

*FCC PART 15, SUBPART B and C
TEST REPORT**for***AMR-DONGLE****MODEL: RXR6000-1301F**

Prepared for

**SMK-LINK ELECTRONICS
3601-B CALLE TECATE
CAMARILLO, CALIFORNIA 93012**

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	REPORT	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 certification, approval or endorsement by NVLAP, NIST or any agency of the federal government.

Device Tested: AMR-Dongle
Model: RXR6000-1301F
S/N: N/A

Product Description: See Operational Description.

Modifications: The EUT was not modified during testing.

Customer: SMK-Link Electronics
3601-B Calle Tecate
Camarillo, California, 93012

Test Dates: January 18 and 23, 2016

Test Specifications: Emissions requirements
CFR Title 47, Part 15, Subpart B; and Subpart C, sections 15.205, 15.207, 15.209, and 15.249

Test Procedure: ANSI C63.4, ANSI C63.10

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 readings in relation to spec limit: 48.54 dBuV @ 0.235 MHz (*U = 2.86 dB)
2	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 Highest readings in relation to spec limit: 32.37 dBuV @ 30.70 MHz (*U = 4.54 dB)

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

1. PURPOSE

This document is a qualification test report based on the emissions tests performed on the AMR-Dongle, Model: RXR6000-1301F. The emissions measurements were performed according to the measurement procedure described in ANSI C63.4 and 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, 15.207, 15.209, and 15.249.



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

SMK-Link Electronics

Massoud Niakan
Daniel Grieder

G.M. Engineering & Program Management
RF/HW Engineer

Compatible Electronics Inc.

Kyle Fujimoto Test Engineer
James Ross Test Engineer

2.4 Date Test Sample was Received

The test sample was received on January 14, 2016.

2.5 Disposition of the Test Sample

The test sample has not been returned to SMK-Link Electronics 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
DNF	Do Not Fit
PCB	Printed Circuit Board
cm	Centimeter

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 for Testing Unlicensed Wireless Devices

4. DESCRIPTION OF TEST CONFIGURATION

4.1 Description of Test Configuration - Emissions

The AMR-Dongle, Model: RXR6000-1301F(EUT), was directly connected to the laptop computer. The laptop computer was also connected to a router, USB mouse, and AC Adapter via its ethernet, USB, and power ports, respectively.

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

The X orientation is when the EUT is parallel to the ground. The Y orientation is when the EUT is perpendicular to the ground mounted vertically. The Z orientation is when the EUT is perpendicular to the ground mounted horizontally.

The voltage was varied $\pm 15\%$ and the transmitting signal amplitude and frequency did not vary.

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. Please see Appendix E for the data sheets.

4.1.1 Cable Constructions and Termination

Cable 1

This is a 17-meter unshielded cable connecting the laptop computer to the router. The cable has an RJ-45 connector at each end.

Cable 2

This is a 1.5-meter braid shielded cable connecting the USB mouse to the laptop computer. The cable has a type 'A' USB connector at the laptop computer end and is hard wired into the USB mouse. The shield of the cable was grounded to the chassis via the connector. The cable has a molded ferrite at the laptop end.

Cable 3

This is a 2-meter unshielded cable connecting the AC adapter to the laptop computer. The cable has a 1-pin connector at the laptop computer 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
AMR-DONGLE	SMK-LINK ELECTRONICS	RXR6000-1301F	N/A	IE3AMRRX15
LAPTOP COMPUTER	DELL	PP22L	24098753773	N/A
AC ADAPTER FOR LAPTOP	DELL	FA65NSP-00	N/A	N/A
USB MOUSE	AGILENT TECHNOLOGIES	M-B0001	HS343HA026D	N/A
ROUTER	NETGEAR	FS105	1D52373709041	N/A

5.2 Emissions Test Equipment

EQUIPMENT TYPE	MANU-FACTURER	MODEL NUMBER	SERIAL NUMBER	CAL. DATE	CAL. CYCLE
RF RADIATED EMISSIONS TEST EQUIPMENT – LAB D					
TDK TestLab	TDK RF Solutions, Inc.	9.22	700145	N/A	N/A
Computer	Hewlett Packard	p6716f	MXX1030PX0	N/A	N/A
LCD Monitor	Hewlett Packard	52031a	3CQ046N3MG	N/A	N/A
EMI Receiver	Rohde & Schwarz	ESIB40	100194	December 4, 2014	2 Year
EMI Receiver, 20 Hz – 26.5 GHz	Agilent Technologies	N9038A	MY51100115	April 3, 2015	1 Year
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
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
RF CONDUCTED EMISSIONS TEST EQUIPMENT – LAB A					
Shield Room Test	Compatible Electronics	11CD	N/A	N/A	N/A
LISN	Com-Power	LI-215	12082	June 9, 2015	1 Year
LISN	Com-Power	LI-215	12090	June 9, 2015	1 Year
Transient Limiter	Com-Power	252A910	1	October 14, 2015	1 Year
Monitor	Hewlett Packard	D5258A	TW74500641	N/A	N/A
Computer	Hewlett Packard	4530	US91912319	N/A	N/A
Spectrum Analyzer – Main Section	Hewlett Packard	8566B	3638A08784	May 27, 2015	1 Year
Spectrum Analyzer – Display Section	Hewlett Packard	85662A	2648A14530	May 27, 2015	1 Year
Quasi-Peak Adapter	Hewlett Packard	85650A	2811A01363	May 27, 2015	1 Year

6. TEST SITE DESCRIPTION

6.1 Test Facility Description

Please refer to section 2.1 and 7.1 of this report for emissions test location.

6.2 EUT Mounting, Bonding and Grounding

For frequencies 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.

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

The EUT was grounded through the chassis of the laptop computer.

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

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

The conducted emissions from the EUT were maximized for operating mode as well as cable placement. The final data was collected under program control by the Shield Room Test 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.

The EUT was tested at 120 VAC. The six highest emissions are listed in Table 1.0.

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, Section 15.207 for conducted emissions.

7.1.2 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 $20 \log(\text{dwell time} / 100 \text{ ms})$. 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. 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 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 CONDUCTED EMISSION RESULTS
AMR-Dongle, Model: RXR6000-1301F

Frequency MHz	Corrected Reading* dBuV	Specification Limit dBuV	Delta (Cor. Reading – Spec. Limit) dB
0.235 (WL)	48.54	52.25	-3.72
3.456 (WL)	42.11	46.00	-3.89
0.307 (BL)	46.12	50.05	-3.93
0.238 (WL)	47.83	52.17	-4.34
0.228 (WL)	47.67	52.52	-4.85
3.419 (WL)	41.01	46.00	-4.99

Table 2.0 RADIATED EMISSION RESULTS
AMR-Dongle, Model: RXR6000-1301F

Frequency MHz	Corrected Reading* dBuV	Specification Limit dBuV	Delta (Cor. Reading – Spec. Limit) dB
30.70 (V)	32.37 (QP)	40.00	-7.63
37.40 (V)	28.94 (QP)	40.00	-11.06
45.70 (V)	27.90 (QP)	40.00	-12.10
60.20 (V)	29.08 (QP)	40.00	-10.92
9764 (Middle Channel) (X-Axis) (V)	39.50 (Avg)	54.00	-14.50
7323 (Middle Channel) (Y-Axis) (V)	39.45 (Avg)	54.00	-14.55

Notes:

- (H) Horizontal
- (V) Vertical
- (QP) Quasi-Peak
- (BL) Black Lead
- (WL) White Lead
- (Avg) Average

* The complete emissions data is given in Appendix E of this report.

8. CONCLUSIONS

The AMR-Dongle, Model: RXR6000-1301F (EUT), as tested, meets all of the specification limits defined in FCC Title 47, Part 15, Subpart B and Subpart C, sections 15.205, 15.207, 15.209, and 15.249.



APPENDIX A

LABORATORY ACCREDITATIONS AND RECOGNITIONS

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Agoura Division
2337 Troutdale Drive
Agoura, CA 91301
(818) 597-0600

Silverado Division
19121 El Toro Road
Silverado, CA 92676
(949) 589-0700

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

LABORATORY ACCREDITATIONS AND RECOGNITIONS



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

NVLAP listing links

[Agoura Division](#) / [Brea Division](#) / [Silverado/Lake Forest Division](#)

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

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



ANSI listing [CETCB](#)



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

US/EU MRA list [NIST MRA site](#)



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

APEC MRA list [NIST MRA site](#)

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



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



FCC Listing, from FCC OET site

[FCC test lab search](http://fjallfoss.fcc.gov/oetcf/eas/reports/TestFirmSearch.cfm) <http://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>

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

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.

No modifications were made to the EUT during the testing.



APPENDIX C

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

ADDITIONAL MODELS COVERED UNDER THIS REPORT

USED FOR THE PRIMARY TEST

AMR-Dongle
Model: RXR6000-1301F
S/N: N/A

ADDITIONALS MODELS COVERED
UNDER THIS REPORT

No additional models were covered under this report.



APPENDIX D

DIAGRAMS AND CHARTS

FIGURE 1: CONDUCTED EMISSIONS TEST SETUP

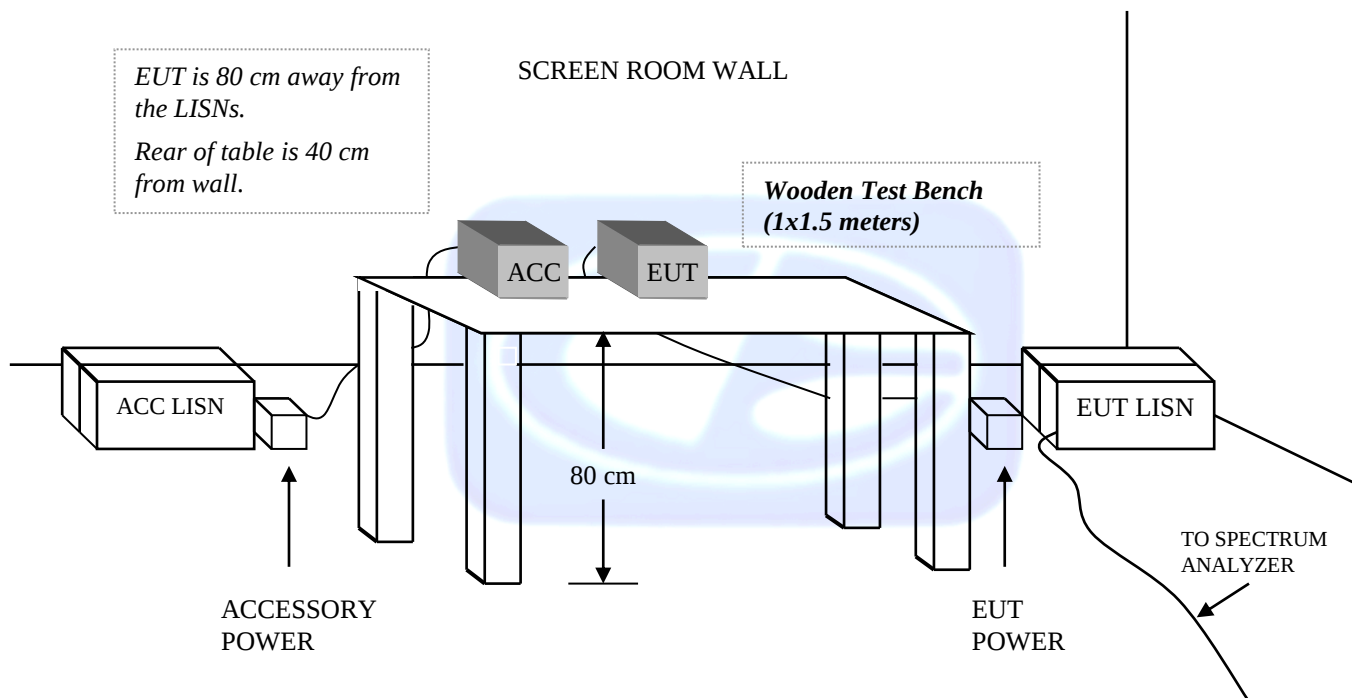
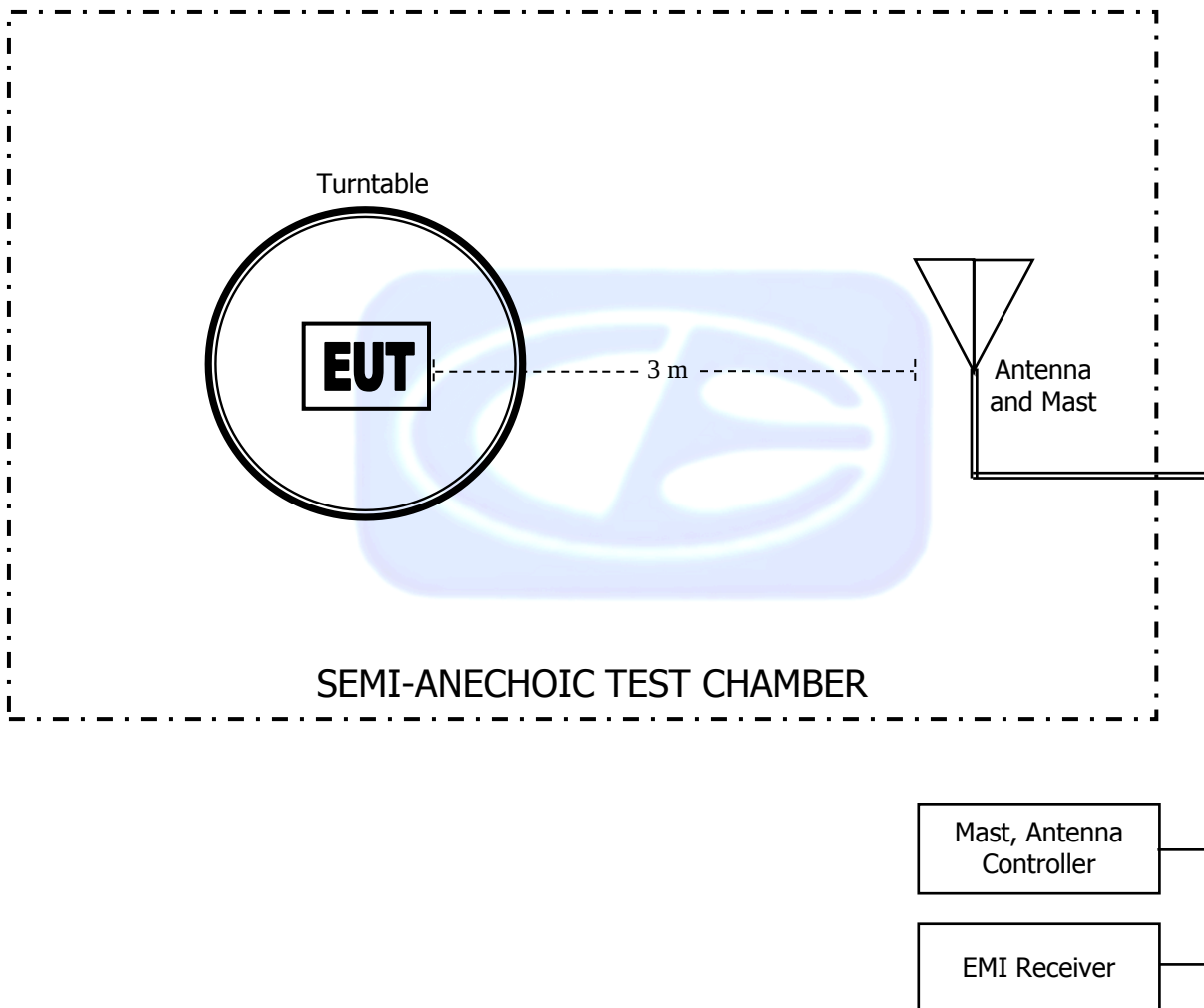


FIGURE 2: LAYOUT OF THE SEMI-ANECHOIC TEST CHAMBER



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**

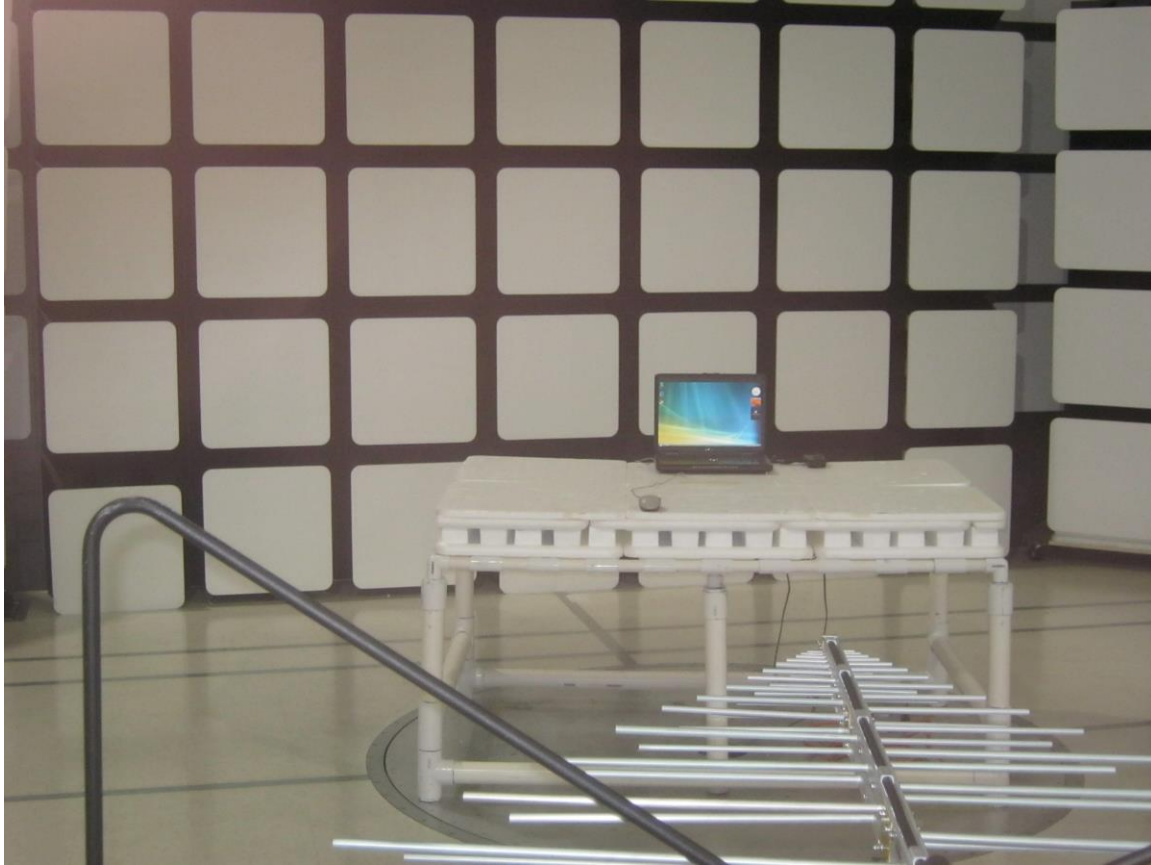
FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
1.0	39.76	6.0	38.77
1.1	40.46	6.5	38.46
1.2	40.05	7.0	38.27
1.3	40.58	7.5	38.77
1.4	39.50	8.0	39.25
1.5	39.92	8.5	38.63
1.6	40.40	9.0	39.58
1.7	40.10	9.5	42.12
1.8	40.49	10.0	38.53
1.9	38.86	11.0	40.21
2.0	41.53	12.0	41.15
2.5	41.05	13.0	40.51
3.0	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

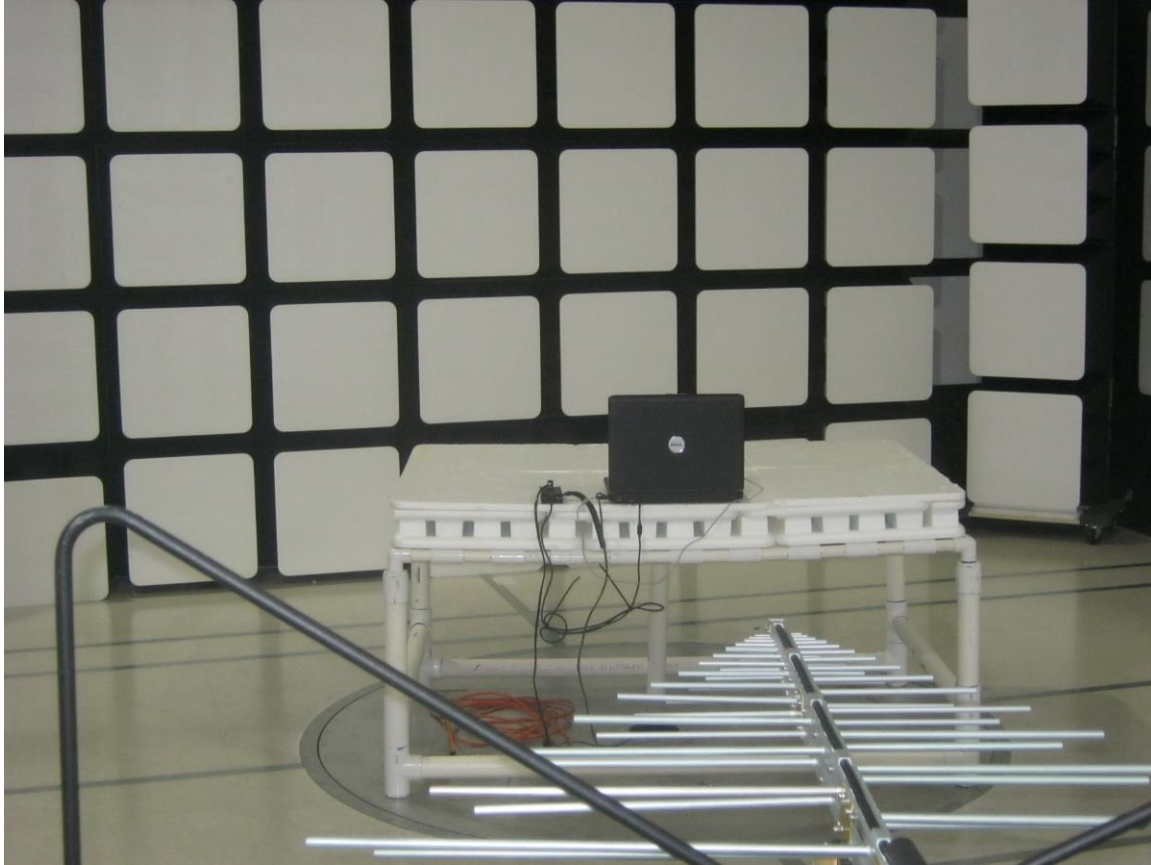


FRONT VIEW

SMK-LINK ELECTRONICS
AMR-DONGLE
MODEL: RXR6000-1301F

FCC SUBPART B AND C – RADIATED EMISSIONS – BELOW 1 GHz

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

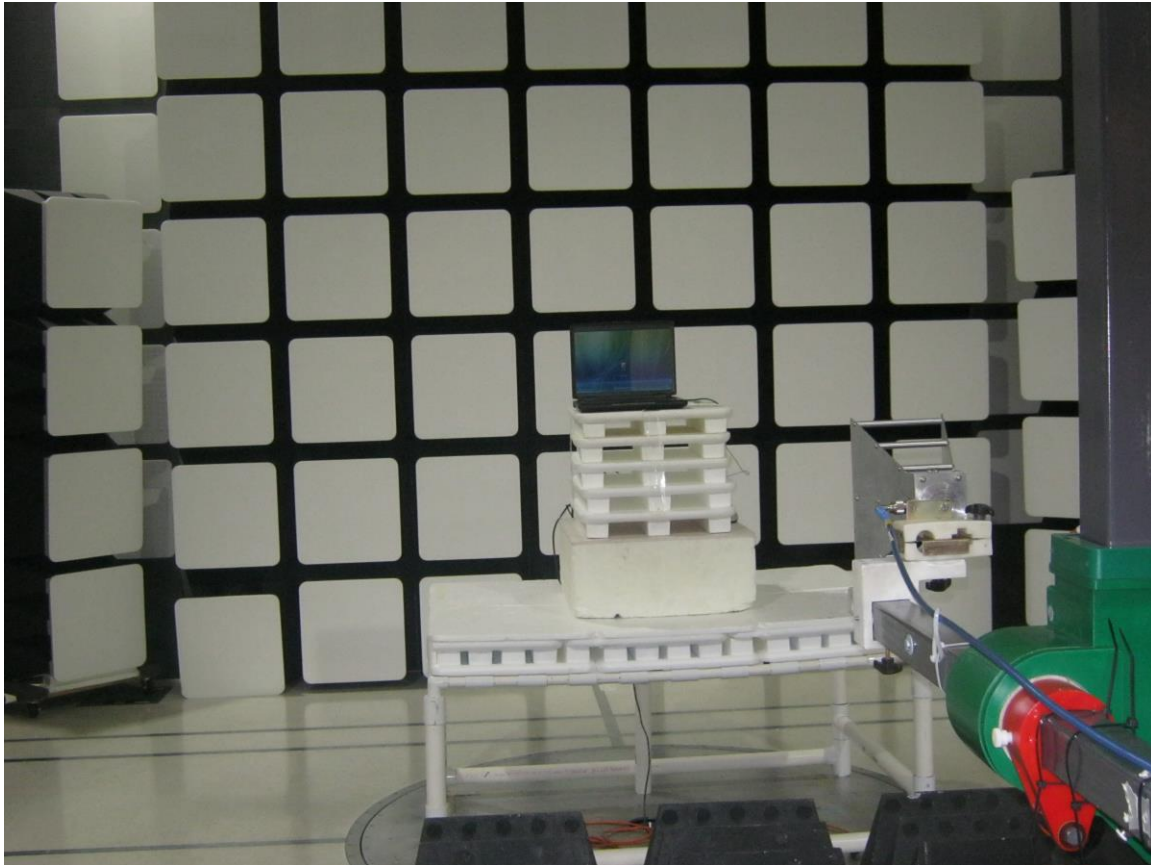


REAR VIEW

SMK-LINK ELECTRONICS
AMR-DONGLE
MODEL: RXR6000-1301F

FCC SUBPART B AND C – RADIATED EMISSIONS – BELOW 1 GHz

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

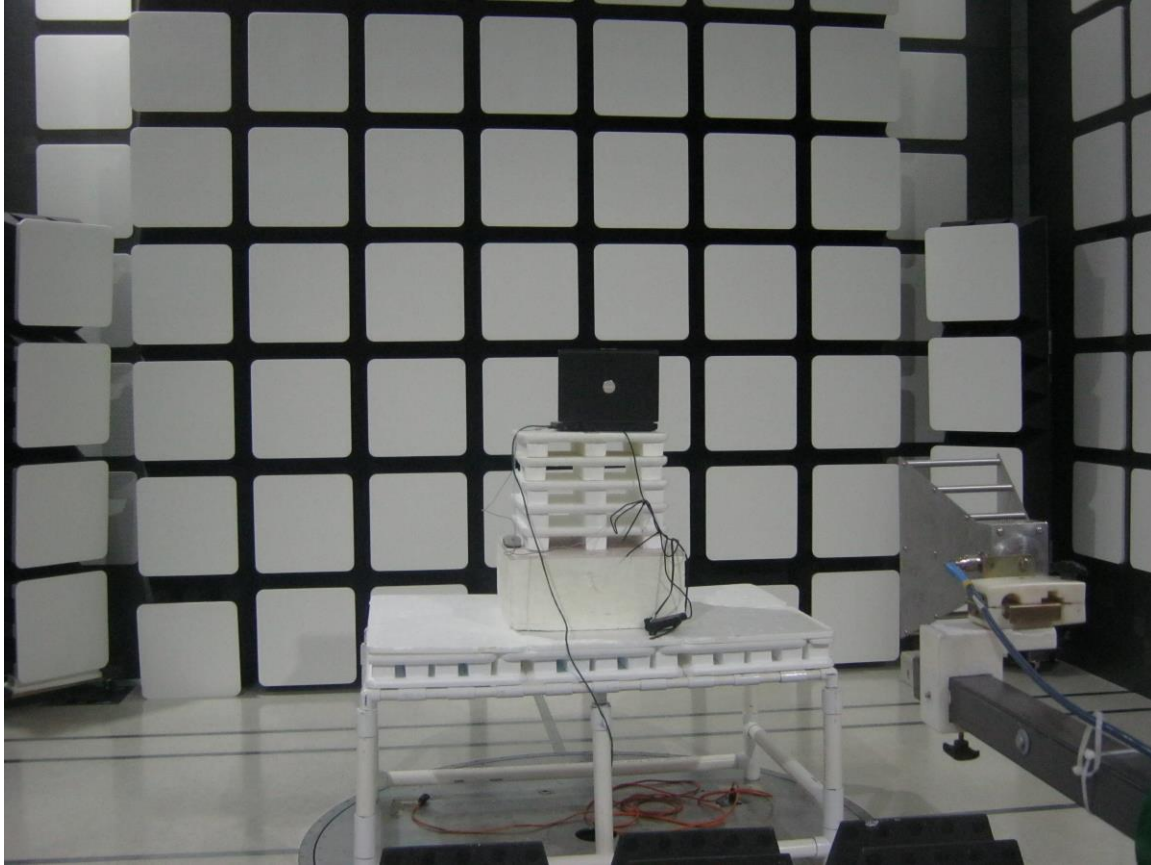


FRONT VIEW

SMK-LINK ELECTRONICS
AMR-DONGLE
MODEL: RXR6000-1301F

FCC SUBPART B AND C – RADIATED EMISSIONS – ABOVE 1 GHz

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



REAR VIEW

SMK-LINK ELECTRONICS
AMR-DONGLE
MODEL: RXR6000-1301F

FCC SUBPART B AND C – RADIATED EMISSIONS – ABOVE 1 GHz

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



FRONT VIEW

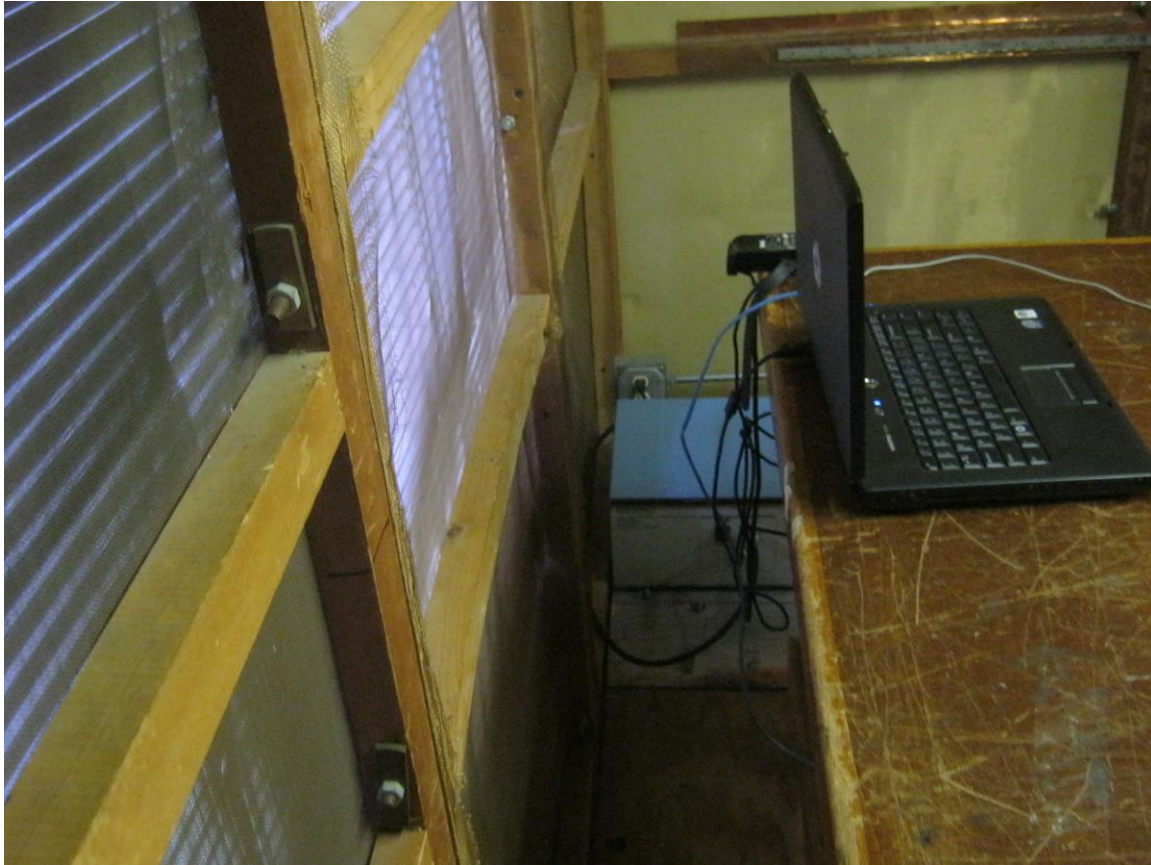
SMK-LINK ELECTRONICS

AMR-DONGLE

MODEL: RXR6000-1301F

FCC SUBPART B AND C – CONDUCTED EMISSIONS

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



REAR VIEW

SMK-LINK ELECTRONICS

AMR-DONGLE

MODEL: RXR6000-1301F

FCC SUBPART B AND C – CONDUCTED EMISSIONS

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

APPENDIX E

DATA SHEETS

FCC 15.249

SMK-Link Electronics
AMR-Dongle
Model: RXR6000-1301F

Date: 01/18/2016
Lab: D
Tested By: Kyle Fujimoto

**Harmonics - Low Channel
X-Axis**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4810	51.62	V	74.00	-22.38	Peak	19.25	138.74	
4810	31.62	V	54.00	-22.38	Avg	19.25	138.74	
7215	56.04	V	74.00	-17.96	Peak	355.00	152.25	
7215	36.04	V	54.00	-17.96	Avg	355.00	152.25	
9620	58.43	V	74.00	-15.57	Peak	25.25	112.23	
9620	38.43	V	54.00	-15.57	Avg	25.25	112.23	
12025								No Emissions
12025								Detected
14430								No Emissions
14430								Detected
16835								No Emissions
16835								Detected
19240								No Emissions
19240								Detected
21645								No Emissions
21645								Detected
24050								No Emissions
24050								Detected

FCC 15.249

SMK-Link Electronics
AMR-Dongle
Model: RXR6000-1301F

Date: 01/18/2016
Lab: D
Tested By: Kyle Fujimoto

**Harmonics - Low Channel
X-Axis**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4810	50.76	H	74.00	-23.24	Peak	21.25	168.83	
4810	30.76	H	54.00	-23.24	Avg	21.25	168.83	
7215	56.81	H	74.00	-17.19	Peak	37.00	130.50	
7215	36.81	H	54.00	-17.19	Avg	37.00	130.50	
9620	58.81	H	74.00	-15.19	Peak	26.75	140.53	
9620	38.81	H	54.00	-15.19	Avg	26.75	140.53	
12025								No Emissions
12025								Detected
14430								No Emissions
14430								Detected
16835								No Emissions
16835								Detected
19240								No Emissions
19240								Detected
21645								No Emissions
21645								Detected
24050								No Emissions
24050								Detected

FCC 15.249

SMK-Link Electronics
AMR-Dongle
Model: RXR6000-1301F

Date: 01/18/2016
Lab: D
Tested By: Kyle Fujimoto

Harmonics - Low Channel
Y-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4810	51.64	V	74.00	-22.36	Peak	205.75	151.52	
4810	31.64	V	54.00	-22.36	Avg	205.75	151.52	
7215	57.53	V	74.00	-16.47	Peak	277.75	142.86	
7215	37.53	V	54.00	-16.47	Avg	277.75	142.86	
9620	52.23	V	74.00	-21.77	Peak	175.75	131.25	
9620	32.23	V	54.00	-21.77	Avg	175.75	131.25	
12025								No Emissions
12025								Detected
14430								No Emissions
14430								Detected
16835								No Emissions
16835								Detected
19240								No Emissions
19240								Detected
21645								No Emissions
21645								Detected
24050								No Emissions
24050								Detected

FCC 15.249

SMK-Link Electronics
 AMR-Dongle
 Model: RXR6000-1301F

Date: 01/18/2016
 Lab: D
 Tested By: Kyle Fujimoto

Harmonics - Low Channel
Y-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4810	59.25	H	74.00	-14.75	Peak	154.00	115.58	
4810	39.25	H	54.00	-14.75	Avg	154.00	115.58	
7215	51.48	H	74.00	-22.52	Peak	113.00	130.38	
7215	31.48	H	54.00	-22.52	Avg	113.00	130.38	
9620	57.71	H	74.00	-16.29	Peak	158.50	152.05	
9620	37.71	H	54.00	-16.29	Avg	158.50	152.05	
12025								No Emissions
12025								Detected
14430								No Emissions
14430								Detected
16835								No Emissions
16835								Detected
19240								No Emissions
19240								Detected
21645								No Emissions
21645								Detected
24050								No Emissions
24050								Detected

FCC 15.249

SMK-Link Electronics
AMR-Dongle
Model: RXR6000-1301F

Date: 01/18/2016
Lab: D
Tested By: Kyle Fujimoto

Harmonics - Low Channel
Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4810	59.06	V	74.00	-14.94	Peak	33.50	152.11	
4810	39.06	V	54.00	-14.94	Avg	33.50	152.11	
7215	56.75	V	74.00	-17.25	Peak	19.75	119.16	
7215	36.75	V	54.00	-17.25	Avg	19.75	119.16	
9620	58.08	V	74.00	-15.92	Peak	137.00	140.53	
9620	38.08	V	54.00	-15.92	Avg	137.00	140.53	
12025								No Emissions
12025								Detected
14430								No Emissions
14430								Detected
16835								No Emissions
16835								Detected
19240								No Emissions
19240								Detected
21645								No Emissions
21645								Detected
24050								No Emissions
24050								Detected

FCC 15.249

SMK-Link Electronics
AMR-Dongle
Model: RXR6000-1301F

Date: 01/18/2016
Lab: D
Tested By: Kyle Fujimoto

**Harmonics - Low Channel
Z-Axis**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4810	51.39	H	74.00	-22.61	Peak	290.75	152.11	
4810	31.39	H	54.00	-22.61	Avg	290.75	152.11	
7215	57.18	H	74.00	-16.82	Peak	61.00	162.55	
7215	37.18	H	54.00	-16.82	Avg	61.00	162.55	
9620	58.32	H	74.00	-15.68	Peak	5.00	167.58	
9620	38.32	H	54.00	-15.68	Avg	5.00	167.58	
12025								No Emissions
12025								Detected
14430								No Emissions
14430								Detected
16835								No Emissions
16835								Detected
19240								No Emissions
19240								Detected
21645								No Emissions
21645								Detected
24050								No Emissions
24050								Detected

FCC 15.249

SMK-Link Electronics
AMR-Dongle
Model: RXR6000-1301F

Date: 01/18/2016
Lab: D
Tested By: Kyle Fujimoto

**Harmonics - Middle Channel
X-Axis**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4882	53.13	V	74.00	-20.87	Peak	67.50	129.49	
4882	33.13	V	54.00	-20.87	Avg	67.50	129.49	
7323	57.39	V	74.00	-16.61	Peak	130.00	105.61	
7323	37.39	V	54.00	-16.61	Avg	130.00	105.61	
9764	59.50	V	74.00	-14.50	Peak	281.00	116.71	
9764	39.50	V	54.00	-14.50	Avg	281.00	116.71	
12205								No Emissions
12205								Detected
14646								No Emissions
14646								Detected
17087								No Emissions
17087								Detected
19528								No Emissions
19528								Detected
21969								No Emissions
21969								Detected
24410								No Emissions
24410								Detected

FCC 15.249

SMK-Link Electronics
AMR-Dongle
Model: RXR6000-1301F

Date: 01/18/2016
Lab: D
Tested By: Kyle Fujimoto

**Harmonics - Middle Channel
X-Axis**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4882	59.56	H	74.00	-14.44	Peak	115.50	133.37	
4882	39.56	H	54.00	-14.44	Avg	115.50	133.37	
7323	52.72	H	74.00	-21.28	Peak	264.00	146.50	
7323	32.72	H	54.00	-21.28	Avg	264.00	146.50	
9764	58.63	H	74.00	-15.37	Peak	345.25	127.52	
9764	38.63	H	54.00	-15.37	Avg	345.25	127.52	
12205								No Emissions
12205								Detected
14646								No Emissions
14646								Detected
17087								No Emissions
17087								Detected
19528								No Emissions
19528								Detected
21969								No Emissions
21969								Detected
24410								No Emissions
24410								Detected

FCC 15.249

SMK-Link Electronics
AMR-Dongle
Model: RXR6000-1301F

Date: 01/18/2016
Lab: D
Tested By: Kyle Fujimoto

Harmonics - Middle Channel

Y-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4882	52.37	V	74.00	-21.63	Peak	301.00	111.70	
4882	32.37	V	54.00	-21.63	Avg	301.00	111.70	
7323	59.45	V	74.00	-14.55	Peak	195.50	121.50	
7323	39.45	V	54.00	-14.55	Avg	195.50	121.50	
9764	59.45	V	74.00	-14.55	Peak	224.75	102.56	
9764	39.45	V	54.00	-14.55	Avg	224.75	102.56	
12205								No Emissions
12205								Detected
14646								No Emissions
14646								Detected
17087								No Emissions
17087								Detected
19528								No Emissions
19528								Detected
21969								No Emissions
21969								Detected
24410								No Emissions
24410								Detected

FCC 15.249

SMK-Link Electronics
AMR-Dongle
Model: RXR6000-1301F

Date: 01/18/2016
Lab: D
Tested By: Kyle Fujimoto

Harmonics - Middle Channel
Y-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4882	52.59	H	74.00	-21.41	Peak	115.25	172.47	
4882	32.59	H	54.00	-21.41	Avg	115.25	172.47	
7323	57.66	H	74.00	-16.34	Peak	280.25	157.01	
7323	37.66	H	54.00	-16.34	Avg	280.25	157.01	
9764	59.85	H	74.00	-14.15	Peak	129.25	155.02	
9764	39.85	H	54.00	-14.15	Avg	129.25	155.02	
12205								No Emissions Detected
14646								No Emissions Detected
17087								No Emissions Detected
19528								No Emissions Detected
21969								No Emissions Detected
24410								No Emissions Detected

FCC 15.249

SMK-Link Electronics
 AMR-Dongle
 Model: RXR6000-1301F

Date: 01/18/2016
 Lab: D
 Tested By: Kyle Fujimoto

Harmonics - Middle Channel
Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4882	51.39	V	74.00	-22.61	Peak	104.25	104.95	
4882	31.39	V	54.00	-22.61	Avg	104.25	104.95	
7323	57.68	V	74.00	-16.32	Peak	45.25	124.23	
7323	37.68	V	54.00	-16.32	Avg	45.25	124.23	
9764	58.65	V	74.00	-15.35	Peak	209.25	124.23	
9764	38.65	V	54.00	-15.35	Avg	209.25	124.23	
12205								No Emissions
12205								Detected
14646								No Emissions
14646								Detected
17087								No Emissions
17087								Detected
19528								No Emissions
19528								Detected
21969								No Emissions
21969								Detected
24410								No Emissions
24410								Detected

FCC 15.249

SMK-Link Electronics
AMR-Dongle
Model: RXR6000-1301F

Date: 01/18/2016
Lab: D
Tested By: Kyle Fujimoto

Harmonics - Middle Channel
Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4882	54.11	H	74.00	-19.89	Peak	310.50	151.46	
4882	34.11	H	54.00	-19.89	Avg	310.50	151.46	
7323	57.86	H	74.00	-16.14	Peak	164.25	133.37	
7323	37.86	H	54.00	-16.14	Avg	164.25	133.37	
9764	58.62	H	74.00	-15.38	Peak	49.25	151.25	
9764	38.62	H	54.00	-15.38	Avg	49.25	151.25	
12205								No Emissions
12205								Detected
14646								No Emissions
14646								Detected
17087								No Emissions
17087								Detected
19528								No Emissions
19528								Detected
21969								No Emissions
21969								Detected
24410								No Emissions
24410								Detected

FCC 15.249

SMK-Link Electronics
AMR-Dongle
Model: RXR6000-1301F

Date: 01/18/2016
Lab: D
Tested By: Kyle Fujimoto

**Harmonics - High Channel
X-Axis**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4940	51.60	V	74.00	-22.40	Peak	166.75	223.94	
4940	31.60	V	54.00	-22.40	Avg	166.75	223.94	
7410	57.14	V	74.00	-16.86	Peak	27.75	210.25	
7410	37.14	V	54.00	-16.86	Avg	27.75	210.25	
9880	58.59	V	74.00	-15.41	Peak	189.50	225.25	
9880	38.59	V	54.00	-15.41	Avg	189.50	225.25	
12350								No Emissions
12350								Detected
14820								No Emissions
14820								Detected
17290								No Emissions
17290								Detected
19760								No Emissions
19760								Detected
22230								No Emissions
22230								Detected
24700								No Emissions
24700								Detected

FCC 15.249

SMK-Link Electronics
AMR-Dongle
Model: RXR6000-1301F

Date: 01/18/2016
Lab: D
Tested By: Kyle Fujimoto

Harmonics - High Channel
X-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4940	52.25	H	74.00	-21.75	Peak	238.00	144.77	
4940	32.25	H	54.00	-21.75	Avg	238.00	144.77	
7410	57.29	H	74.00	-16.71	Peak	213.75	177.37	
7410	37.29	H	54.00	-16.71	Avg	213.75	177.37	
9880	58.63	H	74.00	-15.38	Peak	287.75	160.47	
9880	38.63	H	54.00	-15.38	Avg	287.75	160.47	
12350								No Emissions
12350								Detected
14820								No Emissions
14820								Detected
17290								No Emissions
17290								Detected
19760								No Emissions
19760								Detected
22230								No Emissions
22230								Detected
24700								No Emissions
24700								Detected

FCC 15.249

SMK-Link Electronics
AMR-Dongle
Model: RXR6000-1301F

Date: 01/18/2016
Lab: D
Tested By: Kyle Fujimoto

**Harmonics - High Channel
Y-Axis**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4940	53.86	V	74.00	-20.14	Peak	165.50	113.31	
4940	33.86	V	54.00	-20.14	Avg	165.50	113.31	
7410	57.05	V	74.00	-16.95	Peak	239.75	107.22	
7410	37.05	V	54.00	-16.95	Avg	239.75	107.22	
9880	58.97	V	74.00	-15.03	Peak	268.25	124.89	
9880	38.97	V	54.00	-15.03	Avg	268.25	124.89	
12350								No Emissions
12350								Detected
14820								No Emissions
14820								Detected
17290								No Emissions
17290								Detected
19760								No Emissions
19760								Detected
22230								No Emissions
22230								Detected
24700								No Emissions
24700								Detected

FCC 15.249

SMK-Link Electronics
AMR-Dongle
Model: RXR6000-1301F

Date: 01/18/2016
Lab: D
Tested By: Kyle Fujimoto

Harmonics - High Channel

Y-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4940	54.89	H	74.00	-19.11	Peak	153.25	164.35	
4940	34.89	H	54.00	-19.11	Avg	153.25	164.35	
7410	57.63	H	74.00	-16.37	Peak	155.58	66.50	
7410	37.63	H	54.00	-16.37	Avg	155.58	66.50	
9880	58.36	H	74.00	-15.64	Peak	145.00	155.55	
9880	38.36	H	54.00	-15.64	Avg	145.00	155.55	
12350								No Emissions
12350								Detected
14820								No Emissions
14820								Detected
17290								No Emissions
17290								Detected
19760								No Emissions
19760								Detected
22230								No Emissions
22230								Detected
24700								No Emissions
24700								Detected

FCC 15.249

SMK-Link Electronics
 AMR-Dongle
 Model: RXR6000-1301F

Date: 01/18/2016
 Lab: D
 Tested By: Kyle Fujimoto

Harmonics - High Channel
Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4940	52.27	V	74.00	-21.73	Peak	189.00	163.88	
4940	32.27	V	54.00	-21.73	Avg	189.00	163.88	
7410	57.05	V	74.00	-16.95	Peak	140.50	129.55	
7410	37.05	V	54.00	-16.95	Avg	140.50	129.55	
9880	58.99	V	74.00	-15.01	Peak	21.50	131.55	
9880	38.99	V	54.00	-15.01	Avg	21.50	131.55	
12350								No Emissions
12350								Detected
14820								No Emissions
14820								Detected
17290								No Emissions
17290								Detected
19760								No Emissions
19760								Detected
22230								No Emissions
22230								Detected
24700								No Emissions
24700								Detected

FCC 15.249

SMK-Link Electronics
AMR-Dongle
Model: RXR6000-1301F

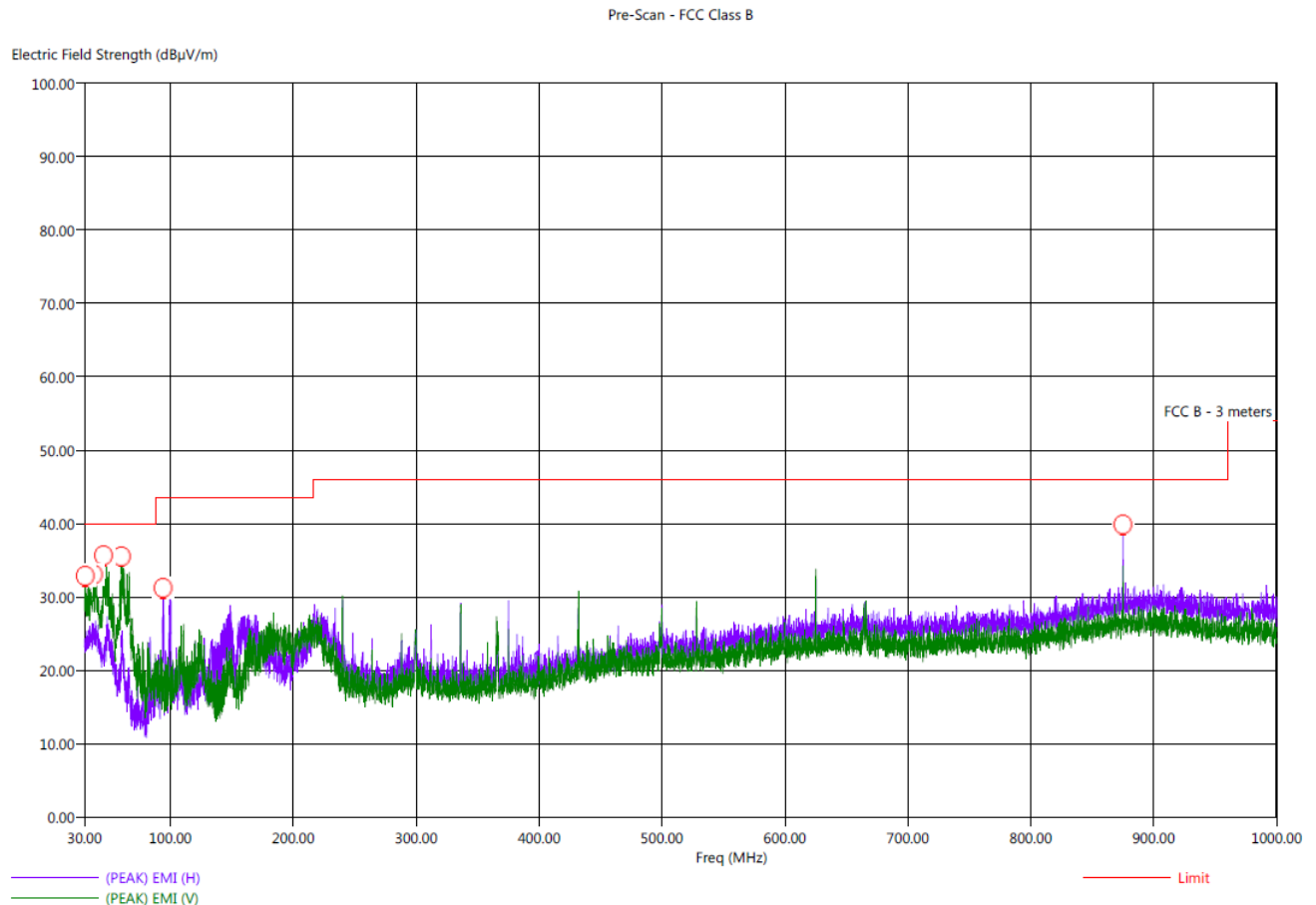
Date: 01/18/2016
Lab: D
Tested By: Kyle Fujimoto

Harmonics - High Channel
Z-Axis

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4940	52.39	H	74.00	-21.61	Peak	76.75	135.22	
4940	32.39	H	54.00	-21.61	Avg	76.75	135.22	
7410	57.65	H	74.00	-16.35	Peak	203.25	125.38	
7410	37.65	H	54.00	-16.35	Avg	203.25	125.38	
9880	59.08	H	74.00	-14.92	Peak	204.50	126.34	
9880	39.08	H	54.00	-14.92	Avg	204.50	126.34	
12350								No Emissions
12350								Detected
14820								No Emissions
14820								Detected
17290								No Emissions
17290								Detected
19760								No Emissions
19760								Detected
22230								No Emissions
22230								Detected
24700								No Emissions
24700								Detected

Title: Pre-Scan - FCC Class B
File: Agilent - Radiated Pre-Scan - 30-1000 MHz - FCC Class B - AMP - X-Axis - 01-14-2016.set
Operator: Kyle Fujimoto
EUT Type: AMR-Dongle
EUT Condition: The EUT is continuously transmitting - X-Axis
Comments: Company: SMK-Link Electronics
Model: RXR6000-1301F
S/N: N/A

1/18/2016 8:17:47 AM
Sequence: Preliminary Scan



X-axis is worst case axis

No additional spurious emissions found between 10 kHz – 30 MHz and 1 GHz – 25 GHz.

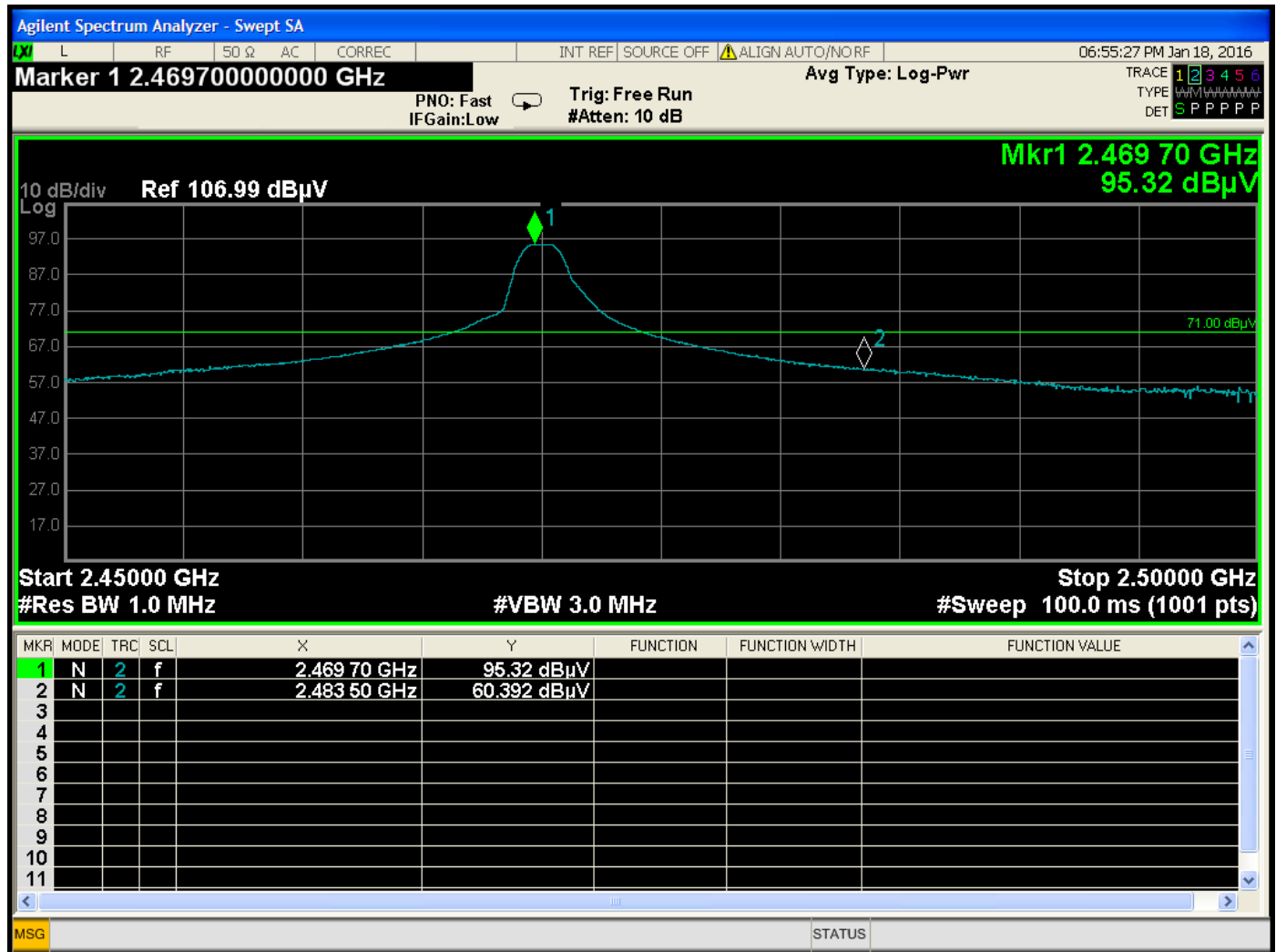
Title: Radiated Final - 30-1000 MHz - FCC Class B
File: Agilent - Radiated Final Scan - 30-1000 MHz - FCC Class B - AMR - X-Axis - 01-18-2016.set
Operator: Kyle Fujimoto
EUT Type: AMR-Dongle
EUT Condition: The EUT is continuously transmitting - X-Axis Worst Case
Customer: SMK-Link Electronics
Model: RXR6000-1301F
S/N: N/A

1/18/2016 8:57:22 AM
Sequence: Final Measurements

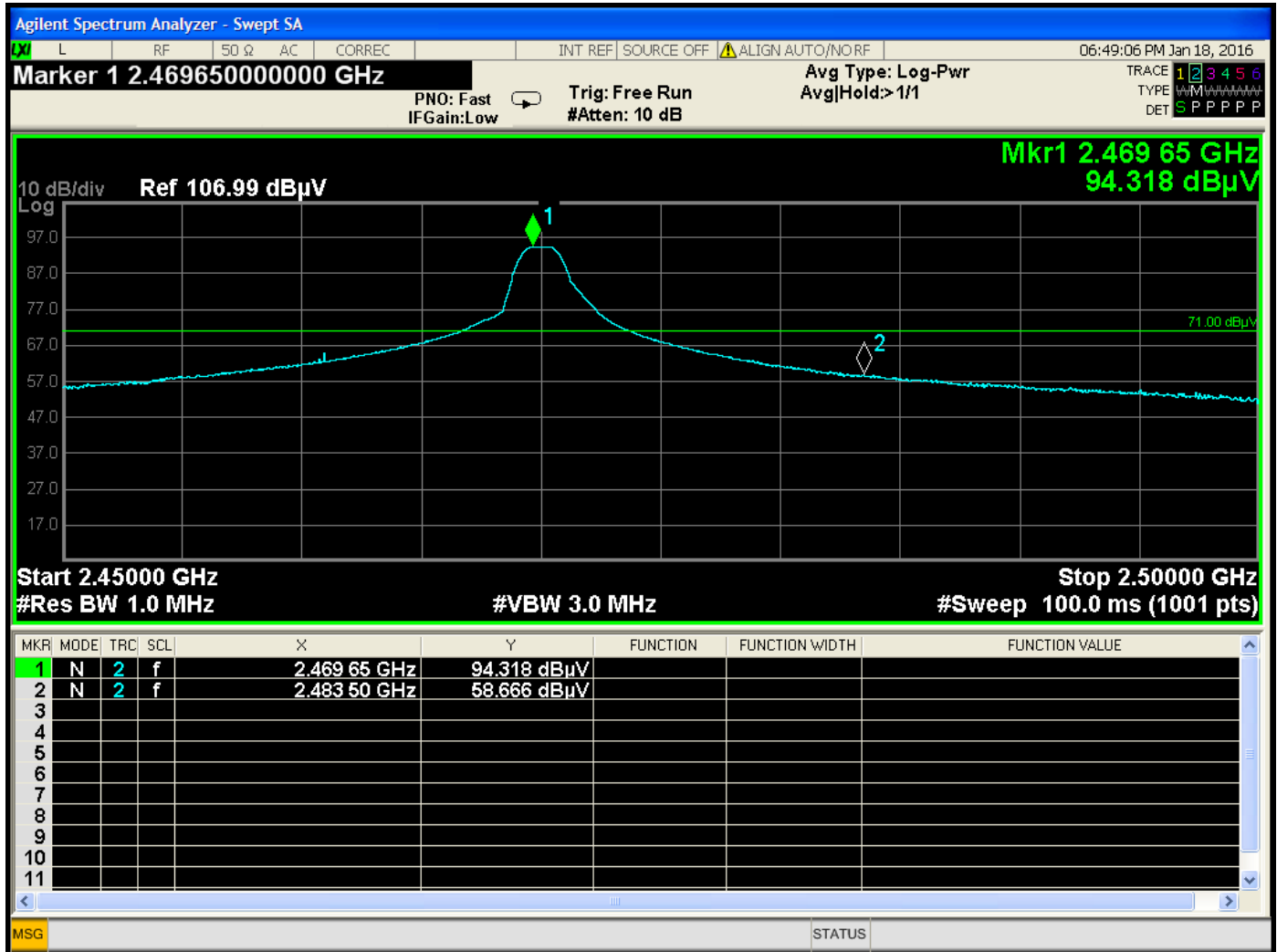
Final-Scan - FCC Class B

Freq (MHz)	Pol	(PEAK) EMI (dBµV/m)	(QP) EMI (dBµV/m)	(PEAK) Margin (dB)	(QP) Margin (dB)	Limit (dBµV/m)	Transducer (dB)	Cable (dB)	Ttbl Agl (deg)	Twr Ht (cm)
30.70	V	35.35	32.37	-4.65	-7.63	40.00	24.04	0.36	331.00	143.52
37.40	V	32.42	28.94	-7.58	-11.06	40.00	24.87	0.41	5.75	159.46
45.70	V	31.05	27.90	-8.95	-12.10	40.00	21.65	0.47	333.25	159.52
60.20	V	31.57	29.08	-8.43	-10.92	40.00	15.34	0.55	301.00	143.28
94.10	H	21.20	18.01	-28.80	-31.99	43.50	13.57	0.69	282.75	352.05
875.00	H	40.04	37.95	-16.96	-19.05	46.00	26.60	2.58	55.50	111.70

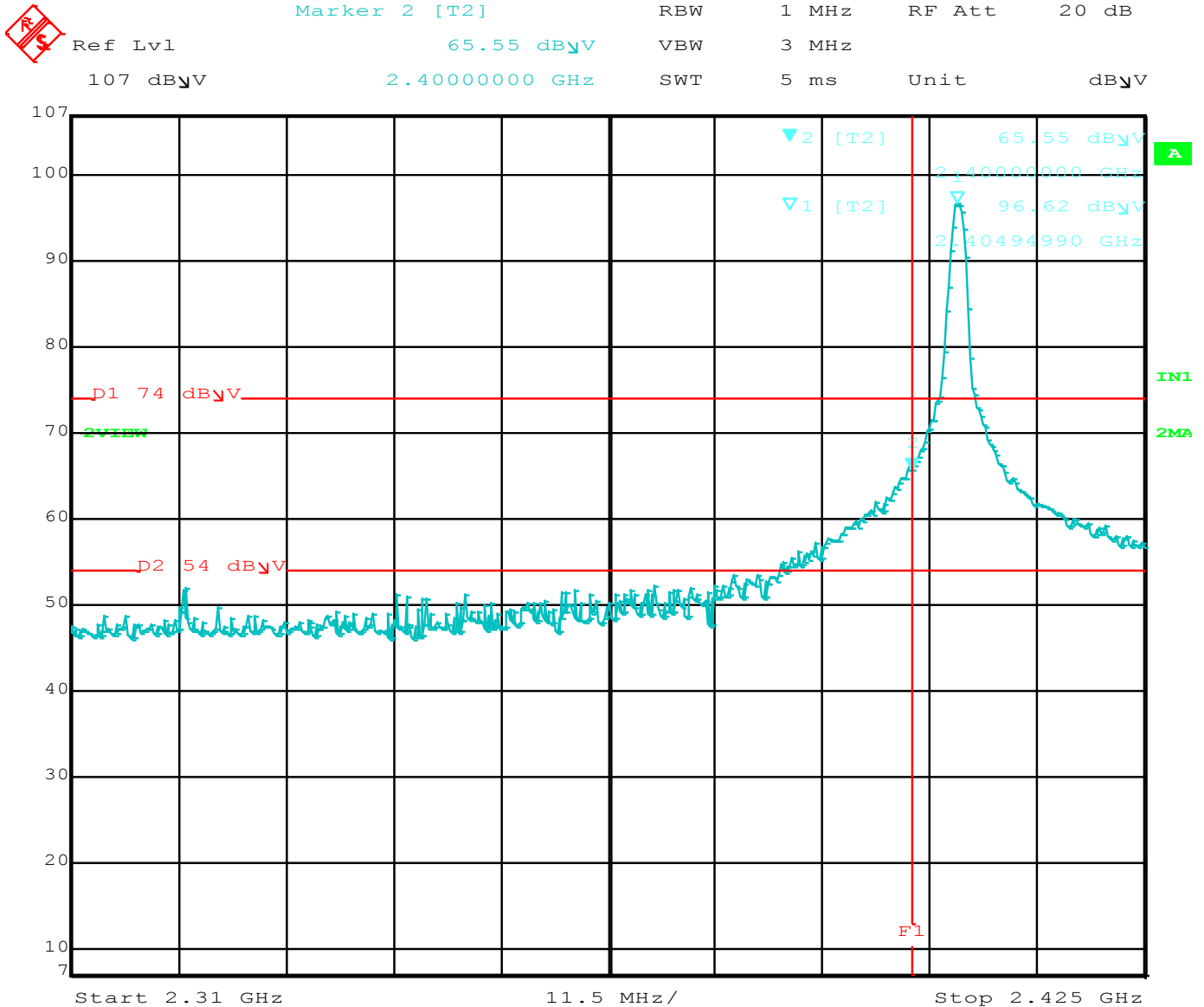




Band Edge – High Channel – Horizontal Polarization – Z-Axis Worst Case

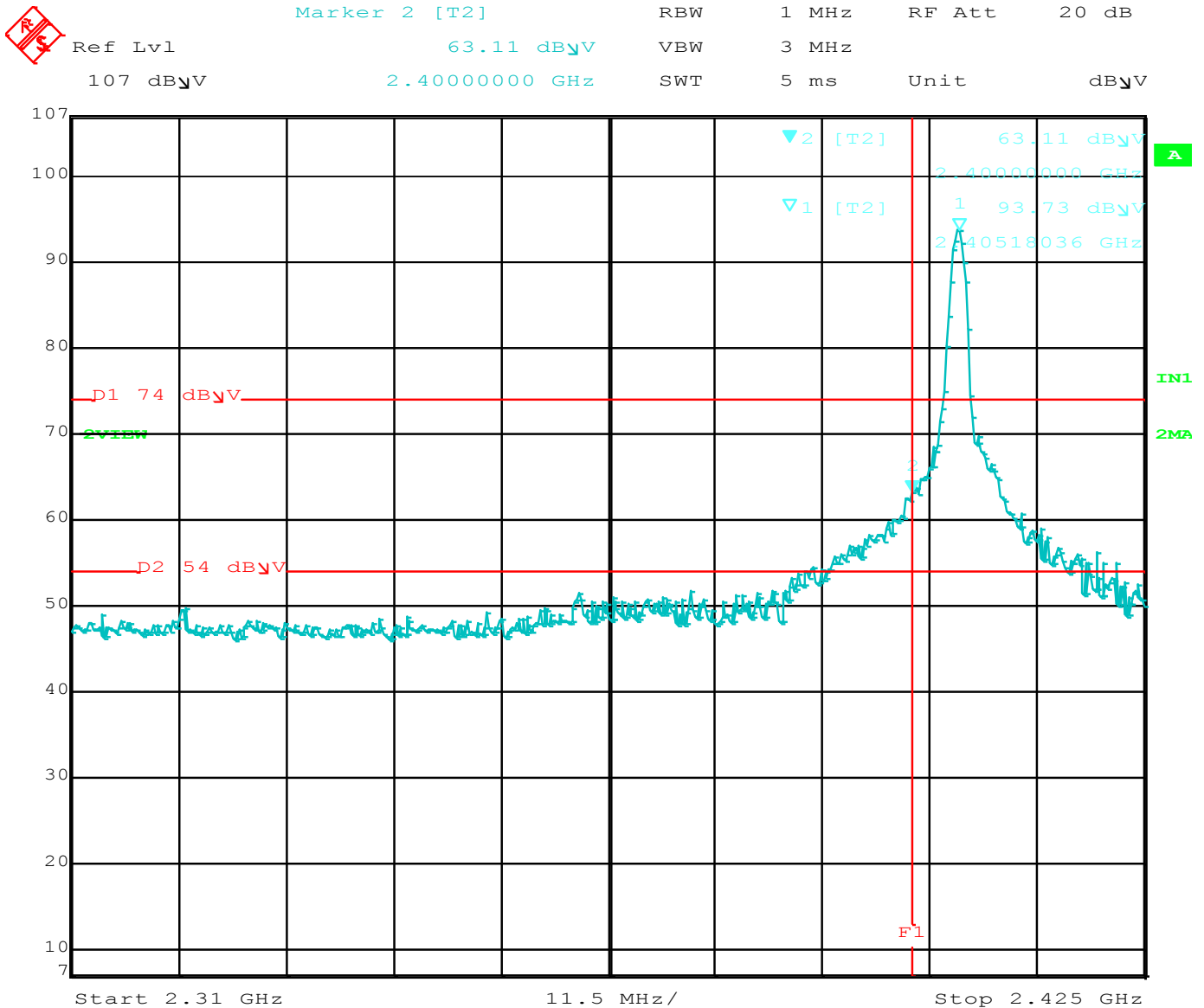


Band Edge – High Channel – Vertical Polarization – Y-Axis Worst Case



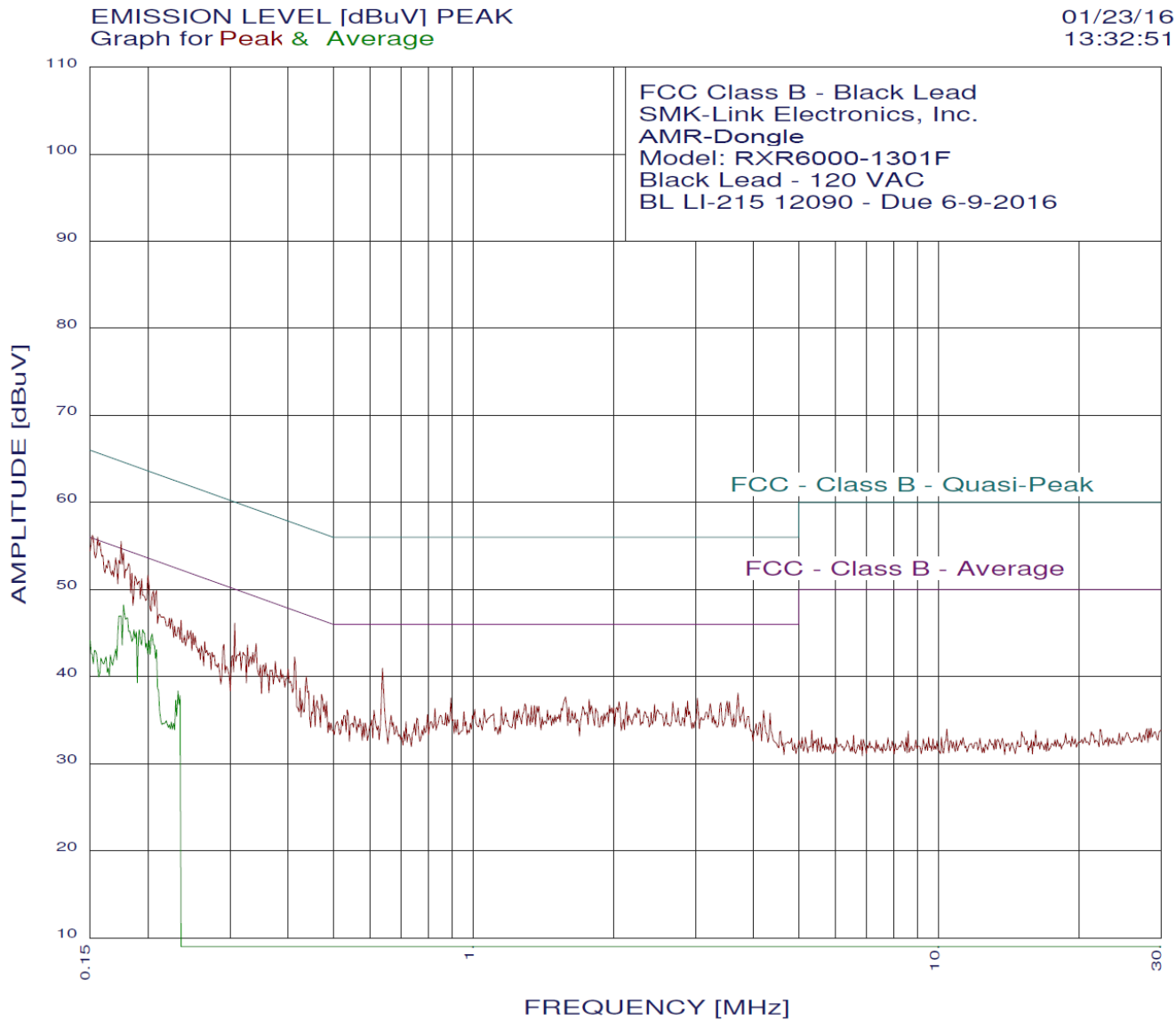
Date: 18.JAN.2016 11:04:12

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



Date: 18.JAN.2016 11:12:48

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



01/23/16 13:32:51

FCC Class B - Black Lead
SMK-Link Electronics, Inc.
AMR-Dongle
Model: RXR6000-1301F
Black Lead - 120 VAC
BL LI-215 12090 - Due 6-9-2016
Test Engineer : Kyle Fujimoto

39 highest peaks above -50.00 dB of FCC - Class B - Average limit line

Peak criteria : 0.00 dB, Curve : Peak

Peak#	Freq(MHz)	Amp(dBuV)	Limit(dB)	Delta(dB)
1	0.175	55.52	54.72	0.80**
2	0.156	56.00	55.69	0.32**
3	0.152	56.22	55.91	0.31**
4	0.157	55.40	55.60	-0.20**
5	0.177	54.21	54.63	-0.42**
6	0.170	53.64	54.94	-1.30**
7	0.182	52.99	54.41	-1.43**
8	0.173	53.32	54.81	-1.49**
9	0.160	53.88	55.47	-1.59**
10	0.164	53.36	55.25	-1.88**
11	0.200	51.60	53.62	-2.02**
12	0.179	52.30	54.54	-2.24**
13	0.184	51.87	54.28	-2.41**
14	0.162	52.77	55.34	-2.56**
15	0.187	51.56	54.15	-2.59**
16	0.194	51.23	53.88	-2.65**
17	0.168	52.15	55.07	-2.92**
18	0.192	50.94	53.97	-3.03**
19	0.208	49.87	53.27	-3.40**
20	0.205	49.88	53.40	-3.52**
21	0.307	46.12	50.05	-3.93
22	0.637	40.95	46.00	-5.05
23	0.413	42.25	47.59	-5.34
24	0.341	43.77	49.18	-5.41
25	0.235	46.44	52.25	-5.81
26	0.327	43.63	49.53	-5.89
27	0.224	46.69	52.65	-5.96**
28	0.212	47.15	53.14	-5.99**
29	0.222	46.70	52.74	-6.04**
30	0.336	42.79	49.31	-6.51
31	0.247	45.29	51.86	-6.57
32	0.375	41.74	48.38	-6.64
33	0.243	45.31	52.00	-6.68
34	0.232	45.66	52.39	-6.73**
35	0.228	45.78	52.52	-6.74**
36	0.250	44.98	51.77	-6.79
37	0.291	43.69	50.49	-6.80
38	0.320	42.76	49.71	-6.94
39	0.315	42.89	49.84	-6.95

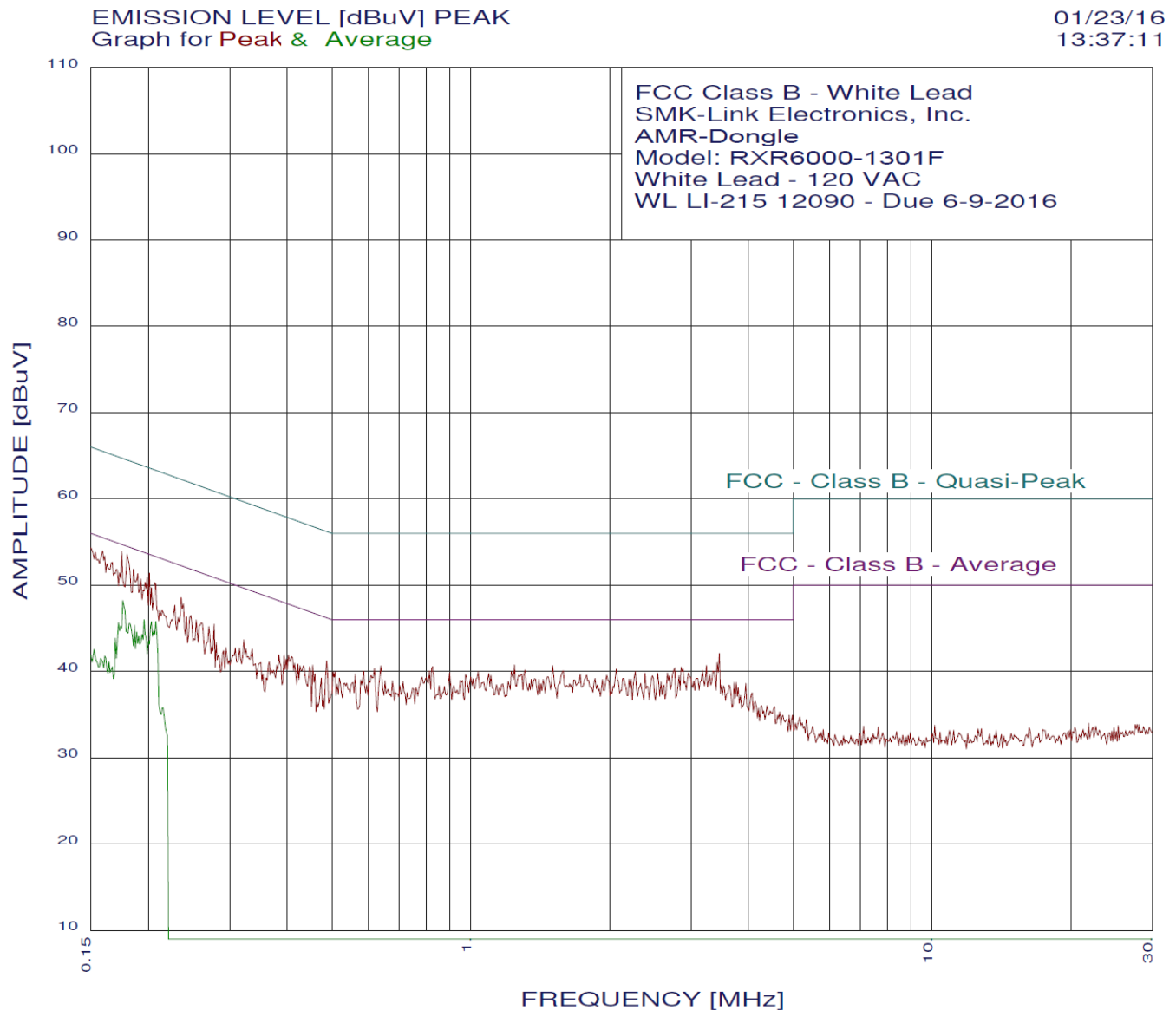
01/23/16 13:32:51

FCC Class B - Black Lead
SMK-Link Electronics, Inc.
AMR-Dongle
Model: RXR6000-1301F
Black Lead - 120 VAC
BL LI-215 12090 - Due 6-9-2016
Test Engineer : Kyle Fujimoto

26 highest peaks above -50.00 dB of FCC - Class B - Average limit line

Peak criteria : 0.00 dB, Curve : Average

Peak#	Freq(MHz)	Amp(dBuV)	Limit(dB)	Delta(dB)
1	0.177	48.21	54.63	-6.42
2	0.181	46.72	54.46	-7.74
3	0.174	46.97	54.77	-7.80
4	0.195	45.36	53.84	-8.48
5	0.204	44.90	53.44	-8.54
6	0.192	45.38	53.97	-8.59
7	0.186	45.36	54.19	-8.83
8	0.188	45.15	54.10	-8.96
9	0.183	45.24	54.37	-9.13
10	0.201	44.13	53.58	-9.45
11	0.199	43.84	53.67	-9.83
12	0.208	43.08	53.27	-10.19
13	0.170	43.16	54.94	-11.78
14	0.166	42.49	55.16	-12.67
15	0.153	43.00	55.82	-12.82
16	0.162	42.29	55.34	-13.04
17	0.158	42.11	55.56	-13.45
18	0.232	38.35	52.39	-14.04
19	0.164	40.96	55.25	-14.28
20	0.234	37.81	52.30	-14.49
21	0.229	37.29	52.48	-15.18
22	0.224	34.77	52.65	-17.88
23	0.219	34.93	52.87	-17.94
24	0.227	34.62	52.57	-17.94
25	0.222	34.46	52.74	-18.28
26	0.215	34.65	53.00	-18.36



01/23/16 13:37:11

FCC Class B - White Lead
SMK-Link Electronics, Inc.
AMR-Dongle
Model: RXR6000-1301F
White Lead - 120 VAC
WL LI-215 12090 - Due 6-9-2016
Test Engineer : Kyle Fujimoto

39 highest peaks above -50.00 dB of FCC - Class B - Average limit line

Peak criteria : 0.00 dB, Curve : Peak

Peak#	Freq(MHz)	Amp(dBuV)	Limit(dB)	Delta(dB)
1	0.175	53.91	54.72	-0.81**
2	0.180	53.58	54.50	-0.91**
3	0.159	53.98	55.51	-1.54**
4	0.153	53.80	55.82	-2.02**
5	0.161	53.37	55.43	-2.06**
6	0.201	51.39	53.58	-2.19**
7	0.185	51.86	54.24	-2.38**
8	0.167	52.64	55.11	-2.47**
9	0.156	52.99	55.69	-2.70**
10	0.189	51.34	54.06	-2.72**
11	0.199	50.90	53.67	-2.77**
12	0.162	52.46	55.34	-2.88**
13	0.206	50.27	53.35	-3.09**
14	0.170	51.83	54.94	-3.12**
15	0.193	50.73	53.93	-3.20**
16	0.173	51.41	54.81	-3.40**
17	0.197	50.31	53.75	-3.44**
18	0.169	51.43	55.03	-3.59**
19	0.235	48.54	52.25	-3.72
20	0.203	49.68	53.49	-3.81**
21	3.456	42.11	46.00	-3.89
22	0.238	47.83	52.17	-4.34
23	0.195	49.42	53.84	-4.42**
24	0.228	47.67	52.52	-4.85
25	3.419	41.01	46.00	-4.99
26	0.486	41.22	46.23	-5.00
27	1.243	40.76	46.00	-5.24
28	3.243	40.70	46.00	-5.30
29	1.504	40.67	46.00	-5.33
30	0.637	40.63	46.00	-5.37
31	0.247	46.49	51.86	-5.37
32	0.277	45.45	50.89	-5.44
33	0.826	40.54	46.00	-5.46
34	2.855	40.50	46.00	-5.50
35	2.766	40.40	46.00	-5.60
36	0.618	40.33	46.00	-5.67
37	0.254	45.96	51.64	-5.68
38	2.885	40.30	46.00	-5.70
39	2.066	40.29	46.00	-5.71

01/23/16 13:37:11

FCC Class B - White Lead
SMK-Link Electronics, Inc.
AMR-Dongle
Model: RXR6000-1301F
White Lead - 120 VAC
WL LI-215 12090 - Due 6-9-2016
Test Engineer : Kyle Fujimoto

20 highest peaks above -50.00 dB of FCC - Class B - Average limit line

Peak criteria : 0.00 dB, Curve : Average

Peak#	Freq(MHz)	Amp(dBuV)	Limit(dB)	Delta(dB)
1	0.176	48.21	54.68	-6.46
2	0.207	45.79	53.31	-7.52
3	0.203	45.74	53.49	-7.75
4	0.196	45.97	53.80	-7.82
5	0.205	44.72	53.40	-8.68
6	0.186	45.37	54.19	-8.82
7	0.182	45.56	54.41	-8.86
8	0.172	45.66	54.86	-9.20
9	0.174	45.24	54.77	-9.53
10	0.188	44.58	54.10	-9.53
11	0.194	44.32	53.88	-9.56
12	0.190	44.06	54.01	-9.96
13	0.200	43.50	53.62	-10.13
14	0.170	43.83	54.98	-11.15
15	0.152	42.59	55.86	-13.28
16	0.161	41.77	55.43	-13.66
17	0.157	41.51	55.60	-14.09
18	0.164	41.14	55.25	-14.10
19	0.167	40.51	55.11	-14.60
20	0.215	35.77	53.00	-17.24
