Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	439.9950	-0.27	peak	33.08	32.81	43.00	150	200	-10.19	



# Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M21808-18343-C-1  
 FCC ID: L9N-7085NUE5

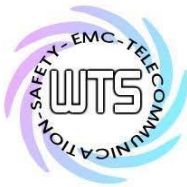


Site : Chamber  
 Condition : FCC\_part 90 POWER  
 EUT : W6M21808-18343  
 M/N:  
 Test Mode : Tx 440MHz  
 Note :

Polarization: *Vertical*  
 Power : 13.6 Vd.c.  
 Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	439.9970	6.43	peak	30.08	36.51	43.00	150	260	-6.49	

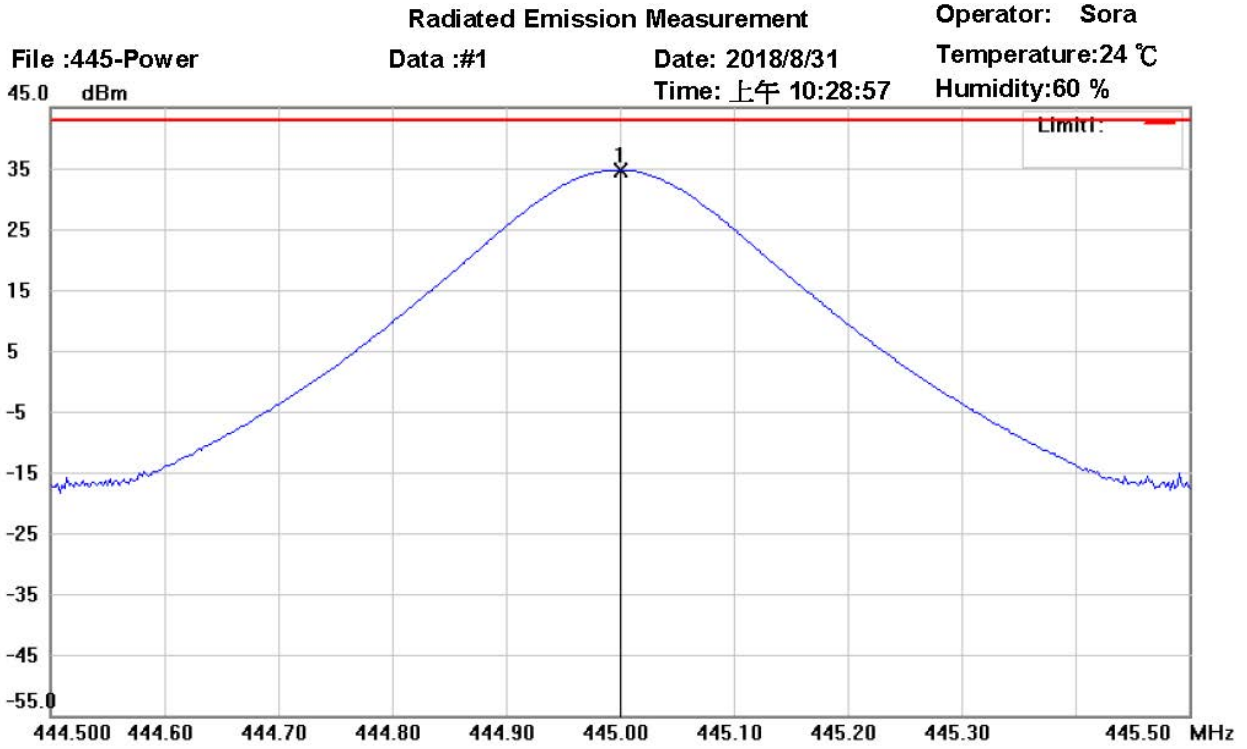




# Worldwide Testing Services(Taiwan) Co., Ltd.

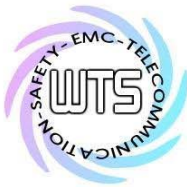
Registration number: W6M21808-18343-C-1  
 FCC ID: L9N-7085NUE5

445 MHz



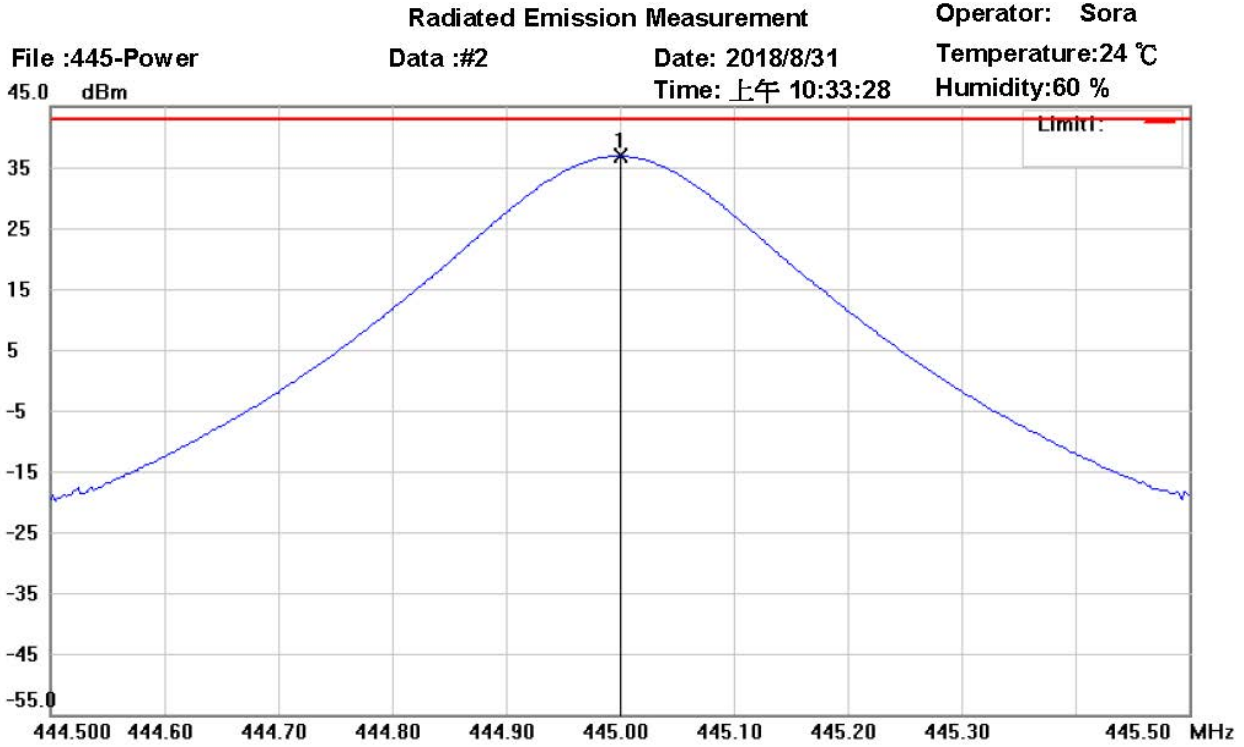
Site : Chamber  
 Condition : FCC\_part 90 POWER      Polarization: *Horizontal*  
 EUT : W6M21808-18343      Power : 13.6 Vd.c.  
 M/N:      Distance: 3m  
 Test Mode : Tx 445MHz  
 Note :

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	445.0010	1.68	peak	33.07	34.75	43.00	150	180	-8.25	



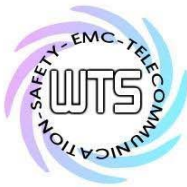
# Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M21808-18343-C-1  
 FCC ID: L9N-7085NUE5



Site : Chamber  
 Condition : FCC\_part 90 POWER      Polarization: *Vertical*  
 EUT : W6M21808-18343      Power : 13.6 Vd.c.  
 M/N:      Distance: 3m  
 Test Mode : Tx 445MHz  
 Note :

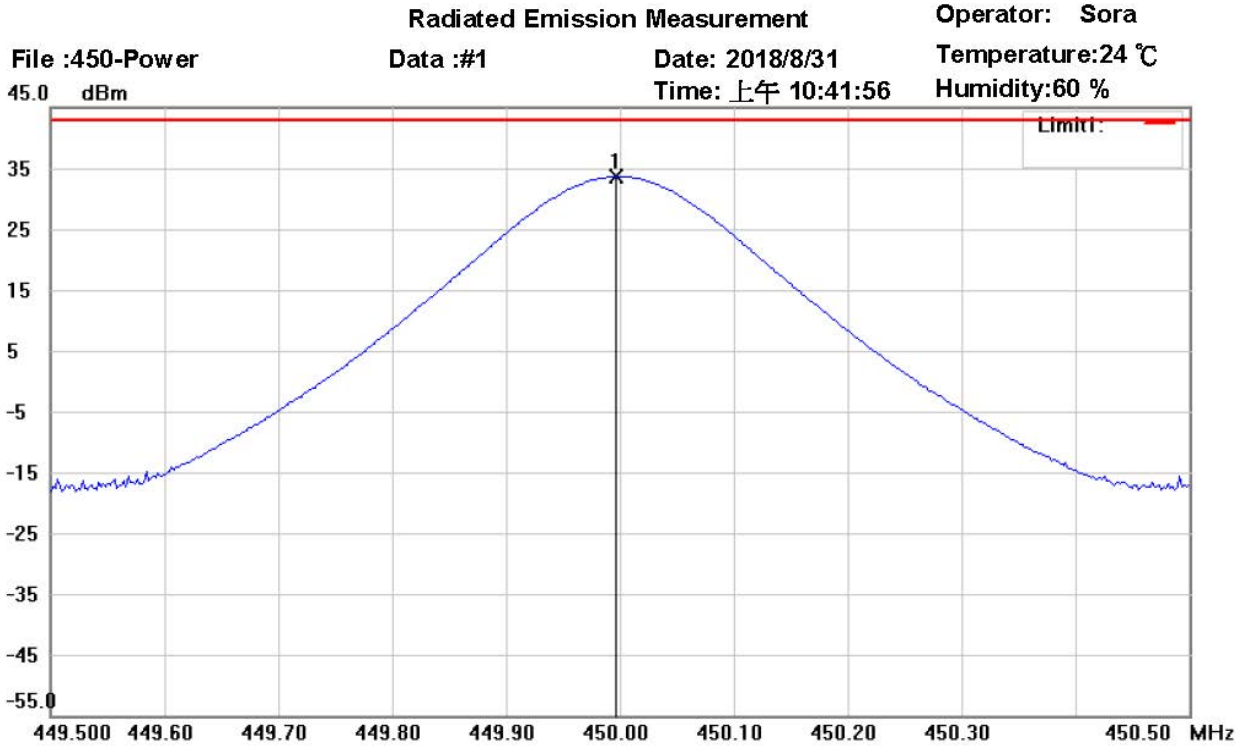
Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	445.0010	6.52	peak	30.31	36.83	43.00	150	260	-6.17	



# Worldwide Testing Services(Taiwan) Co., Ltd.

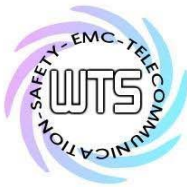
Registration number: W6M21808-18343-C-1  
 FCC ID: L9N-7085NUE5

450 MHz



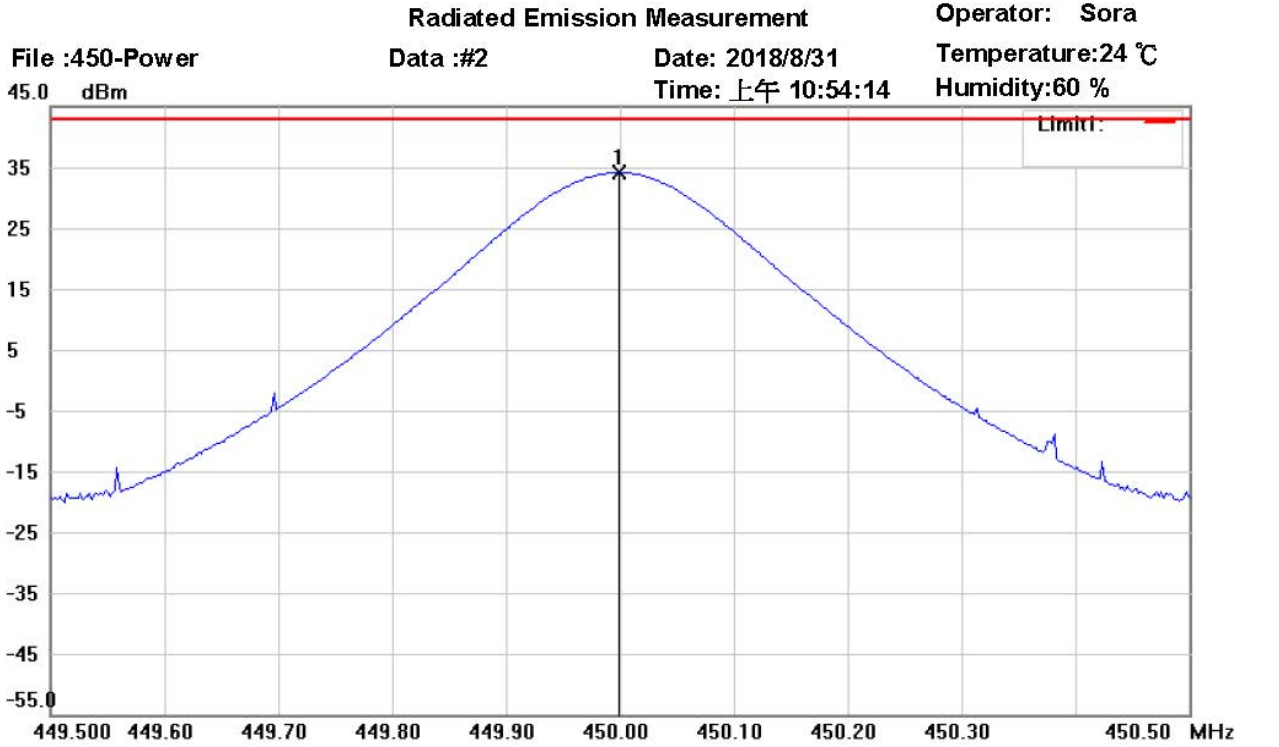
Site : Chamber  
 Condition : FCC\_part 90 POWER      Polarization: *Horizontal*  
 EUT : W6M21808-18343      Power : 13.6 Vd.c.  
 M/N:      Distance: 3m  
 Test Mode : Tx 450MHz  
 Note :

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	449.9970	0.59	peak	33.06	33.65	43.00	150	180	-9.35	



# Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M21808-18343-C-1  
 FCC ID: L9N-7085NUE5



Site : Chamber  
 Condition : FCC\_part 90 POWER      Polarization: *Vertical*  
 EUT : W6M21808-18343      Power : 13.6 Vd.c.  
 M/N:      Distance: 3m  
 Test Mode : Tx 450MHz  
 Note :

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	449.9990	3.60	peak	30.53	34.13	43.00	150	205	-8.87	

Test equipment used: ETSTW-RE 003, ETSTW-RE 042, ETSTW-RE 055, ETSTW-RE 072

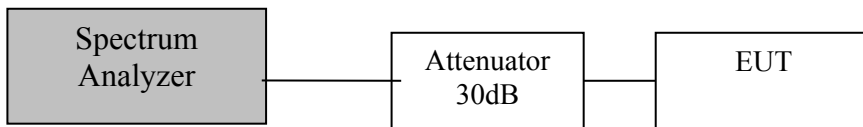
Registration number: W6M21808-18343-C-1  
 FCC ID: L9N-7085NUE5

## 7. Emission masks

### 7.1 Test Procedures

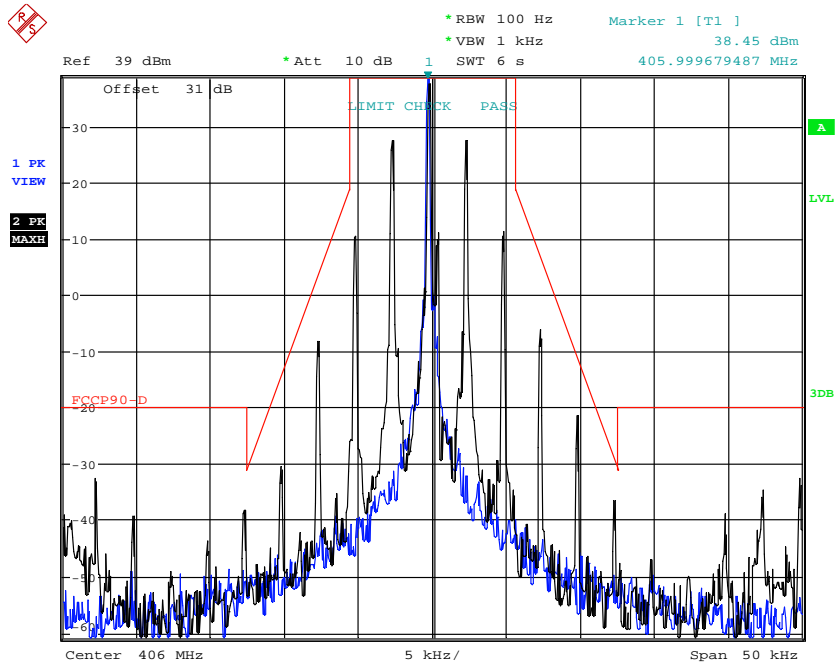
1. The transmitter output is connected to the spectrum analyzer through an attenuator.
2. Set RBW of spectrum analyzer to 100Hz and VBW to 1 kHz.
3. Mark the frequency with maximum peak power as the center of the display of the spectrum
4. Set the span to 50 kHz and the sweep time to Auto.
5. Record the power spectral and compare to the Mask.

### 7.2 Test Setup

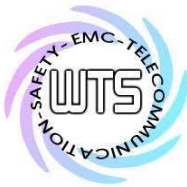


### 7.3 Test Result

12.5 kHz  
 406 MHz

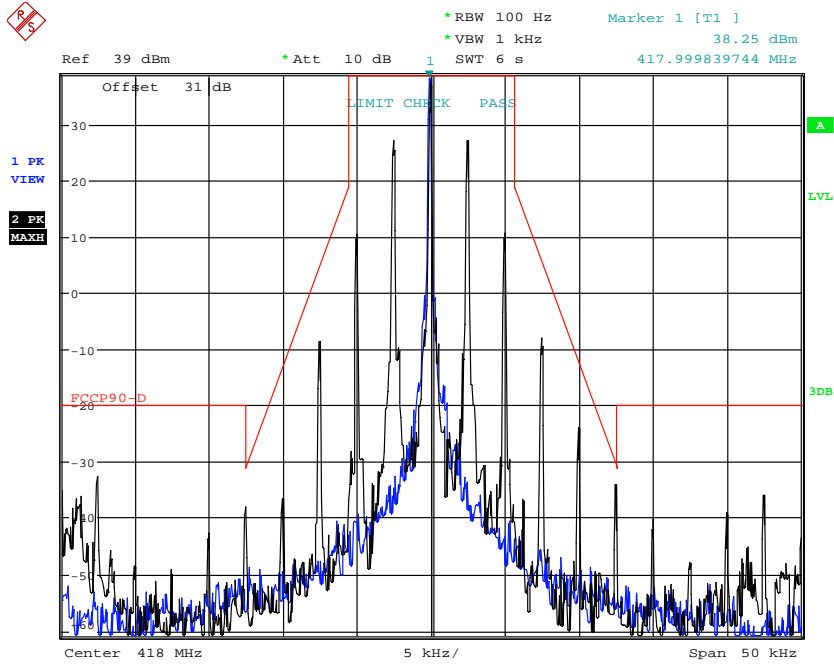


EMISSION MASK 12.5K 406MHz  
 Date: 29.AUG.2018 15:48:17



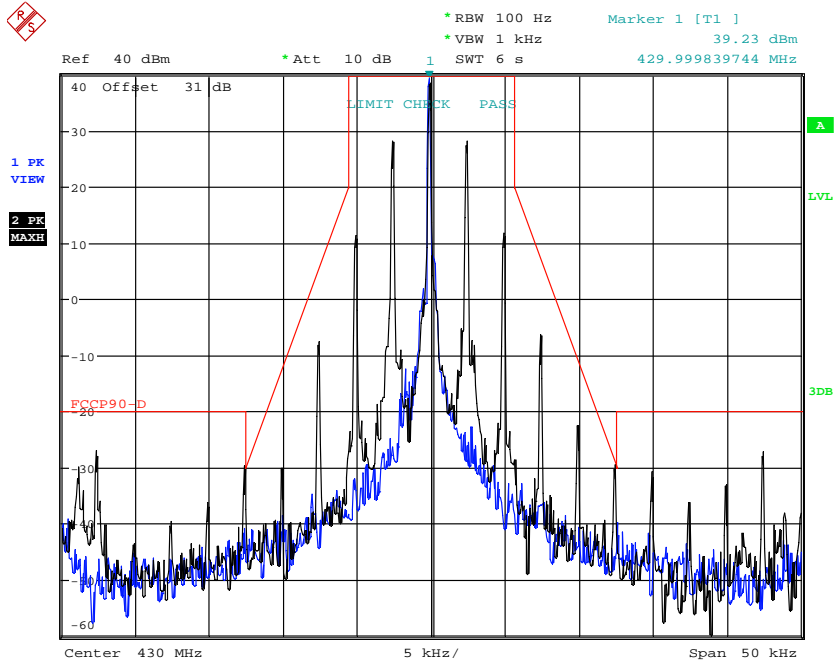
Registration number: W6M21808-18343-C-1  
FCC ID: L9N-7085NUE5

418 MHz

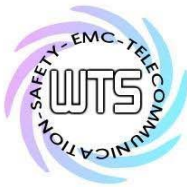


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430 MHz

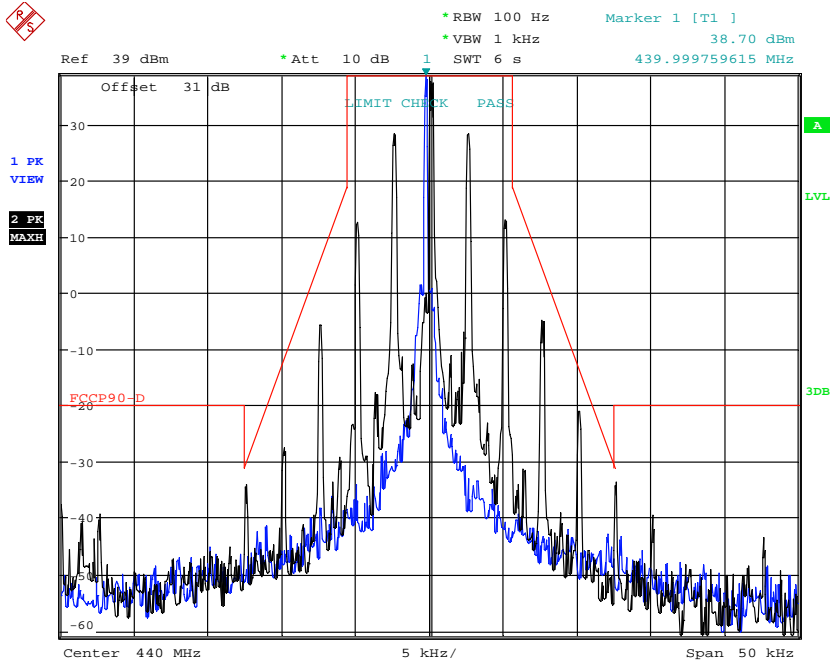


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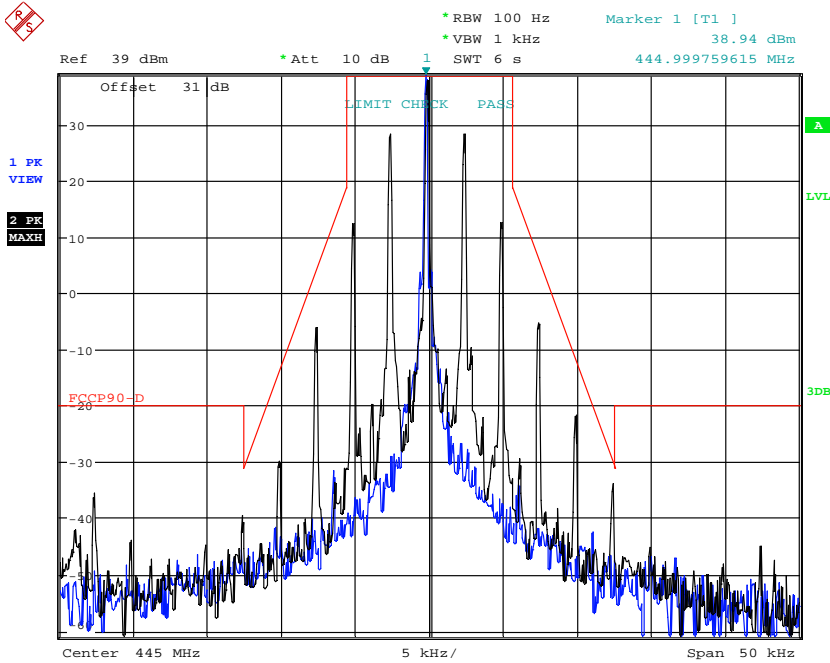
Registration number: W6M21808-18343-C-1  
FCC ID: L9N-7085NUE5

440 MHz

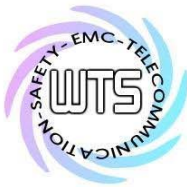


EMISSION MASK 12.5K 440MHz  
Date: 29.AUG.2018 15:46:51

445 MHz

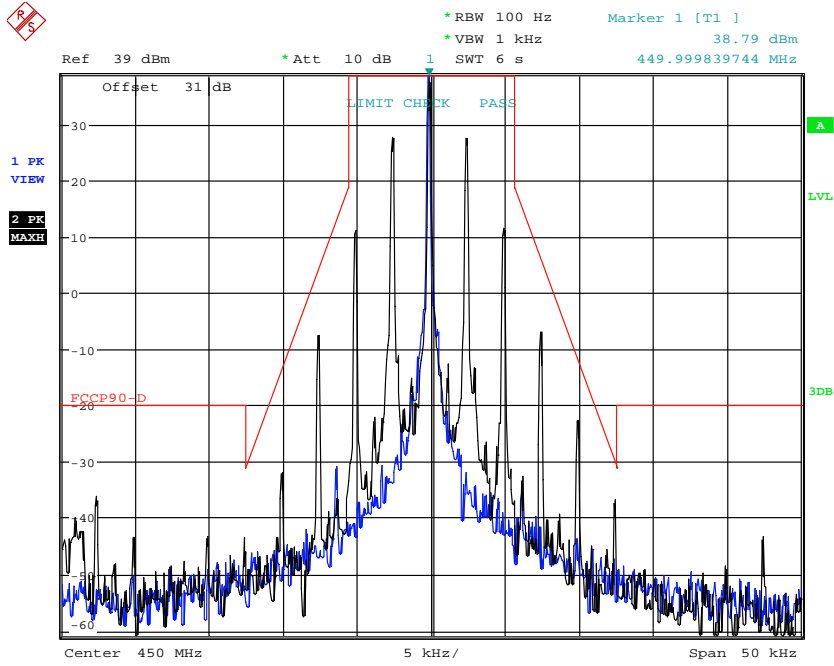


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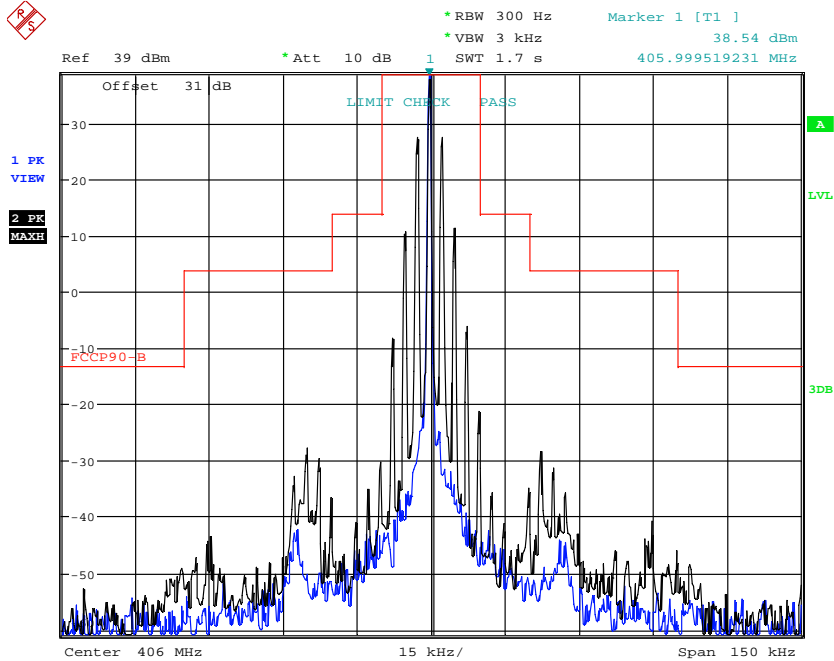
Registration number: W6M21808-18343-C-1  
FCC ID: L9N-7085NUE5

450 MHz



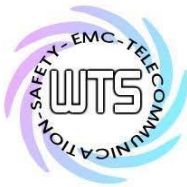
EMISSION MASK 12.5K 450MHz  
Date: 29.AUG.2018 16:08:27

25 kHz  
406 MHz



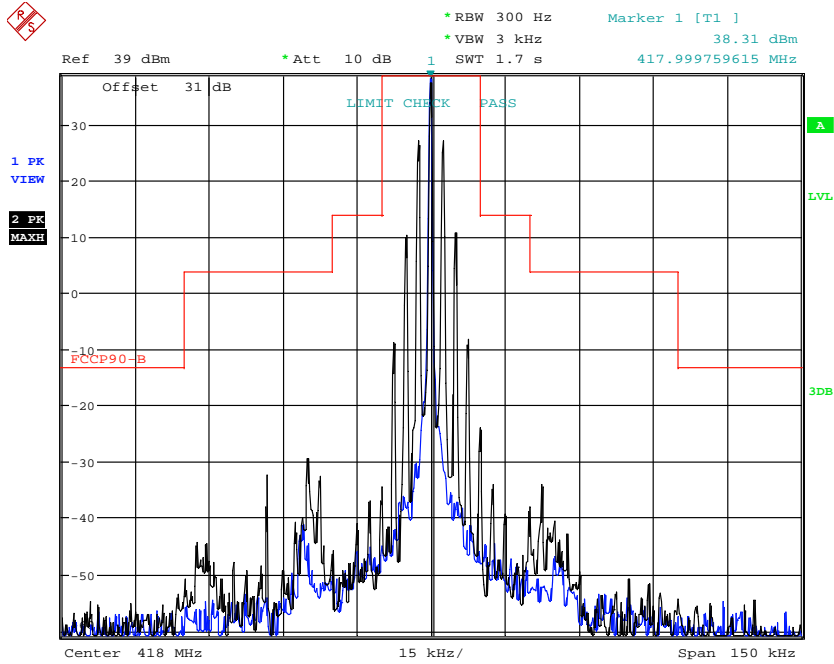
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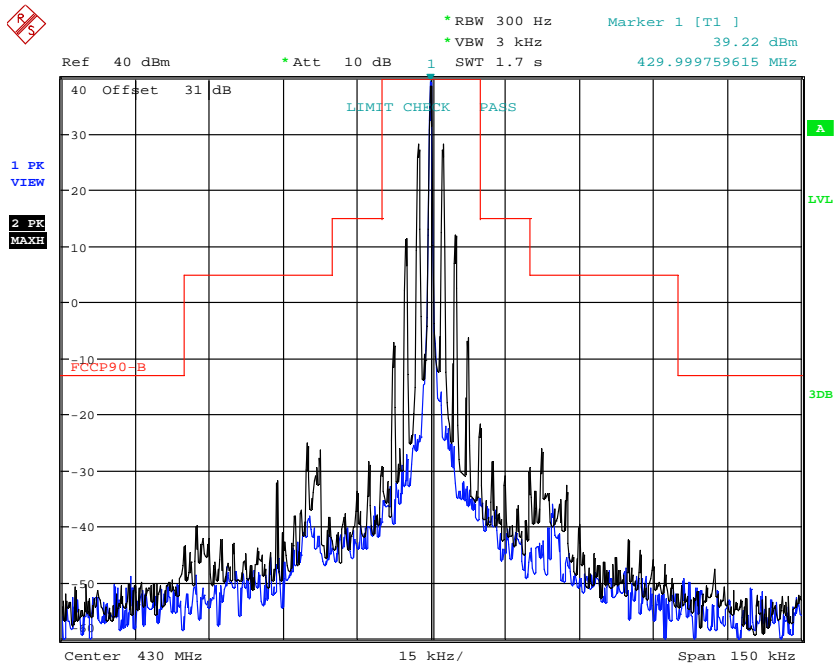
Registration number: W6M21808-18343-C-1  
FCC ID: L9N-7085NUE5

418 MHz

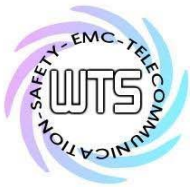


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430 MHz

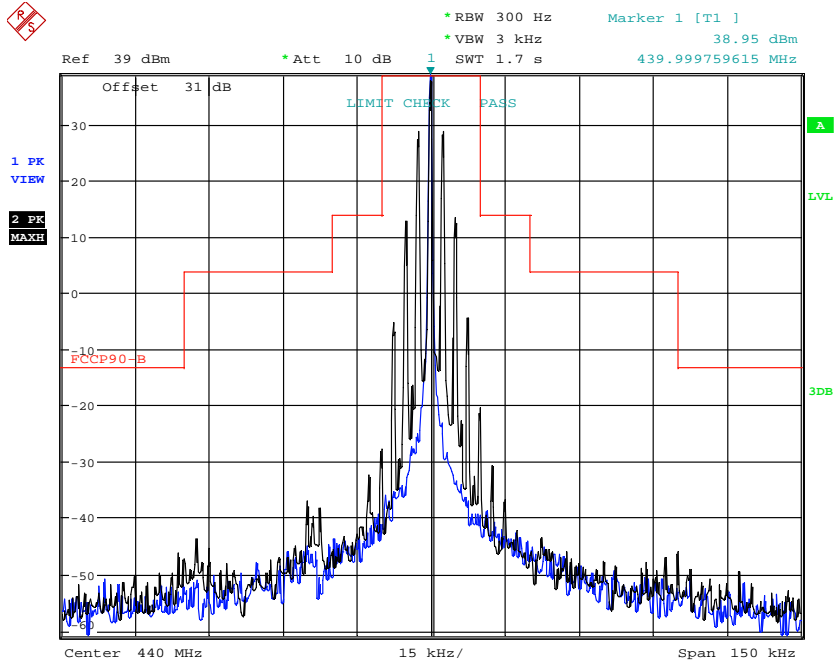


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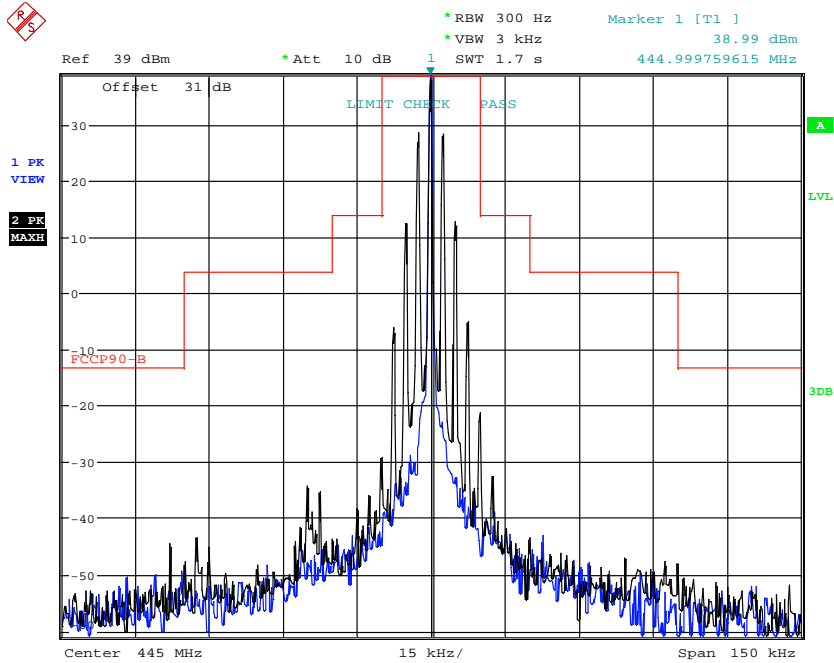
Registration number: W6M21808-18343-C-1  
FCC ID: L9N-7085NUE5

440 MHz

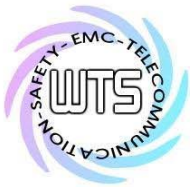


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445 MHz

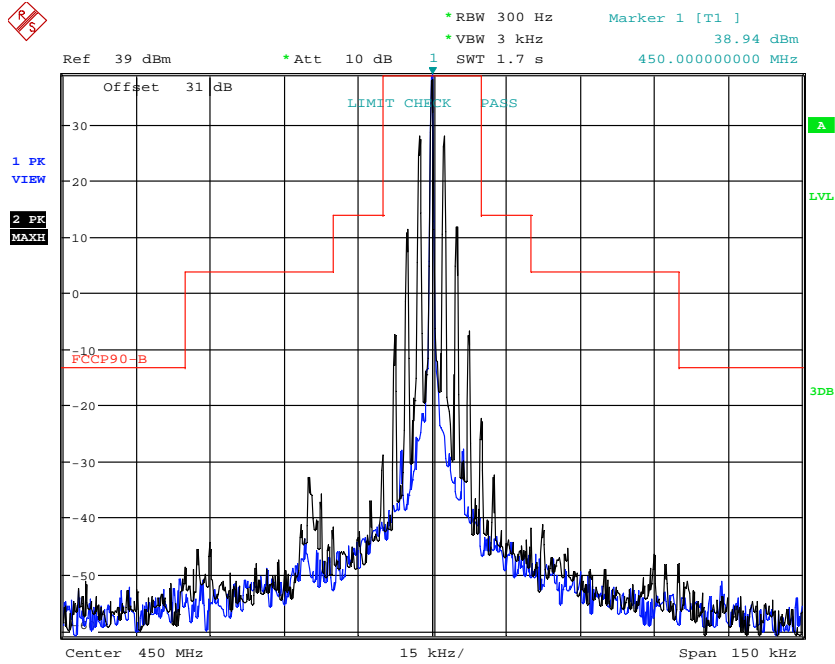


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Date: 29.AUG.2018 16:53:16



Registration number: W6M21808-18343-C-1  
FCC ID: L9N-7085NUE5

450 MHz



EMISSION MASK 25K 450MHz  
Date: 29.AUG.2018 16:49:30

Limit according to FCC § 90.210: 12.5 kHz: Emission Mask D / 25 kHz: Emission Mask C.

Test equipment used: ETSTW-RE 055, ETSTW-RE072

Registration number: W6M21808-18343-C-1  
 FCC ID: L9N-7085NUE5

## 8. Transmitter Spurious Radiated Emission

### 8.1 Test Procedures

The EUT was positioned on a non-conductive turntable, 0.8m above the ground plane.

The radiated emission at the fundamental frequency was measured at 3 m distance with a test antenna and spectrum analyzer.

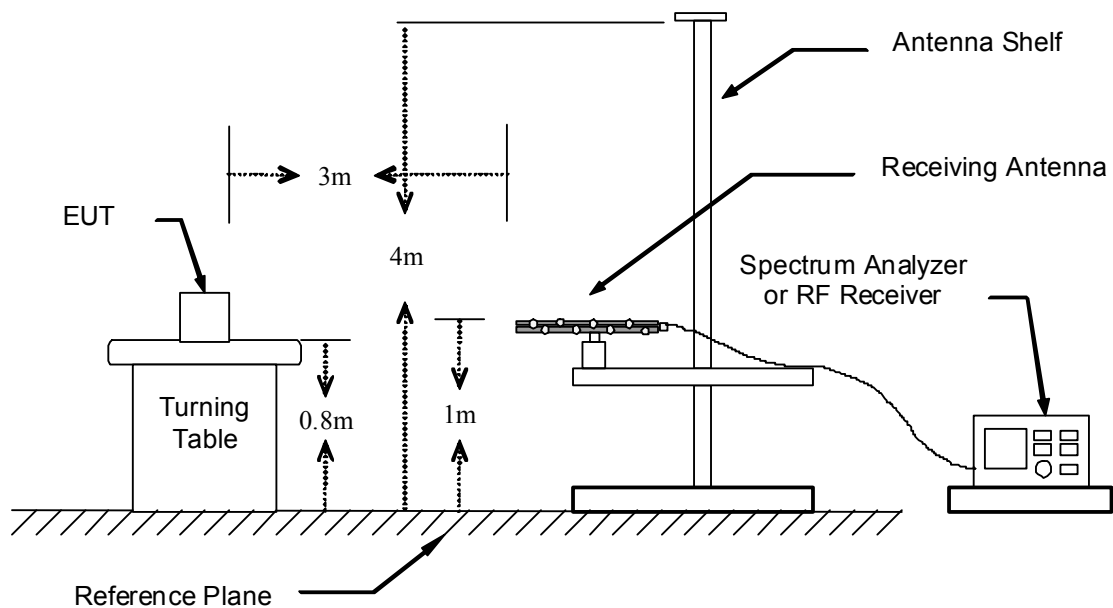
Worst case emission was recorded with the rotation of the turntable and the raising and lowering of the test antenna.

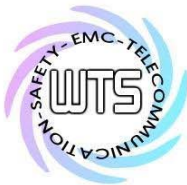
ERP was measured using a substitution method. The EUT was replaced by reference antenna connected to a signal generator.

The test of spurious radiated emission has been carried out with the validated test software. The measurements below 1GHz were performed with a measurement bandwidth of 100 kHz, above 1GHz with a bandwidth of 1MHz.

Spurious emission limits near the carrier are defined by a emission mask.

### 8.2 Test Setup





Registration number: W6M21808-18343-C-1  
 FCC ID: L9N-7085NUE5

8.3 Test Result

Model: 52-7085UE5 Date: --  
 Mode: -- Temperature: -- °C Engineer: --  
 Polarization: Horizontal Humidity: -- %

Frequency (MHz)	Reading (dBm) Peak	Factor (dB) Corr.	Result (dBm)	Limit (dBm)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--

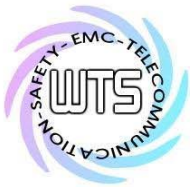
Polarization: Vertical

Frequency (MHz)	Reading (dBm) Peak	Factor (dB) Corr.	Result (dBm)	Limit (dBm)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--

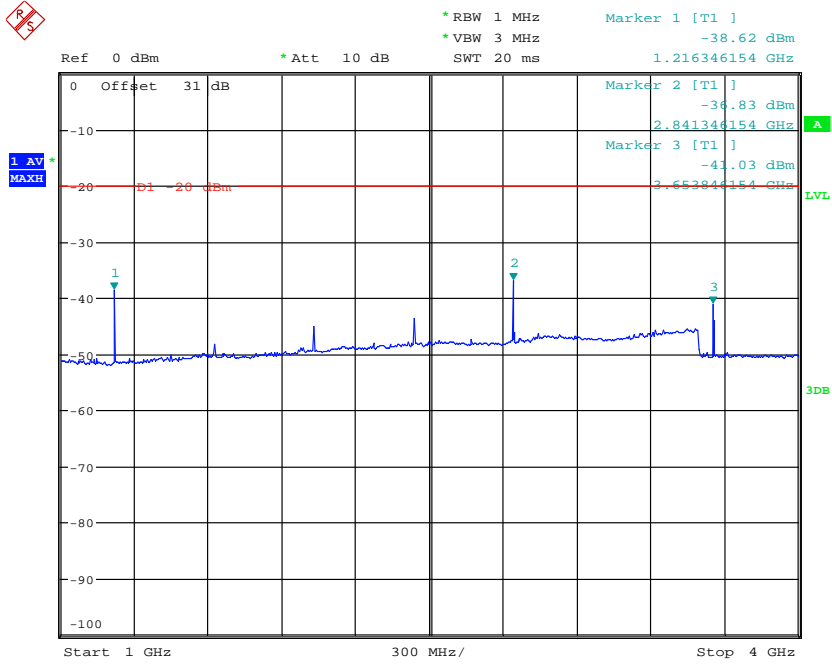
- Note**
1. Correction Factor = Antenna factor + Cable loss - Preamplifier
  2. The formula of measured value as: Test Result = Reading + Correction Factor
  3. Detector function in the form : PK = Peak, QP = Quasi Peak, AV = Average
  4. All not in the table noted test results are more than 20 dB below the relevant limits.
  5. Measurement uncertainty above 30-1000 MHz = ± 3.57 dB, 1-18 GHz = ± 2.60 dB, 18-40 GHz = ± 2.58 dB ; Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.
  6. See attached diagrams in appendix.

Test equipment used: ETSTW-RE 003, ETSTW-RE 042, ETSTW-RE 043, ETSTW-RE 044, ETSTW-RE 072



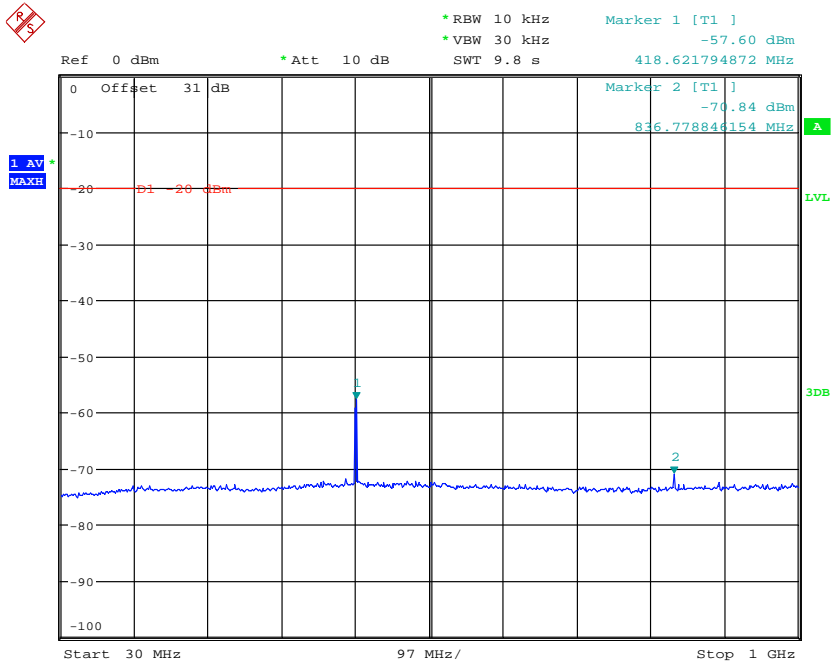


Registration number: W6M21808-18343-C-1  
FCC ID: L9N-7085NUE5

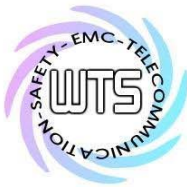


CONDUCTED SPURIOUS EMISSION 12.5K 406MHz  
Date: 30.AUG.2018 15:20:10

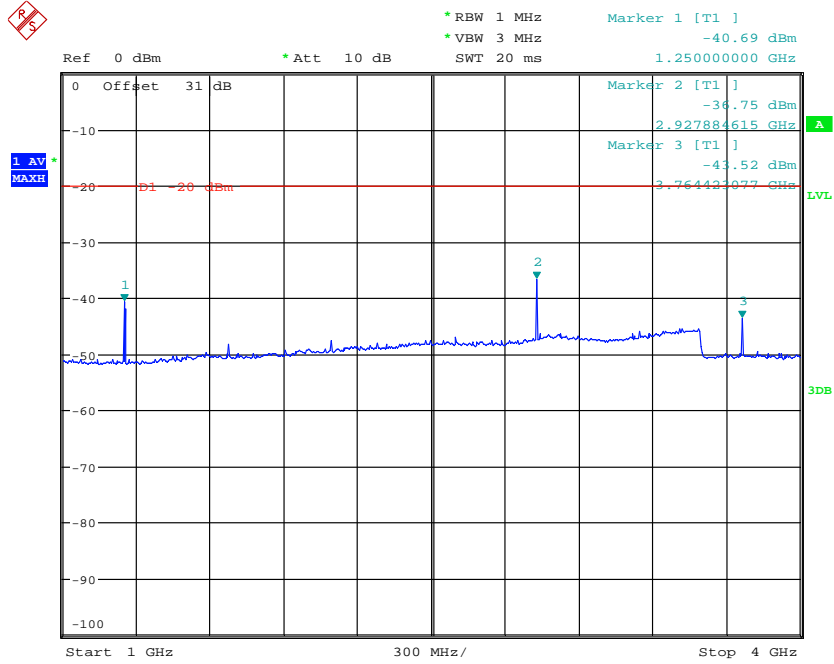
418 MHz



CONDUCTED SPURIOUS EMISSION 12.5K 418MHz  
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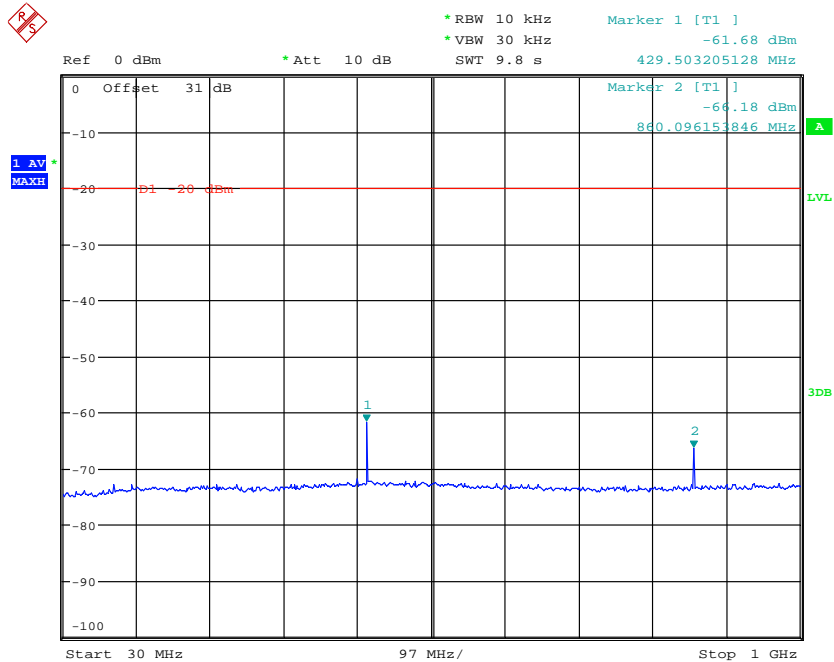


Registration number: W6M21808-18343-C-1  
 FCC ID: L9N-7085NUE5



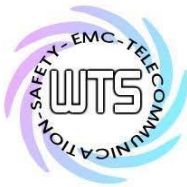
CONDUCTED SPURIOUS EMISSION 12.5K 418MHz  
 Date: 30.AUG.2018 16:04:15

430 MHz

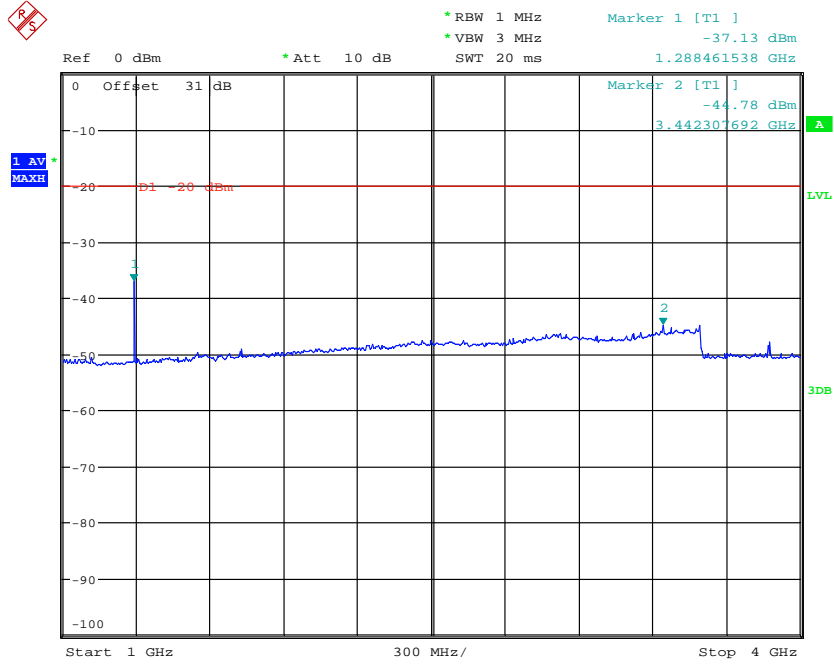


CONDUCTED SPURIOUS EMISSION 12.5K 430MHz  
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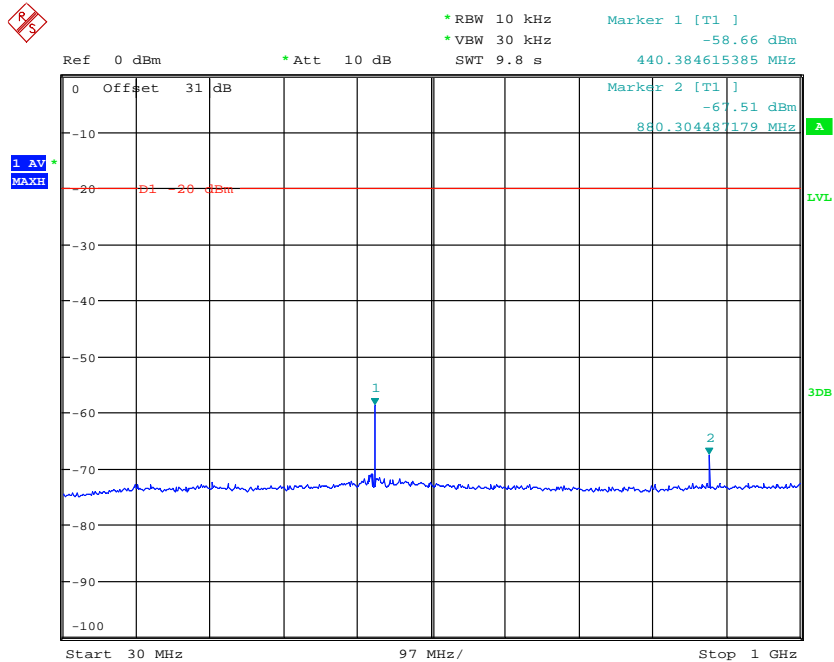


Registration number: W6M21808-18343-C-1  
FCC ID: L9N-7085NUE5

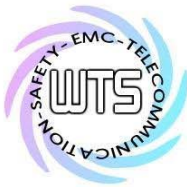


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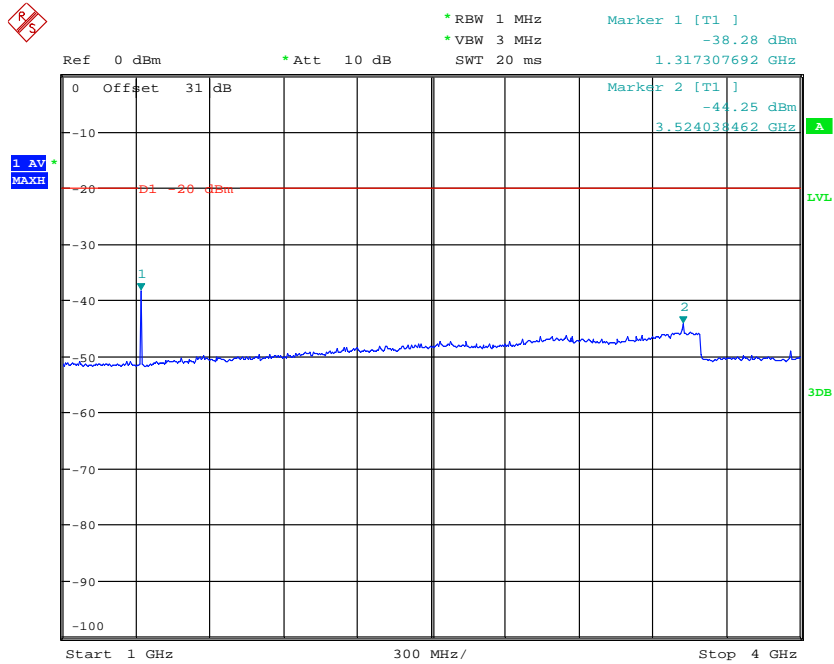
440 MHz



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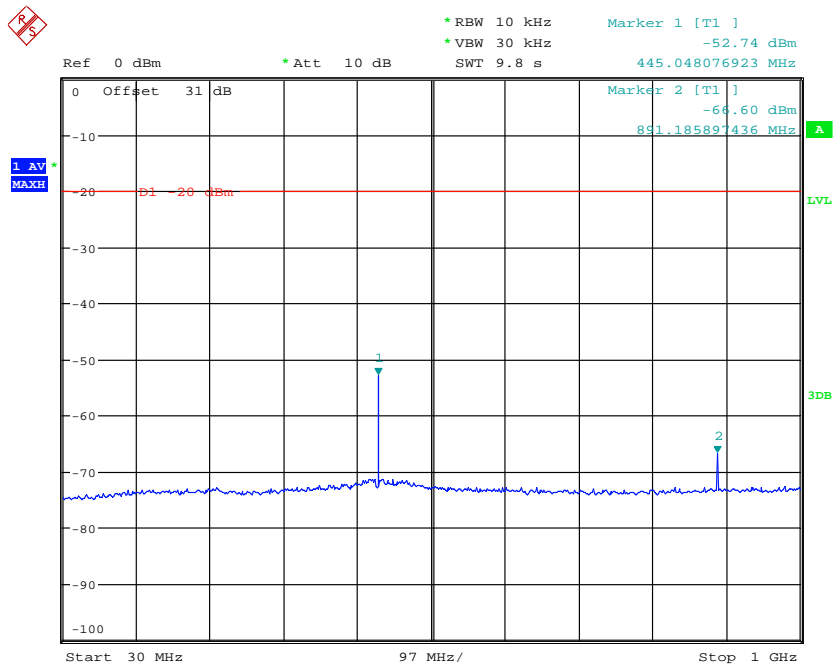


Registration number: W6M21808-18343-C-1  
FCC ID: L9N-7085NUE5

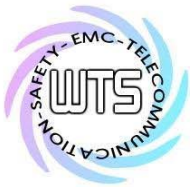


CONDUCTED SPURIOUS EMISSION 12.5K 440MHz  
Date: 30.AUG.2018 15:17:03

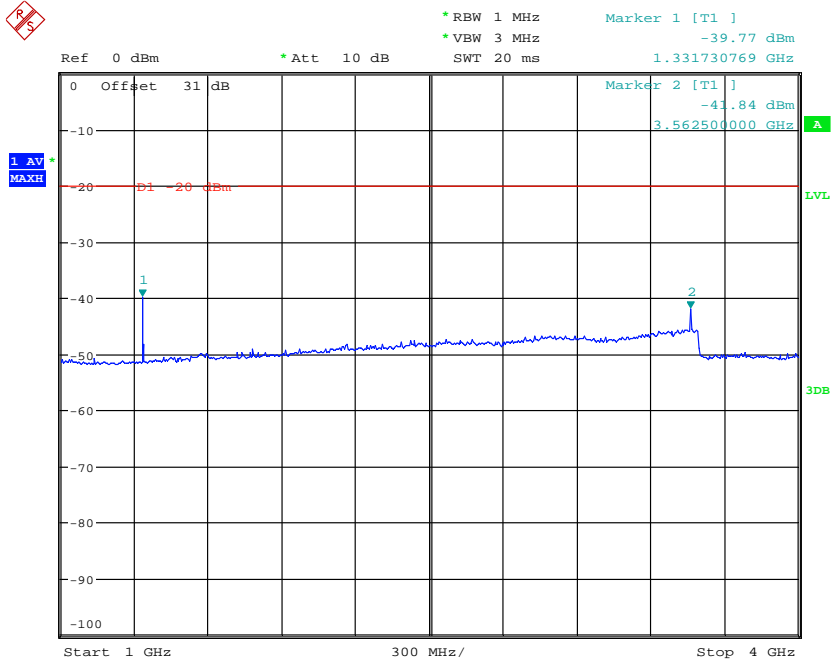
445 MHz



CONDUCTED SPURIOUS EMISSION 12.5K 445MHz  
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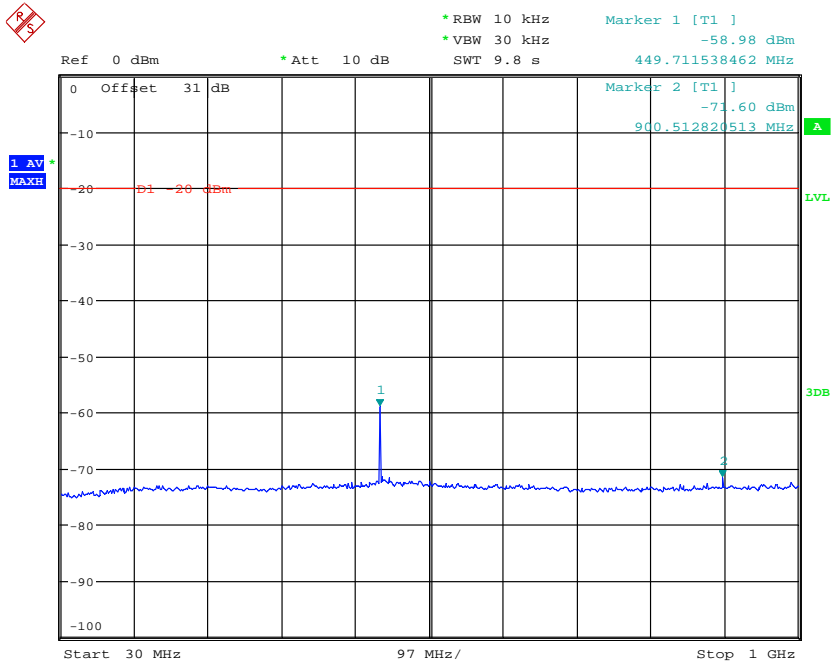


Registration number: W6M21808-18343-C-1  
FCC ID: L9N-7085NUE5

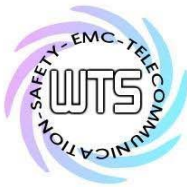


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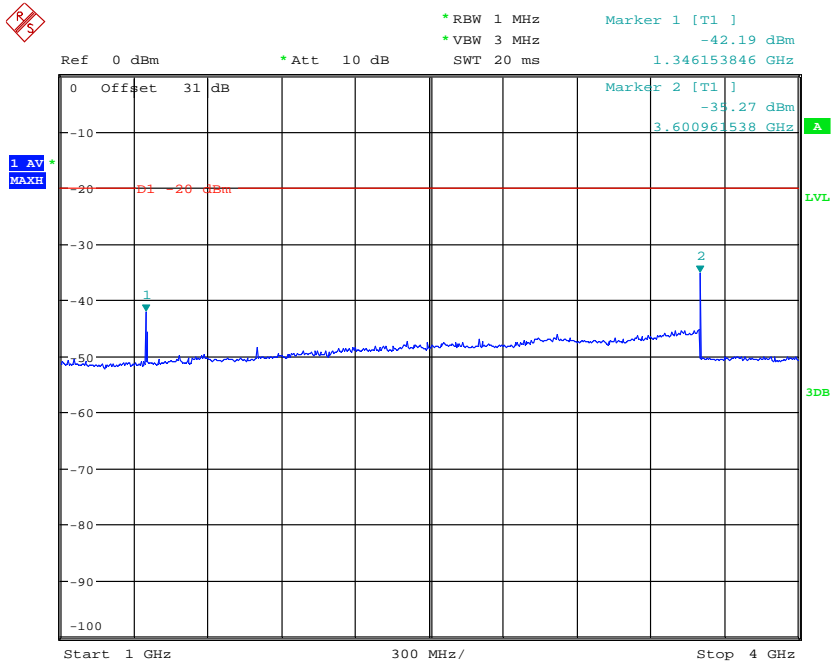
450 MHz



CONDUCTED SPURIOUS EMISSION 12.5K 450MHz  
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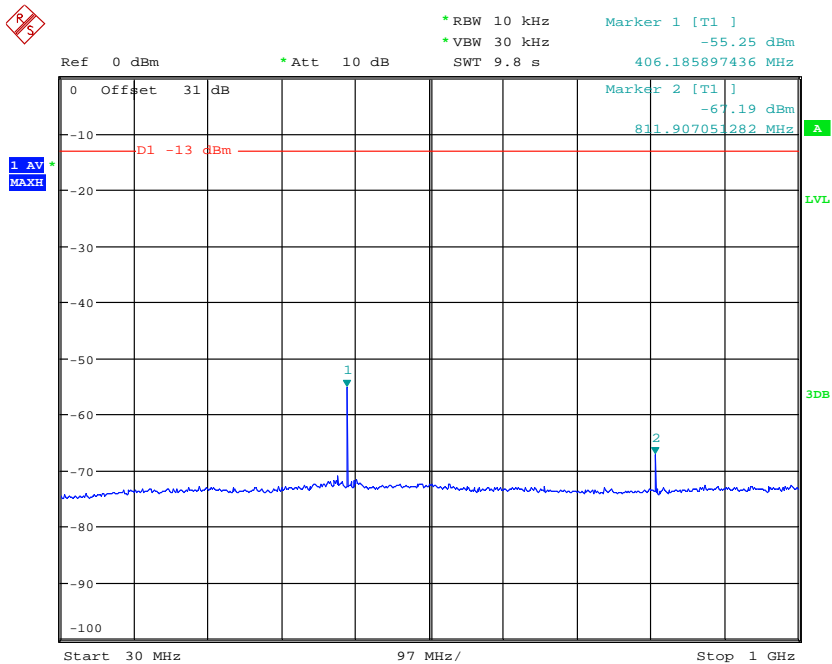


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FCC ID: L9N-7085NUE5

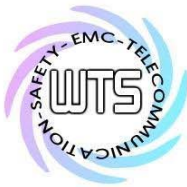


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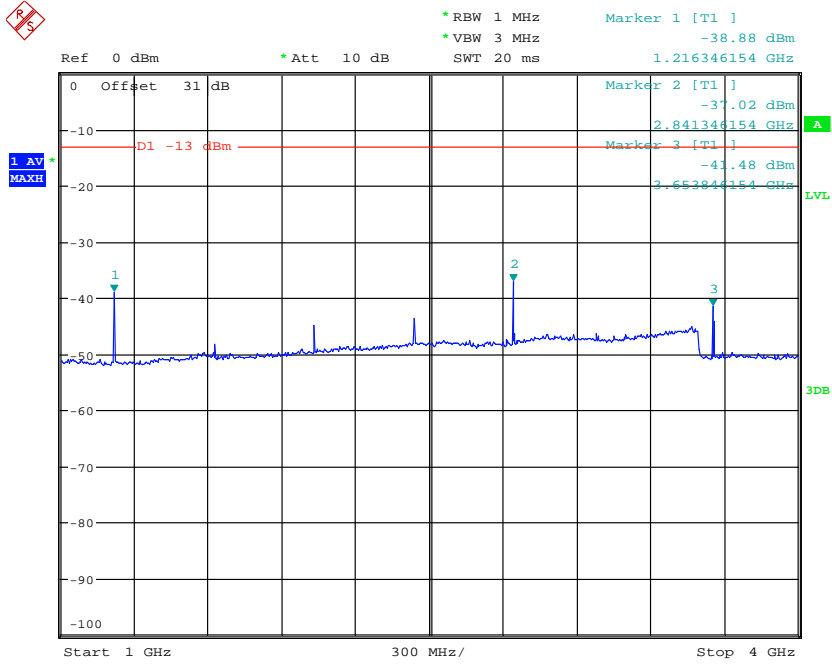
25 kHz  
406 MHz



CONDUCTED SPURIOUS EMISSION 25K 406MHz  
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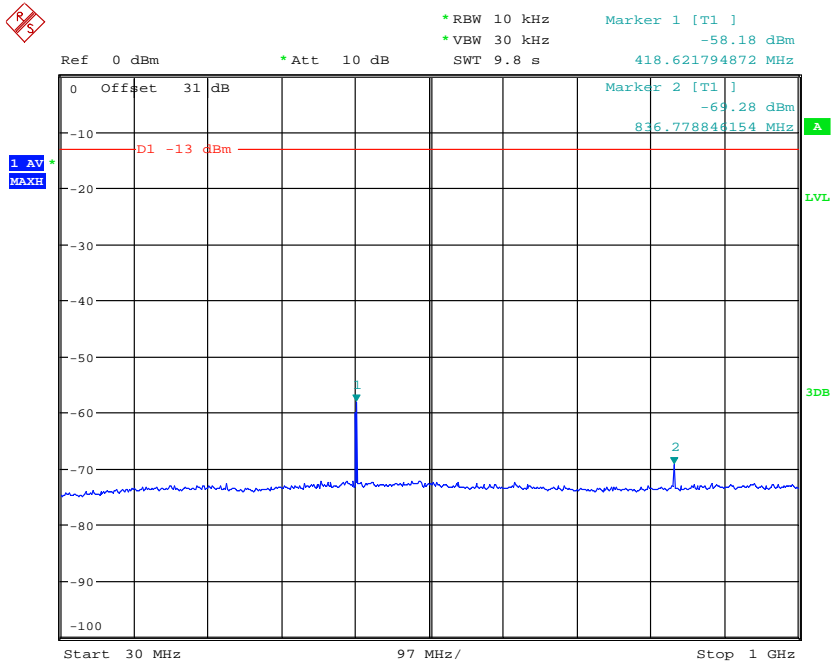


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FCC ID: L9N-7085NUE5

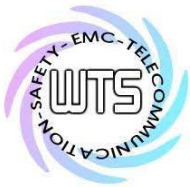


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Date: 30.AUG.2018 15:20:50

418 MHz

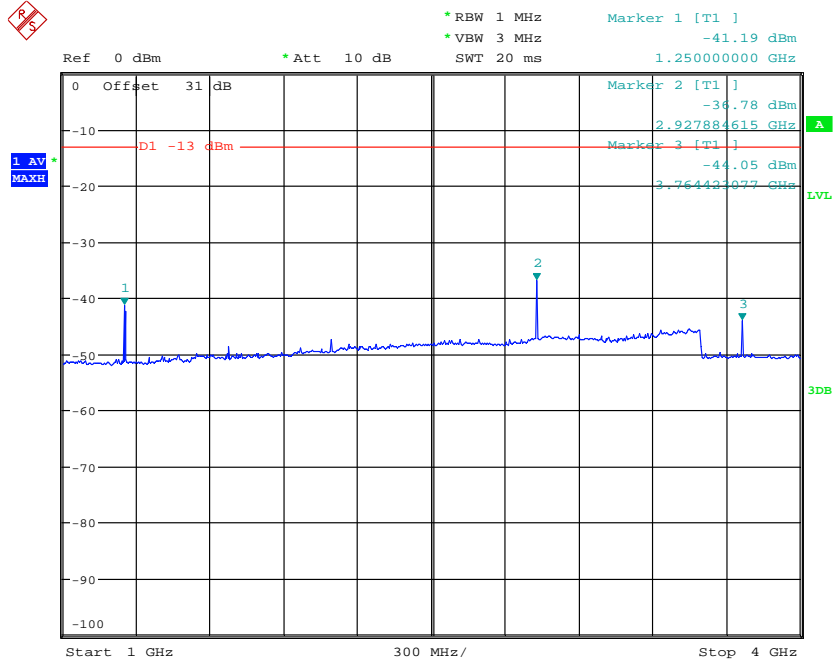


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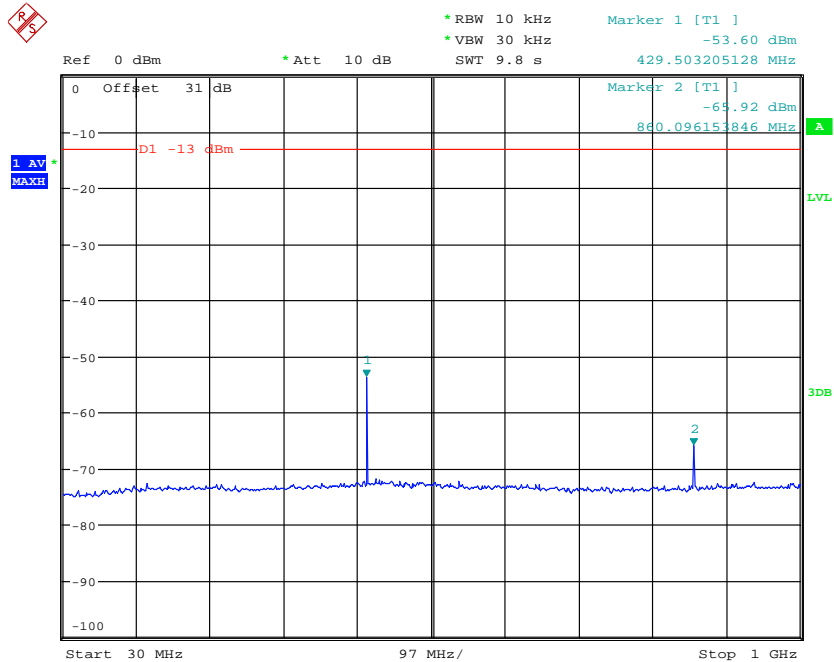
# Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M21808-18343-C-1  
FCC ID: L9N-7085NUE5

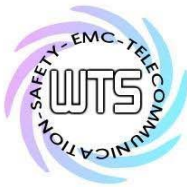


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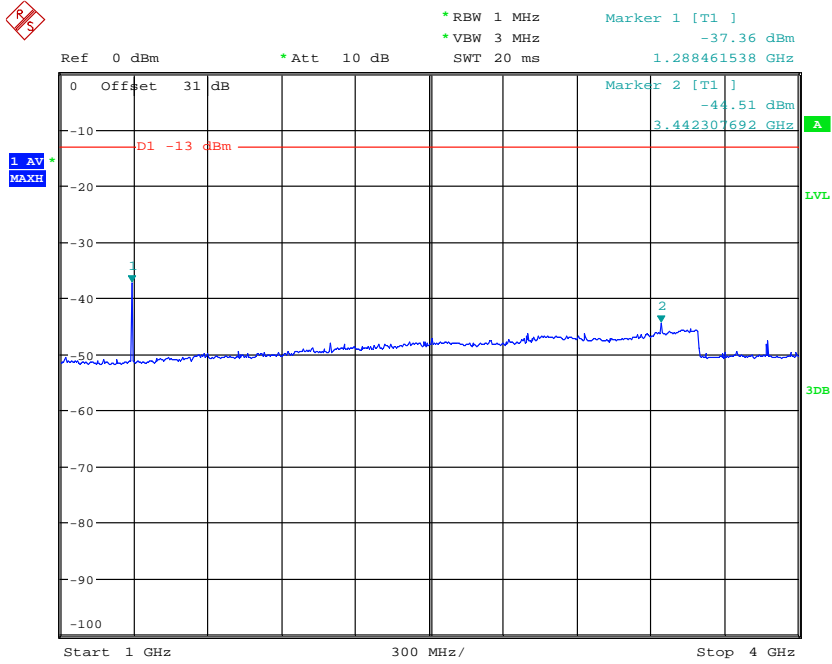
430 MHz



CONDUCTED SPURIOUS EMISSION 25K 430MHz  
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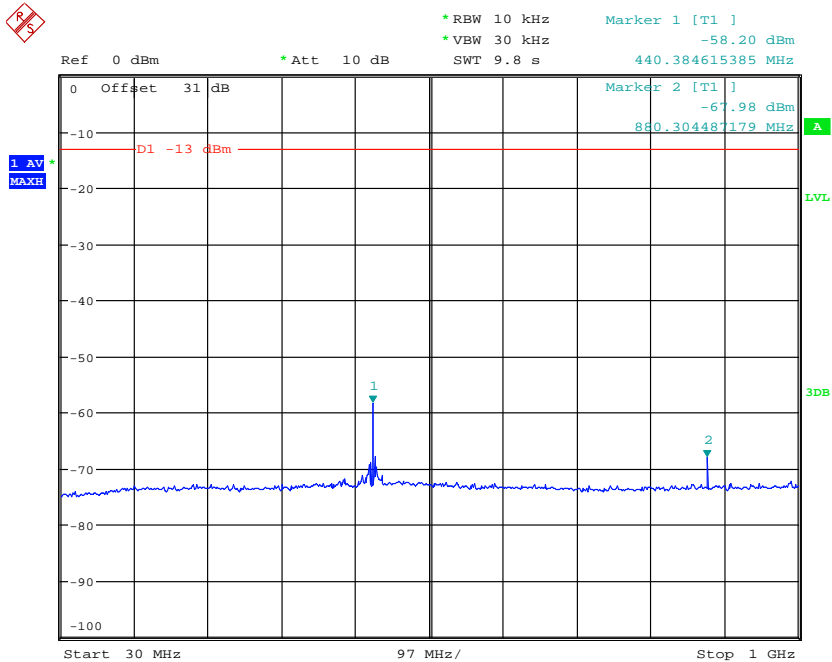


Registration number: W6M21808-18343-C-1  
FCC ID: L9N-7085NUE5

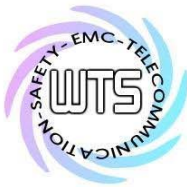


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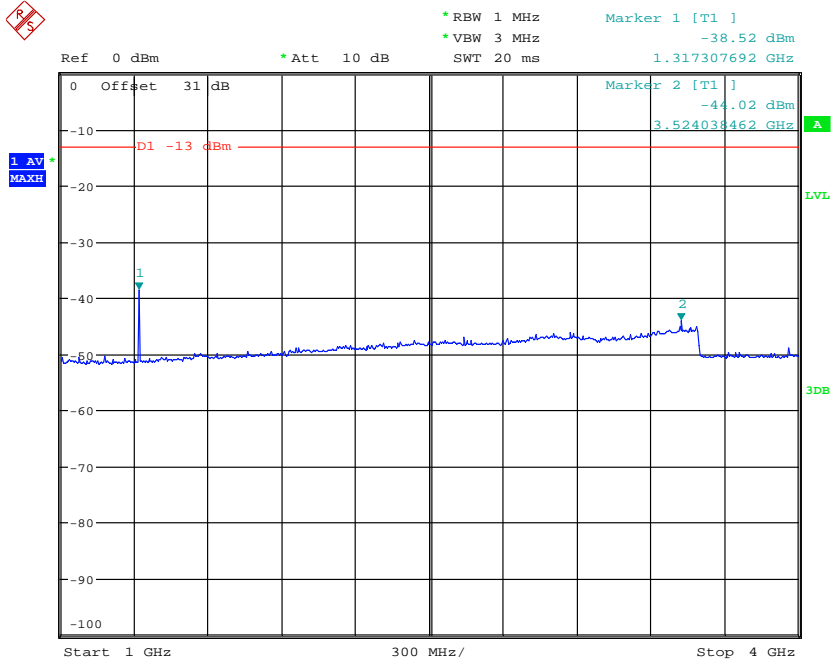
440 MHz



CONDUCTED SPURIOUS EMISSION 25K 440MHz  
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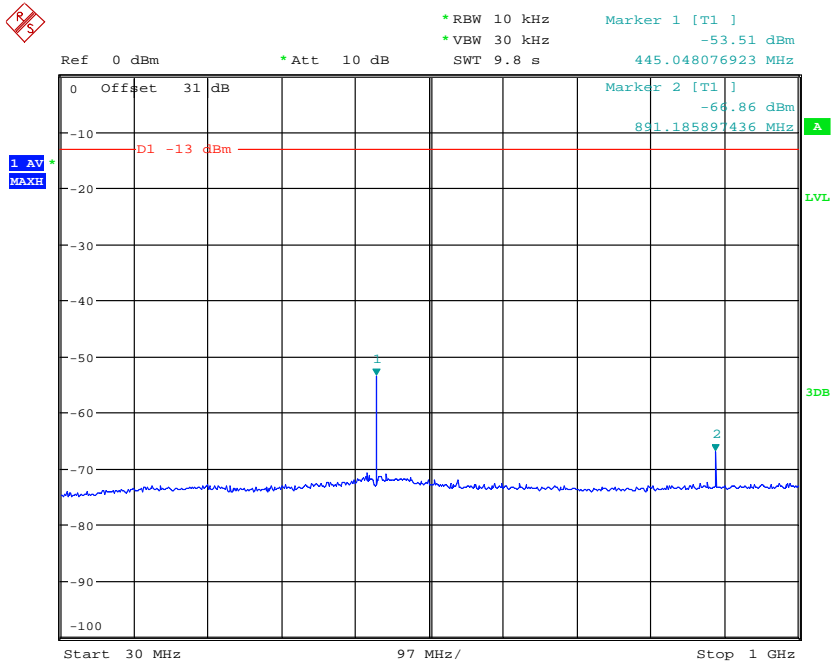


Registration number: W6M21808-18343-C-1  
FCC ID: L9N-7085NUE5



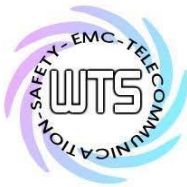
CONDUCTED SPURIOUS EMISSION 25K 440MHz  
Date: 30.AUG.2018 15:16:29

445 MHz

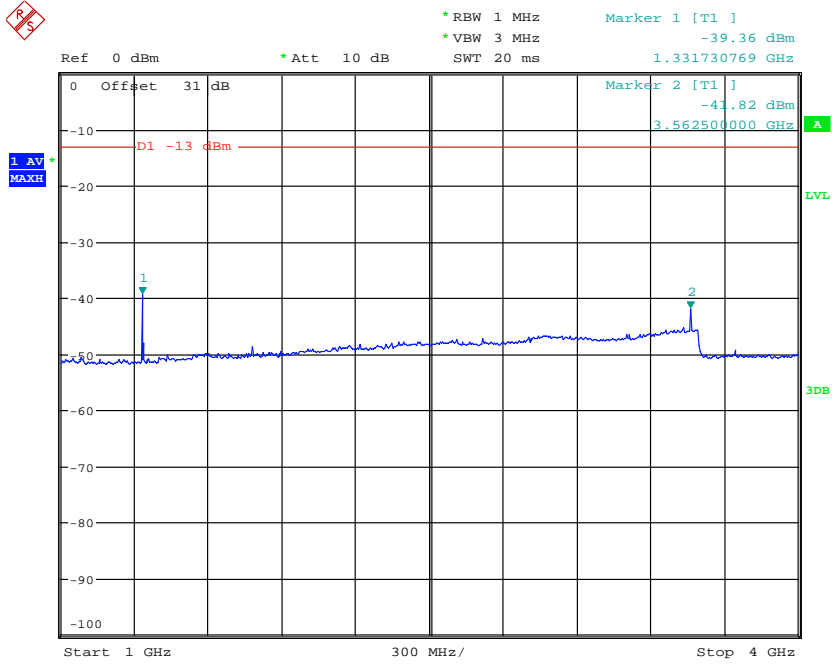


CONDUCTED SPURIOUS EMISSION 25K 445MHz  
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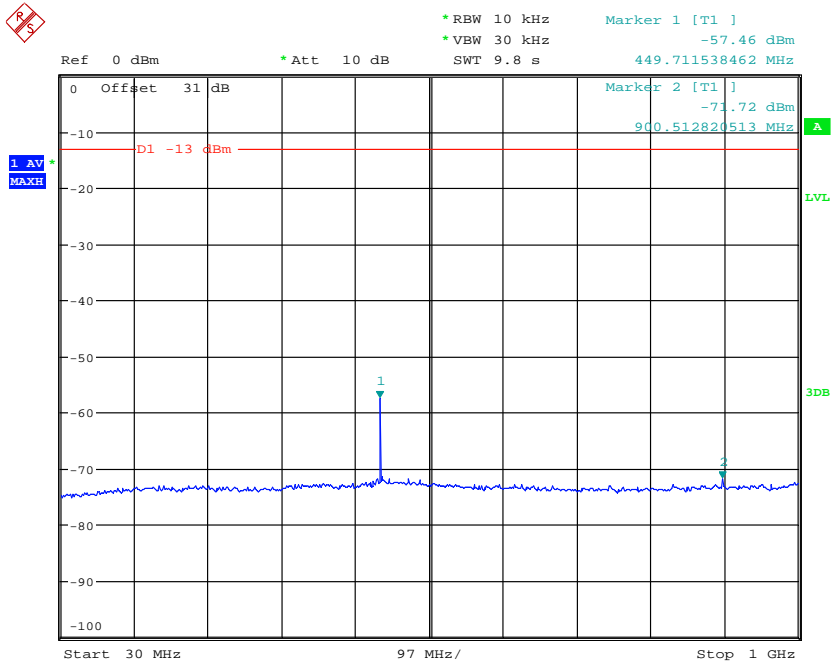


Registration number: W6M21808-18343-C-1  
 FCC ID: L9N-7085NUE5

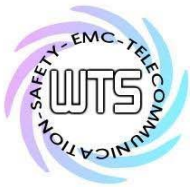


CONDUCTED SPURIOUS EMISSION 25K 445MHz  
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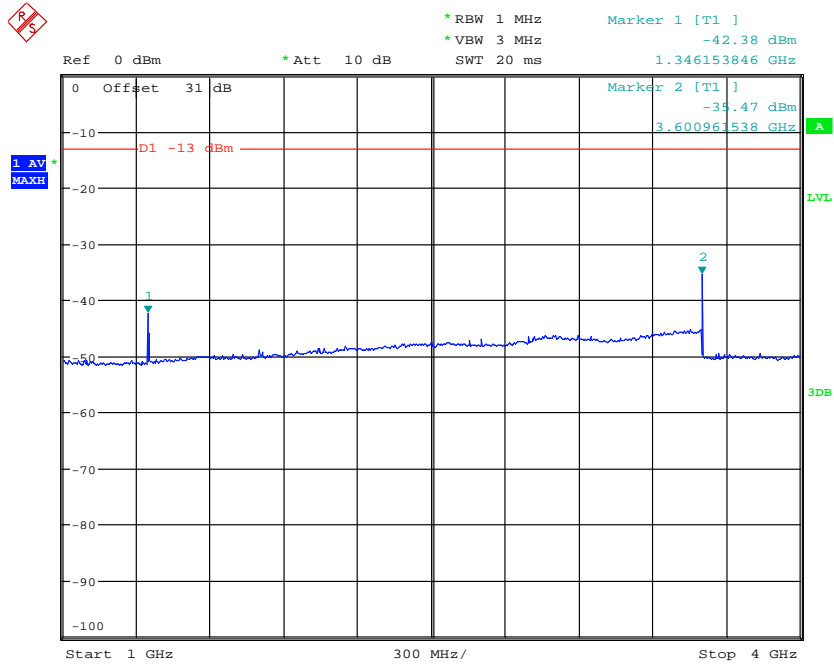
450 MHz



CONDUCTED SPURIOUS EMISSION 25K 450MHz  
 Date: 30.AUG.2018 15:55:22



Registration number: W6M21808-18343-C-1  
FCC ID: L9N-7085NUE5



CONDUCTED SPURIOUS EMISSION 25K 450MHz

Date: 30.AUG.2018 16:00:49

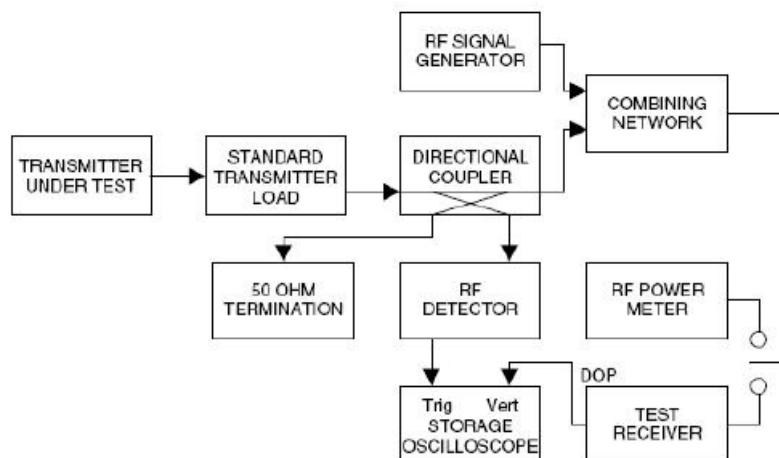
Test equipment used: ETSTW-RE 055, ETSTW-RE 072

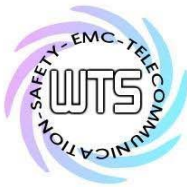
## 10. Transient frequency behavior

### 10.1 Test Procedures

1. SG to the assigned transmitter frequency and modulate it with a 1 kHz tone at  $\pm 25$  kHz deviation and set its output level to below 30dB of EUT signal level to receiver.
2. Set the horizontal sweep rate on the storage oscilloscope to 10 ms per division and adjust the display to continuously view the 1000 Hz tone from the DOP. Adjust the vertical amplitude control of the oscilloscope to display the 1000 Hz at  $\pm 4$  divisions vertically centered on the display.
3. Transmitter on and observe the stored display. The output at the DOP, due to the change in the ratio of power between the signal generator input power and the transmitter output power will, because of the capture effect of the test receiver, produce a change in display: For the first part of the sweep it will show the 1 kHz test signal. Then once the receiver's demodulator has been captured by the transmitter power, the display will show the frequency difference from the assigned frequency to the actual transmitter frequency versus time. The instant when the 1 kHz test signal is completely suppressed (including any capture time due to phasing) is considered to be  $t_{on}$ . The trace should be maintained within the allowed divisions during the period  $t_1$  and  $t_2$ . See the figure in the appropriate standards section.
4. During the time from the end of  $t_2$  to the beginning of  $t_3$  the frequency difference should not exceed the limits set by the FCC in 47 CFR 90.214 and outlined in 3.2.2. The allowed limit is equal to the transmitter frequency times its FCC frequency tolerance times  $\pm 4$  display divisions divided by 25 kHz. For example, at a transmitter assigned frequency of 500 MHz and a frequency tolerance of 5 ppm. This would be 500 MHz times 5 ppm times  $\pm 4$  divisions divided by 25 kHz. This equals  $\pm 0.4$  divisions in this example. Greater vertical sensitivity may be required to view this accurately
5. Adjust the oscilloscope trigger controls so it will trigger on a decreasing magnitude from the RF peak detector, at 1 division from the right side of the display, when the transmitter is turned off. Set the controls to store the display. The moment when the 1 kHz test signal starts to rise is considered to provide  $t_{off}$ .

### 10.2 Test Setup



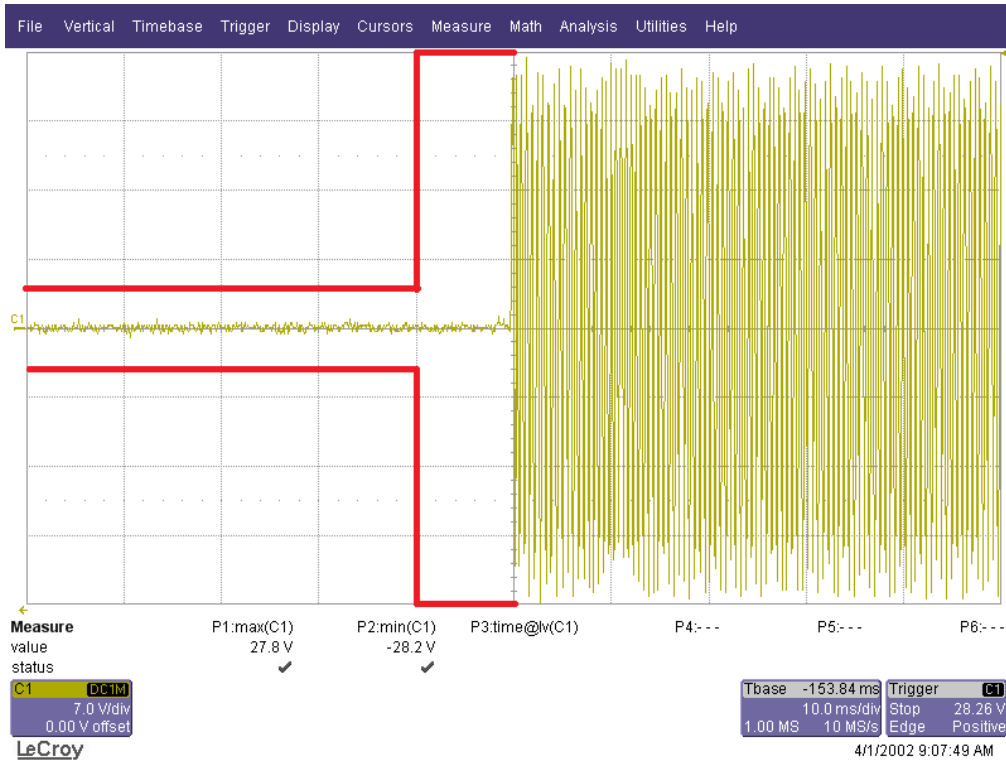


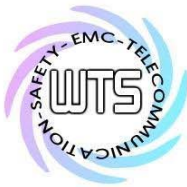
Registration number: W6M21808-18343-C-1  
FCC ID: L9N-7085NUE5

## 10.3 Test Result 406 MHz Off to On



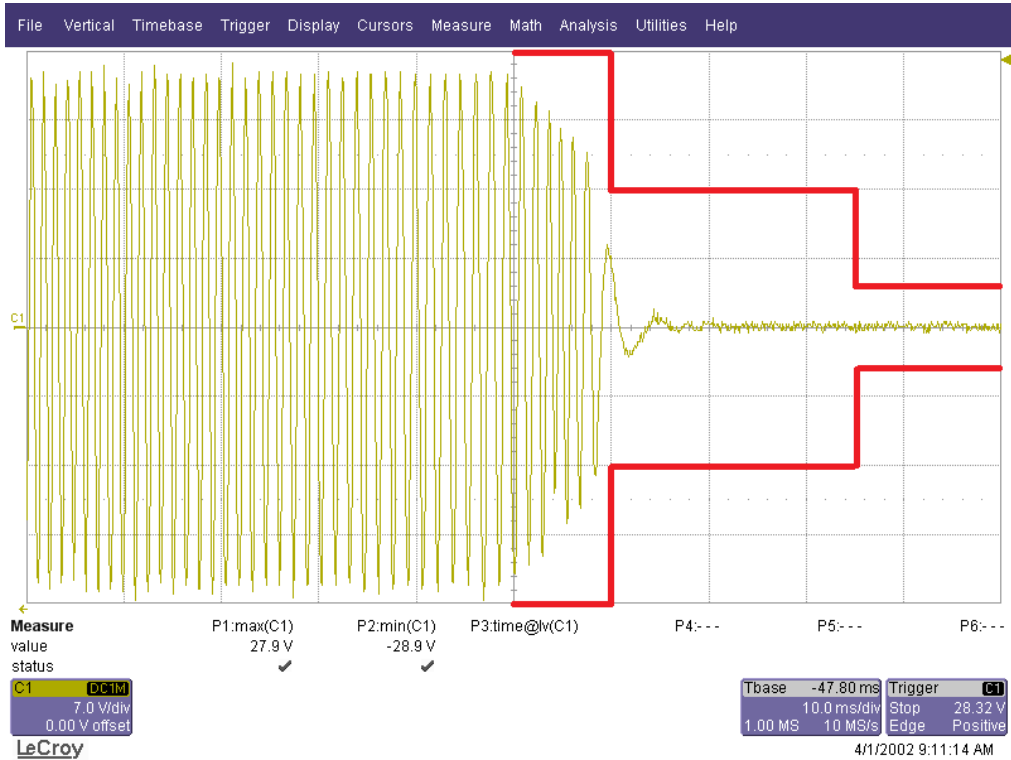
## 406 MHz On to Off



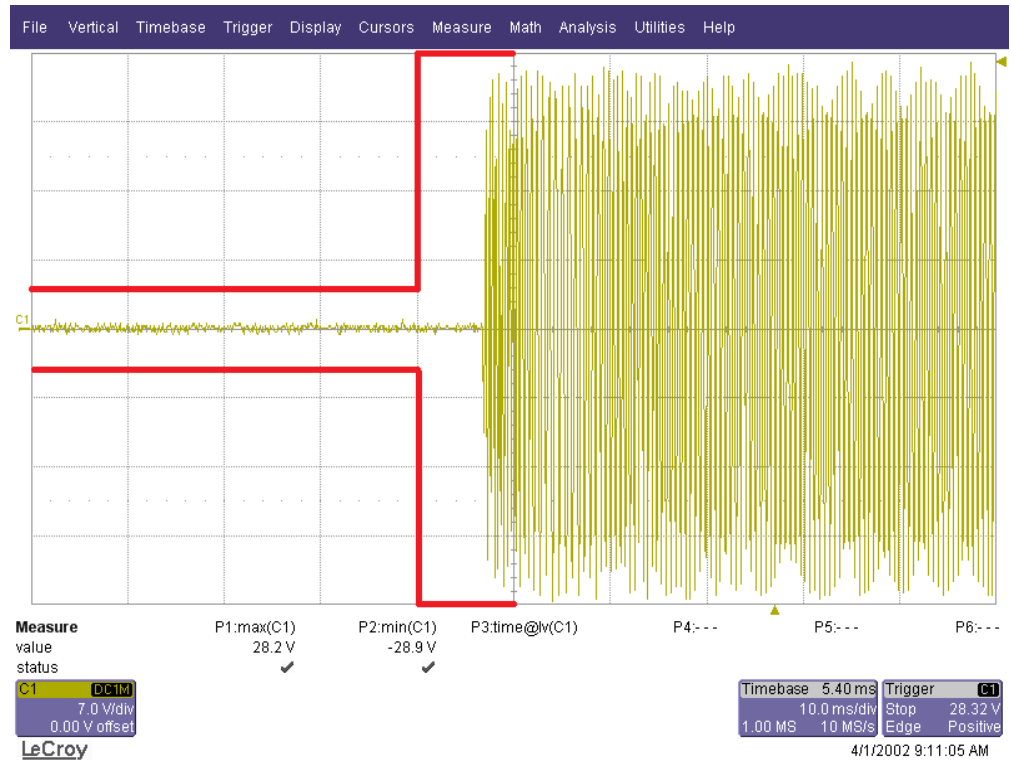


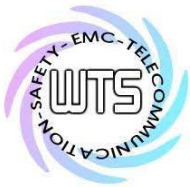
Registration number: W6M21808-18343-C-1  
FCC ID: L9N-7085NUE5

418 MHz Off to On



418 MHz On to Off



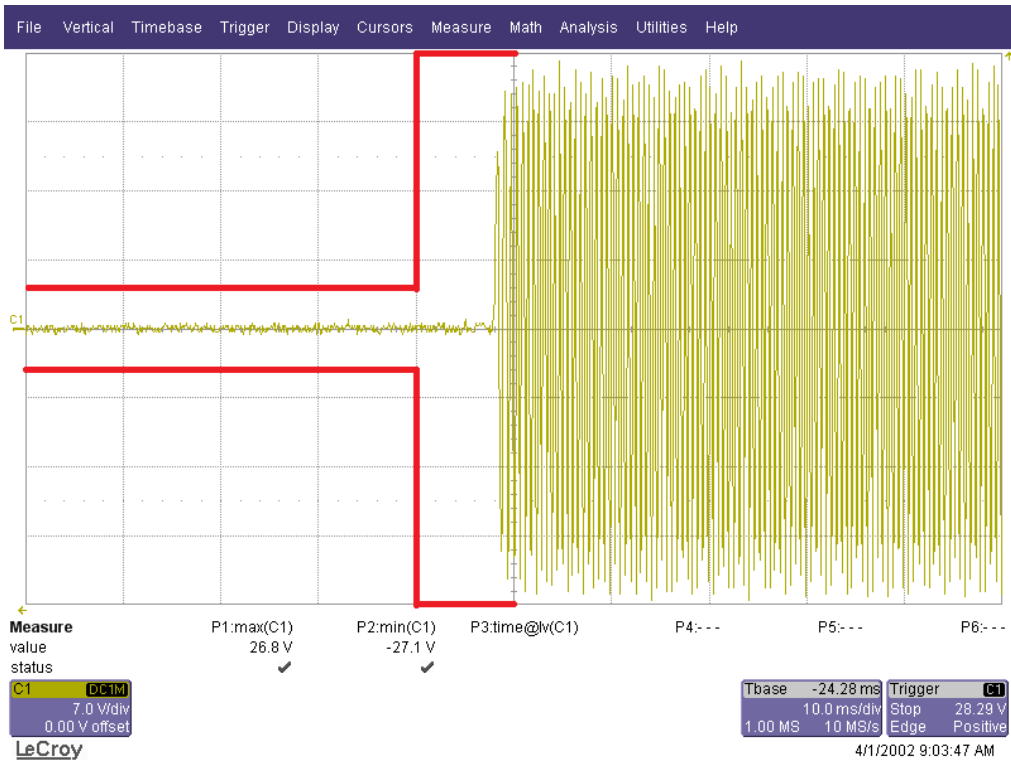


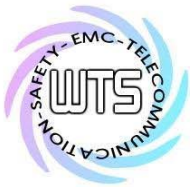
Registration number: W6M21808-18343-C-1  
 FCC ID: L9N-7085NUE5

430 MHz Off to On



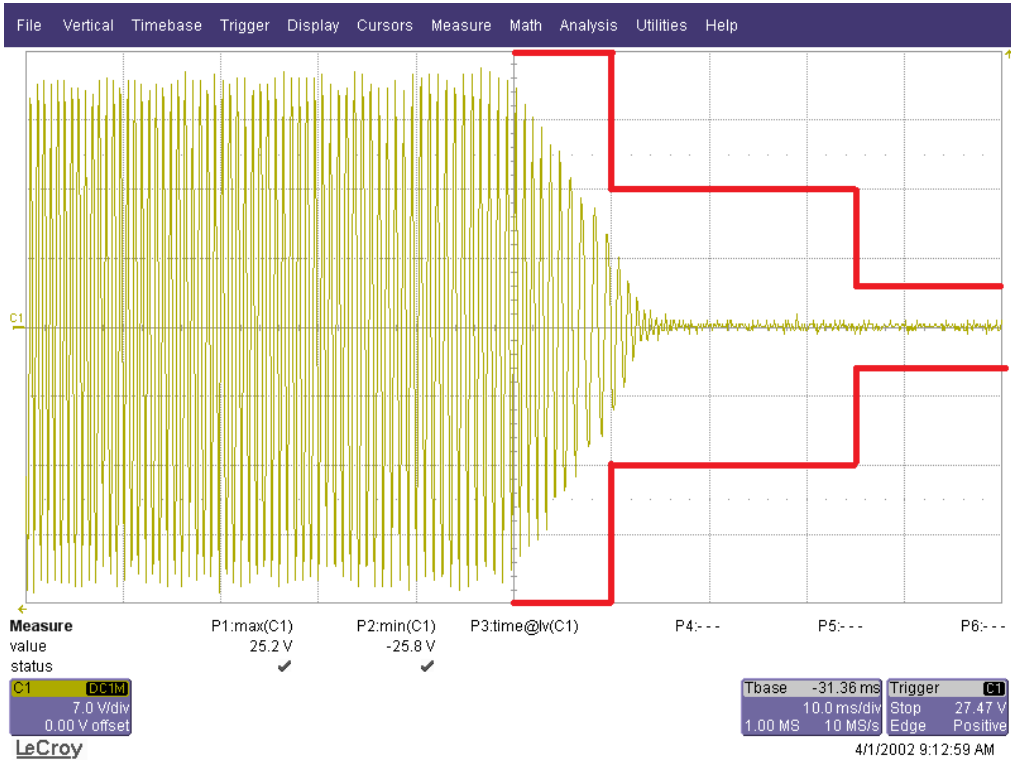
430 MHz On to Off



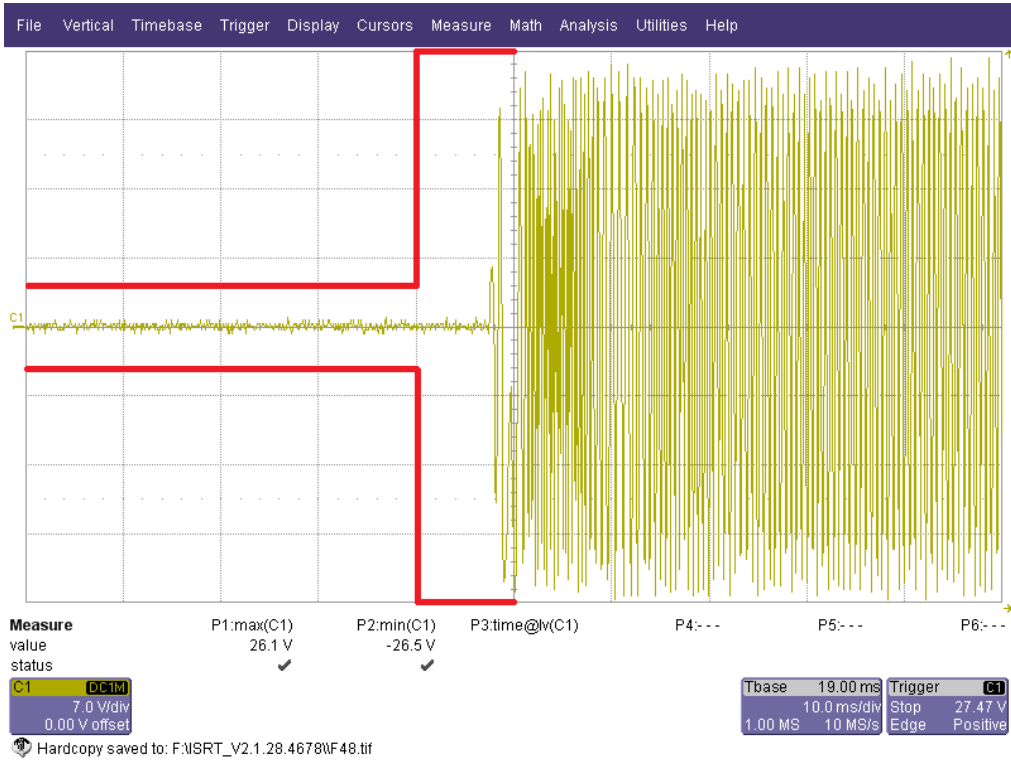


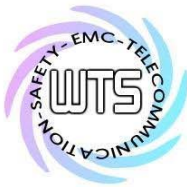
Registration number: W6M21808-18343-C-1  
 FCC ID: L9N-7085NUE5

440 MHz Off to On



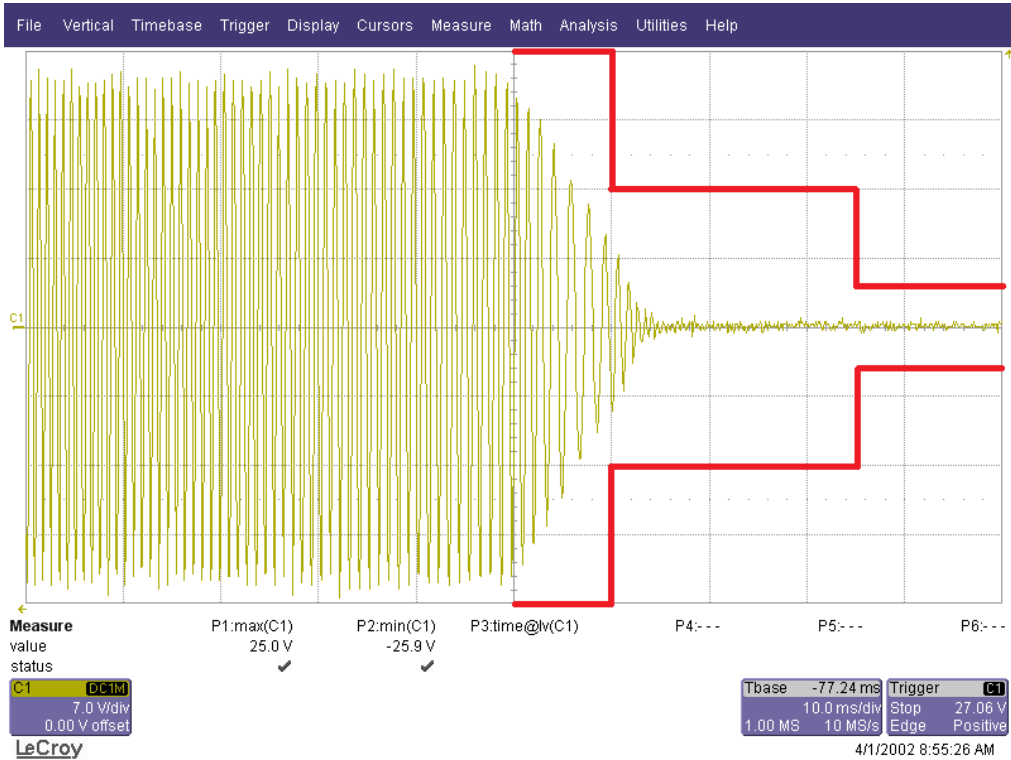
440 MHz On to Off



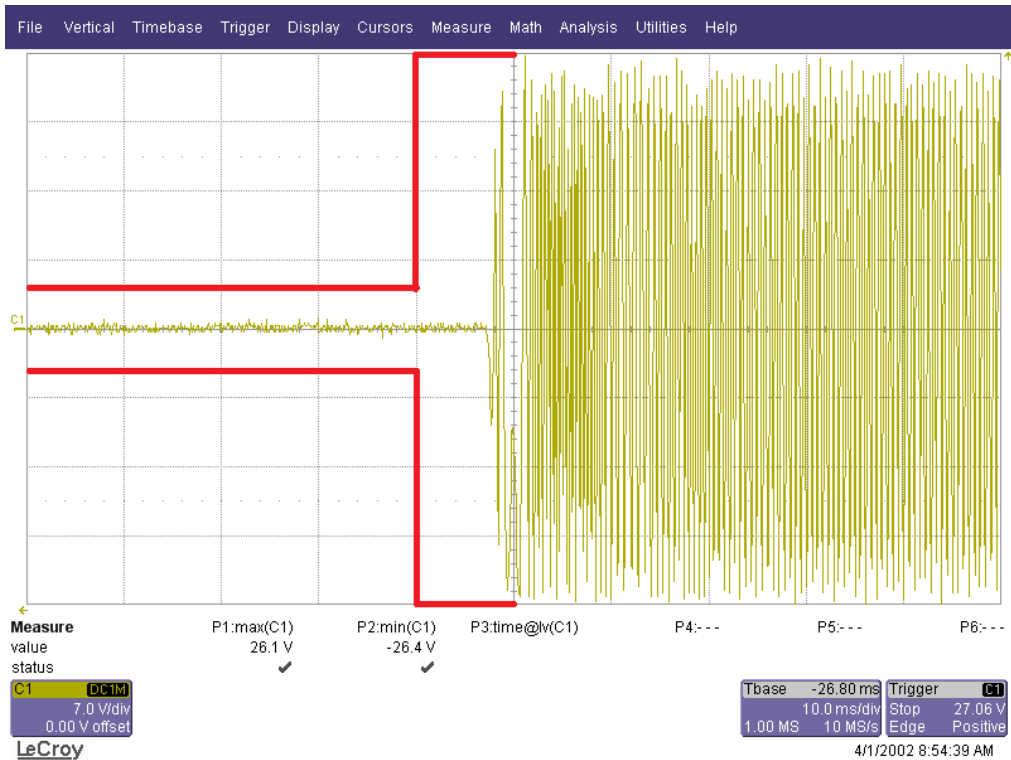


Registration number: W6M21808-18343-C-1  
 FCC ID: L9N-7085NUE5

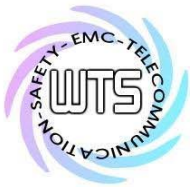
445 MHz Off to On



445 MHz On to Off

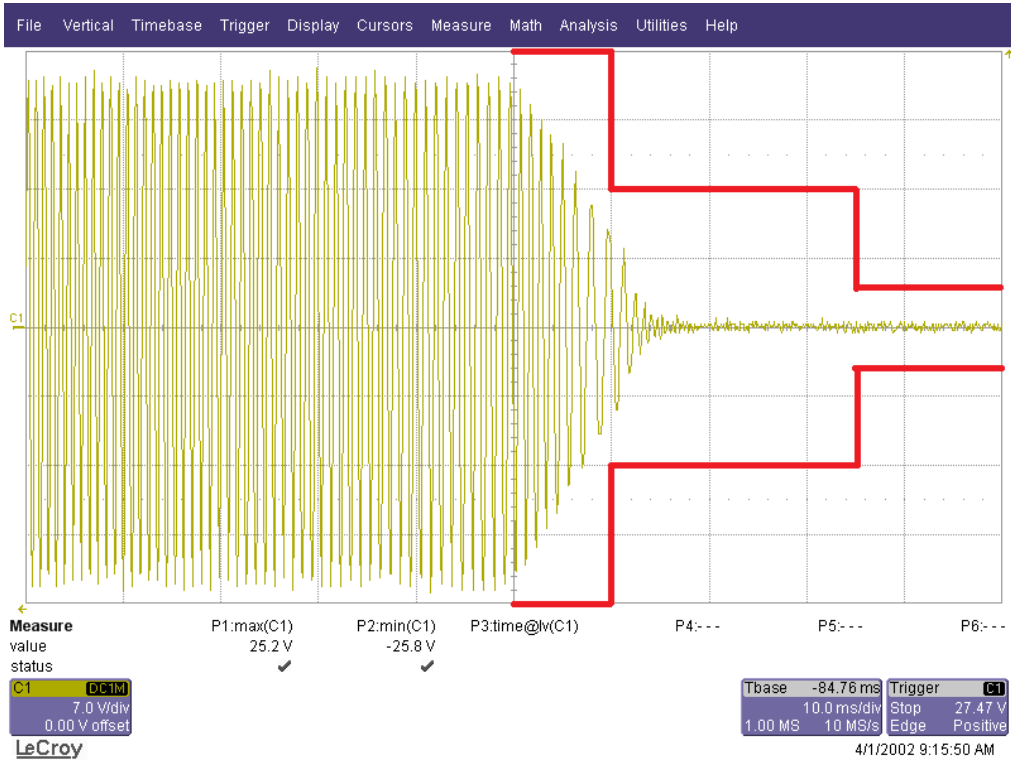






Registration number: W6M21808-18343-C-1  
FCC ID: L9N-7085NUE5

450 MHz Off to On



450 MHz On to Off



Test equipment used: ETSTW-RE 072, ETSTW-RE 033

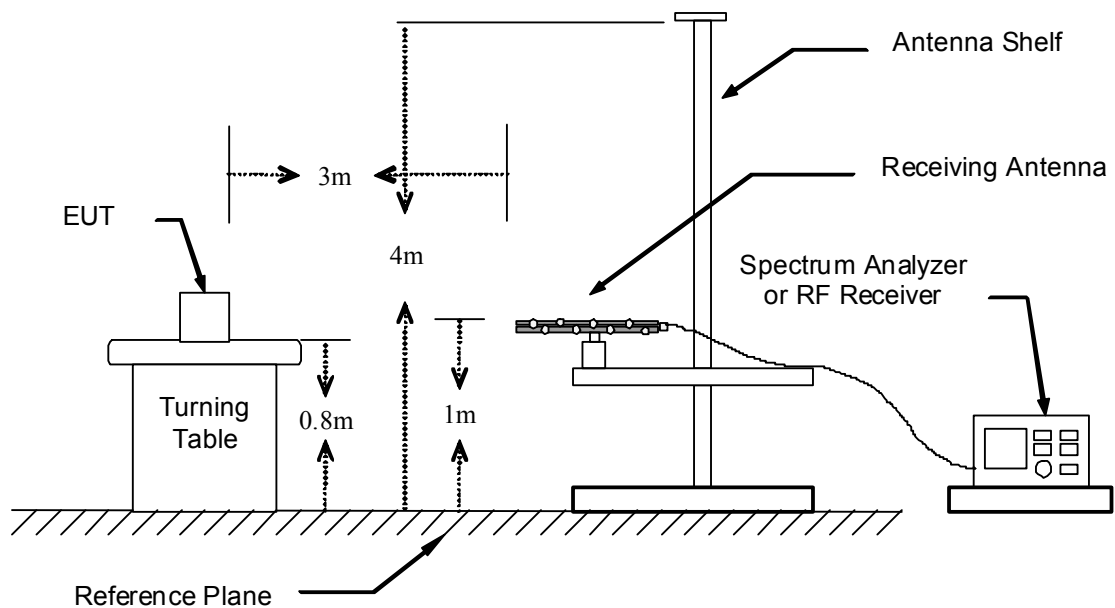
Registration number: W6M21808-18343-C-1  
 FCC ID: L9N-7085NUE5

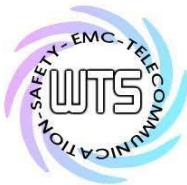
## 11. Receiver Radiated Spurious Emission

### 11.1 Test Procedures

1. Configure the EUT according to ANSI C63.4.
2. The EUT was placed on the top of the turn table 0.8 meter above ground.
3. The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 3 meters far away from the turn table.
4. Power on the EUT and all the supporting units.
5. The turn table was rotated 360 degrees to determine the position of the highest radiation.
6. The height of the broadband receiving antenna was varied between one meter and four meters above ground to find the maximum emission field strength of both horizontal and vertical polarization.
7. For each suspected emission, the antenna tower was scan (from 1 M to 4 M) and then the turn table was rotated (from 0 degree to 360 degrees) to find the maximum reading.
8. Adjust the spectrum analyzer for the following settings:
  - Resolution Bandwidth = 100 kHz for spurious emissions below 1 GHz and 1 MHz for spurious emissions above 1GHz.
  - Video Bandwidth = 100 kHz for spurious emissions below 1 GHz, and 1 MHz for spurious emissions above 1 GHz.
  - Sweep Speed slow enough to maintain measurement calibration.
  - Detector Mode = Positive Peak.

### 11.2 Test Setup





# Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M21808-18343-C-1  
 FCC ID: L9N-7085NUE5

## 11.3 Test Result

Model: 52-7085UE5 Date: --  
 Mode: -- Temperature: -- °C Engineer: --  
 Polarization: Horizontal Humidity: -- %

Frequency (MHz)	Reading (dBm) Peak	Factor (dB) Corr.	Result (dBm)	Limit (dBm)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--

Polarization: Vertical

Frequency (MHz)	Reading (dBm) Peak	Factor (dB) Corr.	Result (dBm)	Limit (dBm)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--

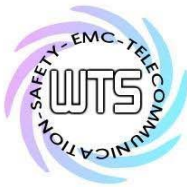
### Note

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. Measurement uncertainty: 30-1000 MHz : ±3.57 dB, 1-18GHz : ±2.60 dB, 18-40 GHz : ±2.58 dB;  
 Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.
5. All not in the table noted test results are more than 20 dB below the relevant limits.
6. Up Line: PK Limit Line, Down Line: Ave Limit Line.
7. See attached diagrams in appendix.

Except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

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

Test equipment used: ETSTW-RE 004, ETSTW-RE 030, ETSTW-RE 062, ETSTW-RE 142, ETSTW-RE 147



Registration number: W6M21808-18343-C-1  
 FCC ID: L9N-7085NUE5

## 12. Maximum Permissible Exposure

### 12.1 Applicable Standard

Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess limit for maximum permissible exposure. In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as a mobile device whereby a distance of 0.9 m normally can be maintained between the user and the device.

### 12.2 MPE Calculation Method

#### (A) Limits for Occupational/Controlled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm <sup>2</sup> )	Averaging Time  E  <sup>2</sup> ,  H  <sup>2</sup> or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	(900/f <sup>2</sup> )*	6
30-300	61.4	0.163	1.0	6
300-1500	--	--	f/300	6
1500-100,000	--	--	5	6

#### (B) Limits for General Population/Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm <sup>2</sup> )	Averaging Time  E  <sup>2</sup> ,  H  <sup>2</sup> or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f <sup>2</sup> )*	30
30-300	27.5	0.073	0.2	30
300-1500	--	--	f/1500	30
1500-100,000	--	--	1.0	30

f = frequency in MHz

\*Plane-wave equivalent power density

$$E \text{ (V/m)} \cdot \frac{\sqrt{30 \times P \times G}}{d}$$

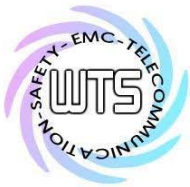
$$\text{Power Density: } Pd \text{ (W/m}^2\text{)} \cdot \frac{E^2}{377}$$

E = Electric field (V/m) P = output power (W) G = EUT Antenna numeric gain (numeric)

d = Separation distance between radiator and human body (m)

The formula can be changed to

$$Pd \cdot \frac{30 \times P \times G}{377 \times d^2}$$

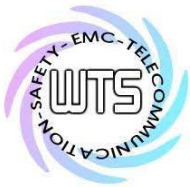


# Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M21808-18343-C-1  
FCC ID: L9N-7085NUE5

Max output power (W)	Antenna numeric Gain	Power Density(S) (mW/cm <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
7.6	3	0.19	0.2	Complies

From the peak EUT RF output power, the minimum mobile separation distance,  $d=0.8$  m as well as the gain of the used antenna, the RF power density can be obtained.



## **Appendix**

### **A. Photos**

1. External Photos
2. Internal Photos
3. Set Up Photo of Radiated Emission

### **B. Measurement diagrams**

Spurious Emissions radiated



Radiated Emission Measurement

Operator: Sora

File :1

Data :#1

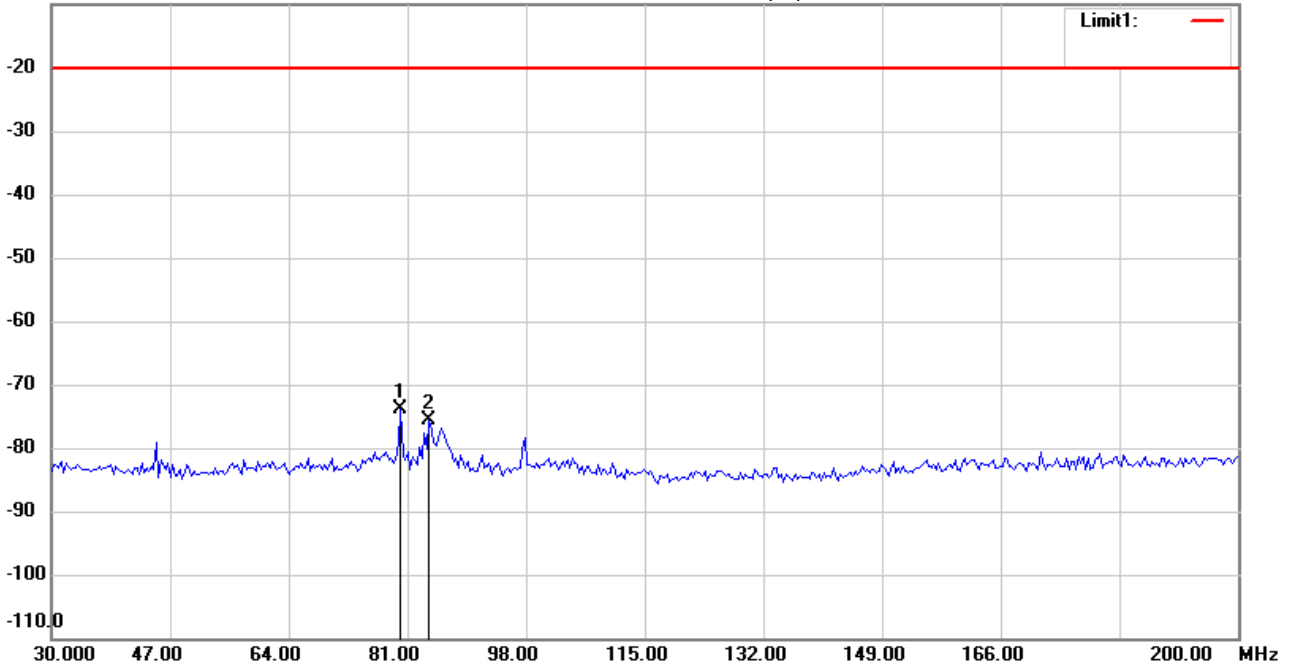
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 下午 02:40:35

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 406MHz

Note :

Polarization: *Horizontal*

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	80.0802	-95.39	peak	21.63	-73.76	-20.00	150	180	-53.76	
	84.1683	-97.00	peak	21.31	-75.69	-20.00	150	115	-55.69	



Radiated Emission Measurement

Operator: Sora

File :1

Data :#2

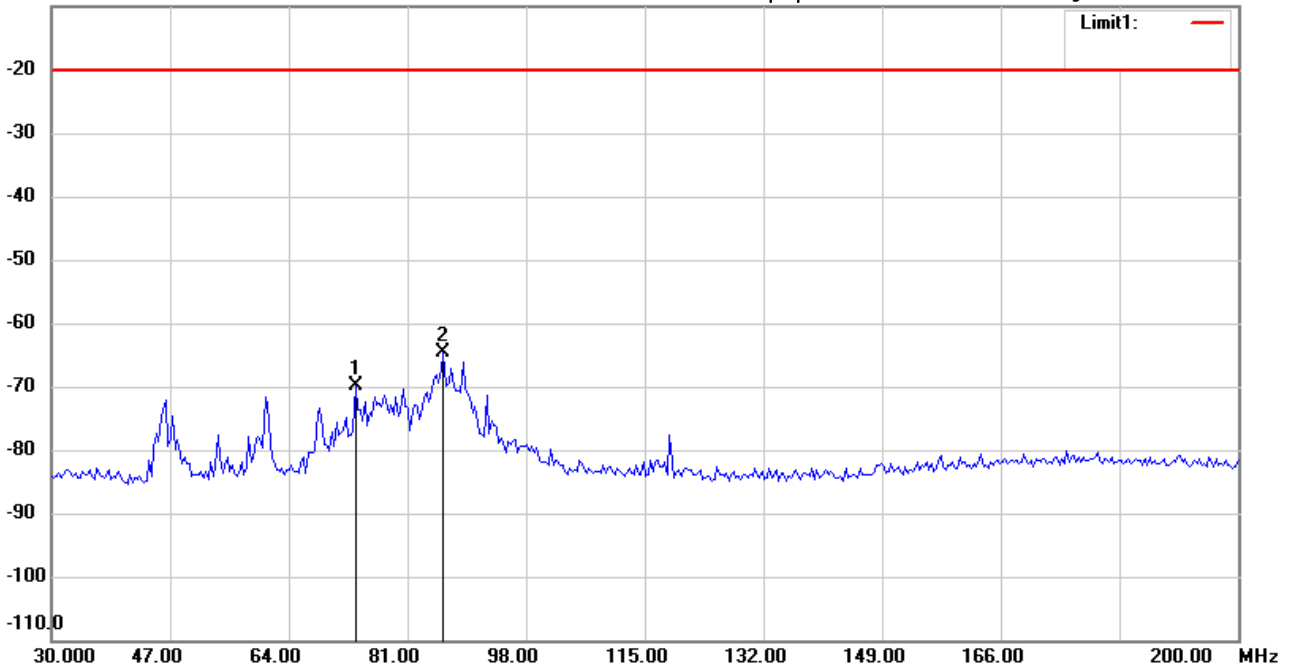
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 下午 02:48:30

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 406MHz

Note :

Polarization: **Vertical**

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	73.6071	-90.86	peak	21.07	-69.79	-20.00	150	295	-49.79	
*	86.2124	-86.16	peak	21.54	-64.62	-20.00	150	245	-44.62	





Radiated Emission Measurement

Operator: Sora

File :2

Data :#1

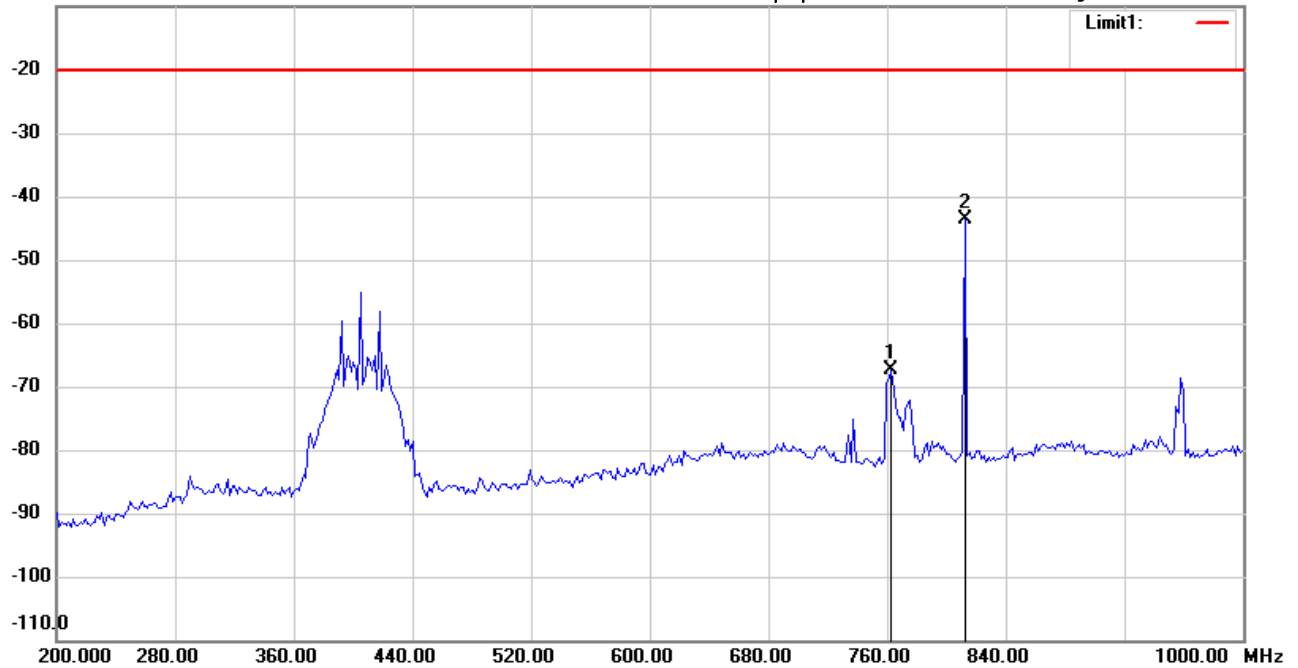
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 下午 01:21:53

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 406MHz

Note :

Polarization: *Horizontal*

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	762.7255	-62.93	peak	-4.54	-67.47	-20.00	150	315	-47.47	
*	812.4248	-39.76	peak	-3.78	-43.54	-20.00	150	180	-23.54	



Radiated Emission Measurement

Operator: Sora

File :2

Data :#2

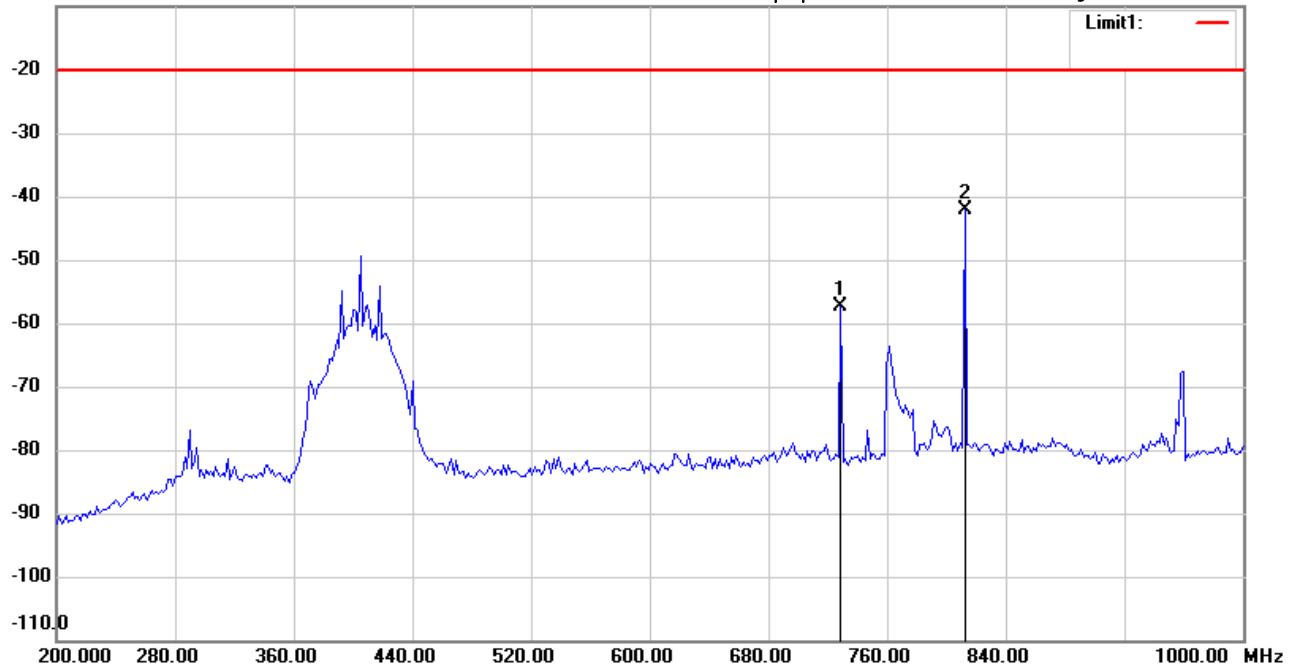
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 下午 01:24:25

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 406MHz

Note :

Polarization: *Vertical*

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	729.0581	-53.93	peak	-3.44	-57.37	-20.00	150	150	-37.37	
*	812.4248	-39.64	peak	-2.46	-42.10	-20.00	150	120	-22.10	



Radiated Emission Measurement

Operator: Sora

File :3

Data :#1

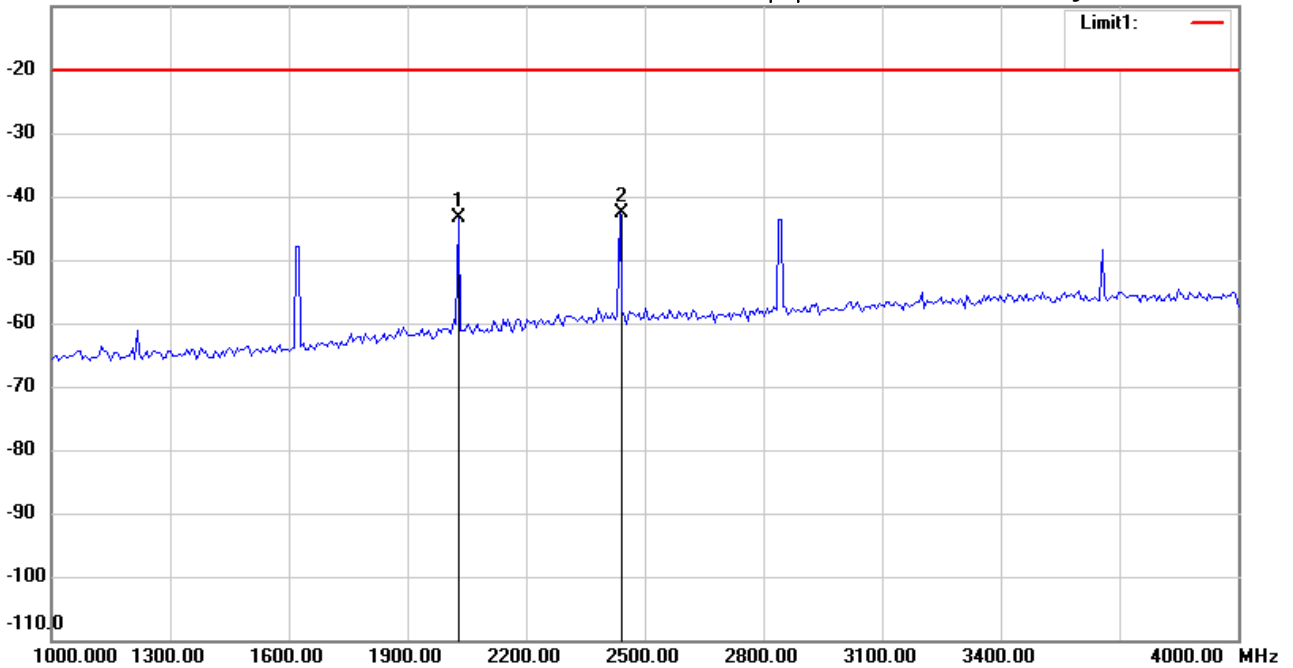
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 下午 01:58:06

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 406MHz

Note :

Polarization: *Horizontal*

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	2028.056	-44.72	peak	1.26	-43.46	-20.00	150	220	-23.46	
*	2436.874	-46.17	peak	3.46	-42.71	-20.00	150	255	-22.71	



Radiated Emission Measurement

Operator: Sora

File :3

Data :#2

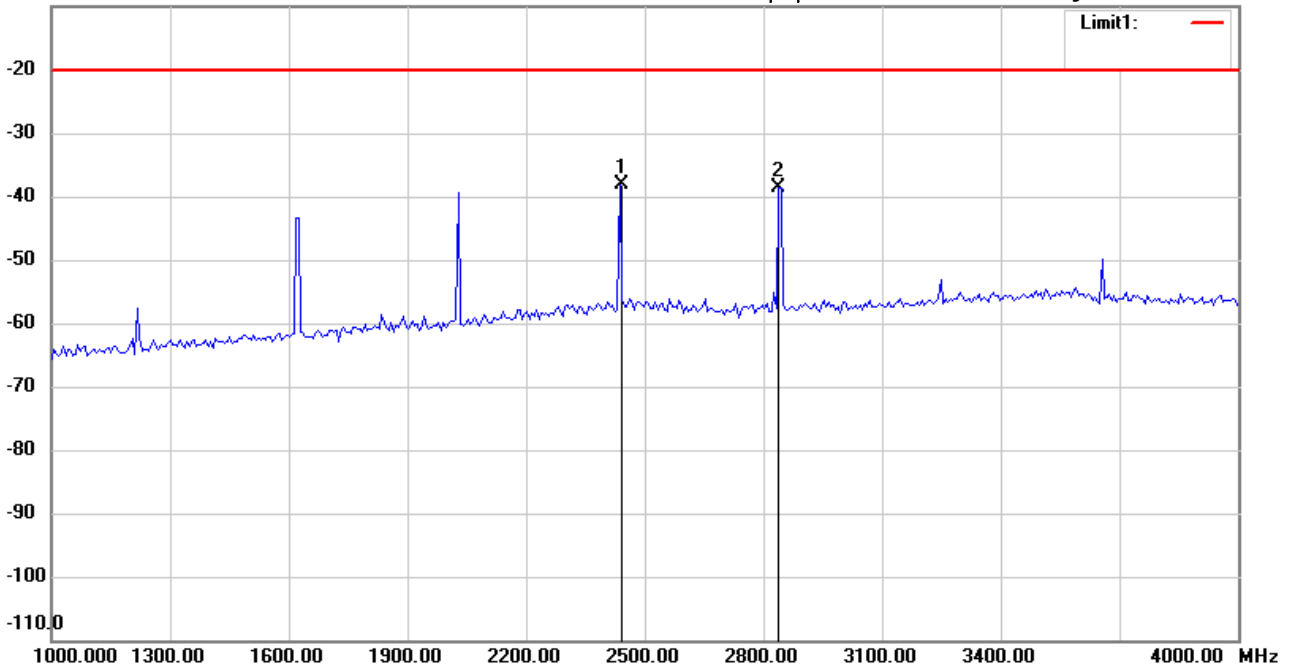
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 下午 02:03:55

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 406MHz

Note :

Polarization: *Vertical*

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	2436.874	-43.09	peak	5.04	-38.05	-20.00	150	330	-18.05	
	2839.679	-43.76	peak	5.23	-38.53	-20.00	150	150	-18.53	



Radiated Emission Measurement

Operator: Sora

File :1

Data :#1

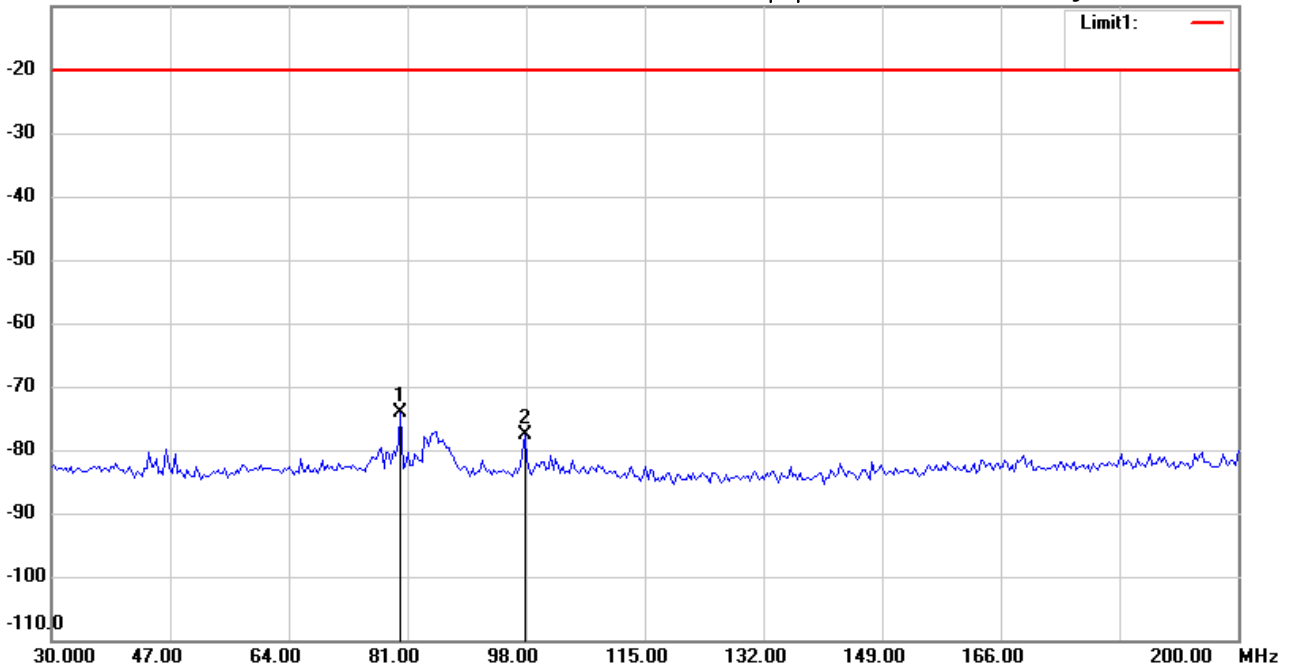
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 下午 02:33:30

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 418MHz

Note :

Polarization: *Horizontal*

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	80.0802	-95.74	peak	21.63	-74.11	-20.00	150	125	-54.11	
	97.7956	-99.08	peak	21.44	-77.64	-20.00	150	100	-57.64	



Radiated Emission Measurement

Operator: Sora

File :1

Data :#2

Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 下午 02:45:56

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 418MHz

Note :

Polarization: *Vertical*

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	46.3527	-94.80	peak	21.11	-73.69	-20.00	150	350	-53.69	
*	84.1683	-90.92	peak	21.44	-69.48	-20.00	150	205	-49.48	



Radiated Emission Measurement

Operator: Sora

File :2

Data :#1

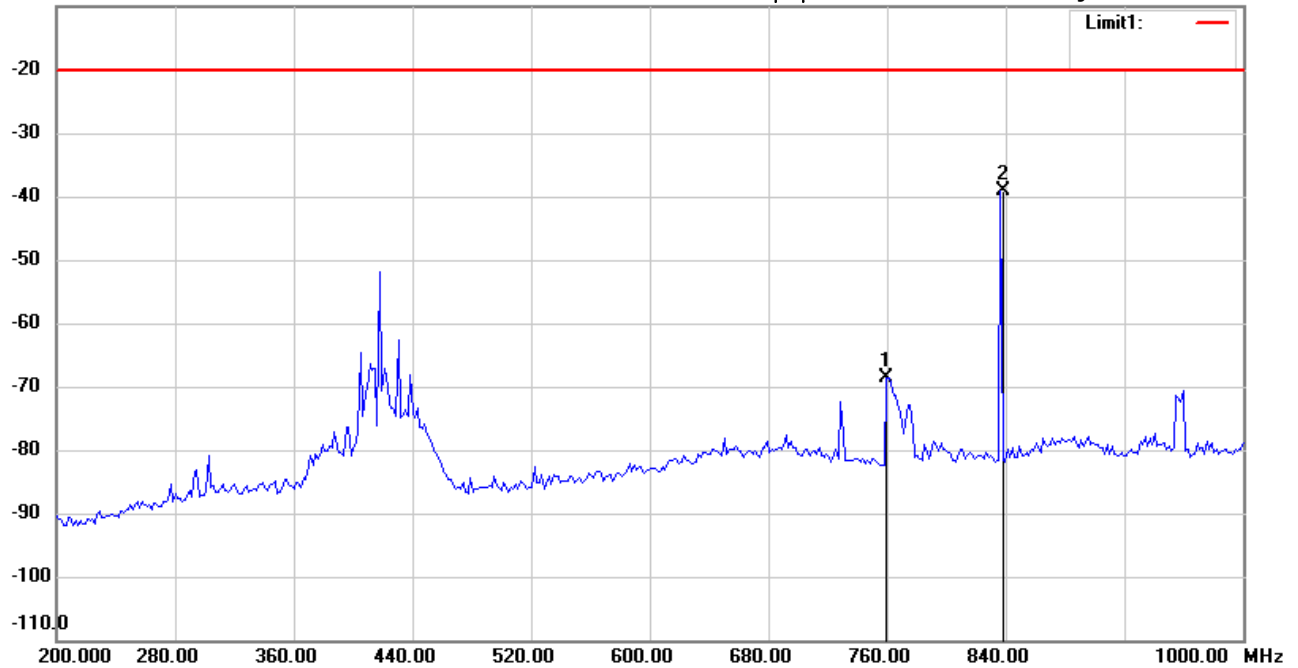
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 下午 01:09:02

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 418MHz

Note :

Polarization: *Horizontal*

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	759.5190	-63.93	peak	-4.57	-68.50	-20.00	150	160	-48.50	
*	836.4730	-36.15	peak	-3.04	-39.19	-20.00	150	210	-19.19	



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei  
 Tel:+886-2-6606-8877  
 Fax:+886-2-6606-8875

Radiated Emission Measurement

Operator: Sora

File :2

Data :#2

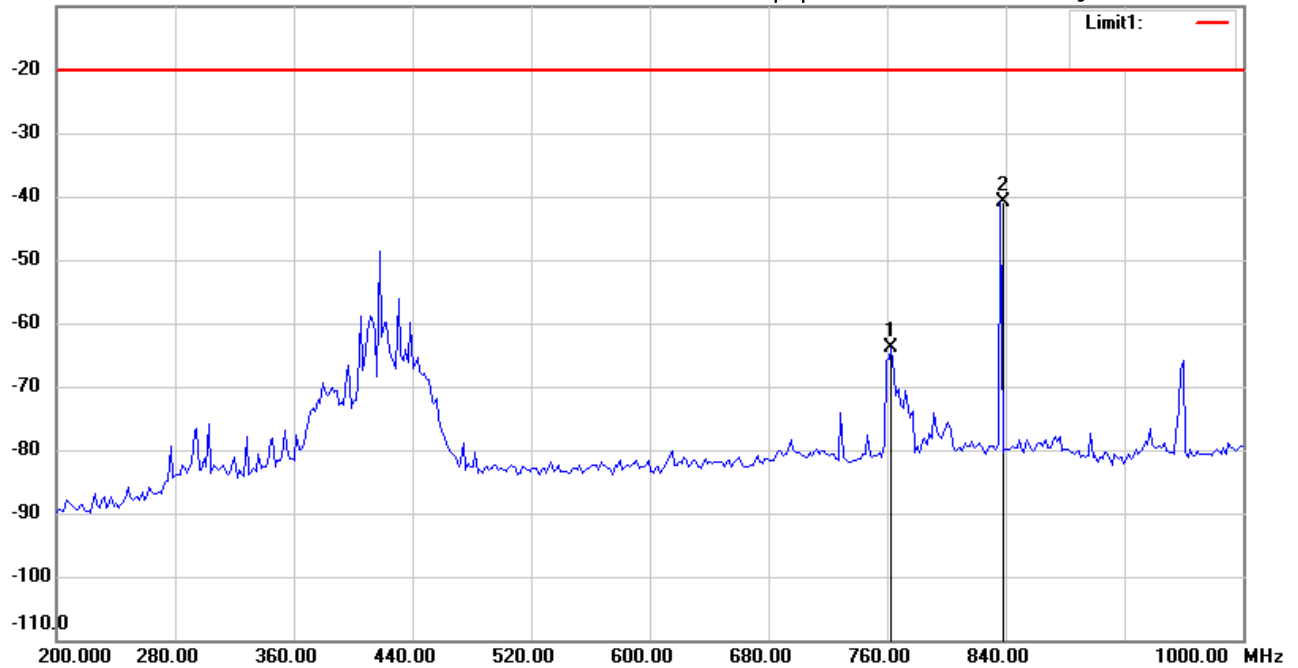
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 下午 01:15:58

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 418MHz

Note :

Polarization: *Vertical*

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	762.7255	-60.48	peak	-3.41	-63.89	-20.00	150	150	-43.89	
*	836.4730	-38.84	peak	-1.97	-40.81	-20.00	150	120	-20.81	

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





Radiated Emission Measurement

Operator: Sora

File :3

Data :#1

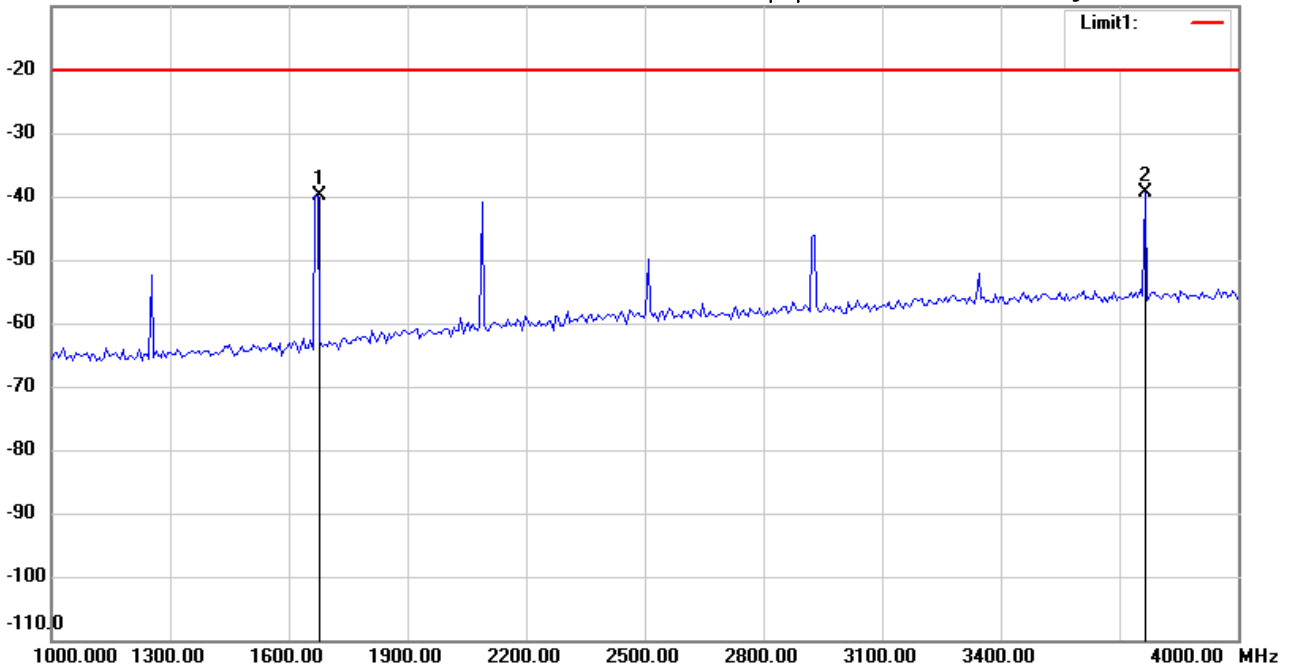
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 下午 02:16:09

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 418MHz

Note :

Polarization: *Horizontal*

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	1673.347	-38.92	peak	-1.05	-39.97	-20.00	150	110	-19.97	
*	3765.531	-47.09	peak	7.67	-39.42	-20.00	150	240	-19.42	



Radiated Emission Measurement

Operator: Sora

File :3

Data :#2

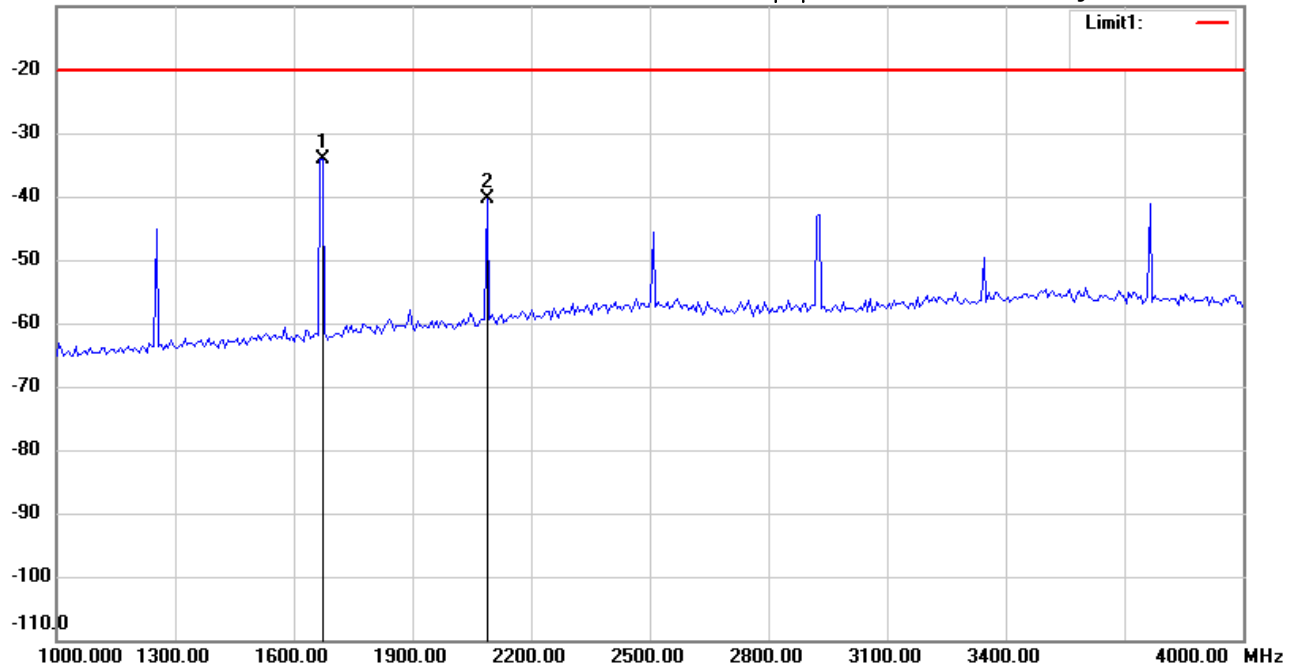
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 下午 02:21:30

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 418MHz

Note :

Polarization: *Vertical*

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	1667.335	-34.72	peak	0.61	-34.11	-20.00	150	150	-14.11	
	2088.176	-43.34	peak	2.86	-40.48	-20.00	150	95	-20.48	



Radiated Emission Measurement

Operator: Sora

File :1

Data :#1

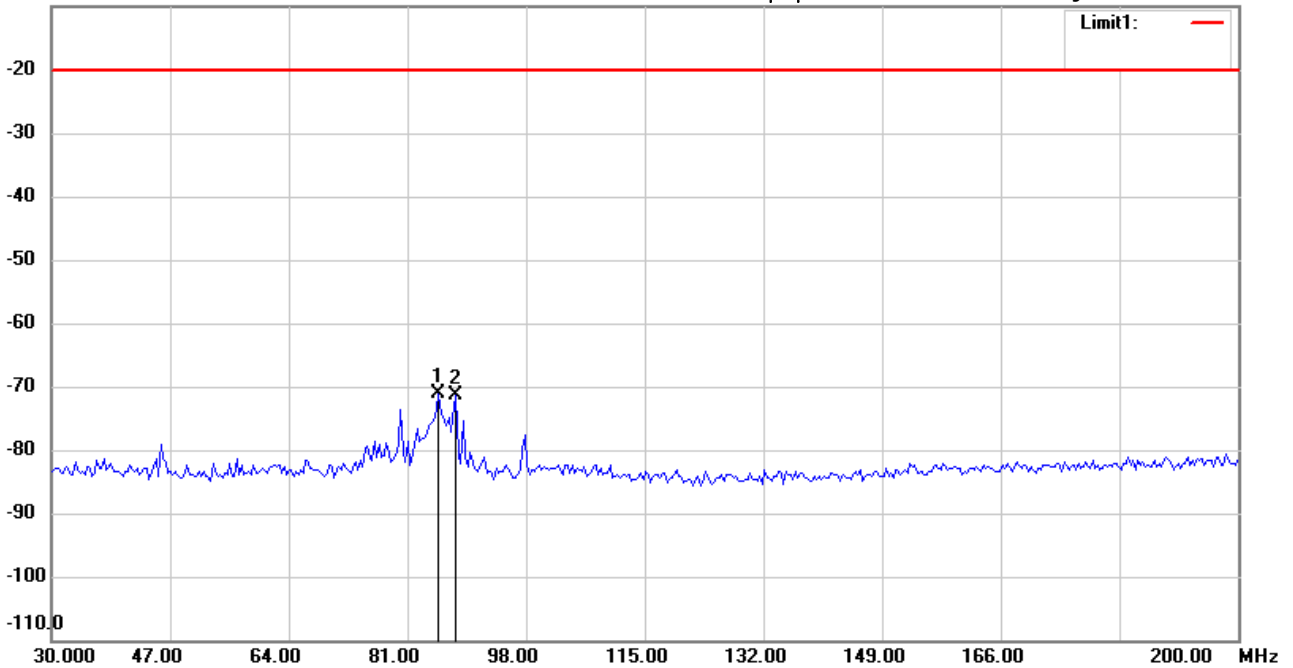
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 下午 02:53:34

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 430MHz

Note :

Polarization: *Horizontal*

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	85.5311	-92.42	peak	21.21	-71.21	-20.00	150	150	-51.21	
	87.9158	-92.28	peak	21.02	-71.26	-20.00	150	125	-51.26	



Radiated Emission Measurement

Operator: Sora

File :1

Data :#2

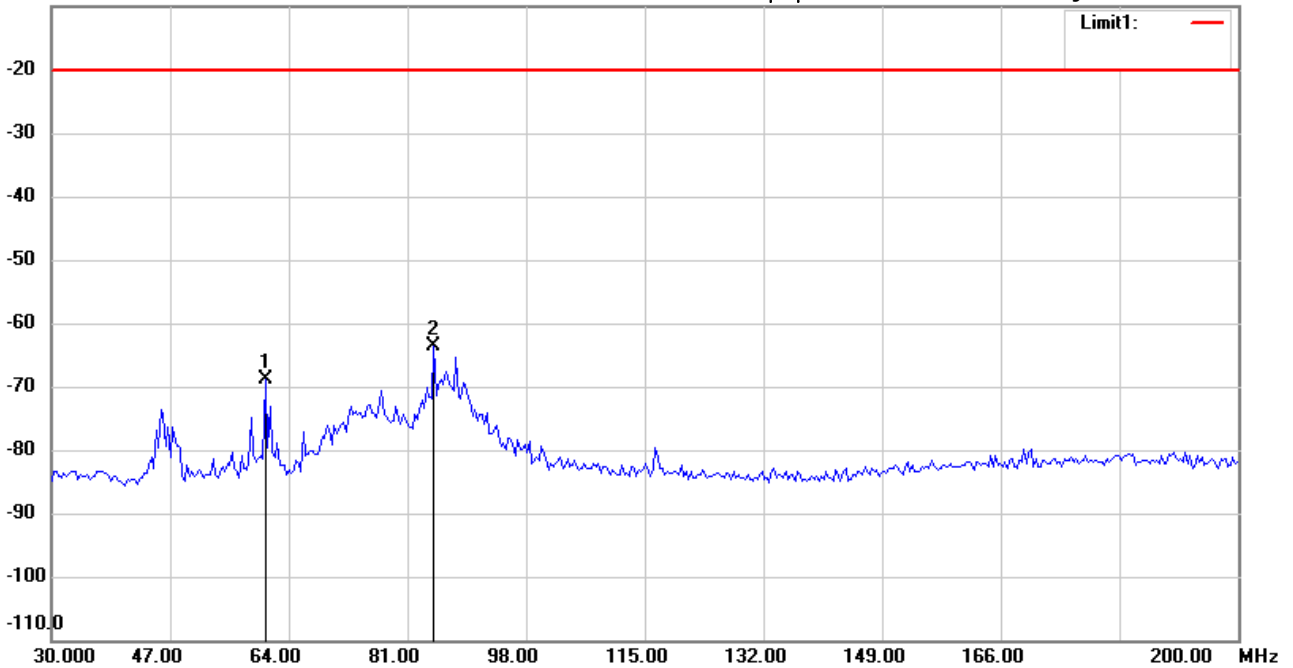
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 下午 02:58:13

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 430MHz

Note :

Polarization: *Vertical*

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	60.6613	-90.34	peak	21.56	-68.78	-20.00	150	315	-48.78	
*	84.8496	-85.14	peak	21.48	-63.66	-20.00	150	285	-43.66	



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Radiated Emission Measurement

Operator: Sora

File :2

Data :#1

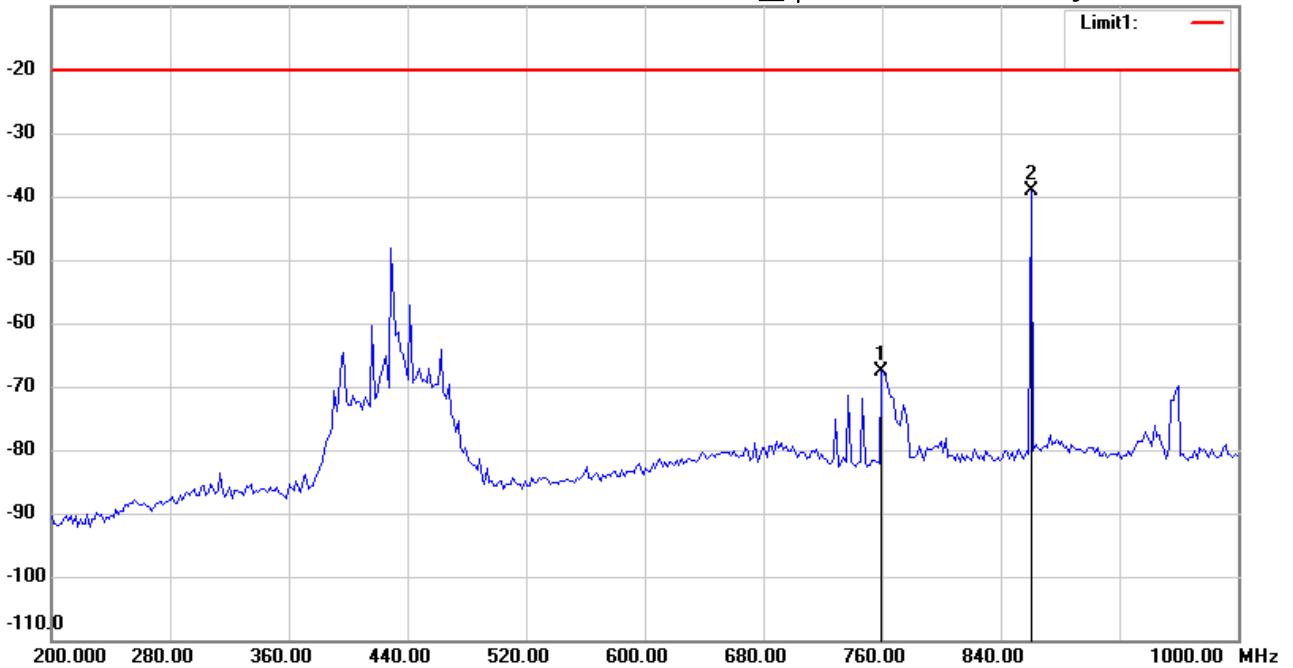
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 上午 11:38:24

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 430MHz

Note :

Polarization: *Horizontal*

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	759.5190	-63.10	peak	-4.57	-67.67	-20.00	150	210	-47.67	
*	860.5210	-36.74	peak	-2.36	-39.10	-20.00	150	270	-19.10	

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



Radiated Emission Measurement

Operator: Sora

File :2

Data :#2

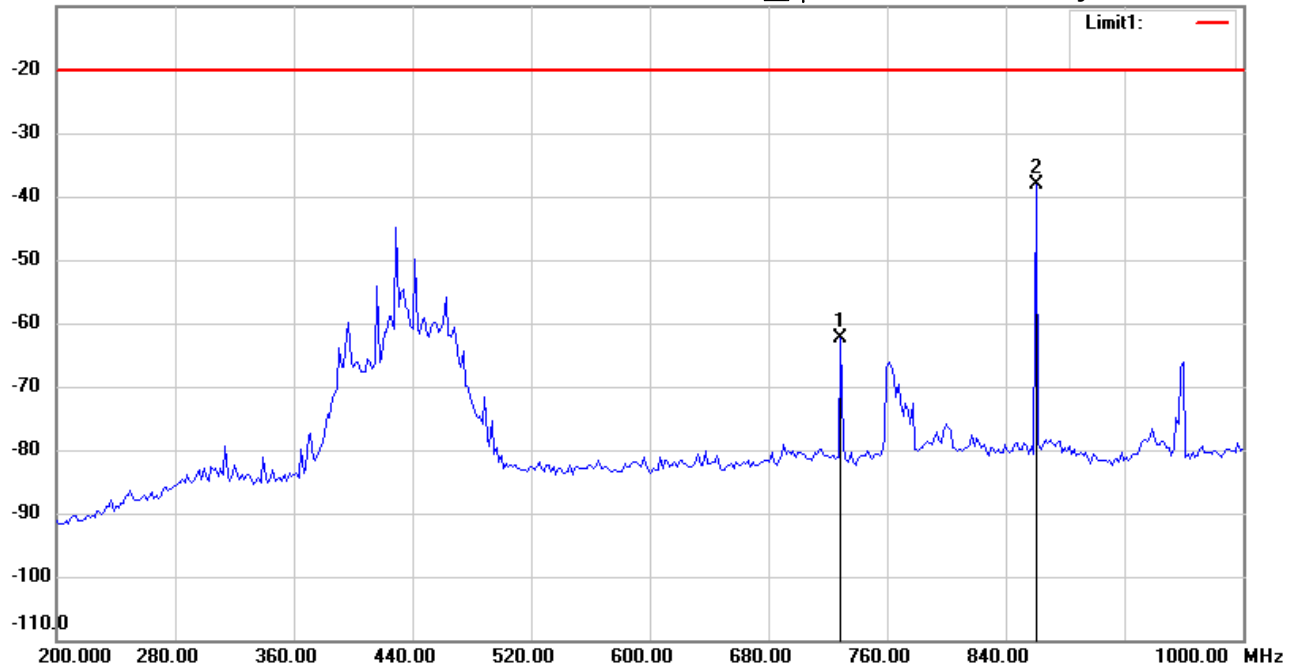
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 上午 11:40:57

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 430MHz

Note :

Polarization: **Vertical**

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	729.0581	-58.86	peak	-3.44	-62.30	-20.00	150	150	-42.30	
*	860.5210	-36.25	peak	-1.93	-38.18	-20.00	150	120	-18.18	



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Radiated Emission Measurement

Operator: Sora

File :3

Data :#1

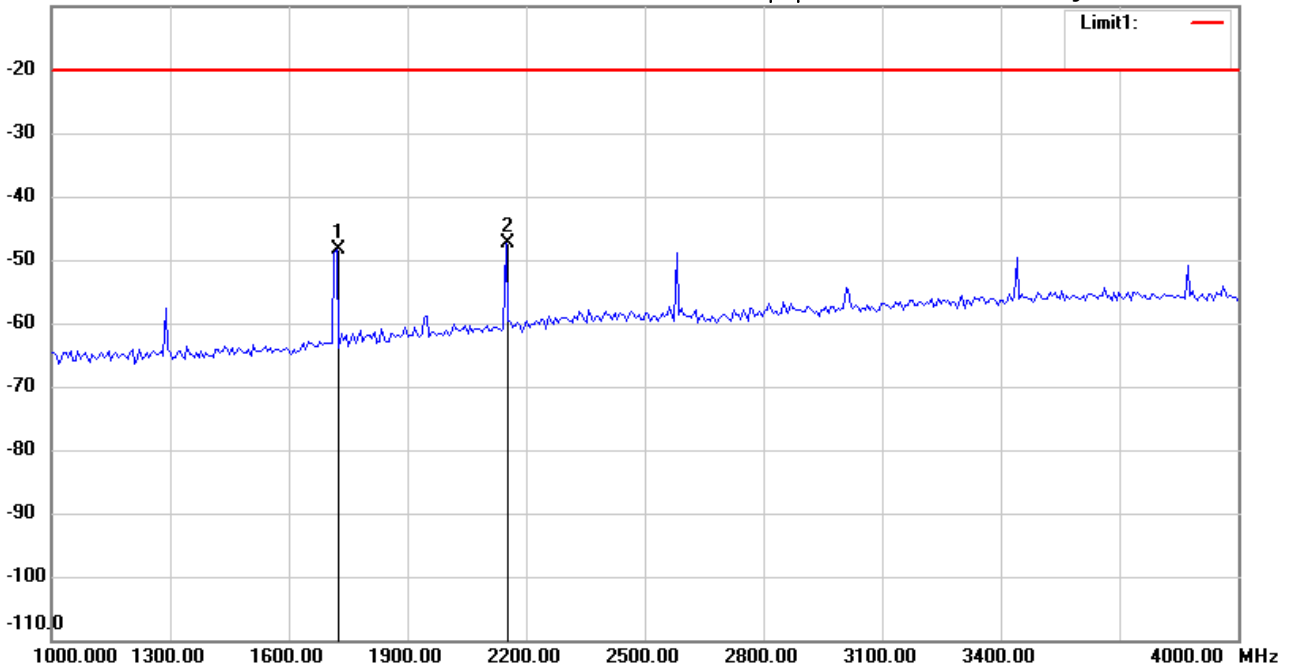
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 下午 01:41:10

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 430MHz

Note :

Polarization: *Horizontal*

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	1721.443	-47.54	peak	-0.73	-48.27	-20.00	150	220	-28.27	
*	2148.297	-49.26	peak	1.91	-47.35	-20.00	150	95	-27.35	

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



Radiated Emission Measurement

Operator: Sora

File :3

Data :#2

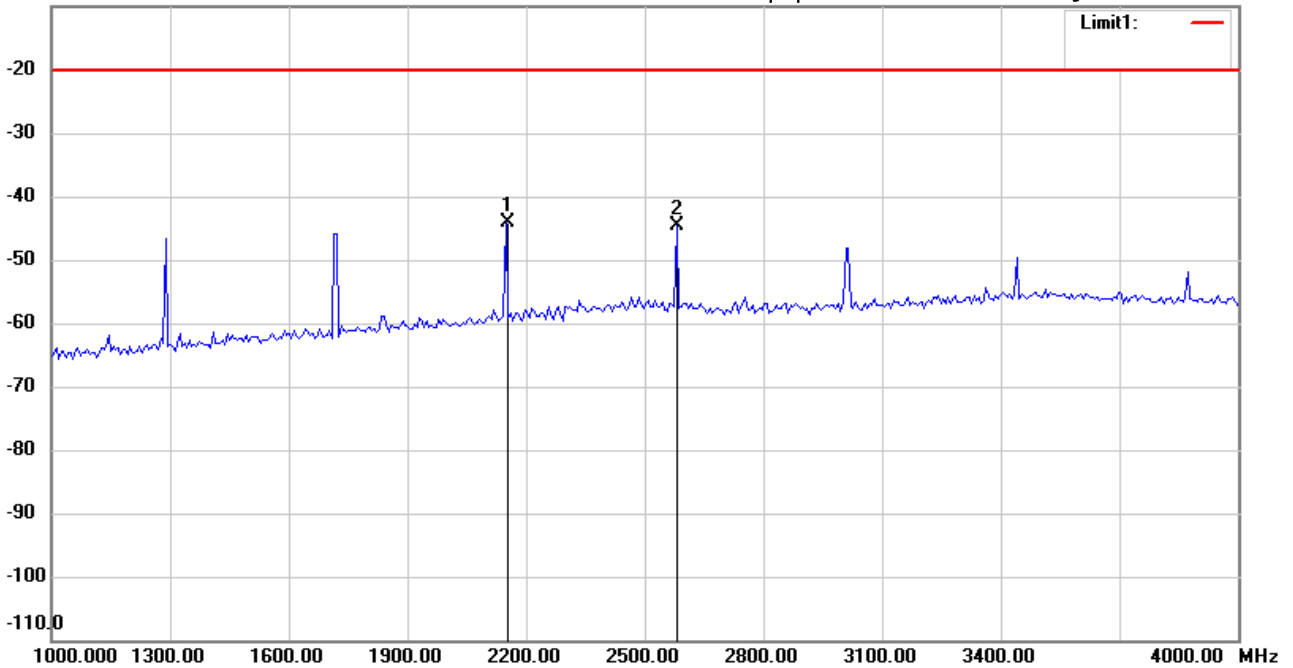
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 下午 01:45:59

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 430MHz

Note :

Polarization: *Vertical*

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	2148.297	-47.26	peak	3.24	-44.02	-20.00	150	155	-24.02	
	2581.162	-49.88	peak	5.38	-44.50	-20.00	150	120	-24.50	





Radiated Emission Measurement

Operator: Sora

File :1

Data :#1

Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 下午 02:37:32

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 440MHz

Note :

Polarization: *Horizontal*

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	80.0802	-94.15	peak	21.63	-72.52	-20.00	150	250	-52.52	
*	84.8496	-89.71	peak	21.26	-68.45	-20.00	150	225	-48.45	



Radiated Emission Measurement

Operator: Sora

File :1

Data :#2

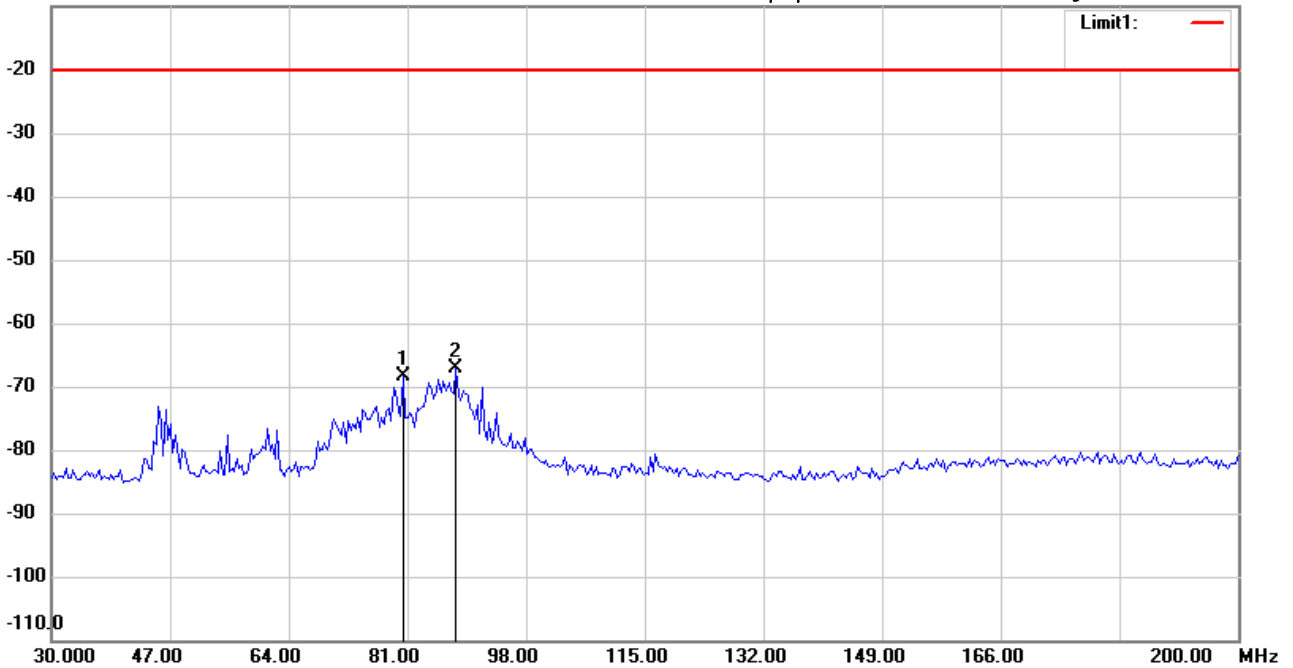
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 下午 02:43:29

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 440MHz

Note :

Polarization: *Vertical*

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	80.4208	-89.64	peak	21.26	-68.38	-20.00	150	220	-48.38	
*	87.9158	-88.63	peak	21.63	-67.00	-20.00	150	355	-47.00	



Radiated Emission Measurement

Operator: Sora

File :2

Data :#1

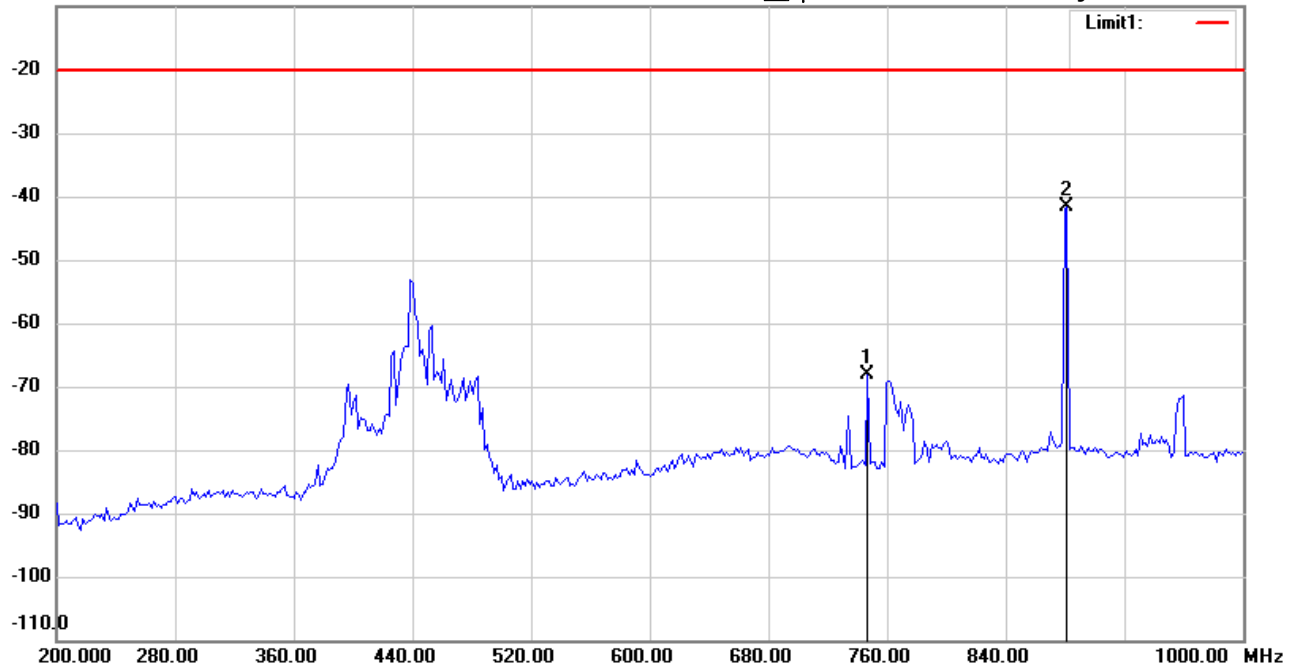
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 上午 11:46:54

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 440MHz

Note :

Polarization: *Horizontal*

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	746.6934	-63.67	peak	-4.53	-68.20	-20.00	150	220	-48.20	
*	881.3627	-39.85	peak	-1.81	-41.66	-20.00	150	265	-21.66	



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Radiated Emission Measurement

Operator: Sora

File :2

Data :#2

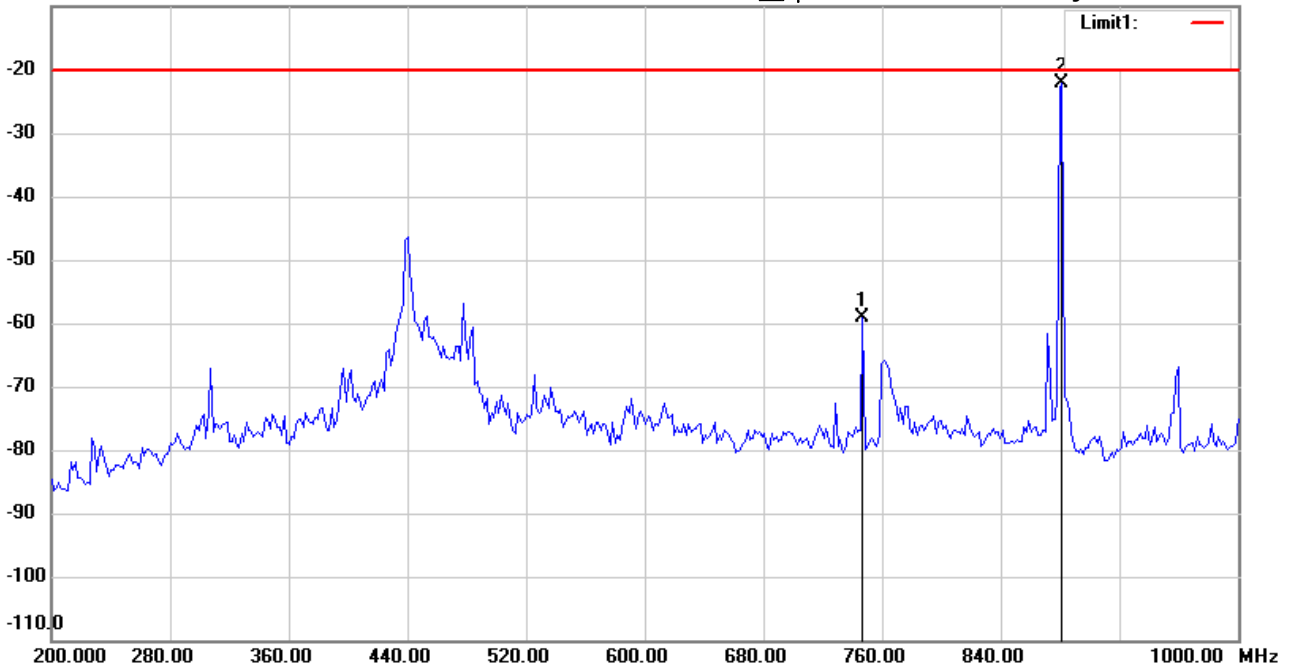
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 上午 11:48:55

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 440MHz

Note :

Polarization: **Vertical**

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	746.6933	-55.52	peak	-3.62	-59.14	-20.00	150	150	-39.14	
*	881.3627	-19.70	peak	-2.38	-22.08	-20.00	150	180	-2.08	

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



Radiated Emission Measurement

Operator: Sora

File :3

Data :#1

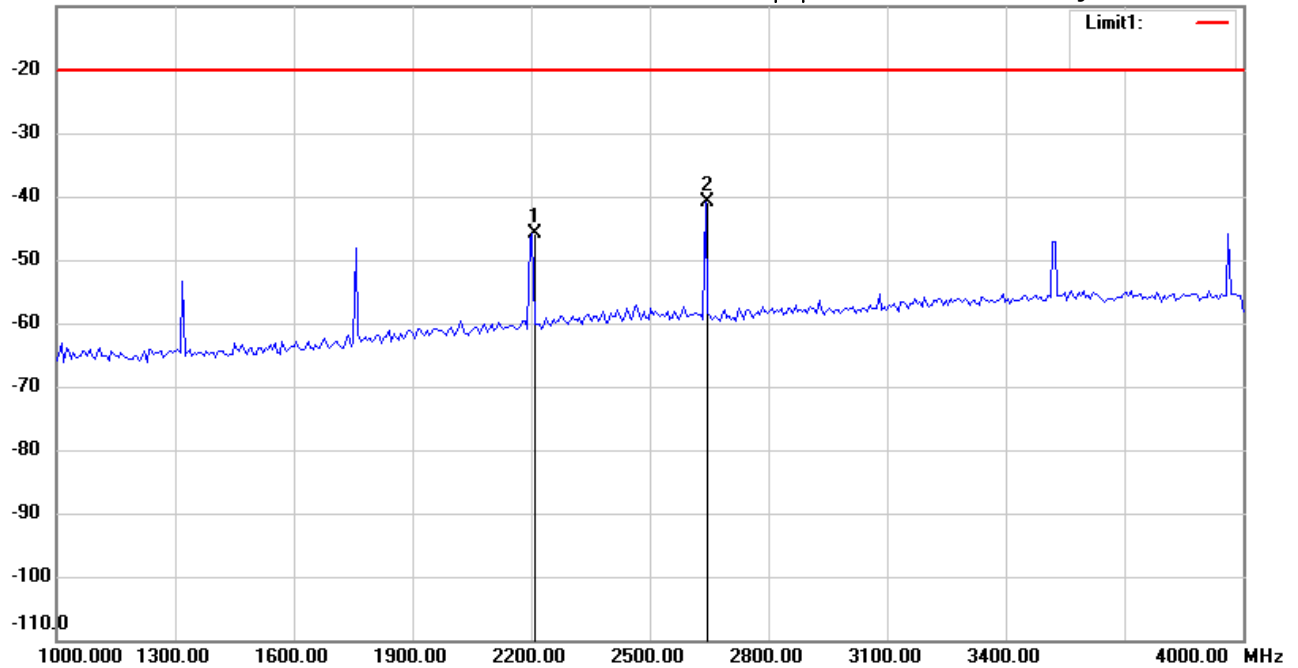
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 下午 02:11:38

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 440MHz

Note :

Polarization: *Horizontal*

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	2202.405	-48.05	peak	2.20	-45.85	-20.00	150	225	-25.85	
*	2641.283	-44.98	peak	4.16	-40.82	-20.00	150	245	-20.82	



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Radiated Emission Measurement

Operator: Sora

File :3

Data :#2

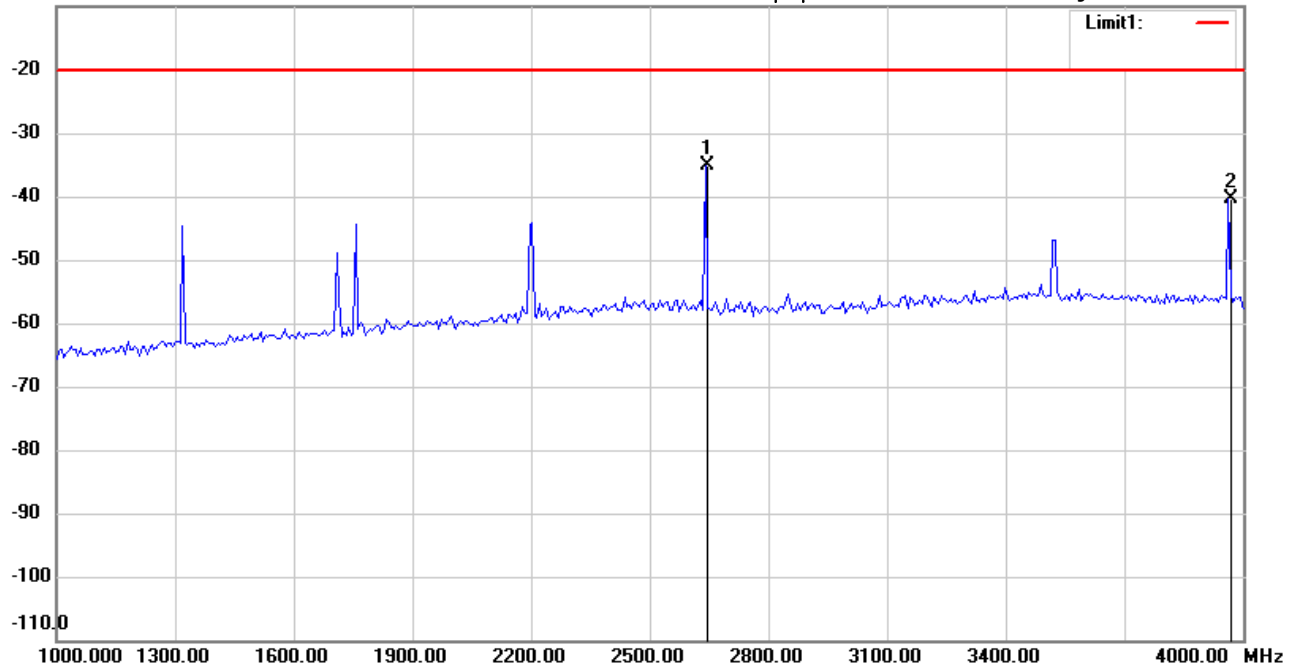
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 下午 02:18:13

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 440MHz

Note :

Polarization: *Vertical*

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	2641.283	-40.54	peak	5.35	-35.19	-20.00	150	155	-15.19	
	3963.928	-47.72	peak	7.26	-40.46	-20.00	150	305	-20.46	

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



Radiated Emission Measurement

Operator: Sora

File :1

Data :#1

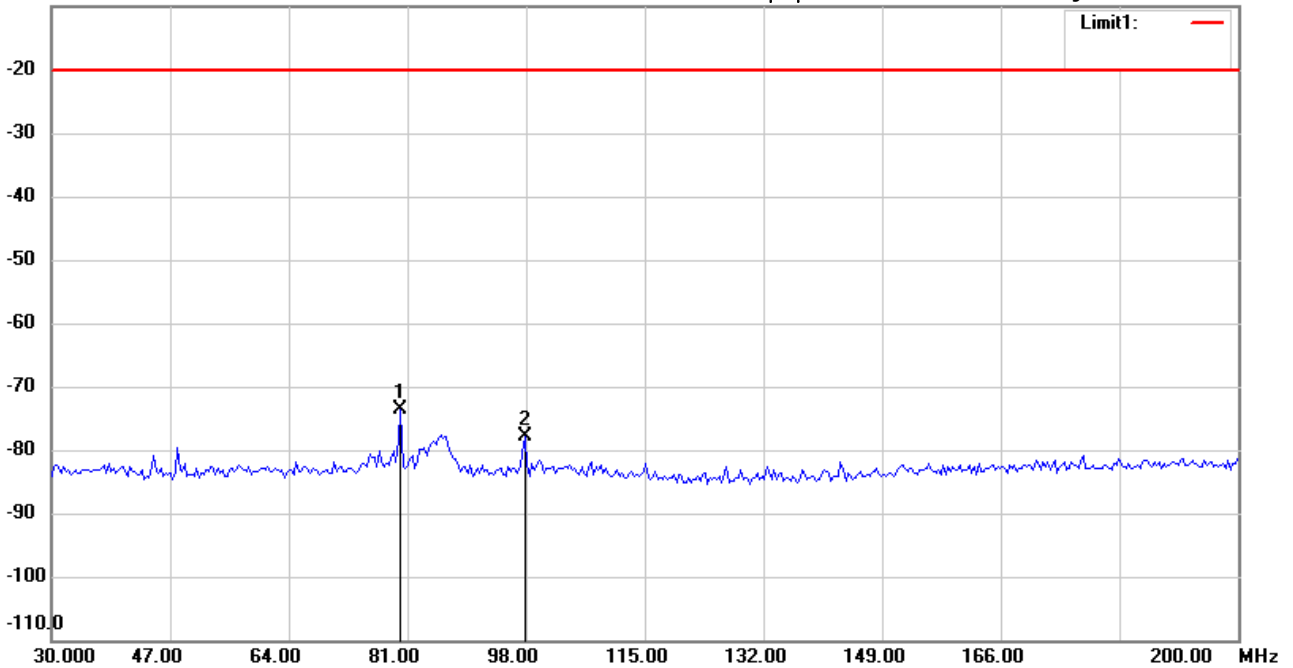
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 下午 02:51:29

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 445MHz

Note :

Polarization: *Horizontal*

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	80.0802	-95.21	peak	21.63	-73.58	-20.00	150	135	-53.58	
	97.7956	-99.33	peak	21.44	-77.89	-20.00	150	120	-57.89	



Radiated Emission Measurement

Operator: Sora

File :1

Data :#2

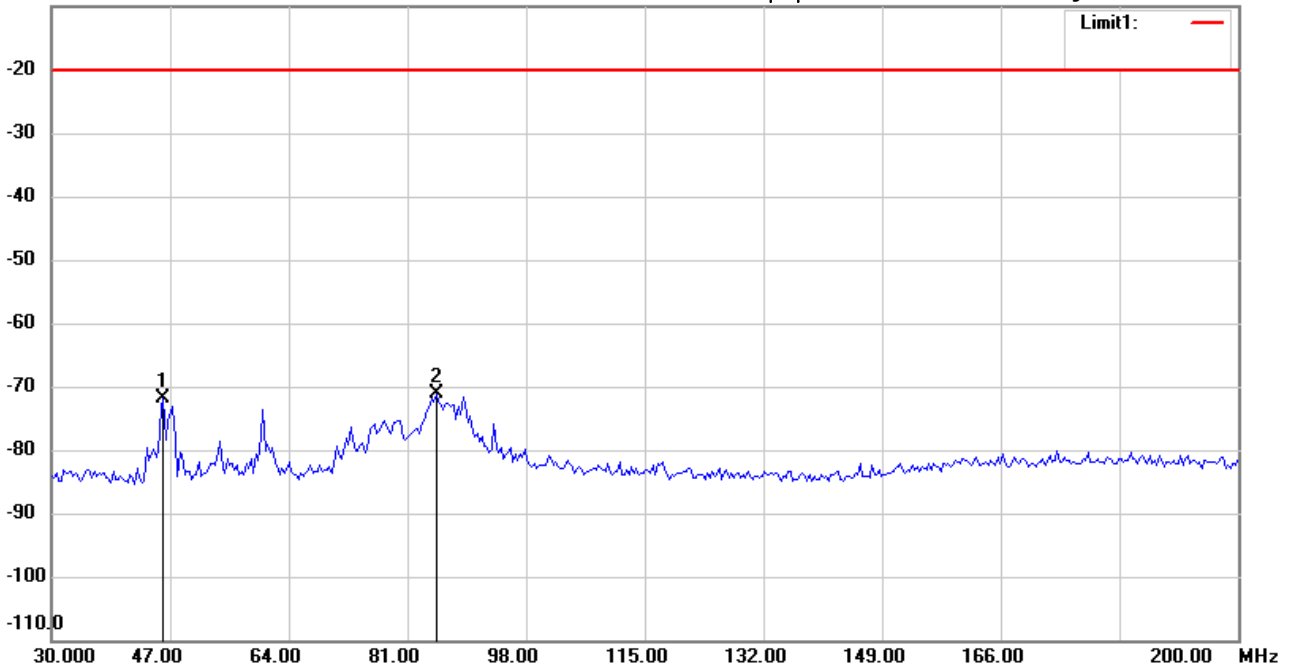
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 下午 02:55:53

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 445MHz

Note :

Polarization: *Vertical*

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	46.0120	-92.97	peak	21.09	-71.88	-20.00	150	255	-51.88	
*	85.1904	-92.57	peak	21.49	-71.08	-20.00	150	80	-51.08	





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Radiated Emission Measurement

Operator: Sora

File :2

Data :#1

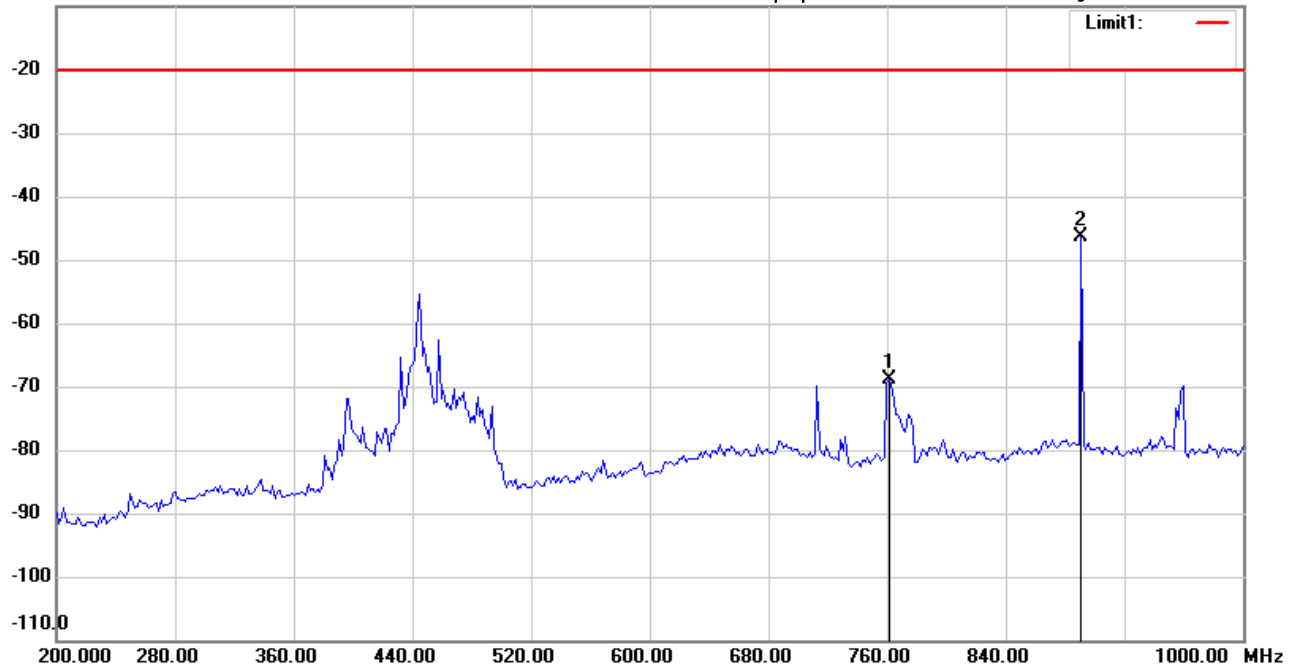
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 下午 01:29:36

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 445MHz

Note :

Polarization: *Horizontal*

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	761.1221	-64.26	peak	-4.56	-68.82	-20.00	150	355	-48.82	
*	890.9820	-44.92	peak	-1.56	-46.48	-20.00	150	300	-26.48	

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



Radiated Emission Measurement

Operator: Sora

File :2

Data :#2

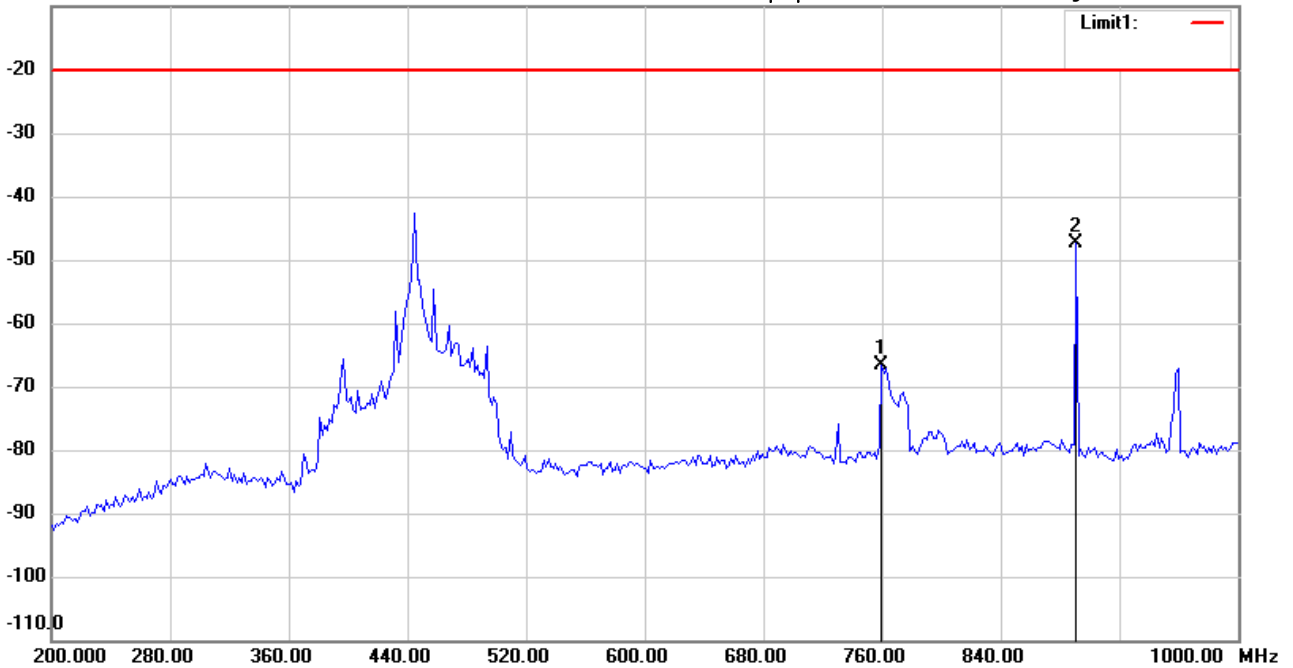
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 下午 01:31:37

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 445MHz

Note :

Polarization: *Vertical*

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	759.5190	-63.08	peak	-3.47	-66.55	-20.00	150	250	-46.55	
*	890.9820	-44.88	peak	-2.59	-47.47	-20.00	150	105	-27.47	



Radiated Emission Measurement

Operator: Sora

File :3

Data :#1

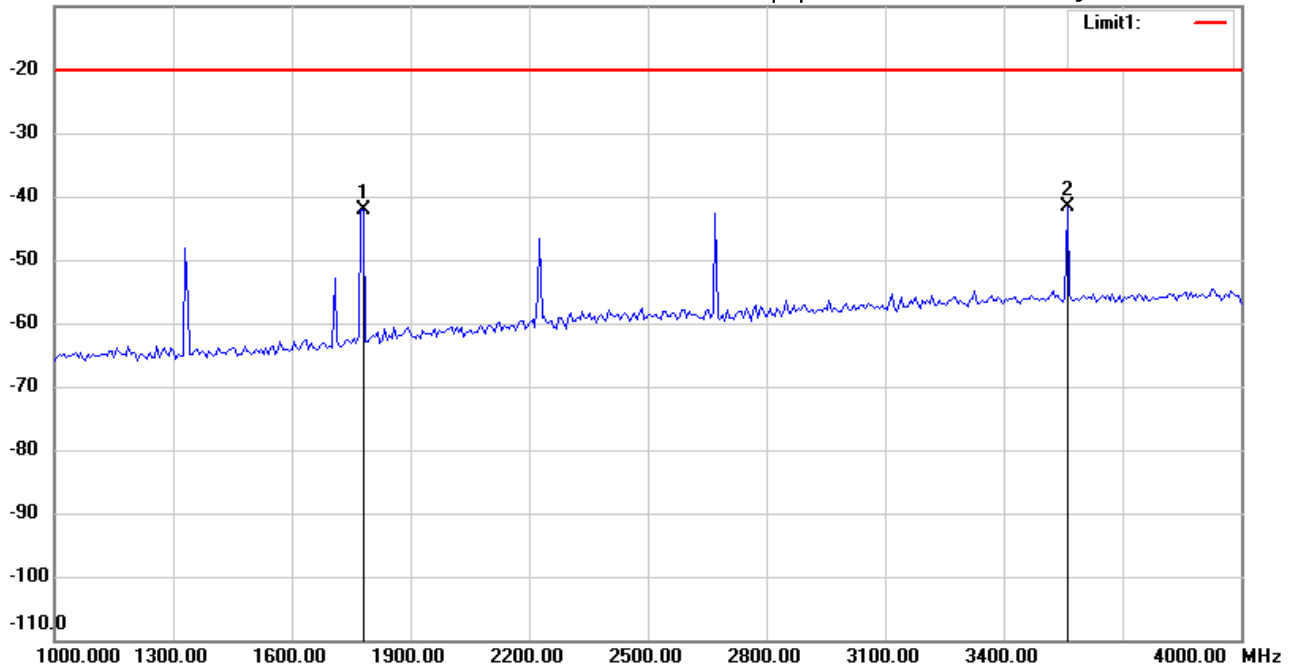
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 下午 01:38:57

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 445MHz

Note :

Polarization: *Horizontal*

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	1781.563	-41.81	peak	-0.34	-42.15	-20.00	150	125	-22.15	
*	3561.122	-49.04	peak	7.38	-41.66	-20.00	150	110	-21.66	



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Radiated Emission Measurement

Operator: Sora

File :3

Data :#2

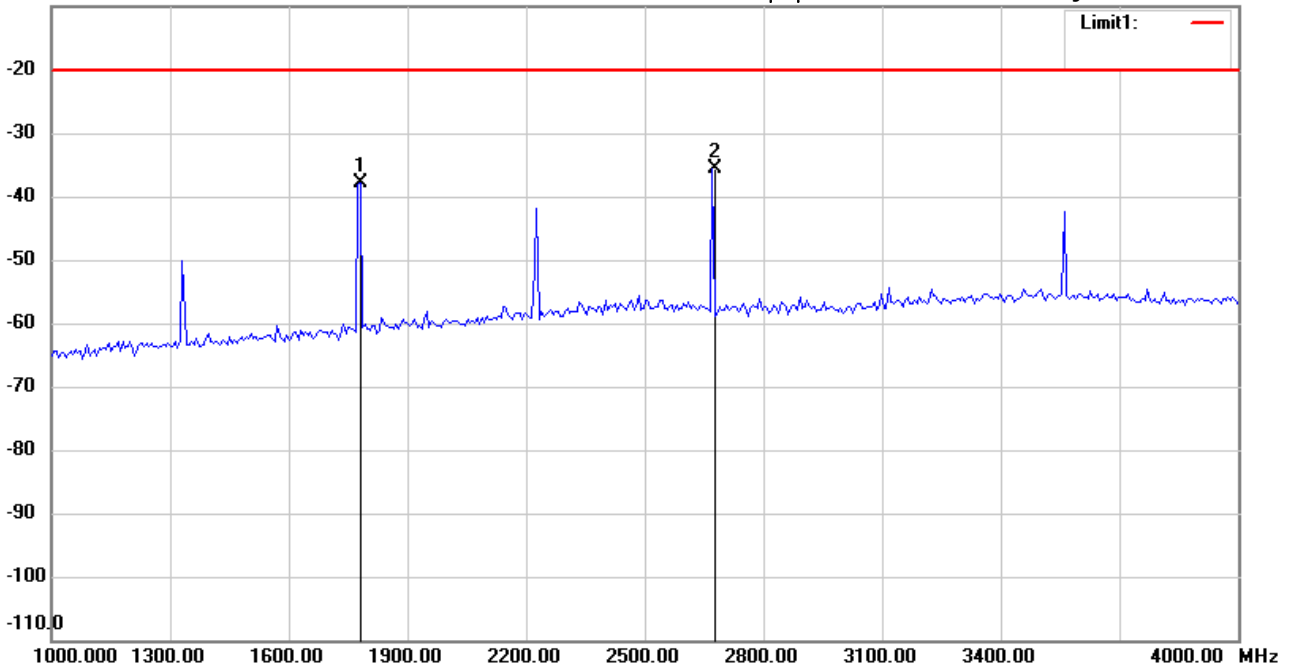
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 下午 01:43:32

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 445MHz

Note :

Polarization: *Vertical*

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	1781.563	-39.12	peak	1.20	-37.92	-20.00	150	245	-17.92	
*	2671.343	-40.87	peak	5.33	-35.54	-20.00	150	180	-15.54	

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



Radiated Emission Measurement

Operator: Sora

File :1

Data :#1

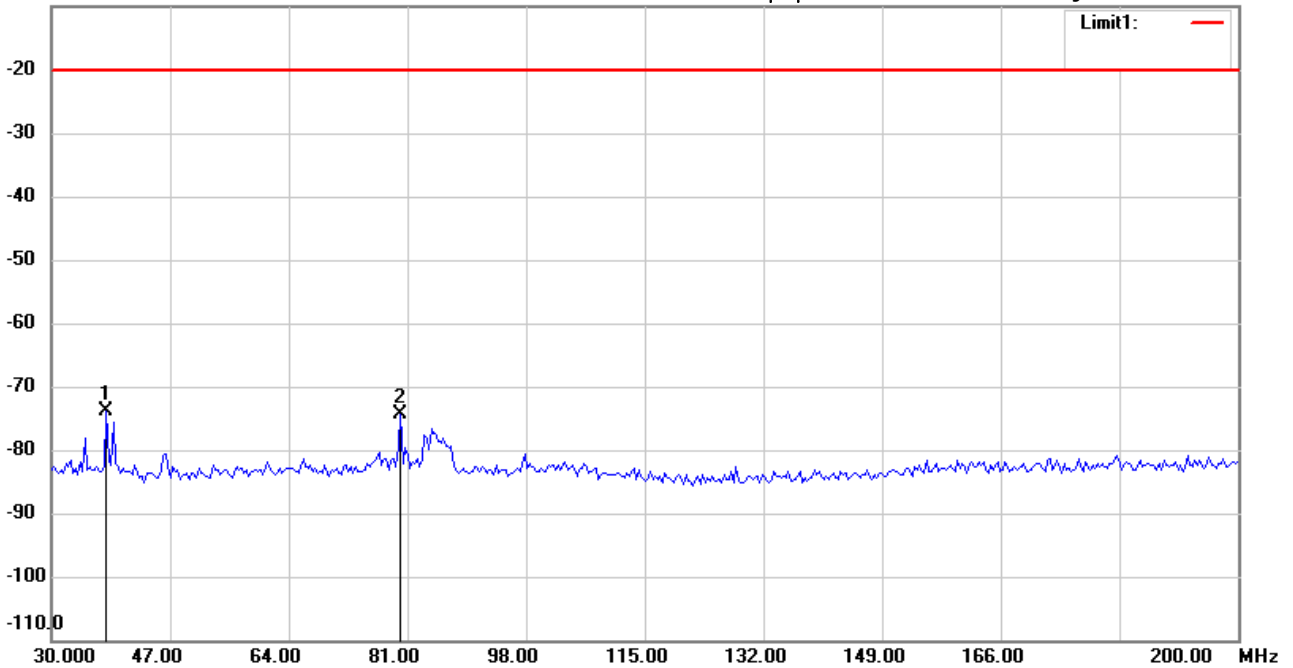
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 下午 03:03:29

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 450MHz

Note :

Polarization: *Horizontal*

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	37.8356	-96.01	peak	22.02	-73.99	-20.00	150	330	-53.99	
	80.0802	-95.97	peak	21.63	-74.34	-20.00	150	75	-54.34	



Radiated Emission Measurement

Operator: Sora

File :1

Data :#2

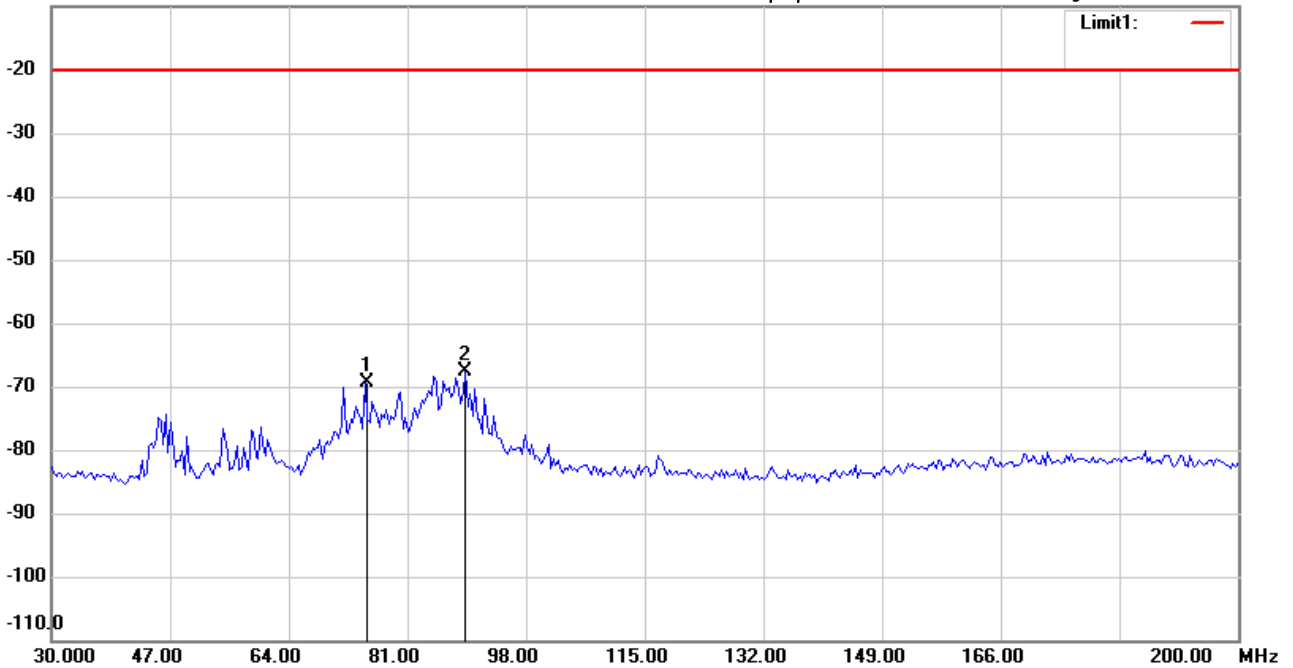
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 下午 03:07:29

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 450MHz

Note :

Polarization: **Vertical**

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	74.9700	-90.48	peak	21.11	-69.37	-20.00	150	95	-49.37	
*	89.2786	-89.41	peak	21.69	-67.72	-20.00	150	115	-47.72	



Radiated Emission Measurement

Operator: Sora

File :2

Data :#1

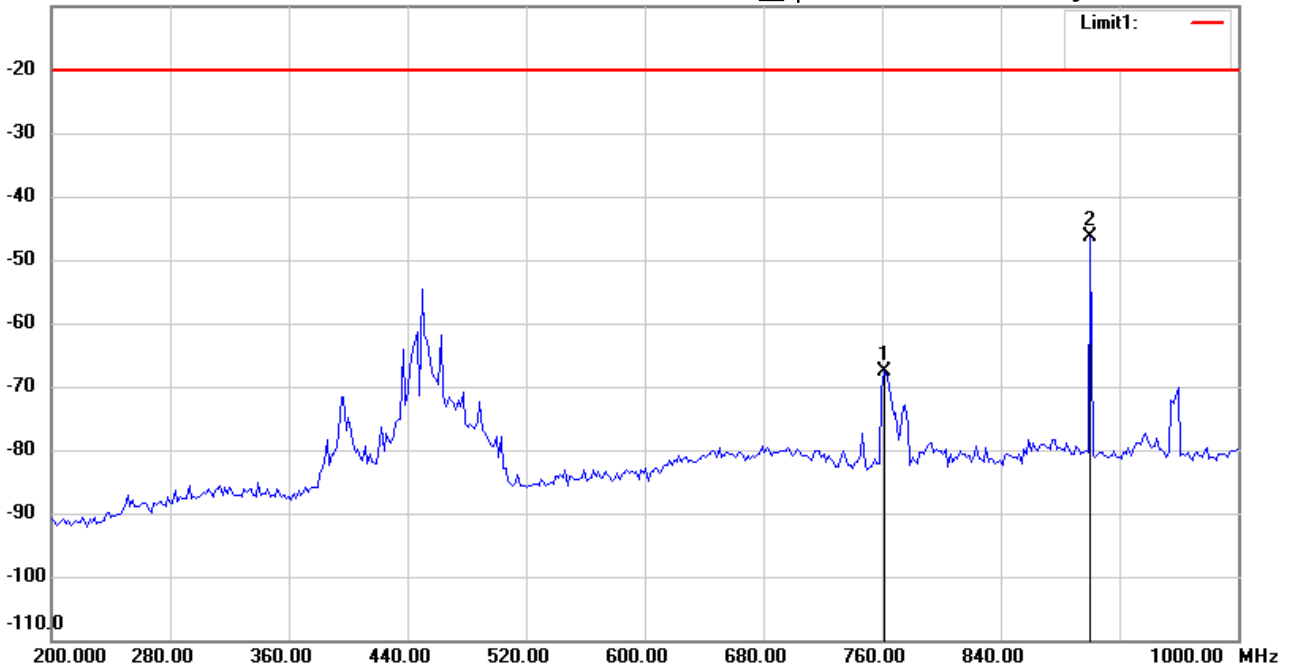
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 上午 11:27:38

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 450MHz

Note :

Polarization: *Horizontal*

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	761.1221	-63.05	peak	-4.56	-67.61	-20.00	150	220	-47.61	
*	900.6012	-44.97	peak	-1.35	-46.32	-20.00	150	245	-26.32	



Radiated Emission Measurement

Operator: Sora

File :2

Data :#2

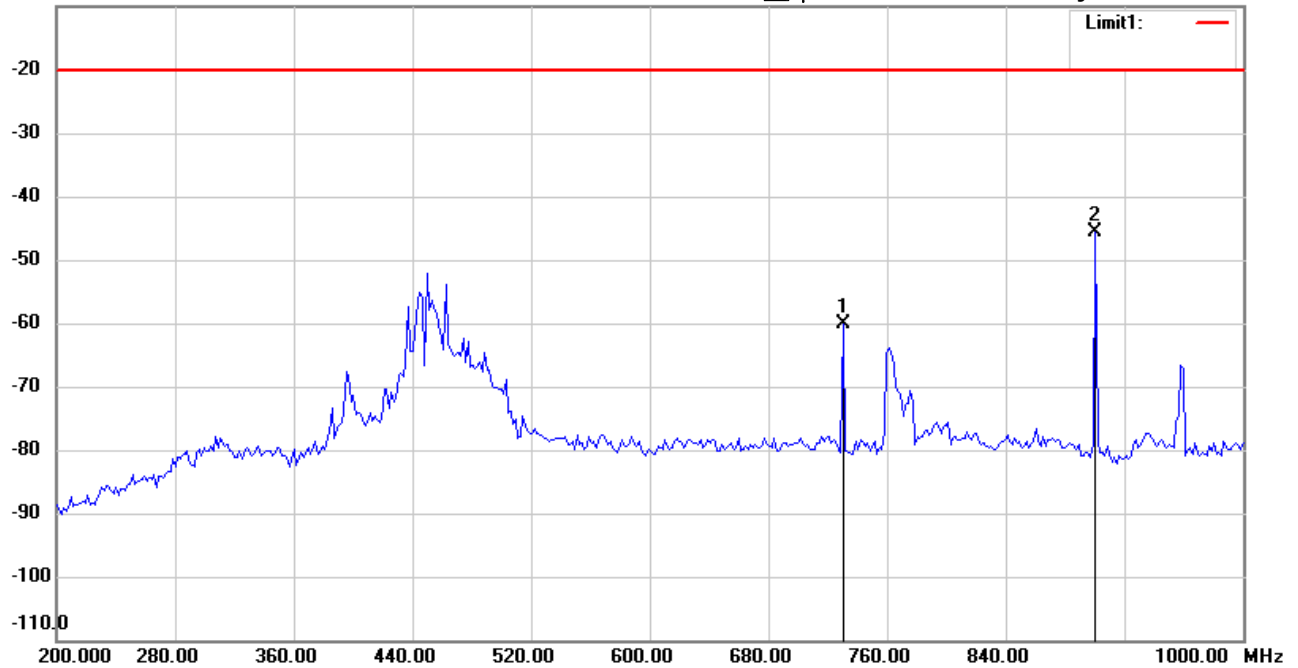
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 上午 11:33:46

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 450MHz

Note :

Polarization: *Vertical*

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	730.6613	-56.74	peak	-3.45	-60.19	-20.00	150	180	-40.19	
*	900.6012	-42.87	peak	-2.79	-45.66	-20.00	150	165	-25.66	





Radiated Emission Measurement

Operator: Sora

File :3

Data :#1

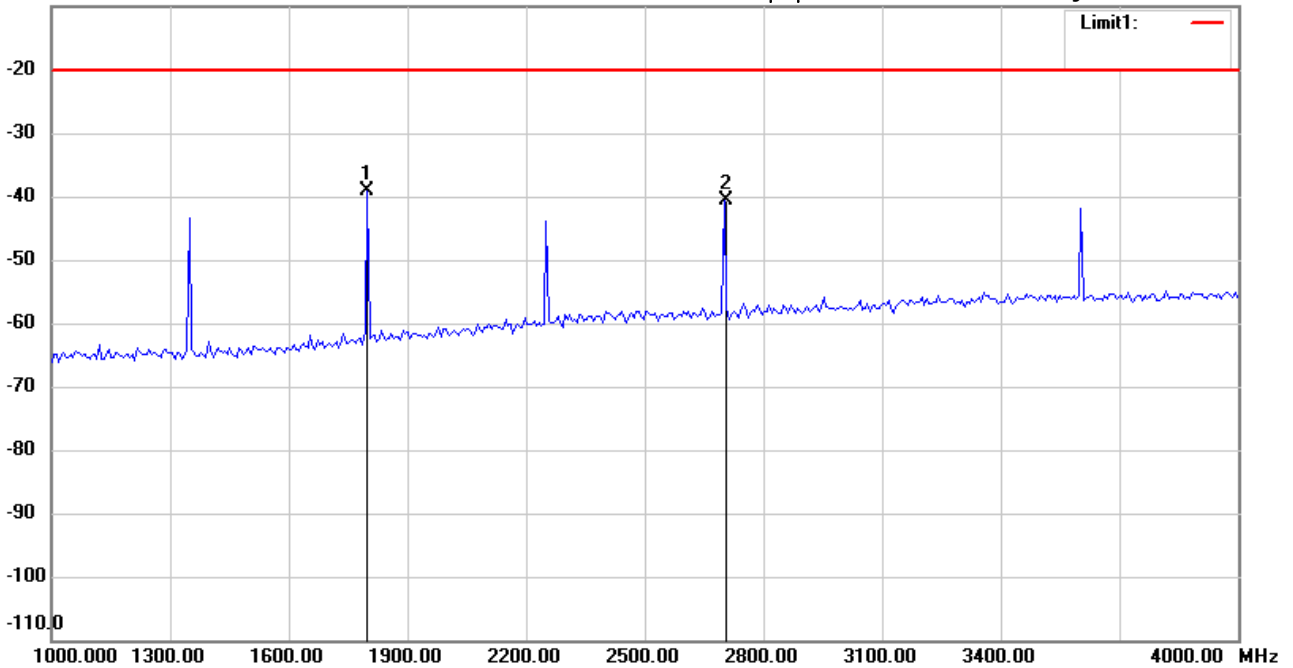
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 下午 01:54:37

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 450MHz

Note :

Polarization: *Horizontal*

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	1799.599	-38.86	peak	-0.22	-39.08	-20.00	150	195	-19.08	
	2701.403	-44.86	peak	4.31	-40.55	-20.00	150	110	-20.55	



Radiated Emission Measurement

Operator: Sora

File :3

Data :#2

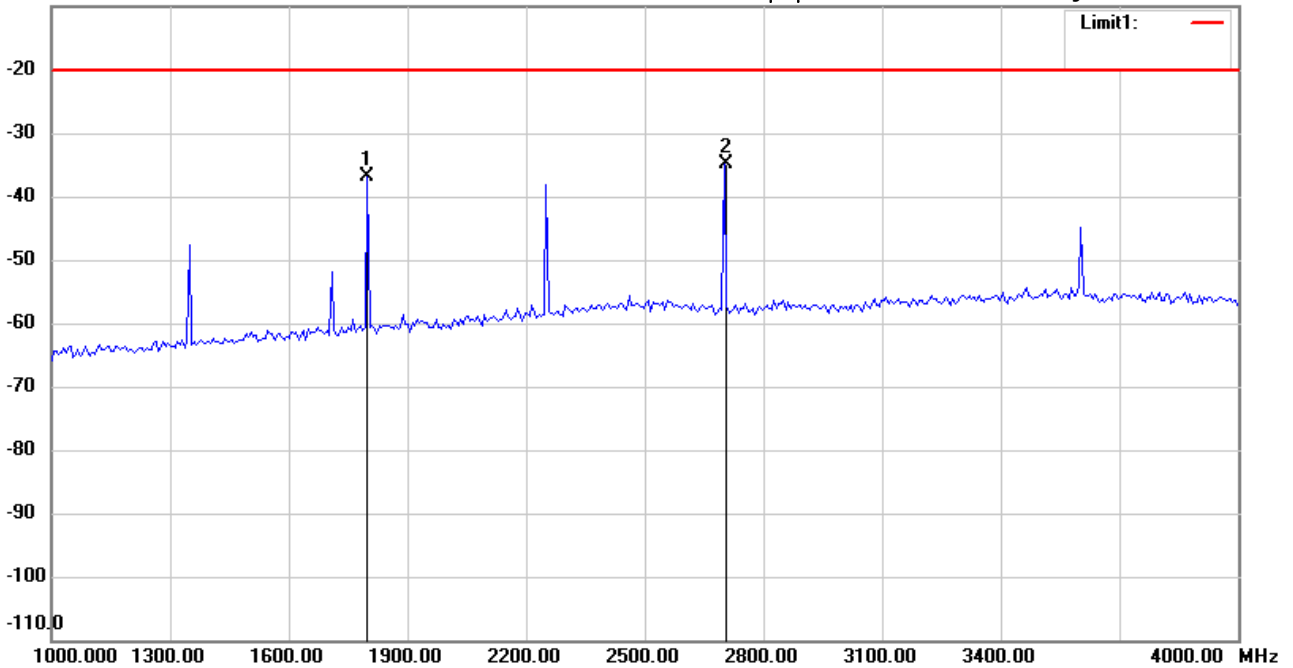
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 下午 02:00:27

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 450MHz

Note :

Polarization: **Vertical**

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	1799.599	-38.28	peak	1.29	-36.99	-20.00	150	105	-16.99	
*	2701.403	-40.22	peak	5.31	-34.91	-20.00	150	270	-14.91	



Radiated Emission Measurement

Operator: Sora

File :1

Data :#1

Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 下午 02:40:35

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 406MHz

Note :

Polarization: *Horizontal*

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	80.0802	-95.39	peak	21.63	-73.76	-13.00	150	180	-60.76	
	84.1683	-97.00	peak	21.31	-75.69	-13.00	150	115	-62.69	



Radiated Emission Measurement

Operator: Sora

File :1

Data :#2

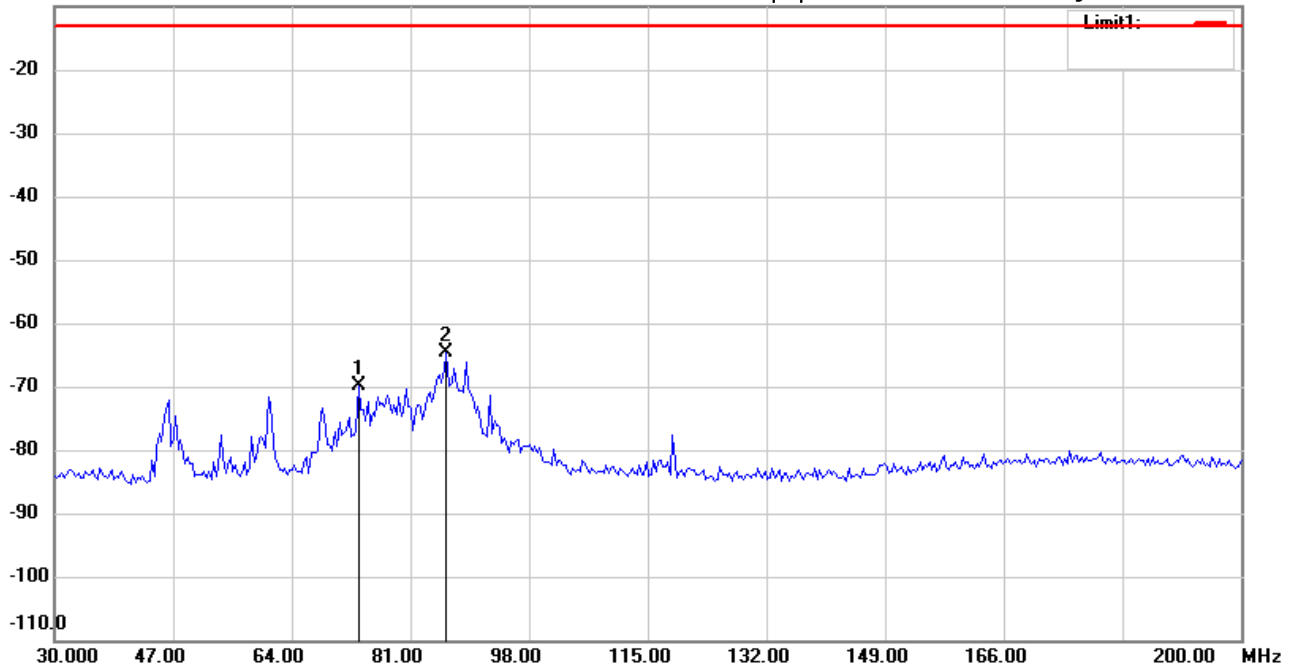
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 下午 02:48:30

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 406MHz

Note :

Polarization: *Vertical*

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	73.6071	-90.86	peak	21.07	-69.79	-13.00	150	295	-56.79	
*	86.2124	-86.16	peak	21.54	-64.62	-13.00	150	245	-51.62	



Radiated Emission Measurement

Operator: Sora

File :2

Data :#1

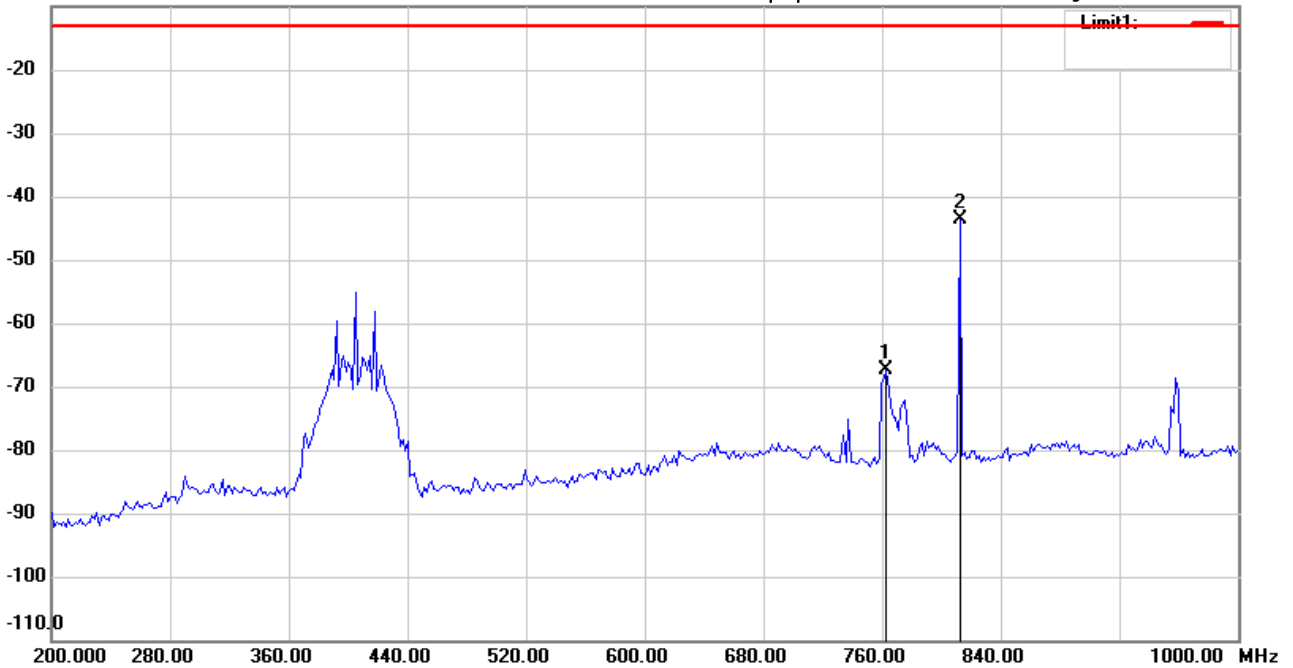
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 下午 01:21:53

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 406MHz

Note :

Polarization: *Horizontal*

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	762.7255	-62.93	peak	-4.54	-67.47	-13.00	150	315	-54.47	
*	812.4248	-39.76	peak	-3.78	-43.54	-13.00	150	180	-30.54	



Radiated Emission Measurement

Operator: Sora

File :2

Data :#2

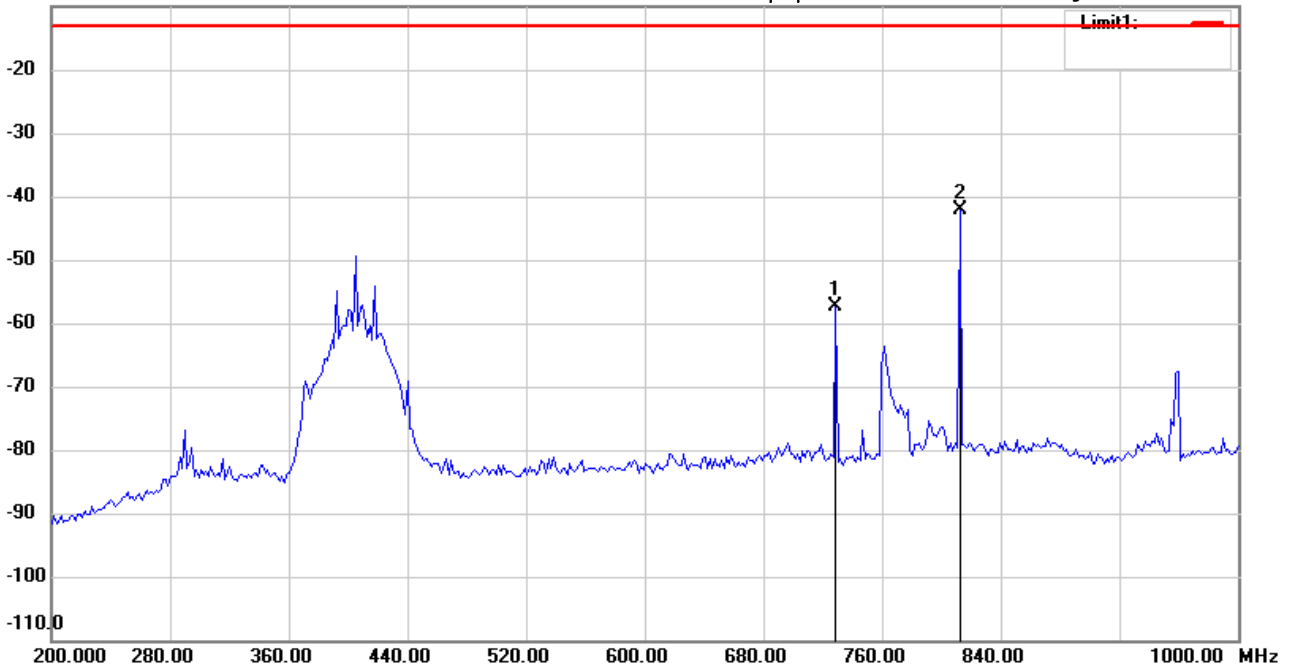
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 下午 01:24:25

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 406MHz

Note :

Polarization: *Vertical*

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	729.0581	-53.93	peak	-3.44	-57.37	-13.00	150	150	-44.37	
*	812.4248	-39.64	peak	-2.46	-42.10	-13.00	150	120	-29.10	



Radiated Emission Measurement

Operator: Sora

File :3

Data :#1

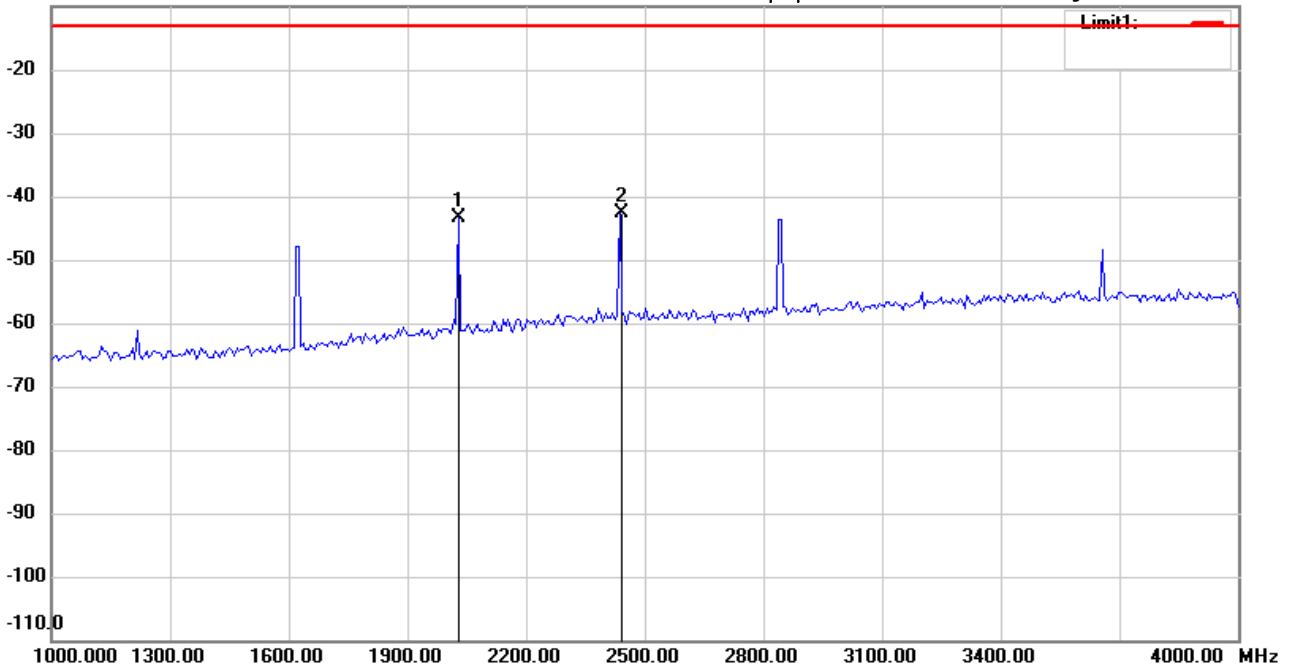
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 下午 01:58:06

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 406MHz

Note :

Polarization: *Horizontal*

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	2028.056	-44.72	peak	1.26	-43.46	-13.00	150	220	-30.46	
*	2436.874	-46.17	peak	3.46	-42.71	-13.00	150	255	-29.71	



Radiated Emission Measurement

Operator: Sora

File :3

Data :#2

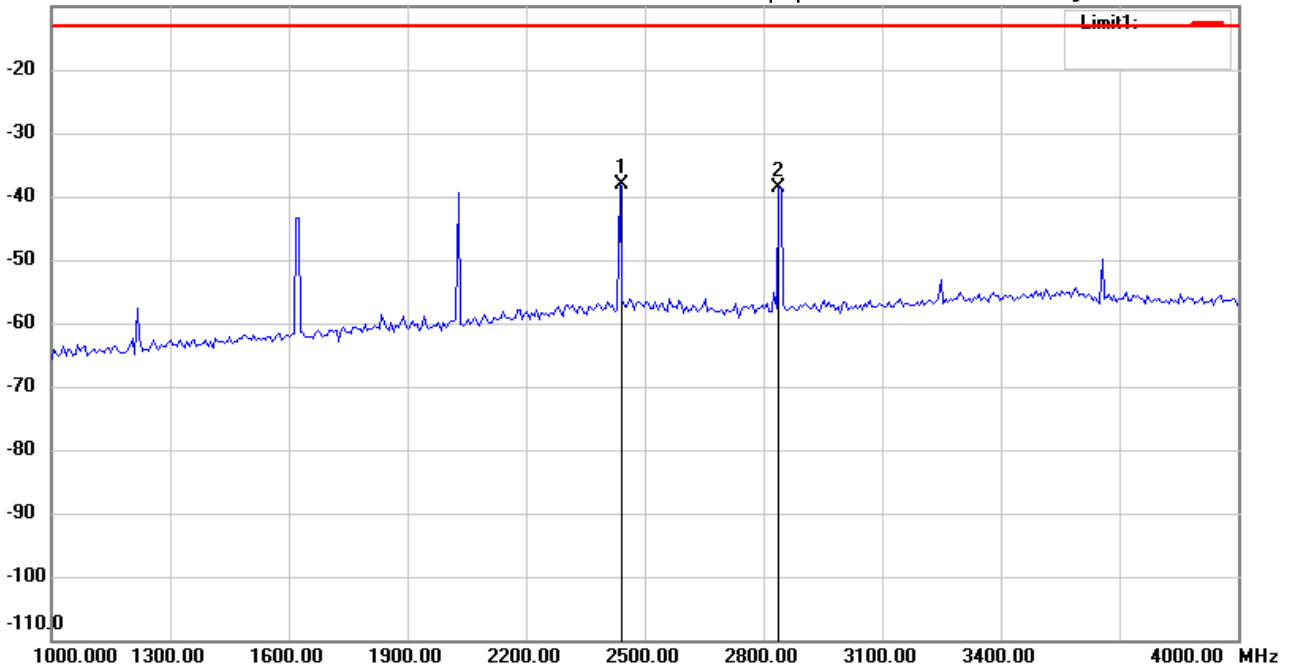
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 下午 02:03:55

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 406MHz

Note :

Polarization: *Vertical*

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	2436.874	-43.09	peak	5.04	-38.05	-13.00	150	330	-25.05	
	2839.679	-43.76	peak	5.23	-38.53	-13.00	150	150	-25.53	





Radiated Emission Measurement

Operator: Sora

File :1

Data :#1

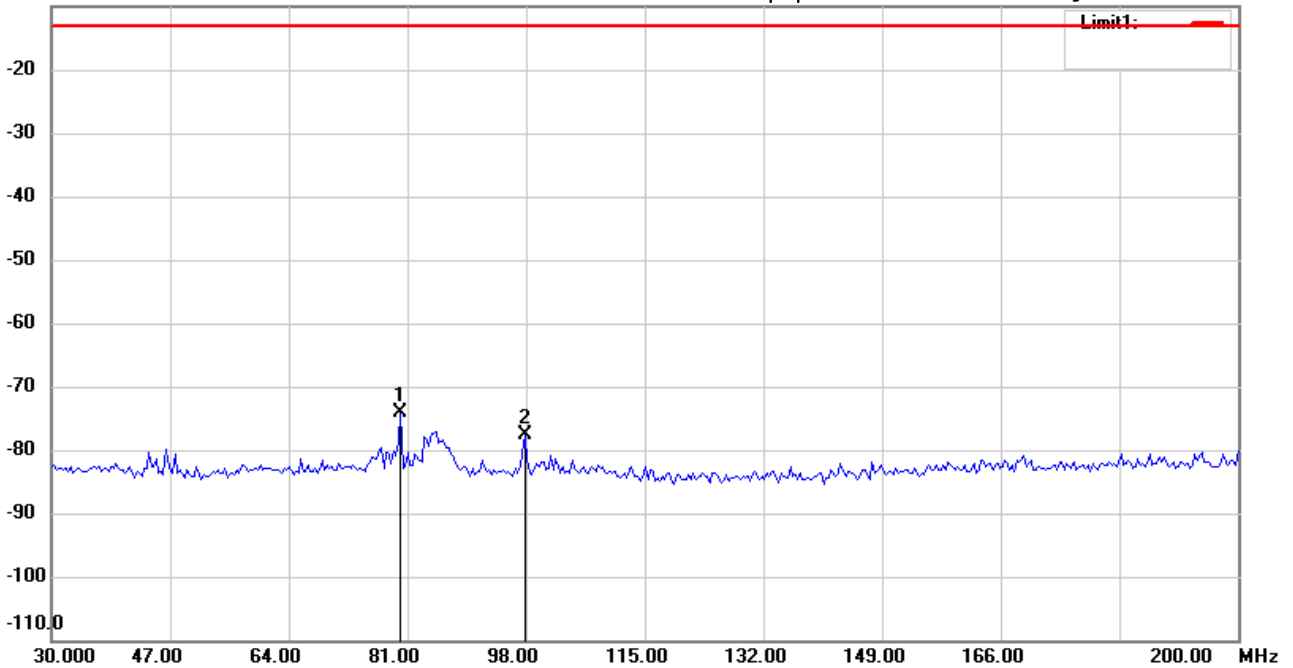
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 下午 02:33:30

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 418MHz

Note :

Polarization: *Horizontal*

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	80.0802	-95.74	peak	21.63	-74.11	-13.00	150	125	-61.11	
	97.7956	-99.08	peak	21.44	-77.64	-13.00	150	100	-64.64	



Radiated Emission Measurement

Operator: Sora

File :1

Data :#2

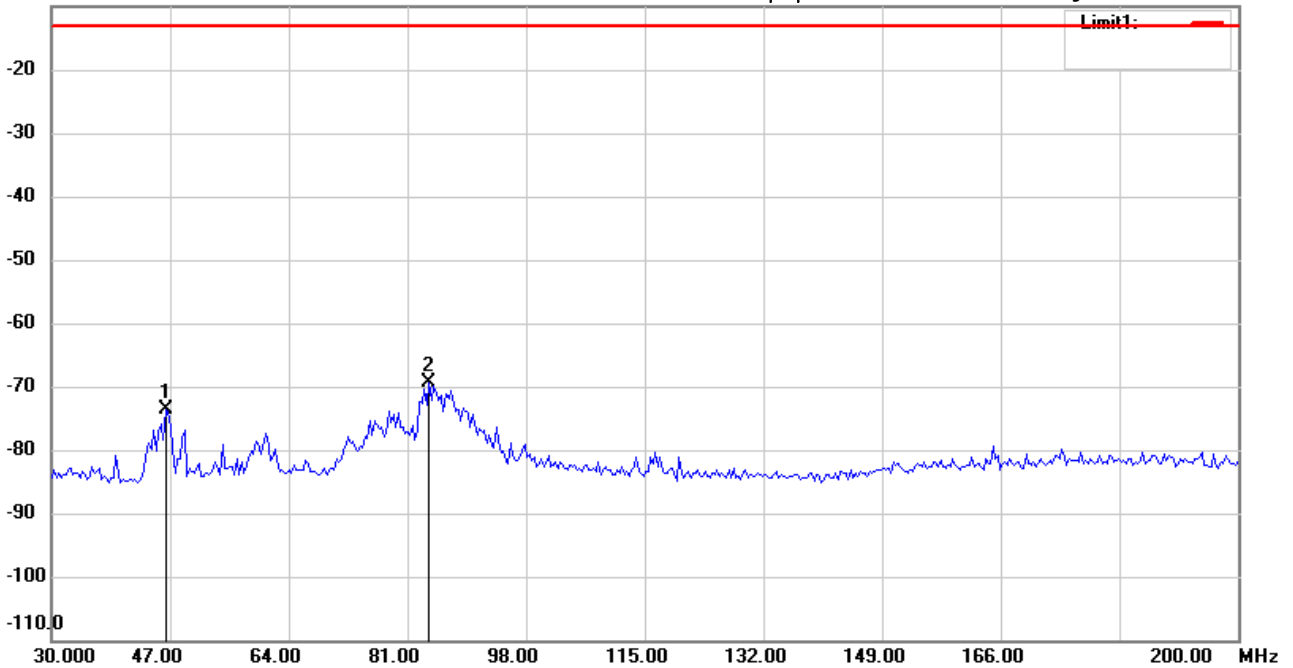
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 下午 02:45:56

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 418MHz

Note :

Polarization: *Vertical*

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	46.3527	-94.80	peak	21.11	-73.69	-13.00	150	350	-60.69	
*	84.1683	-90.92	peak	21.44	-69.48	-13.00	150	205	-56.48	



Radiated Emission Measurement

Operator: Sora

File :2

Data :#1

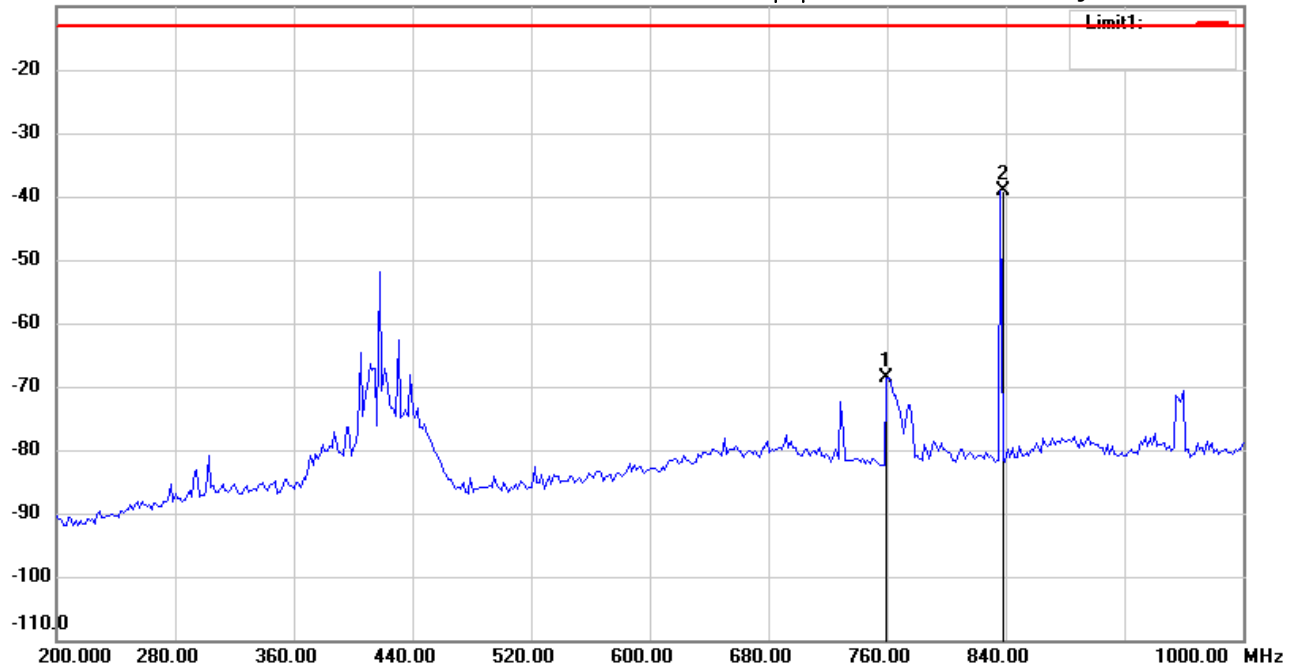
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 下午 01:09:02

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 418MHz

Note :

Polarization: *Horizontal*

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	759.5190	-63.93	peak	-4.57	-68.50	-13.00	150	160	-55.50	
*	836.4730	-36.15	peak	-3.04	-39.19	-13.00	150	210	-26.19	



Radiated Emission Measurement

Operator: Sora

File :2

Data :#2

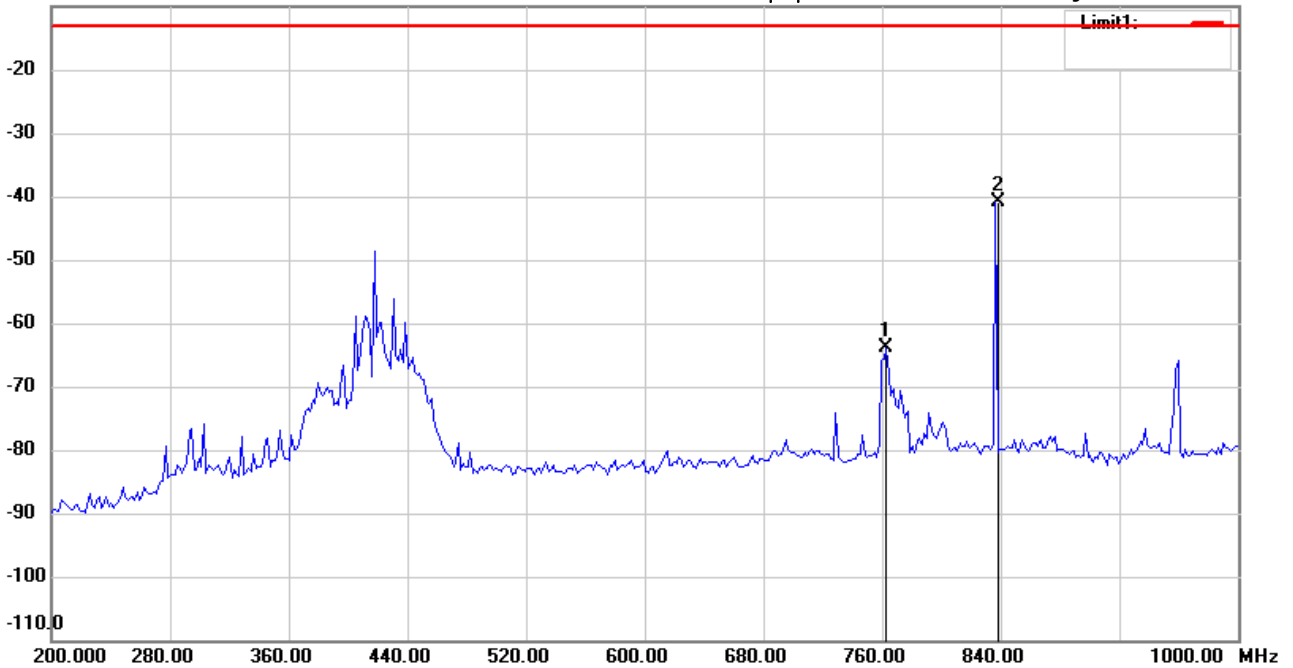
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 下午 01:15:58

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 418MHz

Note :

Polarization: **Vertical**

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	762.7255	-60.48	peak	-3.41	-63.89	-13.00	150	150	-50.89	
*	836.4730	-38.84	peak	-1.97	-40.81	-13.00	150	120	-27.81	



Address:6F.,No.58,Ln 188,Ruey Kuang Rd,Neihu,Taipei  
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 Fax:+886-2-6606-8875

Radiated Emission Measurement

Operator: Sora

File :3

Data :#1

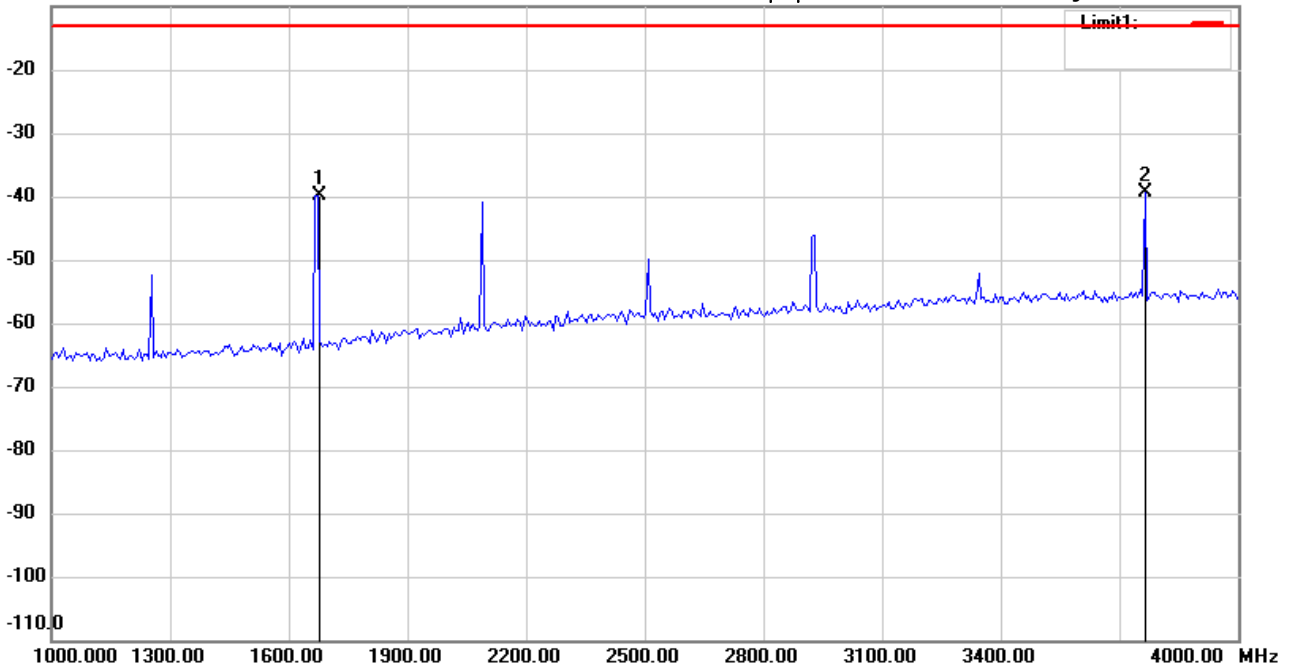
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 下午 02:16:09

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 418MHz

Note :

Polarization: *Horizontal*

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	1673.347	-38.92	peak	-1.05	-39.97	-13.00	150	110	-26.97	
*	3765.531	-47.09	peak	7.67	-39.42	-13.00	150	240	-26.42	

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



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Radiated Emission Measurement

Operator: Sora

File :3

Data :#2

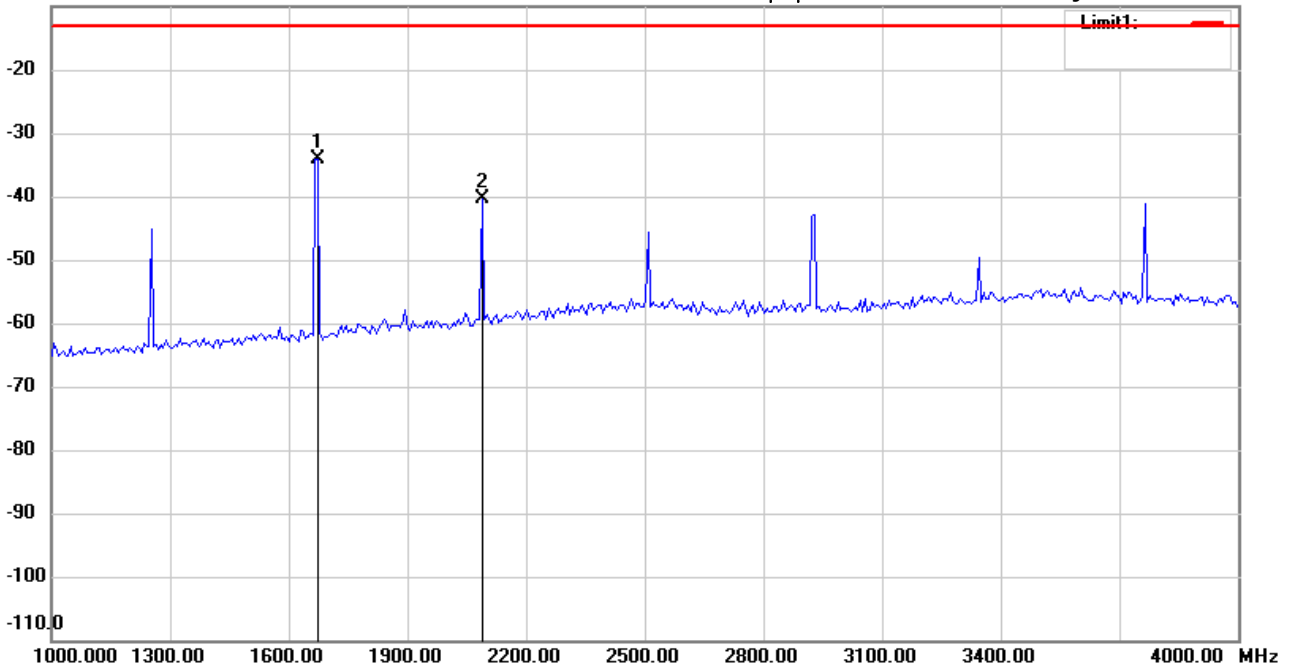
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 下午 02:21:30

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 418MHz

Note :

Polarization: *Vertical*

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	1667.335	-34.72	peak	0.61	-34.11	-13.00	150	150	-21.11	
	2088.176	-43.34	peak	2.86	-40.48	-13.00	150	95	-27.48	

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



Radiated Emission Measurement

Operator: Sora

File :1

Data :#1

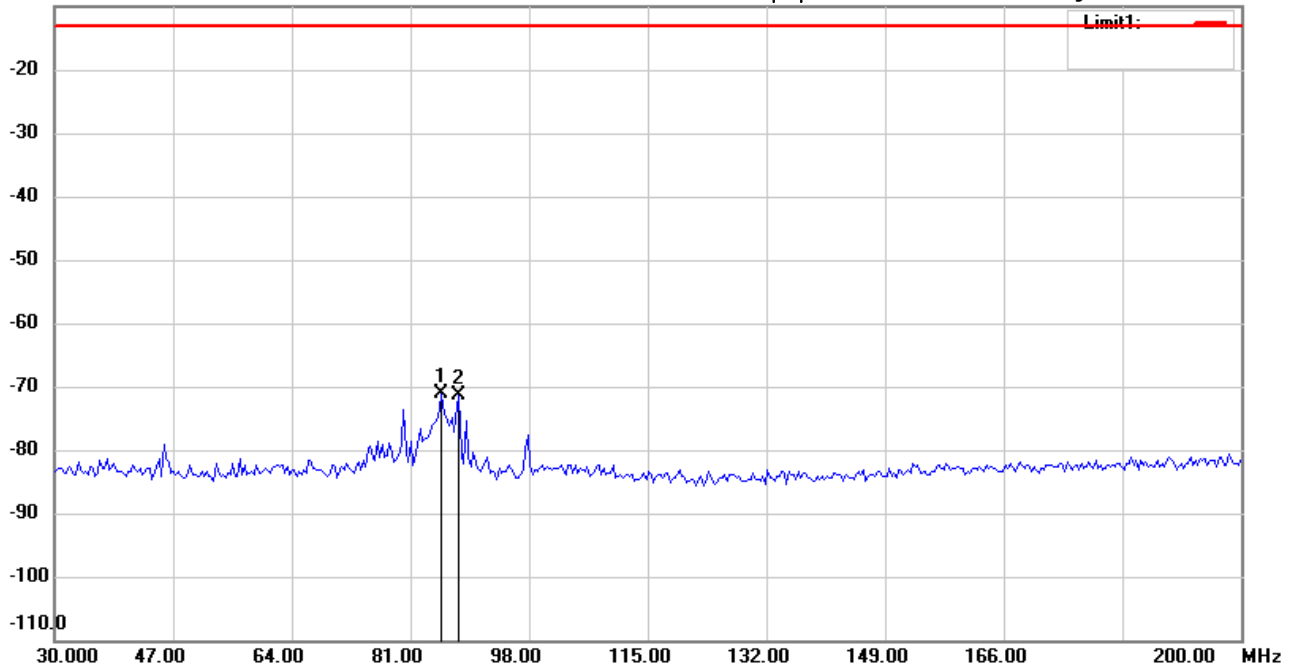
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 下午 02:53:34

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 430MHz

Note :

Polarization: *Horizontal*

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	85.5311	-92.42	peak	21.21	-71.21	-13.00	150	150	-58.21	
	87.9158	-92.28	peak	21.02	-71.26	-13.00	150	125	-58.26	



Radiated Emission Measurement

Operator: Sora

File :1

Data :#2

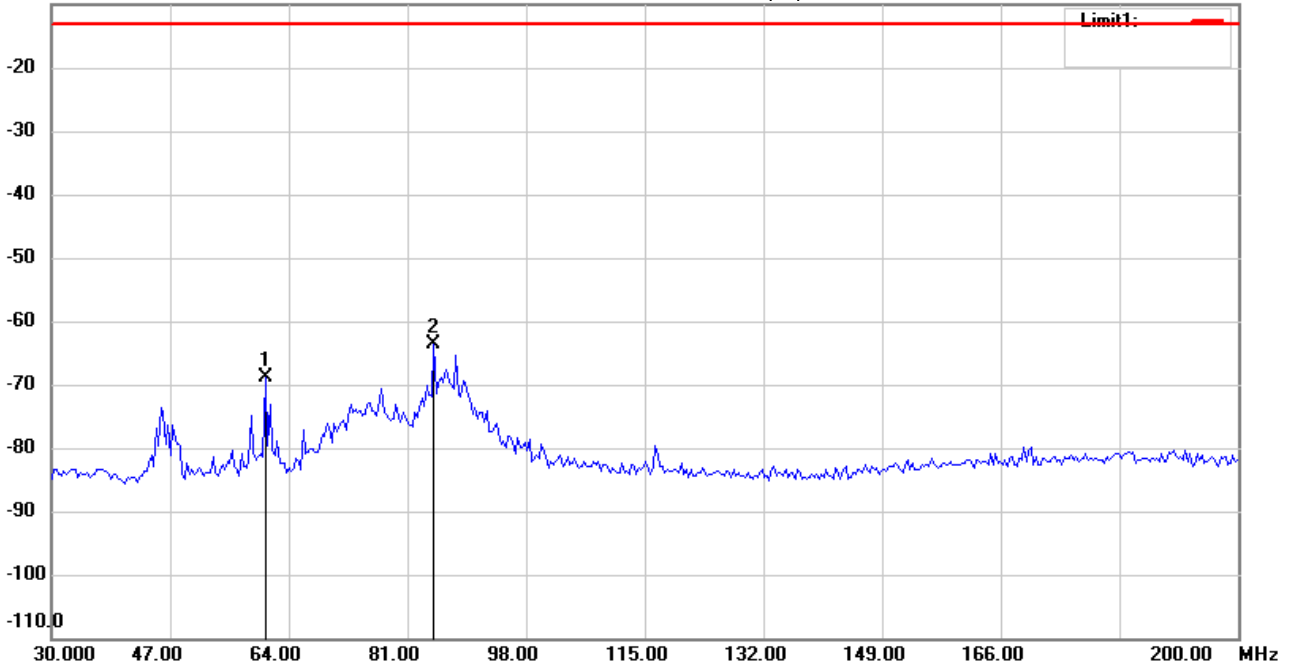
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 下午 02:58:13

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 430MHz

Note :

Polarization: *Vertical*

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	60.6613	-90.34	peak	21.56	-68.78	-13.00	150	315	-55.78	
*	84.8496	-85.14	peak	21.48	-63.66	-13.00	150	285	-50.66	





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Radiated Emission Measurement

Operator: Sora

File :2

Data :#1

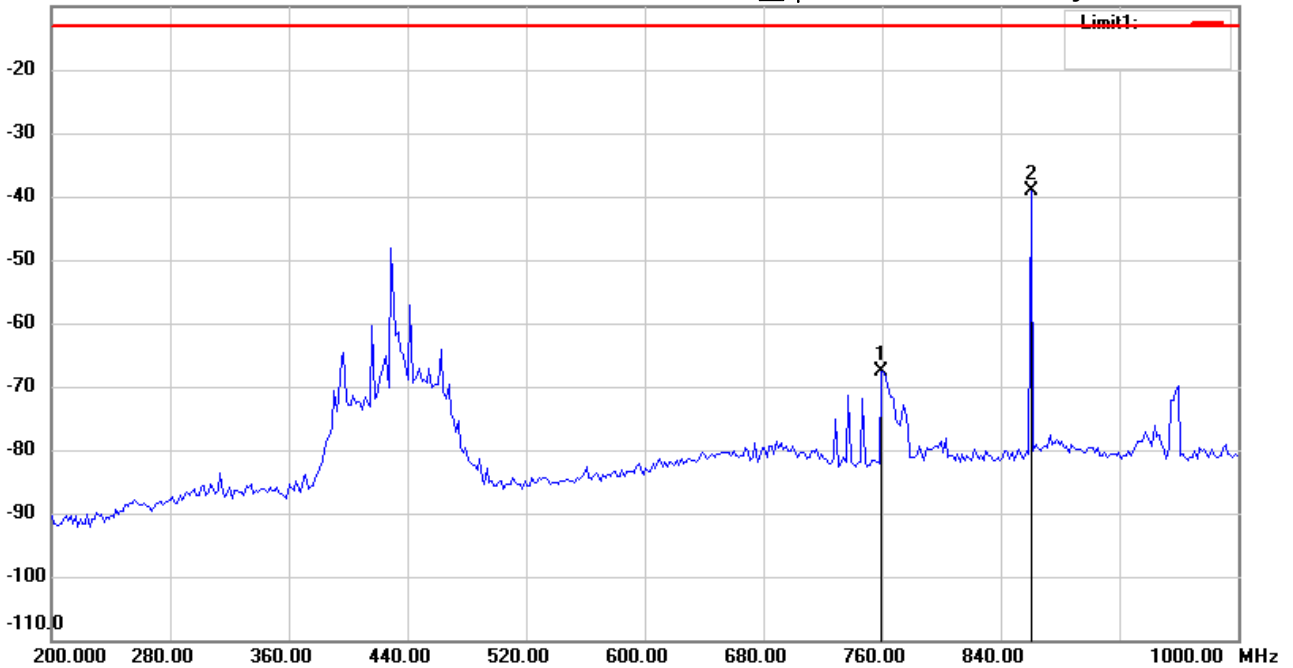
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 上午 11:38:24

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 430MHz

Note :

Polarization: *Horizontal*

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	759.5190	-63.10	peak	-4.57	-67.67	-13.00	150	210	-54.67	
*	860.5210	-36.74	peak	-2.36	-39.10	-13.00	150	270	-26.10	

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



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

Operator: Sora

File :2

Data :#2

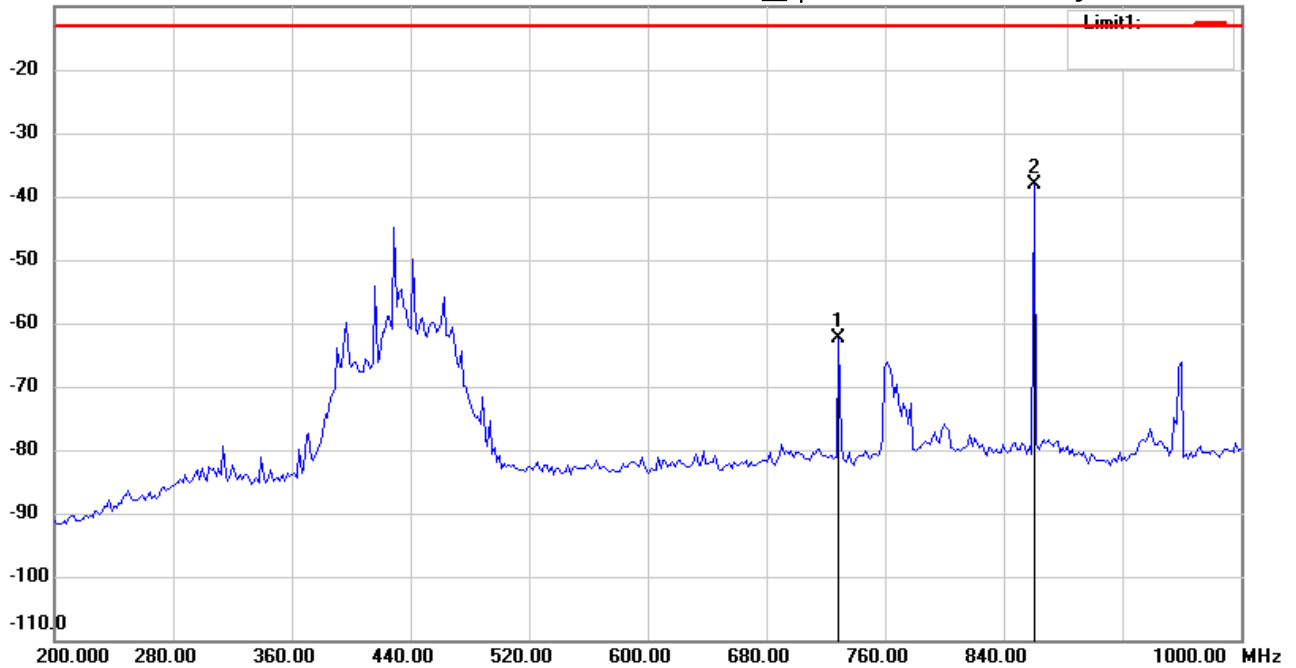
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 上午 11:40:57

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 430MHz

Note :

Polarization: **Vertical**

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	729.0581	-58.86	peak	-3.44	-62.30	-13.00	150	150	-49.30	
*	860.5210	-36.25	peak	-1.93	-38.18	-13.00	150	120	-25.18	

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



Radiated Emission Measurement

Operator: Sora

File :3

Data :#1

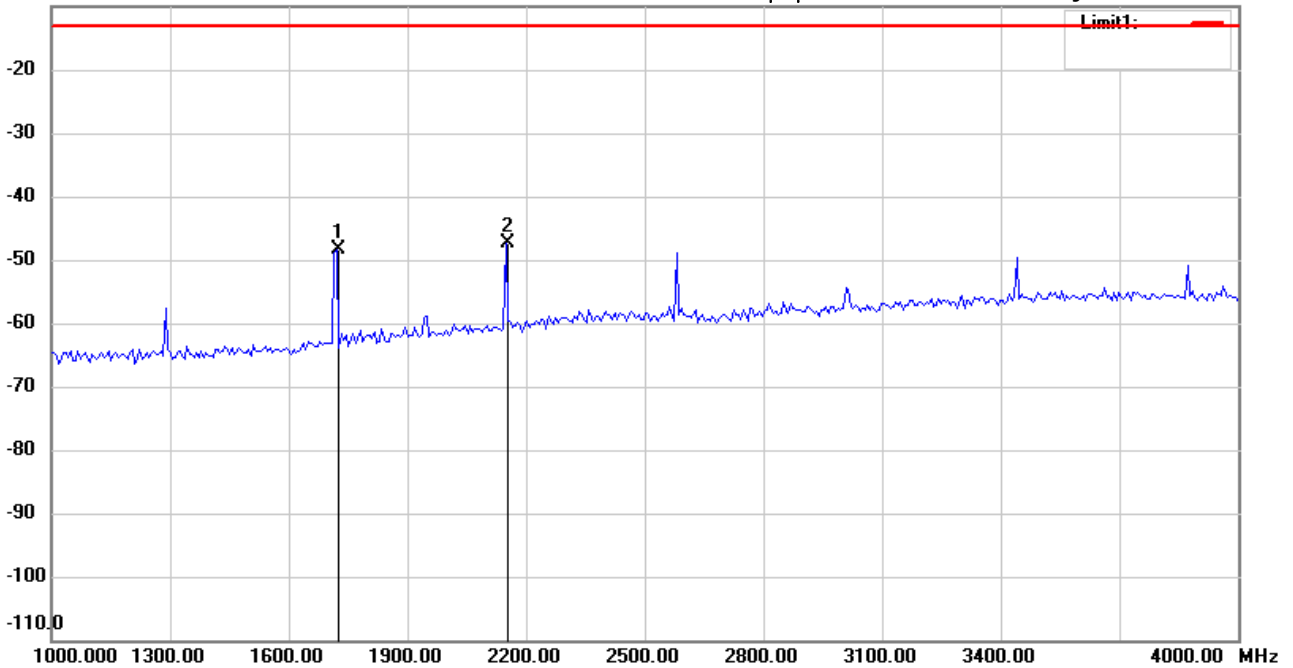
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 下午 01:41:10

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 430MHz

Note :

Polarization: *Horizontal*

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	1721.443	-47.54	peak	-0.73	-48.27	-13.00	150	220	-35.27	
*	2148.297	-49.26	peak	1.91	-47.35	-13.00	150	95	-34.35	



Radiated Emission Measurement

Operator: Sora

File :3

Data :#2

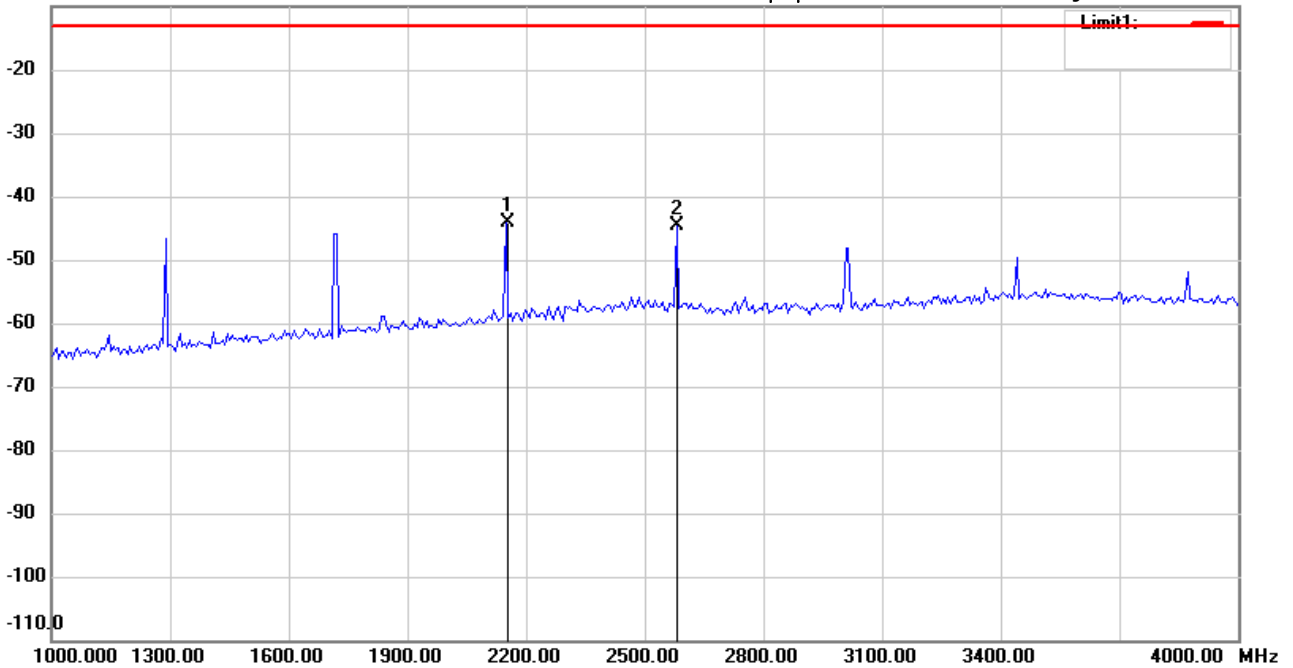
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 下午 01:45:59

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 430MHz

Note :

Polarization: *Vertical*

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	2148.297	-47.26	peak	3.24	-44.02	-13.00	150	155	-31.02	
	2581.162	-49.88	peak	5.38	-44.50	-13.00	150	120	-31.50	



Radiated Emission Measurement

Operator: Sora

File :1

Data :#1

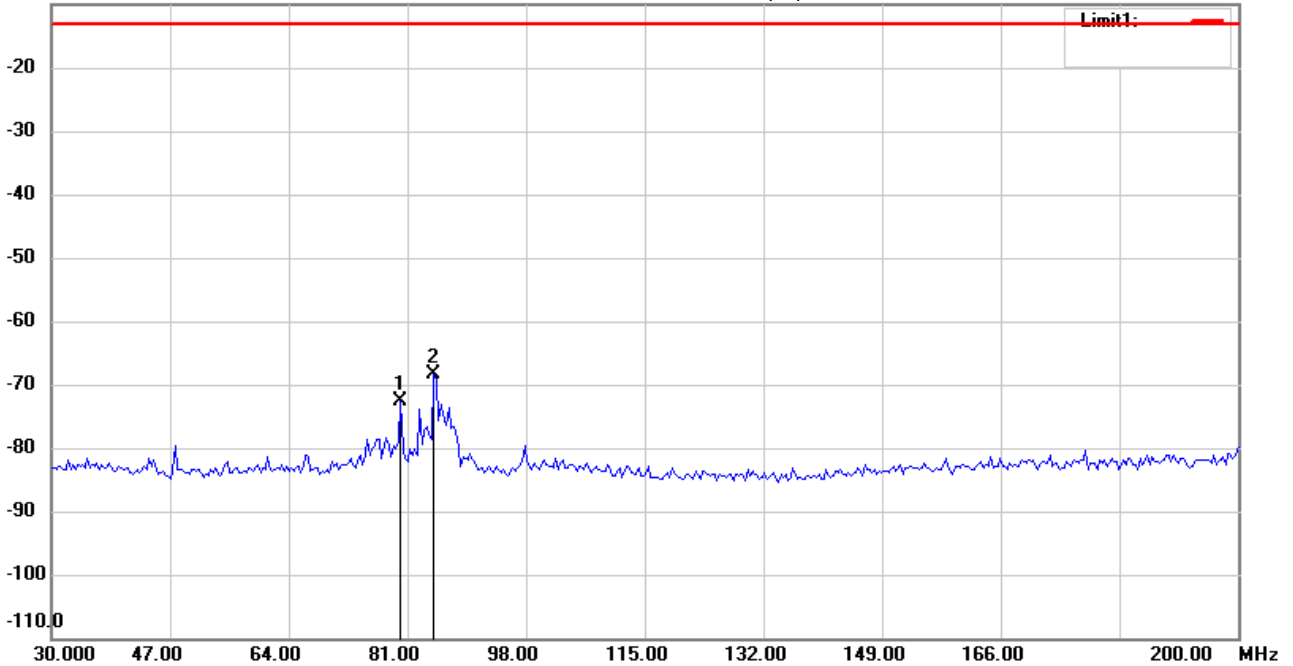
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 下午 02:37:32

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 440MHz

Note :

Polarization: *Horizontal*

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	80.0802	-94.15	peak	21.63	-72.52	-13.00	150	250	-59.52	
*	84.8496	-89.71	peak	21.26	-68.45	-13.00	150	225	-55.45	



Radiated Emission Measurement

Operator: Sora

File :1

Data :#2

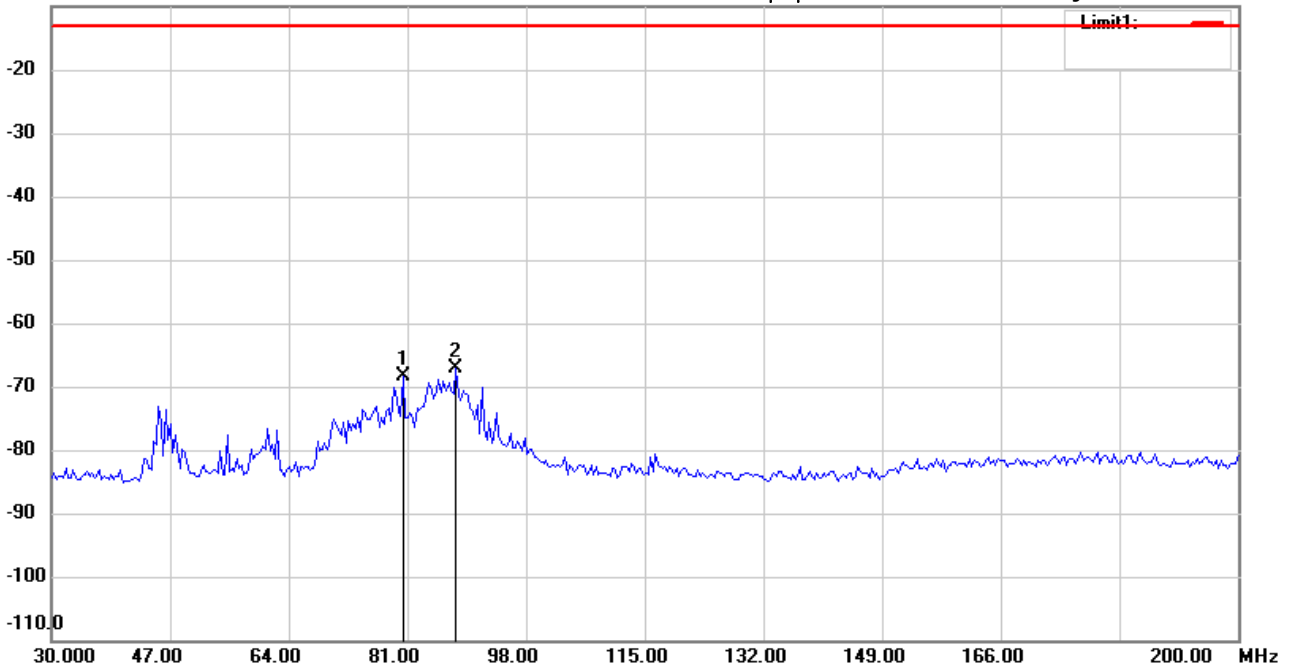
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 下午 02:43:29

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 440MHz

Note :

Polarization: *Vertical*

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	80.4208	-89.64	peak	21.26	-68.38	-13.00	150	220	-55.38	
*	87.9158	-88.63	peak	21.63	-67.00	-13.00	150	355	-54.00	



Radiated Emission Measurement

Operator: Sora

File :2

Data :#1

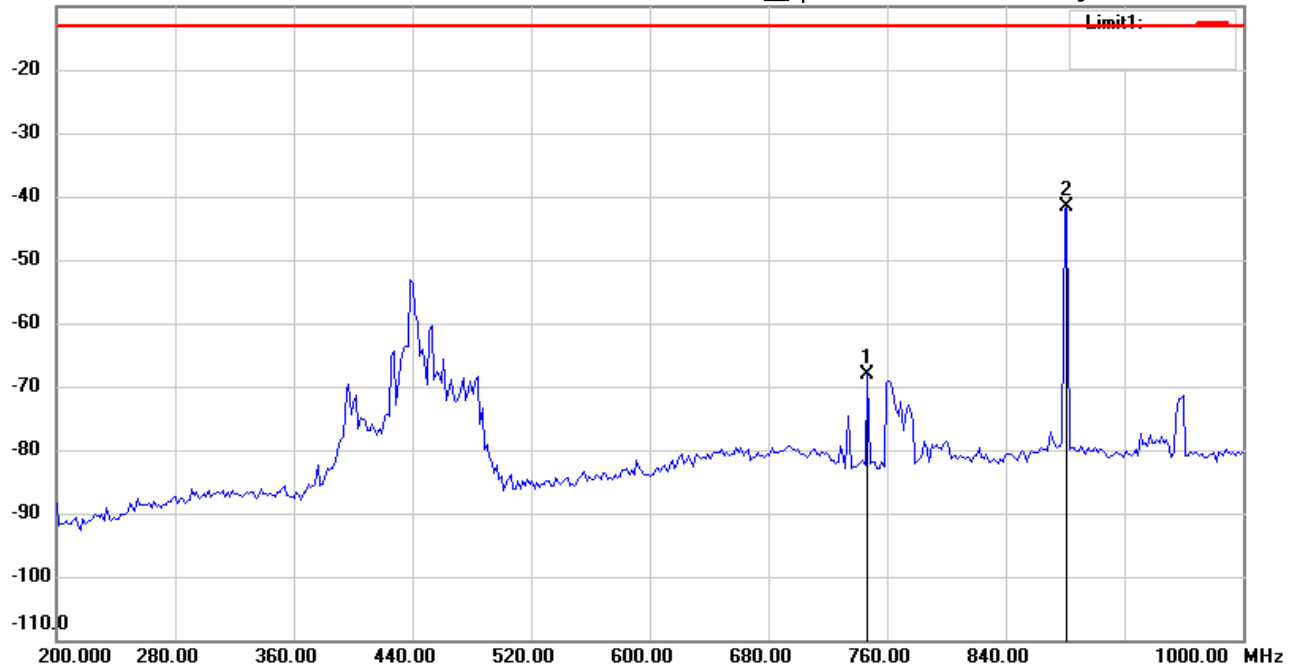
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 上午 11:46:54

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 440MHz

Note :

Polarization: *Horizontal*

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	746.6934	-63.67	peak	-4.53	-68.20	-13.00	150	220	-55.20	
*	881.3627	-39.85	peak	-1.81	-41.66	-13.00	150	265	-28.66	



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Radiated Emission Measurement

Operator: Sora

File :2

Data :#2

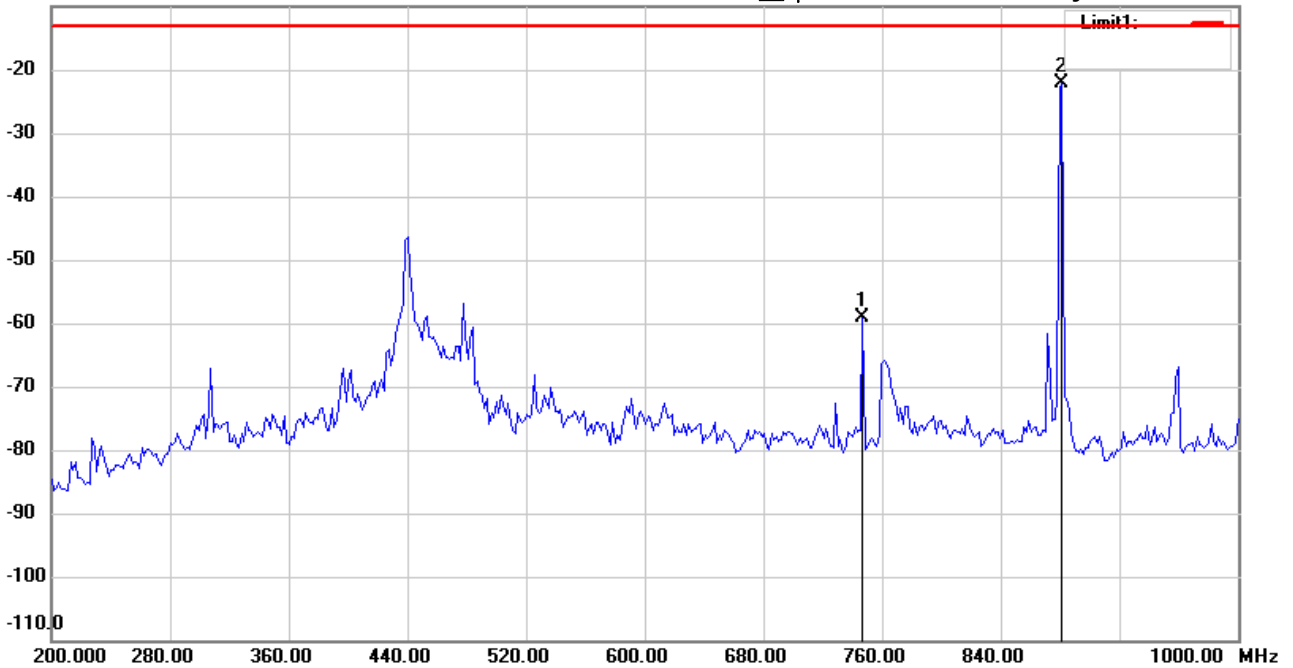
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 上午 11:48:55

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 440MHz

Note :

Polarization: **Vertical**

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	746.6933	-55.52	peak	-3.62	-59.14	-13.00	150	150	-46.14	
*	881.3627	-19.70	peak	-2.38	-22.08	-13.00	150	180	-9.08	

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





Radiated Emission Measurement

Operator: Sora

File :3

Data :#1

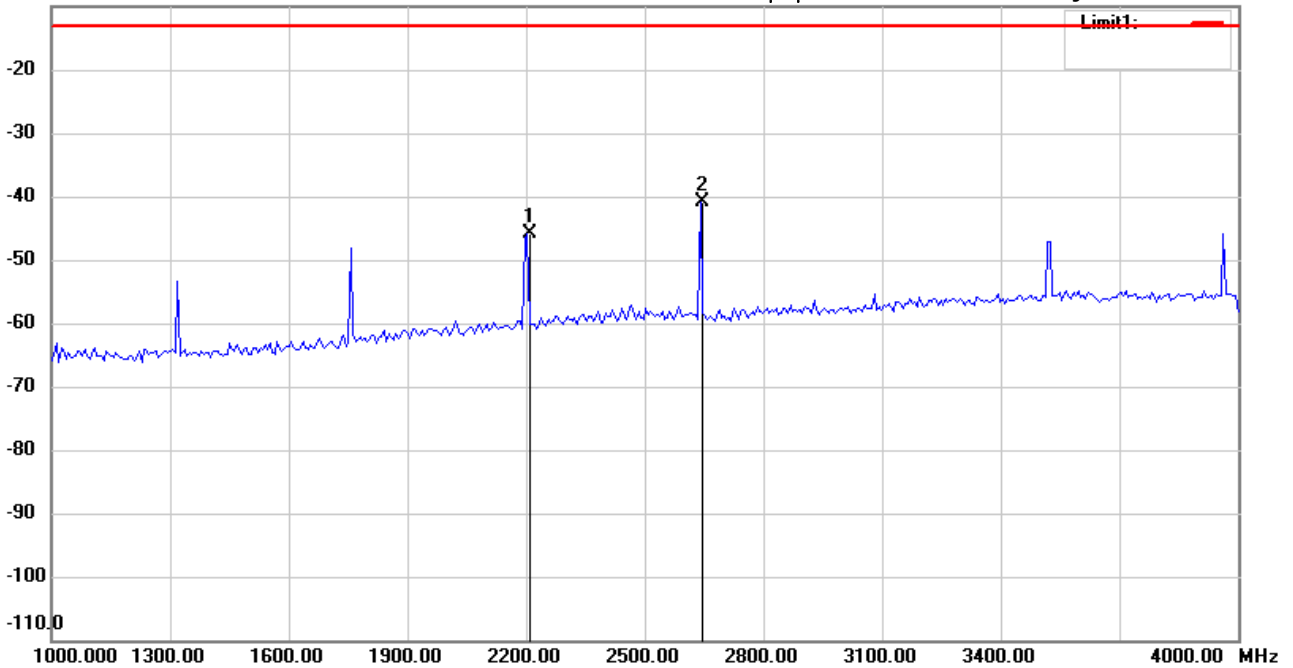
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 下午 02:11:38

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 440MHz

Note :

Polarization: *Horizontal*

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	2202.405	-48.05	peak	2.20	-45.85	-13.00	150	225	-32.85	
*	2641.283	-44.98	peak	4.16	-40.82	-13.00	150	245	-27.82	



Radiated Emission Measurement

Operator: Sora

File :3

Data :#2

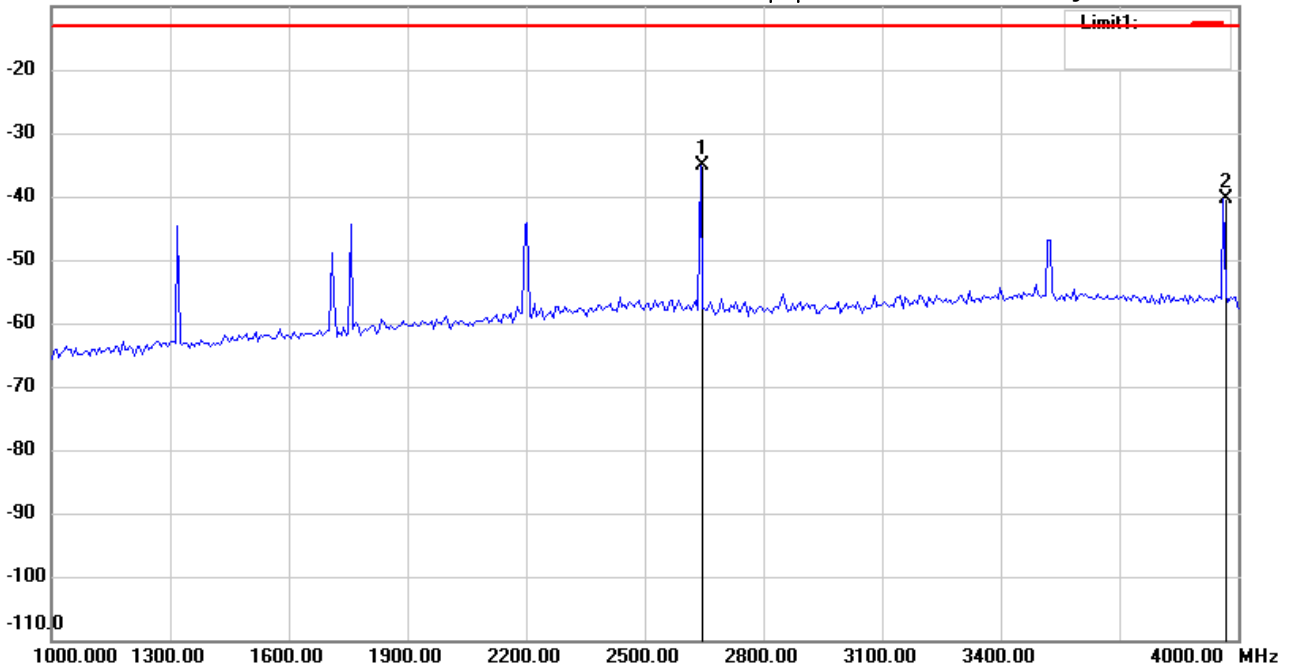
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 下午 02:18:13

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 440MHz

Note :

Polarization: *Vertical*

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	2641.283	-40.54	peak	5.35	-35.19	-13.00	150	155	-22.19	
	3963.928	-47.72	peak	7.26	-40.46	-13.00	150	305	-27.46	



Radiated Emission Measurement

Operator: Sora

File :1

Data :#1

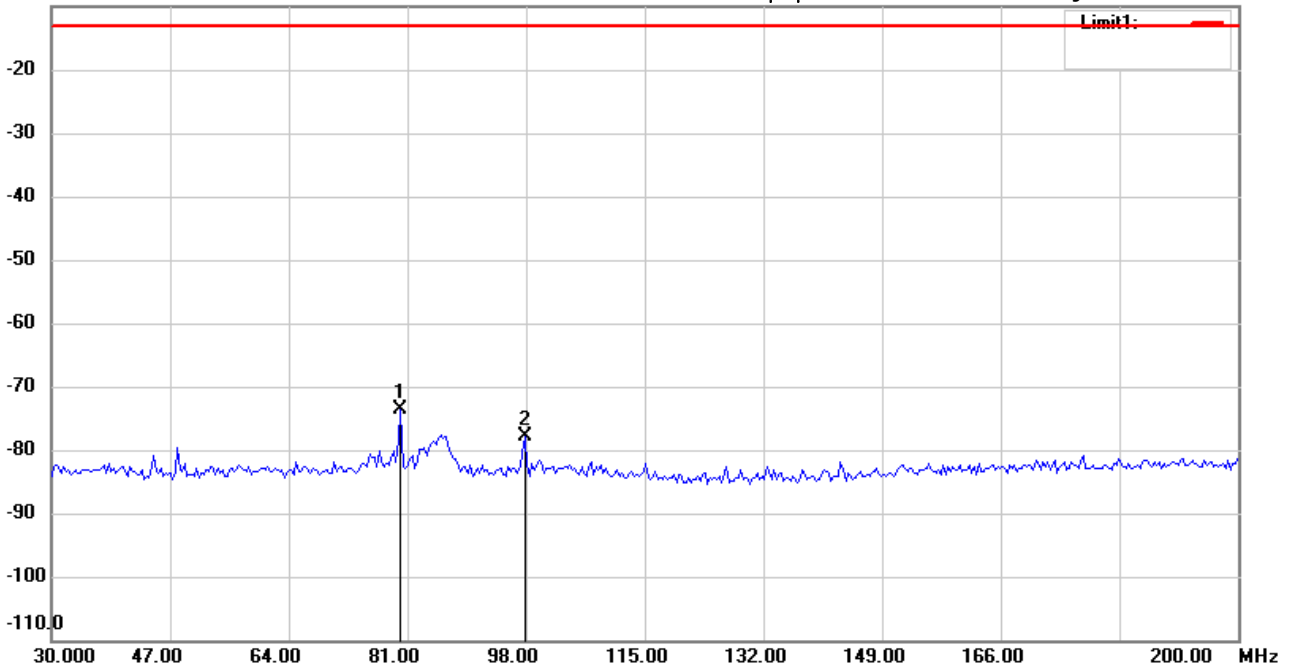
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 下午 02:51:29

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 445MHz

Note :

Polarization: *Horizontal*

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	80.0802	-95.21	peak	21.63	-73.58	-13.00	150	135	-60.58	
	97.7956	-99.33	peak	21.44	-77.89	-13.00	150	120	-64.89	



Radiated Emission Measurement

Operator: Sora

File :1

Data :#2

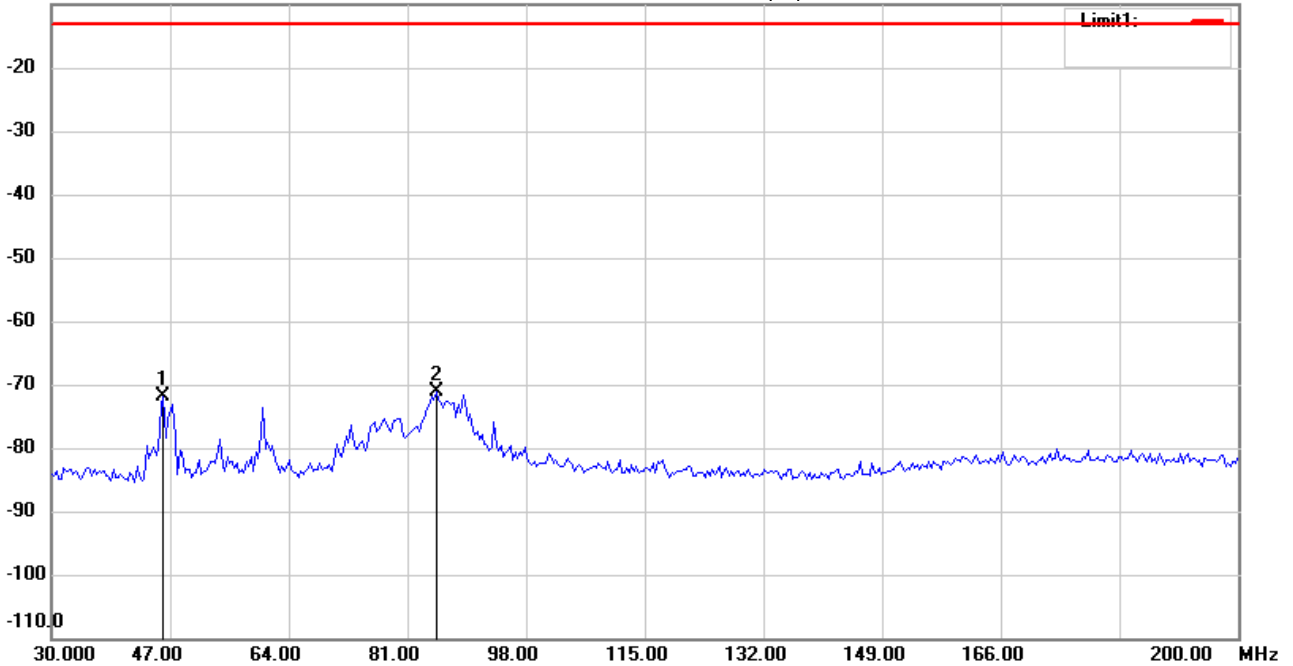
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 下午 02:55:53

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 445MHz

Note :

Polarization: *Vertical*

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	46.0120	-92.97	peak	21.09	-71.88	-13.00	150	255	-58.88	
*	85.1904	-92.57	peak	21.49	-71.08	-13.00	150	80	-58.08	



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Radiated Emission Measurement

Operator: Sora

File :2

Data :#1

Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 下午 01:29:36

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 445MHz

Note :

Polarization: *Horizontal*

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	761.1221	-64.26	peak	-4.56	-68.82	-13.00	150	355	-55.82	
*	890.9820	-44.92	peak	-1.56	-46.48	-13.00	150	300	-33.48	

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



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Radiated Emission Measurement

Operator: Sora

File :2

Data :#2

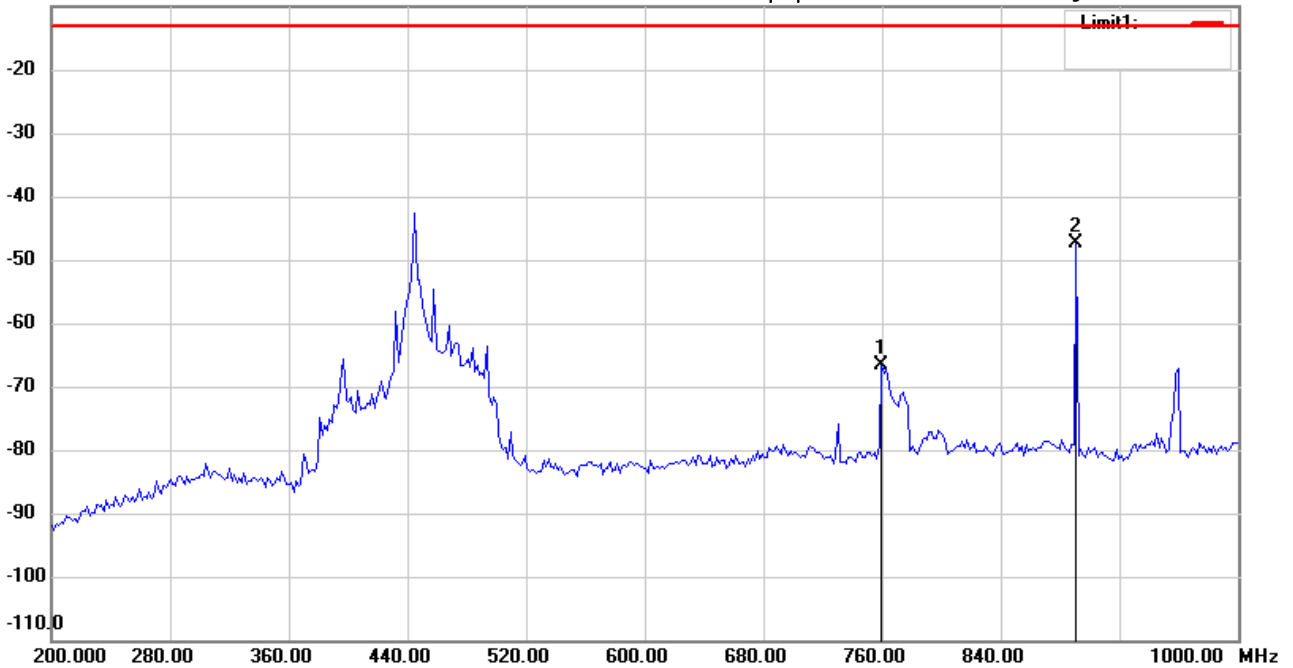
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 下午 01:31:37

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 445MHz

Note :

Polarization: **Vertical**

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	759.5190	-63.08	peak	-3.47	-66.55	-13.00	150	250	-53.55	
*	890.9820	-44.88	peak	-2.59	-47.47	-13.00	150	105	-34.47	

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



Radiated Emission Measurement

Operator: Sora

File :3

Data :#1

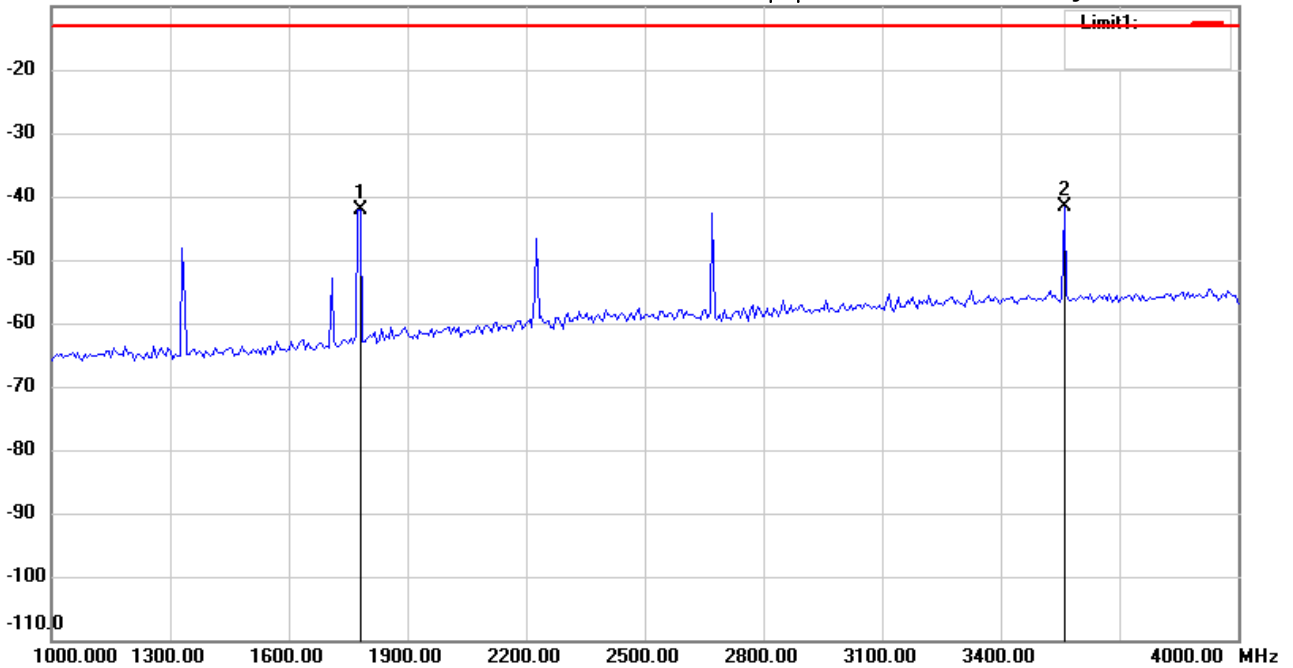
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 下午 01:38:57

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 445MHz

Note :

Polarization: *Horizontal*

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	1781.563	-41.81	peak	-0.34	-42.15	-13.00	150	125	-29.15	
*	3561.122	-49.04	peak	7.38	-41.66	-13.00	150	110	-28.66	



Radiated Emission Measurement

Operator: Sora

File :3

Data :#2

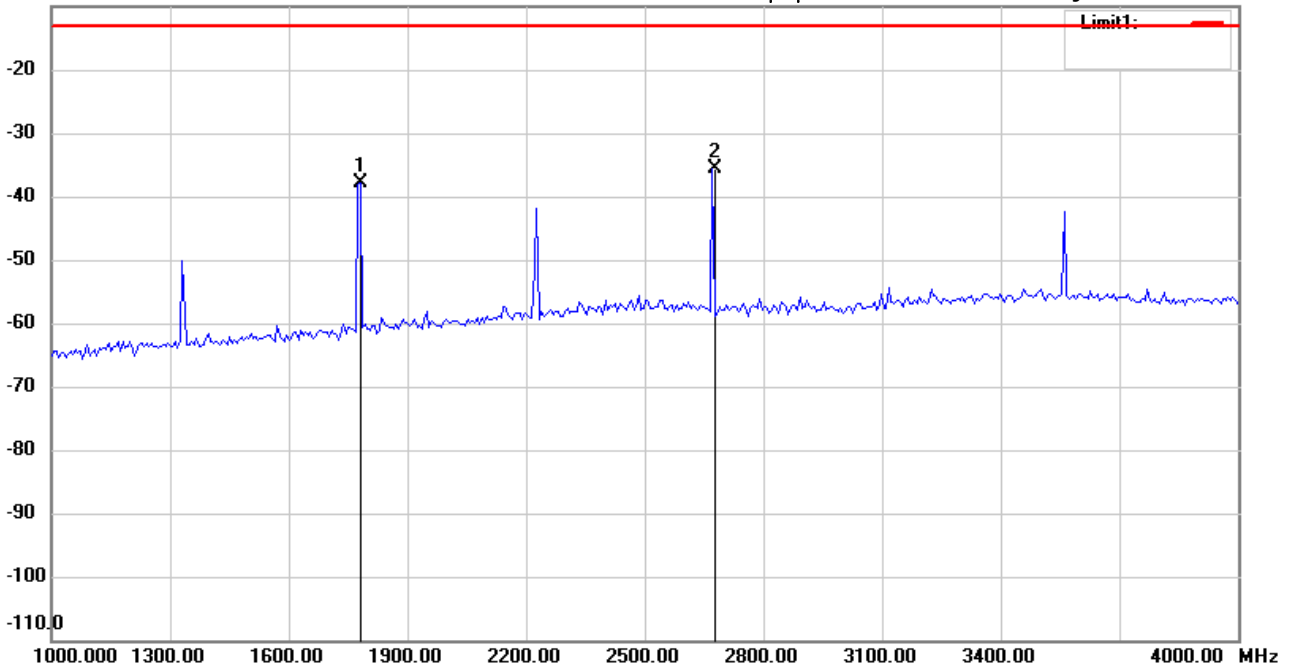
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 下午 01:43:32

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 445MHz

Note :

Polarization: *Vertical*

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	1781.563	-39.12	peak	1.20	-37.92	-13.00	150	245	-24.92	
*	2671.343	-40.87	peak	5.33	-35.54	-13.00	150	180	-22.54	





Radiated Emission Measurement

Operator: Sora

File :1

Data :#1

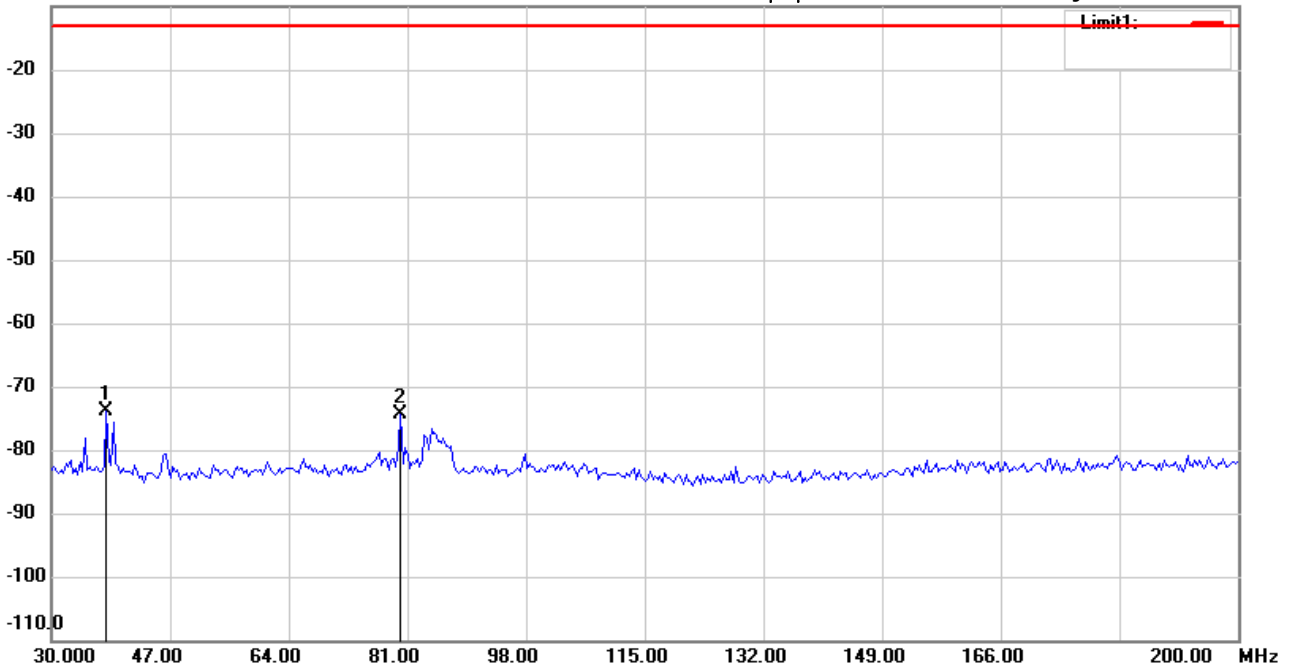
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 下午 03:03:29

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 450MHz

Note :

Polarization: *Horizontal*

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	37.8356	-96.01	peak	22.02	-73.99	-13.00	150	330	-60.99	
	80.0802	-95.97	peak	21.63	-74.34	-13.00	150	75	-61.34	



Radiated Emission Measurement

Operator: Sora

File :1

Data :#2

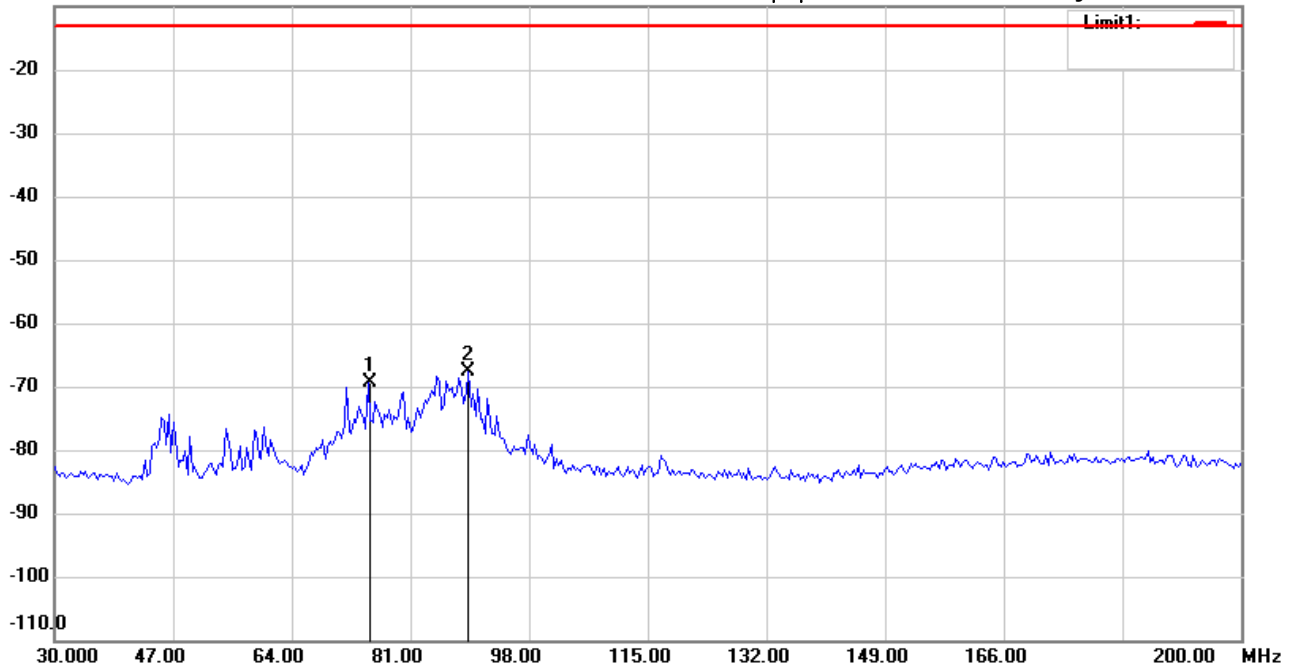
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 下午 03:07:29

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 450MHz

Note :

Polarization: **Vertical**

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	74.9700	-90.48	peak	21.11	-69.37	-13.00	150	95	-56.37	
*	89.2786	-89.41	peak	21.69	-67.72	-13.00	150	115	-54.72	



Radiated Emission Measurement

Operator: Sora

File :2

Data :#1

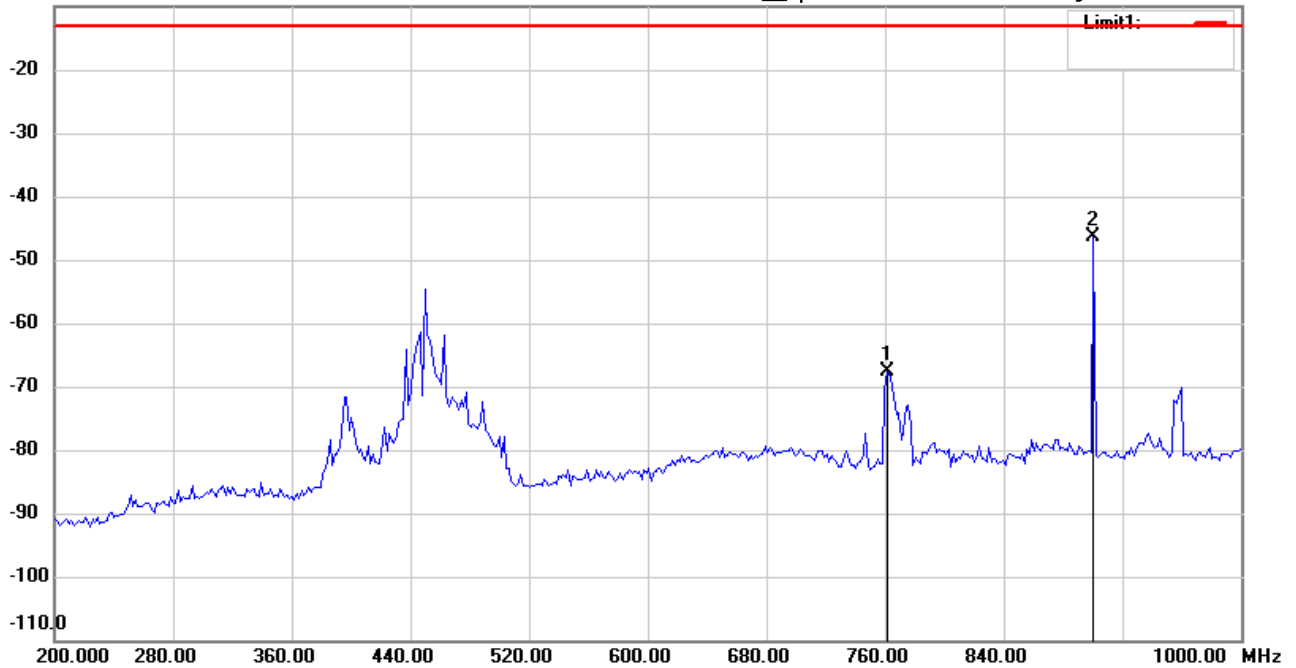
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 上午 11:27:38

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 450MHz

Note :

Polarization: *Horizontal*

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	761.1221	-63.05	peak	-4.56	-67.61	-13.00	150	220	-54.61	
*	900.6012	-44.97	peak	-1.35	-46.32	-13.00	150	245	-33.32	



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Radiated Emission Measurement

Operator: Sora

File :2

Data :#2

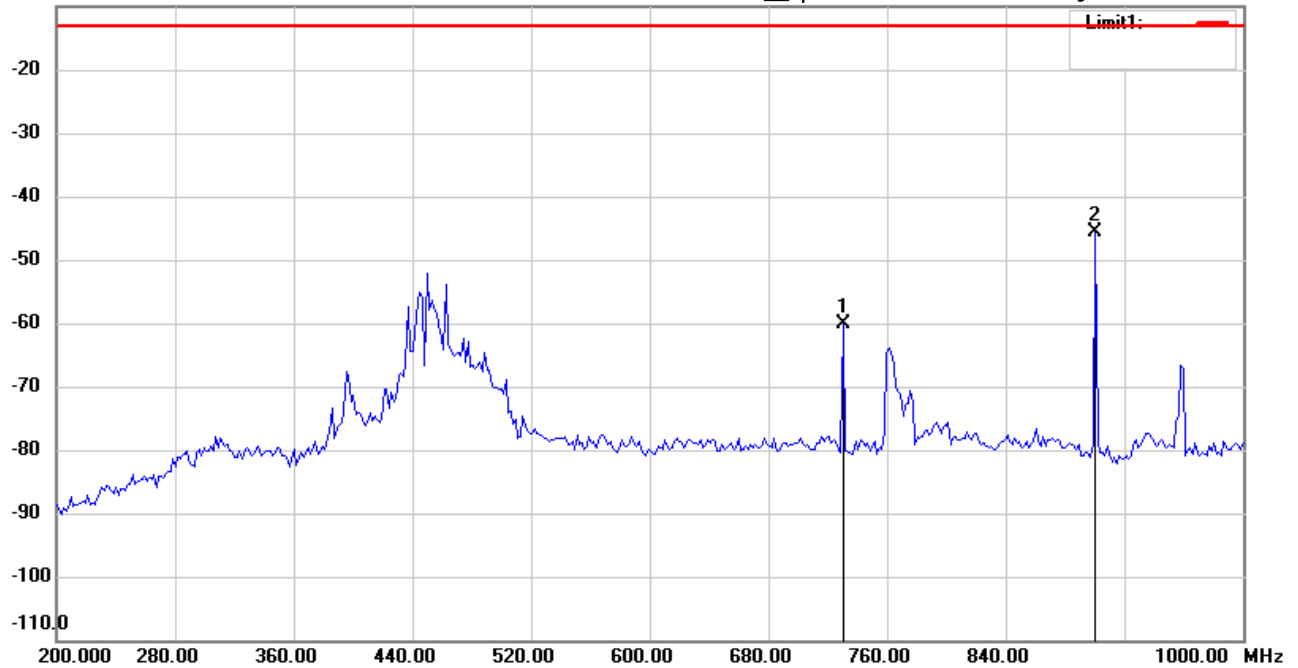
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 上午 11:33:46

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 450MHz

Note :

Polarization: *Vertical*

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	730.6613	-56.74	peak	-3.45	-60.19	-13.00	150	180	-47.19	
*	900.6012	-42.87	peak	-2.79	-45.66	-13.00	150	165	-32.66	

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



Radiated Emission Measurement

Operator: Sora

File :3

Data :#1

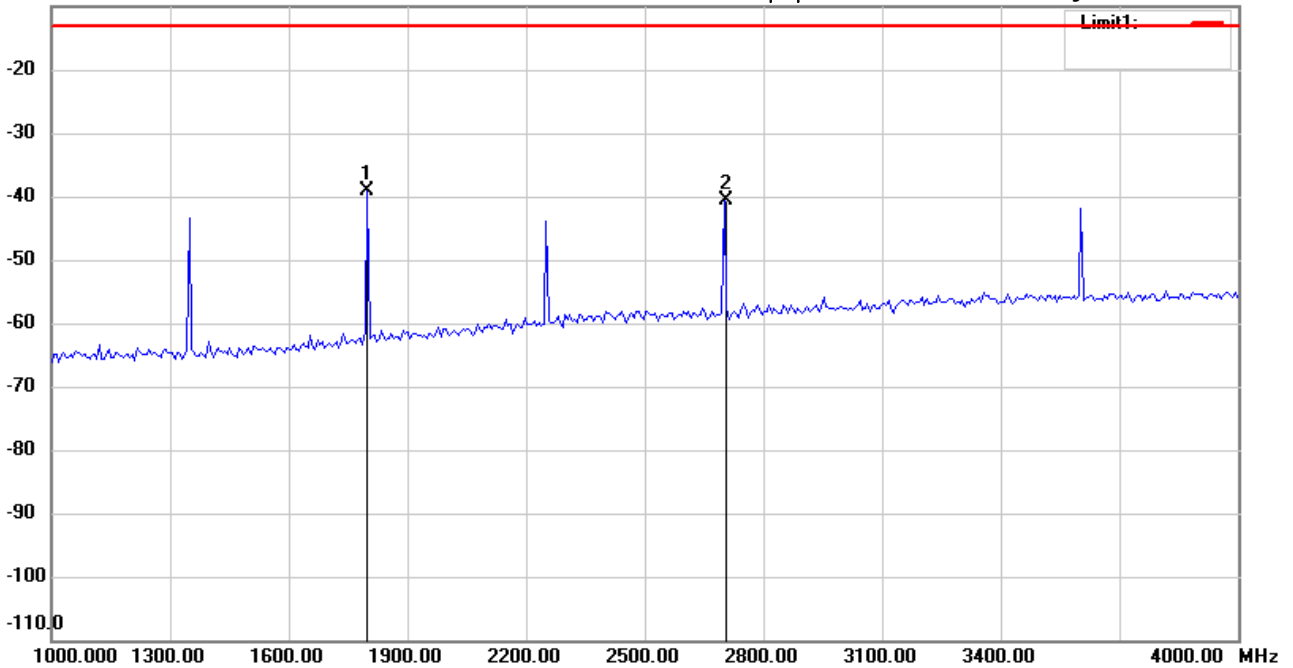
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 下午 01:54:37

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 450MHz

Note :

Polarization: *Horizontal*

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	1799.599	-38.86	peak	-0.22	-39.08	-13.00	150	195	-26.08	
	2701.403	-44.86	peak	4.31	-40.55	-13.00	150	110	-27.55	



Radiated Emission Measurement

Operator: Sora

File :3

Data :#2

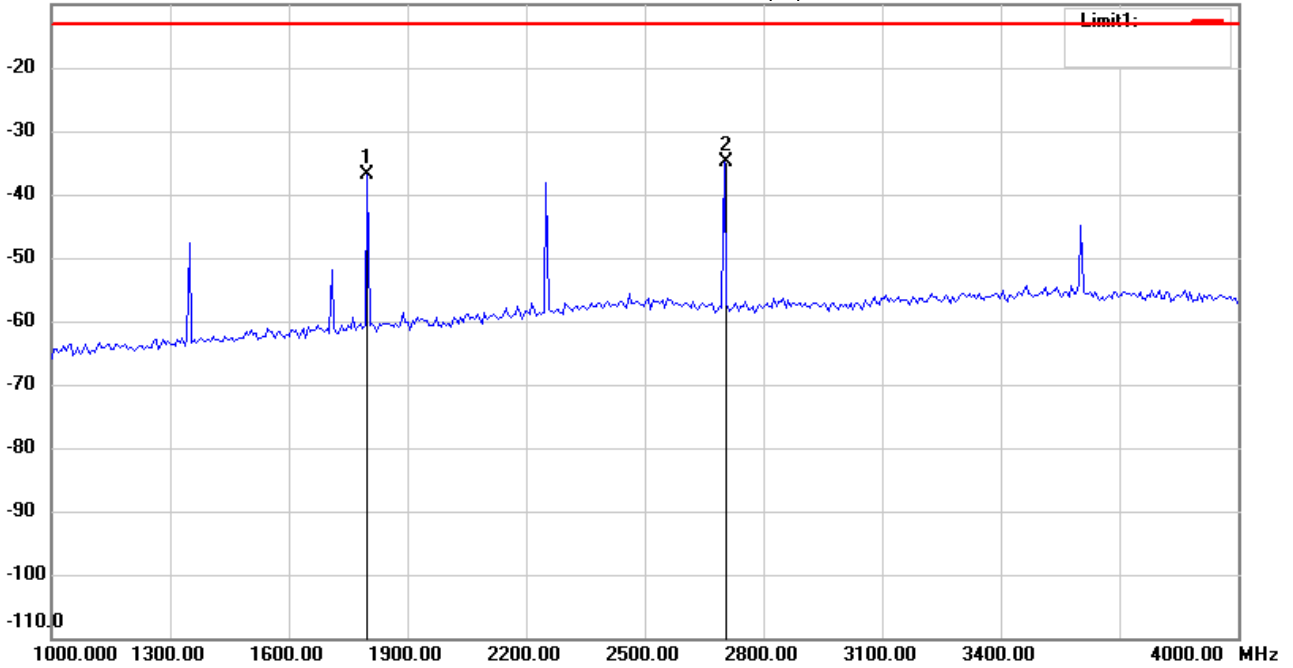
Date: 2018/8/31

Temperature:24 °C

-10.0 dBm

Time: 下午 02:00:27

Humidity:60 %



Site : Chamber

Condition : FCC\_part 90 RE

EUT : W6M21808-18343

M/N:

Test Mode : Tx 450MHz

Note :

Polarization: *Vertical*

Power : 13.6 Vd.c.

Distance: 3m

Mk.	Frequency (MHz)	Reading (dBm)	Detector	Corr. factor (dB)	Result (dBm)	Limit (dBm)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	1799.599	-38.28	peak	1.29	-36.99	-13.00	150	105	-23.99	
*	2701.403	-40.22	peak	5.31	-34.91	-13.00	150	270	-21.91	