

**FCC PART 15 SUBPART B and C
TEST REPORT***for***XSIGHT TOUCH****Model: ARRX18G (US), CARRX18G (CANADA) - URC-20300BG1-XXX-R**

Prepared for

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DATE: FEBRUARY 16, 2009

	REPORT BODY	APPENDICES					TOTAL
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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: Universal Electronics, Inc.
Model: ARRX18G (US), CARRX18G (Canada) - URC-20300BG1-XXX-R
S/N: N/A

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

Manufacturer: Computime Limited.
7/F., How Ming Fty. Bldg.
99 How Ming Street Kwun Tong, Kowloon,
Hong Kong

Test Date(s): January 21 and 23, 2009

Test Specifications: EMI requirements
CFR Title 47, Part 15, Subpart C, sections 15.205, 15.207, 15.209, and 15.231; and
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	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, section 15.207. Highest reading in relation to spec limit: 40.08 dBuV @ 0.637 MHz (*U _c = 0.49 dB)
2	Radiated RF Emissions 10 kHz – 4400 MHz (Transmitter Portion)	Complies with the limits of CFR Title 47, Part 15, Subpart C, sections 15.205, 15.209, and 15.231.
3	Radiated RF Emissions 10 kHz – 4400 MHz (Digital Portion)	Complies with the Class B limits of CFR Title 47, Part 15, Subpart B.

*U_c = combined standard uncertainty

1. PURPOSE

This document is a qualification test report based on the Electromagnetic Interference (EMI) tests performed on the Xsight Touch, Model: ARRX18G (US), CARRX18G (Canada) - URC-20300BG1-XXX-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 15.231 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.

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 Sr. Electrical Core Engineer

Compatible Electronics Inc.

Kyle Fujimoto Test Engineer
Michael Christensen Lab Manager, Brea Division

2.4 Date Test Sample was Received

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

2.5 Disposition of the Test Sample

The test sample has not yet been returned as of the date of this report.

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
Ltd.	Limited
Inc.	Incorporated
IR	Infrared

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

Stand-Alone Mode: The Xsight Touch Model: ARRX18G (US), CARRX18G (Canada) - URC-20300BG1-XXX-R (EUT) was tested as a stand alone unit and tested in three orthogonal axis. The EUT was continuously transmitting during the testing.

Charging Mode: The Xsight Touch Model: ARRX18G (US), CARRX18G (Canada) - URC-20300BG1-XXX-R (EUT) directly connected to the charging cradle. The charging cradle was connected to the AC Adapter via its power port. The EUT was continuously transmitting during the testing. The charging cradle was also charging the batteries of the EUT at the same time.

The EUT stops transmitting immediately after the button is released. The antenna is a PCB trace.

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

Cable 1 (Charging Mode Only)

This is a 2-meter unshielded cable connecting the charging cradle to the AC Adapter. The cable contains a 1/8 inch power connector at the charging cradle 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
XSIGHT TOUCH (EUT)	UNIVERSAL ELECTRONICS, INC.	ARRX18G (US), CARRX18G (CANADA) - URC-20300BG1-XXX-R	N/A	MG3-20300R
AC ADAPTER FOR CRADLE (for charging mode only)	MoSo	XXD-C0800IC5.0-5W	N/A	N/A
CHARGING CRADLE	N/A	N/A	N/A	N/A

5.2 EMI Test Equipment

EQUIPMENT TYPE	MANUFACTURER	MODEL NUMBER	SERIAL NUMBER	CAL. DATE	CAL. CYCLE
GENERAL TEST EQUIPMENT USED FOR ALL RF EMISSIONS TESTS					
Spectrum Analyzer – Main Section	Hewlett Packard	8566B	3638A08768	August 22, 2008	1 Year
Spectrum Analyzer – Display Section	Hewlett Packard	85662A	3701A22262	August 22, 2008	1 Year
Quasi-Peak Adapter	Hewlett Packard	85650A	2811A01363	August 22, 2008	1 Year
EMI Receiver	Rohde & Schwarz	ESIB40	100194	September 17, 2008	2 Year
Computer	Hewlett Packard	4530	US91912319	N/A	N/A
RF RADIATED EMISSIONS TEST EQUIPMENT					
Radiated Emissions Data Capture Program	Compatible Electronics	2.0	N/A	N/A	N/A
Biconical Antenna	Com Power	AB-900	15226	February 28, 2008	1 Year
Log Periodic Antenna	Com Power	AL-100	16060	June 27, 2008	1 Year
Preamplifier	Com-Power	PA-102	1017	January 12, 2009	1 Year
Loop Antenna	Com Power	AL-130	17089	September 29, 2008	1 Year
Horn Antenna	Com Power	AH-118	071175	June 27, 2008	2 Year
Microwave Preamplifier	Com Power	PA-122	181921	March 3, 2008	1 Year
Mast Antenna	Com Power	AM-100	N/A	N/A	N/A
RF CONDUCTED EMISSIONS TEST EQUIPMENT					
Emissions Program	Compatible Electronics	2.3 (SR19)	N/A	N/A	N/A
LISN	Com Power	LI-215	12078	September 29, 2008	1 Year
LISN	Com Power	LI-215	12082	September 29, 2008	1 Year
Transient Limiter	Com Power	252A910	1	September 26, 2008	1 Year

6. TEST SITE DESCRIPTION

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.

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 quasi-peak 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 complies with the **Class B** limits of CFR Title 47, Part 15, Subpart B; and CFR Title 47, Part 15, Subpart C, section 15.207.

7.1.2 Radiated Emissions (Spurious and Harmonics) Test

A measurement receiver and spectrum analyzer were used as a measuring meter. A preamplifier was used to increase the sensitivity of the instrument. The measurement receiver was used in the peak detect mode with the “Max Hold” feature activated. In this mode, the measurement meter and spectrum analyzer records the highest measured reading over all the sweeps.

The readings were averaged by a “duty cycle correction factor”, derived from 20 log (dwell time / one pulse train with blanking interval).

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

FREQUENCY RANGE	TRANSDUCER	EFFECTIVE MEASUREMENT BANDWIDTH
9 kHz to 150 kHz	Active Loop Antenna	200 Hz
150 kHz to 30 MHz	Active Loop Antenna	9 kHz
30 MHz to 300 MHz	Biconical Antenna	120 kHz
300 MHz to 1000 MHz	Log Periodic Antenna	120 kHz
1000 MHz to 4400 MHz	Horn Antenna	1 MHz

The final data was taken with a frequency span of 1 MHz for frequencies below 1000 MHz. For frequencies above 1000 MHz, the final data was taken with a frequency span of 10 MHz. The frequency span was reduced during the preliminary investigations as deemed necessary to distinguish between emissions from the EUT and any ambient signals.

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).

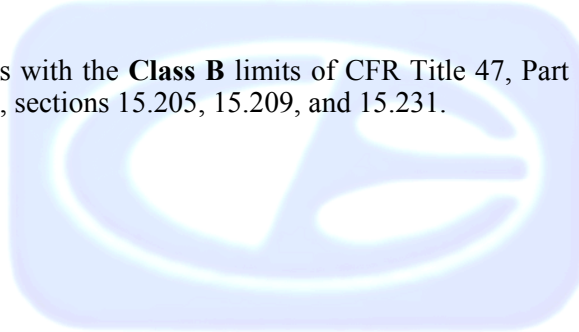
The gunsight method was used when measuring with the horn antenna to ensure accurate results. The loop antenna was also rotated in the horizontal and vertical axis in order to ensure accurate results.

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 distance to obtain final test data. The final qualification data is 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 15.231.



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. Plots 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).



8. CONCLUSIONS

The Xsight Touch, Model: ARRX18G (US), CARRX18G (Canada) - URC-20300BG1-XXX-R, as tested, 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 15.231 for the transmitter portion.



APPENDIX A

LABORATORY RECOGNITIONS

LABORATORY RECOGNITIONS

Compatible Electronics has the following agency accreditations:

National Voluntary Laboratory Accreditation Program - Lab Code: 200528-0

Voluntary Control Council for Interference - Registration Numbers: R-983, C-1026, R-984 and C-1027

Bureau of Standards and Metrology Inspection - Reference Number: SL2-IN-E-1031

Conformity Assessment Body for the EMC Directive Under the US/EU MRA Appointed by NIST

Compatible Electronics is recognized or on file with the following agencies:

Federal Communications Commission

Industry Canada



APPENDIX B

MODIFICATIONS TO THE EUT

MODIFICATIONS TO THE EUT

The modifications listed below were made to the EUT to pass FCC 15.231 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.

There were no modifications made to the EUT.



APPENDIX C

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

ADDITIONAL MODELS COVERED UNDER THIS REPORT

USED FOR THE PRIMARY TEST

Xsight Touch
Model: ARRX18G (US), CARRX18G (Canada) -
URC-20300BG1-XXX-R
S/N: N/A

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

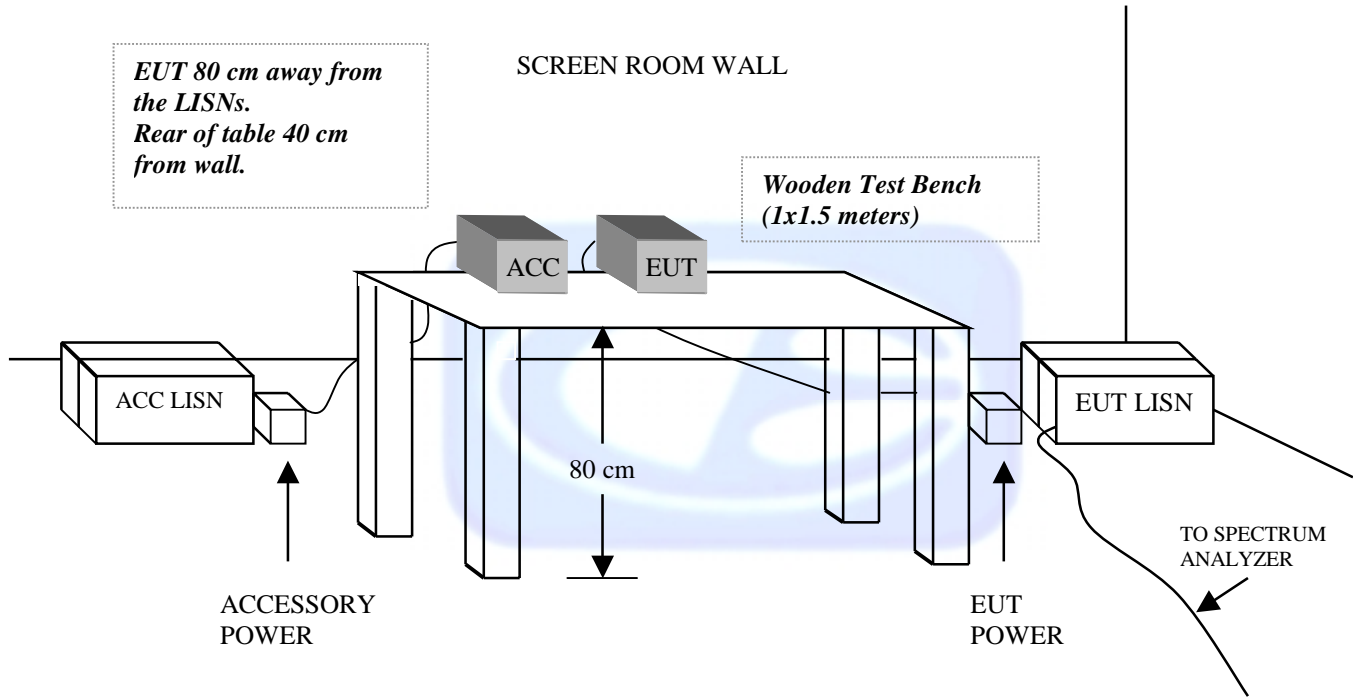
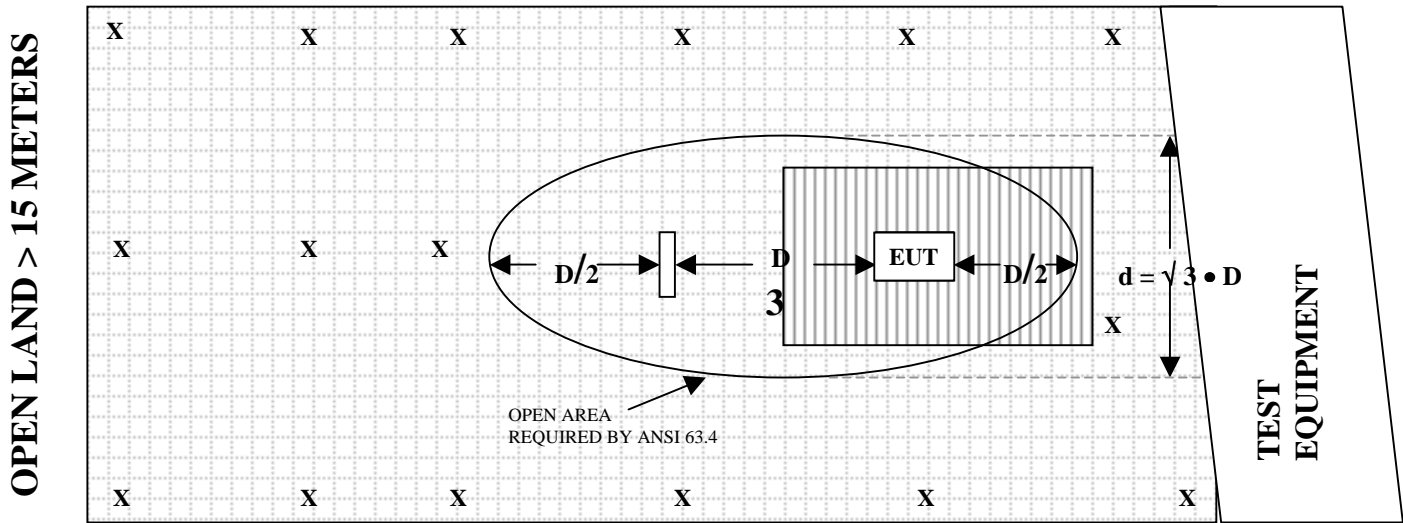


FIGURE 2: PLOT MAP AND LAYOUT OF THE RADIATED TEST SITE

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: 15226

CALIBRATION DATE: FEBRUARY 28, 2008

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
30	12.1	100	10.7
35	12.2	120	13.6
40	11.7	140	12.1
45	9.9	160	12.2
50	11.3	180	15.2
60	9.4	200	16.5
70	7.6	250	16.5
80	6.0	275	18.1
90	6.8	300	21.5

COM-POWER AL-100**LOG PERIODIC ANTENNA**

S/N: 16060

CALIBRATION DATE: JUNE 27, 2008

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
300	12.7	700	21.2
400	15.3	800	21.7
500	17.4	900	21.8
600	19.0	1000	22.8

COM POWER AH-118**HORN ANTENNA**

S/N: 071175

CALIBRATION DATE: JUNE 27, 2008

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
1.0	24.5	10.0	39.4
1.5	25.4	10.5	39.7
2.0	28.3	11.0	39.0
2.5	28.9	11.5	40.0
3.0	29.7	12.0	39.7
3.5	30.8	12.5	41.7
4.0	31.4	13.0	42.7
4.5	32.6	13.5	41.2
5.0	33.7	14.0	41.6
5.5	34.4	14.5	43.2
6.0	34.7	15.0	42.3
6.5	35.4	15.5	39.3
7.0	37.0	16.0	41.7
7.5	37.4	16.5	39.6
8.0	37.6	17.0	43.0
8.5	37.6	17.5	47.1
9.0	38.5	18.0	46.2
9.5	38.6		

COM-POWER PA-102**PREAMPLIFIER**

S/N: 1017

CALIBRATION DATE: JANUARY 12, 2009

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
30	39.0	300	38.8
40	39.0	350	38.8
50	38.8	400	38.7
60	38.7	450	38.6
70	38.8	500	38.3
80	38.8	550	38.9
90	39.1	600	38.4
100	39.1	650	38.8
125	38.9	700	38.4
150	38.9	750	38.5
175	38.9	800	38.3
200	38.8	850	38.4
225	39.0	900	38.1
250	38.9	950	37.4
275	38.8	1000	38.1

COM-POWER PA-122**PREAMPLIFIER**

S/N: 181921

CALIBRATION DATE: MARCH 3, 2008

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
1.0	36.32	10.0	35.47
1.5	35.40	10.5	35.05
2.0	34.77	11.0	34.16
2.5	35.07	11.5	33.75
3.0	34.86	12.0	34.65
3.5	34.48	12.5	34.41
4.0	34.30	13.0	35.36
4.5	33.96	13.5	35.30
5.0	34.06	14.0	35.87
5.5	34.54	14.5	36.44
6.0	35.90	15.0	36.24
6.5	36.85	15.5	35.92
7.0	36.55	16.0	35.53
7.5	35.31	16.5	35.29
8.0	33.57	17.0	34.96
8.5	33.36	17.5	34.02
9.0	35.01	18.0	33.39
9.5	35.97		

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

S/N: 17089

CALIBRATION DATE: SEPTEMBER 29, 2008

FREQUENCY (MHz)	MAGNETIC (dB/m)	ELECTRIC (dB/m)
0.009	-41.57	9.93
0.01	-42.06	9.44
0.02	-42.43	9.07
0.05	-42.50	9.00
0.07	-42.10	9.40
0.1	-42.03	9.47
0.2	-44.50	7.00
0.3	-41.93	9.57
0.5	-41.90	9.60
0.7	-41.73	9.77
1	-41.23	10.27
2	-40.90	10.60
3	-41.20	10.30
4	-41.30	10.20
5	-40.70	10.80
10	-41.10	10.40
15	-42.17	9.33
20	-42.00	9.50
25	-42.20	9.30
30	-43.10	8.40



STAND ALONE MODE

FRONT VIEW

UNIVERSAL ELECTRONICS, INC.

XSIGHT TOUCH

MODEL: ARRX18G (US), CARRX18G (CANADA) - URC-20300BG1-XXX-R

FCC SUBPART B AND C – RADIATED EMISSIONS – 01/21/09

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



STAND ALONE MODE

REAR VIEW

UNIVERSAL ELECTRONICS, INC.
XSIGHT TOUCH

MODEL: ARRX18G (US), CARRX18G (CANADA) - URC-20300BG1-XXX-R
FCC SUBPART B AND C – RADIATED EMISSIONS – 01/21/09

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



CHARGING MODE

FRONT VIEW

UNIVERSAL ELECTRONICS, INC.

XSIGHT TOUCH

MODEL: ARRX18G (US), CARRX18G (CANADA) - URC-20300BG1-XXX-R

FCC SUBPART B AND C – RADIATED EMISSIONS – 01/21/09

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



CHARGING MODE

REAR VIEW

UNIVERSAL ELECTRONICS, INC.
XSIGHT TOUCH

MODEL: ARRX18G (US), CARRX18G (CANADA) - URC-20300BG1-XXX-R
FCC SUBPART B AND C – RADIATED EMISSIONS – 01/21/09

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



CHARGING MODE

FRONT VIEW

UNIVERSAL ELECTRONICS, INC.

XSIGHT TOUCH

MODEL: ARRX18G (US), CARRX18G (CANADA) - URC-20300BG1-XXX-R

FCC SUBPART B AND C – CONDUCTED EMISSIONS – 01/23/09

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



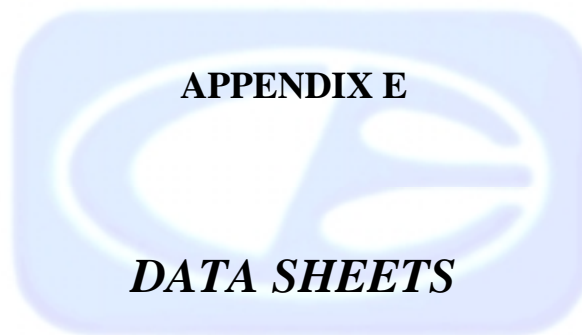
CHARGING MODE

REAR VIEW

UNIVERSAL ELECTRONICS, INC.
XSIGHT TOUCH

MODEL: ARRX18G (US), CARRX18G (CANADA) - URC-20300BG1-XXX-R
FCC SUBPART B AND C – CONDUCTED EMISSIONS – 01/23/09

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



FCC 15.231

Universal Electronics, Inc.

Xsight Touch

Model: ARRX18G (US), CARRX18G (Canada) -

URC-20300BG1-XXX-R

Date: 01/21/09

Labs: B and D

Tested By: Kyle Fujimoto

X-Axis - Duty Cycle 30.13%

Transmit Mode - ASK Mode

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
433.81	74.68	V	100.8	-26.12	Peak	1	90	
433.81	64.26	V	80.8	-16.54	Avg	1	90	
867.62	50.98	V	80.8	-29.82	Peak	1.25	150	
867.62	40.56	V	60.8	-20.24	Avg	1.25	150	
1301.43	60.12	V	74	-13.88	Peak	1.35	180	
1301.43	49.7	V	54	-4.3	Avg	1.35	180	
1735.24	37.21	V	80.8	-43.59	Peak	1.25	250	
1735.24	26.79	V	60.8	-34.01	Avg	1.25	250	
2169.05	48.98	V	80.8	-31.82	Peak	1.35	150	
2169.05	38.56	V	60.8	-22.24	Avg	1.35	150	
2602.86	47.12	V	80.8	-33.68	Peak	1.25	225	
2602.86	36.7	V	60.8	-24.1	Avg	1.25	225	
3036.67	46.54	V	80.8	-34.26	Peak	1.35	225	
3036.67	36.12	V	60.8	-24.68	Avg	1.35	225	
3470.48	48.79	V	80.8	-32.01	Peak	1.25	225	
3470.48	38.37	V	60.8	-22.43	Avg	1.25	225	
3904.29	49.87	V	74	-24.13	Peak	1.35	250	
3904.29	39.45	V	54	-14.55	Avg	1.35	250	
4338.1	45.89	V	74	-28.11	Peak	1.25	150	
4338.1	35.47	V	54	-18.53	Avg	1.25	150	

FCC 15.231

Universal Electronics, Inc.

Xsight Touch

Model: ARRX18G (US), CARRX18G (Canada) -

URC-20300BG1-XXX-R

Date: 01/21/09

Labs: B and D

Tested By: Kyle Fujimoto

X-Axis - Duty Cycle 30.13%

Transmit Mode - ASK Mode

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
433.81	82.87	H	100.8	-17.93	Peak	1	90	
433.81	72.45	H	80.8	-8.35	Avg	1	90	
867.62	53.56	H	80.8	-27.24	Peak	1.25	90	
867.62	43.14	H	60.8	-17.66	Avg	1.25	90	
1301.43	60.11	H	74	-13.89	Peak	1.23	315	
1301.43	49.69	H	54	-4.31	Avg	1.23	315	
1735.24	36.78	H	80.8	-44.02	Peak	1.25	330	
1735.24	26.36	H	60.8	-34.44	Avg	1.25	330	
2169.05	52.78	H	80.8	-28.02	Peak	1.35	135	
2169.05	42.36	H	60.8	-18.44	Avg	1.35	135	
2602.86	48.56	H	80.8	-32.24	Peak	1.25	150	
2602.86	38.14	H	60.8	-22.66	Avg	1.25	150	
3036.67	47.12	H	80.8	-33.68	Peak	1.35	180	
3036.67	36.7	H	60.8	-24.1	Avg	1.35	180	
3470.48	43.26	H	80.8	-37.54	Peak	1.55	165	
3470.48	32.84	H	60.8	-27.96	Avg	1.55	165	
3904.29	42.67	H	74	-31.33	Peak	1.25	150	
3904.29	32.25	H	54	-21.75	Avg	1.25	150	
4338.1	47.12	H	74	-26.88	Peak	1.35	175	
4338.1	36.7	H	54	-17.3	Avg	1.35	175	

FCC 15.231

Universal Electronics, Inc.

Xsight Touch

Model: ARRX18G (US), CARRX18G (Canada) -

URC-20300BG1-XXX-R

Date: 01/21/09

Labs: B and D

Tested By: Kyle Fujimoto

Y-Axis - Duty Cycle 30.13%

Transmit Mode - ASK Mode

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
433.81	81.31	V	100.8	-19.49	Peak	1	90	
433.81	70.89	V	80.8	-9.91	Avg	1	90	
867.62	53.12	V	80.8	-27.68	Peak	1	135	
867.62	42.7	V	60.8	-18.1	Avg	1	135	
1301.43	60.97	V	74	-13.03	Peak	1.25	90	
1301.43	50.55	V	54	-3.45	Avg	1.25	90	
1735.24	38.21	V	80.8	-42.59	Peak	1	90	
1735.24	27.79	V	60.8	-33.01	Avg	1	90	
2169.05	48.77	V	80.8	-32.03	Peak	1.35	180	
2169.05	38.35	V	60.8	-22.45	Avg	1.35	180	
2602.86	47.76	V	80.8	-33.04	Peak	1.26	135	
2602.86	37.34	V	60.8	-23.46	Avg	1.26	135	
3036.67	45.11	V	80.8	-35.69	Peak	1.35	150	
3036.67	34.69	V	60.8	-26.11	Avg	1.35	150	
3470.48	44.21	V	80.8	-36.59	Peak	2.25	225	
3470.48	33.79	V	60.8	-27.01	Avg	2.25	225	
3904.29	46.52	V	74	-27.48	Peak	1.35	215	
3904.29	36.1	V	54	-17.9	Avg	1.35	215	
4338.1	51.67	V	74	-22.33	Peak	1.35	225	
4338.1	41.25	V	54	-12.75	Avg	1.35	225	

FCC 15.231

Universal Electronics, Inc.

Xsight Touch

Model: ARR18G (US), CARR18G (Canada) -

URC-20300BG1-XXX-R

Date: 01/21/09

Labs: B and D

Tested By: Kyle Fujimoto

Y-Axis - Duty Cycle 30.13%

Transmit Mode - ASK Mode

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
433.81	72.45	H	100.8	-28.35	Peak	1.25	150	
433.81	62.03	H	80.8	-18.77	Avg	1.25	150	
867.62	54.21	H	80.8	-26.59	Peak	1.35	180	
867.62	43.79	H	60.8	-17.01	Avg	1.35	180	
1301.43	54.32	H	80.8	-26.48	Peak	1.25	225	
1301.43	43.9	H	60.8	-16.9	Avg	1.25	225	
1735.24	59.26	H	74	-14.74	Peak	1.25	135	
1735.24	48.84	H	54	-5.16	Avg	1.25	135	
2169.05	38.65	H	80.8	-42.15	Peak	1.35	150	
2169.05	28.23	H	60.8	-32.57	Avg	1.35	150	
2602.86	56.21	H	80.8	-24.59	Peak	1.55	135	
2602.86	45.79	H	60.8	-15.01	Avg	1.55	135	
3036.67	54.65	H	80.8	-26.15	Peak	1.26	175	
3036.67	44.23	H	60.8	-16.57	Avg	1.26	175	
3470.48	54.27	H	80.8	-26.53	Peak	1.28	225	
3470.48	43.85	H	60.8	-16.95	Avg	1.28	225	
3904.29	48.76	H	80.8	-32.04	Peak	1.23	225	
3904.29	38.34	H	60.8	-22.46	Avg	1.23	225	
4338.1	51.21	H	74	-22.79	Peak	1.26	235	
4338.1	40.79	H	54	-13.21	Avg	1.26	235	

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Universal Electronics, Inc.

Xsight Touch

Model: ARRX18G (US), CARRX18G (Canada) -

URC-20300BG1-XXX-R

Date: 01/21/09

Labs: B and D

Tested By: Kyle Fujimoto

Z-Axis - Duty Cycle 30.13%

Transmit Mode - ASK Mode

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
433.81	75.03	V	100.8	-25.77	Peak	1	135	
433.81	64.61	V	80.8	-16.19	Avg	1	135	
867.62	55.54	V	80.8	-25.26	Peak	1.25	90	
867.62	45.12	V	60.8	-15.68	Avg	1.25	90	
1301.43	59.56	V	74	-14.44	Peak	1.35	90	
1301.43	49.14	V	54	-4.86	Avg	1.35	90	
1735.24	39.76	V	80.8	-41.04	Peak	1.45	180	
1735.24	29.34	V	60.8	-31.46	Avg	1.45	180	
2169.05	53.78	V	80.8	-27.02	Peak	1.25	135	
2169.05	43.36	V	60.8	-17.44	Avg	1.25	135	
2602.86	50.32	V	80.8	-30.48	Peak	1.25	315	
2602.86	39.9	V	60.8	-20.9	Avg	1.25	315	
3036.67	48.12	V	80.8	-32.68	Peak	1.45	190	
3036.67	37.7	V	60.8	-23.1	Avg	1.45	190	
3470.48	46.32	V	80.8	-34.48	Peak	1.25	135	
3470.48	35.9	V	60.8	-24.9	Avg	1.25	135	
3904.29	47.89	V	74	-26.11	Peak	1.25	225	
3904.29	37.47	V	54	-16.53	Avg	1.25	225	
4338.1	48.54	V	74	-25.46	Peak	1.35	150	
4338.1	38.12	V	54	-15.88	Avg	1.35	150	

FCC 15.231

Universal Electronics, Inc.

Xsight Touch

Model: ARRX18G (US), CARRX18G (Canada) -

URC-20300BG1-XXX-R

Date: 01/21/09

Labs: B and D

Tested By: Kyle Fujimoto

Z-Axis - Duty Cycle 30.13%

Transmit Mode - ASK Mode

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
433.81	83.24	H	100.8	-17.56	Peak	1	135	
433.81	72.82	H	80.8	-7.98	Avg	1	135	
867.62	55.67	H	80.8	-25.13	Peak	1	135	
867.62	45.25	H	60.8	-15.55	Avg	1	135	
1301.43	58.23	H	74	-15.77	Peak	1.25	135	
1301.43	47.81	H	54	-6.19	Avg	1.25	135	
1735.24	34.52	H	80.8	-46.28	Peak	1.35	225	
1735.24	24.1	H	60.8	-36.7	Avg	1.35	225	
2169.05	46.78	H	80.8	-34.02	Peak	1.25	90	
2169.05	36.36	H	60.8	-24.44	Avg	1.25	90	
2602.86	45.23	H	80.8	-35.57	Peak	1.35	225	
2602.86	34.81	H	60.8	-25.99	Avg	1.35	225	
3036.67	45.76	H	80.8	-35.04	Peak	1.25	225	
3036.67	35.34	H	60.8	-25.46	Avg	1.25	225	
3470.48	44.21	H	80.8	-36.59	Peak	1.35	225	
3470.48	33.79	H	60.8	-27.01	Avg	1.35	225	
3904.29	45.87	H	74	-28.13	Peak	1.25	215	
3904.29	35.45	H	54	-18.55	Avg	1.25	215	
4338.1	47.68	H	74	-26.32	Peak	1.35	225	
4338.1	37.26	H	54	-16.74	Avg	1.35	225	

FCC 15.231

Universal Electronics, Inc.

Xsight Touch

Model: ARRX18G (US), CARRX18G (Canada) -

URC-20300BG1-XXX-R

Date: 01/21/09

Labs: B and D

Tested By: Kyle Fujimoto

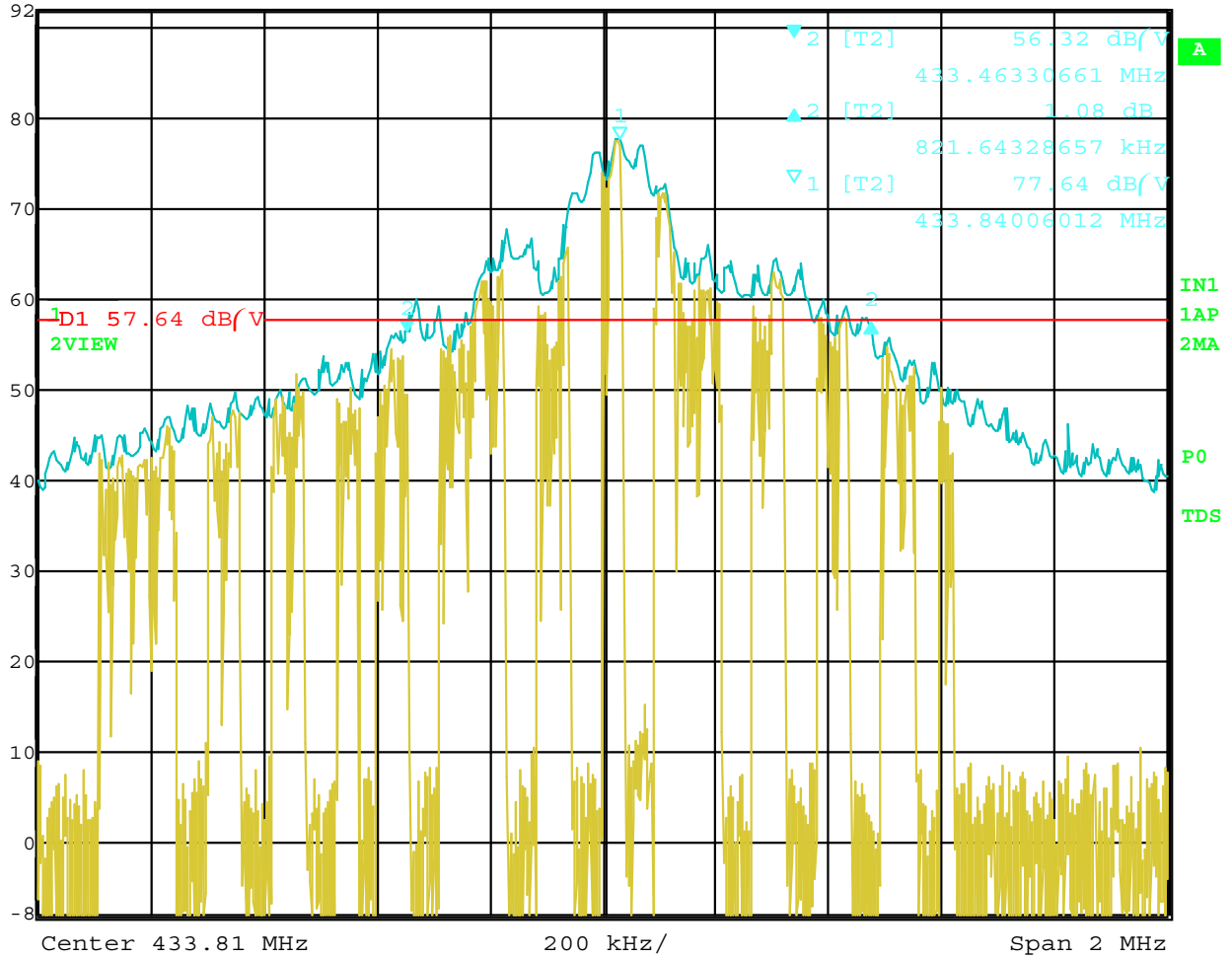
EUT in Charging Cradle - Duty Cycle 30.13%

Transmit Mode - ASK Mode

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
433.91	70.87	V	100.8	-29.93	Peak	1.35	90	
433.91	60.45	V	80.8	-20.35	Avg	1.35	90	
867.82	52.67	V	80.8	-28.13	Peak	1.25	90	
867.82	42.25	V	60.8	-18.55	Avg	1.25	90	
1301.73	58.76	V	74	-15.24	Peak	1.35	135	
1301.73	48.34	V	54	-5.66	Avg	1.35	135	
1735.64	35.78	V	80.8	-45.02	Peak	1.25	0	
1735.64	25.36	V	60.8	-35.44	Avg	1.25	0	
2169.55	49.23	V	80.8	-31.57	Peak	1.25	225	
2169.55	38.81	V	60.8	-21.99	Avg	1.25	225	
2603.46	47.65	V	80.8	-33.15	Peak	1.35	225	
2603.46	37.23	V	60.8	-23.57	Avg	1.35	225	
3037.37	50.82	V	80.8	-29.98	Peak	1.25	315	
3037.37	40.4	V	60.8	-20.4	Avg	1.25	315	
3471.28	47.23	V	80.8	-33.57	Peak	1.25	90	
3471.28	36.81	V	60.8	-23.99	Avg	1.25	90	
3905.19	47.89	V	74	-26.11	Peak	1.35	225	
3905.19	37.47	V	54	-16.53	Avg	1.35	225	
4339.1	49.23	V	74	-24.77	Peak	1.35	225	
4339.1	38.81	V	54	-15.19	Avg	1.35	225	



Delta 2 [T2] RBW 30 kHz RF Att 10 dB
Ref Lvl 1.08 dB VBW 100 kHz
92 dB/V 821.64328657 kHz SWT 6 ms Unit dB/V

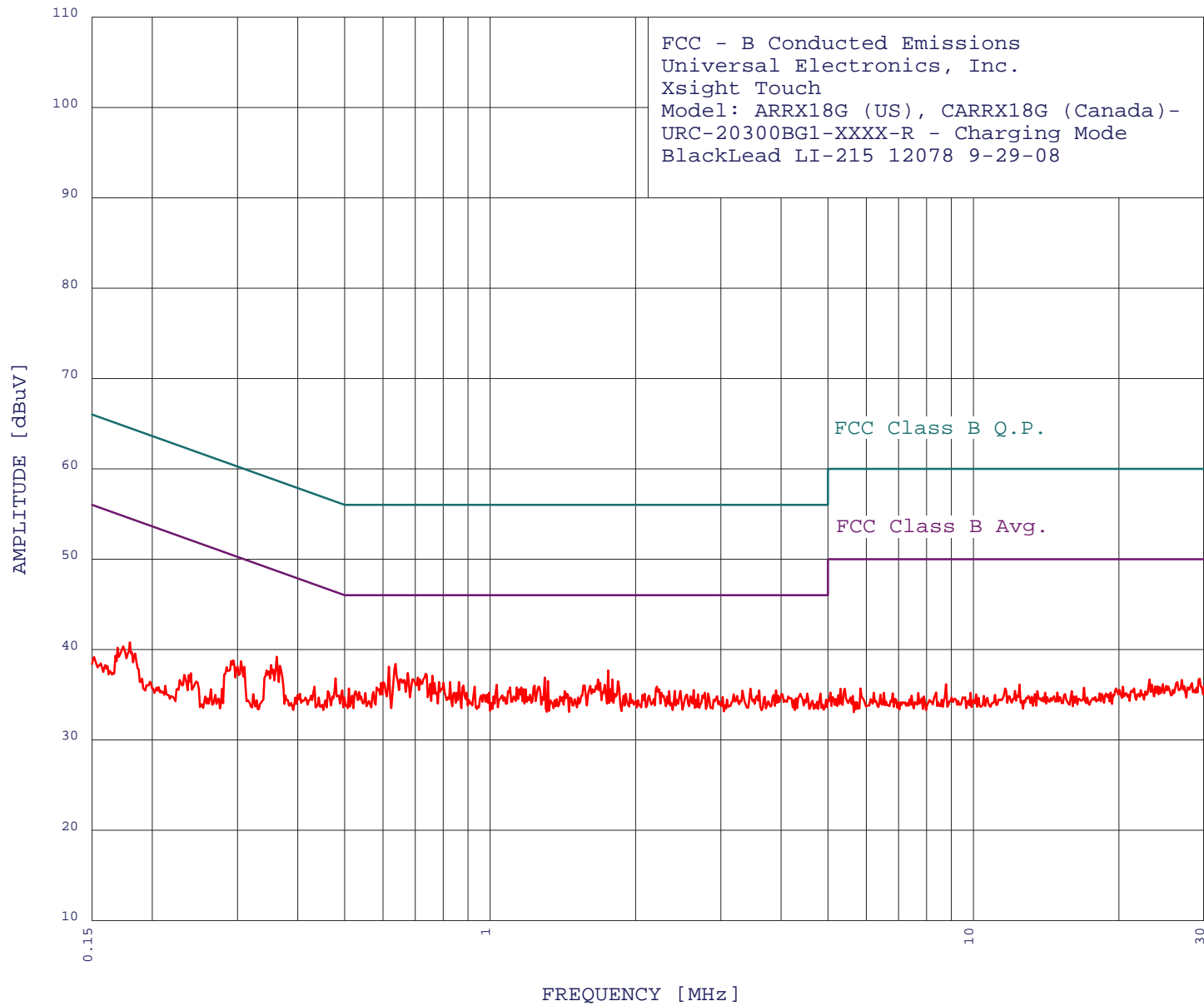


Date: 21.JAN.2009 16:04:09

-20 dB Bandwidth of the Fundamental – ASK Mode

EMISSION LEVEL [dBuV] PEAK
Graph for Peak

1/23/2009 15:42:35



COMPATIBLE
ELECTRONICS



FCC - B Conducted Emissions
 Universal Electronics, Inc.
 Xsight Touch

Model: ARR18G (US), CARR18G (Canada) - URC-20300BG1-XXX-R

FCC Class B - Black Lead

BlackLead LI-215 12078 9-29-08

TEST ENGINEER : Kyle Fujimoto

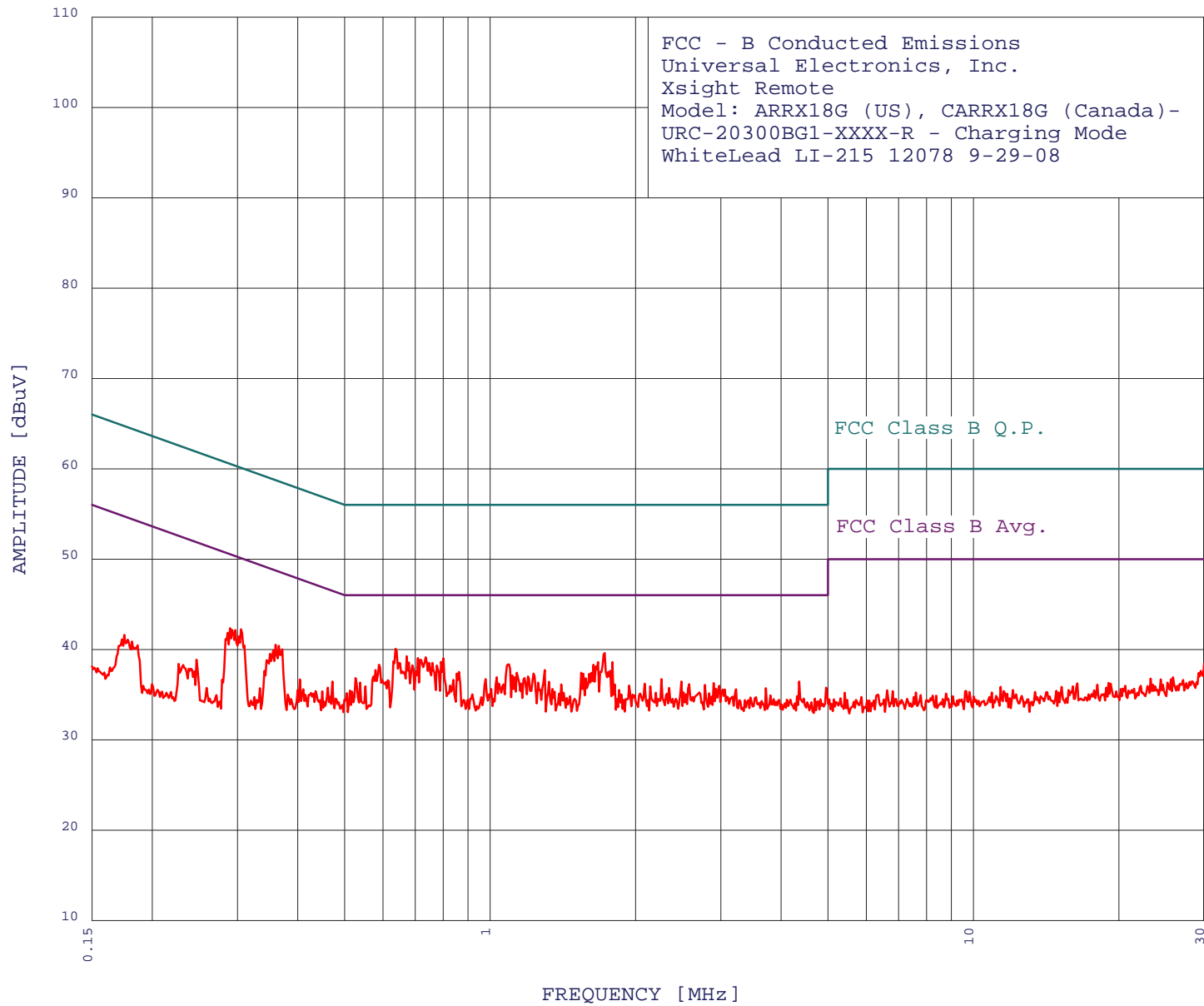
 49 highest peaks above -50.00 dB of FCC Class B Avg. limit line

Peak criteria : 1.00 dB, Curve : Peak

Peak#	Freq(MHz)	Amp(dBuV)	Limit(dB)	Delta(dB)
1	0.637	38.39	46.00	-7.61
2	0.618	38.09	46.00	-7.91
3	1.754	37.69	46.00	-8.31
4	0.676	37.39	46.00	-8.61
5	0.735	37.29	46.00	-8.71
6	0.759	37.09	46.00	-8.91
7	1.297	36.89	46.00	-9.11
8	0.709	36.89	46.00	-9.11
9	0.655	36.69	46.00	-9.31
10	1.671	36.69	46.00	-9.31
11	1.790	36.68	46.00	-9.32
12	1.318	36.49	46.00	-9.51
13	1.840	36.48	46.00	-9.52
14	0.362	39.17	48.69	-9.52
15	0.479	36.79	46.36	-9.57
16	0.862	36.40	46.00	-9.60
17	0.826	36.39	46.00	-9.61
18	0.783	36.39	46.00	-9.61
19	0.601	36.39	46.00	-9.61
20	0.801	36.29	46.00	-9.71
21	0.767	36.29	46.00	-9.71
22	0.595	36.29	46.00	-9.71
23	0.751	36.19	46.00	-9.81
24	1.032	36.10	46.00	-9.90
25	1.726	36.09	46.00	-9.91
26	0.881	36.00	46.00	-10.00
27	1.236	35.99	46.00	-10.01
28	1.560	35.99	46.00	-10.01
29	0.929	35.90	46.00	-10.10
30	1.262	35.89	46.00	-10.11
31	2.214	35.89	46.00	-10.11
32	1.100	35.80	46.00	-10.20
33	1.136	35.80	46.00	-10.20
34	1.160	35.80	46.00	-10.20
35	0.510	35.69	46.00	-10.31
36	3.456	35.65	46.00	-10.35
37	0.367	38.18	48.56	-10.39
38	1.172	35.60	46.00	-10.40
39	1.184	35.59	46.00	-10.41
40	1.772	35.58	46.00	-10.42
41	2.637	35.51	46.00	-10.49
42	3.903	35.47	46.00	-10.53
43	3.605	35.46	46.00	-10.54
44	3.328	35.45	46.00	-10.55
45	2.475	35.40	46.00	-10.60
46	2.410	35.40	46.00	-10.60
47	2.346	35.40	46.00	-10.60
48	0.494	35.49	46.09	-10.61
49	1.426	35.39	46.00	-10.61

EMISSION LEVEL [dBuV] PEAK
Graph for Peak

1/23/2009 15:45:55



COMPATIBLE
ELECTRONICS



FCC - B Conducted Emissions

Universal Electronics, Inc.

Xsight Remote

Model: ARRXL8G (US), CARRXL8G (Canada) - URC-20300BG1-XXX-R

FCC Class B - White Lead

WhiteLead LI-215 12078 9-29-08

TEST ENGINEER : Kyle Fujimoto

49 highest peaks above -50.00 dB of FCC Class B Avg. limit line

Peak criteria : 1.00 dB, Curve : Peak

Peak#	Freq(MHz)	Amp(dBuV)	Limit(dB)	Delta(dB)
1	0.637	40.08	46.00	-5.92
2	1.726	39.61	46.00	-6.39
3	0.672	39.26	46.00	-6.74
4	0.735	39.13	46.00	-6.87
5	0.709	39.04	46.00	-6.96
6	0.801	39.01	46.00	-6.99
7	0.792	38.61	46.00	-7.39
8	1.671	38.61	46.00	-7.39
9	1.790	38.61	46.00	-7.39
10	0.759	38.51	46.00	-7.49
11	1.089	38.32	46.00	-7.68
12	1.637	38.31	46.00	-7.69
13	0.589	38.30	46.00	-7.70
14	0.690	38.25	46.00	-7.75
15	0.775	38.21	46.00	-7.79
16	0.305	42.23	50.10	-7.87
17	0.297	42.13	50.32	-8.19
18	0.290	42.34	50.54	-8.20
19	0.365	40.40	48.61	-8.20
20	0.360	40.51	48.73	-8.23
21	1.297	37.72	46.00	-8.28
22	0.580	37.70	46.00	-8.30
23	0.862	37.52	46.00	-8.48
24	1.136	37.42	46.00	-8.58
25	1.544	37.41	46.00	-8.59
26	1.230	37.32	46.00	-8.68
27	1.560	37.31	46.00	-8.69
28	1.603	37.31	46.00	-8.69
29	0.286	41.84	50.63	-8.79
30	1.112	37.12	46.00	-8.88
31	0.356	39.91	48.82	-8.91
32	1.197	37.02	46.00	-8.98
33	1.032	36.92	46.00	-9.08
34	1.124	36.92	46.00	-9.08
35	0.527	36.83	46.00	-9.17
36	1.178	36.82	46.00	-9.18
37	1.577	36.81	46.00	-9.19
38	2.262	36.72	46.00	-9.28
39	0.979	36.72	46.00	-9.28
40	0.839	36.62	46.00	-9.38
41	4.361	36.44	46.00	-9.56
42	2.488	36.44	46.00	-9.56
43	1.325	36.42	46.00	-9.58
44	0.538	36.33	46.00	-9.67
45	1.256	36.32	46.00	-9.68
46	2.900	36.26	46.00	-9.74
47	1.043	36.22	46.00	-9.78
48	2.089	36.21	46.00	-9.79
49	2.582	36.14	46.00	-9.86