

CTC Laboratories, Inc.

2/F., Building 1 and 1-2/F., Building 2, Jiaquan Building, Guanlan High-Tech Park, Longhua District, Shenzhen, Guangdong, China

Tel: +86-755-27521059 Fax: +86-755-27521011 Http://www.sz-ctc.org.cn

TEST REPORT

Report No. CTC20231341E04

FCC ID.....: WNA-HP46H

Applicant: Shenzhen Skyworth Digital Technology Co.,LTD

District, Shenzhen, China

Manufacturer...... Shenzhen Skyworth Digital Technology Co.,LTD

District, Shenzhen, China

Product Name 4K UHD Streaming TV Box

Trade Mark SKYWORTH, STRONG, QVWI, MECOOL, XG500, Next, NEXT,

9MAX, coocaa, COOCAA, TESLA, SVI studio, QQBOX

Model/Type reference...... HP46H

Listed Model(s) Leap-S3, LEAP-S3, Leap S3, MECOOL, THOMSON, KM7

PLUS, THA 200, THA200, XG500, Start-4K, 9MAX, ATBOX001

THE ULTRA, atbox001 the ultra, QQBOX s100

Standard: FCC CFR Title 47 Part 15 Subpart E Section 15.407

Date of receipt of test sample........ Jul. 01, 2023

Date of testing...... Jul. 01, 2023 ~ Jul. 12, 2023

Date of issue...... Aug. 03, 2023

Result...... PASS

Compiled by:

(Printed name+signature) Lucy Lan

Supervised by:

(Printed name+signature) Eric Zhang

Approved by:

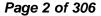
(Printed name+signature) Totti Zhao

Testing Laboratory Name: CTC Laboratories, Inc.

High-Tech Park, Longhua District, Shenzhen, Guangdong, China

Lucy lan Bic shang

This test report may be duplicated completely for legal use with the approval of the applicant. It should not be reproduced except in full, without the written approval of our laboratory. The client should not use it to claim product endorsement by CTC. The Test Result in the report only apply to the tested sample. The test report shall be invalid without all the signatures of testing engineers, reviewer and approver. Any objections must be raised to CTC within 15 days since the date when the report is received. It will not be taken into consideration beyond this limit. The test report merely corresponds to the test sample.





Report No.: CTC20231341E04

	Table of Contents	Page
1. TE	ST SUMMARY	3
1.1.	Test Standards	3
1.2.	REPORT VERSION	
1.3.	TEST DESCRIPTION	4
1.4.	TEST FACILITY	5
1.5.	MEASUREMENT UNCERTAINTY	6
1.6.	Environmental Conditions	
2. GE	ENERAL INFORMATION	7
2.1.	CLIENT INFORMATION	7
2.2.	GENERAL DESCRIPTION OF EUT	
2.3.	Accessory Equipment Information	8
2.4.	Operation State	9
2.5.	MEASUREMENT INSTRUMENTS LIST	12
3. TE	ST ITEM AND RESULTS	14
3.1.	CONDUCTED EMISSION	14
3.2.	RADIATED EMISSION	17
3.3.	BAND EDGE EMISSIONS	81
3.4.	Bandwidth	153
3.5.	PEAK OUTPUT POWER	248
3.6.	Power Spectral Density	252
3.7.	Frequency Stability	297
3.8.	Antenna Requirement	306

Page 3 of 306

Report No.: CTC20231341E04



1. TEST SUMMARY

1.1. Test Standards

The tests were performed according to following standards:

FCC Rules Part 15.407: for 802.11a/n/ac/ax, the test procedure follows the FCC KDB 789033 D02 General UNII Test Procedures New Rules V02r01.

ANSI C63.10-2013: American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices.

1.2. Report Version

Revised No. Date of issue		Description	
01	Aug. 03, 2023	Original	



1.3. Test Description

FCC Part 15 Subpart E (15.407)						
Test Item	Standard Section	Result	Test Engineer			
Antenna Requirement	15.203	Pass	Lucy			
Conducted Emission	15.207	Pass	Lucy			
Band Edge Emissions	15.407(b)	Pass	Lucy			
26dB Bandwidth & 99% Bandwidth	15.407(a)	Pass	Lucy			
6dB Bandwidth (only for UNII-3)	15.407(e)	Pass	Lucy			
Peak Output Power	15.407(a)	Pass	Lucy			
Power Spectral Density	15.407(a)	Pass	Lucy			
Transmitter Radiated Spurious Emission	15.407(b) &15.209	Pass	Lucy			
Frequency Stability	15.407(g)	Pass	Lucy			
Dynamic Frequency Selection (DFS)	15.407(h)	Pass	Lucy			
Automatically Discontinue Transmission	15.407(c)	Pass	Note 3			

Note:

- 1. The measurement uncertainty is not included in the test result.
- 2. N/A: means this test item is not applicable for this device according to the technology characteristic of device.
- 3. During no any information transmission, the EUT can automatically discontinue transmission and become standby mode for power saving. the EUT can detect the controlling signal of ACK message transmitting from remote device and verify whether it shall resend or discontinue transmission.
- 4. Dynamic Frequency Selection (DFS), please reference to the test report No.: CTC20231341E05.

Page 5 of 306

Report No.: CTC20231341E04



1.4. Test Facility

Address of the report laboratory

CTC Laboratories, Inc.

Add: 2/F., Building 1 and 1-2/F., Building 2, Jiaquan Building, Guanlan High-Tech Park, Longhua District, Shenzhen, Guangdong, China

Laboratory accreditation

The test facility is recognized, certified, or accredited by the following organizations:

A2LA-Lab Cert. No.: 4340.01

CTC Laboratories, Inc. EMC Laboratory has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025:2017 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing.

Industry Canada (Registration No.: 9783A, CAB Identifier: CN0029)

CTC Laboratories, Inc. EMC Laboratory has been registered by Certification and Engineer Bureau of Industry Canada for the performance of with Registration NO.: 9783A on Jan, 2016.

FCC (Registration No.: 951311, Designation Number CN1208)

CTC Laboratories, Inc. EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration 951311, Aug 26, 2017.

For anti-fake verification, please visit the official website of Certification and Accreditation Administration of the People's Republic of China: http://yz.cnca.cn



1.5. Measurement Uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. to TR-100028-01 "Electromagnetic compatibility and Radio spectrum Matters (ERM); Uncertainties in the measurement of mobile radio equipment characteristics; Part 1" and TR-100028-02 "Electromagnetic compatibility and Radio spectrum Matters (ERM); Uncertainties in the measurement of mobile radio equipment characteristics; Part 2" and is documented in the CTC Laboratories, Inc. quality system acc. to DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

Below is the best measurement capability for CTC Laboratories, Inc.

Test Items	Measurement Uncertainty	Notes
Emission Bandwidth	±0.0196%	(1)
Maximum Conduct Output Power	±0.766dB	(1)
Power Spectral Density	±1.22dB	(1)
Band Edge Measurements	±1.328dB	(1)
Unwanted Emissions Measurement	9kHz-1GHz: ±0.746dB 1GHz-26GHz: ±1.328dB	(1)
Frequency Stability	±2.76%	(1)
Conducted Emissions 9kHz~30MHz	±3.08 dB	(1)
Radiated Emissions 30~1000MHz	±4.51 dB	(1)
Radiated Emissions 1~18GHz	±5.84 dB	(1)
Radiated Emissions 18~40GHz	±6.12 dB	(1)

Note (1): This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

1.6. Environmental Conditions

	Temperature	15 °C to 35 °C
Normal	Relative Humidity	20 % to 75 %
Condition	Air Pressure	101 kPa
	Voltage	The normal test voltage for the equipment shall be the nominal voltage for which the equipment was designed.
Extreme	Temperature	Measurements shall be made over the extremes of the operating temperature range as declared by the manufacturer.
Condition	Voltage	Measurements shall be made over the extremes of the operating temperature range as declared by the manufacturer.

Normal Condition T _N =Normal Temperature		25 °C
Evtrama Candition	T _L =Lower Temperature	0 °C
Extreme Condition	T _H =Higher Temperature	45 °C



2. GENERAL INFORMATION

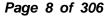
2.1. Client Information

Applicant:	Shenzhen Skyworth Digital Technology Co.,LTD
Address:	14/F,Block A,Skyworth Building,Gaoxin Ave.1.S.,Nanshan District,Shenzhen,China
Manufacturer:	Shenzhen Skyworth Digital Technology Co.,LTD
Address:	14/F,Block A,Skyworth Building,Gaoxin Ave.1.S.,Nanshan District,Shenzhen,China
Factory:	Shenzhen Skyworth Digital Technology Co.,LTD
Address:	14/F,Block A,Skyworth Building,Gaoxin Ave.1.S.,Nanshan District,Shenzhen,China

2.2. General Description of EUT

Product Name:	4K UHD Strea	aming TV Box					
Trade Mark:		SKYWORTH, STRONG, QVWI, MECOOL, XG500, Next, NEXT, 9MAX, coocaa, COOCAA, TESLA, SVI studio, QQBOX					
Model/Type reference:	HP46H						
Listed Model(s):	THA200, XG5	Leap-S3, LEAP-S3, Leap S3, MECOOL, THOMSON, KM7 PLUS, THA 200, THA200, XG500, Start-4K, 9MAX, ATBOX001 THE ULTRA, atbox001 the ultra, QQBOX s100					
Model Difference:		lels are identical ade Mark and m		B, layout and ele	ectrical circuit,		
Power Supply:	DC12V 1A fro	m AC/DC Adapte	er				
Adapter Model 1:	YS-SKY12010 Input: 100-240 Output:12Vdc	Vac 50/60Hz 0.5/	Ą				
Adapter Model 2:		RJ-SKY120100U00S ^{Note2} Input: 100-240Vac 50/60Hz 0.5A					
Hardware Version:	/						
Software Version:	/						
5G Wi-Fi							
Operation Band:	⊠U-NII-1	⊠U-NII-2A	⊠U-NII-2C	⊠U-NII-3			
	U-NII-1	5150MHz~525	50MHz	1			
Operation Fraguency	U-NII-2A	5250MHz~5350MHz					
Operation Frequency:	U-NII-2C	5470MHz~572	25MHz				
	U-NII-3	5725MHz~585	50MHz				
	802.11a	⊠ 20MHz					
Support Bandwidth:	802.11n	⊠ 20MHz	⊠ 40MHz				
	802.11ac	⊠ 20MHz	⊠ 40MHz	⊠ 80MHz			
Modulation:	802.11a: OFDM (BIT/SK, QPSK, BPSK, 16QAM) 802.11n: OFDM (BIT/SK, QPSK, BPSK, 16QAM, 64QAM)						

CTC Laboratories, Inc.





	-		
	802.11ac: OFDM (BIT/SK, QPSK, BPSK, 16QAM, 64QAM, 256QAM)		
	802.11a: 6/9/12/18/24/36/48/54Mbps		
Bit Rate of Transmitter:	802.11n: up to 300Mbps		
	802.11ac: at most 866.7Mbps		
Antenna Type:	PCBA Antenna		
Antenna Gain:	4.2dBi		

2.3. Accessory Equipment Information

Equipment Information						
Name	Model	S/N	Manufacturer			
Notebook	ThinkBook 14G3 ACL	MP246QDR	Lenovo			
Displayer	EW3270-T	EW3270U	BenQ			
Cable Information	Cable Information					
Name	Shielded Type	Ferrite Core	Length			
LAN Cable	Without	Without	1.5M			
HDMI Cable	Without	Without	1.5M			
Test Software Information						
Name	Version	/	/			
WLAN TEST	/	/	/			



2.4. Operation State

Operation Frequency List: The EUT has been tested under typical operating condition. The Applicant provides communication tools software to control the EUT for staying in continuous transmitting. Operation Frequency List:

Operating	20MHz	Bandwidth	40MHz	Bandwidth	80MHz Bandwidth	
Band	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
	36	5180	38	5400		5210
U-NII-1	40	5200	30	5190	42	
O-INII- I	44	5220	46	5230	42	
	48	5240	40	5230		
	52	5260	54	5270		
U-NII-2A	56	5280	D 4	5270	58	F200
U-INII-ZA	60	5300	62	5310	36	5290
	64	5320	02	5310		
	100	5500	102	5510	106	5530
	104	5520				
	108	5540	- 110	5550		
	112	5560				
	116	5580	440	5590		
U-NII-2C	120	5600	118	5590		
	124 5620	106	5630	=		
	128	5640	126	3630	122	5610
	132	5660				
	136	5680	134	5670		
	140	5700				
	149	5745	151	5755		
	153	5765	101	3733		
U-NII-3	157	5785			155	5775
	161	5805	159	5795		
	165	5825				



Test channel is below:

Operating	Test	20MHz Bandwidth		40MHz Bandwidth		80MHz Bandwidth	
Band	Channel	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
	CH∟	36	5180	38	5190	/	/
U-NII-1	СНм	40	5200	/	/	42	5210
	СНн	48	5240	46	5230	/	/
	CH∟	52	5260	54	5270	/	/
U-NII-2A	СНм	56	5280	/	/	58	5290
	СНн	64	5320	62	5310	/	/
	CH∟	100	5500	102	5510	106	5530
U-NII-2C	СНм	116	5580	110	5550	/	/
	СНн	140	5700	134	5670	122	5610
	CH∟	149	5745	151	5755	/	/
U-NII-3	СНм	157	5785	/	/	155	5775
	СНн	165	5825	159	5795	/	/

Data Rated:

Preliminary tests were performed in different data rate, and found which the below bit rate is worst case mode, so only show data which it is the worsted case mode.

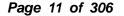
Test Mode	Data Rate (worst mode)
802.11a	6Mbps
802.11n(HT20)/ 802.11n(HT40)	HT-MCS0
802.11ac(VHT20)/ 802.11ac(VHT40)/ 802.11ac(VHT80)	VHT-MCS0

Antenna Specification:

Ant.	Brand	Model Name	Model Name Antenna Type		Gain(dBi)
1	NA	NA	PCBA Antenna	/	4.2
2	NA	NA	PCBA Antenna	/	4.2

Note: Antenna Gain=4.2dBi.

This EUT supports MIMO 2X2, any transmit signals are correlated with each other, so Directional Gain $=G_{Ant.}+10log(N)$ dBi, that is Directional Gain=4.2+10log(2)dBi=7.21dBi. So, output power limit of UNII-3 is 30-7.21+6=28.79dBm, and output power limit of UNII-1 and UNII-2A and UNIII-2C is 23.98-7.21+6=22.77dBm. The power spectral density limit of UNII-1 and UNII-2A and UNIII-2C is 11-7.21+6=9.79dBm/MHz, and power spectral density limit of UNII-3 is 30-7.21+6=28.79dBm/500kHz.





Test Mode:

For RF test items:

The engineering test program was provided and enabled to make EUT continuous transmit.

For AC power line conducted emissions:

The EUT was set to connect with the WLAN AP under large package sizes transmission.

For Radiated spurious emissions test item:

The engineering test program was provided and enabled to make EUT continuous transmit. The EUT in each of three orthogonal axis emissions had been tested, but only the worst case (X axis) data recorded in the report.

For DFS test items:

The EUT has been tested under test mode condition. The Applicant provides software to control the EUT for staying in DFS mode for testing.

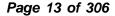


2.5. Measurement Instruments List

Tonsce	end RF Test System				
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Calibrated Until
1	MXA Signal Analyzer	Keysight	N9020A	MY46471737	Dec. 16, 2023
2	Spectrum Analyzer	R&S	FSU26	100105	Dec. 16, 2023
3	Spectrum Analyzer	R&S	FSV40-N	101331	Mar. 14, 2024
4	MXG Vector Signal Generator	Agilent	N5182A	MY47420864	Dec. 16, 2023
5	PSG Analog Signal Generator	Agilent	E8257D	MY46521908	Dec. 16, 2023
6	Power Sensor	Keysight	U2021XA	MY55130004	Mar. 14, 2024
7	Power Sensor	Keysight	U2021XA	MY55130006	Mar. 14, 2024
8	Wideband Radio Communication Tester	R&S	CMW500	102414	Dec. 16, 2023
9	High and low temperature box	ESPEC	MT3035	/	Mar. 24, 2024
10	JS1120 RF Test System	TONSCEND	v2.6	/	/

Radiate	ed Emission (3m chamber 2	2)			
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Calibrated Until
1	Trilog-Broadband Antenna	Schwarzbeck	VULB 9168	9168-1013	Dec. 07, 2024
2	Horn Antenna	Schwarzbeck	BBHA 9120D	9120D-648	Dec. 07, 2024
3	Spectrum Analyzer	R&S	FSU26	100105	Dec. 16, 2023
4	Spectrum Analyzer	R&S	FSV40-N	101331	Mar. 14, 2024
5	Pre-Amplifier	SONOMA	310	186194	Dec. 16, 2023
6	Low Noise Pre-Amplifier	EMCI	EMC051835	980075	Dec. 16, 2023
7	Test Receiver	R&S	ESCI7	100967	Dec. 16, 2023
8	3m chamber 2	Frankonia	EE025	/	Oct. 23, 2024

Radiate	ed Emission (3m chamber 3	3)			
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Calibrated Until
1	Trilog-Broadband Antenna	Schwarzbeck	VULB 9163	01026	Dec. 18, 2024
2	Horn Antenna	Schwarzbeck	BBHA 9120D	9120D-647	Dec. 01, 2024
3	Test Receiver	Keysight	N9038A	MY56400071	Dec. 16, 2023
4	Broadband Premplifier	SCHWARZBECK	BBV9743B	259	Dec. 16, 2023
5	Mirowave Broadband Amplifier	SCHWARZBECK	BBV9718C	111	Dec. 16, 2023
6	3m chamber 3	YIHENG	EE106	/	Sep. 09, 2023

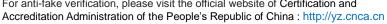




Conduc	Conducted Emission										
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Calibrated Until						
1	LISN	R&S	ENV216	101112	Dec. 16, 2023						
2	LISN	R&S	ENV216	101113	Dec. 16, 2023						
3	EMI Test Receiver	R&S	ESCS30	100353	Dec. 16, 2023						
4	ISN CAT6	Schwarzbeck	NTFM 8158	CAT6-8158-0046	Dec. 16, 2023						
5	ISN CAT5	Schwarzbeck	NTFM 8158	CAT5-8158-0046	Dec. 16, 2023						

Note: 1. The Cal. Interval was one year.

- 2. The Cal. Interval was three years of the antenna.
- 3. The cable loss has been calculated in test result which connection between each test instruments.





3. TEST ITEM AND RESULTS

3.1. Conducted Emission

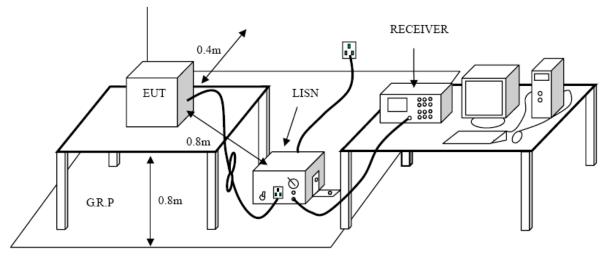
Limit

FCC CFR Title 47 Part 15 Subpart C Section 15.207

Fraguency (MHz)	Conducted Limit (dBµV)				
Frequency (MHz)	Quasi-peak	Average			
0.15 - 0.5	66 to 56 *	56 to 46 *			
0.5 - 5	56	46			
5 - 30	60	50			

^{*} Decreases with the logarithm of the frequency.

Test Configuration



Test Procedure

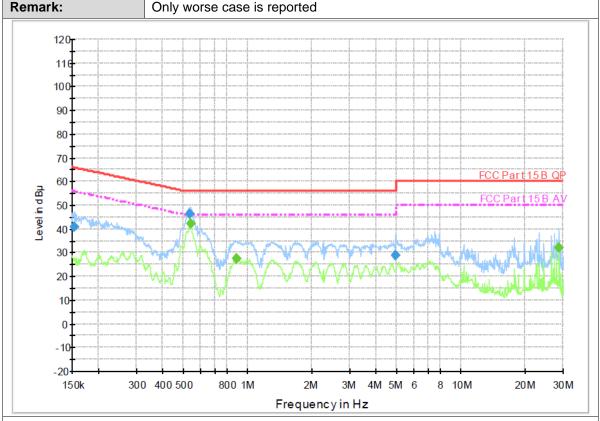
- 1. The EUT was setup according to ANSI C63.10:2013 requirements.
- 2. The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane was located 40 cm to the rear of the EUT. All other surfaces of EUT were at least 80 cm from any other grounded conducting surface.
- 3. The EUT and simulators are connected to the main power through a line impedance stabilization network (LISN). The LISN provides a 50 ohm / 50 μ H coupling impedance for the measuring equipment.
- 4. The peripheral devices are also connected to the main power through a LISN. (Please refer to the block diagram of the test setup and photographs)
- 5. Each current-carrying conductor of the EUT power cord, except the ground (safety) conductor, was individually connected through a LISN to the input power source.
- 6. The excess length of the power cord between the EUT and the LISN receptacle were folded back and forth at the center of the lead to form a bundle not exceeding 40 cm in length.
- 7. Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9 kHz.
- 8. During the above scans, the emissions were maximized by cable manipulation.

Test Mode

Please refer to the clause 2.4.

Test Result

Test Voltage:	AC 120V/60Hz
Terminal:	Line



Final Measurement Detector 1

Frequency (MHz)	QuasiPeak (dBµ V)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµ V)	Comment
0.154250	40.6	1000.00	9.000	On	L1	9.7	25.2	65.8	
0.533840	46.3	1000.00	9.000	On	L1	9.7	9.7	56.0	
4.932760	28.8	1000.00	9.000	On	L1	9.7	27.2	56.0	

Final Measurement Detector 2

Frequency (MHz)	Average (dBµ V)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµ V)	Comment
0.538120	42.3	1000.00	9.000	On	L1	9.7	3.7	46.0	
0.882800	27.3	1000.00	9.000	On	L1	9.7	18.7	46.0	
28.685180	32.1	1000.00	9.000	On	L1	9.9	17.9	50.0	

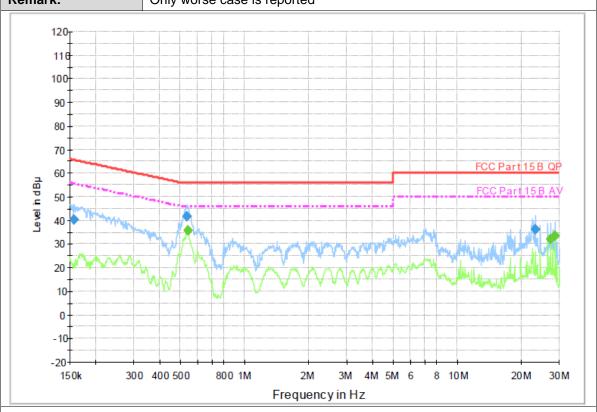
Emission Level = Read Level + Correct Factor



Test Voltage: AC 120V/60Hz

Terminal: Neutral

Remark: Only worse case is reported



Final Measurement Detector 1

Freque (MH	,	QuasiPeak (dBµ V)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµ V)	Comment
0.15	7990	40.2	1000.00	9.000	On	N	10.0	25.4	65.6	
0.53	5980	41.9	1000.00	9.000	On	N	10.0	14.1	56.0	
23.12	2620	36.1	1000.00	9.000	On	N	10.0	23.9	60.0	

Final Measurement Detector 2

	Frequency (MHz)	Average (dBµ V)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµ V)	Comment
	0.540270	35.7	1000.00	9.000	On	N	10.0	10.3	46.0	
ſ	27.343430	31.9	1000.00	9.000	On	N	10.0	18.2	50.0	
	28.685180	33.2	1000.00	9.000	On	N	10.0	16.8	50.0	

Emission Level = Read Level + Correct Factor



3.2. Radiated Emission

Limit

FCC CFR Title 47 Part 15 Subpart C Section 15.209

Frequency	Field Strength	Measurement Distance
(MHz)	(microvolts/meter)	(meters)
0.009~0.490	2400/F (kHz)	300
0.490~1.705	24000/F (kHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
960~1000	500	3

Fraguency Panga (MHz)	dBμV/m (at 3 meters)		
Frequency Range (MHz)	Peak	Average	
Above 1000	74	54	

Note:

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

(2) Emission Level ($dB\mu V/m$)=20log Emission Level ($\mu V/m$).

Limits of unwanted emission out of the restricted bands FCC CFR Title 47 Part 15 Subpart E Section 15, 407(b) / RSS-247 6.2

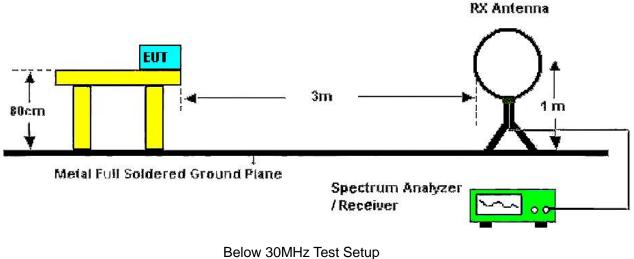
Frequency	EIRP Limits	Equivalent Field Strength	
(MHz)	(dBm) at 3m (dBµV/n		
5150~5250	-27	68.2	
5250~5350	-27	68.2	
5470~5725	-27	68.2	
	-27 (Note 2)	68.2	
5725~5825	10 (Note 2)	105.2	
3725~3623	15.6 (Note 2)	110.8	
	27 (Note 2)	122.2	

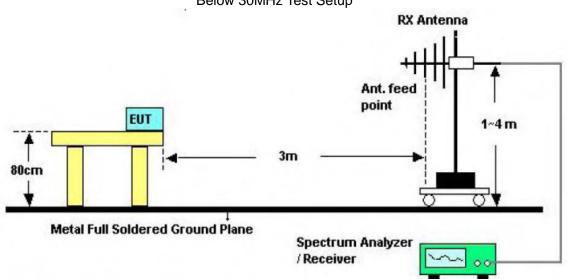
Note:

1. The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength: $E = \frac{1000000\sqrt{30P}}{3} \mu V/m$, where P is the eirp (Watts).

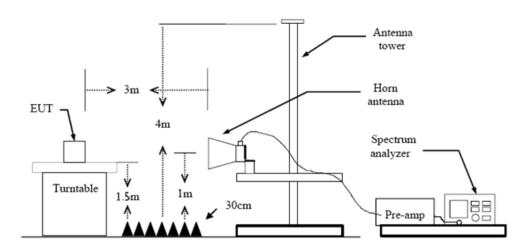
2. According to FCC 16-24, all emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5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







30-1000MHz Test Setup



Above 1GHz Test Setup



Page 19 of 306

Report No.: CTC20231341E04



Test Procedure

- The EUT was setup and tested according to ANSI C63.10:2013.
- 2. The EUT is placed on a turn table which is 0.8 meter above ground for below 1 GHz, and 1.5 m for above 1 GHz. The turn table is rotated 360 degrees to determine the position of the maximum emission level.
- 3. The EUT was set 3 meters from the receiving antenna, which was mounted on the top of a variable height antenna tower.
- 4. For each suspected emission, the EUT was arranged to its worst case and then tune the Antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level to comply with the quidelines.
- 5. Set to the maximum power setting and enable the EUT transmit continuously.
- 6. Use the following spectrum analyzer settings
- (1) Span shall wide enough to fully capture the emission being measured;
- (2) Below 1 GHz:

RBW=120 kHz, VBW=300 kHz, Sweep=auto, Detector function=peak, Trace=max hold;

If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.

(3) From 1 GHz to 10th harmonic:

RBW=1MHz, VBW=3MHz Peak detector for Peak value.

RBW=1MHz, VBW see note 1 with Peak Detector for Average Value.

Note 1: For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 3 MHz for peak measurements and 1 MHz resolution bandwidth with 1/T video bandwidth with peak detector for average measurements. For the Duty Cycle please refer to clause Duty Cycle.

Test Mode

Please refer to the clause 2.4.

Test Result

9 kHz~30 MHz

From 9 kHz to 30 MHz: The conclusion is PASS.

Note: 1. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

2. Pre-scan all antenna, only show the test data for worse case antenna on the test report.

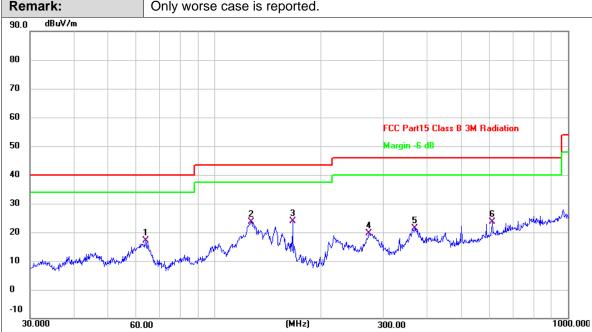
CTC Laboratories, Inc.

Ant. Pol.

Ant. No. Ant 1

Horizontal **Test Mode:** TX 802.11a Mode 5180MHz (U-NII-1)

Remark: Only worse case is reported.



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	63.7588	36.50	-19.30	17.20	40.00	-22.80	QP
2	126.7723	42.26	-18.75	23.51	43.50	-19.99	QP
3 *	166.0680	41.42	-17.61	23.81	43.50	-19.69	QP
4	273.2340	37.45	-17.94	19.51	46.00	-26.49	QP
5	368.1116	37.06	-15.56	21.50	46.00	-24.50	QP
6	609.9217	34.13	-10.51	23.62	46.00	-22.38	QP

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



Ant. No. Ant 1 Ant. Pol. Vertical **Test Mode:** TX 802.11a Mode 5180MHz (U-NII-1) Remark: Only worse case is reported. dBuV/m 90.0 80 70 60 FCC Part15 Class B 3M Radiation Margin -6 dB 50 40 30 20 10 0 30.000 (MHz) 1000.000 60.00 300.00

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	43.6584	42.58	-17.64	24.94	40.00	-15.06	QP
2 *	62.4314	49.25	-19.05	30.20	40.00	-9.80	QP
3	100.5806	43.86	-20.72	23.14	43.50	-20.36	QP
4	366.8231	38.60	-15.58	23.02	46.00	-22.98	QP
5	499.4247	40.68	-12.67	28.01	46.00	-17.99	QP
6	586.8437	36.42	-11.01	25.41	46.00	-20.59	QP

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



Ant. No.	Ant 1
Ant. Pol.	Horizontal
Test Mode:	TX 802.11a Mode 5180MHz (U-NII-1)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	10360.001	47.52	6.67	54.19	74.00	-19.81	peak
2 *	10360.001	33.92	6.67	40.59	54.00	-13.41	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

Ant. No.	Ant 1
Ant. Pol.	Vertical
Test Mode:	TX 802.11a Mode 5180MHz (U-NII-1)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	10360.000	49.02	6.67	55.69	74.00	-18.31	peak
2 *	10360.001	33.93	6.67	40.60	54.00	-13.40	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



Ant. No.	Ant 1
Ant. Pol.	Horizontal
Test Mode:	TX 802.11a Mode 5200MHz (U-NII-1)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1 *	10399.999	34.26	6.72	40.98	54.00	-13.02	AVG
2	10400.000	47.89	6.72	54.61	74.00	-19.39	peak

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

Ant. No.	Ant 1
Ant. Pol.	Vertical
Test Mode:	TX 802.11a Mode 5200MHz (U-NII-1)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level Limit (dBuV/m)		Margin (dB)	Detector
1	10399.999	43.63	6.72	50.35	74.00	-23.65	peak
2 *	10400.001	33.63	6.72	40.35	54.00	-13.65	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



Ant. No.	Ant 1
Ant. Pol.	Horizontal
Test Mode:	TX 802.11a Mode 5240MHz (U-NII-1)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	10480.000	47.40	6.80	54.20	74.00	-19.80	peak
2 *	10480.000	34.15	6.80	40.95	54.00	-13.05	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

Ant. No.	Ant 1
Ant. Pol.	Vertical
Test Mode:	TX 802.11a Mode 5240MHz (U-NII-1)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1 *	10480.000	33.22	6.80	40.02	54.00	-13.98	AVG
2	10480.001	44.49	6.80	51.29	74.00	-22.71	peak

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11n(HT20) Mode 5180MHz (U-NII-1)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1 *	10360.000	33.62	6.67	40.29	54.00	-13.71	AVG
2	10360.001	48.13	6.67	54.80	74.00	-19.20	peak

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Vertical
Test Mode:	TX 802.11n(HT20) Mode 5180MHz (U-NII-1)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector	Height (cm)
1 *	10359.999	33.36	6.67	40.03	54.00	-13.97	AVG	200
2	10360.001	43.84	6.67	50.51	74.00	-23.49	peak	200

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



Ant. No.	Ant 1 + Ant 2		
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11n(HT20) Mode 5200MHz (U-NII-1)		
Remark:	No report for the emission which more than 20 dB below the prescribed limit.		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	10399.999	48.02	6.72	54.74	74.00	-19.26	peak
2 *	10400.000	34.15	6.72	40.87	54.00	-13.13	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Vertical
Test Mode:	TX 802.11n(HT20) Mode 5200MHz (U-NII-1)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	10400.000	45.70	6.72	52.42	74.00	-21.58	peak
2 *	10400.001	33.75	6.72	40.47	54.00	-13.53	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11n(HT20) Mode 5240MHz (U-NII-1)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	10480.001	47.97	6.80	54.77	74.00	-19.23	peak
2 *	10480.001	34.32	6.80	41.12	54.00	-12.88	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

Ant. No.	Ant 1 + Ant 2		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11n(HT20) Mode 5240MHz (U-NII-1)		
Remark:	No report for the emission which more than 20 dB below the prescribed limit.		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1 *	10480.000	33.69	6.80	40.49	54.00	-13.51	AVG
2	10480.001	44.43	6.80	51.23	74.00	-22.77	peak

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



Ant. No.	Ant 1 + Ant 2			
Ant. Pol.	Horizontal			
Test Mode:	TX 802.11ac(VHT20) Mode 5180MHz (U-NII-1)			
Remark:	No report for the emission which more than 20 dB below the prescribed limit.			

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	10359.999	46.98	6.67	53.65	74.00	-20.35	peak
2 *	10359.999	33.59	6.67	40.26	54.00	-13.74	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

Ant. No.	Ant 1 + Ant 2		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11ac(VHT20) Mode 5180MHz (U-NII-1)		
Remark:	No report for the emission which more than 20 dB below the prescribed limit.		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1 *	10359.999	33.77	6.67	40.44	54.00	-13.56	AVG
2	10360.001	47.83	6.67	54.50	74.00	-19.50	peak

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



Ant. No.	Ant 1 + Ant 2		
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11ac(VHT20) Mode 5200MHz (U-NII-1)		
Remark:	No report for the emission which more than 20 dB below the prescribed limit.		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1 *	10400.000	34.11	6.72	40.83	54.00	-13.17	AVG
2	10400.001	47.48	6.72	54.20	74.00	-19.80	peak

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

Ant. No.	Ant 1 + Ant 2			
Ant. Pol.	Vertical			
Test Mode:	TX 802.11ac(VHT20) Mode 5200MHz (U-NII-1)			
Remark:	No report for the emission which more than 20 dB below the prescribed limit.			

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	10400.000	47.32	6.72	54.04	74.00	-19.96	peak
2 *	10400.000	34.14	6.72	40.86	54.00	-13.14	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11ac(VHT20) Mode 5240MHz (U-NII-1)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	10480.000	47.74	6.80	54.54	74.00	-19.46	peak
2 *	10480.000	34.22	6.80	41.02	54.00	-12.98	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

Ant. No.	Ant 1 + Ant 2			
Ant. Pol.	Vertical			
Test Mode:	TX 802.11ac(VHT20) Mode 5240MHz (U-NII-1)			
Remark:	No report for the emission which more than 20 dB below the prescribed limit.			

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1 *	10479.999	34.13	6.80	40.93	54.00	-13.07	AVG
2	10480.000	47.56	6.80	54.36	74.00	-19.64	peak

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11n(HT40) Mode 5190MHz (U-NII-1)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	10380.000	47.65	6.70	54.35	74.00	-19.65	peak
2 *	10380.000	33.94	6.70	40.64	54.00	-13.36	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Vertical
Test Mode:	TX 802.11n(HT40) Mode 5190MHz (U-NII-1)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1 *	10380.000	34.04	6.70	40.74	54.00	-13.26	AVG
2	10380.001	48.13	6.70	54.83	74.00	-19.17	peak

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11n(HT40) Mode 5230MHz (U-NII-1)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	10459.999	47.87	6.78	54.65	74.00	-19.35	peak
2 *	10460.000	34.45	6.78	41.23	54.00	-12.77	AVG

Remarks:

- 1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
- 2.Margin value = Level -Limit value

Ant. No.	Ant 1 + Ant 2			
Ant. Pol.	Vertical			
Test Mode:	TX 802.11n(HT40) Mode 5230MHz (U-NII-1)			
Remark:	No report for the emission which more than 20 dB below the prescribed limit.			

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1 *	10460.000	34.38	6.78	41.16	54.00	-12.84	AVG
2	10460.001	47.56	6.78	54.34	74.00	-19.66	peak

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11ac(VHT40) Mode 5190MHz (U-NII-1)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	10379.999	47.49	6.70	54.19	74.00	-19.81	peak
2 *	10380.000	33.89	6.70	40.59	54.00	-13.41	AVG

Remarks:

- 1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
- 2.Margin value = Level -Limit value

Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Vertical
Test Mode:	TX 802.11ac(VHT40) Mode 5190MHz (U-NII-1)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	10380.000	47.88	6.70	54.58	74.00	-19.42	peak
2 *	10380.000	34.35	6.70	41.05	54.00	-12.95	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11ac(VHT40) Mode 5230MHz (U-NII-1)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	10459.999	48.34	6.78	55.12	74.00	-18.88	peak
2 *	10460.001	34.47	6.78	41.25	54.00	-12.75	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Vertical
Test Mode:	TX 802.11ac(VHT40) Mode 5230MHz (U-NII-1)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	10460.000	47.91	6.78	54.69	74.00	-19.31	peak
2 *	10460.000	34.74	6.78	41.52	54.00	-12.48	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11ac(VHT80) Mode 5210MHz (U-NII-1)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	10419.999	47.63	6.74	54.37	74.00	-19.63	peak
2 *	10420.000	34.74	6.74	41.48	54.00	-12.52	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Vertical
Test Mode: TX 802.11ac(VHT80) Mode 5210MHz (U-NII-1)	
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	10420.000	48.05	6.74	54.79	74.00	-19.21	peak
2 *	10420.000	34.79	6.74	41.53	54.00	-12.47	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



Ant. No.	Ant 1			
Ant. Pol.	Horizontal			
Test Mode:	TX 802.11a Mode 5260MHz (U-NII-2A)			
Remark:	No report for the emission which more than 20 dB below the prescribed limit.			

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1 *	10519.999	34.16	6.97	41.13	54.00	-12.87	AVG
2	10520.000	48.18	6.97	55.15	74.00	-18.85	peak

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

Ant. No.	Ant 1			
Ant. Pol.	Vertical			
Test Mode:	TX 802.11a Mode 5260MHz (U-NII-2A)			
Remark:	No report for the emission which more than 20 dB below the prescribed limit.			

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	10520.000	46.94	6.97	53.91	74.00	-20.09	peak
2 *	10520.000	34.12	6.97	41.09	54.00	-12.91	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



Ant. No.	Ant 1
Ant. Pol.	Horizontal
Test Mode:	TX 802.11a Mode 5280MHz (U-NII-2A)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	10560.000	48.30	7.24	55.54	74.00	-18.46	peak
2 *	10560.000	34.21	7.24	41.45	54.00	-12.55	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

Ant. No.	Ant 1
Ant. Pol.	Vertical
Test Mode:	TX 802.11a Mode 5280MHz (U-NII-2A)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	10560.001	45.45	7.24	52.69	74.00	-21.31	peak
2 *	10560.001	34.26	7.24	41.50	54.00	-12.50	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



Ant. No.	Ant 1
Ant. Pol.	Horizontal
Test Mode:	TX 802.11a Mode 5320MHz (U-NII-2A)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	10639.999	46.74	7.82	54.56	74.00	-19.44	peak
2 *	10640.001	33.20	7.82	41.02	54.00	-12.98	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

Ant. No.	Ant 1
Ant. Pol.	Vertical
Test Mode:	TX 802.11a Mode 5320MHz (U-NII-2A)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	10639.999	44.20	7.82	52.02	74.00	-21.98	peak
2 *	10640.000	32.92	7.82	40.74	54.00	-13.26	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11n(HT20) Mode 5260MHz (U-NII-2A)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1 *	10519.999	34.39	6.97	41.36	54.00	-12.64	AVG
2	10520.000	47.88	6.97	54.85	74.00	-19.15	peak

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Vertical
Test Mode:	TX 802.11n(HT20) Mode 5260MHz (U-NII-2A)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1 *	10520.000	33.91	6.97	40.88	54.00	-13.12	AVG
2	10520.001	44.00	6.97	50.97	74.00	-23.03	peak

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11n(HT20) Mode 5280MHz (U-NII-2A)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	10559.999	48.50	7.24	55.74	74.00	-18.26	peak
2 *	10560.000	34.46	7.24	41.70	54.00	-12.30	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Vertical
Test Mode:	TX 802.11n(HT20) Mode 5280MHz (U-NII-2A)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	10559.999	43.86	7.24	51.10	74.00	-22.90	peak
2 *	10559.999	34.14	7.24	41.38	54.00	-12.62	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11n(HT20) Mode 5320MHz (U-NII-2A)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	10639.999	47.08	7.82	54.90	74.00	-19.10	peak
2 *	10640.000	33.40	7.82	41.22	54.00	-12.78	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Vertical
Test Mode:	TX 802.11n(HT20) Mode 5320MHz (U-NII-2A)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1 *	10640.000	33.27	7.82	41.09	54.00	-12.91	AVG
2	10640.001	44.01	7.82	51.83	74.00	-22.17	peak

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11ac(VHT20) Mode 5260MHz (U-NII-2A)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	10519.999	47.97	6.97	54.94	74.00	-19.06	peak
2 *	10520.001	34.38	6.97	41.35	54.00	-12.65	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Vertical
Test Mode:	TX 802.11ac(VHT20) Mode 5260MHz (U-NII-2A)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1 *	10520.000	34.17	6.97	41.14	54.00	-12.86	AVG
2	10520.001	47.78	6.97	54.75	74.00	-19.25	peak

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11ac(VHT20) Mode 5280MHz (U-NII-2A)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1 *	10559.999	34.34	7.24	41.58	54.00	-12.42	AVG
2	10560.000	47.66	7.24	54.90	74.00	-19.10	peak

Remarks:

1. Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Vertical
Test Mode:	TX 802.11ac(VHT20) Mode 5280MHz (U-NII-2A)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	10560.001	47.75	7.24	54.99	74.00	-19.01	peak
2 *	10560.001	34.40	7.24	41.64	54.00	-12.36	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11ac(VHT20) Mode 5320MHz (U-NII-2A)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	10640.000	46.89	7.82	54.71	74.00	-19.29	peak
2 *	10640.000	33.24	7.82	41.06	54.00	-12.94	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Vertical
Test Mode:	TX 802.11ac(VHT20) Mode 5320MHz (U-NII-2A)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	10639.999	47.01	7.82	54.83	74.00	-19.17	peak
2 *	10640.000	33.25	7.82	41.07	54.00	-12.93	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11n(HT40) Mode 5270MHz (U-NII-2A)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1 *	10539.999	34.20	7.11	41.31	54.00	-12.69	AVG
2	10540.000	47.92	7.11	55.03	74.00	-18.97	peak

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Vertical
Test Mode:	TX 802.11n(HT40) Mode 5270MHz (U-NII-2A)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1 *	10540.000	34.11	7.11	41.22	54.00	-12.78	AVG
2	10540.001	47.20	7.11	54.31	74.00	-19.69	peak

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11n(HT40) Mode 5310MHz (U-NII-2A)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	10620.000	46.97	7.67	54.64	74.00	-19.36	peak
2 *	10620.001	33.27	7.67	40.94	54.00	-13.06	AVG

Remarks:

 $1. Factor \ (dB/m) = Antenna \ Factor \ (dB/m) + Cable \ Factor \ (dB) - Pre-amplifier \ Factor$

2.Margin value = Level -Limit value

Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Vertical
Test Mode:	TX 802.11n(HT40) Mode 5310MHz (U-NII-2A)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	10620.000	46.94	7.67	54.61	74.00	-19.39	peak
2 *	10620.000	33.75	7.67	41.42	54.00	-12.58	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11ac(VHT40) Mode 5270MHz (U-NII-2A)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	10540.000	47.45	7.11	54.56	74.00	-19.44	peak
2 *	10540.000	34.27	7.11	41.38	54.00	-12.62	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Vertical
Test Mode:	TX 802.11ac(VHT40) Mode 5270MHz (U-NII-2A)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1 *	10539.999	34.55	7.11	41.66	54.00	-12.34	AVG
2	10540.000	47.64	7.11	54.75	74.00	-19.25	peak

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11ac(VHT40) Mode 5310MHz (U-NII-2A)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	10620.001	47.52	7.67	55.19	74.00	-18.81	peak
2 *	10620.001	33.27	7.67	40.94	54.00	-13.06	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Vertical
Test Mode:	TX 802.11ac(VHT40) Mode 5310MHz (U-NII-2A)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1 *	10619.999	33.65	7.67	41.32	54.00	-12.68	AVG
2	10620.000	47.41	7.67	55.08	74.00	-18.92	peak

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11ac(VHT80) Mode 5290MHz (U-NII-2A)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1 *	10579.999	34.48	7.39	41.87	54.00	-12.13	AVG
2	10580.001	47.54	7.39	54.93	74.00	-19.07	peak

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Vertical
Test Mode:	TX 802.11ac(VHT80) Mode 5290MHz (U-NII-2A)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	10580.000	47.86	7.39	55.25	74.00	-18.75	peak
2 *	10580.000	35.02	7.39	42.41	54.00	-11.59	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



Ant. No.	Ant 1
Ant. Pol.	Horizontal
Test Mode:	TX 802.11a Mode 5500MHz (U-NII-2C)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	11000.000	51.23	10.35	61.58	74.00	-12.42	peak
2 *	11000.001	37.18	10.35	47.53	54.00	-6.47	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

Ant. No.	Ant 1
Ant. Pol.	Vertical
Test Mode:	TX 802.11a Mode 5500MHz (U-NII-2C)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1 *	10999.999	36.60	10.35	46.95	54.00	-7.05	AVG
2	11000.000	49.16	10.35	59.51	74.00	-14.49	peak

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



Ant. No.	Ant 1
Ant. Pol.	Horizontal
Test Mode:	TX 802.11a Mode 5580MHz (U-NII-2C)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	11160.001	47.22	10.31	57.53	74.00	-16.47	peak
2 *	11160.001	33.85	10.31	44.16	54.00	-9.84	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

Ant. No.	Ant 1
Ant. Pol.	Vertical
Test Mode:	TX 802.11a Mode 5580MHz (U-NII-2C)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1 *	11159.999	33.49	10.31	43.80	54.00	-10.20	AVG
2	11160.000	44.26	10.31	54.57	74.00	-19.43	peak

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



Ant. No.	Ant 1
Ant. Pol.	Horizontal
Test Mode:	TX 802.11a Mode 5700MHz (U-NII-2C)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	11400.001	47.33	10.25	57.58	74.00	-16.42	peak
2 *	11400.001	34.19	10.25	44.44	54.00	-9.56	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

Ant. No.	Ant 1
Ant. Pol.	Vertical
Test Mode:	TX 802.11a Mode 5700MHz (U-NII-2C)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1 *	11399.999	33.91	10.25	44.16	54.00	-9.84	AVG
2	11400.000	44.47	10.25	54.72	74.00	-19.28	peak

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11n(HT20) Mode 5500MHz (U-NII-2C)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	11000.000	50.21	10.35	60.56	74.00	-13.44	peak
2 *	11000.000	36.85	10.35	47.20	54.00	-6.80	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Vertical
Test Mode:	TX 802.11n(HT20) Mode 5500MHz (U-NII-2C)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	10999.999	47.48	10.35	57.83	74.00	-16.17	peak
2 *	10999.999	36.48	10.35	46.83	54.00	-7.17	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11n(HT20) Mode 5580MHz (U-NII-2C)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	11160.000	47.70	10.31	58.01	74.00	-15.99	peak
2 *	11160.000	33.91	10.31	44.22	54.00	-9.78	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Vertical
Test Mode:	TX 802.11n(HT20) Mode 5580MHz (U-NII-2C)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	11160.000	44.31	10.31	54.62	74.00	-19.38	peak
2 *	11160.000	33.62	10.31	43.93	54.00	-10.07	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11n(HT20) Mode 5700MHz (U-NII-2C)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	11400.000	48.54	10.25	58.79	74.00	-15.21	peak
2 *	11400.000	34.29	10.25	44.54	54.00	-9.46	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Vertical
Test Mode:	TX 802.11n(HT20) Mode 5700MHz (U-NII-2C)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1 *	11399.999	33.82	10.25	44.07	54.00	-9.93	AVG
2	11400.000	44.79	10.25	55.04	74.00	-18.96	peak

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11ac(VHT20) Mode 5500MHz (U-NII-2C)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	11000.000	50.46	10.35	60.81	74.00	-13.19	peak
2 *	11000.000	36.85	10.35	47.20	54.00	-6.80	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Vertical
Test Mode:	TX 802.11ac(VHT20) Mode 5500MHz (U-NII-2C)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	10999.999	50.10	10.35	60.45	74.00	-13.55	peak
2 *	11000.000	36.81	10.35	47.16	54.00	-6.84	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11ac(VHT20) Mode 5580MHz (U-NII-2C)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1 *	11159.999	33.90	10.31	44.21	54.00	-9.79	AVG
2	11160.000	46.79	10.31	57.10	74.00	-16.90	peak

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Vertical
Test Mode:	TX 802.11ac(VHT20) Mode 5580MHz (U-NII-2C)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1 *	11160.000	33.89	10.31	44.20	54.00	-9.80	AVG
2	11160.001	47.65	10.31	57.96	74.00	-16.04	peak

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11ac(VHT20) Mode 5700MHz (U-NII-2C)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	11400.001	47.60	10.25	57.85	74.00	-16.15	peak
2 *	11400.001	34.19	10.25	44.44	54.00	-9.56	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Vertical
Test Mode:	TX 802.11ac(VHT20) Mode 5700MHz (U-NII-2C)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1 *	11399.999	34.38	10.25	44.63	54.00	-9.37	AVG
2	11400.000	47.84	10.25	58.09	74.00	-15.91	peak

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11n(HT40) Mode 5510MHz (U-NII-2C)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1 *	11019.999	36.52	10.34	46.86	54.00	-7.14	AVG
2	11020.001	50.60	10.34	60.94	74.00	-13.06	peak

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Vertical
Test Mode:	TX 802.11n(HT40) Mode 5510MHz (U-NII-2C)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	11019.999	49.61	10.34	59.95	74.00	-14.05	peak
2 *	11020.000	36.69	10.34	47.03	54.00	-6.97	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11n(HT40) Mode 5550MHz (U-NII-2C)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	11100.001	48.30	10.33	58.63	74.00	-15.37	peak
2 *	11100.001	35.65	10.33	45.98	54.00	-8.02	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Vertical
Test Mode:	TX 802.11n(HT40) Mode 5550MHz (U-NII-2C)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	11100.001	49.01	10.33	59.34	74.00	-14.66	peak
2 *	11100.001	35.49	10.33	45.82	54.00	-8.18	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11n(HT40) Mode 5670MHz (U-NII-2C)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	11340.000	46.95	10.26	57.21	74.00	-16.79	peak
2 *	11340.000	33.81	10.26	44.07	54.00	-9.93	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Vertical
Test Mode:	TX 802.11n(HT40) Mode 5670MHz (U-NII-2C)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	11340.000	47.24	10.26	57.50	74.00	-16.50	peak
2 *	11340.001	33.91	10.26	44.17	54.00	-9.83	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11ac(VHT40) Mode 5510MHz (U-NII-2C)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	11019.999	50.04	10.34	60.38	74.00	-13.62	peak
2 *	11019.999	36.82	10.34	47.16	54.00	-6.84	AVG

Remarks:

 $1. Factor \ (dB/m) = Antenna \ Factor \ (dB/m) + Cable \ Factor \ (dB) - Pre-amplifier \ Factor$

2.Margin value = Level -Limit value

Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Vertical
Test Mode:	TX 802.11ac(VHT40) Mode 5510MHz (U-NII-2C)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	11020.000	49.51	10.34	59.85	74.00	-14.15	peak
2 *	11020.000	36.77	10.34	47.11	54.00	-6.89	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11ac(VHT40) Mode 5550MHz (U-NII-2C)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1 *	11100.000	35.27	10.33	45.60	54.00	-8.40	AVG
2	11100.001	48.74	10.33	59.07	74.00	-14.93	peak

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Vertical
Test Mode:	TX 802.11ac(VHT40) Mode 5550MHz (U-NII-2C)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	11100.000	48.84	10.33	59.17	74.00	-14.83	peak
2	11100.000	35.75	10.33	46.08	54.00	-7.92	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11ac(VHT40) Mode 5670MHz (U-NII-2C)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	11339.999	47.50	10.26	57.76	74.00	-16.24	peak
2 *	11340.000	34.14	10.26	44.40	54.00	-9.60	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Vertical
Test Mode:	TX 802.11ac(VHT40) Mode 5670MHz (U-NII-2C)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1 *	11340.000	34.23	10.26	44.49	54.00	-9.51	AVG
2	11340.001	47.48	10.26	57.74	74.00	-16.26	peak

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11ac(VHT80) Mode 5530MHz (U-NII-2C)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	11060.000	49.19	10.34	59.53	74.00	-14.47	peak
2 *	11060.000	36.49	10.34	46.83	54.00	-7.17	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Vertical
Test Mode:	TX 802.11ac(VHT80) Mode 5530MHz (U-NII-2C)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	11059.999	49.41	10.34	59.75	74.00	-14.25	peak
2 *	11060.000	36.62	10.34	46.96	54.00	-7.04	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11ac(VHT80) Mode 5610MHz (U-NII-2C)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	11220.000	46.78	10.29	57.07	74.00	-16.93	peak
2 *	11220.000	33.90	10.29	44.19	54.00	-9.81	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Vertical
Test Mode:	TX 802.11ac(VHT80) Mode 5610MHz (U-NII-2C)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1 *	11219.999	33.96	10.29	44.25	54.00	-9.75	AVG
2	11220.000	47.06	10.29	57.35	74.00	-16.65	peak

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



Ant. No.	Ant 1
Ant. Pol.	Horizontal
Test Mode:	TX 802.11a Mode 5745MHz (U-NII-3)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1 *	11490.000	34.33	10.23	44.56	54.00	-9.44	AVG
2	11490.001	48.11	10.23	58.34	74.00	-15.66	peak

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

Ant. No.	Ant 1
Ant. Pol.	Vertical
Test Mode:	TX 802.11a Mode 5745MHz (U-NII-3)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1 *	11489.999	33.81	10.23	44.04	54.00	-9.96	AVG
2	11490.001	45.45	10.23	55.68	74.00	-18.32	peak

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



Ant. No.	Ant 1
Ant. Pol.	Horizontal
Test Mode:	TX 802.11a Mode 5785MHz (U-NII-3)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1 *	11570.000	33.37	10.14	43.51	54.00	-10.49	AVG
2	11570.001	46.68	10.14	56.82	74.00	-17.18	peak

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

Ant. No.	Ant 1
Ant. Pol.	Vertical
Test Mode:	TX 802.11a Mode 5785MHz (U-NII-3)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	11570.000	43.90	10.14	54.04	74.00	-19.96	peak
2 *	11570.000	32.86	10.14	43.00	54.00	-11.00	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



Ant. No.	Ant 1
Ant. Pol.	Horizontal
Test Mode:	TX 802.11a Mode 5825MHz (U-NII-3)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1 *	11650.000	31.89	10.03	41.92	54.00	-12.08	AVG
2	11650.001	46.07	10.03	56.10	74.00	-17.90	peak

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

Ant. No.	Ant 1
Ant. Pol.	Vertical
Test Mode:	TX 802.11a Mode 5825MHz (U-NII-3)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1 *	11650.000	31.55	10.03	41.58	54.00	-12.42	AVG
2	11650.001	41.76	10.03	51.79	74.00	-22.21	peak

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11n(HT20) Mode 5745MHz (U-NII-3)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1 *	11490.000	34.28	10.23	44.51	54.00	-9.49	AVG
2	11490.001	47.93	10.23	58.16	74.00	-15.84	peak

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Vertical
Test Mode:	TX 802.11n(HT20) Mode 5745MHz (U-NII-3)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	11490.000	44.51	10.23	54.74	74.00	-19.26	peak
2 *	11490.001	33.84	10.23	44.07	54.00	-9.93	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11n(HT20) Mode 5785MHz (U-NII-3)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1 *	11569.999	33.35	10.14	43.49	54.00	-10.51	AVG
2	11570.000	47.11	10.14	57.25	74.00	-16.75	peak

Remarks:

1. Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Vertical
Test Mode:	TX 802.11n(HT20) Mode 5785MHz (U-NII-3)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1 *	11569.999	33.03	10.14	43.17	54.00	-10.83	AVG
2	11570.001	43.50	10.14	53.64	74.00	-20.36	peak

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11n(HT20) Mode 5825MHz (U-NII-3)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	11649.999	45.13	10.04	55.17	74.00	-18.83	peak
2 *	11650.001	31.88	10.03	41.91	54.00	-12.09	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Vertical
Test Mode:	TX 802.11n(HT20) Mode 5825MHz (U-NII-3)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1 *	11649.999	31.59	10.04	41.63	54.00	-12.37	AVG
2	11650.000	42.23	10.03	52.26	74.00	-21.74	peak

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11ac(VHT20) Mode 5745MHz (U-NII-3)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	11489.999	47.83	10.23	58.06	74.00	-15.94	peak
2 *	11490.000	34.25	10.23	44.48	54.00	-9.52	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Vertical
Test Mode:	TX 802.11ac(VHT20) Mode 5745MHz (U-NII-3)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1 *	11489.999	34.20	10.23	44.43	54.00	-9.57	AVG
2	11490.001	47.49	10.23	57.72	74.00	-16.28	peak

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11ac(VHT20) Mode 5785MHz (U-NII-3)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	11570.000	47.71	10.14	57.85	74.00	-16.15	peak
2 *	11570.001	33.53	10.14	43.67	54.00	-10.33	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Vertical
Test Mode:	TX 802.11ac(VHT20) Mode 5785MHz (U-NII-3)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	11569.999	46.72	10.14	56.86	74.00	-17.14	peak
2 *	11570.000	33.18	10.14	43.32	54.00	-10.68	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11ac(VHT20) Mode 5825MHz (U-NII-3)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	11650.000	45.53	10.03	55.56	74.00	-18.44	peak
2 *	11650.001	31.85	10.03	41.88	54.00	-12.12	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Vertical
Test Mode:	TX 802.11ac(VHT20) Mode 5825MHz (U-NII-3)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	11649.999	45.08	10.04	55.12	74.00	-18.88	peak
2 *	11649.999	31.74	10.04	41.78	54.00	-12.22	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11n(HT40) Mode 5755MHz (U-NII-3)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	11510.001	48.08	10.21	58.29	74.00	-15.71	peak
2 *	11510.001	34.65	10.21	44.86	54.00	-9.14	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Vertical
Test Mode:	TX 802.11n(HT40) Mode 5755MHz (U-NII-3)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1 *	11509.999	34.22	10.21	44.43	54.00	-9.57	AVG
2	11510.000	47.29	10.21	57.50	74.00	-16.50	peak

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11n(HT40) Mode 5795MHz (U-NII-3)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	11590.000	45.91	10.11	56.02	74.00	-17.98	peak
2 *	11590.000	32.91	10.11	43.02	54.00	-10.98	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Vertical
Test Mode:	TX 802.11n(HT40) Mode 5795MHz (U-NII-3)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	11589.999	46.90	10.11	57.01	74.00	-16.99	peak
2 *	11589.999	32.53	10.11	42.64	54.00	-11.36	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11ac(VHT40) Mode 5755MHz (U-NII-3)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	11510.000	47.68	10.21	57.89	74.00	-16.11	peak
2 *	11510.000	34.22	10.21	44.43	54.00	-9.57	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Vertical
Test Mode:	TX 802.11ac(VHT40) Mode 5755MHz (U-NII-3)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	11510.000	47.29	10.21	57.50	74.00	-16.50	peak
2 *	11510.000	34.56	10.21	44.77	54.00	-9.23	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11ac(VHT40) Mode 5795MHz (U-NII-3)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1 *	11589.999	32.49	10.11	42.60	54.00	-11.40	AVG
2	11590.000	46.50	10.11	56.61	74.00	-17.39	peak

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Vertical
Test Mode:	TX 802.11ac(VHT40) Mode 5795MHz (U-NII-3)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	11590.000	46.54	10.11	56.65	74.00	-17.35	peak
2	11590.000	32.80	10.11	42.91	54.00	-11.09	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11ac(VHT80) Mode 5775MHz (U-NII-3)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	11550.000	46.52	10.17	56.69	74.00	-17.31	peak
2 *	11550.000	33.27	10.17	43.44	54.00	-10.56	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

Ant. No.	Ant 1 + Ant 2
Ant. Pol.	Vertical
Test Mode:	TX 802.11ac(VHT80) Mode 5775MHz (U-NII-3)
Remark:	No report for the emission which more than 20 dB below the prescribed limit.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	11550.000	46.98	10.17	57.15	74.00	-16.85	peak
2 *	11550.000	33.93	10.17	44.10	54.00	-9.90	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor





of 306 Report No.: CTC20231341E04

3.3. Band Edge Emissions

Limit

Limits of unwanted emission out of the restricted bands

FCC CFR Title 47 Part 15 Subpart E Section 15. 407(b)

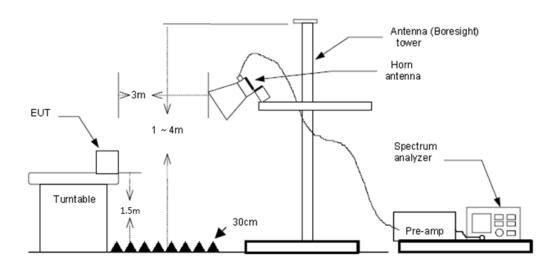
Frequency	EIRP Limits	Equivalent Field Strength
(MHz)	(dBm)	at 3m (dBµV/m)
5150~5250	-27	68.2
5250~5350	-27	68.2
5470~5725	-27	68.2
	-27 (Note 2)	68.2
5725~5825	10 (Note 2)	105.2
3723~3623	15.6 (Note 2)	110.8
	27 (Note 2)	122.2

Note:

1. The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength: $E = \frac{1000000\sqrt{30P}}{2} \mu V/m$, 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.

Test Configuration



Accreditation Administration of the People's Republic of China: http://yz.cnca.cn





Test Procedure

- 1. The EUT was setup and tested according to ANSI C63.10:2013 requirements.
- 2. The EUT is placed on a turn table which is 1.5 meter above ground. The turn table is rotated 360 degrees to determine the position of the maximum emission level.
- 3. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.
- 4. The antenna is scanned from 1 meter to 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10:2013 on radiated measurement.
- 5. The receiver set as follow:

RBW=1MHz, VBW=3MHz Peak detector for Peak value.

RBW=1MHz, VBW see note 1 with Peak Detector for Average Value.

Note 1: For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 3 MHz for peak measurements and 1 MHz resolution bandwidth with 1/T video bandwidth with peak detector for average measurements. For the Duty Cycle please refer to clause Duty Cycle.

Test Mode

Please refer to the clause 2.4.

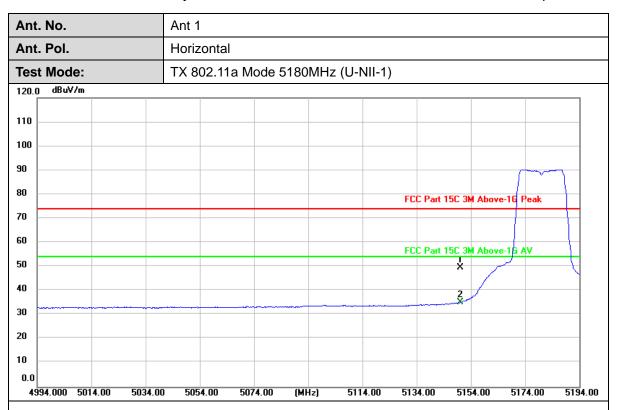
For anti-fake verification, please visit the official website of Certification and Accreditation Administration of the People's Republic of China: http://yz.cnca.cn



Test Result

Note: 1. Pre-scan both 4500-5150MHz, 5350-5460MHz were investigated, report only shows the test data for worst case.

2. Pre-scan all antenna, only show the test data for worse case antenna on the test report.



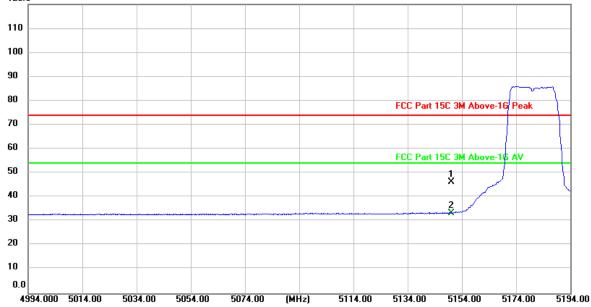
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	5150.000	50.75	-1.18	49.57	74.00	-24.43	peak
2 *	5150.000	36.41	-1.18	35.23	54.00	-18.77	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



Ant. No. Ant 1 Ant. Pol. Vertical **Test Mode:** TX 802.11a Mode 5180MHz (U-NII-1) dBuV/m 120.0 110 100



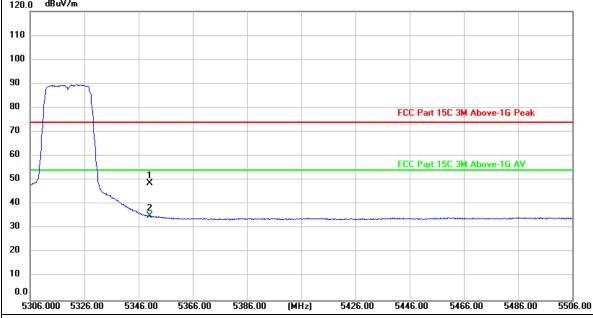
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	5150.000	47.65	-1.18	46.47	74.00	-27.53	peak
2 *	5150.000	34.75	-1.18	33.57	54.00	-20.43	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



Ant. No. Ant 1 Ant. Pol. Horizontal **Test Mode:** TX 802.11a Mode 5320MHz (U-NII-2A) dBuV/m 120.0 110



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	5350.000	49.44	-0.62	48.82	74.00	-25.18	peak
2 *	5350.000	35.72	-0.62	35.10	54.00	-18.90	AVG

Remarks:

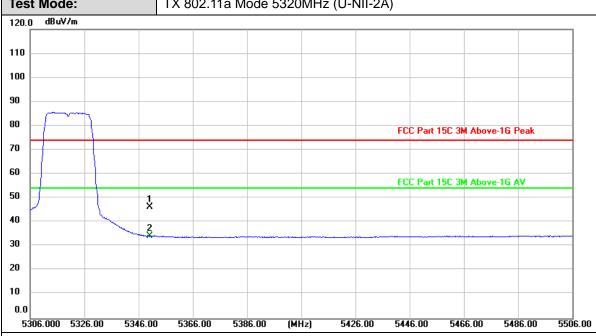
1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



 Ant. No.
 Ant 1

 Ant. Pol.
 Vertical

 Test Mode:
 TX 802.11a Mode 5320MHz (U-NII-2A)



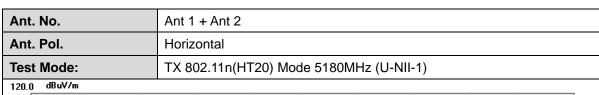
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	5350.000	47.05	-0.62	46.43	74.00	-27.57	peak
2 *	5350.000	35.09	-0.62	34.47	54.00	-19.53	AVG

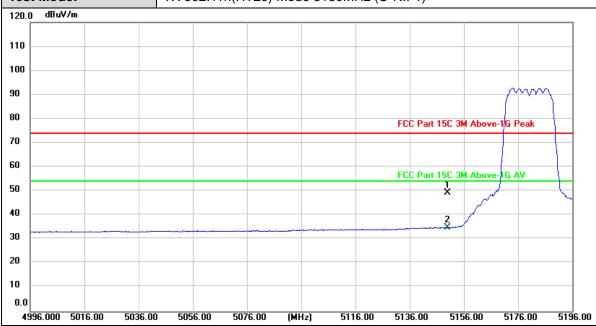
Remarks

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value







No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	5150.000	50.47	-1.18	49.29	74.00	-24.71	peak
2 *	5150.000	36.12	-1.18	34.94	54.00	-19.06	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

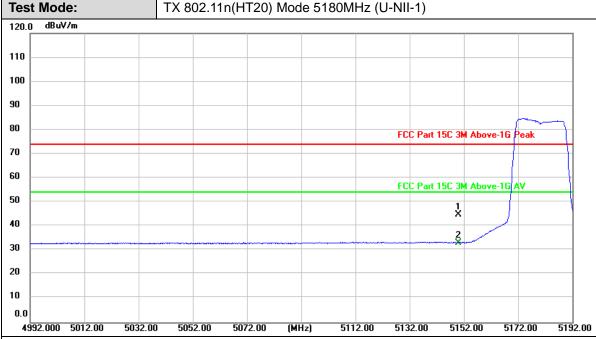
2.Margin value = Level -Limit value



 Ant. No.
 Ant 1 + Ant 2

 Ant. Pol.
 Vertical

 Test Mode:
 TX 802.11n(HT20) Mode 5180MHz (U-NII-1)



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	5150.000	45.95	-1.18	44.77	74.00	-29.23	peak
2 *	5150.000	34.46	-1.18	33.28	54.00	-20.72	AVG

Remarks:

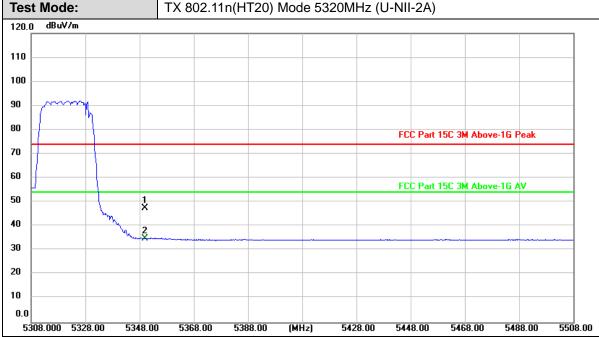
1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



 Ant. No.
 Ant 1 + Ant 2

 Ant. Pol.
 Horizontal

 Test Mode:
 TX 802.11n(HT20) Mode 5320MHz (U-NII-2A)



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	5350.000	48.09	-0.62	47.47	74.00	-26.53	peak
2 *	5350.000	35.63	-0.62	35.01	54.00	-18.99	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value

5508.00

5488.00



Ant. No. Ant 1 + Ant 2 Ant. Pol. Vertical **Test Mode:** TX 802.11n(HT20) Mode 5320MHz (U-NII-2A) dBuV/m 120.0 110 100 90 80 FCC Part 15C 3M Above-1G Peak 70 60 FCC Part 15C 3M Above-1G AV 50 1 X 40 30 20

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	5350.000	46.47	-0.62	45.85	74.00	-28.15	peak
2 *	5350.000	34.48	-0.62	33.86	54.00	-20.14	AVG

(MHz)

5428.00

5448.00

5468.00

Remarks

10 0.0

5308.000 5328.00

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

5388.00

5368.00

5348.00

2.Margin value = Level -Limit value

5154.00

5194.00

5174.00



20 10 0.0

4994.000 5014.00

Ant. No. Ant 1 + Ant 2 Ant. Pol. Horizontal **Test Mode:** TX 802.11ac(VHT20) Mode 5180MHz (U-NII-1) dBuV/m 120.0 110 100 90 80 FCC Part 15C 3M Above-16 Peak 70 60 FCC Part 15C 3M Above-1G AV 50 1 X 40 30

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	5150.000	48.86	-1.18	47.68	74.00	-26.32	peak
2 *	5150.000	36.04	-1.18	34.86	54.00	-19.14	AVG

(MHz)

5114.00

5134.00

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

5074.00

5054.00

5034.00

2.Margin value = Level -Limit value

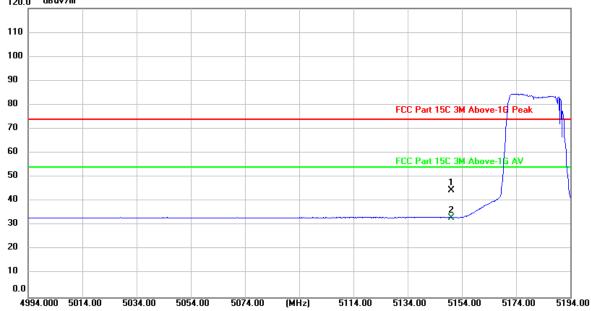


 Ant. No.
 Ant 1 + Ant 2

 Ant. Pol.
 Vertical

 Test Mode:
 TX 802.11ac(VHT20) Mode 5180MHz (U-NII-1)

 120.0
 dBuV/m



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	5150.000	45.72	-1.18	44.54	74.00	-29.46	peak
2 *	5150.000	34.42	-1.18	33.24	54.00	-20.76	AVG

Remarks:

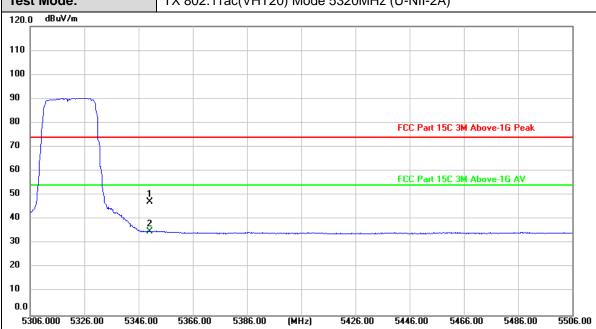
1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor



 Ant. No.
 Ant 1 + Ant 2

 Ant. Pol.
 Horizontal

 Test Mode:
 TX 802.11ac(VHT20) Mode 5320MHz (U-NII-2A)



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	5350.000	47.77	-0.62	47.15	74.00	-26.85	peak
2 *	5350.000	35.60	-0.62	34.98	54.00	-19.02	AVG

Remarks:

1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor

2.Margin value = Level -Limit value