FCC 47 CFR PART 15 SUBPART C AND ANSI C63.4:2003 TEST REPORT (Class II Permissive Change Report)

For

1X1 802.11b/g/n PCIe Module

Model : AR5B125

Trade Name : Atheros

Issued for

Qualcomm Atheros, Inc

1700 Technology Drive, San Jose, CA 95110

Issued by

Compliance Certification Services Inc.
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Revision History

Rev.	Issue Date	Revisions	Effect Page	Revised By
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01	06/14/2012	Change Description of Class II Change	Page 6	Kelly Tsai

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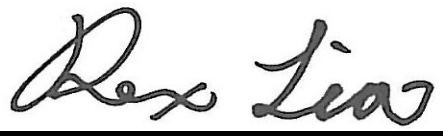
1. TEST REPORT CERTIFICATION

Applicant	：	Qualcomm Atheros, Inc
Address	：	1700 Technology Drive, San Jose, CA 95110
Equipment Under Test	：	1X1 802.11b/g/n PCIe Module
Model	：	AR5B125
Trade Name	：	Atheros
Tested Date	：	March 28 ~ May 24, 2012

APPLICABLE STANDARD	
Standard	**Test Result**
FCC Part 15 Subpart C AND ANSI C63.4:2003	PASS

WE HEREBY CERTIFY THAT: The above equipment has been tested by Compliance Certification Services Inc., and found compliance with the requirements set forth in the technical standards mentioned above. The results of testing in this report apply only to the product/system, which was tested. Other similar equipment will not necessarily produce the same results due to production tolerance and measurement uncertainties.

Approved by:



Rex Liao
Deputy Section Manager

Reviewed by:

Sb Lu
Sr. Engineer

2. EUT DESCRIPTION

Product Name	1X1 802.11b/g/n PCIe Module
Model Number	AR5B125
Identify Number	T120328106
Received Date	March 28, 2012
Frequency Range	IEEE 802.11b/g, 802.11n HT20 : 2412MHz ~ 2462MHz IEEE 802.11n HT40 : 2422MHz～2452MHz
Transmit Power	IEEE 802.11b : 19.91dBm (0.0979W) IEEE 802.11g : 24.13dBm (0.2588W) IEEE 802.11n HT20 : 22.88dBm (0.1941W) IEEE 802.11n HT40 : 22.34dBm (0.1714W)
Channel Spacing	IEEE 802.11b/g, 802.11n HT20/HT40 : 5MHz
Channel Number	IEEE 802.11b/g, 802.11n HT20 : 11 Channels IEEE 802.11n HT40 : 7 Channels
Transmit Data Rate	IEEE 802.11b : 11, 5.5, 2, 1 Mbps IEEE 802.11g : 54, 48, 36, 24, 18, 12, 9, 6 Mbps IEEE 802.11n HT20 : 72.2, 65, 58.5, 57.78, 52, 43.33, 39, 28.89, 26, 21.7, 19.5, 14.44, 13, 7.2, 6.5 Mbps IEEE 802.11n HT40 : 150, 135, 121.5, 120, 108, 90, 81, 60, 54, 45, 40.5, 30, 27, 15, 13.5Mbps
Type of Modulation	IEEE 802.11b : DSSS (CCK, DQPSK, DBPSK) IEEE 802.11g : OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n HT20/40 : OFDM (64QAM, 16QAM, QPSK, BPSK)
Frequency Selection	by software / firmware
Antenna Type	PIFA Antenna, Antenna Gain : 1.73dBi
Power Rating	20Vdc, 3.25A (From Power Adapter)
Test Voltage	120Vac/60Hz
DC Power Cable Type	Non-shielded cable 1.8m (Non-detachable)
I/O Port	USB 2.0 Port ×1, RJ-45 × 1, HDMI Port × 1, USB 3.0 Port × 2 , Audio Port × 1，SD card Port × 1, Power Port × 1

Power Adapter :

No.	Manufacturer	Model No.	Power Input	Power Output
1	lenovo	ADP-65KH B	100-240Vac, 50/60Hz, 1.5A	20Vdc, 3.25A
2	lenovo	PA-1650-56LC	100-240Vac, 50/60Hz, 1.7A	20Vdc, 3.25A

Remark :

1. *The sample selected for test was engineering sample that approximated to production product and was provided by manufacturer.*
2. *For more details, please refer to the User's manual of the EUT.*
3. *This submittal(s) (test report) is intended for FCC ID: PPD-AR5B125 filing to comply with Section 15.207, 15.209 and 15.247 of the FCC Part 15, Subpart C Rules.*

3. DESCRIPTION OF CLASS II CHANGE

The subject approved module is being used in different host (Portable category Configuration, Host brand/Model:lenove / 20169, 4375, Lenovo IdeaPad U310) with a closer antenna to end user distance of 7.4mm.

4. DESCRIPTION OF TEST MODES

The EUT is an 802.11n transceiver in 1X1 802.11b/g/n PCIe Module form factor.
Chain 2 transmits.

Radiated Emission Test (Below 1 GHz)

TX Mode

Conducted / Radiated Emission Test (Above 1 GHz)

IEEE 802.11b, 802.11g, 802.11n HT20 mode

The EUT had been tested under operating condition.

There are three channels have been tested as following :

Channel	Frequency (MHz)
Low	2412
Middle	2437
High	2462

IEEE 802.11b mode : 1Mbps data rate (worst case) were chosen for full testing.

IEEE 802.11g mode : 6Mbps data rate (worst case) were chosen for full testing.

IEEE 802.11n HT20 mode : 6.5Mbps data rate (worst case) were chosen for full testing.

IEEE 802.11n HT40 mode

The EUT had been tested under operating condition.

There are three channels have been tested as following :

Channel	Frequency (MHz)
Low	2422
Middle	2437
High	2452

IEEE 802.11n HT40 mode : 13.5Mbps data rate (worst case) were chosen for full testing.

5. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.4: 2003 and FCC CFR 47, 15.207, 15.209 and 15.247.

6. FACILITIES AND ACCREDITATION

6.1 FACILITIES

All measurement facilities used to collect the measurement data are located at

NO. 989-1 Wen Shan Rd., Shang Shan Village,
Qionglin Shiang Hsinchu County 30741, Taiwan, R.O.C

The sites are constructed in conformance with the requirements of ANSI C63.4:2003 and CISPR 22. All receiving equipment conforms to CISPR 16-1-1, CISPR 16-1-2, CISPR 16-1-3, CISPR 16-1-4, CISPR 16-1-5.

6.2 ACCREDITATIONS

Our laboratories are accredited and approved by the following approval agencies according to ISO/IEC 17025.

Taiwan	TAF

The measuring facility of laboratories has been authorized or registered by the following approval agencies.

Canada	INDUSTRY CANADA
Japan	VCCI
Taiwan	BSMI
USA	FCC MRA

Copies of granted accreditation certificates are available for downloading from our web site, http:///www.ccsrf.com

6.3 MEASUREMENT UNCERTAINTY

The following table is for the measurement uncertainty, which is calculated as per the document CISPR 16-4-2.

PARAMETER	UNCERTAINTY
Semi Anechoic Chamber (966 Chamber_B) / Radiated Emission, 30 to 1000 MHz	+/- 3.5189
Semi Anechoic Chamber (966 Chamber_B) / Radiated Emission, 1 to 18GHz	+/- 2.5164
Semi Anechoic Chamber (966 Chamber_B) / Radiated Emission, 18 to 26 GHz	+/- 2.4967
Semi Anechoic Chamber (966 Chamber_B) / Radiated Emission, 26 to 40 GHz	+/- 2.7655

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

Consistent with industry standard (e.g. CISPR 22: 2006, clause 11, Measurement Uncertainty) determining compliance with the limits shall be base on the results of the compliance measurement. Consequently the measure emissions being less than the maximum allowed emission result in this be a compliant test or passing test.

The acceptable measurement uncertainty value without requiring revision of the compliance statement is base on conducted and radiated emissions being less than U_{CISPR} which is 3.6dB and 5.2dB respectively. CCS values (called U_{Lab} in CISPR 16-4-2) is less than U_{CISPR} as shown in the table above. Therefore, MU need not be considered for compliance.

7. SETUP OF EQUIPMENT UNDER TEST

SUPPORT EQUIPMENT

No.	Product	Manufacturer	Model No.	Serial No.	FCC ID
1	Notebook PC	DELL	INSPIRON 640m PP19L	CN-0MG532-70166-71G-03EC	DoC

No.	Signal Cable Description
1	Non-shielded RJ-45 cable 10m × 1

SETUP DIAGRAM FOR TESTS

EUT & peripherals setup diagram is shown in appendix setup photos.

EUT OPERATING CONDITION

1. Setup all computers like the setup diagram.
2. Run art Test software.
3. Select the following settings.
4. TX Mode:
   1.run cart.bat ,nart.bat.artgui.exe
   2.select :Tests->contTX
   3.select:frequency,rate,tx power
   4.select:TX mask:chain
5. All of the functions are under run.
6. Start test.

8. FCC PART 15.247 REQUIREMENTS

8.1 MAXIMUM PEAK OUTPUT POWER

LIMITS

§ 15.247(b) The maximum peak output power of the intentional radiator shall not exceed the following :

§ 15.247(b) (3) For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands : 1 watt.

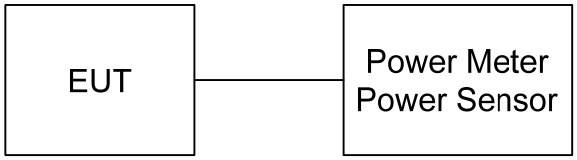
§ 15.247(b) (4) Except as shown in paragraphs (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used the peak output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1) or (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

TEST EQUIPMENT

Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
Power Meter	Anritsu	ML2495A	1149001	12/07/2012
Power Sensor	Anritsu	MA2411B	1126148	12/14/2012

Remark: *Each piece of equipment is scheduled for calibration once a year.*

TEST SETUP



TEST PROCEDURE

The transmitter output is connected to the power meter. The power meter is set to the peak power detection.

TEST RESULTS

IEEE 802.11b Mode

Channel	Channel Frequency (MHz)	Peak Power		Peak Power Limit		Pass / Fail
		(dBm)	(W)	(dBm)	(W)	
Low	2412	18.39	0.0690	30	1	PASS
Middle	2437	19.91	0.0979	30	1	PASS
High	2462	19.72	0.0938	30	1	PASS

Remark:

1. *At finial test to get the worst-case emission at 1Mbps.*
2. *The cable assembly insertion loss of 11.5dB (including 10 dB pad and 1.5 dB cable) was Entered as an offset in the power meter to allow for direct reading of power.*

IEEE 802.11g Mode

Channel	Channel Frequency (MHz)	Peak Power		Peak Power Limit		Pass / Fail
		(dBm)	(W)	(dBm)	(W)	
Low	2412	21.34	0.1361	30	1	PASS
Middle	2437	24.13	0.2588	30	1	PASS
High	2462	20.94	0.1242	30	1	PASS

Remark:

1. *At finial test to get the worst-case emission at 6Mbps.*
2. *The cable assembly insertion loss of 11.5dB (including 10 dB pad and 1.5 dB cable) was Entered as an offset in the power meter to allow for direct reading of power.*

IEEE 802.11n HT20 Mode

Channel	Channel Frequency (MHz)	Peak Power		Peak Power Limit		Pass / Fail
		(dBm)	(W)	(dBm)	(W)	
Low	2412	20.30	0.1072	30	1	PASS
Middle	2437	22.88	0.1941	30	1	PASS
High	2462	20.20	0.1047	30	1	PASS

Remark:

1. *At finial test to get the worst-case emission at 6.5Mbps.*
2. *The cable assembly insertion loss of 11.5dB (including 10 dB pad and 1.5 dB cable) was Entered as an offset in the power meter to allow for direct reading of power.*

IEEE 802.11n HT40 Mode

Channel	Channel Frequency (MHz)	Peak Power		Peak Power Limit		Pass / Fail
		(dBm)	(W)	(dBm)	(W)	
Low	2422	20.23	0.1054	30	1	PASS
Middle	2437	22.34	0.1714	30	1	PASS
High	2452	19.73	0.0940	30	1	PASS

Remark:

1. *At finial test to get the worst-case emission at 13.5Mbps.*
2. *The cable assembly insertion loss of 11.5dB (including 10 dB pad and 1.5 dB cable) was Entered as an offset in the power meter to allow for direct reading of power.*

8.2 RADIATED EMISSION

LIMITS

(1) According to § 15.205 (a) Except as shown in paragraph (d) of this section, only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
[1]0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 -1710	10.6 -12.7
6.26775 - 6.26825	108 -121.94	1718.8 - 1722.2	13.25 -13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 – 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 -16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2655 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3338	36.43 - 36.5
12.57675 - 12.57725	322 -335.4	3600 - 4400	([2])
13.36 - 13.41			

Remark:
1. [1] Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.
2. [2] Above 38.6

(2) According to § 15.205 (b) Except as provided in paragraphs (d) and (e), the field strength of emissions appearing within these frequency bands shall not exceed the limits shown is Section 15.209. At frequencies equal to or less than 1000 MHz, compliance with the limits in Section 15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000 MHz, compliance with the emission limits in Section 15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in Section 15.35 apply to these measurements.

(3) According to § 15.209 (a) Except as provided elsewhere in this Subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table :

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 – 0.490	2400/F(KHz)	300
0.490 – 1.705	24000/F(KHz)	30
1.705 – 30.0	30	30
30 - 88	100 **	3
88 - 216	150 **	3
216 - 960	200 **	3
Above 960	500	3

Remark: ***Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this Part, e.g., Sections 15.231 and 15.241.*

(4) According to § 15.209 (b) In the emission table above, the tighter limit applies at the band edges.

TEST EQUIPMENT

Radiated Emission / 966Chamber_B

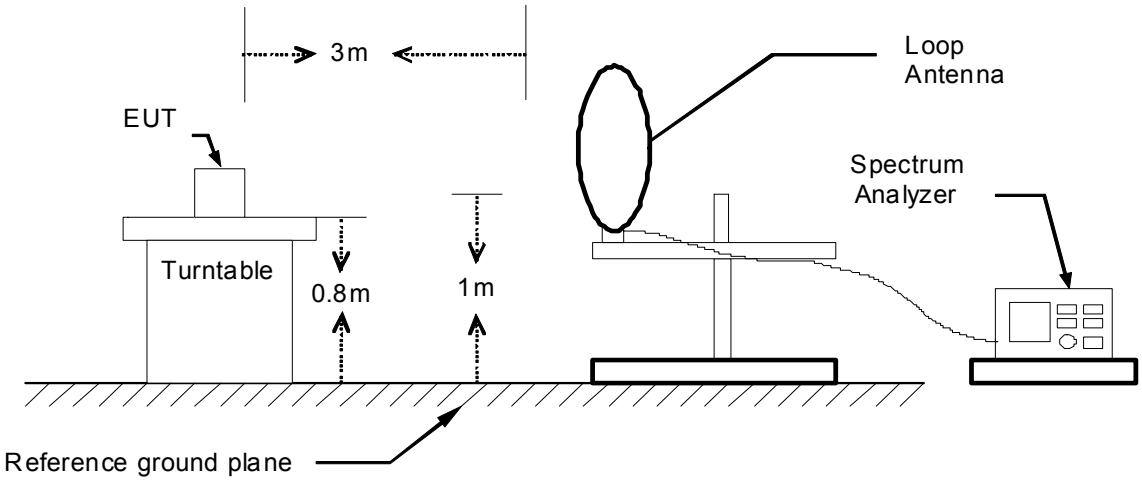
Name of Equipment	Manufacture	Model	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	E4446A	MY43360132	06/19/2012
EMI Receiver	ROHDE & SCHWARZ	ESCS 30	826547/004	10/27/2012
Broadband Hybrid Bi-Log Antenna	Sunol Sciences	JB1	A100209-4	10/05/2012
Double-Ridged Waveguide Horn	ETS-LINDGREN	3117	00078733	12/06/2012
Horn Antenna	COM-POWER	AH-840	03077	12/06/2012
Pre-Amplifier	Agilent	8447D	2944A10052	07/19/2012
Pre-Amplifier	Agilent	8449B	3008A01916	09/18/2012
LOOP Antenna	EMCO	6502	8905-2356	06/10/2012
Notch Filters Band Reject	Micro-Tronics	BRM05702-01	026	N.C.R

Remark: *1. Each piece of equipment is scheduled for calibration once a year.*
2. N.C.R = No Calibration Request.

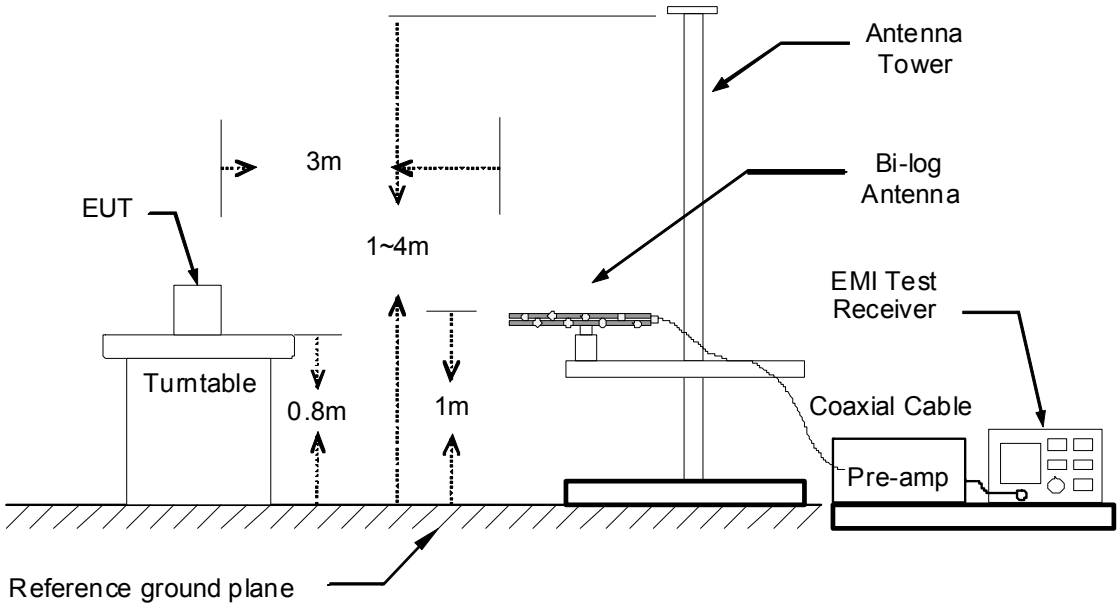
TEST SETUP

The diagram below shows the test setup that is utilized to make the measurements for emission from below 1GHz.

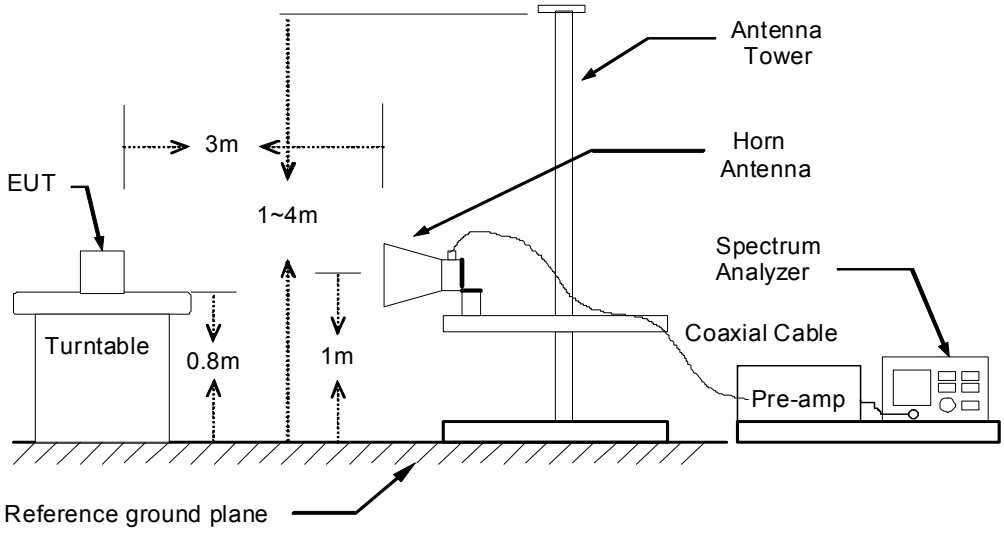
9kHz ~ 30MHz



30MHz ~ 1GHz



The diagram below shows the test setup that is utilized to make the measurements for emission above 1GHz.



TEST PROCEDURE

1. The EUT was placed on the top of a rotating table 0.8 meters above the ground. The table was rotated 360 degrees to determine the position of the highest radiation.
2. While measuring the radiated emission below 1GHz, the EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. While measuring the radiated emission above 1GHz, the EUT was set 3 meters away from the interference-receiving antenna.
3. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarization of the antenna are set to make the measurement.
4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the table was turned from 0 degrees to 360 degrees to find the maximum reading.
5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
6. If the emission level of the EUT in peak mode was 10 dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10 dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

Remark：

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 KHz for Peak detection (PK) and Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1 MHz for Peak detection and frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 10 Hz for Average detection (AV) at frequency above 1GHz.

TEST RESULTS

Below 1 GHz (9kHz ~ 30MHz)

No emission found between lowest internal used/generated frequency to 30MHz.

Below 1 GHz (30MHz ~ 1GHz)

Product Name	1X1 802.11b/g/n PCIe Module	Test By	Rueyyan Lin
Test Model	AR5B125	Test Date	2012/05/23
Test Mode	IEEE 802.11b TX / CH Middle (worst case)	Temp. & Humidity	25°C, 57%

966 Chamber_B at 3Meter / Horizontal						
Frequency (MHz)	Reading (dBμV)	Correction Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark
90.14	58.46	-19.79	38.66	43.50	-4.84	Peak
193.93	56.10	-13.86	42.24	43.50	-1.26	QP
300.63	50.73	-11.84	38.89	46.00	-7.11	Peak
493.66	40.52	-8.36	32.16	46.00	-13.84	Peak
663.41	38.93	-5.80	33.13	46.00	-12.87	Peak
886.51	35.05	-2.39	32.66	46.00	-13.34	Peak

966 Chamber_B at 3Meter / Vertical						
Frequency (MHz)	Reading (dBμV)	Correction Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark
30.00	43.60	-6.10	37.50	40.00	-2.50	QP
91.11	57.20	-19.55	37.65	43.50	-5.85	QP
257.95	47.44	-13.30	34.14	46.00	-11.86	Peak
491.72	43.20	-8.40	34.81	46.00	-11.19	Peak
694.45	39.47	-5.57	33.90	46.00	-12.10	Peak
998.06	36.26	-0.57	35.68	54.00	-18.32	Peak

Remark:

1. *Quasi-peak test would be performed if the peak result were greater than the quasi-peak limit.*
2. *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.*
3. *Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) – PreAmp.Gain (dB)*
4. *Result (dBuV/m) = Reading (dBuV) + Correction Factor (dB/m)*
5. *Margin (dB) = Remark result (dBuV/m) - Quasi-peak limit (dBuV/m).*

TX Above 1 GHz

Product Name	1X1 802.11b/g/n PCIe Module	Test By	Rueyyan Lin
Test Model	AR5B125	Test Date	2012/05/23
Test Mode	IEEE 802.11b TX / CH Low	Temp. & Humidity	25°C, 57%

966 Chamber_B at 3Meter / Horizontal									
Frequency (MHz)	Reading-PK (dBuV)	Reading-AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark
1018.00	48.23	---	-3.82	44.41	---	74.00	54.00	-9.59	Peak
1330.00	54.85	---	-2.82	52.03	---	74.00	54.00	-1.97	Peak
1664.00	50.48	---	-0.80	49.68	---	74.00	54.00	-4.32	Peak
1860.00	47.29	---	0.96	48.26	---	74.00	54.00	-5.74	Peak
2328.00	45.48	---	3.30	48.78	---	74.00	54.00	-5.22	Peak
3210.00	44.20	---	5.64	49.84	---	74.00	54.00	-4.16	Peak
4980.00	40.41	---	9.87	50.28	---	74.00	54.00	-3.72	Peak
6585.00	38.54	---	12.37	50.91	---	74.00	54.00	-3.09	Peak

966 Chamber_B at 3Meter / Vertical									
Frequency (MHz)	Reading-PK (dBuV)	Reading-AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark
1332.00	52.04	---	-2.81	49.23	---	74.00	54.00	-4.77	Peak
1548.00	48.13	---	-1.84	46.29	---	74.00	54.00	-7.71	Peak
1970.00	49.75	---	1.95	51.70	---	74.00	54.00	-2.30	Peak
2658.00	51.46	42.33	4.35	55.81	46.68	74.00	54.00	-7.32	AVG
2986.00	47.35	---	5.37	52.71	---	74.00	54.00	-1.29	Peak
3210.00	47.28	---	5.64	52.91	---	74.00	54.00	-1.09	Peak
3990.00	41.15	---	6.98	48.12	---	74.00	54.00	-5.88	Peak
4830.00	42.20	---	9.50	51.71	---	74.00	54.00	-2.29	Peak

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Average test would be performed if the peak result were greater than the average limit.*
3. *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.*
4. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*
5. *Result = Reading + Correction Factor*
   Margin = Result – Limit
   Remark Peak = Result(PK) – Limit(AV)
   Remark AVG = Result(AV) – Limit(AV)

Product Name	1X1 802.11b/g/n PCIe Module	Test By	Rueyyan Lin
Test Model	AR5B125	Test Date	2012/05/23
Test Mode	IEEE 802.11b TX / CH Middle	Temp. & Humidity	25°C, 57%

966 Chamber_B at 3Meter / Horizontal									
Frequency (MHz)	Reading-PK (dBuV)	Reading-AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark
1332.00	54.63	---	-2.81	51.82	---	74.00	54.00	-2.18	Peak
1578.00	49.89	---	-1.57	48.32	---	74.00	54.00	-5.68	Peak
1676.00	47.40	---	-0.69	46.71	---	74.00	54.00	-7.29	Peak
1864.00	45.58	---	1.00	46.58	---	74.00	54.00	-7.42	Peak
2314.00	46.15	---	3.25	49.40	---	74.00	54.00	-4.60	Peak
3225.00	41.97	---	5.65	47.62	---	74.00	54.00	-6.38	Peak
4485.00	40.40	---	8.64	49.04	---	74.00	54.00	-4.96	Peak
4875.00	40.13	---	9.61	49.74	---	74.00	54.00	-4.26	Peak

966 Chamber_B at 3Meter / Vertical									
Frequency (MHz)	Reading-PK (dBuV)	Reading-AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark
1330.00	52.11	---	-2.82	49.30	---	74.00	54.00	-4.70	Peak
1568.00	48.62	---	-1.66	46.96	---	74.00	54.00	-7.04	Peak
1998.00	48.58	---	2.20	50.78	---	74.00	54.00	-3.22	Peak
2656.00	46.28	---	4.34	50.62	---	74.00	54.00	-3.38	Peak
2986.00	46.36	---	5.37	51.72	---	74.00	54.00	-2.28	Peak
3255.00	43.40	---	5.69	49.09	---	74.00	54.00	-4.91	Peak
3990.00	41.83	---	6.98	48.81	---	74.00	54.00	-5.19	Peak
4875.00	40.61	---	9.61	50.22	---	74.00	54.00	-3.78	Peak

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Average test would be performed if the peak result were greater than the average limit.*
3. *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.*
4. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*
5. *Result = Reading + Correction Factor*
   Margin = Result – Limit
   Remark Peak = Result(PK) – Limit(AV)
   Remark AVG = Result(AV) – Limit(AV)

Product Name	1X1 802.11b/g/n PCIe Module	Test By	Rueyyan Lin
Test Model	AR5B125	Test Date	2012/05/23
Test Mode	IEEE 802.11b TX / CH High	Temp. & Humidity	25°C, 57%

966 Chamber_B at 3Meter / Horizontal									
Frequency (MHz)	Reading-PK (dBuV)	Reading-AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark
1330.00	50.51	---	-2.82	47.69	---	74.00	54.00	-6.31	Peak
1662.00	50.79	---	-0.82	49.97	---	74.00	54.00	-4.03	Peak
1748.00	46.90	---	-0.04	46.85	---	74.00	54.00	-7.15	Peak
1860.00	47.36	---	0.96	48.32	---	74.00	54.00	-5.68	Peak
2332.00	47.49	---	3.31	50.80	---	74.00	54.00	-3.20	Peak
3090.00	41.44	---	5.51	46.95	---	74.00	54.00	-7.05	Peak
4050.00	39.99	---	7.17	47.16	---	74.00	54.00	-6.84	Peak
4920.00	40.21	---	9.72	49.93	---	74.00	54.00	-4.07	Peak

966 Chamber_B at 3Meter / Vertical									
Frequency (MHz)	Reading-PK (dBuV)	Reading-AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark
1048.00	49.36	---	-3.73	45.64	---	74.00	54.00	-8.36	Peak
1334.00	52.55	---	-2.80	49.75	---	74.00	54.00	-4.25	Peak
1968.00	48.65	---	1.93	50.58	---	74.00	54.00	-3.42	Peak
2292.00	47.65	---	3.18	50.82	---	74.00	54.00	-3.18	Peak
2668.00	46.17	---	4.38	50.55	---	74.00	54.00	-3.45	Peak
3000.00	44.75	---	5.41	50.16	---	74.00	54.00	-3.84	Peak
4275.00	40.00	---	7.93	47.93	---	74.00	54.00	-6.07	Peak
4920.00	42.71	---	9.72	52.43	---	74.00	54.00	-1.57	Peak

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Average test would be performed if the peak result were greater than the average limit.*
3. *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.*
4. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*
5. *Result = Reading + Correction Factor*
   Margin = Result – Limit
   Remark Peak = Result(PK) – Limit(AV)
   Remark AVG = Result(AV) – Limit(AV)

Product Name	1X1 802.11b/g/n PCIe Module	Test By	Rueyyan Lin
Test Model	AR5B125	Test Date	2012/05/23
Test Mode	IEEE 802.11g TX / CH Low	Temp. & Humidity	25°C, 57%

966 Chamber_B at 3Meter / Horizontal									
Frequency (MHz)	Reading-PK (dBuV)	Reading-AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark
1330.00	52.33	---	-2.82	49.52	---	74.00	54.00	-4.48	Peak
1588.00	49.32	---	-1.48	47.84	---	74.00	54.00	-6.16	Peak
1834.00	47.30	---	0.73	48.03	---	74.00	54.00	-5.97	Peak
2098.00	44.70	---	2.54	47.24	---	74.00	54.00	-6.76	Peak
2320.00	45.29	---	3.27	48.56	---	74.00	54.00	-5.44	Peak
3210.00	45.64	---	5.64	51.28	---	74.00	54.00	-2.72	Peak
4005.00	41.05	---	7.02	48.07	---	74.00	54.00	-5.93	Peak
4950.00	38.68	---	9.80	48.48	---	74.00	54.00	-5.52	Peak

966 Chamber_B at 3Meter / Vertical									
Frequency (MHz)	Reading-PK (dBuV)	Reading-AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark
1330.00	53.61	---	-2.82	50.79	---	74.00	54.00	-3.21	Peak
1570.00	48.02	---	-1.64	46.38	---	74.00	54.00	-7.62	Peak
1746.00	45.67	---	-0.06	45.60	---	74.00	54.00	-8.40	Peak
1952.00	47.73	---	1.79	49.52	---	74.00	54.00	-4.48	Peak
2662.00	46.66	---	4.36	51.02	---	74.00	54.00	-2.98	Peak
3210.00	50.66	47.02	5.64	56.30	52.66	74.00	54.00	-1.34	AVG
4005.00	43.06	---	7.02	50.08	---	74.00	54.00	-3.92	Peak
4950.00	39.50	---	9.80	49.30	---	74.00	54.00	-4.70	Peak

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Average test would be performed if the peak result were greater than the average limit.*
3. *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.*
4. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*
5. *Result = Reading + Correction Factor*
   Margin = Result – Limit
   Remark Peak = Result(PK) – Limit(AV)
   Remark AVG = Result(AV) – Limit(AV)

Product Name	1X1 802.11b/g/n PCIe Module	Test By	Rueyyan Lin
Test Model	AR5B125	Test Date	2012/05/23
Test Mode	IEEE 802.11g TX / CH Middle	Temp. & Humidity	25°C, 57%

966 Chamber_B at 3Meter / Horizontal

Frequency (MHz)	Reading-PK (dBuV)	Reading-AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark
1334.00	51.13	---	-2.80	48.33	---	74.00	54.00	-5.67	Peak
1562.00	48.24	---	-1.71	46.53	---	74.00	54.00	-7.47	Peak
1658.00	48.81	---	-0.85	47.96	---	74.00	54.00	-6.04	Peak
1968.00	47.21	---	1.93	49.15	---	74.00	54.00	-4.85	Peak
2350.00	46.57	---	3.37	49.93	---	74.00	54.00	-4.07	Peak
3255.00	42.25	---	5.69	47.94	---	74.00	54.00	-6.06	Peak
3750.00	41.22	---	6.47	47.70	---	74.00	54.00	-6.30	Peak
4800.00	38.99	---	9.43	48.42	---	74.00	54.00	-5.58	Peak

966 Chamber_B at 3Meter / Vertical

Frequency (MHz)	Reading-PK (dBuV)	Reading-AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark
1334.00	52.65	---	-2.80	49.84	---	74.00	54.00	-4.16	Peak
1970.00	47.29	---	1.95	49.24	---	74.00	54.00	-4.76	Peak
2342.00	48.05	---	3.34	51.39	---	74.00	54.00	-2.61	Peak
2660.00	47.10	---	4.36	51.46	---	74.00	54.00	-2.54	Peak
2996.00	46.92	---	5.40	52.31	---	74.00	54.00	-1.69	Peak
3255.00	42.79	---	5.69	48.47	---	74.00	54.00	-5.53	Peak
4230.00	39.60	---	7.78	47.38	---	74.00	54.00	-6.62	Peak
4875.00	39.80	---	9.61	49.41	---	74.00	54.00	-4.59	Peak

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Average test would be performed if the peak result were greater than the average limit.*
3. *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.*
4. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*
5. *Result = Reading + Correction Factor*
   Margin = Result – Limit
   Remark Peak = Result(PK) – Limit(AV)
   Remark AVG = Result(AV) – Limit(AV)

Product Name	1X1 802.11b/g/n PCIe Module	Test By	Rueyyan Lin
Test Model	AR5B125	Test Date	2012/05/23
Test Mode	IEEE 802.11g TX / CH High	Temp. & Humidity	25°C, 57%

966 Chamber_B at 3Meter / Horizontal									
Frequency (MHz)	Reading-PK (dBuV)	Reading-AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark
1330.00	52.06	---	-2.82	49.25	---	74.00	54.00	-4.75	Peak
1582.00	49.41	---	-1.53	47.88	---	74.00	54.00	-6.12	Peak
1660.00	49.43	---	-0.83	48.60	---	74.00	54.00	-5.40	Peak
1908.00	47.09	---	1.39	48.49	---	74.00	54.00	-5.51	Peak
2380.00	45.48	---	3.47	48.95	---	74.00	54.00	-5.05	Peak
3285.00	41.46	---	5.72	47.18	---	74.00	54.00	-6.82	Peak
3705.00	41.13	---	6.38	47.51	---	74.00	54.00	-6.49	Peak
4920.00	39.52	---	9.72	49.24	---	74.00	54.00	-4.76	Peak

966 Chamber_B at 3Meter / Vertical									
Frequency (MHz)	Reading-PK (dBuV)	Reading-AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark
1330.00	52.27	---	-2.82	49.46	---	74.00	54.00	-4.54	Peak
1552.00	48.30	---	-1.80	46.50	---	74.00	54.00	-7.50	Peak
1980.00	48.40	---	2.04	50.44	---	74.00	54.00	-3.56	Peak
2058.00	46.76	---	2.41	49.17	---	74.00	54.00	-4.83	Peak
2664.00	46.79	---	4.37	51.16	---	74.00	54.00	-2.84	Peak
3270.00	42.36	---	5.70	48.06	---	74.00	54.00	-5.94	Peak
4515.00	40.36	---	8.73	49.08	---	74.00	54.00	-4.92	Peak
4890.00	40.44	---	9.65	50.09	---	74.00	54.00	-3.91	Peak

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Average test would be performed if the peak result were greater than the average limit.*
3. *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.*
4. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*
5. *Result = Reading + Correction Factor*
   Margin = Result – Limit
   Remark Peak = Result(PK) – Limit(AV)
   Remark AVG = Result(AV) – Limit(AV)

Product Name	1X1 802.11b/g/n PCIe Module	Test By	Rueyyan Lin
Test Model	AR5B125	Test Date	2012/05/23
Test Mode	IEEE 802.11n HT20 TX / CH Low	Temp. & Humidity	25°C, 57%

966 Chamber_B at 3Meter / Horizontal

Frequency (MHz)	Reading-PK (dBuV)	Reading-AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark
1330.00	51.52	---	-2.82	48.71	---	74.00	54.00	-5.29	Peak
1604.00	49.51	---	-1.34	48.17	---	74.00	54.00	-5.83	Peak
1832.00	47.14	---	0.71	47.85	---	74.00	54.00	-6.15	Peak
2186.00	48.37	---	2.83	51.20	---	74.00	54.00	-2.80	Peak
2318.00	45.54	---	3.26	48.80	---	74.00	54.00	-5.20	Peak
3210.00	45.76	---	5.64	51.39	---	74.00	54.00	-2.61	Peak
3915.00	40.81	---	6.82	47.64	---	74.00	54.00	-6.36	Peak
4875.00	39.22	---	9.61	48.83	---	74.00	54.00	-5.17	Peak

966 Chamber_B at 3Meter / Vertical

Frequency (MHz)	Reading-PK (dBuV)	Reading-AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark
1328.00	53.05	---	-2.82	50.22	---	74.00	54.00	-3.78	Peak
1564.00	47.93	---	-1.70	46.23	---	74.00	54.00	-7.77	Peak
1996.00	48.32	---	2.18	50.51	---	74.00	54.00	-3.49	Peak
2166.00	47.16	---	2.76	49.92	---	74.00	54.00	-4.08	Peak
2662.00	47.83	---	4.36	52.20	---	74.00	54.00	-1.80	Peak
3210.00	50.55	46.96	5.64	56.19	52.60	74.00	54.00	-1.40	AVG
3990.00	43.09	---	6.98	50.07	---	74.00	54.00	-3.93	Peak
4920.00	39.52	---	9.72	49.25	---	74.00	54.00	-4.75	Peak

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Average test would be performed if the peak result were greater than the average limit.*
3. *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.*
4. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*
5. *Result = Reading + Correction Factor*
   Margin = Result – Limit
   Remark Peak = Result(PK) – Limit(AV)
   Remark AVG = Result(AV) – Limit(AV)

Product Name	1X1 802.11b/g/n PCIe Module	Test By	Rueyyan Lin
Test Model	AR5B125	Test Date	2012/05/23
Test Mode	IEEE 802.11n HT20 TX / CH Middle	Temp. & Humidity	25°C, 57%

966 Chamber_B at 3Meter / Horizontal									
Frequency (MHz)	Reading-PK (dBuV)	Reading-AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark
1332.00	51.36	---	-2.81	48.55	---	74.00	54.00	-5.45	Peak
1566.00	47.90	---	-1.68	46.22	---	74.00	54.00	-7.78	Peak
1662.00	48.84	---	-0.82	48.02	---	74.00	54.00	-5.98	Peak
1936.00	45.95	---	1.65	47.59	---	74.00	54.00	-6.41	Peak
2318.00	46.20	---	3.26	49.46	---	74.00	54.00	-4.54	Peak
3255.00	43.30	---	5.69	48.98	---	74.00	54.00	-5.02	Peak
3825.00	41.37	---	6.63	48.00	---	74.00	54.00	-6.00	Peak
4995.00	39.98	---	9.91	49.89	---	74.00	54.00	-4.11	Peak

966 Chamber_B at 3Meter / Vertical									
Frequency (MHz)	Reading-PK (dBuV)	Reading-AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark
1330.00	54.45	---	-2.82	51.64	---	74.00	54.00	-2.36	Peak
1584.00	47.12	---	-1.52	45.60	---	74.00	54.00	-8.40	Peak
1910.00	49.32	---	1.41	50.73	---	74.00	54.00	-3.27	Peak
2658.00	47.58	---	4.35	51.93	---	74.00	54.00	-2.07	Peak
2986.00	45.79	---	5.37	51.16	---	74.00	54.00	-2.84	Peak
3255.00	44.48	---	5.69	50.17	---	74.00	54.00	-3.83	Peak
4170.00	40.88	---	7.57	48.45	---	74.00	54.00	-5.55	Peak
4935.00	39.48	---	9.76	49.24	---	74.00	54.00	-4.76	Peak

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Average test would be performed if the peak result were greater than the average limit.*
3. *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.*
4. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*
5. *Result = Reading + Correction Factor*
   Margin = Result – Limit
   Remark Peak = Result(PK) – Limit(AV)
   Remark AVG = Result(AV) – Limit(AV)

Product Name	1X1 802.11b/g/n PCIe Module	Test By	Rueyyan Lin
Test Model	AR5B125	Test Date	2012/05/23
Test Mode	IEEE 802.11n HT20 TX / CH High	Temp. & Humidity	25°C, 57%

966 Chamber_B at 3Meter / Horizontal

Frequency (MHz)	Reading-PK (dBuV)	Reading-AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark
1328.00	51.02	---	-2.82	48.19	---	74.00	54.00	-5.81	Peak
1578.00	48.96	---	-1.57	47.39	---	74.00	54.00	-6.61	Peak
1668.00	49.69	---	-0.76	48.93	---	74.00	54.00	-5.07	Peak
1996.00	46.02	---	2.18	48.20	---	74.00	54.00	-5.80	Peak
2376.00	46.41	---	3.45	49.87	---	74.00	54.00	-4.13	Peak
3285.00	41.73	---	5.72	47.45	---	74.00	54.00	-6.55	Peak
4290.00	40.17	---	7.98	48.15	---	74.00	54.00	-5.85	Peak
4995.00	40.46	---	9.91	50.37	---	74.00	54.00	-3.63	Peak

966 Chamber_B at 3Meter / Vertical

Frequency (MHz)	Reading-PK (dBuV)	Reading-AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark
1330.00	53.18	---	-2.82	50.36	---	74.00	54.00	-3.64	Peak
1556.00	49.02	---	-1.77	47.25	---	74.00	54.00	-6.75	Peak
1972.00	48.00	---	1.97	49.97	---	74.00	54.00	-4.03	Peak
2332.00	46.54	---	3.31	49.85	---	74.00	54.00	-4.15	Peak
2656.00	46.36	---	4.34	50.71	---	74.00	54.00	-3.29	Peak
3285.00	42.02	---	5.72	47.74	---	74.00	54.00	-6.26	Peak
4920.00	39.19	---	9.72	48.91	---	74.00	54.00	-5.09	Peak

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Average test would be performed if the peak result were greater than the average limit.*
3. *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.*
4. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*
5. *Result = Reading + Correction Factor*
   Margin = Result – Limit
   Remark Peak = Result(PK) – Limit(AV)
   Remark AVG = Result(AV) – Limit(AV)

Product Name	1X1 802.11b/g/n PCIe Module	Test By	Rueyyan Lin
Test Model	AR5B125	Test Date	2012/05/23
Test Mode	IEEE 802.11n HT40 TX / CH Low	Temp. & Humidity	25°C, 57%

966 Chamber_B at 3Meter / Horizontal

Frequency (MHz)	Reading-PK (dBuV)	Reading-AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark
1332.00	55.67	---	-2.81	52.86	---	74.00	54.00	-1.14	Peak
1506.00	50.98	---	-2.22	48.76	---	74.00	54.00	-5.24	Peak
1662.00	50.67	---	-0.82	49.85	---	74.00	54.00	-4.15	Peak
1872.00	45.45	---	1.07	46.52	---	74.00	54.00	-7.48	Peak
2320.00	44.51	---	3.27	47.78	---	74.00	54.00	-6.22	Peak
3225.00	43.64	---	5.65	49.30	---	74.00	54.00	-4.70	Peak
4485.00	39.61	---	8.64	48.25	---	74.00	54.00	-5.75	Peak
4950.00	39.46	---	9.80	49.26	---	74.00	54.00	-4.74	Peak

966 Chamber_B at 3Meter / Vertical

Frequency (MHz)	Reading-PK (dBuV)	Reading-AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark
1330.00	53.75	---	-2.82	50.93	---	74.00	54.00	-3.07	Peak
1556.00	47.82	---	-1.77	46.05	---	74.00	54.00	-7.95	Peak
2014.00	47.40	---	2.27	49.67	---	74.00	54.00	-4.33	Peak
2668.00	47.66	---	4.38	52.04	---	74.00	54.00	-1.96	Peak
2994.00	44.83	---	5.39	50.22	---	74.00	54.00	-3.78	Peak
3225.00	50.93	46.51	5.65	56.58	52.16	74.00	54.00	-1.84	AVG
3525.00	41.89	---	6.00	47.89	---	74.00	54.00	-6.11	Peak
4545.00	40.08	---	8.80	48.88	---	74.00	54.00	-5.12	Peak

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Average test would be performed if the peak result were greater than the average limit.*
3. *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.*
4. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*
5. *Result = Reading + Correction Factor*
   Margin = Result – Limit
   Remark Peak = Result(PK) – Limit(AV)
   Remark AVG = Result(AV) – Limit(AV)

Product Name	1X1 802.11b/g/n PCIe Module	Test By	Rueyyan Lin
Test Model	AR5B125	Test Date	2012/05/23
Test Mode	IEEE 802.11n HT40 TX / CH Middle	Temp. & Humidity	25°C, 57%

966 Chamber_B at 3Meter / Horizontal									
Frequency (MHz)	Reading-PK (dBuV)	Reading-AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark
1284.00	47.79	---	-2.97	44.82	---	74.00	54.00	-9.18	Peak
1330.00	53.42	---	-2.82	50.61	---	74.00	54.00	-3.39	Peak
1664.00	51.60	---	-0.80	50.80	---	74.00	54.00	-3.20	Peak
1874.00	47.54	---	1.09	48.63	---	74.00	54.00	-5.37	Peak
2154.00	44.78	---	2.73	47.51	---	74.00	54.00	-6.49	Peak
3195.00	42.15	---	5.62	47.77	---	74.00	54.00	-6.23	Peak
4560.00	39.93	---	8.84	48.76	---	74.00	54.00	-5.24	Peak

966 Chamber_B at 3Meter / Vertical									
Frequency (MHz)	Reading-PK (dBuV)	Reading-AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark
1328.00	51.97	---	-2.82	49.14	---	74.00	54.00	-4.86	Peak
1558.00	47.44	---	-1.75	45.69	---	74.00	54.00	-8.31	Peak
1954.00	49.44	---	1.81	51.25	---	74.00	54.00	-2.75	Peak
2664.00	47.31	---	4.37	51.68	---	74.00	54.00	-2.32	Peak
2992.00	46.67	---	5.39	52.05	---	74.00	54.00	-1.95	Peak
3255.00	44.30	---	5.69	49.99	---	74.00	54.00	-4.01	Peak
3960.00	41.08	---	6.92	47.99	---	74.00	54.00	-6.01	Peak
5010.00	39.51	---	9.94	49.44	---	74.00	54.00	-4.56	Peak

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Average test would be performed if the peak result were greater than the average limit.*
3. *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.*
4. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*
5. *Result = Reading + Correction Factor*
   Margin = Result – Limit
   Remark Peak = Result(PK) – Limit(AV)
   Remark AVG = Result(AV) – Limit(AV)

Product Name	1X1 802.11b/g/n PCIe Module	Test By	Rueyyan Lin
Test Model	AR5B125	Test Date	2012/05/23
Test Mode	IEEE 802.11n HT40 TX / CH High	Temp. & Humidity	25°C, 57%

966 Chamber_B at 3Meter / Horizontal									
Frequency (MHz)	Reading-PK (dBuV)	Reading-AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark
1332.00	51.39	---	-2.81	48.58	---	74.00	54.00	-5.42	Peak
1566.00	48.76	---	-1.68	47.09	---	74.00	54.00	-6.91	Peak
1648.00	49.00	---	-0.94	48.06	---	74.00	54.00	-5.94	Peak
1914.00	45.66	---	1.45	47.10	---	74.00	54.00	-6.90	Peak
2160.00	44.98	---	2.74	47.72	---	74.00	54.00	-6.28	Peak
3270.00	42.21	---	5.70	47.91	---	74.00	54.00	-6.09	Peak
4875.00	39.86	---	9.61	49.47	---	74.00	54.00	-4.53	Peak

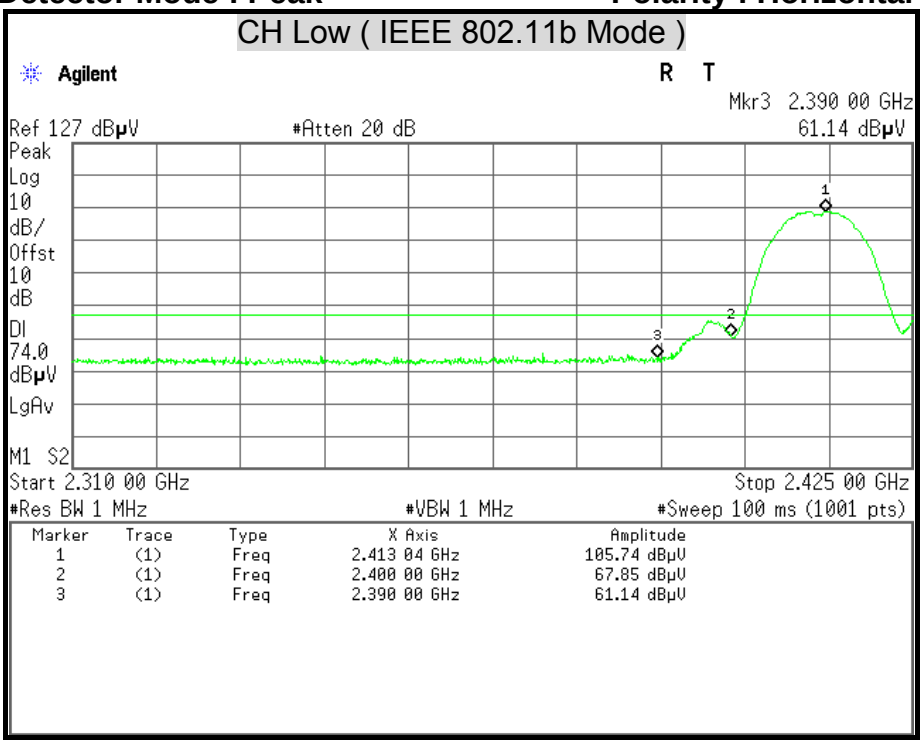
966 Chamber_B at 3Meter / Vertical									
Frequency (MHz)	Reading-PK (dBuV)	Reading-AV (dBuV)	Correction Factor (dB/m)	Result-PK (dBuV/m)	Result-AV (dBuV/m)	Limit-PK (dBuV/m)	Limit-AV (dBuV/m)	Margin (dB)	Remark
1332.00	52.45	---	-2.81	49.64	---	74.00	54.00	-4.36	Peak
1588.00	48.09	---	-1.48	46.61	---	74.00	54.00	-7.39	Peak
1980.00	47.13	---	2.04	49.17	---	74.00	54.00	-4.83	Peak
2656.00	44.93	---	4.34	49.27	---	74.00	54.00	-4.73	Peak
2990.00	45.03	---	5.38	50.41	---	74.00	54.00	-3.59	Peak
3210.00	41.56	---	5.64	47.19	---	74.00	54.00	-6.81	Peak
4950.00	39.42	---	9.80	49.21	---	74.00	54.00	-4.79	Peak
6540.00	39.31	---	12.37	51.68	---	74.00	54.00	-2.32	Peak

Remark:

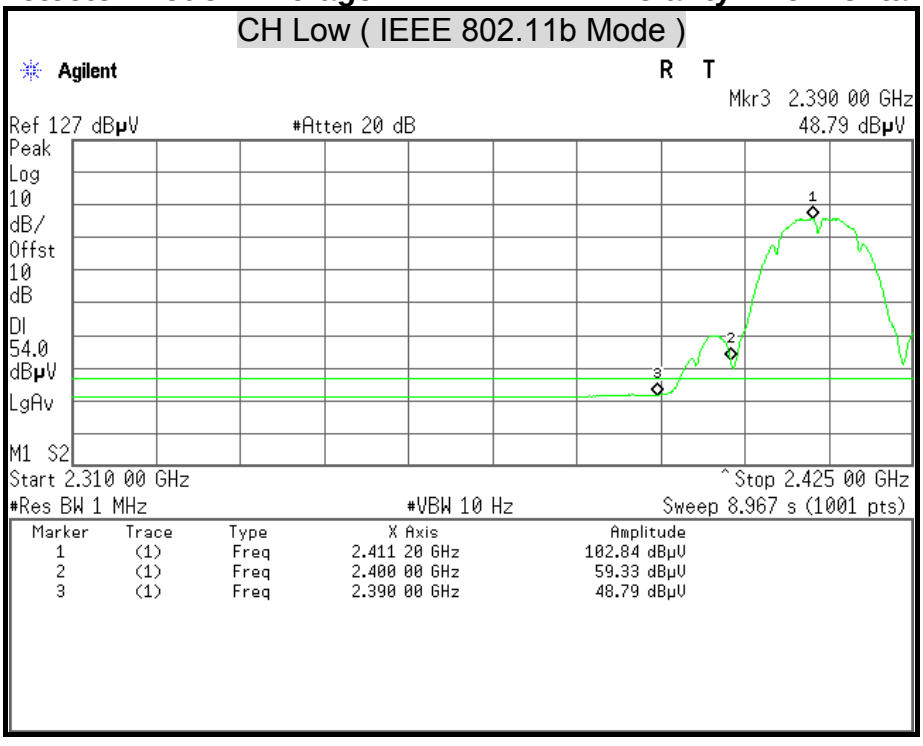
1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Average test would be performed if the peak result were greater than the average limit.*
3. *Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.*
4. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*
5. *Result = Reading + Correction Factor*
   Margin = Result – Limit
   Remark Peak = Result(PK) – Limit(AV)
   Remark AVG = Result(AV) – Limit(AV)

Restricted Band Edges

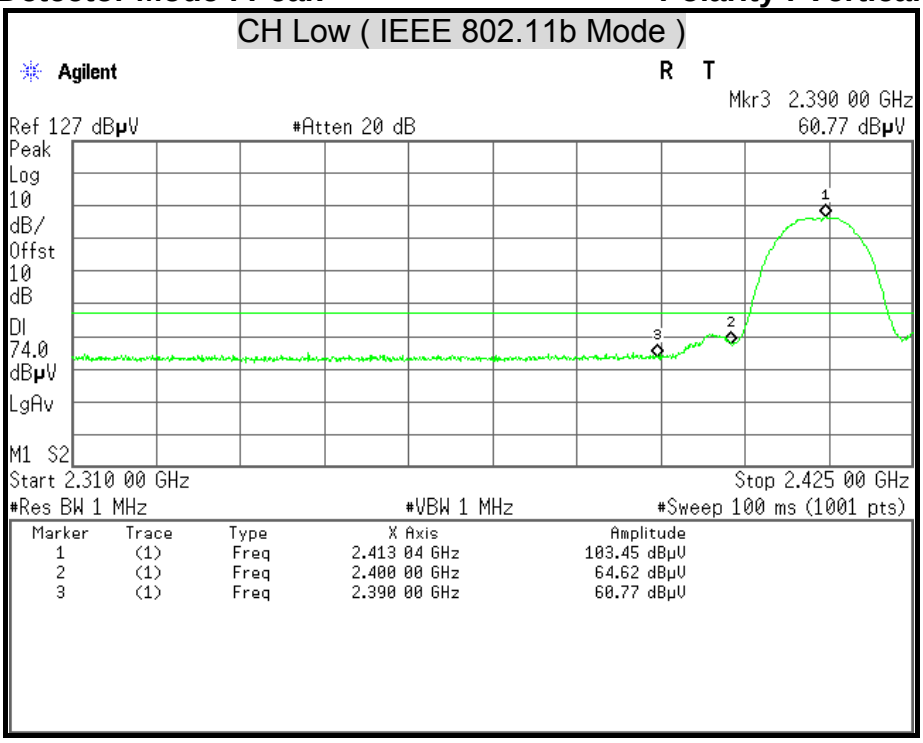
Detector Mode : Peak **Polarity : Horizontal**



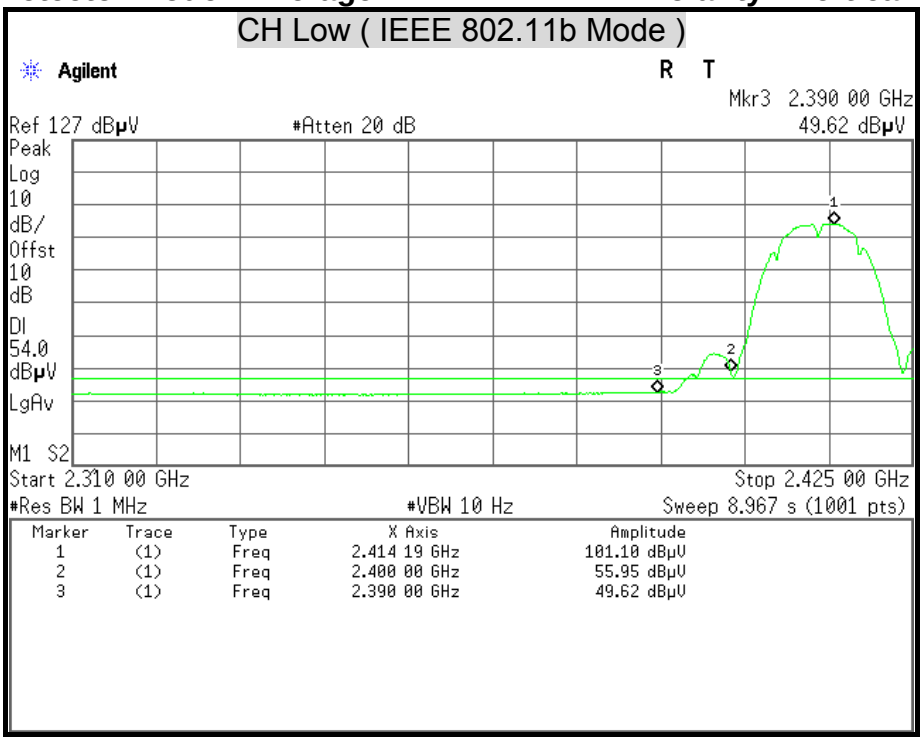
Detector Mode : Average **Polarity : Horizontal**



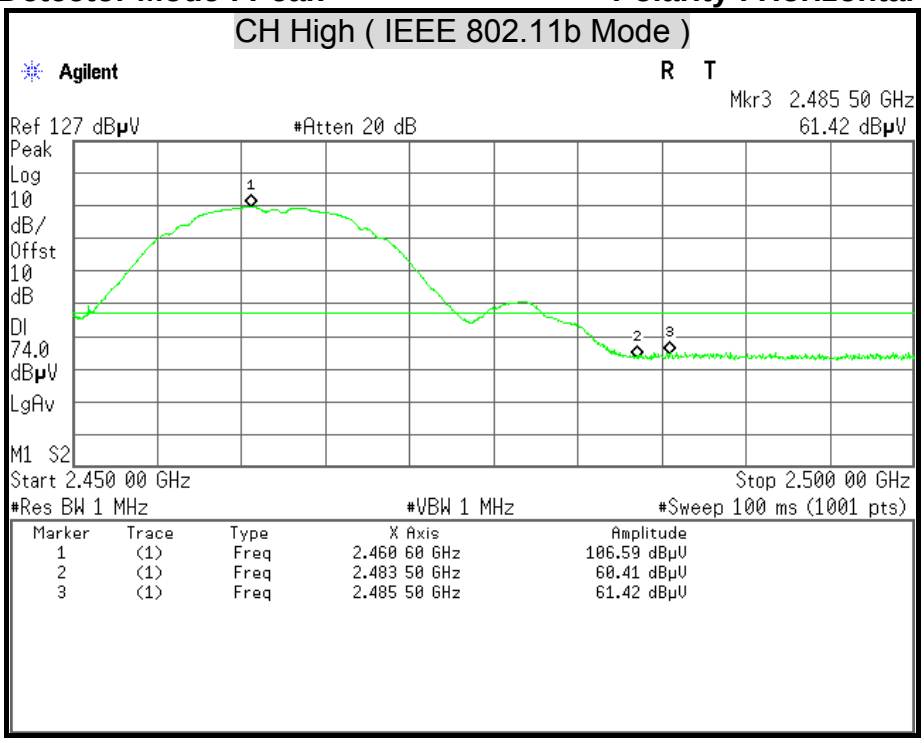
Detector Mode : Peak **Polarity : Vertical**



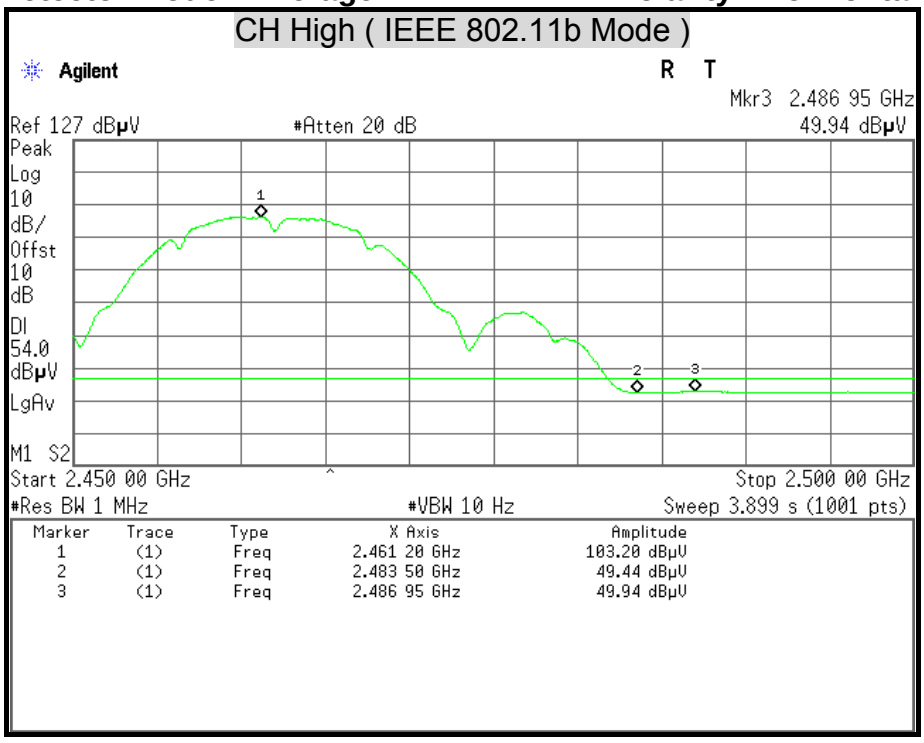
Detector Mode : Average **Polarity : Vertical**



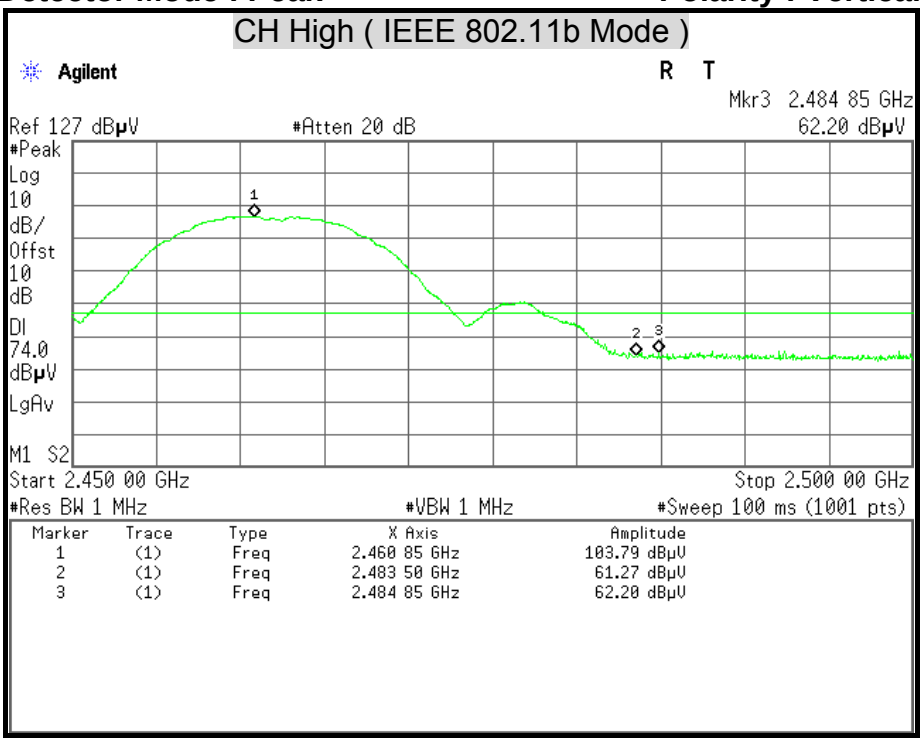
Detector Mode : Peak **Polarity : Horizontal**



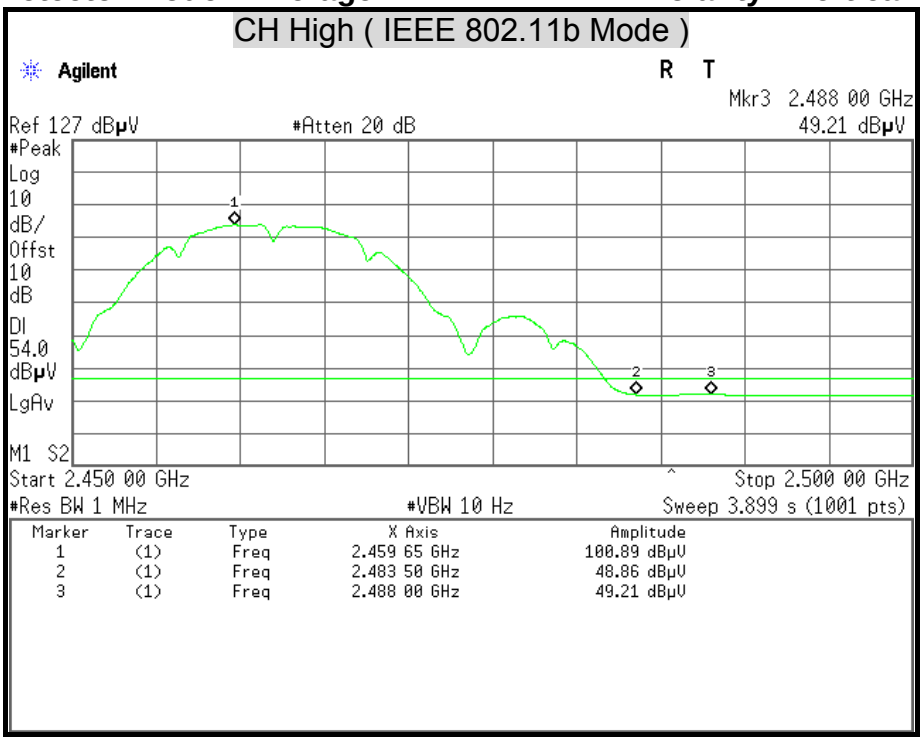
Detector Mode : Average **Polarity : Horizontal**



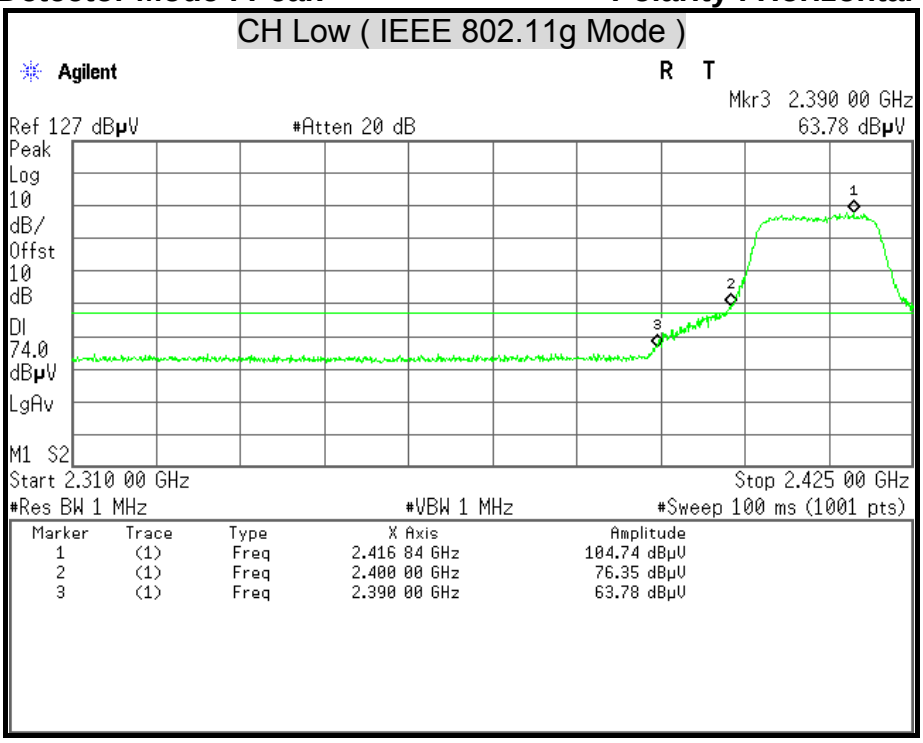
Detector Mode : Peak **Polarity : Vertical**



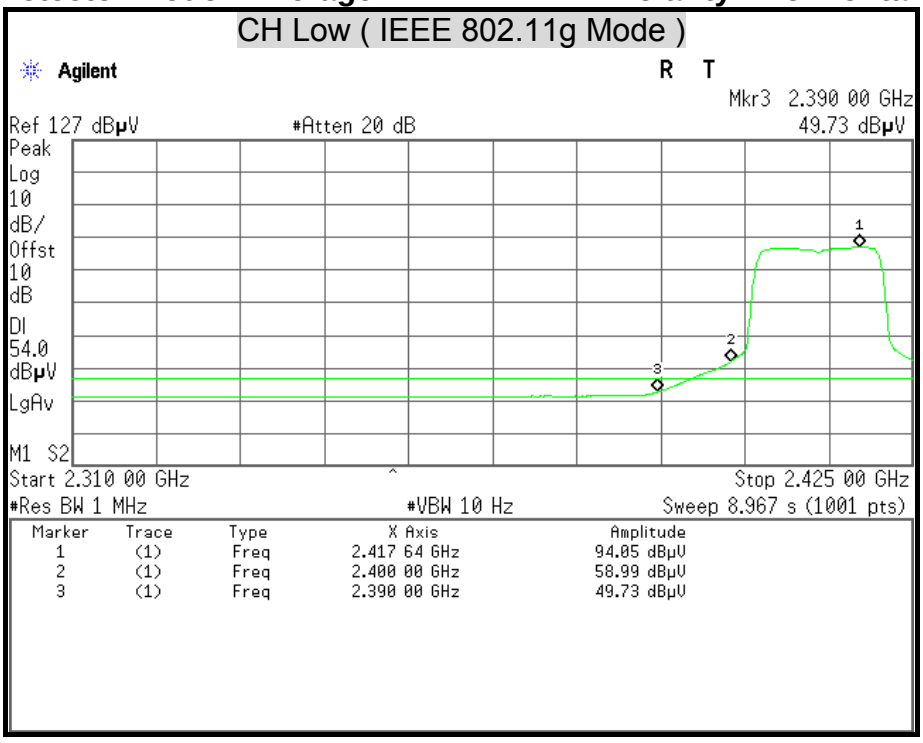
Detector Mode : Average **Polarity : Vertical**



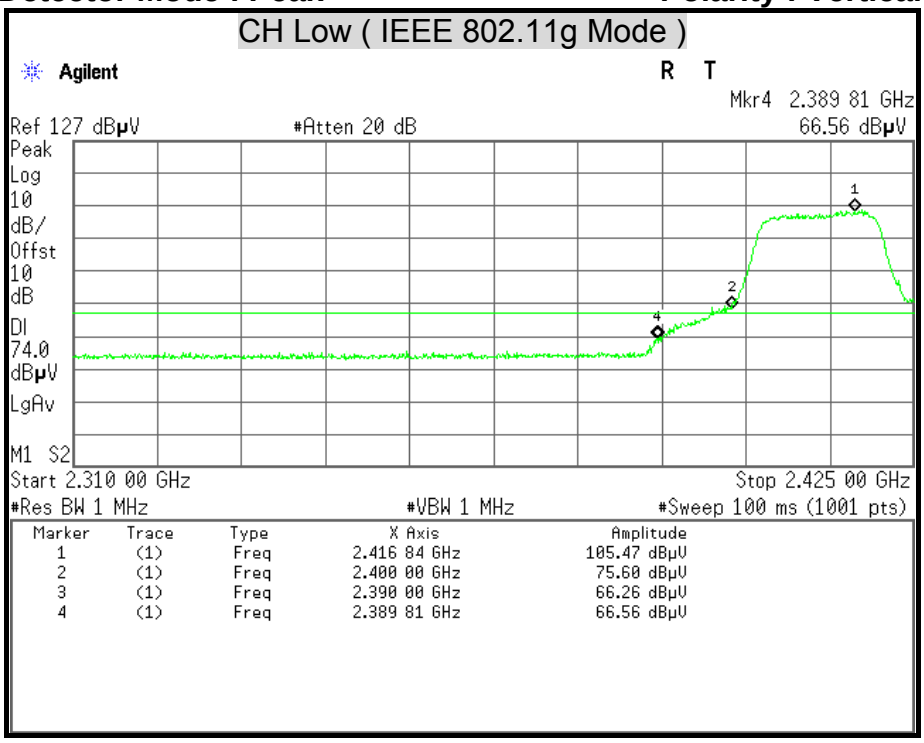
Detector Mode : Peak **Polarity : Horizontal**



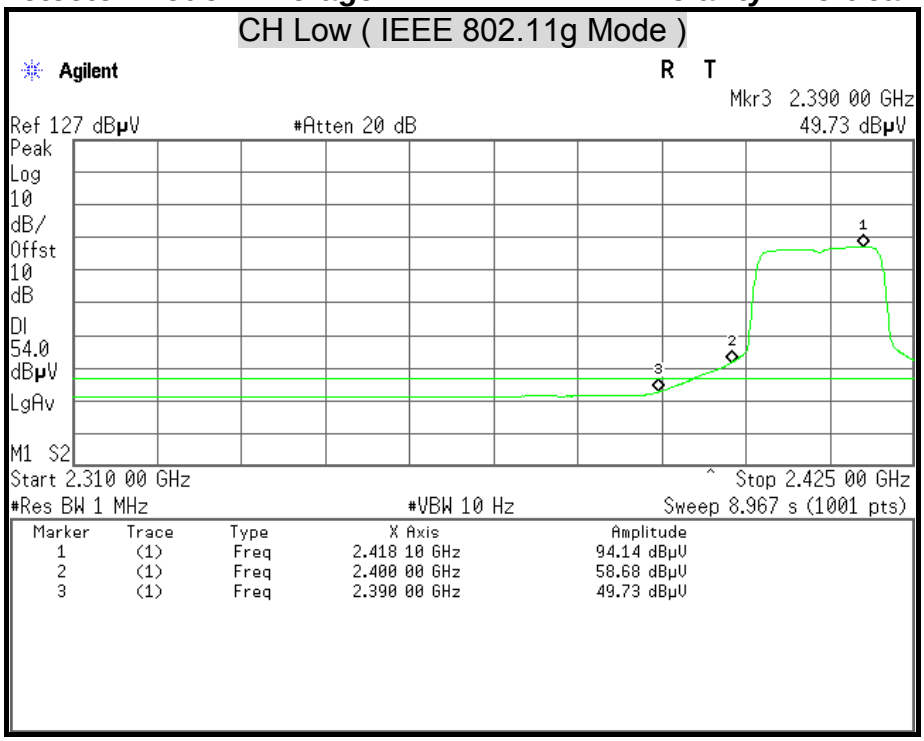
Detector Mode : Average **Polarity : Horizontal**



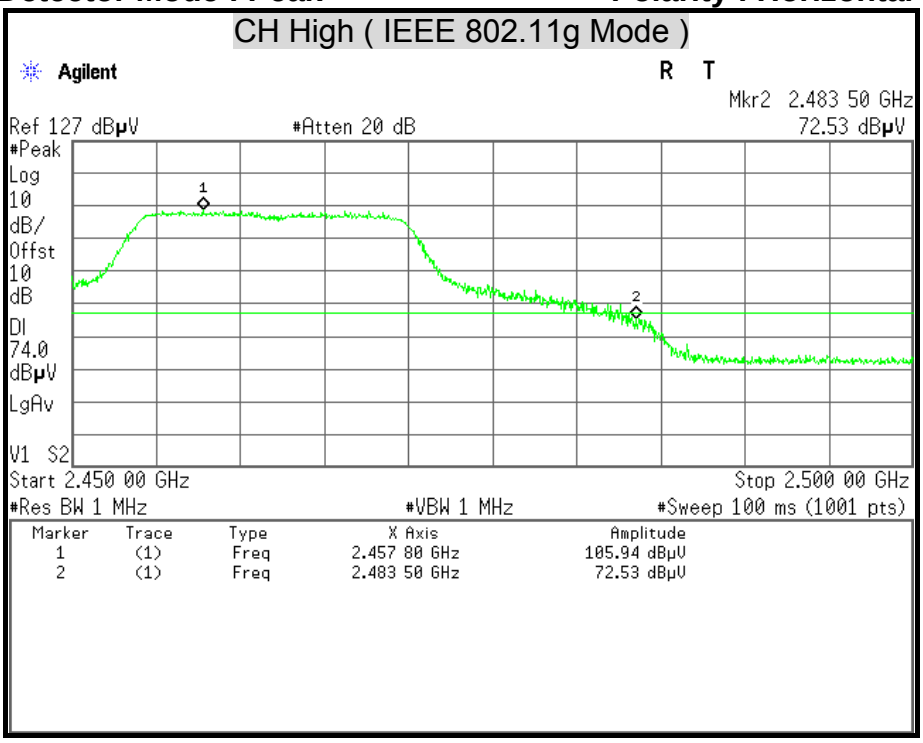
Detector Mode : Peak **Polarity : Vertical**



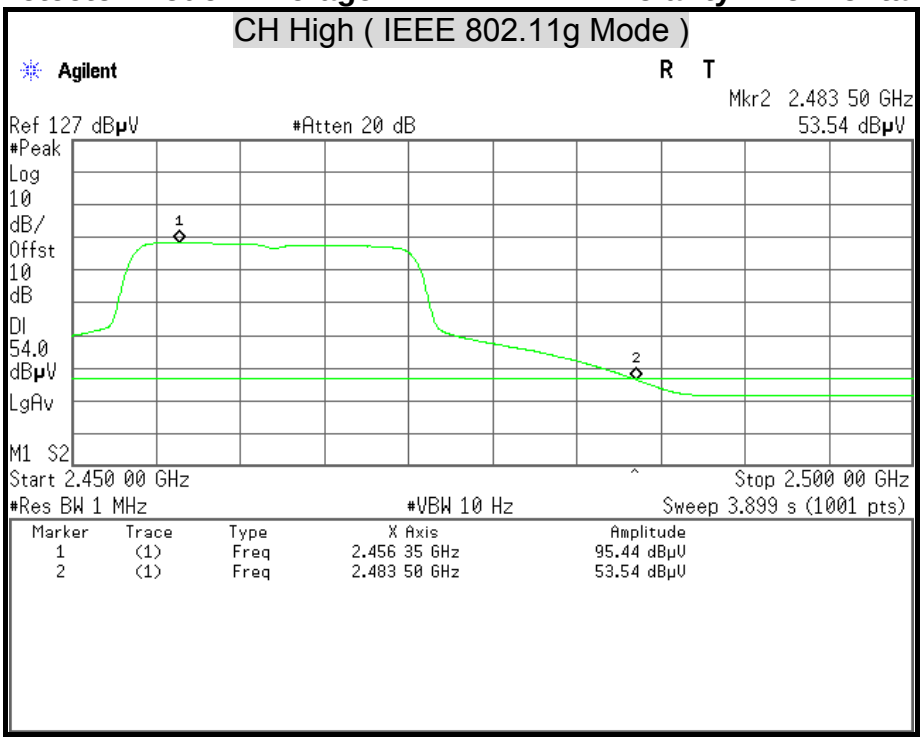
Detector Mode : Average **Polarity : Vertical**



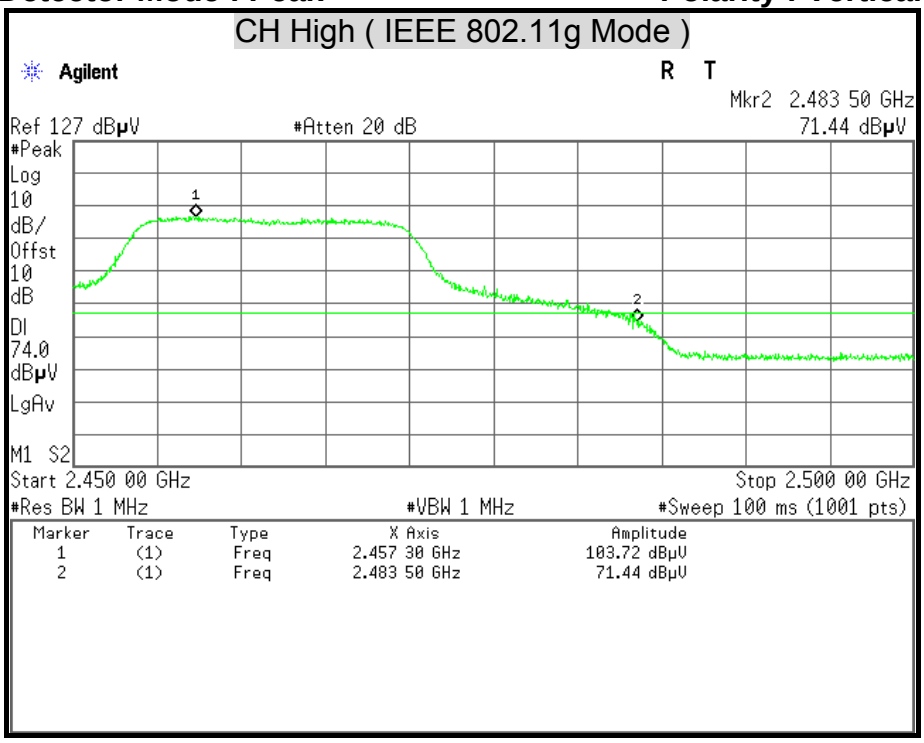
Detector Mode : Peak **Polarity : Horizontal**



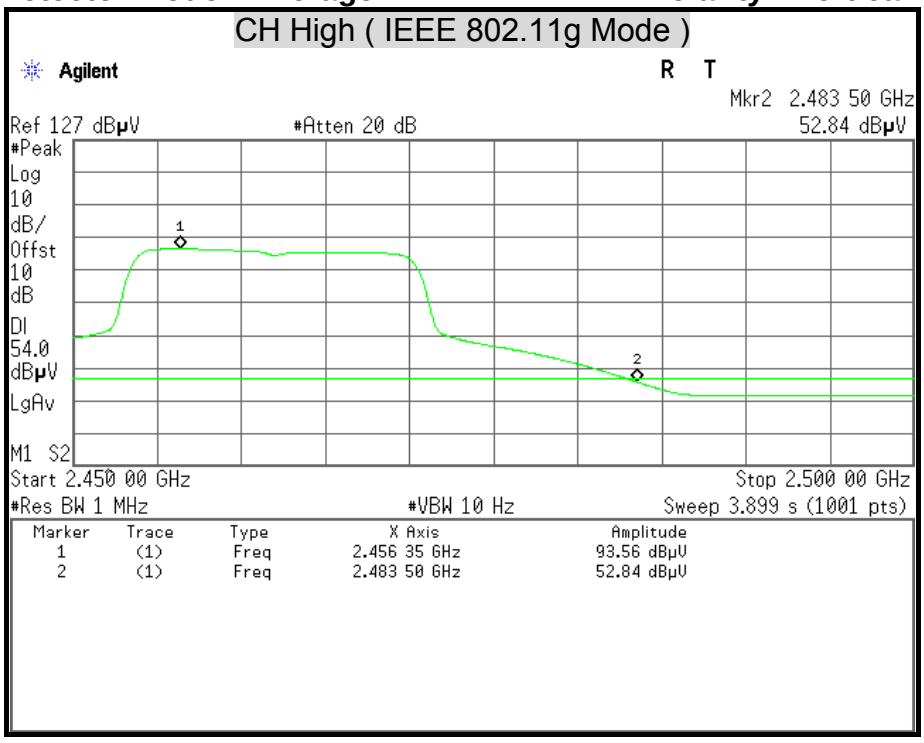
Detector Mode : Average **Polarity : Horizontal**



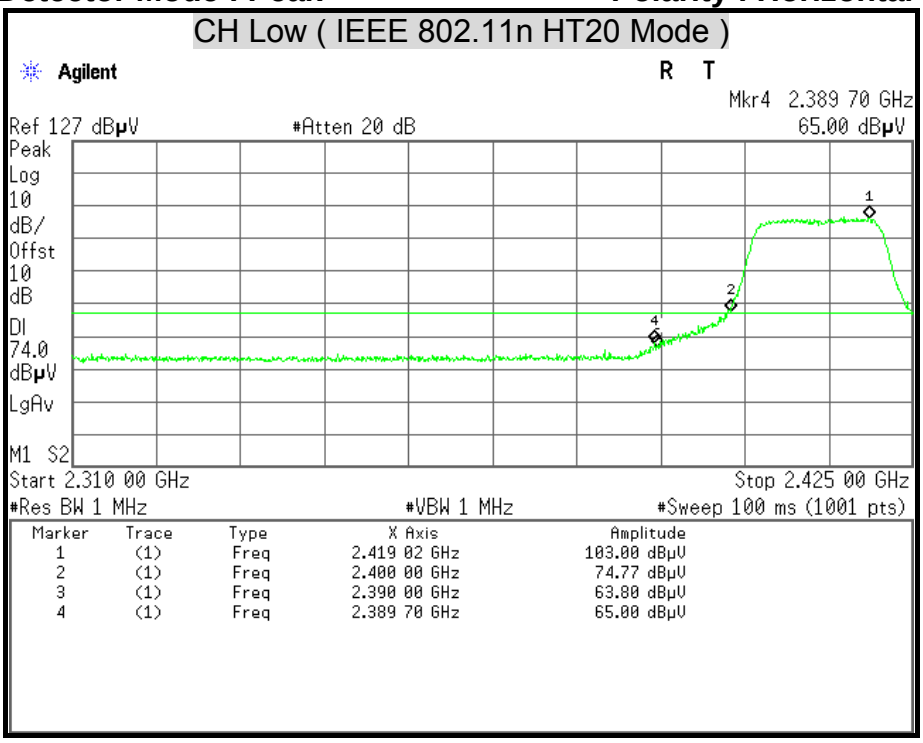
Detector Mode : Peak **Polarity : Vertical**



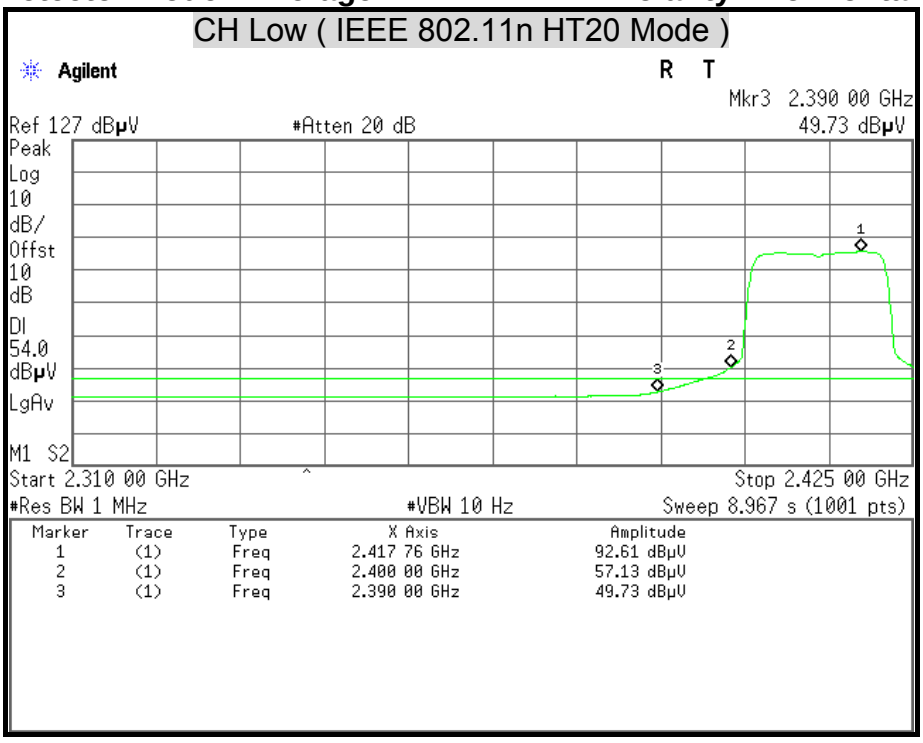
Detector Mode : Average **Polarity : Vertical**



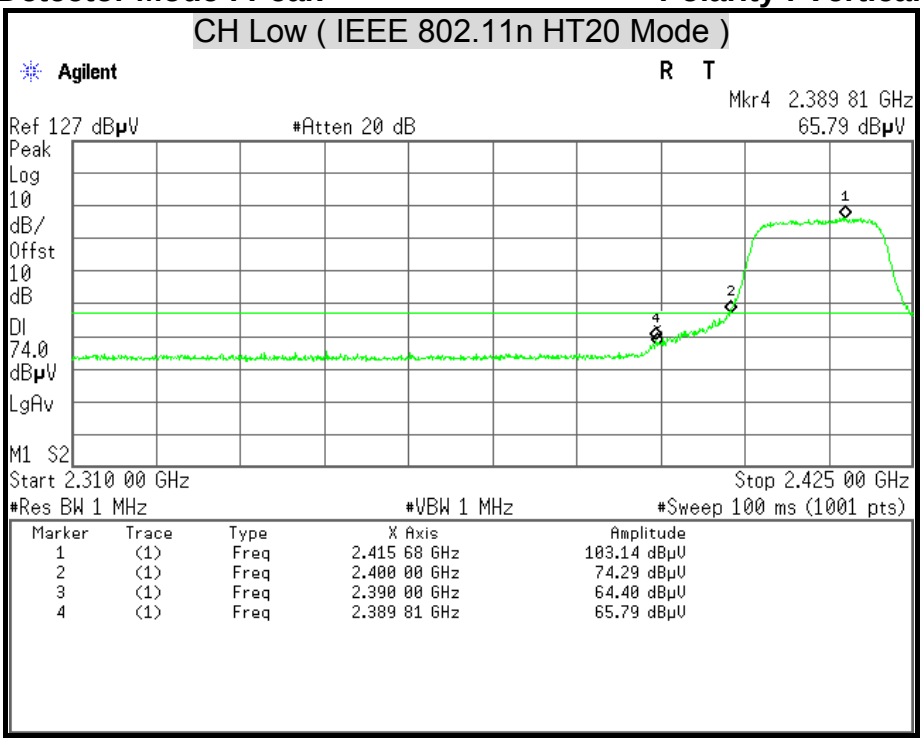
Detector Mode : Peak **Polarity : Horizontal**



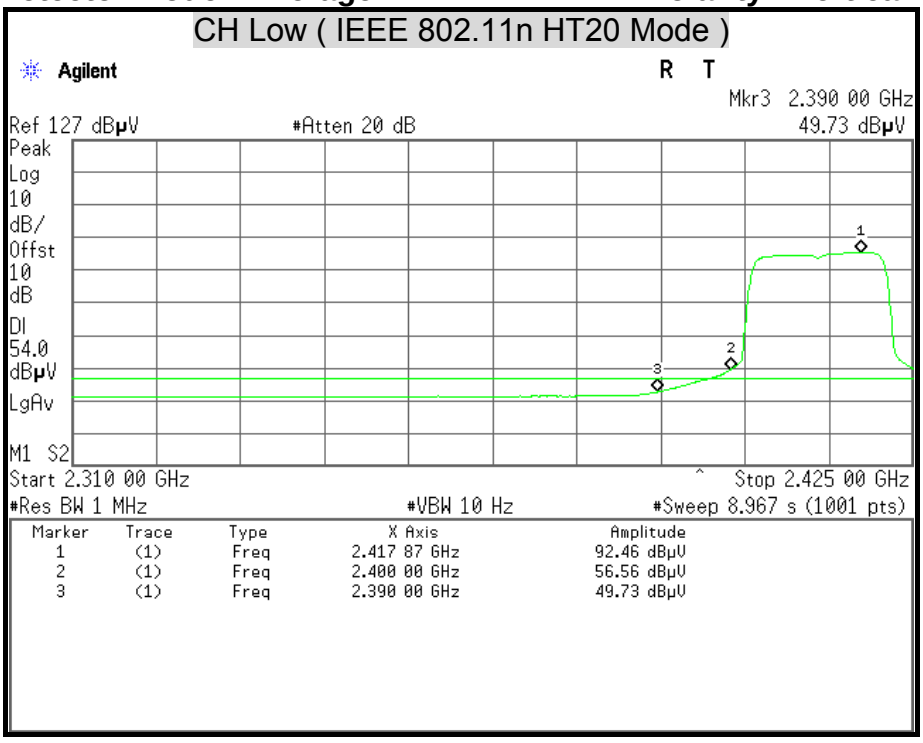
Detector Mode : Average **Polarity : Horizontal**



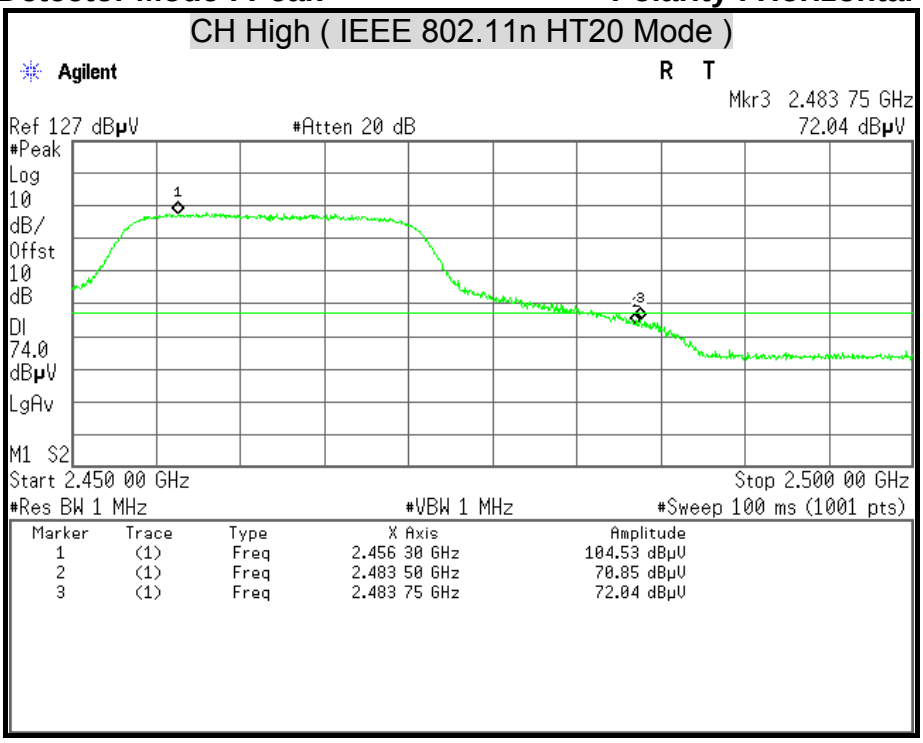
Detector Mode : Peak **Polarity : Vertical**



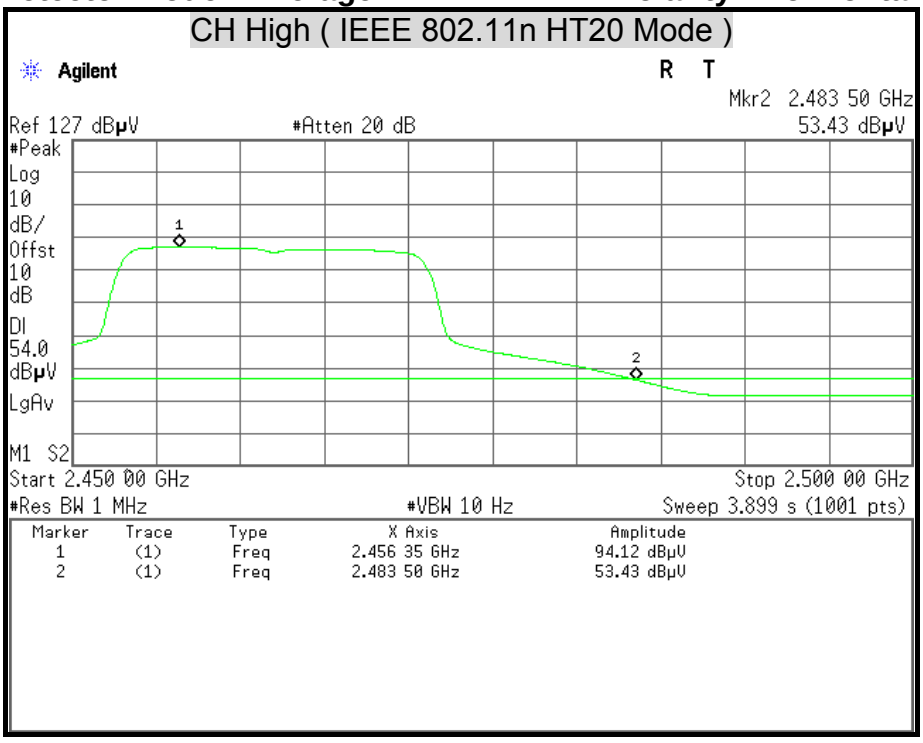
Detector Mode : Average **Polarity : Vertical**



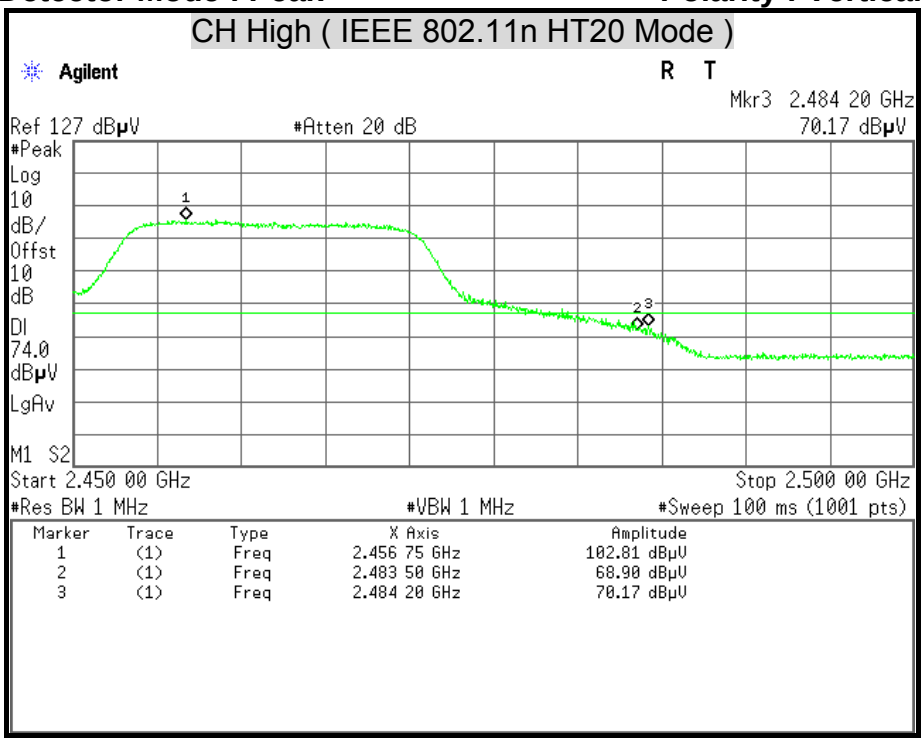
Detector Mode : Peak **Polarity : Horizontal**



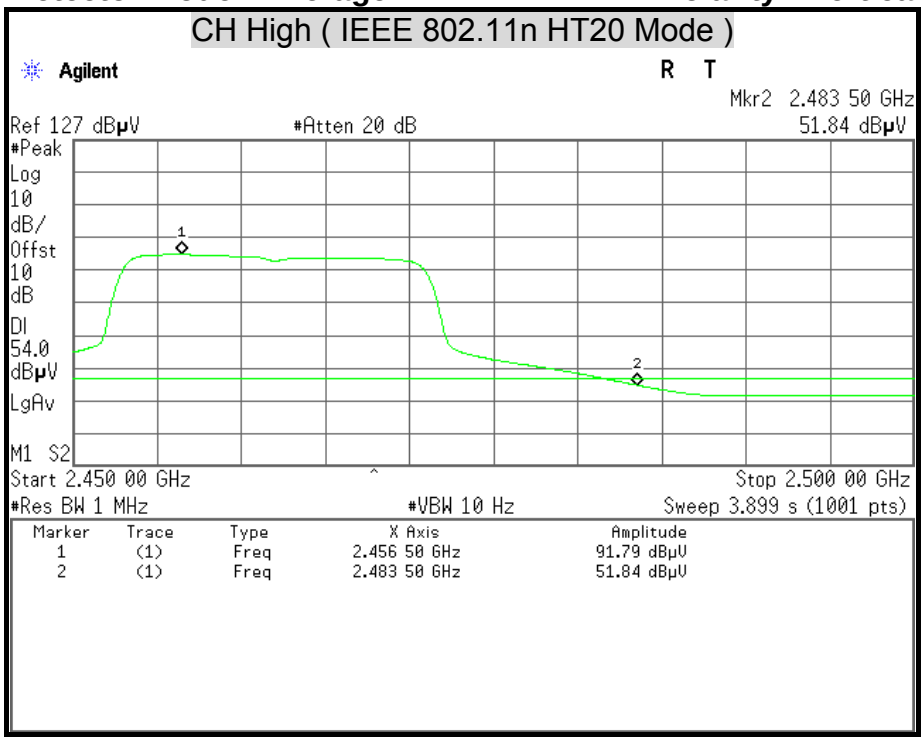
Detector Mode : Average **Polarity : Horizontal**



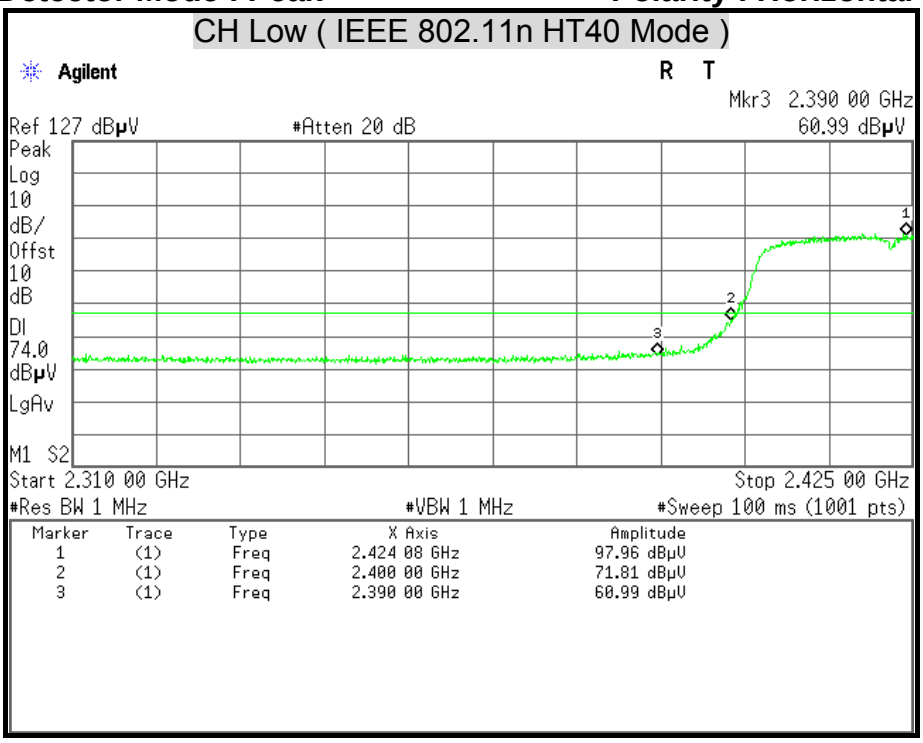
Detector Mode : Peak **Polarity : Vertical**



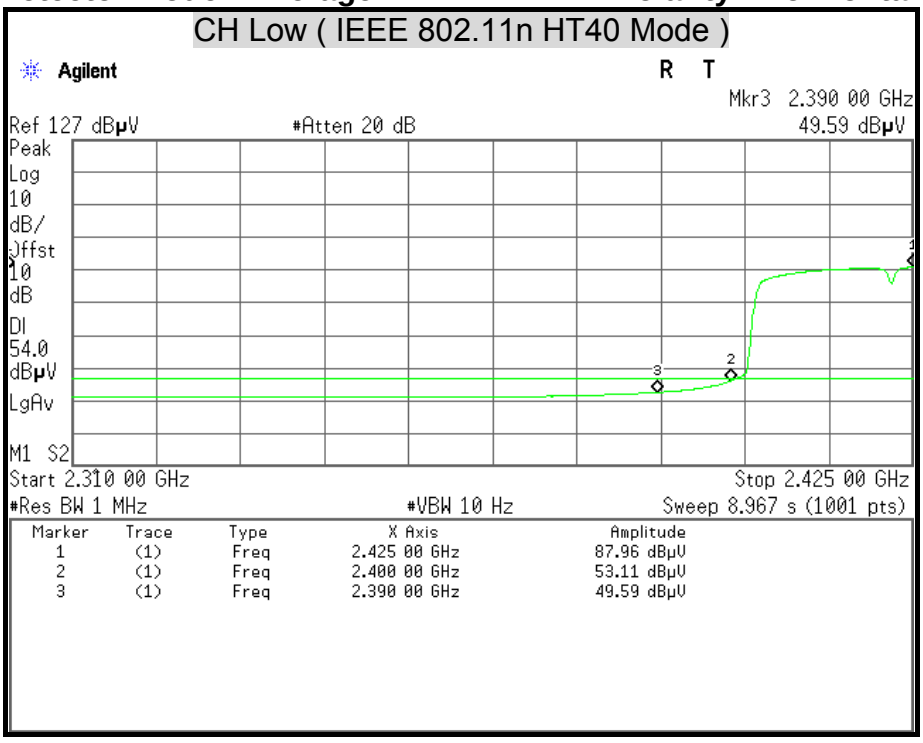
Detector Mode : Average **Polarity : Vertical**



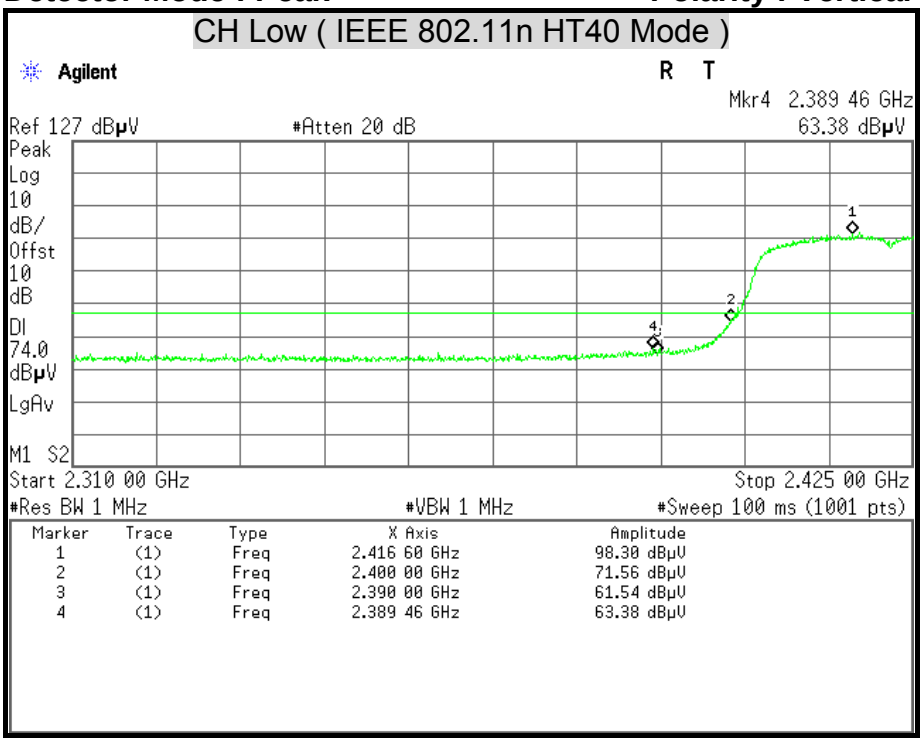
Detector Mode : Peak **Polarity : Horizontal**



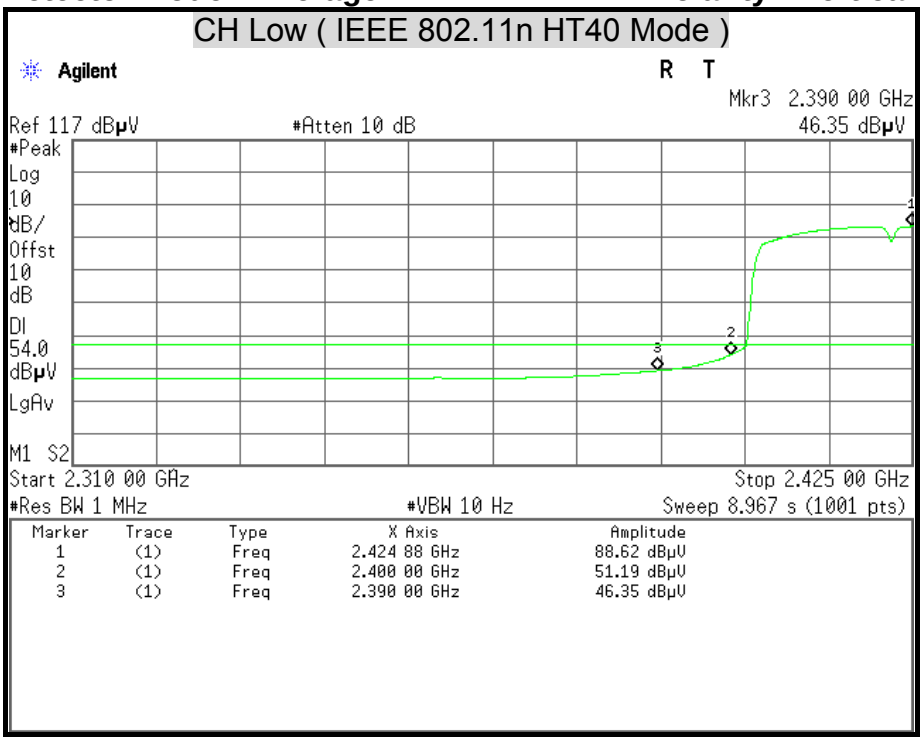
Detector Mode : Average **Polarity : Horizontal**



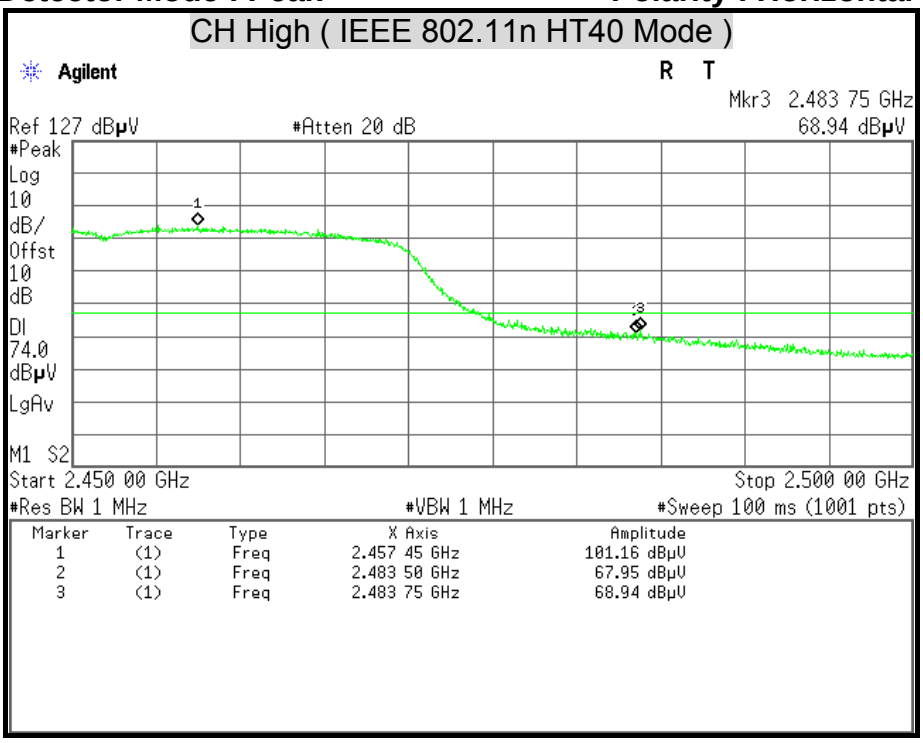
Detector Mode : Peak **Polarity : Vertical**



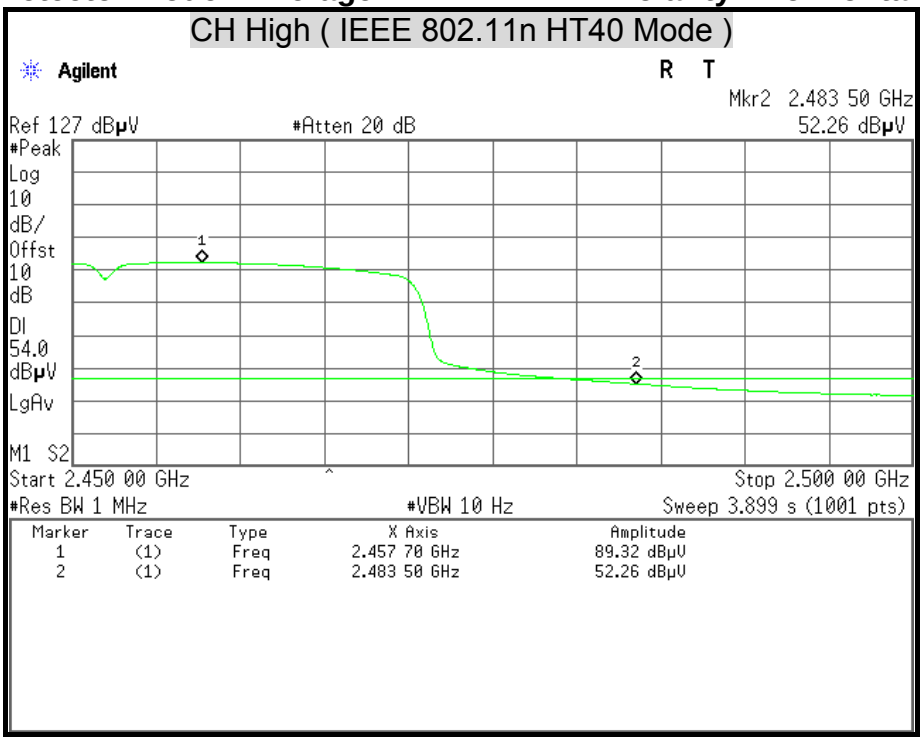
Detector Mode : Average **Polarity : Vertical**



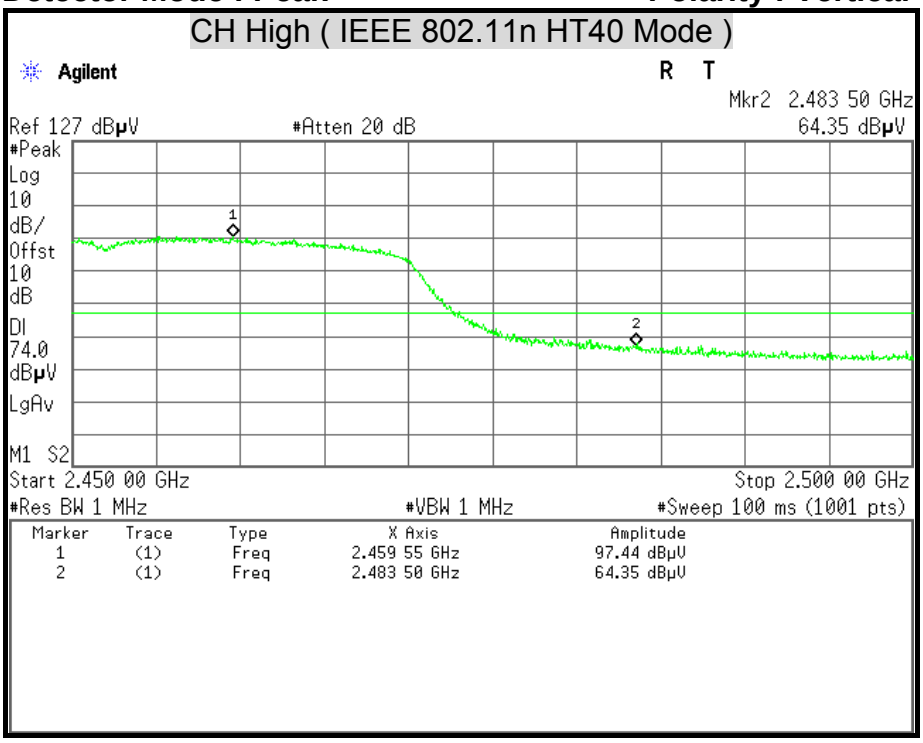
Detector Mode : Peak **Polarity : Horizontal**



Detector Mode : Average **Polarity : Horizontal**



Detector Mode : Peak **Polarity : Vertical**



Detector Mode : Average **Polarity : Vertical**