360 Herndon Parkway
Suite 1400
Herndon, VA 20170
http://www.rheintech.com

Work Order: 2001329 /
Quote Number: QRTL01-358
Dates of Tests: 12/04/2001
FCC Part 15 Certification

CERTIFICATE OF COMPLIANCE
FCC PART 15.247 CERTIFICATION & INDUSTRY CANADA CERTIFICATION

Test Lab:	Applicant Information
Rhein Tech Laboratories, Inc. 360 Herndon Parkway Suite 1400 Herndon, VA 20170 Phone: 703-689-0368 Fax: 703-689-2056 Web Site: www.rheintech.com	Hand Held Products Inc. 7510 E Independence Blvd, Suite 100 Charlotte, NC 28227-1444 USA Phone: 704-537-1444 Fax: 704-532-4191

FCC ID:	HD5-7400-352	**FRN NUMBER:**	0006-2121-79
EQUIPMENT TYPE:	WLAN card	**MODEL(S):**	Dolphin RF
RTL WORK ORDER NUMBER:	2001329	**RTL QUOTE NUMBER:**	QRTL01-358
DATE OF TEST REPORT:	March 6, 2002		

FCC Classification:	DTS –DIGITAL TRANSMISSION SYSTEM
FCC Rule Part(s):	Direct Sequence System
Industry Canada Standard:	RSS-210: Low Power License-Exempt Radio communication Devices (All Frequency Bands)

Frequency Range (MHz)	Output Power (W)	Freq. Tolerance (ppm, %, or Hz)	Emission Designator
2412-2462	0.011	N/A	N/A

We, the undersigned, hereby declare that the equipment tested and referenced in this report conforms to the identified standard(s) as described in this test report. No modifications were made to the equipment during testing in order to achieve compliance with these standards.

Furthermore, there was no deviation from, additions to or exclusions from the FCC Part 2, FCC Part 15, Industry Canada RSS-210, ANSI C63.4, ANSI/TIA/EIA603 and ANSI/TIA/EIA 603-1.

Signature: 

Date: March 7, 2002

Typed/Printed Name: Desmond A. Fraser

Position: President
(NVLAP Signatory)

Accredited by the National Voluntary Accreditation Program for the specific scope of accreditation under Lab Code 200061-0.

Note: This report may not be used by the client to claim product endorsement by NVLAP or any agency of the U.S. Government.

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1 GENERAL INFORMATION

1.1 SCOPE

FCC Rules Part 15.247: Frequency Hopping, Direct Spread Spectrum and Hybrid Systems that are in operation within the bands of 902-928 MHz, 2400-2483.5 MHz and 5725-5850 MHz.

IC RSS-210 Section 6.2.2(o): Frequency Hopping, Direct Spread Spectrum and Hybrid Systems that are in operation within the bands of 902-928 MHz, 2400-2483.5 MHz and 5725-5850 MHz.

A direct sequence (DS) system is a spread spectrum (SS) system in which the carrier has been modulated by a high speed spreading code and an information data stream. The high-speed code sequence dominates the "modulating function" and is the direct cause of the wide spreading of the transmitted signal.

1.2 TEST FACILITY

The open area test site and conducted measurement facility used to collect the radiated data is located at 360 Herndon Parkway, Suite 1400, Herndon, Virginia 20170. This site has been fully described in a report and approved by the Federal Communication Commission to perform AC line conducted and radiated emissions testing (ANSI C63.4 1992).

1.3 RELATED SUBMITAL(S)/GRANT(S)

This is an original application. A DoC report is on file for the receiver section and digital interface for the EUT. The IF, LO and up to the 2nd LO were investigated.

2 EQUIPMENT INFORMATION

2.1 APPLICANT AND EQUIPMENT INFORMATION

Test Lab:	Applicant Information
Rhein Tech Laboratories, Inc. 360 Herndon Parkway Suite 1400 Herndon, VA 20170 Phone: 703-689-0368 Fax: 703-689-2056 Web Site: www.rheintech.com	Hand Held Products Inc. 7510 E Independence Blvd, Suite 100 Charlotte, NC 28227-1444 USA Phone: 704-537-1444 Fax: 704-532-4191

FCC ID:	HD5-7400-352	**FRN NUMBER:**	0006-2121-79
EQUIPMENT TYPE:	PCMCIA card	**MODEL(S):**	Dolphin RF
RTL WORK ORDER NUMBER:	2001329	**RTL QUOTE NUMBER:**	QRTL01-358
DATE OF TEST REPORT:	March 6, 2002		

FCC Classification:	DTS –DIGITAL TRANSMISSION SYSTEM
FCC Rule Part(s):	Direct Sequence System
Industry Canada Standard:	RSS-210: Low Power License-Exempt Radio communication Devices (All Frequency Bands)

Frequency Range (MHz)	Output Power (W)	Freq. Tolerance (ppm, %, or Hz)	Emission Designator
2412-2462	0.011	N/A	N/A

2.2 JUSTIFICATION

The EUT was tested in all three orthogonal planes in order to determine worst-case emissions. Channel 1 at 2412 MHz, Channel 6 at 2437 MHz and channel 11 at 2462 MHz were tested and investigated from 9 kHz to 2 GHz. Data for all three channels are presented in this report.

The EUT contains one a integral antenna; model DOLPHIN 7400.

The EUT was investigated with the integral antenna. The worst-case data taken in this report represents the highest data rate at 11 MBPS. Data rates of 5.5 MBPS, 2 MBPS and 1 MBPS were investigated and found to be in compliance. The change in envelope did not cause the EUT to be non-compliant in any of the aforementioned modes.

2.3 EXERCISING THE EUT

The EUT was configured in a network wireless environment associated with a wireless Access Point (AP) and the AP was connected to a host computer/server. The host computer/server was set to continuously ping the EUT through the AP. The pinging was performed at a 0 ms duty cycle with the EUT transferring data at 11 MBPS with a maximum RF power setting. This was the maximum available setting provided by the Windows CE operating system installed on the EUT. The carrier was checked to verify that the information was being transmitted.

2.4 TEST SYSTEM DETAILS

The FCC Identifiers for all equipment, plus descriptions of all cables used in the tested system are:

TABLE 2-1: EQUIPMENT UNDER TEST (EUT)

PART	MANUFACTURER	MODEL	SERIAL NUMBER	FCC ID	CABLE DESCRIPTION	RTL BAR CODE
COMPUTER	HHP	DOLPHIN 7400	DL2/06732	ACJ9TGCF-281	N/A	01393(

TABLE 2-2: EXTERNAL COMPONENTS IN TEST CONFIGURATION

PART	MANUFACTURER	MODEL	SERIAL NUMBER	FCC ID	CABLE DESCRIPTION	RTL BAR CODE
N/A						

2.5 CONFIGURATION OF TESTED SYSTEM

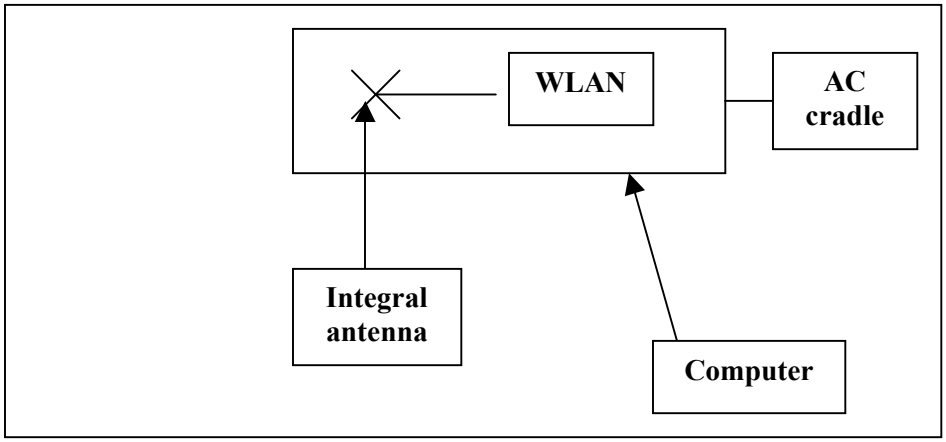


FIGURE 2-1: WORST CASE CONFIGURATION OF SYSTEM UNDER TEST

3 COMPLIANCE WITH THE RESTRICTED BAND EDGE - §15.205

3.1 TEST PROCEDURE

Compliance with the band edges was performed using the FCC's "Radiated Measurement at a Band Edge" guidance document. The final data derived below were from radiated measurements only. The data taken in this report represents the worst case at 11 MBPS. Data rates of 5.5MBPS, 2 MBPS and 1 MBPS were investigated and found to be in compliance. The peak values were used for calculating compliance with the band edges instead of the average values at 1MHz/10 Hz resolution/video bandwidth settings. This was due to extremely low average values measured at both band edge channels.

3.2 COMPLIANCE WITH THE RESTRICTED BAND EDGE TEST DATA

TABLE 3-1: COMPLIANCE WITH THE RESTRICTED BAND EDGE TEST DATA

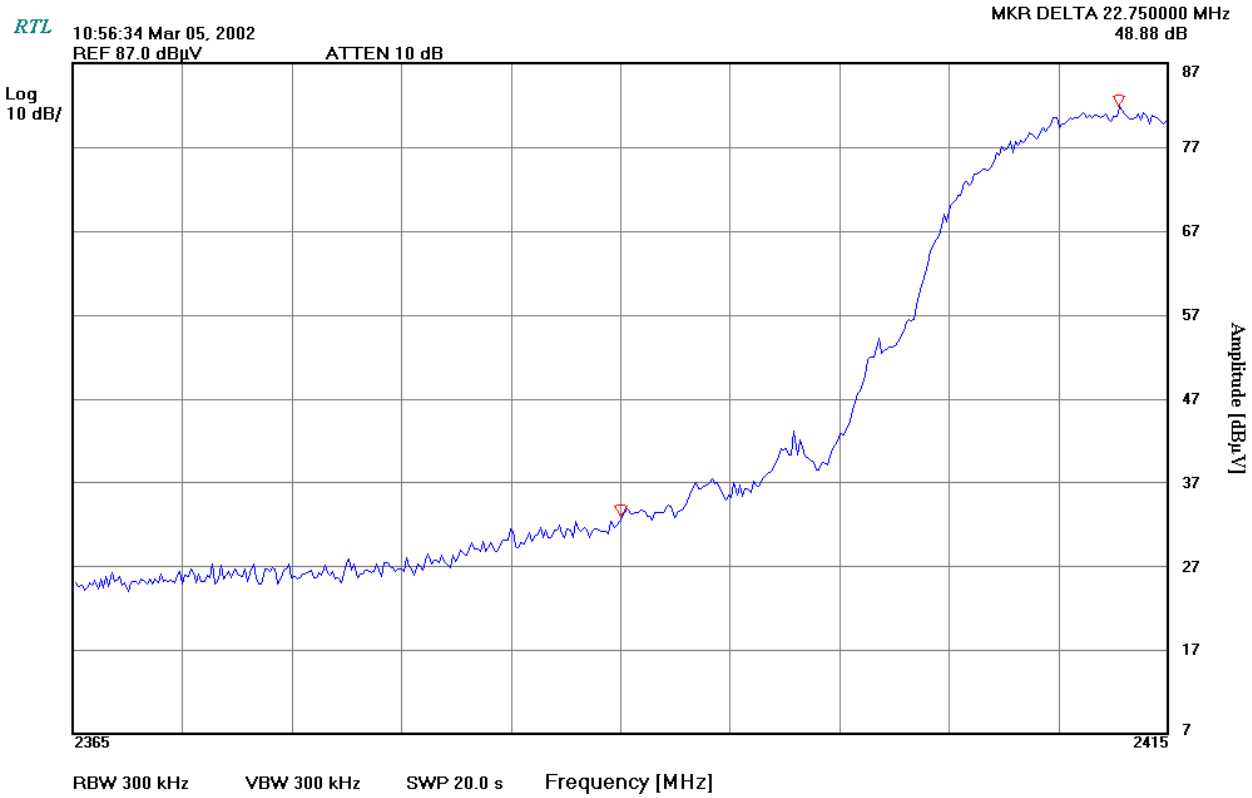
Channel	Frequency tested MHz	Detector	Field Strength Level (dBµV/m)	Delta Value (dB)	Level Corrected (dBµV/m)	FCC Limit (dBµV/m)	FCC Margin (dB)
1	2390.0	Delta marker measurement	82.8	48.9	33.9	54.0	-20.1
11	2483.5	Delta marker measurement	79.5	50.8	28.7	54.0	-25.3

TEST PERSONNEL:

Rachid Sehb		3/5/2002
Test Engineer	Signature	Date Of Test

Channel Number:	1
Channel Frequency:	2412MHz
Bandwidth Resolution:	300kHz
Bandwidth Video:	300kHz
Sweep Time:	20.0s
Span	50MHz

PLOT 3-1: BAND EDGE: DELTA MEASUREMENT FOR CHANNEL 1

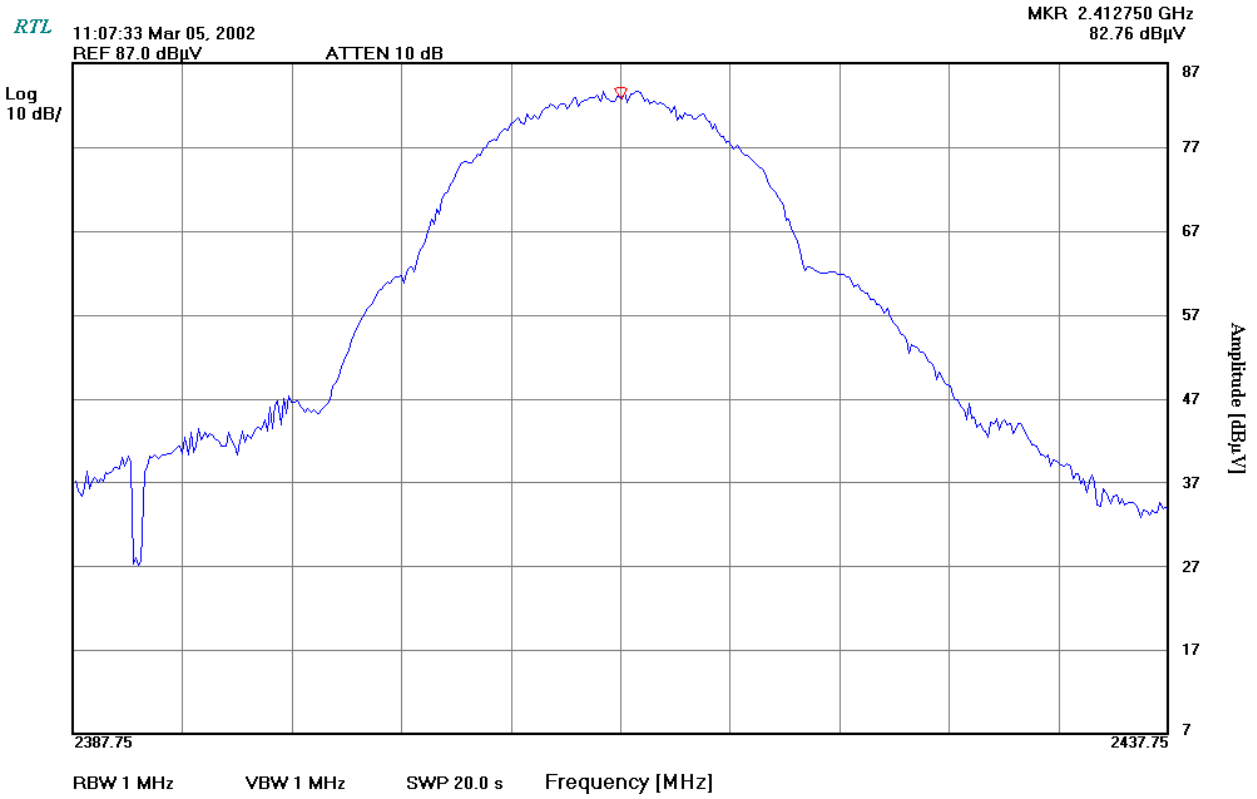


TEST PERSONNEL:

Rachid Sehb		3/5/2002
Test Engineer	Signature	Date Of Test

Channel Number:	1
Channel Frequency:	2412MHz
Bandwidth Resolution:	1MHz
Bandwidth Video:	1MHz
Sweep Time:	20.0s

PLOT 3-2: BAND EDGE: PEAK MEASUREMENT FOR CHANNEL 1

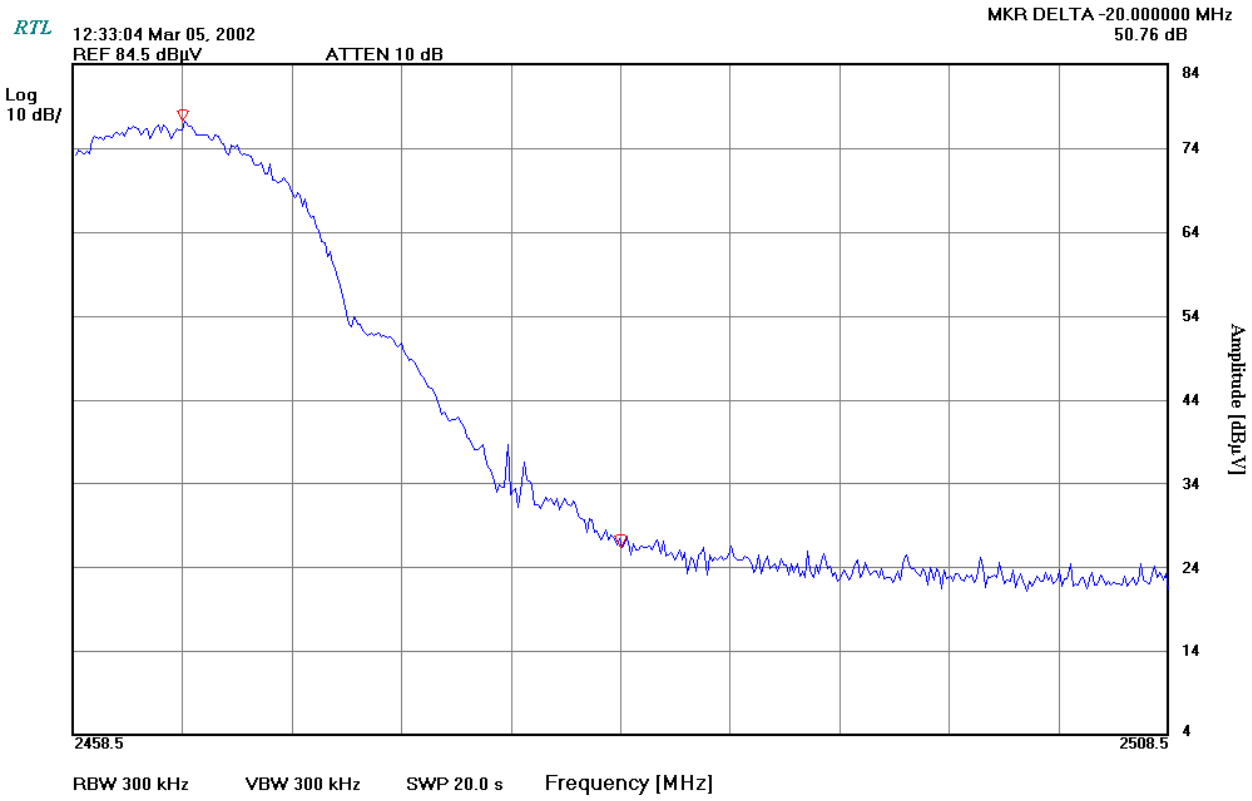


TEST PERSONNEL:

Rachid Sehb		3/05/2002
Test Engineer	Signature	Date Of Test

Channel Number:	11
Channel Frequency:	2462MHz
Bandwidth Resolution:	300kHz
Bandwidth Video:	300kHz
Sweep Time:	20.0s
Span	50MHz

PLOT 3-3: BAND EDGE: DELTA MEASUREMENT FOR CHANNEL 11

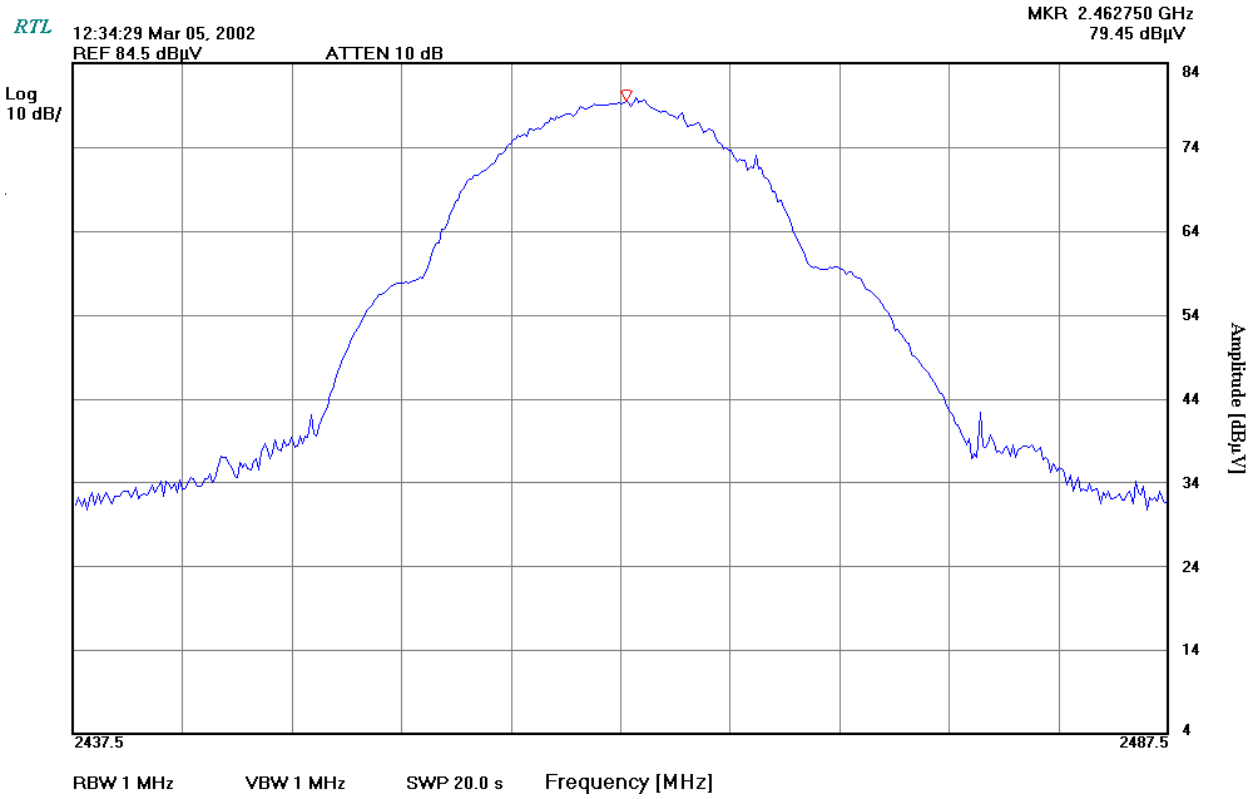


TEST PERSONNEL:

Rachid Sehb		3/5/2002
Test Engineer	Signature	Date Of Test

Channel Number:	11
Channel Frequency:	2462MHz
Bandwidth Resolution:	1MHz
Bandwidth Video:	1MHz
Sweep Time:	20.0s

PLOT 3-4: BAND EDGE: PEAK MEASUREMENT FOR CHANNEL 11



TEST PERSONNEL:

Rachid Sehb		12/04/2001
Test Engineer	Signature	Date Of Test

4 CONDUCTED LIMITS - §15.207

This device was tested and is compliant. Test results are available upon request.

5 RADIATED EMISSION LIMITS (GENERAL REQUIREMENTS) - §15.209

5.1 RADIATED EMISSION LIMITS TEST PROCEDURE

Radiated Spurious Emissions applies to harmonics and spurious emissions that fall in the restricted and non-restricted bands. The restricted bands are listed in Part 15.205. The maximum permitted average field strength for the restricted band is listed in Part 15.209. The EUT was tested in the X-Y, X-Z and Y-Z orthogonal plane.

5.2 TEST EQUIPMENT USED FOR TESTING

TABLE 5-1: RADIATED SPURIOUS EMISSIONS TEST EQUIPMENT

RTL ASSET #	MANUFACTURER	MODEL	PART TYPE	SERIAL NUMBER
900931	HP	8566B	Spectrum Analyzer (100Hz – 22 GHz)	3138A07771
900772	EMCO	3161-02	Horn ANTENNA (2-4 GHz)	900772
900321	EMCO	3161-03	Horn Antennas (4-8,2GHz)	9508-1020
900323	EMCO	3160-7	Horn Antennas (8,2-12,4 GHz)	9605-1054
900325	EMCO	3160-9	Horn Antennas (18 - 26.5 GHz)	9605-1051
900723	Miteq	NA	AMP 100MHz-26GHz	NA
900791	Schaffner - Chase	CBL6112	Antenna (25 MHz - 2 GHz)	2099

5.3 RADIATED EMISSION LIMITS TEST DATA

Operating Frequency : 2412MHz
Channel: 1
Measured EIRP: 9.5dBm

TABLE 5-2: RADIATED EMISSIONS HARMONICS/SPURIOUS (CHANNEL 1)

Emission Frequency (MHz)	Test Detector	Antenna Polarity (H/V)	Turntable Azimuth (deg)	Antenna Height (m)	Analyzer Reading (dBuV)	Site Correction Factor (dB/m)	Emission Level (dBuV/m)	Limit (dBuV/m)
2413.65	Pk	V	10	1.2	77.3	5.5	82.8	Fundamental
2471.31	Pk	V	10	1.2	37.8	5.5	43.3	54.0
2444.87	Pk	V	20	1.2	34.9	5.5	40.4	54.0
2463.42	Pk	V	20	1.2	32.3	5.5	37.8	54.0
2485.69	Pk	V	10	1.2	41.5	5.5	47.0	54.0
2496.27	Pk	V	20	1.2	32.8	5.5	38.3	54.0
4824.00	Pk	V	10	1.0	20 dB < limit			54.0
7236.00	Pk	V	10	1.0	20 dB < limit			54.0
9648.00	Pk	V	10	1.0	20 dB < limit			54.0
12060.00	Pk	V	10	1.0	20 dB < limit			54.0
14472.00	Pk	V	10	1.0	20 dB < limit			54.0
16884.00	Pk	V	10	1.0	20 dB < limit			54.0
19296.00	Pk	V	10	1.0	20 dB < limit			54.0
21708.00	Pk	V	10	1.0	20 dB < limit			54.0
24120.00	Pk	V	10	1.0	20 dB < limit			54.0

PEAK: RES. =1 MHZ, VID= 1MHZ; AVERAGE: RES. =1 MHZ, VID= 10HZ; NF = NOISE FLOOR

TEST PERSONNEL:

Rachid Sehb		3/5/2002
Test Engineer	Signature	Date Of Test

Operating Frequency : 2437MHz
Channel: 6
Measured EIRP: 5.7dBm

TABLE 5-3: RADIATED EMISSIONS HARMONICS/SPURIOUS (CHANNEL 6)

Emission Frequency (MHz)	Test Detector	Antenna Polarity (H/V)	Turntable Azimuth (deg)	Antenna Height (m)	Analyzer Reading (dBuV)	Site Correction Factor (dB/m)	Emission Level (dBuV/m)	Limit (dBuV/m)
2436.96	Pk	V	10	1.2	73.7	5.5	79.2	Fundamental
2485.63	Pk	V	20	1.2	38.0	5.5	43.5	54.0
2496.68	Pk	V	15	1.2	37.5	5.5	43.0	54.0
2507.80	Pk	V	20	1.2	38.4	5.5	43.9	54.0
4870.00	Pk	V	10	1.0	20 dB < limit			54.0
7311.00	Pk	V	10	1.0	20 dB < limit			54.0
9748.00	Pk	V	10	1.0	20 dB < limit			54.0
12185.00	Pk	V	10	1.0	20 dB < limit			54.0
14622.00	Pk	V	10	1.0	20 dB < limit			54.0
17059.00	Pk	V	10	1.0	20 dB < limit			54.0
19496.00	Pk	V	10	1.0	20 dB < limit			54.0
21933.00	Pk	V	10	1.0	20 dB < limit			54.0
24370.00	Pk	V	10	1.0	20 dB < limit			54.0

PEAK: RES. =1 MHZ, VID= 1MHZ; AVERAGE: RES. =1 MHZ, VID= 10HZ; NF = NOISE FLOOR

TEST PERSONNEL:

Rachid Sehb		3/5/2002
Test Engineer	Signature	Date Of Test

Operating Frequency : 2462MHz
Channel: 11
Measured EIRP: 5.2dBm

TABLE 5-4: RADIATED EMISSIONS HARMONICS/SPURIOUS (CHANNEL 11)

Emission Frequency (MHz)	Test Detector	Antenna Polarity (H/V)	Turntable Azimuth (deg)	Antenna Height (m)	Analyzer Reading (dBuV)	Site Correction Factor (dB/m)	Emission Level (dBuV/m)	Limit (dBuV/m)
2394.277	Pk	V	20	1.2	39.1	5.5	44.6	54.0
2463.650	Pk	V	10	1.3	74.0	5.5	79.5	Fundamental
2541.442	Pk	V	10	1.0	36.8	5.5	42.3	54.0
2552.062	Pk	V	10	1.2	37.1	5.5	42.6	54.0
2563.078	Pk	V	20	1.2	36.4	5.5	41.9	54.0
2574.294	Pk	V	20	1.0	35.8	5.5	41.3	54.0
4924.00	Av	V	10	1.0	20 dB < limit			54.0
7386.00	Av	V	10	1.0	20 dB < limit			54.0
9848.00	Av	V	10	1.0	20 dB < limit			54.0
12310.00	Av	V	10	1.0	20 dB < limit			54.0
14772.00	Av	V	10	1.0	20 dB < limit			54.0
17234.00	Av	V	10	1.0	20 dB < limit			54.0
19696.00	Av	V	10	1.0	20 dB < limit			54.0
22158.00	Av	V	10	1.0	20 dB < limit			54.0
24620.00	Av	V	10	1.0	20 dB < limit			54.0

PEAK: RES. =1 MHZ, VID= 1MHZ; AVERAGE: RES. =1 MHZ, VID= 10HZ; NF = NOISE FLOOR

TEST PERSONNEL:

Rachid Sehb		3/5/2002
Test Engineer	Signature	Date Of Test

6 MODULATED BANDWIDTH - §15.247(A)(2)

6.1 MODULATED BANDWIDTH TEST PROCEDURE

The minimum 6 dB bandwidth per FCC 15.247 (a)(2) was measured using a 50 ohm spectrum analyzer with the resolution bandwidth set at 100 kHz, and the video bandwidth set at 300 kHz. Since the EUT has an integral antenna, the test was performed as a radiated testing. The 6 dB value on the bandwidth plots were corrected using the site correction factor (i.e. cable loss, amplifier gain, and antenna factor) and the path loss at 3 meter distance; and referenced to the EIRP value measured in section 7 of this report. The minimum 6 dB modulated bandwidths are as follows:

6.2 MODULATED BANDWIDTH TEST DATA

TABLE 6-1: MINIMUM 6 dB MODULATED BANDWIDTHS

CHANNEL	6 dB BANDWIDTH (MHz)
1	11.1
6	11.1
11	11.6

TEST PERSONNEL:

Rachid Sehb		3/5/2002
Test Engineer	Signature	Date Of Test

6.3 TEST EQUIPMENT USED FOR TESTING

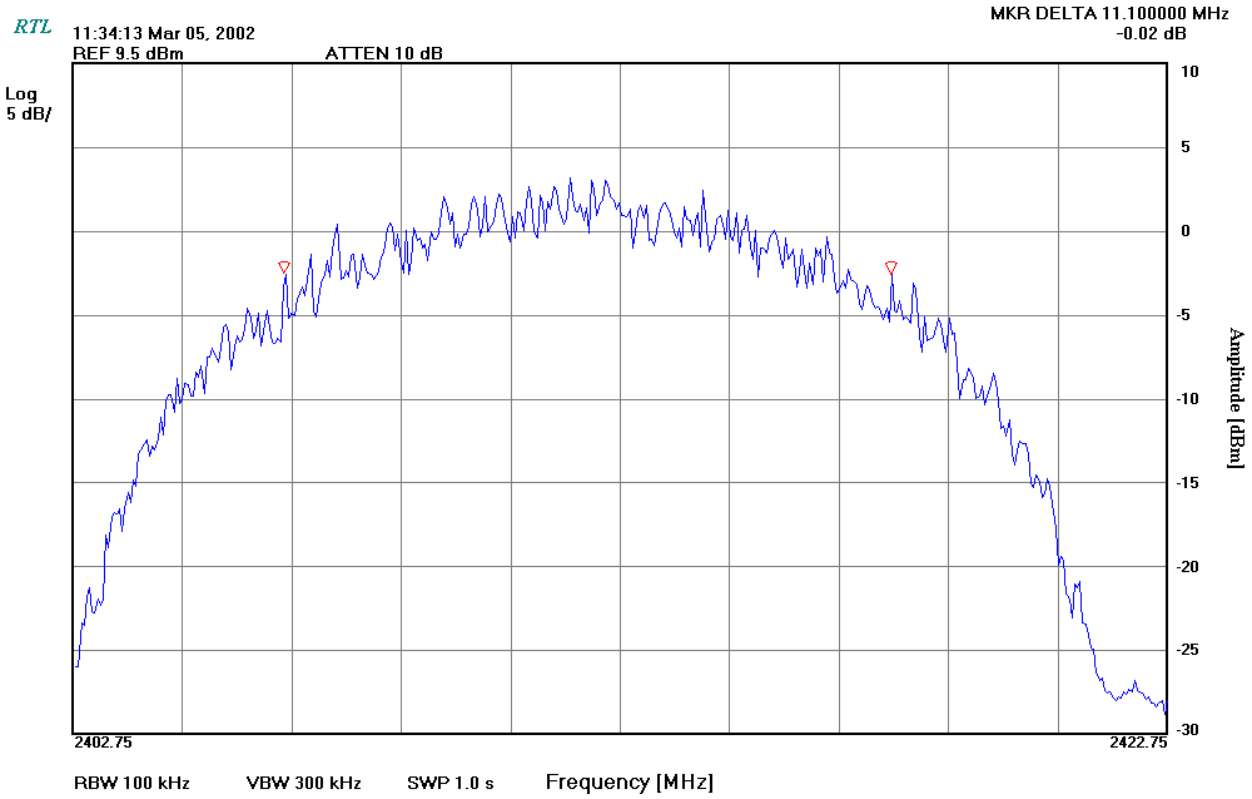
TABLE 6-2: TEST EQUIPMENT USED FOR TESTING (MODULATED BANDWIDTH)

RTL Asset #	Manufacturer	Model	Part Type	Serial Number
900931	HP	8564E	Spectrum Analyzer (30Hz – 40 GHz)	3138A07771
901186	Agilent Technologies	E9323A (50MHz-6GHz)	Peak & Avg. Power Sensor	US40410380
901184	Agilent Technologies	E4416A	EPM-P Power Meter, single channel	GB41050573
900772	EMCO	3161-02	Horn ANTENNA (2-4 GHz)	900772
900723	Miteq	NA	AMP 100MHz-26GHz	NA

6.4 MODULATED BANDWIDTH PLOTS

Channel Number:	1
Channel Frequency:	2412MHz
Bandwidth Resolution:	100kHz
Bandwidth Video:	300kHz
Sweep Time:	20.0ms
Span	20MHz

PLOT 6-1: MODULATED BANDWIDTH CHANNEL 1

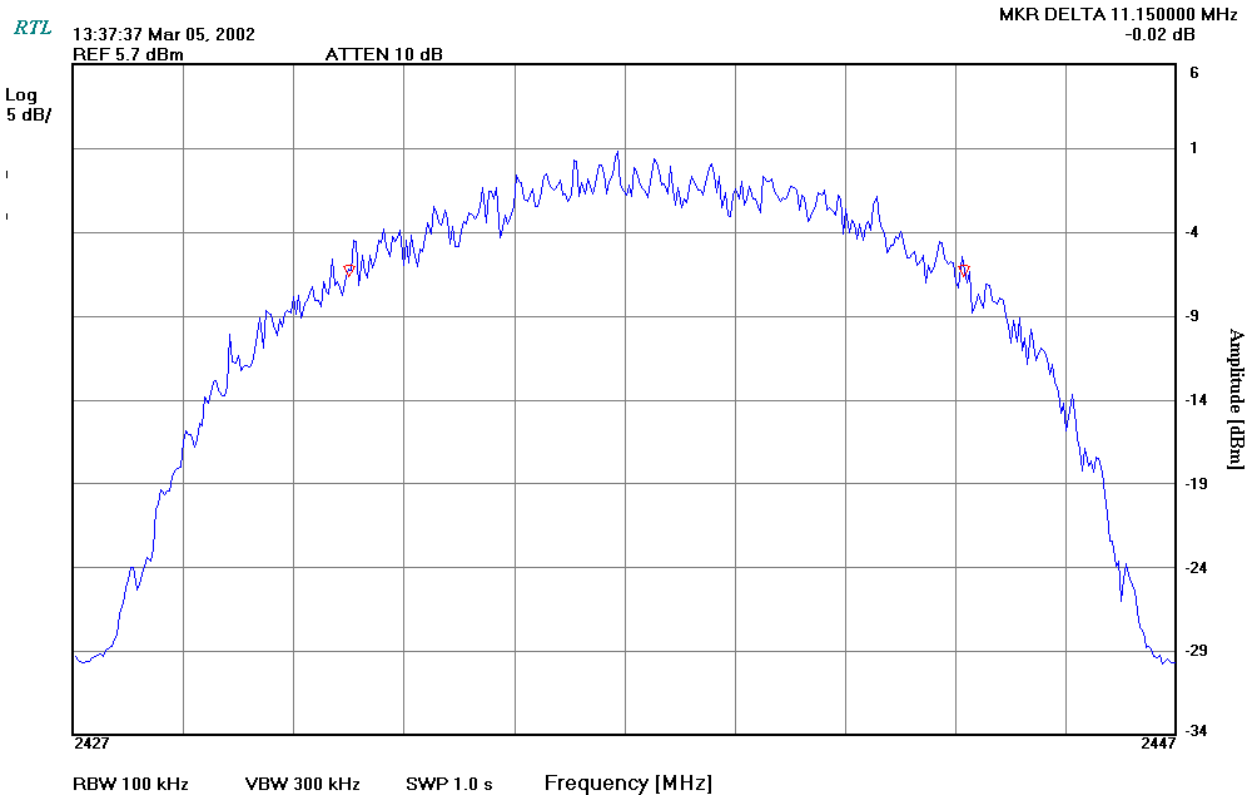


TEST PERSONNEL:

Rachid Sehb		3/5/2002
Test Engineer	Signature	Date Of Test

Channel Number:	6
Channel Frequency:	2437MHz
Bandwidth Resolution:	100kHz
Bandwidth Video:	300kHz
Sweep Time:	20.0ms
Span	20MHz

PLOT 6-2: MODULATED BANDWIDTH CHANNEL 6

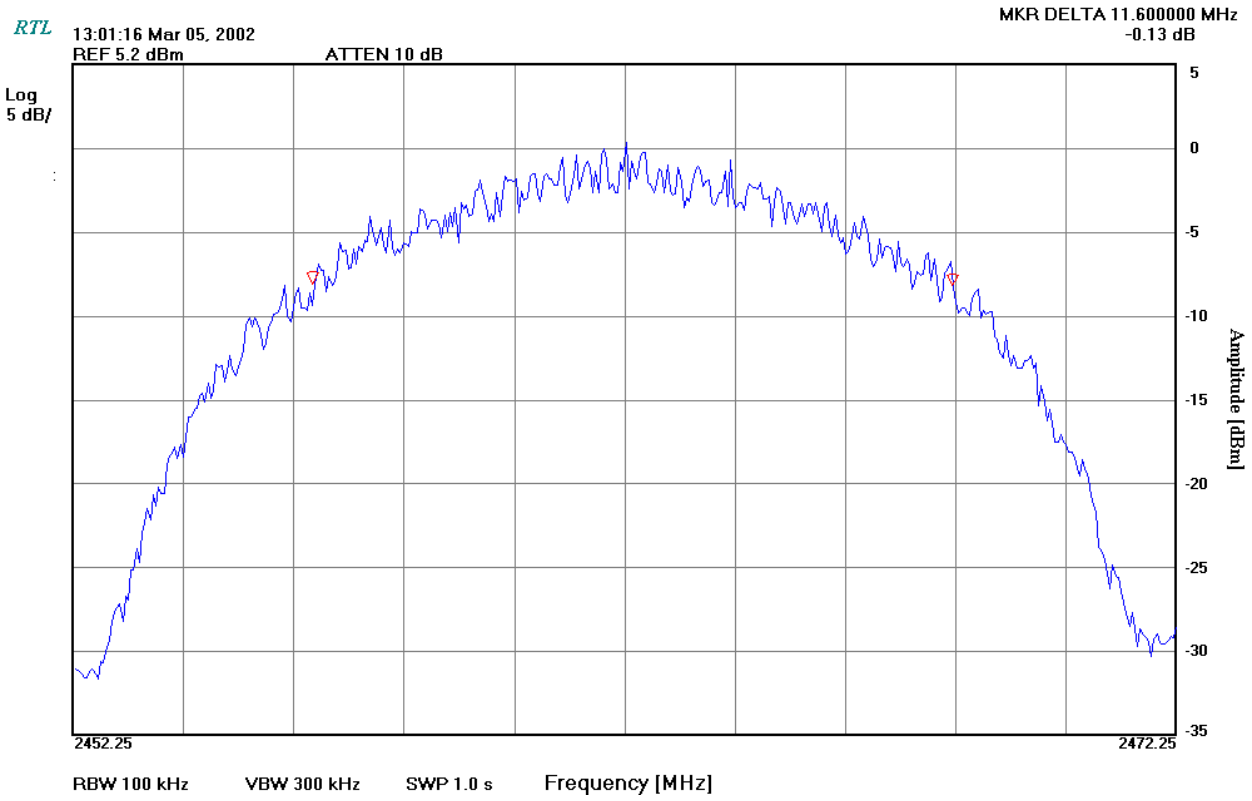


TEST PERSONNEL:

Rachid Sehb		3/4/2002
Test Engineer	Signature	Date Of Test

Channel Number:	11
Channel Frequency:	2464MHz
Bandwidth Resolution:	100kHz
Bandwidth Video:	300kHz
Sweep Time:	1.0s
Span	20MHz

PLOT 6-3: MODULATED BANDWIDTH CHANNEL 11



TEST PERSONNEL:

Rachid Sehb		3/5/2002
Test Engineer	Signature	Date Of Test

7 OUTPUT POWER - §15.247(B)

7.1 OUTPUT POWER TEST PROCEDURE

The EUT contains a fixed integral antenna; conducted output power were calculated from the measured EIRP value and the antenna gain provided by the manufacturer's specification. EIRP measurement was performed as a radiated test using the substitution method.

7.2 POWER OUTPUT TEST DATA

TABLE 7-1: POWER OUTPUT TEST DATA

CHANNEL	EIRP (dBm)*	Antenna Gain (dBi)	CALCULATED POWER CONDUCTED OUTPUT (dBm)
1	9.5	-0.89	10.4
6	5.7	-0.89	6.6
11	5.2	-0.89	6.2

*Measurement accuracy is +/- 1.5 dB

TEST PERSONNEL:

Rachid Sehb		3/5/2002
Test Engineer	Signature	Date Of Test

7.3 TEST EQUIPMENT USED FOR TESTING

TABLE 7-2: TEST EQUIPMENT USED FOR TESTING (RADIATED RF OUTPUT – EIRP)

RTL Asset #	Manufacturer	Model	Part Type	Serial Number
900931	HP	8566B	Spectrum Analyzer (100Hz – 22 GHz)	3138A07771
901186	Agilent Technologies	E9323A (50MHz-6GHz)	Peak & Avg. Power Sensor	US40410380
901184	Agilent Technologies	E4416A	EPM-P Power Meter, single channel	GB41050573
900772	EMCO	3161-02	Horn ANTENNA (2-4 GHz)	900772
900723	Miteq	NA	AMP 100MHz-26GHz	NA
900814	Electro-Metrics	RGA-60	Double Ridges Guide Antenna (1-18 GHz)	2310

8 ANTENNA CONDUCTED SPURIOUS EMISSIONS - §15.247(C)

8.1 ANTENNA CONDUCTED SPURIOUS EMISSIONS TEST PROCEDURES

Not applicable:

Antenna spurious emission per FCC 15.247(c) was not measured from the EUT antenna port using a 50 ohm spectrum analyzer with the resolution bandwidth set at 100 kHz, and the video bandwidth set at 300 kHz because the EUT contained a fixed integral antenna.

TEST PERSONNEL:

Rachid Sehb		3/5/2005
Test Engineer	Signature	Date Of Test

9 POWER SPECTRAL DENSITY - §15.247(D)

9.1 POWER SPECTRAL DENSITY TEST PROCEDURE

The Power spectral density per FCC 15.247(d) was measured using a 50 ohm spectrum analyzer with the resolution bandwidth set at 3kHz, the video bandwidth set at 30kHz, and the sweep time set at 1000 second. . Since the EUT has an integral antenna, the test was performed as a radiated testing. The 6 dB value on the bandwidth plots were corrected using the site correction factor (i.e. cable loss, amplifier gain, and antenna factor) and the path loss at 3 meter distance; and referenced to the EIRP value measured in section 7 of this report. The spectral lines were resolved for the modulated carriers at 2.412GHz, 2.437GHz and 2.463GHz respectively. These levels are well below the +8 dBm limit. See power spectral density table and plots.

9.2 POWER SPECTRAL DENSITY TEST DATA

TABLE 9-1: POWER SPECTRAL DENSITY

CHANNEL	POWER SPECTRAL DENSITY LIMIT = +8DBM
1	-8.13
6	-12.13
11	-13.47

TEST PERSONNEL:

Rachid Sehb		3/5/2002
Test Engineer	Signature	Date Of Test

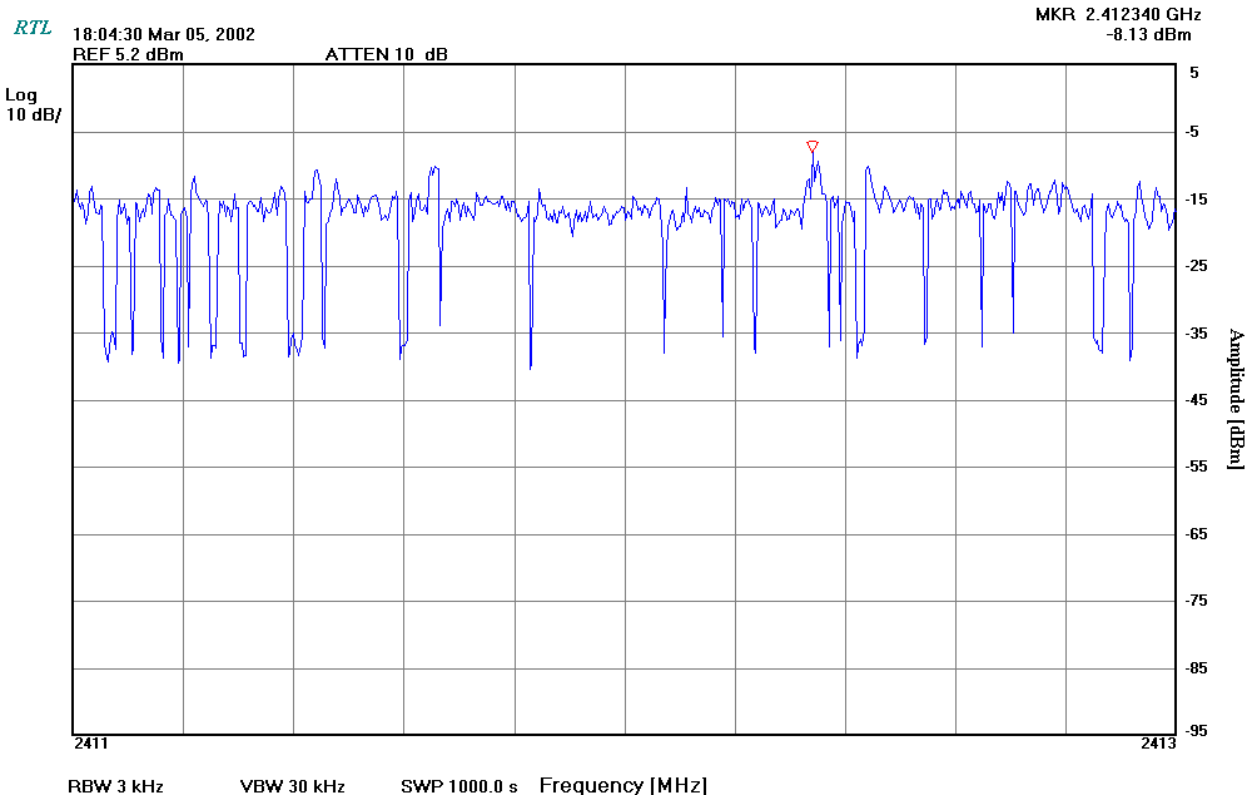
9.3 TEST EQUIPMENT USED FOR TESTING

TABLE 9-2: TEST EQUIPMENT USED FOR TESTING (POWER SPECTRAL DENSITY)

RTL Asset #	Manufacturer	Model	Part Type	Serial Number
900931	HP	8564E	Spectrum Analyzer (30Hz – 40 GHz)	3138A07771
900772	EMCO	3161-02	Horn ANTENNA (2-4 GHz)	900772
900723	Miteq	NA	AMP 100MHz-26GHz	NA

Channel Number:	11
Channel Frequency:	2412MHz
Bandwidth Resolution:	3kHz
Bandwidth Video:	30kHz
Sweep Time:	1000s
Span	2MHz

PLOT 9-1: POWER SPECTRAL DENSITY: CHANNEL 1

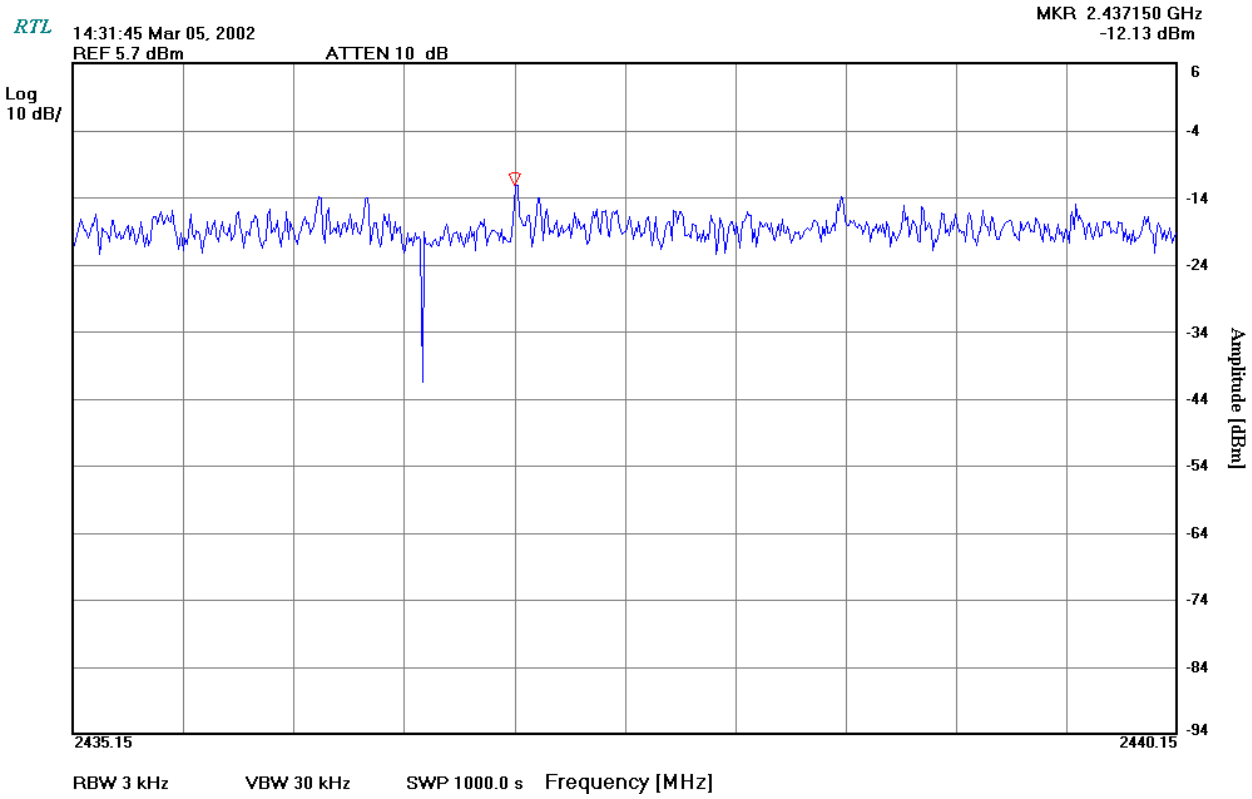


TEST PERSONNEL:

Rachid Sehb		3/5/2002
Test Engineer	Signature	Date Of Test

Channel Number:	6
Channel Frequency:	2437MHz
Bandwidth Resolution:	3kHz
Bandwidth Video:	30kHz
Sweep Time:	1000s
Span	5MHz

PLOT 9-2: POWER SPECTRAL DENSITY: CHANNEL 6

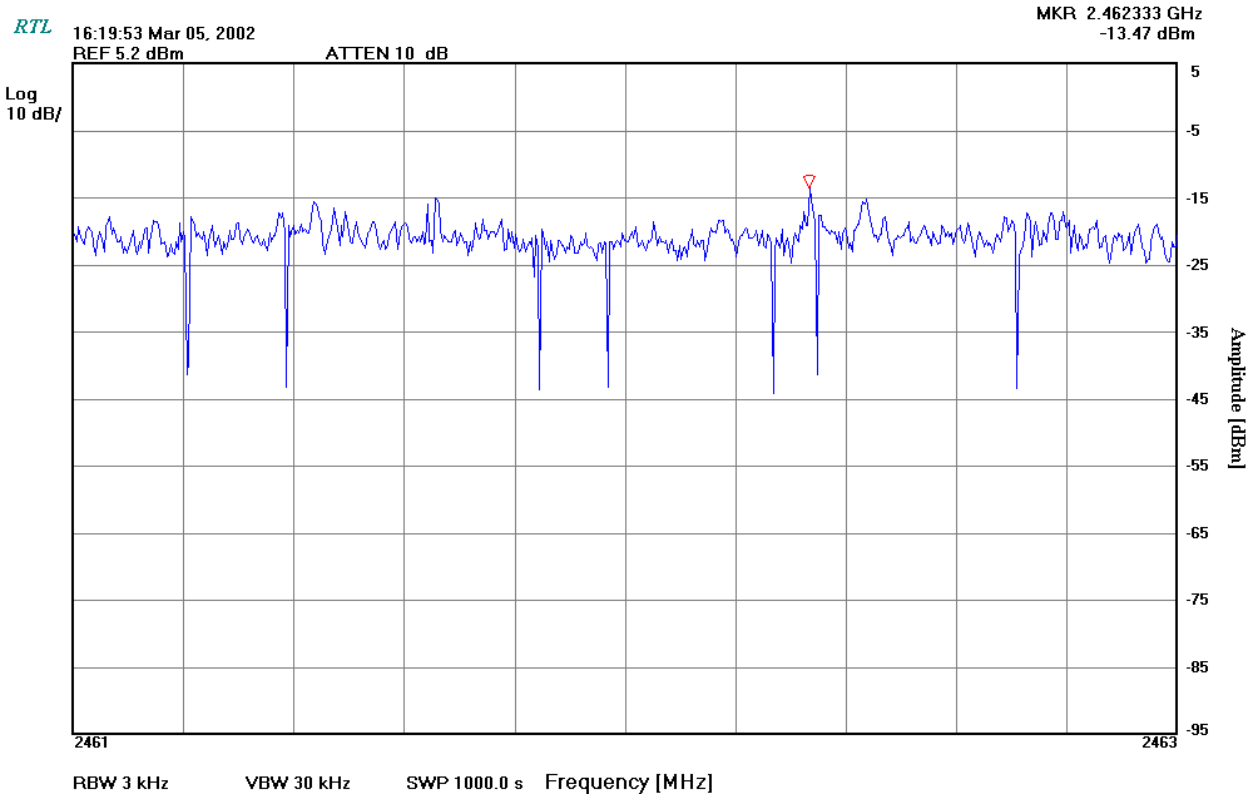


TEST PERSONNEL:

Rachid Sehb		3/5/2002
Test Engineer	Signature	Date Of Test

Channel Number:	11
Channel Frequency:	2464MHz
Bandwidth Resolution:	3kHz
Bandwidth Video:	30kHz
Sweep Time:	1000s
Span	2MHz

PLOT 9-3: POWER SPECTRAL DENSITY: CHANNEL 11



TEST PERSONNEL:

Rachid Sehb		3/5/2002
Test Engineer	Signature	Date Of Test

10 CONCLUSION

Test Lab:	Applicant Information
Rhein Tech Laboratories, Inc. 360 Herndon Parkway Suite 1400 Herndon, VA 20170 Phone: 703-689-0368 Fax: 703-689-2056 Web Site: www.rheintech.com	Hand Held Products Inc. 7510 E Independence Blvd, Suite 100 Charlotte, NC 28227-1444 USA Phone: 704-537-1444 Fax: 704-532-4191

FCC ID:	HD5-7400-352	**FRN NUMBER:**	0006-2121-79
EQUIPMENT TYPE:	PCMCIA card	**MODEL(S):**	Dolphin RF
RTL WORK ORDER NUMBER:	2001329	**RTL QUOTE NUMBER:**	QRTL01-358
DATE OF TEST REPORT:	March 6, 2002		

FCC Classification:	DTS –DIGITAL TRANSMISSION SYSTEM
FCC Rule Part(s):	Part 15.247: Operation within the bands 920-928 MHz, 2400-2483.5 MHz and 5725-5850 MHz Direct Sequence System
Industry Canada Standard:	RSS-210: Low Power License-Exempt Radio communication Devices (All Frequency Bands)

Frequency Range (MHz)	Output Power (W)	Freq. Tolerance (ppm, %, or Hz)	Emission Designator
2412-2462	0.0111	N/A	N/A

The data in this measurement report shows that the EUT complies with all the requirements listed above.

TEST PERSONNEL:

Rachid Sehb		3/5/2002
Test Engineer	Signature	Date Of Test