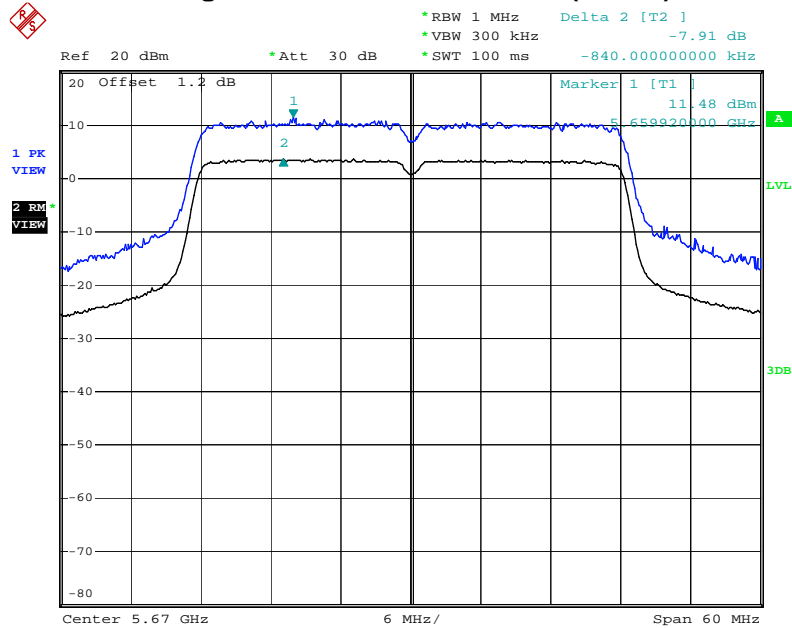


## Peak Excursion Plot on Configuration IEEE 802.11n Port 2 (40MHz) / 5670 MHz



Date: 9.DEC.2011 18:54:56

### 3.6 Radiated Emissions Measurement

#### 3.6.1 Limit

For transmitters operating in the 5.15-5.25 GHz band: all emissions outside of the 5.15-5.25 GHz band shall not exceed an EIRP of -27 dBm/MHz (68.3dBuV/m at 3m). For transmitters operating in the 5.47-5.725 GHz band: all emissions outside of the 5.47-5.725 GHz band shall not exceed an EIRP of -27 dBm/MHz (68.3dBuV/m at 3m). In addition, In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

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

#### 3.6.2 Measuring Instruments and Setting

Please refer to section 4 of equipments list in this report. The following table is the setting of spectrum analyzer and receiver.

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	40 GHz
RB / VB (Emission in restricted band)	1MHz / 1MHz for Peak, 1 MHz / 10Hz for Average
RB / VB (Emission in non-restricted band)	1MHz / 1MHz z for peak

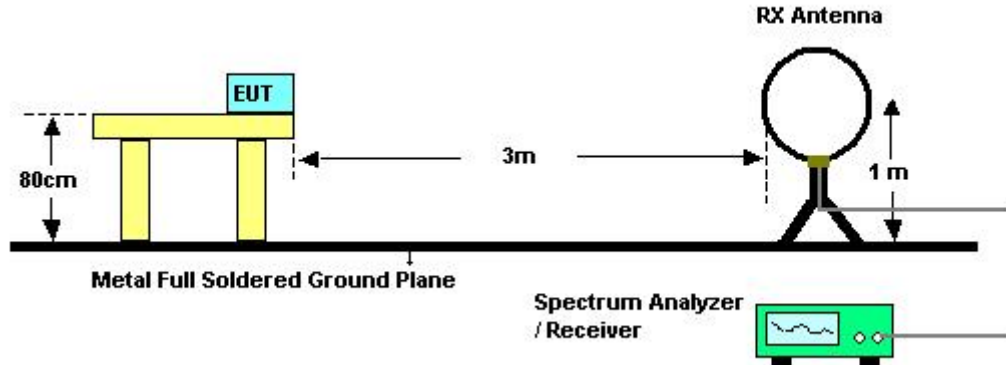
Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RB 200Hz for QP
Start ~ Stop Frequency	150kHz~30MHz / RB 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RB 120kHz for QP

**3.6.3 Test Procedures**

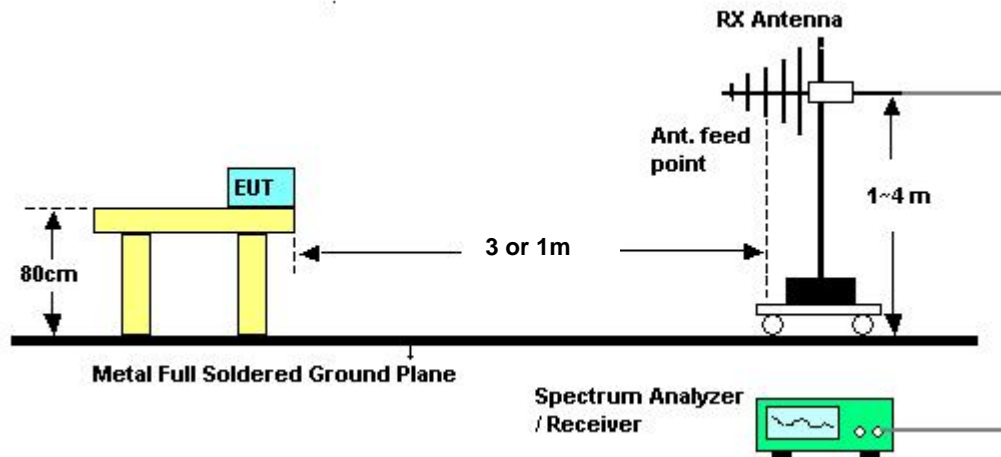
1. Configure the EUT according to ANSI C63.4. The EUT was placed on the top of the turntable 0.8 meter above ground. The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 3 meters far away from the turntable.
2. Power on the EUT and all the supporting units. The turntable was rotated by 360 degrees to determine the position of the highest radiation.
3. The height of the broadband receiving antenna was varied between one meter and four meters above ground to find the maximum emissions field strength of both horizontal and vertical polarization.
4. For each suspected emissions, the antenna tower was scan (from 1 M to 4 M) and then the turntable was rotated (from 0 degree to 360 degrees) to find the maximum reading.
5. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function with specified bandwidth under Maximum Hold Mode.
6. For emissions above 1GHz, use 1MHz VBW and RBW for peak reading. Then 1MHz RBW and 10Hz VBW for average reading in spectrum analyzer.
7. When the radiated emissions limits are expressed in terms of the average value of the emissions, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum value.
8. If the emissions level of the EUT in peak mode was 3 Db lower than the average limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions which do not have 3 Db margin will be repeated one by one using the quasi-peak method for below 1GHz.
9. For testing above 1GHz, the emissions level of the EUT in peak mode was lower than average limit (that means the emissions level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
10. In case the emission is lower than 30MHz, loop antenna has to be used for measurement and the recorded data should be QP measured by receiver. High – Low scan is not required in this case.

### 3.6.4 Test Setup Layout

For radiated emissions below 30MHz



For radiated emissions above 30MHz



Above 5GHz shall be extrapolated to the specified distance using an extrapolation factor of 20 Db/decade from 3m to 1m.

Distance extrapolation factor =  $20 \log (\text{specific distance [3m]} / \text{test distance [1m]})$  (Db);

Limit line = specific limits (dBuV) + distance extrapolation factor [9.54 Db].

### 3.6.5 Test Deviation

There is no deviation with the original standard.

### 3.6.6 EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

**3.6.7 Results of Radiated Emissions (9kHz~30MHz)**

<b>Final Test Date</b>	Dec. 02, 2011	<b>Test Site No.</b>	03CH02-HY
<b>Temperature</b>	22.3℃	<b>Humidity</b>	62%
<b>Test Engineer</b>	Daniel		

<b>Freq. (MHz)</b>	<b>Level (dBuV)</b>	<b>Over Limit (Db)</b>	<b>Limit Line (dBuV)</b>	<b>Remark</b>
-	-	-	-	See Note

Note:

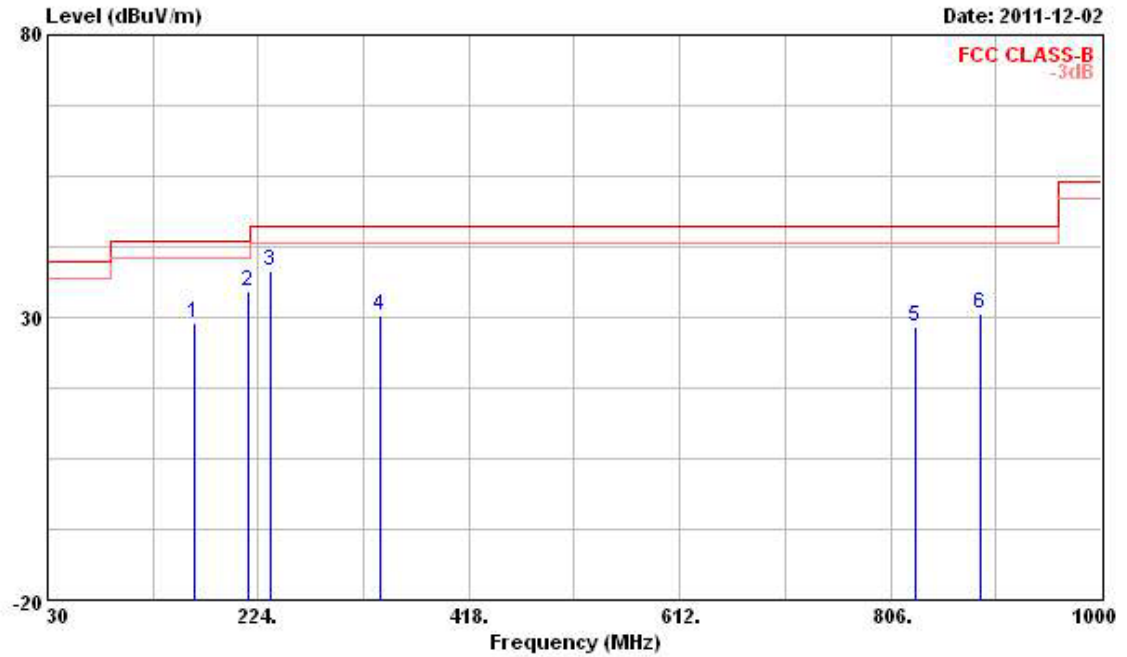
The amplitude of spurious emissions that are attenuated by more than 20Db below the permissible value has no need to be reported.

Distance extrapolation factor =  $40 \log (\text{specific distance} / \text{test distance})$  (Db);

Limit line = specific limits (dBuV) + distance extrapolation factor.

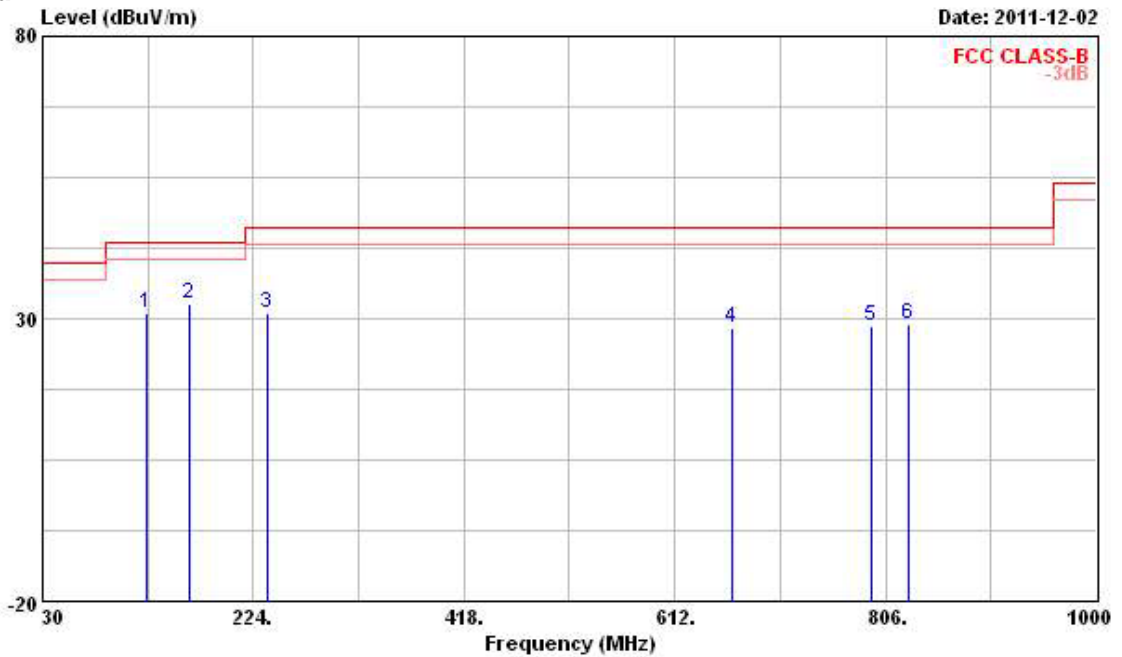
## 3.6.8 Results of Radiated Emissions (30MHz~1GHz)

<b>Final Test Date</b>	Dec. 02, 2011	<b>Test Site No.</b>	03CH02-HY
<b>Temperature</b>	22.3℃	<b>Humidity</b>	62%
<b>Test Engineer</b>	Daniel	<b>Configuration</b>	Normal Mode

**Horizontal**

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	164.830	28.89	-14.61	43.50	43.97	10.34	2.14	27.56	Peak	---	---
2	214.300	34.71	-8.79	43.50	47.72	11.83	2.53	27.37	Peak	---	---
3	234.670	38.32	-7.68	46.00	50.48	12.49	2.67	27.32	Peak	---	---
4	335.550	30.30	-15.70	46.00	40.33	14.26	3.12	27.41	Peak	---	---
5	828.310	28.25	-17.75	46.00	30.91	20.20	4.98	27.84	Peak	---	---
6	889.420	30.64	-15.36	46.00	33.01	20.05	5.21	27.63	Peak	---	---

## Vertical



	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	126.030	31.03	-12.47	43.50	43.80	13.10	1.87	27.74	Peak	---	---
2	164.830	32.70	-10.80	43.50	47.78	10.34	2.14	27.56	Peak	---	---
3	237.580	30.97	-15.03	46.00	43.01	12.59	2.69	27.32	Peak	---	---
4	664.380	28.21	-17.79	46.00	32.80	19.32	4.43	28.34	Peak	---	---
5	792.420	28.69	-17.31	46.00	31.63	20.16	4.86	27.96	Peak	---	---
6	827.340	29.11	-16.89	46.00	31.77	20.20	4.98	27.84	Peak	---	---

## Note:

The amplitude of spurious emissions that are attenuated by more than 20Db below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (Uv/m).

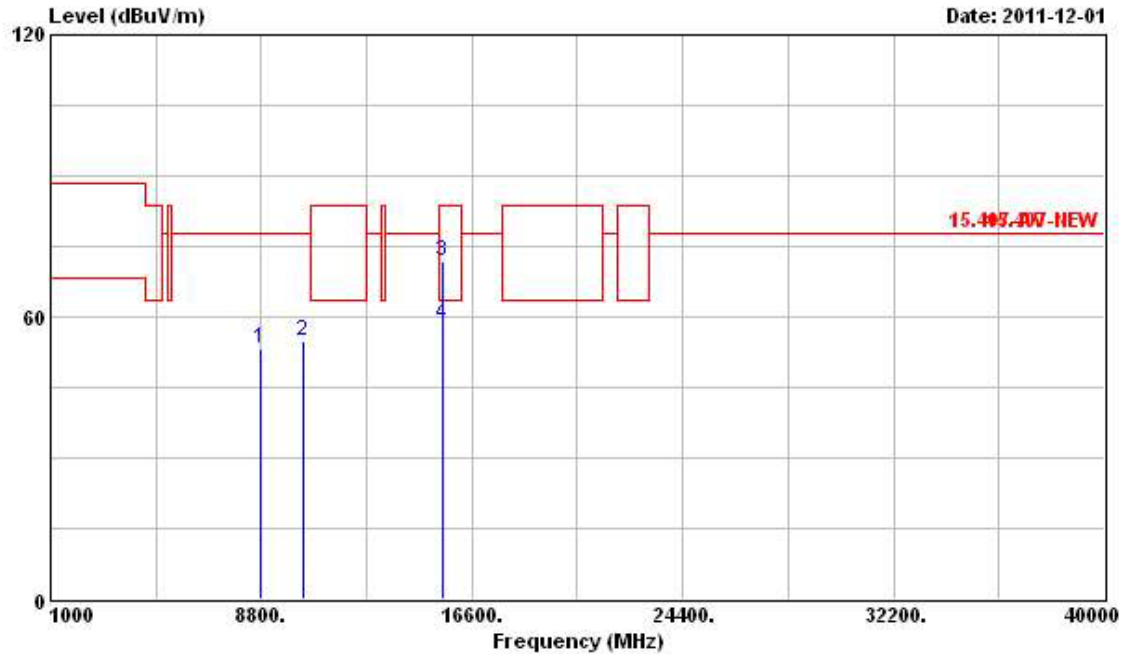
Corrected Reading: Antenna Factor + Cable Loss + Read Level – Preamp Factor = Level.

## 3.6.9 Results for Radiated Emissions (1GHz~40GHz)

## For Single Chain:

Final Test Date	Dec. 01, 2011	Test Site No.	03CH02-HY
Temperature	22.3°C	Humidity	62%
Test Engineer	Daniel	Configuration	802.11a Ch. 36

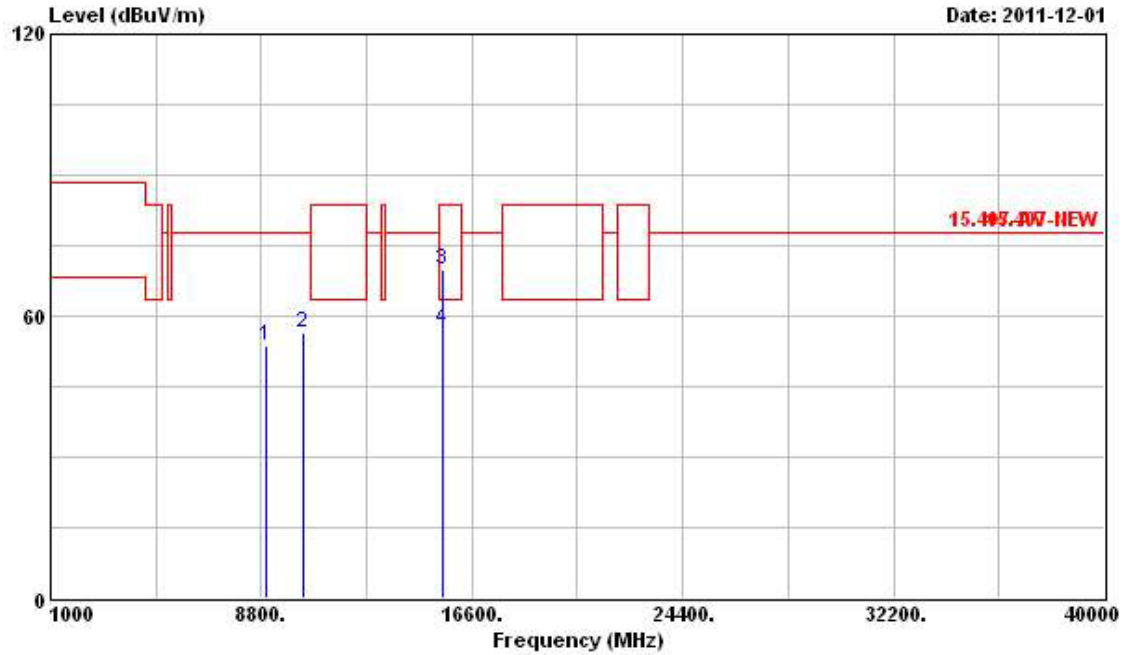
## Horizontal



	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	8782.000	53.29	-24.55	77.84	44.22	38.27	6.08	35.28	Peak	---	---
2	10360.000	54.82	-23.02	77.84	43.31	40.02	6.71	35.22	Peak	---	---
3	15540.000	71.84	-11.70	83.54	55.61	42.81	8.45	35.03	Peak	---	---
4	15540.000	58.28	-5.26	63.54	42.05	42.81	8.45	35.03	Average	---	---



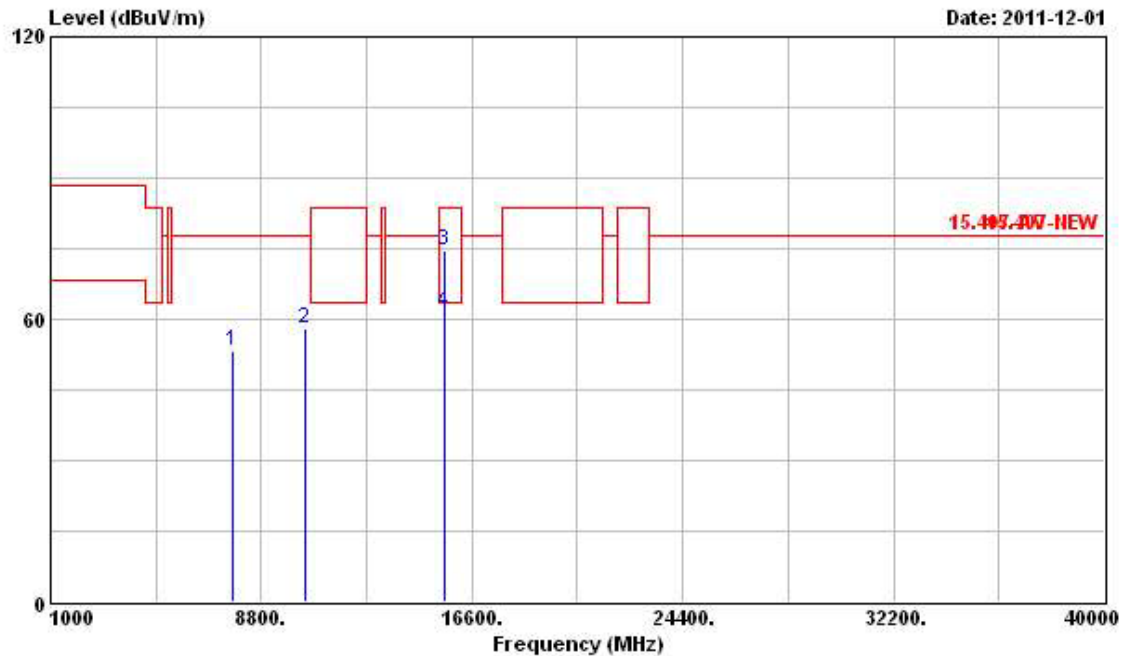
## Vertical



FOURSTAR

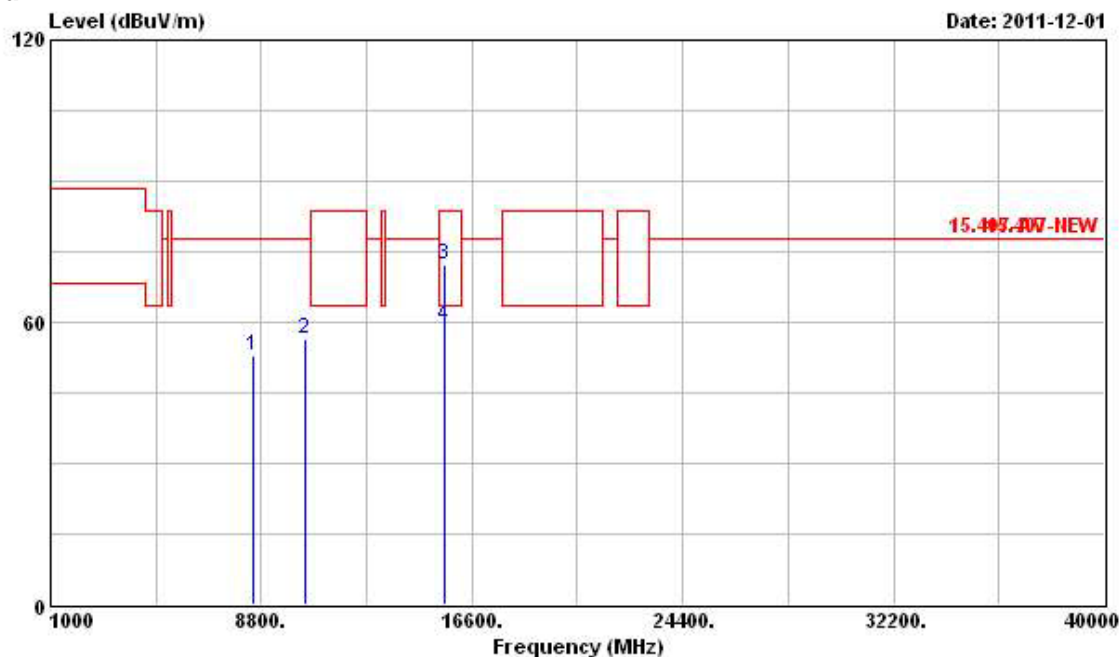
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	8971.000	53.55	-24.29	77.84	44.60	38.13	6.14	35.32	Peak	---	---
2	10360.000	56.27	-21.57	77.84	44.76	40.02	6.71	35.22	Peak	---	---
3	15540.000	69.86	-13.68	83.54	53.63	42.81	8.45	35.03	Peak	---	---
4	15540.000	57.09	-6.45	63.54	40.86	42.81	8.45	35.03	Average	---	---

Final Test Date	Dec. 01, 2011	Test Site No.	03CH02-HY
Temperature	22.3°C	Humidity	62%
Test Engineer	Daniel	Configuration	802.11a Ch. 40

**Horizontal**

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7762.000	53.22	-24.62	77.84	44.64	38.06	5.73	35.21	Peak	---	---
2	10400.000	57.88	-19.96	77.84	46.27	40.04	6.75	35.18	Peak	---	---
3	15600.000	74.64	-8.90	83.54	58.47	42.82	8.45	35.10	Peak	---	---
4	15600.000	61.75	-1.79	63.54	45.58	42.82	8.45	35.10	Average	---	---

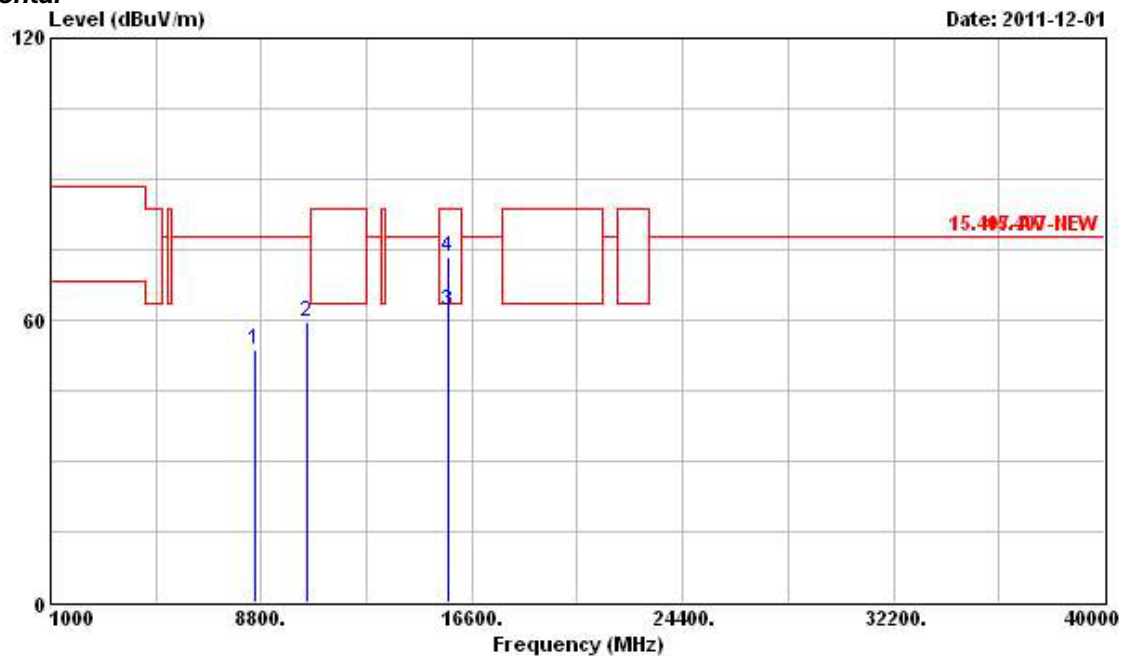
## Vertical



NO. DATE TIME

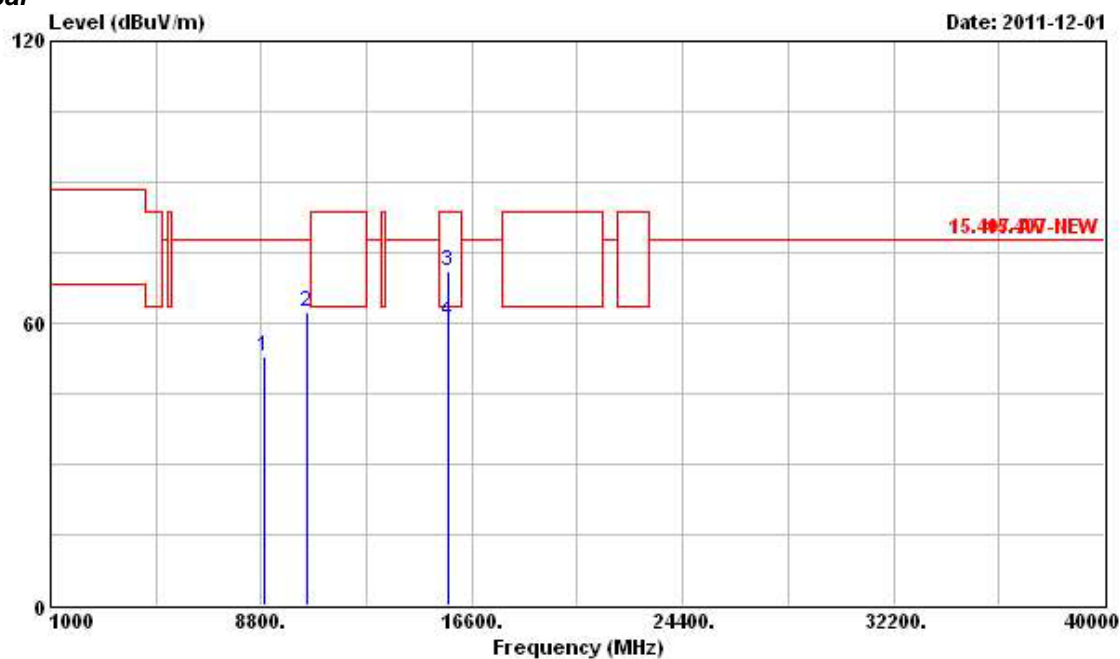
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	8530.000	53.02	-24.82	77.84	43.83	38.47	5.96	35.24	Peak	---	---
2	10400.000	56.33	-21.51	77.84	44.72	40.04	6.75	35.18	Peak	---	---
3	15600.000	72.13	-11.41	83.54	55.96	42.82	8.45	35.10	Peak	---	---
4	15600.000	59.06	-4.48	63.54	42.89	42.82	8.45	35.10	Average	---	---

Final Test Date	Dec. 01, 2011	Test Site No.	03CH02-HY
Temperature	22.3°C	Humidity	62%
Test Engineer	Daniel	Configuration	802.11a Ch. 48

**Horizontal**

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	8566.000	53.77	-24.07	77.84	44.60	38.45	5.97	35.25	Peak	---	---
2	10480.000	59.55	-18.29	77.84	47.76	40.09	6.82	35.12	Peak	---	---
3	15720.000	61.86	-1.68	63.54	45.76	42.84	8.46	35.20	Average	---	---
4	15720.000	73.44	-10.10	83.54	57.34	42.84	8.46	35.20	Peak	---	---

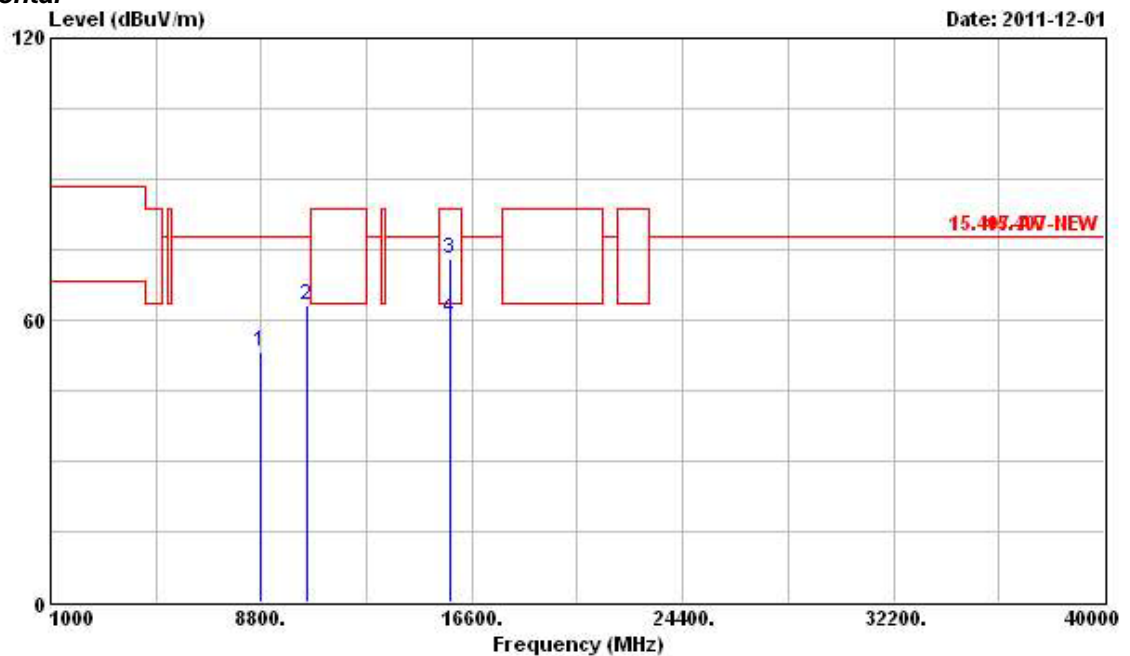
## Vertical



REMARKS

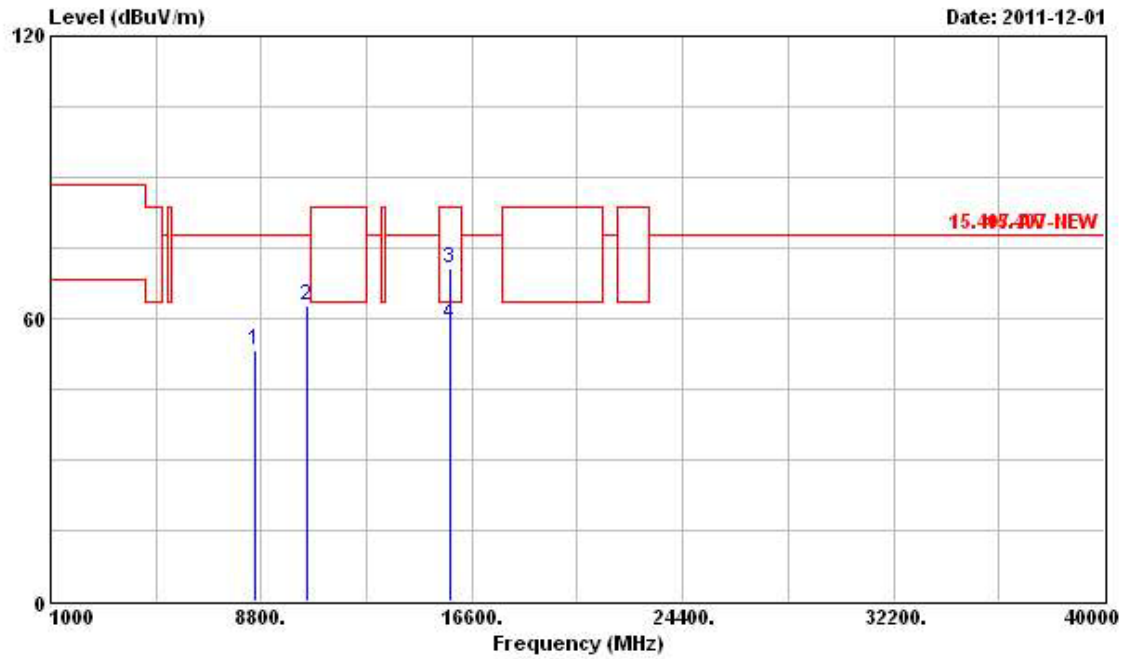
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	8926.000	52.76	-25.08	77.84	43.77	38.17	6.13	35.31	Peak	---	---
2	10480.000	62.34	-15.50	77.84	50.55	40.09	6.82	35.12	Peak	---	---
3	15720.000	70.96	-12.58	83.54	54.86	42.84	8.46	35.20	Peak	---	---
4	15720.000	60.46	-3.08	63.54	44.36	42.84	8.46	35.20	Average	---	---

Final Test Date	Dec. 01, 2011	Test Site No.	03CH02-HY
Temperature	22.3°C	Humidity	62%
Test Engineer	Daniel	Configuration	802.11a Ch. 52

**Horizontal**

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	8791.000	53.42	-24.42	77.84	44.36	38.27	6.08	35.29	Peak	---	---
2	10520.000	63.05	-14.79	77.84	51.19	40.11	6.85	35.10	Peak	---	---
3	15780.000	72.87	-10.67	83.54	56.83	42.86	8.46	35.28	Peak	---	---
4	15780.000	60.50	-3.04	63.54	44.46	42.86	8.46	35.28	Average	---	---

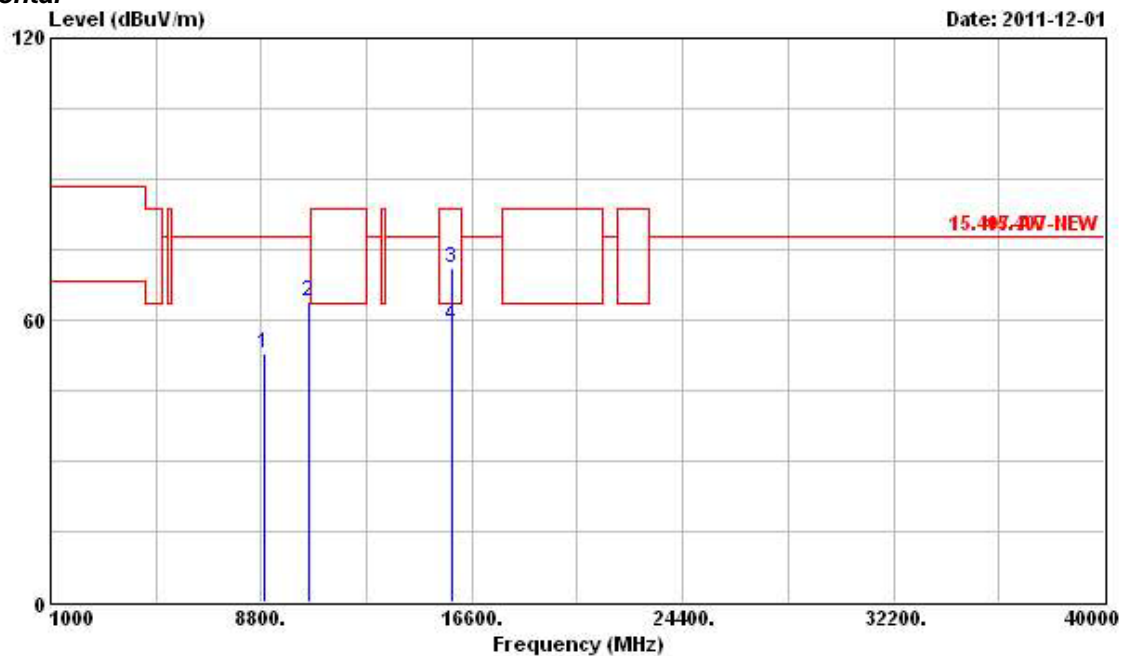
Vertical



FR160328

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	8539.000	53.22	-24.62	77.84	44.04	38.47	5.96	35.25	Peak	---	---
2	10520.000	62.79	-15.05	77.84	50.93	40.11	6.85	35.10	Peak	---	---
3	15780.000	70.64	-12.90	83.54	54.60	42.86	8.46	35.28	Peak	---	---
4	15780.000	58.76	-4.78	63.54	42.72	42.86	8.46	35.28	Average	---	---

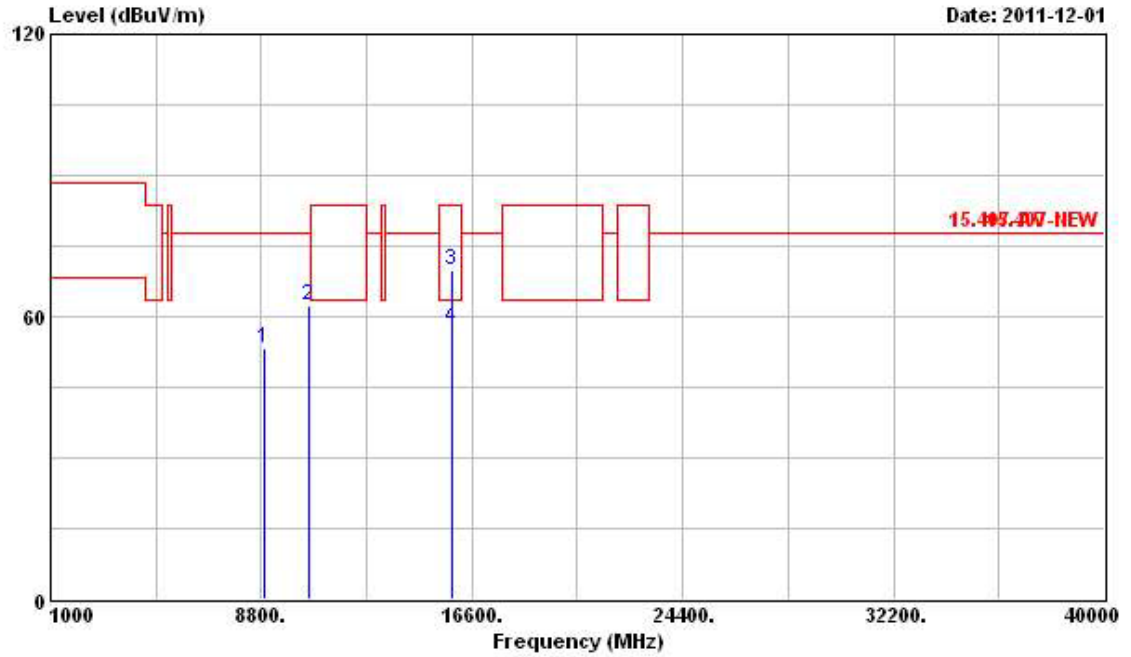
<b>Final Test Date</b>	Dec. 01, 2011	<b>Test Site No.</b>	03CH02-HY
<b>Temperature</b>	22.3°C	<b>Humidity</b>	62%
<b>Test Engineer</b>	Daniel	<b>Configuration</b>	802.11a Ch. 56

**Horizontal**

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	8899.000	52.95	-24.89	77.84	43.94	38.18	6.13	35.30	Peak	---	---
2	10560.000	63.92	-13.92	77.84	51.97	40.13	6.88	35.06	Peak	---	---
3	15840.000	71.22	-12.32	83.54	55.22	42.87	8.46	35.33	Peak	---	---
4	15840.000	58.80	-4.74	63.54	42.80	42.87	8.46	35.33	Average	---	---

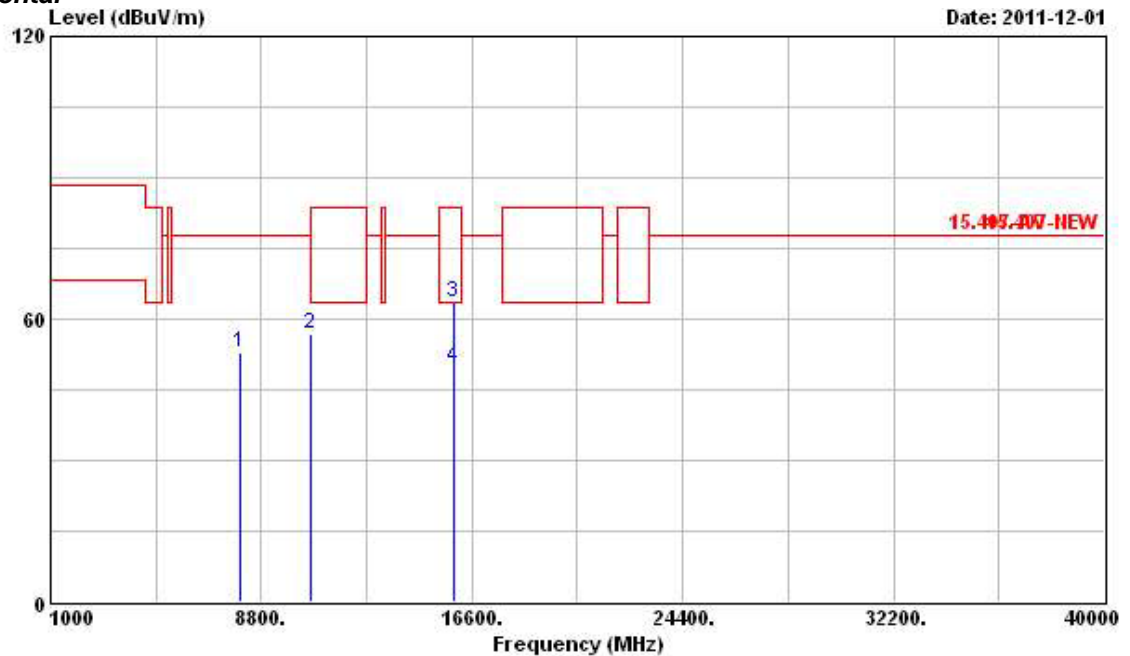


Vertical



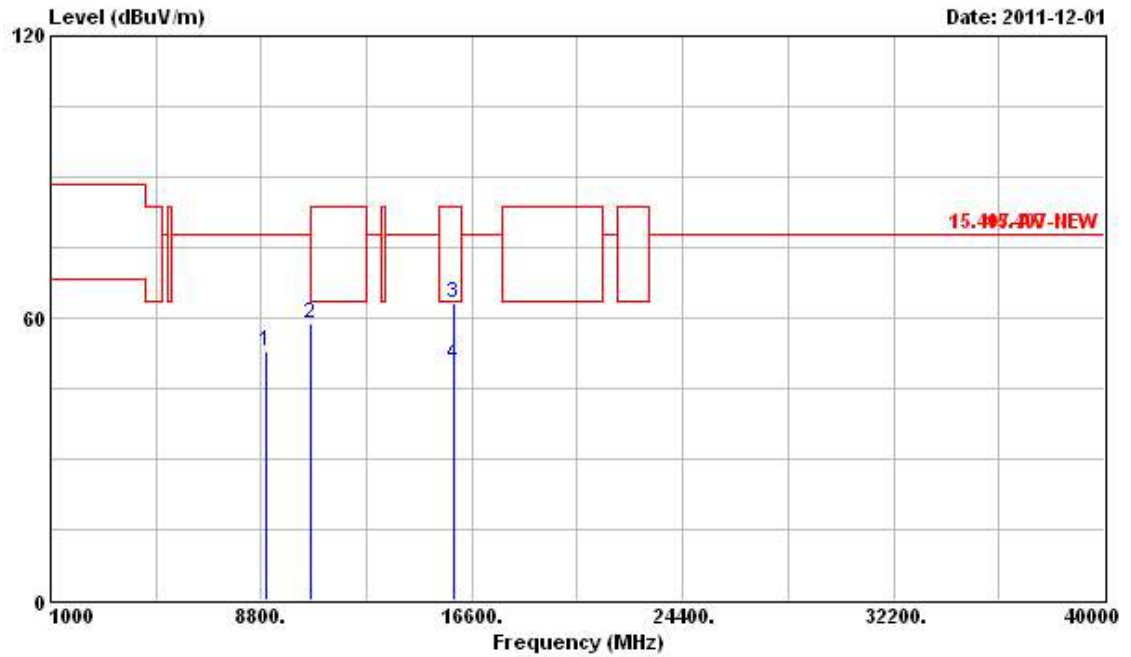
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	8899.000	53.21	-24.63	77.84	44.20	38.18	6.13	35.30	Peak	---	---
2	10560.000	62.42	-15.42	77.84	50.47	40.13	6.88	35.06	Peak	---	---
3	15840.000	69.81	-13.73	83.54	53.81	42.87	8.46	35.33	Peak	---	---
4	15840.000	57.45	-6.09	63.54	41.45	42.87	8.46	35.33	Average	---	---

Final Test Date	Dec. 01, 2011	Test Site No.	03CH02-HY
Temperature	22.3°C	Humidity	62%
Test Engineer	Daniel	Configuration	802.11a Ch. 64

**Horizontal**

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7990.000	53.07	-24.77	77.84	44.34	38.19	5.80	35.26	Peak	---	---
2	10640.000	56.98	-6.56	63.54	44.87	40.18	6.93	35.00	PK	---	---
3	15960.000	63.46	-20.08	83.54	47.55	42.89	8.47	35.45	Peak	---	---
4	15960.000	49.73	-13.81	63.54	33.82	42.89	8.47	35.45	Average	---	---

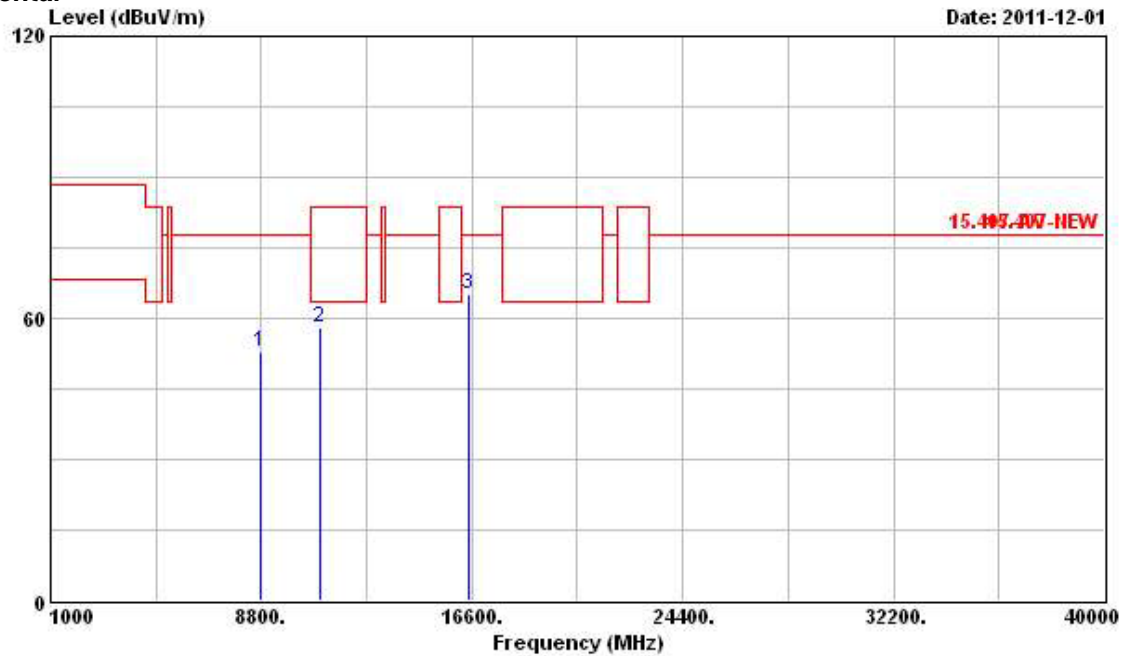
## Vertical



8971.000

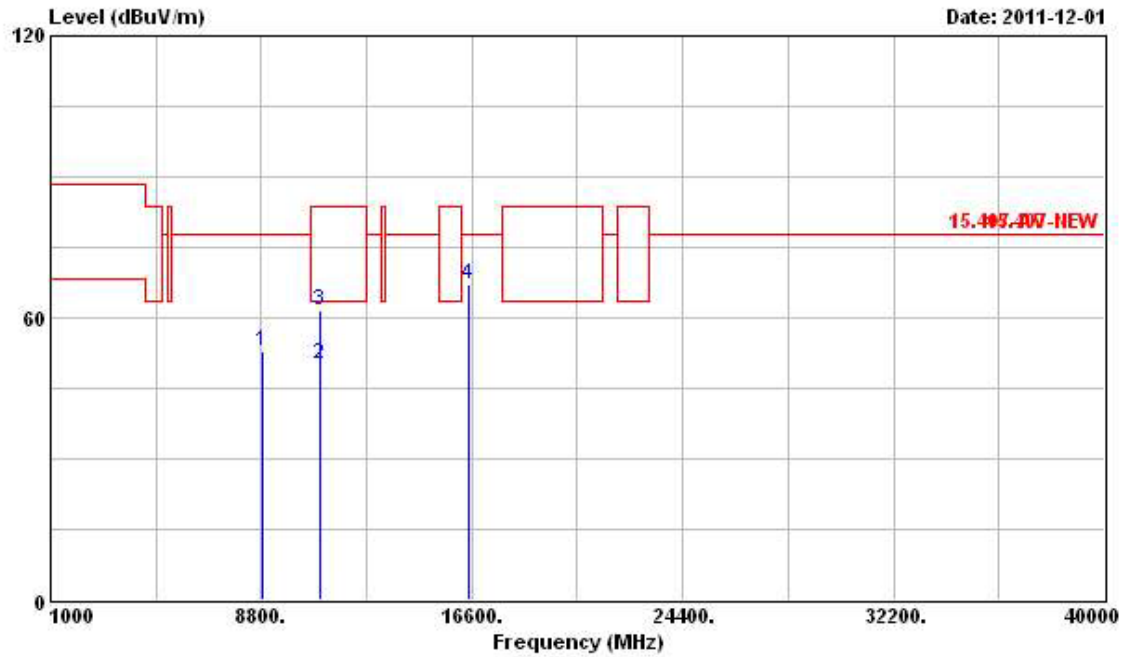
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	8971.000	52.88	-24.96	77.84	43.93	38.13	6.14	35.32	Peak	---	---
2	10640.000	58.96	-4.58	63.54	46.85	40.18	6.93	35.00	PK	---	---
3	15960.000	63.20	-20.34	83.54	47.29	42.89	8.47	35.45	Peak	---	---
4	15960.000	50.15	-13.39	63.54	34.24	42.89	8.47	35.45	Average	---	---

<b>Final Test Date</b>	Dec. 01, 2011	<b>Test Site No.</b>	03CH02-HY
<b>Temperature</b>	22.3°C	<b>Humidity</b>	62%
<b>Test Engineer</b>	Daniel	<b>Configuration</b>	802.11a Ch. 100

**Horizontal**

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	8790.000	52.90	-24.94	77.84	43.83	38.27	6.08	35.28	Peak	---	---
2	11000.000	58.13	-5.41	63.54	45.28	40.40	7.17	34.72	PK	---	---
3	16500.000	64.99	-12.85	77.84	48.24	43.50	8.24	34.99	Peak	---	---

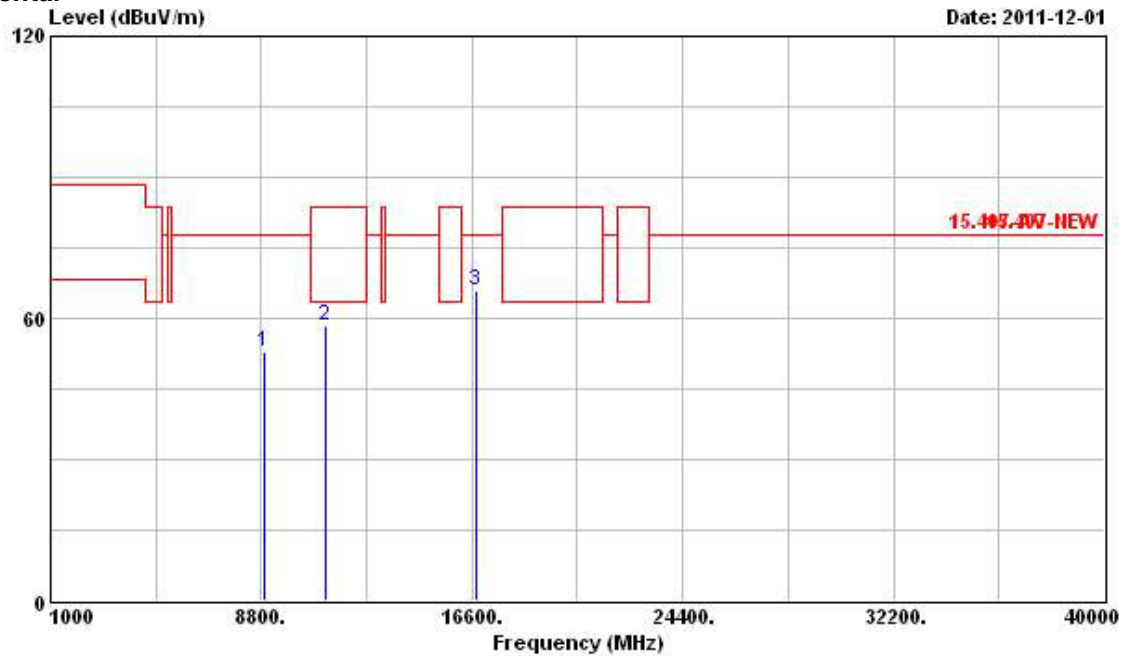
## Vertical



88.30328 20

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	8860.000	52.93	-24.91	77.84	43.90	38.22	6.11	35.30	Peak	---	---
2	11000.000	50.28	-13.26	63.54	37.43	40.40	7.17	34.72	Average	---	---
3	11000.000	61.77	-21.77	83.54	48.92	40.40	7.17	34.72	Peak	---	---
4	16500.000	66.97	-10.87	77.84	50.22	43.50	8.24	34.99	Peak	---	---

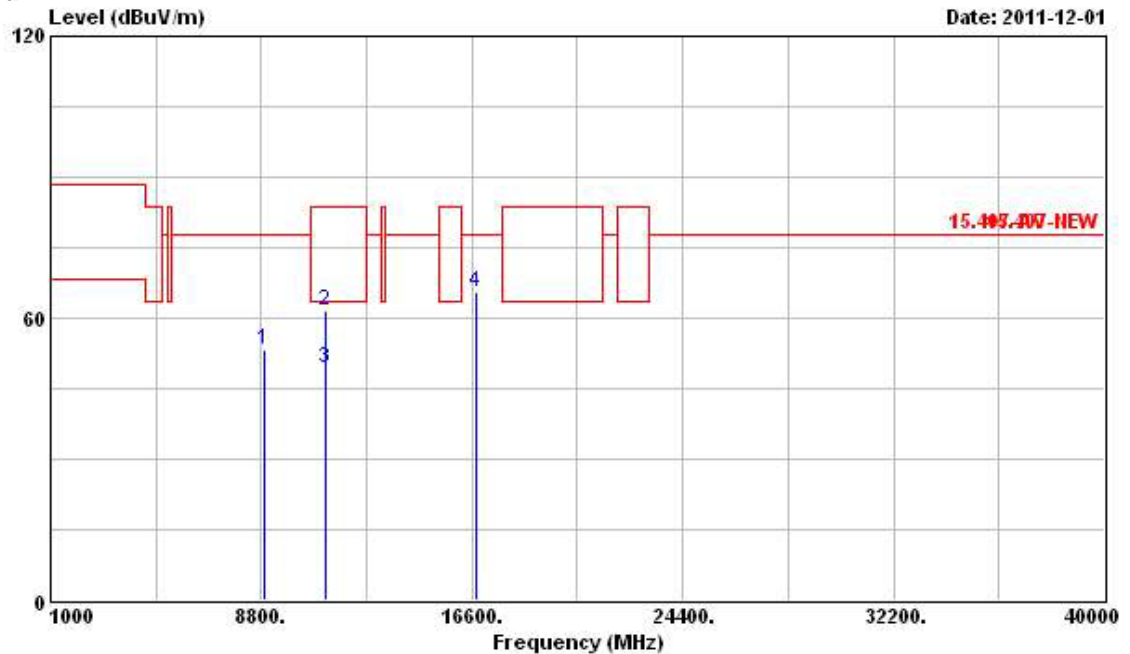
<b>Final Test Date</b>	Dec. 01, 2011	<b>Test Site No.</b>	03CH02-HY
<b>Temperature</b>	22.3°C	<b>Humidity</b>	62%
<b>Test Engineer</b>	Daniel	<b>Configuration</b>	802.11a Ch. 116

**Horizontal**

03CH02-HY

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	8910.000	52.93	-24.91	77.84	43.92	38.18	6.13	35.30	Peak	---	---
2	11160.000	58.54	-5.00	63.54	45.83	40.47	6.96	34.72	PK	---	---
3	16740.000	66.09	-11.75	77.84	48.53	43.60	8.47	34.51	Peak	---	---

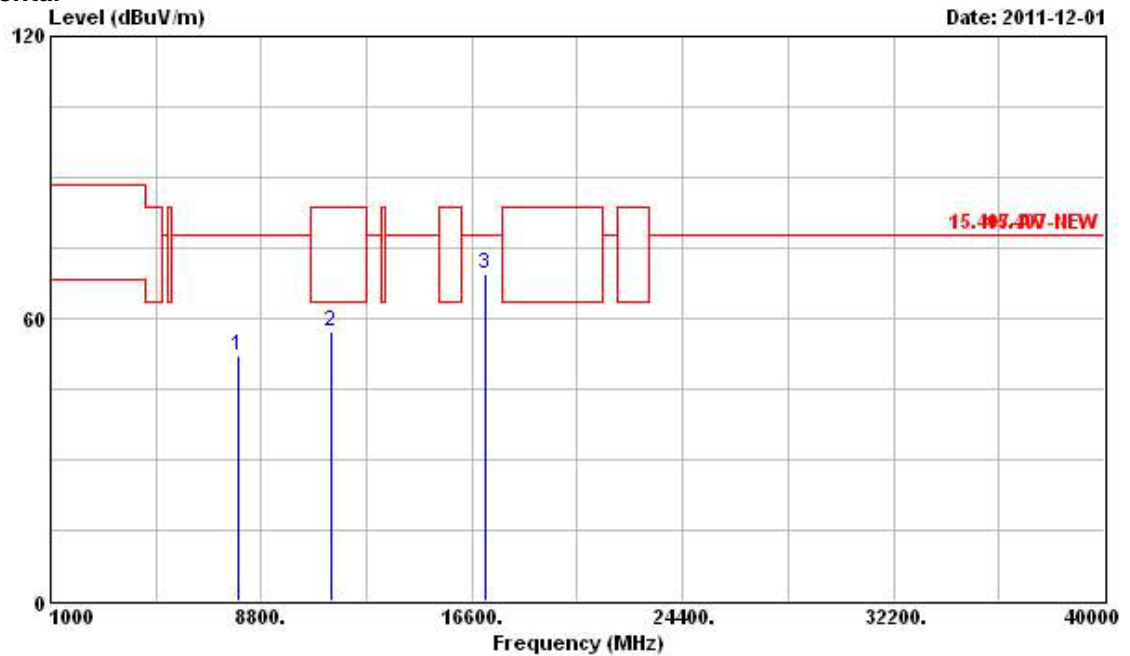
## Vertical



NOISE FLOOR

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	8940.000	53.24	-24.60	77.84	44.26	38.15	6.14	35.31	Peak	---	---
2	11160.000	61.47	-22.07	83.54	48.76	40.47	6.96	34.72	Peak	---	---
3	11160.000	49.25	-14.29	63.54	36.54	40.47	6.96	34.72	Average	---	---
4	16740.000	65.64	-12.20	77.84	48.08	43.60	8.47	34.51	Peak	---	---

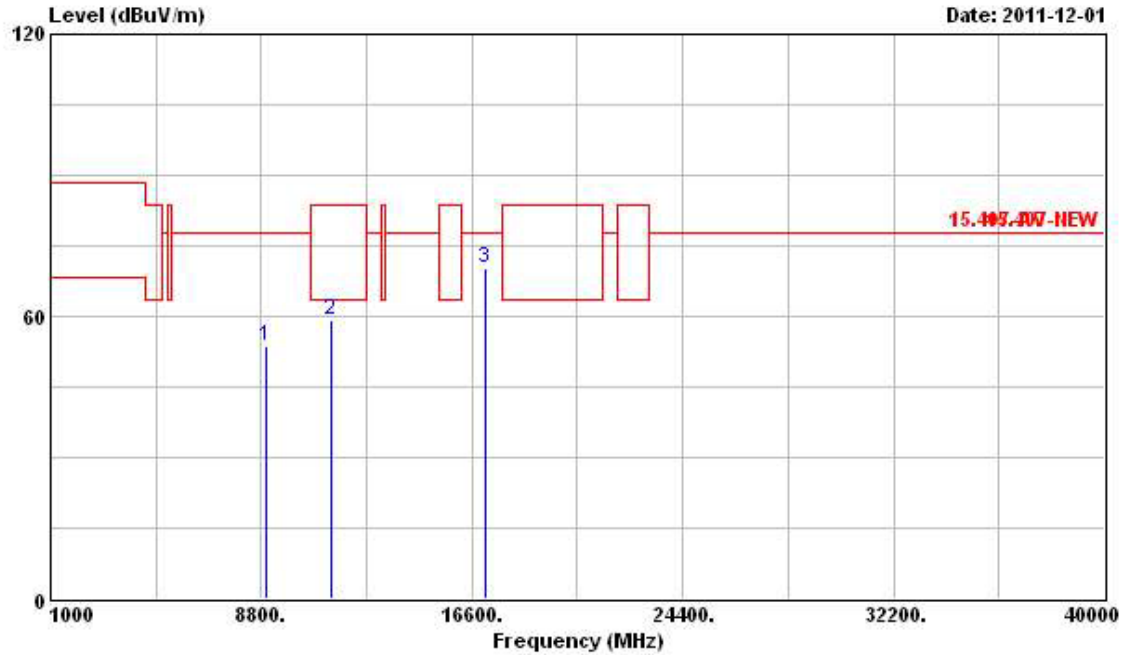
<b>Final Test Date</b>	Dec. 01, 2011	<b>Test Site No.</b>	03CH02-HY
<b>Temperature</b>	22.3°C	<b>Humidity</b>	62%
<b>Test Engineer</b>	Daniel	<b>Configuration</b>	802.11a Ch. 140

**Horizontal**

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7913.500	52.05	-25.79	77.84	43.37	38.15	5.78	35.25	Peak	---	---
2	11400.000	57.30	-6.24	63.54	44.75	40.56	6.71	34.72	PK	---	---
3	17100.000	69.46	-8.38	77.84	51.19	43.64	8.61	33.98	Peak	---	---



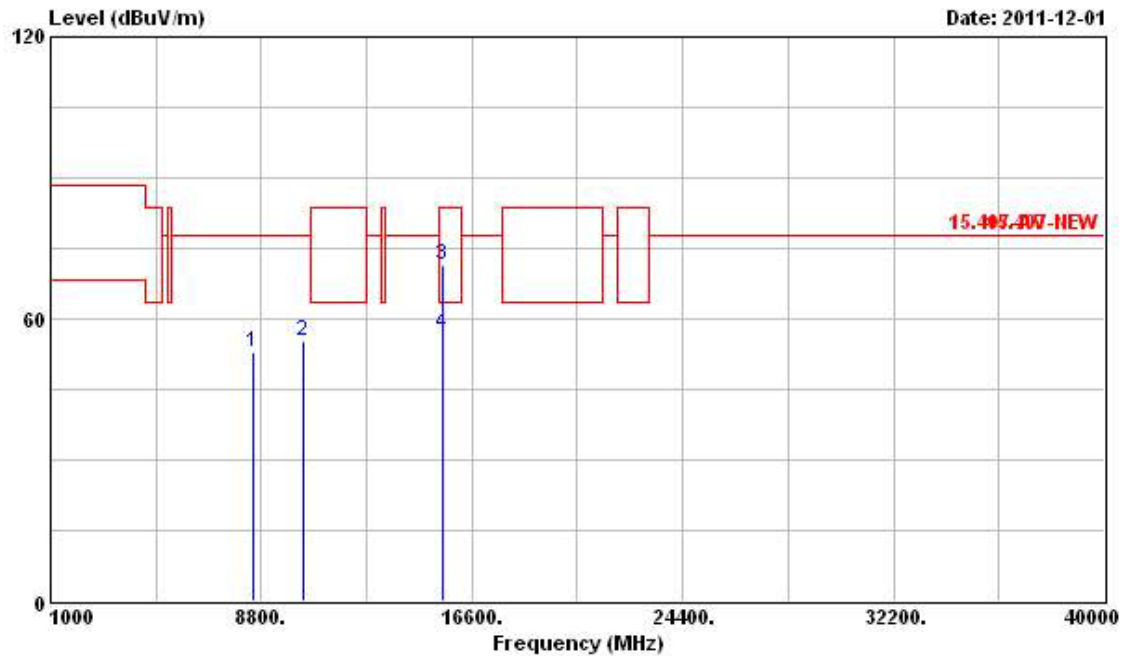
## Vertical



NOISE FLOOR

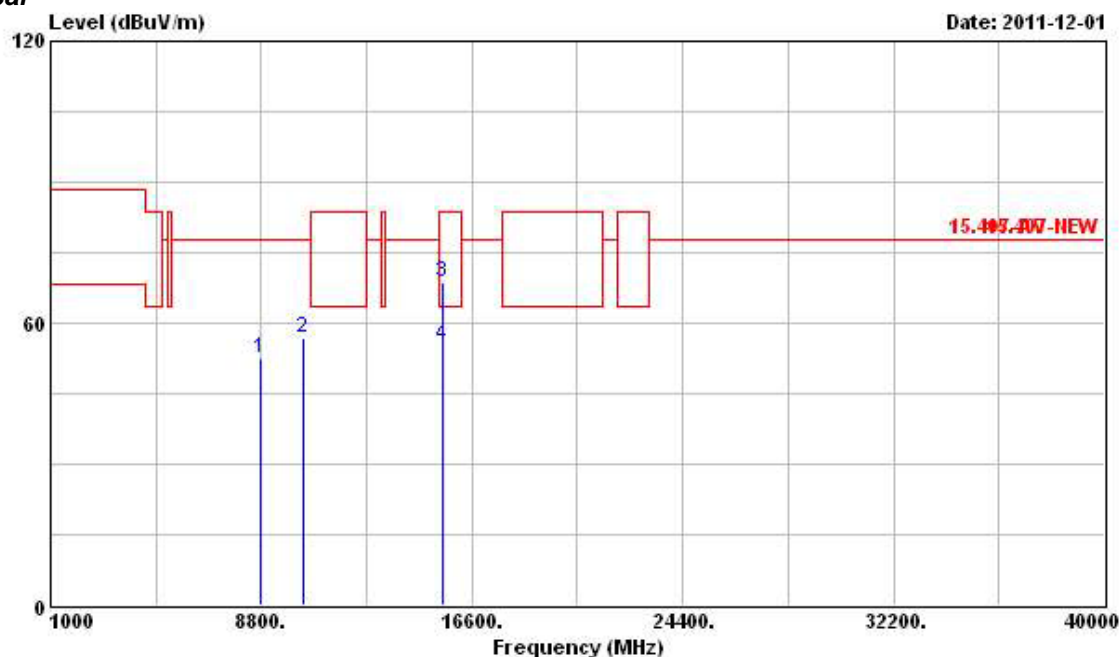
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	8953.000	53.54	-24.30	77.84	44.57	38.14	6.14	35.31	Peak	---	---
2	11400.000	59.29	-4.25	63.54	46.74	40.56	6.71	34.72	PK	---	---
3	17100.000	70.16	-7.68	77.84	51.89	43.64	8.61	33.98	Peak	---	---

<b>Final Test Date</b>	Dec. 01, 2011	<b>Test Site No.</b>	03CH02-HY
<b>Temperature</b>	22.3°C	<b>Humidity</b>	62%
<b>Test Engineer</b>	Daniel	<b>Configuration</b>	802.11n Ch. 36 (20MHz)

**Horizontal**

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	8503.000	53.09	-24.75	77.84	43.89	38.50	5.94	35.24	Peak	---	---
2	10360.000	55.21	-22.63	77.84	43.70	40.02	6.71	35.22	Peak	---	---
3	15540.000	71.43	-12.11	83.54	55.20	42.81	8.45	35.03	Peak	---	---
4	15540.000	56.83	-6.71	63.54	40.60	42.81	8.45	35.03	Average	---	---

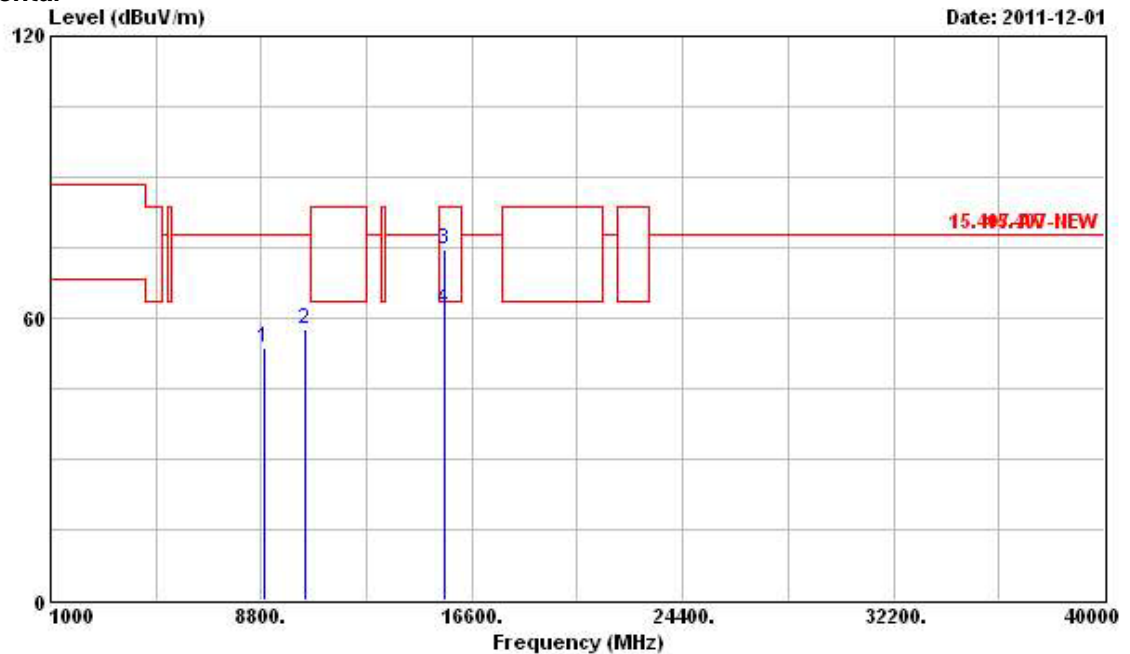
## Vertical



REMARK: 001

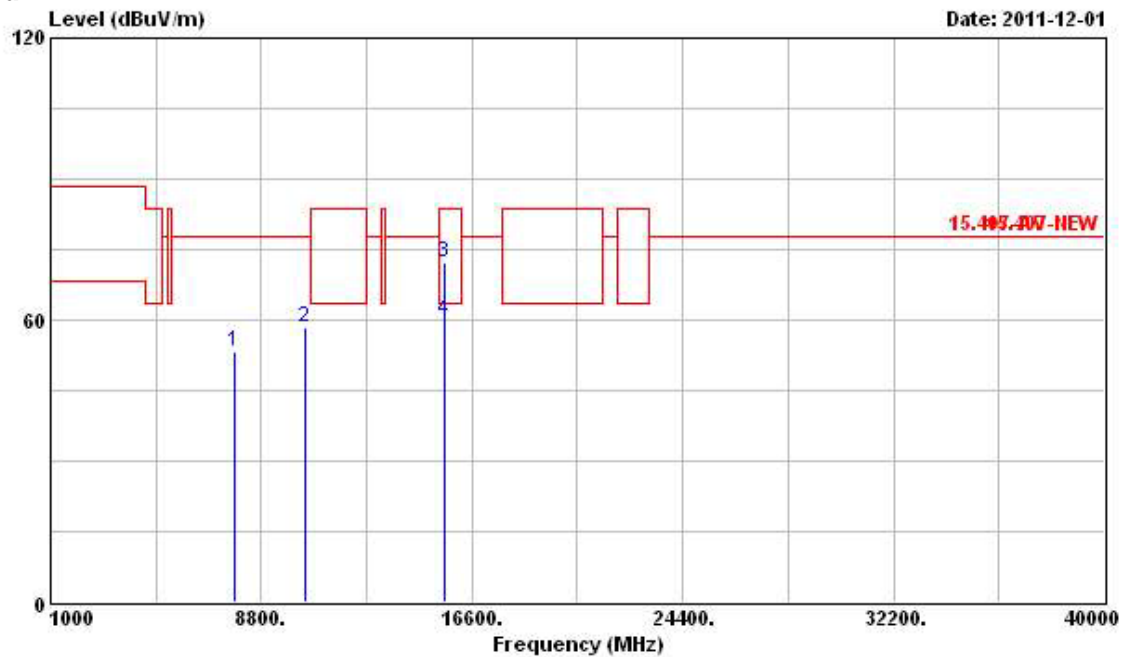
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	8755.000	52.56	-25.28	77.84	43.48	38.30	6.06	35.28	Peak	---
2	10360.000	56.98	-20.86	77.84	45.47	40.02	6.71	35.22	Peak	---
3	15540.000	68.76	-14.78	83.54	52.53	42.81	8.45	35.03	Peak	---
4	15540.000	55.41	-8.13	63.54	39.18	42.81	8.45	35.03	Average	---

Final Test Date	Dec. 01, 2011	Test Site No.	03CH02-HY
Temperature	22.3°C	Humidity	62%
Test Engineer	Daniel	Configuration	802.11n Ch. 40 (20 MHz)

**Horizontal**

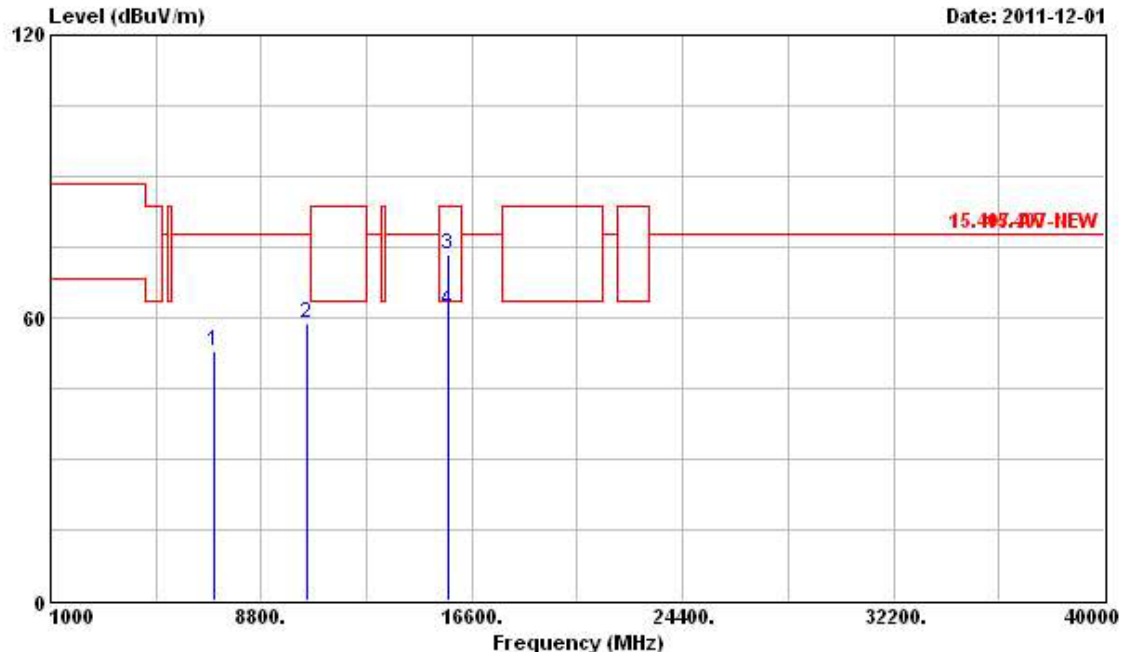
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	8899.000	53.59	-24.25	77.84	44.58	38.18	6.13	35.30	Peak	---	---
2	10400.000	57.61	-20.23	77.84	46.00	40.04	6.75	35.18	Peak	---	---
3	15600.000	74.51	-9.03	83.54	58.34	42.82	8.45	35.10	Peak	---	---
4	15600.000	62.12	-1.42	63.54	45.95	42.82	8.45	35.10	Average	---	---

## Vertical



	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7783.000	53.42	-24.42	77.84	44.83	38.07	5.74	35.22	Peak	---	---
2	10400.000	58.36	-19.48	77.84	46.75	40.04	6.75	35.18	Peak	---	---
3	15600.000	72.33	-11.21	83.54	56.16	42.82	8.45	35.10	Peak	---	---
4	15600.000	59.92	-3.62	63.54	43.75	42.82	8.45	35.10	Average	---	---

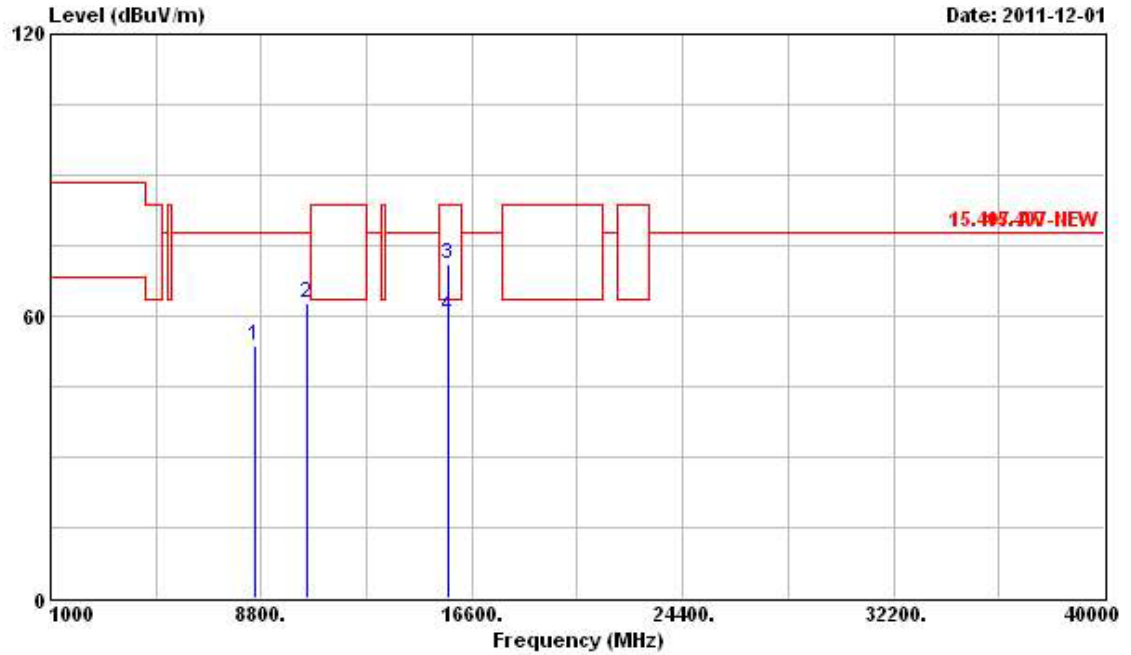
<b>Final Test Date</b>	Dec. 01, 2011	<b>Test Site No.</b>	03CH02-HY
<b>Temperature</b>	22.3°C	<b>Humidity</b>	62%
<b>Test Engineer</b>	Daniel	<b>Configuration</b>	802.11n Ch. 48 (20 MHz)

**Horizontal**

MEASUREMENT

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7054.000	52.98	-24.86	77.84	44.60	37.81	5.60	35.03	Peak	---	---
2	10480.000	58.93	-18.91	77.84	47.14	40.09	6.82	35.12	Peak	---	---
3	15720.000	73.41	-10.13	83.54	57.31	42.84	8.46	35.20	Peak	---	---
4	15720.000	61.55	-1.99	63.54	45.45	42.84	8.46	35.20	Average	---	---

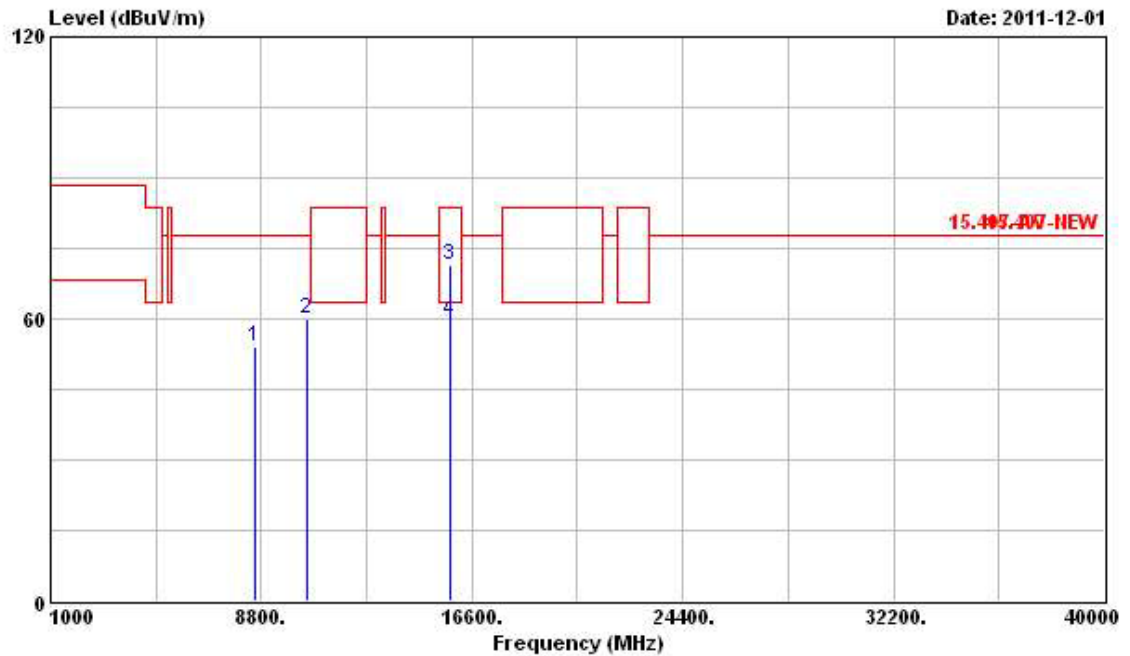
## Vertical



15.405.007-NEW

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	8566.000	53.86	-23.98	77.84	44.69	38.45	5.97	35.25	Peak	---	---
2	10480.000	62.86	-14.98	77.84	51.07	40.09	6.82	35.12	Peak	---	---
3	15720.000	70.97	-12.57	83.54	54.87	42.84	8.46	35.20	Peak	---	---
4	15720.000	59.83	-3.71	63.54	43.73	42.84	8.46	35.20	Average	---	---

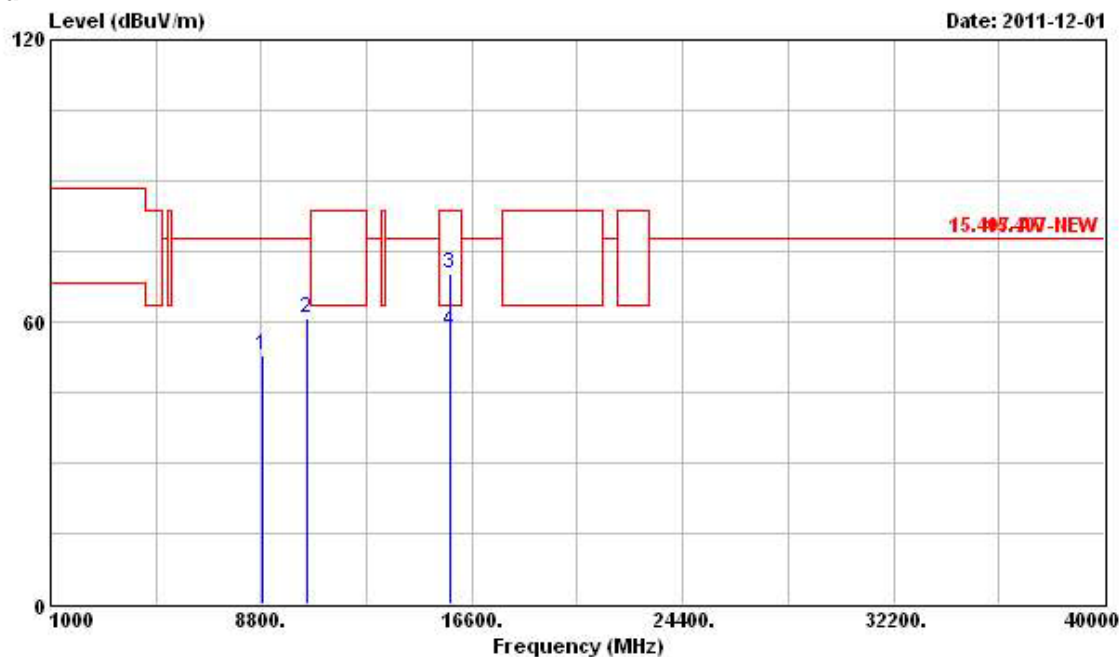
<b>Final Test Date</b>	Dec. 01, 2011	<b>Test Site No.</b>	03CH02-HY
<b>Temperature</b>	22.3°C	<b>Humidity</b>	62%
<b>Test Engineer</b>	Daniel	<b>Configuration</b>	802.11n Ch. 52 (20MHz)

**Horizontal**

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	8566.000	54.09	-23.75	77.84	44.92	38.45	5.97	35.25	Peak	---	---
2	10520.000	59.88	-17.96	77.84	48.02	40.11	6.85	35.10	Peak	---	---
3	15780.000	71.46	-12.08	83.54	55.42	42.86	8.46	35.28	Peak	---	---
4	15780.000	59.72	-3.82	63.54	43.68	42.86	8.46	35.28	Average	---	---

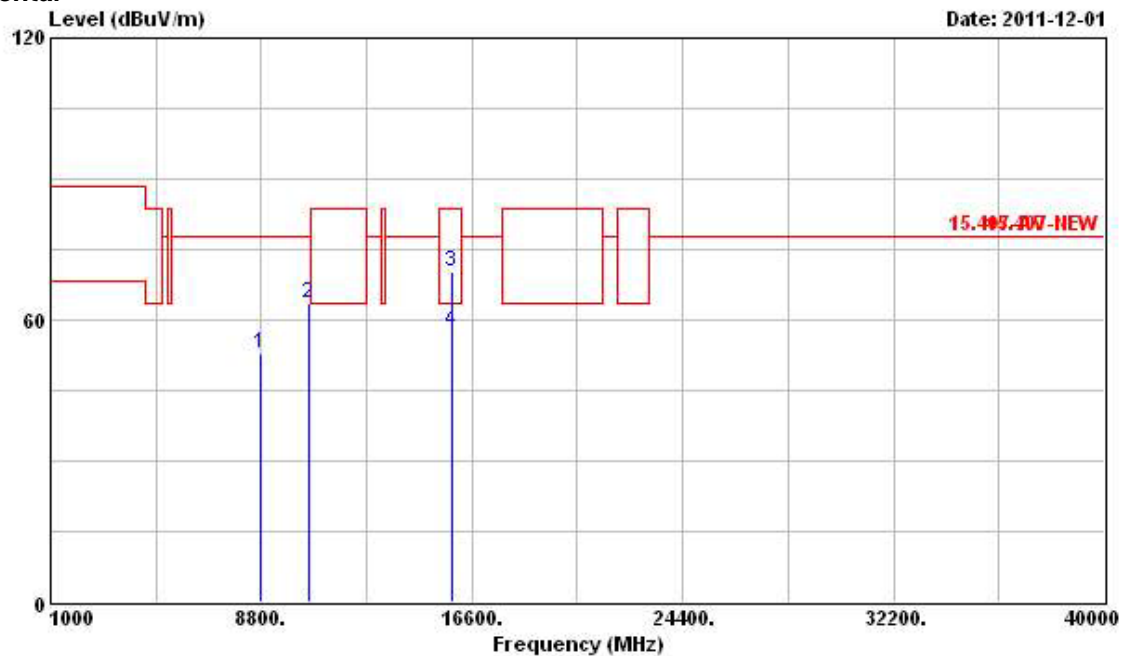


## Vertical



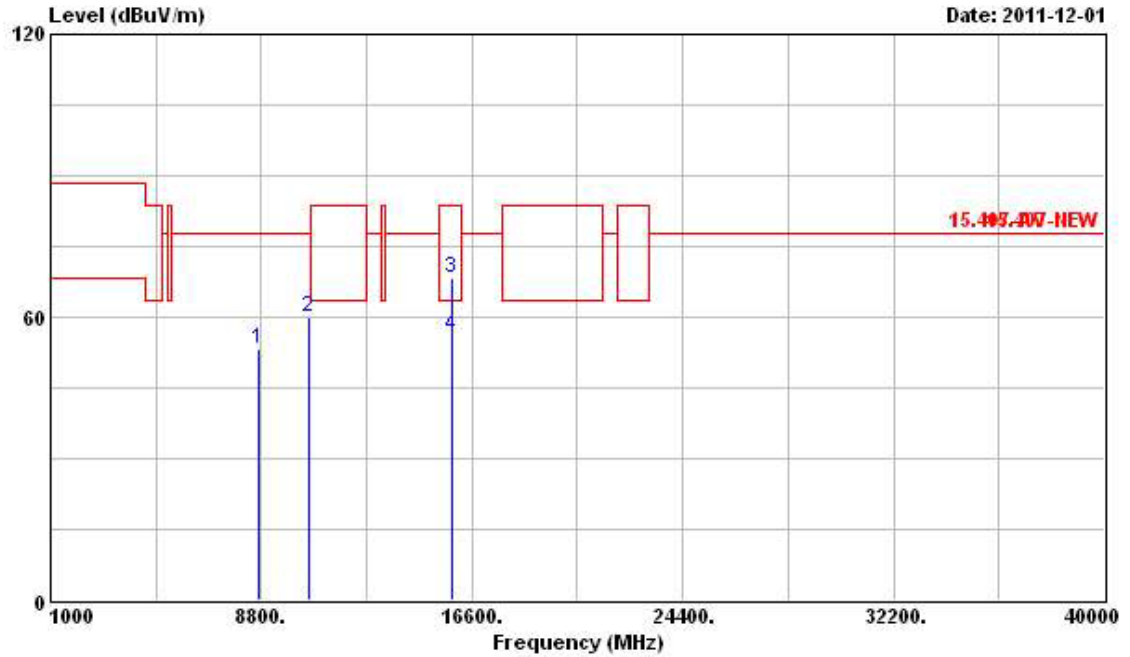
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	8827.000	52.72	-25.12	77.84	43.67	38.25	6.09	35.29	Peak	---	---
2	10520.000	60.82	-17.02	77.84	48.96	40.11	6.85	35.10	Peak	---	---
3	15760.000	70.16	-13.38	83.54	54.10	42.85	8.46	35.25	Peak	---	---
4	15760.000	58.22	-5.32	63.54	42.16	42.85	8.46	35.25	Average	---	---

<b>Final Test Date</b>	Dec. 01, 2011	<b>Test Site No.</b>	03CH02-HY
<b>Temperature</b>	22.3°C	<b>Humidity</b>	62%
<b>Test Engineer</b>	Daniel	<b>Configuration</b>	802.11n Ch. 56 (20 MHz)

**Horizontal**

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	8782.000	53.05	-24.79	77.84	43.98	38.27	6.08	35.28	Peak	---	---
2	10560.000	63.59	-14.25	77.84	51.64	40.13	6.88	35.06	Peak	---	---
3	15840.000	70.26	-13.28	83.54	54.26	42.87	8.46	35.33	Peak	---	---
4	15840.000	57.69	-5.85	63.54	41.69	42.87	8.46	35.33	Average	---	---

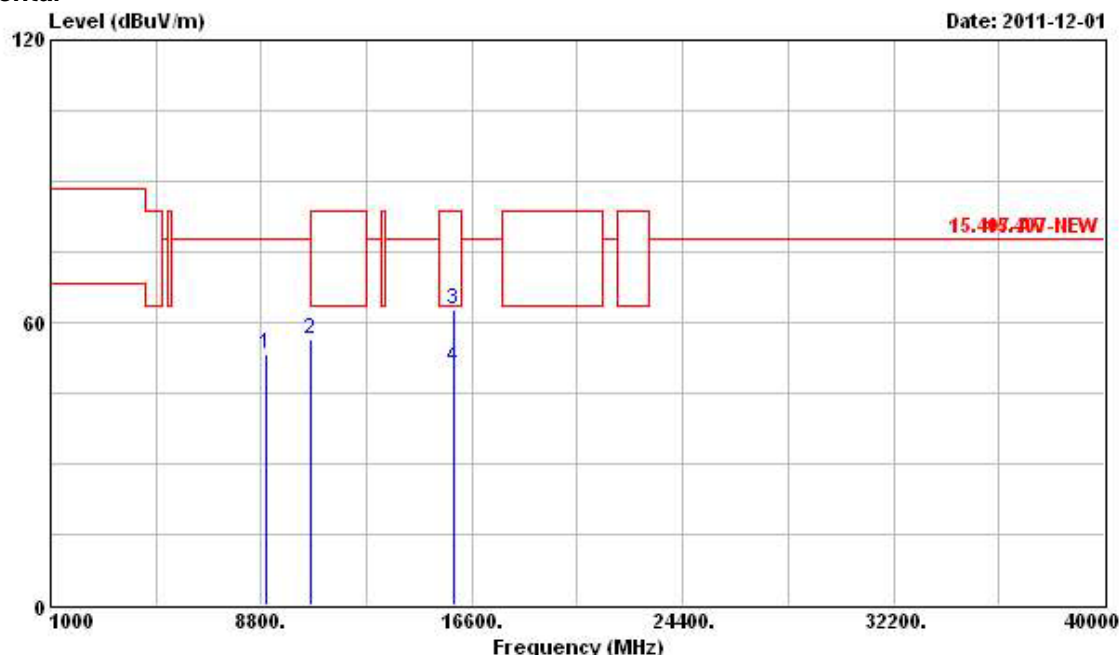
Vertical



8030153.20 20

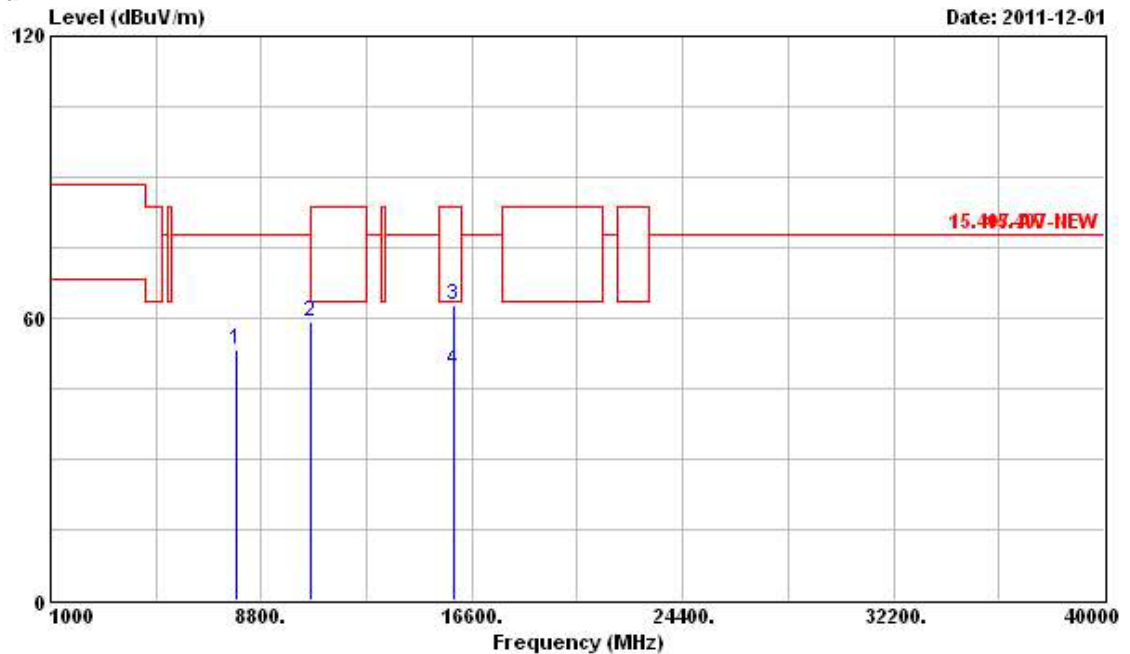
	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp		Ant	Table
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
			dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	8719.000	53.34	-24.50	77.84	44.25	38.33	6.04	35.28	Peak	---	---
2	10560.000	59.99	-17.85	77.84	48.04	40.13	6.88	35.06	Peak	---	---
3	15840.000	68.32	-15.22	83.54	52.32	42.87	8.46	35.33	Peak	---	---
4	15840.000	55.91	-7.63	63.54	39.91	42.87	8.46	35.33	Average	---	---

Final Test Date	Dec. 01, 2011	Test Site No.	03CH02-HY
Temperature	22.3°C	Humidity	62%
Test Engineer	Daniel	Configuration	802.11n Ch. 64 (20 MHz)

**Horizontal**

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	8962.000	53.39	-24.45	77.84	44.42	38.14	6.14	35.31	Peak	---	---
2	10640.000	56.64	-6.90	63.54	44.53	40.18	6.93	35.00	PK	---	---
3	15960.000	62.90	-20.64	83.54	46.99	42.89	8.47	35.45	Peak	---	---
4	15960.000	50.67	-12.87	63.54	34.76	42.89	8.47	35.45	Average	---	---

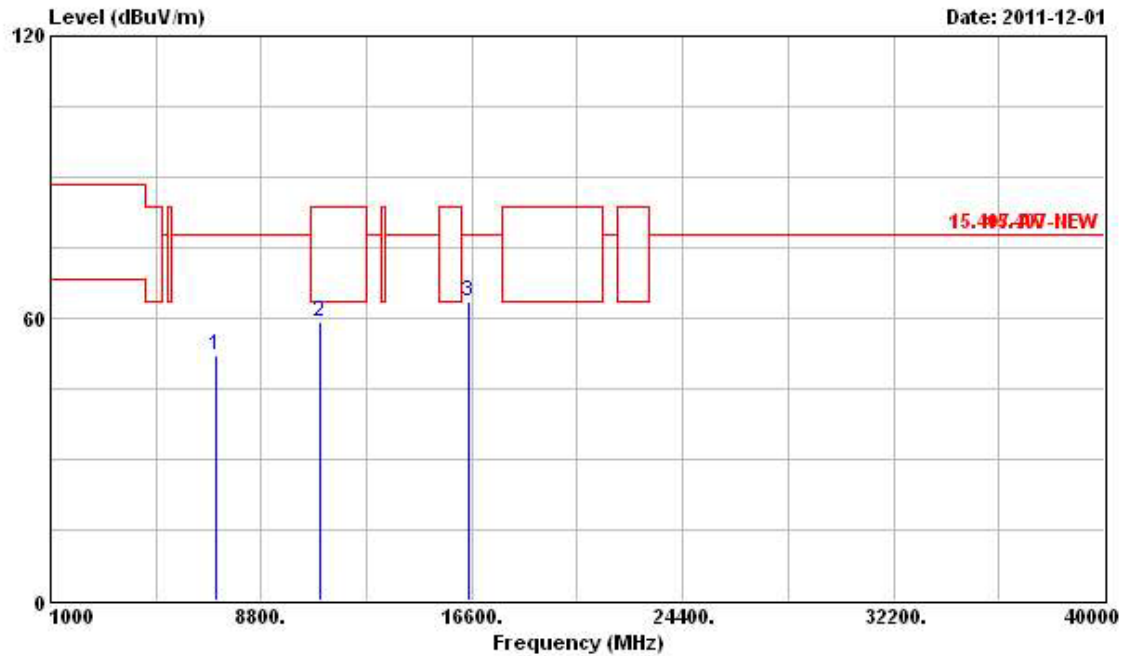
## Vertical



REMARK

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7891.000	53.27	-24.57	77.84	44.60	38.13	5.78	35.24	Peak	---	---
2	10640.000	59.23	-4.31	63.54	47.12	40.18	6.93	35.00	PK	---	---
3	15960.000	62.73	-20.81	83.54	46.82	42.89	8.47	35.45	Peak	---	---
4	15960.000	49.02	-14.52	63.54	33.11	42.89	8.47	35.45	Average	---	---

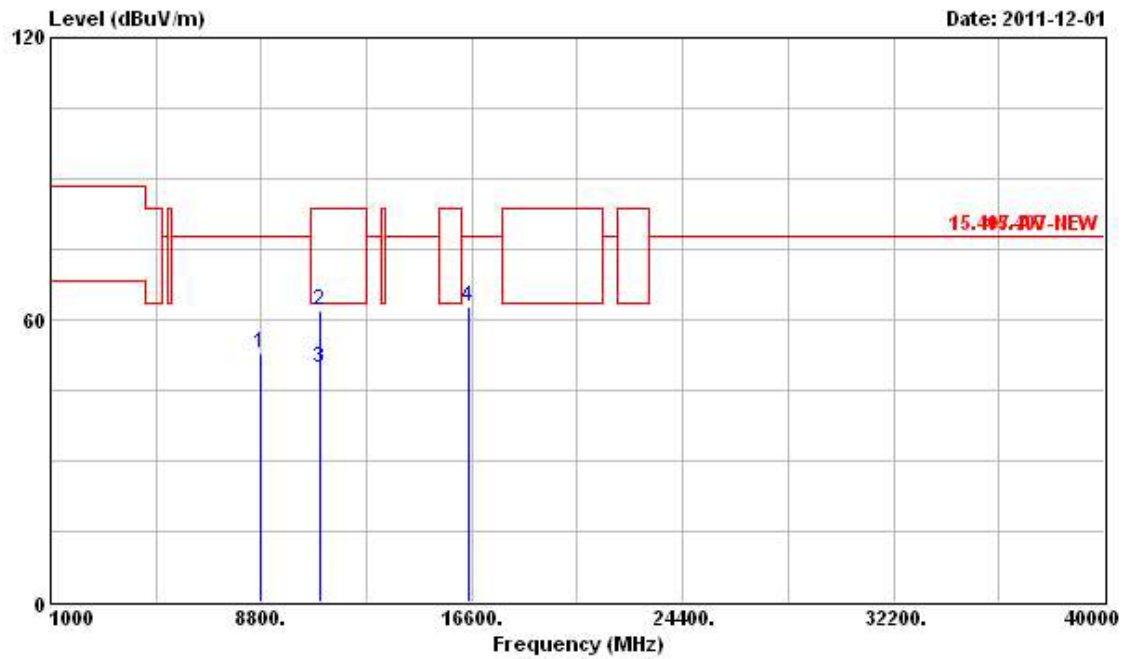
Final Test Date	Dec. 01, 2011	Test Site No.	03CH02-HY
Temperature	22.3°C	Humidity	62%
Test Engineer	Daniel	Configuration	802.11n Ch. 100 (20MHz)

**Horizontal**

NOISE FLOOR

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7150.000	52.09	-25.75	77.84	43.70	37.83	5.62	35.06	Peak	---	---
2	11000.000	59.25	-4.29	63.54	46.40	40.40	7.17	34.72	PK	---	---
3	16500.000	63.72	-14.12	77.84	46.97	43.50	8.24	34.99	Peak	---	---

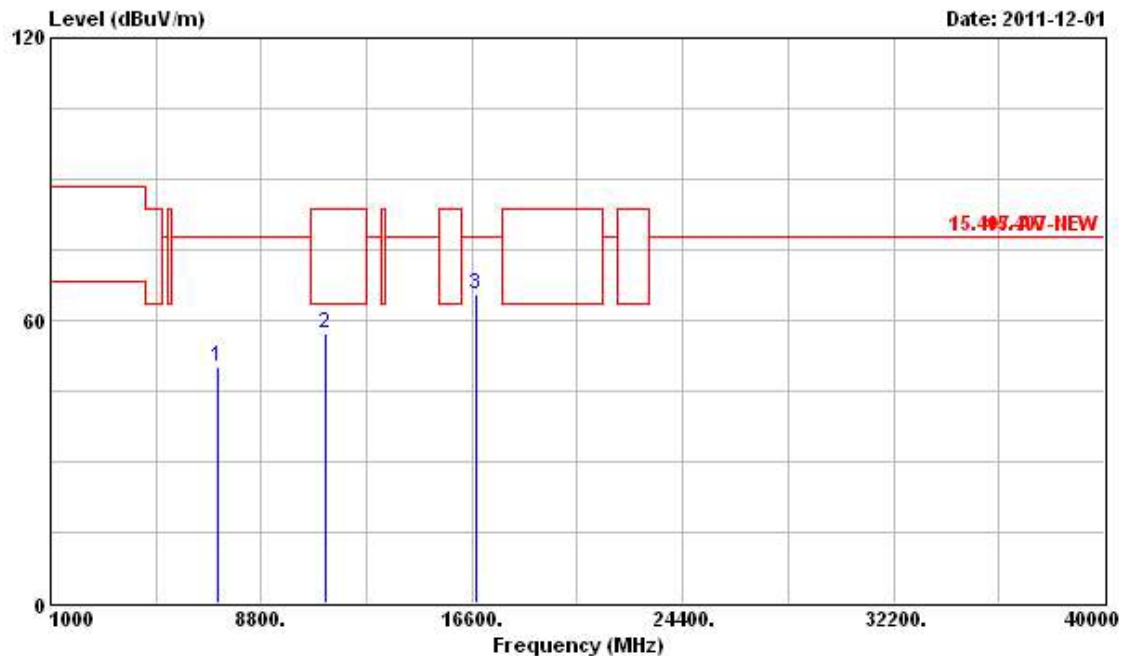
## Vertical



NOV 29 2011

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	8791.000	53.04	-24.80	77.84	43.98	38.27	6.08	35.29	Peak	---	---
2	11000.000	62.07	-21.47	83.54	49.22	40.40	7.17	34.72	Peak	---	---
3	11000.000	49.89	-13.65	63.54	37.04	40.40	7.17	34.72	Average	---	---
4	16500.000	62.60	-15.24	77.84	45.85	43.50	8.24	34.99	Peak	---	---

<b>Final Test Date</b>	Dec. 01, 2011	<b>Test Site No.</b>	03CH02-HY
<b>Temperature</b>	22.3°C	<b>Humidity</b>	62%
<b>Test Engineer</b>	Daniel	<b>Configuration</b>	802.11n Ch. 116 (20 MHz)

**Horizontal**

802.11n

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7190.000	50.29	-27.55	77.84	41.90	37.84	5.62	35.07	Peak	---	---
2	11160.000	57.36	-6.18	63.54	44.65	40.47	6.96	34.72	PK	---	---
3	16740.000	65.37	-12.47	77.84	47.81	43.60	8.47	34.51	Peak	---	---