



# FCC RADIO TEST REPORT

Applicant : Dongguan Newmen Electronics Technology Co.,LTD  
Address : No. 5, Xifa Road, Lin Village,TangxiaTown, Dongguan,  
Guangdong, China  
Equipment : Dongle  
Model No. : MX-201  
Trade Name : Gear Head  
FCC ID : V4P-MX-201

## I HEREBY CERTIFY THAT :

The sample was received on May 04, 2016 and the testing was carried out on May 10, 2016 at CerpPASS Technology Corp. The test result refers exclusively to the test presented test model / sample. Without written approval of CerpPASS Technology Corp., the test report shall not be reproduced except in full.

Approved by:

Miro Chueh  
EMC/RF B.U. Manager

## Laboratory Accreditation:

☐ CerpPASS Technology Corporation Test Laboratory

NVLAP LAB Code:	200954-0
TAF LAB Code:	1439

☒ CerpPASS Technology(SuZhou) Co., Ltd.

NVLAP LAB Code:	200814-0
CNAS LAB Code:	L5515



## Contents

<b>1. Summary of Test Procedure and Test Results.....</b>	<b>4</b>
1.1 Applicable Standards .....	4
<b>2. Test Configuration of Equipment under Test.....</b>	<b>5</b>
2.1 Feature of Equipment under Test.....	5
2.2 Test Mode and Test Software.....	5
2.3 Description of Test System.....	5
2.4 General Information of Test.....	6
<b>3. Test Equipment and Ancillaries Used for Tests.....</b>	<b>7</b>
<b>4. Antenna Requirements.....</b>	<b>8</b>
4.1 Standard Applicable .....	8
4.2 Antenna Construction and Directional Gain.....	8
<b>5. Test of AC Power Line Conducted Emission .....</b>	<b>9</b>
5.1 Test Limit .....	9
5.2 Test Procedures .....	9
5.3 Typical Test Setup .....	10
5.4 Test Result and Data .....	11
<b>6. Test of Spurious Emission (Radiated) .....</b>	<b>13</b>
6.1 Test Limit .....	13
6.2 Test Procedures .....	13
6.3 Typical Test Setup .....	14
6.4 Test Result and Data (30MHz ~ 1GHz).....	15
6.5 Test Result and Data (1GHz ~ 25GHz).....	16
<b>7. 20dB Bandwidth Measurement Data.....</b>	<b>19</b>
7.1 Test Limit .....	19
7.2 Test Procedure .....	19
7.3 Test Setup Layout .....	19
7.4 Test Result and Data.....	19
<b>8. Band Edges Measurement.....</b>	<b>22</b>
8.1 Test Limit .....	22
8.2 Test Procedure .....	22
8.3 Test Setup Layout .....	22
8.4 Restrict band emission Measurement Data .....	23
<b>9. Restricted Bands of Operation.....</b>	<b>25</b>
9.1 Labeling Requirement.....	25



☐ Additional attachment as following record:

[illegible]



## 1. Summary of Test Procedure and Test Results

### 1.1 Applicable Standards

#### FCC Rules and Regulations Part 15 Subpart C §15.249

FCC Rule	. Description of Test	Result
15.203	. Antenna Requirement	Pass
15.207	. Conducted Emission	Pass
15.209	. Radiated Emission	Pass
15.215	. 20dB Bandwidth Measurement	Pass
15.249	. Band Edges Measurement Data	Pass



## 2. Test Configuration of Equipment under Test

### 2.1 Feature of Equipment under Test

Modulation Type	GFSK
Frequency Range	2402MHz~2474MHz
Antenna Type/ gain	Printed Antenna /0.206dBi
Power Rating	DC 5V

### 2.2 Test Mode and Test Software

- During testing, the interface cables and equipment positions were varied according to ANSI C63.4.
- The complete test system included Notebook, Mouse and EUT for the RF test.
- An executive program, "Bus Hound" which transmits and receives data through Wireless.
- Following channel(s) was(were) selected for the test as listed below.

TESTED CHANNEL	TESTED FREQUENCY
Low	2402 MHz
Middle	2442 MHz
High	2474 MHz

### 2.3 Description of Test System

Device	Manufacturer	Model No.	Description
USB Mouse	DELL	OXN967	R41108
Notebook	SONY	PCG-71811P	R33021

Cable:

No.	Cable	Quantity	Description
A	DC Cable	1	1.7m Non Shielding
B	USB Mouse Cable	1	1.5m Non Shielding



## 2.4 General Information of Test

<input type="checkbox"/>	Test Site	<b>Cerpass Technology Corporation Test Laboratory</b> Address: No.10, Ln. 2, Lianfu St., Luzhu Dist., Taoyuan City 33848, Taiwan (R.O.C.) Tel:+886-3-3226-888 Fax:+886-3-3226-881 Address: No.68-1, Shihbachongsi, Shihding Township, New Taipei City 223, Taiwan, R.O.C. Tel: +886-2-2663-8582
	FCC	TW1079, TW1061,390316, 228391, 641184
	IC	4934B-1, 4934E-1, 4934E-2
	VCCI	T-2205 for Telecommunication Test C-4663 for Conducted emission test R-3428, R-4218 for Radiated emission test G-812, G-813 for radiated disturbance above 1GHz
<input checked="" type="checkbox"/>	Test Site	<b>Cerpass Technology (Suzhou) Co.,Ltd</b> Address: No.66,Tangzhuang Road, Suzhou Industrial Park, Jiangsu 215006, China Tel: +86-512-6917-5888 Fax: +86-512-6917-5666
	FCC	916572, 331395
	IC	7290A-1, 7290A-2
	VCCI	T-343 for Telecommunication Test C-2919 for Conducted emission test R-2670 for Radiated emission test G-227 for radiated disturbance above 1GHz
Frequency Range Investigated:		Conducted: from 150kHz to 30 MHz Radiation: from 30 MHz to 25000MHz
Test Distance:		The test distance of radiated emission from antenna to EUT is 3 M.



### 3. Test Equipment and Ancillaries Used for Tests

Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Valid Date
Test Receiver	R&S	ESCI	100564	2016.02.22	2017.02.21
LISN	SCHWARZBECK	NSLK 8127	8127748	2015.10.22	2016.10.21
LISN	SCHWARZBECK	NSLK 8127	8127749	2015.10.22	2016.10.21
Pulse Limiter with 10dB Attenuation	SCHWARZBECK	VTSD 9561-F	9561-F106	2016.02.22	2017.02.21
Temperature/Humidity Meter	mingle	ETH529	N/A	2016.02.19	2017.02.18
Test Receiver	R&S	ESCI	100853	2016.02.22	2017.02.21
AMPLIFIER	HP	8447F	3113A05915	2016.02.22	2017.02.21
BILOG Antenna	SCHAFFNER	CBL6112D	22241	2015.09.30	2016.09.29
Horn Antenna	Sunol	DRH-118	A072913	2015.09.30	2016.09.29
Temp&Humidity&barometer	mingle	ETH529	N/A	2016.02.19	2017.02.18
Preamplifier	Field	AFS44-0010180 0-25- 10P-44	1579008	2015.09.30	2016.09.29
ESG VECTOR SIGNAL GENERATOR	Agilent	E4438C	MY4509258 2	2015.07.18	2016.07.17
MXG VECTOR SIGNAL GENERATOR	Agilent	N5182B	MY5305012 7	2015.07.18	2016.07.17
EXA Signal Analyzer	Agilent	N9020A	US46220290	2015.07.18	2016.07.17
Power sensor	e-channel	ERS-180T-24	TW5451026	2015.06.25	2016.06.24



## 4. Antenna Requirements

### 4.1 Standard Applicable

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

And according to FCC 47 CFR Section 15.247 (b), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

### 4.2 Antenna Construction and Directional Gain

No.	Antenna Type	Antenna Gain
1	Printed Antenna	-6.93dBi





## 5. Test of AC Power Line Conducted Emission

### 5.1 Test Limit

Conducted Emissions were measured from 150 kHz to 30 MHz with a bandwidth of 9 KHz on the 120 VAC power and return leads of the EUT according to the methods defined in ANSI C63.4-2009 Section 3.1. The EUT was placed on a nonmetallic stand in a shielded room 0.8 meters above the ground plane as shown in section 2.2. The interface cables and equipment positioning were varied within limits of reasonable applications to determine the position produced maximum conducted emissions.

Frequency (MHz)	Quasi Peak (dB $\mu$ V)	Average (dB $\mu$ V)
0.15 – 0.5	66-56*	56-46*
0.5 – 5.0	56	46
5.0 – 30.0	60	50

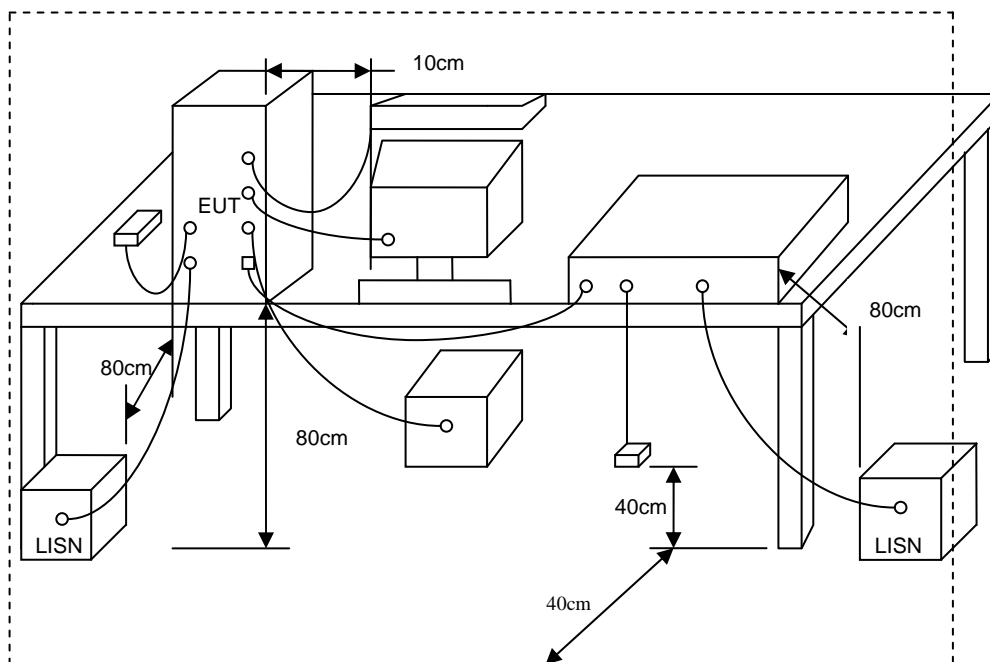
\*Decreases with the logarithm of the frequency.

### 5.2 Test Procedures

- The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
- Connect EUT to the power mains through a line impedance stabilization network (LISN).
- All the support units are connecting to the other LISN.
- The LISN provides 50 ohm coupling impedance for the measuring instrument.
- The FCC states that a 50 ohm, 50 micro-Henry LISN should be used.
- Both sides of AC line were checked for maximum conducted interference.
- The frequency range from 150 kHz to 30 MHz was searched.
- Set the test-receiver system to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.



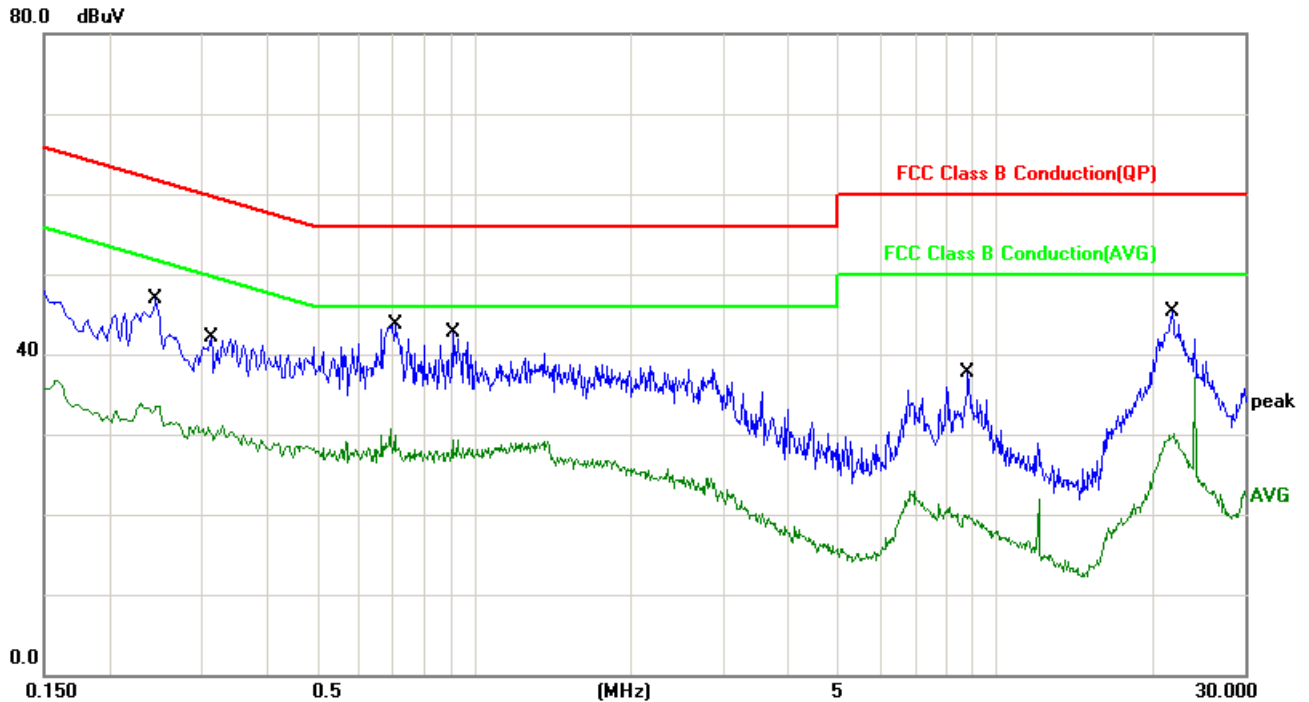
### 5.3 Typical Test Setup





## 5.4 Test Result and Data

Test Mode :	Normal Link	Phase :	Line
Temperature :	20°C	Humidity:	51%
Pressur(mbar) :	1002	Date:	2016/05/09

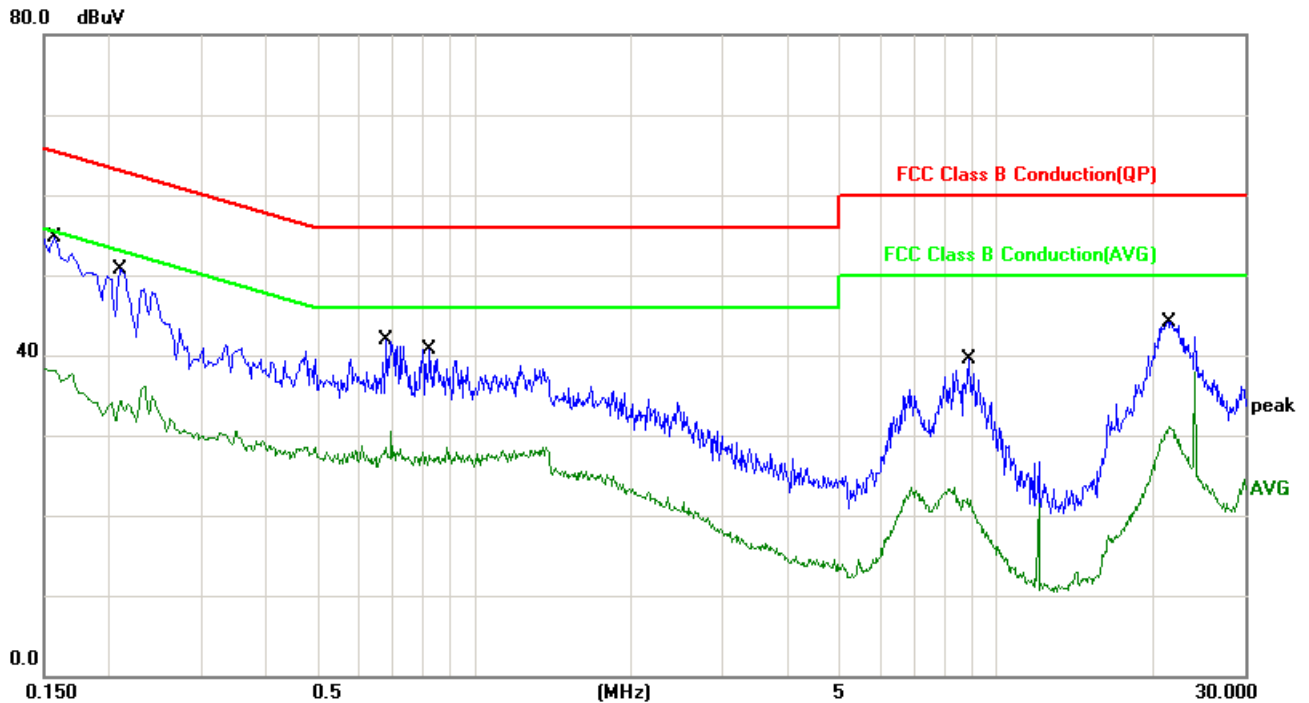


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.2460	10.86	29.69	40.55	61.89	-21.34	QP
2	0.2460	10.86	21.28	32.14	51.89	-19.75	AVG
3	0.3140	10.72	25.46	36.18	59.86	-23.68	QP
4	0.3140	10.72	19.20	29.92	49.86	-19.94	AVG
5	0.7100	10.30	27.48	37.78	56.00	-18.22	QP
6	0.7100	10.30	17.75	28.05	46.00	-17.95	AVG
7	0.9100	10.27	24.77	35.04	56.00	-20.96	QP
8	0.9100	10.27	17.49	27.76	46.00	-18.24	AVG
9	8.8380	10.35	16.78	27.13	60.00	-32.87	QP
10	8.8380	10.35	8.49	18.84	50.00	-31.16	AVG
11	21.8260	10.52	26.58	37.10	60.00	-22.90	QP
12	21.8260	10.52	17.65	28.17	50.00	-21.83	AVG

Note: Measurement Level = Reading Level + Correct Factor+ Attenuator



Test Mode :	Normal Link	Phase :	Neutral
Temperature :	20°C	Humidity :	51%
Pressur(mbar) :	1002	Date :	2016/04/16



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.1580	13.14	35.61	48.75	65.56	-16.81	QP
2	0.1580	13.14	23.82	36.96	55.56	-18.60	AVG
3	0.2100	10.94	33.87	44.81	63.20	-18.39	QP
4	0.2100	10.94	22.03	32.97	53.20	-20.23	AVG
5	0.6820	10.31	25.80	36.11	56.00	-19.89	QP
6	0.6820	10.31	16.94	27.25	46.00	-18.75	AVG
7	0.8260	10.29	22.83	33.12	56.00	-22.88	QP
8	0.8260	10.29	16.84	27.13	46.00	-18.87	AVG
9	8.8860	10.36	19.28	29.64	60.00	-30.36	QP
10	8.8860	10.36	8.99	19.35	50.00	-30.65	AVG
11	21.4780	10.51	27.55	38.06	60.00	-21.94	QP
12	21.4780	10.51	18.73	29.24	50.00	-20.76	AVG

Note: Measurement Level = Reading Level + Correct Factor+ Attenuator



## 6. Test of Spurious Emission (Radiated)

### 6.1 Test Limit

Radiated emissions from 30 MHz to 25 GHz were measured according to the methods defines in ANSI C63.4-2009. The EUT was placed, 0.8 meter above the ground plane, as shown in section 5.6.3. The interface cables and equipment positions were varied within limits of reasonable applications to determine the positions producing maximum radiated emissions for unintentional device, according to § 15.109(a), except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

Frequency (MHz)	Distance Meters	Radiated ( $\mu$ V / M)	Radiated (dB $\mu$ V/ M)
30-88	3	100	40.0
88-216	3	150	43.5
216-960	3	200	46.0
Above 960	3	500	54.0

For unintentional device, according to CISPR PUB.22, for Class B digital devices, the general requirement of field strength of radiated emissions from intentional radiators at a distance of 10 meters shall not exceed the below table.

Frequency (MHz)	Distance Meters	Radiated (dB $\mu$ V/ M)
30-230	10	30
230-1000	10	37

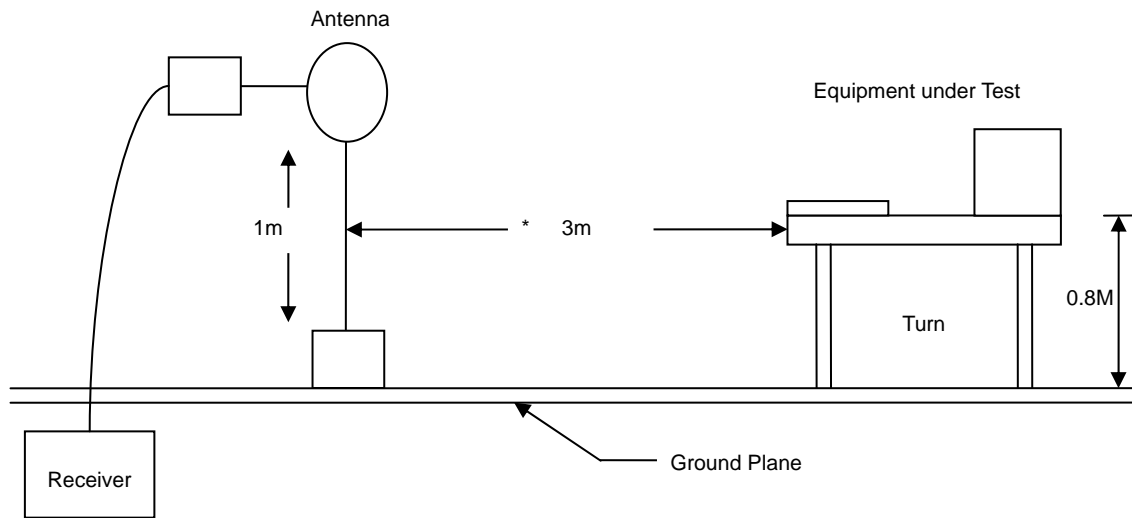
### 6.2 Test Procedures

- The EUT was placed on a rotatable table top 0.8 meter above ground.
- The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
- The table was rotated 360 degrees to determine the position of the highest radiation.
- The antenna is a broadband antenna and its height is varied between one meter and four meters above ground to find the maximum value of the field strength both horizontal polarization and vertical polarization of the antenna are set to make the measurement.
- For each suspected emission the EUT was arranged to its worst case and then tune the antenna tower (from 1 M to 4 M) and turn table (from 0 degree to 360 degrees) to find the maximum reading.
- Set the test-receiver system to Peak or CISPR quasi-peak Detect Function and specified bandwidth with Maximum Hold Mode.
- If the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions which do not have 3 dB margin will be repeated one by one using the quasi-peak method and reported.
- For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
- "Cone of radiation" has been considered to be 3dB bandwidth of the measurement antenna.

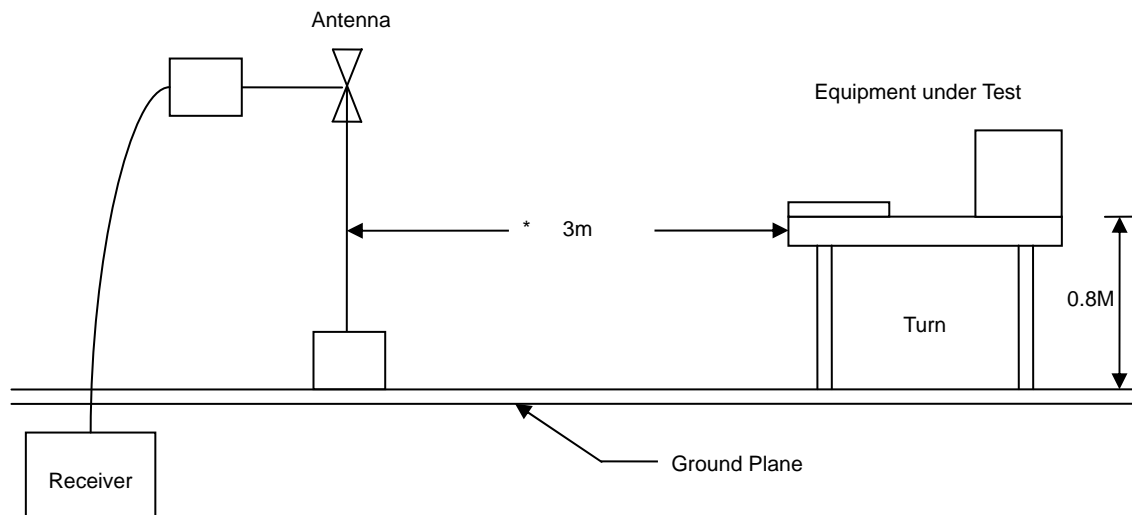


### 6.3 Typical Test Setup

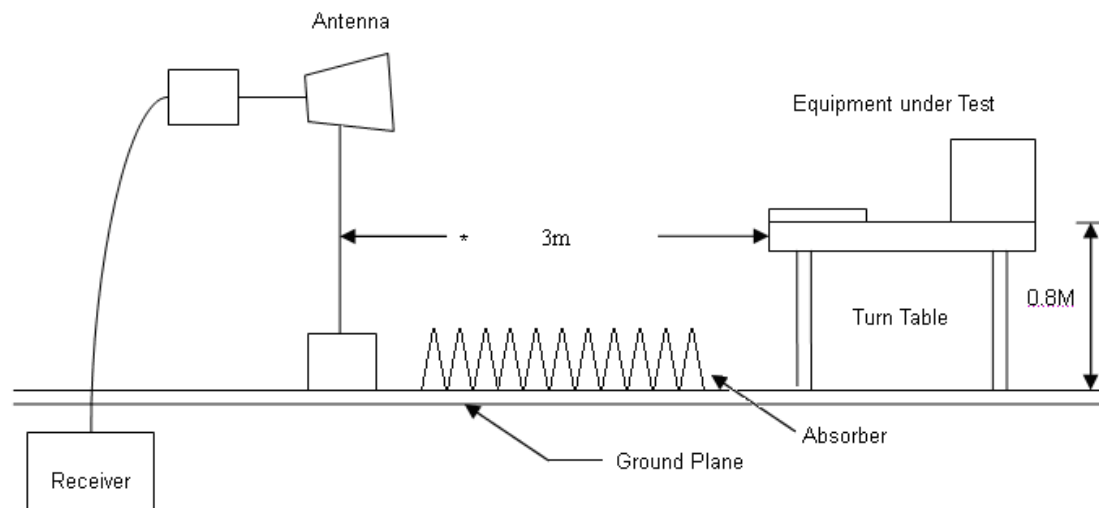
Below 30MHz test setup



30MHz- 1GHz Test Setup



Above 1GHz Test Setup





#### 6.4 Test Result and Data (30MHz ~ 1GHz)

Power	:	DC 5V	Temperature	:	24 °C
Test Mode	:	TX Mode	Humidity	:	54 %
Test date	:	May 09, 2016	Atmospheric Pressure	:	1010 hpa

Frequency (MHz)	AntPol. H/V	Correct Factor (dB)	Reading level (dBuV)	Measure Level (dBuV/m)	Limit 3m (dBuV/m)	Safe Margin (dB)	Detector mode (PK/QP)
30.0000	H	-3.01	29.85	26.84	40.00	-13.16	QP
207.5100	H	-9.50	38.78	29.28	43.50	-14.22	QP
276.3800	H	-8.82	43.91	35.09	46.00	-10.91	QP
344.2799	H	-4.29	41.41	37.12	46.00	-8.88	QP
399.5700	H	-5.16	36.21	31.05	46.00	-14.95	QP
464.5600	H	-2.22	31.94	29.72	46.00	-16.28	QP
30.9700	V	-3.58	30.57	26.99	40.00	-13.01	QP
71.7100	V	-14.83	46.26	31.43	40.00	-8.57	QP
275.4100	V	-8.94	41.17	32.23	46.00	-13.77	QP
693.4800	V	-1.20	37.21	36.01	46.00	-9.99	QP
761.3800	V	1.76	28.75	30.51	46.00	-15.49	QP
830.2500	V	1.01	29.20	30.21	46.00	-15.79	QP

Note: Level = Reading + Factor

Margin = Level – Limit

Factor= Antenna Factor + Cable Loss - Amplifier Factor

**6.5 Test Result and Data (1GHz ~ 25GHz)**

Power	:	DC 5V	Temperature	:	24 °C
Test Mode	:	TX-2402MHz	Humidity	:	54 %
Test date	:	May 09, 2016	Atmospheric Pressure	:	1010 hpa

Frequency (MHz)	AntPol. H/V	Correct Factor (dB)	Reading level (dBuV)	Measure Level (dBuV/m)	Limit 3m (dBuV/m)	Safe Margin (dB)	Detector mode (PK/QP)
2275.000	H	-3.55	57.23	53.68	74.00	-20.32	peak
2955.000	H	0.47	42.52	42.99	74.00	-31.01	peak
4315.000	H	6.72	33.65	40.37	74.00	-33.63	peak
4825.000	H	8.27	43.68	51.95	74.00	-22.05	peak
5930.000	H	10.09	32.06	42.15	74.00	-31.85	peak
7247.500	H	13.05	41.75	54.80	74.00	-19.20	peak
7247.500	H	13.05	27.16	40.21	54.00	-13.79	AVG
1637.500	V	-6.82	55.99	49.17	74.00	-24.83	peak
2020.000	V	-4.64	49.38	44.74	74.00	-29.26	peak
2275.000	V	-3.55	62.13	58.58	74.00	-15.42	peak
2275.000	V	-3.55	46.89	43.34	54.00	-10.66	AVG
2870.000	V	-0.10	41.96	41.86	74.00	-32.14	peak
4825.000	V	8.27	46.22	54.49	74.00	-19.51	peak
4825.000	V	8.27	31.98	40.25	54.00	-13.75	AVG
7247.500	V	13.05	47.44	60.49	74.00	-13.51	peak

Note: Level = Reading + Factor

Margin = Level – Limit

Factor= Antenna Factor + Cable Loss - Amplifier Factor





Power	: DC 5V	Temperature	: 24 °C
Test Mode	: TX-2442MHz	Humidity	: 54 %
Test date	: May 09, 2016	Atmospheric Pressure	: 1010 hpa

Frequency (MHz)	AntPol. H/V	Correct Factor (dB)	Reading level (dBuV)	Measure Level (dBuV/m)	Limit 3m (dBuV/m)	Safe Margin (dB)	Detector mode (PK/QP)
2020.000	H	-4.64	47.21	42.57	74.00	-31.43	peak
2317.500	H	-3.36	51.85	48.49	74.00	-25.51	peak
2955.000	H	0.47	41.88	42.35	74.00	-31.65	peak
4910.000	H	8.43	44.26	52.69	74.00	-21.31	peak
6227.500	H	10.35	33.17	43.52	74.00	-30.48	
7332.500	H	13.38	41.10	54.48	74.00	-19.52	peak
7332.500	H	13.38	26.78	40.16	54.00	-13.84	peak
1637.500	V	-6.82	53.50	46.68	74.00	-27.32	peak
2020.000	V	-4.64	52.13	47.49	74.00	-26.51	peak
2317.500	V	-3.36	56.56	53.20	74.00	-20.80	peak
4910.000	V	8.43	47.27	55.70	74.00	-18.30	peak
4910.000	V	8.43	32.63	41.06	54.00	-12.94	AVG
7332.500	V	13.38	44.78	58.16	74.00	-15.84	peak
7332.500	V	13.38	29.55	42.93	54.00	-11.07	AVG
7502.500	V	14.03	36.10	50.13	74.00	-23.87	peak

Note: Level = Reading + Factor

Margin = Level – Limit

Factor= Antenna Factor + Cable Loss - Amplifier Factor



Power	:	DC 5V	Temperature	:	24 °C
Test Mode	:	TX-2474MHz	Humidity	:	54 %
Test date	:	May 09, 2016	Atmospheric Pressure	:	1010 hpa

Frequency (MHz)	AntPol. H/V	Correct Factor (dB)	Reading level (dBuV)	Measure Level (dBuV/m)	Limit 3m (dBuV/m)	Safe Margin (dB)	Detector mode (PK/QP)
1637.500	H	-6.82	49.40	42.58	74.00	-31.42	peak
2870.000	H	-0.10	42.62	42.52	74.00	-31.48	peak
4442.500	H	7.37	34.27	41.64	74.00	-32.36	peak
4952.500	H	8.51	45.26	53.77	74.00	-20.23	peak
5845.000	H	9.88	32.46	42.34	74.00	-31.66	peak
7460.000	H	13.87	40.06	53.93	74.00	-20.07	peak
1637.500	V	-6.82	60.16	53.34	74.00	-20.66	peak
2020.000	V	-4.64	52.02	47.38	74.00	-26.62	peak
2827.500	V	-0.39	43.68	43.29	74.00	-30.71	peak
4952.500	V	8.51	46.58	55.09	74.00	-18.91	peak
4952.500	V	8.51	31.29	39.80	54.00	-14.20	AVG
6015.000	V	10.27	32.11	42.38	74.00	-31.62	peak
7460.000	V	13.87	44.73	58.60	74.00	-15.40	peak
7460.000	V	13.87	28.94	42.81	54.00	-11.19	AVG

Note: Level = Reading + Factor

Margin = Level – Limit

Factor= Antenna Factor + Cable Loss - Amplifier Factor



## 7. 20dB Bandwidth Measurement Data

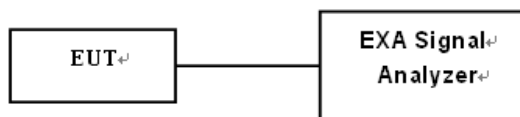
### 7.1 Test Limit

Intentional radiators operating under the alternative provisions to the general emission limits, as contained in § 15.217 through 15.257 and in Subpart E of this part, must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated.

### 7.2 Test Procedure

- The transmitter output was connected to the spectrum analyzer.
- Set RBW of spectrum analyzer to 30 KHz and VBW to 100KHz.
- The 20 dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 20dB.

### 7.3 Test Setup Layout



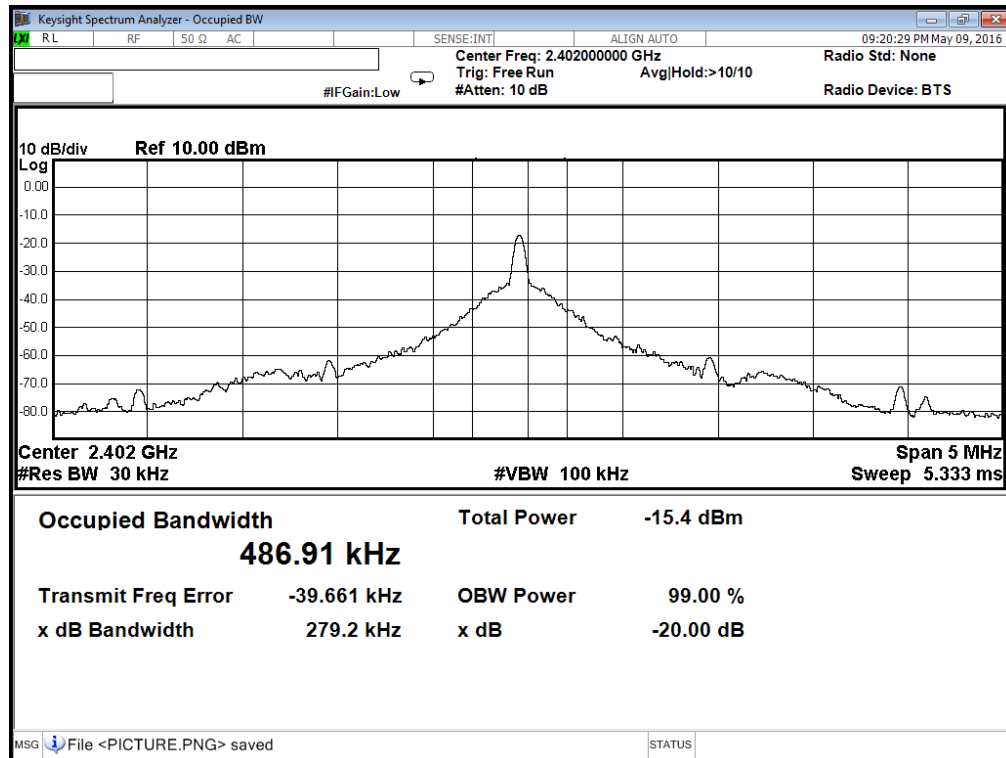
### 7.4 Test Result and Data

Power	: DC 5V	Temperature	: 24 °C
Test Mode	TX-Mode	Humidity	: 54 %
Test date	: May 09, 2016	Atmospheric Pressure	: 1010 hpa

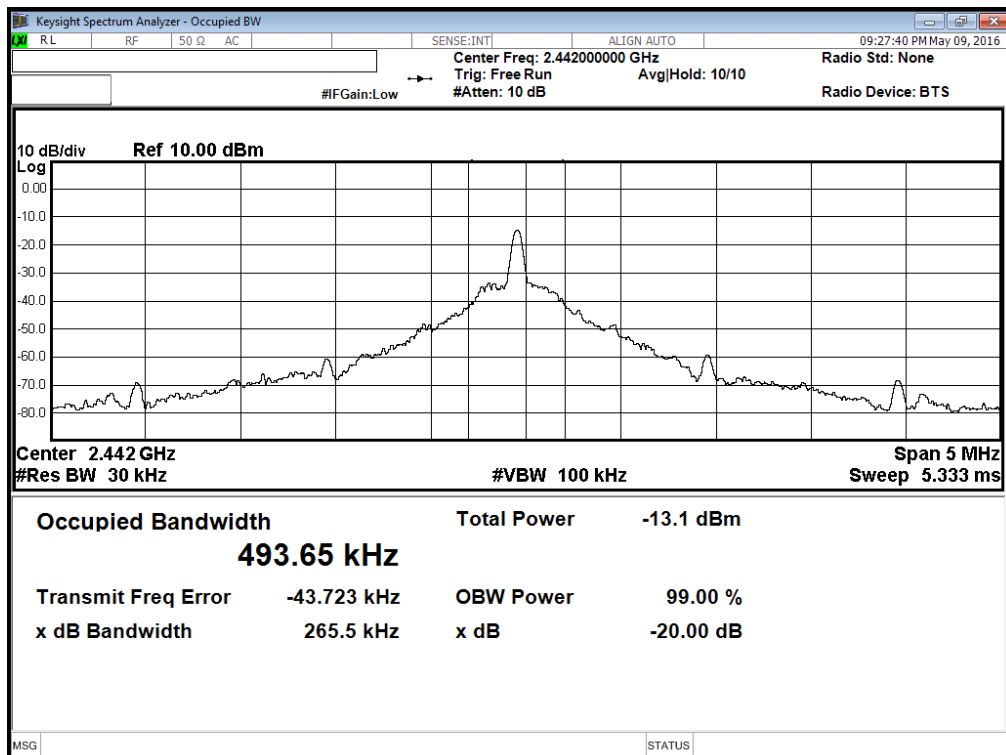
Channel	Frequency (MHz)	20dB Bandwidth (KHz)
Low	2402	279.2
Mid	2442	265.5
High	2474	281.1



Channel: Low

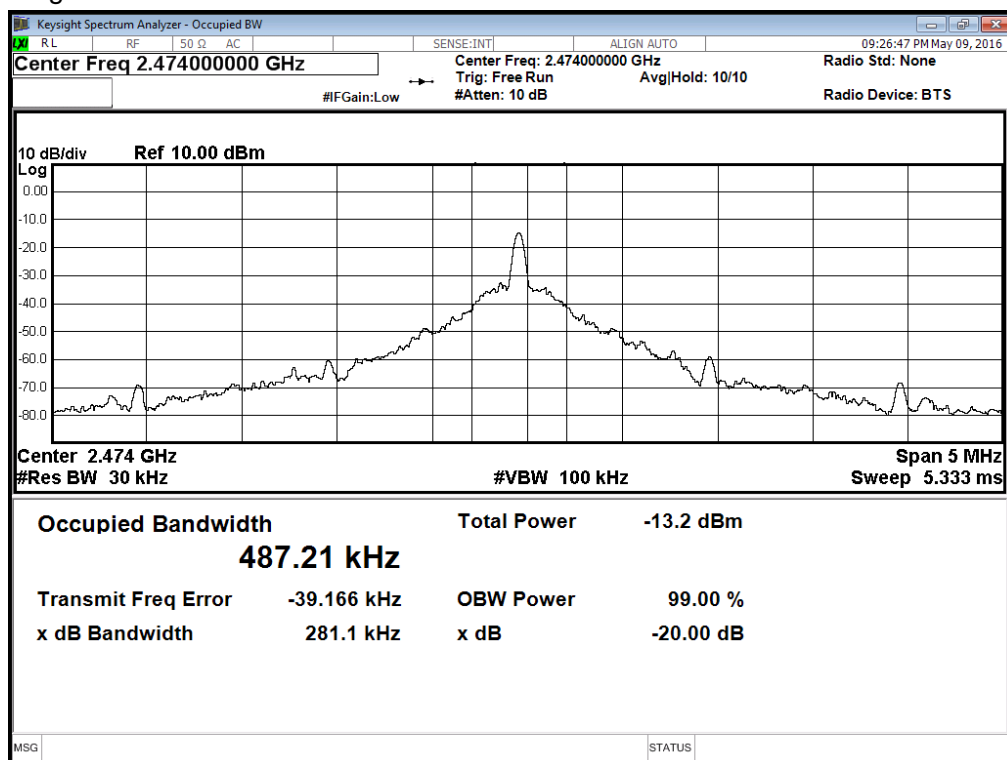


Channel: Mid





Channel: High





## 8. Band Edges Measurement

### 8.1 Test Limit

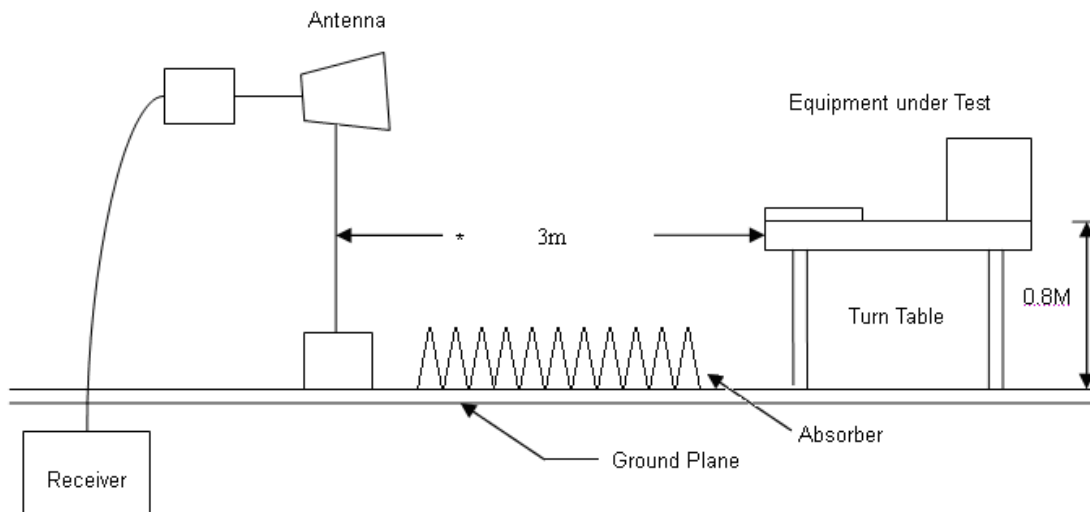
Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation.

### 8.2 Test Procedure

- The EUT was placed on a rotatable table top 0.8 meter above ground.
- The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
- The table was rotated 360 degrees to determine the position of the highest radiation.
- The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and video bandwidth is 3 MHz for Peak detection at frequency above 1GHz.
- The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
- The band edges was measured and recorded.

### 8.3 Test Setup Layout

Above 1GHz Test Setup





#### 8.4 Restrict band emission Measurement Data

Power	:	DC 5V	Temperature	:	24 °C
Test Mode	:	TX-2402MHz	Humidity	:	54 %
Test date	:	May 09, 2016	Atmospheric Pressure	:	1010 hpa

##### VERTICAL

No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	2386.075	-3.07	62.31	59.24	-14.76	74.000	PEAK
2	2386.075	-3.07	47.26	44.19	-9.81	54.000	AVG
3	2390.000	-3.05	48.61	45.56	-28.44	74.000	PEAK
4	2390.000	-3.05	32.58	29.53	-24.47	54.000	AVG
5	2400.000	-3.01	72.74	69.73	-4.27	74.000	PEAK
6	2400.000	-3.01	53.78	50.77	-3.23	54.000	AVG
7	2402.025	-3.00	94.90	91.90	-22.10	114.000	PEAK
8	2402.025	-3.00	78.59	75.59	-18.41	94.000	AVG

##### HORIZONTAL

No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	2386.350	-3.07	57.05	53.98	-20.02	74.000	PEAK
2	2386.350	-3.07	41.35	38.28	-15.72	54.000	AVG
3	2390.000	-3.05	52.48	49.43	-24.57	74.000	PEAK
4	2390.000	-3.05	35.67	32.62	-21.38	54.000	AVG
5	2400.000	-3.01	66.98	63.97	-10.03	74.000	PEAK
6	2400.000	-3.01	49.86	46.85	-7.15	54.000	AVG
7	2402.025	-3.00	88.83	85.83	-28.17	114.000	PEAK
8	2402.025	-3.00	73.14	70.14	-23.86	94.000	AVG



Power	:	DC 5V	Temperature	:	24 °C
Test Mode	:	TX-2474MHz	Humidity	:	54 %
Test date	:	May 09, 2016	Atmospheric Pressure	:	1010 hpa

**VERTICAL**

No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	2474.000	-2.69	94.97	92.28	-21.72	114.000	PEAK
2	2474.000	-2.69	78.39	75.70	-18.30	94.000	AVG
3	2483.500	-2.65	48.34	45.69	-28.31	74.000	PEAK
4	2483.500	-2.65	32.51	29.86	-24.14	54.000	AVG
5	2490.200	-2.62	57.22	54.60	-19.40	74.000	PEAK
6	2490.200	-2.62	42.35	39.73	-14.27	54.000	AVG

**HORIZONTAL**

No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	2474.000	-2.69	89.27	86.58	-27.42	114.000	PEAK
2	2474.000	-2.69	73.71	71.02	-22.98	94.000	AVG
3	2483.500	-2.65	47.69	45.04	-28.96	74.000	PEAK
4	2483.500	-2.65	32.18	29.53	-24.47	54.000	AVG
5	2490.200	-2.62	52.51	49.89	-24.11	74.000	PEAK
6	2490.200	-2.62	38.44	35.82	-18.18	54.000	AVG





## 9. Restricted Bands of Operation

Only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.09000 – 0.11000	16.42000 – 16.42300	399.9 – 410.0	4.500 – 5.250
0.49500 – 0.505**	16.69475 – 16.69525	608.0 – 614.0	5.350 – 5.460
2.17350 – 2.19050	16.80425 – 16.80475	960.0 – 1240.0	7.250 – 7.750
4.12500 – 4.12800	25.50000 – 25.67000	1300.0 – 1427.0	8.025 – 8.500
4.17725 – 4.17775	37.50000 – 38.25000	1435.0 – 1626.5	9.000 – 9.200
4.20725 – 4.20775	73.00000 – 74.60000	1645.5 – 1646.5	9.300 – 9.500
6.21500 – 6.21800	74.80000 – 75.20000	1660.0 – 1710.0	10.600 – 12.700
6.26775 – 6.26825	108.00000 – 121.94000	1718.8 – 1722.2	13.250 – 13.400
6.31175 – 6.31225	123.00000 – 138.00000	2200.0 – 2300.0	14.470 – 14.500
8.29100 – 8.29400	149.90000 – 150.05000	2310.0 – 2390.0	15.350 – 16.200
8.36200 – 8.36600	156.52475 – 156.52525	2483.5 – 2500.0	17.700 – 21.400
8.37625 – 8.38675	156.70000 – 156.90000	2655.0 – 2900.0	22.010 – 23.120
8.41425 – 8.41475	162.01250 – 167.17000	3260.0 – 3267.0	23.600 – 24.000
12.29000 – 12.29300	167.72000 – 173.20000	3332.0 – 3339.0	31.200 – 31.800
12.51975 – 12.52025	240.00000 – 285.00000	3345.8 – 3358.0	36.430 – 36.500
12.57675 – 12.57725	322.00000 – 335.40000	3600.0 – 4400.0	Above 38.6
13.36000 – 13.41000			

\*\* : Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz

### 9.1 Labeling Requirement

The device shall bear the following statement in a conspicuous location on the device:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.