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# FCC TEST REPORT

**REPORT NO.:** RF970124A14

**MODEL NO.:** KaddyMate

**RECEIVED:** Jan. 24, 2008

**TESTED:** May 5 ~ 7, 2008

**ISSUED:** Feb. 11, 2009

**APPLICANT:** Eurogreen International Inc.

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**ISSUED BY:** Bureau Veritas Consumer Products Services  
(H.K.) Ltd., Taoyuan Branch

**LAB LOCATION:** No. 47, 14th Ling, Chia Pau Tsuen, Lin Kou  
Hsiang, Taipei Hsien 244, Taiwan

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## 1. CERTIFICATION

**PRODUCT:** Receiver for remote golf cart  
**BRAND NAME:** LAWIA  
**MODEL NO.:** KaddyMate  
**APPLICANT:** Eurogreen International Inc.  
**TESTED:** May 5 ~ 7, 2008  
**TEST SAMPLE:** ENGINEERING SAMPLE  
**STANDARDS:** FCC Part 15, Subpart C (Section 15.249),  
ANSI C63.4-2003

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

**PREPARED BY** : Celia Chen , **DATE:** Feb. 11, 2009  
( Celia Chen / Senior Specialist )

**TECHNICAL ACCEPTANCE** : Jamison Chan , **DATE:** Feb. 11, 2009  
Responsible for RF ( Jamison Chan / Supervisor )

**APPROVED BY** : Ken Liu , **DATE:** Feb. 11, 2009  
( Ken Liu / Deputy Manager )



## 2. SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC Part 15, Subpart C (Section 15.249)			
STANDARD SECTION	TEST TYPE AND LIMIT	RESULT	REMARK
15.207	Conducted Emission Test	N/A	Power supply is 12Vdc from battery
15.209 15.249 15.249 (d)	Radiated Emission Test Band Edge Measurement Limit: 50dB less than the peak value of fundamental frequency or meet radiated emission limit in section 12.209	PASS	Minimum passing margin is -1.38dB at 34.215MHz

### 2.1 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

MEASUREMENT	FREQUENCY	UNCERTAINTY
Radiated emissions	30MHz ~ 1GHz	3.75 dB
	1GHz ~ 40GHz	2.89 dB



### 3. GENERAL INFORMATION

#### 3.1 GENERAL DESCRIPTION OF EUT

<b>EUT</b>	Receiver for remote golf cart
<b>MODEL NO.</b>	KaddyMate
<b>FCC ID</b>	VZJ89061KR
<b>POWER SUPPLY</b>	12Vdc from battery
<b>MODULATION TYPE</b>	GFSK
<b>FREQUENCY RANGE</b>	906.1MHz, 907.7MHz
<b>NUMBER OF CHANNEL</b>	2
<b>ANTENNA TYPE</b>	Loop antenna with -5.88dBi gain
<b>DATA CABLE</b>	N/A
<b>I/O PORTS</b>	N/A
<b>ASSOCIATED DEVICES</b>	N/A

**NOTE:**

1. The EUT is a Receiver for remote golf cart.
2. The above EUT information was declared by the manufacturer and for more detailed features description, please refer to the manufacturer's specifications or User's Manual.

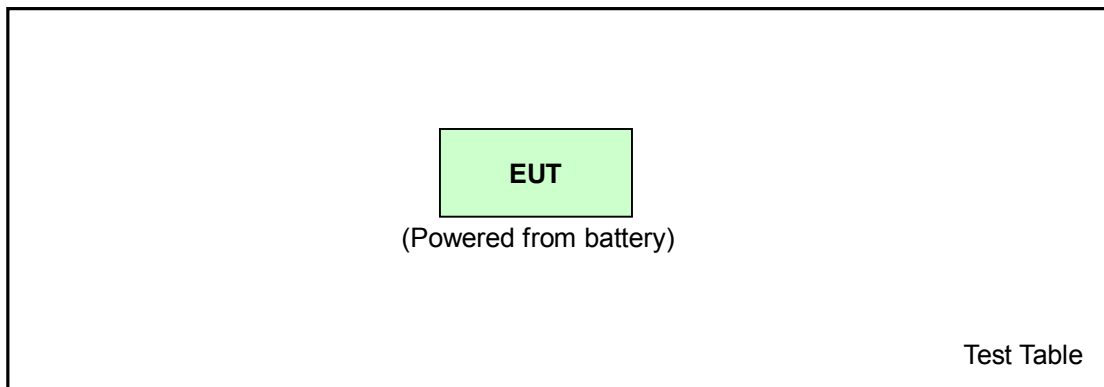


### 3.2 DESCRIPTION OF TEST MODES

2 channels are provided to this EUT:

Channel	Frequency
1	906.1MHz
2	907.7MHz

#### 3.2.1 CONFIGURATION OF SYSTEM UNDER TEST



### 3.2.2 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL:

EUT configure mode	Applicable to				Description
	PLC	RE<1G	RE≥1G	BM	
Mode A	Note	√	√	√	For 906.1MHz
Mode B	Note	√	√	√	For 907.7MHz

Where PLC: Power Line Conducted Emission RE<1G RE: Radiated Emission below 1GHz

RE≥1G: Radiated Emission above 1GHz BM: Bandedge Measurement

Note: No need to concern of Conducted Emission due to the EUT is powered by batteries.

#### RADIATED EMISSION TEST (BELOW 1 GHz):

- Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- Following channel(s) was (were) selected for the final test as listed below.

EUT CONFIGURE MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TYPE
A	1 to 2	1	GFSK
B	1 to 2	2	GFSK

#### RADIATED EMISSION TEST (ABOVE 1 GHz):

- Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- Following channel(s) was (were) selected for the final test as listed below.

EUT CONFIGURE MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TYPE
A	1 to 2	1	GFSK
B	1 to 2	2	GFSK

#### BANDEDGE MEASUREMENT:

- Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- Following channel(s) was (were) selected for the final test as listed below.

EUT CONFIGURE MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TYPE
A	1 to 2	1	GFSK
B	1 to 2	2	GFSK



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### **3.3 GENERAL DESCRIPTION OF APPLIED STANDARDS**

The EUT is a RF product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

**FCC Part 15, Subpart C. (15.249)**

**ANSI C63.4-2003**

All test items have been performed and recorded as per the above standards.

### **3.4 DESCRIPTION OF SUPPORT UNITS**

The EUT has been tested as an independent unit.



## 4. TEST TYPES AND RESULTS

### 4.1 CONDUCTED EMISSION MEASUREMENT

N/A

### 4.2 RADIATED EMISSION MEASUREMENT

#### 4.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT

Emissions radiated outside of the specified bands, shall be according to the general radiated limits in 15.209, 15.249 as following:

15.209 Limit		
Frequencies (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009 ~ 0.490	2400/F(kHz)	300
0.490 ~ 1.705	24000/F(kHz)	30
1.705 ~ 30.0	30	30
30 ~ 88	100	3
88 ~ 216	150	3
216 ~ 960	200	3
Above 960	500	3
15.249 Limit		
Fundamental Frequency	Field Strength of Fundamental (millivolts/meter)	Field Strength of Harmonics (microvolts/meter)
902 ~ 928 MHz	50	500
2400 ~ 2483.5 MHz	50	500
5725 ~ 5875 MHz	50	500
24 ~ 24.25 GHz	250	2500

**NOTE:**

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. As shown in 15.35(b), for frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.



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## 4.2.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
HP Preamplifier	8447D	2432A03504	May 09, 2007	May 08, 2008
HP Preamplifier	8449B	3008A01201	Oct. 02, 2007	Oct. 01, 2008
HP Preamplifier	8449B	3008A01292	Aug. 06, 2007	Aug. 05, 2008
ROHDE & SCHWARZ TEST RECEIVER	ESI7	836697/012	Dec. 06, 2007	Dec. 05, 2008
Schwarzbeck Antenna	VULB 9168	137	May 02, 2008	May 01, 2009
Schwarzbeck Antenna	VHBA 9123	480	Apr. 23, 2008	Apr. 22, 2009
EMCO Horn Antenna	3115	6714	Oct. 19, 2007	Oct. 18, 2008
EMCO Horn Antenna	3115	9312-4192	Apr. 21, 2008	Apr. 20, 2009
ADT. Turn Table	TT100	0306	NA	NA
ADT. Tower	AT100	0306	NA	NA
Software	ADT_Radiated_V7.6.15	NA	NA	NA
SUHNER RF cable	SF104-26.5	CABLE-CH6-17m-01	Nov. 05, 2007	Nov. 04, 2008
ROHDE & SCHWARZ Spectrum Analyzer	FSP 40	100035	Mar. 26, 2008	Mar. 25, 2009

- NOTE:**
1. The calibration interval of the above test instruments is 12 months. And the calibrations are traceable to NML/ROC and NIST/USA.
  2. The horn antenna and HP preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
  3. The test was performed in Chamber No. 6.
  4. The Industry Canada Reference No. IC 7450E-6.
  5. The FCC Site Registration No. is 447212.



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### 4.2.3 TEST PROCEDURES

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi- anechoic. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions would be re-tested one by one using peak, quasi-peak method or average method as specified and then reported in data sheet.

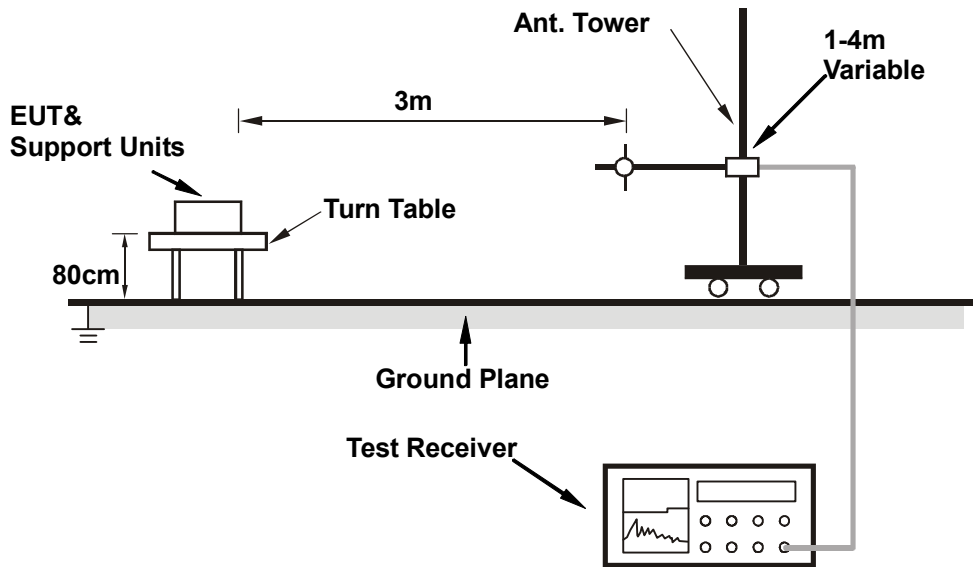
#### NOTE:

1. The resolution bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection at frequency below 1GHz.
2. The resolution bandwidth is 1MHz and video bandwidth of test receiver/spectrum analyzer is 3MHz for Peak detection at frequency above 1GHz. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz for Average detection (AV) at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 10 Hz for Average detection (AV) at frequency above 1GHz.

### 4.2.4 DEVIATION FROM TEST STANDARD

No deviation

### 4.2.5 TEST SETUP



For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

### 4.2.6 EUT OPERATING CONDITIONS

Set the EUT under transmission condition continuously at specific channel frequency.



## 4.2.7 TEST RESULTS

<b>MODULATION TYPE</b>	GFSK	<b>CHANNEL</b>	1
<b>INPUT POWER</b>	12Vdc	<b>FREQUENCY RANGE</b>	Below 1000MHz
<b>ENVIRONMENTAL CONDITIONS</b>	23deg. C, 80%RH, 1001Pa	<b>DETECTOR FUNCTION</b>	Quasi-Peak
<b>TESTED BY</b>	Jun Wu		

### ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	34.215	38.62 QP	40.00	-1.38	1.42 H	215	18.37	20.25
2	90.321	32.65 QP	43.50	-10.85	1.35 H	222	16.89	15.76
3	118.740	33.97 QP	43.50	-9.53	1.30 H	187	15.08	18.89
4	133.870	36.62 QP	43.50	-6.88	1.28 H	14	17.04	19.58
5	198.620	38.78 QP	43.50	-4.72	1.24 H	302	21.67	17.11
6	259.642	36.99 QP	46.00	-9.01	1.24 H	114	15.98	21.01
7	877.124	38.26 QP	46.00	-7.74	1.08 H	119	4.10	34.16

### ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	31.950	38.26 QP	40.00	-1.74	1.00 V	215	18.78	19.48
2	64.870	36.97 QP	40.00	-3.03	1.00 V	45	18.25	18.72
3	99.620	35.21 QP	43.50	-8.29	1.00 V	360	18.24	16.97
4	133.650	33.52 QP	43.50	-9.98	1.00 V	47	13.95	19.57
5	280.862	34.87 QP	46.00	-11.13	1.00 V	215	13.52	21.35
6	305.980	40.26 QP	46.00	-5.74	1.00 V	360	18.47	21.79
7	366.741	37.85 QP	46.00	-8.15	1.00 V	112	14.33	23.52

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.



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<b>MODULATION TYPE</b>	GFSK	<b>CHANNEL</b>	1
<b>INPUT POWER</b>	12Vdc	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>ENVIRONMENTAL CONDITIONS</b>	23deg. C, 80%RH, 1001Pa	<b>TESTED BY</b>	Jun Wu

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*906.100	102.17 PK	114.00	-11.83	1.00 H	292	72.03	30.14
2	*906.100	84.76 AV	94.00	-9.24	1.00 H	292	54.62	30.14

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*906.100	95.12 PK	114.00	-18.88	1.00 V	38	64.98	30.14
2	*906.100	77.56 AV	94.00	-16.44	1.00 V	38	47.42	30.14

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. “ \* “ : Fundamental frequency



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<b>MODULATION TYPE</b>	GFSK	<b>CHANNEL</b>	1
<b>INPUT POWER</b>	12Vdc	<b>FREQUENCY RANGE</b>	1 ~ 10GHz
<b>ENVIRONMENTAL CONDITIONS</b>	23deg. C, 80%RH, 1001Pa	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>TESTED BY</b>	Jun Wu		

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1812.200	46.18 PK	74.00	-27.82	1.07 H	84	13.06	33.12
2	1812.200	35.84 AV	54.00	-18.16	1.07 H	84	2.72	33.12
3	2718.300	45.87 PK	74.00	-28.13	1.00 H	203	9.82	36.05
4	2718.300	32.70 AV	54.00	-21.30	1.00 H	203	-3.35	36.05

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1812.200	46.18 PK	74.00	-27.82	1.27 V	262	13.06	33.12
2	1812.200	35.08 AV	54.00	-18.92	1.27 V	262	1.96	33.12
3	2718.300	44.94 PK	74.00	-29.06	1.00 V	200	8.89	36.05
4	2718.300	32.67 AV	54.00	-21.33	1.00 V	200	-3.38	36.05

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. “ \* “ : Fundamental frequency



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<b>MODULATION TYPE</b>	GFSK	<b>CHANNEL</b>	2
<b>INPUT POWER</b>	12Vdc	<b>FREQUENCY RANGE</b>	Below 1000MHz
<b>ENVIRONMENTAL CONDITIONS</b>	23deg. C, 80%RH, 1001Pa	<b>DETECTOR FUNCTION</b>	Quasi-Peak
<b>TESTED BY</b>	Jun Wu		

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	33.888	37.91 QP	40.00	-2.09	1.47 H	175	17.77	20.14
2	90.261	33.54 QP	43.50	-9.96	1.43 H	232	17.79	15.75
3	119.419	34.91 QP	43.50	-8.59	1.37 H	55	15.95	18.96
4	134.970	35.68 QP	43.50	-7.82	1.33 H	19	16.05	19.63
5	195.230	39.36 QP	43.50	-4.14	1.25 H	61	22.08	17.28
6	259.379	36.90 QP	46.00	-9.10	1.21 H	223	15.90	21.00
7	280.762	37.82 QP	46.00	-8.18	1.18 H	235	16.47	21.35
8	875.591	37.07 QP	46.00	-8.93	1.10 H	307	2.94	34.13

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	30.000	37.24 QP	40.00	-2.76	1.00 V	229	18.43	18.81
2	64.990	37.52 QP	40.00	-2.48	1.00 V	13	18.81	18.71
3	98.036	35.90 QP	43.50	-7.60	1.00 V	100	19.14	16.76
4	133.026	34.45 QP	43.50	-9.05	1.00 V	181	14.90	19.55
5	280.762	35.73 QP	46.00	-10.27	1.00 V	268	14.38	21.35
6	306.032	41.31 QP	46.00	-4.69	1.00 V	10	19.52	21.79
7	366.293	38.63 QP	46.00	-7.37	1.00 V	103	15.12	23.51

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.





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<b>MODULATION TYPE</b>	GFSK	<b>CHANNEL</b>	2
<b>INPUT POWER</b>	12Vdc	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>ENVIRONMENTAL CONDITIONS</b>	23deg. C, 80%RH, 1001Pa	<b>TESTED BY</b>	Jun Wu

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*907.700	101.31 PK	114.00	-12.69	1.00 H	288	71.17	30.14
2	*907.700	83.94 AV	94.00	-10.06	1.00 H	288	53.80	30.14

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*907.700	96.18 PK	114.00	-17.82	1.08 V	352	66.04	30.14
2	*907.700	79.08 AV	94.00	-14.92	1.08 V	352	48.94	30.14

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. “ \* “ : Fundamental frequency



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<b>MODULATION TYPE</b>	GFSK	<b>CHANNEL</b>	2
<b>INPUT POWER</b>	12Vdc	<b>FREQUENCY RANGE</b>	1 ~ 10GHz
<b>ENVIRONMENTAL CONDITIONS</b>	23deg. C, 80%RH, 1001Pa	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>TESTED BY</b>	Jun Wu		

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1815.400	46.75 PK	74.00	-27.25	1.08 H	84	13.61	33.14
2	1815.400	35.55 AV	54.00	-18.45	1.08 H	84	2.41	33.14
3	2723.200	44.85 PK	74.00	-29.15	1.00 H	193	8.77	36.08
4	2723.200	32.78 AV	54.00	-21.22	1.00 H	193	-3.30	36.08

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1815.400	46.72 PK	74.00	-27.28	1.21 V	124	13.58	33.14
2	1815.400	36.37 AV	54.00	-17.63	1.21 V	124	3.23	33.14
3	2723.300	46.41 PK	74.00	-27.59	1.00 V	199	10.33	36.08
4	2723.300	32.83 AV	54.00	-21.17	1.00 V	199	-3.25	36.08

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.
  5. “ \* “ : Fundamental frequency

### 4.3 BAND EDGES MEASUREMENT

#### 4.3.1 LIMITS OF BAND EDGES MEASUREMENT

Below -50dB of the highest emission level of operating band (in 100kHz Resolution Bandwidth).

#### 4.3.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
SPECTRUM ANALYZER	FSP 40	100036	Mar. 13, 2008	Mar. 12, 2009

**NOTE:** The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

#### 4.3.3 TEST PROCEDURE

The transmitter output was connected to the spectrum analyzer via a low loss cable. Set both RBW and VBW of spectrum analyzer to 100 kHz and 300 kHz with suitable frequency span including 100 MHz bandwidth from band edge. The band edges was measured and recorded.

The spectrum plots are attached on the following pages.

#### 4.3.4 DEVIATION FROM TEST STANDARD

No deviation

#### 4.3.5 EUT OPERATING CONDITION

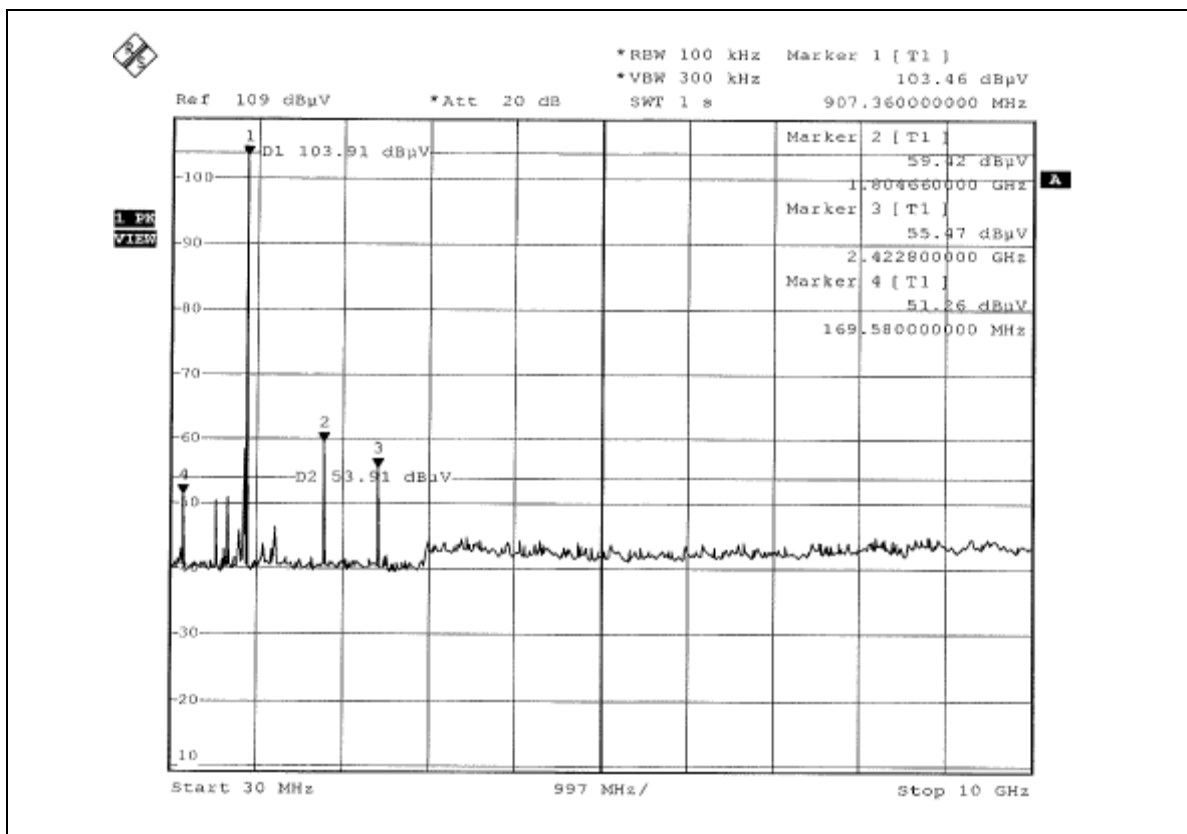
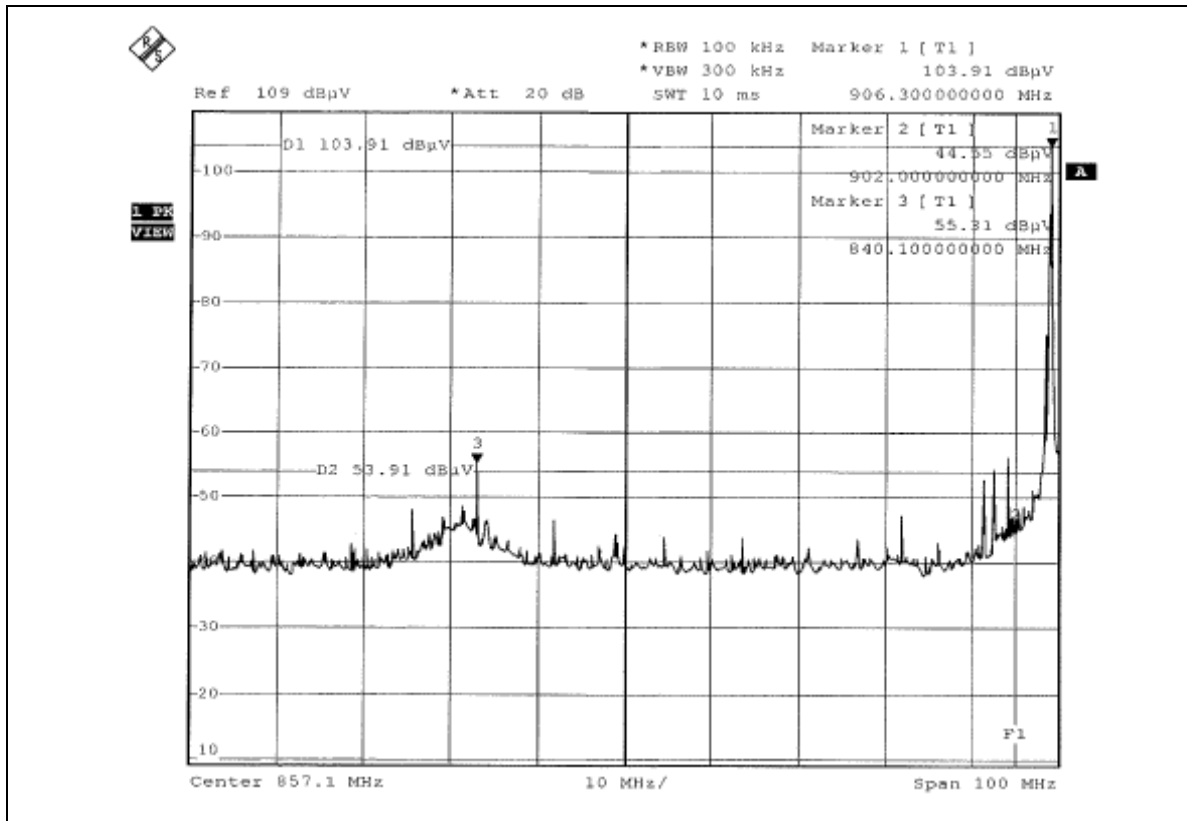
Same as Item 4.2.6

#### 4.3.6 TEST RESULTS

The spectrum plots are attached on the following 4 images. D1 line indicates the highest level, and D2 line indicates the 50dB offset below D1. It shows compliance with the requirement in part 15.249(d).

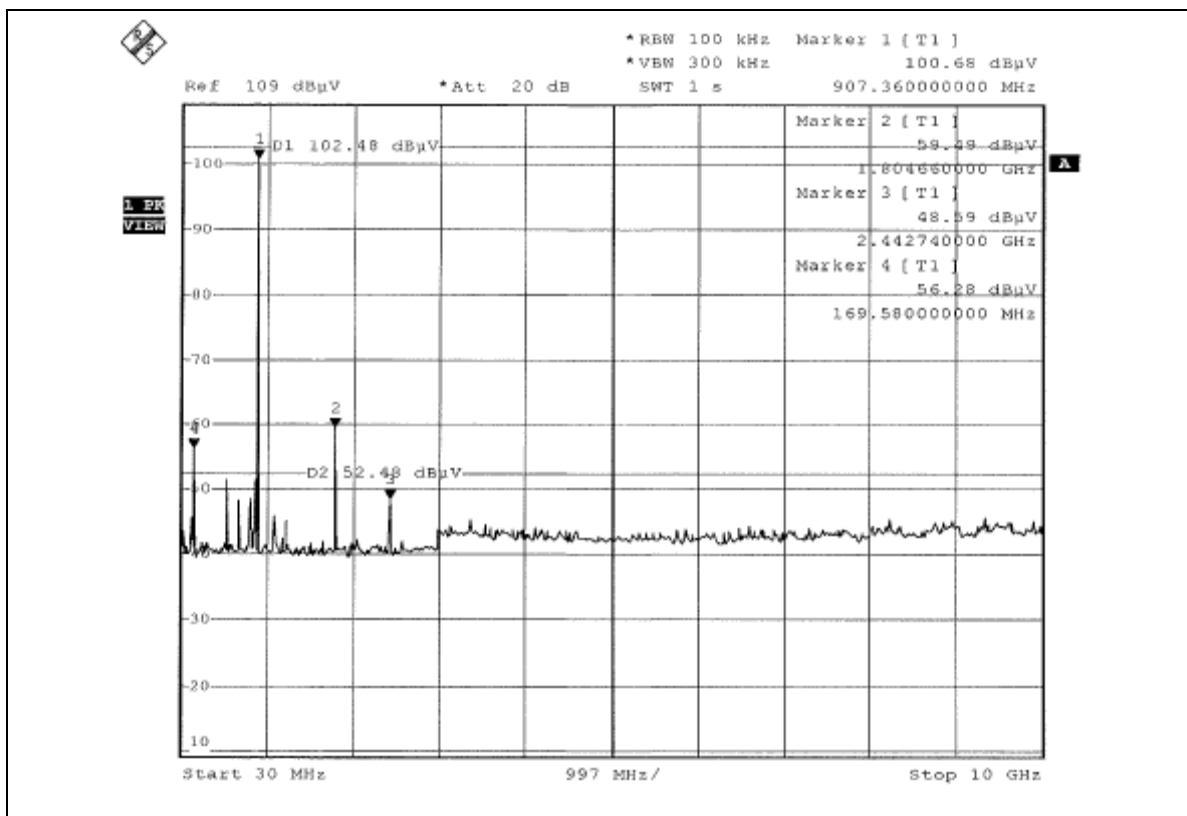
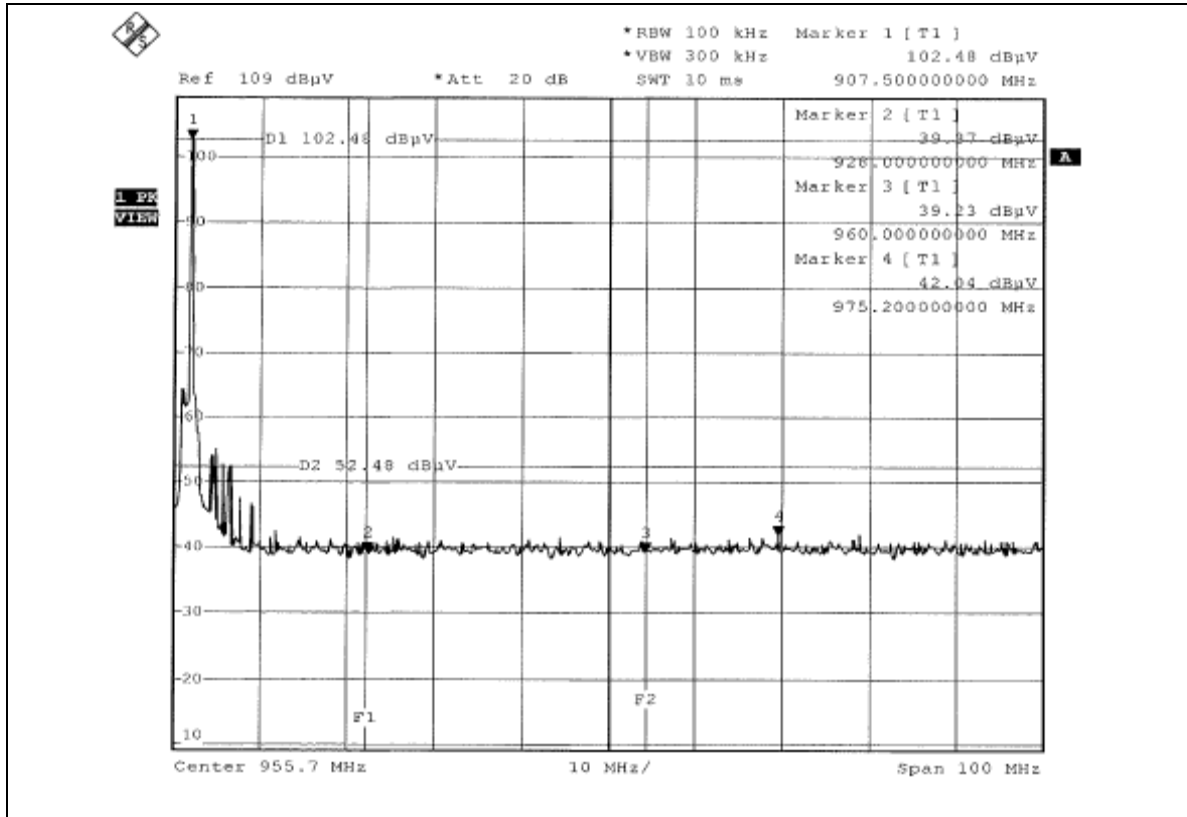


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## 5. PHOTOGRAPHS OF THE TEST CONFIGURATION

Please refer to the attached file (Test Setup Photo).



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## 6. INFORMATION ON THE TESTING LABORATORIES

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved by the following approval agencies according to ISO/IEC 17025.

<b>USA</b>	FCC, NVLAP
<b>Germany</b>	TUV Rheinland
<b>Japan</b>	VCCI
<b>Norway</b>	NEMKO
<b>Canada</b>	INDUSTRY CANADA, CSA
<b>R.O.C.</b>	TAF, BSMI, NCC
<b>Netherlands</b>	Telefication
<b>Singapore</b>	GOST-ASIA(MOU)
<b>Russia</b>	CERTIS(MOU)

Copies of accreditation certificates of our laboratories obtained from approval agencies can be downloaded from our web site: [www.adt.com.tw/index.5/phtml](http://www.adt.com.tw/index.5/phtml).  
If you have any comments, please feel free to contact us at the following:

**Linko EMC/RF Lab:**  
Tel: 886-2-26052180  
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**Hsin Chu EMC/RF Lab:**  
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**Hwa Ya EMC/RF/Safety Telecom Lab:**  
Tel: 886-3-3183232  
Fax: 886-3-3185050

**Web Site:** [www.adt.com.tw](http://www.adt.com.tw)

The address and road map of all our labs can be found in our web site also



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## **7.APPENDIX A – MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB**

No any modifications are made to the EUT by the lab during the test.

**---END---**