

Shenzhen Toby Technology Co., Ltd.

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FCC Radio Test Report FCC ID: 2AAH9-5700

Original Grant

Report No. TB-FCC184369

Applicant Navori Inc

Equipment Under Test (EUT)

EUT Name StiX

5700 Model No.

Brand Name Navori

20211022-08 1-01#& 20211022-08 1-02# Sample ID

Receipt Date 2021-10-26

Test Date 2021-10-26 to 2021-11-26

Issue Date 2021-11-26

Standards FCC Part 15, Subpart E 15.407

Test Method ANSI C63.10: 2013

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

LNAW SU Ray L **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-FCC184369	Rev.01	Initial issue of report	2021-11-26
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1. General Information about EUT

1.1 Client Information

Applicant	:	Navori Inc.
Address : 1000 rue Sherbrooke st W Suite 710 Montreal, QC		1000 rue Sherbrooke st W Suite 710 Montreal, QC H3A 3G4 Canada
Manufacturer		Shenzhen MicoRose Technology Co., Ltd.
		8B2A, Daqing Building, southeast of the intersection of Shennan Road and Guangshen Expressway, Futian District, Shenzhen, China

1.2 General Description of EUT (Equipment Under Test)

EUT Name		StiX		
Models No.	•	5700		
0000	1	Operation Frequency: U-NII-1: 5180MHz~5240MHz, U-NII-3: 5745MHz~5825MHz		
Product		Antenna Gain:	2.0dBi PIFA Antenna	
Description	-1	Modulation Type:	802.11a/n: OFDM (QPSK, BPSK, 16QAM)	
		Bit Rate of Transmitter:	802.11a/n: 6/9/12/18/24/36/48/54 Mbps	
Power Rating		For Adapter (Model:FJ-SW1241202000U): Input: 100-240V~ 50/60Hz 0.6A Max Output:12V, 2A		
Software Version		ubuntu 18.04		
Hardware Version	:	V1		
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.



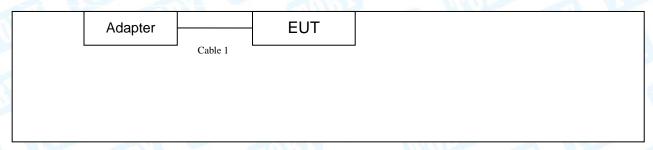


(2) Channel List:

)							
Frequency Band	Channel No.	Frequency	Channel No.	Frequency			
5180~5240MHz	36	5180 MHz	44	5220 MHz			
(U-NII-1)	40	5200 MHz	48	5240 MHz			
For 20 MHz Bandwidth,	For 20 MHz Bandwidth, use channel 36, 40, 44.48.						
Frequency Band	Channel No.	Frequency	Channel No.	Frequency			
5745~5825MHz	149	5745 MHz	161	5805 MHz			
(U-NII-3)	153	5765 MHz	165	5825 MHz			
	157	5785 MHz					
For 20 MHz Bandwidth, use channel 149, 153, 157, 161, 165.							

1.3 Block Diagram Showing the Configuration of System Tested

Charging + TX Mode



1.4 Description of Support Units

Equipment Information							
Name Model FCC ID/VOC Manufacturer Used "√							
Adapter	FJ-SW1241202000U			V			
	Cable Information						
Number Shielded Type Ferrite Core Length Note							
9 (V						



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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.

TOSPOCITYON	y	
		For Conducted Test
Fina	I Test Mode	Description
3	Mode 1	Charging + TX a Mode(5180MHz)
	For	Radiated Test Below 1GHz
Final Test Mode Description		
Mode 2		Charging + TX a Mode(5180MHz)
	For F	Radiated Test Above 1GHz
Test Band Final Test Mode		Description
U-NII-1 Mode 3		TX Mode 802.11a Mode Channel 36/40/48
U-NII-3	Mode 4	TX Mode 802.11a Mode Channel 149/157/165

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)



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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.







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.

THU .	Test Software: SecureCRT	
Test M	Mode: Continuously transmitti	ng
	U-NII-1	
Mode	Frequency (MHz)	Parameters
The same	5180	DEF
802.11a	5200	DEF
	5240	DEF
	U-NII-3	
Mode	Frequency (MHz)	Parameters
	5745	DEF
802.11a	5785	DEF
	5825	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 _{Lab})
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.Designation Number:CN1223

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

FCC Part 15 Subpart E(15.407)						
Standard Section FCC	Test Item	Test Sample(s)	Judgment	Remark		
15.203	Antenna Requirement	20211022-08_1-02#	PASS	N/A		
FCC 15.207(a)	Conducted Emission	20211022-08_1-01#	PASS	N/A		
FCC 15.407(b)& 15.205	Emissions in Restricted Bands	20211022-08_1-02#	PASS	N/A		
15.407(a)	26dB Bandwidth	20211022-08_1-02#	PASS	N/A		
15.407(e)	6dB Bandwidth	20211022-08_1-02#	PASS	N/A		
15.407(a)	Maximum Conducted Output Power	20211022-08_1-02#	PASS	N/A		
15.407(a)	Power Spectral Density	20211022-08_1-02#	PASS	N/A		
15.209 15.407(b)	Transmitter Radiated Spurious Emission	20211022-08_1-01# 20211022-08_1-02#	PASS	N/A		
15.407(g)	Frequency Stability	20211022-08_1-02#	PASS	N/A		
	On Time and Duty Cycle	20211022-08_1-02#	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. 02, 2021	Jul. 01, 2022
RF Switching Unit	Compliance Direction Systems Inc	RSU-A4	34403	Jul. 02, 2021	Jul. 01, 2022
AMN	SCHWARZBECK	NNBL 8226-2	8226-2/164	Jul. 02, 2021	Jul. 01, 2022
LISN	Rohde & Schwarz	ENV216	101131	Jul. 02, 2021	Jul. 01, 2022
Radiation Emission T	est			_	
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
Spectrum Analyzer	Agilent	E4407B	MY45106456	Jul. 02, 2021	Jul. 01, 2022
EMI Test Receiver	Rohde & Schwarz	ESPI	100010/007	Jul. 02, 2021	Jul. 01, 2022
Spectrum Analyzer	Rohde & Schwarz	FSV40-N	102197	Jul. 02, 2021	Jul. 01, 2022
Bilog Antenna	ETS-LINDGREN	3142E	00117537	Mar.01, 2020	Feb. 28, 2022
Horn Antenna	ETS-LINDGREN	3117	00143207	Mar.01, 2020	Feb. 28, 2022
Horn Antenna	ETS-LINDGREN	BBHA 9170	BBHA9170582	Mar.01, 2020	Feb. 28, 2022
Loop Antenna	SCHWARZBECK	FMZB 1519 B	1519B-059	Jul. 06, 2021	Jul. 05, 2022
Pre-amplifier	Sonoma	310N	185903	Feb. 25, 2021	Feb. 24, 2022
Pre-amplifier	HP	8449B	3008A00849	Feb. 25, 2021	Feb. 24, 2022
Pre-amplifier	SKET	LNPA_1840G-50	SK201904032	Feb. 25, 2021	Feb. 24, 2022
Cable	HUBER+SUHNER	100	SUCOFLEX	Feb. 25, 2021	Feb. 24, 2022
Positioning Controller	ETS-LINDGREN	2090	N/A	N/A	N/A
Antenna Conducted I	Emission				
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
Spectrum Analyzer	Agilent	E4407B	MY45106456	Jul. 02, 2021	Jul. 01, 2022
Spectrum Analyzer	Rohde & Schwarz	FSV40-N	102197	Jul. 02, 2021	Jul. 01, 2022
MXA Signal Analyzer	Agilent	N9020A	MY49100060	Sep. 10, 2021	Sep. 09, 2022
Vector Signal Generator	Agilent	N5182A	MY50141294	Sep. 10, 2021	Sep. 09, 2022
Analog Signal Generator	Agilent	N5181A	MY50141953	Sep. 10, 2021	Sep. 09, 2022
	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO26	Sep. 10, 2021	Sep. 09, 2022
DE Dower Consor	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO29	Sep. 10, 2021	Sep. 09, 2022
RF Power Sensor	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO31	Sep. 10, 2021	Sep. 09, 2022
	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO33	Sep. 10, 2021	Sep. 09, 2022



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5. Conducted Emission Test

5.1 Test Standard and Limit

5.1.1Test Standard FCC Part 15.207(a)

5.1.2 Test Limit

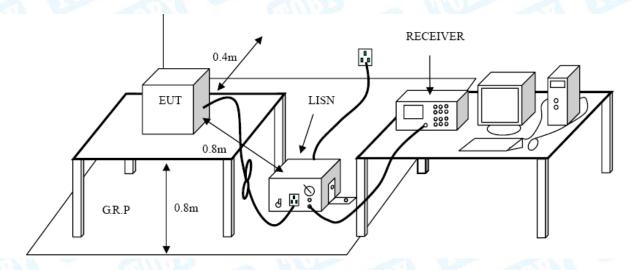
Conducted Emission Test Limit

Eroguonov	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
F70F F00F	10(Note 2)	105.3
5725~5825	15.6(Note 2)	110.9
	27(Note 2)	122.3



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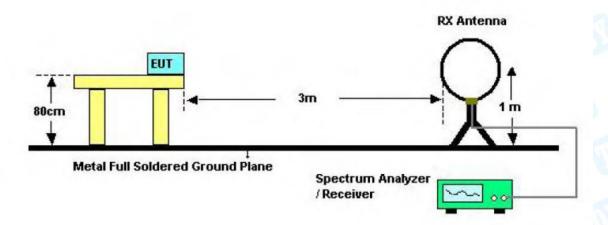
NOTE:

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

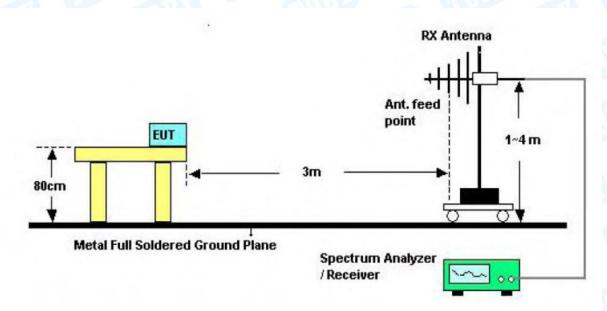
$$\mathsf{E} \!=\! \frac{1000000\sqrt{30P}}{3}\,\mathsf{uV/m},\,\mathsf{where}\;\mathsf{P}\;\mathsf{is}\;\mathsf{the}\;\mathsf{eirp}\;\mathsf{(Watts)}$$

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



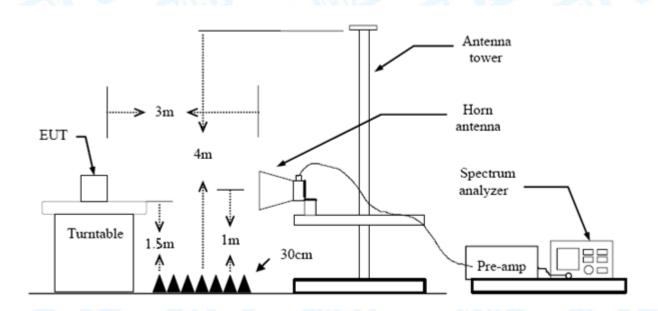
Below 30MHz Test Setup



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. Restricted 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
F70F F00F	10(Note 2)	105.3
5725~5825	15.6(Note 2)	110.9
m181	27(Note 2)	122.3

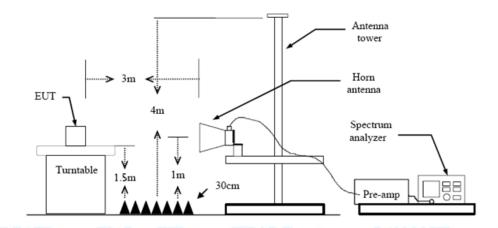
NOTE:

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

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

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

- ---Radiated measurement
- 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.
- The Test antenna shall vary between 1m and 4m, Both Horizontal and Vertical antenna are set to make measurement.
- 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.
- The Peak Value and average value both need to comply with applicable limit above 1 GHz.
- 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.
- For the actual test configuration, please see the test setup photo.
- --- Conducted measurement
- a) Measure the conducted output power (in dBm) using the detector specified by the appropriate regulatory agency (see 11.12.2.3 through 11.12.2.5 for guidance regarding measurement procedures for determining quasi-peak, peak, and average conducted output power, respectively).
- b) Add the maximum transmit antenna gain (in dBi) to the measured output power level to determine the EIRP (see 11.12.2.6 for guidance on determining the applicable antenna gain).
- c) Add the appropriate maximum ground reflection factor to the EIRP (6 dB for frequencies ≤30 MHz; 4.7 dB for frequencies between 30 MHz and 1000 MHz, inclusive; and 0 dB for frequencies > 1000 MHz).
- d) For MIMO devices, measure the power of each chain and sum the EIRP of all chains in linear terms (i.e., watts and mW).
- e) Convert the resultant EIRP to an equivalent electric field strength using the following relationship:

 $E = EIRP-20 \log d + 104.8$

where

E is the electric field strength in dBuV/m

EIRP is the equivalent isotropically radiated power in dBm

d is the specified measurement distance in m

- f) Compare the resultant electric field strength level with the applicable regulatory limit.
- g) Perform the radiated spurious emission test.



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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 Appendix D.



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8. Bandwidth Test

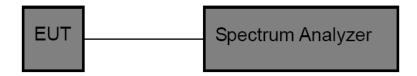
8.1 Test Standard and Limit

8.1.1 Test Standard FCC Part 15.407

8.1.2 Test Limit

FCC Part 15 Subpart C(15.407)			
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 Appendix D.



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9. Maximum Conducted Output Power

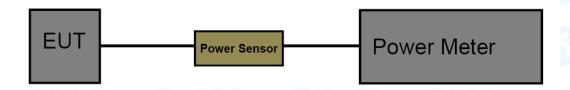
9.1 Test Standard and Limit

9.1.1 Test Standard FCC Part 15.407 (a)

9.1.2 Test Limit

FCC Part 15 Subpart E(15.407)				
Test Item	Frequency Range(MHz)			
and the course	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 Appendix D.



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10. Power Spectral Density Test

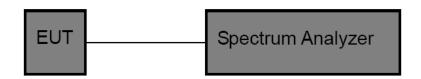
10.1 Test Standard and Limit

10.1.1 Test Standard FCC Part 15.407 (a)

10.1.2 Test Limit

FCC Part 15 Subpart E(15.407)				
Test Item	Limit	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 Appendix D.



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11. Frequency Stability Measurement

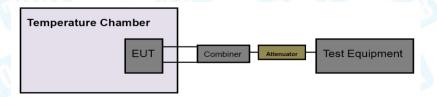
11.1 Test Standard and Limit

11.1.1 Test Standard FCC Part 15.407(g)

11.1.2 Test Limit

FCC Part 15 Subpart C(15.407)					
Test Item	Limit	Frequency Range(MHz)			
TO THE REAL PROPERTY.	Manufacturers of U-NII devices are responsible	5150~5250			
	for ensuring frequency stability such that an	5250~5350			
Frequency Stability 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 Appendix D.



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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 PIFA Antenna. It complies with the standard requirement.

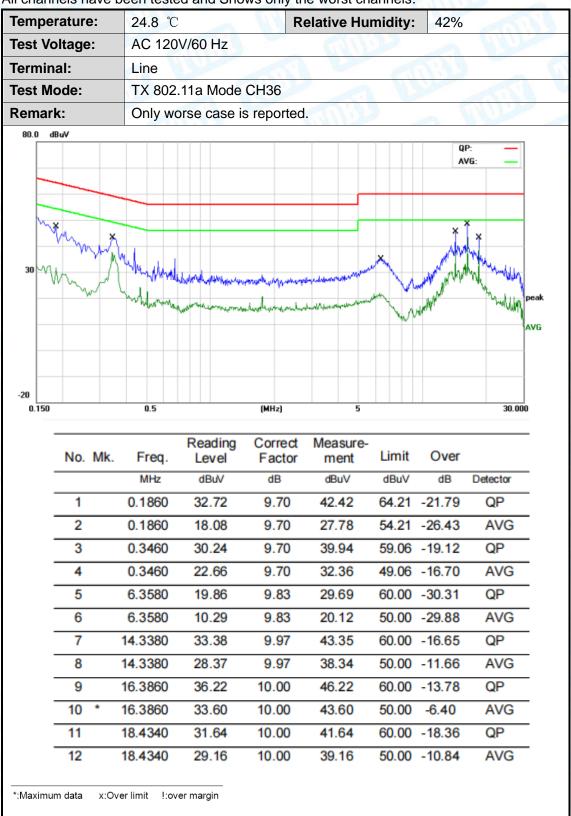
Antenna Type	
▼ Permanent attached antenna	A Desire
☐ Unique connector antenna	W.
□ Professional installation antenna	





Attachment A-- Conducted Emission Test Data

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

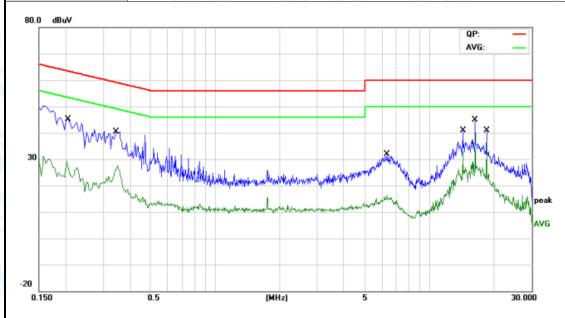




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Temperature:	24.8 ℃	Relative Humidity:	42%
Test Voltage:	AC 120V/60 Hz		
Terminal:	Neutral	(1:33	
Test Mode:	TX 802.11a Mode CH36		
Remark:	Only worse case is repor	ted	



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1		0.2060	31.21	9.80	41.01	63.36	-22.35	QP
2		0.2060	14.25	9.80	24.05	53.36	-29.31	AVG
3		0.3460	25.43	9.80	35.23	59.06	-23.83	QP
4		0.3460	15.99	9.80	25.79	49.06	-23.27	AVG
5		6.3340	14.52	9.87	24.39	60.00	-35.61	QP
6		6.3340	5.43	9.87	15.30	50.00	-34.70	AVG
7		14.3380	29.51	9.99	39.50	60.00	-20.50	QP
8		14.3380	23.83	9.99	33.82	50.00	-16.18	AVG
9		16.3860	33.84	10.00	43.84	60.00	-16.16	QP
10	*	16.3860	30.23	10.00	40.23	50.00	-9.77	AVG
11		18.4340	28.70	10.00	38.70	60.00	-21.30	QP
12		18.4340	25.80	10.00	35.80	50.00	-14.20	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

Ant. Pol.	Ant. Pol. Fest Mode Remark: 80.0 dBuv/	2:	Horiz	zonta 302.1	I 1a Mode 5		(U-NII-1)	(AF)FC			
TX 802.11a Mode 5180MHz (U-NII-1) Remark: Only worse case is reported 80.0 dBw//m (NF)FCC 15C 3M Rediction Margin 6 dB 20 300 40 50 60 70 80 (MHz) 300 400 500 600 700 Reading Correct Measure- No. Mk. Freq. Level Factor ment Limit Over	est Mode Remark: 80.0 dBuV/	'm	TX 8	302.1	1a Mode 5		(U-NII-1)	(AF)FC			
Remark: Only worse case is reported 80.0 dBuV/m (RFJFCC 15C 3M Radiation Margin 6 df 30 1 2 3 3 4 4 5 5 5 5 5 5 5 7 0 90 (NHz) 300 400 500 600 700 No. Mk. Freq. Reading Correct Measure— Readin	80.0 dBuV/	'm		_			(U-NII-1)	(AF)FC	611		
80.0 dBuV/m (NF)FCC 15C 3M Rediction Margin 6 dE 30 20 30.000 40 50 60 70 80 (MHz) 300 400 500 600 700 No. Mk. Freq. Level Factor ment Limit Over	80.0 dBuV/	2	Only	/ WOTS	se case is	reported		(AF)FC			
30 1 2 3 3 4 4 5 5 60 70 80 [MHz] 300 400 500 600 700 Reading Correct Measure- No. Mk. Freq. Level Factor ment Limit Over	30 1	2						(AF)FC			7
-20 30.000 40 50 60 70 80 (MHz) 300 400 500 600 700 Reading Correct Measure- Limit Over	L.							(AF)FC			
-20 30.000 40 50 60 70 80 (MH2) 300 400 500 600 700 Reading Correct Measure- Limit Over	L.							(RF)FC			
-20 30.000 40 50 60 70 80 (MHz) 300 400 500 600 700 Reading Correct Measure- Limit Over	L.							(RF)FC			
30 1 2 3 4 4 5 5 5 5 5 5 60 70 80 (MHz) 300 400 500 600 700 No. Mk. Freq. Level Factor ment Limit Over	L.								C 15C 3M Ra	diation	
30 1 2 3 4 4 4 5 30.000 40 50 60 70 80 (MHz) 300 400 500 600 700 Reading Correct Measure- No. Mk. Freq. Level Factor ment Limit Over	L.								Ma	rgin -6 dB	F
-20 30.000 40 50 60 70 80 (MHz) 300 400 500 600 700 No. Mk. Freq. Level Factor ment Limit Over	L.									6	Ц
-20 30.000 40 50 60 70 80 (MHz) 300 400 500 600 700 No. Mk. Freq. Level Factor ment Limit Over	L.				ı	5			'		
-20 30.000 40 50 60 70 80 (MHz) 300 400 500 600 700 No. Mk. Freq. Reading Correct Measure Limit Over	March 1	ħ		3		4				mound	4
-20 30.000 40 50 60 70 80 (MHz) 300 400 500 600 700 No. Mk. Freq. Level Factor ment Limit Over	- W	+ 51		À		X~~~	Jamy My	all as a way wash	mondan		
30.000 40 50 60 70 80 (MHz) 300 400 500 600 700 Reading Correct Measure- No. Mk. Freq. Level Factor ment Limit Over	۱ "	W Sarry	My 1	$ f \setminus$	J. Lamy	/		»/Men			
30.000 40 50 60 70 80 (MHz) 300 400 500 600 700 Reading Correct Measure- No. Mk. Freq. Level Factor ment Limit Over		Ψ	-		- AMM						-
30.000 40 50 60 70 80 (MHz) 300 400 500 600 700 Reading Correct Measure- No. Mk. Freq. Level Factor ment Limit Over											
30.000 40 50 60 70 80 (MH₂) 300 400 500 600 700 Reading Correct Measure- No. Mk. Freq. Level Factor ment Limit Over											
30.000 40 50 60 70 80 (MH₂) 300 400 500 600 700 Reading Correct Measure- No. Mk. Freq. Level Factor ment Limit Over											-
Reading Correct Measure- No. Mk. Freq. Level Factor ment Limit Over						7111.5		100		= 100	
No. Mk. Freq. Level Factor ment Limit Over	30.000	40 50	60 /	70 BU		[MHzJ	300	100	500 6 00	700 100	00.00
No. Mk. Freq. Level Factor ment Limit Over	_										
Test time 1194. Ecvel Factor ment								Limit	Over		
MHz dBuV dB/m dBuV/m dB Detect	r	No. MK.				Factor					
			MH	Z	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	
1 30.6379 39.83 -13.43 26.40 40.00 -13.60 QF	1		30.63	379	39.83	-13.43	26.40	40.00	-13.60	QP	
2 49.0145 47.22 -22.74 24.48 40.00 -15.52 QF	2		49.01	45	47.22	-22.74	24.48	40.00	-15.52	QP	
3 77.8654 46.69 -22.66 24.03 40.00 -15.97 QF	3		77.86	354	46.69	-22.66	24.03	40.00	-15.97	QP	
4 138.3873 45.91 -22.37 23.54 43.50 -19.96 QF	4		138.38	873	45.91	-22.37	23.54	43.50	-19.96	QP	
			184.48	898	51.51	-19.98	31.53	43.50	-11.97	QP	
5 184.4898 51.51 -19.98 31.53 43.50 -11.97 QF	5			035	46.29	-7.59	38.70	46.00	-7.30	QP	



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N. Y. Janes P.						
Temperature:	24.6 ℃	Relative Humidity:	43%			
Test Voltage:	AC 120V/60Hz	(33)	MDD -			
Ant. Pol.	/ertical					
Test Mode:	TX 802.11a Mode 5180M	TX 802.11a Mode 5180MHz (U-NII-1)				
Remark:	Only worse case is repor	ted.	0.12			



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

^{*:}Maximum data x:Over limit !:over margin



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

Temperature:	23.6 ℃	Relative Humidity:	47%			
Test Voltage:	AC 120V/60 Hz	(3)	1000			
Ant. Pol.	Horizontal					
Test Mode:	TX 802.11a Mode 5180MHz (U-NII-1)					
Remark:	No report for the emission which more than 10 dB below the					
	prescribed limit. Only worse case is reported.					

No.	Mk	. Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBu∀/m	dBu∀/m	dB	Detector
1		10361.012	67.30	-22.24	45.06	54.00	-8.94	AVG
2	*	10361.484	87.46	-22.24	65.22	68.30	-3.08	peak

Remark:

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB μ V/m)-Limit PK/AVG(dB μ V/m)
- 4. The tests evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
- 5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	23.6 ℃	Relative Humidity:	47%				
Test Voltage:	AC 120V/60 Hz						
Ant. Pol.	Vertical	Vertical					
Test Mode:	TX 802.11a Mode 5180MHz (U-NII-1)						
Remark:	No report for the emission which more than 10 dB below the						
	prescribed limit. Only worse case is reported.						

No	o. Mk	c. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBu√/m	dBu∀/m	dB	Detector
1		10360.014	67.45	-22.24	45.21	54.00	-8.79	AVG
2	*	10360.241	87.36	-22.24	65.12	68.30	-3.18	peak

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dBµV/m)-Limit PK/AVG(dBµV/m)
- 4. The tests evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
- 5. No report for the emission which more than 20dB below the prescribed limit.



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1 7 3657					
Temperature:	23.6 ℃	Relative Humidity:	47%		
Test Voltage:	AC 120V/60 Hz	(3)	MDD -		
Ant. Pol.	Horizontal				
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.	100			

No	. Mk	c. Freq.	_		Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBu∀/m	dBu∀/m	dB	Detector
1		10399.171	67.48	-22.16	45.32	54.00	-8.68	AVG
2	*	10401.641	87.17	-22.16	65.01	68.30	-3.29	peak

Remark:

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dB μ V/m)= Corr. (dB/m)+ Read Level (dB μ V)
- 3. Margin (dB) = Peak/AVG (dB μ V/m)-Limit PK/AVG(dB μ V/m)
- 4. The tests evaluated 1-40 GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
- 5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	23.6 ℃	Relative Humidity:	47%			
Test Voltage:	AC 120V/60 Hz					
Ant. Pol.	Vertical					
Test Mode:	TX 802.11a Mode 5200M	TX 802.11a Mode 5200MHz (U-NII-1)				
Remark:	No report for the emissio prescribed limit.	n which more than 10 c	dB below the			

No	. MI	k. Freq.	_	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBu√/m	dBu∀/m	dB	Detector
1		10399.201	68.68	-22.16	46.52	54.00	-7.48	AVG
2	*	10399.621	88.40	-22.16	66.24	68.30	-2.06	peak

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dB μ V/m)= Corr. (dB/m)+ Read Level (dB μ V)
- 3. Margin (dB) = Peak/AVG (dB μ V/m)-Limit PK/AVG(dB μ V/m)
- 4. The tests evaluated 1-40 GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
- 5. No report for the emission which more than 20dB below the prescribed limit.



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Temperature:	23.6 ℃	Relative Humidity:	47%				
Test Voltage:	AC 120V/60 Hz	133					
Ant. Pol.	Horizontal	Horizontal					
Test Mode:	TX 802.11a Mode 5240M	1Hz (U-NII-1)					
Remark:	No report for the emission which more than 10 dB below the						
	prescribed limit.	100					

No	э. М	k. Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBu√/m	dBu∀/m	dB	Detector
1		10480.331	67.76	-22.11	45.65	54.00	-8.35	AVG
2	*	10480.784	87.44	-22.11	65.33	68.30	-2.97	peak

Remark:

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dB μ V/m)= Corr. (dB/m)+ Read Level (dB μ V) 3. Margin (dB) = Peak/AVG (dB μ V/m)-Limit PK/AVG(dB μ V/m)
- 4. The tests evaluated1-40GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
- 5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	23.6 ℃	Relative Humidity:	47%				
Test Voltage:	AC 120V/60 Hz	THU THE	The same of the sa				
Ant. Pol.	Vertical	Vertical					
Test Mode:	TX 802.11a Mode 5240N	1Hz (U-NII-1)	TO THE STATE OF TH				
Remark:	No report for the emission which more than 10 dB below the prescribed limit.						
	prescribed littlit.	701:13	ILL M. I.				

	No.	Mk	. Freq.			Measure- ment	Limit	Over	
			MHz	dBu∀	dB/m	dBu√/m	dBu∀/m	dB	Detector
1			10481.321	67.32	-22.11	45.21	54.00	-8.79	AVG
2		*	10481.604	88.31	-22.11	66.20	68.30	-2.10	peak

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBµV/m)= Corr. (dB/m)+ Read Level (dBµV)
- 3. Margin (dB) = Peak/AVG (dB μ V/m)-Limit PK/AVG(dB μ V/m)
- 4. The tests evaluated1-40GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
- 5. No report for the emission which more than 20dB below the prescribed limit.



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Temperature:	23.6 ℃	Relative Humidity:	47%				
Test Voltage:	AC 120V/60 Hz						
Ant. Pol.	Horizontal	Horizontal					
Test Mode:	TX 802.11n(HT20) Mode	5180MHz (U-NII-1)	(1:30) C				
Remark:	No report for the emissio prescribed limit. Only wo		dB below the				
	*						

No	. M	k. Freq.	_	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBu∀/m	dBu∀/m	dB	Detector
1		10360.311	67.90	-22.24	45.66	54.00	-8.34	AVG
2	*	10360.651	87.35	-22.24	65.11	68.30	-3.19	peak

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB μ V/m)-Limit PK/AVG(dB μ V/m) 4. The tests evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
- 5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	23.6 ℃	Relative Humidity:	47%				
Test Voltage:	AC 120V/60 Hz						
Ant. Pol.	Vertical	Vertical					
Test Mode:	TX 802.11n(HT20) Mode	5180MHz (U-NII-1)					
Remark:	No report for the emission which more than 10 dB below the						
	prescribed limit. Only wo	rse case is reported.	U.S. A				

No	. Mk	. Freq.	_		Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBu∀/m	dBu∀/m	dB	Detector
1		10361.011	67.34	-22.24	45.10	54.00	-8.90	AVG
2	*	10361.741	87.57	-22.24	65.33	68.30	-2.97	peak

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB μ V/m)-Limit PK/AVG(dB μ V/m)
- 4. The tests evaluated1-40GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
- 5. No report for the emission which more than 20dB below the prescribed limit.



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L Y British							
Temperature:	23.6 ℃	Relative Humidity:	47%				
Test Voltage:	AC 120V/60 Hz		MODE				
Ant. Pol.	Horizontal	Horizontal					
Test Mode:	TX 802.11n(HT20) Mode	5200MHz (U-NII-1)					
Remark:	No report for the emission which more than 10 dB below the						
	prescribed limit. Only wo	rse case is reported.					

No	. MI	k. Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBu∀/m	dBu∀/m	dB	Detector
1	*	10440.001	87.38	-22.16	65.22	68.30	-3.08	peak
2		10440.624	68.48	-22.16	46.32	54.00	-7.68	AVG

Remark:

- Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
 Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB μ V/m)-Limit PK/AVG(dB μ V/m)
- 4. The tests evaluated1-40GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
- 5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	23.6 ℃ Relative Humidity: 47%
Test Voltage:	AC 120V/60 Hz
Ant. Pol.	Vertical
Test Mode:	TX 802.11n(HT20) Mode 5200MHz (U-NII-1)
Remark:	No report for the emission which more than 10 dB below the prescribed limit. Only worse case is reported.

No.	Mk	. Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBu√/m	dBu∀/m	dB	Detector
1		10440.024	67.48	-22.16	45.32	54.00	-8.68	AVG
2	*	10440.414	87.38	-22.16	65.22	68.30	-3.08	peak

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB μ V/m)-Limit PK/AVG(dB μ V/m)
- 4. The tests evaluated1-40GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
- 5. No report for the emission which more than 20dB below the prescribed limit.



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Temperature:	23.6 ℃	Relative Humidity:	47%		
<u> </u>		Relative Hamilary.	4770		
Test Voltage:	AC 120V/60 Hz				
Ant. Pol.	Horizontal				
Test Mode:	TX 802.11n(HT20) Mode	e 5240MHz (U-NII-1)			
Remark:	No report for the emission which more than 10 dB below the				
	prescribed limit. Only wo	orse case is reported.			

N	0.	Mk.	Freq.			Measure- ment	Limit	Over	
			MHz	dBu∀	dB/m	dBu\/m	dBu∀/m	dB	Detector
1			10481.014	67.35	-22.11	45.24	54.00	-8.76	AVG
2		*	10481.714	87.43	-22.11	65.32	68.30	-2.98	peak

Remark:

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB μ V/m)-Limit PK/AVG(dB μ V/m)
- 4. The tests evaluated1-40GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
- 5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	23.6 ℃	Relative Humidity:	47%
Test Voltage:	AC 120V/60 Hz		
Ant. Pol.	Vertical	73 100	
Test Mode:	TX 802.11n(HT20) Mode	5240MHz (U-NII-1)	THU
Remark:	No report for the emission prescribed limit. Only wo		dB below the

No	. Mł	c. Freq.			Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBu√/m	dBu∀/m	dB	Detector
1	*	10480.324	87.23	-22.11	65.12	68.30	-3.18	peak
2		10480.754	67.47	-22.11	45.36	54.00	-8.64	AVG

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dB μ V/m)= Corr. (dB/m)+ Read Level (dB μ V) 3. Margin (dB) = Peak/AVG (dB μ V/m)-Limit PK/AVG(dB μ V/m)
- 4. The tests evaluated1-40GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
- 5. No report for the emission which more than 20dB below the prescribed limit.



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

Temperature:	23.4℃	Relative Humidity:	48%			
Test Voltage:	AC 120V/60 Hz	777				
Ant. Pol.	Horizontal					
Test Mode:	TX 802.11a Mode 5745N	MHz (U-NII-3)				
Remark:	No report for the emission which more than 10 dB below the					
	prescribed limit.					

No	. Mk	. Freq.			Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBu√/m	dBu∀/m	dB	Detector
1		11490.012	65.45	-21.24	44.21	54.00	-9.79	AVG
2	*	11490.201	85.46	-21.24	64.22	68.30	-4.08	peak

- Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
 Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB μ V/m)-Limit PK/AVG(dB μ V/m)
- 4. The tests evaluated1-40GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
- 5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	23.4℃	Relative Humidity:	48%
Test Voltage:	AC 120V/60 Hz		
Ant. Pol.	Vertical	TIO.	
Test Mode:	TX 802.11a Mode 5745	MHz (U-NII-3)	COUNTY OF
Remark:	No report for the emission prescribed limit.	on which more than 10	dB below the

N	lo.	Mk.	. Freq.			Measure- ment	Limit	Over	
			MHz	dBu∨	dB/m	dBu√/m	dBu∀/m	dB	Detector
1		*	11490.221	85.46	-21.24	64.22	68.30	-4.08	peak
2			11490.241	66.46	-21.24	45.22	54.00	-8.78	AVG

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB μ V/m)-Limit PK/AVG(dB μ V/m)
- 4. The tests evaluated1-40GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
- 5. No report for the emission which more than 20dB below the prescribed limit.



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23.4℃	Relative Humidity:	48%					
AC 120V/60 Hz	C 120V/60 Hz						
Horizontal							
TX 802.11a Mode 5785M	IHz (U-NII-3)	0.33					
No report for the emission prescribed limit.	n which more than 10	dB below the					
	AC 120V/60 Hz Horizontal TX 802.11a Mode 5785W No report for the emission	AC 120V/60 Hz Horizontal TX 802.11a Mode 5785MHz (U-NII-3) No report for the emission which more than 10 or					

No	No. Mk.		Freq.	Reading Level		Measure- ment	Limit	Over	
			MHz	dBu∀	dB/m	dBuV/m	dBu∀/m	dB	Detector
1	*	115	71.141	84.30	-21.19	63.11	68.30	-5.19	peak
2		115	71.362	67.77	-21.19	46.58	54.00	-7.42	AVG

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB μ V/m)-Limit PK/AVG(dB μ V/m) 4. The tests evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
- 5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	23.4℃	Relative Humidity:	48%					
Test Voltage:	AC 120V/60 Hz							
Ant. Pol.	Vertical							
Test Mode:	TX 802.11a Mode 5785N	TX 802.11a Mode 5785MHz (U-NII-3)						
Remark:	No report for the emission which more than 10 dB below the prescribed limit.							

	Vo.	Mk	. Freq.			Measure- ment	Limit	Over	
			MHz	dBu∨	dB/m	dBu√/m	dBu∀/m	dB	Detector
1		*	11570.014	83.30	-21.19	62.11	68.30	-6.19	peak
2			11571.221	67.41	-21.19	46.22	54.00	-7.78	AVG

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB μ V/m)-Limit PK/AVG(dB μ V/m)
- 4. The tests evaluated1-40GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
- 5. No report for the emission which more than 20dB below the prescribed limit.



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Temperature:23.4℃Relative Humidity:48%Test Voltage:AC 120V/60 HzAnt. Pol.HorizontalTest Mode:TX 802.11a Mode 5825MHz (U-NII-3)Remark:No report for the emission which more than 10 dB below the prescribed limit.

No	. M	lk.	Freq.	Reading Level		Measure- ment	Limit	Over	
			MHz	dBu∨	dB/m	dBu∀/m	dBu∀/m	dB	Detector
1	*	1	1650.141	85.49	-21.14	64.35	68.30	-3.95	peak
2		1	1650.426	67.36	-21.14	46.22	54.00	-7.78	AVG

Remark:

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB μ V/m)-Limit PK/AVG(dB μ V/m)
- 4. The tests evaluated1-40GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
- 5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	23.4℃	Relative Humidity:	48%				
Test Voltage:	AC 120V/60 Hz						
Ant. Pol.	Vertical						
Test Mode:	TX 802.11a Mode 5825N	TX 802.11a Mode 5825MHz (U-NII-3)					
Remark: No report for the emission which more than 10 dB below the prescribed limit.							

No	. Mł	c. Freq.			Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBu√/m	dBu∀/m	dB	Detector
1	*	11651.102	86.41	-21.14	65.27	68.30	-3.03	peak
2		11651.654	66.15	-21.14	45.01	54.00	-8.99	AVG

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB μ V/m)-Limit PK/AVG(dB μ V/m)
- 4. The tests evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
- 5. No report for the emission which more than 20dB below the prescribed limit.



The second second		The second second					
Temperature:	23.4℃	Relative Humidity:	48%				
Test Voltage:	AC 120V/60 Hz						
Ant. Pol.	Horizontal						
Test Mode:	TX 802.11a Mode 58	TX 802.11a Mode 5825MHz (U-NII-3)					
Remark:	No report for the emission which more than 10 dB below the prescribed limit.						
		10.102.112					

No	. M	lk.	Freq.	Reading Level		Measure- ment	Limit	Over	
			MHz	dBu∨	dB/m	dBu∀/m	dBu∀/m	dB	Detector
1	*	1	1650.141	85.49	-21.14	64.35	68.30	-3.95	peak
2		1	1650.426	67.36	-21.14	46.22	54.00	-7.78	AVG

Remark

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB μ V/m)-Limit PK/AVG(dB μ V/m)
- 4. The tests evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
- 5. No report for the emission which more than 20dB below the prescribed limit.

			1 1 Albert							
Tempera	ture:	23.4	\mathbb{C}		Relative Humi	idity: 4	-8%	MAGE		
Test Volt	age:	AC 1	AC 120V/60 Hz							
Ant. Pol. Vertical					1					
Test Mode: TX 802.11a Mode 5825MHz (U-NII-3)					MAL					
Remark:		100	eport for the cribed limit.	emission	which more th	an 10 dB	below the			
No. M	lk. Fre	eq.	Reading Level	Correct Factor		Limit	Over			
	MH	Z	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector		
1 *	11651	.102	86.41	-21.14	65.27	68.30	-3.03	peak		
2	11651	.654	66.15	-21.14	45.01	54.00	-8.99	AVG		

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB μ V/m)-Limit PK/AVG(dB μ V/m)
- 4. The tests evaluated 1-40 GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
- 5. No report for the emission which more than 20dB below the prescribed limit.



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١	Temperature:	23.4℃	Relative Humidity:	48%				
	Test Voltage:	AC 120V/60HZ						
	Ant. Pol.	Horizontal	7:33	TO DE				
	Test Mode:	TX 802.11n(HT20) Mode 5745MHz (U-NII-3)						

N	lo. Mk	. Freq.			Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBu√/m	dBu∀/m	dB	Detector
1		11491.001	66.87	-21.24	45.63	54.00	-8.37	AVG
2	*	11491.254	85.35	-21.24	64.11	68.30	-4.19	peak

Remark:

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB μ V/m)-Limit PK/AVG(dB μ V/m)
- 4. The tests evaluated 1-40 GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
- 5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	23.4℃	Relative Humidity:	48%
Test Voltage:	AC 120V/60HZ	COURT OF	MULL
Ant. Pol.	Vertical		with the same of t
Test Mode:	TX 802.11n(HT20) Mode	e 5745MHz (U-NII-3)	

-	No. M	lk. Freq.			Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBu∀/m	dBuV/m	dB	Detector
1		11491.102	67.45	-21.24	46.21	54.00	-7.79	AVG
2	*	11491.485	83.65	-21.24	62.41	68.30	-5.89	peak

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB μ V/m)-Limit PK/AVG(dB μ V/m)
- 4. The tests evaluated 1-40 GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
- 5. No report for the emission which more than 20dB below the prescribed limit.



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Š	Temperature:	23.4℃	Relative Humidity:	48%			
	Test Voltage:	AC 120V/60HZ	110				
	Ant. Pol.	Horizontal					
	Test Mode:	TX 802.11n(HT20) Mode 5785MHz (U-NII-3)					

No	o. Mł	c. Freq.			Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBuV/m	dBu∀/m	dB	Detector
1		11570.021	64.41	-21.19	43.22	54.00	-10.78	AVG
2	*	11570.352	85.41	-21.19	64.22	68.30	-4.08	peak

Remark:

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB μ V/m)-Limit PK/AVG(dB μ V/m)
- 4. The tests evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
- 5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	23.4℃	Relative Humidity:	48%			
Test Voltage: AC 120V/60HZ						
Ant. Pol.	Vertical					
Test Mode:	TX 802.11n(HT20) Mode 5785MHz (U-NII-3)					

No	. Mk	. Freq.			Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBu√/m	dBu∀/m	dB	Detector
1		11571.012	63.30	-21.19	42.11	54.00	-11.89	AVG
2	*	11571.651	85.41	-21.19	64.22	68.30	-4.08	peak

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB μ V/m)-Limit PK/AVG(dB μ V/m)
- 4. The tests evaluated 1-40 GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
- 5. No report for the emission which more than 20dB below the prescribed limit.



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Temperature:	23.4℃	Relative Humidity:	48%				
Test Voltage:	AC 120V/60HZ						
Ant. Pol.	Horizontal	Horizontal					
Test Mode:	TX 802.11n(HT20) Mode 5825MHz (U-NII-3)						

No.	Mk	. Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBu∀/m	dBu∀/m	dB	Detector
1		11652.103	63.58	-21.14	42.44	54.00	-11.56	AVG
2	*	11652.854	85.36	-21.14	64.22	68.30	-4.08	peak

Remark:

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB μ V/m)-Limit PK/AVG(dB μ V/m)
- 4. The tests evaluated 1-40 GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
- 5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	23.4℃	Relative Humidity:	48%				
Test Voltage: AC 120V/60HZ							
Ant. Pol. Vertical							
Test Mode:	TX 802.11n(HT20) Mode	TX 802.11n(HT20) Mode 5825MHz (U-NII-3)					

No). M	k. Freq.		Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBu∀/m	dBu∀/m	dB	Detector
1	*	11650.217	83.58	-21.14	62.44	68.30	-5.86	peak
2		11650.623	68.36	-21.14	47.22	54.00	-6.78	AVG

Remark:

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB μ V/m)-Limit PK/AVG(dB μ V/m)
- 4. The tests evaluated 1-40 GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
- 5. No report for the emission which more than 20dB below the prescribed limit.

----END OF REPORT-----