FCC&IC Radio Test Report

FCC ID: QISAP6510DN-AGN
IC: 6369A-AP6510DN

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

Issued Date	:	Nov. 25, 2013
Project No.	:	1204C047F
Equipment	:	Outdoor Wireless LAN Access Point
Model Name	:	AP6510DN-AGN-US
Applicant	:	Huawei Technologies Co.,Ltd.
Address for FCC	:	Administration Building, Headquarters of Huawei Technologies Co., Ltd., Bantian, Longgang District, Shenzhen China
Address for IC	:	Administration Building, Headquarters of Huawei Technologies Co., Ltd.,Bantian, Longgang District,Shenzhen 518129 China

Tested by: Neutron Engineering Inc. EMC Laboratory

Date of Receipt: Apr. 17, 2012, Oct. 29, 2013

Date of Test: Apr. 17, 2012 ~ Jul. 17, 2012,
Oct. 29, 2013 ~ Nov. 22, 2013

Testing Engineer : David Mao
(David Mao)

Technical Manager : Leo Hung
(Leo Hung)

Authorized Signatory : Steven Lu
(Steven Lu)

Neutron Engineering Inc.
No.3,Jinshagang 1st Road, ShiXia,
Dalang Town, Dong Guan, China.
TEL: 0769-8318-3000
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Declaration

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

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

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REPORT ISSUED HISTORY

Issued No.	Description	Issued Date
NEI-FICP-3-1204C047B	Original Report.	Jul. 18, 2012
NEI-FICP-3-1204C047F	Compared with the previous report (NEI-FICP-3-1204C047B), differences as follow: Add a new antenna application, which has a reduced gain. The conducted power specifications are not changed. So, only the Radiated Emissions are performed additionally, other test results are remained and directly quoted into this report.See relevant test results for detailed.	Nov. 25, 2013

1. CERTIFICATION

Equipment	:	Outdoor Wireless LAN Access Point
Brand Name	:	HUAWEI
Model Name	:	AP6510DN-AGN-US
Applicant	:	Huawei Technologies Co.,Ltd.
Manufacturer	:	Huawei Technologies Co.,Ltd.
Address	:	Administration Building, Huawei Base, Bantian, Longgang District ,Shenzhen 518129, P.R.China
Factory	:	Huawei Technologies Co.,Ltd.
Address	:	Huawei Base, Bantian, Longgang District, Shenzhen 518129, P.R.China
Date of Test	:	Apr. 17, 2012 ~ Jul. 17, 2012, Oct. 29, 2013 ~ Nov. 22, 2013
Test Item	:	ENGINEERING SAMPLE
Standard(s)	:	FCC Part15, Subpart E(15.407) / ANSI C63.4 : 2009; Canada RSS-210:2010 RSS-GEN Issue 3, Dec 2010 FCC KDB 789033 D01 General UNII Test Procedures v01r03.

The above equipment has been tested and found compliance with the requirement of the relative standards by Neutron Engineering Inc. EMC Laboratory.
The test data, data evaluation, and equipment configuration contained in our test report (Ref No. NEI-FICP-3-1204C047F) were obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of TAF according to the ISO-17025 quality assessment standard and technical standard(s).

Test result included in this report is only for the 5250MHz~5350MHz; 5470~5725MHz Mode part of the product.

2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

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

NOTE:

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

2.1 TEST FACILITY

The test facilities used to collect the test data in this report is **DG-C02/DG-CB03** at the location of No.3,Jinshagang 1st Road, ShiXia, Dalang Town, Dong Guan, China.523792
Neutron's test firm number for FCC: 319330
Neutron's test firm number for IC: 4428B-1

2.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement **y** ± **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**%。

A. Conducted Measurement :

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

B. Radiated Measurement :

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

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

<table>
<tr><td>Equipment</td><td>Outdoor Wireless LAN Access Point</td></tr>
<tr><td>Brand Name</td><td>HUAWEI</td></tr>
<tr><td>Model Name</td><td>AP6510DN-AGN-US</td></tr>
<tr><td>Mode Different</td><td>N/A</td></tr>
<tr><td>Product Description</td><td>
<table>
<tr><td>Operation Frequency</td><td>Band 2:5250MHz~5350MHz
Band 3:5470MHz~5725MHz</td></tr>
<tr><td>Modulation Type</td><td>OFDM</td></tr>
<tr><td>Bit Rate of Transmitter</td><td>300Mbps</td></tr>
<tr><td>Antenna Designation</td><td rowspan="2">Please see note 3.(Page 10)</td></tr>
<tr><td>Antenna Gain(Peak)</td></tr>
<tr><td>Output Power:
Band 2</td><td>802.11a: 21.05 dBm
802.11n 20M: 17.59 dBm (ANT 1)
802.11n 20M: 15.48 dBm (ANT 2)
802.11n 20M: 19.55 dBm
(ANT 1+ANT 2)
802.11n 40M: 17.66dBm (ANT 1)
802.11n 40M: 16.16 dBm (ANT 2)
802.11n 40M: 20.28 dBm
(ANT 1+ANT 2)</td></tr>
<tr><td>Output Power:
Band 3</td><td>802.11a: 21.25 dBm
802.11n 20M: 17.96 dBm (ANT 1)
802.11n 20M: 16.33 dBm (ANT 2)
802.11n 20M: 19.98 dBm
(ANT 1+ANT 2)
802.11n 40M: 17.96dBm (ANT 1)
802.11n 40M: 15.78 dBm (ANT 2)
802.11n 40M: 20.02 dBm
(ANT 1+ANT 2)</td></tr>
</table>
More details of EUT technical specification, please refer to the User's Manual.
</td></tr>
<tr><td>Power Source</td><td>Supplied from PoE.
PoE model: PR60A-TOE-L-01</td></tr>
<tr><td>Power Rating</td><td>I/P: AC 100-240V 1.5A 47-63Hz O/P: DC 48V 1.2A</td></tr>
<tr><td>Connecting I/O Port(s)</td><td>Please refer to the User's Manual.</td></tr>
</table>

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

2. Channel List:

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

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

3. Table for Filed Antenna:

Original Antenna

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 24-6.4+6=23.6; and power density limit is 11-6.4+6=10.6

New Antenna

Ant.	Manufacturer	Model Name	Antenna Type / Connector	Gain (dBi)	Note
1	Guangdong Shenglu Telecommunication Tech. Co., LTD.	SL10671A	Isotropic Antenna / N Male	5.9	TX/RX
2	Guangdong Shenglu Telecommunication Tech. Co., LTD.	SL10671A	Isotropic Antenna / N Male	5.9	TX/RX

4.

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

Note: The EUT support 1TX and 2TX, 2TX is found to be the worst case and recorded.

3.2 DESCRIPTION OF TEST MODES

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

Pretest Test Mode	Description
Mode 1	TX A Mode / CH52, CH60, CH64(Band 2) TX A Mode / CH100, CH112, CH140(Band 3)
Mode 2	TX A Mode / CH52, CH60, CH64(Band 2) TX A Mode / CH100, CH112, CH140(Band 3)
Mode 3	TX N40 Mode / CH54, CH62 (Band 2) TX N40 Mode/CH102, CH110 (Band 3)
Mode 4	TX Mode

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

For Conducted Test	
Final Test Mode	Description
Mode 4	TX Mode

For Radiated Test	
Final Test Mode	Description
Mode 1	TX A Mode / CH52, CH60, CH64(Band 2) TX A Mode / CH100, CH112, CH140(Band 3)
Mode 2	TX A Mode / CH52, CH60, CH64(Band 2) TX A Mode / CH100, CH112, CH140(Band 3)
Mode 3	TX N40 Mode / CH54, CH62 (Band 2) TX N40 Mode/CH102, CH110 (Band 3)

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

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

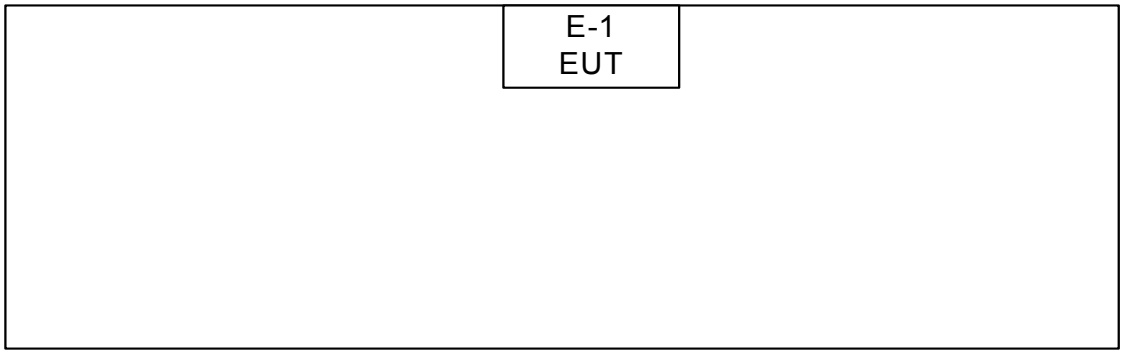
Test software version	N/A		
Frequency	5260 MHz	5280 MHz	5320 MHz
A Mode	17	17	17
Frequency	5500 MHz	5560 MHz	5700 MHz
A Mode	17	17	17

Test software version	N/A		
Frequency	5260 MHz	5280 MHz	5320 MHz
N20 Mode	17	17	17
Frequency	5500 MHz	5560 MHz	5700 MHz
N20 Mode	17	17	18

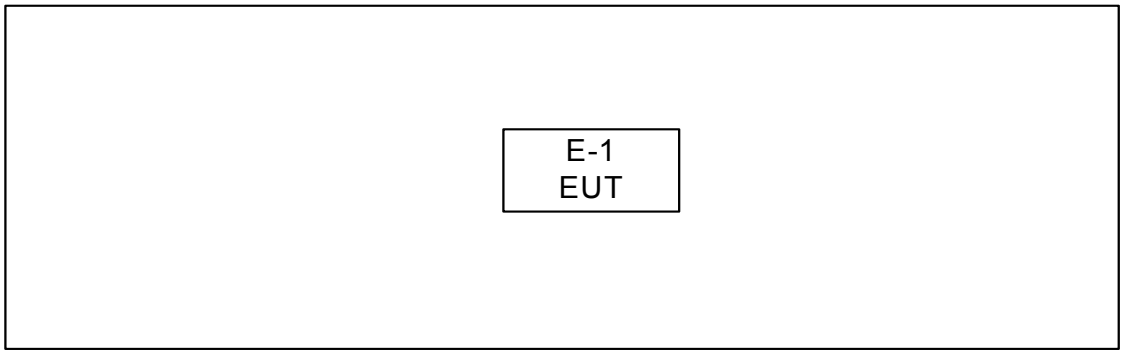
Test software version	N/A		
Frequency	5270 MHz	5310 MHz	
N40 Mode	17	13	
Frequency	5510 MHz	5550 MHz	
N40M Mode	14	13	

3.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

Conducted TX Mode:



Radiated TX Mode:



3.5 DESCRIPTION OF SUPPORT UNITS

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

Item	Equipment	Mfr/Brand	Model/Type No.	FCC ID/IC	Series No.	Note
E-1	Outdoor Wireless LAN Access Point	HUAWEI	AP6510DN-AGN-US	FCC ID:QISAP6510DN-AGN IC: 6369A-AP6510DN	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 『Length』 column.

4. EMC EMISSION TEST

4.1 CONDUCTED EMISSION MEASUREMENT

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

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

Note:

(1) The tighter limit applies at the band edges.

(2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

4.1.2 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	LISN	EMCO	3816/2	00052765	Apr. 25, 2014
2	LISN	R&S	ENV216	100087	Nov. 09, 2014
3	Test Cable	N/A	C_17	N/A	Mar.15, 2014
4	EMI TEST RECEIVER	R&S	ESCS30	826547/022	Apr. 25, 2014
5	50Ω Terminator	SHX	TF2-3G-A	08122902	Apr. 25, 2014

Remark: “N/A” denotes no model name, serial no. or calibration specified.
All calibration period of equipment list is one year.

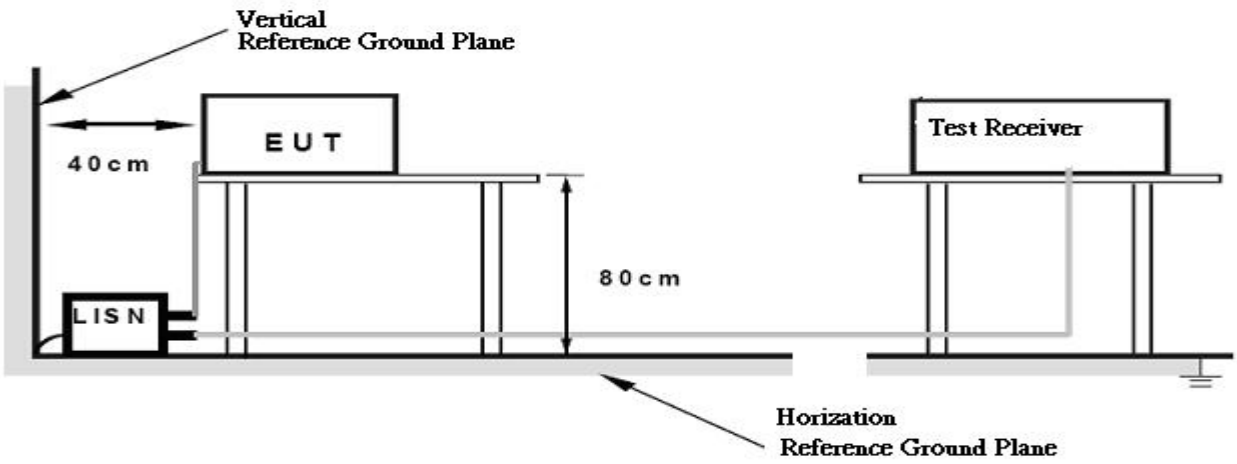
4.1.3 TEST PROCEDURE

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

4.1.4 DEVIATION FROM TEST STANDARD

No deviation

4.1.5 TEST SETUP



4.1.6 EUT OPERATING CONDITIONS

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.
The EUT was programmed to be in continuously transmitting/TX Mode mode.

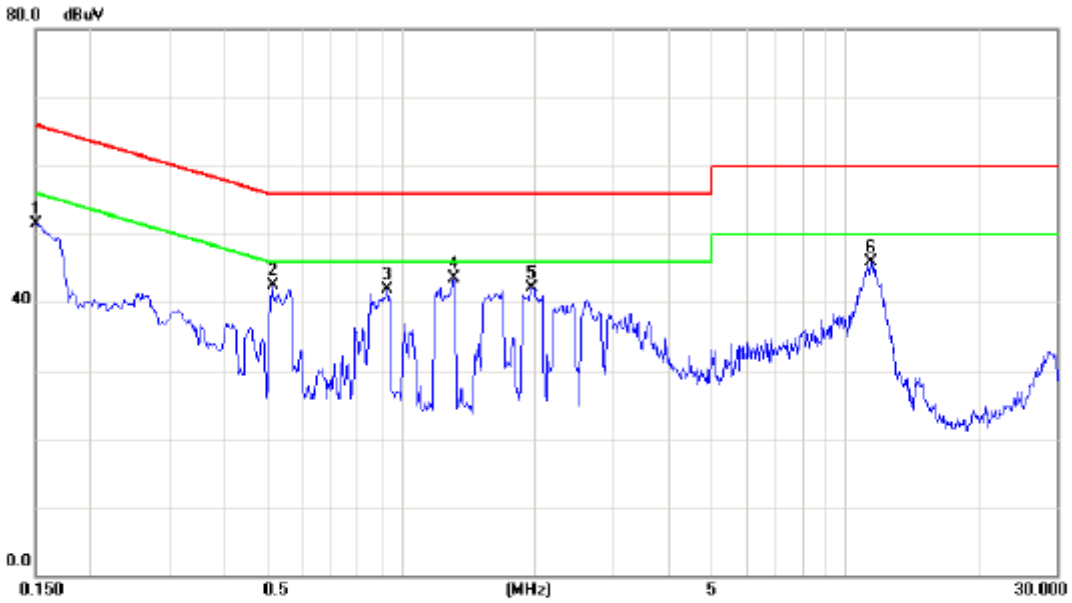
4.1.7 TEST RESULTS

Remark:

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

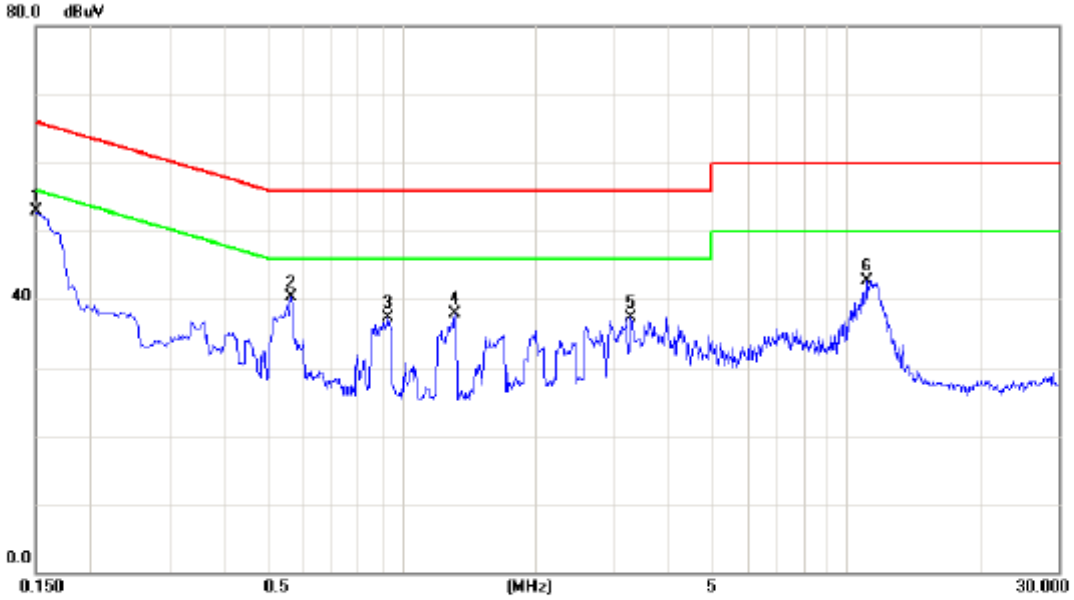
(2) Measuring frequency range from 150KHz to 30MHz ◦

EUT:	Outdoor Wireless LAN Access Point	Model Name:	AP6510DN-AGN-US
Temperature:	24 ℃	Relative Humidity:	55 %
Test Power:	AC 120V/60Hz	Phase:	Line
Test Mode :	TX Mode		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1500	41.61	9.98	51.59	66.00	-14.41	peak	
2		0.5140	32.43	10.01	42.44	56.00	-13.56	peak	
3		0.9380	31.74	10.10	41.84	56.00	-14.16	peak	
4	*	1.3220	33.43	10.09	43.52	56.00	-12.48	peak	
5		1.9780	32.14	10.03	42.17	56.00	-13.83	peak	
6		11.4740	35.58	10.39	45.97	60.00	-14.03	peak	

EUT:	Outdoor Wireless LAN Access Point	Model Name:	AP6510DN-AGN-US
Temperature:	24 ℃	Relative Humidity:	55 %
Test Power:	AC 120V/60Hz	Phase:	Neutral
Test Mode :	TX Mode		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.1500	43.02	9.83	52.85	66.00	-13.15	peak	
2		0.5660	30.35	9.92	40.27	56.00	-15.73	peak	
3		0.9340	27.35	9.99	37.34	56.00	-18.66	peak	
4		1.3180	27.89	10.03	37.92	56.00	-18.08	peak	
5		3.2780	27.25	10.15	37.40	56.00	-18.60	peak	
6		11.1420	32.25	10.48	42.73	60.00	-17.27	peak	

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

Notes:

(1) The limit for radiated test was performed according to FCC PART 15C.

(2) The tighter limit applies at the band edges.

LIMITS OF UNWANTED EMISSION OUT OF THE RESTRICTED BANDS

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

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

$$E=\frac{1000000\sqrt{30P}}{3}$$ μV/m, where P is the eirp (Watts)

4.2.2 MEASUREMENT INSTRUMENTS LIST

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

Remark: “N/A” denotes no model name, serial no. or calibration specified.
All calibration period of equipment list is one year.

4.2.3 TEST PROCEDURE

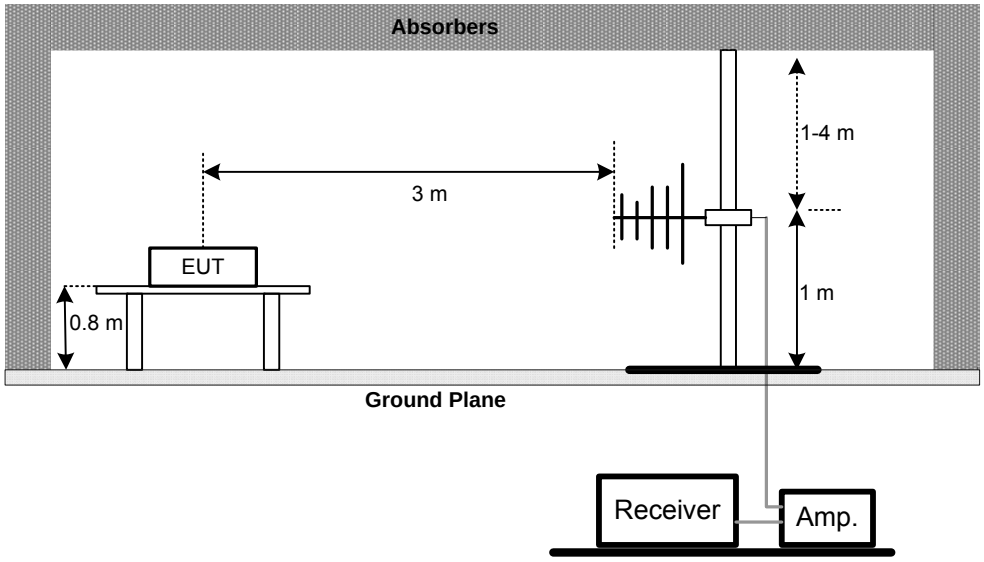
a. The measuring distance of at 1.5m shall be used for measurements at frequency up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.
b. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated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

4.2.4 DEVIATION FROM TEST STANDARD

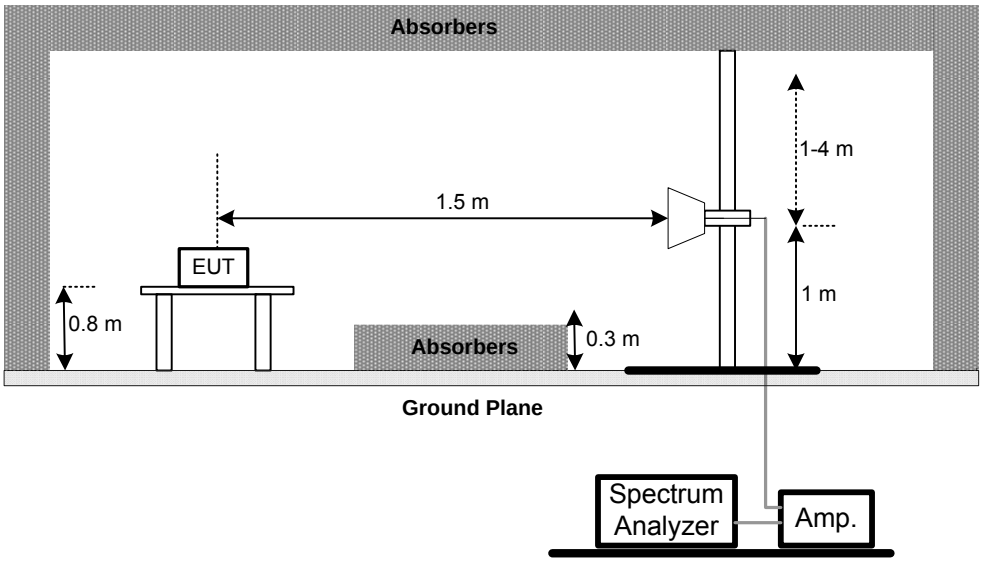
No deviation

4.2.5 TEST SETUP

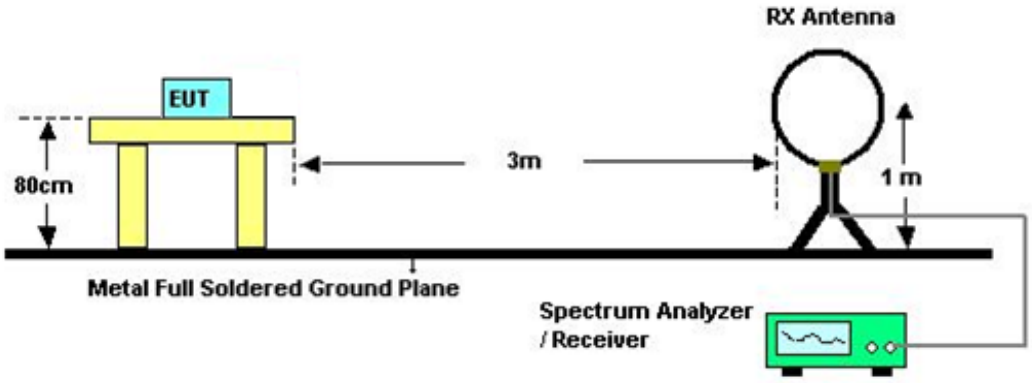
Radiated Emission Test Set-Up Frequency30 - 1000MHz



Radiated Emission Test Set-Up Frequency Above 1 GHz



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.

4.2.7 TEST RESULTS (BELOW 30MHZ)

EUT:	Outdoor Wireless LAN Access Point	Model Name:	AP6510DN-AGN-US
Temperature:	25 ℃	Relative Humidity:	58 %
Test Voltage:	AC 120V/60Hz		
Test Mode:	TX MODE		

Freq. (MHz)	Ant. 0°/90°	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
0.0093	0°	17.35	24.30	41.65	128.27	-78.00	AVG
0.0093	0°	19.86	24.30	44.16	148.27	-94.13	PK
0.0128	0°	18.05	24.30	42.35	125.49	-72.64	AVG
0.0128	0°	20.74	24.30	45.04	145.49	-90.12	PK
0.0263	0°	17.72	23.90	41.62	119.19	-71.89	AVG
0.0263	0°	20.44	23.90	44.34	139.19	-89.16	PK
0.0385	0°	18.14	23.13	41.27	115.90	-69.40	AVG
0.0385	0°	20.67	23.13	43.80	135.90	-84.95	PK
0.4219	0°	18.32	19.99	38.31	95.10	-58.43	AVG
0.4219	0°	20.78	19.99	40.77	115.10	-75.09	PK
1.2635	0°	19.56	19.57	39.13	65.57	-16.93	QP

Freq. (MHz)	Ant. 0°/90°	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
0.0098	90°	18.26	24.30	42.56	127.82	-84.81	AVG
0.0098	90°	20.59	24.30	44.89	147.82	-102.03	PK
0.0252	90°	17.62	23.97	41.59	119.58	-82.07	AVG
0.0252	90°	20.09	23.97	44.06	139.58	-99.76	PK
0.0316	90°	19.11	23.57	42.68	117.61	-71.94	AVG
0.0316	90°	20.54	23.57	44.11	137.61	-89.27	PK
0.0434	90°	18.16	22.82	40.98	114.85	-67.37	AVG
0.0434	90°	20.95	22.82	43.77	134.85	-84.45	PK
0.2775	90°	17.35	20.33	37.68	98.74	-55.72	AVG
0.2775	90°	20.67	20.33	41.00	118.74	-72.26	PK
1.6820	90°	18.52	19.53	38.05	63.09	-18.69	QP

Remark：

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

4.2.8 TEST RESULTS-BETWEEN 30MHZ - 1000MHZ

Remark:

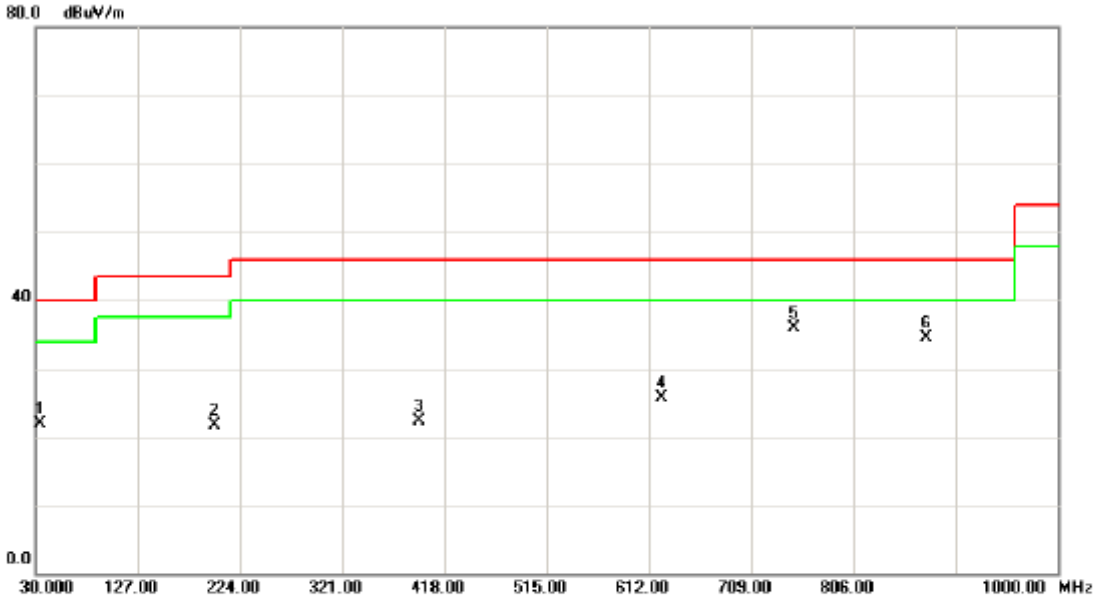
(1) Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode or Peak Mode with Detector BW=120KHz ; SPA setting in RBW=120KHz, VBW =120KHz, Swp. Time = 0.3 sec./MHz ◦

(2) 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 ◦

(3) Measuring frequency range from 30MHz to 1000MHz ◦

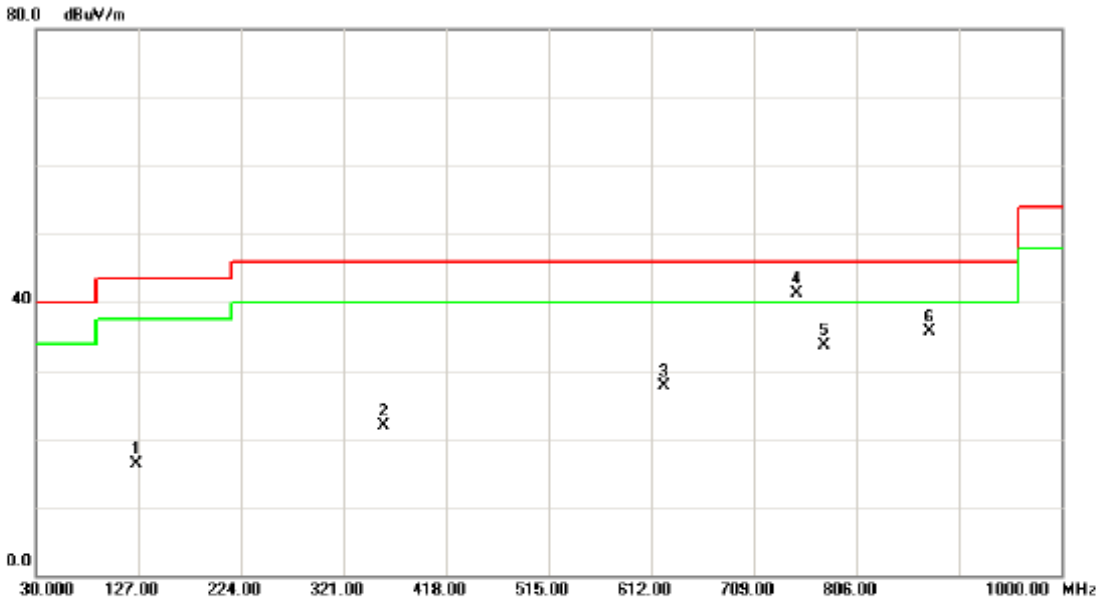
(4) If the peak scan value lower limit more than 20dB, then this signal data does not show in table ◦

EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6510DN-AGN-US
Temperature:	25℃	Relative Humidity:	58 %
Test Voltage :	AC 120V/60Hz	Phase:	Vertical
Test Mode :	Band 2/TX A Mode 5260MHz		



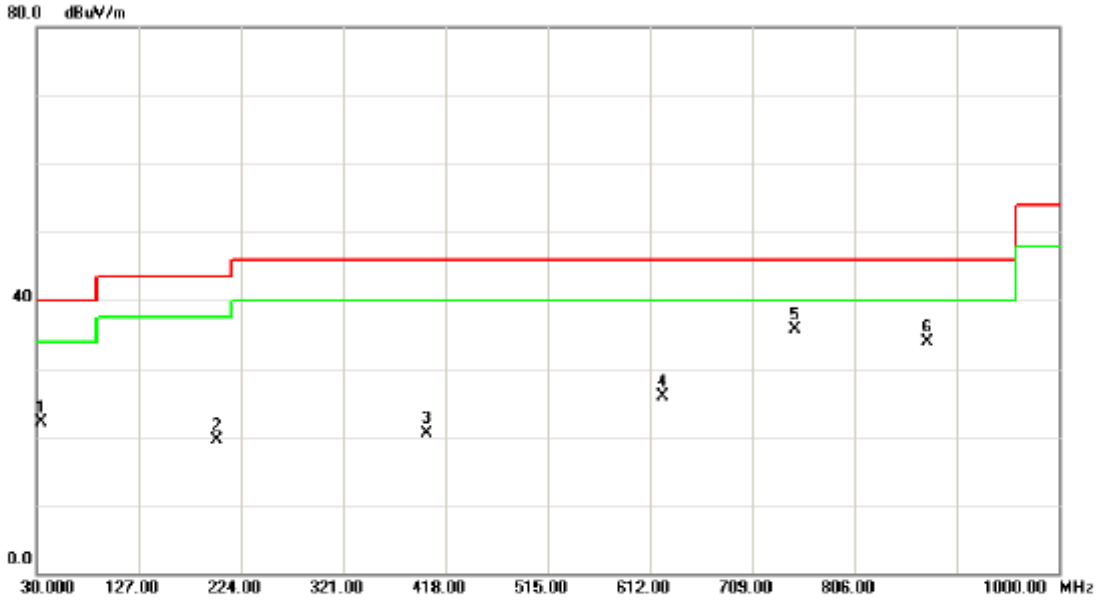
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		34.8500	37.29	-15.33	21.96	40.00	-18.04	peak	
2		199.7500	36.89	-15.18	21.71	43.50	-21.79	peak	
3		393.7500	32.36	-10.08	22.28	46.00	-23.72	peak	
4		624.6100	32.50	-6.86	25.64	46.00	-20.36	peak	
5	*	749.7400	40.84	-4.91	35.93	46.00	-10.07	peak	
6		874.8700	37.02	-2.48	34.54	46.00	-11.46	peak	

EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6510DN-AGN-US
Temperature:	25℃	Relative Humidity:	58 %
Test Voltage :	AC 120V/60Hz	Phase:	Horizontal
Test Mode :	Band 2/TX A Mode 5260MHz		



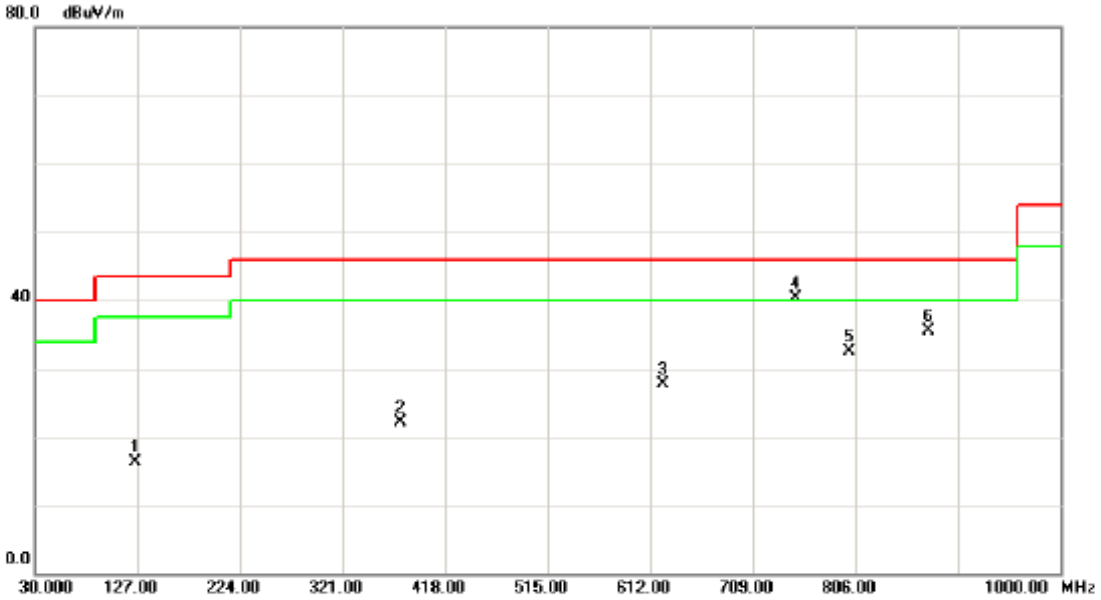
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		125.0600	29.95	-13.61	16.34	43.50	-27.16	peak	
2		358.8300	33.00	-11.18	21.82	46.00	-24.18	peak	
3		624.6100	34.66	-6.86	27.80	46.00	-18.20	peak	
4	*	749.7400	46.23	-4.91	41.32	46.00	-4.68	peak	
5		774.9600	37.74	-4.01	33.73	46.00	-12.27	peak	
6		874.8700	38.22	-2.48	35.74	46.00	-10.26	peak	

EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6510DN-AGN-US
Temperature:	25℃	Relative Humidity:	58 %
Test Voltage :	AC 120V/60Hz	Phase:	Vertical
Test Mode :	Band 2/TX A Mode 5280MHz		



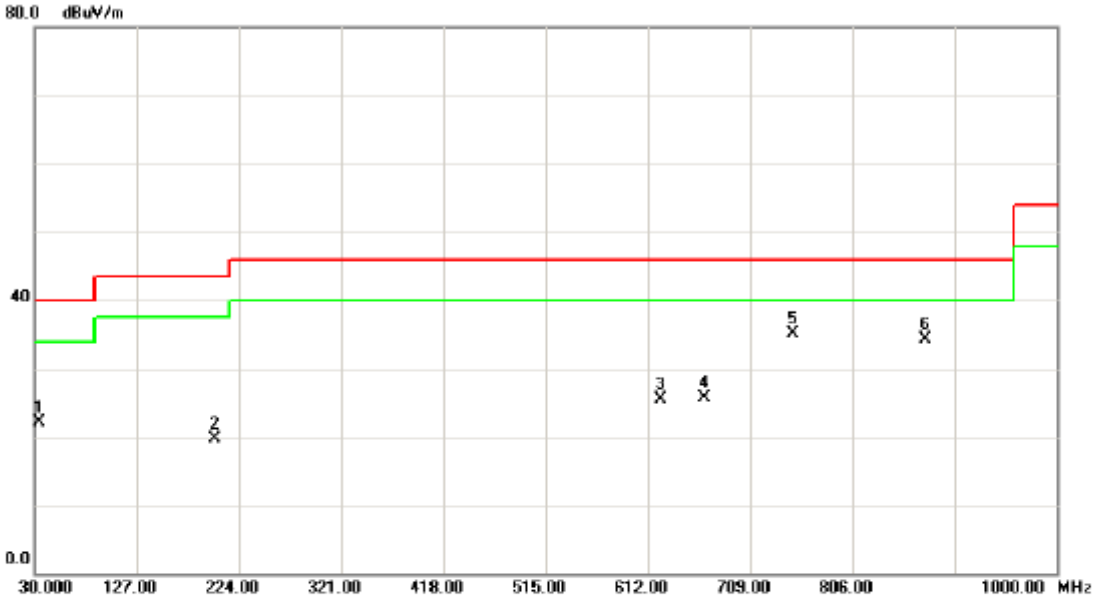
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		34.8500	37.36	-15.33	22.03	40.00	-17.97	peak	
2		200.7200	34.75	-15.21	19.54	43.50	-23.96	peak	
3		400.5400	30.43	-9.87	20.56	46.00	-25.44	peak	
4		624.6100	32.74	-6.86	25.88	46.00	-20.12	peak	
5	*	749.7400	40.61	-4.91	35.70	46.00	-10.30	peak	
6		874.8700	36.39	-2.48	33.91	46.00	-12.09	peak	

EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6510DN-AGN-US
Temperature:	25℃	Relative Humidity:	58 %
Test Voltage :	AC 120V/60Hz	Phase:	Horizontal
Test Mode :	Band 2/TX A Mode 5280MHz		



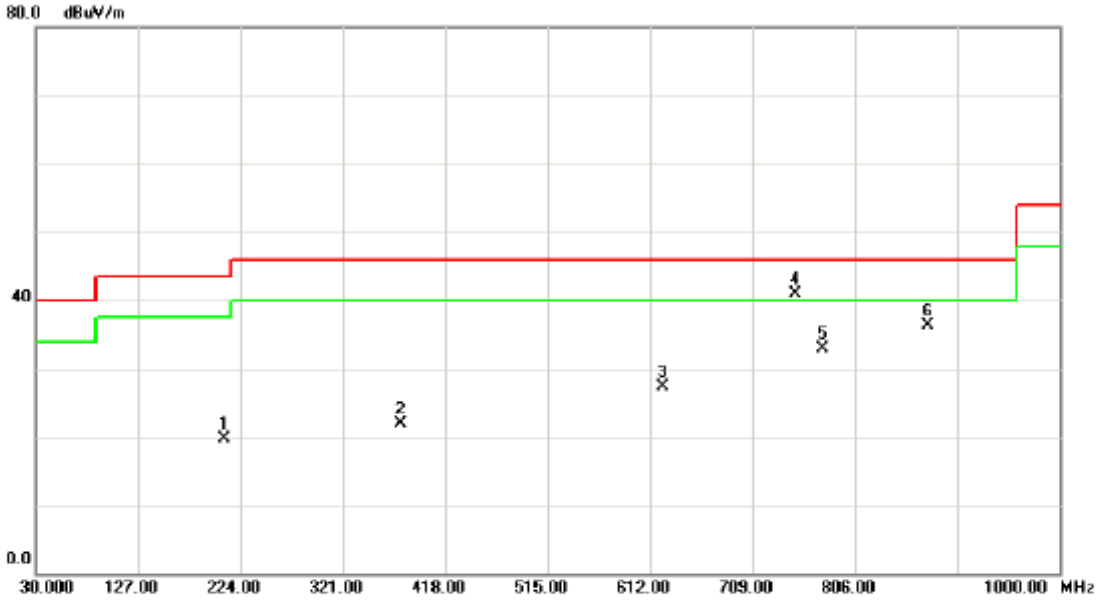
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		125.0600	29.86	-13.61	16.25	43.50	-27.25	peak	
2		375.3200	32.83	-10.66	22.17	46.00	-23.83	peak	
3		624.6100	34.49	-6.86	27.63	46.00	-18.37	peak	
4	*	749.7400	45.22	-4.91	40.31	46.00	-5.69	peak	
5		800.1800	35.55	-3.11	32.44	46.00	-13.56	peak	
6		874.8700	37.95	-2.48	35.47	46.00	-10.53	peak	

EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6510DN-AGN-US
Temperature:	25℃	Relative Humidity:	58 %
Test Voltage :	AC 120V/60Hz	Phase:	Vertical
Test Mode :	Band 2/TX A Mode 5320MHz		



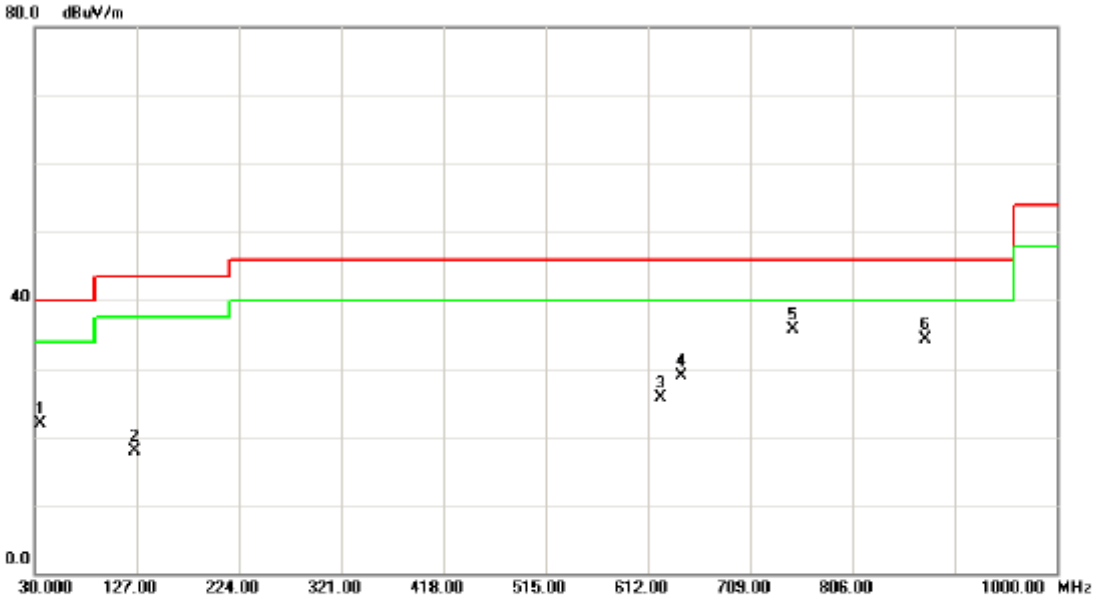
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		34.8500	37.49	-15.33	22.16	40.00	-17.84	peak	
2		200.7200	34.92	-15.21	19.71	43.50	-23.79	peak	
3		624.6100	32.34	-6.86	25.48	46.00	-20.52	peak	
4		665.3500	31.06	-5.34	25.72	46.00	-20.28	peak	
5	*	749.7400	40.10	-4.91	35.19	46.00	-10.81	peak	
6		874.8700	36.75	-2.48	34.27	46.00	-11.73	peak	

EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6510DN-AGN-US
Temperature:	25℃	Relative Humidity:	58 %
Test Voltage :	AC 120V/60Hz	Phase:	Horizontal
Test Mode :	Band 2/TX A Mode 5320MHz		



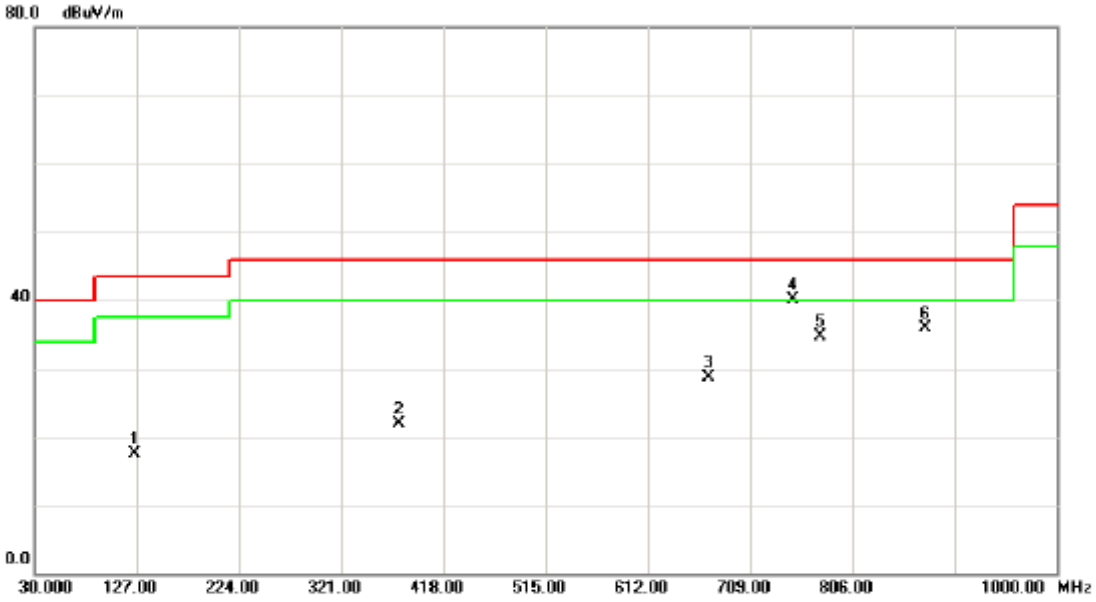
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		209.4500	35.03	-15.25	19.78	43.50	-23.72	peak	
2		375.3200	32.56	-10.66	21.90	46.00	-24.10	peak	
3		624.6100	34.23	-6.86	27.37	46.00	-18.63	peak	
4	*	749.7400	45.74	-4.91	40.83	46.00	-5.17	peak	
5		774.9600	36.89	-4.01	32.88	46.00	-13.12	peak	
6		874.8700	38.77	-2.48	36.29	46.00	-9.71	peak	

EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6510DN-AGN-US
Temperature:	25℃	Relative Humidity:	58 %
Test Voltage :	AC 120V/60Hz	Phase:	Vertical
Test Mode :	Band 2/TX A Mode 5500MHz		



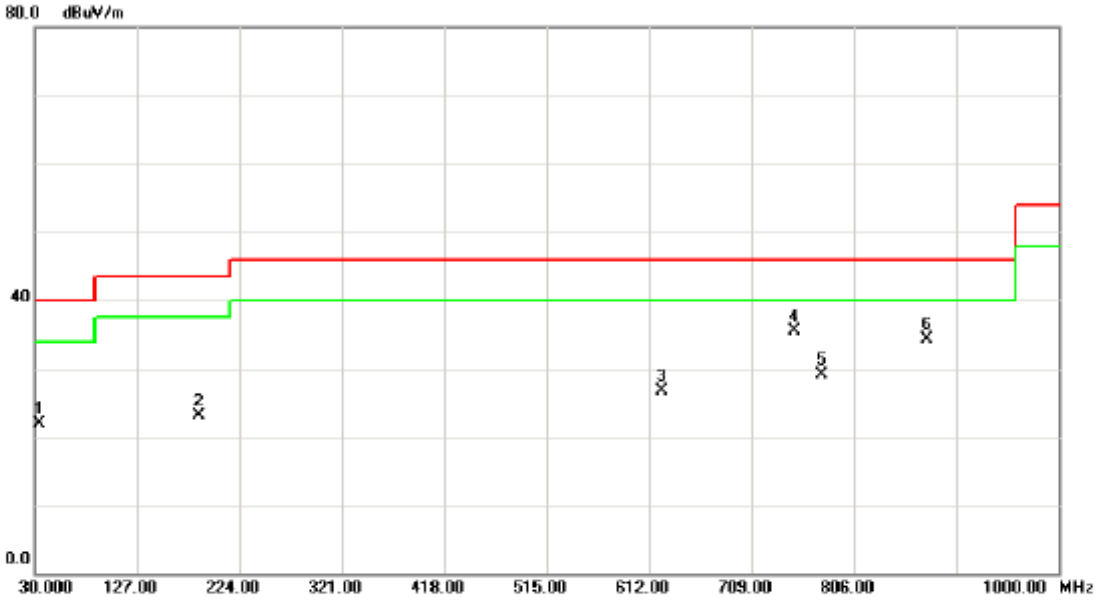
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		35.8200	37.11	-15.13	21.98	40.00	-18.02	peak	
2		125.0600	31.52	-13.61	17.91	43.50	-25.59	peak	
3		624.6100	32.54	-6.86	25.68	46.00	-20.32	peak	
4		644.0100	34.74	-5.87	28.87	46.00	-17.13	peak	
5	*	749.7400	40.56	-4.91	35.65	46.00	-10.35	peak	
6		874.8700	36.74	-2.48	34.26	46.00	-11.74	peak	

EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6510DN-AGN-US
Temperature:	25℃	Relative Humidity:	58 %
Test Voltage :	AC 120V/60Hz	Phase:	Horizontal
Test Mode :	Band 2/TX A Mode 5500MHz		



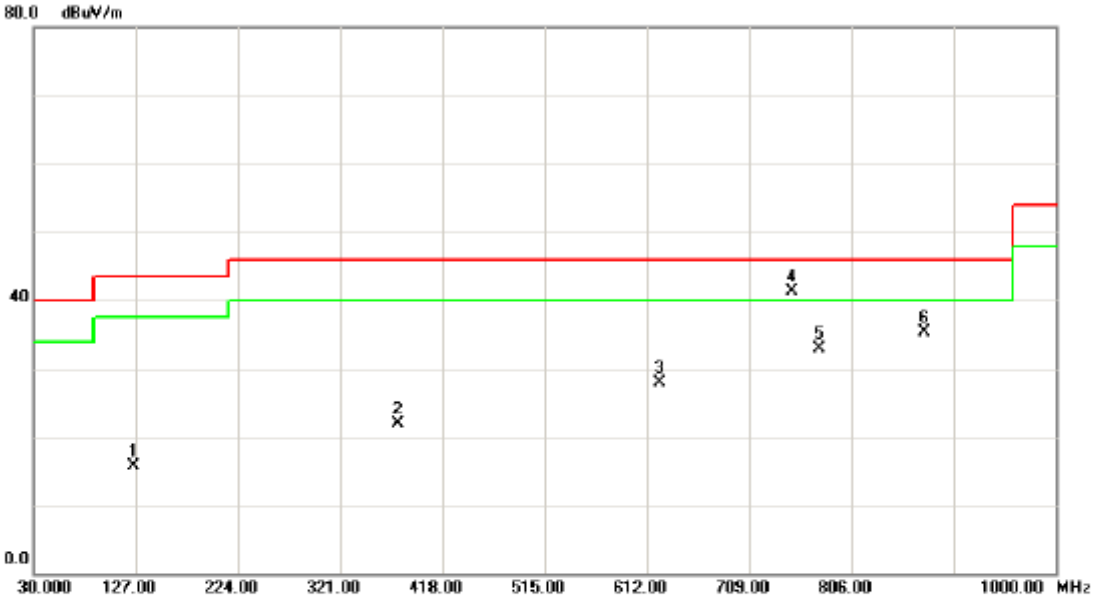
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		125.0600	31.02	-13.61	17.41	43.50	-26.09	peak	
2		375.3200	32.50	-10.66	21.84	46.00	-24.16	peak	
3		669.2300	33.91	-5.28	28.63	46.00	-17.37	peak	
4	*	749.7400	45.07	-4.91	40.16	46.00	-5.84	peak	
5		774.9600	38.62	-4.01	34.61	46.00	-11.39	peak	
6		874.8700	38.39	-2.48	35.91	46.00	-10.09	peak	

EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6510DN-AGN-US
Temperature:	25℃	Relative Humidity:	58 %
Test Voltage :	AC 120V/60Hz	Phase:	Vertical
Test Mode :	Band 2/TX A Mode 5560MHz		



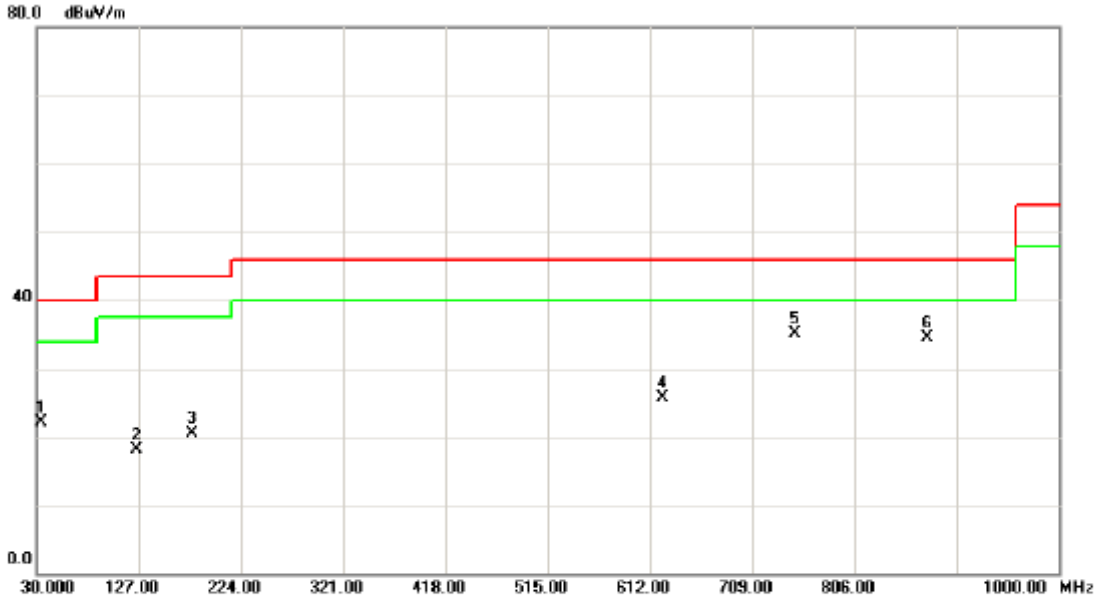
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		34.8500	37.22	-15.33	21.89	40.00	-18.11	peak	
2		186.1700	36.84	-13.75	23.09	43.50	-20.41	peak	
3		624.6100	33.48	-6.86	26.62	46.00	-19.38	peak	
4	*	749.7400	40.49	-4.91	35.58	46.00	-10.42	peak	
5		774.9600	33.12	-4.01	29.11	46.00	-16.89	peak	
6		874.8700	36.71	-2.48	34.23	46.00	-11.77	peak	

EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6510DN-AGN-US
Temperature:	25℃	Relative Humidity:	58 %
Test Voltage :	AC 120V/60Hz	Phase:	Horizontal
Test Mode :	Band 2/TX A Mode 5560MHz		



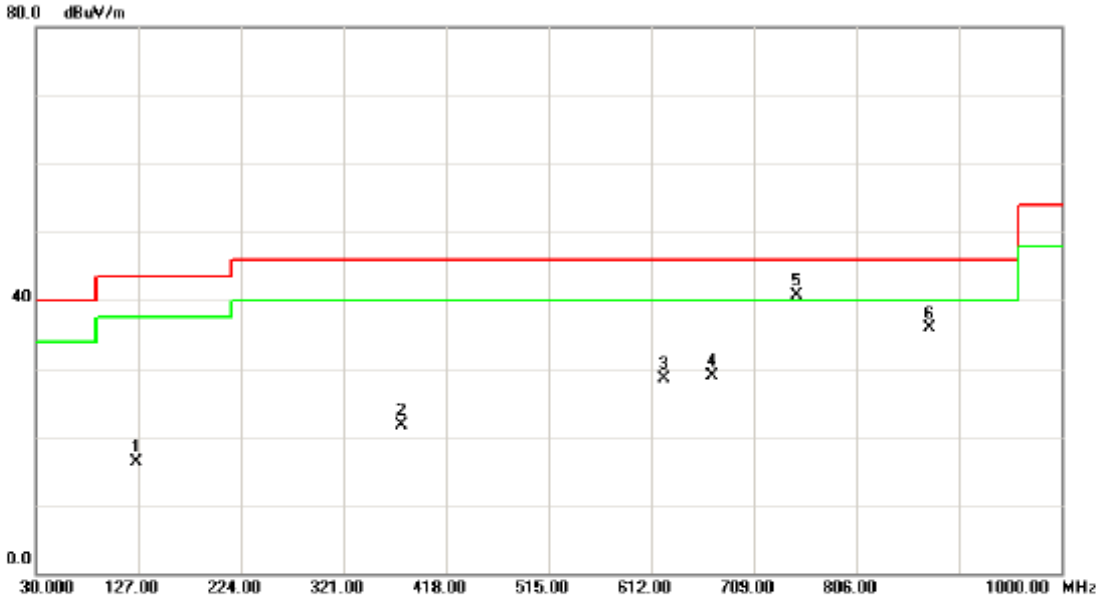
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		125.0600	29.41	-13.61	15.80	43.50	-27.70	peak	
2		375.3200	32.57	-10.66	21.91	46.00	-24.09	peak	
3		624.6100	34.68	-6.86	27.82	46.00	-18.18	peak	
4	*	749.7400	46.27	-4.91	41.36	46.00	-4.64	peak	
5		774.9600	36.98	-4.01	32.97	46.00	-13.03	peak	
6		874.8700	37.72	-2.48	35.24	46.00	-10.76	peak	

EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6510DN-AGN-US
Temperature:	25℃	Relative Humidity:	58 %
Test Voltage :	AC 120V/60Hz	Phase:	Vertical
Test Mode :	Band 2/TX A Mode 5700MHz		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		34.8500	37.48	-15.33	22.15	40.00	-17.85	peak	
2		125.0600	31.68	-13.61	18.07	43.50	-25.43	peak	
3		177.4400	33.22	-12.81	20.41	43.50	-23.09	peak	
4		624.6100	32.60	-6.86	25.74	46.00	-20.26	peak	
5	*	749.7400	39.95	-4.91	35.04	46.00	-10.96	peak	
6		874.8700	37.07	-2.48	34.59	46.00	-11.41	peak	

EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6510DN-AGN-US
Temperature:	25℃	Relative Humidity:	58 %
Test Voltage :	AC 120V/60Hz	Phase:	Horizontal
Test Mode :	Band 2/TX A Mode 5700MHz		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		125.0600	29.85	-13.61	16.24	43.50	-27.26	peak	
2		375.3200	32.30	-10.66	21.64	46.00	-24.36	peak	
3		624.6100	35.43	-6.86	28.57	46.00	-17.43	peak	
4		669.2300	34.25	-5.28	28.97	46.00	-17.03	peak	
5	*	749.7400	45.64	-4.91	40.73	46.00	-5.27	peak	
6		874.8700	38.32	-2.48	35.84	46.00	-10.16	peak	

4.2.9 TEST RESULTS - ABOVE 1000MHZ

EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6510DN-AGN-US
Temperature:	25°C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 2/ TX A Mode 5260MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		Note
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)									
5262.20	V	56.32	49.47	43.00	99.32	92.47	-5.45	-12.30					X/F
10520.70	V	36.24	26.18	15.88	52.12	42.06	-52.65	-62.71	68.30	54.00	-27.00	-41.30	X/H

Remark:

(1) Spectrum Setting : 30MHz – 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto

(2) All readings are Peak unless otherwise stated AV in column of『Note』. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.

(3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency。"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)

(4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission 。

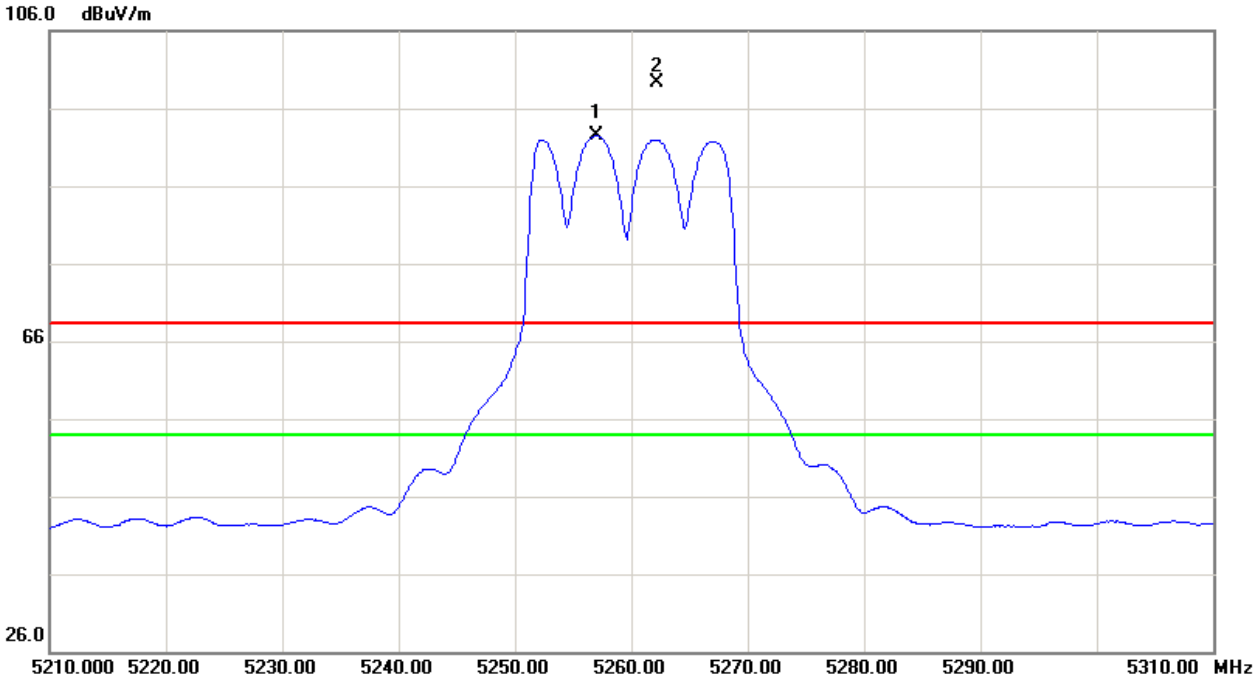
(5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

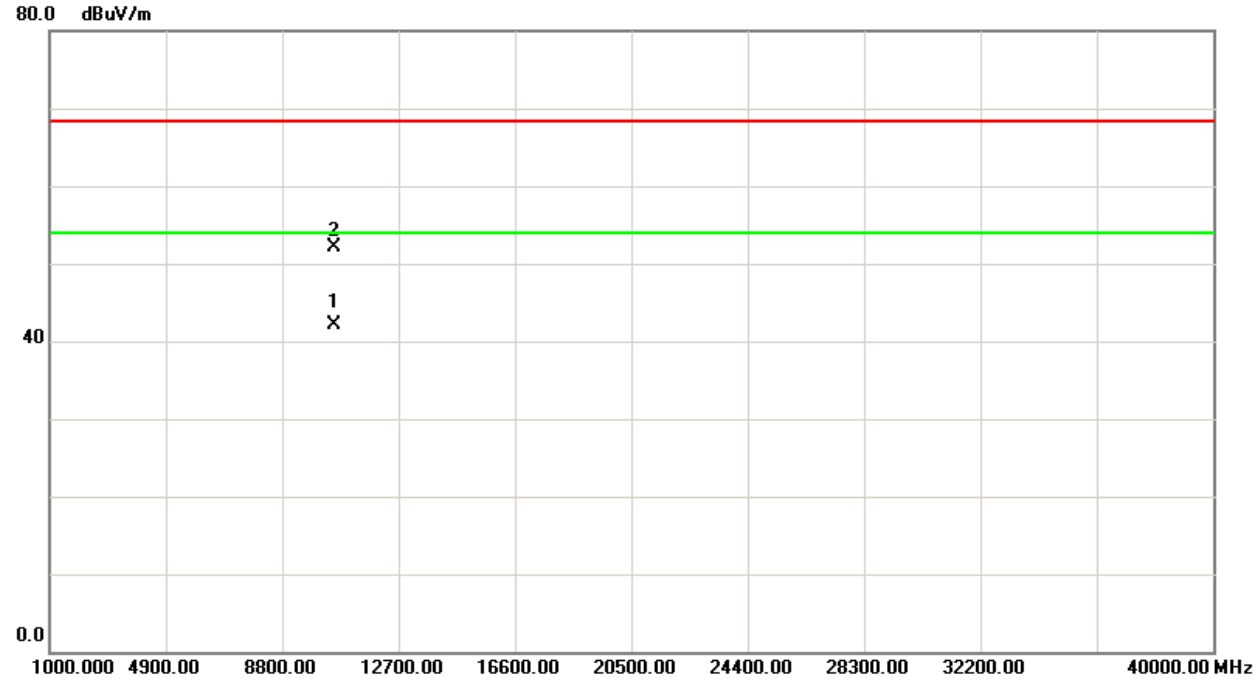
(6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(7) EUT Orthogonal Axes:
"X" - denotes Laid on Table；"Y" - denotes Vertical Stand；"Z" - denotes Side Stand

(8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Orthogonal Axis:X
Band 2/CH52(Above 1000 MHz, Vertical)





EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6510DN-AGN-US
Temperature:	25°C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 2/ TX A Mode 5260MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		Note
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)									
5255.70	H	58.75	50.71	42.98	101.73	93.69	-3.04	-11.08					X/F
10522.00	H	34.58	24.19	15.88	50.46	40.07	-54.31	-64.70	68.30	54.00	-27.00	-41.30	X/H

Remark:

(1) Spectrum Setting : 30MHz – 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto

(2) All readings are Peak unless otherwise stated AV in column of『Note』. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.

(3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency。"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)

(4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission 。

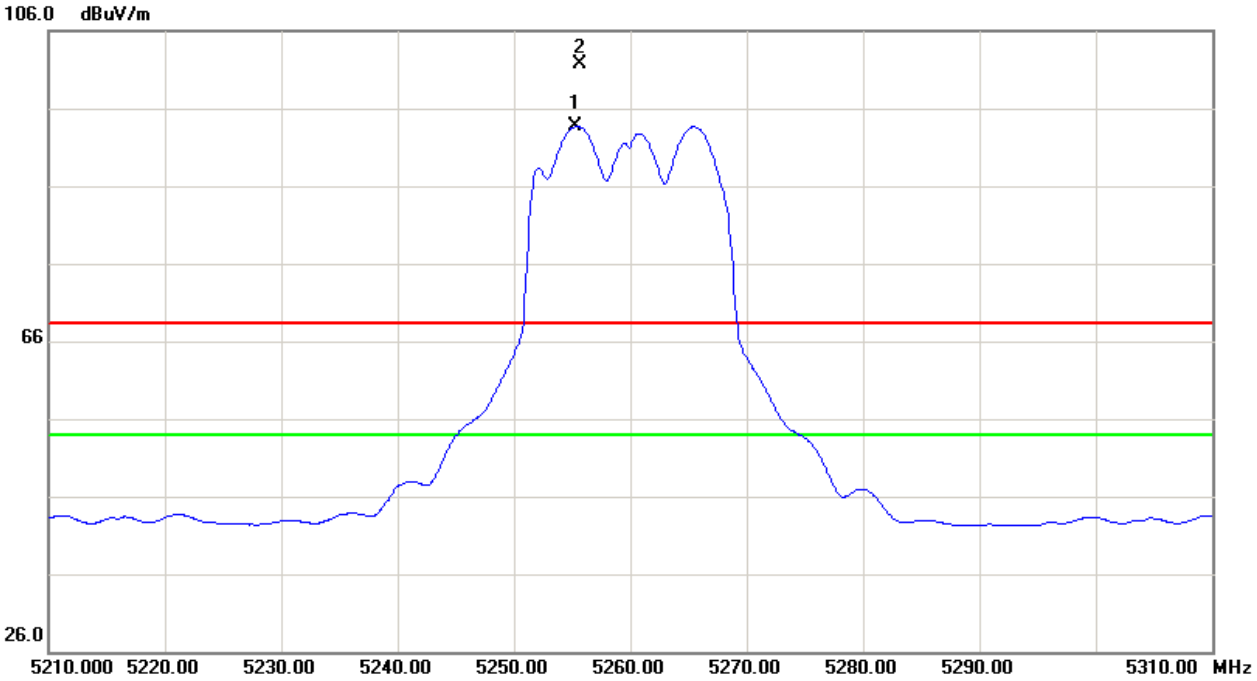
(5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

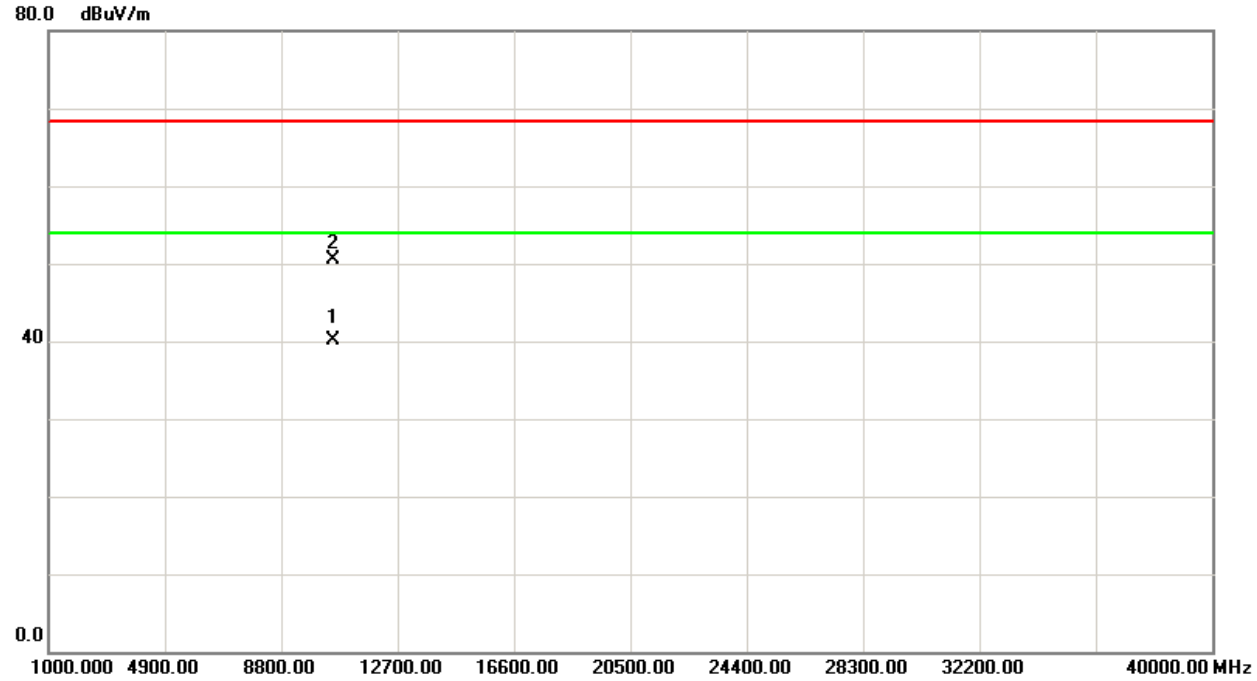
(6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(7) EUT Orthogonal Axes:
"X" - denotes Laid on Table；"Y" - denotes Vertical Stand；"Z" - denotes Side Stand

(8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Orthogonal Axis:X
Band 2/CH52 (Above 1000 MHz, Horizontal)





EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6510DN-AGN-US
Temperature:	25°C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 2/ TX A Mode 5280MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		Note
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)									
5275.00	V	54.71	47.99	43.03	97.74	91.02	-7.03	-13.75					X/F
10564.10	V	35.86	25.77	16.00	51.86	41.77	-52.91	-63.00	68.30	54.00	-27.00	-41.30	X/H

Remark:

(1) Spectrum Setting : 30MHz – 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto

(2) All readings are Peak unless otherwise stated AV in column of『Note』. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.

(3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency。"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)

(4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission 。

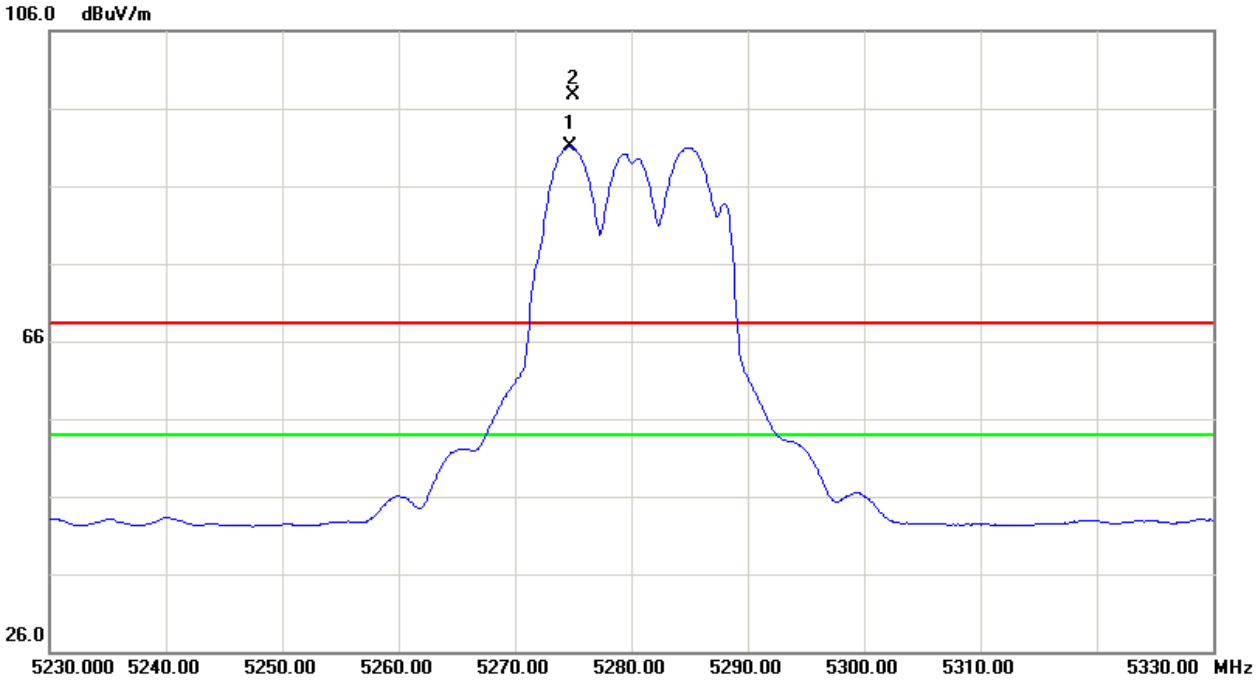
(5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

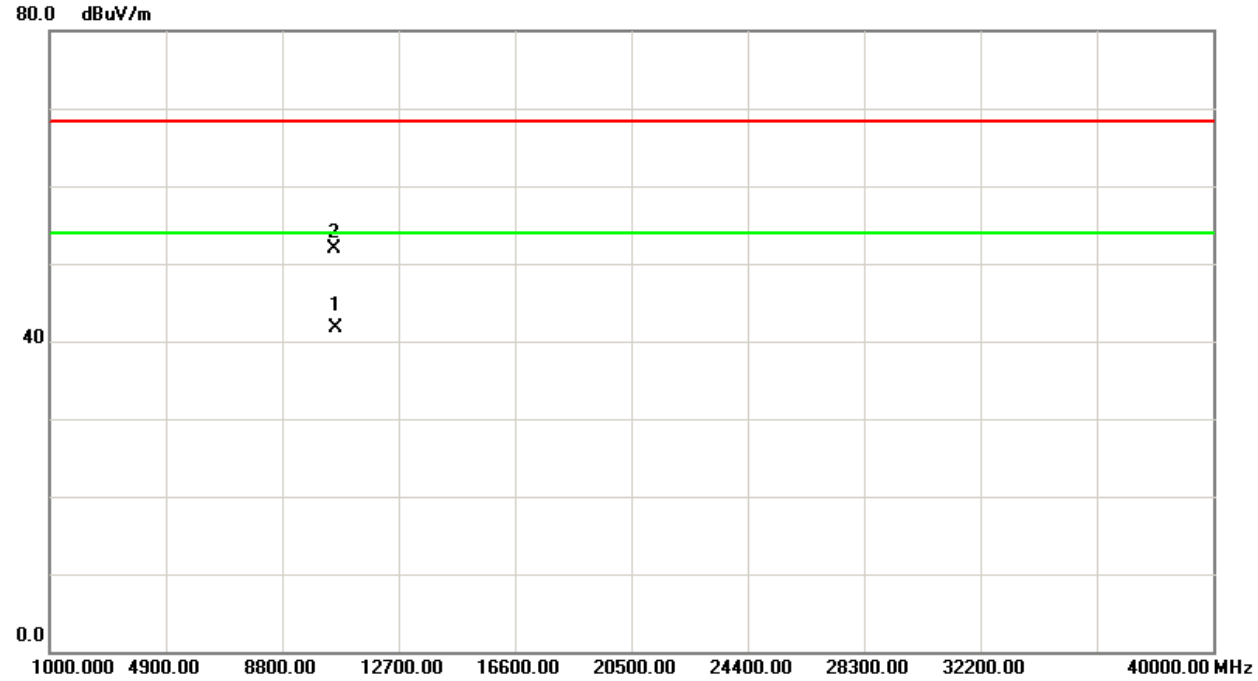
(6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(7) EUT Orthogonal Axes:
"X" - denotes Laid on Table；"Y" - denotes Vertical Stand；"Z" - denotes Side Stand

(8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Orthogonal Axis:X
Band 2/CH60(Above 1000 MHz, Vertical)





EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6510DN-AGN-US
Temperature:	25°C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 2/ TX A Mode 5280MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		Note
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)									
5273.70	H	57.91	50.25	43.03	100.94	93.28	-3.83	-11.49					X/F
10563.10	H	34.26	23.87	16.00	50.26	39.87	-54.51	-64.90	68.30	54.00	-27.00	-41.30	X/H

Remark:

(1) Spectrum Setting : 30MHz – 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto

(2) All readings are Peak unless otherwise stated AV in column of『Note』. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.

(3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency。"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)

(4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission 。

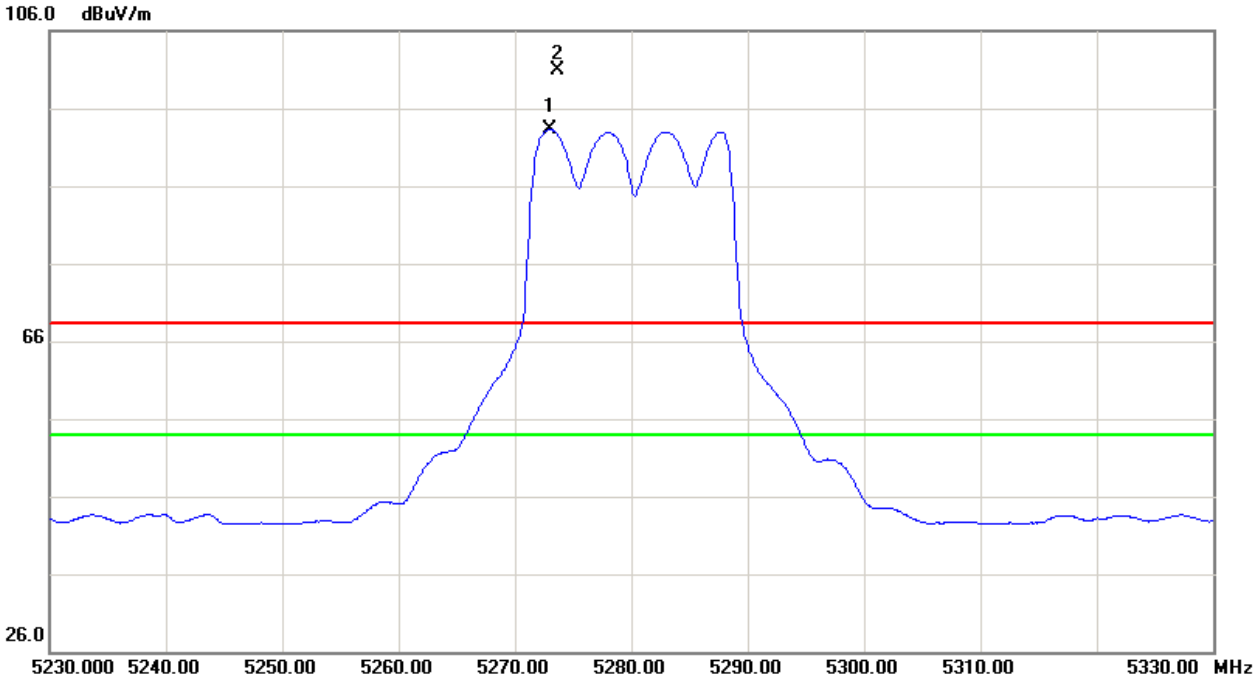
(5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

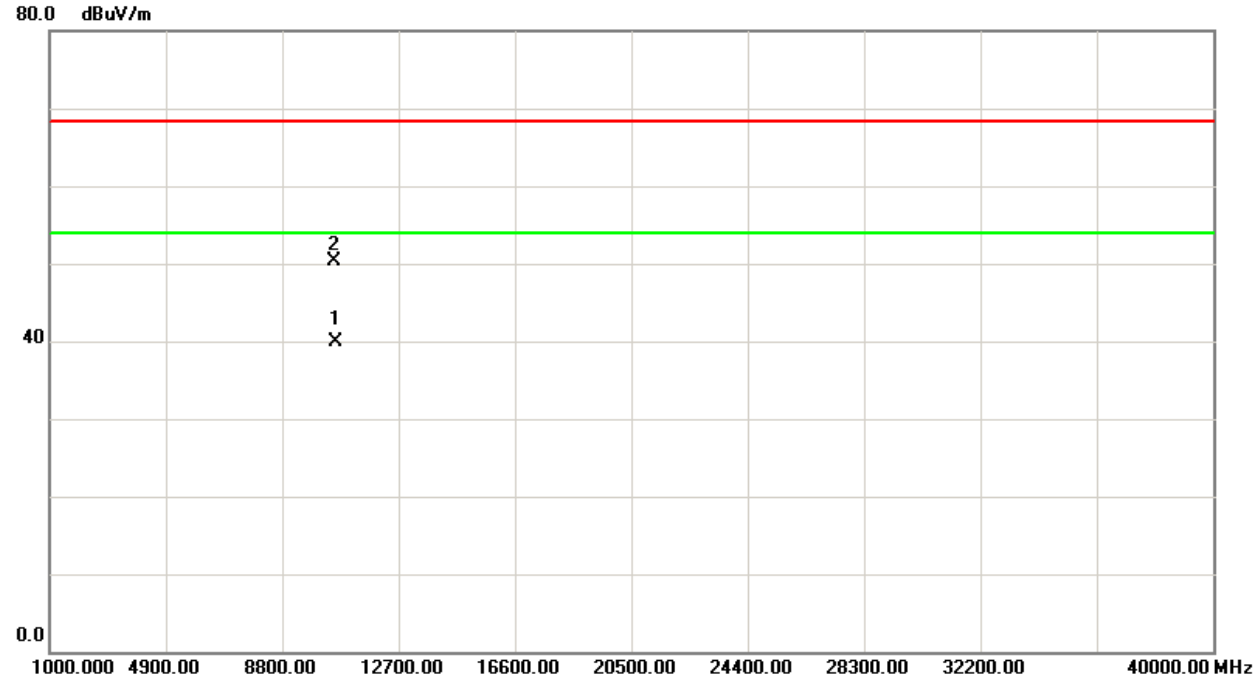
(6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(7) EUT Orthogonal Axes:
"X" - denotes Laid on Table；"Y" - denotes Vertical Stand；"Z" - denotes Side Stand

(8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Orthogonal Axis:X
Band 2/CH60(Above 1000 MHz, Horizontal)





EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6510DN-AGN-US
Temperature:	25°C	Relative Humidity :	52 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 2/ TX A Mode 5320MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		Note
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)									
5318.70	V	56.22	48.49	43.13	99.35	91.62	-5.42	-13.15					X/F
5350.00	V	9.04	-0.77	43.21	52.25	42.44	-52.52	-62.33	68.30	54.00	-27.00	-41.30	X/E
10643.60	V	35.68	25.62	16.23	51.91	41.85	-52.86	-62.92	68.30	54.00	-27.00	-41.30	X/H

Remark:

(1) Spectrum Setting : 30MHz – 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto

(2) All readings are Peak unless otherwise stated AV in column of『Note』. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.

(3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency。"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)

(4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission 。

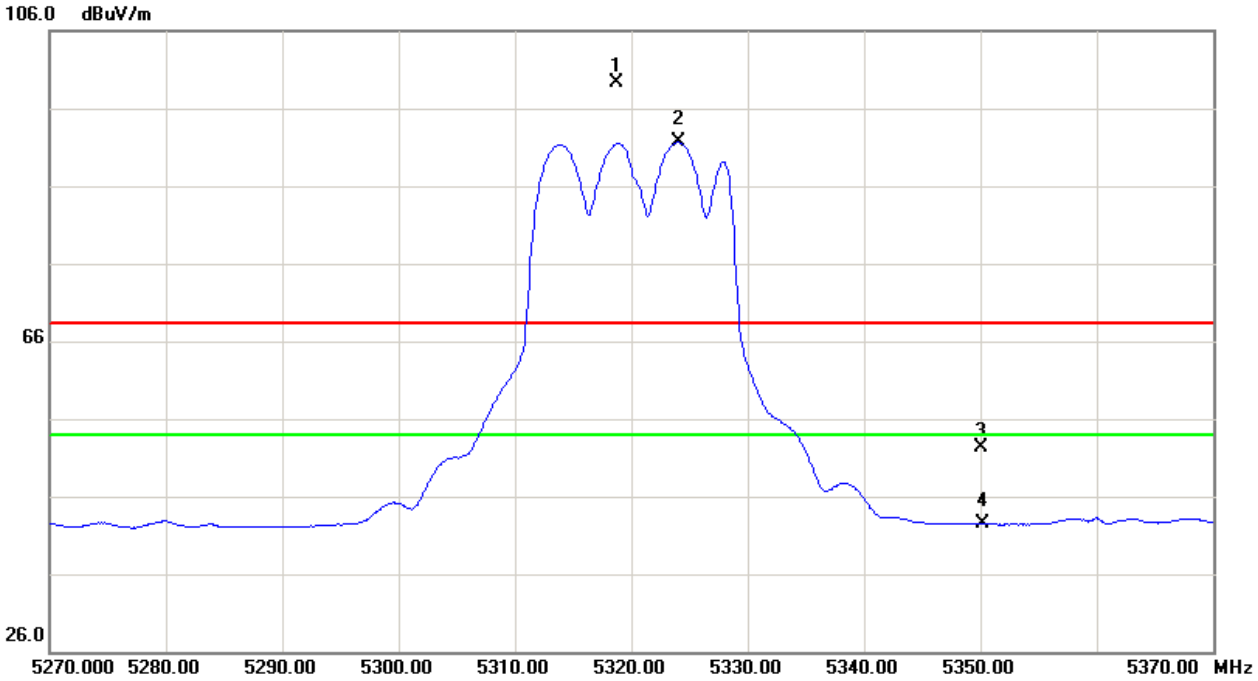
(5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

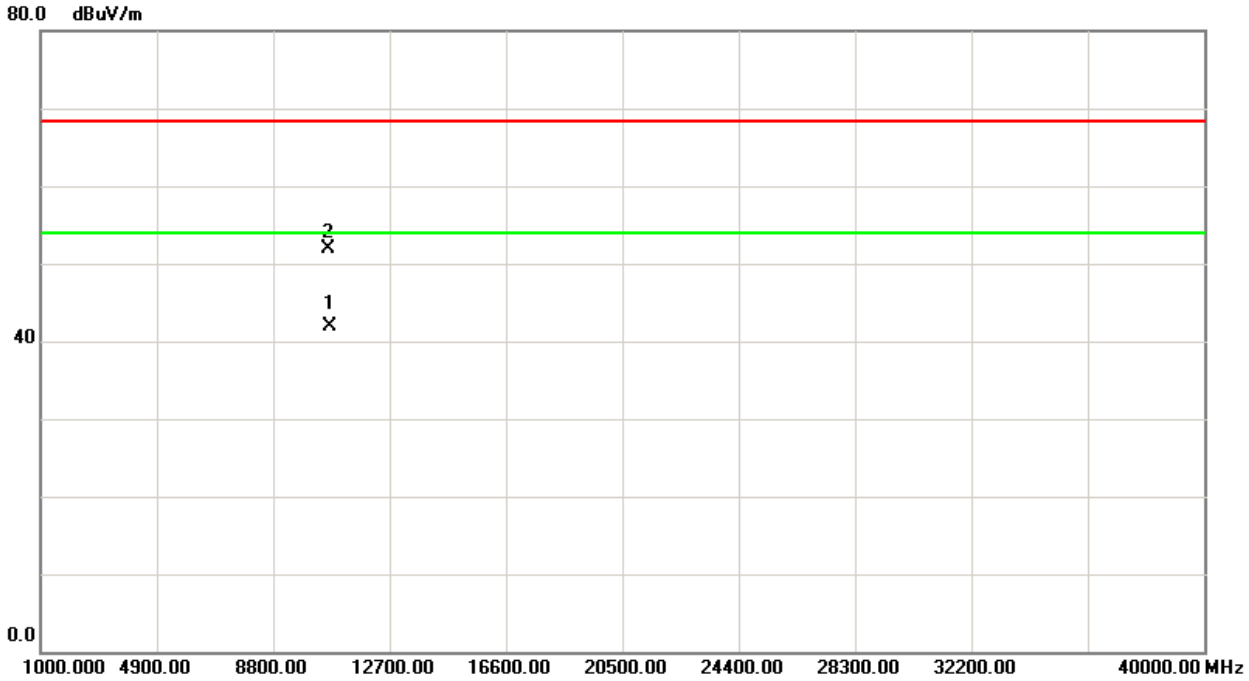
(6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(7) EUT Orthogonal Axes:
"X" - denotes Laid on Table；"Y" - denotes Vertical Stand；"Z" - denotes Side Stand

(8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Orthogonal Axis:X
Band 2/CH64(Above 1000 MHz, Vertical)





EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6510DN-AGN-US
Temperature:	25°C	Relative Humidity :	52 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 2/ TX A Mode 5320MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		Note
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)									
5312.80	H	56.82	49.22	43.12	99.94	92.34	-4.83	-12.43					X/F
5350.00	H	7.73	-0.64	43.21	50.94	42.57	-53.83	-62.20	68.30	54.00	-27.00	-41.30	X/E
10647.70	H	33.99	23.28	16.24	50.23	39.52	-54.54	-65.25	68.30	54.00	-27.00	-41.30	X/H

Remark:

(1) Spectrum Setting : 30MHz – 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto

(2) All readings are Peak unless otherwise stated AV in column of『Note』. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.

(3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency。"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)

(4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission 。

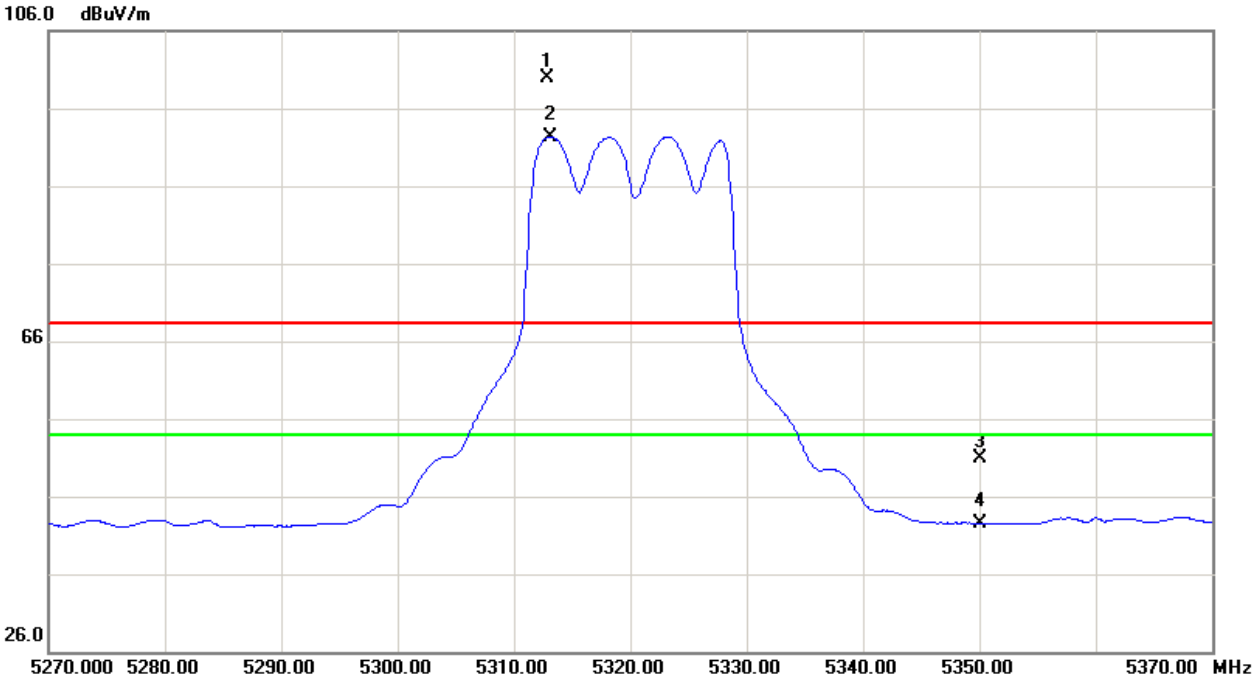
(5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

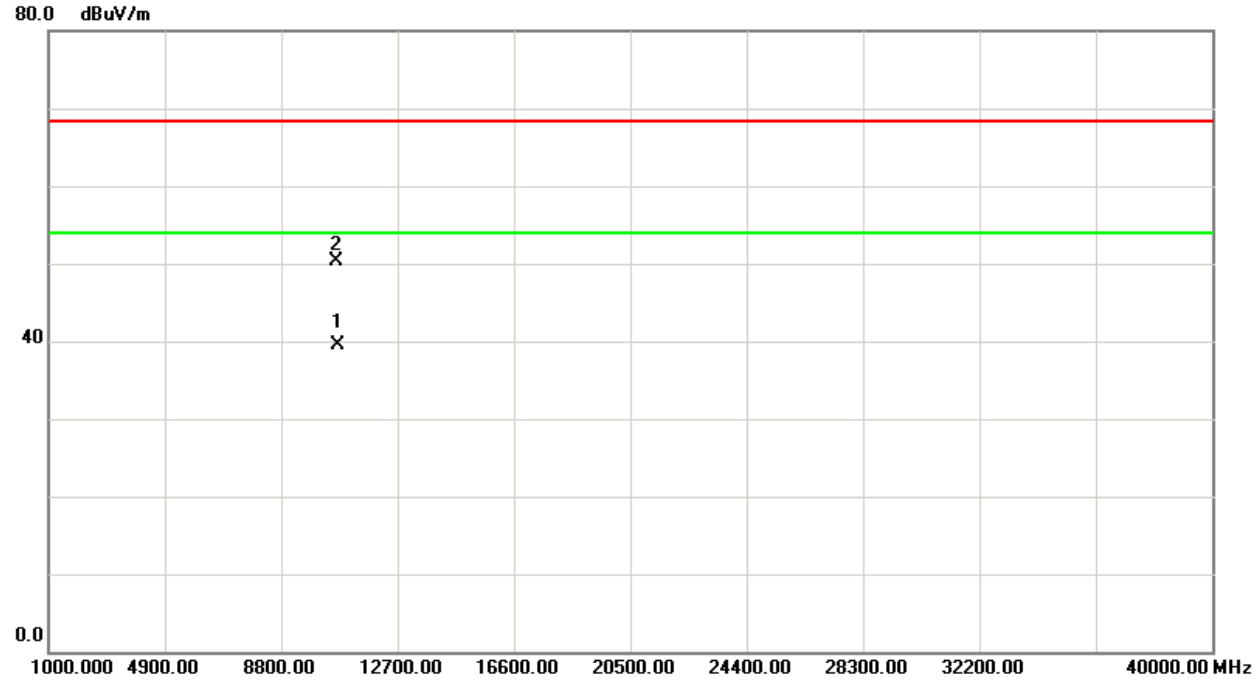
(6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(7) EUT Orthogonal Axes:
"X" - denotes Laid on Table；"Y" - denotes Vertical Stand；"Z" - denotes Side Stand

(8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Orthogonal Axis:X
Band 2/CH64(Above 1000 MHz, Horizontal)





EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6510DN-AGN-US
Temperature:	25°C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 2/ TX N20 Mode 5260MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		Note
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)									
5257.40	V	57.60	47.61	42.98	100.58	90.59	-4.19	-14.18					X/F
10528.40	V	35.72	25.67	15.90	51.62	41.57	-53.15	-63.20	68.30	54.00	-27.00	-41.30	X/H

Remark:

(1) Spectrum Setting : 30MHz – 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto

(2) All readings are Peak unless otherwise stated AV in column of『Note』. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.

(3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency。"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)

(4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission 。

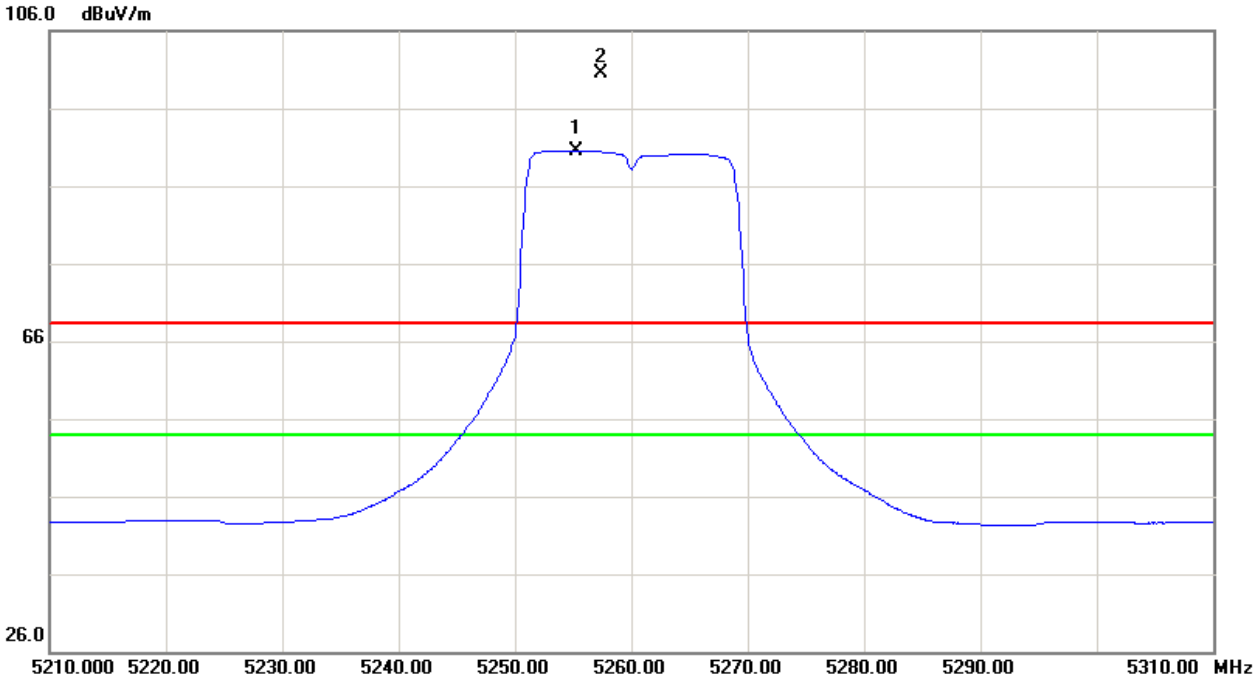
(5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

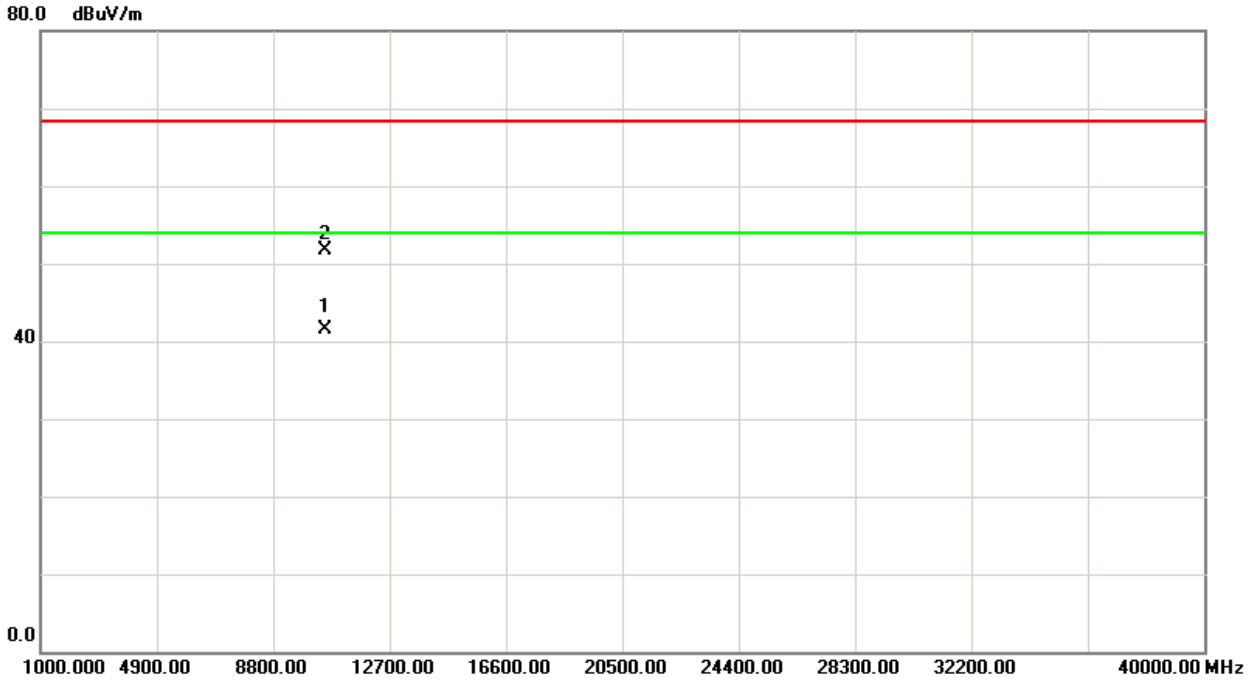
(6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(7) EUT Orthogonal Axes:
"X" - denotes Laid on Table；"Y" - denotes Vertical Stand；"Z" - denotes Side Stand

(8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Orthogonal Axis:X
Band 2/CH52(Above 1000 MHz, Vertical)





EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6510DN-AGN-US
Temperature:	25°C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 2/ TX N20 Mode 5260MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		Note
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)									
5253.60	H	58.88	48.77	42.98	101.86	91.75	-2.91	-13.02					X/F
10524.40	H	33.87	23.68	15.89	49.76	39.57	-55.01	-65.20	68.30	54.00	-27.00	-41.30	X/H

Remark:

(1) Spectrum Setting : 30MHz – 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto

(2) All readings are Peak unless otherwise stated AV in column of『Note』. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.

(3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency。"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)

(4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission 。

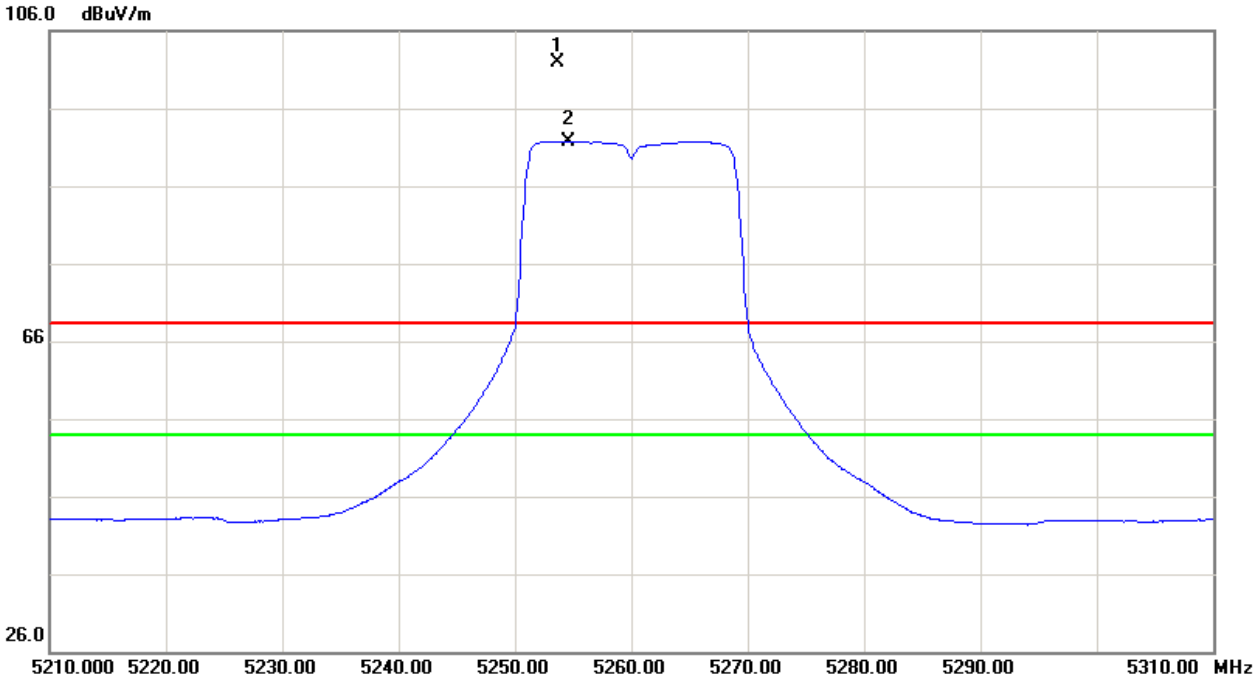
(5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

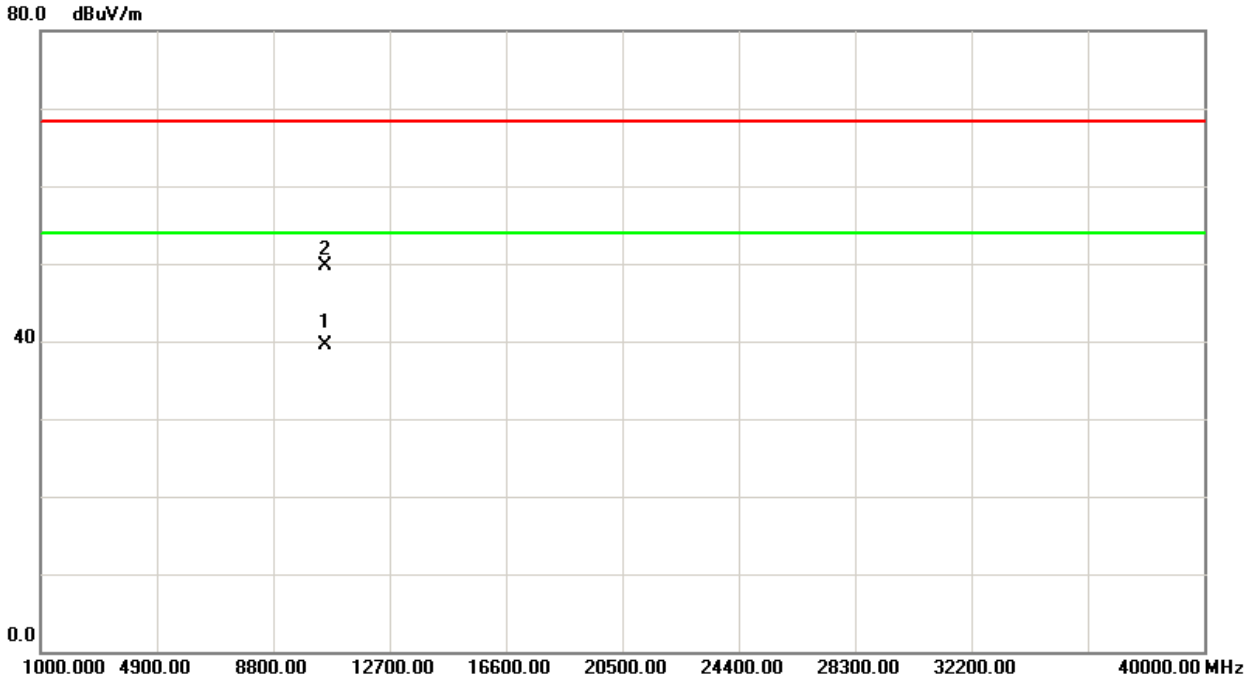
(6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(7) EUT Orthogonal Axes:
"X" - denotes Laid on Table；"Y" - denotes Vertical Stand；"Z" - denotes Side Stand

(8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Orthogonal Axis:X
Band 2/CH52(Above 1000 MHz, Horizontal)





EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6510DN-AGN-US
Temperature:	25°C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 2/ TX N20 Mode 5280MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		Note
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)									
5272.40	V	57.23	47.09	43.02	100.25	90.11	-4.52	-14.66					X/F
10562.20	V	35.10	25.06	16.00	51.10	41.06	-53.67	-63.71	68.30	54.00	-27.00	-41.30	X/H

Remark:

(1) Spectrum Setting : 30MHz – 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto

(2) All readings are Peak unless otherwise stated AV in column of『Note』. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.

(3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency。"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)

(4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission 。

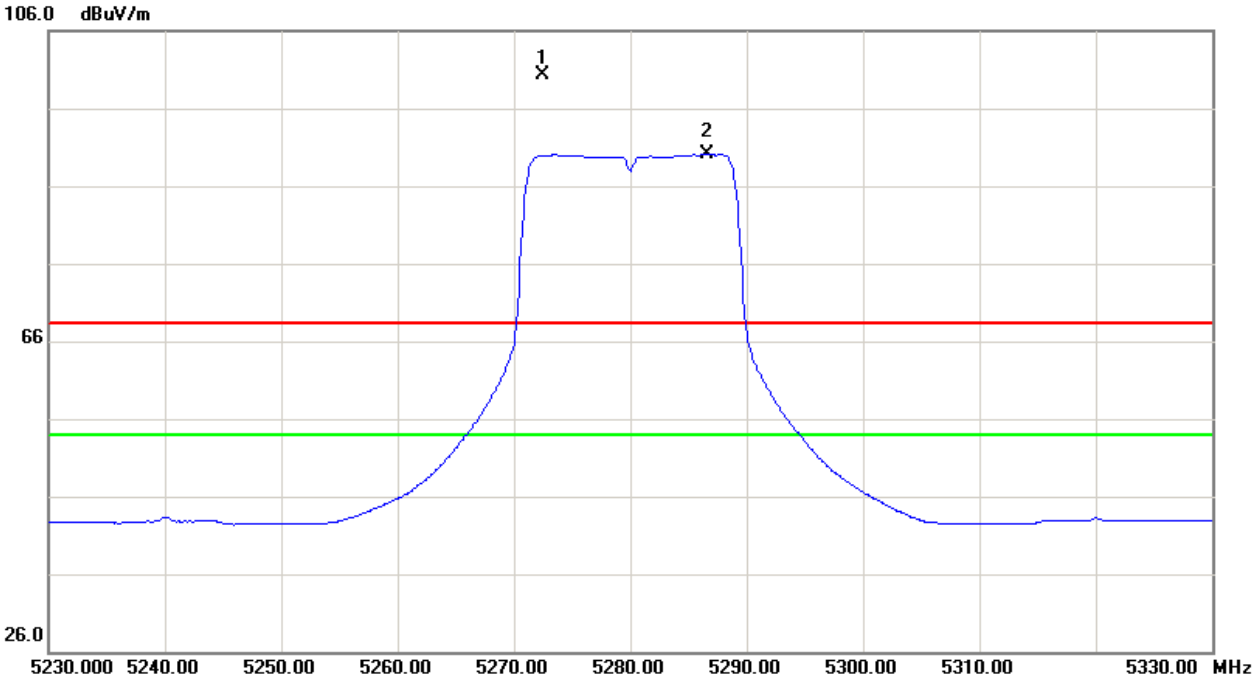
(5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

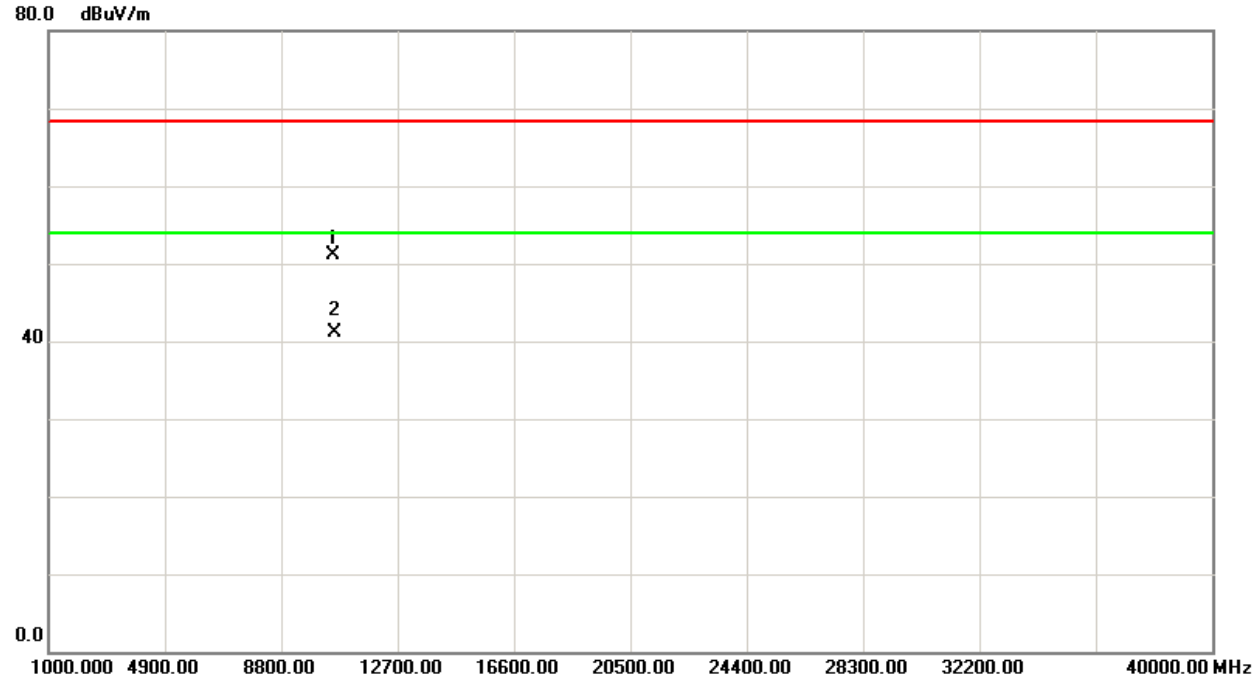
(6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(7) EUT Orthogonal Axes:
"X" - denotes Laid on Table；"Y" - denotes Vertical Stand；"Z" - denotes Side Stand

(8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Orthogonal Axis:X
Band 2/CH60(Above 1000 MHz, Vertical)





EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6510DN-AGN-US
Temperature:	25°C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 2/ TX N20 Mode 5280MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		Note
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)									
5287.00	H	56.55	47.70	43.06	99.61	90.76	-5.16	-14.01					X/F
10562.70	H	33.74	23.12	16.00	49.74	39.12	-55.03	-65.65	68.30	54.00	-27.00	-41.30	X/H

Remark:

(1) Spectrum Setting : 30MHz – 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto

(2) All readings are Peak unless otherwise stated AV in column of『Note』. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.

(3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency。"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)

(4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission 。

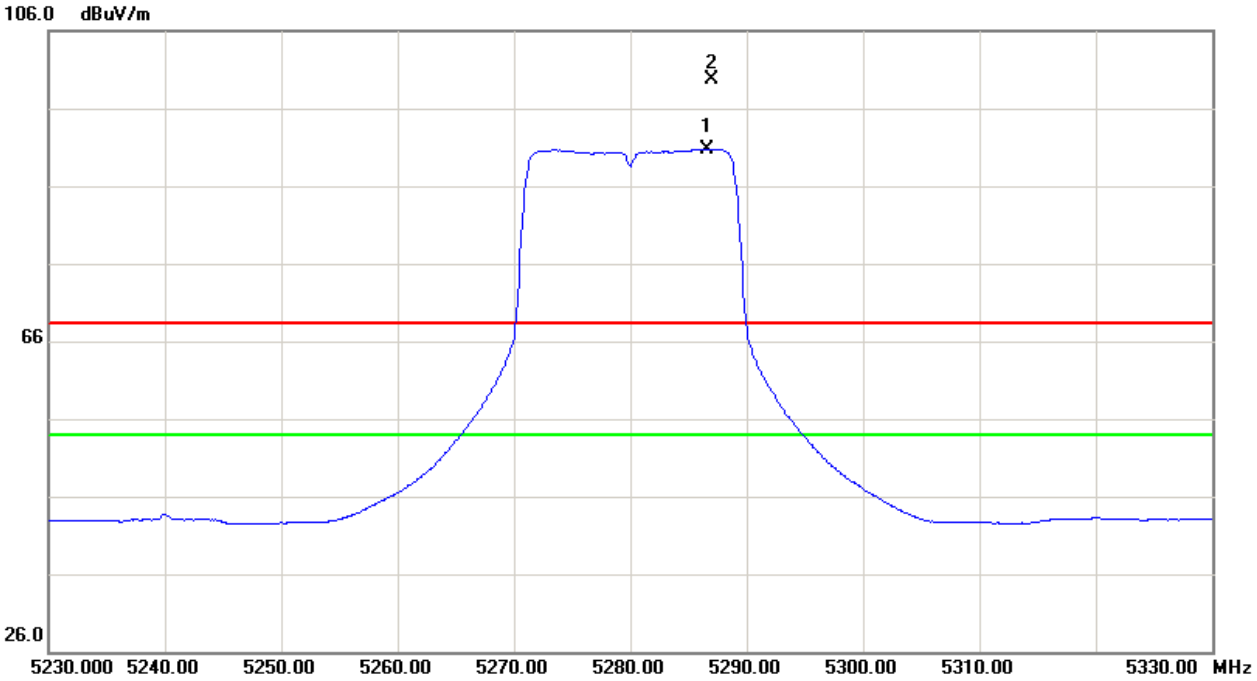
(5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

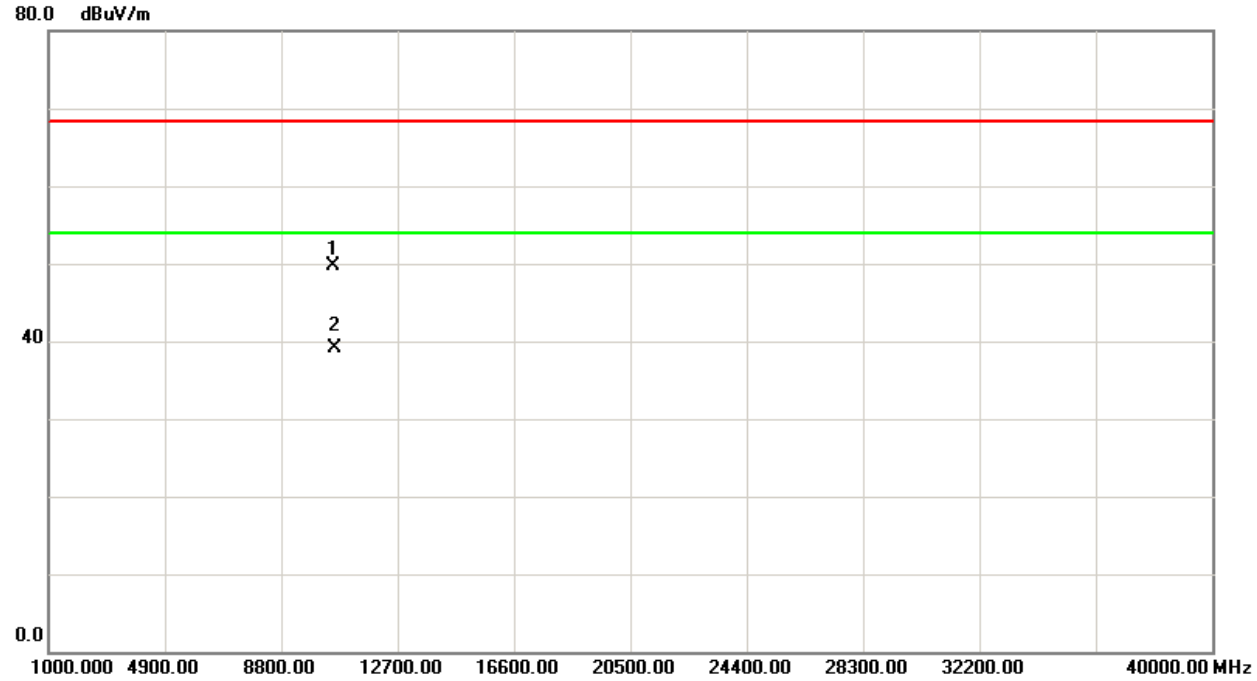
(6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(7) EUT Orthogonal Axes:
"X" - denotes Laid on Table；"Y" - denotes Vertical Stand；"Z" - denotes Side Stand

(8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Orthogonal Axis:X
Band 2/CH60(Above 1000 MHz, Horizontal)





EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6510DN-AGN-US
Temperature:	25°C	Relative Humidity :	52 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 2/ TX N20 Mode 5320MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		Note
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)									
5325.00	V	55.47	45.87	43.15	98.62	89.02	-6.15	-15.75					X/F
5350.00	V	6.42	-0.67	43.21	49.63	42.54	-55.14	-62.23	68.30	54.00	-27.00	-41.30	X/E
10645.50	V	34.94	24.88	16.24	51.18	41.12	-53.59	-63.65	68.30	54.00	-27.00	-41.30	X/H

Remark:

(1) Spectrum Setting : 30MHz – 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto

(2) All readings are Peak unless otherwise stated AV in column of『Note』. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.

(3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency。"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)

(4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission 。

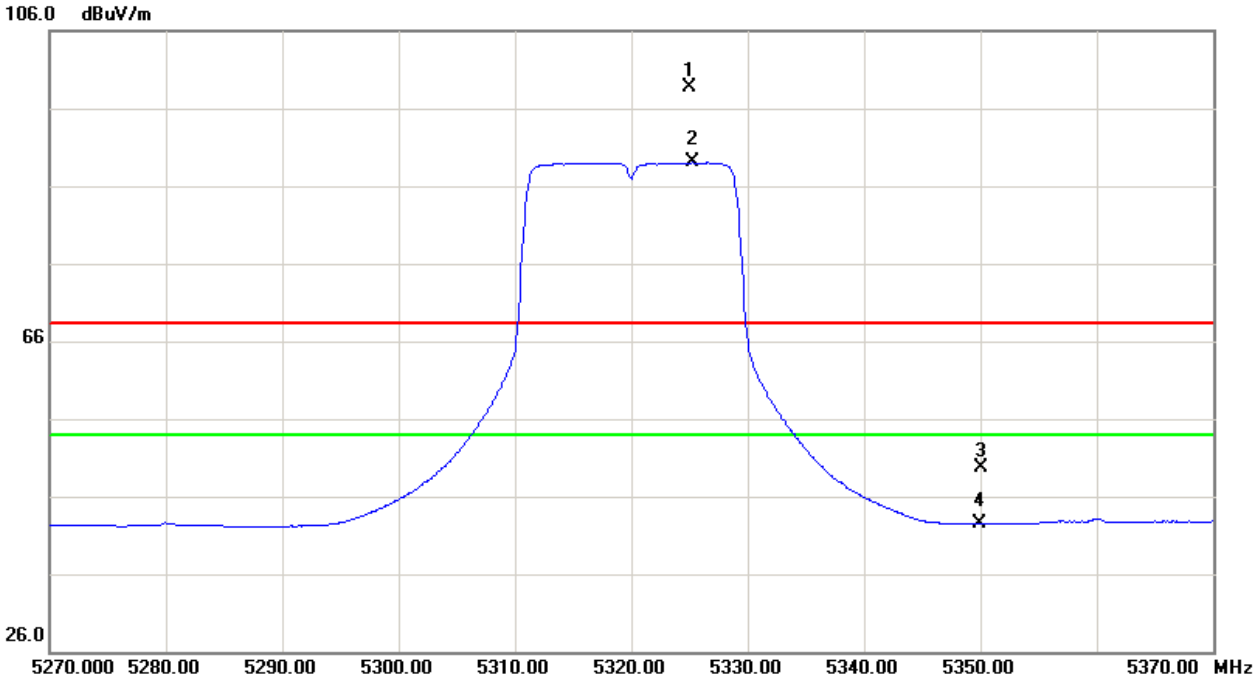
(5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

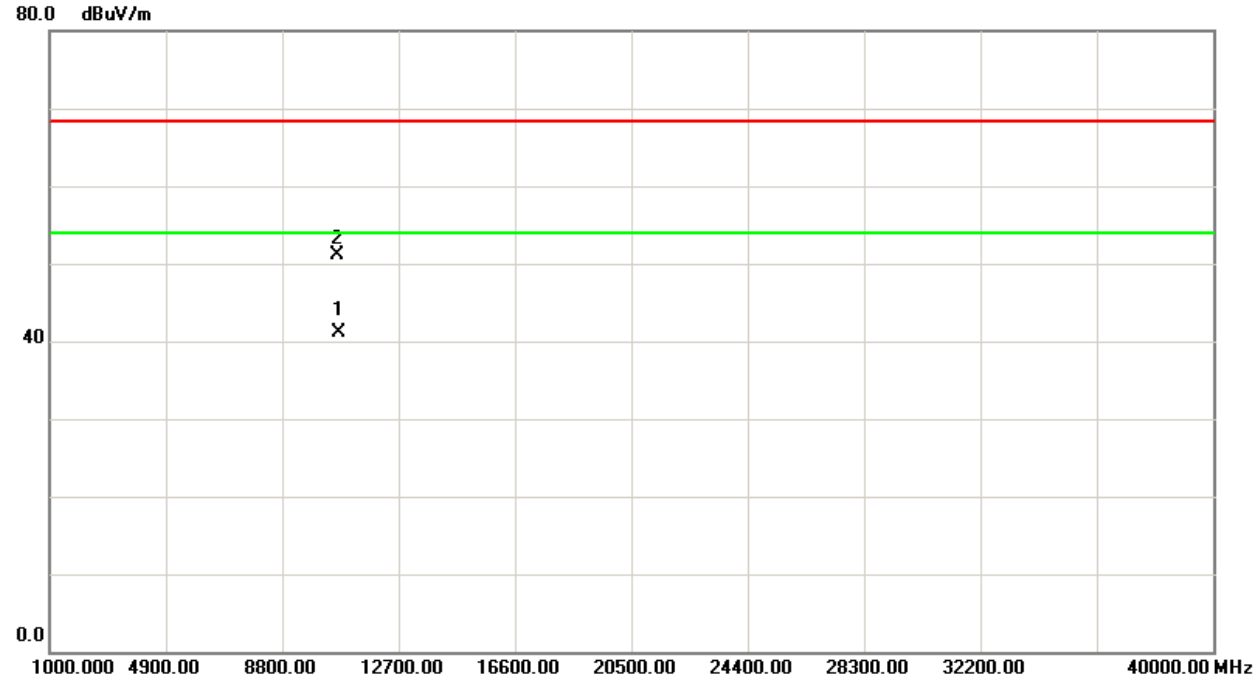
(6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(7) EUT Orthogonal Axes:
"X" - denotes Laid on Table；"Y" - denotes Vertical Stand；"Z" - denotes Side Stand

(8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Orthogonal Axis:X
Band 2/CH64(Above 1000 MHz, Vertical)





EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6510DN-AGN-US
Temperature:	25°C	Relative Humidity :	52 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 2/ TX N20 Mode 5320MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		Note
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)									
5326.80	H	57.10	46.91	43.15	100.25	90.06	-4.52	-14.71					X/F
5350.00	H	9.01	-0.70	43.21	52.22	42.51	-52.55	-62.26	68.30	54.00	-27.00	-41.30	X/E
10643.80	H	33.21	22.68	16.24	49.45	38.92	-55.32	-65.85	68.30	54.00	-27.00	-41.30	X/H

Remark:

(1) Spectrum Setting : 30MHz – 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto

(2) All readings are Peak unless otherwise stated AV in column of『Note』. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.

(3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency。"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)

(4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission 。

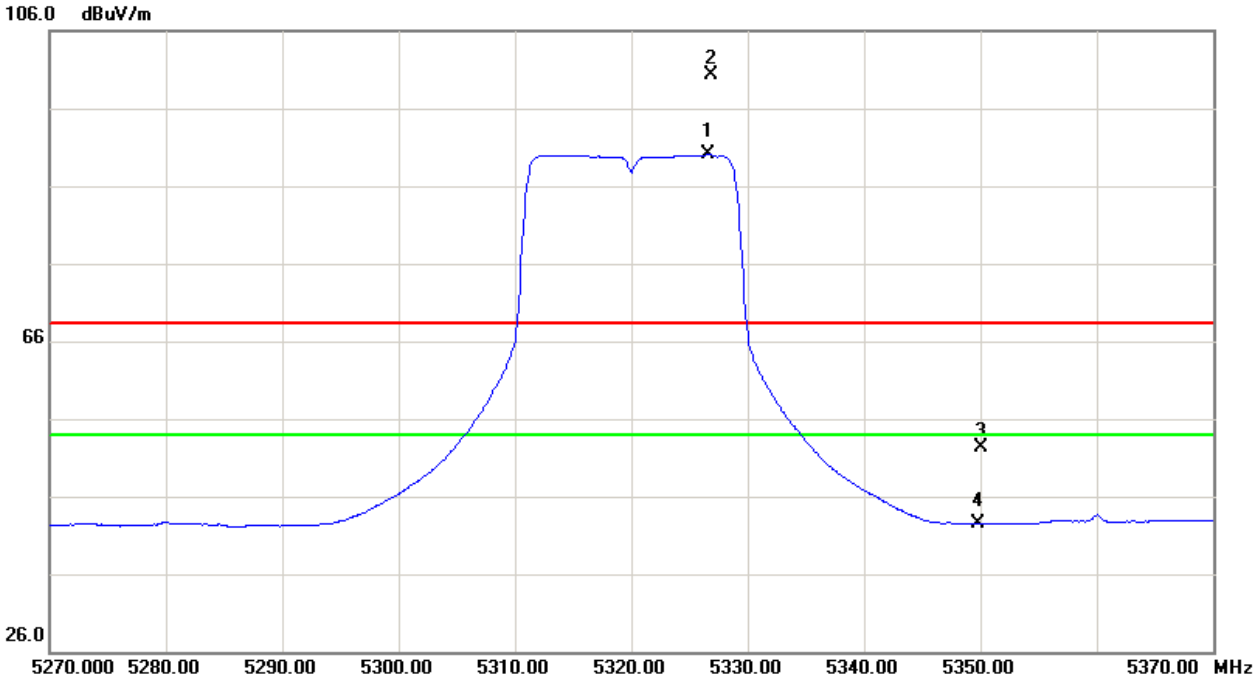
(5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

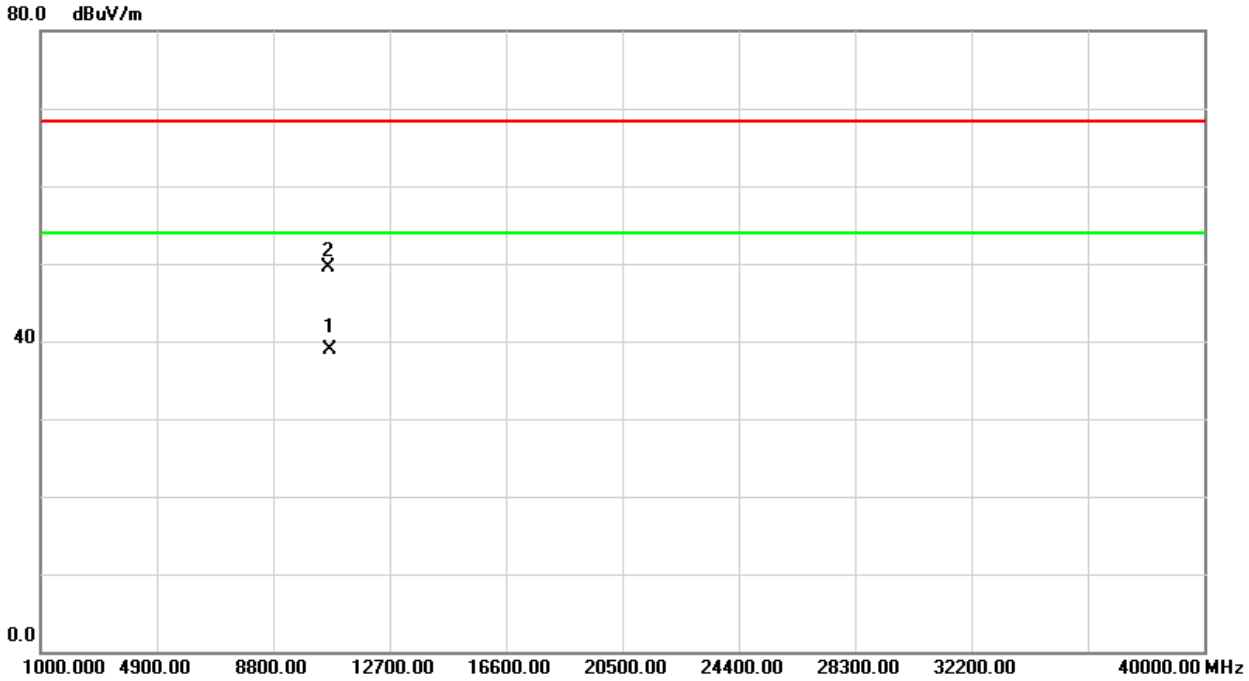
(6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(7) EUT Orthogonal Axes:
"X" - denotes Laid on Table；"Y" - denotes Vertical Stand；"Z" - denotes Side Stand

(8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Orthogonal Axis:X
Band 2/CH64(Above 1000 MHz, Horizontal)





EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6510DN-AGN-US
Temperature:	25°C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 2/ TX N40 Mode 5270MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		Note
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)									
5272.60	V	53.44	44.50	43.02	96.46	87.52	-8.31	-17.25					X/F
10543.80	V	34.38	24.11	15.95	50.33	40.06	-54.44	-64.71	68.30	54.00	-27.00	-41.30	X/H

Remark:

(1) Spectrum Setting : 30MHz – 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto

(2) All readings are Peak unless otherwise stated AV in column of『Note』. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.

(3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency。"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)

(4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission 。

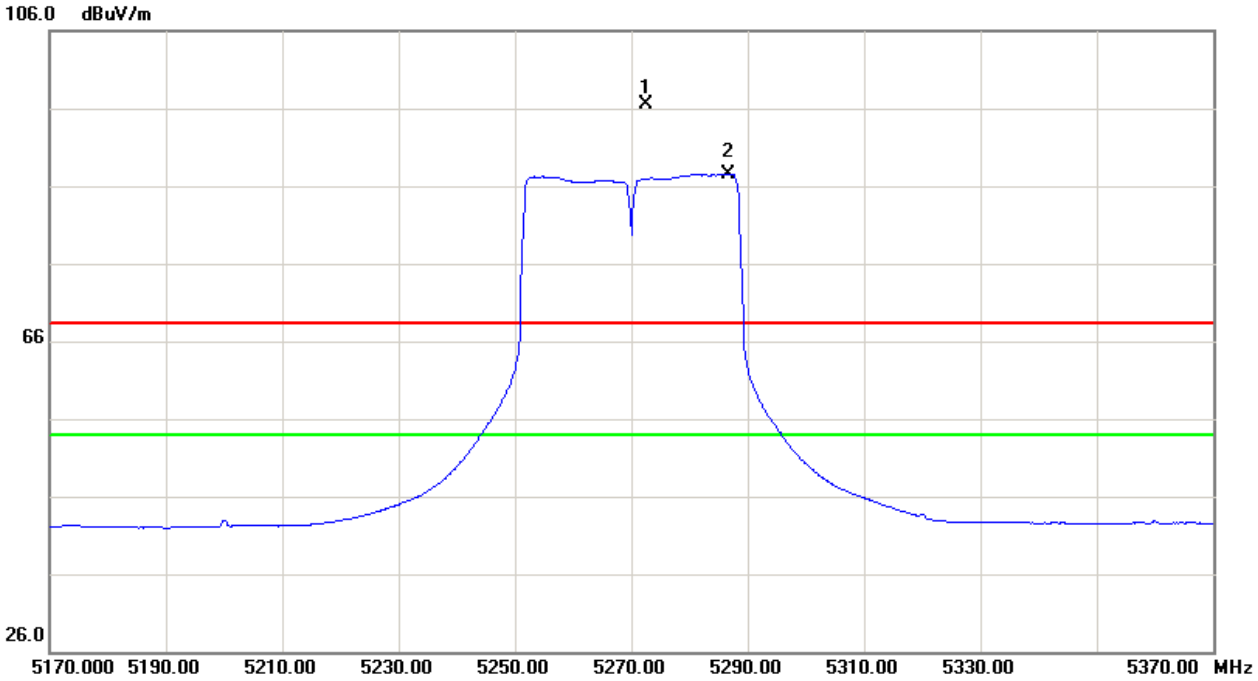
(5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

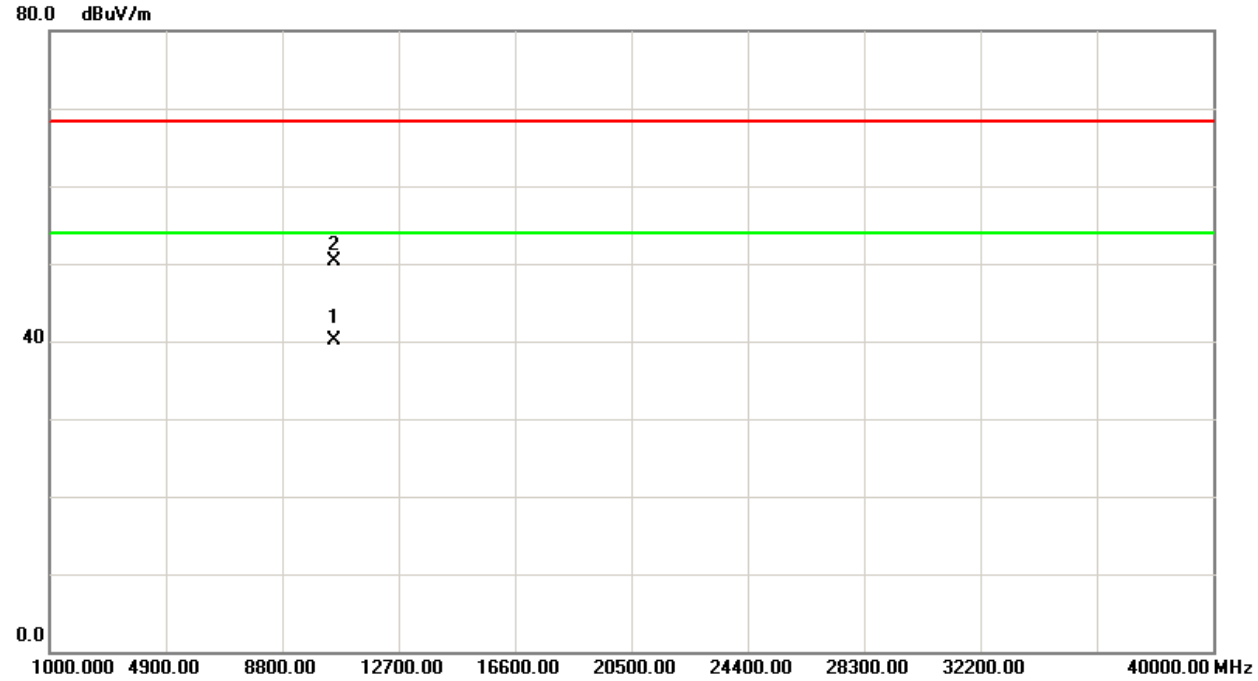
(6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(7) EUT Orthogonal Axes:
"X" - denotes Laid on Table；"Y" - denotes Vertical Stand；"Z" - denotes Side Stand

(8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Orthogonal Axis:X
Band 2/CH54(Above 1000 MHz, Vertical)





EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6510DN-AGN-US
Temperature:	25°C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 2/ TX N40 Mode 5270MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		Note
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)									
5257.40	H	55.38	45.26	42.98	98.36	88.24	-6.41	-16.53					X/F
10546.20	H	32.79	22.58	15.95	48.74	38.53	-56.03	-66.24	68.30	54.00	-27.00	-41.30	X/H

Remark:

(1) Spectrum Setting : 30MHz – 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto

(2) All readings are Peak unless otherwise stated AV in column of『Note』. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.

(3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency。"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)

(4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission 。

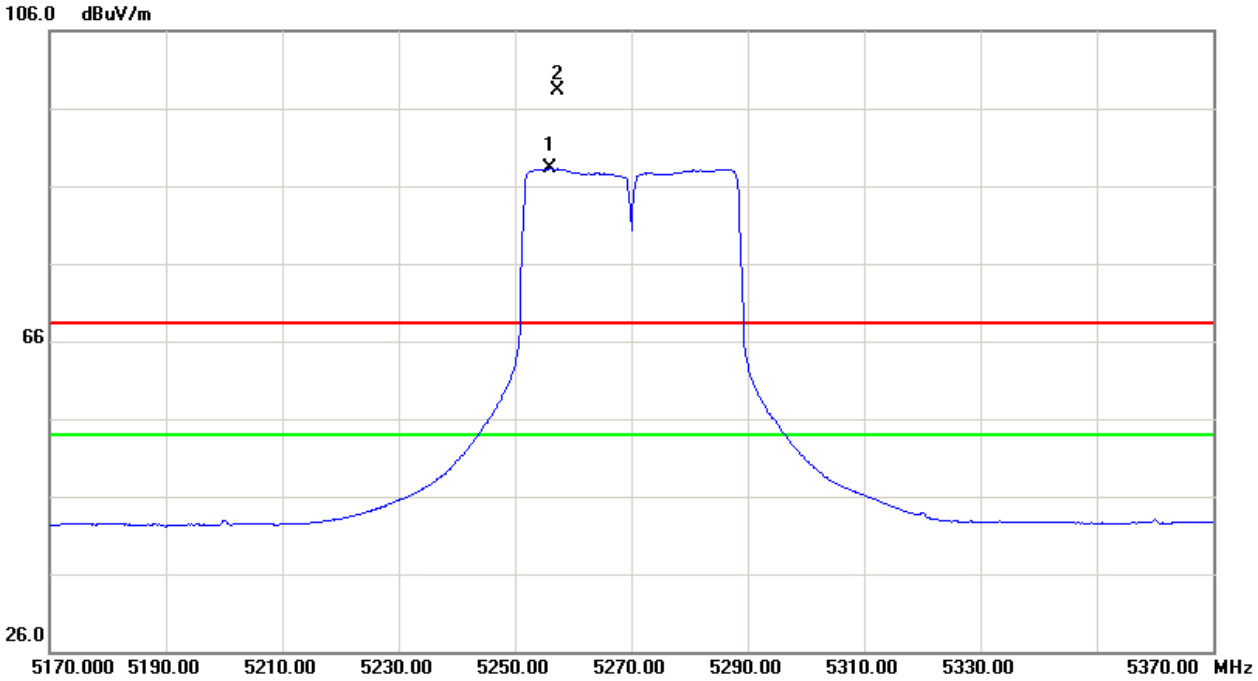
(5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

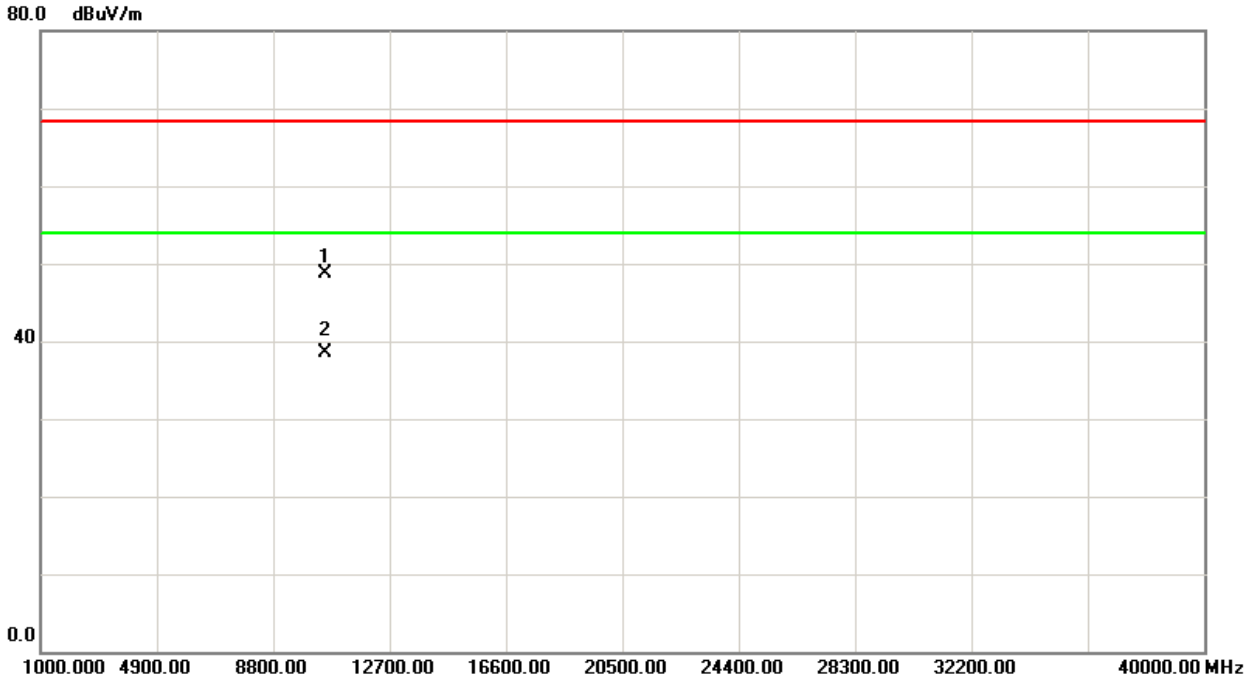
(6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(7) EUT Orthogonal Axes:
"X" - denotes Laid on Table；"Y" - denotes Vertical Stand；"Z" - denotes Side Stand

(8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Orthogonal Axis:X
Band 2/CH54(Above 1000 MHz, Horizontal)





EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6510DN-AGN-US
Temperature:	25°C	Relative Humidity :	52 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 2/ TX N40 Mode 5310MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		Note
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)									
5318.40	V	49.31	39.95	43.13	92.44	83.08	-12.33	-21.69					X/F
5350.00	V	10.47	0.04	43.21	53.68	43.25	-51.09	-61.52	68.30	54.00	-27.00	-41.30	X/E
10624.50	V	33.86	23.90	16.18	50.04	40.08	-54.73	-64.69	68.30	54.00	-27.00	-41.30	X/H

Remark:

(1) Spectrum Setting : 30MHz – 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto

(2) All readings are Peak unless otherwise stated AV in column of『Note』. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.

(3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency。"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)

(4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission 。

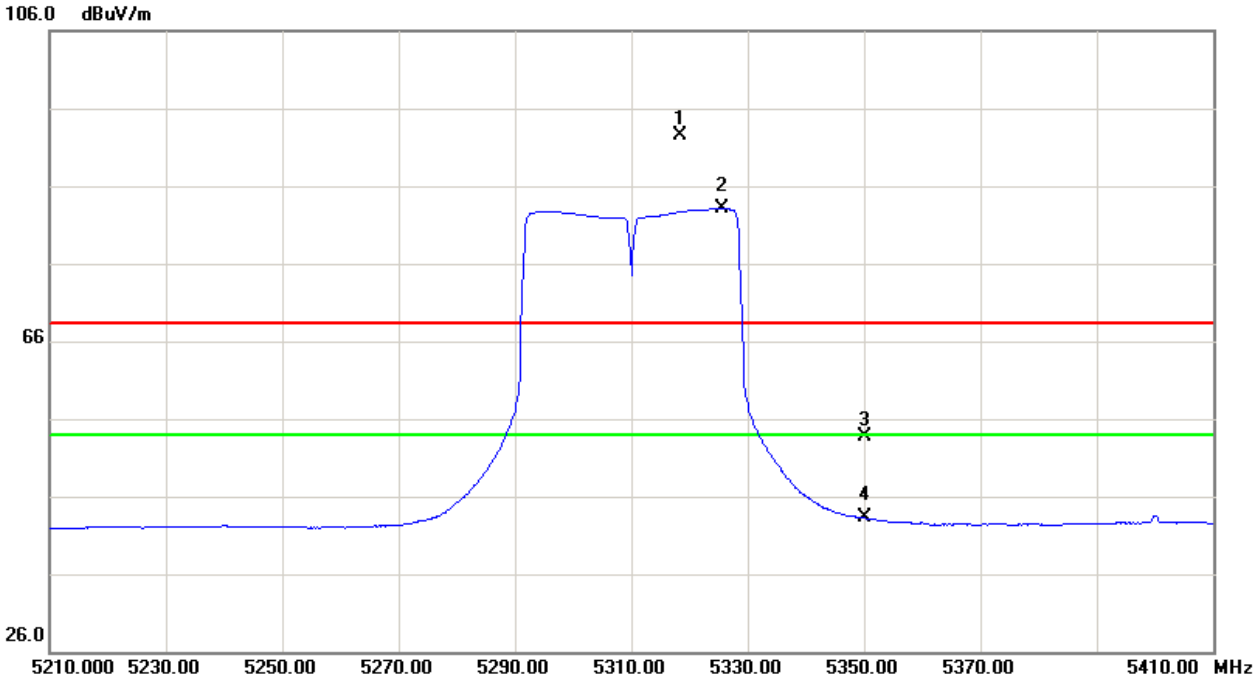
(5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

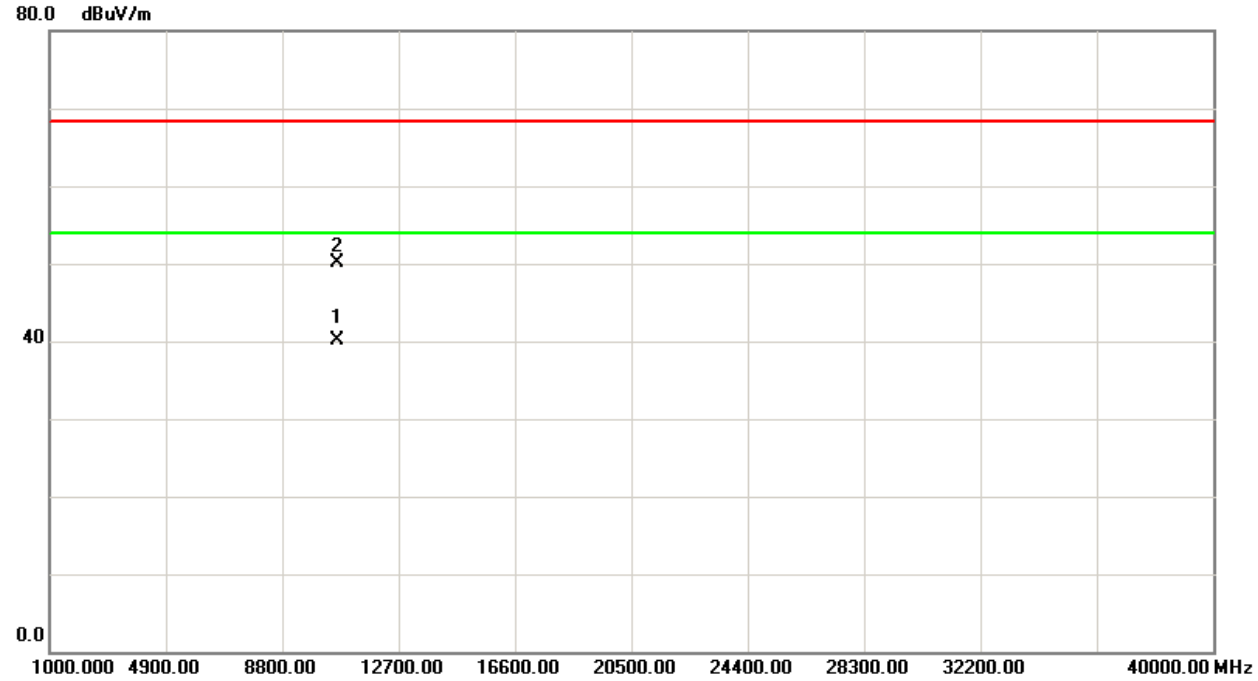
(6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(7) EUT Orthogonal Axes:
"X" - denotes Laid on Table；"Y" - denotes Vertical Stand；"Z" - denotes Side Stand

(8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Orthogonal Axis:X
Band 2/CH62(Above 1000 MHz, Vertical)





EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6510DN-AGN-US
Temperature:	25°C	Relative Humidity :	52 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 2/ TX N40 Mode 5310MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		Note
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)									
5315.00	H	49.65	40.93	43.12	92.77	84.05	-12.00	-20.72					X/F
5350.00	H	8.37	0.26	43.21	51.58	43.47	-53.19	-61.30	68.30	54.00	-27.00	-41.30	X/E
10623.50	H	32.49	21.85	16.18	48.67	38.03	-56.10	-66.74	68.30	54.00	-27.00	-41.30	X/H

Remark:

(1) Spectrum Setting : 30MHz – 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto

(2) All readings are Peak unless otherwise stated AV in column of『Note』. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.

(3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency。"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)

(4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission 。

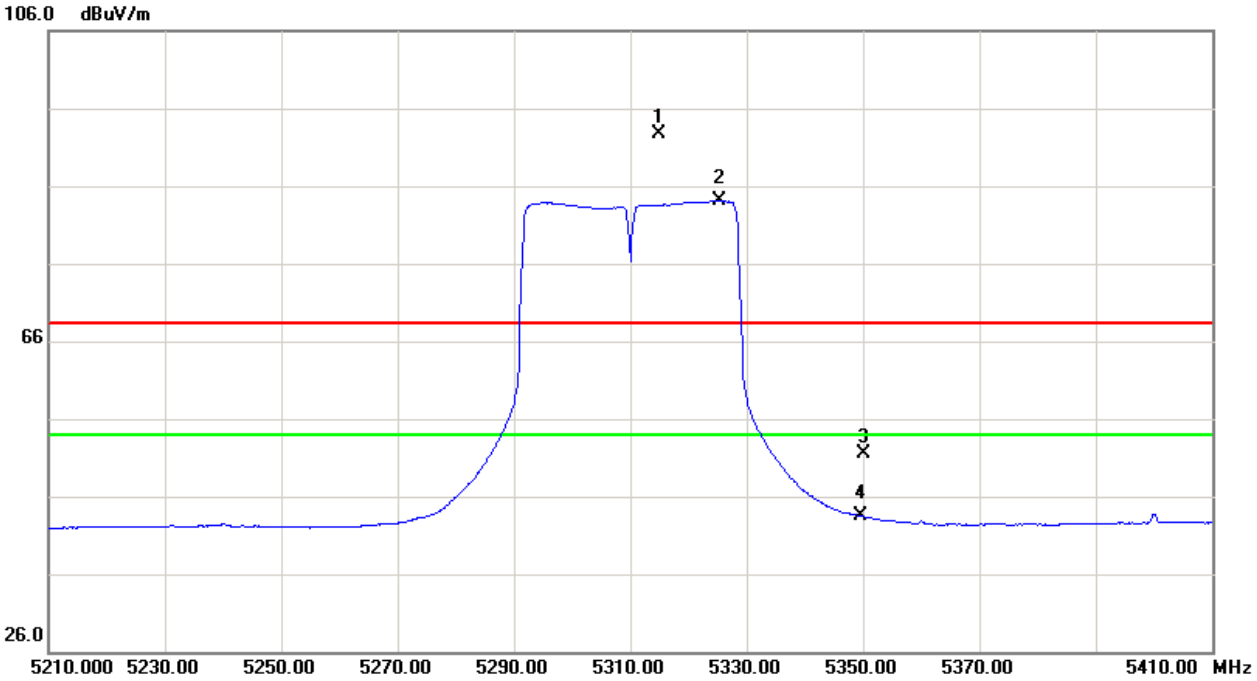
(5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

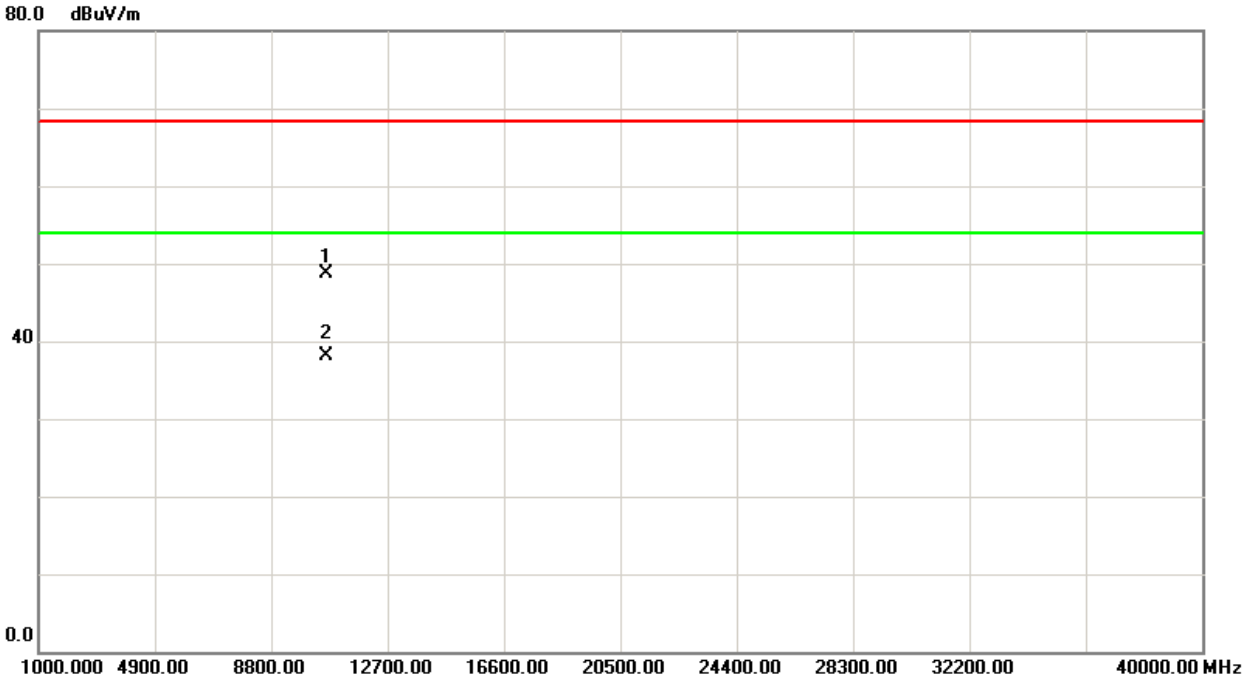
(6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(7) EUT Orthogonal Axes:
"X" - denotes Laid on Table；"Y" - denotes Vertical Stand；"Z" - denotes Side Stand

(8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Orthogonal Axis:X
Band 2/CH62(Above 1000 MHz, Horizontal)





EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6510DN-AGN-US
Temperature:	25°C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 3/ TX A Mode 5500MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		Note
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)									
5460.00	V	9.63	0.23	43.49	53.12	43.72	-51.65	-61.05	68.30	54.00	-27.00	-41.30	X/E
5470.00	V	9.08	0.43	43.50	52.58	43.93	-52.19	-60.84	68.30	54.00	-27.00	-41.30	X/E
5505.80	V	61.06	53.44	43.60	104.66	97.04	-0.11	-7.73					X/F
11006.60	V	34.51	24.36	17.28	51.79	41.64	-52.98	-63.13	68.30	54.00	-27.00	-41.30	X/H

Remark:

(1) Spectrum Setting : 30MHz – 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto

(2) All readings are Peak unless otherwise stated AV in column of『Note』. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.

(3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency。"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)

(4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission 。

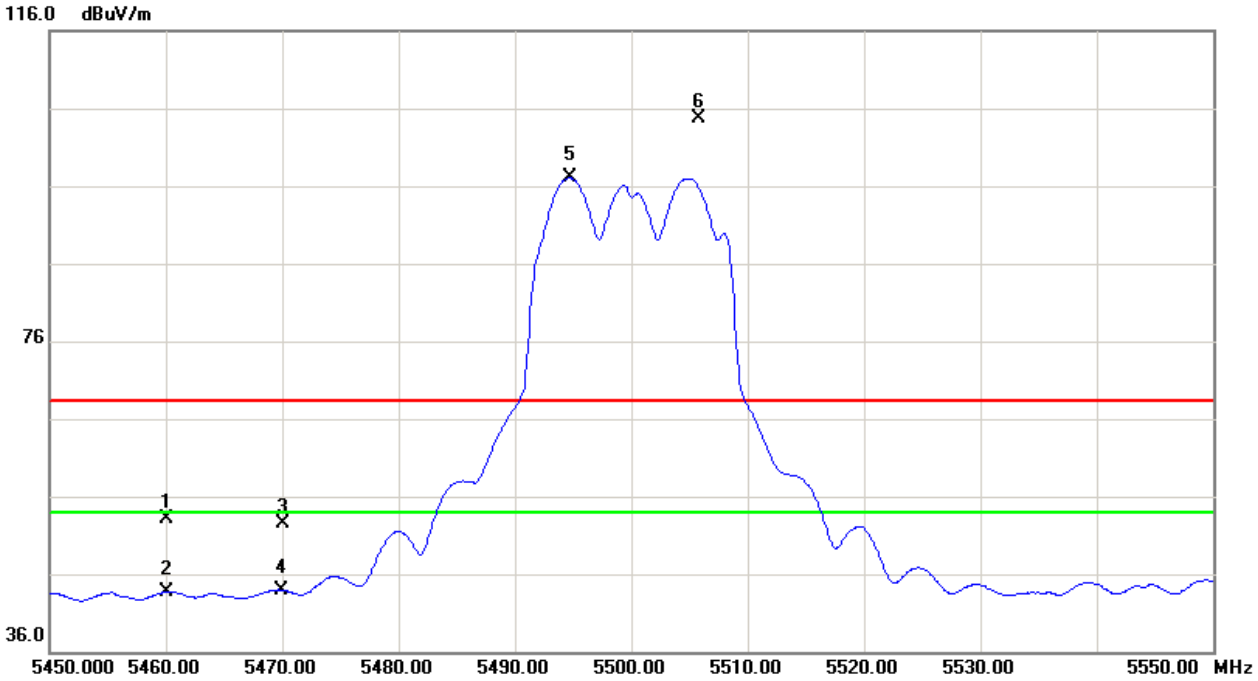
(5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

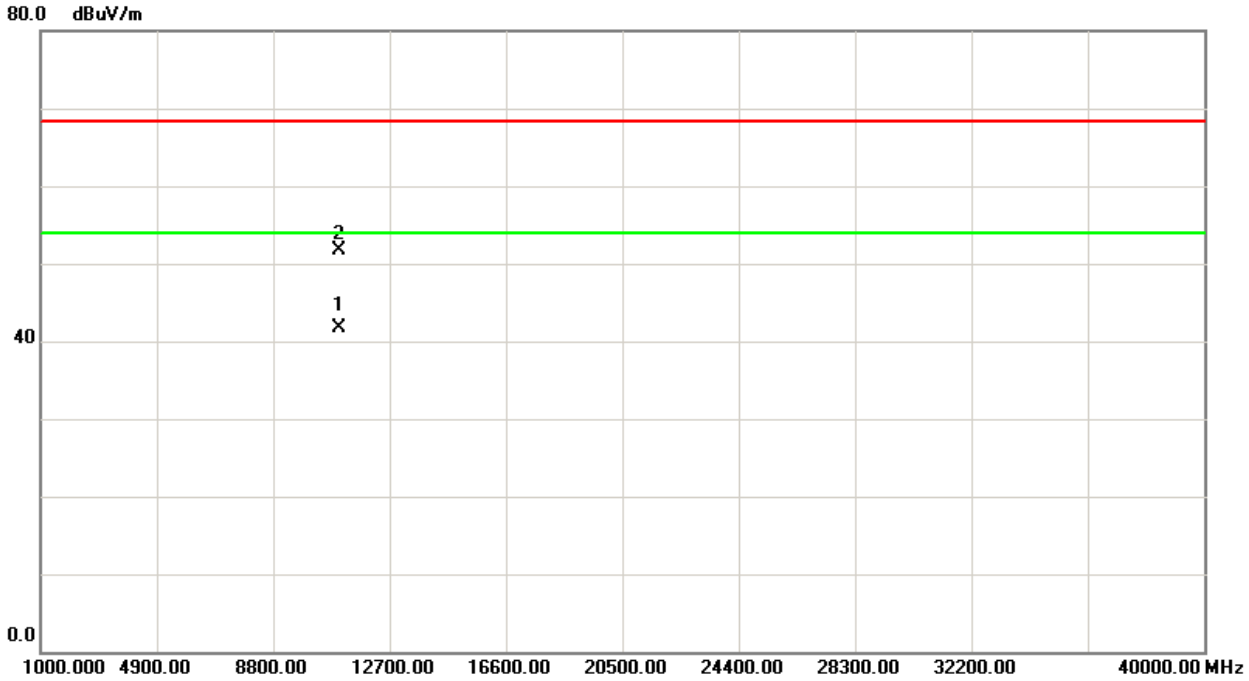
(6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(7) EUT Orthogonal Axes:
"X" - denotes Laid on Table；"Y" - denotes Vertical Stand；"Z" - denotes Side Stand

(8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Orthogonal Axis:X
Band 3/CH100(Above 1000 MHz, Vertical)





EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6510DN-AGN-US
Temperature:	25°C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 3/ TX A Mode 5500MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		Note
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)									
5460.00	H	8.60	0.28	43.49	52.09	43.77	-52.68	-61.00	68.30	54.00	-27.00	-41.30	X/E
5470.00	H	8.84	0.33	43.50	52.34	43.83	-52.43	-60.94	68.30	54.00	-27.00	-41.30	X/E
5505.10	H	60.61	53.15	43.60	104.21	96.75	-0.56	-8.02					X/F
11006.10	H	32.70	22.20	17.28	49.98	39.48	-54.79	-65.29	68.30	54.00	-27.00	-41.30	X/H

Remark:

(1) Spectrum Setting : 30MHz – 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto

(2) All readings are Peak unless otherwise stated AV in column of『Note』. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.

(3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency。"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)

(4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission 。

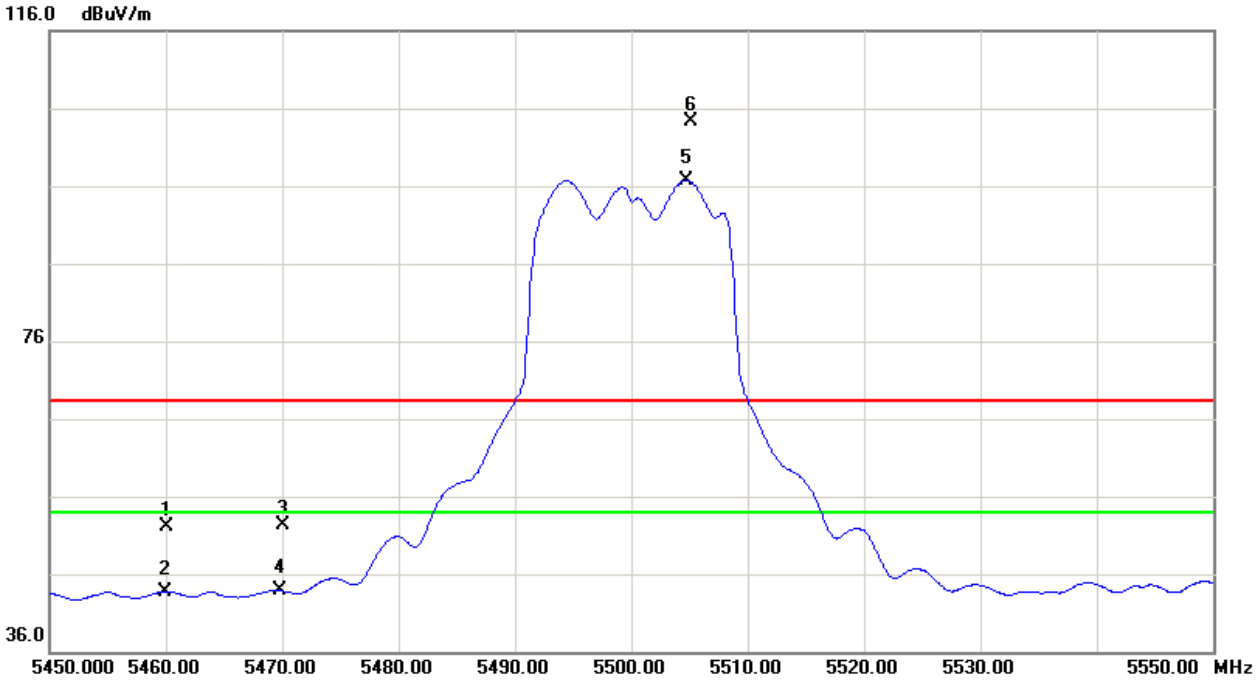
(5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

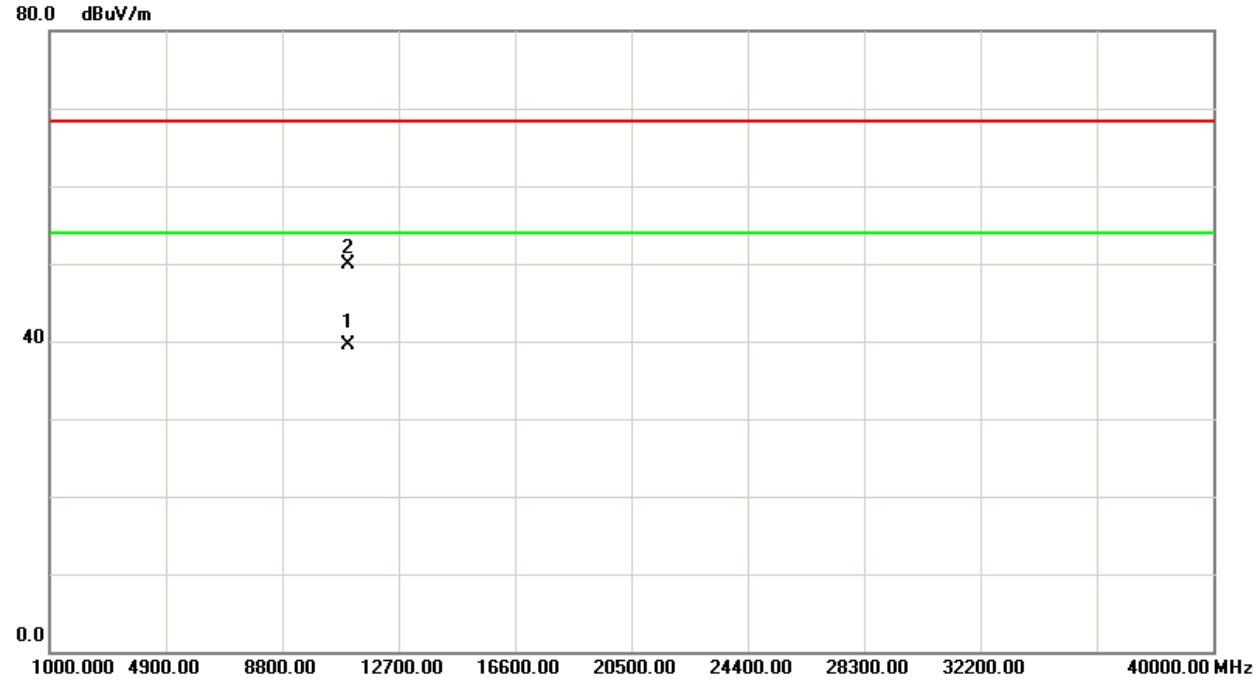
(6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(7) EUT Orthogonal Axes:
"X" - denotes Laid on Table；"Y" - denotes Vertical Stand；"Z" - denotes Side Stand

(8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Orthogonal Axis:X
Band 3/CH100(Above 1000 MHz, Horizontal)





EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6510DN-AGN-US
Temperature:	25°C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 3/ TX A Mode 5560MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		Note
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)									
5563.30	V	61.26	54.00	43.80	105.06	97.80	0.29	-6.97					X/F
11126.50	V	33.80	23.59	17.57	51.37	41.16	-53.40	-63.61	68.30	54.00	-27.00	-41.30	X/H

Remark:

(1) Spectrum Setting : 30MHz – 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto

(2) All readings are Peak unless otherwise stated AV in column of『Note』. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.

(3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency。"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)

(4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission 。

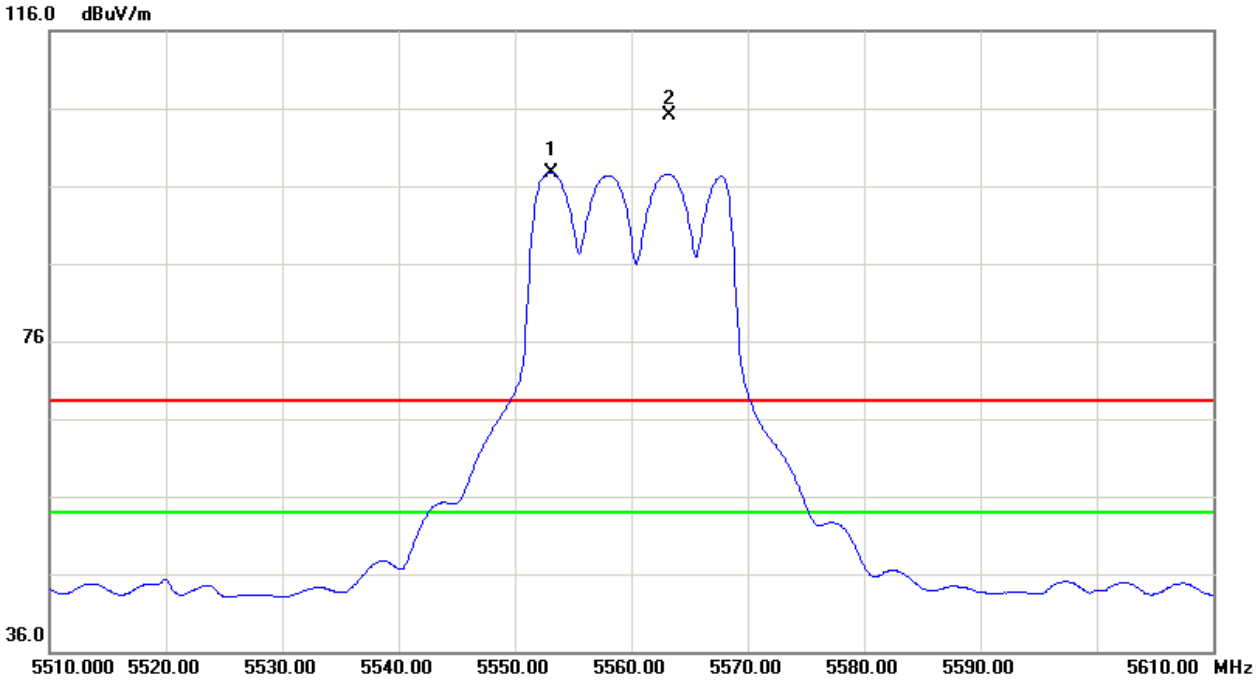
(5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

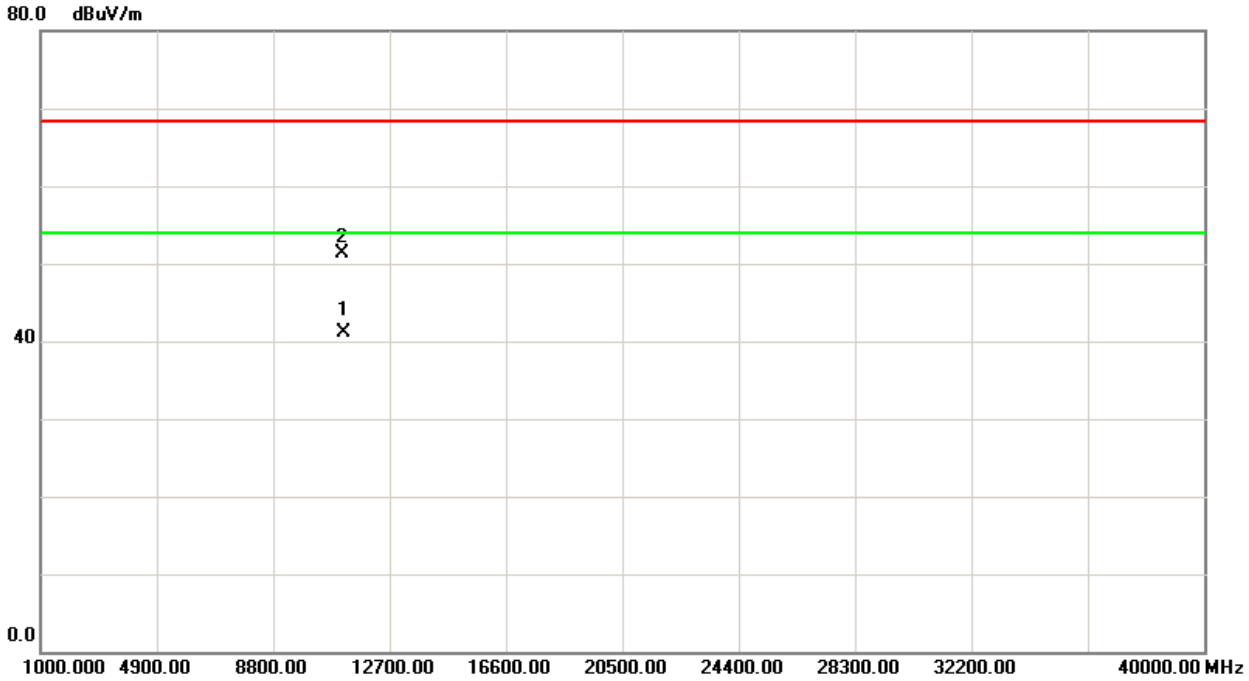
(6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(7) EUT Orthogonal Axes:
"X" - denotes Laid on Table；"Y" - denotes Vertical Stand；"Z" - denotes Side Stand

(8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Orthogonal Axis:X
Band 3/CH112(Above 1000 MHz, Vertical)





EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6510DN-AGN-US
Temperature:	25°C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 3/ TX A Mode 5560MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		Note
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)									
5557.70	H	61.36	53.60	43.77	105.13	97.37	0.36	-7.40					X/F
11122.40	H	31.79	21.47	17.56	49.35	39.03	-55.42	-65.74	68.30	54.00	-27.00	-41.30	X/H

Remark:

(1) Spectrum Setting : 30MHz – 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto

(2) All readings are Peak unless otherwise stated AV in column of『Note』. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.

(3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency。"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)

(4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission 。

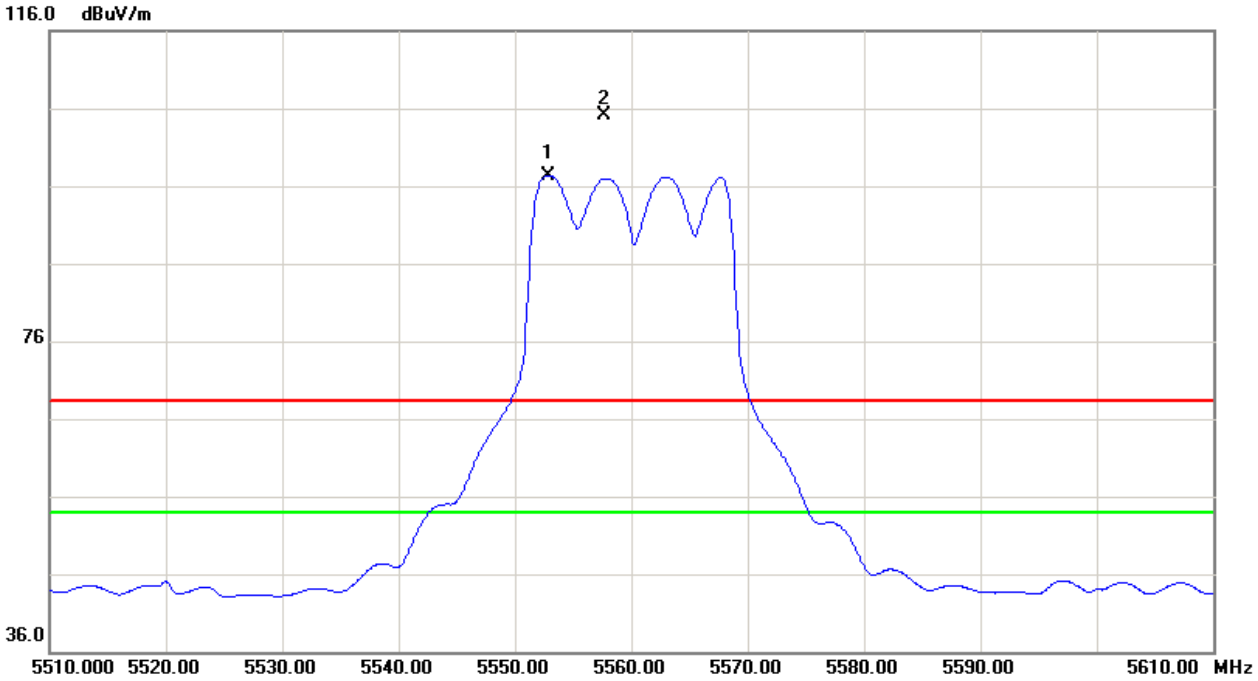
(5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

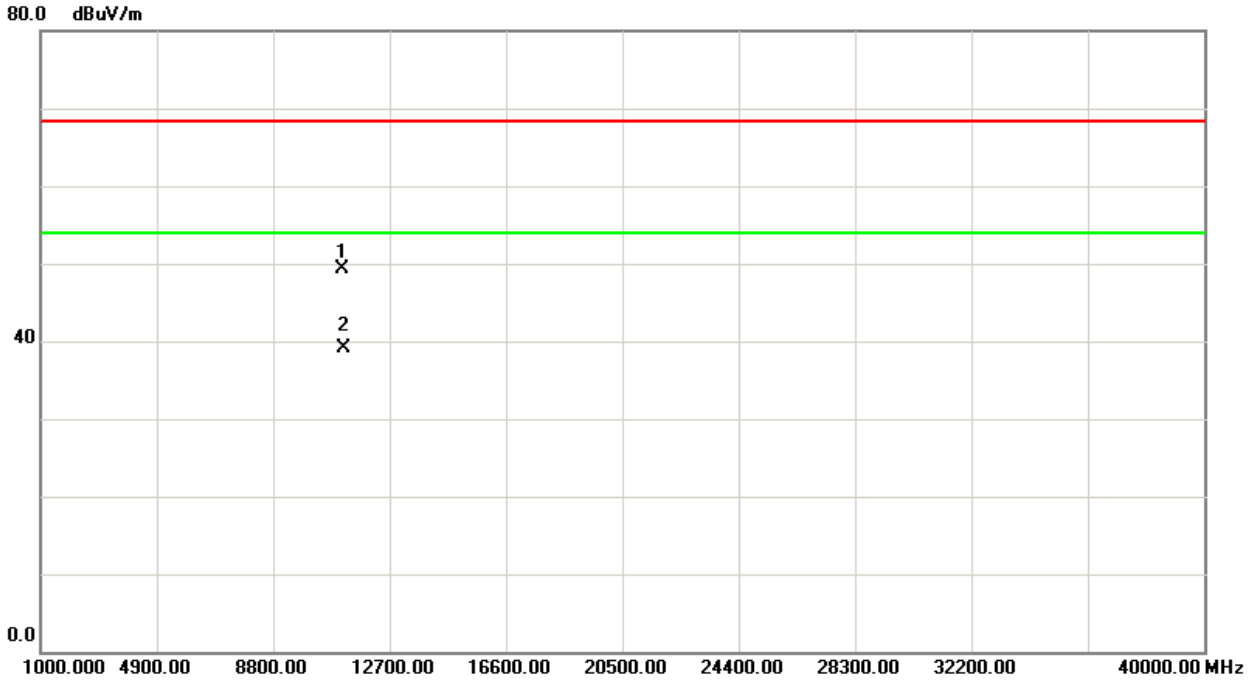
(6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(7) EUT Orthogonal Axes:
"X" - denotes Laid on Table；"Y" - denotes Vertical Stand；"Z" - denotes Side Stand

(8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Orthogonal Axis:X
Band 3/CH112(Above 1000 MHz, Horizontal)





EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6510DN-AGN-US
Temperature:	25°C	Relative Humidity :	52 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 3/ TX A Mode 5700MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		Note
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)									
5705.10	V	59.04	51.92	44.29	103.33	96.21	-1.44	-8.56					X/F
5725.00	V	9.97	1.46	44.34	54.31	45.80	-50.46	-58.97	68.30	54.00	-27.00	-41.30	X/E
11405.10	V	33.00	22.94	18.26	51.26	41.20	-53.51	-63.57	68.30	54.00	-27.00	-41.30	X/H

Remark:

(1) Spectrum Setting : 30MHz – 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto

(2) All readings are Peak unless otherwise stated AV in column of『Note』. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.

(3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency。"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)

(4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission 。

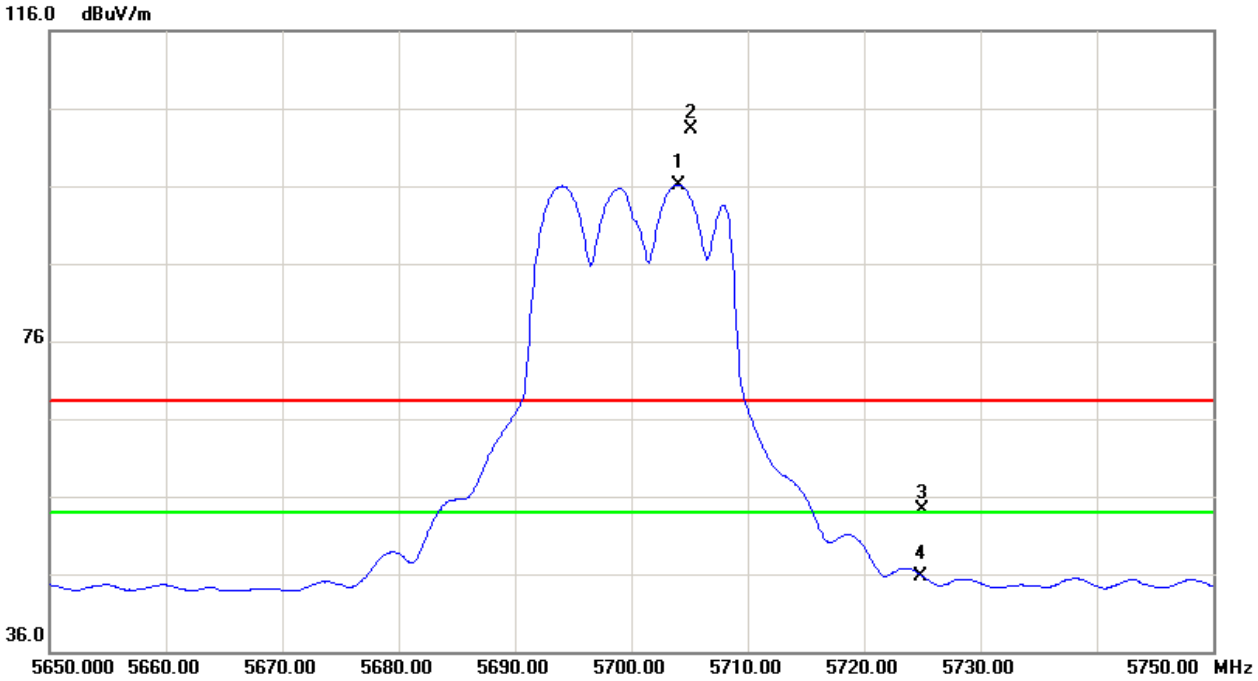
(5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

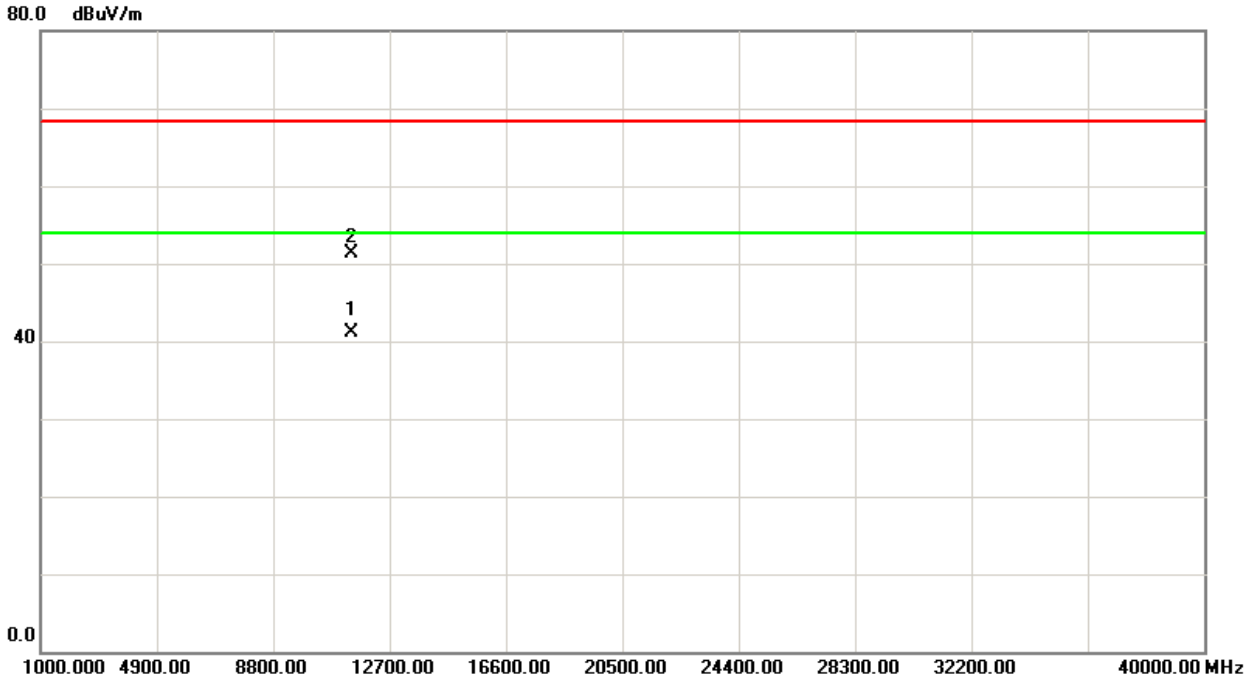
(6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(7) EUT Orthogonal Axes:
"X" - denotes Laid on Table；"Y" - denotes Vertical Stand；"Z" - denotes Side Stand

(8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Orthogonal Axis:X
Band 3/CH140(Above 1000 MHz, Vertical)





EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6510DN-AGN-US
Temperature:	25°C	Relative Humidity :	52 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 3/ TX A Mode 5700MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		Note
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)									
5692.70	H	60.19	52.28	44.24	104.43	96.52	-0.34	-8.25					X/F
5725.00	H	9.81	0.57	44.34	54.15	44.91	-50.62	-59.86	68.30	54.00	-27.00	-41.30	X/E
11406.70	H	31.51	20.87	18.26	49.77	39.13	-55.00	-65.64	68.30	54.00	-27.00	-41.30	X/H

Remark:

(1) Spectrum Setting : 30MHz – 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto

(2) All readings are Peak unless otherwise stated AV in column of『Note』. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.

(3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency。"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)

(4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission 。

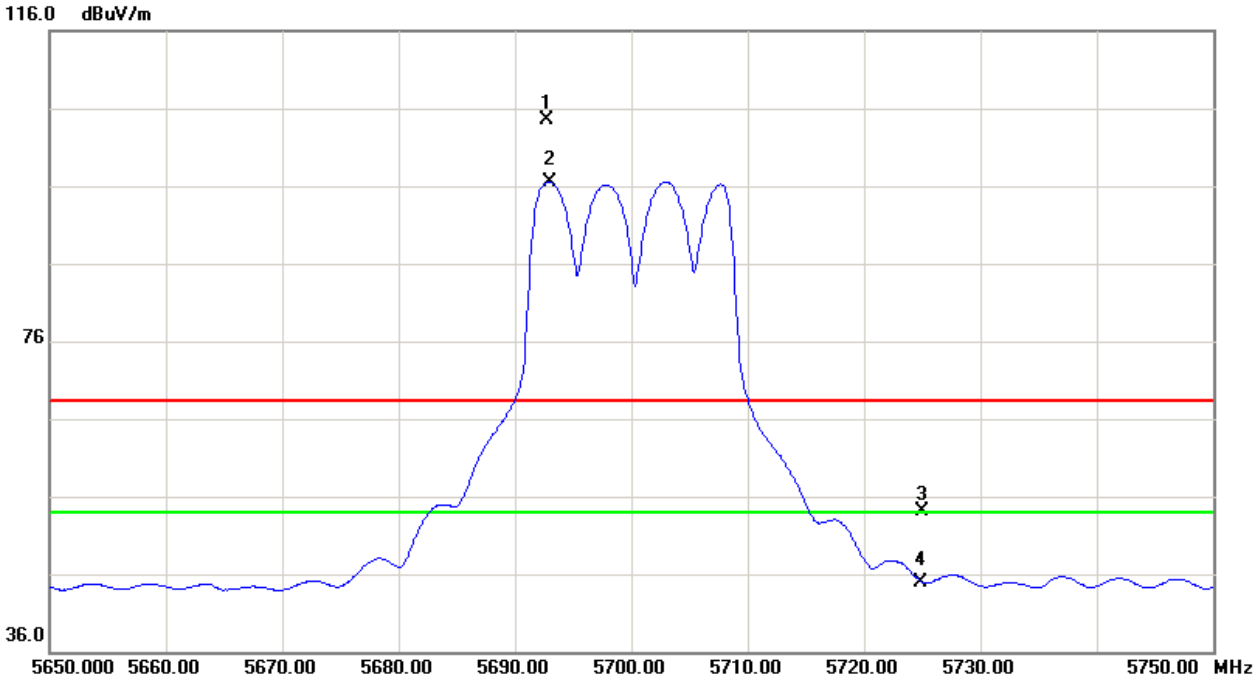
(5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

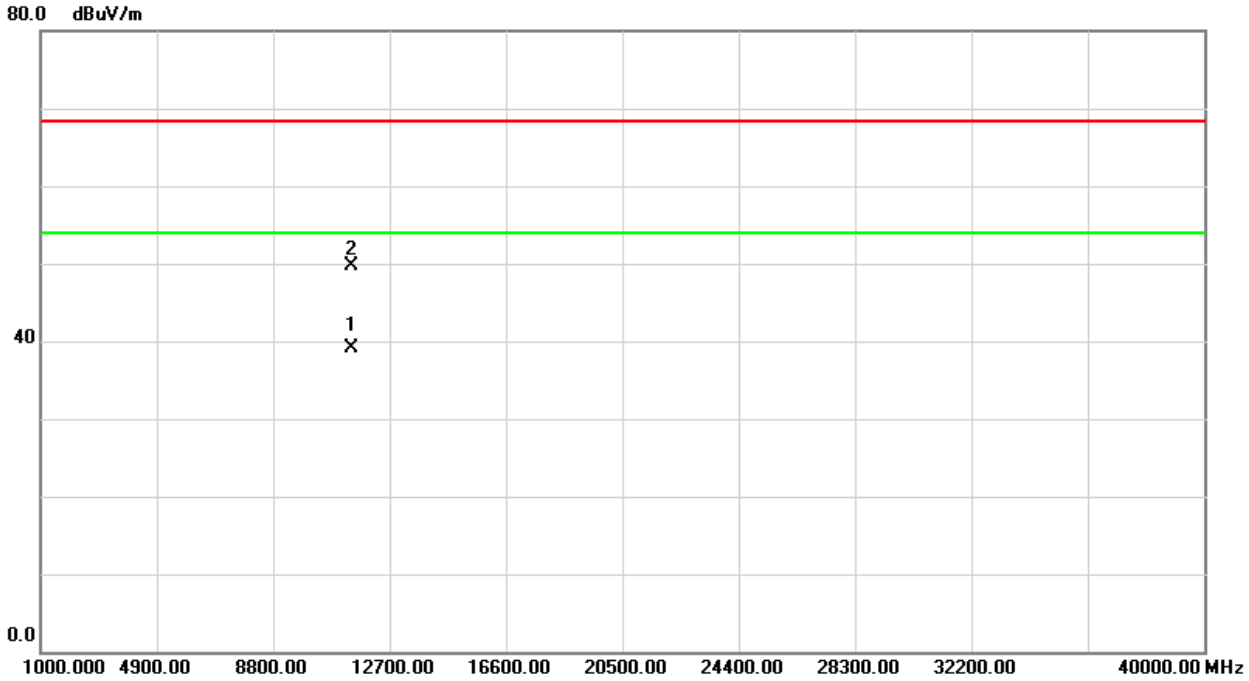
(6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(7) EUT Orthogonal Axes:
"X" - denotes Laid on Table；"Y" - denotes Vertical Stand；"Z" - denotes Side Stand

(8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Orthogonal Axis:X
Band 3/CH140(Above 1000 MHz, Horizontal)





EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6510DN-AGN-US
Temperature:	25°C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 3/ TX N20 Mode 5500MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		Note
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)									
5460.00	V	15.68	5.10	43.49	59.17	48.59	-45.60	-56.18	68.30	54.00	-27.00	-41.30	X/E
5470.00	V	13.96	5.34	43.50	57.46	48.84	-47.31	-55.93	68.30	54.00	-27.00	-41.30	X/E
5506.40	V	59.95	50.74	43.60	103.55	94.34	-1.22	-10.43					X/F
11004.10	V	33.62	23.63	17.26	50.88	40.89	-53.89	-63.88	68.30	54.00	-27.00	-41.30	X/H

Remark:

(1) Spectrum Setting : 30MHz – 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto

(2) All readings are Peak unless otherwise stated AV in column of『Note』. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.

(3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency。"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)

(4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission 。

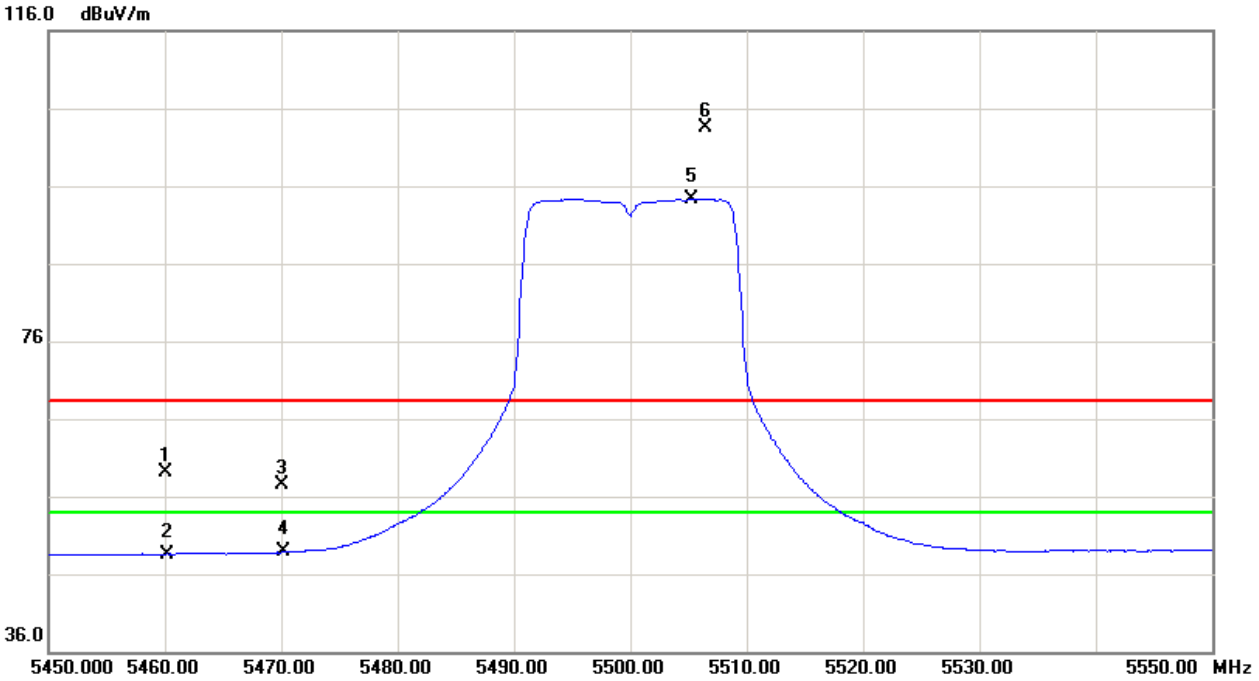
(5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

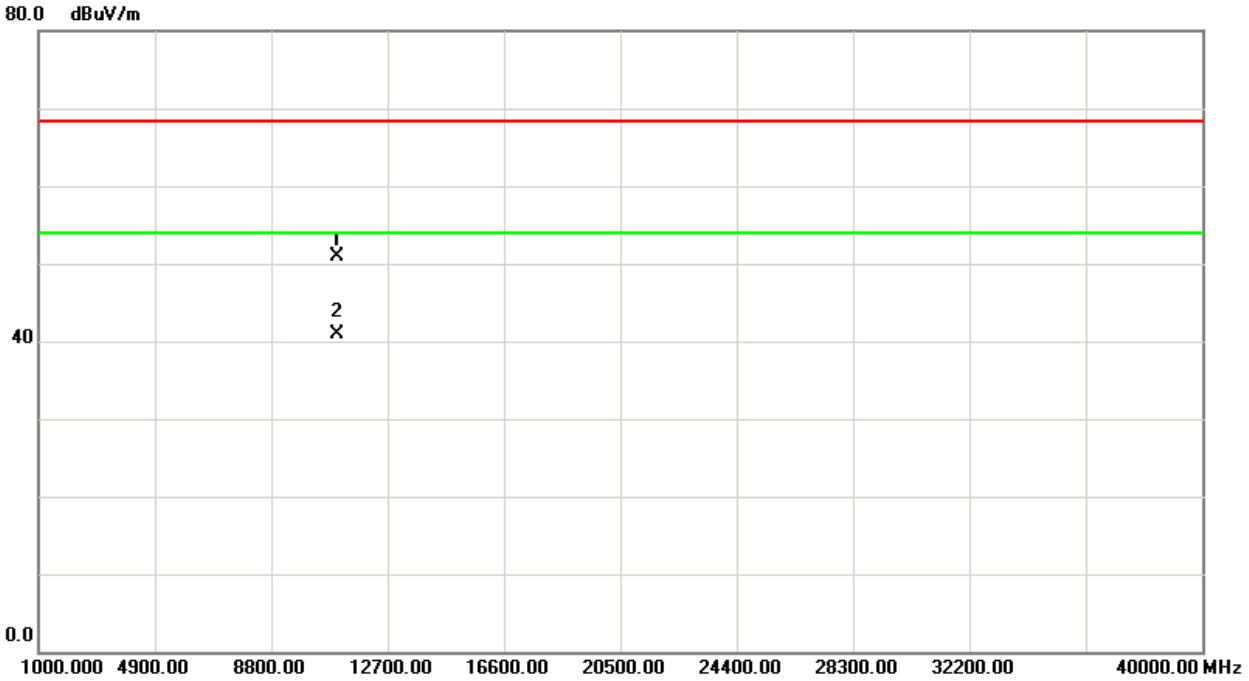
(6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(7) EUT Orthogonal Axes:
"X" - denotes Laid on Table；"Y" - denotes Vertical Stand；"Z" - denotes Side Stand

(8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Orthogonal Axis:X
Band 3/CH100(Above 1000 MHz, Vertical)





EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6510DN-AGN-US
Temperature:	25°C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 3/ TX N20 Mode 5500MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		Note
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)									
5460.00	H	14.55	5.11	43.49	58.04	48.60	-46.73	-56.17	68.30	54.00	-27.00	-41.30	X/E
5470.00	H	13.19	5.26	43.50	56.69	48.76	-48.08	-56.01	68.30	54.00	-27.00	-41.30	X/E
5502.90	H	59.96	50.72	43.59	103.55	94.31	-1.22	-10.46					X/F
11004.50	H	31.92	21.48	17.26	49.18	38.74	-55.59	-66.03	68.30	54.00	-27.00	-41.30	X/H

Remark:

(1) Spectrum Setting : 30MHz – 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto

(2) All readings are Peak unless otherwise stated AV in column of『Note』. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.

(3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency。"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)

(4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission 。

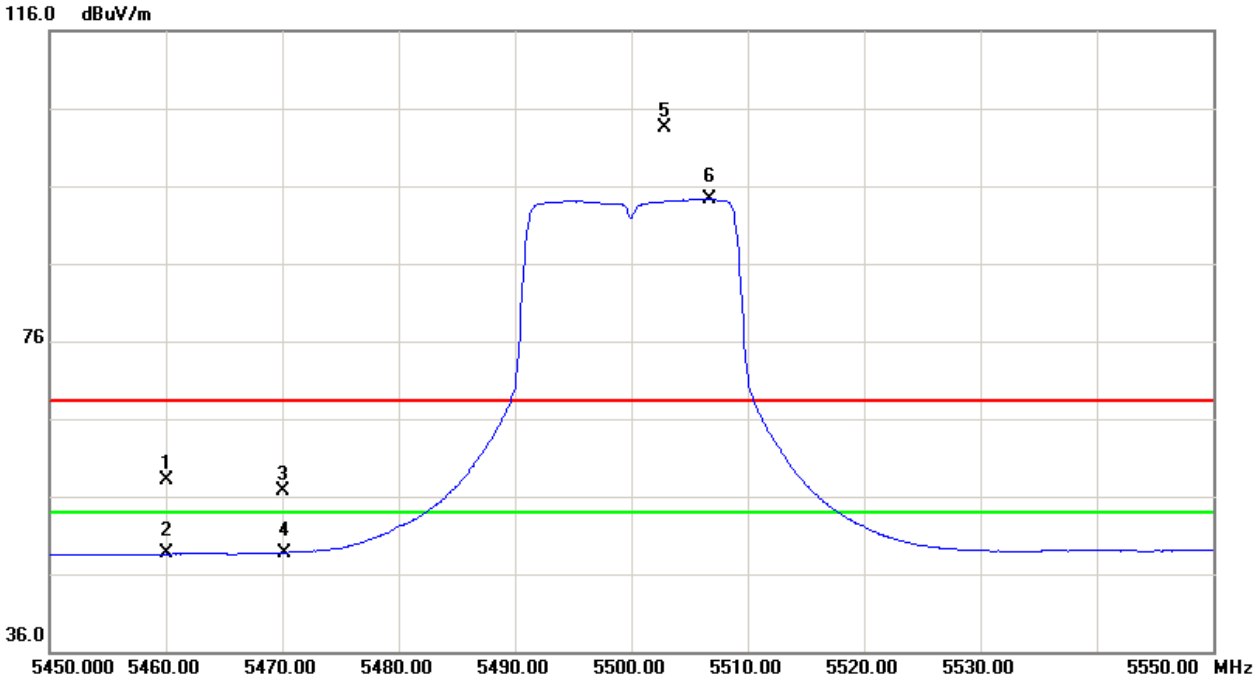
(5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

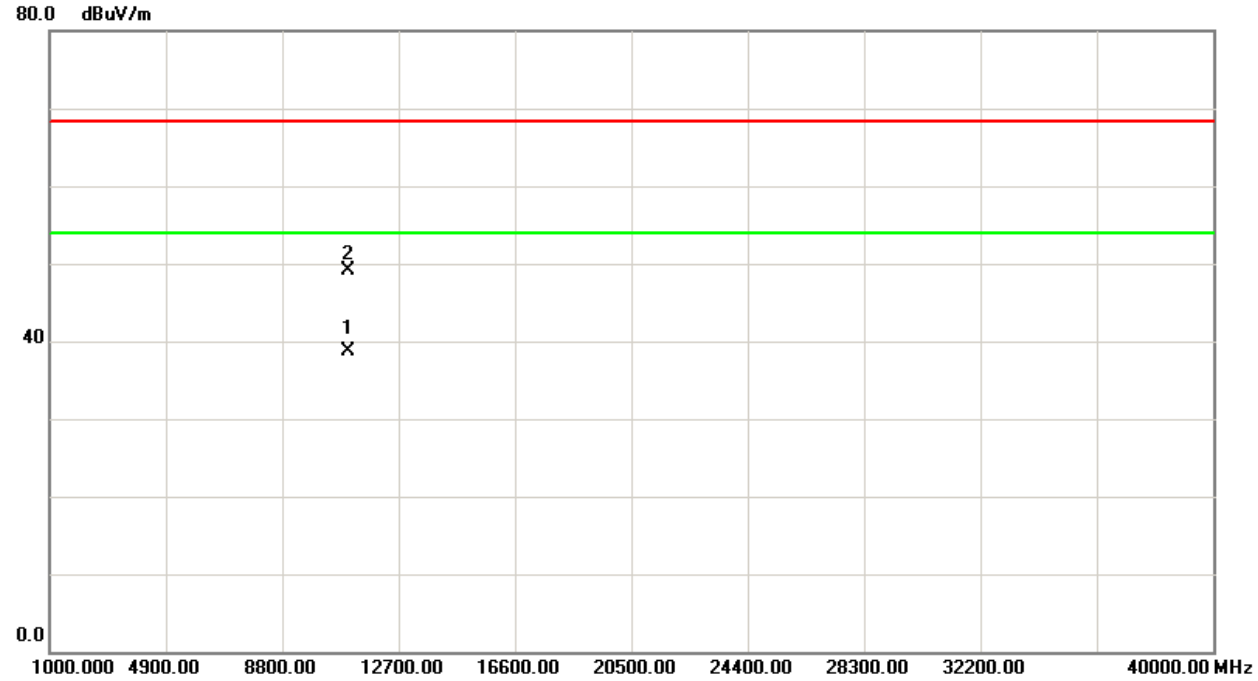
(6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(7) EUT Orthogonal Axes:
"X" - denotes Laid on Table；"Y" - denotes Vertical Stand；"Z" - denotes Side Stand

(8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Orthogonal Axis:X
Band 3/CH100(Above 1000 MHz, Horizontal)





EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6510DN-AGN-US
Temperature:	25°C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 3/ TX N20 Mode 5560MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		Note
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)									
5555.80	V	60.58	51.09	43.77	104.35	94.86	-0.42	-9.91					X/F
11122.90	V	33.28	23.17	17.57	50.85	40.74	-53.92	-64.03	68.30	54.00	-27.00	-41.30	X/H

Remark:

(1) Spectrum Setting : 30MHz – 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto

(2) All readings are Peak unless otherwise stated AV in column of『Note』. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.

(3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency。"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)

(4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission 。

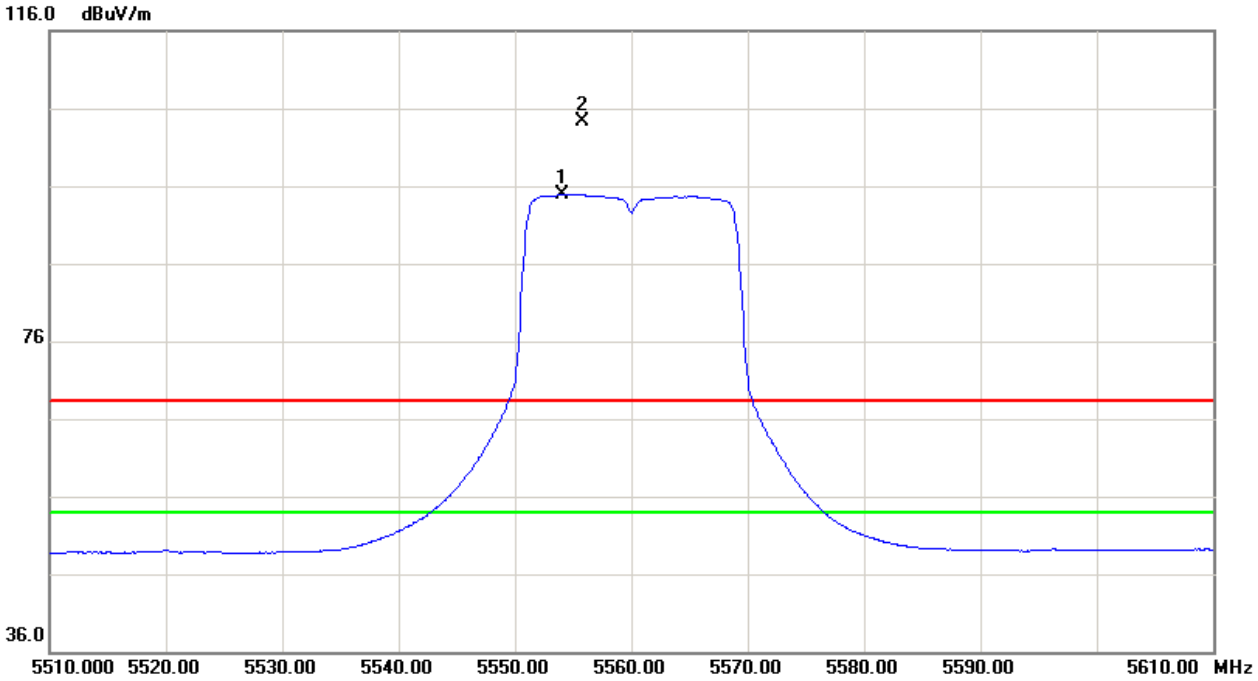
(5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

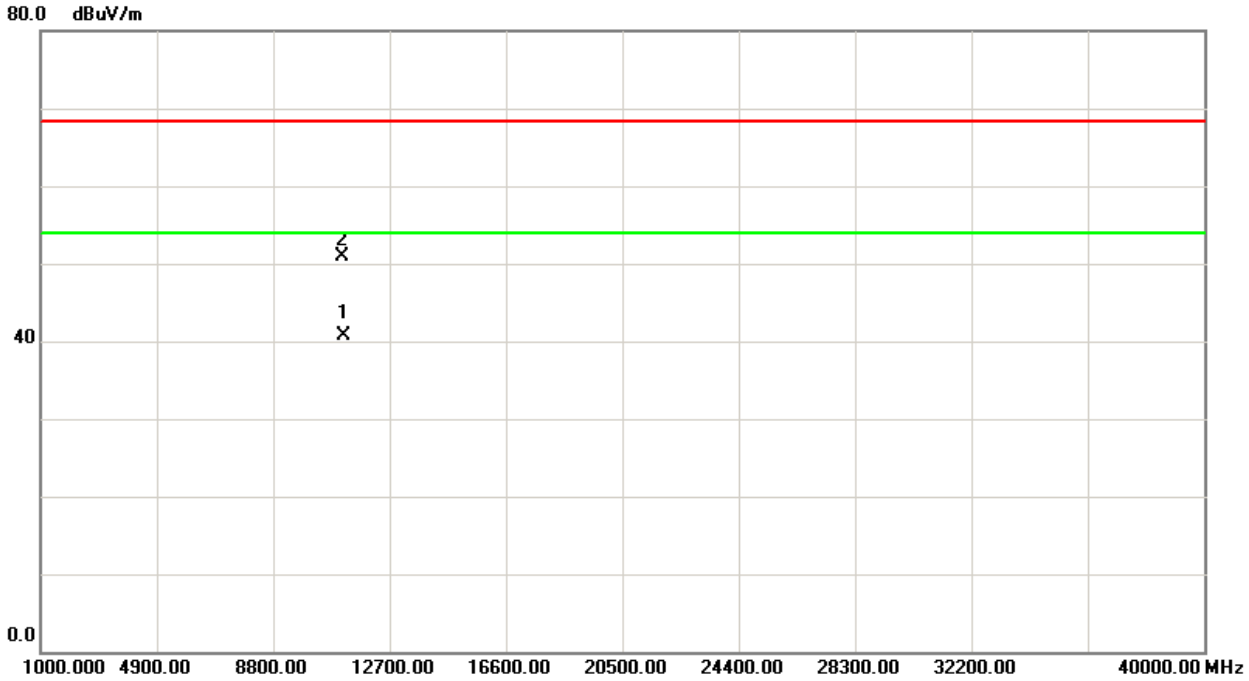
(6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(7) EUT Orthogonal Axes:
"X" - denotes Laid on Table；"Y" - denotes Vertical Stand；"Z" - denotes Side Stand

(8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Orthogonal Axis:X
Band 3/CH112(Above 1000 MHz, Vertical)





EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6510DN-AGN-US
Temperature:	25°C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 3/ TX N20 Mode 5560MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		Note
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)									
5554.30	H	60.44	51.27	43.76	104.20	95.03	-0.57	-9.74					X/F
11122.80	H	31.30	21.04	17.57	48.87	38.61	-55.90	-66.16	68.30	54.00	-27.00	-41.30	X/H

Remark:

(1) Spectrum Setting : 30MHz – 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto

(2) All readings are Peak unless otherwise stated AV in column of『Note』. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.

(3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency。"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)

(4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission 。

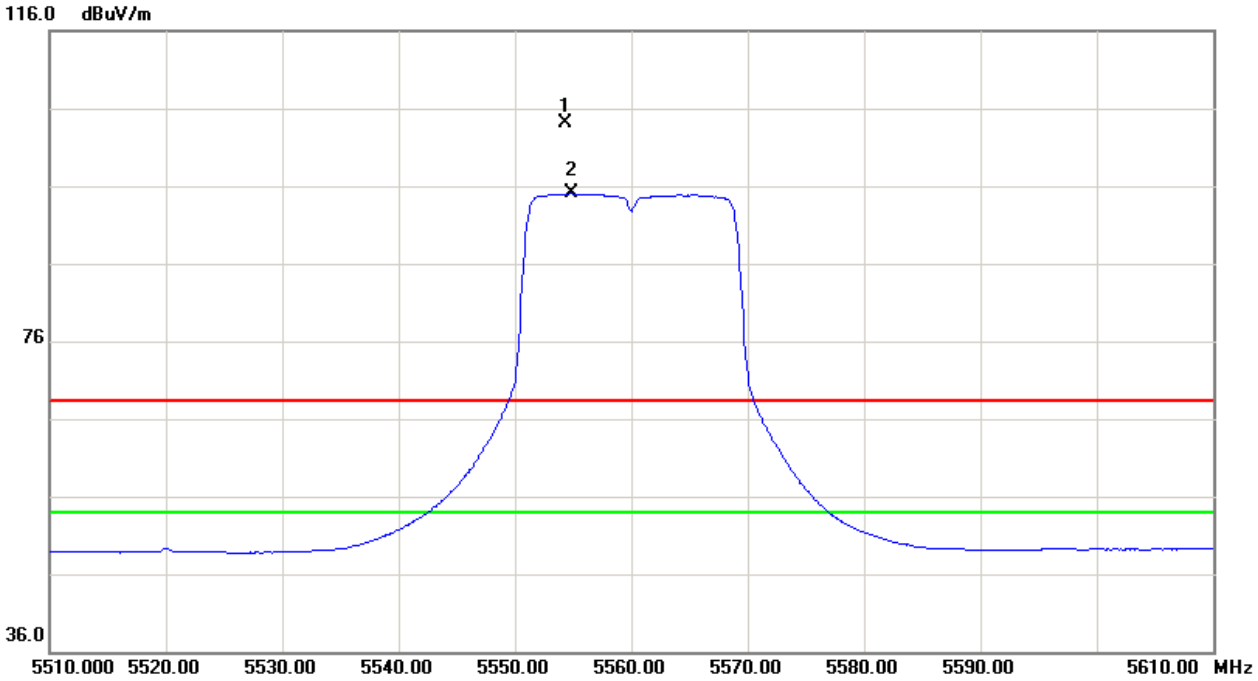
(5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

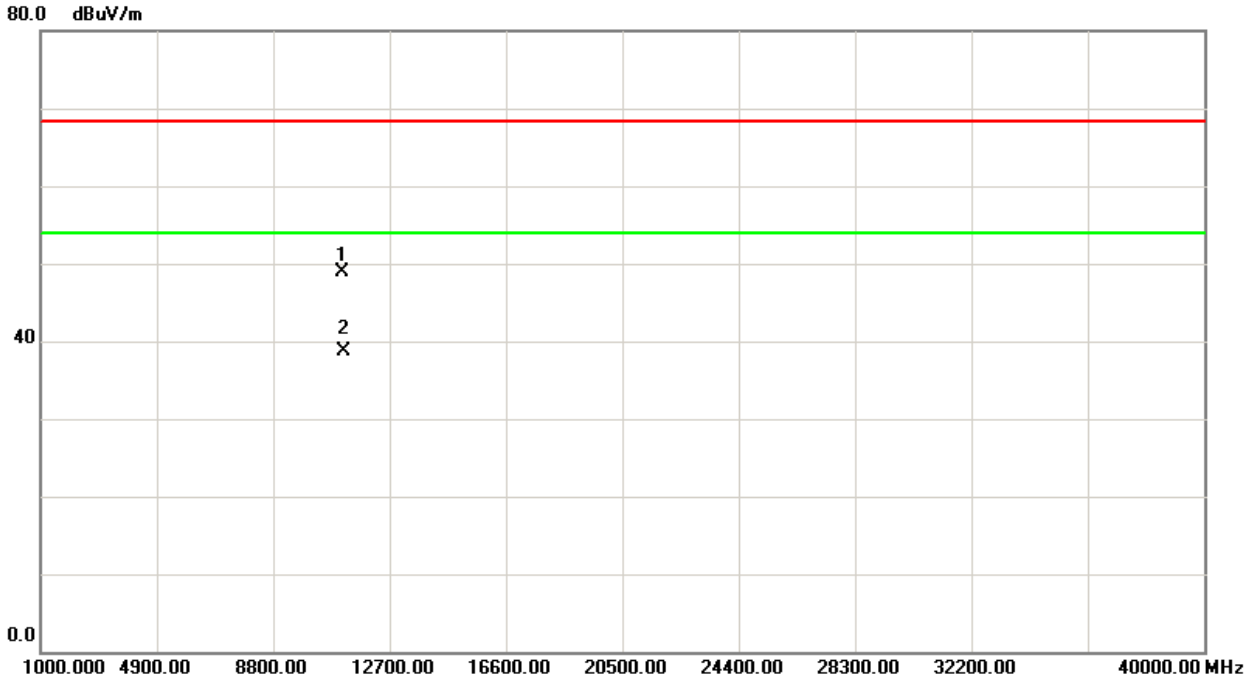
(6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(7) EUT Orthogonal Axes:
"X" - denotes Laid on Table；"Y" - denotes Vertical Stand；"Z" - denotes Side Stand

(8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Orthogonal Axis:X
Band 3/CH112(Above 1000 MHz, Horizontal)





EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6510DN-AGN-US
Temperature:	25°C	Relative Humidity :	52 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 3/ TX N20 Mode 5700MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		Note
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)									
5693.30	V	59.66	49.20	44.24	103.90	93.44	-0.87	-11.33					X/F
5725.00	V	10.53	1.78	44.34	54.87	46.12	-49.90	-58.65	68.30	54.00	-27.00	-41.30	X/E
11402.90	V	32.26	22.11	18.25	50.51	40.36	-54.26	-64.41	68.30	54.00	-27.00	-41.30	X/H

Remark:

(1) Spectrum Setting : 30MHz – 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto

(2) All readings are Peak unless otherwise stated AV in column of『Note』. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.

(3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency。"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)

(4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission 。

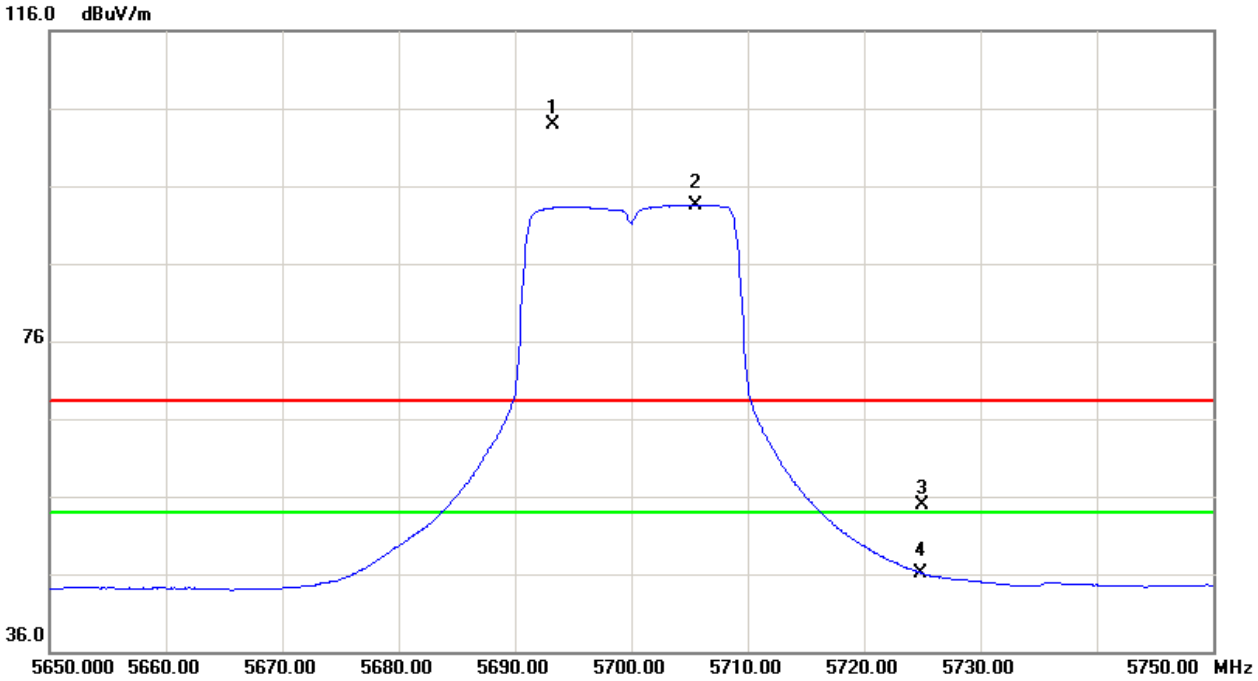
(5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

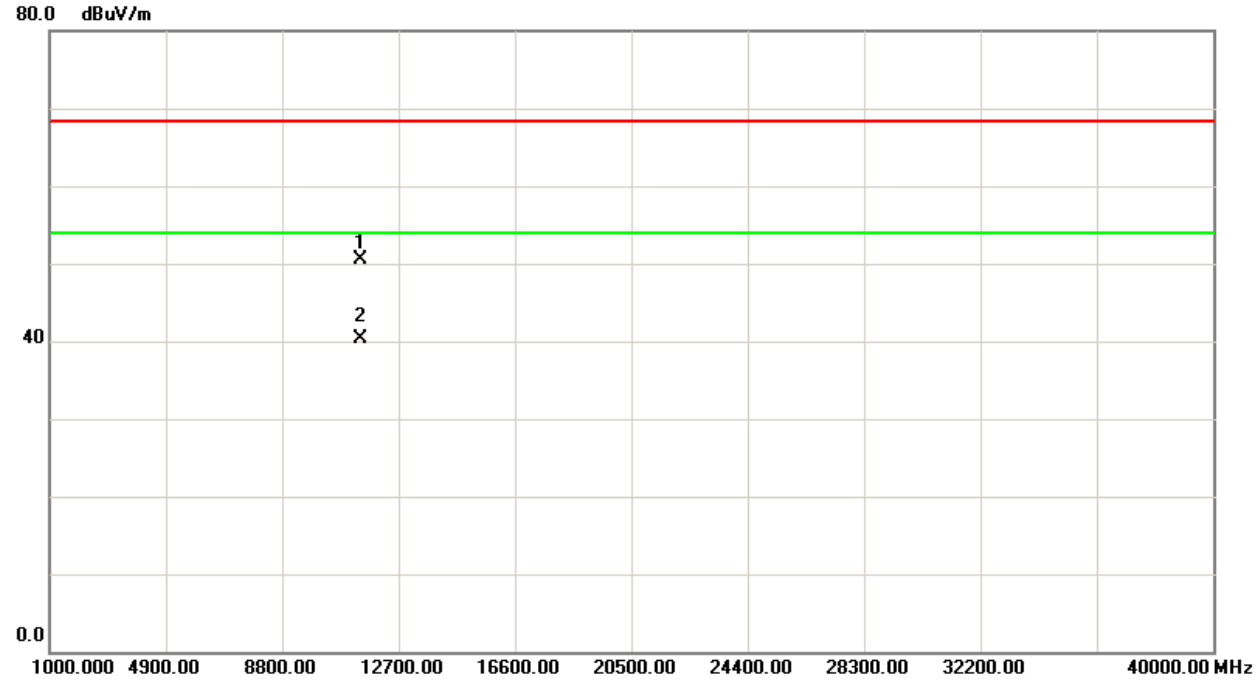
(6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(7) EUT Orthogonal Axes:
"X" - denotes Laid on Table；"Y" - denotes Vertical Stand；"Z" - denotes Side Stand

(8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Orthogonal Axis:X
Band 3/CH140(Above 1000 MHz, Vertical)





EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6510DN-AGN-US
Temperature:	25°C	Relative Humidity :	52 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 3/ TX N20 Mode 5700MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		Note
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)									
5696.00	H	58.52	49.22	44.25	102.77	93.47	-2.00	-11.30					X/F
5725.00	H	15.67	1.89	44.34	60.01	46.23	-44.76	-58.54	68.30	54.00	-27.00	-41.30	X/E
11125.90	H	31.36	20.91	17.57	48.93	38.48	-55.84	-66.29	68.30	54.00	-27.00	-41.30	X/H

Remark:

(1) Spectrum Setting : 30MHz – 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto

(2) All readings are Peak unless otherwise stated AV in column of『Note』. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.

(3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency。"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)

(4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission 。

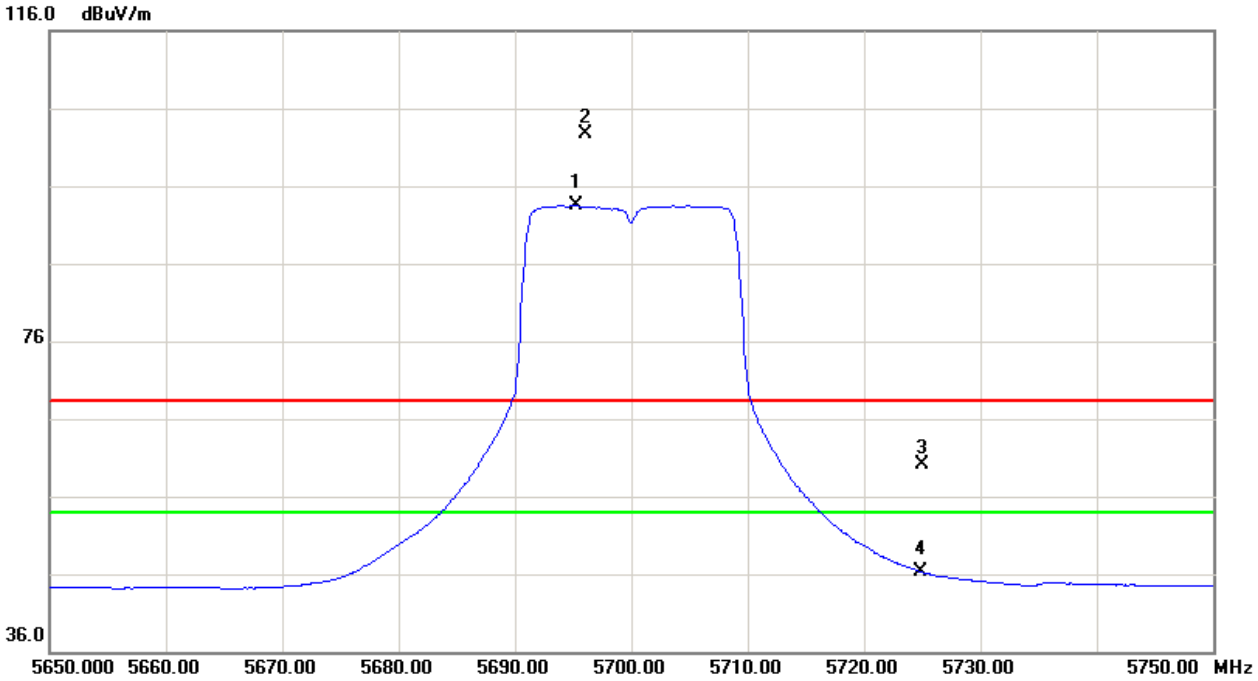
(5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

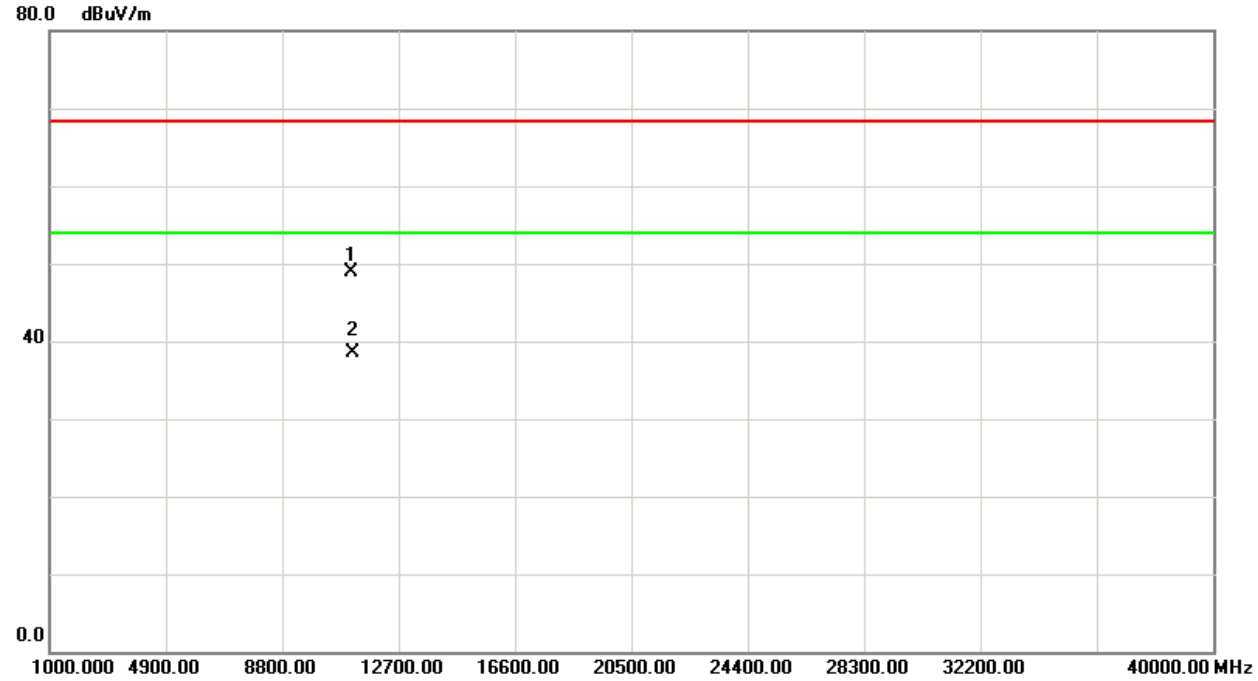
(6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(7) EUT Orthogonal Axes:
"X" - denotes Laid on Table；"Y" - denotes Vertical Stand；"Z" - denotes Side Stand

(8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Orthogonal Axis:X
Band 3/CH140(Above 1000 MHz, Horizontal)





EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6510DN-AGN-US
Temperature:	25°C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 3/ TX N40 Mode 5510MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		Note
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)									
5460.00	V	13.67	5.12	43.49	57.16	48.61	-47.61	-56.16	68.30	54.00	-27.00	-41.30	X/E
5470.00	V	14.67	6.14	43.50	58.17	49.64	-46.60	-55.13	68.30	54.00	-27.00	-41.30	X/E
5493.40	V	54.83	45.96	43.56	98.39	89.52	-6.38	-15.25					X/F
11022.50	V	32.71	23.03	17.31	50.02	40.34	-54.75	-64.43	68.30	54.00	-27.00	-41.30	X/H

Remark:

(1) Spectrum Setting : 30MHz – 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto

(2) All readings are Peak unless otherwise stated AV in column of『Note』. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.

(3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency。"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)

(4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission 。

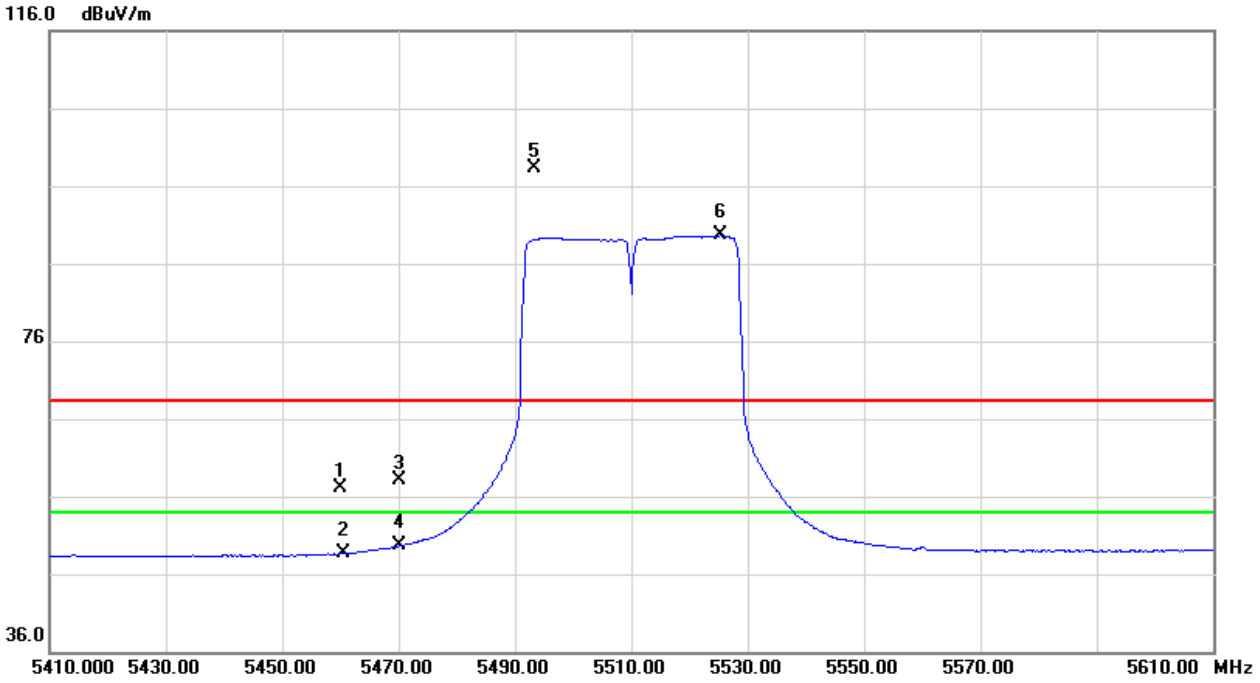
(5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

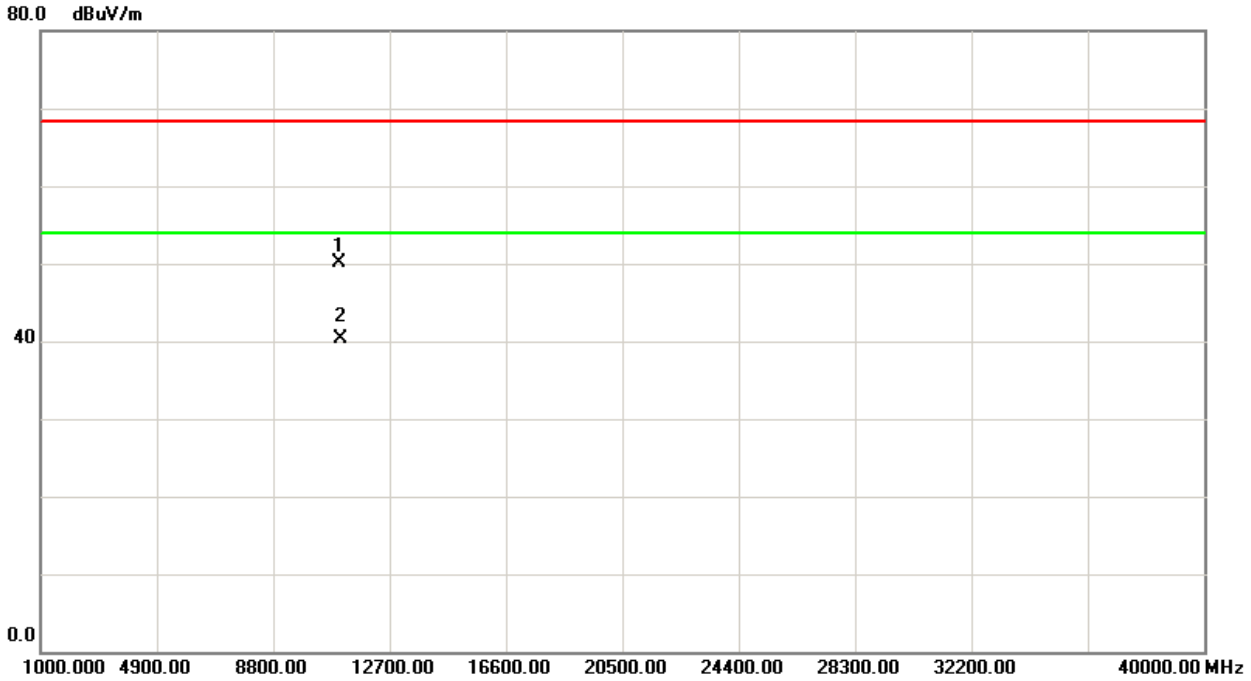
(6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(7) EUT Orthogonal Axes:
"X" - denotes Laid on Table；"Y" - denotes Vertical Stand；"Z" - denotes Side Stand

(8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Orthogonal Axis:X
Band 3/CH102(Above 1000 MHz, Vertical)





EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6510DN-AGN-US
Temperature:	25°C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 3/ TX N40 Mode 5510MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		Note
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)									
5460.00	H	12.32	5.18	43.49	55.81	48.67	-48.96	-56.10	68.30	54.00	-27.00	-41.30	X/E
5470.00	H	14.77	6.12	43.50	58.27	49.62	-46.50	-55.15	68.30	54.00	-27.00	-41.30	X/E
5512.00	H	54.94	46.02	43.63	98.57	89.65	-6.20	-15.12					X/F
11025.50	H	30.74	20.69	17.32	48.06	38.01	-56.71	-66.76	68.30	54.00	-27.00	-41.30	X/H

Remark:

(1) Spectrum Setting : 30MHz – 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto

(2) All readings are Peak unless otherwise stated AV in column of『Note』. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.

(3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency。"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)

(4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission 。

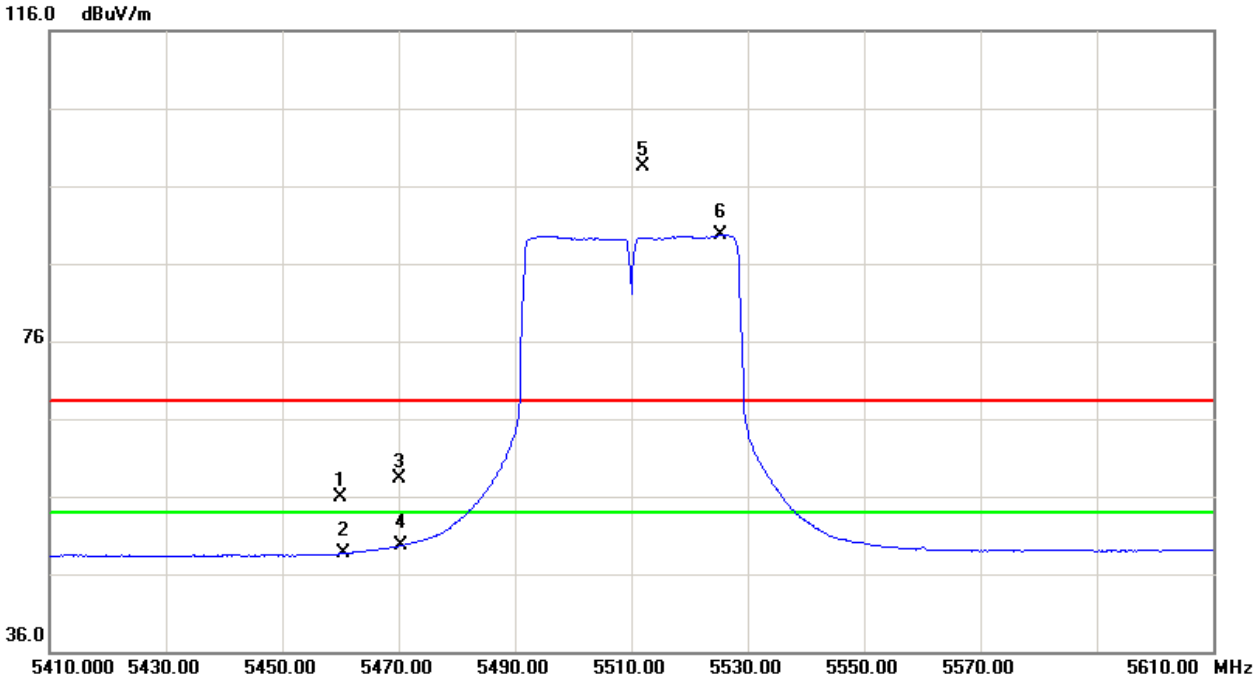
(5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

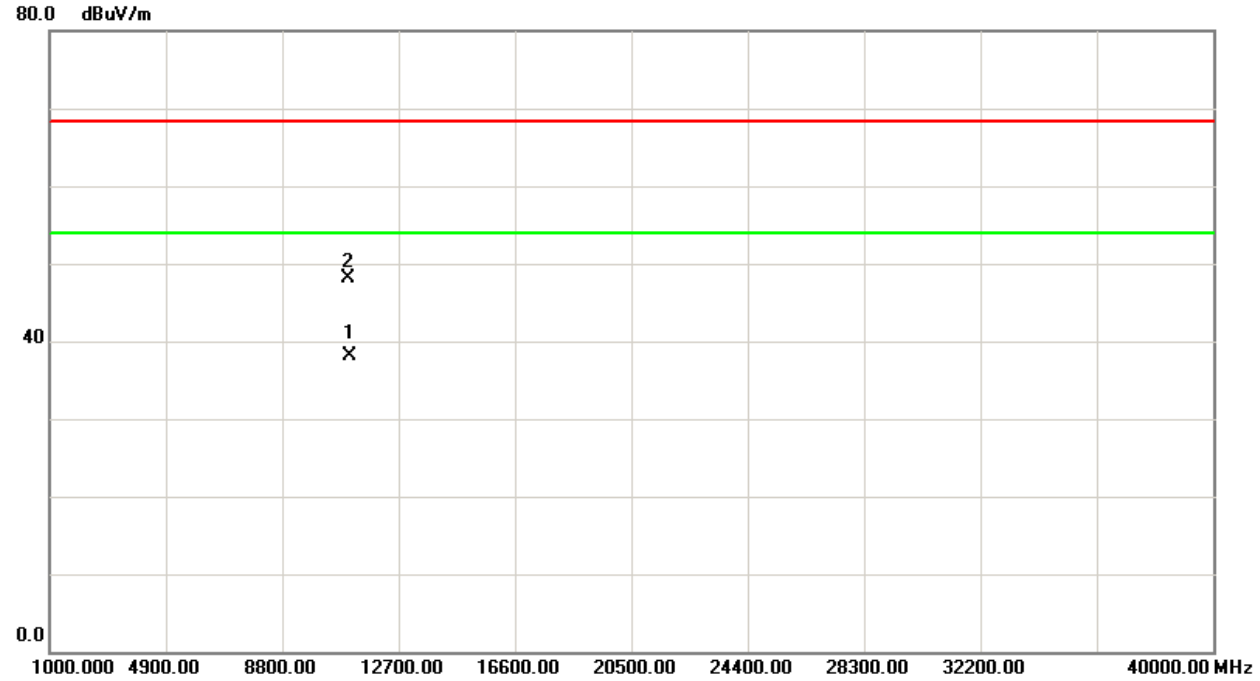
(6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(7) EUT Orthogonal Axes:
"X" - denotes Laid on Table；"Y" - denotes Vertical Stand；"Z" - denotes Side Stand

(8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Orthogonal Axis:X
Band 3/CH102(Above 1000 MHz, Horizontal)





EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6510DN-AGN-US
Temperature:	25°C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 3/ TX N40 Mode 5550MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		Note
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)									
5554.00	V	57.77	48.22	43.76	101.53	91.98	-3.24	-12.79					X/F
11103.10	V	32.80	22.62	17.51	50.31	40.13	-54.46	-64.64	68.30	54.00	-27.00	-41.30	X/H

Remark:

(1) Spectrum Setting : 30MHz – 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto

(2) All readings are Peak unless otherwise stated AV in column of『Note』. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.

(3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency。"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)

(4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission 。

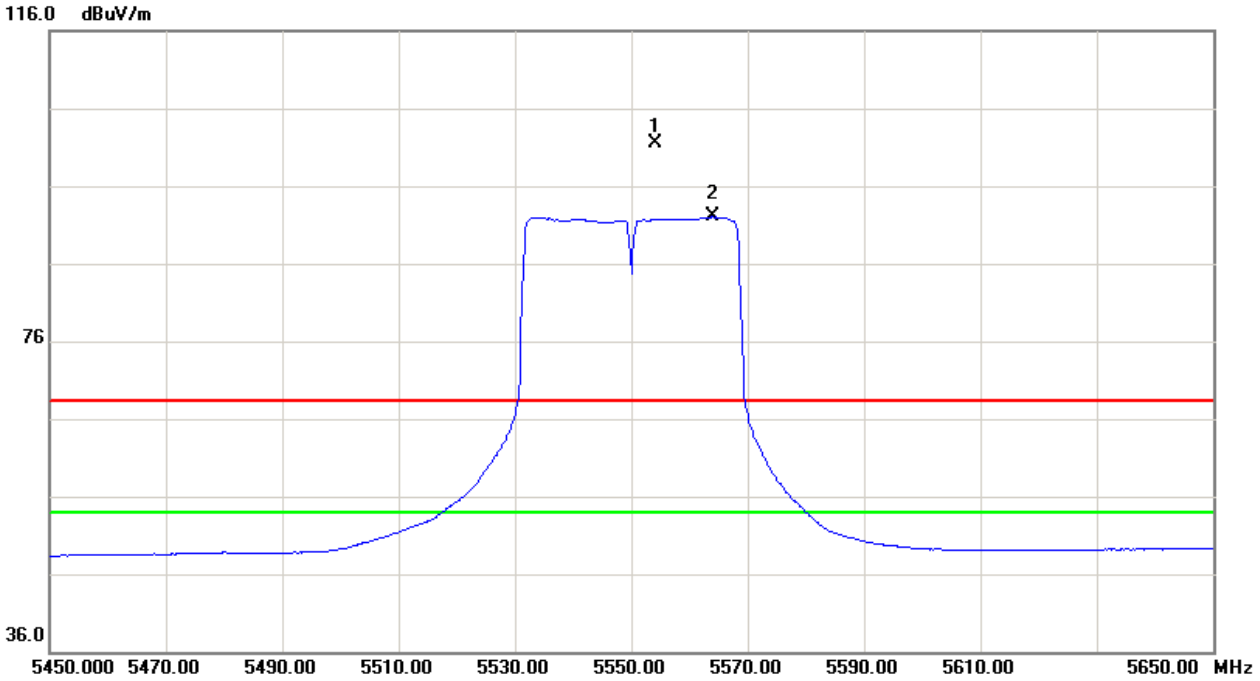
(5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

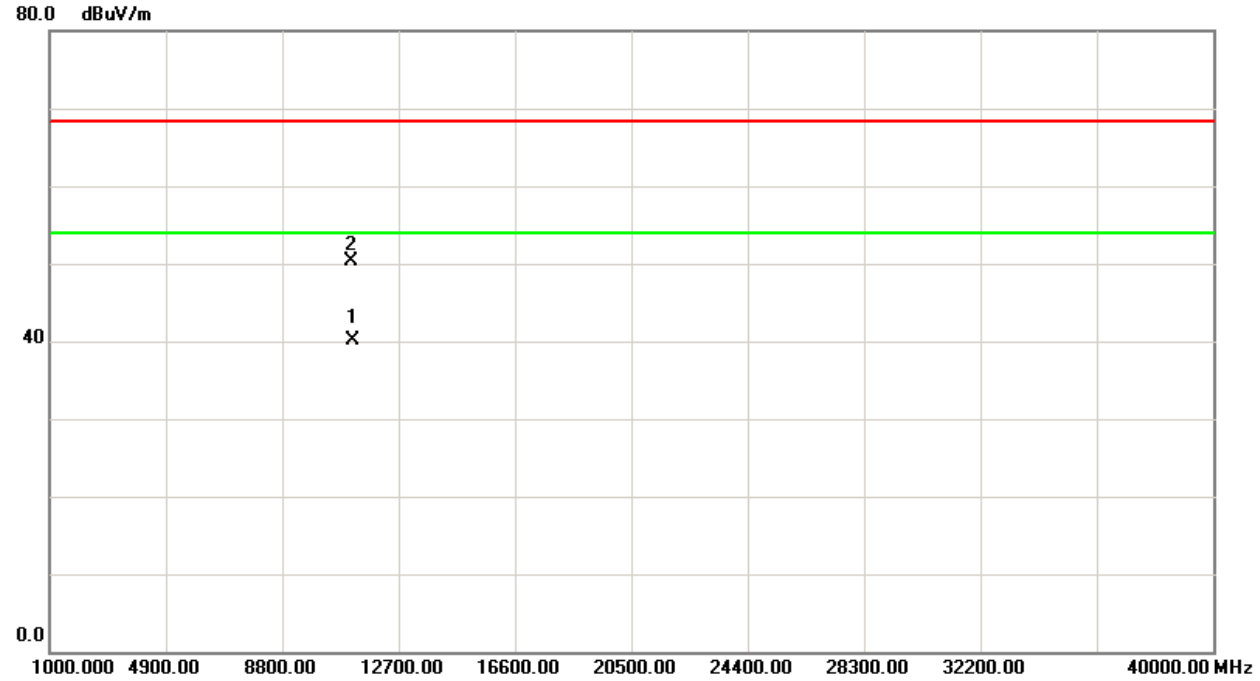
(6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(7) EUT Orthogonal Axes:
"X" - denotes Laid on Table；"Y" - denotes Vertical Stand；"Z" - denotes Side Stand

(8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Orthogonal Axis:X
Band 3/CH110(Above 1000 MHz, Vertical)





EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6510DN-AGN-US
Temperature:	25°C	Relative Humidity :	58 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	Band 3/ TX N40 Mode 5550MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.(dBuV/m)		Act.(dBm)		Limit(dBuV/m)		Limit(dBm)		Note
		Peak	AV		Peak	AV	Peak	AV	Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)									
5556.00	H	57.26	48.34	43.77	101.03	92.11	-3.74	-12.66					X/F
11105.80	H	30.69	20.57	17.52	48.21	38.09	-56.56	-66.68	68.30	54.00	-27.00	-41.30	X/H

Remark:

(1) Spectrum Setting : 30MHz – 1000MHz , RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms. 1GHz- 40GHz, RBW= 1MHz, VBW= 1MHz, Sweep time = Auto

(2) All readings are Peak unless otherwise stated AV in column of『Note』. Peak denotes that the Peak reading compliance with the AV Limits and then AV Mode measurement didn't perform.

(3) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency。"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)

(4) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission 。

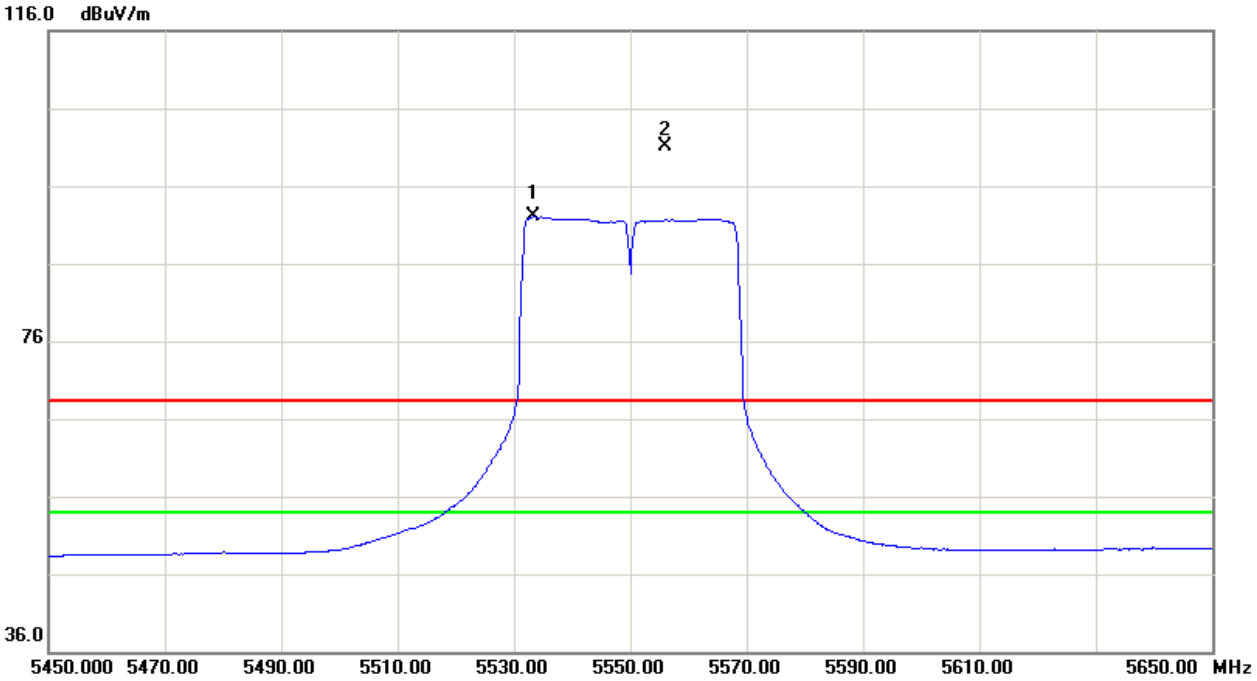
(5) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

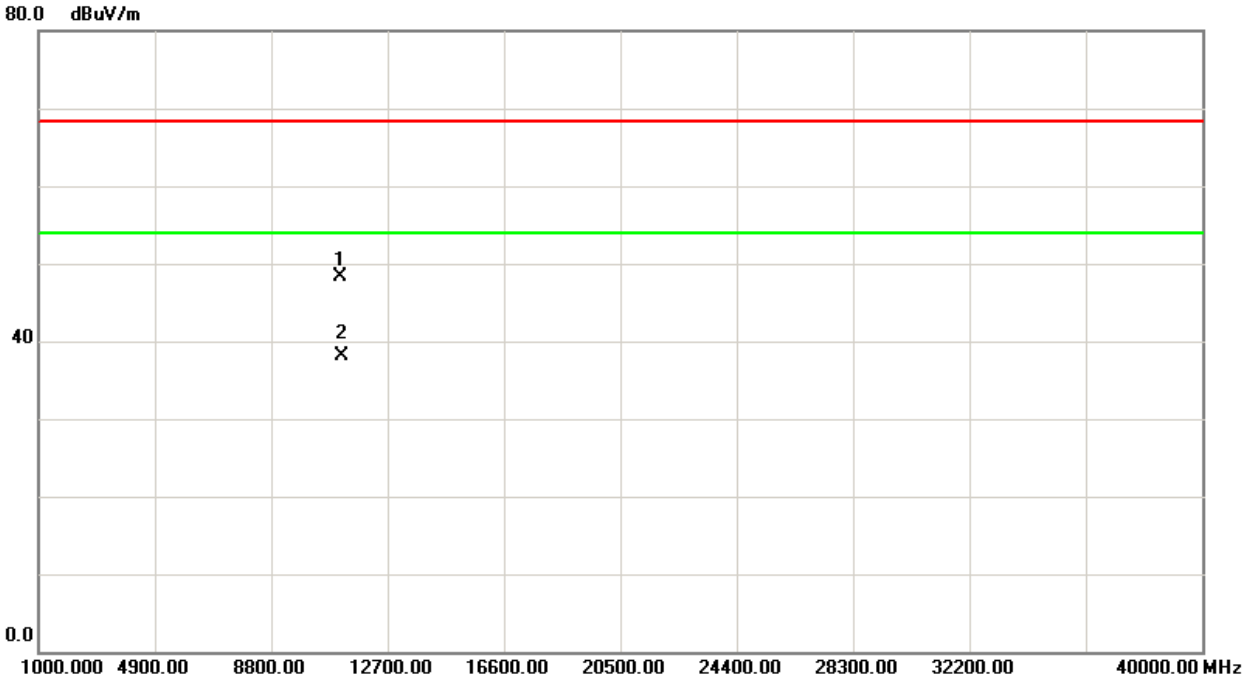
(6) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(7) EUT Orthogonal Axes:
"X" - denotes Laid on Table；"Y" - denotes Vertical Stand；"Z" - denotes Side Stand

(8) During the measurements above 1GHz it is taken care of that the EUT is always within the 3dB cone of radiation BW of the used antenna.

Orthogonal Axis:X
Band 3/CH110(Above 1000 MHz, Horizontal)





5. 26dB SPECTRUM BANDWIDTH

5.1 APPLIED PROCEDURES / LIMIT

FCC Part15, Subpart E / RSS-210: 2010			
Test Item	Limit	Frequency Range (MHz)	Result
26 dB Bandwidth	------	5250MHz~5350 5470MHz~5725	PASS

5.1.1 MEASUREMENT INSTRUMENTS LIST

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

Remark: “N/A” denotes no model name, serial no. or calibration specified.
All calibration period of equipment list is one year.

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.

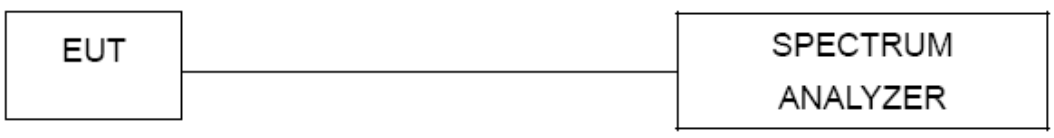
Spectrum Parameters	Setting
Attenuation	Auto
Span Frequency	> 26dB Bandwidth
RB	300 kHz
VB	1000 kHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

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

5.1.3 DEVIATION FROM STANDARD

No deviation.

5.1.4 TEST SETUP



5.1.5 EUT OPERATION CONDITIONS

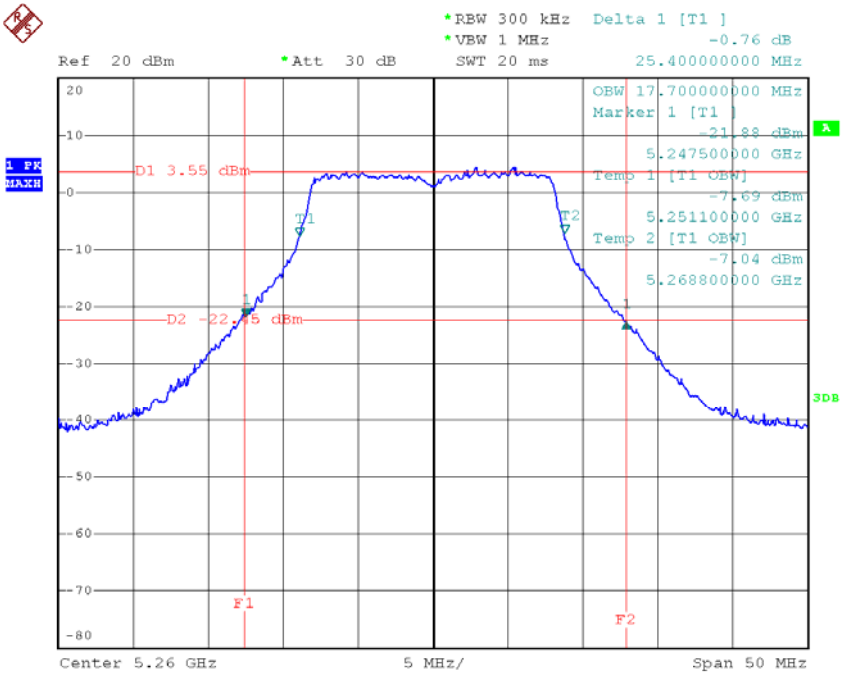
The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.

5.1.6 TEST RESULTS

EUT：	Outdoor Wireless LAN Access Point	Model Name ：	AP6510DN-AGN-US
Temperature：	25°C	Relative Humidity：	58 %
Test Voltage：	AC 120V/60Hz		
Test Mode ：	Band 2/TX A Mode /CH52, CH56, CH64		

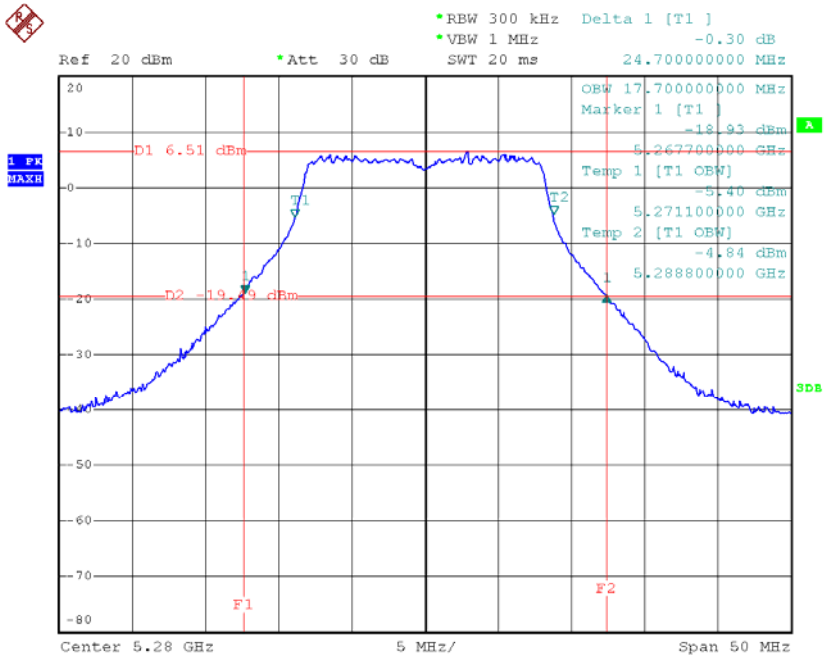
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
CH52	5260	25.40	17.70
CH56	5280	24.70	17.70
CH64	5320	25.00	17.70

CH52



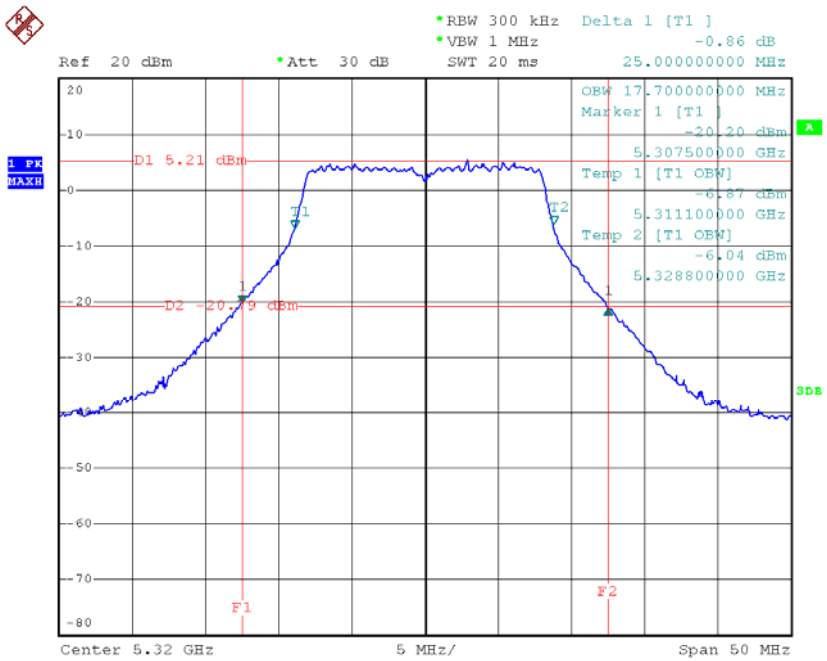
Date: 18.APR.2012 11:00:36

CH56



Date: 18.APR.2012 11:16:54

CH64

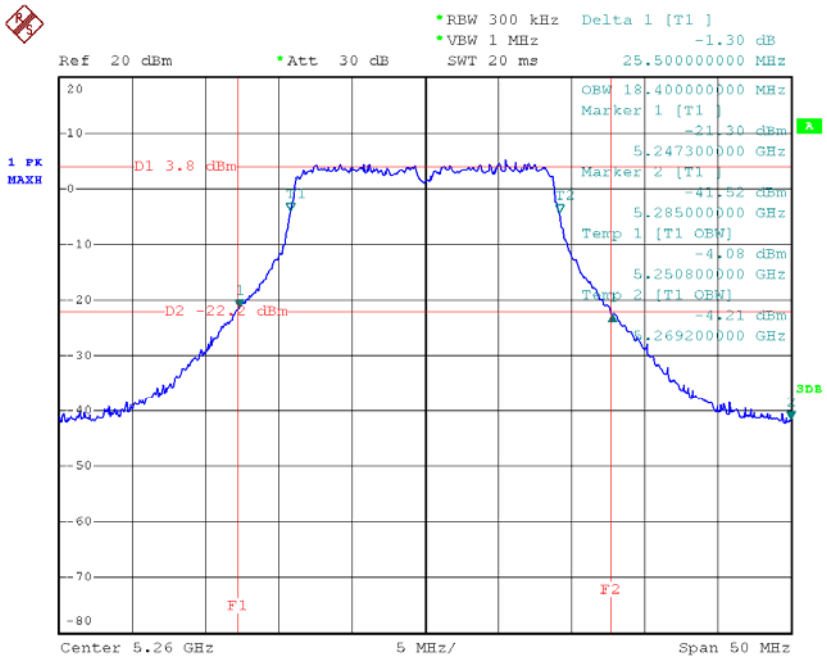


Date: 18.APR.2012 11:24:26

EUT：	Outdoor Wireless LAN Access Point	Model Name ：	AP6510DN-AGN-US
Temperature：	25°C	Relative Humidity：	58 %
Test Voltage：	AC 120V/60Hz		
Test Mode ：	Band 2/TX N20 Mode /CH52, CH56, CH64		

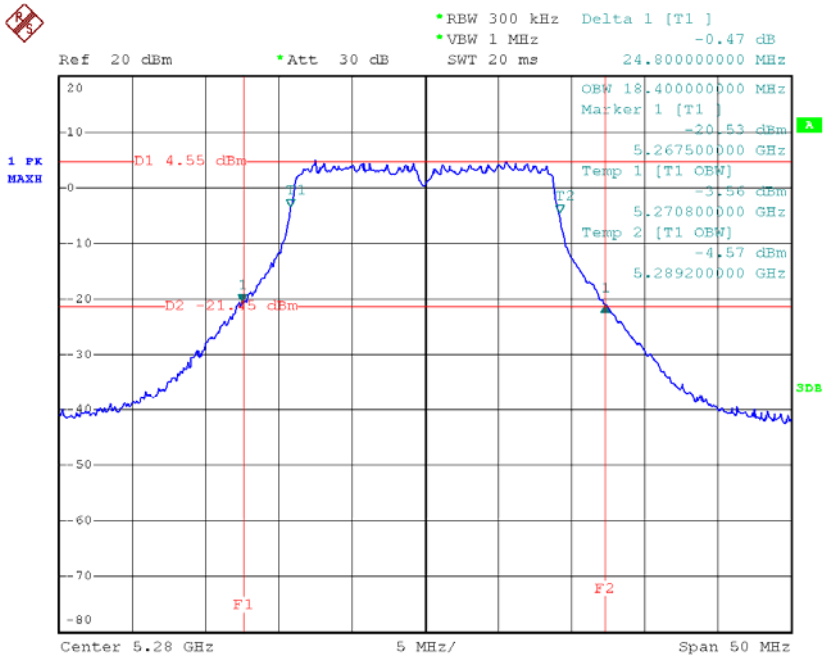
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
CH52	5260	25.50	18.40
CH56	5280	24.80	18.40
CH64	5320	24.80	18.40

CH52



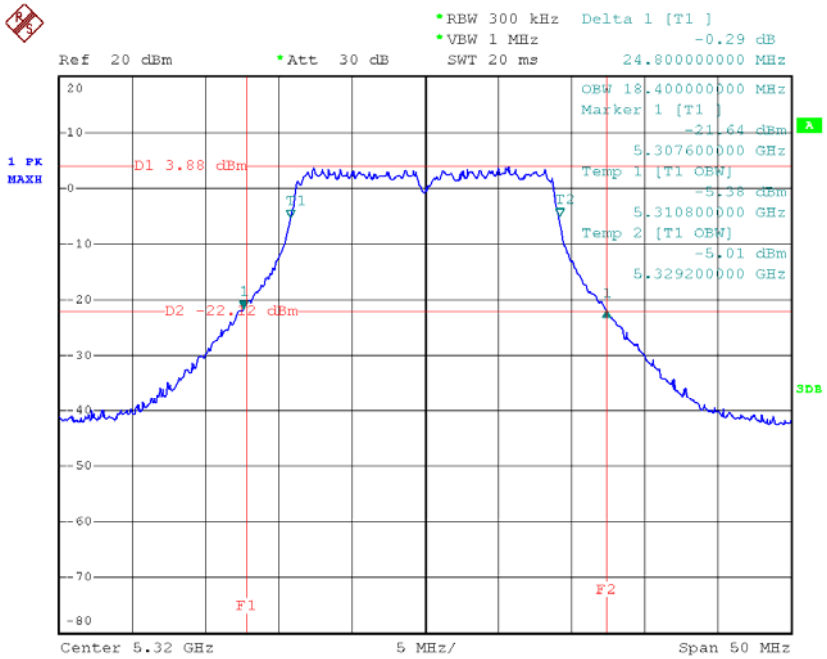
Date: 18.APR.2012 13:53:58

CH56



Date: 18.APR.2012 13:57:37

CH64

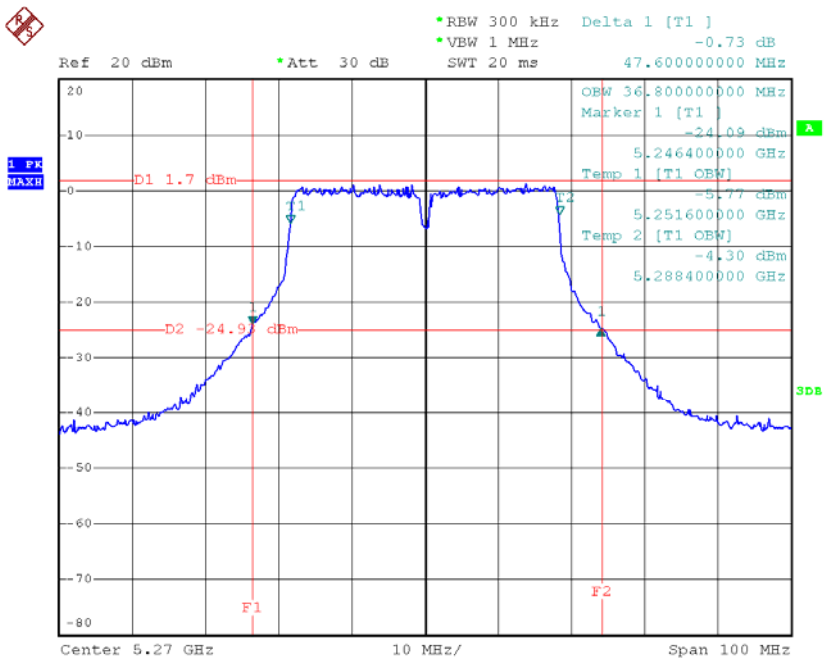


Date: 18.APR.2012 14:01:09

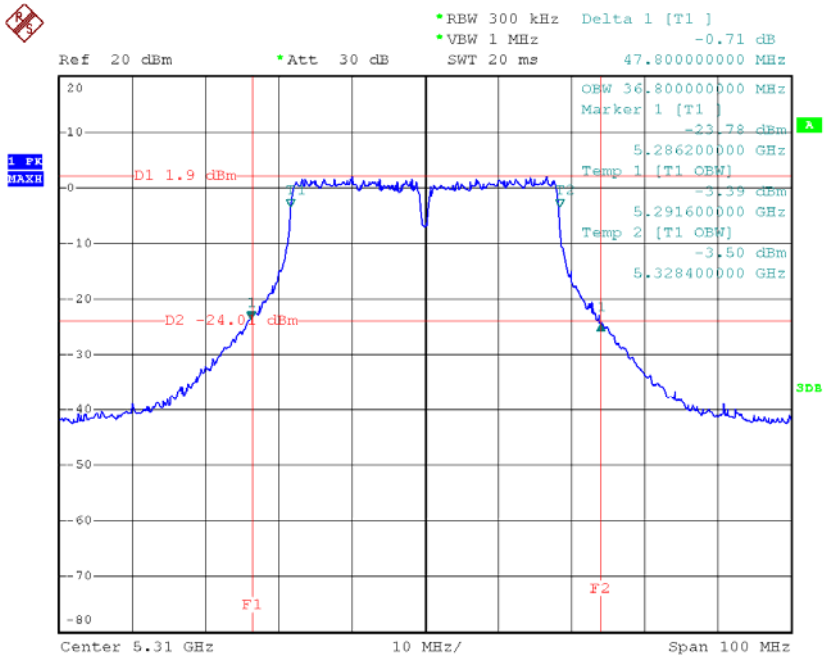
EUT：	Outdoor Wireless LAN Access Point	Model Name ：	AP6510DN-AGN-US
Temperature：	25°C	Relative Humidity：	58 %
Test Voltage：	AC 120V/60Hz		
Test Mode ：	Band 2/TX N40 Mode /CH54, CH62		

Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
CH54	5270	47.60	36.80
CH62	5310	47.80	36.80

CH54



CH62

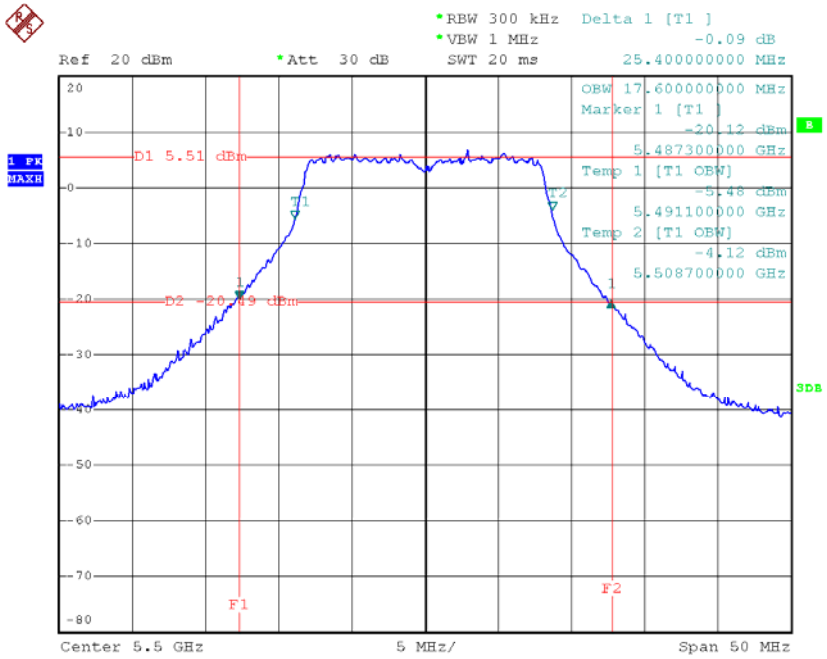


Date: 18.APR.2012 16:03:09

EUT：	Outdoor Wireless LAN Access Point	Model Name ：	AP6510DN-AGN-US
Temperature：	25°C	Relative Humidity：	58 %
Test Voltage：	AC 120V/60Hz		
Test Mode ：	Band 3/TX A Mode /CH100, CH112, CH140		

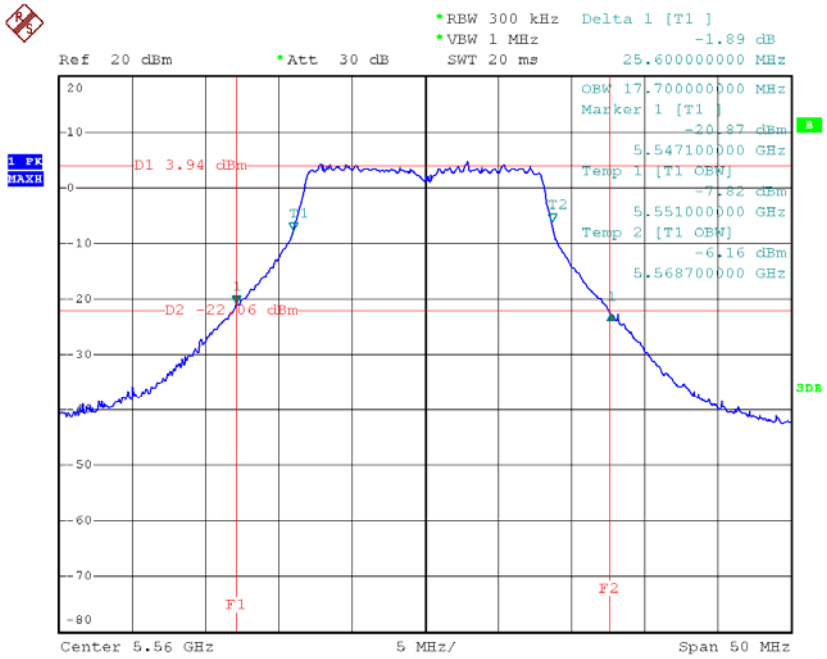
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
CH100	5500	25.40	17.60
CH112	5560	25.60	17.70
CH140	5700	25.40	17.70

CH100



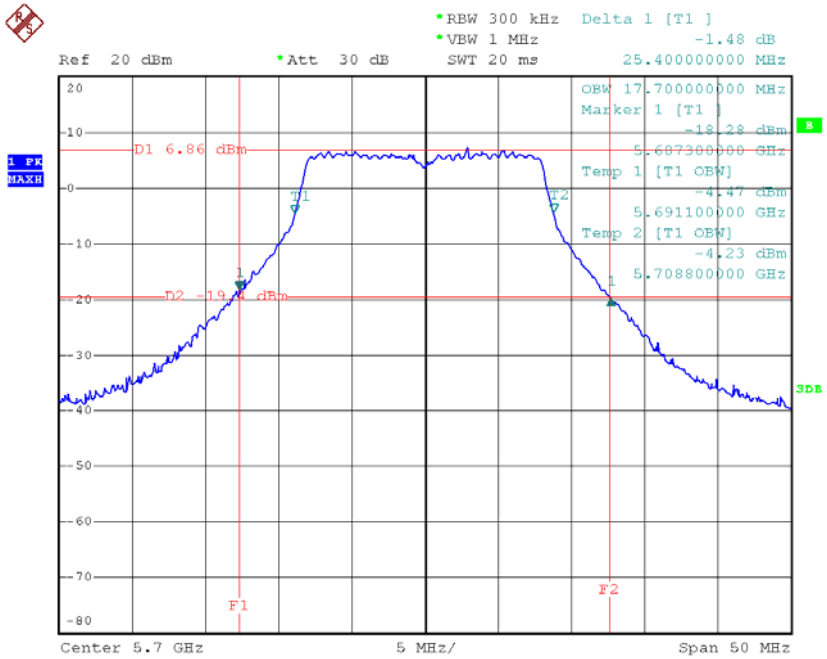
Date: 18.APR.2012 22:00:42

CH116



Date: 18.APR.2012 22:02:53

CH140

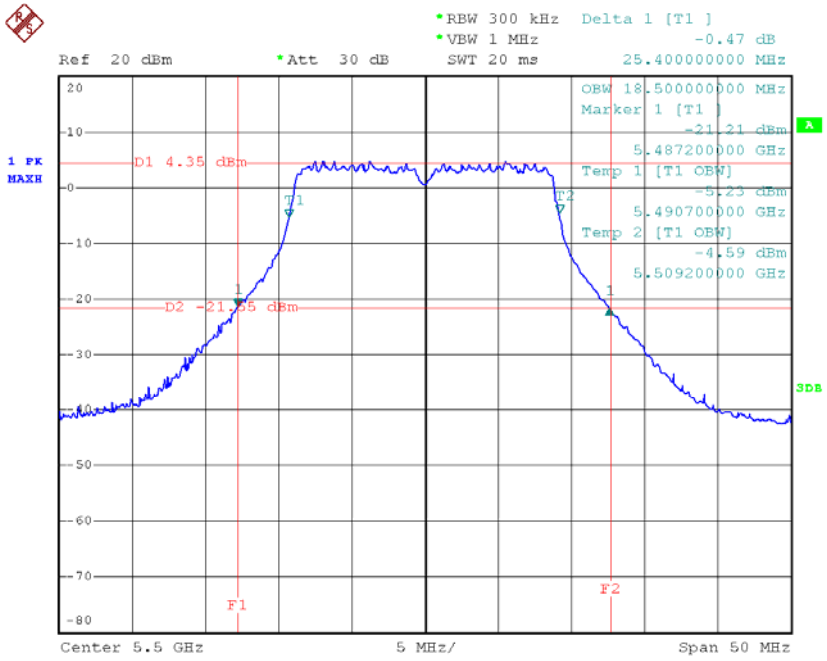


Date: 18.APR.2012 22:06:07

EUT：	Outdoor Wireless LAN Access Point	Model Name ：	AP6510DN-AGN-US
Temperature：	25°C	Relative Humidity：	58 %
Test Voltage：	AC 120V/60Hz		
Test Mode ：	Band 3/TX N20 Mode /CH100, CH112, CH140		

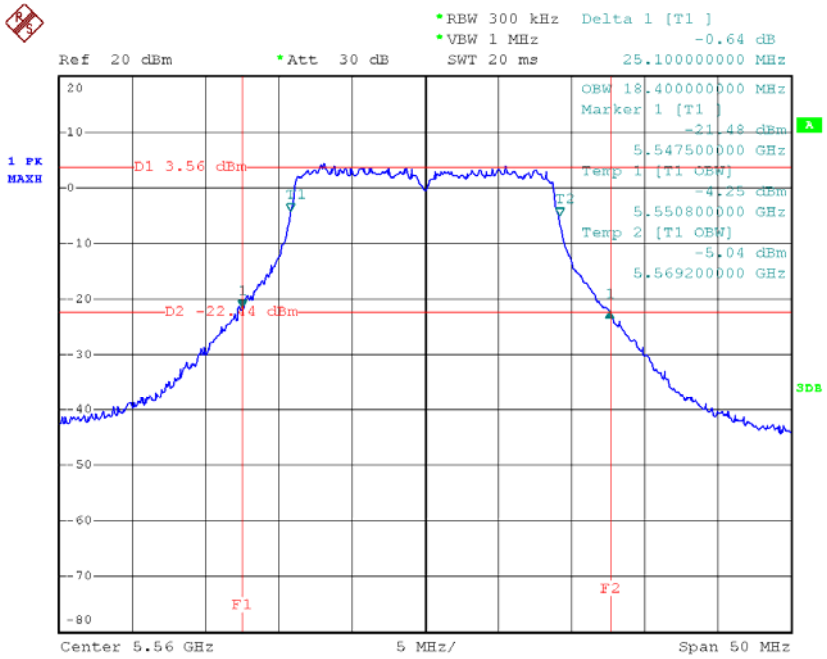
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
CH100	5500	25.40	18.50
CH112	5560	25.10	18.40
CH140	5700	25.00	18.40

CH100



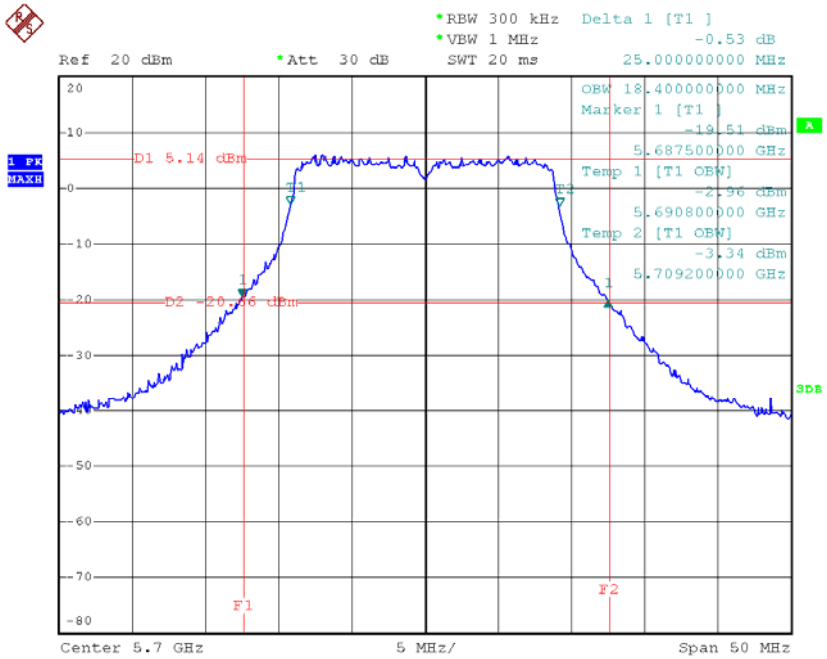
Date: 18.APR.2012 14:08:47

CH116



Date: 18.APR.2012 14:10:28

CH140

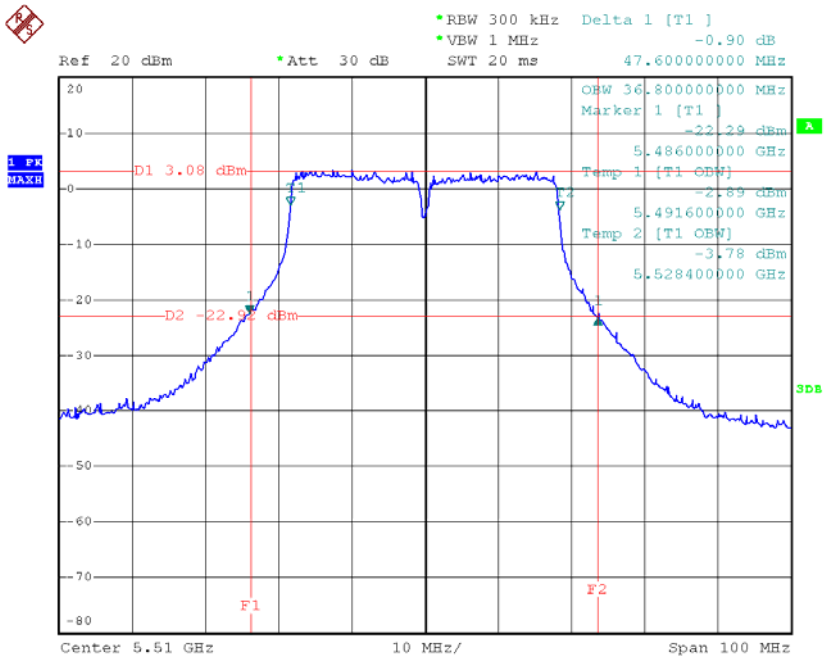


Date: 18.APR.2012 14:14:01

EUT：	Outdoor Wireless LAN Access Point	Model Name ：	AP6510DN-AGN-US
Temperature：	25°C	Relative Humidity：	58 %
Test Voltage：	AC 120V/60Hz		
Test Mode ：	Band 3/TX N40 Mode /CH102, CH110		

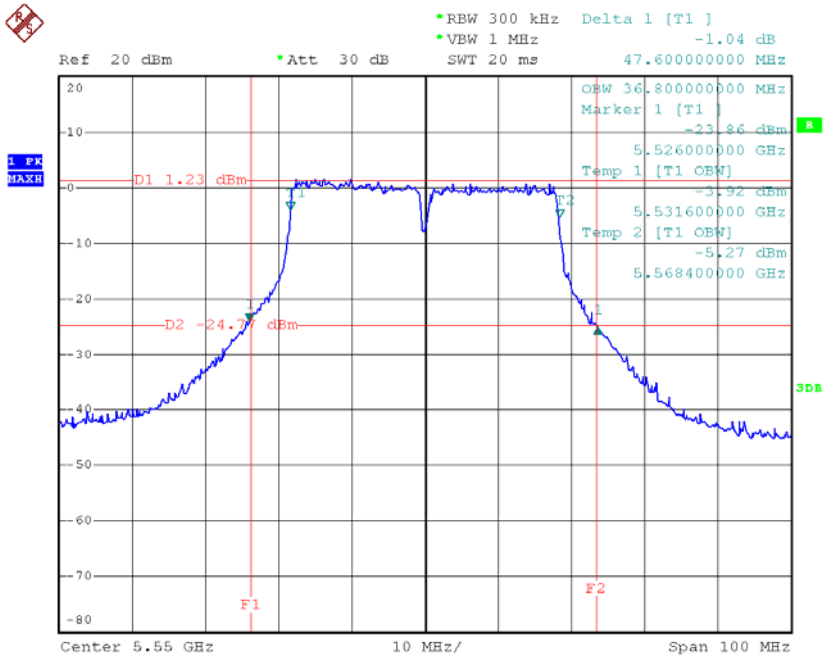
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
CH102	5510	47.60	36.80
CH110	5550	47.60	36.80

CH102



Date: 18.APR.2012 16:55:05

CH110



Date: 18.APR.2012 20:45:42

6. MAXIMUM CONDUCTED OUTPUT POWER

6.1 APPLIED PROCEDURES / LIMIT

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

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

6.1.1 MEASUREMENT INSTRUMENTS LIST

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

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

6.1.2 TEST PROCEDURE

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

b.

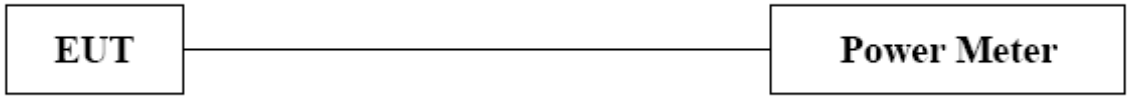
Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	Encompass the entire emissions bandwidth (EBW) of the signal
RB	= 1 MHz.
VB	≥ 3 MHz.
Detector	RMS
Trace	Max Hold
Sweep Time	auto

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

6.1.3 DEVIATION FROM STANDARD

No deviation.

6.1.4 TEST SETUP



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.

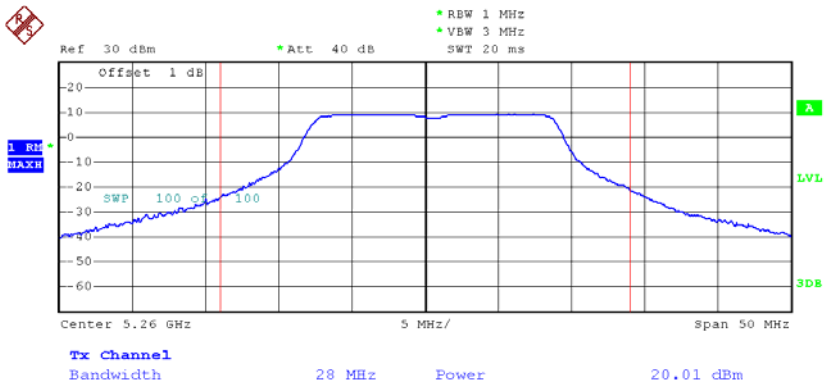
6.1.6 TEST RESULTS

EUT：	Outdoor Wireless LAN Access Point	Model Name ：	AP6510DN-AGN-US
Temperature：	25°C	Relative Humidity：	58 %
Test Voltage：	AC 120V/60Hz		
Test Mode ：	Band 2/TX A Mode/CH52, CH56, CH64		

Peak Output Power

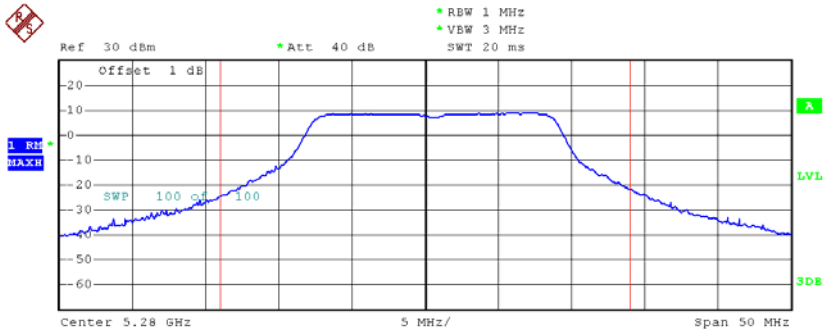
Test Channel	Frequency (MHz)	Peak Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH52	5260	20.01	24	0.251
CH56	5280	19.66	24	0.251
CH64	5320	21.05	24	0.251

CH52



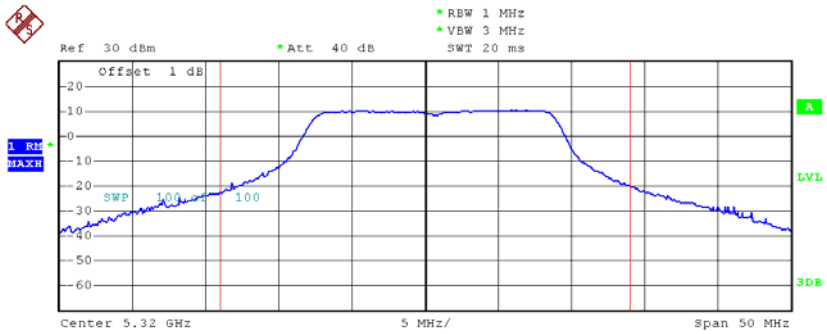
Date: 31.MAY.2012 20:04:06

CH56



Date: 31.MAY.2012 19:59:15

CH64

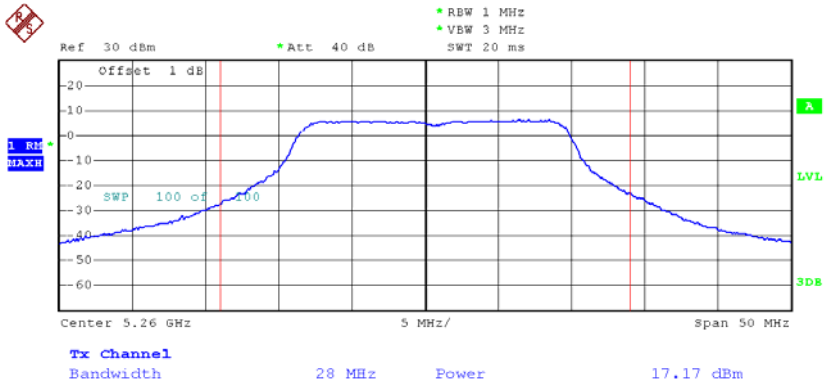


Date: 31.MAY.2012 20:04:42

EUT：	Outdoor Wireless LAN Access Point	Model Name ：	AP6510DN-AGN-US
Temperature：	25°C	Relative Humidity：	58 %
Test Voltage：	AC 120V/60Hz		
Test Mode ：	Band 2/TX N20 Mode/CH52, CH56, CH64(ANT 1)		

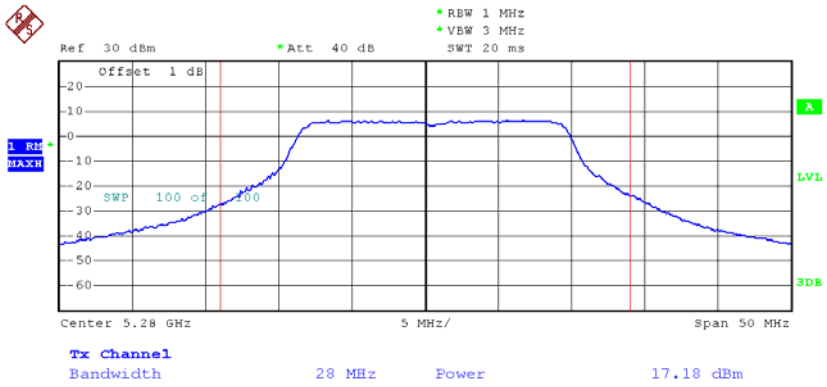
Test Channel	Frequency (MHz)	Peak Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH52	5260	17.17	24	0.251
CH56	5280	17.18	24	0.251
CH64	5320	17.59	24	0.251

CH52



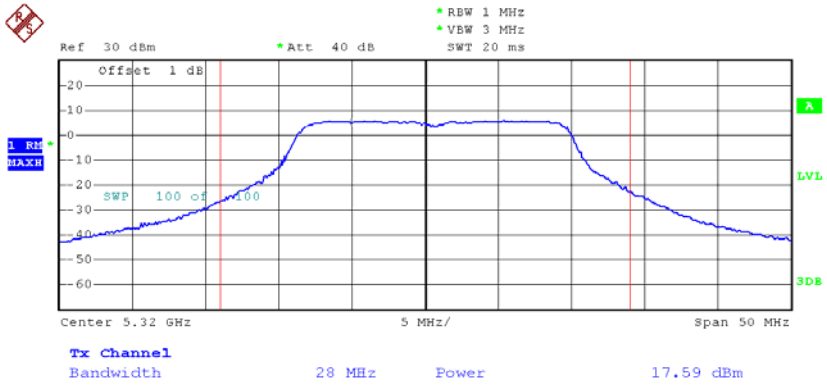
Date: 31.MAY.2012 20:25:07

CH56



Date: 31.MAY.2012 20:27:11

CH64

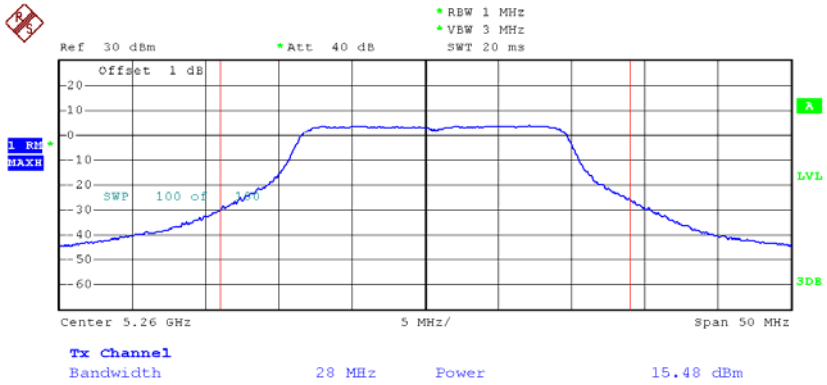


Date: 31.MAY.2012 20:27:36

EUT：	Outdoor Wireless LAN Access Point	Model Name ：	AP6510DN-AGN-US
Temperature：	25°C	Relative Humidity：	58 %
Test Voltage：	AC 120V/60Hz		
Test Mode ：	Band 2/TX N20 Mode/CH52, CH56, CH64(ANT 2)		

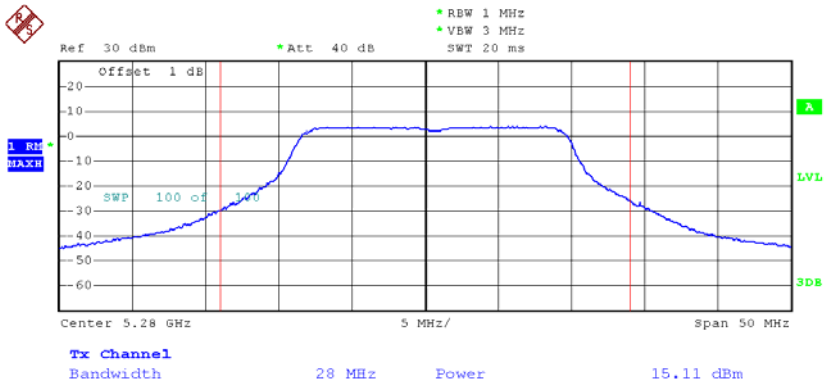
Test Channel	Frequency (MHz)	Peak Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH52	5260	15.48	24	0.251
CH56	5280	15.11	24	0.251
CH64	5320	15.16	24	0.251

CH52



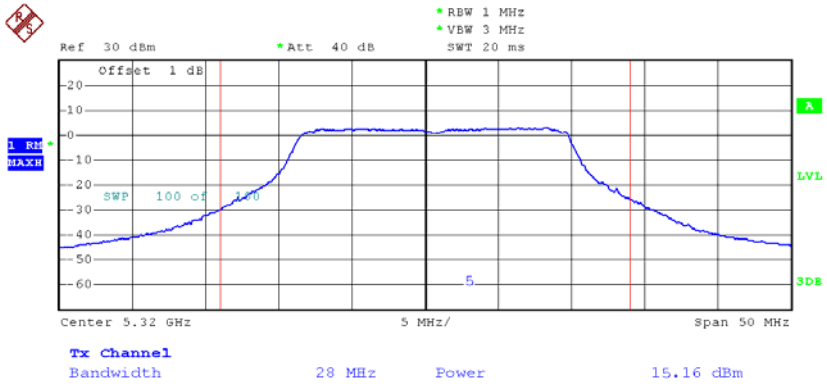
Date: 31.MAY.2012 20:43:49

CH56



Date: 31.MAY.2012 20:45:03

CH64

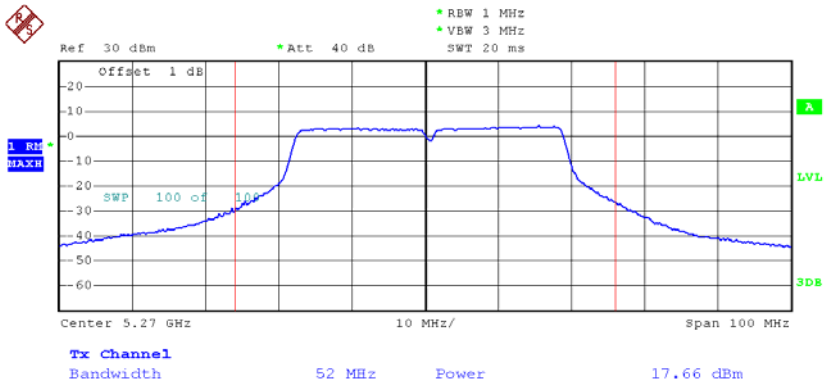


Date: 31.MAY.2012 20:46:55

EUT：	Outdoor Wireless LAN Access Point	Model Name ：	AP6510DN-AGN-US
Temperature：	25°C	Relative Humidity：	58 %
Test Voltage：	AC 120V/60Hz		
Test Mode ：	Band 2/TX N40 Mode/CH54, CH62 (ANT 1)		

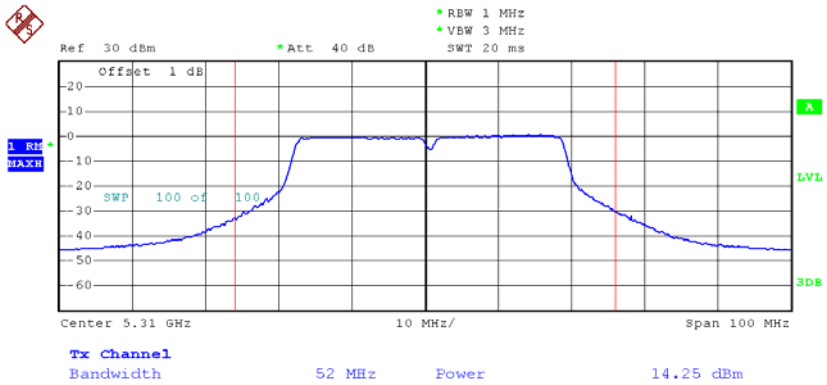
Test Channel	Frequency (MHz)	Peak Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH54	5270	17.66	24	0.251
CH62	5310	14.25	24	0.251

CH54



Date: 31.MAY.2012 20:58:00

CH62

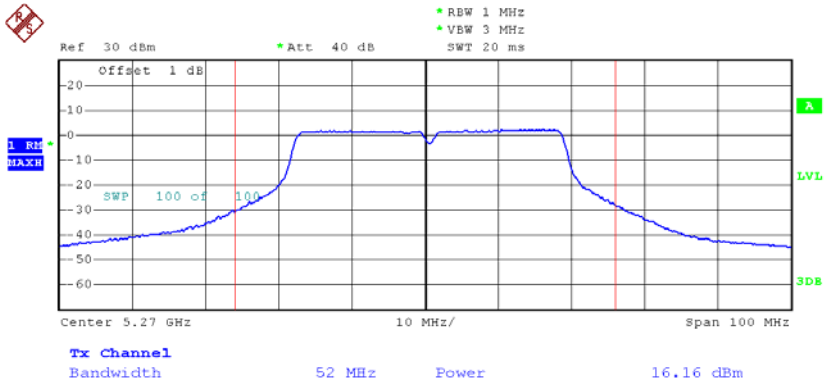


Date: 31.MAY.2012 21:00:07

EUT：	Outdoor Wireless LAN Access Point	Model Name ：	AP6510DN-AGN-US
Temperature：	25°C	Relative Humidity：	58 %
Test Voltage：	AC 120V/60Hz		
Test Mode ：	Band 2/TX N40 Mode/CH54, CH62 (ANT 2)		

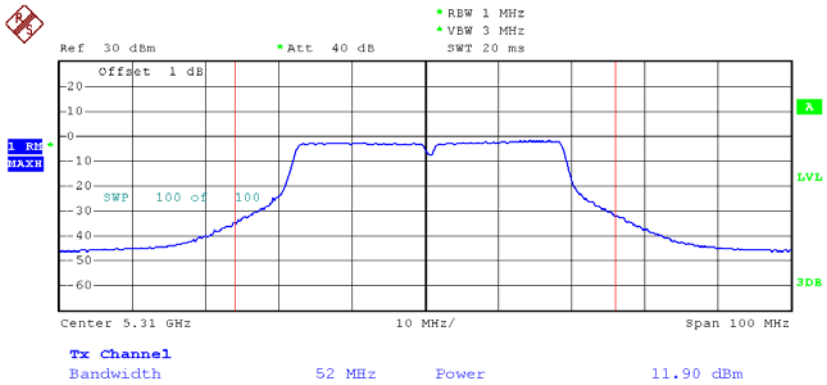
Test Channel	Frequency (MHz)	Peak Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH54	5270	16.16	24	0.251
CH62	5310	11.90	24	0.251

CH54



Date: 31.MAY.2012 21:18:30

CH62



Date: 31.MAY.2012 21:20:34

EUT：	Outdoor Wireless LAN Access Point	Model Name ：	AP6510DN-AGN-US
Temperature：	25 ℃	Relative Humidity：	58 %
Pressure：	1010 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	Band 2/ TX N20 Mode /CH52, CH56, CH64 (ANT1+ANT2)		

Test Channel	Frequency (MHz)	Maximum Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH52	5260 MHz	19.42	23.6	0.1148
CH56	5280 MHz	19.28	23.6	0.1148
CH64	5320 MHz	19.55	23.6	0.1148

EUT：	Outdoor Wireless LAN Access Point	Model Name ：	AP6510DN-AGN-US
Temperature：	25 ℃	Relative Humidity：	58 %
Pressure：	1010 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	Band 2/ TX N40 Mode /CH54, CH62 (ANT1+ANT2)		

Test Channel	Frequency (MHz)	Maximum Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH54	5270 MHz	19.98	23.6	0.1148
CH62	5310 MHz	16.24	23.6	0.1148

Remark：

(1) **The MIMO test requirement, RF conducted output power shall measure each transmitter chain by using channel power method.**
And after obtain each individual transmitter chain power, then sum the output power by using the following formula:
((dBm/Chain 1)/10^Log) + ((dBm/Chain 2)/10^log) + ((dBm/ChainN)/10^log) = Combined peak output power in mW.

(2) **Antenna Gain 1=6.4 dBi**

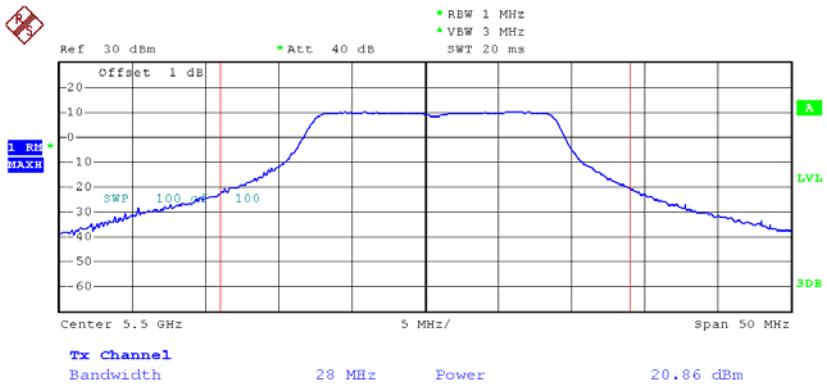
(3) **This EUT supports MIMO 2T2R, all transmit signals are completely uncorrelated, then, Direction gain = G_{ANT}, that is Directional gain=6.4; So,the out power limit is 24-6.4+6=23.6; and power density limit is 11-6.4+6=10.6**

EUT：	Outdoor Wireless LAN Access Point	Model Name ：	AP6510DN-AGN-US
Temperature：	25°C	Relative Humidity：	58 %
Test Voltage：	AC 120V/60Hz		
Test Mode ：	Band 3/TX A Mode/CH100, CH116, CH140		

Peak Output Power

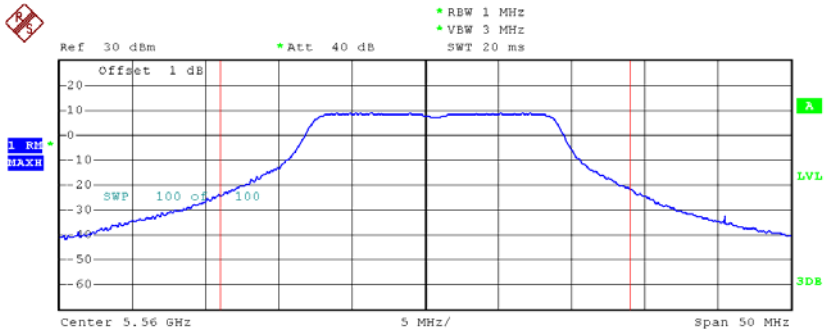
Test Channel	Frequency (MHz)	Peak Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH100	5500	20.86	24	0.251
CH116	5580	19.65	24	0.251
CH140	5700	21.25	24	0.251

CH100



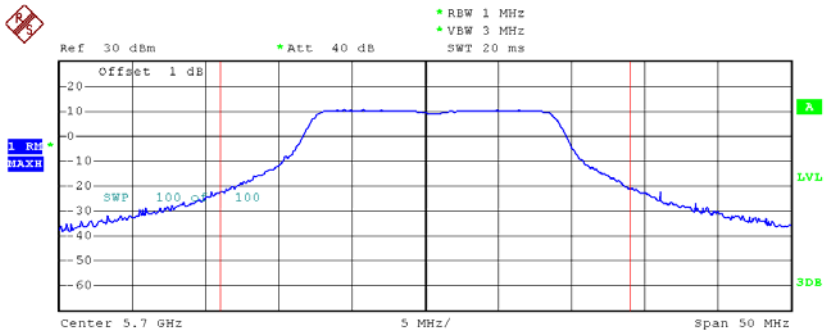
Date: 31.MAY.2012 20:07:16

CH116



Date: 31.MAY.2012 20:09:44

CH140



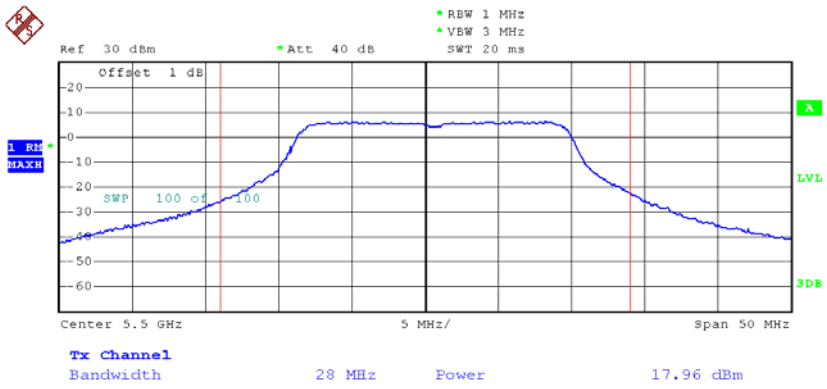
Date: 31.MAY.2012 20:10:19

EUT：	Outdoor Wireless LAN Access Point	Model Name ：	AP6510DN-AGN-US
Temperature：	25°C	Relative Humidity：	58 %
Test Voltage：	AC 120V/60Hz		
Test Mode ：	Band 3/TX N20 Mode/CH100, CH112, CH140(ANT 1)		

Peak Output Power

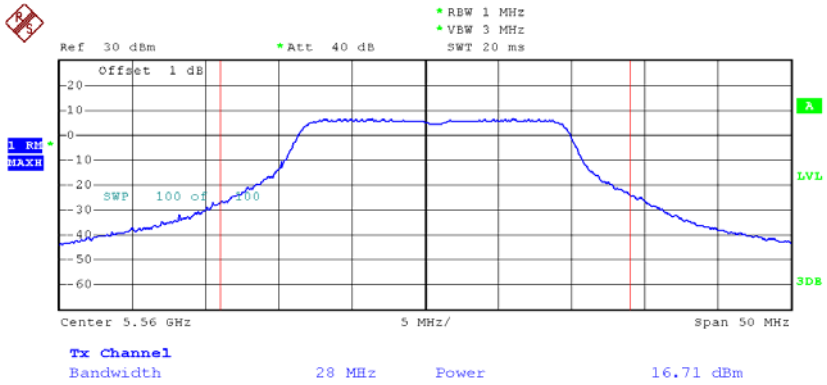
Test Channel	Frequency (MHz)	Peak Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH100	5500	17.96	24	0.251
CH112	5560	16.17	24	0.251
CH140	5700	17.37	24	0.251

CH100



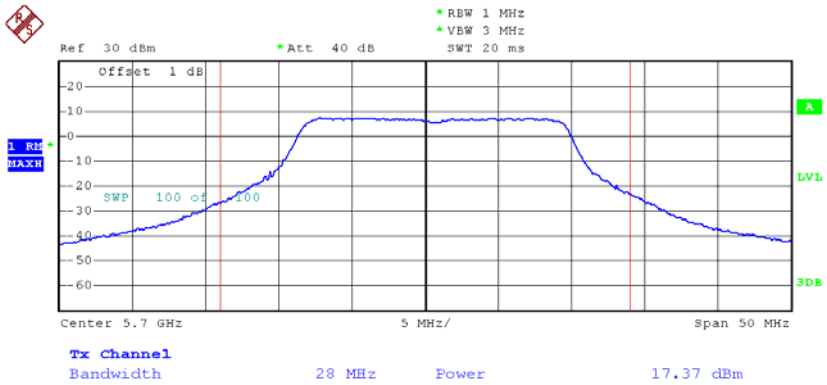
Date: 31.MAY.2012 20:29:41

CH116



Date: 31.MAY.2012 20:33:00

CH140



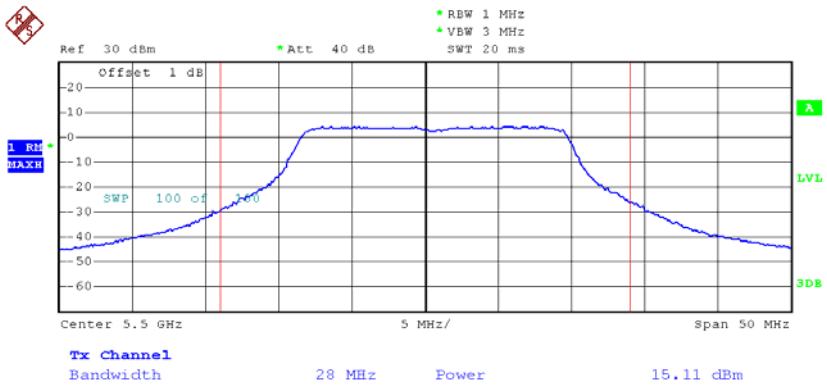
Date: 31.MAY.2012 20:33:25

EUT：	Outdoor Wireless LAN Access Point	Model Name ：	AP6510DN-AGN-US
Temperature：	25°C	Relative Humidity：	58 %
Test Voltage：	AC 120V/60Hz		
Test Mode ：	Band 3/TX N20 Mode/CH100, CH112, CH140(ANT 2)		

Peak Output Power

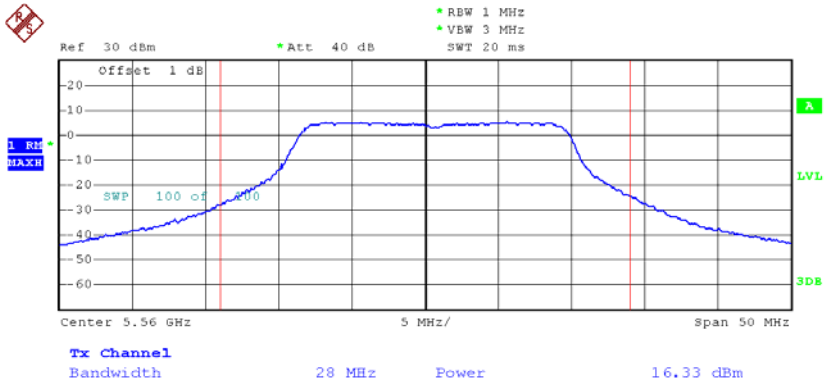
Test Channel	Frequency (MHz)	Peak Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH100	5500	15.11	24	0.251
CH112	5560	16.33	24	0.251
CH140	5700	16.22	24	0.251

CH100



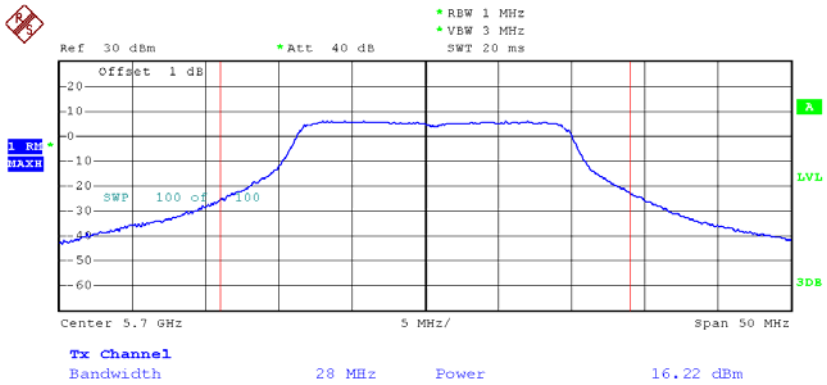
Date: 31.MAY.2012 20:47:21

CH116



Date: 31.MAY.2012 20:50:10

CH140

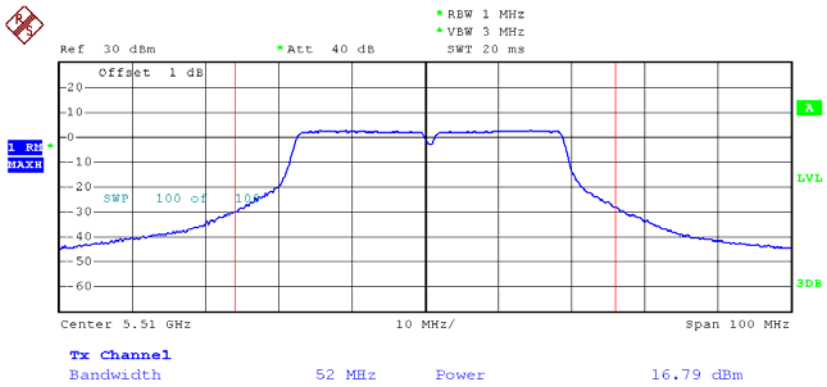


Date: 31.MAY.2012 20:50:45

EUT：	Outdoor Wireless LAN Access Point	Model Name ：	AP6510DN-AGN-US
Temperature：	25°C	Relative Humidity：	58 %
Test Voltage：	AC 120V/60Hz		
Test Mode ：	Band 3/TX N40 Mode/CH102, CH110 (ANT 1)		

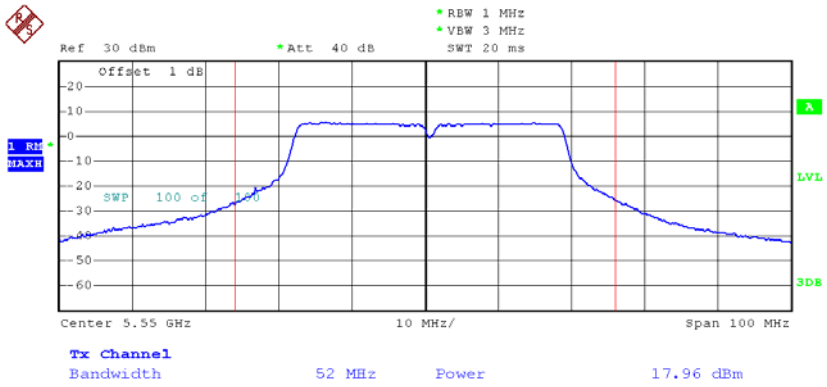
Test Channel	Frequency (MHz)	Peak Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH102	5510	16.79	24	0.251
CH110	5550	17.96	24	0.251

CH102



Date: 31.MAY.2012 21:03:33

CH110

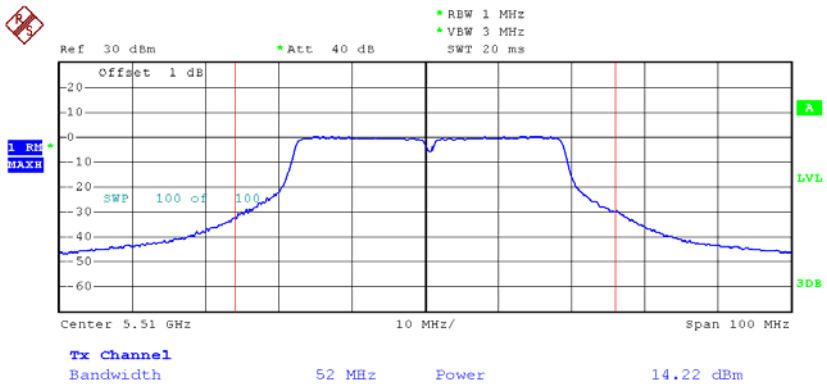


Date: 31.MAY.2012 21:08:14

EUT：	Outdoor Wireless LAN Access Point	Model Name ：	AP6510DN-AGN-US
Temperature：	25°C	Relative Humidity：	58 %
Test Voltage：	AC 120V/60Hz		
Test Mode ：	Band 3/TX N40 Mode/CH102, CH110 (ANT 2)		

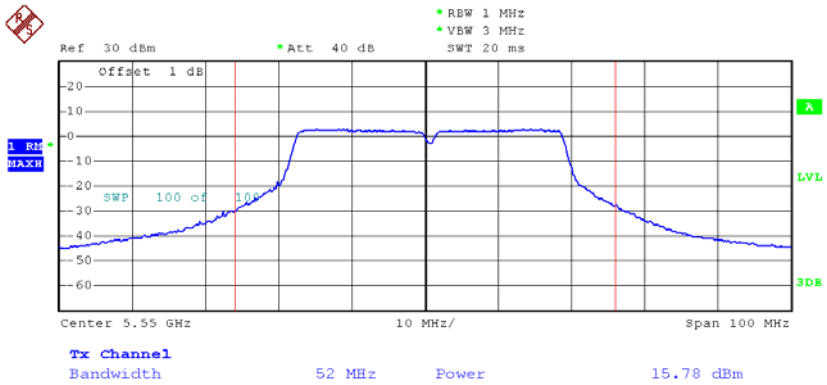
Test Channel	Frequency (MHz)	Peak Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH102	5510	14.22	24	0.251
CH110	5550	15.78	24	0.251

CH102



Date: 31.MAY.2012 21:22:02

CH110



Date: 31.MAY.2012 21:28:56

EUT：	Outdoor Wireless LAN Access Point	Model Name ：	AP6510DN-AGN-US
Temperature：	25 ℃	Relative Humidity：	58 %
Pressure：	1010 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	Band 3 TX N20 Mode /CH100, CH116, CH134 (ANT1+ANT2)		

Test Channel	Frequency (MHz)	Maximum Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH100	5500	19.78	23.6	0.1148
CH116	5580	19.53	23.6	0.1148
CH134	5700	19.84	23.6	0.1148

EUT：	Outdoor Wireless LAN Access Point	Model Name ：	AP6510DN-AGN-US
Temperature：	25 ℃	Relative Humidity：	58 %
Pressure：	1010 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	Band 3/ TX N40 Mode /CH54, CH62 (ANT1+ANT2)		

Test Channel	Frequency (MHz)	Maximum Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH102	5510	16.79	23.6	0.1148
CH110	5550	17.96	23.6	0.1148

Remark：

(1) **The MIMO test requirement, RF conducted output power shall measure each transmitter chain by using channel power method.**
And after obtain each individual transmitter chain power, then sum the output power by using the following formula:
((dBm/Chain 1)/10^Log) + ((dBm/Chain 2)/10^log) + ((dBm/ChainN)/10^log) = Combined peak output power in mW.

(2) **Antenna Gain 1=6.4 dBi**

(3) **This EUT supports MIMO 2T2R, all transmit signals are completely uncorrelated, then, Direction gain = G_{ANT}, that is Directional gain=6.4; So,the out power limit is 24-6.4+6=23.6; and power density limit is 11-6.4+6=10.6**

7. ANTENNA CONDUCTED SPURIOUS EMISSION

7.1 APPLIED PROCEDURES / LIMIT

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

7.1.1 MEASUREMENT INSTRUMENTS LIST

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

Remark: “N/A” denotes no model name, serial no. or calibration specified.
All calibration period of equipment list is one year.

7.1.2 TEST PROCEDURE

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

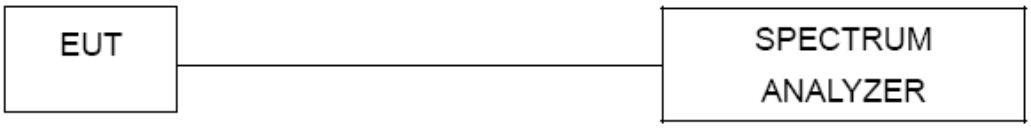
b.

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

7.1.3 DEVIATION FROM STANDARD

No deviation.

7.1.4 TEST SETUP



7.1.5 EUT OPERATION CONDITIONS

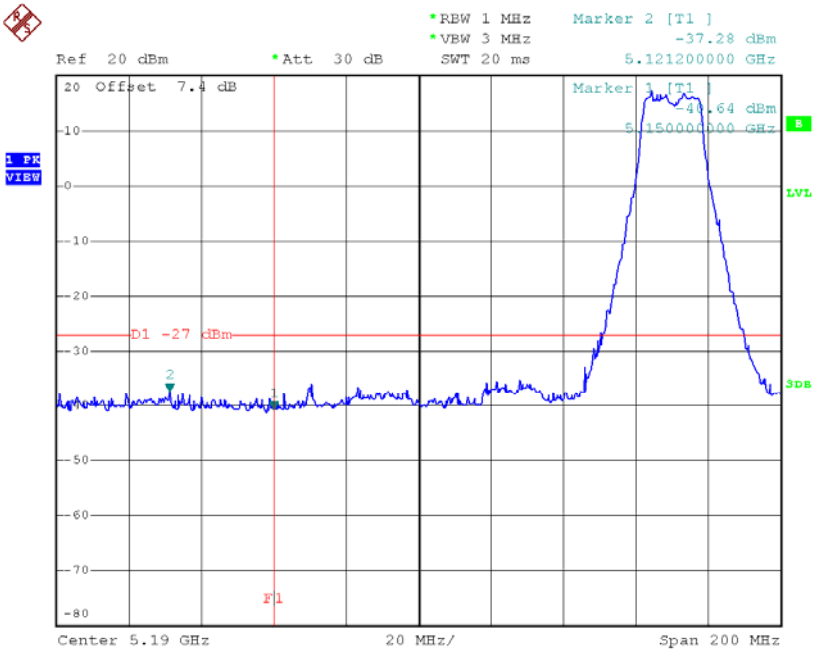
The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.

7.1.6 TEST RESULTS

EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6510DN-AGN-US
Temperature:	25°C	Relative Humidity:	58 %
Test Voltage:	AC 120V/60Hz		
Test Mode :	Band 2/TX A Mode/ CH52, CH60 , CH64/ANT 1		

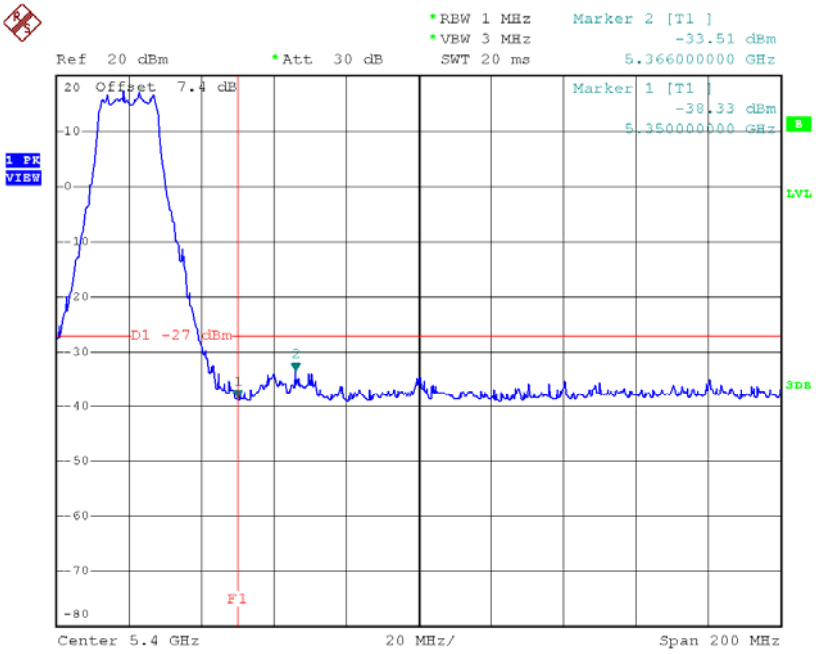
Channel of Worst Data: CH64			
The max. radio frequency power in any 1000kHz bandwidth outside the frequency band		The max. radio frequency power in any 1000kHz bandwidth within the frequency band.	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)
5121.20	-37.28	5366.00	-33.51
Limit: -27 dBm/1MHz Result:PASS			
Measurement method: S.A Read value+Ant gain+cable loss			

TX mode CH52



Date: 19.NOV.2013 22:33:03

TX mode CH64

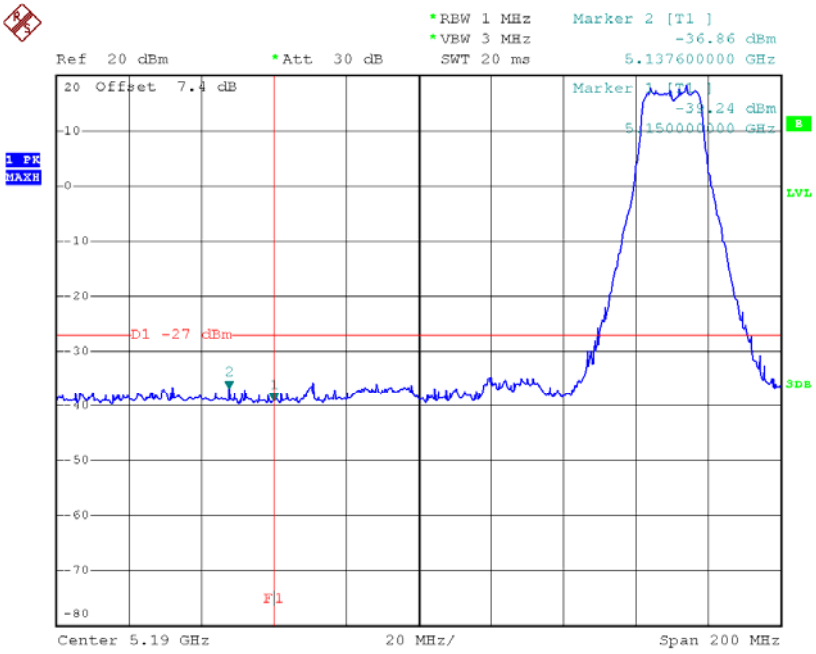


Date: 19.NOV.2013 22:33:55

EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6510DN-AGN-US
Temperature:	25°C	Relative Humidity:	58 %
Test Voltage:	AC 120V/60Hz		
Test Mode :	Band 2/TX A Mode/ CH52, CH60 , CH64/ANT 2		

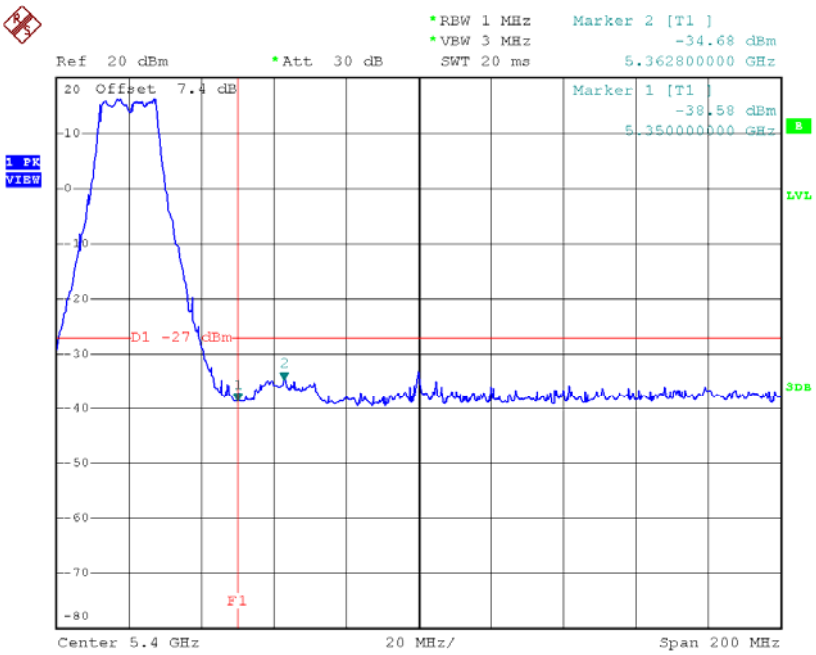
Channel of Worst Data: CH64			
The max. radio frequency power in any 1000kHz bandwidth outside the frequency band		The max. radio frequency power in any 1000kHz bandwidth within the frequency band.	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)
5137.60	-36.86	5362.80	-34.68
Limit: -27 dBm/1MHz		Result:PASS	
Measurement method: S.A Read value+Ant gain+cable loss			

TX mode CH52



Date: 19.NOV.2013 22:32:47

TX mode CH64

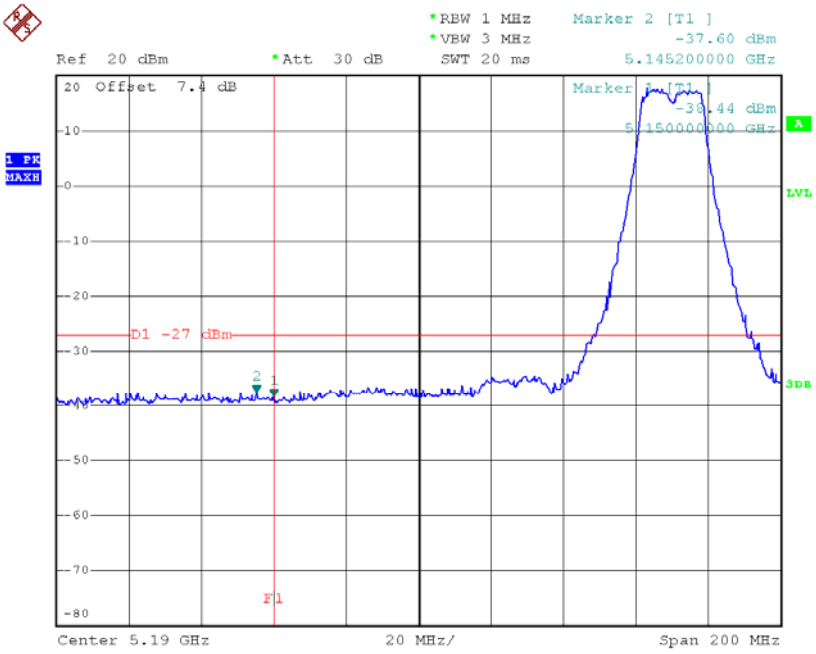


Date: 19.NOV.2013 22:34:07

EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6510DN-AGN-US
Temperature:	25°C	Relative Humidity:	58 %
Test Voltage:	AC 120V/60Hz		
Test Mode :	Band 2/TX N20 Mode/ CH52, CH60 , CH64/ANT 1		

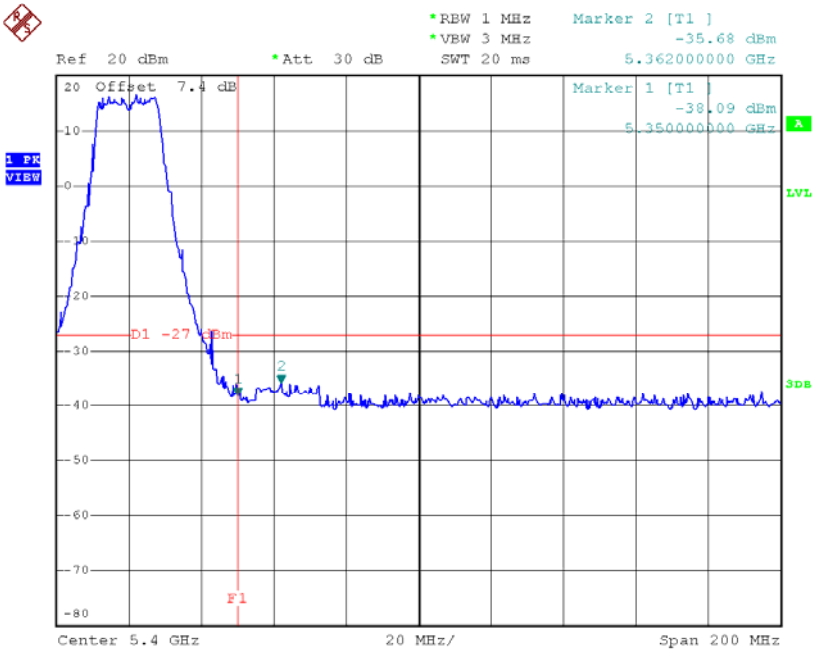
Channel of Worst Data: CH64			
The max. radio frequency power in any 1000kHz bandwidth outside the frequency band		The max. radio frequency power in any 1000kHz bandwidth within the frequency band.	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)
5145.20	-37.60	5362.00	-35.68
Limit: -27 dBm/1MHz Result:PASS			
Measurement method: S.A Read value+Ant gain+cable loss			

TX mode CH52



Date: 19.NOV.2013 23:54:17

TX mode CH64

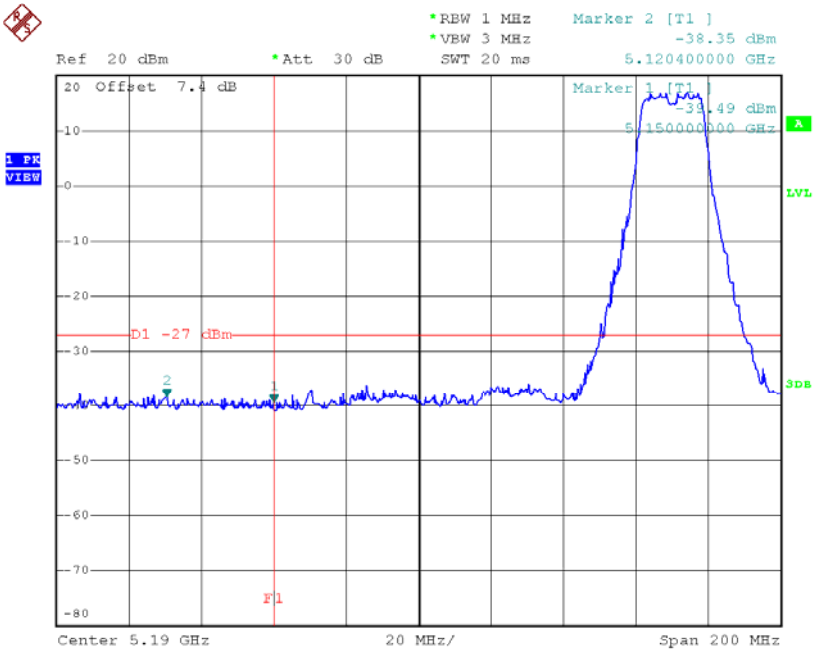


Date: 19.NOV.2013 23:55:10

EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6510DN-AGN-US
Temperature:	25°C	Relative Humidity:	58 %
Test Voltage:	AC 120V/60Hz		
Test Mode :	Band 2/TX N20 Mode/ CH52, CH60 , CH64/ANT 2		

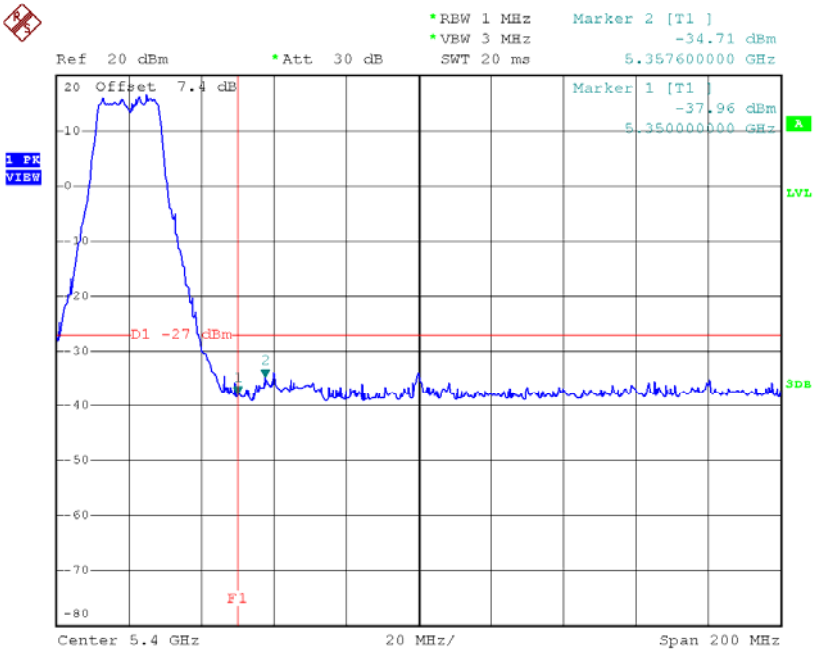
Channel of Worst Data: CH64			
The max. radio frequency power in any 1000kHz bandwidth outside the frequency band		The max. radio frequency power in any 1000kHz bandwidth within the frequency band.	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)
5120.40	-38.35	5357.60	-34.71
Limit: -27 dBm/1MHz Result:PASS			
Measurement method: S.A Read value+Ant gain+cable loss			

TX mode CH52



Date: 19.NOV.2013 23:57:45

TX mode CH64

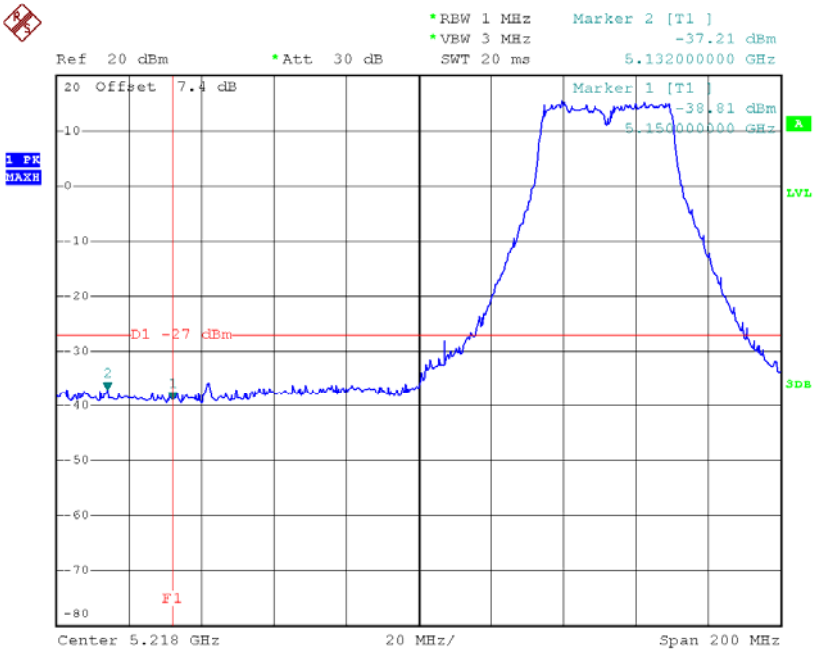


Date: 19.NOV.2013 23:56:25

EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6510DN-AGN-US
Temperature:	25°C	Relative Humidity:	58 %
Test Voltage:	AC 120V/60Hz		
Test Mode :	Band 2/TX N40 Mode/ CH54, CH62/ANT 1		

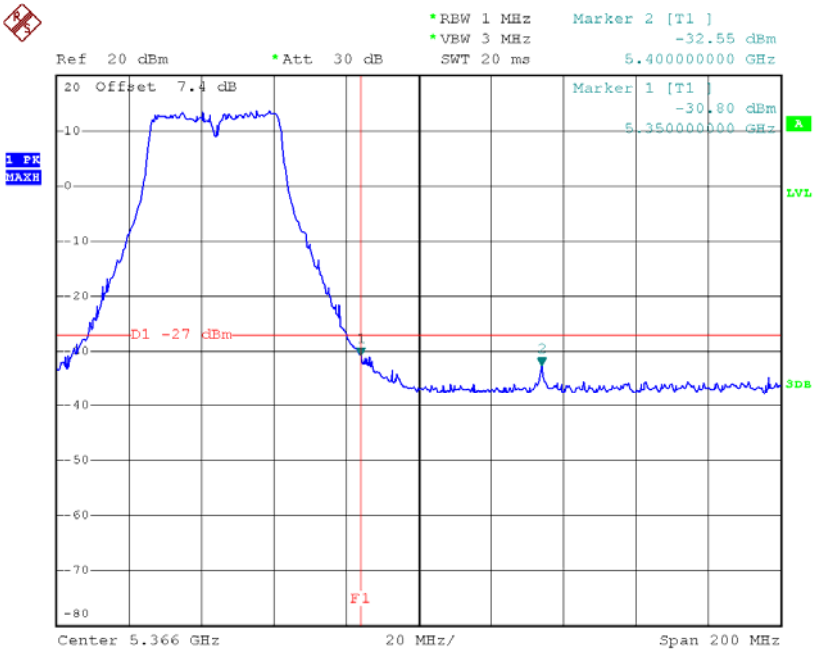
Channel of Worst Data: CH62			
The max. radio frequency power in any 1000kHz bandwidth outside the frequency band		The max. radio frequency power in any 1000kHz bandwidth within the frequency band.	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)
5132.00	-37.21	5350.00	-30.80
Limit: -27 dBm/1MHz Result:PASS			
Measurement method: S.A Read value+Ant gain+cable loss			

TX mode CH54



Date: 20.NOV.2013 01:04:18

TX mode CH62

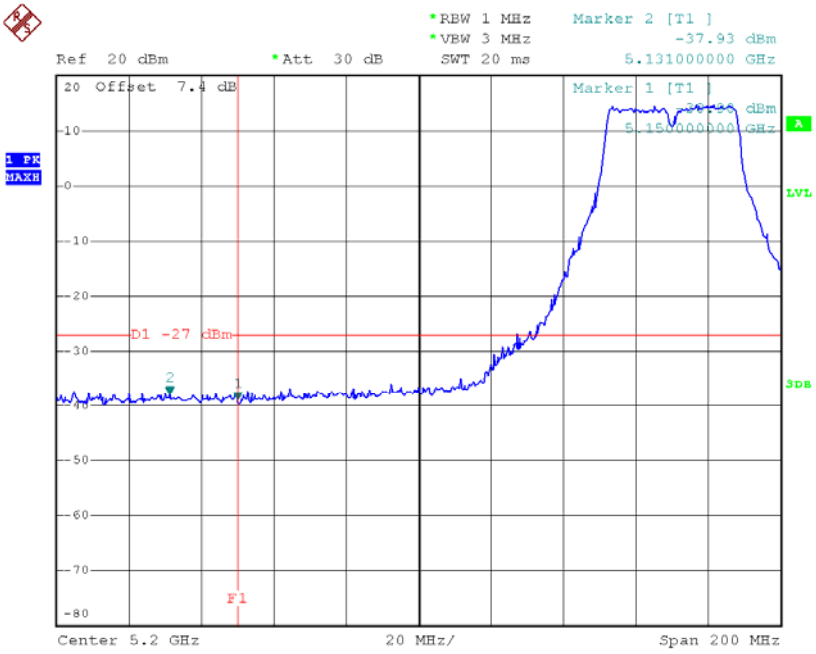


Date: 20.NOV.2013 01:05:28

EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6510DN-AGN-US
Temperature:	25°C	Relative Humidity:	58 %
Test Voltage:	AC 120V/60Hz		
Test Mode :	Band 2/TX N40 Mode/ CH54, CH62/ANT 2		

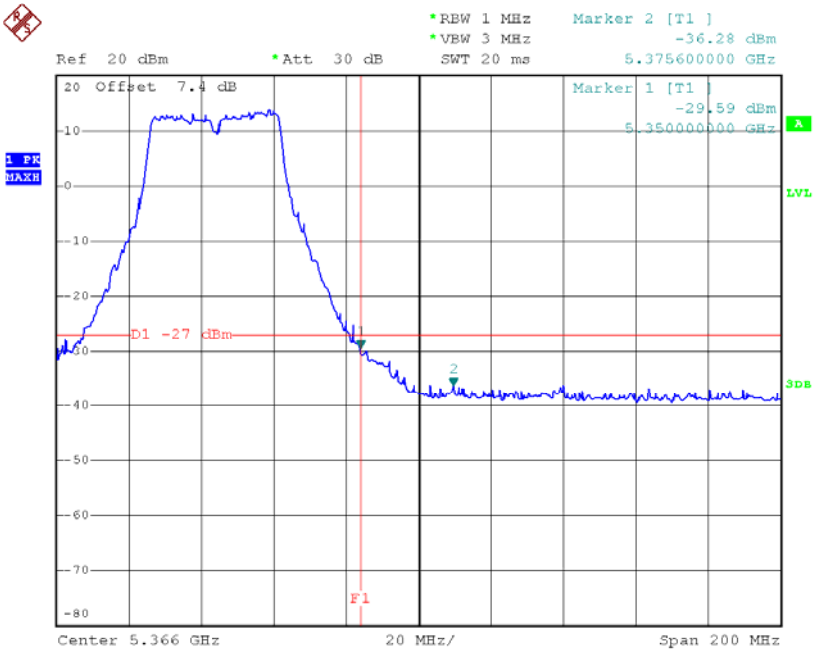
Channel of Worst Data: CH62			
The max. radio frequency power in any 1000kHz bandwidth outside the frequency band		The max. radio frequency power in any 1000kHz bandwidth within the frequency band.	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)
5131.00	-37.93	5350.00	-29.59
Limit: -27 dBm/1MHz Result:PASS			
Measurement method: S.A Read value+Ant gain+cable loss			

TX mode CH54



Date: 20.NOV.2013 01:10:07

TX mode CH62

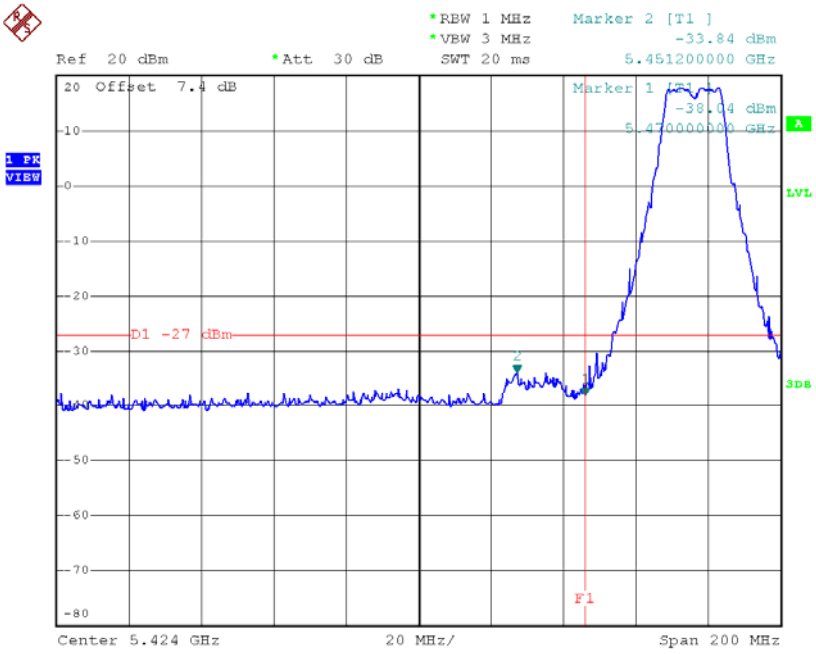


Date: 20.NOV.2013 01:09:02

EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6510DN-AGN-US
Temperature:	25°C	Relative Humidity:	58 %
Test Voltage:	AC 120V/60Hz		
Test Mode :	Band 3/TX A Mode/ CH100, CH112,CH140/ANT 1		

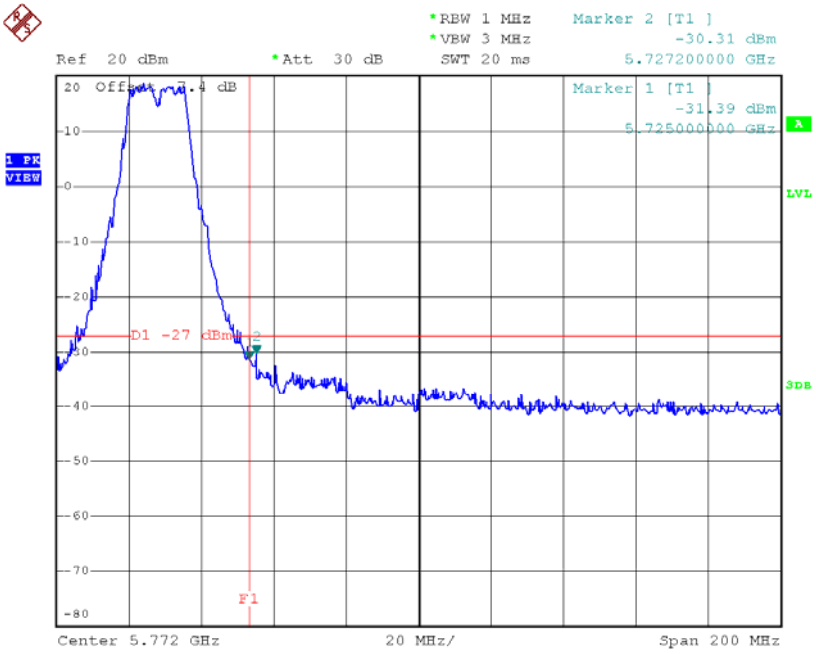
Channel of Worst Data: CH140			
The max. radio frequency power in any 1000kHz bandwidth outside the frequency band		The max. radio frequency power in any 1000kHz bandwidth within the frequency band.	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)
5451.20	-33.84	5727.20	-30.31
Limit: -27 dBm/1MHz Result:PASS			
Measurement method: S.A Read value+Ant gain+cable loss			

TX mode CH100



Date: 20.NOV.2013 00:17:33

TX mode CH140

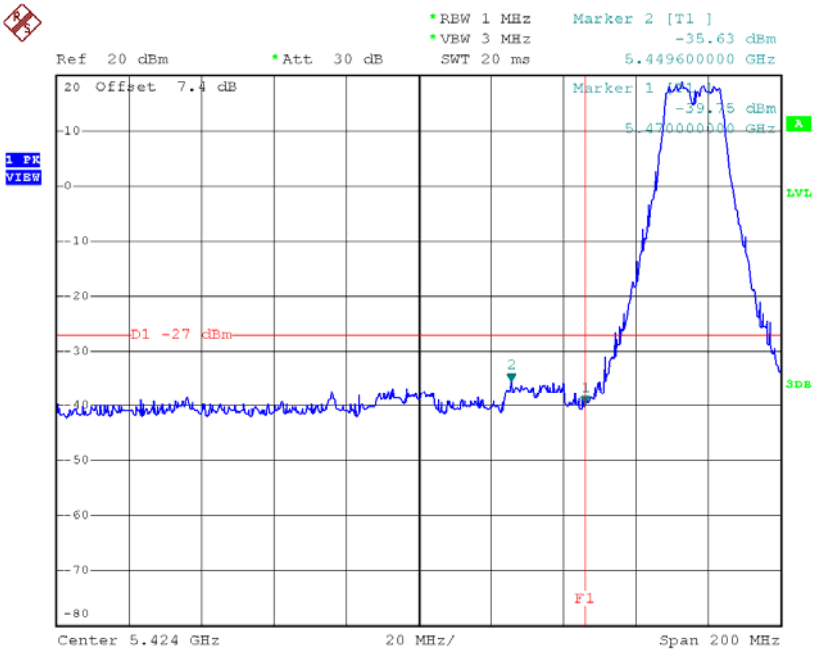


Date: 20.NOV.2013 00:18:41

EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6510DN-AGN-US
Temperature:	25°C	Relative Humidity:	58 %
Test Voltage:	AC 120V/60Hz		
Test Mode :	Band 3/TX A Mode/ CH100, CH112,CH140/ANT 2		

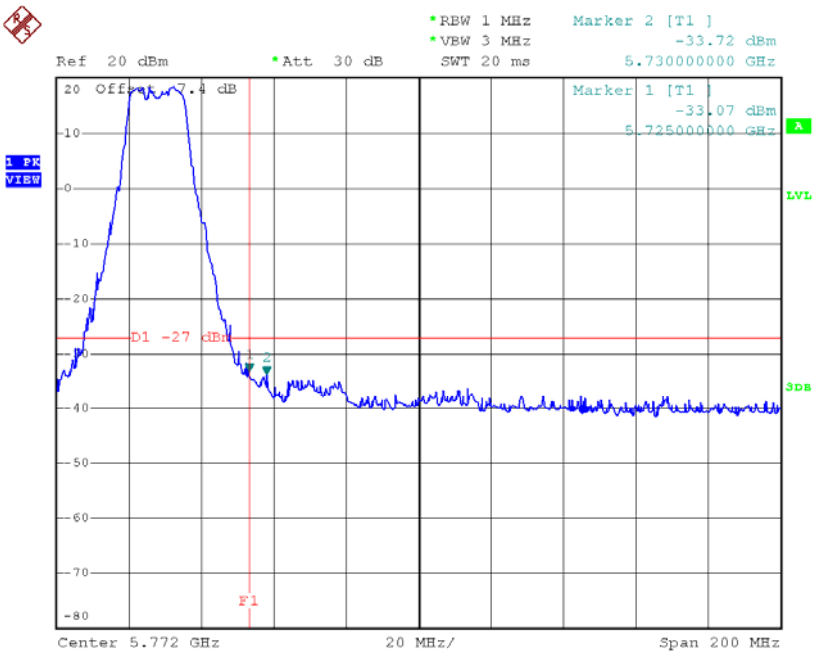
Channel of Worst Data: CH140			
The max. radio frequency power in any 1000kHz bandwidth outside the frequency band		The max. radio frequency power in any 1000kHz bandwidth within the frequency band.	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)
5449.60	-35.63	5725.00	-33.07
Limit: -27 dBm/1MHz Result:PASS			
Measurement method: S.A Read value+Ant gain+cable loss			

TX mode CH100



Date: 20.NOV.2013 00:20:40

TX mode CH140

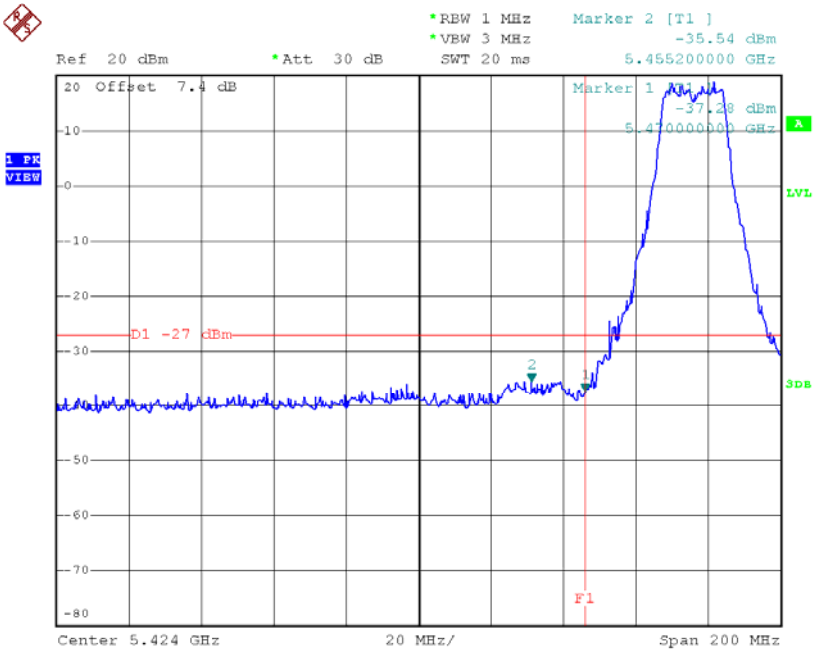


Date: 20.NOV.2013 00:19:15

EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6510DN-AGN-US
Temperature:	25°C	Relative Humidity:	58 %
Test Voltage:	AC 120V/60Hz		
Test Mode :	Band 3/TX N20 Mode/ CH100, CH112,CH140/ANT 1		

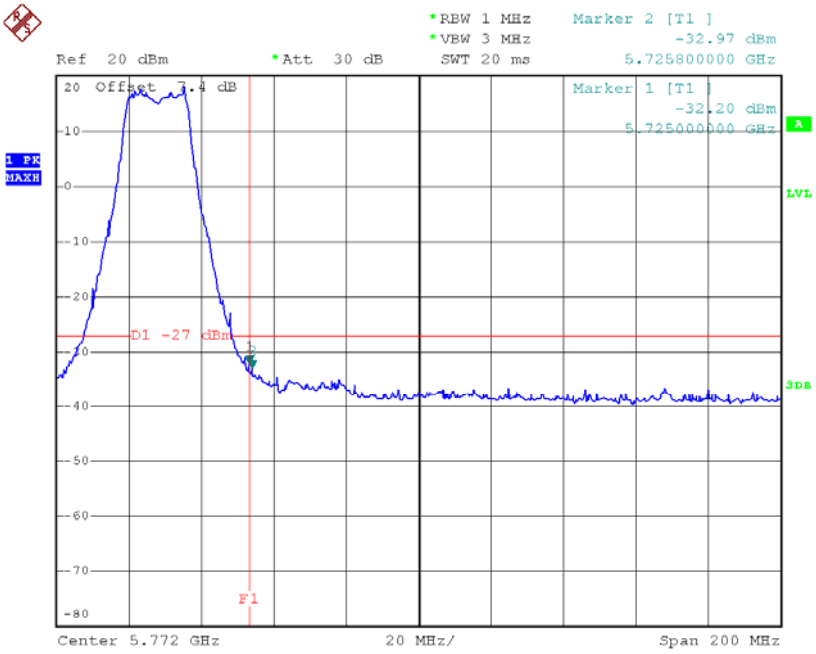
Channel of Worst Data: CH140			
The max. radio frequency power in any 1000kHz bandwidth outside the frequency band		The max. radio frequency power in any 1000kHz bandwidth within the frequency band.	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)
5455.20	-35.54	5725.00	-32.20
Limit: -27 dBm/1MHz Result:PASS			
Measurement method: S.A Read value+Ant gain+cable loss			

TX mode CH100



Date: 20.NOV.2013 00:37:36

TX mode CH140

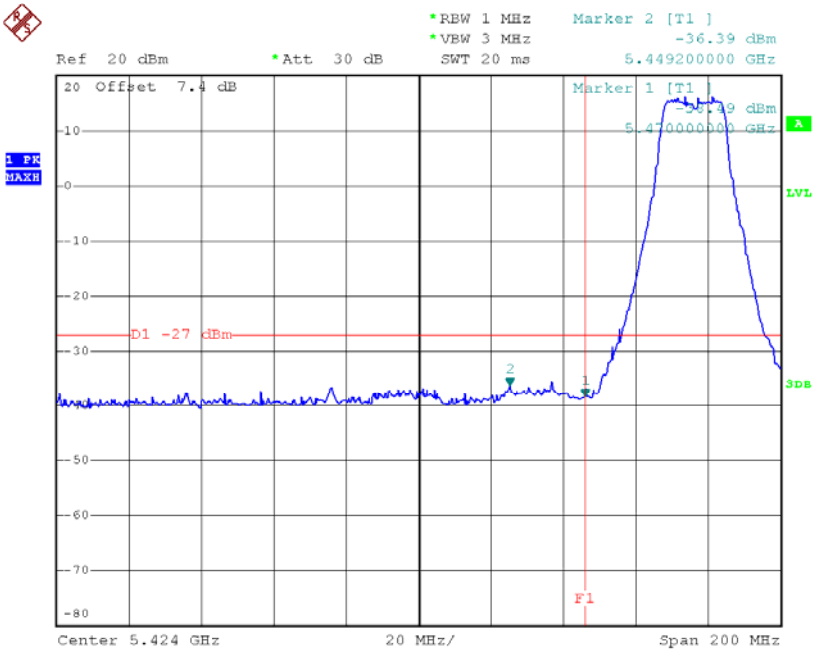


Date: 20.NOV.2013 00:40:29

EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6510DN-AGN-US
Temperature:	25°C	Relative Humidity:	58 %
Test Voltage:	AC 120V/60Hz		
Test Mode :	Band 3/TX N20 Mode/ CH100, CH112,CH140/ANT 2		

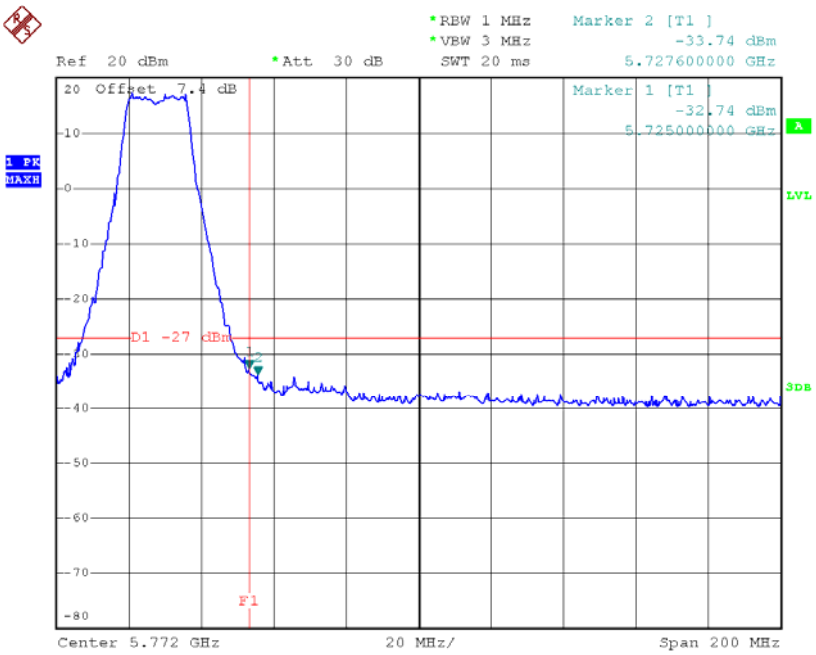
Channel of Worst Data: CH140			
The max. radio frequency power in any 1000kHz bandwidth outside the frequency band		The max. radio frequency power in any 1000kHz bandwidth within the frequency band.	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)
5469.20	-36.39	5725.00	-32.74
Limit: -27 dBm/1MHz Result:PASS			
Measurement method: S.A Read value+Ant gain+cable loss			

TX mode CH100



Date: 20.NOV.2013 00:42:12

TX mode CH140

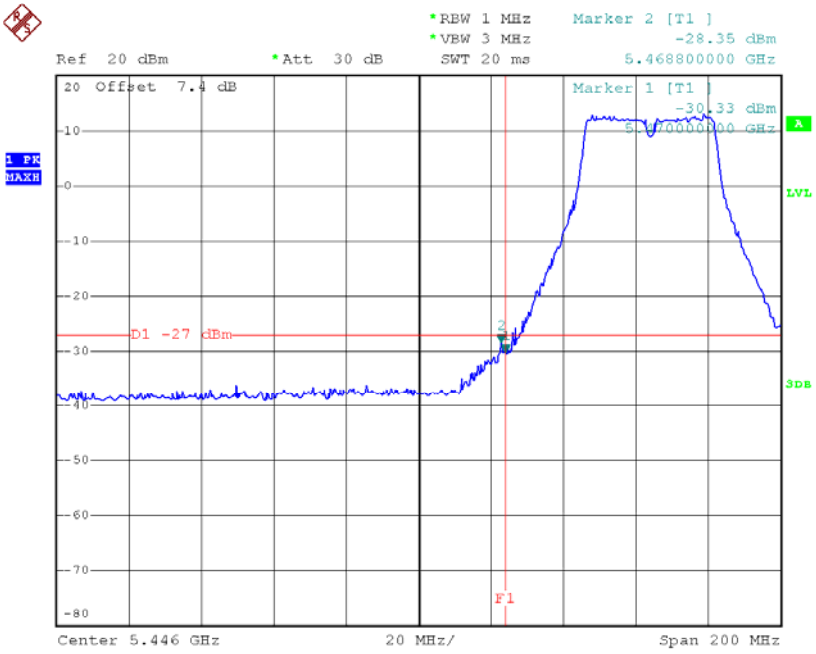


Date: 20.NOV.2013 00:47:44

EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6510DN-AGN-US
Temperature:	25°C	Relative Humidity:	58 %
Test Voltage:	AC 120V/60Hz		
Test Mode :	Band 3/TX N40 Mode/ CH102, CH110 /ANT 1		

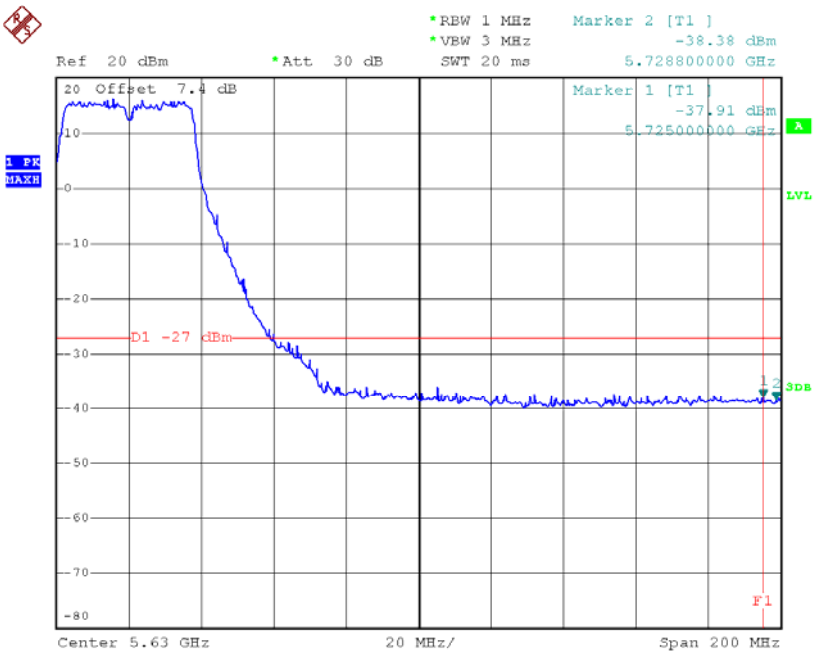
Channel of Worst Data: CH102			
The max. radio frequency power in any 1000kHz bandwidth outside the frequency band		The max. radio frequency power in any 1000kHz bandwidth within the frequency band.	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)
5468.80	-28.35	5725.00	-37.91
Limit: -27 dBm/1MHz Result:PASS			
Measurement method: S.A Read value+Ant gain+cable loss			

TX mode CH102



Date: 20.NOV.2013 01:35:53

TX mode CH110

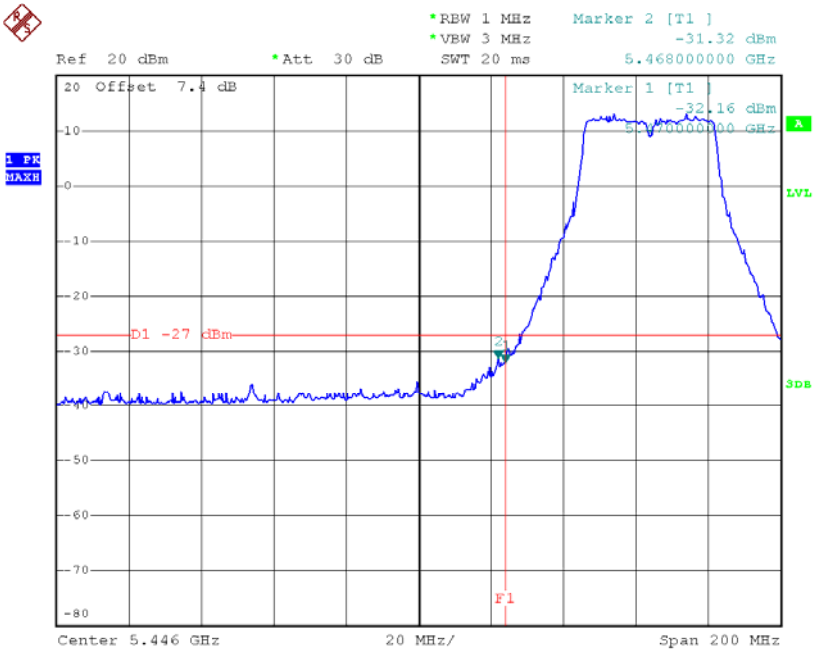


Date: 20.NOV.2013 01:36:52

EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6510DN-AGN-US
Temperature:	25°C	Relative Humidity:	58 %
Test Voltage:	AC 120V/60Hz		
Test Mode :	Band 3/TX N40 Mode/ CH102, CH110 /ANT 2		

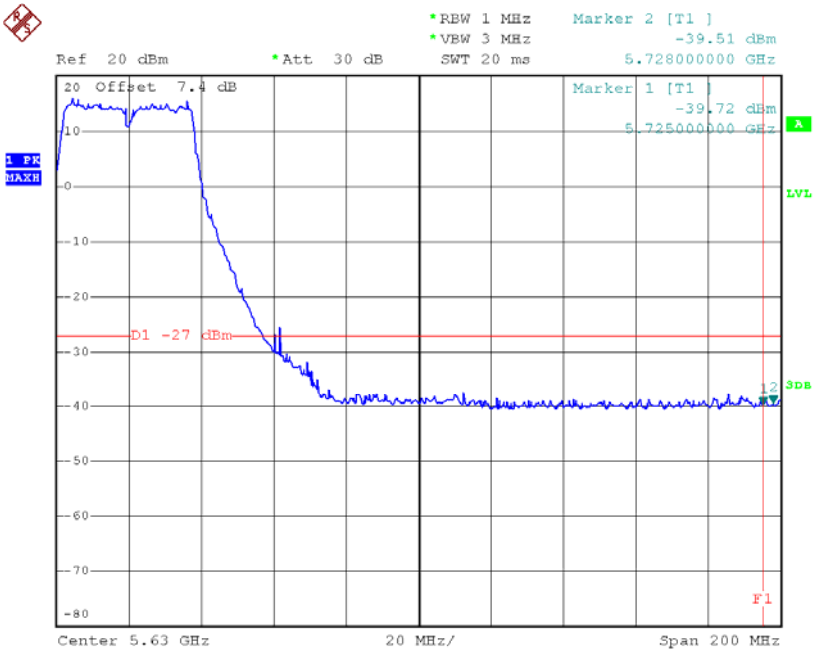
Channel of Worst Data: CH102			
The max. radio frequency power in any 1000kHz bandwidth outside the frequency band		The max. radio frequency power in any 1000kHz bandwidth within the frequency band.	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)
5468.00	-31.32	5728.00	-39.51
Limit: -27 dBm/1MHz Result:PASS			
Measurement method: S.A Read value+Ant gain+cable loss			

TX mode CH102



Date: 20.NOV.2013 01:39:02

TX mode CH110



Date: 20.NOV.2013 01:38:10

8. POWER SPECTRAL DENSITY TEST

8.1 APPLIED PROCEDURES / LIMIT

FCC Part15, Subpart E			
Test Item	Limit	Frequency Range (MHz)	Result
Power Spectral Density	11 dBm	5250 - 5350	PASS
	11 dBm	5470 - 5725	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	100129	Nov.26.2011	Nov.26.2012

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

8.1.2 TEST PROCEDURE

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

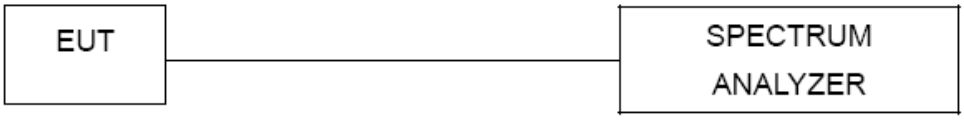
b.

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

8.1.3 DEVIATION FROM STANDARD

No deviation.

8.1.4 TEST SETUP



8.1.5 EUT OPERATION CONDITIONS

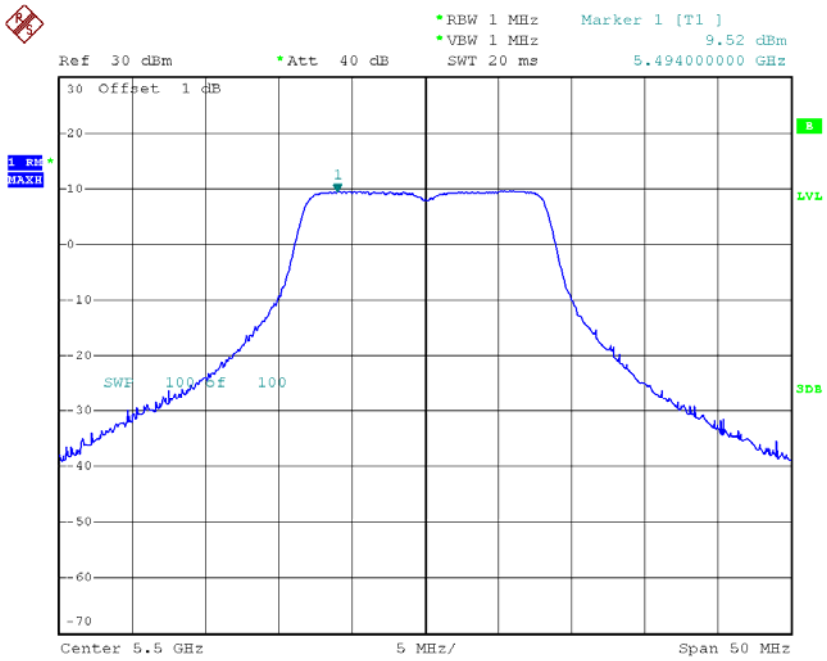
The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.

8.1.6 TEST RESULTS

EUT：	Outdoor Wireless LAN Access Point	Model Name ：	AP6510DN-AGN-US
Temperature：	25°C	Relative Humidity：	58 %
Test Voltage：	AC 120V/60Hz		
Test Mode ：	Band 2/TX A Mode/CH52, CH56, CH64		

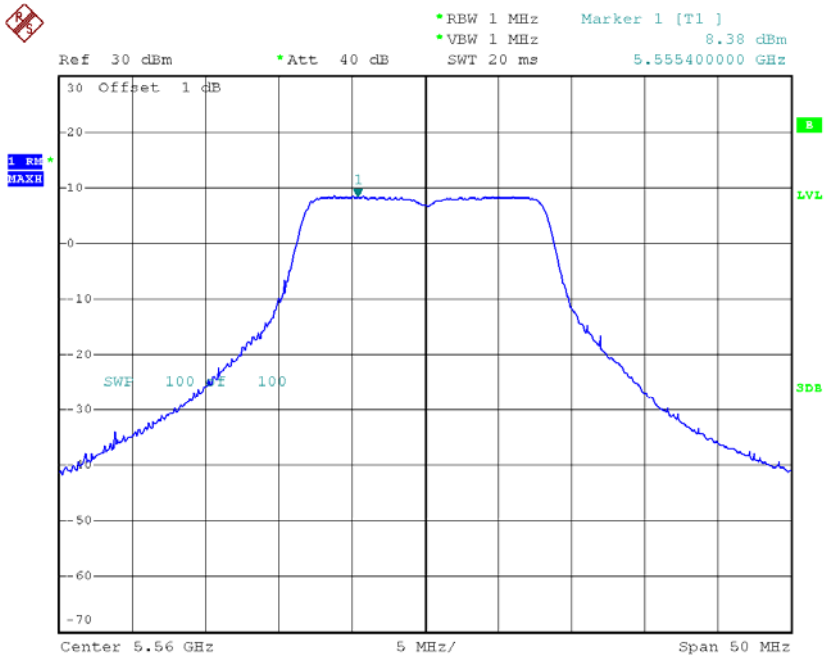
Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH52	5260	9.52	11
CH56	5280	8.38	11
CH64	5320	9.82	11

CH52



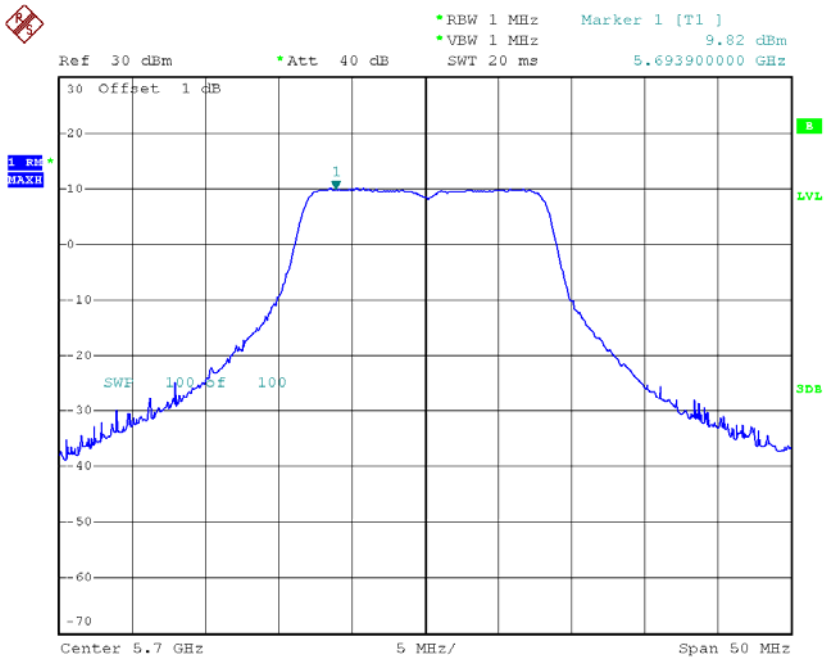
Date: 31.MAY.2012 20:07:57

CH56



Date: 31.MAY.2012 20:08:58

CH64



Date: 31.MAY.2012 20:10:38

EUT：	Outdoor Wireless LAN Access Point	Model Name ：	AP6510DN-AGN-US
Temperature：	25°C	Relative Humidity：	58 %
Test Voltage：	AC 120V/60Hz		
Test Mode ：	Band 2/TX N20 Mode/CH52, CH56, CH64		

ANT 1			
Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH52	5260	4.91	11
CH56	5280	5.05	11
CH64	5320	5.05	11

ANT 2			
Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH52	5260	3.29	11
CH56	5280	2.97	11
CH64	5320	2.94	11

(ANT 1+ANT 2)			
Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH52	5260	7.48	10.6
CH56	5280	7.21	10.6
CH64	5320	7.36	10.6

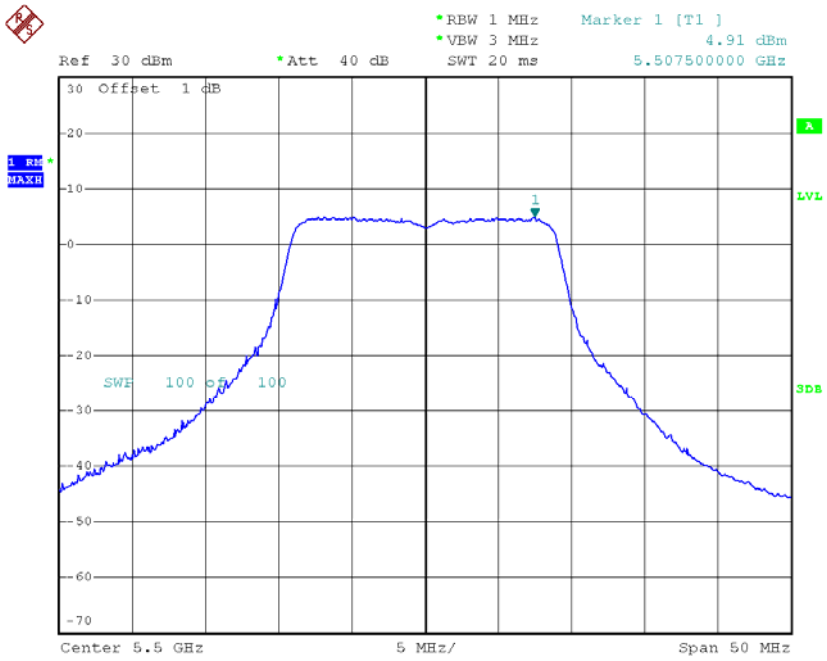
Remark：

(1) **The MIMO test requirement, RF conducted output power shall measure each transmitter chain by using channel power method.**
And after obtain each individual transmitter chain power, then sum the output power by using the following formula:
((dBm/Chain 1)/10^Log) + ((dBm/Chain 2)/10^log) + ((dBm/ChainN)/10^log) = Combined peak output power in mW.

(2) **Antenna Gain 1=6.4 dBi**

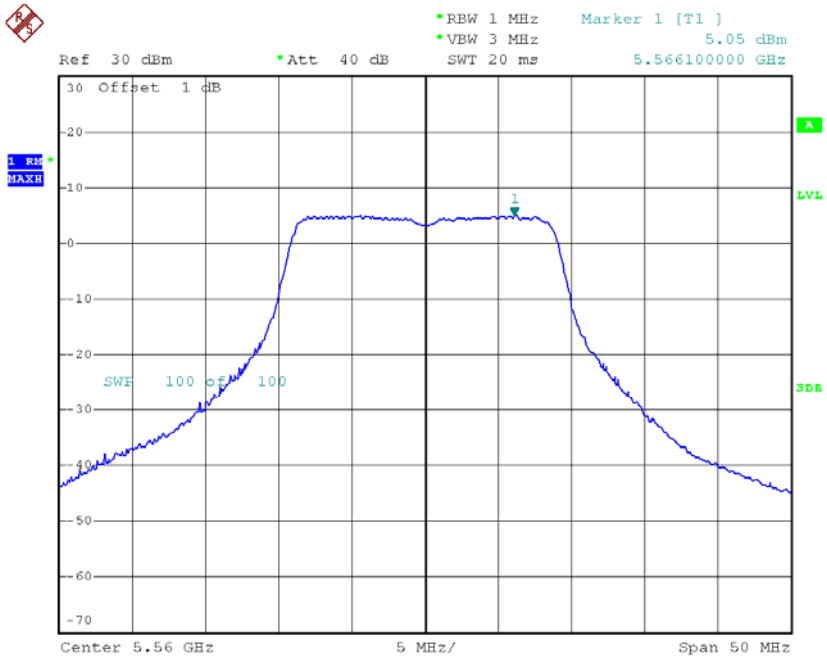
(3) **This EUT supports MIMO 2T2R, all transmit signals are completely uncorrelated, then, Direction gain = G_{ANT}, that is Directional gain=6.4; So,the out power limit is 24-6.4+6=23.6; and power density limit is 11-6.4+6=10.6**

CH52-ANT 1



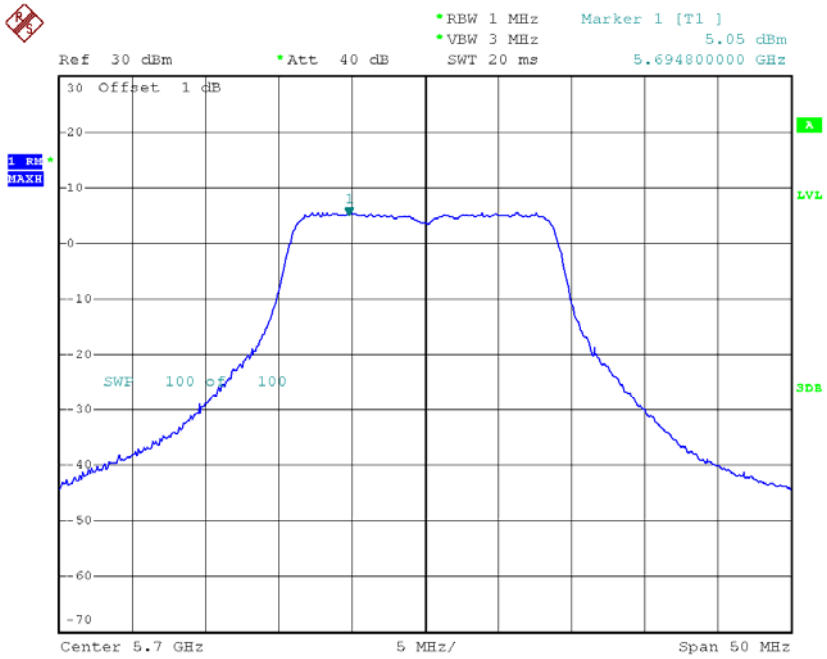
Date: 15.JUL.2012 12:38:02

CH56-ANT 1



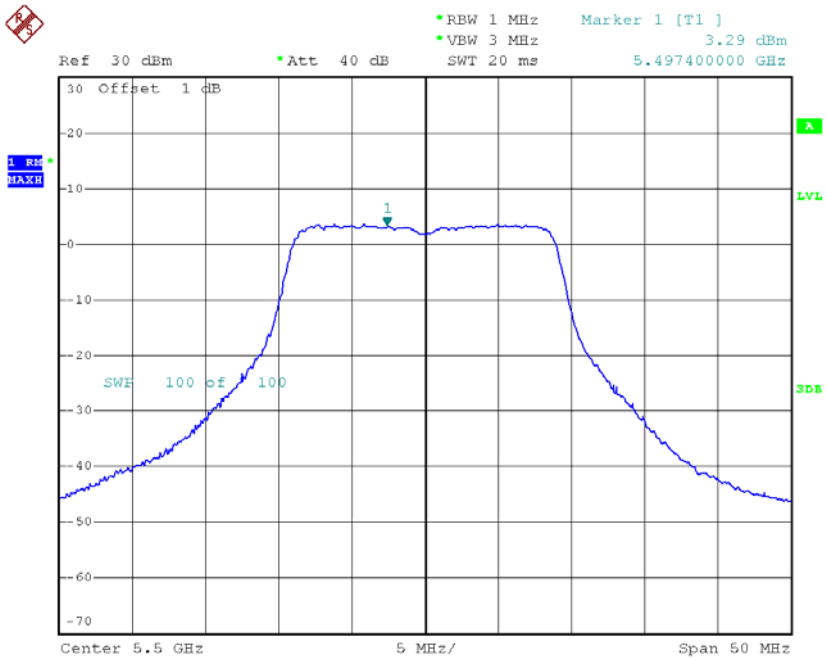
Date: 15.JUL.2012 12:51:17

CH64-ANT 1



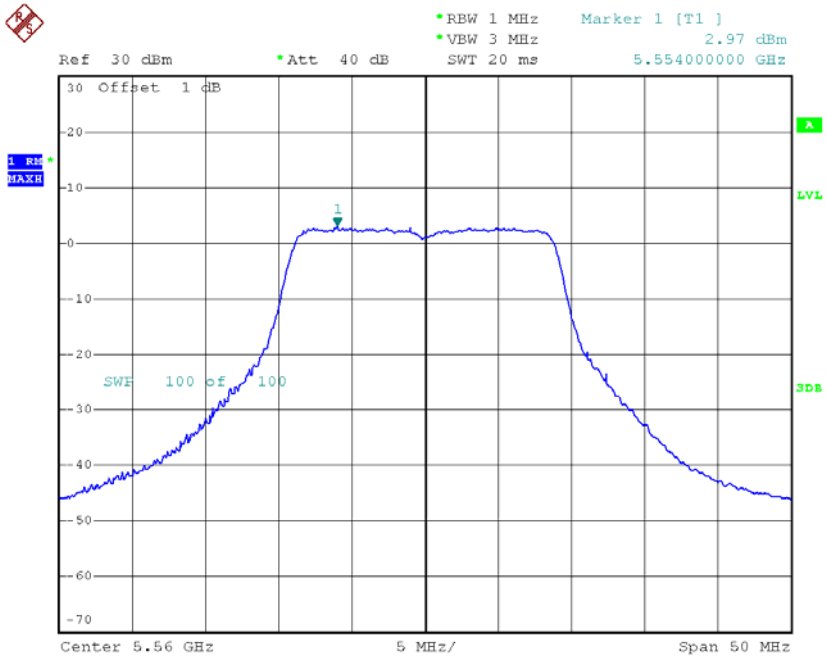
Date: 15.JUL.2012 12:40:08

CH52-ANT 2



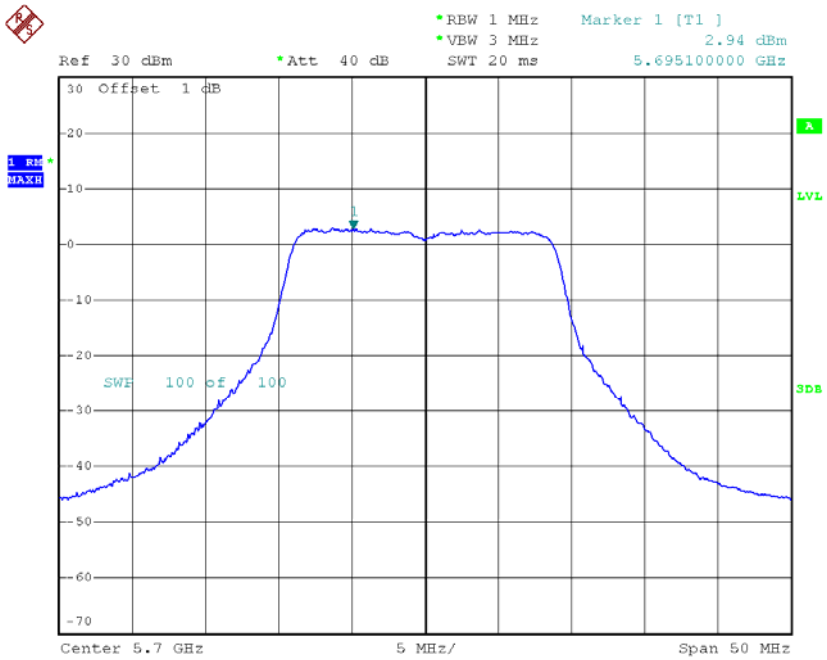
Date: 15.JUL.2012 12:56:49

CH56-ANT 2



Date: 15.JUL.2012 12:48:45

CH64-ANT 2



Date: 15.JUL.2012 12:44:06

EUT：	Outdoor Wireless LAN Access Point	Model Name ：	AP6510DN-AGN-US
Temperature：	25°C	Relative Humidity：	58 %
Test Voltage：	AC 120V/60Hz		
Test Mode ：	Band 2/TX N40 Mode/CH54, CH62		

ANT 1			
Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH54	5270	2.82	11
CH62	5310	4.82	11

ANT 2			
Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH54	5270	0.13	11
CH62	5310	1.96	11

(ANT 1+ANT 2)			
Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH54	5270	5.67	10.6
CH62	5310	1.96	10.6

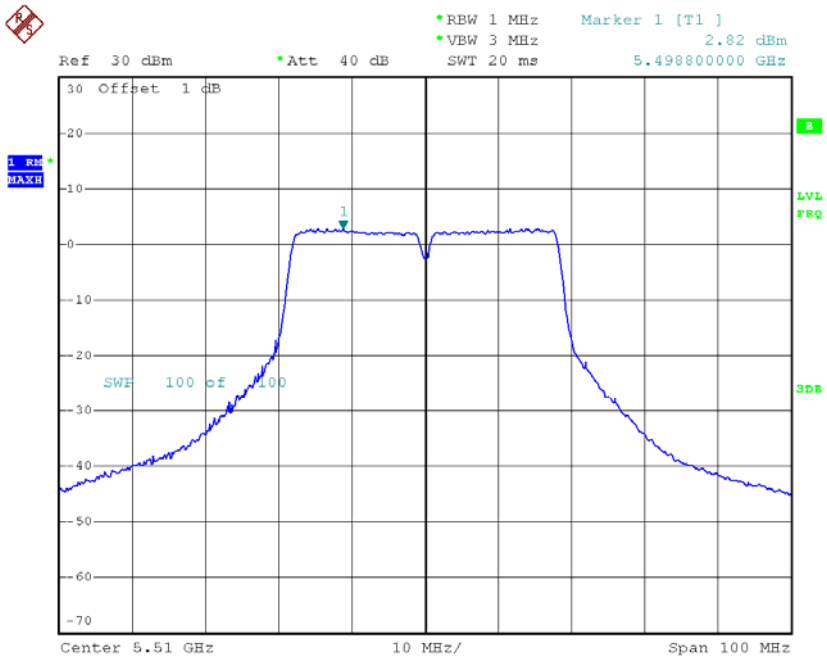
Remark：

(1) **The MIMO test requirement, RF power density shall measure each transmitter chain by using channel power density method.**
And after obtain each individual transmitter chain power density, then sum the power density by using the following formula:
((dBm/Chain 1)/10^Log) + ((dBm/Chain 2)/10^log) + ((dBm/ChainN)/10^log) = Combined power density in mW.

(2) **Antenna Gain 1=6.4 dBi**

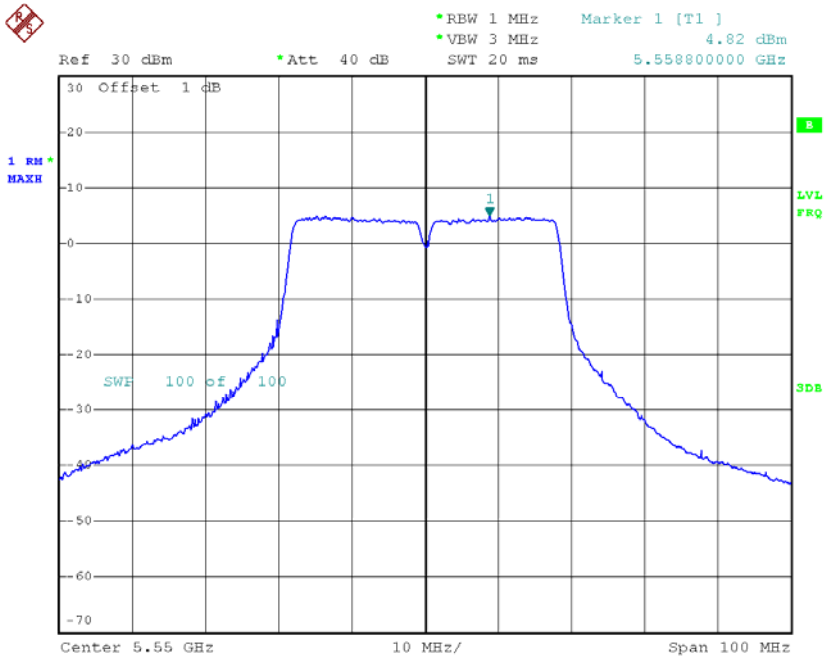
(3) **This EUT supports MIMO 2T2R, all transmit signals are completely uncorrelated, then, Direction gain = G_{ANT}, that is Directional gain=6.4; So,the out power limit is 24-6.4+6=23.6; and power density limit is 11-6.4+6=10.6**

CH54-ANT 1



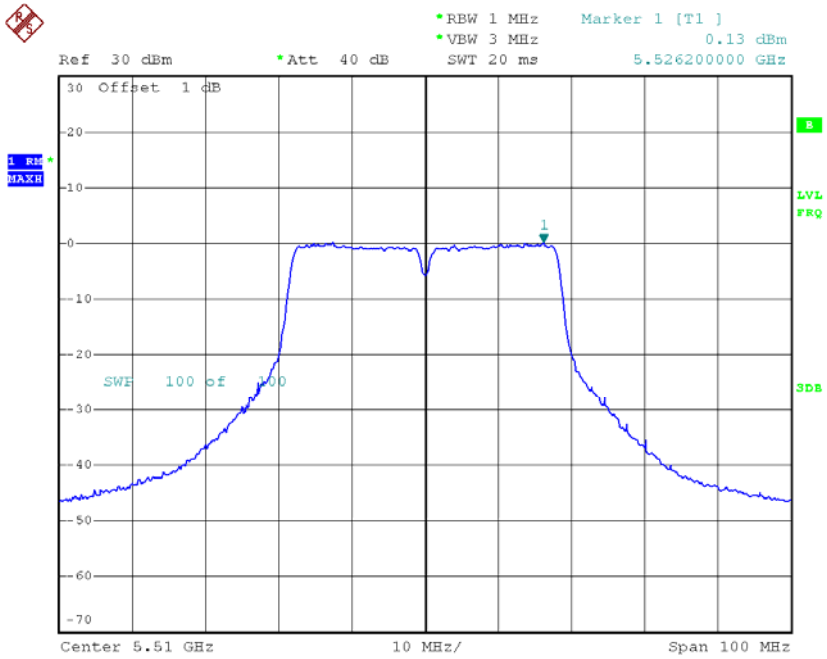
Date: 31.MAY.2012 21:02:51

CH62-ANT 1



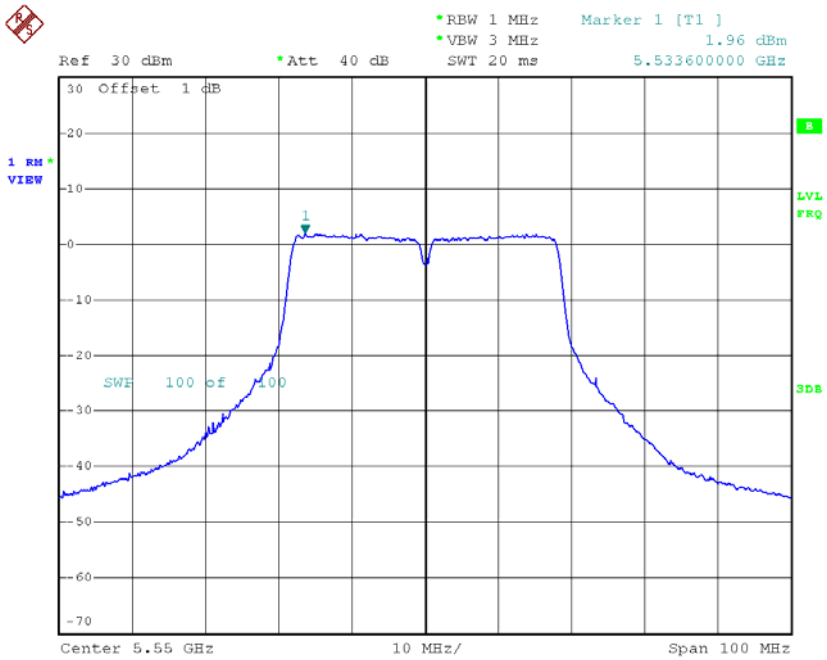
Date: 31.MAY.2012 21:08:59

CH54-ANT 2



Date: 31.MAY.2012 21:22:23

CH62-ANT 2

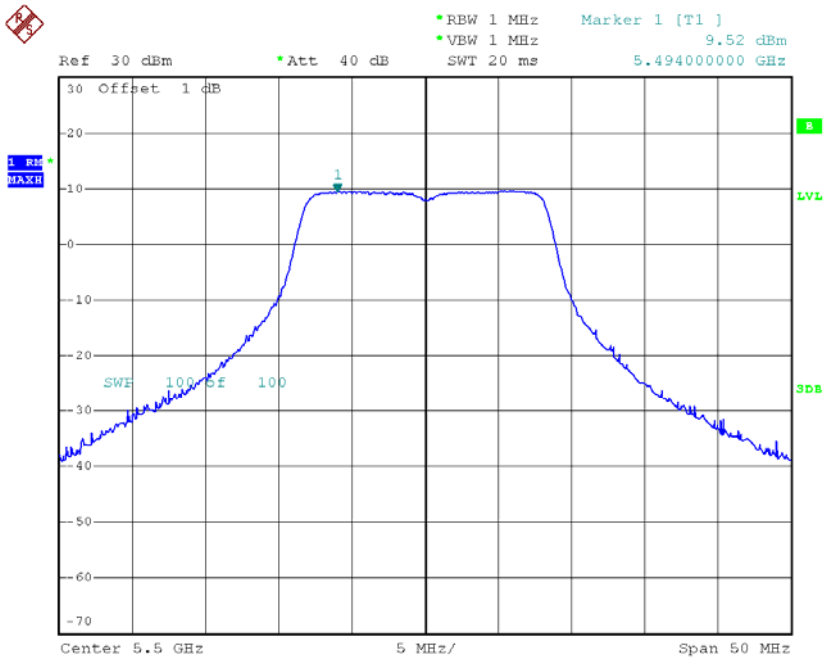


Date: 31.MAY.2012 21:30:15

EUT：	Outdoor Wireless LAN Access Point	Model Name ：	AP6510DN-AGN-US
Temperature：	25°C	Relative Humidity：	58 %
Test Voltage：	AC 120V/60Hz		
Test Mode ：	Band 3/TX A Mode/CH100, CH112, CH140		

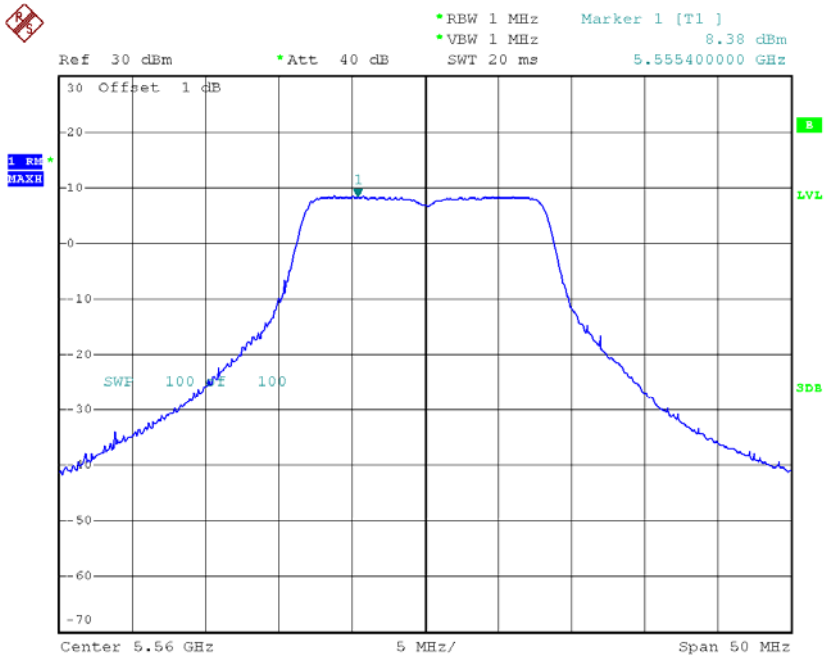
Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH100	5500	9.52	11
CH112	5560	8.38	11
CH140	5700	9.82	11

CH100



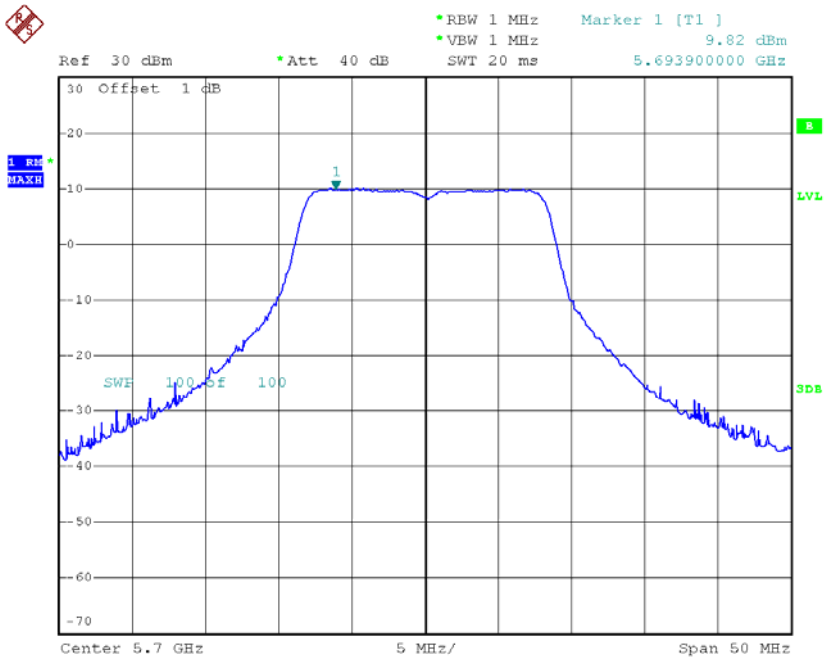
Date: 31.MAY.2012 20:07:57

CH112



Date: 31.MAY.2012 20:08:58

CH140



Date: 31.MAY.2012 20:10:38

EUT：	Outdoor Wireless LAN Access Point	Model Name ：	AP6510DN-AGN-US
Temperature：	25°C	Relative Humidity：	58 %
Test Voltage：	AC 120V/60Hz		
Test Mode ：	Band 3/TX N20 Mode/CH100, CH112, CH140		

ANT 1			
Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH100	5500	4.91	11
CH112	5560	5.05	11
CH140	5700	5.25	11

ANT 2			
Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH100	5500	3.29	11
CH112	5560	2.97	11
CH140	5700	2.94	11

(ANT 1+ANT 2)			
Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH100	5500	7.19	10.6
CH112	5560	7.14	10.6
CH140	5700	7.13	10.6

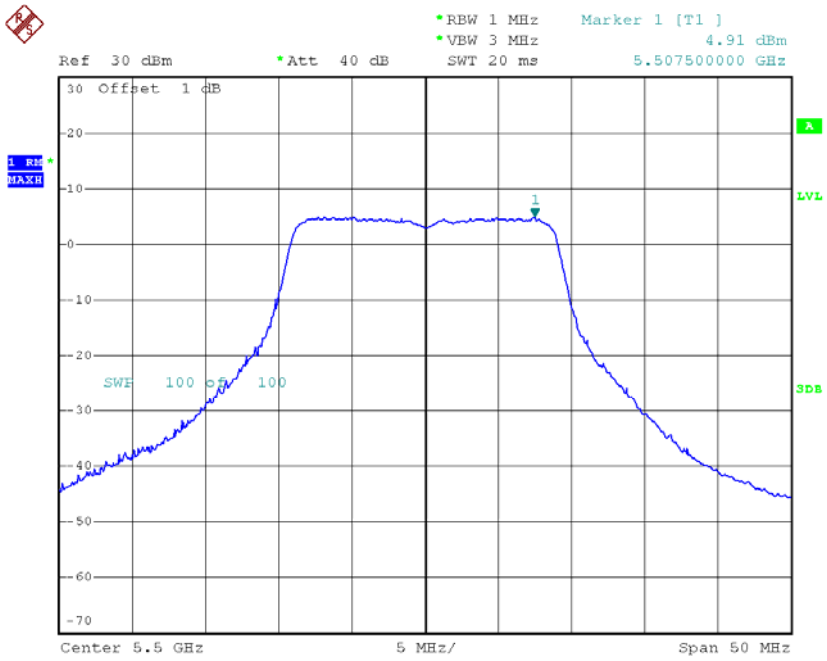
Remark：

(1) **The MIMO test requirement, RF conducted output power shall measure each transmitter chain by using channel power method.**
And after obtain each individual transmitter chain power, then sum the output power by using the following formula:
((dBm/Chain 1)/10^Log) + ((dBm/Chain 2)/10^log) + ((dBm/ChainN)/10^log) = Combined peak output power in mW.

(2) **Antenna Gain 1=6.4 dBi**

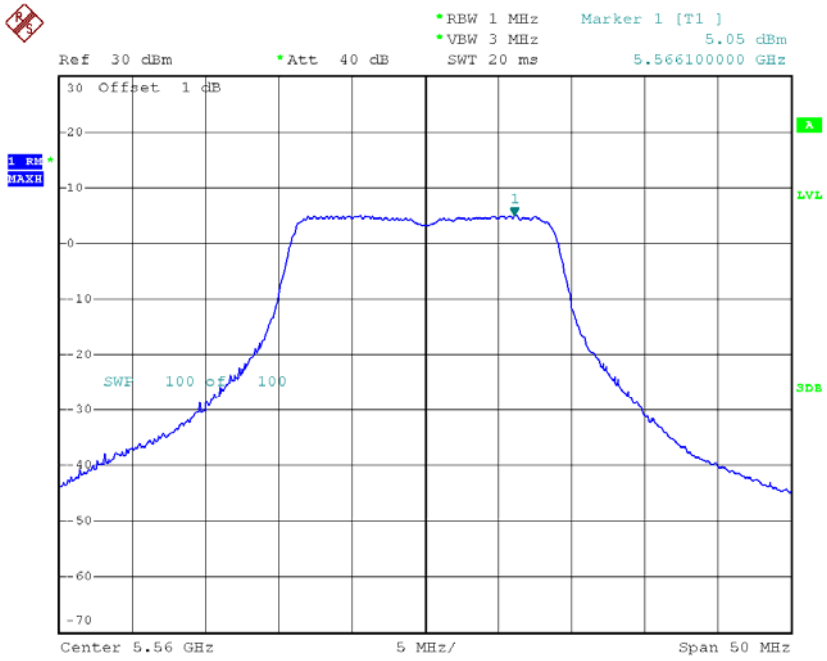
(3) **This EUT supports MIMO 2T2R, all transmit signals are completely uncorrelated, then, Direction gain = G_{ANT}, that is Directional gain=6.4; So,the out power limit is 24-6.4+6=23.6; and power density limit is 11-6.4+6=10.6**

CH100-ANT 1



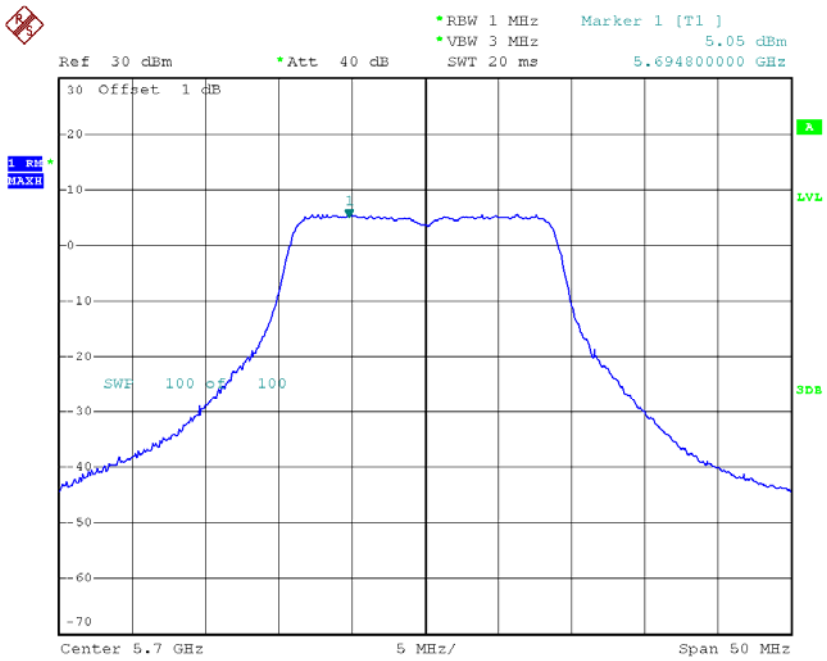
Date: 15.JUL.2012 12:38:02

CH112-ANT 1



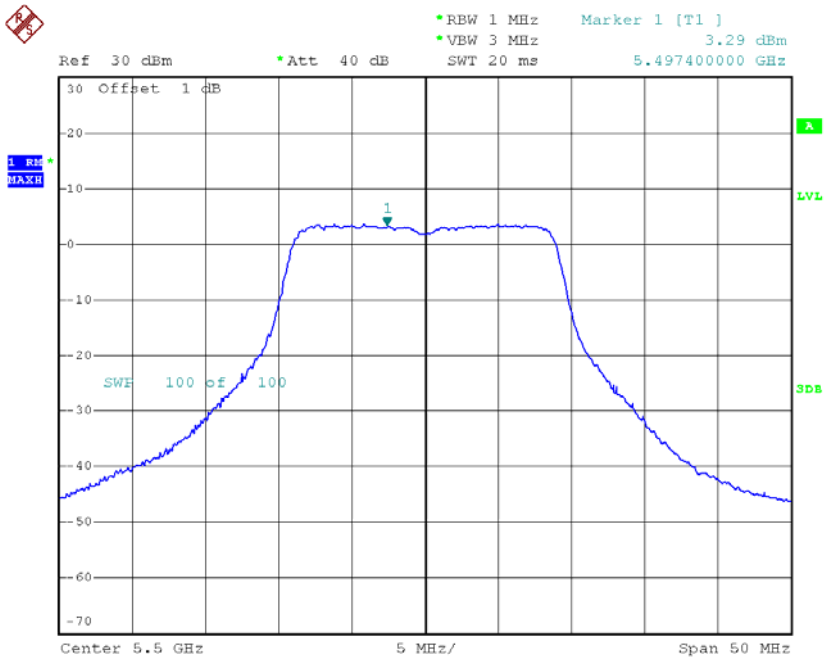
Date: 15.JUL.2012 12:51:17

CH140-ANT 1



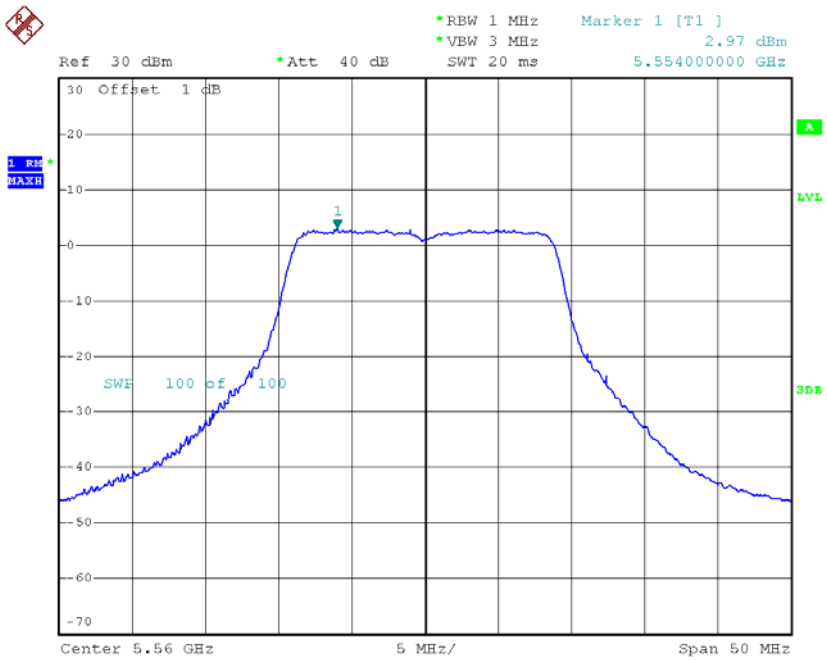
Date: 15.JUL.2012 12:40:08

CH100-ANT 2



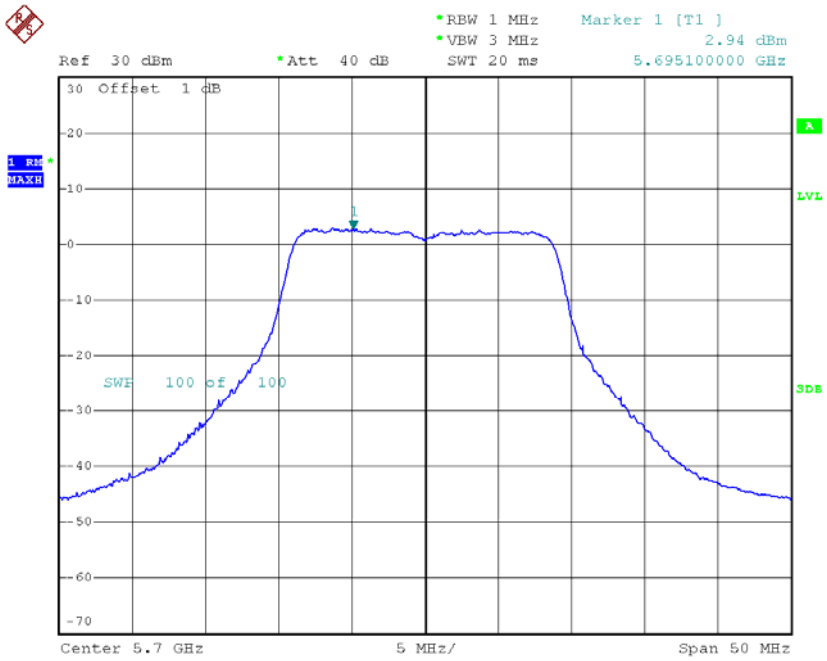
Date: 15.JUL.2012 12:56:49

CH112-ANT 2



Date: 15.JUL.2012 12:48:45

CH140-ANT 2



Date: 15.JUL.2012 12:44:06

EUT：	Outdoor Wireless LAN Access Point	Model Name ：	AP6510DN-AGN-US
Temperature：	25°C	Relative Humidity：	58 %
Test Voltage：	AC 120V/60Hz		
Test Mode ：	Band 3/TX N40 Mode/CH102, CH110		

ANT 1			
Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH102	5510	2.82	11
CH110	5550	4.82	11

ANT 2			
Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH102	5510	0.13	11
CH110	5550	1.96	11

(ANT 1+ANT 2)			
Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH102	5510	4.69	10.6
CH110	5550	6.63	10.6

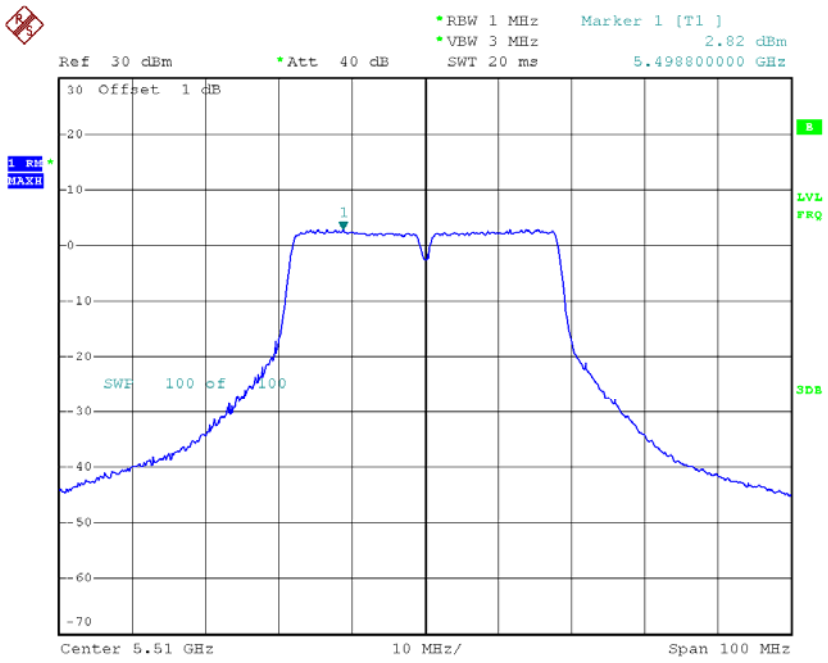
Remark：

(1) **The MIMO test requirement, RF power density shall measure each transmitter chain by using channel power density method.**
And after obtain each individual transmitter chain power density, then sum the power density by using the following formula:
((dBm/Chain 1)/10^Log) + ((dBm/Chain 2)/10^log) + ((dBm/ChainN)/10^log) = Combined power density in mW.

(2) **Antenna Gain 1=6.4 dBi**

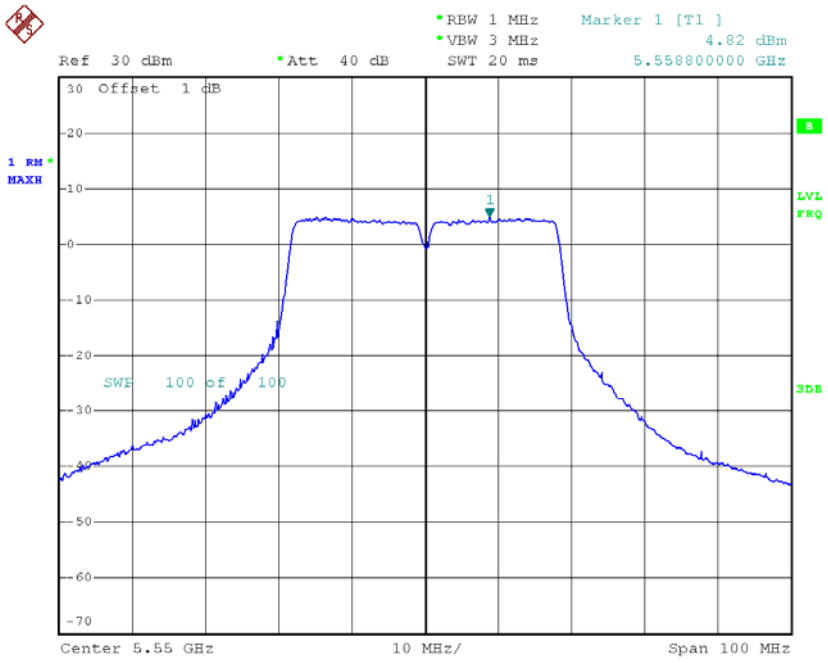
(3) **This EUT supports MIMO 2T2R, all transmit signals are completely uncorrelated, then, Direction gain = G_{ANT}, that is Directional gain=6.4; So,the out power limit is 24-6.4+6=23.6; and power density limit is 11-6.4+6=10.6**

CH102-ANT 1



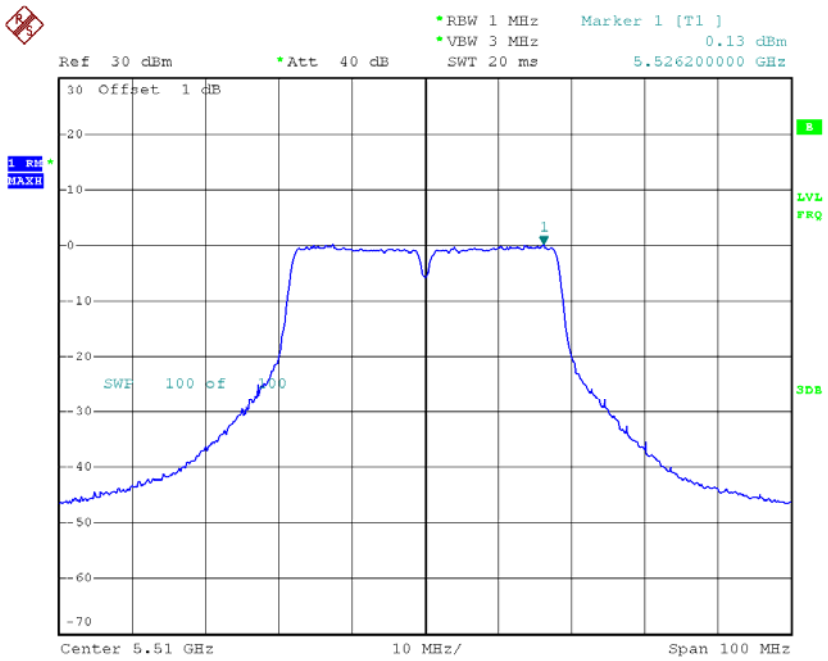
Date: 31.MAY.2012 21:02:51

CH110-ANT 1



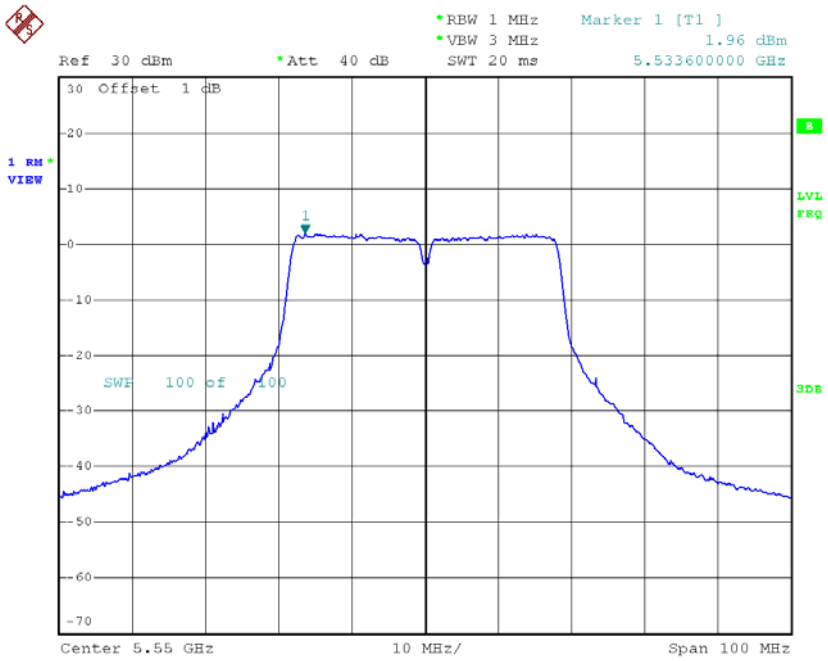
Date: 31.MAY.2012 21:08:59

CH102-ANT 2



Date: 31.MAY.2012 21:22:23

CH110-ANT 2



Date: 31.MAY.2012 21:30:15

9. PEAK EXCURSION MEASUREMENT

9.1 APPLIED PROCEDURES / LIMIT

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

9.1.1 MEASUREMENT INSTRUMENTS LIST

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

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

9.1.2 TEST PROCEDURE

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

b.

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

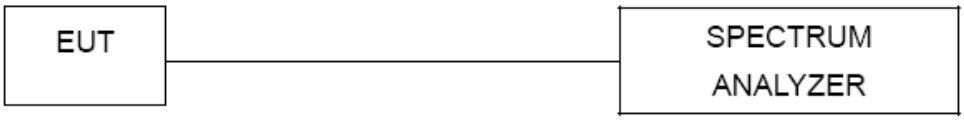
c. Peak Trace: Set RBW = 1 MHz, VBW ≥ 3 MHz with peak detector and maxhold settings.

d. Average Trace: set RBW = 1 MHz, VBW = 3 MHz with RMS detector and trace average across 100 traces in power averaging mode.

9.1.3 DEVIATION FROM STANDARD

No deviation.

9.1.4 TEST SETUP



9.1.5 EUT OPERATION CONDITIONS

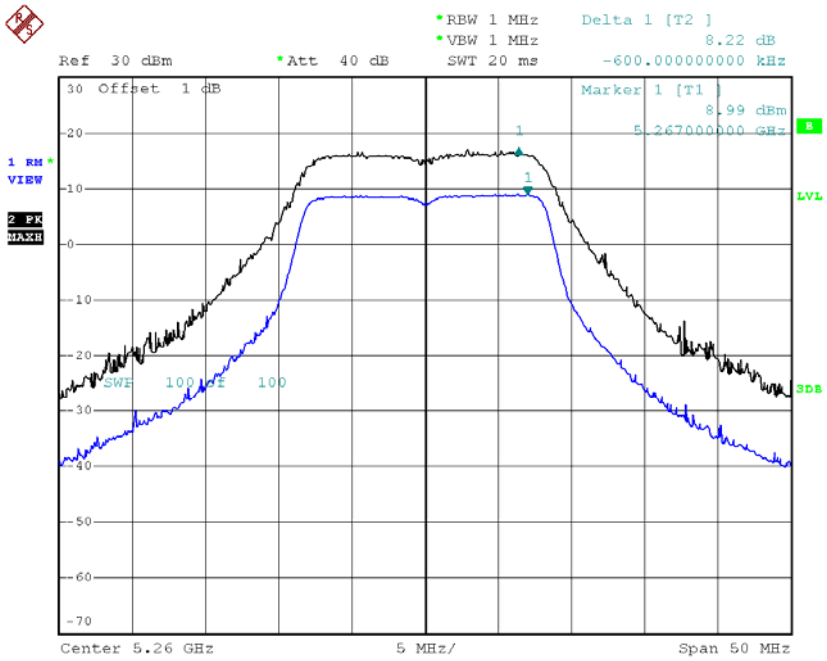
The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.

9.1.6 TEST RESULTS

EUT：	Outdoor Wireless LAN Access Point	Model Name ：	AP6510DN-AGN-US
Temperature：	25°C	Relative Humidity：	58 %
Test Voltage：	AC 120V/60Hz		
Test Mode ：	Band 2/TX A Mode/CH52, CH56, CH64		

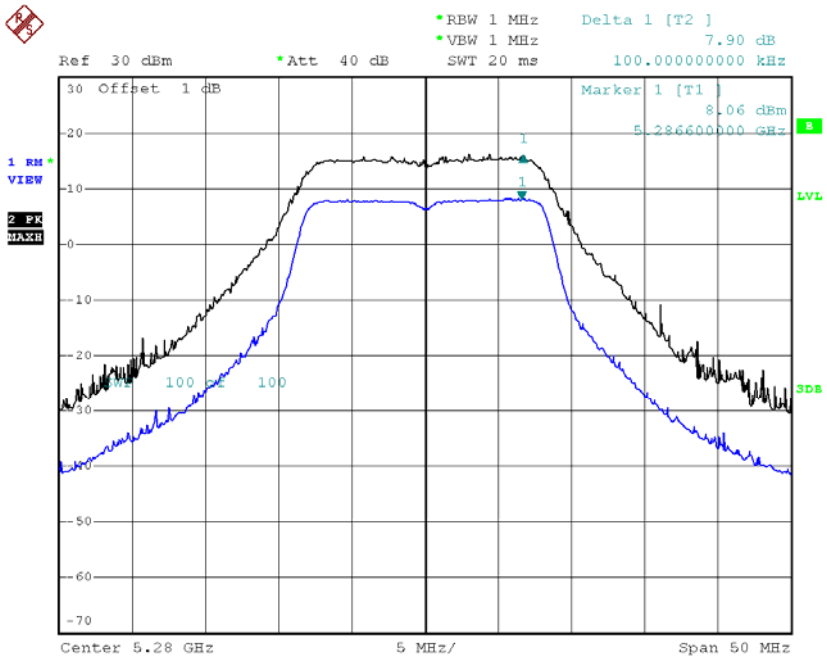
Test Channel	Frequency (MHz)	Peak Excursion (dB)	LIMIT (dB)
CH52	5260	8.22	13
CH56	5280	7.90	13
CH64	5320	843	13

CH52



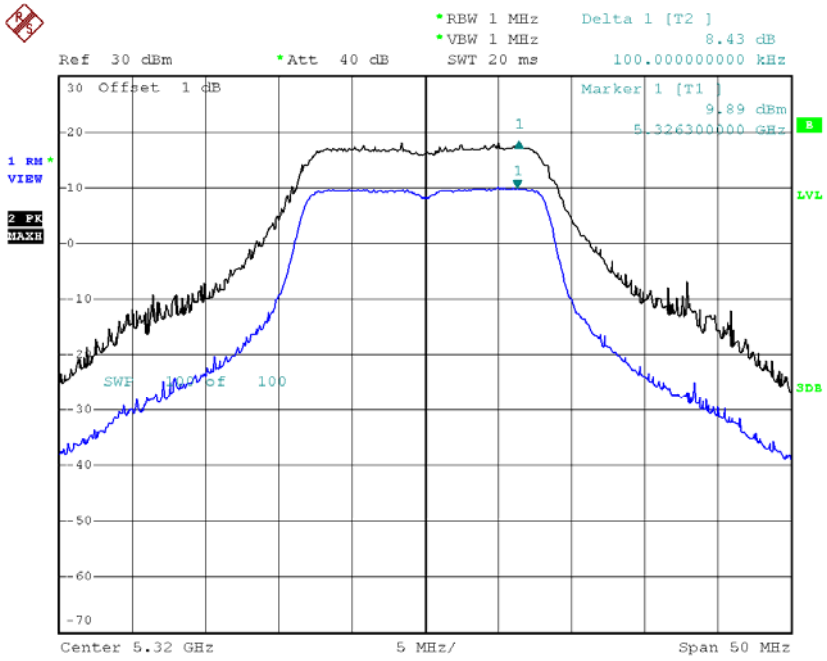
Date: 31.MAY.2012 20:03:40

CH56



Date: 31.MAY.2012 20:02:44

CH64

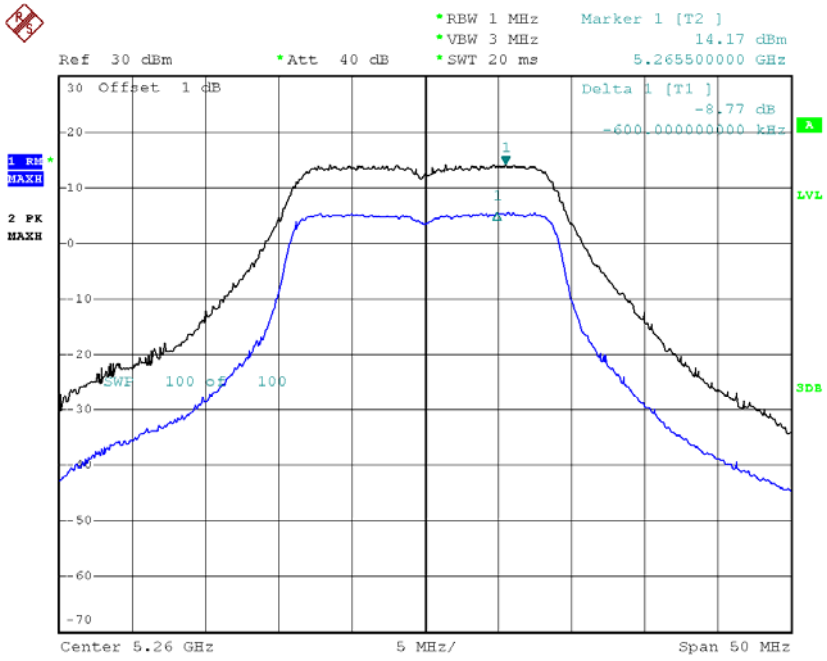


Date: 31.MAY.2012 20:05:18

EUT：	Outdoor Wireless LAN Access Point	Model Name ：	AP6510DN-AGN-US
Temperature：	25°C	Relative Humidity：	58 %
Test Voltage：	AC 120V/60Hz		
Test Mode ：	Band 2/TX N20 Mode/CH52, CH56, CH64		

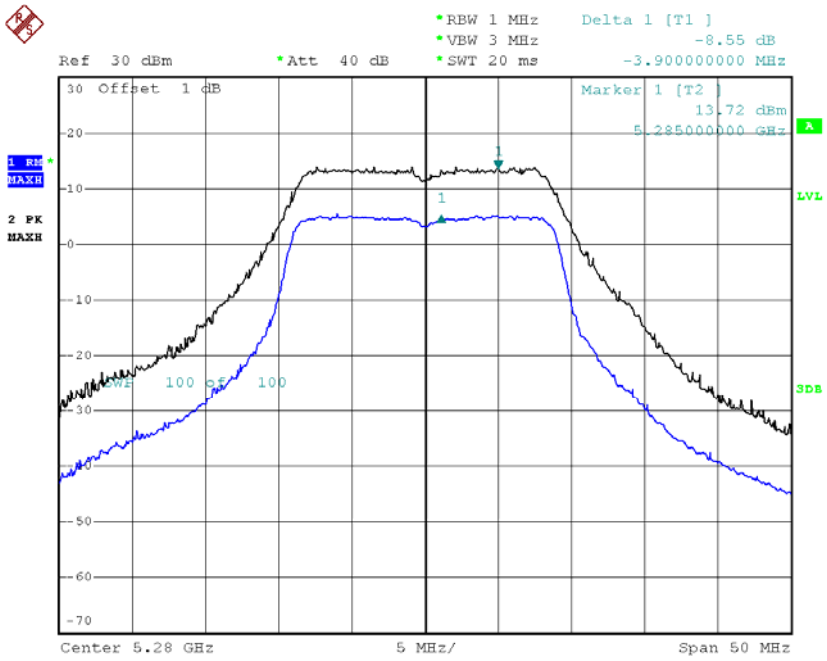
Test Channel	Frequency (MHz)	Peak Excursion (dB)	LIMIT (dB)
CH52	5260	8.77	13
CH56	5280	8.55	13
CH64	5320	8.71	13

CH52



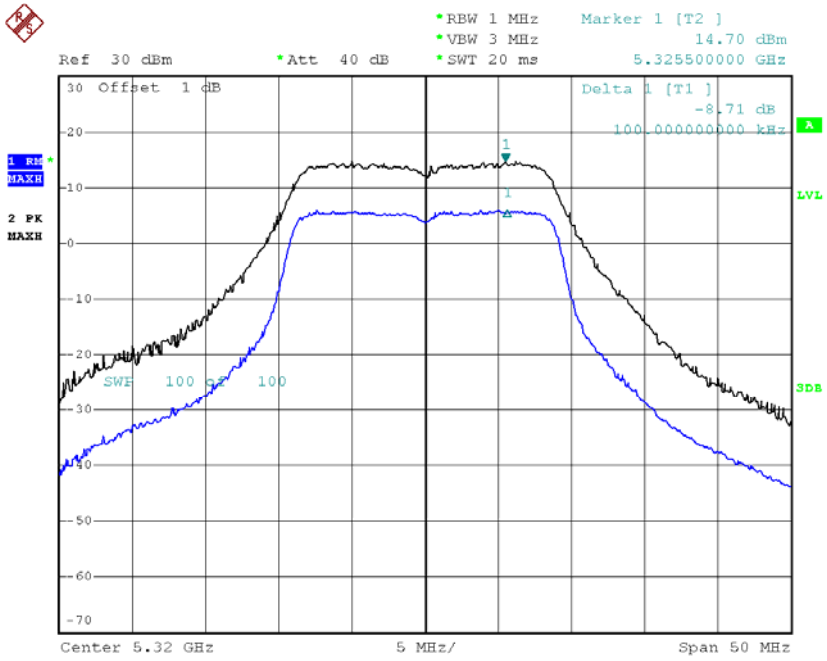
Date: 17.JUL.2012 21:49:16

CH56



Date: 17.JUL.2012 21:51:37

CH64

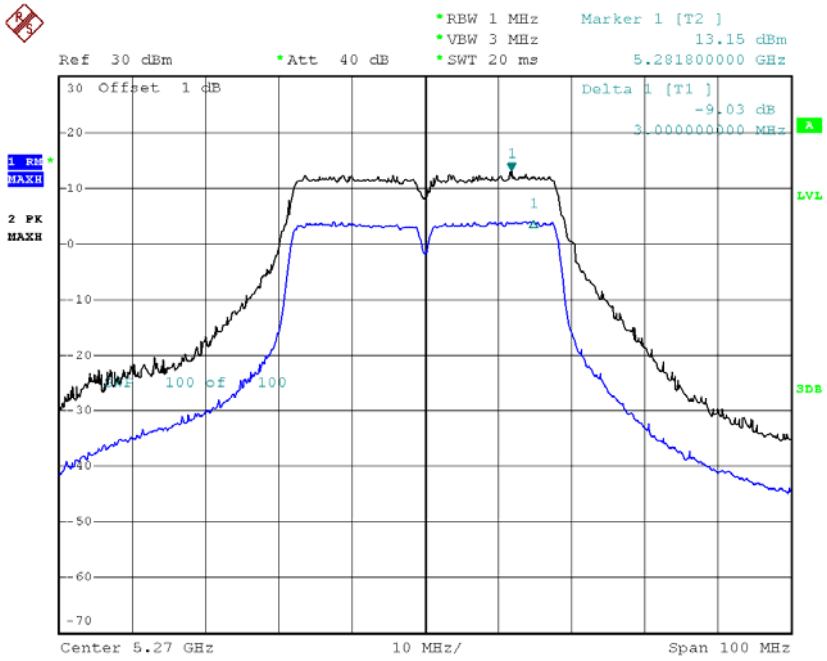


Date: 17.JUL.2012 21:52:27

EUT：	Outdoor Wireless LAN Access Point	Model Name ：	AP6510DN-AGN-US
Temperature：	25°C	Relative Humidity：	58 %
Test Voltage：	AC 120V/60Hz		
Test Mode ：	Band 2/TX N40 Mode/CH54, CH62		

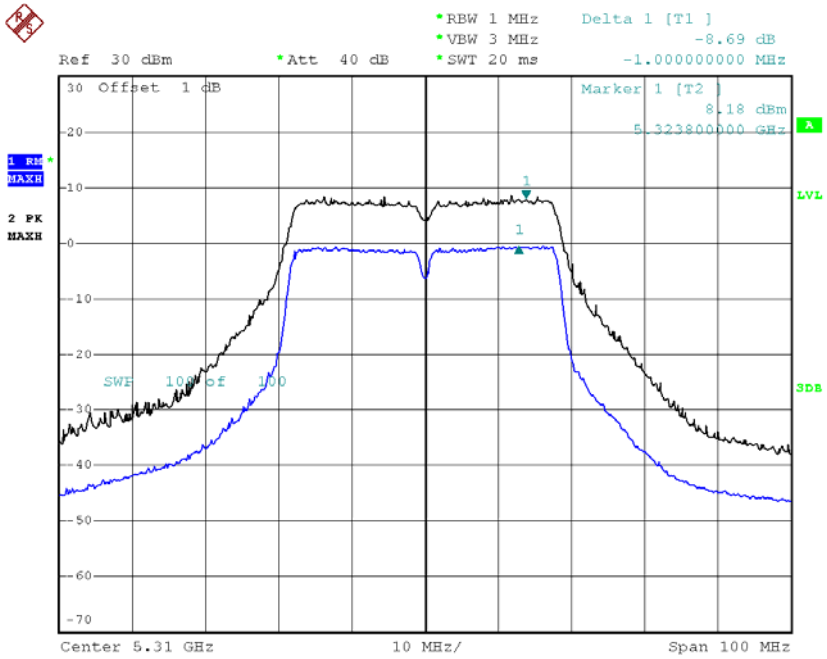
Test Channel	Frequency (MHz)	Peak Excursion (dB)	LIMIT (dB)
CH54	5270	9.03	13
CH62	5310	8.69	13

CH54



Date: 17.JUL.2012 21:59:54

CH62

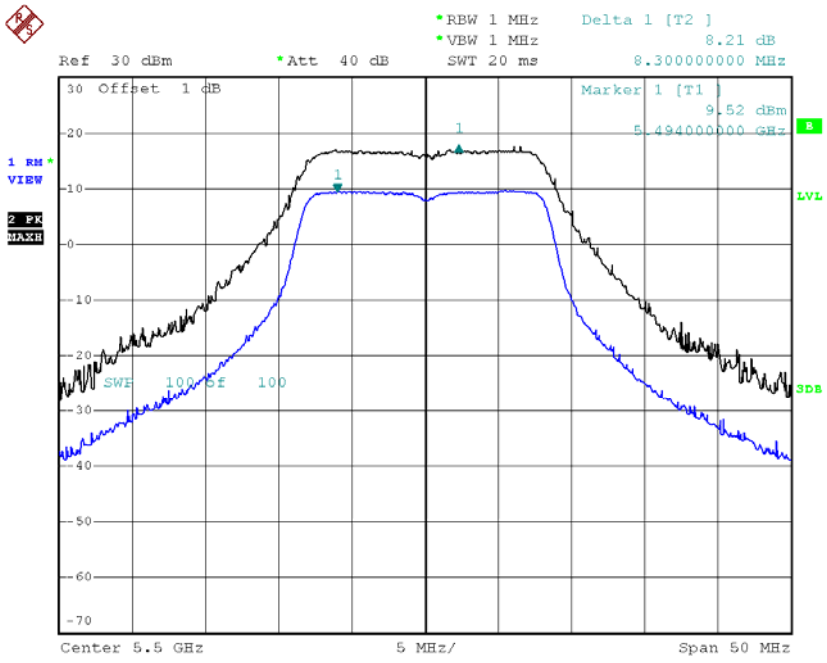


Date: 17.JUL.2012 22:00:58

EUT：	Outdoor Wireless LAN Access Point	Model Name ：	AP6510DN-AGN-US
Temperature：	25°C	Relative Humidity：	58 %
Test Voltage：	AC 120V/60Hz		
Test Mode ：	Band 3/TX A Mode/CH100, CH112, CH140		

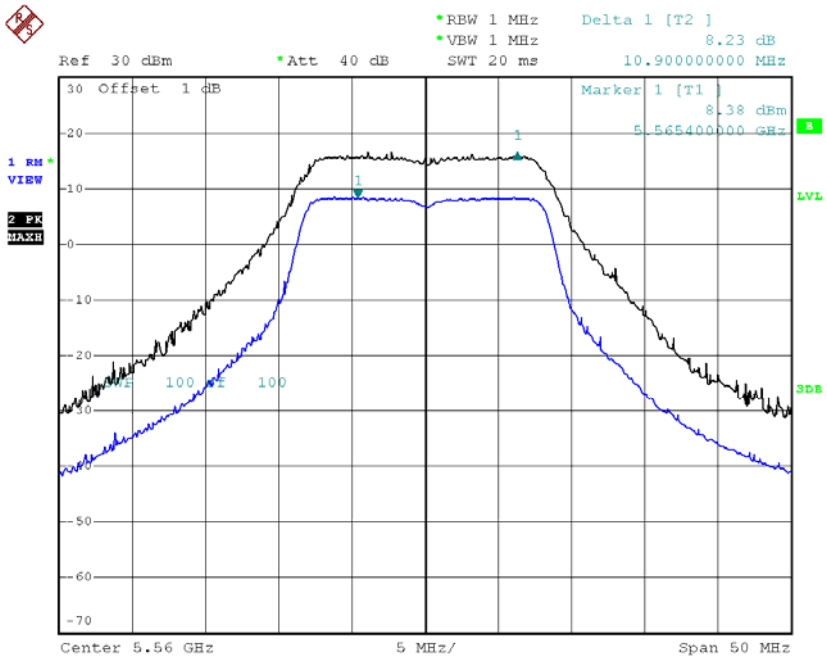
Test Channel	Frequency (MHz)	Peak Excursion (dB)	LIMIT (dB)
CH100	5500	8.21	13
CH112	5560	8.23	13
CH140	5700	8.69	13

CH100



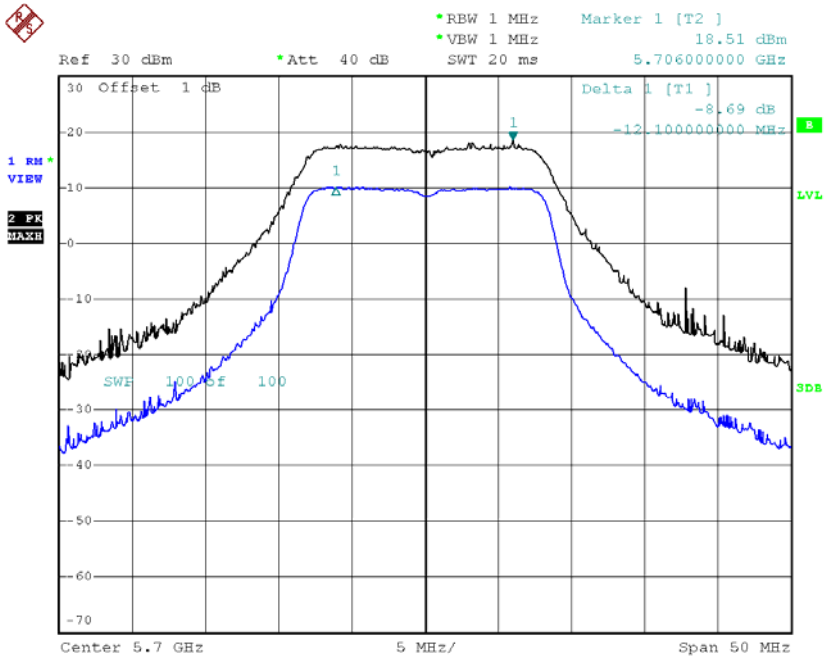
Date: 31.MAY.2012 20:08:16

CH112



Date: 31.MAY.2012 20:09:11

CH140

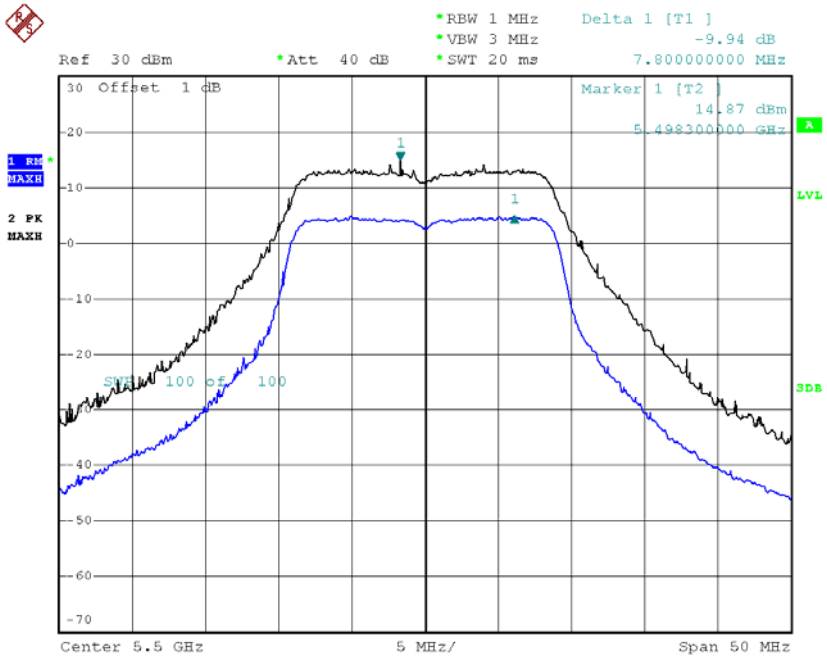


Date: 31.MAY.2012 20:11:14

EUT：	Outdoor Wireless LAN Access Point	Model Name ：	AP6510DN-AGN-US
Temperature：	25°C	Relative Humidity：	58 %
Test Voltage：	AC 120V/60Hz		
Test Mode ：	Band 3/TX N20 Mode/ CH100, CH112, CH140		

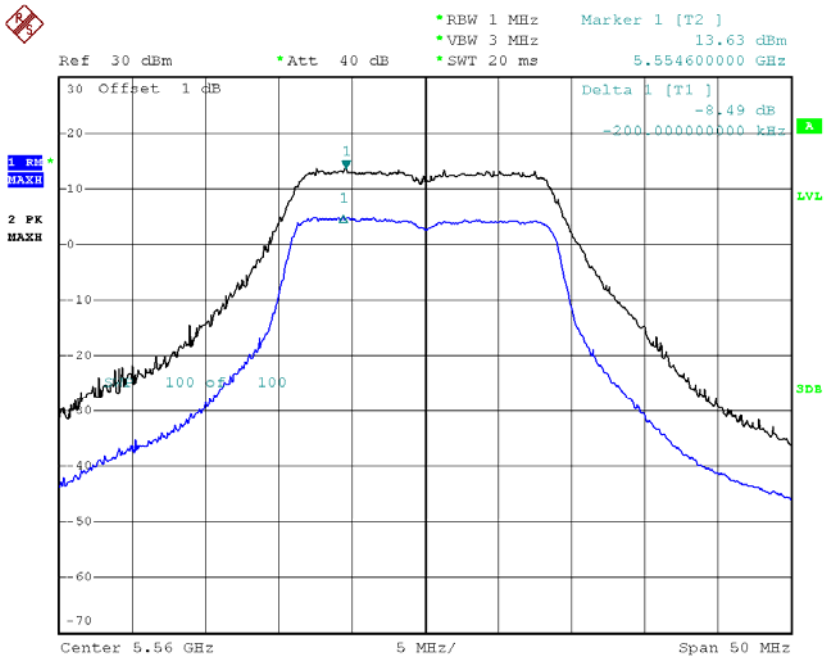
Test Channel	Frequency (MHz)	Peak Excursion (dB)	LIMIT (dB)
CH100	5500	9.94	13
CH112	5560	8.49	13
CH140	5700	8.62	13

CH100



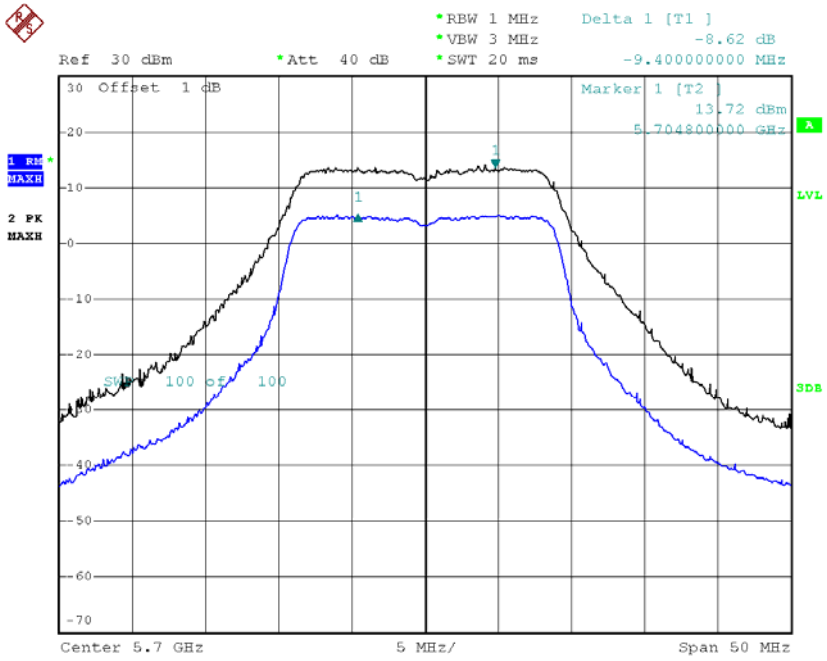
Date: 17.JUL.2012 21:54:28

CH112



Date: 17.JUL.2012 21:55:55

CH140

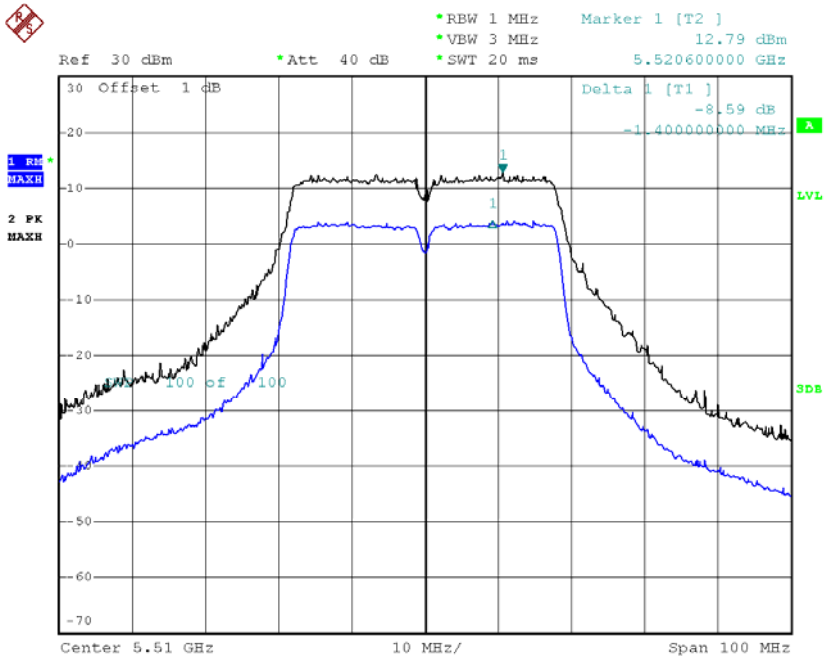


Date: 17.JUL.2012 21:57:31

EUT：	Outdoor Wireless LAN Access Point	Model Name ：	AP6510DN-AGN-US
Temperature：	25°C	Relative Humidity：	58 %
Test Voltage：	AC 120V/60Hz		
Test Mode ：	Band 3/TX N40 Mode/CH102, CH110		

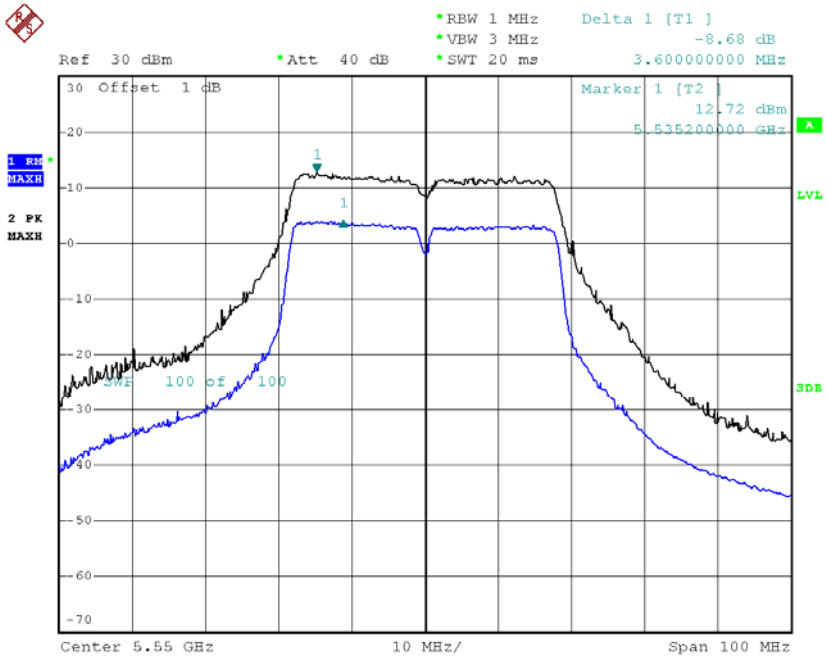
Test Channel	Frequency (MHz)	Peak Excursion (dB)	LIMIT (dB)
CH102	5510	8.59	13
CH110	5550	8.68	13

CH102



Date: 17.JUL.2012 22:02:42

CH110



Date: 17.JUL.2012 22:03:47

10. FREQUENCY STABILITY MEASUREMENT

10.1 APPLIED PROCEDURES / LIMIT

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

10.1.1 MEASUREMENT INSTRUMENTS LIST

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

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

10.1.2 TEST PROCEDURE

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

b.

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

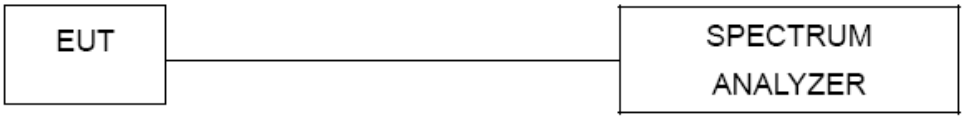
c. The test extreme voltage is to change the primary supply voltage from 85 to 115 percent of the nominal value.

d. user manual temperature is -40°C~60°C.

10.1.3 DEVIATION FROM STANDARD

No deviation.

10.1.4 TEST SETUP



10.1.5 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.

10.1.6 TEST RESULTS

EUT：	Outdoor Wireless LAN Access Point	Model Name ：	AP6510DN-AGN-US
Temperature：	25°C	Relative Humidity：	58 %
Test Voltage：	AC 120V/60Hz		
Test Mode ：	Band 2		

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)
(V)	5320
138	5319.986400
120	5319.986800
102	5319.987000
Max. Deviation (MHz)	0.013600
Max. Deviation (ppm)	2.56

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)
(℃)	5320
-40	5319.985600
-30	5319.985800
-20	5319.986000
-10	5319.986200
0	5319.986400
10	5319.986500
20	5319.986800
30	5319.987000
40	5319.987100
50	5319.987200
60	5319.987400
Max. Deviation (MHz)	0.014400
Max. Deviation (ppm)	2.71

EUT：	Outdoor Wireless LAN Access Point	Model Name ：	AP6510DN-AGN-US
Temperature：	25°C	Relative Humidity：	58 %
Test Voltage：	AC 120V/60Hz		
Test Mode ：	Band 3		

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)
(V)	5500
138	5499.985300
120	5499.985600
102	5499.985700
Max. Deviation (MHz)	0.014700
Max. Deviation (ppm)	2.67

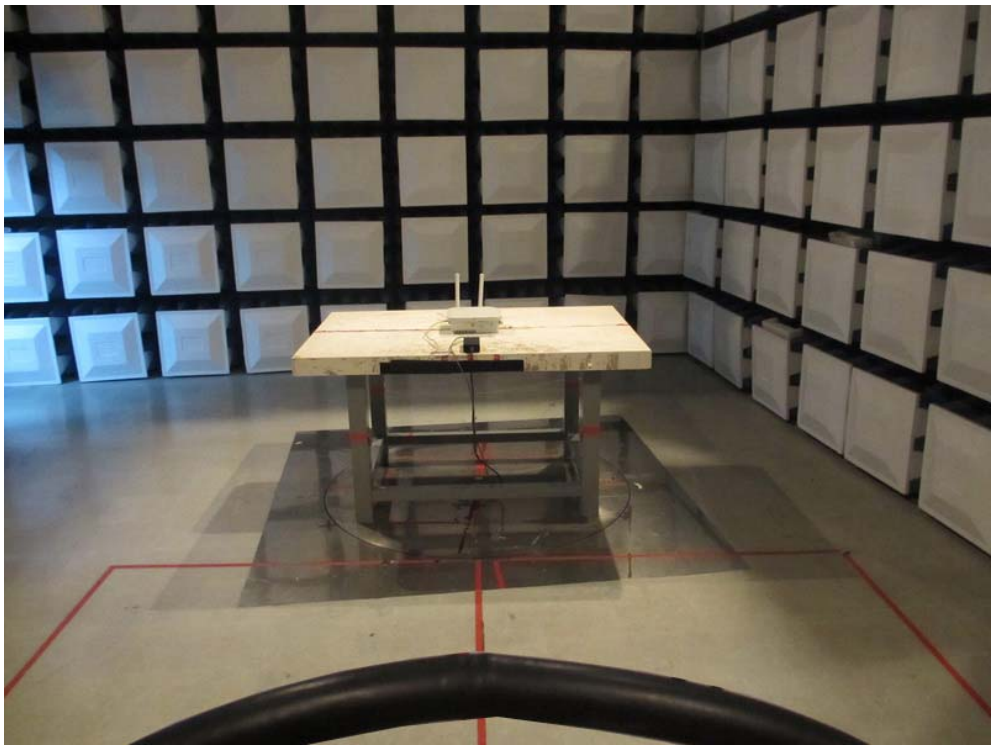
Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)
(℃)	5500
-40	5499.984970
-30	5499.984980
-20	5499.985000
-10	5499.985200
0	5499.985300
10	5499.985400
20	5499.985600
30	5499.985800
40	5499.986000
50	5499.986100
60	5499.986200
Max. Deviation (MHz)	0.015030
Max. Deviation (ppm)	2.73

11. EUT TEST PHOTO

Conducted Measurement Photos

Radiated Measurement Photos
9KHz~300MHz



Radiated Measurement Photos
30~1000MHz

Radiated Measurement Photos
Above 1000MHz