

FCC COMPLIANCE REPORT

Order No. : STR-06-0186/G
Reference No. : STK-06-EMCG0058
Applicant : Daesung Electric Co., Ltd.
Address of Applicant : 8-27B/L, 743-5, Wonsi-Dong, Danwon-Gu, Ansan-Si,
Gyeonggi-Do, Korea
Manufacturer : Daesung Electric Co., Ltd.
Address of Manufacturer : 8-27B/L, 743-5, Wonsi-Dong, Danwon-Gu, Ansan-Si,
Gyeonggi-Do, Korea

Equipment Under Test (EUT) :

Name : RX ASSY-KEYLESS ENTRY
Model No. : 223004362

Standards : FCC Part 15, Subpart B, Class B
ANSI C63.4:2003

Date of Receipt : 17 April 2006
Date of Test : 03 May 2006
Date of Issue : 19 May 2005

Test Result :	PASS
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In the configuration tested, the EUT complied with the standards specified above.

Remarks :

This report details the results of the testing carried out on one sample, the results contained in this test report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

This report shall not be reproduced except in full, without the written approval of the laboratory. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards.



Carl Lee
EMC DIV. Manager
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1. General Information

1.1 Applicant & Manufacturer Information

Applicant : Daesung Electric Co., Ltd.
Address of Applicant : 8-27B/L, 743-5, Wonsi-Dong, Danwon-Gu, Ansan-Si, Gyeonggi-Do, Korea
Manufacturer : Daesung Electric Co., Ltd.
Address of Manufacturer : 8-27B/L, 743-5, Wonsi-Dong, Danwon-Gu, Ansan-Si, Gyeonggi-Do, Korea

1.2 General Description of EUT

Product Name : RX ASSY-KEYLESS ENTRY
Model Name : 223004362
Serial No : None

1.3 Details of EUT

Tested Power Supply : DC 12V
Port : Antenna IN
Description of Operating : Receiving Mode

1.4 Description of Support Units

Product	Model No.	Serial No.	Manufacturer
DC Power Supply	DGP-300	N/A	DAE GIL

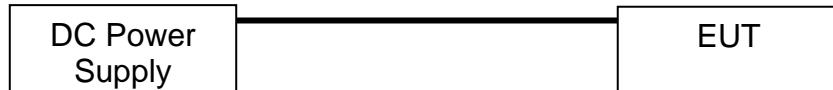
1.5 Cable List

Start		END		Cable Spec.	
Name	I/O Port	Name	I/O Port	Length	Shield
EUT	DC IN	DC Power Supply	DC OUT	2.5	Unshielded

1.6 System Configuration

Description	Model	Serial No.	Manufacturer
Main Board	IK030000/30/BO M/F	N/A	DELPHI
Cristal Module	VQ_RX(REV_SO P_3B)	N/A	N/A
Junction Board	15491228-02A	N/A	N/A

1.7 Test Set-Up Configuration



1.8 Measurement Procedure

Conducted Emission Testing was performed according ANSI C63.4:2003 in a shielded room with peripherals placed on a table, 0.8m high over a metal floor. It was located more than required distance away from the shielded room wall.

Radiated Emission Testing was performed according to ANSI C63.4:2003 at the open field test site. The EUT was placed in a 0.8m high table along with the peripherals. The turn table was **separated from the antenna distance 3meters**. Cables were placed in a position to produce maximum emissions as determined by experimentation, and operation mode was selected for maximum.

The frequencies and amplitudes of maximum emission were measured at varying azimuths, antenna heights and antenna polarities. Reported are maximized emission levels.

1.9 Standards Applicable for Testing

Table of tests to be carried out under FCC Part 15, Subpart B, CLASS B

Test Standards	Status
FCC Part 15,Subpart B, Class B	Applicable
Deviation from Standard	No Deviation

1.10 Summary of Results

The data collected shows that Model **223004362** complies with of the FCC Part 15, Subpart B Rules. The highest emission level observed was at 830.25MHz radiated emission with a margin of 9.31dB.

Radio Disturbance

2.1 Test Results

	Results
Conducted Emission	N/A
Radiated Emission	PASS

2.2 Frequency Range

Conducted Emission : 150 kHz - 30 MHz
Radiated Emission : 30 MHz - 1000 MHz

2.3 Limits Of Conducted And Radiated Emission

2.3.1 Limit Of Conducted Emission Of FCC Part 15, Subpart B

FREQUENCY (MHz)	Class A (dBuV)		Class B (dBuV)	
	Quasi - peak	Average	Quasi - peak	Average
0.15 - 0.5	79	66	66 - 56	56 - 46
0.50 - 5.0	73	60	56	46
5.0 - 30.0	73	60	60	50

Note : (1) The lower limit shall apply at the transition frequencies.

- (2) The limit decreases linearly with the logarithm of the frequency in the range 0.15 to 0.50 MHz.
- (3) All emanation from a class A/B digital device or system, including any network of conductors and apparatus connected there to, shall not exceed the level of field strengths specified above.

2.3.2 Limit Of Radiated Emission Of FCC Part 15, Subpart B

FREQUENCY (MHz)	Class A (at 10m)*		Class B (at 10m)*	
	dBuV/m		dBuV/m	
30-230	40		30	
230-1000	47		37	

* Detector Function : Quasi - Peak

2.4. Test of Conducted Emission

2.4.1 Test Equipments

Equipment	Manufacturer	Model No.	Date of Calibration
Test Receiver	ESHS 10	Rohde & Schwarz	Sep. 2005
TWO-LINE V-NETWORK	NNB 41	SCHAFFNER	Sep. 2005
TWO-LINE V-NETWORK	ENV216	Rohde & Schwarz	Dec. 2005
Pulse Limiter	ESH3-Z2	Rohde & Schwarz	Dec. 2005

2.4.2 Test Site

Name and address : SGS Testing Korea Co., Ltd.
18-34, Sanbon-dong, Gunpo, Gyeonggi-do, Korea, 435-041

2.4.3 Operating Environment

Temperature : degree C Humidity : %RH
Atmospheric Pressure : mBar

2.4.4 Measurement Data

Measurement Bandwidth : 9kHz

Date of Test :

* Measurements using CISPR quasi-peak mode

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Forest Lee / Test Engineer

2.5 Test of Radiated Emission

2.5.1 Test Instruments

Description	Manufacturer	Model No.	Date of Calibration
Test Receiver	ESVS 10	R & S	Apr. 2006
Biconical Antenna	VHA9103	Schwarzbeck	Mar. 2006
Logperiodic Antenna	UHALP9107	R & S	May 2005
Amplifier	8447F	H.P	Jun. 2005
Spectrum Analyzer	8593E	H.P	Sep. 2005

2.5.2 Test Site

Name and address : SGS Testing Korea Co., Ltd.
18-34, Sanbon-dong, Gunpo, Gyeonggi-do, Korea, 435-041

2.5.3 Operating Environment

Temperature : 26.5 degree C Humidity : 38.0 %RH
Atmospheric Pressure : 1002 mBar

2.5.4 Measurement Data

Measurment Bandwidth : 120kHz

Date of Test : May 03, 2006

FREQ. (MHz)	LEVEL (dB μ V)	POL (H/V)	*AF (dB)	**CL (dB)	F/S (dB μ V/m)	LIMIT (dB μ V/m)	***MARGIN (dB μ V)
37.43	38.2	V	10.76	-27.67	21.29	40.0	18.71
84.68	37.5	V	7.38	-27.26	17.62	40.0	22.38
87.38	40.1	V	7.92	-27.23	20.79	40.0	19.21
90.08	39.8	V	8.47	-27.20	21.07	40.0	18.93
830.25	38.8	V	23.95	-25.06	37.69	47.0	9.31

* AF = Antenna Factor. ** CL = Cable Loss.

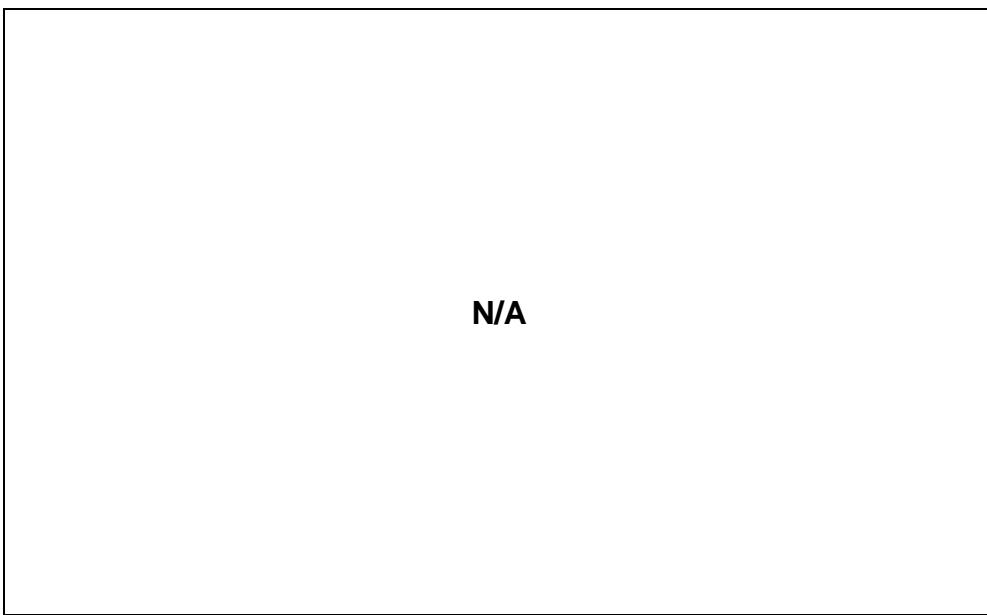
*** Margin=Each Frequency Limit Level(dBuV) - (Level+AF+CL)



Forest Lee / Test Engineer

3. Photographs of Test

- Front View of Conducted Emission



- Rear View of Conducted Emission

