

## Shenzhen Toby Technology Co., Ltd.



Report No.: TBR-C-202302-0215-51

Page: 1 of 173

# Radio Test Report

FCC ID: 2AW68-NP1257GB

Report No. : TBR-C-202302-0215-51

**Applicant**: Shenzhen SDMC Technology Co., Ltd.

**Equipment Under Test (EUT)** 

**EUT Name** : AC1200 Dual Band WiFi GPON Terminal,

Dual Band WiFi GPON Terminal,

Terminal WiFi GPON de doble banda AC1200

Model No. : NP1257GB

Series Model No. : ---

Brand Name : SDMC, Claro, D FIBRA

Sample ID : 202302-0215-5-1#&202302-0215-5-2#

**Receipt Date** : 2023-03-14

**Test Date** : 2023-03-15 to 2023-04-13

Issue Date : 2023-04-14

Standards : FCC Part 15 Subpart E 15.407

Test Method: ANSI C63.10: 2013

KDB 789033 D02 General UNII Test Procedures New Rules v02r01

KDB 662911 D01 Multiple Transmitter Output v02r01

Conclusions : PASS

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

Witness Engineer :

Engineer Supervisor : TMA

Engineer Manager :

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

Report No.: TBR-C-202302-0215-51 Page: 2 of 173

## Contents

CO	NTENTS	2
RE\	VISION HISTORY	5
1.	GENERAL INFORMATION ABOUT EUT	6
	1.1 Client Information	6
	1.2 General Description of EUT (Equipment Under Test)	6
	1.3 Block Diagram Showing the Configuration of System Tested	
	1.4 Description of Support Units	
	1.5 Description of Test Mode	
	1.6 Description of Test Software Setting	10
	1.7 Measurement Uncertainty	12
	1.8 Test Facility	13
2.	TEST SUMMARY	14
3.	TEST SOFTWARE	14
4.	TEST EQUIPMENT	15
5.	CONDUCTED EMISSION TEST	
	5.1 Test Standard and Limit	16
	5.2 Test Setup	16
	5.3 Test Procedure	
	5.4 Deviation From Test Standard	16
	5.5 EUT Operating Mode	17
	5.6 Test Data	17
6.	RADIATED AND CONDUCTED UNWANTED EMISSIONS	18
	6.1 Test Standard and Limit	18
	6.2 Test Setup	19
	6.3 Test Procedure	
	6.4 Deviation From Test Standard	
	6.5 EUT Operating Mode	22
	6.6 Test Data	22
7.	RESTRICTED BANDS REQUIREMENT	23
	7.1 Test Standard and Limit	23
	7.2 Test Setup	24
	7.3 Test Procedure	25
	7.4 Deviation From Test Standard	25





Report No.: TBR-C-202302-0215-51 Page: 3 of 173

	7.5 EUT Operating Mode	25
	7.6 Test Data	
8.	BANDWIDTH TEST	26
	8.1 Test Standard and Limit	26
	8.2 Test Setup	26
	8.3 Test Procedure	26
	8.4 Deviation From Test Standard	28
	8.5 EUT Operating Mode	28
	8.6 Test Data	28
9.	MAXIMUM CONDUCTED OUTPUT POWER	29
	9.1 Test Standard and Limit	
	9.2 Test Setup	
	9.3 Test Procedure	
	9.4 Deviation From Test Standard	30
	9.5 EUT Operating Mode	
	9.6 Test Data	
10.	POWER SPECTRAL DENSITY TEST	31
	10.1 Test Standard and Limit	
	10.2 Test Setup	
	10.3 Test Procedure	
	10.4 Deviation From Test Standard	
	10.5 Antenna Connected Construction	
	10.6 Test Data	
11.	FREQUENCY STABILITY	
	11.1 Test Standard and Limit	
	11.2 Test Setup	
	11.3 Test Procedure	
	11.4 Deviation From Test Standard	
	11.5 Antenna Connected Construction	
	11.6 Test Data	
12.	ANTENNA REQUIREMENT	
Á	12.1 Test Standard and Limit	
	12.2 Deviation From Test Standard	
	12.3 Antenna Connected Construction	
	12.4 Test Data	
ATT	ACHMENT A CONDUCTED EMISSION TEST DATA	
AII	ACHIVIENT A CONDUCTED EIVII 30 ION TEST DATA	30





Report No.: TBR-C-202302-0215-51 Page: 4 of 173

ATTACHMENT BUNWANTED EMISSIONS DATA	40
ATTACHMENT C RESTRICTED BANDS REQUIREMENT TEST DATA	104





Report No.: TBR-C-202302-0215-51 Page: 5 of 173

# **Revision History**

Report No.	Version	Description	Issued Date
TBR-C-202302-0215-51	Rev.01	Initial issue of report	2023-04-14
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Page: 6 of 173

## 1. General Information about EUT

#### 1.1 Client Information

Applicant : S		Shenzhen SDMC Technology Co., Ltd.	
Address : Room 1022, Floor 10, Building A 3rd Road, Dalang Community, X Shenzhen, China		Room 1022, Floor 10, Building A, Customs Building, No. 2, Xin'an 3rd Road, Dalang Community, Xin'an Street, Bao'an District, Shenzhen, China	
Manufacturer : Shenzhen SDMC Techn		Shenzhen SDMC Technology Co., Ltd.	
Address		Room 1022, Floor 10, Building A, Customs Building, No. 2, Xin'an 3rd Road, Dalang Community, Xin'an Street, Bao'an District, Shenzhen, China	

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

EUT Name	:	AC1200 Dual Band WiFi GPON Terminal, Dual Band WiFi GPON Terminal, Terminal WiFi GPON de doble banda AC1200				
HVIN/Models No.		NP1257GB	NP1257GB			
Model Different		N/A				
COURS OF THE PARTY	N	Operation Frequency: U-NII-1: 5180MHz~5240MHz, U-NII-2A: 5260MHz~5320MHz U-NII-2C: 5500MHz~5720MHz, U-NII-3: 5745MHz~5825MHz				
			Dipole Antenna	Ant. 1	Ant. 2	
		J. T. L. L.	Band(U-NII-1):	3.67dBi	3.22dBi	
Product	3	Antenna Gain:	Band(U-NII-2A):	3.67dBi	3.23dBi	
Description			Band(U-NII-2C):	3.11dBi	3.24dBi	
	N.		Band(U-NII-3):	2.99dBi	3.28dBi	
	Modulation Type:		802.11a: OFDM (QPSK, BPSK, 16QAM, 64QAM) 802.11n: OFDM (QPSK, BPSK, 16QAM, 64QAM) 802.11ac: OFDM (QPSK, BPSK, 16QAM, 64QAM, 256QAM)			
Power Rating		AC Adapter 1#(Model: SA12BV-120100U <b>SUNUN</b> ): Input: 100-240V~, 50/60Hz, 0.4A Output: 12.0V=1A AC Adapter 2#(Model: F12L33-120100SPAU <b>FRECOM</b> ): Input: 100-240V~, 50/60Hz, 0.3A Output: 12.0V=1.0A 12.0W				
Software Version		N/A				
Hardware Version	-	N/A				
Pomark:						

#### Remark

- (1) The adapter provided by the applicant, the verified for the RF conduction test provided by TOBY test lab.
- (2) For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.
- (3) Antenna information from antenna specification.





Page: 7 of 173

#### (4) Channel List:

Frequency Band	Channel No.	Frequency	Channel No.	Frequency
5180~5240MHz ( <b>U-NII-1</b> )	36	5180 MHz	44	5220 MHz
	38	5190 MHz	46	5230 MHz
	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
	52	5260 MHz	60	5300 MHz
5260~5320 MHz	54	5270 MHz	62	5310MHz
(U-NII-2A)	56	5280MHz	64	5320 MHz
	58	5290MHz		

For 20 MHz Bandwidth, use channel 52, 56, 60, 64. For 40 MHz Bandwidth, use channel 54, 62. For 80 MHz Bandwidth, use channel 58

Frequency Band	Channel No.	Frequency	Channel No.	Frequency
	100	5500 MHz	124	5620 MHz
	102	5510 MHz	126	5630 MHz
	104	5520 MHz	128	5640 MHz
	106	5530 MHz	132	5660 MHz
5500~5720 MHz	108	5540 MHz	134	5670 MHz
(U-NII-2C)	110	5550 MHz	136	5680 MHz
	112	5560 MHz	138	5690 MHz
	116	5580 MHz	140	5700 MHz
	118	5590 MHz	142	5710 MHz
	120	5600 MHz	144	5720 MHz
	122	5610 MHz		

For 20 MHz Bandwidth, use channel 100, 104, 108, 112, 116, 120, 124, 128, 132, 136, 140, 144

For 40 MHz Bandwidth, use channel 102, 110, 118, 126, 134, 142

For 80 MHz Bandwidth, use channel 106, 122, 138.

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

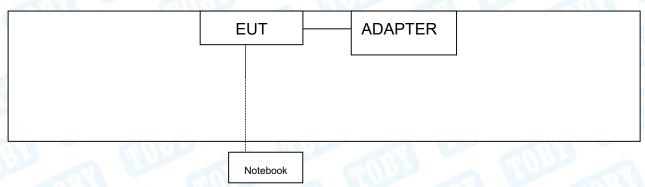
For 20 MHz Bandwidth, use channel 149, 153, 157, 161, 165. For 40 MHz Bandwidth, use channel 151, 159. For 80 MHz Bandwidth, use channel 155.





Page: 8 of 173

## 1.3 Block Diagram Showing the Configuration of System Tested



## 1.4 Description of Support Units

Equipment Information					
Name	Model	FCC ID/VOC	Manufacturer	Used "√"	
Notebook	Inspiron 5493	000	DELL	1	
	Cable Information				
Number	Shielded Type	Ferrite Core	Length	Note	
Cable 1	NO	NO	1.0M	Accessory	





Page: 9 of 173

### 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.

орогацотт		or Conducted Test(AC Power)
Fina	al Test Mode	Description
	Mode 1	TX a Mode(5180MHz)
	F	For Radiated Test Below 1GHz
Fina	al Test Mode	Description
	Mode 2	TX a Mode(5180MHz)
	For Radiate	ed Above 1GHz and RF Conducted Test
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
	Mode 6	TX Mode 802.11n(HT40) Mode Channel 38/46
3 67	Mode 7	TX Mode 802.11ac(VHT40) Mode Channel 38/46
	Mode 8	TX Mode 802.11ac(VHT80) Mode Channel 42
	Mode 9	TX Mode 802.11a Mode Channel 52/56/64
	Mode 10	TX Mode 802.11n(HT20) Mode Channel 52/56/64
U-NII-2A	Mode 11	TX Mode 802.11ac(VHT20) Mode Channel 52/56/64
U-MII-ZA	Mode 12	TX Mode 802.11n(HT40) Mode Channel 54/62
	Mode 13	TX Mode 802.11ac(VHT40) Mode Channel 54/62
	Mode 14	TX Mode 802.11ac(VHT80) Mode Channel 58
HUL	Mode 15	TX Mode 802.11a Mode Channel 100/116/144
	Mode 16	TX Mode 802.11n(HT20) Mode Channel 100/116/144
U-NII-2C	Mode 17	TX Mode 802.11ac(VHT20) Mode Channel 100/116/144
0-1111-20	Mode 18	TX Mode 802.11n(HT40) Mode Channel 102/110/142
	Mode 19	TX Mode 802.11ac(VHT40) Mode Channel 102/110/142
	Mode 20	TX Mode 802.11ac(VHT80) Mode Channel 106/138
THE PERSON	Mode 21	TX Mode 802.11a Mode Channel 149/157/165
	Mode 22	TX Mode 802.11n(HT20) Mode Channel 149/157/165
U-NII-3	Mode 23	TX Mode 802.11ac(VHT20) Mode Channel 149/157/165
0-1411-3	Mode 24	TX Mode 802.11n(HT40) Mode Channel 151/159
	Mode 25	TX Mode 802.11ac(VHT40) Mode Channel 151/159
	Mode 26	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:

Mode	Data Rate
a Mode-SISO	6Mbps
n(VHT20) Mode-MIMO	MCS8
n(VHT40) Mode-MIMO	MCS8
ac(VHT20) Mode-MIMO	MCS0
ac(VHT40) Mode-MIMO	MCS0
ac(VHT80) Mode-MIMO	MCS0

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

(3) The EUT is considered a Mobile unit; in normal use 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.





Page: 10 of 173

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 RF setting.

	Software: QATool Dbg.ex U-NII-1		
Made	F	Parar	neters
Mode	Frequency (MHz)	Ant.1	Ant.
	5180	24	24
802.11a	5200	24	24
	5240	24	24
	5180	24	24
802.11n(HT20)	5200	24	24
	5240	24	24
THU THE	5180	24	24
802.11ac(VHT20)	5200	24	24
	5240	24	24
802.11n(HT40)	5190	22	22
802.1111(H140)	5230	22	22
902 44 co(\/LIT40\	5190	22	22
802.11ac(VHT40)	5230	22	22
802.11ac(VHT80)	5210	22	22
	U-NII-2A		
Mode	Eroguanov (MHz)	Parar	neters
Wiode	Frequency (MHz)	Ant.1	Ant.
	5260	24	24
802.11a	5280	24	24
	5320	24	24
	5260	24	24
802.11n(HT20)	5280	24	24
	5320	24	24
	5260	24	24
802.11ac(VHT20)	5280	24	24
	5320	24	24
802.11n(HT40)	5270	22	22
002.1111(H140)	5310	22	22
802.11ac(VHT40)	5270	22	22
002.11aC(VH140)	5310	22	22
802.11ac(VHT80)	5290	22	22





Report No.: TBR-C-202302-0215-51 Page: 11 of 173

	U-NII-2C		
Mode	Frequency (MHz)		neters
		Ant.1	Ant.2
000 44	5500	24	24
802.11a	5580	24	24
	5720	24	24
000 44 ~ (LITOO)	5500	24	24
802.11n(HT20)	5580		
	5720	24	24
	5500	24	24
802.11ac(VHT20)	5580	24	24
	5720	24	24
	5510	22	22
802.11n(HT40)	5550	22	22
	5710	22	22
	5510	22	22
802.11ac(VHT40)	5550	22	22
	5710	22	22
	5530	1E	1E
802.11ac(VHT80)	5610	1E	1E
(1)	5690	1E	1E
	U-NII-3	_	
Mode	Frequency (MHz)		neters
Wode	Frequency (WIHZ)	Ant.1	Ant.2
	5745	24	24
802.11a	5785	24	24
	5825	24	24
	5745	24	24
802.11n(HT20)	5785	24	24
3	5825	24	24
The Carling	5745	24	24
802.11ac(VHT20)	5785	24	24
	5825	24	24
000 44 (11740)	5755	24	24
802.11n(HT40)	5795	24	24
	5755	24	24
802.11ac(VHT40)	5795	24	24
	0100	28	28





Page: 12 of 173

## 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	$\pm$ 4.20 dB
RF Power-Conducted	1	±0.95 dB
Power Spectral Density- Conducted	1	±3dB
Occupied Bandwidth	1	±3.8%
Unwanted Emission- Conducted	1	±2.72 dB





Page: 13 of 173

### 1.8 Test Facility

The testing report were performed by the Shenzhen Toby Technology Co., Ltd., in their facilities located at 1/F.,Building 6, Rundongsheng Industrial Zone, Longzhu, Xixiang, Bao'an District, 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: 2017 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: 2017 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. CAB identifier: CN0056.





Report No.: TBR-C-202302-0215-51 Page: 14 of 173

## 2. Test Summary

Standard Section	Test Item	Test Sample(s)	Judgment
FCC 15.207(a)	Conducted Emission	202302-0215-5-1#	PASS
FCC 15.209 & 15.407(b)	Radiated Unwanted Emissions	202302-0215-5-1#	PASS
FCC 15.203	Antenna Requirement	202302-0215-5-2#	PASS
FCC 15.407(a)	-26dB Emission Bandwidth	202302-0215-5-2#	PASS
FCC 15.407(e)	-6dB Min Emission Bandwidth	202302-0215-5-2#	PASS
FCC 15.407(a)	Maximum Conducted Output Power	202302-0215-5-2#	PASS
FCC 15.407(a)	Power Spectral Density	202302-0215-5-2#	PASS
FCC 15.407(b)& 15.205	Emissions in Restricted Bands	202302-0215-5-2#	PASS
FCC 15.407(b)&15.209	Conducted Unwanted Emissions	202302-0215-5-2#	PASS
FCC 15.407(g)	Frequency Stability	202302-0215-5-2#	PASS
	On Time and Duty Cycle	202302-0215-5-2#	

Note: (1) N/A is an abbreviation for Not Applicable.

## 3. Test Software

Test Item	Test Software	Manufacturer	Version No.
Conducted Emission	EZ-EMC	EZ	CDI-03A2
Radiation Emission	EZ-EMC	EZ	FA-03A2RE
Radiation Emission	EZ-EMC	EZ	FA-03A2RE+
RF Test System	JS1120-3	Tonscend	V3.2.22





Report No.: TBR-C-202302-0215-51 Page: 15 of 173

## 4. Test Equipment

Conducted Emission	n Test				
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
EMI Test Receiver	Rohde & Schwarz	ESCI	100321	Jun. 23, 2022	Jun. 22, 2023
RF Switching Unit	Compliance Direction Systems Inc	RSU-A4	34403	Jun. 23, 2022	Jun. 22, 2023
AMN	SCHWARZBECK	NNBL 8226-2	8226-2/164	Jun. 22, 2022	Jun. 21, 2023
LISN	Rohde & Schwarz	ENV216	101131	Jun. 22, 2022	Jun. 21, 2023
Radiation Emission	Test	-		-	
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
Spectrum Analyzer	Agilent	N9020A	MY49100060	Sep. 01, 2022	Aug. 31, 2023
Spectrum Analyzer	Rohde & Schwarz	FSV40-N	102197	Jun. 23, 2022	Jun. 22, 2023
EMI Test Receiver	Rohde & Schwarz	ESU-8	100472/008	Feb. 23, 2023	Feb. 22, 2024
Bilog Antenna	SCHWARZBECK	VULB 9168	1225	Dec. 05, 2021	Dec. 04, 2023
Horn Antenna	SCHWARZBECK	BBHA 9120 D	2463	Feb. 26, 2022	Feb.25, 2024
Horn Antenna	SCHWARZBECK	BBHA 9170	1118	Jun. 26, 2022	Jun.25, 2024
Loop Antenna	SCHWARZBECK	FMZB 1519 B	1519B-059	Jun. 26, 2022	Jun.25, 2024
HF Amplifier	Tonscend	TAP9E6343	AP21C806117	Sep. 01, 2022	Aug. 31, 2023
HF Amplifier	Tonscend	TAP051845	AP21C806141	Sep. 01, 2022	Aug. 31, 2023
HF Amplifier	Tonscend	TAP0184050	AP21C806129	Sep. 01, 2022	Aug. 31, 2023
Pre-amplifier	HP	8449B	3008A00849	Feb. 23, 2023	Feb. 22, 2024
Antenna Conducted	Emission				
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
Spectrum Analyzer	Rohde & Schwarz	FSV40-N	102197	Jun. 23, 2022	Jun. 22, 2023
MXA Signal Analyzer	Agilent	N9020A	MY49100060	Sep. 01, 2022	Aug. 31, 2023
Spectrum Analyzer	KEYSIGT	N9020B	MY60110172	Sep. 01, 2022	Aug. 31, 2023
4000	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO26	Sep. 01, 2022	Aug. 31, 2023
RF Power Sensor	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO29	Sep. 01, 2022	Aug. 31, 2023
IN I OWEI SEIISUI	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO31	Sep. 01, 2022	Aug. 31, 2023
W. D	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO33	Sep. 01, 2022	Aug. 31, 2023
Power Control Box	Tonsced	JS0806-4ADC	21C8060387	N/A	N/A
RF Control Unit	Tonsced	JS0806-2	21F8060439	Sep. 01, 2022	Aug. 31, 2023
Temperature and Humidity Chamber	ZhengHang	ZH-QTH-1500	ZH2107264	Jun. 22, 2022	Jun. 21, 2023



Page: 16 of 173

## 5. Conducted Emission Test

#### 5.1 Test Standard and Limit

5.1.1 Test Standard

FCC Part 15.207

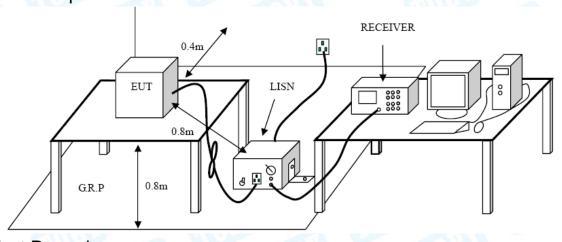
#### 5.1.2 Test Limit

Fraguenav	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



#### 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
- 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 9 kHz, and the test frequency band is from 0.15MHz to 30MHz.

#### 5.4 Deviation From Test Standard

No deviation





Report No.: TBR-C-202302-0215-51 Page: 17 of 173

Page:

## 5.5 EUT Operating Mode

Please refer to the description of test mode.

### 5.6 Test Data

Please refer to the Attachment A inside test report.





Page: 18 of 173

## 6. Radiated and Conducted Unwanted Emissions

#### 6.1 Test Standard and Limit

6.1.1 Test Standard

### FCC Part 15.209 & FCC Part 15.407(b)

#### 6.1.2 Test Limit

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table:

Caraarr	al field atvenueth limite at freeze an air	Dolow 20MH-		
Genera	General field strength limits at frequencies Below 30MHz			
Frequency Field Strength Measurement Distan (MHz) (microvolt/meter) (meters)				
0.009~0.490	2400/F(KHz)	300		
0.490~1.705	24000/F(KHz)	30		
1.705~30.0	30	30		

**Note:** 1, The emission limits for the ranges 9-90 kHz and 110-490 kHz are based on measurements employing a linear average detector.

General field strength limits at frequencies above 30 MHz			
Frequency Field strength Measur (MHz) (µV/m at 3 m)		Measurement Distance (meters)	
30~88	100	3	
88~216	150	3	
216~960	200	3	
Above 960	500	3	

General field strength limits at frequencies 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)
- (3) For frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

#### 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
5725 - 5925	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:





Page: 19 of 173

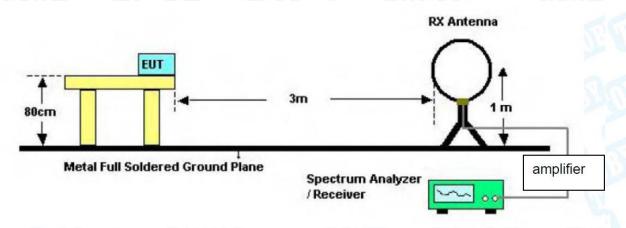
$$E = \frac{1000000\sqrt{30P}}{3} \text{ uV/m, where P is the eirp (Watts)}$$

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 the band 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 or below 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.

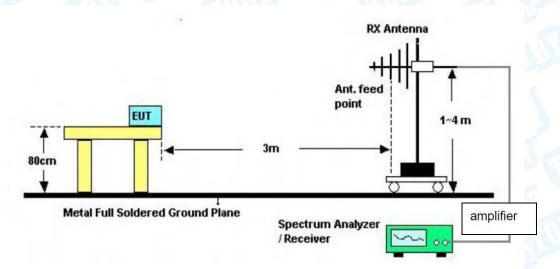
3, For frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

#### 6.2 Test Setup

#### Radiated measurement



#### **Below 30MHz Test Setup**

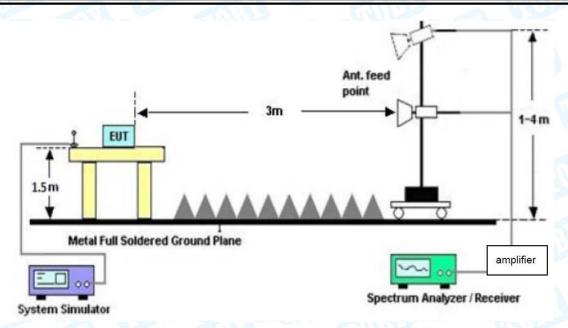


**Below 1000MHz Test Setup** 

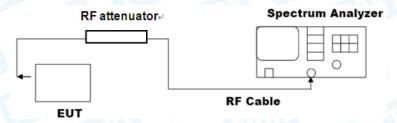




Page: 20 of 173



#### **Above 1GHz Test Setup**



**Conducted measurement** 

#### 6.3 Test Procedure

#### ---Radiated measurement

- The measuring distance of 3m shall be used for measurements at frequency up to 1GHz and above 1 GHz. The EUT was placed on a rotating 0.8m high above ground, the table was rotated 360 degrees to determine the position of the highest radiation.
- 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.
- ●If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit Below 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





Page: 21 of 173

comply with applicable limit above 1 GHz.

● Testing frequency range 30MHz-1GHz the measuring instrument use VBW=120 kHz with Quasi-peak detection. Testing frequency range 9KHz-150Hz the measuring instrument use VBW=200Hz with Quasi-peak detection. Testing frequency range 9KHz-30MHz the measuring instrument use VBW=9kHz with Quasi-peak detection.

- 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

#### Reference level measurement

Establish a reference level by using the following procedure:

- a) Set instrument center frequency to DTS channel center frequency.
- b) Set the span to≥1.5 times the DTS bandwidth.
- c) Set the RBW = 100 kHz.
- d) Set the VBW≥[3\*RBW].
- e) Detector = peak.
- f) Sweep time = auto couple.
- g) Trace mode = max hold.
- h) Allow trace to fully stabilize.
- i) Use the peak marker function to determine the maximum PSD level.

Note that the channel found to contain the maximum PSD level can be used to establish the reference level.

#### Emission level measurement

Establish an emission level by using the following procedure:

- a) Set the center frequency and span to encompass frequency range to be measured.
- b) Set the RBW = 100 kHz.
- c) Set the VBW≥[3\*RBW].
- d) Detector = peak.
- e) Sweep time = auto couple.
- f) Trace mode = max hold.
- g) Allow trace to fully stabilize.
- h) Use the peak marker function to determine the maximum amplitude level.

Ensure that the amplitude of all unwanted emissions outside of the authorized frequency band (excluding restricted frequency bands) is attenuated by at least the minimum requirements specified in 11.11. Report the three highest emissions relative to the limit.





Page: 22 of 173

## 6.4 Deviation From Test Standard

No deviation

## 6.5 EUT Operating Mode

Please refer to the description of test mode.

#### 6.6 Test Data

Radiated measurement please refer to the Attachment B inside test report.

Conducted measurement please refer to the external appendix report of 5G Wi-Fi.



Page: 23 of 173

## 7. Restricted Bands Requirement

#### 7.1 Test Standard and Limit

7.1.1 Test Standard

#### FCC Part 15.205 & FCC Part 15.407(b)

#### 7.1.2 Test Limit

For 15.205 requirement

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a) of FCC part 15, must also comply with the radiated emission limits specified in Section 15.209(a).

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
<sup>1</sup> 0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74,6	1645.5-1646.5	9,3-9,5
6,215-6,218	74,8-75,2	1660-1710	10,6-12,7
6,26775-6,26825	108-121.94	1718.8-1722.2	13,25-13,4
6,31175-6,31225	123-138	2200-2300	14.47-14 <b>.</b> 5
8,291-8,294	149.9-150.05	2310-2390	15,35-16,2
8,362-8,366	156,52475-156,52525	2483,5-2500	17.7-21.4
8,37625-8,38675	156,7-156,9	2690-2900	22,01-23,12
8,41425-8,41475	162,0125-167,17	3260-3267	23,6-24,0
12,29-12,293	167,72-173,2	3332-3339	31,2-31,8
12,51975-12,52025	240-285	3345,8-3358	36,43-36,5
12,57675-12,57725	322-335,4	3600-4400	( <sup>2</sup> )
13.36-13.41			

#### For 15.407(b) requirement

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
5725~5825	-27(Note 2)	68.3
	10(Note 2)	105.3
	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:

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

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 the band 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 or below 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.

**Note:** According the ANSI C63.10 11.12.2 antenna-port conducted measurements may also be used as an alternative to radiated measurements for determining compliance in the restricted frequency bands requirements. If conducted measurements are performed, then proper impedance matching must be ensured and an additional radiated test forcabinet/case emissions is required.





Page: 24 of 173

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47CFR must not exceed the limits shown in Table per Section 15.209.

General field strength limits at frequencies Below 30MHz			
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	

**Note:** 1, The emission limits for the ranges 9-90 kHz and 110-490 kHz are based on measurements employing a linear average detector.

General field strength limits at frequencies above 30 MHz		
Frequency (MHz)	Field strength (μV/m at 3 m)	Measurement Distance (meters)
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

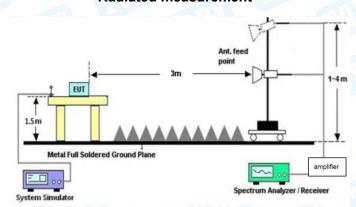
General field strength limits at frequencies Above 1000MHz			
Frequency	Distance of 3m (dBuV/m)		
(MHz)	Peak	Average	
Above 1000	74	54	

#### Note:

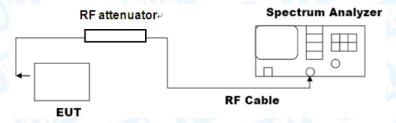
- (1) The tighter limit applies at the band edges.
- (2) Emission Level(dBuV/m)=20log Emission Level(uV/m)
- (3) For frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

## 7.2 Test Setup

#### Radiated measurement



#### **Conducted measurement**





Page: 25 of 173

#### 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
- 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.

#### 7.4 Deviation From Test Standard

No deviation

#### 7.5 EUT Operating Mode

Please refer to the description of test mode.

#### 7.6 Test Data

Please refer to the Attachment C inside test report.





Page: 26 of 173

## 8. Bandwidth Test

#### 8.1 Test Standard and Limit

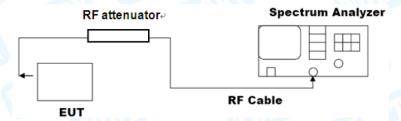
8.1.1 Test Standard

FCC Part 15.407(a) & FCC Part 15.407(e)

8.1.2 Test Limit

Test Item	Limit	Frequency Range (MHz)
26 dB Bandwidth	N/A	5150~5250
		5250~5350
		5470~5725
6 dB Bandwidth	≥500kHz	5725~5850

### 8.2 Test Setup



#### 8.3 Test Procedure

#### ---Emission bandwidth

- The procedure for this method is as follows:
- a) Set RBW = approximately 1% of the emission bandwidth.
- b) Set the VBW > RBW.
- c) Detector = peak.
- d) Trace mode = max hold.
- e) Measure the maximum width of the emission that is 26 dB down from the peak of the emission.

Compare this with the RBW setting of the instrument. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

NOTE—The automatic bandwidth measurement capability of a spectrum analyzer or an EMI receiver may be employed if it implements the functionality described in the preceding items.





Page: 27 of 173

#### ---DTS bandwidth

- The steps for the first option are as follows:
- a) Set RBW = 100 kHz.
- b) Set the VBW≥[3\*RBW].
- c) Detector = peak.
- d) Trace mode = max hold.
- e) Sweep = auto couple.
- f) Allow the trace to stabilize.
- g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

#### ---occupied bandwidth

- The occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers are each equal to 0.5% of the total mean power of the given emission. The following procedure shall be used for measuring 99% power bandwidth:
- a) The instrument center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be between 1.5 times and 5.0 times the OBW.
- b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW, and VBW shall be approximately three times the RBW, unless otherwise specified by the applicable requirement.
- c) Set the reference level of the instrument as required, keeping the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope shall be more than [10 log (OBW/RBW)] below the reference level. Specific guidance is given in 4.1.5.2.
- d) Step a) through step c) might require iteration to adjust within the specified range.
- e) Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
- f) Use the 99% power bandwidth function of the instrument (if available) and report the measured bandwidth.
- g) If the instrument does not have a 99% power bandwidth function, then the trace data points are recovered and directly summed in linear power terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% of the total is reached; that frequency is recorded as the lower frequency. The





Page: 28 of 173

process is repeated until 99.5% of the total is reached; that frequency is recorded as the upper frequency. The 99% power bandwidth is the difference between these two frequencies.

h) The occupied bandwidth shall be reported by providing plot(s) of the measuring instrument display; the plot axes and the scale units per division shall be clearly labeled. Tabular data may be reported in addition to the plot(s).

#### 8.4 Deviation From Test Standard

No deviation

## 8.5 EUT Operating Mode

Please refer to the description of test mode.

#### 8.6 Test Data

Please refer to the external appendix report of 5G Wi-Fi.





Page: 29 of 173

## 9. Maximum Conducted Output Power

9.1 Test Standard and Limit

9.1.1 Test Standard

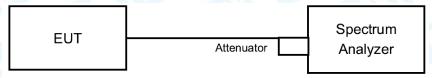
FCC Part 15.407(a)

9.1.2 Test Limit

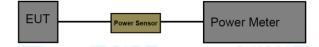
	FCC Part 15 Sub	part E(15.407)		
Limit	Frequency Range(MHz)			
	5150~5250	5250~5350	5470~5725	5725~5850
Max Conducted TX Power	Master Device: 1 Watt(30dBm) Client Device: 250mW(24dBm)	24dBm (250 mW) or 11 dBm+ 10 log B, whichever is lower (B= 26-dB emission BW)		1 Watt (30dBm)
Max E.I.R.P	4 W (36 dBm) with 6 dBi antenna  200 W (53 dBm) for fixed P-t-P application with 23 dBiantenna  Additional rule for outdoor operation:  Max_EIRP< 125 mW(21 dBm) at any elevation angle > 30°from horizon	1 W (30 dBm) with 6 dBi antenna		4 W (36 dBm) with 6 dBi antenna
TPC	NO	dBm) and able to	RP ≥ 500 mW (27 b lower EIRP below dBm EIRP < 500mW	NO

## 9.2 Test Setup

For channel straddling 5720MHz & 5710MHz & 5690MHz



#### **For Other Channel**







Page: 30 of 173

#### 9.3 Test Procedure

#### For channel straddling 5720MHz & 5710MHz & 5690MHz

- a) Set span to encompass the entire 26 dB EBW or 99% OBW of the signal.
- b) Set RBW = 1 MHz.
- c) Set VBW ≥ 3 MHz.
- d) Number of points in sweep ≥ [2 X span / RBW]. (This gives bin-to-bin spacing ≤ RBW / 2, so that narrowband signals are not lost between frequency bins.)
- e) Sweep time = auto.
- f) Detector = RMS (i.e., power averaging), if available. Otherwise, use sample detector mode.
- g) If transmit duty cycle < 98%, use a video trigger with the trigger level set to enable triggering only on full power pulses. The transmitter shall operate at maximum power control level for the entire duration of every sweep. If the EUT transmits continuously (i.e., with no OFF intervals) or at duty cycle ≥98%, and if each transmission is entirely at the maximum power control level, then the trigger shall be set to "free run."
- h) Trace average at least 100 traces in power averaging (rms) mode.
- i) Compute power by integrating the spectrum across the 26 dB EBW or 99% OBW of the signal using the instrument's band power measurement function, with band limits set equal to the EBW or OBW band edges. If the instrument does not have a band power function, then sum the spectrum levels (in power units) at 1 MHz intervals extending across the 26 dB EBW or 99% OBW of the spectrum.

#### For Other Channel

● The EUT was connected to RF power meter via a broadband power sensor as show the block above. The power sensor video bandwidth is greater than or equal to the DTS bandwidth of the equipment.

#### 9.4 Deviation From Test Standard

No deviation

#### 9.5 EUT Operating Mode

Please refer to the description of test mode.

#### 9.6 Test Data

Please refer to the external appendix report of 5G Wi-Fi.





Page: 31 of 173

## 10. Power Spectral Density Test

10.1 Test Standard and Limit

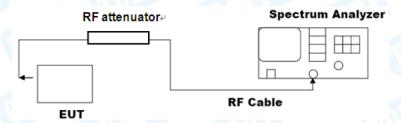
10.1.1 Test Standard

FCC Part 15.407(a)

10.1.2 Test Limit

Test Item	Limit	Frequency Range(MHz)
Power Spectral  Density	Master Device: 17dBm/MHz Client Device: 11dBm/MHz	5150~5250
	11dBm/MHz	5250~5350
	11dBm/MHz	5470~5725
	30dBm/500kHz	5725~5850

#### 10.2 Test Setup



#### 10.3 Test Procedure

- ●Notwithstanding that some regulatory requirements refer to peak power spectral density (PPSD), in some cases the intent is to measure the maximum value of the time average of the power spectral density during a period of continuous transmission. The procedure for this method is as follows:
- a) Create an average power spectrum for the EUT operating mode being tested by following the instructions in 12.3.2 for measuring maximum conducted output power using a spectrum analyzer or EMI receiver; that is, select the appropriate test method (SA-1, SA-2, SA-3, or their respective alternatives) and apply it up to, but not including, the step labeled, "Compute power…."(This procedure is required even if the maximum conducted output power measurement was performed using the power meter method PM.)
- b) Use the peak search function on the instrument to find the peak of the spectrum.
- c) Make the following adjustments to the peak value of the spectrum, if applicable:
- 1) If method SA-2 or SA-2A was used, then add [10 log (1 / D)], where D is the duty cycle, to the peak of the spectrum.





Page: 32 of 173

2) If method SA-3A was used and the linear mode was used in step h) of 12.3.2.7, add 1 dB to the final result to compensate for the difference between linear averaging and power averaging.

- d) The result is the PPSD.
- e) The procedure in item a) through item c) requires the use of 1 MHz resolution bandwidth to satisfy the 1 MHz measurement bandwidth specified by some regulatory authorities.95 This requirement also permits use of resolution bandwidths less than 1 MHz"provided that the measured power is integrated to show the total power over the measurement bandwidth"(i.e., 1 MHz). If measurements are performed using a reduced resolution bandwidth and integrated over 1 MHz bandwidth, the following adjustments to the procedures apply:
- 1) Set RBW≥1 / T, where T is defined in 12.2 a).
- 2) Set VBW ≥ [3\*RBW].
- 3) Care shall be taken such that the measurements are performed during a period of continuous transmission or are corrected upward for duty cycle.

## 10.4 Deviation From Test Standard

No deviation

10.5 Antenna Connected Construction

Please refer to the description of test mode.

#### 10.6 Test Data

Please refer to the external appendix report of 5G Wi-Fi.





Page: 33 of 173

## 11. Frequency Stability

#### 11.1 Test Standard and Limit

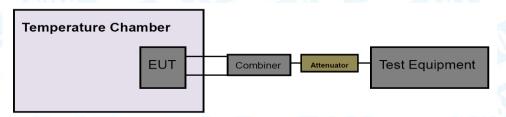
11.1.1 Test Standard

FCC Part 15.407(g)

11.1.2 Test Limit

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the users manual.

#### 11.2 Test Setup



#### 11.3 Test Procedure

#### Frequency stability with respect to ambient temperature

- a) Supply the EUT with a nominal ac voltage or install a new or fully charged battery in the EUT. If possible, a dummy load shall be connected to the EUT because an antenna near the metallic walls of an environmental test chamber could affect the output frequency of the EUT. If the EUT is equipped with a permanently attached, adjustable-length antenna, then the EUT shall be placed in the center of the chamber with the antenna adjusted to the shortest length possible. Turn ON the EUT and tune it to one of the number of frequencies shown in 5.6.
- b) Couple the unlicensed wireless device output to the measuring instrument by connecting an antenna to the measuring instrument with a suitable length of coaxial cable and placing the measuring antenna near the EUT (e.g., 15 cm away), or by connecting a dummy load to the measuring instrument, through an attenuator if necessary.
- NOTE—An instrument that has an adequate level of accuracy as specified by the procuring or regulatory agency is the recommended measuring instrument.
- c) Adjust the location of the measurement antenna and the controls on the measurement instrument to obtain a suitable signal level (i.e., a level that will not overload the measurement instrument but is strong enough to allow measurement of the operating or fundamental frequency of the EUT).
- d) Turn the EUT OFF and place it inside the environmental temperature chamber. For devices that have oscillator heaters, energize only the heater circuit.
- e) Set the temperature control on the chamber to the highest specified in the regulatory requirements for the type of device and allow the oscillator heater and the chamber temperature to stabilize.
- f) While maintaining a constant temperature inside the environmental chamber, turn the EUT ON and record the operating frequency at startup, and at 2 minutes, 5 minutes, and 10 minutes after the EUT is energized. Four measurements in total are made.
- g) Measure the frequency at each of frequencies specified in 5.6.
- h) Switch OFF the EUT but do not switch OFF the oscillator heater.





Page: 34 of 173

i) Lower the chamber temperature by not more that  $10^{\circ}$ C, and allow the temperature inside the chamber to stabilize.

j) Repeat step f) through step i) down to the lowest specified temperature.

#### Frequency stability when varying supply voltage

Unless otherwise specified. these tests shall be made at ambient room temperature (+15 $^{\circ}$ C to +25 $^{\circ}$ C). An antenna shall be connected to the antenna output terminals of the EUT if possible. If the EUT is equipped with or uses an adjustable-length antenna, then it shall be fully extended.

a) Supply the EUT with nominal voltage or install a new or fully charged battery in the EUT. Turn ON the EUT and couple its output to a frequency counter or other frequency-measuring instrument.

NOTE—An instrument that has an adequate level of accuracy as specified by the procuring or regulatory agency is the recommended measuring instrument.

- b) Tune the EUT to one of the number of frequencies required in 5.6. Adjust the location of the measurement antenna and the controls on the measurement instrument to obtain a suitable signal level (i.e., a level that will not overload the measurement instrument but is strong enough to allow measurement of the operating or fundamental frequency of the EUT).
- c) Measure the frequency at each of the frequencies specified in 5.6.
- d) Repeat the above procedure at 85% and 115% of the nominal supply voltage as described in 5.13.

#### 11.4 Deviation From Test Standard

No deviation

#### 11.5 Antenna Connected Construction

Please refer to the description of test mode.

#### 11.6 Test Data

Please refer to the external appendix report of 5G Wi-Fi.





Page: 35 of 173

## 12. Antenna Requirement

#### 12.1 Test Standard and Limit

12.1.1 Test 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 Deviation From Test Standard

No deviation

#### 12.3 Antenna Connected Construction

The max. gains of the antenna used for transmitting is Ant.1: 3.67dBi/ Ant.2: 3.28dBi, and the antenna de-signed with permanent attachment and no consideration of replacement. Please see the EUT photo for details.

#### 12.4 Test Data

The EUT antenna is a Dipole Antenna. It complies with the standard requirement.

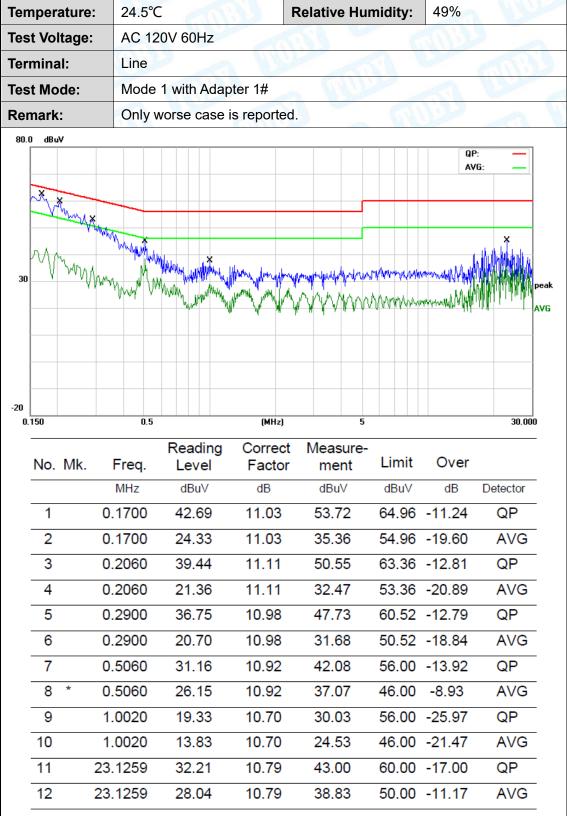
Antenna Type		
☐Permanent attached antenna	2	
⊠Unique connector antenna		
☐Professional installation antenna	1	





36 of 173

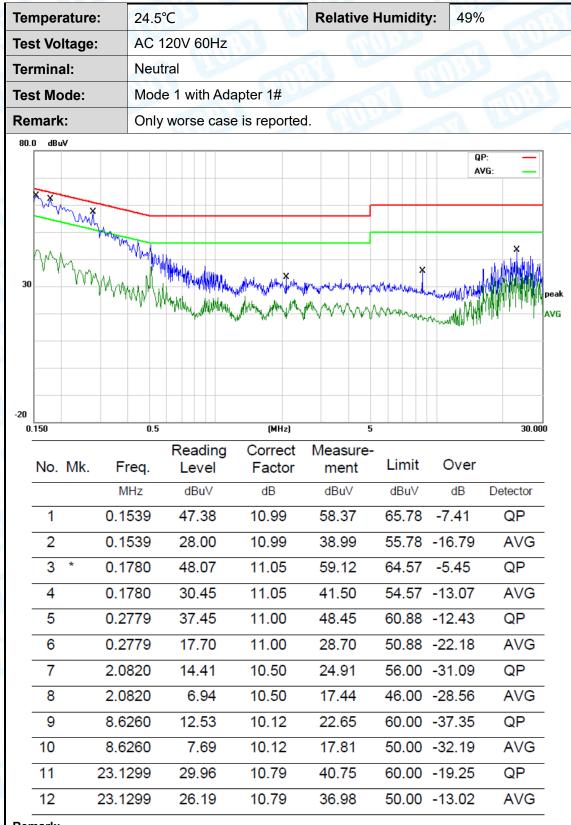
## **Attachment A-- Conducted Emission Test Data**



- 1. Corr. Factor (dB) = LISN Factor (dB) + Cable Loss (dB)
- 2. Margin (dB) =QuasiPeak/Average (dBuV)-Limit (dBuV)



Page: 37 of 173



- 1. Corr. Factor (dB) = LISN Factor (dB) + Cable Loss (dB)
- 2. Margin (dB) =QuasiPeak/Average (dBuV)-Limit (dBuV)



Page: 38 of 173

					4 1 1 1 1 K										
	Tem	per	ature	:	24.5°C			33	Re	lative I	Humidity	: 49%	2	All	A STATE
	Tes	t Vol	ltage:		AC 120	OV 60	Hz		1			ant	13		•
	Terr	mina	ıl:	· ·	Line	3		M	V Bass			1		M)	
	Tes	t Mo	de:		Mode	1 with	Adap	ter 2#		D.H.			J. M.		
	Ren	nark	:		Only w	orse o	case i	s report	ed.						11
þ	80.0	) dBu	۸												1
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			0 0	V VVVV	A JAN AN	of the same	والمالية المراجعة المالية المراجعة	January Haraket Wales Japan Per	<sub>ኒ/</sub> ሶኒ/	V~VVV	***	monoum	الماليك المجارية والمداورة	anne grader	AVG
L															
	-20	150			0.5			641			5			20.00	
	U. -	150			U.5			(МН:						30.00	-
		No.	Mk.	F	req.	Read Lev	_	Corre Facto		Measu ment	1.2	t Ove	er		
	-				ИHz	dBı		dB		dBuV	dBu\	/ dB	De	tector	-
	-	1		0.1	580	31.	99	11.00	)	42.99	65.5	6 -22.5	7	QP	-
	-	2		0.1	580	12.	47	11.00	)	23.47	55.5	6 -32.0	9	AVG	-
	-	3		0.4	1340	22.	52	10.90	)	33.42	57.1	8 -23.7	6	QP	-
4	-	4		0.4	1340	15.	20	10.90	)	26.10	47.1	8 -21.0	8	AVG	-
	-	5		0.5	5140	20.	90	10.92	2	31.82	56.0	0 -24.1	8	QP	-
	-	6	*	0.5	5140	14.	45	10.92	2	25.37	46.0	0 -20.6	3	AVG	-
	-	7		0.8	8860	14.	20	10.76	<b>)</b>	24.96	56.0	0 -31.0	4	QP	-
	-	8		0.8	8860	9.	05	10.76	<u> </u>	19.81	46.0	0 -26.1	9	AVG	-
	-	9		3.5	020	13.	93	10.15	;	24.08	56.0	0 -31.9	2	QP	-
	-	10			5020	9.	19	10.15	;	19.34	46.0	0 -26.6	6	AVG	-
	-	11		25.3	3700	14.	62	10.95	;	25.57	60.0	0 -34.4	3	QP	-
	-	12		25.3	3700		05	10.95		20.00		0 -30.0		AVG	-

- Remark: 1. Corr. Factor (dB) = LISN Factor (dB) + Cable Loss (dB)
- 2. Margin (dB) =QuasiPeak/Average (dBuV)-Limit (dBuV)



Report No.: TBR-C-202302-0215-51 Page: 39 of 173



Temperature:	24.5°C		Relative Hui	midity:	49%
Test Voltage:	AC 120V	60Hz	CALL)		13 KM
Terminal:	Neutral	The same		GII	133
Test Mode:	Mode 1 w	vith Adapter 2#			
Remark:	Only wors	se case is report	ed.		A FREE
30 dBuV	Wald Mark of the Constraint of	High the same of the color of the same of	kengawa kepengan pangan	all of the same of	QP:
0.150 No. Mk.	Freq. Le	(MHz) ading Correct evel Factor	ment Li		30.00 Over
- 4 * 0		BuV dB			dB Detector
		11.03		5.15 -14	
		.54 11.03	32.57 55	5.15 -22	2.58 AVG
.,		00 44.00	40.75		
		.66 11.09		1.03 -17	7.28 QP
4 0	.1900 14	.67 11.09	25.76 54	i.03 -17 i.03 -28	7.28 QP 3.27 AVG
4 0 5 0	.1900 14 .2220 36	.67 11.09 .55 11.09	25.76 54 47.64 62	i.03 -17 i.03 -28 2.74 -15	7.28 QP 3.27 AVG 5.10 QP
4 0 5 0 6 0	.1900 14 .2220 36 .2220 20	.67 11.09 .55 11.09 .14 11.09	25.76 54 47.64 62 31.23 52	1.03 -17 1.03 -28 2.74 -15 2.74 -21	7.28 QP 3.27 AVG 5.10 QP 5.51 AVG
4 0 5 0 6 0 7 0	.1900 14 .2220 36 .2220 20 .5899 16	.67 11.09 .55 11.09 .14 11.09 .87 10.90	25.76 54 47.64 62 31.23 52 27.77 56	1.03 -17 1.03 -28 2.74 -15 2.74 -21 3.00 -28	7.28 QP 8.27 AVG 6.10 QP 6.51 AVG 8.23 QP
4 0 5 0 6 0 7 0 8 0	.1900 14 .2220 36 .2220 20 .5899 16	.67 11.09 .55 11.09 .14 11.09 .87 10.90 .23 10.90	25.76 54 47.64 62 31.23 52 27.77 56 16.13 46	1.03 -17 1.03 -28 2.74 -15 2.74 -21 3.00 -28 3.00 -29	7.28 QP 8.27 AVG 6.10 QP 6.51 AVG 8.23 QP 9.87 AVG
4 0 5 0 6 0 7 0 8 0 9 1	.1900 14 .2220 36 .2220 20 .5899 16 .5899 5	11.09 1.55 11.09 1.14 11.09 1.87 10.90 1.23 10.90 1.04 10.60	25.76 54 47.64 62 31.23 52 27.77 56 16.13 46 18.64 56	1.03 -17 1.03 -28 2.74 -15 2.74 -21 3.00 -28 3.00 -29 3.00 -37	7.28 QP 8.27 AVG 6.10 QP 6.51 AVG 8.23 QP 9.87 AVG 7.36 QP
4 0 5 0 6 0 7 0 8 0 9 1 10 1	.1900 14 .2220 36 .2220 20 .5899 16 .5899 5 .6419 8	.67 11.09 .55 11.09 .14 11.09 .87 10.90 .23 10.90	25.76 54 47.64 62 31.23 52 27.77 56 16.13 46 18.64 56 13.37 46	1.03 -17 1.03 -28 2.74 -15 2.74 -21 3.00 -28 3.00 -29	7.28 QP 8.27 AVG 6.10 QP 6.51 AVG 8.23 QP 9.87 AVG 7.36 QP 9.63 AVG

- 1. Corr. Factor (dB) = LISN Factor (dB) + Cable Loss (dB)
- 2. Margin (dB) =QuasiPeak/Average (dBuV)-Limit (dBuV)



Page: 40 of 173

# **Attachment B--Unwanted Emissions Data**

## --- Radiated Unwanted Emissions

## 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

Temperature:	24.3℃	Relative Humidity:	45%
Test Voltage:	AC 120V 60Hz		
Ant. Pol.	Horizontal		
Test Mode:	Mode 2 with Adapter 1#	1000	
Remark:	Only worse case is reported	1. (1)	



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	66.2661	42.71	-24.13	18.58	40.00	-21.42	QP	Р
2!	172.5987	63.07	-23.22	39.85	43.50	-3.65	QP	Р
3 *	261.0582	65.98	-22.38	43.60	46.00	-2.40	QP	Р
4	316.5889	56.05	-20.51	35.54	46.00	-10.46	QP	Р
5	368.1116	55.36	-18.85	36.51	46.00	-9.49	QP	Р
6	451.1350	48.84	-16.59	32.25	46.00	-13.75	QP	Р

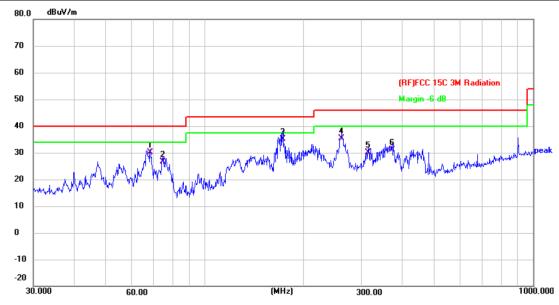
- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. QuasiPeak (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = QuasiPeak (dB $\mu$ V/m)-Limit QPK(dB $\mu$ V/m)





Page: 41 of 173

Temperature:	24.3℃	Relative Humidity:	45%					
Test Voltage:	AC 120V 60Hz	WALL STATE OF THE						
Ant. Pol.	Vertical		Wind and					
Test Mode:	Mode 2 with Adapter 1#							
Remark:	Only worse case is reported	ed.						
80.0 dBuV/m								



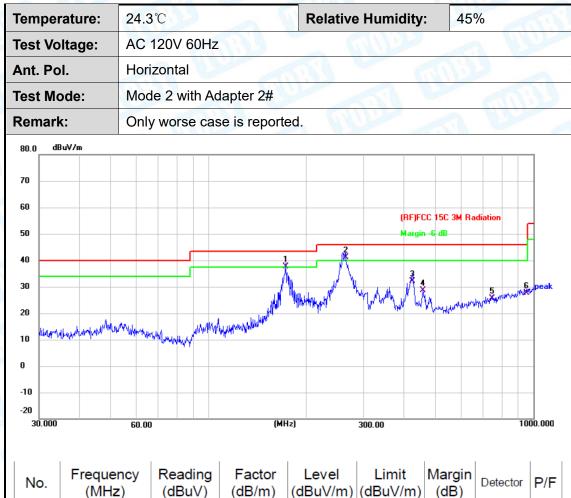
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	68.1514	54.32	-24.27	30.05	40.00	-9.95	QP	Р
2	74.3955	52.11	-25.53	26.58	40.00	-13.42	QP	Р
3 *	172.5988	58.37	-23.22	35.15	43.50	-8.35	QP	Р
4	261.0583	57.80	-22.38	35.42	46.00	-10.58	QP	Р
5	314.3765	50.76	-20.56	30.20	46.00	-15.80	QP	Р
6	372.0045	49.78	-18.73	31.05	46.00	-14.95	QP	Р

- Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
   QuasiPeak (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = QuasiPeak (dB $\mu$ V/m)-Limit QPK(dB $\mu$ V/m)





Page: 42 of 173



No	<b>)</b> .	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	ļ	172.5988	60.73	-23.22	37.51	43.50	-5.99	QP	Р
2	*	263.8190	63.49	-22.24	41.25	46.00	-4.75	QP	Р
3		423.5403	49.51	-17.26	32.25	46.00	-13.75	QP	Р
4		457.5073	45.00	-16.42	28.58	46.00	-17.42	QP	Р
5		747.4825	35.79	-10.15	25.64	46.00	-20.36	QP	Р
6		952.0937	34.47	-6.89	27.58	46.00	-18.42	QP	Р

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. QuasiPeak (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = QuasiPeak (dB $\mu$ V/m)-Limit QPK(dB $\mu$ V/m)





Page: 43 of 173



Гетре	24.3	24.3℃ Relative Humidity: 45%										
Test Vo	ltage:	AC	120\	/ 60H	z		4000		A W	Mad		
Ant. Po	ol.	Vert	Vertical									
Test M	ode:	Mod	Mode 2 with Adapter 2#									
Remar	k:	Only	y wo	rse ca	ase is reporte	ed.			All			
80.0 dl												
70												
60												
								CC 15C 3M R	ladiation	Ч		
50						Margin-			-6 dB			
				_						Ш		
40						* \	c			4		
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30 20	www.	Wara	havely profession of the second	~\/\w	Mary Mary Mary Mary Mary Mary Mary Mary	Many Many Andrew		Mary de Malara april	de desirabilità de la capta de	. <sub>vu</sub> peak		
30 20 10 0 -10 -20	A A A A A A A A A A A A A A A A A A A			~\\\\	Lywran want	Many Many Many Many Many Many Many Many	Maddle James Control	har halaraha				
30 20 NAMA 0 0 -10	A A A A A A A A A A A A A A A A A A A	60.00		~\\\\\	Mary or a regularity of the second	Hz)	300.00	har high ha		peak		
30 20 NAWA		60.00					I		1			
30 20 NAWA	Freque (MF	60.000 ency	Re	eading BuV)		Level	300.00 Limit (dBuV/m)	Margin	1			
40 30 20 10 0 0 10 20 30.000	Frequ	ency	Re (d	ading	Factor	Level	Limit	Margin	1	000.000		
30 20 10 0 -10 -20 30.000 No.	Freque (MF	60.00 ency Hz)	Re (dl	ading	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	000.000		

## Remark:

5 \*

6

101.2885

172.5988

410.3825

Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
 QuasiPeak (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)

55.48

57.28

47.25

-25.56

-23.22

-17.64

29.92

34.06

29.61

43.50

43.50

46.00

-13.58

-9.44

-16.39

QP

QP

QΡ

Ρ

Ρ

3. Margin (dB) = QuasiPeak (dB $\mu$ V/m)-Limit QPK(dB $\mu$ V/m)



Page: 44 of 173

## **Above 1GHz**

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

Temperature:	24.5°C	Relative Humidity:	49%
Test Voltage:	AC 120V/60Hz	The state of the s	NO.
Ant. Pol.	Horizontal		MULL
Test Mode:	TX 802.11a Mode 5180N	/IHz (U-NII-1)-SISO	

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	10358.320	44.36	6.12	50.48	68.30	-17.82	peak	Р
2	10358.640	35.36	6.12	41.48	54.00	-12.52	AVG	Р
3	15537.200	52.39	9.28	61.67	68.30	-6.63	peak	Р
4 *	15541.520	42.54	9.27	51.81	54.00	-2.19	AVG	Р

#### Remark:

### 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 $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-40 GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40 GHz.
- 5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	24.5°C	Relative Humidity:	49%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical	THU THE	
Test Mode:	TX 802.11a Mode 5180N	1Hz (U-NII-1) -SISO	

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	10360.240	51.06	6.12	57.18	68.30	-11.12	peak	Р
2	10364.480	40.53	6.14	46.67	54.00	-7.33	AVG	Р
3 *	15540.720	43.73	9.27	53.00	54.00	-1.00	AVG	Р
4	15546.080	54.73	9.24	63.97	68.30	-4.33	peak	Р

- 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 $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-40 GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40 GHz.
- 5. No report for the emission which more than 20dB below the prescribed limit.





Page: 45 of 173

Temperature:	24.5°C	Relative Humidity:	49%
Test Voltage:	AC 120V/60Hz	MODE	A VIVE
Ant. Pol.	Horizontal		Will a
Test Mode:	TX 802.11a Mode 5200	MHz (U-NII-1) -SISO	

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	10400.800	41.95	6.27	48.22	54.00	-5.78	AVG	Р
2	10401.500	51.42	6.27	57.69	68.30	-10.61	peak	Р
3 *	15658.500	43.92	8.49	52.41	54.00	-1.59	AVG	Р
4	15659.500	53.37	8.48	61.85	68.30	-6.45	peak	Р

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

Temperature:	24.5°C	Relative Humidity:	49%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11a Mode 5200N	1Hz (U-NII-1) -SISO	N. W.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	10401.560	42.42	6.27	48.69	54.00	-5.31	AVG	Р
2	10402.600	52.08	6.27	58.35	68.30	-9.95	peak	Р
3	15659.650	52.41	8.48	60.89	68.30	-7.41	peak	Р
4 *	15659.750	43.50	8.48	51.98	54.00	-2.02	AVG	Р

- 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 $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-40 GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz.
- 5. No report for the emission which more than 20dB below the prescribed limit.





46 of 173 Page:

			WIND AND DESIGNATION OF THE PERSON OF THE PE
Temperature:	24.5°C	Relative Humidity:	49%
Test Voltage:	AC 120V/60Hz	Will Draw	7 110
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11a Mode 5240	MHz (U-NII-1) -SISO	

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	10478.600	41.92	6.41	48.33	54.00	-5.67	AVG	Р
2	10479.500	52.48	6.42	58.90	68.30	-9.40	peak	Р
3	15723.500	52.71	8.16	60.87	68.30	-7.43	peak	Р
4 *	15723.700	43.82	8.17	51.99	54.00	-2.01	AVG	Р

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

Temperature:	24.5°C	Relative Humidity:	49%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11a Mode 5240M	IHz (U-NII-1) -SISO	

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	10477.690	41.58	6.41	47.99	54.00	-6.01	AVG	Р
2	10478.300	50.83	6.41	57.24	68.30	-11.06	peak	Р
3 *	15721.500	44.49	8.16	52.65	54.00	-1.35	AVG	Р
4	15721.800	53.73	8.16	61.89	68.30	-6.41	peak	Р

- 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 $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-40 GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz.
- 5. No report for the emission which more than 20dB below the prescribed limit.





Page: 47 of 173

Temperature:	24.5°C	Relative Humidity:	49%
Test Voltage:	AC 120V/60Hz	WO TO	A VIVE
Ant. Pol.	Horizontal		Will a
Test Mode:	TX 802.11n(HT20) Mod	le 5180MHz (U-NII-1)-M	IMO

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	10361.360	43.66	6.12	49.78	68.30	-18.52	peak	Р
2	10361.760	35.24	6.13	41.37	54.00	-12.63	AVG	Р
3 *	15543.120	40.53	9.26	49.79	54.00	-4.21	AVG	Р
4	15546.640	51.48	9.24	60.72	68.30	-7.58	peak	Р

#### 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 $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-40 GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40 GHz.
- 5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	24.5°C	Relative Humidity:	49%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertial	WORDS.	THU
Test Mode:	TX 802.11n(HT20) Mode	5180MHz (U-NII-1) -M	IMO

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	10358.000	40.37	6.12	46.49	54.00	-7.51	AVG	Р
2	10359.920	49.43	6.12	55.55	68.30	-12.75	peak	Р
3	15538.480	54.80	9.28	64.08	68.30	-4.22	peak	Р
4 *	15543.280	43.54	9.26	52.80	54.00	-1.20	AVG	Р

- 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 $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-40 GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40 GHz.
- 5. No report for the emission which more than 20dB below the prescribed limit.





Page: 48 of 173

Temperature:	24.5°C	Relative Humidity:	49%
Test Voltage:	AC 120V/60Hz	MODE	A VIVE
Ant. Pol.	Horizontal		Will a
Test Mode:	TX 802.11n(HT20) Mod	de 5200MHz (U-NII-1) -M	IIMO

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	10401.800	50.99	6.27	57.26	68.30	-11.04	peak	Р
2	10402.800	41.72	6.27	47.99	54.00	-6.01	AVG	Р
3 *	15658.500	44.05	8.49	52.54	54.00	-1.46	AVG	Р
4	15659.480	52.96	8.48	61.44	68.30	-6.86	peak	Р

### Remark:

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

Temperature:	24.5°C	Relative Humidity:	49%
Test Voltage:	AC 120V/60Hz		(00)
Ant. Pol.	Vertical	A COLOR	
Test Mode:	TX 802.11n(HT20) Mode	• 5200MHz (U-NII-1) -M	IIMO

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	10400.560	41.69	6.27	47.96	54.00	-6.04	AVG	Р
2	10401.450	51.59	6.27	57.86	68.30	-10.44	peak	Р
3 *	15658.650	43.37	8.49	51.86	54.00	-2.14	AVG	Р
4	15659.580	52.50	8.48	60.98	68.30	-7.32	peak	Р

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





Page: 49 of 173

Temperature:	24.5°C	Relative Humidity:	49%
Test Voltage:	AC 120V/60Hz	MODE	A PULL
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11n(HT20) Mod	de 5240MHz (U-NII-1) -M	IIMO

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	10477.650	41.55	6.41	47.96	54.00	-6.04	AVG	Р
2	10478.600	51.45	6.41	57.86	68.30	-10.44	peak	Р
3 *	15721.900	43.88	8.16	52.04	54.00	-1.96	AVG	Р
4	15722.400	52.58	8.16	60.74	68.30	-7.56	peak	Р

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

Temperature:	24.5°C	Relative Humidity:	49%
Test Voltage:	AC 120V/60Hz	THU THE	
Ant. Pol.	Vertical	MUDE	
Test Mode:	TX 802.11n(HT20) Mode	5240MHz (U-NII-1) -M	IIMO

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	10478.660	41.82	6.41	48.23	54.00	-5.77	AVG	Р
2	10479.540	50.81	6.42	57.23	68.30	-11.07	peak	Р
3 *	15720.560	43.95	8.16	52.11	54.00	-1.89	AVG	Р
4	15722.400	53.08	8.16	61.24	68.30	-7.06	peak	Р

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





Page: 50 of 173

Temperature:	24.5°C	Relative Humidity:	49%
Test Voltage:	AC 120V/60Hz	WOOD IN	A WILL
Ant. Pol.	Horizontal		1000
Test Mode:	TX 802.11ac(VHT20)	Mode 5180MHz (U-NII-1)	-MIMO

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	10359.502	45.93	6.12	52.05	68.30	-16.25	peak	Р
2	10359.678	35.52	6.12	41.64	54.00	-12.36	AVG	Р
3	15537.520	50.39	9.28	59.67	68.30	-8.63	peak	Р
4 *	15539.440	40.21	9.28	49.49	54.00	-4.51	AVG	Р

### Remark:

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

Temperature:	24.5°C	Relative Humidity:	49%
remperature.	24.5 C	Relative Hailliaity.	4970
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11ac(VHT20)	Mode 5180MHz (U-NII-1)	-MIMO

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	10358.880	40.11	6.12	46.23	54.00	-7.77	AVG	Р
2	10359.360	49.07	6.12	55.19	68.30	-13.11	peak	Р
3	15538.800	52.77	9.28	62.05	68.30	-6.25	peak	Р
4 *	15541.760	43.75	9.27	53.02	54.00	-0.98	AVG	Р

- 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 $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-40 GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz.
- 5. No report for the emission which more than 20dB below the prescribed limit.





Page: 51 of 173

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Temperature:	24.5°C	Relative Humidity:	49%				
Test Voltage:	AC 120V/60Hz	William .	A VIVE				
Ant. Pol.	Horizontal	Horizontal					
Test Mode:	TX 802.11ac(VHT20) N	TX 802.11ac(VHT20) Mode 5200MHz (U-NII-1) -MIMO					

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	10399.800	41.38	6.27	47.65	54.00	-6.35	AVG	Р
2	10400.580	51.85	6.27	58.12	68.30	-10.18	peak	Р
3	15659.720	52.41	8.48	60.89	68.30	-7.41	peak	Р
4 *	15659.500	43.86	8.48	52.34	54.00	-1.67	AVG	Р

- 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 $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m) 4. The tests evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz.
- 5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	24.5℃	Relative Humidity:	49%
Test Voltage:	AC 120V/60Hz	WILLIAM STATE	
Ant. Pol.	Vertical		
Test Mode:	TX 802.11ac(VHT20) Mc	de 5200MHz (U-NII-1)	-MIMO

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	10389.580	40.72	6.24	46.96	54.00	-7.04	AVG	Р
2	10400.520	50.71	6.27	56.98	68.30	-11.32	peak	Р
3	15658.470	52.39	8.49	60.88	68.30	-7.42	peak	Р
4 *	15659.680	43.56	8.48	52.04	54.00	-1.96	AVG	Р

- 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 $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-40 GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz.
- 5. No report for the emission which more than 20dB below the prescribed limit.





Page: 52 of 173

Temperature:	24.5°C	Relative Humidity:	49%
Test Voltage:	AC 120V/60Hz	William .	A VIVE
Ant. Pol.	Horizontal		111373
Test Mode:	TX 802.11 ac(VHT20)	Mode 5240MHz (U-NII-1	) -MIMO

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	10478.570	51.24	6.41	57.65	68.30	-10.65	peak	Р
2	10479.850	41.81	6.42	48.23	54.00	-5.77	AVG	Р
3	15719.800	52.41	8.15	60.56	68.30	-7.74	peak	Р
4 *	15720.590	44.25	8.16	52.41	54.00	-1.59	AVG	Р

### 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 $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-40 GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz.
- 5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	24.5°C	Relative Humidity:	49%			
Test Voltage:	AC 120V/60Hz	CITIES .	4000			
Ant. Pol.	Vertical	Vertical				
Test Mode:	TX 802.11ac(VHT20) Mc	de 5240MHz (U-NII-1)	-MIMO			

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	10478.680	41.28	6.41	47.69	54.00	-6.31	AVG	Р
2	10479.790	51.16	6.42	57.58	68.30	-10.72	peak	Р
3	15720.500	52.73	8.16	60.89	68.30	-7.41	peak	Р
4 *	15721.800	43.83	8.16	51.99	54.00	-2.01	AVG	Р

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





Page: 53 of 173

Temperature:	24.5°C	Relative Humidity:	49%
Test Voltage:	AC 120V/60Hz	MODE	A VIVE
Ant. Pol.	Horizontal		Will a
Test Mode:	TX 802.11n(HT40) Mod	de 5190MHz (U-NII-1) -M	IIMO

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	10380.087	47.70	6.21	53.91	68.30	-14.39	peak	Р
2	10380.107	38.49	6.21	44.70	54.00	-9.30	AVG	Р
3	15572.880	54.61	9.12	63.73	68.30	-4.57	peak	Р
4 *	15573.200	43.15	9.12	52.27	54.00	-1.73	AVG	Р

#### 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 $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-40 GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40 GHz.
- 5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	24.5°C	Relative Humidity:	49%				
Test Voltage:	AC 120V/60Hz	COLUMN TO THE PARTY OF THE PART					
Ant. Pol.	Vertical	/ertical					
Test Mode:	TX 802.11n(HT40) Mode	5190MHz (U-NII-1) -M	IIMO				

No	).	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1		10369.280	38.51	6.15	44.66	68.30	-23.64	peak	Р
2		10382.080	45.85	6.21	52.06	54.00	-1.94	AVG	Р
3	*	15562.480	43.92	9.17	53.09	54.00	-0.91	AVG	Р
4		15568.400	55.17	9.14	64.31	68.30	-3.99	peak	Р

- 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 $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-40 GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40 GHz.
- 5. No report for the emission which more than 20dB below the prescribed limit.





Page: 54 of 173

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Temperature:	24.5°C	Relative Humidity:	49%
Test Voltage:	AC 120V/60Hz	William .	7
Ant. Pol.	Horizontal		111373
Test Mode:	TX 802.11n(HT40) Mod	de 5230MHz (U-NII-1) -M	IIMO

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	10460.980	39.91	6.37	46.28	54.00	-7.72	AVG	Р
2	10462.870	48.30	6.39	54.69	68.30	-13.61	peak	Р
3	15688.650	53.02	8.23	61.25	68.30	-7.05	peak	Р
4 *	15689.520	43.86	8.22	52.08	54.00	-1.92	AVG	Р

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

Temperature:	24.5°C	Relative Humidity:	49%
Test Voltage:	AC 120V/60Hz	COUNTY OF	
Ant. Pol.	Vertical		
Test Mode:	TX 802.11n(HT40) Mode	5230MHz (U-NII-1) -M	IMO

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	10457.390	48.66	6.37	55.03	68.30	-13.27	peak	Р
2	10458.250	39.32	6.37	45.69	54.00	-8.31	AVG	Р
3 *	15691.980	43.49	8.20	51.69	54.00	-2.31	AVG	Р
4	15692.520	52.65	8.20	60.85	68.30	-7.45	peak	Р

- 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 $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-40 GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz.
- 5. No report for the emission which more than 20dB below the prescribed limit.





Page: 55 of 173

and the same of th			
Temperature:	24.5°C	Relative Humidity:	49%
Test Voltage:	AC 120V/60Hz	CITIES OF	A VIVE
Ant. Pol.	Horizontal		111373
Test Mode:	TX 802.11ac(VHT40)	Mode 5190MHz (U-NII-1)	-MIMO

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	10379.534	37.04	6.20	43.24	54.00	-10.76	AVG	Р
2	10380.228	45.23	6.21	51.44	68.30	-16.86	peak	Р
3	15573.200	53.45	9.12	62.57	68.30	-5.73	peak	Р
4 *	15577.360	42.89	9.10	51.99	54.00	-2.01	AVG	Р

#### 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 $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-40 GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40 GHz.
- 5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	24.5°C	Relative Humidity:	49%
Test Voltage:	AC 120V/60Hz	William .	
Ant. Pol.	Vertical		
Test Mode:	TX 802.11ac(VHT40) Mc	de 5190MHz (U-NII-1)	-MIMO

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	10378.400	38.82	6.19	45.01	54.00	-8.99	AVG	Р
2	10380.960	48.76	6.21	54.97	68.30	-13.33	peak	Р
3 *	15568.400	43.74	9.14	52.88	54.00	-1.12	AVG	Р
4	15584.080	55.00	9.07	64.07	68.30	-4.23	peak	Р

- 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 $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-40 GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40 GHz.
- 5. No report for the emission which more than 20dB below the prescribed limit.





Page: 56 of 173

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Temperature:	24.5°C	Relative Humidity:	49%
Test Voltage:	AC 120V/60Hz	William .	A VIVE
Ant. Pol.	Horizontal		Will a
Test Mode:	TX 802.11ac(VHT40) N	Mode 5230MHz (U-NII-1)	-MIMO

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	10457.680	48.99	6.37	55.36	68.30	-12.94	peak	Р
2	10458.690	39.88	6.37	46.25	54.00	-7.75	AVG	Р
3 *	15657.400	42.77	8.49	51.26	54.00	-2.74	AVG	Р
4	15658.900	51.16	8.49	59.65	68.30	-8.65	peak	Р

#### 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 $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-40 GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40 GHz.
- 5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	24.5°C	Relative Humidity:	49%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical	WORDS.	
Test Mode:	TX 802.11ac(VHT40) Mo	de 5230MHz (U-NII-1)	-MIMO

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	10458.690	49.88	6.37	56.25	68.30	-12.05	peak	Р
2	10459.650	41.48	6.37	47.85	54.00	-6.15	AVG	Р
3 *	15658.520	43.47	8.49	51.96	54.00	-2.04	AVG	Р
4	15659.500	52.07	8.48	60.55	68.30	-7.75	peak	Р

- 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 $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-40 GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40 GHz.
- 5. No report for the emission which more than 20dB below the prescribed limit.





Page: 57 of 173

Temperature:	24.5°C	Relative Humidity:	49%
Test Voltage:	AC 120V/60Hz	TU	
Ant. Pol.	Horizontal	WILLIAM STATE	73 110
Test Mode:	TX 802.11ac(VHT80) Mo	ode 5210MHz (U-NII-1)	-MIMO

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	10419.883	50.57	6.30	56.87	68.30	-11.43	peak	Р
2	10419.883	38.46	6.30	44.76	54.00	-9.24	AVG	Р
3 *	15625.200	41.85	8.77	50.62	54.00	-3.38	AVG	Р
4	15682.160	53.77	8.29	62.06	68.30	-6.24	peak	Р

### 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 $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-40 GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40 GHz.
- 5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	24.5°C	Relative Humidity:	49%
Test Voltage:	AC 120V/60Hz		D OU
Ant. Pol.	Vertical		MILLER
Test Mode:	TX 802.11ac(VHT80) Mo	ode 5210MHz (U-NII-1)	-MIMO

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	10420.100	48.00	6.30	54.30	68.30	-14.00	peak	Р
2	10420.343	38.70	6.30	45.00	54.00	-9.00	AVG	Р
3	15624.560	56.20	8.79	64.99	68.30	-3.31	peak	Р
4 *	15626.480	44.02	8.77	52.79	54.00	-1.21	AVG	Р

- 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 $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-40 GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40 GHz.
- 5. No report for the emission which more than 20dB below the prescribed limit.





Page: 58 of 173

## 5260MHz-5320MHz(U-NII-2A)

Temperature:	24.5°C	24.5°C Relative Humidity:	
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11a Mode 5260N	MHz (U-NII-2A) -SISO	COURS !

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	10523.600	51.42	6.44	57.86	68.30	-10.44	peak	Р
2	10523.600	41.79	6.44	48.23	54.00	-5.77	AVG	Р
3	15782.360	52.65	8.24	60.89	68.30	-7.41	peak	Р
4 *	15782.360	43.85	8.24	52.09	54.00	-1.91	AVG	Р

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

Temperature:	24.5°C	Relative Humidity:	49%
Test Voltage:	AC 120V/60Hz	THUIS	
Ant. Pol.	Vertical		
Test Mode:	TX 802.11a Mode 5260N	MHz (U-NII-2A) -SISO	WURT I

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	10522.700	50.25	6.44	56.69	68.30	-11.61	peak	Р
2	10523.480	42.18	6.44	48.62	54.00	-5.38	AVG	Р
3	15781.600	53.56	8.24	61.80	68.30	-6.50	peak	Р
4 *	15781.600	44.23	8.24	52.47	54.00	-1.53	AVG	Р

- 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 $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-40 GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz.
- 5. No report for the emission which more than 20dB below the prescribed limit.





Page: 59 of 173

Temperature:	24.5°C	Relative Humidity:	49%
Test Voltage:	AC 120V/60Hz	MILLIAN	A AMOS
Ant. Pol.	Horizontal		100
Test Mode:	TX 802.11a Mode 5280	MHz (U-NII-2A) -SISO	

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	10560.500	50.42	6.43	56.85	68.30	-11.45	peak	Р
2	10560.500	40.82	6.43	47.25	54.00	-6.75	AVG	Р
3 *	15841.700	44.48	7.90	52.38	54.00	-1.62	AVG	Р
4	15842.700	53.34	7.89	61.23	68.30	-7.07	peak	Р

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

Temperature:	24.5°C	Relative Humidity:	49%
Test Voltage:	AC 120V/60Hz	THUIS	
Ant. Pol.	Vertical		
Test Mode:	TX 802.11a Mode 5280N	MHz (U-NII-2A) -SISO	WURT I

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	10561.800	40.47	6.42	46.89	54.00	-7.11	AVG	Р
2	10562.300	50.45	6.42	56.87	68.30	-11.43	peak	Р
3	15842.200	52.98	7.90	60.88	68.30	-7.42	peak	Р
4 *	15842.500	44.01	7.90	51.91	54.00	-2.09	AVG	Р

- 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 $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m) 4. The tests evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz.
- 5. No report for the emission which more than 20dB below the prescribed limit.





Page: 60 of 173

The second secon			
Temperature:	24.5°C	Relative Humidity:	49%
Test Voltage:	AC 120V/60Hz	William .	
Ant. Pol.	Horizontal		1000
Test Mode:	TX 802.11a Mode 53	20MHz (U-NII-2A) -SISO	

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	10639.866	49.31	6.66	55.97	68.30	-12.33	peak	Р
2	10640.345	39.35	6.67	46.02	54.00	-7.98	AVG	Р
3	15957.520	55.50	7.38	62.88	68.30	-5.42	peak	Р
4 *	15958.080	43.86	7.39	51.25	54.00	-2.75	AVG	Р

### Remark:

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

Temperature:	24.5°C	Relative Humidity:	49%
Test Voltage:	AC 120V/60Hz	THUE	
Ant. Pol.	Vertical		
Test Mode:	TX 802.11a Mode 5320N	MHz (U-NII-2A) -SISO	WURT I

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	10639.827	40.88	6.66	47.54	54.00	-6.46	AVG	Р
2	10640.400	49.97	6.67	56.64	68.30	-11.66	peak	Р
3 *	15961.840	44.57	7.39	51.96	54.00	-2.04	AVG	Р
4	15968.480	55.30	7.39	62.69	68.30	-5.61	peak	Р

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





Page: 61 of 173

Temperature:	24.5°C	Relative Humidity:	49%
Test Voltage:	AC 120V/60Hz	MODE	A VIVE
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11n(HT20) Mod	le 5260MHz (U-NII-2A) -	-MIMO

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	10522.700	42.12	6.44	48.56	54.00	-5.44	AVG	Р
2	10523.600	51.79	6.44	58.23	68.30	-10.07	peak	Р
3 *	15781.580	43.90	8.23	52.13	54.00	-1.87	AVG	Р
4	15783.600	52.33	8.25	60.58	68.30	-7.72	peak	Р

- 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 $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-40 GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz.
- 5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	24.5°C	Relative Humidity:	49%
Test Voltage:	AC 120V/60Hz	THURSDAY	TO THE
Ant. Pol.	Vertical	MUDE	
Test Mode:	TX 802.11n(HT20) Mode	5260MHz (U-NII-2A) -	MIMO

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	10523.500	49.80	6.44	56.24	68.30	-12.06	peak	Р
2	10523.860	41.82	6.44	48.26	54.00	-5.74	AVG	Р
3 *	15780.600	43.92	8.24	52.16	54.00	-1.84	AVG	Р
4	15781.750	52.65	8.24	60.89	68.30	-7.41	peak	Р

- 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 $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m) 4. The tests evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz.
- 5. No report for the emission which more than 20dB below the prescribed limit.





Page: 62 of 173

Temperature:	24.5°C	Relative Humidity:	49%
Test Voltage:	AC 120V/60Hz	MODE	A PULL
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11n(HT20) Mod	de 5280MHz (U-NII-2A) -	MIMO

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	10560.500	50.45	6.43	56.88	68.30	-11.42	peak	Р
2	10561.350	40.56	6.43	46.99	54.00	-7.01	AVG	Р
3	15840.800	52.98	7.90	60.88	68.30	-7.42	peak	Р
4 *	15841.700	44.28	7.90	52.18	54.00	-1.82	AVG	Р

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

Temperature:	24.5°C	Relative Humidity:	49%
Test Voltage:	AC 120V/60Hz	THURSDAY	
Ant. Pol.	Vertical	MUDE	
Test Mode:	TX 802.11n(HT20) Mode	5280MHz (U-NII-2A) -	MIMO

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	10559.800	40.80	6.43	47.23	54.00	-6.77	AVG	Р
2	10560.300	50.84	6.43	57.27	68.30	-11.03	peak	Р
3 *	15840.500	44.15	7.91	52.06	54.00	-1.94	AVG	Р
4	15841.200	52.36	7.90	60.26	68.30	-8.04	peak	Р

- 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 $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-40 GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz.
- 5. No report for the emission which more than 20dB below the prescribed limit.





Page: 63 of 173

Temperature:	24.5°C	Relative Humidity:	49%
Test Voltage:	AC 120V/60Hz	MODE	A PULL
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11n(HT20) Mod	de 5320MHz (U-NII-2A) -	MIMO

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	10639.688	39.46	6.66	46.12	54.00	-7.88	AVG	Р
2	10640.023	48.43	6.66	55.09	68.30	-13.21	peak	Р
3 *	15958.960	42.03	7.39	49.42	54.00	-4.58	AVG	Р
4	15960.480	53.68	7.39	61.07	68.30	-7.23	peak	Р

### 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 $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-40 GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz.
- 5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	24.5°C	Relative Humidity:	49%
Test Voltage:	AC 120V/60Hz		(00)
Ant. Pol.	Vertical	A COLOR	
Test Mode:	TX 802.11n(HT20) Mode	• 5320MHz (U-NII-2A) -	MIMO

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	10639.842	40.53	6.66	47.19	54.00	-6.81	AVG	Р
2	10640.075	49.79	6.66	56.45	68.30	-11.85	peak	Р
3 *	15961.600	45.23	7.39	52.62	54.00	-1.38	AVG	Р
4	15964.960	56.01	7.40	63.41	68.30	-4.89	peak	Р

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





Page: 64 of 173

Temperature:	24.5°C	Relative Humidity:	49%
Test Voltage:	AC 120V/60Hz	MUDDE	
Ant. Pol.	Horizontal		1000
Test Mode:	TX 802.11ac(VHT20) Mo	ode 5260MHz (U-NII-2A	A) -MIMO

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	10520.470	50.91	6.44	57.35	68.30	-10.95	peak	Р
2	10520.560	41.54	6.44	47.98	54.00	-6.02	AVG	Р
3 *	15780.690	43.66	8.24	51.90	54.00	-2.10	AVG	Р
4	15782.500	52.54	8.24	60.78	68.30	-7.52	peak	Р

- 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 $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-40 GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz.
- 5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	24.5°C	Relative Humidity:	49%
Test Voltage:	AC 120V/60Hz	THURSDAY	
Ant. Pol.	Vertical	MUDE	
Test Mode:	TX 802.11ac(VHT20) Mc	de 5260MHz (U-NII-2A	A) -MIMO

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	10520.260	41.10	6.44	47.54	54.00	-6.46	AVG	Р
2	10520.860	50.45	6.43	56.88	68.30	-11.42	peak	Р
3	15778.690	52.26	8.23	60.49	68.30	-7.81	peak	Р
4 *	15780.560	44.11	8.24	52.35	54.00	-1.65	AVG	Р

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





Page: 65 of 173

Temperature:	24.5°C	Relative Humidity:	49%
Test Voltage:	AC 120V/60Hz	MODE	A MILLER
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11ac(VHT20) N	Node 5280MHz (U-NII-2A	A) -MIMO

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	10559.810	40.49	6.43	46.92	54.00	-7.08	AVG	Р
2	10561.230	51.01	6.43	57.44	68.30	-10.86	peak	Р
3	15840.580	52.66	7.91	60.57	68.30	-7.73	peak	Р
4 *	15841.260	44.02	7.90	51.92	54.00	-2.08	AVG	Р

### 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 $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-40 GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz.
- 5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	24.5°C	Relative Humidity:	49%
Test Voltage:	AC 120V/60Hz		4000
Ant. Pol.	Vertical	A COLOR	
Test Mode:	TX 802.11ac(VHT20) Mo	ode 5280MHz (U-NII-2A	A) -MIMO

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	10558.950	41.23	6.43	47.66	54.00	-6.34	AVG	Р
2	10560.430	50.52	6.43	56.95	68.30	-11.35	peak	Р
3	15841.240	52.56	7.90	60.46	68.30	-7.84	peak	Р
4 *	15841.350	44.34	7.90	52.24	54.00	-1.76	AVG	Р

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





66 of 173 Page:

Temperature:	24.5°C	Relative Humidity:	49%
Test Voltage:	AC 120V/60Hz	CHILD BY	
Ant. Pol.	Horizontal	1773	1000
Test Mode:	TX 802.11 ac(VHT20) M	lode 5320MHz (U-NII-2/	A) -MIMO

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	10638.880	37.79	6.66	44.45	54.00	-9.55	AVG	Р
2	10640.480	46.80	6.67	53.47	68.30	-14.83	peak	Р
3 *	15955.760	40.92	7.39	48.31	54.00	-5.69	AVG	Р
4	15958.720	54.03	7.39	61.42	68.30	-6.88	peak	Р

- 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 $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m) 4. The tests evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz.
- 5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	24.5°C	Relative Humidity:	49%
Test Voltage:	AC 120V/60Hz	The state of the s	
Ant. Pol.	Vertical		2
Test Mode:	TX 802.11ac(VHT20) Mo	ode 5320MHz (U-NII-2A	A) -MIMO

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	10633.920	40.74	6.63	47.37	54.00	-6.63	AVG	Р
2	10640.480	50.05	6.67	56.72	68.30	-11.58	peak	Р
3 *	15957.280	45.17	7.39	52.56	54.00	-1.44	AVG	Р
4	15963.600	55.61	7.39	63.00	68.30	-5.30	peak	Р

- 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 $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-40 GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz.
- 5. No report for the emission which more than 20dB below the prescribed limit.





Page: 67 of 173

Temperature:	24.5°C	Relative Humidity:	49%
Test Voltage:	AC 120V/60Hz	MODE	
Ant. Pol.	Horizontal		Will a
Test Mode:	TX 802.11n(HT40) Mod	de 5270MHz (U-NII-2A) -	MIMO

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	10537.990	40.40	6.45	46.85	54.00	-7.15	AVG	Р
2	10538.660	49.43	6.44	55.87	68.30	-12.43	peak	Р
3 *	15807.670	43.77	8.19	51.96	54.00	-2.04	AVG	Р
4	15808.630	52.02	8.18	60.20	68.30	-8.10	peak	Р

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

Temperature:	24.5°C	Relative Humidity:	49%
Test Voltage:	AC 120V/60Hz	COLUMN TO THE PARTY OF THE PART	
Ant. Pol.	Vertical		
Test Mode:	TX 802.11n(HT40) Mode	5270MHz (U-NII-2A) -	MIMO

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	10537.300	40.81	6.44	47.25	54.00	-6.75	AVG	Р
2	10539.500	49.58	6.44	56.02	68.30	-12.28	peak	Р
3 *	15809.520	43.78	8.18	51.96	54.00	-2.04	AVG	Р
4	15809.600	51.69	8.18	59.87	68.30	-8.43	peak	Р

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





68 of 173 Page:

Temperature:	24.5°C	Relative Humidity:	49%
Test Voltage:	AC 120V/60Hz	MODE	A PULL
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11n(HT40) Mod	de 5310MHz (U-NII-2A) -	MIMO

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	10618.400	39.73	6.52	46.25	54.00	-7.75	AVG	Р
2	10618.900	49.34	6.53	55.87	68.30	-12.43	peak	Р
3 *	15927.690	44.59	7.39	51.98	54.00	-2.02	AVG	Р
4	15928.300	52.77	7.38	60.15	68.30	-8.15	peak	Р

- 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 $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m) 4. The tests evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz.
- 5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	24.5°C	Relative Humidity:	49%
Test Voltage:	AC 120V/60Hz	TUD	100
Ant. Pol.	Vertical	MUD	
Test Mode:	TX 802.11n(HT40) Mode	5310MHz (U-NII-2A) -	MIMO

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	10618.500	48.83	6.53	55.36	68.30	-12.94	peak	Р
2	10619.600	38.83	6.53	45.36	54.00	-8.64	AVG	Р
3	15931.500	53.69	7.39	61.08	68.30	-7.22	peak	Р
4 *	15931.500	44.27	7.39	51.66	54.00	-2.34	AVG	Р

- 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 $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-40 GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz.
- 5. No report for the emission which more than 20dB below the prescribed limit.





Page: 69 of 173

Temperature:	24.5°C	Relative Humidity:	49%
Test Voltage:	AC 120V/60Hz	WO TO	THE PARTY OF THE P
Ant. Pol.	Horizontal		IURA -
Test Mode:	TX 802.11ac(VHT40) M	lode 5270MHz (U-NII-2A	A) -MIMO

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	10538.960	40.58	6.44	47.02	54.00	-6.98	AVG	Р
2	10539.650	49.61	6.44	56.05	68.30	-12.25	peak	Р
3 *	15808.600	43.68	8.18	51.86	54.00	-2.14	AVG	Р
4	15808.900	51.28	8.18	59.46	68.30	-8.84	peak	Р

- 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 $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m) 4. The tests evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz.
- 5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	24.5°C	Relative Humidity:	49%
Test Voltage:	AC 120V/60Hz	4000	
Ant. Pol.	Vertical		
Test Mode:	TX 802.11ac(VHT40) Mc	de 5270MHz (U-NII-2A	A) -MIMO

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	10537.860	48.91	6.45	55.36	68.30	-12.94	peak	Р
2	10538.520	40.06	6.44	46.50	54.00	-7.50	AVG	Р
3	15809.700	51.89	8.18	60.07	68.30	-8.23	peak	Р
4 *	15809.800	43.81	8.18	51.99	54.00	-2.01	AVG	Р

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





Page: 70 of 173

Temperature:	24.5°C	Relative Humidity:	49%
Test Voltage:	AC 120V/60Hz	MODE	A MILLER
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11ac(VHT40) N	Node 5310MHz (U-NII-2A	A) -MIMO

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	10617.990	48.46	6.52	54.98	68.30	-13.32	peak	Р
2	10617.990	39.34	6.52	45.86	54.00	-8.14	AVG	Р
3 *	15931.250	44.47	7.39	51.86	54.00	-2.14	AVG	Р
4	15931.700	52.71	7.39	60.10	68.30	-8.20	peak	Р

- 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 $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m) 4. The tests evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz.
- 5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	24.5°C	Relative Humidity:	49%
Test Voltage:	AC 120V/60Hz	TUDE	100
Ant. Pol.	Vertical	TO THE STATE OF TH	
Test Mode:	TX 802.11ac(VHT40) Mc	ode 5310MHz (U-NII-2A	A) -MIMO

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	10618.690	39.70	6.53	46.23	54.00	-7.77	AVG	Р
2	10618.700	48.61	6.53	55.14	68.30	-13.16	peak	Р
3	15932.500	53.46	7.39	60.85	68.30	-7.45	peak	Р
4 *	15932.500	44.85	7.39	52.24	54.00	-1.76	AVG	Р

- 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 $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-40 GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz.
- 5. No report for the emission which more than 20dB below the prescribed limit.





Page: 71 of 173

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Temperature:	24.5°C	Relative Humidity:	49%
Test Voltage:	AC 120V/60Hz	MODE	A VIVE
Ant. Pol.	Horizontal		Will a
Test Mode:	TX 802.11ac(VHT80) N	Node 5290MHz (U-NII-2A	A) -MIMO

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	10579.500	41.22	6.43	47.65	68.30	-20.65	peak	Р
2	10580.250	49.89	6.43	56.32	68.30	-11.98	peak	Р
3 *	15868.290	44.49	7.67	52.16	54.00	-1.84	AVG	Р
4	15869.520	53.60	7.65	61.25	68.30	-7.05	peak	Р

- 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 $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m) 4. The tests evaluated1-40GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency or 40GHz.
- 5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	24.5°C	Relative Humidity:	49%
Test Voltage:	AC 120V/60Hz	TUDE	100
Ant. Pol.	Vertical	TO THE STATE OF TH	
Test Mode:	TX 802.11ac(VHT80) Mc	ode 5290MHz (U-NII-2A	A) -MIMO

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	10578.920	39.95	6.43	46.38	54.00	-7.62	AVG	Р
2	10580.250	48.93	6.43	55.36	68.30	-12.94	peak	Р
3	15868.520	53.17	7.67	60.84	68.30	-7.46	peak	Р
4 *	15870.650	44.19	7.65	51.84	54.00	-2.16	AVG	Р

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

