

*FCC PART 15, SUBPART B and C
TEST REPORT**for***GIULIANI PC REMOTE 2005****MODEL: URC-3010BA0**

Prepared for
UNIVERSAL ELECTRONICS, INC.
6101 GATEWAY DRIVE
CYPRESS, CALIFORNIA 90630-4841

Prepared by: *Kyle Fujimoto*

KYLE FUJIMOTO

Approved by: *James Ross*

JAMES ROSS

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

DATE: SEPTEMBER 21, 2005

	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: Giuliani PC Remote 2005
Model: URC-3010BA0
S/N: N/A

Product Description: See Expository Statement

Modifications: The EUT was modified in order to meet the specifications. Please see the list located in Appendix B of this test report.

Manufacturer: Universal Electronics, Inc.
6101 Gateway Drive
Cypress, California 90630-4841

Test Dates: November 9 and 11, 2005

Test Specifications: EMI requirements
CFR Title 47, Part 15 Subpart B; and Subpart C, Sections 15.205, 15.209 and 15.231

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 battery power only and cannot be plugged into the AC public mains.
2	Radiated RF Emissions, 10 kHz – 4.4 GHz	Complies with the Class B limits of CFR Title 47, Part 15, Subpart B; and Subpart C, sections 15.205, 15.209, and 15.231.

1. PURPOSE

This document is a qualification test report based on the Electromagnetic Interference (EMI) tests performed on the Giuliani PC Remote 2005 Model: URC-3010BA0. 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; and Subpart C, sections 15.205, 15.209, and 15.231.



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 Electrical Staff Engineer

Compatible Electronics, Inc.

Benigno Chavez Test Engineer

James Ross Test Engineer

Kyle Fujimoto Test Engineer

2.4 Date Test Sample was Received

The test sample was received on September 16, 2005.

2.5 Disposition of the Test Sample

The sample has not yet been returned to Universal Electronics, Inc. as of the date of this 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	Model
S/N	Serial Number
HP	Hewlett Packard
ITE	Information Technology Equipment
CML	Corrected Meter Limit
LISN	Line Impedance Stabilization Network
TX	Transmit
RX	Receive
PCB	Printed Circuit Board

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	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 Giuliani PC Remote 2005 Model: URC-3010BA0 (EUT) was tested as a stand-alone device. The EUT was tested while it was continuously transmitting and in three orthogonal axis. The EUT has an antenna that is soldered to its RF PCB.

The EUT only transmits when a button is being pressed. The EUT stops transmitting when the button is released.

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

The EUT has no external cables.



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

EQUIPMENT	MANUFACTURER	MODEL	SERIAL NUMBER	FCC ID
GIULIANI PC REMOTE 2005 (EUT)	UNIVERSAL ELECTRONICS, INC.	URC-3010BA0	N/A	MG33010

5.2 EMI Test Equipment

EQUIPMENT TYPE	MANU-FACTURER	MODEL NUMBER	SERIAL NUMBER	CAL. DATE	CAL. CYCLE
Radiate Emissions Data Capture Program	Compatible Electronics	2.0	N/A	N/A	N/A
Spectrum Analyzer – Main Section	Hewlett Packard	8566B	3638A08784	June 10, 2005	1 Year
Spectrum Analyzer – Display Section	Hewlett Packard	85662A	3701A22279	June 10, 2005	1 Year
Quasi-Peak Adapter	Hewlett Packard	85650A	2430A00424	June 11, 2005	1 Year
EMI Receiver	Rohde & Schwarz	ESIB40	100172	October 28, 2004	1 Year
Preamplifier	Com-Power	PA-103	1582	February 3, 2005	1 Year
Preamplifier	Com-Power	PA-102	1017	January 5, 2005	1 Year
Microwave Preamplifier	Com-Power	PA-122	25195	February 25, 2005	1 Year
Loop Antenna	Com-Power	AL-130	17089	September 3, 2004	2 Year
Biconical Antenna	Com Power	AB-900	15250	March 11, 2005	1 Year
Log Periodic Antenna	Com Power	AL-100	16247	August 22, 2005	1 Year
Biconical Antenna	Com Power	AB-900	15227	March 11, 2005	1 Year
Log Periodic Antenna	Com Power	AL-100	16060	August 22, 2005	1 Year
Horn Antenna	Antenna Research	DRG-118/A	1053	January 16, 2004	2 Year
Antenna Mast	Com Power	AM-100	N/A	N/A	N/A
Antenna Mast	EMCO	2090	9609-1176	N/A	N/A
Turntable	Com Power	TT-100	N/A	N/A	N/A
Computer	Hewlett Packard	4530	US91912319	N/A	N/A
Monitor	Hewlett Packard	D5258A	TW74500641	N/A	N/A
Computer	Hewlett Packard	D5251A 888	US74458128	N/A	N/A
Monitor	Hewlett Packard	D5258A	DK74889705	N/A	N/A

6. TEST SITE DESCRIPTION

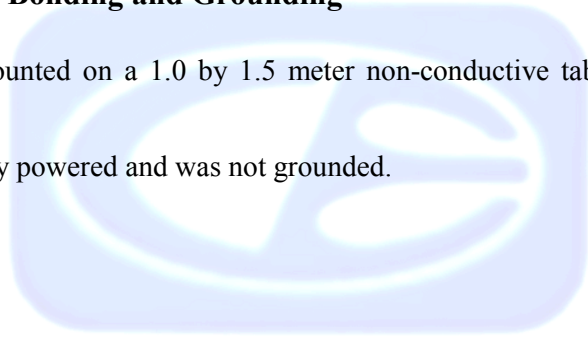
6.1 Test Facility Description

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 is battery powered and 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 Radiated Emissions (Spurious and Harmonics) Test

The spectrum analyzer and EMI Receiver were used as a measuring meter along with the quasi-peak adapter. Amplifiers were used to increase the sensitivity of the instrument. The Com-Power Active Loop Antenna Model: AL-130 was used for frequencies from 9 kHz to 30 MHz, the Com-Power Preamplifiers Models: PA-102 and PA-103 were used for frequencies from 30 MHz to 1 GHz, and the Com-Power Microwave Preamplifier Model: PA-122 was used for frequencies from 1 GHz to 4.4 GHz. The spectrum analyzer was used in the peak detect mode with the "Max Hold" feature activated. In this mode, the spectrum analyzer and EMI Receiver records the highest measured reading over all the sweeps.

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 4.4 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.

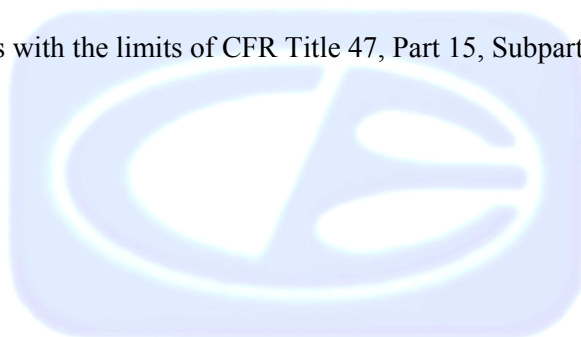
The presence of ambient signals was verified by turning the EUT off. In case an ambient signal was detected, the measurement bandwidth was reduced temporarily and verification was made that an additional adjacent peak did not exist. This ensures that the ambient signal does not hide any emissions from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

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. The data sheet of the -20 dB bandwidth is located in Appendix E.

Test Results:

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



8. CONCLUSIONS

The Giuliani PC Remote 2005 Model: URC-3010BA0 meets all of the **Class B** specification limits defined in CFR Title 47, Part 15, Subpart B; and Subpart C, sections 15.205, 15.209, and 15.231.



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 15.231 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.

Modifications:

- 1) Change C32 from 12 pF to 8.2 pF
- 2) Change C35 from 6.8 pF to 12 pF
- 3) C37, which was not populated, is now 0.5pF



APPENDIX C

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

ADDITIONAL MODELS COVERED UNDER THIS REPORT

USED FOR THE PRIMARY TEST

Giuliani PC Remote 2005
Model: URC-3010BA0
S/N: N/A

There are no additional models covered under this report.

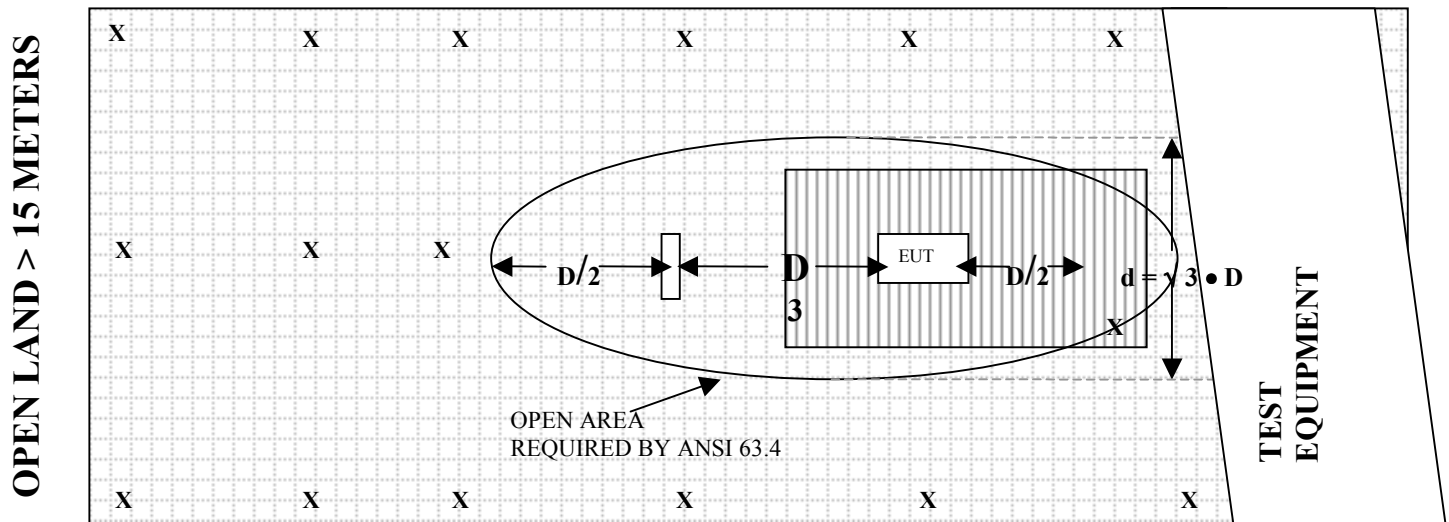


APPENDIX D

DIAGRAMS, CHARTS, AND PHOTOS

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

OPEN LAND > 15 METERS



OPEN LAND > 15 METERS

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

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

S/N: 17089

CALIBRATION DATE: SEPTEMBER 3, 2004

FREQUENCY (MHz)	MAGNETIC (dB/m)	ELECTRIC (dB/m)
0.009	-40.8	10.7
0.01	-40.9	10.6
0.02	-41.8	9.7
0.05	-42.0	9.5
0.07	-41.5	10.0
0.1	-41.7	9.8
0.2	-44.1	7.4
0.3	-41.6	9.9
0.5	-41.5	10.0
0.7	-41.4	10.1
1	-41.0	10.5
2	-40.6	10.9
3	-40.8	10.7
4	-41.0	10.5
5	-40.4	11.1
10	-40.7	10.8
15	-41.6	9.9
20	-41.3	10.2
25	-43.0	8.5
30	-42.6	8.9

COM-POWER AB-900

BICONICAL ANTENNA

S/N: 15250

CALIBRATION DATE: MARCH 11, 2005

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
30	10.90	120	13.10
35	10.90	125	12.40
40	10.90	140	11.90
45	10.30	150	11.80
50	11.40	160	13.30
60	10.40	175	15.40
70	7.40	180	14.60
80	6.20	200	15.70
90	8.20	250	16.50
100	10.10	300	19.20

COM-POWER AL-100

LOG PERIODIC ANTENNA

S/N: 16247

CALIBRATION DATE: AUGUST 22, 2005

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
300	12.70	700	19.72
400	13.19	800	20.59
500	14.99	900	21.10
600	15.95	1000	24.35

ANTENNA RESEARCH DRG-118/A**HORN ANTENNA**

S/N: 1053

CALIBRATION DATE: JANUARY 16, 2004

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
1.0	24.4	10.0	38.7
1.5	25.2	10.5	39.0
2.0	28.2	11.0	38.9
2.5	28.5	11.5	41.3
3.0	30.1	12.0	40.5
3.5	31.0	12.5	40.0
4.0	31.2	13.0	40.2
4.5	31.9	13.5	40.5
5.0	33.2	14.0	41.6
5.5	33.7	14.5	44.8
6.0	34.3	15.0	41.4
6.5	35.0	15.5	39.2
7.0	36.7	16.0	39.4
7.5	37.3	16.5	40.9
8.0	37.1	17.0	42.6
8.5	37.3	17.5	45.1
9.0	37.7	18.0	41.7
9.5	38.6		

COM-POWER PA-103**PREAMPLIFIER**

S/N: 1582

CALIBRATION DATE: FEBRUARY 3, 2005

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
30	33.2	300	33.0
40	33.0	350	32.8
50	33.1	400	32.8
60	33.0	450	32.8
70	33.2	500	32.5
80	33.2	550	32.5
90	33.1	600	32.4
100	33.2	650	32.4
125	33.1	700	32.3
150	33.0	750	32.2
175	33.0	800	32.2
200	33.0	850	32.4
225	33.0	900	31.8
250	33.0	950	32.3
275	32.9	1000	32.0

COM-POWER PA-122**MICROWAVE PREAMPLIFIER**

S/N: 25195

CALIBRATION DATE: FEBRUARY 25, 2005

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
1.0	31.45	6.0	31.35
1.1	31.34	6.5	31.10
1.2	31.29	7.0	30.54
1.3	31.28	7.5	29.72
1.4	31.25	8.0	29.22
1.5	31.21	8.5	28.75
1.6	31.14	9.0	28.67
1.7	31.07	9.5	29.14
1.8	31.12	10.0	30.12
1.9	31.04	11.0	29.30
2.0	31.20	12.0	29.86
2.5	31.56	13.0	30.57
3.0	32.17	14.0	29.90
3.5	32.56	15.0	30.14
4.0	32.51	16.0	31.13
4.5	32.52	17.0	29.97
5.0	32.33	18.0	28.77
5.5	31.60		

COM-POWER AB-900

BICONICAL ANTENNA

S/N: 15227

CALIBRATION DATE: MARCH 11, 2005

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
30	11.10	120	13.20
35	10.80	125	12.60
40	11.10	140	12.10
45	10.50	150	11.90
50	11.70	160	13.10
60	10.70	175	15.40
70	7.70	180	14.50
80	6.30	200	16.00
90	8.00	250	16.10
100	10.00	300	19.70

COM-POWER AL-100

LOG PERIODIC ANTENNA

S/N: 16060

CALIBRATION DATE: AUGUST 22, 2005

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
300	12.73	700	19.72
400	13.38	800	20.49
500	15.12	900	21.31
600	16.27	1000	24.25

COM-POWER PA-102**PREAMPLIFIER**

S/N: 1017

CALIBRATION DATE: JANUARY 5, 2005

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
30	38.4	300	38.5
40	38.3	350	38.5
50	38.2	400	38.3
60	38.4	450	38.0
70	38.4	500	38.0
80	38.3	550	38.1
90	38.3	600	38.2
100	37.7	650	37.8
125	38.4	700	37.9
150	38.6	750	37.5
175	38.4	800	37.2
200	38.5	850	37.6
225	38.3	900	36.9
250	38.6	950	37.0
275	38.4	1000	36.3



FRONT VIEW

UNIVERSAL ELECTRONICS, INC.
GIULIANI PC REMOTE 2005
MODEL: URC-3010BA0
FCC SUBPART B AND C – RADIATED EMISSIONS – 11-11-05

**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.
GIULIANI PC REMOTE 2005
MODEL: URC-3010BA0
FCC SUBPART B AND C – RADIATED EMISSIONS – 11-11-05

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

Brea Division
114 Olinda Drive
Brea, CA 92823
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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



FRONT VIEW

UNIVERSAL ELECTRONICS, INC.
GIULIANI PC REMOTE 2005
MODEL: URC-3010BA0
FCC SUBPART B AND C – RADIATED EMISSIONS – 11-09-05

**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.
GIULIANI PC REMOTE 2005
MODEL: URC-3010BA0
FCC SUBPART B AND C – RADIATED EMISSIONS – 11-09-05

**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



FRONT VIEW

UNIVERSAL ELECTRONICS, INC.
GIULIANI PC REMOTE 2005
MODEL: URC-3010BA0
FCC SUBPART B AND C - RADIATED EMISSIONS – 11-11-05

**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.
GIULIANI PC REMOTE 2005
MODEL: URC-3010BA0
FCC SUBPART B AND C - RADIATED EMISSIONS – 11-11-05

**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
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(949) 589-0700

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

APPENDIX E

DATA SHEETS

RADIATED EMISSIONS

DATA SHEETS

FCC 15.231

Universal Electronics, Inc.
 Giuliani PC Remote 2005
 Model: URC-3010BA0
 Configuration: Transmit Mode

Date: 11/9/05

Lab: A

Tested By: Kyle Fujimoto

Duty Cycle: 33.21%

Peak to Average Drop: 9.57 dB

Change C32 to 8.2 pF**Change C35 to 12 pF****Add C37 which is 0.5 pF**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
433.92	84.49	H	100.8	-16.31	Peak	1	90	X-Axis
433.92	74.92	H	80.8	-5.88	Avg	1	90	X-Axis
433.92	82.29	H	100.8	-18.51	Peak	1	90	Z-Axis
433.92	72.72	H	80.8	-8.08	Avg	1	90	Z-Axis
433.92	73.56	H	100.8	-27.24	Peak	1.5	315	Y-Axis
433.92	63.99	H	80.8	-16.81	Avg	1.5	315	Y-Axis
433.92	71.99	V	100.8	-28.81	Peak	1.5	0	X-Axis
433.92	62.42	V	80.8	-18.38	Avg	1.5	0	X-Axis
433.92	72.69	V	100.8	-28.11	Peak	1	225	Z-Axis
433.92	63.12	V	80.8	-17.68	Avg	1	225	Z-Axis
433.92	82.59	V	100.8	-18.21	Peak	1	225	Y-Axis
433.92	73.02	V	80.8	-7.78	Avg	1	225	Y-Axis

FCC 15.231

Universal Electronics, Inc.
 Giuliani PC Remote 2005
 Model: URC-3010BA0
 Configuration: Transmit Mode

Date: 11/11/05

Lab: B

Tested By: Kyle Fujimoto

Duty Cycle: 33.21%

Peak to Average Drop: 9.57 dB

X-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
867.84	50.9	V	80.8	-29.9	Peak	1.5	225	
867.84	41.33	V	60.8	-19.47	Avg	1.5	225	
1301.76	53.65	V	74	-20.35	Peak	3.18	225	
1301.76	44.08	V	54	-9.92	Avg	3.18	225	
1735.7	46.75	V	74	-27.25	Peak	3.15	270	
1735.7	37.18	V	54	-16.82	Avg	3.15	270	
2169.6	53.74	V	80.8	-27.06	Peak	1.72	90	
2169.6	44.17	V	60.8	-16.63	Avg	1.72	90	
2603.52	53.51	V	80.8	-27.29	Peak	1.07	90	
2603.52	43.94	V	60.8	-16.86	Avg	1.07	90	
3037.44	50.28	V	80.8	-30.52	Peak	3.69	225	
3037.44	40.71	V	60.8	-20.09	Avg	3.69	225	
3471.36	49.06	V	80.8	-31.74	Peak	1.69	225	
3471.36	39.49	V	60.8	-21.31	Avg	1.69	225	
3905.28	46.32	V	74	-27.68	Peak	2.63	225	
3905.28	36.75	V	54	-17.25	Avg	2.63	225	
4339.2	48.8	V	74	-25.2	Peak	2.55	225	
4339.2	39.23	V	54	-14.77	Avg	2.55	225	

FCC 15.231

Universal Electronics, Inc.
 Giuliani PC Remote 2005
 Model: URC-3010BA0
 Configuration: Transmit Mode

Date: 11/11/05
 Lab: B
 Tested By: Kyle Fujimoto

Duty Cycle: 33.21%

Peak to Average Drop: 9.57 dB

X-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
867.84	50.2	H	80.8	-30.6	Peak	1.5	225	
867.84	40.63	H	60.8	-20.17	Avg	1.5	225	
1301.76	51.95	H	74	-22.05	Peak	3.13	225	
1301.76	42.38	H	54	-11.62	Avg	3.13	225	
1735.7	48.26	H	74	-25.74	Peak	1.82	270	
1735.7	38.69	H	54	-15.31	Avg	1.82	270	
2169.6	53.71	H	80.8	-27.09	Peak	1.9	270	
2169.6	44.14	H	60.8	-16.66	Avg	1.9	270	
2603.52	50.08	H	80.8	-30.72	Peak	2.42	180	
2603.52	40.51	H	60.8	-20.29	Avg	2.42	180	
3037.44	47.1	H	80.8	-33.7	Peak	2.34	270	
3037.44	37.53	H	60.8	-23.27	Avg	2.34	270	
3471.36	50.11	H	80.8	-30.69	Peak	3.32	225	
3471.36	40.54	H	60.8	-20.26	Avg	3.32	225	
3905.28	51.39	H	74	-22.61	Peak	2.68	180	
3905.28	41.82	H	54	-12.18	Avg	2.68	180	
4339.2	51.41	H	74	-22.59	Peak	2.68	315	
4339.2	41.84	H	54	-12.16	Avg	2.68	315	

FCC 15.231

Universal Electronics, Inc.
 Giuliani PC Remote 2005
 Model: URC-3010BA0
 Configuration: Transmit Mode

Date: 11/11/05
 Lab: B
 Tested By: Kyle Fujimoto

Duty Cycle: 33.21%

Peak to Average Drop: 9.57 dB

Y-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
867.84	55.6	V	80.8	-25.2	Peak	1.5	225	
867.84	46.03	V	60.8	-14.77	Avg	1.5	225	
1301.76	53.44	V	74	-20.56	Peak	1.78	225	
1301.76	43.87	V	54	-10.13	Avg	1.78	225	
1735.7	49.12	V	74	-24.88	Peak	1.26	90	
1735.7	39.55	V	54	-14.45	Avg	1.26	90	
2169.6	57.54	V	80.8	-23.26	Peak	1.75	225	
2169.6	47.97	V	60.8	-12.83	Avg	1.75	225	
2603.52	53.88	V	80.8	-26.92	Peak	1.84	225	
2603.52	44.31	V	60.8	-16.49	Avg	1.84	225	
3037.44	59.07	V	80.8	-21.73	Peak	2.38	225	
3037.44	49.5	V	60.8	-11.3	Avg	2.38	225	
3471.36	58.87	V	80.8	-21.93	Peak	2.16	225	
3471.36	49.3	V	60.8	-11.5	Avg	2.16	225	
3905.28	47.8	V	74	-26.2	Peak	1.67	225	
3905.28	38.23	V	54	-15.77	Avg	1.67	225	
4339.2	51.84	V	74	-22.16	Peak	2.63	180	
4339.2	42.27	V	54	-11.73	Avg	2.63	180	

FCC 15.231

Universal Electronics, Inc.
 Giuliani PC Remote 2005
 Model: URC-3010BA0
 Configuration: Transmit Mode

Date: 11/11/05
 Lab: B
 Tested By: Kyle Fujimoto

Duty Cycle: 33.21%

Peak to Average Drop: 9.57 dB

Y-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
867.84	53.1	H	80.8	-27.7	Peak	1.5	225	
867.84	43.53	H	60.8	-17.27	Avg	1.5	225	
1301.76	53.12	H	74	-20.88	Peak	2.58	225	
1301.76	43.55	H	54	-10.45	Avg	2.58	225	
1735.7	49.4	H	74	-24.6	Peak	2.82	270	
1735.7	39.83	H	54	-14.17	Avg	2.82	270	
2169.6	55.11	H	80.8	-25.69	Peak	1.98	270	
2169.6	45.54	H	60.8	-15.26	Avg	1.98	270	
2603.52	60.66	H	80.8	-20.14	Peak	1.54	180	
2603.52	51.09	H	60.8	-9.71	Avg	1.54	180	
3037.44	52.09	H	80.8	-28.71	Peak	1.47	180	
3037.44	42.52	H	60.8	-18.28	Avg	1.47	180	
3471.36	52.42	H	80.8	-28.38	Peak	2.63	180	
3471.36	42.85	H	60.8	-17.95	Avg	2.63	180	
3905.28	54.46	H	74	-19.54	Peak	1.34	225	
3905.28	44.89	H	54	-9.11	Avg	1.34	225	
4339.2	49.6	H	74	-24.4	Peak	2.26	225	
4339.2	40.03	H	54	-13.97	Avg	2.26	225	

FCC 15.231

Universal Electronics, Inc.
 Giuliani PC Remote 2005
 Model: URC-3010BA0
 Configuration: Transmit Mode

Date: 11/11/05
 Lab: B
 Tested By: Kyle Fujimoto

Duty Cycle: 33.21%

Peak to Average Drop: 9.57 dB

Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
867.84	55.4	V	80.8	-25.4	Peak	1.5	225	
867.84	45.83	V	60.8	-14.97	Avg	1.5	225	
1301.76	55.23	V	74	-18.77	Peak	1.51	180	
1301.76	45.66	V	54	-8.34	Avg	1.51	180	
1735.7	50.9	V	74	-23.1	Peak	1.64	225	
1735.7	41.33	V	54	-12.67	Avg	1.64	225	
2169.6	57.42	V	80.8	-23.38	Peak	1.58	225	
2169.6	47.85	V	60.8	-12.95	Avg	1.58	225	
2603.52	58.13	V	80.8	-22.67	Peak	2.97	225	
2603.52	48.56	V	60.8	-12.24	Avg	2.97	225	
3037.44	52.31	V	80.8	-28.49	Peak	2.46	270	
3037.44	42.74	V	60.8	-18.06	Avg	2.46	270	
3471.36	49.74	V	80.8	-31.06	Peak	2.71	225	
3471.36	40.17	V	60.8	-20.63	Avg	2.71	225	
3905.28	50.19	V	74	-23.81	Peak	1.24	225	
3905.28	40.62	V	54	-13.38	Avg	1.24	225	
4339.2	49.41	V	74	-24.59	Peak	2.65	90	
4339.2	39.84	V	54	-14.16	Avg	2.65	90	

FCC 15.231

Universal Electronics, Inc.
 Giuliani PC Remote 2005
 Model: URC-3010BA0
 Configuration: Transmit Mode

Date: 11/11/05
 Lab: B
 Tested By: Kyle Fujimoto

Duty Cycle: 33.21%

Peak to Average Drop: 9.57 dB

Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
867.84	56	H	80.8	-24.8	Peak	1.25	90	
867.84	46.43	H	60.8	-14.37	Avg	1.25	90	
1301.76	53.53	H	74	-20.47	Peak	2.9	225	
1301.76	43.96	H	54	-10.04	Avg	2.9	225	
1735.7	46.23	H	74	-27.77	Peak	1.56	225	
1735.7	36.66	H	54	-17.34	Avg	1.56	225	
2169.6	56.18	H	80.8	-24.62	Peak	1.47	90	
2169.6	46.61	H	60.8	-14.19	Avg	1.47	90	
2603.52	52.61	H	80.8	-28.19	Peak	1.48	90	
2603.52	43.04	H	60.8	-17.76	Avg	1.48	90	
3037.44	59.02	H	80.8	-21.78	Peak	1.68	315	
3037.44	49.45	H	60.8	-11.35	Avg	1.68	315	
3471.36	61.27	H	80.8	-19.53	Peak	2.35	225	
3471.36	51.7	H	60.8	-9.1	Avg	2.35	225	
3905.28	52.89	H	74	-21.11	Peak	2.02	225	
3905.28	43.32	H	54	-10.68	Avg	2.02	225	
4339.2	56.39	H	74	-17.61	Peak	1.44	315	
4339.2	46.82	H	54	-7.18	Avg	1.44	315	

FCC 15.231

Universal Electronics, Inc.
Giuliani PC Remote 2005
Model: URC-3010BA0
Configuration: Transmit Mode

Date: 11/11/05
Lab: B
Tested By: Kyle Fujimoto

Duty Cycle: 33.21%

Peak to Average Drop: 9.57 dB

Digital Portion and Non-Harmonic Emissions from the Tx 1 GHz - 4.4 GHz

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
								No Emissions
								Detected from the Digital
								Portion nor any Non-Harmoinc
								Emissions from the EUT
								for Vertical and Horizontal
								Polarizations
								1 GHz - 4.4 GHz

FCC 15.231

Universal Electronics, Inc.
 Giuliani PC Remote 2005
 Model: URC-3010BA0
 Configuration: Transmit Mode

Date: 11/11/05
 Lab: D
 Tested By: Kyle Fujimoto

Duty Cycle: 33.21%

Peak to Average Drop: 9.57 dB

Digital Portion and Non-Harmonic Emissions from the Tx 10 kHz to 1 GHz

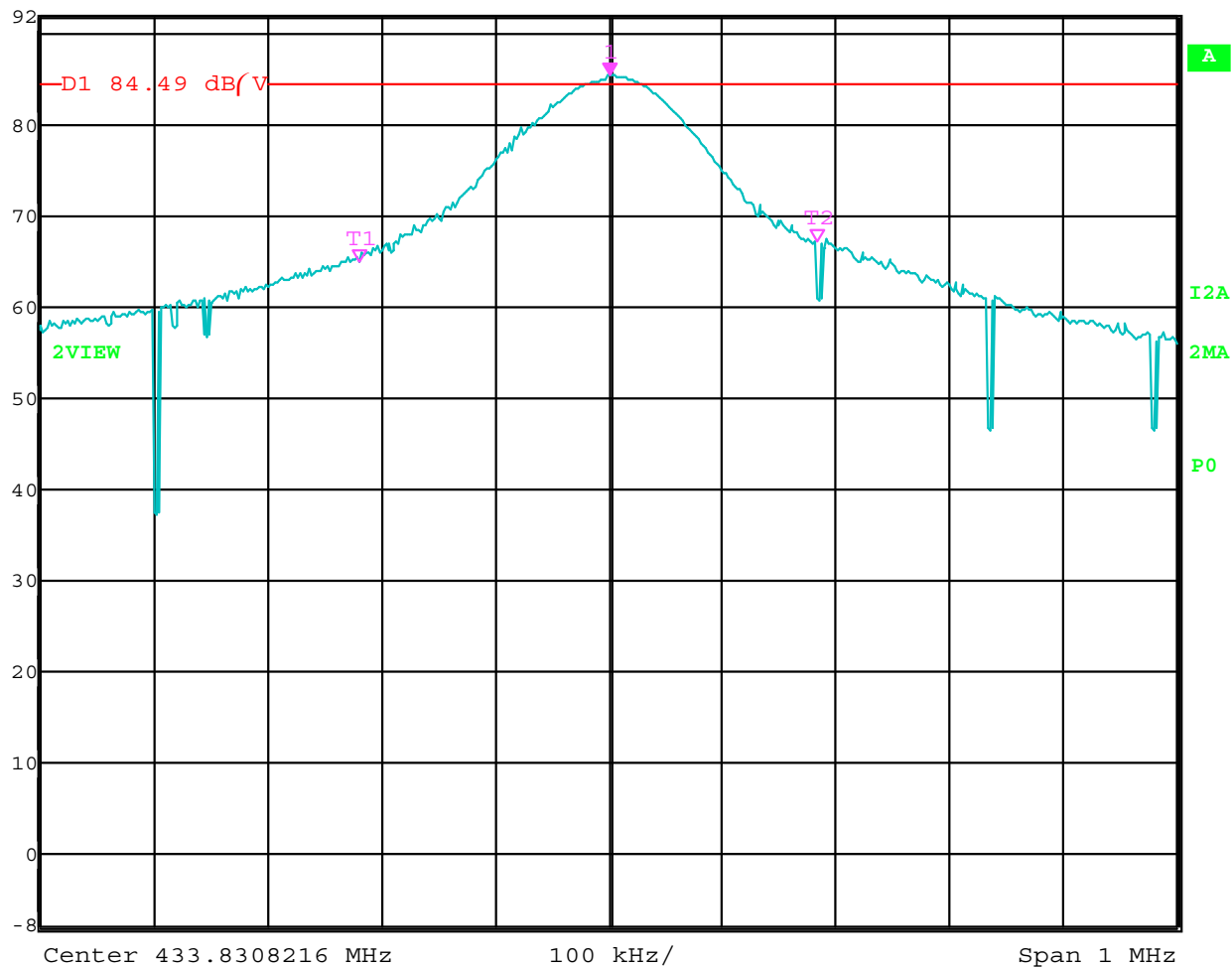
Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
39.96	30.43	V	40	-9.57	Peak	1	180	
56.25	31.27	V	40	-8.73	Peak	1	180	
69.68	30.5	V	40	-9.5	Peak	1	180	
119.95	25.48	V	43.5	-18.02	Peak	1	270	
164.96	23.35	V	43.5	-20.15	Peak	1	180	
179.97	20.63	V	43.5	-22.87	Peak	1	225	
249.97	30.96	V	46	-15.04	Peak	1	270	
49.84	28.94	H	40	-11.06	Peak	1	225	
64.78	18.64	H	40	-21.36	Peak	1	225	
120.01	26.98	H	40	-13.02	Peak	1	225	
149.97	33.84	H	43.5	-9.66	Peak	1	225	
274.98	31.88	H	46	-14.12	Peak	1	225	
314.98	20.35	V	46	-25.65	Peak	1.5	225	
349.98	29	V	46	-17	Peak	1.5	45	
419.97	18.97	V	46	-27.03	Peak	1.5	45	
824.98	23.79	V	46	-22.21	Peak	1.5	45	
349.95	23.79	H	46	-22.21	Peak	1.5	45	
449.96	17.42	H	46	-28.58	Peak	1.5	45	
549.98	23.2	H	46	-22.8	Peak	1.5	45	
799.57	34.84	H	46	-11.16	Peak	1.5	45	

-20 dB BANDWIDTH

DATA SHEET



Ref Lvl 92 dB/V
Marker 1 [T2 ndB] 20.00 dB
BW 402.80561122 kHz
RBW 100 kHz
VBW 100 kHz
RF Att 10 dB
SWT 5.5 ms
Unit dB/V



Date: 11.NOV.2005 14:30:11

Bandwidth 20 dB of the Fundamental