

FCC Radio Test Report FCC ID: T58WF2780R

This report concerns (check one): Original Grant Class II Change

Project No. : 1409C014

Equipment: AC1200 Wireless Dual Band Gigabit Router

Model Name : WF2880

Applicant : NETIS SYSTEMS CO., LTD

Address: 4F&5F R&D Building, Oriental Cyberport, High-Tech

Industrial Park, Nanshan, Shenzhen, China.

Date of Receipt : Sep. 01, 2014

Date of Test : Sep. 01, 2014 ~ Oct. 08, 2014

Issued Date : Oct. 17, 2014 Tested by : BTL Inc.

Testing Engineer : Favid

(David Mao)

Technical Manager

(Leo Hung)

Authorized Signatory

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Declaration

BTL represents to the client that testing is done in accordance with standard procedures as applicable and that test instruments used has been calibrated with the standards traceable to National Measurement Laboratory (**NML**) of **R.O.C.**, or National Institute of Standards and Technology (**NIST**) of **U.S.A.**

BTL's reports apply only to the specific samples tested under conditions. It is manufacture's responsibility to ensure that additional production units of this model are manufactured with the identical electrical and mechanical components. **BTL** shall have no liability for any declarations, inferences or generalizations drawn by the client or others from **BTL** issued reports.

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BTL's laboratory quality assurance procedures are in compliance with the **ISO Guide 17025** requirements, and accredited by the conformity assessment authorities listed in this test report.

Limitation

For the use of the authority's logo is limited unless the Test Standard(s)/Scope(s)/Item(s) mentioned in this test report is (are) included in the conformity assessment authorities acceptance respective.

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REPORT ISSUED HISTORY

Issued No.	Description	Issued Date
NEI-FCCP-2-1402C047	Original Report.	Apr. 10, 2014
BTL-FCCP-2-1409C014	Compared with previous report (NEI-FCCP-2-1402C047), added a USB port, the adapter and model name are changed, the RF module is the same, Conducted Emission and Radiated Emission (Below 1GHz) have been re-evaluated and recorded in the test report.	Oct. 17, 2014

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1. CERTIFICATION

Equipment : AC1200 Wireless Dual Band Gigabit Router

Brand Name: netis Model Name: WF2880

Applicant : NETIS SYSTEMS CO., LTD Manufacturer : Shenzhen Netcore Industrial Ltd.

Address : 4F&5F R&D Building, Oriental Cyberport, High-Tech Industrial Park, Nanshan,

Shenzhen, China.

Factory : Dongguan City Netcore Network Technology Co.,Ltd.

Address : No. 10-1, Sankeng Road, Qinghutou, Tangxia Town, Dongguan City

Date of Test : Sep. 01, 2014 ~ Oct. 08, 2014 Test Item : ENGINEERING SAMPLE

Standard(s) : FCC Part15, Subpart E(15.407) / ANSI C63.4 : 2009;

FCC KDB 789033 D01 General UNII Test Procedures v01r03.

The above equipment has been tested and found compliance with the requirement of the relative standards by BTL Inc..

The test data, data evaluation, and equipment configuration contained in our test report (Ref No. BTL-FCCP-2-1409C014) were obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of TAF according to the ISO-17025 quality assessment standard and technical standard(s).

Test result included in this report is only for the 5150MHz~5250MHz Mode part of the product.

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2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

FCC Part15, Subpart E			
Standard(s) Section	Test Item	Judgment	Remark
15.207	AC Power Line Conducted Emissions	PASS	
15.407(a)	26dB Spectrum Bandwidth	N/A	
15.407(a)	Maximum Conducted Output Power	N/A	
15.407(a)	Power Spectral Density	N/A	
15.407(a)	Peak Excursion	N/A	
15.407(a)	Radiated Emissions	PASS	
15.407(b)	Band Edge Emissions	N/A	
15.407(g)	Frequency Stability	N/A	
15.203	Antenna Requirements	N/A	

NOTE:

(1)" N/A" denotes test is not applicable in this test report.

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2.1 TEST FACILITY

The test facilities used to collect the test data in this report is **DG-C02/DG-CB03** at the location of No.3, Jinshagang 1st Road, ShiXia, Dalang Town, Dong Guan, China.523792 BTL's test firm number for FCC: 319330

2.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement $\mathbf{y} \pm \mathbf{U}$, where expended uncertainty \mathbf{U} is based on a standard uncertainty multiplied by a coverage factor of $\mathbf{k=2}$, providing a level of confidence of approximately 95%.

A. Conducted Measurement:

Test Site	Method	Measurement Frequency Range	U,(dB)	NOTE
DG-C02	CISPR	150 KHz ~ 30MHz	1.94	

B. Radiated Measurement:

Test Site	Method	Measurement Frequency Range	Ant. H / V	U,(dB)	NOTE
		9KHz~30MHz	V	3.79	
		9KHz~30MHz	Н	3.57	
		30MHz ~ 200MHz	V	3.82	
		30MHz ~ 200MHz	Н	3.60	
DG-CB03	CISPR	200MHz ~ 1,000MHz	V	3.86	
DG-CB03	CISER	200MHz ~ 1,000MHz	Н	3.94	
		1GHz~18GHz	V	3.12	
		1GHz~18GHz	Н	3.68	
		18GHz~40GHz	V	4.15	
		18GHz~40GHz	Н	4.14	

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3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

Equipment	AC1200 Wireless Dual Band Gigabit Router		
Brand Name	netis		
Model Name	WF2880		
Mode Different	N/A		
Product Description	Operation Frequency Modulation Type Bit Rate of Transmitter Antenna Designation Antenna Gain(Peak) Output Power (Max.) More details of EUT te User's Manual.	Band 1:5150MHz~5250MHz OFDM 300Mbps Please see note 3.(Page 10) 802.11a: 13.72 dBm 802.11n (20M): 15.78 dBm 802.11n (40M): 15.63 dBm 802.11ac (20M): 15.84 dBm 802.11ac (40M): 15.63 dBm 802.11ac (40M): 15.63 dBm chnical specification, please refer to the	
Power Source	DC Voltage Supplied from AC Adapter. Brand/Model: GOSPELL / G0612U-120-150		
Power Rating	I/P: AC 100-240V~ 50/60Hz 0.5A MAX O/P: DC 12V 1.5A		

Note

1. For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

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2. Channel List:

802.11a / 802.11n 20MHz/802.11ac 20MHz		802.11n 40M/802.11ac 40MHz		802.11ac 80MHz	
Band 1		Band 1		Band 1	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
36	5180	38	5190	42	5210
40	5200	46	5230		
44	5220				
48	5240				

3. Antenna Specification:

Ant.	Manufacturer	Model Name	Antenna Type	Connector	Gain (dBi)
6	RF link	RF21C00077A	Dipole Antenna	N/A	5.88
7	RF link	RF21C00073A	Dipole Antenna	N/A	5.88

Note:

The EUT incorporates a MIMO function. Physically, the EUT provides two completed transmitters and two receivers (2T2R). all transmit signals are completely uncorrelated, then, **Direction gain = G**ant, that is Directional gain=5.88dBi

4.

Operating Mode	1TX	3TX
802.11a	V (ANT 6)	-
802.11n(20MHz)	-	V (ANT 6 + ANT 7)
802.11n(40MHz)	-	V (ANT 6 + ANT 7)
802.11ac(20MHz)	-	V (ANT 6 + ANT 7)
802.11ac(40MHz)	-	V (ANT 6 + ANT 7)
802.11ac(80MHz)	-	V (ANT 6 + ANT 7)

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3.2 DESCRIPTION OF TEST MODES

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

Pretest Test Mode	Description
Mode 1	TX A Mode / CH36, CH40, CH48(Band 1)
Mode 2	TX N20 Mode / CH36, CH40, CH48(Band 1)
Mode 3	TX N40 Mode / CH38, CH46 (Band 1)
Mode 4	TX AC N20 Mode / CH36, CH40, CH48(Band 1)
Mode 5	TX AC N40 Mode / CH38, CH46 (Band 1)
Mode 6	TX AC N80 Mode / CH42 (Band 1)
Mode 7	TX Mode

The EUT system operated these modes were found to be the worst case during the pre-scanning test as following:

For Conducted Test	
Final Test Mode	Description
Mode 7	TX Mode

	For Radiated Test
Final Test Mode	Description
Mode 1	TX A Mode / CH36, CH40, CH48(Band 1)
Mode 2	TX N20 Mode / CH36, CH40, CH48(Band 1)
Mode 3	TX N40 Mode / CH38, CH46 (Band 1)
Mode 4	TX AC N20 Mode / CH36, CH40, CH48(Band 1)
Mode 5	TX AC N40 Mode / CH38, CH46 (Band 1)
Mode 6	TX AC N80 Mode / CH42 (Band 1)

Note: For Radiated Below 1G test, the 802.11a mode is found to be the worst case and recorded.

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3.3 TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING

During testing channel & power controlling software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product

Test software version	Cart					
Frequency	5180 MHz	5200MHz	5240 MHz			
A Mode	23	22	21			
N20 Mode	30	29	28			
AC 20 Mode	20	19	17			

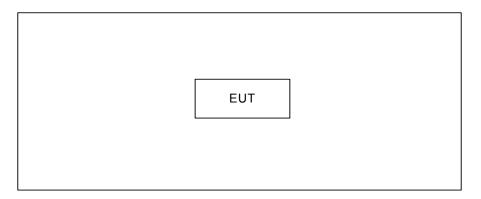
Test software version	Cart				
Frequency	5190 MHz	5230MHz			
N40 Mode	30	29			
AC 40 Mode	27	27			

Test software version	Cart				
Frequency	5210 MHz				
AC 80 Mode	23				

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3.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



3.5 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Item	Equipment	Mfr/Brand	Model/Type No.	FCC ID/IC	Series No.	Note
-	-	-	-	-	-	

Iten	Shielded Type	Ferrite Core	Length	Note
-	-	-	ı	-

Note:

(1) The support equipment was authorized by Declaration of Confirmation.

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4. EMC EMISSION TEST

4.1 CONDUCTED EMISSION MEASUREMENT

4.1.1 POWER LINE CONDUCTED EMISSION (Frequency Range 150KHz-30MHz)

FREQUENCY (MHz)	Class A	(dBuV)	Class B (dBuV)		
PREQUENCT (MIDZ)	Quasi-peak	Average	Quasi-peak	Average	
0.15 -0.5	79.00	66.00	66 - 56 *	56 - 46 *	
0.50 -5.0	73.00	60.00	56.00	46.00	
5.0 -30.0	73.00	60.00	60.00	50.00	

Note:

- (1) The tighter limit applies at the band edges.
- (2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

4.1.2 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	LISN	EMCO	3816/2	00052765	Mar. 29, 2015
2	LISN	R&S	ENV216	101447	Mar. 29, 2015
3	Test Cable	N/A	C_17	N/A	Mar. 14, 2015
4	EMI TEST RECEIVER	R&S	ESCS30	833364/017	Mar. 29, 2015
5	50Ω Terminator	SHX	TF2-3G-A	08122902	Mar. 29, 2015
6	Measurement Software	Fara	EZ-EMC Ver.NB-03A1-01	N/A	N/A

Remark: "N/A" denotes no model name, serial no. or calibration specified.

All calibration period of equipment list is one year.

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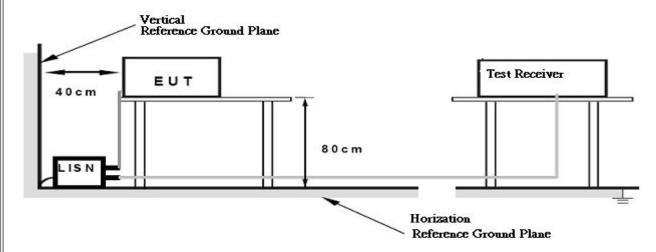
4.1.3 TEST PROCEDURE

- a. The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
- c. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- d. LISN at least 80 cm from nearest part of EUT chassis.
- e. For the actual test configuration, please refer to the related Item –EUT Test Photos.

4.1.4 DEVIATION FROM TEST STANDARD

No deviation

4.1.5 TEST SETUP



4.1.6 EUT OPERATING CONDITIONS

The EUT was configured for testing in a typical function (as a customer would normally use it). The EUT was programmed to be in continuously transmitting/TX Mode mode.

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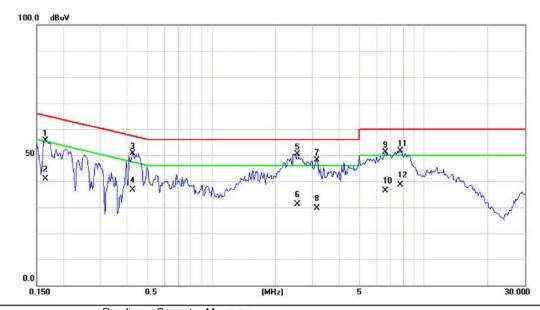


4.1.7 TEST RESULTS Remark: (1) All readings are QP Mode value unless otherwise stated AVG in column of Note . If the QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only QP Mode was measured, but AVG Mode didn't perform.In this case, a " * " marked in AVG Mode column of Interference Voltage Measured. (2) Measuring frequency range from 150KHz to 30MHz.

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H-111.	AC1200 Wireless Dual Band Gigabit Router	Model Name:	WF2880
Temperature:	24 ℃	Relative Humidity:	55 %
Test Power:	AC 120V/60Hz	Phase:	Line
Test Mode :	TX Mode		

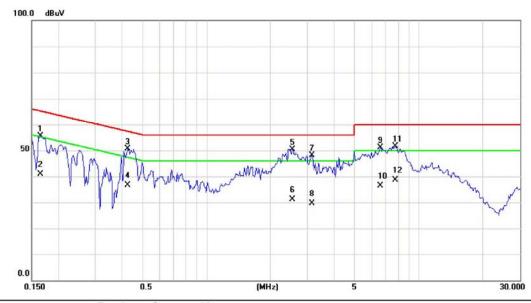


MHz dBuV dB dBuV dBuV dB Detector Comment 1 0.1655 46.08 9.52 55.60 65.18 -9.58 peak 2 0.1655 31.30 9.52 40.82 55.18 -14.36 AVG 3 0.4273 41.15 9.57 50.72 57.31 -6.59 peak 4 0.4273 27.10 9.57 36.67 47.31 -10.64 AVG 5 * 2.5522 40.62 9.74 50.36 56.00 -5.64 peak 6 2.5522 21.40 9.74 31.14 46.00 -14.86 AVG 7 3.1396 38.48 9.76 48.24 56.00 -7.76 peak 8 3.1396 19.80 9.76 29.56 46.00 -16.44 AVG 9 6.6250 41.07 9.97 51.04 60.00 -8.96 peak 10 6.6250 <t< th=""><th>No.</th><th>Mk.</th><th>Freq.</th><th>Reading Level</th><th>Correct Factor</th><th>Measure- ment</th><th>Limit</th><th>Over</th><th></th><th></th></t<>	No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
2 0.1655 31.30 9.52 40.82 55.18 -14.36 AVG 3 0.4273 41.15 9.57 50.72 57.31 -6.59 peak 4 0.4273 27.10 9.57 36.67 47.31 -10.64 AVG 5 * 2.5522 40.62 9.74 50.36 56.00 -5.64 peak 6 2.5522 21.40 9.74 31.14 46.00 -14.86 AVG 7 3.1396 38.48 9.76 48.24 56.00 -7.76 peak 8 3.1396 19.80 9.76 29.56 46.00 -16.44 AVG 9 6.6250 41.07 9.97 51.04 60.00 -8.96 peak 10 6.6250 26.50 9.97 36.47 50.00 -13.53 AVG 11 7.7576 41.65 10.04 51.69 60.00 -8.31 peak			MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
3 0.4273 41.15 9.57 50.72 57.31 -6.59 peak 4 0.4273 27.10 9.57 36.67 47.31 -10.64 AVG 5 * 2.5522 40.62 9.74 50.36 56.00 -5.64 peak 6 2.5522 21.40 9.74 31.14 46.00 -14.86 AVG 7 3.1396 38.48 9.76 48.24 56.00 -7.76 peak 8 3.1396 19.80 9.76 29.56 46.00 -16.44 AVG 9 6.6250 41.07 9.97 51.04 60.00 -8.96 peak 10 6.6250 26.50 9.97 36.47 50.00 -13.53 AVG 11 7.7576 41.65 10.04 51.69 60.00 -8.31 peak	1		0.1655	46.08	9.52	55.60	65.18	-9.58	peak	
4 0.4273 27.10 9.57 36.67 47.31 -10.64 AVG 5 * 2.5522 40.62 9.74 50.36 56.00 -5.64 peak 6 2.5522 21.40 9.74 31.14 46.00 -14.86 AVG 7 3.1396 38.48 9.76 48.24 56.00 -7.76 peak 8 3.1396 19.80 9.76 29.56 46.00 -16.44 AVG 9 6.6250 41.07 9.97 51.04 60.00 -8.96 peak 10 6.6250 26.50 9.97 36.47 50.00 -13.53 AVG 11 7.7576 41.65 10.04 51.69 60.00 -8.31 peak	2		0.1655	31.30	9.52	40.82	55.18	-14.36	AVG	
5 * 2.5522 40.62 9.74 50.36 56.00 -5.64 peak 6 2.5522 21.40 9.74 31.14 46.00 -14.86 AVG 7 3.1396 38.48 9.76 48.24 56.00 -7.76 peak 8 3.1396 19.80 9.76 29.56 46.00 -16.44 AVG 9 6.6250 41.07 9.97 51.04 60.00 -8.96 peak 10 6.6250 26.50 9.97 36.47 50.00 -13.53 AVG 11 7.7576 41.65 10.04 51.69 60.00 -8.31 peak	3		0.4273	41.15	9.57	50.72	57.31	-6.59	peak	
6 2.5522 21.40 9.74 31.14 46.00 -14.86 AVG 7 3.1396 38.48 9.76 48.24 56.00 -7.76 peak 8 3.1396 19.80 9.76 29.56 46.00 -16.44 AVG 9 6.6250 41.07 9.97 51.04 60.00 -8.96 peak 10 6.6250 26.50 9.97 36.47 50.00 -13.53 AVG 11 7.7576 41.65 10.04 51.69 60.00 -8.31 peak	4		0.4273	27.10	9.57	36.67	47.31	-10.64	AVG	
7 3.1396 38.48 9.76 48.24 56.00 -7.76 peak 8 3.1396 19.80 9.76 29.56 46.00 -16.44 AVG 9 6.6250 41.07 9.97 51.04 60.00 -8.96 peak 10 6.6250 26.50 9.97 36.47 50.00 -13.53 AVG 11 7.7576 41.65 10.04 51.69 60.00 -8.31 peak	5	*	2.5522	40.62	9.74	50.36	56.00	-5.64	peak	
8 3.1396 19.80 9.76 29.56 46.00 -16.44 AVG 9 6.6250 41.07 9.97 51.04 60.00 -8.96 peak 10 6.6250 26.50 9.97 36.47 50.00 -13.53 AVG 11 7.7576 41.65 10.04 51.69 60.00 -8.31 peak	6		2.5522	21.40	9.74	31.14	46.00	-14.86	AVG	
9 6.6250 41.07 9.97 51.04 60.00 -8.96 peak 10 6.6250 26.50 9.97 36.47 50.00 -13.53 AVG 11 7.7576 41.65 10.04 51.69 60.00 -8.31 peak	7		3.1396	38.48	9.76	48.24	56.00	-7.76	peak	
10 6.6250 26.50 9.97 36.47 50.00 -13.53 AVG 11 7.7576 41.65 10.04 51.69 60.00 -8.31 peak	8		3.1396	19.80	9.76	29.56	46.00	-16.44	AVG	
11 7.7576 41.65 10.04 51.69 60.00 -8.31 peak	9		6.6250	41.07	9.97	51.04	60.00	-8.96	peak	
Page 1	10		6.6250	26.50	9.97	36.47	50.00	-13.53	AVG	
12 7.7576 28.70 10.04 38.74 50.00 -11.26 AVG	11		7.7576	41.65	10.04	51.69	60.00	-8.31	peak	
	12		7.7576	28.70	10.04	38.74	50.00	-11.26	AVG	

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EUT:	AC1200 Wireless Dual Band Gigabit Router	Model Name:	WF2880
Temperature:	24 ℃	Relative Humidity:	55 %
Test Power:	AC 120V/60Hz	Phase:	Neutral
Test Mode :	TX Mode		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1655	46.08	9.52	55.60	65.18	-9.58	peak	
2		0.1655	31.30	9.52	40.82	55.18	-14.36	AVG	
3		0.4273	41.15	9.57	50.72	57.31	-6.59	peak	
4		0.4273	27.10	9.57	36.67	47.31	-10.64	AVG	
5	*	2.5522	40.62	9.74	50.36	56.00	-5.64	peak	
6		2.5522	21.40	9.74	31.14	46.00	-14.86	AVG	
7		3.1396	38.48	9.76	48.24	56.00	-7.76	peak	
8		3.1396	19.80	9.76	29.56	46.00	-16.44	AVG	
9		6.6250	41.07	9.97	51.04	60.00	-8.96	peak	
10		6.6250	26.50	9.97	36.47	50.00	-13.53	AVG	
11		7.7576	41.65	10.04	51.69	60.00	-8.31	peak	
12		7.7576	28.70	10.04	38.74	50.00	-11.26	AVG	

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4.2 RADIATED EMISSION MEASUREMENT

4.2.1 RADIATED EMISSION LIMITS (Frequency Range 9kHz-1000MHz)

20dBc in any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

Frequencies	Field Strength	Measurement Distance
(MHz)	(micorvolts/meter)	(meters)
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

Notes

- (1) The limit for radiated test was performed according to FCC PART 15C.
- (2) The tighter limit applies at the band edges.

LIMITS OF UNWANTED EMISSION OUT OF THE RESTRICTED BANDS

Frequencies	EIRP Limit (dBm)	Equivalent Field Strength
(MHz)	EIRF LIIIII (UDIII)	at 3m (dBµV/m)
5150~5250	-27	68.3
5250~5350	-27	68.3
5470~5725	-27	68.3
5725~5825	-27	68.3
	-17	78.3

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

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

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4.2.2 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Antenna	Schwarbeck	VULB9160	9160-3232	Mar. 29, 2015
2	Amplifier	HP	8447D	2944A09673	Mar. 29, 2015
3	Receiver	AGILENT	N9038A	MY52130039	Sep. 30, 2015
4	Test Cable	N/A	C-01_CB03	N/A	Jul. 01, 2015
5	Controller	CT	SC100	N/A	N/A
6	Measurement Software	Fara	EZ-EMC Ver.NB-03A1-01	N/A	N/A

Remark: "N/A" denotes no model name, serial no. or calibration specified.

All calibration period of equipment list is one year.

4.2.3 TEST PROCEDURE

- a. The measuring distance of at 1.5m shall be used for measurements at frequency up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.
- b. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- c. The height of the equipment or of the substitution antenna shall be 0.8 m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- e. If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
- f. For the actual test configuration, please refer to the related Item –EUT Test Photos.

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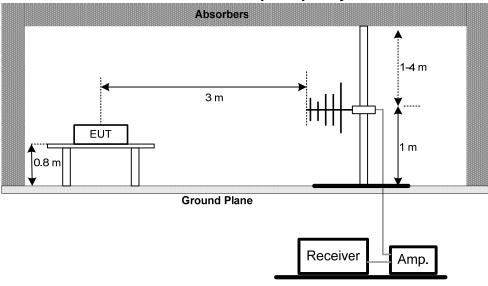


4.2.4 DEVIATION FROM TEST STANDARD

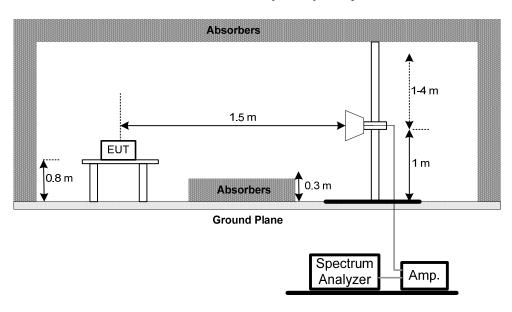
No deviation

4.2.5 TEST SETUP

Radiated Emission Test Set-Up Frequency30 - 1000MHz



Radiated Emission Test Set-Up Frequency Above 1 GHz



4.2.6 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of **4.1.6** Unless otherwise a special operating condition is specified in the follows during the testing.

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4.2.7 TEST RESULTS-BETWEEN 30MHZ - 1000MHZ

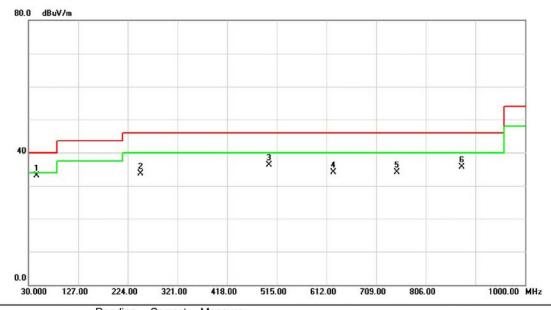
Remark:

- (1) Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode or Peak Mode with Detector BW=120KHz; SPA setting in RBW=120KHz, VBW =120KHz, Swp. Time = 0.3 sec./MHz.
- (2) All readings are Peak unless otherwise stated QP in column of <code>『Note』</code>. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform.
- (3) Measuring frequency range from 30MHz to 1000MHz.
- (4) If the peak scan value lower limit more than 20dB, then this signal data does not show in table.

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H-111.	AC1200 Wireless Dual Band Gigabit Router	Model Name :	WF2880
Temperature:	25℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	Band 1/TX A Mode 5180MHz		
Phase:	Vertical		



No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	45.5200	45.01	-11.93	33.08	40.00	-6.92	peak	
2		249.2200	46.98	-13.26	33.72	46.00	-12.28	peak	
3		499.4800	43.82	-7.53	36.29	46.00	-9.71	peak	
4		625.5800	37.51	-3.38	34.13	46.00	-11.87	peak	
5		749.7400	35.31	-1.12	34.19	46.00	-11.81	peak	
6		875.8400	33.98	1.72	35.70	46.00	-10.30	peak	

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H-111.	AC1200 Wireless Dual Band Gigabit Router	Model Name :	WF2880
Temperature:	25 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	Band 1/TX A Mode 5180MHz		
Phase:	Horizontal		



No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		249.2200	50.68	-13.26	37.42	46.00	-8.58	peak	
2		375.3200	43.36	-8.83	34.53	46.00	-11.47	peak	
3		499.4800	39.94	-7.53	32.41	46.00	-13.59	peak	
4		749.7400	33.28	-1.12	32.16	46.00	-13.84	peak	
5	*	875.8400	36.62	1.72	38.34	46.00	-7.66	peak	
6		959.2600	34.95	2.63	37.58	46.00	-8.42	peak	

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IF111.	AC1200 Wireless Dual Band Gigabit Router	Model Name :	WF2880
Temperature:	25℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	Band 1/TX A Mode 5200MHz		
Phase:	Vertical		



No.	Mk	. Freq.	Level	Factor	ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	45.5200	46.20	-11.93	34.27	40.00	-5.73	peak	
2		375.3200	41.27	-8.83	32.44	46.00	-13.56	peak	
3		499.4800	44.44	-7.53	36.91	46.00	-9.09	peak	
4		625.5800	37.93	-3.38	34.55	46.00	-11.45	peak	
5		749.7400	35.63	-1.12	34.51	46.00	-11.49	peak	
6		875.8400	31.60	1.72	33.32	46.00	-12.68	peak	

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H-111.	AC1200 Wireless Dual Band Gigabit Router	Model Name :	WF2880
Temperature:	25 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	Band 1/TX A Mode 5200MHz		
Phase:	Horizontal		

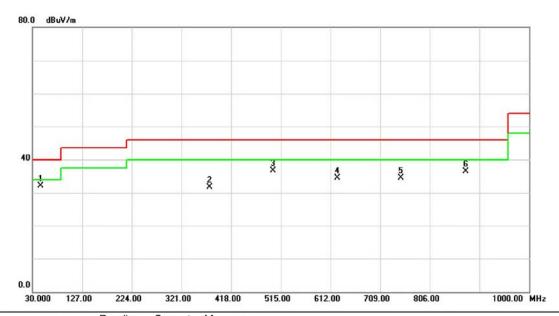


No.	Mk.	Freq.	Level	Factor	ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		249.2200	50.54	-13.26	37.28	46.00	-8.72	peak	
2		375.3200	44.23	-8.83	35.40	46.00	-10.60	peak	
3		499.4800	40.58	-7.53	33.05	46.00	-12.95	peak	
4		749.7400	33.44	-1.12	32.32	46.00	-13.68	peak	
5	*	875.8400	37.19	1.72	38.91	46.00	-7.09	peak	
6		959.2600	35.71	2.63	38.34	46.00	-7.66	peak	

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IF111.	AC1200 Wireless Dual Band Gigabit Router	Model Name :	WF2880
Temperature:	25℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	Band 1/TX A Mode 5240MHz		
Phase:	Vertical		



No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	45.5200	43.96	-11.93	32.03	40.00	-7.97	peak	
2		375.3200	40.57	-8.83	31.74	46.00	-14.26	peak	
3		499.4800	44.26	-7.53	36.73	46.00	-9.27	peak	
4		625.5800	37.86	-3.38	34.48	46.00	-11.52	peak	
5		749.7400	35.66	-1.12	34.54	46.00	-11.46	peak	
6		875.8400	34.87	1.72	36.59	46.00	-9.41	peak	

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H-111.	AC1200 Wireless Dual Band Gigabit Router	Model Name :	WF2880	
Temperature:	25 ℃	Relative Humidity:	58 %	
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz	
Test Mode :	Band 1/TX A Mode 5240MHz			
Phase:	Horizontal			



MHz dBuV dB dBuV/m dB uV/m dB Detector Comment 1 249.2200 50.35 -13.26 37.09 46.00 -8.91 peak 2 375.3200 43.85 -8.83 35.02 46.00 -10.98 peak 3 499.4800 40.05 -7.53 32.52 46.00 -13.48 peak 4 * 875.8400 37.03 1.72 38.75 46.00 -7.25 peak 5 959.2600 34.95 2.63 37.58 46.00 -8.42 peak 6 1000.000 35.51 2.41 37.92 54.00 -16.08 peak	No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
2 375.3200 43.85 -8.83 35.02 46.00 -10.98 peak 3 499.4800 40.05 -7.53 32.52 46.00 -13.48 peak 4 * 875.8400 37.03 1.72 38.75 46.00 -7.25 peak 5 959.2600 34.95 2.63 37.58 46.00 -8.42 peak 6 1000.000 35.51 2.41 37.92 54.00 -16.08 peak			MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
3 499.4800 40.05 -7.53 32.52 46.00 -13.48 peak 4 * 875.8400 37.03 1.72 38.75 46.00 -7.25 peak 5 959.2600 34.95 2.63 37.58 46.00 -8.42 peak 6 1000.000 35.51 2.41 37.92 54.00 -16.08 peak	1		249.2200	50.35	-13.26	37.09	46.00	-8.91	peak	
4 * 875.8400 37.03 1.72 38.75 46.00 -7.25 peak 5 959.2600 34.95 2.63 37.58 46.00 -8.42 peak 6 1000.000 35.51 2.41 37.92 54.00 -16.08 peak	2	,	375.3200	43.85	-8.83	35.02	46.00	-10.98	peak	
5 959.2600 34.95 2.63 37.58 46.00 -8.42 peak 6 1000.000 35.51 2.41 37.92 54.00 -16.08 peak	3		499.4800	40.05	-7.53	32.52	46.00	-13.48	peak	
6 1000.000 35.51 2.41 37.92 54.00 -16.08 peak	4	*	875.8400	37.03	1.72	38.75	46.00	-7.25	peak	
	5		959.2600	34.95	2.63	37.58	46.00	-8.42	peak	
	6		1000.000	35.51	2.41	37.92	54.00	-16.08	peak	

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5. EUT TEST PHOTO

Conducted Measurement Photos





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Radiated Measurement Photos

30MHz to 1000MHz





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