

# Shenzhen Toby Technology Co., Ltd.

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# **FCC Radio Test Report** FCC ID: XMF-MID1032

## **Original Grant**

Report No. TB-FCC173946

Lightcomm Technology Co., Ltd. **Applicant** 

**Equipment Under Test (EUT)** 

**EUT Name TABLET** 

Model No. MID1032-MR

Series Model No. DL1036

**Brand Name** 

TBBJ-20200630-10-1#& TBBJ-20200630-10-2# Sample ID

**Receipt Date** 2020-07-02

**Test Date** 2020-07-03 to 2020-07-30

**Issue Date** 2020-07-30

**Standards** FCC Part 15, Subpart E 15.407

: ANSI C63.10: 2013 **Test Method** 

Conclusions **PASS** 

In the configuration tested, the EUT complied with the standards specified above,

The EUT technically complies with the FCC and IC requirements

**Test/Witness Engineer** 

**Test/Witness Engineer** 

**Approved& Authorized** 

This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in the report.

TB-RF-074-1.0

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# **Revision History**

Report No.	Version	Description	Issued Date
TB-FCC173946	Rev.01	Initial issue of report	2020-07-30
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## 1. General Information about EUT

## 1.1 Client Information

Applicant : Lightcomm Technology Co., Ltd.		Lightcomm Technology Co., Ltd.
Address : UNIT 1306 13/F ARION COMMERCIAL CENTRE,2-12 QUEEN'S ROAD WEST,SHEUNG WAN HK		
Manufacturer : Huizhou Hengdu Electronics Co., Ltd.		Huizhou Hengdu Electronics Co., Ltd.
Address : No.8 Huitai Road, Huinan High-tech Industrial Park, Huiao Huizhou, Guangdong, China		No.8 Huitai Road, Huinan High-tech Industrial Park, Huiao Avenue, Huizhou, Guangdong, China

## 1.2 General Description of EUT (Equipment Under Test)

<b>EUT Name</b>		TABLET			
Models No.	: ,	MID1032-MR, DL1036			
Model Difference	): \		All these models are identical in the same PCB, layout and electrical circuit, The only difference is model name for commercial purpose.		
	111	Operation Frequency U-NII-1: 5180M	uency: Hz~5240MHz, U-NII-3: 5745MHz~5825MHz		
		Antenna Gain:	1.15dBi FPC Antenna		
Product Description		Modulation Type:	802.11a: OFDM (QPSK, BPSK, 16QAM) 802.11n: OFDM (QPSK, BPSK, 16QAM, 64QAM) 802.11ac: OFDM (QPSK, BPSK, 16QAM, 64QAM, 256QAM)		
		Bit Rate of Transmitter:	802.11a: 6/9/12/18/24/36/48/54 Mbps 802.11n: up to 150Mbps 802.11ac: at most 433.3 Mbps		
Power Rating	9	Adapter (TEKA012-052000UK) Input: AC 100-240V, 50/60Hz Output: DC 5V 2A DC 3.8V by 5000mAh Li-ion battery			
Software Version	:	Android 10			
Hardware Version	:	MID1032MR_MT8168_LPDDR4_EMMC_V1_0			
Remark		The adapter and antenna gain provided by the applicant, the verified for the RF conduction test provided by TOBY test lab.			

#### Note:

(1) This Test Report is FCC Part 15, Subpart E(15.407) for 802.11a/n/ac, the test procedure follows the KDB 789033 D02 General U-NII Test Procedures New Rules v02r01. More detailed features description, please refer to the manufacturer's specifications or the User's Manual.



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(2) Channel List:

Frequency Band	Channel No.	Frequency	Channel No.	Frequency
5400 50401411	36	5180 MHz	44	5220 MHz
5180~5240MHz (U-NII-1)	38	5190 MHz	46	5230 MHz
(0-1411-1)	40	5200 MHz	48	5240 MHz
	42	5210 MHz		_

For 20 MHz Bandwidth, use channel 36, 40, 44, 48. For 40 MHz Bandwidth, use channel 38, 46.

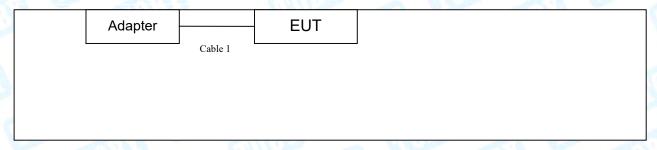
For 80 MHz Bandwidth, use channel 42.

Frequency Band	Channel No.	Frequency	Channel No.	Frequency
5745 5005NAL	149	5745 MHz	157	5785 MHz
5745~5825MHz (U-NII-3)	151	5755 MHz	159	5795 MHz
(0-1411-3)	153	5765 MHz	161	5805 MHz
	155	5775 MHz	165	5825 MHz

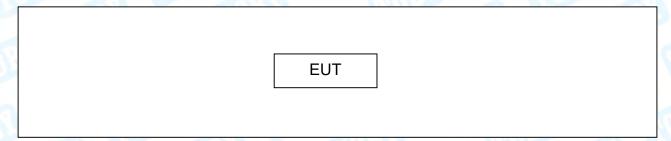
For 20 MHz Bandwidth, use channel 149, 153, 157, 161, 165. For 40 MHz Bandwidth, use channel 151, 159. For 80 MHz Bandwidth, use channel 155.

## 1.3 Block Diagram Showing the Configuration of System Tested

## **Charging + TX Mode**



#### **TX Mode**



## 1.4 Description of Support Units

The EUT has been test as an independent unit.



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### 1.5 Description of Test Mode

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned follow was evaluated respectively.

respectively.					
For Conducted Test					
Final Test Mode		Description			
1	Mode 1	Charging + TX a Mode(5180MHz)			
	For	Radiated Test Below 1GHz			
Fina	I Test Mode	Description			
	Mode 2	Charging + TX a Mode(5180MHz)			
	For I	Radiated Test Above 1GHz			
Test Band Final Test Mode		Description			
	Mode 3	TX Mode 802.11a Mode Channel 36/40/48			
	Mode 4	TX Mode 802.11n(HT20) Mode Channel 36/40/48			
U-NII-1	Mode 5	TX Mode 802.11ac(VHT20) Mode Channel 36/40/48			
U-INII- I	Mode 6	TX Mode 802.11n(HT40) Mode Channel 38/46			
	Mode 7	TX Mode 802.11ac(VHT40) Mode Channel 38/46			
33	Mode 8	TX Mode 802.11ac(VHT80) Mode Channel 42			
	Mode 9	TX Mode 802.11a Mode Channel 149/157/165			
Mar.	Mode 10	TX Mode 802.11n(HT20) Mode Channel 149/157/165			
U-NII-3	Mode 11	TX Mode 802.11ac(vHT20) Mode Channel 149/157/165			
U-INII-3	Mode 12	TX Mode 802.11n(HT40) Mode Channel 151/159			
O. H. D.	Mode13	TX Mode 802.11ac(VHT40) Mode Channel 151/159			
	Mode 14	TX Mode 802.11ac(VHT80) Mode Channel 155			

#### Note:

(1) For all test, we have verified the construction and function in typical operation. And all the test modes were carried out with the EUT in transmitting operation in maximum power with all kinds of data rate.

According to ANSI C63.10 standards, the measurements are performed at the highest, middle, lowest available channels, and the worst case data rate as follows:

802.11a Mode: OFDM (6 Mbps) 802.11n (HT20) Mode: MCS 0 802.11n (HT40) Mode: MCS 0 802.11a(VHT20) Mode: MCS 0 802.11a(VHT40) Mode: MCS 0 802.11a(VHT80) Mode: MCS 0



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(2) During the testing procedure, the continuously transmitting with the maximum power mode was programmed by the customer.

(3) The EUT is considered a portable unit; it was positioned on X-plane. The worst case was found positioned on X-plane. Therefore only the test data of this X-plane was used for radiated emission measurement test.



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## 1.6 Description of Test Software Setting

During testing channel& Power controlling software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product power parameters of WLAN.

Test Mo	de: Continuously transmitti	ng
	U-NII-1	
Mode	Frequency (MHz)	Parameters
	5180	DEF
802.11a	5200	DEF
	5240	DEF
	5180	DEF
802.11n(HT20)	5200	DEF
	5240	DEF
W. T. C.	5180	DEF
Mode 802.11a 802.11n(HT20) 802.11ac(VHT20) 802.11ac(VHT40) 802.11ac(VHT80) Mode 802.11a 802.11a 802.11a 802.11a 802.11a 802.11a	5200	DEF
	5240	DEF
902 44n/UT40\	5190	DEF
ου2. Ι Ι Ι Ι (Π Ι 4U)	5230	DEF
Mode  802.11a  802.11n(HT20)  802.11ac(VHT20)  802.11ac(VHT40)  802.11ac(VHT80)  Mode  802.11a  802.11a  802.11a	5190	DEF
002.11aC(VI114U)	5230	DEF
802.11ac(VHT80)	5210	DEF
	U-NII-3	
Mode	Frequency (MHz)	Parameters
	5745	DEF
802.11a	5785	DEF
	5825	DEF
	5745	DEF
802.11n(HT20)	5785	DEF
	5825	DEF
	5745	DEF
802.11ac(HT20)	5785	DEF
55211185(111 <b>25</b> )	5825	DEF
	5755	DEF
802.11n(HT40)	5795	DEF
		2
802.11ac(VHT40)	5755	DEF
TALL SHOW THE SHOW TH	5795	DEF



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### 1.7 Measurement Uncertainty

The reported uncertainty of measurement  $y \pm U$ , where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95 %.

Test Item	Parameters	Expanded Uncertainty (U <sub>Lab</sub> )
Conducted Emission	Level Accuracy: 9kHz~150kHz 150kHz to 30MHz	±3.50 dB ±3.10 dB
Radiated Emission	Level Accuracy: 9kHz to 30 MHz	±4.60 dB
Radiated Emission	Level Accuracy: 30MHz to 1000 MHz	±4.50 dB
Radiated Emission	Level Accuracy: Above 1000MHz	±4.20 dB

## 1.8 Test Facility

The testing was performed by the Shenzhen Toby Technology Co., Ltd., in their facilities located at:1A/F., Bldg.6, Yusheng Industrial Zone, The National Road No.107 Xixiang Section 467, Xixiang, Bao'an, Shenzhen, Guangdong, China.

At the time of testing, the following bodies accredited the Laboratory:

#### CNAS (L5813)

The Laboratory has been accredited by CNAS to ISO/IEC 17025: 2005 General Requirements for the Competence of Testing and Calibration Laboratories for the competence in the field of testing. And the Registration No.: CNAS L5813.

#### A2LA Certificate No.: 4750.01

The laboratory has been accredited by American Association for Laboratory Accreditation(A2LA) to ISO/IEC 17025: 2005 General Requirements for the Competence of Testing and Calibration Laboratories for the technical competence in the field of Electrical Testing. And the A2LA Certificate No.: 4750.01.FCC Accredited Test Site Number: 854351.

#### IC Registration No.: (11950A)

The Laboratory has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing. The site registration: Site# 11950A.



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2. Test Summary

Standard Section FCC	Test Item	Test Sample(s)	Judgment	Remark
15.203	Antenna Requirement	TBBJ-20200630-10-2#	PASS	N/A
15.207	Conducted Emission	TBBJ-20200630-10-1#	PASS	N/A
15.407(b)	Band Edge Emissions	TBBJ-20200630-10-2#	PASS	N/A
15.407(a)	26dB Bandwidth&99% Bandwidth	TBBJ-20200630-10-2#	PASS	N/A
15.407(e)	6dB Bandwidth	TBBJ-20200630-10-2#	PASS	N/A
15.407(a)	AVG Output Power	TBBJ-20200630-10-2#	PASS	N/A
15.407(a)	Power Spectral Density	TBBJ-20200630-10-2#	PASS	N/A
15.209 15.407(b)	Transmitter Radiated Spurious Emission	TBBJ-20200630-10-1# TBBJ-20200630-10-2#	PASS	N/A
15.407(a)	Peak Excursion	TBBJ-20200630-10-2#	PASS	N/A
15.407(g)	Frequency Stability	TBBJ-20200630-10-2#	PASS	N/A

# 3. Test Software

Test Item	Test Software	Manufacturer	Version No.
Conducted Emission	EZ-EMC	EZ	CDI-03A2
Radiation Emission	EZ-EMC	EZ	FA-03A2RE
RF Conducted  Measurement	MTS-8310	MWRFtest	V2.0.0.0



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# 4. Test Equipment

Conducted Emission	Test				
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
EMI Test Receiver	Rohde & Schwarz	ESCI	100321	Jul. 06, 2020	Jul. 05, 2021
RF Switching Unit	Compliance Direction Systems Inc	RSU-A4	34403	Jul. 06, 2020	Jul. 05, 2021
AMN	SCHWARZBECK	NNBL 8226-2	8226-2/164	Jul. 06, 2020	Jul. 05, 2021
LISN	Rohde & Schwarz	ENV216	101131	Jul. 06, 2020	Jul. 05, 2021
Radiation Emission T	est				
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
Spectrum Analyzer	Agilent	E4407B	MY45106456	Jul. 06, 2020	Jul. 05, 2021
EMI Test Receiver	Rohde & Schwarz	ESPI	100010/007	Jul. 06, 2020	Jul. 05, 2021
Spectrum Analyzer	Rohde & Schwarz	FSV40-N	102197	Jul. 06, 2020	Jul. 05, 2021
Bilog Antenna	ETS-LINDGREN	3142E	00117537	Mar.01, 2020	Feb. 28, 2021
Horn Antenna	ETS-LINDGREN	3117	00143207	Mar.01, 2020	Feb. 28, 2021
Horn Antenna	ETS-LINDGREN	BBHA 9170	BBHA9170582	Aug.07, 2019	Aug. 06, 2020
Loop Antenna	SCHWARZBECK	FMZB 1519 B	1519B-059	Jul. 06, 2020	Jul. 05, 2021
Pre-amplifier	Sonoma	310N	185903	Mar.01, 2020	Feb. 28, 2021
Pre-amplifier	HP	8449B	3008A00849	Mar.01, 2020	Feb. 28, 2021
Cable	HUBER+SUHNER	100	SUCOFLEX	Mar.01, 2020	Feb. 28, 2021
Positioning Controller	ETS-LINDGREN	2090	N/A	N/A	N/A
Antenna Conducted E	Emission				
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
Spectrum Analyzer	Agilent	E4407B	MY45106456	Jul. 06, 2020	Jul. 05, 2021
Spectrum Analyzer	Rohde & Schwarz	ESCI	100010/007	Jul. 06, 2020	Jul. 05, 2021
MXA Signal Analyzer	Agilent	N9020A	MY49100060	Sep. 16, 2019	Sep. 15, 2020
Vector Signal Generator	Agilent	N5182A	MY50141294	Sep. 16, 2019	Sep. 15, 2020
Analog Signal Generator	Agilent	N5181A	MY50141953	Sep. 16, 2019	Sep. 15, 2020
1	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO26	Sep. 16, 2019	Sep. 15, 2020
	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO29	Sep. 16, 2019	Sep. 15, 2020
RF Power Sensor	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO31	Sep. 16, 2019	Sep. 15, 2020



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## 5. Conducted Emission Test

### 5.1 Test Standard and Limit

5.1.1Test Standard FCC Part 15.207

#### 5.1.2 Test Limit

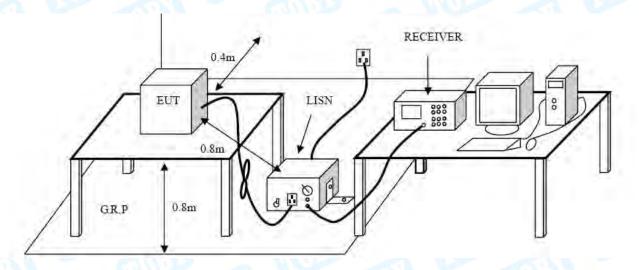
### **Conducted Emission Test Limit**

Eraguanav	Maximum RF Line Voltage (dBμV)		
Frequency	Quasi-peak Level	Average Level	
150kHz~500kHz	66 ~ 56 *	56 ~ 46 *	
500kHz~5MHz	56	46	
5MHz~30MHz	60	50	

#### Notes:

- (1) \*Decreasing linearly with logarithm of the frequency.
- (2) The lower limit shall apply at the transition frequencies.
- (3) The limit decrease in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

## 5.2 Test Setup





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#### 5.3 Test Procedure

The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/50uH of coupling impedance for the measuring instrument.

Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.

I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.

LISN at least 80 cm from nearest part of EUT chassis.

The bandwidth of EMI test receiver is set at 9kHz, and the test frequency band is from 0.15MHz to 30MHz.

#### 5.4 Deviation From Test Standard

No deviation

### 5.5 EUT Operating Mode

Please refer to the description of test mode.

#### 5.6 Test Data

Please refer to the Attachment A.



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## 6. Radiated Emission Test

### 6.1 Test Standard and Limit

6.1.1 Test Standard FCC Part 15.209

6.1.2 Test Limit

#### Radiated Emission Limits (9kHz~1000MHz)

Frequency (MHz	Field Strength (microvolt/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

### Radiated Emission Limit (Above 1000MHz)

Frequency	Distance of 3m (dBuV/m)		
(MHz)	Peak	Average	
Above 1000	74	54	

#### Note:

(1) The tighter limit applies at the band edges.

(2) Emission Level(dBuV/m)=20log Emission Level(uV/m)

#### Limits of unwanted emission out of the restricted bands

Frequency (MHz)	EIRP Limits (dBm)	Equivalent Field Strength at 3m (dBuV/m)
5150~5250	-27	68.3
5250~5350	-27	68.3
5470~5725	-27	68.3
	-27(Note 2)	68.3
	10(Note 2)	105.3
5725~5825	15.6(Note 2)	110.9
	27(Note 2)	122.3



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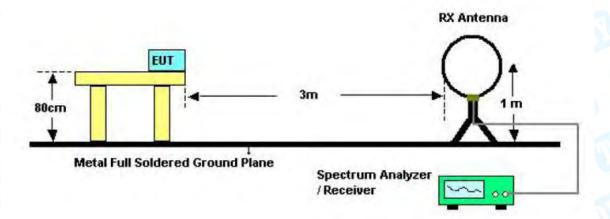
NOTE:

1, The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

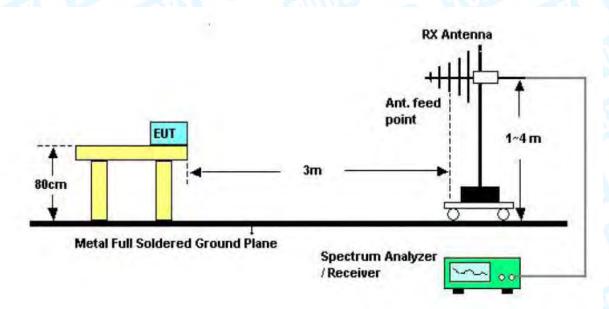
$$\mathsf{E} = \frac{1000000\sqrt{30P}}{3}\,\mathsf{uV/m},\,\mathsf{where}\;\mathsf{P}\;\mathsf{is}\;\mathsf{the\;eirp\;(Watts)}$$

2, According to FCC 16-24,All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below theband edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above orbelow the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27dBm/MHz at the band edge.

### 6.2 Test Setup



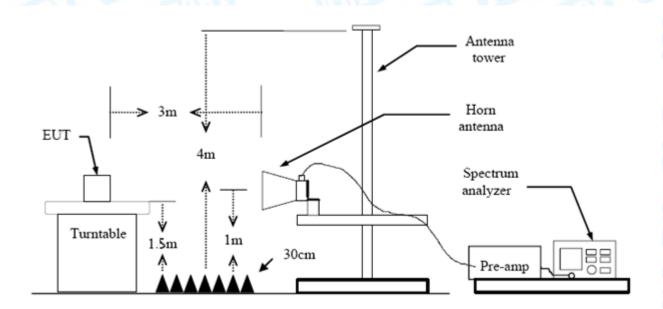
## Below 30MHz Test Setup



Below 1000MHz Test Setup



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Above 1GHz Test Setup

#### 6.3 Test Procedure

- (1) The measuring distance of 3m shall be used for measurements at frequency up to 1GHz. The EUT was placed on a rotating 0.8m high above the ground, the table was rotated 360 degrees to determine the position of the highest radiation.
- (2) Measurements at frequency above 1GHz. The EUT was placed on a rotating 1.5m high above the ground. RF absorbers covered the ground plane with a minimum area of 3.0m by 3.0m between the EUT and measurement receiver antenna. The RF absorber shall not exceed 30cm in high above the conducting floor. The table was rotated 360 degrees to determine the position of the highest radiation.
- (3) The Test antenna shall vary between 1m and 4m, Both Horizontal and Vertical Antenna 0re set to make measurement.
- (4) The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- (5) If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit Bellow 1 GHz, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed. But the Peak Value and average value both need to comply with applicable limit above 1 GHz.
- (6) Testing frequency range below 1GHz the measuring instrument use VBW=120 kHz with Quasi-peak detection.
- (7) Testing frequency range above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with Peak Detector for Peak Values, and use RBW=1 MHz and VBW=10 Hz with Peak Detector for Average Values.
- (8) For the actual test configuration, please see the test setup photo.



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### 6.4 Deviation From Test Standard

No deviation

## 6.5 EUT Operating Condition

The Equipment Under Test was set to Continual Transmitting in maximum power.

#### 6.6 Test Data

Remark: During testing above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with Peak Detector for Peak Values, and use RBW=1 MHz and VBW=10 Hz with Peak Detector for Average Values.

Please refer to the Attachment B.



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## 7. Band Edge Emissions

#### 7.1 Test Standard and Limit

7.1.1 Test Standard FCC Part 15.407(b)

#### 7.1.2 Test Limit

Limits of unwanted emission out of the restricted bands

Frequency (MHz)	EIRP Limits (dBm)	Equivalent Field Strength at 3m (dBuV/m)
5150~5250	-27	68.3
5250~5350	-27	68.3
5470~5725	-27	68.3
	-27(Note 2)	68.3
3	10(Note 2)	105.3
5725~5825	15.6(Note 2)	110.9
	27(Note 2)	122.3

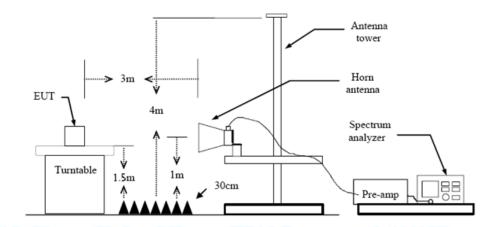
#### NOTE:

1, The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

$$\mathsf{E} = \frac{1000000\sqrt{30P}}{3}\,\mathsf{uV/m}, \,\mathsf{where}\;\mathsf{P}\;\mathsf{is}\;\mathsf{the\;eirp\;(Watts)}$$

2, According to FCC 16-24,All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below theband edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above orbelow the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27dBm/MHz at the band edge.

## 7.2 Test Setup





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#### 7.3 Test Procedure

(1) The measuring distance of 3m shall be used for measurements at frequency up to 1GHz. The EUT was placed on a rotating 0.8m high above the ground, the table was rotated 360 degrees to determine the position of the highest radiation.

- (2) Measurements at frequency above 1GHz. The EUT was placed on a rotating 1.5m high above the ground. RF absorbers covered the ground plane with a minimum area of 3.0m by 3.0m between the EUT and measurement receiver antenna. The RF absorber shall not exceed 30cm in high above the conducting floor. The table was rotated 360 degrees to determine the position of the highest radiation.
- (3) The Test antenna shall vary between 1m and 4m, Both Horizontal and Vertical Antenna 0re set to make measurement.
- (4) The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- (5) If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit Bellow 1 GHz, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed. But the Peak Value and average value both need to comply with applicable limit above 1 GHz.
- (6) Testing frequency range below 1GHz the measuring instrument use VBW=120 kHz with Quasi-peak detection.
- (7) Testing frequency range above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with Peak Detector for Peak Values, and use RBW=1 MHz and VBW=10 Hz with Peak Detector for Average Values.
- (8) For the actual test configuration, please see the test setup photo.

#### 7.4 Deviation From Test Standard

No deviation

## 7.5 EUT Operating Condition

The Equipment Under Test was set to Continual Transmitting in maximum power.

#### 7.6 Test Data

Please refer to the Attachment C.



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## 8. Bandwidth Test

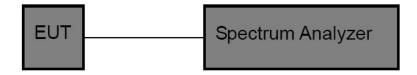
## 8.1 Test Standard and Limit

8.1.1 Test Standard FCC Part 15.407

8.1.2 Test Limit

FCC Part 15 Subpart C(15.407)/RSS-210				
Test Item	Limit	Frequency Range (MHz)		
26 Bandwidth	N/A	5150~5250		
		5250~5350		
		5500~5700		
6 dB Bandwidth	>500kHz	5725~5850		

## 8.2 Test Setup



### 8.3 Test Procedure

- (1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.
- (2) The setting of the spectrum analyser as below:

26dB Bandwidth Test			
Spectrum Parameters	Setting		
Attenuation	Auto		
Span	>26 dB Bandwidth		
RBW	Approximately 1% of the emission bandwidth		
VBW	VBW>RBW		
Detector	Peak		
Trace	Max Hold		
Sweep Time	Auto		



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6dB Bandwidth Test				
Spectrum Parameters	Setting			
Attenuation	Auto			
Span	>6 dB Bandwidth			
RBW	100 kHz			
VBW	VBW>=3*RBW			
Detector	Peak			
Trace	Max Hold			
Sweep Time	Auto			
	99% Occupied Bandwidth Test			
Spectrum Parameters	Setting			
Attenuation	Auto			
RBW	1% to 5% of the OBW			
VBW	≥ 3RBW			
Detector	Peak			
Trace	Max Hold			

## 8.4 Deviation From Test Standard

No deviation

## 8.5 EUT Operating Condition

The EUT was set to continuously transmitting in each mode and low, Middle and high channel for the test.

#### 8.6 Test Data

Please refer to the Attachment D.



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## 9. Output Power Test

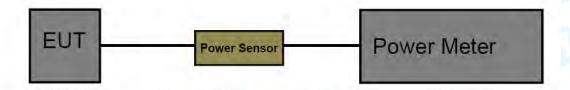
#### 9.1 Test Standard and Limit

9.1.1 Test Standard FCC Part 15.407 (a)

#### 9.1.2 Test Limit

FCC Part 15 Subpart E(15.407)/RSS-210					
Test Item	Limit	Frequency Range(MHz)			
	Fixed: 1 Watt (30dBm) Mobile and Portable: 250mW (24dBm)	5150~5250			
Conducted Output Power	250mW (24dBm)	5250~5350			
	250mW (24dBm)	5500~5700			
	1 Watt (30dBm)	5725~5850			

## 9.2 Test Setup



#### 9.3 Test Procedure

The measurement is according to section 3 of KDB 789033 D02 General U-NII Test Procedures New Rules v02r01.

The EUT was connected to RF power meter via a broadband power sensor as show the block above.

#### 9.4 Deviation From Test Standard

No deviation

## 9.5 EUT Operating Condition

The EUT was set to continuously transmitting in the max power during the test.

#### 9.6 Test Date

Please refer to the Attachment E.



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## 10. Power Spectral Density Test

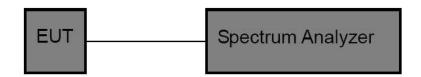
#### 10.1 Test Standard and Limit

10.1.1 Test Standard FCC Part 15.407 (a)

10.1.2 Test Limit

FCC Part 15 Subpart E(15.407)				
Test Item	Frequency Range(MHz)			
Power Spectral Density	Other than Mobile and Portable : 17dBm/MHz Mobile and Portable : 11dBm/MHz	5150~5250		
	11dBm/MHz	5250~5350		
	11dBm/MHz	5500~5700		
	30dBm/500kHz	5725~5850		

### 9.2 Test Setup



#### 10.3 Test Procedure

The EUT was directly connected to the Spectrum Analyzer and antenna output port as show in the block diagram above. The measurement is according to KDB 789033 D02 General U-NII Test Procedures New Rules v02r01.

- (1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.
  - (2) Set analyser centre frequency to transmitting frequency.
  - (3) Set the span to encompass the entire emissions bandwidth (EBW)(alternatively, the entire 99% OBW) of the signal.

(4) Set the RBW to: 1 MHz (5) Set the VBW to: 3 MHz

(6) Detector: RMS(7) Trace: Max Hold(7) Sweep time: auto

(8) Trace average at least 100 traces in power averaging.



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(9) User the peak marker function to determine the maximum amplitude level within the RBW. Apply correction to the result if different RBW is used.

### 10.4 Deviation From Test Standard

No deviation

## 10.5 EUT Operating Condition

The EUT was set to continuously transmitting in each mode and low, Middle and high channel for the test.

#### 10.6 Test Data

Please refer to the Attachment F.



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## 11. Frequency Stability Measurement

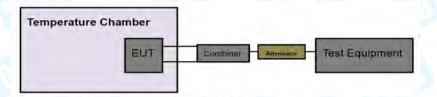
#### 11.1 Test Standard and Limit

11.1.1 Test Standard FCC Part 15.407

#### 11.1.2 Test Limit

FCC Part 15 Subpart C(15.407)					
Test Item	Limit	Frequency Range(MHz)			
The state of the s	Manufacturers of U-NII devices are responsible	5150~5250			
	for ensuring frequency stability such that an	5250~5350			
Peak Excursion  Measurement	emission is maintained within the band of	5500~5700			
	operation under all conditions of normal operation as specified in the users manual	5725~5850			

## 11.2 Test Setup



#### 11.3 Test Procedure

The EUT was directly connected to the Spectrum Analyzer and antenna output port as show in the block diagram above.

- (1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.
  - (2) Set analyser centre frequency to transmitting frequency.
  - (3) Set the span to encompass the entire emissions bandwidth (EBW) of the signal.
  - (4) Set the RBW to: 10 kHz, VBW=10 kHz with peak detector and maxhold settings.
  - (5) The test extreme voltage is to change the primary supply voltage from 85 to 115 percent of the nominal value.
  - (6) Extreme temperature is 0°C~50°C

#### 11.4 Deviation From Test Standard

No deviation



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## 11.5 EUT Operating Condition

The EUT was set to continuously transmitting in continuously un-modulation transmitting mode.

### 11.6 Test Data

Please refer to the Attachment G.



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## 12. Antenna Requirement

### 12.1 Standard Requirement

12.1.1 Standard FCC Part 15.203

#### 12.1.2 Requirement

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this Section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

### 12.2 Antenna Connected Construction

The gains of the antenna used for transmitting is 1.15dBi, and the antenna de-signed with permanent attachment and no consideration of replacement. Please see the EUT photo for details.

#### 12.3 Deviation From Test Standard

No deviation

#### 12.4 Result

The EUT antennas are FPC Antenna. It complies with the standard requirement.

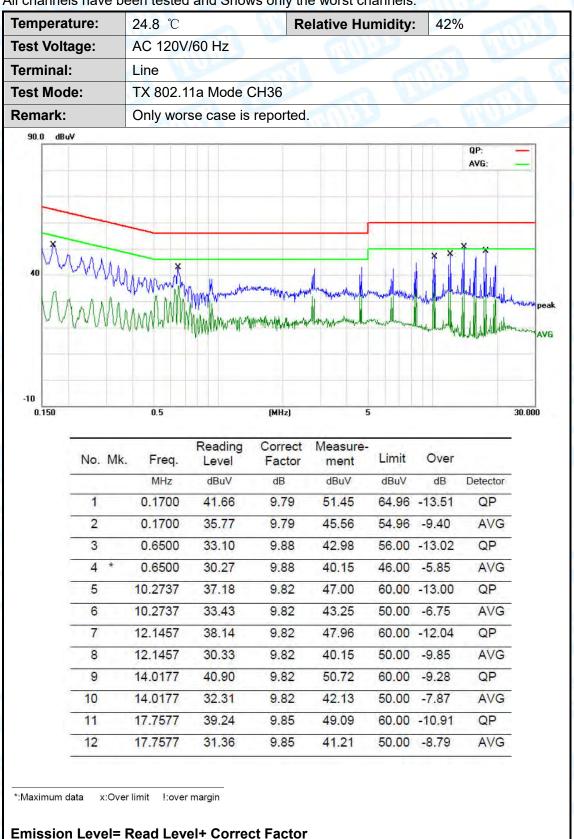
Antenna Type
☐ Permanent attached antenna
✓ Unique connector antenna
☐ Professional installation antenna





## **Attachment A-- Conducted Emission Test Data**

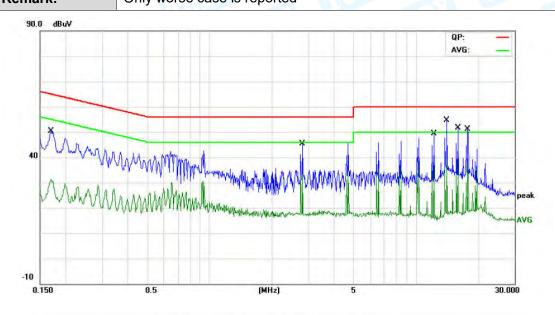
Remark: All channels have been tested and Shows only the worst channels.





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Temperature:	24.8 ℃	Relative Humidity:	42%
Test Voltage:	AC 120V/60 Hz		
Terminal:	Neutral	133	THE PARTY OF THE P
Test Mode:	TX 802.11a Mode CH36		
Remark:	Only worse case is repor	ted	



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1		0.1700	40.76	9.62	50.38	64.96	-14.58	QP
2		0.1700	40.76	9.62	50.38	54.96	-4.58	AVG
3		2.8140	35.59	9.86	45.45	56.00	-10.55	QP
4		2.8140	31.26	9.86	41.12	46.00	-4.88	AVG
5		12.2057	39.40	9.86	49.26	60.00	-10.74	QP
6	*	12.2057	35.79	9.86	45.65	50.00	-4.35	AVG
7	Τ.	14.0859	44.85	9.86	54.71	60.00	-5.29	QP
8		14.0859	31.40	9.86	41.26	50.00	-8.74	AVG
9	. 3	15.9657	41.75	9.81	51.56	60.00	-8.44	QP
10		15.9657	33.71	9.81	43.52	50.00	-6.48	AVG
11		17.8458	41.31	9.72	51.03	60.00	-8.97	QP
12		17.8458	33.80	9.72	43.52	50.00	-6.48	AVG

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



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## **Attachment B-- Radiated Emission Test Data**

#### 9 KHz~30 MHz

From 9 KHz to 30 MHz: Conclusion: PASS

Note: The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

#### 30MHz~1GHz

Temperatu	ıı <del>c</del> .	24.	6 ℃		R	elative Hur	nidity:	43%		
Test Voltaç	je:	AC	120V	//60Hz						65
Ant. Pol.		Но	rizonta	al	111		MAIN		22.9	1
Test Mode	:	TX	802.1	1a Mode s	5180MHz	(U-NII-1)		CINI		
Remark:		On	ly wor	se case is	reported				(	116
80.0 dBuV/	n									
								- [ - [		
				-			(DF)E	CC 15C 3M R	adiation	
						2-		Ma	argin -6 df	4
4								4-19	6 X	
			+++		5 X	T				
301									1	
30 1	2 X VI	No.	× 3	Lummy	* In	A widow.	MAN MORAL	moderan	Jamos	John Marie
Managara	www.	NA.	× ×	Lummy	Žund	Jana Mark	ngh phonosy	Andrew	Jhannet	
-20 30.000	40 50	60	70 80		(MHz)	30		500 600	700	1000.00
-20 30.000	40 50		Å			*		500 600 Over	700	1000.00
-20 30.000		Fi	70 80	Reading	(MH₂) Correct	30 Measure-	10 400	Over	700	
-20 30.000		. Fr	70 80 req.	Reading Level	(MH₂)  Correct Factor	30 Measure- ment	00 400 Limit	Over dB	Detec	tor
-20 30.000		. Fr M 30.6	70 80 req.	Reading Level dBuV	(MHz)  Correct Factor dB/m	Measure- ment dBuV/m	Limit	Over dB -13.60	Detec	tor
-20 30.000		Fi M 30.6	70 80 req.	Reading Level dBuV 39.83	(MHz)  Correct Factor dB/m -13.43	Measure- ment dBuV/m 26.40	Limit dBuV/m 40.00	Over  dB  -13.60  -15.52	Detec QF QF	tor
-20 30.000 N		30.6 49.0 77.8	70 80 req. 1Hz 3379	Reading Level dBuV 39.83 47.22	Correct Factor dB/m -13.43 -22.74	Measure- ment dBuV/m 26.40 24.48	Limit dBuV/m 40.00 40.00	Over  -13.60  -15.52  -15.97	Detection QF	tor
-20 30.000 N 1 2 3		Fr M 30.6 49.0 77.8 138.	70 80 req. IHz 6379 0145 8654	Reading Level dBuV 39.83 47.22 46.69	(MH₂)  Correct Factor dB/m -13.43 -22.74 -22.66	Measure- ment dBuV/m 26.40 24.48 24.03	Limit dBuV/m 40.00 40.00	Over  dB  -13.60  -15.52  -15.97  -19.96	Detection QF	tor

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



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_							
Tempe	rature:	<b>24.6</b> ℃	Relative Humidity:	43%			
Test V	oltage:	AC 120V/60Hz		THUE			
Ant. P	ol.	Vertical					
Test M	ode:	TX 802.11a Mode 5180MHz (U-NII-1)					
Remai	·k:	Only worse case is repor	ted.	1/193			



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		31.5095	47.10	-14.08	33.02	40.00	-6.98	QP
2	*	46.6664	56.91	-21.96	34.95	40.00	-5.05	QP
3		77.3212	53.39	-22.71	30.68	40.00	-9.32	QP
4		140.3421	53.19	-22.35	30.84	43.50	-12.66	QP
5		183.2005	51.92	-20.01	31.91	43.50	-11.59	QP
6		665.8035	41.19	-7.59	33.60	46.00	-12.40	QP
6		665.8035	41.19	-7.59	33.60	46.00	-1	2.40

<sup>\*:</sup>Maximum data x:Over limit !:over margin



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5180MHz-5240MHz(U-NII-1)

Temperature:	<b>25</b> ℃	Relative Humidity:	55%
Test Voltage:	DC 3.8V	(1) T	Min a
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11a Mode 5180M	1Hz (U-NII-1)	1
Remark:	No report for the emissio	n which more than 10 o	dB below the
	prescribed limit. Only wo	rse case is reported.	

No	. Mk	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	10359.171	24.41	20.50	44.91	54.00	-9.09	AVG
2		10359.735	34.88	20.50	55.38	68.30	-12.92	peak



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Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.8V		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11a Mode 5180M	IHz (U-NII-1)	
Remark:	No report for the emission	n which more than 10 o	dB below the
	prescribed limit. Only wor	rse case is reported.	

No	. M	k.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
			MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	10	0360.949	23.73	20.50	44.23	54.00	-9.77	AVG
2		10	0361.011	34.61	20.50	55.11	68.30	-13.19	peak



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			E. 11 1 1 1 2 2
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.8V	(1) T	MODE
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11a Mode 5200M	IHz (U-NII-1)	
Remark:	No report for the emissio	n which more than 10 o	dB below the
	prescribed limit.		

No	. Mk	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	10399.738	23.32	20.56	43.88	54.00	-10.12	AVG
2		10401.421	33.84	20.56	54.40	68.30	-13.90	peak



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ì	Temperature:	25 ℃	Relative Humidity:	55%			
	Test Voltage:	DC 3.8V	(1) T				
	Ant. Pol.	Vertical					
	Test Mode:	TX 802.11a Mode 5200MHz (U-NII-1)					
	Remark:	No report for the emission which more than 10 dB below the					
		prescribed limit.					

No. N		. Freq.	Reading Level	Correct Factor		Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	10399.377	38.08	20.56	58.64	68.30	-9.66	peak
2		10399.377	19.80	20.56	40.36	54.00	-13.64	AVG



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Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.8V	(B)	THE STATE OF
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11a Mode 5240M	IHz (U-NII-1)	7
Remark:	No report for the emissio	n which more than 10 o	dB below the
	prescribed limit.		

No.	Mk	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	10479.838	23.55	20.68	44.23	54.00	-9.77	AVG
2		10481.708	34.25	20.68	54.93	68.30	-13.37	peak



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			E 111111
Temperature:	<b>25</b> ℃	Relative Humidity:	55%
Test Voltage:	DC 3.8V		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11a Mode 5240M	1Hz (U-NII-1)	- D
Remark:	No report for the emissio	n which more than 10	dB below the
	prescribed limit.		

No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		10480.125	34.14	20.68	54.82	68.30	-13.48	peak
2	*	10481.733	23.45	20.68	44.13	54.00	-9.87	AVG



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Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.8V		
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11n(HT20) Mode	5180MHz (U-NII-1)	
Remark:	No report for the emissio	n which more than 10	dB below the
	prescribed limit.		

No	. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	10358.030	22.92	20.50	43.42	54.00	-10.58	AVG
2		10358.990	33.66	20.50	54.16	68.30	-14.14	peak



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Temperature	e: 25 °C	Relative Humidity:	55%
Test Voltage	: DC 3.8V		Min and
Ant. Pol.	Vertical		
Test Mode:	TX 802.11n(HT20) Mod	le 5180MHz (U-NII-1)	TO THE
Remark:	No report for the emiss	ion which more than 10	dB below the
	prescribed limit.	10 m	

No	. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		10360.287	34.49	20.50	54.99	68.30	-13.31	peak
2	*	10361.509	24.36	20.50	44.86	54.00	-9.14	AVG



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Temperature:	<b>25</b> ℃	Relative Humidity:	55%
Test Voltage:	DC 3.8V		
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11n(HT20) Mode	5200MHz (U-NII-1)	
Remark:	No report for the emissio	n which more than 10 o	dB below the
	prescribed limit.		

No	. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	10398.865	23.60	20.56	44.16	54.00	-9.84	AVG
2		10399.177	33.92	20.56	54.48	68.30	-13.82	peak



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Temperature:	<b>25</b> ℃	Relative Humidity:	55%
Test Voltage:	DC 3.8V		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11n(HT20) Mode	5200MHz (U-NII-1)	- The same
Remark:	No report for the emissio	n which more than 10 o	dB below the
	prescribed limit.		

No	. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	10400.673	23.86	20.56	44.42	54.00	-9.58	AVG
2		10401.870	33.74	20.56	54.30	68.30	-14.00	peak



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			E. (1.1.1.1.1.2)
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.8V	133	
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11n(HT20) Mode	5240MHz (U-NII-1)	- The same
Remark:	No report for the emission	n which more than 10 o	dB below the
	prescribed limit.	- a W	

No.	. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		10480.374	34.35	20.68	55.03	68.30	-13.27	peak
2	*	10480.611	23.68	20.68	44.36	54.00	-9.64	AVG



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Temperature:	25 ℃	Relative Humidity:	55%		
Test Voltage:	DC 3.8V	(B)			
Ant. Pol.	Vertical				
Test Mode:	TX 802.11n(HT20) Mode	TX 802.11n(HT20) Mode 5240MHz (U-NII-1)			
Remark:	No report for the emissio	n which more than 10 o	dB below the		
	prescribed limit.				

No	. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		10480.536	33.69	20.68	54.37	68.30	-13.93	peak
2	*	10480.586	22.87	20.68	43.55	54.00	-10.45	AVG



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Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.8V	033	
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11ac(VHT20) Mo	de 5180MHz (U-NII-1)	
Remark:	No report for the emissio	n which more than 10	dB below the
	prescribed limit.	- a U	

No	. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		10360.820	34.05	20.68	54.73	68.30	-13.57	peak
2	*	10360.120	23.42	20.68	44.10	54.00	-9.90	AVG



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			E. Al A V Ma
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.8V	033	
Ant. Pol.	Vertical		
Test Mode:	TX 802.11ac(VHT20) Mo	de 5180MHz (U-NII-1)	
Remark:	No report for the emission	n which more than 10 o	dB below the
	prescribed limit.		

No.	Mk	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	10360.878	23.02	20.68	43.70	54.00	-10.30	AVG
2		10360.998	34.46	20.68	55.14	68.30	-13.16	peak
2	_	10300.990	34.40	20.00	33.14	00.30	-10.	10



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Temperature:	<b>25</b> ℃	Relative Humidity:	55%			
Test Voltage:	DC 3.8V	(B) - (	THE STATE OF			
Ant. Pol.	Horizontal					
Test Mode:	TX 802.11ac(VHT20) Mo	TX 802.11ac(VHT20) Mode 5200MHz (U-NII-1)				
Remark:	No report for the emissio	No report for the emission which more than 10 dB below the				
	prescribed limit.	- O				

No	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		10400.703	34.66	20.68	55.34	68.30	-12.96	peak
2	*	10400.414	23.85	20.68	44.53	54.00	-9.47	AVG



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Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.8V	(1) T	
Ant. Pol.	Vertical		
Test Mode:	TX 802.11ac(VHT20) Mo	de 5200MHz (U-NII-1)	
Remark:	No report for the emission	n which more than 10 o	dB below the
	prescribed limit.	- a U	

No. M	. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	10400.606	23.48	20.67	44.15	54.00	-9.85	AVG
2		10400.030	34.46	20.68	55.14	68.30	-13.16	peak



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Ì	Temperature:	25 ℃	Relative Humidity:	55%		
	Test Voltage:	DC 3.8V	(1) T			
	Ant. Pol.	Horizontal				
	Test Mode:	TX 802.11 ac(VHT20) Mode 5240MHz (U-NII-1)				
	Remark:	No report for the emission which more than 10 dB below the				
١		prescribed limit.				

No. Mk.	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	10478.616	23.30	20.68	43.98	54.00	-10.02	AVG
2		10482.481	33.69	20.68	54.37	68.30	-13.93	peak



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Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.8V	(1) T	
Ant. Pol.	Vertical		
Test Mode:	TX 802.11ac(VHT20) Mo	de 5240MHz (U-NII-1)	
Remark:	dB below the		
	prescribed limit.	- a U	

No	. Mk	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	10478.678	23.59	20.68	44.27	54.00	-9.73	AVG
2	- 1	10480.973	34.19	20.68	54.87	68.30	-13.43	peak



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Temperature:	25 ℃	Relative Humidity:	55%		
Test Voltage:	DC 3.8V	133			
Ant. Pol.	Horizontal				
Test Mode:	TX 802.11n(HT40) Mode 5190MHz (U-NII-1)				
Remark:	No report for the emission	n which more than 10 o	dB below the		
	prescribed limit.				

No	. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		10380.529	34.03	20.68	54.71	68.30	-13.59	peak
2	*	10380.641	23.33	20.68	44.01	54.00	-9.99	AVG



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Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	DC 3.8V	(1)33 - (	MOD			
Ant. Pol.	Vertical	ertical				
Test Mode: TX 802.11n(HT40) Mode 5190MHz (U-NII-1)						
Remark:	No report for the emissio	report for the emission which more than 10 dB below the				
	prescribed limit.					

No	. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	10380.855	23.59	20.67	44.26	54.00	-9.74	AVG
2		10380.332	35.42	20.68	56.10	68.30	-12.20	peak



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Temperature:	25 ℃	Relative Humidity:	55%		
Test Voltage:	DC 3.8V	(1) T			
Ant. Pol.					
Test Mode:	TX 802.11n(HT40) Mode	ode 5230MHz (U-NII-1)			
Remark:	dB below the				
	prescribed limit.				

No	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	10460.591	22.91	20.68	43.59	54.00	-10.41	AVG
2		10460.810	33.74	20.68	54.42	68.30	-13.88	peak



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			E. M. M. Marie			
Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	DC 3.8V	133				
Ant. Pol.	Vertical					
Test Mode:	TX 802.11n(HT40) Mode 5230MHz (U-NII-1)					
Remark:	No report for the emission	n which more than 10 o	dB below the			
	prescribed limit.					

No	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		10460.506	34.26	20.67	54.93	68.30	-13.37	peak
2	*	10460.065	23.02	20.68	43.70	54.00	-10.30	AVG



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Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.8V	(1) T	
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11ac(VHT40) Mo	de 5190MHz (U-NII-1)	
Remark:	No report for the emissio	n which more than 10 o	dB below the
	prescribed limit.	- a U	

No	Mk	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	10380.766	22.93	20.68	43.61	54.00	-10.39	AVG
2		10380.738	34.40	20.68	55.08	68.30	-13.22	peak



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			E. Al A V Ma
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.8V	033	
Ant. Pol.	Vertical		
Test Mode:	TX 802.11ac(VHT40) Mo	de 5190MHz (U-NII-1)	
Remark:	No report for the emission	n which more than 10 o	dB below the
	prescribed limit.	- O	

No	. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		10380.978	35.21	20.68	55.89	68.30	-12.41	peak
2	*	10380.100	23.59	20.68	44.27	54.00	-9.73	AVG



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Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.8V	(1) T	Min and
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11ac(VHT40) Mo	de 5230MHz (U-NII-1)	TO THE PARTY OF TH
Remark:	No report for the emissio	n which more than 10 o	dB below the
	prescribed limit.		

No	. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	10460.077	23.96	20.68	44.64	54.00	-9.36	AVG
2	- 1	10460.661	35.16	20.68	55.84	68.30	-12.46	peak



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Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.8V	(1) T	MOD TO
Ant. Pol.	Vertical		
Test Mode:	TX 802.11ac(VHT40) Mo	de 5230MHz (U-NII-1)	
Remark:	No report for the emissio	n which more than 10 o	dB below the
	prescribed limit.		

No	. Mk. Freq.	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		10460.551	34.58	20.68	55.26	68.30	-13.04	peak
2	*	10460.322	22.88	20.68	43.56	54.00	-10.44	AVG



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Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.8V	(1) T	Mary To
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11ac(VHT80) Mo	de 5210MHz (U-NII-1)	
Remark:	No report for the emissio	n which more than 10 o	dB below the
	prescribed limit.	- a U	

	Over	Limit	Measure- ment	Correct Factor	Reading Level	Freq.	Mk.	No.
Detecto	dB	dBuV/m	dBuV/m	dB/m	dBuV	MHz		
peak	-12.44	68.30	55.86	20.68	35.18	0420.127	1	1
AVG	-9.59	54.00	44.41	20.68	23.73	0420.125	* 1	2



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Temperature:	<b>25</b> ℃	Relative Humidity:	55%
Test Voltage:	DC 3.8V	033	
Ant. Pol.	Vertical		
Test Mode:	TX 802.11ac(VHT80) Mo	de 5210MHz (U-NII-1)	
Remark:	No report for the emissio	n which more than 10 o	dB below the
	prescribed limit.	- O	

No	. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		10420.531	34.21	20.67	54.88	68.30	-13.42	peak
2	*	10420.222	22.52	20.68	43.20	54.00	-10.80	AVG



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5745MHz-5825MHz(U-NII-3)

	( )		
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.8V	(1) T	
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11a Mode 5745M	1Hz (U-NII-3)	
Remark:	No report for the emissio	n which more than 10 o	dB below the
	prescribed limit.		

No	. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	11488.631	19.73	21.81	41.54	54.00	-12.46	AVG
2		11488.930	29.68	21.81	51.49	68.30	-16.81	peak



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			E 111111
Temperature:	<b>25</b> ℃	Relative Humidity:	55%
Test Voltage:	DC 3.8V		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11a Mode 5745M	1Hz (U-NII-3)	- D
Remark:	No report for the emissio	n which more than 10	dB below the
	prescribed limit.		

No	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	11488.661	19.56	21.81	41.37	54.00	-12.63	AVG
2		11488.945	30.63	21.81	52.44	68.30	-15.86	peak



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Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.8V		
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11a Mode 5785M	IHz (U-NII-3)	TO THE
Remark:	No report for the emissio	n which more than 10 o	dB below the
	prescribed limit.		

No	. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	11569.147	20.68	21.88	42.56	54.00	-11.44	AVG
2		11570.883	30.73	21.88	52.61	68.30	-15.69	peak



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Temperature:	<b>25</b> ℃	Relative Humidity:	55%
Test Voltage:	DC 3.8V	(1) T	MOD TO
Ant. Pol.	Vertical		
Test Mode:	TX 802.11a Mode 5785M	IHz (U-NII-3)	1
Remark:	No report for the emissio	n which more than 10 o	dB below the
	prescribed limit.		

No	. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	11569.454	21.89	21.88	43.77	54.00	-10.23	AVG
2		11571.496	30.98	21.88	52.86	68.30	-15.44	peak



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			E. M. M. Marie
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.8V		
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11a Mode 5825M	IHz (U-NII-3)	- The same
Remark:	No report for the emissio	n which more than 10 o	dB below the
	prescribed limit.		

No	. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	11648.818	19.63	21.96	41.59	54.00	-12.41	AVG
2		11650.973	31.09	21.96	53.05	68.30	-15.25	peak



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			E 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.8V		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11a Mode 5825M	IHz (U-NII-3)	- The same
Remark:	No report for the emissio	n which more than 10 o	dB below the
	prescribed limit.		

No	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		11648.818	29.90	21.96	51.86	68.30	-16.44	peak
2	*	11650.052	21.49	21.96	43.45	54.00	-10.55	AVG



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	Temperature:	25 ℃	Relative Humidity:	55%			
	Test Voltage:	DC 3.8V	(1) T				
	Ant. Pol.	Horizontal					
f	Test Mode:	TX 802.11n(HT20) Mode 5745MHz (U-NII-3)					
	Remark:	No report for the emission which more than 10 dB below the					
		prescribed limit.					

No	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	11488.706	21.13	21.81	42.94	54.00	-11.06	AVG
2		11489.888	31.75	21.81	53.56	68.30	-14.74	peak



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Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	DC 3.8V	(1)3 T	MOD TO			
Ant. Pol.	Vertical					
Test Mode:	TX 802.11n(HT20) Mode	5745MHz (U-NII-3)				
Remark:	No report for the emissio	n which more than 10	dB below the			
	prescribed limit.					

No	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		11488.631	29.46	21.81	51.27	68.30	-17.03	peak
2	*	11490.591	19.34	21.81	41.15	54.00	-12.85	AVG



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Temperature:	25 ℃	Relative Humidity:	55%		
Test Voltage:	DC 3.8V	(1) T			
Ant. Pol.	Horizontal				
Test Mode:	TX 802.11n(HT20) Mode 5785MHz (U-NII-3)				
Remark:	No report for the emission which more than 10 dB below the				
	prescribed limit.				

No.	. Mk	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		11570.576	30.66	21.88	52.54	68.30	-15.76	peak
2	*	11570.838	19.88	21.88	41.76	54.00	-12.24	AVG



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Temperature	e: 25 °C	Relative Humidity:	55%			
Test Voltage	: DC 3.8V		Mora			
Ant. Pol.	Vertical	Vertical				
Test Mode:	TX 802.11n(HT20) Mod	TX 802.11n(HT20) Mode 5785MHz (U-NII-3)				
Remark:	No report for the emiss	No report for the emission which more than 10 dB below the				
	prescribed limit.					

No	. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		11569.095	30.85	21.88	52.73	68.30	-15.57	peak
2	*	11569,222	20.32	21.88	42.20	54.00	-11.80	AVG



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Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.8V	(1) T	Min and
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11n(HT20) Mode	5825MHz (U-NII-3)	TO THE PARTY OF TH
Remark:	No report for the emissio	n which more than 10 o	dB below the
	prescribed limit.		

No	. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		11649.948	31.02	21.96	52.98	68.30	-15.32	peak
2	*	11651.451	20.43	21.96	42.39	54.00	-11.61	AVG



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Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	DC 3.8V	(1) T				
Ant. Pol.	Vertical					
Test Mode:	TX 802.11n(HT20) Mode 5825MHz (U-NII-3)					
Remark:	No report for the emission which more than 10 dB below the					
	prescribed limit.					

No	. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		11650.419	30.51	21.96	52.47	68.30	-15.83	peak
2	*	11650.606	20.36	21.96	42.32	54.00	-11.68	AVG



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			E. 11 1 1 1 2
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.8V	(1) T	
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11ac(VHT20) Mo	de 5745MHz (U-NII-3)	
Remark:	No report for the emission	n which more than 10 o	dB below the
	prescribed limit.	- a U	

No.	Mk.	Mk. Freq.	Reading Correct Level Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	11490.808	20.35	21.81	42.16	54.00	-11.84	AVG
2		11491.055	30.78	21.81	52.59	68.30	-15.71	peak



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			E. 11 1 1 1 2			
Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	DC 3.8V	(1) T				
Ant. Pol.	Vertical					
Test Mode:	TX 802.11ac(VHT20) Mo	de 5745MHz (U-NII-3)				
Remark:	No report for the emission which more than 10 dB below the					
	prescribed limit.	- a U				

No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		11488.818	29.94	21.81	51.75	68.30	-16.55	peak
2	*	11489.461	19.36	21.81	41.17	54.00	-12.83	AVG



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			E 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	DC 3.8V	133				
Ant. Pol.	Horizontal					
Test Mode:	TX 802.11ac(VHT20) Mo	de 5785MHz (U-NII-3)	1			
Remark:	<b>lemark:</b> No report for the emission which more than 10 dB below the					
	prescribed limit.					

No.	. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		11568.960	30.83	21.88	52.71	68.30	-15.59	peak
2	*	11571.369	21.08	21.88	42.96	54.00	-11.04	AVG



Report No.: TB-FCC173946
Page: 76 of 191

Temperature:	<b>25</b> ℃	Relative Humidity:	55%		
Test Voltage:	DC 3.8V	(B) - (	THE STATE OF		
Ant. Pol.	Vertical				
Test Mode:	TX 802.11ac(VHT20) Mo	de 5785MHz (U-NII-3)	1		
Remark: No report for the emission which more than 10 dB below to					
	prescribed limit.				

No.	. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		11568.534	30.00	21.88	51.88	68.30	-16.42	peak
2	*	11570.284	19.42	21.88	41.30	54.00	-12.70	AVG



Report No.: TB-FCC173946
Page: 77 of 191

Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.8V	(1) T	
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11ac(VHT20) Mo	de 5825MHz (U-NII-3)	7
Remark:	No report for the emission	n which more than 10 o	dB below the
	prescribed limit.	- a U	

No.	). M	lk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
			MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	1	1649.693	21.59	21.96	43.55	54.00	-10.45	AVG
2		1	1651.249	31.18	21.96	53.14	68.30	-15.16	peak



Report No.: TB-FCC173946
Page: 78 of 191

Temperature:	<b>25</b> ℃	Relative Humidity:	55%				
Test Voltage:	DC 3.8V						
Ant. Pol.	Vertical						
Test Mode:	TX 802.11ac(VHT20) Mo	de 5825MHz (U-NII-3)	- The same				
Remark:	Remark: No report for the emission which more than 10 dB below the						
	prescribed limit.						

No. Mk	lk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
			MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	1	1648.930	21.46	21.96	43.42	54.00	-10.58	AVG
2		1	1650.943	31.65	21.96	53.61	68.30	-14.69	peak



Report No.: TB-FCC173946
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			E. M. M. Marie
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.8V		
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11n(HT40) Mode	5755MHz (U-NII-3)	
Remark:	No report for the emissio	n which more than 10 o	dB below the
	prescribed limit.	- a W	

No	. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		11509.080	30.78	21.82	52.60	68.30	-15.70	peak
2	*	11510.800	20.88	21.82	42.70	54.00	-11.30	AVG



Report No.: TB-FCC173946
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Temperature:	<b>25</b> ℃	Relative Humidity:	55%
Test Voltage:	DC 3.8V	(1) T	
Ant. Pol.	Vertical		
Test Mode:	TX 802.11n(HT40) Mode	5755MHz (U-NII-3)	
Remark:	No report for the emissio	n which more than 10 o	dB below the
	prescribed limit.		

No	. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	11510.748	21.64	21.82	43.46	54.00	-10.54	AVG
2		11511.496	31.48	21.82	53.30	68.30	-15.00	peak



Report No.: TB-FCC173946
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Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.8V	(1) T	
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11n(HT40) Mode	5795MHz (U-NII-3)	- The same
Remark:	No report for the emissio	n which more than 10	dB below the
	prescribed limit.		

No	. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	2.7	11588.983	31.72	21.90	53.62	68.30	-14.68	peak
2	*	11589.993	21.43	21.90	43.33	54.00	-10.67	AVG



Report No.: TB-FCC173946
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Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.8V	133	
Ant. Pol.	Vertical		
Test Mode:	TX 802.11n(HT40) Mode	5795MHz (U-NII-3)	
Remark:	No report for the emission	n which more than 10 o	dB below the
	prescribed limit.		

No	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		11589.993	29.04	21.90	50.94	68.30	-17.36	peak
2	*	11590.591	18.93	21.90	40.83	54.00	-13.17	AVG



Report No.: TB-FCC173946
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Temperature:	<b>25</b> ℃	Relative Humidity:	55%
Test Voltage:	DC 3.8V	(B) - (	THE STATE OF
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11ac(VHT40) Mo	de 5755MHz (U-NII-3)	
Remark:	No report for the emissio	n which more than 10 c	dB below the
	prescribed limit.		

Mk	. Freq.	Reading Level			Limit	Over	
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
	11509.259	31.83	21.82	53.65	68.30	-14.65	peak
*	11510.127	21.28	21.82	43.10	54.00	-10.90	AVG
	Mk *	MHz 11509.259	Mk. Freq. Level	Mk.         Freq.         Level         Factor           MHz         dBuV         dB/m           11509.259         31.83         21.82	Mk.         Freq.         Level         Factor         ment           MHz         dBuV         dBuV/m         dBuV/m           11509.259         31.83         21.82         53.65	Mk.         Freq.         Level         Factor         ment         Limit           MHz         dBuV         dBuV         dBuV/m         dBuV/m           11509.259         31.83         21.82         53.65         68.30	Mk.         Freq.         Level         Factor         ment         Limit         Over           MHz         dBuV         dBuV         dBuV/m         dBuV/m         dBuV/m         dB           11509.259         31.83         21.82         53.65         68.30         -14.65



Report No.: TB-FCC173946
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Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.8V	133	
Ant. Pol.	Vertical		
Test Mode:	TX 802.11ac(VHT40) Mo	de 5755MHz (U-NII-3)	- The same
Remark:	No report for the emissio	n which more than 10 o	dB below the
	prescribed limit.		

No	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	11510.980	20.87	21.82	42.69	54.00	-11.31	AVG
2		11511.332	30.43	21.82	52.25	68.30	-16.05	peak



Report No.: TB-FCC173946
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			E. Al A V Ma					
Temperature:	25 ℃	Relative Humidity:	55%					
Test Voltage:	DC 3.8V	033						
Ant. Pol.	Horizontal							
Test Mode:	TX 802.11ac(VHT40) Mo	de 5795MHz (U-NII-3)						
Remark:	No report for the emission	No report for the emission which more than 10 dB below the						
	prescribed limit.	- O D						

No.	. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	11589.828	20.51	21.90	42.41	54.00	-11.59	AVG
2		11590.860	30.26	21.90	52.16	68.30	-16.14	peak



Report No.: TB-FCC173946
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Temperature:	25 ℃	Relative Humidity:	55%					
Test Voltage:	DC 3.8V	(1) To (1)	THE STATE OF					
Ant. Pol.	Vertical							
Test Mode:	TX 802.11ac(VHT40) Mo	de 5795MHz (U-NII-3)						
Remark:	No report for the emission	No report for the emission which more than 10 dB below the						
	prescribed limit.	- a W						

No.	Mk	k. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	11588.623	20.77	21.90	42.67	54.00	-11.33	AVG
2		11589.200	30.68	21.90	52.58	68.30	-15.72	peak



Report No.: TB-FCC173946
Page: 87 of 191

Temperature:	25 ℃	Relative Humidity:	55%					
Test Voltage:	DC 3.8V	(B) - (	THE STATE OF					
Ant. Pol.	Horizontal							
Test Mode:	TX 802.11ac(VHT80) Mo	de 5775MHz (U-NII-3)	7					
Remark:	No report for the emission	No report for the emission which more than 10 dB below the						
	prescribed limit.							

No.	. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	11549.611	20.70	21.86	42.56	54.00	-11.44	AVG
2		11551.302	30.63	21.86	52.49	68.30	-15.81	peak



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Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.8V	033	
Ant. Pol.	Vertical		
Test Mode:	TX 802.11ac(VHT80) Mo	de 5775MHz (U-NII-3)	
Remark:	No report for the emission	n which more than 10 o	dB below the
	prescribed limit.		

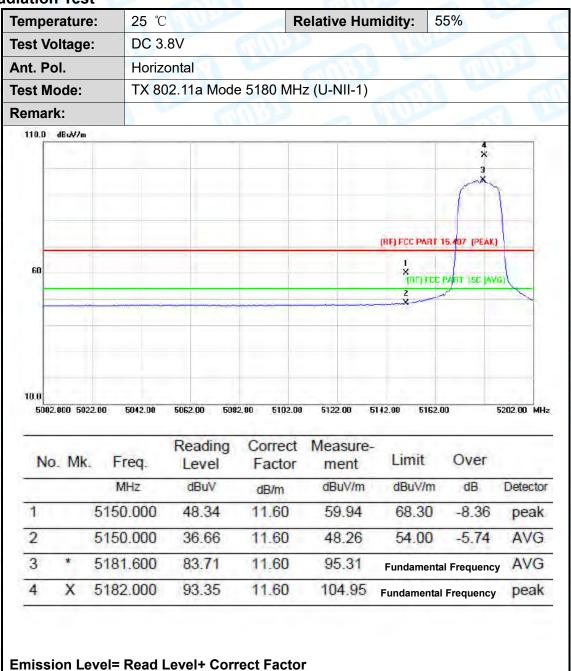
No	. MI	k. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	11548.594	21.33	21.86	43.19	54.00	-10.81	AVG
2		11548.870	31.88	21.86	53.74	68.30	-14.56	peak





# Attachment C-- Restricted Bands Requirement and Band-edge Test Data

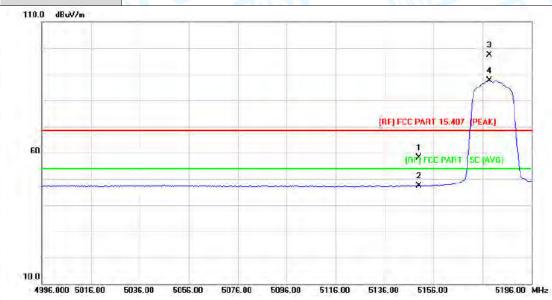
## (1) Radiation Test





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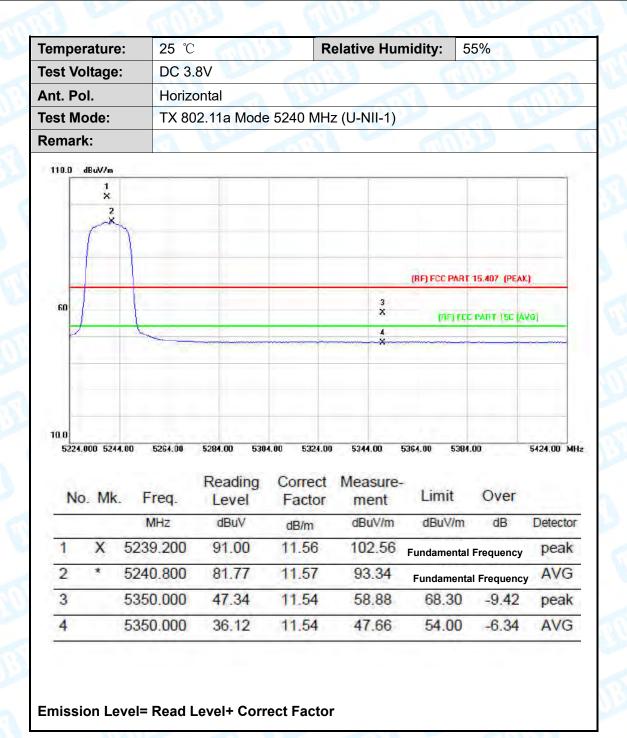
Temperature: **Relative Humidity:** 25 ℃ 55% **Test Voltage:** DC 3.8V Ant. Pol. Vertical **Test Mode:** TX 802.11a Mode 5180 MHz (U-NII-1) Remark:



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1	1.7	5150.000	46.49	11.60	58.09	68.30	-10.21	peak
2		5150.000	35.76	11.60	47.36	54.00	-6.64	AVG
3	X	5178.800	85.72	11.60	97.32	Fundamental Frequency		peak
4	*	5178.800	76.14	11.60	87.74	Fundamenta	I Frequency	AVG



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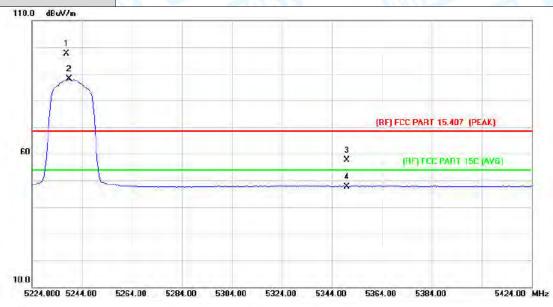




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Temperature:25 °CRelative Humidity:55%Test Voltage:DC 3.8VAnt. Pol.VerticalTest Mode:TX 802.11a Mode 5240 MHz (U-NII-1)

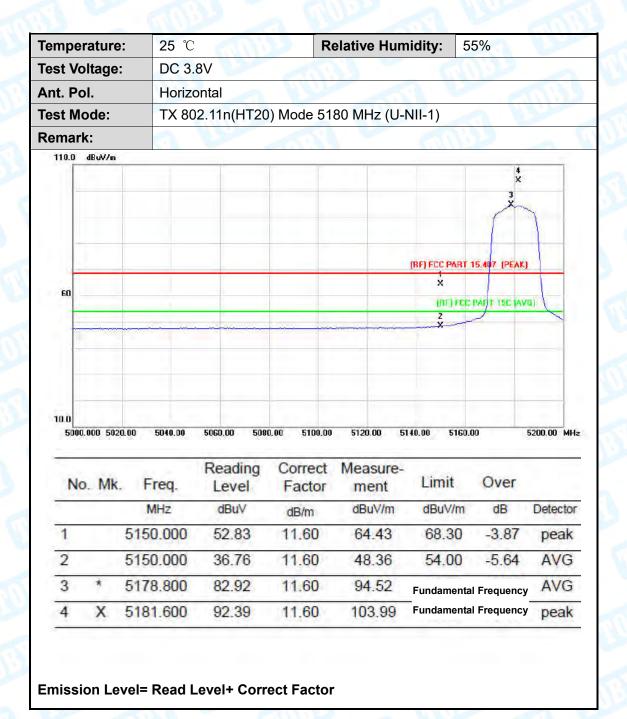
### Remark:



No	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	X	5237.600	86.03	11.57	97.60	- Fundamental	Frequency	peak
2	*	5238.800	76.58	11.56	88.14	– Fundamental	Frequency	AVG
3		5350.000	46.14	11.54	57.68	68.30	-10.62	peak
4		5350.000	36.16	11.54	47.70	54.00	-6.30	AVG

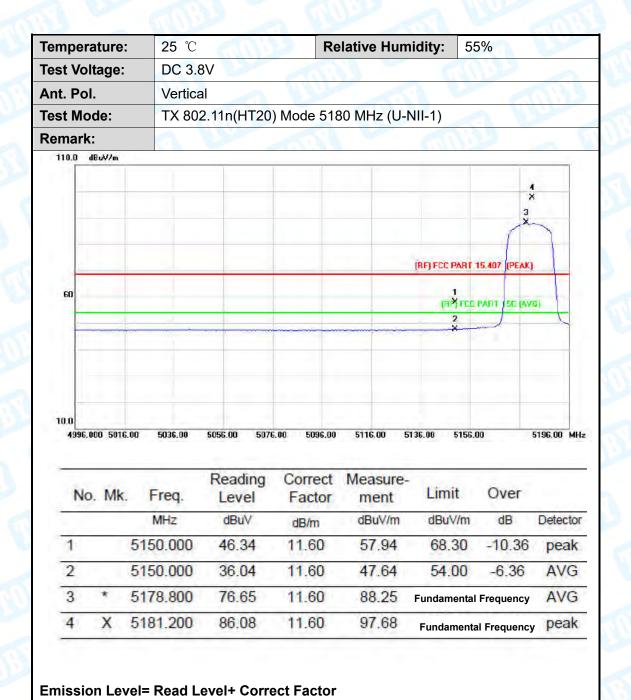


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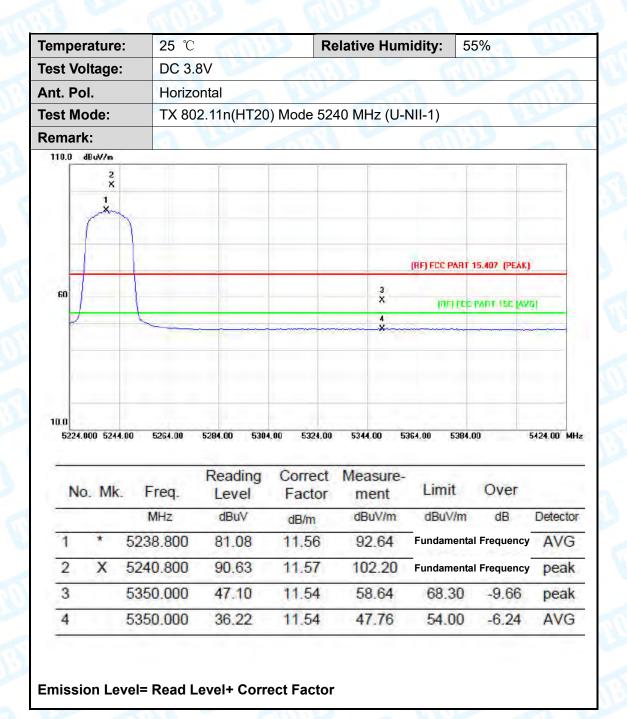


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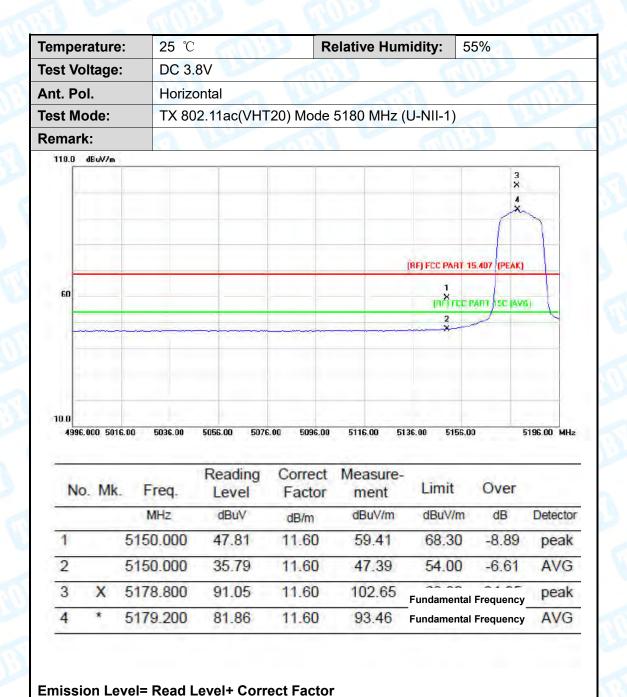
Temperature:25 °CRelative Humidity:55%Test Voltage:DC 3.8VAnt. Pol.VerticalTest Mode:TX 802.11n(HT20) Mode 5240 MHz (U-NII-1)Remark:Remark:



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	X	5237.600	85.80	11.57	97.37	Fundamental	Frequency	peak
2	*	5238.800	76.49	11.56	88.05	Fundamental	Frequency	AVG
3		5350.000	46.77	11.54	58.31	68.30	-9.99	peak
4		5350.000	35.62	11.54	47.16	54.00	-6.84	AVG

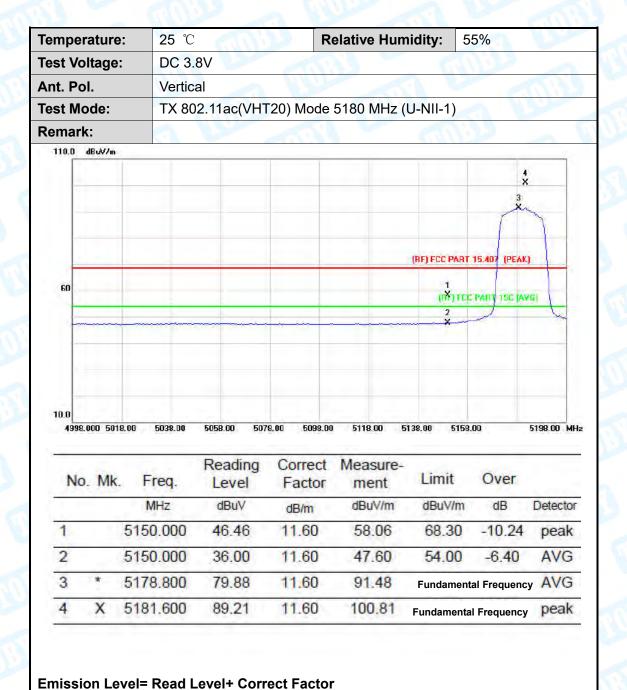


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5222.000 5242.00

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Temperature: 25 °C Relative Humidity: 55%

Test Voltage: DC 3.8V

Ant. Pol. Horizontal

Test Mode: TX 802.11ac(VHT20) Mode 5240 MHz (U-NII-1)

Remark:

## 

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	X	5238.400	91.52	11.56	103.08	Fundamental Frequency		peak
2	*	5238.400	81.88	11.56	93.44	- Fundamenta	I Frequency	AVG
3		5350.000	45.82	11.54	57.36	68.30	-10.94	peak
4		5350.000	36.18	11.54	47.72	54.00	-6.28	AVG

5362.00

5382.00

5422.00 MHz

**Emission Level= Read Level+ Correct Factor** 

5282.00

5302,00

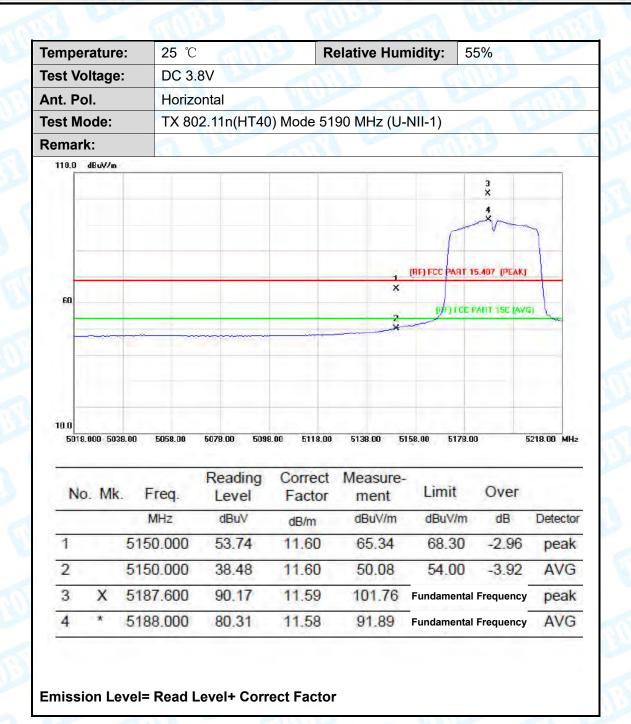


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Tempe	eratu	re:	2	5 °C				)	Rel	ative	Hum	idity	5	5%			
est V	oltag	e:	D	C 3.8	V			4	0								a
Ant. Pol.		Ve	Vertical								13						
Test M	lode:		T	TX 802.11ac(VHT20) Mode 5240 MHz (U-NII-1)													
Remai	rk:						d	50		1		M	W	33			N
110.0	dBuV/i	n															7
		2 X															
		1 X															
	1	and in	1														
			1														1
-	+		1									(RF) FC	CPART	15.407	(PEAK)		
60			+								3	-	an ret	PART	15C (AV6	il	
-	)	T	1				3170				4						
10.0		1															
10.0 522	2.000 5	242.00	526	2.00	5282.00	530:	2.00	532	2.00	5342.	00 53	62.00	5382	.00	5	422.00	MHz
			100			ading		Corr			asure	- 10	imit	,	Over		
	No.	MK.		eq.		evel		Fac	tor		nent				. 4		
			110	Hz		iBu∀		dB/r		dE	BuV/m	d	BuV/r	n	dB	5,170	ecto
1	3	t	5238	.400	7	9.05		11.5	6	9	0.61	Fund	ament	al Fre	quency	A	VG
2	)	X	5240	.800	8	8.79		11.5	57	10	00.36	Fund	ament	al Fre	quency	p	eak
3			5350	.000	4	7.64		11.5	54	5	9.18	6	8.30	)	9.12	р	eak
4			5350	000	2	5.40		11.5	1	4	6.94	-	4.00	1	-7.06	۸	VG



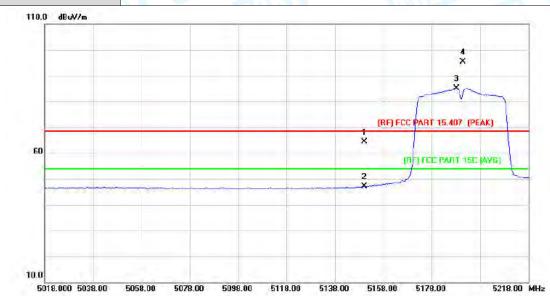
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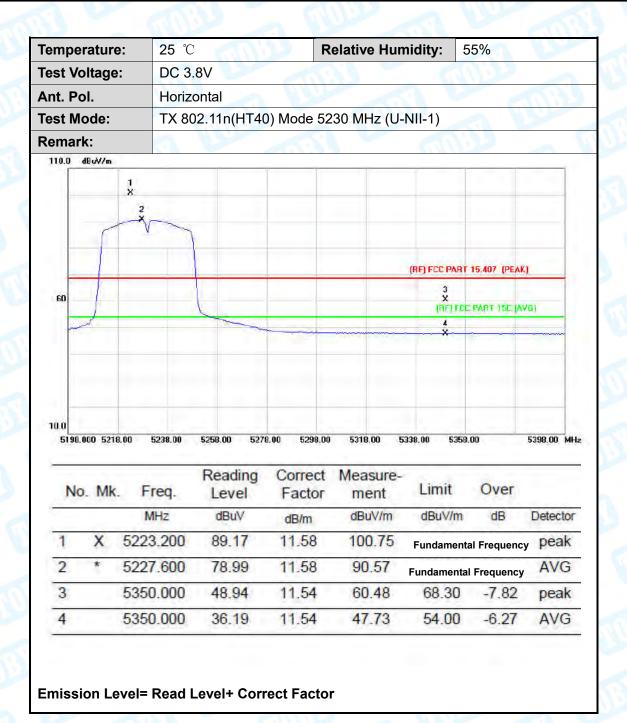
Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	DC 3.8V	(1)3 T	Min a			
Ant. Pol.	Vertical					
Test Mode:	TX 802.11n(HT40) Mode 5190 MHz (U-NII-1)					
Remark:						



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		5150.000	52.77	11.60	64.37	68.30	-3.93	peak
2	1.0	5150.000	35.46	11.60	47.06	54.00	-6.94	AVG
3	*	5188.400	73.60	11.58	85.18	Fundamenta	l Frequency	AVG
4	X	5190.800	83.72	11.58	95.30	— Fundamenta	al Frequency	peak

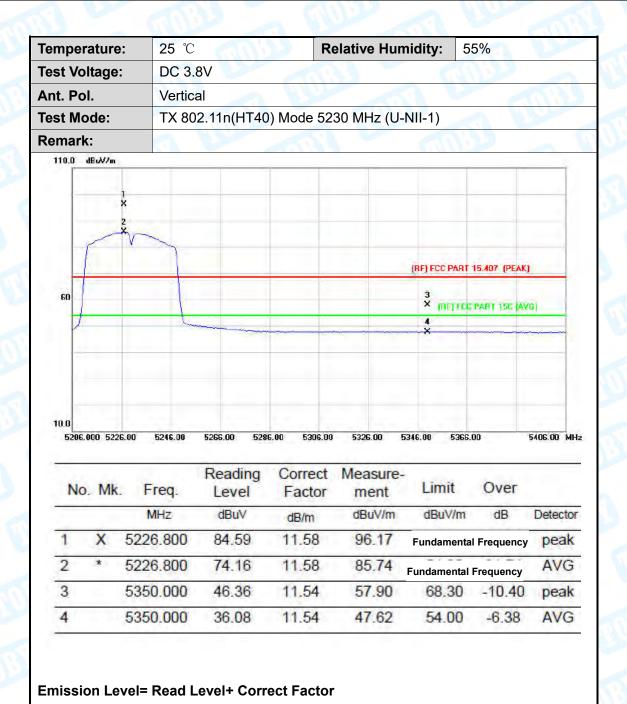


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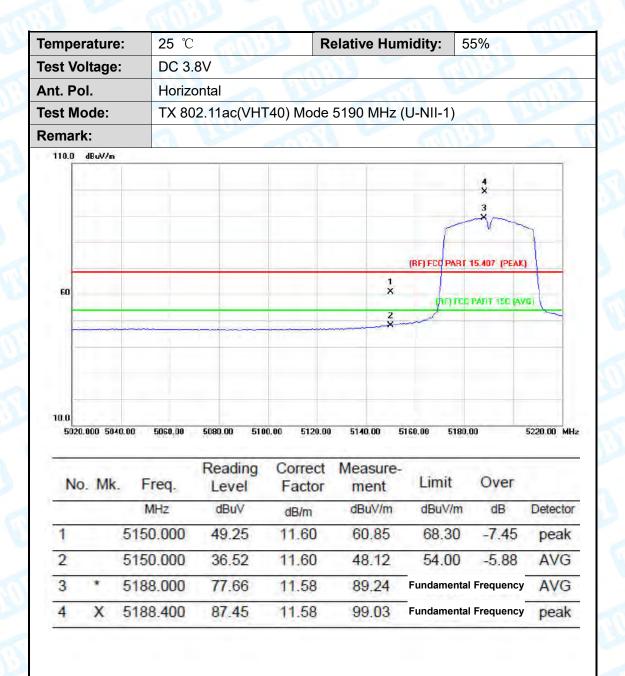


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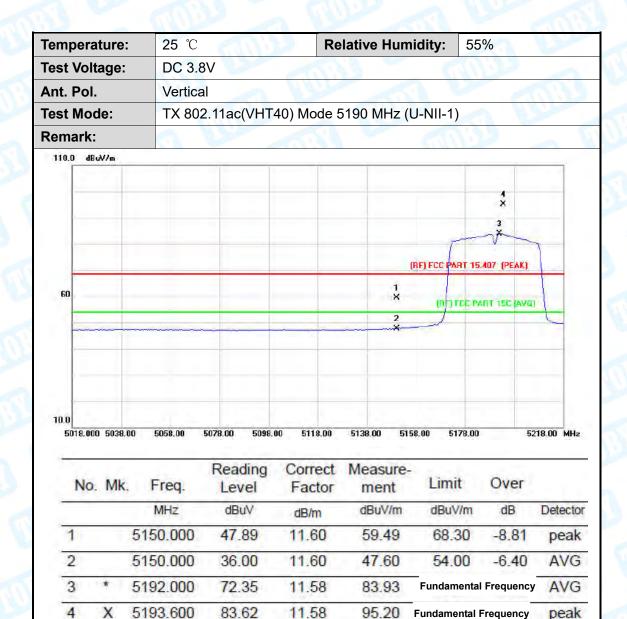


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95.20

**Fundamental Frequency** 

**Emission Level= Read Level+ Correct Factor** 

83.62

X

peak



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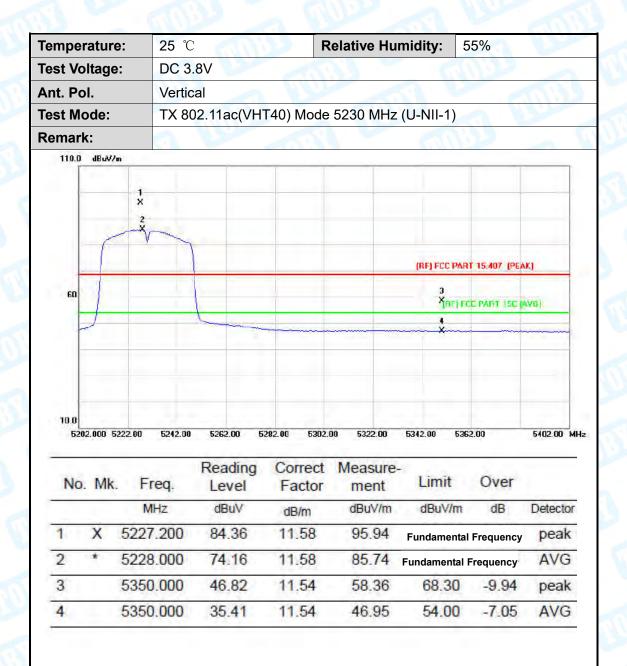
Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	DC 3.8V	(1) T	MOD .			
Ant. Pol.	Horizontal					
Test Mode:	TX 802.11ac(VHT40) Mo	de 5230 MHz (U-NII-1)				
Remark:			11.20 C			



No	. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	X	5228.000	87.18	11.58	98.76	Fundamental	Frequency	peak
2	*	5228.000	77.25	11.58	88.83	Fundamental	Frequency	AVG
3		5350.000	46.04	11.54	57.58	68.30	-10.72	peak
4		5350.000	36.06	11.54	47.60	54.00	-6.40	AVG



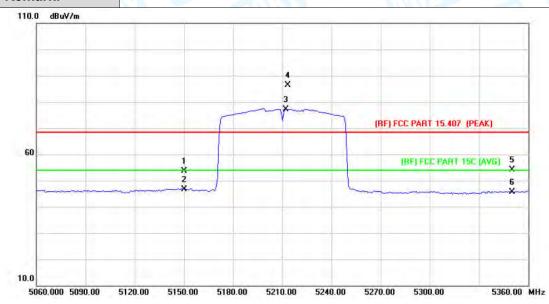
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Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.8V	(B) (	THE STATE OF
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11ac(VHT80) Mo	de 5210 MHz (U-NII-1)	
Remark:	0		

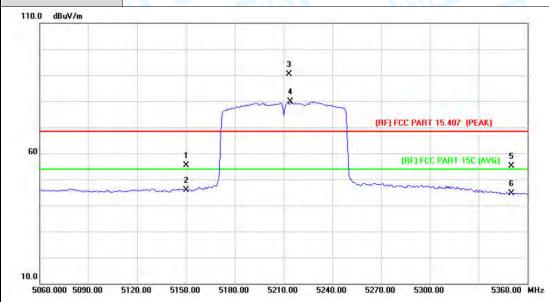


No.	Mk.	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		5150.000	40.02	13.54	53.56	68.30	-14.74	peak
2		5150.000	33.18	13.54	46.72	54.00	-7.28	AVG
3	*	5212.400	63.75	13.49	77.24	Fundamenta	al Frequency	AVG
4	X	5213.590	72.83	13.49	86.32	Fundamenta	al Frequency	peak
5		5350.000	40.68	13.40	54.08	68.30	-14.22	peak
6		5350.000	32.31	13.40	45.71	54.00	-8.29	AVG



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Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.8V	(B) - (	THE STATE OF
Ant. Pol.	Vertical		
Test Mode:	TX 802.11ac(VHT80) Mo	de 5210 MHz (U-NII-1)	
Remark:	0		

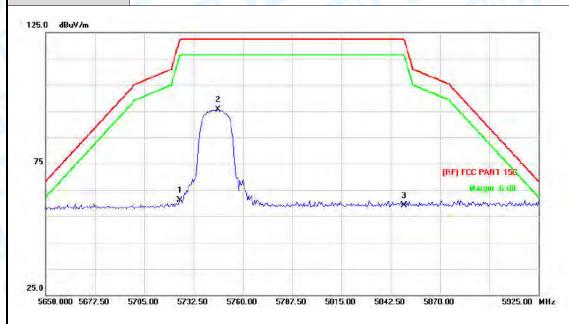


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		5150.000	41.82	13.54	55.36	68.30	-12.94	peak
2		5150.000	32.39	13.54	45.93	54.00	-8.07	AVG
3	X	5213.590	76.87	13.49	90.36	Fundamental	Frequency	peak
4	*	5214.200	66.43	13.49	79.92	Fundamental	Frequency	AVG
5		5350.000	41.83	13.40	55.23	68.30	-13.07	peak
6		5350.000	31.21	13.40	44.61	54.00	-9.39	AVG



Page: 111 of 191

Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.8V		
Ant. Pol.	Horizontal	THE PERSON NAMED IN	
Test Mode:	TX 802.11a Mode 5745 N	MHz (U-NII-3)	1.73 C
Remark:	DES LIMIT	- O	

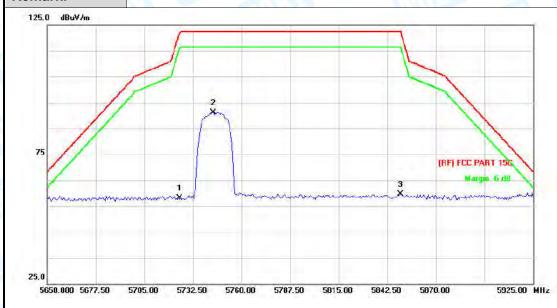


No	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		5725.000	47.14	13.89	61.03	122.30	-61.27	peak
2	*	5746.250	81.80	13.95	95.75	122.30	-26,55	peak
3		5850.000	44.89	14.23	59.12	122.30	-63.18	peak



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Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.8V	(1)3 T	Miles -
Ant. Pol.	Vertical		
Test Mode:	TX 802.11a Mode 5745 M	MHz (U-NII-3)	1
Remark:			1/42

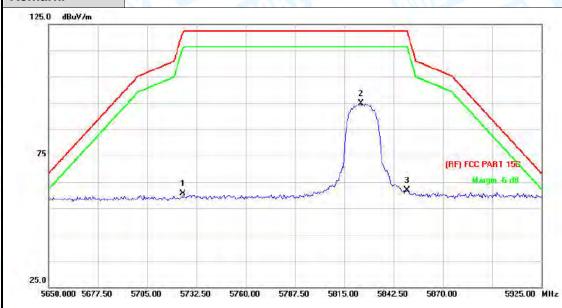


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		5725.000	44.31	13.89	58.20	122.30	-64.10	peak
2	*	5744.050	77.15	13.95	91.10	122.30	-31.20	peak
3		5850.000	45.32	14.23	59.55	122.30	-62.75	peak



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Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.8V	(1)3 T	Miles -
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11a Mode 5825 M	MHz (U-NII-3)	1
Remark:			1/42



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		5725.000	46.85	13.89	60.74	122.30	-61.56	peak
2	*	5824.350	80.67	14.16	94.83	122.30	-27.47	peak
3		5850.000	47.71	14.23	61.94	122.30	-60.36	peak



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Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.8V		Min a
Ant. Pol.	Vertical		Salar.
Test Mode:	TX 802.11a Mode 5825 N	MHz (U-NII-3)	
Remark:			1199 - 10

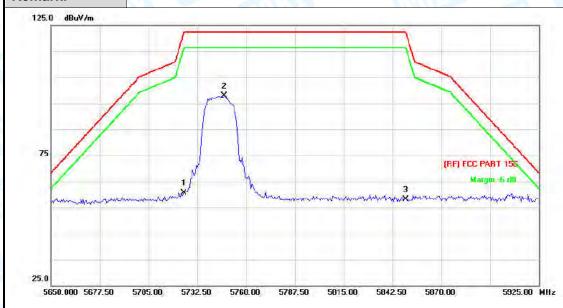
## 75 (RF) FCC PART 156 Malgin 6 dB 1 25.0 5650.000 5677.50 5705.00 5732.50 5760.00 5787.50 5815.00 5842.50 5870.00 5925.00 MHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		5725.000	44.28	13.89	58.17	122.30	-64.13	peak
2	*	5824.350	77.30	14.16	91.46	122.30	-30.84	peak
3		5850.000	45.59	14.23	59.82	122.30	-62.48	peak



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			E. (1.1.1.1.1.2m)
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.8V	(1) T	MOD TO
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11n(HT20) Mode	5745 MHz (U-NII-3)	
Remark:			(1)

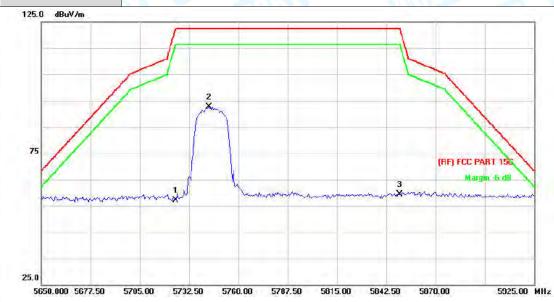


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV dB/m	dB/m	dBuV/m	dBuV/m	dB	Detector
1		5725.000	46.67	13.89	60.56	122.30	-61.74	peak
2	*	5747.900	83.89	13.96	97.85	122.30	-24.45	peak
3		5850,000	43.79	14.23	58.02	122.30	-64.28	peak



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Temperature:	<b>25</b> ℃	Relative Humidity:	55%
Test Voltage:	DC 3.8V		Min a
Ant. Pol.	Vertical		Salar.
Test Mode:	TX 802.11n(HT20) Mode	5745 MHz (U-NII-3)	- The same
Remark:	0 13		1.73

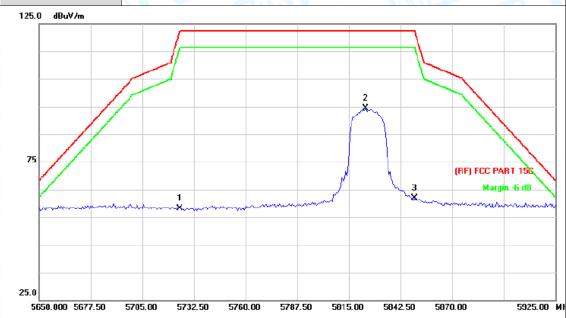


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
	MHz	MHz	dBuV	dB/m dBuV	dBuV/m	dBuV/m dBuV/m	dB	Detector
1	-7	5725.000	43.36	13.89	57.25	122.30	-65.05	peak
2	*	5743.500	78.59	13.95	92.54	122.30	-29.76	peak
3		5850.000	45.19	14.23	59.42	122.30	-62.88	peak



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Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.8V	133	
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11n(HT20) Mode	5825 MHz (U-NII-3)	
Remark:			

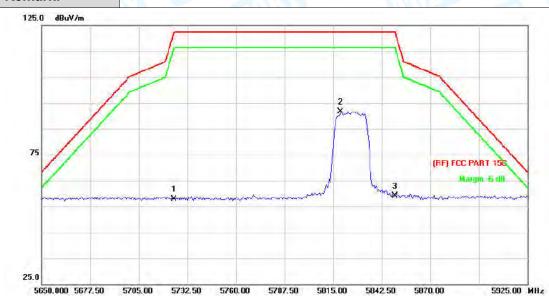


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		5725.000	44.23	13.89	58.12	122.30	-64.18	peak
2	*	5823.800	80.18	14.16	94.34	122.30	-27.96	peak
3		5850.000	47.69	14.23	61.92	122.30	-60.38	peak



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Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.8V	(1) T	MODE
Ant. Pol.	Vertical		
Test Mode:	TX 802.11n(HT20) Mode	5825 MHz (U-NII-3)	- The -
Remark:	0		

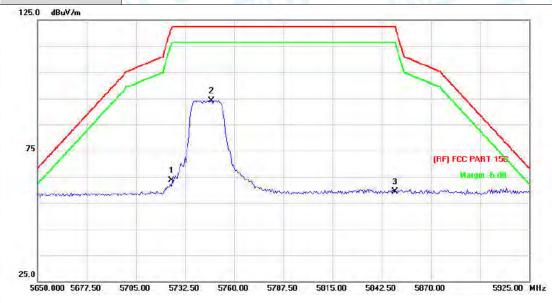


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		5725.000	44.02	13.89	57.91	122.30	-64.39	peak
2	*	5819.400	77.48	14.14	91.62	122.30	-30.68	peak
3		5850.000	44.85	14.23	59.08	122.30	-63.22	peak



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Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.8V	(B) - (	THE STATE OF
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11ac(VHT20) Mo	de 5745 MHz (U-NII-3)	
Remark:			

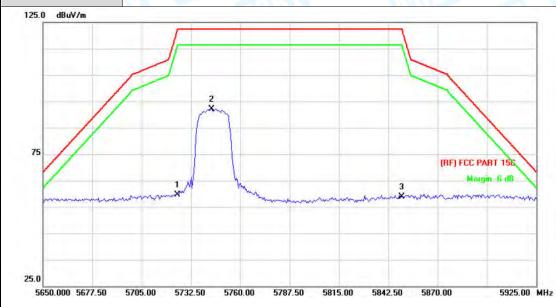


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	MHz dBuV dB/m	dB/m	dBuV/m	dBuV/m	dB	Detector
1	1,11	5725.000	49.75	13.89	63.64	122.30	-58.66	peak
2	*	5747.350	80.22	13.96	94.18	122.30	-28.12	peak
3	-:	5850.000	45.13	14.23	59.36	122.30	-62.94	peak



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Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.8V	(B) (	THE STATE OF
Ant. Pol.	Vertical		
Test Mode:	TX 802.11ac(VHT20) Mo	de 5745 MHz (U-NII-3)	1 The
Remark:			

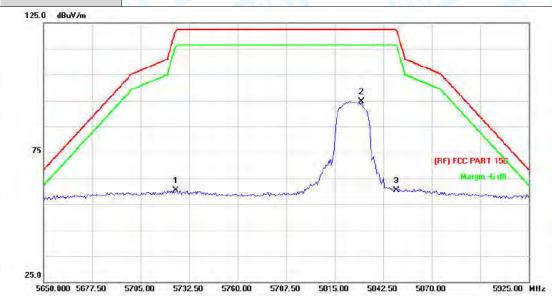


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		5725.000	45.63	13.89	59.52	122.30	-62.78	peak
2	*	5744.050	78.07	13.95	92.02	122.30	-30.28	peak
3		5850.000	44.75	14.23	58.98	122.30	-63.32	peak



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Temperature:	<b>25</b> ℃	Relative Humidity:	55%					
Test Voltage:	DC 3.8V	(B) (	THE STATE OF					
Ant. Pol.	Horizontal	Horizontal						
Test Mode:	TX 802.11ac(VHT20) Mo	TX 802.11ac(VHT20) Mode 5825 MHz (U-NII-3)						
Remark:	0							

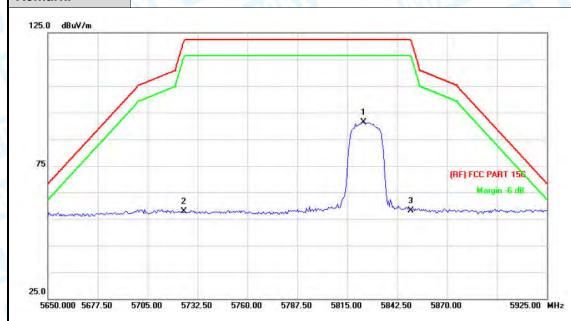


No	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	. 1	5725.000	46.50	13.89	60.39	122.30	-61.91	peak
2	*	5830.400	80.52	14.17	94.69	122.30	-27.61	peak
3		5850.000	46.07	14.23	60.30	122.30	-62.00	peak



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			E. Al A V Mark					
Temperature:	25 ℃	Relative Humidity:	55%					
Test Voltage:	DC 3.8V	3.8V						
Ant. Pol.	Vertical	ertical						
Test Mode:	TX 802.11ac(VHT20) Mo	X 802.11ac(VHT20) Mode 5825 MHz (U-NII-3)						
Remark:			(19.5)					

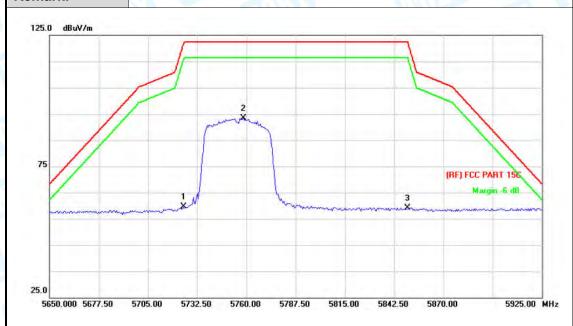


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	-	5725.000	44.02	13.89	57.91	122.30	-64.39	peak
2	*	5823.800	77.20	14.16	91.36	122.30	-30.94	peak
3		5850.000	43.89	14.23	58.12	122.30	-64.18	peak



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Temperature:	25 ℃	Relative Humidity:	55%					
Test Voltage:	DC 3.8V	C 3.8V						
Ant. Pol.	Horizontal							
Test Mode:	TX 802.11n(HT40) Mode	TX 802.11n(HT40) Mode 5755 MHz (U-NII-3)						
Remark:			(1) C					

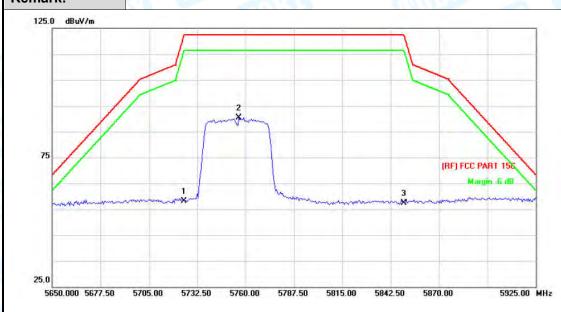


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		5725.000	45.79	13.89	59.68	122.30	-62.62	peak
2	*	5758.350	79.52	13.97	93.49	122.30	-28.81	peak
3		5850.000	44.96	14.23	59.19	122.30	-63.11	peak



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Temperature:	25 ℃	Relative Humidity:	55%					
Test Voltage:	DC 3.8V	C 3.8V						
Ant. Pol.	Vertical	/ertical						
Test Mode:	TX 802.11n(HT40) Mode	TX 802.11n(HT40) Mode 5755 MHz (U-NII-3)						
Remark:			(1)					

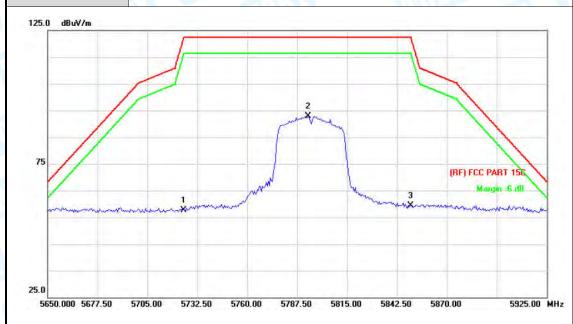


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		5725.000	44.28	13.89	58.17	122.30	-64.13	peak
2	*	5756.150	76.52	13.97	90.49	122.30	-31.81	peak
3		5850.000	43.17	14.23	57.40	122.30	-64.90	peak



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Temperature:	25 ℃	Relative Humidity:	55%					
Test Voltage:	DC 3.8V	C 3.8V						
Ant. Pol.	Horizontal							
Test Mode:	TX 802.11n(HT40) Mode	TX 802.11n(HT40) Mode 5795 MHz (U-NII-3)						
Remark:			(12) _ (I)					

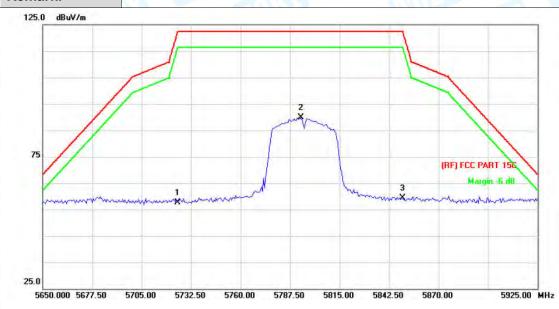


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		5725.000	43.84	13,89	57.73	122.30	-64.57	peak
2	*	5793.550	78.85	14.08	92.93	122.30	-29.37	peak
3		5850.000	45.23	14.23	59.46	122.30	-62.84	peak



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Temperature:	25 ℃	Relative Humidity:	55%					
Test Voltage:	DC 3.8V	C 3.8V						
Ant. Pol.	Vertical							
Test Mode:	TX 802.11n(HT40) Mode	TX 802.11n(HT40) Mode 5795 MHz (U-NII-3)						
Remark:								

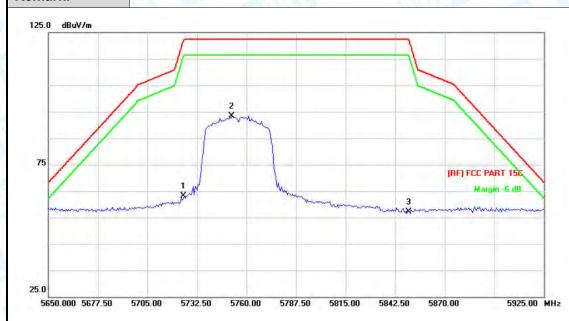


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	1
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		5725.000	43.66	13.89	57.55	122.30	-64.75	peak
2	*	5793.550	75.76	14.08	89.84	122.30	-32.46	peak
3		5850.000	45.18	14.23	59.41	122.30	-62.89	peak



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Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.8V	(1) T	MODE
Ant. Pol.	Horizontal		Salar.
Test Mode:	TX 802.11ac(VHT40) Mo	de 5755 MHz (U-NII-3)	
Remark:			11.50

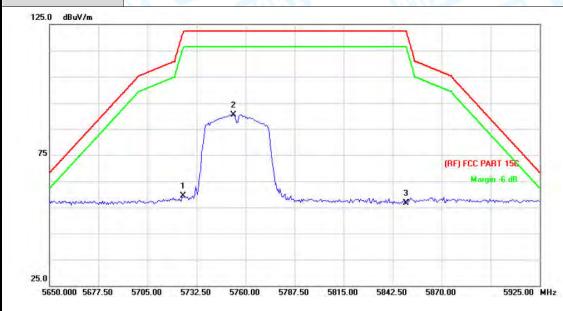


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		5725.000	49.36	13.89	63.25	122.30	-59.05	peak
2	*	5751.750	79.48	13.96	93.44	122.30	-28.86	peak
3		5850.000	42.99	14.23	57.22	122.30	-65.08	peak



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Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.8V	(1)3 T	THUS TO
Ant. Pol.	Vertical		
Test Mode:	TX 802.11ac(VHT40) Mo	de 5755 MHz (U-NII-3)	
Remark:			



Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
	5725.000	45.41	13.89	59.30	122.30	-63.00	peak
*	5753.400	76.44	13.97	90.41	122.30	-31.89	peak
	5850.000	42.28	14.23	56.51	122.30	-65.79	peak
		MHz 5725.000 * 5753.400	Mk. Freq. Level  MHz dBuV  5725.000 45.41  * 5753.400 76.44	Mk.         Freq.         Level         Factor           MHz         dBuV         dB/m           5725.000         45.41         13.89           *         5753.400         76.44         13.97	Mk.         Freq.         Level         Factor         ment           MHz         dBuV         dBuV/m         dBuV/m           5725.000         45.41         13.89         59.30           *         5753.400         76.44         13.97         90.41	Mk.         Freq.         Level         Factor         ment         Limit           MHz         dBuV         dBuV         dBuV/m         dBuV/m           5725.000         45.41         13.89         59.30         122.30           *         5753.400         76.44         13.97         90.41         122.30	Mk.         Freq.         Level         Factor         ment         Limit         Over           MHz         dBuV         dBuV         dBuV/m         dBuV/m         dBuV/m         dB           5725.000         45.41         13.89         59.30         122.30         -63.00           *         5753.400         76.44         13.97         90.41         122.30         -31.89



5650.000 5677.50

Report No.: TB-FCC173946

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		F	
Temperature:	<b>25</b> ℃	Relative Humidity:	55%
Test Voltage:	DC 3.8V		THUS TO
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11ac(VHT40) Mc	de 5795 MHz (U-NII-3)	
Remark:			1.33

## 125.0 dBuV/m (FIF) FCC PART 15ts Margin 6 dBu

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		5725.000	44.77	13.89	58.66	122.30	-63.64	peak
2	*	5791.350	77.54	14.07	91.61	122.30	-30.69	peak
3	7	5850.000	45.52	14.23	59.75	122.30	-62.55	peak

5787.50

5815.00

5842.50

5870.00

5925.00 MHz

**Emission Level= Read Level+ Correct Factor** 

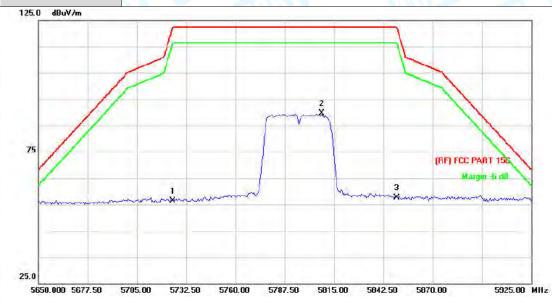
5732.50

5760.00



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Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.8V	(1) T	
Ant. Pol.	Vertical		
Test Mode:	TX 802.11ac(VHT40) Mo	de 5795 MHz (U-NII-3)	
Remark:	0 13		(1.72)

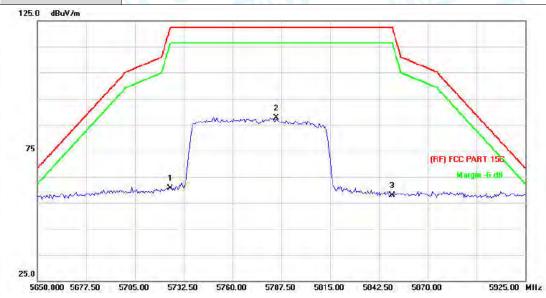


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		5725.000	42.48	13.89	56.37	122.30	-65.93	peak
2	*	5808.400	75.46	14.12	89.58	122.30	-32.72	peak
3		5850.000	43.29	14.23	57.52	122.30	-64.78	peak



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Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.8V	(1) T	MOD .
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11ac(VHT80) Mo	de 5775 MHz (U-NII-3)	
Remark:			11.20 C

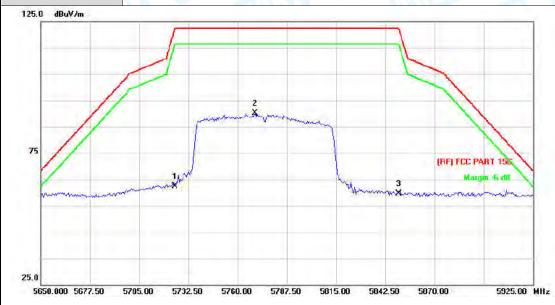


Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
	5725.000	46.73	13.89	60.62	122.30	-61.68	peak
*	5784.750	73.46	14.05	87.51	122.30	-34.79	peak
	5850.000	43.69	14.23	57.92	122.30	-64.38	peak
	*	MHz 5725.000	Mk. Freq. Level  MHz dBuV  5725.000 46.73  * 5784.750 73.46	Mk.         Freq.         Level         Factor           MHz         dBuV         dB/m           5725.000         46.73         13.89           *         5784.750         73.46         14.05	Mk.         Freq.         Level         Factor         ment           MHz         dBuV         dBuV/m         dBuV/m           5725.000         46.73         13.89         60.62           *         5784.750         73.46         14.05         87.51	Mk.         Freq.         Level         Factor         ment         Limit           MHz         dBuV         dBuV         dBuV/m         dBuV/m           5725.000         46.73         13.89         60.62         122.30           *         5784.750         73.46         14.05         87.51         122.30	Mk.         Freq.         Level         Factor         ment         Limit         Over           MHz         dBuV         dBuV         dBuV/m         dBuV/m         dBuV/m         dB           5725.000         46.73         13.89         60.62         122.30         -61.68           *         5784.750         73.46         14.05         87.51         122.30         -34.79



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Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.8V		Mos
Ant. Pol.	Vertical		
Test Mode:	TX 802.11ac(VHT80) Mo	de 5775 MHz (U-NII-3)	
Remark:	0		



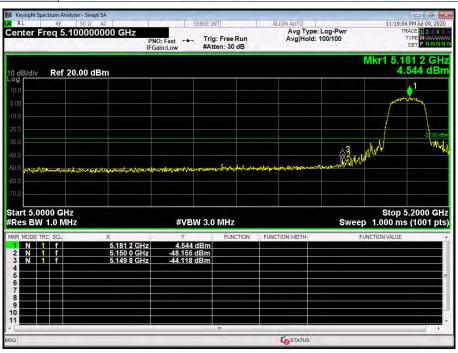
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		5725.000	48.60	13.89	62.49	122.30	-59.81	peak
2	*	5769.900	76.00	14.02	90.02	122.30	-32.28	peak
3		5850.000	45.52	14.23	59.75	122.30	-62.55	peak



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## (1) Conducted Test







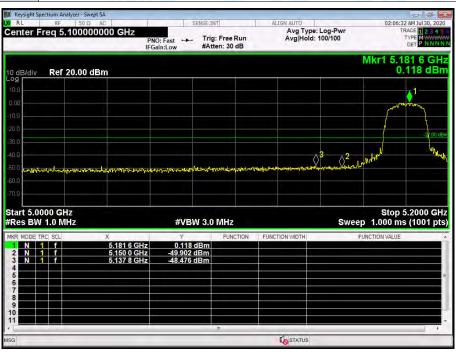


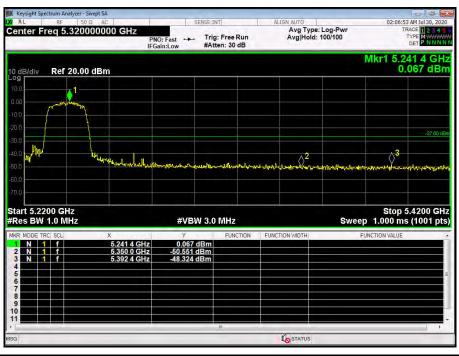
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Temperature:25  $^{\circ}$ Relative Humidity:55%Test Voltage:DC 3.8V

**Test Mode:** TX 802.11n(HT20) mode(U-NII-1) / 5180MHz&5240MHz

**Remark:** The EUT is programmed in continuously transmitting mode

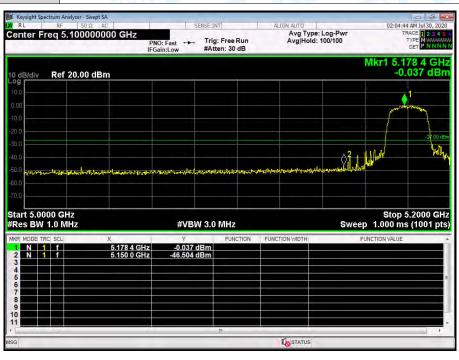


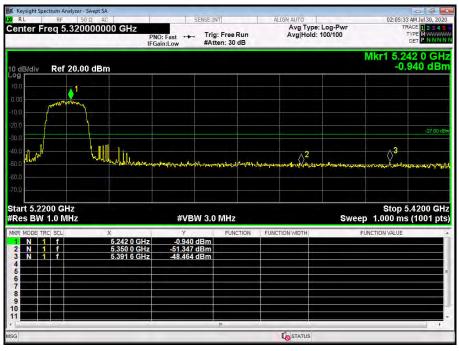




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Temperature:25 °CRelative Humidity:55%Test Voltage:DC 3.8VTest Mode:TX 802.11ac(VHT20) mode(U-NII-1) / 5180MHz&5240MHzRemark:The EUT is programmed in continuously transmitting mode





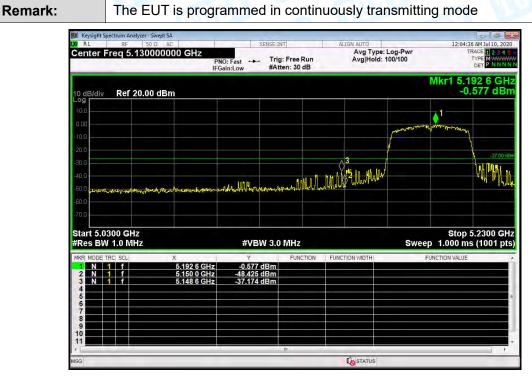


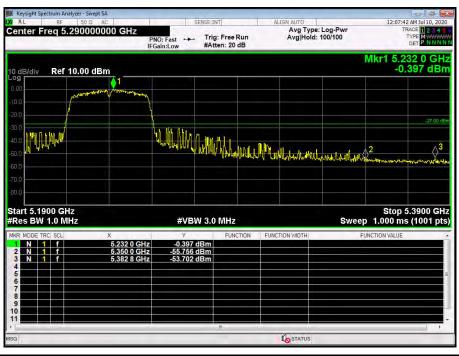
Report No.: TB-FCC173946 Page: 136 of 191

 Temperature:
 25 °C
 Relative Humidity:
 55%

 Test Voltage:
 DC 3.8V

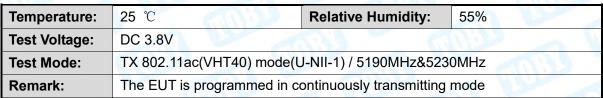
 Test Mode:
 TX 802.11n(HT40) mode(U-NII-1) / 5190MHz&5230MHz



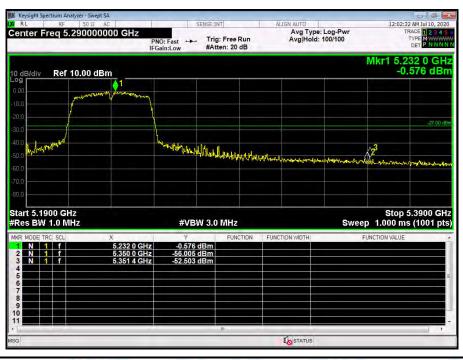




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