

FCC PART 15 SUBPART B and C TEST REPORT

for

WHEELCHAIR SCALE SYSTEM – PAD MODEL: 1415-100

Prepared for

INNOVISION DEVICES, LLC 26352 RUETHER AVENUE SANTA CLARITA, CALIFORNIA 91350

Prepared by: Kule Fajimoto

KYLE FUJIMOTO

Approved by: James Ross

JAMES ROSS

COMPATIBLE ELECTRONICS INC. 114 OLINDA DRIVE BREA, CALIFORNIA 92823 (714) 579-0500

DATE: FEBRUARY 18, 2010

	REPORT		APPENDICES			TOTAL	
	BODY	A	В	C	D	E	
PAGES	18	2	2	2	11	7	42

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Wheelchair Scale System – Pad Model: 1415-100

TABLE OF CONTENTS

Section	n / Title	PAGE
GENER	RAL REPORT SUMMARY	4
SUMM.	ARY OF TEST RESULTS	4
1.	PURPOSE	5
2.1 2.2 2.3 2.4 2.5 2.6	ADMINISTRATIVE DATA Location of Testing Traceability Statement Cognizant Personnel Date Test Sample was Received Disposition of the Test Sample Abbreviations and Acronyms	6 6 6 6 6 6
3.	APPLICABLE DOCUMENTS	7
4.1 4.1.1 5. 5.1 5.2	DESCRIPTION OF TEST CONFIGURATION Description of Test Configuration – EMI Cable Construction and Termination LISTS OF EUT, ACCESSORIES AND TEST EQUIPMENT EUT and Accessory List EMI Test Equipment	8 8 9 10 10
6.1 6.2 6.3	TEST SITE DESCRIPTION Test Facility Description EUT Mounting, Bonding and Grounding Facility Environmental Characteristics	12 12 12 12
7. 7.1 7.1.1 7.1.2 7.1.3 7.2	Radiated Emissions (Spurious and Harmonics) Test	13 13 13 14 16 17
σ.	CONCLUSIONS	18



LIST OF APPENDICES

APPENDIX	TITLE		
A	Laboratory Accreditations and Recognitions		
В	Modifications to the EUT		
С	Additional Models Covered Under This Report		
D	Diagram, Charts, and Photos		
	Test Setup Diagram		
	Antenna and Amplifier Factors		
	• Radiated Emissions Photos		
Е	Data Sheets		

LIST OF FIGURES

FIGURE	TITLE
1	Conducted Emissions Test Setup
2	Plot Map And Layout of Radiated Test Site – 3 Meters



GENERAL REPORT SUMMARY

Compatible Electronics Inc. generates this electromagnetic emission test report, 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: Wheelchair Scale System - Pad

Model: 1415-100

S/N: N/A

Product Description: See Expository Statement

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

Customer: Innovision Devices, LLC

26352 Ruether Avenue

Santa Clarita, California 91350

Test Date(s): Feburary 15 and 16, 2011

Test Specifications: EMI requirements

CFR Title 47, Part 15, Subpart B

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 to 30 MHz	The EUT does not directly or indirectly connect to the AC mains, thus this test was not performed.
2	Radiated RF Emissions 10 kHz – 4180 MHz (Transmitter Portion)	Complies with the limits of CFR Title 47, Part 15, Subpart C, sections 15.205, 15.209, and 15.231. Highest reading in relation to spec limit: 70.24 (Avg) dBuV/m @ 418 MHz (*U = 3.59 dB)
3	Radiated RF Emissions 10 kHz – 4180 MHz (Receiver and Digital Portion)	Complies with the Class B limits of CFR Title 47, Part 15, Subpart B.

^{*}U = Expanded Uncertainty with a coverage factor of k=2





PURPOSE

This document is a qualification test report based on the Electromagnetic Interference (EMI) tests performed on the Wheelchair Scale System - Pad, Model: 1415-100. 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 15.231 for the transmitter portion.

FCC Part 15 Subpart B and FCC Section 15.231 Test Report

Wheelchair Scale System – Pad Model: 1415-100

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.

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

Innovision Devices, LLC

David Lyznick COO

Compatible Electronics Inc.

Kyle Fujimoto Test Engineer James Ross Test Engineer

2.4 Date Test Sample was Received

The test sample was received prior to the date of testing.

2.5 Disposition of the Test Sample

The test sample has returned to Innovision Devices, LLC on February 17, 2011.

2.6 Abbreviations and Acronyms

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

FCC Federal Communications Commission

RF Radio Frequency

EMI Electromagnetic Interference EUT Equipment Under Test

P/N Part Number S/N Serial Number

ITE Information Technology Equipment
LISN Line Impedance Stabilization Network

NVLAP National Voluntary Laboratory Accreditation Program

CFR Code of Federal Regulations

N/A Not Applicable

LLC Limited Liability Company

Inc. Incorporated IR Infrared

COO Chief Operating Officer



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

FCC Part 15 Subpart B and FCC Section 15.231 Test Report
Wheelchair Scale System - Pad

Model: 1415-100

4. DESCRIPTION OF TEST CONFIGURATION

4.1 Description of Test Configuration – EMI

The Wheelchair Scale System – Pad, Model: 1415-100 (EUT) was tested as a stand alone unit and mounted directly on the turntable. The EUT was continuously transmitting and receiving.

The EUT's antenna was soldered directly to the PCB.

It was determined that the emissions were at their highest level when the EUT was operating in the above configuration. The final emissions data was taken in this mode of operation and any cables were maximized. All initial investigations were performed with the measurement receiver in manual mode scanning the frequency range continuously. Photographs of the test setup are in Appendix D of this report.



4.1.1

Cable Construction and Termination

There are no external cables connected to the EUT.



FCC Part 15 Subpart B and FCC Section 15.231 Test Report
Wheelchair Scale System - Pad

Model: 1415-100

5. LISTS OF EUT, ACCESSORIES AND TEST EQUIPMENT

5.1 EUT and Accessory List

EQUIPMENT	MANUFACTURER	MODEL NUMBER	SERIAL NUMBER	FCC ID
WHEELCHAIR SCALE SYSTEM – PAD (EUT)	INNOVISION DEVICES, LLC	1415-100	N/A	Y961415100



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	
EMI Receiver	Rohde & Schwarz	ESIB40	100194	November 19, 2010	November 19, 2012	
Monitor	Hewlett Packard	D5258A	TW74500641	N/A	N/A	
	RF RADIATED EMISSIONS TEST EQUIPMENT					
Biconical Antenna	Com Power	AB-900	15250	June 18, 2010	June 18, 2011	
Log Periodic Antenna	Com Power	AL-100	16252	June 9, 2010	June 9, 2011	
Preamplifier	Com-Power	PA-102	1017	January 11, 2011	January 11, 2012	
Loop Antenna	Com-Power	AL-130	17089	January 21, 2011	January 21, 2012	
Horn Antenna	Com-Power	AH-118	071175	March 18, 2010	March 18, 2012	
Microwave Preamplifier	Com-Power	PA-118	181656	December 22, 2010	December 22, 2011	
Antenna Mast	Com Power	AM-100	N/A	N/A	N/A	

FCC Part 15 Subpart B and FCC Section 15.231 Test Report Wheelchair Scale System - Pad

TEST SITE DESCRIPTION 6.

6.1 **Test Facility Description**

Please refer to section 2.1 and 7.1.2 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.

6.3 **Facility Environmental Characteristics**

When applicable refer to the data sheets in Appendix E for the relative humidity, air temperature, and barometric pressure.

FCC Part 15 Subpart B and FCC Section 15.231 Test Report
Wheelchair Scale System – Pad

Model: 1415-100

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 Conducted Emissions Test

The measurement receiver was used as a measuring meter. The data was collected with the measurement receiver in the peak detect mode with the "Max Hold" feature activated. The quasipeak was used only where indicated in the data sheets. A transient limiter was used for the protection of the measurement receiver's input stage, and the offset was adjusted accordingly to read the actual data measured. The LISN output was measured using the measurement receiver. The output of the second LISN was terminated by a 50-ohm termination. The effective measurement bandwidth used for this test was 9 kHz.

Please see section 6.2 of this report for mounting, bonding and grounding of the EUT. The EUT was powered through the LISN, which was bonded to the ground plane. The LISN power was filtered and the filter was bonded to the ground plane. The EUT was set up with the minimum distances from any conductive surfaces as specified in ANSI C63.4. The excess power cord was wrapped in a figure eight pattern to form a bundle not exceeding 0.4 meters in length.

The conducted emissions from the EUT were maximized for operating mode as well as cable placement. The final data was collected under program control by the Compatible Electronics conducted emissions software in several overlapping sweeps by running the spectrum analyzer at a minimum scan rate of 10 seconds per octave. The final qualification data is located in Appendix E.

Test Results:

The EUT does not directly or indirectly connect to the AC mains, thus this test was not performed.

FCC Part 15 Subpart B and FCC Section 15.231 Test Report
Wheelchair Scale System – Pad

7.1.2 Radiated Emissions (Spurious and Harmonics) Test

The EMI Receiver was used as a measuring meter. 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 Model: PA-118 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 quasi-peak function was used only for those readings which are marked accordingly on the data sheets.

The readings were averaged by a "duty cycle correction factor," derived from 20 log (total on time / 100 mS). The pulse train only transmits a maximum of one time in a 100 mS period.

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

FREQUENCY RANGE	EFFECTIVE MEASUREMENT BANDWIDTH	TRANSDUCER
10 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 4.18 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 by the Radiated Emission Manual Test software. 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.

FCC Part 15 Subpart B and FCC Section 15.231 Test Report Wheelchair Scale System - Pad Model: 1415-100

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.

Test Results:

The EUT complies with the Class B limits of CFR Title 47, Part 15, Subpart B; and the limits of CFR Title 47, Part 15, Subpart C, Sections 15.209 and 15.231.

FCC Part 15 Subpart B and FCC Section 15.231 Test Report
Wheelchair Scale System – Pad

Model: 1415-100

7.1.3 RF Emissions Test Results

Table 1.0 RADIATED EMISSION RESULTS

Wheelchair Scale System – Pad, Model: 1415-100

Frequency MHz	Corrected Reading* dBuV	Specification Limit dBuV	Delta (Cor. Reading – Spec. Limit) dB
418	70.24 (A)	80.28	-10.04
410.01	32.26	46.00	-13.74
836	46.34 (A)	60.28	-13.94
2321.4	37.57 (A)	54.00	-16.43
4180	36.15 (A)	54.00	-17.85
1851.3	33.22 (A)	54.00	-20.78

Notes:

- * The complete emissions data is given in Appendix E of this report.
- A Average Reading



7.2 **Bandwidth of the Fundamental**

The -20 dB bandwidth was checked to see that it was within 0.25% of the fundamental frequency for the EUT. A plot of the -20 dB bandwidth are located in Appendix E.

Test Results:

The EUT complies with the limits of CFR Title 47, Part 15, Subpart C, section 15.231(c).

FCC Part 15 Subpart B and FCC Section 15.231 Test Report
Wheelchair Scale System - Pad

8. CONCLUSIONS

The Wheelchair Scale System – Pad, Model: 1415-100 (EUT), as tested, meets all of the <u>Class B</u> specification limits defined in 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 15.231 for the transmitter portion.



APPENDIX A

LABORATORY ACCREDITATIONS AND RECOGNITIONS



LABORATORY ACCREDITATIONS AND RECOGNITIONS



For US, Canada, Australia/New Zealand, Japan, Taiwan, Korea, and the European Union, Compatible Electronics is currently accredited by NVLAP to ISO/IEC 17025. Please follow the link to the NIST/NVLAP site for each of our facilities' NVLAP certificate and scope of accreditation

NVLAP listing links

Agoura Division / Brea Division / Silverado/Lake Forest Division

.Quote from ISO-ILAC-IAF Communiqué on 17025:

"A laboratory's fulfilment of the requirements of ISO/IEC 17025:2005 means the laboratory meets both the technical competence requirements and management system requirements that are necessary for it to consistently deliver technically valid test results and calibrations. The management system requirements in ISO/IEC 17025:2005 (Section 4) are written in language relevant to laboratory operations and meet the principles of ISO 9001:2008 Quality Management Systems — Requirements."



ANSI listing CETCB



Compatible Electronics has been nominated as a Conformity Assessment Body (CAB) for EMC under the US/EU Mutual Recognition Agreement (MRA).

US/EU MRA list NIST MRA site



Compatible Electronics has been nominated as a Conformity Assessment Body (CAB) for Taiwan/BSMI under the US/APEC (Asia-Pacific Economic Cooperation) Mutual Recognition Agreement (MRA). **APEC MRA list** NIST MRA site

We are also listed for IT products by the following country/agency:



VCCI Support member: Please visit http://www.vcci.jp/vcci_e/



FCC Listing, from FCC OET site

FCC test lab search https://fjallfoss.fcc.gov/oetcf/eas/reports/TestFirmSearch.cfm



Compatible Electronics IC listing can be found at: http://www.ic.gc.ca/eic/site/ic1.nsf/eng/home



APPENDIX B

MODIFICATIONS TO THE EUT



MODIFICATIONS TO THE EUT

The modifications listed below were made to the EUT to pass FCC 15.231 and/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 modification were made to the EUT during the testing.





APPENDIX C

ADDITIONAL MODELS COVERED UNDER THIS REPORT

ADDITIONAL MODELS COVERED UNDER THIS REPORT

USED FOR THE PRIMARY TEST

 $Wheel chair\ Scale\ System-Pad$

Model: 1415-100

ALSO APPROVED UNDER THIS REPORT:

There were no additional models covered under this report.



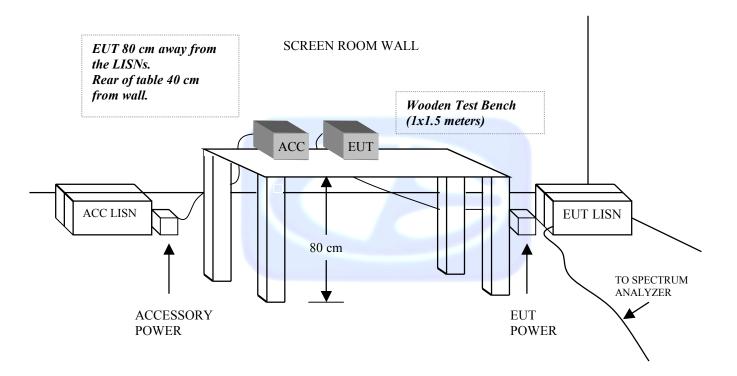


APPENDIX D

DIAGRAMS, CHARTS, AND PHOTOS



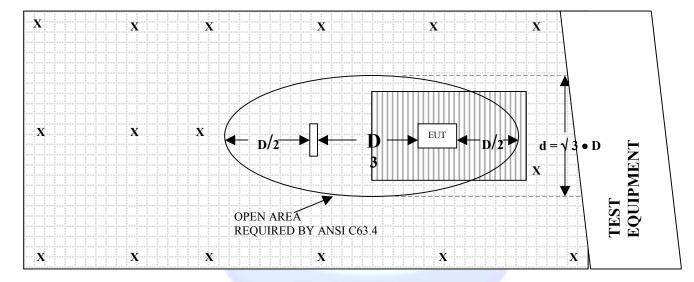
FIGURE 1: CONDUCTED EMISSIONS TEST SETUP



OPEN LAND > 15 METERS

FIGURE 2: PLOT MAP AND LAYOUT OF RADIATED SITE – 3 METERS

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: 15250

CALIBRATION DATE: JUNE 18, 2010

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
30	12.8	100	11.5
35	11.3	120	13.6
40	10.8	140	12.5
45	10.1	160	13.2
50	11.0	180	15.5
60	11.1	200	16.9
70	7.3	250	16.4
80	7.5	275	18.7
90	8.3	300	19.5



COM-POWER AL-100

LOG PERIODIC ANTENNA

S/N: 16252

CALIBRATION DATE: JUNE 9, 2010

FREQUENCY	FACTOR	FREQUENCY	FACTOR
(MHz)	(dB)	(MHz)	(dB)
300	12.7	700	19.5
400	16.1	800	20.9
500	16.9	900	20.8
600	20.1	1000	21.5

COM POWER AH-118

HORN ANTENNA

S/N: 071175

CALIBRATION DATE: MARCH 18, 2010

FREQUENCY	FACTOR	FREQUENCY	FACTOR
(GHz)	(dB)	(GHz)	(dB)
1.0	22.2	10.0	39.8
1.5	24.2	10.5	40.2
2.0	27.2	11.0	39.7
2.5	27.8	11.5	39.9
3.0	30.5	12.0	41.7
3.5	30.9	12.5	42.7
4.0	31.9	13.0	42.3
4.5	33.2	13.5	40.3
5.0	33.6	14.0	42.6
5.5	36.2	14.5	43.4
6.0	35.8	15.0	41.9
6.5	36.1	15.5	40.8
7.0	37.9	16.0	41.0
7.5	37.4	16.5	41.5
8.0	38.0	17.0	44.5
8.5	38.8	17.5	47.6
9.0	38.0	18.0	50.8
9.5	39.2		



COM-POWER PA-102

PREAMPLIFIER

S/N: 1017

CALIBRATION DATE: JANUARY 11, 2011

FREQUENCY	FACTOR	FREQUENCY	FACTOR
(MHz)	(dB)	(MHz)	(dB)
20	38.2	300	38.1
30	38.1	350	38.0
40	38.2	400	37.9
50	38.2	450	37.7
60	38.2	500	37.6
70	38.2	550	37.9
80	38.2	600	37.9
90	38.2	650	37.7
100	38.1	700	37.9
125	38.2	750	37.5
150	38.2	800	37.6
175	38.2	850	37.6
200	38.2	900	37.0
225	38.2	950	37.2
250	38.2	1000	36.8
275	38.2		

COM-POWER PA-118

PREAMPLIFIER

S/N: 181656

CALIBRATION DATE: DECEMBER 22, 2010

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
1.0	24.90	10.0	26.07
1.5	26.50	10.5	24.97
2.0	26.79	11.0	24.79
2.5	26.90	11.5	24.33
3.0	27.03	12.0	24.24
3.5	26.94	12.5	24.92
4.0	27.18	13.0	24.52
4.5	26.79	13.5	24.33
5.0	26.25	14.0	24.56
5.5	26.16	14.5	24.99
6.0	25.52	15.0	26.06
6.5	25.29	15.5	26.87
7.0	24.45	16.0	25.95
7.5	24.18	16.5	24.69
8.0	24.02	17.0	24.20
8.5	24.54	17.5	25.12
9.0	24.91	18.0	26.03
9.5	25.42		



COM-POWER AL-130

LOOP ANTENNA

S/N: 17089

CALIBRATION DATE: JANUARY 21, 2011

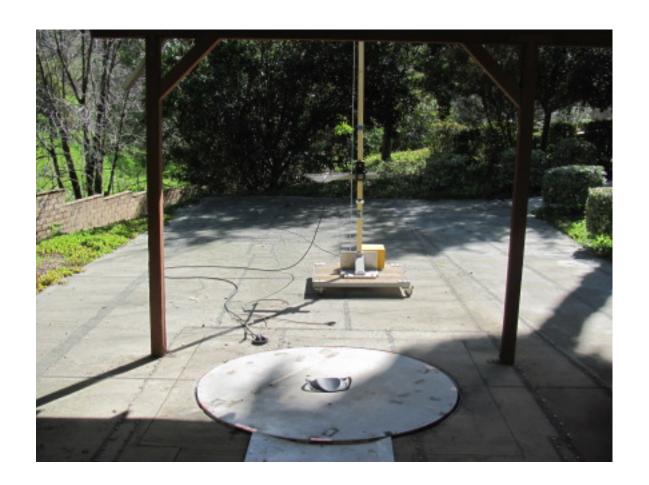
FREQUENCY	MAGNETIC	ELECTRIC
(MHz)	(dB/m)	(dB/m)
0.009	-41.9	9.6
0.01	-41.79	9.71
0.02	-41.43	10.07
0.05	-41.53	9.97
0.07	-41.47	10.03
0.1	-41.44	10.06
0.2	-41.61	9.89
0.3	-41.62	9.88
0.5	-41.66	9.84
0.7	-41.48	10.02
1	-41.13	10.37
2	-40.89	10.61
3	-41.00	10.50
4	-41.14	10.36
5	-41.02	10.48
10	-40.69	10.82
15	-40.41	11.09
20	-41.07	10.43
25	-42.10	9.40
30	-41.15	10.35



FRONT VIEW

INNOVISION DEVICES, LLC
WHEELCHAIR SCALE SYSTEM – PAD
MODEL: 1415-100
FCC SUBPART B AND C – RADIATED EMISSIONS

PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS



REAR VIEW

INNOVISION DEVICES, LLC WHEELCHAIR SCALE SYSTEM – PAD MODEL: 1415-100 FCC SUBPART B AND C – RADIATED EMISSIONS

PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS



APPENDIX E

DATA SHEETS



FCC 15.231

Innovision Devices, LLC Date: 02/15/2011 Wheelchair System - Pad Labs: B and D

Model: 1415-100 Tested By: Kyle Fujimoto

Transmit Mode Duty Cycle: 16.93%

					Peak /	Ant.	Table	
Freq. (MHz)	Level	Pol (v/h)	Limit	Margin	QP / Avg	Height (m)	Angle (deg)	Comments
418	85.66		100.28	-14.62	Peak	1	180	Comments
418	70.24	V	80.28	-14.62	Peak	1	180	
410	70.24	V	00.20	-10.04	Peak	I	160	
836	61.76	V	80.28	-18.52	Peak	1	180	
836	46.34	V	60.28	-13.94	Avg	1	180	
030	40.54	V	00.20	-13.34	Avg	l l	100	
1254	40.38	V	74	-33.62	Peak	1.25	135	
1254	24.96	V	54	-29.04	Avg	1.25	135	
1201	2	,	0.1	20.01	, . · · · · · ·	1120		
1672	44.49	V	74	-29.51	Peak	1	180	
1672	29.07	V	54	-24.93	Avg	1	180	
					J			
2090	48.75	V	80.28	-31.53	Peak	1.25	135	
2090	33.33	V	60.28	-26.95	Avg	1.25	135	
					J			
2508	46.31	V	80.28	-27.69	Peak	1.25	135	
2508	30.89	V	60.28	-23.11	Avg	1.25	135	
2926	47.45	V	80.28	-32.83	Peak	1	150	
2926	32.03	V	60.28	-28.25	Avg	1	150	
3344	47.91	V	80.28	-32.37	Peak	1.25	135	
3344	32.49	V	60.28	-27.79	Avg	1.25	135	
					-			
3762	48.18	V	74	-25.82	Peak	1.25	135	
3762	32.76	V	54	-21.24	Avg	1.25	135	
4180	51.57	V	74	-22.43	Peak	1	180	
4180	36.15	V	54	-17.85	Avg	1	180	



FCC 15.231

Innovision Devices, LLC Date: 02/15/2011 Wheelchair System - Pad Labs: B and D

Model: 1415-100 Tested By: Kyle Fujimoto

Transmit Mode Duty Cycle: 16.93%

Freq.	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
418	81.25	H	100.28	-19.03	Peak	1	90	
418	65.83	Н	80.28	-14.45	Peak	1	90	
836	59.31	Н	80.28	-20.97	Peak	1.25	150	
836	43.89	Н	60.28	-16.39	Avg	1.25	150	
1254	40.45	Н	74	-33.55	Peak	1.25	135	
1254	25.03	Н	54	-28.97	Avg	1.25	135	
1672	42.79	Н	74	-31.21	Peak	1.25	155	
1672	27.37	Н	54	-26.63	Avg	1.25	155	
2090	46.21	Н	80.28	-34.07	Peak	1.35	165	
2090	30.79	Н	60.28	-29.49	Avg	1.35	165	
2508	47.11	Н	80.28	-26.89	Peak	1.25	175	
2508	31.69	Н	60.28	-22.31	Avg	1.25	175	
2926	46.21	Н	80.28	-34.07	Peak	1.35	185	
2926	30.79	Н	60.28	-29.49	Avg	1.35	185	
3344	44.01	Н	80.28	-36.27	Peak	1.25	175	
3344	28.59	Н	60.28	-31.69	Avg	1.25	175	
					-			
3762	47.43	Н	74	-26.57	Peak	1.25	185	
3762	32.01	Н	54	-21.99	Avg	1.25	185	
					Ŭ			
4180	49.05	Н	74	-24.95	Peak	1.35	195	
4180	33.63	Н	54	-20.37	Avg	1.34	195	



FCC Class B and FCC 15.231

Innovision Devices, LLC Date: 02/16/2011 Wheelchair System - Pad Labs: B and D

Model: 1415-100 Tested By: Kyle Fujimoto

Receiver Mode

Vertical and Horizontal Polarizations - 10 kHz to 4180 MHz

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1851.3	45.94	V	74	-28.06	Peak	1	90	
1851.3	33.22	V	54	-20.78	Avg	1	90	No Emissions Detected
								from 10 kHz to 1000 MHz
2321.44	45.36	V	74	-28.64	Peak	1.25	135	for the Receiver Mode
2321.44	33.52	V	54	-20.48	Avg	1.25	135	for both the Vertical and
								Horizontal Polarizations.
1851.3	45.55	Н	74	-28.45	Peak	1.35	145	
1851.3	33.17	Н	54	-20.83	Avg	1.35	145	
								- 1
2321.44	48.03	Н	74	-25.97	Peak	1.25	145	
2321.44	34.65	Н	54	-19.35	Avg	1.25	145	
			1					



FCC Class B and FCC 15.231

Innovision Devices, LLC Date: 02/16/2011 Wheelchair System - Pad Labs: B and D

Model: 1415-100 Tested By: Kyle Fujimoto

Transmit Mode

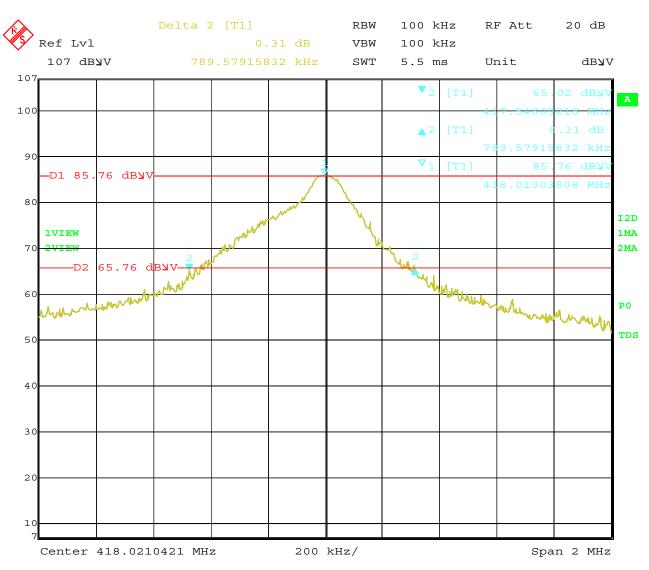
Vertical and Horizontal Polarizations - 10 kHz to 4180 MHz

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
2321.44	48.77	Н	74	-25.23	Peak	1.25	45	
2321.44	37.57	Н	54	-16.43	Avg	1.25	45	No Other Emissions Detected
								from 10 kHz to 1000 MHz
2321.44	51.31	V	74	-22.69	Peak	1.25	45	for the Digital Portion
2321.44	36.28	V	54	-17.72	Avg	1.25	45	for both the Vertical and
								Horizontal Polarizations.
410.01	32.26	Н	46	-13.74	Peak	1.25	135	
							1144	No Other Emissions Detected
								from 10 kHz to 1000 MHz
								for the Non-Harmonic
								Emissions from the Tx for the
			1					EUT for both the Vertical and
								Horizontal Polarizations.

-20 dB BANDWIDTH

DATA SHEETS





15.FEB.2011 Date: 09:16:17

-20 dB Bandwidth of the Fundamental