

*FCC PART 15, SUBPART B and C
TEST REPORT**for***CM RECEIVER****MODEL: E65400**

Prepared for

GATEKEEPER SYSTEMS, INC.
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DATE: SEPTEMBER 8, 2008

	REPORT BODY	APPENDICES					TOTAL
		<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E</i>	
PAGES	15	2	2	2	14	27	62

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TABLE OF CONTENTS

Section / Title	PAGE
GENERAL REPORT SUMMARY	4
SUMMARY OF TEST RESULTS	4
1. PURPOSE	5
2. ADMINISTRATIVE DATA	6
2.1 Location of Testing	6
2.2 Traceability Statement	6
2.3 Cognizant Personnel	6
2.4 Date Test Sample was Received	6
2.5 Disposition of the Test Sample	6
2.6 Abbreviations and Acronyms	6
3. APPLICABLE DOCUMENTS	7
4. DESCRIPTION OF TEST CONFIGURATION	8
4.1 Description Of Test Configuration - EMI	8
4.1.1 Cable Construction and Termination	9
5. LISTS OF EUT, ACCESSORIES AND TEST EQUIPMENT	10
5.1 EUT and Accessory List	10
5.2 EMI Test Equipment	11
6. TEST SITE DESCRIPTION	12
6.1 Test Facility Description	12
6.2 EUT Mounting, Bonding and Grounding	12
7. TEST PROCEDURES	13
7.1 RF Emissions	13
7.1.1 Radiated Emissions (Spurious and Harmonics) Test	13
7.1.2 Radiated Emissions (Spurious and Harmonics) Test (Continued)	14
8. CONCLUSIONS	15

LIST OF APPENDICES

APPENDIX	TITLE
A	Laboratory Recognitions
B	Modifications to the EUT
C	Additional Models Covered Under This Report
D	Diagrams, Charts, and Photos • Test Setup Diagrams • Radiated Emissions Photos • Antenna and Effective Gain Factors
E	Data Sheets

LIST OF FIGURES

FIGURE	TITLE
1	Plot Map And Layout of Radiated Test Site – 3 Meters

GENERAL REPORT SUMMARY

This electromagnetic emission test report is generated by Compatible Electronics Inc., which is an independent testing and consulting firm. The test report is based on testing performed by Compatible Electronics personnel according to the measurement procedures described in the test specifications given below and in the "Test Procedures" section of this report.

The measurement data and conclusions appearing herein relate only to the sample tested and this report may not be reproduced without the written permission of Compatible Electronics, unless done so in full.

This report must not be used to claim product endorsement by NVLAP, NIST or any other agency of the U.S. Government.

Device Tested: CM Receiver
Model: E65400
S/N: N/A

Product Description: See Expository Statement

Modifications: The EUT was not modified in order to meet the specifications.

Manufacturer: Gatekeeper Systems, Inc.
8 Studebaker
Irvine, California 92618

Test Dates: July 23 and 24, 2008

Test Specifications: EMI requirements
CFR Title 47, Part 15 Subpart B; and Subpart C, Sections 15.205, 15.209 and 15.249

Test Procedure: ANSI C63.4

Test Deviations: The test procedure was not deviated from during the testing.

SUMMARY OF TEST RESULTS

TEST	DESCRIPTION	RESULTS
1	Conducted RF Emissions, 150 kHz – 30 MHz	This test was not performed because the EUT cannot be plugged into the AC public mains.
2	Radiated RF Emissions, 10 kHz – 25000 MHz (Transmitter Portion)	Complies with the limits of CFR Title 47, Part 15, Subpart C, section 15.205, 15.209, and 15.249.
3	Radiated RF Emissions, 10 kHz – 25000 MHz (Digital and Receiver Portion)	Complies with the Class B limits of CFR Title 47, Part 15, Subpart B.

1. PURPOSE

This document is a qualification test report based on the Electromagnetic Interference (EMI) tests performed on the CM Receiver, Model: E65400. The EMI measurements were performed according to the measurement procedure described in ANSI C63.4. The tests were performed in order to determine whether the electromagnetic emissions from the equipment under test, referred to as EUT hereafter, are within the **Class B** specification limits defined by CFR Title 47, Part 15, Subpart B for the digital and receiver portion; and the limits defined in Subpart C, sections 15.205, 15.209, and 15.249 for the transmitter portion.

This test report covers the announce radio, which was tested under section 15.249. For the announce radio, please see the Compatible Electronics test report number: **B80722B1**.

2. ADMINISTRATIVE DATA

2.1 Location of Testing

The EMI tests described herein were performed at the test facility of Compatible Electronics, 114 Olinda Drive, Brea, California 92823.

2.2 Traceability Statement

The calibration certificates of all test equipment used during the test are on file at the location of the test. The calibration is traceable to the National Institute of Standards and Technology (NIST).

2.3 Cognizant Personnel

Gatekeeper Systems, Inc.

Mike James Principal Engineer

Compatible Electronics, Inc.

Kyle Fujimoto Test Engineer

Michael Christensen Lab Manager, Brea Division

2.4 Date Test Sample was Received

The test sample was received on July 9, 2008.

2.5 Disposition of the Test Sample

The sample has not been returned to Gatekeeper Systems, Inc. as of September 8, 2008.

2.6 Abbreviations and Acronyms

The following abbreviations and acronyms may be used in this document.

RF	Radio Frequency
EMI	Electromagnetic Interference
EUT	Equipment Under Test
P/N	Part Number
S/N	Serial Number
HP	Hewlett Packard
ITE	Information Technology Equipment
CML	Corrected Meter Limit
LISN	Line Impedance Stabilization Network

3. APPLICABLE DOCUMENTS

The following documents are referenced or used in the preparation of this EMI Test Report.

SPEC	TITLE
CFR Title 47, Part 15	FCC Rules – Radio frequency devices (including digital devices)
ANSI C63.4 2003	American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz

4. DESCRIPTION OF TEST CONFIGURATION

4.1 Description Of Test Configuration - EMI

Setup and operation of the equipment under test.

The CM Receiver, Model: ES65400 (EUT) was connected to two dipole antennas via its antenna port #1 and antenna port #2. The EUT was powered by a 9 volt battery. The EUT was also continuously transmitting or receiving, depending on the test performed.

The EUT was also programmed via the dip switches and jumpers inside the EUT. This allowed the EUT to be placed in the low, middle, and high channels. The EUT was also continuously transmitting or receiving, depending on the test performed.

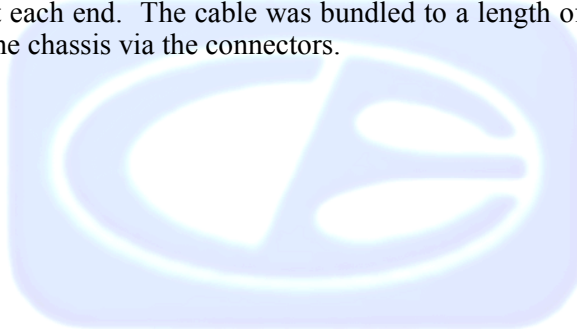
For this test report, the EUT was investigated for the data radio (antenna port #2). For the announce radio (antenna port #1), please see Compatible Electronics report number: **B80722B1**.

The final radiated data was taken in the both transmitting and receiving modes. Please see Appendix E for the data sheets.

4.1.1 Cable Construction and Termination

Cable 1 This is a 1.5-meter braid shielded cable connecting the EUT to antenna port #1. The cable has an SMA connector at each end. The cable was bundled to a length of 1 meter. The shield of the cable was grounded to the chassis via the connectors.

Cable 2 This is a 1.5-meter braid shielded cable connecting the EUT to antenna port #2. The cable has an SMA connector at each end. The cable was bundled to a length of 1 meter. The shield of the cable was grounded to the chassis via the connectors.



5. LISTS OF EUT, ACCESSORIES AND TEST EQUIPMENT**5.1 EUT and Accessory List**

EQUIPMENT	MANUFACTURER	MODEL NUMBER	SERIAL NUMBER	FCC ID
CM RECEIVER (EUT)	GATEKEEPER SYSTEMS, INC.	ES65400	N/A	SOX-D9700
DIPOLE ANTENNA #1	NEARSON	P/N: S151AM-2450S	N/A	N/A
DIPOLE ANTENNA #2	NEARSON	P/N: S151AM-2450S	N/A	N/A

5.2 EMI Test Equipment

EQUIPMENT TYPE	MANU-FACTURER	MODEL NUMBER	SERIAL NUMBER	CALIBRATION DATE	CALIBRATION DUE DATE
GENERAL TEST EQUIPMENT USED FOR ALL RF EMISSIONS TESTS					
Computer	Hewlett Packard	4530	US91912319	N/A	N/A
Monitor	Hewlett Packard	D5258A	TW74500641	N/A	N/A
RF RADIATED EMISSIONS TEST EQUIPMENT					
EMI Receiver	Rohde & Schwarz	ESIB40	100172	November 27, 2006	Nov. 27, 2008
Biconical Antenna	Com Power	AB-900	15227	February 28, 2008	Feb. 28, 2009
Log Periodic Antenna	Com Power	AL-100	16252	June 27, 2008	June 27, 2009
Preamplifier	Com-Power	PA-103	1582	January 11, 2008	Jan. 11, 2009
Loop Antenna	Com Power	AL-130	17089	September 24, 2007	Sept. 24, 2009
Horn Antenna	Com Power	AH-118	071175	June 27, 2008	June 27, 2010
Microwave Preamplifier	Com Power	PA-122	181921	March 3, 2008	March 3, 2009
Microwave Preamplifier	Com Power	PA-840	711013	March 3, 2008	March 3, 2009
Horn Antenna	Com-Power	AH826	71957	December 12, 2007	Dec. 12, 2009
Antenna Mast	Com Power	AM-100	N/A	N/A	N/A
Antenna Mast	EMCO	2070	N/A	N/A	N/A
Multi-Device Controller	EMCO	2090	9609-1176	N/A	N/A

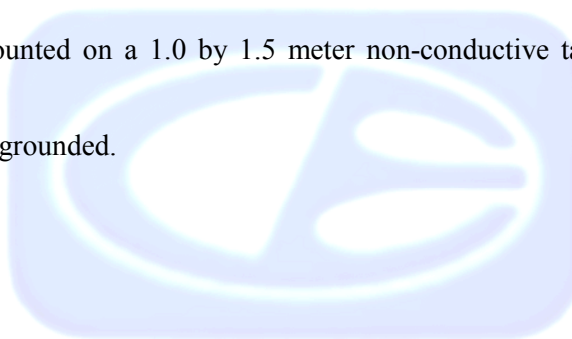
6. TEST SITE DESCRIPTION**6.1 Test Facility Description**

Please refer to section 2.1 and 7.1 of this report for EMI test location.

6.2 EUT Mounting, Bonding and Grounding

The EUT was mounted on a 1.0 by 1.5 meter non-conductive table 0.8 meters above the ground plane.

The EUT was not grounded.



7. TEST PROCEDURES

The following sections describe the test methods and the specifications for the tests. Test results are also included in this section.

7.1 RF Emissions

7.1.1 Radiated Emissions (Spurious and Harmonics) Test

The EMI Receiver was used as a measuring meter along with the quasi-peak adapter. Amplifiers were used to increase the sensitivity of the instrument. The Com Power Preamplifier Model: PA-103 was used for frequencies from 30 MHz to 1 GHz, and the Com-Power Microwave Preamplifier Model: PA-122 was used for frequencies above 1 GHz. The EMI Receiver was used in the peak detect mode with the "Max Hold" feature activated. In this mode, the EMI Receiver records the highest measured reading over all the sweeps.

The frequencies above 1 GHz were averaged manually by narrowing the video filter down to 10 Hz and putting the sweep time on AUTO on the spectrum analyzer to keep the amplitude reading calibrated.

The measurement bandwidths and transducers used for the radiated emissions test were:

FREQUENCY RANGE	EFFECTIVE MEASUREMENT BANDWIDTH	TRANSDUCER
9 kHz to 150 kHz	200 Hz	Active Loop Antenna
150 kHz to 30 MHz	9 kHz	Active Loop Antenna
30 MHz to 300 MHz	120 kHz	Biconical Antenna
300 MHz to 1 GHz	120 kHz	Log Periodic Antenna
1 GHz to 25 GHz	1 MHz	Horn Antenna

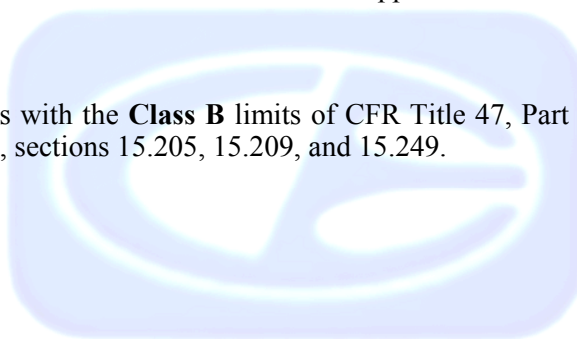
The open field test site of Compatible Electronics, Inc. was used for radiated emission testing. This test site is set up according to ANSI C63.4. Please see section 6.2 of this report for mounting, bonding and grounding of the EUT. The turntable supporting the EUT is remote controlled using a motor. The turntable permits EUT rotation of 360 degrees in order to maximize emissions. Also, the antenna mast allows height variation of the antenna from 1 meter to 4 meters. Data was collected in the worst case (highest emission) configuration of the EUT. At each reading, the EUT was rotated 360 degrees and the antenna height was varied from 1 to 4 meters (for E field radiated field strength). The gunsight method was used when measuring with the horn antenna in order to ensure accurate results. The loop antenna was also rotated in the horizontal and vertical axis in order to ensure accurate results.

7.1.2 Radiated Emissions (Spurious and Harmonics) Test (Continued)

The presence of ambient signals was verified by turning the EUT off. In case an ambient signal was detected, the measurement bandwidth was reduced temporarily and verification was made that an additional adjacent peak did not exist. This ensures that the ambient signal does not hide any emissions from the EUT. The EUT was tested at a 3 meter test distance to obtain the final test data. The final qualification data sheets are located in Appendix E.

Test Results:

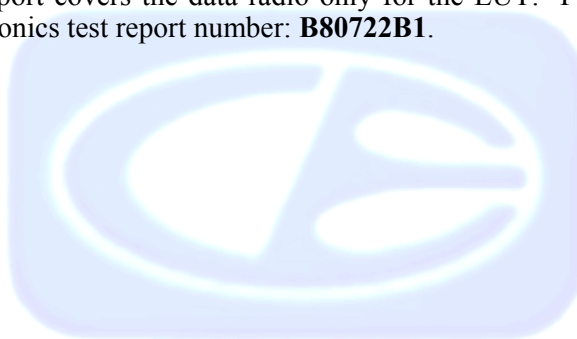
The EUT complies with the **Class B** limits of CFR Title 47, Part 15, Subpart B; and CFR Title 47, Part 15, Subpart C, sections 15.205, 15.209, and 15.249.



8. CONCLUSIONS

The CM Receiver, Model: E65400 meets all of the **Class B** specification limits defined in CFR Title 47, Part 15, Subpart B for the digital portion; and the limits defined in Subpart C, sections 15.205, 15.209, and 15.249 for the transmitter portion.

Note: This test report covers the data radio only for the EUT. For the announce radio, please see Compatible Electronics test report number: **B80722B1**.



APPENDIX A

LABORATORY RECOGNITIONS

LABORATORY RECOGNITIONS

Compatible Electronics has the following agency accreditations:

National Voluntary Laboratory Accreditation Program - Lab Code: 200528-0

Voluntary Control Council for Interference - Registration Numbers: R-983, C-1026, R-984 and C-1027

Bureau of Standards and Metrology Inspection - Reference Number: SL2-IN-E-1031

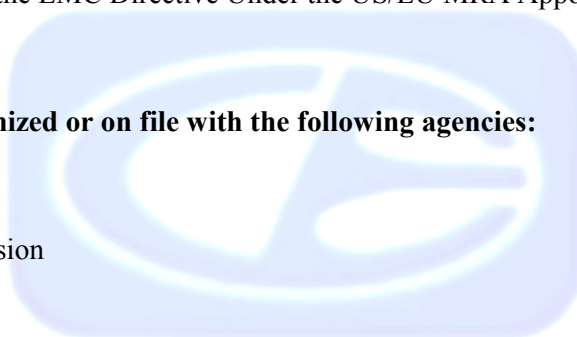
Conformity Assessment Body for the EMC Directive Under the US/EU MRA Appointed by NIST

Compatible Electronics is recognized or on file with the following agencies:

Federal Communications Commission

Industry Canada

Radio-Frequency Technologies (Competent Body)



APPENDIX B

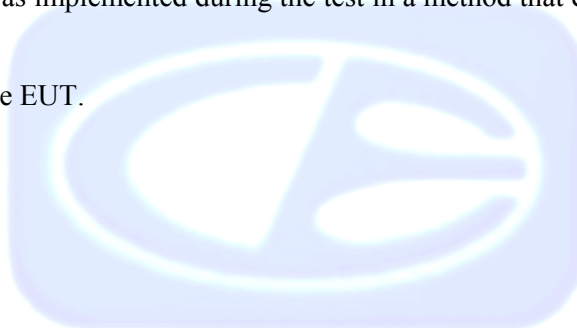
MODIFICATIONS TO THE EUT

MODIFICATIONS TO THE EUT

The modifications listed below were made to the EUT to pass FCC 15.249 or FCC Class B specifications.

All the rework described below was implemented during the test in a method that could be reproduced in all the units by the manufacturer.

No modifications were made to the EUT.



APPENDIX C

***ADDITIONAL MODELS COVERED
UNDER THIS REPORT***

ADDITIONAL MODELS COVERED UNDER THIS REPORT

USED FOR THE PRIMARY TEST

CM Receiver
Model: E65400
S/N: N/A

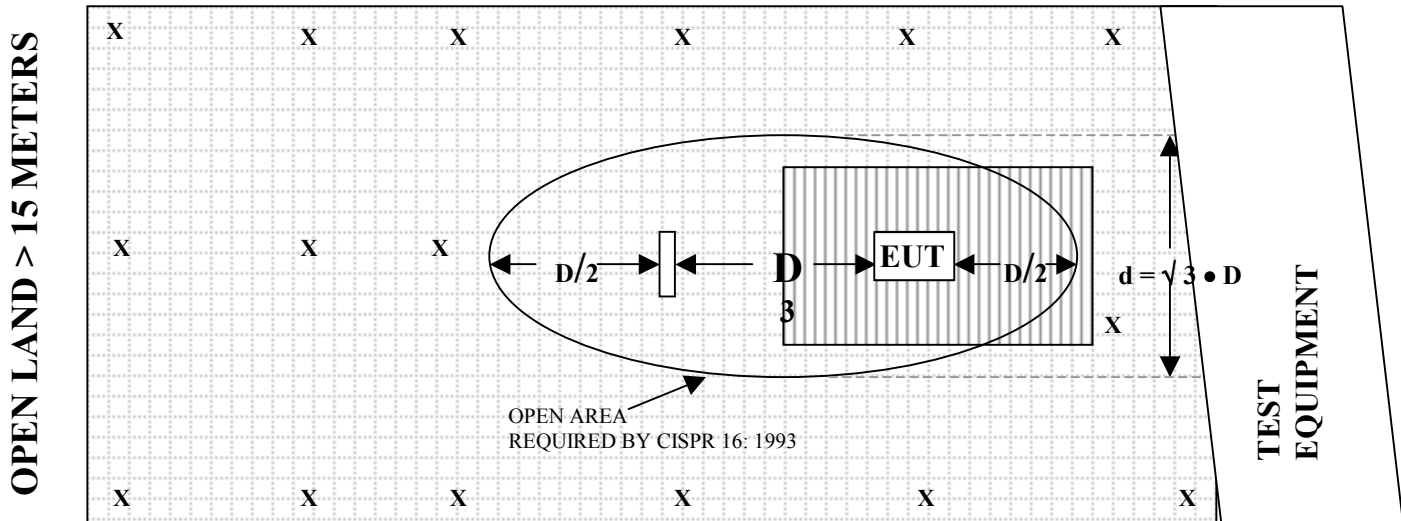
There were no additional models covered under this report.



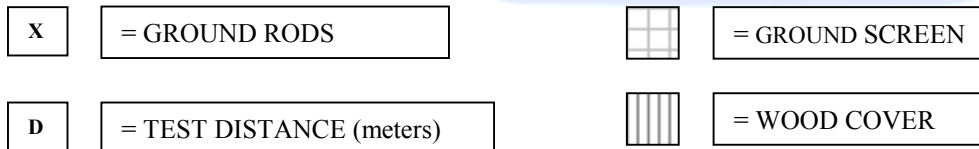
APPENDIX D***DIAGRAMS, CHARTS, AND PHOTOS***

FIGURE 1: PLOT MAP AND LAYOUT OF RADIATED TEST SITE – 3 METERS

OPEN LAND > 15 METERS



OPEN LAND > 15 METERS



COM-POWER AB-900

BICONICAL ANTENNA

S/N: 15227

CALIBRATION DATE: FEBRUARY 28, 2008

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
30	12.3	100	10.6
35	9.4	120	13.6
40	9.0	140	11.8
45	9.9	160	12.3
50	11.3	180	15.7
60	9.4	200	16.8
70	7.4	250	14.5
80	6.2	275	18.7
90	6.8	300	21.4

COM-POWER AL-100

LOG PERIODIC ANTENNA

S/N: 16252

CALIBRATION DATE: JUNE 27, 2008

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
300	13.5	700	19.3
400	14.8	800	21.3
500	16.7	900	22.0
600	18.8	1000	22.8

COM-POWER PA-103**PREAMPLIFIER**

S/N: 1582

CALIBRATION DATE: JANUARY 11, 2008

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
30	32.9	300	32.4
40	32.7	350	32.4
50	32.8	400	32.2
60	32.9	450	31.7
70	32.9	500	32.1
80	32.9	550	31.8
90	32.7	600	32.0
100	32.8	650	32.0
125	32.9	700	32.1
150	32.6	750	32.0
175	32.7	800	31.6
200	32.7	850	31.6
225	32.5	900	31.5
250	32.7	950	31.7
275	32.5	1000	31.3

COM-POWER PA-122**PREAMPLIFIER**

S/N: 181921

CALIBRATION DATE: MARCH 3, 2008

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
1.0	36.32	10.0	35.47
1.5	35.40	10.5	35.05
2.0	34.77	11.0	34.16
2.5	35.07	11.5	33.75
3.0	34.86	12.0	34.65
3.5	34.48	12.5	34.41
4.0	34.30	13.0	35.36
4.5	33.96	13.5	35.30
5.0	34.06	14.0	35.87
5.5	34.54	14.5	36.44
6.0	35.90	15.0	36.24
6.5	36.85	15.5	35.92
7.0	36.55	16.0	35.53
7.5	35.31	16.5	35.29
8.0	33.57	17.0	34.96
8.5	33.36	17.5	34.02
9.0	35.01	18.0	33.39
9.5	35.97		

COM-POWER AH-118**HORN ANTENNA****S/N: 071175****CALIBRATION DATE: JUNE 27, 2008**

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
1.0	24.5	10.0	39.4
1.5	25.4	10.5	39.7
2.0	28.3	11.0	39.0
2.5	28.9	11.5	40.0
3.0	29.7	12.0	39.7
3.5	30.8	12.5	41.7
4.0	31.4	13.0	42.7
4.5	32.6	13.5	41.2
5.0	33.7	14.0	41.6
5.5	34.4	14.5	43.2
6.0	34.7	15.0	42.3
6.5	35.4	15.5	39.3
7.0	37.0	16.0	41.7
7.5	37.4	16.5	39.6
8.0	37.6	17.0	43.0
8.5	37.6	17.5	47.1
9.0	38.5	18.0	46.2
9.5	38.6		

COM-POWER AL-130**LOOP ANTENNA**

S/N: 17089

CALIBRATION DATE: SEPTEMBER 24, 2007

FREQUENCY (MHz)	MAGNETIC (dB/m)	ELECTRIC (dB/m)
0.009	-41.27	10.23
0.01	-41.96	9.54
0.02	-41.73	9.77
0.03	-40.46	11.04
0.04	-40.56	10.94
0.05	-42.00	9.50
0.06	-41.30	10.20
0.1	-41.43	10.07
0.2	-43.90	7.60
0.3	-41.43	10.07
0.4	-41.40	10.10
0.5	-41.40	10.10
0.6	-40.93	10.57
1	-40.83	10.67
2	-40.3	11.20
5	-40.2	11.30
8	-40.6	10.90
9	-40.1	11.40
10	-40.4	11.10
15	-41.67	9.83
20	-41.10	10.40
25	-42.8	8.70
30	-42.8	8.70

COM-POWER PA-840**MICROWAVE PREAMPLIFIER**

S/N: 711013

CALIBRATION DATE: MARCH 3, 2008

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
18.0	27.49	29.5	26.44
18.5	28.46	30.0	26.95
19.0	28.98	30.5	26.42
19.5	28.46	31.0	27.11
20.0	28.23	31.5	27.27
20.5	27.44	32.0	26.76
21.0	26.91	32.5	24.49
21.5	26.65	33.0	23.19
22.0	26.50	33.5	22.57
22.5	27.15	34.0	22.11
23.0	27.36	34.5	23.52
23.5	27.08	35.0	24.86
24.0	26.36	35.5	25.52
24.5	24.95	36.0	25.81
25.0	26.83	36.5	22.08
25.5	27.00	37.0	23.31
26.0	27.58	37.5	26.91
26.5	26.02	38.0	25.89
27.0	24.20	38.5	24.75
27.5	23.64	39.0	25.77
28.0	26.39	39.5	25.83
28.5	26.66	40.0	27.62
29.0	26.40		

COM-POWER AH826**HORN ANTENNA****S/N: 71957****CALIBRATION DATE: DECEMBER 12, 2007**

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
18.0	33.5	22.5	35.5
18.5	33.5	23.0	35.9
19.0	34.0	23.5	35.7
19.5	34.0	24.0	35.6
20.0	34.3	24.5	36.0
20.5	34.9	25.0	36.2
21.0	34.7	25.5	36.1
21.5	35.0	26.0	36.2
22.0	35.0	26.5	35.7



FRONT VIEW

GATEKEEPER SYSTEMS, INC.

CM RECEIVER

MODEL: E65400

FCC SUBPART B AND C – RADIATED EMISSIONS

**PHOTOGRAPH SHOWING THE EUT CONFIGURATION
FOR MAXIMUM EMISSIONS**

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Agoura Division
2337 Troutdale Drive
Agoura, CA 91301
(818) 597-0600

Silverado Division
19121 El Toro Road
Silverado, CA 92676
(949) 589-0700

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400



REAR VIEW

GATEKEEPER SYSTEMS, INC.
CM RECEIVER
MODEL: E65400
FCC SUBPART B AND C – RADIATED EMISSIONS

**PHOTOGRAPH SHOWING THE EUT CONFIGURATION
FOR MAXIMUM EMISSIONS**

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Agoura Division
2337 Troutdale Drive
Agoura, CA 91301
(818) 597-0600

Silverado Division
19121 El Toro Road
Silverado, CA 92676
(949) 589-0700

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(949) 587-0400



FRONT VIEW

GATEKEEPER SYSTEMS, INC.

CM RECEIVER

MODEL: E65400

FCC SUBPART B AND C – RADIATED EMISSIONS

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Lake Forest Division
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REAR VIEW

GATEKEEPER SYSTEMS, INC.
CM RECEIVER
MODEL: E65400
FCC SUBPART B AND C – RADIATED EMISSIONS

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(949) 587-0400

APPENDIX E

DATA SHEETS

RADIATED EMISSIONS

DATA SHEETS

FCC 15.249

Gatekeeper Systems, Inc.

CM Receiver

Model: E65400

Date: 07/23/08

Lab: B

Tested By: Kyle Fujimoto

Low Channel - X-Axis**20 FSK Radio**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
2452.12	88.08	V	114	-25.92	Peak	1.15	315	
2452.12	87.87	V	94	-6.13	Avg	1.15	315	
4904.25	51.01	V	74	-22.99	Peak	1.15	135	
4904.25	48.29	V	54	-5.71	Avg	1.15	135	
7356.3		V	74	-74	Peak			No Emission
7356.3		V	54	-54	Avg			Detected
9808.5		V	74	-74	Peak			No Emission
9808.5		V	54	-54	Avg			Detected
12260		V	74	-74	Peak			No Emission
12260		V	54	-54	Avg			Detected
14712		V	74	-74	Peak			No Emission
14712		V	54	-54	Avg			Detected
17164		V	74	-74	Peak			No Emission
17164		V	54	-54	Avg			Detected
19617		V	74	-74	Peak			No Emission
19617		V	54	-54	Avg			Detected
22069		V	74	-74	Peak			No Emission
22069		V	54	-54	Avg			Detected
24521		V	74	-74	Peak			No Emission
24521		V	54	-54	Avg			Detected

FCC 15.249

Gatekeeper Systems, Inc.

CM Receiver

Model: E65400

Date: 07/23/08

Lab: B

Tested By: Kyle Fujimoto

Low Channel - X-Axis**20 FSK Radio**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
2452.12	78.86	H	114	-35.14	Peak	1.25	180	
2452.12	76.94	H	94	-17.06	Avg	1.25	180	
4904.2	54.41	H	74	-19.59	Peak	1.16	150	
4904.2	52.48	H	54	-1.52	Avg	1.16	150	
7356.67		H	74	-74	Peak			No Emission
7356.7		H	54	-54	Avg			Detected
9808.5		H	74	-74	Peak			No Emission
9808.5		H	54	-54	Avg			Detected
12260		H	74	-74	Peak			No Emission
12260		H	54	-54	Avg			Detected
14712		H	74	-74	Peak			No Emission
14712		H	54	-54	Avg			Detected
17165		H	74	-74	Peak			No Emission
17165		H	54	-54	Avg			Detected
19617		H	74	-74	Peak			No Emission
19617		H	54	-54	Avg			Detected
22069		H	74	-74	Peak			No Emission
22069		H	54	-54	Avg			Detected
24521		H	74	-74	Peak			No Emission
24521		H	54	-54	Avg			Detected

FCC 15.249

Gatekeeper Systems, Inc.

CM Receiver

Model: E65400

Date: 07/23/08

Lab: B

Tested By: Kyle Fujimoto

Low Channel - Y-Axis**20 FSK Radio**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
2452.12	90.96	V	114	-23.04	Peak	1.15	150	
2452.12	89.91	V	94	-4.09	Avg	1.15	150	
4904.2	52.24	V	74	-21.76	Peak	1.19	180	
4904.2	46.81	V	54	-7.19	Avg	1.19	180	
7356.67		V	74	-74	Peak			No Emission
7356.7		V	54	-54	Avg			Detected
9808.5		V	74	-74	Peak			No Emission
9808.5		V	54	-54	Avg			Detected
12260		V	74	-74	Peak			No Emission
12260		V	54	-54	Avg			Detected
14712		V	74	-74	Peak			No Emission
14712		V	54	-54	Avg			Detected
17165		V	74	-74	Peak			No Emission
17165		V	54	-54	Avg			Detected
19617		V	74	-74	Peak			No Emission
19617		V	54	-54	Avg			Detected
22069		V	74	-74	Peak			No Emission
22069		V	54	-54	Avg			Detected
24521		V	74	-74	Peak			No Emission
24521		V	54	-54	Avg			Detected

FCC 15.249

Gatekeeper Systems, Inc.

CM Receiver

Model: E65400

Date: 07/23/08

Lab: B

Tested By: Kyle Fujimoto

Low Channel - Y-Axis**20 FSK Radio**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
2452.12	81.92	H	114	-32.08	Peak	1.15	225	
2452.12	81.55	H	94	-12.45	Avg	1.15	225	
4904.2	54.02	H	74	-19.98	Peak	1.19	150	
4904.2	51.95	H	54	-2.05	Avg	1.19	150	
7356.67		H	74	-74	Peak			No Emission
7356.7		H	54	-54	Avg			Detected
9808.5		H	74	-74	Peak			No Emission
9808.5		H	54	-54	Avg			Detected
12260		H	74	-74	Peak			No Emission
12260		H	54	-54	Avg			Detected
14712		H	74	-74	Peak			No Emission
14712		H	54	-54	Avg			Detected
17165		H	74	-74	Peak			No Emission
17165		H	54	-54	Avg			Detected
19617		H	74	-74	Peak			No Emission
19617		H	54	-54	Avg			Detected
22069		H	74	-74	Peak			No Emission
22069		H	54	-54	Avg			Detected
24521		H	74	-74	Peak			No Emission
24521		H	54	-54	Avg			Detected

FCC 15.249

Gatekeeper Systems, Inc.

CM Receiver

Model: E65400

Date: 07/23/08

Lab: B

Tested By: Kyle Fujimoto

Low Channel - Z-Axis**20 FSK Radio**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
2452.12	87.27	V	114	-26.73	Peak	1.12	135	
2452.12	83.21	V	94	-10.79	Avg	1.12	135	
4904.2	53.58	V	74	-20.42	Peak	1.15	150	
4904.2	51.59	V	54	-2.41	Avg	1.15	150	
7356.67		V	74	-74	Peak			No Emission
7356.7		V	54	-54	Avg			Detected
9808.5		V	74	-74	Peak			No Emission
9808.5		V	54	-54	Avg			Detected
12260		V	74	-74	Peak			No Emission
12260		V	54	-54	Avg			Detected
14712		V	74	-74	Peak			No Emission
14712		V	54	-54	Avg			Detected
17165		V	74	-74	Peak			No Emission
17165		V	54	-54	Avg			Detected
19617		V	74	-74	Peak			No Emission
19617		V	54	-54	Avg			Detected
22069		V	74	-74	Peak			No Emission
22069		V	54	-54	Avg			Detected
24521		V	74	-74	Peak			No Emission
24521		V	54	-54	Avg			Detected

FCC 15.249

Gatekeeper Systems, Inc.

CM Receiver

Model: E65400

Date: 07/23/08

Lab: B

Tested By: Kyle Fujimoto

Low Channel - Z-Axis**20 FSK Radio**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
2452.12	84.17	H	114	-29.83	Peak	1.25	225	
2452.12	83.69	H	94	-10.31	Avg	1.25	225	
4904.20	52.42	H	74	-21.58	Peak	1.16	135	
4904.20	48.01	H	54	-5.99	Avg	1.16	135	
7356.67		H	74	-74	Peak			No Emission
7356.7		H	54	-54	Avg			Detected
9808.5		H	74	-74	Peak			No Emission
9808.5		H	54	-54	Avg			Detected
12260		H	74	-74	Peak			No Emission
12260		H	54	-54	Avg			Detected
14712		H	74	-74	Peak			No Emission
14712		H	54	-54	Avg			Detected
17165		H	74	-74	Peak			No Emission
17165		H	54	-54	Avg			Detected
19617		H	74	-74	Peak			No Emission
19617		H	54	-54	Avg			Detected
22069		H	74	-74	Peak			No Emission
22069		H	54	-54	Avg			Detected
24521		H	74	-74	Peak			No Emission
24521		H	54	-54	Avg			Detected

FCC 15.249

Gatekeeper Systems, Inc.

CM Receiver

Model: E65400

Date: 07/23/08

Lab: B

Tested By: Kyle Fujimoto

Middle Channel - X-Axis**20 FSK Radio**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
2464.15	88.53	V	114	-25.47	Peak	1.16	315	
2464.15	86.82	V	94	-7.18	Avg	1.16	315	
4928.26	51.35	V	74	-22.65	Peak	1.19	225	
4928.26	48.66	V	54	-5.34	Avg	1.19	225	
7392.38		V	74	-74	Peak			No Emission
7392.38		V	54	-54	Avg			Detected
9865.13		V	74	-74	Peak			No Emission
9865.13		V	54	-54	Avg			Detected
12321		V	74	-74	Peak			No Emission
12321		V	54	-54	Avg			Detected
14784		V	74	-74	Peak			No Emission
14784		V	54	-54	Avg			Detected
17248		V	74	-74	Peak			No Emission
17248		V	54	-54	Avg			Detected
19713		V	74	-74	Peak			No Emission
19713		V	54	-54	Avg			Detected
22177		V	74	-74	Peak			No Emission
22177		V	54	-54	Avg			Detected
24641		V	74	-74	Peak			No Emission
24641		V	54	-54	Avg			Detected

FCC 15.249

Gatekeeper Systems, Inc.

CM Receiver

Model: E65400

Date: 07/23/08

Lab: B

Tested By: Kyle Fujimoto

Middle Channel - X-Axis**20 FSK Radio**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
2464.15	75.69	H	114	-38.31	Peak	1.12	135	
2464.15	75.18	H	94	-18.82	Avg	1.12	135	
4928.26	54.68	H	74	-19.32	Peak	1.15	225	
4928.26	52.68	H	54	-1.32	Avg	1.15	225	
7392.38		H	74	-74	Peak			No Emission
7392.38		H	54	-54	Avg			Detected
9865.13		H	74	-74	Peak			No Emission
9865.13		H	54	-54	Avg			Detected
12321		H	74	-74	Peak			No Emission
12321		H	54	-54	Avg			Detected
14784		H	74	-74	Peak			No Emission
14784		H	54	-54	Avg			Detected
17248		H	74	-74	Peak			No Emission
17248		H	54	-54	Avg			Detected
19713		H	74	-74	Peak			No Emission
19713		H	54	-54	Avg			Detected
22177		H	74	-74	Peak			No Emission
22177		H	54	-54	Avg			Detected
24641		H	74	-74	Peak			No Emission
24641		H	54	-54	Avg			Detected

FCC 15.249

Gatekeeper Systems, Inc.

CM Receiver

Model: E65400

Date: 07/23/08

Lab: B

Tested By: Kyle Fujimoto

Middle Channel - Y-Axis**20 FSK Radio**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
2464.15	86.21	V	114	-27.79	Peak	1.15	150	
2464.15	86.05	V	94	-7.95	Avg	1.15	150	
4928.26	50.06	V	74	-23.94	Peak	1.19	150	
4928.26	47.07	V	54	-6.93	Avg	1.19	150	
7392.38		V	74	-74	Peak			No Emission
7392.38		V	54	-54	Avg			Detected
9865.13		V	74	-74	Peak			No Emission
9865.13		V	54	-54	Avg			Detected
12321		V	74	-74	Peak			No Emission
12321		V	54	-54	Avg			Detected
14784		V	74	-74	Peak			No Emission
14784		V	54	-54	Avg			Detected
17248		V	74	-74	Peak			No Emission
17248		V	54	-54	Avg			Detected
19713		V	74	-74	Peak			No Emission
19713		V	54	-54	Avg			Detected
22177		V	74	-74	Peak			No Emission
22177		V	54	-54	Avg			Detected
24641		V	74	-74	Peak			No Emission
24641		V	54	-54	Avg			Detected

FCC 15.249

Gatekeeper Systems, Inc.

CM Receiver

Model: E65400

Date: 07/23/08

Lab: B

Tested By: Kyle Fujimoto

Middle Channel - Y-Axis**20 FSK Radio**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
2464.15	74.11	H	114	-39.89	Peak	1.15	150	
2464.15	72.79	H	94	-21.21	Avg	1.15	150	
4928.26	55.27	H	74	-18.73	Peak	1.16	125	
4928.26	52.69	H	54	-1.31	Avg	1.16	125	
7392.38		H	74	-74	Peak			No Emission
7392.38		H	54	-54	Avg			Detected
9865.13		H	74	-74	Peak			No Emission
9865.13		H	54	-54	Avg			Detected
12321		H	74	-74	Peak			No Emission
12321		H	54	-54	Avg			Detected
14784		H	74	-74	Peak			No Emission
14784		H	54	-54	Avg			Detected
17248		H	74	-74	Peak			No Emission
17248		H	54	-54	Avg			Detected
19713		H	74	-74	Peak			No Emission
19713		H	54	-54	Avg			Detected
22177		H	74	-74	Peak			No Emission
22177		H	54	-54	Avg			Detected
24641		H	74	-74	Peak			No Emission
24641		H	54	-54	Avg			Detected

FCC 15.249

Gatekeeper Systems, Inc.

CM Receiver

Model: E65400

Date: 07/23/08

Lab: B

Tested By: Kyle Fujimoto

Middle Channel - Z-Axis**20 FSK Radio**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
2464.15	87.28	V	114	-26.72	Peak	1.15	150	
2464.15	87.21	V	94	-6.79	Avg	1.15	150	
4928.26	54.28	V	74	-19.72	Peak	1.19	180	
4928.26	52.11	V	54	-1.89	Avg	1.19	180	
7392.38		V	74	-74	Peak			No Emission
7392.38		V	54	-54	Avg			Detected
9865.13		V	74	-74	Peak			No Emission
9865.13		V	54	-54	Avg			Detected
12321		V	74	-74	Peak			No Emission
12321		V	54	-54	Avg			Detected
14784		V	74	-74	Peak			No Emission
14784		V	54	-54	Avg			Detected
17248		V	74	-74	Peak			No Emission
17248		V	54	-54	Avg			Detected
19713		V	74	-74	Peak			No Emission
19713		V	54	-54	Avg			Detected
22177		V	74	-74	Peak			No Emission
22177		V	54	-54	Avg			Detected
24641		V	74	-74	Peak			No Emission
24641		V	54	-54	Avg			Detected

FCC 15.249

Gatekeeper Systems, Inc.

CM Receiver

Model: E65400

Date: 07/23/08

Lab: B

Tested By: Kyle Fujimoto

Middle Channel - Z-Axis**20 FSK Radio**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
2464.15	77.62	H	114	-36.38	Peak	1.15	315	
2464.15	77.23	H	94	-16.77	Avg	1.15	315	
4928.26	53.81	H	74	-20.19	Peak	1.12	135	
4928.26	52.01	H	54	-1.99	Avg	1.12	135	
7392.38		H	74	-74	Peak			No Emission
7392.38		H	54	-54	Avg			Detected
9865.13		H	74	-74	Peak			No Emission
9865.13		H	54	-54	Avg			Detected
12321		H	74	-74	Peak			No Emission
12321		H	54	-54	Avg			Detected
14784		H	74	-74	Peak			No Emission
14784		H	54	-54	Avg			Detected
17248		H	74	-74	Peak			No Emission
17248		H	54	-54	Avg			Detected
19713		H	74	-74	Peak			No Emission
19713		H	54	-54	Avg			Detected
22177		H	74	-74	Peak			No Emission
22177		H	54	-54	Avg			Detected
24641		H	74	-74	Peak			No Emission
24641		H	54	-54	Avg			Detected

FCC 15.249

Gatekeeper Systems, Inc.

CM Receiver

Model: E65400

Date: 07/23/08

Lab: B

Tested By: Kyle Fujimoto

High Channel - X-Axis**20 FSK Radio**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
2480.13	92.43	V	114	-21.57	Peak	1.25	315	
2480.1	92.11	V	94	-1.89	Avg	1.25	315	
4960.2	51.61	V	74	-22.39	Peak	1.25	225	
4960.2	48.91	V	54	-5.09	Avg	1.25	225	
7440.3		V	74	-74	Peak			No Emission
7440.3		V	54	-54	Avg			Detected
9920.5		V	74	-74	Peak			No Emission
9920.5		V	54	-54	Avg			Detected
12400		V	74	-74	Peak			No Emission
12400		V	54	-54	Avg			Detected
14880		V	74	-74	Peak			No Emission
14880		V	54	-54	Avg			Detected
17361		V	74	-74	Peak			No Emission
17361		V	54	-54	Avg			Detected
19841		V	74	-74	Peak			No Emission
19841		V	54	-54	Avg			Detected
22321		V	74	-74	Peak			No Emission
22321		V	54	-54	Avg			Detected
24801		V	74	-74	Peak			No Emission
24801		V	54	-54	Avg			Detected

FCC 15.249

Gatekeeper Systems, Inc.

CM Receiver

Model: E65400

Date: 07/23/08

Lab: B

Tested By: Kyle Fujimoto

High Channel - X-Axis**20 FSK Radio**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
2480.13	75.31	H	114	-38.69	Peak	1.15	225	
2480.1	74.98	H	94	-19.02	Avg	1.15	225	
4960.2	53.41	H	74	-20.59	Peak	1.19	150	
4960.2	49.76	H	54	-4.24	Avg	1.19	150	
7440.3		H	74	-74	Peak			No Emission
7440.3		H	54	-54	Avg			Detected
9920.5		H	74	-74	Peak			No Emission
9920.5		H	54	-54	Avg			Detected
12400		H	74	-74	Peak			No Emission
12400		H	54	-54	Avg			Detected
14880		H	74	-74	Peak			No Emission
14880		H	54	-54	Avg			Detected
17361		H	74	-74	Peak			No Emission
17361		H	54	-54	Avg			Detected
19841		H	74	-74	Peak			No Emission
19841		H	54	-54	Avg			Detected
22321		H	74	-74	Peak			No Emission
22321		H	54	-54	Avg			Detected
24801		H	74	-74	Peak			No Emission
24801		H	54	-54	Avg			Detected

FCC 15.249

Gatekeeper Systems, Inc.

CM Receiver

Model: E65400

Date: 07/23/08

Lab: B

Tested By: Kyle Fujimoto

High Channel - Y-Axis**20 FSK Radio**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
2480.13	91.82	V	114	-22.18	Peak	1.15	315	
2480.1	91.01	V	94	-2.99	Avg	1.15	315	
4960.2	54.39	V	74	-19.61	Peak	2.05	225	
4960.2	52.54	V	54	-1.46	Avg	2.05	225	
7440.3		V	74	-74	Peak			No Emission
7440.3		V	54	-54	Avg			Detected
9920.5		V	74	-74	Peak			No Emission
9920.5		V	54	-54	Avg			Detected
12400		V	74	-74	Peak			No Emission
12400		V	54	-54	Avg			Detected
14880		V	74	-74	Peak			No Emission
14880		V	54	-54	Avg			Detected
17361		V	74	-74	Peak			No Emission
17361		V	54	-54	Avg			Detected
19841		V	74	-74	Peak			No Emission
19841		V	54	-54	Avg			Detected
22321		V	74	-74	Peak			No Emission
22321		V	54	-54	Avg			Detected
24801		V	74	-74	Peak			No Emission
24801		V	54	-54	Avg			Detected

FCC 15.249

Gatekeeper Systems, Inc.

CM Receiver

Model: E65400

Date: 07/23/08

Lab: B

Tested By: Kyle Fujimoto

High Channel - Y-Axis**20 FSK Radio**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
2480.13	75.01	H	114	-38.99	Peak	1.15	225	
2480.1	74.78	H	94	-19.22	Avg	1.15	225	
4960.2	52.94	H	74	-21.06	Peak	1.18	135	
4960.2	50.43	H	54	-3.57	Avg	1.18	135	
7440.3		H	74	-74	Peak			No Emission
7440.3		H	54	-54	Avg			Detected
9920.5		H	74	-74	Peak			No Emission
9920.5		H	54	-54	Avg			Detected
12400		H	74	-74	Peak			No Emission
12400		H	54	-54	Avg			Detected
14880		H	74	-74	Peak			No Emission
14880		H	54	-54	Avg			Detected
17361		H	74	-74	Peak			No Emission
17361		H	54	-54	Avg			Detected
19841		H	74	-74	Peak			No Emission
19841		H	54	-54	Avg			Detected
22321		H	74	-74	Peak			No Emission
22321		H	54	-54	Avg			Detected
24801		H	74	-74	Peak			No Emission
24801		H	54	-54	Avg			Detected

FCC 15.249

Gatekeeper Systems, Inc.
 CM Receiver
 Model: E65400

Date: 07/23/08

Lab: B

Tested By: Kyle Fujimoto

High Channel - Z-Axis
20 FSK Radio

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
2480.13	91.51	V	114	-22.49	Peak	1.18	315	
2480.1	90.92	V	94	-3.08	Avg	1.18	315	
4960.2	54.09	V	74	-19.91	Peak	1.52	0	
4960.2	50.85	V	54	-3.15	Avg	1.52	0	
7440.3		V	74	-74	Peak			No Emission
7440.3		V	54	-54	Avg			Detected
9920.5		V	74	-74	Peak			No Emission
9920.5		V	54	-54	Avg			Detected
12400		V	74	-74	Peak			No Emission
12400		V	54	-54	Avg			Detected
14880		V	74	-74	Peak			No Emission
14880		V	54	-54	Avg			Detected
17361		V	74	-74	Peak			No Emission
17361		V	54	-54	Avg			Detected
19841		V	74	-74	Peak			No Emission
19841		V	54	-54	Avg			Detected
22321		V	74	-74	Peak			No Emission
22321		V	54	-54	Avg			Detected
24801		V	74	-74	Peak			No Emission
24801		V	54	-54	Avg			Detected

FCC 15.249

Gatekeeper Systems, Inc.

CM Receiver

Model: E65400

Date: 07/23/08

Lab: B

Tested By: Kyle Fujimoto

High Channel - Z-Axis**20 FSK Radio**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
2480.13	77.49	H	114	-36.51	Peak	1.15	150	
2480.1	76.74	H	94	-17.26	Avg	1.15	150	
4960.2	53.82	H	74	-20.18	Peak	1.15	150	
4960.2	51.83	H	54	-2.17	Avg	1.15	150	
7440.3		H	74	-74	Peak			No Emission
7440.3		H	54	-54	Avg			Detected
9920.5		H	74	-74	Peak			No Emission
9920.5		H	54	-54	Avg			Detected
12400		H	74	-74	Peak			No Emission
12400		H	54	-54	Avg			Detected
14880		H	74	-74	Peak			No Emission
14880		H	54	-54	Avg			Detected
17361		H	74	-74	Peak			No Emission
17361		H	54	-54	Avg			Detected
19841		H	74	-74	Peak			No Emission
19841		H	54	-54	Avg			Detected
22321		H	74	-74	Peak			No Emission
22321		H	54	-54	Avg			Detected
24801		H	74	-74	Peak			No Emission
24801		H	54	-54	Avg			Detected



Test Location : Compatible Electronics Page : 1/2
 Customer : Gatekeeper Date : 7/24/2008
 Manufacturer : Gatekeeper Time : 9:22:43
 Eut name : 2.4 GHz Transceiver Lab : A
 Model : CM Receiver Test Distance : 3.0 Meters
 Serial # : N/A
 Specification : FCC B
 Distance correction factor ($20 * \log(\text{test}/\text{spec})$) : 0.00
 Test Mode : Radiated Emissions Qualification
 30 MHz to 1 GHz Vertical and Horizontal
 Clocks: 10 MHz and 13 MHz
 Test Engineers: James Ross and Michael Gates

Pol	Freq MHz	Rdng dBuV	Cable loss dB	Ant factor dB	Amp gain dB	Cor'd rdg = R dBuV	Limit = L dBuV/m	Delta R-L dB
1H	208.072	49.30	3.00	16.39	32.63	36.06	43.50	-7.44
2H	221.067	46.10	3.16	15.77	32.53	32.49	46.00	-13.51
3H	247.059	42.30	3.47	14.62	32.68	27.71	46.00	-18.29
4H	260.065	46.80	3.54	16.24	32.62	33.96	46.00	-12.04
5H	250.086	50.80	3.50	14.52	32.70	36.12	46.00	-9.88
6H	195.038	39.00	2.90	16.54	32.70	25.74	43.50	-17.76
7V	260.071	56.20	3.54	16.24	32.62	43.36	46.00	-2.64
8V	260.074Qp	54.71	3.54	16.24	32.62	41.88	46.00	-4.12
9V	247.058	50.10	3.47	14.62	32.68	35.51	46.00	-10.49
10V	208.067	51.10	3.00	16.39	32.63	37.86	43.50	-5.64
11V	221.067	49.20	3.16	15.77	32.53	35.59	46.00	-10.41
12V	143.080	50.30	2.45	11.88	32.68	31.95	43.50	-11.55
13V	156.078	48.50	2.60	12.21	32.63	30.68	43.50	-12.82
14V	182.087	53.90	2.90	15.82	32.70	39.92	43.50	-3.58
15V	234.057	47.30	3.31	15.18	32.57	33.22	46.00	-12.78
16V	273.076	50.70	3.59	18.39	32.51	40.17	46.00	-5.83
17V	286.043	42.10	3.65	19.92	32.45	33.21	46.00	-12.79
18V	299.043	39.00	3.70	21.30	32.40	31.59	46.00	-14.41
19H	273.043	40.30	3.59	18.39	32.51	29.76	46.00	-16.24
20H	286.089	46.00	3.65	19.93	32.45	37.12	46.00	-8.88
21V	312.075	46.60	3.90	13.68	32.40	31.78	46.00	-14.22
22V	364.075	42.40	4.53	14.37	32.34	28.96	46.00	-17.04
23V	416.073	46.00	4.70	15.14	32.03	33.80	46.00	-12.20
24V	442.057	39.60	4.85	15.65	31.78	28.33	46.00	-17.67
25V	546.057	42.40	5.68	17.71	31.82	33.97	46.00	-12.03
26V	572.057	37.80	5.84	18.25	31.89	30.00	46.00	-16.00
27V	637.057	38.80	6.22	18.99	32.00	32.02	46.00	-13.98
28V	650.057	40.50	6.30	19.06	32.00	33.86	46.00	-12.14
29V	702.057	43.50	6.52	19.34	32.10	37.27	46.00	-8.73
30V	728.057	42.80	6.73	19.89	32.04	37.37	46.00	-8.63
31V	520.056	38.00	5.52	17.15	31.98	28.70	46.00	-17.30
32V	585.058	36.60	5.91	18.51	31.94	29.08	46.00	-16.92
33V	715.056	38.30	6.62	19.62	32.07	32.47	46.00	-13.53



Test Location : Compatible Electronics
Customer : Gatekeeper
Manufacturer : Gatekeeper
Eut name : 2.4 GHz Transceiver
Model : CM Receiver
Serial # : N/A
Specification : FCC B
Distance correction factor ($20 * \log(\text{test}/\text{spec})$) : 0.00
Test Mode : Radiated Emissions Qualification
30 MHz to 1 GHz Vertical and Horizontal
Clocks: 10 MHz and 13 MHz
Test Engineers: James Ross and Michael Gates

Page : 2/2
Date : 7/24/2008
Time : 9:22:43
Lab : A
Test Distance : 3.0

Pol	Freq MHz	Rdng dBuV	Cable loss dB	Ant factor dB	Amp gain dB	Cor'd rdg = R dBuV	Limit = L dBuV/m	Delta R-L dB
34V	780.056	38.80	7.02	20.92	31.76	34.99	46.00	-11.01
35H	312.066	49.90	3.90	13.68	32.40	35.08	46.00	-10.92
36H	338.066	45.90	4.32	14.04	32.40	31.86	46.00	-14.14
37H	364.066	52.90	4.53	14.37	32.34	39.46	46.00	-6.54
38H	390.066	44.70	4.58	14.69	32.24	31.73	46.00	-14.27
39H	416.066	46.50	4.70	15.14	32.03	34.30	46.00	-11.70
40H	442.066	44.70	4.85	15.65	31.78	33.43	46.00	-12.57
41H	468.066	41.60	5.09	16.14	31.85	30.98	46.00	-15.02
42H	494.066	43.90	5.34	16.60	32.05	33.79	46.00	-12.21
43H	507.066	39.30	5.44	16.86	32.06	29.55	46.00	-16.45
44H	520.066	42.10	5.52	17.15	31.98	32.80	46.00	-13.20
45H	533.066	40.40	5.60	17.44	31.90	31.54	46.00	-14.46
46H	546.066	46.50	5.68	17.72	31.82	38.07	46.00	-7.93
47H	611.066	40.90	6.07	18.86	32.00	33.83	46.00	-12.17
48H	663.066	39.70	6.35	19.12	32.03	33.15	46.00	-12.85
49H	689.066	38.60	6.46	19.25	32.08	32.23	46.00	-13.77
50H	702.066	46.70	6.52	19.34	32.10	40.47	46.00	-5.53

BAND EDGES

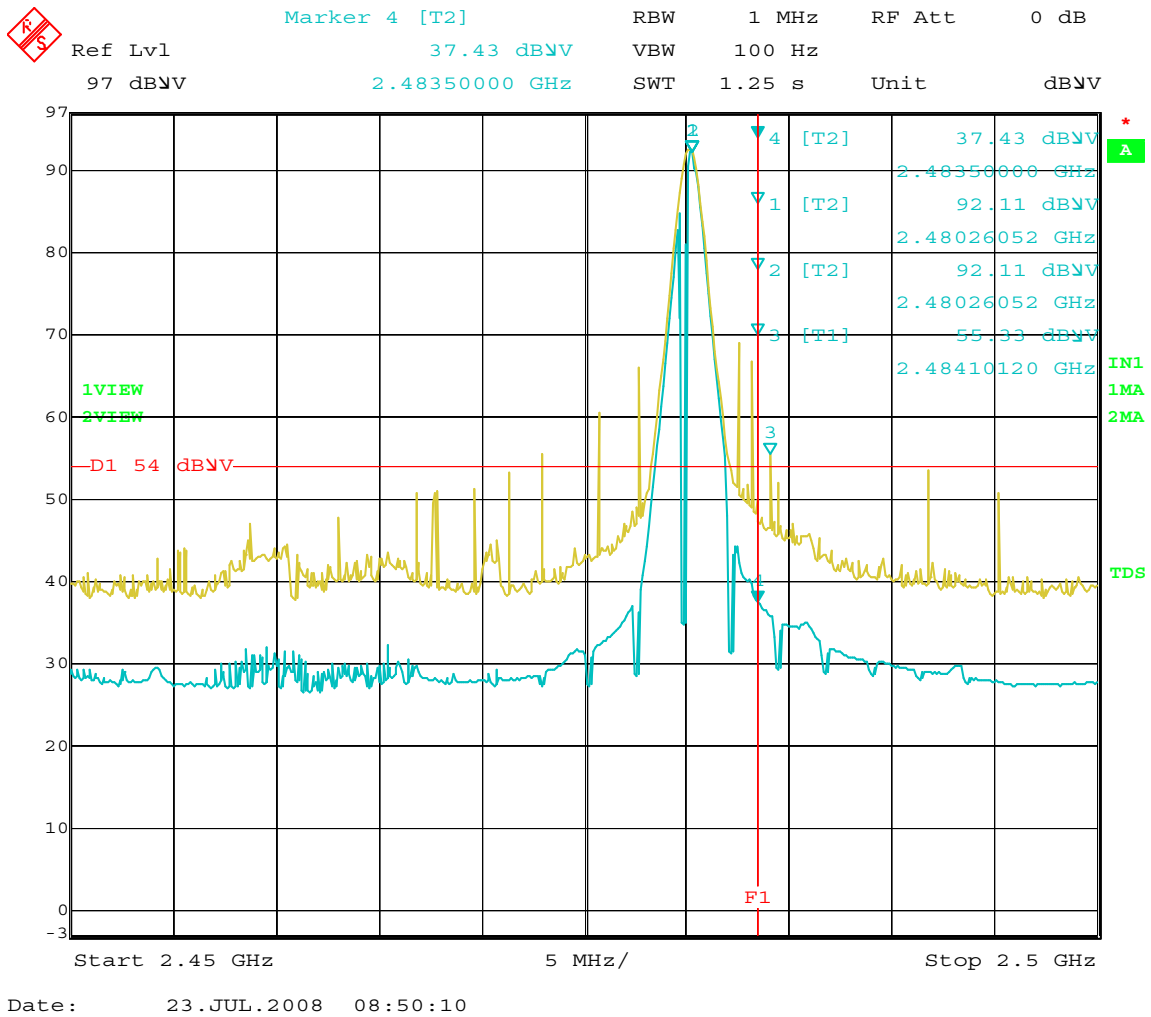
DATA SHEETS

Gatekeeper Systems, Inc.
CM Receiver
Model: E65400

Date: 07/23/08
Lab: B
Tested By: Kyle Fujimoto

Band Edges - for 20 FSK Radio
Y-Axis (Worst Case)

[illegible]



Band Edge – Vertical Polarization – Y-Axis (Worst Case) – High Channel

Note: The low channel is at 2452.12 MHz and is not near any band edge.