## FCC PART 15 SUBPART C TEST REPORT

for

**Air Flow Probe** 

**Model No.: DTHA2** 

FCC ID: 2AKE4DTHA2

of

Applicant: Kane USA Inc.

Address: 7601 E. 88th Place Ste. 888, Indianapolis, Indiana 46256,

United State

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.: W6M21809-18394-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



Registration number: W6M21809-18394-C-1

FCC ID: 2AKE4DTHA2

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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.

Reproduction or publication of extracts from the report requires the prior written approval of the Worldwide Testing Services(Taiwan) Co., Ltd.

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	ACTAP!

September 27, 2018 Spencer Yang Spencer Yang

Date WTS-Lab. Name Signature

### Technical responsibility for area of testing:

September 27, 2018 Kevin Wang

Date WTS Name Signature



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1.2 Testing laboratory

#### 1.2.1 Location

**OATS** 

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

Taiwan (R.O.C.)

3 meter semi-anechoic chamber

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

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

Company

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

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

#### 1.2.2 Details of accreditation status

Accredited testing laboratory

A2LA accredited number: 2732.01

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

Industry Canada filed test laboratory Reg. No. 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: Kane USA Inc.

Street: 7601 E. 88th Place Ste. 888, City: Indianapolis, Indiana 46256,

Country: United State

Telephone: /. Fax: /.

FCC ID: 2AKE4DTHA2

## 1.4 Application details

Date of receipt of test item: September 6, 2018

Date of test: from September 6, 2018 to September 25, 2018

### 1.5 General information of Test item

Type of test item: Air Flow Probe

Model Number: DTHA2

Brand Name: UEi

Multi-listing model number: /.

Photos: see Appendix

#### Technical data

Frequency band: 2402 MHz – 2480 MHz

Frequency (ch 0 or A): 2402 MHz
Frequency (ch 19 or B): 2440 MHz
Frequency (ch 39 or C): 2480 MHz

Number of Channels: 40

Operation modes: Duplex
Modulation Type: GFSK

Fixed point-to-point operation:  $\square$  Yes  $/ \boxtimes$  No

Type of Antenna: PCB Antenna

Antenna gain: 4.33 dBi

Power supply: Battery 6Vd.c. (CR 2032x2)

Emission designator: 1M10G1D

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>

Power ( ch 0 or A): Conducted: -1.33 dBm Power ( ch 19 or B): Conducted: -1.18 dBm Power ( ch 39 or C): Conducted: -2.13 dBm

**Manufacturer:** (if applicable)

Name: AZ Instrument Corp.

Street: No. 3-2, Chien-kuo road, TEPZ Tantzu,

City: 427 Taichung, Country: Taiwan R.O.C.

Additional information: ./.

#### 1.6 Test standards

Technical standard: FCC RULES SUBPART C § 15.247 (2017-10)

FCC ID: 2AKE4DTHA2 **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

Relative humidity content: 20 ... 75 %

Air pressure: 86 ... 103 kPa

Power supply: Battery 6Vd.c. (CR 2032x2)

Extreme conditions parameters: ./.

Test item Name	Uncertainty
Estimation Result of Uncertainty of Conducted Emission	Expanded Uncertainty: 1.54 dB
Estimation Result of Uncertainty of Radiated Emission(3M)	Expanded Uncertainty: 0.009-30 MHz: 2.17 dB 30-1000 MHz: 3.57 dB 1-18 GHz: 2.60 dB 18-40 GHz: 2.58 dB
Estimation Result of Uncertainty of Bandwidth Measurement 20 dB Bandwidth, Occupied bandwidth, Channel bandwidth, Necessary Bandwidth	Expanded Uncertainty: 0.45 kHz
Estimation Result of Uncertainty of Conducted Output Power Measurement Output power	Expanded Uncertainty: 1.01 dB
Estimation Result of Uncertainty of Power Density Measurement Power density	Expanded Uncertainty: 1.73 dB
Estimation Result of Uncertainty of Band Edge Measurement	Expanded Uncertainty: 0.98 dBc



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2.3 **Test Equipment List** 

No.	Test equipment	Type	Serial No.	Manufacturer	Cal. Date	Next Cal. Date
ETSTW-CE 001	EMI TEST RECEIVER	ESHS10	842121/013	R&S	2018/5/30	2019/5/29
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	2018/8/21	2019/8/20
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	2018/7/13	2019/7/12
ETSTW-CE 016	TWO-LINE V-NETWORK	ENV216	100050	R&S	2018/8/21	2019/8/20
ETSTW-CE 028	MXE EMI Receiver	N9038A	MY53220110	Agilent	2018/7/16	2019/7/15
ETSTW-RE 003	EMI TEST RECEIVER	ESI 26	831438/001	R&S	2018/5/30	2019/5/29
ETSTW-RE 004	EMI TEST RECEIVER	ESI 40	832427/004	R&S	2018/5/21	2019/5/20
ETSTW-RE 012	TUNABLE BANDREJECT FILTER	D.C 0309	146	K&L	Function	on Test
ETSTW-RE 013	TUNABLE BANDREJECT FILTER	D.C 0336	397	K&L	Function	on Test
ETSTW-RE 018	MICROWAVE HORN ANTENNA	AT4560	27212	AR	2018/7/13	2019/7/12
ETSTW-RE 027	Passive Loop Antenna	6512	00034563	ETS-Lindgren	2018/7/12	2019/7/11
ETSTW-RE 030	Double-Ridged Guide Horn Antenna	3117	00035224	ETS-Lindgren	2018/3/26	2019/3/25
ETSTW-RE 042	Biconical Antenna	HK116	100172	R&S	2018/1/23	2019/1/22
ETSTW-RE 043	Log-Periodic Dipole Antenna	HL223	100166	R&S	2018/4/13	2019/4/12
ETSTW-RE 044	Log-Periodic Antenna	HL050	100094	R&S	2018/4/26	2019/4/25
ETSTW-RE 045	ESA-E SERIES SPECTRUM ANALYZER	E4404B	MY45111242	Agilent	Pre-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	2018/9/7	2019/9/6
ETSTW-RE 088	SOLID STATE AMPLIFIER	KMA180265A01	99057	KMIC	2018/9/17	2019/9/16
ETSTW-RE 091	Match Pad	MDCS1500	None	WOKEN	2018/4/16	2019/4/15
ETSTW-RE 099	DC Block	50DB-007-1	None	JFW	2018/2/23	2019/2/22
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



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ETSTW-RE 120         RF Player         MP9200         MP9210-111022         ADIVIC         Function test           ETSTW-RE 122         SIGNAL GENERATOR         SMF100A         102149         R&S         2018/5/29         2019           ETSTW-RE 125         5GHz Notch filter         5NSL11-5200/E221.3-O/O         1         K&L Microwave         2018/8/8         2015           ETSTW-RE 126         5GHz Notch filter         5NSL12-5800/E221.3-O/O         1         K&L Microwave         2018/8/8         2015           ETSTW-RE 127         RF Switch Box         RFS-01         None         WTS         2018/2/27         2019           ETSTW-RE 128         5.3GHz Notch filter         N0153001         SN487233         Microwave Circuits         2018/8/8         2015           ETSTW-RE 129         5.5GHz Notch filter         N0555984         SN487234         Microwave Circuits         2018/8/8         2015           ETSTW-RE 130         Handheld RF Spectrum Analyzer         N9340A         CN0147000204         Agilent         Pre-test Use           ETSTW-RE 142         Amplifier         8447D         2805A03378         Agilent         2018/3/30         2019           ETSTW-RE 151         Thermohygrometer         608-h1         45104376         TESTO         2018/8/1	7/8/7 7/8/7 7/2/26 7/8/7 7/8/7 7/3/29 7/3/22 7/8/16
ETSTW-RE 125         5GHz Notch filter         5NSL11-5200/E221.3-O/O         1         K&L Microwave         2018/8/8         2019/E21.3-O/O           ETSTW-RE 126         5GHz Notch filter         5NSL12-5800/E221.3-O/O         1         K&L Microwave         2018/8/8         2019/E21.3-O/O           ETSTW-RE 127         RF Switch Box         RFS-01         None         WTS         2018/2/27         2019/E21.3-O/O           ETSTW-RE 128         5.3GHz Notch filter         N0153001         SN487233         Microwave Circuits         2018/8/8         2015/E21.3-O/O           ETSTW-RE 129         5.5GHz Notch filter         N0555984         SN487234         Microwave Circuits         2018/8/8         2015/E21.3-O/O           ETSTW-RE 130         Handheld RF Spectrum Analyzer         N9340A         CN0147000204         Agilent         Pre-test Use           ETSTW-RE 142         Amplifier         8447D         2805A03378         Agilent         2018/3/30         2019/EETSTW-RE 151           ETSTW-RE 151         Thermohygrometer         608-h1         45104376         TESTO         2018/8/17         2019/ETSTW-EMI 011         USB Compact Modulator         SFC-U         101689         R&S         2018/5/10         2015/ETSTW-EMI 011         2018/F/17         2019/ETSTW-EMI 011         2018/F/17         2019/ETST	7/8/7 7/8/7 7/2/26 7/8/7 7/8/7 7/3/29 7/3/22 7/8/16
ETSTW-RE 125	7/8/7 72/26 7/8/7 7/8/7 7/3/29 7/3/22 7/8/16
ETSTW-RE 126 SGHz Notch filter 5800/E221.3-O/O 1 K&L Microwave 2018/8/8 2019 ETSTW-RE 127 RF Switch Box RFS-01 None WTS 2018/2/27 2019 ETSTW-RE 128 5.3GHz Notch filter N0153001 SN487233 Microwave Circuits 2018/8/8 2019 ETSTW-RE 129 5.5GHz Notch filter N0555984 SN487234 Microwave Circuits 2018/8/8 2019 ETSTW-RE 130 Handheld RF Spectrum Analyzer N9340A CN0147000204 Agilent Pre-test Use ETSTW-RE 142 Amplifier 8447D 2805A03378 Agilent 2018/3/30 2019 ETSTW-RE 147 Bi-log Hybrid Antenna MCTD 2786B BLB16M04005 ETC 2018/3/23 2019 ETSTW-RE 151 Thermohygrometer 608-h1 45104376 TESTO 2018/8/17 2019 ETSTW-EMI 011 USB Compact Modulator SFC-U 101689 R&S 2018/5/10 2019 ETSTW-EMS 008 Exposure Level Tester ELT-400 G-0009 Narda 2018/7/17 2019	72/26 7/8/7 7/8/7 7/3/29 7/3/22 7/8/16
ETSTW-RE 128         5.3GHz Notch filter         N0153001         SN487233         Microwave Circuits         2018/8/8         2019/8           ETSTW-RE 129         5.5GHz Notch filter         N0555984         SN487234         Microwave Circuits         2018/8/8         2019/8           ETSTW-RE 130         Handheld RF Spectrum Analyzer         N9340A         CN0147000204         Agilent         Pre-test Use           ETSTW-RE 142         Amplifier         8447D         2805A03378         Agilent         2018/3/30         2019/8           ETSTW-RE 147         Bi-log Hybrid Antenna         MCTD 2786B         BLB16M04005         ETC         2018/3/23         2019/8           ETSTW-RE 151         Thermohygrometer         608-h1         45104376         TESTO         2018/8/17         2019/8           ETSTW-EMI 011         USB Compact Modulator         SFC-U         101689         R&S         2018/5/10         2019/8           ETSTW-EMS 008         Exposure Level Tester         ELT-400         G-0009         Narda         2018/7/17         2019/8	//8/7 //8/7 //3/29 //3/22 //8/16
ETSTW-RE 129         5.5GHz Notch filter         N0555984         SN487234         Microwave Circuits         2018/8/8         2019           ETSTW-RE 130         Handheld RF Spectrum Analyzer         N9340A         CN0147000204         Agilent         Pre-test Use           ETSTW-RE 142         Amplifier         8447D         2805A03378         Agilent         2018/3/30         2019           ETSTW-RE 147         Bi-log Hybrid Antenna         MCTD 2786B         BLB16M04005         ETC         2018/3/23         2019           ETSTW-RE 151         Thermohygrometer         608-h1         45104376         TESTO         2018/8/17         2019           ETSTW-EMI 011         USB Compact Modulator         SFC-U         101689         R&S         2018/5/10         2019           ETSTW-EMS 008         Exposure Level Tester         ELT-400         G-0009         Narda         2018/7/17         2019	/3/29 /3/22 /8/16 //5/9
ETSTW-RE 130         Handheld RF Spectrum Analyzer         N9340A         CN0147000204         Agilent         Pre-test Use           ETSTW-RE 142         Amplifier         8447D         2805A03378         Agilent         2018/3/30         2019           ETSTW-RE 147         Bi-log Hybrid Antenna         MCTD 2786B         BLB16M04005         ETC         2018/3/23         2019           ETSTW-RE 151         Thermohygrometer         608-h1         45104376         TESTO         2018/8/17         2019           ETSTW-EMI 011         USB Compact Modulator         SFC-U         101689         R&S         2018/5/10         2019           ETSTW-EMS 008         Exposure Level Tester         ELT-400         G-0009         Narda         2018/7/17         2019	/3/29 /3/22 /8/16
ETSTW-RE 130 Analyzer N9340A CN014/000204 Agitent Pre-test Use  ETSTW-RE 142 Amplifier 8447D 2805A03378 Agilent 2018/3/30 2019  ETSTW-RE 147 Bi-log Hybrid Antenna MCTD 2786B BLB16M04005 ETC 2018/3/23 2019  ETSTW-RE 151 Thermohygrometer 608-h1 45104376 TESTO 2018/8/17 2019  ETSTW-EMI 011 USB Compact Modulator SFC-U 101689 R&S 2018/5/10 2019  ETSTW-EMS 008 Exposure Level Tester ELT-400 G-0009 Narda 2018/7/17 2019	/3/22 /8/16 //5/9
ETSTW-RE 147 Bi-log Hybrid Antenna MCTD 2786B BLB16M04005 ETC 2018/3/23 2019 ETSTW-RE 151 Thermohygrometer 608-h1 45104376 TESTO 2018/8/17 2019 ETSTW-EMI 011 USB Compact Modulator SFC-U 101689 R&S 2018/5/10 2019 ETSTW-EMS 008 Exposure Level Tester ELT-400 G-0009 Narda 2018/7/17 2019	/3/22 /8/16 //5/9
ETSTW-RE 151         Thermohygrometer         608-h1         45104376         TESTO         2018/8/17         2019/2019           ETSTW-EMI 011         USB Compact Modulator         SFC-U         101689         R&S         2018/5/10         2019/2019           ETSTW-EMS 008         Exposure Level Tester         ELT-400         G-0009         Narda         2018/7/17         2019/2019	/8/16
ETSTW-EMI 011         USB Compact Modulator         SFC-U         101689         R&S         2018/5/10         2019           ETSTW-EMS 008         Exposure Level Tester         ELT-400         G-0009         Narda         2018/7/17         2019	/5/9
ETSTW-EMS 008	
1	7/16
ETSTW-GSM 002 Universal Radio Communication Tester CMU 200 109439 R&S 2018/2/27 2019	2/26
ETSTW-GSM 003 Radio Communication Analyzer MT8820C 6201342073 Anritsu 2018/3/2 2019	/3/1
ETSTW-GSM 004 Wideband Radio Communication Tester CMW500 128092 R&S 2017/10/16 2018/	10/15
ETSTW-GSM 019 Band Reject Filter WRCTF824/849- 822/851-40 /12+9SS 3 WI 2018/1/11 2019	1/10
ETSTW-GSM 020 Band Reject Filter WRCD1747/1748- 1743/1752-32/5SS 1 WI 2018/1/11 2019	1/10
ETSTW-GSM 021 Band Reject Filter WRCD1879.5/1880.5 -1875.5/1884.5- 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	/9/6
ETSTW-GSM 024 Radio Communication Analyzer MT8821C None Anritsu 2018/3/7 2019	/3/6
ETSTW-GSM 025 Band Reject Filter BRM19835 001 Micro-Tronics 2018/8/9 2019	/8/8
ETSTW-Cable 011 SMA to N type Cable RGU-400 None THERMAX Pre-test Use NCR	
ETSTW-Cable 016 BNC Cable Switch Box B Cable 1 Schwarz beck 2018/2/22 2019	2/21
ETSTW-Cable 017 BNC Cable X Cable B Cable 2 Schwarz beck 2018/2/22 2019	2/21
ETSTW-Cable 018 BNC Cable Y Cable B Cable 3 Schwarz beck 2018/2/22 2019	2/21
ETSTW-Cable 019 BNC Cable Z Cable B Cable 4 Schwarz beck 2018/2/22 2019	2/21
ETSTW-Cable 020 N TYPE Cable OATS Cable 1 N30N30-L335-15M JYE BAO CO.,LTD. 2018/7/2 2019	/7/1
ETSTW-Cable 026 Microwave Cable SUCOFLEX 104 279075 HUBER+SUHNER 2018/2/27 2019	2/26
ETSTW-Cable 027 Microwave Cable SUCOFLEX 104 279083 HUBER+SUHNER 2018/5/14 2019	5/13
ETSTW-Cable 028 Microwave Cable FA147A0015M2020 30064-2 UTIFLEX 2018/9/17 2019	9/16
ETSTW-Cable 029 Microwave Cable FA147A0015M2020 30064-3 UTIFLEX 2018/9/17 2019	9/16
ETSTW-Cable 030 Microwave Cable SUCOFLEX 104 (S_Cable 9) 279067 HUBER+SUHNER 2018/2/27 2019	2/26
ETSTW-Cable 031 Microwave Cable SUCOFLEX 104 (S Cable 10) 238092 HUBER+SUHNER 2018/3/30 2019	3/29
ETSTW-Cable 043 Microwave Cable SUCOFLEX 104 317576 HUBER+SUHNER 2018/3/30 2019	3/29
ETSTW-Cable 048 Microwave Cable SUCOFLEX 104 325519 HUBER+SUHNER 2018/3/30 2019	3/29



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ETSTW-Cable 058	Microwave Cable	SUCOFLEX 104	none	HUBER+SUHNER	2018/6/9	2019/6/8
ETSTW-Cable 064 Microwave Cable		SUCOFLEX 104	MY28891	HUBER+SUHNER	2018/3/30	2019/3/29
ETSTW-Cable 066 SMA type cable		32022	None	ASTROLAB	2018/8/30	2019/8/29
ETSTW-Cable 071 N TYPE CABLE		EMCCFD400-NM- NM-25000	170239	EMCI	2018/6/9	2019/6/8
WTSTW-SW 002 EMI TEST SOFTWARE		EZ_EMC	None	Farad	Version I	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 5.2 using a 50μH LISN (if necessary). Both lines were observed. The bandwidth of the spectrum analyzer was 10 kHz with an appropriate sweep speed.

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

**FORMULA OF CONVERSION FACTORS:** The Field Strength at 3m was established by adding the meter reading of the spectrum analyzer (which is set to read in units of  $dB\mu V$ ) 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  $20 \text{ dB}\mu\text{V} + 10.36 \text{ dB} + 6 \text{ dB} = 36.36 \text{ dB}\mu\text{V/m} \text{ @3m}$ 

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

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

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

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

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



FCC ID: 2AKE4DTHA2

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



Registration number: W6M21809-18394-C-1 FCC ID: 2AKE4DTHA2

## Test results (enclosure)

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

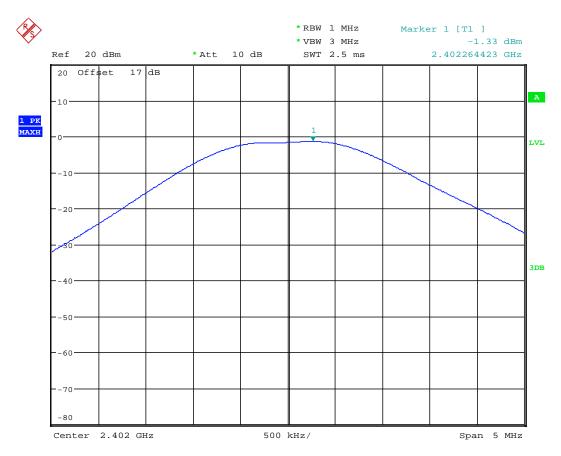
The following is intentionally left blank.

FCC ID: 2AKE4DTHA2

## 3.1 Peak Output Power (transmitter)

FCC Rule: 15.247(d)(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.



MAX OUTPUT POWER BT4.0 CH00 Date: 6.SEP.2018 14:29:22



Registration number: W6M21809-18394-C-1

FCC ID: 2AKE4DTHA2



MAX OUTPUT POWER BT4.0 CH19 Date: 6.SEP.2018 14:31:10



MAX OUTPUT POWER BT4.0 CH39 Date: 6.SEP.2018 14:32:16



Registration number: W6M21809-18394-C-1

FCC ID: 2AKE4DTHA2

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, ETSTW-RE 050

FCC ID: 2AKE4DTHA2

## 3.2 Equivalent isotropic radiated power

FCC Rule: 15.247(b)(3)

Test exclusion = max. conducted output power

Test exclusion = -1.18 dBm

**RESULT:** 

Test standard : FCC KDB Publication

447498 D01 General RF Exposure Guidance v06

## 3.3 RF Exposure Compliance Requirements

According to KDB447498 10 D01v06:

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  $\geq 0.5$  cm separation from the antenna elements to significant metal parts of the enclosure to minimize potential perturbations.

Frequency Band:2402-2480 MHz

Maximum Power fed to Antenna: 0.7621 mW

Separation distances:

Antenna feed center to metal parts of enclosure: > 5 mm Distance prescribed in user manual: > 5 mm

MHz	5	10	15	20	25	mm
2450	10	19	29	38	48	SAR Test Exclusion Threshold (mW)

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: 2AKE4DTHA2

### 3.4 Transmitter Radiated Emissions in Restricted Bands

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

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

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

Frequency ≤ 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: 2AKE4DTHA2

### 3.5 Spurious Emissions (tx)

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

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

FCC Rule: 15.247(d), 15.35

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

#### Limits:

For frequencies above 1GHz (Peak measurements).

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

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

Max. reading – 20 dB

Guidance on Measurement of Digit Transmission Systems:

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

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

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

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



FCC ID: 2AKE4DTHA2

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: DTHA2 Date: -Mode: -- Temperature: -- °C Engineer: -Polarization: -- Humidity: -- %

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

Frequency	Reading (dBuV)		Factor (dB)	Result (dBuV/m)		Limit (dBuV/m)		Margin	Table Degree	Ant. High
(MHz)	Peak	Ave.	Corr.	Peak	Ave.	Peak	Ave.	(dB)	(Deg.)	(m)
						-				
						1				-
						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: 30-1000 MHz =  $\pm$  3.57 dB, 1-18 GHz =  $\pm$  2.60 dB, 18-40 GHz =  $\pm$  2.58 dB; Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.
- 6. Please see attached diagrams in Appendix.

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

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

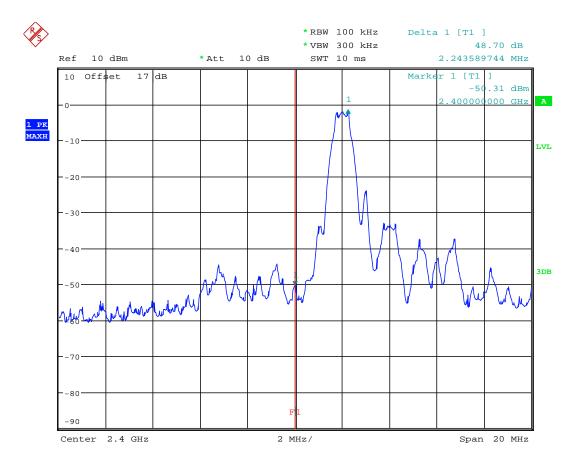
ETSTW-RE 147

FCC ID: 2AKE4DTHA2

### 3.6 Radiated Emission on the band edge

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

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

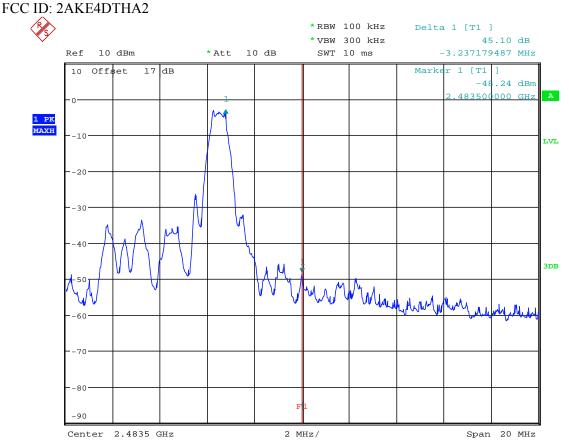


BANDEDGE BT4.0 CH00

Date: 6.SEP.2018 14:29:54



Registration number: W6M21809-18394-C-1



BANDEDGE BT4.0 CH39
Date: 6.SEP.2018 14:32:48

Limit:

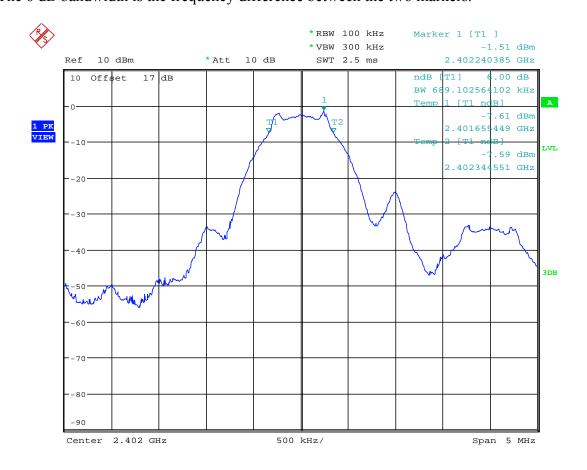
Frequency Range / MHz	Limit			
902 –928				
2400 – 2483.5	- 20 dB			
5725 - 5850				

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

FCC ID: 2AKE4DTHA2

#### 3.7 Minimum 6 dB Bandwidth

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



6DB BANDWIDTH BT4.0 CH00 Date: 6.SEP.2018 14:29:34

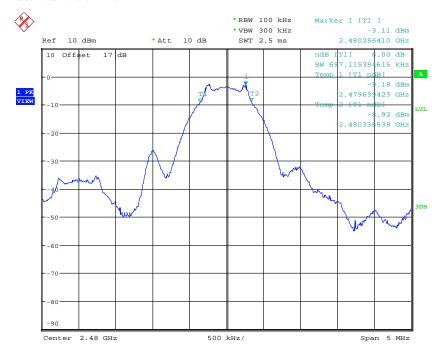


Registration number: W6M21809-18394-C-1

FCC ID: 2AKE4DTHA2



6DB BANDWIDTH BT4.0 CH19
Date: 6.SEP.2018 14:31:22



6DB BANDWIDTH BT4.0 CH39
Date: 6.SEP.2018 14:32:28



Registration number: W6M21809-18394-C-1 FCC ID: 2AKE4DTHA2

Limits:

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

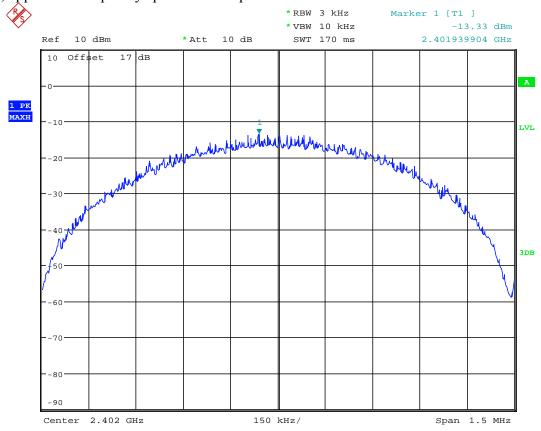
Test equipment used: ETSTW-RE 055, ETSTW-RE 050

FCC ID: 2AKE4DTHA2

## 3.8 Peak Power Spectral Density

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

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

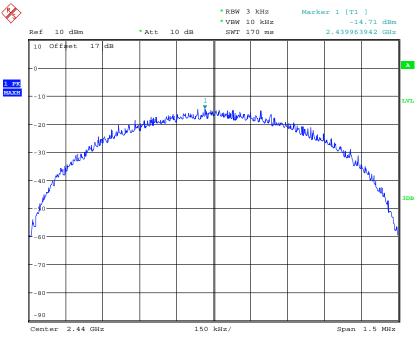


POWER DENSITY BT4.0 CH00
Date: 6.SEP.2018 14:29:46

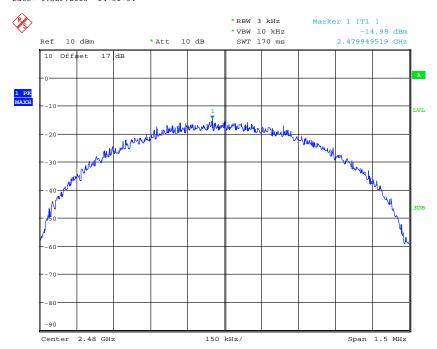


Registration number: W6M21809-18394-C-1

FCC ID: 2AKE4DTHA2



POWER DENSITY BT4.0 CH19
Date: 6.SEP.2018 14:31:34



POWER DENSITY BT4.0 CH39
Date: 6.SEP.2018 14:32:40



Registration number: W6M21809-18394-C-1 FCC ID: 2AKE4DTHA2

Limits:

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

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



Registration number: W6M21809-18394-C-1

FCC ID: 2AKE4DTHA2

#### 3.9 Radiated Emission from Receiver Part

Model: DTHA2 Date: -
Mode: -- Temperature: -- °C Engineer: --

Polarization: -- Humidity: -- %

1 0101120111				110111110110		, 0		
Frequency (MHz)	Reading (dBuV)	Detector	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Table Degree (Deg.)	Ant. High (cm)

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

- 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:  $30-1000 \text{ MHz} = \pm 3.57 \text{ dB}$ ,  $1-18 \text{ GHz} = \pm 2.60 \text{ dB}$ ,  $18-40 \text{ GHz} = \pm 2.58 \text{ dB}$ ; Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k=2.
- 6. Please refer to separated test report no.: W6M21809-18394-P-15B.



FCC ID: 2AKE4DTHA2

#### 3.10 Power Line Conducted Emission

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

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

	Model:	DTHA2 Date:		-					
	Mode:		Te	mperature	:	°C	Er	ngineer:	
P	olarization:	N	H	Iumidity:		%			
	Frequency	Read	ding	Factor	Res	sult	Liı	nit	Margin
		(dBuV)		(dB)	(dB	(dBuV)		uV)	_
	(MHz)	QP	Ave.	Corr.	QP	Ave.	QP	Ave.	(dB)
					1	1			
					1	1			

Polarization: L1

г									
	Frequency	Reading		Factor	Result		Liı	nit	Margin
		(dBuV)		(dB)	(dBuV)		(dBuV)		
	(MHz)	QP	Ave.	Corr.	QP	Ave.	QP	Ave.	(dB)
		1							
		1							-
		-							

#### Note:

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

#### 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: W6M21809-18394-C-1 FCC ID: 2AKE4DTHA2

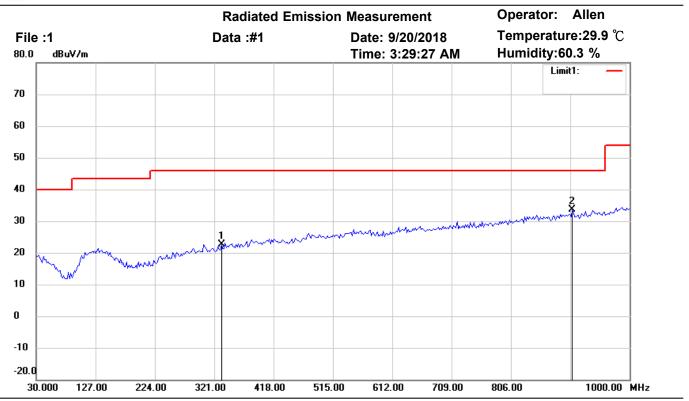
## **Appendix**

## Measurement diagrams

Radiated Emission\_TX



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Site: Chamber

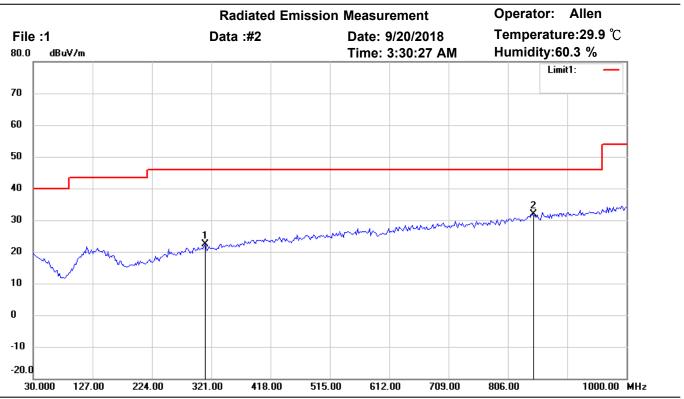
Condition: FCC\_part 15 RE-Class C\_30-1000MHz Polarization: Horizontal

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
	333.2465	27.52	peak	-4.91	22.61	46.00	100	145	-23.39	
*	906.6933	28.54	peak	4.99	33.53	46.00	100	70	-12.47	



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Site: Chamber

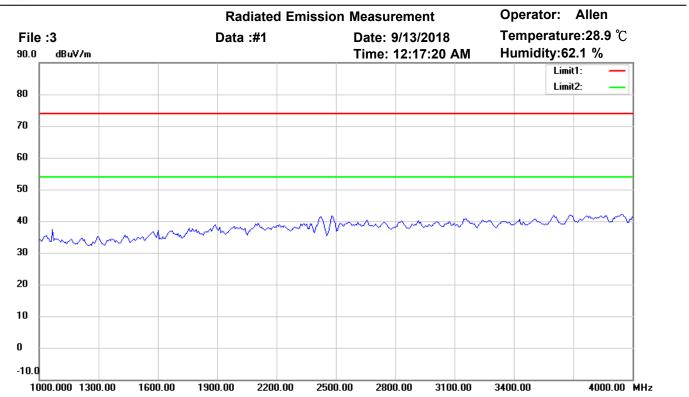
Condition: FCC\_part 15 RE-Class C\_30-1000MHz Polarization: Vertical

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
	311.8637	27.64	peak	-5.31	22.33	46.00	100	230	-23.67	
*	846.4330	27.97	peak	3.80	31.77	46.00	100	100	-14.23	



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Site: Chamber

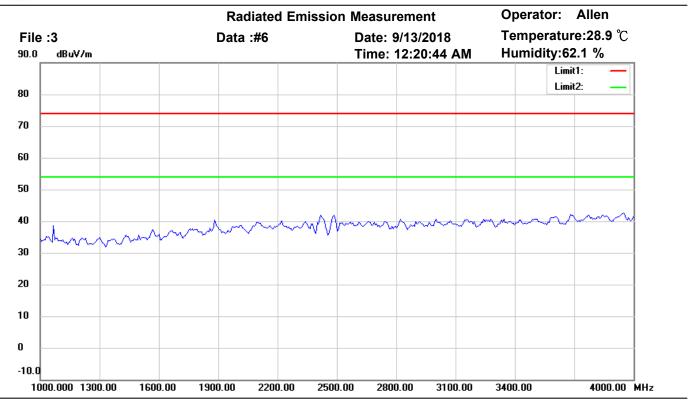
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Horizontal

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

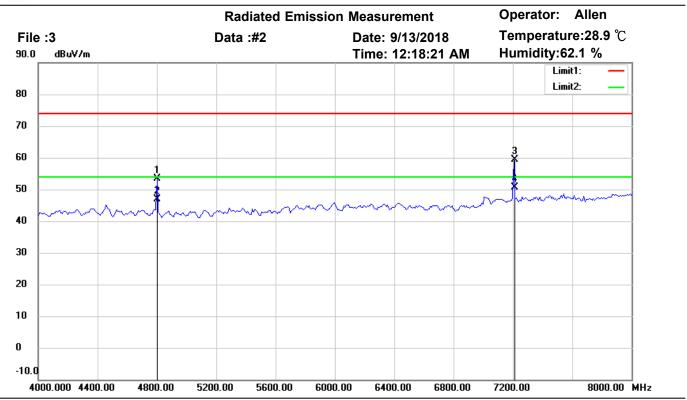
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Vertical

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

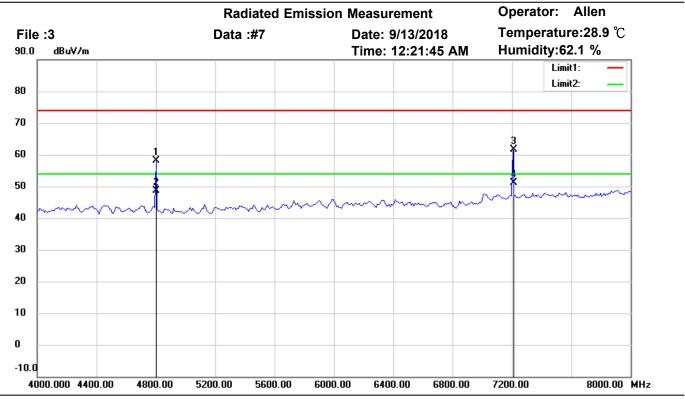
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Horizontal

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	52.57	peak	0.75	53.32	74.00	150	330	-20.68	
	4801.603	46.13	AVG	0.75	46.88	54.00	150	330	-7.12	
	7206.413	53.99	peak	5.38	59.37	74.00	150	75	-14.63	
*	7206.413	45.34	AVG	5.38	50.72	54.00	150	75	-3.28	



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Site: Chamber

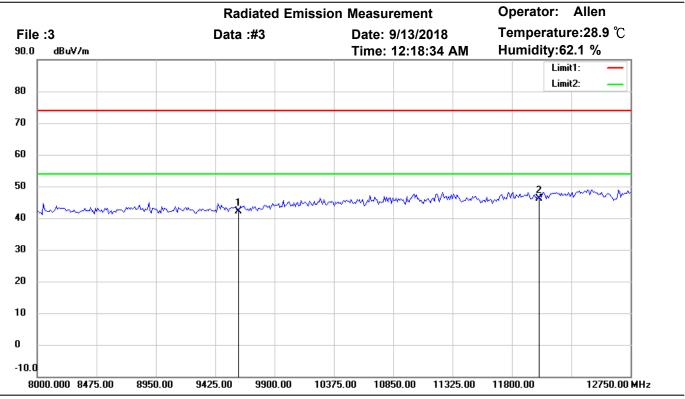
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Vertical

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
	4801.603	57.36	peak	0.75	58.11	74.00	150	120	-15.89	
	4801.603	47.81	AVG	0.75	48.56	54.00	150	120	-5.44	
	7206.413	56.32	peak	5.38	61.70	74.00	150	285	-12.30	
*	7206.413	45.79	AVG	5.38	51.17	54.00	150	285	-2.83	



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Site: Chamber

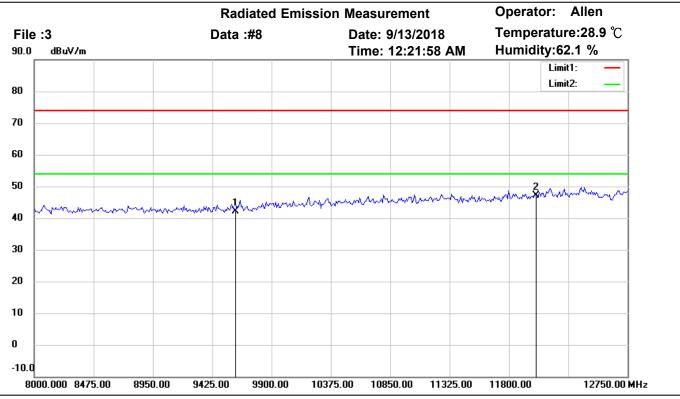
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Horizontal

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	33.82	peak	8.25	42.07	74.00	150	45	-31.93	
*	12010.000	32.69	peak	13.50	46.19	74.00	150	170	-27.81	



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Site: Chamber

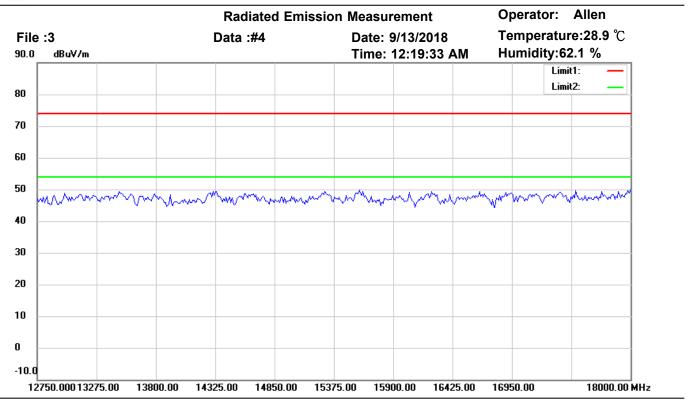
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Vertical

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	33.82	peak	8.25	42.07	74.00	150	230	-31.93	
*	12010.000	33.54	peak	13.50	47.04	74.00	150	50	-26.96	



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Site: Chamber

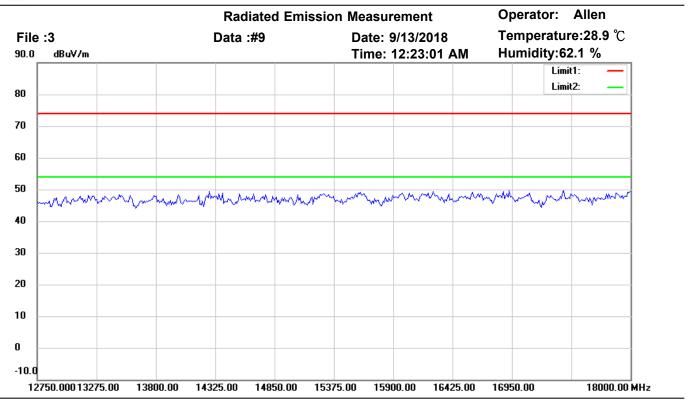
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Horizontal

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)	



Tel:+886-2-6606-8877 Fax:+886-2-6606-8875



Site: Chamber

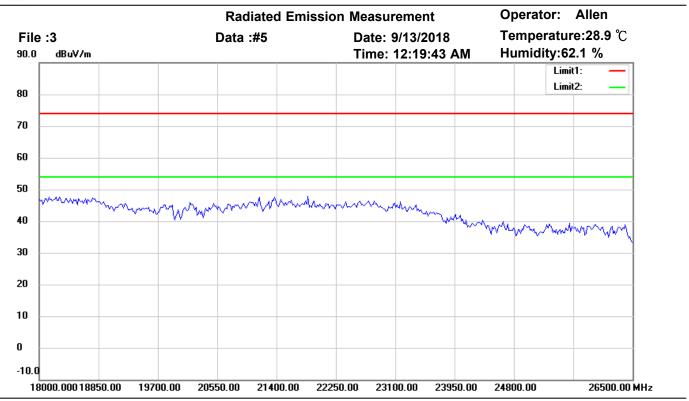
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Vertical

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

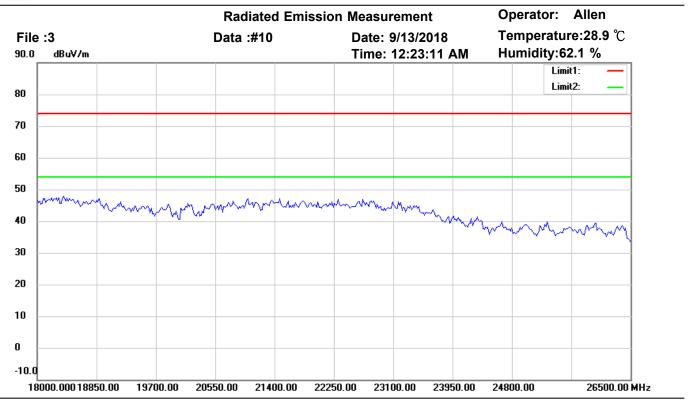
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Horizontal

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

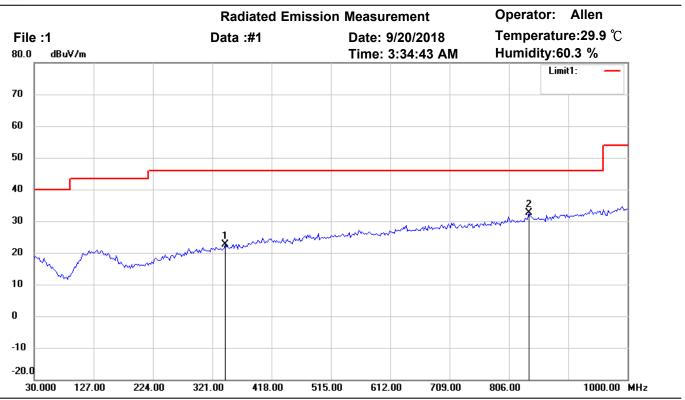
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Vertical

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

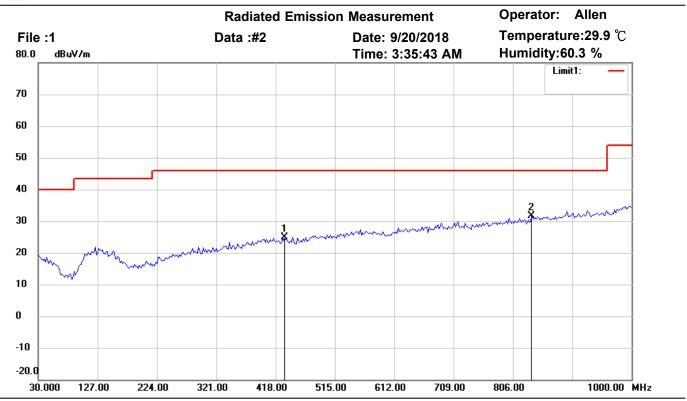
Condition: FCC\_part 15 RE-Class C\_30-1000MHz Polarization: Horizontal

Test Mode: TX 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
	342.9658	27.29	peak	-4.73	22.56	46.00	100	140	-23.44	
*	838.6572	29.13	peak	3.60	32.73	46.00	100	185	-13.27	



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Site: Chamber

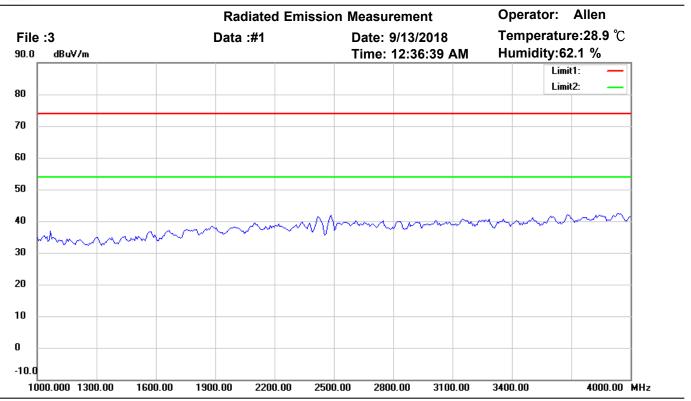
Condition: FCC\_part 15 RE-Class C\_30-1000MHz Polarization: Vertical

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
	430.4410	27.98	peak	-3.20	24.78	46.00	100	255	-21.22	
*	836.7134	28.06	peak	3.54	31.60	46.00	100	160	-14.40	



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Site: Chamber

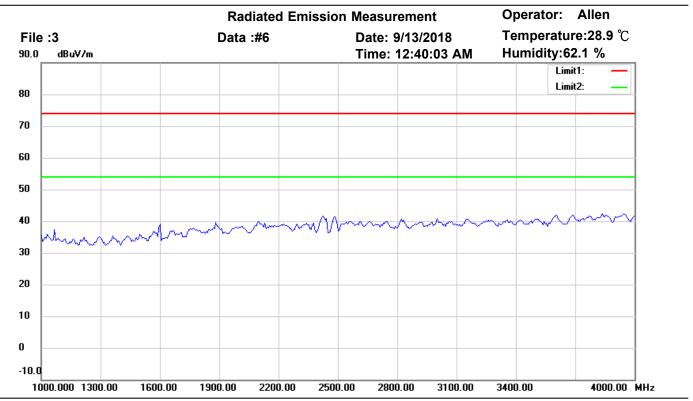
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Horizontal

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

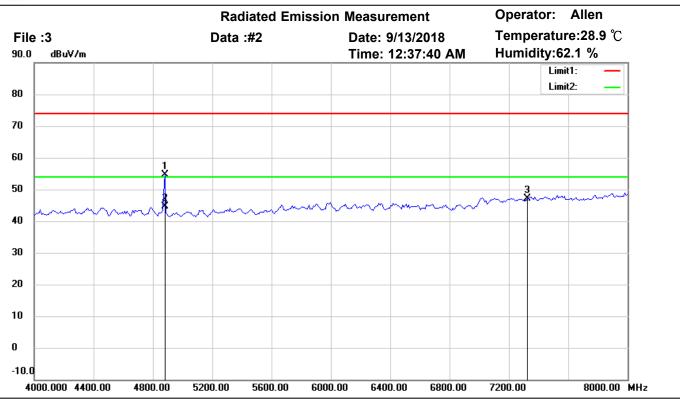
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Vertical

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

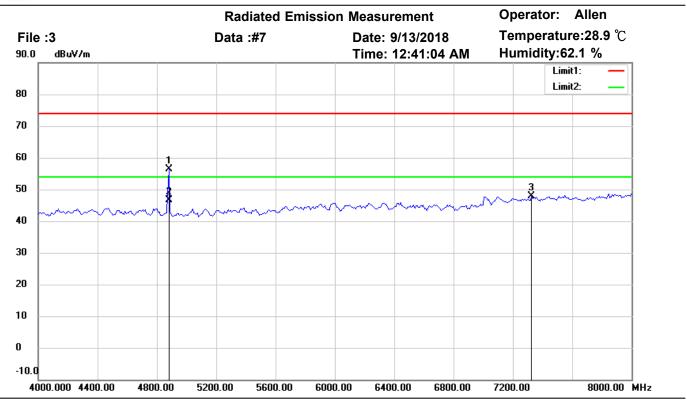
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Horizontal

Test Mode: TX 2440MHz

Mk.	Frequency (MHz)	Reading (dBuV)	Detector	Corr. factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Ant.Pos (cm)	Tab.Pos (deg.)	Margin (dB)	Comment
	4873.748	53.87	peak	0.69	54.56	74.00	150	40	-19.44	
*	4873.748	43.85	AVG	0.69	44.54	54.00	150	40	-9.46	
	7320.000	41.39	peak	5.62	47.01	74.00	150	305	-26.99	



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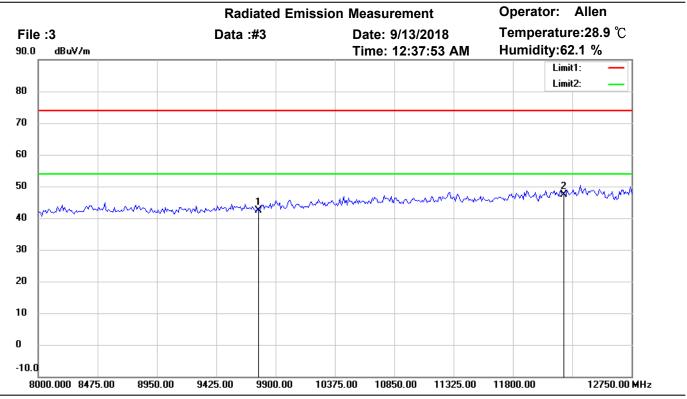
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Vertical

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
	4873.748	55.68	peak	0.69	56.37	74.00	150	145	-17.63	
*	4873.748	45.82	AVG	0.69	46.51	54.00	150	145	-7.49	
	7320.000	42.17	peak	5.62	47.79	74.00	150	130	-26.21	



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Site: Chamber

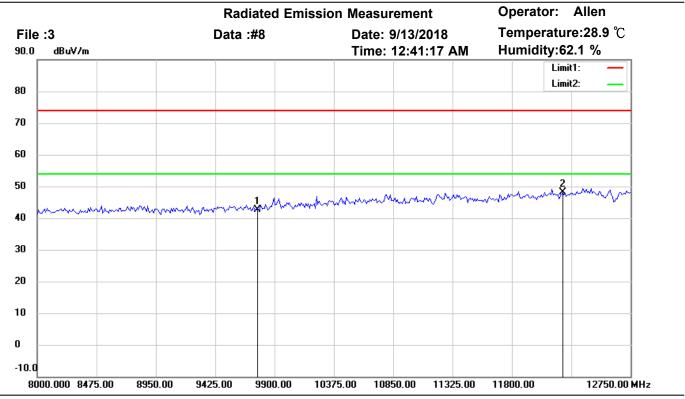
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Horizontal

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
	9760.000	33.69	peak	8.64	42.33	74.00	150	223	-31.67	
*	12200.000	32.20	peak	15.24	47.44	74.00	150	147	-26.56	



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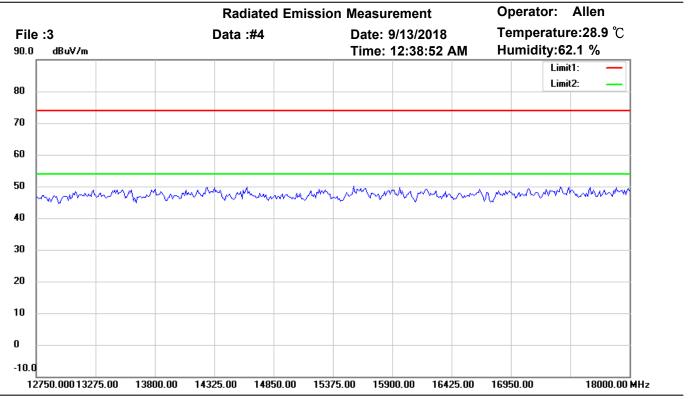
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Vertical

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	33.88	peak	8.64	42.52	74.00	150	170	-31.48	
*	12200.000	33.00	peak	15.24	48.24	74.00	150	40	-25.76	



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Site: Chamber

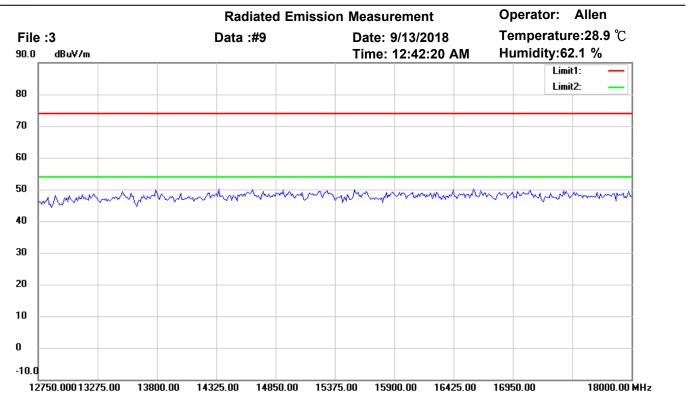
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Horizontal

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

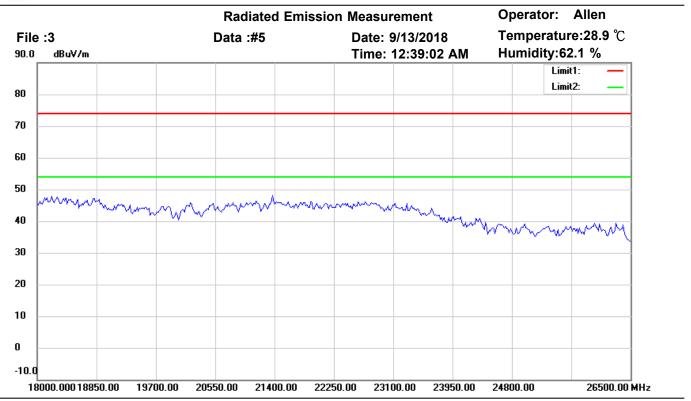
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Vertical

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

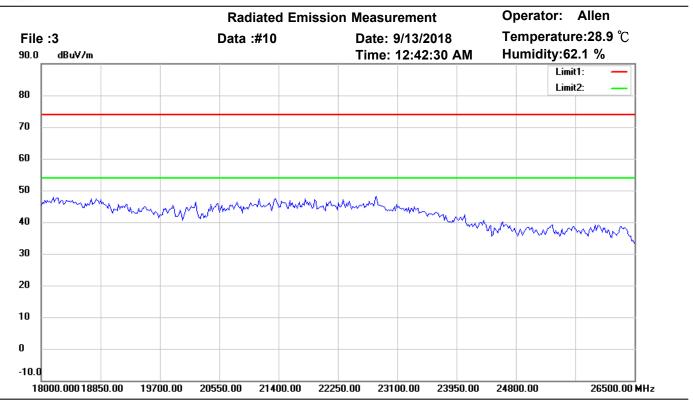
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Horizontal

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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Site: Chamber

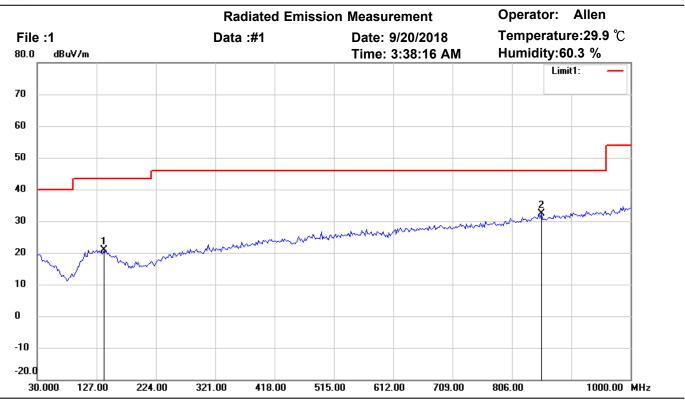
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Vertical

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

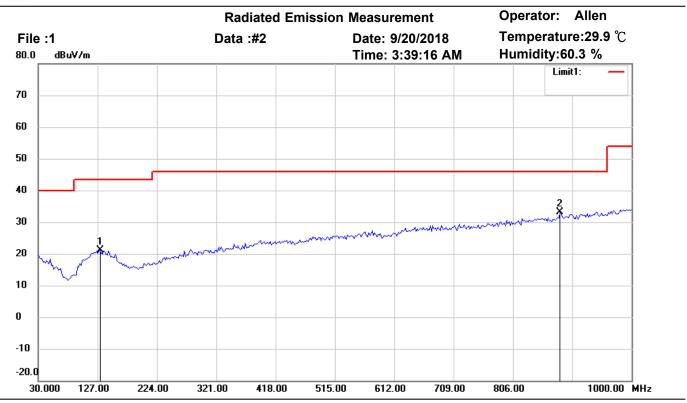
Condition: FCC\_part 15 RE-Class C\_30-1000MHz Polarization: Horizontal

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
	138.8576	27.43	peak	-6.43	21.00	43.50	100	145	-22.50	
*	854.2083	28.36	peak	3.97	32.33	46.00	100	70	-13.67	



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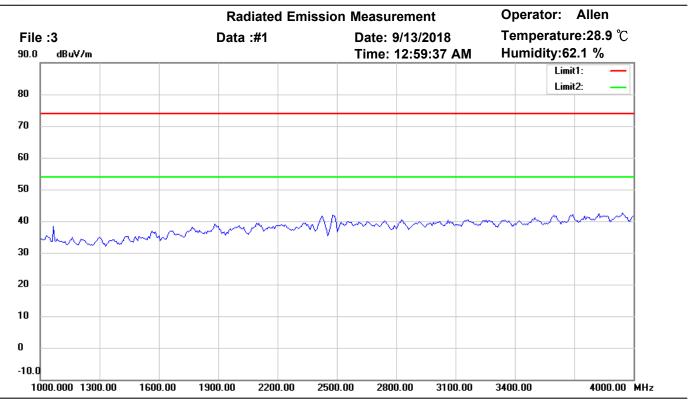
Condition: FCC\_part 15 RE-Class C\_30-1000MHz Polarization: Vertical

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
	131.0822	27.40	peak	-6.33	21.07	43.50	100	295	-22.43	
*	883.3667	28.57	peak	4.55	33.12	46.00	100	60	-12.88	



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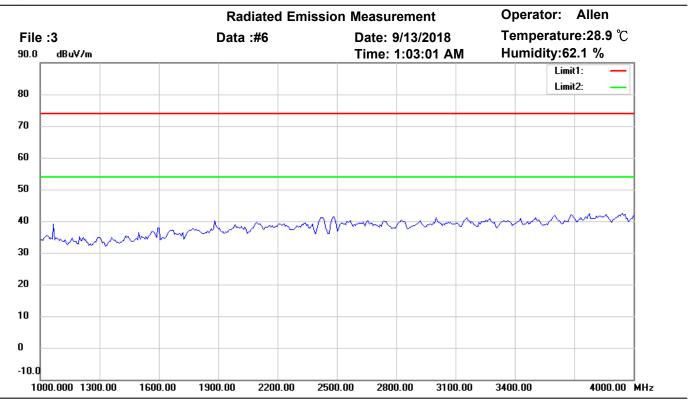
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Horizontal

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

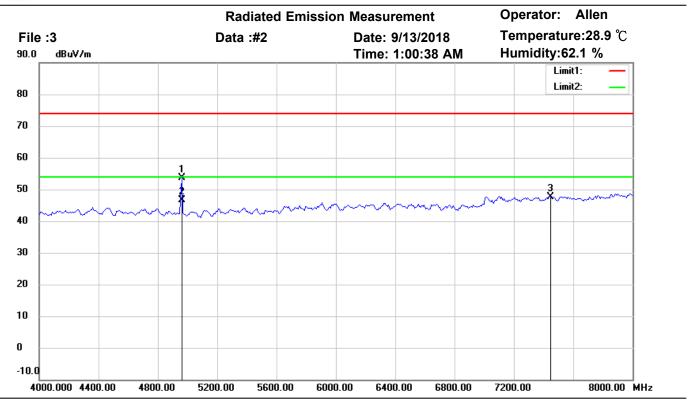
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Vertical

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

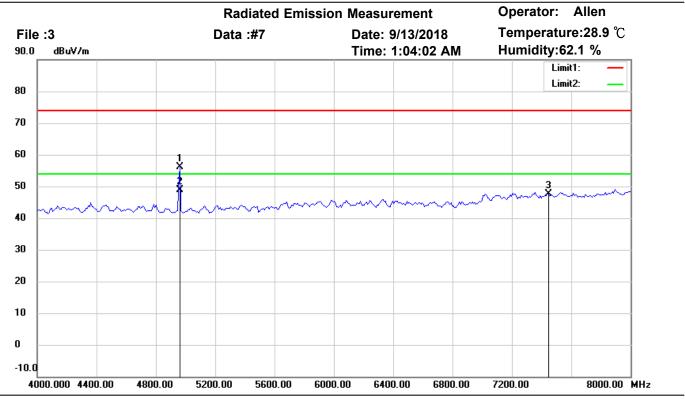
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Horizontal

Test Mode: TX 2480MHz

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	52.93	peak	0.76	53.69	74.00	150	135	-20.31	
*	4953.908	45.98	AVG	0.76	46.74	54.00	150	135	-7.26	
	7440.000	41.67	peak	5.99	47.66	74.00	150	80	-26.34	



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Site: Chamber

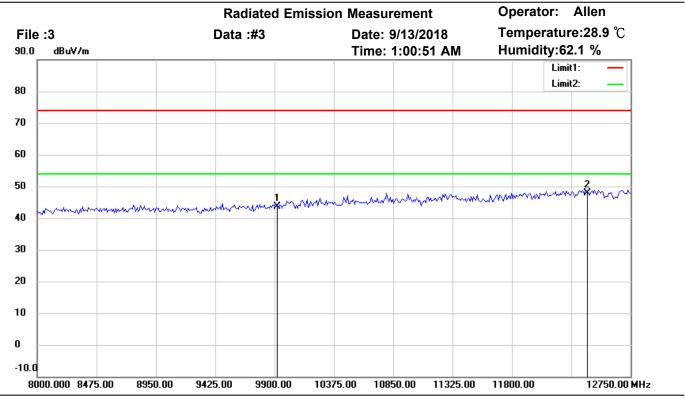
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Vertical

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	55.38	peak	0.76	56.14	74.00	150	180	-17.86	
*	4953.908	48.02	AVG	0.76	48.78	54.00	150	180	-5.22	
	7440.000	41.75	peak	5.99	47.74	74.00	150	75	-26.26	



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Site: Chamber

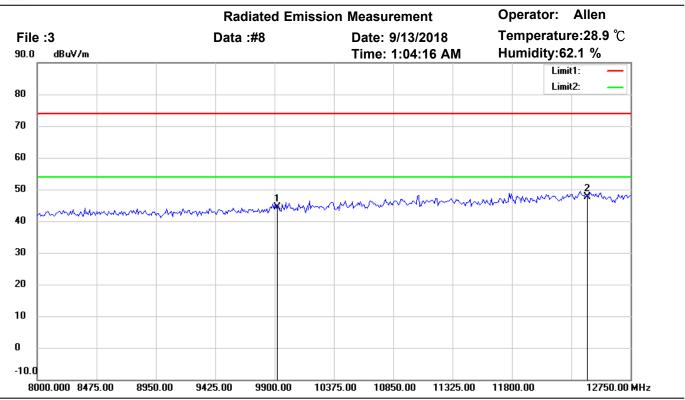
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Horizontal

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
	9920.000	33.97	peak	9.70	43.67	74.00	150	40	-30.33	
*	12400.000	32.08	peak	15.76	47.84	74.00	150	185	-26.16	



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Site: Chamber

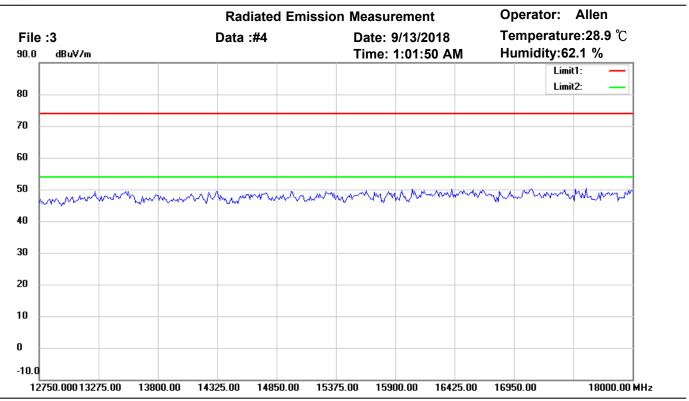
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Vertical

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
	9920.000	34.62	peak	9.70	44.32	74.00	150	80	-29.68	
*	12400.000	31.83	peak	15.76	47.59	74.00	150	295	-26.41	



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Site: Chamber

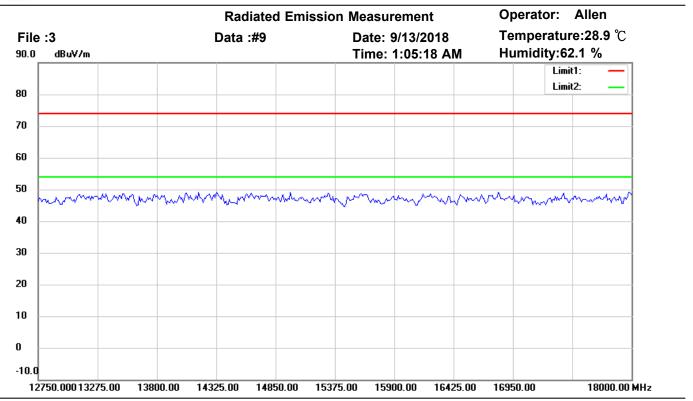
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Horizontal

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

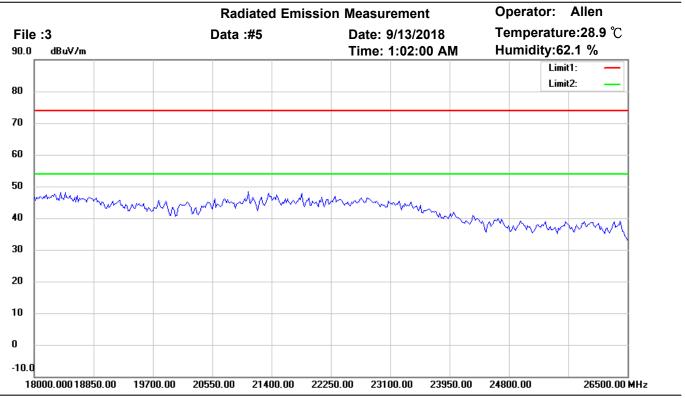
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Vertical

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

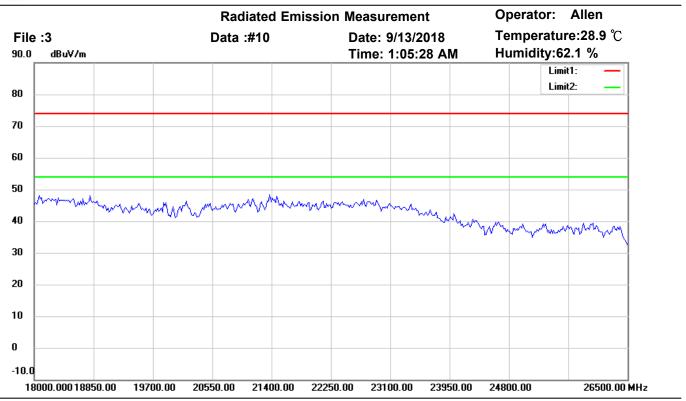
Condition: FCC\_part 15 RE-Class C\_Above 1GHz\_PK Polarization: Horizontal

Test Mode: TX 2480MHz

	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)	