

FCC&IC Radio Test Report

FCC ID: QISAP6610DN-AGN IC: 6369A-AP6610DN

This report concerns	(check one):	Original Grant	Class II Change
	(00000).	C. Igiliai C. alii	

Issued Date : Nov. 25, 2013 **Project No.** : 1204C048C

Equipment: Outdoor Wireless LAN Access Point

Model Name : AP6610DN-AGN-US

Applicant: Huawei Technologies Co.,Ltd.

Address for FCC: Administration Building, Headquarters of

Huawei Technologies Co., Ltd., Bantian, Longgang District Shenzhen China

Address for IC : Administration Building, Headquarters of

Huawei Technologies Co., Ltd., Bantian, Longgang District, Shenzhen 518129

China

Tested by: Neutron Engineering Inc. EMC Laboratory

Date of Receipt: Apr. 17, 2012; Oct. 10, 2013

Date of Test: Apr. 17, 2012 ~ Jul. 16, 2012

Oct. 10, 2013 ~ Nov. 22, 2013

Testing Engineer : Favid Man

(David Mad

Technical Manager :

(Leo Hung)

Authorized Signatory:

(Steven Lu)

Neutron Engineering Inc.

No.3, Jinshagang 1st Road, ShiXia, Dalang Town, Dong Guan, China.

TEL: 0769-8318-3000 FAX: 0769-8319-6000



Declaration

Neutron 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.**

Neutron'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. **Neutron** shall have no liability for any declarations, inferences or generalizations drawn by the client or others from **Neutron** issued reports.

Neutron's reports must not be used by the client to claim product endorsement by the authorities or any agency of the Government.

This report is the confidential property of the client. As a mutual protection to the clients, the public and **Neutron-self**, extracts from the test report shall not be reproduced except in full with **Neutron**'s authorized written approval.

Neutron'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.

Report No.: NEI-FICP-3-1204C048C Page 2 of 206

Table of Contents	Page
1 . CERTIFICATION	6
2 . SUMMARY OF TEST RESULTS	7
2.1 TEST FACILITY	8
2.2 MEASUREMENT UNCERTAINTY	8
	-
3. GENERAL INFORMATION	9
3.1 GENERAL DESCRIPTION OF EUT	9
3.2 DESCRIPTION OF TEST MODES	12
3.3 TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING	13
3.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTE	M TESTED 14
3.5 DESCRIPTION OF SUPPORT UNITS	15
4 . EMC EMISSION TEST	16
4.1 CONDUCTED EMISSION MEASUREMENT	16
4.1.1 POWER LINE CONDUCTED EMISSION	16
4.1.2 MEASUREMENT INSTRUMENTS LIST	16
4.1.3 TEST PROCEDURE 4.1.4 DEVIATION FROM TEST STANDARD	17
4.1.5 TEST SETUP	17 17
4.1.6 EUT OPERATING CONDITIONS	17
4.1.7 TEST RESULTS	18
4.2 RADIATED EMISSION MEASUREMENT	21
4.2.1 RADIATED EMISSION LIMITS	21
4.2.2 MEASUREMENT INSTRUMENTS LIST	22
4.2.3 TEST PROCEDURE 4.2.4 DEVIATION FROM TEST STANDARD	22 22
4.2.5 TEST SETUP	23
4.2.6 EUT OPERATING CONDITIONS	24
4.2.7 TEST RESULTS (BELOW 30MHZ)	25
4.2.8 TEST RESULTS-BETWEEN 30MHZ - 1000MHZ	26
4.2.9 TEST RESULTS - ABOVE 1000MHZ	39
5 . 26DB SPECTRUM BANDWIDTH	103
5.1 APPLIED PROCEDURES / LIMIT	103
5.1.1 MEASUREMENT INSTRUMENTS LIST 5.1.2 TEST PROCEDURE	103 103
5.1.2 TEST PROCEDURE 5.1.3 DEVIATION FROM STANDARD	103
5.1.4 TEST SETUP	103
5.1.5 EUT OPERATION CONDITIONS	104
5.1.6 TEST RESULTS	105
6 . MAXIMUM CONDUCTED OUTPUT POWER	117

Report No.: NEI-FICP-3-1204C048C Page 3 of 206

BIL	Neutron Engineering	In	C

	Table of Contents	Page
6.1 APPLIED I	PROCEDURES / LIMIT	117
6.1.1 MEAS	SUREMENT INSTRUMENTS LIST	117
6.1.2 TEST	PROCEDURE	117
	ATION FROM STANDARD	118
6.1.4 TEST		118
	OPERATION CONDITIONS	118
	RESULTS	119
	ONDUCTED SPURIOUS EMISSION	141
	PROCEDURES / LIMIT	141
	SUREMENT INSTRUMENTS LIST	141
_	PROCEDURE	141
	ATION FROM STANDARD	141
7.1.4 TEST		141
	OPERATION CONDITIONS TRESULTS	141 142
	ECTRAL DENSITY TEST	166
_	PROCEDURES / LIMIT	166
=	SUREMENT INSTRUMENTS LIST PROCEDURE	166 166
	ATION FROM STANDARD	166
8.1.4 TEST		166
-	OPERATION CONDITIONS	166
	RSION MEASUREMENT	185
-	PROCEDURES / LIMIT SUREMENT INSTRUMENTS LIST	185 185
•	PROCEDURE	185
-	ATION FROM STANDARD	185
9.1.4 TEST		186
-	OPERATION CONDITIONS	186
	RESULTS	187
10 . FREQUENC	CY STABILITY MEASUREMENT	199
10.1 APPLIED	PROCEDURES / LIMIT	199
10.1.1 ME	ASUREMENT INSTRUMENTS LIST	199
10.1.2 TES	T PROCEDURE	199
10.1.3 DEV	VIATION FROM STANDARD	199
10.1.4 TES	T SETUP	200
	OPERATION CONDITIONS	200
10.1.6 TES	T RESULTS	201
11. EUT TEST P	РНОТО	203

Report No.: NEI-FICP-3-1204C048C

REPORT ISSUED HISTORY

Issued No.	Description	Issued Date
NEI-FICP-3-1204C048A	Original Report	Jul. 26, 2012
	Compared with the previous report	
	(NEI-FICP-3-1204C048A),	
	differences as follow: Add a new antenna	
	application, which has a reduced gain. The	
NEI-FICP-3-1204C048C	conducted power specifications are not changed.	Nov. 25, 2013
	So, only the Radiated Emissions are performed	
	additionally, other test results are remained and	
	directly quoted into this report.See relevant test	
	results for detailed.	

Report No.: NEI-FICP-3-1204C048C Page 5 of 206

1. CERTIFICATION

Equipment : Outdoor Wireless LAN Access Point

Brand Name: HUAWEI

Model Name: AP6610DN-AGN-US

Applicant : Huawei Technologies Co.,Ltd. Manufacturer : Huawei Technologies Co.,Ltd.

Address : Administration Building, Huawei Base, Bantian, Longgang District , Shenzhen

518129, P.R.China

Factory: Huawei Technologies Co.,Ltd.

Address : Huawei Base, Bantian, Longgang District, Shenzhen 518129, P.R.China

Date of Test : Apr. 17, 2012 ~ Jul. 16, 2012 Oct. 10, 2013 ~ Nov. 22, 2013

Test Item : ENGINEERING SAMPLE

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

Canada RSS-210:2010 RSS-GEN Issue 3, Dec 2010

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 Neutron Engineering Inc. EMC Laboratory.

The test data, data evaluation, and equipment configuration contained in our test report (Ref No. NEI-FICP-3-1204C048C) 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 5250MHz~5350MHz; 5470~5725MHz Mode part of the product.

Report No.: NEI-FICP-3-1204C048C Page 6 of 206

2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

FCC Part15, Subpart E / RSS-210: 20100 , RSS-GEN Issue 3, Dec 2010					
Standard	(s) Section	Test Item	Judgment	Remark	
RSS-GEN 7.2.2	15.207	AC Power Line Conducted Emissions	PASS		
RSS-210 A9.2(1)	15.407(a)	26dB Spectrum Bandwidth	PASS		
RSS-210 A9.2(1)	15.407(a)	Maximum Conducted Output Power	PASS		
RSS-210 A9.2(1)	15.407(a)	Power Spectral Density	PASS		
-	15.407(a)	Peak Excursion	PASS		
RSS-210 Annex 8 (A8.5)	15.407(a)	Radiated Emissions	PASS		
RSS-210 A9.2(1)	15.407(b)	Band Edge Emissions	PASS		
RSS-210 A1.1.4	15.407(g)	Frequency Stability	PASS		
-	15.203	Antenna Requirements	PASS		

NOTE:

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

Report No.: NEI-FICP-3-1204C048C Page 7 of 206

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

Neutron's test firm number for FCC: 319330 Neutron's test firm number for IC: 4428B-1

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 $\mathbf{95}\%$ \circ

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	
	CISPR	30MHz ~ 200MHz	Н	3.60	
DG-CB03		200MHz ~ 1,000MHz	V	3.86	
DG-CB03		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	

Report No.: NEI-FICP-3-1204C048C Page 8 of 206



3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

Equipment	Outdoor Wireless LAN Access Point			
Brand Name	HUAWEI			
Model Name	AP6610DN-AGN-US			
Mode Different	N/A			
Product Description	Operation Frequency Modulation Type: Bit Rate of Transmitter: Antenna Designation Antenna Gain(Peak) Output Power: Band 2 Output Power: Band 3 More details of EUT to User's Manual.	Band 2:5250MHz~5350MHz Band 3:5470MHz~5725MHz OFDM 300Mbps —Please see note 3.(Page 10) 802.11a: 21.40 dBm 802.11n 20M: 16.25 dBm (ANT 1) 802.11n 20M: 16.45 dBm (ANT 2) 802.11n 20M: 19.36 dBm (ANT 1+ANT 2) 802.11n 40M: 16.52dBm (ANT 1) 802.11n 40M: 16.03 dBm (ANT 2) 802.11n 40M: 19.29 dBm (ANT 1+ANT 2) 802.11a: 22.34 dBm 802.11a: 22.34 dBm 802.11n 20M: 15.97 dBm (ANT 1) 802.11n 20M: 15.47 dBm (ANT 2) 802.11n 20M: 15.47 dBm (ANT 2) 802.11n 40M: 16.98dBm (ANT 1) 802.11n 40M: 16.51 dBm (ANT 1) 802.11n 40M: 16.51 dBm (ANT 2) 802.11n 40M: 19.76 dBm (ANT 1+ANT 2) echnical specification, please refer to the		
Power Source	#1 AC Mains. #2 DC Voltage supplied from internal power. (Brand/ Model name: Huntkey / PD30-12A & Brand/ Model name: VAPEL / PD30-12A)			
Power Rating	#1 AC 230V/50Hz #2 I/P: 100-240V~; 50/60Hz; 0.85A MAX O/P: 12V; 0-2.5A			
Connecting I/O Port(s)	Please refer to the User	r's Manual.		

Note

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

Report No.: NEI-FICP-3-1204C048C Page 9 of 206

2. Channel List:

802.11a / 802.11n 20M							
Band 2 Band 3							
Channel	Frequency (MHz)	Channel	Channel Frequency (MHz) Channel Frequency (MHz)				
52	5260	100	5500	136	5680		
56	5280	104	5520	140	5700		
60	5300	108	5540				
64	5320	112	5560				

802.11n 40M						
Band 2 Band 3						
Channel	Frequency (MHz)	Channel	Frequency (MHz)			
54	5270	102	5510			
62	5310	110	5550			

3. Table for Filed Antenna:

Original Antenna

Origi	Original Antenna								
Ant.	Brand	Model Name	el Name		Gain (dBi) 5.2GHz				
1	() LARSEN	W5030	N Male	TX/RX	6.4				
2	() LARSEN	W5030	N Male	TX/RX	6.4				

New Antenna

Ant.	Manufacturer	Model Name	Antenna Type	Connector	Gain (dBi)
1	GUANGDON G SHENGLU TELECOMMU NICATION TECH. CO.,LTD.	SL10671A	Isotropic Antenna / N Male	N/A	5.9
2	GUANGDON G SHENGLU TELECOMMU NICATION TECH. CO.,LTD.	SL10671A	Isotropic Antenna / N Male	N/A	5.9

Report No.: NEI-FICP-3-1204C048C Page 10 of 206



Neutron Engineering Inc.—

4.

Operating Mode	1TX	2TX
TX Mode		
802.11a	V (ANT 1 or ANT 2)	V (ANT 1 + ANT 2)
802.11n(20MHz)	V (ANT 1 or ANT 2)	V (ANT 1 + ANT 2)
802.11n(40MHz)	V (ANT 1 or ANT 2)	V (ANT 1 + ANT 2)

Report No.: NEI-FICP-3-1204C048C Page 11 of 206

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 / CH52, CH56, CH64(Band 2) TX A Mode / CH100, CH112, CH140(Band 3)		
Mode 2	TX N20 Mode / CH52, CH56, CH64(Band 2) TX N20 Mode / CH100, CH112, CH140(Band 3)		
Mode 3	TX N40 Mode / CH54, CH62 (Band 2) TX N40 Mode/CH102, CH110 (Band 3)		
Mode 4	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 4	TX Mode				

For Radiated Test					
Final Test Mode	Description				
Mode 1	TX A Mode / CH52, CH56, CH64(Band 2) TX A Mode / CH100, CH112, CH140(Band 3)				
Mode 2	TX N20 Mode / CH52, CH56, CH64(Band 2) TX N20 Mode / CH100, CH112, CH140(Band 3)				
Mode 3	TX N40 Mode / CH54, CH62 (Band 2) TX N40 Mode/CH102, CH110 (Band 3)				

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

Report No.: NEI-FICP-3-1204C048C Page 12 of 206

3.3 TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING

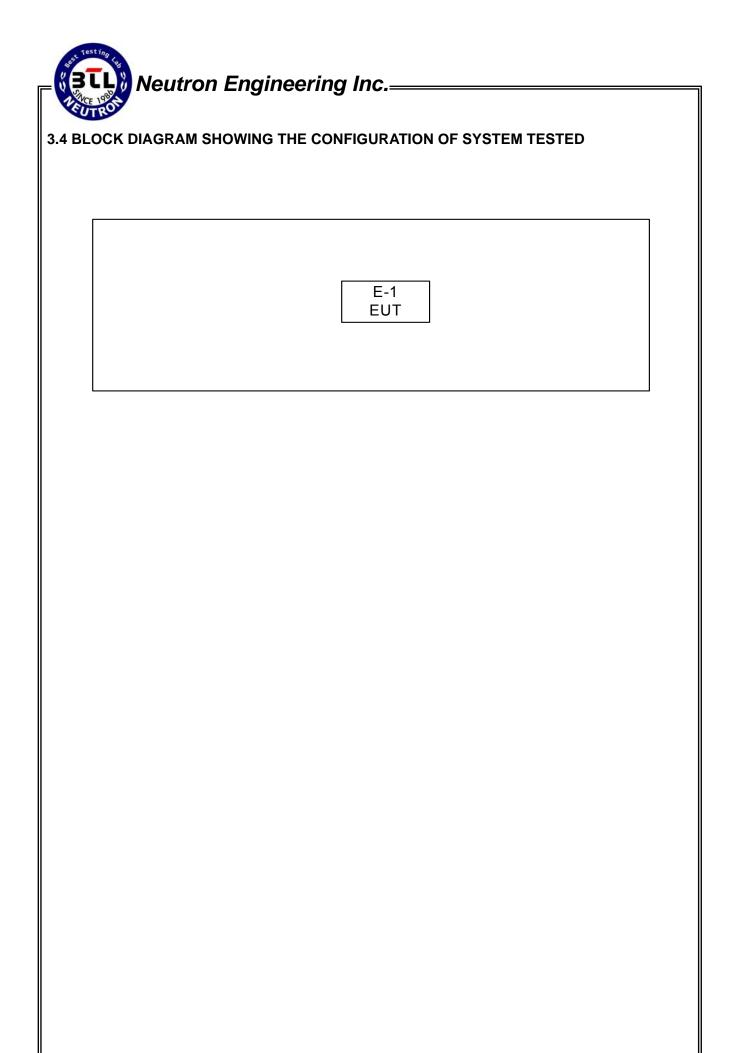
During testing channel & power controlling software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final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

Test software version	CART		
Frequency	5260	5280	5320
A Mode	20	20	19
Frequency	5500	5560	5700
A Mode	19	19	18

Test software version			
Frequency	5260	5280	5320
N20 Mode	16	16	16
Frequency	5500	5560	5700
N20 Mode	16	16	16

Test software version	CART			
Frequency	5270	5310		
N40 Mode	16	13		
Frequency	5510	5550		
N40M Mode	13	16		

Report No.: NEI-FICP-3-1204C048C Page 13 of 206



Report No.: NEI-FICP-3-1204C048C Page 14 of 206

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
E-1	Outdoor Wireless LAN Access Point		AP6610DN-AG N-US	FCC ID:QISAP6610DN-AGN IC: 6369A-AP6610DN	N/A	EUT

Item	Shielded Type	Ferrite Core	Length	Note
-	-	-	-	-

Note:

- (1) The support equipment was authorized by Declaration of Confirmation.
- (2) For detachable type I/O cable should be specified the length in m in <code>"Length"</code> column.

Report No.: NEI-FICP-3-1204C048C Page 15 of 206

4. EMC EMISSION TEST

4.1 CONDUCTED EMISSION MEASUREMENT

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

	Class A (dBuV)		Class B (dBuV)	
FREQUENCY (MHz)	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	Apr. 25, 2014
2	LISN	R&S	ENV216	100087	Nov. 09, 2014
3	Test Cable	N/A	C_17	N/A	Mar.15, 2014
4	EMI TEST RECEIVER	R&S	ESCS30	826547/022	Apr. 25, 2014
5	50Ω Terminator	SHX	TF2-3G-A	08122902	Apr. 25, 2014

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

All calibration period of equipment list is one year.

Report No.: NEI-FICP-3-1204C048C Page 16 of 206

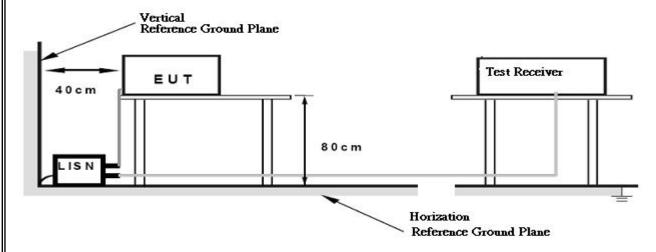
4.1.3 TEST PROCEDURE

- 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 fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

The EUT was programmed to be in continuously transmitting/TX Mode mode.

Report No.: NEI-FICP-3-1204C048C Page 17 of 206

4.1.7 TEST RESULTS

ı	▢	\sim	m	1	r	,	•
•	$\overline{}$	▭		เล	ш	n	

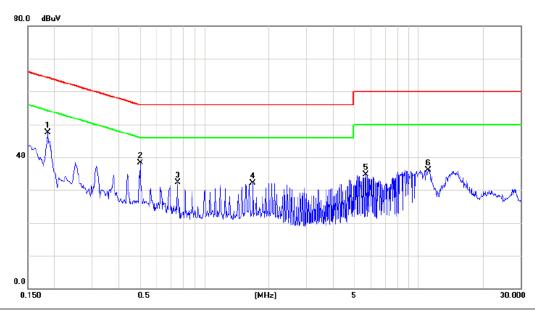
(1) All readings are QP Mode value unless otherwise stated AVG in column of Note. If the QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only QP Mode was measured, but AVG Mode didn't perform on this case, a " * " marked in AVG Mode column of Interference Voltage Measured on the Note of

(2) Measuring	frequency	range from	150KHz to	o 30MHz
\-	, wicasaring	nequency	range nom	1001112	

Report No.: NEI-FICP-3-1204C048C Page 18 of 206



IF() [.	Outdoor Wireless LAN Access Point	Model Name:	AP6610DN-AGN-US
Temperature:	24 ℃	Relative Humidity:	55 %
Test Power:	AC 120V/60Hz	Phase:	Line
Test Mode :	TX Mode		

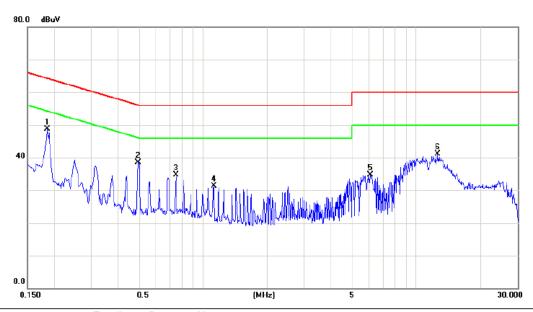


No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1 *	0.1864	37.55	10.00	47.55	64.20	-16.65	peak	
2	0.5020	28.37	10.01	38.38	56.00	-17.62	peak	
3	0.7540	22.25	10.08	32.33	56.00	-23.67	peak	
4	1.6940	21.99	10.05	32.04	56.00	-23.96	peak	
5	5.7060	24.49	10.14	34.63	60.00	-25.37	peak	
6	11.1020	25.67	10.37	36.04	60.00	-23.96	peak	

Report No.: NEI-FICP-3-1204C048C Page 19 of 206



IF() [.	Outdoor Wireless LAN Access Point	Model Name:	AP6610DN-AGN-US
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	*	0.1864	38.87	9.84	48.71	64.20	-15.49	peak	
	2		0.4980	28.64	9.90	38.54	56.03	-17.49	peak	
	3		0.7500	24.68	9.96	34.64	56.00	-21.36	peak	
-	4		1.1260	21.20	10.01	31.21	56.00	-24.79	peak	
-	5		6.1100	24.48	10.30	34.78	60.00	-25.22	peak	
-	6		12.6660	30.49	10.52	41.01	60.00	-18.99	peak	
_										

Report No.: NEI-FICP-3-1204C048C Page 20 of 206



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)& RSS-210 section 2.2&A8.5, 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 (MHz)	EIRP Limit (dBm)	Equivalent Field Strength 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:

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

Report No.: NEI-FICP-3-1204C048C Page 21 of 206

4.2.2 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Antenna	Schwarbeck	VULB9160	9160-3232	Apr. 25, 2014
2	Amplifier	HP	8447D	2944A09673	Apr. 25, 2014
3	Test Receiver	R&S	ESCI	100382	Apr. 25, 2014
4	Test Cable	N/A	C-01_CB03	N/A	Jul. 02, 2014
5	Antenna	ETS	3115	00075789	Apr. 25, 2014
6	Amplifier	Agilent	8449B	3008A02274	Apr. 25, 2014
7	Spectrum	Agilent	E4408B	US39240143	Nov. 09, 2014
8	Test Cable	HUBER+SUHNER	C-45	N/A	Apr. 30, 2014
9	Controller	СТ	SC100	N/A	N/A
10	Horn Antenna	EMCO	3115	9605-4803	Apr. 25, 2014
11	Active Loop Antenna	R&S	HFH2-Z2	830749/020	Apr. 25, 2014
12	Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170319	Oct. 22, 2014

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.

4.2.4 DEVIATION FROM TEST STANDARD

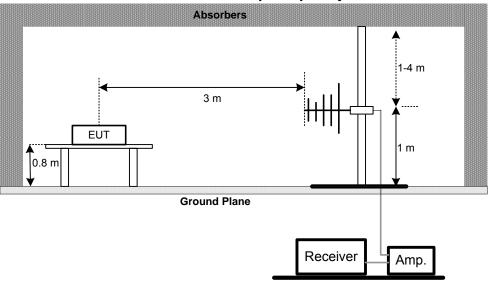
No deviation

Report No.: NEI-FICP-3-1204C048C Page 22 of 206

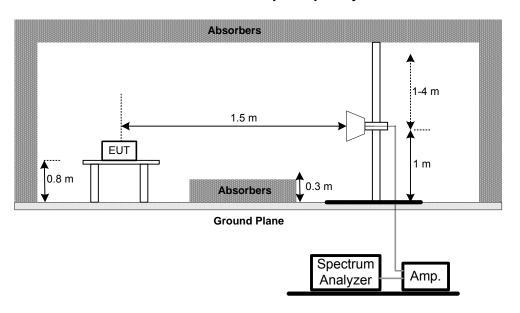


4.2.5 TEST SETUP

Radiated Emission Test Set-Up Frequency30 - 1000MHz



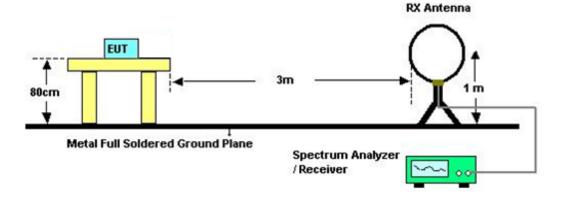
Radiated Emission Test Set-Up Frequency Above 1 GHz



Report No.: NEI-FICP-3-1204C048C Page 23 of 206



Radiated emissions below 30MHz



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.

Report No.: NEI-FICP-3-1204C048C Page 24 of 206

4.2.7 TEST RESULTS (BELOW 30MHZ)

EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	25℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX Mode		

Freq.	Ant.	Reading(RA)	Corr.Factor(CF)	Measured(FS)	Limits(QP)	Margin	Note
(MHz)	0°/90°	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	Note
0.0075	0°	25.59	24.30	49.89	130.10	-80.21	AV
0.0075	0°	29.57	24.30	53.87	150.10	-96.23	PK
0.0255	0°	21.64	23.95	45.59	119.46	-73.87	AVG
0.0255	0°	24.31	23.95	48.26	139.46	-91.20	PK
0.0388	0°	21.51	23.11	44.62	115.84	-71.22	AVG
0.0388	0°	24.38	23.11	47.49	135.84	-88.35	PK
0.0635	0°	18.73	22.13	40.86	111.55	-70.69	AV
0.0635	0°	23.92	22.13	46.05	131.55	-85.50	PK
0.2672	0°	20.63	20.36	40.99	99.07	-58.08	AVG
0.2672	0°	22.88	20.36	43.24	119.07	-75.83	PK
1.4736	0°	27.12	19.55	46.67	64.24	-17.56	QP

Freq. (MHz)	Ant. 0°/90°	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
— ` 			` '		,	` '	41.
0.0097	90°	19.42	24.30	43.72	127.85	-84.13	AV
0.0097	90°	20.28	24.30	44.58	147.85	-103.27	PK
0.0223	90°	15.54	24.15	39.69	120.63	-80.94	AVG
0.0223	90°	17.42	24.15	41.57	140.63	-99.06	PK
0.0462	90°	18.95	22.64	41.59	114.32	-72.72	AVG
0.0462	90°	21.27	22.64	43.91	134.32	-90.40	PK
0.0773	90°	21.11	21.85	42.96	109.84	-66.88	AV
0.0773	90°	22.27	21.85	44.12	129.84	-85.72	PK
0.3758	90°	21.38	20.10	41.48	96.10	-54.63	AVG
0.3758	90°	24.55	20.10	44.65	116.10	-71.46	PK
1.7162	90°	25.95	19.53	45.48	69.54	-24.06	QP

Remark:

- (1) The amplitude of spurious emissions which are attenuated by more than 20 dB belc the permissible value has no need to be reported.
- (2) Distance extrapolation factor = 40 log (specific distance / test distance) (dB);.
- (3) Limit line = specific limits (dBuV) + distance extrapolation factor...

Report No.: NEI-FICP-3-1204C048C Page 25 of 206

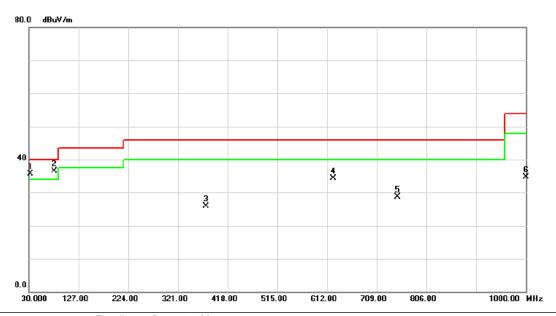
4.2.8 TEST RESULTS-BETWEEN 30MHZ - 1000MHZ

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 = $0.3 \text{ sec./MHz} \circ$
- (2) All readings are Peak unless otherwise stated QP in column of \lceil Note $_{
 m l}$. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform $_{
 m o}$
- (3) Measuring frequency range from 30MHz to 1000MHz o
- (4) If the peak scan value lower limit more than 20dB, then this signal data does not show in table \circ

Report No.: NEI-FICP-3-1204C048C Page 26 of 206

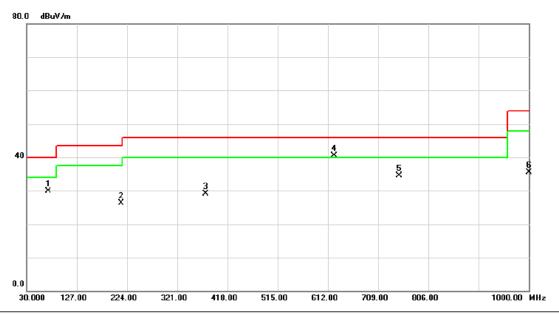
EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	25℃	Relative Humidity:	58 %
Test Voltage :	AC 120V/60Hz	Phase:	Vertical
Test Mode :	Band 2/TX A Mode 5260MHz		



N	lo.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
			MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
	1	İ	32.9100	51.50	-15.75	35.75	40.00	-4.25	peak	
	2	*	79.4700	53.96	-17.43	36.53	40.00	-3.47	peak	
	3		375.3200	36.66	-10.66	26.00	46.00	-20.00	peak	
	4		624.6100	41.19	-6.86	34.33	46.00	-11.67	peak	
	5		749.7400	33.70	-4.91	28.79	46.00	-17.21	peak	
	6		1000.000	34.48	0.26	34.74	54.00	-19.26	peak	

Report No.: NEI-FICP-3-1204C048C Page 27 of 206

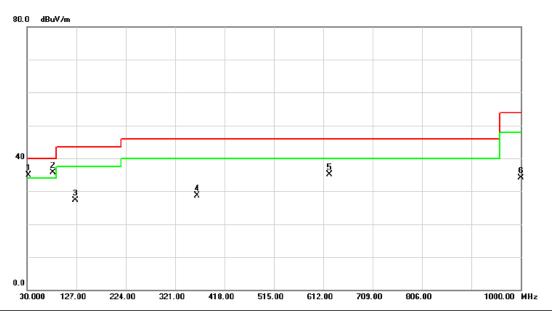
EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	25 ℃	Relative Humidity:	58 %
Test Voltage :	AC 120V/60Hz	Phase:	Horizontal
Test Mode :	Band 2/TX A Mode 5260MHz		



1	No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
			MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
	1		71.7100	46.28	-16.46	29.82	40.00	-10.18	peak	
	2	2	212.3600	41.60	-15.20	26.40	43.50	-17.10	peak	
	3	3	375.3200	39.77	-10.66	29.11	46.00	-16.89	peak	
	4	* 6	324.6100	47.35	-6.86	40.49	46.00	-5.51	peak	
	5	7	749.7400	39.45	-4.91	34.54	46.00	-11.46	peak	
	6	1	000.000	35.32	0.26	35.58	54.00	-18.42	peak	

Report No.: NEI-FICP-3-1204C048C Page 28 of 206

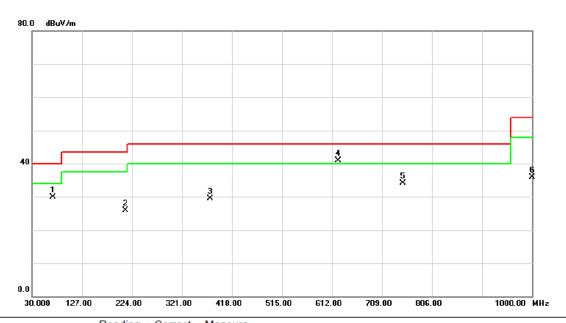
EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	25℃	Relative Humidity:	58 %
Test Voltage :	AC 120V/60Hz	Phase:	Vertical
Test Mode :	Band 2/TX A Mode 5280MHz		



No.	Mk	c. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	İ	32.9100	50.58	-15.75	34.83	40.00	-5.17	peak	
2	*	81.4100	53.26	-17.60	35.66	40.00	-4.34	peak	
3		125.0600	40.92	-13.61	27.31	43.50	-16.19	peak	
4		364.6500	39.68	-10.99	28.69	46.00	-17.31	peak	
5		624.6100	42.03	-6.86	35.17	46.00	-10.83	peak	
6		1000.000	33.79	0.26	34.05	54.00	-19.95	peak	

Report No.: NEI-FICP-3-1204C048C Page 29 of 206

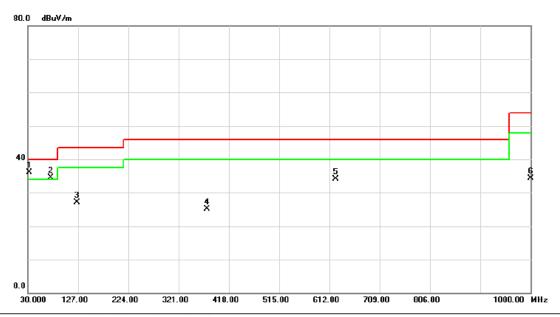
EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	25℃	Relative Humidity:	58 %
Test Voltage :	AC 120V/60Hz	Phase:	Horizontal
Test Mode :	Band 2/TX A Mode 5280MHz		



	No.	Mk.	Freq.	Reading Level	Factor	Measure- ment	Limit	Over		
-			MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
	1		70.7400	46.26	-16.37	29.89	40.00	-10.11	peak	
	2	:	211.3900	41.08	-15.22	25.86	43.50	-17.64	peak	
Ī	3	,	375.3200	40.24	-10.66	29.58	46.00	-16.42	peak	
	4	*	624.6100	47.67	-6.86	40.81	46.00	-5.19	peak	
Ī	5		749.7400	39.06	-4.91	34.15	46.00	-11.85	peak	
	6		1000.000	35.65	0.26	35.91	54.00	-18.09	peak	
_										

Report No.: NEI-FICP-3-1204C048C Page 30 of 206

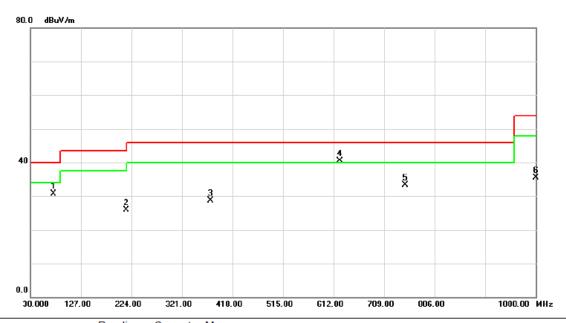
EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	25℃	Relative Humidity:	58 %
Test Voltage :	AC 120V/60Hz	Phase:	Vertical
Test Mode :	Band 2/TX A Mode 5320MHz		



	No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
			MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
_	1	*	32.9100	51.94	-15.75	36.19	40.00	-3.81	peak	
_	2	İ	74.6200	51.18	-16.72	34.46	40.00	-5.54	peak	
	3	,	125.0600	40.70	-13.61	27.09	43.50	-16.41	peak	
_	4		375.3200	35.69	-10.66	25.03	46.00	-20.97	peak	
_	5	(624.6100	40.89	-6.86	34.03	46.00	-11.97	peak	
	6	•	1000.000	34.09	0.26	34.35	54.00	-19.65	peak	

Report No.: NEI-FICP-3-1204C048C Page 31 of 206

EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	25 ℃	Relative Humidity:	58 %
Test Voltage :	AC 120V/60Hz	Phase:	Horizontal
Test Mode :	Band 2/TX A Mode 5320MHz		

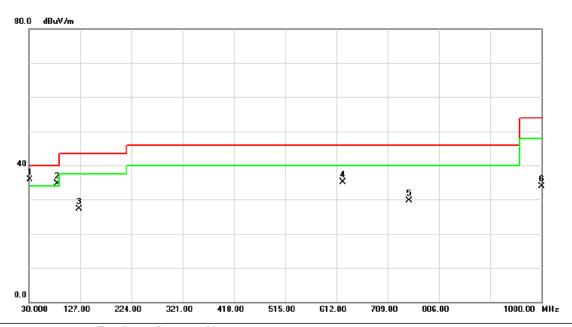


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		74.6200	47.42	-16.72	30.70	40.00	-9.30	peak	
2	2	214.3000	41.11	-15.15	25.96	43.50	-17.54	peak	
3	;	375.3200	39.38	-10.66	28.72	46.00	-17.28	peak	
4	* (624.6100	47.30	-6.86	40.44	46.00	-5.56	peak	
5	1	749.7400	38.23	-4.91	33.32	46.00	-12.68	peak	
6		1000.000	35.27	0.26	35.53	54.00	-18.47	peak	

Report No.: NEI-FICP-3-1204C048C Page 32 of 206



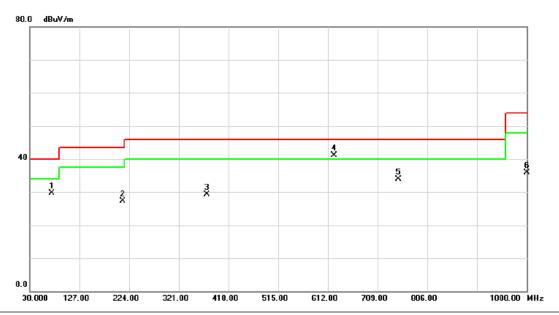
EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	25℃	Relative Humidity:	58 %
Test Voltage :	AC 120V/60Hz	Phase:	Vertical
Test Mode :	Band 3/TX A Mode 5500MHz		



	No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
-			MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
_	1	*	31.9400	51.82	-15.96	35.86	40.00	-4.14	peak	
_	2	İ	83.3500	52.53	-17.75	34.78	40.00	-5.22	peak	
_	3		125.0600	40.83	-13.61	27.22	43.50	-16.28	peak	
_	4		624.6100	41.92	-6.86	35.06	46.00	-10.94	peak	
_	5		749.7400	34.54	-4.91	29.63	46.00	-16.37	peak	
-	6		1000.000	33.58	0.26	33.84	54.00	-20.16	peak	
-										

Report No.: NEI-FICP-3-1204C048C Page 33 of 206

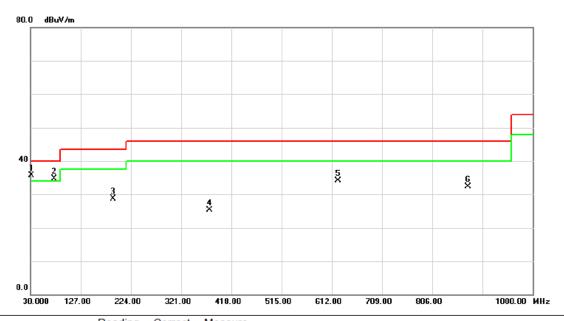
EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	25 ℃	Relative Humidity:	58 %
Test Voltage :	AC 120V/60Hz	Phase:	Horizontal
Test Mode :	Band 3/TX A Mode 5500MHz		



	No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
_			MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
	1		73.6500	46.28	-16.64	29.64	40.00	-10.36	peak	
_	2	2	211.3900	42.61	-15.22	27.39	43.50	-16.11	peak	
_	3	;	375.3200	40.02	-10.66	29.36	46.00	-16.64	peak	
-	4	* (624.6100	47.97	-6.86	41.11	46.00	-4.89	peak	
_	5	-	749.7400	38.86	-4.91	33.95	46.00	-12.05	peak	
_	6	•	1000.000	35.66	0.26	35.92	54.00	-18.08	peak	

Report No.: NEI-FICP-3-1204C048C Page 34 of 206

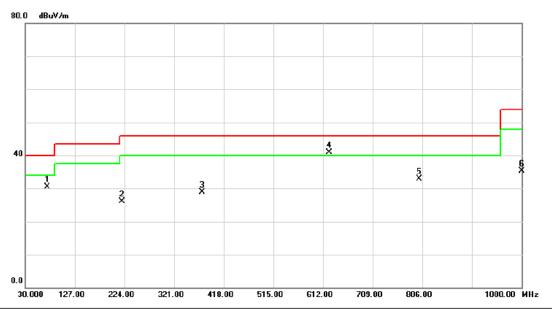
EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	25℃	Relative Humidity:	58 %
Test Voltage :	AC 120V/60Hz	Phase:	Vertical
Test Mode :	Band 3/TX A Mode 5560MHz		



	No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
			MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
	1	*	31.9400	51.65	-15.96	35.69	40.00	-4.31	peak	
	2	İ	75.5900	51.59	-16.85	34.74	40.00	-5.26	peak	
	3		190.0500	42.97	-14.31	28.66	43.50	-14.84	peak	
_	4		375.3200	35.97	-10.66	25.31	46.00	-20.69	peak	
	5		624.6100	40.98	-6.86	34.12	46.00	-11.88	peak	
_	6		874.8700	34.85	-2.48	32.37	46.00	-13.63	peak	

Report No.: NEI-FICP-3-1204C048C Page 35 of 206

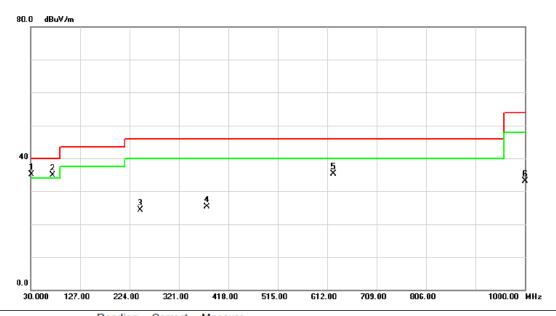
EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	25 ℃	Relative Humidity:	58 %
Test Voltage :	AC 120V/60Hz	Phase:	Horizontal
Test Mode :	Band 3/TX A Mode 5560MHz		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBu∨	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		72.6800	47.02	-16.55	30.47	40.00	-9.53	peak	
2		219.1500	41.06	-15.04	26.02	46.00	-19.98	peak	
3		375.3200	39.53	-10.66	28.87	46.00	-17.13	peak	
4	*	624.6100	47.67	-6.86	40.81	46.00	-5.19	peak	
5		800.1800	36.07	-3.11	32.96	46.00	-13.04	peak	
6		1000.000	35.13	0.26	35.39	54.00	-18.61	peak	

Report No.: NEI-FICP-3-1204C048C Page 36 of 206

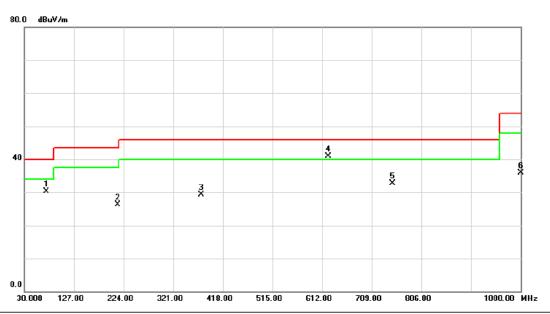
EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	25℃	Relative Humidity:	58 %
Test Voltage :	AC 120V/60Hz	Phase:	Vertical
Test Mode :	Band 3/TX A Mode 5700MHz		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	31.9400	51.16	-15.96	35.20	40.00	-4.80	peak	
2	İ	72.6800	51.55	-16.55	35.00	40.00	-5.00	peak	
3		245.3400	39.25	-14.90	24.35	46.00	-21.65	peak	
4		375.3200	35.94	-10.66	25.28	46.00	-20.72	peak	
5		624.6100	42.20	-6.86	35.34	46.00	-10.66	peak	
6		1000.000	32.93	0.26	33.19	54.00	-20.81	peak	

Report No.: NEI-FICP-3-1204C048C Page 37 of 206

EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	25 ℃	Relative Humidity:	58 %
Test Voltage :	AC 120V/60Hz	Phase:	Horizontal
Test Mode :	Band 3/TX A Mode 5700MHz		



No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		73.6500	46.98	-16.64	30.34	40.00	-9.66	peak	
2		212.3600	41.42	-15.20	26.22	43.50	-17.28	peak	
3		375.3200	39.92	-10.66	29.26	46.00	-16.74	peak	
4	*	624.6100	47.79	-6.86	40.93	46.00	-5.07	peak	
5		749.7400	37.52	-4.91	32.61	46.00	-13.39	peak	
6		1000.000	35.59	0.26	35.85	54.00	-18.15	peak	

Report No.: NEI-FICP-3-1204C048C Page 38 of 206

4.2.9 TEST RESULTS - ABOVE 1000MHZ

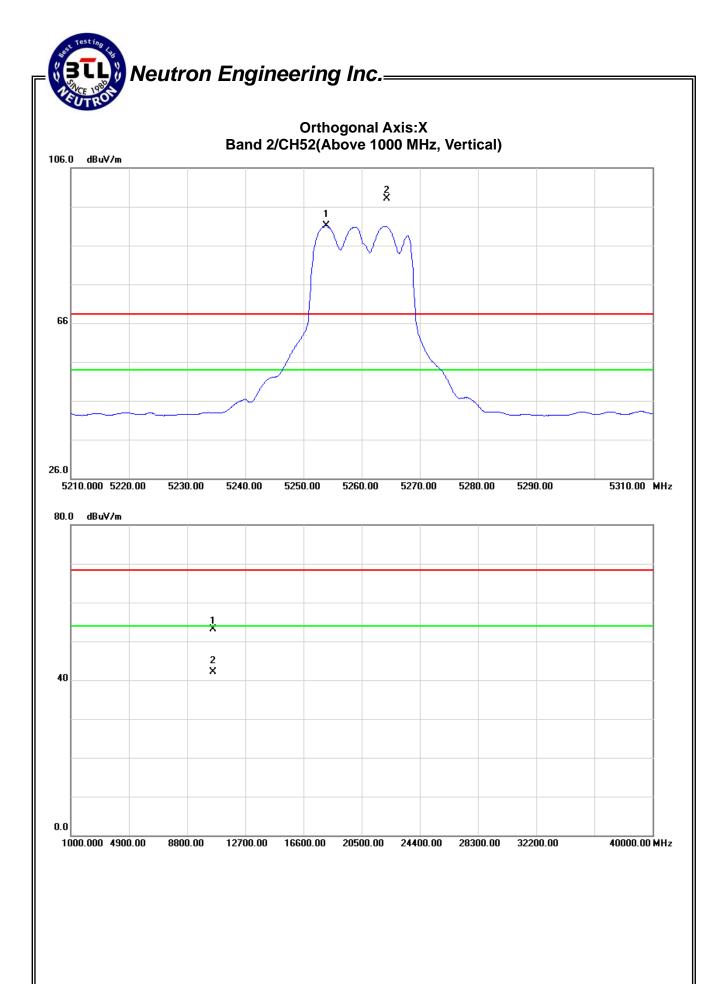
EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	25°C	Relative Humidity:	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 2/ TX A Mode 5260MHz		

Freq.	Ant.Pd.	Read	ding	Ant./CF	Act.(dE	BuV/m)	Act.(dBm)	Limit(dBuV/m)		Limit(dBm)		
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)									
5264.30	V	55.20	48.15	43.00	98.20	91.15	-6.57	-13.62					X/F
10516.65	V	37.29	26.23	15.87	53.16	42.10	-51.61	-62.67	68.30	54.00	-27.00	-41.30	X/H

Remark:

- (1) Spectrum Setting: 30MHz 1000MHz, RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated AV in column of <code>『Note』</code>. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission •
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Report No.: NEI-FICP-3-1204C048C Page 39 of 206



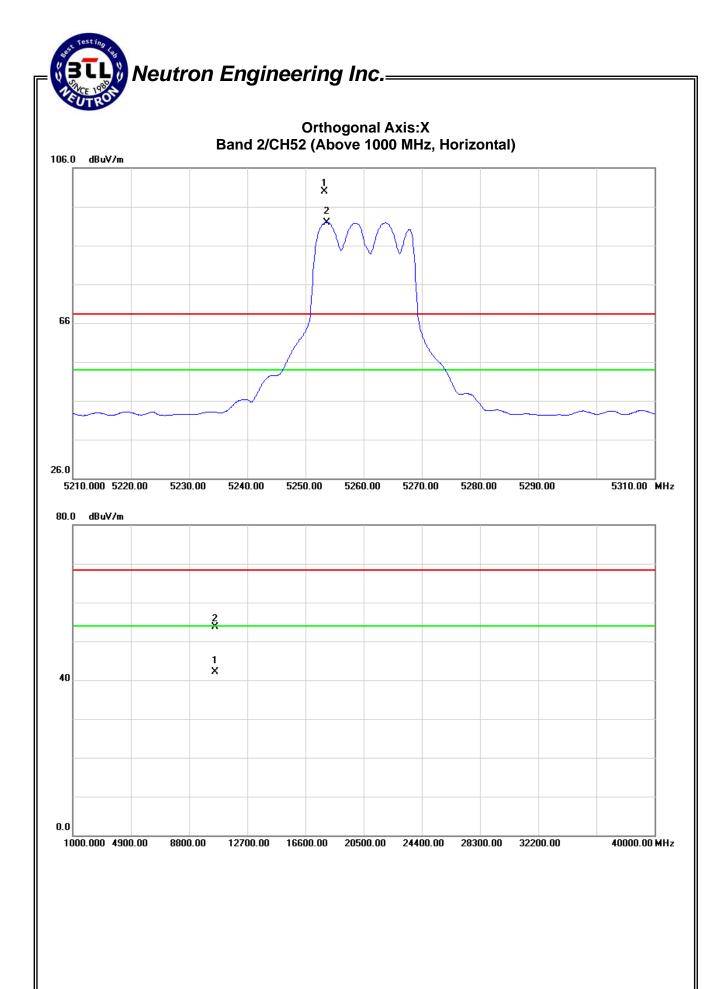


EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	25°C	Relative Humidity:	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 2/ TX A Mode 5260MHz		

Freq.	Ant.Pd.	Read	ding	Ant./CF	Act.(dE	BuV/m)	Act.(dBm)	Limit(dBuV/m)		Limit(dBm)		
		Peak	AV] [Peak	AV	Peak	AV	Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)									
5253.20	Н	56.89	48.99	42.98	99.87	91.97	-4.90	-12.80					X/F
10518.25	Н	37.80	26.23	15.87	53.67	42.10	-51.10	-62.67	68.30	54.00	-27.00	-41.30	X/H

- (1) Spectrum Setting : 30MHz 1000MHz, RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated AV in column of <code>『Note』</code>. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission ∘
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Report No.: NEI-FICP-3-1204C048C Page 41 of 206



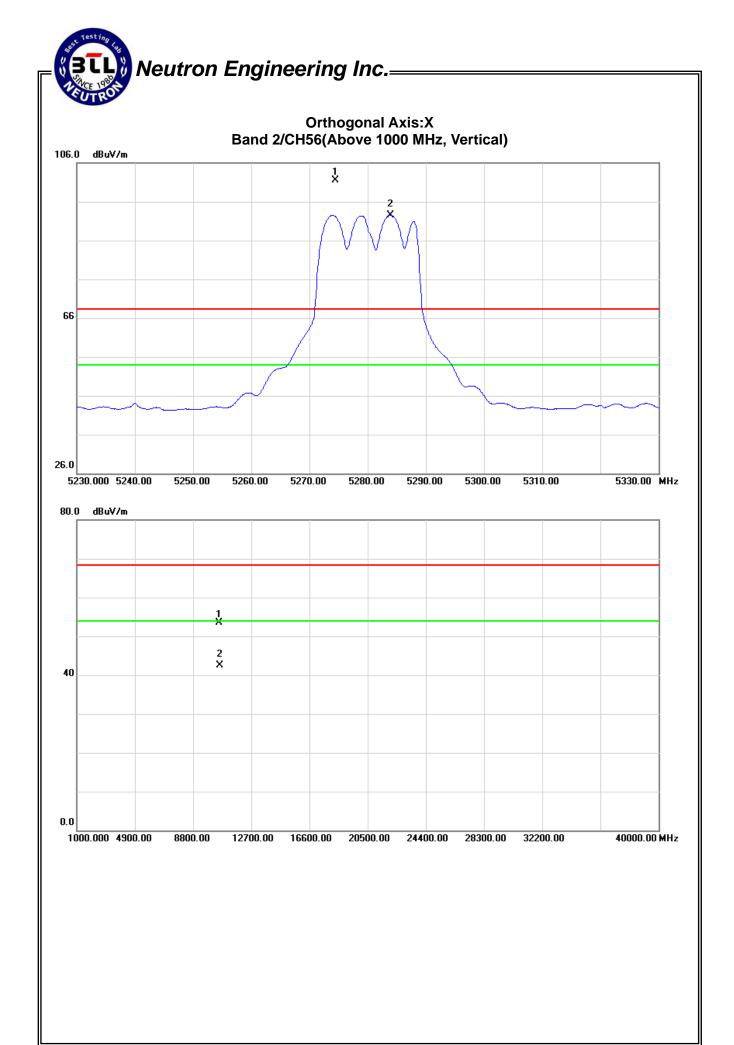


EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	25°C	Relative Humidity:	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 2/ TX A Mode 5280MHz		

Freq.	Ant.Pd.	Read	ding	Ant./CF	Act.(dE	BuV/m)	Act.(dBm)	Limit(d	lBuV/m)	Limit(dBm)		
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)									
5274.40	V	58.41	49.55	43.03	101.44	92.58	-3.33	-12.19					X/F
10562.30	V	37.52	26.42	16.00	53.52	42.42	-51.25	-62.35	68.30	54.00	-27.00	-41.30	X/H

- (1) Spectrum Setting : 30MHz 1000MHz, RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated AV in column of 『Note』. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission ∘
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Report No.: NEI-FICP-3-1204C048C Page 43 of 206



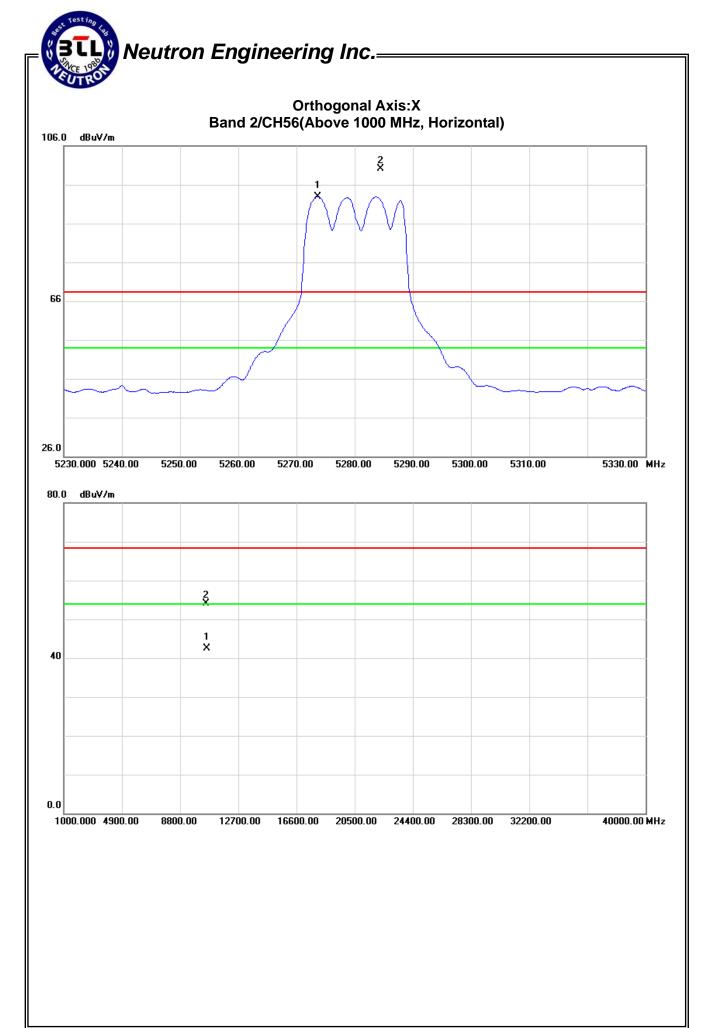


EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	25°C	Relative Humidity:	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 2/ TX A Mode 5280MHz		

Freq.	Ant.Pd.	Read	ding	Ant./CF	Act.(dE	BuV/m)	Act.(dBm)	Limit(dBuV/m)		Limit(dBm)		
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)									
5284.40	Н	57.10	49.85	43.03	100.13	92.88	-4.64	-11.89					X/F
10563.50	Н	38.01	26.53	16.00	54.01	42.53	-50.76	-62.24	68.30	54.00	-27.00	-41.30	X/H

- (1) Spectrum Setting : 30MHz 1000MHz, RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated AV in column of 『Note』. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission ∘
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Report No.: NEI-FICP-3-1204C048C Page 45 of 206



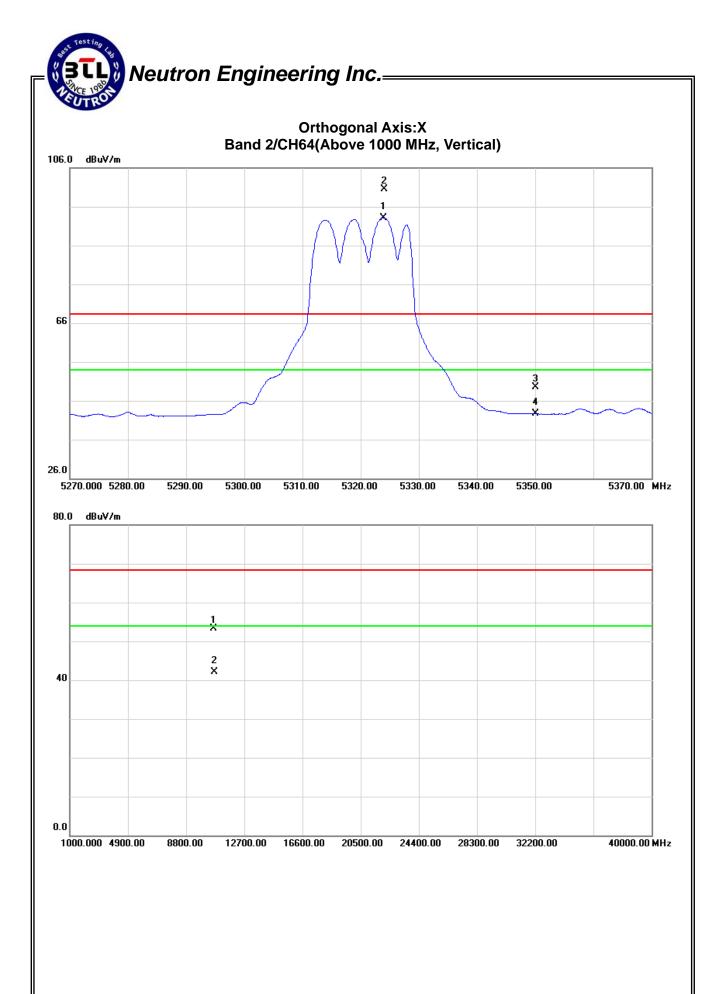


EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	25°C	Relative Humidity:	52 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 2/ TX A Mode 5320MHz		

Freq.	Ant.Pd.	Reading		Ant./CF	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)									
5324.10	V	57.35	50.00	43.15	100.50	93.15	-4.27	-11.62					X/F
5350.00	V	6.31	-0.54	43.21	49.52	42.67	-55.25	-62.10	68.30	54.00	-27.00	-41.30	X/E
10642.50	V	37.06	25.94	16.23	53.29	42.17	-51.48	-62.60	68.30	54.00	-27.00	-41.30	X/H

- (1) Spectrum Setting: 30MHz 1000MHz, RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated AV in column of 『Note』. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission •
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Report No.: NEI-FICP-3-1204C048C Page 47 of 206



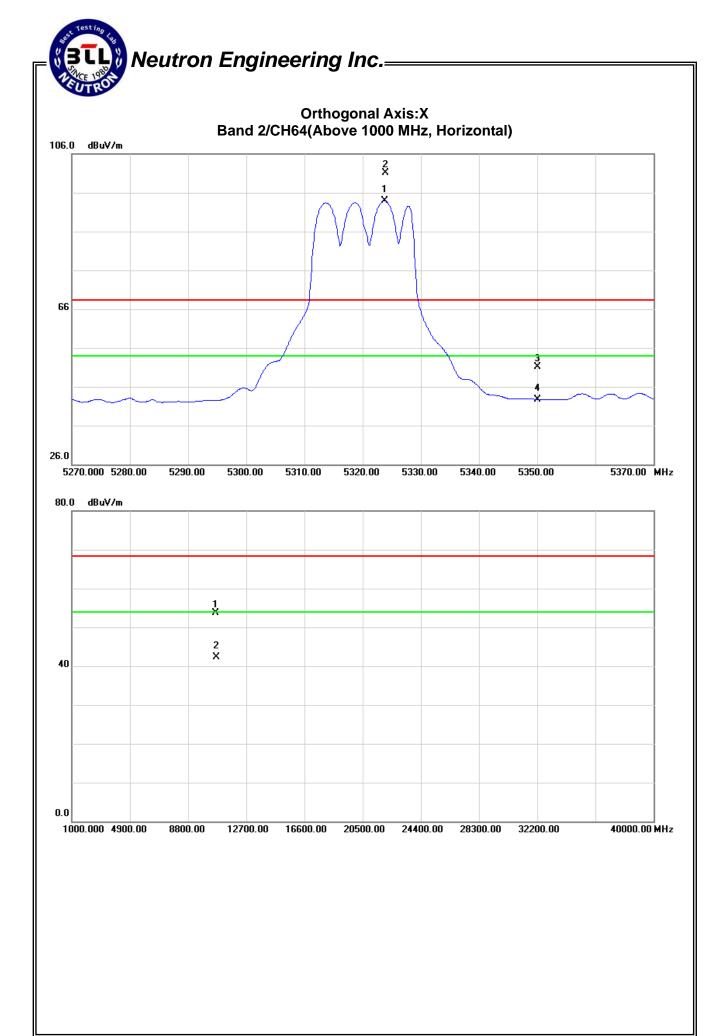


EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	25°C	Relative Humidity:	52 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 2/ TX A Mode 5320MHz		

Freq.	Ant.Pd.	Reading		Ant./CF	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)									
5323.80	Н	57.89	57.89	43.15	101.04	101.04	-3.73	-3.73					X/F
5350.00	Н	7.97	-0.45	43.21	51.18	42.76	-53.59	-62.01	68.30	54.00	-27.00	-41.30	X/E
10642.50	Н	37.50	26.13	16.23	53.73	42.36	-51.04	-62.41	68.30	54.00	-27.00	-41.30	X/H

- (1) Spectrum Setting: 30MHz 1000MHz, RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated AV in column of 『Note』. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission •
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Report No.: NEI-FICP-3-1204C048C Page 49 of 206



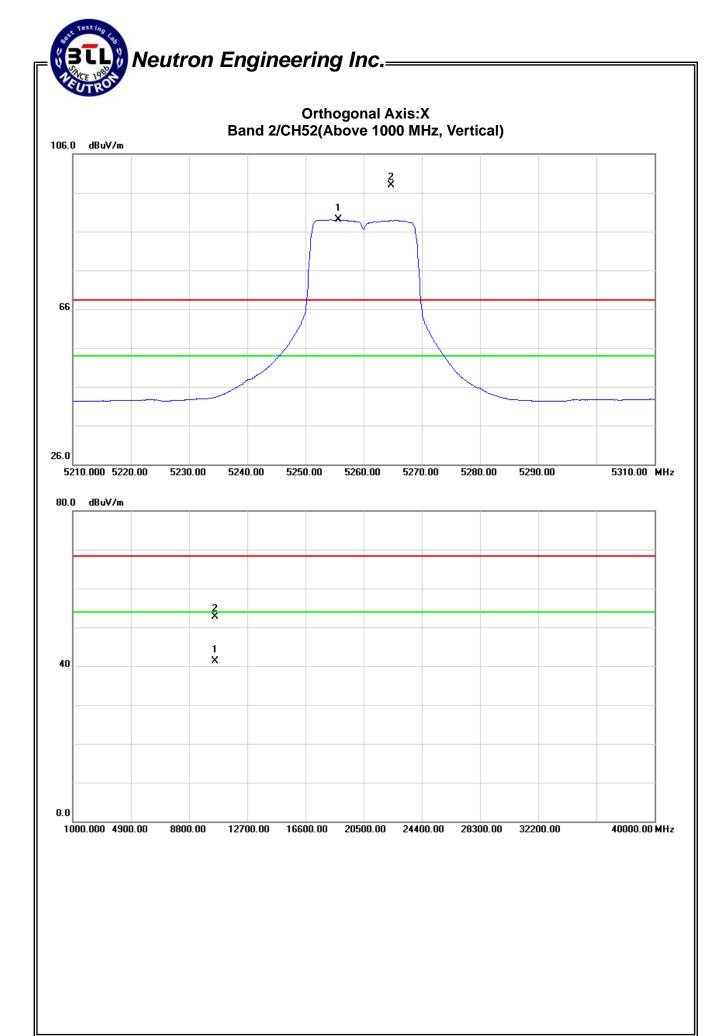


EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US						
Temperature:	25°C	Relative Humidity:	58 %						
Test Voltage :	AC 120V/60Hz								
Test Mode :	Band 2/ TX N20 Mode 5260MH								

Freq.	Ant.Pd.	Read	ding	Ant./CF	Act.(dE	Act.(dBuV/m)		Act.(dBm)		3uV/m)	Limit(dBm)		
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)									
5264.70	V	54.86	46.05	42.98	97.84	89.03	-6.93	-15.74					X/F
10524.60	V	36.74	25.43	15.89	52.63	41.32	-52.14	-63.45	68.30	54.00	-27.00	-41.30	X/H

- (1) Spectrum Setting : 30MHz 1000MHz, RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated AV in column of <code>『Note』</code>. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission ∘
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Report No.: NEI-FICP-3-1204C048C Page 51 of 206



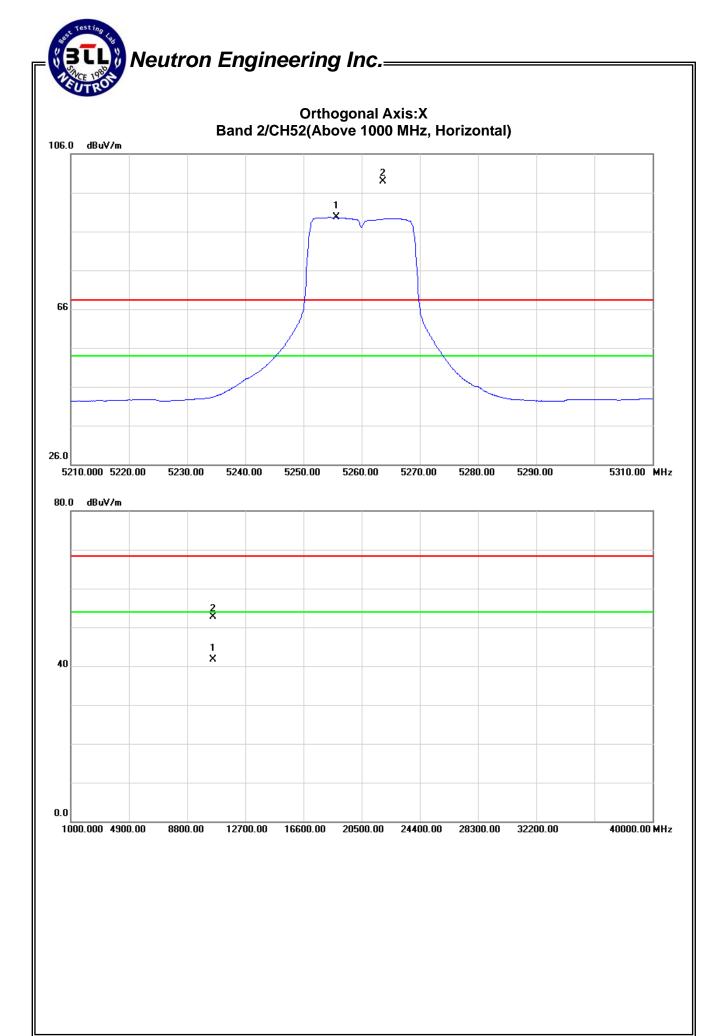


EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US						
Temperature:	25°C	Relative Humidity:	58 %						
Test Voltage :	AC 120V/60Hz								
Test Mode :	Band 2/ TX N20 Mode 5260MH	and 2/ TX N20 Mode 5260MHz							

Freq.	Ant.Pd.	Reading A		Ant./CF	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)									
5263.70	Н	55.98	46.65	43.00	98.98	89.65	-5.79	-15.12					X/F
10524.70	Н	36.86	25.76	15.89	52.75	41.65	-52.02	-63.12	68.30	54.00	-27.00	-41.30	X/H

- (1) Spectrum Setting : 30MHz 1000MHz, RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated AV in column of 『Note』. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission ∘
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Report No.: NEI-FICP-3-1204C048C Page 53 of 206



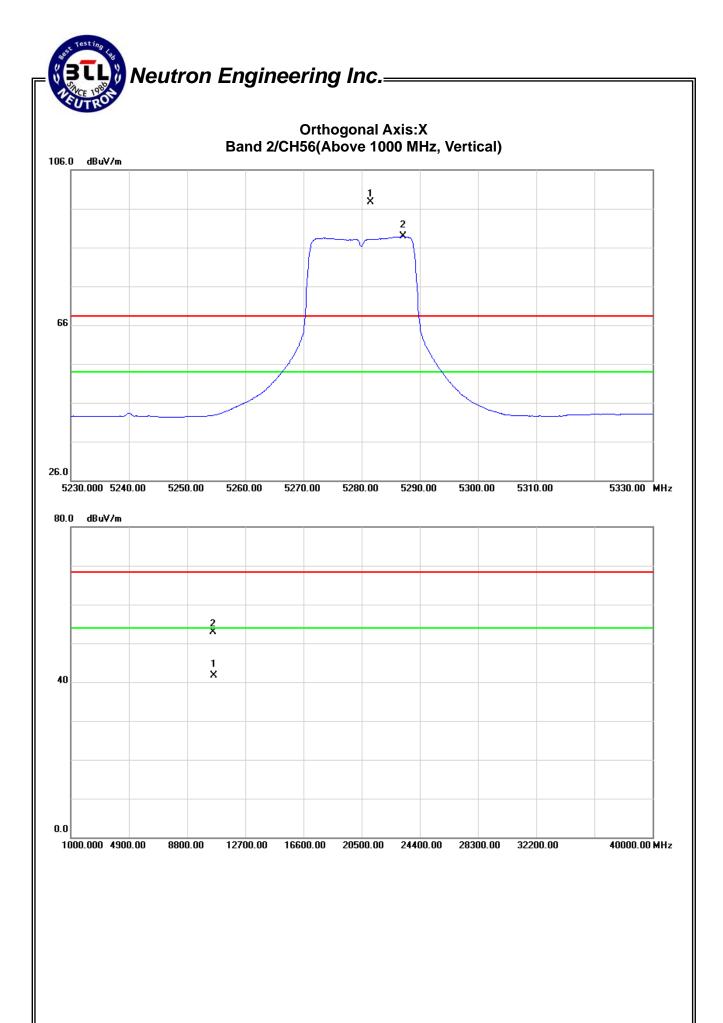


EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US						
Temperature:	25°C	Relative Humidity:	58 %						
Test Voltage :	AC 120V/60Hz								
Test Mode :	Band 2/ TX N20 Mode 5280MH	and 2/ TX N20 Mode 5280MHz							

Freq.	Ant.Pd.			Ant./CF	Act.(dE	Act.(dBuV/m)		Act.(dBm)		lBuV/m)	Limit(dBm)		
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)									
5281.50	V	54.75	45.76	43.04	97.79	88.80	-6.98	-15.97					X/F
10563.70	V	36.89	25.67	16.00	52.89	41.67	-51.88	-63.10	68.30	54.00	-27.00	-41.30	X/H

- (1) Spectrum Setting : 30MHz 1000MHz, RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated AV in column of 『Note』. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission ∘
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Report No.: NEI-FICP-3-1204C048C Page 55 of 206



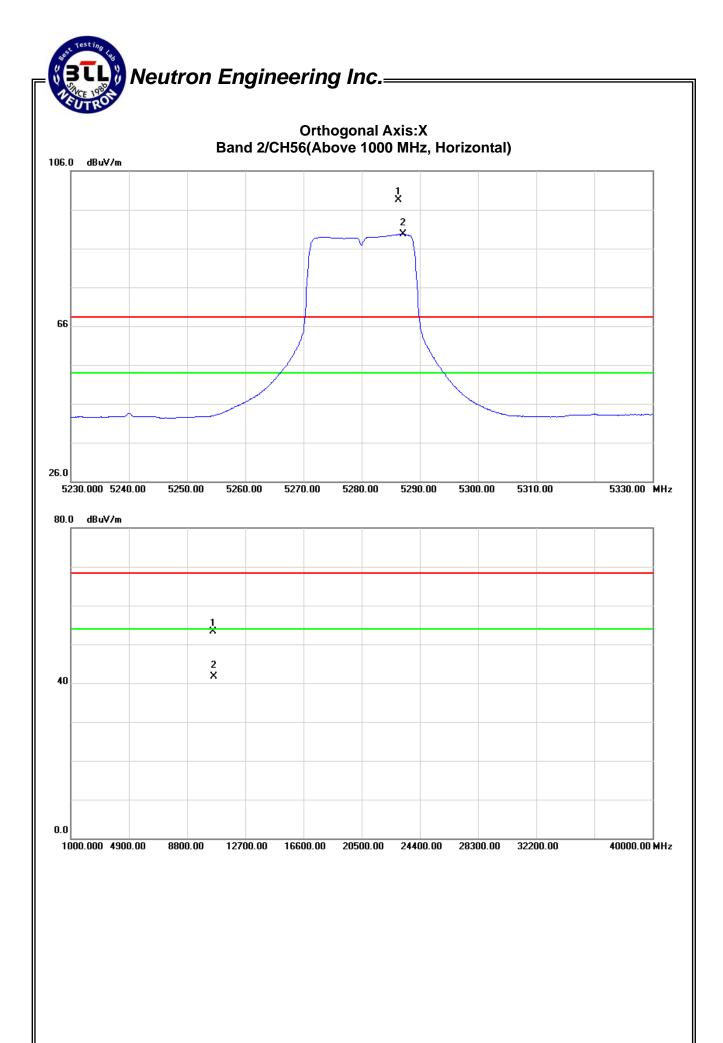


EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	25°C	Relative Humidity:	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 2/ TX N20 Mode 5280MH	łz	

Freq.	Ant.Pd.	Reading		Ant./CF	Act.(dE	BuV/m)	Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)									
5286.30	Н	55.39	46.63	43.06	98.45	89.69	-6.32	-15.08					X/F
10562.60	Н	37.29	25.73	16.00	53.29	41.73	-51.48	-63.04	68.30	54.00	-27.00	-41.30	X/H

- (1) Spectrum Setting : 30MHz 1000MHz, RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated AV in column of <code>『Note』</code>. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission ∘
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Report No.: NEI-FICP-3-1204C048C Page 57 of 206



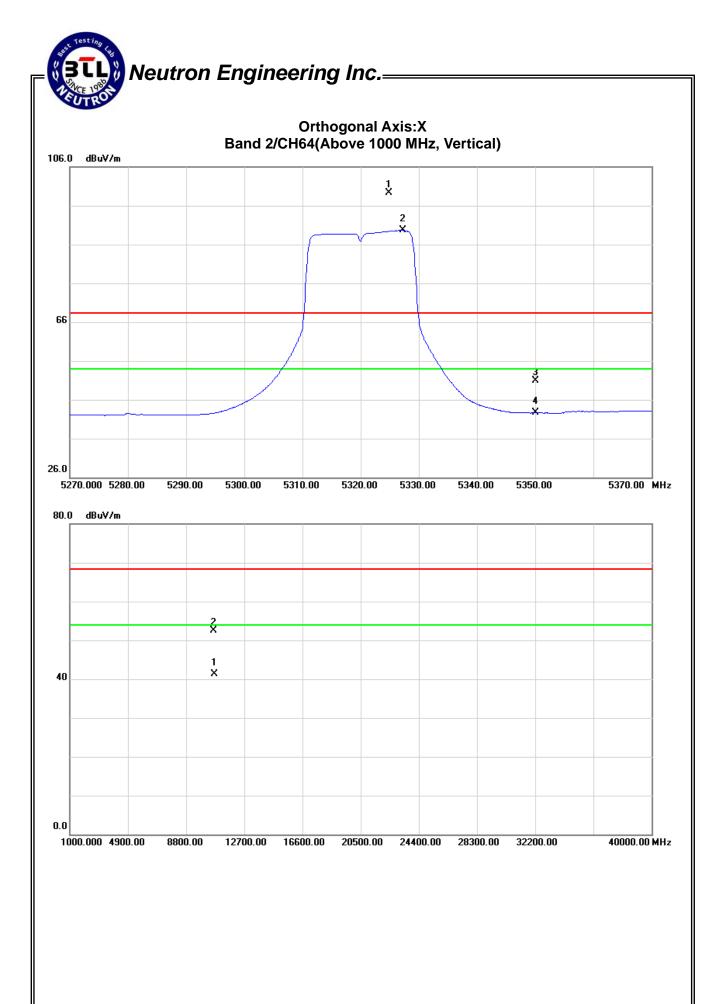


EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	25°C	Relative Humidity:	52 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 2/ TX N20 Mode 5320MF	łz	

Freq.	Ant.Pd.	Read	ding	Ant./CF	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)									
5324.90	V	56.18	46.51	43.15	99.33	89.66	-5.44	-15.11					X/F
5350.00	V	7.70	-0.58	43.21	50.91	42.63	-53.86	-62.14	68.30	54.00	-27.00	-41.30	X/E
10645.00	V	36.27	25.16	16.24	52.51	41.40	-52.26	-63.37	68.30	54.00	-27.00	-41.30	X/H

- (1) Spectrum Setting: 30MHz 1000MHz, RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated AV in column of <code>『Note』</code>. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission ∘
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Report No.: NEI-FICP-3-1204C048C Page 59 of 206



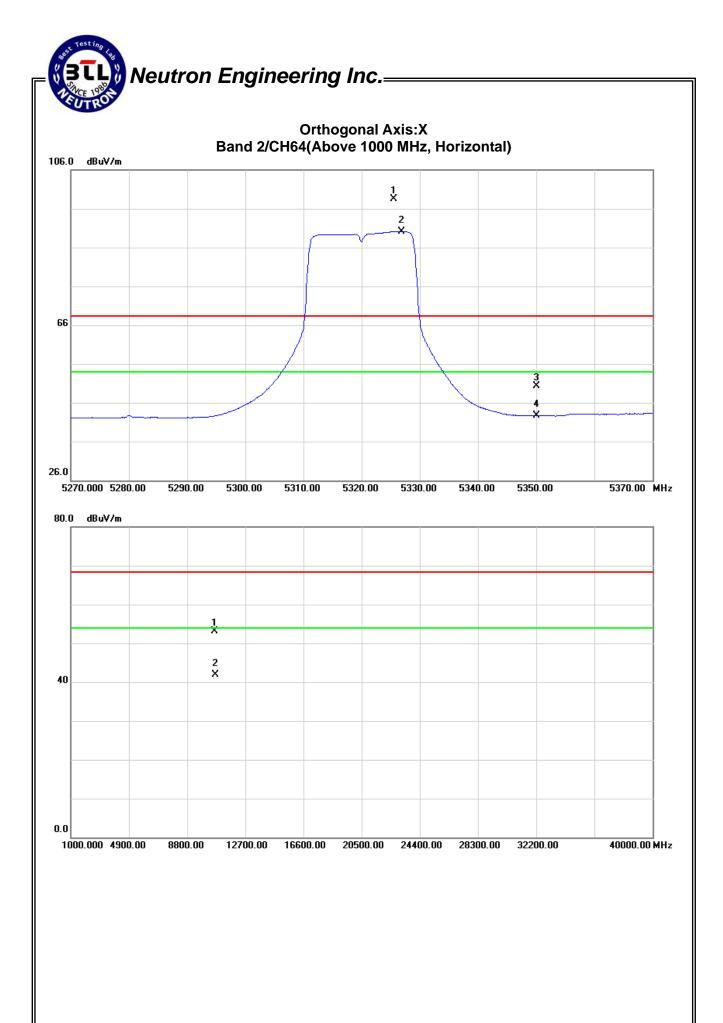


EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	25°C	Relative Humidity:	52 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 2/ TX N20 Mode 5320MF	łz	

Freq.	Ant.Pd.	Reading		Ant./CF	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)									
5325.50	Н	55.45	47.02	43.15	98.60	90.17	-6.17	-14.60					X/F
5350.00	Н	7.16	-0.50	43.21	50.37	42.71	-54.40	-62.06	68.30	54.00	-27.00	-41.30	X/E
10641.50	Н	36.84	25.75	16.23	53.07	41.98	-51.70	-62.79	68.30	54.00	-27.00	-41.30	X/H

- (1) Spectrum Setting: 30MHz 1000MHz, RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated AV in column of <code>『Note』</code>. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission ∘
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Report No.: NEI-FICP-3-1204C048C Page 61 of 206



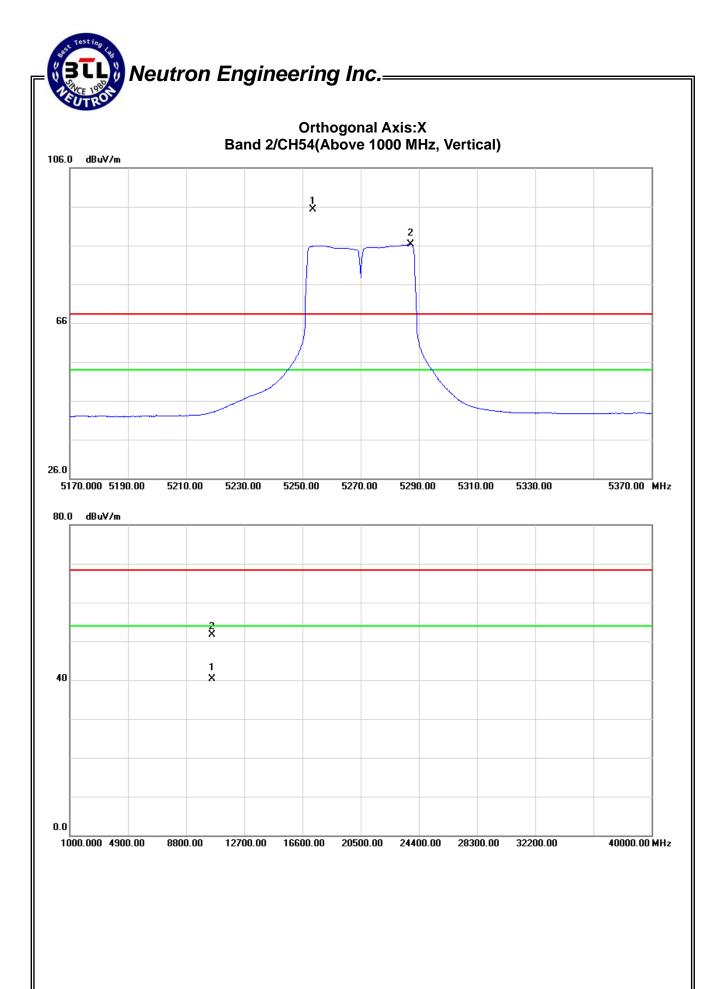


EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	25°C	Relative Humidity:	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 2/ TX N40 Mode 5270MH	łz	

Freq.	Ant.Pd.	Read	ding	Ant./CF	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)									
5253.60	V	52.39	43.20	42.98	95.37	86.18	-9.40	-18.59					X/F
10546.20	V	35.74	24.41	15.94	51.68	40.35	-53.09	-64.42	68.30	54.00	-27.00	-41.30	X/H

- (1) Spectrum Setting : 30MHz 1000MHz, RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated AV in column of <code>『Note』</code>. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission ∘
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Report No.: NEI-FICP-3-1204C048C Page 63 of 206



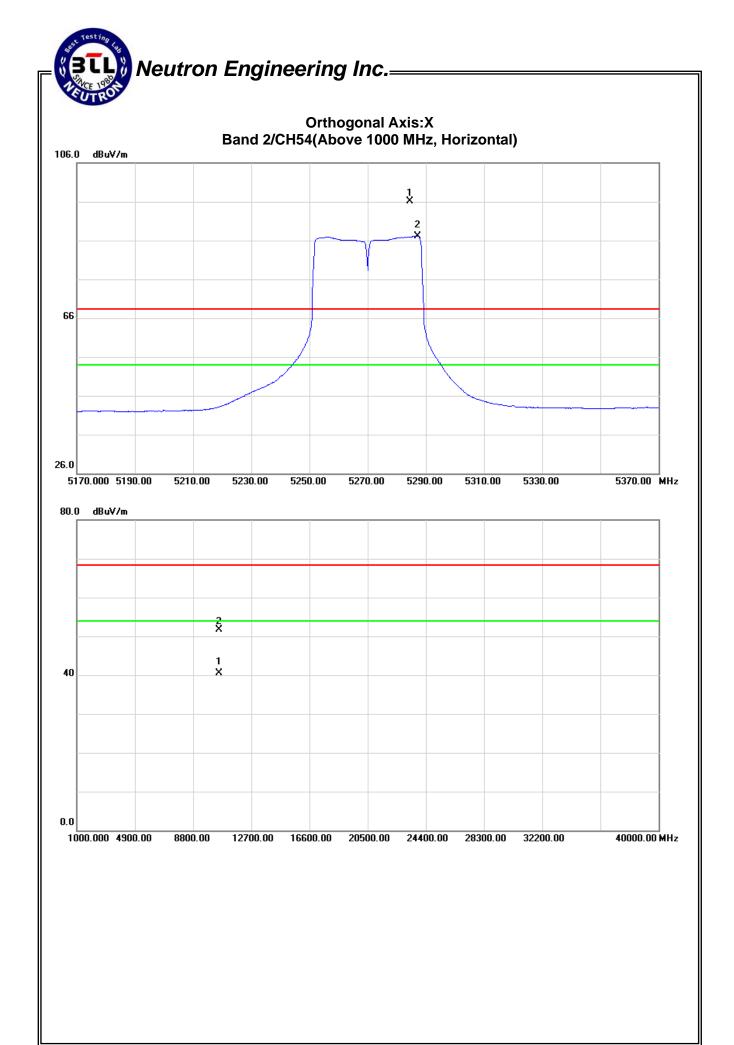


EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US					
Temperature:	25°C	Relative Humidity:	58 %					
Test Voltage :	AC 120V/60Hz							
Test Mode :	Band 2/ TX N40 Mode 5270MH							

Freq.	Ant.Pd.	Read	ding	Ant./CF	Act.(dE	BuV/m)	Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)									
5284.40	Н	53.02	44.07	43.05	96.07	87.12	-8.70	-17.65					X/F
10543.20	Н	35.73	24.64	15.94	51.67	40.58	-53.10	-64.19	68.30	54.00	-27.00	-41.30	X/H

- (1) Spectrum Setting : 30MHz 1000MHz, RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated AV in column of 『Note』. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission ∘
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Report No.: NEI-FICP-3-1204C048C Page 65 of 206



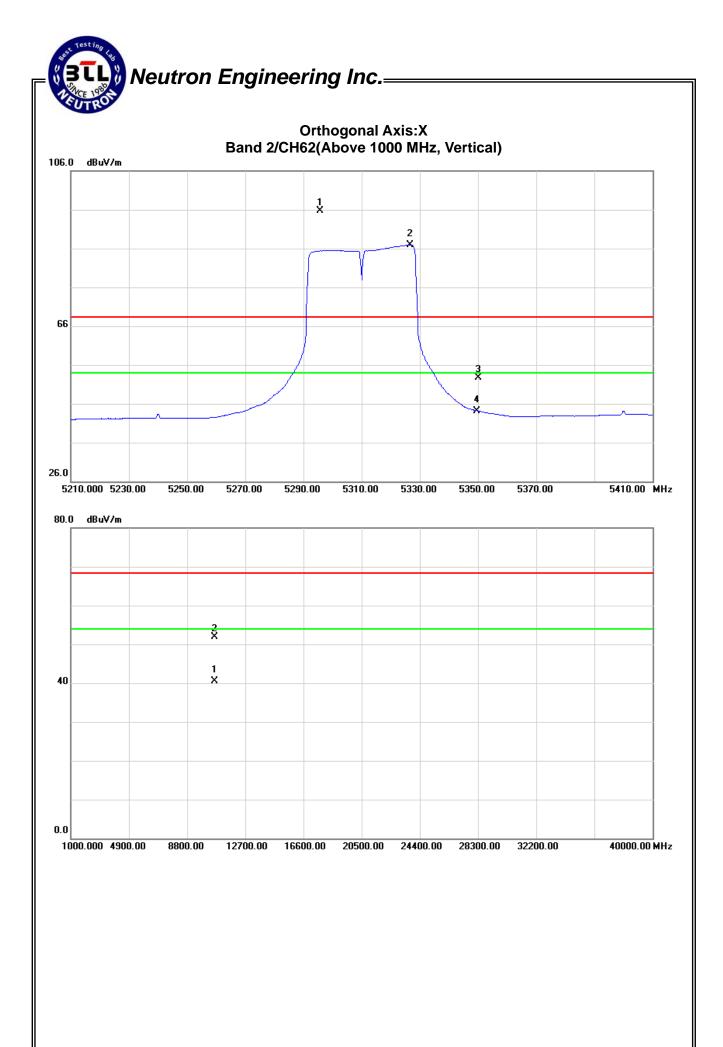


EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US					
Temperature:	25°C	Relative Humidity:	52 %					
Test Voltage :	AC 120V/60Hz							
Test Mode :	Band 2/ TX N40 Mode 5310MH	and 2/ TX N40 Mode 5310MHz						

Freq.	Ant.Pd.	Reading		Ant./CF	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)									
5295.80	V	52.57	43.76	43.07	95.64	86.83	-9.13	-17.94					X/F
5350.00	V	9.46	0.98	43.21	52.67	44.19	-52.10	-60.58	68.30	54.00	-27.00	-41.30	X/E
10624.50	V	35.69	24.43	16.16	51.85	40.59	-52.92	-64.18	68.30	54.00	-27.00	-41.30	X/H

- (1) Spectrum Setting: 30MHz 1000MHz, RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated AV in column of <code>『Note』</code>. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission ∘
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Report No.: NEI-FICP-3-1204C048C Page 67 of 206



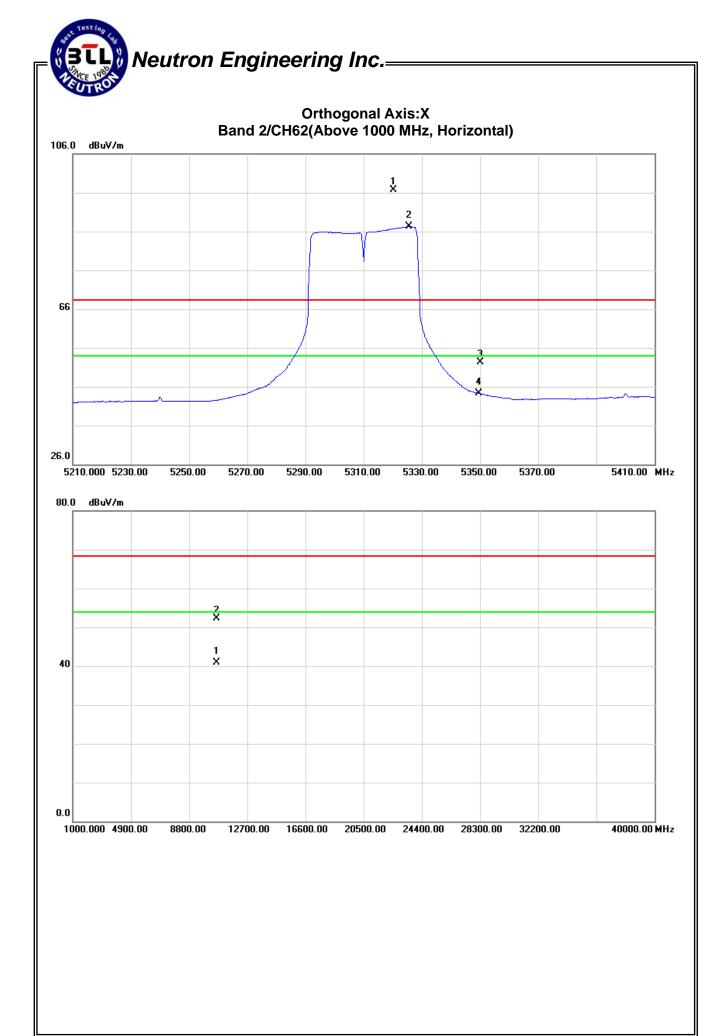


EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	25°C	Relative Humidity:	52 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 2/ TX N40 Mode 5310MH	łz	

Freq.	Ant.Pd.	Read	ding	Ant./CF	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)									
5320.20	Н	53.65	44.07	43.14	96.79	87.21	-7.98	-17.56					X/F
5350.00	Н	9.16	1.02	43.21	52.37	44.23	-52.40	-60.54	68.30	54.00	-27.00	-41.30	X/E
10625.30	Н	36.08	24.80	16.18	52.26	40.98	-52.51	-63.79	68.30	54.00	-27.00	-41.30	X/H

- (1) Spectrum Setting: 30MHz 1000MHz, RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated AV in column of <code>『Note』</code>. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission ∘
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Report No.: NEI-FICP-3-1204C048C Page 69 of 206



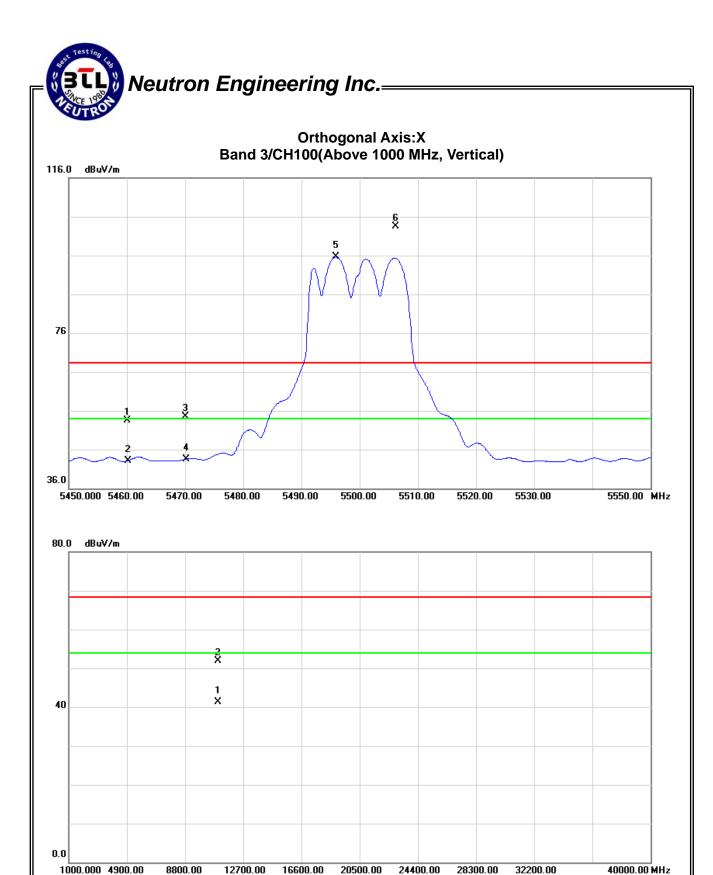


EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	25°C	Relative Humidity:	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 3/ TX A Mode 5500MHz		

Freq.	Ant.Pd.	. Reading		Ant./CF	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)									
5460.00	V	10.11	-0.45	43.49	53.60	43.04	-51.17	-61.73	68.30	54.00	-27.00	-41.30	X/E
5470.00	V	10.94	-0.06	43.50	54.44	43.44	-50.33	-61.33	68.30	54.00	-27.00	-41.30	X/E
5506.20	V	59.82	52.04	43.60	103.42	95.64	-1.35	-9.13					X/F
11006.20	V	34.61	23.94	17.27	51.88	41.21	-52.89	-63.56	68.30	54.00	-27.00	-41.30	X/H

- (1) Spectrum Setting: 30MHz 1000MHz, RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated AV in column of 『Note』. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission ∘
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Report No.: NEI-FICP-3-1204C048C Page 71 of 206



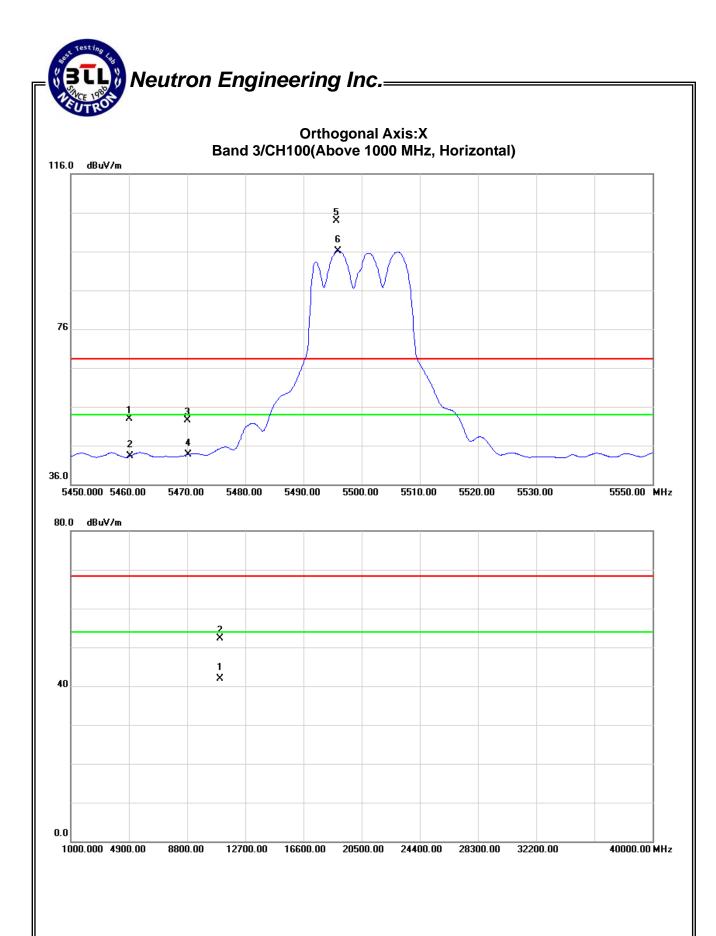


EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	25°C	Relative Humidity:	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 3/ TX A Mode 5500MHz		

Freq.	Ant.Pd.	Read	ding	Ant./CF	Act.(dE	Act.(dBuV/m)		Act.(dBm)		(BuV/m	Limit(dBm)		
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)									
5460.00	Н	9.42	-0.28	43.49	52.91	43.21	-51.86	-61.56	68.30	54.00	-27.00	-41.30	X/E
5470.00	Н	8.95	0.17	43.50	52.45	43.67	-52.32	-61.10	68.30	54.00	-27.00	-41.30	X/E
5495.60	Н	60.32	52.56	43.57	103.89	96.13	-0.88	-8.64					X/F
11003.90	Н	35.14	24.59	17.26	52.40	41.85	-52.37	-62.92	68.30	54.00	-27.00	-41.30	X/H

- (1) Spectrum Setting: 30MHz 1000MHz, RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated AV in column of <code>『Note』</code>. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission ∘
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Report No.: NEI-FICP-3-1204C048C Page 73 of 206



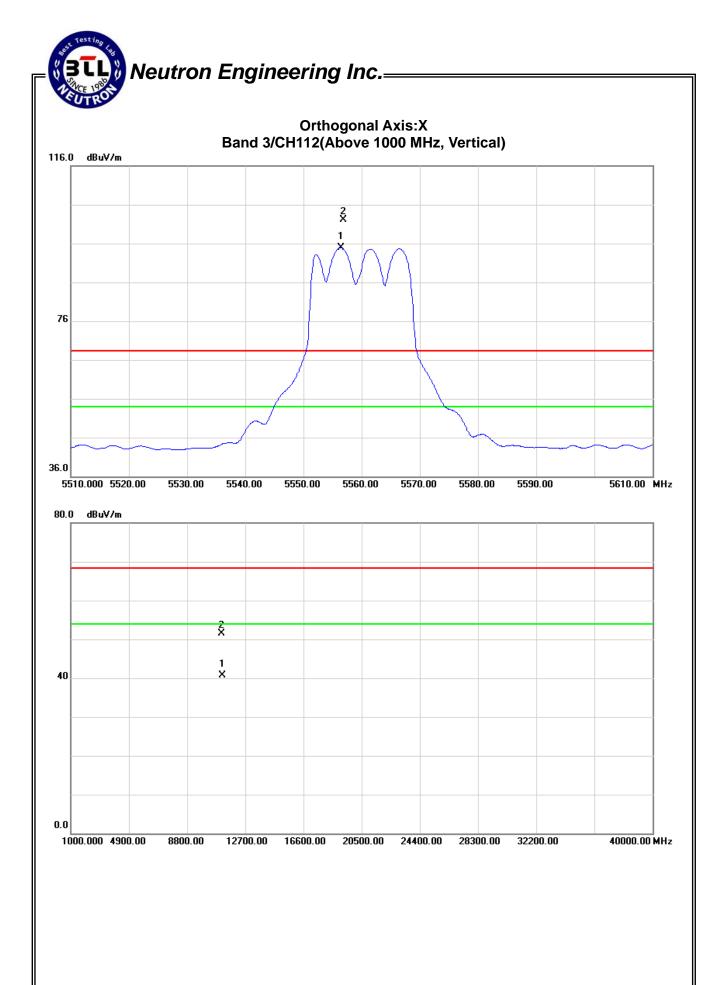


EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	25°C	Relative Humidity:	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 3/ TX A Mode 5560MHz		

Freq.	Ant.Pd.	Read	ding	Ant./CF	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)									
5556.80	V	58.29	51.13	43.77	102.06	94.90	-2.71	-9.87					X/F
11126.30	V	33.86	23.06	17.57	51.43	40.63	-53.34	-64.14	68.30	54.00	-27.00	-41.30	X/H

- (1) Spectrum Setting : 30MHz 1000MHz, RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated AV in column of 『Note』. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency of E" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission ∘
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Report No.: NEI-FICP-3-1204C048C Page 75 of 206



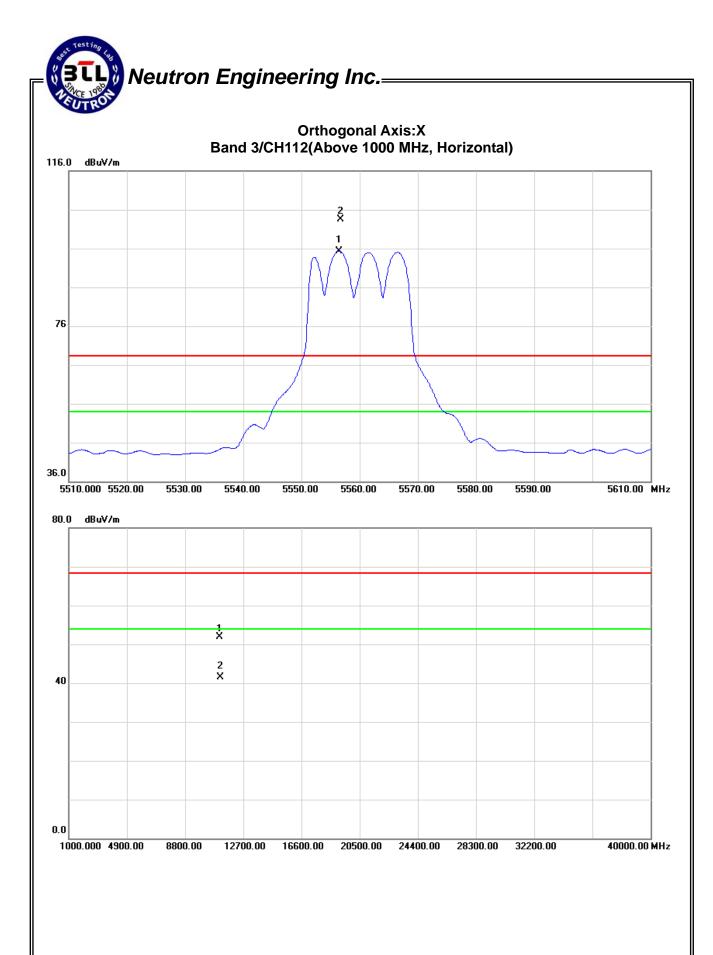


EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	25°C	Relative Humidity:	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 3/ TX A Mode 5560MHz		

Freq.	Ant.Pd.	Reading		Ant./CF	Act.(dE	BuV/m)	Act.((dBm) Lim		Limit(dBuV/m)		Limit(dBm)	
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)									
5556.70	Н	59.67	51.54	43.77	103.44	95.31	-1.33	-9.46					X/F
11122.20	Н	34.35	23.87	17.56	51.91	41.43	-52.86	-63.34	68.30	54.00	-27.00	-41.30	X/H

- (1) Spectrum Setting: 30MHz 1000MHz, RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated AV in column of 『Note』. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission •
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Report No.: NEI-FICP-3-1204C048C Page 77 of 206



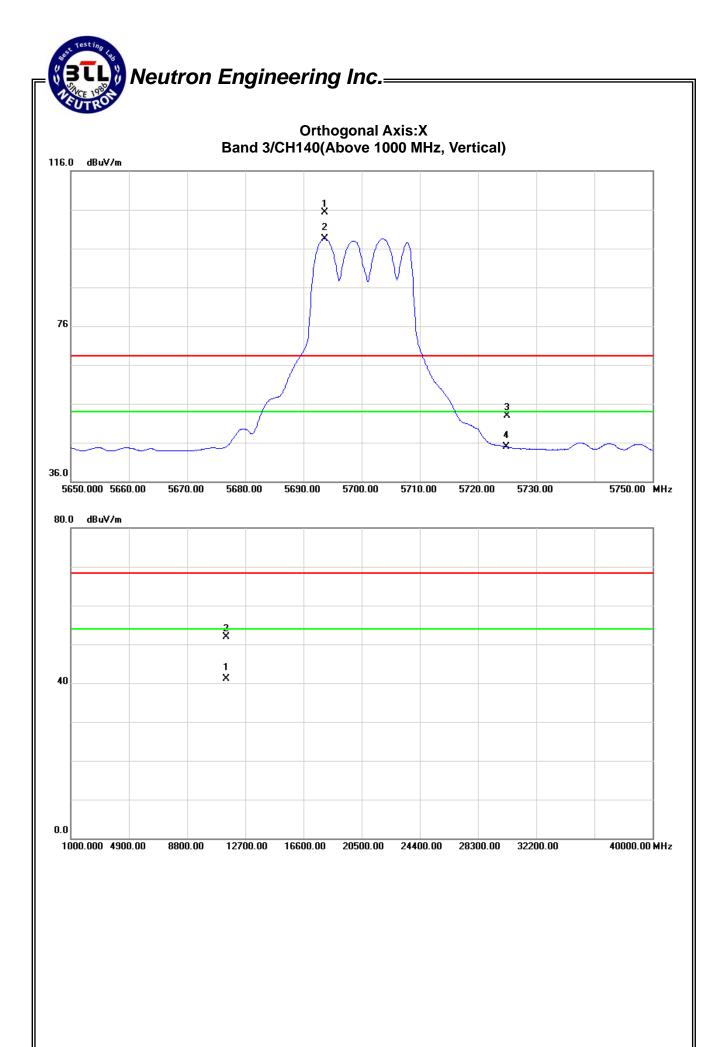


EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	25°C	Relative Humidity:	52 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 3/ TX A Mode 5700MHz		

Freq.	Ant.Pd.	Reading		Ant./CF	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)									
5693.70	V	61.15	54.25	44.24	105.39	98.49	0.62	-6.28					X/F
5725.00	V	8.60	0.54	44.34	52.94	44.88	-51.83	-59.89	68.30	54.00	-27.00	-41.30	X/E
11406.20	V	33.74	22.86	18.26	52.00	41.12	-52.77	-63.65	68.30	54.00	-27.00	-41.30	X/H

- (1) Spectrum Setting: 30MHz 1000MHz, RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated AV in column of <code>『Note』</code>. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission ∘
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Report No.: NEI-FICP-3-1204C048C Page 79 of 206



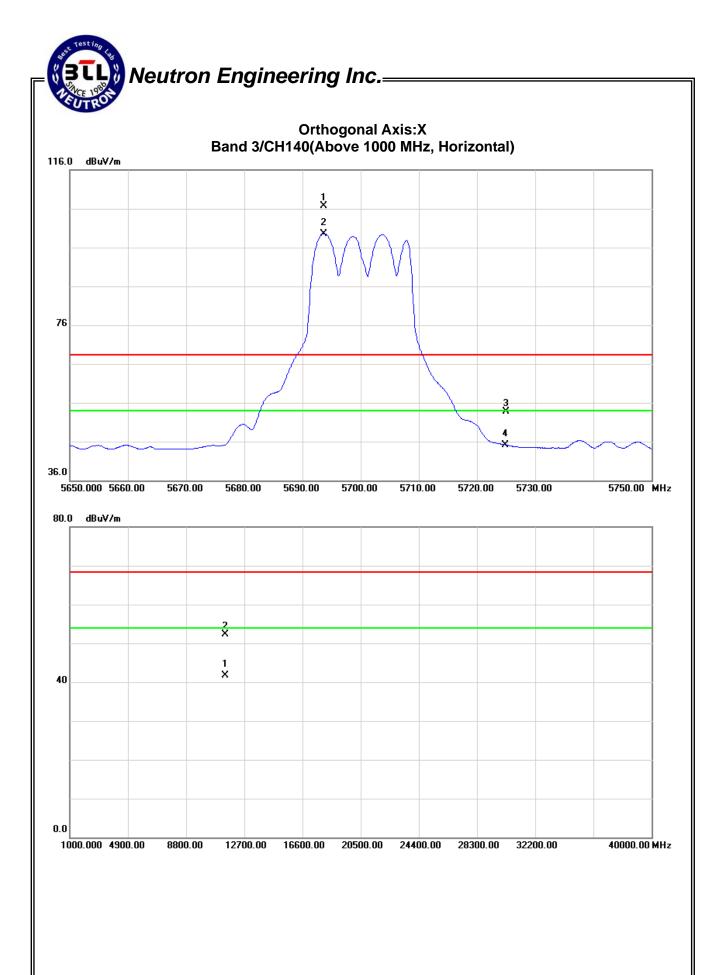


EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	25°C	Relative Humidity:	52 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 3/ TX A Mode 5700MHz		

Freq.	Ant.Pd.	Reading		Ant./CF	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)									
5693.70	Н	62.41	55.30	44.24	106.65	99.54	1.88	-5.23					X/F
5725.00	Н	9.29	0.78	44.34	53.63	45.12	-51.14	-59.65	68.30	54.00	-27.00	-41.30	X/E
11405.60	Н	33.97	23.46	18.25	52.22	41.71	-52.55	-63.06	68.30	54.00	-27.00	-41.30	X/H

- (1) Spectrum Setting : 30MHz 1000MHz, RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated AV in column of 『Note』. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency of E" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission ∘
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Report No.: NEI-FICP-3-1204C048C Page 81 of 206



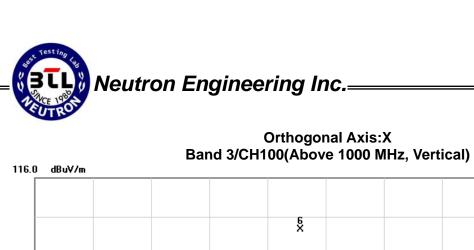


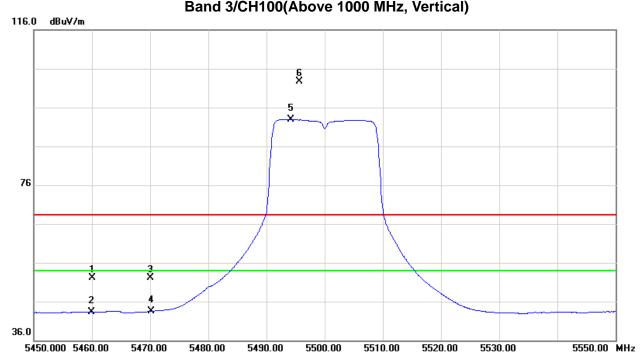
EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	25°C	Relative Humidity:	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 3/ TX N20 Mode 5500MH	łz	

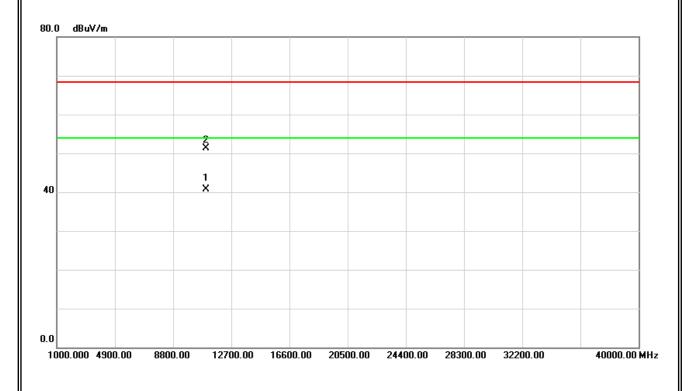
Freq.	Ant.Pd.	Read	ding	Ant./CF	/CF Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)									
5460.00	V	8.63	-0.23	43.49	52.12	43.26	-52.65	-61.51	68.30	54.00	-27.00	-41.30	X/E
5470.00	V	8.68	-0.02	43.50	52.18	43.48	-52.59	-61.29	68.30	54.00	-27.00	-41.30	X/E
5495.60	V	59.11	49.36	43.57	102.68	92.93	-2.09	-11.84					X/F
11002.90	V	34.04	23.46	17.28	51.32	40.74	-53.45	-64.03	68.30	54.00	-27.00	-41.30	X/H

- (1) Spectrum Setting: 30MHz 1000MHz, RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated AV in column of <code>『Note』</code>. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission ∘
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Report No.: NEI-FICP-3-1204C048C Page 83 of 206







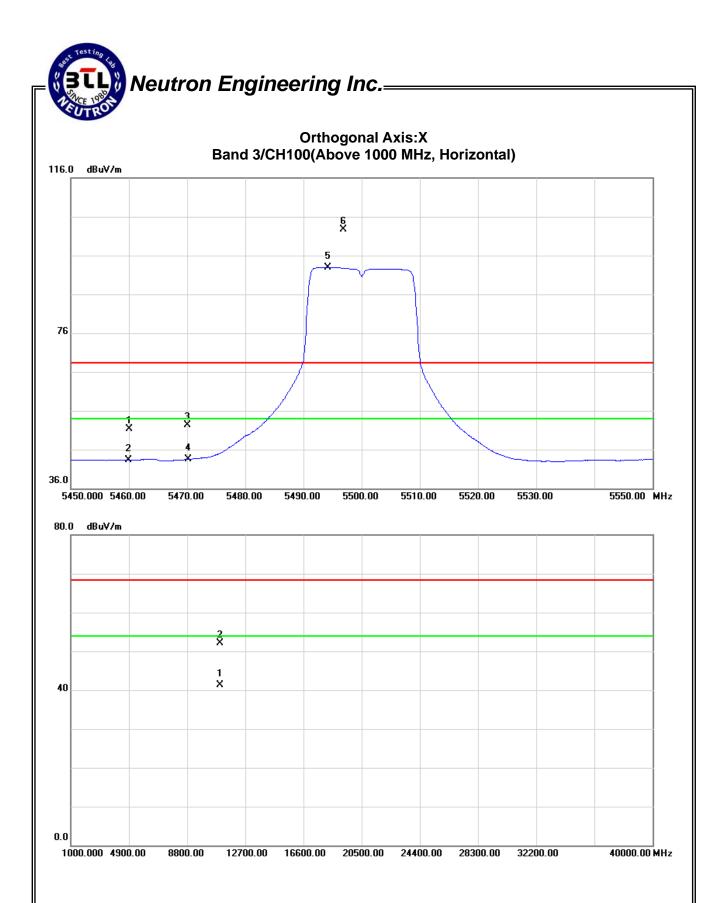


EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	25°C	Relative Humidity:	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 3/ TX N20 Mode 5500MF	łz	

Freq.	Ant.Pd.	Read	ding	Ant./CF	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)									
5460.00	Н	7.90	-0.23	43.49	51.39	43.26	-53.38	-61.51	68.30	54.00	-27.00	-41.30	X/E
5470.00	Н	8.74	-0.08	43.50	52.24	43.42	-52.53	-61.35	68.30	54.00	-27.00	-41.30	X/E
5496.90	Н	59.15	49.12	43.58	102.73	92.70	-2.04	-12.07					X/F
11005.50	Н	34.76	24.01	17.28	52.04	41.29	-52.73	-63.48	68.30	54.00	-27.00	-41.30	X/H

- (1) Spectrum Setting: 30MHz 1000MHz, RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated AV in column of 『Note』. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission ∘
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Report No.: NEI-FICP-3-1204C048C Page 85 of 206



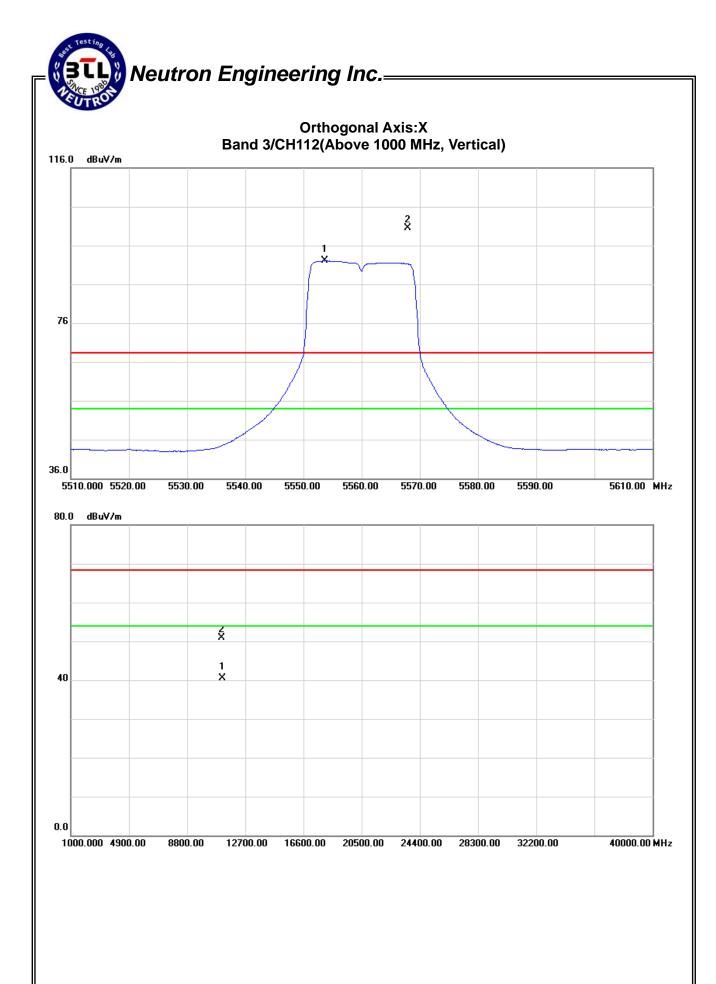


EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	25°C	Relative Humidity:	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 3/ TX N20 Mode 5560MH	łz	

Freq.	Ant.Pd.	Read	ding	Ant./CF	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)									
5567.90	V	56.67	48.27	43.81	100.48	92.08	-4.29	-12.69					X/F
11126.80	V	33.40	22.97	17.57	50.97	40.54	-53.80	-64.23	68.30	54.00	-27.00	-41.30	X/H

- (1) Spectrum Setting : 30MHz 1000MHz, RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated AV in column of <code>『Note』</code>. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission ∘
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Report No.: NEI-FICP-3-1204C048C Page 87 of 206



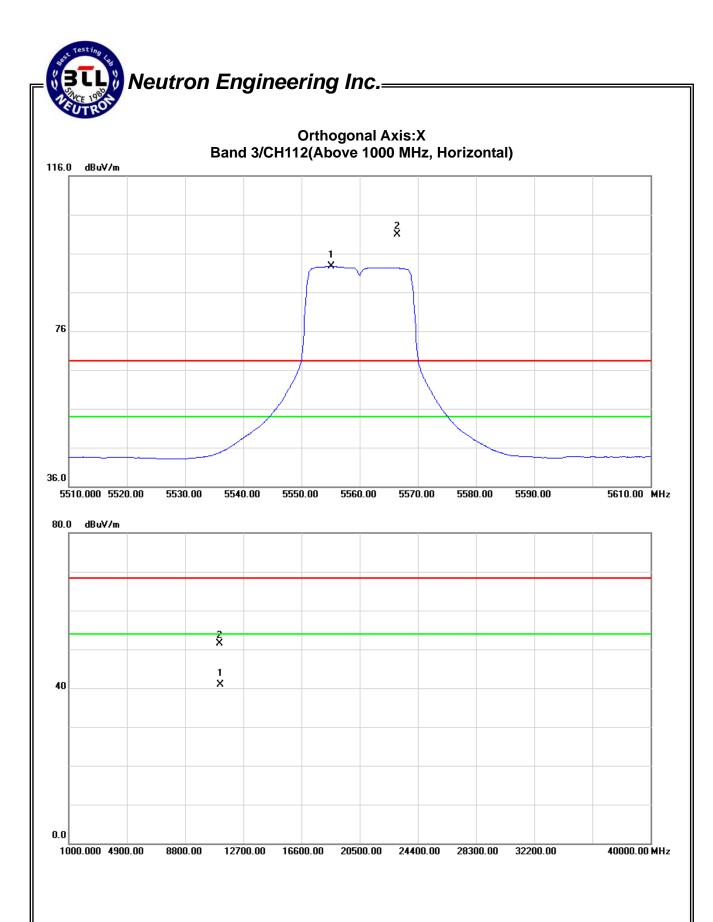


EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	25°C	Relative Humidity:	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 3/ TX N20 Mode 5560MH	łz	

Freq.	Ant.Pd.			Ant./CF	Act.(dE	BuV/m)	Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)									
5566.40	Н	57.13	48.89	43.81	100.94	92.70	-3.83	-12.07					X/F
11126.20	Н	33.87	23.28	17.57	51.44	40.85	-53.33	-63.92	68.30	54.00	-27.00	-41.30	X/H

- (1) Spectrum Setting: 30MHz 1000MHz, RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated AV in column of 『Note』. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission •
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Report No.: NEI-FICP-3-1204C048C Page 89 of 206



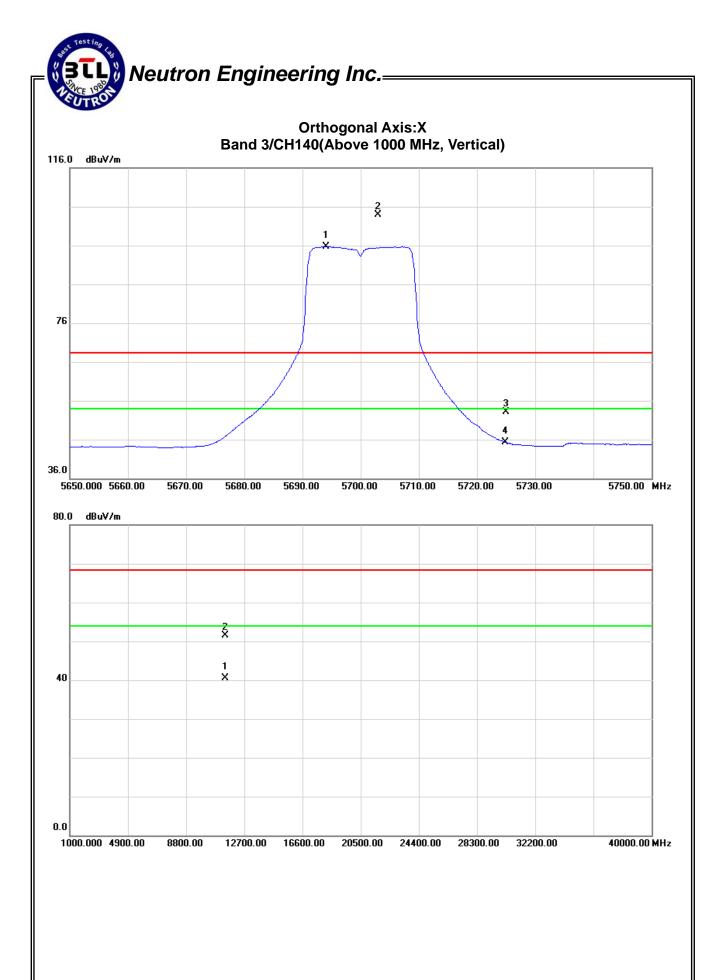


EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	25°C	Relative Humidity:	52 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 3/ TX N20 Mode 5700MH	łz	

Freq.	Ant.Pd.	Reading		Ant./CF	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)									
5703.00	V	59.61	51.43	44.28	103.89	95.71	-0.88	-9.06					X/F
5725.00	V	8.85	0.89	44.34	53.19	45.23	-51.58	-59.54	68.30	54.00	-27.00	-41.30	X/E
11405.90	V	33.16	22.29	18.26	51.42	40.55	-53.35	-64.22	68.30	54.00	-27.00	-41.30	X/H

- (1) Spectrum Setting : 30MHz 1000MHz, RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated AV in column of 『Note』. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission ∘
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Report No.: NEI-FICP-3-1204C048C Page 91 of 206



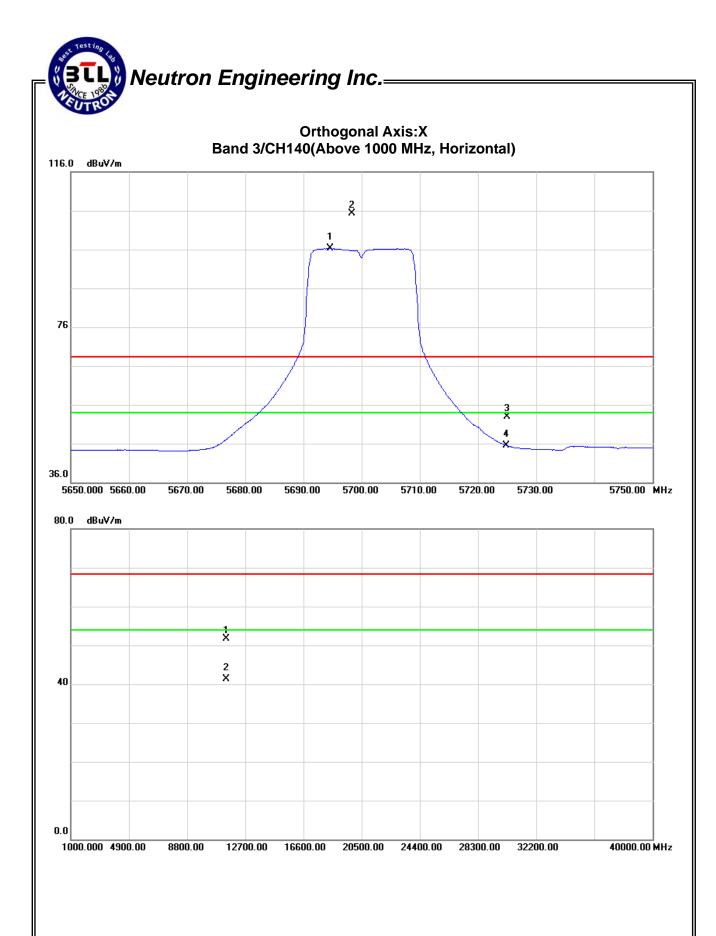


EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	25°C	Relative Humidity:	52 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 3/ TX N20 Mode 5700MH	łz	

Freq.	Ant.Pd.	Read	ding	Ant./CF	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	Peak	AV	Note
(MHz)	HV	(dBuV)	(dBuV)	CF(dB)									
5698.30	Н	61.08	52.01	44.25	105.33	96.26	0.56	-8.51					X/F
5725.00	Н	8.59	1.16	44.34	52.93	45.50	-51.84	-59.27	68.30	54.00	-27.00	-41.30	X/E
11406.50	Н	33.42	22.98	18.26	51.68	41.24	-53.09	-63.53	68.30	54.00	-27.00	-41.30	X/H

- (1) Spectrum Setting : 30MHz 1000MHz, RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated AV in column of 『Note』. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency of E" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission ∘
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Report No.: NEI-FICP-3-1204C048C Page 93 of 206



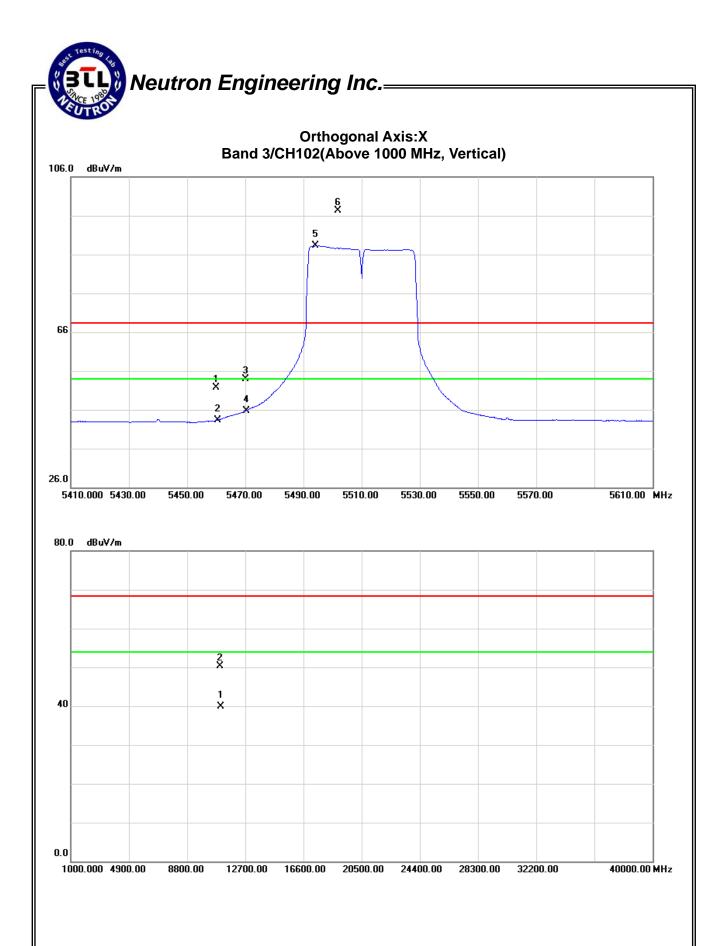


EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	25°C	Relative Humidity:	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 3/ TX N40 Mode 5510MH	łz	

Freq.	Ant.Pd.			Ant./CF	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)									
5460.00	V	8.27	-0.20	43.49	51.76	43.29	-53.01	-61.48	68.30	54.00	-27.00	-41.30	X/E
5470.00	V	10.41	2.18	43.50	53.91	45.68	-50.86	-59.09	68.30	54.00	-27.00	-41.30	X/E
5501.80	V	53.76	44.68	43.57	97.33	88.25	-7.44	-16.52					X/F
11026.30	V	33.07	22.68	17.33	50.40	40.01	-54.37	-64.76	68.30	54.00	-27.00	-41.30	X/H

- (1) Spectrum Setting: 30MHz 1000MHz, RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated AV in column of 『Note』. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission ∘
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Report No.: NEI-FICP-3-1204C048C Page 95 of 206



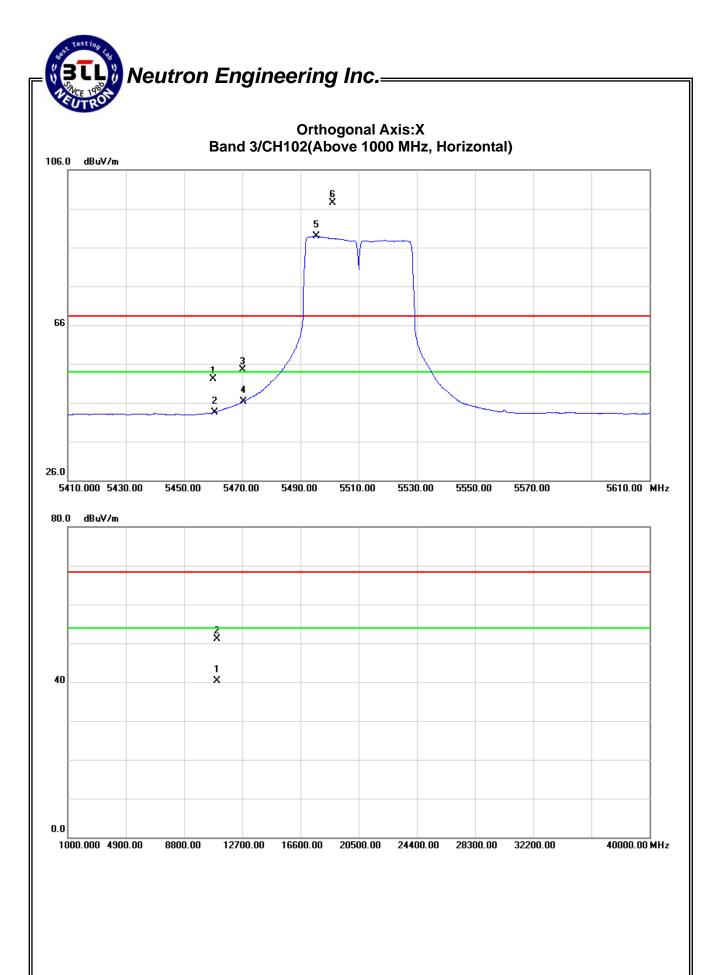


EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US			
Temperature:	25°C	Relative Humidity:	58 %			
Test Voltage :	AC 120V/60Hz	C 120V/60Hz				
Test Mode :	Band 3/ TX N40 Mode 5510MH	Band 3/ TX N40 Mode 5510MHz				

Freq.	Ant.Pd.	Read	ding	Ant./CF	Act.(dE	BuV/m)	Act.(dBm)	Limit(c	(BuV/m	Limit((dBm)	
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)									
5460.00	Н	8.69	0.01	43.49	52.18	43.50	-52.59	-61.27	68.30	54.00	-27.00	-41.30	X/E
5470.00	Н	10.97	2.72	43.50	54.47	46.22	-50.30	-58.55	68.30	54.00	-27.00	-41.30	X/E
5501.00	Н	53.90	45.31	43.57	97.47	88.88	-7.30	-15.89					X/F
11026.40	Н	33.79	23.06	17.33	51.12	40.39	-53.65	-64.38	68.30	54.00	-27.00	-41.30	X/H

- (1) Spectrum Setting: 30MHz 1000MHz, RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated AV in column of 『Note』. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission ∘
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Report No.: NEI-FICP-3-1204C048C Page 97 of 206



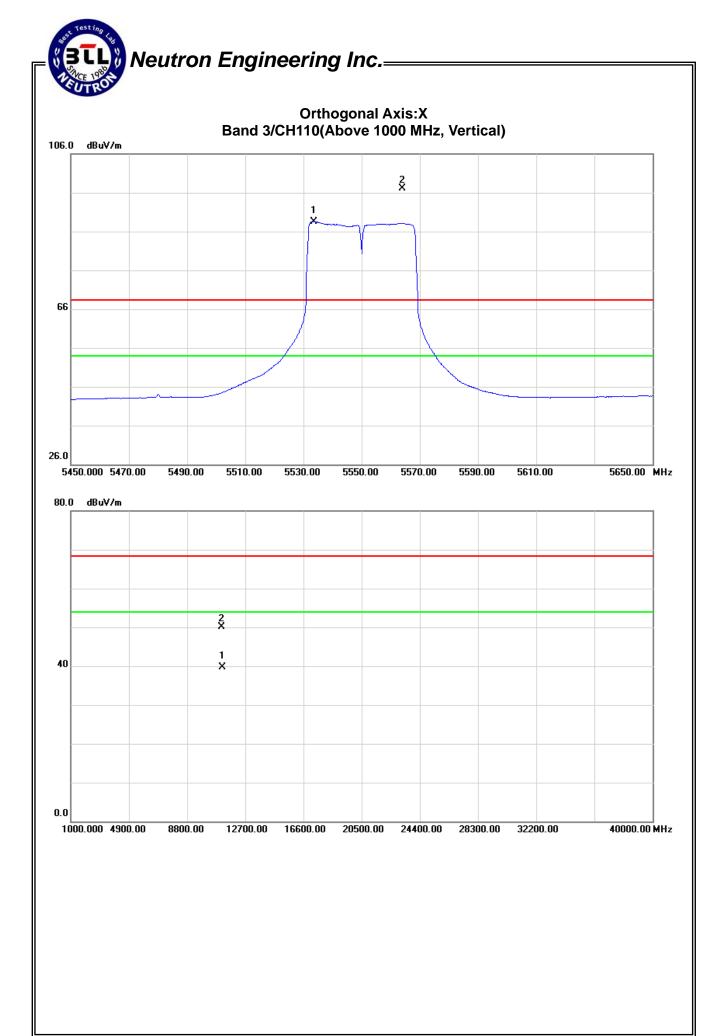


EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US				
Temperature:	25°C	Relative Humidity:	58 %				
Test Voltage :	AC 120V/60Hz	C 120V/60Hz					
Test Mode :	Band 3/ TX N40 Mode 5550MHz						

Freq.	Ant.Pd.	Read	ding	Ant./CF	Act.(dE	BuV/m)	Act.(dBm)	Limit(c	lBuV/m)	Limit((dBm)	
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)									
5564.00	V	53.39	44.91	43.80	97.19	88.71	-7.58	-16.06					X/F
1103.40	V	32.57	22.15	17.51	50.08	39.66	-54.69	-65.11	68.30	54.00	-27.00	-41.30	X/H

- (1) Spectrum Setting: 30MHz 1000MHz, RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated AV in column of <code>『Note』</code>. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission ∘
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Report No.: NEI-FICP-3-1204C048C Page 99 of 206



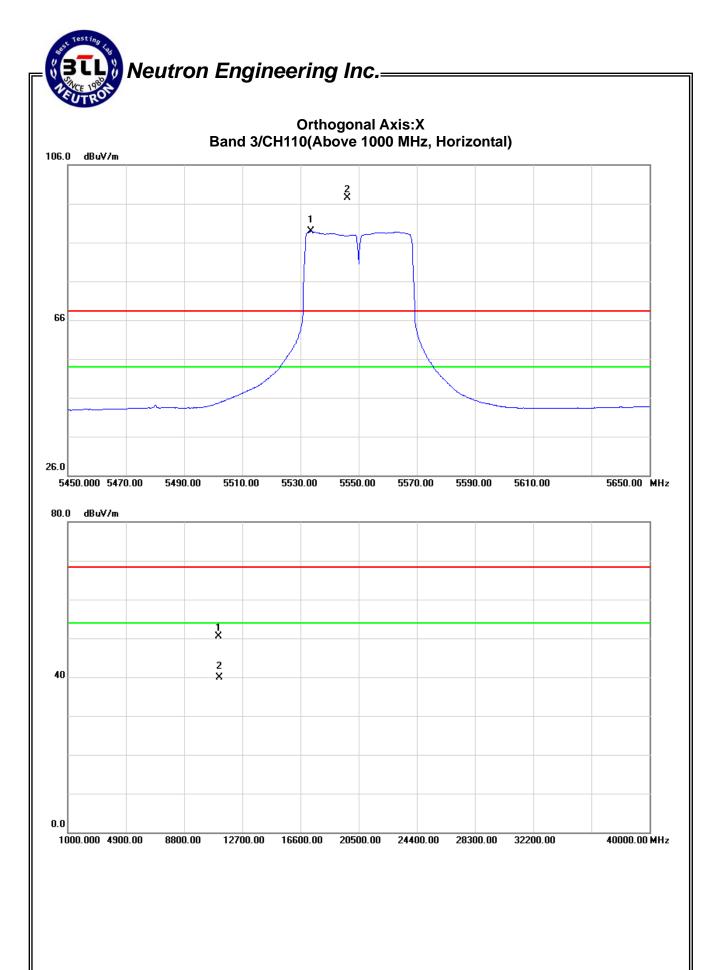


EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US				
Temperature:	25°C	Relative Humidity:	58 %				
Test Voltage :	AC 120V/60Hz	C 120V/60Hz					
Test Mode :	Band 3/ TX N40 Mode 5550MH	Band 3/ TX N40 Mode 5550MHz					

Freq.	Ant.Pd.	Read	ding	Ant./CF	Act.(dE	BuV/m)	Act.(dBm)	Limit(c	BuV/m)	Limit((dBm)	
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)									
5546.20	Н	53.80	45.13	43.74	97.54	88.87	-7.23	-15.90					X/F
11106.50	Н	32.89	22.48	17.52	50.41	40.00	-54.36	-64.77	68.30	54.00	-27.00	-41.30	X/H

- (1) Spectrum Setting: 30MHz 1000MHz, RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto
- (2) All readings are Peak unless otherwise stated AV in column of 『Note』. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.
- (3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission •
- (5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (7) EUT Orthogonal Axes:
 - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Report No.: NEI-FICP-3-1204C048C Page 101 of 206



5. 26DB SPECTRUM BANDWIDTH

5.1 APPLIED PROCEDURES / LIMIT

FCC Part15, Subpart E							
Test Item Limit Frequency Range (MHz)							
26 dB Bandwidth	dP Pandwidth		PASS				
20 UB Balluwiutii		5500MHz~5700	PASS				

5.1.1 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibration	Next Calibration
1	Spectrum Analyzer	R&S	FSP_40	100129	Nov.26.2011	Nov.26.2012

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

5.1.2 TEST PROCEDURE

a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,

_	
n	
v	

Spectrum Parameters	Setting
Attenuation	Auto
Span Frequency	> 26dB Bandwidth
RB	300 kHz
VB	1000 kHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

c. Measured the spectrum width with power higher than 26dB below carrier

5.1.3 DEVIATION FROM STANDARD

No deviation.

5.1.4 TEST SETUP

EUT	SPECTRUM
	ANALYZER

Report No.: NEI-FICP-3-1204C048C Page 103 of 206

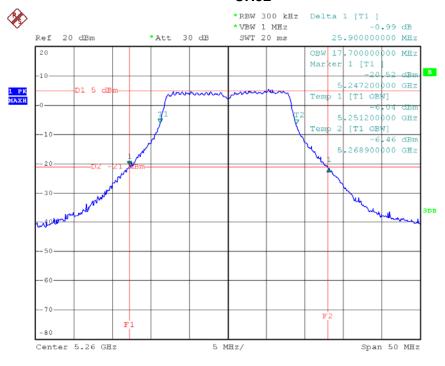
Report No.: NEI-FICP-3-1204C048C Page 104 of 206

5.1.6 TEST RESULTS

EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US		
Temperature:	25°C	Relative Humidity:	58 %		
Test Voltage:	C 120V/60Hz				
Test Mode :	Band 2/TX A Mode /CH52, CH56, CH64				

Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
CH52	5260	25.90	17.70
CH56	5280	25.40	17.80
CH64	5320	26.10	17.70

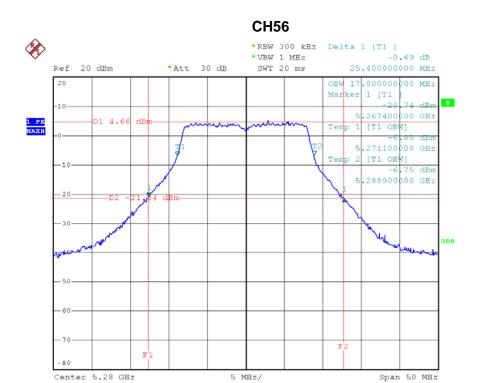
CH52



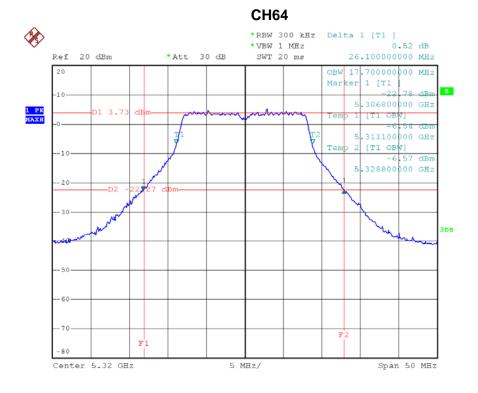
Date: 20.APR.2012 05:26:14

Report No.: NEI-FICP-3-1204C048C Page 105 of 206

Neutron Engineering Inc.



Date: 20.APR.2012 05:27:57

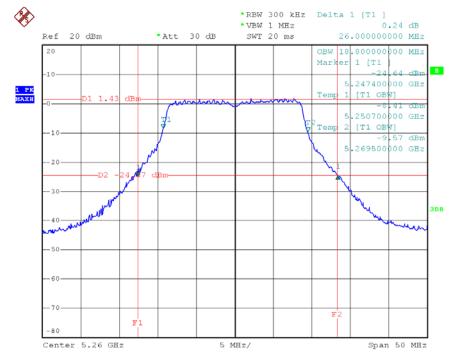


Date: 20.APR.2012 05:30:31

EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US	
Temperature:	25°C	Relative Humidity:	58 %	
Test Voltage:	AC 120V/60Hz			
Test Mode :	Band 2/TX N20 Mode /CH52, CH56, CH64			

Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
CH52	5260	26.00	18.80
CH56	5280	26.40	18.80
CH64	5320	25.40	18.80

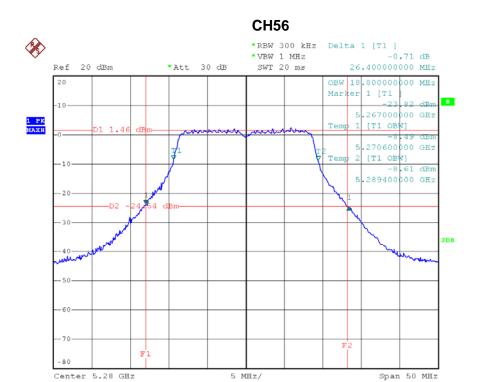
CH52



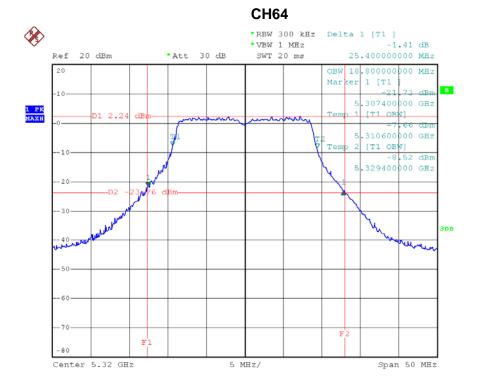
Date: 20.APR.2012 06:07:39

Report No.: NEI-FICP-3-1204C048C Page 107 of 206

Neutron Engineering Inc.



Date: 20.APR.2012 06:09:25



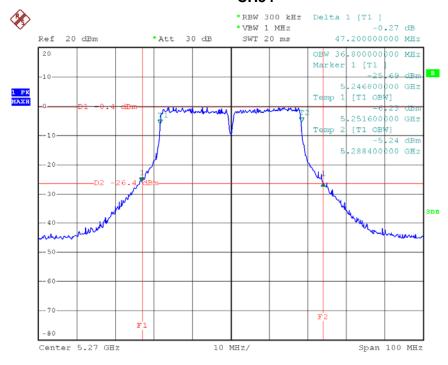
Date: 20.APR.2012 06:10:41



EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US	
Temperature:	25°C	Relative Humidity:	58 %	
Test Voltage:	AC 120V/60Hz			
Test Mode :	Band 2/TX N40 Mode /CH54, CH62			

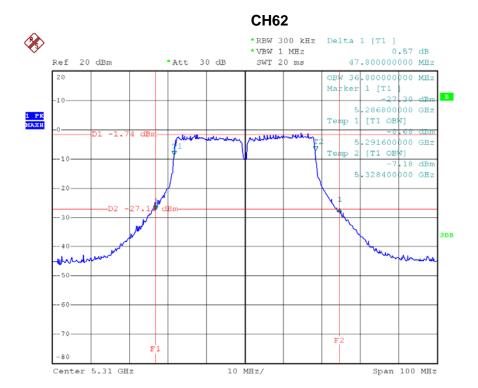
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
CH54	5270	47.20	36.80
CH62	5310	47.80	36.80

CH54



Date: 21.APR.2012 21:39:54

Report No.: NEI-FICP-3-1204C048C Page 109 of 206



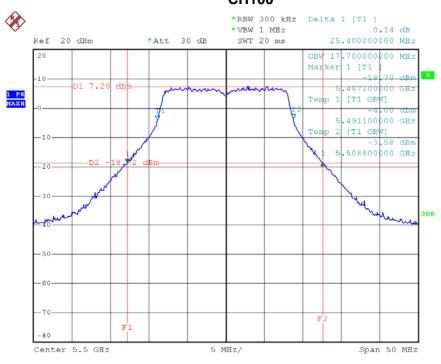
Date: 21.APR.2012 21:41:56

Report No.: NEI-FICP-3-1204C048C Page 110 of 206

EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US	
Temperature:	25°C	Relative Humidity:	58 %	
Test Voltage:	AC 120V/60Hz			
Test Mode :	Band 3/TX A Mode /CH100, CH112, CH140			

Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
CH100	5500	25.40	17.70
CH112	5560	25.60	17.70
CH140	5700	25.20	17.80

CH100

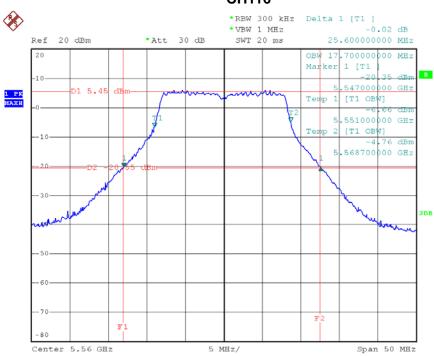


Date: 20.APR.2012 05:32:48

Report No.: NEI-FICP-3-1204C048C Page 111 of 206

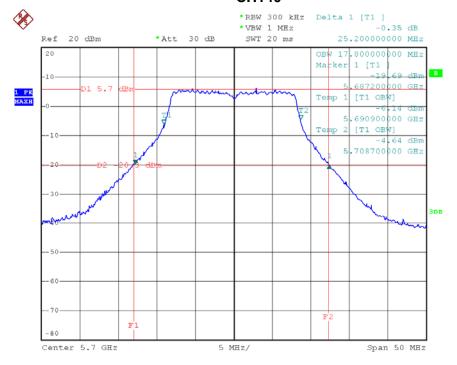
Neutron Engineering Inc.





Date: 20.APR.2012 05:34:47

CH140



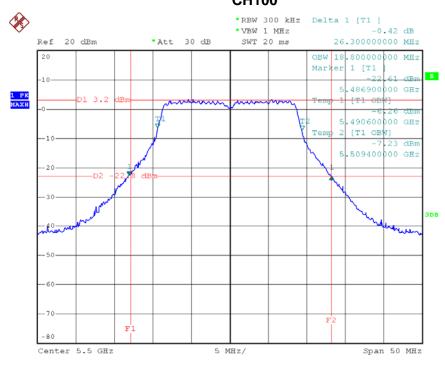
Date: 20.APR.2012 05:36:05



EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	25°C	Relative Humidity:	58 %
Test Voltage:	AC 120V/60Hz		
Test Mode :	Band 3/TX N20 Mode /CH100, CH112, CH140		

Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
CH100	5500	26.30	18.80
CH112	5560	26.10	18.80
CH140	5700	26.10	18.80

CH100

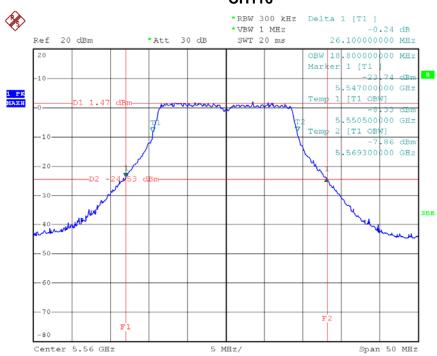


Date: 20.APR.2012 06:13:07

Report No.: NEI-FICP-3-1204C048C Page 113 of 206

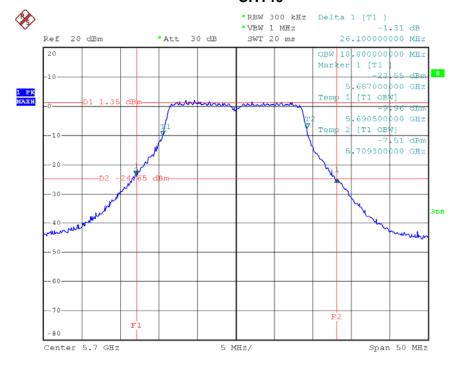
Neutron Engineering Inc.





Date: 20.APR.2012 06:14:55

CH140



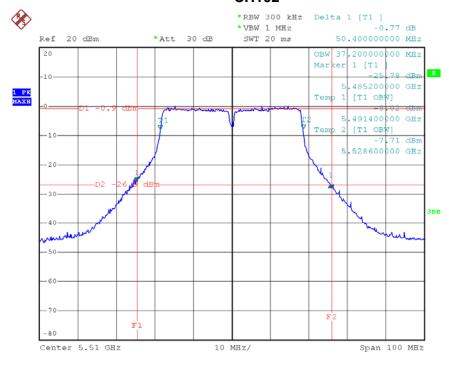
Date: 20.APR.2012 06:16:46



EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US	
Temperature:	25°C	Relative Humidity:	58 %	
Test Voltage:	AC 120V/60Hz			
Test Mode :	Band 3/TX N40 Mode /CH102, CH110			

Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
CH102	5510	50.40	37.20
CH110	5550	50.00	37.00

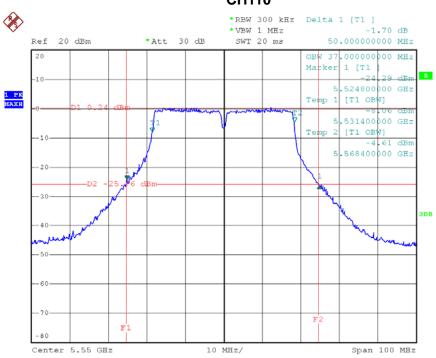
CH102



Date: 21.APR.2012 21:20:42

Report No.: NEI-FICP-3-1204C048C Page 115 of 206





Date: 21.APR.2012 21:24:55

Report No.: NEI-FICP-3-1204C048C Page 116 of 206

6. MAXIMUM CONDUCTED OUTPUT POWER

6.1 APPLIED PROCEDURES / LIMIT

FCC Part15, Subpart E				
Test Item	Frequency Range (MHz)	Limit	Result	
Peak Output Power	5150 - 5250	not exceed the lesser of 50 mW (17dBm) or 4 dBm + 10log B,	PASS	
	5250 - 5350	not exceed the lesser of 250 mW (24dBm) or 11 dBm + 10log B	PASS	
	5470 - 5725	not exceed the lesser of 250 mW (24dBm) or 11 dBm + 10log B	PASS	

Note: where "B" is the 26 dB emissions bandwidth in MHz.

6.1.1 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibration	Next Calibration
1	Spectrum Analyzer	R&S	FSP_40	100129	Nov.26.2011	Nov.26.2012

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

6.1.2 TEST PROCEDURE

a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,

b.

Spectrum Parameter	Setting
Attenuation	Auto
Chan Fraguenay	Encompass the entire emissions bandwidth
Span Frequency	(EBW) of the signal
RB	= 1 MHz.
VB	≥ 3 MHz.
Detector	RMS
Trace	Max Hold
Sweep Time	auto

c. Test was performed in accordance with method of KDB 789033 D01.

Report No.: NEI-FICP-3-1204C048C Page 117 of 206



6.1.3 DEVIATION FROM STANDARD

No deviation.

6.1.4 TEST SETUP

EUT	SPECTRUM
	ANALYZER

6.1.5 EUT OPERATION 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.

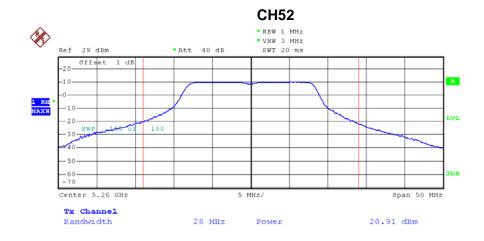
Report No.: NEI-FICP-3-1204C048C Page 118 of 206

6.1.6 TEST RESULTS

EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US	
Temperature:	25°C	Relative Humidity:	58 %	
Test Voltage:	AC 120V/60Hz			
Test Mode :	Band 2/TX A Mode/CH52, CH56, CH64			

Peak Output Power

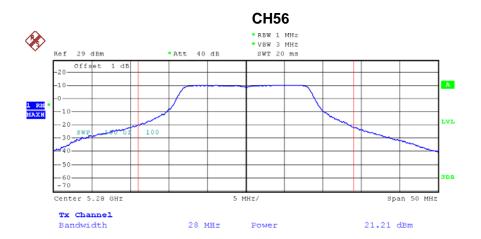
Test Channel	Frequency (MHz)	Peak Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH52	5260	20.91	24	0.251
CH56	5280	21.21	24	0.251
CH64	5320	21.40	24	0.251



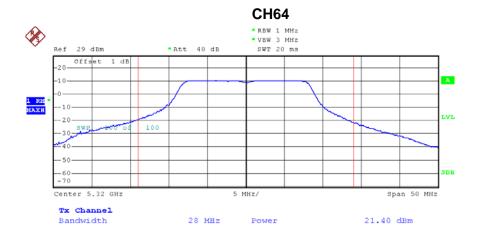
Date: 30.MAY.2012 05:53:34

Report No.: NEI-FICP-3-1204C048C Page 119 of 206





Date: 30.MAY.2012 06:06:27

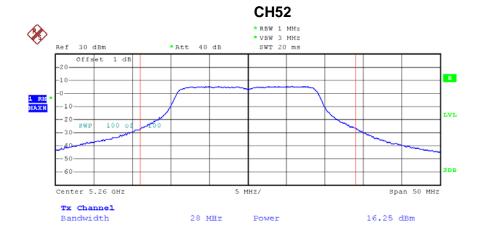


Date: 30.MAY.2012 06:07:52



EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US	
Temperature:	25°C	Relative Humidity:	58 %	
Test Voltage:	AC 120V/60Hz			
Test Mode :	Band 2/TX N20 Mode/CH52, CH56, CH64(ANT 1)			

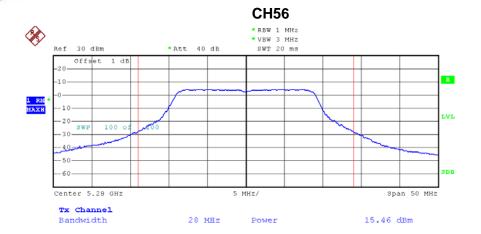
Test Channel	Frequency (MHz)	Peak Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH52	5260	16.25	24	0.251
CH56	5280	15.46	24	0.251
CH64	5320	15.55	24	0.251



Date: 15.JUL.2012 13:51:37

Report No.: NEI-FICP-3-1204C048C Page 121 of 206

Neutron Engineering Inc.



Date: 15.JUL.2012 13:51:08

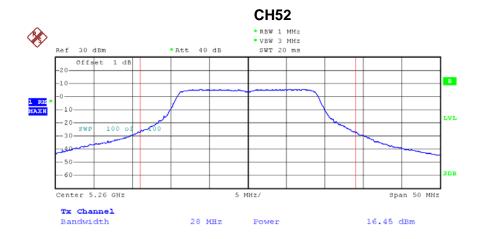


Date: 15.JUL.2012 13:50:31



EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	25°C	Relative Humidity:	58 %
Test Voltage:	AC 120V/60Hz		
Test Mode :	Band 2/TX N20 Mode/CH52, CH56, CH64(ANT 2)		

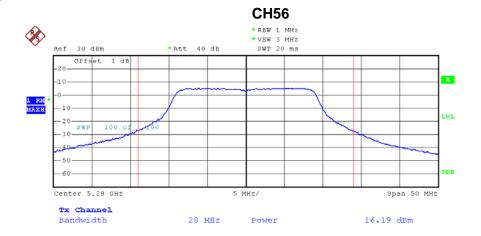
Test Channel	Frequency (MHz)	Peak Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH52	5260	16.45	24	0.251
CH56	5280	16.19	24	0.251
CH64	5320	15.98	24	0.251



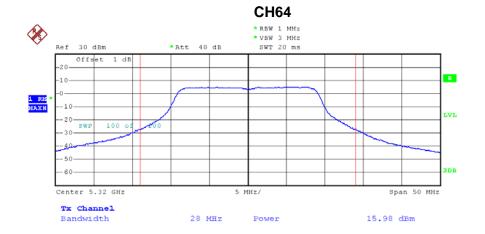
Date: 15.JUL.2012 13:35:24

Report No.: NEI-FICP-3-1204C048C Page 123 of 206

Neutron Engineering Inc.



Date: 15.JUL.2012 13:34:45

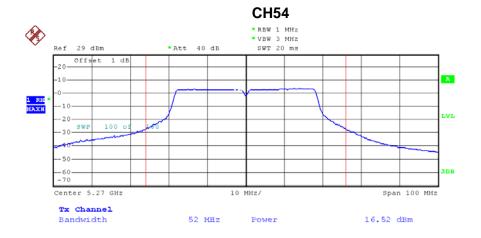


Date: 15.JUL.2012 13:33:03



EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US	
Temperature:	25°C	Relative Humidity:	58 %	
Test Voltage:	AC 120V/60Hz			
Test Mode :	Band 2/TX N40 Mode/CH54, CH62 (ANT 1)			

Test Channel	Frequency (MHz)	Peak Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH54	5270	16.52	24	0.251
CH62	5310	13.79	24	0.251



Date: 30.MAY.2012 07:08:55

Report No.: NEI-FICP-3-1204C048C Page 125 of 206

Neutron Engineering Inc. CH62 * RBW 1 MHz * VDW 3 MHz * VDW 3 MHz Ref 29 dBm * Att 40 dB SWT 20 ms Offset 1 dB Offset 1 dB Offset 20 SWP 100 of 100 decorated by the second

10 MHz/

Power

13.79 dBm

52 MHz

Date: 30.MAY.2012 07:11:37

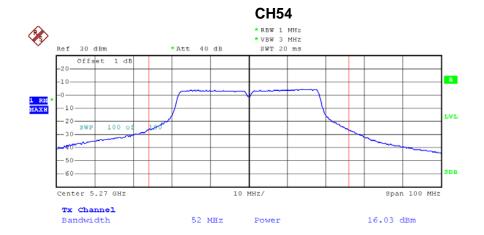
-- 60 --- 70

Tx Channel Bandwidth



EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US	
Temperature:	25°C	Relative Humidity:	58 %	
Test Voltage:	AC 120V/60Hz			
Test Mode :	Band 2/TX N40 Mode/CH54, CH62 (ANT 2)			

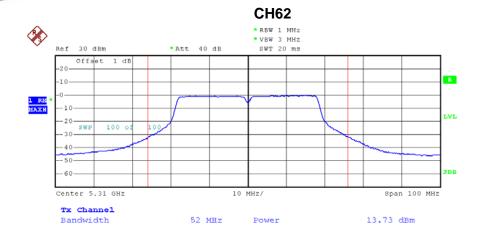
Test Channel	Frequency (MHz)	Peak Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH54	5270	16.03	24	0.251
CH62	5310	13.73	24	0.251



Date: 31.MAY.2012 16:17:33

Report No.: NEI-FICP-3-1204C048C Page 127 of 206

Neutron Engineering Inc.



Date: 31.MAY.2012 16:20:02

Report No.: NEI-FICP-3-1204C048C Page 128 of 206

EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US	
Temperature:	25 ℃	Relative Humidity:	58 %	
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz	
Test Mode :	Band 2/ TX N20 Mode /CH52, CH56, CH64 (ANT1+ANT2)			

Test Channel	Frequency (MHz)	Maximum Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH52	5260 MHz	19.36	20.6	0.1148
CH56	5280 MHz	18.85	20.6	0.1148
CH64	5320 MHz	18.78	20.6	0.1148

EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US	
Temperature:	25 ℃	Relative Humidity:	58 %	
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz	
Test Mode :	Band 2/ TX N40 Mode /CH54, CH62 (ANT1+ANT2)			

Test Channel	Frequency (MHz)	Maximum Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH54	5270 MHz	19.29	20.6	0.1148
CH62	5310 MHz	16.77	20.6	0.1148

Remark:

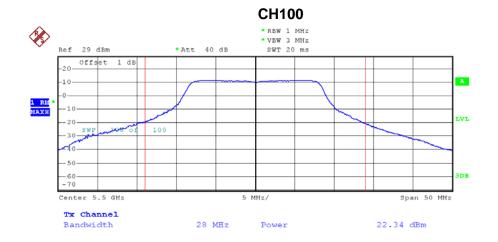
- (1) The MIMO test requirement, RF conducted output power shall measure each transmitter chain by using channel power method. And after obtain each individual transmitter chain power, then sum the output power by using the following formula: ((dBm/Chain 1)/10^Log) + ((dBm/Chain 2)/10^log) + ((dBm/ChainN)/10^log) = Combined peak output power in mW.
- (2) Antenna Gain 1=6.4 dBi
- (3) This EUT supports MIMO 2T2R, all transmit signals are completely uncorrelated, then, Direction gain = $G_{ANT}+10log(N)dBi$, that is Directional gain=9.4; So,the out power limit is 24-9.4+6=20.6; and power density limit is 11-9.4+6=7.6

Report No.: NEI-FICP-3-1204C048C Page 129 of 206

EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US	
Temperature:	25°C	Relative Humidity:	58 %	
Test Voltage:	AC 120V/60Hz			
Test Mode :	Band 3/TX A Mode/CH100, CH116, CH140			

Peak Output Power

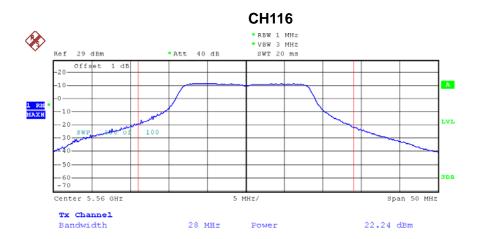
Test Channel	Frequency (MHz)	Peak Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH100	5500	22.34	24	0.251
CH116	5580	22.24	24	0.251
CH140	5700	19.66	24	0.251



Date: 30.MAY.2012 06:12:12

Report No.: NEI-FICP-3-1204C048C Page 130 of 206





Date: 30.MAY.2012 06:12:44

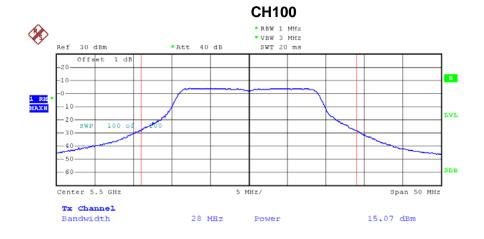


Date: 30.MAY.2012 06:17:08

EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	25°C	Relative Humidity:	58 %
Test Voltage:	AC 120V/60Hz		
Test Mode :	Band 3/TX N20 Mode/CH100,	CH112, CH140(ANT	1)

Peak Output Power

Test Channel	Frequency (MHz)	Peak Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH100	5500	15.07	24	0.251
CH112	5560	15.97	24	0.251
CH140	5700	15.79	24	0.251



Date: 15.JUL.2012 13:49:31

Report No.: NEI-FICP-3-1204C048C Page 132 of 206





Date: 15.JUL.2012 13:48:54

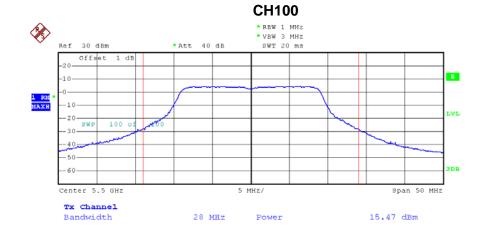


Date: 15.JUL.2012 13:48:15

EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	25°C	Relative Humidity:	58 %
Test Voltage:	AC 120V/60Hz		
Test Mode :	Band 3/TX N20 Mode/CH100, CH112, CH140(ANT 2)		

Peak Output Power

Test Channel	Frequency (MHz)	Peak Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH100	5500	15.47	24	0.251
CH112	5560	15.26	24	0.251
CH140	5700	15.17	24	0.251



Date: 15.JUL.2012 13:22:58

Report No.: NEI-FICP-3-1204C048C Page 134 of 206





Date: 15.JUL.2012 13:22:33

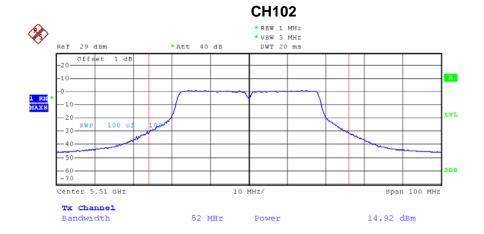


Date: 15.JUL.2012 13:21:51



EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US	
Temperature:	25°C	Relative Humidity:	58 %	
Test Voltage:	AC 120V/60Hz			
Test Mode :	Band 3/TX N40 Mode/CH102, CH110 (ANT 1)			

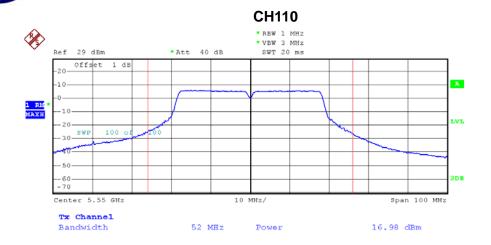
Test Channel	Frequency (MHz)	Peak Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH102	5510	14.92	24	0.251
CH110	5550	16.98	24	0.251



Date: 30.MAY.2012 07:20:54

Report No.: NEI-FICP-3-1204C048C Page 136 of 206

Neutron Engineering Inc.

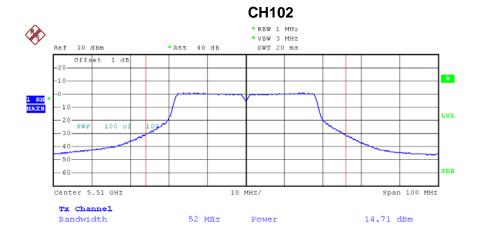


Date: 30.MAY.2012 07:17:57

Report No.: NEI-FICP-3-1204C048C Page 137 of 206

EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US	
Temperature:	25°C	Relative Humidity:	58 %	
Test Voltage:	AC 120V/60Hz			
Test Mode :	Band 3/TX N40 Mode/CH102, CH110 (ANT 2)			

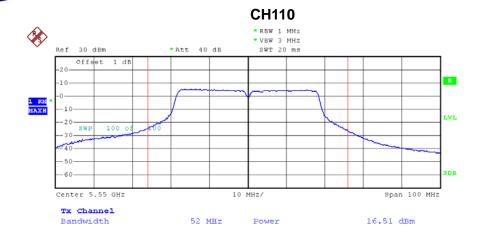
Test Channel	Frequency (MHz)	Peak Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH102	5510	14.71	24	0.251
CH110	5550	16.51	24	0.251



Date: 31.MAY.2012 16:29:35

Report No.: NEI-FICP-3-1204C048C Page 138 of 206

Neutron Engineering Inc.



Date: 31.MAY.2012 16:23:40

Report No.: NEI-FICP-3-1204C048C Page 139 of 206

EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	25 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	Band 3 TX N20 Mode /CH100, CH116, CH134 (ANT1+ANT2)		

Test Channel	Frequency (MHz)	Maximum Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH100	5500	18.28	20.6	0.1148
CH116	5580	18.64	20.6	0.1148
CH134	5700	18.50	20.6	0.1148

EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	25 ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	Band 3/ TX N40 Mode /CH54, CH62 (ANT1+ANT2)		

Test Channel	Frequency (MHz)	Maximum Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH102	5510	17.83	20.6	0.1148
CH110	5550	19.76	20.6	0.1148

Remark:

- (1) The MIMO test requirement, RF conducted output power shall measure each transmitter chain by using channel power method. And after obtain each individual transmitter chain power, then sum the output power by using the following formula: ((dBm/Chain 1)/10^Log) + ((dBm/Chain 2)/10^log) + ((dBm/ChainN)/10^log) = Combined peak output power in mW.
- (2) Antenna Gain 1=6.4 dBi
- (3) This EUT supports MIMO 2T2R, all transmit signals are completely uncorrelated, then, Direction gain = G_{ANT}+10log(N)dBi, that is Directional gain=9.4; So,the out power limit is 24-9.4+6=20.6; and power density limit is 11-9.4+6=7.6

Report No.: NEI-FICP-3-1204C048C Page 140 of 206

7. ANTENNA CONDUCTED SPURIOUS EMISSION

7.1 APPLIED PROCEDURES / LIMIT

FCC Part15, Subpart E / RSS-210: 2010				
Test Item Limit Frequency Range (MHz) Result				
Antenna conducted Spurious Emission	-27 dBm/1MHz	5150 - 5250 5250 - 5350 5470 - 5725	PASS	

7.1.1 MEASUREMENT INSTRUMENTS LIST

I	tem	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
	1	Spectrum Analyzer	R&S	FSP_40	100129	Nov. 09, 2014

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

All calibration period of equipment list is one year.

7.1.2 TEST PROCEDURE

a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,

b.

Spectrum Parameter	Setting
Attenuation	Auto
RB	1000 kHz
VB	1000 kHz
Trace	Max Hold
Sweep Time	Auto

7.1.3 DEVIATION FROM STANDARD

No deviation.

7.1.4 TEST SETUP

EUT	SPECTRUM
	ANALYZER

7.1.5 EUT OPERATION 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.

Report No.: NEI-FICP-3-1204C048C Page 141 of 206

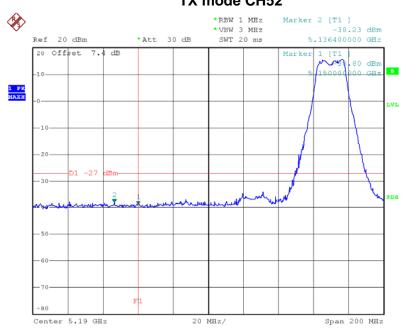
7.1.6 TEST RESULTS

EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US	
Temperature:	25°C	Relative Humidity:	58 %	
Test Voltage:	AC 120V/60Hz			
Test Mode :	Band 2/TX A Mode/ CH52, CH5	Band 2/TX A Mode/ CH52, CH56, CH60/ANT 1		

Channel of Worst Data: CH52				
The max. radio frequency power in any 1000kHz bandwidth outside the frequency band bandwidth within the frequency band.				
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)	
5136.40	-38.23	5358.00	-33.52	
Limit: -27 dBm/1MHz Result:PASS				
Measurement method: S.A Read value+Ant gain+cable loss				

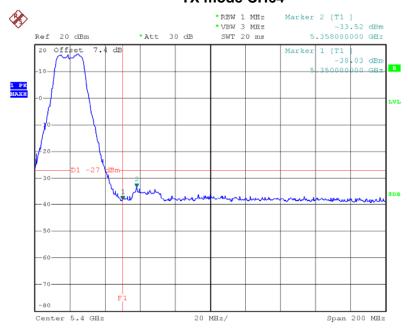
Report No.: NEI-FICP-3-1204C048C Page 142 of 206





Date: 20.NOV.2013 04:28:03

TX mode CH64



Date: 20.NOV.2013 04:29:10

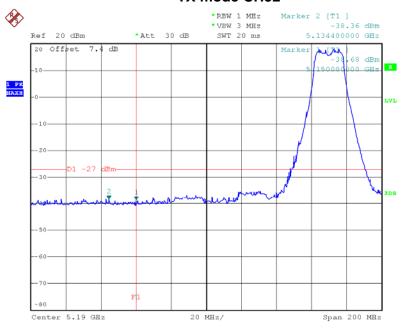


EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US	
Temperature:	25°C	Relative Humidity:	58 %	
Test Voltage:	AC 120V/60Hz			
Test Mode :	Band 2/TX A Mode/ CH52, CH56, CH60/ANT 2			

Channel of Worst Data: CH52					
The max. radio frequency power in any 1000kHz The max. radio frequency power in any 1000kHz bandwidth outside the frequency band bandwidth within the frequency band.					
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)		
5134.00	-38.36	5359.60	-33.21		
Limit: -27 dBm/1MHz Result:PASS					
Measurement method: S.A Read value+Ant gain+cable loss					

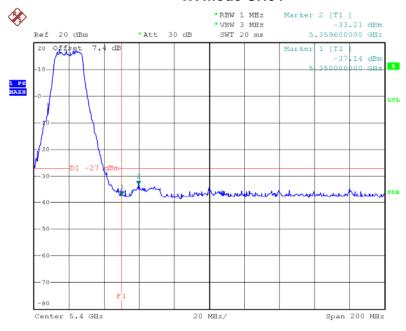
Report No.: NEI-FICP-3-1204C048C Page 144 of 206





Date: 20.NOV.2013 04:31:11

TX mode CH64



Date: 20.NOV.2013 04:30:31

Report No.: NEI-FICP-3-1204C048C Page 145 of 206

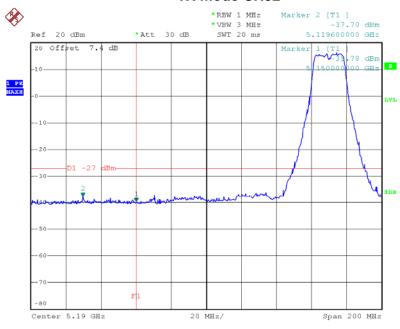


EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US	
Temperature:	25°C	Relative Humidity:	58 %	
Test Voltage:	AC 120V/60Hz			
Test Mode :	Band 2/TX N20 Mode/ CH52, CH56 , CH64/ANT 1			

Channel of Worst Data: CH52				
The max. radio frequency power in any 1000kHz bandwidth outside the frequency band bandwidth within the frequency band.				
FREQUENCY(MHz) POWER(dBm) FREQUENCY(MHz) POWER(dBm)			POWER(dBm)	
5119.60	-37.70	5370.00	-34.50	
Limit: -27 dBm/1MHz Result:PASS				
Measurement method: S.A Read value+Ant gain+cable loss				

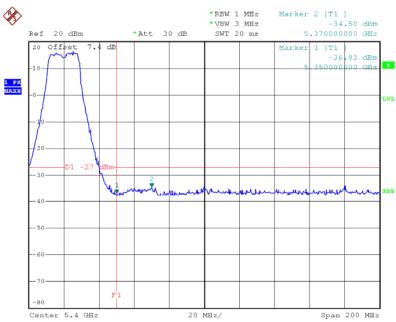
Report No.: NEI-FICP-3-1204C048C Page 146 of 206





Date: 20.NOV.2013 05:31:36

TX mode CH64



Date: 20.NOV.2013 05:32:44

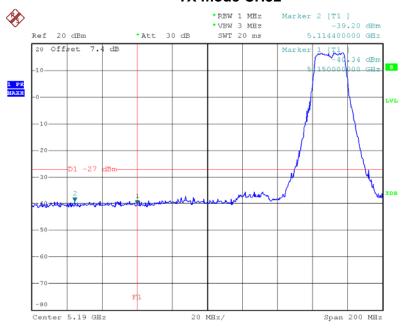


EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US	
Temperature:	25°C	Relative Humidity:	58 %	
Test Voltage:	AC 120V/60Hz			
Test Mode :	Band 2/TX N20 Mode/ CH52, CH56 , CH64/ANT 2			

Channel of Worst Data: CH52				
The max. radio frequency power in any 1000kHz bandwidth outside the frequency band bandwidth within the frequency band.				
FREQUENCY(MHz) POWER(dBm) FREQUENCY(MHz) POWER(dBm				
5114.40	-39.20	5358.00	-34.88	
Limit: -27 dBm/1MHz Result:PASS				
Measurement method: S.A Read value+Ant gain+cable loss				

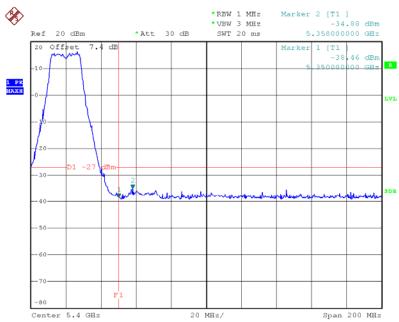
Report No.: NEI-FICP-3-1204C048C Page 148 of 206

TX mode CH52



Date: 20.NOV.2013 05:36:16

TX mode CH64



Date: 20.NOV.2013 05:35:36

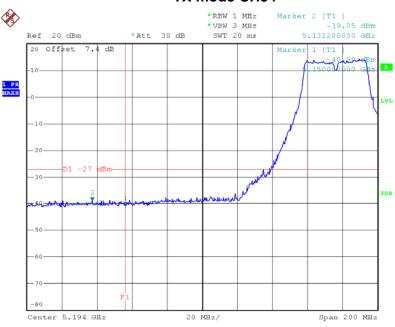


EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US	
Temperature:	25°C	Relative Humidity:	58 %	
Test Voltage:	AC 120V/60Hz			
Test Mode :	Band 2/TX N40 Mode/ CH54, CH62/ANT 1			

Channel of Worst Data: CH54				
The max. radio frequency power in any 1000kHz bandwidth outside the frequency band bandwidth within the frequency band.				
FREQUENCY(MHz) POWER(dBm) FREQUENCY(MHz) POWER(dBm)			POWER(dBm)	
5131.20	-39.05	5350.00	-33.11	
Limit: -27 dBm/1MHz Result:PASS				
Measurement method: S.A Read value+Ant gain+cable loss				

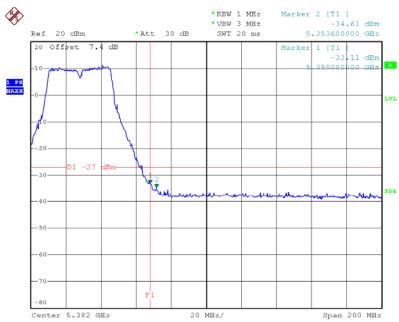
Report No.: NEI-FICP-3-1204C048C Page 150 of 206





Date: 21.NOV.2013 00:01:50

TX mode CH62



Date: 21.NOV.2013 00:03:58

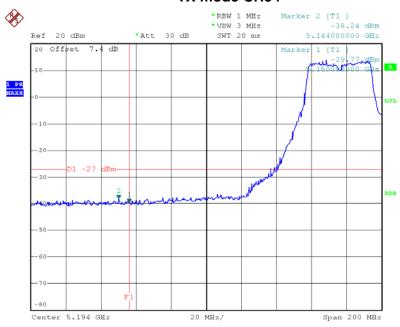


EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US	
Temperature:	25°C	Relative Humidity:	58 %	
Test Voltage:	AC 120V/60Hz			
Test Mode :	Band 2/TX N40 Mode/ CH54, CH62/ANT 2			

Channel of Worst Data: CH54				
The max. radio frequency power in any 1000kHz bandwidth outside the frequency band bandwidth within the frequency band.				
FREQUENCY(MHz) POWER(dBm) FREQUENCY(MHz) POWER(dBm)			POWER(dBm)	
5144.00	-38.24	5350.00	-31.33	
Limit: -27 dBm/1MHz Result:PASS				
Measurement method: S.A Read value+Ant gain+cable loss				

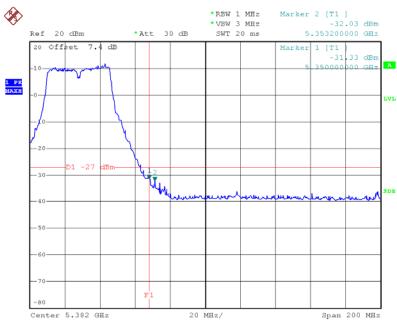
Report No.: NEI-FICP-3-1204C048C Page 152 of 206





Date: 21.NOV.2013 00:02:22

TX mode CH62



Date: 21.NOV.2013 00:03:16



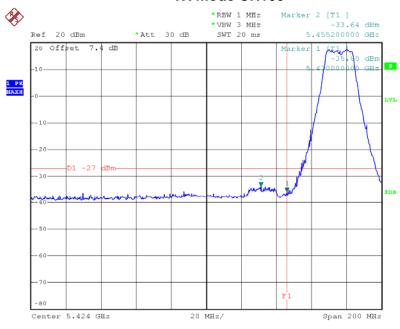
EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US	
Temperature:	25°C	Relative Humidity:	58 %	
Test Voltage:	AC 120V/60Hz			
Test Mode :	Band 3/TX A Mode/ CH100, CH112,CH140/ANT 1			

Channel of Worst Data: CH100				
The max. radio frequency power in any 1000kHz bandwidth outside the frequency band bandwidth within the frequency band.				
FREQUENCY(MHz) POWER(dBm) FREQUENCY(MHz) POWER(dBm)			POWER(dBm)	
5455.20	-33.64	5725.00	-32.86	
Limit: -27 dBm/1MHz Result:PASS				
Measurement method: S.A Read value+Ant gain+cable loss				

Report No.: NEI-FICP-3-1204C048C Page 154 of 206

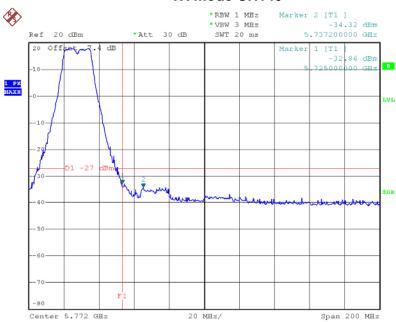






Date: 20.NOV.2013 05:51:23

TX mode CH140



Date: 20.NOV.2013 05:52:19

Report No.: NEI-FICP-3-1204C048C Page 155 of 206



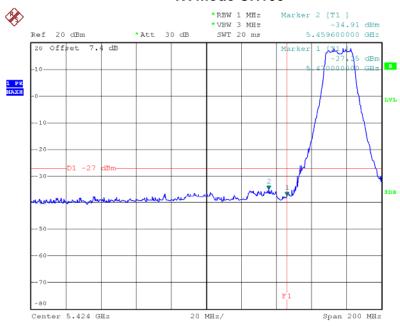
EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US	
Temperature:	25°C	Relative Humidity:	58 %	
Test Voltage:	AC 120V/60Hz			
Test Mode :	Band 3/TX A Mode/ CH100, CH112,CH140/ANT 2			

Channel of Worst Data: CH100				
The max. radio frequency power in any 1000kHz bandwidth outside the frequency band bandwidth within the frequency band.				
FREQUENCY(MHz) POWER(dBm) FREQUENCY(MHz) POWER(dBm)				
5459.60	-34.91	5732.40	-33.69	
Limit: -27 dBm/1MHz Result:PASS				
Measurement method: S.A Read value+Ant gain+cable loss				

Report No.: NEI-FICP-3-1204C048C Page 156 of 206

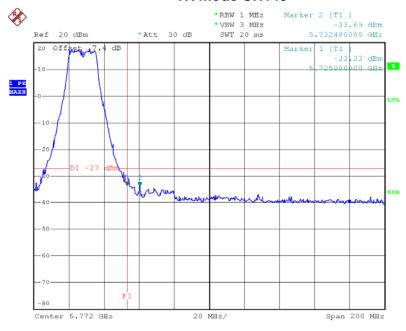


TX mode CH100



Date: 20.NOV.2013 05:54:31

TX mode CH140



Date: 20.NOV.2013 05:53:29

Report No.: NEI-FICP-3-1204C048C Page 157 of 206



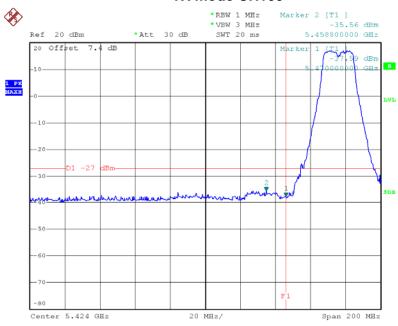
EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US	
Temperature:	25°C	Relative Humidity:	58 %	
Test Voltage:	AC 120V/60Hz			
Test Mode :	Band 3/TX N20 Mode/ CH100, CH112,CH140/ANT 1			

Channel of Worst Data: CH100				
	ey power in any 1000kHz the frequency band	The max. radio frequence bandwidth within the	y power in any 1000kHz ne frequency band.	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)	
5458.00 -35.56		5725.00	-32.86	
Limit: -27 dBm/1MHz Result:PASS				
Measurement method: S.A Read value+Ant gain+cable loss				

Report No.: NEI-FICP-3-1204C048C Page 158 of 206

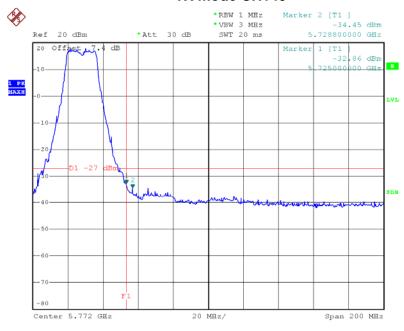


TX mode CH100



Date: 20.NOV.2013 06:14:10

TX mode CH140



Date: 20.NOV.2013 06:16:38

Report No.: NEI-FICP-3-1204C048C Page 159 of 206



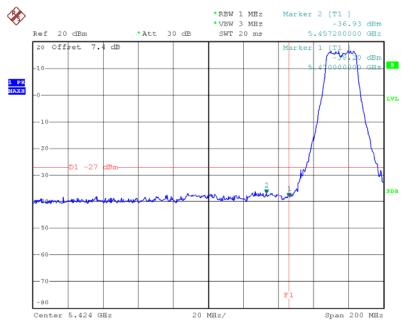
EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	25°C	Relative Humidity:	58 %
Test Voltage:	AC 120V/60Hz		
Test Mode :	Band 3/TX N20 Mode/ CH100, CH112,CH140/ANT 2		

Channel of Worst Data: CH100				
	ey power in any 1000kHz the frequency band	The max. radio frequence bandwidth within the	y power in any 1000kHz ne frequency band.	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)	
5457.20 -36.93		5725.00	-32.39	
Limit: -27 dBm/1MHz Result:PASS				
Measurement method: S.A Read value+Ant gain+cable loss				

Report No.: NEI-FICP-3-1204C048C Page 160 of 206

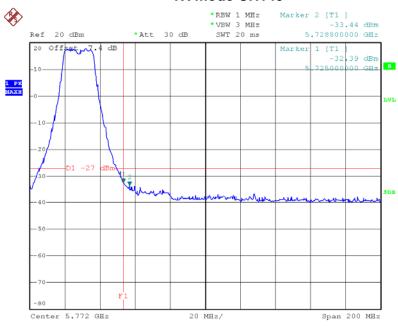


TX mode CH100



Date: 20.NOV.2013 06:14:38

TX mode CH140



Date: 20.NOV.2013 06:16:14

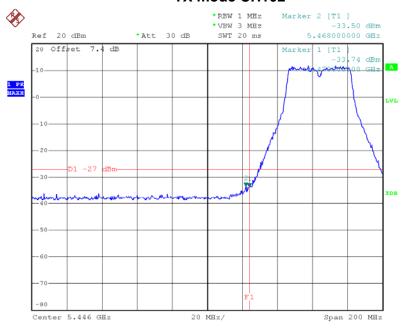


EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US	
Temperature:	25°C	Relative Humidity:	58 %	
Test Voltage:	AC 120V/60Hz			
Test Mode :	Band 3/TX N40 Mode/ CH102, CH110 /ANT 1			

Channel of Worst Data: CH102				
	ey power in any 1000kHz the frequency band	The max. radio frequence bandwidth within the	y power in any 1000kHz ne frequency band.	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)	
5468.00 -33.50		5728.00	-38.50	
Limit: -27 dBm/1MHz Result:PASS				
Measurement method: S.A Read value+Ant gain+cable loss				

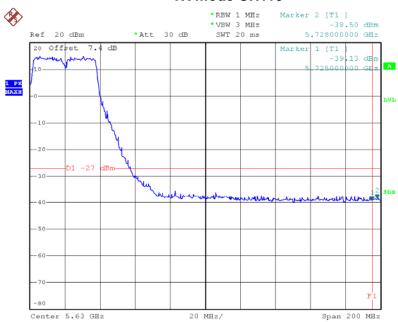
Report No.: NEI-FICP-3-1204C048C Page 162 of 206

TX mode CH102



Date: 21.NOV.2013 00:15:57

TX mode CH110



Date: 21.NOV.2013 00:18:03

Report No.: NEI-FICP-3-1204C048C Page 163 of 206

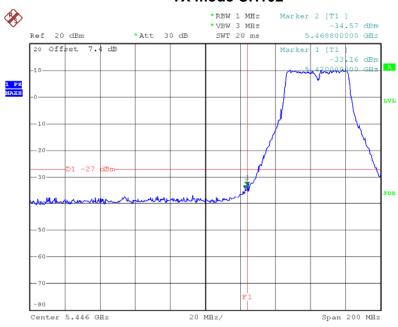


EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US	
Temperature:	25°C	Relative Humidity:	58 %	
Test Voltage:	AC 120V/60Hz			
Test Mode :	Band 3/TX N40 Mode/ CH102, CH110/ANT 2			

Channel of Worst Data: CH102				
	ey power in any 1000kHz the frequency band	The max. radio frequence bandwidth within the	y power in any 1000kHz ne frequency band.	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)	
5470.00 -33.16		5729.60	-38.64	
Limit: -27 dBm/1MHz Result:PASS				
Measurement method: S.A Read value+Ant gain+cable loss				

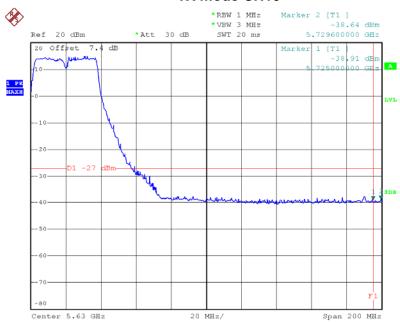
Report No.: NEI-FICP-3-1204C048C Page 164 of 206





Date: 21.NOV.2013 00:16:24

TX mode CH10



Date: 21.NOV.2013 00:17:21

Report No.: NEI-FICP-3-1204C048C Page 165 of 206

8. POWER SPECTRAL DENSITY TEST

8.1 APPLIED PROCEDURES / LIMIT

FCC Part15, Subpart E				
Test Item	Limit	Frequency Range (MHz)	Result	
Power Spectral Density	4 dBm	5150 - 5250	PASS	
	11 dBm	5250 - 5350	PASS	
	11 dBm	5470 - 5725	PASS	

8.1.1 MEASUREMENT INSTRUMENTS LIST

Ite	m Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibration	Next Calibration
1	Spectrum Analyzer	R&S	FSP_40	100129	Nov.26.2011	Nov.26.2012

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

8.1.2 TEST PROCEDURE

a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,

b.

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	Encompass the entire emissions bandwidth (EBW) of
Span Frequency	the signal
RB	= 1 MHz.
VB	3 MHz.
Detector	RMS
Trace	Max Hold
Sweep Time	Auto

8.1.3 DEVIATION FROM STANDARD

No deviation.

8.1.4 TEST SETUP

EUT	SPECTRUM
	ANALYZER

8.1.5 EUT OPERATION 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.

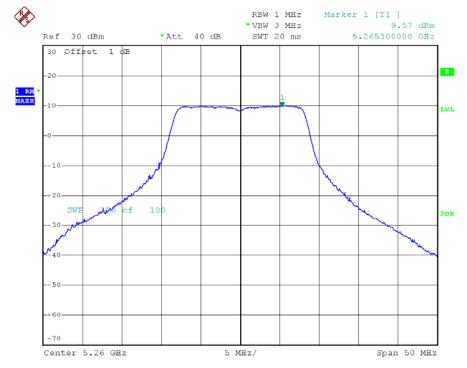
Report No.: NEI-FICP-3-1204C048C Page 166 of 206

8.1.6 TEST RESULTS

EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	25°C	Relative Humidity:	58 %
Test Voltage:	AC 120V/60Hz		
Test Mode :	Band 2/TX A Mode/CH52, CH56, CH64		

Test Channel	Frequency	Power Density	LIMIT
rest Oriannei	(MHz)	(dBm)	(dBm)
CH52	5260	9.57	11
CH56	5280	9.52	11
CH64	5320	9.85	11

CH52



Date: 30.MAY.2012 05:56:13

Report No.: NEI-FICP-3-1204C048C Page 167 of 206

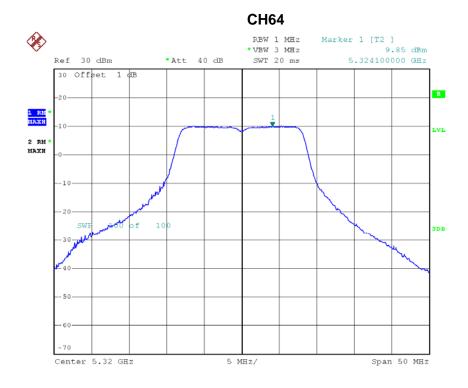


5 MHz/

Span 50 MHz

Date: 30.MAY.2012 05:57:43

Center 5.28 GHz



Date: 30.MAY.2012 06:09:13



EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	25°C	Relative Humidity:	58 %
Test Voltage:	AC 120V/60Hz		
Test Mode :	Band 2/TX N20 Mode/CH52, CH56, CH64		

ANT 1			
Test Channel	Frequency	Power Density	LIMIT
lest Chamilei	(MHz)	(dBm)	(dBm)
CH52	5260	4.57	11
CH56	5280	4.25	11
CH64	5320	4.00	11

ANT 2			
Test Channel	Frequency	Power Density	LIMIT
lest Chamilei	(MHz)	(dBm)	(dBm)
CH52	5260	4.59	11
CH56	5280	4.34	11
CH64	5320	4.47	11

(ANT 1+ANT 2)				
Test Channel	Frequency	Power Density	LIMIT	
lest Chamber	(MHz)	(dBm)	(dBm)	
CH52	5260	7.59	10.6	
CH56	5280	7.31	10.6	
CH64	5320	7.25	10.6	

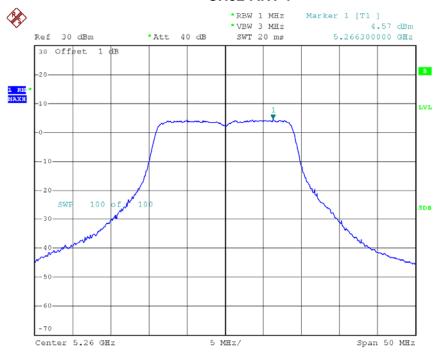
Remark:

- (1) The MIMO test requirement, RF conducted output power shall measure each transmitter chain by using channel power method.

 And after obtain each individual transmitter chain power, then sum the output power by using the following formula:
 - ((dBm/Chain 1)/10^Log) + ((dBm/Chain 2)/10^log) + ((dBm/ChainN)/10^log) = Combined peak output power in mW.
- (2) Antenna Gain 1=6.4 dBi
- (3) This EUT supports MIMO 2T2R, all transmit signals are completely uncorrelated, then, Direction gain = G_{ANT} , that is Directional gain=6.4; So,the out power limit is 24-6.4+6=23.6; and power density limit is 11-6.4+6=10.6

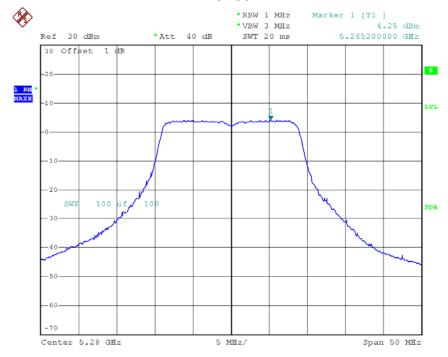
Report No.: NEI-FICP-3-1204C048C Page 169 of 206

CH52-ANT 1



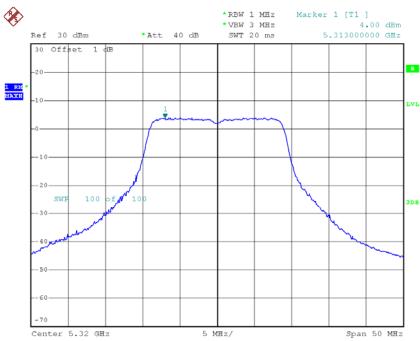
Date: 15.JUL.2012 13:37:22

CH56-ANT 1



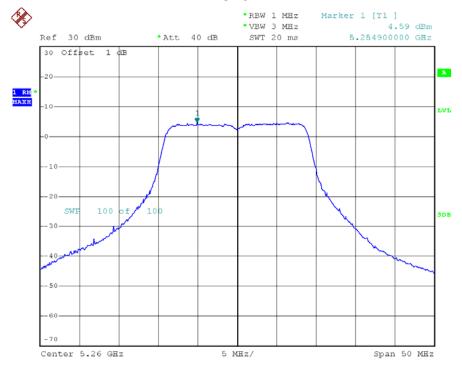
Date: 15.JUL.2012 13:38:54

CH64-ANT 1



Date: 15.JUL.2012 13:39:46

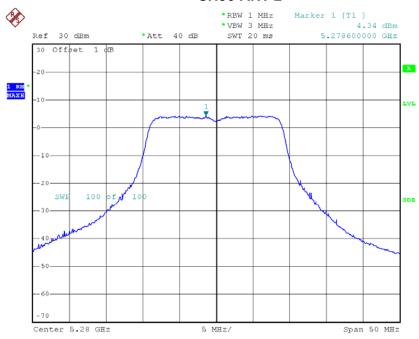
CH52-ANT 2



Date: 15.JUL.2012 13:11:31

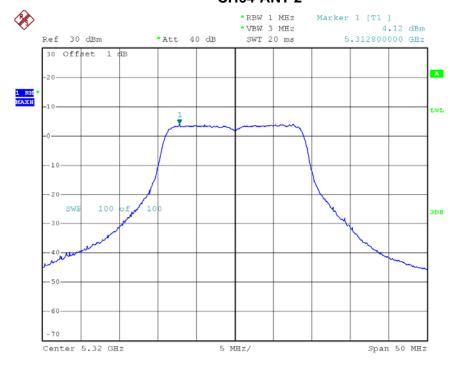
Report No.: NEI-FICP-3-1204C048C

CH56-ANT 2



Date: 15.JUL.2012 13:14:10

CH64-ANT 2



Date: 15.JUL.2012 13:15:47



EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US	
Temperature:	25°C	Relative Humidity:	58 %	
Test Voltage:	AC 120V/60Hz			
Test Mode :	Band 2/TX N40 Mode/CH54, CH62			

ANT 1			
Test Channel	Frequency	Power Density	LIMIT
lest Chamilei	(MHz)	(dBm)	(dBm)
CH54	5270	3.39	11
CH62	5310	-1.04	11

ANT 2				
Test Channel	Frequency	Power Density	LIMIT	
rest Chamber	(MHz)	(dBm)	(dBm)	
CH54	5270	3.28	11	
CH62	5310	-0.61	11	

(ANT 1+ANT 2)				
Test Channel	Frequency	Power Density	LIMIT	
lest Chamilei	(MHz)	(dBm)	(dBm)	
CH54	5270	6.35	10.6	
CH62	5310	2.19	10.6	

Remark:

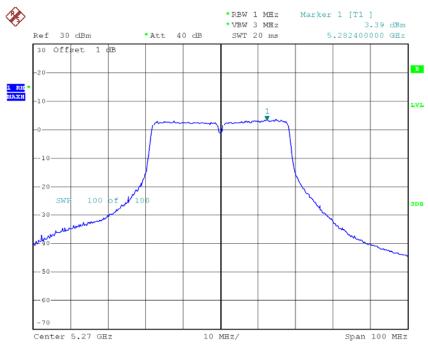
- (1) The MIMO test requirement, RF power density shall measure each transmitter chain by using channel power density method.

 And after obtain each individual transmitter chain power density, then sum the power density by using the following formula:

 ((dBm/Chain 1)/10^Log) + ((dBm/Chain 2)/10^log) + ((dBm/ChainN)/10^log) = Combined power density in mW.
- (2) Antenna Gain 1=6.4 dBi
- (3) This EUT supports MIMO 2T2R, all transmit signals are completely uncorrelated, then, Direction gain = G_{ANT} , that is Directional gain=6.4; So,the out power limit is 24-6.4+6=23.6; and power density limit is 11-6.4+6=10.6

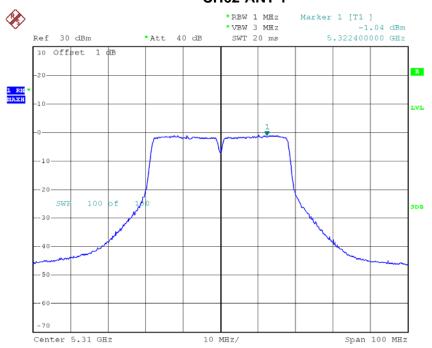
Report No.: NEI-FICP-3-1204C048C Page 173 of 206





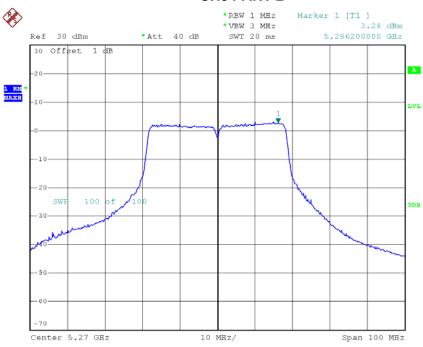
Date: 30.MAY.2012 07:08:03

CH62-ANT 1



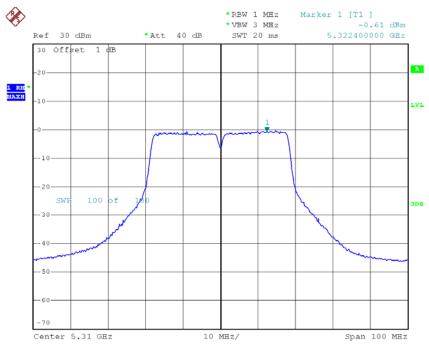
Date: 30.MAY.2012 07:12:15

CH54-ANT 2



Date: 31.MAY.2012 16:18:08

CH62-ANT 2



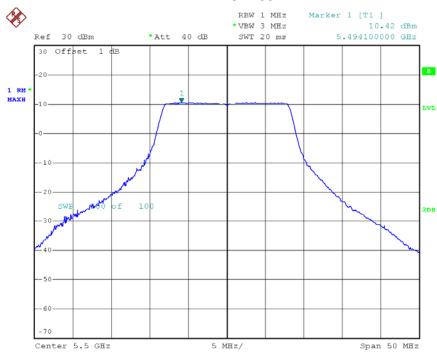
Date: 31.MAY.2012 16:20:33



EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	25°C	Relative Humidity:	58 %
Test Voltage:	AC 120V/60Hz		
Test Mode :	Band 3/TX A Mode/CH100, CH112, CH140		

Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH100	5500	10.42	11
CH112	5560	10.37	11
CH140	5700	8.30	11

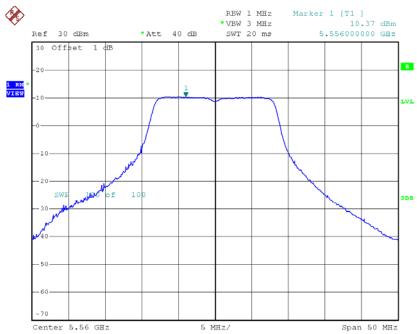
CH100



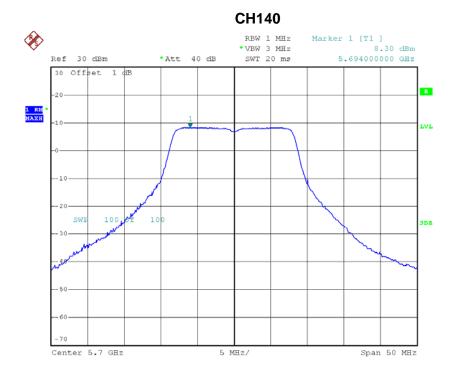
Date: 30.MAY.2012 06:11:15

Report No.: NEI-FICP-3-1204C048C Page 176 of 206





Date: 30.MAY.2012 06:14:02



Date: 30.MAY.2012 06:17:43

Report No.: NEI-FICP-3-1204C048C Page 177 of 206



EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	25°C	Relative Humidity:	58 %
Test Voltage:	AC 120V/60Hz		
Test Mode :	Band 3/TX N20 Mode/CH100, CH112, CH140		

ANT 1					
Test Channel	Frequency	Power Density	LIMIT		
	(MHz)	(dBm)	(dBm)		
CH100	5500	4.70	11		
CH112	5560	4.38	11		
CH140	5700	4.57	11		

ANT 2					
Test Channel	Frequency	Power Density	LIMIT		
	(MHz)	(dBm)	(dBm)		
CH100	5500	4.40	11		
CH112	5560	3.92	11		
CH140	5700	4.47	11		

(ANT 1+ANT 2)					
Test Channel	Frequency	Power Density	LIMIT		
	(MHz)	(dBm)	(dBm)		
CH100	5500	7.56	10.6		
CH112	5560	7.17	10.6		
CH140	5700	7.53	10.6		

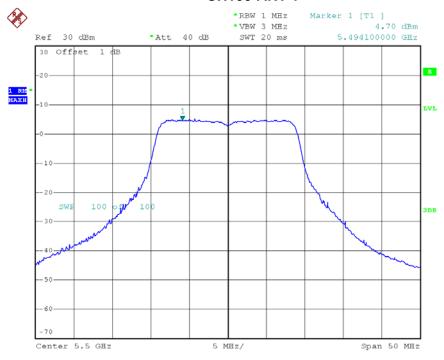
Remark:

- (1) The MIMO test requirement, RF conducted output power shall measure each transmitter chain by using channel power method.

 And after obtain each individual transmitter chain power, then sum the output power by using the following formula:
 - ((dBm/Chain 1)/10^Log) + ((dBm/Chain 2)/10^log) + ((dBm/ChainN)/10^log) = Combined peak output power in mW.
- (2) Antenna Gain 1=6.4 dBi
- (3) This EUT supports MIMO 2T2R, all transmit signals are completely uncorrelated, then, Direction gain = G_{ANT} , that is Directional gain=6.4; So,the out power limit is 24-6.4+6=23.6; and power density limit is 11-6.4+6=10.6

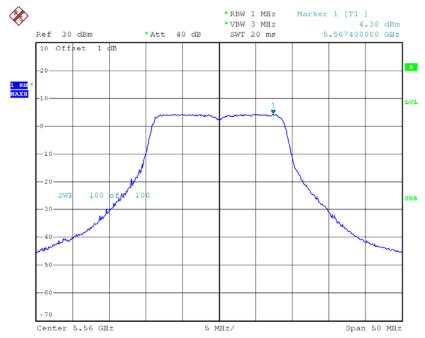
Report No.: NEI-FICP-3-1204C048C Page 178 of 206

CH100-ANT 1



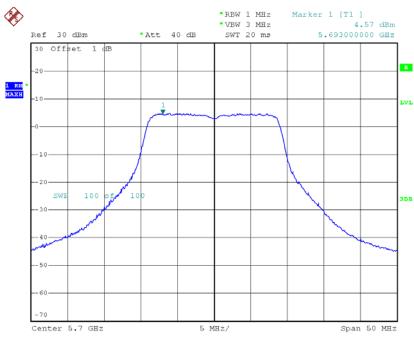
Date: 15.JUL.2012 13:40:20

CH112-ANT 1



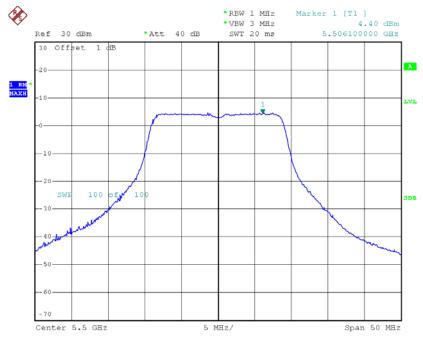
Date: 15.JUL.2012 13:46:08

CH140-ANT 1



Date: 15.JUL.2012 13:47:42

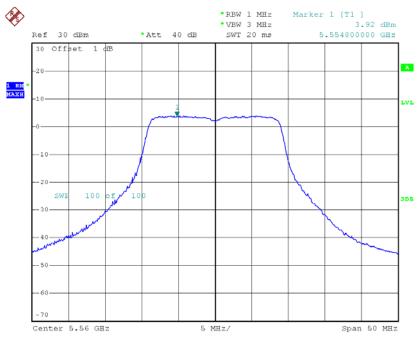
CH100-ANT 2



Date: 15.JUL.2012 13:17:34

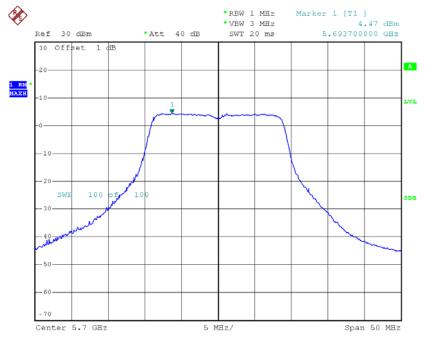
Neutron Engineering Inc.

CH112-ANT 2



Date: 15.JUL.2012 13:19:30

CH140-ANT 2



Date: 15.JUL.2012 13:20:15



EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US	
Temperature:	25°C	Relative Humidity:	58 %	
Test Voltage:	AC 120V/60Hz			
Test Mode :	Band 3/TX N40 Mode/CH102, CH110			

ANT 1				
Test Channel	Frequency	Power Density	LIMIT	
lest Chamilei	(MHz)	(dBm)	(dBm)	
CH102	5510	0.77	11	
CH110	5550	4.02	11	

ANT 2					
Test Channel	Frequency	Power Density	LIMIT		
lest Chamilei	(MHz)	(dBm)	(dBm)		
CH102	5510	0.77	11		
CH110	5550	3.90	11		

(ANT 1+ANT 2)				
Test Channel	Frequency	Power Density	LIMIT	
rest Chamilei	(MHz)	(dBm)	(dBm)	
CH102	5510	3.78	10.6	
CH110	5550	6.97	10.6	

Remark:

- (1) The MIMO test requirement, RF power density shall measure each transmitter chain by using channel power density method.

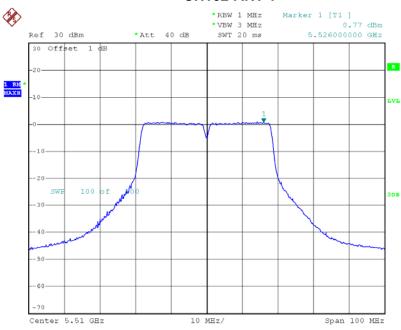
 And after obtain each individual transmitter chain power density, then sum the power density by using the following formula:

 ((dBm/Chain 1)/10^Log) + ((dBm/Chain 2)/10^log) + ((dBm/ChainN)/10^log) = Combined power density in mW.
- (2) Antenna Gain 1=6.4 dBi
- (3) This EUT supports MIMO 2T2R, all transmit signals are completely uncorrelated, then, Direction gain = G_{ANT} , that is Directional gain=6.4; So,the out power limit is 24-6.4+6=23.6; and power density limit is 11-6.4+6=10.6

Report No.: NEI-FICP-3-1204C048C Page 182 of 206

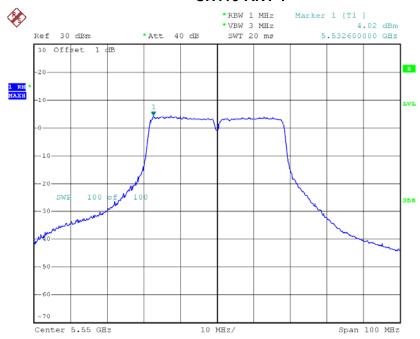
Neutron Engineering Inc.

CH102-ANT 1



Date: 30.MAY.2012 07:20:18

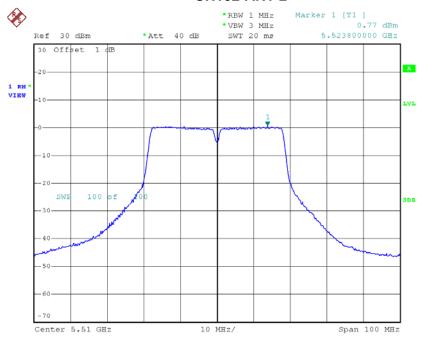
CH110-ANT 1



Date: 30.MAY.2012 07:18:24

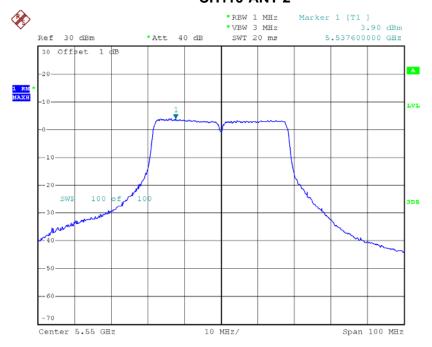
Neutron Engineering Inc.

CH102-ANT 2



Date: 31.MAY.2012 16:30:14

CH110-ANT 2



Date: 31.MAY.2012 16:24:45

9. PEAK EXCURSION MEASUREMENT

9.1 APPLIED PROCEDURES / LIMIT

FCC Part15, Subpart E					
Test Item Limit Frequency Range (MHz) Result					
Dook Evourgion		5150 - 5250	PASS		
Peak Excursion Measurement	13 dB	5250 - 5350	PASS		
		5470 - 5725	PASS		

9.1.1 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibration	Next Calibration
1	Spectrum Analyzer	R&S	FSP_40	100129	Nov.26.2011	Nov.26.2012

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

9.1.2 TEST PROCEDURE

a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,

n	١.

Spectrum Parameter	Setting
Attenuation	Auto
Span Fraguancy	Encompass the entire emissions bandwidth (EBW) of
Span Frequency	the signal
RB	1000 kHz (Peak Trace) / 1000 kHz (Average Trace)
VB	3000 kHz (Peak Trace) / 3000 kHz (Average Trace)
Detector	Peak (Peak Trace) / Rms (Average Trace)
Trace	Max Hold
Sweep Time	Auto

- C. Peak Trace: Set RBW = 1 MHz, VBW ≥ 3 MHz with peak detector and maxhold settings.
- d. Average Trace: set RBW = 1 MHz, VBW = 3 MHz with RMS detector and trace average across 100 traces in power averaging mode.

9.1.3 DEVIATION FROM STANDARD

No deviation.

Report No.: NEI-FICP-3-1204C048C Page 185 of 206



ANALYZER

9.1.5 EUT OPERATION 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.

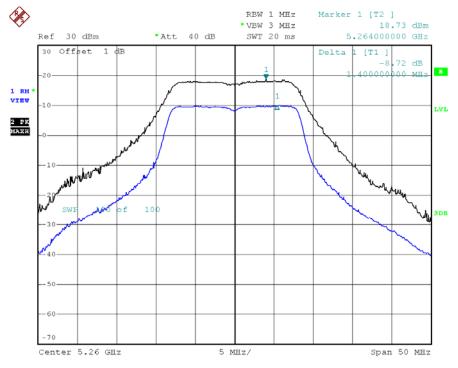
Report No.: NEI-FICP-3-1204C048C Page 186 of 206

9.1.6 TEST RESULTS

EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US	
Temperature:	25°C	Relative Humidity:	58 %	
Test Voltage:	AC 120V/60Hz			
Test Mode :	Band 2/TX A Mode/CH52, CH56, CH64			

Test Channel	Frequency (MHz)	Peak Excursion (dB)	LIMIT (dB)
CH52	5260	8.72	13
CH56	5280	8.98	13
CH64	5320	8.10	13

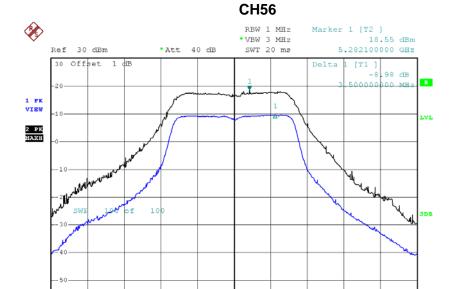
CH52



Date: 30.MAY.2012 05:56:48

Report No.: NEI-FICP-3-1204C048C Page 187 of 206



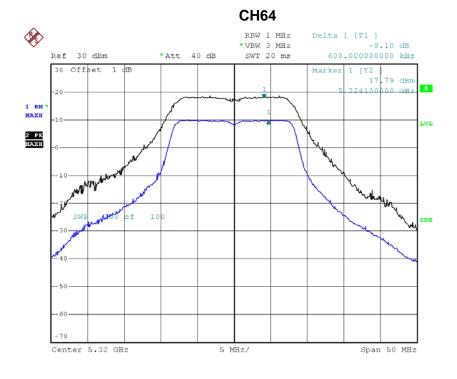


5 MHz/

Span 50 MHz

Date: 30.MAY.2012 05:59:44

Center 5.28 GHz

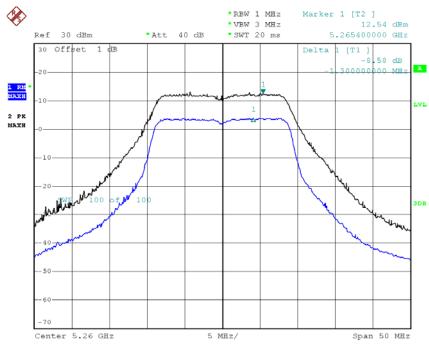


Date: 30.MAY.2012 06:09:45

EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US	
Temperature:	25°C	Relative Humidity:	58 %	
Test Voltage:	AC 120V/60Hz			
Test Mode :	Band 2/TX N20 Mode/CH52, CH56, CH64			

Test Channel	Frequency (MHz)	Peak Excursion (dB)	LIMIT (dB)
CH52	5260	8.58	13
CH56	5280	9.33	13
CH64	5320	8.58	13

CH52

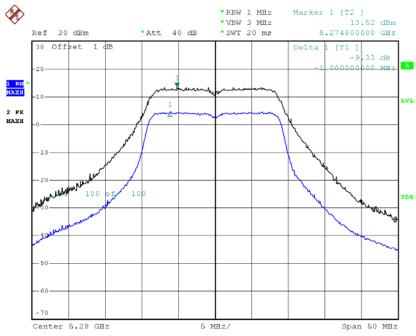


Date: 17.JUL.2012 22:10:50

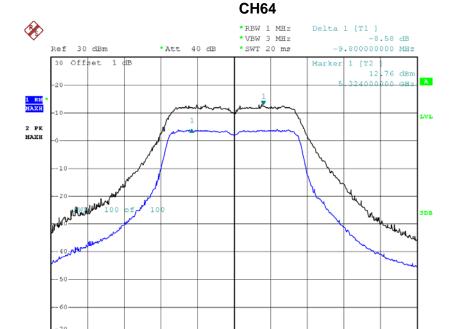
Report No.: NEI-FICP-3-1204C048C Page 189 of 206







Date: 17.JUL.2012 22:12:41



5 MHz/

Span 50 MHz

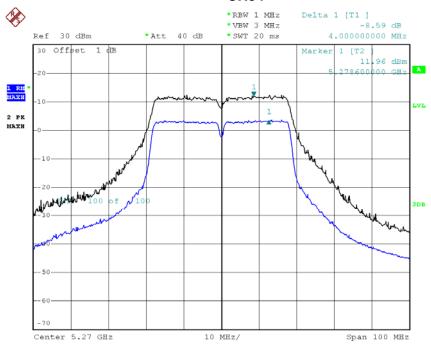
Date: 17.JUL.2012 22:16:04

Center 5.32 GHz

EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	25°C	Relative Humidity:	58 %
Test Voltage:	AC 120V/60Hz		
Test Mode :	Band 2/TX N40 Mode/CH54, CH62		

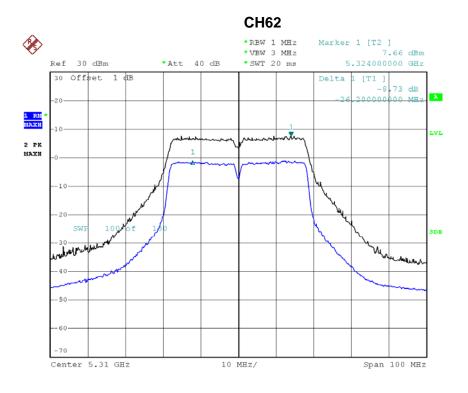
Test Channel	Frequency (MHz)	Peak Excursion (dB)	LIMIT (dB)
CH54	5270	8.59	13
CH62	5310	8.73	13

CH54



Date: 17.JUL.2012 22:20:09

Report No.: NEI-FICP-3-1204C048C Page 191 of 206



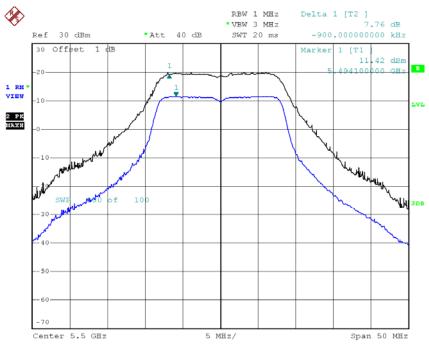
Date: 17.JUL.2012 22:21:57

Report No.: NEI-FICP-3-1204C048C Page 192 of 206

EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	25°C	Relative Humidity:	58 %
Test Voltage:	AC 120V/60Hz		
Test Mode :	Band 3/TX A Mode/CH100, CH112, CH140		

Test Channel	Frequency (MHz)	Peak Excursion (dB)	LIMIT (dB)
CH100	5500	7.76	13
CH112	5560	8.95	13
CH140	5700	9.33	13

CH100

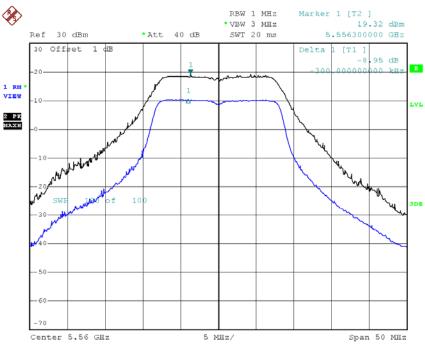


Date: 30.MAY.2012 06:11:57

Report No.: NEI-FICP-3-1204C048C Page 193 of 206

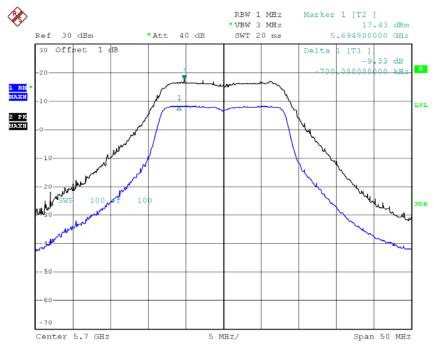
Neutron Engineering Inc.





Date: 30.MAY.2012 06:14:58

CH140

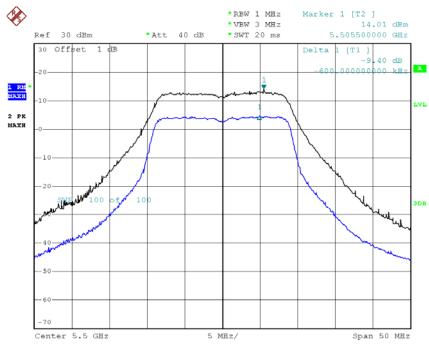


Date: 30.MAY.2012 06:18:26

EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	25°C	Relative Humidity:	58 %
Test Voltage:	AC 120V/60Hz		
Test Mode :	Band 3/TX N20 Mode/ CH100, CH112, CH140		

Test Channel	Frequency (MHz)	Peak Excursion (dB)	LIMIT (dB)
CH100	5500	9.4	13
CH112	5560	9.2	13
CH140	5700	8.75	13

CH100

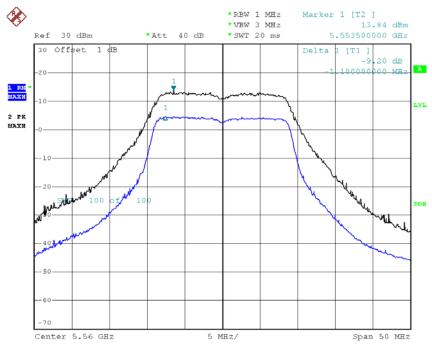


Date: 17.JUL.2012 22:15:25

Report No.: NEI-FICP-3-1204C048C Page 195 of 206

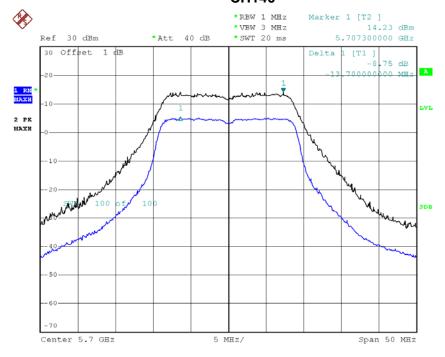
Neutron Engineering Inc.





Date: 17.JUL.2012 22:17:09

CH140

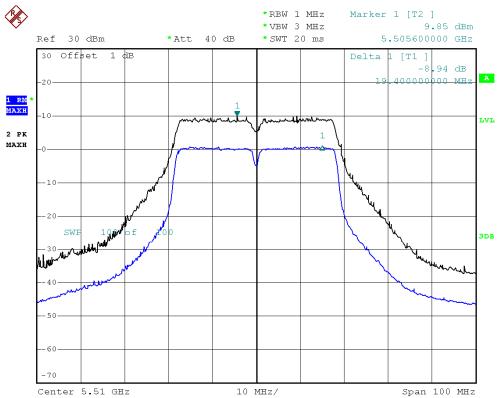


Date: 17.JUL.2012 22:18:05

EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	25°C	Relative Humidity:	58 %
Test Voltage:	AC 120V/60Hz		
Test Mode :	Band 3/TX N40 Mode/CH102, CH110		

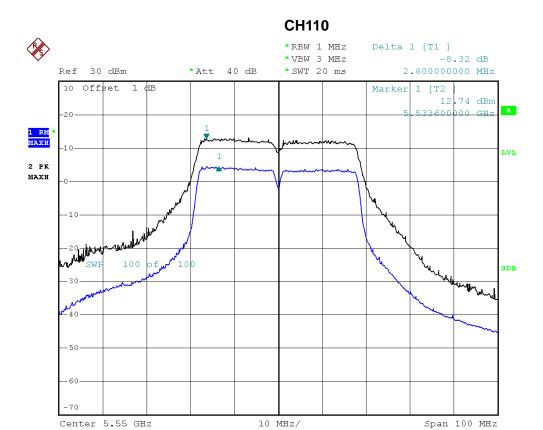
Test Channel	Frequency (MHz)	Peak Excursion (dB)	LIMIT (dB)
CH102	5510	8.94	13
CH110	5550	8.32	13

CH102



Date: 17.JUL.2012 22:23:17

Report No.: NEI-FICP-3-1204C048C Page 197 of 206



Date: 17.JUL.2012 22:25:08

Report No.: NEI-FICP-3-1204C048C Page 198 of 206

10. FREQUENCY STABILITY MEASUREMENT

10.1 APPLIED PROCEDURES / LIMIT

FCC Part15, Subpart E 15.407(g)				
Test Item	Limit	Frequency Range (MHz)	Result	
	specified in the user's manual	5150 - 5250	PASS	
Frequency Stability		5250 - 5350	N/A	
		5470 - 5725	N/A	

10.1.1 MEASUREMENT INSTRUMENTS LIST

I	tem	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
	1	Spectrum Analyzer	R&S	FSP_40	100129	Nov.26.2012
	2	Precision Oven Tester	HOLINK	H-T-1F-D	BA03101701	May. 11, 2013

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

10.1.2 TEST PROCEDURE

a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	Entire absence of modulation emissions bandwidth
RB	10 kHz
VB	10 kHz
Sweep Time	Auto

c. The test extreme voltage is to change the primary supply voltage from 85 to 115 percent of the nominal value.

10.1.3 DEVIATION FROM STANDARD

No deviation.

Report No.: NEI-FICP-3-1204C048C Page 199 of 206

d. user manual temperature is 0°C~60°C.



10.1.4 TEST SETUP

EUT	SPECTRUM
	ANALYZER

10.1.5 EUT OPERATION CONDITIONS

The EUT	tested system	was configured	d as the s	tatements	of 4.1.6 l	Jnless of	otherwise a	a special
operating	condition is sp	pecified in the fo	ollows du	ring the tes	sting.			•

Report No.: NEI-FICP-3-1204C048C Page 200 of 206

10.1.6 TEST RESULTS

EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	25°C	Relative Humidity:	58 %
Test Voltage:	AC 120V/60Hz		
Test Mode :	Band 2		

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)		
(V)	5320		
138	5319.981800		
120	5319.982000		
102	5319.982400		
Max. Deviation (MHz)	0.018200		
Max. Deviation (ppm)	3.42		

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)
(°C)	5320
-20	5319.981000
-10	5319.981400
0	5319.981700
10	5319.981900
20	5319.982000
30	5319.982400
40	5319.982600
50	5319.987280
Max. Deviation (MHz)	0.019000
Max. Deviation (ppm)	3.57

Report No.: NEI-FICP-3-1204C048C Page 201 of 206



EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	25°C	Relative Humidity:	58 %
Test Voltage:	AC 120V/60Hz		
Test Mode :	Band 2		

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)
138	5499.981130
120	5499.981200
102	5499.981500
Max. Deviation (MHz)	0.018870
Max. Deviation (ppm)	3.43

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)
(°C)	5500
-20	5499.980000
-10	5499.981000
0	5499.981100
10	5499.981200
20	5499.981200
30	5499.981300
40	5499.981500
50	5499.981600
Max. Deviation (MHz)	0.020000
Max. Deviation (ppm)	3.64

Report No.: NEI-FICP-3-1204C048C Page 202 of 206



11. EUT TEST PHOTO

Conducted Measurement Photos





Report No.: NEI-FICP-3-1204C048C Page 203 of 206



Radiated Measurement Photos 9KHz~300MHz

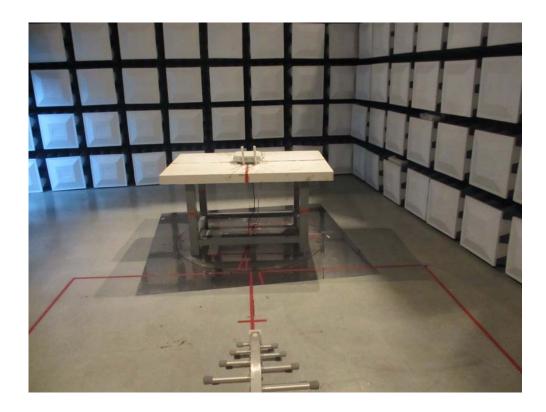




Report No.: NEI-FICP-3-1204C048C Page 204 of 206



Radiated Measurement Photos 30~1000MHz



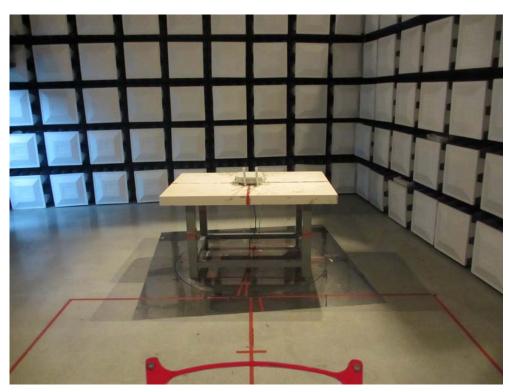


Report No.: NEI-FICP-3-1204C048C Page 205 of 206



Radiated Measurement Photos Above 1000MHz





Report No.: NEI-FICP-3-1204C048C Page 206 of 206