

TEST REPORT

Applicant: KAON BROADBAND Co., Ltd
Address of Applicant: 884-3, Seongnam-daero, Bundang-gu, Seongnam-si, Gyeonggi-do, South Korea
Manufacturer: KAON BROADBAND Co., Ltd
Address of Manufacturer: 884-3, Seongnam-daero, Bundang-gu, Seongnam-si, Gyeonggi-do, South Korea
Factory: Bowei Technology Co., Ltd
Address of Factory: 2F, Building 2, No. 306 Gushui Road, Haining Economic Development Zone, Haining, Jiaxing City, Zhejiang, 314499, China

Equipment Under Test (EUT)

Product Name: GPON ONT
Model No.: PG2142
Trade Mark: 

FCC ID: 2AXCW-PG2142

Applicable standards: FCC CFR Title 47 Part 15 Subpart E Section 15.407

Date of sample receipt: May 07, 2025

Date of Test: May 07, 2025-July 16, 2025

Date of report issued: July 16, 2025

Test Result : PASS *

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

Authorized Signature:

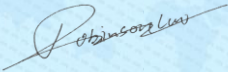
Robinson Luo
Laboratory Manager

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.

2 Version

Version No.	Date	Description
00	July 16, 2025	Original

Prepared By:



Date:

July 16, 2025

Project Engineer

Check By:


Reviewer

Date:

July 16, 2025

3 Contents

	Page
1 COVER PAGE	1
2 VERSION	2
3 CONTENTS	3
4 TEST SUMMARY	4
4.1 MEASUREMENT UNCERTAINTY	4
5 GENERAL INFORMATION	5
5.1 GENERAL DESCRIPTION OF EUT	5
5.2 TEST MODE	7
5.3 DESCRIPTION OF SUPPORT UNITS	7
5.4 TEST FACILITY.....	7
5.5 TEST LOCATION	7
5.6 ADDITIONAL INSTRUCTIONS.....	7
6 TEST INSTRUMENTS LIST	8
7 TEST RESULTS AND MEASUREMENT DATA.....	10
7.1 ANTENNA REQUIREMENT	10
7.2 CONDUCTED EMISSIONS	11
7.3 MAXIMUM CONDUCTED OUTPUT POWER.....	14
7.4 CHANNEL BANDWIDTH AND 99% OCCUPIED BANDWIDTH	15
7.5 POWER SPECTRAL DENSITY	16
7.6 BAND EDGE.....	17
7.6.1 Radiated Emission Method.....	17
7.7 SPURIOUS EMISSION.....	26
7.7.1 Radiated Emission Method.....	26
8 TEST SETUP PHOTO	38
9 EUT CONSTRUCTIONAL DETAILS	38

4 Test Summary

Test Item	Section	Result
Antenna requirement	FCC part 15.203	Pass
AC Power Line Conducted Emission	FCC part 15.207	Pass
Maximum Conducted Output Power	FCC part 15.407(a)(3)	Pass
Channel Bandwidth and 99% Occupied Bandwidth	FCC part 15.407(e)	Pass
Power Spectral Density	FCC part 15.407(a)(3)	Pass
Band Edge	FCC part 15.407(b)(4)	Pass
Spurious Emission	FCC part 15.205/15.209/15.407(b)(4)	Pass
Frequency Stability	FCC part 15.407(g)	N/A

Remarks:

1. Pass: The EUT complies with the essential requirements in the standard.
2. Test according to ANSI C63.10:2013
3. N/A: Not applicable.

4.1 Measurement Uncertainty

No.	Item	Measurement Uncertainty
1	Radio Frequency	$\pm 7.25 \times 10^{-8}$
2	Duty cycle	$\pm 0.37\%$
3	Occupied Bandwidth	$\pm 3\%$
4	RF conducted power	$\pm 0.75\text{dB}$
5	RF power density	$\pm 3\text{dB}$
6	Conducted Spurious emissions	$\pm 2.58\text{dB}$
7	AC Power Line Conducted Emission	$\pm 3.44\text{dB}$ (0.15MHz ~ 30MHz)
8	Radiated Spurious emission test	$\pm 3.1\text{dB}$ (9kHz-30MHz)
		$\pm 3.8039\text{dB}$ (30MHz-200MHz)
		$\pm 3.9679\text{dB}$ (200MHz-1GHz)
		$\pm 4.29\text{dB}$ (1GHz-18GHz)
		$\pm 3.30\text{dB}$ (18GHz-40GHz)
9	Temperature test	$\pm 1^\circ\text{C}$
10	Humidity test	$\pm 3\%$
11	Time	$\pm 3\%$

5 General Information

5.1 General Description of EUT

Product Name:	GPON ONT
Model No.:	PG2142
Test Model No:	PG2142
Remark: There are no series models.	
Test sample(s) ID:	GTSL2025050367-2
Sample(s) Status:	Engineer sample
S/N:	KAON14xyyzz
Operation Frequency:	802.11a/802.11n(HT20)/802.11ac(HT20)/802.11ax(HE20): 5745MHz~ 5825MHz 802.11n(HT40)/ 802.11ac(HT40) 802.11ax(HE40): 5755MHz ~ 5795MHz 802.11ac(HT80) 802.11ax(HE80): 5775MHz
Channel numbers:	802.11a/802.11n(HT20)/802.11ac(HT20)/802.11ax(HE20): 5 802.11n(HT40)/ 802.11ac(HT40)/802.11ax(HE40): 2 802.11ac(HT80)/802.11ax(HE80): 1
Channel bandwidth:	802.11a/802.11n(HT20)/802.11ac(HT20)/802.11ax(HE20): 20MHz 802.11n(HT40)/802.11ac(HT40)/802.11ax(HE40): 40MHz 802.11ac(HT80)/802.11ax(HE80): 80MHz
Modulation technology:	Orthogonal Frequency Division Multiplexing (OFDM)
Antenna Type:	PCB Antenna
Antenna gain:	3.3 dBi
Power supply:	12V 1.5A

Remark:

1. Antenna gain information provided by the customer
2. The relevant information of the sample is provided by the entrusting company, and the laboratory is not responsible for its authenticity.

Operation Frequency each of channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
149	5745MHz	151	5755MHz	153	5765MHz	155	5775MHz
157	5785MHz	159	5795MHz	161	5805MHz	163	5815MHz
165	5825MHz						

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:

Test channel	Frequency (MHz)		
	802.11 a/n/ac(HT20))/ax(HE20)	802.11 n/ac(HT40)/ax(HE40)	802.11ac(HT80)/ax(HE80)
Lowest channel	5745	5755	
Middle channel	5785		5775
Highest channel	5825	5795	

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:

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

Mode	Data rate	Mode	Data rate
802.11a	6Mbps	802.11n/ac(HT40)/ax(HE40)	13Mbps
802.11n/ac(HT20)/ax(HE20)	6.5Mbps	802.11ac(HT80)/ax(HE80)	29.3Mbps

5.3 Description of Support Units

Manufacturer	Description	Model	Serial Number
Supplied by client	adapter	A2678	AC24YFOE52222096
Insta 360	Charging base	CINSBBEA	N/A

5.4 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.

- **ISED—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 ISED 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).

5.5 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

5.6 Additional Instructions

Test Software	Secure CRT (Version 6.2.3)
Power level setup	Default

6 Test Instruments list

Radiated Emission:						
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	Apr. 11, 2025	Apr. 10, 2026
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	Apr. 12, 2025	Apr. 11, 2026
4	BiConiLog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9168	GTS640	Apr. 12, 2025	Apr. 11, 2026
5	Double -ridged waveguide horn	SCHWARZBECK MESS-ELEKTRONIK	BBHA 9120 D	GTS208	Apr. 11, 2025	Apr. 10, 2026
6	Wideband Radio Communication Tester	Rohde & Schwarz	CMW500	GTS575	Jul. 01, 2025	Jun. 30, 2026
7	Loop Antenna	ZHINAN	ZN30900A	GTS534	Nov.16, 2024	Nov.15, 2025
8	Broadband Preamplifier	SCHWARZBECK	BBV9718	GTS535	Apr. 11, 2025	Apr. 10, 2026
9	Amplifier(1GHz-26.5GHz)	HP	8449B	GTS601	Apr. 11, 2025	Apr. 10, 2026
10	Horn Antenna (18GH-40GHz)	Schwarzbeck	BBHA 9170	GTS691	Apr. 11, 2025	Apr. 10, 2026
11	FSV·Signal Analyzer (10Hz-40GHz)	Keysight	FSV-40-N	GTS666	Mar. 11, 2025	Mar. 10, 2026
12	Amplifier	/	LNA-1000-30S	GTS650	Apr. 11, 2025	Apr. 10, 2026
13	CDNE M2+M3-16A	HCT	30MHz-300MHz	GTS692	Nov. 13, 2024	Nov. 12, 2025
14	Wideband Amplifier	/	WDA-01004000-15P35	GTS602	Apr. 11, 2025	Apr. 10, 2026
15	Thermo meter	JINCHUANG	GSP-8A	GTS643	Apr. 15, 2025	Apr. 14, 2026
16	RE cable 1	GTS	N/A	GTS675	Jul. 01, 2025	Jun. 30, 2026
17	RE cable 2	GTS	N/A	GTS676	Jul. 01, 2025	Jun. 30, 2026
18	RE cable 3	GTS	N/A	GTS677	Jul. 01, 2025	Jun. 30, 2026
19	RE cable 4	GTS	N/A	GTS678	Jul. 01, 2025	Jun. 30, 2026
20	RE cable 5	GTS	N/A	GTS679	Jul. 01, 2025	Jun. 30, 2026
21	RE cable 6	GTS	N/A	GTS680	Jul. 01, 2025	Jun. 30, 2026
22	RE cable 7	GTS	N/A	GTS681	Jul. 04, 2025	Jul. 03, 2026
23	RE cable 8	GTS	N/A	GTS682	Jul. 04, 2025	Jul. 03, 2026
24	EMI Test Software	AUDIX	E3-6.100614a	GTS725	N/A	N/A

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	Jul. 12, 2022	Jul. 11, 2027
2	EMI Test Receiver	R&S	ESCI 7	GTS552	Apr. 12, 2025	Apr. 11, 2026
3	LISN	ROHDE & SCHWARZ	ENV216	GTS226	Apr. 11, 2025	Apr. 10, 2026
4	Coaxial Cable	GTS	N/A	GTS227	N/A	N/A
5	Thermo meter	JINCHUANG	GSP-8A	GTS642	Apr. 15, 2025	Apr. 14, 2026
6	Absorbing clamp	Elektronik-Feinmechanik	MDS21	GTS229	Apr. 12, 2025	Apr. 11, 2026
7	ISN	SCHWARZBECK	NTFM 8158	GTS565	Apr. 11, 2025	Apr. 10, 2026
8	High voltage probe	SCHWARZBECK	TK9420	GTS537	Apr. 11, 2025	Apr. 10, 2026
9	Antenna end assembly	Weinschel	1870A	GTS560	Apr. 11, 2025	Apr. 10, 2026
10	JS32-CE	Tonscend	N/A	GTS905	N/A	N/A

RF Conducted Test:						
Item	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	Apr. 11, 2025	Apr. 10, 2026
2	EMI Test Receiver	R&S	ESCI 7	GTS552	Apr. 12, 2025	Apr. 11, 2026
3	ESG Analog Signal Generator	Agilent	E4428C	GTS568	Apr. 11, 2025	Apr. 10, 2026
4	Wideband Power Meter	Keysight	N1924A	GTS673	Apr. 11, 2025	Apr. 10, 2026
5	USB RF Power Sensor	DARE	RPR3006W	GTS569	Apr. 11, 2025	Apr. 10, 2026
6	RF Switch Box	Shongyi	RFSW3003328	GTS571	Apr. 11, 2025	Apr. 10, 2026
7	Programmable Constant Temp & Humi Test Chamber	WEWON	WHTH-150L-40-880	GTS572	Apr. 11, 2025	Apr. 10, 2026
8	Thermo meter	JINCHUANG	GSP-8A	GTS641	Apr. 15, 2025	Apr. 14, 2026
9	UXA Signal Analyzer	keysight	N9040B-550	GTS901	Jul. 30, 2024	Jul. 29, 2025
10	MXG Vector Signal Generator	keysight	N5182B	GTS902	Jul. 30, 2024	Jul. 29, 2025
11	RF Contorl Unit	Tonscend	JS0806-2	GTS903	Aug. 19, 2024	Aug. 18, 2025

General used equipment:						
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
1	Barometer	KUMAO	SF132	GTS647	Aug. 17, 2024	Aug. 16, 2025

7 Test results and Measurement Data

7.1 Antenna requirement

Standard requirement:	FCC Part15 C Section 15.203
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.	
E.U.T Antenna:	
The antenna is PCB antenna, reference to the appendix II for details	

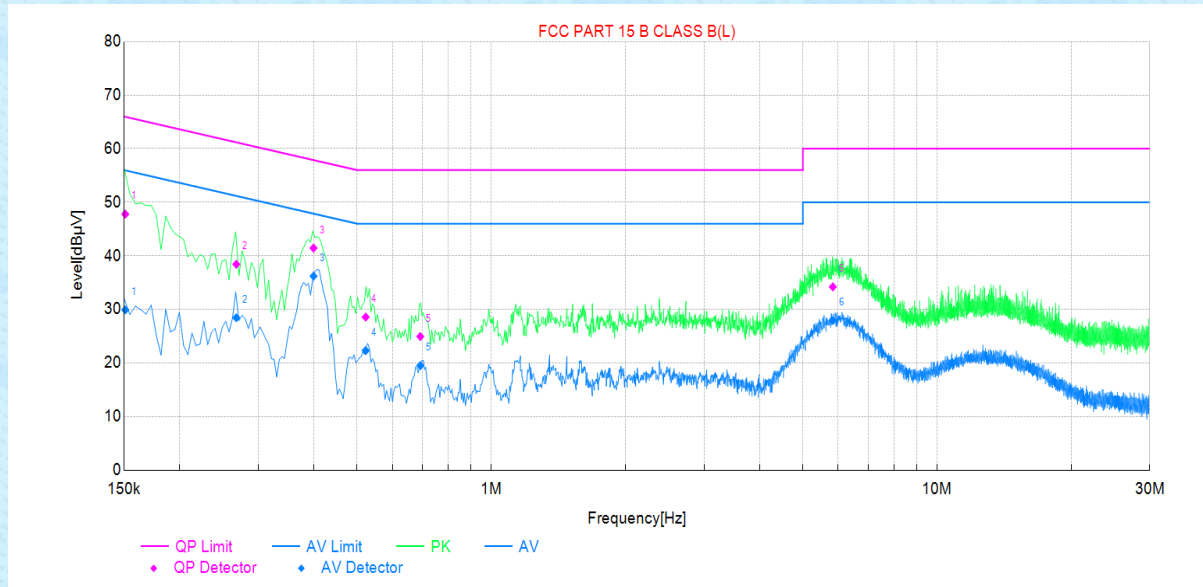
7.2 Conducted Emissions

Test Requirement:	FCC Part15 C Section 15.207					
Test Method:	ANSI C63.10:2013					
Test Frequency Range:	150KHz to 30MHz					
Receiver setup:	RBW=9KHz, VBW=30KHz, Sweep time=auto					
Limit:	Frequency range (MHz)		Limit (dBuV)			
			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 setup:	Reference Plane Remark E.U.T: Equipment Under Test LISN: Line Impedance Stabilization Network Test table height=0.8m					
Test procedure:	1. The E.U.T and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm/50uH coupling impedance for the measuring equipment. 2. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs). 3. Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10:2013 on conducted measurement.					
Test Instruments:	Refer to section 6.0 for details					
Test mode:	Refer to section 5.2 for details					
Test environment:	Temp.:	25 °C	Humid.:	52%	Press.:	1012mbar
Test voltage:	AC 120V, 60Hz					
Test results:	Pass					

Measurement data

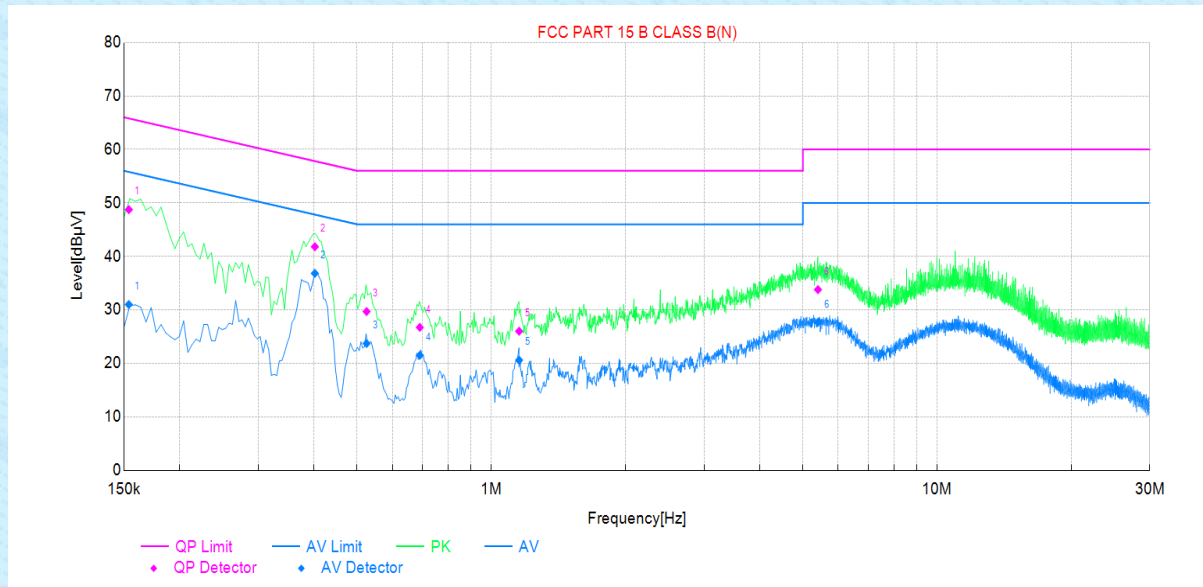
Pre-scan all test modes, found worst case at 802.11ac(VHT80) 5775MHz, and so only show the test result of it.

Line:



NO.	Frequency [MHz]	Factor [dB]	QP Reading [dBμV]	QP Value [dBμV]	QP Limit [dBμV]	QP Margin [dB]	AV Reading [dBμV]	AV Value [dBμV]	AV Limit [dBμV]	AV Margin [dB]	Verdict
1	0.1509	19.91	27.87	47.78	65.95	18.17	9.99	29.90	55.95	26.05	PASS
2	0.2678	19.92	18.51	38.43	61.19	22.76	8.52	28.44	51.19	22.75	PASS
3	0.3991	19.93	21.52	41.45	57.87	16.42	16.27	36.20	47.87	11.67	PASS
4	0.5225	19.94	8.63	28.57	56.00	27.43	2.38	22.32	46.00	23.68	PASS
5	0.6929	19.92	4.98	24.93	56.00	31.07	-0.45	19.50	46.00	26.50	PASS
6	5.8377	20.10	14.10	34.20	60.00	25.80	7.84	27.94	50.00	22.06	PASS

Neutral:

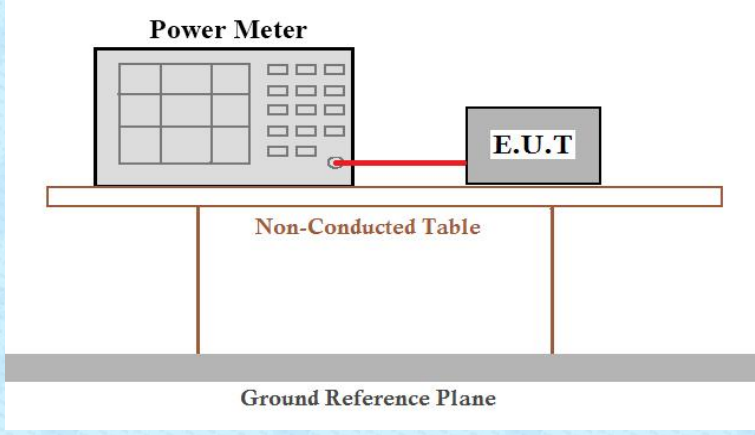


NO.	Frequency [MHz]	Factor [dB]	QP Reading [dBμV]	QP Value [dBμV]	QP Limit [dBμV]	QP Margin [dB]	AV Reading [dBμV]	AV Value [dBμV]	AV Limit [dBμV]	AV Margin [dB]	Verdict
1	0.1537	19.81	28.94	48.75	65.80	17.05	11.19	31.00	55.80	24.80	PASS
2	0.4019	19.83	21.98	41.81	57.81	16.00	17.00	36.83	47.81	10.98	PASS
3	0.5250	19.84	9.85	29.69	56.00	26.31	3.88	23.72	46.00	22.28	PASS
4	0.6911	19.85	6.88	26.73	56.00	29.27	1.66	21.51	46.00	24.49	PASS
5	1.1544	19.88	6.13	26.01	56.00	29.99	0.72	20.60	46.00	25.40	PASS
6	5.4060	19.99	13.80	33.79	60.00	26.21	7.70	27.69	50.00	22.31	PASS

Notes:

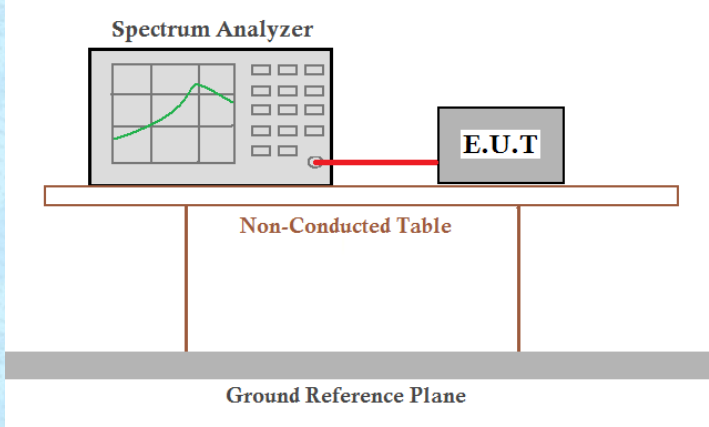
1. An initial pre-scan was performed on the line and neutral lines with peak detector.
2. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
3. Level=Reading+Factor
4. If the average limit is met when using a quasi-peak detector receiver, the EUT shall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

7.3 Maximum Conducted Output Power

Test Requirement:	FCC Part15 E Section 15.407(a)(3)
Test Method:	ANSI C63.10:2013 and KDB 789033 D02 General U-NII Test Procedures New Rules v02r01
Limit:	30dBm
Duty Cycle set up:	RBW=VBW=8MHz
Test setup:	 The diagram illustrates the test setup. A Power Meter is connected to an E.U.T. (Equipment Under Test) via a red cable. Both the Power Meter and the E.U.T. are placed on a Non-Conducted Table. The table is supported by a Ground Reference Plane.
Test Instruments:	Refer to section 6.0 for details
Test mode:	Refer to section 5.2 for details
Test results:	Pass

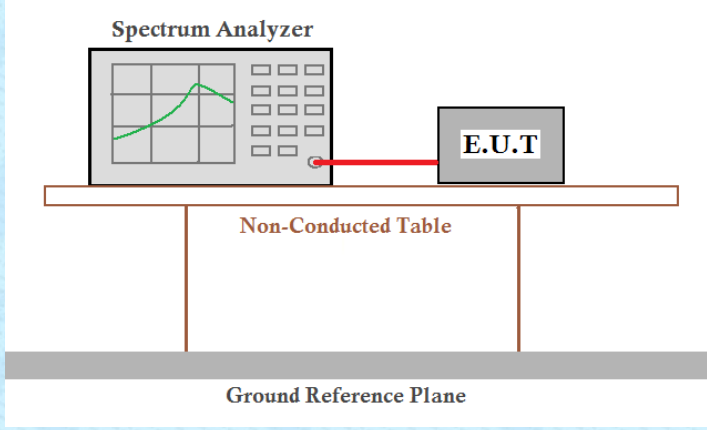
Measurement Data: The detailed test data see Appendix.

7.4 Channel Bandwidth and 99% Occupied Bandwidth

Test Requirement:	FCC Part15 E Section 15.407(e)
Test Method:	ANSI C63.10:2013 and KDB 789033 D02 General U-NII Test Procedures New Rules v02r01
Limit:	>500KHz
Test setup:	 The diagram illustrates the test setup. A Spectrum Analyzer is connected to an E.U.T. (Equipment Under Test) via a red cable. Both are placed on a Non-Conducted Table, which is supported by a 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.

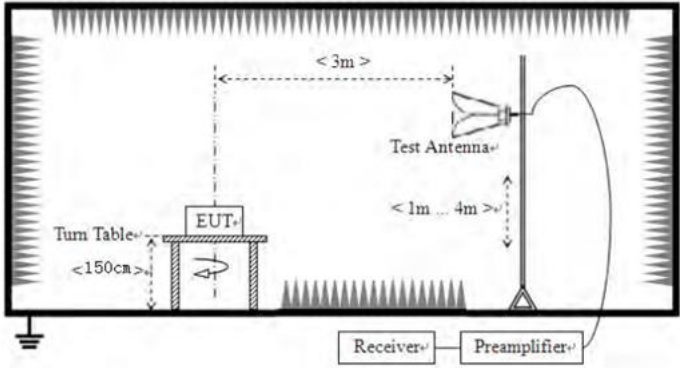
7.5 Power Spectral Density

Test Requirement:	FCC Part15 E Section 15.407(a)(3)
Test Method:	ANSI C63.10:2013 and KDB 789033 D02 General U-NII Test Procedures New Rules v02r01
Limit:	30dBm/500kHz
Test setup:	 The diagram illustrates the test setup. A Spectrum Analyzer is connected to an E.U.T. (Equipment Under Test) via a red cable. Both the Spectrum Analyzer and the E.U.T. are placed on a Non-Conducted Table. The table is supported by a 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.

7.6 Band edge

7.6.1 Radiated Emission Method

Test Requirement:	FCC Part15 C Section 15.209 and 15.205				
Test Method:	ANSI C63.10: 2013				
Test Frequency Range:	9kHz to 40GHz, only worse case is reported				
Test site:	Measurement Distance: 3m				
Receiver setup:	Frequency	Detector	RBW	VBW	Value
	Above 1GHz	Peak	1MHz	3MHz	Peak
		RMS	1MHz	3MHz	RMS
Limit:	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 25 MHz 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 27 dBm/MHz at the band edge.				
Test setup:					
Test Procedure:	1. The EUT was placed on the top of a rotating table 1.5 meters 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. 3. 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. 4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rota table was turned from 0 degrees to 360 degrees to find the maximum reading. 5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. 6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet. 7. The radiation measurements are performed in X, Y, Z axis positioning. And found the X axis positioning which it is worse case, only the test worst case mode is recorded in the report.				
Test Instruments:	Refer to section 6.0 for details				
Test mode:	Refer to section 5.2 for details				

Test results:	Pass
---------------	------

Remarks:

1. *Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor*
2. *The emission levels of other frequencies are very lower than the limit and not show in test report.*
3. *The pre-test were performed on lowest, middle and highest frequencies, only the worst case's (lowest and highest frequencies) data was showed.*
4. *According to KDB 789033 D02v02r01 section G) 1) d), for measurements above 1000 MHz @3m distance, the limit of field strength is computed as follows:*

$$E[\text{dBuV/m}] = \text{EIRP}[\text{dBm}] + 95.2;$$

$$E[\text{dBuV/m}] = -27 + 95.2 = 68.2\text{dBuV/m}.$$

$$E[\text{dBuV/m}] = 10 + 95.2 = 105.2\text{dBuV/m}.$$

$$E[\text{dBuV/m}] = 15.6 + 95.2 = 110.8\text{dBuV/m}.$$

$$E[\text{dBuV/m}] = 27 + 95.2 = 122.2\text{dBuV/m}$$

Measurement data:

mode:		802.11a		Test Frequency:		5745MHz	
Frequency	Reading	Level	Factor	Limit	Margin	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dBμV/m)	(dB)	(dBμV/m)	(dB)		H/V
5634.69	48.69	60.61	11.92	68.30	7.69	peak	H
5925.79	48.51	61.56	13.05	68.30	6.74	peak	H
5638.75	49.63	61.55	11.92	68.30	6.75	peak	V
5948.38	48.94	62.06	13.12	68.30	6.24	peak	V
mode:		802.11a		Test Frequency:		5785MHz	
Frequency	Reading	Level	Factor	Limit	Margin	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dBμV/m)	(dB)	(dBμV/m)	(dB)		H/V
5631.99	48.86	60.78	11.92	68.30	7.52	peak	H
5946.88	49.50	62.62	13.12	68.30	5.68	peak	H
5633.39	48.47	60.40	11.93	68.30	7.90	peak	V
5926.24	48.62	61.67	13.05	68.30	6.63	peak	V
mode:		802.11a		Test Frequency:		5825MHz	
Frequency	Reading	Level	Factor	Limit	Margin	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dBμV/m)	(dB)	(dBμV/m)	(dB)		H/V
5647.26	48.58	60.49	11.91	68.30	7.81	peak	H
5927.19	48.45	61.50	13.05	68.30	6.80	peak	H
5630.79	49.28	61.20	11.92	68.30	7.10	peak	V
5930.50	52.22	65.28	13.06	68.30	3.02	peak	V

mode:		802.11n(HT20)		Test Frequency:		5745MHz	
Frequency	Reading	Level	Factor	Limit	Margin	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dBμV/m)	(dB)	(dBμV/m)	(dB)		H/V
5648.53	49.51	61.43	11.92	68.30	6.87	peak	H
5928.78	48.95	62.01	13.06	68.30	6.29	peak	H
5637.71	49.62	61.54	11.92	68.30	6.76	peak	V
5933.62	48.32	61.39	13.07	68.30	6.91	peak	V
mode:		802.11n(HT20)		Test Frequency:		5785MHz	
Frequency	Reading	Level	Factor	Limit	Margin	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dBμV/m)	(dB)	(dBμV/m)	(dB)		H/V
5647.65	48.12	60.03	11.91	68.30	8.27	peak	H
5926.21	48.42	61.47	13.05	68.30	6.83	peak	H
5628.06	48.31	60.23	11.92	68.30	8.07	peak	V
5947.63	48.97	62.09	13.12	68.30	6.21	peak	V
mode:		802.11n(HT20)		Test Frequency:		5825MHz	
Frequency	Reading	Level	Factor	Limit	Margin	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dBμV/m)	(dB)	(dBμV/m)	(dB)		H/V
5639.04	49.20	61.12	11.92	68.30	7.18	peak	H
5938.69	48.70	61.79	13.09	68.30	6.51	peak	H
5640.70	48.52	60.44	11.92	68.30	7.86	peak	V
5923.74	53.76	66.79	13.03	69.23	2.44	peak	V

mode:		802.11n(HT40)		Test Frequency:		5755MHz	
Frequency	Reading	Level	Factor	Limit	Margin	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dBμV/m)	(dB)	(dBμV/m)	(dB)		H/V
5652.66	55.39	67.31	11.92	70.27	2.96	peak	H
5946.36	49.74	62.86	13.12	68.30	5.44	peak	H
5645.67	54.67	66.59	11.92	68.30	1.71	peak	V
5925.56	52.66	65.71	13.05	68.30	2.59	peak	V
mode:		802.11n(HT40)		Test Frequency:		5795MHz	
Frequency	Reading	Level	Factor	Limit	Margin	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dBμV/m)	(dB)	(dBμV/m)	(dB)		H/V
5641.35	49.39	61.31	11.92	68.30	6.99	peak	H
5932.61	50.17	63.24	13.07	68.30	5.06	peak	H
5649.64	48.53	60.45	11.92	68.30	7.85	peak	V
5927.22	53.78	66.83	13.05	68.30	1.47	peak	V

mode:		802.11ac(HT20)		Test Frequency:		5745MHz	
Frequency	Reading	Level	Factor	Limit	Margin	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dBμV/m)	(dB)	(dBμV/m)	(dB)		H/V
5649.60	49.44	61.36	11.92	68.30	6.94	peak	H
5927.12	48.67	61.72	13.05	68.30	6.58	peak	H
5640.96	49.15	61.07	11.92	68.30	7.23	peak	V
5931.87	48.36	61.42	13.06	68.30	6.88	peak	V
mode:		802.11ac(HT20)		Test Frequency:		5785MHz	
Frequency	Reading	Level	Factor	Limit	Margin	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dBμV/m)	(dB)	(dBμV/m)	(dB)		H/V
5628.54	48.83	60.75	11.92	68.30	7.55	peak	H
5932.87	49.41	62.48	13.07	68.30	5.82	peak	H
5642.49	48.53	60.45	11.92	68.30	7.85	peak	V
5927.41	48.02	61.07	13.05	68.30	7.23	peak	V
mode:		802.11ac(HT20)		Test Frequency:		5825MHz	
Frequency	Reading	Level	Factor	Limit	Margin	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dBμV/m)	(dB)	(dBμV/m)	(dB)		H/V
5629.13	48.57	60.50	11.93	68.30	7.80	peak	H
5939.34	48.90	61.99	13.09	68.30	6.31	peak	H
5632.12	49.52	61.44	11.92	68.30	6.86	peak	V
5925.95	50.56	63.61	13.05	68.30	4.69	peak	V

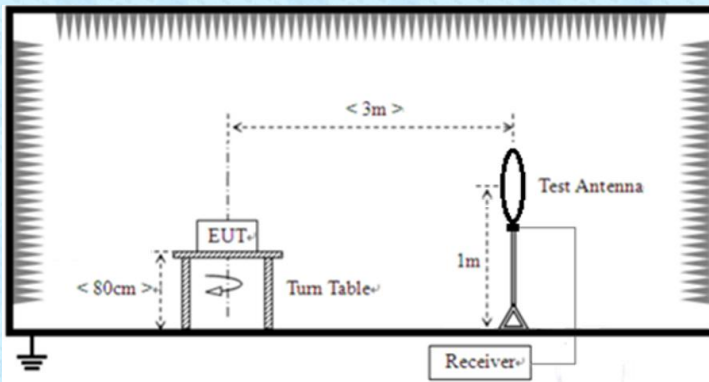
mode:		802.11ac(HT40)		Test Frequency:		5755MHz	
Frequency	Reading	Level	Factor	Limit	Margin	Detector	Ant. Pol.
(MHz)	(dBμV)	(dBμV/m)	(dB)	(dBμV/m)	(dB)	Type	H/V
5651.78	54.21	66.13	11.92	69.62	3.49	peak	H
5937.81	50.27	63.36	13.09	68.30	4.94	peak	H
5645.93	54.82	66.74	11.92	68.30	1.56	peak	V
5931.44	51.89	64.95	13.06	68.30	3.35	peak	V
mode:		802.11ac(HT40)		Test Frequency:		5795MHz	
Frequency	Reading	Level	Factor	Limit	Margin	Detector	Ant. Pol.
(MHz)	(dBμV)	(dBμV/m)	(dB)	(dBμV/m)	(dB)	Type	H/V
5639.63	48.60	60.52	11.92	68.30	7.78	peak	H
5927.61	50.04	63.09	13.05	68.30	5.21	peak	H
5647.72	49.40	61.31	11.91	68.30	6.99	peak	V
5924.29	55.06	68.10	13.04	68.82	0.72	peak	V
mode:		802.11ac(HT80)		Test Frequency:		5775MHz	
Frequency	Reading	Level	Factor	Limit	Margin	Detector	Ant. Pol.
(MHz)	(dBμV)	(dBμV/m)	(dB)	(dBμV/m)	(dB)	Type	H/V
5649.64	52.08	64.00	11.92	68.30	4.30	peak	H
5925.43	52.87	65.92	13.05	68.30	2.38	peak	H
5648.92	51.73	63.65	11.92	68.30	4.65	peak	V
5928.94	54.59	67.65	13.06	68.30	0.65	peak	V

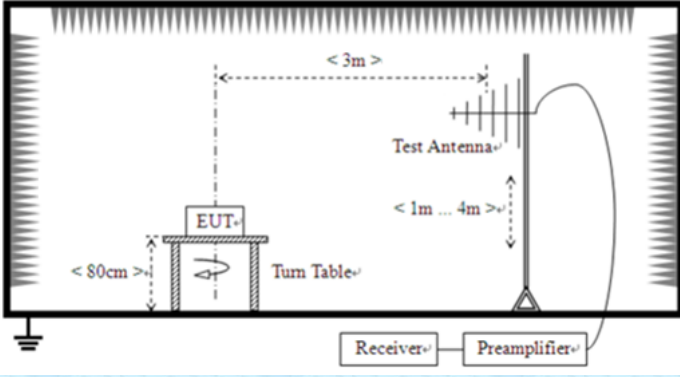
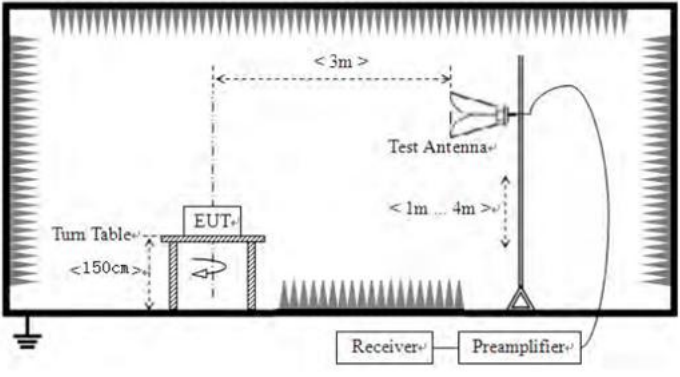
mode:		802.11ax(HE20)		Test Frequency:		5745MHz	
Frequency	Reading	Level	Factor	Limit	Margin	Detector	Ant. Pol.
(MHz)	(dBμV)	(dBμV/m)	(dB)	(dBμV/m)	(dB)	Type	H/V
5630.92	49.15	61.07	11.92	68.30	7.23	peak	H
5927.06	47.72	60.77	13.05	68.30	7.53	peak	H
5633.42	48.26	60.19	11.93	68.30	8.11	peak	V
5934.66	48.71	61.78	13.07	68.30	6.52	peak	V
mode:		802.11ax(HE20)		Test Frequency:		5785MHz	
Frequency	Reading	Level	Factor	Limit	Margin	Detector	Ant. Pol.
(MHz)	(dBμV)	(dBμV/m)	(dB)	(dBμV/m)	(dB)	Type	H/V
5635.76	47.81	59.73	11.92	68.30	8.57	peak	H
5936.38	48.24	61.32	13.08	68.30	6.98	peak	H
5646.00	48.69	60.61	11.92	68.30	7.69	peak	V
5930.01	47.89	60.95	13.06	68.30	7.35	peak	V
mode:		802.11ax(HE20)		Test Frequency:		5825MHz	
Frequency	Reading	Level	Factor	Limit	Margin	Detector	Ant. Pol.
(MHz)	(dBμV)	(dBμV/m)	(dB)	(dBμV/m)	(dB)	Type	H/V
5649.41	48.28	60.20	11.92	68.30	8.10	peak	H
5931.64	47.83	60.89	13.06	68.30	7.41	peak	H
5642.29	50.33	62.25	11.92	68.30	6.05	peak	V
5938.37	48.43	61.52	13.09	68.30	6.78	peak	V

mode:		802.11ax(HE40)		Test Frequency:		5755MHz	
Frequency	Reading	Level	Factor	Limit	Margin	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dBμV/m)	(dB)	(dBμV/m)	(dB)		H/V
5649.41	54.53	66.45	11.92	68.30	1.85	peak	H
5939.83	49.40	62.49	13.09	68.30	5.81	peak	H
5650.90	54.78	66.69	11.91	68.97	2.28	peak	V
5926.11	51.90	64.95	13.05	68.30	3.35	peak	V
mode:		802.11ax(HE40)		Test Frequency:		5795MHz	
Frequency	Reading	Level	Factor	Limit	Margin	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dBμV/m)	(dB)	(dBμV/m)	(dB)		H/V
5636.25	49.20	61.12	11.92	68.30	7.18	peak	H
5935.28	49.73	62.81	13.08	68.30	5.49	peak	H
5645.41	48.89	60.81	11.92	68.30	7.49	peak	V
5924.26	53.56	66.60	13.04	68.85	2.25	peak	V
mode:		802.11ax(HE80)		Test Frequency:		5775MHz	
Frequency	Reading	Level	Factor	Limit	Margin	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dBμV/m)	(dB)	(dBμV/m)	(dB)		H/V
5649.60	51.79	63.71	11.92	68.30	4.59	peak	H
5927.80	53.30	66.35	13.05	68.30	1.95	peak	H
5643.95	51.42	63.33	11.91	68.30	4.97	peak	V
5927.74	54.56	67.61	13.05	68.30	0.69	peak	V
5931.90	54.91	67.97	13.06	68.30	0.33	peak	V

7.7 Spurious Emission

7.7.1 Radiated Emission Method

Test Requirement:	FCC Part15 C Section 15.209, Part 15E Section 15.407(b)(4)																												
Test Method:	ANSI C63.10:2013																												
Test Frequency Range:	9kHz to 40GHz																												
Test site:	Measurement Distance: 3m																												
Receiver setup:	Frequency	Detector	RBW	VBW	Value																								
	9kHz-150KHz	Quasi-peak	200Hz	1kHz	Quasi-peak Value																								
	150kHz-30MHz	Quasi-peak	9kHz	30kHz	Quasi-peak Value																								
	30MHz-1GHz	Quasi-peak	120KHz	300KHz	Quasi-peak Value																								
	Above 1GHz	Peak	1MHz	3MHz	Peak Value																								
		AV	1MHz	3MHz	Average Value																								
Note: For Duty cycle ≥ 98%, average detector set as above For Duty cycle < 98%, average detector set as below: VBW ≥ 1 / T																													
Limit:	<table><tr><th>Frequency (MHz)</th><th>Field strength (microvolts/meter)</th><th>Measurement distance (meters)</th></tr><tr><td>0.009-0.490</td><td>2400/F(kHz)</td><td>300</td></tr><tr><td>0.490-1.705</td><td>24000/F(kHz)</td><td>30</td></tr><tr><td>1.705-30.0</td><td>30</td><td>30</td></tr><tr><td>30-88</td><td>100**</td><td>3</td></tr><tr><td>88-216</td><td>150**</td><td>3</td></tr><tr><td>216-960</td><td>200**</td><td>3</td></tr><tr><td>Above 960</td><td>500</td><td>3</td></tr></table>					Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)	0.009-0.490	2400/F(kHz)	300	0.490-1.705	24000/F(kHz)	30	1.705-30.0	30	30	30-88	100**	3	88-216	150**	3	216-960	200**	3	Above 960	500	3
	Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)																										
	0.009-0.490	2400/F(kHz)	300																										
	0.490-1.705	24000/F(kHz)	30																										
	1.705-30.0	30	30																										
	30-88	100**	3																										
	88-216	150**	3																										
	216-960	200**	3																										
	Above 960	500	3																										
	The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.																												
Test setup:	For radiated emissions from 9kHz to 30MHz																												
																													
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 1GHz and 1.5 meters for above 1GHz) 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. 3. 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. 4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rota table was turned from 0 degrees to 360 degrees to find the maximum reading. 5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. 6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet. 7. The radiation measurements are performed in X, Y, Z axis positioning. And found the X axis positioning which it is worse case, only the test worst case mode is recorded in the report.
Test Instruments:	Refer to section 6.0 for details
Test mode:	Refer to section 5.2 for details

Test environment:	Temp.:	25 °C	Humid.:	52%	Press.:	1012mbar
Test voltage:	AC 120V, 60Hz					
Test results:	Pass					

Remarks:

1. Pre-scan all kind of the place mode (X-axis, Y-axis, Z-axis), and found the Y-axis which it is worse case.

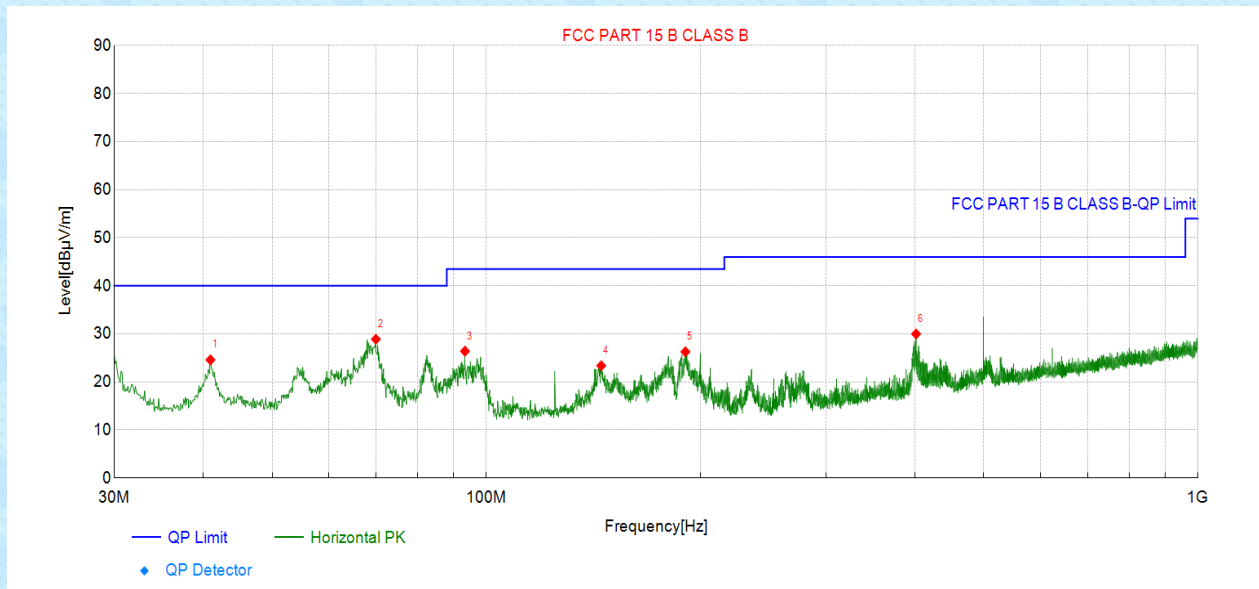
Measurement Data:

9 kHz ~ 30 MHz

The low frequency, which started from 9 kHz to 30 MHz, was pre-scanned and the result which was 20 dB lower than the limit line per 15.31(o) was not reported.

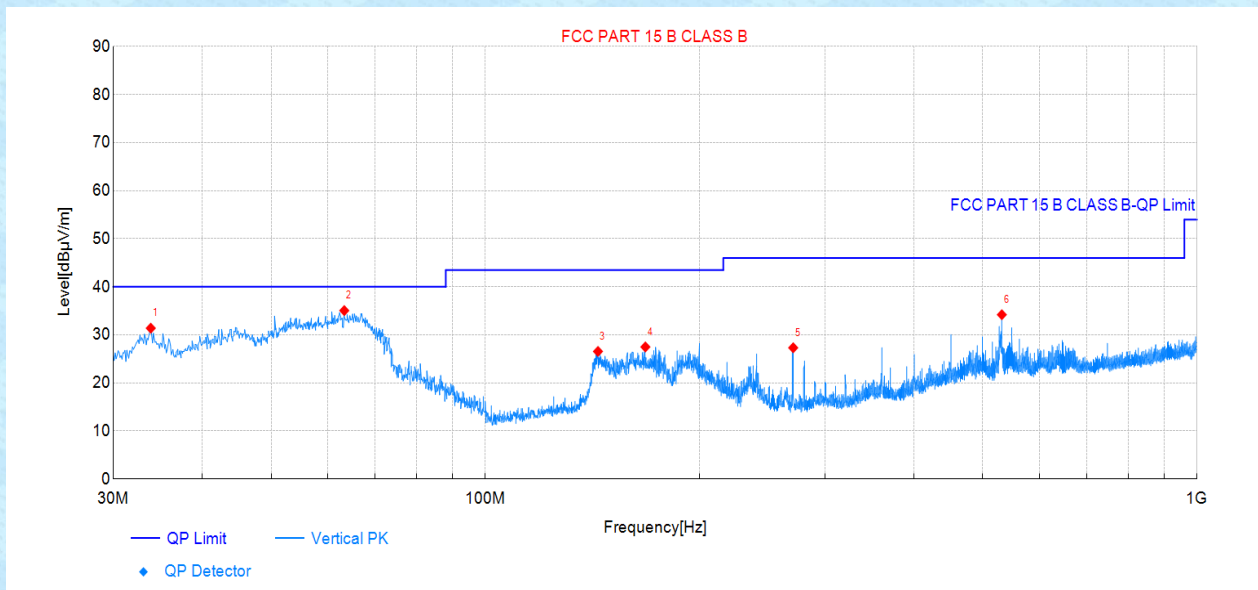
Below 1GHz

Pre-scan all test modes, found worst case at 802.11ac(VHT80) 5775MHz, and so only show the test result of it.

Horizontal:

NO.	Frequenc y [MHz]	Readin g [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margi n [dB]	Det	Pol	Verdic t
1	40.96	47.05	24.60	-22.45	40.00	15.40	PK	Horizontal 	PASS
2	69.96	54.12	28.90	-25.22	40.00	11.10	PK	Horizontal 	PASS
3	93.34	52.95	26.41	-26.54	43.50	17.09	PK	Horizontal 	PASS
4	145.04	45.08	23.38	-21.70	43.50	20.12	PK	Horizontal 	PASS
5	190.44	51.14	26.28	-24.86	43.50	17.22	PK	Horizontal 	PASS
6	401.70	48.95	29.99	-18.96	46.00	16.01	PK	Horizontal 	PASS

Vertical:



NO.	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Det	Pol	Verdict
1	33.88	54.68	31.40	-23.28	40.00	8.60	PK	Vertical	PASS
2	63.37	59.17	35.06	-24.11	40.00	4.94	PK	Vertical	PASS
3	143.98	48.38	26.56	-21.82	43.50	16.94	PK	Vertical	PASS
4	167.84	49.64	27.49	-22.15	43.50	16.01	PK	Vertical	PASS
5	270.75	50.21	27.32	-22.89	46.00	18.68	PK	Vertical	PASS
6	531.78	50.15	34.20	-15.95	46.00	11.80	PK	Vertical	PASS

Above 1GHz:

802.11a				Test Frequency: 5745MHz		
Frequency	Reading	Level	Factor	Limit	Margin	polarization
(MHz)	(dBμV)	(dBμV/m)	(dB)	(dBμV/m)	(dB)	
11490.00	52.96	60.46	7.50	74.00	13.54	Vertical
17232.00	47.63	60.37	12.74	68.20	7.83	Vertical
11487.00	53.22	60.73	7.51	74.00	13.27	Horizontal
17237.00	53.89	66.64	12.75	68.20	1.56	Horizontal
3830.10	39.82	47.12	7.30	54.00	6.88	Vertical
11490.00	37.42	44.92	7.50	54.00	9.08	Vertical
11489.00	41.63	49.13	7.50	54.00	4.87	Horizontal
17238.00	32.97	45.72	12.75	-	-	Horizontal
802.11a				Test Frequency: 5785MHz		
Frequency	Reading	Level	Factor	Limit	Margin	polarization
(MHz)	(dBμV)	(dBμV/m)	(dB)	(dBμV/m)	(dB)	
11567.00	56.76	64.46	7.70	74.00	9.54	Vertical
17358.00	51.93	65.14	13.21	68.20	3.06	Vertical
11572.00	54.94	62.67	7.73	74.00	11.33	Horizontal
17351.00	54.14	67.32	13.18	68.20	0.88	Horizontal
3856.70	37.02	44.42	7.40	54.00	9.58	Vertical
11572.00	37.89	45.62	7.73	54.00	8.38	Vertical
11572.00	40.98	48.71	7.73	54.00	5.29	Horizontal
17354.00	38.50	51.70	13.20	-	-	Horizontal
802.11a				Test Frequency: 5825MHz		
Frequency	Reading	Level	Factor	Limit	Margin	polarization
(MHz)	(dBμV)	(dBμV/m)	(dB)	(dBμV/m)	(dB)	
11651.00	53.06	60.63	7.57	74.00	13.37	Vertical
17484.00	51.28	65.23	13.95	68.20	2.97	Vertical
11652.00	54.41	61.97	7.56	74.00	12.03	Horizontal
17488.00	53.26	67.24	13.98	68.20	0.96	Horizontal
3883.30	38.66	46.15	7.49	54.00	7.85	Vertical
11643.00	33.32	40.93	7.61	54.00	13.07	Vertical
3883.30	33.06	40.55	7.49	54.00	13.45	Horizontal
11651.00	41.49	49.06	7.57	54.00	4.94	Horizontal

802.11n(HT20)				Test Frequency: 5745MHz		
Frequency	Reading	Level	Factor	Limit	Margin	polarization
(MHz)	(dBμV)	(dBμV/m)	(dB)	(dBμV/m)	(dB)	
11490.00	55.82	63.32	7.50	74.00	10.68	Vertical
17236.00	48.33	61.08	12.75	68.20	7.12	Vertical
11482.00	54.95	62.50	7.55	74.00	11.50	Horizontal
17241.00	53.77	66.54	12.77	68.20	1.66	Horizontal
3830.10	38.75	46.05	7.30	54.00	7.95	Vertical
11490.00	37.56	45.06	7.50	54.00	8.94	Vertical
3830.10	35.06	42.36	7.30	54.00	11.64	Horizontal
11489.00	41.25	48.75	7.50	54.00	5.25	Horizontal
802.11n(HT20)				Test Frequency: 5785MHz		
Frequency	Reading	Level	Factor	Limit	Margin	polarization
(MHz)	(dBμV)	(dBμV/m)	(dB)	(dBμV/m)	(dB)	
11573.00	55.74	63.47	7.73	74.00	10.53	Vertical
17357.00	50.80	64.01	13.21	68.20	4.19	Vertical
11574.00	53.55	61.28	7.73	74.00	12.72	Horizontal
17357.00	53.90	67.11	13.21	68.20	1.09	Horizontal
3856.70	36.96	44.36	7.40	54.00	9.64	Vertical
11571.00	40.06	47.78	7.72	54.00	6.22	Vertical
3551.50	35.88	41.73	5.85	-	-	Horizontal
11573.00	40.22	47.95	7.73	54.00	6.05	Horizontal
802.11n(HT20)				Test Frequency: 5825MHz		
Frequency	Reading	Level	Factor	Limit	Margin	polarization
(MHz)	(dBμV)	(dBμV/m)	(dB)	(dBμV/m)	(dB)	
11650.00	53.02	60.59	7.57	74.00	13.41	Vertical
17482.00	51.53	65.46	13.93	68.20	2.74	Vertical
11656.00	54.93	62.46	7.53	74.00	11.54	Horizontal
17470.00	54.02	67.87	13.85	68.20	0.33	Horizontal
3883.30	37.83	45.32	7.49	54.00	8.68	Vertical
11651.00	37.32	44.89	7.57	54.00	9.11	Vertical
3883.30	32.00	39.49	7.49	54.00	14.51	Horizontal
11651.00	40.93	48.50	7.57	54.00	5.50	Horizontal

802.11n(HT40)				Test Frequency: 5755MHz		
Frequency	Reading	Level	Factor	Limit	Margin	polarization
(MHz)	(dBμV)	(dBμV/m)	(dB)	(dBμV/m)	(dB)	
11508.00	55.47	62.93	7.46	74.00	11.07	Vertical
17277.00	48.55	61.44	12.89	68.20	6.76	Vertical
11512.00	53.77	61.24	7.47	74.00	12.76	Horizontal
17275.00	54.98	67.87	12.89	68.20	0.33	Horizontal
3836.40	37.34	44.67	7.33	54.00	9.33	Vertical
11516.00	37.14	44.64	7.50	54.00	9.36	Vertical
3836.40	34.29	41.62	7.33	54.00	12.38	Horizontal
11516.00	41.83	49.33	7.50	54.00	4.67	Horizontal
802.11n(HT40)				Test Frequency: 5795MHz		
Frequency	Reading	Level	Factor	Limit	Margin	polarization
(MHz)	(dBμV)	(dBμV/m)	(dB)	(dBμV/m)	(dB)	
11590.00	50.72	58.52	7.80	74.00	15.48	Vertical
17387.00	47.65	60.98	13.33	68.20	7.22	Vertical
11603.00	50.11	57.94	7.83	74.00	16.06	Horizontal
17379.00	50.46	63.76	13.30	68.20	4.44	Horizontal
3863.70	37.12	44.54	7.42	54.00	9.46	Vertical
11583.00	34.57	42.34	7.77	54.00	11.66	Vertical
3504.60	38.46	43.97	5.51	-	-	Horizontal
11596.00	36.97	44.80	7.83	54.00	9.20	Horizontal

802.11ac(HT20)				Test Frequency: 5745MHz		
Frequency	Reading	Level	Factor	Limit	Margin	polarization
(MHz)	(dBμV)	(dBμV/m)	(dB)	(dBμV/m)	(dB)	
11486.00	55.84	63.36	7.52	74.00	10.64	Vertical
17231.00	51.20	63.93	12.73	68.20	4.27	Vertical
11496.00	55.96	63.41	7.45	74.00	10.59	Horizontal
17231.00	54.33	67.06	12.73	68.20	1.14	Horizontal
3830.10	38.31	45.61	7.30	54.00	8.39	Vertical
11491.00	37.67	45.16	7.49	54.00	8.84	Vertical
3830.10	34.87	42.17	7.30	54.00	11.83	Horizontal
11489.00	43.89	51.39	7.50	54.00	2.61	Horizontal
802.11ac(HT20)				Test Frequency: 5785MHz		
Frequency	Reading	Level	Factor	Limit	Margin	polarization
(MHz)	(dBμV)	(dBμV/m)	(dB)	(dBμV/m)	(dB)	
11574.00	58.76	66.49	7.73	74.00	7.51	Vertical
17349.00	51.47	64.65	13.18	68.20	3.55	Vertical
11572.00	53.66	61.39	7.73	74.00	12.61	Horizontal
17359.00	53.32	66.53	13.21	68.20	1.67	Horizontal
3856.70	37.40	44.80	7.40	54.00	9.20	Vertical
11568.00	37.87	45.58	7.71	54.00	8.42	Vertical
3856.70	32.38	39.78	7.40	54.00	14.22	Horizontal
11568.00	40.26	47.97	7.71	54.00	6.03	Horizontal
802.11ac(HT20)				Test Frequency: 5825MHz		
Frequency	Reading	Level	Factor	Limit	Margin	polarization
(MHz)	(dBμV)	(dBμV/m)	(dB)	(dBμV/m)	(dB)	
11646.00	52.23	59.82	7.59	74.00	14.18	Vertical
17467.00	48.85	62.68	13.83	68.20	5.52	Vertical
11654.00	54.35	61.90	7.55	74.00	12.10	Horizontal
17473.00	51.10	64.98	13.88	68.20	3.22	Horizontal
3883.30	38.31	45.80	7.49	54.00	8.20	Vertical

11648.00	36.38	43.96	7.58	54.00	10.04	Vertical
3883.30	32.00	39.49	7.49	54.00	14.51	Horizontal
11650.00	40.47	48.04	7.57	54.00	5.96	Horizontal

802.11ac(HT40)				Test Frequency: 5755MHz		
Frequency	Reading	Level	Factor	Limit	Margin	polarization
(MHz)	(dBμV)	(dBμV/m)	(dB)	(dBμV/m)	(dB)	
11510.00	56.77	64.24	7.47	74.00	9.76	Vertical
17269.00	48.34	61.21	12.87	68.20	6.99	Vertical
11507.00	54.17	61.63	7.46	74.00	12.37	Horizontal
17241.00	53.91	66.68	12.77	68.20	1.52	Horizontal
3836.40	37.08	44.41	7.33	54.00	9.59	Vertical
11508.00	36.68	44.14	7.46	54.00	9.86	Vertical
3836.40	33.57	40.90	7.33	54.00	13.10	Horizontal
11509.00	41.46	48.93	7.47	54.00	5.07	Horizontal
802.11ac(HT40)				Test Frequency: 5795MHz		
Frequency	Reading	Level	Factor	Limit	Margin	polarization
(MHz)	(dBμV)	(dBμV/m)	(dB)	(dBμV/m)	(dB)	
11591.00	52.00	59.80	7.80	74.00	14.20	Vertical
17372.00	48.57	61.84	13.27	68.20	6.36	Vertical
11591.00	51.42	59.22	7.80	74.00	14.78	Horizontal
17389.00	50.47	63.80	13.33	68.20	4.40	Horizontal
3863.70	36.80	44.22	7.42	54.00	9.78	Vertical
11594.00	34.54	42.36	7.82	54.00	11.64	Vertical
3863.00	31.04	38.45	7.41	54.00	15.55	Horizontal
11591.00	37.63	45.43	7.80	54.00	8.57	Horizontal
802.11ac(HT80)				Test Frequency: 5775MHz		
Frequency	Reading	Level	Factor	Limit	Margin	polarization
(MHz)	(dBμV)	(dBμV/m)	(dB)	(dBμV/m)	(dB)	
3566.90	47.39	53.37	5.98	68.20	14.83	Vertical
11548.00	46.77	54.40	7.63	74.00	19.60	Vertical
3850.40	41.53	48.91	7.38	74.00	25.09	Horizontal

11567.00	46.29	53.99	7.70	74.00	20.01	Horizontal
3540.30	36.24	42.01	5.77	-	-	Vertical
3850.40	39.48	46.86	7.38	54.00	7.14	Vertical
1920.50	35.09	34.24	-0.85	-	-	Horizontal
3849.70	34.70	42.07	7.37	54.00	11.93	Horizontal

802.11ax(HE20)				Test Frequency: 5745MHz		
Frequency	Reading	Level	Factor	Limit	Margin	polarization
(MHz)	(dBμV)	(dBμV/m)	(dB)	(dBμV/m)	(dB)	
11485.00	55.85	63.37	7.52	74.00	10.63	Vertical
17239.00	50.72	63.48	12.76	68.20	4.72	Vertical
11491.00	55.63	63.12	7.49	74.00	10.88	Horizontal
17239.00	54.44	67.20	12.76	68.20	1.00	Horizontal
3830.10	38.15	45.45	7.30	54.00	8.55	Vertical
11490.00	37.23	44.73	7.50	54.00	9.27	Vertical
3830.10	35.41	42.71	7.30	54.00	11.29	Horizontal
11489.00	44.28	51.78	7.50	54.00	2.22	Horizontal
802.11ax(HE20)				Test Frequency: 5785MHz		
Frequency	Reading	Level	Factor	Limit	Margin	polarization
(MHz)	(dBμV)	(dBμV/m)	(dB)	(dBμV/m)	(dB)	
11571.00	55.18	62.90	7.72	74.00	11.10	Vertical
17352.00	52.50	65.69	13.19	68.20	2.51	Vertical
11569.00	51.69	59.40	7.71	74.00	14.60	Horizontal
17354.00	53.05	66.25	13.20	68.20	1.95	Horizontal
3856.70	37.15	44.55	7.40	54.00	9.45	Vertical
11571.00	37.27	44.99	7.72	54.00	9.01	Vertical
3856.70	31.63	39.03	7.40	54.00	14.97	Horizontal
11573.00	39.99	47.72	7.73	54.00	6.28	Horizontal
802.11ax(HE20)				Test Frequency: 5825MHz		
Frequency	Reading	Level	Factor	Limit	Margin	polarization
(MHz)	(dBμV)	(dBμV/m)	(dB)	(dBμV/m)	(dB)	
11646.00	52.39	59.98	7.59	74.00	14.02	Vertical

17472.00	50.95	64.82	13.87	68.20	3.38	Vertical
11654.00	54.96	62.51	7.55	74.00	11.49	Horizontal
17478.00	52.71	66.62	13.91	68.20	1.58	Horizontal
3883.30	38.07	45.56	7.49	54.00	8.44	Vertical
11648.00	36.03	43.61	7.58	54.00	10.39	Vertical
11648.00	39.86	47.44	7.58	54.00	6.56	Horizontal
17476.00	34.47	48.37	13.90	-	-	Horizontal

802.11ax(HE40)				Test Frequency: 5755MHz		
Frequency	Reading	Level	Factor	Limit	Margin	polarization
(MHz)	(dBμV)	(dBμV/m)	(dB)	(dBμV/m)	(dB)	
11513.00	57.30	64.78	7.48	74.00	9.22	Vertical
17274.00	50.76	63.64	12.88	68.20	4.56	Vertical
11506.00	53.22	60.67	7.45	74.00	13.33	Horizontal
17270.00	53.60	66.47	12.87	68.20	1.73	Horizontal
3836.40	37.12	44.45	7.33	54.00	9.55	Vertical
11511.00	37.37	44.85	7.48	54.00	9.15	Vertical
3836.40	34.17	41.50	7.33	54.00	12.50	Horizontal
11509.00	41.99	49.46	7.47	54.00	4.54	Horizontal
802.11ax(HE40)				Test Frequency: 5795MHz		
Frequency	Reading	Level	Factor	Limit	Margin	polarization
(MHz)	(dBμV)	(dBμV/m)	(dB)	(dBμV/m)	(dB)	
11588.00	52.46	60.26	7.80	74.00	13.74	Vertical
17395.00	46.72	60.08	13.36	68.20	8.12	Vertical
11594.00	49.67	57.49	7.82	74.00	16.51	Horizontal
17390.00	48.91	62.25	13.34	68.20	5.95	Horizontal
3863.70	37.37	44.79	7.42	54.00	9.21	Vertical
11594.00	33.55	41.37	7.82	54.00	12.63	Vertical
11593.00	36.96	44.77	7.81	54.00	9.23	Horizontal
17385.00	34.97	48.29	13.32	-	-	Horizontal
802.11ax(HE80)				Test Frequency: 5775MHz		
Frequency	Reading	Level	Factor	Limit	Margin	polarization

(MHz)	(dBμV)	(dBμV/m)	(dB)	(dBμV/m)	(dB)	
3850.40	44.47	51.85	7.38	74.00	22.15	Vertical
11572.00	46.88	54.61	7.73	74.00	19.39	Vertical
3520.00	45.40	51.02	5.62	68.20	17.18	Horizontal
11524.00	44.42	51.95	7.53	74.00	22.05	Horizontal
1375.20	33.09	30.97	-2.12	54.00	23.03	Vertical
3849.70	39.65	47.02	7.37	54.00	6.98	Vertical
3503.90	36.22	41.72	5.50	-	-	Horizontal
3849.70	34.93	42.30	7.37	54.00	11.70	Horizontal

Notes:

1. Level=Reading+Factor
2. The test trace is same as the ambient noise (the test frequency range: 18GHz~40GHz), therefore no data appear in the report.
3. If the test result on peak is lower than the limit more than 20dB, then average measurement needn't be performed.

8 Test Setup Photo

Reference to the **appendix I** for details.

9 EUT Constructional Details

Reference to the **appendix II** for details.

-----END-----