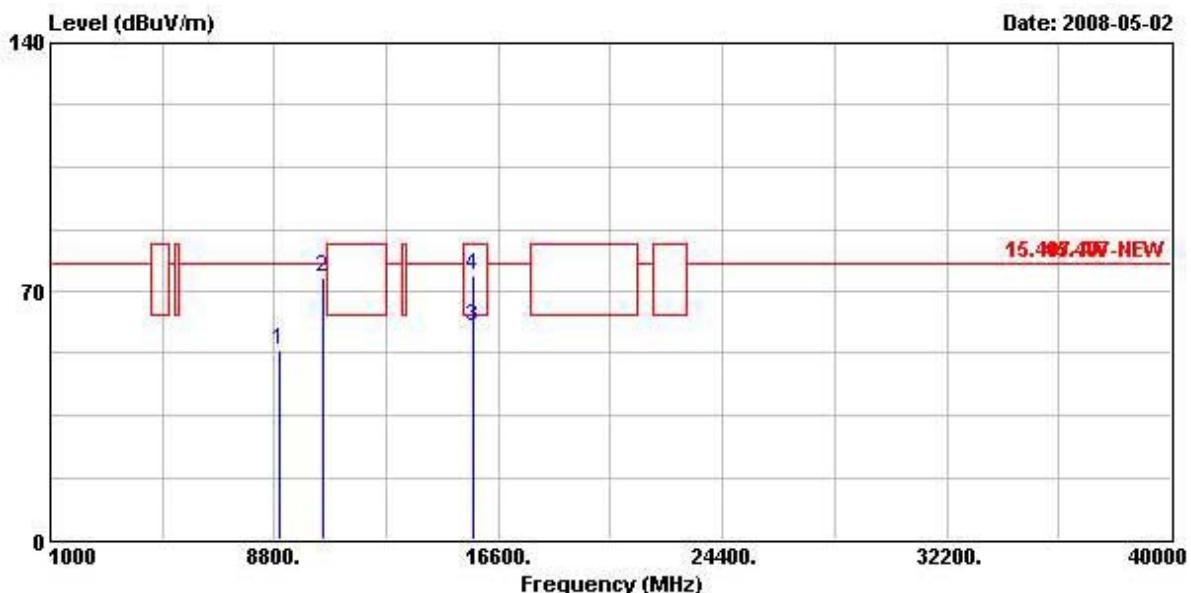
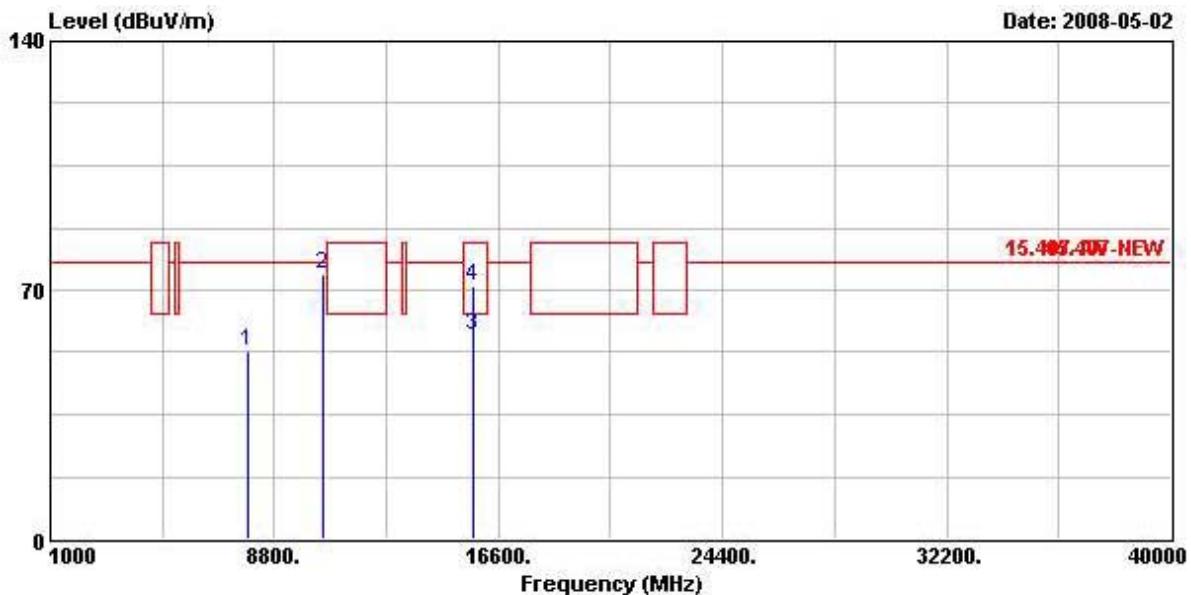


Test date	May 02, 2008	Test Site No.	03CH03-HY
Temperature	26°C	Humidity	54%
Test Engineer	Duncan	Configuration	802.11n CH 48 (20MHz)

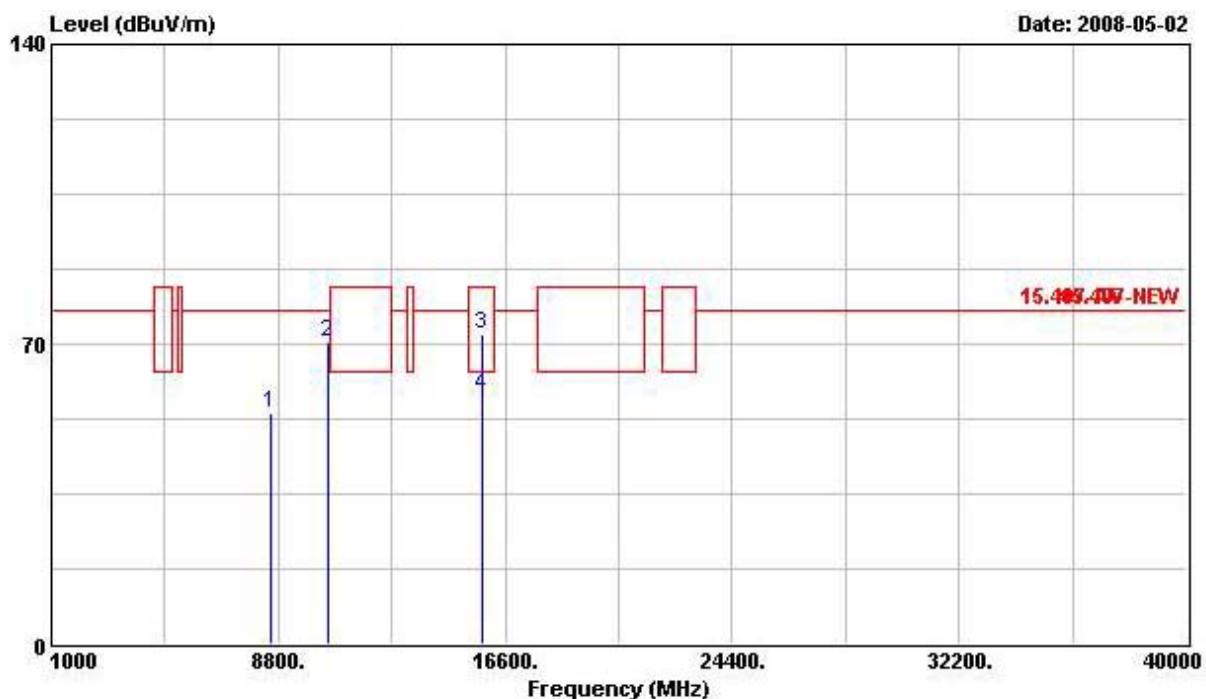
**Horizontal**

Freq	Level	Over Limit	Line	Read Antenna		Cable Loss	Preamp Factor	Remark
				MHz	dBuV/m	dB	dBuV/m	dB
1	8996.000	53.17	-24.67	77.84	42.78	38.59	4.60	32.81 PEAK
2	10480.000	73.75	-4.09	77.84	59.47	39.30	6.23	31.25 PEAK
3	15718.800	59.86	-3.68	63.54	44.46	37.59	7.41	29.60 AVERAGE
4	15718.800	74.32	-9.22	83.54	58.92	37.59	7.41	29.60 Peak

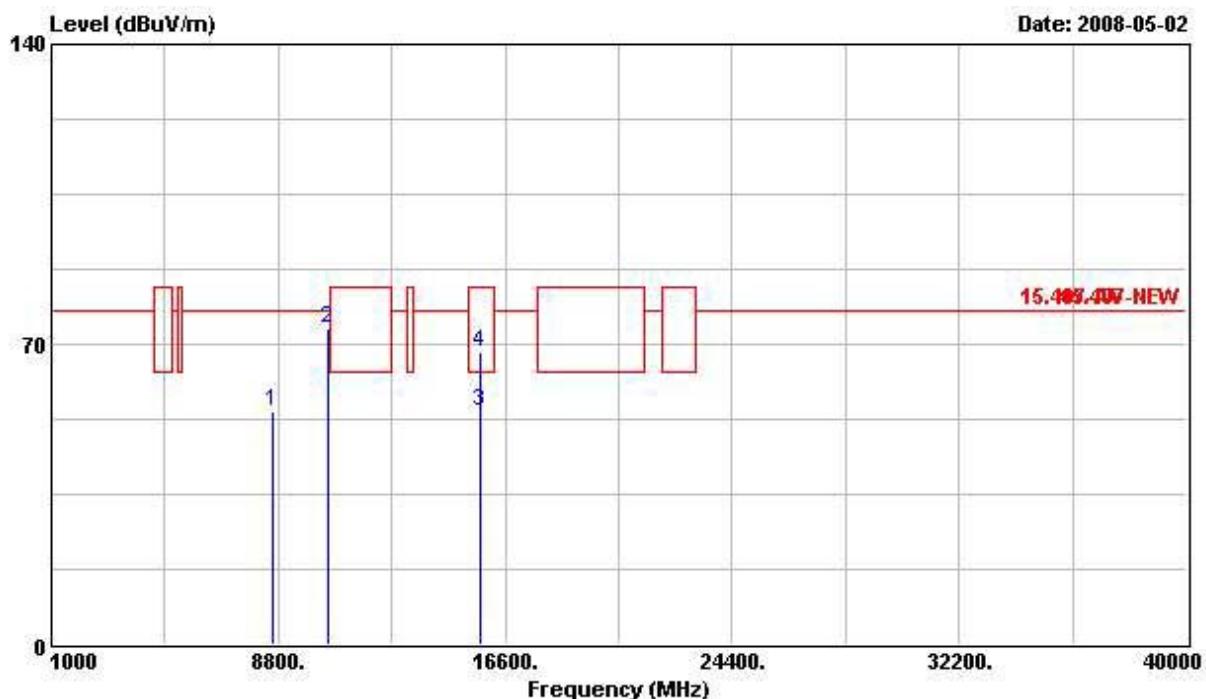
*Vertical*

Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Remark
		Line	dBuV/m	dB	dBuV	dB/m	dB	
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	7888.000	52.65	-25.19	77.84	43.14	37.68	4.67	32.84 PEAK
2	10488.000	74.70	-3.14	77.84	60.42	39.30	6.23	31.25 PEAK
3	15722.300	57.13	-6.41	63.54	41.73	37.59	7.41	29.60 AVERAGE
4	15722.300	71.32	-12.22	83.54	55.92	37.59	7.41	29.60 Peak

<b>Test date</b>	May 02, 2008	<b>Test Site No.</b>	03CH03-HY
<b>Temperature</b>	26	<b>Humidity</b>	54%
<b>Test Engineer</b>	Duncan	<b>Configuration</b>	802.11n CH 52 (20MHz)

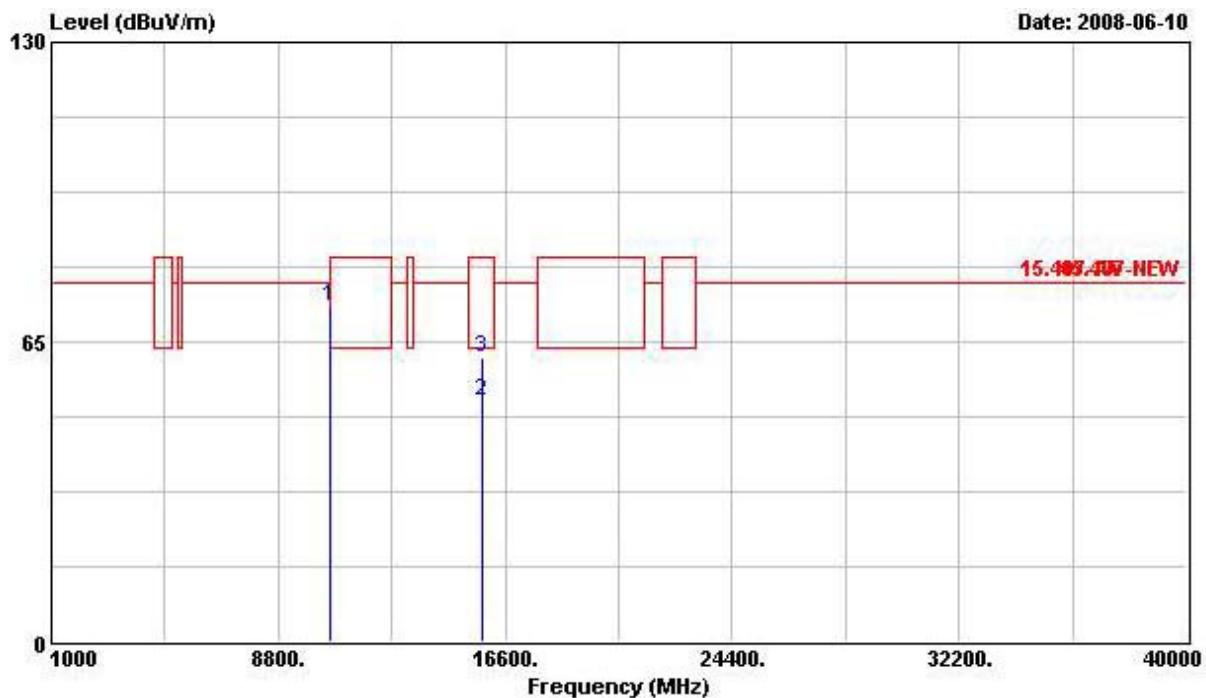
**Horizontal**

Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Remark
		Line	Limit	Antenna	Level Factor	Cable Loss	Preamp Factor	
1	8532.000	53.93	-23.91	77.84	43.00	38.32	5.42	32.81 PEAK
2	10524.000	70.35	-7.49	77.84	55.95	39.29	6.28	31.17 PEAK
3	15780.600	72.52	-11.02	83.54	57.05	37.61	7.42	29.56 Peak
4	15780.600	58.13	-5.41	63.54	42.66	37.61	7.42	29.56 AVERAGE

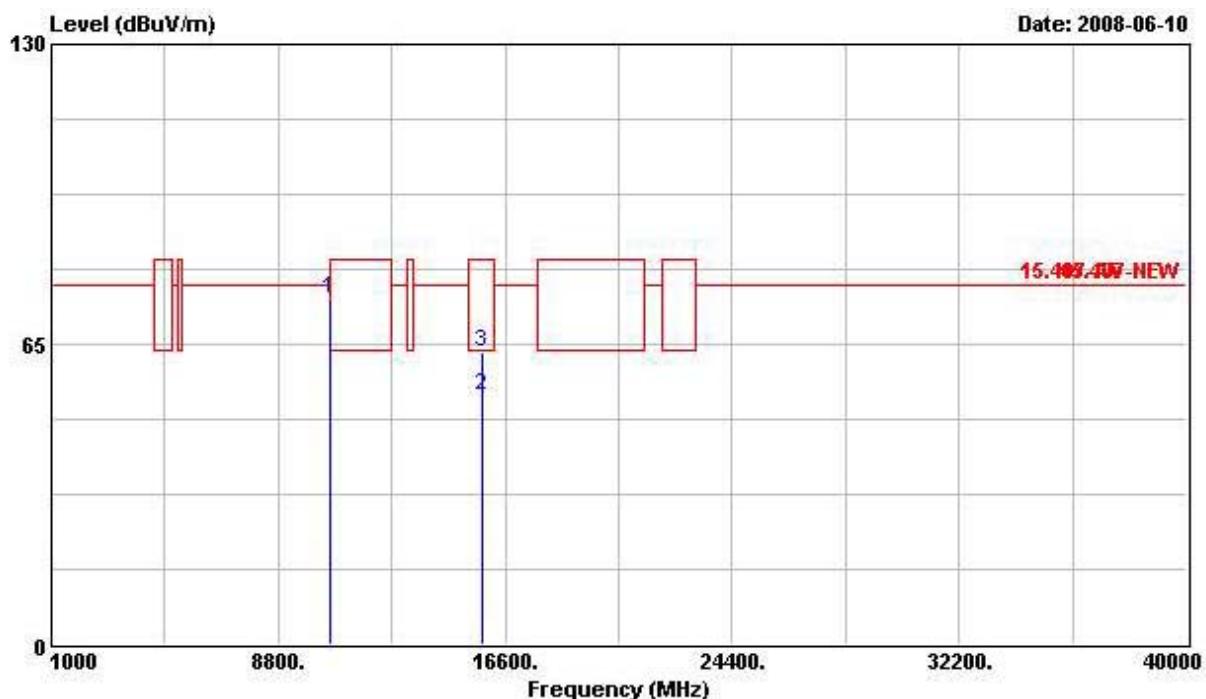
*Vertical*

Freq	Level	Over Limit		Read Antenna		Cable Preamp		Remark
		MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	
1	8608.000	54.39	-23.45	77.84	43.54	38.37	5.28	32.81 PEAK
2	10520.000	73.90	-3.94	77.84	59.50	39.29	6.28	31.17 PEAK
3	15777.700	54.35	-9.19	63.54	38.88	37.61	7.42	29.56 AVERAGE
4	15777.700	68.16	-15.38	83.54	52.69	37.61	7.42	29.56 Peak

<b>Test date</b>	Jun. 10, 2008	<b>Test Site No.</b>	03CH03-HY
<b>Temperature</b>	26	<b>Humidity</b>	54%
<b>Test Engineer</b>	Duncan	<b>Configuration</b>	802.11n CH 56 (20MHz)

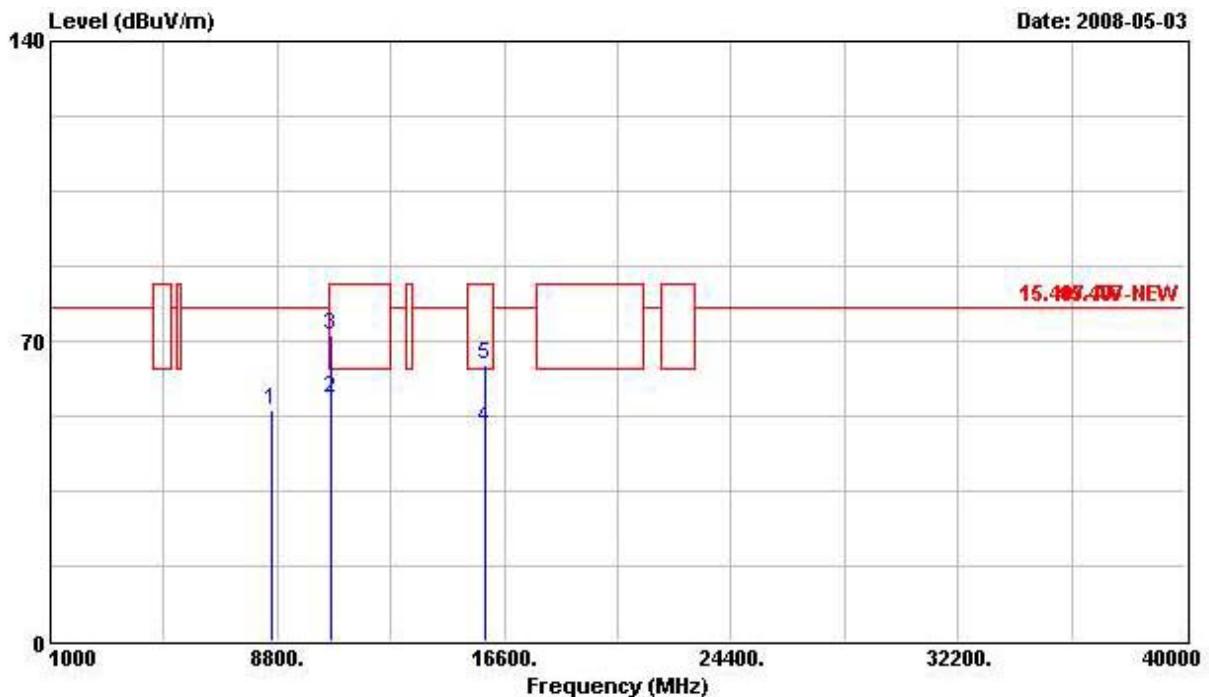
**Horizontal**

Freq	Level	Over Limit		Read Antenna Line	Cable Factor	Preamp Factor	Remark
		MHz	dBuV/m	dB	dBuV/m		
1	10560.600	72.68	-5.16	77.84	58.14	39.27	6.30 31.03 Peak
2	15838.840	51.99	-11.55	63.54	36.45	37.64	7.43 29.53 Average
3	15838.840	61.41	-22.13	83.54	45.87	37.64	7.43 29.53 Peak

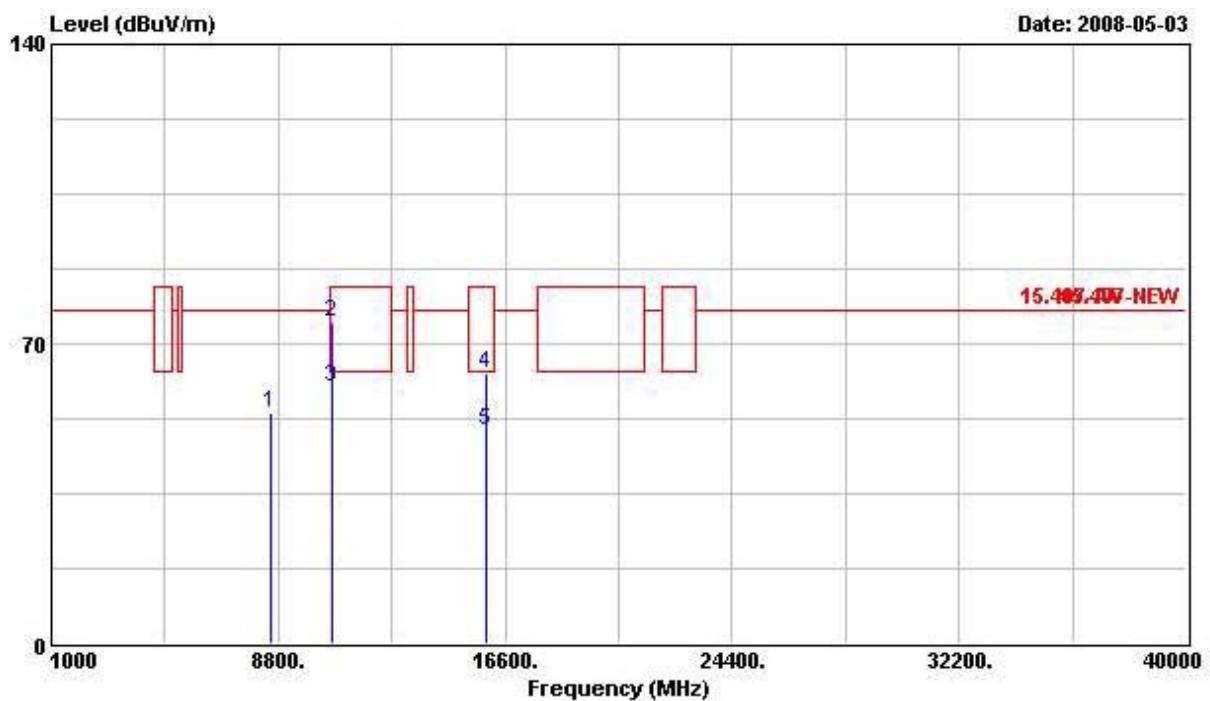
*Vertical*

Freq	Level	Over Limit		Read Antenna		Cable Preamp		Remark
		MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	
1 @	<b>10560.600</b>	74.66	-3.18	77.84	60.12	39.27	6.30	<b>31.03 Peak</b>
2	<b>15838.840</b>	53.79	-9.75	63.54	38.25	37.64	7.43	<b>29.53 AVERAGE</b>
3	<b>15838.840</b>	63.08	-20.46	83.54	47.54	37.64	7.43	<b>29.53 Peak</b>

<b>Test date</b>	May 03, 2008	<b>Test Site No.</b>	03CH03-HY
<b>Temperature</b>	26	<b>Humidity</b>	54%
<b>Test Engineer</b>	Duncan	<b>Configuration</b>	802.11n CH 64 (20MHz)

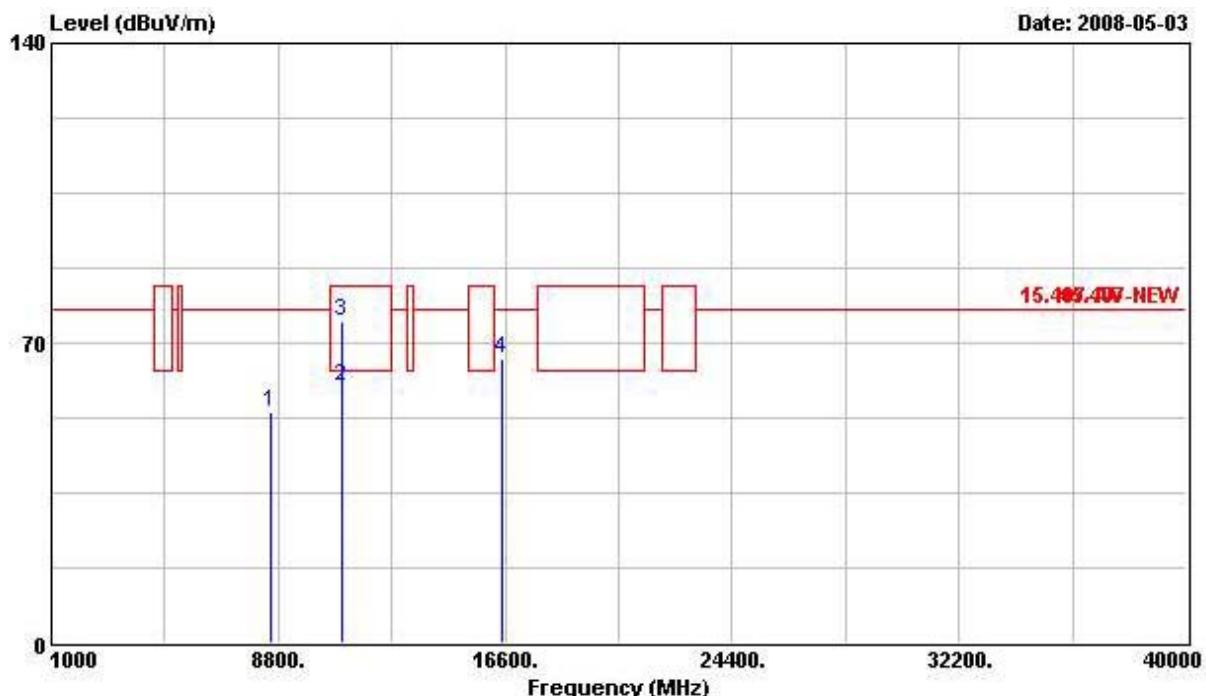
**Horizontal**

Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Remark
		Line	Limit	Antenna	Factor	Cable	Loss	
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	8608.000	54.08	-23.76	77.84	43.24	38.37	5.28	32.81 PEAK
2	10639.200	56.57	-6.97	63.54	41.82	39.22	6.34	30.81 AVERAGE
3	10639.200	71.49	-12.05	83.54	56.74	39.22	6.34	30.81 Peak
4	15964.300	49.59	-13.95	63.54	33.91	37.69	7.46	29.46 AVERAGE
5	15964.300	64.53	-19.01	83.54	48.85	37.69	7.46	29.46 Peak

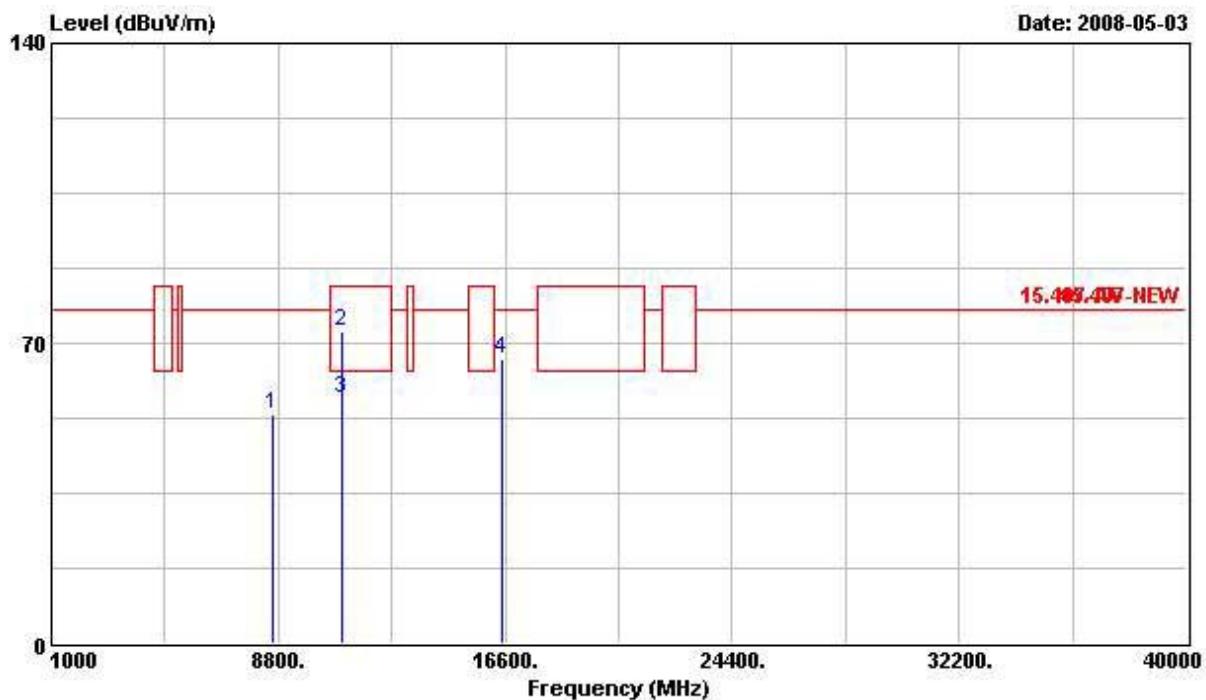
*Vertical*

Freq	Level	Over Limit	Line	Read		Antenna Level	Cable Loss Factor	Preamp Factor	Remark
				MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m
1	8556.000	53.99	-23.85	77.84	43.12	38.33	5.35	32.81	PEAK
2	10639.700	75.08	-8.46	83.54	60.33	39.22	6.34	30.81	Peak
3	10639.700	59.73	-3.81	63.54	44.97	39.22	6.34	30.81	AVERAGE
4	15961.200	63.10	-20.44	83.54	47.42	37.69	7.46	29.46	Peak
5	15961.200	49.65	-13.89	63.54	33.98	37.69	7.46	29.46	AVERAGE

<b>Test date</b>	May 03, 2008	<b>Test Site No.</b>	03CH03-HY
<b>Temperature</b>	26	<b>Humidity</b>	54%
<b>Test Engineer</b>	Duncan	<b>Configuration</b>	802.11n CH 100 (20MHz)

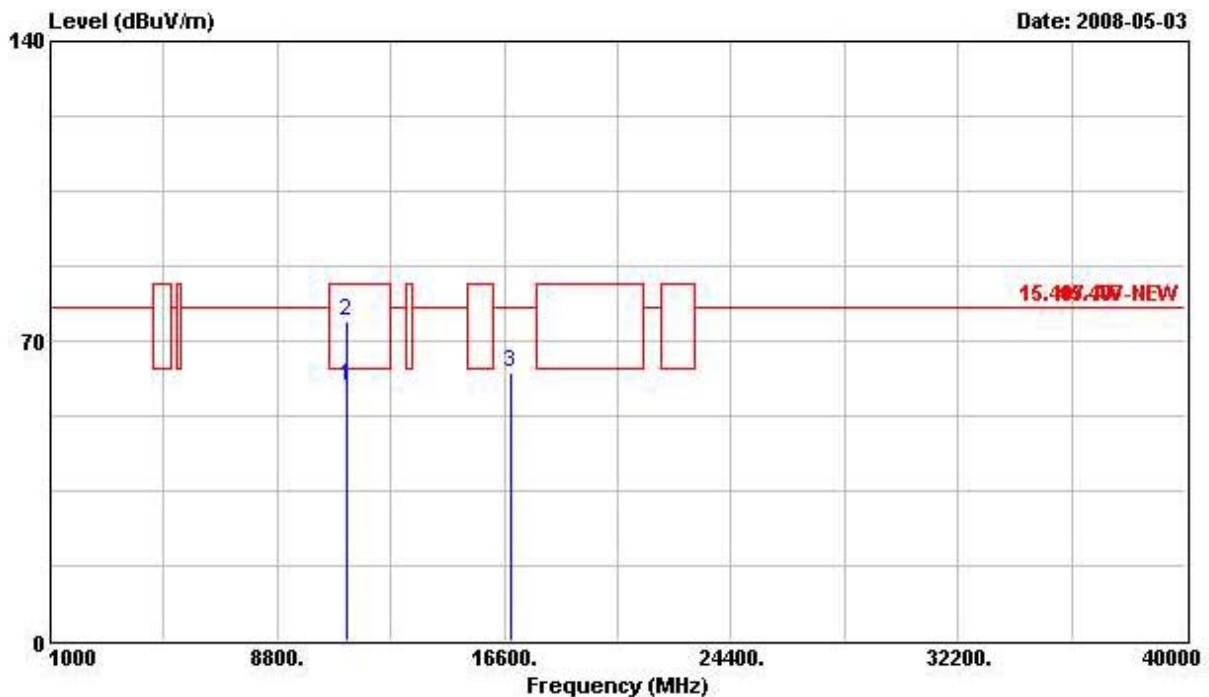
**Horizontal**

Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Remark
		Line	Limit	Level	Factor	dB	dB	
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	8560.000	53.95	-23.89	77.84	43.07	38.34	5.35	32.81 PEAK
2	11000.000	59.94	-3.60	63.54	44.19	39.00	6.55	29.81 AVERAGE
3	11000.000	75.06	-8.48	83.54	59.32	39.00	6.55	29.81 Peak
4	16492.000	66.54	-11.30	77.84	49.50	38.96	7.52	29.44 PEAK

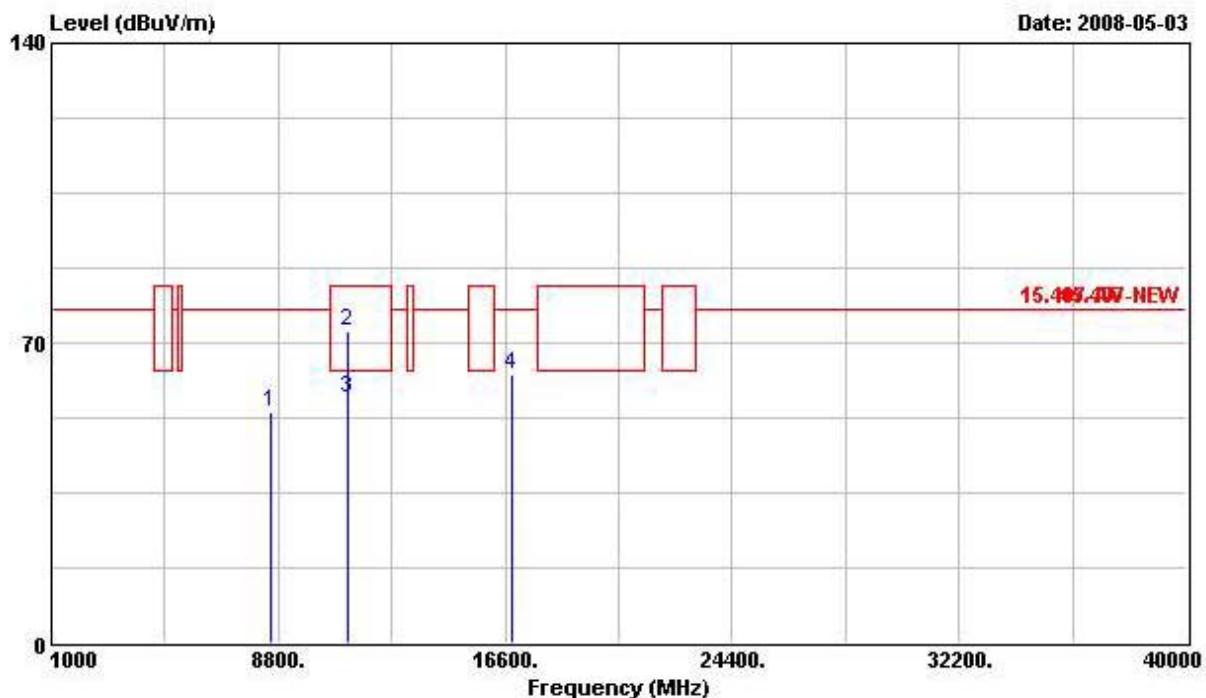
*Vertical*

Freq	Level	Over Limit	Limit	Read		Antenna Factor	Cable Preamp		Remark
				Line	dBuV		dB	dB/m	
	MHz	dBuV/m		dB	dBuV/m				
1	8588.000	53.54	-24.30	77.84	42.72	38.35	5.28	32.81	PEAK
2	10999.300	72.83	-10.71	83.54	57.09	39.00	6.55	29.81	Peak
3	10999.300	57.17	-6.37	63.54	41.43	39.00	6.55	29.81	AVERAGE
4	16496.000	66.40	-11.44	77.84	49.32	39.00	7.52	29.44	PEAK

<b>Test date</b>	May 03, 2008	<b>Test Site No.</b>	03CH03-HY
<b>Temperature</b>	26	<b>Humidity</b>	54%
<b>Test Engineer</b>	Duncan	<b>Configuration</b>	802.11n CH 120 (20MHz)

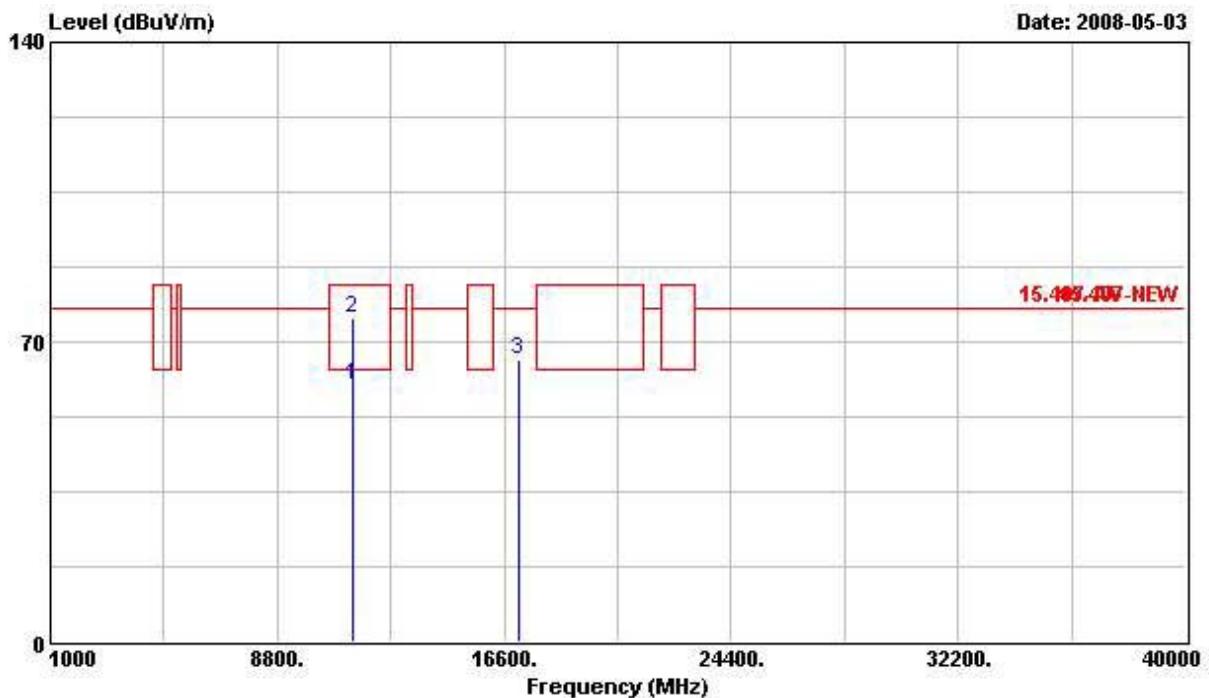
**Horizontal**

Freq MHz	Level dBuV/m	Over Limit	Line Limit	Read dBuV	Antenna Factor	Cable dB	Preamp dB	Remark
		dB	dBuV/m	dBuV	dB/m	dB	dB	
11199.700	59.59	-3.95	63.54	44.51	39.28	6.66	30.86	AVERAGE
11199.700	74.73	-8.81	83.54	59.66	39.28	6.66	30.86	Peak
16804.000	62.50	-15.34	77.84	43.26	40.43	7.67	28.85	PEAK

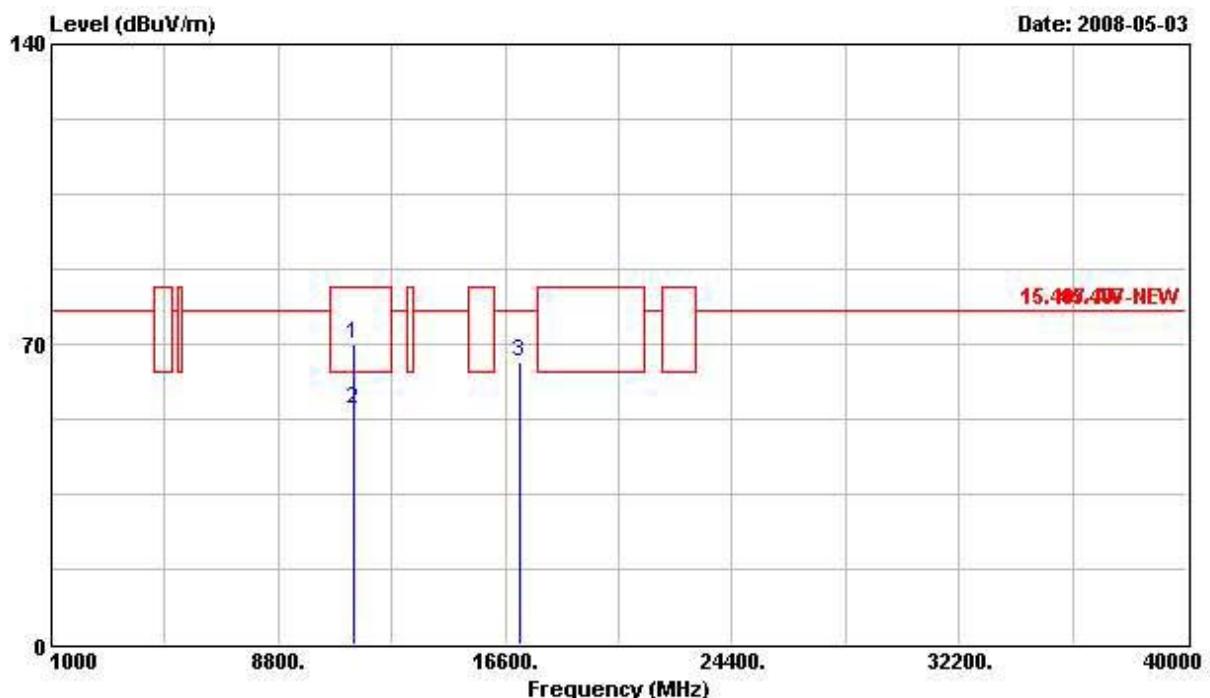
*Vertical*

Freq	Level	Over Limit		Read		Antenna Factor	Cable Preamp		Remark
		MHz	dBuV/m	dB	dBuV/m		dBuV	dB/m	
1	8516.000	53.82	-24.02	77.84	42.90	38.31	5.42	32.81	PEAK
2	11199.700	72.60	-10.94	83.54	57.53	39.28	6.66	30.86	Peak
3	11199.700	57.18	-6.36	63.54	42.11	39.28	6.66	30.86	AVERAGE
4	16800.000	62.75	-15.09	77.84	43.58	40.35	7.67	28.85	PEAK

<b>Test date</b>	May 03, 2008	<b>Test Site No.</b>	03CH03-HY
<b>Temperature</b>	26	<b>Humidity</b>	54%
<b>Test Engineer</b>	Duncan	<b>Configuration</b>	802.11n CH 140 (20MHz)

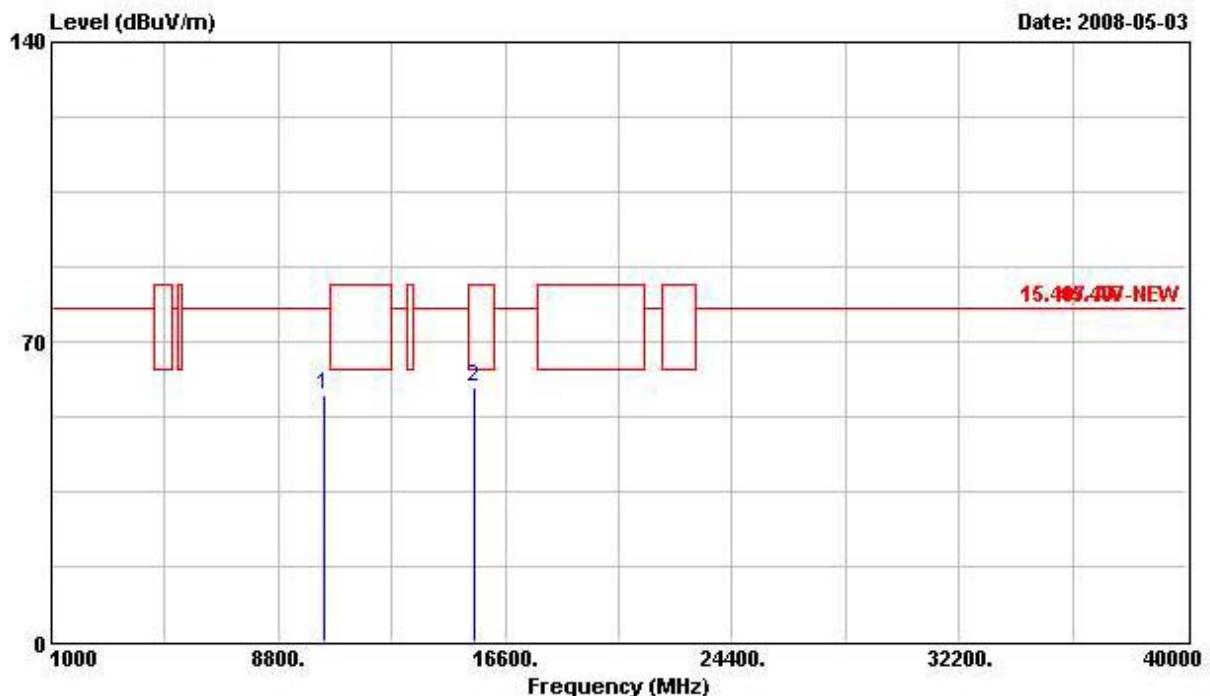
**Horizontal**

Freq MHz	Level dBuV/m	Over Limit	Line	Read dBuV	Antenna Factor	Cable dB	Preamp dB	Remark
		Limit dB	dBuV/m	dB	dB/m	dB	dB	
1	11400.800	59.76	-3.78	63.54	45.37	39.56	6.75	31.92 AVERAGE
2	11400.800	75.34	-8.20	83.54	60.95	39.56	6.75	31.92 Peak
3	17100.000	65.75	-12.09	77.84	44.35	42.14	7.79	28.53 PEAK

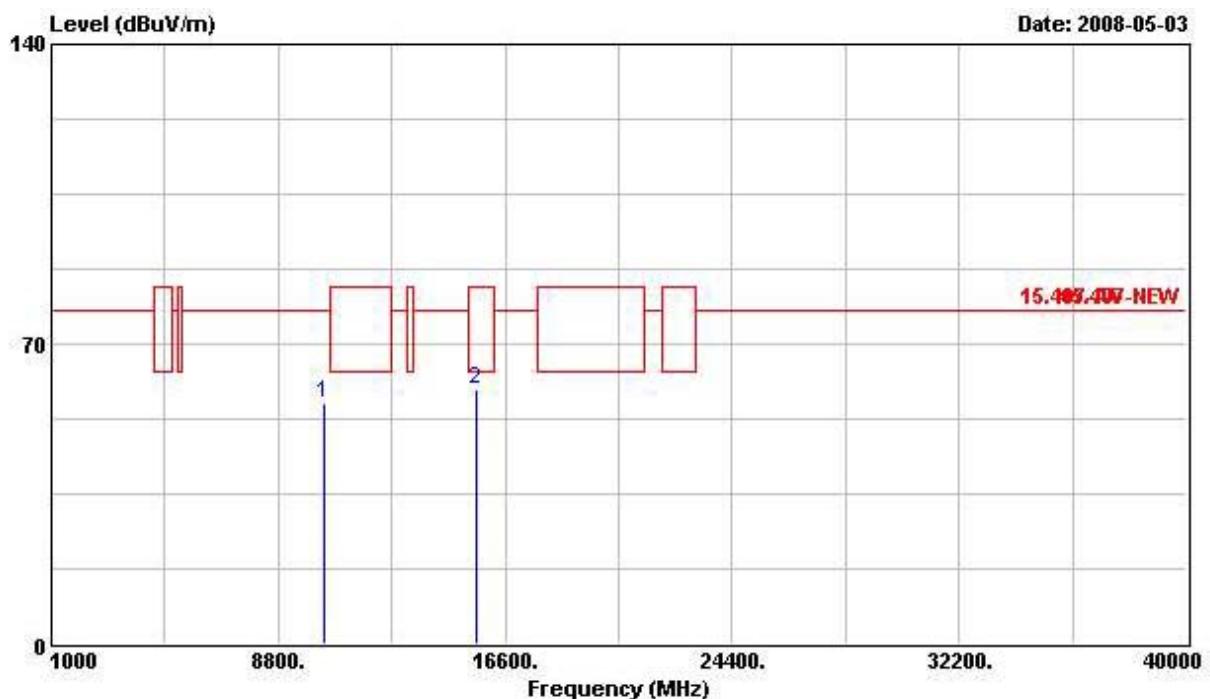
**Vertical**

Freq	Level	Over Limit	Line	Read		Antenna Factor	Cable Preamp		Remark
				MHz	dBuV/m		dB	dBuV/m	
1	11400.200	69.99	-13.55	83.54	55.60	39.56	6.75	31.92	Peak
2	11400.200	54.78	-8.76	63.54	40.40	39.56	6.75	31.92	AVERAGE
3	17100.000	65.90	-11.94	77.84	44.49	42.14	7.79	28.53	PEAK

<b>Test date</b>	May 03, 2008	<b>Test Site No.</b>	03CH03-HY
<b>Temperature</b>	26°C	<b>Humidity</b>	54%
<b>Test Engineer</b>	Duncan	<b>Configuration</b>	802.11n CH 38 (40MHz)

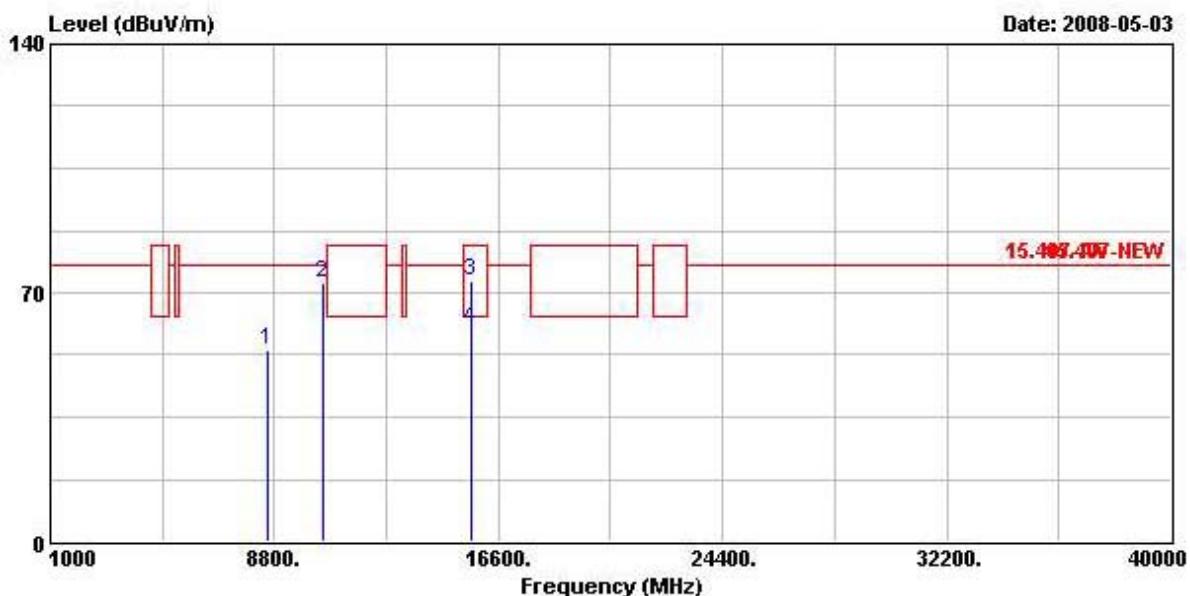
**Horizontal**

Freq MHz	Level dBuV/m	Over Limit		Read Line Level dBuV	Antenna Factor	Cable Loss dB	Preamp Factor	Remark
		Limit dB	Line dBuV/m					
1	10376.000	57.51	-20.33	77.84	43.68	39.32	6.09	31.59 PEAK
2	15574.000	59.33	-4.21	63.54	44.09	37.53	7.38	29.67 PK

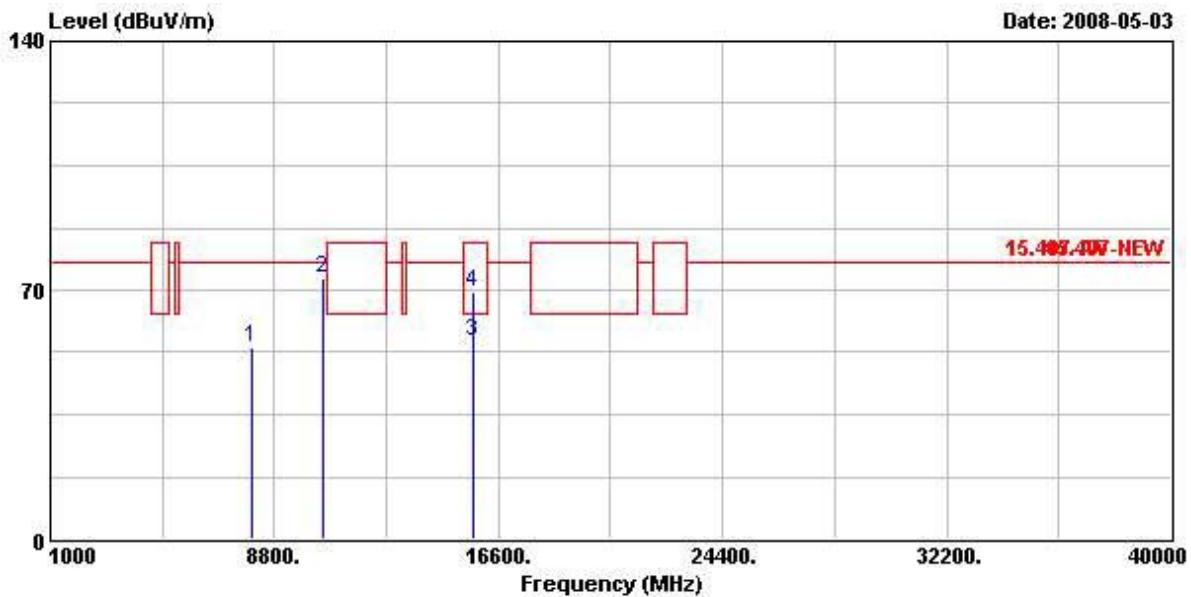
*Vertical*

Freq	Level	Over Limit	Limit Line	Read		Antenna Factor	Cable Loss	Preamp Factor	Remark
				MHz	dBuV/m				
1	10376.000	56.19	-21.65	77.84	42.37	39.32	6.09	31.59	PEAK
2	15576.000	59.28	-4.26	63.54	44.04	37.53	7.38	29.67	PK

Test date	May 03, 2008	Test Site No.	03CH03-HY
Temperature	26°C	Humidity	54%
Test Engineer	Duncan	Configuration	802.11n CH 46 (40MHz)

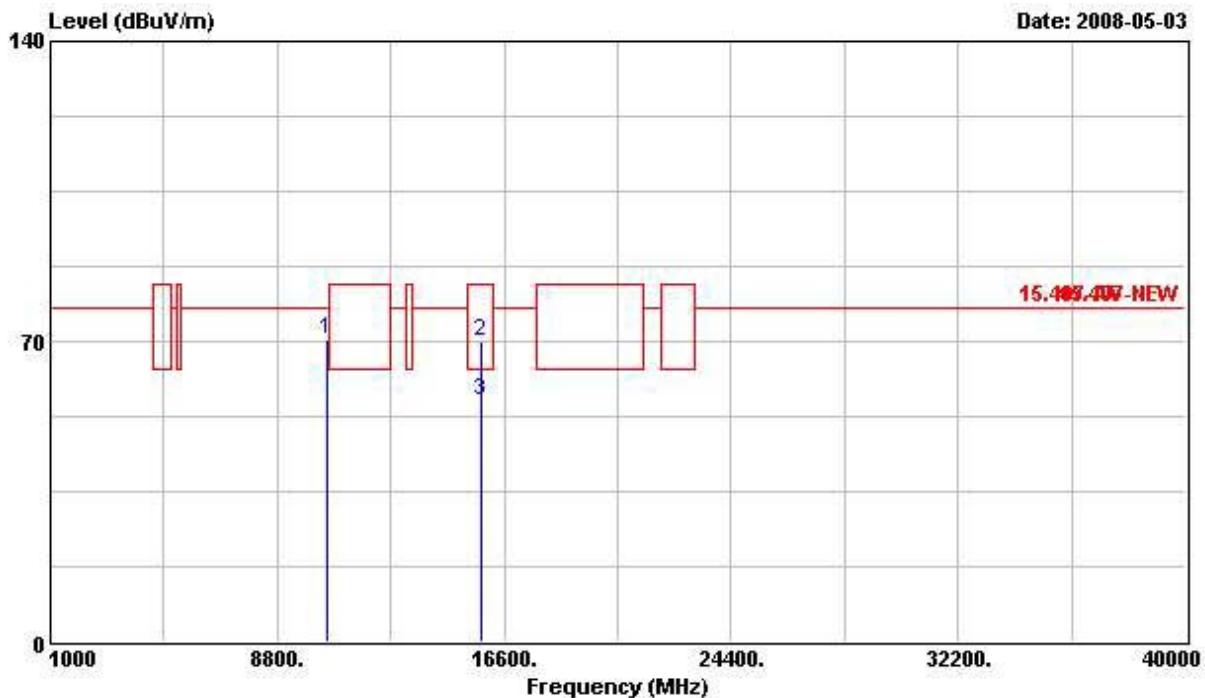
**Horizontal**

Freq	Level	Over Limit	Limit Line	Read		Antenna Factor	Cable Loss	Preamp Factor	Remark
				dB	dBuV/m				
1	8600.000	53.70	-24.14	77.84	42.86	38.36	5.28	32.81	PEAK
2 @	10464.000	73.04	-4.80	77.84	58.84	39.31	6.23	31.34	PEAK
3	15684.200	73.45	-10.09	83.54	58.08	37.58	7.40	29.61	Peak
4 @	15684.200	60.05	-3.49	63.54	44.69	37.58	7.40	29.61	AVERAGE

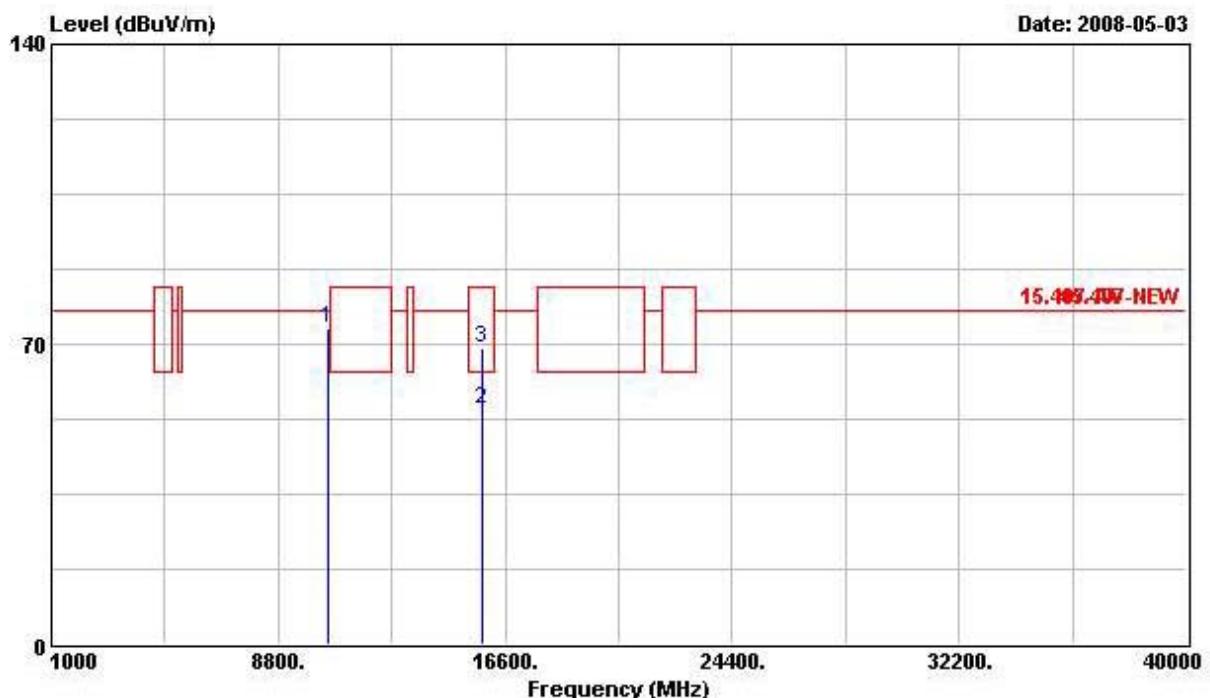
*Vertical*

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Remark
			MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	
1	7996.000	53.64	-24.20	77.84	43.94	37.80	4.70	32.80	PEAK
2 @	10464.000	73.44	-4.40	77.84	59.24	39.31	6.23	31.34	PEAK
3	15691.000	55.52	-8.02	63.54	40.15	37.58	7.40	29.61	AVERAGE
4	15691.000	69.48	-14.06	83.54	54.11	37.58	7.40	29.61	Peak

<b>Test date</b>	May 03, 2008	<b>Test Site No.</b>	03CH03-HY
<b>Temperature</b>	26°C	<b>Humidity</b>	54%
<b>Test Engineer</b>	Duncan	<b>Configuration</b>	802.11n CH 54 (40MHz)

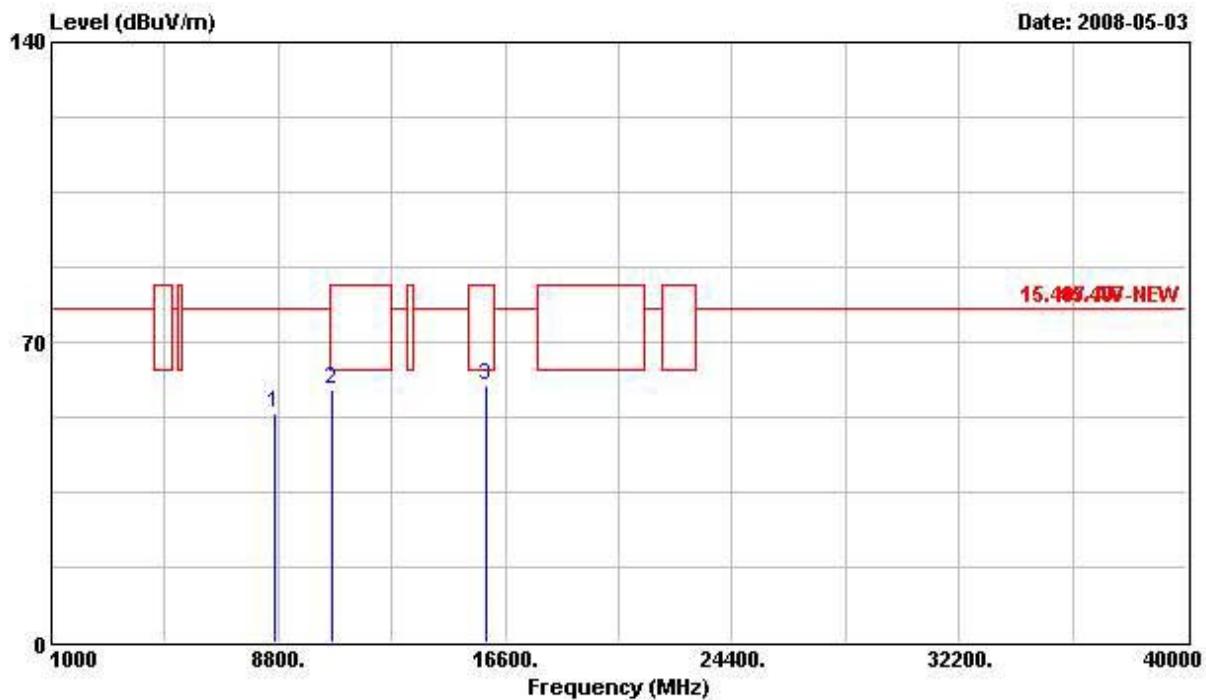
**Horizontal**

Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Remark
		Line	Limit	Level	Factor	Loss	Factor	
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	<b>10544.000</b>	<b>70.67</b>	<b>-7.17</b>	<b>77.84</b>	<b>56.19</b>	<b>39.28</b>	<b>6.30</b>	<b>31.10 PEAK</b>
2	<b>15811.200</b>	<b>70.01</b>	<b>-13.53</b>	<b>83.54</b>	<b>54.50</b>	<b>37.62</b>	<b>7.43</b>	<b>29.54 Peak</b>
3	<b>15811.200</b>	<b>56.22</b>	<b>-7.32</b>	<b>63.54</b>	<b>40.71</b>	<b>37.62</b>	<b>7.43</b>	<b>29.54 AVERAGE</b>

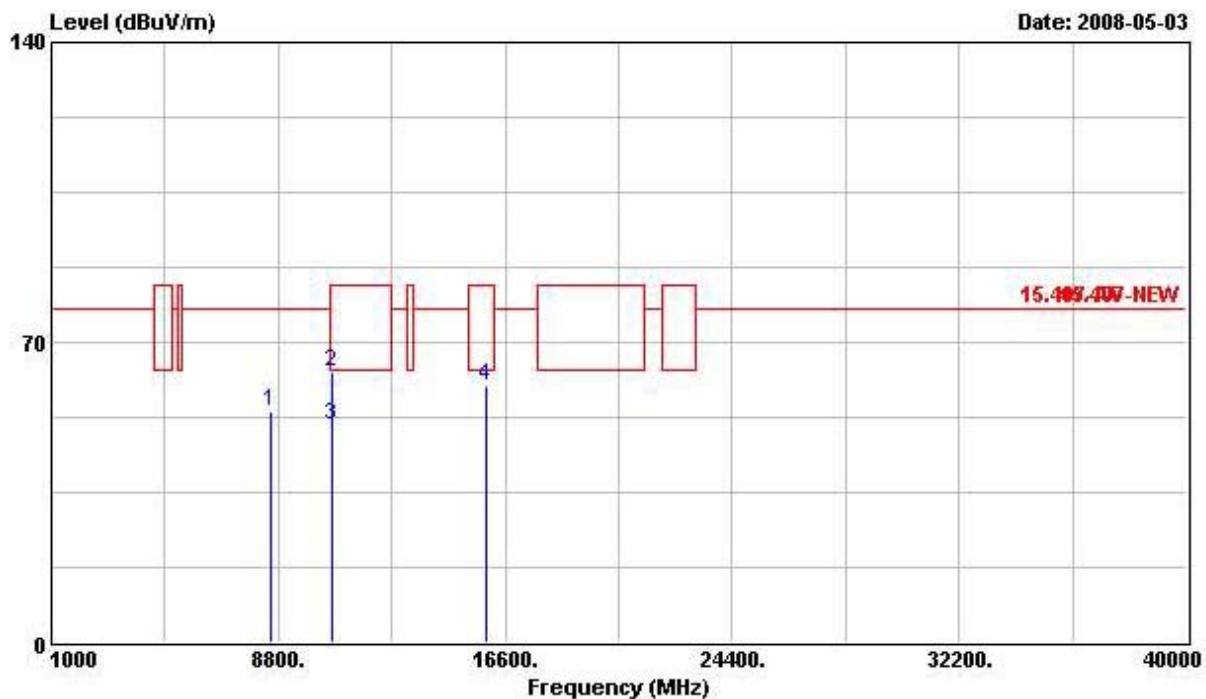
*Vertical*

Freq	Level	Over Limit	Limit Line	Read		Antenna Factor	Cable Preamp		Remark
				MHz	dBuV/m		dB	dBuV/m	
1	<b>10536.000</b>	73.73	-4.11	77.84	59.25	39.28	6.30	31.10	PEAK
2	<b>15807.200</b>	54.73	-8.81	63.54	39.22	37.62	7.43	29.54	AVERAGE
3	<b>15807.200</b>	68.95	-14.59	83.54	53.44	37.62	7.43	29.54	Peak

<b>Test date</b>	May 03, 2008	<b>Test Site No.</b>	03CH03-HY
<b>Temperature</b>	26°C	<b>Humidity</b>	54%
<b>Test Engineer</b>	Duncan	<b>Configuration</b>	802.11n CH 62 (40MHz)

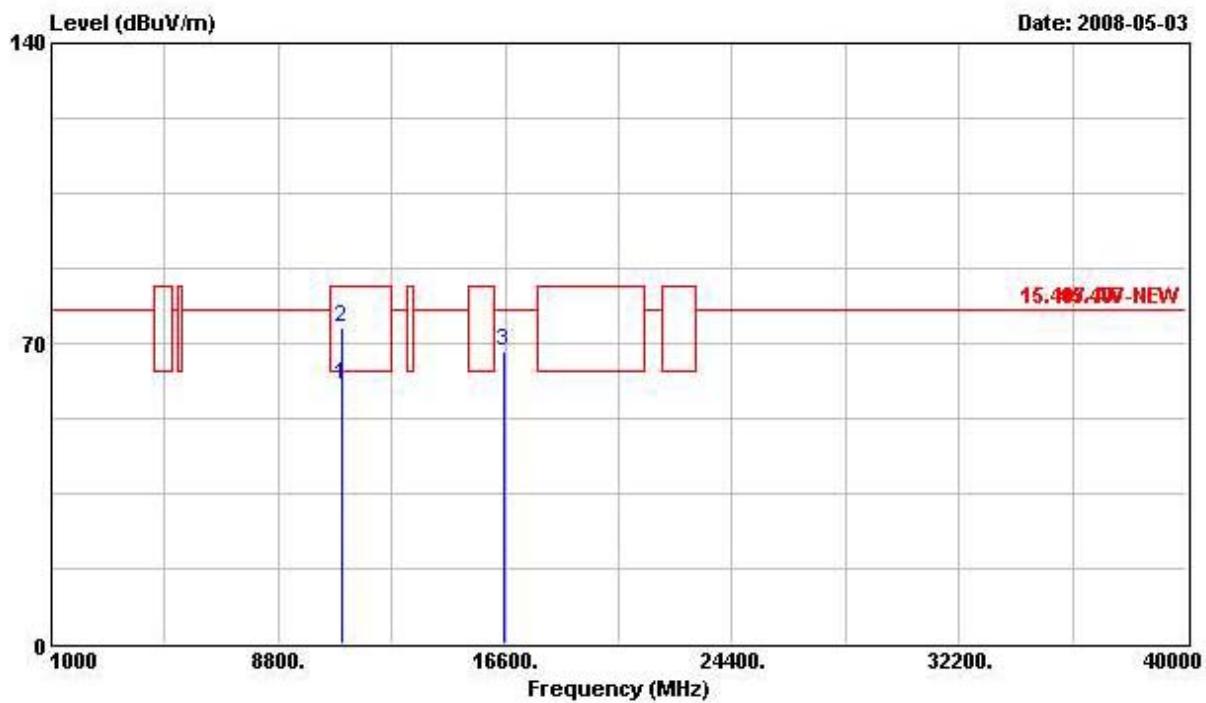
**Horizontal**

Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Remark
		Line	Limit	Level	Factor	Loss	Factor	
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	8700.000	53.54	-24.30	77.84	42.78	38.42	5.15	32.81 PEAK
2	10616.000	58.78	-4.76	63.54	44.09	39.23	6.34	30.88 PK
3	15930.000	59.90	-3.64	63.54	44.27	37.67	7.45	29.49 PK

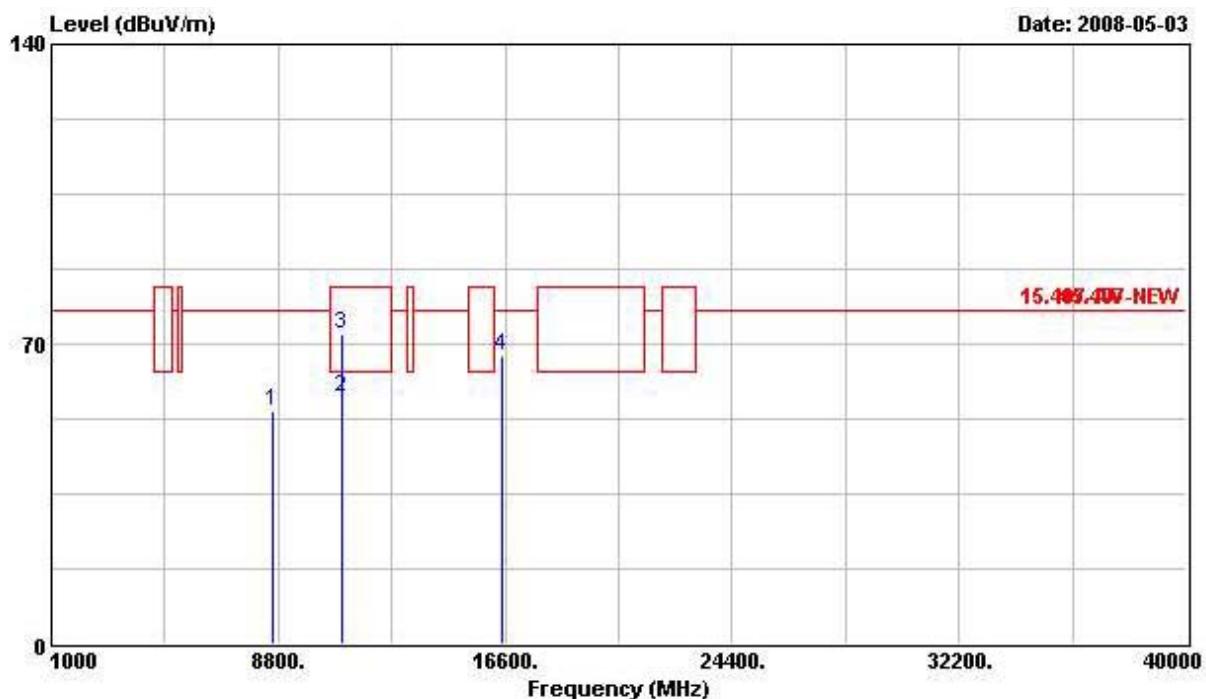
*Vertical*

Freq	Level	Over Limit		Read Antenna Line		Cable Preamp		Remark
		MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	
1	8532.000	53.65	-24.19	77.84	42.72	38.32	5.42	32.81 PEAK
2	10616.000	62.86	-20.68	83.54	48.17	39.23	6.34	30.88 PEAK
3	10616.000	50.86	-12.68	63.54	36.17	39.23	6.34	30.88 Average
4	15930.000	59.72	-3.82	63.54	44.09	37.67	7.45	29.49 PK

Test date	May 03, 2008	Test Site No.	03CH03-HY
Temperature	26°C	Humidity	54%
Test Engineer	Duncan	Configuration	802.11n CH 102 (40MHz)

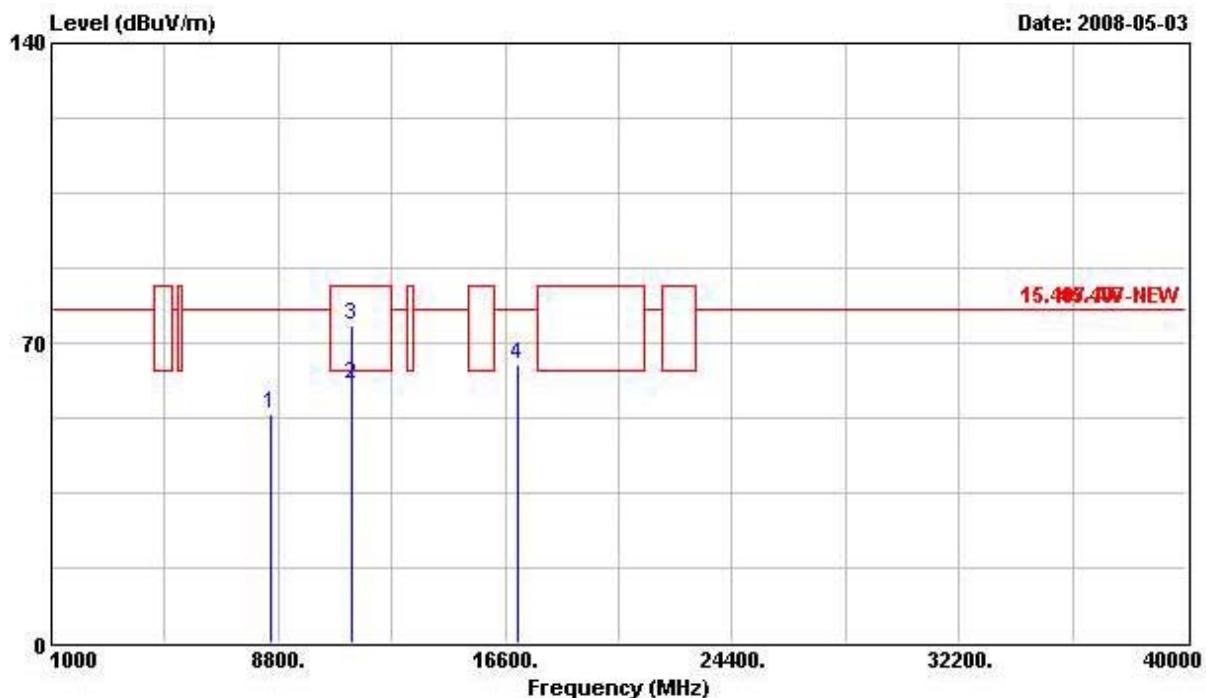
**Horizontal**

Freq	Level	Over Limit		Read Line	Antenna Factor	Cable Preamp		Remark
		MHz	dBuV/m	dB	dBuV/m	dB	dB	
1	11016.400	60.19	-3.35	63.54	44.54	39.02	6.57	29.94 AVERAGE
2	11016.400	73.70	-9.84	83.54	58.05	39.02	6.57	29.94 Peak
3	16532.000	68.19	-9.65	77.84	50.90	39.16	7.52	29.39 PEAK

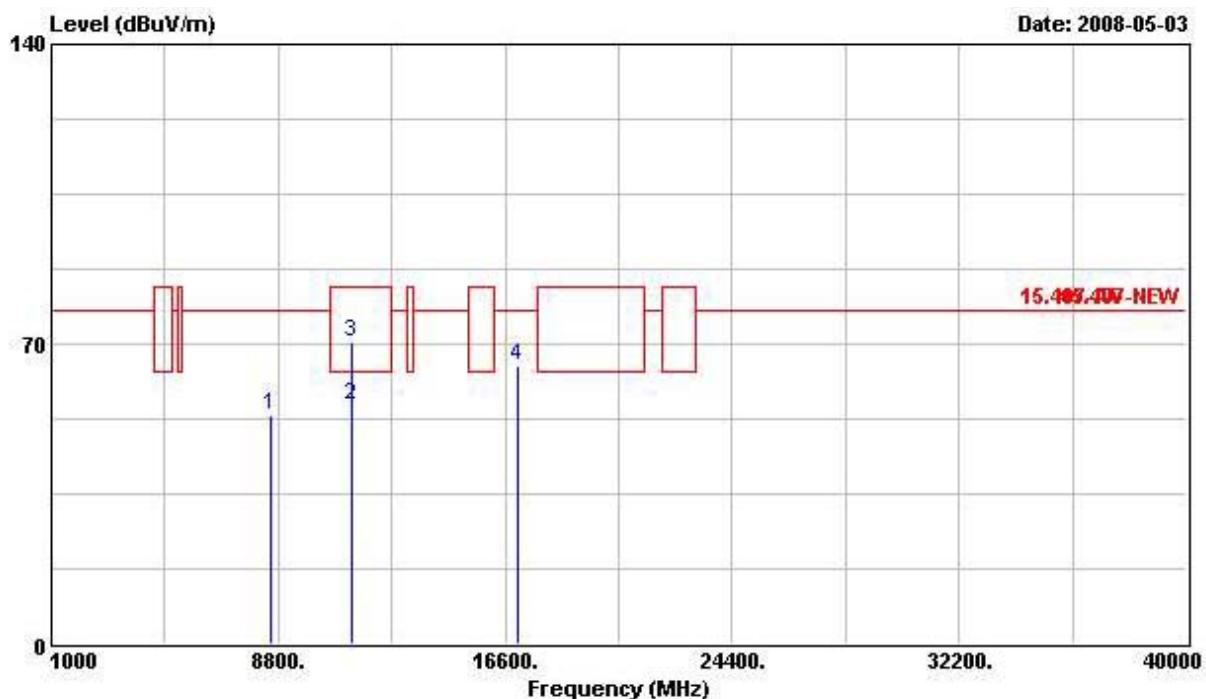
*Vertical*

Freq	Level	Over Limit		Read Antenna		Cable Preamp		Remark
		MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	
1	8580.000	54.41	-23.43	77.84	43.52	38.35	5.35	32.81 PEAK
2	11011.600	57.70	-5.84	63.54	42.05	39.02	6.57	29.94 AVERAGE
3	11011.600	72.18	-11.36	83.54	56.53	39.02	6.57	29.94 Peak
4	16522.000	67.30	-10.54	77.84	50.08	39.08	7.52	29.39 PEAK

<b>Test date</b>	May 03, 2008	<b>Test Site No.</b>	03CH03-HY
<b>Temperature</b>	26°C	<b>Humidity</b>	54%
<b>Test Engineer</b>	Duncan	<b>Configuration</b>	802.11n CH 134 (40MHz)

**Horizontal**

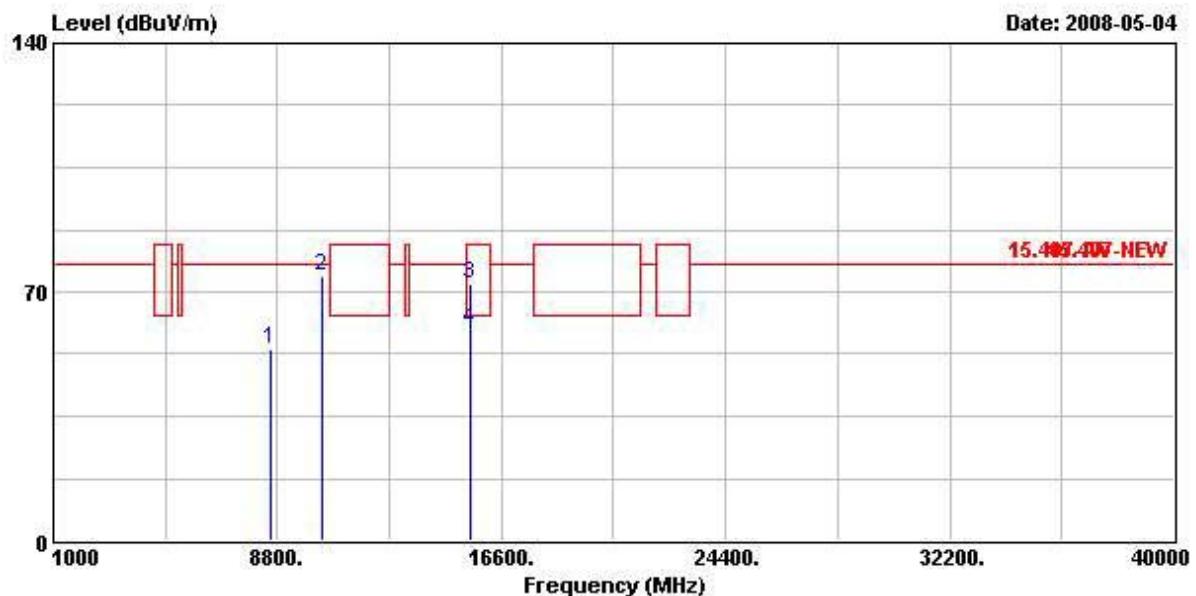
Freq	Level	Over Limit	Limit	Read		Antenna	Cable	Preamp
				Line	Level Factor			
1	8520.000	53.43	-24.41	77.84	42.51	38.31	5.42	32.81 PEAK
2 @	11339.200	60.49	-3.05	63.54	45.84	39.47	6.71	31.52 AVERAGE
3	11339.200	74.04	-9.50	83.54	59.39	39.47	6.71	31.52 Peak
4	17014.000	64.97	-12.87	77.84	44.27	41.44	7.78	28.52 PEAK

*Vertical*

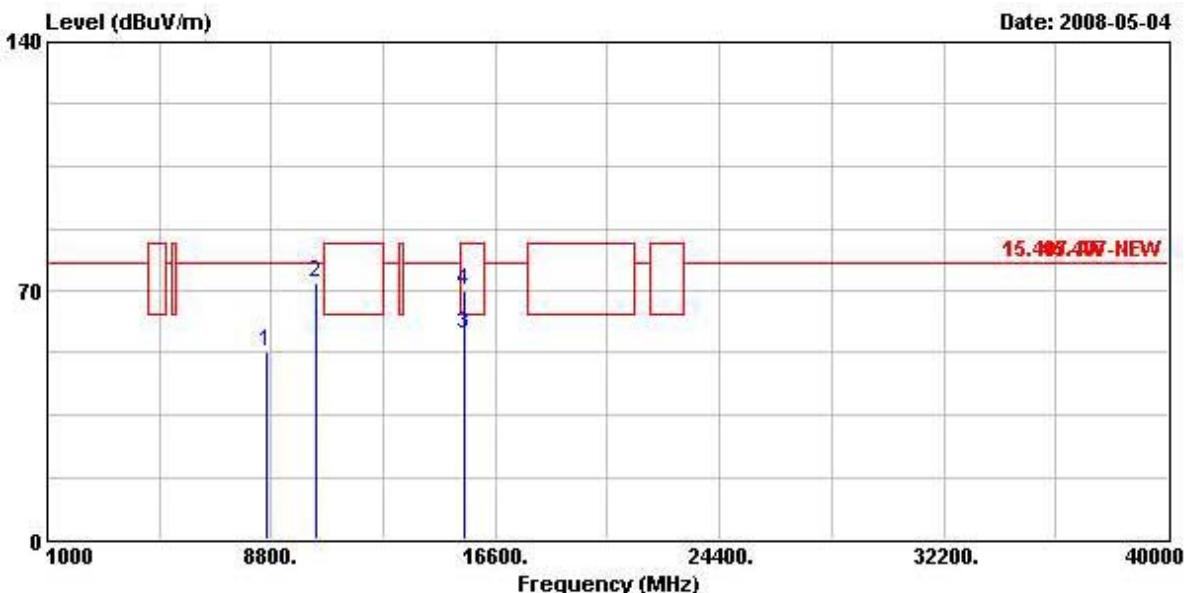
Freq	Level	Over Limit		Read Antenna		Cable Preamp		Remark
		MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	
1	8536.000	53.48	-24.36	77.84	42.55	38.32	5.42	32.81 PEAK
2	11340.000	55.67	-7.87	63.54	41.01	39.47	6.71	31.52 AVERAGE
3	11340.000	70.35	-13.19	83.54	55.70	39.47	6.71	31.52 Peak
4	17010.000	65.05	-12.79	77.84	44.35	41.44	7.78	28.52 PEAK

For Two Chain:

<b>Test date</b>	May 04, 2008	<b>Test Site No.</b>	03CH03-HY
<b>Temperature</b>	26°C	<b>Humidity</b>	54%
<b>Test Engineer</b>	Duncan	<b>Configuration</b>	802.11n CH 36 (20MHz)

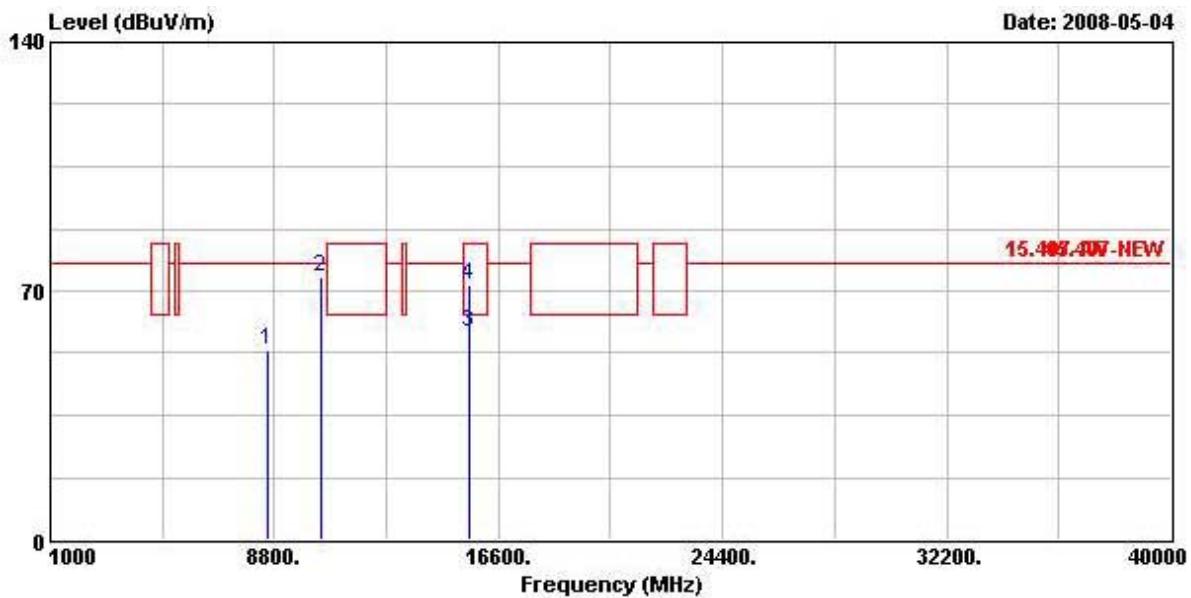
**Horizontal**

Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Remark
		Line	dBuV/m	dB	dBuV	dB/m	dB	
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	8532.000	54.06	-23.78	77.84	43.13	38.32	5.42	32.81 AVERAGE
2 @	10364.900	74.29	-3.55	77.84	60.55	39.33	6.09	31.67 Peak
3	15536.800	72.09	-11.45	83.54	56.90	37.51	7.37	29.69 Peak
4 @	15536.800	59.24	-4.30	63.54	44.05	37.51	7.37	29.69 AVERAGE

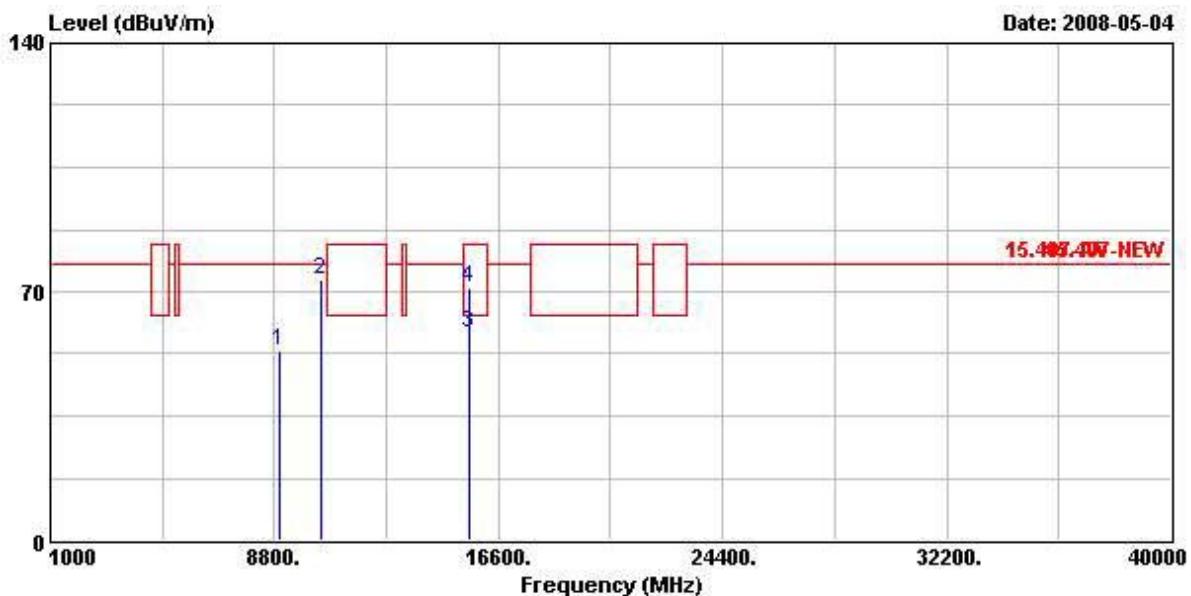
*Vertical*

Freq	Level	Over Limit	Limit Line	Read Antenna		Cable Loss	Preamp Factor	Remark	
				MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m
1	8656.000	53.01	-24.83	77.84	42.22	38.39	5.21	32.81	PEAK
2	10360.200	72.46	-5.38	77.84	58.72	39.33	6.09	31.67	PEAK
3	15542.200	57.83	-5.71	63.54	42.64	37.51	7.37	29.69	Average
4	15542.200	69.77	-13.77	83.54	54.58	37.51	7.37	29.69	PEAK

<b>Test date</b>	May 04, 2008	<b>Test Site No.</b>	03CH03-HY
<b>Temperature</b>	26°C	<b>Humidity</b>	54%
<b>Test Engineer</b>	Duncan	<b>Configuration</b>	802.11n CH 40 (20MHz)

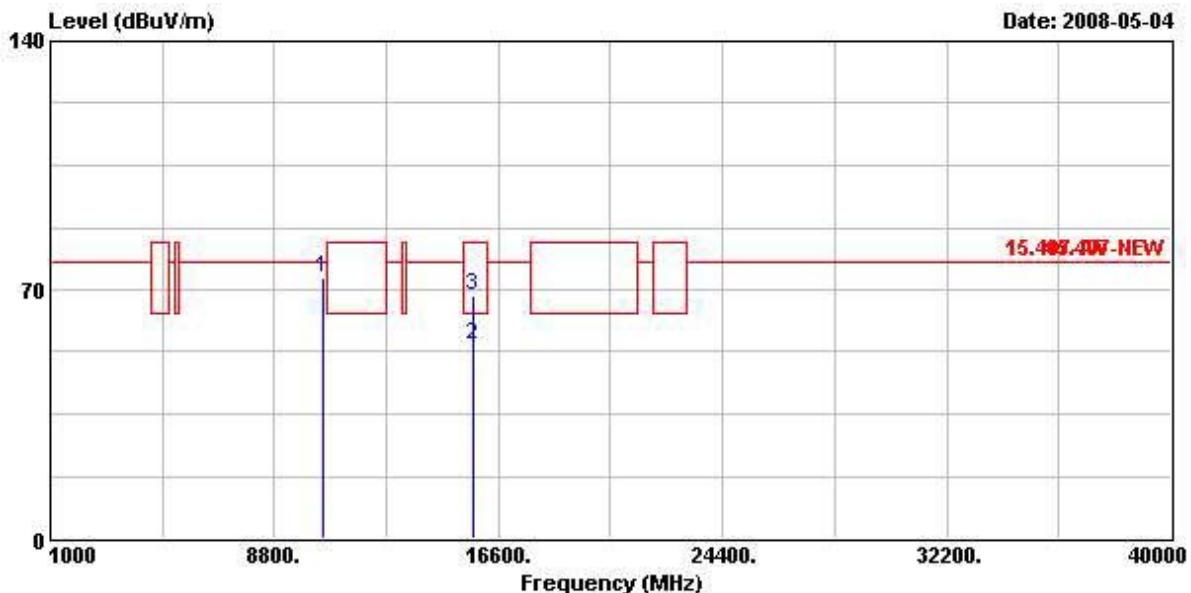
**Horizontal**

Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Remark
		MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	
1	8532.000	53.30	-24.54	77.84	42.37	38.32	5.42	32.81 PEAK
2 @	10401.400	73.67	-4.17	77.84	59.72	39.32	6.14	31.51 PEAK
3 @	15600.600	58.57	-4.97	63.54	43.30	37.54	7.38	29.65 Average
4	15600.600	71.64	-11.90	83.54	56.37	37.54	7.38	29.65 PEAK

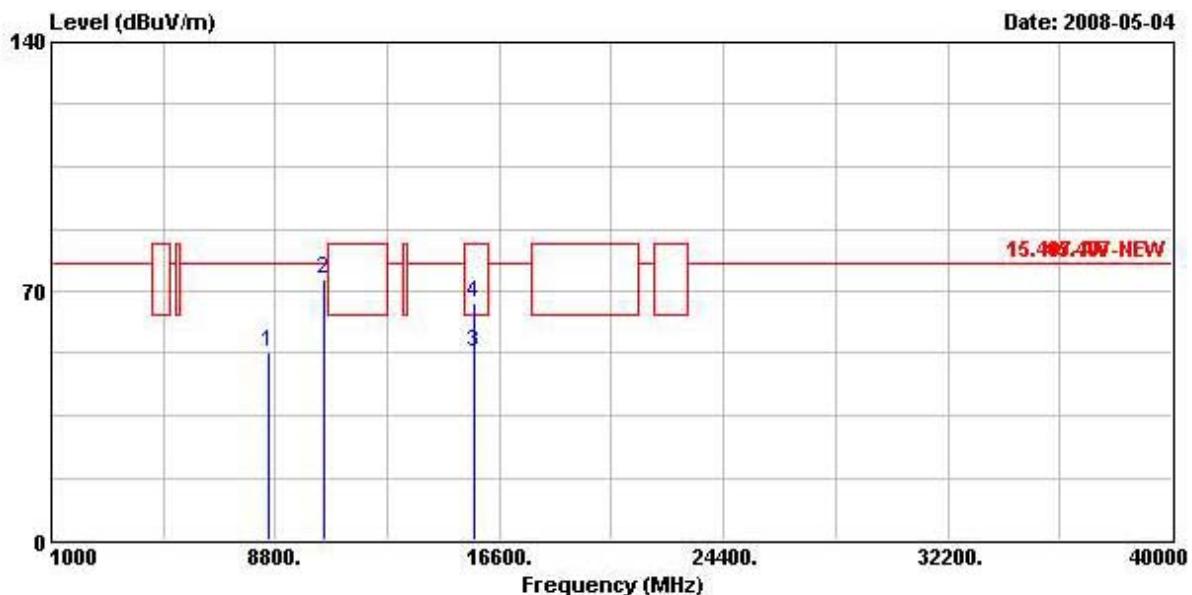
*Vertical*

Freq	Level	Over Limit	Limit Line	ReadAntenna		Cable Loss	Preamp Factor	Remark	
				MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m
1	<b>8976.000</b>	53.42	-24.42	77.84	43.04	38.58	4.60	32.81	PEAK
2 @	<b>10400.100</b>	73.31	-4.53	77.84	59.36	39.32	6.14	31.51	PEAK
3 @	<b>15601.900</b>	58.09	-5.45	63.54	42.81	37.54	7.39	29.65	Average
4	<b>15601.900</b>	70.86	-12.68	83.54	55.58	37.54	7.39	29.65	PEAK

Test date	May 04, 2008	Test Site No.	03CH03-HY
Temperature	26°C	Humidity	54%
Test Engineer	Duncan	Configuration	802.11n CH 48 (20MHz)

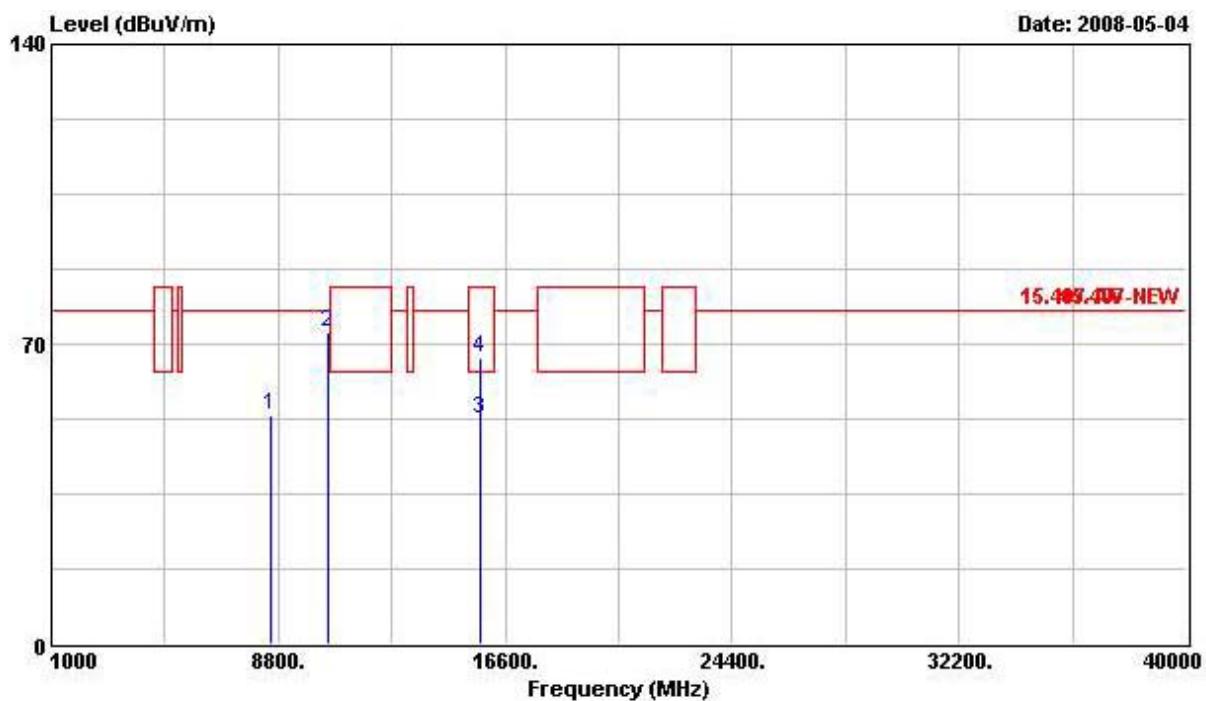
**Horizontal**

Freq	Level	Over Limit	Line	Read Antenna		Cable Loss	Preamp Factor	Remark		
				MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB
1	0	10482.000	73.40	-4.44	77.84	59.13	39.30	6.23	31.25	PEAK
2	0	15719.100	54.68	-8.86	63.54	39.28	37.59	7.41	29.60	Average
3	0	15719.100	68.11	-15.43	83.54	52.71	37.59	7.41	29.60	PEAK

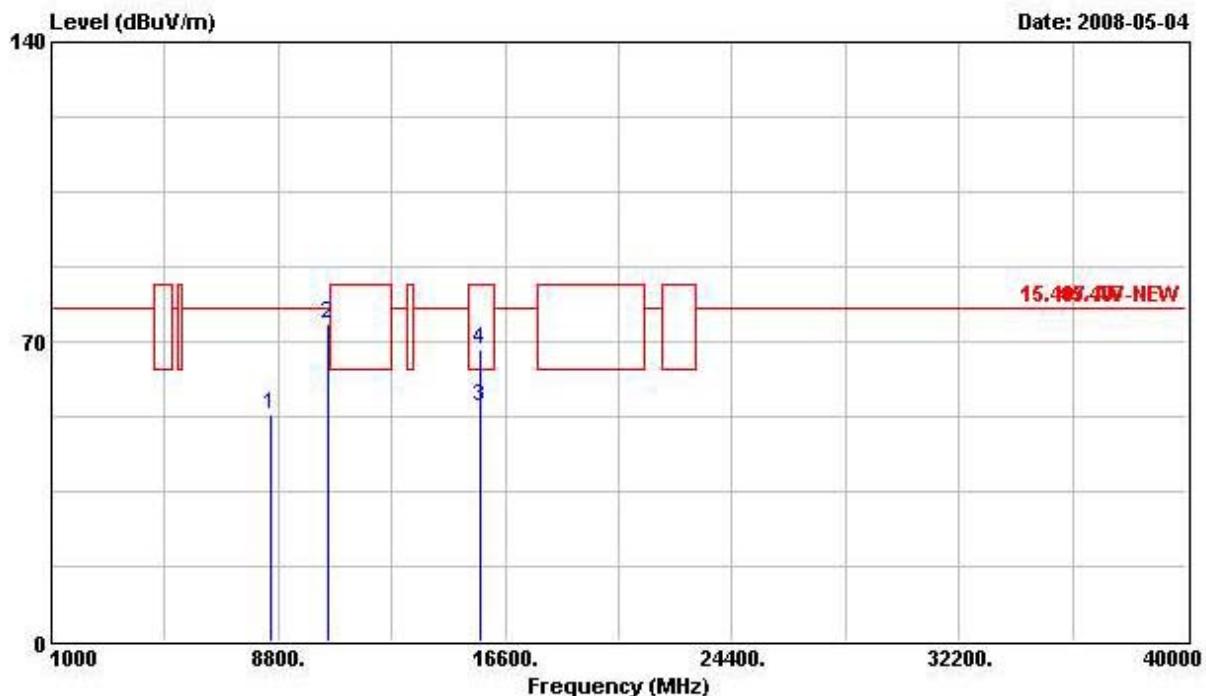
**Vertical**

	Freq MHz	Level dBuV/m	Over Limit dB	Limit dBuV/m	Read Antenna		Cable Loss dB	Preamp Factor	Remark
					Line	Level Factor			
	MHz	dBuV/m	dB	dBuV/m					
1	8532.000	53.00	-24.84	77.84	42.07	38.32	5.42	32.81	PEAK
2 @	10480.100	73.18	-4.66	77.84	58.90	39.30	6.23	31.25	PEAK
3	15725.900	52.98	-10.56	63.54	37.58	37.59	7.41	29.60	Average
4	15725.900	66.48	-17.06	83.54	51.08	37.59	7.41	29.60	PEAK

<b>Test date</b>	May 04, 2008	<b>Test Site No.</b>	03CH03-HY
<b>Temperature</b>	26°C	<b>Humidity</b>	54%
<b>Test Engineer</b>	Duncan	<b>Configuration</b>	802.11n CH 52 (20MHz)

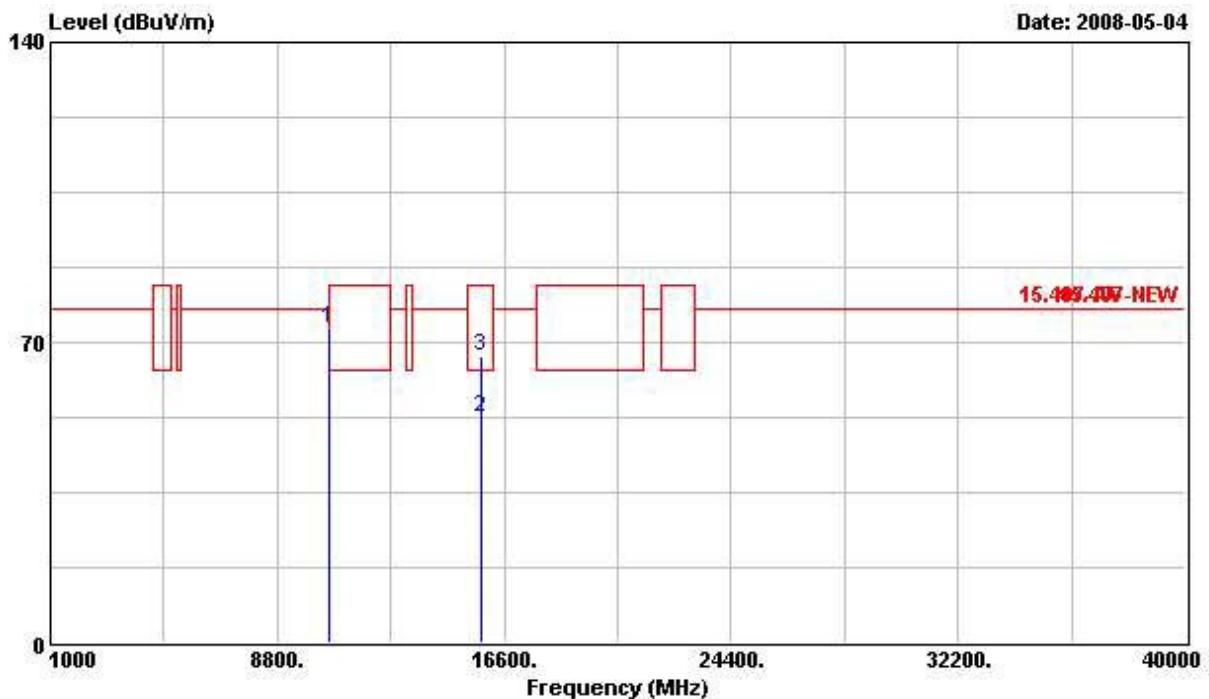
**Horizontal**

Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Remark
		Line	Limit	Level	Factor	Loss	Factor	
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	8532.000	53.59	-24.25	77.84	42.66	38.32	5.42	32.81 PEAK
2	10524.200	72.72	-5.12	77.84	58.32	39.29	6.28	31.17 PEAK
3	15774.000	52.42	-11.12	63.54	36.96	37.61	7.42	29.57 Average
4	15774.000	66.93	-16.61	83.54	51.47	37.61	7.42	29.57 PEAK

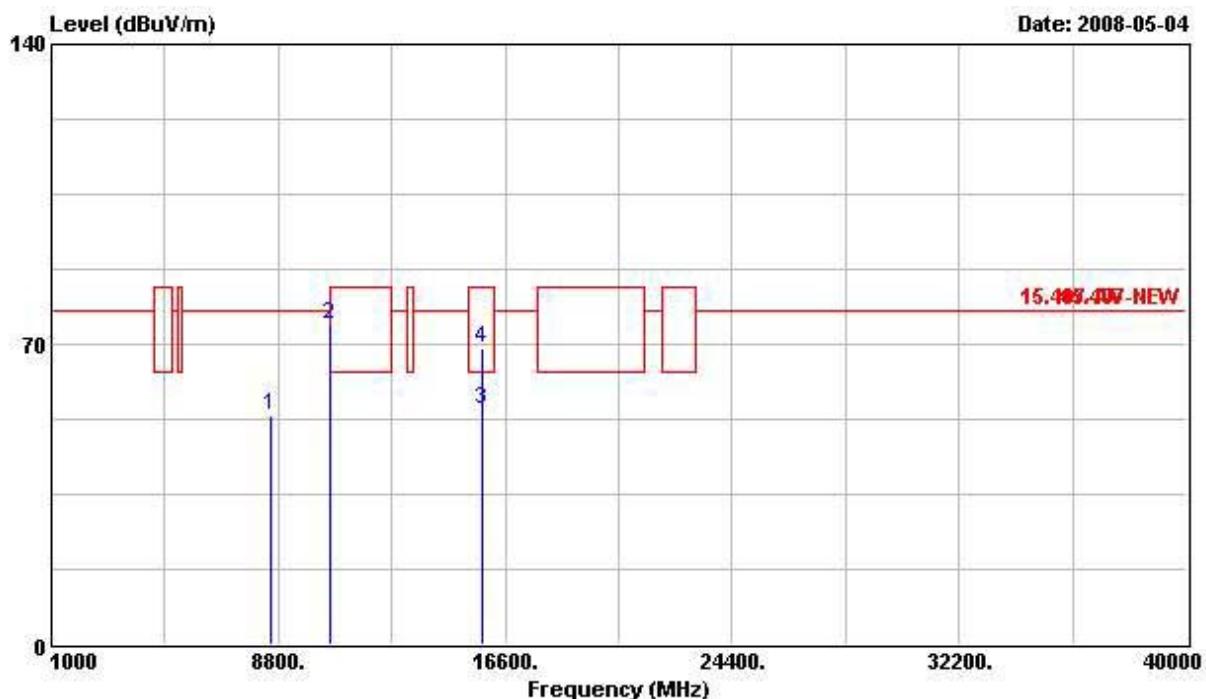
*Vertical*

Freq	Level	Over Limit		Read		Antenna Factor	Cable Preamp		Remark
		MHz	dBuV/m	dB	dBuV/m		dBuV	dB/m	
1	8536.000	53.09	-24.75	77.84	42.16	38.32	5.42	32.81	PEAK
2	10513.400	74.25	-3.59	77.84	59.85	39.29	6.28	31.17	PEAK
3	15773.900	54.95	-8.59	63.54	39.49	37.61	7.42	29.57	Average
4	15773.900	68.13	-15.41	83.54	52.68	37.61	7.42	29.57	PEAK

<b>Test date</b>	May 04, 2008	<b>Test Site No.</b>	03CH03-HY
<b>Temperature</b>	26°C	<b>Humidity</b>	54%
<b>Test Engineer</b>	Duncan	<b>Configuration</b>	802.11n CH 56 (20MHz)

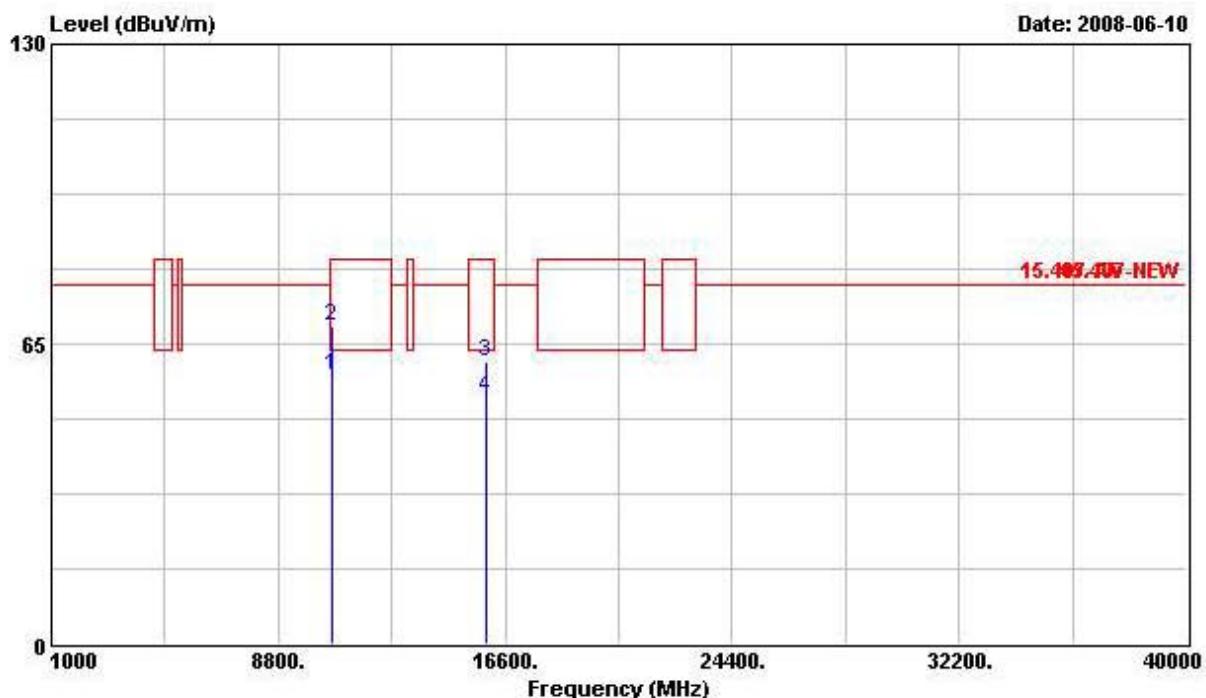
**Horizontal**

Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Remark
		Line	Limit	Antenna	Level Factor	Cable Loss	Preamp Factor	
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	10570.100	73.30	-4.54	77.84	58.77	39.26	6.30	31.03 PEAK
2	15837.800	52.59	-10.95	63.54	37.05	37.64	7.43	29.53 Average
3	15837.800	66.78	-16.76	83.54	51.24	37.64	7.43	29.53 PEAK

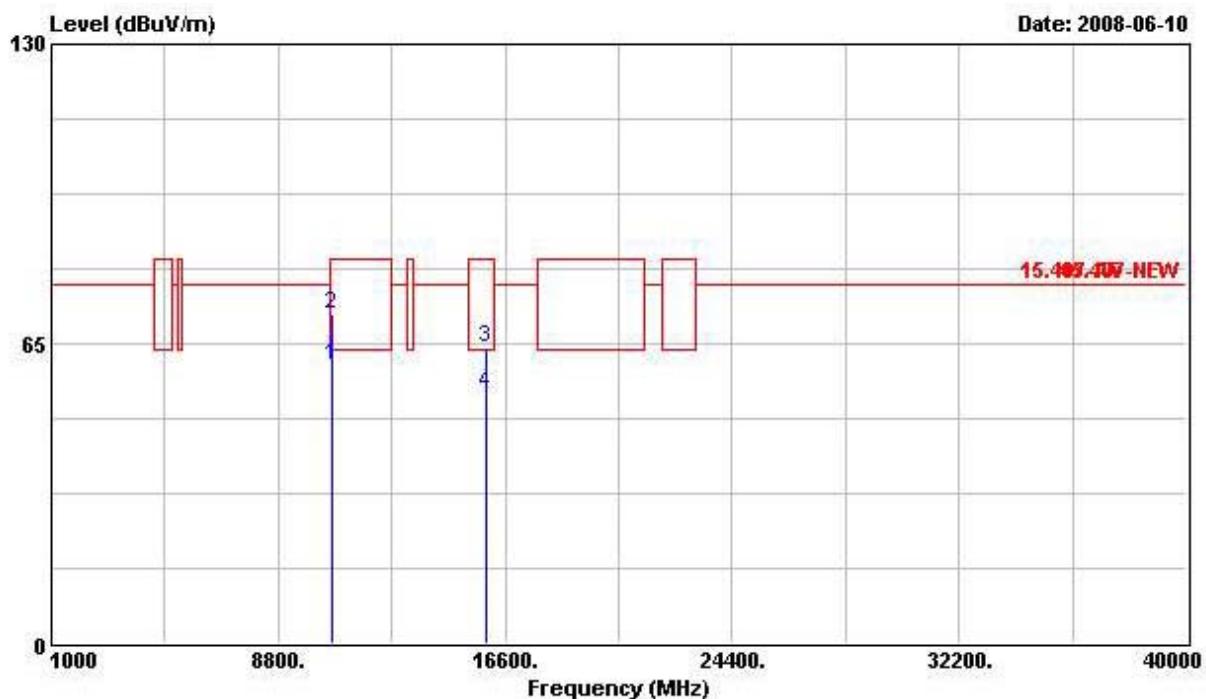
*Vertical*

Freq	Level	Over Limit		Read		Antenna Line Factor	Cable Preamp		Remark
		MHz	dBuV/m	dB	dBuV/m		dB	dB	
1	8556.000	53.61	-24.23	77.84	42.74	38.33	5.35	32.81	PEAK
2 @	10560.100	74.82	-3.02	77.84	60.28	39.27	6.30	31.03	PEAK
3	15838.100	55.03	-8.51	63.54	39.49	37.64	7.43	29.53	Average
4	15838.100	69.22	-14.32	83.54	53.68	37.64	7.43	29.53	PEAK

<b>Test date</b>	Jun. 10, 2008	<b>Test Site No.</b>	03CH03-HY
<b>Temperature</b>	26°C	<b>Humidity</b>	54%
<b>Test Engineer</b>	Duncan	<b>Configuration</b>	802.11n CH 64 (20MHz)

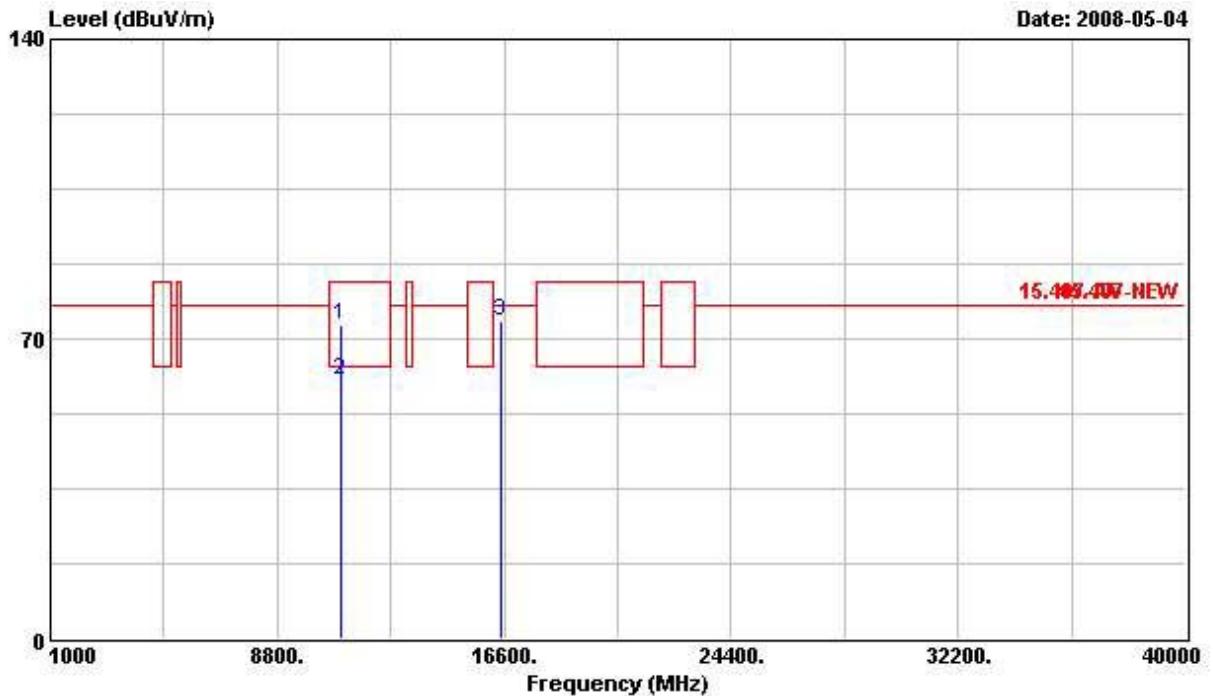
**Horizontal**

Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Remark
		Limit	Line	Level	Factor	Loss	Factor	
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	10640.320	58.36	-5.18	63.54	43.61	39.22	6.34	30.81 AVERAGE
2	10640.320	69.03	-14.51	83.54	54.28	39.22	6.34	30.81 Peak
3	15960.000	61.29	-22.25	83.54	45.61	37.69	7.46	29.46 Peak
4	15960.000	53.29	-10.25	63.54	37.61	37.69	7.46	29.46 Average

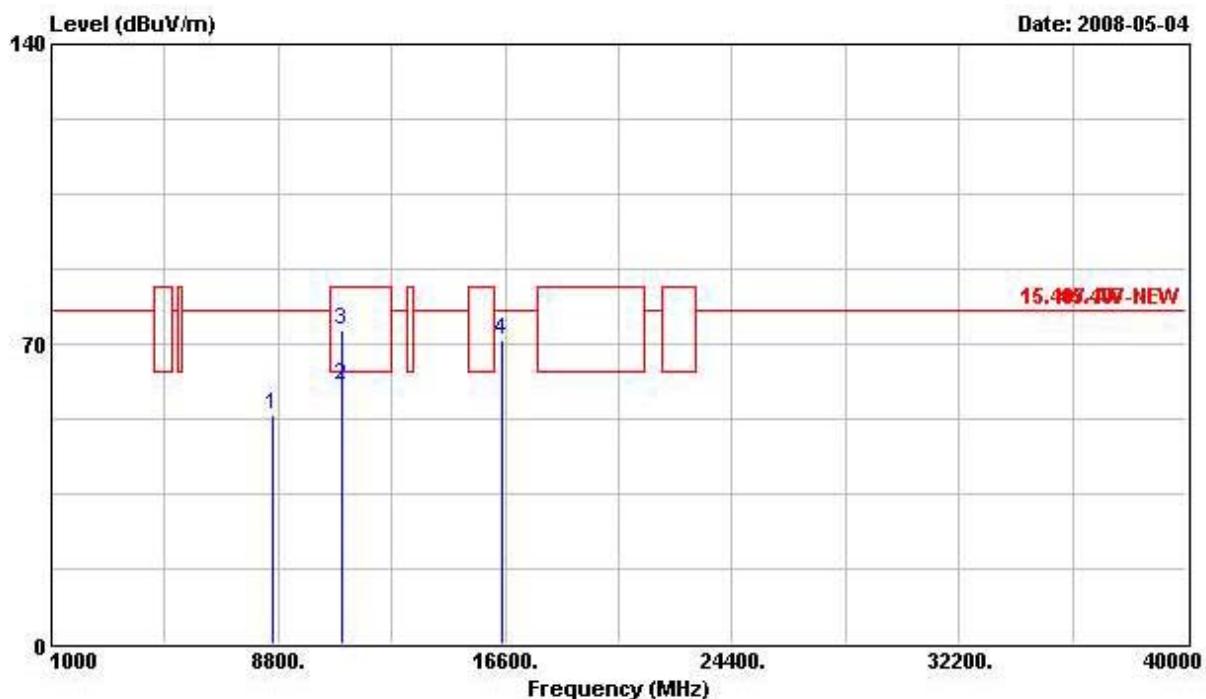
*Vertical*

Freq	Level	Over Limit		Read Line	Antenna Factor	Cable Preamp		Remark
		MHz	dBuV/m	dB	dBuV/m	dB	dB	
1	10640.400	60.11	-3.43	63.54	45.36	39.22	6.34	30.81 AVERAGE
2	10640.400	71.53	-12.01	83.54	56.78	39.22	6.34	30.81 Peak
3	15960.000	64.11	-19.43	83.54	48.43	37.69	7.46	29.46 Peak
4	15960.000	54.22	-9.32	63.54	38.54	37.69	7.46	29.46 Average

<b>Test date</b>	May 04, 2008	<b>Test Site No.</b>	03CH03-HY
<b>Temperature</b>	26°C	<b>Humidity</b>	54%
<b>Test Engineer</b>	Duncan	<b>Configuration</b>	802.11n CH 100 (20MHz)

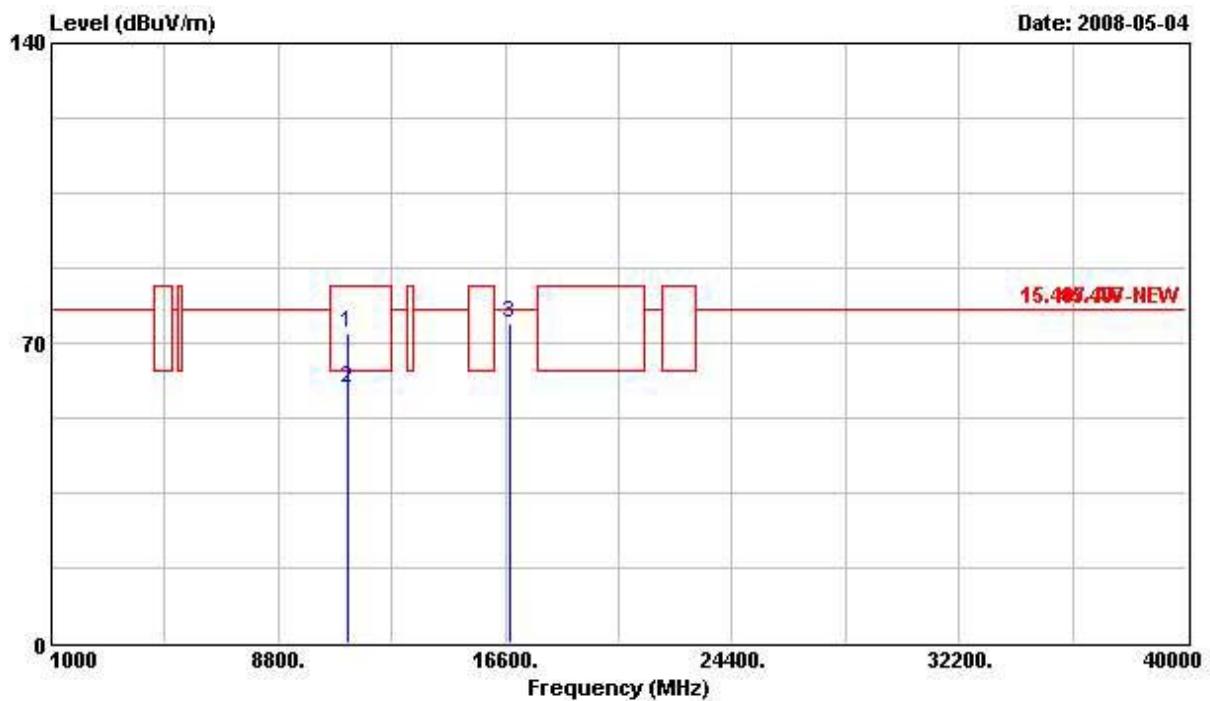
**Horizontal**

Freq	Level	Over Limit		ReadAntenna		Cable Preamp		Remark
		MHz	dBuV/m	dB	Line	Level	Factor	
1	11001.000	73.17	-10.37	83.54	57.41	39.00	6.57	29.81 PEAK
2	11001.000	60.50	-3.04	63.54	44.74	39.00	6.57	29.81 Average
3	16496.900	73.92	-3.92	77.84	56.84	39.00	7.52	29.44 PEAK

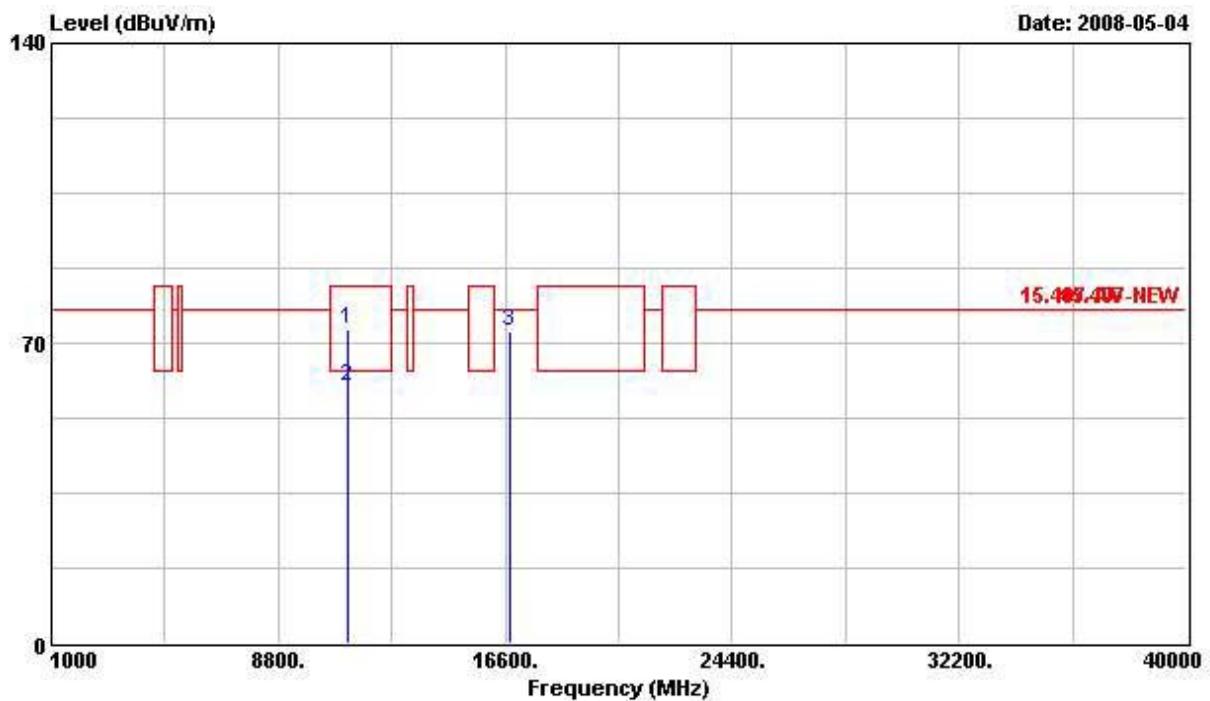
*Vertical*

Freq	Level	Over Limit		Read Antenna		Cable Preamp		Remark
		MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	
1	8588.000	53.52	-24.32	77.84	42.69	38.35	5.28	32.81 PEAK
2	10998.600	60.47	-3.07	63.54	44.73	39.00	6.55	29.81 Average
3	10998.600	73.38	-10.16	83.54	57.64	39.00	6.55	29.81 PEAK
4	16505.500	70.97	-6.87	77.84	53.89	39.00	7.52	29.44 PEAK

<b>Test date</b>	May 04, 2008	<b>Test Site No.</b>	03CH03-HY
<b>Temperature</b>	26°C	<b>Humidity</b>	54%
<b>Test Engineer</b>	Duncan	<b>Configuration</b>	802.11n CH 120 (20MHz)

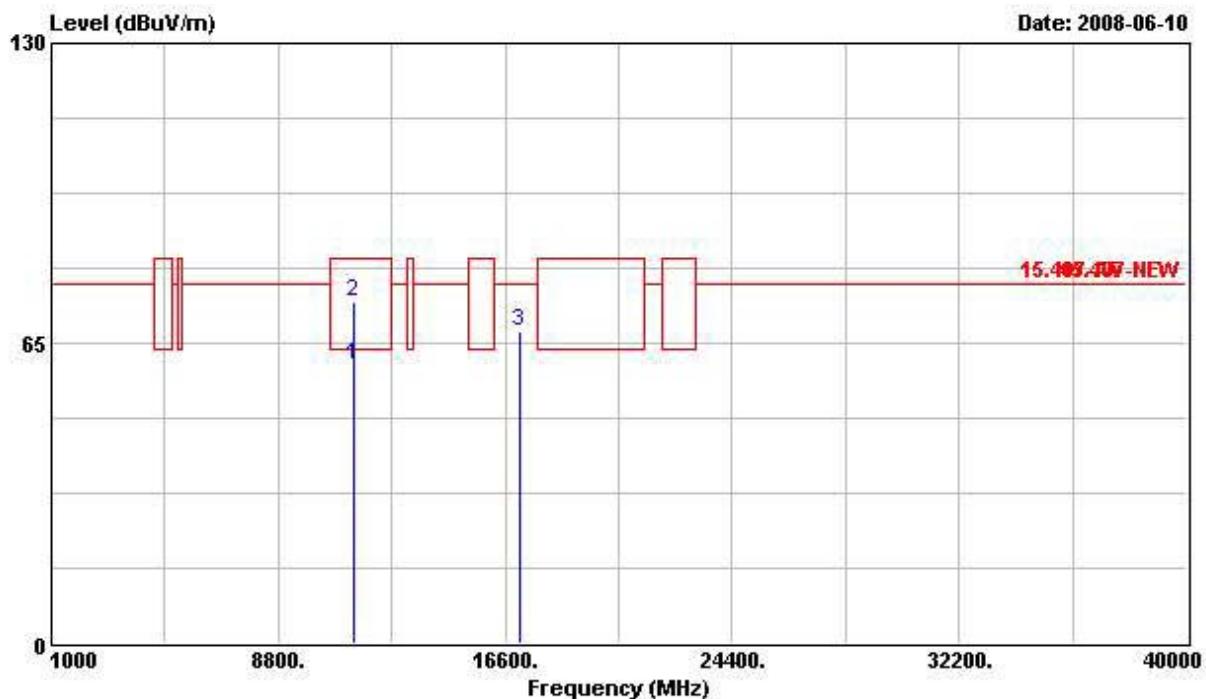
**Horizontal**

Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Remark
		Line	Limit	Antenna	Level Factor	Cable Loss	Preamp Factor	
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	11194.900	72.39	-11.15	83.54	57.33	39.28	6.64	30.86 PEAK
2	11194.900	59.32	-4.22	63.54	44.26	39.28	6.64	30.86 Average
3 @	16786.600	74.63	-3.21	77.84	55.51	40.35	7.67	28.90 PEAK

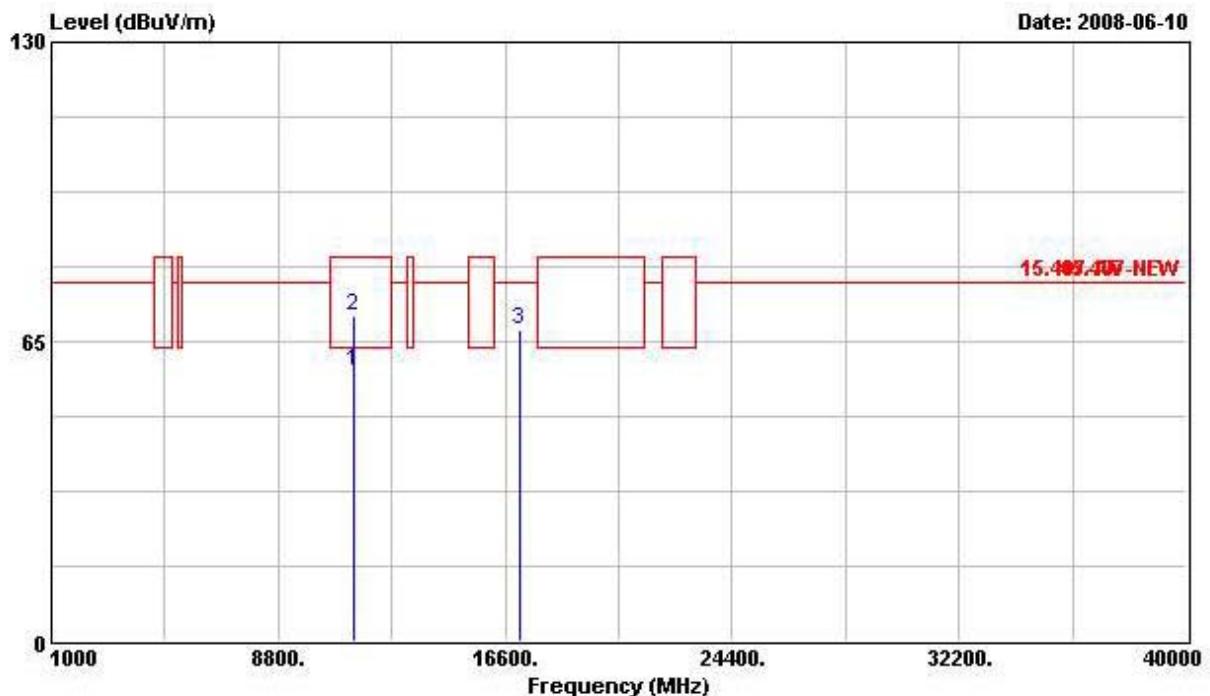
*Vertical*

Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Remark
		MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	
1	11199.200	73.06	-10.48	83.54	57.99	39.28	6.66	30.86 PEAK
2	11199.200	60.00	-3.54	63.54	44.93	39.28	6.66	30.86 Average
3	16789.100	72.93	-4.91	77.84	53.81	40.35	7.67	28.90 PEAK

<b>Test date</b>	Jun. 10, 2008	<b>Test Site No.</b>	03CH03-HY
<b>Temperature</b>	26°C	<b>Humidity</b>	54%
<b>Test Engineer</b>	Duncan	<b>Configuration</b>	802.11n CH 140 (20MHz)

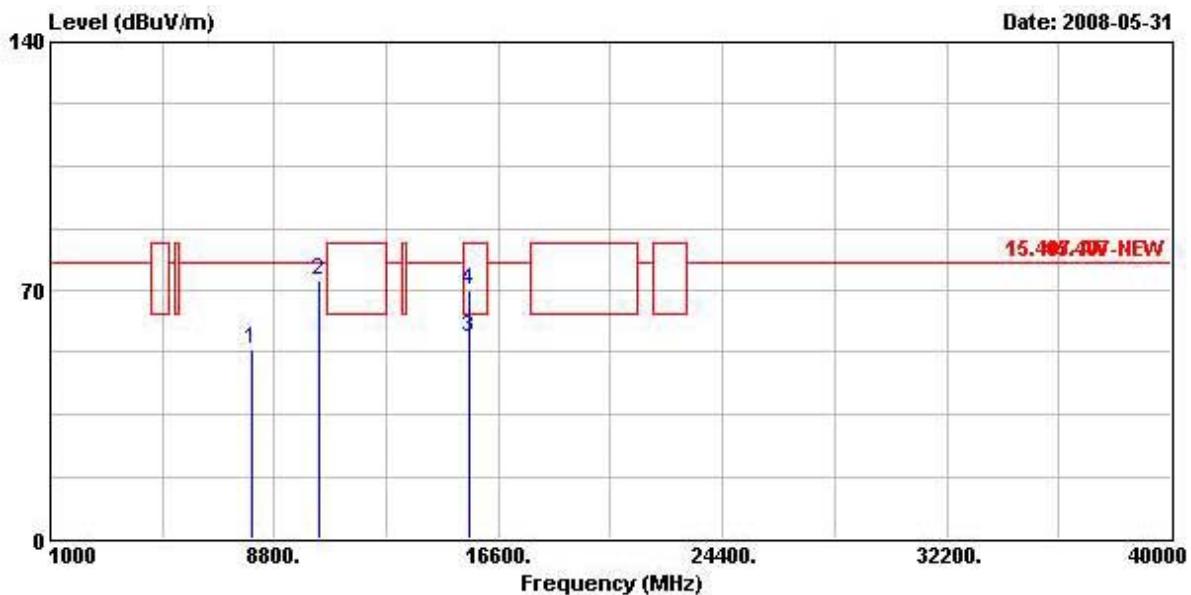
**Horizontal**

Freq MHz	Level dBuV/m	Over	Limit	Read	Antenna	Cable	Preamp	Remark
		Line	Limit	Level	Factor	Loss	Factor	
11400.920	60.25	-3.29	63.54	45.87	39.56	6.75	31.92	AVERAGE
11400.920	73.81	-9.73	83.54	59.42	39.56	6.75	31.92	Peak
17100.000	67.58	-10.26	77.84	46.18	42.14	7.79	28.53	PEAK

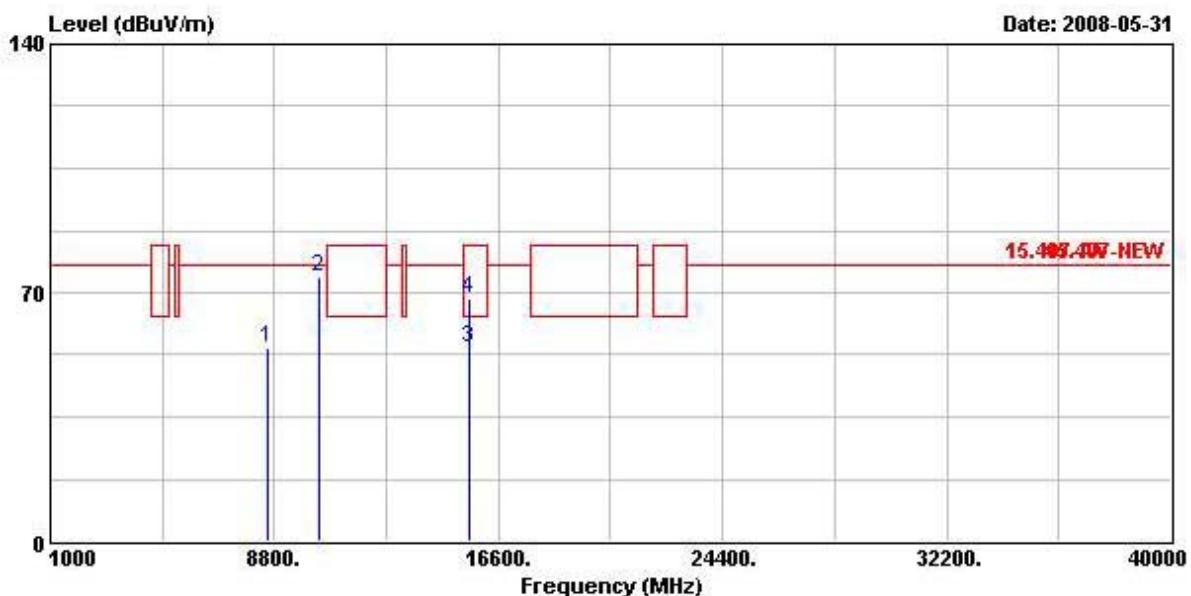
*Vertical*

Freq	Level	Over Limit		Read	Antenna	Cable Preamp		Remark
		MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	
1	11401.080	58.60	-4.94	63.54	44.22	39.56	6.75	31.92 AVERAGE
2	11401.080	70.70	-12.84	83.54	56.31	39.56	6.75	31.92 Peak
3	17100.000	67.43	-10.41	77.84	46.03	42.14	7.79	28.53 PEAK

<b>Test date</b>	May 31, 2008	<b>Test Site No.</b>	03CH03-HY
<b>Temperature</b>	26°C	<b>Humidity</b>	54%
<b>Test Engineer</b>	Duncan	<b>Configuration</b>	802.11n CH 38 (40MHz)

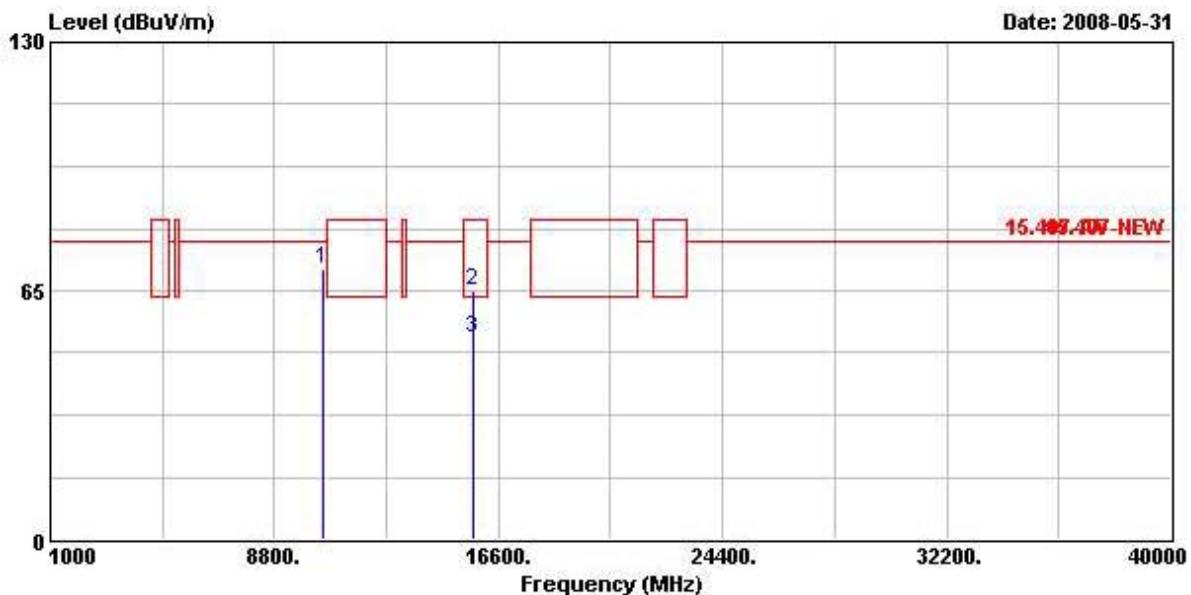
**Horizontal**

Freq	Level	Over Limit	Limit Line	Read Antenna		Cable Loss	Preamp Factor	Remark	
				MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m
1	7988.000	53.34	-24.50	77.84	43.66	37.78	4.70	32.80	PEAK
2	10381.100	72.79	-5.05	77.84	58.92	39.32	6.14	31.59	PEAK
3	15558.000	56.60	-6.94	63.54	41.39	37.52	7.37	29.68	Average
4	15558.000	69.95	-13.59	83.54	54.74	37.52	7.37	29.68	PEAK

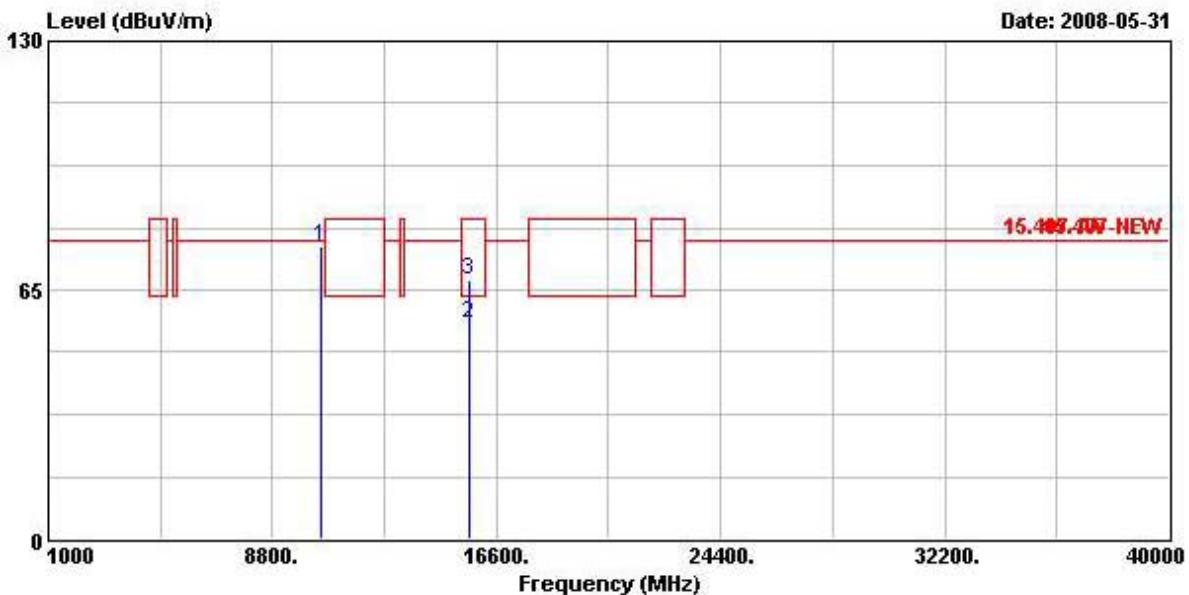
*Vertical*

Freq	Level	Over Limit	Limit Line	Read		Antenna Factor	Cable Loss	Preamp dB	Remark
				dBuV/m	dB				
1	8596.000	54.38	-23.46	77.84	43.54	38.36	5.28	32.81	PEAK
2	10380.000	74.21	-3.63	77.84	60.34	39.32	6.14	31.59	PEAK
3	15562.000	54.38	-9.16	63.54	39.16	37.53	7.37	29.68	Average
4	15562.000	68.54	-15.00	83.54	53.32	37.53	7.37	29.68	PEAK

<b>Test date</b>	May 31, 2008	<b>Test Site No.</b>	03CH03-HY
<b>Temperature</b>	26°C	<b>Humidity</b>	54%
<b>Test Engineer</b>	Duncan	<b>Configuration</b>	802.11n CH 46 (40MHz)

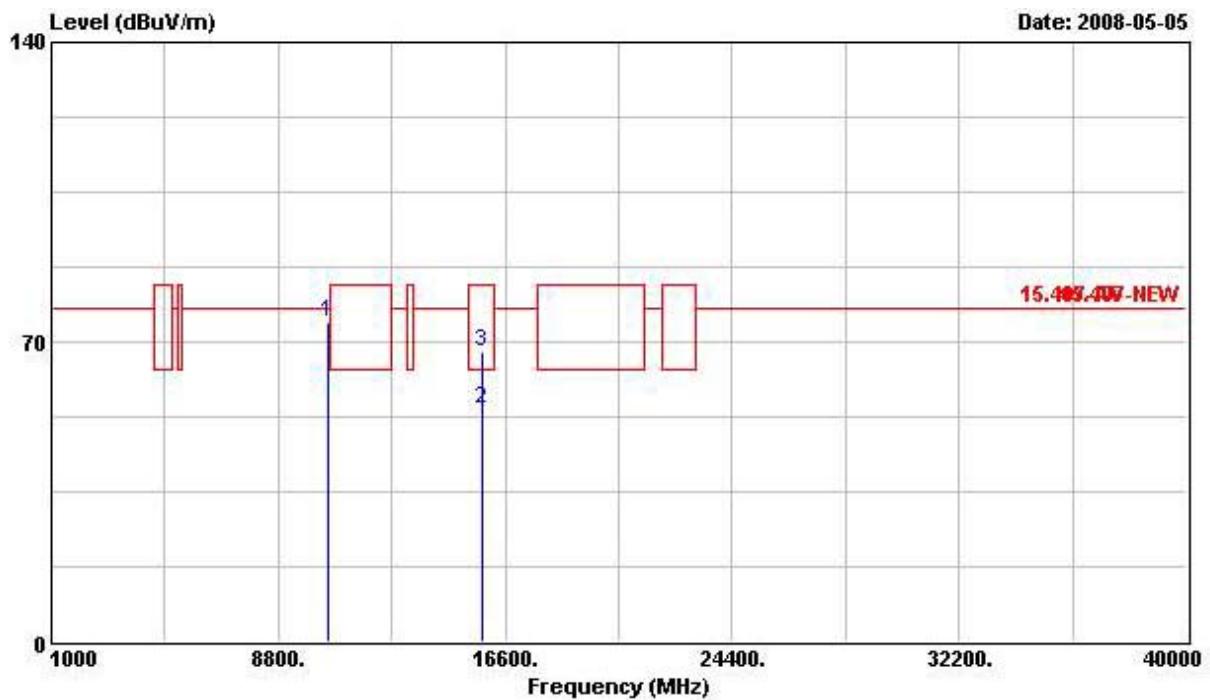
**Horizontal**

Freq	Level	Over Limit		Read Line		Antenna Factor	Cable Preamp		Remark
		MHz	dBuV/m	dB	dBuV/m		dBuV	dB/m	
1	10460.000	70.77	-7.07	77.84	56.57	39.31	6.23	31.34	PEAK
2	15686.100	64.92	-18.62	83.54	49.55	37.58	7.40	29.61	Peak
3	15686.100	52.54	-11.00	63.54	37.17	37.58	7.40	29.61	AVERAGE

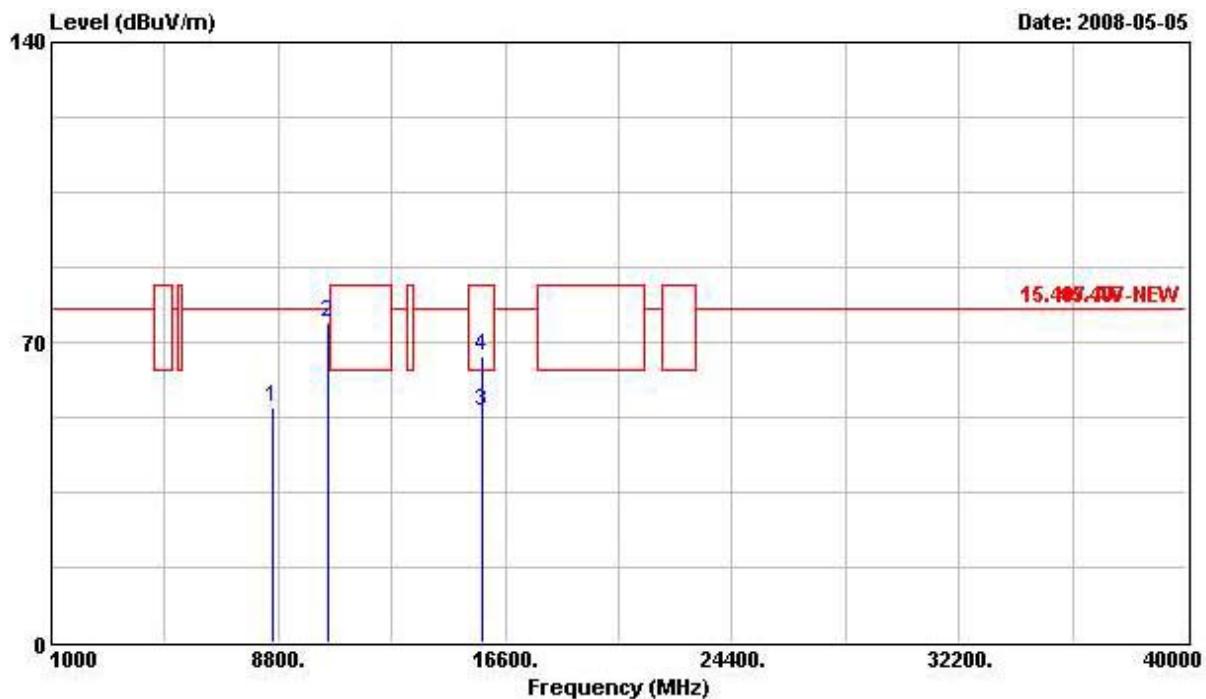
*Vertical*

Freq	Level	Over Limit	Read		Antenna	Cable	Preamp	Loss Factor	Remark
			Line	Factor					
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		
10460.100	104.60	76.11	-1.73	77.84	61.90	39.31	6.23	31.34	PEAK
15683.600	156.83	55.98	-7.56	63.54	40.61	37.58	7.40	29.61	Average
15683.600	156.83	67.83	-15.71	83.54	52.47	37.58	7.40	29.61	PEAK

Test date	May 05, 2008	Test Site No.	03CH03-HY
Temperature	26°C	Humidity	54%
Test Engineer	Duncan	Configuration	802.11n CH 54 (40MHz)

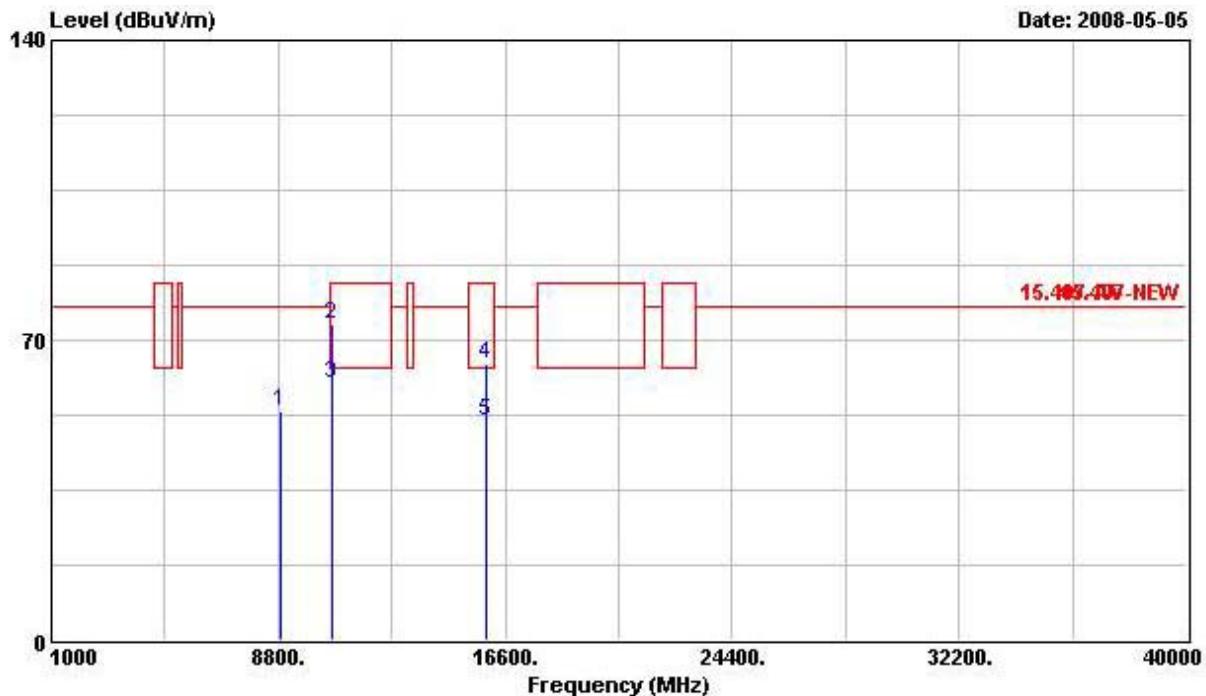
**Horizontal**

Freq MHz	Level dBuV/m	Over Limit dB	Limit dBuV/m	Read		Antenna Level dBuV	Cable Loss dB	Preamp Factor	Remark
				Line	Factor				
1	10540.100	74.43	-3.41	77.84	59.95	39.28	6.30	31.10	PEAK
2	15821.700	54.42	-9.12	63.54	38.91	37.63	7.43	29.54	Average
3	15821.700	67.50	-16.04	83.54	51.99	37.63	7.43	29.54	Peak

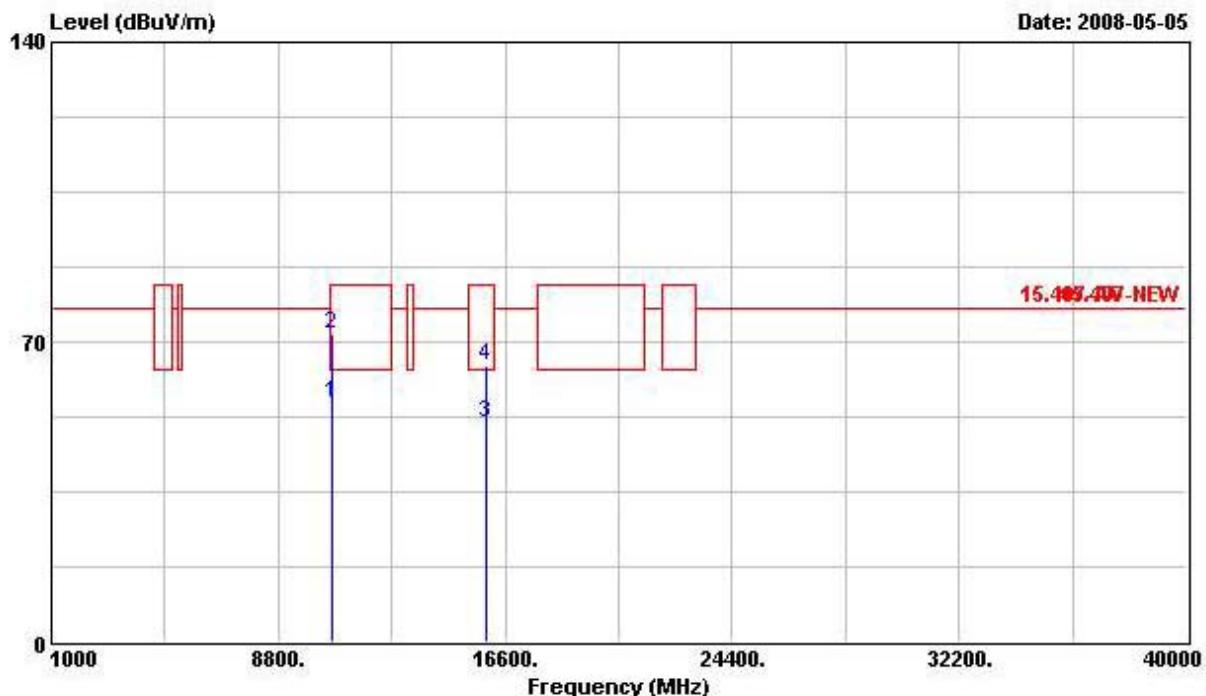
*Vertical*

Freq	Level	Over Limit		Read Line	Antenna Factor	Cable Preamp		Remark
		MHz	dBuV/m	dB	dBuV/m	dB	dB	
1	8584.000	54.65	-23.19	77.84	43.83	38.35	5.28	32.81 Peak
2	10540.000	74.73	-3.11	77.84	60.25	39.28	6.30	31.10 Peak
3	15805.000	53.72	-9.82	63.54	38.21	37.62	7.43	29.54 Average
4	15805.000	66.91	-16.63	83.54	51.40	37.62	7.43	29.54 Peak

<b>Test date</b>	May 05, 2008	<b>Test Site No.</b>	03CH03-HY
<b>Temperature</b>	26°C	<b>Humidity</b>	54%
<b>Test Engineer</b>	Duncan	<b>Configuration</b>	802.11n CH 62 (40MHz)

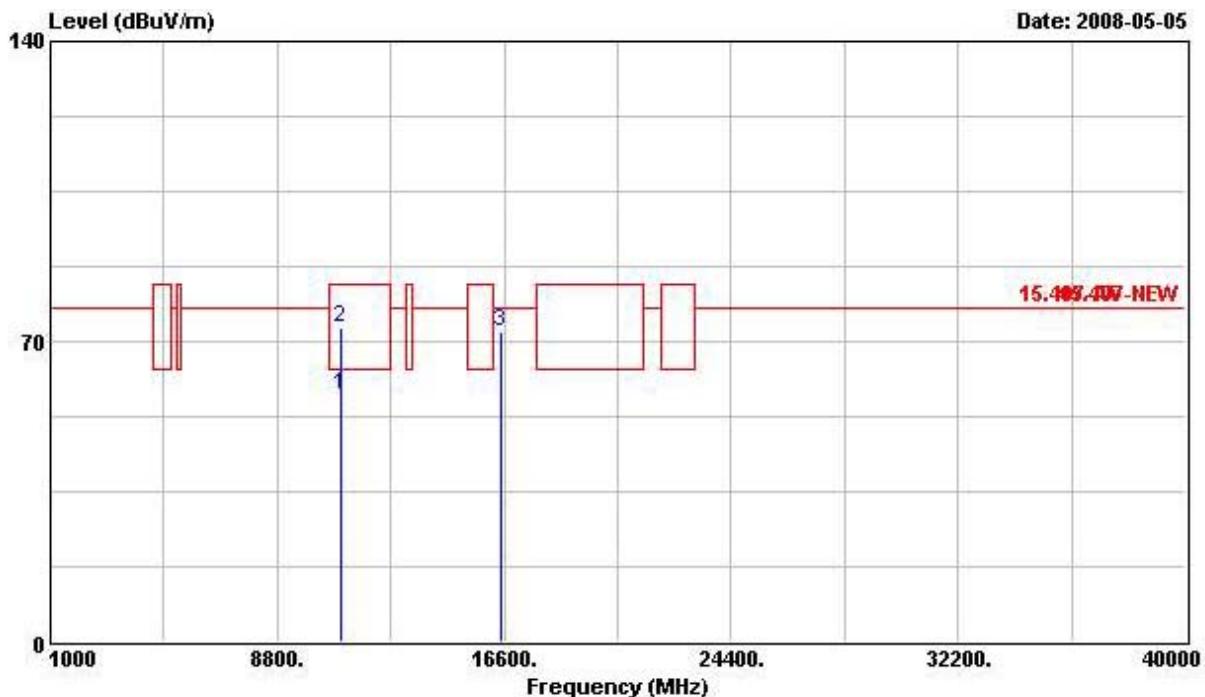
**Horizontal**

Freq	Level	Over Limit	Limit Line	Read Antenna		Cable Loss	Preamp Factor	Remark	
				MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m
1	8904.000	53.21	-24.63	77.84	42.73	38.54	4.74	32.81	PEAK
2	10621.400	73.84	-9.70	83.54	59.15	39.23	6.34	30.88	Peak
3	10621.400	59.76	-3.78	63.54	45.07	39.23	6.34	30.88	AVERAGE
4	15932.200	64.37	-19.17	83.54	48.73	37.67	7.45	29.48	Peak
5	15932.200	51.02	-12.52	63.54	35.38	37.67	7.45	29.48	AVERAGE

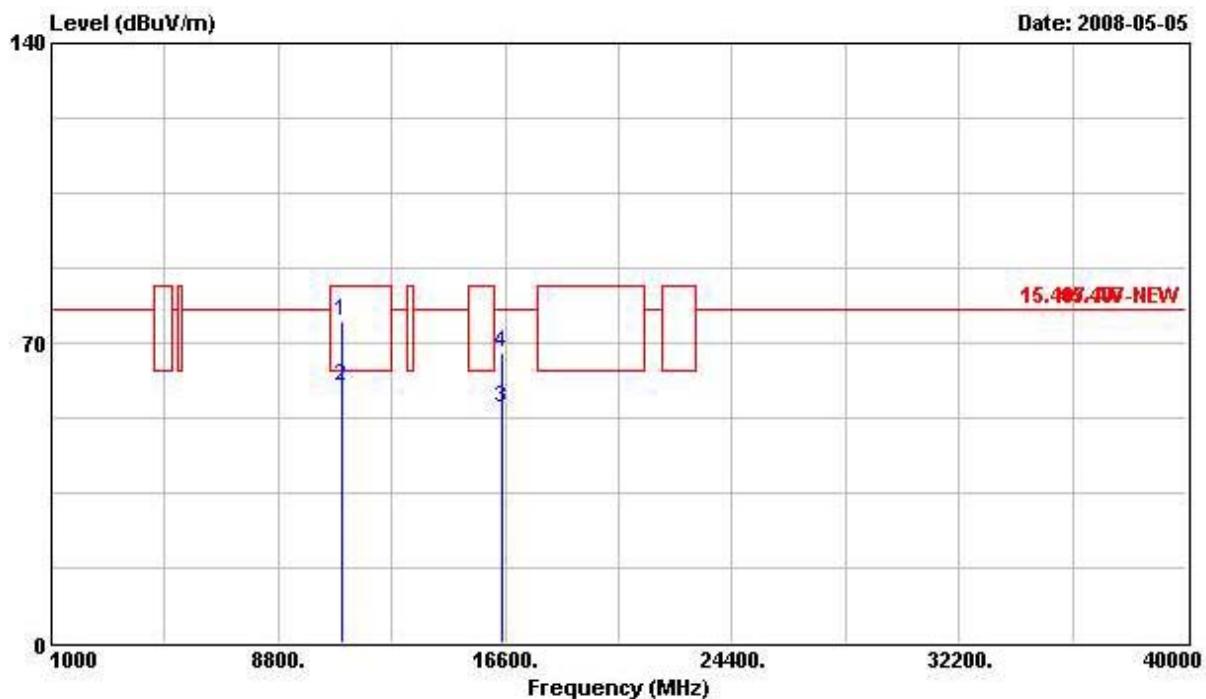
*Vertical*

Freq	Level	Over Limit		Read		Antenna Factor	Cable Preamp		Remark
		MHz	dBuV/m	dB	dBuV/m		dBuV	dB/m	
1	10619.800	55.94	-7.60	63.54	41.25	39.23	6.34	30.88	AVERAGE
2	10619.800	71.64	-11.90	83.54	56.95	39.23	6.34	30.88	Peak
3	15934.400	51.04	-12.50	63.54	35.39	37.67	7.45	29.48	AVERAGE
4	15934.400	64.25	-19.29	83.54	48.61	37.67	7.45	29.48	Peak

<b>Test date</b>	May 05, 2008	<b>Test Site No.</b>	03CH03-HY
<b>Temperature</b>	26°C	<b>Humidity</b>	54%
<b>Test Engineer</b>	Duncan	<b>Configuration</b>	802.11n CH 102 (40MHz)

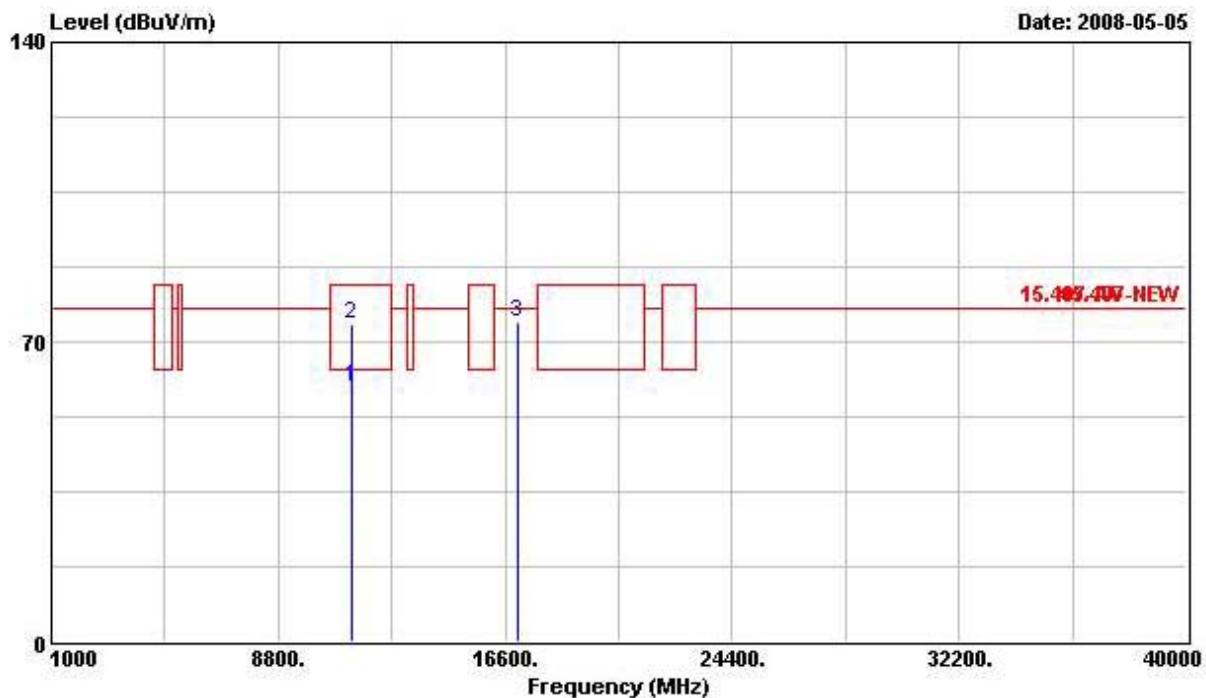
**Horizontal**

Freq MHz	Level dBuV/m	Over Limit		Read Line Level dBuV	Antenna Factor dB/m	Cable Loss dB		Preamp Factor dB	Remark
		Limit dB	dBuV/m			dB	dB		
1	11020.000	57.34	-6.20	63.54	41.69	39.02	6.57	29.94	Average
2	11020.000	73.44	-10.10	83.54	57.79	39.02	6.57	29.94	PEAK
3	16521.300	72.22	-5.62	77.84	55.01	39.08	7.52	29.39	PEAK

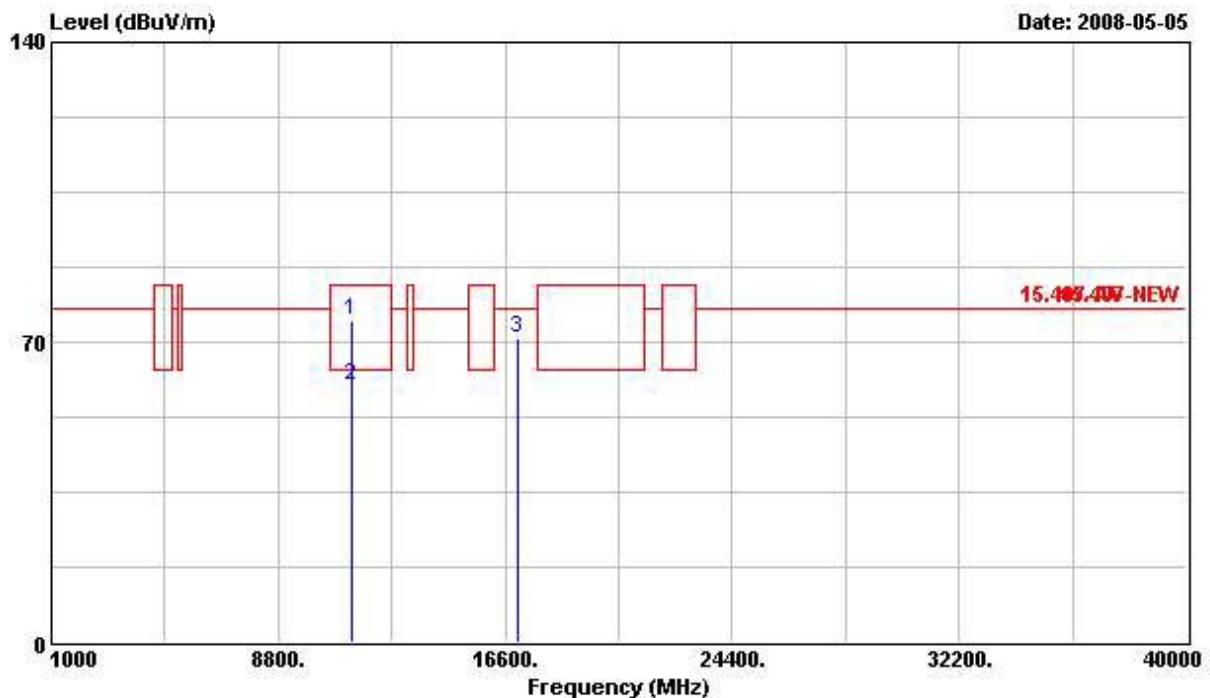
*Vertical*

Freq	Level	Over Limit		Read		Antenna Factor	Cable Preamp		Remark
		MHz	dBuV/m	dB	dBuV/m		dBuV	dB/m	
1	11020.000	75.07	11.53	63.54	59.42	39.02	6.57	29.94	Average
2	11020.000	59.68	-3.86	63.54	44.03	39.02	6.57	29.94	Average
3	16518.000	54.71	-23.13	77.84	37.50	39.08	7.52	29.39	Average
4	16518.000	67.72	-10.12	77.84	50.51	39.08	7.52	29.39	PEAK

<b>Test date</b>	May 05, 2008	<b>Test Site No.</b>	03CH03-HY
<b>Temperature</b>	26°C	<b>Humidity</b>	54%
<b>Test Engineer</b>	Duncan	<b>Configuration</b>	802.11n CH 134 (40MHz)

**Horizontal**

Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Remark
		Line	Limit	Antenna	Level	Factor	Loss	
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	11339.000	59.22	-4.32	63.54	44.57	39.47	6.71	31.52 Average
2	11339.000	74.12	-9.42	83.54	59.47	39.47	6.71	31.52 PEAK
3	17016.200	74.78	-3.06	77.84	54.08	41.44	7.78	28.52 PEAK

**Vertical**

Freq MHz	Level dBuV/m	Over Limit		Read Line Level dBuV	Antenna Factor dB/m	Cable Loss dB		Preamp Factor dB	Remark
		Limit dB	Line dBuV/m			Cable Loss dB	Preamp Factor dB		
1	11338.700	75.10	-8.44	83.54	60.45	39.47	6.71	31.52	PEAK
2	11338.700	59.77	-3.77	63.54	45.12	39.47	6.71	31.52	Average
3	17018.200	71.02	-6.82	77.84	50.32	41.44	7.78	28.52	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.

The limits above 5GHz shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade form 3m to 1m.

Distance extrapolation factor = 20 log (specific distance [3m] / test distance [1m]) (dB);

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

### 3.7 Band Edge and Fundamental Emissions Measurement

#### 3.7.1 Limit

For transmitters operating in the 5.15-5.35 GHz band: all emissions outside of the 5.15-5.35 GHz band shall not exceed an EIRP of -27 dBm/MHz (68.3dB<sub>V</sub>/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 (68.3dB<sub>V</sub>/m at 3m). For transmitters operating in the 5.725-5.825 GHz band: all emissions within the frequency range from the band edge to 10 MHz above or below the band edge shall not exceed an EIRP of -17 dBm/MHz (78.3dB<sub>V</sub>/m at 3m); for frequencies 10 MHz or greater above or below the band edge, emissions shall not exceed an EIRP of -27 dBm/MHz (68.3dB<sub>V</sub>/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

#### 3.7.2 Measuring Instruments and Setting

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

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	100 MHz
RB / VB (Emission in restricted band)	1MHz / 1MHz for Peak, 1 MHz / 10Hz for Average
RB / VB (Emission in non-restricted band)	1 MHz /1 MHz for Peak

#### 3.7.3 Test Procedures

- The test procedure is the same as section 3.6.3, only the frequency range investigated is limited to 100MHz around bandedges.
- In case the emission is fail due to the used RB/VB is too wide, marker-delta method of FCC Public Notice DA00-705 will be followed.

#### 3.7.4 Test Setup Layout

This test setup layout is the same as that shown in section 3.6.4.

### 3.7.5 Test Deviation

There is no deviation with the original standard.

### 3.7.6 EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

### 3.7.7 Test Result of Band Edge and Fundamental Emissions

For Single Chain:

<b>Test date</b>	May 02, 2008			<b>Test Site No.</b>	03CH03-HY		
<b>Temperature</b>	26°C			<b>Humidity</b>	54%		
<b>Test Engineer</b>	Duncan			<b>Configuration</b>	802.11a CH 36,40, 48		

#### Channel 36

Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Remark
		Limit	Line	Level	Factor	Loss	Factor	
		MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	
1 @	5149.900	61.76	-1.78	63.54	23.47	34.35	3.94	0.00 Average
2 @	5181.400	116.50			78.19	34.38	3.92	0.00 Average
1 @	5149.500	78.55	-4.99	83.54	40.26	34.35	3.94	0.00 Peak
2 @	5183.000	125.65			87.34	34.38	3.92	0.00 Peak

An item 2 is Fundamental Emissions.

#### Channel 40

Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Remark
		Limit	Line	Level	Factor	Loss	Factor	
		MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	
1	5148.100	71.56	-11.98	83.54	33.27	34.35	3.94	0.00 Peak
2 @	5196.800	126.94			88.64	34.40	3.90	0.00 Peak
1 @	5149.900	59.27	-4.27	63.54	20.98	34.35	3.94	0.00 Average
2 @	5198.000	117.96			79.66	34.40	3.90	0.00 Average

An item 2 is Fundamental Emissions.

#### Channel 48

Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Remark
		Limit	Line	Level	Factor	Loss	Factor	
		MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	
1	5143.200	70.75	-12.79	83.54	32.46	34.35	3.94	0.00 Peak
2 @	5239.600	126.43			88.12	34.43	3.88	0.00 Peak
3	5393.200	69.65	-13.89	83.54	31.27	34.58	3.80	0.00 Peak
1 @	5148.400	59.12	-4.42	63.54	20.83	34.35	3.94	0.00 Average
2 @	5237.600	117.81			79.50	34.43	3.88	0.00 Average
3	5358.000	57.76	-5.78	63.54	19.39	34.55	3.82	0.00 Average

An item 2 is Fundamental Emissions.

<b>Test date</b>	Jun.10, 2008	<b>Test Site No.</b>	03CH03-HY
<b>Temperature</b>	26	<b>Humidity</b>	54%
<b>Test Engineer</b>	Duncan	<b>Configuration</b>	802.11a CH 52, 56, 64

**Channel 52**

	<b>Freq</b>	<b>Level</b>	<b>Over</b>	<b>Limit</b>	<b>Read</b>	<b>Antenna</b>	<b>Cable</b>	<b>Preamp</b>	<b>Remark</b>
			<b>MHz</b>	<b>dBuV/m</b>	<b>dB</b>	<b>dBuV/m</b>	<b>dBuV</b>	<b>dB/m</b>	
1	5107.600	70.97	-12.57	83.54	32.69	34.32	3.96	0.00	Peak
2 @	5262.400	129.05			90.70	34.47	3.88	0.00	Peak
3	5355.200	69.61	-13.93	83.54	31.24	34.55	3.82	0.00	Peak
1	5116.800	59.20	-4.34	63.54	20.94	34.32	3.94	0.00	Average
2 @	5264.000	120.28			81.93	34.47	3.88	0.00	Average
3	5350.100	57.86	-5.68	63.54	19.49	34.55	3.82	0.00	Average

An item 2 is Fundamental Emissions.

**Channel 56**

	<b>Freq</b>	<b>Level</b>	<b>Over</b>	<b>Limit</b>	<b>Read</b>	<b>Antenna</b>	<b>Cable</b>	<b>Preamp</b>	<b>Remark</b>
			<b>MHz</b>	<b>dBuV/m</b>	<b>dB</b>	<b>dBuV/m</b>	<b>dBuV</b>	<b>dB/m</b>	
1 @	5276.680	128.31			89.97	34.48	3.86	0.00	Peak
2	5367.580	69.84	-13.70	83.54	31.46	34.57	3.82	0.00	Peak
1 @	5276.680	119.53			81.19	34.48	3.86	0.00	Average
2	5360.150	58.08	-5.46	63.54	19.71	34.55	3.82	0.00	Average

An item 1 is Fundamental Emissions.

**Channel 64**

	<b>Freq</b>	<b>Level</b>	<b>Over</b>	<b>Limit</b>	<b>Read</b>	<b>Antenna</b>	<b>Cable</b>	<b>Preamp</b>	<b>Remark</b>
			<b>MHz</b>	<b>dBuV/m</b>	<b>dB</b>	<b>dBuV/m</b>	<b>dBuV</b>	<b>dB/m</b>	
1 @	5322.700	125.12			86.77	34.52	3.84	0.00	Peak
2 @	5352.200	81.77	-1.77	83.54	43.40	34.55	3.82	0.00	Peak
1 @	5322.700	115.02			76.67	34.52	3.84	0.00	Average
2 @	5350.100	61.47	-2.07	63.54	23.10	34.55	3.82	0.00	Average

An item 1 is Fundamental Emissions.

<b>Test date</b>	Jun. 10, 2008	<b>Test Site No.</b>	03CH03-HY
<b>Temperature</b>	26	<b>Humidity</b>	54%
<b>Test Engineer</b>	Duncan	<b>Configuration</b>	802.11a CH 100, 120, 140

**Channel 100**

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Remark
			Limit	Line	dBuV	dB/m	Loss	Factor	
	MHz	dBuV/m	dB	dBuV/m					
1	5459.700	78.09	-5.45	83.54	39.66	34.65	3.78	0.00	Peak
2 @	5496.900	121.27			82.82	34.70	3.75	0.00	Peak
1	5459.900	59.60	-3.94	63.54	21.17	34.65	3.78	0.00	Average
2 @	5496.100	111.61			73.17	34.68	3.75	0.00	Average

An item 2 is Fundamental Emissions.

**Channel 120**

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Remark
			Limit	Line	dBuV	dB/m	Loss	Factor	
	MHz	dBuV/m	dB	dBuV/m					
1 @	5602.700	122.03			83.67	34.72	3.64	0.00	Peak
1 @	5603.500	112.29			73.93	34.72	3.64	0.00	Average

An item 1 is Fundamental Emissions.

**Channel 140**

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Remark
			Limit	Line	dBuV	dB/m	Loss	Factor	
	MHz	dBuV/m	dB	dBuV/m					
1 @	5702.600	122.27			84.01	34.74	3.52	0.00	Peak
2 @	5725.000	75.80	-2.04	77.84	37.54	34.74	3.52	0.00	Peak
1 @	5702.600	112.78			74.52	34.74	3.52	0.00	Average
2	5725.000	59.24	-18.60	77.84	20.98	34.74	3.52	0.00	Average

An item 1 is Fundamental Emissions.

<b>Test date</b>	May 02, 2008	<b>Test Site No.</b>	03CH03-HY
<b>Temperature</b>	26°C	<b>Humidity</b>	54%
<b>Test Engineer</b>	Duncan	<b>Configuration</b>	802.11n CH 36, 40, 48 (20MHz)

**Channel 36**

Freq	Level	Over Limit		ReadAntenna		Cable Preamp		Remark
		Limit	Line	Level	Factor	Loss	Factor	
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1 @	5149.600	79.90	-3.64	83.54	41.61	34.35	3.94	0.00 Peak
2 @	5180.800	125.48			87.17	34.38	3.92	0.00 Peak
1 @	5149.900	62.35	-1.19	63.54	24.06	34.35	3.94	0.00 Average
2 @	5181.300	116.07			77.76	34.38	3.92	0.00 Average

An item 2 is Fundamental Emissions.

**Channel 40**

Freq	Level	Over Limit		ReadAntenna		Cable Preamp		Remark
		Limit	Line	Level	Factor	Loss	Factor	
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	5149.800	72.57	-10.97	83.54	34.28	34.35	3.94	0.00 Peak
2 @	5203.400	127.30			89.00	34.40	3.90	0.00 Peak
1 @	5149.500	59.48	-4.06	63.54	21.19	34.35	3.94	0.00 Average
2 @	5197.400	118.11			79.81	34.40	3.90	0.00 Average

An item 2 is Fundamental Emissions.

**Channel 48**

Freq	Level	Over Limit		ReadAntenna		Cable Preamp		Remark
		Limit	Line	Level	Factor	Loss	Factor	
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	5149.600	71.37	-12.17	83.54	33.08	34.35	3.94	0.00 Peak
2 @	5240.800	126.18			87.87	34.43	3.88	0.00 Peak
3	5359.600	69.73	-13.81	83.54	31.36	34.55	3.82	0.00 Peak
1 @	5106.400	59.27	-4.27	63.54	20.99	34.32	3.96	0.00 Average
2 @	5237.600	117.41			79.10	34.43	3.88	0.00 Average
3	5351.600	57.82	-5.72	63.54	19.45	34.55	3.82	0.00 Average

An item 2 is Fundamental Emissions.

<b>Test date</b>	Jun. 10, 2008	<b>Test Site No.</b>	03CH03-HY
<b>Temperature</b>	26	<b>Humidity</b>	54%
<b>Test Engineer</b>	Duncan	<b>Configuration</b>	802.11n CH 52, 56, 64 (20MHz)

**Channel 52**

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Remark
			Limit	Line	Antenna Level	Factor	Loss	Factor	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	5091.600	71.42	-12.12	83.54	33.16	34.30	3.96	0.00	Peak
2 @	5262.400	129.36			91.01	34.47	3.88	0.00	Peak
3	5364.800	69.39	-14.15	83.54	31.01	34.57	3.82	0.00	Peak
1	5100.800	59.15	-4.39	63.54	20.89	34.30	3.96	0.00	Average
2 @	5264.000	119.91			81.56	34.47	3.88	0.00	Average
3	5355.600	57.91	-5.63	63.54	19.54	34.55	3.82	0.00	Average

An item 2 is Fundamental Emissions.

**Channel 56**

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Remark
			Limit	Line	Antenna Level	Factor	Loss	Factor	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1 @	5280.400	127.29			88.95	34.48	3.86	0.00	Peak
2	5374.800	69.56	-13.98	83.54	31.18	34.57	3.82	0.00	Peak
1 @	5277.400	118.13			79.79	34.48	3.86	0.00	Average
2	5353.400	57.64	-5.90	63.54	19.27	34.55	3.82	0.00	Average

An item 1 is Fundamental Emissions.

**Channel 64**

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Remark
			Limit	Line	Antenna Level	Factor	Loss	Factor	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1 @	5320.600	124.78			86.43	34.52	3.84	0.00	Peak
2 @	5350.300	81.91	-1.63	83.54	43.54	34.55	3.82	0.00	Peak
1 @	5318.300	115.42			77.07	34.52	3.84	0.00	Average
2 @	5350.100	62.23	-1.31	63.54	23.86	34.55	3.82	0.00	Average

An item 1 is Fundamental Emissions.

<b>Test date</b>	Jun. 10, 2008	<b>Test Site No.</b>	03CH03-HY
<b>Temperature</b>	26	<b>Humidity</b>	54%
<b>Test Engineer</b>	Duncan	<b>Configuration</b>	802.11n CH 100, 120, 140 (20MHz)

**Channel 100**

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Remark
			Limit	Line	Level	Factor	Loss	Factor	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1		5459.800	77.70	-5.84	83.54	39.27	34.65	3.78	0.00 Peak
2 @		5499.800	125.95			87.50	34.70	3.75	0.00 Peak
1 @		5459.900	62.05	-1.49	63.54	23.62	34.65	3.78	0.00 Average
2 @		5495.800	116.73			78.29	34.68	3.75	0.00 Average

An item 2 is Fundamental Emissions.

**Channel 120**

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Remark
			Limit	Line	Level	Factor	Loss	Factor	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1 @		5603.500	127.48			89.12	34.72	3.64	0.00 Peak
1 @		5602.200	117.40			79.04	34.72	3.64	0.00 Average

An item 1 is Fundamental Emissions.

**Channel 140**

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Remark
			Limit	Line	Level	Factor	Loss	Factor	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1 @		5699.500	121.64			83.38	34.74	3.52	0.00 Peak
2		5725.400	74.29	-3.55	77.84	36.03	34.74	3.52	0.00 Peak
1 @		5698.700	111.67			73.41	34.74	3.52	0.00 Average
2		5725.000	58.56	-19.28	77.84	20.30	34.74	3.52	0.00 Average

An item 1 is Fundamental Emissions.

<b>Test date</b>	May 02, 2008	<b>Test Site No.</b>	03CH03-HY
<b>Temperature</b>	26°C	<b>Humidity</b>	54%
<b>Test Engineer</b>	Duncan	<b>Configuration</b>	802.11n CH 38, 46, 54 (40MHz)

**Channel 38**

Freq	Level	Over Limit		ReadAntenna		Cable Preamp		Remark
		Line	Limit	Level	Factor	Loss	Factor	
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	5149.900	76.03	-7.51	83.54	37.74	34.35	3.94	0.00 Peak
2 @	5191.600	114.17			75.87	34.40	3.90	0.00 Peak
1 @	5149.900	62.51	-1.03	63.54	24.22	34.35	3.94	0.00 Average
2 @	5196.400	105.20			66.90	34.40	3.90	0.00 Average

An item 2 is Fundamental Emissions.

**Channel 46**

Freq	Level	Over Limit		ReadAntenna		Cable Preamp		Remark
		Line	Limit	Level	Factor	Loss	Factor	
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	5149.900	72.41	-11.13	83.54	34.12	34.35	3.94	0.00 Peak
2 @	5223.800	123.09			84.77	34.42	3.90	0.00 Peak
1 @	5106.400	59.27	-4.27	63.54	20.99	34.32	3.96	0.00 Average
2 @	5237.600	117.41			79.10	34.43	3.88	0.00 Average
3	5351.600	57.82	-5.72	63.54	19.45	34.55	3.82	0.00 Average

An item 2 is Fundamental Emissions.

**Channel 54**

Freq	Level	Over Limit		ReadAntenna		Cable Preamp		Remark
		Line	Limit	Level	Factor	Loss	Factor	
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1 @	5264.200	115.84			77.49	34.47	3.88	0.00 Average
2 @	5412.800	60.96	-2.58	63.54	22.55	34.62	3.80	0.00 Average
1 @	5263.400	125.63			87.28	34.47	3.88	0.00 Peak
2	5353.600	76.01	-7.53	83.54	37.64	34.55	3.82	0.00 Peak

An item 1 is Fundamental Emissions.

<b>Test date</b>	May 02, 2008	<b>Test Site No.</b>	03CH03-HY
<b>Temperature</b>	26	<b>Humidity</b>	54%
<b>Test Engineer</b>	Duncan	<b>Configuration</b>	802.11n CH 62, 102, 134 (40MHz)

**Channel 62**

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Remark
			Limit	Line	Level	Factor	Loss	Factor	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1 @	5318.400	113.53			75.18	34.52	3.84	0.00	Peak
2	5350.400	73.69	-9.85	83.54	35.32	34.55	3.82	0.00	Peak
1 @	5316.800	104.59			66.24	34.52	3.84	0.00	Average
2 @	5350.100	62.11	-1.43	63.54	23.74	34.55	3.82	0.00	Average

An item 1 is Fundamental Emissions.

**Channel 102**

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Remark
			Limit	Line	Level	Factor	Loss	Factor	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	5456.200	77.95	-5.59	83.54	39.52	34.65	3.78	0.00	Peak
2 @	5495.200	117.69			79.25	34.68	3.75	0.00	Peak
1 @	5459.900	61.73	-1.81	63.54	23.30	34.65	3.78	0.00	Average
2 @	5493.800	108.67			70.23	34.68	3.75	0.00	Average

An item 2 is Fundamental Emissions.

**Channel 134**

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Remark
			Limit	Line	Level	Factor	Loss	Factor	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1 @	5657.000	120.01			81.68	34.73	3.60	0.00	Peak
2	5731.200	73.85	-3.99	77.84	35.59	34.74	3.52	0.00	Peak
1 @	5657.600	110.35			72.02	34.73	3.60	0.00	Average
2	5725.600	58.43	-19.41	77.84	20.17	34.74	3.52	0.00	Average

An item 1 is Fundamental Emissions.

## For Two Chain:

<b>Test date</b>	May 07, 2008	<b>Test Site No.</b>	03CH03-HY
<b>Temperature</b>	26°C	<b>Humidity</b>	54%
<b>Test Engineer</b>	Duncan	<b>Configuration</b>	802.11n CH 36, 40, 48 (20MHz)

## Channel 36

	<b>Freq</b>	<b>Level</b>	<b>Over Limit</b>	<b>Limit Line</b>	<b>Read</b>	<b>Antenna</b>	<b>Cable</b>	<b>Preamp</b>	<b>Remark</b>
			<b>MHz</b>	<b>dBuV/m</b>	<b>dB</b>	<b>dBuV/m</b>	<b>dBuV</b>	<b>dB/m</b>	
1	5149.900	77.20	-6.34	83.54	38.91	34.35	3.94	0.00	Peak
2 @	5178.200	126.48			88.17	34.38	3.92	0.00	Peak
1 @	5149.900	61.79	-1.75	63.54	23.50	34.35	3.94	0.00	Average
2 @	5178.200	115.80			77.49	34.38	3.92	0.00	Average

An item 2 is Fundamental Emissions.

## Channel 40

	<b>Freq</b>	<b>Level</b>	<b>Over Limit</b>	<b>Limit Line</b>	<b>Read</b>	<b>Antenna</b>	<b>Cable</b>	<b>Preamp</b>	<b>Remark</b>
			<b>MHz</b>	<b>dBuV/m</b>	<b>dB</b>	<b>dBuV/m</b>	<b>dBuV</b>	<b>dB/m</b>	
1	5149.800	75.57	-7.97	83.54	37.28	34.35	3.94	0.00	Peak
2 @	5202.600	132.09			93.79	34.40	3.90	0.00	Peak
1 @	5149.900	62.31	-1.23	63.54	24.02	34.35	3.94	0.00	Average
2 @	5202.600	121.74			83.44	34.40	3.90	0.00	Average

An item 2 is Fundamental Emissions.

## Channel 48

	<b>Freq</b>	<b>Level</b>	<b>Over Limit</b>	<b>Limit Line</b>	<b>Read</b>	<b>Antenna</b>	<b>Cable</b>	<b>Preamp</b>	<b>Remark</b>
			<b>MHz</b>	<b>dBuV/m</b>	<b>dB</b>	<b>dBuV/m</b>	<b>dBuV</b>	<b>dB/m</b>	
1	5146.800	72.42	-11.12	83.54	34.13	34.35	3.94	0.00	Peak
2 @	5236.000	131.13			92.82	34.43	3.88	0.00	Peak
3	5354.400	71.76	-11.78	83.54	33.39	34.55	3.82	0.00	Peak
1 @	5149.600	61.09	-2.45	63.54	22.80	34.35	3.94	0.00	Average
2 @	5236.000	121.45			83.14	34.43	3.88	0.00	Average
3 @	5356.000	61.16	-2.38	63.54	22.79	34.55	3.82	0.00	Average

An item 2 is Fundamental Emissions.

<b>Test date</b>	Apr. 22, 2008	<b>Test Site No.</b>	03CH03-HY
<b>Temperature</b>	26	<b>Humidity</b>	54%
<b>Test Engineer</b>	Duncan	<b>Configuration</b>	802.11n CH 52, 56, 64 (20MHz)

**Channel 52**

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Remark
			Limit	Line	Antenna Level	Factor	Loss	Factor	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1 @		<b>5274.450 131.71</b>			93.38	34.47	3.86	0.00	Peak
2		<b>5353.050 72.32</b>	-11.22	<b>83.54</b>	33.95	34.55	3.82	0.00	Peak
1 @		<b>5274.450 121.50</b>			83.17	34.47	3.86	0.00	Average
2 @		<b>5350.050 61.42</b>	-2.12	<b>63.54</b>	23.05	34.55	3.82	0.00	Average

An item 2 is Fundamental Emissions.

**Channel 56**

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Remark
			Limit	Line	Antenna Level	Factor	Loss	Factor	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1 @		<b>5274.450 131.71</b>			93.38	34.47	3.86	0.00	Peak
2		<b>5353.050 72.32</b>	-11.22	<b>83.54</b>	33.95	34.55	3.82	0.00	Peak
1 @		<b>5274.450 121.50</b>			83.17	34.47	3.86	0.00	Average
2 @		<b>5350.050 61.42</b>	-2.12	<b>63.54</b>	23.05	34.55	3.82	0.00	Average

An item 2 is Fundamental Emissions.

**Channel 64**

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Remark
			Limit	Line	Antenna Level	Factor	Loss	Factor	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1 @		<b>5317.500 126.42</b>			88.07	34.52	3.84	0.00	Peak
2		<b>5350.100 77.24</b>	-6.30	<b>83.54</b>	38.87	34.55	3.82	0.00	Peak
1 @		<b>5321.500 116.15</b>			77.80	34.52	3.84	0.00	Average
2 @		<b>5350.100 61.22</b>	-2.32	<b>63.54</b>	22.85	34.55	3.82	0.00	Average

An item 1 is Fundamental Emissions.

<b>Test date</b>	Jun 10, 2008	<b>Test Site No.</b>	03CH03-HY
<b>Temperature</b>	26	<b>Humidity</b>	54%
<b>Test Engineer</b>	Duncan	<b>Configuration</b>	802.11n CH 100, 120, 140 (20MHz)

**Channel 100**

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Remark
			Limit	Line	Level	Factor	Loss	Factor	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1		5459.620	80.01	-3.53	83.54	41.58	34.65	3.78	0.00 Peak
2 @		5493.190	128.17			89.73	34.68	3.75	0.00 Peak
1 @		5459.980	62.16	-1.38	63.54	23.73	34.65	3.78	0.00 Average
2 @		5493.190	116.85			78.41	34.68	3.75	0.00 Average

An item 2 is Fundamental Emissions.

**Channel 120**

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Remark
			Limit	Line	Level	Factor	Loss	Factor	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1 @		5601.900	128.65			90.29	34.72	3.64	0.00 Peak
1 @		5601.900	118.28			79.92	34.72	3.64	0.00 Average

An item 1 is Fundamental Emissions.

**Channel 140**

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Remark
			Limit	Line	Level	Factor	Loss	Factor	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1 @		5697.800	125.08			86.78	34.74	3.56	0.00 Peak
2 @		5725.100	75.67	-2.17	77.84	37.41	34.74	3.52	0.00 Peak
1 @		5697.100	113.91			75.61	34.74	3.56	0.00 Average
2		5725.000	59.75	-18.09	77.84	21.49	34.74	3.52	0.00 Average

An item 1 is Fundamental Emissions.

<b>Test date</b>	May 14, 2008	<b>Test Site No.</b>	03CH03-HY
<b>Temperature</b>	26°C	<b>Humidity</b>	54%
<b>Test Engineer</b>	Duncan	<b>Configuration</b>	802.11n CH 38, 46, 54 (40MHz)

**Channel 38**

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Remark
			Limit	Line	Level	Factor	Loss	Factor	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1		5149.640	73.16	-10.38	83.54	34.87	34.35	3.94	0.00 Peak
2 @		5195.360	116.01			77.71	34.40	3.90	0.00 Peak
1 @		5149.880	62.38	-1.16	63.54	24.09	34.35	3.94	0.00 Average
2 @		5195.360	105.45			67.15	34.40	3.90	0.00 Average

An item 2 is Fundamental Emissions.

**Channel 46**

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Remark
			Limit	Line	Level	Factor	Loss	Factor	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1		5149.050	75.60	-7.94	83.54	37.31	34.35	3.94	0.00 Peak
2 @		5236.500	126.75			88.44	34.43	3.88	0.00 Peak
1 @		5149.650	62.50	-1.04	63.54	24.21	34.35	3.94	0.00 Average
2 @		5236.500	115.68			77.37	34.43	3.88	0.00 Average

An item 2 is Fundamental Emissions.

**Channel 54**

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Remark
			Limit	Line	Level	Factor	Loss	Factor	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1 @		5276.290	127.13			88.79	34.48	3.86	0.00 Peak
2		5351.340	75.04	-8.50	83.54	36.67	34.55	3.82	0.00 Peak
1 @		5276.290	115.93			77.59	34.48	3.86	0.00 Average
2 @		5350.200	61.68	-1.86	63.54	23.31	34.55	3.82	0.00 Average

An item 1 is Fundamental Emissions.

<b>Test date</b>	May 07, 2008	<b>Test Site No.</b>	03CH03-HY
<b>Temperature</b>	26	<b>Humidity</b>	54%
<b>Test Engineer</b>	Duncan	<b>Configuration</b>	802.11n CH 62, 102, 134 (40MHz)

**Channel 62**

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Remark
			Limit	Line	Level	Factor	Loss	Factor	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1 @		<b>5316.290 116.55</b>			78.20	34.52	3.84	0.00	Peak
2		<b>5350.170 72.74</b>	-10.80	83.54	34.37	34.55	3.82	0.00	Peak
1 @		<b>5316.290 105.39</b>			67.04	34.52	3.84	0.00	Average
2 @		<b>5350.060 61.56</b>	-1.98	63.54	23.19	34.55	3.82	0.00	Average

An item 1 is Fundamental Emissions.

**Channel 102**

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Remark
			Limit	Line	Level	Factor	Loss	Factor	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1		<b>5459.940 75.47</b>	-8.07	83.54	37.04	34.65	3.78	0.00	Peak
2 @		<b>5505.540 120.64</b>			82.22	34.70	3.72	0.00	Peak
1 @		<b>5460.000 61.51</b>	-2.03	63.54	23.08	34.65	3.78	0.00	Average
2 @		<b>5505.540 108.95</b>			70.53	34.70	3.72	0.00	Average

An item 2 is Fundamental Emissions.

**Channel 134**

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Remark
			Limit	Line	Level	Factor	Loss	Factor	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1 @		<b>5653.650 121.49</b>			83.16	34.73	3.60	0.00	Peak
2		<b>5726.250 74.49</b>	-3.35	77.84	36.23	34.74	3.52	0.00	Peak
1 @		<b>5653.650 109.81</b>			71.48	34.73	3.60	0.00	Average
2		<b>5725.000 59.38</b>	-18.46	77.84	21.12	34.74	3.52	0.00	Average

An item 1 is Fundamental Emissions.

## Note:

Emission level (dBuV/m) = 20 log Emission level (uV/m)

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

The limits 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 (specific distance [3m] / test distance [1m]) (dB);

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

### 3.8 Frequency Stability Measurement

#### 3.8.1 Limit

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emissions is maintained within the band of operation under all conditions of normal operation as specified in the user's manual or  $\pm 20\text{ppm}$  (IEEE 802.11a specification).

#### 3.8.2 Measuring Instruments and Setting

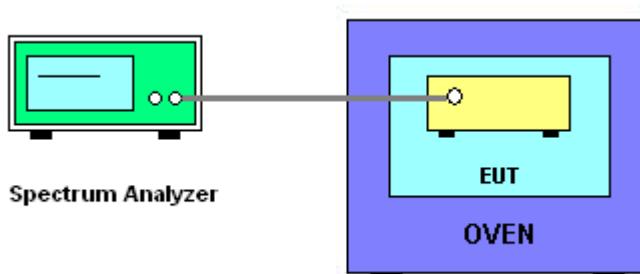
Please refer to section 4 of equipments list in this report. The following table is the setting of the spectrum analyzer.

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

#### 3.8.3 Test Procedures

1. The transmitter output (antenna port) was connected to the spectrum analyser.
2. EUT have transmitted absence of modulation signal and fixed channelize.
3. Set the spectrum analyzer span to view the entire absence of modulation emissions bandwidth.
4. Set RBW = 10 kHz, VBW = 10 kHz with peak detector and maxhold settings.
5. fc is declaring of channel frequency. Then the frequency error formula is  $(fc-f)/fc \times 10^6 \text{ ppm}$  and the limit is less than  $\pm 20\text{ppm}$  (IEEE 802.11a specification).
6. The test extreme voltage is to change the primary supply voltage from 85 to 115 percent of the nominal value
7. Extreme temperature rule is  $-30^\circ\text{C} \sim 50^\circ\text{C}$ .

#### 3.8.4 Test Setup Layout



### 3.8.5 Test Deviation

There is no deviation with the original standard.

### 3.8.6 EUT Operation during Test

The EUT was programmed to be in continuously un-modulation transmitting mode.

### 3.8.7 Test Result of Frequency Stability

#### Voltage vs. Frequency Stability

##### For Single Chain

Voltage	Measurement Frequency (MHz)	
(V)	IEEE 802.11a 5200	IEEE 802.11a 5500
126.5	5199.998700	5499.999400
110	5199.998400	5499.998700
93.5	5199.996900	5499.995800
<b>Max. Deviation (MHz)</b>	0.003100	0.004200
<b>Max. Deviation (ppm)</b>	0.60	0.76

#### Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)	
( )	IEEE 802.11a 5200	IEEE 802.11a 5500
-30	5199.988700	5499.968400
-20	5199.991700	5499.971800
-10	5199.994200	5499.978400
0	5199.997400	5499.985700
10	5199.998700	5499.991400
20	5199.998400	5499.998700
30	5199.999200	5500.003100
40	5200.009400	5500.012400
50	5200.015700	5500.019700
<b>Max. Deviation (MHz)</b>	0.015700	0.031600
<b>Max. Deviation (ppm)</b>	3.02	5.75

## For Two Chain

Voltage	Measurement Frequency (MHz)			
(V)	IEEE 802.11n 5200 (20MHz)	IEEE 802.11n 5230 (40MHz)	IEEE 802.11n 5500 (20MHz)	IEEE 802.11n 5510 (40MHz)
126.5	5219.9988	5229.9988	5499.999400	5509.999700
110	5219.9978	5229.9978	5499.998700	5509.998100
93.5	5219.9974	5229.9974	5499.995800	5509.999400
Max. Deviation (MHz)	0.0026	0.002600	0.004200	0.001900
Max. Deviation (ppm)	0.50	0.50	0.76	0.34

## Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
( )	IEEE 802.11n 5200 (20MHz)	IEEE 802.11n 5230 (40MHz)	IEEE 802.11n 5500 (20MHz)	IEEE 802.11n 5510 (40MHz)
-30	5219.991700	5229.991700	5499.968400	5509.996200
-20	5219.988400	5229.988400	5499.971800	5509.995200
-10	5219.989700	5229.989700	5499.978400	5509.996200
0	5219.992800	5229.992800	5499.985700	5509.997400
10	5219.994100	5229.994100	5499.991400	5509.998900
20	5219.997800	5229.998800	5499.998700	5509.998100
30	5219.998800	5229.998800	5500.003100	5510.000400
40	5220.001100	5230.007500	5500.012400	5510.001800
50	5220.009200	5230.010400	5500.019700	5510.003400
Max. Deviation (MHz)	0.011600	0.011600	0.031600	0.004800
Max. Deviation (ppm)	2.22	2.2180	5.75	0.8711

### **3.9 Antenna Requirements**

#### **3.9.1 Limit**

Except for special regulations, the Low-power Radio-frequency Devices must not be equipped with any jacket for installing an antenna with extension cable. An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this Section. The manufacturer may design the unit so that the user can replace a broken antenna, but the use of a standard antenna jack or electrical connector is prohibited. Further, this requirement does not apply to intentional radiators that must be professionally installed.

#### **3.9.2 Antenna Connector Construction**

Please refer to section 2.3 in this test report; antenna connector complied with the requirements.

## 4 LIST OF MEASURING EQUIPMENTS

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
Receiver	R&S	ESCS 30	836858/024	9 kHz - 2.75 GHz	Sep. 11, 2007	Conduction (CO01-LK)
LISN	SCHAFFNER	NNB-41	98087	9 kHz - 30 MHz	Sep. 21, 2007	Conduction (CO01-LK)
RF Cable-CON	Suhner Switzerland	RG223/U	CB017	9 kHz - 30 MHz	Nov. 30, 2007	Conduction (CO01-LK)

Note: Calibration Interval of instruments listed above is one year.

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
Spectrum Analyzer	R&S	FSP30	100023	9kHz ~ 30GHz	Jan. 10, 2008	Conducted (TH01-HY)
Power Meter	R&S	NRVS	100444	DC ~ 40GHz	Jun. 27, 2007	Conducted (TH01-HY)
Power Sensor	R&S	NRV-Z51	100458	DC ~ 30GHz	Jun. 27, 2007	Conducted (TH01-HY)
Power Sensor	R&S	NRV-Z32	100057	30MHz ~ 6GHz	Jun. 27, 2007	Conducted (TH01-HY)
Power Meter	R&S	NRVS	100444	DC ~ 40GHz	Jun. 26, 2008	Conducted (TH01-HY)
Power Sensor	R&S	NRV-Z51	100458	DC ~ 30GHz	Jun. 26, 2008	Conducted (TH01-HY)
Power Sensor	R&S	NRV-Z32	100057	30MHz ~ 6GHz	Jun. 26, 2008	Conducted (TH01-HY)
DC Power Source	G.W.	GPC-6030D	C671845	DC 1V ~ 60V	Mar. 13, 2008	Conducted (TH01-HY)
Temp. and Humidity Chamber	KSON	THS-C3L	612	N/A	Oct. 01, 2007	Conducted (TH01-HY)
RF CABLE-1m	Jye Bao	RG142	CB034-1m	20MHz ~ 7GHz	Dec. 01, 2007	Conducted (TH01-HY)
RF CABLE-2m	Jye Bao	RG142	CB035-2m	20MHz ~ 1GHz	Dec. 01, 2007	Conducted (TH01-HY)
Vector Signal Generator	R&S	SMU200A	102098	100kHz ~ 6GHz	Nov. 14, 2007	Conducted (TH01-HY)
Signal Generator	R&S	SMR40	100116	10MHz ~ 40GHz	Mar. 10, 2008	Conducted (TH01-HY)

Note: Calibration Interval of instruments listed above is one year.

**FCC TEST REPORT**

Report No.: FR843032-07AI

<b>Instrument</b>	<b>Manufacturer</b>	<b>Model No.</b>	<b>Serial No.</b>	<b>Characteristics</b>	<b>Calibration Date</b>	<b>Remark</b>
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	30 MHz - 1 GHz 3m	Jun. 14, 2007	Radiation (03CH03-HY)
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	30 MHz - 1 GHz 3m	Jun. 14, 2008	Radiation (03CH03-HY)
Amplifier	SCHAFFNER	COA9231A	18667	9 kHz - 2 GHz	Jan. 14, 2008	Radiation (03CH03-HY)
Amplifier	Agilent	8449B	3008A02120	1 GHz - 26.5 GHz	Jun. 07, 2007	Radiation (03CH03-HY)
Amplifier	Agilent	8449B	3008A02120	1 GHz - 26.5 GHz	Jun. 06, 2008	Radiation (03CH03-HY)
Spectrum Analyzer	R&S	FSP40	100305	9 kHz - 40 GHz	Sep. 27, 2007	Radiation (03CH03-HY)
Bilog Antenna	SCHAFFNER	CBL 6112D	22237	30 MHz - 1 GHz	Jul. 21, 2007	Radiation (03CH03-HY)
Horn Antenna	EMCO	3115	6741	1GHz ~ 18GHz	Mar. 04, 2008	Radiation (03CH03-HY)
Horn Antenna	SCHWARZBECK	BBHA9170	BBHA9170154	15 GHz - 40 GHz	Jan. 18, 2008	Radiation (03CH03-HY)
RF Cable-R03m	Jye Bao	RG142	CB021	30 MHz - 1 GHz	Dec. 03, 2007	Radiation (03CH03-HY)
RF Cable-HIGH	SUHNER	SUCOFLEX 106	03CH03-HY	1 GHz - 40 GHz	Dec. 03, 2007	Radiation (03CH03-HY)
Turn Table	HD	DS 420	420/650/00	0 – 360 degree	N/A	Radiation (03CH03-HY)
Antenna Mast	HD	MA 240	240/560/00	1 m - 4 m	N/A	Radiation (03CH03-HY)

Note: Calibration Interval of instruments listed above is one year.

<b>Instrument</b>	<b>Manufacturer</b>	<b>Model No.</b>	<b>Serial No.</b>	<b>Characteristics</b>	<b>Calibration Date</b>	<b>Remark</b>
AC Power Source	HPC	HPA-500W	HPA-9100024	AC 0 ~ 300V	May 04, 2007*	Conducted (TH01-HY)
Amplifier	MITEQ	AMF-6F-260400	9121372	26.5 GHz - 40 GHz	Jan. 22, 2007*	Radiation (03CH03-HY)
Loop Antenna	R&S	HFH2-Z2	860004/001	9 kHz - 30 MHz	May 22, 2008*	Radiation (03CH03-HY)

Note: Calibration Interval of instruments listed above is two year.

**5 TEST LOCATION**

SHIJR	ADD : 6Fl., No. 106, Sec. 1, Shintai 5th Rd., Shijr City, Taipei, Taiwan 221, R.O.C. TEL : 886-2-2696-2468 FAX : 886-2-2696-2255
HWA YA	ADD : No. 52, Hwa Ya 1st Rd., Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C. TEL : 886-3-327-3456 FAX : 886-3-318-0055
LINKOU	ADD : No. 30-2, Dingfu Tsuen, Linkou Shiang, Taipei, Taiwan 244, R.O.C TEL : 886-2-2601-1640 FAX : 886-2-2601-1695
DUNGHU	ADD : No. 3, Lane 238, Kangle St., Neihu Chiu, Taipei, Taiwan 114, R.O.C. TEL : 886-2-2631-4739 FAX : 886-2-2631-9740
JUNGHE	ADD : 7Fl., No. 758, Jungjeng Rd., Junghe City, Taipei, Taiwan 235, R.O.C. TEL : 886-2-8227-2020 FAX : 886-2-8227-2626
NEIHU	ADD : 4Fl., No. 339, Hsin Hu 2 <sup>nd</sup> Rd., Taipei 114, Taiwan, R.O.C. TEL : 886-2-2794-8886 FAX : 886-2-2794-9777
JHUBEI	ADD : No.8, Lane 728, Bo-ai St., Jhubei City, HsinChu County 302, Taiwan, R.O.C. TEL : 886-3-656-9065 FAX : 886-3-656-9085

## 6 TAF CERTIFICATE OF ACCREDITATION



Certificate No.: L1190-070110

財團法人全國認證基金會  
Taiwan Accreditation Foundation

### Certificate of Accreditation

This is to certify that

**Sporton International Inc.**  
**EMC & Wireless Communications Laboratory**  
No.52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan Hsiang, Tao Yuan Hsien,  
Taiwan, R.O.C.

is accredited in respect of laboratory

Accreditation Criteria	: ISO/IEC 17025:2005
Accreditation Number	: 1190
Originally Accredited	: December 15, 2003
Effective Period	: January 10, 2007 to January 09, 2010
Accredited Scope	: Testing Field, see described in the Appendix
Specific Accreditation Program	: Accreditation Program for Designated Testing Laboratory for Commodities Inspection : Accreditation Program for Telecommunication Equipment Testing Laboratory

Jay-San Chen  
President, Taiwan Accreditation Foundation  
Date : January 10, 2007

PL, total 9 pages

The Appendix forms an integral part of this Certificate, which shall be invalid when used without the Appendix.