FCC CLASS II PERMISSIVE CHANGE TEST REPORT

for

ECHOSTAR 52.0 MELBOURNE 2015

MODEL: URC-2024BC1-R

Prepared for

UNIVERSAL ELECTRONICS, INC.
201 EAST SANDPOINTE AVE., 8TH FLOOR
SANTA ANA, CA 92707

Prepared by:_____

KYLE FUJIMOTO

Approved by:_____

JAMES ROSS

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BREA, CALIFORNIA 92823
(714) 579-0500

DATE: OCTOBER 22, 2015

	REPORT BODY	APPENDICES						TOTAL
		A	***B***	***C***	***D***	***E***	***F***	
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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 certification, approval or endorsement by NVLAP, NIST or any agency of the federal government.

Device Tested:	EchoStar 52.0 Melbourne 2015 Model: URC-2024BC1-R EchoStar model number: 52.0 S/N: N/A
Product Description:	The device is an RF remote control.
Modifications:	The EUT was not modified during the testing.
Customer:	Universal Electronics, Inc. 201 East Sandpointe Ave., 8TH Floor Santa Ana California, 92707
Test Date:	October 15, 2015
Test Specifications:	Emissions requirements CFR Title 47, Part 15, Subpart B; and Subpart C, sections 15.205, 15.209, and 15.249
Test Procedure:	ANSI C63.4 and ANSI C63.10
Test Deviations:	The test procedure was not deviated from during the testing.

SUMMARY OF TEST RESULTS

TEST	DESCRIPTION	RESULTS
1	Spurious Radiated RF Emissions, 10 kHz – 25,000 MHz (Transmitter and Digital portion)	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 15.205, 15.209 and 15.249
2	Conducted RF Emissions, 150 kHz to 30 MHz	This test was not performed because the EUT operates on battery power and does not connect to the AC mains.

1. PURPOSE

This document is a qualification test report based on the emissions tests performed on the EchoStar 52.0 Melbourne 2015, Model: URC-2024BC1-R. The emissions measurements were performed according to the measurement procedure described in ANSI C63.10. 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 15.249.

The EUT was originally granted under the FCC ID: MG3-2024. The EUT is a Class II Permissive Change because a change was made to the non-radio portion of the EUT and it is no longer electrically identical to the original. However, no RF parameters such as power output and frequency have been changed.

2. ADMINISTRATIVE DATA

2.1 Location of Testing

The emissions 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.

James Ross	Test Engineer
Kyle Fujimoto	Test Engineer

2.4 Date Test Sample was Received

The test sample was received on October 15, 2015.

2.5 Disposition of the Test Sample

The test sample has not been returned to Universal Electronics, Inc. as of the date of this test 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	Part Number
S/N	Serial Number
HP	Hewlett Packard
ITE	Information Technology Equipment
CML	Corrected Meter Limit
LISN	Line Impedance Stabilization Network
N/A	Not Applicable

3. APPLICABLE DOCUMENTS

The following documents are referenced or used in the preparation of this emissions Test Report.

SPEC	TITLE
FCC Title 47, Part 15 Subpart C	FCC Rules - Radio frequency devices (including digital devices) – Intentional Radiators
FCC Title 47, Part 15 Subpart B	FCC Rules - Radio frequency devices (including digital devices) – Unintentional Radiators
ANSI C63.4 2014	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
ANSI C63.10 2013	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices
EN 50147-2: 1997	Anechoic chambers. Alternative test site suitability with respect to site attenuation

4. DESCRIPTION OF TEST CONFIGURATION

4.1 Description of Test Configuration - Emissions

The EchoStar 52.0 Melbourne 2015, Model: URC-2024BC1-R (EUT) is a remote control that is powered by two AA 1.5 VDC batteries.

The EUT was tested for emissions at the low, middle, and high channels while in the X, Y and Z axis. The EUT was continuously transmitting.

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

5. LISTS OF EUT, ACCESSORIES AND TEST EQUIPMENT

5.1 EUT and Accessory List

EQUIPMENT	MANUFACTURER	MODEL NUMBER	SERIAL NUMBER	FCC ID
ECHOSTAR 52.0 MELBOURNE 2015	UNIVERSAL ELECTRONICS, INC.	URC-2024BC1-R ECHOSTAR MODEL NUMBER 52.0	N/A	MG3-2024

5.2 Emissions Test Equipment

EQUIPMENT TYPE	MANU-FACTURER	MODEL NUMBER	SERIAL NUMBER	CALIBRATION DATE	CAL. CYCLE
GENERAL TEST EQUIPMENT USED IN LAB B					
Computer	Compaq	CQ5210F	CNX9360CF9	N/A	N/A
Monitor	Hewlett Packard	HPs2031a	3CQ046N3MD	N/A	N/A
EMI Receiver	Rohde & Schwarz	ESIB40	100194	December 4, 2014	1 Year
GENERAL TEST EQUIPMENT USED IN LAB D					
Computer	Hewlett Packard	p6716f	MXX1030PX0	N/A	N/A
LCD Monitor	Hewlett Packard	52031a	3CQ046N3MG	N/A	N/A
EMI Receiver, 20 Hz – 26.5 GHz	Agilent Technologies	N9038A	MY51100115	April 3, 2015	1 Year
RF RADIATED EMISSIONS TEST EQUIPMENT					
CombiLog Antenna	Com-Power	AC-220	61060	September 3, 2015	1 Year
Preamplifier	Com-Power	PA-118	551024	March 6, 2015	1 Year
Preamplifier	Com-Power	PA-840	711013	May 13, 2014	2 Year
Loop Antenna	Com-Power	AL-130	17089	February 6, 2015	2 Year
Horn Antenna	Com-Power	AH-118	071175	February 26, 2014	2 Year
Horn Antenna	Com-Power	AH-826	0071957	N/A	N/A
Antenna Mast	Com Power	AM-100	N/A	N/A	N/A
System Controller	Sunol Sciences Corporation	SC110V	112213-1	N/A	N/A
Turntable	Sunol Sciences Corporation	2011VS	N/A	N/A	N/A
Antenna-Mast	Sunol Sciences Corporation	TWR95-4	112213-3	N/A	N/A

6. TEST SITE DESCRIPTION

6.1 Test Facility Description

Please refer to section 2.1 of this report for emissions test location.

6.2 EUT Mounting, Bonding and Grounding

1 GHz and below: The EUT was mounted on a 1.0 by 1.5 meter non-conductive table 0.8 meters above the ground plane.

Above 1 GHz: The EUT was mounted 1.5 meters above the ground plane.

The EUT was not grounded.

7. TEST PROCEDURES

The following sections describe the test methods and the specifications for the tests. Test results are also included in this section.

7.1 RF Emissions

7.1.1 Radiated Emissions Test

The EMI Receiver was used as the measuring meter. A built-in, internal preamplifier was used to increase the sensitivity of the instrument. The EMI Receiver was initially used with the Analyzer mode feature activated. In this mode, the EMI receiver can then record the actual frequency to be measured. This final reading is then taken accurately in the EMI Receiver mode, which takes into account the cable loss, amplifier gain and antenna factors, so that a true reading is compared to the true limit. A quasi-peak reading was taken only for those readings, which are marked accordingly on the data sheets.

For frequencies above 1 GHz, the readings were average by a "duty cycle correction factor", derived from 20 log (dwell time / 100 ms). This duty cycle correction factor was then subtracted from the peak reading.

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	Loop Antenna
150 kHz to 30 MHz	9 kHz	Loop Antenna
30 MHz to 1 GHz	120 kHz	Combilog Antenna
1 GHz to 25 GHz	1 MHz	Horn Antenna

The EMI test chamber of Compatible Electronics, Inc. was used for radiated emissions testing. This test site is in full compliance with ANSI C63.4, EN 50147-2 and CISPR 22. 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.

Radiated Emissions Test

The EUT was tested at a 3-meter test distance from 10 kHz to 25 GHz.

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 15.249 for radiated emissions. Please see Appendix E for the data sheets.

7.1.3 RF Emissions Test Results

Table 1.0 RADIATED EMISSION RESULTS
EchoStar 52.0 Melbourne 2015, Model: URC-2024BC1-R

Frequency MHz	Average Corrected Reading* dBuV	Specification Limit dBuV	Delta (Cor. Reading – Spec. Limit) dB
7425 (H) (Z-Axis) (High Channel)	49.95	54	-4.05
7350 (H) (Z-Axis) (Mid Channel)	49.95	54	-4.05
7425 (H) (Z-Axis) (High Channel)	49.90	54	-4.10
7350 (V) (Z-Axis) (Mid Channel)	48.95	54	-5.05
7275 (H) (Z-Axis) (Low Channel)	48.70	54	-5.30
7350 (V) (Y-Axis) (Mid Channel)	48.48	54	-5.52

Notes:

(H) Horizontal
(V) Vertical
* The complete emissions data is given in Appendix E of this report.

8. CONCLUSIONS

The EchoStar 52.0 Melbourne 2015, Model: URC-2024BC1-R, as tested, meets all of the specification limits defined in CFR Title 47, Part 15, Subpart B; and the limits of CFR Title 47, Part 15, Subpart C, sections 15.205, 15.209, and 15.249.

APPENDIX A

LABORATORY ACCREDITATIONS AND RECOGNITIONS

LABORATORY ACCREDITATIONS AND RECOGNITIONS

NVLAP LAB CODES 200063-0, 200528-0, 200527-0

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 Subpart B and FCC 15.249 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.

The EUT was not modified during the testing.

APPENDIX C

ADDITIONAL MODELS COVERED UNDER THIS REPORT

ADDITIONAL MODELS COVERED UNDER THIS REPORT

USED FOR THE PRIMARY TEST	EchoStar 52.0 Melbourne 2015 Model: URC-2024BC1-R EchoStar model number: 52.0 S/N: N/A

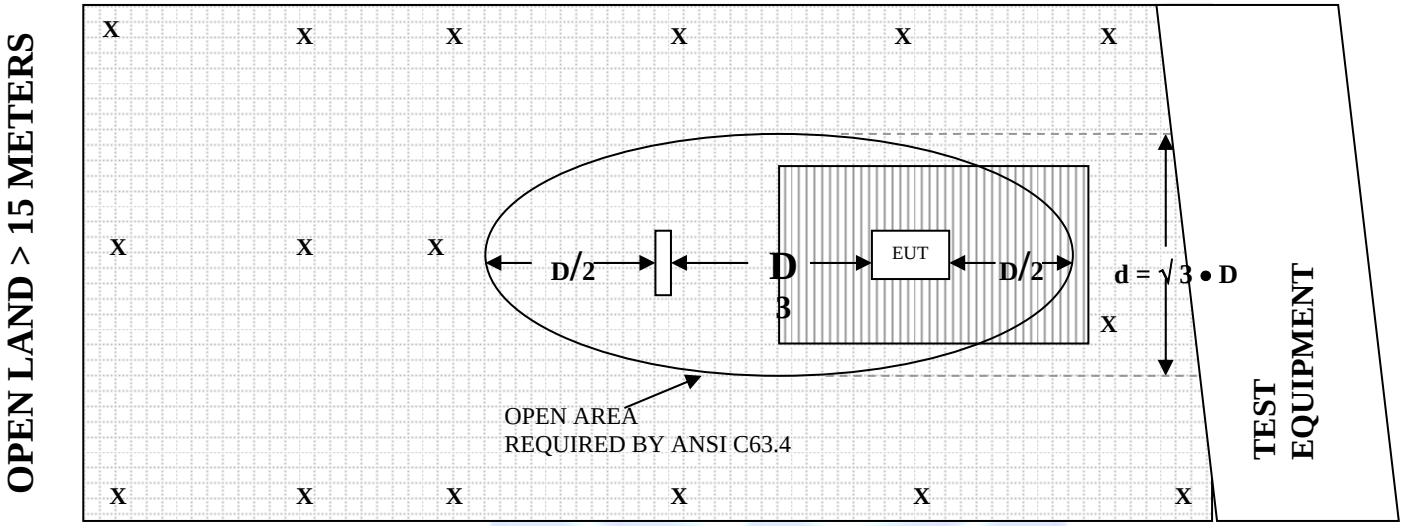
There were no additional models covered under this report.

APPENDIX D

DIAGRAMS AND CHARTS

FIGURE 1: PLOT MAP AND LAYOUT OF RADIATED SITE

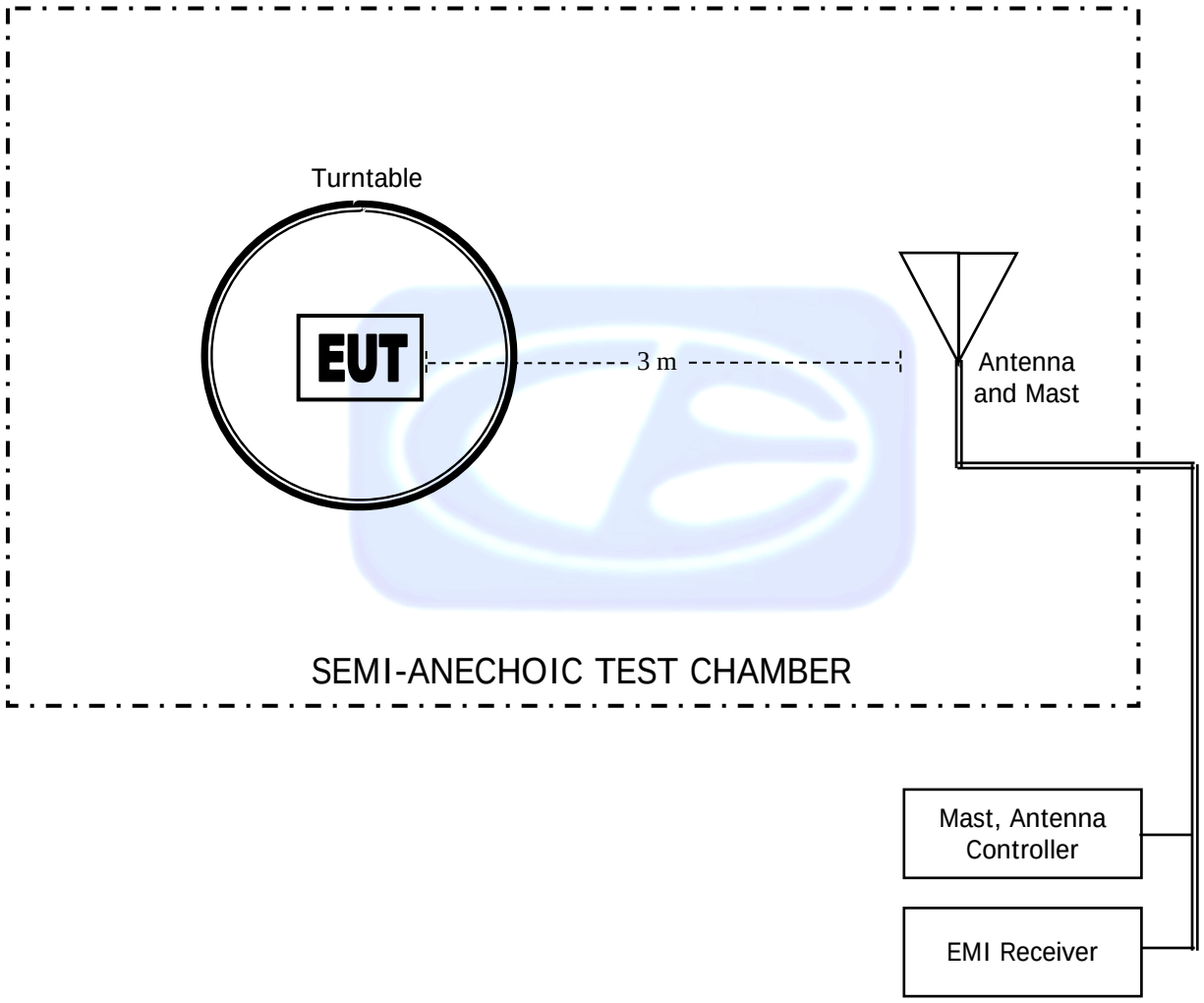
OPEN LAND > 15 METERS



OPEN LAND > 15 METERS

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

FIGURE 2: LAYOUT OF THE SEMI-ANECHOIC TEST CHAMBER



COM-POWER AL-130

LOOP ANTENNA

S/N: 17089

CALIBRATION DATE: FEBRUARY 6, 2015

FREQUENCY (MHz)	MAGNETIC (dB/m)	ELECTRIC (dB/m)
0.009	-33.18	18.32
0.01	-34.10	17.40
0.02	-38.65	12.85
0.03	-39.28	12.22
0.04	-40.09	11.41
0.05	-40.85	10.65
0.06	-40.88	10.62
0.07	-41.07	10.43
0.08	-41.04	10.46
0.09	-41.19	10.31
0.1	-41.20	10.30
0.2	-41.52	9.98
0.3	-41.53	9.97
0.4	-41.42	10.08
0.5	-41.53	9.97
0.6	-41.53	9.97
0.7	-41.43	10.07
0.8	-41.23	10.27
0.9	-41.13	10.37
1	-41.14	10.36
2	-40.80	10.70
3	-40.66	10.84
4	-40.61	10.89
5	-40.33	11.17
6	-40.53	10.97
7	-40.47	11.03
8	-40.48	11.02
9	-39.93	11.57
10	-39.81	11.69
15	-43.35	8.15
20	-39.16	12.34
25	-40.24	11.26
30	-43.18	8.32

COM-POWER AC-220

COMBILOG ANTENNA

S/N: 61060

CALIBRATION DATE: SEPTEMBER 3, 2015

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
30	24.00	200	13.00
35	24.30	250	15.30
40	25.40	300	18.20
45	21.50	350	17.90
50	22.50	400	18.60
60	15.40	450	19.80
70	12.70	500	21.60
80	11.10	550	22.40
90	13.40	600	23.70
100	13.80	650	24.30
120	15.40	700	24.00
125	15.40	750	24.50
140	13.10	800	24.30
150	17.20	850	26.30
160	13.20	900	26.90
175	14.20	950	26.00
180	14.30	1000	25.60

COM POWER AH-118

HORN ANTENNA

S/N: 071175

CALIBRATION DATE: FEBRUARY 26, 2014

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
1.0	24.23	10.0	38.43
1.5	25.84	10.5	40.19
2.0	28.14	11.0	40.49
2.5	29.51	11.5	41.39
3.0	31.20	12.0	42.02
3.5	32.17	12.5	43.30
4.0	31.40	13.0	42.77
4.5	31.86	13.5	40.18
5.0	34.82	14.0	42.59
5.5	34.38	14.5	41.74
6.0	36.31	15.0	41.84
6.5	34.81	15.5	38.48
7.0	37.48	16.0	39.52
7.5	36.98	16.5	37.85
8.0	36.66	17.0	41.33
8.5	38.47	17.5	44.96
9.0	37.22	18.0	48.50
9.5	37.86		

COM-POWER PA-118

PREAMPLIFIER

S/N: 551024

CALIBRATION DATE: MARCH 6, 2015

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
1.0	39.76	6.0	38.77
1.1	40.46	6.5	38.46
1.2	40.05	7.0	38.27
1.3	40.58	7.5	38.77
1.4	39.50	8.0	39.25
1.5	39.92	8.5	38.63
1.6	40.40	9.0	39.58
1.7	40.10	9.5	42.12
1.8	40.49	10.0	38.53
1.9	38.86	11.0	40.21
2.0	41.53	12.0	41.15
2.5	41.05	13.0	40.51
3.0	40.29	14.0	40.32
3.5	40.82	15.0	39.47
4.0	40.88	16.0	39.88
4.5	41.37	17.0	39.79
5.0	40.73	18.0	40.61
5.5	39.05		

COM-POWER AH-826

HORN ANTENNA

S/N: 71957

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
18.0	33.5	22.5	35.5
18.5	33.5	23.0	35.9
19.0	34.0	23.5	35.7
19.5	34.0	24.0	35.6
20.0	34.3	24.5	36.0
20.5	34.9	25.0	36.2
21.0	34.7	25.5	36.1
21.5	35.0	26.0	36.2
22.0	35.0	26.5	35.7

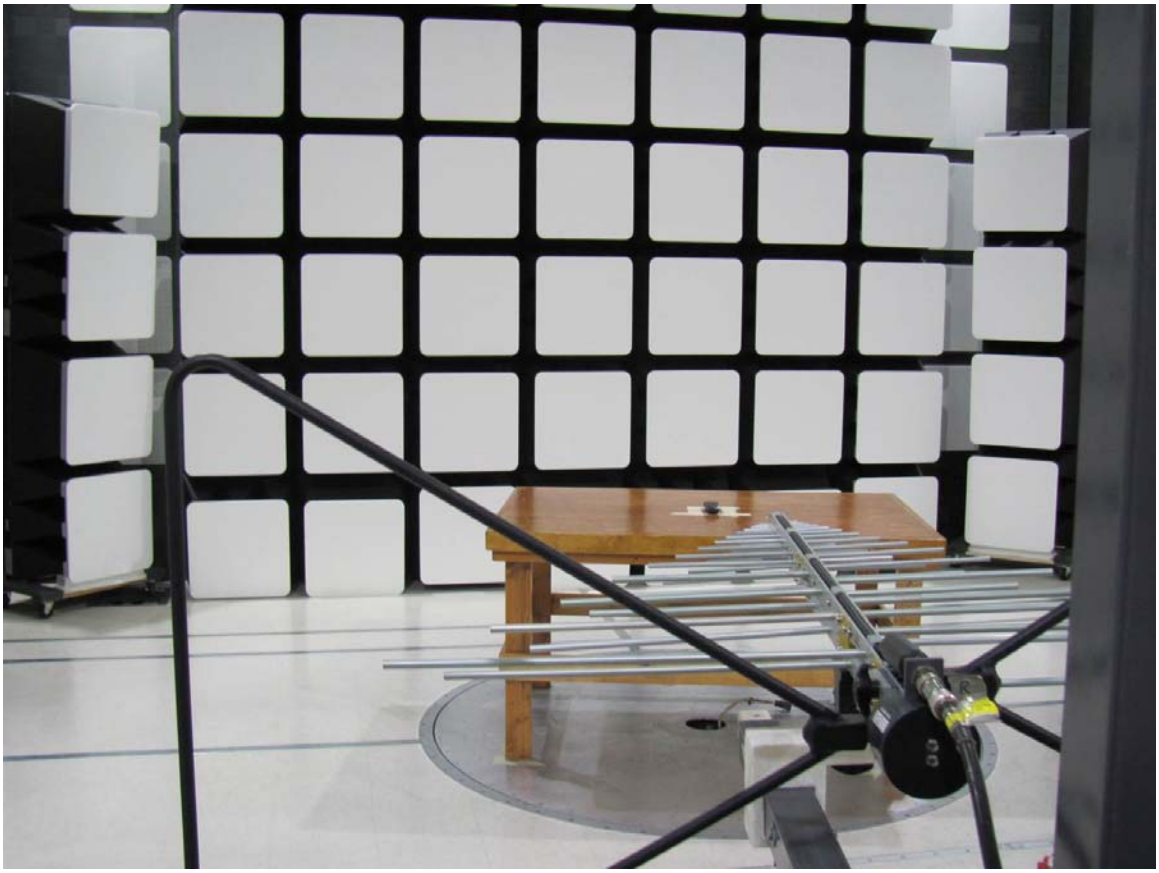
COM-POWER PA-840

MICROWAVE PREAMPLIFIER

S/N: 711013

CALIBRATION DATE: MAY 13, 2014

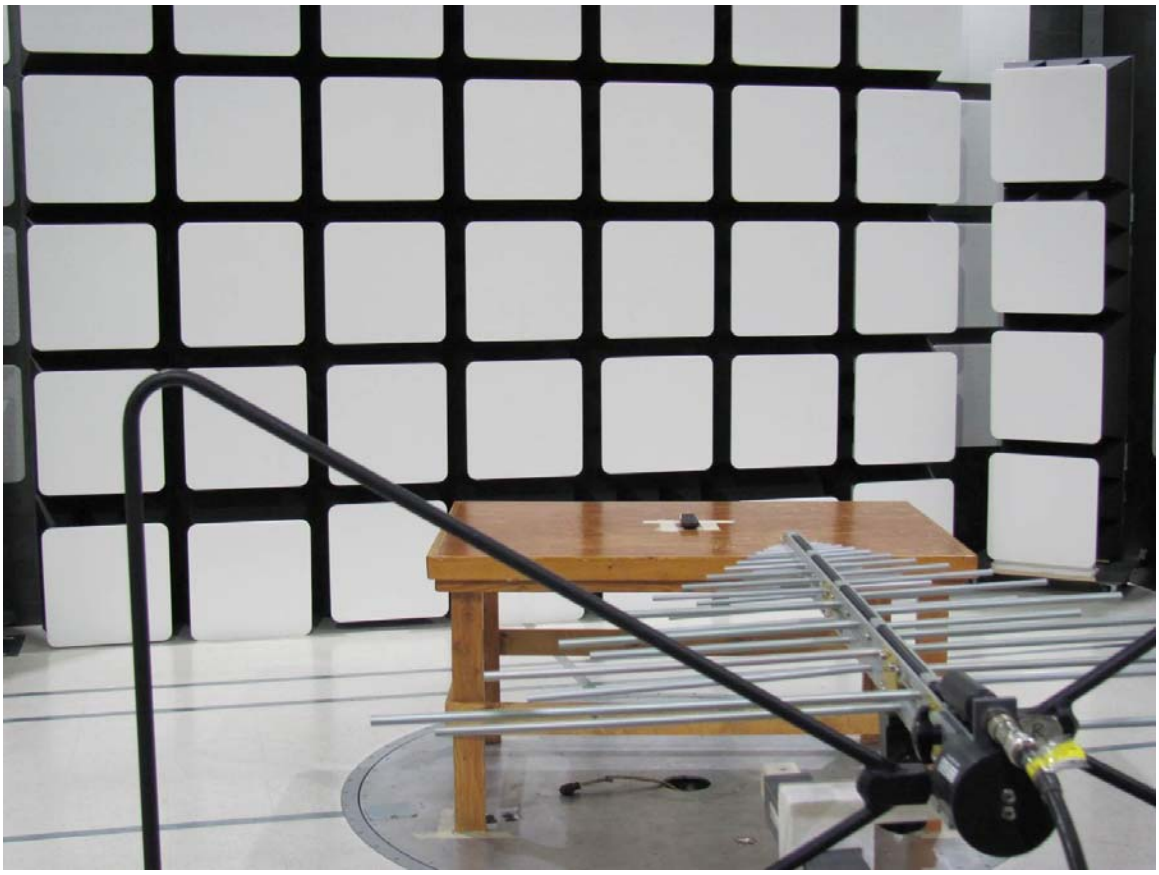
FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
18.0	25.19	31.0	25.69
19.0	24.48	31.5	25.74
20.0	24.39	32.0	26.35
21.0	24.73	32.5	26.64
22.0	23.49	33.0	25.98
23.0	24.23	33.5	24.68
24.0	24.59	34.0	24.61
25.0	25.32	34.5	23.78
26.0	25.66	35.0	24.74
26.5	25.99	35.5	24.39
27.0	26.26	36.0	23.46
27.5	25.33	36.5	23.71
28.0	24.49	37.0	26.35
28.5	24.74	37.5	23.49
29.0	25.93	38.0	25.42
29.5	26.28	38.5	24.87
30.0	26.17	39.0	22.60
30.5	26.11	39.5	20.57
		40.0	19.15



FRONT VIEW

UNIVERSAL ELECTRONICS, INC.
ECHOSTAR 52.0 MELBOURNE 2015
MODEL: URC-2024BC1-R
FCC SUBPART B AND C – RADIATED EMISSIONS – BELOW 1 GHz

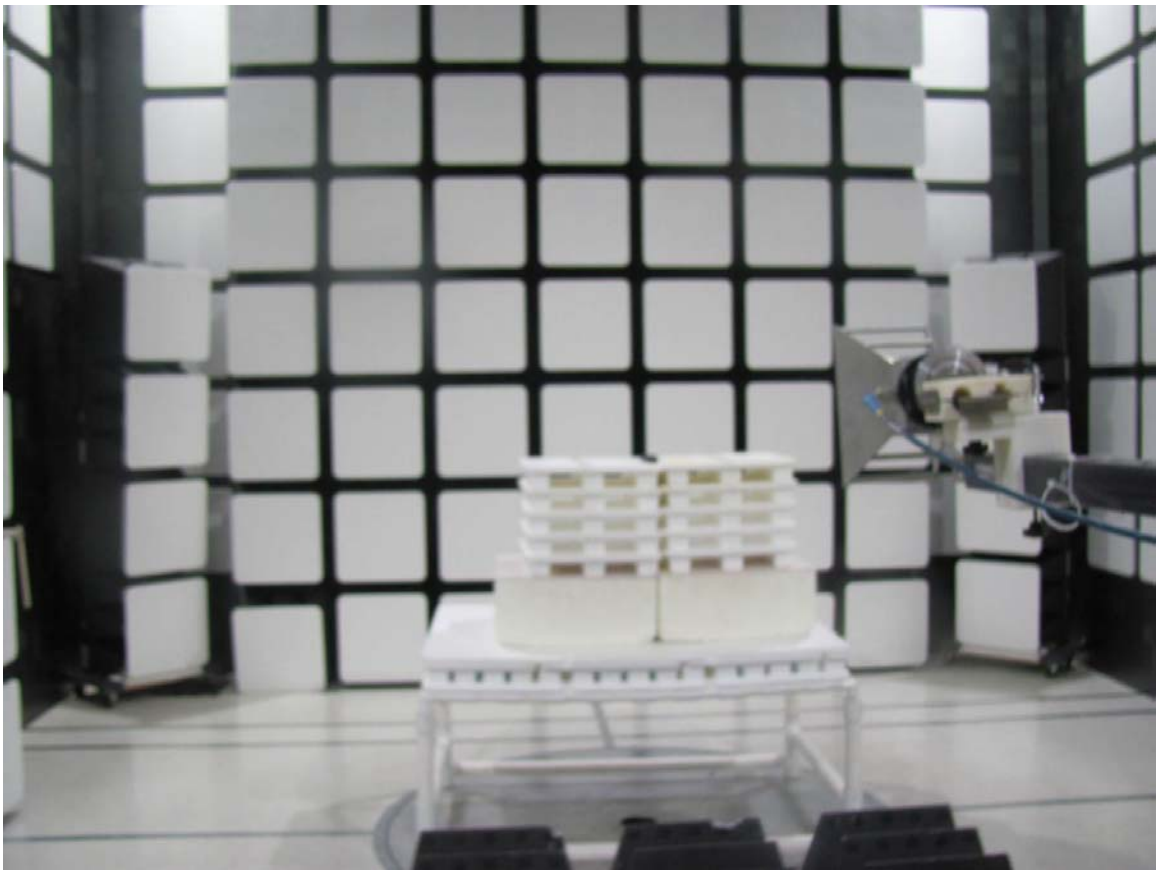
PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS



REAR VIEW

UNIVERSAL ELECTRONICS, INC.
ECHOSTAR 52.0 MELBOURNE 2015
MODEL: URC-2024BC1-R
FCC SUBPART B AND C – RADIATED EMISSIONS – BELOW 1 GHz

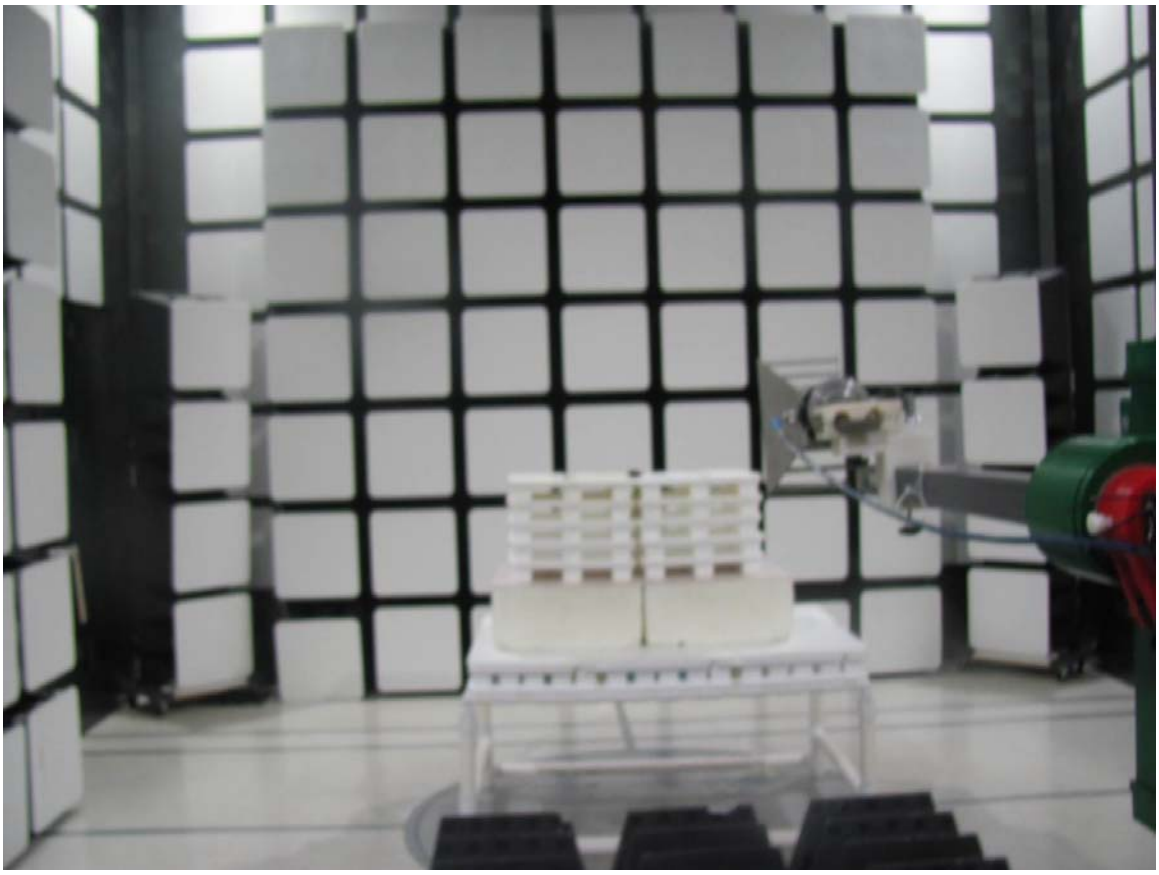
PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS



FRONT VIEW

UNIVERSAL ELECTRONICS, INC.
ECHOSTAR 52.0 MELBOURNE 2015
MODEL: URC-2024BC1-R
FCC SUBPART B AND C – RADIATED EMISSIONS – ABOVE 1 GHz

PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS



REAR VIEW

UNIVERSAL ELECTRONICS, INC.
ECHOSTAR 52.0 MELBOURNE 2015
MODEL: URC-2024BC1-R
FCC SUBPART B AND C – RADIATED EMISSIONS – ABOVE 1 GHz

PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS

APPENDIX E

DATA SHEETS

RADIATED EMISSIONS

DATA SHEETS

FCC 15.249

Universal Electronics, Inc.
EchoStar 52.0 Melbourne 2015
Model: URC-2024BC1-R

Date: 10/15/2015
Lab: D
Tested By: Kyle Fujimoto

Low Channel
X-Axis - Vertical

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
2425	79.21	V	114.00	-34.79	Peak	244.50	110.95	
2425	59.21	V	94.00	-34.79	Avg	244.50	110.95	
4850	54.29	V	74.00	-19.71	Peak	140.25	110.83	
4850	34.29	V	54.00	-19.71	Avg	140.25	110.83	
7275	65.61	V	74.00	-8.39	Peak	304.50	110.77	
7275	45.61	V	54.00	-8.39	Avg	304.50	110.77	
9700	58.02	V	74.00	-15.98	Peak	133.00	126.95	
9700	38.02	V	54.00	-15.98	Avg	133.00	126.95	
12125								**No Emissions**
12125								**Detected**
14550								**No Emissions**
14550								**Detected**
16975								**No Emissions**
16975								**Detected**
19400								**No Emissions**
19400								**Detected**
21825								**No Emissions**
21825								**Detected**
24250								**No Emissions**
24250								**Detected**

FCC 15.249

Universal Electronics, Inc.
EchoStar 52.0 Melbourne 2015
Model: URC-2024BC1-R

Date: 10/15/2015
Lab: D
Tested By: Kyle Fujimoto

Low Channel
X-Axis - Horizontal

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
2425	95.67	H	114.00	-18.33	Peak	162.25	158.00	
2425	75.67	H	94.00	-18.33	Avg	162.25	158.00	
4850	57.07	H	74.00	-16.93	Peak	140.50	158.95	
4850	37.07	H	54.00	-16.93	Avg	140.50	158.95	
7275	66.55	H	74.00	-7.45	Peak	0.00	110.89	
7275	46.55	H	54.00	-7.45	Avg	0.00	110.89	
9700	56.15	H	74.00	-17.85	Peak	244.25	158.95	
9700	36.15	H	54.00	-17.85	Avg	244.25	158.95	
12125								**No Emissions**
12125								**Detected**
14550								**No Emissions**
14550								**Detected**
16975								**No Emissions**
16975								**Detected**
19400								**No Emissions**
19400								**Detected**
21825								**No Emissions**
21825								**Detected**
24250								**No Emissions**
24250								**Detected**

FCC 15.249

Universal Electronics, Inc.
EchoStar 52.0 Melbourne 2015
Model: URC-2024BC1-R

Date: 10/15/2015
Lab: D
Tested By: Kyle Fujimoto

Low Channel
Y-Axis - Vertical

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
2425	94.49	V	114.00	-19.52	Peak	75.25	177.28	
2425	74.49	V	94.00	-19.52	Avg	75.25	177.28	
4850	54.48	V	74.00	-19.52	Peak	331.25	126.95	
4850	34.48	V	54.00	-19.52	Avg	331.25	126.95	
7275	67.08	V	74.00	-6.92	Peak	16.00	206.89	
7275	47.08	V	54.00	-6.92	Avg	16.00	206.89	
9700	55.64	V	74.00	-18.36	Peak	184.75	110.89	
9700	35.64	V	54.00	-18.36	Avg	184.75	110.89	
12125								**No Emissions**
12125								**Detected**
14550								**No Emissions**
14550								**Detected**
16975								**No Emissions**
16975								**Detected**
19400								**No Emissions**
19400								**Detected**
21825								**No Emissions**
21825								**Detected**
24250								**No Emissions**
24250								**Detected**

FCC 15.249

Universal Electronics, Inc.
EchoStar 52.0 Melbourne 2015
Model: URC-2024BC1-R

Date: 10/15/2015
Lab: D
Tested By: Kyle Fujimoto

Low Channel
Y-Axis - Horizontal

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
2425	96.60	H	114.00	-17.40	Peak	356.00	157.82	
2425	76.60	H	94.00	-17.40	Avg	356.00	157.82	
4850	58.99	H	74.00	-15.01	Peak	0.00	158.00	
4850	38.99	H	54.00	-15.01	Avg	0.00	158.00	
7275	67.05	H	74.00	-6.95	Peak	335.50	205.82	
7275	47.05	H	54.00	-6.95	Avg	335.50	205.82	
9700	55.99	H	74.00	-18.01	Peak	24.75	300.00	
9700	35.99	H	54.00	-18.01	Avg	24.75	300.00	
12125								**No Emissions**
12125								**Detected**
14550								**No Emissions**
14550								**Detected**
16975								**No Emissions**
16975								**Detected**
19400								**No Emissions**
19400								**Detected**
21825								**No Emissions**
21825								**Detected**
24250								**No Emissions**
24250								**Detected**

FCC 15.249

Universal Electronics, Inc.
EchoStar 52.0 Melbourne 2015
Model: URC-2024BC1-R

Date: 10/15/2015
Lab: D
Tested By: Kyle Fujimoto

Low Channel
Z-Axis - Vertical

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
2425	98.06	V	114.00	-15.94	Peak	27.75	142.95	
2425	78.06	V	94.00	-15.94	Avg	27.75	142.95	
4850	57.29	V	74.00	-16.71	Peak	242.50	127.01	
4850	37.29	V	54.00	-16.71	Avg	242.50	127.01	
7275	67.40	V	74.00	-6.60	Peak	118.25	174.23	
7275	47.40	V	54.00	-6.60	Avg	118.25	174.23	
9700	56.21	V	74.00	-17.79	Peak	93.25	174.89	
9700	36.21	V	54.00	-17.79	Avg	93.25	174.89	
12125								**No Emissions**
12125								**Detected**
14550								**No Emissions**
14550								**Detected**
16975								**No Emissions**
16975								**Detected**
19400								**No Emissions**
19400								**Detected**
21825								**No Emissions**
21825								**Detected**
24250								**No Emissions**
24250								**Detected**

FCC 15.249

Universal Electronics, Inc.
EchoStar 52.0 Melbourne 2015
Model: URC-2024BC1-R

Date: 10/15/2015
Lab: D
Tested By: Kyle Fujimoto

Low Channel
Z-Axis - Horizontal

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
2425	86.91	H	114.00	-27.09	Peak	302.00	157.88	
2425	66.91	H	94.00	-27.09	Avg	302.00	157.88	
4850	55.72	H	74.00	-18.28	Peak	65.75	158.00	
4850	35.72	H	54.00	-18.28	Avg	65.75	158.00	
7275	68.70	H	74.00	-5.30	Peak	98.00	190.00	
7275	48.70	H	54.00	-5.30	Avg	98.00	190.00	
9700	56.89	H	74.00	-17.11	Peak	92.25	174.00	
9700	36.89	H	54.00	-17.11	Avg	92.25	174.00	
12125								**No Emissions**
12125								**Detected**
14550								**No Emissions**
14550								**Detected**
16975								**No Emissions**
16975								**Detected**
19400								**No Emissions**
19400								**Detected**
21825								**No Emissions**
21825								**Detected**
24250								**No Emissions**
24250								**Detected**

FCC 15.249

Universal Electronics, Inc.
EchoStar 52.0 Melbourne 2015
Model: URC-2024BC1-R

Date: 10/15/2015
Lab: D
Tested By: Kyle Fujimoto

Middle Channel
X-Axis - Vertical

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
2450	81.23	V	114.00	-32.77	Peak	266.00	110.00	
2450	61.23	V	94.00	-32.77	Avg	266.00	110.00	
4900	53.54	V	74.00	-20.46	Peak	288.00	236.92	
4900	33.54	V	54.00	-20.46	Avg	288.00	236.92	
7350	66.25	V	74.00	-7.75	Peak	120.25	110.95	
7350	46.25	V	54.00	-7.75	Avg	120.25	110.95	
9800	57.10	V	74.00	-16.90	Peak	130.25	300.00	
9800	37.10	V	54.00	-16.90	Avg	130.23	300.00	
12250								**No Emissions**
12250								**Detected**
14700								**No Emissions**
14700								**Detected**
17150								**No Emissions**
17150								**Detected**
19600								**No Emissions**
19600								**Detected**
22050								**No Emissions**
22050								**Detected**
24500								**No Emissions**
24500								**Detected**

FCC 15.249

Universal Electronics, Inc.
EchoStar 52.0 Melbourne 2015
Model: URC-2024BC1-R

Date: 10/15/2015
Lab: D
Tested By: Kyle Fujimoto

Middle Channel
X-Axis - Horizontal

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
2450	97.04	H	114.00	-16.96	Peak	188.00	110.65	
2450	77.04	H	94.00	-16.96	Avg	188.00	110.65	
4900	58.94	H	74.00	-15.06	Peak	139.50	128.38	
4900	38.94	H	54.00	-15.06	Avg	139.50	128.38	
7350	66.92	H	74.00	-7.08	Peak	352.00	110.65	
7350	46.92	H	54.00	-7.08	Avg	352.00	110.50	
9800	56.99	H	74.00	-17.01	Peak	209.00	110.77	
9800	36.99	H	54.00	-17.01	Avg	209.00	110.77	
12250								**No Emissions**
12250								**Detected**
14700								**No Emissions**
14700								**Detected**
17150								**No Emissions**
17150								**Detected**
19600								**No Emissions**
19600								**Detected**
22050								**No Emissions**
22050								**Detected**
24500								**No Emissions**
24500								**Detected**

FCC 15.249

Universal Electronics, Inc.
EchoStar 52.0 Melbourne 2015
Model: URC-2024BC1-R

Date: 10/15/2015
Lab: D
Tested By: Kyle Fujimoto

Middle Channel
Y-Axis - Vertical

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
2450	92.64	V	114.00	-21.36	Peak	41.00	174.77	
2450	72.64	V	94.00	-21.36	Avg	41.00	174.77	
4900	55.94	V	74.00	-18.06	Peak	145.50	134.29	
4900	35.94	V	54.00	-18.06	Avg	145.50	134.29	
7350	68.48	V	74.00	-5.52	Peak	132.25	190.83	
7350	48.48	V	54.00	-5.52	Avg	132.25	190.83	
9800	57.72	V	74.00	-16.28	Peak	354.00	125.82	
9800	37.72	V	54.00	-16.28	Avg	354.00	125.82	
12250								**No Emissions**
12250								**Detected**
14700								**No Emissions**
14700								**Detected**
17150								**No Emissions**
17150								**Detected**
19600								**No Emissions**
19600								**Detected**
22050								**No Emissions**
22050								**Detected**
24500								**No Emissions**
24500								**Detected**

FCC 15.249

Universal Electronics, Inc.
EchoStar 52.0 Melbourne 2015
Model: URC-2024BC1-R

Date: 10/15/2015
Lab: D
Tested By: Kyle Fujimoto

Middle Channel
Y-Axis - Horizontal

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
2450	96.44	H	114.00	-17.56	Peak	197.00	141.88	
2450	76.44	H	94.00	-17.56	Avg	197.00	141.88	
4900	58.64	H	74.00	-15.37	Peak	197.00	142.77	
4900	38.64	H	54.00	-15.37	Avg	197.00	142.77	
7350	65.22	H	74.00	-8.78	Peak	261.00	110.00	
7350	45.22	H	54.00	-8.78	Avg	261.00	110.00	
9800	57.55	H	74.00	-16.45	Peak	280.50	125.88	
9800	37.55	H	54.00	-16.45	Avg	280.50	125.88	
12250								**No Emissions**
12250								**Detected**
14700								**No Emissions**
14700								**Detected**
17150								**No Emissions**
17150								**Detected**
19600								**No Emissions**
19600								**Detected**
22050								**No Emissions**
22050								**Detected**
24500								**No Emissions**
24500								**Detected**

FCC 15.249

Universal Electronics, Inc.
EchoStar 52.0 Melbourne 2015
Model: URC-2024BC1-R

Date: 10/15/2015
Lab: D
Tested By: Kyle Fujimoto

Middle Channel
Z-Axis - Vertical

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
2450	97.48	V	114.00	-16.53	Peak	141.00	126.05	
2450	77.48	V	94.00	-16.53	Avg	141.00	126.05	
4900	59.18	V	74.00	-14.82	Peak	189.75	110.89	
4900	39.18	V	54.00	-14.82	Avg	189.75	110.89	
7350	68.95	V	74.00	-5.05	Peak	277.25	207.01	
7350	48.95	V	54.00	-5.05	Avg	277.25	207.01	
9800	56.92	V	74.00	-17.08	Peak	173.50	252.86	
9800	36.92	V	54.00	-17.08	Avg	173.50	252.86	
12250								**No Emissions**
12250								**Detected**
14700								**No Emissions**
14700								**Detected**
17150								**No Emissions**
17150								**Detected**
19600								**No Emissions**
19600								**Detected**
22050								**No Emissions**
22050								**Detected**
24500								**No Emissions**
24500								**Detected**

FCC 15.249

Universal Electronics, Inc.
EchoStar 52.0 Melbourne 2015
Model: URC-2024BC1-R

Date: 10/15/2015
Lab: D
Tested By: Kyle Fujimoto

Middle Channel
Z-Axis - Horizontal

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
2450	89.69	H	114.00	-24.31	Peak	129.50	222.83	
2450	69.69	H	94.00	-24.31	Avg	129.50	222.83	
4900	53.78	H	74.00	-20.22	Peak	180.50	126.59	
4900	33.78	H	54.00	-20.22	Avg	180.50	126.59	
7350	69.95	H	74.00	-4.05	Peak	283.75	206.95	
7350	49.95	H	54.00	-4.05	Avg	283.75	206.95	
9800	56.75	H	74.00	-17.25	Peak	274.00	300.00	
9800	36.75	H	54.00	-17.25	Avg	274.00	300.00	
12250								**No Emissions**
12250								**Detected**
14700								**No Emissions**
14700								**Detected**
17150								**No Emissions**
17150								**Detected**
19600								**No Emissions**
19600								**Detected**
22050								**No Emissions**
22050								**Detected**
24500								**No Emissions**
24500								**Detected**

FCC 15.249

Universal Electronics, Inc.
EchoStar 52.0 Melbourne 2015
Model: URC-2024BC1-R

Date: 10/15/2015
Lab: D
Tested By: Kyle Fujimoto

High Channel
X-Axis - Vertical

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
2475	79.89	V	114.00	-34.11	Peak	254.25	287.91	
2475	59.89	V	94.00	-34.11	Avg	254.25	287.91	
4950	55.89	V	74.00	-18.11	Peak	132.00	126.71	
4950	35.89	V	54.00	-18.11	Avg	132.00	126.71	
7425	65.09	V	74.00	-8.91	Peak	197.25	126.89	
7425	45.09	V	54.00	-8.91	Avg	197.25	126.89	
9900	57.71	V	74.00	-16.29	Peak	121.75	190.83	
9900	37.71	V	54.00	-16.29	Avg	121.75	190.83	
12375								**No Emissions**
12375								**Detected**
14850								**No Emissions**
14850								**Detected**
17325								**No Emissions**
17325								**Detected**
19800								**No Emissions**
19800								**Detected**
22275								**No Emissions**
22275								**Detected**
24750								**No Emissions**
24750								**Detected**

FCC 15.249

Universal Electronics, Inc.
EchoStar 52.0 Melbourne 2015
Model: URC-2024BC1-R

Date: 10/15/2015
Lab: D
Tested By: Kyle Fujimoto

High Channel
X-Axis - Horizontal

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
2475	95.65	H	114.00	-18.35	Peak	188.75	110.77	
2475	75.65	H	94.00	-18.35	Avg	188.75	110.77	
4950	60.04	H	74.00	-13.96	Peak	158.25	110.95	
4950	40.04	H	54.00	-13.96	Avg	158.25	110.95	
7425	63.45	H	74.00	-10.56	Peak	119.75	126.00	
7425	43.45	H	54.00	-10.56	Avg	119.75	126.00	
9900	56.98	H	74.00	-17.02	Peak	249.25	127.07	
9900	36.98	H	54.00	-17.02	Avg	249.25	127.07	
12375								**No Emissions**
12375								**Detected**
14850								**No Emissions**
14850								**Detected**
17325								**No Emissions**
17325								**Detected**
19800								**No Emissions**
19800								**Detected**
22275								**No Emissions**
22275								**Detected**
24750								**No Emissions**
24750								**Detected**

FCC 15.249

Universal Electronics, Inc.
EchoStar 52.0 Melbourne 2015
Model: URC-2024BC1-R

Date: 10/15/2015
Lab: D
Tested By: Kyle Fujimoto

High Channel
Y-Axis - Vertical

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
2475	91.25	V	114.00	-22.75	Peak	41.75	175.97	
2475	71.25	V	94.00	-22.75	Avg	41.75	175.97	
4950	57.43	V	74.00	-16.57	Peak	123.25	158.00	
4950	37.43	V	54.00	-16.57	Avg	123.25	158.00	
7425	68.36	V	74.00	-5.65	Peak	126.25	190.83	
7425	48.36	V	54.00	-5.65	Avg	126.25	190.83	
9900	57.15	V	74.00	-16.85	Peak	322.00	252.97	
9900	37.15	V	54.00	-16.85	Avg	322.00	252.97	
12375								**No Emissions**
12375								**Detected**
14850								**No Emissions**
14850								**Detected**
17325								**No Emissions**
17325								**Detected**
19800								**No Emissions**
19800								**Detected**
22275								**No Emissions**
22275								**Detected**
24750								**No Emissions**
24750								**Detected**

FCC 15.249

Universal Electronics, Inc.
EchoStar 52.0 Melbourne 2015
Model: URC-2024BC1-R

Date: 10/15/2015
Lab: D
Tested By: Kyle Fujimoto

High Channel
Y-Axis - Horizontal

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
2475	93.64	H	114.00	-20.36	Peak	200.00	206.95	
2475	73.64	H	94.00	-20.36	Avg	200.00	206.95	
4950	60.82	H	74.00	-13.18	Peak	176.00	157.94	
4950	40.82	H	54.00	-13.18	Avg	176.00	157.94	
7425	66.20	H	74.00	-7.80	Peak	262.00	110.95	
7425	46.20	H	54.00	-7.80	Avg	262.00	110.95	
9900	57.21	H	74.00	-16.79	Peak	308.25	204.80	
9900	37.21	H	54.00	-16.79	Avg	308.25	204.80	
12375								**No Emissions**
12375								**Detected**
14850								**No Emissions**
14850								**Detected**
17325								**No Emissions**
17325								**Detected**
19800								**No Emissions**
19800								**Detected**
22275								**No Emissions**
22275								**Detected**
24750								**No Emissions**
24750								**Detected**

FCC 15.249

Universal Electronics, Inc.
EchoStar 52.0 Melbourne 2015
Model: URC-2024BC1-R

Date: 10/15/2015
Lab: D
Tested By: Kyle Fujimoto

High Channel
Z-Axis - Vertical

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
2475	96.42	V	114.00	-17.58	Peak	24.75	143.85	
2475	76.42	V	94.00	-17.58	Avg	24.75	143.85	
4950	59.27	V	74.00	-14.73	Peak	214.75	143.01	
4950	39.27	V	54.00	-14.73	Avg	214.75	143.01	
7425	69.95	V	74.00	-4.05	Peak	227.25	110.89	
7425	49.95	V	54.00	-4.05	Avg	227.25	110.89	
9900	54.55	V	74.00	-19.45	Peak	159.25	300.08	
9900	34.55	V	54.00	-19.45	Avg	159.25	300.08	
12375								**No Emissions**
12375								**Detected**
14850								**No Emissions**
14850								**Detected**
17325								**No Emissions**
17325								**Detected**
19800								**No Emissions**
19800								**Detected**
22275								**No Emissions**
22275								**Detected**
24750								**No Emissions**
24750								**Detected**

FCC 15.249

Universal Electronics, Inc.
EchoStar 52.0 Melbourne 2015
Model: URC-2024BC1-R

Date: 10/15/2015
Lab: D
Tested By: Kyle Fujimoto

High Channel
Z-Axis - Horizontal

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
2475	83.00	H	114.00	-31.00	Peak	77.00	126.77	
2475	63.00	H	94.00	-31.00	Avg	77.00	126.77	
4950	54.49	H	74.00	-19.51	Peak	271.50	110.77	
4950	34.49	H	54.00	-19.51	Avg	271.50	110.77	
7425	69.90	H	74.00	-4.10	Peak	233.00	110.77	
7425	49.90	H	54.00	-4.10	Avg	233.00	110.77	
9900	58.52	H	74.00	-15.48	Peak	229.00	222.71	
9900	38.52	H	54.00	-15.48	Avg	229.00	222.71	
12375								**No Emissions**
12375								**Detected**
14850								**No Emissions**
14850								**Detected**
17325								**No Emissions**
17325								**Detected**
19800								**No Emissions**
19800								**Detected**
22275								**No Emissions**
22275								**Detected**
24750								**No Emissions**
24750								**Detected**

FCC 15.249

Universal Electronics, Inc.
EchoStar 52.0 Melbourne 2015
Model: URC-2024BC1-R

Date: 10/15/2015
Lab: D
Tested By: Kyle Fujimoto

Digital Portion and Non-Harmonic Emissions from the Transmitter
10 kHz to 1000 MHz and 1 GHz to 25 GHz

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
								No Emissions Detected
								from 10 kHz to 1000 MHz
								for the Digital Portion
								for both the Vertical and
								Horizontal Polarizations.
								No Emissions Detected
								from 10 kHz to 1000 MHz
								for the Non-Harmonic
								Emissions from the Tx for the
								EUT for both the Vertical and
								Horizontal Polarizations.
								Investigated in the
								X, Y, and Z-Axis
								No Emissions Detected
								from 1 GHz to 25 GHz
								for the Digital Portion
								for both the Vertical and
								Horizontal Polarizations.
								No Emissions Detected
								from 1 GHz to 25 GHz
								for the Non-Harmonic
								Emissions from the Tx for the
								EUT for both the Vertical and
								Horizontal Polarizations.
								Investigated in the
								X, Y, and Z-Axis

BAND EDGES

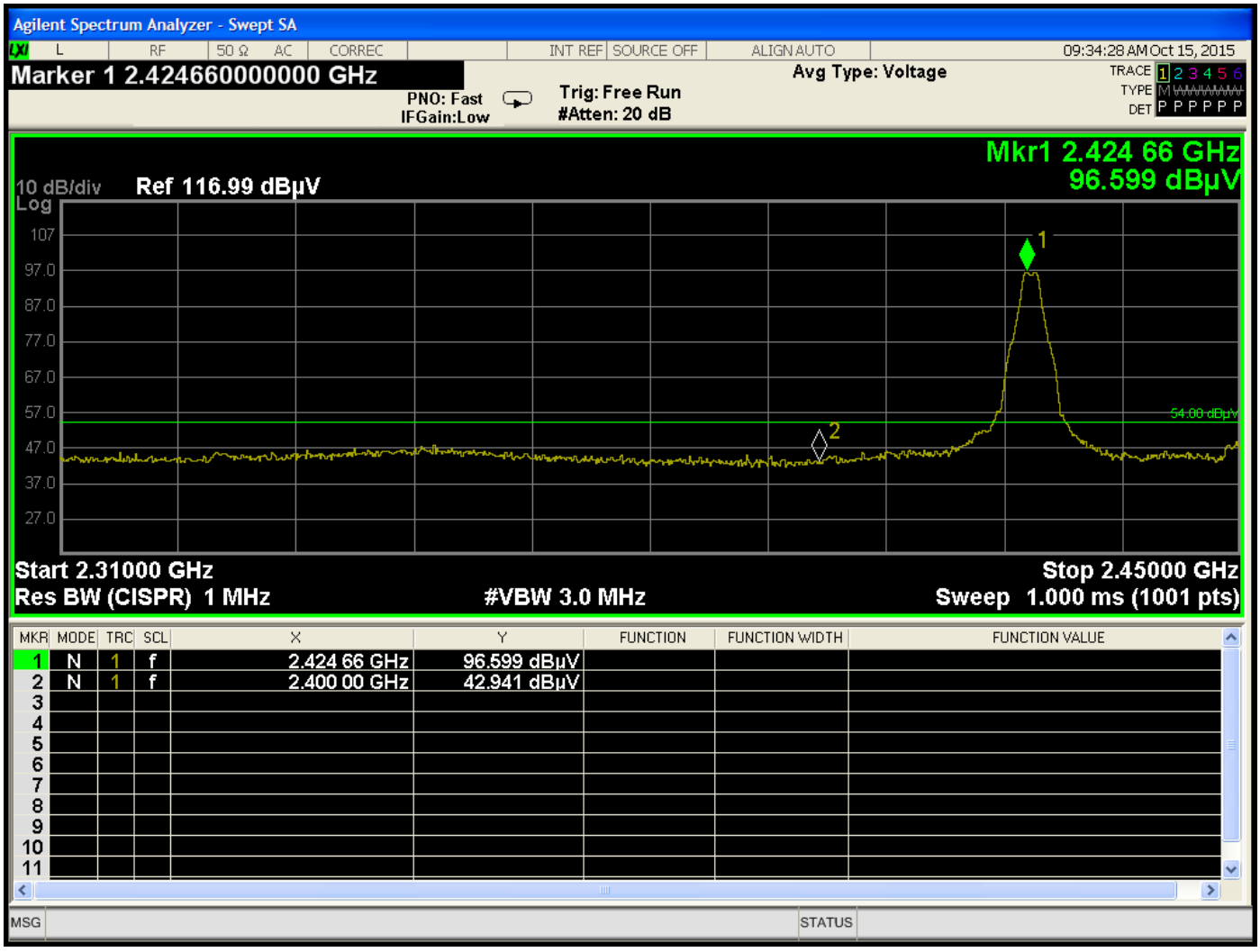
FCC 15.249

Universal Electronics, Inc.
EchoStar 52.0 Melbourne 2015
Model: URC-2024BC1-R

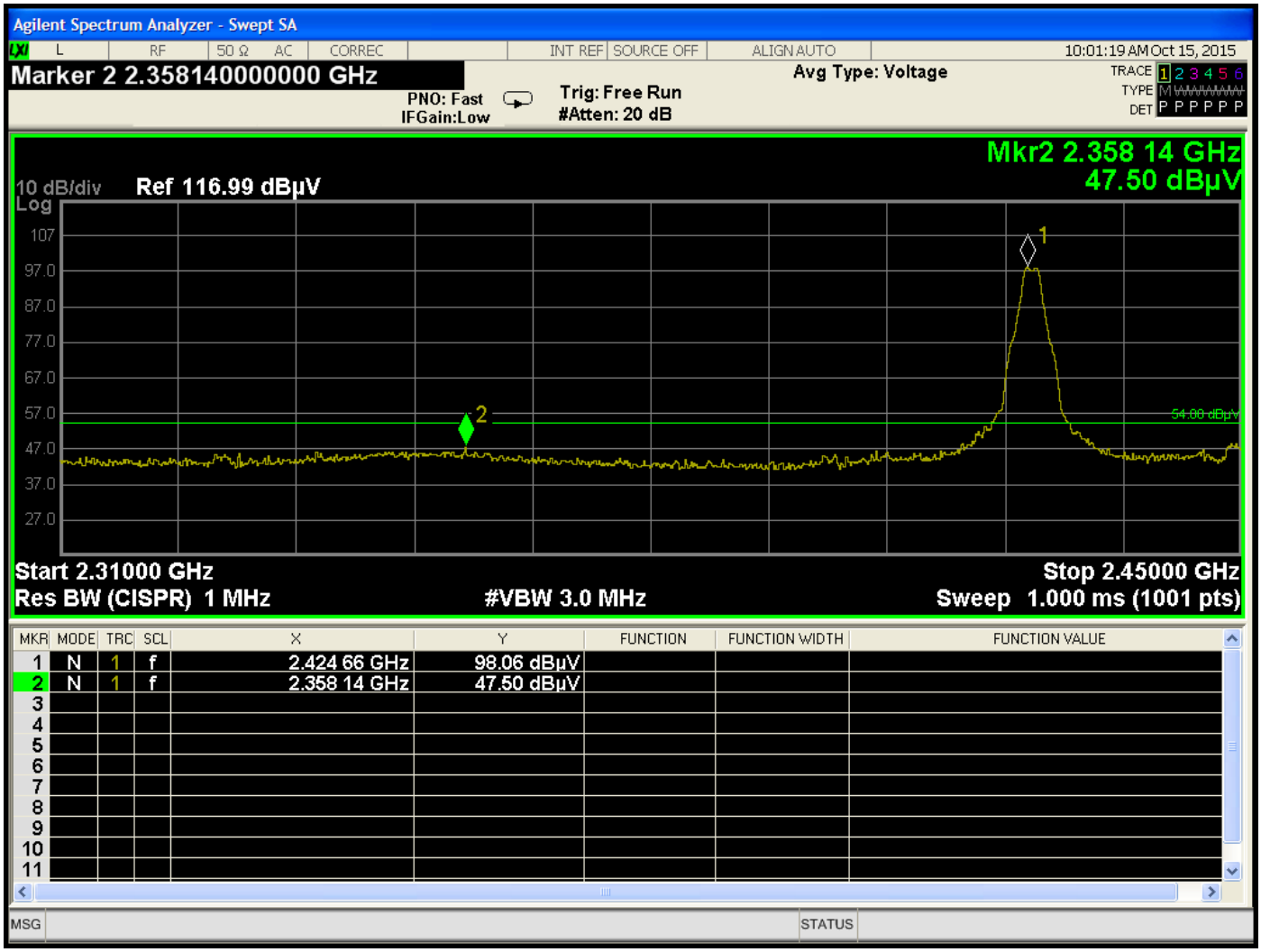
Date: 10/15/2015
Lab: D
Tested By: Kyle Fujimoto

Band Edges

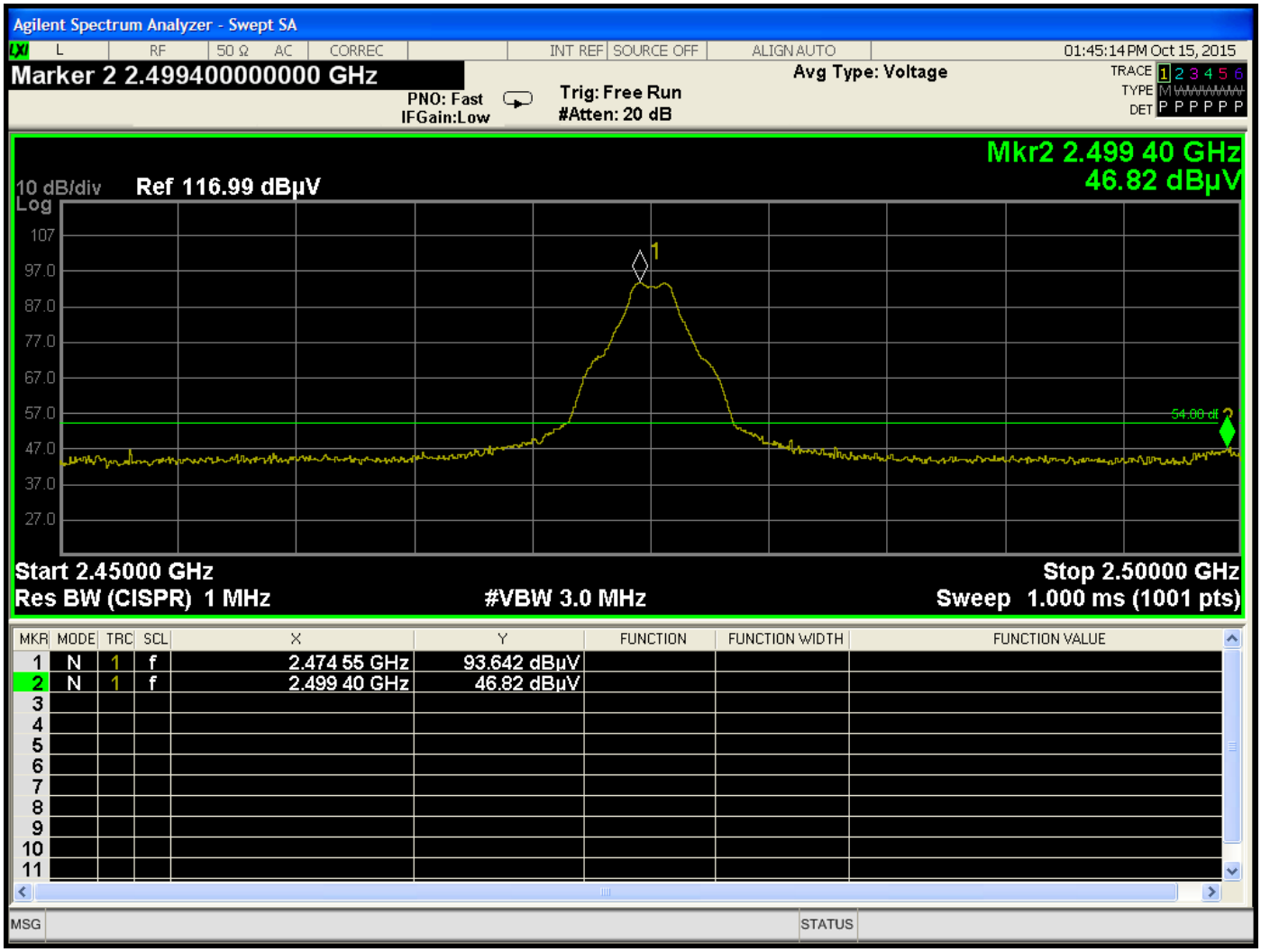
Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
2425	98.06	V	114.00	-15.94	Peak	27.75	142.95	Fundamental
2425	78.06	V	94.00	-15.94	Avg	27.75	142.95	of Low Channel
2358.14	47.5	V	74	-26.5	Peak	27.75	142.95	Band Edge of Low Channel
2358.14	27.5	V	54	-26.5	Avg	27.75	142.95	Z-Axis Worst Case
2425	96.60	H	114.00	-17.40	Peak	356.00	157.82	Fundamental of
2425	76.60	H	94.00	-17.40	Avg	356.00	157.82	Low Channel
2400	42.941	H	74	-31.059	Peak	356.00	157.82	Band Edge of Low Channel
2400	22.941	H	54	-31.059	Avg	356.00	157.82	Y-Axis Worst Case
2475	93.64	H	114.00	-20.36	Peak	200.00	206.95	Fundamental of
2475	73.64	H	94.00	-20.36	Avg	200.00	206.95	High Channel
2499.4	46.82	H	74	-27.18	Peak	200	206.95	Band Edge of High Channel
2499.4	26.82	H	54	-27.18	Avg	200	206.95	Y-Axis Worst Case
2475	96.42	V	114.00	-17.58	Peak	24.75	143.85	Fundamental of
2475	76.42	V	94.00	-17.58	Avg	24.75	143.85	High Channel
2499.5	49.57	V	74	-24.43	Peak	24.75	143.85	Band Edge of High Channel
2499.5	29.57	V	54	-24.43	Avg	24.75	143.85	Z-Axis Worst Case



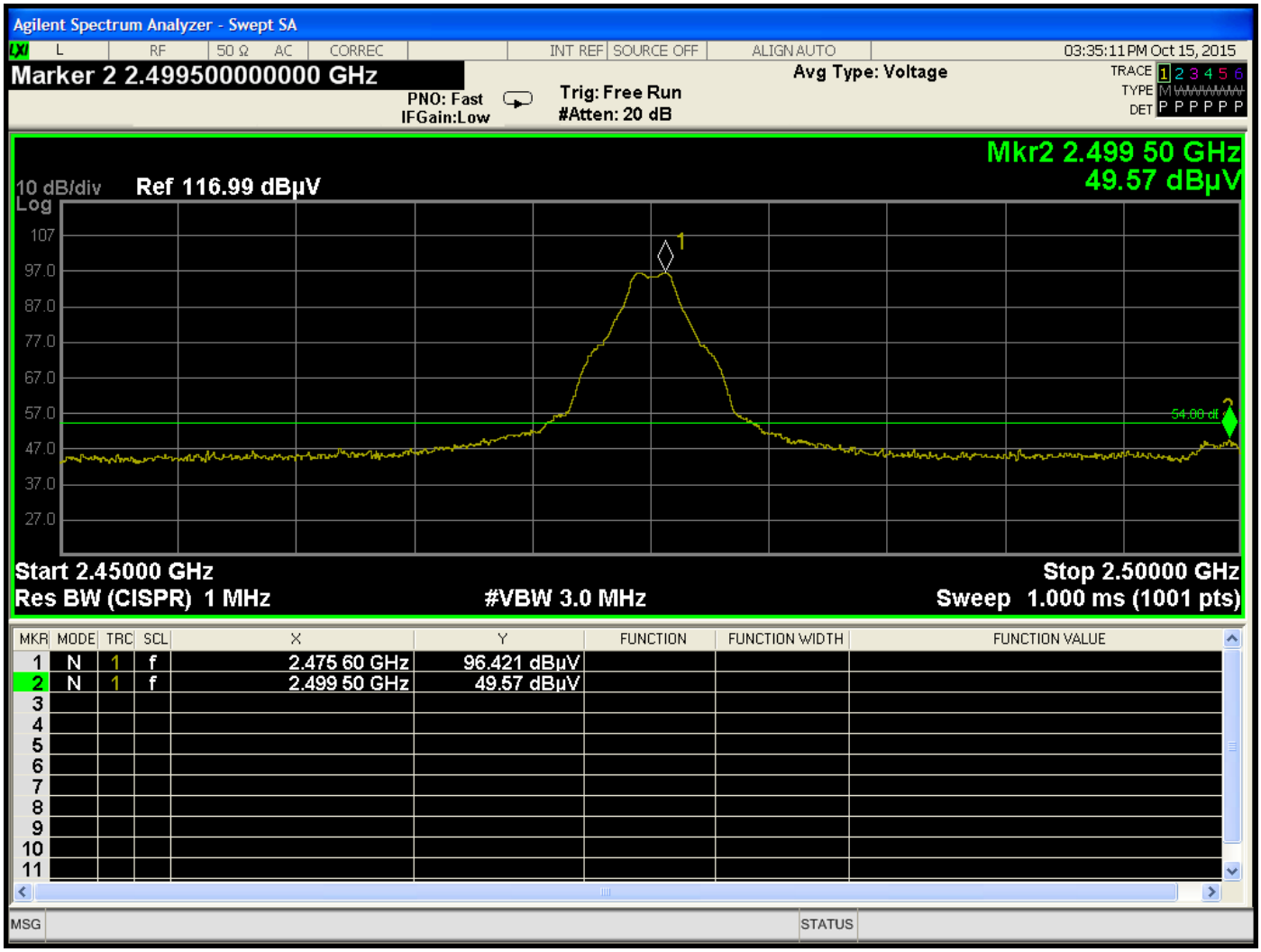
Band Edge – Low Channel – Horizontal Polarization – Y-Axis – Worst Case



Band Edge – Low Channel – Vertical Polarization – Z-Axis – Worst Case



Band Edge – High Channel – Horizontal Polarization – Y-Axis – Worst Case



Band Edge – High Channel – Vertical Polarization – Z-Axis – Worst Case

APPENDIX F

CLASS II PERMISSIVE CHANGE INFORMATION

The following change(s) were made to the EUT for the Class II Permissive Change:

1. Y2 (32.768kHz), C27, and C28 are not populated on the PCBA as the uC now supports an internal RTC signal. The only change for the uC part number is the revision of the TI CC2620 IC from a PG2.2 revision to PG2.3. As a result, the 32KHz crystal and its associated loading caps can be removed. The product model number changed from URC-2024BC0-R to URC-2024BC1-R.

DELTA FROM CLASS II PERSMISSIVE CHANGE TO ORIGINAL UNIT

FREQUENCY (MHz)	Worse case Delta from Test Report B50423D1 (dBuV/m)	Worst case Delta from Test Report B51015D1 (dBuV/m)	DELTA
2425.00	-13.90	-15.94	-2.04
4850.00	-13.40	-15.01	-1.61
7275.00	-7.41	-5.30	+2.11
9700.00	-17.92	-15.98	+1.94
2450.00	-13.75	-16.53	-2.78
4900.00	-13.74	-14.82	-1.08
7350.00	-6.85	-4.05	+2.08
9800.00	-16.46	-16.28	+0.18
2475.00	-13.91	-17.58	-3.67
4950.00	-10.68	-13.18	-2.50
7425.00	-6.26	-4.05	+2.21
9900.00	-16.95	-15.48	+1.47
2498.00 – 2499.50	-23.14	-24.43	-1.29
2352.00 – 2358.14	-30.82	-26.05	+4.77