

**DIGITAL EMC CO., LTD.**

683-3, Yubang-Dong, Yongin-Si, Kyunggi-Do, Korea. 449-080

Tel: +82-31-321-2664 Fax: +82-31-321-1664

<http://www.digitalemccom>**CERTIFICATION OF COMPLIANCE****MODNNET CO., LTD.**Room 206, E&C INNOBIZ TOWER, # 1320-2 Sindang-dong,
Dalseo-gu, Daegu Metropolitan City, 704-919, Korea

Dates of Tests: September 24 ~ October 12, 2009

Test Report S/N: DR50111002W

Test Site : DIGITAL EMC CO., LTD.

FCC ID

XZC-YM-09RX

APPLICANT

MODNNET CO., LTD.

Purpose	:	Original Grant
FCC Equipment Class	:	Part 15 Spread Spectrum Transmitter(DSS)
Device name	:	Wireless Microphone System
Manufacturer	:	MODNNET CO., LTD.
FCC ID	:	XZC-YM-09RX
Model name	:	YM-09RX
Test Device Serial number	:	Identical prototype
FCC Rule Part(s)	:	FCC Part 15.247 Subpart C ANSI C63.4-2003
Frequency Range	:	2402 ~ 2480 MHz
Max. Output power	:	10.78 dBm Conducted
Data of issue	:	February 18, 2010

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1. General information

This report contains the result of tests performed by:

DIGITAL EMC CO., LTD.

Address: 683-3, Yubang-Dong, Yongin-Si, Kyunggi-Do, Korea. 449-080

<http://www.digitalemc.com> E-mail: Harveysung@digitalemc.com

Tel: +82-31-321-2664 Fax: +82-31-321-1664

Quality control in the testing laboratory is implemented as per ISO/IEC 17025 which is the "General requirements for the competent of calibration and testing laboratory".

Tested by: *Engineer*

February 18, 2010

D.C. Cha



Date

Name

Signature

Witnessed by: *Engineer*

February 18, 2010

S.K. RYU



Date

Name

Signature

Reviewed by: *Manager*

February 18, 2010

W.J. Lee



Date

Name

Signature

Applicant:

Company name : MODNNET CO., LTD.

Address : Room 206, E&C INNOBIZ TOWER, # 1320-2 Sindang-dong, Dalseo-gu, Daegu
Metropolitan City, 704-919, Korea

Date of order : June 05, 2009

2. Equipment information

XZC-YM-09RX

2.1 Equipment description

Equipment model no.	YM-09RX
Equipment serial no.	Identical prototype
Type of equipment	Wireless Microphone System
Frequency band	2402 ~ 2480 MHz
Type of Modulation	<input checked="" type="checkbox"/> GFSK for 1Mbps(BDR mode) ^{Note 1} <input type="checkbox"/> $\pi/4$ -DQPSK for 2Mbps(EDR mode) <input type="checkbox"/> 8DPSK for 3Mbps(EDR mode)
Spread Spectrum	Frequency Hopping
Channel Spacing	1.0 MHz
Power	AC 120V 60Hz
Type of antenna	<input type="checkbox"/> Internal Type: <input checked="" type="checkbox"/> External Type: Dipole Antenna(Max. Peak Gain: 3.12dBi)

- Note 1: This device supports only DH1 packet.



2.2 Ancillary equipment

Equipment	Model No.	Serial No.	Manufacturer	Note
Adaptor	3A-181WP12	N/A	ENG ELECTRONIC CO., LTD	-
-	-	-	-	-

3. Information about test items

YM-09RX

3.1 Tested frequency

- Hopping Function: Enable

Frequency	TX	RX
Frequency band of operation	2402MHz ~ 2480MHz	2402MHz ~ 2480MHz

- Hopping Function: Disable

Frequency	TX	RX
Lowest frequency	2402MHz	2402MHz
Middle frequency	2441MHz	2441MHz
Highest frequency	2480MHz	2480MHz

3.2 Tested environment

Temperature	:	21 ~ 24 °C
Relative humidity content	:	37 ~ 49 % R.H.
Details of power supply	:	AC 120V 60Hz

3.3 Test mode

Test Case 1	-
Test Case 2	-

3.4 Auxiliary equipment

Equipment	Model No.	Serial No.	Manufacturer	Note
-	-	-	-	-
-	-	-	-	-

3.5 EMI Suppression Device(s)/Modifications

EMI suppression device(s) added and/or modifications made during testing

→ None

4. Test Report

4.1 Summary of tests

FCC Part Section(s)	Parameter	Limit (Using in 2400 ~ 2483.5MHz)	Test Condition	Status Note 1
I. Test Items				
15.247(a)	Carrier Frequency Separation	>= 20dB BW or >= Two-Thirds of the 20dB BW	Conducted	C
	Number of Hopping Frequencies	>= 15 hops		C
	20 dB Bandwidth	None		C
	Dwell Time	=< 0.4 seconds		C
15.247(b)	Transmitter Output Power	=< 1Watt , if CHs >= 75 Others =<0.125W		C
15.247(c)	Band-edge /Conducted	The radiated emission to any 100 kHz of out-band shall be at least 20dB below the highest in-band spectral density.		C
	Conducted Spurious Emissions		C	
15.205 15.209	Radiated Spurious Emissions	FCC 15.209 Limits	Radiated	C
15.207	AC Conducted Emissions	EN 55022	AC Line Conducted	C
15.203	Antenna Requirements	FCC 15.203	-	C
Note 1: C=Comply NC=Not Comply NT=Not Tested NA=Not Applicable				

The sample was tested according to the following specification:

FCC Parts 15.247; ANSI C-63.4-2003, DA00-705

4.2 Transmitter requirements

4.2.1 Carrier Frequency Separation

- Procedure:

The carrier frequency separation was measured with a spectrum analyzer connected to the antenna terminal, while EUT had its hopping function enabled.

After the trace being stable, the reading value between the peaks of the adjacent channels using the marker-delta function was recorded as the measurement results.

The spectrum analyzer is set to:

Span = wide enough to capture the peaks of two adjacent channels

RBW = 1% of the span

Sweep = auto

VBW = \geq RBW

Detector function = peak

Trace = max hold

- Measurement Data: **Comply**

Hopping Mode	Data rate	Peak of center channel (MHz)	Peak of adjacent Channel (MHz)	Test Result (MHz)
Enable	1Mbps	2440.010000	2441.012000	1.002000

See next page for actual measured spectrum plot.

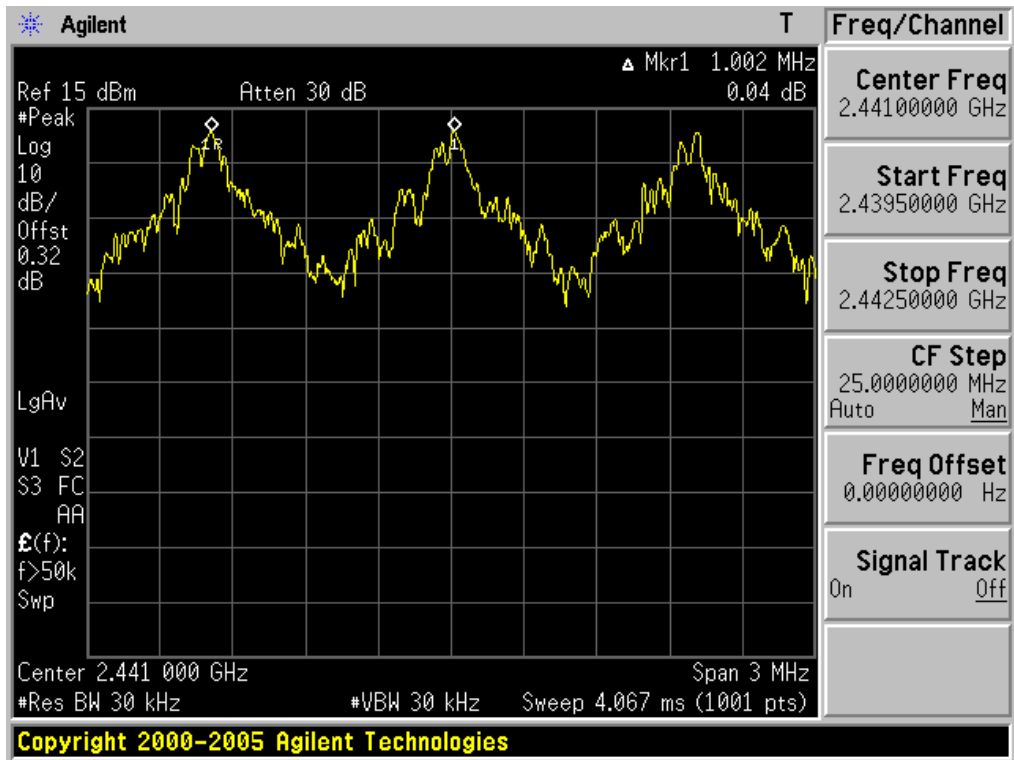
- Minimum Standard:

Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater.

Alternatively, frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW

Carrier Frequency Separation

Hopping mode: Enable & Data rate: 1Mbps



4.2.2 Number of Hopping Frequencies

- Procedure:

The number of hopping frequencies was measured with a spectrum analyzer connected to the antenna terminal, while EUT had its hopping function enabled.

To get higher resolution, four frequency ranges within the 2400 ~ 2483.5 MHz FH band were examined.

The spectrum analyzer is set to:

Span = 25MHz Plot 1: Start Frequency = 2389.5MHz, Stop Frequency = 2414.5 MHz

Plot 2: Start Frequency = 2414.5MHz, Stop Frequency = 2439.5 MHz

Plot 3: Start Frequency = 2439.5MHz, Stop Frequency = 2464.5 MHz

Plot 4: Start Frequency = 2464.5MHz, Stop Frequency = 2489.5 MHz

RBW = 1% of the span or more

Sweep = auto

VBW = \geq RBW

Detector function = peak

Trace = max hold

- Measurement Data: **Comply**

Hopping mode	Data rate	Test Result (Total Hops)
Enable	1Mbps	79

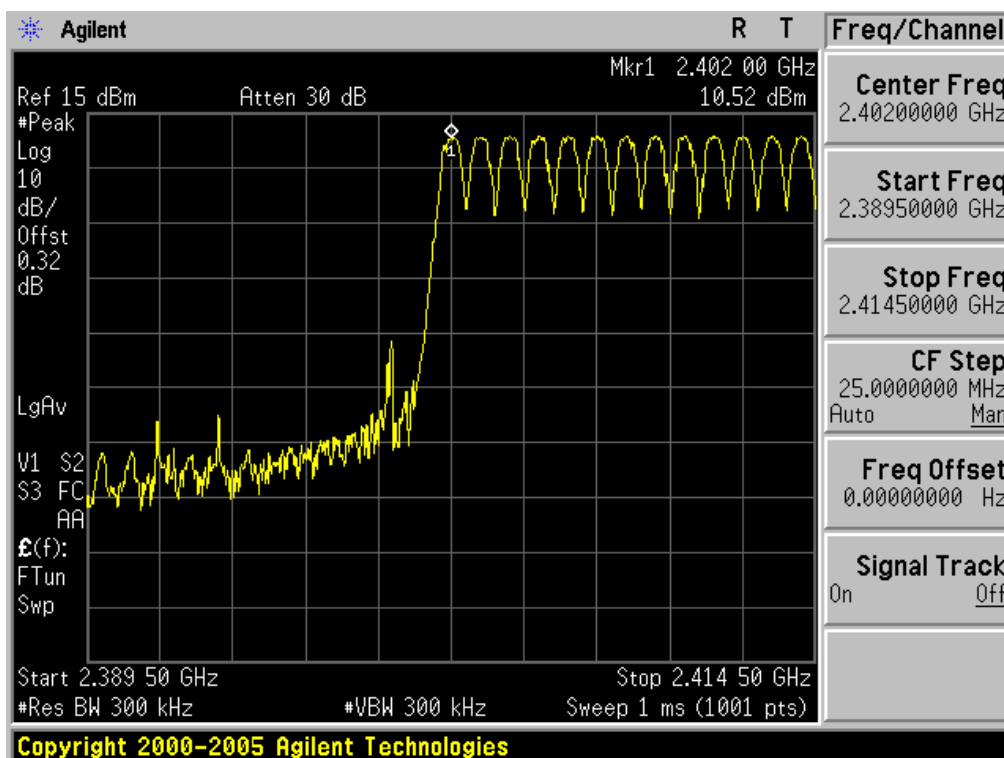
Note 1: See next pages for actual measured spectrum plots.

- Minimum Standard:

At least 15 hops

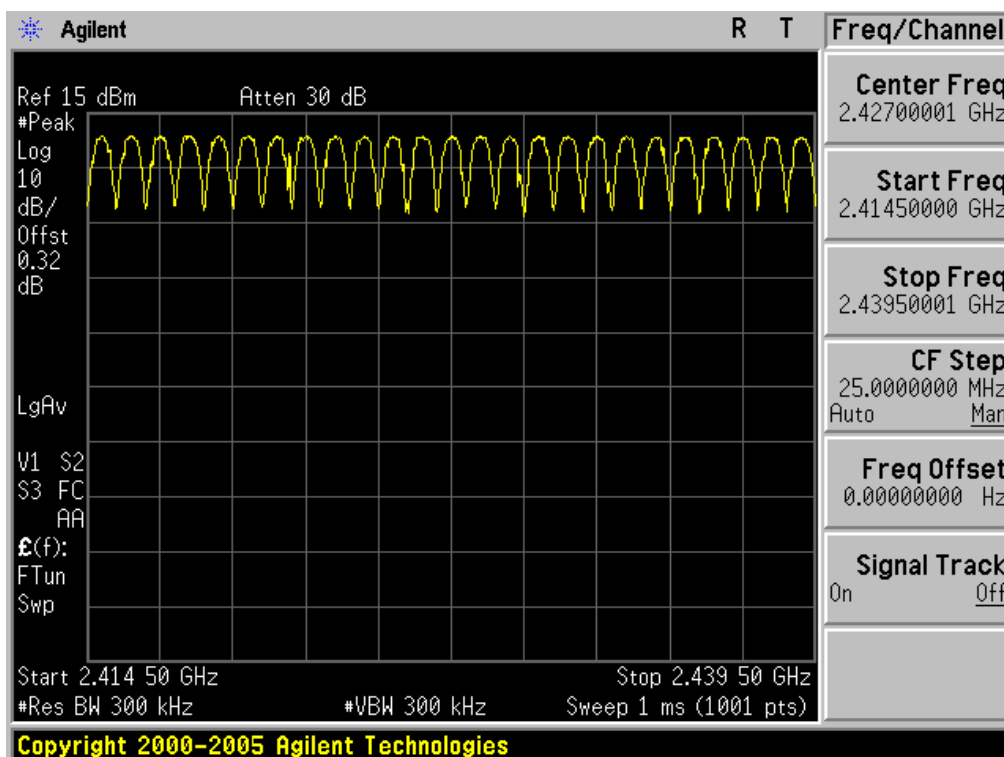
Number of Hopping Frequencies 1

Hopping mode: Enable & Data rate: 1Mbps



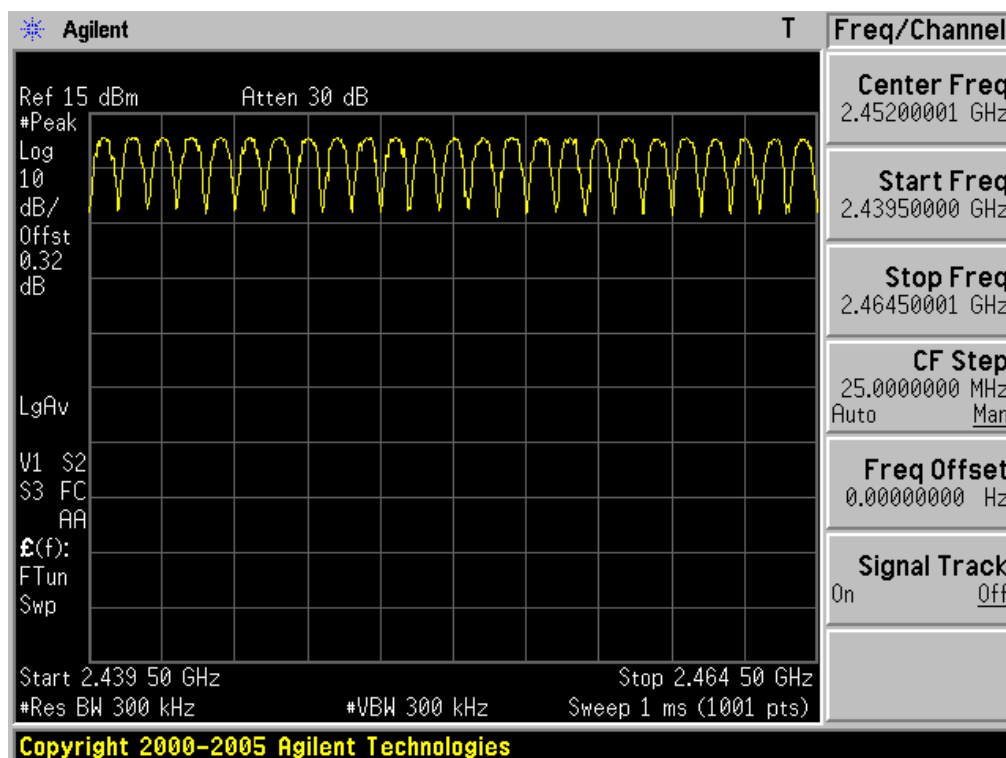
Number of Hopping Frequencies 2

Hopping mode: Enable & Data rate: 1Mbps



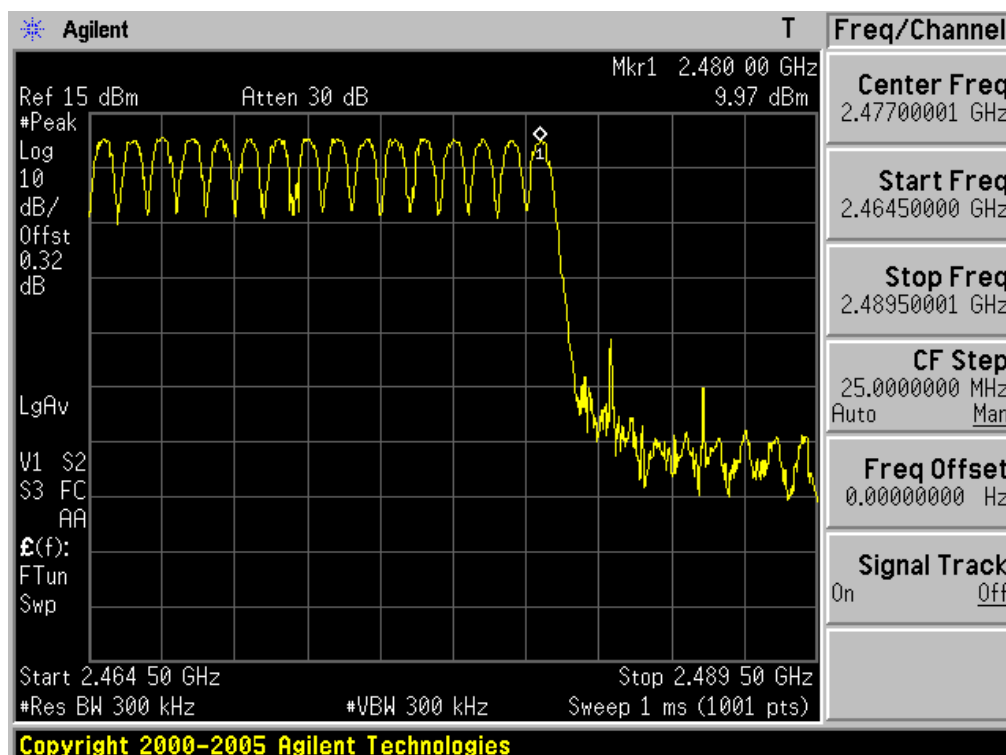
Number of Hopping Frequencies 3

Hopping mode: Enable & Data rate: 1Mbps



Number of Hopping Frequencies 4

Hopping mode: Enable & Data rate: 1Mbps



4.2.3 20 dB Bandwidth

- Procedure:

The bandwidth at 20 dB below the highest inband spectral density was measured with a spectrum analyzer connected to the antenna terminal, while EUT had its hopping function disabled at the highest, middle and the lowest available channels.

After the trace being stable, Use the marker-to-peak function to set the marker to the peak of the emission. Use the marker-delta function to measure 20dB down one side of the emission. Reset the marker-delta function, and move the marker to the other side of the emission, until it is (as close as possible to) even with the reference marker level. The marker-delta reading at this point is the 20 dB bandwidth of the emission.

The spectrum analyzer is set to:

Center frequency = the highest, middle and the lowest Frequencies

Span = approximately 2 or 3 times of the 20 dB bandwidth

RBW = 1% of the 20dB bandwidth or more

Sweep = auto

VBW = \geq RBW

Detector function = peak

Trace = max hold

- Measurement Data: **Comply**

Hopping mode	Date rate	Tested Frequency	Test Results (MHz)
Disable	1Mbps	Lowest	0.740
		Middle	0.750
		Highest	0.750

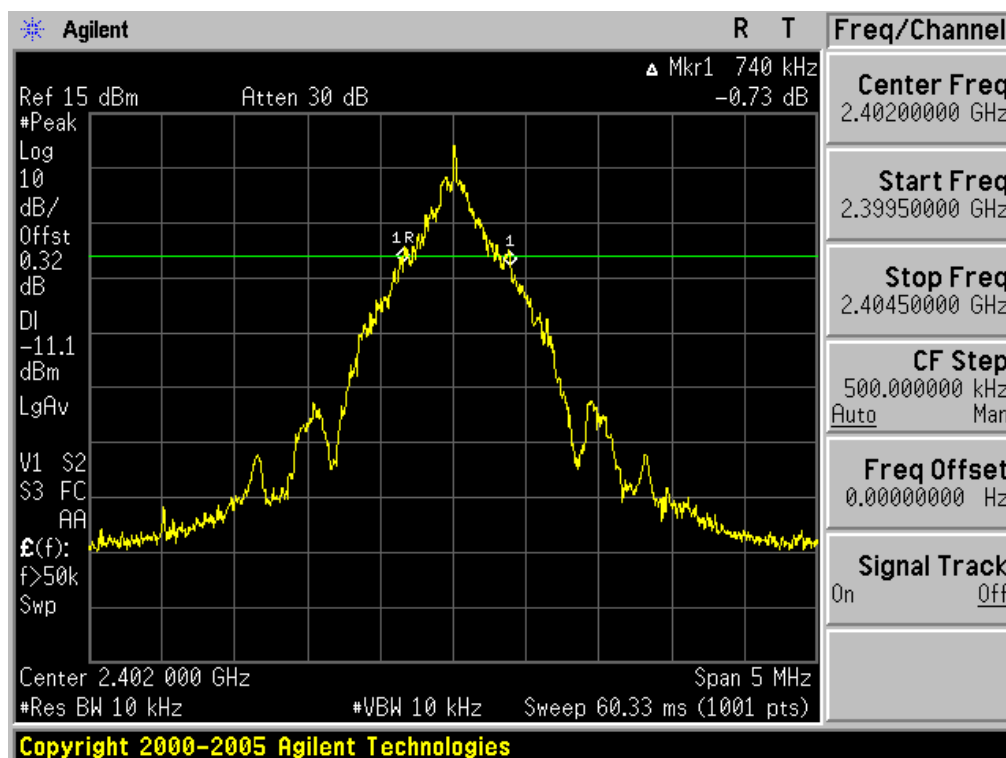
Note 1: See next pages for actual measured spectrum plots.

- Minimum Standard:

None

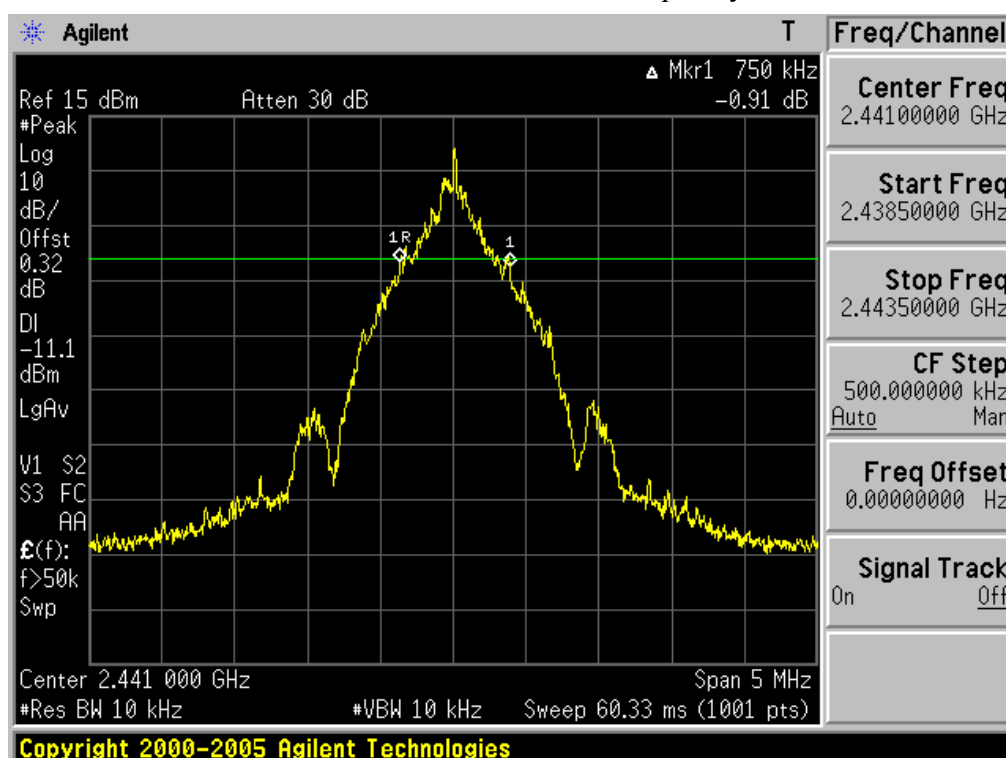
20dB Bandwidth

Lowest Frequency & Data rate: 1Mbps



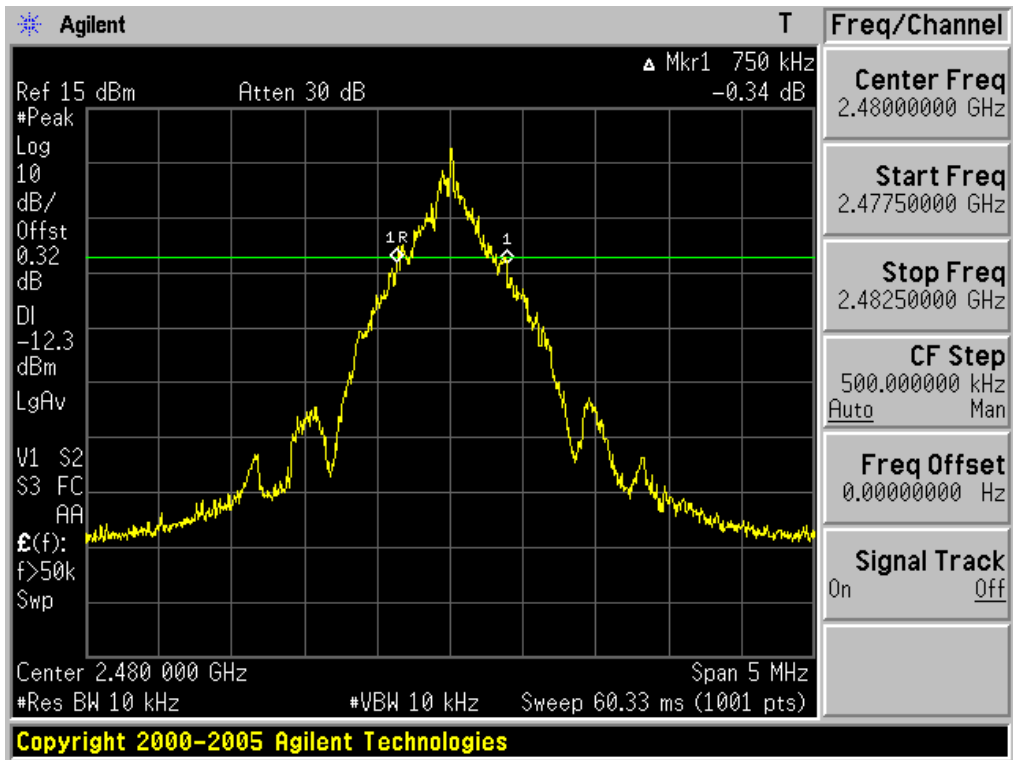
20dB Bandwidth

Middle Frequency & Data rate: 1Mbps



20dB Bandwidth

Highest Frequency & Data rate: 1Mbps



4.2.4 Time of Occupancy (Dwell Time)

- Procedure:

The dwell time was measured with a spectrum analyzer connected to the antenna terminal, while EUT had its hopping function enabled.

The spectrum analyzer is set to:

Center frequency = 2441 MHz

Span = zero

RBW = 1 MHz

VBW = \geq RBW

Trace = max hold

Detector function = peak

- Measurement Data: **Comply**

Hopping mode	Data Rate	Packet Type	Burst On Time (ms)	Period (ms)	Number of hopping Channels	Test Result (s)
Enable	1Mbps	DH 5	0.1959	1.002	79	0.0782

Note 1: Each new transmission event begins on the next channel in the hopping sequence after the final channel used in the previous transmission event.

DWELL TIME=(0.4 x Number of hopping Channels) x Burst On time / (period x Number of hopping Channels)

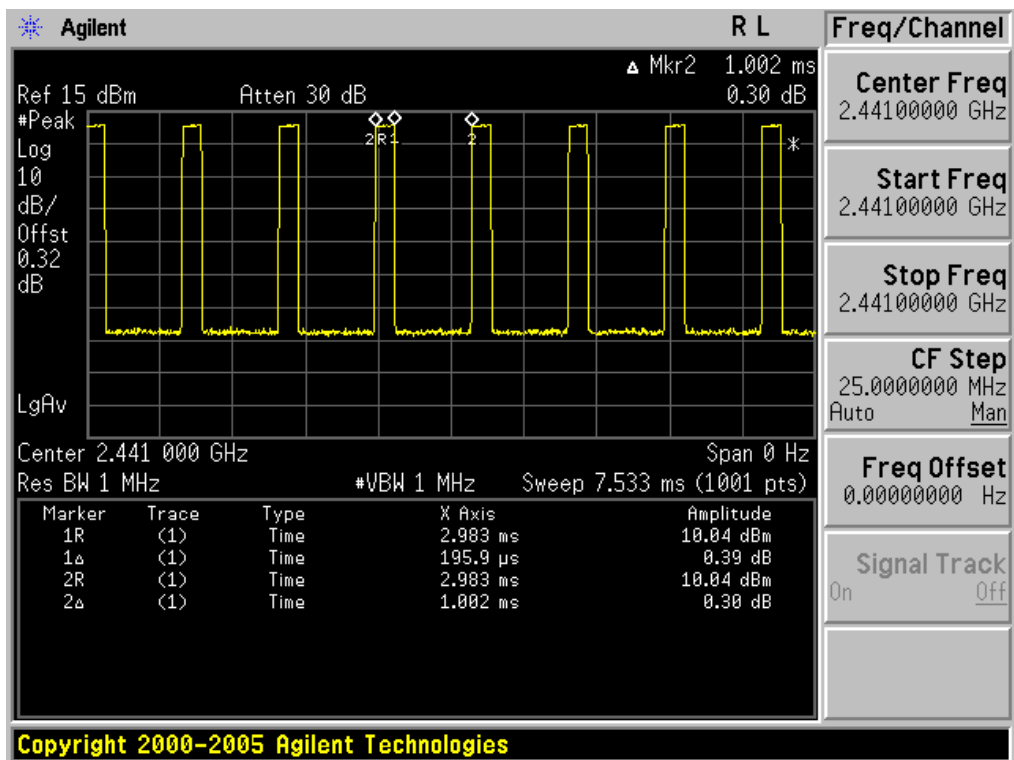
Note 2: See next pages for actual measured spectrum plots.

- Minimum Standard:

No greater than 0.4 seconds

Time of Occupancy

Hopping mode: Enable & Data rate: 1Mbps



4.2.5 Peak Output Power

- Procedure:

The peak output power was measured with a spectrum analyzer connected to the antenna terminal, while EUT had its hopping function disabled at the highest, middle and the lowest available channels.

After the trace being stable, Use the marker-to-peak function to set the marker to the peak of the emission. The indicated level is the peak output power.

The spectrum analyzer is set to:

Center frequency = the highest, middle and the lowest Frequencies

Span = approximately 5 times of the 20 dB bandwidth

RBW = greater than the 20dB bandwidth of the emission being measured

VBW = \geq RBW

Detector function = peak

Trace = max hold

Sweep = auto

- Measurement Data: **Comply**

Hopping mode	Data rate	Tested Frequency	Test Results	
			dBm	mW
Disable	1Mbps	Lowest	10.78	11.967
		Middle	10.60	11.482
		Highest	9.56	9.036

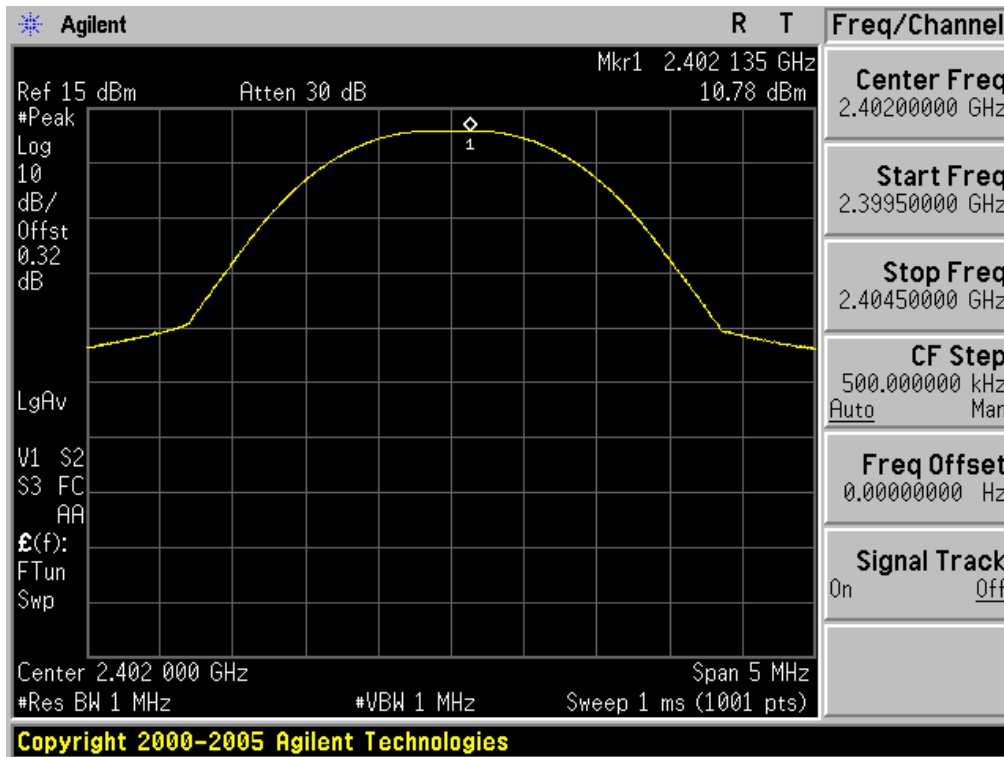
Note 1: See next pages for actual measured spectrum plots.

- Minimum Standard:

For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 non-overlapping hopping channels, and all frequency hopping systems in the 5725-5850 MHz band: **1 Watt**. For all other frequency hopping systems in the 2400-2483.5 MHz band: **0.125 Watts**

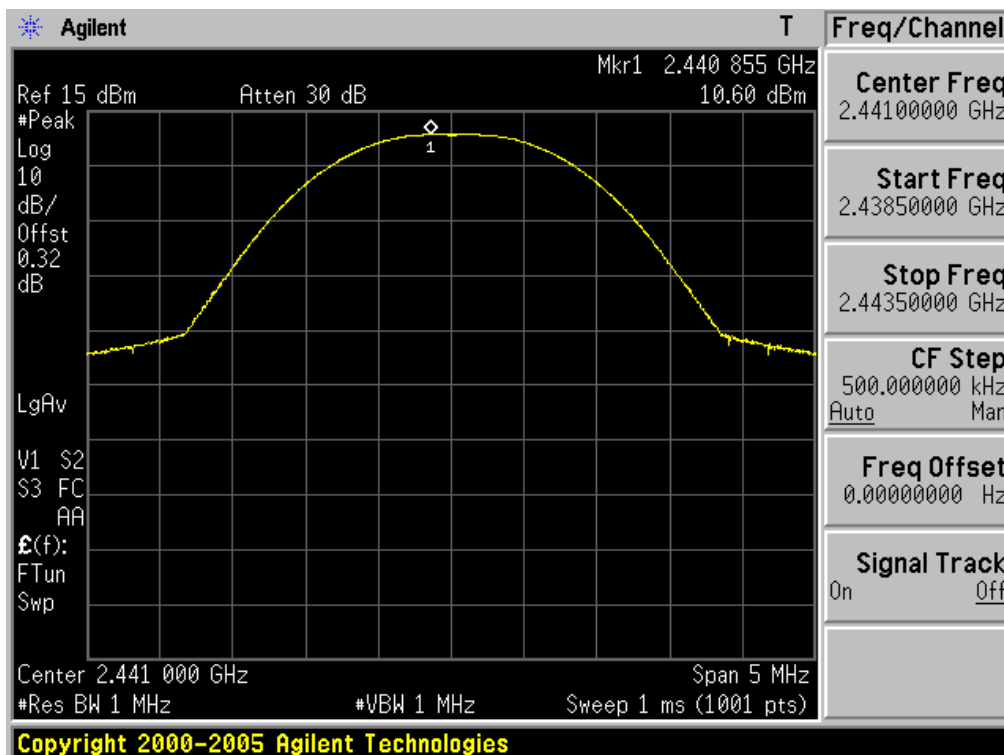
Peak Output Power

Lowest Frequency & Data rate: 1Mbps



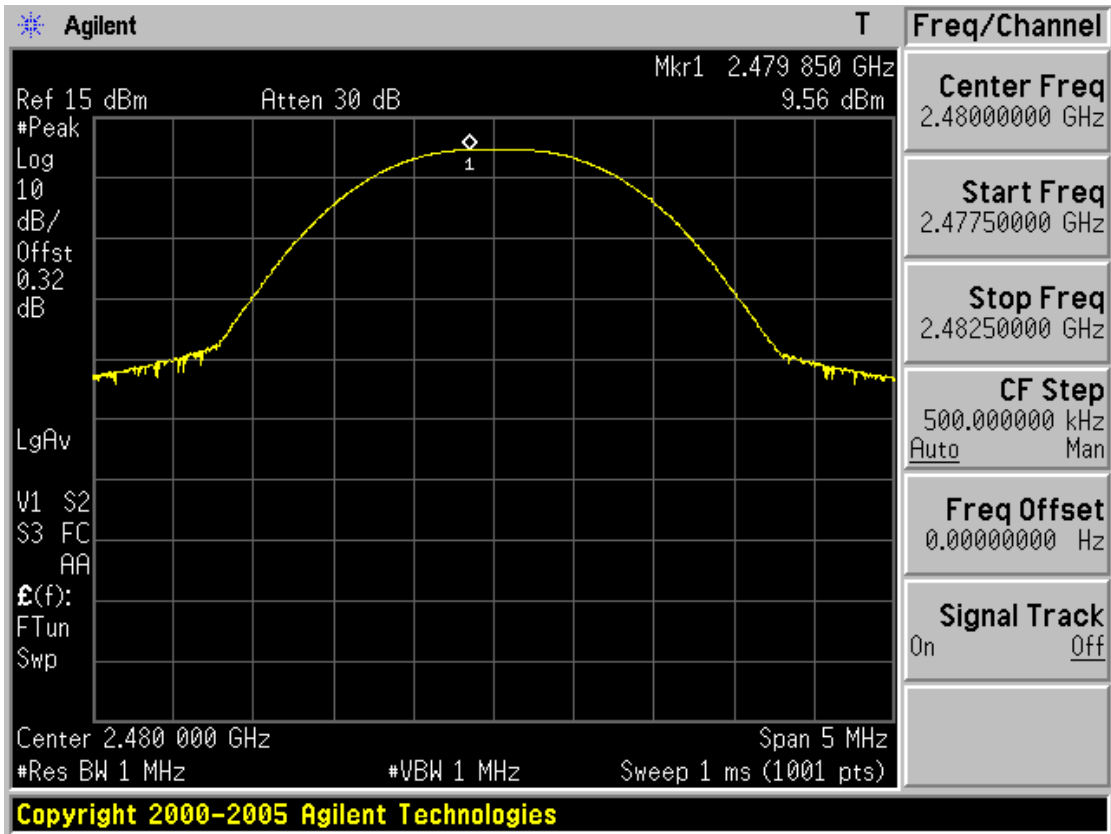
Peak Output Power

Middle Frequency & Data rate: 1Mbps



Peak Output Power

Highest Frequency & Data rate: 1Mbps



	0	0	1	0
0	0	0	0	0
0	0	0	0	0
1	0	0	0	0
0	0	0	0	0

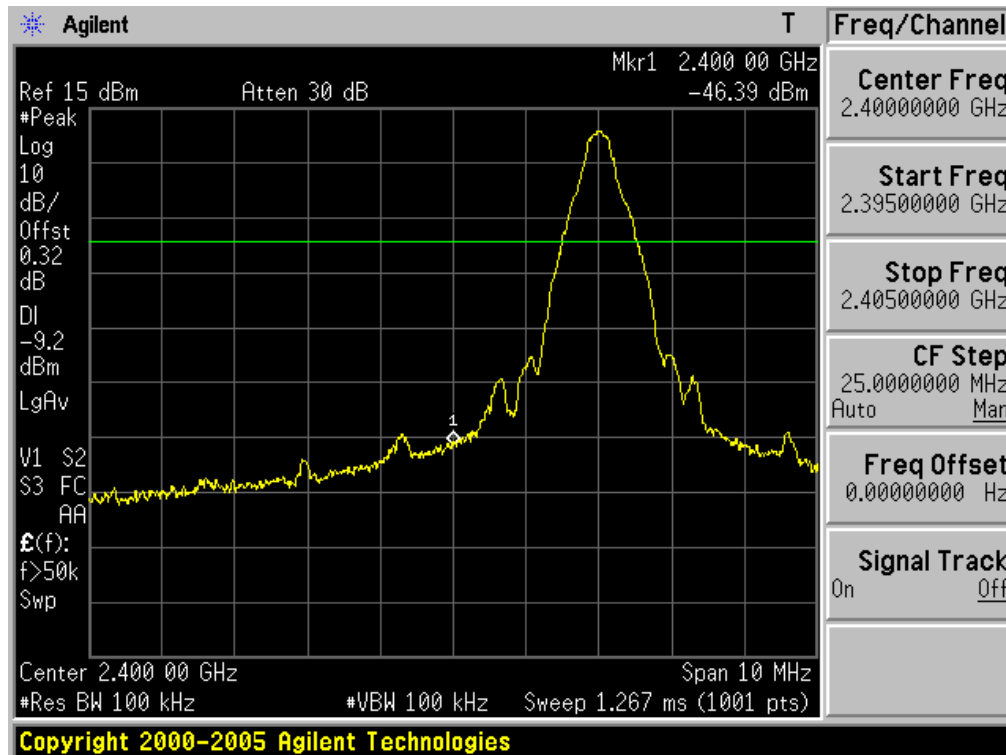
1 0 1 0

TABLE 1
 Summary of the 1000 Genomes Project

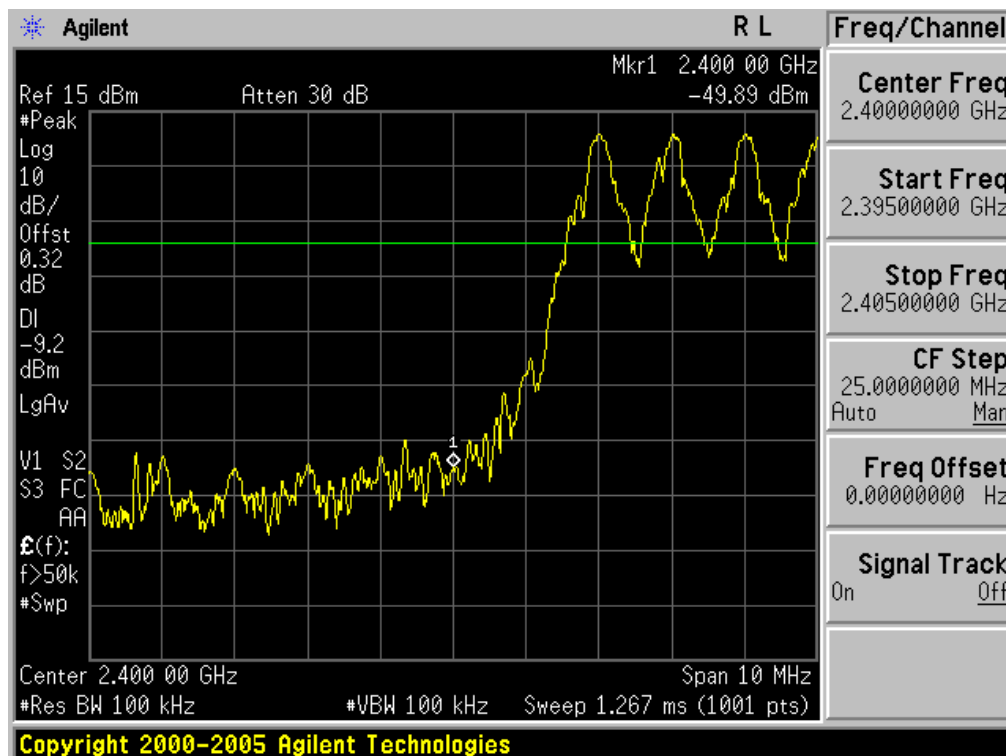
100

[illegible]

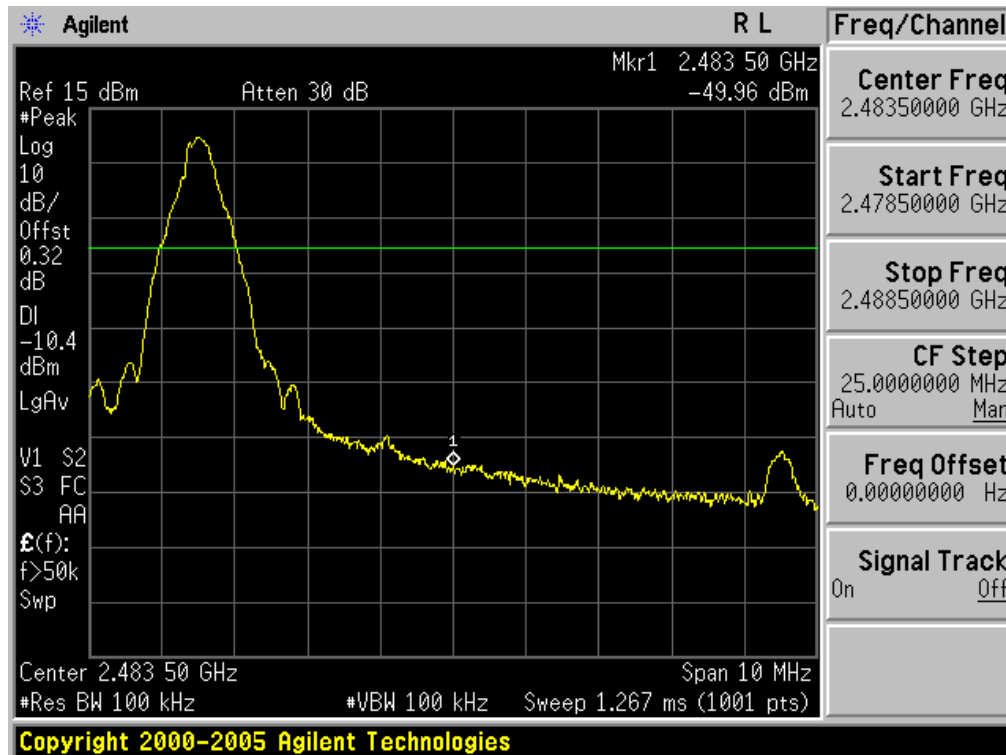
Low Band-edge Hopping mode: Disable & Data rate: 1Mbps



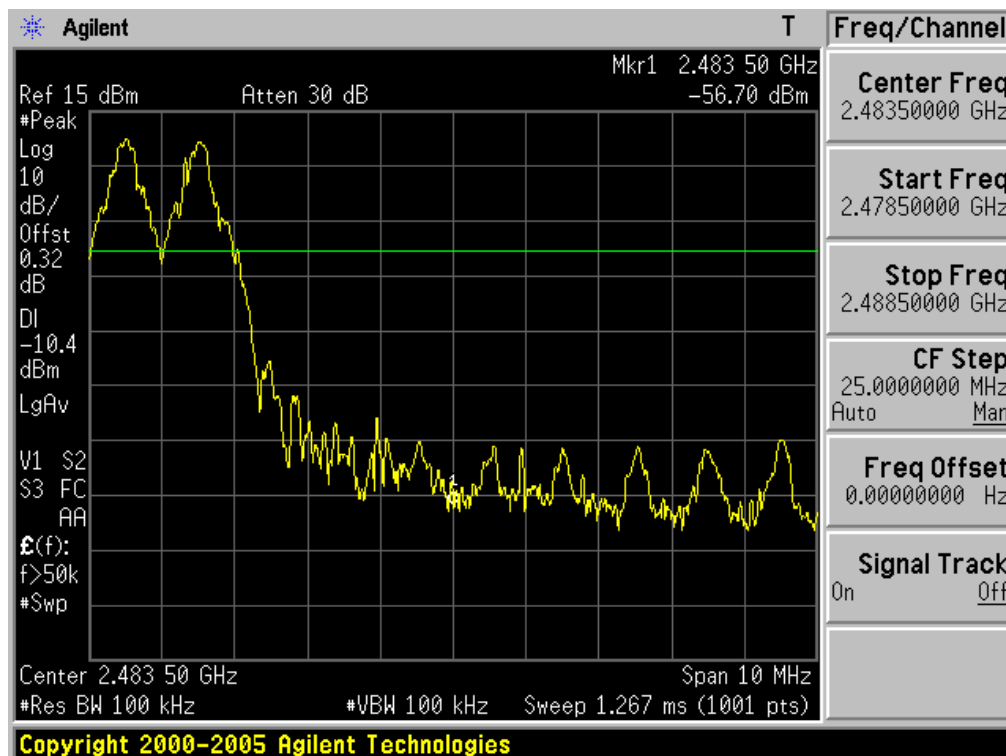
Low Band-edge Hopping mode: Enable & Data rate: 1Mbps



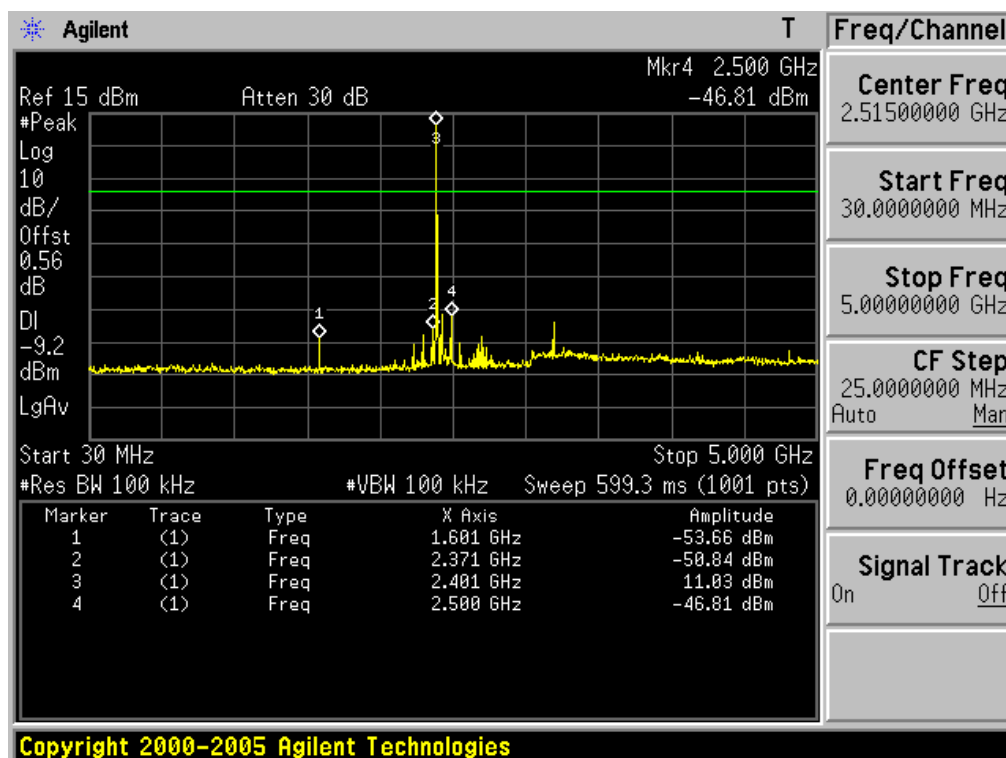
High Band-edge Hopping mode: Disable & Data rate: 1Mbps



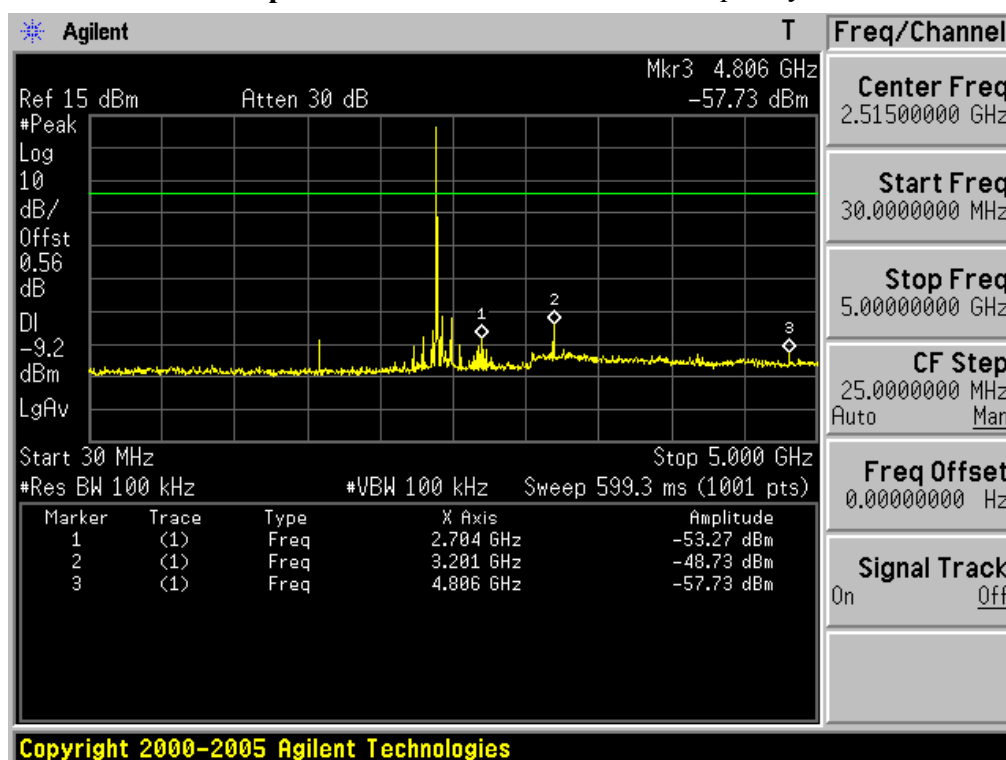
High Band-edge Hopping mode: Enable & Data rate: 1Mbps



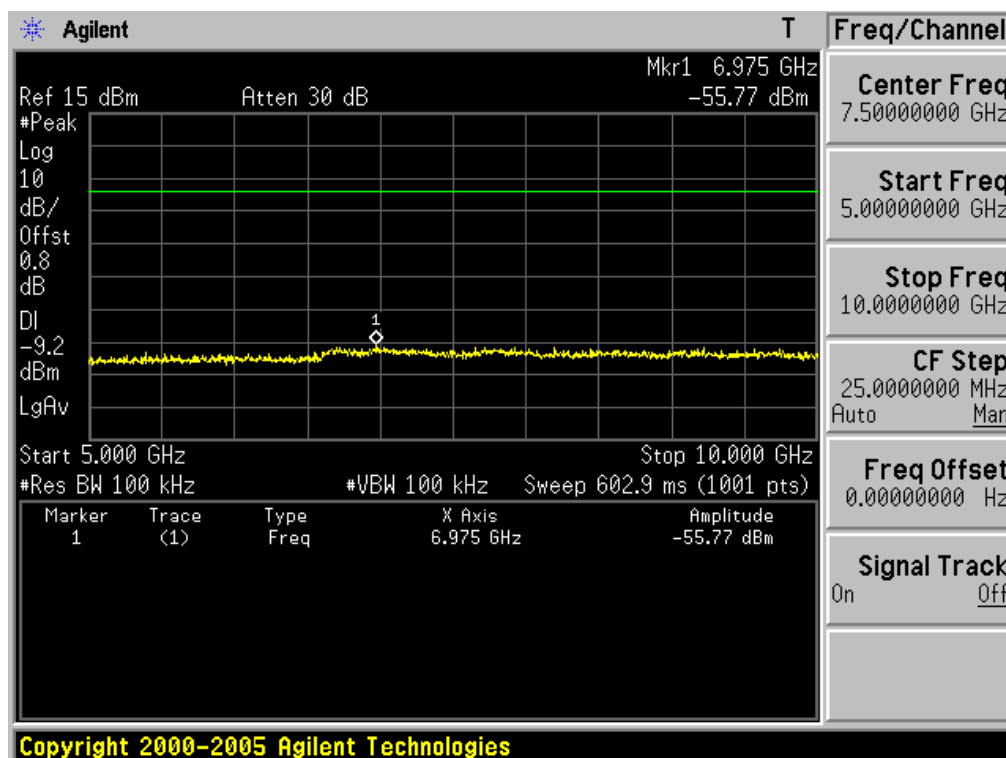
30MHz ~ 5GHz Conducted Spurious Emissions Lowest Frequency & Data rate: 1Mbps



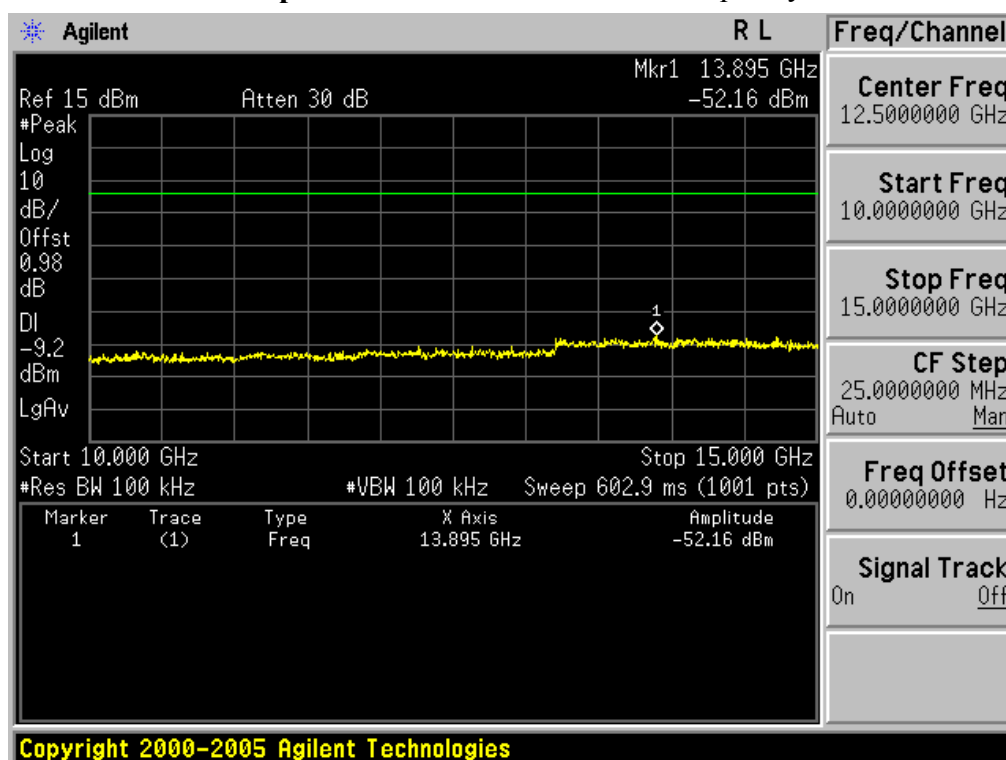
30MHz ~ 5GHz Conducted Spurious Emissions Lowest Frequency & Data rate: 1Mbps



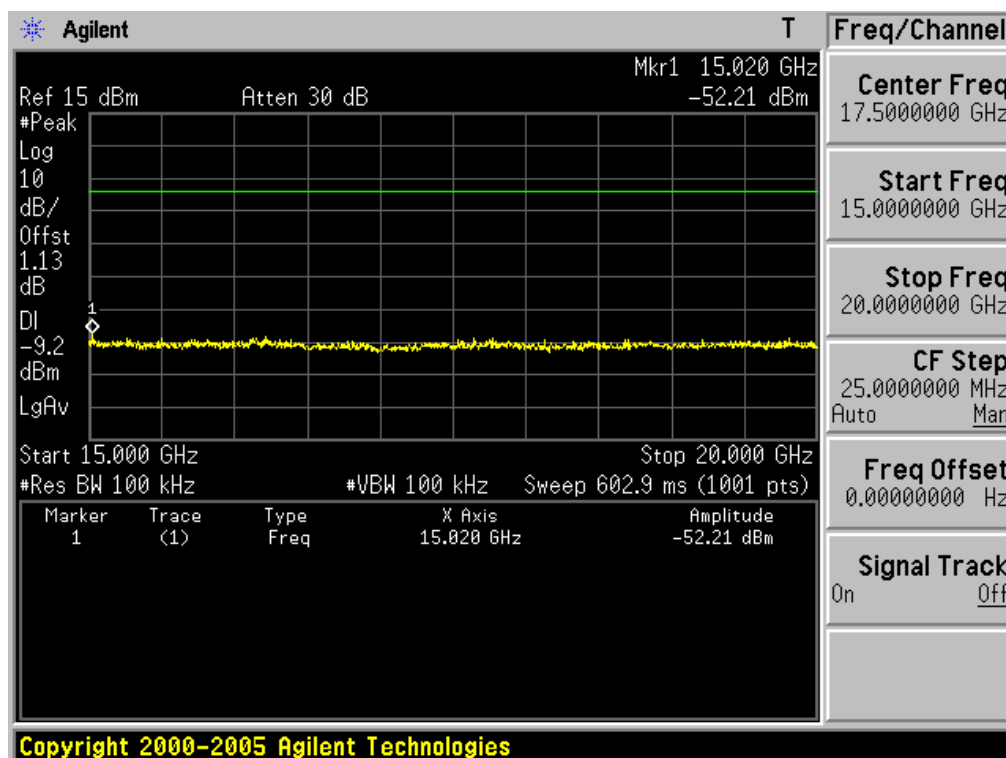
5GHz ~ 10GHz Conducted Spurious Emissions Lowest Frequency & Data rate: 1Mbps



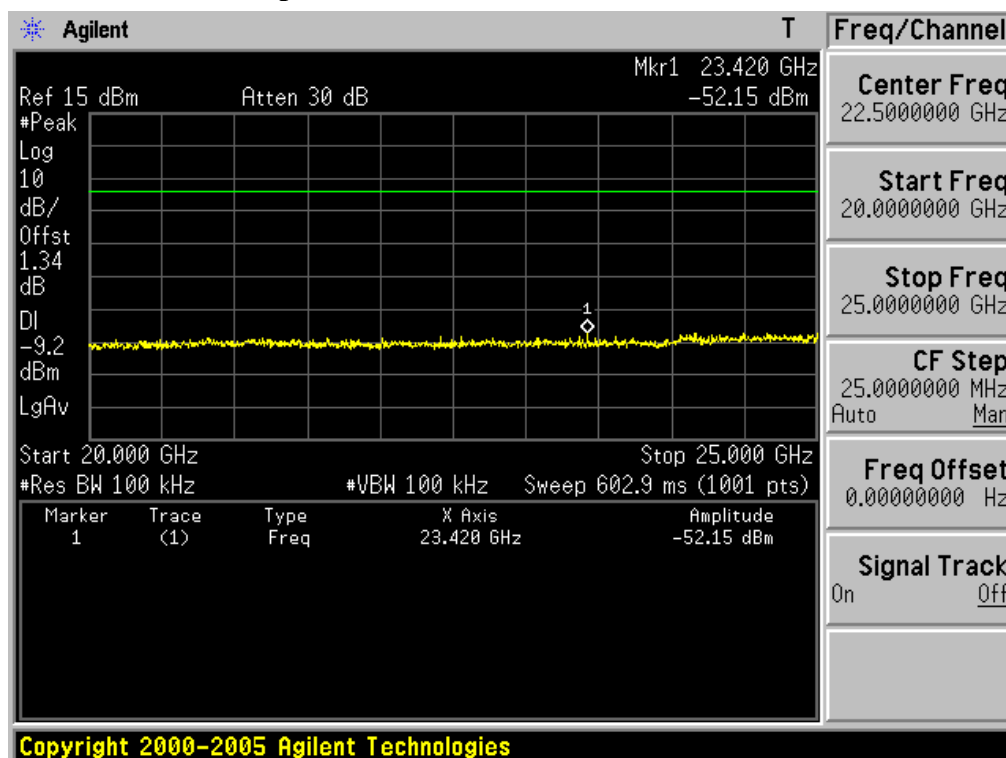
10GHz ~ 15GHz Conducted Spurious Emissions Lowest Frequency & Data rate: 1Mbps



15GHz ~ 20GHz Conducted Spurious Emissions Lowest Frequency & Data rate: 1Mbps

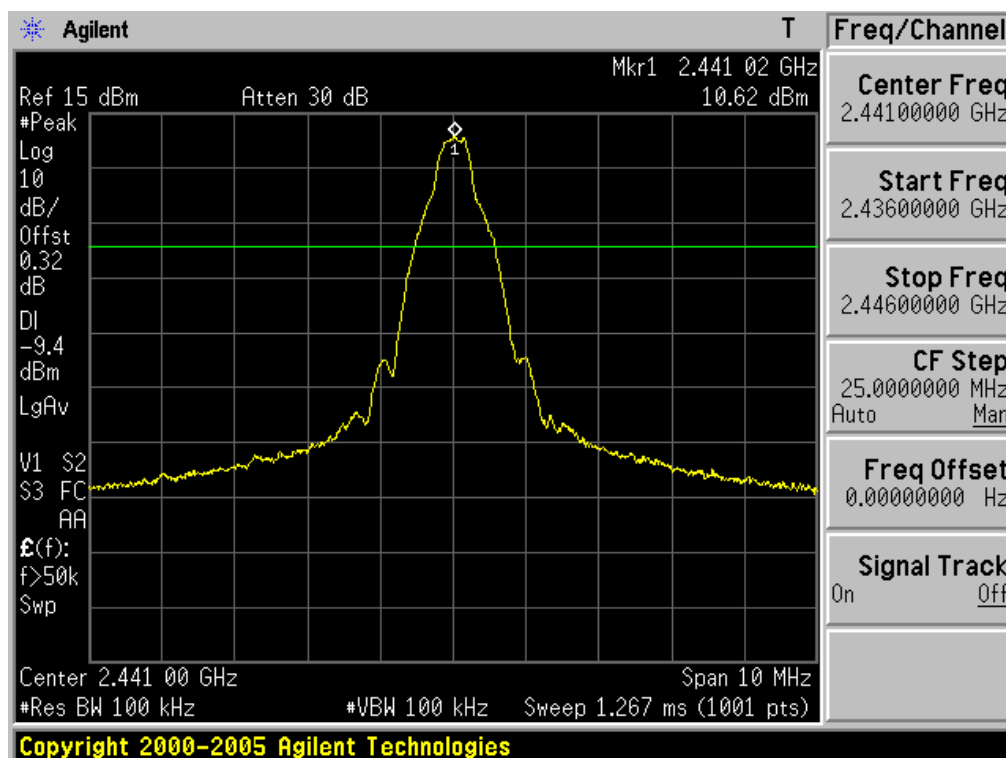


20GHz ~ 25GHz Conducted Spurious Emissions Lowest Frequency & Data rate: 1Mbps



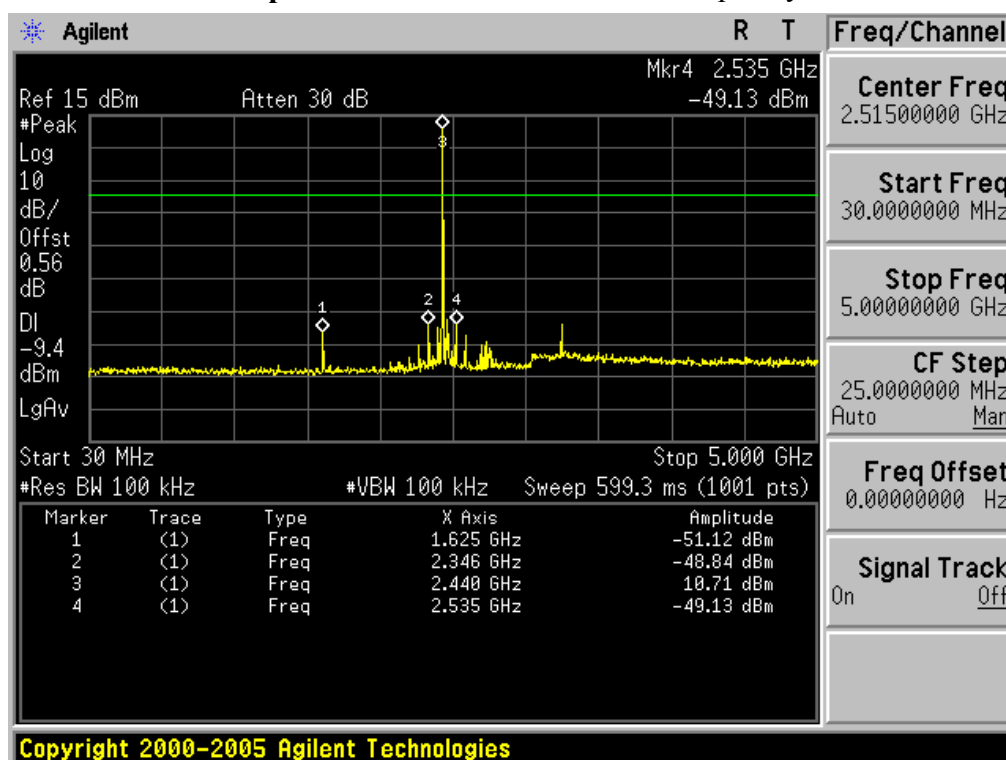
Reference for limit

Middle Frequency & Data rate: 1Mbps

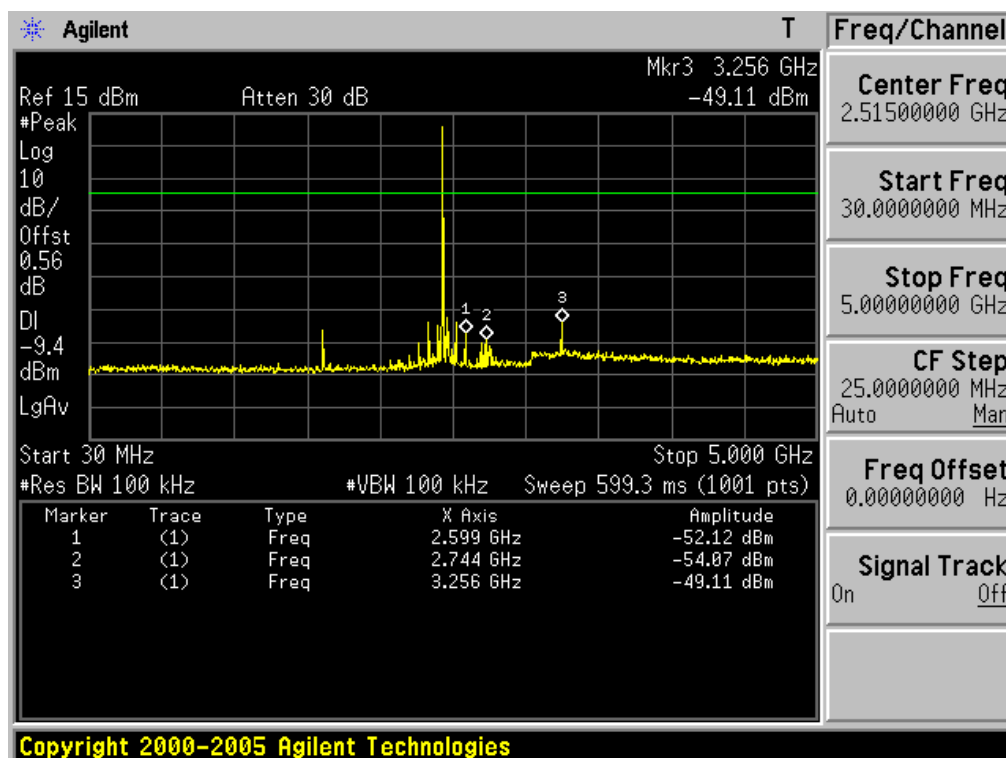


30MHz ~ 5GHz Conducted Spurious Emissions

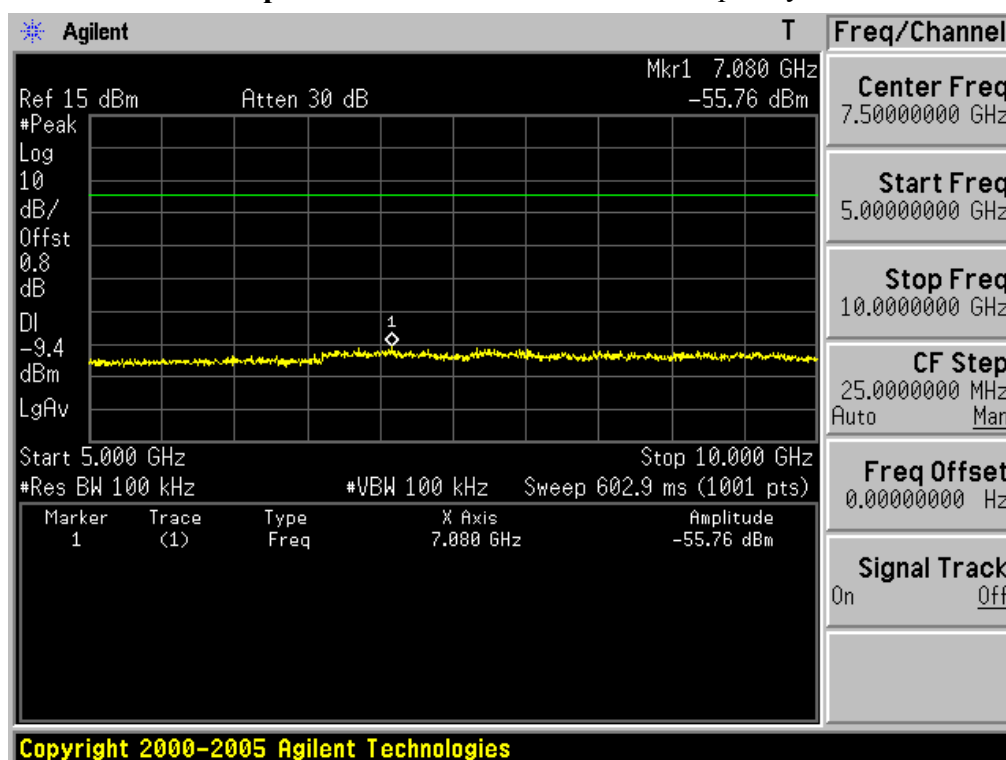
Middle Frequency & Data rate: 1Mbps



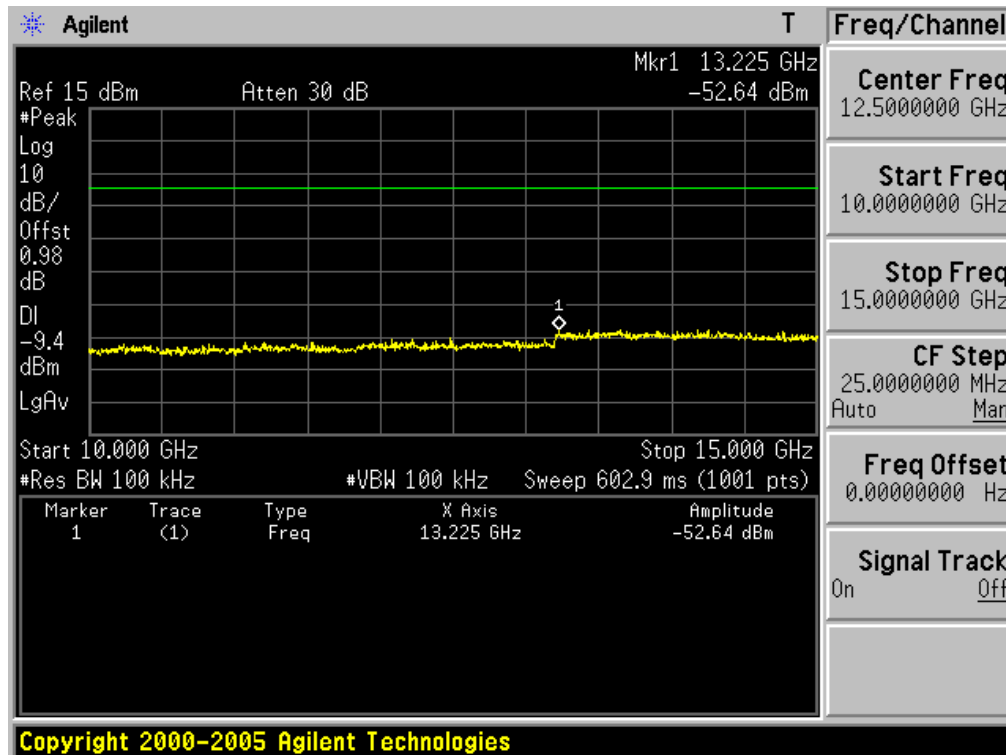
30MHz ~ 5GHz Conducted Spurious Emissions Middle Frequency & Data rate: 1Mbps



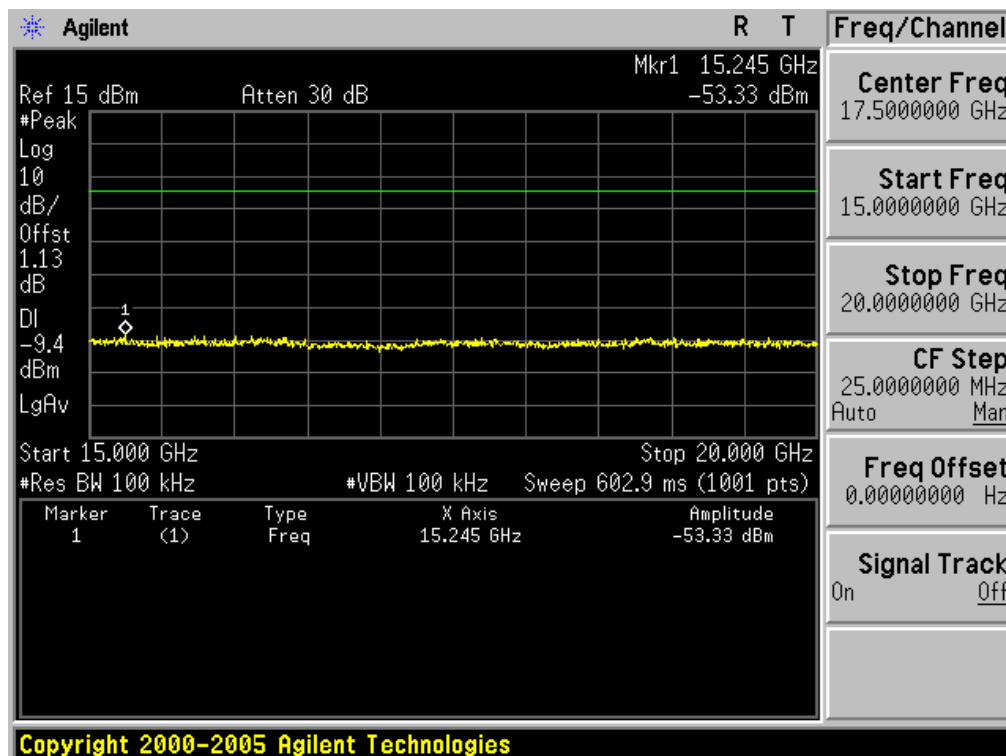
5GHz ~ 10GHz Conducted Spurious Emissions Middle Frequency & Data rate: 1Mbps



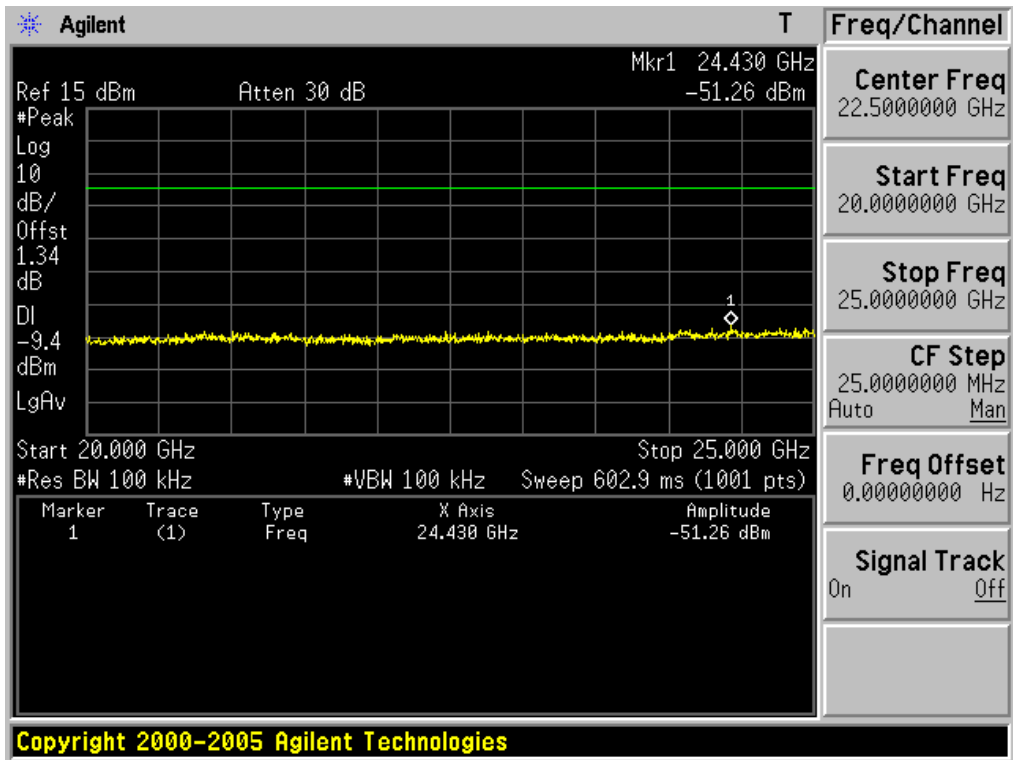
10GHz ~ 15GHz Conducted Spurious Emissions Middle Frequency & Data rate: 1Mbps



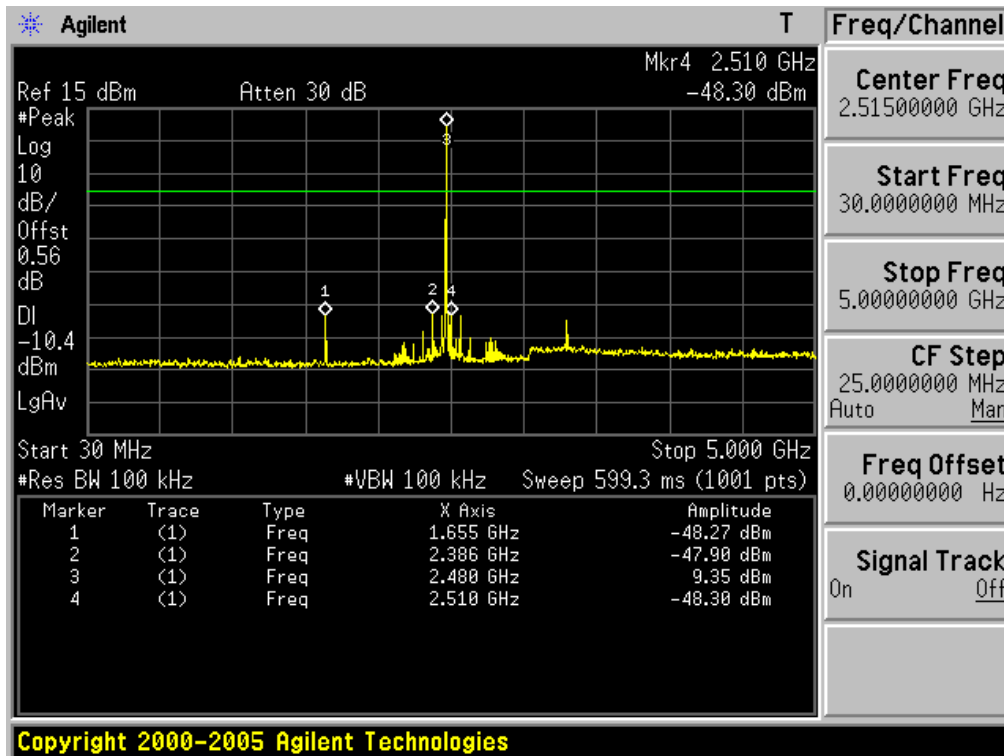
15GHz ~ 20GHz Conducted Spurious Emissions Middle Frequency & Data rate: 1Mbps



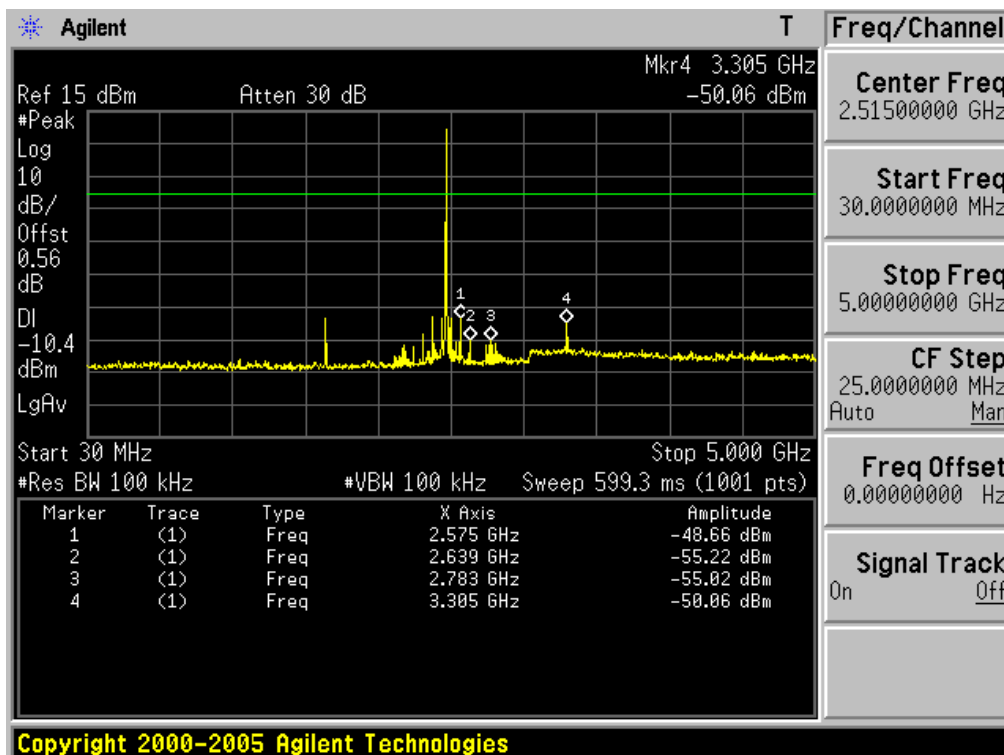
20GHz ~ 25GHz Conducted Spurious Emissions Middle Frequency & Data rate: 1Mbps



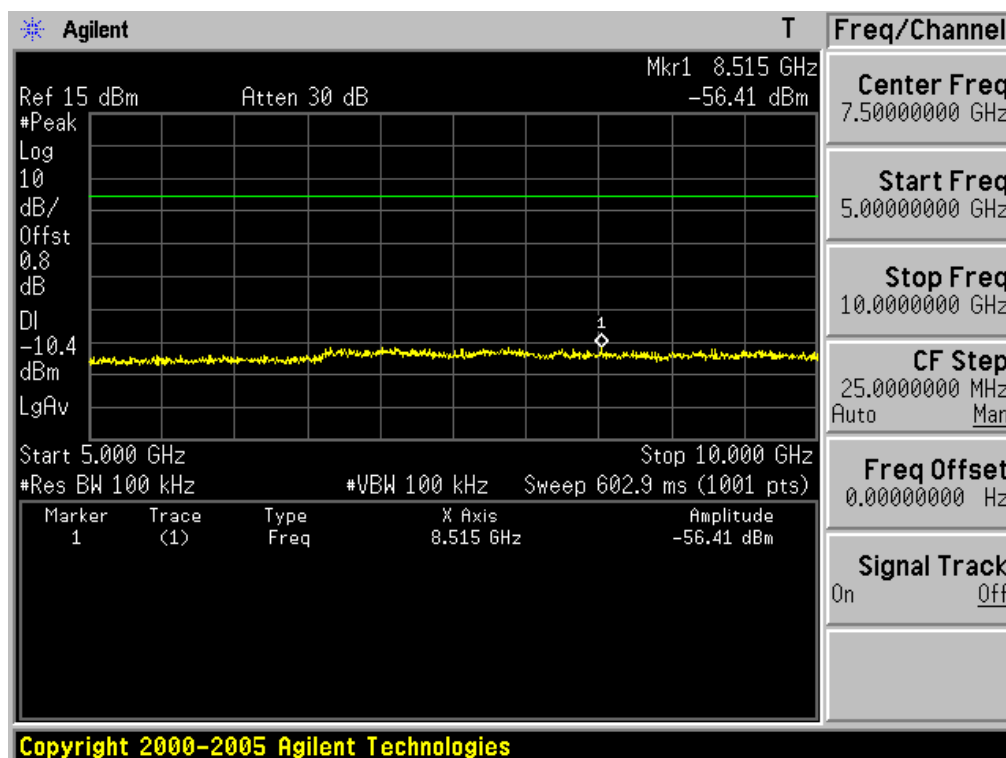
30MHz ~ 5GHz Conducted Spurious Emissions Highest Frequency & Data rate: 1Mbps



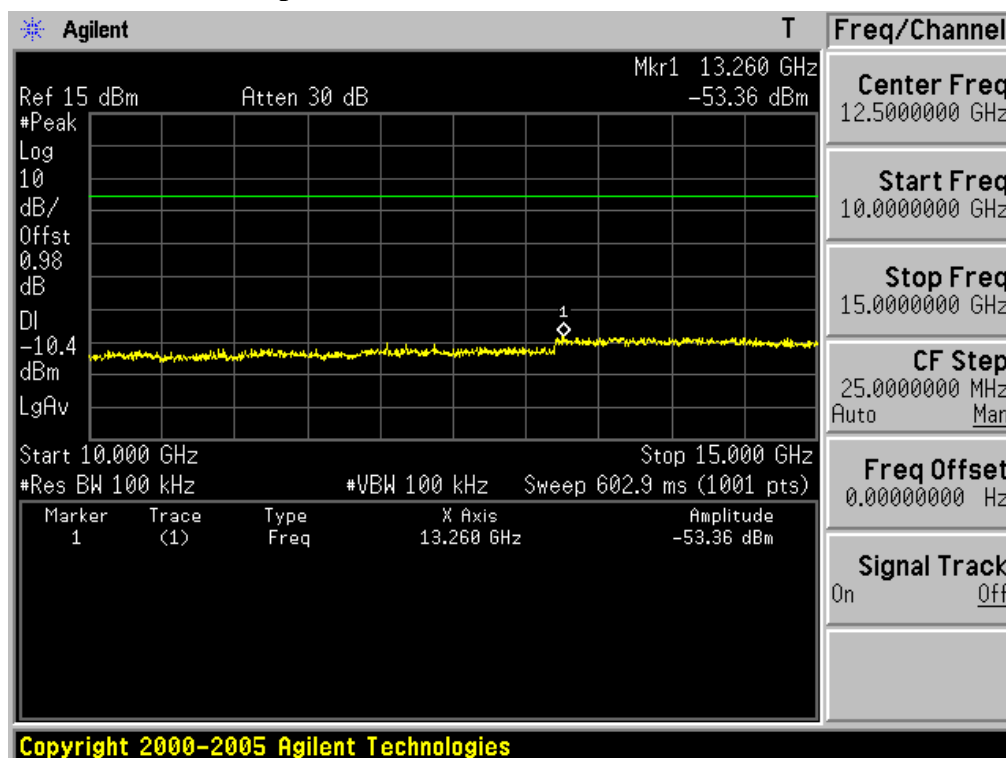
30MHz ~ 5GHz Conducted Spurious Emissions Highest Frequency & Data rate: 1Mbps



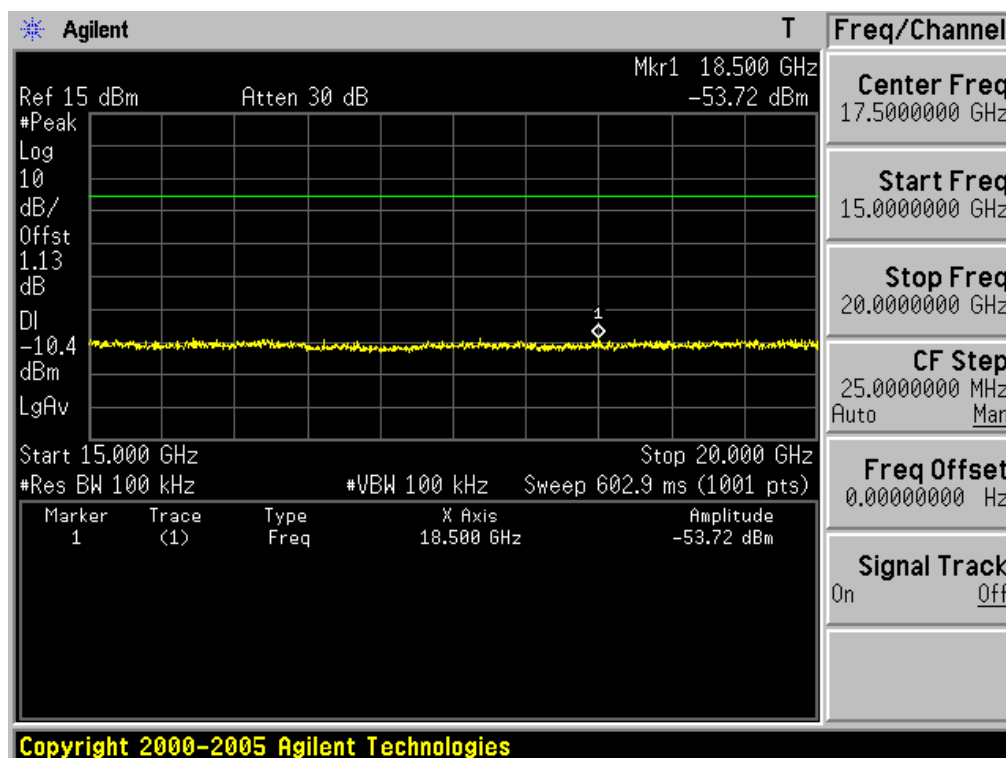
5GHz ~ 10GHz Conducted Spurious Emissions Highest Frequency & Data rate: 1Mbps



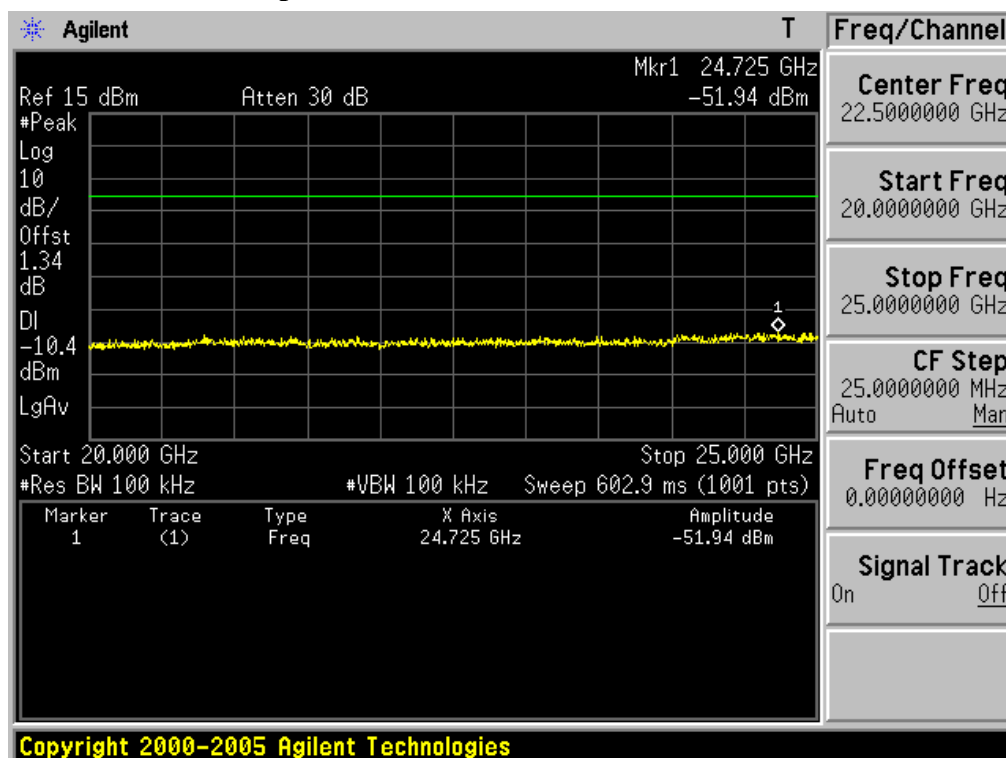
10GHz ~ 15GHz Conducted Spurious Emissions Highest Frequency & Data rate: 1Mbps



15GHz ~ 20GHz Conducted Spurious Emissions Highest Frequency & Data rate: 1Mbps



20GHz ~ 25GHz Conducted Spurious Emissions Highest Frequency & Data rate: 1Mbps



4.2.7 Radiated Spurious Emissions

- Procedure:

The EUT was placed on a 0.8m high wooden table inside a shielded enclosure. An antenna was placed near the EUT and measurements of frequencies and amplitudes of field strengths were recorded for reference during final measurements. For final radiated testing, measurements were performed in OATS. Measurements were performed with the EUT oriented in 3 orthogonal axis and rotated 360 degrees to determine worst-case orientation for maximum emissions.

The spectrum analyzer is set to:

Tested frequency = Low, Middle, High Frequencies

Frequency Range = 30 MHz ~ 10th harmonic.

RBW and VBW = 1. Frequency range: 30MHz ~ 1GHz

RBW = 120KHz / VBW = \geq RBW

2. Frequency range: 1GHz ~ 10th harmonics

Peak mode: RBW = 1MHz / VBW = \geq RBW

Average mode: RBW = 1MHz / VBW = 10Hz

Detector function = Peak

Sweep = auto

Trace = max hold

- Measurement Data: **Comply**

Note 1: See next pages for actual measured spectrum plots and data.

- Minimum Standard:

▪ FCC Part 15.209(a) and (b)

Frequency (MHz)	Limit (uV/m) @ 3m
30 ~ 88	100 **
88 ~ 216	150 **
216 ~ 960	200 **
Above 960	500

** Except as provided in 15.209(g), fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54-72 MHz, 76-88MHz, 174-216MHz or 470-806MHz. However, operation within these frequency bands is permitted under other sections of this Part, e.g. 15.231 and 15.241.

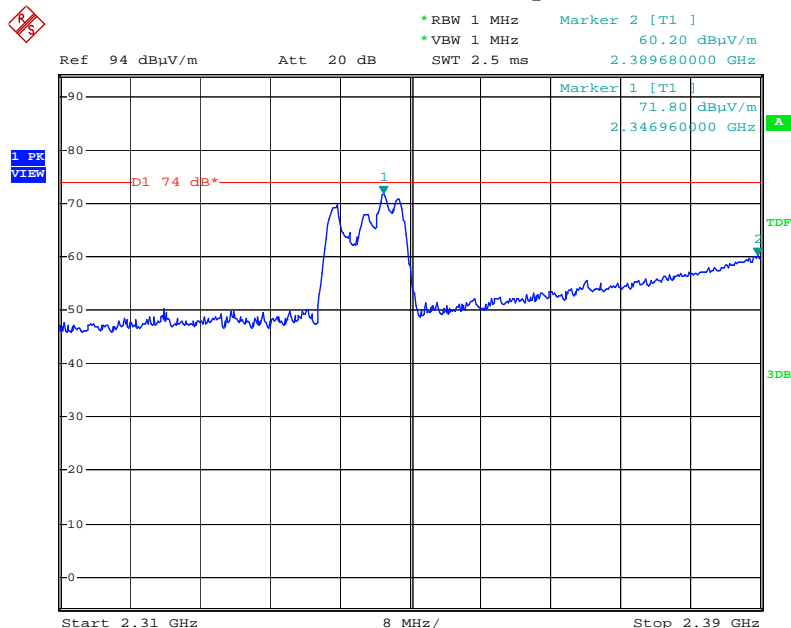
▪ FCC Part 15.205 (a): Only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	MHz	GHz	GHz
0.009 ~ 0.110	8.41425 ~ 8.41475	108 ~ 121.94	1300 ~ 1427	3600 ~ 4400	14.47 ~ 14.5
0.495 ~ 0.505	12.29 ~ 12.293	123 ~ 138	1435 ~ 1626.5	4.5 ~ 5.15	15.35 ~ 16.2
2.1735 ~ 2.1905	12.51975 ~ 12.52025	149.9 ~ 150.05	1645.5 ~ 1646.5	5.35 ~ 5.46	17.7 ~ 21.4
4.125 ~ 4.128	12.57675 ~ 12.57725	156.52475 ~ 156.52525	1660 ~ 1710	7.25 ~ 7.75	22.01 ~ 23.12
4.17725 ~ 4.17775	13.36 ~ 13.41	156.7 ~ 156.9	1718.8 ~ 1722.2	8.025 ~ 8.5	23.6 ~ 24.0
4.20725 ~ 4.20775	16.42 ~ 16.423	162.0125 ~ 167.17	2200 ~ 2300	9.0 ~ 9.2	31.2 ~ 31.8
6.215 ~ 6.218	16.69475 ~ 16.69525	167.72 ~ 173.2	2310 ~ 2390	9.3 ~ 9.5	36.43 ~ 36.5
6.26775 ~ 6.26825	16.80425 ~ 16.80475	240 ~ 285	2483.5 ~ 2500	10.6 ~ 12.7	Above 38.6
6.31175 ~ 6.31225	25.5 ~ 25.67	322 ~ 335.4	2655 ~ 2900	13.25 ~ 13.4	
8.291 ~ 8.294	37.5 ~ 38.25	399.90 ~ 410	3260 ~ 3267		
8.362 ~ 8.366	73 ~ 74.6	608 ~ 614	3332 ~ 3339		
8.37625 ~ 8.38675	74.8 ~ 75.2	960 ~ 1240	3345.8 ~ 3358		

▪ **FCC Part 15.205(b):** The field strength of emissions appearing within these frequency bands shall not exceed the limits shown in §15.209. At frequencies equal to or less than 1000 MHz, compliance with the limits in §15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000 MHz, compliance with the emission limits in §15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in §15.35 apply to these measurements.

Restricted Band Edge Lowest Frequency & Data rate: 1Mbps

Peak mode / Horizontal polarization

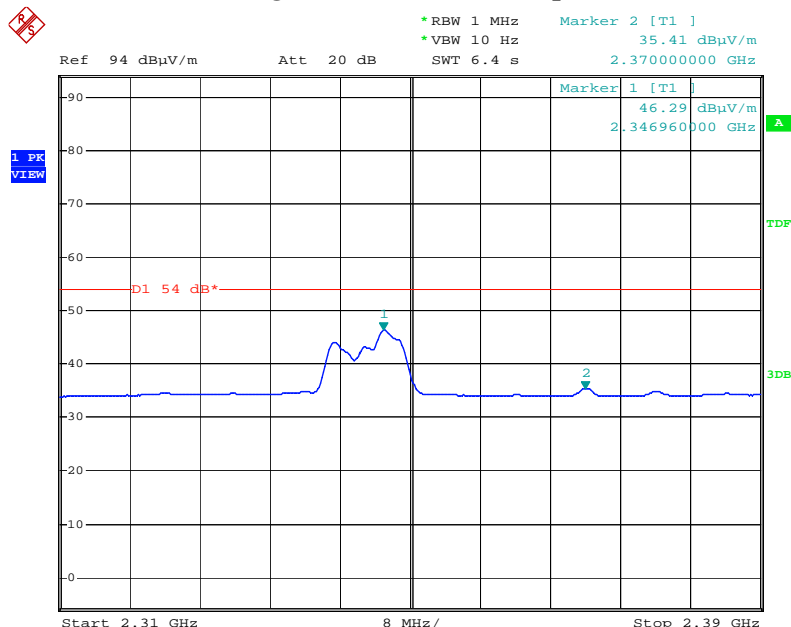


Date: 6.OCT.2009 08:09:36

Marker 1's emissions of the low band edge test plots are emissions from WIMAX downlink signal in Korea.

Restricted Band Edge Lowest Frequency & Data rate: 1Mbps

Average mode / Horizontal polarization

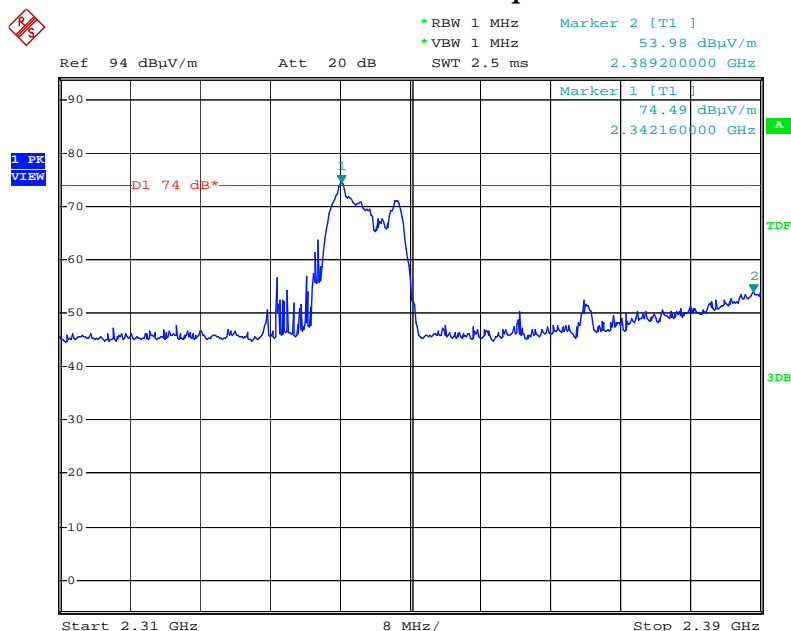


Date: 6.OCT.2009 08:10:48

Marker 1's emissions of the low band edge test plots are emissions from WIMAX downlink signal in Korea.

Restricted Band Edge Lowest Frequency & Data rate: 1Mbps

Peak mode / Vertical polarization

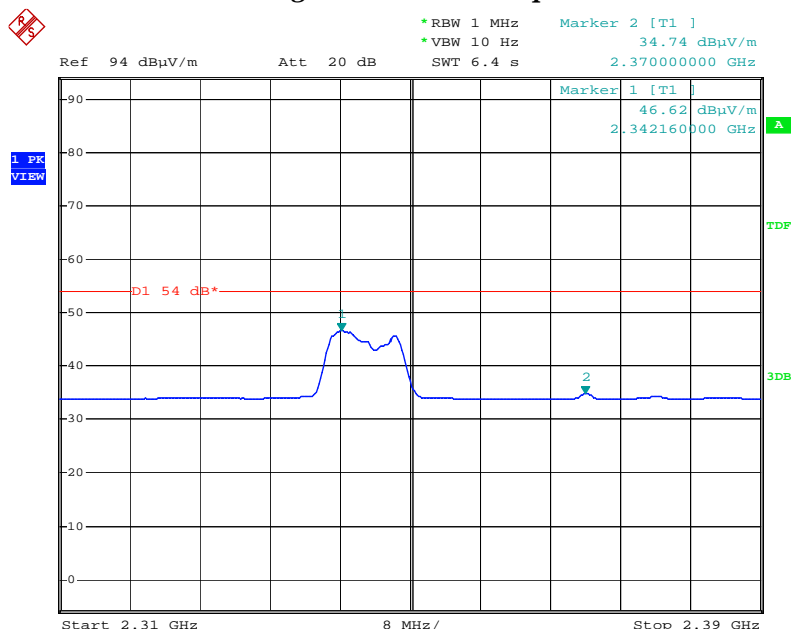


Date: 6.OCT.2009 08:20:14

Marker 1's emissions of the low band edge test plots are emissions from WIMAX downlink signal in Korea.

Restricted Band Edge Lowest Frequency & Data rate: 1Mbps

Average mode / Vertical polarization

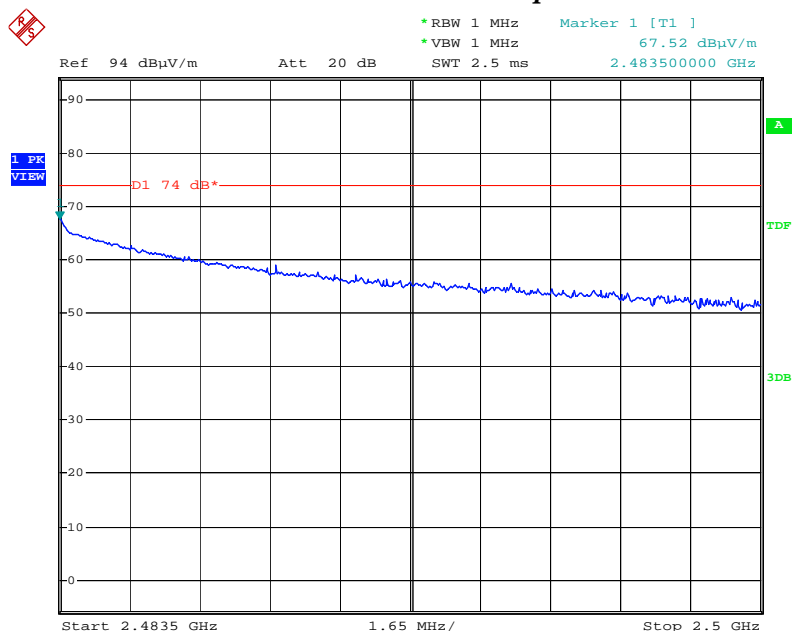


Date: 6.OCT.2009 08:21:48

Marker 1's emissions of the low band edge test plots are emissions from WIMAX downlink signal in Korea.

Restricted Band Edge Highest Frequency & Data rate: 1Mbps

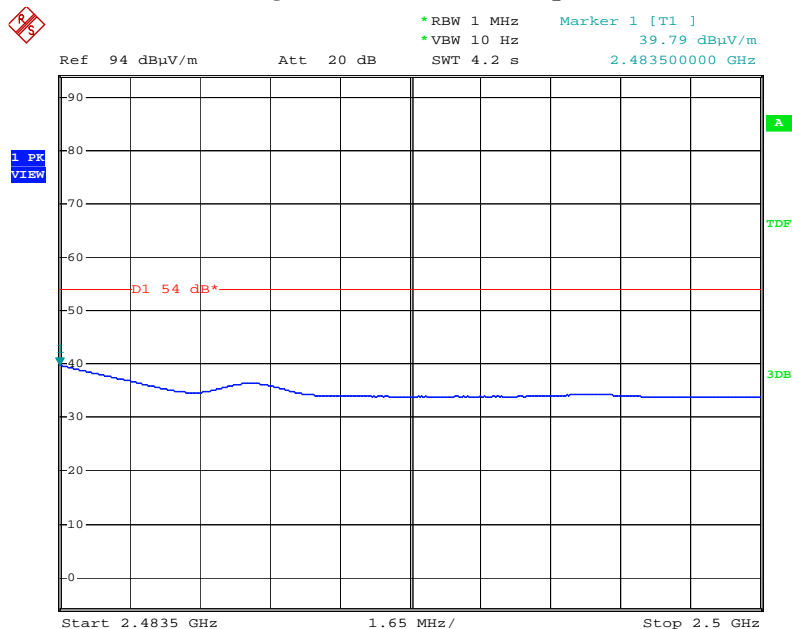
Peak mode / Horizontal polarization



Date: 6.OCT.2009 07:46:16

Restricted Band Edge Highest Frequency & Data rate: 1Mbps

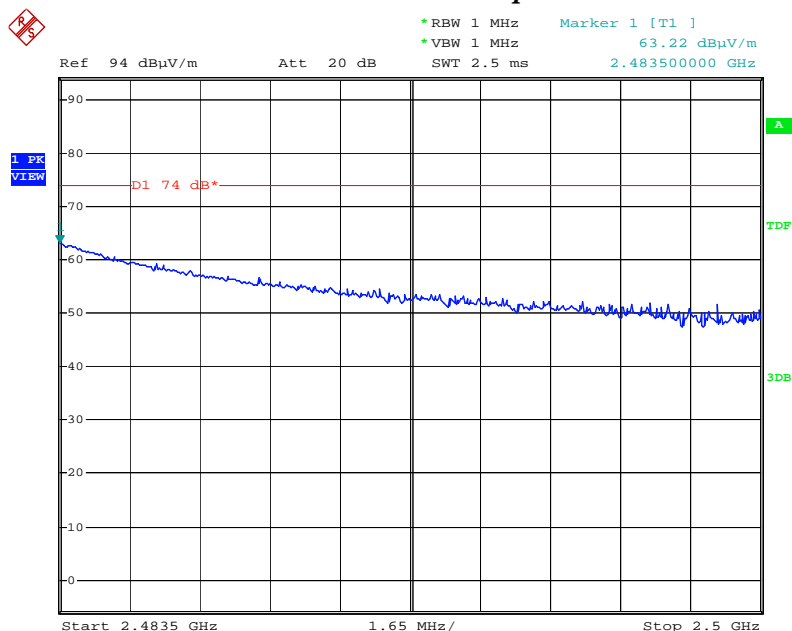
Average mode / Horizontal polarization



Date: 6.OCT.2009 07:47:26

Restricted Band Edge Highest Frequency & Data rate: 1Mbps

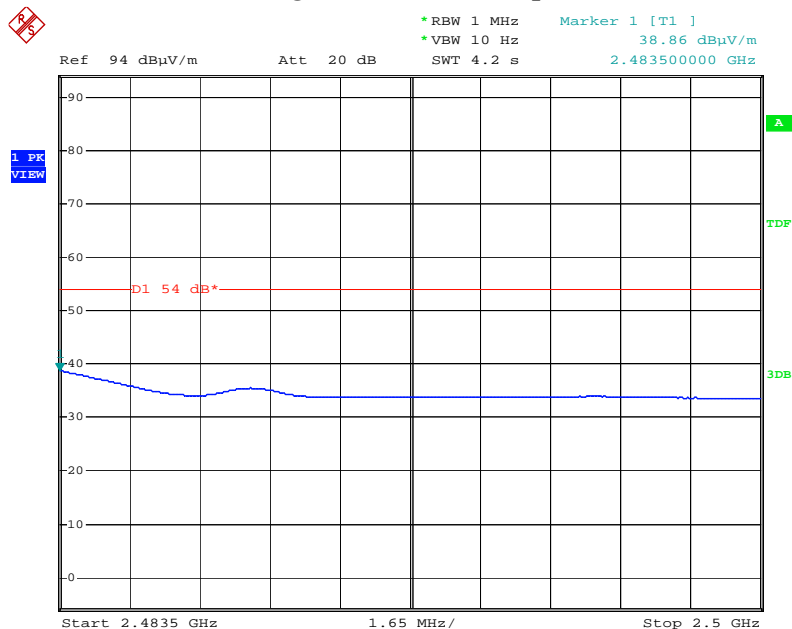
Peak mode / Vertical polarization



Date: 6.OCT.2009 07:40:17

Restricted Band Edge Highest Frequency & Data rate: 1Mbps

Average mode / Vertical polarization



Date: 6.OCT.2009 07:41:20

30MHz ~ 1GHz Radiated Spurious Emissions

Lowest Frequency & Data rate: 1Mbps



RADIATED EMISSION

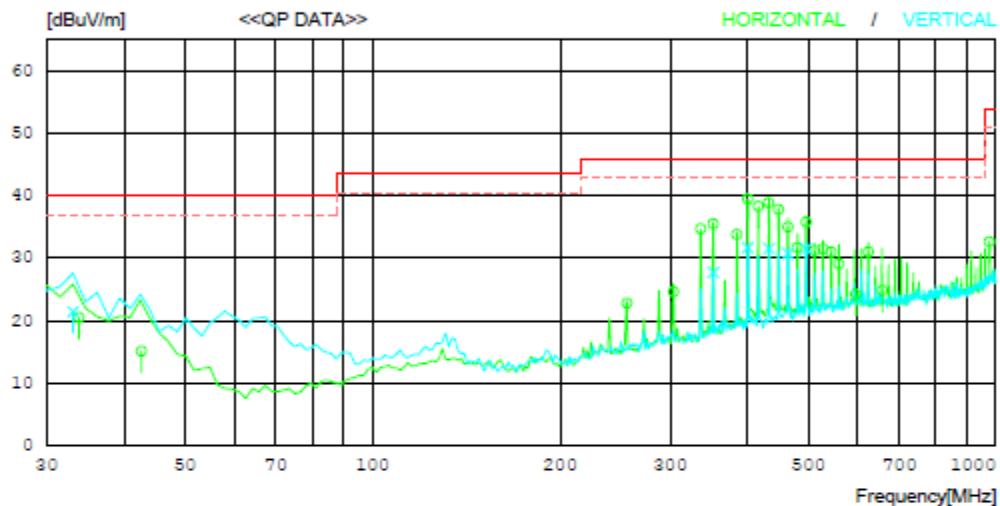
Date : 2008-09-24

Model Name : YM-09RX
Model No. :
Serial No. : Identical prototype
Test Condition : TX: 2402MHz

Reference No. :
Power Supply : 120V 60Hz
Temp/Humi : 24°C 39%
Operator : D.C.CHA

Memo :

LIMIT : FCC Part15 Subpart B Class B (3m)
MARGIN: 3 dB



No.	FREQ [MHz]	READING QP [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	33.840	26.0	16.0	0.9	22.4	20.5	40.0	19.5	100	1
2	304.010	31.0	14.4	2.6	23.4	24.6	46.0	21.4	100	61
3	336.004	40.6	15.1	2.7	23.7	34.7	46.0	11.3	100	61
4	351.990	41.0	15.5	2.8	23.8	35.5	46.0	10.5	100	1
5	384.000	38.6	16.2	2.9	23.9	33.8	46.0	12.2	100	1
6	400.002	44.0	16.5	3.0	24.0	39.5	46.0	6.5	100	61
7	416.000	42.5	16.8	3.1	24.1	38.3	46.0	7.7	201	200
8	432.000	42.8	17.0	3.2	24.1	38.9	46.0	7.1	201	190
9	447.997	41.5	17.2	3.2	24.1	37.8	46.0	8.2	201	358
10	464.005	38.5	17.4	3.3	24.2	35.0	46.0	11.0	201	358
11	480.013	34.8	17.7	3.4	24.2	31.7	46.0	14.3	201	358
12	496.003	38.6	17.9	3.5	24.2	35.8	46.0	10.2	201	358
13	512.000	33.8	18.1	3.6	24.3	31.2	46.0	14.8	201	358
14	527.994	33.9	18.3	3.6	24.3	31.5	46.0	14.5	201	97
15	544.002	33.1	18.5	3.7	24.3	31.0	46.0	15.0	201	358
16	560.000	30.9	18.7	3.8	24.3	29.1	46.0	16.9	100	177
17	595.925	25.4	19.1	4.0	24.3	24.2	46.0	21.8	201	0
18	624.009	32.0	19.1	4.1	24.2	31.0	46.0	15.0	201	358
19	657.714	25.9	18.9	4.1	24.1	24.8	46.0	21.2	201	358
20	976.005	29.2	21.0	5.3	22.9	32.6	54.0	21.4	201	97
21	42.605	23.5	13.1	0.9	22.4	15.1	40.0	24.9	201	358
22	256.000	30.4	13.3	2.3	23.2	22.8	46.0	23.2	201	358

No.	FREQ [MHz]	READING QP [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Vertical -----										
23	33.109	26.6	16.4	0.8	22.4	21.4	40.0	18.6	100	351
24	432.611	35.4	17.0	3.2	24.1	31.5	46.0	14.5	100	146
25	496.344	34.3	17.9	3.5	24.2	31.5	46.0	14.5	100	201
26	400.012	36.2	16.5	3.0	24.0	31.7	46.0	14.3	299	358
27	464.007	34.2	17.4	3.3	24.2	30.7	46.0	15.3	100	358
28	352.014	33.2	15.5	2.8	23.8	27.7	46.0	18.3	299	126

30MHz ~ 1GHz Radiated Spurious Emissions

Middle Frequency & Data rate: 1Mbps



RADIATED EMISSION

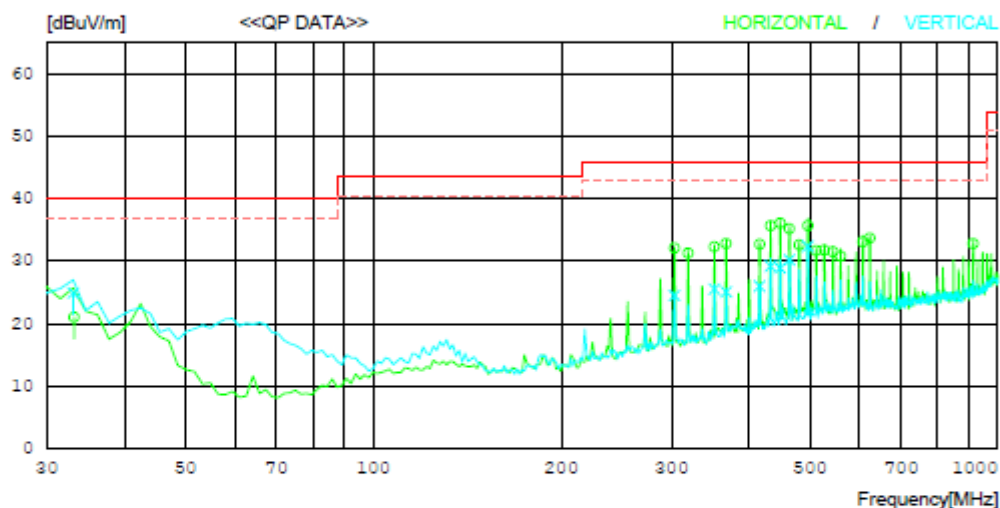
Date : 2009-09-24

Model Name : YM-09RX
Model No. :
Serial No. : Identical prototype
Test Condition : TX: 2441MHz

Reference No. :
Power Supply : 120V 60Hz
Temp/Humi : 24°C 39%
Operator : D.C.CHA

Memo :

LIMIT : FCC Part15 Subpart.B Class B (3m)
MARGIN: 3 dB



No.	FREQ [MHz]	READING QP [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	33.201	26.2	16.4	0.8	22.4	21.0	40.0	19.0	400	358
2	303.415	38.5	14.4	2.6	23.4	32.1	46.0	13.9	100	1
3	319.229	37.4	14.8	2.6	23.5	31.3	46.0	14.7	100	228
4	351.558	37.8	15.5	2.8	23.8	32.3	46.0	13.7	100	86
5	367.125	37.9	15.8	2.9	23.8	32.8	46.0	13.2	100	66
6	415.475	36.9	16.8	3.1	24.1	32.7	46.0	13.3	198	358
7	432.555	39.6	17.0	3.2	24.1	35.7	46.0	10.3	198	358
8	448.247	39.8	17.2	3.2	24.1	36.1	46.0	9.9	198	358
9	463.680	38.7	17.4	3.3	24.2	35.2	46.0	10.8	198	190
10	480.750	35.7	17.7	3.4	24.2	32.6	46.0	13.4	198	358
11	496.245	38.5	17.9	3.5	24.2	35.7	46.0	10.3	198	288
12	511.754	34.3	18.1	3.6	24.3	31.7	46.0	14.3	198	358
13	527.337	34.2	18.3	3.6	24.3	31.8	46.0	14.2	198	358
14	544.457	33.6	18.5	3.7	24.3	31.5	46.0	14.5	198	102
15	560.055	32.6	18.7	3.8	24.3	30.8	46.0	15.2	198	82
16	608.241	34.2	19.1	4.0	24.2	33.1	46.0	12.9	100	212
17	623.750	34.7	19.1	4.1	24.2	33.7	46.0	12.3	100	212
18	912.856	31.0	19.9	5.0	23.1	32.8	46.0	13.2	100	100

----- Vertical -----										
No.	FREQ [MHz]	READING QP [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
19	33.105	30.1	16.4	0.8	22.4	24.9	40.0	15.1	101	358
20	303.570	30.9	14.4	2.6	23.4	24.5	46.0	21.5	101	174
21	351.724	31.0	15.5	2.8	23.8	25.5	46.0	20.5	301	358
22	367.323	30.2	15.8	2.9	23.8	25.1	46.0	20.9	101	358
23	415.475	30.2	16.8	3.1	24.1	26.0	46.0	20.0	201	160
24	432.611	33.1	17.0	3.2	24.1	29.2	46.0	16.8	201	1
25	448.156	32.6	17.2	3.2	24.1	28.9	46.0	17.1	101	358
26	463.700	33.7	17.4	3.3	24.2	30.2	46.0	15.8	101	191
27	496.344	35.2	17.9	3.5	24.2	32.4	46.0	13.6	101	358

30MHz ~ 1GHz Radiated Spurious Emissions

Highest Frequency & Data rate: 1Mbps

RADIATED EMISSION

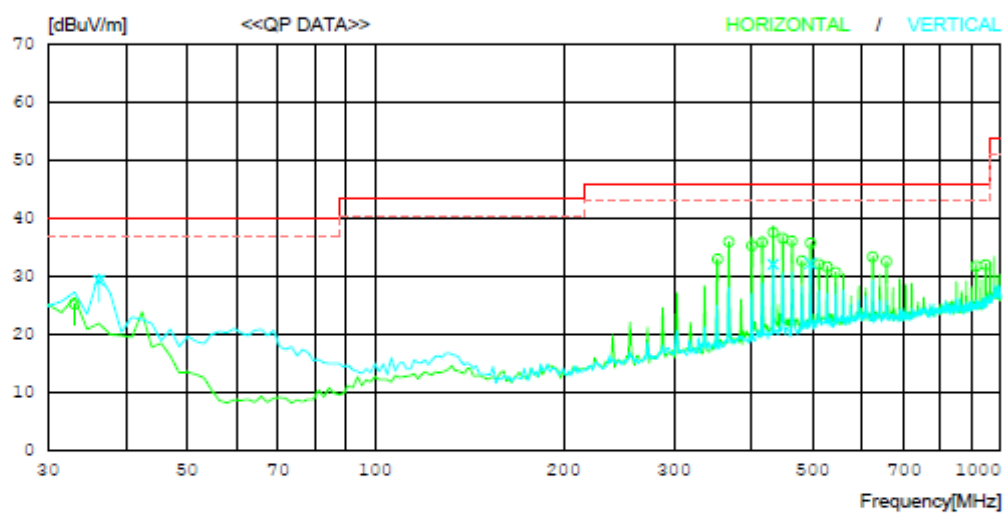
Date : 2009-09-24

Model Name : YM-09RX
 Model No. :
 Serial No. : Identical prototype
 Test Condition : TX: 2480MHz

Reference No. :
 Power Supply : 120V 60Hz
 Temp/Humi : 24°C 39%
 Operator : D.C.CHA

Memo :

LIMIT : FCC Part15 Subpart.B Class B (3m)
 MARGIN: 3 dB



No.	FREQ [MHz]	READING QP [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	33.109	30.5	16.4	0.8	22.4	25.3	40.0	14.7	101	1
2	352.779	38.5	15.5	2.8	23.8	33.0	46.0	13.0	101	65
3	367.784	41.1	15.8	2.9	23.8	36.0	46.0	10.0	101	1
4	399.960	39.8	16.5	3.0	24.0	35.3	46.0	10.7	101	45
5	415.512	40.1	16.8	3.1	24.1	35.9	46.0	10.1	201	205
6	432.611	41.5	17.0	3.2	24.1	37.6	46.0	8.4	201	358
7	448.156	40.3	17.2	3.2	24.1	36.6	46.0	9.4	201	358
8	463.680	39.6	17.4	3.3	24.2	36.1	46.0	9.9	201	358
9	480.810	35.8	17.7	3.4	24.2	32.7	46.0	13.3	201	358
10	496.270	38.6	17.9	3.5	24.2	35.8	46.0	10.2	201	358
11	511.900	34.7	18.1	3.6	24.3	32.1	46.0	13.9	201	358
12	527.434	34.1	18.3	3.6	24.3	31.7	46.0	14.3	201	358
13	544.522	32.8	18.5	3.7	24.3	30.7	46.0	15.3	201	107
14	623.813	34.4	19.1	4.1	24.2	33.4	46.0	12.6	101	216
15	656.458	33.7	18.9	4.1	24.1	32.6	46.0	13.4	201	0
16	912.948	30.0	19.9	5.0	23.1	31.8	46.0	14.2	101	114
17	945.580	29.4	20.5	5.1	23.0	32.0	46.0	14.0	101	103
----- Vertical -----										
No.	FREQ [MHz]	READING QP [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
18	36.211	35.7	15.1	0.9	22.4	29.3	40.0	10.7	199	1
19	432.500	36.0	17.0	3.2	24.1	32.1	46.0	13.9	199	257
20	496.200	35.1	17.9	3.5	24.2	32.3	46.0	13.7	100	358

1GHz ~ 25GHz Radiated Spurious Emissions

▪ Lowest Frequency & Data rate: 1Mbps

Frequency (MHz)	ANT Pol	Reading(dBuV)		T.F (dB)	Result(dBuV/m)		Limit(dBuV/m)		Margin(dB)	
		PK	AV		PK	AV	PK	AV	PK	AV
4804	H	50.06	36.06	7.27	57.33	43.33	74.00	54.00	16.67	10.67
4804	V	49.63	36.01	7.27	56.90	43.28	74.00	54.00	17.10	10.72
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-

▪ Middle Frequency & Data rate: 1Mbps

Frequency (MHz)	ANT Pol	Reading(dBuV)		T.F (dB)	Result(dBuV/m)		Limit(dBuV/m)		Margin(dB)	
		PK	AV		PK	AV	PK	AV	PK	AV
4882	H	50.39	35.55	7.65	58.04	43.20	74.00	54.00	15.96	10.80
4882	V	49.95	35.54	7.65	57.60	43.19	74.00	54.00	16.40	10.81
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-

▪ Highest Frequency & Data rate: 1Mbps

Frequency (MHz)	ANT Pol	Reading(dBuV)		T.F (dB)	Result(dBuV/m)		Limit(dBuV/m)		Margin(dB)	
		PK	AV		PK	AV	PK	AV	PK	AV
4960	H	49.02	35.19	7.96	56.98	43.15	74.00	54.00	17.02	10.85
4960	V	50.14	35.24	7.96	58.10	43.20	74.00	54.00	15.90	10.80
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-

Note.

1. No other spurious and harmonic emissions were detected at a level greater than 20dB below limit.
2. Sample Calculation.

$$\text{Margin} = \text{Limit} - \text{Result} \quad / \quad \text{Result} = \text{Reading} + \text{T.F} \quad / \quad \text{T.F} = \text{AF} + \text{CL} - \text{AG}$$

Where, T.F = Total Factor, AF = Antenna Factor, CL = Cable Loss, AG = Amplifier Gain

4.2.8 AC Line Conducted Emissions

- Procedure:

The conducted emissions are measured in the shielded room with a spectrum analyzer in peak hold. While the measurement, EUT had its hopping function disabled at the middle channels in line with Section 15.31(m). Emissions closest to the limit are measured in the quasi-peak and average detector mode with the tuned receiver using a bandwidth of 9 kHz. The emissions are maximized further by cable manipulation and Exerciser operation. The highest emissions relative to the limit are listed.

- Measurement Data: **Comply**

Note 1: See next pages for actual measured spectrum plots and data.

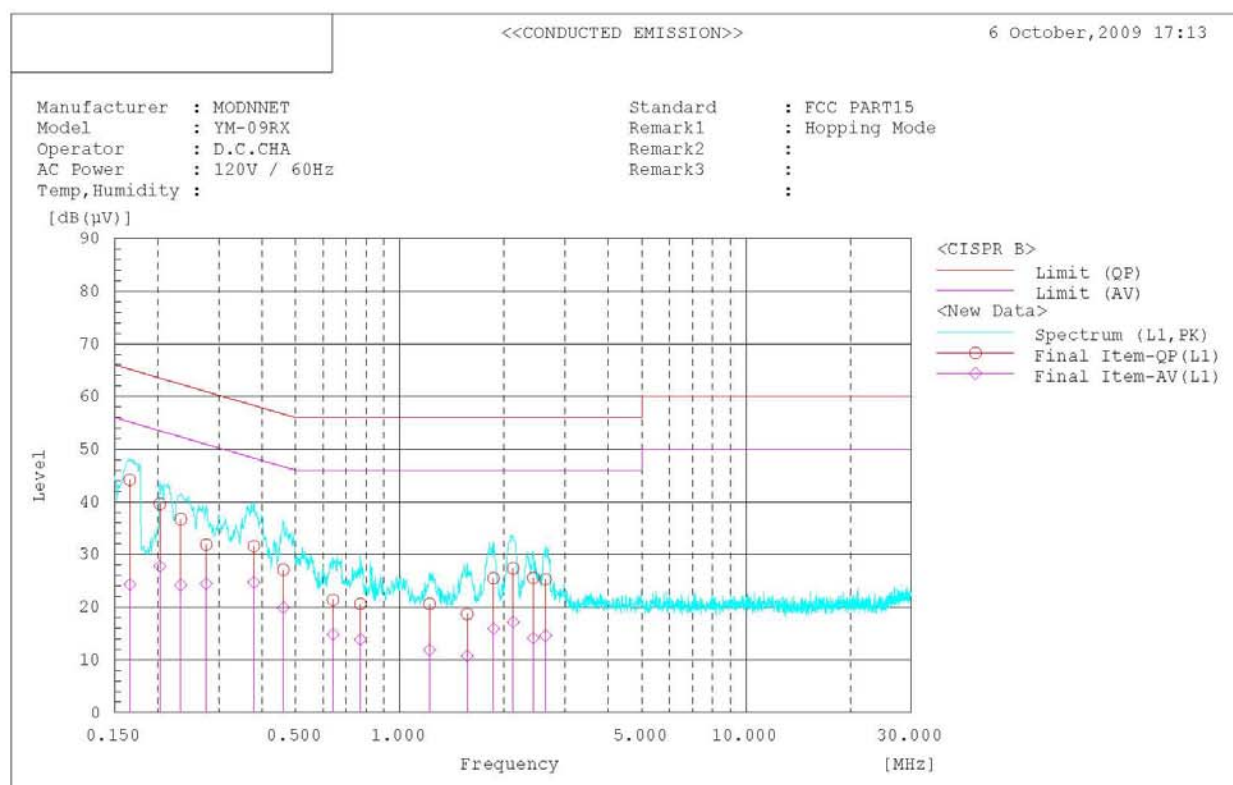
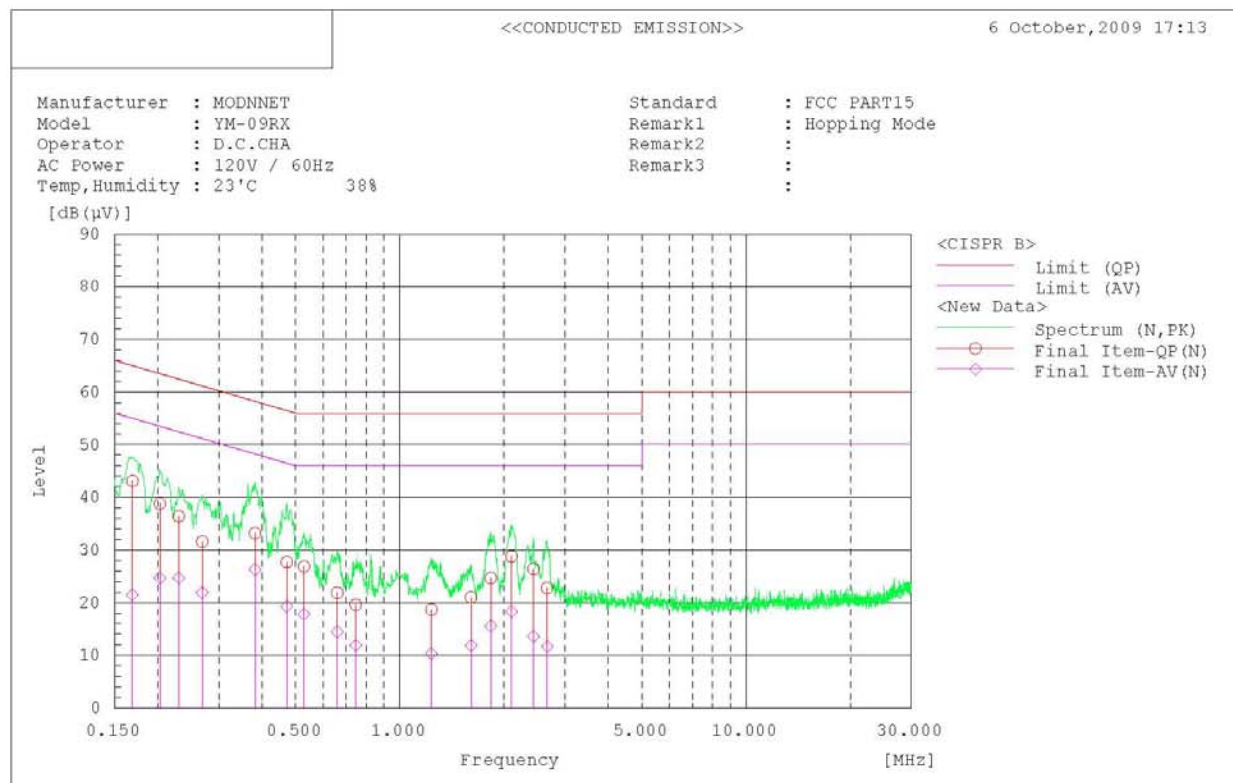
- Minimum Standard: FCC Part 15.207(a)/EN 55022

Frequency Range (MHz)	Conducted Limit (dBuV)	
	Quasi-Peak	Average
0.15 ~ 0.5	66 to 56 *	56 to 46 *
0.5 ~ 5	56	46
5 ~ 30	60	50

* Decreases with the logarithm of the frequency

AC Line Conducted Emissions (Graph)

Hopping mode: Enable & Data rate: 1Mbps



AC Line Conducted Emissions (Data List)

Hopping mode: Enable & Data rate: 1Mbps

<<CONDUCTED EMISSION>>

6 October, 2009 17:13

Standard : FCC PART15

Manufacturer : MODRNET

Model : YM-09RX

Operator : D.C.CHA

AC Power : 120V / 60Hz

Temp, Humidity : 23°C 38%

Remark1 : Hopping Mode

Remark2 :

Remark3 :

Final Result

--- N Phase ---

No.	Frequency	Reading QP	Reading AV	c.f	Result QP	Result AV	Limit QP	Limit AV	Margin QP	Margin AV	Remark
	[MHz]	[dB (μV)]	[dB (μV)]	[dB]	[dB (μV)]	[dB (μV)]	[dB (μV)]	[dB (μV)]	[dB]	[dB]	
1	0.169	43.0	21.4	0.1	43.1	21.5	65.0	55.0	21.9	33.5	
2	0.203	38.7	24.6	0.1	38.8	24.7	63.5	53.5	24.7	28.8	
3	0.230	36.3	24.6	0.1	36.4	24.7	62.4	52.4	26.0	27.7	
4	0.269	31.5	21.8	0.1	31.6	21.9	61.1	51.1	29.5	29.2	
5	0.382	33.1	26.2	0.1	33.2	26.3	58.2	48.2	25.0	21.9	
6	0.472	27.6	19.2	0.1	27.7	19.3	56.5	46.5	28.8	27.2	
7	0.529	26.8	17.7	0.1	26.9	17.8	56.0	46.0	29.1	28.2	
8	0.660	21.8	14.4	0.1	21.9	14.5	56.0	46.0	34.1	31.5	
9	0.746	19.5	11.8	0.1	19.6	11.9	56.0	46.0	36.4	34.1	
10	1.235	18.6	10.2	0.1	18.7	10.3	56.0	46.0	37.3	35.7	
11	1.607	20.8	11.7	0.2	21.0	11.9	56.0	46.0	35.0	34.1	
12	1.832	24.5	15.4	0.2	24.7	15.6	56.0	46.0	31.3	30.4	
13	2.104	28.6	18.1	0.2	28.8	18.3	56.0	46.0	27.2	27.7	
14	2.435	26.2	13.4	0.2	26.4	13.6	56.0	46.0	29.6	32.4	
15	2.665	22.6	11.5	0.2	22.8	11.7	56.0	46.0	33.2	34.3	

--- L1 Phase ---

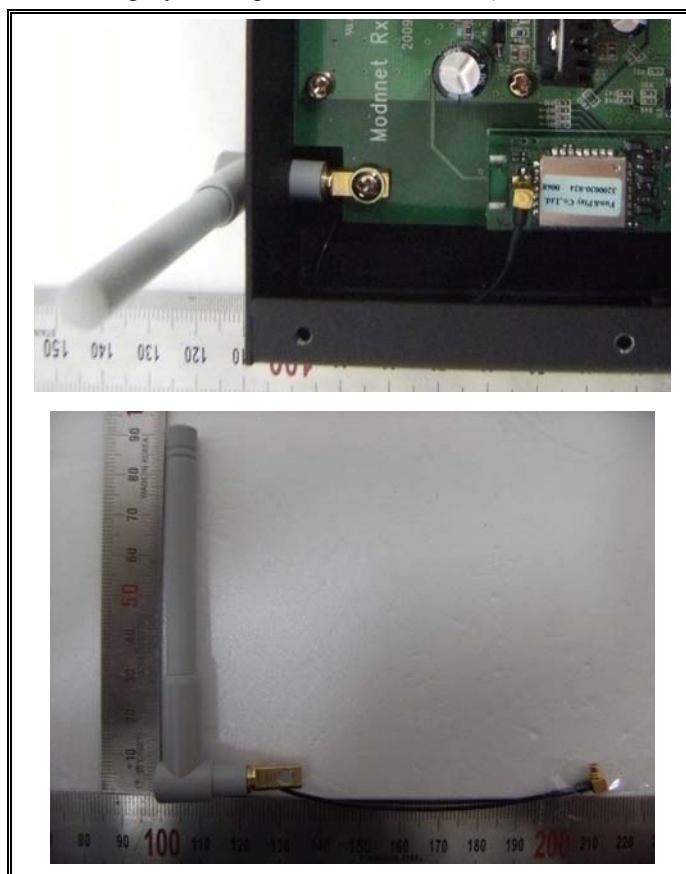
No.	Frequency	Reading QP	Reading AV	c.f	Result QP	Result AV	Limit QP	Limit AV	Margin QP	Margin AV	Remark
	[MHz]	[dB (μV)]	[dB (μV)]	[dB]	[dB (μV)]	[dB (μV)]	[dB (μV)]	[dB (μV)]	[dB]	[dB]	
1	0.166	44.1	24.2	0.1	44.2	24.3	65.2	55.2	21.0	30.9	
2	0.203	39.5	27.7	0.1	39.6	27.8	63.5	53.5	23.9	25.7	
3	0.233	36.6	24.1	0.1	36.7	24.2	62.3	52.3	25.6	28.1	
4	0.276	31.8	24.4	0.1	31.9	24.5	60.9	50.9	29.0	26.4	
5	0.379	31.5	24.6	0.1	31.6	24.7	58.3	48.3	26.7	23.6	
6	0.461	27.0	19.8	0.1	27.1	19.9	56.7	46.7	29.6	26.8	
7	0.642	21.3	14.7	0.1	21.4	14.8	56.0	46.0	34.6	31.2	
8	0.770	20.5	13.8	0.1	20.6	13.9	56.0	46.0	35.4	32.1	
9	1.219	20.5	11.8	0.1	20.6	11.9	56.0	46.0	35.4	34.1	
10	1.566	18.5	10.6	0.2	18.7	10.8	56.0	46.0	37.3	35.2	
11	1.865	25.3	15.7	0.2	25.5	15.9	56.0	46.0	30.5	30.1	
12	2.125	27.2	17.0	0.2	27.4	17.2	56.0	46.0	28.6	28.8	
13	2.429	25.4	13.9	0.2	25.6	14.1	56.0	46.0	30.4	31.9	
14	2.635	25.1	14.4	0.2	25.3	14.6	56.0	46.0	30.7	31.4	

4.2.9 Antenna Requirements

- Procedure:

Describe how the EUT complies with the requirement that either its antenna is permanently attached, or that it employs a unique antenna connector, for every antenna proposed for use with the EUT.

- **Conclusion:** **Comply**(This device employs a unique antenna connector.)



- Minimum Standard:

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions.

APPENDIX

TEST EQUIPMENT FOR TESTS

To facilitate inclusion on each page of the test equipment used for related tests, each item of test equipment.

	Type	Manufacturer	Model	Cal.Due.Date (dd/mm/yy)	Next.Due.Date (dd/mm/yy)	S/N
<input checked="" type="checkbox"/>	Spectrum Analyzer	Agilent	E4440A	25/09/09	25/09/10	MY45304199
<input checked="" type="checkbox"/>	Spectrum Analyzer	Rohde Schwarz	FSQ26	05/06/09	05/06/10	200445
<input type="checkbox"/>	Spectrum Analyzer(RE)	H.P	8563E	13/10/09	13/10/10	3551A04634
<input type="checkbox"/>	Power Meter	H.P	EMP-442A	02/07/09	02/07/10	GB37170413
<input type="checkbox"/>	Power Sensor	H.P	8481A	02/07/09	02/07/10	3318A96332
<input type="checkbox"/>	Power Divider	Agilent	11636B	13/10/09	13/10/10	56471
<input type="checkbox"/>	Power Splitter	Anritsu	K241B	13/10/09	13/10/10	20611
<input type="checkbox"/>	Power Splitter	Anritsu	K241B	02/07/09	02/07/10	017060
<input type="checkbox"/>	Frequency Counter	H.P	5342A	13/07/09	13/07/10	2119A04450
<input type="checkbox"/>	TEMP & HUMIDITY Chamber	JISCO	KR-100/J-RHC2	10/10/09	10/10/10	30604493/021031
<input type="checkbox"/>	Digital Multimeter	H.P	34401A	13/03/09	13/03/10	3146A13475, US36122178
<input type="checkbox"/>	Multifunction Synthesizer	HP	8904A	06/10/09	06/10/10	3633A08404
<input checked="" type="checkbox"/>	Signal Generator	Rohde Schwarz	SMR20	13/03/09	13/03/10	101251
<input checked="" type="checkbox"/>	Signal Generator	H.P	ESG-3000A	02/07/09	02/07/10	US37230529
<input type="checkbox"/>	Vector Signal Generator	Rohde Schwarz	SMJ100A	11/01/10	11/01/11	100148
<input type="checkbox"/>	Audio Analyzer	H.P	8903B	02/07/09	02/07/10	3011A09448
<input type="checkbox"/>	Modulation Analyzer	H.P	8901B	02/07/09	02/07/10	3028A03029
<input type="checkbox"/>	8960 Series 10 Wireless Comms. Test Set	Agilent	E5515C	02/07/09	02/07/10	GB43461134
<input type="checkbox"/>	Universal Radio communication Tester	Rohde Schwarz	CMU 200	19/05/09	19/05/10	106760
<input type="checkbox"/>	Bluetooth Tester	TESCOM	TC-3000B	02/07/09	02/07/10	3000B000268
<input type="checkbox"/>	Thermo hygrometer	BODYCOM	BJ5478	28/01/10	28/01/11	090205-3
<input checked="" type="checkbox"/>	Thermo hygrometer	BODYCOM	BJ5478	28/01/10	28/01/11	090205-2
<input type="checkbox"/>	Thermo hygrometer	BODYCOM	BJ5478	28/01/10	28/01/11	090205-4
<input checked="" type="checkbox"/>	AC Power supply	DAEKWANG	5KVA	13/03/09	13/03/10	20060321-1
<input type="checkbox"/>	DC Power Supply	HP	6622A	13/03/09	13/03/10	3448A03760
<input type="checkbox"/>	DC Power Supply	HP	6633A	13/03/09	13/03/10	3524A06634
<input type="checkbox"/>	BAND Reject Filter	Microwave Circuits	N0308372	06/10/09	06/10/10	3125-01DC0352
<input type="checkbox"/>	BAND Reject Filter	Wainwright	WRCG1750	06/10/09	06/10/10	2
<input type="checkbox"/>	High-Pass Filter	ANRITSU	MP526D	06/10/09	06/10/10	M27756
<input type="checkbox"/>	High-pass filter	Wainwright	WHNX8.5	N/A	N/A	1
<input checked="" type="checkbox"/>	High-Pass Filter	Wainwright	WHKX3.0	N/A	N/A	9
<input type="checkbox"/>	Tunable Notch Filter	Wainwright	WRCT800.0 /960.0-0.2/40-8SSK	N/A	N/A	32
<input type="checkbox"/>	Tunable Notch Filter	Wainwright	WRCD1700.0 /2000.0-0.2/40-10SSK	N/A	N/A	53
<input type="checkbox"/>	Tunable Notch Filter	Wainwright	WRCT1900.0 /2200.0-5/40-10SSK	N/A	N/A	30
<input checked="" type="checkbox"/>	HORN ANT	ETS	3115	17/06/09	17/06/10	6419
<input type="checkbox"/>	HORN ANT	ETS	3115	23/09/09	23/09/10	21097
<input type="checkbox"/>	HORN ANT	A.H.Systems	SAS-574	10/06/09	10/06/10	154
<input type="checkbox"/>	HORN ANT	A.H.Systems	SAS-574	10/06/09	10/06/10	155

	Type	Manufacturer	Model	Cal.Due.Date (dd/mm/yy)	Next.Due.Date (dd/mm/yy)	S/N
<input type="checkbox"/>	Dipole Antenna	Schwarzbeck	VHA9103	06/10/09	06/10/10	2116
<input type="checkbox"/>	Dipole Antenna	Schwarzbeck	VHA9103	06/10/09	06/10/10	2117
<input type="checkbox"/>	Dipole Antenna	Schwarzbeck	UHA9105	05/10/09	05/10/10	2261
<input type="checkbox"/>	Dipole Antenna	Schwarzbeck	UHA9105	05/10/09	05/10/10	2262
<input type="checkbox"/>	LOOP Antenna	ETS	6502	14/09/09	14/09/10	3471
<input type="checkbox"/>	Coaxial Fixed Attenuators	Agilent	8491B	02/07/09	02/07/10	MY39260700
<input type="checkbox"/>	Attenuator (3dB)	WEINSCHEL	56-3	16/12/09	16/12/10	Y2342
<input type="checkbox"/>	Attenuator (3dB)	WEINSCHEL	56-3	16/12/09	16/12/10	Y2370
<input type="checkbox"/>	Attenuator (10dB)	WEINSCHEL	23-10-34	01/10/09	01/10/10	BP4386
<input type="checkbox"/>	Attenuator (10dB)	WEINSCHEL	23-10-34	11/01/10	11/01/11	BP4387
<input type="checkbox"/>	Attenuator (20dB)	WEINSCHEL	86-20-11	06/10/09	06/10/10	432
<input type="checkbox"/>	Attenuator (10dB)	WEINSCHEL	31696	06/10/09	06/10/10	446
<input type="checkbox"/>	Attenuator (10dB)	WEINSCHEL	31696	06/10/09	06/10/10	408
<input type="checkbox"/>	Attenuator (40dB)	WEINSCHEL	57-40-33	01/10/09	01/10/10	NN837
<input type="checkbox"/>	Attenuator (30dB)	JFW	50FH-030-300	13/03/09	13/03/10	060320-1
<input type="checkbox"/>	Type N Coaxial CIRCULATOR	NOVA MICROWAVE	0088CAN	02/07/09	02/07/10	788
<input type="checkbox"/>	Type N Coaxial CIRCULATOR	NOVA MICROWAVE	0185CAN	02/07/09	02/07/10	790
<input type="checkbox"/>	Type N Coaxial CIRCULATOR	NOVA MICROWAVE	0215CAN	02/07/09	02/07/10	112
<input checked="" type="checkbox"/>	Amplifier (30dB)	Agilent	8449B	10/10/09	10/10/10	3008A01590
<input type="checkbox"/>	Amplifier	EMPOWER	BBS3Q7ELU	02/11/09	02/11/10	1020
<input type="checkbox"/>	RF Power Amplifier	OPHIRRF	5069F	02/07/09	02/07/10	1006
<input checked="" type="checkbox"/>	EMI TEST RECEIVER	R&S	ESU	29/01/10	29/01/11	100014
<input checked="" type="checkbox"/>	BILOG ANTENNA	SCHAFFNER	CBL6112B	02/06/09	02/06/10	2737
<input checked="" type="checkbox"/>	Amplifier (22dB)	H.P	8447E	29/01/10	29/01/11	2945A02865
<input type="checkbox"/>	EMI TEST RECEIVER	R&S	ESCI	12/05/09	12/05/10	100364
<input type="checkbox"/>	LOG-PERIODIC ANT.	Schwarzbeck	UHALP9108A	30/05/09	30/05/10	590
<input type="checkbox"/>	BICONICAL ANT.	Schwarzbeck	VHA 9103	02/06/09	02/06/10	2233
<input type="checkbox"/>	LOG-PERIODIC ANT.	Schwarzbeck	UHALP 9108 A-1	07/10/09	07/10/10	1098
<input type="checkbox"/>	BICONICAL ANT.	Schwarzbeck	VHA 9103	06/10/09	06/10/10	91031946
<input type="checkbox"/>	Low Noise Pre Amplifier	TSJ	MLA-100K01-B01-2	13/03/09	13/03/10	1252741
<input type="checkbox"/>	Amplifier (25dB)	Agilent	8447D	12/05/09	12/05/10	2944A10144
<input type="checkbox"/>	Amplifier (25dB)	Agilent	8447D	03/07/09	03/07/10	2648A04922
<input checked="" type="checkbox"/>	Spectrum Analyzer(CE)	H.P	8591E	26/04/09	26/04/10	3649A05889
<input checked="" type="checkbox"/>	LISN	Kyoritsu	KNW-407	29/01/10	29/01/11	8-317-8
<input checked="" type="checkbox"/>	LISN	Kyoritsu	KNW-242	29/01/10	29/01/11	8-654-15
<input checked="" type="checkbox"/>	CVCF	NF Electronic	4420	13/03/09	13/03/10	304935/337980
<input checked="" type="checkbox"/>	50 ohm Terminator	HME	CT-01	12/01/10	12/01/11	N/A
<input checked="" type="checkbox"/>	RFI/FIELD Intensity Meter	Kyoritsu	KNM-2402	03/07/09	03/07/10	4N-170-3