# FCC PART 15 SUBPART C TEST REPORT

for

**Bluetooth Keyboard** 

**Model No.: BT-870-TP-SLIM** 

FCC ID: XA9-BT-870-TP

of

Applicant: IKEY, LTD

Address: 2621 RIDGEPOINT DR. STE 235 AUSTIN Texas

United States 78754

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.: W6M21710-17520-C-1

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

FCC ID: XA9-BT-870-TP

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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 is performance generally conforms to representative cases of communications equipment.

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

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

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### Specific Conditions:

Usage of the hereunder tested device in combination with other integrated or external antennas requires at least additional output power measurements, spurious emission measurements, conducted emission measurements (AC supply lines) and radio frequency exposure evaluations for each individual configuration performed, for certification by FCC.

#### Tester:

April 12, 2018	Spencer Yang		Spencer		
Date	WTS-Lab.	Name		Signature	

#### **Technical responsibility for area of testing:**

April 12, 2018	]	Kevin Wang	Kevin	Warry
Date	WTS	Name	Signat	ure

10 / 100 01

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### 1.2 Testing laboratory

#### 1.2.1 Location

**OATS** 

No.5-1, Lishui, Shuang Sing Village, Wanli Dist., New Taipei City 207,

Taiwan (R.O.C.)

3 meter semi-anechoic chamber

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

TEL:886-2-6613-0228 FAX:886-2-2791-5046

#### Company

Worldwide Testing Services(Taiwan) Co., Ltd. 6F, NO. 58, LANE 188, RUEY-KUANG RD. NEIHU, TAIPEI 114, TAIWAN R.O.C.

Tel : 886-2-66068877 Fax : 886-2-66068879

#### 1.2.2 Details of accreditation status

Accredited testing laboratory

A2LA accredited number: 2732.01

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

Industry Canada filed test laboratory Reg. No. 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: IKEY, LTD

Street: 2621 RIDGEPOINT DR. STE 235

Town: AUSTIN Texas
Country: United States 78754
Telephone: 512,837,0383

Telephone: 512-837-0283 Fax: 512-927-8530

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## 1.4 Application details

Date of receipt of test item: December 28, 2017

Date of test: from December 29, 2017 to April 12, 2018

## 1.5 General information of Test item

Type of test item:	Bluetooth Keyboard
Model Number:	BT-870-TP-SLIM
Brand Name:	iKey
Multi-listing model number:	BT-870-TP
Photos:	see Appendix
Technical data	

Frequency band:	2.4 GHz – 2.4835 GHz

Number of Channels: Bluetooth 2.0 79 channels

Bluetooth 4.0 40 channels

Operation modes: Duplex

Modulation Type: GFSK  $\cdot \pi/4DQPSK \cdot 8DPSK$ 

Fixed point-to-point operation:  $\square$  Yes /  $\square$  No Type of Antenna: Trace Antenna

Antenna gain: 0 dBi

Power supply: Battery 3.7Vd.c., 3100mAh, 11.5Wh

Charge 120Va.c.

Emission designator: Bluetooth 2.0: 1M23F1D

Bluetooth 4.0: 1M05G1D

Host device: none

Classification :

Fixed Device	
Mobile Device (Human Body distance > 20cm)	
Portable Device (Human Body distance < 20cm)	

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### <u>Transmitter</u> <u>Unom</u>

#### **Mode A (Bluetooth 2.0 Normal mode)**

Power (ch 0): Conducted: 7.47 dBm Power (ch 39): Conducted: 7.47 dBm Power (ch 78): Conducted: 7.33 dBm

#### Mode B (Bluetooth 2.0 EDR mode)

Power ( ch 0): Conducted: 8.05 dBm Power ( ch 39): Conducted: 7.98 dBm Power ( ch 78): Conducted: 7.78 dBm

#### Mode C (Bluetooth 4.0)

Power ( ch 0): Conducted: 7.02 dBm Power ( ch 19): Conducted: 6.98 dBm Power ( ch 39): Conducted: 6.83 dBm

### Manufacturer: (if applicable)

Name: IPA Electronics (Taiwan) Corp.

Street: 5F-3, #190, Sec. 2, Zhong Xing Rd, Xindian District,

Town: New Taipei City, Country: Taiwan 231

#### 1.6 Test standards

Technical standard: FCC RULES PART 15 SUBPART C § 15.247 (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 2.5 were ascertained in the course of the tests performed.	

#### 2.2 Test environment

Temperature: 23 °C

Relative humidity content: 20 ... 75 %

Air pressure: 86 ... 103 kPa

Power supply: Battery 3.7Vd.c., 3100mAh, 11.5Wh

Charge 120Va.c.

Extreme conditions parameters: ./.



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**Test Equipment List** 

No.	Test equipment	Туре	Serial No.	Manufacturer	Cal. Date	Next Cal. Date
ETSTW-CE 001	EMI TEST RECEIVER	ESHS10	842121/013	R&S	2017/5/26	2018/5/25
ETSTW-CE 003	AC POWER SOURCE	APS-9102	D161137	GW	Function	on 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	2017/8/22	2018/8/21
ETSTW-CE 008	HF-EICHLEITUNG RF STEP ATTENUATOR 139dB DPSP	334.6010.02	844581/024	R&S	Function	on Test
ETSTW-CE 009	TEMP.&HUMIDITY CHAMBER	GTH-225-40-1P-U	MAA0305-009	GIANT FORCE	2017/7/14	2018/7/13
ETSTW-CE 016	TWO-LINE V-NETWORK	ENV216	100050	R&S	2017/8/31	2018/8/30
ETSTW-CE 028	MXE EMI Receiver	N9038A	MY53220110	Agilent	2017/7/11	2018/7/10
ETSTW-RE 003	EMI TEST RECEIVER	ESI 26	831438/001	R&S	2017/5/26	2018/5/25
ETSTW-RE 004	EMI TEST RECEIVER	ESI 40	832427/004	R&S	2017/5/17	2018/5/16
ETSTW-RE 005	EMI TEST RECEIVER	ESVS10	843207/020	R&S	2017/8/25	2018/8/24
ETSTW-RE 012	TUNABLE BANDREJECT FILTER	D.C 0309	146	K&L	Function	on Test
ETSTW-RE 013	TUNABLE BANDREJECT FILTER	D.C 0336	397	K&L	Function Test	
ETSTW-RE 018	MICROWAVE HORN ANTENNA	AT4560	27212	AR	2017/7/4	2018/7/3
ETSTW-RE 027	Passive Loop Antenna	6512	00034563	ETS-Lindgren	2017/7/3	2018/7/2
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	2018/4/9	2019/4/8
ETSTW-RE 044	Log-Periodic Antenna	HL050	100094	R&S	2017/4/27	2018/4/26
ETSTW-RE 045	ESA-E SERIES SPECTRUM ANALYZER	E4404B	MY45111242	Agilent	Pre-te	st 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	on Test
ETSTW-RE 069	Double-Ridged Guide Horn Antenna	3117	00069377	ETS-Lindgren	Function	on Test
ETSTW-RE 072	CELL SITE TEST SET	8921A	3339A00375	HP	2017/9/11	2018/9/10
ETSTW-RE 088	SOLID STATE AMPLIFIER	KMA180265A01	99057	KMIC	2017/9/19	2018/9/18
ETSTW-RE 091	Match Pad	MDCS1500	None	WOKEN	2018/4/9	2019/4/8
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	Functi	on 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	Functi	on test
ETSTW-RE 122	SIGNAL GENERATOR	SMF100A	102149	R&S	2017/5/26	2018/5/25
ETSTW-RE 125	5GHz Notch filter	5NSL11- 5200/E221.3-O/O	1	K&L Microwave	2017/8/9	2018/8/8
ETSTW-RE 126	5GHz Notch filter	5NSL12- 5800/E221.3-O/O	1	K&L Microwave	2017/8/9	2018/8/8
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	2017/8/9	2018/8/8
ETSTW-RE 129	5.5GHz Notch filter	N0555984	SN487234	Microwave Circuits	2017/8/9	2018/8/8
ETSTW-RE 130	Handheld RF Spectrum Analyzer	N9340A	CN0147000204	Agilent	Pre-te	st 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	2017/8/30	2018/8/29
ETSTW-EMI 011	USB Compact Modulator	SFC-U	101689	R&S	2017/5/10	2018/5/9
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	2017/9/13	2018/9/12
ETSTW-GSM 024	Radio Communication Analyzer	MT8821C	None	Anritsu	2018/3/7	2019/3/6
ETSTW-Cable 011	SMA to N type Cable	RGU-400	None	THERMAX	Pre-test U	Jse 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.	2017/7/3	2018/7/2
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	2017/5/12	2018/5/11
ETSTW-Cable 028	Microwave Cable	FA147A0015M2020	30064-2	UTIFLEX	2017/9/7	2018/9/6
ETSTW-Cable 029	Microwave Cable	FA147A0015M2020	30064-3	UTIFLEX	2017/9/7	2018/9/6
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



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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	2018/2/21	2019/2/20
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	2017/8/31	2018/8/30
ETSTW-Cable 071	N TYPE CABLE	EMCCFD400-NM- NM-25000	170239	EMCI	2018/2/21	2019/2/20
WTSTW-SW 002	EMI TEST SOFTWARE	EZ_EMC	None	Farad	Version E	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

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#### 2.4 General Test Procedure

**POWER LINE CONDUCTED INTERFERENCE:** The procedure used was ANSI STANDARD C63.10-2013 6.2 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 6.3 employing a spectrum analyzer. For investigated frequency is equal to or below 1GHz, the RBW and VBW of the spectrum analyzer was 100 kHz and 100kHz respectively with an appropriate sweep speed. For investigated frequency is above 1GHz, both of RBW and VBW of the spectrum analyzer were 1 MHz with an appropriate sweep speed. The analyzer was calibrated in dB above a microvolt at the output of the antenna.

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

Example:

Freq (MHz) METER READING + ACF + CABLE LOSS(to the receiver) = FS

33  $20 \text{ dB}\mu\text{V} + 10.36 \text{ dB} + 6 \text{ dB} = 36.36 \text{ dB}\mu\text{V/m} \text{ (a)3m}$ 

The EUT was placed on a table 80 cm high and with dimensions of 1m by 1.5m (non metallic table) and arranged according to ANSI C63.10-2013 6.2.2. The table used for radiated measurements is capable of continuous rotation. The spectrum was scanned from 30 MHz to the frequency specified as follows:

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

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

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

When the radiated emission limits are expressed in terms of the average value of the emission, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1

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seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum value.

The formula is as follows:

Average = Peak + Duty Factor

Duty Factor = 20 log (dwell time/T)

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

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

ANSI STANDARD C63.10-2013 B.2.7: Any measurements that utilize special test software shall be indicated and referenced in the test report. During testing, test software 'EZ EMC' was used for setting up different operation modes.

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# Test results (enclosure)

TEST CASE	Para. Number	Required	Test passed	Test failed
Peak Output Power	15.247(b)	×	×	
Equivalent isotropically radiated Power	15.247(b)	×	×	
Spurious Emissions radiated – Transmitter operating	15.247(c)	×	×	
Spurious Emissions conducted – Transmitter operating	15.247			
Carrier Frequency Separation	15.247(a) (1)	×	×	
Number of Hopping Frequencies	15.247(a) (1)(i)	×	×	
Time of Occupancy (Dwell Time)	15.247(a) (1)(i)	×	×	
20 dB Bandwidth	15.247(a) (1)(i)	×	×	
Minimum 6 dB Bandwidth	15.247(a)(2)	×	×	
Band-edge Compliance of RF Emission	15.247(d)	×	×	
Peak Power Spectral Density	15.247(e)	×	×	
Radiated Emission from Receiver Part	15.109			
Power Line Conducted Emission	15.207(a)	×	×	

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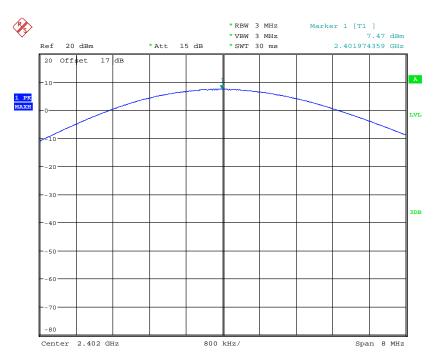
## 3.1 Peak Output Power (transmitter)

FCC Rule: 15.247(b)(3)

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

The power was measured with modulation (declared by the applicant).

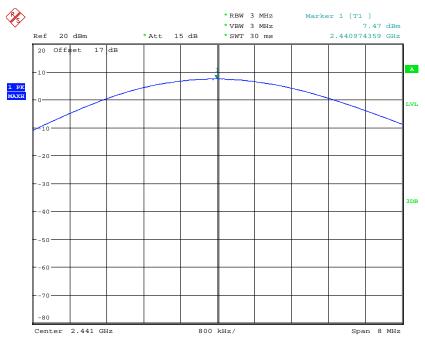
# Bluetooth 2.0 Normal mode



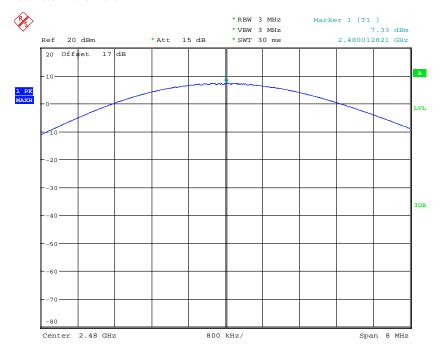
MAX OUTPUT POWER CH0
Date: 8.JAN.2018 15:30:25

Registration number: W6M21710-17520-C-1

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MAX OUTPUT POWER CH39
Date: 8.JAN.2018 15:31:12



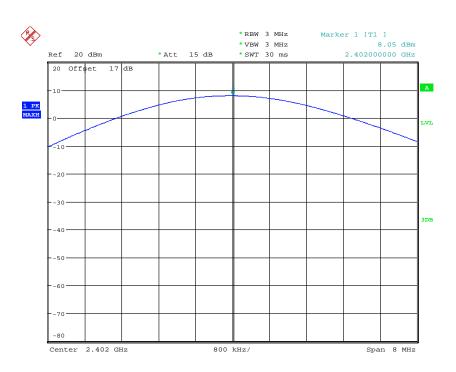
MAX OUTPUT POWER CH78
Date: 8.JAN.2018 15:31:40



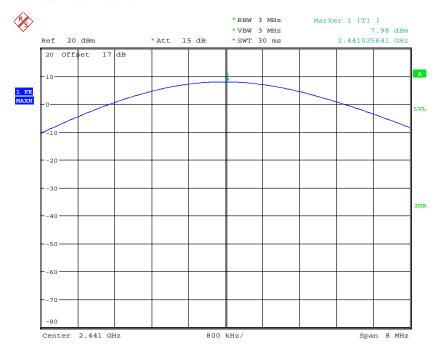
Registration number: W6M21710-17520-C-1

FCC ID: XA9-BT-870-TP

EDR mode



MAX OUTPUT POWER CH0 EDR MODE Date: 8.JAN.2018 15:37:28



MAX OUTPUT POWER CH39 EDR MODE Date: 8.JAN.2018 15:38:12



Registration number: W6M21710-17520-C-1

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MAX OUTPUT POWER CH78 EDR MODE Date: 8.JAN.2018 15:41:44

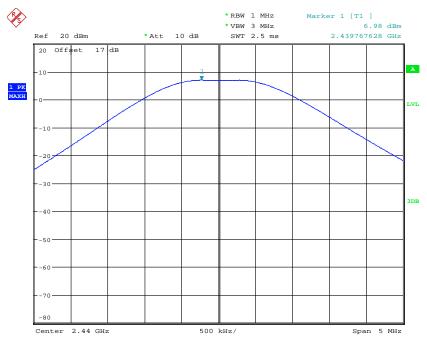
#### Bluetooth 4.0



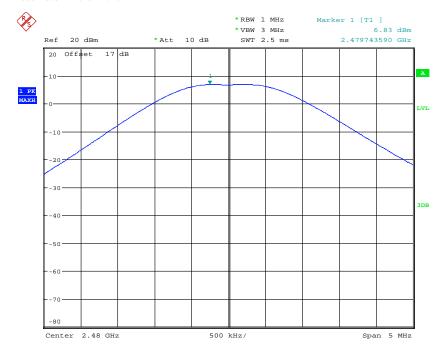
MAX OUTPUT POWER BT4.0 CH00 Date: 8.JAN.2018 16:03:28

Registration number: W6M21710-17520-C-1

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MAX OUTPUT POWER BT4.0 CH19 Date: 8.JAN.2018 16:04:14



MAX OUTPUT POWER BT4.0 CH39 Date: 8.JAN.2018 16:04:50

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### Limits:

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

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

Test equipment used: ETSTW-RE 055

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## 3.2 Equivalent isotropic radiated power

FCC Rule: 15.247(b)(3) Bluetooth 2.0+EDR

Test exclusion = max. conducted output power

Test exclusion = 8.05 dBm

Bluetooth 4.0

Test exclusion = max. conducted output power

Test exclusion = 7.02 dBm

Test equipment used: ETSTW-RE 055

### 3.3 RF Exposure Compliance Requirements

#### **RESULT:**

Test standard : FCC KDB Publication

447498 D01 General RF Exposure Guidance v06

According to 447498 D01 General RF Exposure Guidance v06:

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

The enclosure of the device provides  $\ge 0.5$  cm separation from the antenna elements to significant metal parts of the enclosure to minimize potential perturbations.

Frequency Band:2400-2483.5 MHz

Maximum Power fed to Antenna (BT2.0): 6.3826 mW Maximum Power fed to Antenna (BT4.0): 5.0350 mW

Separation distances:

Radiator to user: > 5 mm

Ι	Distance pres	cribed in us	er manual:				
	MHz	5	10	15	20	25	mm
	2450	10	19	29	38	48	SAR Test Exclusion Threshold (mW)
Ī			1				
	MHz	30	35	40	45	50	mm
	2450	57	67	77	86	96	SAR Test Exclusion Threshold (mW)

MHz	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	mm
2450	96	196	296	396	496	596	696	796	896	996	1096	1196	1296	1396	1496	mW

FCC ID: XA9-BT-870-TP

#### 3.4 Transmitter Radiated Emissions in Restricted Bands

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

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

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

Frequency ≤ 1 GHz, RBW:100 kHz, VBW: 100 kHz (Peak measurements) Frequency > 1 GHz, RBW: 1 MHz, VBW: 1 MHz (Peak measurements) Frequency > 1 GHz, RBW:1 MHz, VBW: 10 Hz (Average measurements)

Limits.

For frequencies below 1GHz:

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

For frequencies above 1GHz (Average measurements).

Guidance on Measurement of Digit Transmission Systems:

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

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

Duty cycle correction = 20 log (dwell time/ 100ms)

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

Explanation: See attached diagrams in Appendix.

FCC ID: XA9-BT-870-TP

## 3.5 Spurious Emissions (tx)

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

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

FCC Rule: 15.247(c), 15.35

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

Limits:

For frequencies above 1GHz (Peak measurements).

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

For frequencies above 1GHz (Average measurements). Max. reading – 20dB

Max. reading – 20 dB

Guidance on Measurement of Digit Transmission Systems:

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

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

Duty Cycle correction = 20 log (dwell time/100ms)

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

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

FCC ID: XA9-BT-870-TP

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

#### Calculation of test results:

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

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

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

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

#### Summary table with radiated data of the test plots

Model:	BT-8	70-TP-SL	IM	Date:				
Mode:				Temperature:			Engineer:	
Polarization:	Horizontal			Humidity:				
Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)
	-		-					

Frequency	Read (dB)	_	Factor (dB)	Result (dBu	$\sim$	Limit (dBu	$\sim$	Margin	Table Degree	Ant. High
(MHz)	Peak	Ave.	Corr.	Peak	Ave.	Peak	Ave.	(dB)	(Deg.)	(cm)
	I	I		I		ŀ	ŀ		ŀ	1

#### 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 for 3m measurement:  $30\text{-}1000 \text{ MHz} = \pm 3.57 \text{ dB}$ , 1-18 GHz =  $\pm 2.60 \text{ dB}$ , 18-40 GHz= $\pm 2.58 \text{ dB}$ ; Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.
- 6. Up Line: PK Limit Line, Down Line: Ave Limit Line.
- 7. See attached diagrams in appendix.

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

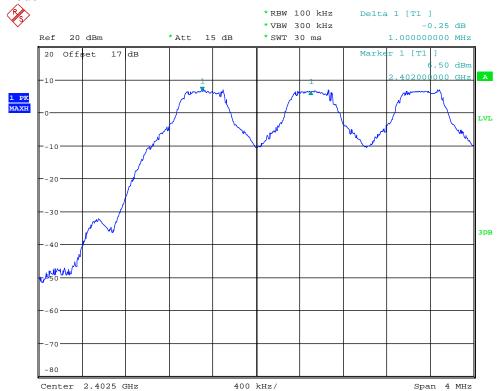
Test equipment used: ETSTW-RE 004, ETSTW-RE 030, ETSTW-RE 062, ETSTW-RE 142, ETSTW-RE 147

FCC ID: XA9-BT-870-TP

## 3.6 Carrier Frequency Separation

Carrier Frequency Separation was measured with modulation (declared by manufacturer). According to FCC rules part 15 subpart C §15.247 frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or 20 dB bandwidth of the hopping channel, whichever is greater.

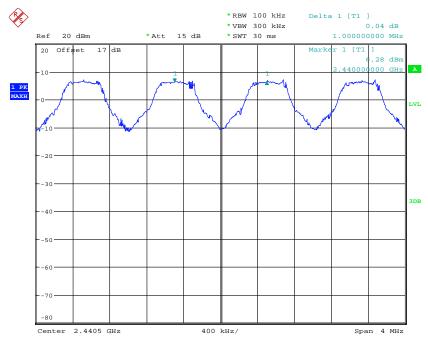
Bluetooth 2.0 Normal mode



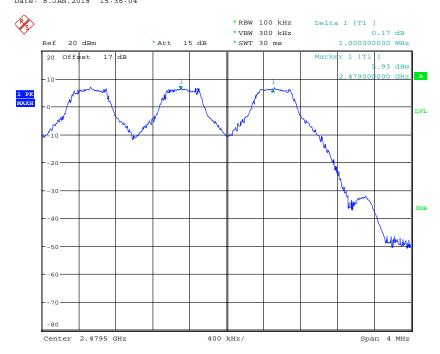
FREQUENCY SEPARATION CH0
Date: 8.JAN.2018 15:35:20

Registration number: W6M21710-17520-C-1

FCC ID: XA9-BT-870-TP



FREQUENCY SEPARATION CH39
Date: 8.JAN.2018 15:36:04



FREQUENCY SEPARATION CH78
Date: 8.JAN.2018 15:36:52

Registration number: W6M21710-17520-C-1 FCC ID: XA9-BT-870-TP

### **Limits:**

Frequency Range	Limits					
MHz	20 dB bandwidth < 25 kHz	20 dB bandwidth > 25 kHz				
902-928	25 kHz	20 dB bandwidth				
2400-2483.5 5725-5850.0	25 kHz	20 dB bandwidth				

Test equipment used: ETSTW-RE 055, ETSTW-RE 064

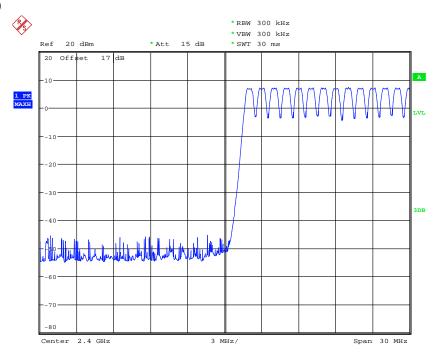
FCC ID: XA9-BT-870-TP

## 3.7 Number of Hopping Frequencies

According to FCC rules part 15 subpart C §15.247 frequency hopping systems operating in the 2400-2483.5 MHz band shall use at least 15 hopping frequencies. Frequency hopping systems in 5725-5850 MHz bands shall use least 75 hopping frequencies.

For frequency hopping systems operating in the 902-928 MHz band: if the 20dB bandwidth of the hopping channel is less than 250 kHz, the system shall use at least 50 hopping frequencies; if the 20dB bandwidth of the hopping channel 250 kHz or greater, the system shall use at least 25 hopping frequencies.

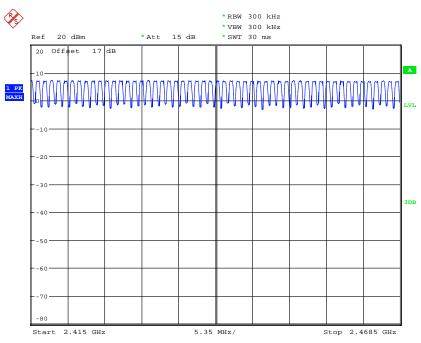
### Bluetooth 2.0



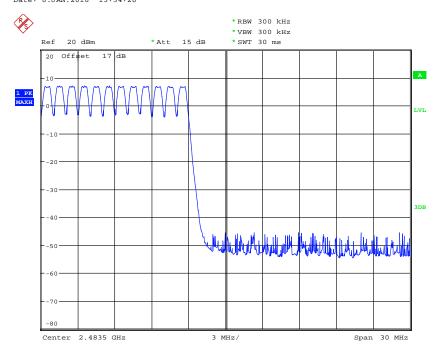
NUMBER OF HOPPING CH0-13
Date: 8.JAN.2018 15:32:40

Registration number: W6M21710-17520-C-1

FCC ID: XA9-BT-870-TP



NUMBER OF HOPPING CH14-66
Date: 8.JAN.2018 15:34:28



NUMBER OF HOPPING CH67-78
Date: 8.JAN.2018 15:33:20

FCC ID: XA9-BT-870-TP

#### Limits:

Frequency Range	Limit	
MHz	20dB Bandwidth	Number of Channels
902-928 MHz	Bandwidth < 250 kHz	≥ 50
902-928 MHZ	Bandwidth ≥ 250 kHz	≥ 25
2400-2483.5	not defined	15
5725-5850.0 MHz	1 MHz	75

Test equipment used: ETSTW-RE 055, ETSTW-RE 064

### 3.7.1 Pseudorandom Frequency Hopping Sequence

The generation of the hopping sequence is determined by the Bluetooth core specification and complies with the FCC requirements.

### 3.7.2 Coordination of hopping sequences to other transmitters

According to the Bluetooth core specification such a coordination is not possible. During scatternet function only one of the two hopping sequences will be used at a definite moment.

### 3.7.3 System Receiver Hopping Capability

According to the Bluetooth core specification. The system receivers shift frequencies in synchronization with the transmitted signals.

FCC ID: XA9-BT-870-TP

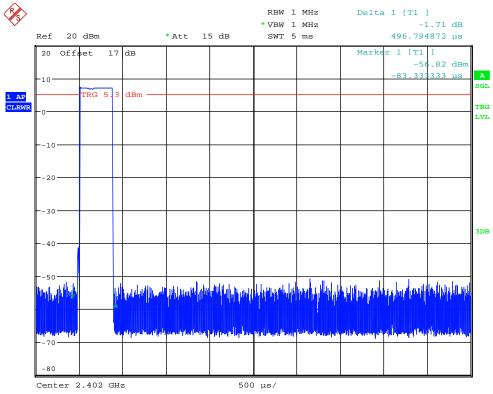
## 3.8 Time of Occupancy (Dwell Time)

Frequency hopping systems operating in the 5725-5850 MHz band shall use an average time of occupancy on any frequency not greater than 0.4 seconds within a 30 second period.

In 2400-2483.5 MHz band the average time of occupancy on any channel shall not be greater than 0.4 seconds multiplied by the number of hopping channels employed.

For frequency hopping systems operating in the 902-928 MHz band: if the 20dB bandwidth of the hopping channel is less than 250 kHz, the average time of occupancy on any frequency shall not greater than 0.4 seconds within a 20 second period; if the 20dB bandwidth of the hopping channel is 250 kHz or greater, the average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 10 second period.

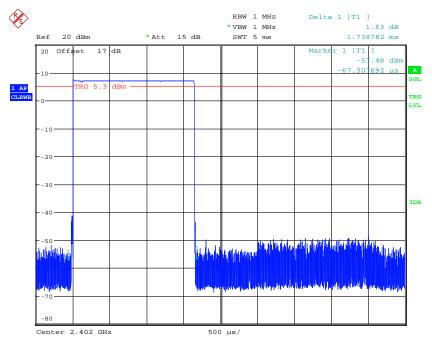
#### Bluetooth 2.0



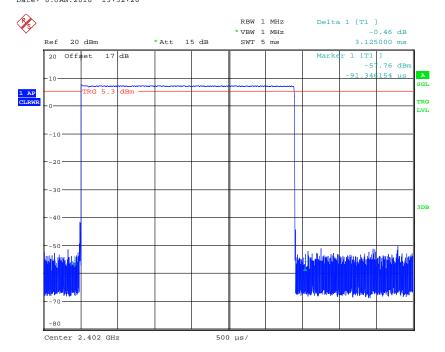
DWELL TIME CHO DH1 ( 0.496ms \* 320events = 158.72ms )
Date: 8.JAN.2018 16:01:50

Registration number: W6M21710-17520-C-1

FCC ID: XA9-BT-870-TP



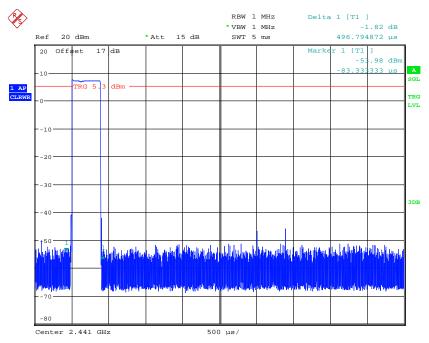
DWELL TIME CHO DH3 ( 1.738ms \* 160events = 278.08ms )
Date: 8.JAN.2018 15:52:26



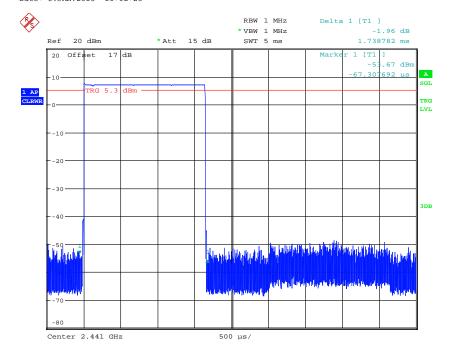
DWELL TIME CH0 DH5 ( 3.125 ms \* 106 events = 331.25 ms ) Date: 8.JAN.2018 - 15:49:41

Registration number: W6M21710-17520-C-1

FCC ID: XA9-BT-870-TP



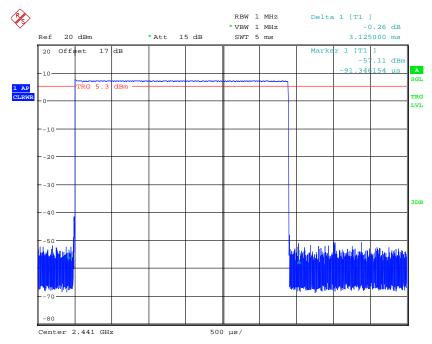
DWELL TIME CH39 DH1 ( 0.496ms \* 320events = 158.72ms )
Date: 8.JAN.2018 16:02:25



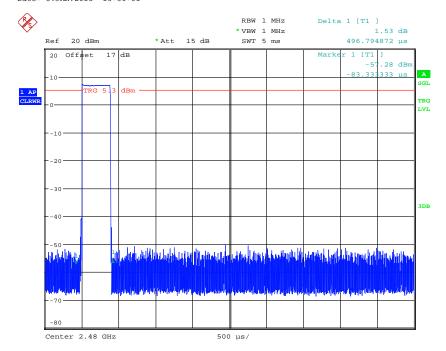
DWELL TIME CH39 DH3 ( 1.738ms \* 160events = 278.08ms )
Date: 8.JAN.2018 15:52:07

Registration number: W6M21710-17520-C-1

FCC ID: XA9-BT-870-TP



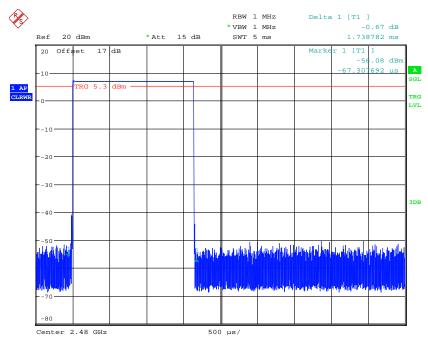
DWELL TIME CH39 DH5 ( 3.125ms \* 106events = 331.25ms )
Date: 8.JAN.2018 15:50:01



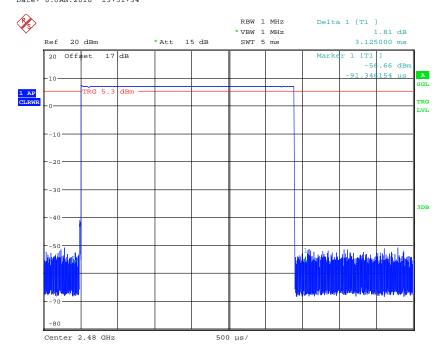
DWELL TIME CH78 DH1 (  $0.496 \, \mathrm{ms} \, \star \, 320 \, \mathrm{events} \, = \, 158.72 \, \mathrm{ms}$  ) Date:  $8.J \, \mathrm{AN}.2018 \, 16:02:47$ 

Registration number: W6M21710-17520-C-1

FCC ID: XA9-BT-870-TP



DWELL TIME CH78 DH3 ( 1.738ms \* 160events = 278.08ms )
Date: 8.JAN.2018 15:51:34



DWELL TIME CH78 DH5 ( 3.125ms \* 106events = 331.25ms )
Date: 8.JAN.2018 15:50:26



Registration number: W6M21710-17520-C-1 FCC ID: XA9-BT-870-TP

# Limits and measurement periods:

Frequency MHz	Number of channels	Measurement Periode	Limit
902 – 928	≥50	20 s	0.4 s
902 – 928	49 ≥ 25	10 s	0.4 s
2400 – 2483.5	≥ 15	0.4 s * number of used channels	0.4 s
5725- 5850	≥ 75	30 s	0.4s

Test equipment used: ETSTW-RE 055, ETSTW-RE 064

FCC ID: XA9-BT-870-TP

#### 3.9 20dB Bandwidth

Frequency hopping systems operating in the 5725-5850 MHz bands shall use a maximum 20dB bandwidth of 1 MHz.

The 20dB bandwidth is measured on the lowest, middle and highest hopping channel.

For frequency hopping systems operating in the 902-928 MHz band the maximum 20dB bandwidth of the hopping channel is 500 kHz.

Bluetooth 2.0 Normal mode

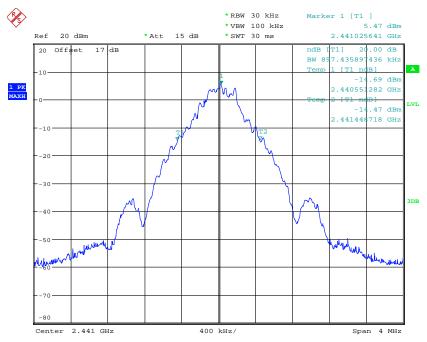


20DB BANDWIDTH CH0

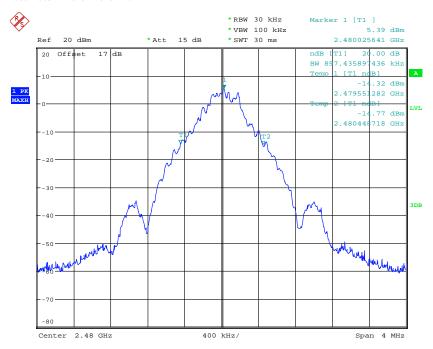
Date: 8.JAN.2018 15:30:37

Registration number: W6M21710-17520-C-1

FCC ID: XA9-BT-870-TP



20DB BANDWIDTH CH39
Date: 8.JAN.2018 15:31:20



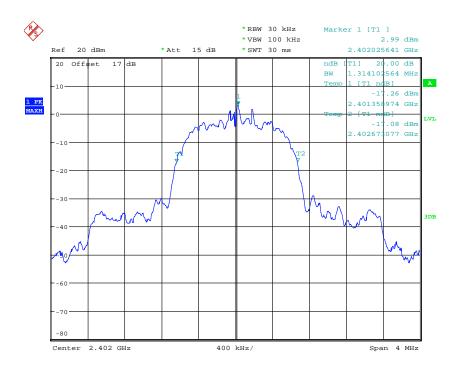
20DB BANDWIDTH CH78
Date: 8.JAN.2018 15:31:48



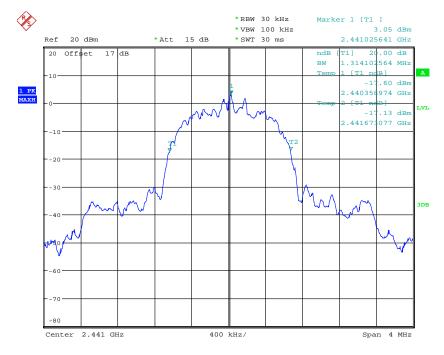
Registration number: W6M21710-17520-C-1

FCC ID: XA9-BT-870-TP

EDR mode



20DB BANDWIDTH CHO EDR MODE Date: 8.JAN.2018 15:37:36

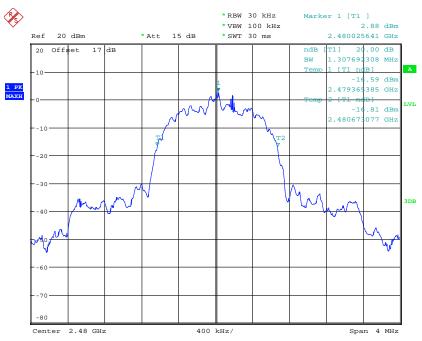


20DB BANDWIDTH CH39 EDR MODE Date: 8.JAN.2018 15:38:20



Registration number: W6M21710-17520-C-1

FCC ID: XA9-BT-870-TP



20DB BANDWIDTH CH78 EDR MODE Date: 8.JAN.2018 15:41:52

#### **Limits:**

Frequency Range / MHz	Limit
902-928	≤ 500 kHz
2400-2483.5	not defined
5725-5850	≤ 1 MHz

Test equipment used: ETSTW-RE 055, ETSTW-RE 064

#### 3.9.1 System Receiver Input Bandwidth

It is determined in the Bluetooth core specification. The value matches to the bandwidth of transmitter signal.

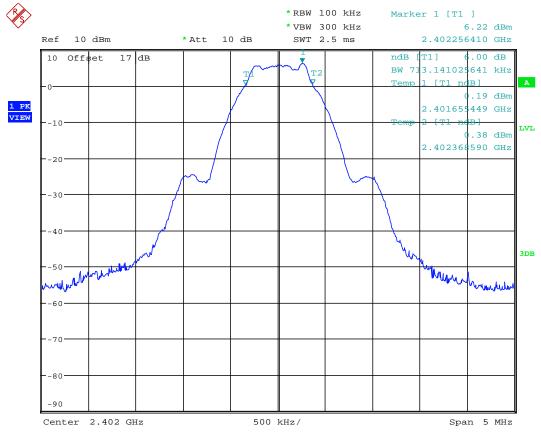
Registration number: W6M21710-17520-C-1

FCC ID: XA9-BT-870-TP

#### 3.10 Minimum 6 dB Bandwidth

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

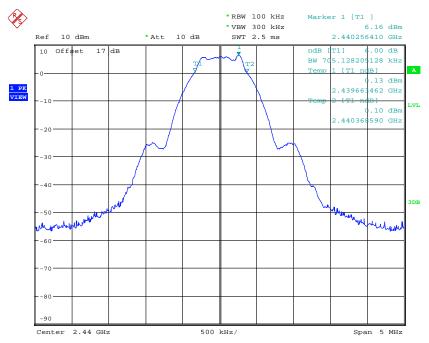




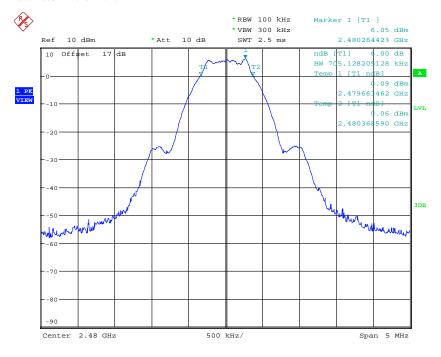
6DB BANDWIDTH BT4.0 CH00 Date: 8.JAN.2018 16:03:38

Registration number: W6M21710-17520-C-1

FCC ID: XA9-BT-870-TP



6DB BANDWIDTH BT4.0 CH19 Date: 8.JAN.2018 16:04:24



6DB BANDWIDTH BT4.0 CH39
Date: 8.JAN.2018 16:05:00



Registration number: W6M21710-17520-C-1 FCC ID: XA9-BT-870-TP

#### Limits:

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

Test equipment used: ETSTW-RE 055

Registration number: W6M21710-17520-C-1

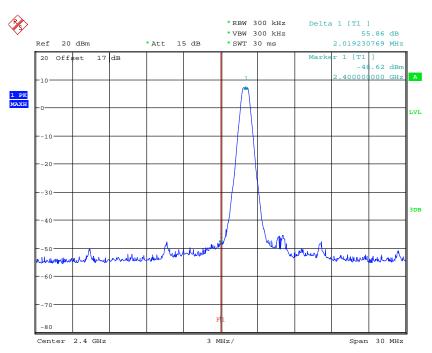
FCC ID: XA9-BT-870-TP

### 3.11 Radiated Emission on the band edge

According to FCC rules part 15 subpart C §15.247(c) in any 100 kHz bandwidth outside the frequency band in which the intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in § 15.209(a) is not required.

In addition radiated emission which fall in the restricted bands, as defined in section 15.205(a), must also with the radiated emission limits.

## Bluetooth 2.0 Normal mode

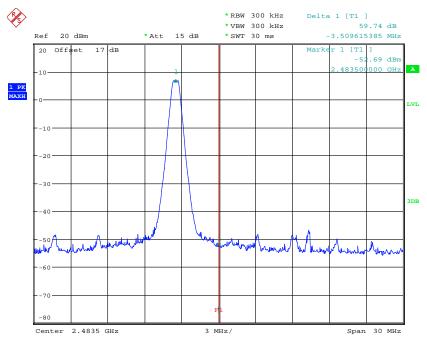


BANDEDGE CHO

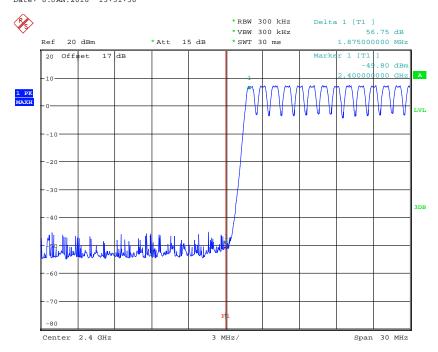
Date: 8.JAN.2018 15:30:52

Registration number: W6M21710-17520-C-1

FCC ID: XA9-BT-870-TP



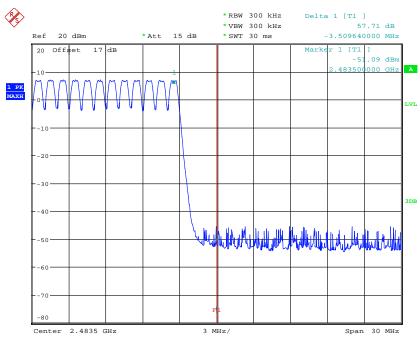




BANDEDGE CHO HOPPING MODE Date: 8.JAN.2018 15:32:41

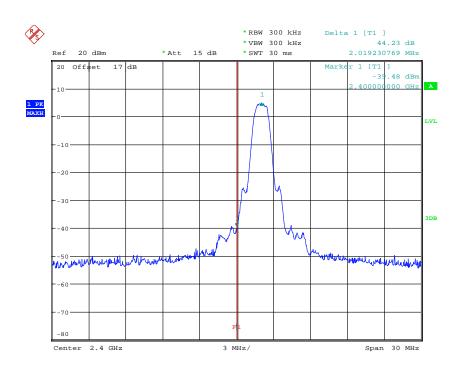
Registration number: W6M21710-17520-C-1

FCC ID: XA9-BT-870-TP



BANDEDGE CH78 HOPPING MODE Date: 8.JAN.2018 15:33:21

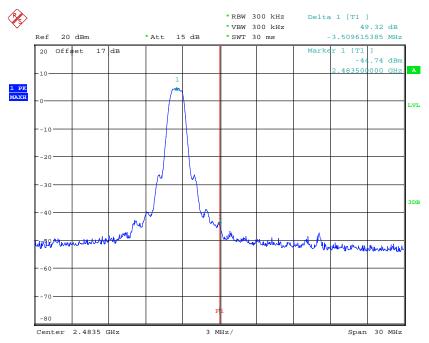
#### EDR mode



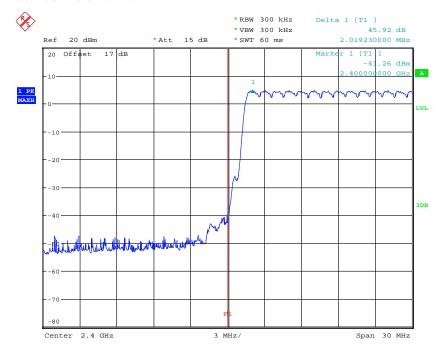
BANDEDGE CH0 EDR MODE
Date: 8.JAN.2018 15:37:44

Registration number: W6M21710-17520-C-1

FCC ID: XA9-BT-870-TP



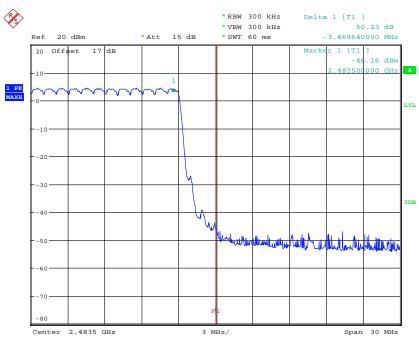
BANDEDGE CH78 EDR MODE
Date: 8.JAN.2018 15:42:04



BANDEDGE CH0 EDR HOPPING MODE Date: 8.JAN.2018 15:44:08

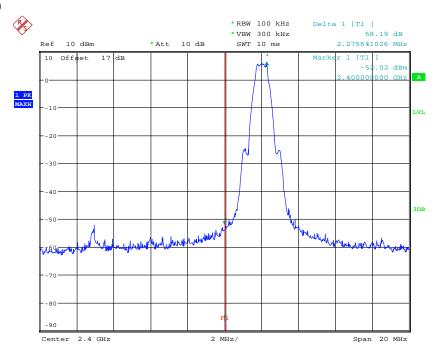
Registration number: W6M21710-17520-C-1

FCC ID: XA9-BT-870-TP



BANDEDGE CH78 EDR HOPPING MODE Date: 8.JAN.2018 15:45:52

#### Bluetooth 4.0

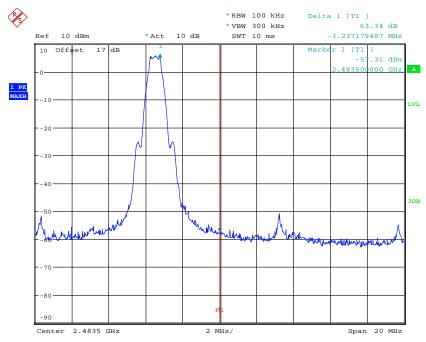


BANDEDGE BT4.0 CH00 Date: 8.JAN.2018 16:03:56



Registration number: W6M21710-17520-C-1

FCC ID: XA9-BT-870-TP



BANDEDGE BT4.0 CH39
Date: 8.JAN.2018 16:05:18

#### Limit:

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

Test equipment used: ETSTW-RE 055

Registration number: W6M21710-17520-C-1

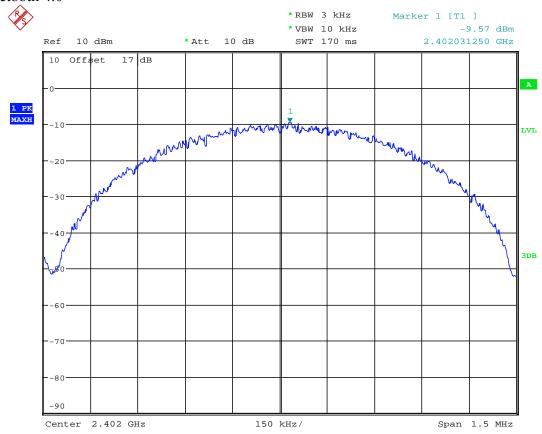
FCC ID: XA9-BT-870-TP

### 3.12 Peak Power Spectral Density

Peak Power Spectral density is a measured at low, middle and high channel.

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

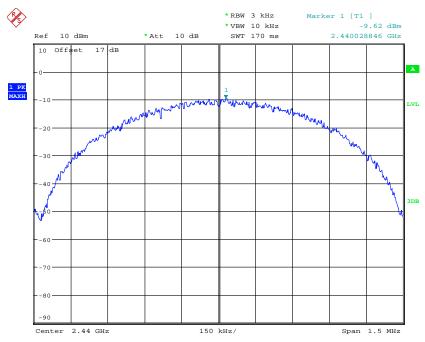
#### Bluetooth 4.0



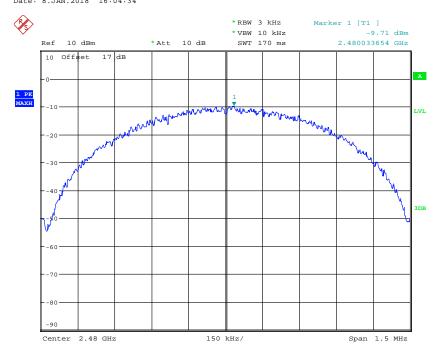
POWER DENSITY BT4.0 CH00
Date: 8.JAN.2018 16:03:48

Registration number: W6M21710-17520-C-1

FCC ID: XA9-BT-870-TP



POWER DENSITY BT4.0 CH19
Date: 8.JAN.2018 16:04:34



POWER DENSITY BT4.0 CH39
Date: 8.JAN.2018 16:05:10



Registration number: W6M21710-17520-C-1 FCC ID: XA9-BT-870-TP

#### Limits:

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

Test equipment used: ETSTW-RE 055

Registration number: W6M21710-17520-C-1

FCC ID: XA9-BT-870-TP

#### 3.13 Radiated Emission from Receiver Part

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FCC Rule: 15.109

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:

BT-870-TP-SLIM Model: Date: Mode: Temperature: Engineer: Polarization: Horizontal Humidity: Table Ant. Frequency Reading Factor Result Limit Margin Detector Degree High (MHz) (dBuV) (dBuV/m) (dBuV/m) (dB) (dB) (Deg.) (cm)

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Frequency	Reading (dBuV)		Factor Result @3m (dB) (dBuV/m)		$\odot$		Margin		Ant.	
(MHz)	Peak	av) Ave.	(dB) Corr.	Peak	V/m) Ave.	(	(dBuV/m) Peak Ave.		Degree (Deg.)	High (cm)

Frequency of Emission	Field Strength	Field Strength
(MHz)	(microvolts/meter)	(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

Explanation: Please refer to separated test report no.: W6M21710-17520-P-15B.

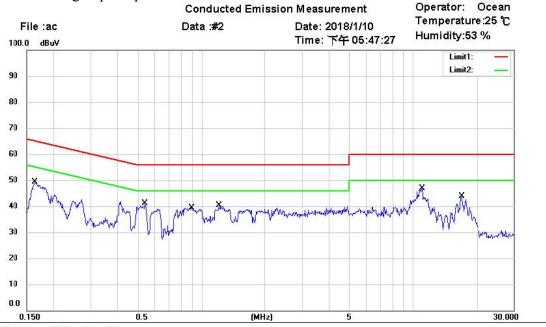
Registration number: W6M21710-17520-C-1

FCC ID: XA9-BT-870-TP

#### 3.14 Power Line Conducted Emission

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

This measurement was transact first with instrumentation using an average and peak detector and a 10 kHz bandwidth. If the peak detector achieves a calculated level, the measurement is repeated by an instrumentation using a quasi-peak detector.



Site: Chamber\_03

Condition: FCC Part 15 Class B Conduction (QP)

Power: 120 Va.c.

Phase:

EUT: W6M21710-17520

M/N:

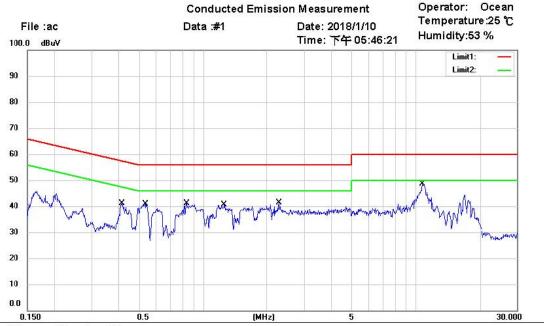
Test Mode: Charge

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corrected factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Comment
	0.1633	35.35	QP	9.74	45.09	65.29	-20.20	
	0.1633	29.17	AVG	9.74	38.91	55.29	-16.38	
	0.5404	28.50	QP	9.74	38.24	56.00	-17.76	
	0.5404	19.25	AVG	9.74	28.99	46.00	-17.01	
	0.8960	26.16	QP	9.76	35.92	56.00	-20.08	
	0.8960	12.01	AVG	9.76	21.77	46.00	-24.23	
	1.2088	24.98	QP	9.77	34.75	56.00	-21.25	
	1.2088	12.79	AVG	9.77	22.56	46.00	-23.44	
	10.9875	31.53	QP	10.11	41.64	60.00	-18.36	
*	10.9875	24.06	AVG	10.11	34.17	50.00	-15.83	
	16.9500	22.54	QP	10.21	32.75	60.00	-27.25	
	16.9500	15.56	AVG	10.21	25.77	50.00	-24.23	



Registration number: W6M21710-17520-C-1

FCC ID: XA9-BT-870-TP



Phase:

Power: 120 Va.c.

L1

Site: Chamber\_03

Condition: FCC Part 15 Class B Conduction (QP)

EUT: W6M21710-17520

M/N:

Test Mode: Charge

Note:

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corrected factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Comment
	0.4140	29.76	QP	9.73	39.49	57.57	-18.08	
*	0.4140	24.43	AVG	9.73	34.16	47.57	-13.41	
	0.5336	27.41	QP	9.73	37.14	56.00	-18.86	
	0.5336	16.43	AVG	9.73	26.16	46.00	-19.84	
	0.8307	27.13	QP	9.74	36.87	56.00	-19.13	
	0.8307	18.48	AVG	9.74	28.22	46.00	-17.78	
	1.2515	26.16	QP	9.75	35.91	56.00	-20.09	
	1.2515	15.89	AVG	9.75	25.64	46.00	-20.36	
	2.2775	25.04	QP	9.80	34.84	56.00	-21.16	
	2.2775	16.32	AVG	9.80	26.12	46.00	-19.88	
	10.7000	22.76	QP	10.05	32.81	60.00	-27.19	
	10.7000	12.18	AVG	10.05	22.23	50.00	-27.77	

-	Level (dBμV)				
Frequency	quasi-peak	average			
150 kHz	lower limit line	Lower limit line			

- 1. The formula of measured value as: Test Result = Reading + Correction Factor
- 2. The Correction Factor = Cable Loss + LISN Insertion Loss + Pulse Limit Loss
- 3. Detector function in the form: PK = Peak, QP = Quasi Peak, AV = Average
- 4. All not in the table noted test results are more than 20 dB below the relevant limits.
- 5. Measurement uncertainty =  $\pm 1.54$ dB; Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.
- 6. Up Line: QP Limit Line, Down Line: Ave Limit Line.



Registration number: W6M21710-17520-C-1 FCC ID: XA9-BT-870-TP

#### Limits:

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

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

Registration number: W6M21710-17520-C-1 FCC ID: XA9-BT-870-TP

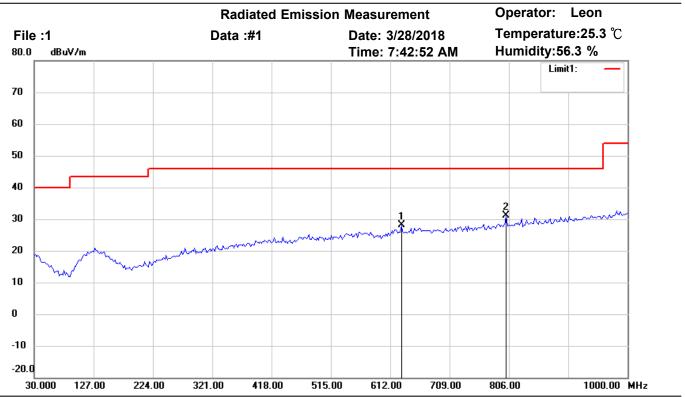
### **Appendix**

### **Measurement diagrams**

Spurious Emissions radiated\_TX



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Site: Chamber

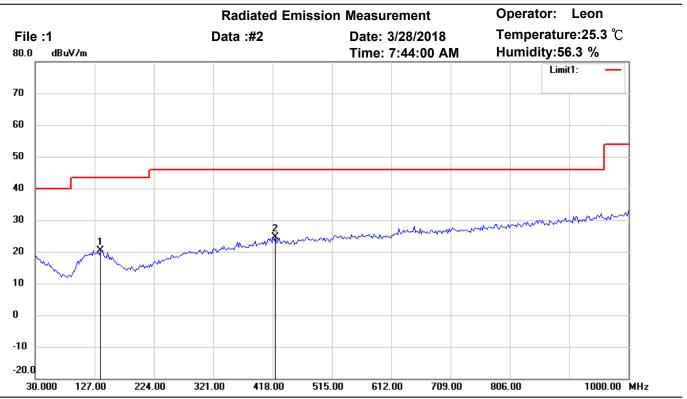
Condition: FCC\_part 15 RE-Class C\_30-1000MHz Polarization: Horizontal

Test Mode: TX 2402MHz

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	630.6612	28.91	peak	-0.85	28.06	46.00	100	174	-17.94	
*	801.7233	29.60	peak	1.43	31.03	46.00	100	205	-14.97	



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Site: Chamber

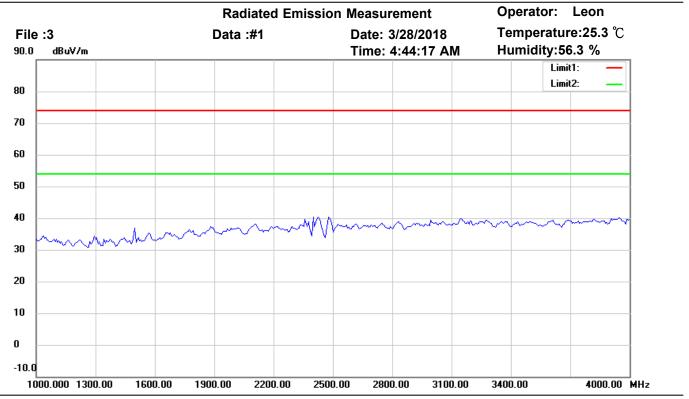
Condition: FCC\_part 15 RE-Class C\_30-1000MHz Polarization: Vertical

Test Mode: TX 2402MHz

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	136.9138	27.25	peak	-6.80	20.45	43.50	100	285	-23.05	
*	422.6653	27.93	peak	-3.32	24.61	46.00	100	70	-21.39	



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Site: Chamber

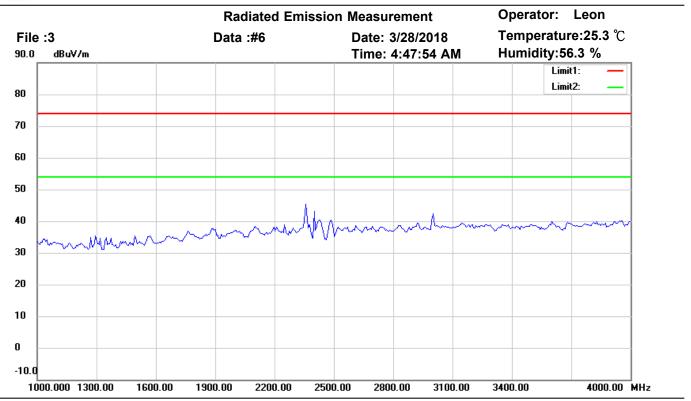
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Horizontal

Test Mode: TX 2402MHz

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



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Site: Chamber

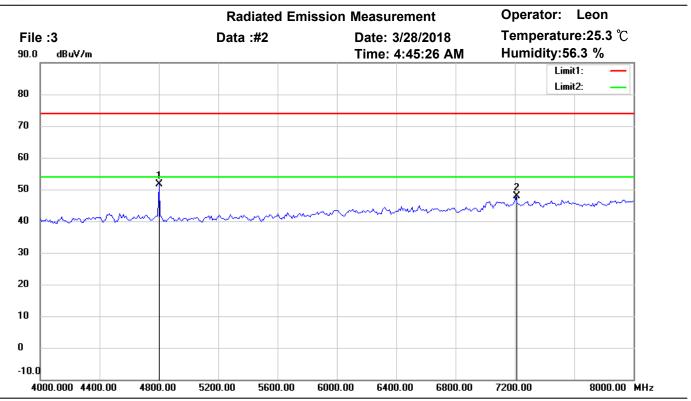
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Vertical

Test Mode: TX 2402MHz

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



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Site: Chamber

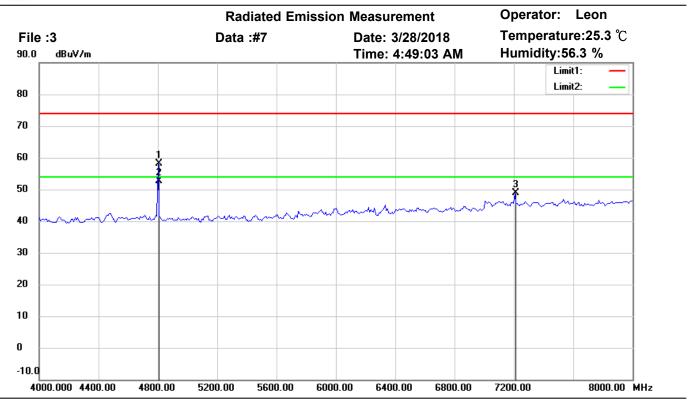
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Horizontal

Test Mode: TX 2402MHz

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	4801.603	51.47	peak	0.08	51.55	74.00	150	190	-22.45	
	7206.413	42.85	peak	5.06	47.91	74.00	150	245	-26.09	



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Site: Chamber

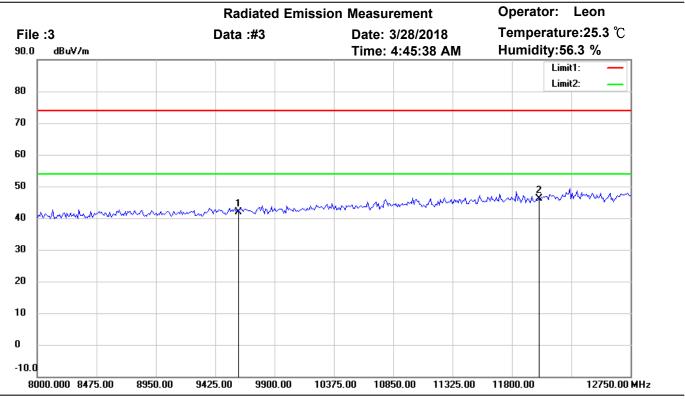
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Vertical

Test Mode: TX 2402MHz

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	4804.034	58.17	peak	0.08	58.25	74.00	160	45	-15.75	
*	4804.034	52.53	AVG	0.08	52.61	54.00	160	45	-1.39	
	7206.413	43.90	peak	5.06	48.96	74.00	150	240	-25.04	



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Site: Chamber

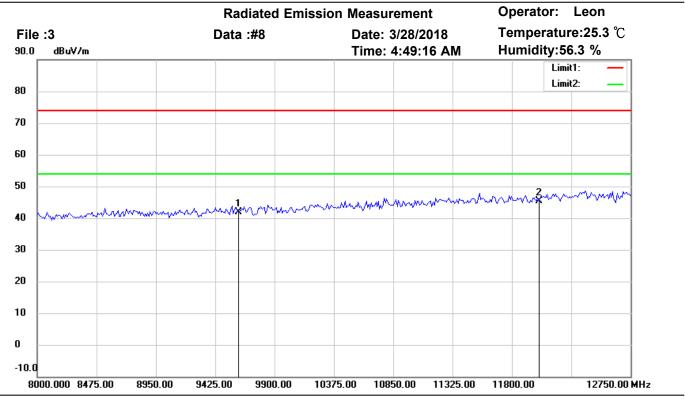
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Horizontal

Test Mode: TX 2402MHz

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	9608.000	33.99	peak	7.96	41.95	74.00	150	50	-32.05	
*	12010.000	33.26	peak	12.90	46.16	74.00	150	270	-27.84	



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Site: Chamber

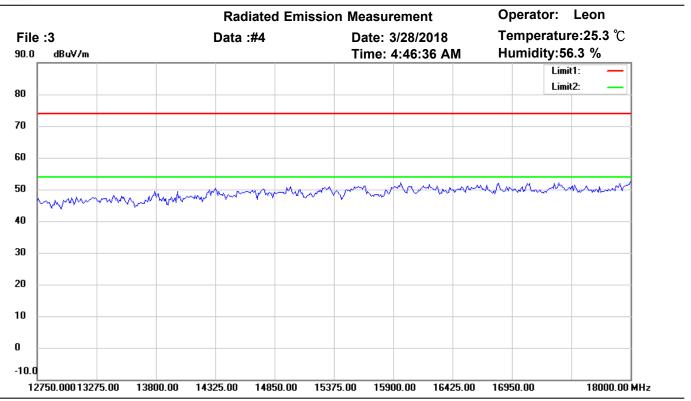
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Vertical

Test Mode: TX 2402MHz

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	9608.000	33.94	peak	7.96	41.90	74.00	150	85	-32.10	
*	12010.000	32.57	peak	12.90	45.47	74.00	150	220	-28.53	



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Site: Chamber

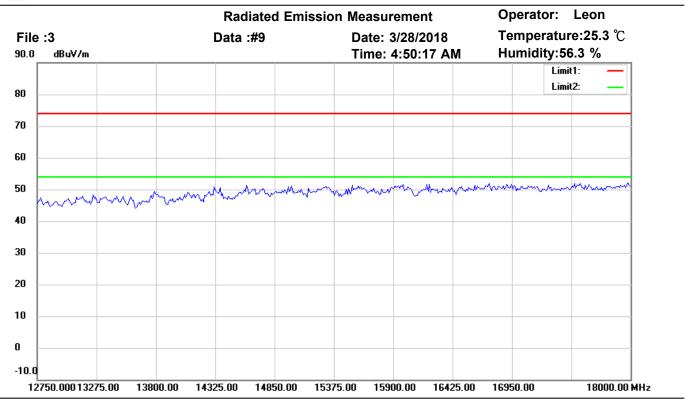
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Horizontal

Test Mode: TX 2402MHz

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



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Site: Chamber

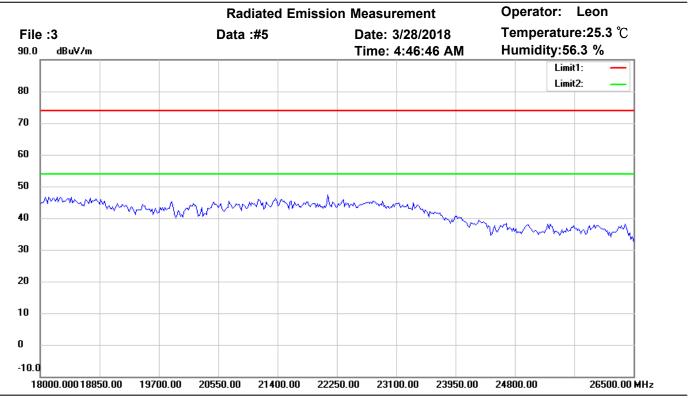
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Vertical

Test Mode: TX 2402MHz

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



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Site: Chamber

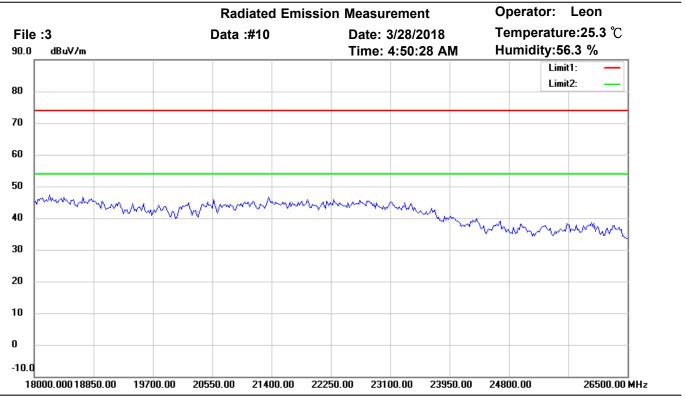
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Horizontal

Test Mode: TX 2402MHz

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



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Site: Chamber

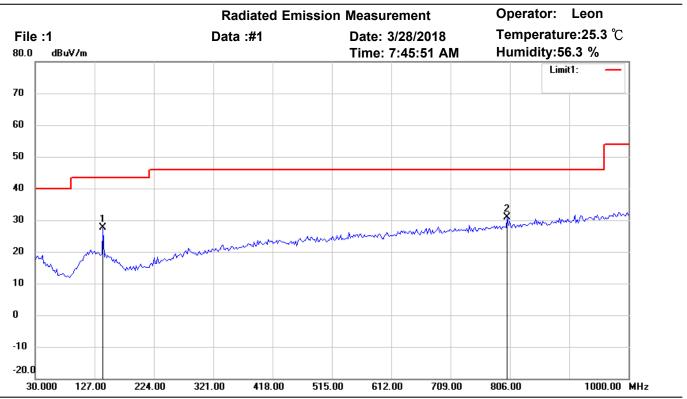
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Vertical

Test Mode: TX 2402MHz

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



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Site: Chamber

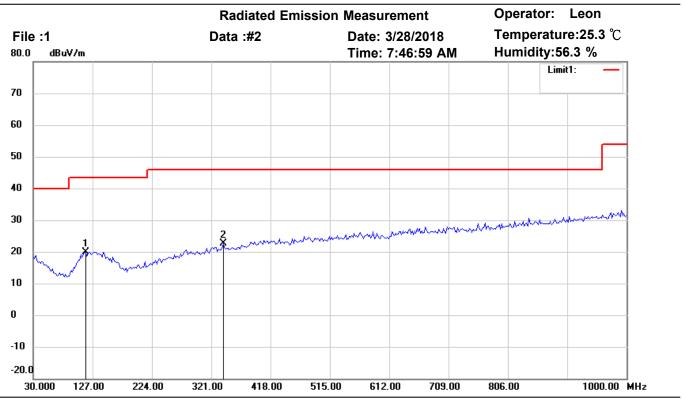
Condition: FCC\_part 15 RE-Class C\_30-1000MHz Polarization: Horizontal

Test Mode: TX 2441MHz

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	140.8015	34.54	peak	-6.94	27.60	43.50	100	330	-15.90	
*	801.7233	29.55	peak	1.43	30.98	46.00	100	145	-15.02	



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Site: Chamber

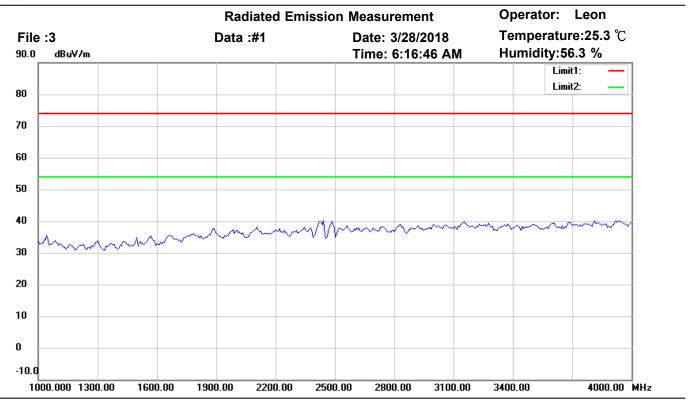
Condition: FCC\_part 15 RE-Class C\_30-1000MHz Polarization: Vertical

Test Mode: TX 2441MHz

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	115.5311	27.14	peak	-7.20	19.94	43.50	100	85	-23.56	
*	341.0220	27.48	peak	-4.94	22.54	46.00	100	270	-23.46	



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Site: Chamber

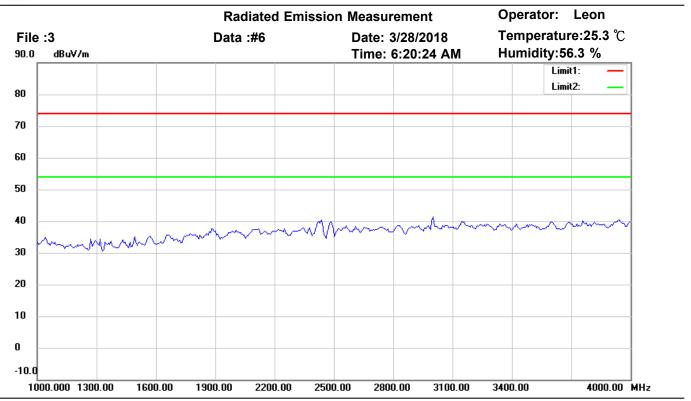
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Horizontal

Test Mode: TX 2441MHz

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



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Site: Chamber

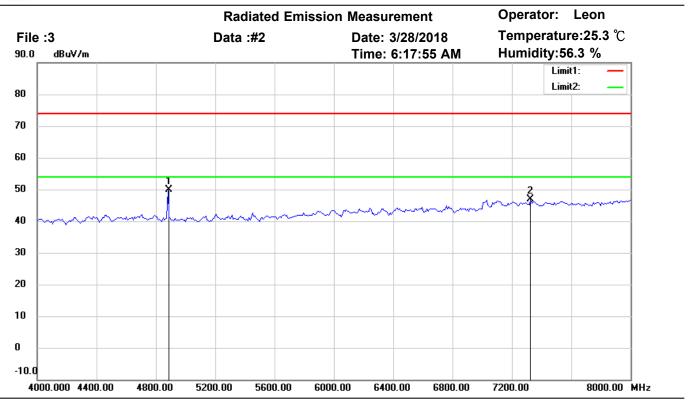
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Vertical

Test Mode: TX 2441MHz

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



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Site: Chamber

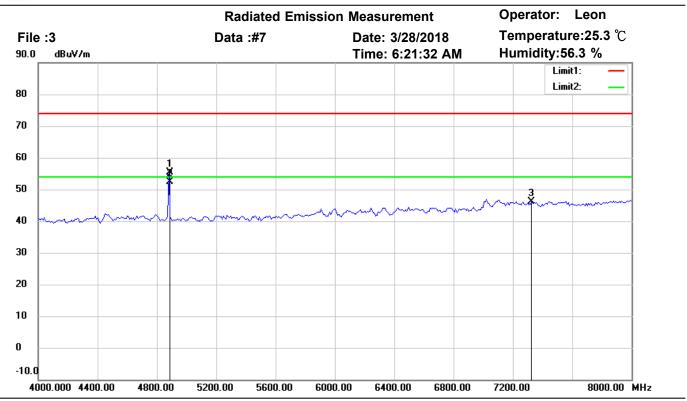
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Horizontal

Test Mode: TX 2441MHz

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	4881.764	49.67	peak	0.17	49.84	74.00	150	90	-24.16	
	7323.000	41.71	peak	5.11	46.82	74.00	150	85	-27.18	



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Site: Chamber

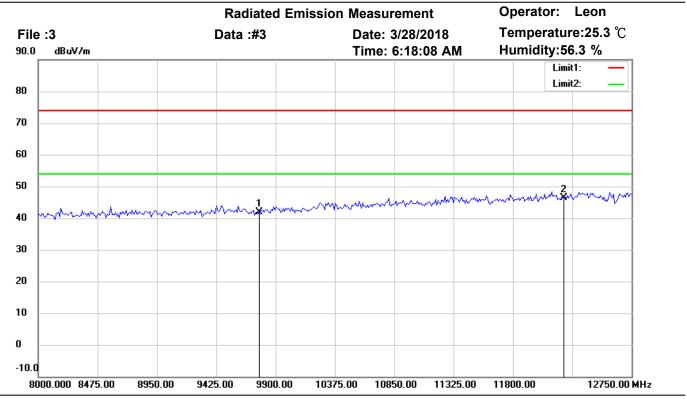
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Vertical

Test Mode: TX 2441MHz

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	4881.764	55.28	peak	0.17	55.45	74.00	165	243	-18.55	
*	4881.764	52.13	AVG	0.17	52.30	54.00	165	243	-1.70	
	7323.000	41.04	peak	5.11	46.15	74.00	150	95	-27.85	



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Site: Chamber

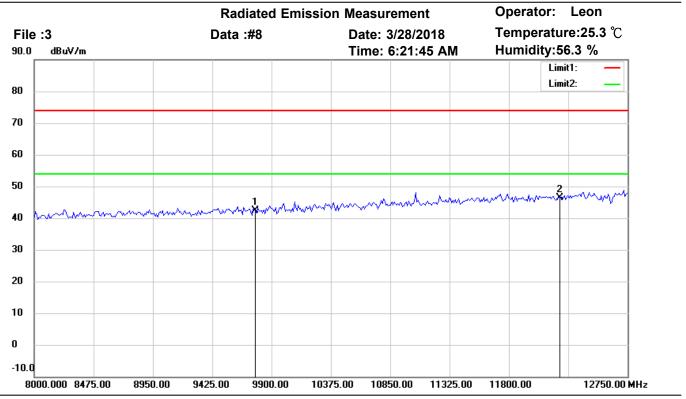
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Horizontal

Test Mode: TX 2441MHz

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	9764.000	33.68	peak	8.22	41.90	74.00	150	95	-32.10	
*	12205.000	32.41	peak	14.08	46.49	74.00	150	260	-27.51	



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Site: Chamber

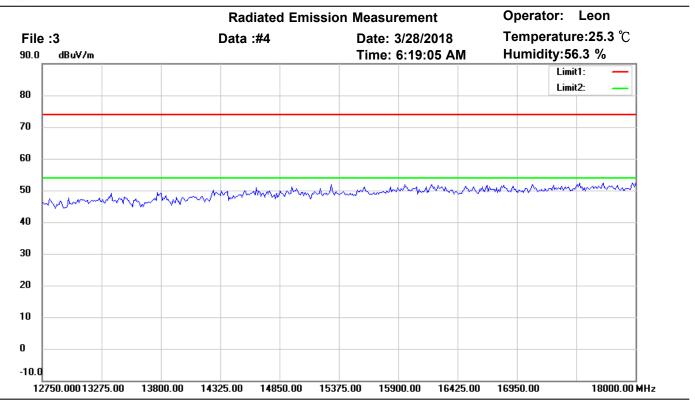
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Vertical

Test Mode: TX 2441MHz

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	9764.000	34.15	peak	8.22	42.37	74.00	150	250	-31.63	
*	12205.000	32.38	peak	14.08	46.46	74.00	150	186	-27.54	



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Site: Chamber

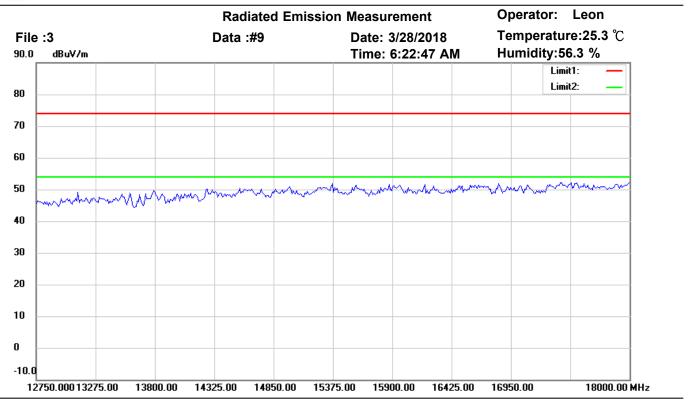
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Horizontal

Test Mode: TX 2441MHz

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



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Site: Chamber

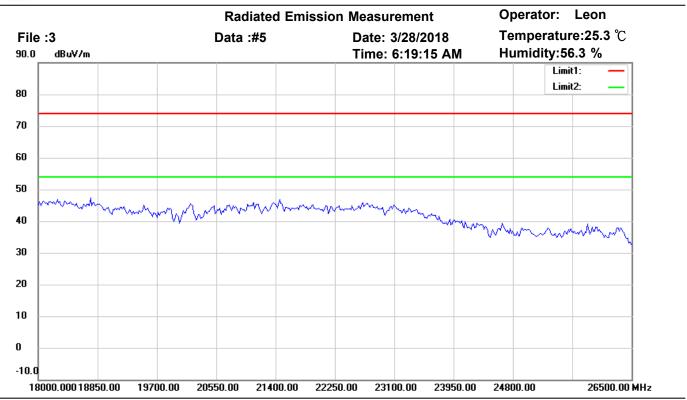
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Vertical

Test Mode: TX 2441MHz

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



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Site: Chamber

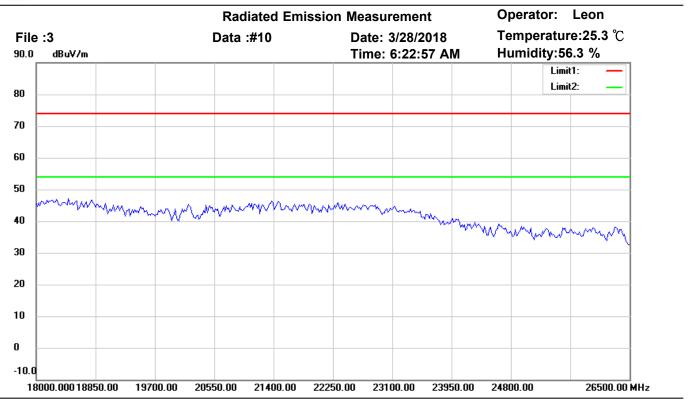
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Horizontal

Test Mode: TX 2441MHz

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



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Site: Chamber

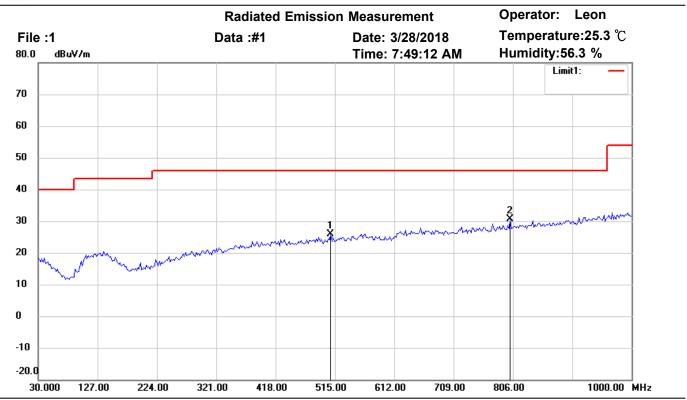
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Vertical

Test Mode: TX 2441MHz

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



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Site: Chamber

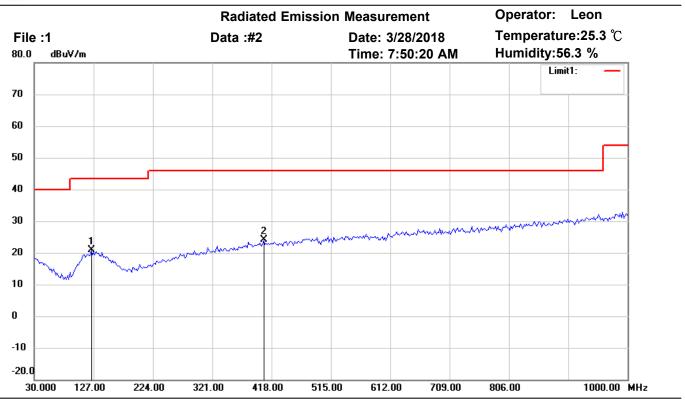
Condition: FCC\_part 15 RE-Class C\_30-1000MHz Polarization: Horizontal

Test Mode: TX 2480MHz

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	508.1963	28.62	peak	-2.64	25.98	46.00	100	90	-20.02	
*	801.7233	29.16	peak	1.43	30.59	46.00	100	55	-15.41	



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Site: Chamber

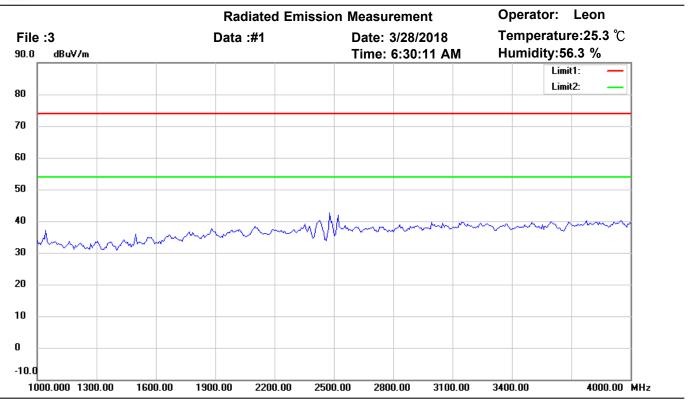
Condition: FCC\_part 15 RE-Class C\_30-1000MHz Polarization: Vertical

Test Mode: TX 2480MHz

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	123.3066	27.63	peak	-6.78	20.85	43.50	100	95	-22.65	
*	405.1703	27.66	peak	-3.50	24.16	46.00	100	60	-21.84	



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Site: Chamber

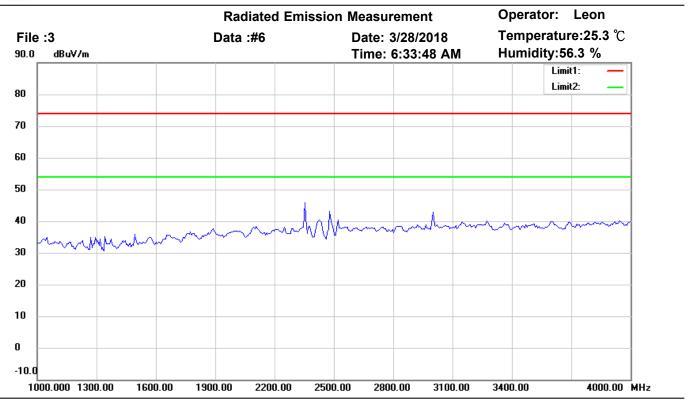
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Horizontal

Test Mode: TX 2480MHz

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



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Site: Chamber

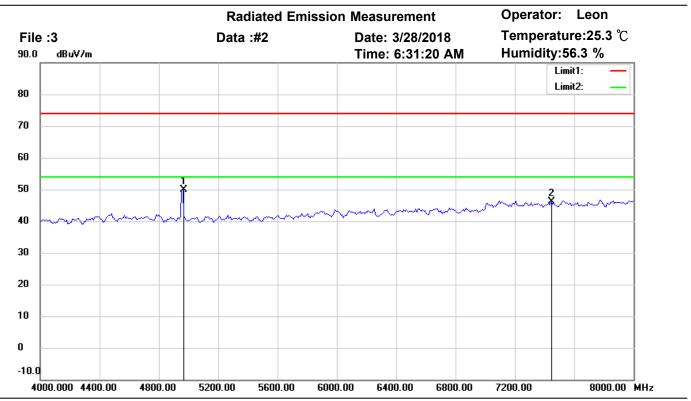
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Vertical

Test Mode: TX 2480MHz

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



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Site: Chamber

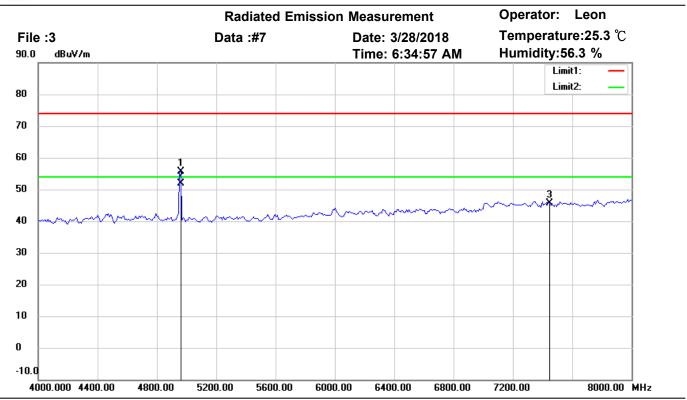
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Horizontal

Test Mode: TX 2480MHz

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	4961.924	49.64	peak	0.21	49.85	74.00	150	285	-24.15	
	7440.000	40.96	peak	5.18	46.14	74.00	150	90	-27.86	



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Site: Chamber

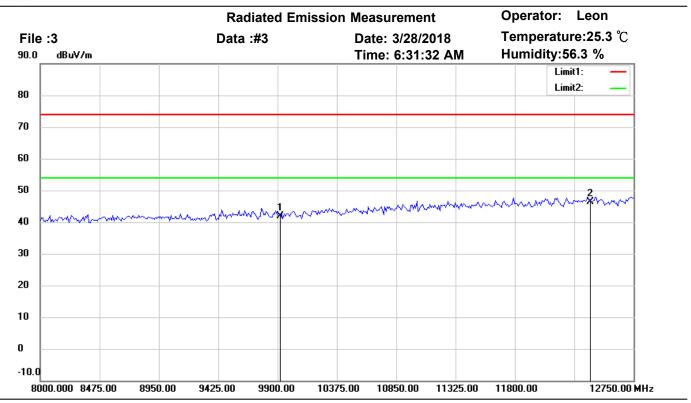
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Vertical

Test Mode: TX 2480MHz

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	4953.908	55.47	peak	0.21	55.68	74.00	160	237	-18.32	
*	4953.908	51.79	AVG	0.21	52.00	54.00	160	237	-2.00	
	7440.000	40.34	peak	5.18	45.52	74.00	150	90	-28.48	



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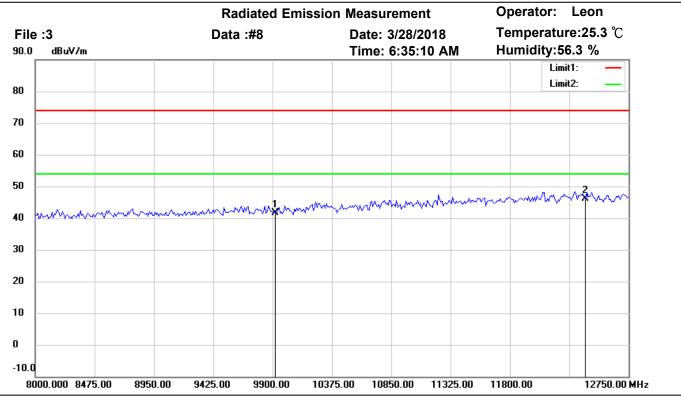
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Horizontal

Test Mode: TX 2480MHz

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	9920.000	33.29	peak	8.55	41.84	74.00	150	45	-32.16	
*	12400.000	31.93	peak	14.41	46.34	74.00	150	270	-27.66	



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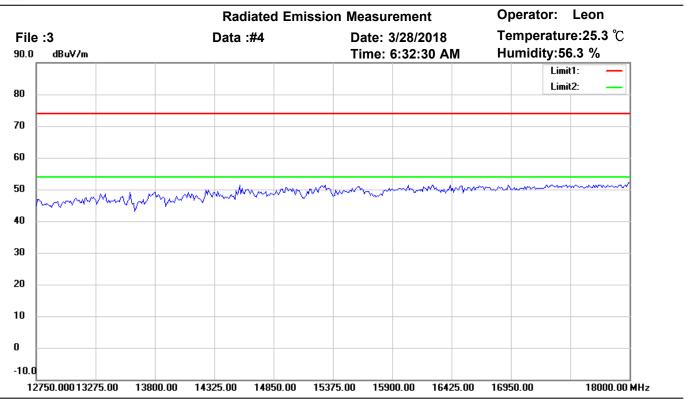
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Test Mode: TX 2480MHz

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	9920.000	33.04	peak	8.55	41.59	74.00	150	285	-32.41	
*	12400.000	31.69	peak	14.41	46.10	74.00	150	240	-27.90	



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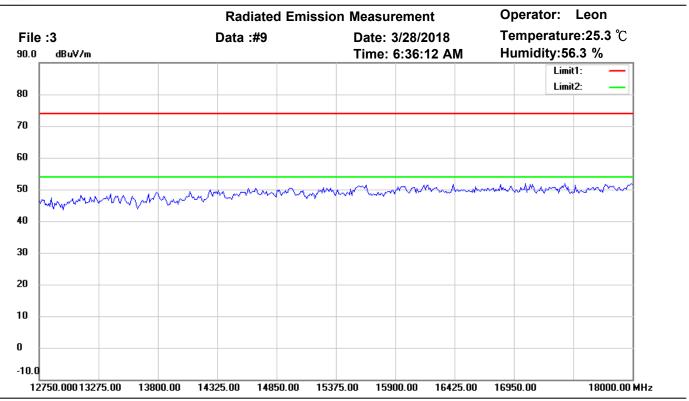
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Horizontal

Test Mode: TX 2480MHz

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



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Site: Chamber

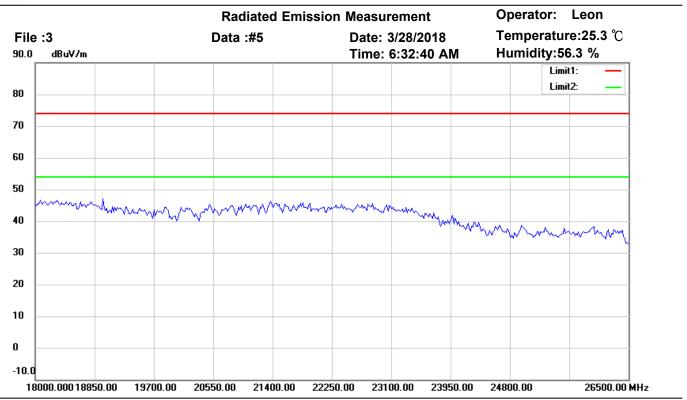
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Vertical

Test Mode: TX 2480MHz

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



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Site: Chamber

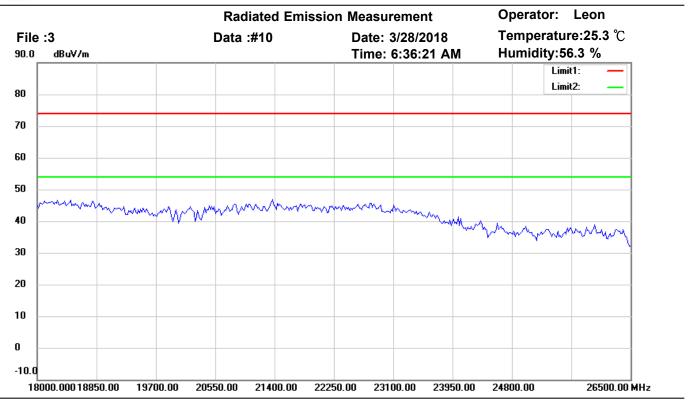
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Horizontal

Test Mode: TX 2480MHz

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



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Site: Chamber

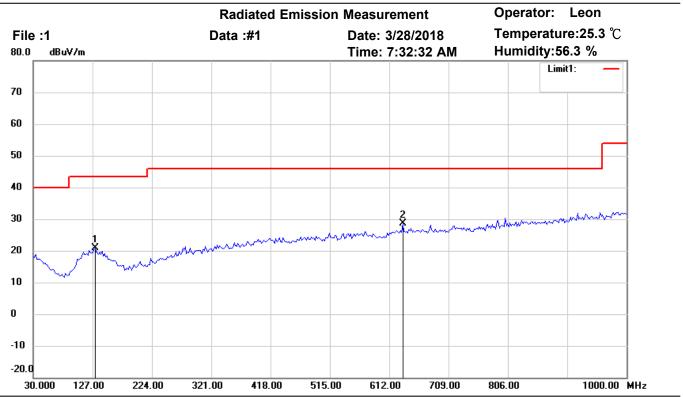
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Vertical

Test Mode: TX 2480MHz

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



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Site: Chamber

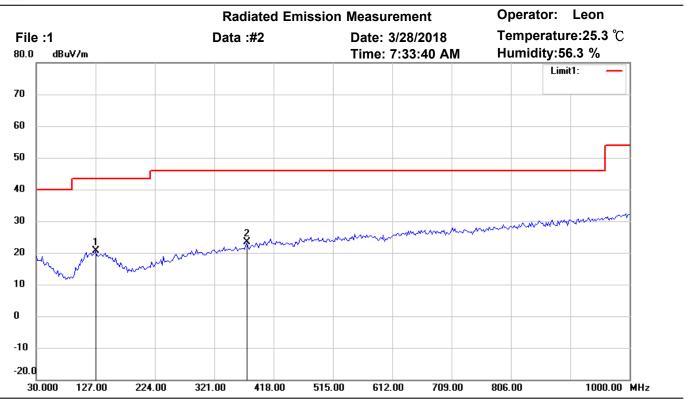
Condition: FCC\_part 15 RE-Class C\_30-1000MHz Polarization: Horizontal

Test Mode: TX 2402MHz

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	131.0822	27.63	peak	-6.67	20.96	43.50	100	235	-22.54	
*	634.5490	29.43	peak	-0.72	28.71	46.00	100	60	-17.29	



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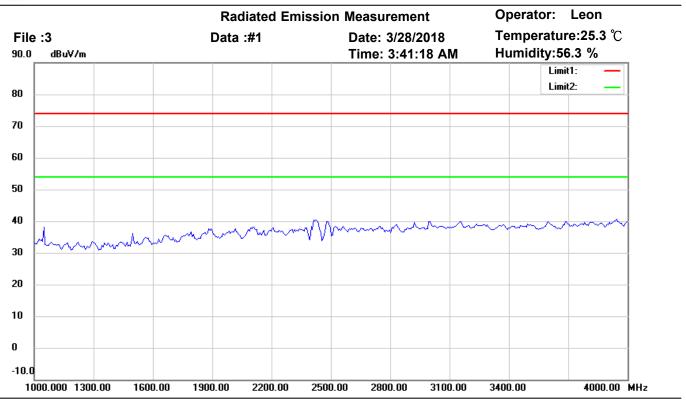
Condition: FCC\_part 15 RE-Class C\_30-1000MHz Polarization: Vertical

Test Mode: TX 2402MHz

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	127.1944	27.32	peak	-6.71	20.61	43.50	100	175	-22.89	
*	374.0681	27.48	peak	-4.13	23.35	46.00	100	40	-22.65	



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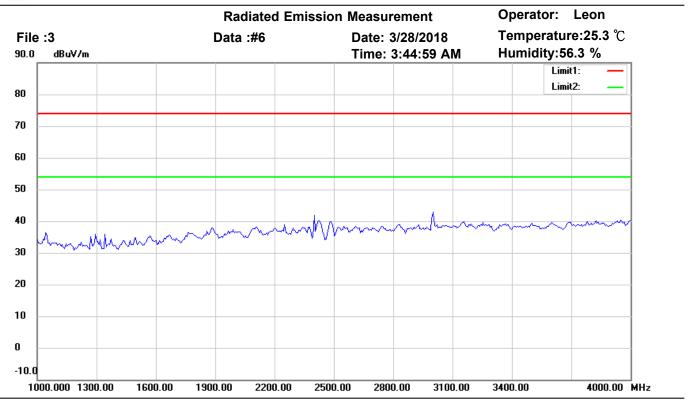
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Horizontal

Test Mode: TX 2402MHz

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



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Site: Chamber

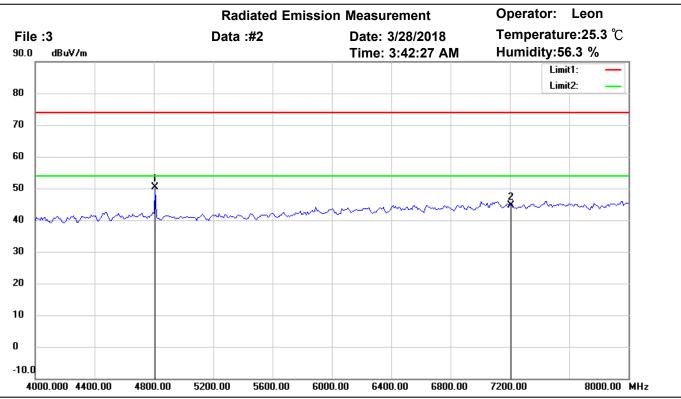
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Vertical

Test Mode: TX 2402MHz

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



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Site: Chamber

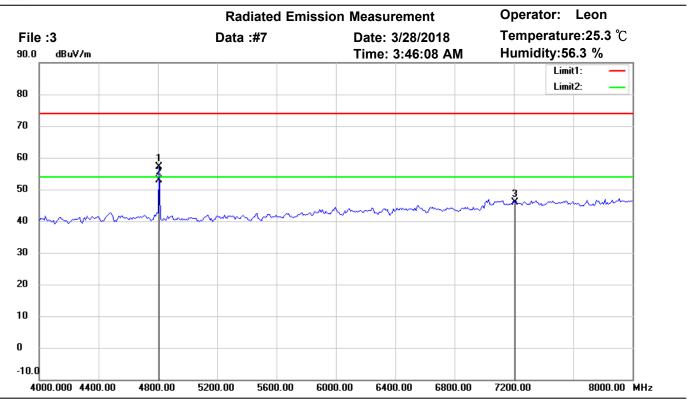
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Horizontal

Test Mode: TX 2402MHz

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	4809.619	50.23	peak	0.09	50.32	74.00	150	220	-23.68	
	7206.000	39.57	peak	5.06	44.63	74.00	150	175	-29.37	



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Site: Chamber

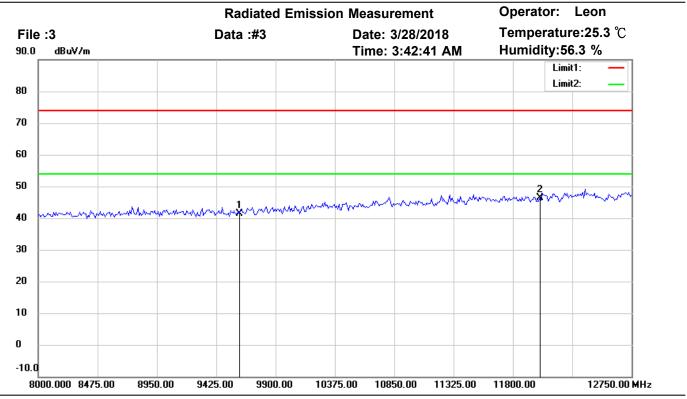
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Vertical

Test Mode: TX 2402MHz

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	4809.619	56.98	peak	0.09	57.07	74.00	185	235	-16.93	
*	4809.619	52.79	AVG	0.09	52.88	54.00	185	235	-1.12	
	7206.000	40.90	peak	5.06	45.96	74.00	150	240	-28.04	



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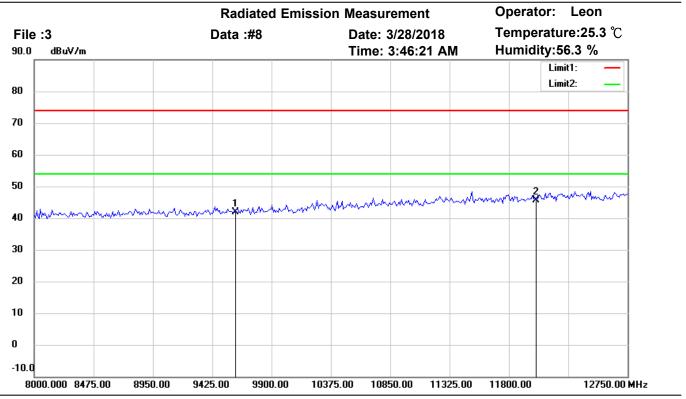
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Horizontal

Test Mode: TX 2402MHz

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	9608.000	33.47	peak	7.96	41.43	74.00	150	95	-32.57	
*	12010.000	33.38	peak	12.90	46.28	74.00	150	260	-27.72	



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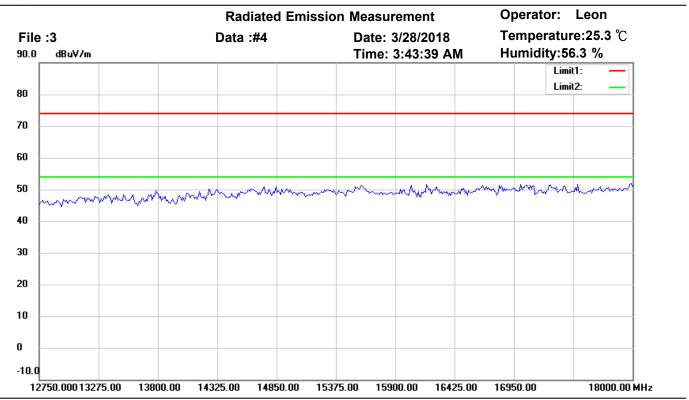
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Vertical

Test Mode: TX 2402MHz

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	9608.000	33.95	peak	7.96	41.91	74.00	150	85	-32.09	
*	12010.000	32.76	peak	12.90	45.66	74.00	150	240	-28.34	



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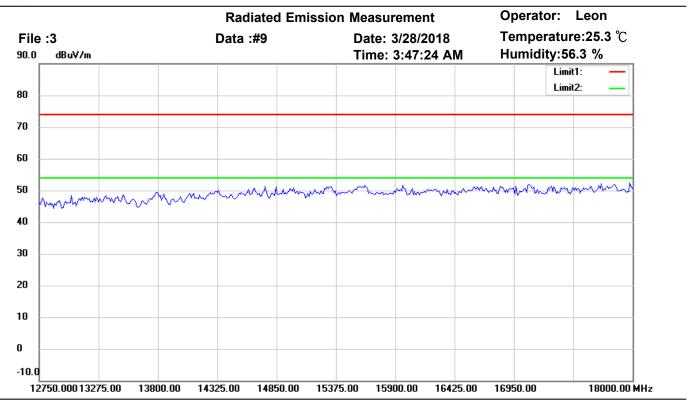
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Horizontal

Test Mode: TX 2402MHz

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



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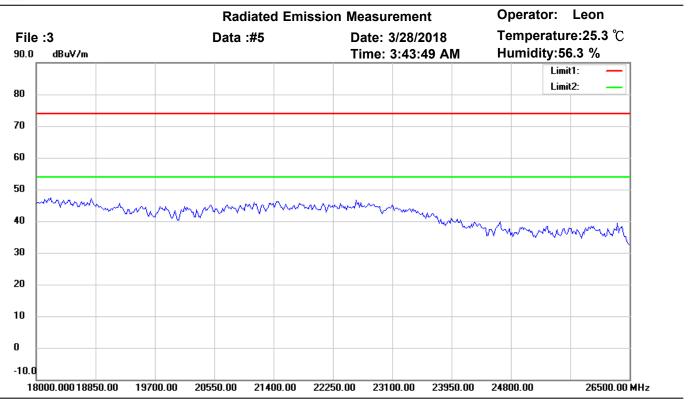
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Vertical

Test Mode: TX 2402MHz

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



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Site: Chamber

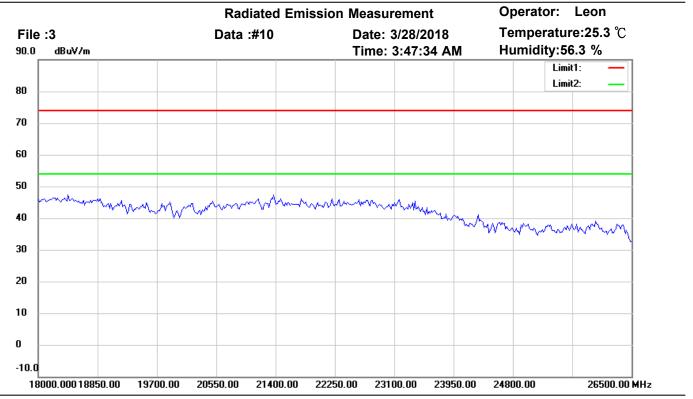
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Horizontal

Test Mode: TX 2402MHz

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



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Site: Chamber

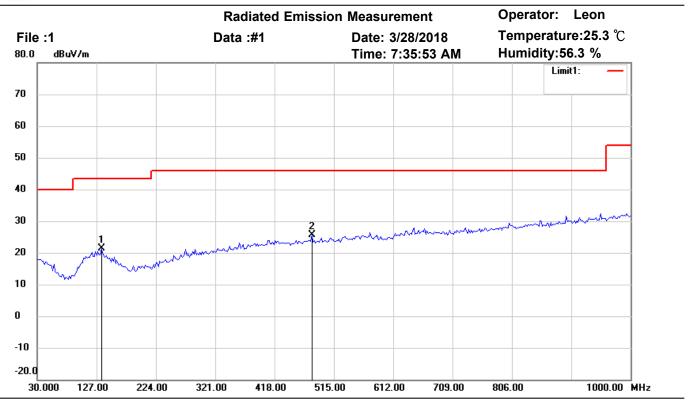
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Vertical

Test Mode: TX 2402MHz

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



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Site: Chamber

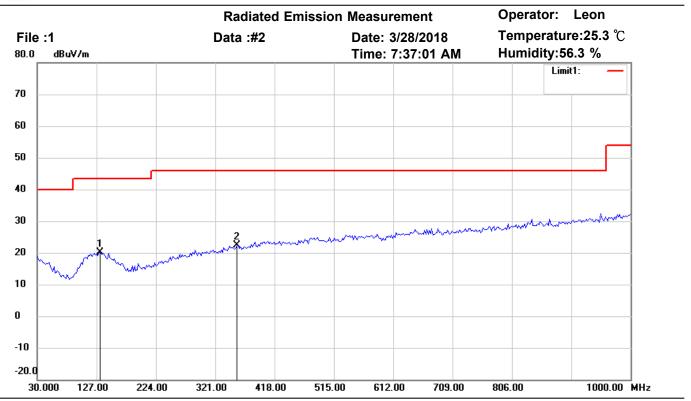
Condition: FCC\_part 15 RE-Class C\_30-1000MHz Polarization: Horizontal

Test Mode: TX 2440MHz

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	134.9698	28.20	peak	-6.75	21.45	43.50	100	145	-22.05	
*	479.0380	28.47	peak	-2.95	25.52	46.00	100	90	-20.48	



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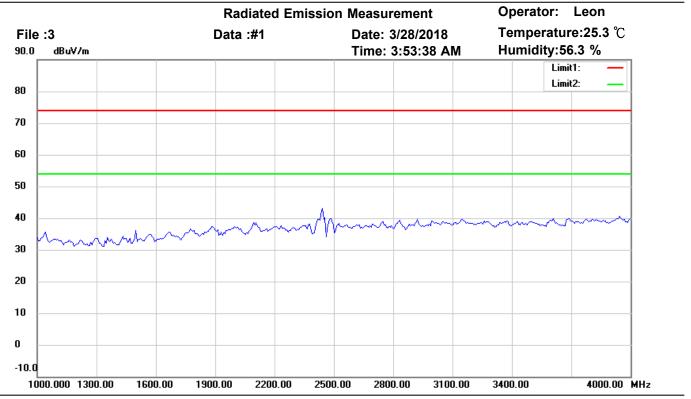
Condition: FCC\_part 15 RE-Class C\_30-1000MHz Polarization: Vertical

Test Mode: TX 2440MHz

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	133.0261	26.89	peak	-6.71	20.18	43.50	100	35	-23.32	
	356.5731	26.91	peak	-4.56	22.35	46.00	100	260	-23.65	



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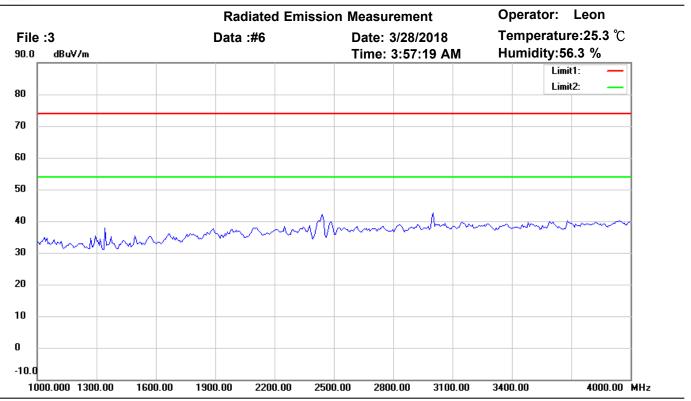
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Horizontal

Test Mode: TX 2440MHz

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



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Site: Chamber

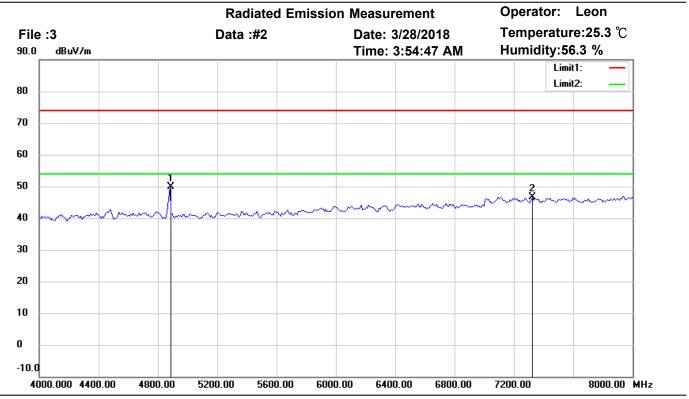
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Vertical

Test Mode: TX 2440MHz

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



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Site: Chamber

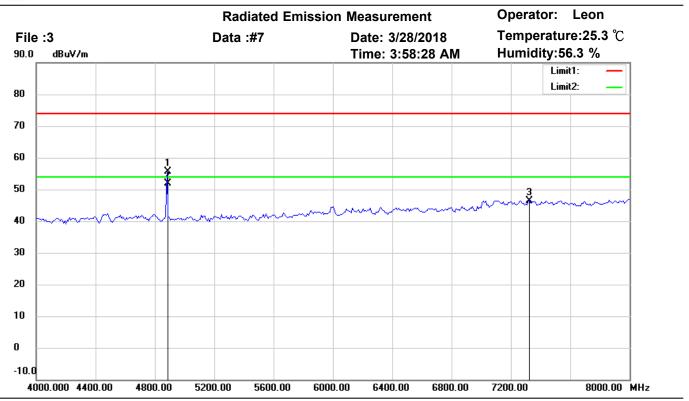
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Horizontal

Test Mode: TX 2440MHz

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	4881.764	49.73	peak	0.17	49.90	74.00	150	43	-24.10	
	7320.000	41.48	peak	5.10	46.58	74.00	150	175	-27.42	



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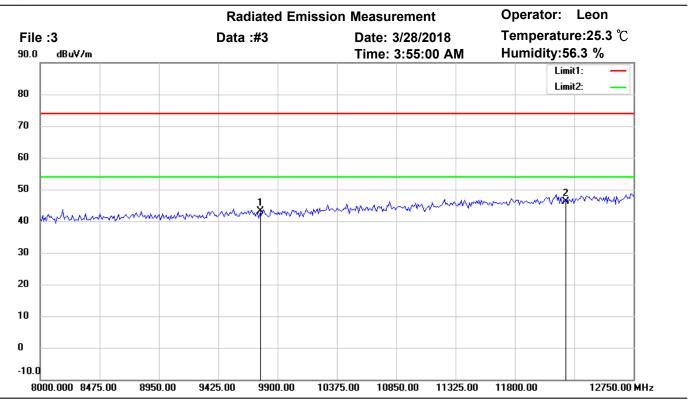
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Vertical

Test Mode: TX 2440MHz

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	4881.764	55.53	peak	0.17	55.70	74.00	170	236	-18.30	
*	4881.764	51.76	AVG	0.17	51.93	54.00	170	236	-2.07	
	7320.000	41.34	peak	5.10	46.44	74.00	150	90	-27.56	



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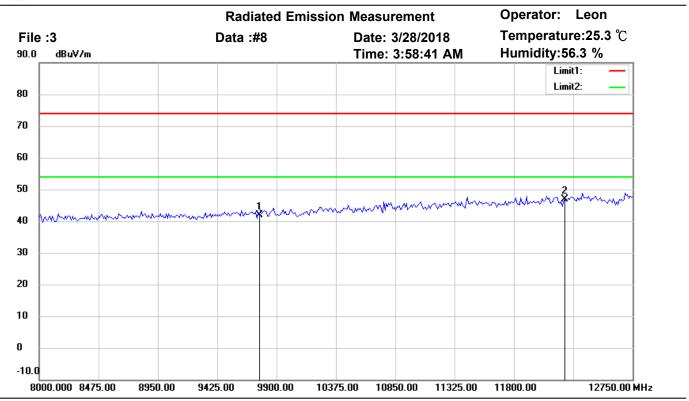
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Horizontal

Test Mode: TX 2440MHz

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	9760.000	34.87	peak	8.21	43.08	74.00	150	265	-30.92	
*	12200.000	32.15	peak	14.09	46.24	74.00	150	97	-27.76	



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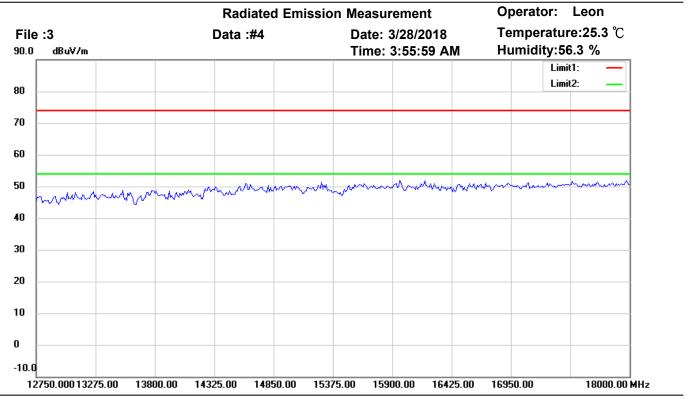
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Vertical

Test Mode: TX 2440MHz

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	9760.000	33.60	peak	8.21	41.81	74.00	150	85	-32.19	
*	12200.000	32.89	peak	14.09	46.98	74.00	150	270	-27.02	



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Site: Chamber

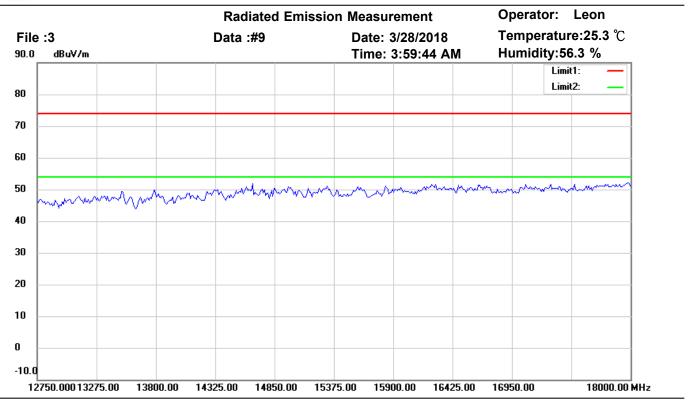
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Horizontal

Test Mode: TX 2440MHz

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



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Site: Chamber

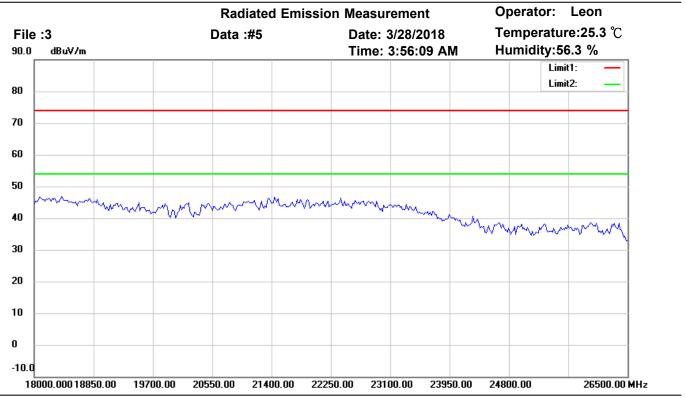
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Vertical

Test Mode: TX 2440MHz

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



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Site: Chamber

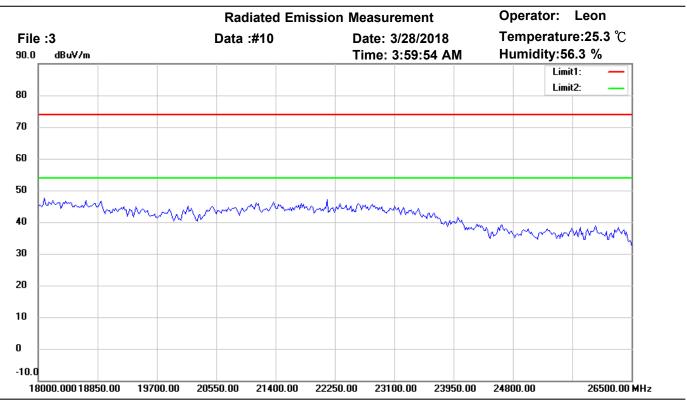
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Horizontal

Test Mode: TX 2440MHz

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



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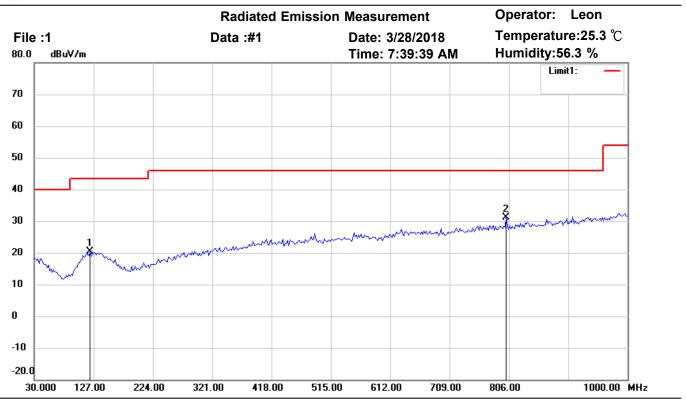
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Vertical

Test Mode: TX 2440MHz

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



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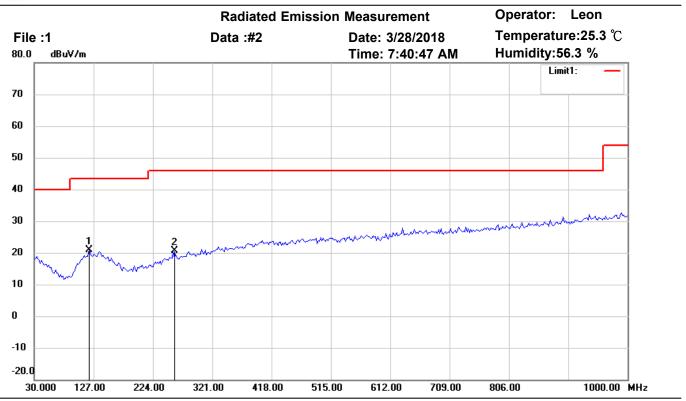
Condition: FCC\_part 15 RE-Class C\_30-1000MHz Polarization: Horizontal

Test Mode: TX 2480MHz

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	121.3627	27.30	peak	-6.82	20.48	43.50	100	235	-23.02	
*	801.7233	29.66	peak	1.43	31.09	46.00	100	90	-14.91	



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Site: Chamber

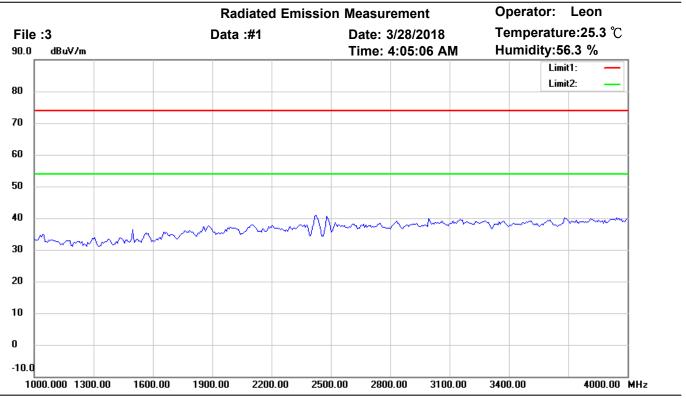
Condition: FCC\_part 15 RE-Class C\_30-1000MHz Polarization: Vertical

Test Mode: TX 2480MHz

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	119.4188	27.78	peak	-6.90	20.88	43.50	100	255	-22.62	
	257.4350	27.99	peak	-7.36	20.63	46.00	100	170	-25.37	



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Site: Chamber

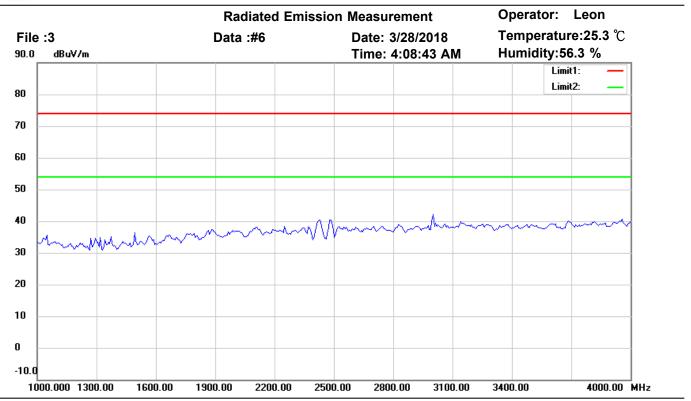
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Horizontal

Test Mode: TX 2480MHz

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



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Site: Chamber

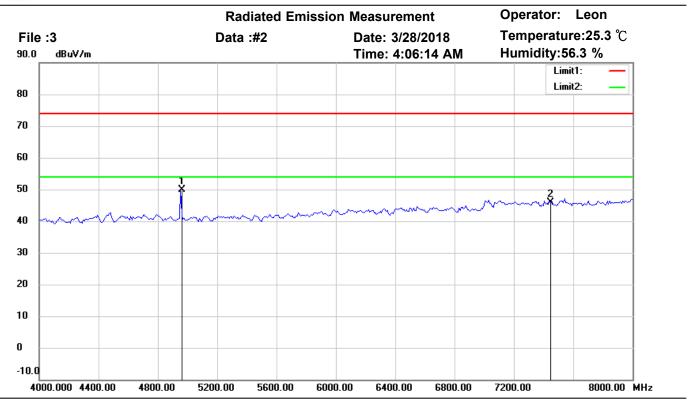
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Vertical

Test Mode: TX 2480MHz

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



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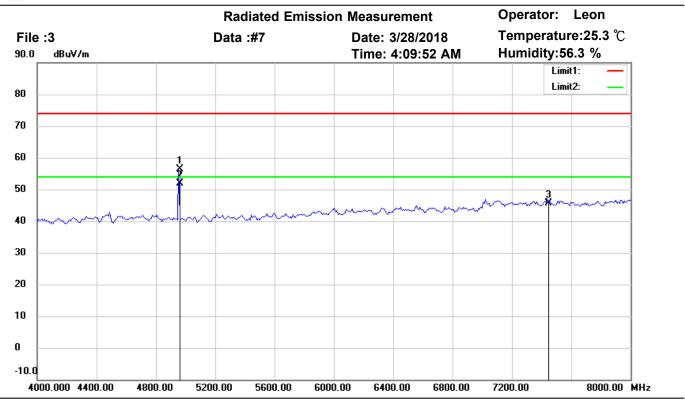
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Horizontal

Test Mode: TX 2480MHz

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
*	4953.908	49.62	peak	0.21	49.83	74.00	150	46	-24.17	
	7440.000	40.65	peak	5.18	45.83	74.00	150	175	-28.17	



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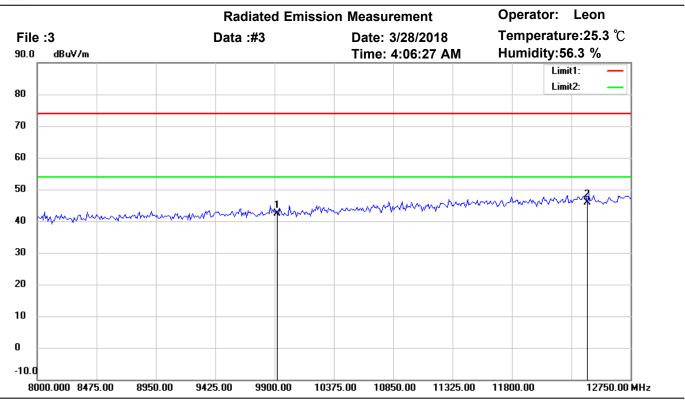
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Vertical

Test Mode: TX 2480MHz

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	4953.908	56.23	peak	0.21	56.44	74.00	163	271	-17.56	
*	4953.908	51.70	AVG	0.21	51.91	54.00	163	271	-2.09	
	7440.000	40.53	peak	5.18	45.71	74.00	150	159	-28.29	



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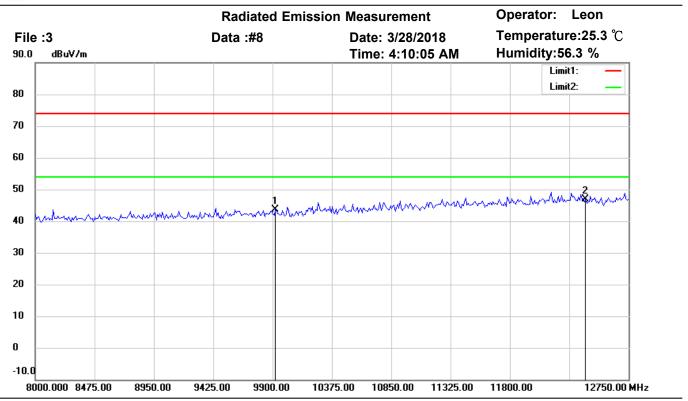
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Horizontal

Test Mode: TX 2480MHz

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	9920.000	33.87	peak	8.55	42.42	74.00	150	257	-31.58	
*	12400.000	31.56	peak	14.41	45.97	74.00	150	94	-28.03	



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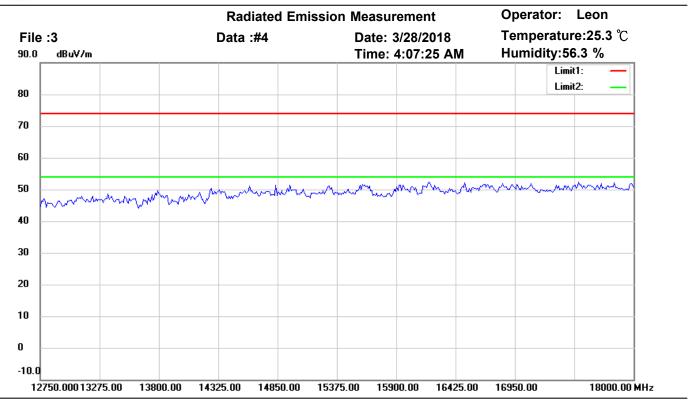
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Vertical

Test Mode: TX 2480MHz

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	9920.000	35.17	peak	8.55	43.72	74.00	150	85	-30.28	
*	12400.000	32.46	peak	14.41	46.87	74.00	150	270	-27.13	



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Site: Chamber

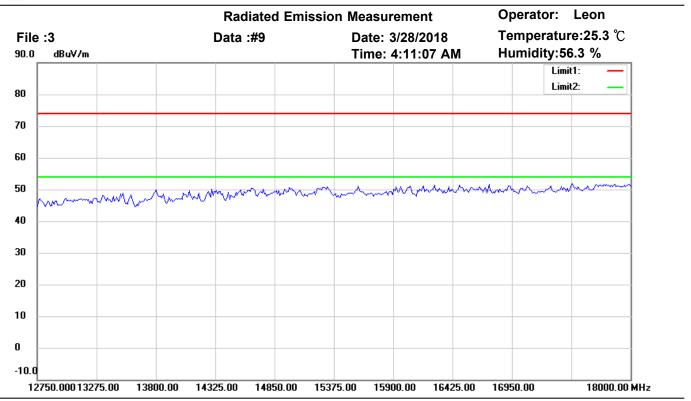
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Horizontal

Test Mode: TX 2480MHz

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



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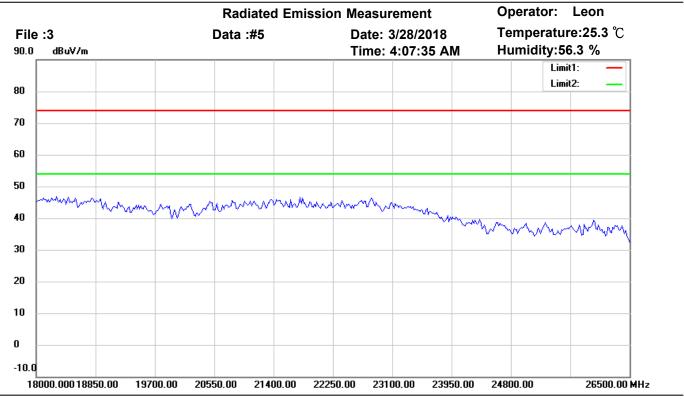
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Vertical

Test Mode: TX 2480MHz

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



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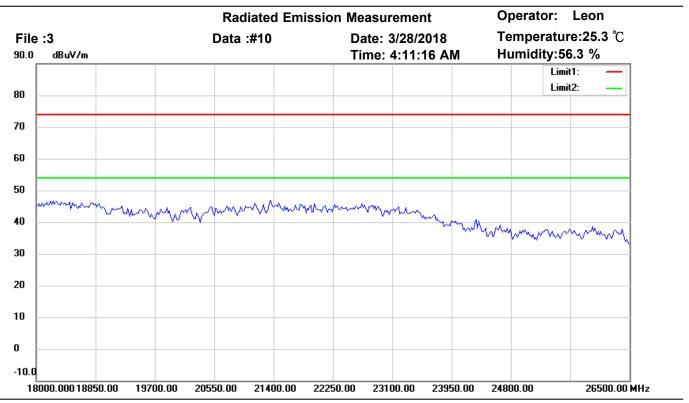
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Horizontal

Test Mode: TX 2480MHz

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



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Site: Chamber

Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Vertical

Test Mode: TX 2480MHz

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