FCC PART 15, SUBPART B and C
TEST REPORT

for

CM REMOTE

MODEL: K-9400

Prepared for

GATEKEEPER SYSTEMS, INC.
8 STUDEBAKER
IRVINE, CALIFORNIA 92618

Prepared by:_____

KYLE FUJIMOTO

Approved by:_____

MICHAEL CHIRSTENSEN

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114 OLINDA DRIVE
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DATE: SEPTEMBER 4, 2008

	REPORT BODY	APPENDICES					TOTAL
		A	***B***	***C***	***D***	***E***	
PAGES	15	2	2	2	12	26	**59**

TABLE OF CONTENTS

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 Remote Model: K-9400 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 17 and 18, 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 Remote, Model: K-9400. 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.

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 June 23, 2008.

2.5 Disposition of the Test Sample

The sample has not been returned to Gatekeeper Systems, Inc. as of the date of this test report.

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 Remote, Model: ES65400 (EUT) was tested as a stand alone unit and tested in 3 orthogonal axis. 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 programmed by hitting a certain sequence of buttons on 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.

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

There are not external cables connected to the EUT.

5. LISTS OF EUT, ACCESSORIES AND TEST EQUIPMENT

5.1 EUT and Accessory List

EQUIPMENT	MANUFACTURER	MODEL NUMBER	SERIAL NUMBER	FCC ID
CM REMOTE (EUT)	GATEKEEPER SYSTEMS, INC.	K-9400	N/A	**SOX-K9400**

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 Remote, Model: K-9400 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.

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

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

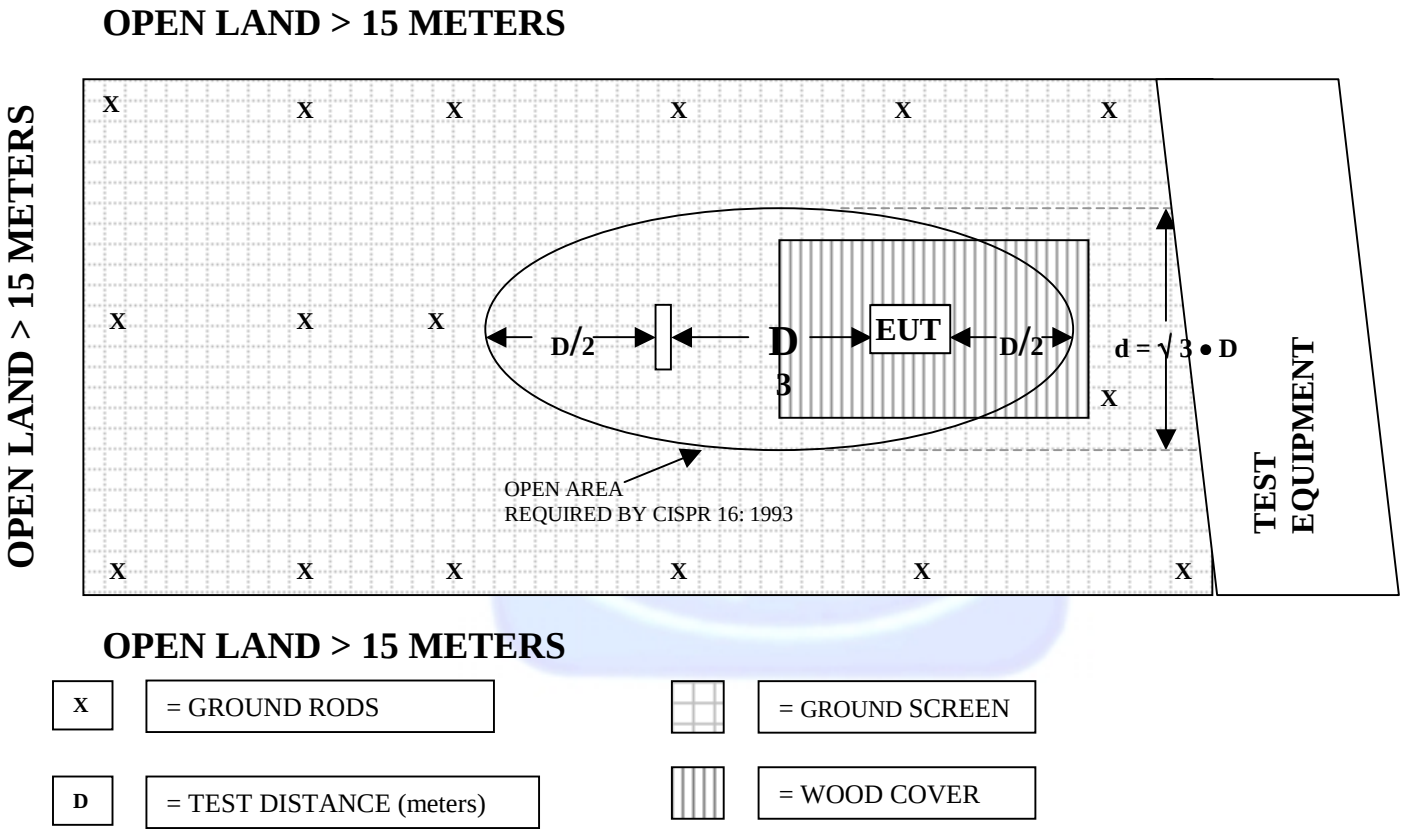
CM Remote
Model: K-9400
S/N: N/A

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



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 REMOTE
MODEL: K-9400
FCC SUBPART B AND C – RADIATED EMISSIONS

PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS

REAR VIEW

GATEKEEPER SYSTEMS, INC.
CM REMOTE
MODEL: K-9400
FCC SUBPART B AND C – RADIATED EMISSIONS

PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS

APPENDIX E

DATA SHEETS

RADIATED EMISSIONS

DATA SHEETS

FCC 15.249
Gatekeeper Systems, Inc.
CM Remote
Model: K-9400

Date: 08/04/08
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	88.21	V	94	-5.79	Peak	1.16	180	
4904.25	62.06	V	74	-11.94	Peak	1.19	150	
4904.25	46.78	V	54	-7.22	Avg	1.19	150	
7356.3	52.45	V	74	-21.55	Peak	1.18	150	
7356.3	40.15	V	54	-13.85	Avg	1.18	150	
9808.5	51.52	V	74	-22.48	Peak	1.15	160	
9808.5	36.37	V	54	-17.63	Avg	1.15	160	
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 Remote
Model: K-9400

Date: 08/04/08
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	93.66	H	94	-0.34	Peak	1.15	180	
4904.2	64.86	H	74	-9.14	Peak	2.25	180	
4904.2	49.25	H	54	-4.75	Avg	2.25	180	
7356.67	58.36	H	74	-15.64	Peak	1.16	150	
7356.7	46.94	H	54	-7.06	Avg	1.16	150	
9808.5	52.29	H	74	-21.71	Peak	1.18	150	
9808.5	38.57	H	54	-15.43	Avg	1.18	150	
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 Remote
Model: K-9400

Date: 08/04/08
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	90.87	V	94	-3.13	Peak	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	56.77	V	74	-17.23	Peak	1.15	150	
7356.7	44.34	V	54	-9.66	Avg	1.15	150	
9808.5	53.83	V	74	-20.17	Peak	1.18	150	
9808.5	38.17	V	54	-15.83	Avg	1.18	150	
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 Remote
Model: K-9400

Date: 08/04/08
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	91.81	H	94	-2.19	Peak	1.58	225	
4904.2	65.15	H	74	-8.85	Peak	1.15	150	
4904.2	49.26	H	54	-4.74	Avg	1.15	150	
7356.67	54.52	H	74	-19.48	Peak	1.19	150	
7356.7	42.91	H	54	-11.09	Avg	1.19	150	
9808.5	52.06	H	74	-21.94	Peak	1.24	180	
9808.5	38.48	H	54	-15.52	Avg	1.24	180	
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 Remote
Model: K-9400

Date: 08/04/08
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	91.39	V	94	-2.61	Peak	1.18	90	
4904.2	66.63	V	74	-7.37	Peak	1.19	225	
4904.2	50.61	V	54	-3.39	Avg	1.19	225	
7356.67	59.91	V	74	-14.09	Peak	1.18	150	
7356.7	47.45	V	54	-6.55	Avg	1.18	150	
9808.5	53.01	V	74	-20.99	Peak	1.19	180	
9808.5	38.11	V	54	-15.89	Avg	1.19	180	
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 Remote
Model: K-9400

Date: 08/04/08
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	88.62	H	94	-5.38	Peak	1.15	150	
4899.25	60.61	H	74	-13.39	Peak	1.19	150	
4899.25	46.01	H	54	-7.99	Avg	1.19	150	
7356.67	51.33	H	74	-22.67	Peak	1.19	150	
7356.7	39.49	H	54	-14.51	Avg	1.19	150	
9808.5	50.69	H	74	-23.31	Peak	1.19	180	
9808.5	36.41	H	54	-17.59	Avg	1.19	180	
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 Remote
Model: K-9400

Date: 08/04/08
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	89.49	V	94	-4.51	Peak	1.15	150	
4928.26	63.68	V	74	-10.32	Peak	1.15	150	
4928.26	48.87	V	54	-5.13	Avg	1.15	150	
7392.38	55.91	V	74	-18.09	Peak	1.18	100	
7392.38	36.78	V	54	-17.22	Avg	1.18	100	
9865.13	51.16	V	74	-22.84	Peak	1.19	150	No Emission
9865.13	38.59	V	54	-15.41	Avg	1.19	150	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 Remote
Model: K-9400

Date: 08/04/08
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	93.33	H	94	-0.67	Peak	1.25	150	
4928.26	62.27	H	74	-11.73	Peak	1.19	150	
4928.26	47.91	H	54	-6.09	Avg	1.19	150	
7392.38	59.36	H	74	-14.64	Peak	1.15	150	
7392.38	46.61	H	54	-7.39	Avg	1.15	150	
9865.13	54.04	H	74	-19.96	Peak	1.18	150	
9865.13	38.76	H	54	-15.24	Avg	1.18	150	
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 Remote
Model: K-9400

Date: 08/04/08
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	90.68	V	94	-3.32	Peak	1.15	180	
4928.26	69.92	V	74	-4.08	Peak	1.15	135	
4928.26	52.43	V	54	-1.57	Avg	1.15	135	
7392.38	59.91	V	74	-14.09	Peak	1.18	225	
7392.38	46.69	V	54	-7.31	Avg	1.18	225	
9865.13	53.52	V	74	-20.48	Peak	1.15	150	
9865.13	38.61	V	54	-15.39	Avg	1.15	150	
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 Remote
Model: K-9400

Date: 08/04/08
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	93.41	H	94	-0.59	Peak	1.15	180	
4928.26	68.87	H	74	-5.13	Peak	1.19	150	
4928.26	51.46	H	54	-2.54	Avg	1.19	150	
7392.38	59.13	H	74	-14.87	Peak	1.15	225	No Emission
7392.38	46.63	H	54	-7.37	Avg	1.15	225	Detected
9865.13	53.16	H	74	-20.84	Peak	1.18	150	No Emission
9865.13	39.38	H	54	-14.62	Avg	1.18	150	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 Remote
Model: K-9400

Date: 08/04/08
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	93.31	V	94	-0.69	Peak	1.15	150	
4928.26	68.17	V	74	-5.83	Peak	1.18	125	
4928.26	51.27	V	54	-2.73	Avg	1.18	125	
7392.38	60.17	V	74	-13.83	Peak	1.27	135	
7392.38	48.06	V	54	-5.94	Avg	1.27	135	
9865.13	53.19	V	74	-20.81	Peak	1.18	150	
9865.13	38.41	V	54	-15.59	Avg	1.18	150	
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 Remote
Model: K-9400

Date: 08/04/08
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	88.15	H	94	-5.85	Peak	1.16	150	
4928.26	62.41	H	74	-11.59	Peak	1.18	225	
4928.26	47.89	H	54	-6.11	Avg	1.18	225	
7392.38	53.99	H	74	-20.01	Peak	1.15	225	
7392.38	43.08	H	54	-10.92	Avg	1.15	225	
9865.13	53.79	H	74	-20.21	Peak	1.16	225	
9865.13	39.59	H	54	-14.41	Avg	1.16	225	
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 Remote
Model: K-9400

Date: 08/04/08
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	89.06	V	94	-4.94	Peak	1.15	225	
4960.2	64.03	V	74	-9.97	Peak	1.18	150	
4960.2	48.94	V	54	-5.06	Avg	1.18	150	
7440.3	55.37	V	74	-18.63	Peak	1.19	225	
7440.3	43.68	V	54	-10.32	Avg	1.19	225	
9920.5	52.46	V	74	-21.54	Peak	1.18	125	
9920.5	39.09	V	54	-14.91	Avg	1.18	125	
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 Remote
Model: K-9400

Date: 08/04/08
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	93.34	H	94	-0.66	Peak	1.5	125	
4960.2	64.17	H	74	-9.83	Peak	1.19	150	
4960.2	48.78	H	54	-5.22	Avg	1.19	150	
7440.3	58.52	H	74	-15.48	Peak	1.18	150	
7440.3	45.15	H	54	-8.85	Avg	1.18	150	
9920.5	53.91	H	74	-20.09	Peak	1.15	150	
9920.5	42.19	H	54	-11.81	Avg	1.15	150	
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 Remote
Model: K-9400

Date: 08/04/08
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	88.55	V	94	-5.45	Peak	1.15	180	
4960.2	66.18	V	74	-7.82	Peak	1.15	150	
4960.2	50.61	V	54	-3.39	Avg	1.15	150	
7440.3	57.97	V	74	-16.03	Peak	1.16	225	
7440.3	46.42	V	54	-7.58	Avg	1.16	225	
9920.5	51.73	V	74	-22.27	Peak	1.18	125	
9920.5	39.56	V	54	-14.44	Avg	1.18	125	
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 Remote
Model: K-9400

Date: 08/04/08
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	93.15	H	94	-0.85	Peak	1.15	180	
4960.2	66.14	H	74	-7.86	Peak	1.18	150	
4960.2	49.92	H	54	-4.08	Avg	1.18	150	
7440.3	57.06	H	74	-16.94	Peak	1.18	150	
7440.3	45.51	H	54	-8.49	Avg	1.18	150	
9920.5	53.82	H	74	-20.18	Peak	1.19	150	
9920.5	39.18	H	54	-14.82	Avg	1.19	150	
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 Remote
Model: K-9400

Date: 08/04/08
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	93.6	V	94	-0.4	Peak	1.15	150	
4960.2	67.11	V	74	-6.89	Peak	1.18	150	
4960.2	50.45	V	54	-3.55	Avg	1.18	150	
7440.3	60.07	V	74	-13.93	Peak	1.16	135	
7440.3	48.07	V	54	-5.93	Avg	1.16	135	
9920.5	53.89	V	74	-20.11	Peak	1.18	135	
9920.5	39.16	V	54	-14.84	Avg	1.18	135	
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 Remote
Model: K-9400

Date: 08/04/08
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	88.09	H	94	-5.91	Peak	1.15	135	
4960.2	59.36	H	74	-14.64	Peak	1.18	150	
4960.2	45.15	H	54	-8.85	Avg	1.18	150	
7440.3	53.91	H	74	-20.09	Peak	1.15	150	
7440.3	43.21	H	54	-10.79	Avg	1.15	150	
9920.5	51.26	H	74	-22.74	Peak	1.18	180	
9920.5	39.06	H	54	-14.94	Avg	1.18	180	
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 Remote
Model: K-9400

Date: 08/12/08
Lab: B
Tested By: Kyle Fujimoto

Middle Channel - Receive Mode - Y-Axis (Worst Case)

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
								No Emissions were discovered
								from the Receive Mode for the EUT
								from 10 kHz to 25 GHz
								for both Vertical and Horizontal
								Polarizations

FCC 15.249

Gatekeeper Systems, Inc.
CM Remote
Model: K-9400

Date: 08/12/08
Lab: B
Tested By: Kyle Fujimoto

Digital Portion and Non-Harmonic Emissions from the Transmitter - Y-Axis (Worst Case)

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
								No Emissions were discovered
								from the Digital Portion for the EUT
								from 10 kHz to 25 GHz
								for both Vertical and Horizontal
								Polarizations
								No Emissions were discovered
								from the Non-Harmonic Emissions
								from the Transmitter for the EUT
								from 10 kHz to 25 GHz
								for both Vertical and Horizontal
								Polarizations

BAND EDGES

DATA SHEETS

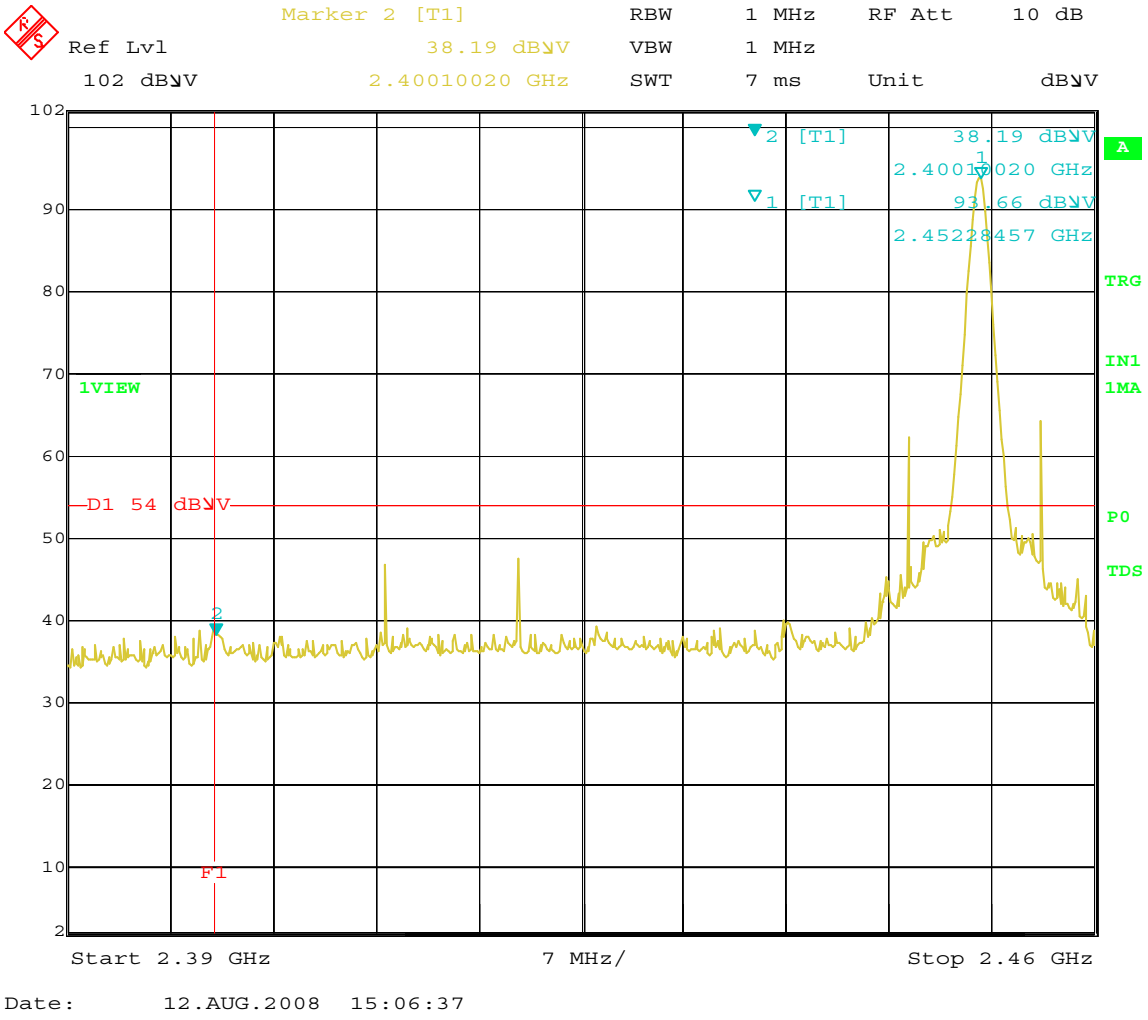
FCC 15.249

Gatekeeper Systems, Inc.
CM Remote
Model: TBD

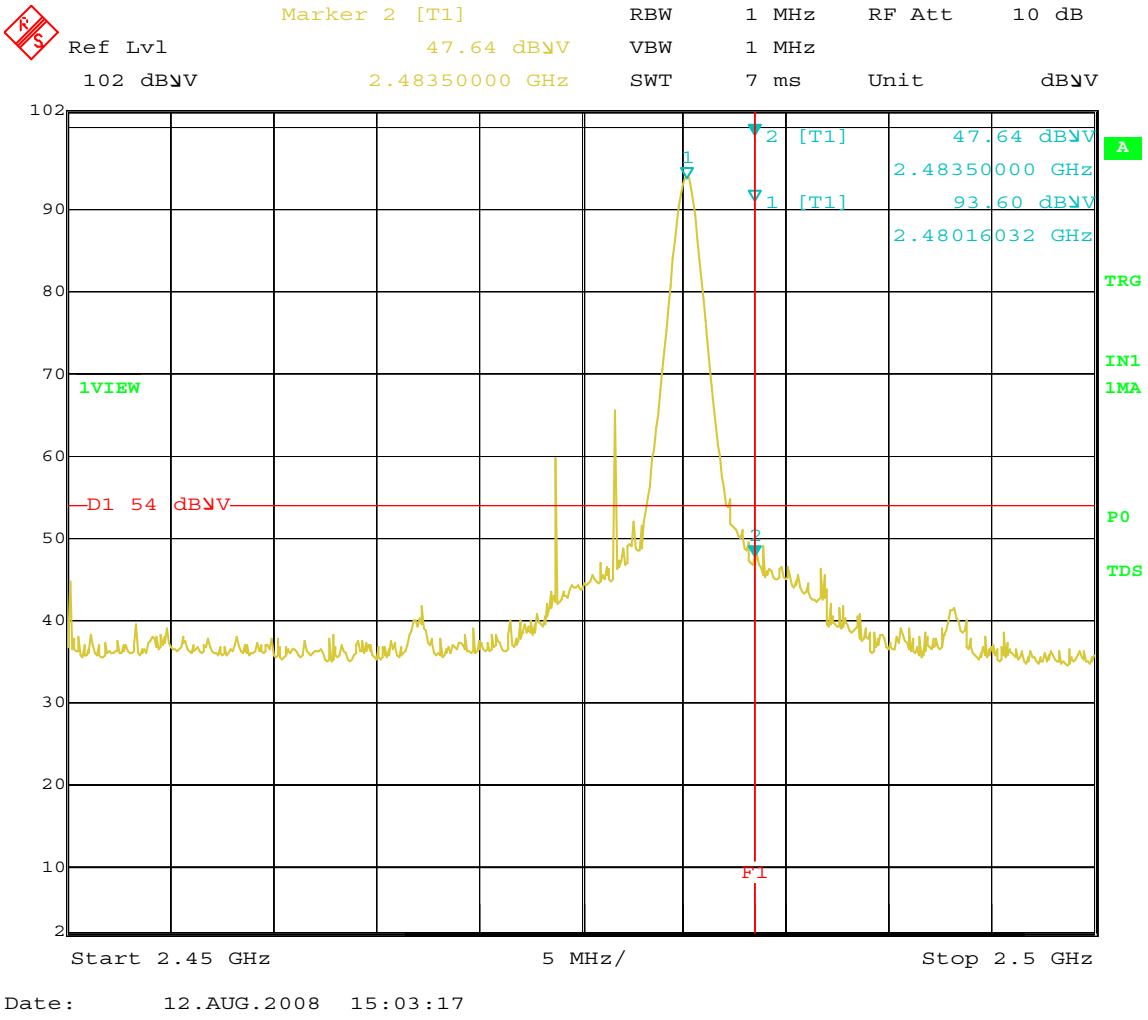
Date: 08/12/08
Lab: B
Tested By: Kyle Fujimoto

Low Channel - X-Axis
High Channel - Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
2452.12	93.66	V	94	-0.34	Peak	1.16	180	Fundemantal of Low Channel
2400	38.19	V	54	-15.81	Peak	1.16	180	Band Edge of Low Channel
2480.1	93.6	V	94	-0.4	Peak	1.18	150	Fundamental of High Chanel
2483.5	47.64	V	54	-6.36	Peak	1.18	150	Band Edge of High Channel



Band Edge – Low Channel – Vertical Polarization – X-Axis



Band Edge – High Channel – Vertical Polarization – Z-Axis