FCC PART 15, SUBPART B and C
TEST REPORT

for

REMOTE CONTROLLED LOCKING WHEEL

MODEL: W-9200

Prepared for
GATEKEEPER SYSTEMS, INC.
8 STUDEBAKER
IRVINE, CALIFORNIA 92618

Prepared by:_____

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DATE: OCTOBER 20, 2006

	REPORT BODY	APPENDICES					TOTAL
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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:	Remote Controlled Locking Wheel Model: W-9200 S/N: N/A
Product Description:	See Expository Statement
Modifications:	The EUT was not modified in order to meet the specifications.
Customer:	Gatekeeper Systems, Inc. 8 Studebaker Irvine, California 92618
Test Dates:	September 27 and 28, 2006
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 operates on batteries only and 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 Remote Controlled Locking Wheel, Model: W-9200. 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 uplink mode, which was tested under section 15.249. For the download mode, please see the Compatible Electronics test report number: **B61009D2.**

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.

Scott Carter Chief Scientist

Compatible Electronics, Inc.

Kyle Fujimoto Test Engineer
James Ross Test Engineer

2.4 Date Test Sample was Received

The test sample was received on September 27, 2006.

2.5 Disposition of the Test Sample

The sample was returned to Gatekeeper Systems, Inc. on October 16, 2006.

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.

Specifics of the EUT and Peripherals Tested

The Remote Controlled Locking Wheel, Model: W-9200 (EUT) was tested as a stand alone unit and placed at the center of the turntable. A remote control was used to control the locking and unlocking of the wheel. The EUT was also continuously transmitting or receiving, depending on the test performed.

The EUT was also controlled by the laptop connected to the serial transmit board placed 10 meters away from the test site. The laptop sent commands to the EUT via the serial transmit board so that the EUT could be placed in the low, middle, and high channels. For this test report, all of the data was taken in the uplink mode. For the download mode, please see Compatible Electronics report number: **B61009D2**.

The final radiated data was taken in the mode above. Please see Appendix E for the data sheets.

4.1.1 Cable Construction and Termination

Cable 1 This is a 5-meter braid and foil shielded cable connecting the laptop to the serial transmit board. The cable has a D-9 pin metallic connector at each end. The shield of the cable was grounded to the chassis via the connectors.

Cable 2 This is a 2-meter unshielded cable connecting the laptop to the AC Adapter. The cable has a 1/8 inch power connector at the laptop end and is hard wired into the AC Adapter.

Cable 3 This is a 2-meter unshielded cable connecting the serial transmit board to the AC Adapter. The cable has a 1/8 inch power connector at the serial transmit board end and is hard wired into the AC Adapter.

5. LISTS OF EUT, ACCESSORIES AND TEST EQUIPMENT

5.1 EUT and Accessory List

EQUIPMENT	MANUFACTURER	MODEL NUMBER	SERIAL NUMBER	FCC ID
REMOTE CONTROLLED LOCKING WHEEL (EUT)	GATEKEEPER SYSTEMS, INC.	W-9200	N/A	**SOXW9200**
LAPTOP	DELL	LATITUDE D505	CN-0H2029-48643-4BM-2301	QDS-BRCM-1005-D
AC ADAPTER FOR LAPTOP	DELL	F8834	CN-0F8834-48661-63G-7105	N/A
REMOTE CONTROL	GATKEEPER SYSTEMS, INC.	CARTKEY	N/A	N/A
SERIAL TRANSMIT BOARD	GATEKEEPER SYSTEMS, INC.	CORONADO	10	N/A
AC ADAPTER FOR SERIAL TRANSMIT BOARD	ENG	3A-161WU09	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	October 28, 2004	October 28, 2006
Preamplifier	Com Power	PA-102	1017	January 19, 2006	Jan. 19, 2007
Biconical Antenna	Com Power	AB-900	15227	March 9, 2006	March 9, 2007
Log Periodic Antenna	Com Power	AL-100	16060	July 17, 2006	July 17, 2007
Loop Antenna	Com Power	AL-130	17089	September 21, 2005	Sept. 21, 2007
Horn Antenna	Antenna Research	DRG-118/A	1053	March 6, 2006	March 6, 2008
Microwave Preamplifier	Com Power	PA-840	711919	January 20, 2006	Jan. 20, 2007
Horn Antenna	Com Power	AH826	71957	December 12, 2005	Dec. 12, 2007
Microwave Preamplifier	Com Power	PA-122	181917	January 20, 2006	Jan. 20, 2007
Antenna Mast	Com Power	AM-100	N/A	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-102 was used for frequencies from 30 MHz to 1 GHz, and the Com-Power Microwave Preamplifier Models: PA-122 and PA-840 were 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 EMI Receiver 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 Remote Controlled Locking Wheel, Model: W-9200 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 uplink mode only for the EUT. For the download mode, please see Compatible Electronics test report number: **B61009D2**.

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

Remote Controlled Locking Wheel
Model: W-9200
S/N: N/A

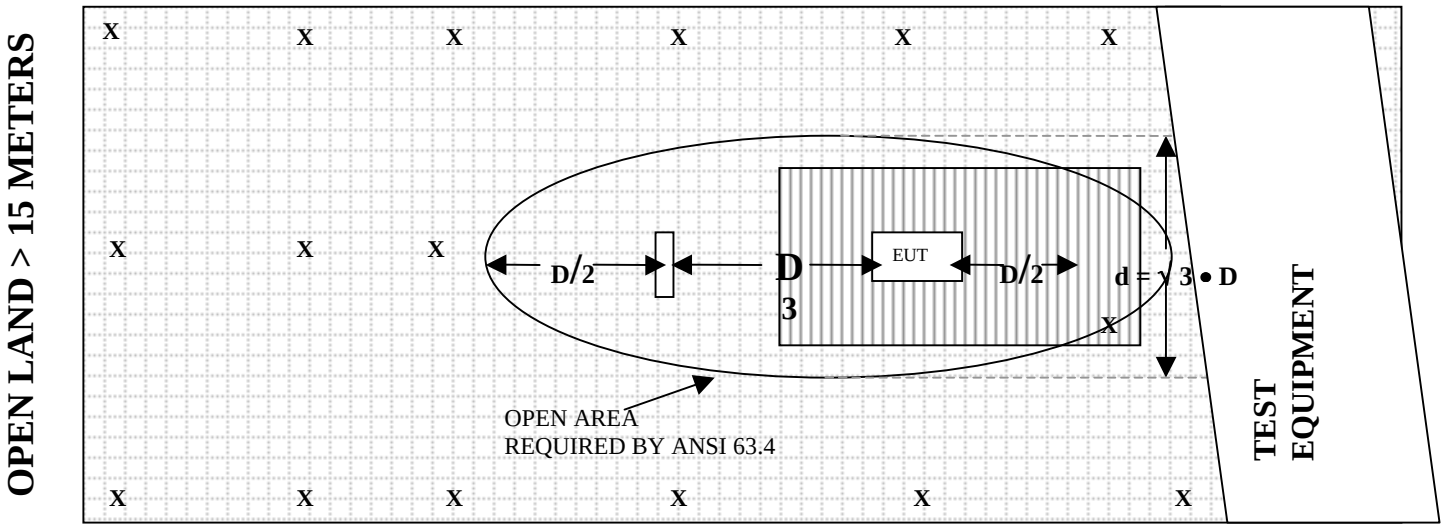
There were no additional models covered under this report.

APPENDIX D

DIAGRAMS, CHARTS, AND PHOTOS

FIGURE 1: PLOT MAP AND LAYOUT OF 3 METER RADIATED SITE

OPEN LAND > 15 METERS



OPEN LAND > 15 METERS

X = GROUND RODS	= GROUND SCREEN
D = TEST DISTANCE (meters)	= WOOD COVER

COM-POWER AB-900

BICONICAL ANTENNA

S/N: 15227

CALIBRATION DATE: MARCH 9, 2006

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
30	11.12	120	13.50
35	10.17	125	12.63
40	9.75	140	12.20
45	12.22	150	11.85
50	13.28	160	13.25
60	11.36	175	15.74
70	7.95	180	16.23
80	5.95	200	16.79
90	7.62	250	16.47
100	10.89	300	17.49

COM-POWER AL-100

LOG PERIODIC ANTENNA

S/N: 16060

CALIBRATION DATE: JULY 17, 2006

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
300	13.58	700	20.49
400	14.53	800	20.13
500	15.36	900	22.15
600	18.29	1000	22.76

COM-POWER PA-102

PREAMPLIFIER

S/N: 1017

CALIBRATION DATE: JANUARY 19, 2006

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
30	38.3	300	38.4
40	38.4	350	38.4
50	38.3	400	38.0
60	38.4	450	38.1
70	38.5	500	37.5
80	38.4	550	38.0
90	38.4	600	38.0
100	38.4	650	37.7
125	38.1	700	37.7
150	38.5	750	37.7
175	38.4	800	37.0
200	38.3	850	37.2
225	38.3	900	36.6
250	38.1	950	36.3
275	38.3	1000	36.3

COM-POWER PA-122

PREAMPLIFIER

S/N: 181917

CALIBRATION DATE: JANUARY 20, 2006

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
1.0	34.697	10.0	36.558
1.5	33.817	10.5	35.048
2.0	33.587	11.0	33.258
2.5	33.804	11.5	32.960
3.0	33.850	12.0	33.312
3.5	33.943	12.5	33.836
4.0	34.399	13.0	34.178
4.5	34.847	13.5	34.197
5.0	35.172	14.0	33.769
5.5	35.383	14.5	33.392
6.0	35.539	15.0	33.387
6.5	34.802	15.5	34.038
7.0	33.793	16.0	34.884
7.5	33.511	16.5	35.740
8.0	33.910	17.0	35.341
8.5	34.907	17.5	34.729
9.0	36.036	18.0	33.760
9.5	36.661		

ANTENNA RESEARCH DRG-118/A

HORN ANTENNA

S/N: 1053

CALIBRATION DATE: MARCH 6, 2006

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
1.0	24.46	10.0	39.55
1.5	25.05	10.5	39.86
2.0	28.42	11.0	38.49
2.5	29.91	11.5	40.71
3.0	31.46	12.0	40.59
3.5	31.91	12.5	40.17
4.0	31.55	13.0	39.70
4.5	31.94	13.5	40.84
5.0	32.90	14.0	41.58
5.5	34.07	14.5	45.14
6.0	35.69	15.0	42.20
6.5	33.11	15.5	39.42
7.0	36.51	16.0	38.80
7.5	37.27	16.5	41.08
8.0	37.21	17.0	44.11
8.5	37.16	17.5	46.29
9.0	38.27	18.0	41.61
9.5	39.73		

COM-POWER PA-840

MICROWAVE PREAMPLIFIER

S/N: 711919

CALIBRATION DATE: JANUARY 20, 2006

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
18.0	27.932	29.5	27.310
18.5	28.277	30.0	26.860
19.0	28.500	30.5	27.450
19.5	28.397	31.0	27.448
20.0	28.570	31.5	27.868
20.5	28.183	32.0	27.922
21.0	28.007	32.5	27.866
21.5	27.823	33.0	27.314
22.0	27.747	33.5	27.403
22.5	27.290	34.0	26.687
23.0	27.406	34.5	26.390
23.5	26.508	35.0	26.365
24.0	26.657	35.5	26.347
24.5	27.102	36.0	26.138
25.0	27.742	36.5	26.481
25.5	27.646	37.0	26.236
26.0	27.934	37.5	27.029
26.5	27.976	38.0	27.883
27.0	26.984	38.5	29.021
27.5	26.745	39.0	29.408
28.0	27.075	39.5	28.429
28.5	27.015	39.75	27.704
29.0	27.169	40.0	26.441

COM-POWER AH826

HORN ANTENNA

S/N: 71957

CALIBRATION DATE: DECEMBER 12, 2005

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
18.0	32.4	22.5	32.0
18.5	31.4	23.0	32.2
19.0	31.5	23.5	31.2
19.5	30.9	24.0	33.1
20.0	33.1	24.5	33.1
20.5	33.4	25.0	33.4
21.0	32.1	25.5	33.4
21.5	32.5	26.0	32.9
22.0	32.3	26.5	33.6

COM-POWER AL-130

LOOP ANTENNA

S/N: 17089

CALIBRATION DATE: SEPTEMBER 21, 2005

FREQUENCY (MHz)	MAGNETIC (dB/m)	ELECTRIC (dB/m)
0.009	-42.84	8.66
0.01	-41.93	9.57
0.02	-41.29	10.21
0.05	-42.37	9.13
0.07	-41.8	9.7
0.1	-41.83	9.67
0.2	-44.13	7.37
0.3	-41.73	9.77
0.5	-41.8	9.7
0.7	-41.53	9.97
1	-41.46	10.04
2	-41.14	10.36
3	-41.26	10.24
4	-41.46	10.04
5	-41.10	10.40
10	-40.83	10.67
15	-41.47	10.03
20	-35.44	16.06
25	-42.37	9.13
30	-42.94	8.56

FRONT VIEW

GATEKEEPER SYSTEMS, INC.
REMOTE CONTROLLED LOCKING WHEEL
MODEL: W-9200
FCC SUBPART B AND C – RADIATED EMISSIONS – BELOW 1 GHz

PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS

REAR VIEW

GATEKEEPER SYSTEMS, INC.
REMOTE CONTROLLED LOCKING WHEEL
MODEL: GS2V2
FCC SUBPART B AND C – RADIATED EMISSIONS – BELOW 1 GHz

PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS

FRONT VIEW

GATEKEEPER SYSTEMS, INC.
REMOTE CONTROLLED LOCKING WHEEL
MODEL: W-9200
FCC SUBPART B AND C – RADIATED EMISSIONS – ABOVE 1 GHz

PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS

REAR VIEW

GATEKEEPER SYSTEMS, INC.
REMOTE CONTROLLED LOCKING WHEEL
MODEL: W-9200
FCC SUBPART B AND C – RADIATED EMISSIONS – ABOVE 1 GHz

PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS

APPENDIX E

DATA SHEETS

FCC 15.249
Gatekeeper Systems, Inc.
Remote Controlled Locking Wheel
Model: W-9200

Date: 09/27/06
Lab: D
Tested By: Kyle Fujimoto

Band Edges
Uplink Mode -- 20 kpbs

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
2401.6	84.52	V	94	-9.48	Peak	2.39	135	Fundamental of Low Channel
2400	50.87	V	54	-3.13	Peak	2.74	135	**Band Edge Low Channel**
2451.80	83.18	V	94	-10.82	Peak	1.5	315	Fundamental of High Channel
2483.5		V	54	-54	Peak			**No Emission Detected**
								at Band Edge High Channel

FCC 15.249

Gatekeeper Systems, Inc.
Remote Controlled Locking Wheel
Model: W-9200

Date: 09/27/06
Lab: D
Tested By: Kyle Fujimoto

Band Edges
Uplink Mode -- 20 kpbs

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
2401.6	84.82	H	94	-9.18	Peak	1	135	Fundamental of Low Channel
2400	51.25	H	54	-2.75	Peak	1	135	**Band Edge Low Channel**
2451.80	83.1	H	94	-10.9	Peak	3	315	Fundamental of High Channel
2483.5		H	54	-54	Peak			**No Emission Detected**
								at Band Edge High Channel

FCC 15.249
Gatekeeper Systems, Inc.
Remote Controlled Locking Wheel
Model: W-9200

Date: 09/27/06
Lab: D
Tested By: Kyle Fujimoto

Low Channel
Uplink Mode -- 20 kpbs

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
2401.6	84.52	V	94	-9.48	Peak	2.39	135	
4803	59.41	V	74	-14.59	Peak	2.79	135	
4803	52.25	V	54	-1.75	Avg	2.79	135	
7204.5	54.06	V	74	-19.94	Peak	1.72	225	
7204.5	41.47	V	54	-12.53	Avg	1.72	225	
9606.02		V	74	-74	Peak			No Emission
9606.02		V	54	-54	Avg			Detected
12008		V	74	-74	Peak			No Emission
12008		V	54	-54	Avg			Detected
14409		V	74	-74	Peak			No Emission
14409		V	54	-54	Avg			Detected
16811		V	74	-74	Peak			No Emission
16811		V	54	-54	Avg			Detected
19212		V	--	--	Peak			No Emission
19212		V	--	--	Avg			Detected
21614		V	--	--	Peak			No Emission
21614		V	--	--	Avg			Detected
24015		V	--	--	Peak			No Emission
24015		V	--	--	Avg			Detected

FCC 15.249
Gatekeeper Systems, Inc.
Remote Controlled Locking Wheel
Model: W-9200

Date: 09/27/06
Lab: D
Tested By: Kyle Fujimoto

Low Channel
Uplink Mode -- 20 kpbs

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
2401.6	84.82	H	94	-9.18	Peak	1	135	
4803	51.58	H	74	-22.42	Peak	1	315	
4803	42.49	H	54	-11.51	Avg	1	315	
7204.5	52.92	H	74	-21.08	Peak	1	45	
7204.5	39.04	H	54	-14.96	Avg	1	45	
9606.02		H	74	-74	Peak			No Emission
9606.02		H	54	-54	Avg			Detected
12008		H	74	-74	Peak			No Emission
12008		H	54	-54	Avg			Detected
14409		H	74	-74	Peak			No Emission
14409		H	54	-54	Avg			Detected
16811		H	74	-74	Peak			No Emission
16811		H	54	-54	Avg			Detected
19212		H	--	--	Peak			No Emission
19212		H	--	--	Avg			Detected
21614		H	--	--	Peak			No Emission
21614		H	--	--	Avg			Detected
24015		H	--	--	Peak			No Emission
24015		H	--	--	Avg			Detected

FCC 15.249
Gatekeeper Systems, Inc.
Remote Controlled Locking Wheel
Model: W-9200

Date: 09/27/06
Lab: D
Tested By: Kyle Fujimoto

Middle Channel
Uplink Mode -- 20 kpbs

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
2426.61	84.52	V	94	-9.48	Peak	2.39	135	
4853.04	59.41	V	74	-14.59	Peak	2.79	135	
4853.04	52.25	V	54	-1.75	Avg	2.79	135	
7279.57	54.06	V	74	-19.94	Peak	1.72	225	
7279.57	41.47	V	54	-12.53	Avg	1.72	225	
9706.11		V	74	-74	Peak			No Emission
9706.11		V	54	-54	Avg			Detected
12132.6		V	74	-74	Peak			No Emission
12132.6		V	54	-54	Avg			Detected
14559.2		V	74	-74	Peak			No Emission
14559.2		V	54	-54	Avg			Detected
16985.7		V	74	-74	Peak			No Emission
16985.7		V	54	-54	Avg			Detected
19412.2		V	--	--	Peak			No Emission
19412.2		V	--	--	Avg			Detected
21838.8		V	--	--	Peak			No Emission
21838.8		V	--	--	Avg			Detected
24265		V	--	--	Peak			No Emission
24265		V	--	--	Avg			Detected

FCC 15.249
Gatekeeper Systems, Inc.
Remote Controlled Locking Wheel
Model: W-9200

Date: 09/27/06
Lab: D
Tested By: Kyle Fujimoto

Middle Channel
Uplink Mode -- 20 kpbs

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
2426.61	87.09	H	94	-6.91	Peak	1	135	
4853.04	57.06	H	74	-16.94	Peak	1.25	150	
4853.04	51.26	H	54	-2.74	Avg	1.25	150	
7279.57	54.14	H	74	-19.86	Peak	1.25	225	
7279.57	41.75	H	54	-12.25	Avg	1.25	225	
9706.11		H	74	-74	Peak			No Emission
9706.11		H	54	-54	Avg			Detected
12132.6		H	74	-74	Peak			No Emission
12132.6		H	54	-54	Avg			Detected
14559.2		H	74	-74	Peak			No Emission
14559.2		H	54	-54	Avg			Detected
16985.7		H	74	-74	Peak			No Emission
16985.7		H	54	-54	Avg			Detected
19412.2		H	--	--	Peak			No Emission
19412.2		H	--	--	Avg			Detected
21838.8		H	--	--	Peak			No Emission
21838.8		H	--	--	Avg			Detected
24265		H	--	--	Peak			No Emission
24265		H	--	--	Avg			Detected

FCC 15.249
Gatekeeper Systems, Inc.
Remote Controlled Locking Wheel
Model: W-9200

Date: 09/27/06
Lab: D
Tested By: Kyle Fujimoto

High Channel
Uplink Mode - 20 kbps

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
2451.80	83.18	V	94	-10.82	Peak	1.5	315	
4903	52.19	V	74	-21.81	Peak	1.5	270	
4903	45.09	V	54	-8.91	Avg	1.5	270	
7354.5	53.74	V	74	-20.26	Peak	1.5	180	
7354.5	38.74	V	54	-15.26	Avg	1.5	180	
9806		V	74	-74	Peak			No Emission
9806		V	54	-54	Avg			Detected
12257		V	74	-74	Peak			No Emission
12257		V	54	-54	Avg			Detected
14709		V	74	-74	Peak			No Emission
14709		V	54	-54	Avg			Detected
17161		V	74	-74	Peak			No Emission
17161		V	54	-54	Avg			Detected
19612		V	--	--	Peak			No Emission
19612		V	--	--	Avg			Detected
22064		V	--	--	Peak			No Emission
22064		V	--	--	Avg			Detected
24515		V	--	--	Peak			No Emission
24515		V	--	--	Avg			Detected

FCC 15.249
Gatekeeper Systems, Inc.
Remote Controlled Locking Wheel
Model: GS2V2

Date: 09/27/06
Lab: B
Tested By: Kyle Fujimoto

High Channel
Uplink Mode - 20 kbps

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
2451.42	83.1	H	94	-10.9	Peak	3	315	
4903	47.84	H	74	-26.16	Peak	2.5	225	
4903	39.79	H	54	-14.21	Avg	2.5	225	
7354.5	51.65	H	74	-22.35	Peak	2.15	135	
7354.5	36.72	H	54	-17.28	Avg	2.15	135	
9806		H	74	-74	Peak			No Emission
9806		H	54	-54	Avg			Detected
12257		H	74	-74	Peak			No Emission
12257		H	54	-54	Avg			Detected
14709		H	74	-74	Peak			No Emission
14709		H	54	-54	Avg			Detected
17161		H	74	-74	Peak			No Emission
17161		H	54	-54	Avg			Detected
19612		H	--	--	Peak			No Emission
19612		H	--	--	Avg			Detected
22064		H	--	--	Peak			No Emission
22064		H	--	--	Avg			Detected
24515		H	--	--	Peak			No Emission
24515		H	--	--	Avg			Detected

RSS-GEN and RSS-210

Gatekeeper Systems, Inc.
Remote Controlled Locking Wheel
Model: W-9200

Date: 09/28/06
Lab: D
Tested By: Kyle Fujimoto

Middle Channel - Receive Mode
Uplink Mode - 20 kbps and Downlink Mode - 500 kbps

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

COMPATIBLE ELECTRONICS

Test Location : Compatible Electronics
Customer : Gatekeeper Systems, Inc.
Manufacturer : Gatekeeper Systems, Inc.
Eut name : Remote Controlled Locking Wheel
Model : W-9200
Serial # : 173
Specification : FCC Class B
Distance correction factor (20 * log(test/spec) : 0.00
Test Mode : Radiated Emissions - 10 kHz - 1 GHz
Vertical and Horizontal Polarization
Uplink Mode - Worst Case
Test Engineer: Kyle Fujimoto

Page : 1/1
Date : 9/28/2006
Time : 13:06:57
Lab : D
Test Distance : 3 Meters

Pol	Freq	Rdng	Cable loss	Ant factor	Amp gain	Cor'd rdg = R	Limit = L	Delta R-L
	MHz	dBuV	dB	dB	dB	dBuV	dBuV/m	dB
1V	78.000	38.90	1.08	6.33	38.42	7.89	40.00	-32.11
2H	78.000	36.90	1.08	6.33	38.42	5.89	40.00	-34.11
3V	130.000	38.60	1.50	12.48	38.19	14.40	43.50	-29.10
4H	130.000	33.70	1.50	12.48	38.19	9.50	43.50	-34.00
5V	156.000	36.40	1.63	12.70	38.47	12.25	43.50	-31.25
6V	208.000	35.40	2.07	16.73	38.30	15.90	43.50	-27.60
7V	261.400	35.70	2.05	16.72	38.19	16.27	46.00	-29.73
8V	338.000	36.90	2.50	13.97	38.40	14.97	46.00	-31.03
9H	342.400	37.10	2.50	14.02	38.40	15.22	46.00	-30.78
10V	442.000	36.90	2.82	14.90	38.08	16.53	46.00	-29.47
11H	472.000	34.60	2.98	15.15	37.83	14.90	46.00	-31.10