



FCC RADIO TEST REPORT

Applicant : REL ACOUSTICS Ltd.
Address : North Road, Bridgend Industrial, Estate
Bridgend CF313TP U.K.
Equipment : Wireless Sub Bass System
Model No. : NO.25
Trade Name : REL
FCC ID : 2AATQNO25

I HEREBY CERTIFY THAT :

The sample was received on Sep. 26, 2016 and the testing was carried out on Jan. 20, 2017 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/ Technical director

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



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☐ Additional attachment as following record:

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1. Summary of Test Procedure and Test Results

1.1 Applicable Standards

ANSI C63.4: 2014

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

Equipment	Wireless Sub Bass System
Model No.	NO.25
Power Ratings	AC 240V~50Hz,FUSE:T7AL 250Vac,1000W, AC 120V~60Hz,FUSE:T15AL 250Vac,1000W
Frequency	2403MHz -2479MHz
Antenna type	Dipole Antenna with 2.0dBi
Modulation technology	GFSK
Temperature Range	0-55℃

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, Load and EUT for the RF test.
- An executive program, "**Setup_PurePath_Wireless_Commander.1.0.36940.exe**" which transmits and receives data through Wireless.
- The EUT had been tested under operating condition
EUT staying in continuous transmitting mode was programmed.
FHSS : Channel Low (2403MHz), Channel Mid (2441MHz) and Channel High (2479MHz) were chosen for full testing.

2.3 Description of Test System

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

Cable:

No.	Cable	Quantity	Description
A	USB Cable	1	1.0m Non shielding
B	USB Mouse Cable	1	1.8m Non shielding
C	DC Cable	1	1.0m Non Shielding with one core



2.4 General Information of Test

☐	Test Site	Cerpass Technology Corporation Test Laboratory 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
☒	Test Site	Cerpass Technology (Suzhou) Co.,Ltd 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.

2.5 Measurement Uncertainty

Measurement Item	Measurement Uncertainty
Conducted Emission	± 2.71 dB
Radiation test (3m) below 1GHz	Vertical : ± 4.11 dB
	Horizontal: ± 4.10 dB
adiation test (3m) below 1GHz 30 MHz ~ 25GHz	Vertical : ± 4.11 dB
	Horizontal: ± 4.10 dB
20 dB Bandwidthd	7500 Hz



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	2016.03.28	2017.03.27
LISN	SCHWARZBECK	NSLK 8127	8127749	2016.03.28	2017.03.27
Pulse Limiter with 10dB Attenuation	SCHWARZBECK	VTSD 9561-F	9561-F106	2016.02.22	2017.02.21
Temperature/Humidity Meter	mingle	ETH529	N/A	2016.02.22	2017.02.21
AMPLIFIER	HP	8447F	3113A05915	2016.02.22	2017.02.21
Loop Antenna	R&S	HFH2-Z2	100150	2016.04.16	2017.04.15
BILOG Antenna	SCHAFFNER	CBL6112D	22241	2016.02.24	2017.02.23
Horn Antenna	Sunol	DRH-118	A072913	2016.10.12	2017.10.11
Broad-Band Horn Antenna	Schwarzbeck	BBHA9170	9170-347	2016.04.16	2017.04.15
Preamplifier	COM-POWER	PA-840	711885	2016.03.26	2017.03.25
Temp&Humidity&barometer	mingle	ETH529	N/A	2016.02.19	2017.02.18
Preamplifier	Feld	AFS44-0010180 0-25- 10P-44	1579008	2016.09.30	2017.09.29
ESG VECTOR SIGNAL GENERATOR	Agilent	E4438C	MY4509258 2	2016.06.06	2017.06.05
MXG VECTOR SIGNAL GENERATOR	Agilent	N5182B	MY5305012 7	2016.06.06	2017.06.05
EXA Signal Analyzer	Agilent	N9020A	US46220290	2016.06.06	2017.06.05
Power sensor	e-channel	ERS-180T-24	TW5451026	2016.06.25	2017.06.24
Series Power Meter	ANRITSU	ML24958A	1224005	2016.03.27	2017.03.26



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	Dipole Antenna	2.0dBi



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. 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 μ V)	Average (dB μ V)
0.15 – 0.5	66-56*	56-46*
0.5 – 5.0	56	46
5.0 – 30.0	60	50

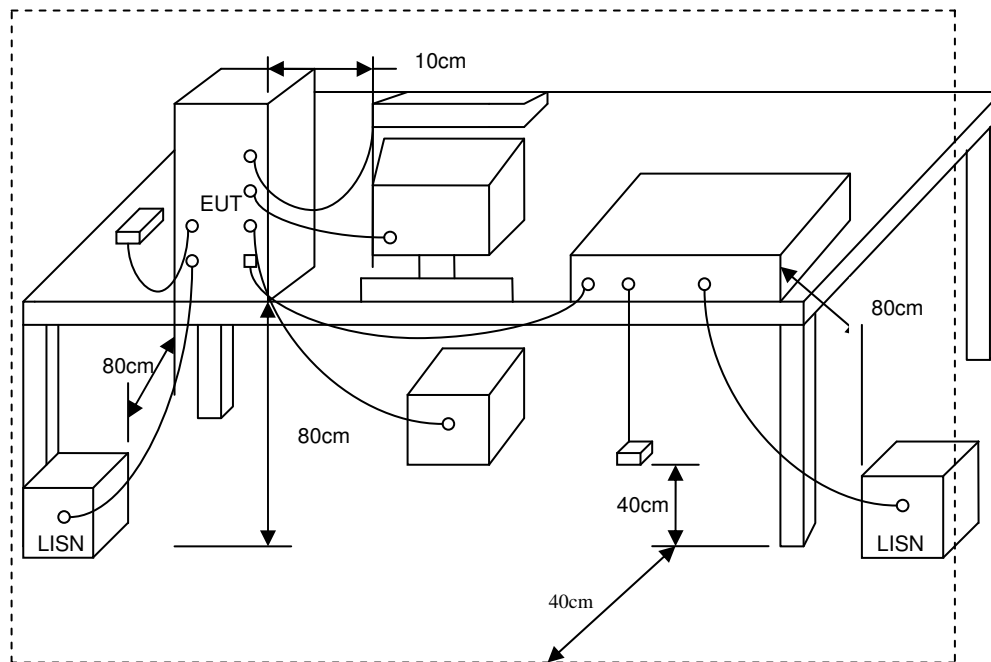
*Decreases with the logarithm of the frequency.

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.



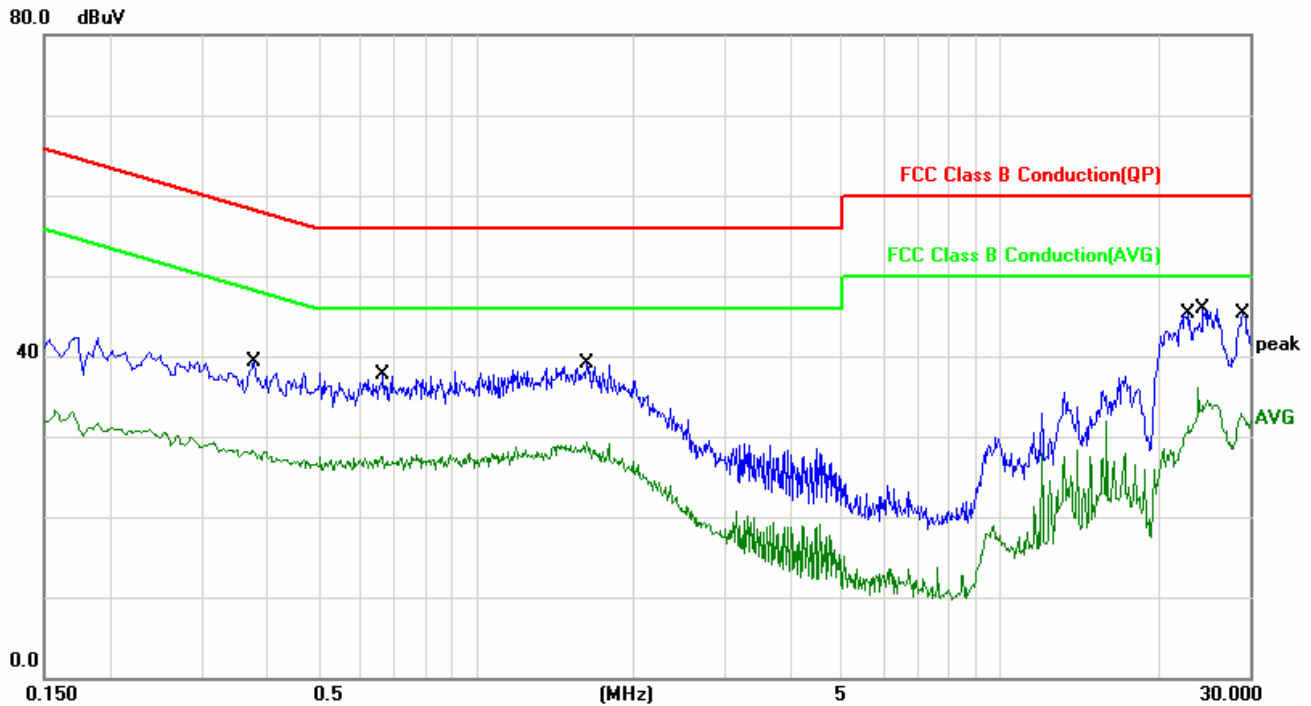
5.3 Typical Test Setup





5.4 Test Result and Data

Test Mode :	Normal Link	Phase :	Line
Temperature :	20 °C	Humidity:	51%
Pressur(mbar) :	1002	Date:	2017/01/20

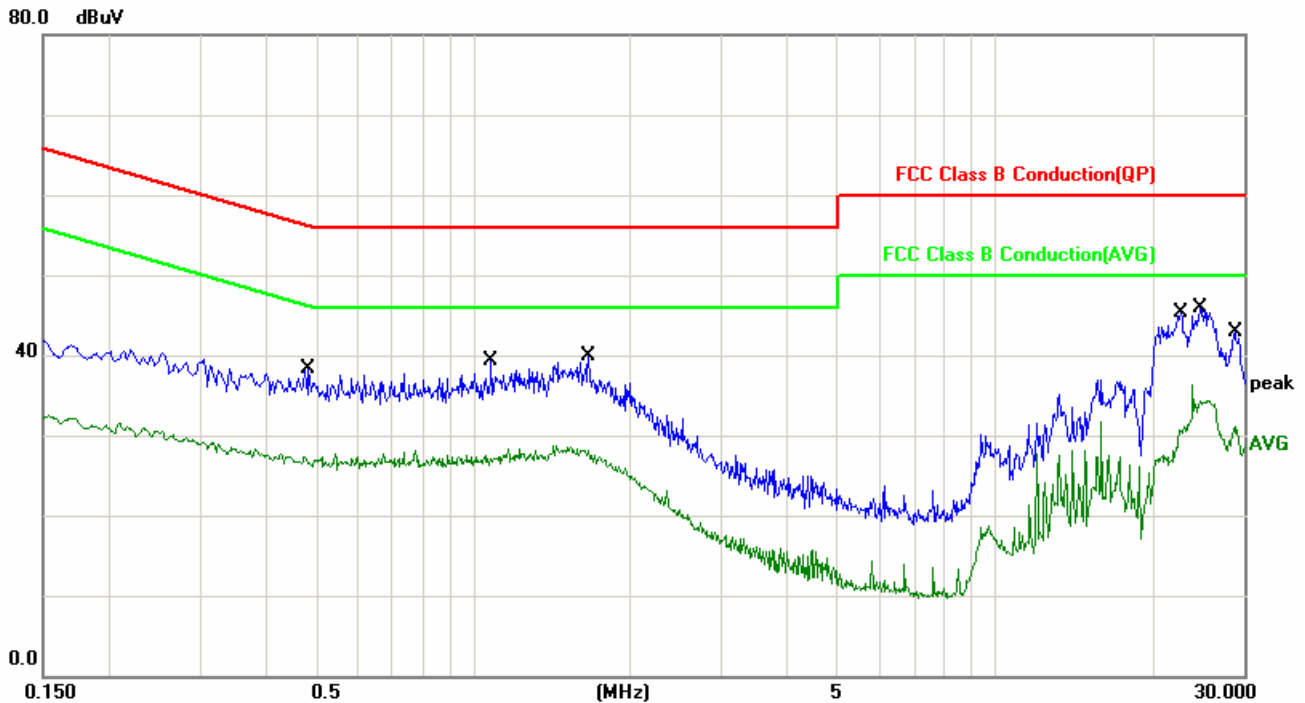


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.3780	9.96	22.74	32.70	58.32	-25.62	QP
2	0.3780	9.96	17.62	27.58	48.32	-20.74	AVG
3	0.6660	10.04	21.53	31.57	56.00	-24.43	QP
4	0.6660	10.04	16.46	26.50	46.00	-19.50	AVG
5	1.6300	10.72	22.57	33.29	56.00	-22.71	QP
6	1.6300	10.72	17.38	28.10	46.00	-17.90	AVG
7	22.8220	10.58	28.20	38.78	60.00	-21.22	QP
8	22.8220	10.58	19.18	29.76	50.00	-20.24	AVG
9	24.5060	10.59	28.71	39.30	60.00	-20.70	QP
10	24.5060	10.59	22.10	32.69	50.00	-17.31	AVG
11	29.2100	10.64	27.68	38.32	60.00	-21.68	QP
12	29.2100	10.64	20.62	31.26	50.00	-18.74	AVG

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



Test Mode :	Normal Link	Phase :	Neutral
Temperature :	20°C	Humidity :	51%
Pressur(mbar) :	1002	Date :	2017/01/20



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.4860	9.90	22.26	32.16	56.24	-24.08	QP
2	0.4860	9.90	17.95	27.85	46.24	-18.39	AVG
3	1.0859	10.13	21.74	31.87	56.00	-24.13	QP
4	1.0859	10.13	16.58	26.71	46.00	-19.29	AVG
5	1.6700	10.15	22.27	32.42	56.00	-23.58	QP
6	1.6700	10.15	17.04	27.19	46.00	-18.81	AVG
7	22.7660	10.58	28.77	39.35	60.00	-20.65	QP
8	22.7660	10.58	19.39	29.97	50.00	-20.03	AVG
9	24.7780	10.59	28.84	39.43	60.00	-20.57	QP
10	24.7780	10.59	22.55	33.14	50.00	-16.86	AVG
11	28.8020	10.63	25.62	36.25	60.00	-23.75	QP
12	28.8020	10.63	18.77	29.40	50.00	-20.60	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. 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 (μ V / M)	Radiated (dB μ 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 μ V/ M)
30-230	10	30
230-1000	10	37

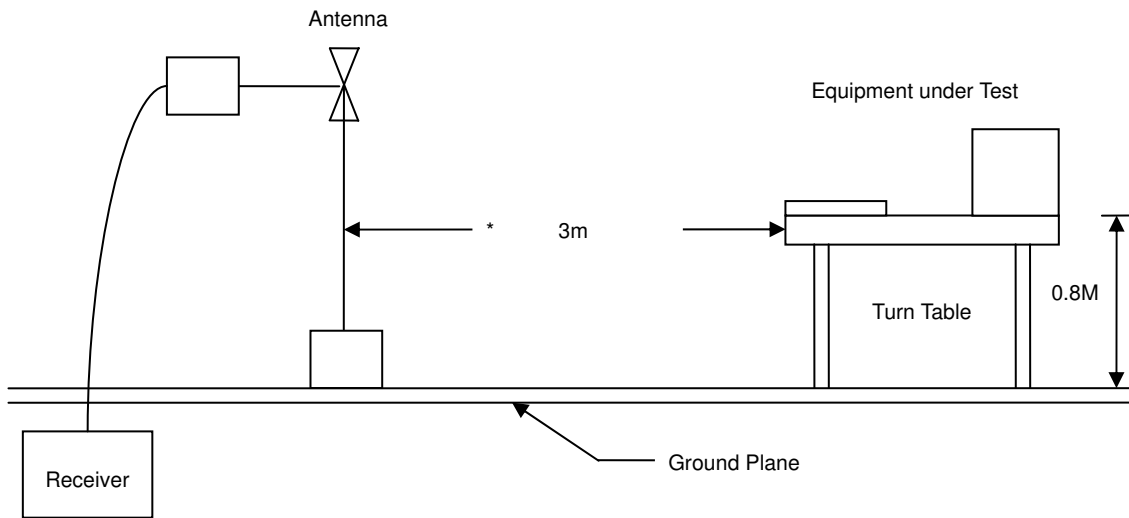
6.2 Test Procedures

- 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.

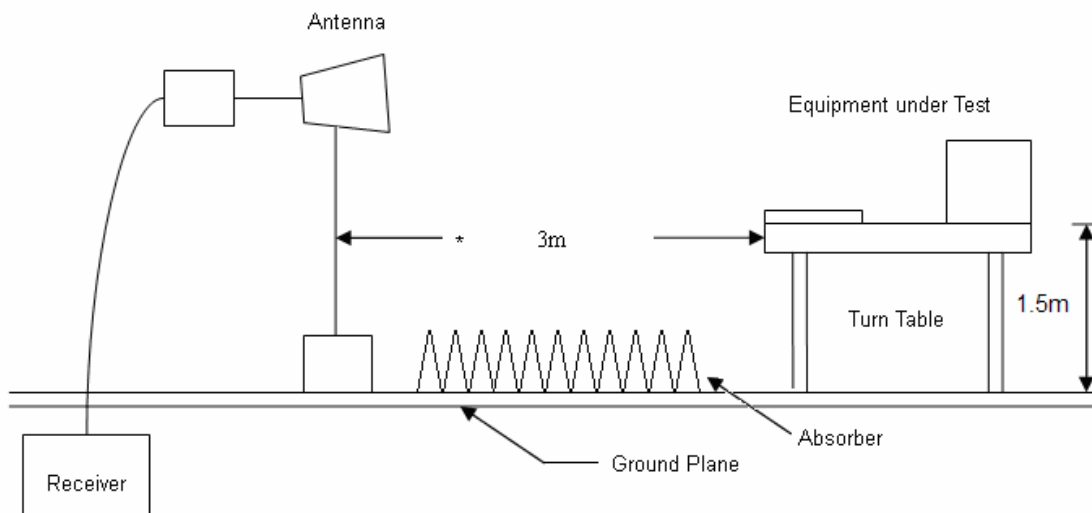


6.3 Typical Test Setup

Below 1GHz Test Setup



Above 1GHz Test Setup





6.4 Test Result and Data

6.4.1 Test Result and Data of Transmitter (9kHz-30MHz)

All spurious emissions (9kHz-30MHz) are below fundamental emissions field strength and the levels exceed the level of 20 dB below the applicable limit.

**6.4.2 Test Result and Data of Transmitter (30MHz ~ 1GHz)**

Power	:	AC 120V	Temperature	:	24 °C
Test Mode	:	TX Mode	Humidity	:	54 %
Test date	:	Jan. 20, 2017	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)
65.8900	H	-15.68	51.23	35.55	40.00	-4.45	QP
102.7500	H	-9.37	46.98	37.61	43.50	-5.89	QP
110.5100	H	-8.50	45.77	37.27	43.50	-6.23	QP
172.5900	H	-11.75	49.36	37.61	43.50	-5.89	QP
196.8400	H	-9.84	46.58	36.74	43.50	-6.76	QP
322.9400	H	-5.98	39.24	33.26	46.00	-12.74	QP
53.2800	V	-14.73	52.31	37.58	40.00	-2.42	QP
113.4200	V	-8.30	44.23	35.93	43.50	-7.57	QP
150.2800	V	-10.85	51.36	40.51	43.50	-2.99	QP
163.8600	V	-12.30	51.49	39.19	43.50	-4.31	QP
173.5600	V	-11.79	52.34	40.55	43.50	-2.95	QP
196.8400	V	-9.84	50.23	40.39	43.50	-3.11	QP

Note: Level = Reading + Factor

Margin = Level – Limit

Factor= Antenna Factor + Cable Loss - Amplifier Factor

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

Power	:	AC 120V	Temperature	:	24 °C
Test Mode	:	TX-2403MHz	Humidity	:	54 %
Test date	:	Jan. 20, 2017	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)
1467.500	H	-7.91	62.20	54.29	74.00	-19.71	peak
1467.500	H	-7.91	49.37	41.46	54.00	-12.54	AVG
1765.000	H	-6.08	62.60	56.52	74.00	-17.48	peak
1765.000	H	-6.08	50.11	44.03	54.00	-9.97	AVG
2062.500	H	-4.46	56.23	51.77	74.00	-22.23	peak
2062.500	H	-4.46	45.67	41.21	54.00	-12.79	AVG
3210.000	H	1.87	52.02	53.89	74.00	-20.11	peak
3210.000	H	1.87	40.44	42.31	54.00	-11.69	AVG
4400.000	H	7.15	41.61	48.76	74.00	-25.24	peak
7375.000	H	13.54	33.55	47.09	74.00	-26.91	peak
1170.000	V	-10.62	64.06	53.44	74.00	-20.56	peak
1467.500	V	-7.91	64.67	56.76	74.00	-17.24	peak
1467.500	V	-7.91	53.58	45.67	54.00	-8.33	AVG
2062.500	V	-4.46	55.85	51.39	74.00	-22.61	peak
2912.500	V	0.18	54.26	54.44	74.00	-19.56	peak
2912.500	V	0.18	43.29	43.47	54.00	-10.53	AVG
3210.000	V	1.87	50.74	52.61	74.00	-21.39	peak
3210.000	V	1.87	39.85	41.72	54.00	-12.28	AVG
7630.000	V	14.09	33.34	47.43	74.00	-26.57	peak

Note: Level = Reading + Factor

Margin = Level – Limit

Factor= Antenna Factor + Cable Loss - Amplifier Factor



Power	: AC 120V	Temperature	: 24 °C
Test Mode	: TX-2441MHz	Humidity	: 54 %
Test date	: Jan. 20, 2017	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)
1255.000	H	-9.84	67.77	57.93	74.00	-16.07	peak
2062.500	H	-9.84	57.62	47.78	54.00	-6.22	AVG
2062.500	H	-4.46	59.84	55.38	74.00	-18.62	peak
2912.500	H	-4.46	48.23	43.77	54.00	-10.23	AVG
3507.500	H	0.18	50.01	50.19	74.00	-23.81	peak
3507.500	H	3.43	50.24	53.67	74.00	-20.33	peak
4187.500	H	3.43	39.87	43.30	54.00	-10.70	AVG
7332.500	H	6.07	41.27	47.34	74.00	-26.66	peak
1255.000	H	13.38	33.54	46.92	74.00	-27.08	peak
1467.500	V	-7.91	63.71	55.80	74.00	-18.20	peak
1467.500	V	-7.91	52.14	44.23	54.00	-9.77	AVG
1892.500	V	-5.35	58.53	53.18	74.00	-20.82	peak
3210.000	V	1.87	53.13	55.00	74.00	-19.00	peak
3210.000	V	1.87	42.68	44.55	54.00	-9.45	AVG
3805.000	V	4.44	42.97	47.41	74.00	-26.59	peak
3805.000	V	4.44	31.65	36.09	54.00	-17.91	AVG
4995.000	V	8.59	36.72	45.31	74.00	-28.69	peak
7417.500	V	13.71	33.11	46.82	74.00	-27.18	peak

Note: Level = Reading + Factor

Margin = Level – Limit

Factor= Antenna Factor + Cable Loss - Amplifier Factor



Power	: AC 120V	Temperature	: 24 °C
Test Mode	: TX-2479MHz	Humidity	: 54 %
Test date	: Jan. 20, 2017	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)
1297.500	H	-9.46	65.99	56.53	74.00	-17.47	peak
1297.500	H	-9.46	53.57	44.11	54.00	-9.89	AVG
1765.000	H	-6.08	61.05	54.97	74.00	-19.03	peak
1765.000	H	-6.08	50.16	44.08	54.00	-9.92	AVG
2912.500	H	0.18	52.46	52.64	74.00	-21.36	peak
2912.500	H	0.18	40.38	40.56	54.00	-13.44	AVG
3507.500	H	3.43	41.91	45.34	74.00	-28.66	peak
5760.000	H	9.66	34.27	43.93	74.00	-30.07	peak
7502.500	H	14.03	34.19	48.22	74.00	-25.78	peak
1255.000	V	-9.84	65.46	55.62	74.00	-18.38	peak
1255.000	V	-9.84	54.78	44.94	54.00	-9.06	AVG
1467.500	V	-7.91	59.33	51.42	74.00	-22.58	peak
2062.500	V	-4.46	59.30	54.84	74.00	-19.16	peak
2062.500	V	-4.46	48.15	43.69	54.00	-10.31	AVG
3210.000	V	1.87	51.10	52.97	74.00	-21.03	peak
3210.000	V	1.87	40.49	42.36	54.00	-11.64	AVG
5165.000	V	8.74	33.80	42.54	74.00	-31.46	peak
7247.500	V	13.05	32.67	45.72	74.00	-28.28	peak

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 100 KHz and VBW to 300KHz.
- 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



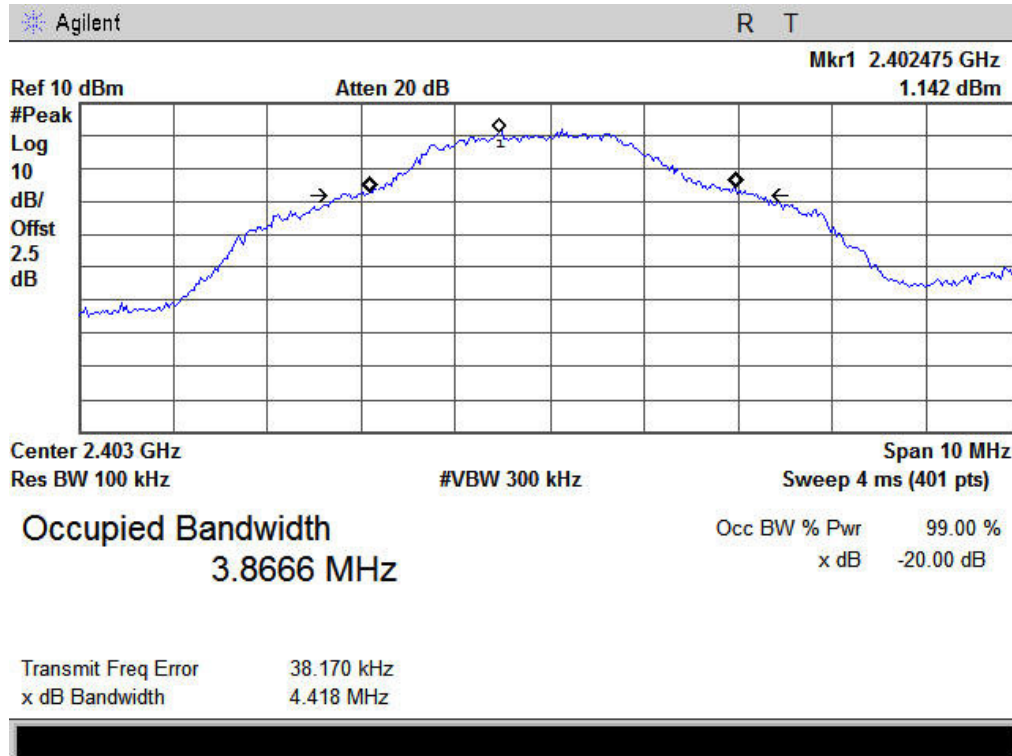
7.4 Test Result and Data

Power	: AC 120V	Temperature	: 24 °C
Test Mode	TX-Mode	Humidity	: 54 %
Test date	: Jan. 20, 2017	Atmospheric Pressure	: 1010 hpa

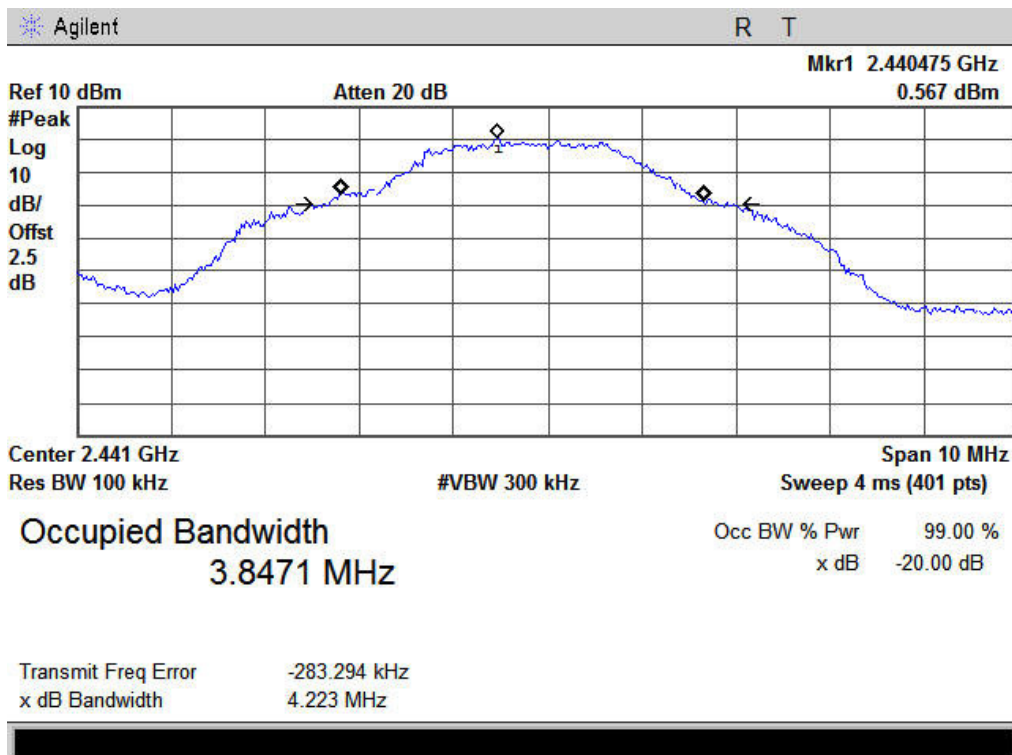
Channel	Frequency (MHz)	20dB Bandwidth (KHz)
Low	2403	4418.00
Mid	2441	4223.00
High	2479	4311.00



Channel: Low

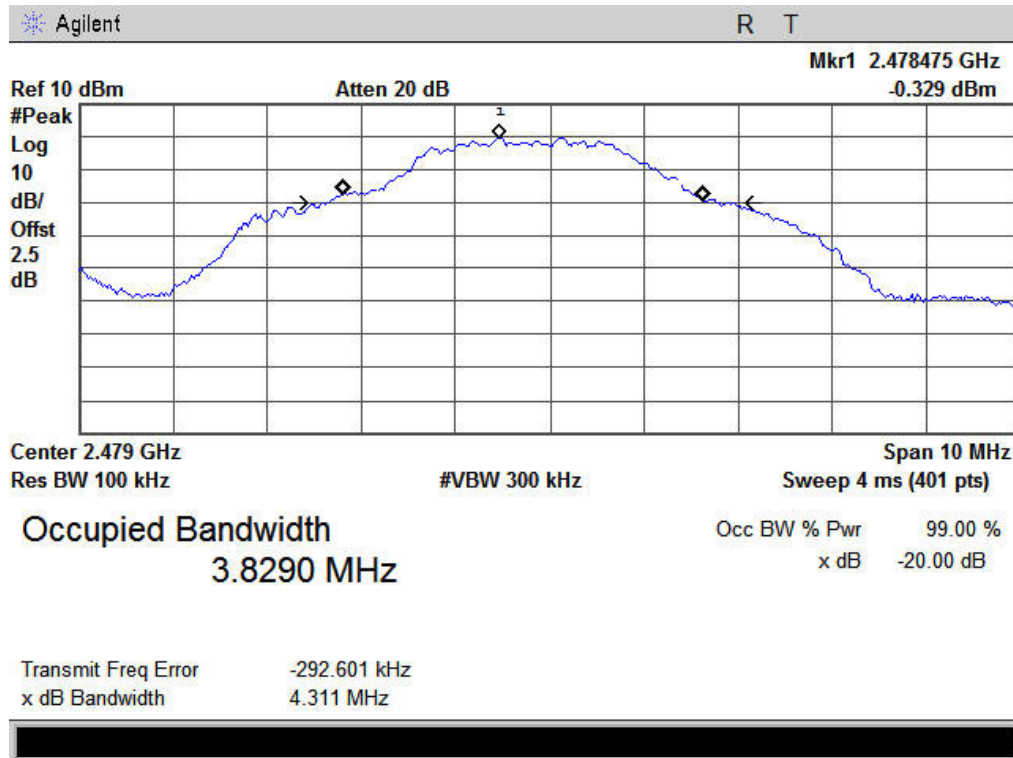


Channel: Mid





Channel: High





8. Band Edges Measurement

8.1 Test Limit

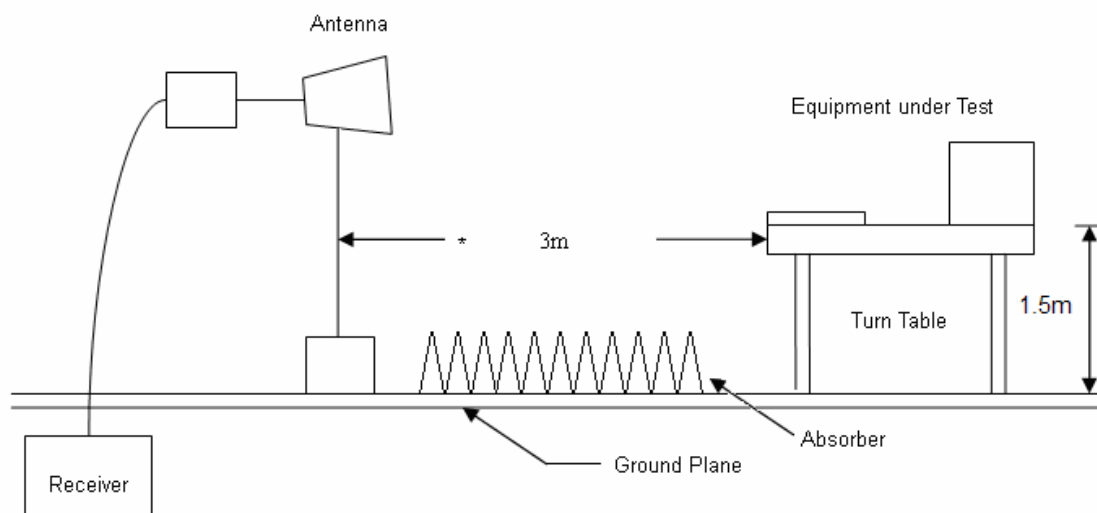
Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation.

8.2 Test Procedure

- The EUT was placed on a rotatable table top 1.5 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	:	AC 120V	Temperature	:	24 °C
Test Mode	:	TX-2403MHz	Humidity	:	54 %
Test date	:	Jan. 20, 2017	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	2390.000	-3.05	54.46	51.41	-22.59	74.00	PEAK
2	2390.000	-3.05	38.97	35.92	-18.08	54.00	AVG
3	2400.000	-3.01	65.64	62.63	-11.37	74.00	PEAK
4	2400.000	-3.01	50.15	47.14	-6.86	54.00	AVG
5	2403.880	-2.99	82.31	79.32	-34.68	114.000	PEAK
6	2403.880	-2.99	67.16	64.17	-29.83	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	2390.000	-3.05	50.94	47.89	-26.11	74.000	PEAK
2	2390.000	-3.05	35.94	32.89	-21.11	54.000	AVG
3	2400.000	-3.01	72.28	69.27	-4.73	74.000	PEAK
4	2400.000	-3.01	55.96	52.95	-1.05	54.000	AVG
5	2403.880	-2.99	88.19	85.20	-28.80	114.000	PEAK
6	2403.880	-2.99	74.22	71.23	-22.77	94.000	AVG



Power	:	AC 120V	Temperature	:	24 °C
Test Mode	:	TX-2479MHz	Humidity	:	54 %
Test date	:	Jan. 20, 2017	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	2478.125	-2.67	90.00	87.33	-26.67	114.000	PEAK
2	2478.125	-2.67	78.24	75.57	-18.43	94.000	AVG
3	2483.500	-2.65	56.57	53.92	-20.08	74.000	PEAK
4	2483.500	-2.65	46.51	43.86	-10.14	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	2478.750	-2.67	97.26	94.59	-19.41	114.000	PEAK
2	2478.750	-2.67	85.31	82.64	-11.36	94.000	AVG
3	2483.500	-2.65	64.31	61.66	-12.34	74.000	PEAK
4	2483.500	-2.65	54.02	51.37	-2.63	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.