

*FCC PART 15, SUBPART B and C
TEST REPORT**for*

GE/JASCO ZWAVE LCD AV REMOTE 2007

MODEL: URC-8902BA0-R

Prepared for

UNIVERSAL ELECTRONICS, INC.
6101 GATEWAY DRIVE
CYPRESS, CALIFORNIA 90630Prepared by: *Kyle Fujimoto*

KYLE FUJIMOTO

Approved by: *Michael Christensen*

MICHAEL CHRISTENSEN

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

DATE: JULY 23, 2008

	REPORT BODY	APPENDICES					TOTAL
		<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E</i>	
PAGES	17	2	2	2	10	11	44

This report shall not be reproduced except in full, without the written approval of Compatible Electronics.

TABLE OF CONTENTS

Section / Title	PAGE
GENERAL REPORT SUMMARY	4
SUMMARY OF TEST RESULTS	5
1. PURPOSE	6
2. ADMINISTRATIVE DATA	7
2.1 Location of Testing	7
2.2 Traceability Statement	7
2.3 Cognizant Personnel	7
2.4 Date Test Sample was Received	7
2.5 Disposition of the Test Sample	7
2.6 Abbreviations and Acronyms	7
3. APPLICABLE DOCUMENTS	8
4. DESCRIPTION OF TEST CONFIGURATION	9
4.1 Description Of Test Configuration - EMI	9
4.1.1 Cable Construction and Termination	10
5. LISTS OF EUT, ACCESSORIES AND TEST EQUIPMENT	11
5.1 EUT and Accessory List	11
5.2 EMI Test Equipment	12
6. TEST SITE DESCRIPTION	13
6.1 Test Facility Description	13
6.2 EUT Mounting, Bonding and Grounding	13
7. TEST PROCEDURES	14
7.1 Conducted Emissions Test	14
7.2 Radiated Emissions (Spurious and Harmonics) Test	15
7.3 Radiated Emissions (Spurious and Harmonics) Test (Continued)	16
8. CONCLUSIONS	17

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 <ul style="list-style-type: none">• 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 Site

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: GE/Jasco Zwave LCD AV Remote 2007
Model: URC-8902BA0-R
Jasco Model Number: 45608

Product Description: See Expository Statement

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

Customer: Universal Electronics, Inc.
6101 Gateway Drive
Cypress, California 90630

Test Dates: June 19 and 20, 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

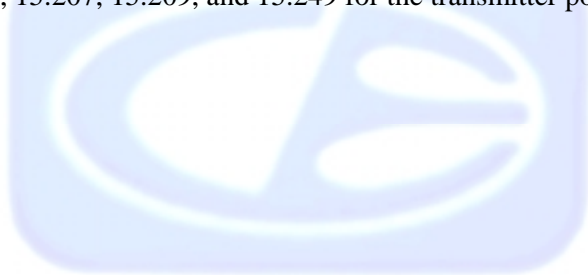
Test Deviations: The test procedure was not deviated from during the testing.

SUMMARY OF TEST RESULTS

TEST	DESCRIPTION	RESULTS
1	Conducted RF Emissions, 150 kHz – 30 MHz	This test was not performed because the EUT operates on batteries only and cannot be plugged into the AC public mains.
2	Radiated RF Emissions, 10 kHz – 9300 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 – 9300 MHz (Digital 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 GE/Jasco Zwave LCD AV Remote 2007, Model: URC-8902BA0-R. 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 portion; and the limits defined in Subpart C, sections 15.205, 15.207, 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

Universal Electronics, Inc.

Jesse Mendez Senior Electrical Core Engineer

Compatible Electronics, Inc.

Kyle Fujimoto Test Engineer

Michael Christensen Lab Manager

2.4 Date Test Sample was Received

The test sample was received on June 19, 2008.

2.5 Disposition of the Test Sample

The sample has not been returned to Universal Electronics, Inc. as of July 23, 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.

Specifics of the EUT and Peripherals Tested

The GE/Jasco Zwave LCD AV Remote 2007, Model: URC-8902BA0-R (EUT) was tested as a stand alone unit. The EUT was placed at the center of the non-conductive table. The EUT was transmitting and receiving on a continuous basis. The EUT's antenna is directly soldered to the PCB.

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

4.1.1 Cable Construction and Termination

There were no external cables connected to the EUT.



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

EQUIPMENT	MANUFACTURER	MODEL NUMBER	JASCO MODEL NUMBER	FCC ID
GE/JASCO ZWAVE LCD AV REMOTE 2007 (EUT)	UNIVERSAL ELECTRONICS, INC.	URC-8902BA0-R	45608	MG345608

5.2 EMI Test Equipment

EQUIPMENT TYPE	MANUFACTURER	MODEL NUMBER	SERIAL NUMBER	CALIBRATION DATE	CALIBRATION DUE DATE
RF RADIATED EMISSIONS TEST EQUIPMENT					
Computer	Hewlett Packard	4530	US91912319	N/A	N/A
EMI Receiver	Rohde & Schwarz	ESIB40	100172	November 27, 2006	Nov. 27, 2008
Monitor	Hewlett Packard	D5258A	TW74500641	N/A	N/A
Spectrum Analyzer – Main Section	Hewlett Packard	8566B	3638A08768	August 14, 2007	August 14, 2008
Spectrum Analyzer – Display Section	Hewlett Packard	85662A	3701A22262	August 14, 2007	August 14, 2008
Quasi-Peak Adapter	Hewlett Packard	85650A	2811A01363	August 14, 2007	August 14, 2008
Biconical Antenna	Com Power	AB-900	15227	February 28, 2008	Feb. 28, 2009
Log Periodic Antenna	Com Power	AL-100	16241	July 9, 2007	July 9, 2008
Preamplifier	Com-Power	PA-103	1582	January 11, 2008	Jan. 11, 2009
Loop Antenna	Com-Power	AL-130	17089	September 24, 2007	Sept. 24, 2008
Double Ridge Horn Antenna	Com-Power	AH-118	10073	July 17, 2006	July 17, 2008
Microwave Preamplifier	Com-Power	PA-122	181921	March 3, 2008	March 3, 2009
Antenna Mast	Com-Power	AM-100	N/A	N/A	N/A

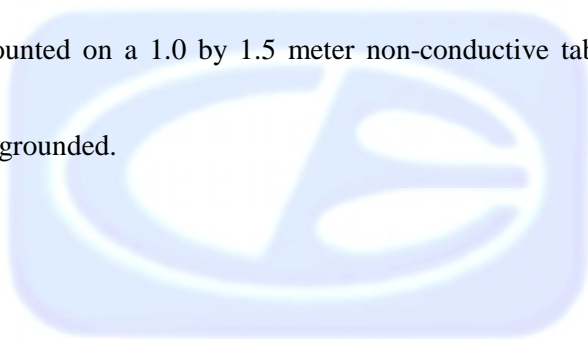
6. TEST SITE DESCRIPTION**6.1 Test Facility Description**

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 Conducted Emissions Test

The spectrum analyzer was used as a measuring meter. The data was collected with the spectrum analyzer in the peak detect mode with the "Max Hold" feature activated. The quasi-peak was used only where indicated in the data sheets. A transient limiter was used for the protection of the spectrum analyzer input stage, and the offset was adjusted accordingly to read the actual data measured. The LISN output was measured using the spectrum analyzer. 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 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:

This test was not performed because the EUT operates on batteries only and cannot be plugged into the AC public mains.

7.2 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 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 spectrum analyzer or 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 9.3 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.

7.3 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 GE/Jasco Zwave LCD AV Remote 2007, Model: URC-8902BA0-R 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, 15.207, 15.209, and 15.249 for the transmitter portion.





APPENDIX A

LABORATORY RECOGNITIONS

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

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)





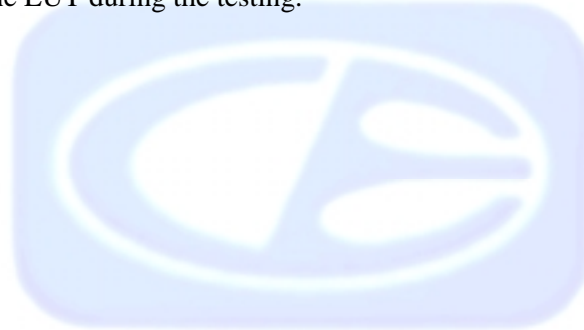
APPENDIX B

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.

No modifications were made to the EUT during the testing.





APPENDIX C

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

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

ADDITIONAL MODELS COVERED UNDER THIS REPORT

USED FOR THE PRIMARY TEST

GE/Jasco Zwave LCD AV Remote 2007
Model: URC-8902BA0-R
Jasco Model Number: 45608

There were no additional models covered under this report.



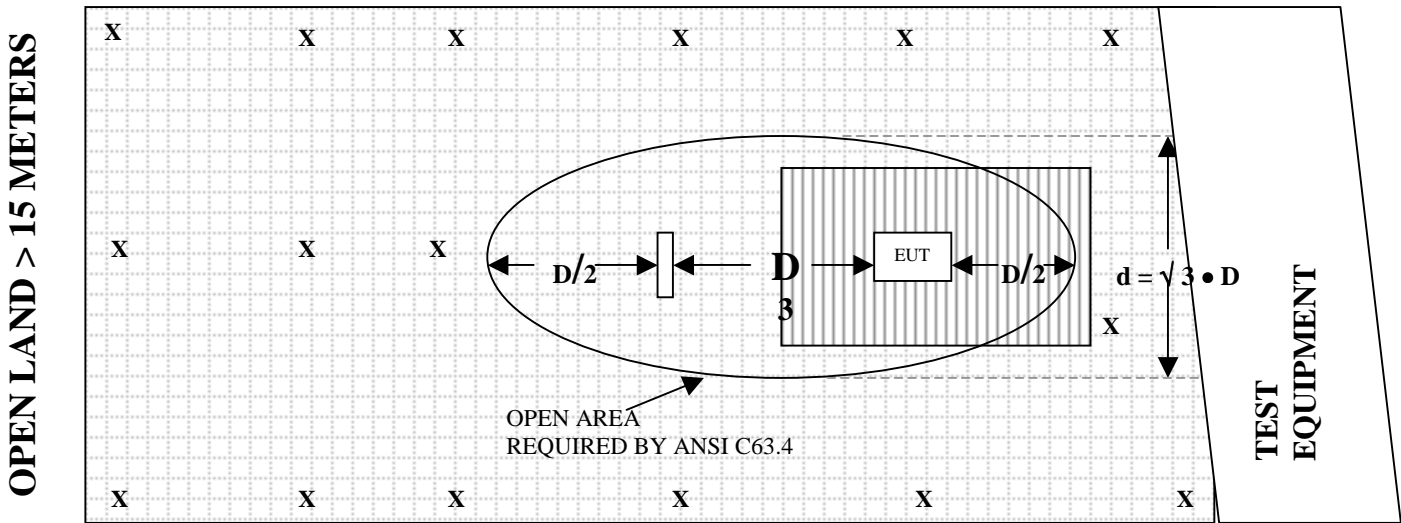


APPENDIX D

DIAGRAMS, CHARTS, AND PHOTOS

FIGURE 1: PLOT MAP AND LAYOUT OF 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: 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: 16241

CALIBRATION DATE: JULY 9, 2007

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
300	15.2	700	19.9
400	15.4	800	22.3
500	17.0	900	22.3
600	19.1	1000	24.2

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	18.5	32.70

COM-POWER AH-118**DOUBLE RIDGE HORN ANTENNA**

S/N: 10073

CALIBRATION DATE: JULY 17, 2006

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
1.0	25.331	10.0	42.391
1.5	27.507	10.5	39.194
2.0	31.581	11.0	38.504
2.5	30.906	11.5	40.724
3.0	30.276	12.0	41.079
3.5	30.396	12.5	41.014
4.0	30.881	13.0	41.201
4.5	32.77	13.5	42.335
5.0	34.067	14.0	43.248
5.5	33.914	14.5	45.639
6.0	34.028	15.0	43.197
6.5	35.779	15.5	41.751
7.0	38.347	16.0	42.462
7.5	39.096	16.5	41.908
8.0	39.377	17.0	40.277
8.5	38.646	17.5	48.117
9.0	37.438	18.0	54.113
9.5	38.403		

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
0.05	-42.0	9.5
0.07	-41.5	10.0
0.1	-41.43	10.07
0.2	-43.9	7.9
0.3	-41.43	10.07
0.5	-41.40	10.1
0.7	-41.13	10.37
1	-40.83	10.67
2	-40.30	11.20
3	-40.60	10.90
4	-41.00	10.50
5	-40.20	11.30
10	-40.40	11.10
15	-41.67	9.83
20	-41.10	10.40
25	-42.80	8.70
30	-42.80	8.70



FRONT VIEW

UNIVERSAL ELECTRONICS, INC.
GE/JASCO ZWAVE LCD AV REMOTE 2007
MODEL: URC-8902BA0-R
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

UNIVERSAL ELECTRONICS, INC.
GE/JASCO ZWAVE LCD AV REMOTE 2007
MODEL: URC-8902BA0-R
FCC SUBPART B AND C – RADIATED EMISSIONS

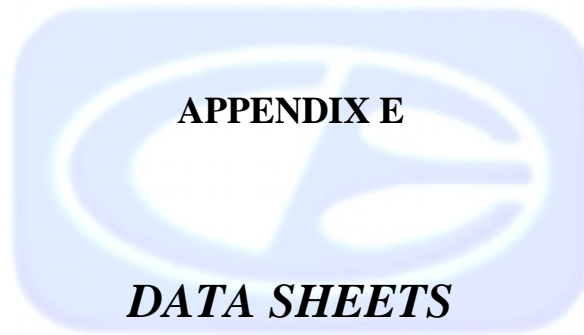
**PHOTOGRAPH SHOWING THE EUT CONFIGURATION
FOR MAXIMUM EMISSIONS**

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



RADIATED EMISSIONS

DATA SHEETS

FCC 15.249

Universal Electronics, Inc.
 GE/Jasco Zwave LCD AV Remote 2007
 Model: URC-8902BA0-R
 Jasco Model Number: 45608

Date: 06/19/08
 Labs: B and D
 Tested By: Kyle Fujimoto

X-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
908.4	75.92	V	94	-18.08	Peak	1	180	
1816.8	40.12	V	74	-33.88	Peak	2.31	135	
1816.8	27.16	V	54	-26.84	Avg	2.31	135	
2725.2	39.26	V	74	-34.74	Peak	1.87	225	
2725.2	26.61	V	54	-27.39	Peak	1.87	225	
3633.6	40.81	V	74	-33.19	Peak	1.41	180	
3633.6	29.42	V	54	-24.58	Avg	1.41	180	
4542	42.91	V	74	-31.09	Peak	1.41	135	
4542	30.52	V	54	-23.48	Avg	1.41	135	
5450.4		V	74	-74	Peak			No Emission
5450.4		V	54	-54	Avg			Detected
6358.8		V	74	-74	Peak			No Emission
6358.8		V	54	-54	Avg			Detected
7267.2		V	74	-74	Peak			No Emission
7267.2		V	54	-54	Avg			Detected
8175.6		V	74	-74	Peak			No Emission
8175.6		V	54	-54	Avg			Detected
9084		V	74	-74	Peak			No Emission
9084		V	54	-54	Avg			Detected

FCC 15.249

Universal Electronics, Inc.
 GE/Jasco Zwave LCD AV Remote 2007
 Model: URC-8902BA0-R
 Jasco Model Number: 45608

Date: 06/19/08
 Labs: B and D
 Tested By: Kyle Fujimoto

X-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
908.4	79.72	H	94	-14.28	Peak	2.5	150	
1816.8	42.31	H	74	-31.69	Peak	1.16	135	
1816.8	36.36	H	54	-17.64	Avg	1.16	135	
2725.2	41.22	H	74	-32.78	Peak	1.17	315	
2725.2	26.74	H	54	-27.26	Peak	1.17	315	
3633.6	43.57	H	74	-30.43	Peak	2.24	135	
3633.6	31.36	H	54	-22.64	Avg	2.24	135	
4542	42.71	H	74	-31.29	Peak	1.64	150	
4542	30.52	H	54	-23.48	Avg	1.64	150	
5450.4		H	74	-74	Peak			No Emission
5450.4		H	54	-54	Avg			Detected
6358.8		H	74	-74	Peak			No Emission
6358.8		H	54	-54	Avg			Detected
7267.2		H	74	-74	Peak			No Emission
7267.2		H	54	-54	Avg			Detected
8175.6		H	74	-74	Peak			No Emission
8175.6		H	54	-54	Avg			Detected
9084		H	74	-74	Peak			No Emission
9084		H	54	-54	Avg			Detected

FCC 15.249

Universal Electronics, Inc.
 GE/Jasco Zwave LCD AV Remote 2007
 Model: URC-8902BA0-R
 Jasco Model Number: 45608

Date: 06/19/08
 Labs: B and D
 Tested By: Kyle Fujimoto

Y-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
908.4	77.52	V	94	-16.48	Peak			
1816.8	41.18	V	74	-32.82	Peak	2.21	135	
1816.8	28.96	V	54	-25.04	Avg	2.21	135	
2725.2	40.07	V	74	-33.93	Peak	1.84	135	
2725.2	26.83	V	54	-27.17	Peak	1.84	135	
3633.6	45.69	V	74	-28.31	Peak	1	315	
3633.6	41.51	V	54	-12.49	Avg	1	315	
4542	42.72	V	74	-31.28	Peak	1.67	135	
4542	30.56	V	54	-23.44	Avg	1.67	135	
5450.4		V	74	-74	Peak			No Emission
5450.4		V	54	-54	Avg			Detected
6358.8		V	74	-74	Peak			No Emission
6358.8		V	54	-54	Avg			Detected
7267.2		V	74	-74	Peak			No Emission
7267.2		V	54	-54	Avg			Detected
8175.6		V	74	-74	Peak			No Emission
8175.6		V	54	-54	Avg			Detected
9084		V	74	-74	Peak			No Emission
9084		V	54	-54	Avg			Detected

FCC 15.249

Universal Electronics, Inc.
 GE/Jasco Zwave LCD AV Remote 2007
 Model: URC-8902BA0-R
 Jasco Model Number: 45608

Date: 06/19/08
 Labs: B and D
 Tested By: Kyle Fujimoto

Y-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
908.4	84.9	H	94	-9.1	Peak	1	125	
1816.8	40.02	H	74	-33.98	Peak	1.08	135	
1816.8	25.52	H	54	-28.48	Avg	1.08	135	
2725.2	43.15	H	74	-30.85	Peak	1.36	125	
2725.2	30.28	H	54	-23.72	Peak	1.36	125	
3633.6	47.04	H	74	-26.96	Peak	1	135	
3633.6	42.48	H	54	-11.52	Avg	1	135	
4542	43.08	H	74	-30.92	Peak	1.24	135	
4542	30.53	H	54	-23.47	Avg	1.24	135	
5450.4		H	74	-74	Peak			No Emission
5450.4		H	54	-54	Avg			Detected
6358.8		H	74	-74	Peak			No Emission
6358.8		H	54	-54	Avg			Detected
7267.2		H	74	-74	Peak			No Emission
7267.2		H	54	-54	Avg			Detected
8175.6		H	74	-74	Peak			No Emission
8175.6		H	54	-54	Avg			Detected
9084		H	74	-74	Peak			No Emission
9084		H	54	-54	Avg			Detected

FCC 15.249

Universal Electronics, Inc.
 GE/Jasco Zwave LCD AV Remote 2007
 Model: URC-8902BA0-R
 Jasco Model Number: 45608

Date: 06/19/08
 Labs: B and D
 Tested By: Kyle Fujimoto

Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
908.4	77.12	V	94	-16.88	Peak	1.25	250	
1816.8	39.46	V	74	-34.54	Peak	1.38	125	
1816.8	25.04	V	54	-28.96	Avg	1.38	125	
2725.2	40.34	V	74	-33.66	Peak	2.11	135	
2725.2	26.58	V	54	-27.42	Peak	2.11	135	
3633.6	42.32	V	74	-31.68	Peak	1.99	180	
3633.6	34.87	V	54	-19.13	Avg	1.99	180	
4542	43.89	V	74	-30.11	Peak	1.99	135	
4542	30.64	V	54	-23.36	Avg	1.99	135	
5450.4		V	74	-74	Peak			No Emission
5450.4		V	54	-54	Avg			Detected
6358.8		V	74	-74	Peak			No Emission
6358.8		V	54	-54	Avg			Detected
7267.2		V	74	-74	Peak			No Emission
7267.2		V	54	-54	Avg			Detected
8175.6		V	74	-74	Peak			No Emission
8175.6		V	54	-54	Avg			Detected
9084		V	74	-74	Peak			No Emission
9084		V	54	-54	Avg			Detected

FCC 15.249

Universal Electronics, Inc.
 GE/Jasco Zwave LCD AV Remote 2007
 Model: URC-8902BA0-R
 Jasco Model Number: 45608

Date: 06/19/08
 Labs: B and D
 Tested By: Kyle Fujimoto

Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
908.4	77.32	H	94	-16.68	Peak			
1816.8	39.84	H	74	-34.16	Peak	1.78	135	
1816.8	24.51	H	54	-29.49	Avg	1.78	135	
2725.2	39.17	H	74	-34.83	Peak	1.63	125	
2725.2	26.71	H	54	-27.29	Peak	1.63	125	
3633.6	40.12	H	74	-33.88	Peak	1.19	125	
3633.6	28.27	H	54	-25.73	Avg	1.19	125	
4542	43.35	H	74	-30.65	Peak	1.19	125	
4542	30.56	H	54	-23.44	Avg	1.19	125	
5450.4		H	74	-74	Peak			No Emission
5450.4		H	54	-54	Avg			Detected
6358.8		H	74	-74	Peak			No Emission
6358.8		H	54	-54	Avg			Detected
7267.2		H	74	-74	Peak			No Emission
7267.2		H	54	-54	Avg			Detected
8175.6		H	74	-74	Peak			No Emission
8175.6		H	54	-54	Avg			Detected
9084		H	74	-74	Peak			No Emission
9084		H	54	-54	Avg			Detected

Test Location : Compatible Electronics **Page** : 1/1
Customer : Universal Electronics, Inc. **Date** : 6/20/2008
Manufacturer : Universal Electronics, Inc. **Time** : 13:57:37
Eut name : GE/Jasco Zwave LCD AV Remote 2007 **Lab** : D
Model : URC-8902BA0-R **Test Distance** : 3.0 Meters
Serial # : (Jasco Model Number: 45608)
Specification : FCC Class B
Distance correction factor (20 * log(test/spec)) : 0.00
Test Type: Radiated Emissions Qualification
Test Range: 10 kHz to 1 GHz (Vertical and Horizontal)
Test Engineer: James Ross
Operation Mode: Transmit

Pol	Freq	Rdng	Cable	Ant	Amp	Cor'd	Limit	Delta
	MHz	dBuV	loss	factor	gain	rdg = R	= L	R-L
			dB	dB	dB	dBuV	dBuV/m	dB

Note: No EUT emissions were found in the above noted test frequency range

Test Location : Compatible Electronics **Page** : 1/1
Customer : Universal Electronics, Inc. **Date** : 6/20/2008
Manufacturer : Universal Electronics, Inc. **Time** : 9:53:19
Eut name : GE/Jasco Zwave LCD AV Remote 2007 **Lab** : D
Model : URC8902BA0-R **Test Distance** : 3.0 Meters
Serial # : (Jasco Model Number: 45608)
Specification : FCC Class B
Distance correction factor (20 * log(test/spec)) : 0.00
Test Type: Radiated Emissions Qualification
Test Range: 30 MHz to 1 GHz (Vertical and Horizontal)
Test Engineer: James Ross
Operation Mode: Receive

Pol	Freq	Rdng	Cable	Ant	Amp	Cor'd	Limit	Delta
	MHz	dBuV	loss dB	factor dB	gain dB	rdg = R dBuV	= L dBuV/m	R-L dB

Note: No EUT emissions were found in the above noted test frequency range
