# FCC/IC Radio Test Report

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

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

**Issued Date** : Jul. 18, 2012 **Project No.** : 1204C048A

**Equipment**: Outdoor Wireless LAN Access Point

Model Name : AP6610DN-AGN-US

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

Address for FCC: Bantian, Longgang District, Shenzhen China

Address for IC : Bantian, Longgang District, Shenzhen, 518129 China

Tested by:

Neutron Engineering Inc. EMC Laboratory

Date of Receipt: Apr. 17, 2012

Date of Test:

Apr. 17, 2012 ~ Jul. 16, 2012

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# 1. CERTIFICATION

Equipment: Outdoor Wireless LAN Access Point

Brand Name: HUAWEI

Model Name: AP6610DN-AGN-US

Applicant: Huawei Technologies Co.,Ltd. Date of Test: Apr. 17, 2012 ~ Jul. 16, 2012 Test Item: ENGINEERING SAMPLE

Standards: FCC Part15, Subpart C(15.247) / ANSI C63.4: 2009; Canada RSS-210:2010

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-2-1204C048A) were obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of NVLAP and TAF according to the ISO-17025 quality assessment standard and technical standard(s).

Test result included in this report is only for the 5725~5825 MHz part of the product.

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# 2. SUMMARY OF TEST RESULTS

	FCC Part15 (15.247) , Subpart C / RSS-210: 2010			
Standard	Section	Test Item	Judgment	Remark
RSS-GEN 7.2.2	1 15 207   Conducted Emission		PASS	
RSS-210 A8.5	15.247 (d)	Antenna conducted Spurious Emission	PASS	
RSS-210 A8.2(a)	15.247 (a)(2)	6dB Bandwidth	PASS	
RSS-210 A8.4(4)	15.247 (b)	Peak Output Power	PASS	
RSS-210 A8.2(b)	15.247 (e)	Power Spectral Density	PASS	
-	15.203	Antenna Requirement	PASS	
RSS-210 Annex 8 (A8.5)	Annex 8   15.247(d)   FCC Limit: Table 15.209		PASS	
RSS- Gen 7.2.3 Note(1) Receiver Radiated Emissions RSS-210 Limit: Table 3		PASS		
-	1.1307 1.1310 2.1091 2.1093	RF Exposure Compliance	PASS	

Test procedures according to the technical standards:

# NOTE:

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

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# 2.1 TEST FACILITY

The test facilities used to collect the test data in this report is **DG-CB02/DG-C02** at the location of No.3, Jinshagang 1st Road, ShiXia, Dalang Town, Dong Guan, China.523792 Neutron's test firm number is 319330

# 2.2 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

The reported uncertainty of measurement y  $\pm$  U, where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 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	Method Measurement Frequency Range		U,(dB)	NOTE
		30MHz ~ 200MHz	V	3.82	
		30MHz ~ 200MHz	Н	3.60	
DG-CB03	CISPR	200MHz ~ 1,000MHz	V	3.86	
DG-CB03	-CBU3   CISEK	200MHz ~ 1,000MHz	Н	3.94	
		1GHz~18GHz	V	3.12	
		1GHz~18GHz	Н	3.68	

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# 3. GENERAL INFORMATION

# 3.1 GENERAL DESCRIPTION OF EUT

Equipment	Outdoor Wireless LAN A	ccess Point	
Brand Name	HUAWEI		
Model Name	AP6610DN-AGN-US		
OEM Brand/Model Name	N/A		
Model Difference	N/A		
Product Description	The EUT is a Outdoor Wireless LAN Access Point .  Operation Frequency 5725~5825 MHz  Modulation Type 802.11a/n:OFDM  Bit Rate of Transmitter 300Mbps  Number of Channel 5 CH, Please see Note 2. (please see page 10)  Antenna Designation Please see Note 3.  Antenna Gain(Peak) (please see page 10)  Output Power 802.11a: 29.30 dBm 802.11n 20M: 23.63 dBm (ANT 1 802.11n 20M: 23.70 dBm (ANT 1 802.11n 20M: 26.44 dBm (ANT 1+ANT 2) 802.11n 40M: 23.42 dBm (ANT 1 802.11n 40M: 22.86 dBm (ANT 1 802.11n 40M: 26.16 dBm (ANT 1+ANT 2)  Based on the application, features, or specification exhibite in User's Manual, the EUT is considered as an ITE/Computing Device. More details of EUT technical specification, please refer to the User's Manual.  #1 AC Mains.		
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		

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# Note:

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

2.

802.11a / 802.11n 20M					
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
149	5745	153	5765	157	5785
161	5805	165	5825		

802.11n 40M			
Channel	Frequency (MHz)	Channel	Frequency (MHz)
151	5755	159	5795

# 3. Antenna Specification:

# Table for Filed Antenna

Ant.	Brand	Model Name	Antenna Type / Connector	function	Gain (dBi) 5.2GHz
1	() LARSEN	W5030	N Male	TX/RX	6.4
2	() LARSEN	W5030	N Male	TX/RX	6.4

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 30-6.4+6=29.6; and power density limit is 8-6.4+6=7.6

Operating Mode  TX Mode	1TX	2TX
802.11a	V (ANT1 or ANT2)	-
802.11n(20MHz)	-	V (ANT1 & ANT2)
802.11n(40MHz)	-	V (ANT1 & ANT2)

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## 3.2 DESCRIPTION OF TEST MODES

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

Pretest Mode	Description
Mode 1	TX A Mode CHANNEL 149/157/165
Mode 2	TX N20 Mode CHANNEL 149/157/165
Mode 3	TX N40 Mode CHANNEL 151/159
Mode 4	Normal Link

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	Normal Link	

For Radiated Test				
Final Test Mode	Description			
Mode 1	TX A Mode CHANNEL 149/157/165			
Mode 2	TX N20 Mode CHANNEL 149/157/165			
Mode 3	TX N40 Mode CHANNEL 151/159			

### Note:

(1) The measurements are performed at the highest, middle, lowest available channels.

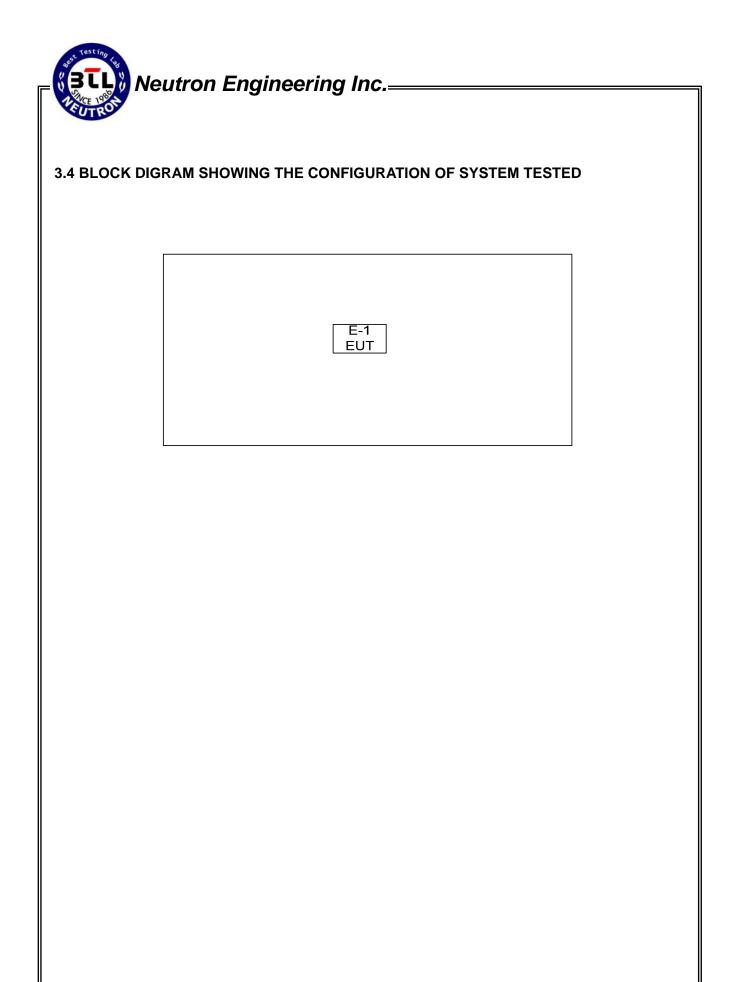
#### 3.3 TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING

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	Test Program: Cart				
Frequency	5745 MHz	5785 MHz	5825MHz		
A Mode	17	17	17		
N20M Mode	15	15	15		

Test software Version	Test Program: Cart			
Frequency	5755 MHz	5795 MHz		
N40M Mode	15	15		

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# 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.

ltem	Equipment	Mfr/Brand	Model/Type No.	FCC /IC ID	Series No.	Note
E-1	Outdoor Wireless LAN Access Point	HUAWEI	AP6610DN-AGN-U S	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.

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# 4. EMC EMISSION TEST

# 4.1 CONDUCTED EMISSION MEASUREMENT

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

FREQUENCY (MHz)	Class A (dBuV)		Class B	Standard	
TREQUENCT (MITZ)	Quasi-peak	Average	Quasi-peak	Average	Stariuaru
0.15 -0.5	79.00	66.0	66 - 56 *	56 - 46 *	CISPR
0.50 -5.0	73.00	60.00	56.00	46.00	CISPR
5.0 -30.0	73.00	60.00	60.00	50.00	CISPR

0.15 -0.5	79.00	66.00	66 - 56 *	56 - 46 *	FCC
0.50 -5.0	73.00	60.00	56.00	46.00	FCC
5.0 -30.0	73.00	60.00	60.00	50.00	FCC

# 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 AND SETTING

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibration	Next Calibration
1	LISN	EMCO	3816/2	00052765	May.26.2012	May.04.2013
2	LISN	R&S	ENV216	100087	May.26.2012	May.04.2013
3	Test Cable	N/A	C_17	N/A	Mar.18.2012	Mar.28.2013
4	EMI TEST RECEIVER	R&S	ESCS30	826547/02 2	May.26.2012	May.04.2013
5	50Ω Terminator	SHX	TF2-3G-A	08122902	May.26.2012	May.04.2013

Remark: "N/A" denotes No Model Name., Serial No. or No Calibration specified.

# The following table is the setting of the receiver

Receiver Parameters	Setting	
Attenuation	10 dB	
Start Frequency	0.15 MHz	
Stop Frequency	30 MHz	
IF Bandwidth	9 kHz	

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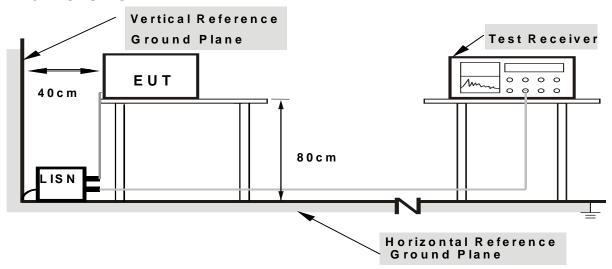
#### **4.1.3 TEST PROCEDURE**

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

## 4.1.4 DEVIATION FROM TEST STANDARD

No deviation

#### 4.1.5 TEST SETUP



Note: 1.Support units were connected to second LISN.

2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

#### 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/Normal Link mode.

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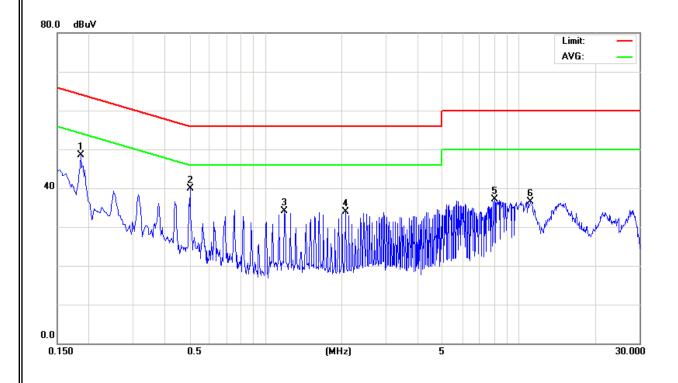
# 4.1.7 TEST RESULTS

EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US		
Temperature:	<b>25</b> ℃	Relative Humidity:	58 %		
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz		
Test Mode : Normal Link – Huntkey adapter					

Freq.	Terminal	Measure	Measured(dBuV)		Limits(dBuV)		Note
(MHz)	L/N	QP-Mode	AV-Mode	QP-Mode	AV-Mode	(dB)	NOLE
0.19	Line	48.55	*	64.20	54.20	-15.65	(QP)
0.50	Line	39.88	*	56.00	46.00	-16.12	(QP)
1.19	Line	34.01	*	56.00	46.00	-21.99	(QP)
2.07	Line	33.90	*	56.00	46.00	-22.10	(QP)
8.03	Line	37.05	*	60.00	50.00	-22.95	(QP)
11.10	Line	36.54	*	60.00	50.00	-23.46	(QP)

# Remark

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

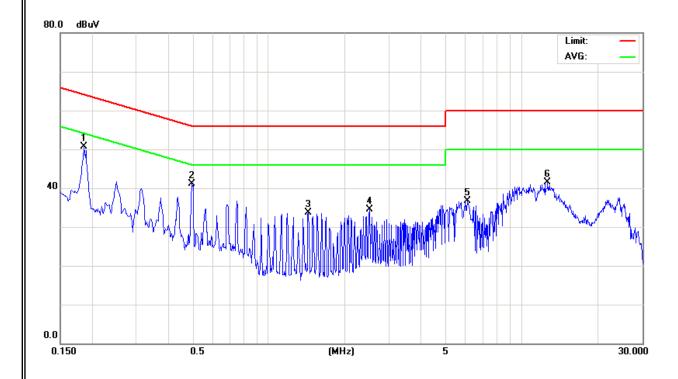


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EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US		
Temperature:	<b>25</b> ℃	Relative Humidity:	58 %		
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz		
Test Mode :	Normal Link – Huntkey adapter				

Freq.	Terminal	Measure	d(dBuV)	Limits(	(dBuV)	Margin	Note
(MHz)	L/N	QP-Mode	AV-Mode	QP-Mode	AV-Mode	(dB)	NOLE
0.19	Neutral	50.71	*	64.20	54.20	-13.49	(QP)
0.50	Neutral	41.04	*	56.03	46.03	-14.99	(QP)
1.43	Neutral	33.76	*	56.00	46.00	-22.24	(QP)
2.50	Neutral	34.52	*	56.00	46.00	-21.48	(QP)
6.11	Neutral	36.78	*	60.00	50.00	-23.22	(QP)
12.67	Neutral	41.51	*	60.00	50.00	-18.49	(QP)

- (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 North AVG Mode column of Interference Voltage Measured on
- (2) Measuring frequency range from 150KHz to 30MHz o



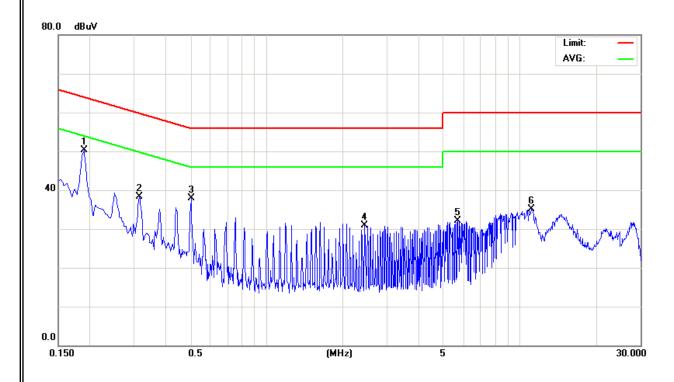
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EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	<b>25</b> ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	Normal Link – VAPEL adapter		

Freq.	Terminal	Measure	d(dBuV)	Limits	(dBuV)	Margin	Note
(MHz)	L/N	QP-Mode	AV-Mode	QP-Mode	AV-Mode	(dB)	NOLE
0.19	Line	50.25	*	64.04	54.04	-13.79	(QP)
0.31	Line	38.39	*	59.86	49.86	-21.47	(QP)
0.50	Line	37.88	*	56.00	46.00	-18.12	(QP)
2.45	Line	30.96	*	56.00	46.00	-25.04	(QP)
5.71	Line	32.13	*	60.00	50.00	-27.87	(QP)
11.10	Line	35.04	*	60.00	50.00	-24.96	(QP)

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



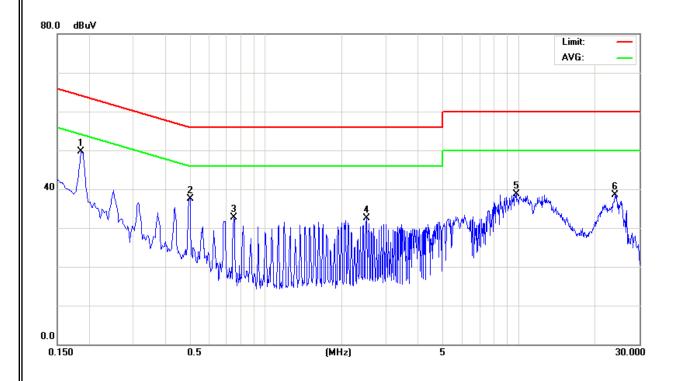
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EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	<b>25</b> ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	Normal Link – VAPEL adapter		

Freq.	Terminal	Measure	d(dBuV)	Limits	(dBuV)	Margin	Note
(MHz)	L/N	QP-Mode	AV-Mode	QP-Mode	AV-Mode	(dB)	NOLE
0.19	Neutral	49.76	*	64.21	54.21	-14.45	(QP)
0.50	Neutral	37.57	*	56.00	46.00	-18.43	(QP)
0.75	Neutral	32.64	*	56.00	46.00	-23.36	(QP)
2.50	Neutral	32.52	*	56.00	46.00	-23.48	(QP)
9.80	Neutral	38.80	*	60.00	50.00	-21.20	(QP)
24.09	Neutral	38.45	*	60.00	50.00	-21.55	(QP)

- (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 North AVG Mode column of Interference Voltage Measured on
- (2) Measuring frequency range from 150KHz to 30MHz o



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#### 4.2 RADIATED EMISSION MEASUREMENT

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

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

Frequencies	Field Strength	Measurement Distance
(MHz)	(micorvolts/meter)	(meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

## LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)

FREQUENCY (MHz)	(dBuV/m) (at 1.5m)		
FREQUENCT (IVITIZ)	PEAK	AVERAGE	
Above 1000	80	60	

#### Notes:

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

Limit line = specific limits (dBuV) + 6 dB

(3) Emission level (dBuV/m)=20log Emission level (uV/m). The limits above 5GHz shall be extrapolated to the specified distance using an extrapolation factor of 20dB/decade form 3m to 1.5m Distance extrapolation factor = 20 log (3m/1.5m) dB;

#### FREQUENCY RANGE OF RADIATED MEASUREMENT (For unintentional radiators)

Highest frequency generated or Upper frequency of measurement used in the device or on which the device operates or tunes (MHz)	Range (MHz)
Below 1.705	30
1.705 – 108	1000
108 – 500	2000
500 – 1000	5000
Above 1000	5 <sup>th</sup> harmonic of the highest frequency or 40 GHz, whichever is lower

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# 4.2.2 MEASUREMENT INSTRUMENTS LIST ANS SETTING

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibration	Next Calibration
1	Antenna	Schwarbeck	VULB9160	9160-3232	Jun .04.2012	May.25.2013
2	Amplifier	HP	8447D	2944A09673	May.26.2012	May.04.2013
3	Test Receiver	R&S	ESCI	100382	May.26.2012	May.04.2013
4	Test Cable	N/A	C-01_CB03	N/A	Jul.01.2011	Jul.01.2013
5	Antenna	ETS	3115	00075789	May.26.2012	May.25.2013
6	Amplifier	Agilent	8449B	3008A02274	May.26.2012	May.04.2013
7	Spectrum	Agilent	E4408B	US39240143	Nov.25.2011	Nov.25.2012
8	Test Cable	HUBER+SUH NER	C-45	N/A	May.04.2012	May.02.2013
9	Controller	СТ	SC100	N/A	N/A	N/A
10	Active Loop Antenna	R&S	HFH2-Z2	830749/020	May.26.2012	May.04.2013
11	Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170319	Oct.13.2011	Oct.13.2012
12	Horn Antenna	EMCO	3115	9605-4803	May.26.2012	May.25.2013

Remark: "N/A" denotes No Model Name / Serial No. and No Calibration specified.

Spectrum Parameter	Setting	
Attenuation	Auto	
Start Frequency	1000 MHz	
Stop Frequency	10th carrier harmonic	
RB / VB	AND - / AND - for Dook A MULE / ADD - for Average	
(Emission in restricted band)	1MHz / 1MHz for Peak, 1 MHz / 10Hz for Average	

Receiver Parameter	Setting	
Attenuation	Auto	
Start ~ Stop Frequency	9kHz~90kHz for PK/AVG detector	
Start ~ Stop Frequency	90kHz~110kHz for QP detector	
Start ~ Stop Frequency	110kHz~490kHz for PK/AVG detector	
Start ~ Stop Frequency	490kHz~30MHz for QP detector	
Start ~ Stop Frequency	30MHz~1000MHz for QP detector	

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## **4.2.3 TEST PROCEDURE**

- a. The measuring distance of at 1.5 m 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.

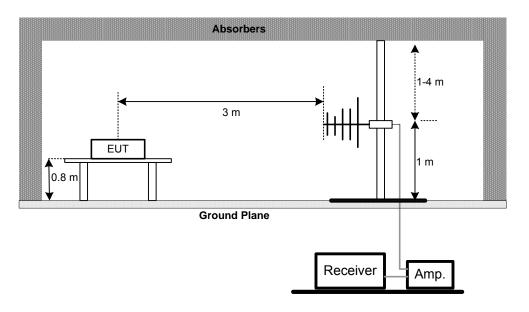
4.2.4 DEVIATION FROM TEST STANDARD
No deviation

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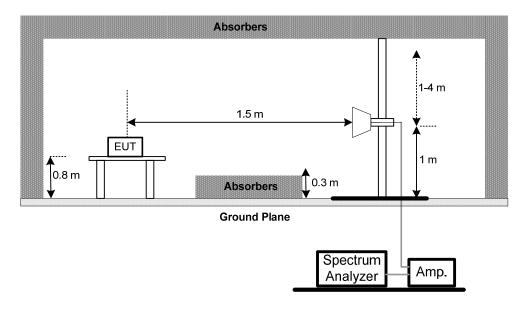


# 4.2.5 TEST SETUP

(A) Radiated Emission Test Set-Up Frequency Below 1 GHz



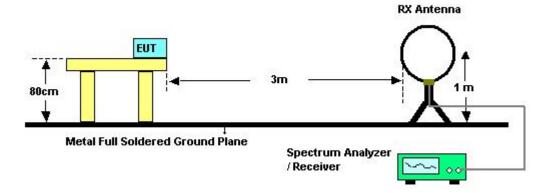
(B) Radiated Emission Test Set-Up Frequency Above 1 GHz



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(C) For 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.

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# 4.2.7 TEST RESULTS (BELOW 30MHZ)

EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	<b>25</b> ℃	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)	NOIC
0.091	0°	27.74	21.58	49.32	108.44	-59.12	QP
0.10	0°	44.02	21.44	65.46	107.76	-42.31	QP
0.10	0°	24.15	21.34	45.49	107.26	-61.78	QP
0.11	0°	22.63	21.24	43.87	106.78	-62.91	QP
0.52	0°	21.58	19.87	41.45	73.26	-31.81	QP
1.29	0°	25.76	19.57	45.33	65.41	-20.08	QP

Freq. (MHz)	Ant. 0°/90°	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
0.095	90°	18.23	21.50	39.73	108.07	-68.33	QP
0.10	90°	19.36	21.34	40.70	107.27	-66.57	QP
0.11	90°	23.06	21.25	44.31	106.85	-62.53	QP
0.51	90°	21.82	19.84	41.66	73.40	-31.74	QP
0.62	90°	21.73	20.20	41.93	71.69	-29.76	QP
1.30	90°	22.89	19.57	42.46	65.35	-22.89	QP

# Remark:

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

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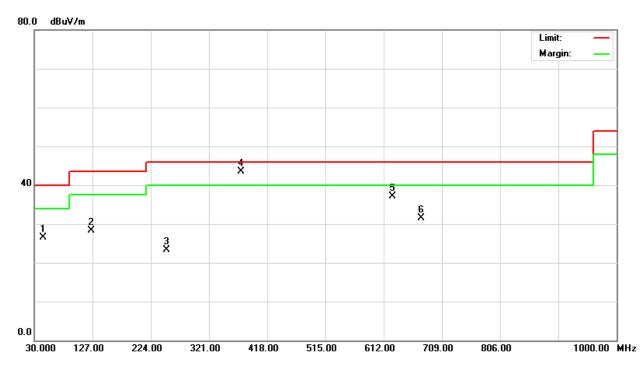
# 4.2.8 TEST RESULTS (BETWEEN 30 - 1000 MHZ)

EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	<b>25</b> ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX A Mode 5745MHz – Huntke	y adapter	

Freq. (MHz)	Ant. H/V	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
44.55	V	43.00	-16.49	26.51	40.00	- 13.49	
124.58	V	45.79	-17.58	28.21	43.50	- 15.29	
250.68	<b>V</b>	37.00	-13.78	23.22	46.00	- 22.78	
374.35	V	53.15	-9.55	43.60	46.00	- 2.40	QP
626.55	V	41.43	-4.35	37.08	46.00	- 8.92	
675.05	V	35.00	-3.55	31.45	46.00	- 14.55	

#### 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 $_{
  m J}$ . 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  $\circ$
- (4) If the peak scan value lower limit more than 20dB, then this signal data does not show in table  $\circ$

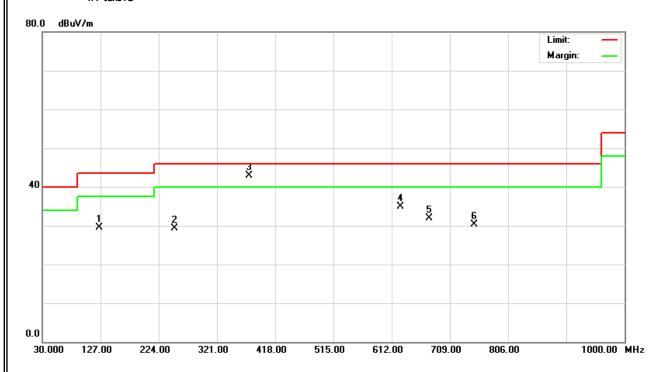


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EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	25℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX A Mode 5745MHz – Huntke	y adapter	

Freq. (MHz)	Ant. H/V	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
124.58	Η	47.04	-17.58	29.46	43.50	- 14.04	
250.68	Н	42.99	-13.78	29.21	46.00	- 16.79	
374.35	Η	52.50	-9.55	42.95	46.00	- 3.05	
626.55	Η	39.31	-4.35	34.96	46.00	- 11.04	
675.05	Н	35.43	-3.55	31.88	46.00	- 14.12	
750.23	Н	32.74	-2.42	30.32	46.00	- 15.68	

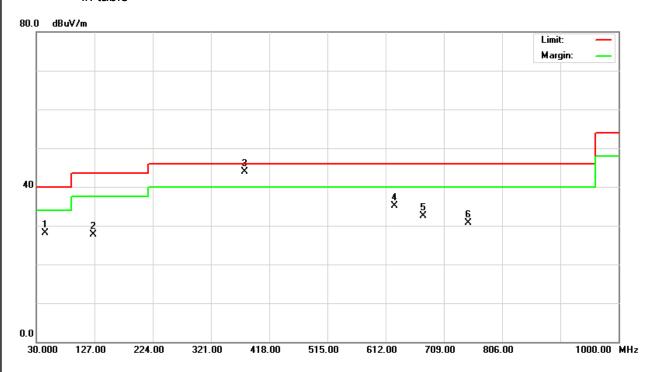
- (1) Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode or Peak Mode with Detector BW=120KHz ; SPA setting in RBW=120KHz, VBW =120KHz, Swp. Time = 0.3 sec./MHz  $^{\circ}$
- (2) All readings are Peak unless otherwise stated QP in column of  $\lceil$  Note  $\rceil$ . Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform  $\circ$
- (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  $\circ$



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 A Mode 5785MHz – Huntke	y adapter	

Freq. (MHz)	Ant. H/V	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
44.55	V	44.50	-16.49	28.01	40.00	- 11.99	
124.58	V	45.29	-17.58	27.71	43.50	- 15.79	
374.36	V	53.36	-9.55	43.81	46.00	- 2.19	QP
626.55	V	39.43	-4.35	35.08	46.00	- 10.92	
675.05	V	36.00	-3.55	32.45	46.00	- 13.55	
750.23	V	33.10	-2.42	30.68	46.00	- 15.32	

- (1) Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode or Peak Mode with Detector BW=120KHz ; SPA setting in RBW=120KHz, VBW =120KHz, Swp. Time = 0.3 sec./MHz  $^{\circ}$
- (2) All readings are Peak unless otherwise stated QP in column of  $\lceil$  Note  $\rceil$ . Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform  $\circ$
- (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  $\circ$

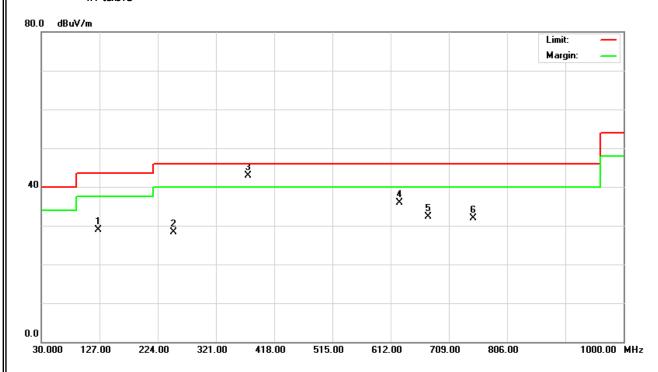


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EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	25℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX A Mode 5785MHz – Huntke	y adapter	

Freq. (MHz)	Ant. H/V	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
124.58	Η	46.54	-17.58	28.96	43.50	- 14.54	
250.68	Н	41.99	-13.78	28.21	46.00	- 17.79	
374.35	Η	52.50	-9.55	42.95	46.00	- 3.05	
626.55	Η	40.31	<b>-</b> 4.35	35.96	46.00	- 10.04	
675.05	Н	35.93	-3.55	32.38	46.00	- 13.62	
750.23	Н	34.24	-2.42	31.82	46.00	- 14.18	

- (1) Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode or Peak Mode with Detector BW=120KHz ; SPA setting in RBW=120KHz, VBW =120KHz, Swp. Time = 0.3 sec./MHz  $^{\circ}$
- (2) All readings are Peak unless otherwise stated QP in column of  $\lceil$  Note  $\rceil$ . Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform  $\circ$
- (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  $\circ$

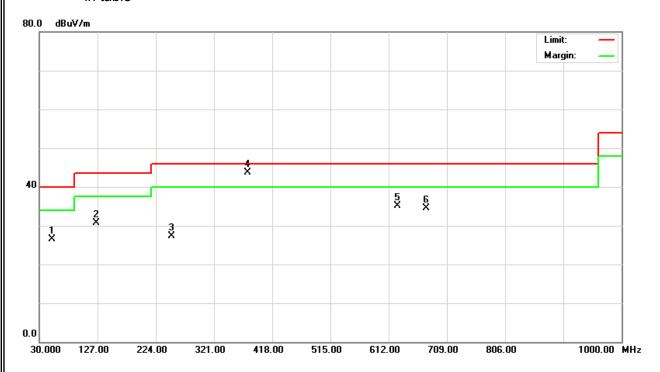


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EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	25℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX A Mode 5825MHz – Huntke	y adapter	

Freq. (MHz)	Ant. H/V	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
51.83	V	43.53	-17.00	26.53	40.00	- 13.47	
124.58	V	48.29	-17.58	30.71	43.50	- 12.79	
250.68	V	41.00	-13.78	27.22	46.00	- 18.78	
374.37	V	53.27	-9.55	43.72	46.00	- 2.28	QP
626.55	V	39.43	-4.35	35.08	46.00	- 10.92	
675.05	V	38.00	-3.55	34.45	46.00	- 11.55	

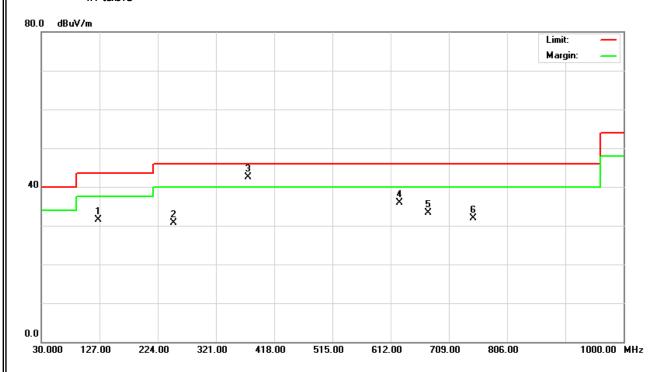
- (1) Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode or Peak Mode with Detector BW=120KHz ; SPA setting in RBW=120KHz, VBW =120KHz, Swp. Time = 0.3 sec./MHz  $^{\circ}$
- (2) All readings are Peak unless otherwise stated QP in column of  $\lceil$  Note  $\rceil$ . Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform  $\circ$
- (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  $\circ$



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 :	X A Mode 5825MHz – Huntkey adapter						

Freq. (MHz)	Ant. H/V	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
124.58	Η	49.04	-17.58	31.46	43.50	- 12.04	
250.68	Н	44.49	-13.78	30.71	46.00	- 15.29	
374.35	Η	52.00	-9.55	42.45	46.00	- 3.55	
626.55	Η	40.31	<b>-</b> 4.35	35.96	46.00	- 10.04	
675.05	Н	36.93	-3.55	33.38	46.00	- 12.62	
750.23	Н	34.24	-2.42	31.82	46.00	- 14.18	

- (1) Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode or Peak Mode with Detector BW=120KHz ; SPA setting in RBW=120KHz, VBW =120KHz, Swp. Time = 0.3 sec./MHz  $^{\circ}$
- (2) All readings are Peak unless otherwise stated QP in column of  $\lceil$  Note  $\rceil$ . Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform  $\circ$
- (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  $\circ$

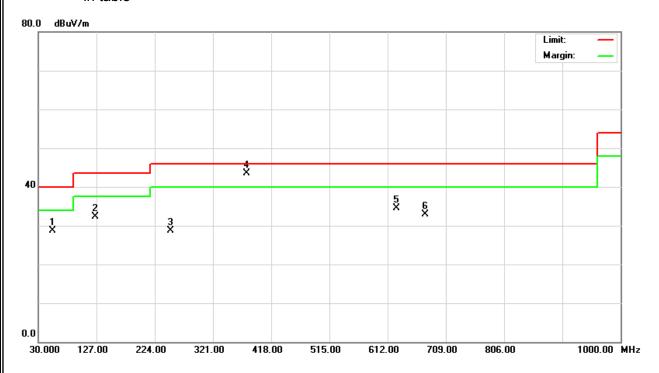


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EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	25℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	RX Mode – Huntkey adapter		

Freq. (MHz)	Ant. H/V	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
54.25	V	45.65	-17.00	28.65	40.00	- 11.35	
124.58	V	49.79	-17.58	32.21	43.50	- 11.29	
250.68	V	42.50	-13.78	28.72	46.00	- 17.28	
374.36	V	53.06	-9.55	43.51	46.00	- 2.49	QP
626.55	V	38.93	-4.35	34.58	46.00	- 11.42	
675.05	V	36.50	-3.55	32.95	46.00	- 13.05	

- (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  $\circ$

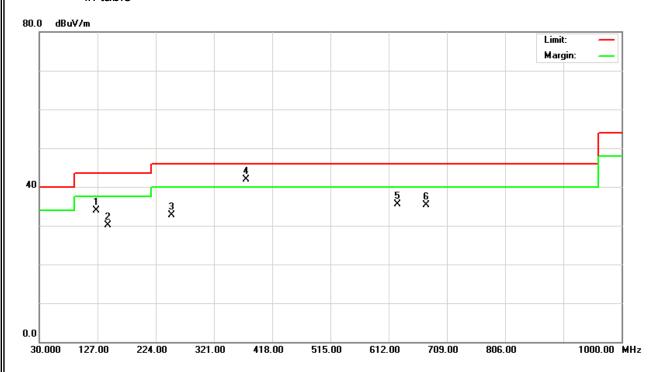


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EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	25℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	RX Mode – Huntkey adapter		

Fred (MH		Ant. H/V	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
124.	58	Н	51.54	-17.58	33.96	43.50	- 9.54	
143.9	98	Н	47.18	-17.03	30.15	43.50	- 13.35	
250.6	68	Н	46.50	-13.78	32.72	46.00	- 13.28	
374.3	35	Н	51.50	-9.55	41.95	46.00	- 4.05	
626.	55	Н	39.81	-4.35	35.46	46.00	- 10.54	
675.0	05	Н	38.93	-3.55	35.38	46.00	- 10.62	

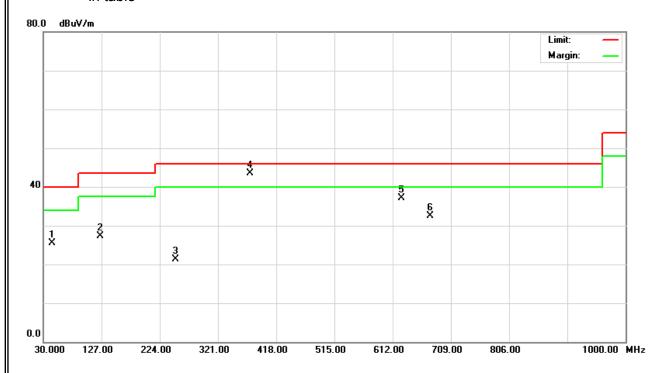
- (1) Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode or Peak Mode with Detector BW=120KHz ; SPA setting in RBW=120KHz, VBW =120KHz, Swp. Time = 0.3 sec./MHz  $^{\circ}$
- (2) All readings are Peak unless otherwise stated QP in column of  $\lceil$  Note  $\rceil$ . Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform  $\circ$
- (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  $\circ$



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 A Mode 5745MHz – VAPEL adapter					

Freq. (MHz)	Ant. H/V	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
44.55	V	42.00	-16.49	25.51	40.00	- 14.49	
124.58	V	44.79	-17.58	27.21	43.50	- 16.29	
250.68	V	35.00	-13.78	21.22	46.00	- 24.78	
374.35	V	53.15	-9.55	43.60	46.00	- 2.40	QP
626.55	V	41.43	-4.35	37.08	46.00	- 8.92	
675.05	V	36.00	-3.55	32.45	46.00	- 13.55	

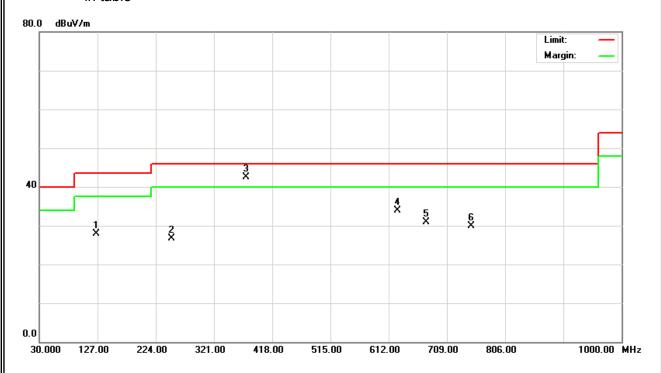
- (1) Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode or Peak Mode with Detector BW=120KHz ; SPA setting in RBW=120KHz, VBW =120KHz, Swp. Time = 0.3 sec./MHz  $^{\circ}$
- (2) All readings are Peak unless otherwise stated QP in column of  $\lceil$  Note $_{
  m l}$ . 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  $\circ$



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 A Mode 5745MHz – VAPEL adapter					

Freq. (MHz)	Ant. H/V	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
124.58	Η	45.54	-17.58	27.96	43.50	- 15.54	
250.68	Η	40.49	-13.78	26.71	46.00	- 19.29	
374.35	Η	52.00	-9.55	42.45	46.00	- 3.55	
626.55	Η	38.31	-4.35	33.96	46.00	- 12.04	
675.05	Ι	34.43	-3.55	30.88	46.00	- 15.12	
750.23	Н	32.24	-2.42	29.82	46.00	- 16.18	

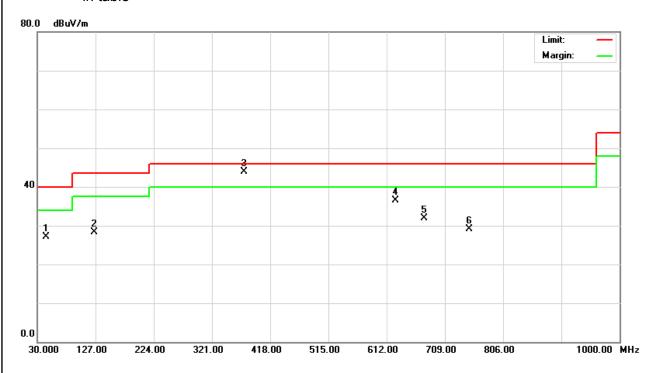
- (1) Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode or Peak Mode with Detector BW=120KHz ; SPA setting in RBW=120KHz, VBW =120KHz, Swp. Time = 0.3 sec./MHz  $^{\circ}$
- (2) All readings are Peak unless otherwise stated QP in column of  $\lceil$  Note  $\rceil$ . Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform  $\circ$
- (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  $\circ$



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 A Mode 5785MHz – VAPEL adapter					

Freq. (MHz)	Ant. H/V	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
44.55	V	43.50	-16.49	27.01	40.00	- 12.99	
124.58	V	45.79	-17.58	28.21	43.50	- 15.29	
374.35	V	53.36	-9.55	43.81	46.00	- 2.19	QP
626.55	V	40.93	-4.35	36.58	46.00	- 9.42	
675.05	V	35.50	-3.55	31.95	46.00	- 14.05	
750.23	V	31.60	-2.42	29.18	46.00	- 16.82	

- (1) Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode or Peak Mode with Detector BW=120KHz ; SPA setting in RBW=120KHz, VBW =120KHz, Swp. Time = 0.3 sec./MHz  $^{\circ}$
- (2) All readings are Peak unless otherwise stated QP in column of  $\lceil$  Note  $\rceil$ . Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform  $\circ$
- (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  $\circ$

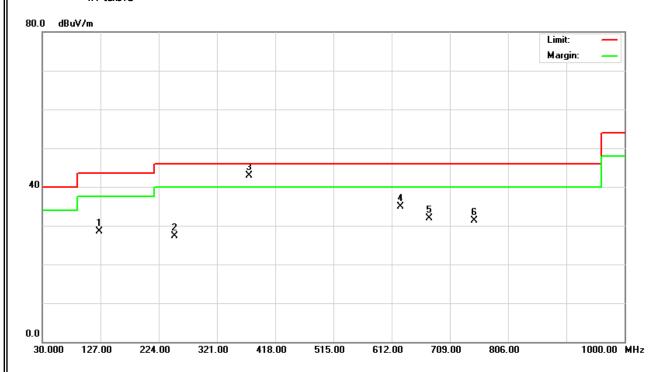


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EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US		
Temperature:	25℃	Relative Humidity:	58 %		
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz		
Test Mode :	TX A Mode 5785MHz – VAPEL adapter				

Freq. (MHz)	Ant. H/V	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
124.58	Н	46.04	-17.58	28.46	43.50	- 15.04	
250.68	Н	40.99	-13.78	27.21	46.00	- 18.79	
374.35	Н	52.50	-9.55	42.95	46.00	- 3.05	
626.55	Н	39.31	<b>-</b> 4.35	34.96	46.00	- 11.04	
675.05	Н	35.43	-3.55	31.88	46.00	- 14.12	
750.23	Н	33.74	-2.42	31.32	46.00	- 14.68	

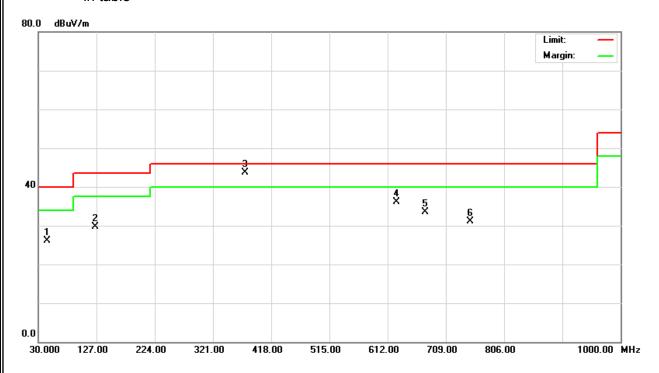
- (1) Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode or Peak Mode with Detector BW=120KHz ; SPA setting in RBW=120KHz, VBW =120KHz, Swp. Time = 0.3 sec./MHz  $^{\circ}$
- (2) All readings are Peak unless otherwise stated QP in column of  $\lceil$  Note $_{
  m l}$ . 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  $\circ$



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 A Mode 5825MHz – VAPEL	adapter	

Freq. (MHz)	Ant. H/V	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
44.55	V	42.50	-16.49	26.01	40.00	- 13.99	
124.58	V	47.29	-17.58	29.71	43.50	- 13.79	
374.35	V	53.27	-9.55	43.72	46.00	- 2.28	QP
626.55	V	40.43	-4.35	36.08	46.00	- 9.92	
675.05	V	37.00	-3.55	33.45	46.00	- 12.55	
750.23	V	33.60	-2.42	31.18	46.00	- 14.82	

- (1) Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode or Peak Mode with Detector BW=120KHz ; SPA setting in RBW=120KHz, VBW =120KHz, Swp. Time = 0.3 sec./MHz  $^{\circ}$
- (2) All readings are Peak unless otherwise stated QP in column of  $\lceil$  Note  $\rceil$ . Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform  $\circ$
- (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  $\circ$

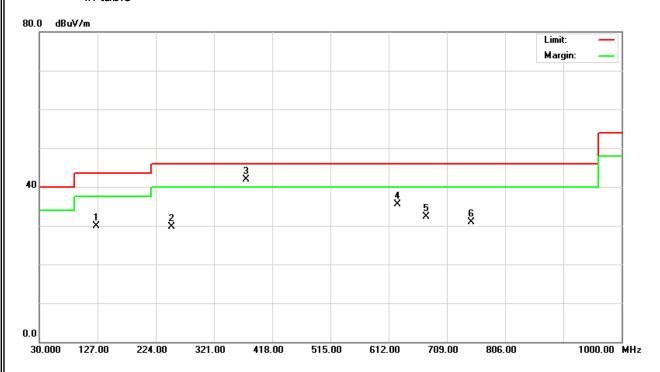


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EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	25℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX A Mode 5825MHz – VAPEL	adapter	

Freq. (MHz)	Ant. H/V	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
124.58	Н	47.54	-17.58	29.96	43.50	- 13.54	
250.68	Н	43.49	-13.78	29.71	46.00	- 16.29	
374.35	Н	51.50	-9.55	41.95	46.00	- 4.05	
626.55	Н	39.81	<b>-</b> 4.35	35.46	46.00	- 10.54	
675.05	Н	35.93	-3.55	32.38	46.00	- 13.62	
750.23	Н	33.24	-2.42	30.82	46.00	- 15.18	

- (1) Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode or Peak Mode with Detector BW=120KHz ; SPA setting in RBW=120KHz, VBW =120KHz, Swp. Time = 0.3 sec./MHz  $^{\circ}$
- (2) All readings are Peak unless otherwise stated QP in column of  $\lceil$  Note  $\rceil$ . Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform  $\circ$
- (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  $\circ$

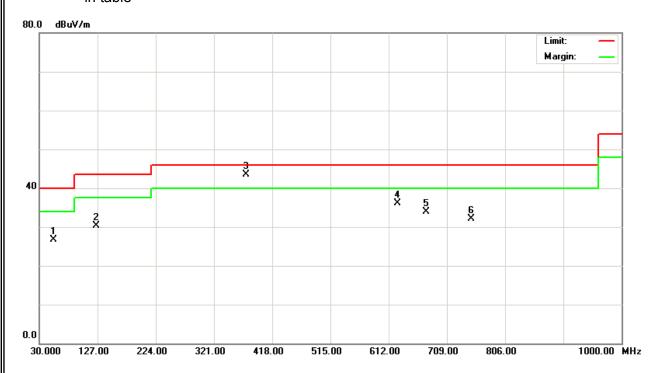




EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	25℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	RX Mode - VAPEL adapter		

Freq.	Ant.	Reading(RA)	, ,	Measured(FS)	Limits(QP)	Margin	Note
(MHz)	H/V	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
54.25	V	43.65	-17.00	26.65	40.00	- 13.35	
124.58	V	47.79	-17.58	30.21	43.50	- 13.29	
374.35	V	53.06	-9.55	43.51	46.00	- 2.49	QP
626.55	V	40.43	-4.35	36.08	46.00	- 9.92	
675.05	V	37.50	-3.55	33.95	46.00	- 12.05	
750.23	V	34.60	-2.42	32.18	46.00	- 13.82	

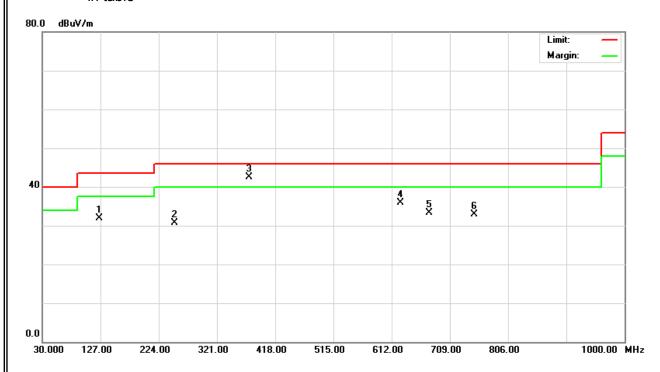
- (1) Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode or Peak Mode with Detector BW=120KHz ; SPA setting in RBW=120KHz, VBW =120KHz, Swp. Time = 0.3 sec./MHz  $\circ$
- (2) All readings are Peak unless otherwise stated QP in column of  $\lceil$  Note $_{
  m l}$ . 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  $\circ$
- (4) If the peak scan value lower limit more than 20dB, then this signal data does not show in table  $\circ$



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 :	RX Mode - VAPEL adapter		

Freq. (MHz)	Ant. H/V	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
124.58	Н	49.54	-17.58	31.96	43.50	- 11.54	
250.68	Н	44.49	-13.78	30.71	46.00	- 15.29	
374.35	Н	51.97	-9.55	42.42	46.00	- 3.58	
626.55	Н	40.31	-4.35	35.96	46.00	- 10.04	
675.05	Н	36.93	-3.55	33.38	46.00	- 12.62	
750.23	Н	35.24	-2.42	32.82	46.00	- 13.18	

- (1) Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode or Peak Mode with Detector BW=120KHz ; SPA setting in RBW=120KHz, VBW =120KHz, Swp. Time = 0.3 sec./MHz  $^{\circ}$
- (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  $\circ$



# 4.2.9 TEST RESULTS (ABOVE 1000 MHZ)

EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	<b>25</b> ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX A Mode 5745MHz		

Freg. Ant.Pol.	Rea	ding	Ant./CF	A	ct.	Lir	nit		
пец.	AIIL.FOI.	Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
5725.00	V	37.21	19.83	40.90	78.11	60.73	93.51	83.55	X/E
5740.25	V	72.56	62.60	40.95	113.51	103.55			X/F
4999.98	V	51.33	47.88	5.93	57.26	53.81	80.00	60.00	X/H
11490.02	V	43.87	29.04	13.27	57.14	42.31	80.00	60.00	X/H

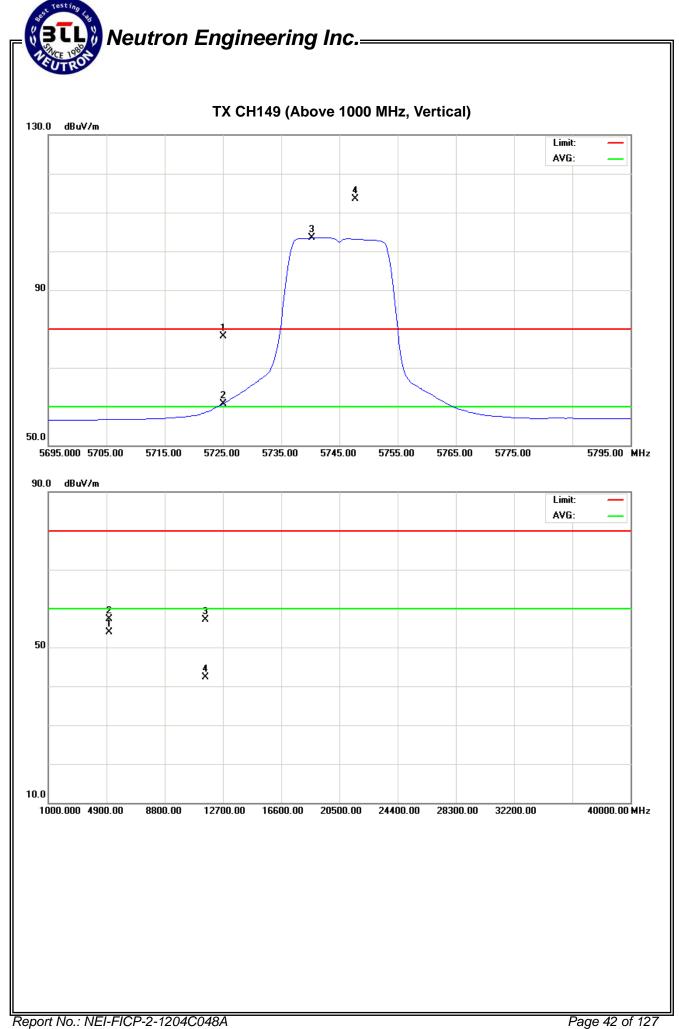
### Remark:

- (1) All readings are Peak unless otherwise stated QP in column of  $\lceil$ Note $_{
  m J}$ . Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform  $_{
  m O}$
- (2) 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.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission  $\circ$
- (4) 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.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
  - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna
- (8) The limits above 5GHz shall be extrapolated to the specified distance using an extrapolation factor of 20dB/decade form 3m to 1.5m

Distance extrapolation factor = 20 log (3m/1.5m) dB;

Limit line = specific limits (dBuV) + 6 dB

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EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	<b>25</b> ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX A Mode 5745MHz		

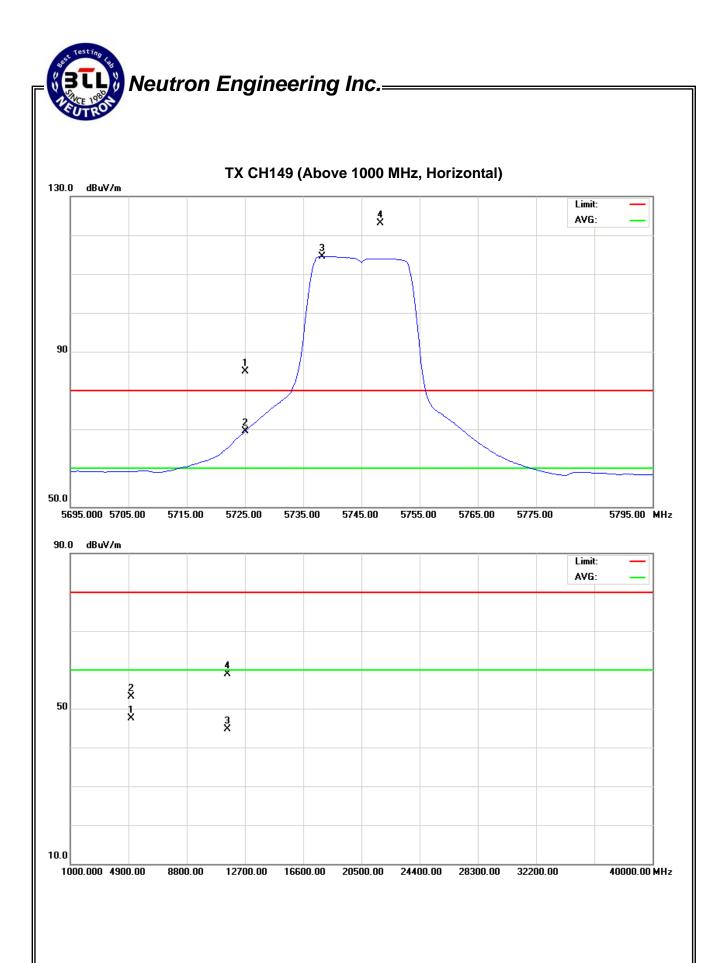
Freg. Ant.Pol.	Rea	ding	Ant./CF	A	ct.	Lir	mit		
rreq.	Ant.Poi.	Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
5725.00	Н	43.94	28.60	40.90	84.84	69.50	103.07	94.59	X/E
5738.25	Н	82.13	73.65	40.94	123.07	114.59			X/F
4999.98	Н	47.25	41.66	5.93	53.18	47.59	80.00	60.00	X/H
11490.70	Н	45.58	31.45	13.27	58.85	44.72	80.00	60.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of  ${}^{\mathbb{F}}$ Note $_{\mathbb{J}}$ . Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform  $\circ$
- (2) 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.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission ∘
- (4) 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.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
  - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna
- (8) The limits above 5GHz shall be extrapolated to the specified distance using an extrapolation factor of 20dB/decade form 3m to 1.5m

Distance extrapolation factor = 20 log (3m/1.5m) dB;

Limit line = specific limits (dBuV) + 6 dB

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EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	<b>25</b> ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX A Mode 5785MHz		

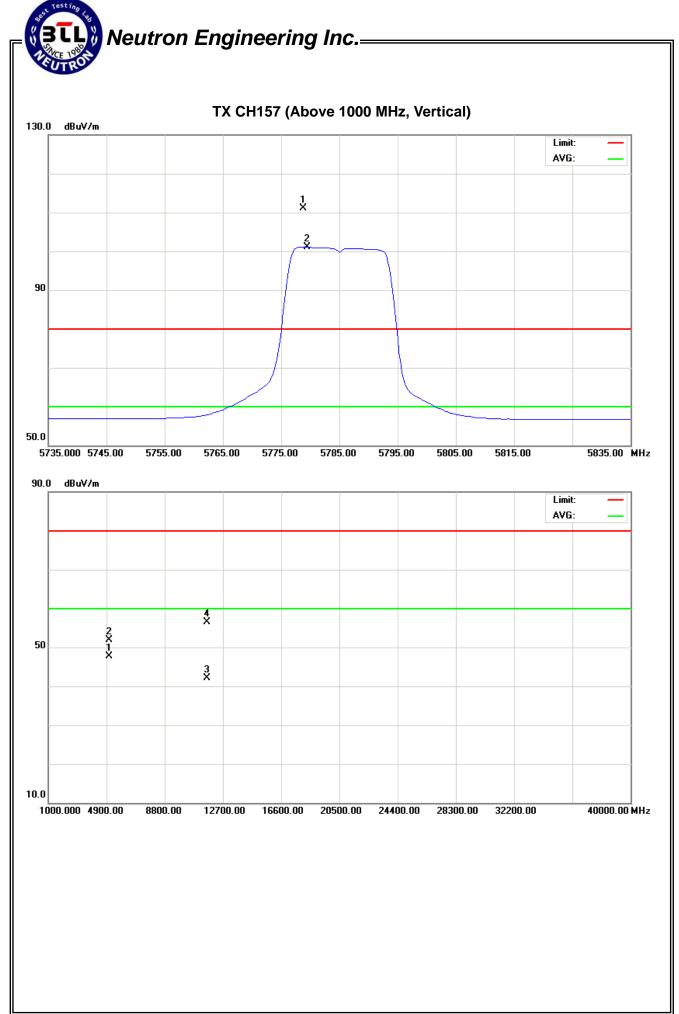
Freg. Ant	Ant.Pol.	Reading		Ant/CF	A	Act.		Limit		
пец.	ATILPOI.	Peak	AV		Peak	AV	Peak	AV	Note	
(MHz)	HV	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)		
5778.75	V	69.91	59.98	41.11	111.02	101.09			X/F	
4999.99	V	45.93	41.69	5.93	51.86	47.62	80.00	60.00	X/H	
11570.51	V	43.16	28.82	13.36	56.52	42.18	80.00	60.00	X/H	

- (1) All readings are Peak unless otherwise stated QP in column of  $\lceil$  Note $_{
  m J}$ . Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform  $_{
  m O}$
- (2) 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.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission  $\circ$
- (4) 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.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
  - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna
- (8) The limits above 5GHz shall be extrapolated to the specified distance using an extrapolation factor of 20dB/decade form 3m to 1.5m

Distance extrapolation factor = 20 log (3m/1.5m) dB;

Limit line = specific limits (dBuV) + 6 dB

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EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	<b>25</b> ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX A Mode 5785MHz		

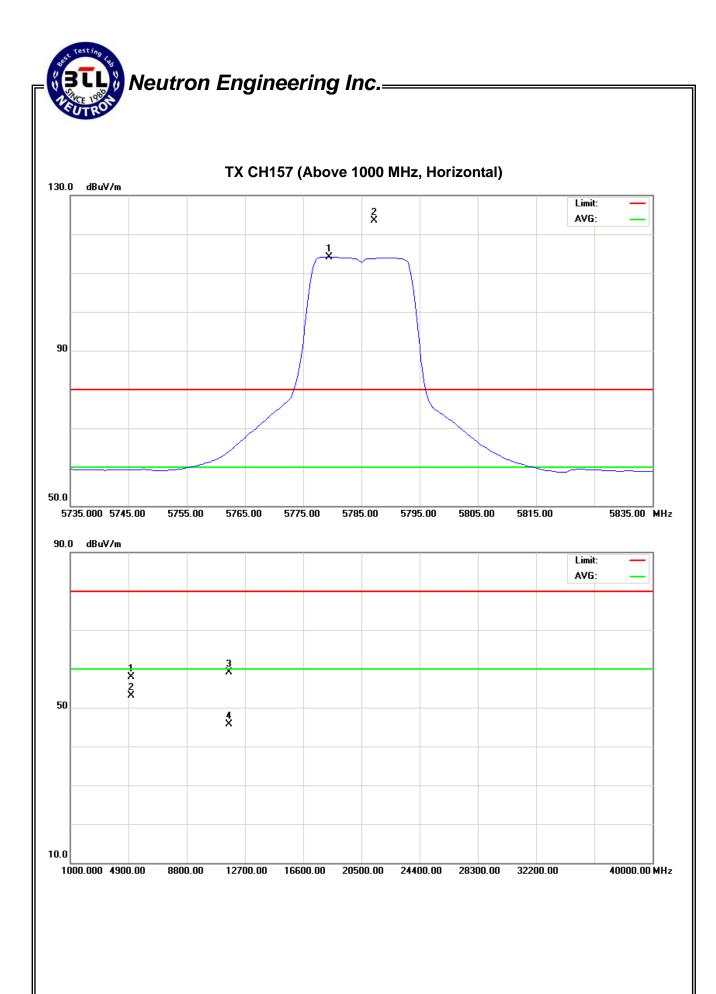
Freg. An	Ant.Pol.	Ant Pol Reading Ant/CF		Act.		Limit			
пец.	AHLFUI.	Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	HV	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
5779.50	Н	82.36	73.04	41.11	123.47	114.15			X/F
4999.99	Н	51.91	47.08	5.93	57.84	53.01	80.00	60.00	X/H
11570.21	Н	45.76	32.28	13.36	59.12	45.64	80.00	60.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of  $\lceil$ Note $_{
  m J}$ . Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform  $_{
  m O}$
- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency of F' denotes fundamental frequency; "H' denotes spurious frequency. "E' denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission  $\circ$
- (4) 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.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
  - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna
- (8) The limits above 5GHz shall be extrapolated to the specified distance using an extrapolation factor of 20dB/decade form 3m to 1.5m

Distance extrapolation factor = 20 log (3m/1.5m) dB;

Limit line = specific limits (dBuV) + 6 dB

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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 A Mode 5825MHz		

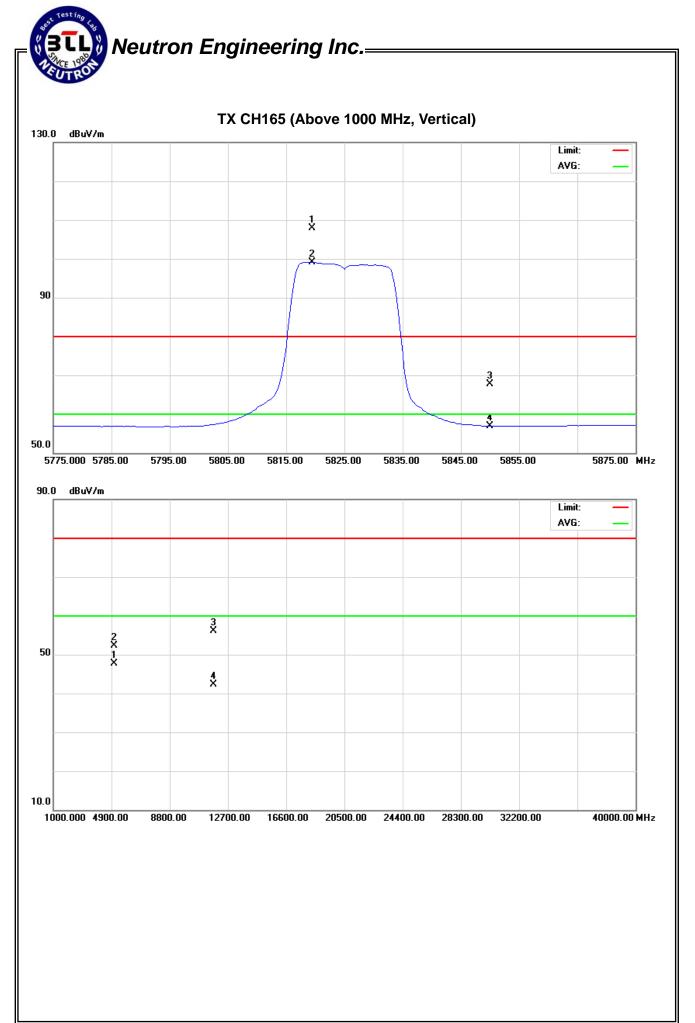
Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Limit		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
5819.50	V	66.61	57.84	41.27	107.88	99.11			X/F
5850.00	V	26.28	15.56	41.38	67.66	56.94	87.88	79.11	X/E
4999.99	V	46.41	41.75	5.93	52.34	47.68	80.00	60.00	X/H
11650.05	V	42.65	28.95	13.43	56.08	42.38	80.00	60.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of  $\lceil$ Note $_{
  m J}$ . Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform  $_{
  m O}$
- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency of F' denotes fundamental frequency; "H' denotes spurious frequency. "E' denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission •
- (4) 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.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
  - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna
- (8) The limits above 5GHz shall be extrapolated to the specified distance using an extrapolation factor of 20dB/decade form 3m to 1.5m

Distance extrapolation factor = 20 log (3m/1.5m) dB;

Limit line = specific limits (dBuV) + 6 dB

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EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	<b>25</b> ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX A Mode 5825MHz		

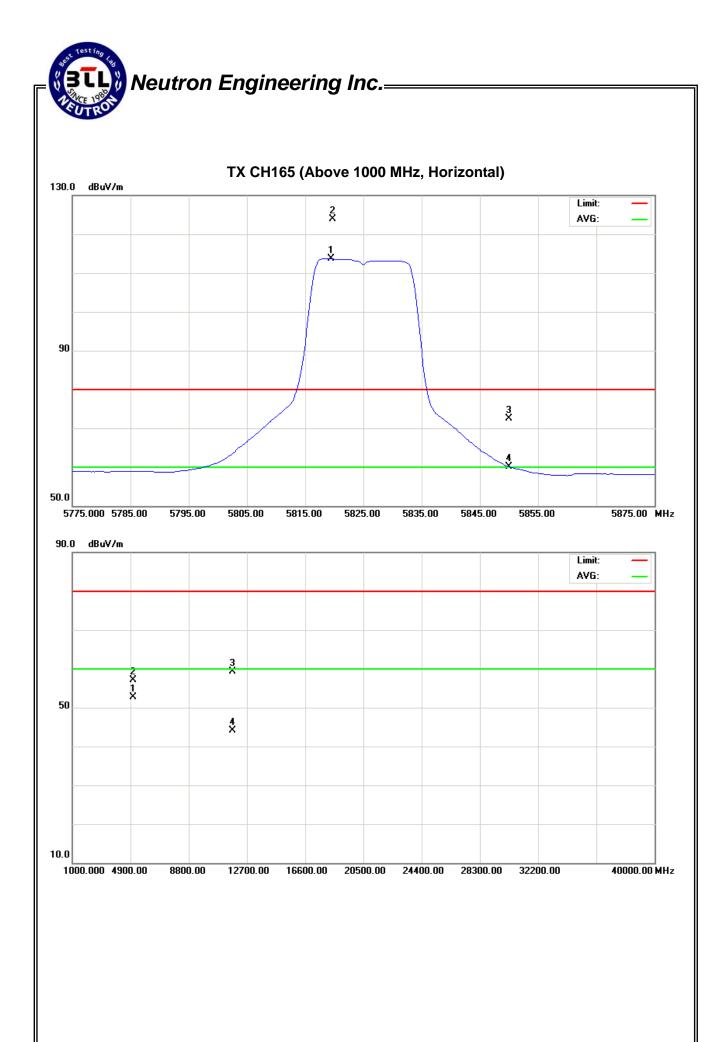
Freq.	Ant.Pol.	Rea	ding	Ant./CF	Act.		Lir		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
5819.50	Н	82.65	72.42	41.27	123.92	113.69			X/F
5850.00	Н	31.02	18.71	41.38	72.40	60.09	103.92	93.69	X/E
4999.99	Н	51.27	46.68	5.93	57.20	52.61	80.00	60.00	X/H
11650.32	Н	45.85	30.62	13.43	59.28	44.05	80.00	60.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of  $\lceil$ Note $_{
  m J}$ . Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform  $_{
  m O}$
- (2) 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.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission ∘
- (4) 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.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
  - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna
- (8) The limits above 5GHz shall be extrapolated to the specified distance using an extrapolation factor of 20dB/decade form 3m to 1.5m

Distance extrapolation factor = 20 log (3m/1.5m) dB;

Limit line = specific limits (dBuV) + 6 dB

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EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	<b>25</b> ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N20 Mode 5745MHz		

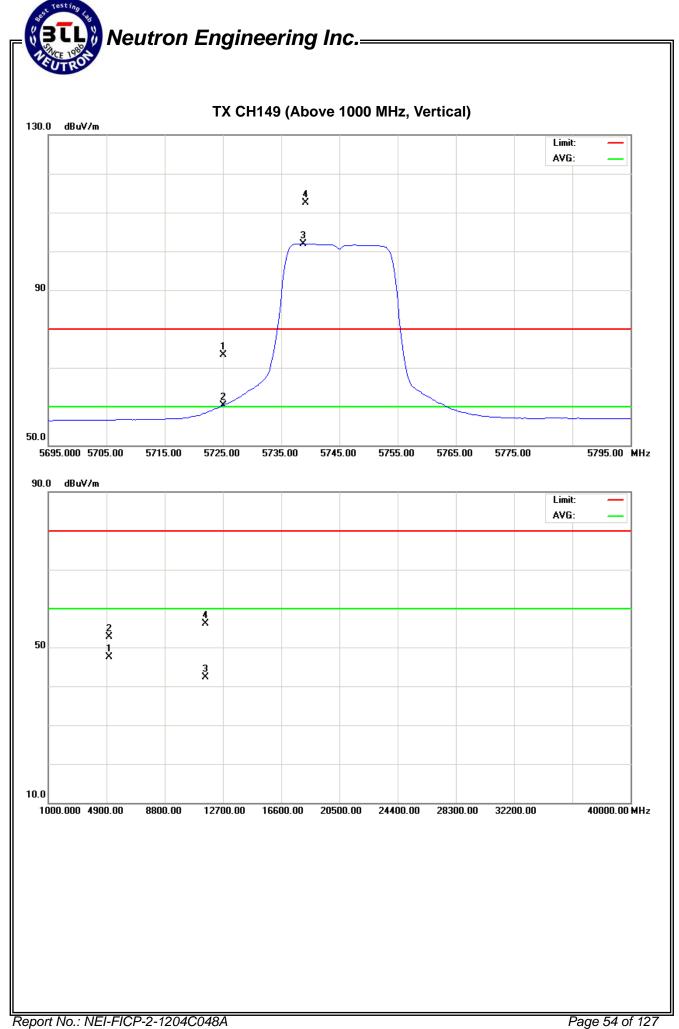
Freq.	Ant.Pol.	Rea	Reading		Act.		Liı		
пец.	AIIL.FOI.	Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	HV	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
5725.00	V	32.49	19.34	40.90	73.39	60.24	92.46	81.93	X/E
5738.75	٧	71.52	60.99	40.94	112.46	101.93			X/F
5000.00	V	46.76	41.58	5.93	52.69	47.51	80.00	60.00	X/H
11490.02	V	42.85	29.09	13.27	56.12	42.36	80.00	60.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of  $\lceil$ Note $_{
  m J}$ . Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform  $_{
  m O}$
- (2) 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.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission  $\circ$
- (4) 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.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
  - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna
- (8) The limits above 5GHz shall be extrapolated to the specified distance using an extrapolation factor of 20dB/decade form 3m to 1.5m

Distance extrapolation factor = 20 log (3m/1.5m) dB;

Limit line = specific limits (dBuV) + 6 dB

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Report No.: NEI-FICP-2-1204C048A

EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	<b>25</b> ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N20 Mode 5745MHz		

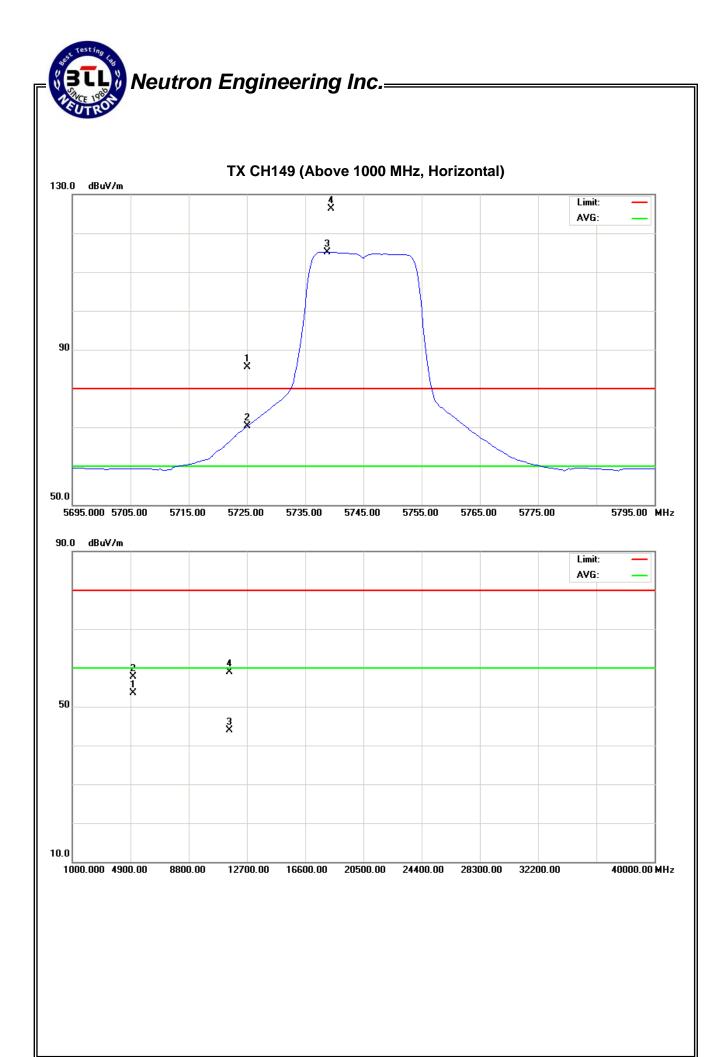
Freg. Ant.Pol.	Ant Dol	Reading		Ant./CF	Ant./CF Act.		Lir		
rreq.	AHLPOL	Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	HV	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
5725.00	Н	44.56	29.33	40.90	85.46	70.23	106.40	95.18	XΈ
5739.50	Н	85.46	74.24	40.94	126.40	115.18			X/F
4999.99	Н	51.72	47.49	5.93	57.65	53.42	80.00	60.00	X/H
11490.73	Н	45.59	30.55	13.27	58.86	43.82	80.00	60.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of  $\lceil$ Note $_{
  m J}$ . Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform  $_{
  m O}$
- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency of F' denotes fundamental frequency; "H' denotes spurious frequency. "E' denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission ∘
- (4) 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.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
  - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna
- (8) The limits above 5GHz shall be extrapolated to the specified distance using an extrapolation factor of 20dB/decade form 3m to 1.5m

Distance extrapolation factor = 20 log (3m/1.5m) dB;

Limit line = specific limits (dBuV) + 6 dB

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EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	<b>25</b> ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N20 Mode 5785MHz		

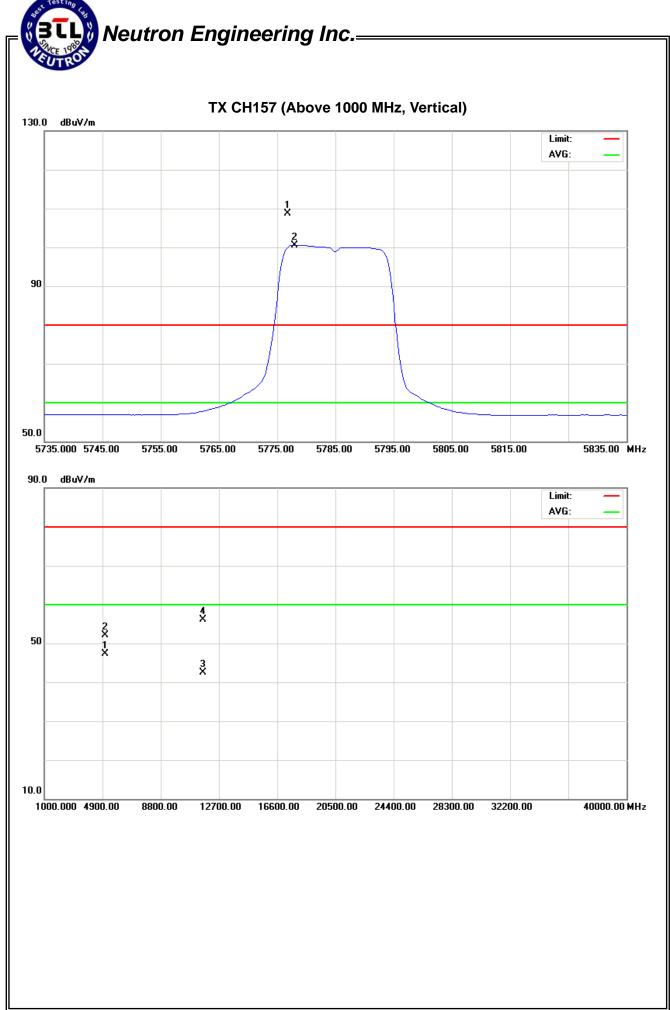
Freq. Ant [	Ant.Pol.	Ant Dol Rea	ding	Ant./CF	Act.		Limit		
Freq.	AIILPOI.	Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
5776.75	V	67.56	59.41	41.09	108.65	100.50			X/F
5000.00	V	46.25	41.38	5.93	52.18	47.31	80.00	60.00	X/H
11570.13	V	42.79	29.16	13.36	56.15	42.52	80.00	60.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of  $\lceil$ Note $_{
  m J}$ . Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform  $_{
  m O}$
- (2) 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.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission •
- (4) 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.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
  - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna
- (8) The limits above 5GHz shall be extrapolated to the specified distance using an extrapolation factor of 20dB/decade form 3m to 1.5m

Distance extrapolation factor = 20 log (3m/1.5m) dB;

Limit line = specific limits (dBuV) + 6 dB

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EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	<b>25</b> ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N20 Mode 5785MHz		

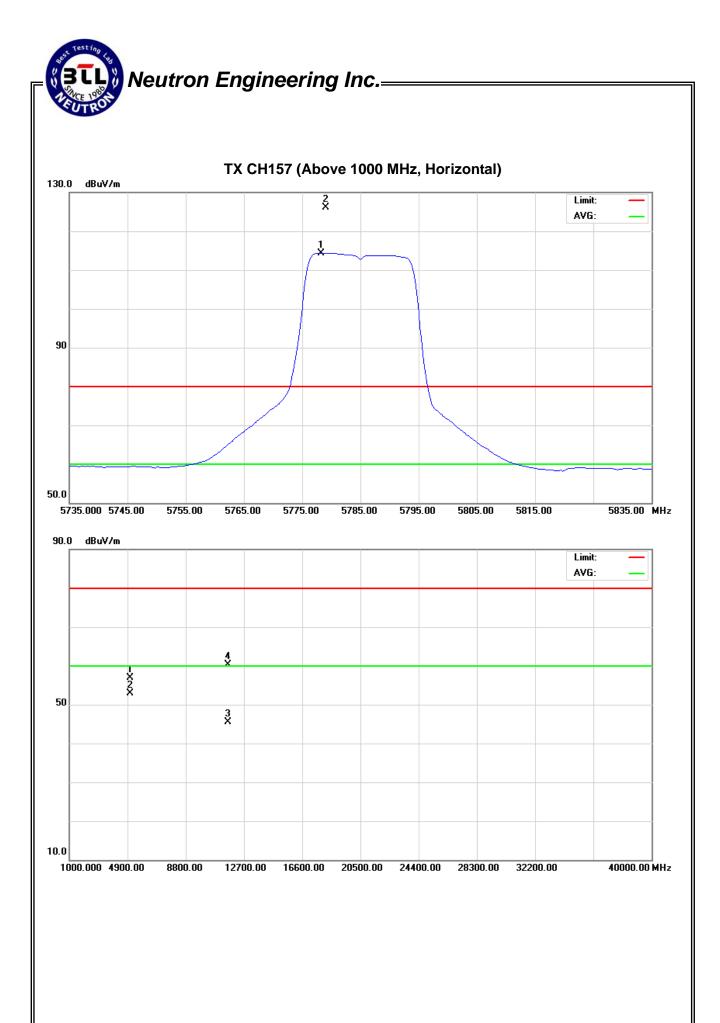
Freg. A	Ant Dol	Ant.Pol. Reading Ant.		Ant/CF	A	ct.	Liı		
пец.	AHLFUI.	Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	HV	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
5778.25	Н	84.93	73.27	41.10	126.03	114.37			X/F
4999.99	Н	50.96	46.98	5.93	56.89	52.91	80.00	60.00	X/H
11570.42	Н	46.89	32.24	13.36	60.25	45.60	80.00	60.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of  $\lceil$ Note $_{
  m J}$ . Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform  $_{
  m O}$
- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency of F' denotes fundamental frequency; "H' denotes spurious frequency. "E' denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission  $\circ$
- (4) 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.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
  - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna
- (8) The limits above 5GHz shall be extrapolated to the specified distance using an extrapolation factor of 20dB/decade form 3m to 1.5m

Distance extrapolation factor = 20 log (3m/1.5m) dB;

Limit line = specific limits (dBuV) + 6 dB

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EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	<b>25</b> ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N20 Mode 5825MHz		

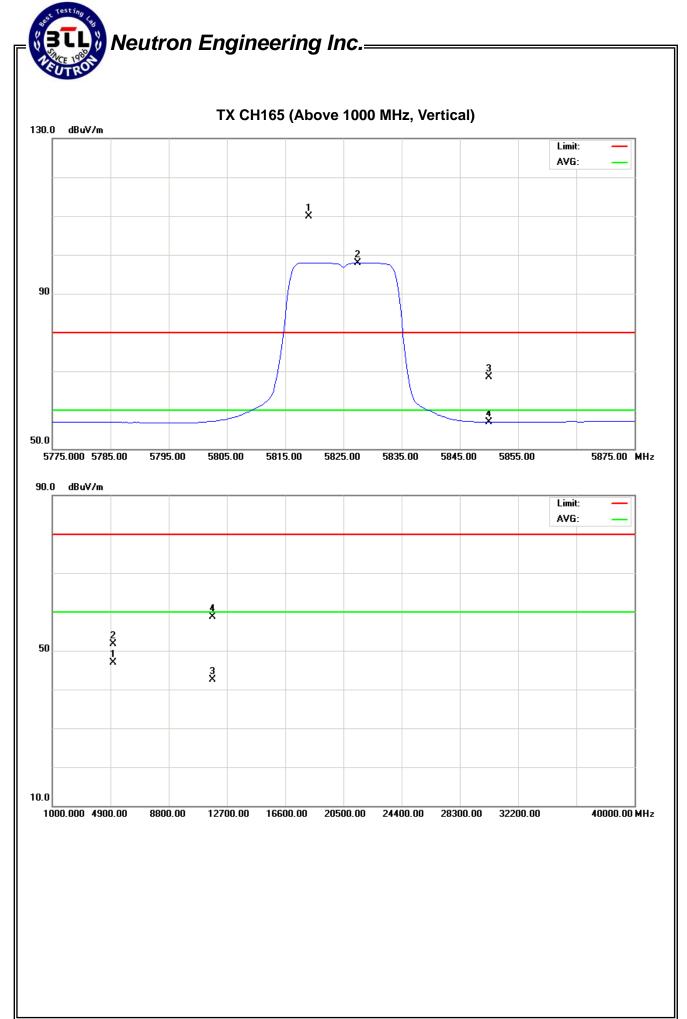
Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Limit		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
5819.00	V	68.60	56.70	41.26	109.86	97.96			X/F
5850.00	V	27.17	15.46	41.38	68.55	56.84	89.86	77.96	X/E
4999.98	V	45.76	40.89	5.93	51.69	46.82	80.00	60.00	X/H
11650.38	V	45.19	29.13	13.43	58.62	42.56	80.00	60.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of  $\lceil$ Note $_{
  m J}$ . Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform  $_{
  m O}$
- (2) 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.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission •
- (4) 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.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
  - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna
- (8) The limits above 5GHz shall be extrapolated to the specified distance using an extrapolation factor of 20dB/decade form 3m to 1.5m

Distance extrapolation factor = 20 log (3m/1.5m) dB;

Limit line = specific limits (dBuV) + 6 dB

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EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	<b>25</b> ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N20Mode 5825MHz		

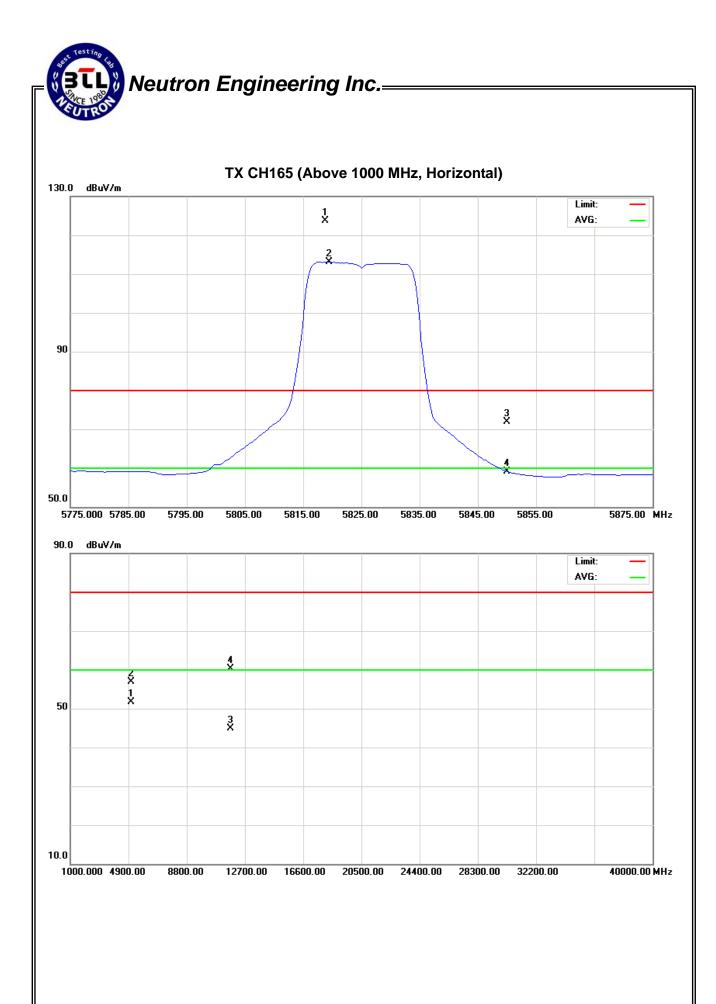
Freq.	Ant.Pol.	Rea	ding	Ant./CF	Act.		Lir		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
5818.75	Н	82.54	71.77	41.27	123.81	113.04			X/F
5850.00	Н	30.46	17.76	41.38	71.84	59.14	103.81	93.04	X/E
4999.98	Н	51.01	45.68	5.93	56.94	51.61	80.00	60.00	X/H
11650.24	Н	46.82	31.42	13.43	60.25	44.85	80.00	60.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of  $\lceil$ Note $_{
  m J}$ . Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform  $_{
  m O}$
- (2) 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.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission ∘
- (4) 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.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
  - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna
- (8) The limits above 5GHz shall be extrapolated to the specified distance using an extrapolation factor of 20dB/decade form 3m to 1.5m

Distance extrapolation factor = 20 log (3m/1.5m) dB;

Limit line = specific limits (dBuV) + 6 dB

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EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	<b>25</b> ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N40 Mode 5755MHz		

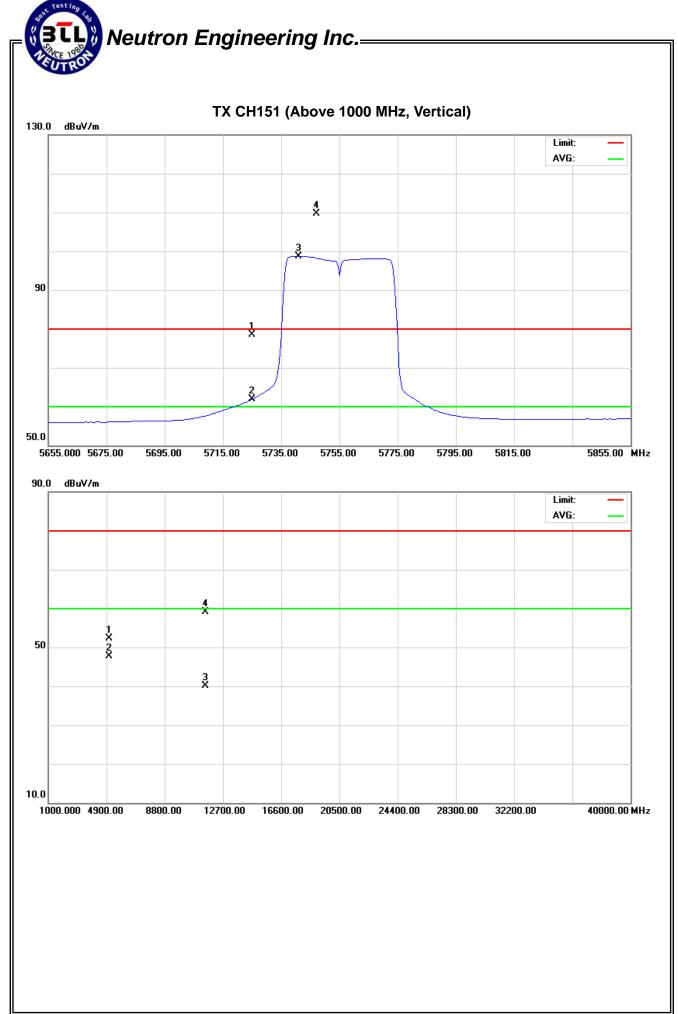
Freg. Ant.	Ant.Pol.	Rea	ading Ant./0		Act.		Limit		
rieq.	AIILPOI.	Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
5725.00	V	37.68	20.94	40.90	78.58	61.84	89.71	78.75	X/E
5747.00	٧	68.73	57.77	40.98	109.71	98.75			X/F
4999.98	V	46.43	41.71	5.93	52.36	47.64	80.00	60.00	X/H
11510.38	V	45.83	26.79	13.3	59.13	40.09	80.00	60.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of  $\lceil$ Note $_{
  m J}$ . Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform  $_{
  m O}$
- (2) 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.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission  $\circ$
- (4) 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.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
  - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna
- (8) The limits above 5GHz shall be extrapolated to the specified distance using an extrapolation factor of 20dB/decade form 3m to 1.5m

Distance extrapolation factor = 20 log (3m/1.5m) dB;

Limit line = specific limits (dBuV) + 6 dB

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EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	<b>25</b> ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N40 Mode 5755MHz		

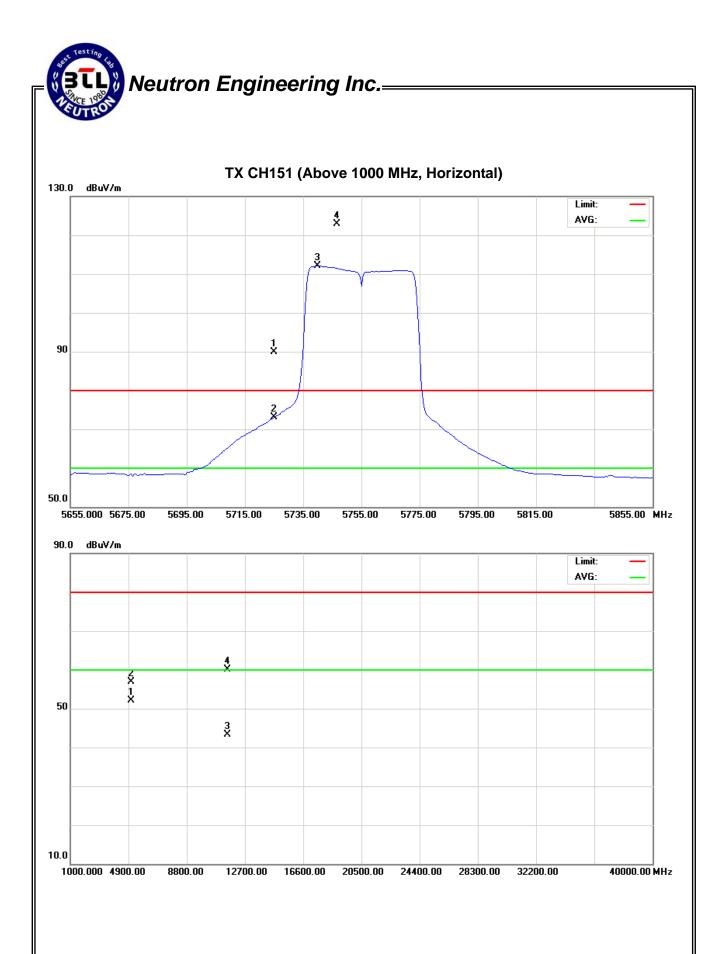
Erog	Ant.Pol.	Ant Pol Read		Ant/CF	A	Act.		Limit	
Freq.	AHLPOL	Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	HV	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
5725.00	Н	48.91	32.11	40.90	89.81	73.01	102.81	92.09	X/E
5746.50	Н	81.83	71.11	40.98	122.81	11209			X/F
4999.99	Н	50.93	46.23	5.93	56.86	52.16	80.00	60.00	X/H
11510.32	Н	46.71	29.95	13.30	60.01	43.25	80.00	60.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of  $\lceil$ Note $_{
  m J}$ . Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform  $_{
  m O}$
- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency of F' denotes fundamental frequency; "H' denotes spurious frequency. "E' denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission ∘
- (4) 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.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
  - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna
- (8) The limits above 5GHz shall be extrapolated to the specified distance using an extrapolation factor of 20dB/decade form 3m to 1.5m

Distance extrapolation factor = 20 log (3m/1.5m) dB;

Limit line = specific limits (dBuV) + 6 dB

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EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	<b>25</b> ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N40 Mode 5795MHz		

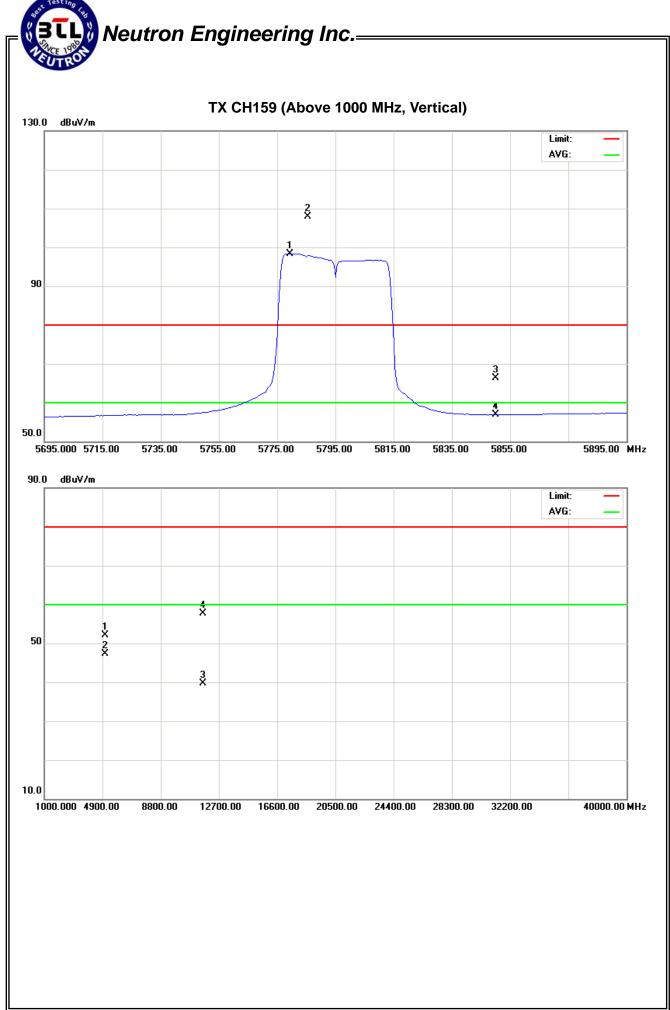
Freq.	Ant.Pol.	Rea	Reading Ant./CF		Act.		Limit		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	HV	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
5779.50	V	66.71	57.26	41.13	107.84	98.39			X/F
5850.00	V	24.83	15.44	41.38	66.21	56.82	87.84	78.39	X/E
4999.98	V	46.18	41.46	5.93	52.11	47.39	80.00	60.00	X/H
11591.26	V	44.25	26.39	13.38	57.63	39.77	80.00	60.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of  $\lceil$ Note $_{
  m J}$ . Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform  $_{
  m O}$
- (2) 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.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission  $\circ$
- (4) 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.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
  - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna
- (8) The limits above 5GHz shall be extrapolated to the specified distance using an extrapolation factor of 20dB/decade form 3m to 1.5m

Distance extrapolation factor = 20 log (3m/1.5m) dB;

Limit line = specific limits (dBuV) + 6 dB

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EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	<b>25</b> ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N40 Mode 5795MHz		

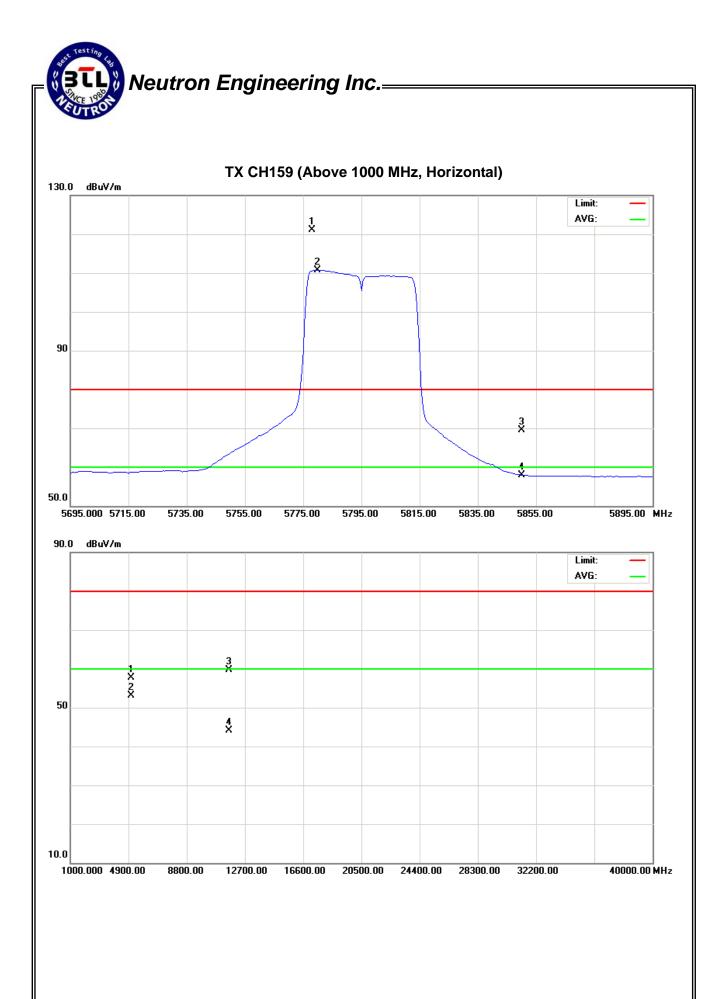
Freq.	Ant.Pol.	Rea	Reading Ant/CF		Act.		Limit		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	HV	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
5778.00	Н	79.98	69.61	41.11	121.09	110.72			X/F
5850.00	Н	28.20	16.57	41.38	69.58	57.95	101.09	90.72	X/E
4999.99	Н	51.71	47.17	5.93	57.64	53.10	80.00	60.00	X/H
11590.27	Н	46.29	30.64	13.38	59.67	44.02	80.00	60.00	X/H

- (1) All readings are Peak unless otherwise stated QP in column of <code>『Note』</code>. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform  $\circ$
- (2) 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.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission  $\circ$
- (4) 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.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
  - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna
- (8) The limits above 5GHz shall be extrapolated to the specified distance using an extrapolation factor of 20dB/decade form 3m to 1.5m

Distance extrapolation factor = 20 log (3m/1.5m) dB;

Limit line = specific limits (dBuV) + 6 dB

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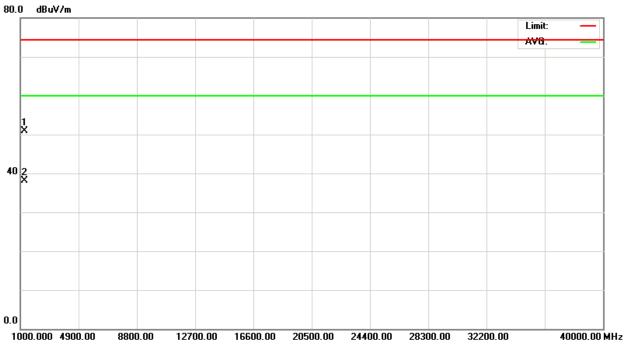
EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	<b>25</b> ℃	Relative Humidity:	58 %
Pressure:	1006hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	RX Mode		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Limit		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
1195.29	V	58.89	46.06	-8.04	50.85	38.02	80.00	60.00	X/H

#### Remark:

- (1) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform ∘
- (2) Measuring frequency range from 1000MHz to 6000MHz 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.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission  $\circ$
- (4) 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.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:

"X" - denotes Laid on Table; "Y" - denotes Vertical Stand; "Z" - denotes Side Stand



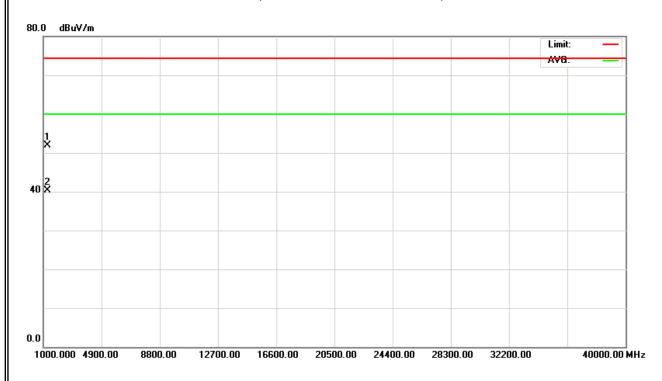
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EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	<b>25</b> ℃	Relative Humidity:	58 %
Pressure:	1006hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	RX Mode		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Limit		
		Peak	AV		Peak	AV	Peak	AV	Note
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
1200.27	Н	59.98	48.34	-8.02	51.96	40.32	80.00	60.00	X/H

#### Remark:

- (1) All readings are Peak unless otherwise stated QP in column of  $\lceil$ Note $_{
  m J}$ . Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform  $_{
  m O}$
- (2) Measuring frequency range from 1000MHz to 6000MHz 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.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission  $\circ$
- (4) 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.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis:
  - "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand



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#### 5. BANDWIDTH TEST

#### 5.1 Applied procedures / limit

FCC Part15 (15.247) , Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(a)(2)	Bandwidth	>= 500KHz (6dB bandwidth)	5725 - 5825	PASS

#### **5.1.1 MEASUREMENT INSTRUMENTS LIST**

Iten	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibration	Next Calibration
1	Spectrum Analyzer	R&S	FSP_40	100185	Nov.26.2011	Nov.26.2012

Remark: "N/A" denotes No Model Name., Serial No. or No 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,
- b. Spectrum Setting: RBW= 300KHz, VBW=1MHz, Sweep time = 20 ms.

#### **5.1.3 DEVIATION FROM STANDARD**

No deviation.

#### 5.1.4 TEST SETUP

EUT	SPECTRUM
	ANALYZER

#### **5.1.5 EUT OPERATION CONDITIONS**

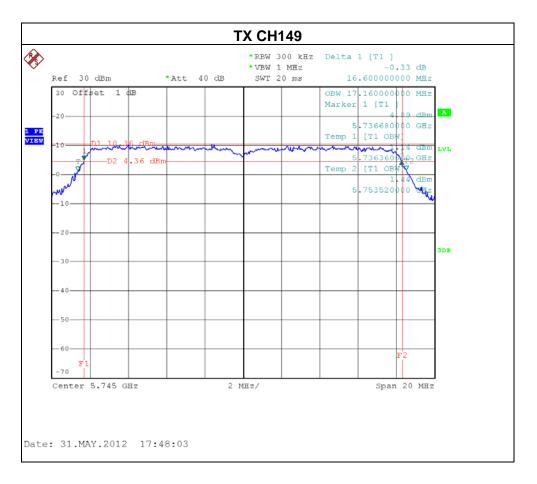
The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.

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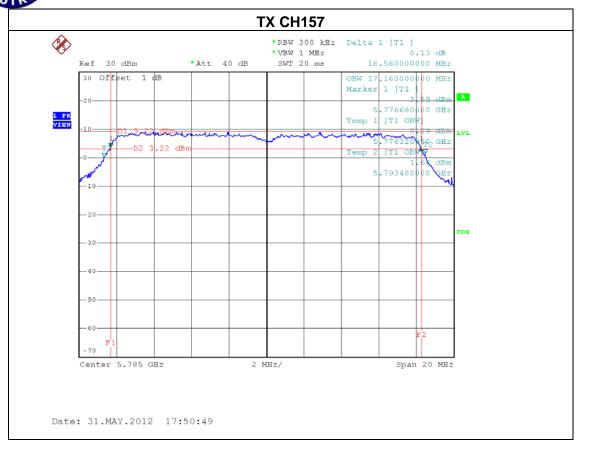
#### **5.1.6 TEST RESULTS**

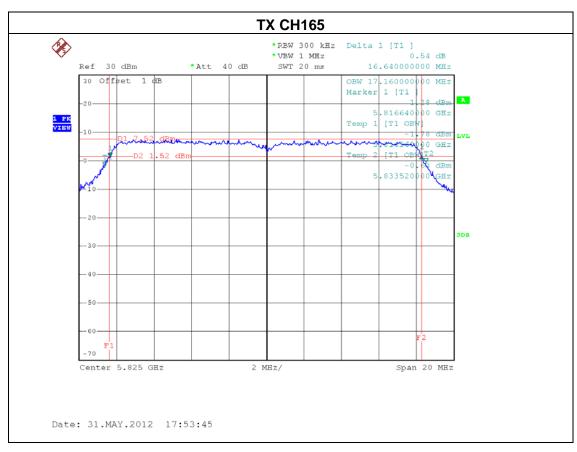
EUT:	Outdoor Wireless LAN Access Point	Model Name. :	AP6610DN-AGN-US		
Temperature:	<b>25</b> ℃	Relative Humidity:	58 %		
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz		
Test Mode :	TX A Mode /CH149, CH157, CH165				

Test Channel	Frequency	6dB Bandwidth	99% Occupied BW	LIMIT
Test Chamilei	(MHz)	(MHz)	(MHz)	(MHz)
CH149	5745	16.60	17.16	>=500KHz
CH157	5785	16.56	17.16	>=500KHz
CH165	5825	16.64	17.16	>=500KHz



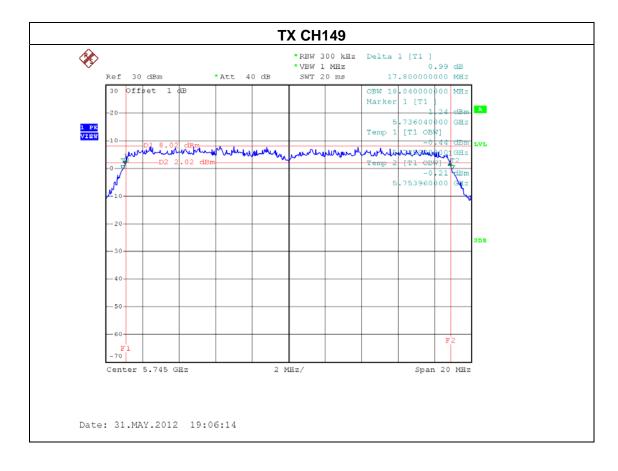
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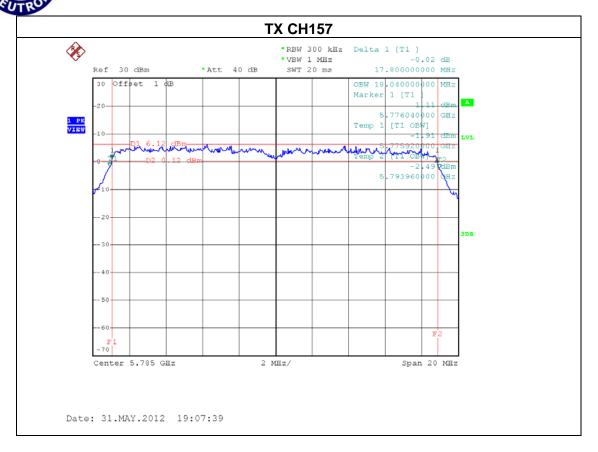


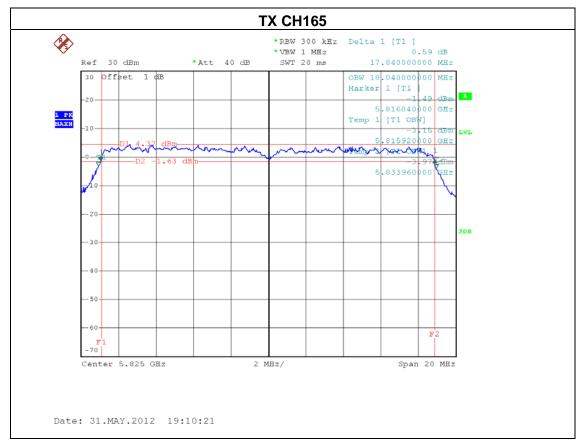
EUT:	Outdoor Wireless LAN Access Point	Model Name. :	AP6610DN-AGN-US	
Temperature:	<b>25</b> ℃	Relative Humidity:	58 %	
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz	
Test Mode : TX N20 Mode /CH149, CH157, CH165 (Antenna 1)				

Test Channel	Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	LIMIT (MHz)
CH149	5745	17.80	18.04	>=500KHz
CH157	5785	17.80	18.04	>=500KHz
CH165	5825	17.84	18.04	>=500KHz



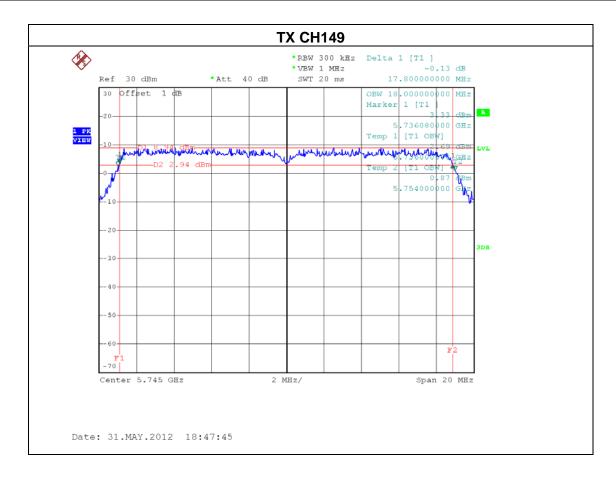
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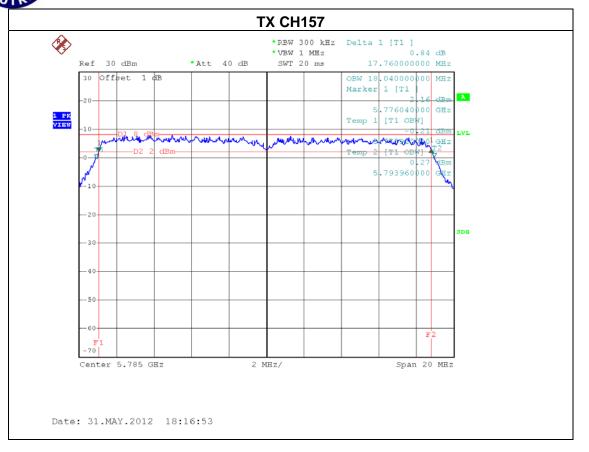


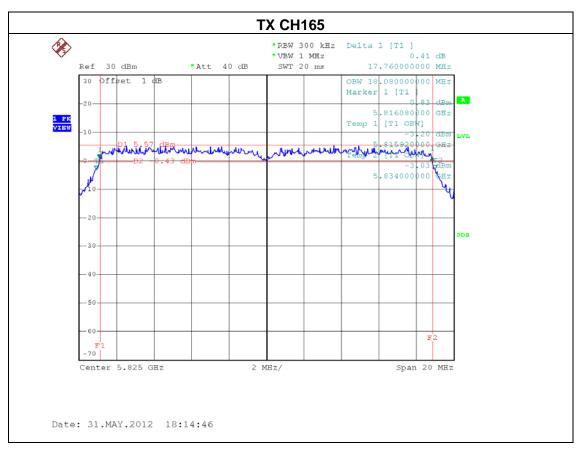
EUT:	Outdoor Wireless LAN Access Point	Model Name. :	AP6610DN-AGN-US		
Temperature:	<b>25</b> ℃	Relative Humidity:	58 %		
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz		
Test Mode :	TX N20 Mode /CH149, CH157, CH165 (Antenna 2)				

Test Channel	Frequency	6dB Bandwidth	99% Occupied BW	LIMIT
rest onamer	(MHz)	(MHz)	(MHz)	(MHz)
CH149	5745	17.80	18.00	>=500KHz
CH157	5785	17.76	18.04	>=500KHz
CH165	5825	17.76	18.08	>=500KHz



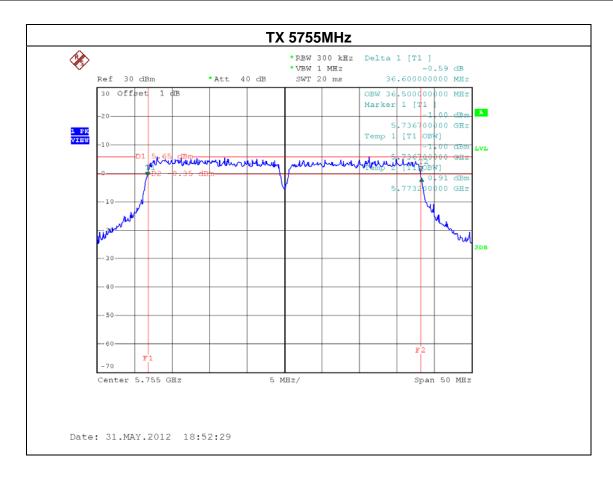
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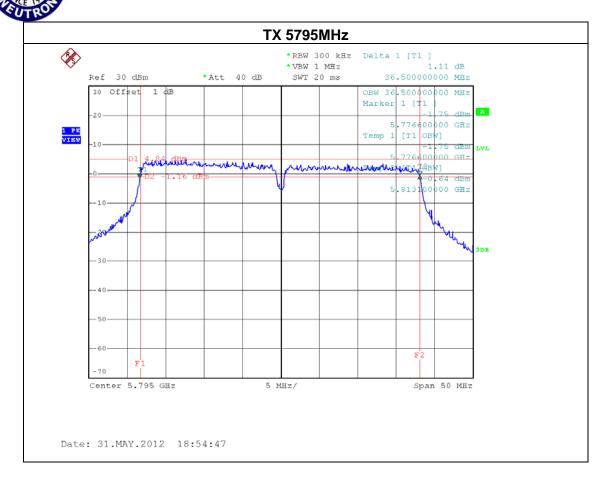


EUT:	Outdoor Wireless LAN Access Point	Model Name. :	AP6610DN-AGN-US	
Temperature:	<b>25</b> ℃	Relative Humidity:	58 %	
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz	
Test Mode :	TX N40 Mode /CH151, CH159 (Antenna 1)			

Test Channel	Frequency	6dB Bandwidth	99% Occupied BW	LIMIT
rest Orialinei	(MHz)	(MHz)	(MHz)	(MHz)
CH151	5755	36.60	36.50	>=500KHz
CH159	5795	36.50	36.50	>=500KHz

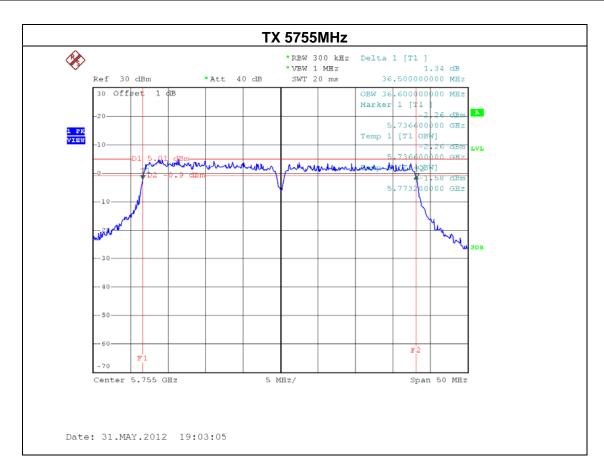


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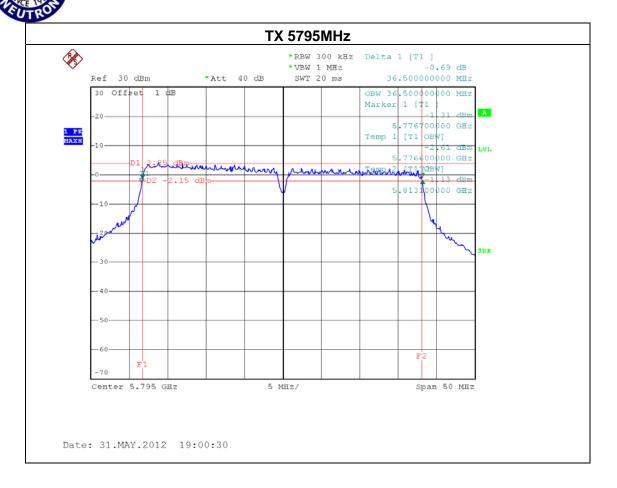


EUT:	Outdoor Wireless LAN Access Point	Model Name. :	AP6610DN-AGN-US
Temperature:	<b>25</b> ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode : TX N40 Mode / CH151, CH159 (Antenna 2)			

Test Channel	Frequency	6dB Bandwidth	99% Occupied BW	LIMIT
lest Chamilei	(MHz)	(MHz)	(MHz)	(MHz)
CH151	5755	36.50	36.60	>=500KHz
CH159	5795	36.50	36.50	>=500KHz



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#### **6. MAXIMUM OUTPUT POWER TEST**

#### 6.1 Applied procedures / limit

FCC Part15 (15.247) , Subpart C				
Section Test Item Limit Frequency Range (MHz)				Result
15.247(b)(3)	Maximum Output Power	1 watt or 30dBm	5725 - 5825	PASS

#### **6.1.1 MEASUREMENT INSTRUMENTS LIST**

Iter	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibration	Next Calibration
1	Power Meter	Anritsu	ML2495A	1128009	Nov.01.2011	Nov.01.2012
2	Pluse Power Sensor	Anritsu	MA2411B	1128009	Nov.01.2011	Nov.01.2012

Remark: "N/A" denotes No Model Name., Serial No. or No 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,

#### **6.1.3 DEVIATION FROM STANDARD**

No deviation.

#### 6.1.4 TEST SETUP

EUT	Power Meter
	1 GWGI WIGIGI

#### **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.

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#### 6.1.6 TEST RESULTS

EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US	
Temperature:	<b>25</b> ℃	Relative Humidity:	58 %	
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz	
Test Mode :	TX A Mode /CH149, CH157, CH165			

Test Channel	Frequency (MHz)	Maximum Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH149	5745 MHz	29.05	29.6	0.912
CH157	5785 MHz	29.30	29.6	0.912
CH165	5825MHz	28.60	29.6	0.912

EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	<b>25</b> ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N20 Mode /CH149, CH157,	CH165	

		ANT 1		
Test Channel	Frequency (MHz)	Maximum Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH149	5745 MHz	23.63	29.6	0.912
CH157	5785 MHz	23.14	29.6	0.912
CH165	5825MHz	22.90	29.6	0.912

EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US	
Temperature:	<b>25</b> ℃	Relative Humidity:	58 %	
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz	
Test Mode :	TX N20 Mode /CH149, CH157, CH165			

		ANT 2		
Test Channel	Frequency (MHz)	Maximum Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH149	5745 MHz	23.01	29.6	0.912
CH157	5785 MHz	23.70	29.6	0.912
CH165	5825MHz	22.86	29.6	0.912

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EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	<b>25</b> ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N40 Mode /CH151, CH159		

		ANT 1		
Test Channel	Frequency (MHz)	Maximum Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH151	5755 MHz	23.42	29.6	0.912
CH159	5795 MHz	23.30	29.6	0.912

EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	<b>25</b> ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N40 Mode /CH151, CH159		

		ANT 2		
Test Channel	Frequency (MHz)	Maximum Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH151	5755 MHz	22.86	29.6	0.912
CH159	5795 MHz	22.70	29.6	0.912

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EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	<b>25</b> ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode : TX N20 Mode /CH149, CH157, CH165			

		ANT 1+ANT 2		
Test Channel	Frequency (MHz)	Maximum Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH149	5745 MHz	26.34	29.6	0.912
CH157	5785 MHz	26.44	29.6	0.912
CH165	5825MHz	25.89	29.6	0.912

EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	<b>25</b> ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N40 Mode /CH151, CH159		

		ANT1+ANT2		
Test Channel	Frequency (MHz)	Maximum Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH151	5755 MHz	26.16	29.6	0.912
CH159	5795 MHz	26.02	29.6	0.912

#### 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 30-6.4+6=29.6; and power density limit is 8-6.4+6=7.6

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#### 7. ANTENNA CONDUCTED SPURIOUS EMISSION

#### 7.1 Applied procedures / limit

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

Frequencies (MHz)	Field Strength (micorvolts/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

#### 7.1.1 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibration	Next Calibration
1	Spectrum Analyzer	R&S	FSP_40	100185	Nov.26.2011	Nov.26.2012

Remark: "N/A" denotes No Model Name., Serial No. or No Calibration specified.

#### 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 Setting: RBW= 100KHz, VBW=300KHz, Sweep time =20 ms.

#### 7.1.3 DEVIATION FROM STANDARD

No deviation.

#### 7.1.4 TEST SETUP



#### 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.

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#### 7.1.6 TEST RESULTS

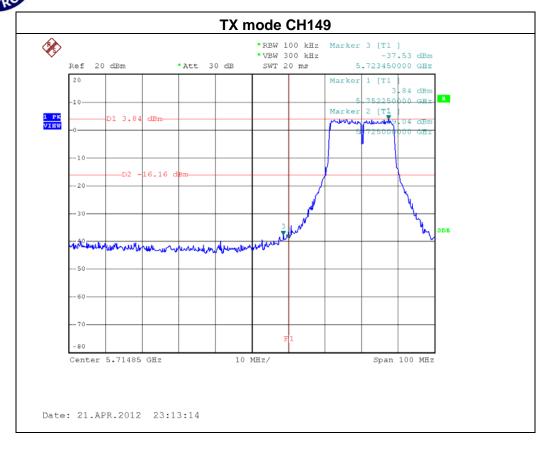
EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	<b>25</b> ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	de : TX A Mode /CH149, CH157, CH165		

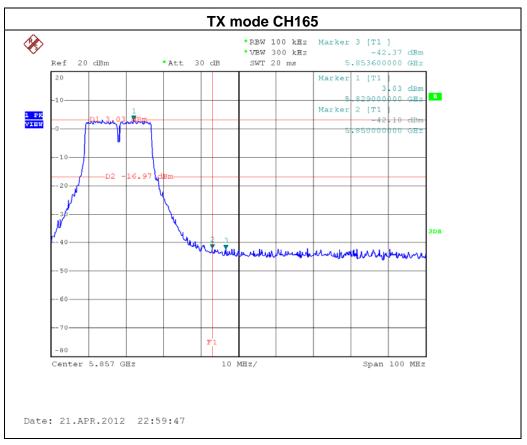
Channel of Worst Data: CH149			
The max. radio frequency power in any 100kHz bandwidth outside the frequency band		The max. radio frequency power in any 100 kHz bandwidth within the frequency band.	
FREQUENCY(MHz)	POWER(dBm)	) FREQUENCY(MHz) POWER(dBm)	
5723.45 -37.53 5850.00 -42.10			
Result			

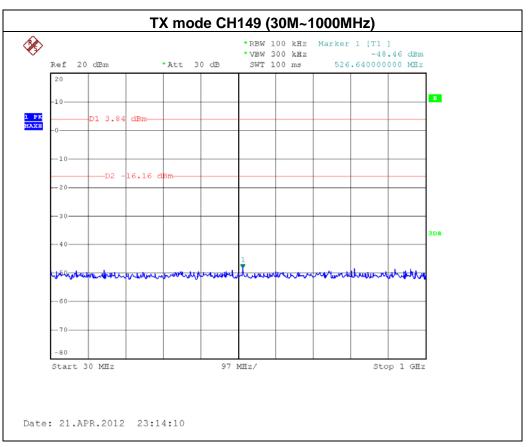
#### Result

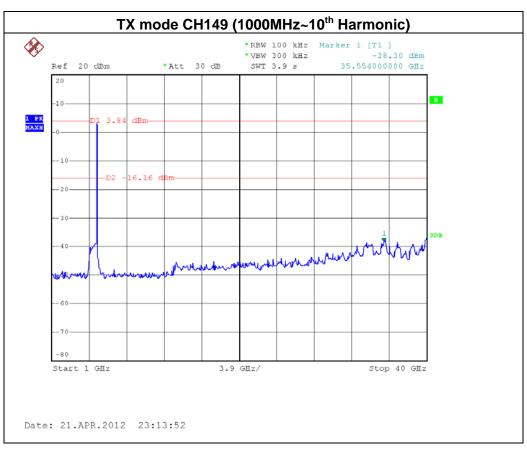
In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest lever of the desired power.

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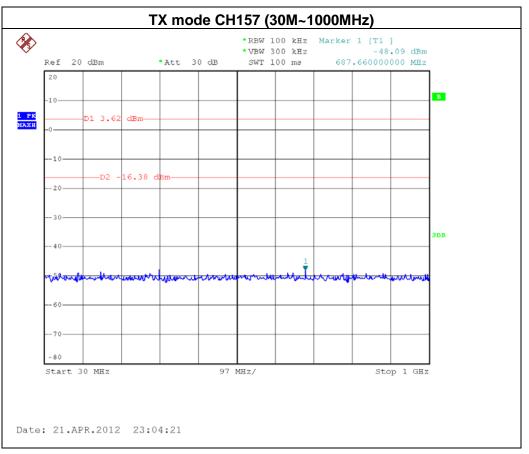


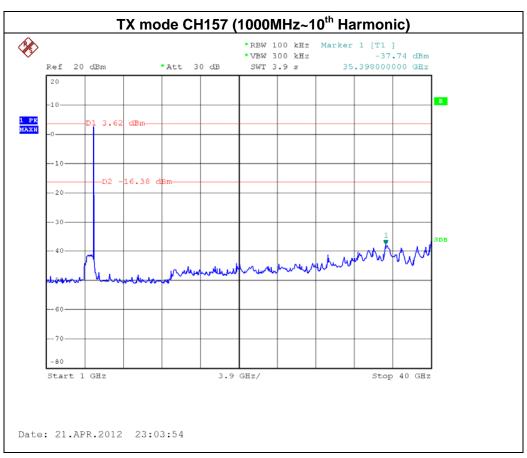


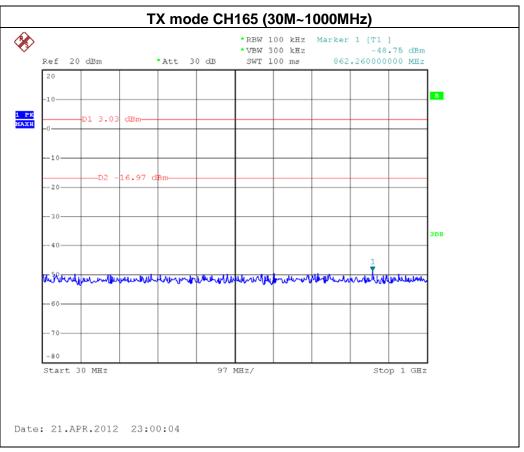


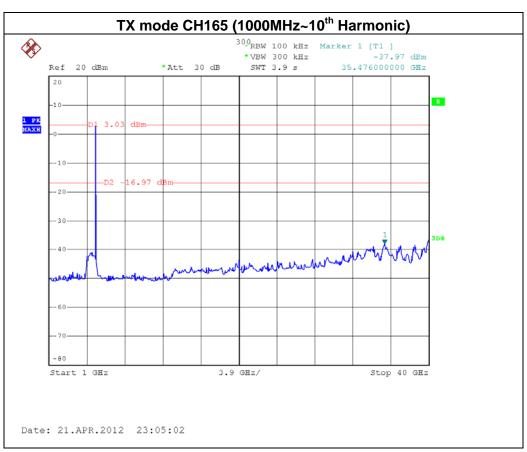


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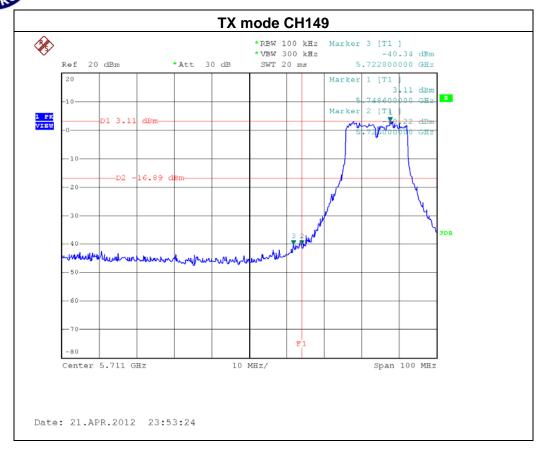


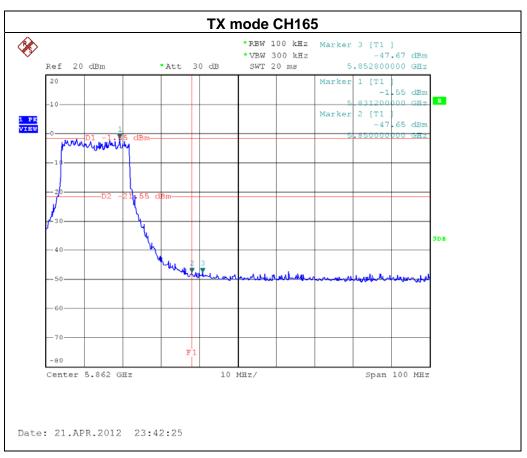
EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	<b>25</b> ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode : TX N20 Mode /CH149, CH157, CH165 (ANT 1)			

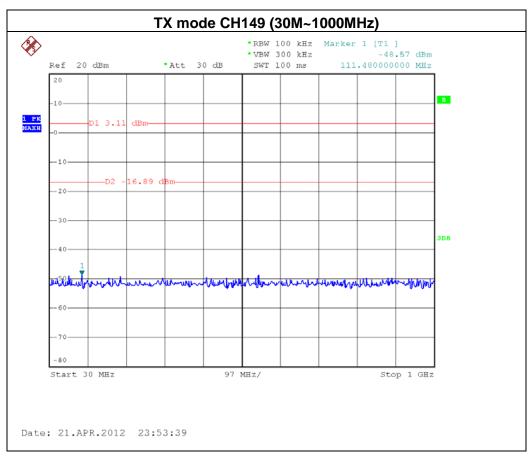
Channel of Worst Data: CH149			
The max. radio frequency power in any 100kHz bandwidth outside the frequency band		The max. radio frequency power in any 100 kHz bandwidth within the frequency band.	
FREQUENCY(MHz) POWER(dBm) FREQUENCY(MHz) POWER(dBm)		POWER(dBm)	
5725.00	-47.65		
Result			

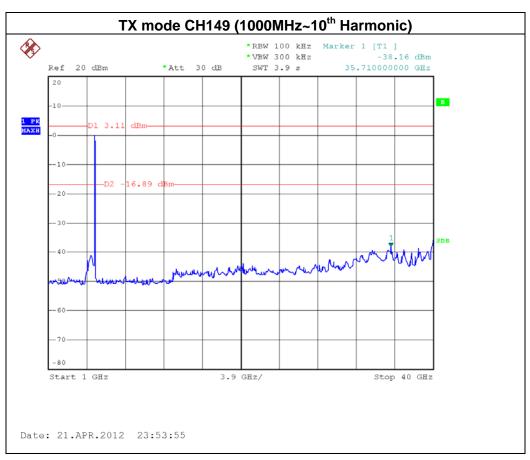
In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest lever of the desired power.

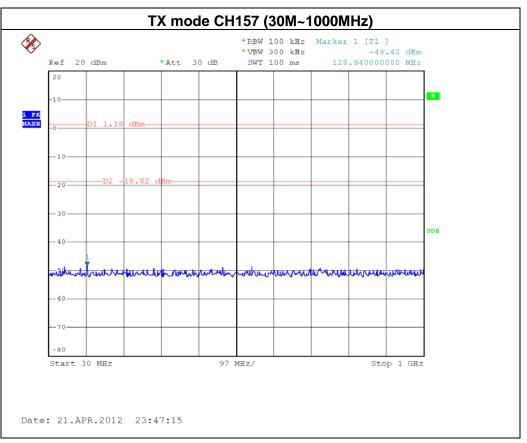
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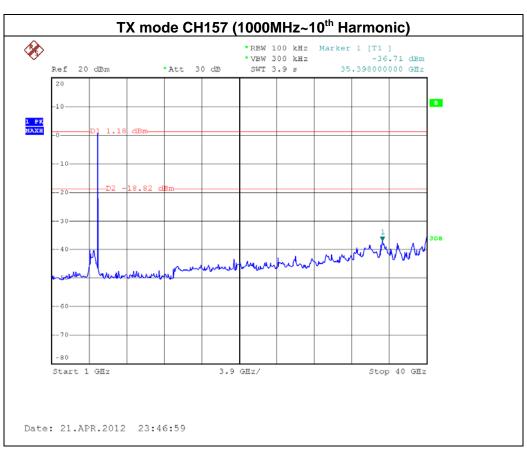


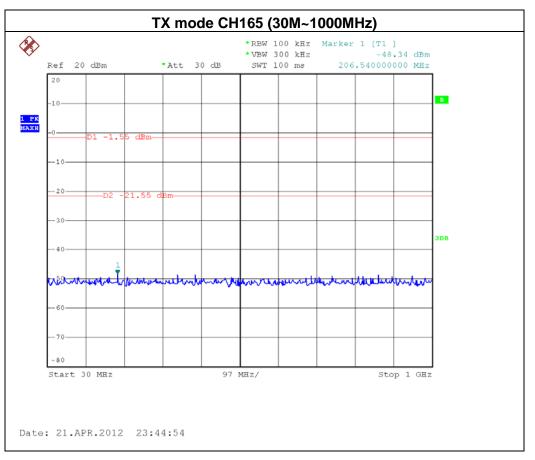


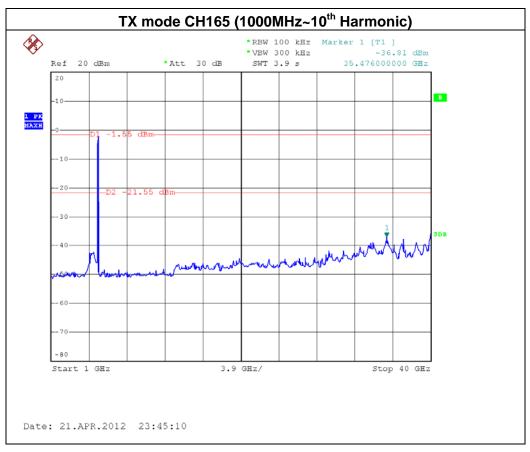












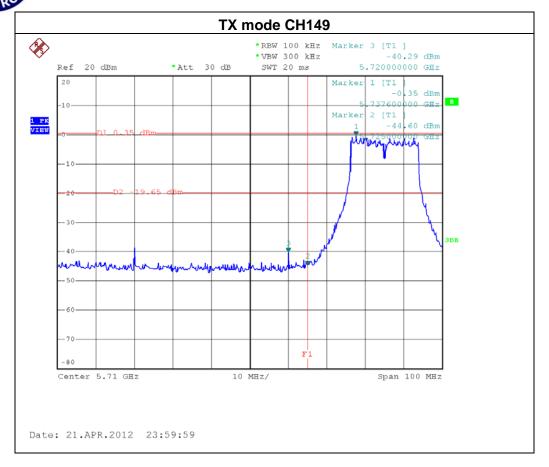


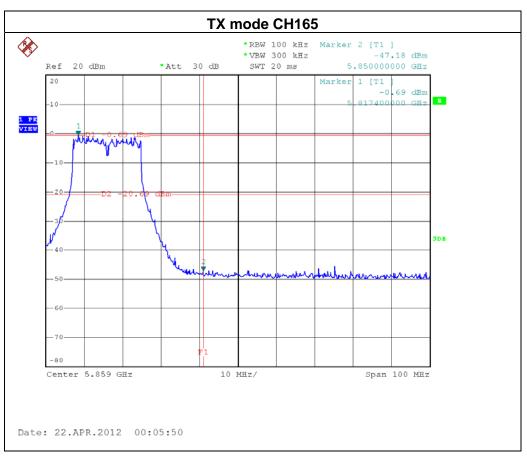
EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	<b>25</b> ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N20 Mode /CH149, CH157,	CH165 (ANT 2)	

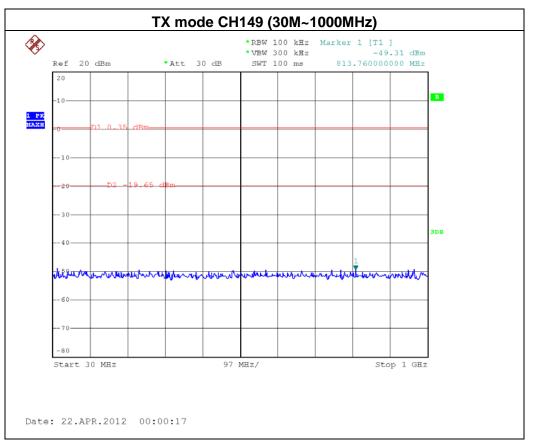
Channel of Worst Data: CH149			
	cy power in any 100kHz the frequency band	The max. radio frequency power in any 100 kHz bandwidth within the frequency band.	
FREQUENCY(MHz)	POWER(dBm)	) FREQUENCY(MHz) POWER(dBm)	
5725.00 -44.60 5855.00 -47.18			
Result			

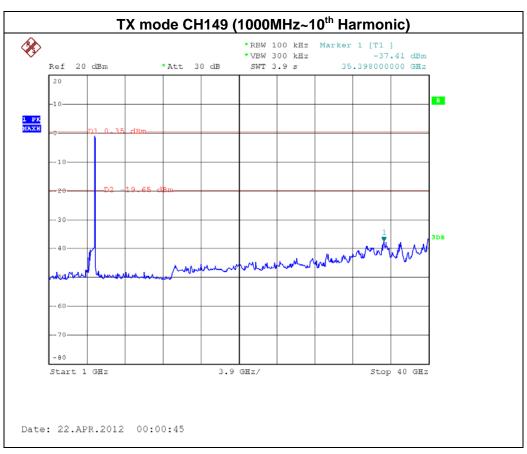
In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest lever of the desired power.

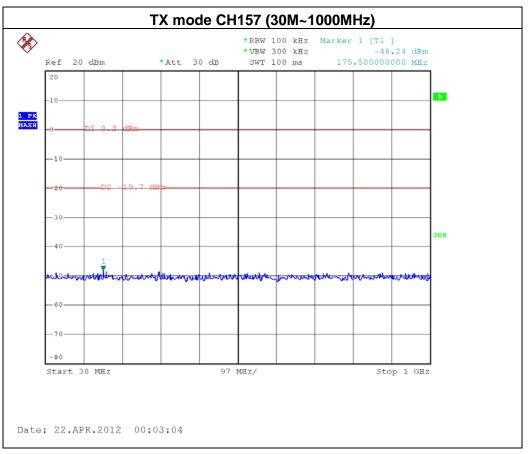
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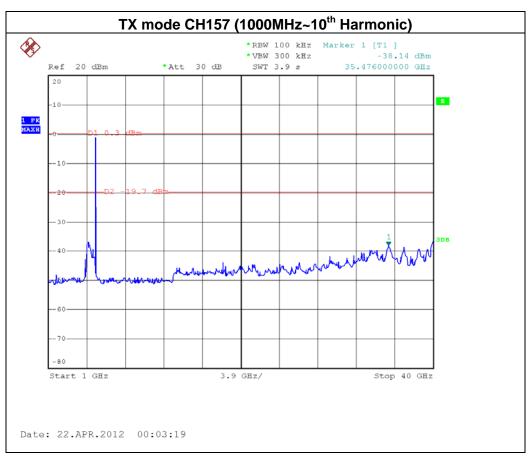


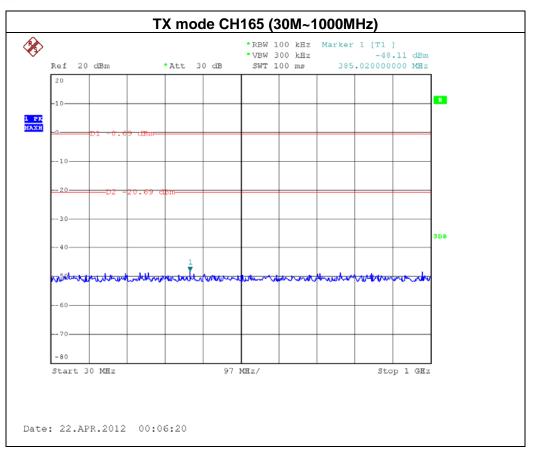


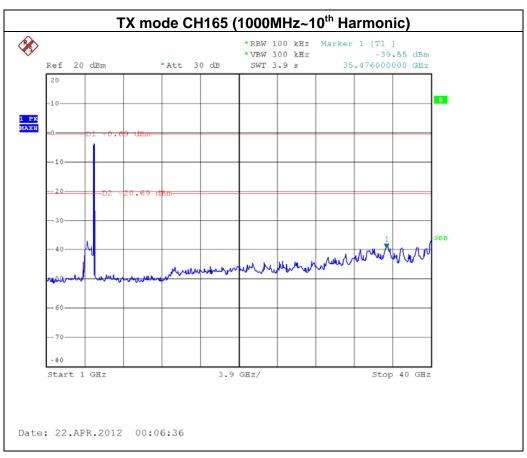












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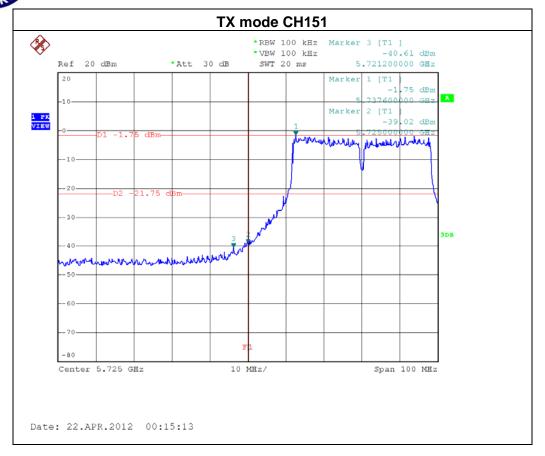
EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	<b>25</b> ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N40 Mode /CH151, CH159 (ANT 1)		

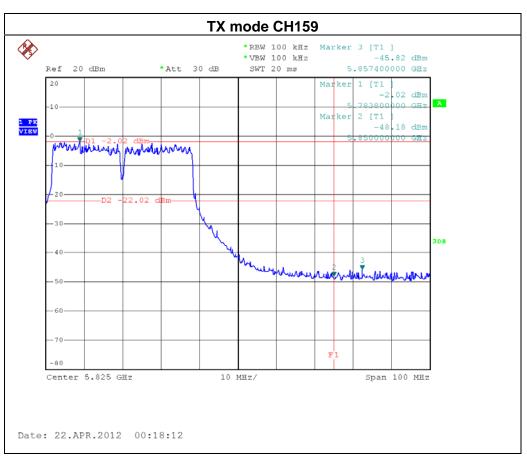
Channel of Worst Data: CH151			
The max. radio frequency power in any 100kHz bandwidth outside the frequency band		The max. radio frequency power in any 100 kHz bandwidth within the frequency band.	
FREQUENCY(MHz) POWER(dBm) FREQUENCY(MHz) POWER(dBi		POWER(dBm)	
5725.00 -39.02 5857.40 -45.82			
Pacult			

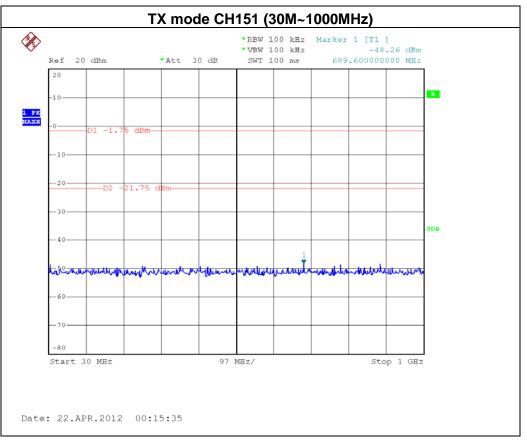
#### Result

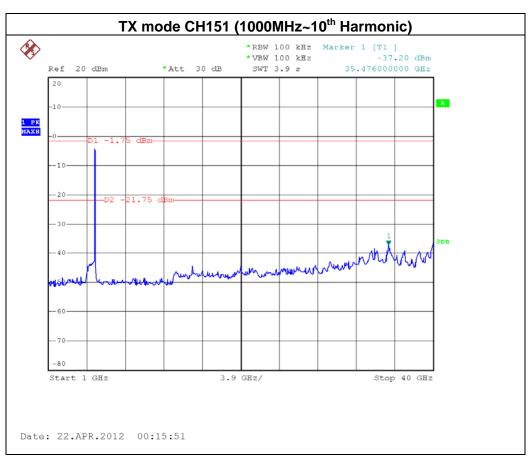
In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest lever of the desired power.

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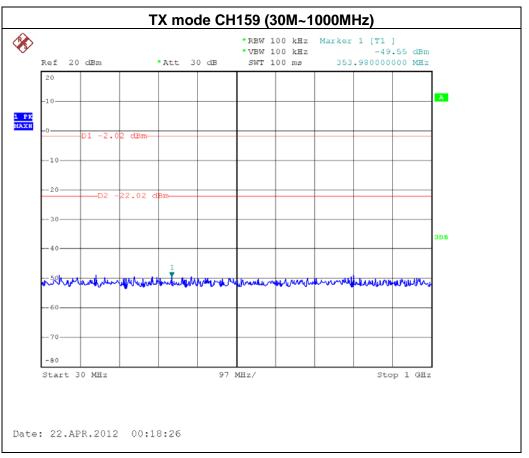


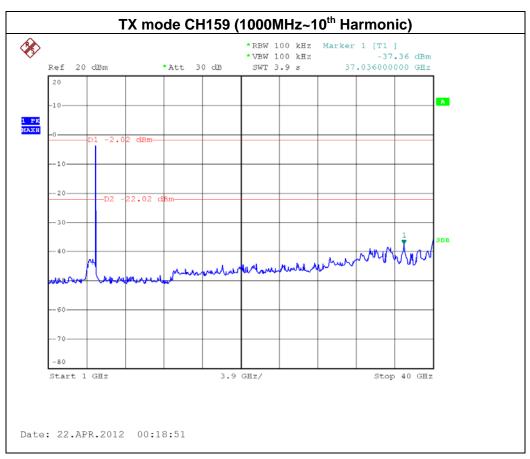






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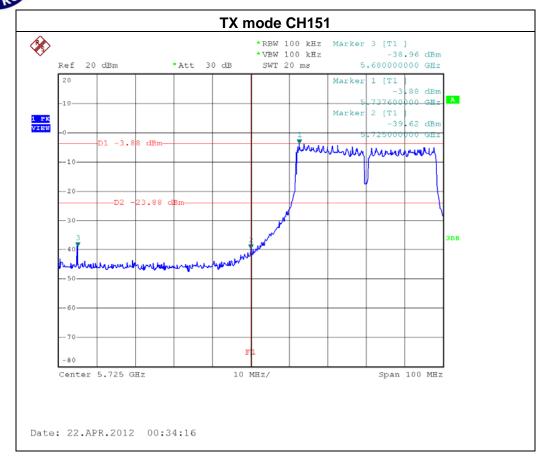


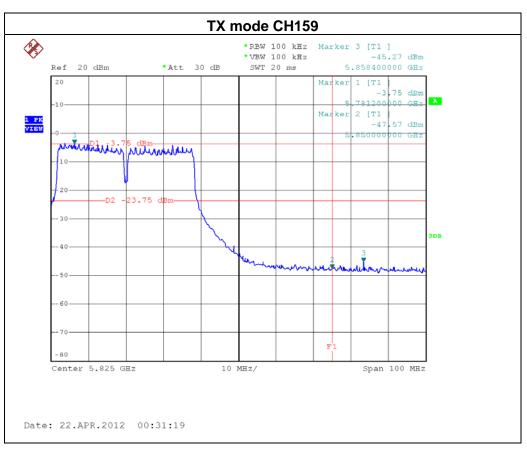
EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	<b>25</b> ℃	Relative Humidity:	58 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N40 Mode /CH151, CH159 (ANT 2)		

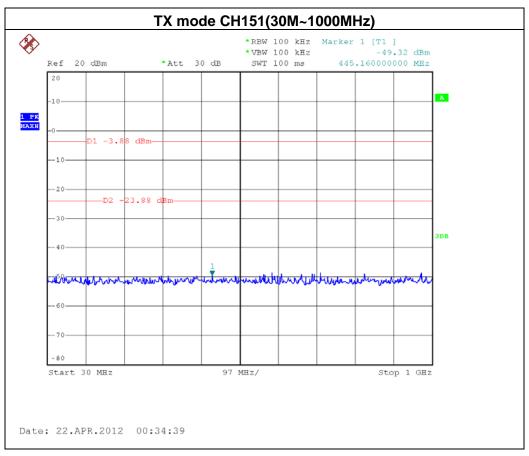
Channel of Worst Data: CH151				
The max. radio frequency power in any 100kHz bandwidth outside the frequency band bandwidth within the frequency band.				
FREQUENCY(MHz)	FREQUENCY(MHz) POWER(dBm) FREQUENCY(MHz) POWER(dBm)			
5725.00 -39.62 5858.40 -45.27				
	Re	sult		

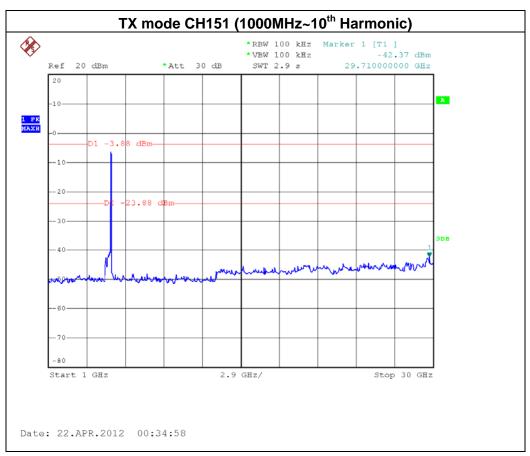
In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest lever of the desired power.

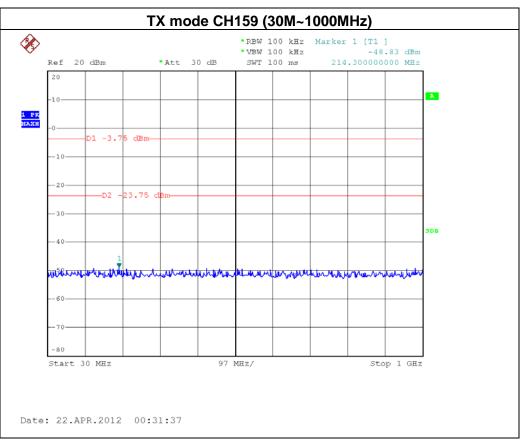
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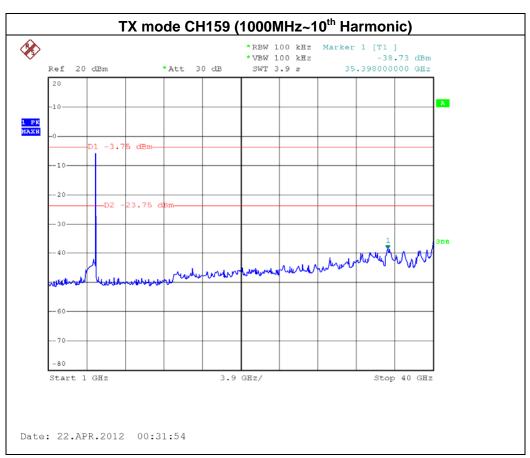












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#### 8. POWER SPECTRAL DENSITY TEST

#### 8.1 Applied procedures / limit

FCC Part15 (15.247) , Subpart C					
Section	Test Item	Limit	Frequency Range (MHz)	Result	
15.247(e)	Power Spectral Density	8 dBm (in any 3KHz)	5745 - 5825	PASS	

#### **8.1.1 MEASUREMENT INSTRUMENTS LIST**

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibration	Next Calibration
1	Spectrum Analyzer	R&S	FSP_40	100185	Nov.26.2011	Nov.26.2012

Remark: "N/A" denotes No Model Name., Serial No. or No 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 Setting: RBW=100KHz, VBW=300 KHz, Sweep time = 20s.

#### 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.

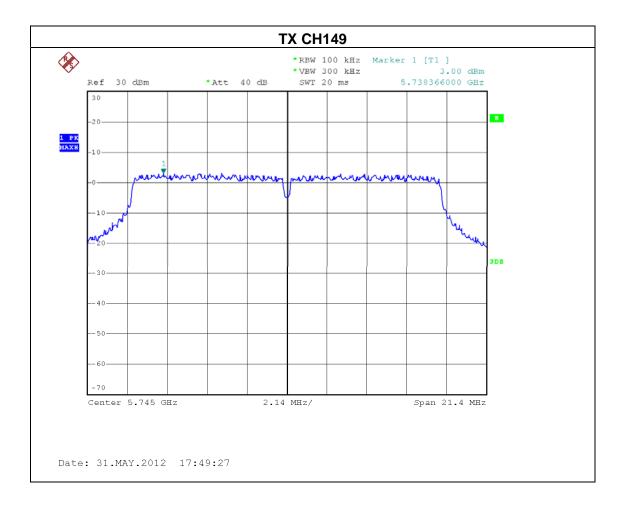
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#### 8.1.6 TEST RESULTS

EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	<b>23</b> ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX A Mode /CH149, CH157, CH165		

Test Channel	Frequency	Power Density	LIMIT
rest Charmer	(MHz)	(dBm)	(dBm)
CH149	5745 MHz	-12.20	8
CH157	5785 MHz	-13.42	8
CH165	5825 MHz	-15.68	8

Note: DWCF (dB) =  $10 \log (3K/100K) = -15.2dB$ 



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EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	<b>23</b> ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N20 Mode /CH149, CH157, CH165		

ANT 1					
Test Channel	Frequency	Power Density	LIMIT		
rest Chamilei	(MHz)	(dBm)	(dBm)		
CH149	5745 MHz	-13.38	8		
CH157	5785 MHz	-16.33	8		
CH165	5825 MHz	-16.23	8		

ANT 2					
Test Channel	Frequency	Power Density	LIMIT		
rest orialine	(MHz)	(dBm)	(dBm)		
CH149	5745 MHz	-12.29	8		
CH157	5785 MHz	-12.80	8		
CH165	5825 MHz	-15.53	8		

Antenna Amphenol-SAA (ANT 1+ANT 2)					
Test Channel	Frequency	Power Density	LIMIT		
rest orialine	(MHz)	(dBm)	(dBm)		
CH149	5745 MHz	-9.79	7.6		
CH157	5785 MHz	-11.21	7.6		
CH165	5825 MHz	-12.86	7.6		

Note: DWCF (dB) =  $10 \log (3K/100K) = -15.2dB$ 

#### Remark:

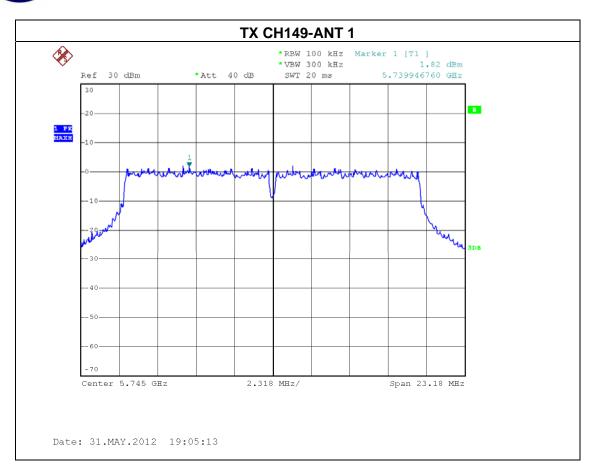
- (1) The MIMO test requirement, RF conducted output power shall measure each transmitter chain by using channel power method.

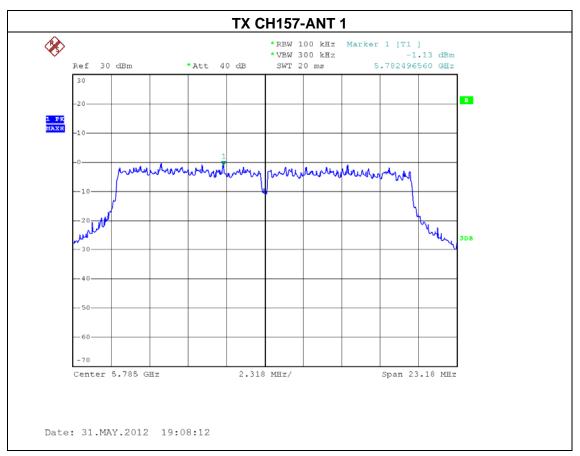
  And after obtain each individual transmitter chain power, then sum the output power by using the following formula:

  ((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 30-6.4+6=29.6; and power density limit is 8-6.4+6=7.6

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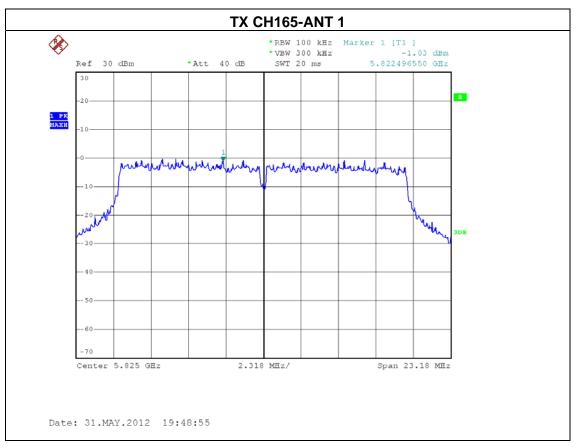


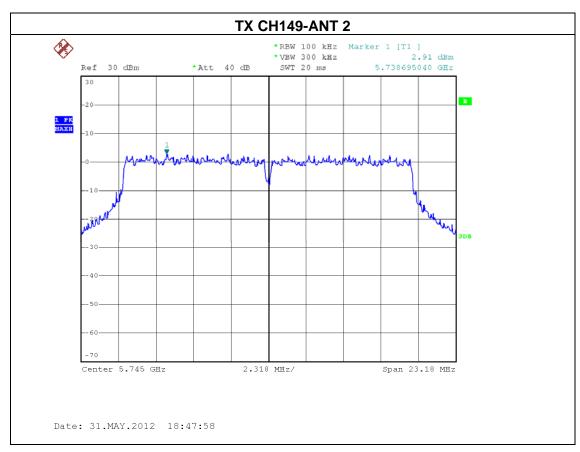




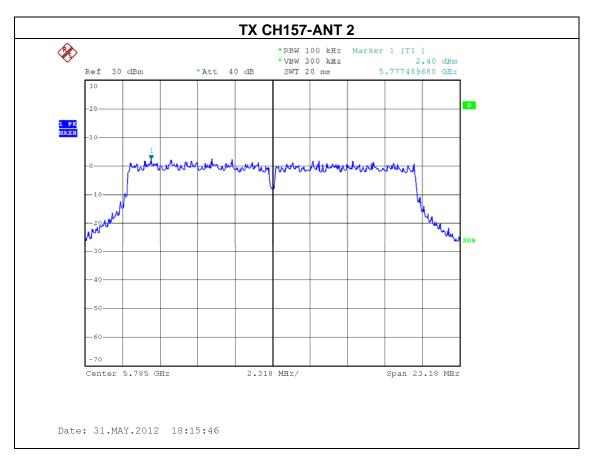
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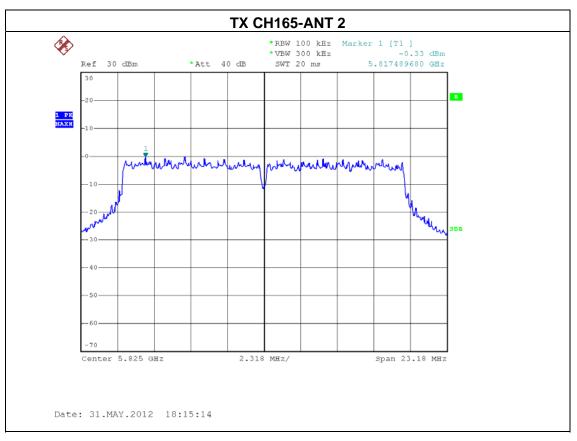














EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AGN-US
Temperature:	<b>23</b> ℃	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N40 Mode /CH151, CH159		

ANT 1					
Test Channel	Frequency	Power Density	LIMIT		
	(MHz)	(dBm)	(dBm)		
CH151	5755 MHz	-15.25	8		
CH159	5795 MHz	-17.02	8		

ANT 2					
Test Channel	Frequency	Power Density	LIMIT		
	(MHz)	(dBm)	(dBm)		
CH151	5755 MHz	-17.10	8		
CH159	5795 MHz	-17.49	8		

Antenna Amphenol-SAA (ANT 1+ ANT 2)					
Test Channel	Frequency	Power Density	LIMIT		
	(MHz)	(dBm)	(dBm)		
CH151	5755 MHz	-13.07	7.6		
CH159	5795 MHz	-14.24	7.6		

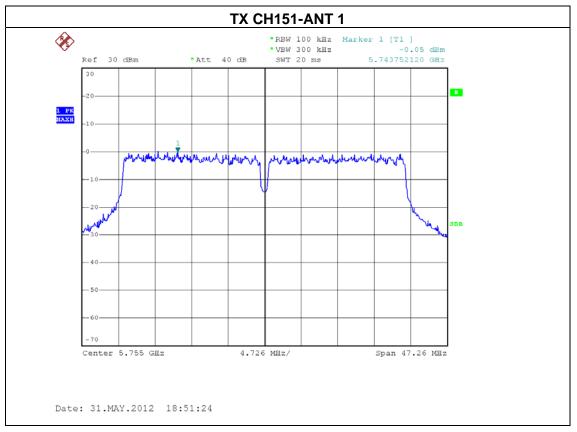
Note: DWCF (dB) =  $10 \log (3K/100K) = -15.2dB$ 

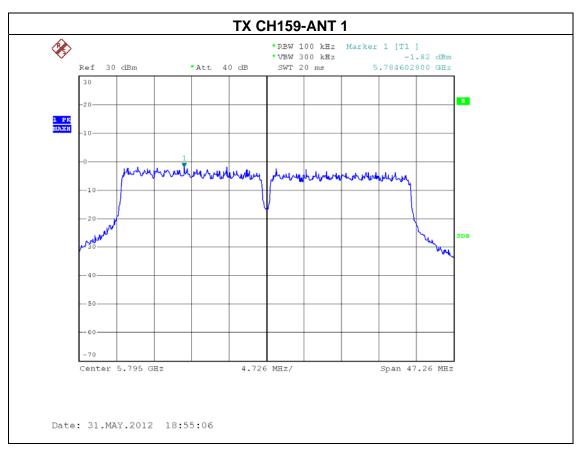
#### Remark:

- (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 30-6.4+6=29.6; and power density limit is 8-6.4+6=7.6

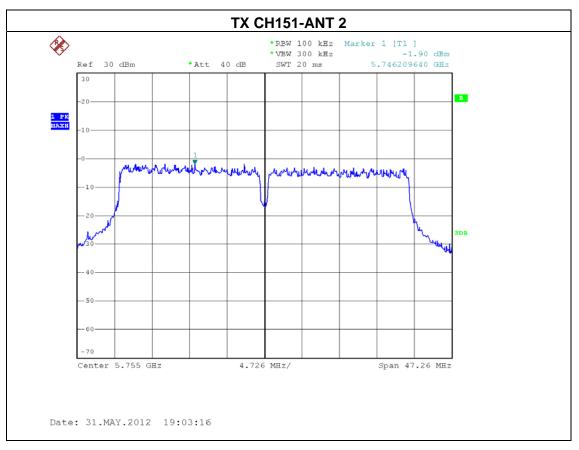
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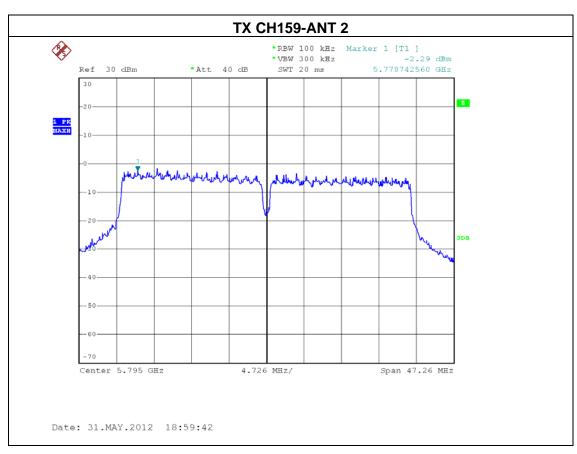














#### 9. EUT TEST PHOTO

#### **Conducted Measurement Photos**

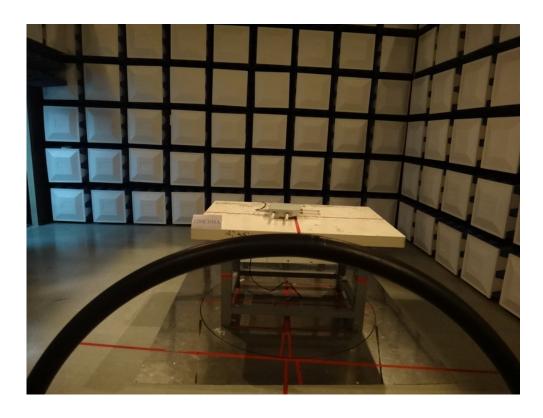


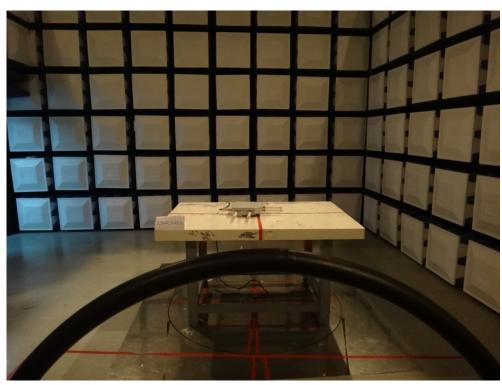


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### Radiated Measurement Photos 9K~30MHz



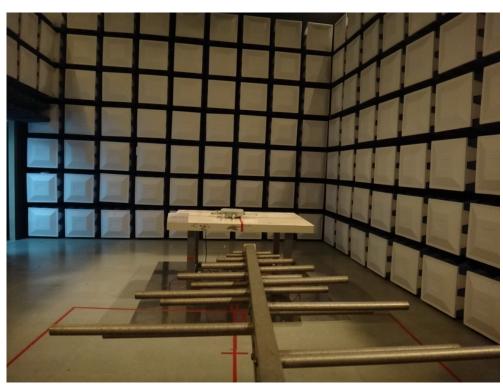


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### Radiated Measurement Photos 30~1000MHz





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## Radiated Measurement Photos ABOVE 1G





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