



MOTOROLA

PERSONAL COMMUNICATIONS SECTOR

**PRODUCT SAFETY AND COMPLIANCE
EMC LABORATORY**

EMC TEST REPORT - Addendum

Test Report Number –15444-1WLAN

Report Date – December 22, 2004

The test results contained herein relate only to the model(s) identified. It is the manufacturer's responsibility to assure that additional production units of this model are manufactured with identical electrical and mechanical characteristics.

As the responsible EMC Engineer, I hereby declare that the equipment tested as specified in this report conforms to the requirements indicated.

A handwritten signature in blue ink that reads "Michael E. Hill".

Signature:

Name: Michael E. Hill

Title: Senior Staff Electrical Engineer

Date: December 26, 2004

This report must not be reproduced, except in full, without written approval from this laboratory.

THIS REPORT MUST NOT BE USED TO CLAIM PRODUCT ENDORSEMENT BY A2LA OR ANY AGENCY OF THE U.S. GOVERNMENT.

A2LA Certificate Number: 1846-01



Table of Contents

Test Report Details 3
Applicable Standards 4
Summary of Testing..... 5
General and Special Conditions..... 6
Equipment and Cable Configurations 7
Measuring Equipment and Calibration Information 7
Description of WLAN Transmitter 8
Measurement Procedures and Data..... 9
 Antenna Gain 9
 SPECTRUM BANDWIDTH..... 9
 Measurement Procedure..... 9
 Measurement Results 9
 MAXIMUM PEAK OUTPUT POWER (CONDUCTED) 14
 Measurement Procedure..... 14
 Measurement Results 14
 Maximum Peak Output Power (Radiated)..... 18
 Measurement Procedure..... 18
 Measurement Results 18
 Power Spectral Density..... 26
 Measurement Procedure..... 26
 Measurement Results 26
 FIELD STRENGTH OF SPURIOUS EMISSIONS 27
 Measurement Procedure..... 27
 Measurement Results 27
 Measurement Procedure..... 38
 Measurement Results 38
 SPURIOUS RF CONDUCTED EMISSIONS 45
 Measurement Procedure..... 45
 Measurement Results 45

Test Report Details

Tests Performed By: Motorola Personal Communications Sector
Product Safety and Compliance Group
600 North US Hwy 45
Libertyville, IL 60048
PH (847) 523-6167 Fax (847) 523-4538
Motorola PCS FRN: 0004321311
FCC Registration Number: 316588
Industry Canada Number: IC3908

Radiated Emissions
Performed By: Underwriters Laboratories
International EMC Services
333 Pfingsten RD
Northbrook, IL 60062
Contact: Lubomir Madjarov
(Tel) 847/664-3957
(Fax) 847/313-3957

Tests Requested By: Motorola Inc.
Personal Communications Sector
600 North US Hwy 45
Libertyville, IL 60048

Product Type: Cellular Phone

Signaling Capability: GSM 1900, WLAN, Bluetooth

Model Number: M1000

Version: SJUG003A

Serial Numbers: LM10630102, LM10630081,
LM10630038, LM10630020

Testing Complete Date: December 24, 2005

Applicable Standards

All tests and measurements indicated in this document were performed in accordance with the Code of Federal Regulations Title 47 Part 2, Sub-part J as well as the following parts:

- Part 15 Subpart C – Intentional Radiators
- Part 22 Subpart H - Public Mobile Services
- Part 24 - Personal Communications Services
- Part 90 - Private Land Mobile Radio Service

Applicable Standards: TIA EIA 137-A, TIA EIA 98-C, ANSI 63.4 2003, RSS-118 (AMPS), RSS-128 (TDMA), RSS-129 (CDMA), RSS-133 (PCS)

Summary of Testing

Test	Test Name	Pass/Fail
1	Antenna Gain (CFR47 Part 15.204)	Pass
2	Spectrum Bandwidth	Pass
3	Maximum Peak Output Power-Conducted (Part 15.247(b) (1))	Pass
4	Maximum Peak Output Power-Radiated (15.247 (b) (1))	Pass
5	Power Spectral Density (15.247(d))	Pass
6	Band Edge Compliance of Conducted Emissions (Part 15.247(c))	Pass
7	Band Edge Compliance of Radiated Emissions (Part 15/247(c))	N/A
8	Conducted Spurious Emissions (15.247 (c) (1))	Pass
9	Emissions Limitations (15.247(c))	

Test	Test Name	Results
1	Antenna Gain (CFR47 Part 15.204)	-3dBi
2	Spectrum Bandwidth (6dB)	11.39MHz
3	Maximum Peak Output Power-Conducted (Part 15.247(b) (1))	13.17dBm
4	Maximum Peak Output Power-Radiated (15.247 (b) (1))	102.3dBuV
5	Power Spectral Density (15.247(d))	-3.44dBm
6	Band Edge Compliance of Conducted Emissions (Part 15.247(c))	(See graphs)
7	Band Edge Compliance of Radiated Emissions (Part 15/247(c))	(See graphs)
8	Conducted Spurious Emissions (15.247 (c) (1))	(See graphs)
9	Emissions Limitations (15.247(c))	

The margin with respect to the limit is the minimum margin for all modes and bands. () indicates the margin at which the product exceeds the limit.

General and Special Conditions

The EUT was tested using a fully charged battery when applicable. Where a battery could not be used due to the need for a controlled variation of input voltage, an external power supply was utilized.

Special test S/W was used for these tests. In all tests, the WLAN was transmitting at 11Mbit/s (DSSS).

All testing was done in an indoor controlled environment with an average temperature of 22° C and relative humidity of 50%.

Equipment and Cable Configurations

The EUT was tested in a stand-alone configuration that is representative of typical use.

Measuring Equipment and Calibration Information

Manufacturer	Equipment Type	Model No.	Serial Number	Cal. Due Date
Rohde & Schwarz	Receiver	ESI26	838786/010	5/17/2005
Hewlett-Packard	EMC Analyzer	8593EM	3536A00118	10/2/2005
Hewlett-Packard	EMC Analyzer	7405	US39440191	11/13/2005
Miteq	Preamplifier 0.1-26.5GHz	NSP2650-NF-S	966350	1/8/2005
ETS	DRG Horn Antenna	3115	6222	10/4/2005
A.H. Systems Inc.	DRG Horn Antenna	SAS-2--/571	365	12/17/2004
ETS	Log-Periodic Antenna	3148	1188	3/5/2005
ETS	Biconical Antenna	3110B	3370	11/14/2005
Attenuator	Weinschel	AS-6	6675	10/14/2005
Attenuator	Weinschel	AS-6	6677	11/4/2005
Rohde & Schwarz	Mobile Test Set	CMD 80	DE29008	N/A
Hewlett-Packard	Signal Generator	83623B	3844A01195	6/20/2005
Thermotron	Environmental Chamber	S-4	31580	1/5/2005
Agilent	Power Meter	EE4418B	GB40206388	12/5/2005
Agilent	Power Sensor	E4412B	US38486321	12/5/2005
Hewlett-Packard	Pre-Amplifier	8447F	2805A03419	5/19/2005

U.L. Equipment

Hewlett Packard	QP Adapter	85650A	2811A01069	1/8/2005
Hewlett Packard	S/A Display	8566B	2542A12974	1/8/2005
Hewlett Packard	S/A	8566B	2637A03376	1/8/2005
Hewlett Packard	RF Preselector	85685A	2810A00692	1/8/2005
Rohde & Schwarz	S/A	FSEK20	DE2525315	1/9/2005
EMCO	Horn Antenna 1-18GHz	3115	2638	7/10/2005
EMCO	Horn Antenna 18-26.5GHz	3160-09	9904-1165	N/A*
Chase	Bi-Con Antenna 30-300MHz	VBA6106A	1246	6/23/2005
Chase	Log-Periodic Antenna	UPA6108	1120	6/23/2005

All equipment is on a one-year calibration cycle.

Description of WLAN Transmitter

The M1000 cell phone offers WLAN as a feature. The WLAN direct sequence spread-spectrum transceiver is designed to operate between 2400 and 2483 MHz. The PIFA (Planar Inverted Folded Antenna) WLAN antenna is mounted on the PCB inside of the EUT. The antenna installation is permanent and the gain is -3dBi.

As a WLAN transmitter, it is designed operate with other WLAN devices as defined by industrial standard. In this application, the device is battery-operated.

Measurement Procedures and Data

Antenna Gain

CFR 47 Part 15.204

The M1000 WLAN Planar Inverted Folding Antenna (PIFA) gain is -3dBi.

SPECTRUM BANDWIDTH

CFR 47 Part 15.247 (b)

Measurement Procedure

The RF output port of the Equipment-Under-Test is directly coupled to the input of the EMC analyzer through a specialized RF connector and a 20dB passive attenuator. A fully charged battery was used for the supply voltage.

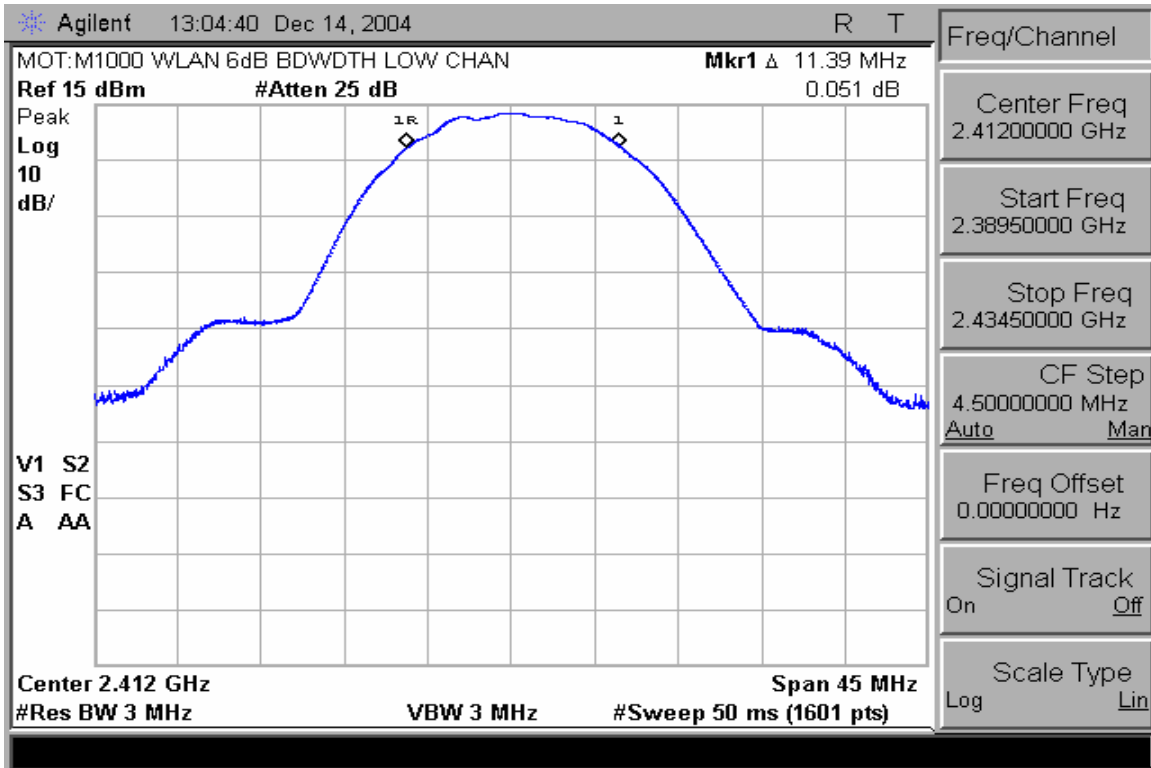
The WLAN DSSS was enabled. The spectrum analyzer used the following settings:

1. Span = the frequency band of operation
2. RBW \geq 100kHz
3. VBW \geq 100kHz
4. Sweep = Auto
5. Detector function = peak
6. Trace = max hold

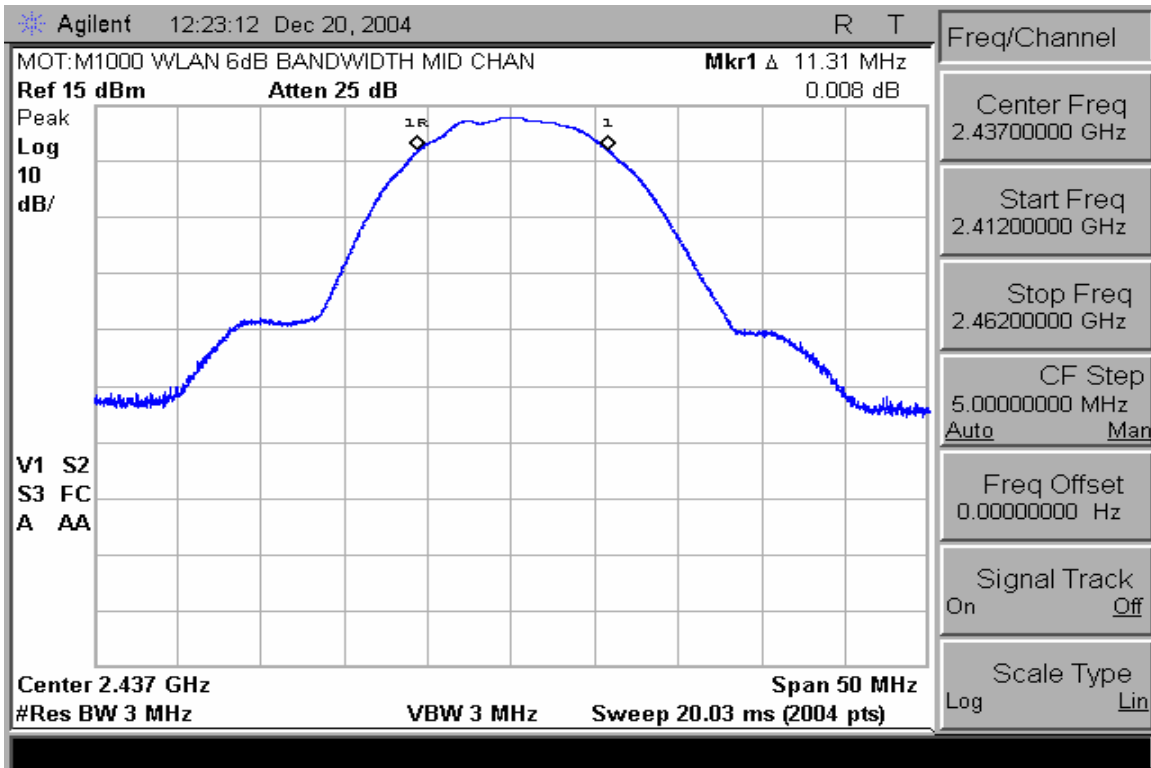
The trace was allowed to stabilize. 6 dB and 20 dB bandwidths were taken.

Measurement Results

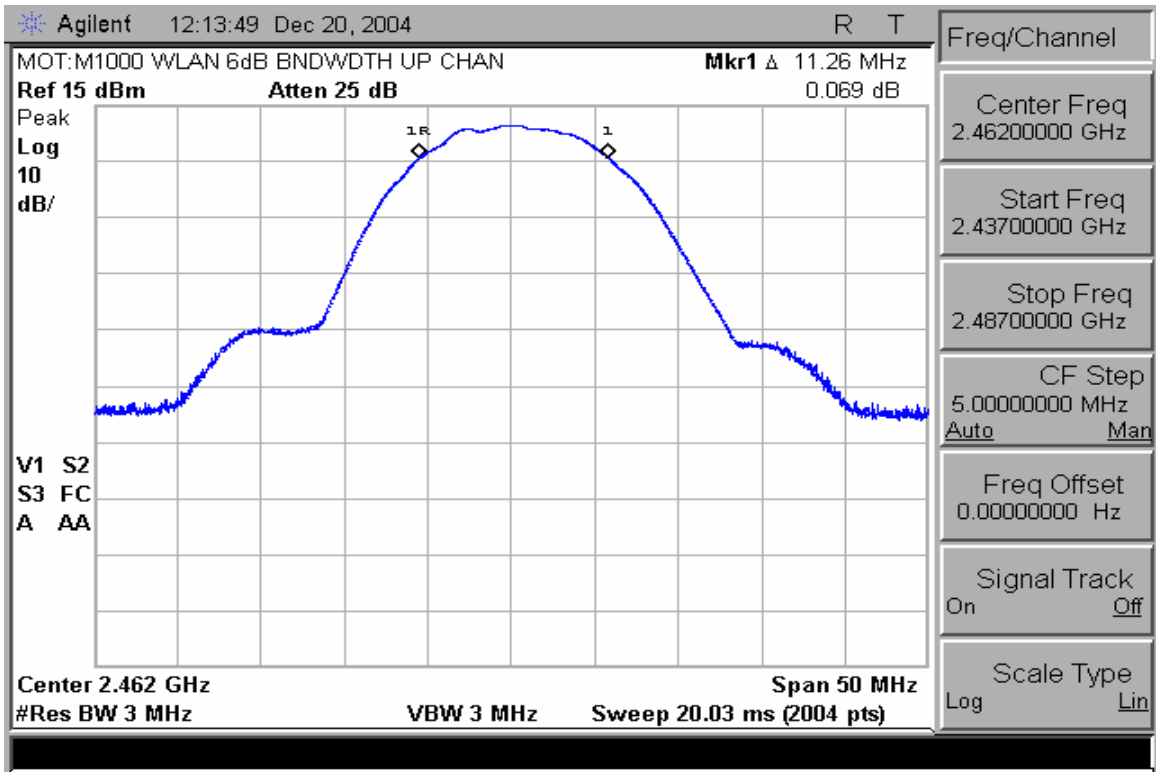
See attached.



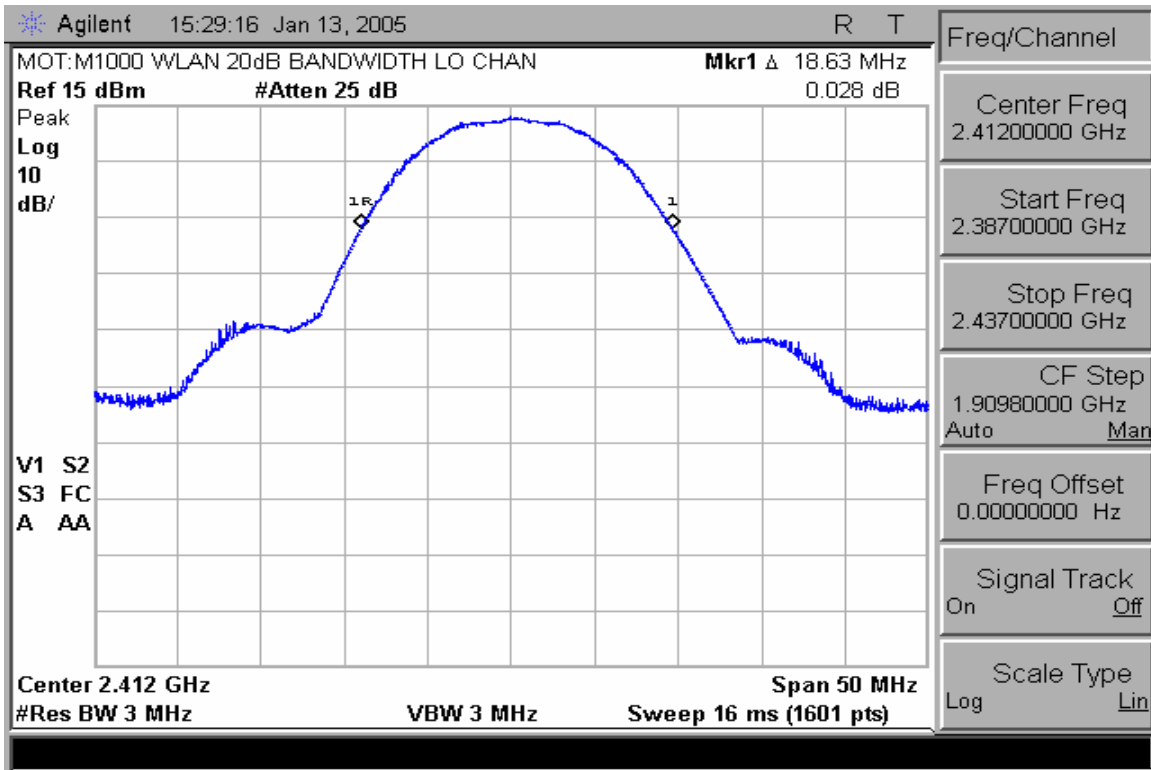
6dB Bandwidth Low Channel



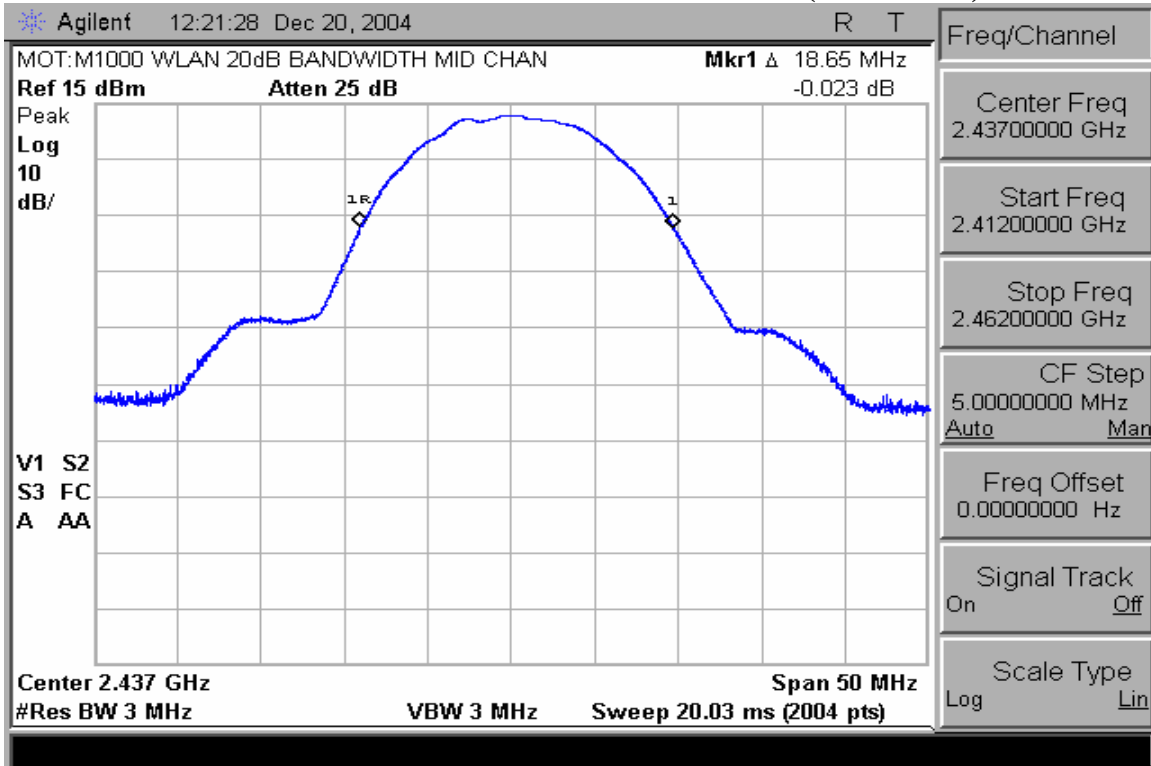
6dB Bandwidth Mid Channel



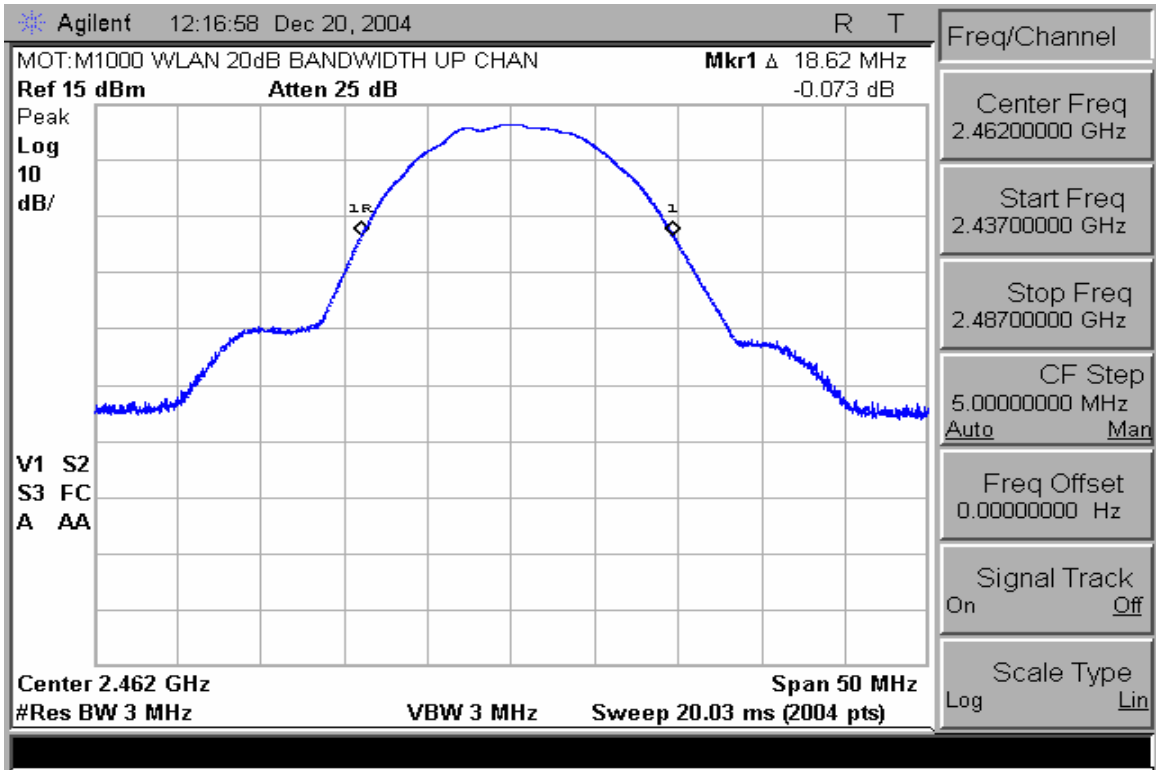
6dB Bandwidth High Channel



WLAN 20dB Bandwidth Low Channel (2412MHz)



WLAN 20dB Bandwidth Mid Channel (2437MHz)



WLAN COND 20dB Bandwidth Up Chan (2462MHz)

MAXIMUM PEAK OUTPUT POWER (CONDUCTED)

CFR47 Part 15.247 (b) (1)

Measurement Procedure

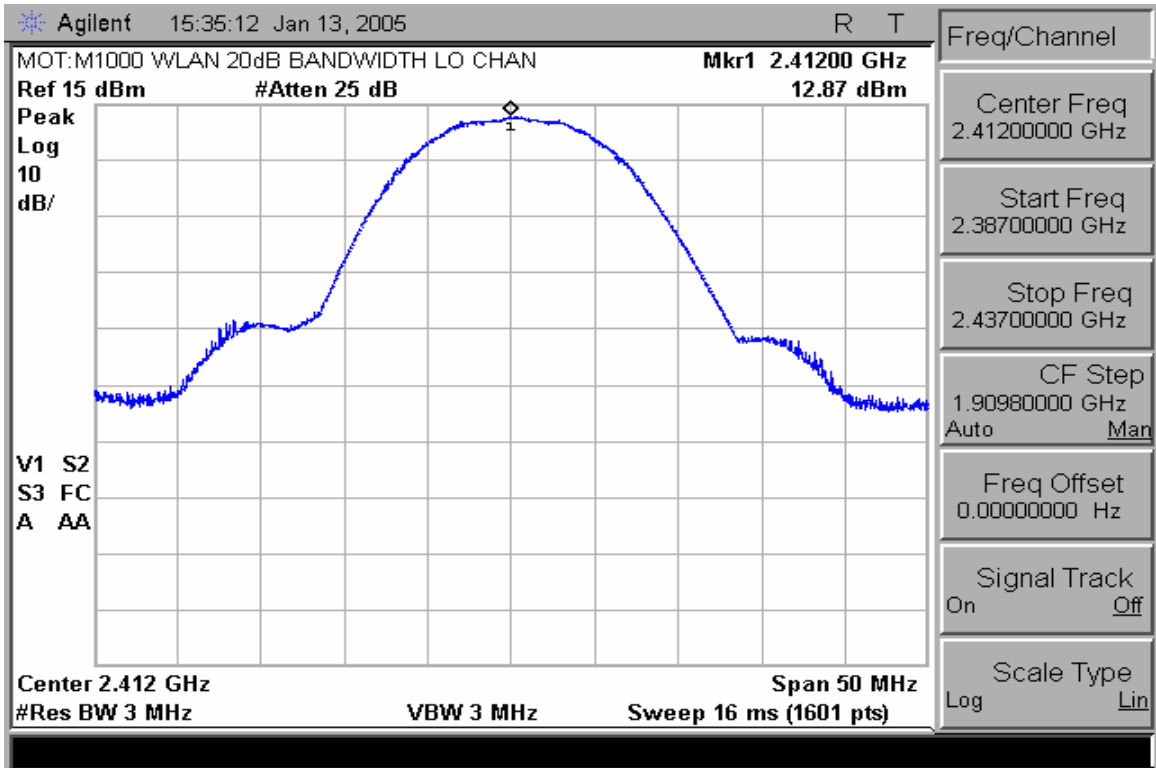
The RF output port of the Equipment-Under-Test is directly coupled to the input of the EMC analyzer through a specialized RF connector and a 20dB passive attenuator. A fully charged battery was used for the supply voltage.

The WLAN of the EUT was enabled. The following spectrum analyzer settings were used:

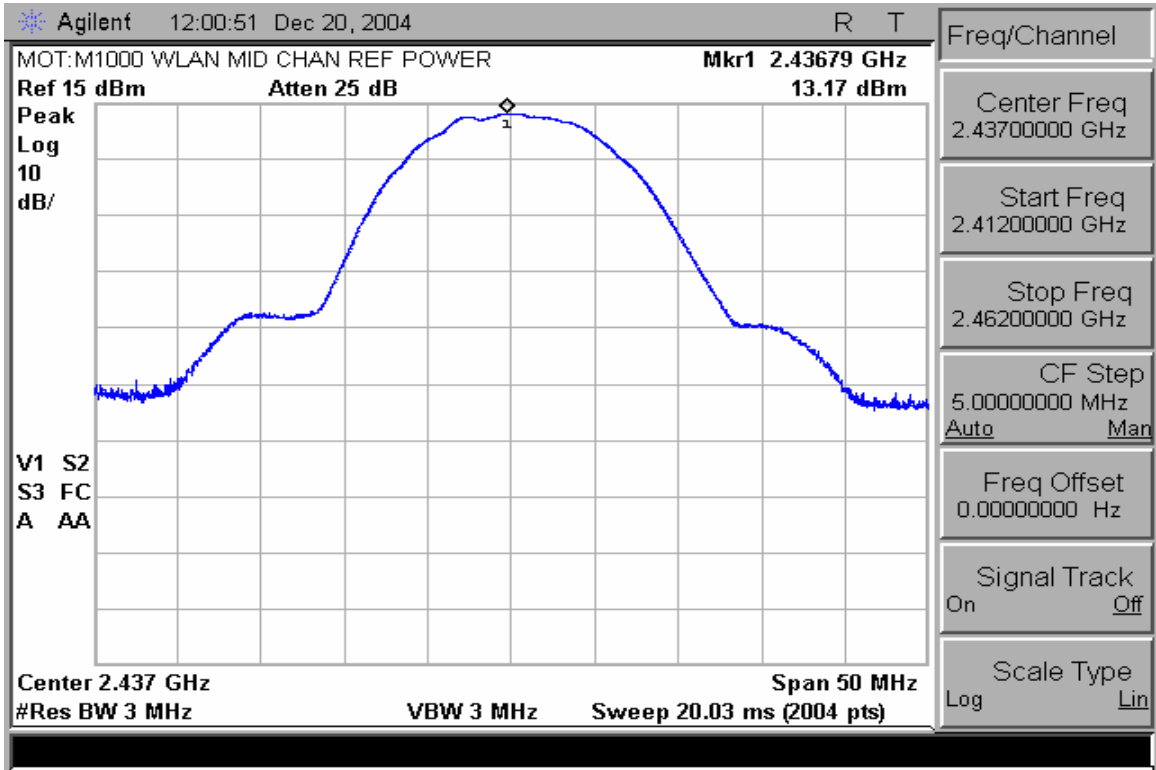
1. Span = 30MHz
2. RBW = 10 MHz
3. VBW \geq RBW
4. Sweep = 5ms
5. Detector function = peak
6. Trace = max hold

Measurement Results

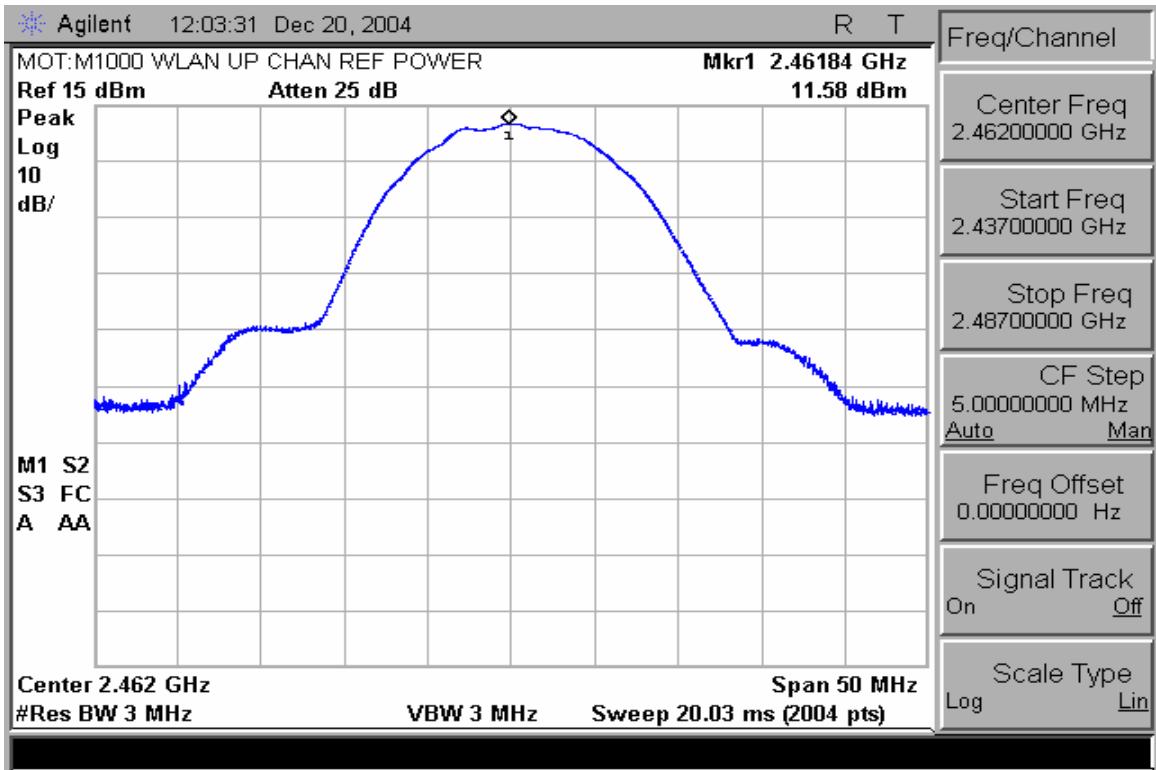
Attached



Maximum Peak Output Power DSSS System (Conducted) Low Channel



Maximum Peak Output Power DSSS System (Conducted) Mid Channel



Maximum Peak Output Power DSSS System (Conducted) High Channel

Maximum Peak Output Power (Radiated)

CFR 47 Part 15.247 (b) (1)

Measurement Procedure

The RF output port of the Equipment-Under-Test is directly coupled to the input of the EMC analyzer through a specialized RF connector and a 10dB passive attenuator. A fully charged battery was used for the supply voltage.

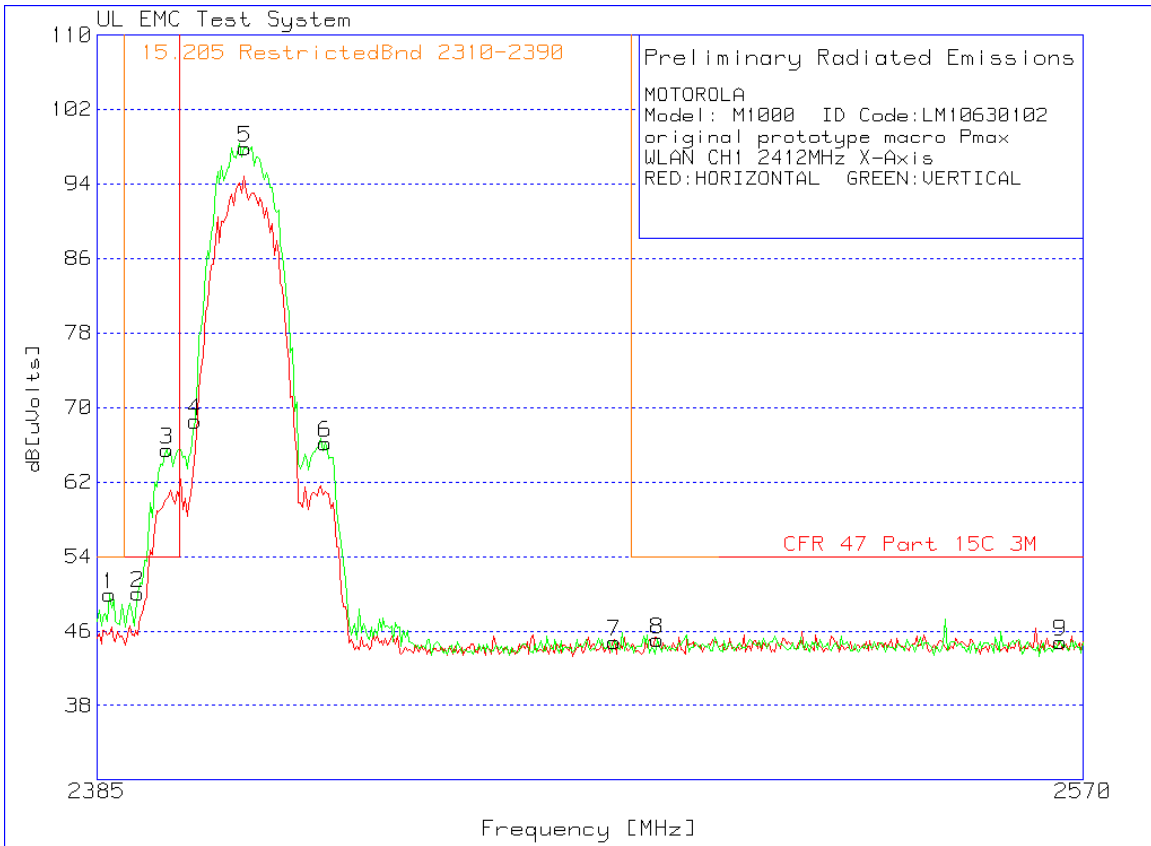
The WLAN DSSS function of the EUT was enabled. The spectrum analyzer used the following settings:

1. Span = approx. 2 to 3 times the 20dB bandwidth $RBW \geq 1\%$ of the 20dB span
2. VBW \geq RBW
3. Sweep = auto
4. Detector function = peak
5. Trace = max hold

The trace was allowed to stabilize. The EUT was transmitting at its maximum data rate. The marker-to-peak function was used to set the marker to the peak of the emission.

Measurement Results

Attached

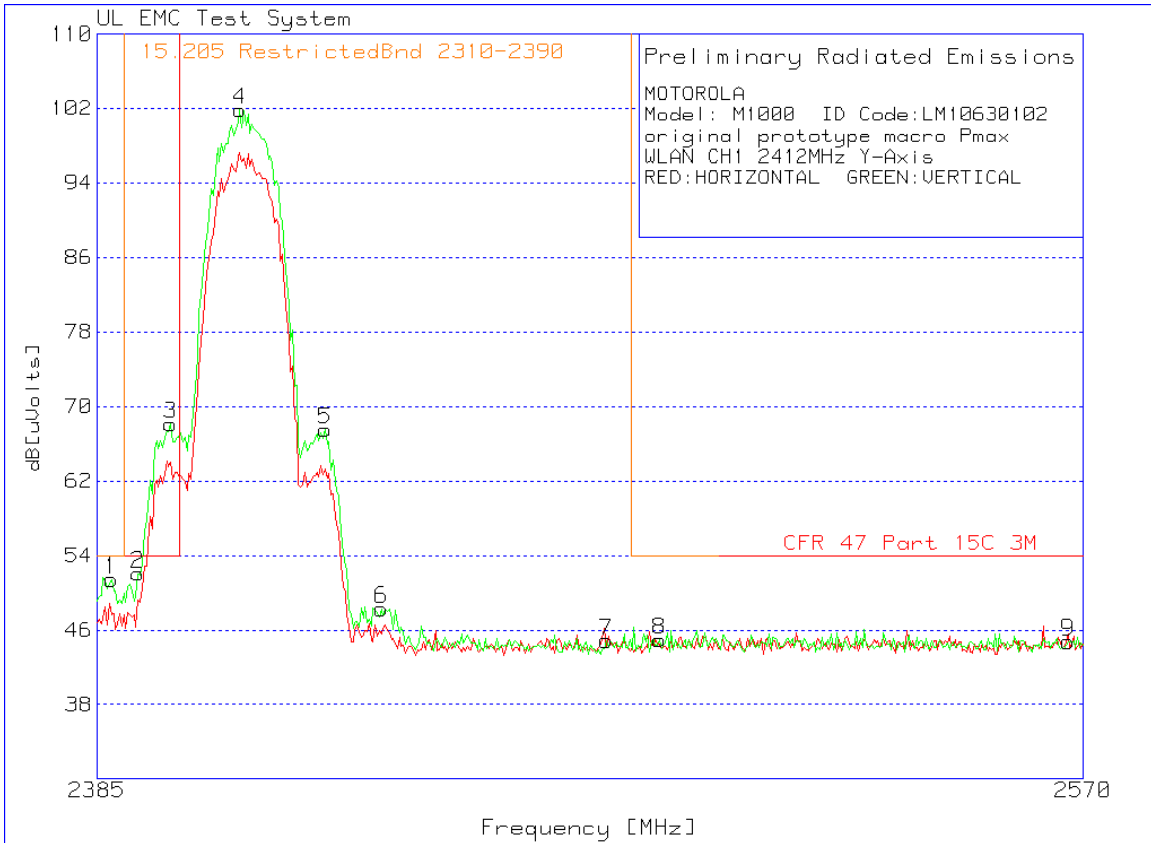


Maximum Peak Output Power Low Channel X-Orientation

MOTOROLA
 Model: M1000 ID Code:LM10630102
 original prototype macro Pmax
 WLAN CH1 2412MHz X-Axis
 RED:HORIZONTAL GREEN:VERTICAL

Marker Number	Test Frequency [MHz]	Meter Reading [dB(uV)]	Detector Type	Gain/Loss Factor [dB]	Transducer Factor [dB]	Level dB[uVolts]	Limit 1	Margin 1[dB]	Limit 2	Margin 2[dB]	Height [cm]	Polarity
2 - 4GHz 2385 - 2570MHz												
1	2387.224	24.8	pk	3.3	21.8	49.9	54	-4.1	54	-4.1	100	Vert
2	2392.415	24.95	pk	3.3	21.8	50.05	54	-3.95	999	-948.95	100	Vert
3	2397.605	40.36	pk	3.3	21.8	65.46	54	11.46	999	-933.54	100	Vert
4	2402.796	43.45	pk	3.3	21.8	68.55	999	-930.45	999	-930.45	100	Vert
5	2411.879	72.74	pk	3.3	21.8	97.84	999	-901.16	999	-901.16	100	Vert
6	2426.523	40.97	pk	3.3	21.9	66.17	999	-932.83	999	-932.83	100	Vert
7	2480.281	19.5	pk	3.3	22	44.8	999	-954.2	999	-954.2	150	Vert
8	2488.437	19.67	pk	3.3	22.1	45.07	54	-8.93	54	-8.93	100	Vert
9	2565.551	19.33	pk	3.3	22.2	44.83	54	-9.17	0	44.83	150	Vert

LIMIT 1: CFR 47 Part 15C 3M
 LIMIT 2: 15.205 RestrictedBnd 2310-2390

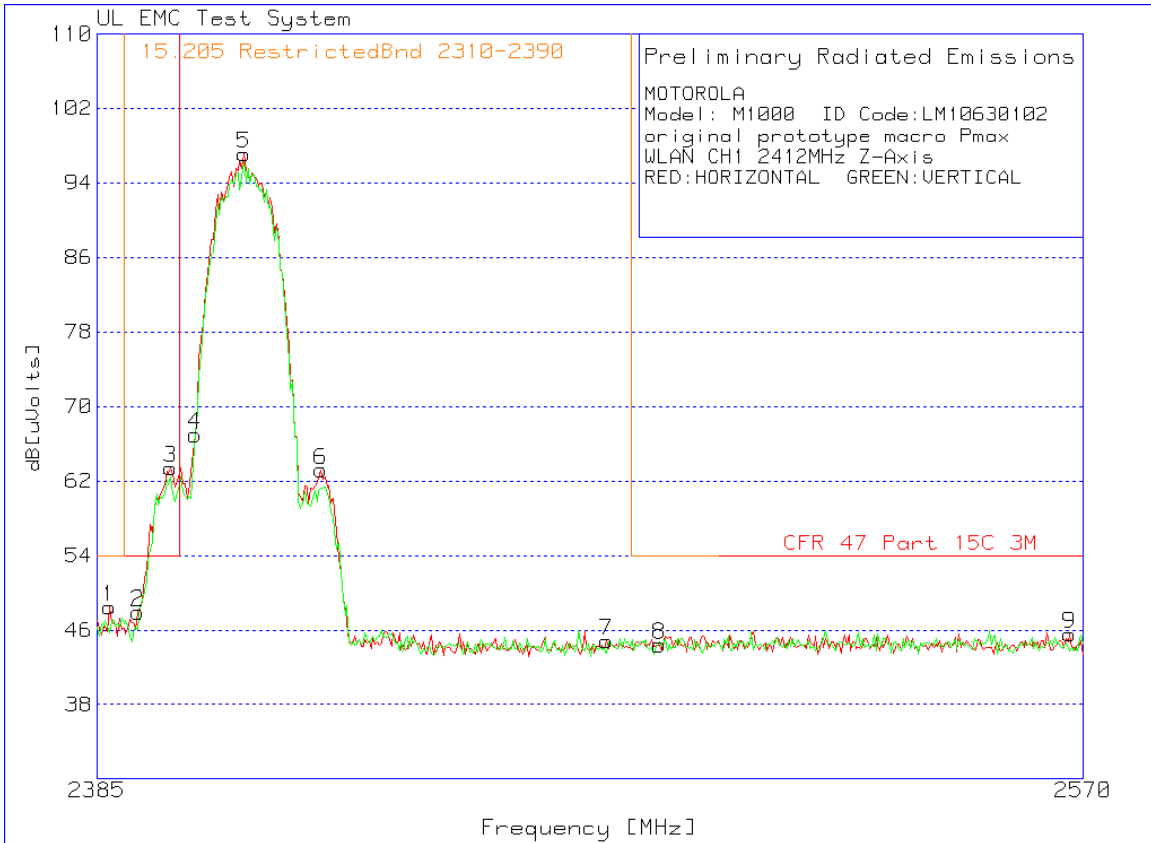


Maximum Peak Output Power Low Channel Y-Orientation

MOTOROLA
 Model: M1000 ID Code:LM10630102
 original prototype macro Pmax
 WLAN CH1 2412MHz Y-Axis
 RED:HORIZONTAL GREEN:VERTICAL

Marker Number	Test Frequency [MHz]	Meter Reading [dB(uV)]	Detector Type	Gain/Loss Factor [dB]	Transducer Factor [dB]	Level dB[uVolts]	Limit 1	Margin 1[dB]	Limit 2	Margin 2[dB]	Height [cm]	Polarity
2 - 4GHz 2385 - 2570MHz												
1	2387.595	26.33 pk		3.3	21.8	51.43	54	-2.57	54	-2.57	100	Vert
2	2392.415	26.97 pk		3.3	21.8	52.07	54	-1.93	999	-946.93	100	Vert
3	2398.347	43.03 pk		3.3	21.8	68.13	54	14.13	999	-930.87	100	Vert
4	2410.952	76.73 pk		3.3	21.8	101.83	999	-897.17	999	-897.17	100	Vert
5	2426.523	42.3 pk		3.3	21.9	67.5	999	-931.5	999	-931.5	100	Vert
6	2436.904	23.08 pk		3.3	21.9	48.28	999	-950.72	999	-950.72	100	Vert
7	2478.798	19.56 pk		3.3	22	44.86	999	-954.14	999	-954.14	100	Vert
8	2488.808	19.55 pk		3.3	22.1	44.95	54	-9.05	54	-9.05	100	Vert
9	2567.034	19.28 pk		3.3	22.2	44.78	54	-9.22	0	44.78	100	Vert

LIMIT 1: CFR 47 Part 15C 3M
 LIMIT 2: 15.205 RestrictedBnd 2310-2390

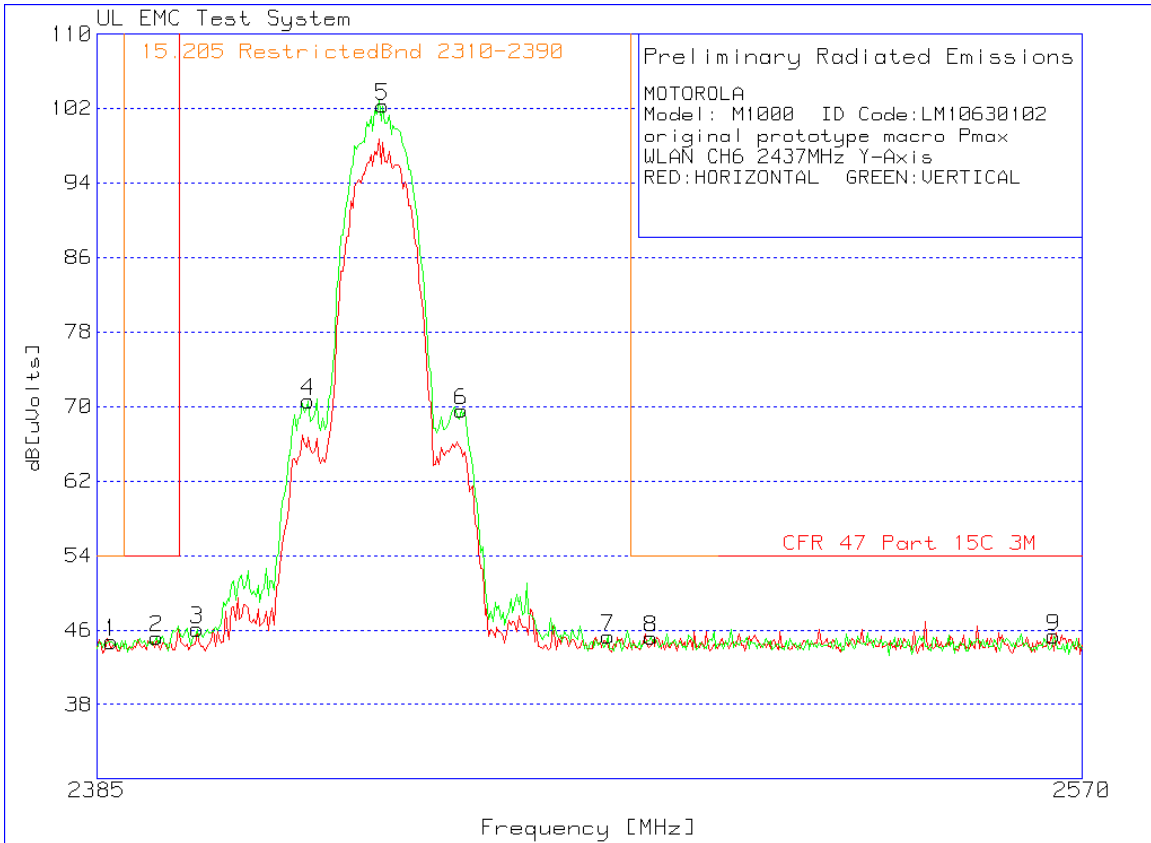


Maximum Peak Output Power Low Channel Z-Orientation

MOTOROLA
 Model: M1000 ID Code:LM10630102
 original prototype macro Pmax
 WLAN CH1 2412MHz Z-Axis
 RED:HORIZONTAL GREEN:VERTICAL

Marker Number	Test Frequency [MHz]	Meter Reading [dB(uV)]	Detector Type	Gain/Loss Factor [dB]	Transducer Factor [dB]	Level dB[uVolts]	Limit 1	Margin 1[dB]	Limit 2	Margin 2[dB]	Height [cm]	Polarity
2 - 4GHz 2385 - 2570MHz												
1	2387.224	23.38 pk		3.3	21.8	48.48	54	-5.52	54	-5.52	100	Horz
2	2392.415	22.81 pk		3.3	21.8	47.91	54	-6.09	999	-951.09	100	Horz
3	2398.347	38.27 pk		3.3	21.8	63.37	54	9.37	999	-935.63	100	Horz
4	2402.796	41.86 pk		3.3	21.8	66.96	999	-932.04	999	-932.04	100	Horz
5	2411.693	72.03 pk		3.3	21.8	97.13	999	-901.87	999	-901.87	100	Horz
6	2425.782	37.98 pk		3.3	21.9	63.18	999	-935.82	999	-935.82	100	Horz
7	2478.798	19.5 pk		3.3	22	44.8	999	-954.2	999	-954.2	100	Horz
8	2488.808	18.99 pk		3.3	22.1	44.39	54	-9.61	54	-9.61	100	Horz
9	2567.405	20.07 pk		3.3	22.2	45.57	54	-8.43	54	0	149	Horz

LIMIT 1: CFR 47 Part 15C 3M
 LIMIT 2: 15.205 RestrictedBnd 2310-2390

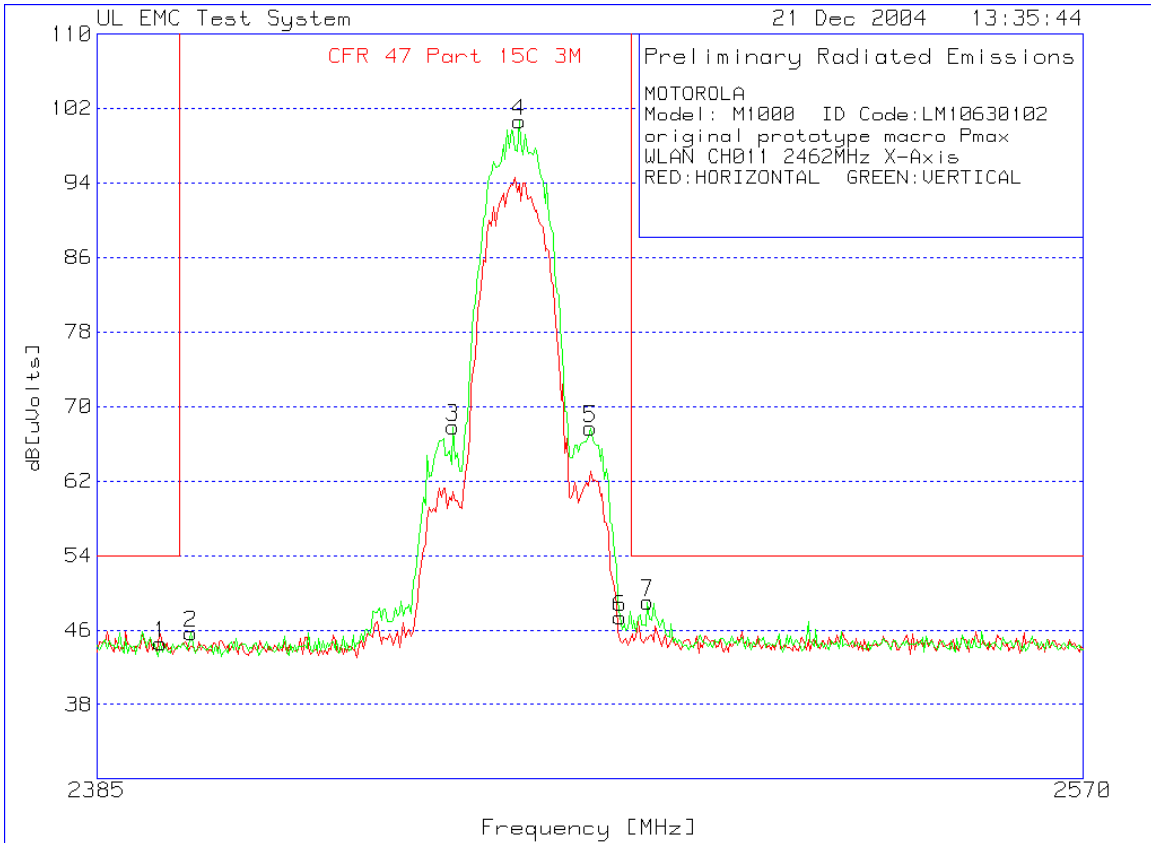


Maximum Peak Output Power Mid Channel Y-Orientation

MOTOROLA
 Model: M1000 ID Code:LM10630102
 original prototype macro Pmax
 WLAN CH6 2437MHz Y-Axis
 RED:HORIZONTAL GREEN:VERTICAL

Marker Number	Test Frequency [MHz]	Meter Reading [dB(uV)]	Detector Type	Gain/Loss Factor [dB]	Transducer Factor [dB]	Level dB[uVolts]	Limit 1	Margin 1[dB]	Limit 2	Margin 2[dB]	Height [cm]	Polarity
2 - 4GHz 2385 - 2570MHz												
1	2387.595	19.65 pk		3.3	21.8	44.75	54	-9.25	54	-9.25	100	Vert
2	2395.752	20.1 pk		3.3	21.8	45.2	54	-8.8	999	-953.8	100	Vert
3	2403.166	20.99 pk		3.3	21.8	46.09	999	-952.91	999	-952.91	100	Vert
4	2423.557	45.42 pk		3.3	21.9	70.62	999	-928.38	999	-928.38	100	Vert
5	2437.275	77.1 pk		3.3	21.9	102.3	999	-896.7	999	-896.7	100	Vert
6	2451.733	44.25 pk		3.3	22	69.55	999	-929.45	999	-929.45	100	Vert
7	2479.168	20.02 pk		3.3	22	45.32	999	-953.68	999	-953.68	150	Vert
8	2487.325	19.81 pk		3.3	22.1	45.21	54	-8.79	54	-8.79	150	Vert
9	2564.439	19.84 pk		3.3	22.2	45.34	54	-8.66	0	45.34	100	Vert

LIMIT 1: CFR 47 Part 15C 3M
 LIMIT 2: 15.205 RestrictedBnd 2310-2390

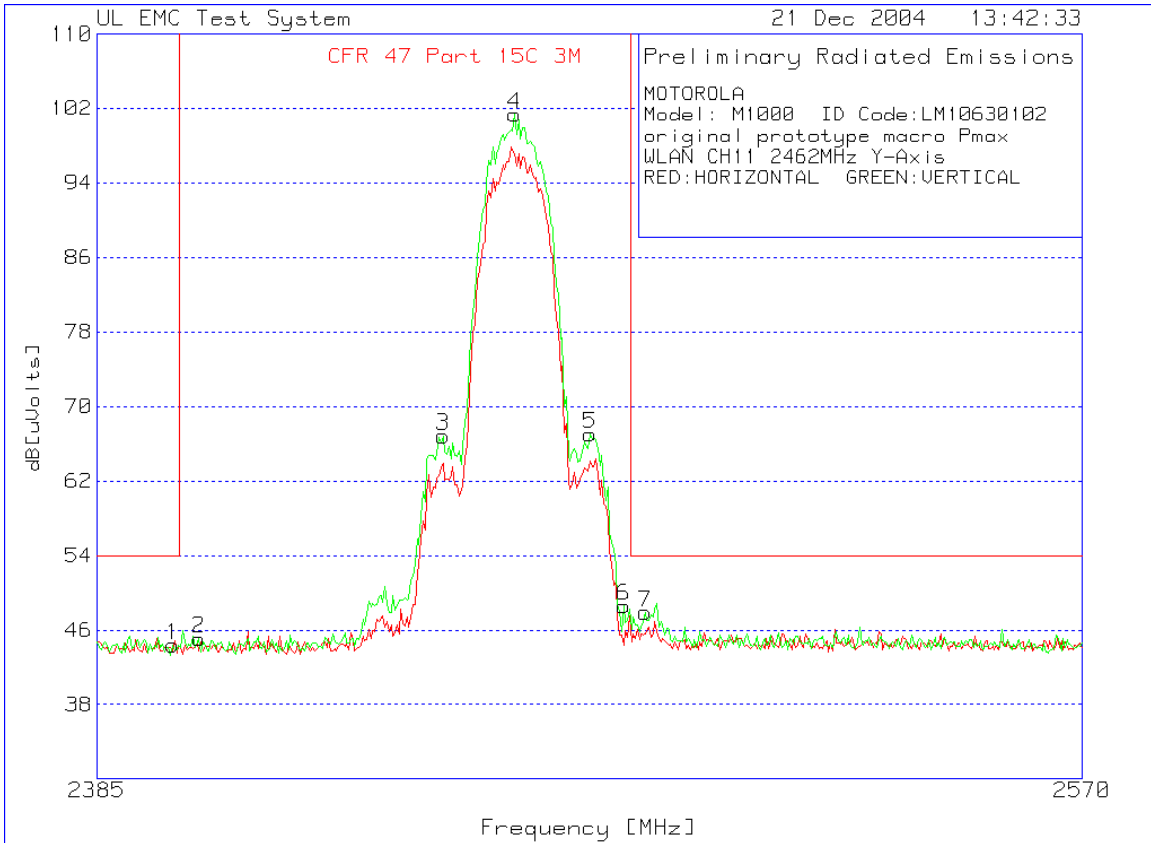


Maximum Peak Output Power High Channel X-Orientation

MOTOROLA
 Model: M1000 ID Code:LM10630102
 original prototype macro Pmax
 WLAN CH011 2462MHz X-Axis
 RED:HORIZONTAL GREEN:VERTICAL

Marker Number	Test Frequency [MHz]	Meter Reading [dB(uV)]	Detector Type	Gain/Loss Factor [dB]	Transducer Factor [dB]	Level dB[uVolts]	Limit 1	Margin 1[dB]	Height [cm]	Polarity
2 - 4GHz 2385 - 2570MHz										
1	2396.493	19.46 pk		3.3	21.8	44.56	54	-9.44	149	Vert
2	2402.054	20.59 pk		3.3	21.8	45.69	999	-953.31	100	Vert
3	2450.251	42.5 pk		3.3	22	67.8	999	-931.2	100	Vert
4	2462.485	75.36 pk		3.3	22	100.66	999	-898.34	100	Vert
5	2475.832	42.39 pk		3.3	22	67.69	999	-931.31	100	Vert
6	2481.393	22.05 pk		3.3	22	47.35	999	-951.65	100	Vert
7	2486.583	23.63 pk		3.3	22.1	49.03	54	-4.97	100	Vert

LIMIT 1: CFR 47 Part 15C 3M
 LIMIT 2: NONE

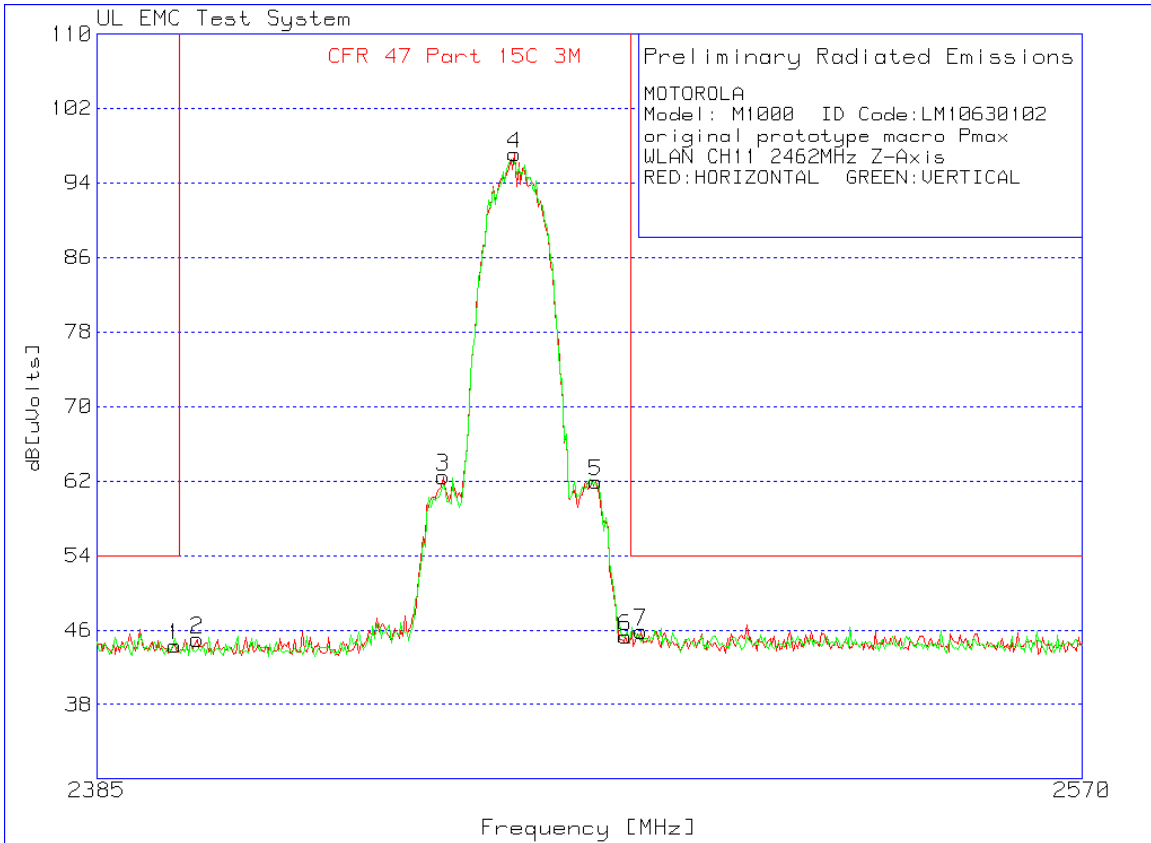


Maximum Peak Output Power High Channel Y-Orientation

MOTOROLA
 Model: M1000 ID Code:LM10630102
 original prototype macro Pmax
 WLAN CH11 2462MHz Y-Axis
 RED:HORIZONTAL GREEN:VERTICAL

Marker Number	Test Frequency [MHz]	Meter Reading [dB(uV)]	Detector Type	Gain/Loss Factor [dB]	Transducer Factor [dB]	Level dB[uVolts]	Limit 1	Margin 1[dB]	Height [cm]	Polarity
2 - 4GHz 2385 - 2570MHz										
1	2398.717	19.28 pk		3.3	21.8	44.38	54	-9.62	149	Vert
2	2403.537	19.97 pk		3.3	21.8	45.07	999	-953.93	100	Vert
3	2448.397	41.65 pk		3.3	21.9	66.85	999	-932.15	100	Vert
4	2461.743	76.04 pk		3.3	22	101.34	999	-897.66	100	Vert
5	2475.832	41.71 pk		3.3	22	67.01	999	-931.99	100	Vert
6	2482.134	23.26 pk		3.3	22	48.56	999	-950.44	100	Vert
7	2486.212	22.5 pk		3.3	22.1	47.9	54	-6.1	100	Vert

LIMIT 1: CFR 47 Part 15C 3M



Maximum Peak Output Power High Channel Z-Orientation

MOTOROLA
 Model: M1000 ID Code:LM10630102
 original prototype macro Pmax
 WLAN CH11 2462MHz Z-Axis
 RED:HORIZONTAL GREEN:VERTICAL

Marker Number	Test Frequency [MHz]	Meter Reading [dB(uV)]	Detector Type	Gain/Loss Factor [dB]	Transducer Factor [dB]	Level dB[uVolts]	Limit 1	Margin 1[dB]	Height [cm]	Polarity
2 - 4GHz 2385 - 2570MHz										
1	2399.088	19.23 pk		3.3	21.8	44.33	54	-9.67	100	Horz
2	2403.166	19.92 pk		3.3	21.8	45.02	999	-953.98	100	Horz
3	2448.397	37.27 pk		3.3	21.9	62.47	999	-936.53	100	Horz
4	2461.743	71.8 pk		3.3	22	97.1	999	-901.9	100	Horz
5	2476.944	36.61 pk		3.3	22	61.91	999	-937.09	100	Horz
6	2482.505	20.01 pk		3.3	22	45.31	999	-953.69	100	Horz
7	2485.471	20.45 pk		3.3	22.1	45.85	54	-8.15	100	Horz

LIMIT 1: CFR 47 Part 15C 3M

Power Spectral Density

CFR 47 Part 15.247 (d)

Measurement Procedure

The RF output port of the Equipment-Under-Test is directly coupled to the input of the EMC analyzer through a specialized RF connector and a 10dB passive attenuator. A fully charged battery was used for the supply voltage.

The WLAN DSSS function of the EUT was enabled. The spectrum analyzer used the following settings:

1. Span = 1.5MHz
2. VBW =3KHz
3. RBW=3kHz
4. Sweep = 500s
5. Detector function = peak
6. Trace = max hold

The trace was allowed to stabilize. The EUT was transmitting at its maximum data rate.

Measurement Results

2412 MHz	2437	2462
-3.44dBm	-3.35 dBm	-3.43 dBm

FIELD STRENGTH OF SPURIOUS EMISSIONS

CFR Part 2.1053, 15.249

Measurement Procedure

The Equipment-Under-Test is placed inside the semi-anechoic chamber on a wooden table at the turntable center. For each spurious frequency, the antenna mast is raised and lowered from 1 to 4 meters and the turntable is rotated 360 degrees to obtain a maximum reading on the spectrum analyzer. This is repeated for both horizontal and vertical polarizations of the receive antenna.

The Equipment-Under-Test is then replaced with a substitution antenna fed by a signal generator. With the signal generator tuned to a particular spurious frequency, the antenna mast is raised and lowered from 1 to 4 meters to obtain a maximum reading at the spectrum analyzer. The output of the signal generator is then adjusted until a reading identical to that obtained with the actual transmitter is achieved.

The power in dBm of each spurious emission is calculated by correcting the signal generator level for cable loss and gain of the substitution antenna referenced to a dipole.

The field strength of each radiated emission is calculated by correcting the EMI receiver level for cable loss, amplifier gain, and antenna correction factors.

Field Strength (dBuV/m) = EMI Receiver Level (dBuV) + Cable Loss (dB) -
Amplifier Gain (dB) + Antenna Correction Factor (1/m)

A fully charged battery was used for the supply voltage.

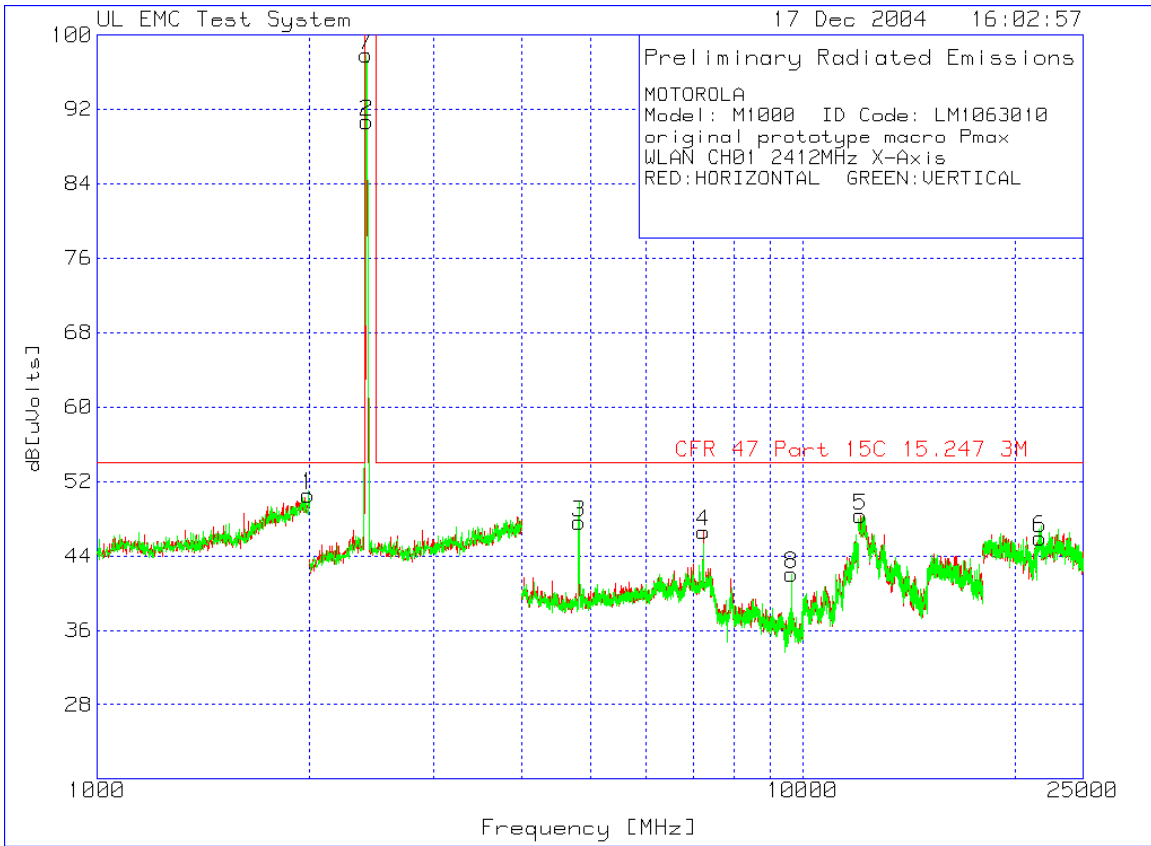
It was determined that Channel 1 was the representative worst case based on preliminary measurements. Consequently, radiated emissions data for the sweeps from 30MHz to 25GHz were made with the EUT configured for low channel operation.

This data was taken at Underwriter's Laboratories.

Measurement Results

Attached

There were no discernible emissions above the noise floor for 30-1000MHz for Low, Mid and High Channels and all polarizations.

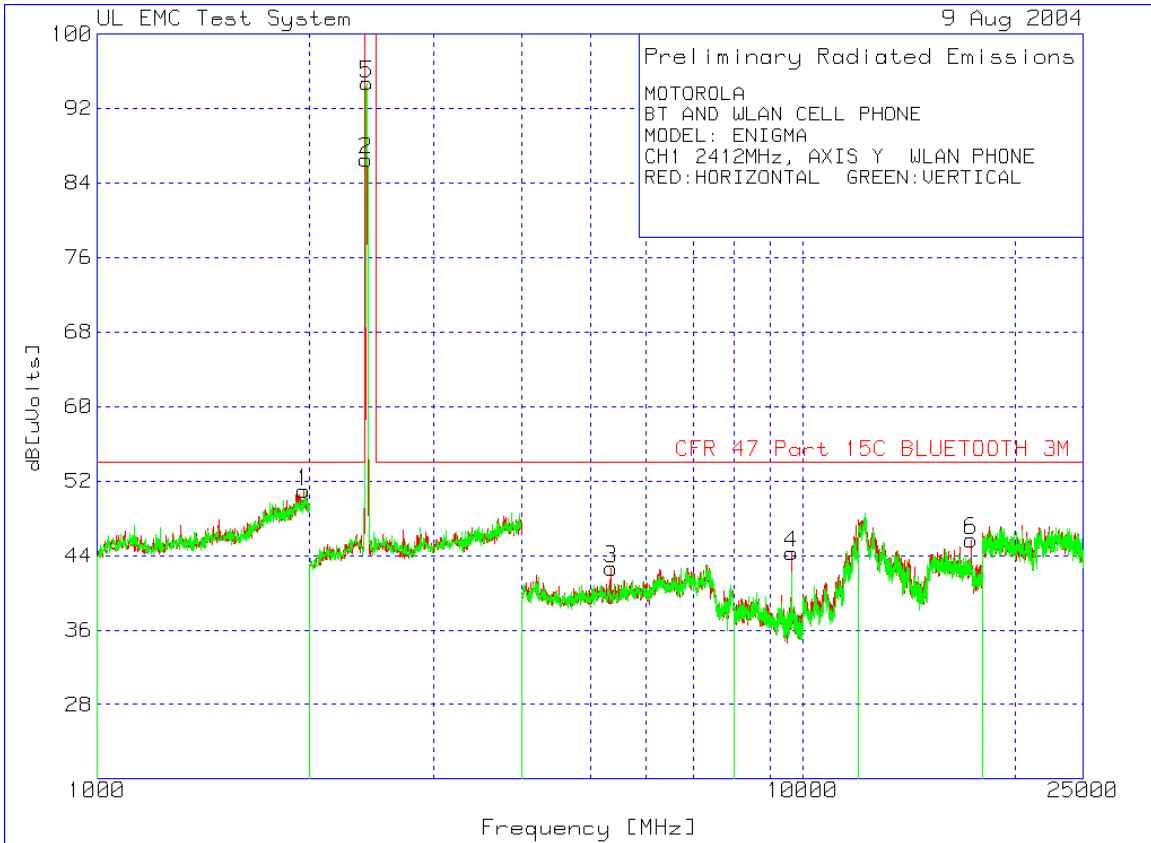


1-25GHz Low Channel X-Orientation

MOTOROLA
 Model: M1000 ID Code: LM1063010
 original prototype macro Pmax
 WLAN CH01 2412MHz X-Axis
 RED:HORIZONTAL GREEN:VERTICAL

Marker Number	Test Frequency [MHz]	Meter Reading [dB(uV)]	Detector Type	Gain/Loss Factor [dB]	Transducer Factor [dB]	Level dB[uVolts]	Limit 1	Margin 1[dB]	Height [cm]	Polarity
1 - 2GHz 1000 - 2000MHz										
1	1991.984	19.93	pk		3.1	27.5	50.53	54	-3.47	150 Horz
2 - 4GHz 2000 - 4000MHz										
2	2412.826	65.58	pk		3.3	21.8	90.68	999	-908.32	100 Horz
4 - 8GHz 4000 - 8000MHz										
3	4824.825	71.2	pk		-51.3	27.7	47.6	54	-6.4	100 Horz
4	7239.239	64.17	pk		-47.6	30	46.57	54	-7.43	100 Horz
12 - 18GHz 12000 - 18000MHz										
5	12072.072	51.23	pk		-42.3	39.4	48.33	54	-5.67	100 Horz
18-26.5GHz 18000 - 25000MHz										
6	21685.686	66.54	pk		-61	40.4	45.94	54	-8.06	100 Horz
2 - 4GHz 2000 - 4000MHz										
7	2408.818	72.74	pk		3.3	21.8	97.84	999	-901.16	100 Vert
8 - 12GHz 8000 - 12000MHz										
8	9649.65	54.46	pk		-48.8	36.4	42.06	54	-11.94	100 Vert

LIMIT 1: CFR 47 Part 15C 15.247 3M

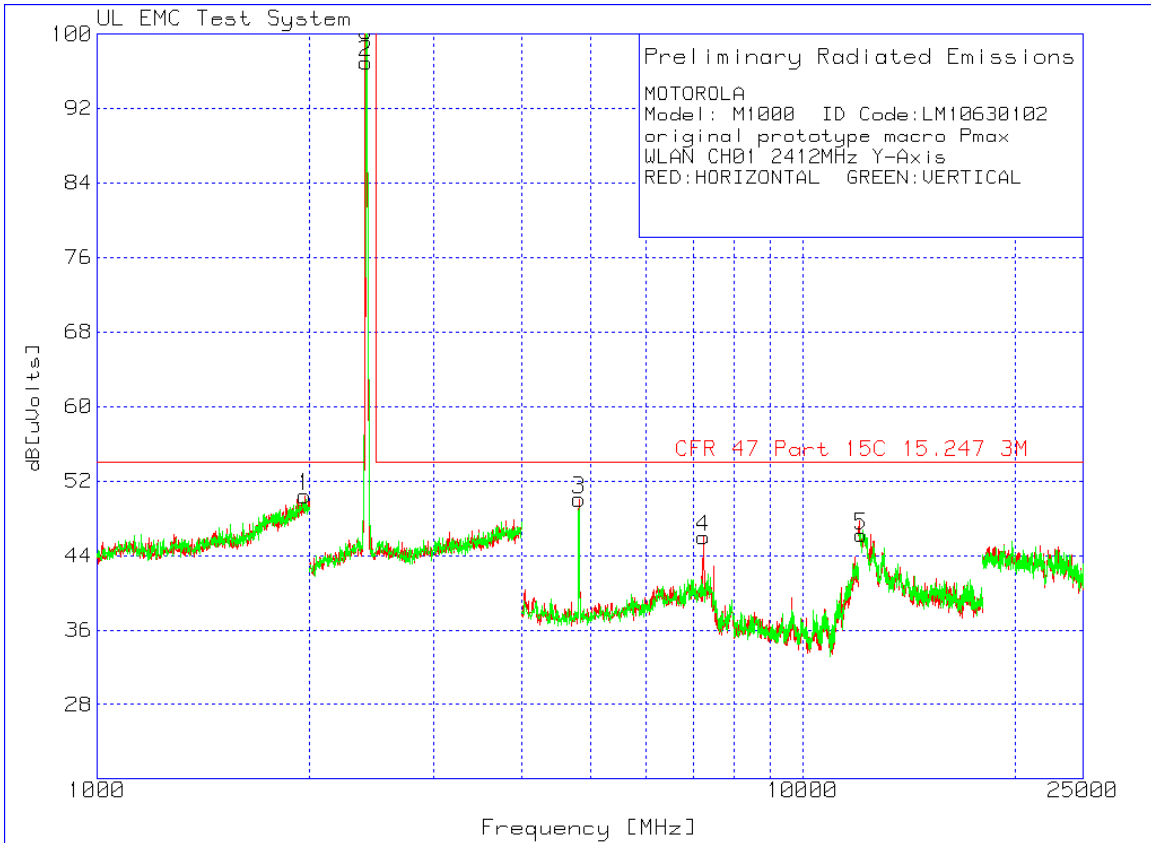


1-25GHz Low Channel Y-Orientation

MOTOROLA
 BT AND WLAN CELL PHONE
 MODEL: ENIGMA
 CH1 2412MHz, AXIS Y WLAN PHONE
 RED:HORIZONTAL GREEN:VERTICAL

Marker Number	Test Frequency [MHz]	Meter Reading [dB(uV)]	Detector Type	Gain/Loss Factor [dB]	Transducer Factor [dB]	Level dB[uVolts]	Limit 1	Margin 1[dB]	Height [cm]	Polarity
1 - 2GHz 1000 - 2000MHz										
1	1961.924	20.53	pk	3.1	27.3	50.93	54	-3.07	150	Horz
2 - 4GHz 2000 - 4000MHz										
2	2408.818	61.42	pk	3.3	21.8	86.52	999	-912.48	100	Horz
4 - 8GHz 4000 - 8000MHz										
3	5357.357	65.54	pk	-50.9	28	42.64	54	-11.36	149	Horz
8 - 12GHz 8000 - 12000MHz										
4	9645.646	56.69	pk	-48.8	36.4	44.29	54	-9.71	149	Horz
12 - 18GHz 12000 - 18000MHz										
6	17339.34	47.39	pk	-41.8	40.1	45.69	54	-8.31	150	Horz
2 - 4GHz 2000 - 4000MHz										
5	2412.826	69.63	pk	3.3	21.8	94.73	999	-904.27	100	Vert

LIMIT 1: CFR 47 Part 15C BLUETOOTH 3M
 LIMIT 2: NONE

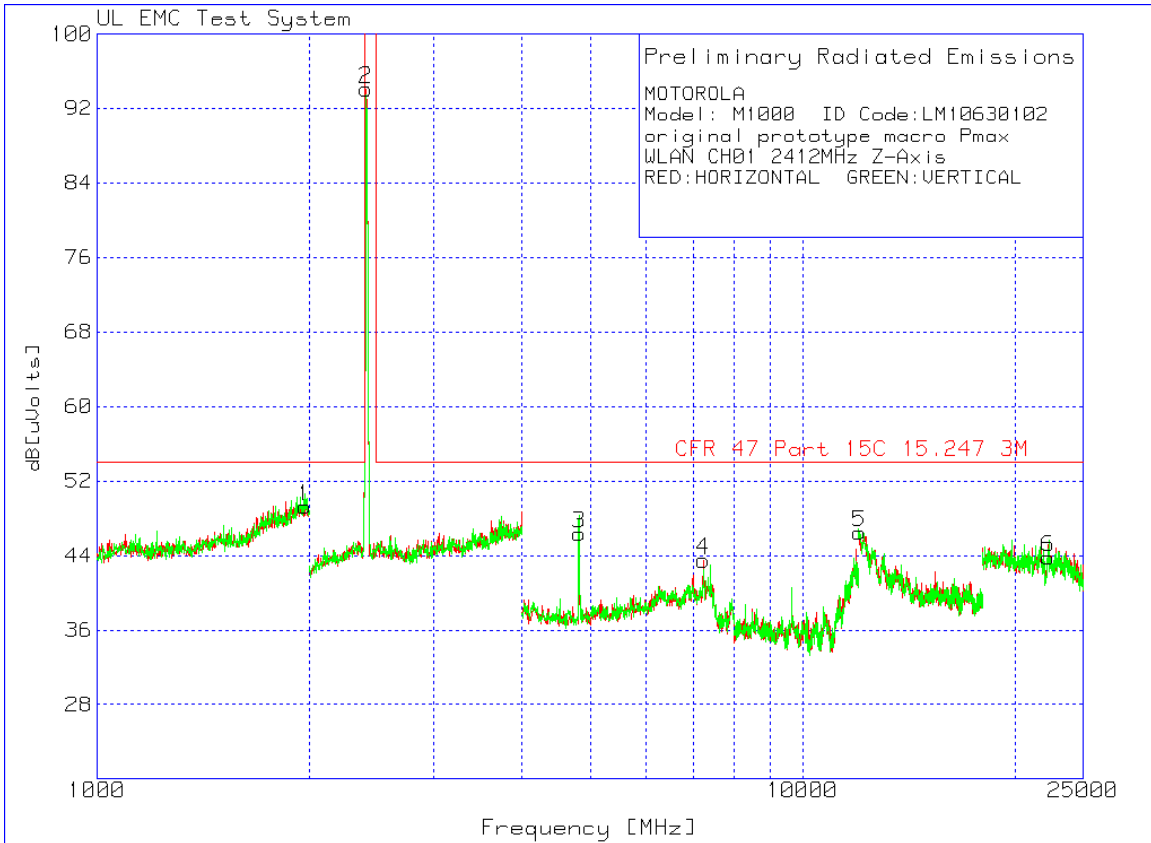


1-25GHz Low Channel Y-Orientation

MOTOROLA
 Model: M1000 ID Code:LM10630102
 original prototype macro Pmax
 WLAN CH01 2412MHz Y-Axis
 RED:HORIZONTAL GREEN:VERTICAL

Marker Number	Test Frequency [MHz]	Meter Reading [dB(uV)]	Detector Type	Gain/Loss Factor [dB]	Transducer Factor [dB]	Level dB[uVolts]	Limit 1	Margin 1[dB]	Height [cm]	Polarity
1 - 2GHz 1000 - 2000MHz										
1	1969.94	19.9 pk		3.1	27.4	50.4	54	-3.6	149	Horz
2 - 4GHz 2000 - 4000MHz										
2	2408.818	71.87 pk		3.3	21.8	96.97	999	-902.03	100	Horz
4 - 8GHz 4000 - 8000MHz										
3	4825.651	73.67 pk		-51.3	27.7	50.07	54	-3.93	100	Horz
4	7230.461	63.58 pk		-47.5	29.9	45.98	54	-8.02	100	Horz
12 - 18GHz 12000 - 18000MHz										
5	12108.216	49.2 pk		-42.4	39.4	46.2	54	-7.8	150	Horz
2 - 4GHz 2000 - 4000MHz										
6	2408.818	75.2 pk		3.3	21.8	100.3	999	-898.7	100	Vert

LIMIT 1: CFR 47 Part 15C 15.247 3M

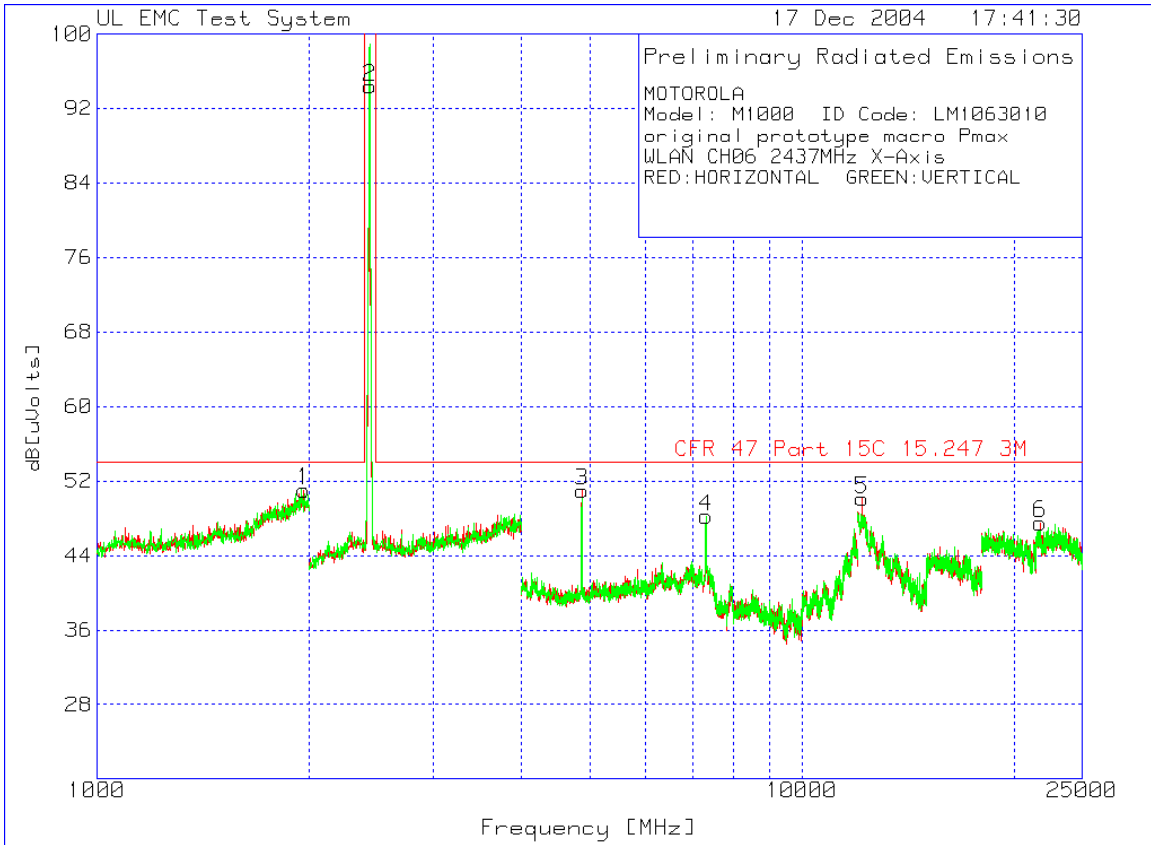


1-25GHz Low Channel Z-Orientation

MOTOROLA
 Model: M1000 ID Code:LM10630102
 original prototype macro Pmax
 WLAN CH01 2412MHz Z-Axis
 RED:HORIZONTAL GREEN:VERTICAL

Marker Number	Test Frequency [MHz]	Meter Reading [dB(uV)]	Detector Type	Gain/Loss Factor [dB]	Transducer Factor [dB]	Level dB[uVolts]	Limit 1	Margin 1[dB]	Height [cm]	Polarity
1 - 2GHz 1000 - 2000MHz										
1	1969.94	18.74	pk	3.1	27.4	49.24	54	-4.76	150	Horz
2 - 4GHz 2000 - 4000MHz										
2	2408.818	69.01	pk	3.3	21.8	94.11	999	-904.89	100	Horz
4 - 8GHz 4000 - 8000MHz										
3	4825.651	69.94	pk	-51.3	27.7	46.34	54	-7.66	149	Horz
4	7230.461	61.11	pk	-47.5	29.9	43.51	54	-10.49	100	Horz
12 - 18GHz 12000 - 18000MHz										
5	12024.048	48.66	pk	-41.6	39.4	46.46	54	-7.54	150	Vert
18-26.5GHz 18000 - 25000MHz										
6	22292.585	62.49	pk	-59.2	40.5	43.79	54	-10.21	149	Vert

LIMIT 1: CFR 47 Part 15C 15.247 3M

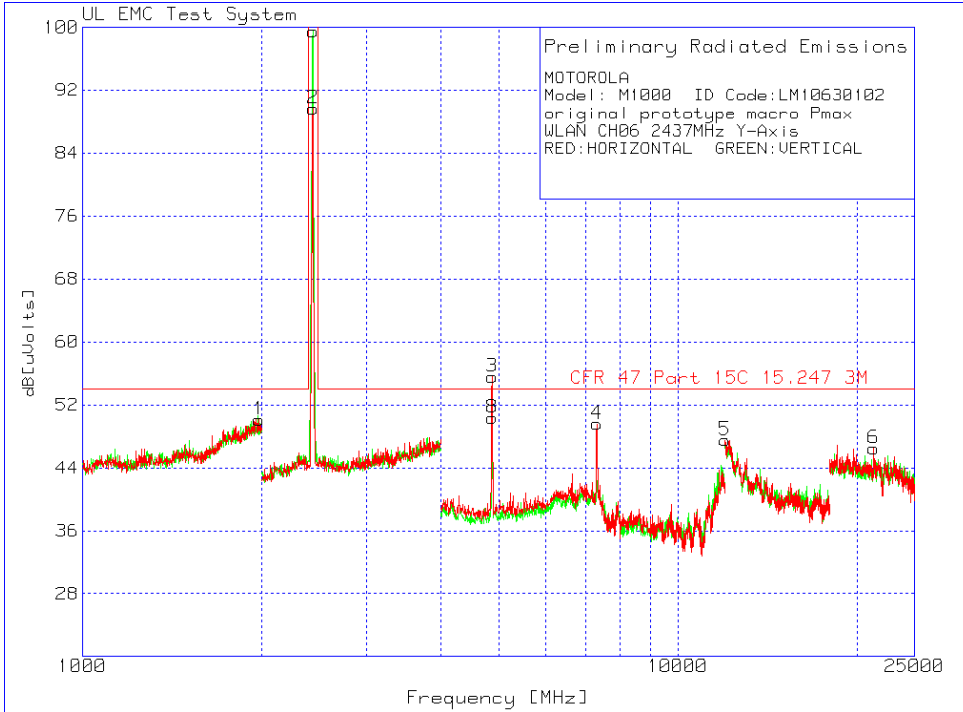


1-25GHz Mid Channel X-Orientation

MOTOROLA
 Model: M1000 ID Code: LM1063010
 original prototype macro Pmax
 WLAN CH06 2437MHz X-Axis
 RED:HORIZONTAL GREEN:VERTICAL

Marker Number	Test Frequency [MHz]	Meter Reading [dB(uV)]	Detector Type	Gain/Loss Factor [dB]	Transduce Factor [dB]	Level dB[uVolts]	Limit 1	Margin 1[dB]	Height [cm]	Polarity
1 - 2GHz 1000 - 2000MHz										
1	1963.928	20.61	pk	3.1	27.3	51.01	54	-2.99	100	Horz
2 - 4GHz 2000 - 4000MHz										
2	2436.874	69.17	pk	3.3	21.9	94.37	999	-904.63	100	Horz
4 - 8GHz 4000 - 8000MHz										
3	4872.873	74.57	pk	-51.3	27.7	50.97	54	-3.03	100	Horz
12 - 18GHz 12000 - 18000MHz										
5	12180.18	52.28	pk	-41.6	39.4	50.08	54	-3.92	150	Horz
18-26.5GHz 18000 - 25000MHz										
6	21776.78	67.82	pk	-60.7	40.4	47.52	54	-6.48	100	Horz
4 - 8GHz 4000 - 8000MHz										
4	7319.319	64.71	pk	-47.1	30.6	48.21	54	-5.79	100	Vert

LIMIT 1: CFR 47 Part 15C 15.247 3M



1-25GHz Mid Channel Y-Orientation

MOTOROLA
 Model: M1000 ID Code:LM10630102
 original prototype macro Pmax
 WLAN CH06 2437MHz Y-Axis
 RED:HORIZONTAL GREEN:VERTICAL

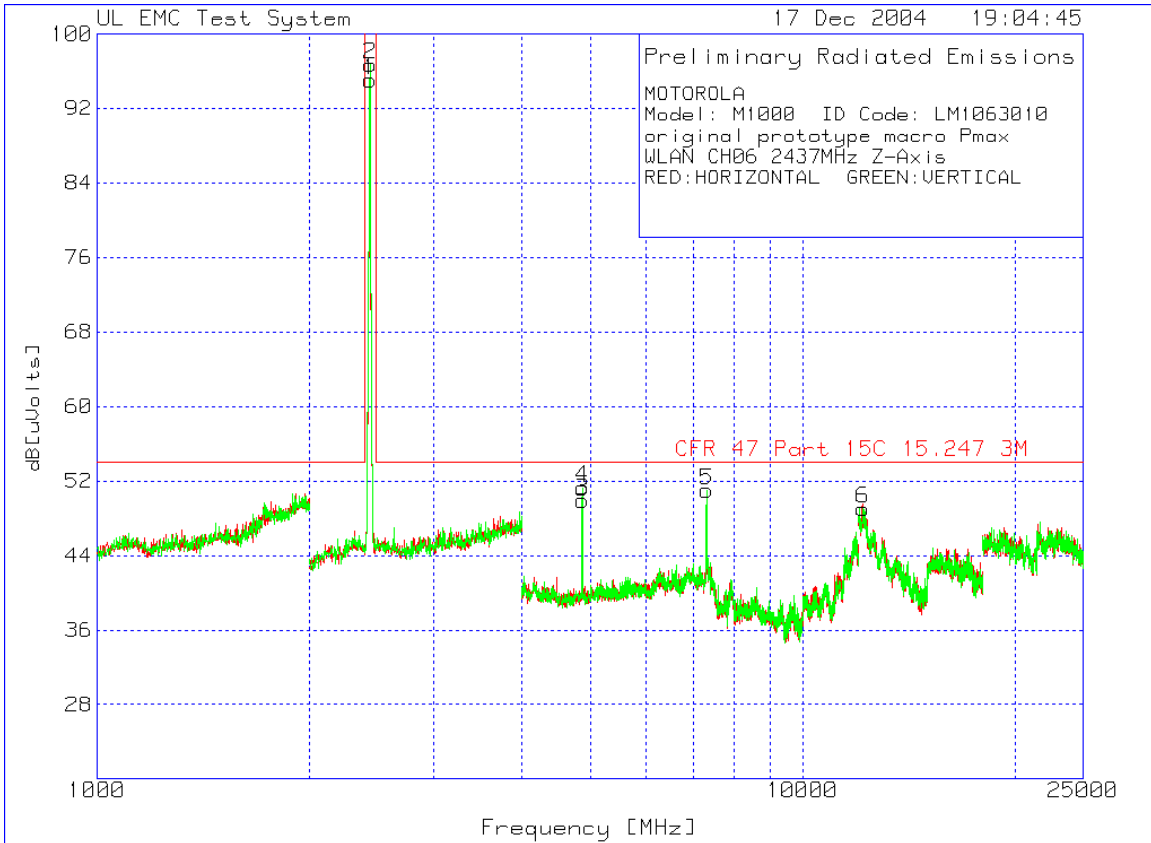
Marker Number	Test Frequency [MHz]	Meter Reading [dB(uV)]	Detector Type	Gain/Loss Factor [dB]	Transducer Factor [dB]	Level dB[uVolts]	Limit 1	Margin 1[dB]	Height [cm]	Polarity
2 - 4GHz 2000 - 4000MHz	7	2436.874	74.32	pk	3.3	21.9	99.52	999	-899.48	100 Vert
4 - 8GHz 4000 - 8000MHz	8	4873.747	73.98	pk	-51.3	27.7	50.38	54	-3.62	100 Vert
1 - 2GHz 1000 - 2000MHz	1	1977.956	19.59	pk	3.1	27.4	50.09	54	-3.91	150 Vert
2 - 4GHz 2000 - 4000MHz	2	2436.874	64.48	pk	3.3	21.9	89.68	999	-909.32	150 Vert
4 - 8GHz 4000 - 8000MHz	3	4873.747	79.17	pk	-51.3	27.7	55.57	54	1.57	100 Vert
	4	7310.621	66.19	pk	-47.1	30.5	49.59	54	-4.41	100 Vert
12 - 18GHz 12000 - 18000MHz	5	12000	49.33	pk	-41.2	39.4	47.53	54	-6.47	149 Vert
18-26.5GHz 18000 - 25000MHz	6	21338.677	68.26	pk	-62	40.2	46.46	54	-7.54	149 Vert

LIMIT 1: CFR 47 Part 15C 15.247 3M

MOTOROLA
 Model: M1000 ID Code:LM10630102
 original prototype macro Pmax
 WLAN CH06 2437MHz Y-Axis
 RED:HORIZONTAL GREEN:VERTICAL

Marker Number	Test Frequency [MHz]	Meter Reading [dB(uV)]	Detector Type	Gain/Loss Factor [dB]	Transducer Factor [dB]	Level dB[uVolts]	Limit 1	Margin 1[dB]	Height [cm]	Polarity
4 - 8GHz 4000 - 8000MHz	3	4873.747	75.3	av	-51.3	27.7	51.7	54	-2.3	100 Vert

LIMIT 1: CFR 47 Part 15C 15.247 3M
 LIMIT 2: NONE

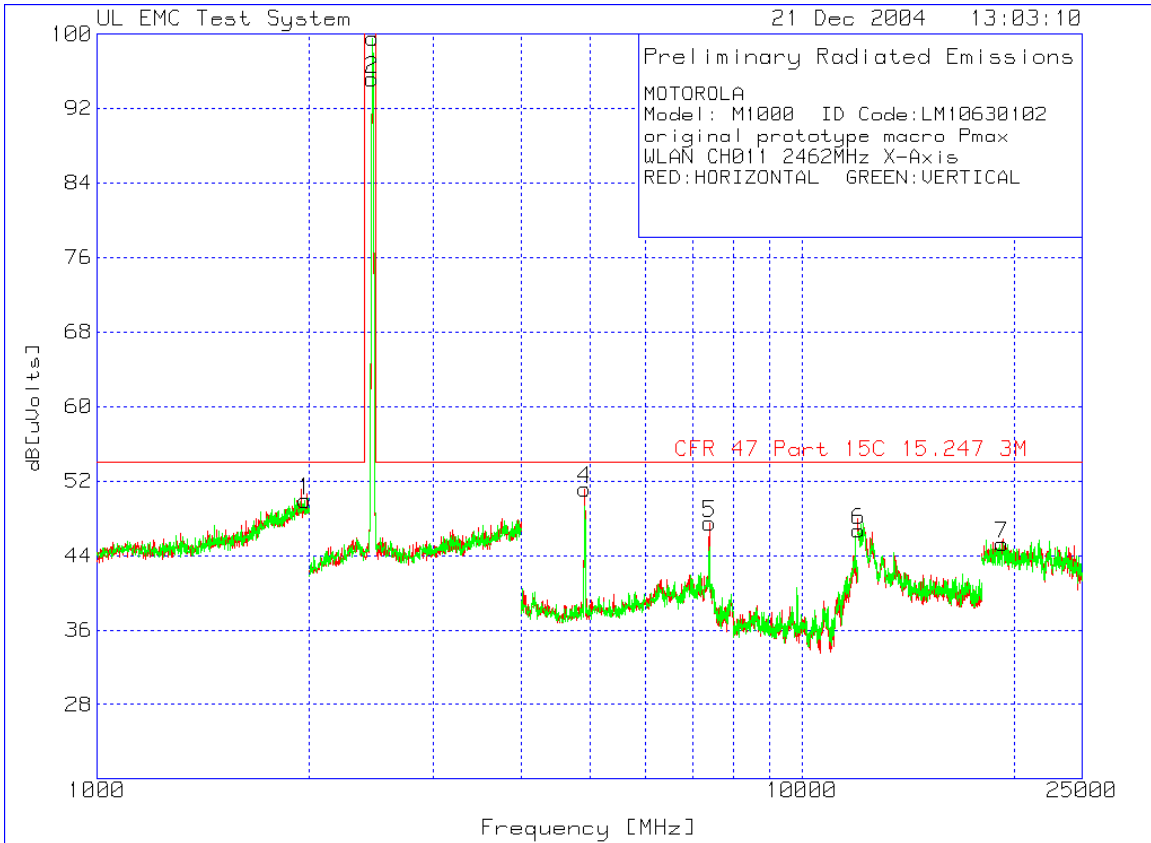


1-25GHz Mid Channel Z-Orientation

MOTOROLA
 Model: M1000 ID Code: LM1063010
 original prototype macro Pmax
 WLAN CH06 2437MHz Z-Axis
 RED:HORIZONTAL GREEN:VERTICAL

Marker Number	Test Frequency [MHz]	Meter Reading [dB(uV)]	Detector Type	Gain/Loss Factor [dB]	Transducer Factor [dB]	Level dB[uVolts]	Limit 1	Margin 1[dB]	Height [cm]	Polarity
2 - 4GHz 2000 - 4000MHz										
1	2436.874	69.85 pk		3.3	21.9	95.05	999	-903.95	100	Horz
4 - 8GHz 4000 - 8000MHz										
3	4872.873	73.51 pk		-51.3	27.7	49.91	54	-4.09	100	Horz
2 - 4GHz 2000 - 4000MHz										
2	2436.874	71.49 pk		3.3	21.9	96.69	999	-902.31	149	Vert
4 - 8GHz 4000 - 8000MHz										
4	4872.873	74.87 pk		-51.3	27.7	51.27	54	-2.73	100	Vert
5	7311.311	67.6 pk		-47.1	30.5	51	54	-3	100	Vert
12 - 18GHz 12000 - 18000MHz										
6	12180.18	51.24 pk		-41.6	39.4	49.04	54	-4.96	100	Vert

LIMIT 1: CFR 47 Part 15C 15.247 3M
 LIMIT 2: NONE

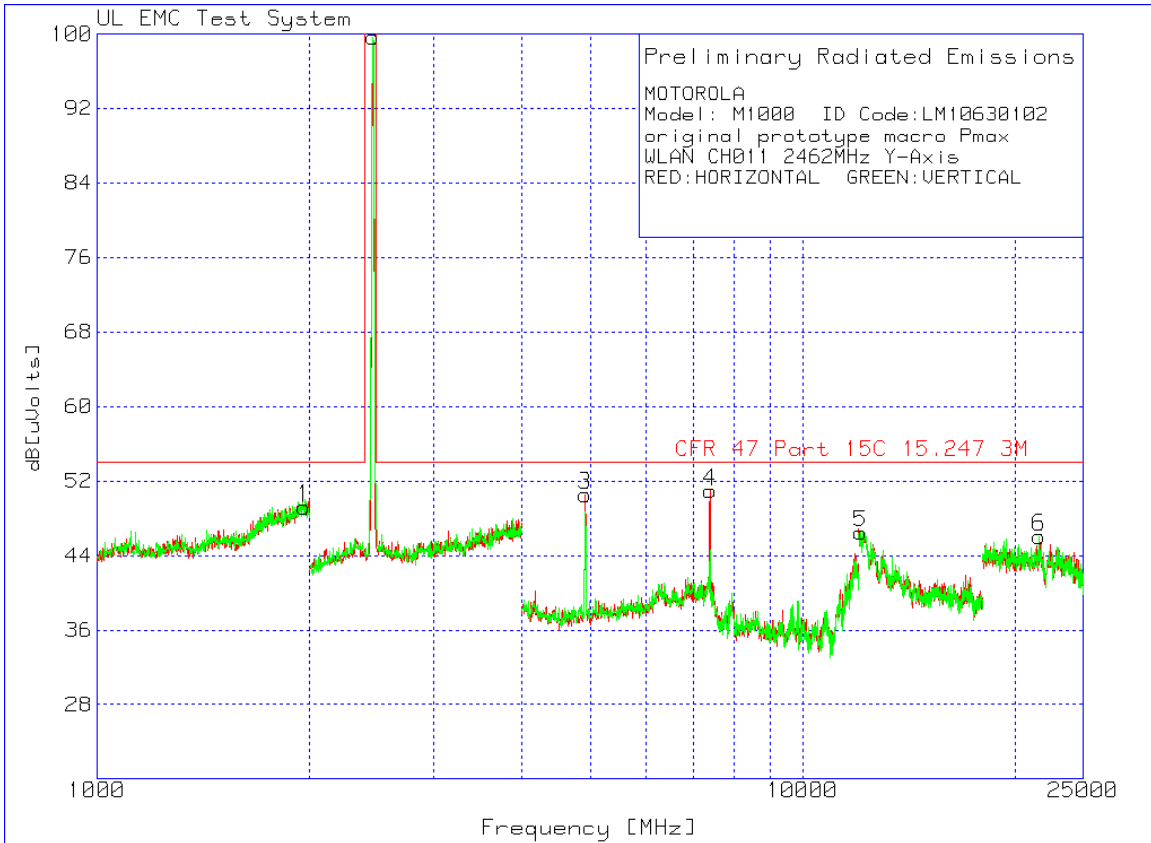


1-25GHz High Channel X-Orientation

MOTOROLA
Model: M1000 ID Code:LM10630102
original prototype macro Pmax
WLAN CH011 2462MHz X-Axis
RED:HORIZONTAL GREEN:VERTICAL

Marker Number	Test Frequency [MHz]	Meter Reading [dB(uV)]	Detector Type	Gain/Loss Factor [dB]	Transducer Factor [dB]	Level dB[uVolts]	Limit 1	Margin 1[dB]	Height [cm]	Polarity
1 - 2GHz 1000 - 2000MHz										
1	1973.948	19.43 pk		3.1	27.4	49.93	54	-4.07	100	Horz
2 - 4GHz 2000 - 4000MHz										
2	2456.914	69.91 pk		3.3	22	95.21	999	-903.79	100	Horz
4 - 8GHz 4000 - 8000MHz										
4	4921.844	74.84 pk		-51.5	27.8	51.14	54	-2.86	100	Horz
5	7390.782	63.69 pk		-47.3	31.1	47.49	54	-6.51	100	Horz
12 - 18GHz 12000 - 18000MHz										
6	12024.048	48.9 pk		-41.6	39.4	46.7	54	-7.3	150	Horz
18-26.5GHz 18000 - 25000MHz										
7	19262.525	73.06 pk		-68.1	40.3	45.26	54	-8.74	149	Horz
2 - 4GHz 2000 - 4000MHz										
3	2460.922	74.27 pk		3.3	22	99.57	999	-899.43	100	Vert

LIMIT 1: CFR 47 Part 15C 15.247 3M

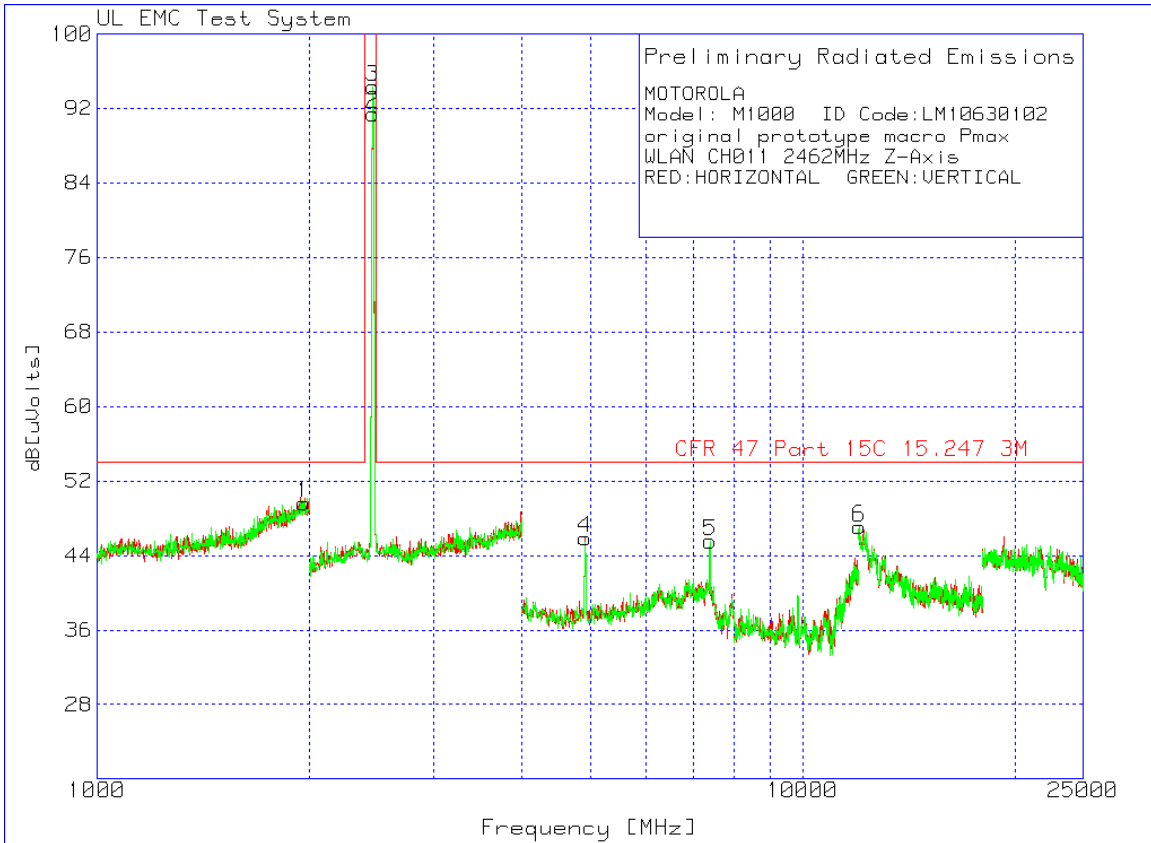


1-25GHz High Channel Y-Orientation

MOTOROLA
Model: M1000 ID Code:LM10630102
original prototype macro Pmax
WLAN CH011 2462MHz Y-Axis
RED:HORIZONTAL GREEN:VERTICAL

Marker Number	Test Frequency [MHz]	Meter Reading [dB(uV)]	Detector Type	Gain/Loss Factor [dB]	Transducer Factor [dB]	Level dB[uVolts]	Limit 1	Margin 1[dB]	Height [cm]	Polarity
4 - 8GHz 4000 - 8000MHz										
3	4921.844	74.23	pk	-51.5	27.8	50.53	54	-3.47	99	Horz
4	7390.782	67.13	pk	-47.3	31.1	50.93	54	-3.07	99	Horz
1 - 2GHz 1000 - 2000MHz										
1	1965.932	18.82	pk	3.1	27.3	49.22	54	-4.78	100	Vert
2 - 4GHz 2000 - 4000MHz										
2	2460.922	74.35	pk	3.3	22	99.65	999	-899.35	100	Vert
12 - 18GHz 12000 - 18000MHz										
5	12096.192	49.59	pk	-42.5	39.4	46.49	54	-7.51	150	Vert
18-26.5GHz 18000 - 25000MHz										
6	21661.323	66.64	pk	-61	40.4	46.04	54	-7.96	150	Vert

LIMIT 1: CFR 47 Part 15C 15.247 3M
 LIMIT 2: NONE



1-25GHz High Channel Z-Orientation

MOTOROLA
 Model: M1000 ID Code:LM10630102
 original prototype macro Pmax
 WLAN CH011 2462MHz Z-Axis
 RED:HORIZONTAL GREEN:VERTICAL

Marker Number	Test Frequency [MHz]	Meter Reading [dB(uV)]	Detector Type	Gain/Loss Factor [dB]	Transducer Factor [dB]	Level dB[uVolts]	Limit 1	Margin 1 [dB]	Height [cm]	Polarity
1 - 2GHz 1000 - 2000MHz										
1	1961.924	19.25 pk			3.1	27.3	49.65	54	-4.35	150 Horz
2 - 4GHz 2000 - 4000MHz										
2	2460.922	66.15 pk			3.3	22	91.45	999	-907.55	100 Horz
4 - 8GHz 4000 - 8000MHz										
4	4921.844	69.56 pk			-51.5	27.8	45.86	54	-8.14	100 Horz
2 - 4GHz 2000 - 4000MHz										
3	2460.922	69.02 pk			3.3	22	94.32	999	-904.68	100 Vert
4 - 8GHz 4000 - 8000MHz										
5	7390.782	61.74 pk			-47.3	31.1	45.54	54	-8.46	100 Vert
12 - 18GHz 12000 - 18000MHz										
6	12024.048	49.25 pk			-41.6	39.4	47.05	54	-6.95	100 Vert

LIMIT 1: CFR 47 Part 15C 15.247 3M

BAND-EDGE COMPLIANCE OF RF RADIATED EMISSIONS

CFR 47 Part 15.247

Measurement Procedure

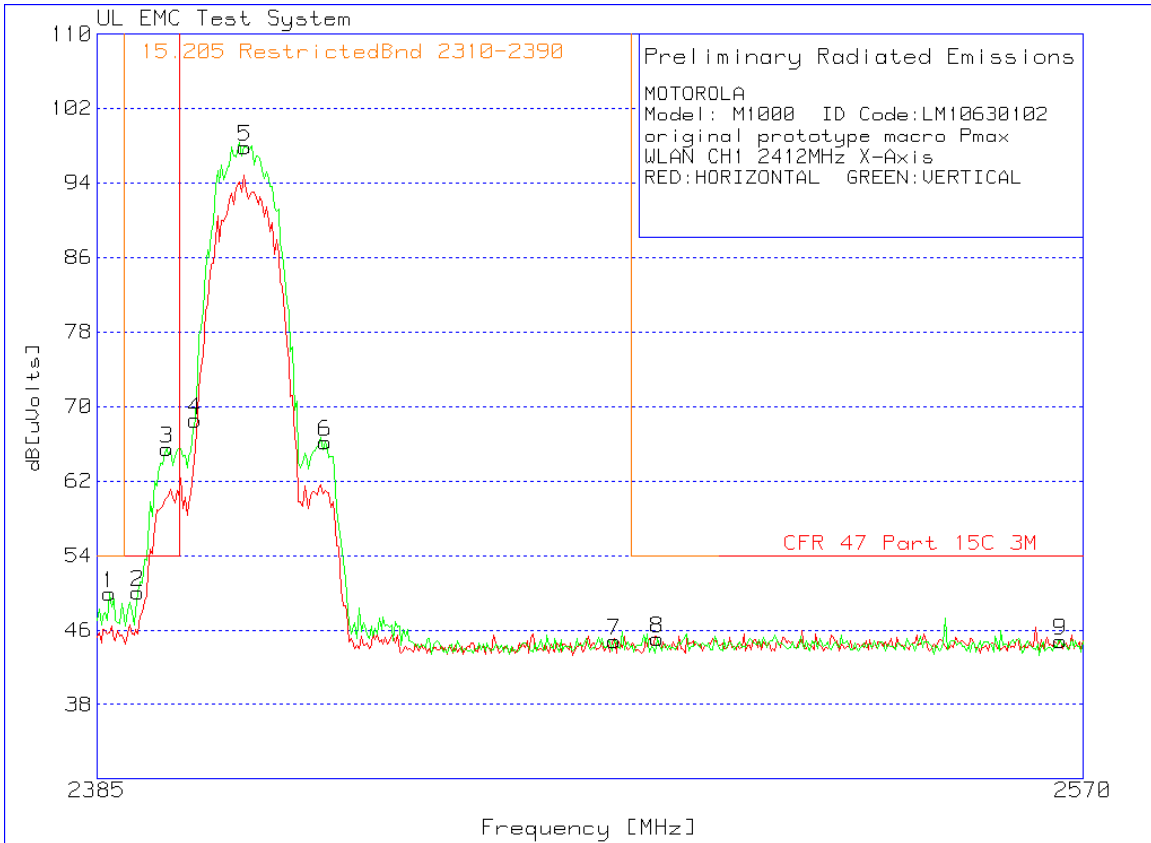
The RF output port of the Equipment-Under-Test is directly coupled to the input of the EMC analyzer through a specialized RF connector and a 10dB passive attenuator. A fully charged battery was used for the supply voltage.

The spectrum analyzer used the following settings:

1. Span = the frequency band of operation
2. RBW \geq 100kHz
3. VBW \geq 100kHz
4. Sweep = 5ms
5. Detector function = peak
6. Trace = max hold

Measurement Results

See Attached:

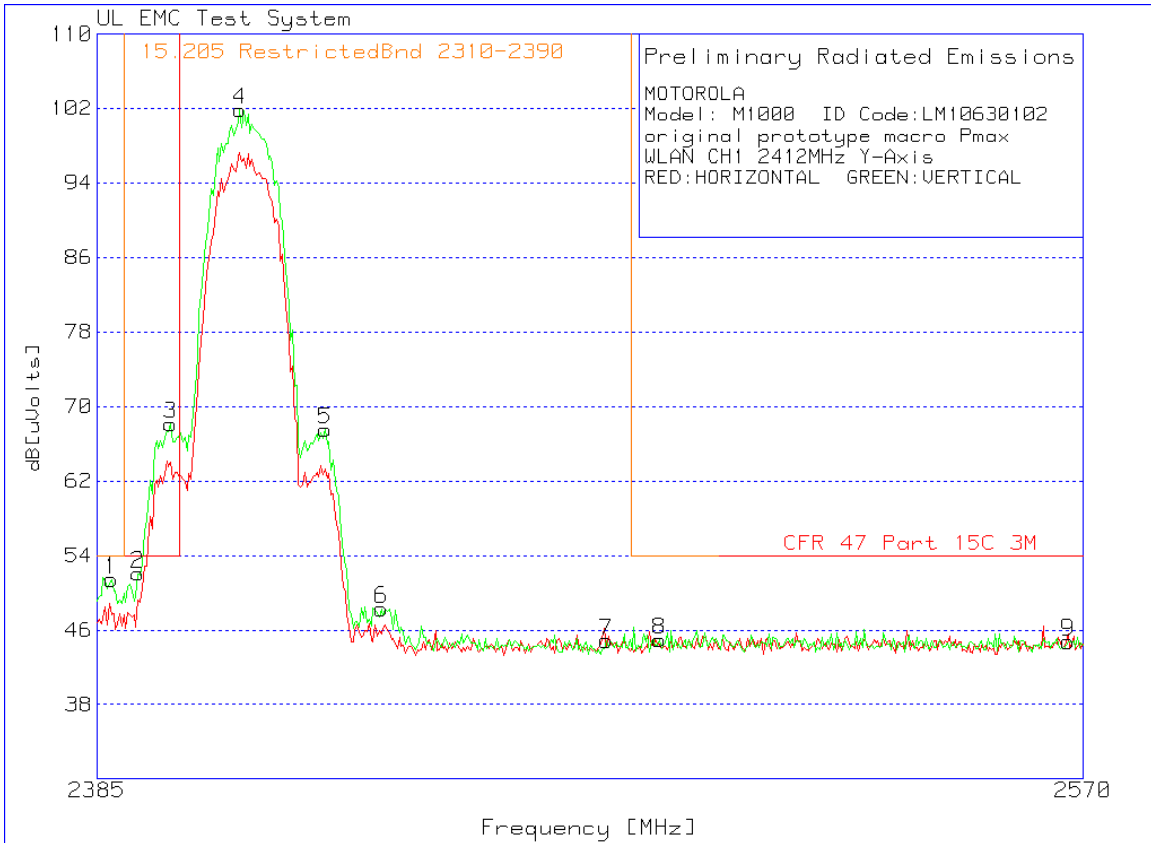


Low Band Edge X-Orientation

MOTOROLA
 Model: M1000 ID Code: LM10630102
 original prototype macro Pmax
 WLAN CH1 2412MHz X-Axis
 RED: HORIZONTAL GREEN: VERTICAL

Marker Number	Test Frequency [MHz]	Meter Reading [dB(uV)]	Detector Type	Gain/Loss Factor [dB]	Transducer Factor [dB]	Level dB[uVolts]	Limit 1	Margin 1[dB]	Limit 2	Margin 2[dB]	Height [cm]	Polarity
2 - 4GHz 2385 - 2570MHz												
1	2387.224	24.8 pk		3.3	21.8	49.9	54	-4.1	54	-4.1	100	Vert
2	2392.415	24.95 pk		3.3	21.8	50.05	54	-3.95	999	-948.95	100	Vert
3	2397.605	40.36 pk		3.3	21.8	65.46	54	11.46	999	-933.54	100	Vert
4	2402.796	43.45 pk		3.3	21.8	68.55	999	-930.45	999	-930.45	100	Vert
5	2411.879	72.74 pk		3.3	21.8	97.84	999	-901.16	999	-901.16	100	Vert
6	2426.523	40.97 pk		3.3	21.9	66.17	999	-932.83	999	-932.83	100	Vert
7	2480.281	19.5 pk		3.3	22	44.8	999	-954.2	999	-954.2	150	Vert
8	2488.437	19.67 pk		3.3	22.1	45.07	54	-8.93	54	-8.93	100	Vert
9	2565.551	19.33 pk		3.3	22.2	44.83	54	-9.17	0	44.83	150	Vert

LIMIT 1: CFR 47 Part 15C 3M
 LIMIT 2: 15.205 RestrictedBnd 2310-2390



Low Band Edge Y-Orientation

MOTOROLA

Model: M1000 ID Code:LM10630102

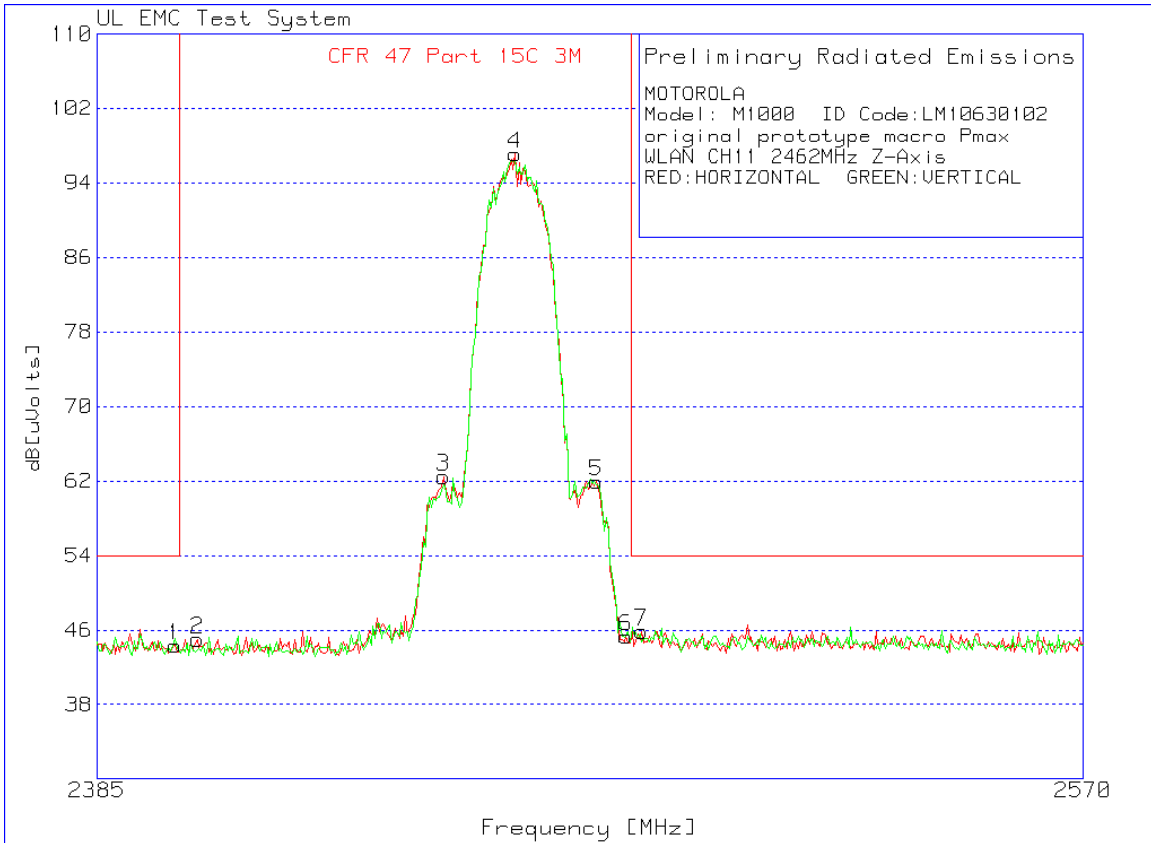
original prototype macro Pmax

WLAN CH11 2462MHz Y-Axis

RED:HORIZONTAL GREEN:VERTICAL

Marker Number	Test Frequency [MHz]	Meter Reading [dB(uV)]	Detector Type	Gain/Loss Factor [dB]	Transducer Factor [dB]	Level dB[uVolts]	Limit 1	Margin 1[dB]	Height [cm]	Polarity
2 - 4GHz 2385 - 2570MHz										
1	2398.717	19.28 pk		3.3	21.8	44.38	54	-9.62	149	Vert
2	2403.537	19.97 pk		3.3	21.8	45.07	999	-953.93	100	Vert
3	2448.397	41.65 pk		3.3	21.9	66.85	999	-932.15	100	Vert
4	2461.743	76.04 pk		3.3	22	101.34	999	-897.66	100	Vert
5	2475.832	41.71 pk		3.3	22	67.01	999	-931.99	100	Vert
6	2482.134	23.26 pk		3.3	22	48.56	999	-950.44	100	Vert
7	2486.212	22.5 pk		3.3	22.1	47.9	54	-6.1	100	Vert

LIMIT 1: CFR 47 Part 15C 3M

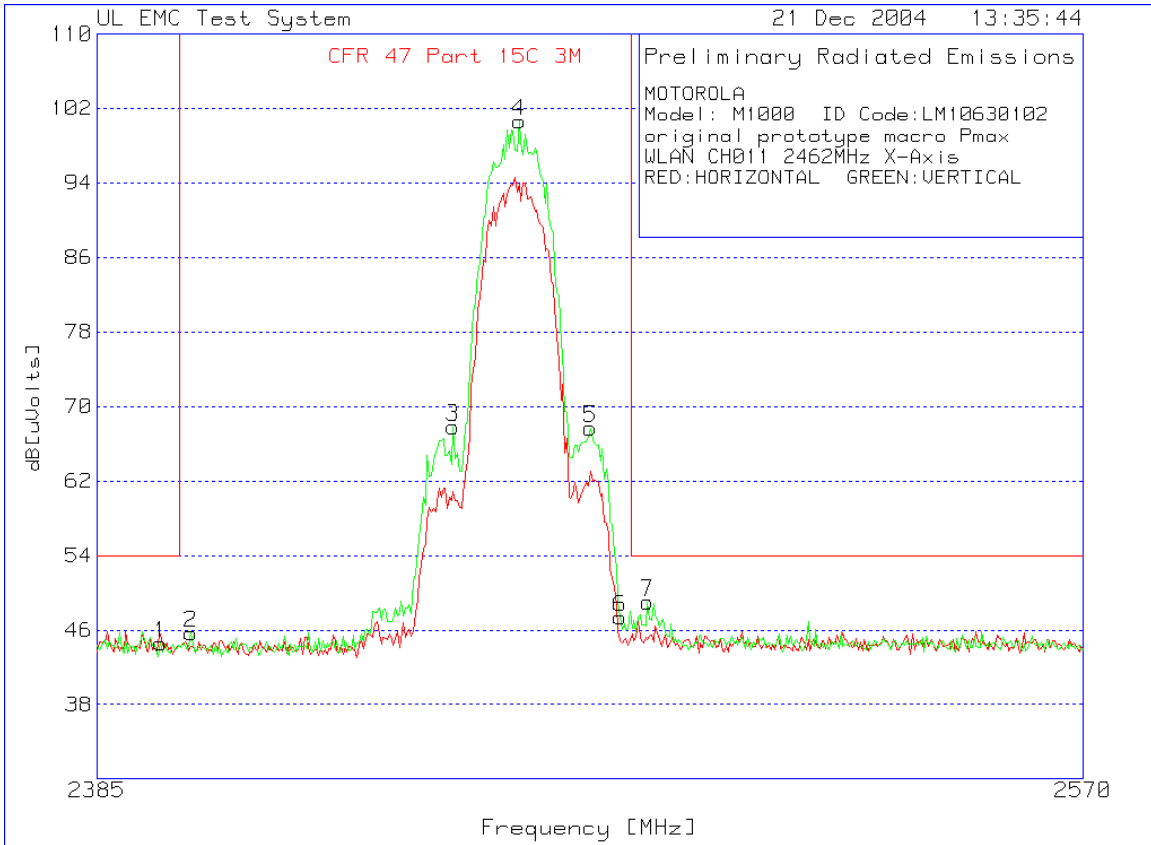


Low Band Edge Z-Orientation

MOTOROLA
 Model: M1000 ID Code: LM10630102
 original prototype macro Pmax
 WLAN CH1 2412MHz Z-Axis
 RED: HORIZONTAL GREEN: VERTICAL

Marker Number	Test Frequency [MHz]	Meter Reading [dB(uV)]	Detector Type	Gain/Loss Factor [dB]	Transducer Factor [dB]	Level dB[uVolts]	Limit 1	Margin 1[dB]	Limit 2	Margin 2[dB]	Height [cm]	Polarity
2 - 4GHz 2385 - 2570MHz												
1	2387.224	23.38	pk	3.3	21.8	48.48	54	-5.52	54	-5.52	100	Horz
2	2392.415	22.81	pk	3.3	21.8	47.91	54	-6.09	999	-951.09	100	Horz
3	2398.347	38.27	pk	3.3	21.8	63.37	54	9.37	999	-935.63	100	Horz
4	2402.796	41.86	pk	3.3	21.8	66.96	999	-932.04	999	-932.04	100	Horz
5	2411.693	72.03	pk	3.3	21.8	97.13	999	-901.87	999	-901.87	100	Horz
6	2425.782	37.98	pk	3.3	21.9	63.18	999	-935.82	999	-935.82	100	Horz
7	2478.798	19.5	pk	3.3	22	44.8	999	-954.2	999	-954.2	100	Horz
8	2488.808	18.99	pk	3.3	22.1	44.39	54	-9.61	54	-9.61	100	Horz
9	2567.405	20.07	pk	3.3	22.2	45.57	54	-8.43	0	45.57	149	Horz

LIMIT 1: CFR 47 Part 15C 3M
 LIMIT 2: 15.205 RestrictedBnd 2310-2390

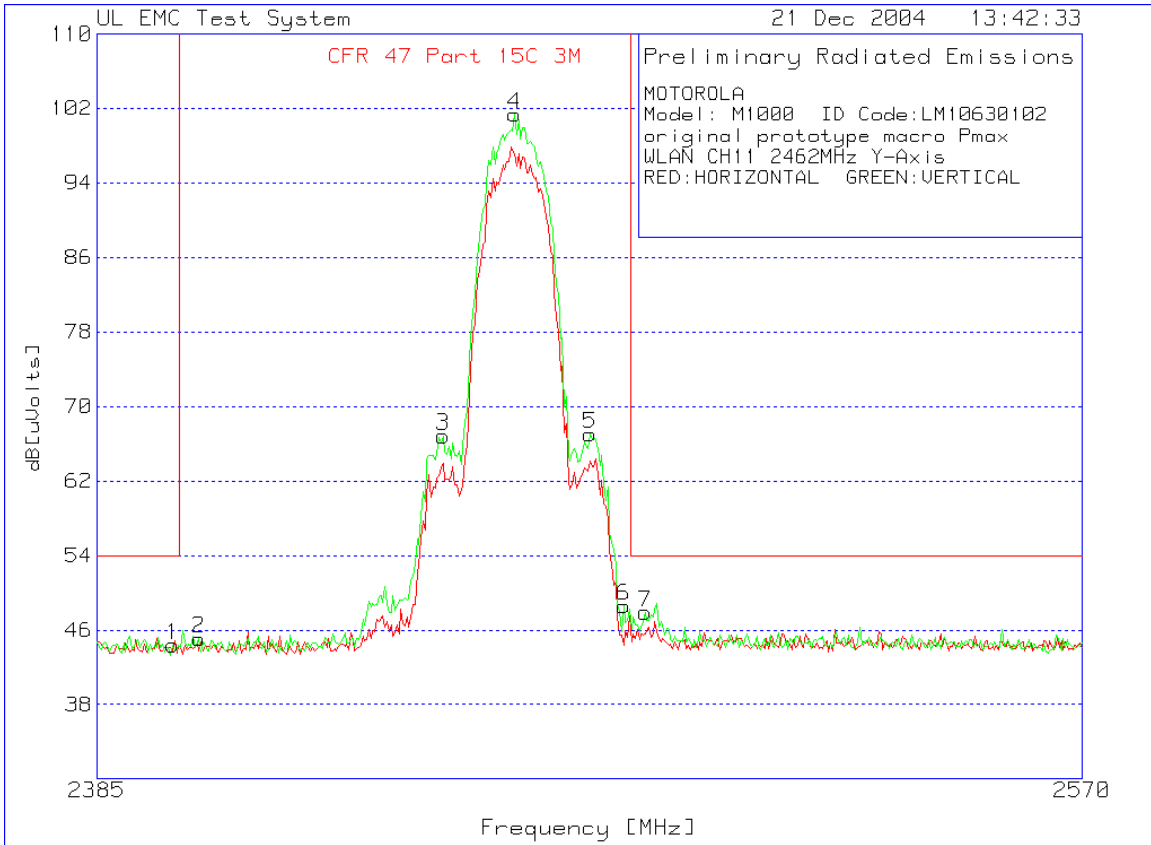


High Band Edge X-Orientation

MOTOROLA
 Model: M1000 ID Code:LM10630102
 original prototype macro Pmax
 WLAN CH011 2462MHz X-Axis
 RED:HORIZONTAL GREEN:VERTICAL

Marker Number	Test Frequency [MHz]	Meter Reading [dB(uV)]	Detector Type	Gain/Loss Factor [dB]	Transducer Factor [dB]	Level dB[uVolts]	Limit 1	Margin 1[dB]	Height [cm]	Polarity
2 - 4GHz 2385 - 2570MHz										
1	2396.493	19.46	pk	3.3	21.8	44.56	54	-9.44	149	Vert
2	2402.054	20.59	pk	3.3	21.8	45.69	999	-953.31	100	Vert
3	2450.251	42.5	pk	3.3	22	67.8	999	-931.2	100	Vert
4	2462.485	75.36	pk	3.3	22	100.66	999	-898.34	100	Vert
5	2475.832	42.39	pk	3.3	22	67.69	999	-931.31	100	Vert
6	2481.393	22.05	pk	3.3	22	47.35	999	-951.65	100	Vert
7	2486.583	23.63	pk	3.3	22.1	49.03	54	-4.97	100	Vert

LIMIT 1: CFR 47 Part 15C 3M
 LIMIT 2: NONE

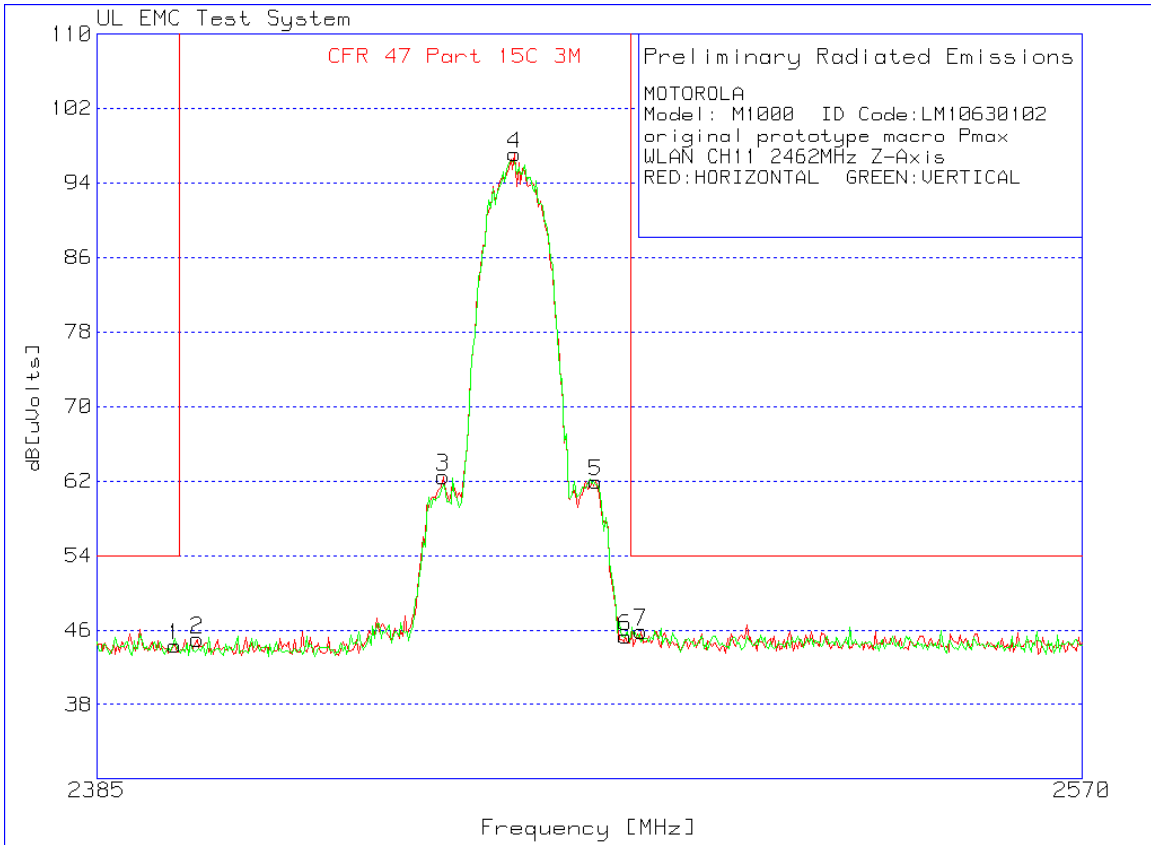


High Band Edge Y-Orientation

MOTOROLA
 Model: M1000 ID Code:LM10630102
 original prototype macro Pmax
 WLAN CH11 2462MHz Y-Axis
 RED:HORIZONTAL GREEN:VERTICAL

Marker Number	Test Frequency [MHz]	Meter Reading [dB(uV)]	Detector Type	Gain/Loss Factor [dB]	Transducer Factor [dB]	Level dB[uVolts]	Limit 1	Margin 1[dB]	Height [cm]	Polarity
2 - 4GHz 2385 - 2570MHz										
1	2398.717	19.28 pk		3.3	21.8	44.38	54	-9.62	149	Vert
2	2403.537	19.97 pk		3.3	21.8	45.07	999	-953.93	100	Vert
3	2448.397	41.65 pk		3.3	21.9	66.85	999	-932.15	100	Vert
4	2461.743	76.04 pk		3.3	22	101.34	999	-897.66	100	Vert
5	2475.832	41.71 pk		3.3	22	67.01	999	-931.99	100	Vert
6	2482.134	23.26 pk		3.3	22	48.56	999	-950.44	100	Vert
7	2486.212	22.5 pk		3.3	22.1	47.9	54	-6.1	100	Vert

LIMIT 1: CFR 47 Part 15C 3M
 LIMIT 2: NONE



High Band Edge Z-Orientation

MOTOROLA
 Model: M1000 ID Code:LM10630102
 original prototype macro Pmax
 WLAN CH11 2462MHz Z-Axis
 RED:HORIZONTAL GREEN:VERTICAL

Marker Number	Test Frequency [MHz]	Meter Reading [dB(uV)]	Detector Type	Gain/Loss Factor [dB]	Transducer Factor [dB]	Level dB[uVolts]	Limit 1	Margin 1[dB]	Height [cm]	Polarity
2 - 4GHz 2385 - 2570MHz										
1	2399.088	19.23 pk		3.3	21.8	44.33	54	-9.67	100	Horz
2	2403.166	19.92 pk		3.3	21.8	45.02	999	-953.98	100	Horz
3	2448.397	37.27 pk		3.3	21.9	62.47	999	-936.53	100	Horz
4	2461.743	71.8 pk		3.3	22	97.1	999	-901.9	100	Horz
5	2476.944	36.61 pk		3.3	22	61.91	999	-937.09	100	Horz
6	2482.505	20.01 pk		3.3	22	45.31	999	-953.69	100	Horz
7	2485.471	20.45 pk		3.3	22.1	45.85	54	-8.15	100	Horz

LIMIT 1: CFR 47 Part 15C 3M

SPURIOUS RF CONDUCTED EMISSIONS

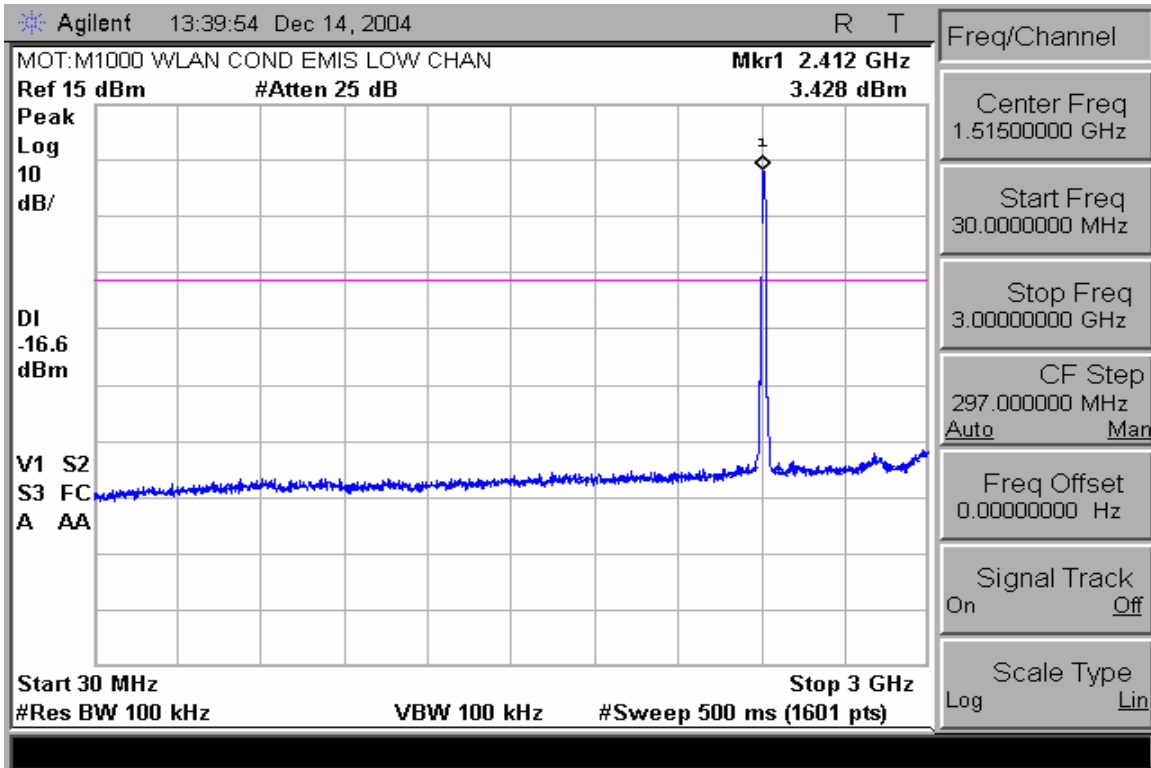
CFR 47 Part 15.247

Measurement Procedure

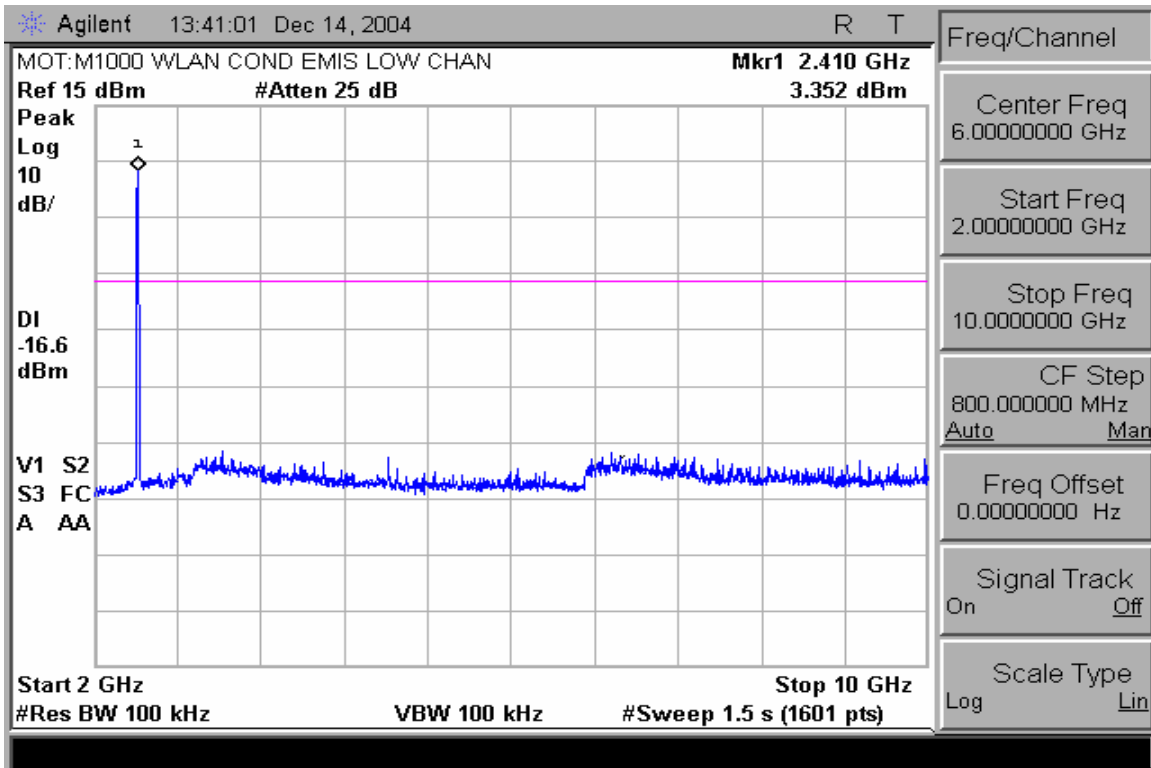
The RF output port of the Equipment-Under-Test is directly coupled to the input of the EMC analyzer through a specialized RF connector and a 10dB passive attenuator. A fully charged battery was used for the supply voltage.

Measurement Results

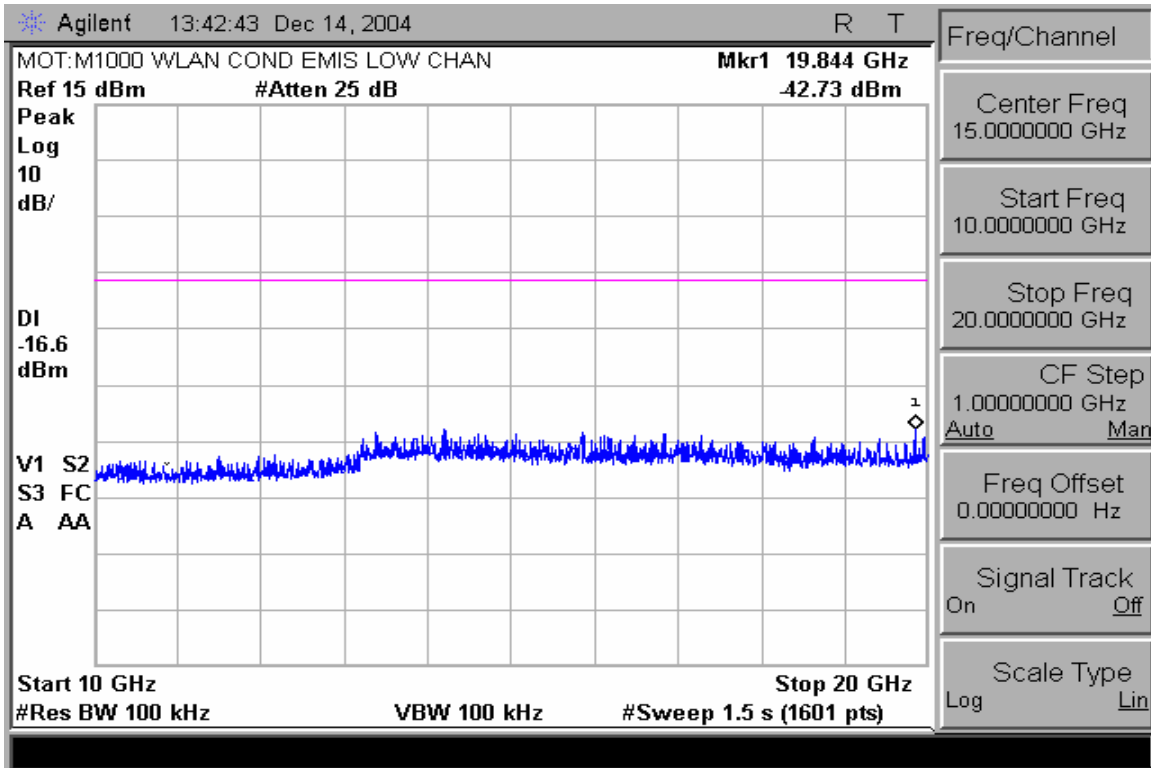
See attached:



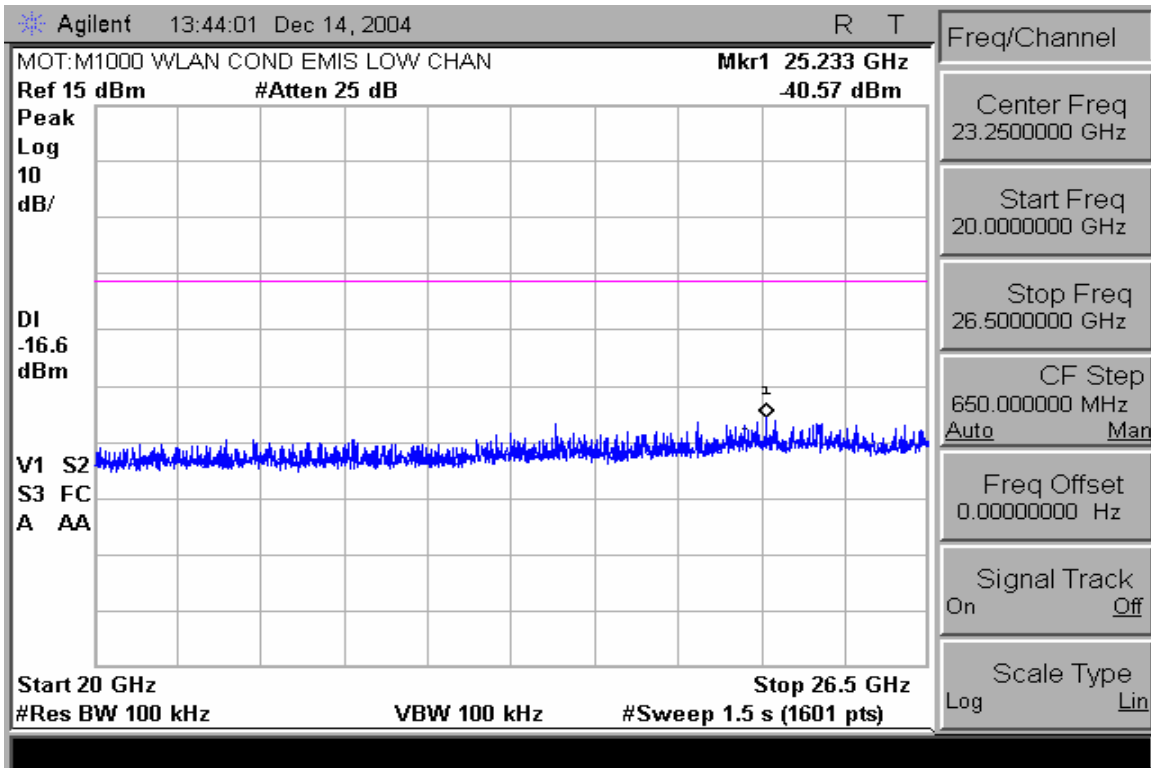
Conducted Spurious Emissions 30-3000MHz (Low Channel Enabled)



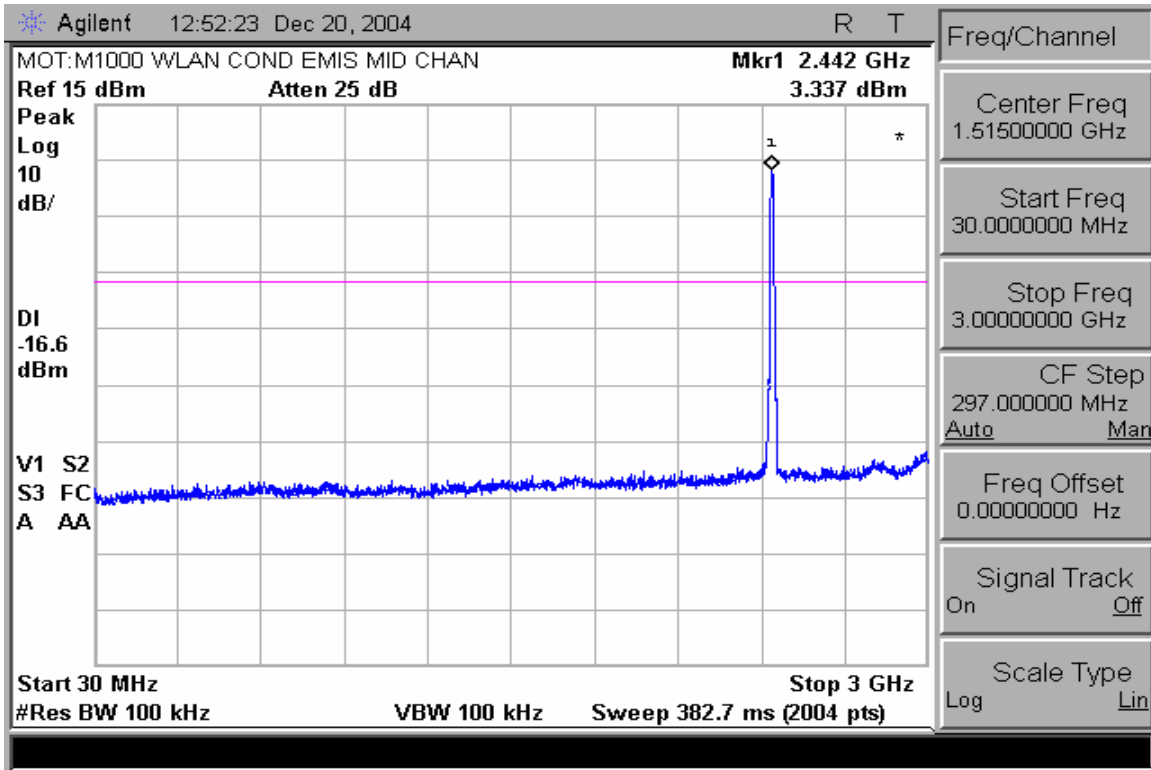
Conducted Spurious Emissions 2-10GHz (Low Channel Enabled)



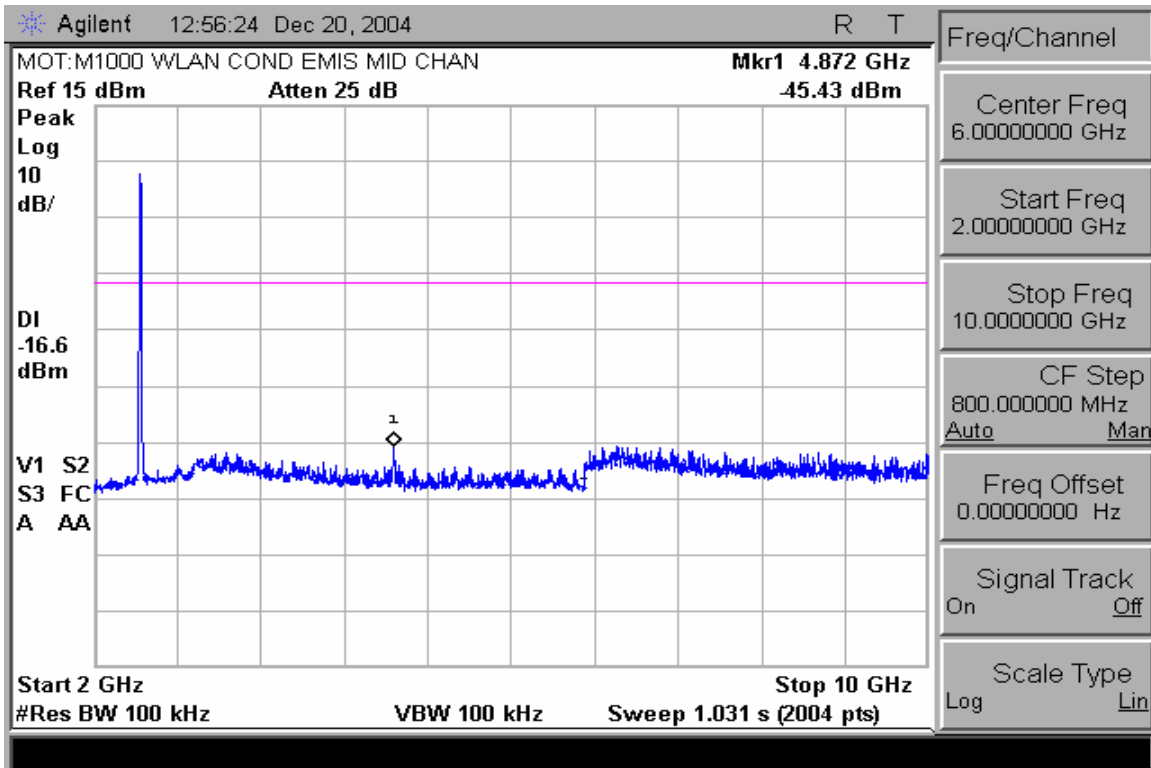
Conducted Spurious Emissions 10-20GHz (Low Channel Enabled)



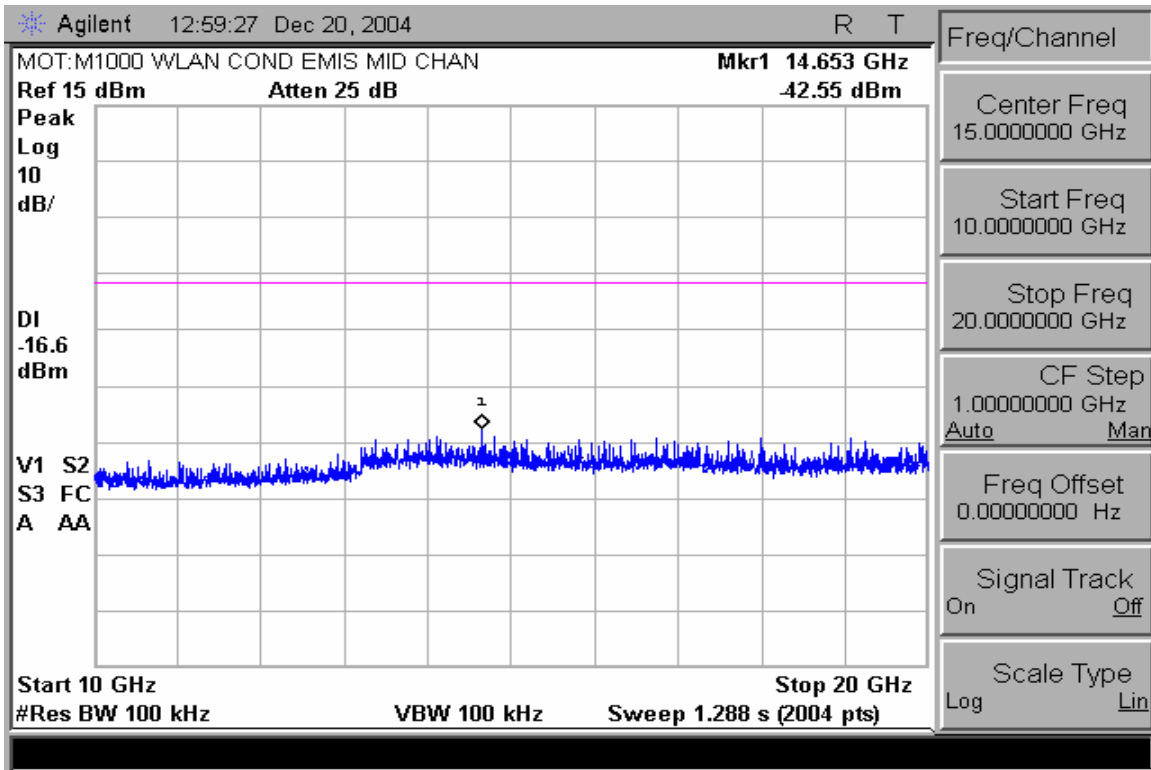
Conducted Spurious Emissions 20-26.5GHz (Low Channel Enabled)



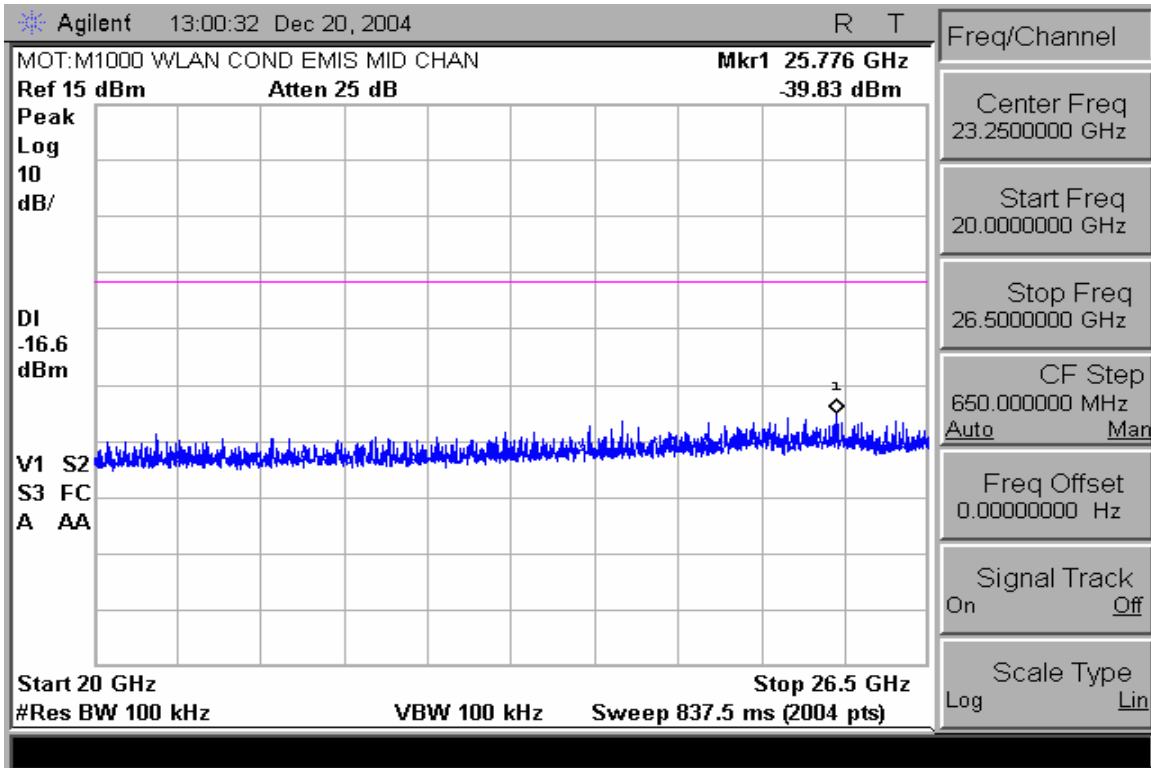
Conducted Spurious Emissions 30-3000MHz (Mid Channel Enabled)



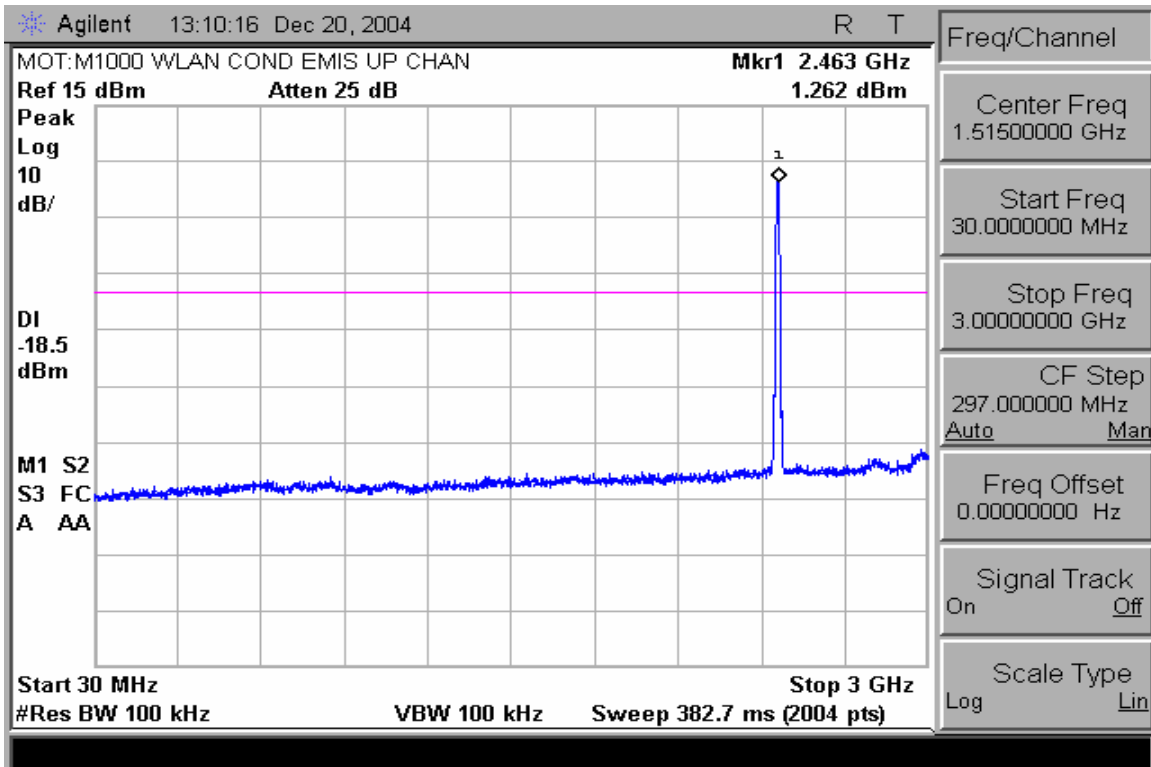
Conducted Spurious Emissions 2-10GHz (Mid Channel Enabled)



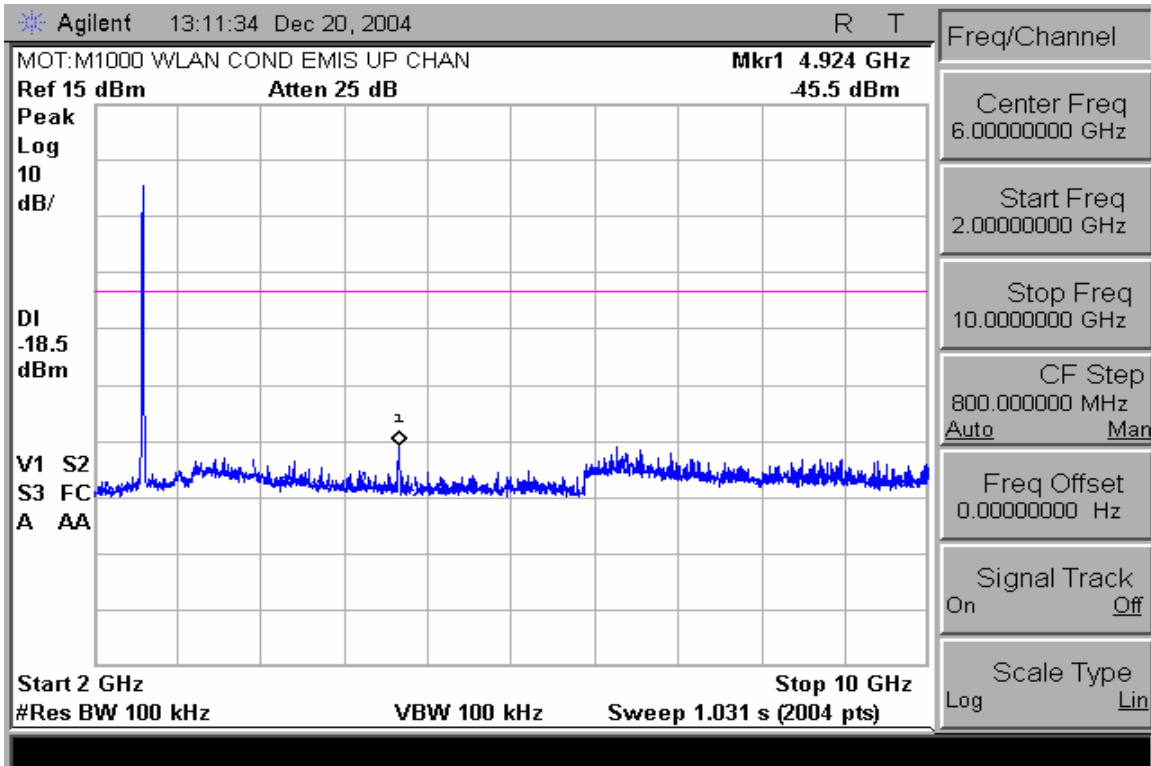
Conducted Spurious Emissions 10-20GHz (Mid Channel Enabled)



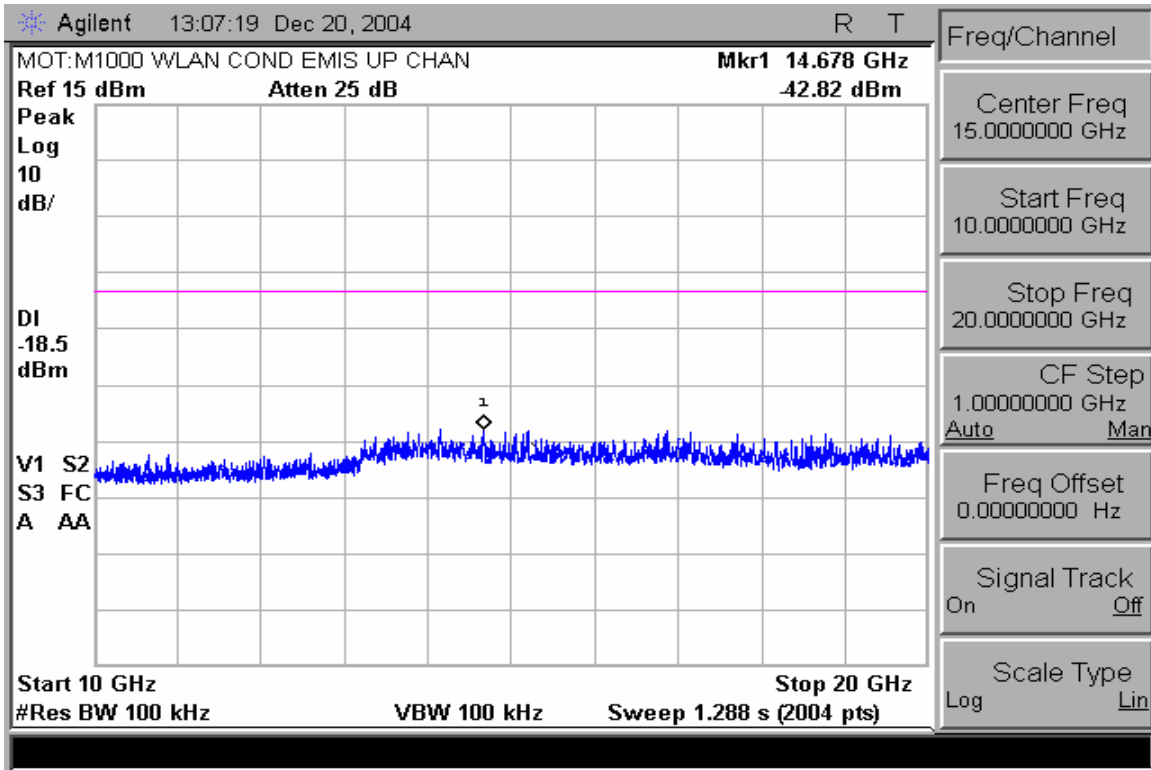
Conducted Spurious Emissions 20-26.5GHz (Mid Chan Enabled)



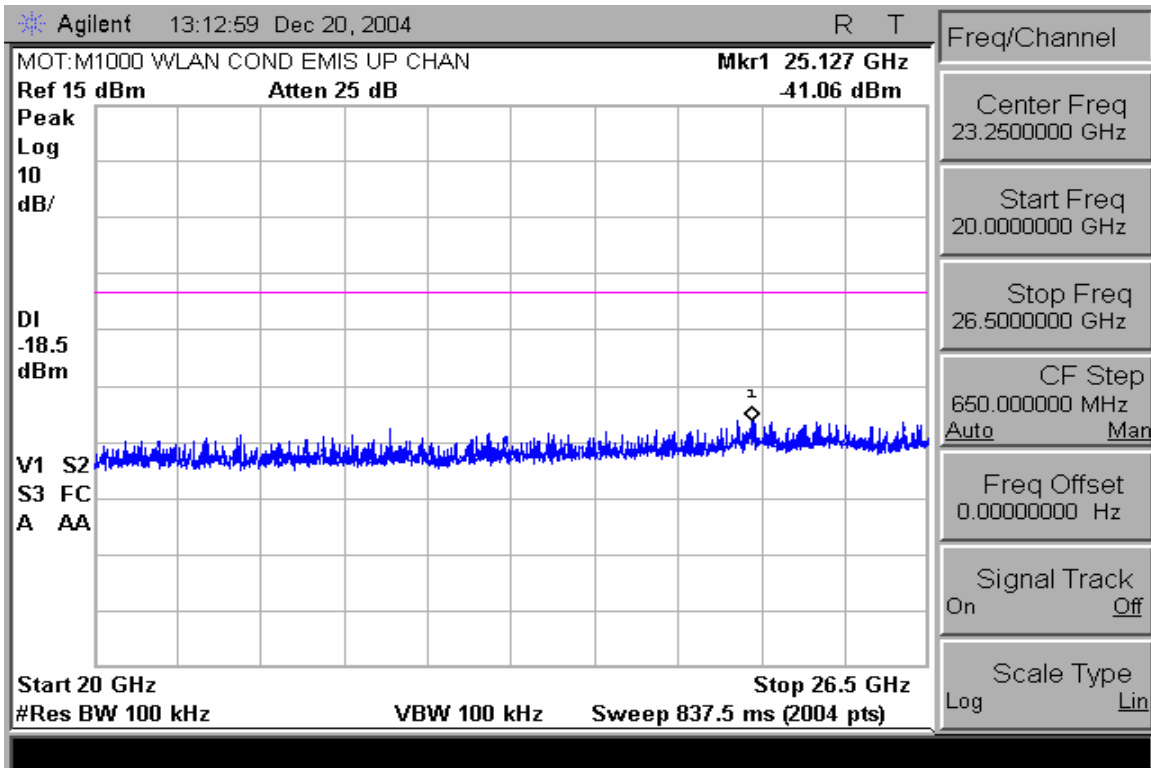
Conducted Spurious Emissions 30-3000MHz (High Channel Enabled)



Conducted Spurious Emissions 2-10GHz (High Channel Enabled)



Conducted Spurious Emissions 10-20GHz (High Channel Enabled)



Conducted Spurious Emissions 20-26.5GHz (High Chan Enabled)

End of Test Report