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## Amended FCC Test Report


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Product: DCMA-82 PCI Transmitter Module

FCC ID: QVT-525-V21

Test Report No: R101309-02-01A

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**1.0 Summary of test results**

**1.1 Test Results**

The EUT has been tested according to the following specifications:

<b>APPLIED STANDARDS: FCC Part 15, Subpart C</b>			
<b>Standard Section</b>	<b>Test Type and Limit</b>	<b>Result</b>	<b>Remark</b>
15.203	Unique Antenna Requirement	Pass	EUT requires professional installation.
15.207	Conducted Emissions	Pass	Meets the requirement of the limit.
15.209	Radiated Emissions	Pass	Meets the requirement of the limit.
15.247(a)(2)	Minimum Bandwidth, Limit: min. 500kHz	Pass	Meets the requirement of the limit.
15.247(b)	Maximum Peak Output Power	Pass	Meets the requirement of the limit.
15.247(e)	Power Spectral Density, Limit: Max. 8dBm	Pass	Meets the requirement of the limit.
15.247(d)	Band Edge Measurement, Limit: 20dB less than the peak value of fundamental frequency	Pass	Meets the requirement of the limit.

## **1.2 Test Methods**

### **1.2.1 Conducted AC Emissions**

The EUT was powered by 120VAC/60Hz with a 50Ω load on the antenna port. Compliance to 47 CFR Part 15.207 was tested in accordance with the methods of ANSI/IEEE C63.4: 2003. Measurements were made on both conductors.

### **1.2.2 Radiated Emissions**

Compliance to 47 CFR Parts 15.209 and 15.247 was tested in accordance with the methods of ANSI/IEEE C63.4: 2003. Several configurations were examined and the results presented represent a worst-case scenario. The EUT was placed on a wooden table approximately 80cm high and centered on a 4m diameter turntable. The table was rotated to find the angles of maximum emissions and the receiving antenna was moved from 1m to 4m in both vertical and horizontal positions. The EUT was tested while sitting both vertically and horizontally. The horizontal configuration produced the highest emissions, and that position was used for all radiated testing. All measurements were taken at a distance of 10m for 30MHz – 1GHz, 3m for 1GHz – 18GHz, and 1m for 18GHz - 40GHz .

## **1.3 Reason for amendment.**

This report has been modified to include the following note in section 2.3:

“Note: The EUT uses the same radio card and the same RF section for both the 5.7GHz and 4.9GHz band.”

This report includes and makes obsolete NCEE Labs report R101309-02-01.

**2.0 Description****2.1 Equipment under test**

EUT Received Date: 10 November 2009

EUT Tested Dates: 10 – 18 November 2009

PRODUCT	DCMA-82 PCI Transmitter Module
SERIAL NUMBER	C194918A02E8C01
MODULATION TYPE	OFDM, DBPSK, DQPSK, CCK Maximum data rate 11mbs
RADIO TECHNOLOGY	802.11a, a turbo, b, g, g super
FREQUENCY RANGE	2.412-2.462GHz: 802.11b, g, g super 5.745-5.825GHz: 802.11a, a turbo 4.986GHz-4.988GHz: Public safety Band (public safety band testing is covered in a separate report)
NUMBER OF CHANNELS	802.11b, g, 11 802.11g super: 1 802.11a: 5 802.11a turbo: 2 Public Safety Band: 2
MAX OUTPUT POWER	24.53dBm (283.99mW)
TEST SOFTWARE	3eTi AirGuard Wireless Access Point Version 4.3.3.00, Build 14

*NOTE:*

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

**2.2 Laboratory description**

All testing was performed at the NCEE Lincoln facility, which is a FCC and IC registered lab. This site has been fully described in previously submitted reports. Laboratory environmental conditions varied slightly throughout the tests:

Relative humidity of  $45 \pm 4\%$

Temperature of  $20 \pm 3^\circ$  Celsius

### 2.3 Description of test modes

The EUT was tested at the frequencies below:

Channel	Frequency GHz	Test Mode
1	2.412	802.11b/g mixed (low)
6	2.437	802.11b/g mixed (middle)
11	2.462	802.11b/g mixed (high)
6**	2.437	802.11g super (only channel)
149	5.745	802.11a (low)
157	5.785	802.11a (middle)
165	5.825	802.11a (high)
152*	5.760	802.11a turbo (low)
160*	5.800	802.11a turbo (high)

\*Note: for 802.11a turbo mode, only channels 152 and 160 are available, therefore there was no middle channel tested.

\*\*Note: for 802.11g super mode, only channel 6 is available, therefore it was the only channel tested.

Note: the EUT can only transmit at one frequency at a time. The software does not allow simultaneous operation of the 2.4GHz and 5.8GHz radios.

Note: The EUT uses the same radio card and the same RF section for both the 5.7GHz and 4.9GHz band.

### 2.4 Applied standards

The EUT uses digital modulation and operates between 2.412GHz – 2.462GHz and 5.745GHz – 5.800GHz. It has no AC mains connection. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

**FCC Part 15, Subpart C (15.247) using ANSI/IEEE C63.4: 2003**  
**FCC Part 15, Subpart C (15.209) using ANSI/IEEE C63.4: 2003**  
**KDB Publication No. 558074: 2005**

All test items have been performed and recorded as per the above standards.

### 2.5 Description of support units

None

## **2.6 Configuration of system under test**

This EUT was set to transmit in a worse-case scenario with modulation on. The software allowed the selection of the channel and modulation type.

**List of antenna options for use with DCMA-82**

Model	Manufacturer	Type	2.4GHz Gain (dBi)	5GHz Gain (dBi)
RD2458-5-OTDR**	Pacific Wireless	omni	2.2	5
SAA04-22008A	SmartAnt	omni	2.5	5.0
HG5808U	HyperLink Technologies	omni	---	8
HG5817D*	HyperLink Technologies	dish	---	17
OD9-2400	Mobile Mark	omni	9	---
HG2414D*	HyperLink Technologies	dish	14	---
HG5822G*	HyperLink Technologies	grid	---	22
HG2424G	HyperLink Technologies	grid	24	---

\*These antennas are intended for point-to-point, bridge mode operation only.

\*\*This antenna was not tested, because the SAA04-22008A antenna was also a dual-band omni-directional antenna with a higher gain.

**3.0 Test equipment used**

DESCRIPTION AND MANUFACTURER	MODEL NO.	SERIAL NO.	LAST CALIBRATION DATE
Rohde & Schwarz Test Receiver****	ESI26	100037	16 Sep 2009
EMCO Biconilog Antenna	3142B	1654	6 Feb 2009
EMCO Horn Antenna	3115	6415	6 Feb 2009
EMCO Horn Antenna***	3116	2576	6 Jun 2008
Rohde & Schwarz LISN	ESH3-Z5	100023	10 Feb 2009
Hewlett Packard Power Meter	4378	100307	20 Jan 2009
Hewlett Packard Power Sensor	8481A	2702A63981	20 Jan 2009
Rohde & Schwarz Preamp*	TS-PR18	082001/003	15 Dec 2008
Trilithic High Pass Filter*	6HC330	23042	15 Dec 2008
Mini-circuits High Pass Filter**	VHF-8400+	15542	15 Dec 2008
OML WR28 26 to 40GHz Mixer	M28HWD	Ka91124-1	24 Nov 2009

\*Used for radiated measurements above 3GHz

\*\*Used for measurements above 6GHz

\*\*\*Used for measurements above 18GHz

\*\*\*\*Test receiver included an upgrade with an internal oscillator which was used with the mixer to make measurements from 26 – 40GHz.



#### **4.0 Detailed results**

#### **4.1 Unique antenna requirement**

##### **4.1.1 Standard applicable**

For intentional device, according to FCC 47 CFR Section 15.203, 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.

##### **4.1.2 Antenna description**

The equipment requires professional installation, and the antenna port will not be readily accessible in its final configuration, which meets this requirement.

## 4.2 Radiated emissions

### 4.2.1 Limits for radiated emissions measurements

Emissions radiated outside of the specified bands shall be applied to the limits in 15.209 as followed:

FREQUENCIES (MHz)	FIELD STRENGTH ( $\mu\text{V/m}$ )	MEASUREMENT DISTANCE (m)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	3
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

**NOTE:**

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 \* log \* Emission level ( $\mu\text{V/m}$ ).
3. As shown in 15.35(b), for frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits by more than 20dB under any condition of modulation.

#### 4.2.2 Test procedures

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground plane in a 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. All measurements were taken at a distance of 10m for 30MHz – 1GHz, 3m for 1GHz – 18GHz, and 1m for 18GHz-40GHz .
- c. The antenna was a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are used to make the measurement.
- d. For each suspected emission, the EUT was arranged to maximize its emissions and then the antenna height was varied from 1 meter to 4 meters and the rotating table was turned from 0 degrees to 360 degrees to find the maximum emission reading.
- e. The test-receiver system was set to use a peak detector with a specified resolution bandwidth. For spectrum analyzer measurements, the composite maximum of several analyzer sweeps was used for final measurements.
- f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10 dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

**NOTE:**

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Peak detection (PK) and Quasi-peak detection (QP) at frequencies below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz for peak and average detectors at frequencies above 1GHz.

### 4.2.3 Deviations from test standard

No deviation.

### 4.2.4 Test setup

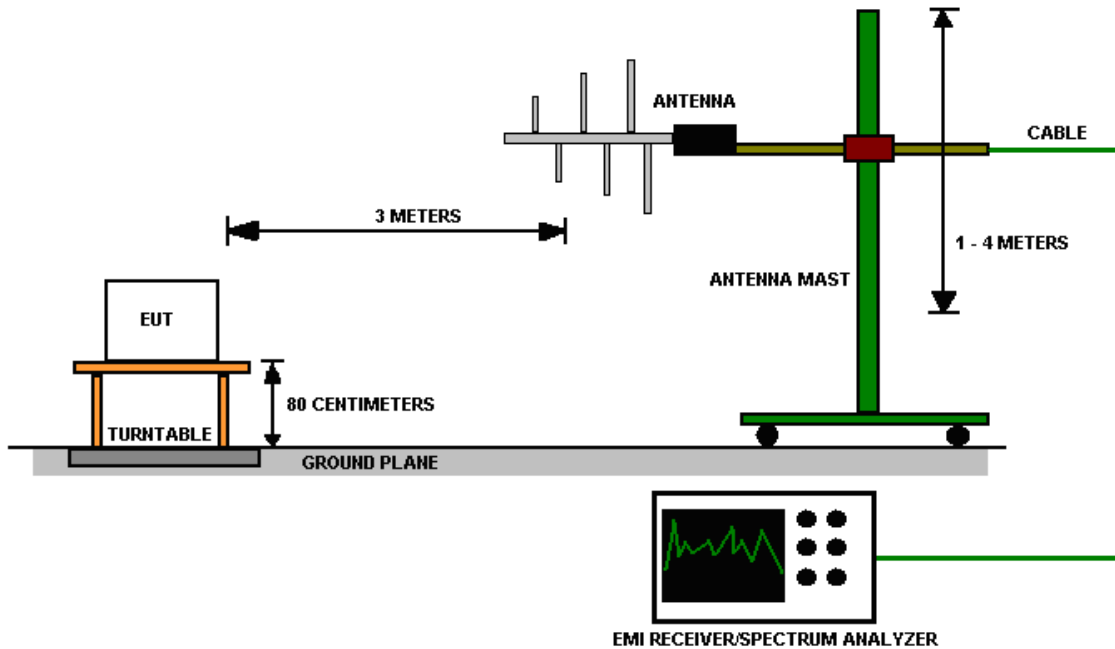


Figure 1 - Radiated Emissions Test Setup

For the actual test configuration, please refer to Appendix A for photographs of the test configuration.

### 4.2.5 EUT operating conditions

A special test program was used to make the EUT transmit continuously. The software allowed the selection of the channel, modulation and power setting. Power setting was at maximum for all tests.

**4.2.6 Test results**

EUT	DCMA-82 PCI Transmitter Module	MODE	Continuous transmit
INPUT POWER	5VDC	FREQUENCY RANGE	30MHz – 40GHz
ENVIRONMENTAL CONDITIONS	45% ± 5% RH 20 ± 3°C	TECHNICIAN	NJohnson

**REMARKS:**

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB)
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. Pretesting was done for all high, middle and low channel settings for 802.11a, b and g. Worse-case quasi-peak results are presented below. Antenna model is listed atop of table.
6. Quasi-peak, Average and Peak measurements are provided for each combination of antenna and operating mode (antennas designed for only 1 frequency band were only tested on that frequency band).
7. Plots are provided for each antenna, showing the operating mode that produced the least margin.

**Table 1 - 802.11b, SAA04-2208A**

Frequency	Level	Limit	Margin	Height	Angle	Pol.	Channel
MHz	dBµV/m	dBµV/m	dB	cm	deg		
66.00	31.66	39.00	7.30	250	301	VERTICAL	1
99.00	32.56	43.50	10.90	115	359	VERTICAL	1
132.00	36.08	43.50	7.40	349	271	HORIZONTAL	1
198.00	37.45	43.50	6.10	399	2	HORIZONTAL	1
659.98	43.47	46.40	2.90	146	323	HORIZONTAL	1
813.94	44.10	46.40	2.30	106	340	HORIZONTAL	1
945.94	36.00	46.40	10.40	100	332	HORIZONTAL	1
198.00	36.62	43.50	6.90	400	0	HORIZONTAL	6
659.98	43.78	46.40	2.60	126	336	HORIZONTAL	6
813.94	44.06	46.40	2.30	99	347	HORIZONTAL	6
923.98	40.35	46.40	6.00	101	342	HORIZONTAL	6
945.94	43.61	46.40	2.80	100	332	HORIZONTAL	6
198.00	36.54	43.50	7.00	399	0	HORIZONTAL	11
659.98	43.84	46.40	2.60	115	0	HORIZONTAL	11
813.94	43.96	46.40	2.40	100	345	HORIZONTAL	11
923.98	40.28	46.40	6.10	149	358	HORIZONTAL	11
945.94	36.85	46.40	9.60	100	330	HORIZONTAL	11

Table 2 - 802.11g, SAA04-2208A

Frequency	Level	Limit	Margin	Height	Angle	Pol.	Channel
MHz	dB $\mu$ V/m	dB $\mu$ V/m	dB	cm	deg		
66.00	31.66	39.00	7.30	250	301	VERTICAL	1
99.00	32.56	43.50	10.90	115	359	VERTICAL	1
132.00	36.08	43.50	7.40	349	271	HORIZONTAL	1
198.00	37.45	43.50	6.10	399	2	HORIZONTAL	1
659.98	43.47	46.40	2.90	146	323	HORIZONTAL	1
813.94	44.10	46.40	2.30	106	340	HORIZONTAL	1
945.94	36.00	46.40	10.40	100	332	HORIZONTAL	1
198.00	36.62	43.50	6.90	400	0	HORIZONTAL	6
659.98	43.78	46.40	2.60	126	336	HORIZONTAL	6
813.94	44.06	46.40	2.30	99	347	HORIZONTAL	6
923.98	40.35	46.40	6.00	101	342	HORIZONTAL	6
945.94	43.61	46.40	2.80	100	332	HORIZONTAL	6
198.00	36.54	43.50	7.00	399	0	HORIZONTAL	11
659.98	43.84	46.40	2.60	115	0	HORIZONTAL	11
813.94	43.96	46.40	2.40	100	345	HORIZONTAL	11
923.98	40.28	46.40	6.10	149	358	HORIZONTAL	11
945.94	36.85	46.40	9.60	100	330	HORIZONTAL	11
198.00	35.32	43.50	8.20	200	0	HORIZONTAL	6 super
659.98	43.46	46.40	2.90	112	0	HORIZONTAL	6 super
791.98	45.78	46.40	0.60	99	340	HORIZONTAL	6 super
813.94	44.02	46.40	2.40	101	330	HORIZONTAL	6 super
923.98	42.25	46.40	4.10	98	330	HORIZONTAL	6 super

Table 3 - 802.11a, SAA04-2208A

Frequency	Level	Limit	Margin	Height	Angle	Pol.	Channel
MHz	dB $\mu$ V/m	dB $\mu$ V/m	dB	cm	deg		
198.00	36.99	43.50	6.50	100	76	VERTICAL	149
659.98	42.91	46.40	3.50	120	329	HORIZONTAL	149
791.98	45.75	46.40	0.70	101	340	HORIZONTAL	149
813.94	42.47	46.40	3.90	98	340	HORIZONTAL	149
923.98	40.15	46.40	6.30	101	330	HORIZONTAL	149
198.00	33.22	43.50	10.30	200	0	HORIZONTAL	157
659.98	43.66	46.40	2.70	113	319	HORIZONTAL	157
791.98	45.09	46.40	1.30	101	330	HORIZONTAL	157
813.94	42.11	46.40	4.30	98	9	HORIZONTAL	157
198.00	34.94	43.50	8.60	199	0	HORIZONTAL	165
659.98	43.31	46.40	3.10	130	329	HORIZONTAL	165
791.98	45.52	46.40	0.90	100	344	HORIZONTAL	165
813.94	42.97	46.40	3.40	100	359	HORIZONTAL	165
923.98	46.39	46.40	0.00	100	334	HORIZONTAL	165
198.00	32.94	43.50	10.60	200	0	HORIZONTAL	152 Turbo
791.98	43.30	46.40	3.10	99	340	HORIZONTAL	152 Turbo
813.94	43.90	46.40	2.50	100	330	HORIZONTAL	152 Turbo
923.98	40.80	46.40	5.60	99	330	HORIZONTAL	152 Turbo
945.94	42.97	46.40	3.40	99	330	HORIZONTAL	152 Turbo
198.00	32.82	43.50	10.70	200	0	HORIZONTAL	160 Turbo
659.98	43.38	46.40	3.00	113	328	HORIZONTAL	160 Turbo
791.98	43.40	46.40	3.00	99	340	HORIZONTAL	160 Turbo
813.94	43.80	46.40	2.60	100	330	HORIZONTAL	160 Turbo
923.98	42.81	46.40	3.60	100	332	HORIZONTAL	160 Turbo

**Table 4 – 802.11b, OD9-2400**

Frequency	Level	Limit	Margin	Height	Angle	Pol.	Channel
MHz	dB $\mu$ V/m	dB $\mu$ V/m	dB	cm	deg		
99.00	28.70	43.50	14.80	153	56	VERTICAL	1
100.02	30.55	43.50	13.00	150	77	VERTICAL	1
175.98	34.90	43.50	8.60	399	332	HORIZONTAL	1
198.00	34.82	43.50	8.70	376	330	HORIZONTAL	1
199.98	31.99	43.50	11.50	400	44	HORIZONTAL	1
220.00	35.15	46.40	11.30	347	313	HORIZONTAL	1
250.00	41.95	46.40	4.50	250	62	HORIZONTAL	1
395.98	40.01	46.40	6.40	193	32	HORIZONTAL	1
461.98	38.34	46.40	8.10	193	0	HORIZONTAL	1
549.94	41.94	46.40	4.50	150	330	HORIZONTAL	1
659.98	41.40	46.40	5.00	109	10	HORIZONTAL	1
791.98	43.57	46.40	2.80	100	330	HORIZONTAL	1
813.94	38.60	46.40	7.80	99	359	HORIZONTAL	1
923.98	40.79	46.40	5.60	103	339	HORIZONTAL	1
945.94	41.95	46.40	4.40	100	337	HORIZONTAL	1
198.00	33.07	43.50	10.40	197	330	HORIZONTAL	6
395.98	42.75	46.40	3.70	200	273	HORIZONTAL	6
791.98	44.29	46.40	2.10	99	341	HORIZONTAL	6
945.94	43.67	46.40	2.70	98	330	HORIZONTAL	6
198.00	32.91	43.50	10.60	200	344	HORIZONTAL	11
659.98	43.12	46.40	3.30	100	0	HORIZONTAL	11
813.94	41.77	46.40	4.60	99	359	HORIZONTAL	11
923.98	42.67	46.40	3.70	101	348	HORIZONTAL	11
945.94	43.49	46.40	2.90	98	328	HORIZONTAL	11



Table 5 - 802.11g, OD9-2400

Frequency	Level	Limit	Margin	Height	Angle	Pol.	Channel
MHz	dB $\mu$ V/m	dB $\mu$ V/m	dB	cm	deg		
198.00	32.73	43.50	10.80	200	0	HORIZONTAL	1
659.98	43.26	46.40	3.10	115	0	HORIZONTAL	1
813.94	39.16	46.40	7.20	100	10	HORIZONTAL	1
923.98	41.08	46.40	5.30	101	340	HORIZONTAL	1
945.94	39.20	46.40	7.20	99	320	HORIZONTAL	1
198.00	32.48	43.50	11.00	200	346	HORIZONTAL	6
659.98	42.56	46.40	3.80	103	0	HORIZONTAL	6
813.94	41.91	46.40	4.50	101	1	HORIZONTAL	6
923.98	42.33	46.40	4.10	98	340	HORIZONTAL	6
945.94	42.16	46.40	4.20	99	344	HORIZONTAL	6
198.00	33.74	43.50	9.80	200	0	HORIZONTAL	11
659.98	43.01	46.40	3.40	100	2	HORIZONTAL	11
791.98	40.69	46.40	5.70	101	340	HORIZONTAL	11
813.94	41.95	46.40	4.40	103	2	HORIZONTAL	11
198.00	32.30	43.50	11.20	200	0	HORIZONTAL	6 super
791.98	41.01	46.40	5.40	101	335	HORIZONTAL	6 super
813.94	39.26	46.40	7.10	108	340	HORIZONTAL	6 super
945.94	42.78	46.40	3.60	99	337	HORIZONTAL	6 super

Table 6 - 802.11b, HG2414D

Frequency	Level	Limit	Margin	Height	Angle	Pol.	Channel
MHz	dB $\mu$ V/m	dB $\mu$ V/m	dB	cm	deg		
132.00	31.93	43.50	11.60	401	194	HORIZONTAL	1
165.00	31.45	43.50	12.10	398	203	HORIZONTAL	1
175.02	33.81	43.50	9.70	399	153	HORIZONTAL	1
175.98	38.33	43.50	5.20	401	285	HORIZONTAL	1
198.00	41.22	43.50	2.30	398	325	HORIZONTAL	1
219.28	23.76	46.40	22.60	270	323	HORIZONTAL	1
250.00	41.85	46.40	4.50	399	19	HORIZONTAL	1
395.98	41.81	46.40	4.60	196	9	HORIZONTAL	1
571.96	42.46	46.40	3.90	136	329	HORIZONTAL	1
659.98	43.31	46.40	3.10	99	334	HORIZONTAL	1
945.94	44.72	46.40	1.70	101	329	HORIZONTAL	1
132.00	33.91	43.50	9.60	363	188	HORIZONTAL	6
175.98	37.98	43.50	5.50	399	282	HORIZONTAL	6
198.00	40.44	43.50	3.10	327	325	HORIZONTAL	6
791.98	44.36	46.40	2.00	100	338	HORIZONTAL	6
813.94	40.69	46.40	5.70	146	333	HORIZONTAL	6
945.94	43.24	46.40	3.20	101	323	HORIZONTAL	6
132.00	34.29	43.50	9.20	350	191	HORIZONTAL	11
175.92	34.68	43.50	8.80	349	301	HORIZONTAL	11
198.00	42.92	43.50	0.60	399	330	HORIZONTAL	11
813.94	43.22	46.40	3.20	98	331	HORIZONTAL	11
923.98	44.30	46.40	2.10	100	340	HORIZONTAL	11
945.94	40.08	46.40	6.30	104	336	HORIZONTAL	11

Table 7 – 802.11g, HG2414D

Frequency	Level	Limit	Margin	Height	Angle	Pol.	Channel
MHz	dB $\mu$ V/m	dB $\mu$ V/m	dB	cm	deg		
175.98	37.33	43.50	6.20	400	288	HORIZONTAL	1
198.00	40.84	43.50	2.70	400	324	HORIZONTAL	1
198.18	31.74	43.50	11.80	399	323	HORIZONTAL	1
572.02	42.98	46.40	3.40	143	314	HORIZONTAL	1
923.98	42.09	46.40	4.30	259	334	HORIZONTAL	1
945.94	39.25	46.40	7.10	101	326	HORIZONTAL	1
132	33.87	43.5	9.6	362	178	HORIZONTAL	6
175.98	38.64	43.5	4.9	399	289	HORIZONTAL	6
198	40.65	43.5	2.8	401	334	HORIZONTAL	6
571.96	42.73	46.4	3.7	143	324	HORIZONTAL	6
813.94	42.88	46.4	3.5	98	336	HORIZONTAL	6
923.98	40.58	46.4	5.8	101	346	HORIZONTAL	6
132.00	33.85	43.50	9.70	350	188	HORIZONTAL	11
175.92	35.64	43.50	7.90	399	289	HORIZONTAL	11
198.00	40.42	43.50	3.10	401	334	HORIZONTAL	11
814.00	37.25	46.40	9.10	145	330	HORIZONTAL	11
923.98	42.08	46.40	4.30	103	342	HORIZONTAL	11
945.94	38.31	46.40	8.10	100	336	HORIZONTAL	11
132.00	35.09	43.50	8.4	350	186	HORIZONTAL	6 super
175.92	35.30	43.50	8.2	399	296	HORIZONTAL	6 super
198.00	39.91	43.50	3.6	401	334	HORIZONTAL	6 super
572.02	41.45	46.40	4.9	144	309	HORIZONTAL	6 super
791.98	46.18	46.40	0.2	100	333	HORIZONTAL	6 super
813.94	40.70	46.40	5.7	100	334	HORIZONTAL	6 super

Table 8 – 802.11b, HG2414G

Frequency	Level	Limit	Margin	Height	Angle	Pol.	Channel
MHz	dB $\mu$ V/m	dB $\mu$ V/m	dB	cm	deg		
100.02	32.36	43.50	11.10	137	114	VERTICAL	1
198.00	39.22	43.50	4.30	397	305	HORIZONTAL	1
395.98	41.93	46.40	4.50	200	29	HORIZONTAL	1
659.98	43.01	46.40	3.40	101	349	HORIZONTAL	1
791.98	44.73	46.40	1.70	99	0	HORIZONTAL	1
813.94	42.46	46.40	3.90	313	359	HORIZONTAL	1
923.98	40.78	46.40	5.60	98	340	HORIZONTAL	1
945.94	42.96	46.40	3.40	100	337	HORIZONTAL	1
198.00	37.11	43.50	6.40	350	294	HORIZONTAL	6
199.98	32.93	43.50	10.60	313	41	HORIZONTAL	6
791.98	46.04	46.40	0.40	100	336	HORIZONTAL	6
813.94	43.63	46.40	2.80	100	336	HORIZONTAL	6
923.98	42.26	46.40	4.10	103	340	HORIZONTAL	6
945.94	42.68	46.40	3.70	100	346	HORIZONTAL	6
198.00	37.11	43.50	6.40	350	294	HORIZONTAL	11
199.98	32.93	43.50	10.60	313	41	HORIZONTAL	11
791.98	46.04	46.40	0.40	100	336	HORIZONTAL	11
813.94	43.63	46.40	2.80	100	336	HORIZONTAL	11
923.98	42.26	46.40	4.10	103	340	HORIZONTAL	11
945.94	42.68	46.40	3.70	100	346	HORIZONTAL	11

Table 9 – 802.11g, HG2414G

Frequency	Level	Limit	Margin	Height	Angle	Pol.	Channel
MHz	dB $\mu$ V/m	dB $\mu$ V/m	dB	cm	deg		
99.96	31.69	43.50	11.80	399.00	225	HORIZONTAL	1
198.00	36.51	43.50	7.00	401.00	324	HORIZONTAL	1
791.98	42.03	46.40	4.40	100.00	338	HORIZONTAL	1
813.94	39.95	46.40	6.40	144.00	359	HORIZONTAL	1
945.94	42.67	46.40	3.70	100.00	332	HORIZONTAL	1
99.96	31.91	43.50	11.60	399.00	212	HORIZONTAL	6
198.00	36.99	43.50	6.50	364.00	286	HORIZONTAL	6
199.98	33.05	43.50	10.50	294.00	46	HORIZONTAL	6
791.98	43.43	46.40	3.00	306.00	345	HORIZONTAL	6
813.94	43.42	46.40	3.00	100.00	335	HORIZONTAL	6
945.94	42.70	46.40	3.70	100.00	341	HORIZONTAL	6
198.00	37.14	43.50	6.40	400.00	287	HORIZONTAL	11
199.98	34.26	43.50	9.20	293.00	41	HORIZONTAL	11
659.98	41.76	46.40	4.60	147.00	319	HORIZONTAL	11
791.98	42.25	46.40	4.10	99.00	357	HORIZONTAL	11
813.94	42.62	46.40	3.80	103.00	0	HORIZONTAL	11
923.98	40.89	46.40	5.50	100.00	342	HORIZONTAL	11
100.02	31.14	43.50	12.40	401.00	229	HORIZONTAL	6 super
198.00	36.99	43.50	6.50	350.00	290	HORIZONTAL	6 super
199.98	33.50	43.50	10.00	399.00	44	HORIZONTAL	6 super
659.98	43.18	46.40	3.20	99.00	310	HORIZONTAL	6 super
791.98	46.01	46.40	0.40	101.00	0	HORIZONTAL	6 super
813.94	38.29	46.40	8.10	98.00	4	HORIZONTAL	6 super

Table 10 – 802.11a, HG2817D

Frequency	Level	Limit	Margin	Height	Angle	Pol.	Channel
MHz	dB $\mu$ V/m	dB $\mu$ V/m	dB	cm	deg		
175.98	38.28	43.50	5.20	400	304	HORIZONTAL	149
198.00	39.30	43.50	4.20	350	324	HORIZONTAL	149
550.00	42.63	46.40	3.80	150	19	HORIZONTAL	149
571.96	45.01	46.40	1.40	136	29	HORIZONTAL	149
946.00	37.13	46.40	9.30	104	320	HORIZONTAL	149
198.00	38.10	43.50	5.40	199	315	HORIZONTAL	157
572.02	44.07	46.40	2.30	133	29	HORIZONTAL	157
593.98	43.69	46.40	2.70	100	29	HORIZONTAL	157
945.94	37.47	46.40	8.90	99	340	HORIZONTAL	157
198.00	34.97	43.5	8.50	199	325	HORIZONTAL	165
572.02	44.38	46.4	2.00	140	29	HORIZONTAL	165
593.98	44.57	46.4	1.80	150	19	HORIZONTAL	165
923.98	41.15	46.4	5.20	99	341	HORIZONTAL	165
945.94	44.84	46.4	1.60	100	336	HORIZONTAL	165
198.00	36.22	43.50	7.30	197	320	HORIZONTAL	152 Turbo
549.94	44.04	46.40	2.40	149	19	HORIZONTAL	152 Turbo
571.90	44.40	46.40	2.00	133	29	HORIZONTAL	152 Turbo
945.94	39.74	46.40	6.70	99	333	HORIZONTAL	152 Turbo
198.00	35.95	43.50	7.60	200	335	HORIZONTAL	160 Turbo
572.02	44.50	46.40	1.90	136	29	HORIZONTAL	160 Turbo
791.98	45.45	46.40	1.00	99	311	HORIZONTAL	160 Turbo
945.94	44.95	46.40	1.40	98	333	HORIZONTAL	160 Turbo

Table 11 – 802.11a, HG5808U

Frequency	Level	Limit	Margin	Height	Angle	Pol.	Channel
MHz	dBμV/m	dBμV/m	dB	cm	deg		
124.98	35.92	43.50	7.60	100	0	VERTICAL	149
132.00	33.66	43.50	9.80	99	0	VERTICAL	149
175.92	34.36	43.50	9.10	399	304	HORIZONTAL	149
197.94	37.29	43.50	6.20	401	304	HORIZONTAL	149
198.00	37.63	43.50	5.90	100	90	VERTICAL	149
549.94	42.96	46.40	3.40	149	357	HORIZONTAL	149
791.98	43.81	46.40	2.60	101	305	HORIZONTAL	149
813.94	39.50	46.40	6.90	101	330	HORIZONTAL	149
923.98	45.19	46.40	1.20	100	9	HORIZONTAL	149
945.94	43.24	46.40	3.20	98	334	HORIZONTAL	149
198.00	35.06	43.50	8.40	200	331	HORIZONTAL	157
593.98	41.42	46.40	5.00	149	152	HORIZONTAL	157
791.98	43.68	46.40	2.70	99	337	HORIZONTAL	157
923.98	37.77	46.40	8.60	100	336	HORIZONTAL	157
945.94	35.12	46.40	11.30	101	309	HORIZONTAL	157
198.00	34.59	43.50	8.90	200	335	HORIZONTAL	165
549.94	43.15	46.40	3.20	149	0	HORIZONTAL	165
791.98	41.40	46.40	5.00	103	283	HORIZONTAL	165
923.98	44.19	46.40	2.20	100	338	HORIZONTAL	165
945.94	41.94	46.40	4.50	106	309	HORIZONTAL	165
198.00	35.70	43.50	7.80	200	319	HORIZONTAL	152 Turbo
791.98	44.35	46.40	2.10	100	295	HORIZONTAL	152 Turbo
813.94	39.26	46.40	7.10	109	330	HORIZONTAL	152 Turbo
923.98	45.42	46.40	1.00	100	9	HORIZONTAL	152 Turbo
945.94	43.05	46.40	3.40	100	336	HORIZONTAL	152 Turbo
198.00	36.00	43.50	7.50	200	306	HORIZONTAL	160 Turbo
659.98	42.81	46.40	3.60	145	323	HORIZONTAL	160 Turbo
791.98	40.13	46.40	6.30	100	309	HORIZONTAL	160 Turbo
923.98	40.16	46.40	6.20	99	336	HORIZONTAL	160 Turbo
945.94	34.71	46.40	11.70	99	333	HORIZONTAL	160 Turbo

Table 12 – 802.11a, HG5822G

Frequency	Level	Limit	Margin	Height	Angle	Pol.	Channel
MHz	dB $\mu$ V/m	dB $\mu$ V/m	dB	cm	deg		
198.00	34.89	43.50	8.60	350	0	HORIZONTAL	149
571.96	40.39	46.40	6.00	133	82	HORIZONTAL	149
659.98	43.17	46.40	3.20	110	325	HORIZONTAL	149
813.94	44.21	46.40	2.20	100	327	HORIZONTAL	149
923.98	44.84	46.40	1.60	100	317	HORIZONTAL	149
945.94	37.47	46.40	8.90	102	327	HORIZONTAL	149
198.00	32.92	43.50	10.60	200	0	HORIZONTAL	157
593.98	43.33	46.40	3.10	130	86	HORIZONTAL	157
791.98	42.70	46.40	3.70	100	325	HORIZONTAL	157
923.98	37.98	46.40	8.40	100	318	HORIZONTAL	157
945.94	36.10	46.40	10.30	145	335	HORIZONTAL	157
198.00	32.50	43.50	11.00	200	351	HORIZONTAL	165
593.98	43.74	46.40	2.70	100	88	HORIZONTAL	165
791.98	42.70	46.40	3.70	99	325	HORIZONTAL	165
923.98	37.94	46.40	8.50	100	320	HORIZONTAL	165
945.94	42.67	46.40	3.70	110	343	HORIZONTAL	165
198.00	35.23	43.50	8.30	199	352	HORIZONTAL	152 Turbo
791.98	45.14	46.40	1.30	100	311	HORIZONTAL	152 Turbo
813.94	44.04	46.40	2.40	100	332	HORIZONTAL	152 Turbo
923.98	44.71	46.40	1.70	99	313	HORIZONTAL	152 Turbo
945.94	35.93	46.40	10.50	99	348	HORIZONTAL	152 Turbo
197.94	31.59	43.50	11.90	200	351	HORIZONTAL	160 Turbo
659.98	41.73	46.40	4.70	100	2	HORIZONTAL	160 Turbo
791.98	43.11	46.40	3.30	145	318	HORIZONTAL	160 Turbo
923.98	44.58	46.40	1.80	100	336	HORIZONTAL	160 Turbo
945.94	36.55	46.40	9.90	99	346	HORIZONTAL	160 Turbo



Table 13 – 802.11b, SAA04-22008A

Frequency	Level	Limit	Margin	Height	Angle	Pol.	Level Pk	Ch.
MHz	dBμV/m	dBμV/m	dB	cm	deg		dBμV/m	
2407.50	64.53	NA	NA	99	325	V	108.47	1
2413.00	66.63	NA	NA	115	320	V	111.93	1
2418.00	60.73	NA	NA	119	320	V	104.55	1
4812.50	47.91	59.50	11.60	100	326	V	59.42	1
4815.50	44.77	59.50	14.70	148	126	H	58.13	1
4824.00	45.79	59.50	13.70	120	320	V	70.61	1
2407.50	108.47	NA	NA	99	325	V	108.47	6
2413.00	111.93	NA	NA	115	320	V	111.93	6
2418.00	104.55	NA	NA	119	320	V	104.55	6
4812.50	59.42	59.50	0.10	100	326	V	59.42	6
4815.50	58.13	59.50	1.40	148	126	H	58.13	6
2461.00	64.90	NA	NA	130	311	V	110.19	11
4930.50	45.53	59.50	14.00	100	191	H	58.82	11
4944.50	45.77	59.50	13.70	200	359	H	59.13	11

Table 14 – 802.11g, SAA04-22008A

Frequency	Level	Limit	Margin	Height	Angle	Pol.	Level Pk	Ch.
MHz	dBμV/m	dBμV/m	dB	cm	deg		dBμV/m	
2409.50	63.86	NA	NA	100	331	V	107.14	1
4577.50	43.80	59.50	15.70	130	232	V	56.76	1
4824.00	44.95	59.50	14.50	159	56	V	61.09	1
2436.00	103.29	NA	NA	99	306	V	110.91	6
4859.00	45.00	59.50	14.50	141	133	H	58.10	6
4876.00	45.20	59.50	14.30	100	286	V	58.84	6
4975.50	45.94	59.50	13.60	200	325	V	60.10	6
2461.00	62.54	NA	NA	100	311	V	105.85	11
4896.00	45.24	59.50	14.30	150	28	V	58.53	11
4921.50	45.50	59.50	14.00	149	29	H	59.41	11
4923.00	45.51	59.50	14.00	106	143	V	59.04	11
2429.00	97.63	NA	NA	100	314	V	108.30	6 sup
4848.00	44.98	59.50	14.50	199	38	H	58.34	6 sup
4860.50	45.04	59.50	14.50	200	178	V	58.78	6 sup
5076.50	46.53	59.50	13.00	150	359	H	60.10	6 sup

Table 15 - 802.11a, SAA04-22008A

Frequency	Level	Limit	Margin	Height	Angle	Pol.	Level Pk	Ch.
MHz	dB $\mu$ V/m	dB $\mu$ V/m	dB	cm	deg		dB $\mu$ V/m	
1452.00	50.74	59.50	8.80	101	0	H	57.15	149
5618.00	49.89	59.50	9.60	200	207	V	63.35	149
5741.00	65.62	NA	NA	101	25	V	123.32	149
5746.00	65.56	NA	NA	99	19	V	122.13	149
5749.50	65.61	NA	NA	98	27	V	123.59	149
5932.50	51.48	59.50	8.00	128	323	H	64.94	149
1452.00	50.67	59.50	8.80	100	354	H	57.15	157
5661.50	50.14	59.50	9.40	149	301	V	63.50	157
5780.00	65.06	NA	NA	106	359	V	120.69	157
5781.00	65.38	NA	NA	100	99	V	121.73	157
5790.50	65.84	NA	NA	100	97	V	122.67	157
5895.50	51.62	59.50	7.90	184	136	H	64.71	157
2453.50	36.89	59.50	22.60	199	27	H	50.30	165
5747.00	50.72	59.50	8.80	100	93	V	69.40	165
5821.00	66.16	NA	NA	100	359	V	122.57	165
5829.00	66.12	NA	NA	100	5	V	123.33	165
5922.00	51.50	59.50	8.00	184	108	V	64.54	165
5644.50	50.04	59.50	9.50	149	84	V	62.88	152 turb
5752.00	63.18	NA	NA	100	107	V	117.76	152 turb
5768.00	63.39	NA	NA	100	19	V	118.21	152 turb
5773.50	63.21	NA	NA	99	1	V	117.13	152 turb
5884.50	51.86	59.50	7.60	105	34	V	65.55	152 turb
5681.00	50.34	59.50	9.20	150	16	V	63.88	160 turb
5789.50	63.64	NA	NA	100	0	V	118.06	160 turb
5805.50	107.32	NA	NA	100	19	V	117.46	160 turb
5809.00	63.73	NA	NA	99	3	V	118.12	160 turb
5928.50	51.46	59.50	8.00	170	242	H	64.95	160 turb

Table 16 – 802.11b, HG2424G

Frequency	Level	Limit	Margin	Height	Angle	Pol.	Level Pk	Ch.
MHz	dBµV/m	dBµV/m	dB	cm	deg		dBµV/m	
2410.50	NA	NA	NA	99	46	V	113.76	1
2411.00	NA	NA	NA	101	46	V	114.18	1
2413.00	NA	NA	NA	98	46	V	114.06	1
4818.00	44.70	59.50	14.80	150	299	H	58.27	1
4818.50	44.71	59.50	14.80	370	80	H	58.00	1
4834.00	44.79	59.50	14.70	101	258	H	58.03	1
2438.00	63.50	NA	NA	140	97	V	108.07	6
4693.00	44.29	59.50	15.20	161	347	H	57.68	6
4874.00	46.14	59.50	13.40	115	338	V	71.28	6
5377.00	47.68	59.50	11.80	199	29	V	60.87	6
2463.00	106.61	NA	NA	119	68	V	110.79	11
4922.00	45.44	59.50	14.10	200	340	H	59.16	11
4923.50	45.44	59.50	14.10	150	281	H	58.79	11
5075.00	46.48	59.50	13.00	115	160	H	59.59	11

Table 17 – 802.11g, HG2424G

Frequency	Level	Limit	Margin	Height	Angle	Pol.	Level Pk	Ch.
MHz	dBµV/m	dBµV/m	dB	cm	deg		dBµV/m	
2413.00	105.62	NA	NA	100	90	V	109.98	1
4824.00	45.95	59.50	13.50	100	90	V	71.78	1
4850.50	44.89	59.50	14.60	170	291	V	58.86	1
2438.00	106.75	NA	NA	101	51	V	110.96	6
4871.00	45.09	59.50	14.40	150	297	H	58.15	6
4900.00	45.25	59.50	14.30	141	302	H	58.27	6
2461.00	102.74	NA	NA	115	73	V	107.23	11
4913.00	45.44	59.50	14.10	150	278	H	58.60	11
4924.00	45.94	59.50	13.60	149	115	V	66.47	11
2444.00	97.36	NA	NA	114	86	V	107.86	6 sup
4871.00	45.11	59.50	14.40	100	315	V	60.83	6 sup

Table 18 - 802.11a, HG5822G

Frequency	Level	Limit	Margin	Height	Angle	Pol.	Level Pk	Ch.
MHz	dB $\mu$ V/m	dB $\mu$ V/m	dB	cm	deg		dB $\mu$ V/m	
1452.00	51.34	59.50	8.20	100	359	H	57.80	149
5741.00	120.15	NA	NA	120	19	V	131.77	149
5741.50	74.88	NA	NA	120	19	V	131.14	149
5749.00	73.59	NA	NA	100	24	V	125.99	149
1364.00	42.29	59.50	17.20	115	359	H	50.07	157
1452.00	49.91	59.50	9.60	106	1	H	56.64	157
2019.50	35.77	59.50	23.70	150	291	V	49.42	157
5779.50	120.10	NA	NA	98	19	V	130.80	157
5788.00	75.07	NA	NA	101	19	V	130.45	157
5789.50	66.84	NA	NA	104	24	V	126.48	157
5797.50	63.76	NA	NA	104	19	V	117.14	157
1452.00	51.18	59.50	8.30	101	13	H	57.67	165
1529.50	31.41	59.50	28.10	200	277	H	44.53	165
5822.00	75.30	NA	NA	99	19	V	130.52	165
5828.00	75.25	NA	NA	99	19	V	130.68	165
5829.50	120.08	NA	NA	100	19	V	130.85	165
5832.50	75.36	NA	NA	107	19	V	129.94	165
1452.00	49.93	59.50	9.60	99	354	H	56.64	152 turb
5752.00	63.82	NA	NA	100	24	V	121.69	152 turb
5754.50	72.92	NA	NA	99	19	V	126.02	152 turb
5756.00	72.79	NA	NA	107	19	V	125.89	152 turb
5762.00	72.99	NA	NA	100	19	V	126.17	152 turb
5772.50	64.29	NA	NA	100	5	V	121.31	152 turb
5785.00	61.48	NA	NA	106	11	V	112.64	152 turb
1452.00	49.61	59.50	9.90	97	358	H	56.52	160 turb
5794.50	65.23	NA	NA	100	19	V	126.93	160 turb
5802.00	65.32	NA	NA	99	19	V	125.76	160 turb
5802.50	65.73	NA	NA	115	19	V	126.40	160 turb
5808.50	65.07	NA	NA	99	19	V	126.24	160 turb
5821.00	61.56	NA	NA	101	19	V	109.55	160 turb

Table 19 - 802.11a, HG5817D

Frequency	Level	Limit	Margin	Height	Angle	Pol.	Level Pk	Ch.
MHz	dB $\mu$ V/m	dB $\mu$ V/m	dB	cm	deg		dB $\mu$ V/m	
1232.00	43.67	NA	NA	150	353	V	49.82	149
5738.50	74.65	NA	NA	100	3	V	130.34	149
5741.00	74.64	NA	NA	100	2	V	131.14	149
5747.50	118.57	NA	NA	130	19	V	129.53	149
5749.00	74.53	NA	NA	120	19	V	129.65	149
5760.50	61.37	NA	NA	106	5	V	111.74	149
1452.00	51.75	59.50	7.80	101	1	H	58.06	157
5784.00	74.73	NA	NA	99	19	V	129.46	157
5785.00	116.66	NA	NA	130	19	V	129.18	157
5789.00	74.90	NA	NA	100	5	V	130.33	157
1452.00	50.38	59.50	9.10	150	359	H	57.02	165
5827.50	75.02	NA	NA	99	359	V	128.88	165
5829.00	75.12	NA	NA	130	19	V	129.41	165
5832.50	75.01	NA	NA	131	19	V	128.54	165
1452.00	51.73	59.50	7.80	100	359	H	58.19	152 turb
5757.00	114.54	NA	NA	100	5	V	125.10	152 turb
5763.00	64.65	NA	NA	120	19	V	124.95	152 turb
5765.50	64.82	NA	NA	119	19	V	125.57	152 turb
5772.50	64.93	NA	NA	100	5	V	124.54	152 turb
1452.00	51.68	59.50	7.80	100	0	H	57.93	160 turb
5795.50	114.48	NA	NA	119	19	V	125.43	160 turb
5804.50	65.44	NA	NA	130	12	V	126.24	160 turb
5809.50	64.95	NA	NA	106	5	V	125.22	160 turb

Table 20 - 802.11b, HG2414D

Frequency	Level	Limit	Margin	Height	Angle	Pol.	Level Pk	Ch.
MHz	dB $\mu$ V/m	dB $\mu$ V/m	dB	cm	deg		dB $\mu$ V/m	
1452.00	50.68	59.50	8.80	106	0	H	57.15	1.00
2407.50	72.53	NA	NA	120	19	V	115.86	1.00
2413.00	72.77	NA	NA	107	2	V	117.36	1.00
4734.00	44.35	59.50	15.10	194	265	H	57.61	1.00
4824.00	48.19	59.50	11.30	100	19	V	81.80	1.00
4989.50	45.88	59.50	13.60	99	159	V	59.49	1.00
1452.00	52.04	59.50	7.50	100	0	H	58.44	6.00
2432.00	72.90	NA	NA	120	19	V	116.90	6.00
2436.00	76.21	NA	NA	115	12	V	121.42	6.00
4802.50	44.59	59.50	14.90	194	267	H	57.69	6.00
4874.00	48.95	59.50	10.60	115	19	V	82.96	6.00
4935.00	45.45	59.50	14.00	150	4	V	59.09	6.00
1452.00	51.91	59.50	7.60	100	0	H	58.19	11.00
2456.00	66.98	NA	NA	115	19	V	112.92	11.00
2461.00	73.28	NA	NA	118	19	V	117.99	11.00
2463.00	71.92	NA	NA	99	23	V	115.85	11.00
4850.00	44.82	NA	NA	100	324	H	58.07	11.00
4924.00	49.91	59.50	9.60	115	19	V	84.70	11.00

Table 21 - 802.11g, HG2414D

Frequency	Level	Limit	Margin	Height	Angle	Pol.	Level Pk	Ch.
MHz	dB $\mu$ V/m	dB $\mu$ V/m	dB	cm	deg		dB $\mu$ V/m	
1452.00	51.61	59.50	7.90	100	348	H	58.19	1
2407.50	70.87	NA	NA	115	19	V	114.58	1
2411.00	73.04	NA	NA	100	5	V	116.77	1
2413.00	73.35	NA	NA	117	19	V	117.50	1
4750.50	44.25	59.50	15.20	99	152	H	57.79	1
4824.00	47.47	59.50	12.00	100	19	V	78.81	1
4915.50	45.36	59.50	14.10	194	118	V	58.48	1
1452.00	51.90	59.50	7.60	100	353	H	58.19	6
2432.00	72.53	NA	NA	100	1	V	114.98	6
2438.00	75.63	NA	NA	119	19	V	119.49	6
4803.00	44.63	59.50	14.90	150	359	V	57.83	6
4874.00	48.92	59.50	10.60	115	19	V	81.58	6
4957.00	45.79	59.50	13.70	149	216	H	59.29	6
1452.00	51.69	59.50	7.80	100	0	H	58.06	11
2456.00	104.87	NA	NA	117	19	V	109.8	11
2461.00	110.61	NA	NA	115	19	V	114.87	11
2466.00	68.77	NA	NA	115	24	V	113.11	11
4875.00	45.03	59.50	14.50	160	338	H	58.31	11
4924.00	49.00	59.50	10.50	115	19	V	81.42	11
4930.00	45.38	59.50	14.10	106	272	H	59.32	11
4961.00	45.78	59.50	13.70	150	123	V	59.05	11

Table 22 - 802.11b, OD9-2400

Frequency	Level	Limit	Margin	Height	Angle	Pol.	Level Pk	Ch.
MHz	dB $\mu$ V/m	dB $\mu$ V/m	dB	cm	deg		dB $\mu$ V/m	
1452.00	51.74	59.50	7.80	100	350	H	58.32	1
2407.50	65.80	NA	NA	131	152	V	109.77	1
2410.00	68.40	NA	NA	100	5	V	113.32	1
2411.00	68.45	NA	NA	100	5	V	114.32	1
4768.00	44.36	59.50	15.10	194	37	V	57.90	1
4824.00	46.20	59.50	13.30	99	52	V	74.13	1
4848.00	44.81	59.50	14.70	194	353	V	58.34	1
1452.00	49.81	59.50	9.70	150	339	H	56.27	6
2432.00	67.62	NA	NA	106	52	V	112.14	6
2436.00	71.56	NA	NA	106	2	V	116.13	6
4874.00	46.46	59.50	13.00	106	19	V	74.02	6
4877.50	45.02	59.50	14.50	200	79	H	58.32	6
4927.50	45.32	59.50	14.20	115	263	H	58.66	6
1452.00	50.37	59.50	9.10	100	346	H	56.39	11
2456.00	62.94	NA	NA	130	59	V	107.99	11
2461.00	67.92	NA	NA	130	18	V	113.37	11
2464.00	67.72	NA	NA	130	19	V	112.62	11
2466.00	66.94	NA	NA	130	2	V	112.16	11
4924.00	46.52	59.50	13.00	149	271	V	73.44	11
4937.00	45.45	59.50	14.00	199	342	H	58.84	11



Table 23 - 802.11g, OD9-2400

Frequency	Level	Limit	Margin	Height	Angle	Pol.	Level Pk	Ch.
MHz	dB $\mu$ V/m	dB $\mu$ V/m	dB	cm	deg		dB $\mu$ V/m	
2413.00	67.30	NA	NA	99	19	V	111.37	1
4818.50	44.61	59.50	14.90	200	299	H	57.72	1
4824.00	45.67	59.50	13.80	107	19	V	70.87	1
1899.00	34.56	59.50	24.90	200	178	V	48.52	6
2436.00	107.04	NA	NA	130	61	V	111.29	6
4862.00	44.83	59.50	14.70	194	170	H	58.53	6
4875.00	44.98	59.50	14.50	183	278	H	58.31	6
1650.00	37.31	59.50	22.20	100	332	V	48.63	11
2461.00	67.65	NA	NA	129	19	V	111.70	11
4924.00	46.96	59.50	12.50	130	140	V	74.09	11
1540.00	41.23	59.50	18.30	101	333	H	52.17	6 sup
2422.50	50.99	59.50	8.50	100	104	V	112.33	6 sup
2426.50	51.16	59.50	8.30	115	52	V	113.22	6 sup
2442.50	102.04	NA	NA	131	64	V	112.08	6 sup
4683.00	44.17	59.50	15.30	99	240	V	57.95	6 sup
4857.50	44.78	59.50	14.70	200	0	V	57.82	6 sup

Table 24 - 802.11a, HG5808U

Frequency	Level	Limit	Margin	Height	Angle	Pol.	Level Pk	Ch.
MHz	dBµV/m	dBµV/m	dB	cm	deg		dBµV/m	
1452.00	52.05	59.50	7.40	100	0	H	58.32	149
5737.50	64.76	NA	NA	130	283	V	120.05	149
5742.50	65.17	NA	NA	106	73	V	121.64	149
5743.00	65.03	NA	NA	115	92	V	121.53	149
5748.50	110.11	NA	NA	100	94	V	120.99	149
5761.00	61.24	NA	NA	150	34	V	106.05	149
1452.00	52.01	59.50	7.50	100	0	H	58.44	157
5777.50	65.55	NA	NA	128	88	V	122.99	157
5785.00	108.17	NA	NA	99	90	V	120.88	157
5789.00	65.43	NA	NA	101	96	V	121.89	157
5796.50	61.71	NA	NA	100	107	V	105.62	157
1452.00	52.01	59.50	7.50	100	0	H	58.44	165
5777.50	65.55	NA	NA	128	88	V	122.99	165
5785.00	108.17	NA	NA	99	90	V	120.88	165
5789.00	65.43	NA	NA	101	96	V	121.89	165
5796.50	61.71	NA	NA	100	107	V	105.62	165
1452.00	51.87	59.50	7.60	100	0	H	58.32	152 turb
5748.00	63.07	NA	NA	100	98	V	116.70	152 turb
5763.00	63.38	NA	NA	100	85	V	117.92	152 turb
5765.50	106.61	NA	NA	100	83	V	116.84	152 turb
5773.00	63.32	NA	NA	100	91	V	117.22	152 turb
1452.00	52.00	59.50	7.50	100	353	H	58.44	160 turb
5789.50	63.70	NA	NA	150	359	V	118.16	160 turb
5809.50	105.95	NA	NA	100	82	V	118.22	160 turb

**Table 25 - Receive Mode/Standby, HG2414D\***

Frequency	Level	Limit	Margin	Height	Angle	Pol.
MHz	dBµV/m	dBµV/m	dB	cm	deg	
132.00	28.76	43.50	14.70	112	57	VERTICAL
150.00	28.90	43.50	14.60	145	291	VERTICAL
153.96	31.46	43.50	12.00	400	326	HORIZONTAL
175.92	33.48	43.50	10.00	337	0	HORIZONTAL
198.00	34.62	43.50	8.90	330	0	HORIZONTAL
199.98	32.05	43.50	11.40	99	73	VERTICAL
250.00	41.33	46.40	5.10	98	252	VERTICAL
593.98	40.80	46.40	5.60	131	359	HORIZONTAL
791.98	43.18	46.40	3.20	98	359	HORIZONTAL
813.94	42.80	46.40	3.60	101	356	HORIZONTAL
923.98	45.32	46.40	1.10	99	329	HORIZONTAL
945.94	42.88	46.40	3.50	101	323	HORIZONTAL

\*Unit was tested with HG2414D antenna because it produced the smallest margin in transmit mode testing.

**Table 26 - Receive Mode/Standby, HG2414D\***

Frequency	Level	Limit	Margin	Height	Angle	Pol.	Level
MHz	dBµV/m	dBµV/m	dB	cm	deg		dBµV/m
1342.00	44.09	54.00	9.90	99	359	H	50.89
1452.00	49.43	54.00	4.60	101	0	H	55.26
1474.00	43.60	54.00	10.40	98	4	H	51.72
1848.00	42.95	54.00	11.00	115	0	H	45.24
2454.50	19.73	54.00	34.30	100	112	V	33.63
5940.00	30.02	54.00	24.00	149	79	V	43.49
7912.50	46.58	54.00	7.40	199	54	H	46.28
14527.50	40.49	54.00	13.50	150	75	V	54.13
17938.00	47.33	54.00	6.70	98	150	H	60.69

\*Unit was tested with HG2414D antenna because it produced the smallest margin in transmit mode testing.

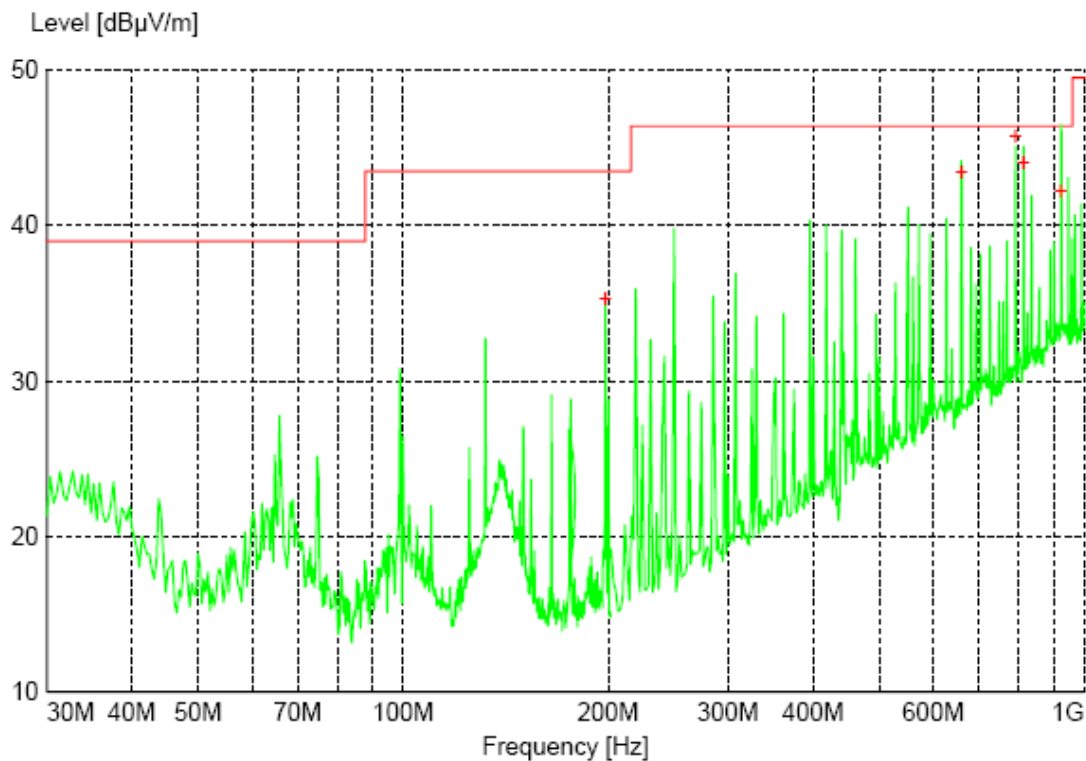


Figure 2 - Radiated Emissions Plot, SAA04-2208A, 802.11g super, Ch. 6

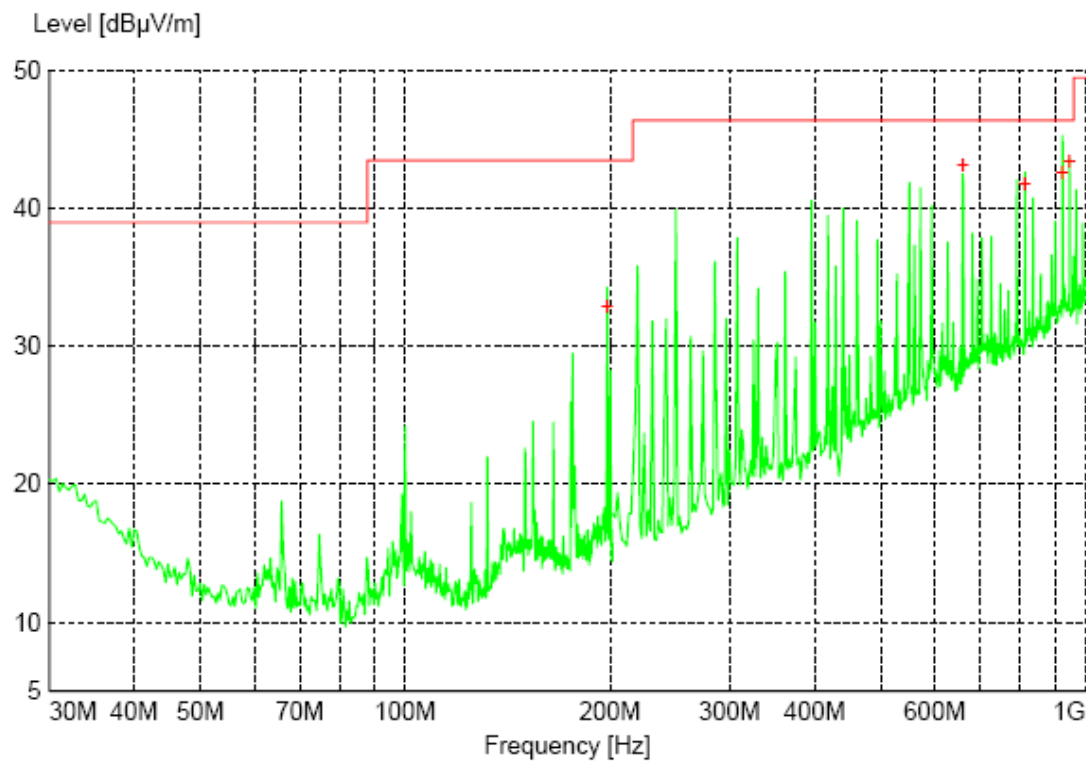


Figure 3 - Radiated Emissions Plot, OD9-2400, 802.11b, Ch. 11

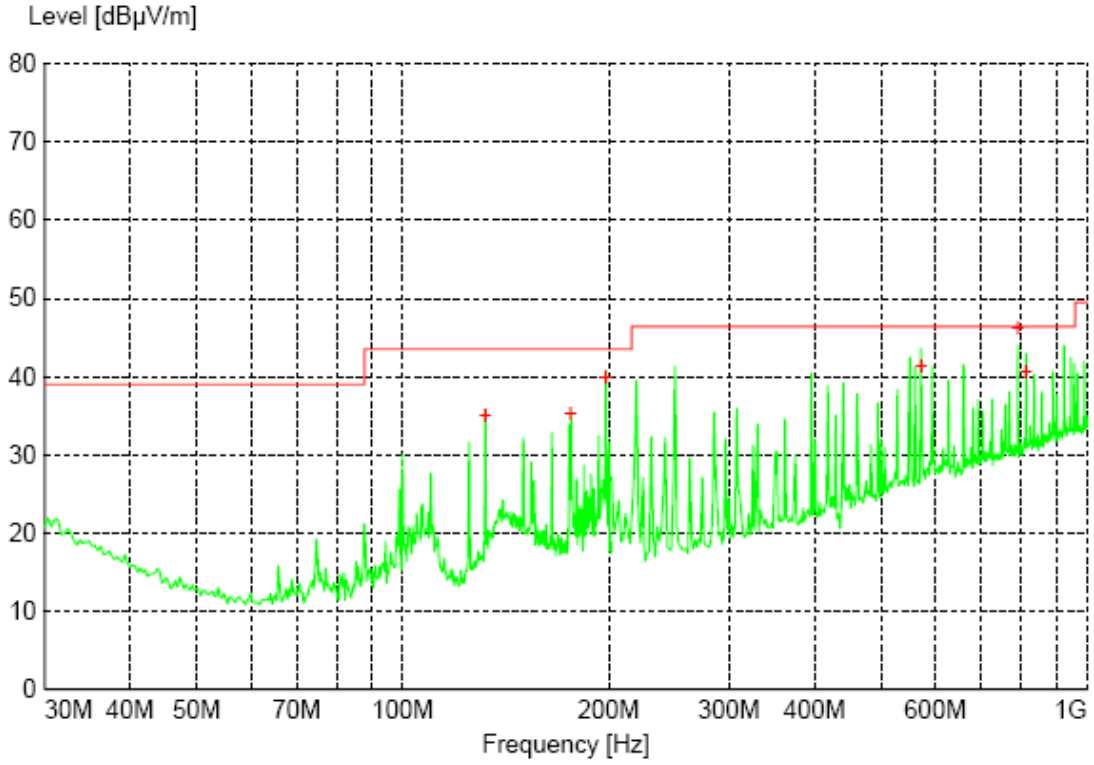


Figure 4 - Radiated Emissions Plot, HG2414D, 802.11g super, Ch. 6

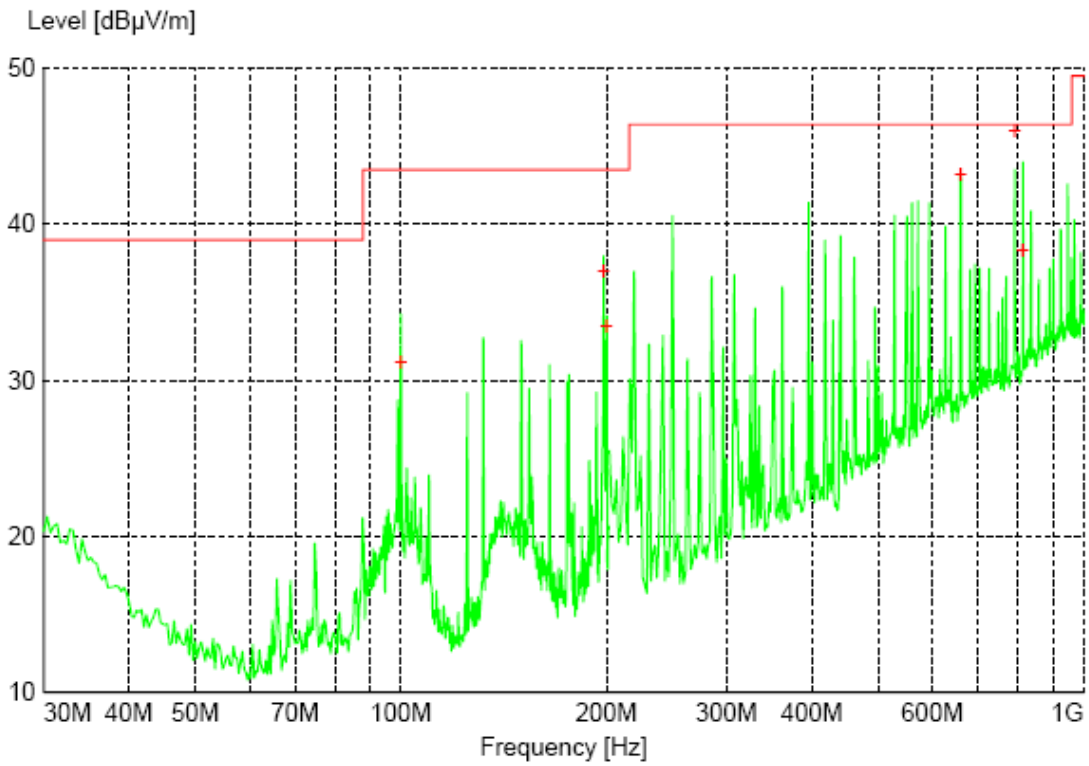


Figure 5 - Radiated Emissions Plot, HG2414G, 802.11g super, Ch. 6

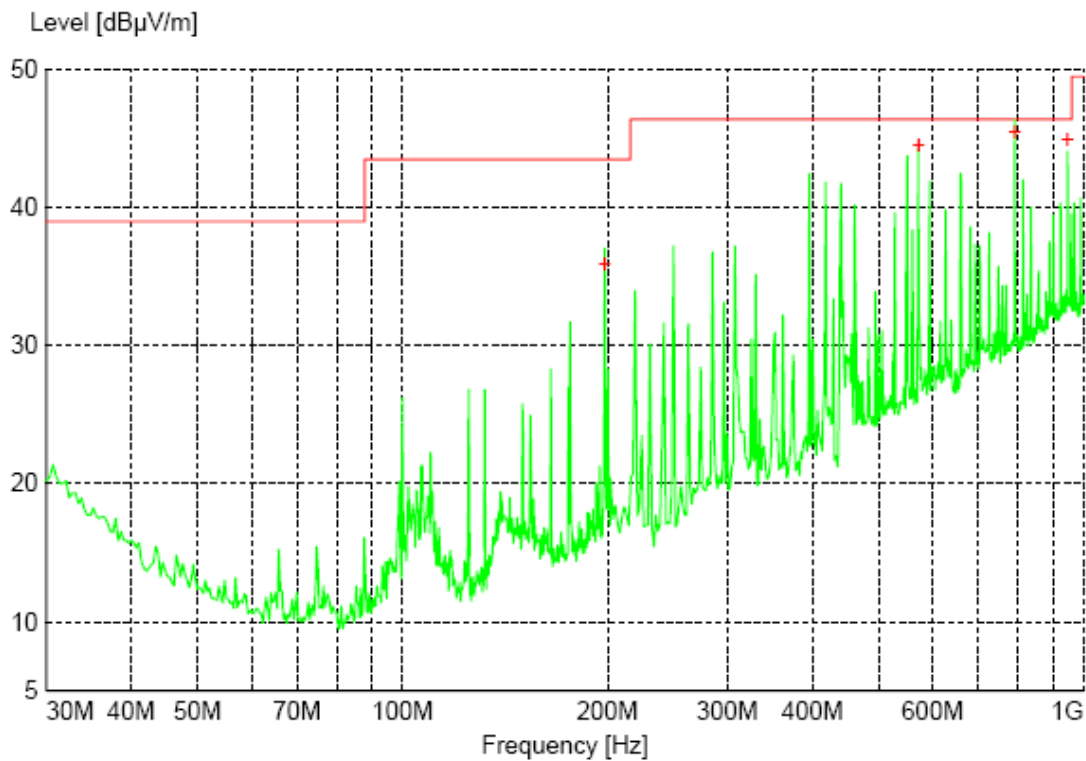


Figure 6 - Radiated Emissions Plot, HG5817D, 802.11a turbo, Ch. 160

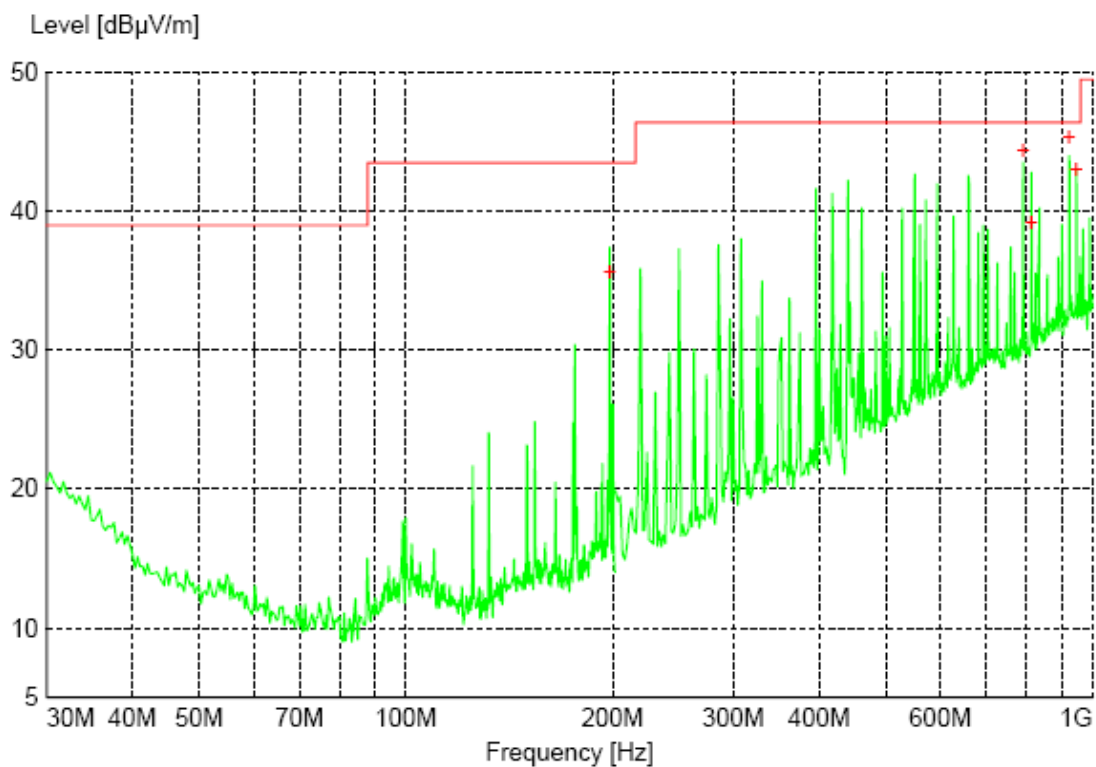


Figure 7 - Radiated Emissions Plot, HG5808, 802.11a turbo, Ch. 152

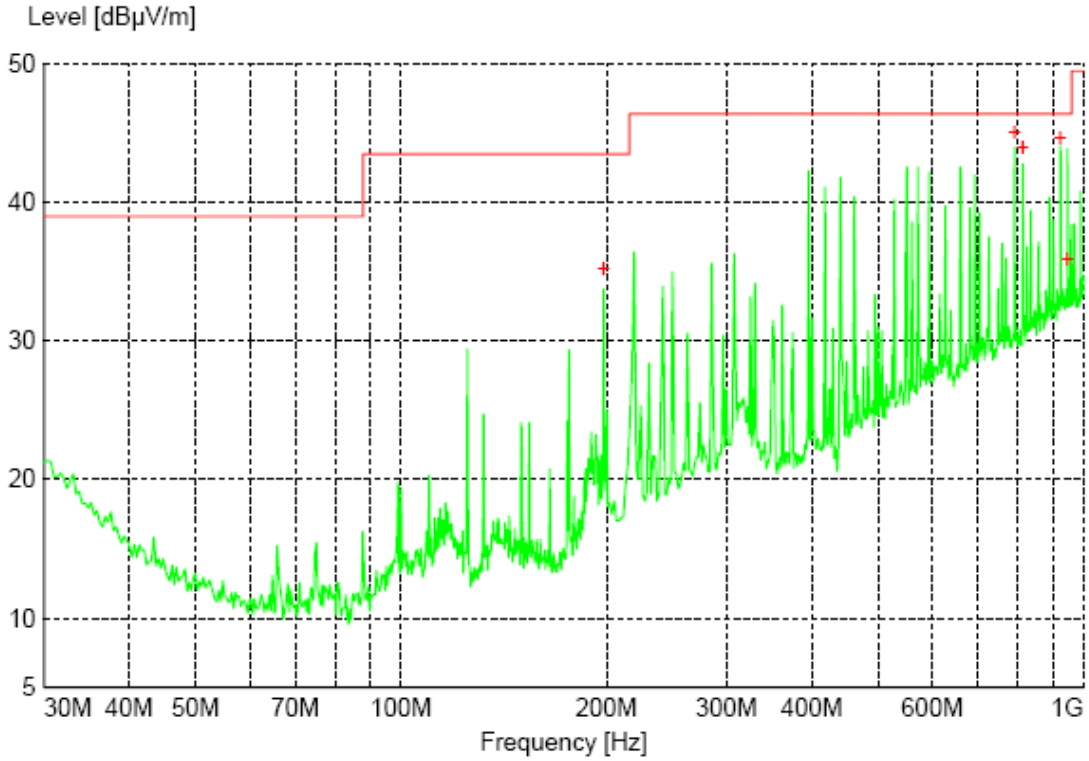


Figure 8 - Radiated Emissions Plot, HG5822G, 802.11a turbo, Ch. 152

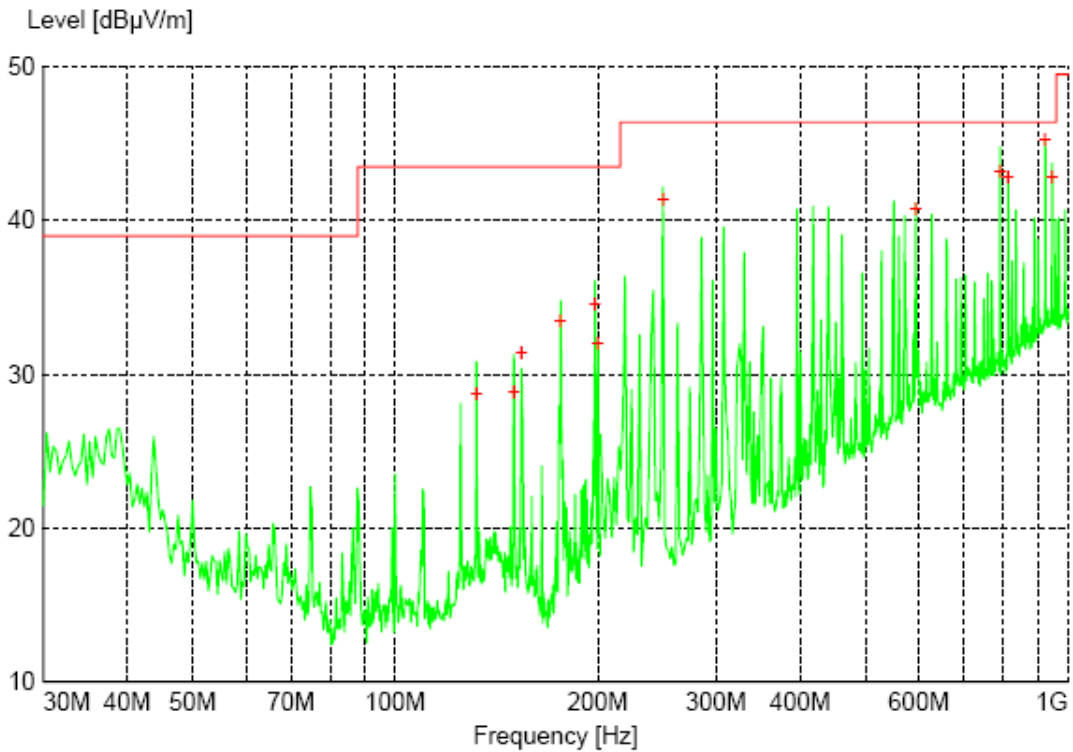


Figure 9 - Radiated Emissions Plot, HG2414D, Receive Mode/Standby