TEST REPORT

Applicant: Wyrestorm Technologies LLC

Address of Applicant: 23 Wood Rd, Round Lake, New York 12151, United States

Manufacturer/Factory: Shen Zhen Proitav Technology Co.,Ltd

Address of 301-401, Building 16, Hejing Industrial Park, No.87, Hexiu West Road, Heping Community, Fuhai St., Baoan District,

Shenzhen, China

Equipment Under Test (EUT)

Product Name: HDMI Switcher

Model No.: SW-540-TX-W (MS330-A01)

Trade Mark: WyreStorm

FCC ID: 2A2CW-SW540TXW

Applicable standards: FCC CFR Title 47 Part 15 Subpart C Section 15.247

Date of sample receipt: August 23, 2021

Date of Test: August 24, 2021-September 10, 2021

Date of report issued: September 13, 2021

Test Result: PASS *

Authorized Signature:

Robinson Luo Laboratory Manager

This results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

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^{*} In the configuration tested, the EUT complied with the standards specified above.



2 Version

Version No.	Ø Date	Description		
00	September 13, 2021	Original		

Prepared By:	Trankly	Date:	September 13, 2021	
	Project Engineer			600
Check By:	(Labour lux)	Date:	September 13, 2021	
	Reviewer		10 m 2 m 10 m 10 m	



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4 Test Summary

Test Item	Section	Result
Antenna requirement	FCC part 15.203/15.247 (c)	Pass
AC Power Line Conducted Emission	FCC part 15.207	Pass
Conducted Peak Output Power	FCC part 15.247 (b)(3)	Pass
Channel Bandwidth & 99% OCB	FCC part 15.247 (a)(2)	Pass
Power Spectral Density	FCC part 15.247 (e)	Pass
Band Edge	FCC part 15.247(d)	Pass
Spurious Emission	FCC part 15.205/15.209	Pass

Remark: Test according to ANSI C63.10:2013 and RSS-Gen

Test according: KDB 662911 D01 Multiple Transmitter Output v02r01

Pass: The EUT complies with the essential requirements in the standard.

Measurement Uncertainty

Test Item	Frequency Range	Measurement Uncertainty	Notes	
Radiated Emission	30MHz-200MHz	3.8039dB	(1)	
Radiated Emission	200MHz-1GHz	3.9679dB	(1)	
Radiated Emission	1GHz-18GHz	4.29dB	(1)	
Radiated Emission	18GHz-40GHz	3.30dB	(1)	
AC Power Line Conducted Emission	0.15MHz ~ 30MHz	3.44dB	(1)	



5 General Information

5.1 General Description of EUT

Product Name:	HDMI Switcher
Model No.:	SW-540-TX-W (MS330-A01)
Serial No.:	WS2126000026
Test sample(s) ID:	GTS202108000221-1
Sample(s) Status	Engineer sample
Operation Frequency:	802.11n(HT20): 2412MHz~2462MHz
Channel numbers:	802.11n(HT20): 11
Channel separation:	5MHz
Modulation technology:	802.11n(HT20):
4 4 4	Orthogonal Frequency Division Multiplexing (OFDM)
Antenna Type:	Integral Antenna
	ANT 1: 2dBi
Antenna gain:	ANT 2: 2dBi
Power supply:	Adapter 1:
	Model: NBS24J120200D5
	Input: AC 100-240V, 50/60Hz, 0.6A
	Output: DC 12.0V, 2.0A, 24.0W
	Adapter 2:
	Model: FJ-SW1202000N
	Input: AC 100-240V, 50/60Hz, 0.6A Max
2 2 2 2 2	Output: DC 12.0V, 2.0A, 24.0W



Operation Frequency each of channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
1	2412MHz	4	2427MHz	7	2442MHz	10	2457MHz
2	2417MHz	5	2432MHz	8 8	2447MHz	11	2462MHz
3	2422MHz	6	2437MHz	9	2452MHz		

Note:

In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

Tool shownel	Frequency (MHz)
Test channel	802.11n(HT20)
Lowest channel	2412MHz
Middle channel	2437MHz
Highest channel	2462MHz

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5.2 Test mode

Transmitting mode Keep the EUT in continuously transmitting mode

We have verified the construction and function in typical operation. All the test modes were carried out with the EUT in transmitting operation, which was shown in this test report and defined as follows:

Pre-scan all kind of data rate in lowest channel, and found the follow list which it was worst case.

Mode	802.11n(HT20)	
Data rate	6.5Mbps	

5.3 Description of Support Units

Manufacturer	Description	Model	Serial Number	
Lenovo	Notebook PC	E40-80	N/A	

5.4 Deviation from Standards

None.

5.5 Abnormalities from Standard Conditions

None.

5.6 Test Facility

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

• FCC—Registration No.: 381383

Designation Number: CN5029

Global United Technology Services Co., Ltd., Shenzhen 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 files.

IC —Registration No.: 9079A

CAB identifier: CN0091

The 3m Semi-

anechoic chamber of Global United Technology Services Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing

• NVLAP (LAB CODE:600179-0)

Global United Technology Services Co., Ltd., is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP).

5.7 Test Location

All tests were performed at:

Global United Technology Services Co., Ltd.

Address: No. 123-128, Tower A, Jinyuan Business Building, No.2, Laodong Industrial Zone, Xixiang Road, Baoan District, Shenzhen, Guangdong, China 518102

Tel: 0755-27798480 Fax: 0755-27798960



6 Test Instruments list

Rad	iated Emission:			2.0		
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
1	3m Semi- Anechoic Chamber	ZhongYu Electron	9.2(L)*6.2(W)* 6.4(H)	GTS250	July. 02 2020	July. 01 2025
2	Control Room	ZhongYu Electron	6.2(L)*2.5(W)* 2.4(H)	GTS251	N/A	N/A
3	EMI Test Receiver	Rohde & Schwarz	ESU26	GTS203	June. 24 2021	June. 23 2022
4	BiConiLog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9163	GTS214	June. 24 2021	June. 23 2022
5	Double -ridged waveguide horn	SCHWARZBECK MESS-ELEKTRONIK	BBHA 9120 D	GTS208	June. 24 2021	June. 23 2022
6	Horn Antenna	ETS-LINDGREN	3160	GTS217	June. 24 2021	June. 23 2022
7	EMI Test Software	AUDIX	E3	N/A	N/A	N/A
8	Coaxial Cable	GTS	N/A	GTS213	June. 24 2021	June. 23 2022
9	Coaxial Cable	GTS	N/A	GTS211	June. 24 2021	June. 23 2022
10	Coaxial cable	GTS	N/A	GTS210	June. 24 2021	June. 23 2022
11	Coaxial Cable	GTS	N/A	GTS212	June. 24 2021	June. 23 2022
12	Amplifier(100kHz-3GHz)	HP	8347A	GTS204	June. 24 2021	June. 23 2022
13	Amplifier(2GHz-20GHz)	HP	84722A	GTS206	June. 24 2021	June. 23 2022
14	Amplifier (18-26GHz)	Rohde & Schwarz	AFS33-18002 650-30-8P-44	GTS218	June. 24 2021	June. 23 2022
15	Band filter	Amindeon	82346	GTS219	June. 24 2021	June. 23 2022
16	Power Meter	Anritsu	ML2495A	GTS540	June. 24 2021	June. 23 2022
17	Power Sensor	Anritsu	MA2411B	GTS541	June. 24 2021	June. 23 2022
18	Wideband Radio Communication Tester	Rohde & Schwarz	CMW500	GTS575	June. 24 2021	June. 23 2022
19	Splitter	Agilent	11636B	GTS237	June. 24 2021	June. 23 2022
20	Loop Antenna	ZHINAN	ZN30900A	GTS534	June. 24 2021	June. 23 2022
21	Breitband hornantenne	SCHWARZBECK	BBHA 9170	GTS579	Oct. 18 2020	Oct. 17 2021
22	Amplifier	TDK	PA-02-02	GTS574	Oct. 18 2020	Oct. 17 2021
23	Amplifier	TDK	PA-02-03	GTS576	Oct. 18 2020	Oct. 17 2021
24	PSA Series Spectrum Analyzer	Rohde & Schwarz	FSP	GTS578	June. 24 2021	June. 23 2022



Cond	Conducted Emission						
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)	
1	Shielding Room	ZhongYu Electron	7.3(L)x3.1(W)x2.9(H)	GTS252	May.15 2019	May.14 2022	
2	EMI Test Receiver	R&S	ESCI 7	GTS552	June. 24 2021	June. 23 2022	
3	Coaxial Switch	ANRITSU CORP	MP59B	GTS225	June. 24 2021	June. 23 2022	
4	ENV216 2-L-V- NETZNACHB.DE	ROHDE&SCHWARZ	ENV216	GTS226	June. 24 2021	June. 23 2022	
5	Coaxial Cable	GTS	N/A	GTS227	N/A	N/A	
6	EMI Test Software	AUDIX	E3	N/A	N/A	N/A	
7	Thermo meter	KTJ	TA328	GTS233	June. 24 2021	June. 23 2022	
8	Absorbing clamp	Elektronik- Feinmechanik	MDS21	GTS229	June. 24 2021	June. 23 2022	
9	ISN	SCHWARZBECK	NTFM 8158	GTS565	June. 24 2021	June. 23 2022	
10	High voltage probe	SCHWARZBECK	TK9420	GTS537	July. 09 2021	July. 08 2022	

RF Conducted Test:						
ltem	Test Equipment	Manufacturer	Model No.	Serial No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
1	MXA Signal Analyzer	Agilent	N9020A	GTS566	June. 24 2021	June. 23 2022
2	EMI Test Receiver	R&S	ESCI 7	GTS552	June. 24 2021	June. 23 2022
3	Spectrum Analyzer	Agilent	E4440A	GTS533	June. 24 2021	June. 23 2022
4	MXG vector Signal Generator	Agilent	N5182A	GTS567	June. 24 2021	June. 23 2022
5	ESG Analog Signal Generator	Agilent	E4428C	GTS568	June. 24 2021	June. 23 2022
6	USB RF Power Sensor	DARE	RPR3006W	GTS569	June. 24 2021	June. 23 2022
7	RF Switch Box	Shongyi	RFSW3003328	GTS571	June. 24 2021	June. 23 2022
8	Programmable Constant Temp & Humi Test Chamber	WEWON	WHTH-150L-40-880	GTS572	June. 24 2021	June. 23 2022

General used equipment:							
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)	
_1	Humidity/ Temperature Indicator	KTJ	TA328	GTS243	June. 24 2021	June. 23 2022	
2	Barometer	ChangChun	DYM3	GTS255	June. 24 2021	June. 23 2022	



7 Test results and Measurement Data

7.1 Antenna requirement

Standard requirement: FCC Part15 C Section 15.203 /247(c)

15.203 requirement:

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

15.247(c) (1)(i) requirement:

(i) Systems operating in the 2400-2483.5 MHz band that is used exclusively for fixed. Point-to-point operations may employ transmitting antennas with directional gain greater than 6dBi provided the maximum conducted output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6dBi.

EUT Antenna:

The antenna is Integral antenna, the best case gain of the antenna is 2dBi, reference to the appendix II for details



7.2 Conducted Emissions

Test Requirement:	FCC Part15 C Section 15.207		4 4 4		
Test Method:	ANSI C63.10:2013				
Test Frequency Range:	150KHz to 30MHz	-8-8-3	8 - 8 - 8		
Receiver setup:	RBW=9KHz, VBW=30KHz, S	weep time=auto	2 2 2		
Limit:	Frequency range (MHz)	Frequency range (MHz) Limit (dBuV)			
		Quasi-peak	Average		
	0.15-0.5	66 to 56*	56 to 46*		
	0.5-5 5-30	56 60	46		
	* Decreases with the logarithr		30		
Test setup:	Reference Plane		29 29 29		
Test procedure:	Remark: E.U.T Equipment Under Test LISN Line Impedence Stabilization Network Test table height=0.8m 1. The E.U.T and simulators a				
. sot production	line impedance stabilization 50ohm/50uH coupling imposes a second termination. (Please refer to photographs). 3. Both sides of A.C. line are interference. In order to fin positions of equipment and	edance for the measuralso connected to the m/50uH coupling important of the block diagram of the checked for maximum differences.	This provides a uring equipment. e main power through a edance with 50ohm of the test setup and m conducted sion, the relative		
·	 50ohm/50uH coupling important and according to ANSI C63.10: 	edance for the measuralso connected to the m/50uH coupling improte the block diagram of the checked for maximum distribution of the interface coupling and conducted in the maximum emisural all of the interface coupling the measural and the measural all of the measural and the measural	This provides a uring equipment. e main power through a edance with 50ohm of the test setup and m conducted sion, the relative ables must be changed		
Test Instruments:	 50ohm/50uH coupling important imp	edance for the measuralso connected to the m/50uH coupling improte the block diagram of the checked for maximum distribution of the interface coupling and conducted in the maximum emisural all of the interface coupling the measural and the measural all of the measural and the measural	This provides a uring equipment. e main power through a edance with 50ohm of the test setup and m conducted sion, the relative ables must be changed		
·	 50ohm/50uH coupling important and according to ANSI C63.10: 	also connected to the measuralso connected to the m/50uH coupling improvement of the block diagram of the checked for maximum distribution of the interface of 2013 on conducted in the maximum emisural all of the interface of 2013 on conducted in the conducted i	This provides a uring equipment. e main power through a edance with 50ohm of the test setup and m conducted sion, the relative ables must be changed		
Test Instruments:	 50ohm/50uH coupling important and according to ANSI C63.10: Refer to section 5.2 for details 	also connected to the measuralso connected to the m/50uH coupling improvement of the block diagram of the checked for maximum distribution of the interface of 2013 on conducted in the maximum emisural all of the interface of 2013 on conducted in the conducted i	This provides a uring equipment. e main power through a edance with 50ohm of the test setup and m conducted sion, the relative ables must be changed		
Test Instruments: Test mode:	 50ohm/50uH coupling important and according to ANSI C63.10: Refer to section 5.2 for details 	edance for the measuralso connected to the m/50uH coupling imported to the block diagram of the block diagram of the maximum emisural all of the interface of 2013 on conducted not see the conducted not be seen to be seen the maximum emisural all of the interface of 2013 on conducted not be seen the cond	This provides a uring equipment. e main power through a edance with 50ohm of the test setup and m conducted sion, the relative ables must be changed neasurement.		

Remark: Both high and low voltages have been tested to show only the worst low voltage test data.

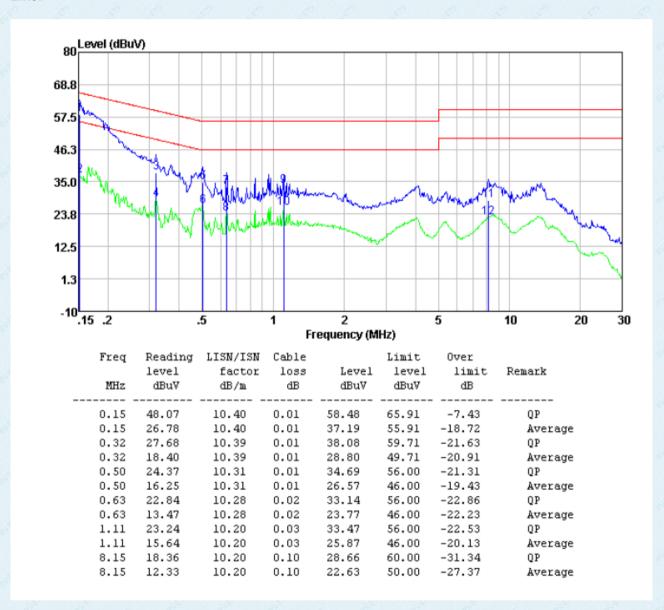
Xixiang Road, Baoan District, Shenzhen, Guangdong, China 518102



Report No.: GTS202108000221F01

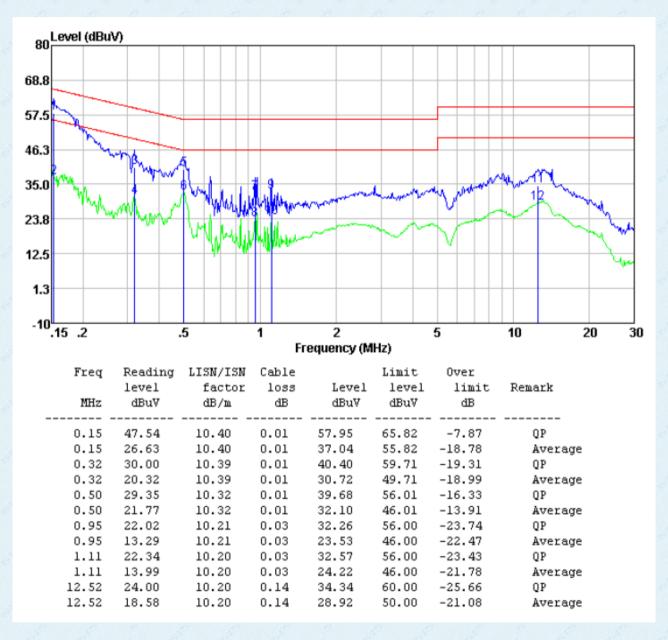
Measurement data

Adapter 1 Line:





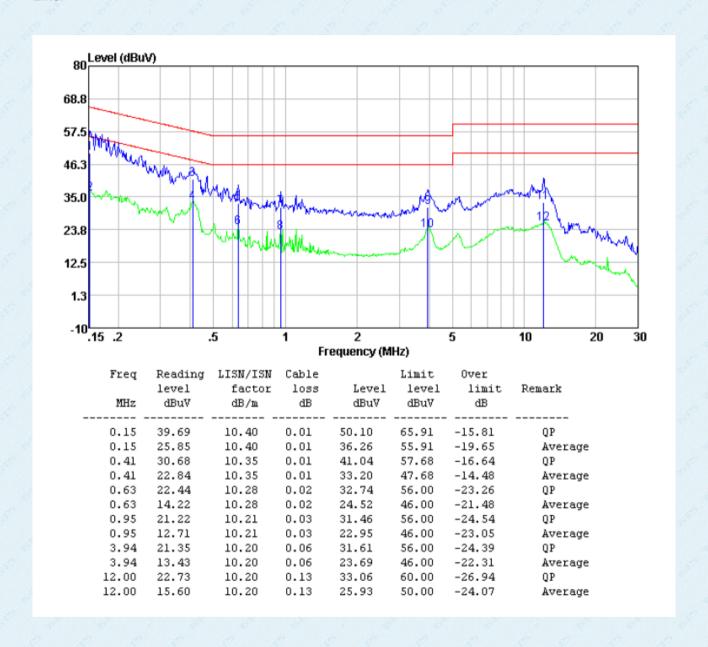
Neutral:





Adapter 2 Line:

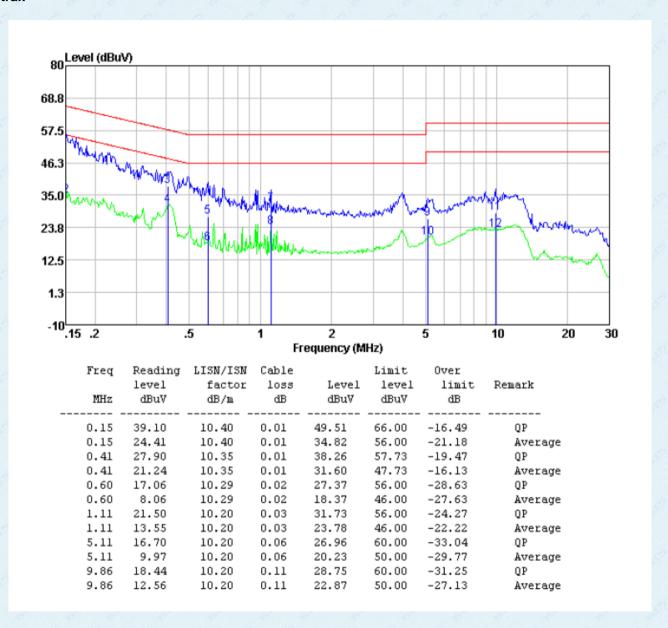
Report No.: GTS202108000221F01





Neutral:

Report No.: GTS202108000221F01

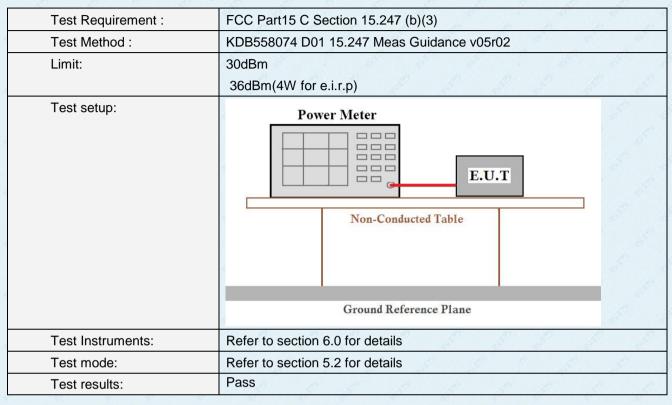


Notes:

- 1. An initial pre-scan was performed on the line and neutral lines with peak detector.
- 2. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
- 3. Final Level =Receiver Read level + LISN Factor + Cable Loss
- 4. If the average limit is met when using a quasi-peak detector receiver, the EUT shall be deemed to meet both limits and measurement with the average detector receiver is unnecessary.



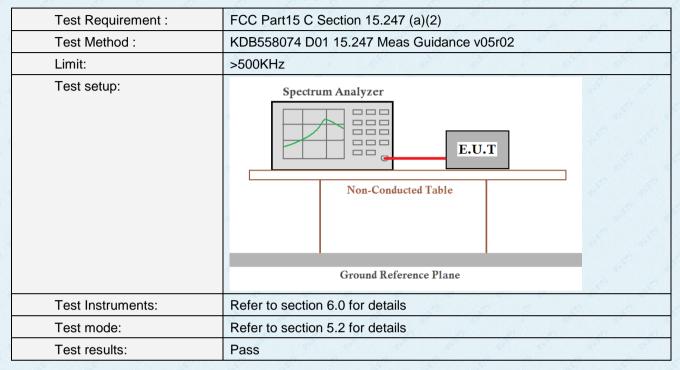
7.3 Conducted Peak Output Power



Measurement Data: The detailed test data see Appendix for WIFI_2.4G.



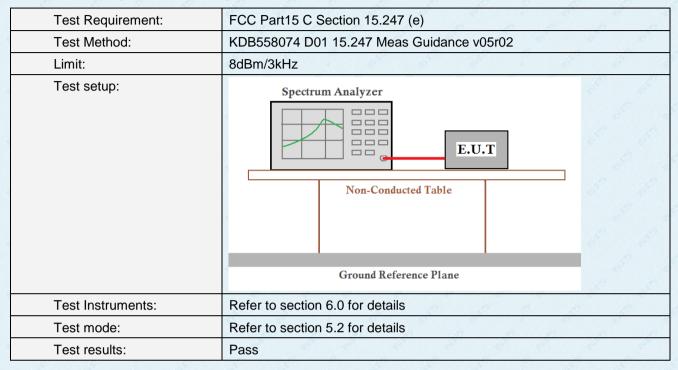
7.4 Channel Bandwidth & 99% Occupy Bandwidth



Measurement Data: The detailed test data see Appendix for WIFI_2.4G.



7.5 Power Spectral Density



Measurement Data: The detailed test data see Appendix for WIFI_2.4G.



7.6 Spurious Emission Spurious Emission in Non-restricted & restricted Bands

7.6.1 Conducted Emission Method

Test Requirement:	FCC Part15 C Section 15.247 (d)					
Test Method:	KDB558074 D01 15.247 Meas Guidance v05r02					
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.					
Test setup:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane					
Test Instruments:	Refer to section 6.0 for details					
Test mode:	Refer to section 5.2 for details					
Test results:	Pass					

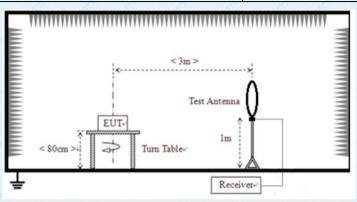
Measurement Data: The detailed test data see Appendix for WIFI_2.4G.



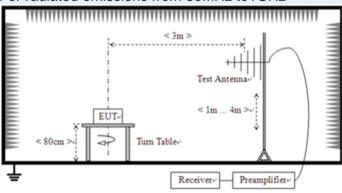
7.6.2 Radiated Emission Method

Test Requirement:	FCC Part15 C	Section	n 15.209	FCC Part15 C Section 15.209					
Test Method:	ANSI C63.10: 2013 & RSS-Gen 9kHz to 25GHz								
Test Frequency Range:									
Test site:	Measurement	4							
Receiver setup:	Frequenc	су	Detector	RBW	VBW	Value			
	9KHz-150H		Quasi-peak	200Hz	600Hz	Quasi-peak			
	150KHz-30	MHz	Quasi-peak	9KHz	30KHz	Quasi-peak			
	30MHz-10	GHz	Quasi-peak	120KHz	300KHz	Quasi-peak			
			Peak	1MHz	3MHz	Peak			
	Above 1G	Hz -	Peak	1MHz	10Hz	Average			
	0.009-0.490 0.490-1.705 1.705-30.0 30-88 88-216 216-960 Above 960	2400/F(k 24000/F 30 100** 150** 200** 500	(kHz)			3			
	measurement the frequence Radiated em	nts emp by band nission	shown in the ploying a CISI Is 9-90 kHz, 1 limits in these ploying an ave	PR quasi-p 10-490 kH three ban	eak detec z and abo ds are bas	tor except fove 1000 MHz			
IC Limit:	measurement the frequence Radiated em measuremen	nts emp by band hission nts emp	oloying a CISI ls 9-90 kHz, 1 limits in these	PR quasi-p 10-490 kH three ban erage dete	eak detect z and abo ds are bas ctor.	tor except fo ve 1000 MHz sed on			
IC Limit:	measurement the frequence Radiated em measuremen	nts emp by band nission nts emp - Genera	oloying a CISI ls 9-90 kHz, 1 limits in these oloying an ave	PR quasi-p 10-490 kH three ban erage dete	peak detective and aboom designed are based to contractions.	tor except fo ve 1000 MHz sed on			
IC Limit:	measurement the frequence Radiated em measuremen	nts emp by band nission nts emp - Genera Fr	oloying a CISI Is 9-90 kHz, 1 Ilimits in these cloying an ave at field strength line equency (MHz) 30 - 88	PR quasi-p 10-490 kH three ban erage dete mits at freque Field stre (µV/m at	peak detective and aboom designed are based to contractions.	tor except fo ve 1000 MHz sed on			
IC Limit:	measurement the frequence Radiated em measuremen	onts empty band nission onts empty – Genera	oloying a CISI Is 9-90 kHz, 1 Ilimits in these cloying an ave al field strength lin equency (MHz) 80 - 88 8 - 216	PR quasi-p 10-490 kH e three ban erage dete mits at freque Field stre (µV/m at 100 150	peak detective and aboom designed are based to contractions.	tor except fo ve 1000 MHz sed on			
IC Limit:	measurement the frequence Radiated em measuremen	nts empty band nission nts empty - General Fr	oloying a CISI Is 9-90 kHz, 1 Ilimits in these cloying an ave at field strength line equency (MHz) 30 - 88	PR quasi-p 10-490 kH three ban erage dete mits at freque Field stre (µV/m at	peak detective and aboom designed are based to contractions.	tor except fo ve 1000 MHz sed on			
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IC Limit:	measurement the frequence Radiated emmeasurement Table 5	rits empty band hission ints empty - General 8 21 At	bloying a CISI Is 9-90 kHz, 1 Is 9-90 kHz, 1 Ilimits in these bloying an ave al field strength lin equency (MHz) 80 - 88 8 - 216 16 - 960 bove 960 If field strength lin Magnetic fie	PR quasi-p 10-490 kH e three ban erage dete mits at freque Field stre (µV/m at 100 150 200 500 mits at freque	peak detective and about a are based tor. Increase above 30 Ingth 3 m) Increase below 30 Increase belo	tor except fove 1000 MHz sed on MHz MHz ment			
IC Limit:	Table 6	rits empty band nission ints e	bloying a CISI Is 9-90 kHz, 1 Is 9-90 kHz, 1 Ilimits in these bloying an ave al field strength lin equency (MHz) 80 - 88 8 - 216 16 - 960 bove 960 Magnetic field field strength lin Magnetic field (III) 6.37/F	PR quasi-p 10-490 kH e three ban erage dete mits at freque Field stre (µV/m at 100 150 200 500 mits at freque eld strength (Field) (A/m) (F in kHz)	ncies below 30 H- Measure distant (m)	tor except fove 1000 MHz sed on MHz MHz ment nce			
IC Limit:	Table 6 Free 9 - 4 490 -	rits empty band nission ints empty band nission ints empty - General 8 21 At - General equency 190 kHz 1 1705 kHz	bloying a CISI Is 9-90 kHz, 1 Is 9-90 kHz, 1 Ilimits in these bloying an ave al field strength lin equency (MHz) 30 - 88 8 - 216 16 - 960 bove 960 Magnetic field field strength lin Magnetic field 6.37/F 2 63.7/F	PR quasi-p 10-490 kH e three ban erage dete mits at freque Field stre (µV/m at 100 150 200 500 mits at freque eld strength (Field) (A/m) (F in kHz) (F in kHz)	ncies below 30 H- Measure distan (m) 300 30	tor except fove 1000 MHz sed on MHz MHz MHz MHz			
IC Limit:	Table 6 Table 1.705 Note 1: T	rits empty band nission ints empty band nission ints empty - General 8 21 At - General 1705 kHz 1 1	bloying a CISI Is 9-90 kHz, 1 Is 9-90 kHz, 1 Ilimits in these bloying an ave al field strength lin equency (MHz) 30 - 88 8 - 216 16 - 960 bove 960 Magnetic field field strength lin Magnetic field 6.37/F 2 63.7/F	PR quasi-p 10-490 kH e three ban erage dete mits at freque Field stre (µV/m at 100 150 200 500 mits at freque eld strength (Field) (Fin kHz) (Fin kHz) 0.08 nges 9-90 kHz	ncies below 30 H- Measure distant (m) 300 300 300 300 300 300 300 300 300 30	tor except fove 1000 MHz sed on O MHz O MHz ement nce O			

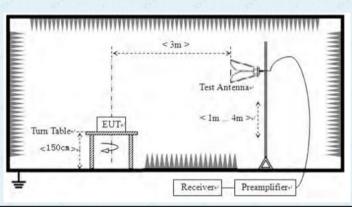




For radiated emissions from 30MHz to1GHz



For radiated emissions above 1GHz



Test Procedure:

- 1. The EUT was placed on the top of a rotating table (0.8m for below 1G and 1.5m for above 1G) above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation.
- 2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.



	6		Report No.:	GTS2021080	00221F01	
		enna was tuned to e was turned from	heights from	1 meter to 4	meters	
	5. The test-receive Bandwidth with I	ct Function ar	nd Specified			
	EUT would be re margin would be	evel of the EUT in nen testing could be eported. Otherwise e re-tested one by las specified and t	e stopped an the emissior one using pe	d the peak vans that did no ak, quasi-pea	alues of the t have 10dB k or	
Test Instruments:	Refer to section 6.0) for details	2 2		9	
Test mode:	Refer to section 5.2	2 for details				
Test voltage:	AC120V 60Hz	AC120V 60Hz				
Test environment:	Temp.: 25 °C	Humid.:	52%	Press.:	1012mbar	
Test voltage:	AC 120V, 60Hz				8 8	
Test results:	Pass	8 8	8 8	8 8	9 (9	

Remarks:

- 1. Only the worst case Main Antenna test data.
- 2. Pre-scan all kind of the place mode (X-axis, Y-axis, Z-axis), and found the Y-axis which it is worse case.

Measurement data:

■ 9kHz~30MHz

The emission from 9 kHz to 30MHz was pre-tested and found the result was 20dB lower than the limit, and according to 15.31(o) & RSS-Gen 6.13, the test result no need to reported.

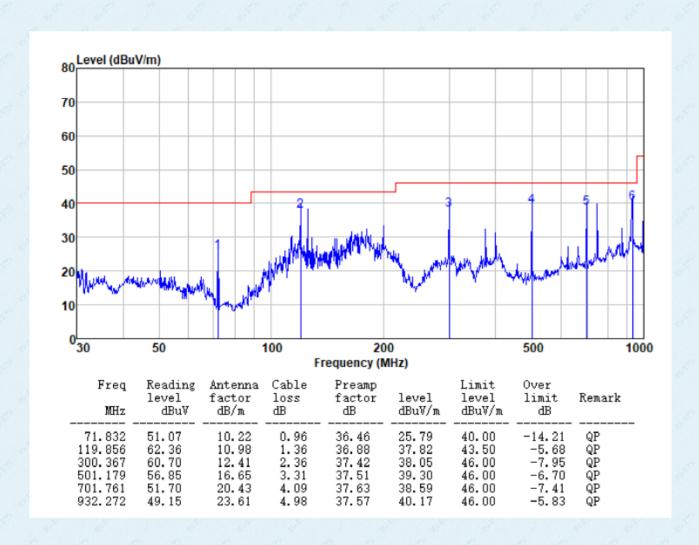


All antennas have test, only the worst case ANT 1 report.

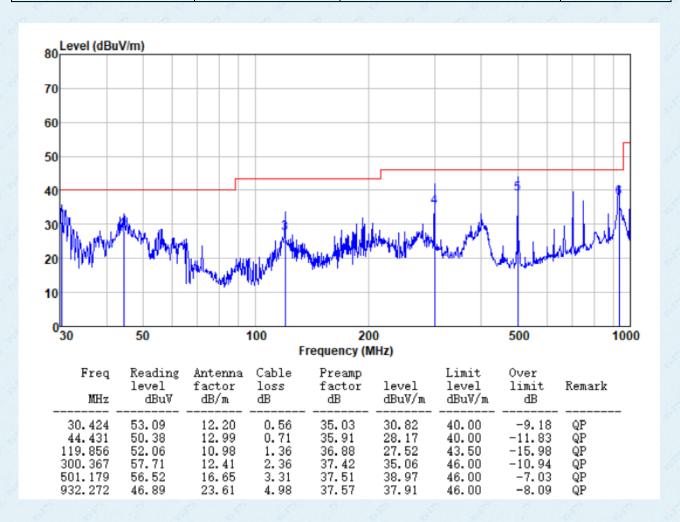
Adapter 1:

■ Below 1GHz

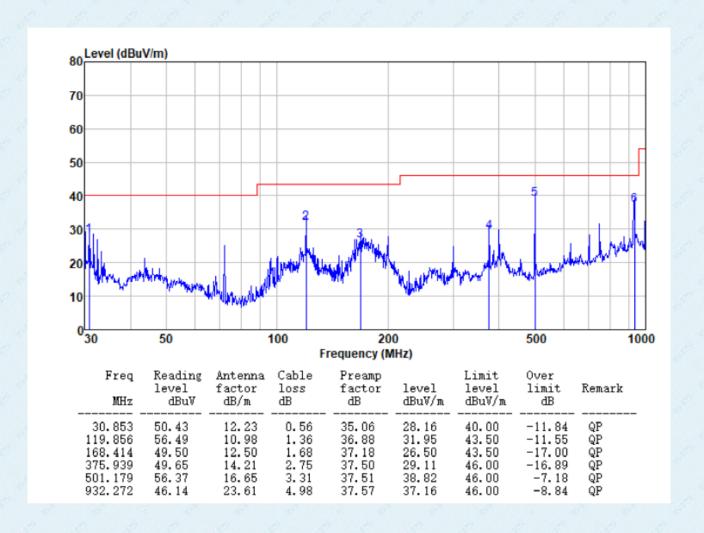
Test channel:	Lowest	Polarziation:	Horizontal





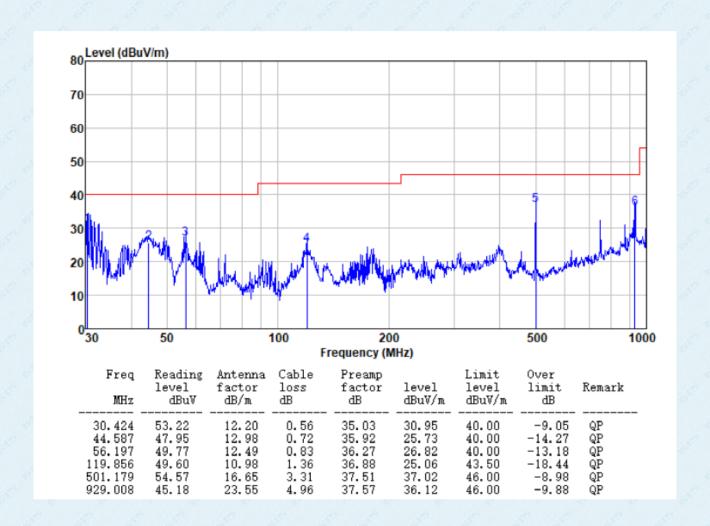






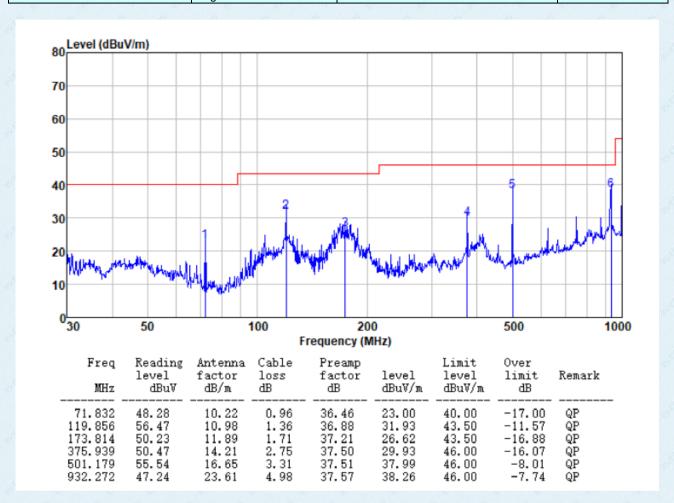


Test channel:	Middle	Polarziation:	Vertical
1 Cot onarrior.	iviladic	i diaiziation.	v Ci tioui



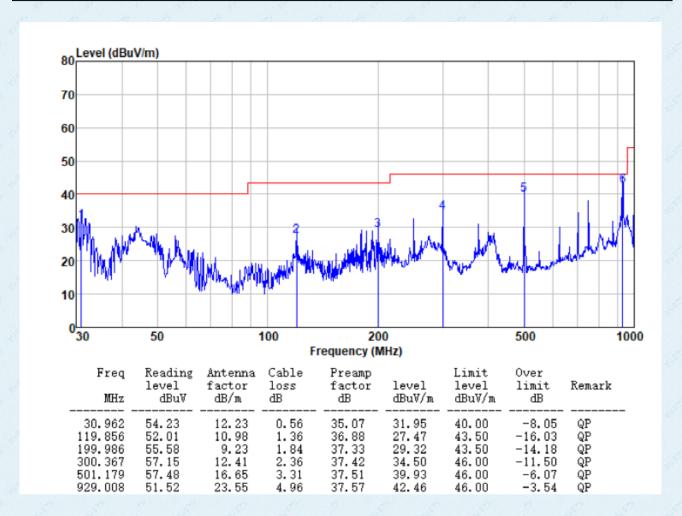


Test channel: Highest Polarziation: Horizontal





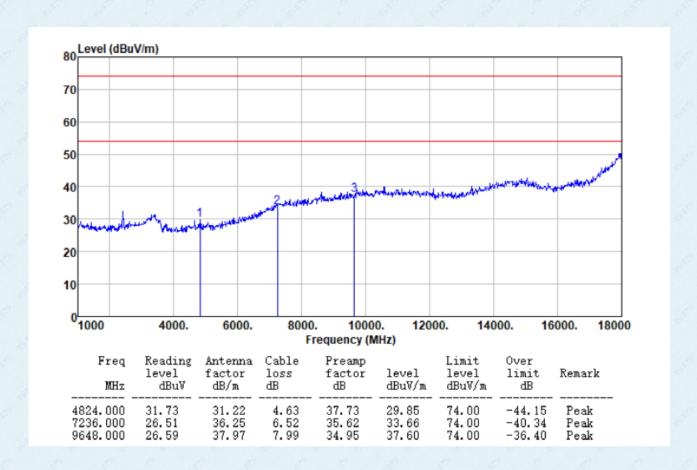
Test channel: Highest Polarziation: Vertical





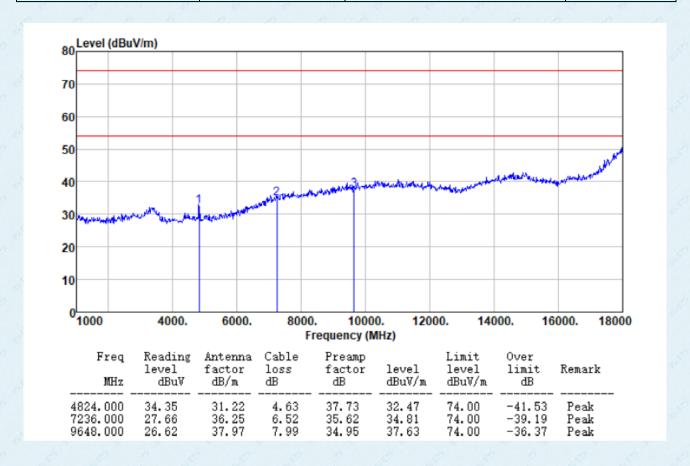
Above 1GHz

ś	Test channel:	Lowest	Polarziation:	Horizontal	
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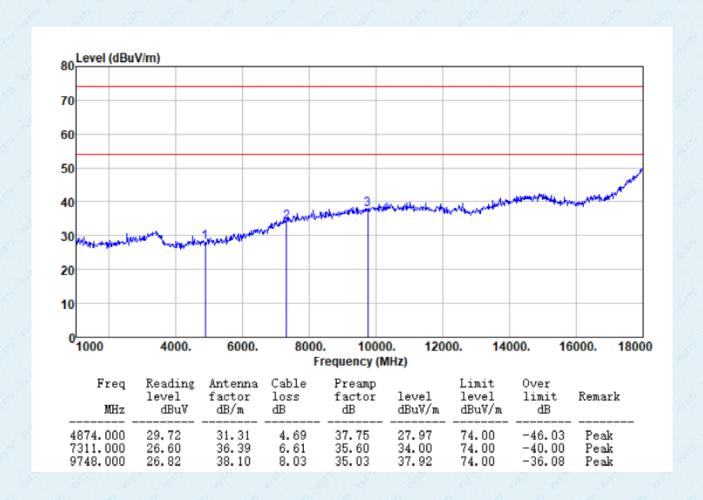


Test channel: Lowest Polarziation: Vertical



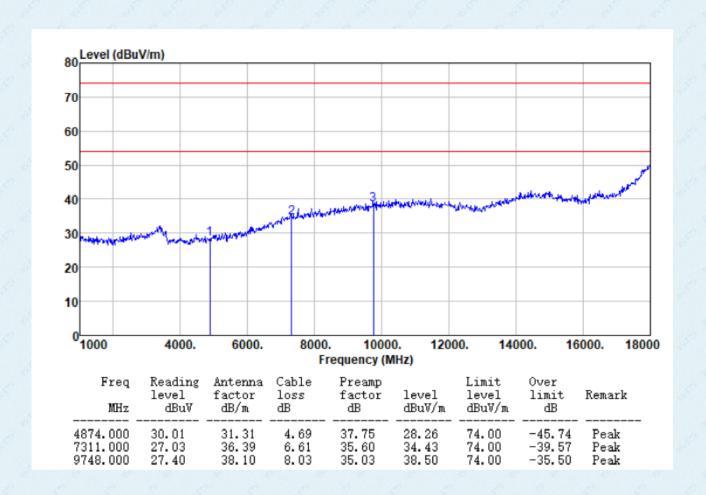


Te	st channel:	Middle	Polarziation:	Horizontal	
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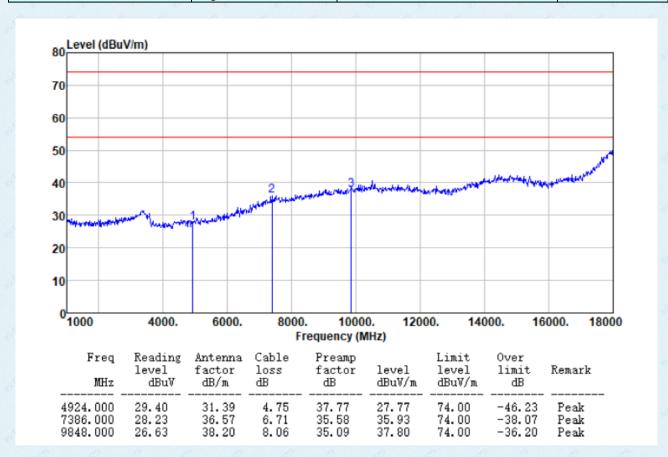


Test channel: Middle	Polarziation:	Vertical	
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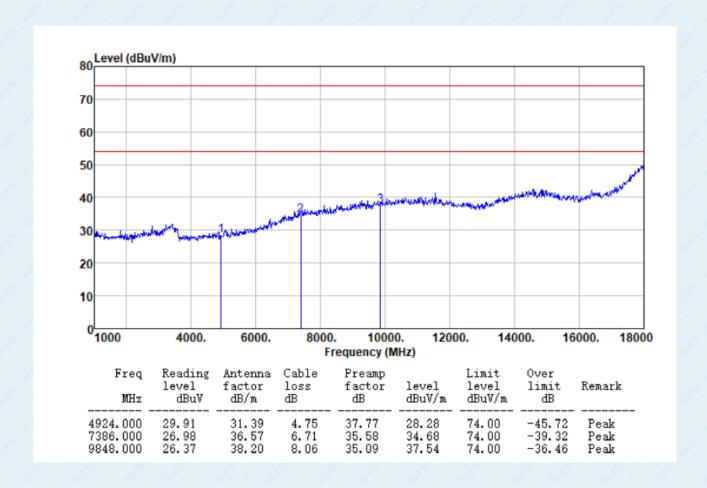


Test channel: Highest Polarziation: Horizontal





Test channel:	Highest	Polarziation:	Vertical
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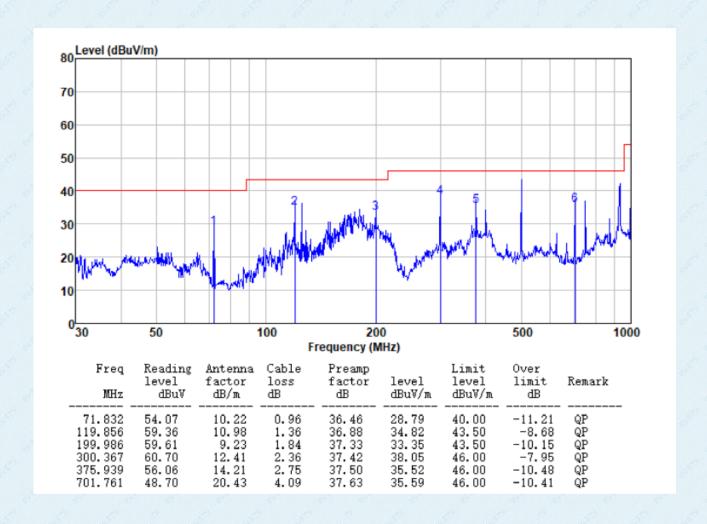




Adapter 2:

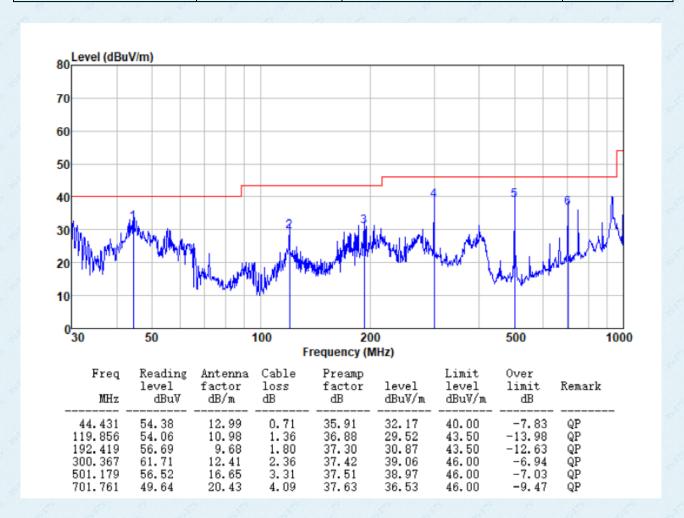
■ Below 1GHz

Test channel: Lowest Polarziation: Horizo	ıtal
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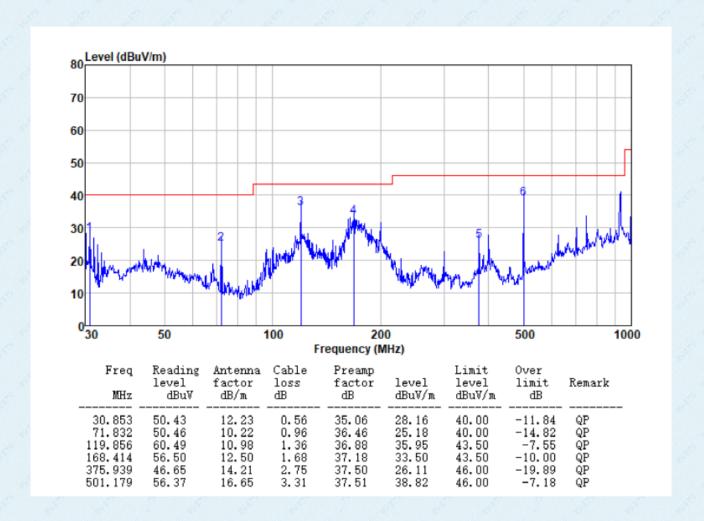


Test channel: Lowest Polarziation: Vertical



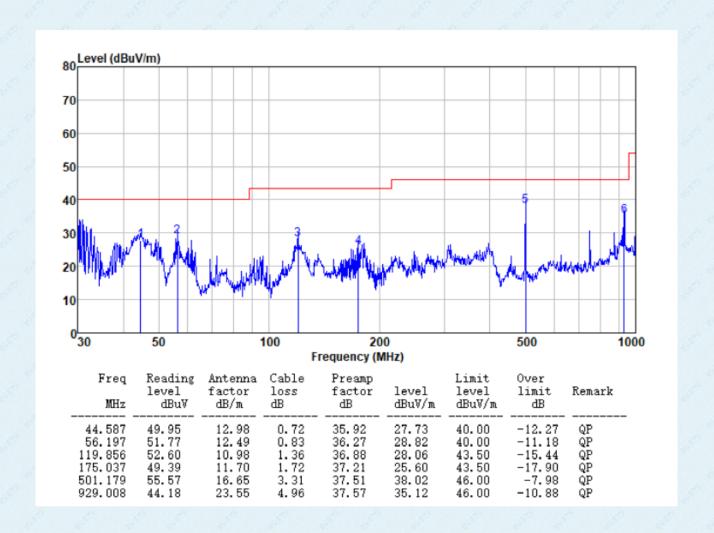


Test channel: Middle Polarziation: Horizontal



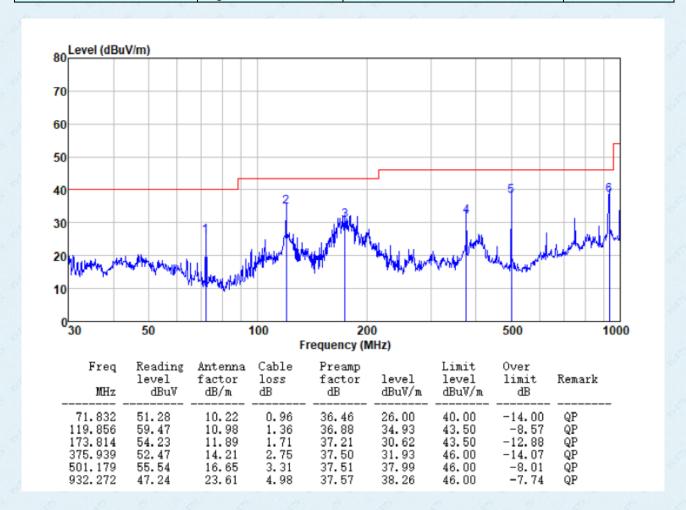


Test channel: Middle	Polarziation:	Vertical	
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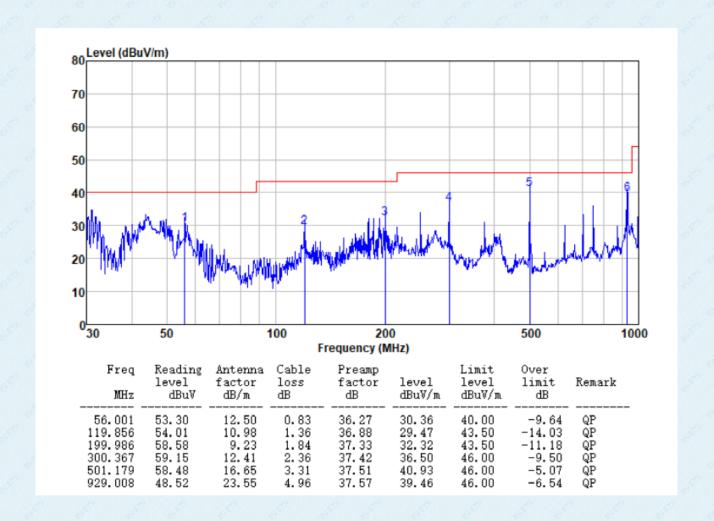




Test channel: Highest Polarziation: Horizontal





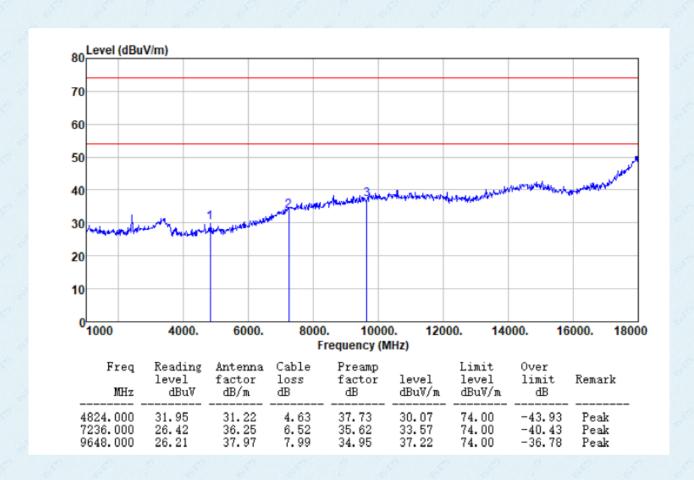


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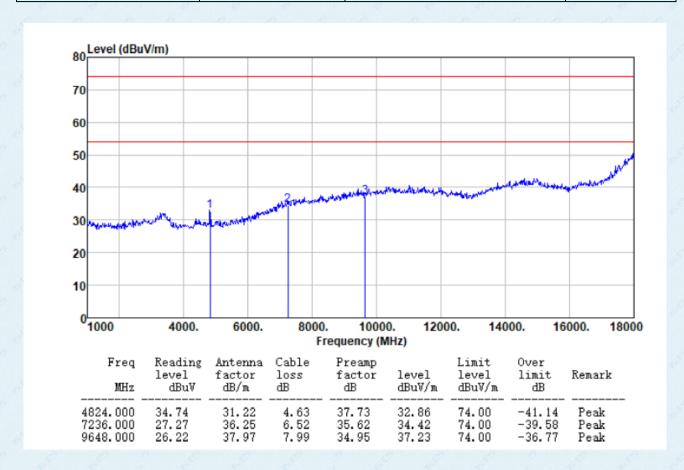
■ Above 1GHz

Test channel: Lowest	Polarziation:	Horizontal	ı
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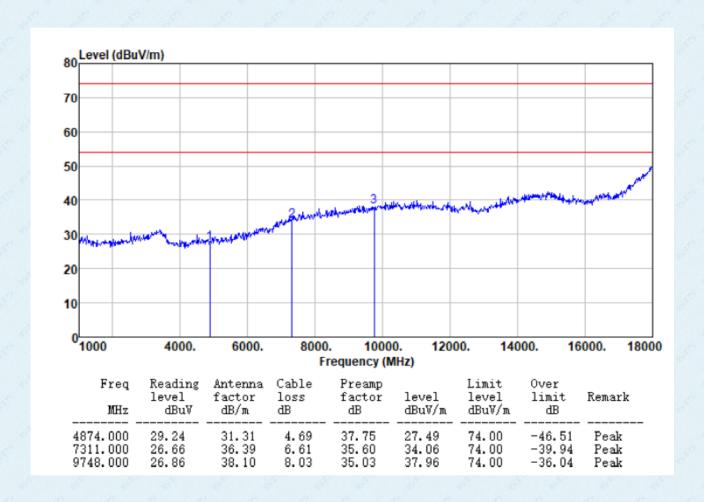


Test channel: Lowest Polarziation: Vertical



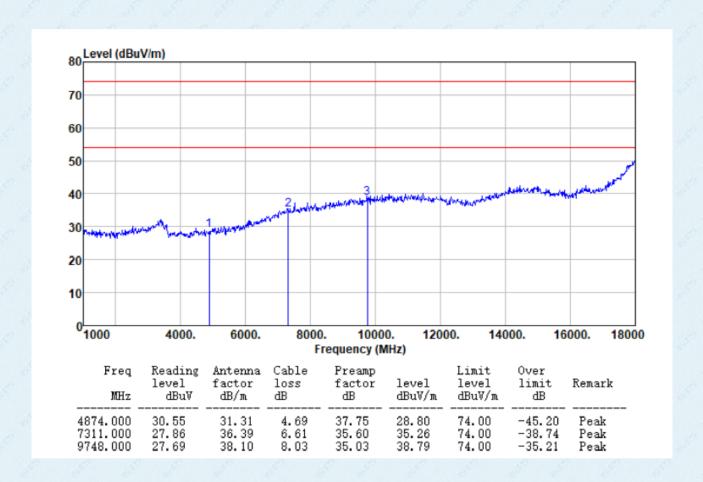


Test channel: Middle Polarziation: Horizontal



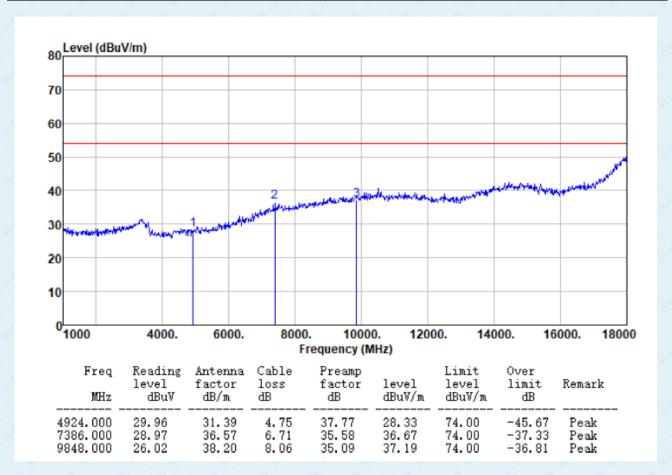


Test channel: Middle	Polarziation:	Vertical	
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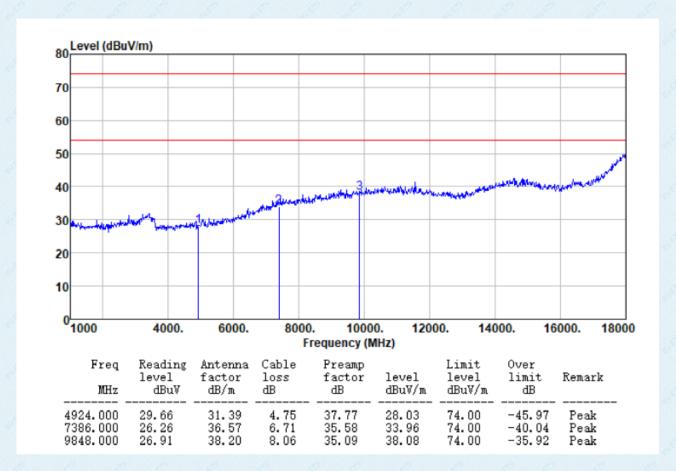


Test channel: Highest Polarziation: Horizontal





Test channel:	Highest	Polarziation:	Vertical
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Remark:

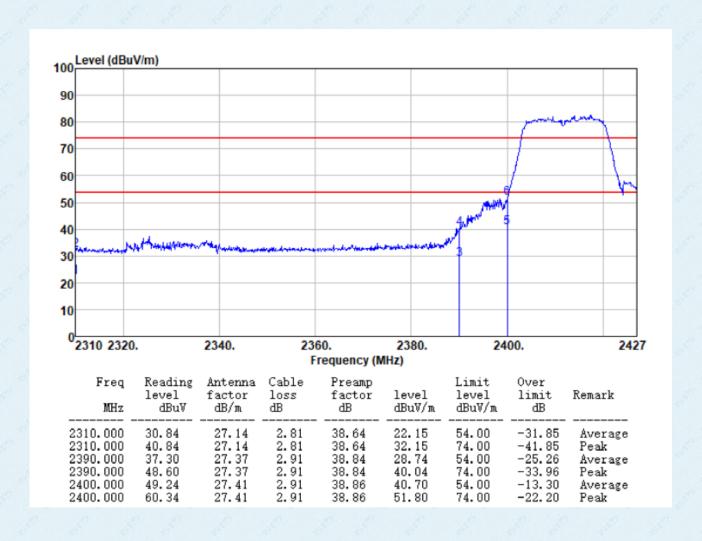
- 1 Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2 "*", means this data is the too weak instrument of signal is unable to test.
- 3. The emission levels of other frequencies are very lower than the limit and not show in test report.



Unwanted Emissions in restricted Frequency Bands All adapter have test, only the worst case adapter 1 report.

ANT 1:

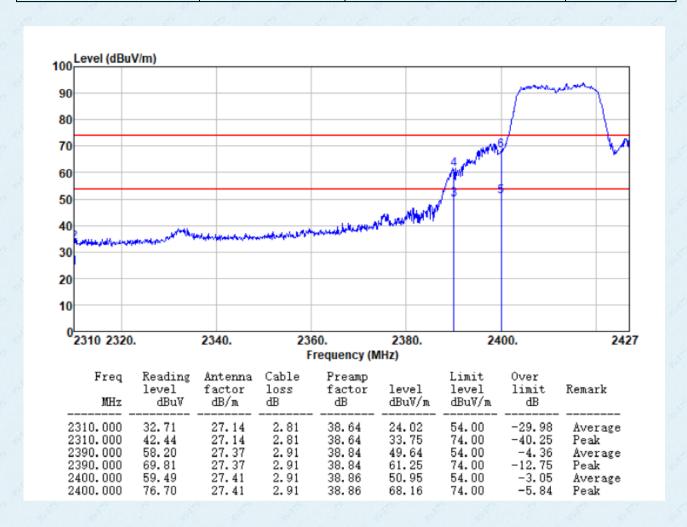
Test channel:	Lowest	Polarziation:	Horizontal	K
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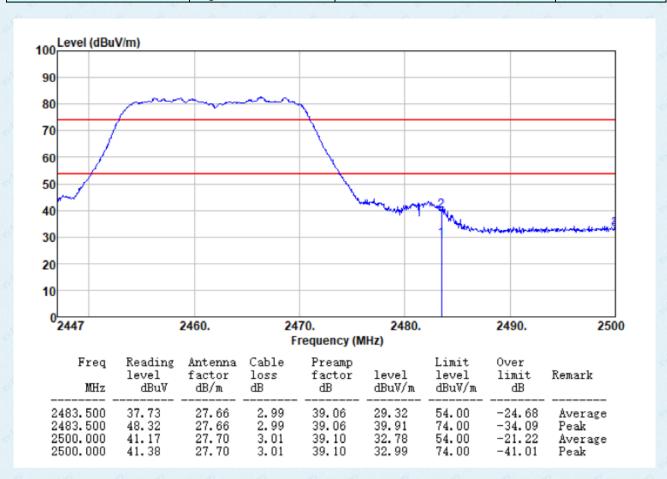
Test channel: Lowest Polarziation: Vertical



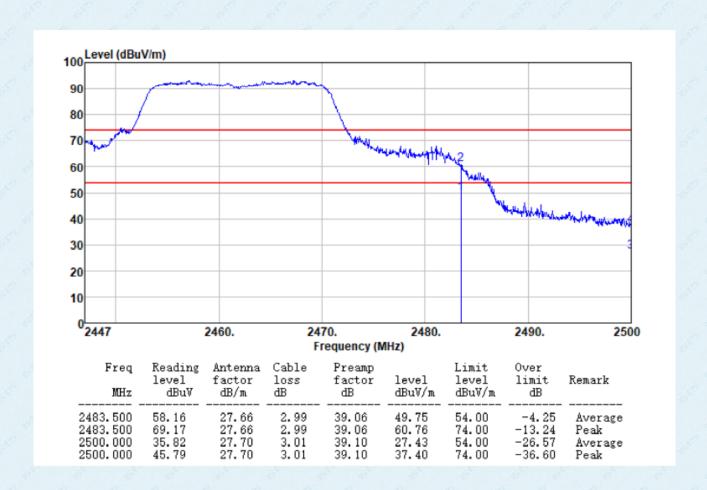
Xixiang Road, Baoan District, Shenzhen, Guangdong, China 518102 Telephone: +86 (0) 755 2779 8480 Fax: +86 (0) 755 2779 8960



Test channel: Highest Polarziation: Horizontal



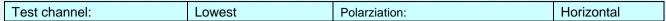


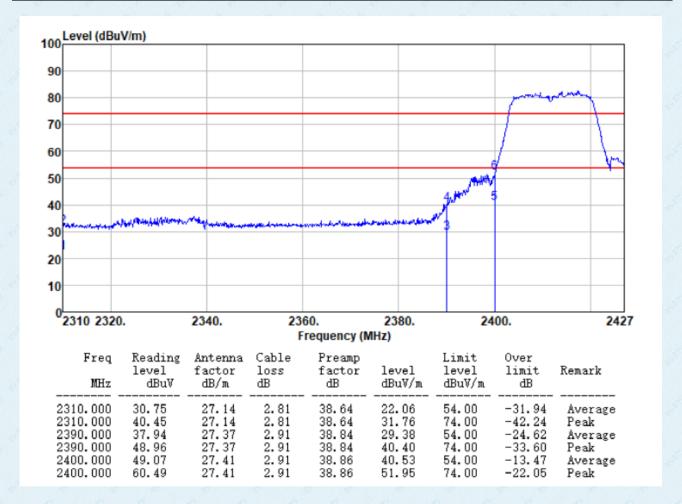




ANT 2:

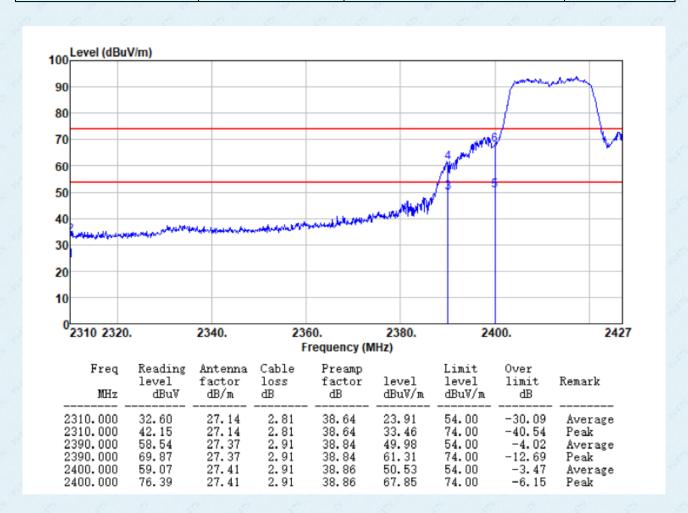
Report No.: GTS202108000221F01





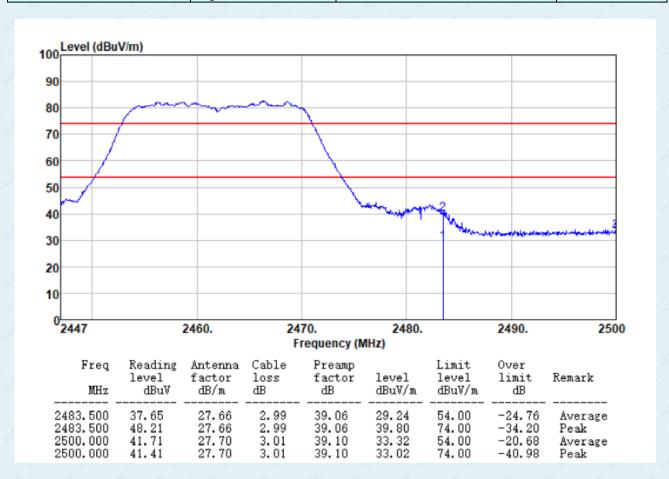


Test channel: Lowest Polarziation: Vertical

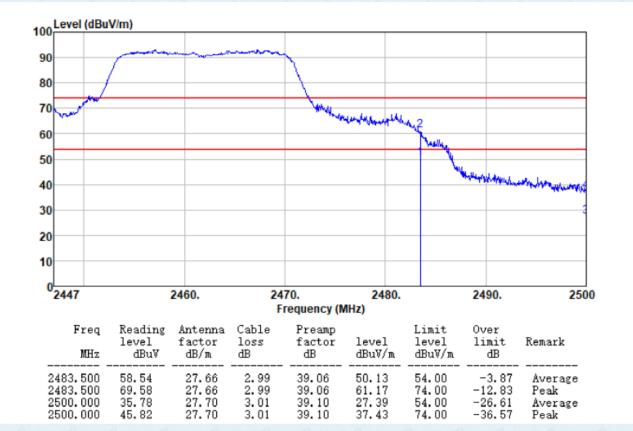




Test channel: Highest Polarziation: Horizontal







Remarks:

- 1. Only the worst case Main Antenna test data.
- 2. The pre-test were performed on lowest, middle and highest frequencies, only the worst case's (lowest and highest frequencies) data was showed.
- 3. Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 4. The emission levels of other frequencies are very lower than the limit and not show in test report.



8 Test Setup Photo

Reference to the appendix I for details.

9 EUT Constructional Details

Reference to the appendix II for details.

-----End-----