166 South Carter, Genoa City, WI 53128

Company:	RF Technologies, Inc.
Models Tested:	0800-0550 and 0800-0551
Report Number:	20829
Project Number:	7072

Code of Federal Regulations 47 Part 15 – Radio Frequency Devices

Subpart C – Intentional Radiators
Section 15.247
Operation within the bands 902 - 928 MHz, 2400 – 2483.5 MHz and 5725 – 5850 MHz,

THE FOLLOWING **MEETS** THE ABOVE TEST SPECIFICATION

Formal Name:	Quick Response Premiere Router/Gateway
Kind of Equipment:	Transceiver (FCC ID: KXU-SRTCCZ24V3)
Frequency Range:	2405 - 2475 MHz
Test Configuration:	Stand-alone
Model Number(s):	0800-0550 (with internal antenna), 0800-0551 (with external antenna)
Models Tested:	0800-0550 and 0800-0551
Serial Number(s):	DUT 5 and DUT 6
Date of Tests:	August 13th to 21st, 2015 and August 27th, 2015
Test Conducted For:	RF Technologies, Inc. 3125 N. 126th Street Brookfield, WI 53005

NOTICE: "This test report relates only to the items tested and must not be used by the client to claim product endorsement by NVLAP or any agency of the U.S. Government". Please see the "Description of Test Sample" page listed inside of this report.

ELECTRONIC SYSTEMS, INC.
166 South Carter, Genoa City, WI 53128

Company:	RF Technologies, Inc.
Models Tested:	0800-0550 and 0800-0551
Report Number:	20829
Project Number:	7072

SIGNATURE PAGE

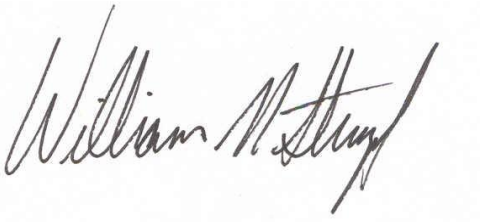
Tested By:

Pual Leo
Test Engineer

Reviewed By:

Craig Brandt
Senior Engineer

Approved By:



William m. Stumpf
OATS Manager

Table of Contents

United States Department of Commerce
National Institute of Standards and Technology

NVLAP®

Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 100276-0

D.L.S. Electronic Systems, Inc.
Wheeling, IL

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

ELECTROMAGNETIC COMPATIBILITY AND TELECOMMUNICATIONS

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2014-10-01 through 2015-09-30
Effective dates

For the National Institute of Standards and Technology

NVLAP-01C (REV. 2009-01-28)

1.0 Summary of Test Report

It was determined that the RF Technologies, Inc., Quick Response Premiere Router/Gateway, Models 0800-0550 and 0800-0551, comply with the requirements of CFR 47 Part 15 Subpart C Section 15.247.

Subpart C Section 15.247 Applicable Technical Requirements Tested:

Section	Description	Procedure	Note	Compliant?
15.247(a)(2)	6 dB Emission Bandwidth	FCC KDB 558074 ANSI C63.4-2014 ANSI C63.10-2013	1	Yes
15.247(b)(3)	Maximum Peak Conducted Output Power	FCC KDB 558074 ANSI C63.4-2014 ANSI C63.10-2013	1	Yes
15.247(d)	Band Edge Emissions	FCC KDB 558074 ANSI C63.4-2014 ANSI C63.10-2013	1	Yes
15.247(d)	RF Conducted Spurious Emissions	FCC KDB 558074 ANSI C63.4-2014 ANSI C63.10-2013	1	Yes
15.247(d), 15.209	Radiated Spurious Emissions	ANSI C63.4-2014	2	Yes
15.247(d), 15.209, 15.205	Radiated Emissions in Restricted Bands	FCC KDB 558074 ANSI C63.4-2014 ANSI C63.10-2013	2	Yes
15.247(d)	Radiated Restricted Band Edge Emissions	FCC KDB 558074 ANSI C63.4-2014 ANSI C63.10-2013	2	Yes
15.247(e)	Peak Power Spectral Density	FCC KDB 558074 ANSI C63.4-2014 ANSI C63.10-2013	1	Yes
15.207(a)	AC Power Line Conducted Emissions	ANSI C63.4-2014	3	Yes
Informative	Duty Cycle	FCC KDB 558074		NA

Note 1: RF Conducted measurement.
Note 2: Radiated Emissions measurement.
Note 3: AC Mains Emissions measurement

2.0 Introduction

On August 13th to 27th, 2015 the Quick Response Premiere Router/Gateway, Models 0800-0550 and 0800-0551, as provided from RF Technologies, Inc. were tested to the requirements of CFR 47 Part 15 Subpart C Section 15.247. To meet these requirements, the procedures contained within this report were performed by personnel of D.L.S Electronic Systems, Inc.

3.0 Test Facilities

D.L.S. Electronic Systems, Inc. is a full service EMC/Safety Testing Laboratory accredited to ISO 17025. NVLAP Certificate and Scope can be viewed at http://www.dlsemc.com/certificate. Our facilities are registered with the FCC, Industry Canada, and VCCI.

Wisconsin Test Facility:
D.L.S. Electronic Systems, Inc.
166 S. Carter Street
Genoa City, Wisconsin 53128

Wheeling Test Facility:
D.L.S. Electronic Systems, Inc.
1250 Peterson Drive
Wheeling, IL 60090

4.0 Description of Test Sample

Description:

The Quick Response Router (Model 0800-0550) and Gateway (Model 0800-0551) form a wireless mesh network in the 2.4GHz ISM band using the Zigbee network protocol over an IEEE 802.15.4 physical layer. This mesh network enables the wireless routing of small data packets between a central server and wireless end devices. The end devices provide the human interface for a wireless nurse call system. Both are permanently affixed to interior walls and receive DC power from an external power supply with an internal battery backup.

Type of Equipment / Frequency Range:

Nurse Call and Security Device / 2405 MHz to 2475 MHz

Physical Dimensions of Equipment Under Test:

Length: 4.5” x Width: 2.7” x Height: 0.56”

Power Source:

9 – 15 VDC

4.0 Description of Test Sample continued…

Internal Frequencies:

32 MHz

Transmit / Receive Frequencies Used For Test Purpose:

2405 MHz, 2440 MHz, 2475 MHz

Type of Modulation(s):

DSSS / O-QPSK 2M chip/s

Antenna Types:

Internal PCB Trace Antenna or External 1/4 Wave Whip

Description of Circuit Board(s) / Part Number:

QR Premiere Router	0800-0550 rev A
QR Premiere Gateway	0800-0551 rev A

5.0 Test Equipment

A list of the equipment used can be found in the table below. All primary equipment was calibrated against known reference standards with a verified traceable path to NIST.

D.L.S. Wisconsin – Site 2 and Screen Room

Description	Manufacturer	Model Number	Serial Number	Frequency Range	Cal Dates	Cal Due Dates
Emissions 30-1000 MHz (S2)						
Receiver	Rohde & Schwarz	ESI 40	837808/006	20 Hz – 40 GHz	6-25-15	6-25-16
Preamplifier	Rohde & Schwarz	TS-PR10	032001/004	9 kHz – 1 GHz	1-7-15	1-7-16
Antenna	EMCO	3104C	00054892	20 MHz – 200 MHz	10-1-14	10-1-16
Antenna	EMCO	3146	1205	200 MHz – 1 GHz	10-24-14	10-24-16
Test Software	Rohde & Schwarz	ESK-1	V1.7.1	N/A	N/A	N/A
Emissions 1-18 GHz (S2)						
Horn Antenna	EMCO	3115	9502-4451	1-18GHz	6-1-15	6-1-16
Test Software	Rohde & Schwarz	ESK-1	V1.7.1	N/A	N/A	N/A
Emissions 18-26 GHz (S2)						
Preamp	Miteq	AMF-8B-180265-40-10P-H/S	438727	18GHz-26GHz	6-29-15	6-29-16
Horn Antenna	ETS Lindgren	3116	00062917	18 – 40GHz	10-24-13	9-24-15
Filter-High Pass	K & L	50140	8	18-40GHz	3-24-16	3-23-16
Test Software	Rohde & Schwarz	ESK-1	V1.7.1	N/A	N/A	N/A
AC Line Conducted (Screen Room)						
Receiver	Narda PMM	9010F	020WW40102	10Hz-50MHz	6-25-15	6-25-16
LISN	Solar	9252-50-R-24-BNC	961019	9 kHz – 30 MHz	5-21-15	5-21-16
Filter- High-Pass	SOLAR	7930-120	090702	120 kHz – 30 MHz	1-7-15	1-7-16
Limiter	Electro-Metrics	EM-7600	705	9 kHz – 30 MHz	1-7-15	1-7-16
Test Software	Narda PMM	PMM Emission Suite	Rel.2.17	N/A	N/A	N/A

Test Equipment continued: **D.L.S. Wisconsin – Chamber G1**

Description	Manufacturer	Model Number	Serial Number	Frequency Range	Cal Dates	Cal Due Dates
RF Conducted (G1)						
Receiver	Rohde & Schwarz	ESI 40	837808/005	20 Hz – 40 GHz	6-25-15	6-25-16
Power Meter	Anritsu	ML2487A	6K00002069	100khz-65GHz	6-25-15	6-25-16
Power Sensor	Anritsu	MA2490A	031563	50MHz-8GHz	6-25-15	6-25-16
10db Attenuator	Narda	4768-10	0702	DC-40GHz	7-1-15	7-1-16
Test Software	Rohde & Schwarz	ESK-1	V1.7.1	N/A	N/A	N/A
1-18 GHz (G1)						
Receiver	Rohde & Schwarz	ESI 40	837808/005	20 Hz – 40 GHz	6-25-15	6-25-16
Preamp	Ciao	CA118-4010	101	1GHz-18GHz	1-26-15	1-26-16
Horn Antenna	EMCO	3115	9502-4451	1-18GHz	6-1-15	6-1-16
Filter- High-Pass	Q-Microwave	100462	1	4.2GHz-18GHz	8-14-15	8-14-16
Test Software	Rohde & Schwarz	ESK-1	V1.7.1	N/A	N/A	N/A

6.0 Test Arrangements

Emissions Measurement Arrangement:

All radiated emission measurements were performed at D.L.S. Electronic Systems, Inc. and set up according to ANSI C63.4-2014, unless otherwise noted. Description of procedures and measurements can be found in Appendix B – Measurement Data. See Appendix A for additional photos of the test set up.

Unless otherwise noted, the bandwidth of the measuring receiver / analyzer used during testing is shown below.

Frequency Range	Bandwidth (-6 dB)
10 to 150 kHz	200 Hz
150 kHz to 30 MHz	9 kHz
30 MHz to 1 GHz	120 kHz
Above 1 GHz	1 MHz

7.0 Test Conditions

Test Conditions recorded during test:

Temperature and Humidity:

72°F at 56% RH or as noted on test data

Voltage:

9 – 15 VDC

8.0 Modifications Made To EUT For Compliance

None noted at time of test.

9.0 Additional Descriptions

There were two models tested. Model 0800-0550 has an Internal Antenna. Model 0800-0551 has an External High Gain Antenna. Both models are identical in every other way.
Both models were tested in TX mode using Tera Term terminal emulator and test software. Both models were tested at the low, mid, and high channels of operation. Both units were tested in 3 orthogonal positions for radiated emissions.

10.0 Antenna Statement

SECTION 15.203 ANTENNA REQUIREMENT

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device…. This requirement does not apply to carrier current devices or to devices operated under the provisions of Sections 15.211, 15.213, 15.217, 15.219, or 15.221.

Statement: This wireless device (Intentional Radiator) meets the requirements of FCC Part 15.203:

☐ The antenna is permanently attached

☐ The antenna has a unique coupling to the intentional radiator.
Description of coupling:

☒ This intentional radiator is professionally installed

☐ This intentional radiator, in accordance with Section 15.31(d), must be measured at the installation site.

11.0 Results

Measurements were performed in accordance with FCC KDB 558074 D01 DTS Meas Guidance v03r03, ANSI C63.4-2014, and ANSI C63.10-2013. Graphical and tabular data can be found in Appendix B at the end of this report.

12.0 Conclusion

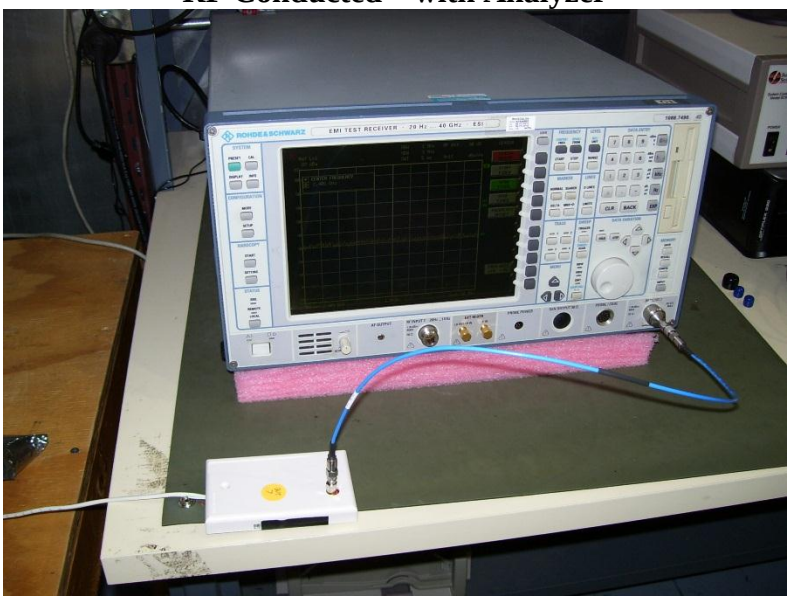
The Quick Response Premiere Router/Gateway, Models 0800-0550 and 0800-0551, as provided from RF Technologies, Inc. tested from August 13th to 27th, 2015 **meets** the requirements of CFR 47 Part 15 Subpart C Section 15.247.

Appendix A – Test Photos

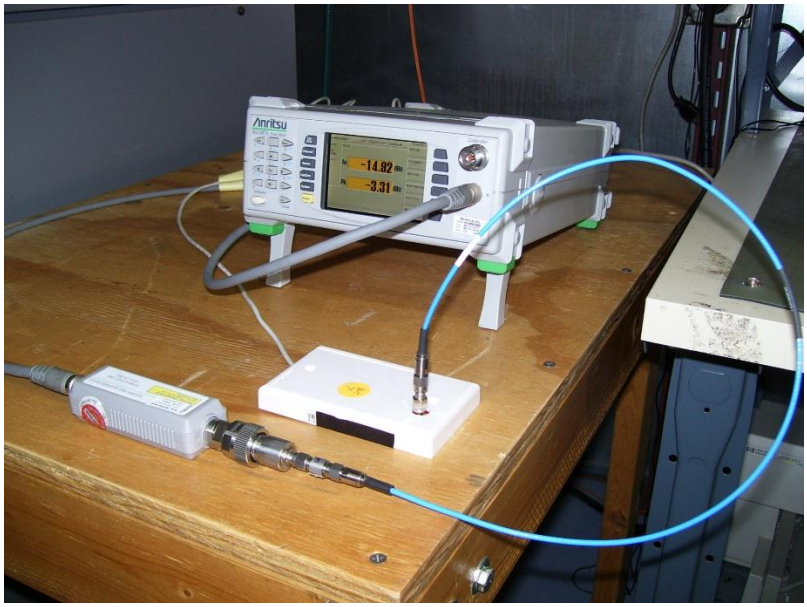
Photo Information and Test Setup:

EUT – Quick Response Premiere Router/Gateway, Models 0800-0550 and 0800-0551

RF Conducted – with Analyzer



RF Conducted – with Power Meter



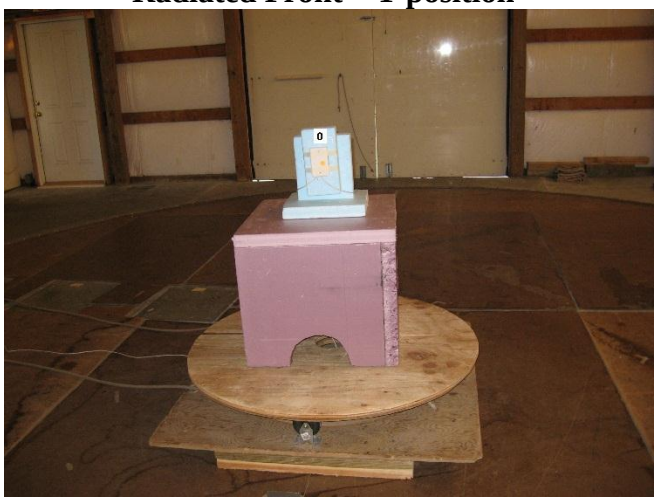
166 South Carter, Genoa City, WI 53128

Appendix A

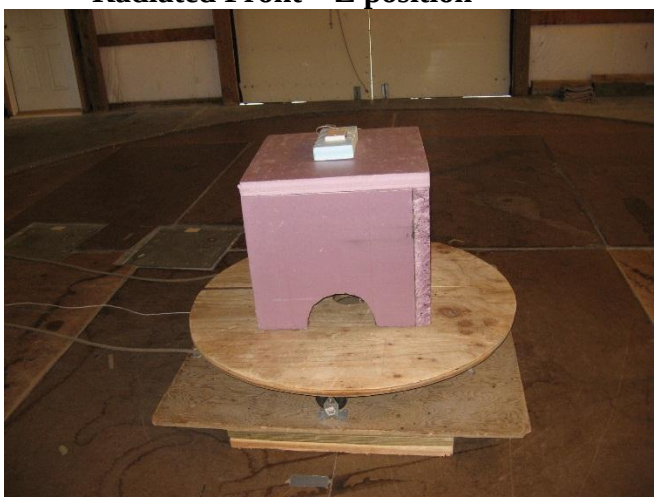
Model 0800-0550, Radiated 30 to 1000MHz

Radiated Front – X position

Radiated Front – Y position



Radiated Front – Z position



Radiated Back

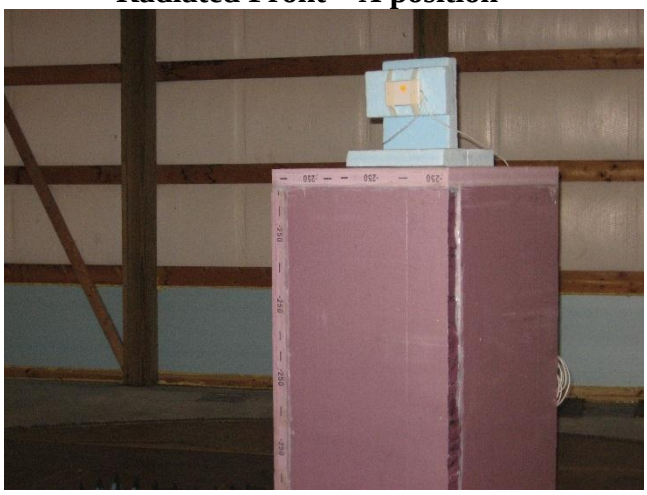
Item 0: EUT – Quick Response Premiere Router, Model 0800-0550
Item 1: 10m unshielded power cable
Item 2: 10m power cable to daisy chain additional units

166 South Carter, Genoa City, WI 53128

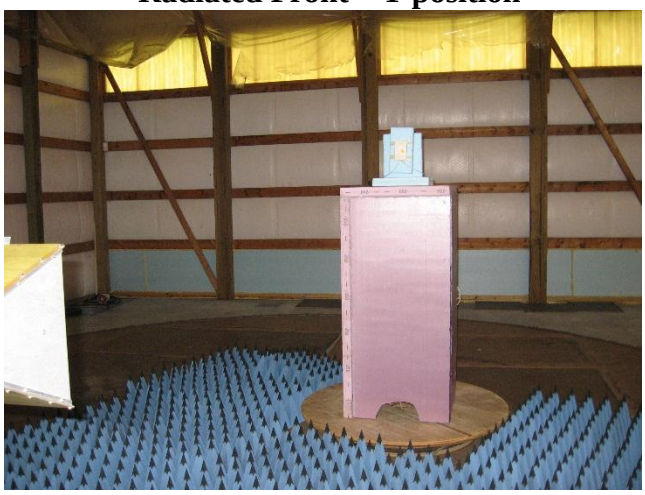
Appendix A

Model 0800-0550, Radiated 1 to 18GHz

Radiated Front – X position

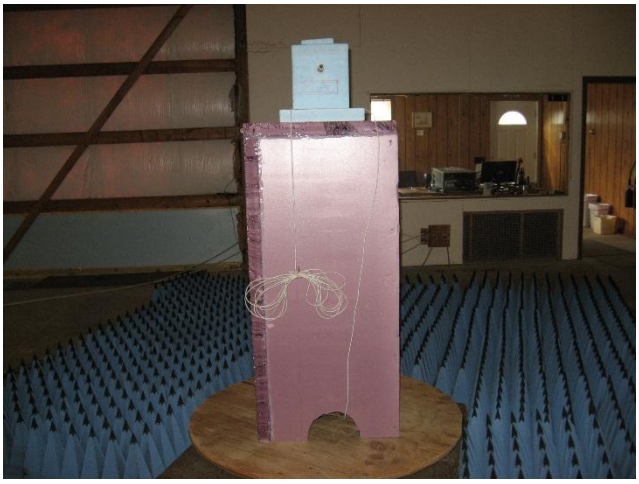


Radiated Front – Y position



Radiated Front – Z position

Radiated Back

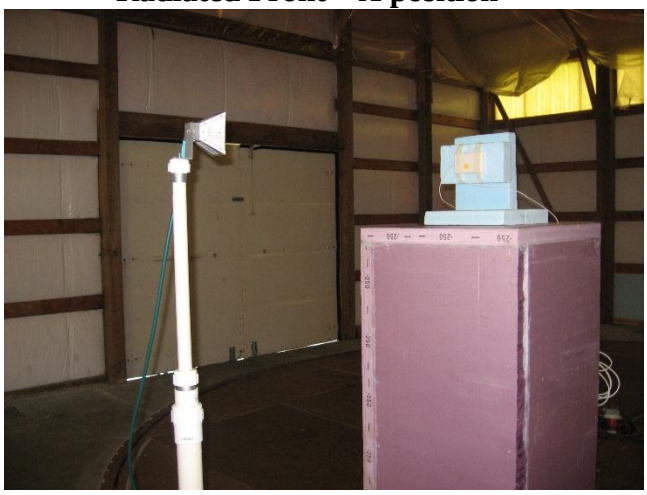


166 South Carter, Genoa City, WI 53128

Appendix A

Model 0800-0550, Radiated 18 to 25GHz

Radiated Front – X position



Radiated Front – Y position

Radiated Front – Z position

Radiated Back

Appendix A

Model 0800-0550

AC Line Conducted - Front

AC Line Conducted – Back

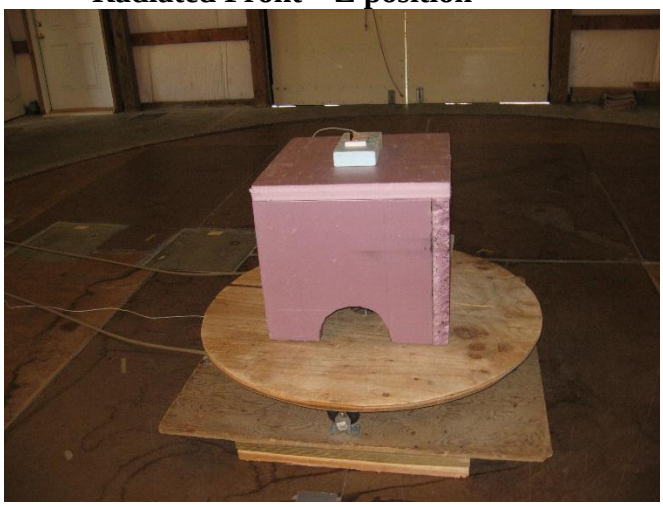
Appendix A

Model 0800-0551, Radiated 30 to 1000MHz

Radiated Front – X position

Radiated Front – Y position

Radiated Front – Z position



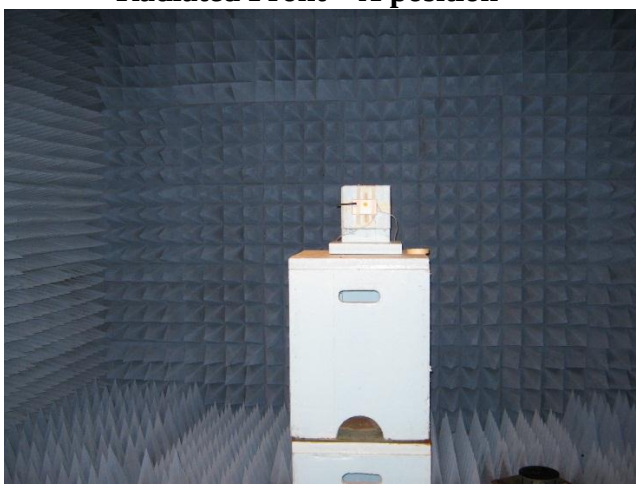
Radiated Back

Item 0: EUT – Quick Response Premiere Gateway, Model 0800-0551
Item 1: 10m unshielded power cable
Item 2: 10m power cable to daisy chain additional units

Appendix A

Model 0800-0551, Radiated 1 to 18GHz

Radiated Front – X position



Radiated Front – Y position

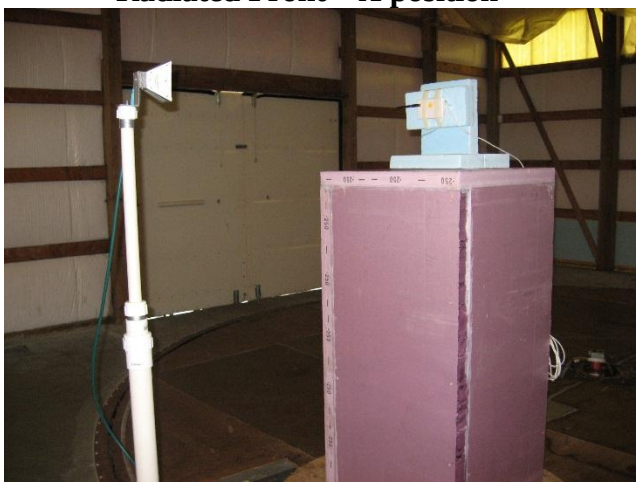
Radiated Front – Z position

Radiated Back

Appendix A

Model 0800-0551, Radiated 18 to 25GHz

Radiated Front – X position



Radiated Front – Y position

Radiated Front – Z position

Radiated Back

Appendix A

Model 0800-0550

AC Line Conducted - Front

AC Line Conducted – Back

Appendix B – Measurement Data

B1.0 6 dB Emission Bandwidth

Rule Part: FCC Pt.15.247(a)(2)

Test Procedure: FCC KDB 558074 D01 DTS Meas Guidance v03r03,
ANSI C63.4-2014 and ANSI C63.10-2013

Limit: Must be greater than 500 kHz.

Results: Compliant

Notes: The EUT was set to transmit at its maximum power, maximum data rate, and maximum duty cycle (100%).
The EUT was tested at low, middle, and high channels.

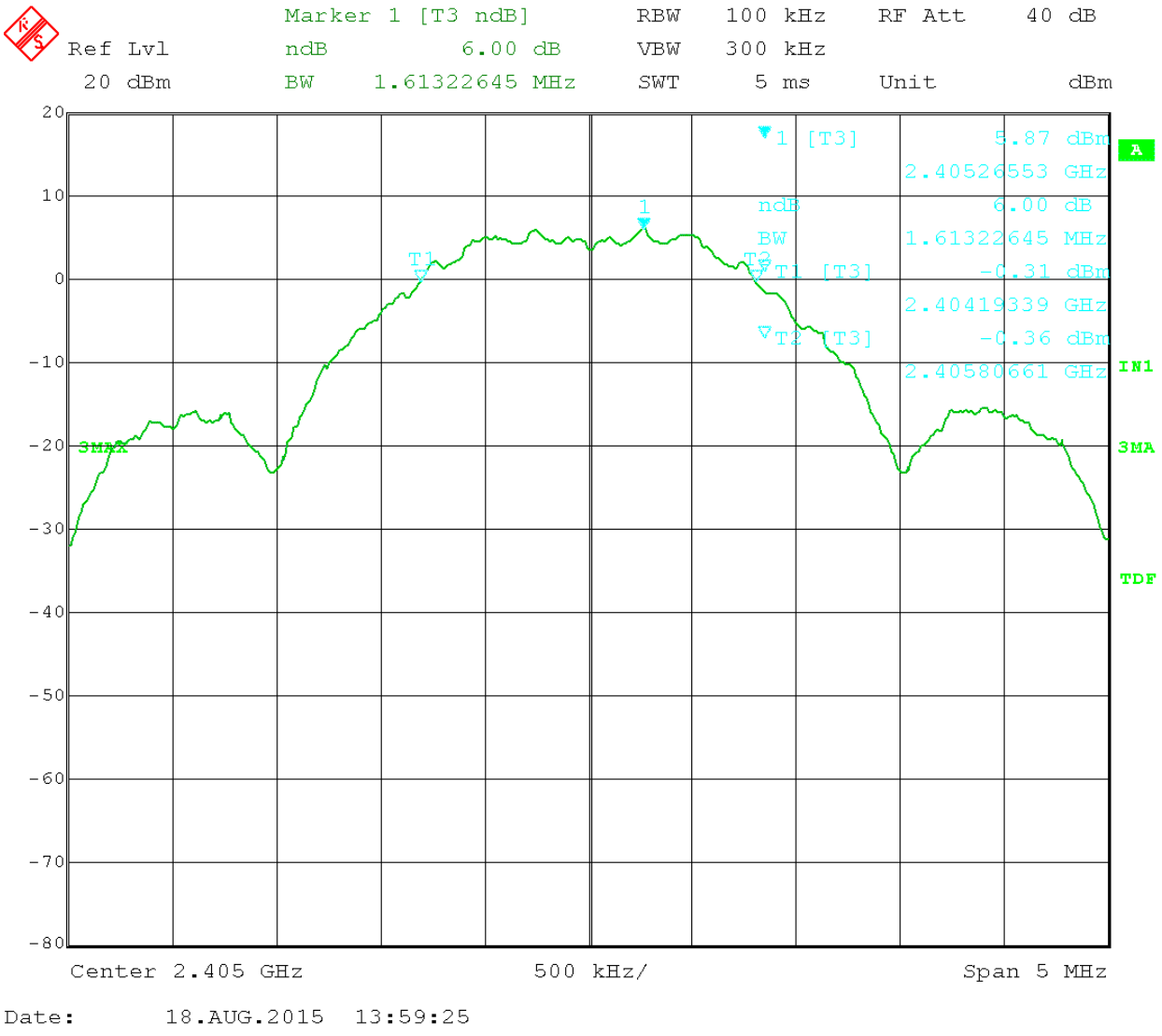
166 South Carter, Genoa City, WI 53128

Company: RF Technologies, Inc.
Models Tested: 0800-0550 and 0800-0551
Report Number: 20829
Project Number: 7072

Test Date: 08-18-2015
Company: RFT Technologies
EUT: Quick Response Premier Router/Gateway
Test: 6 dB Bandwidth - Conducted – 15.247 (a)(2)
Operator: Paul L

Comment: Low Channel – Ch.11 2.405 GHz

6 dB Bandwidth = 1.613 MHz

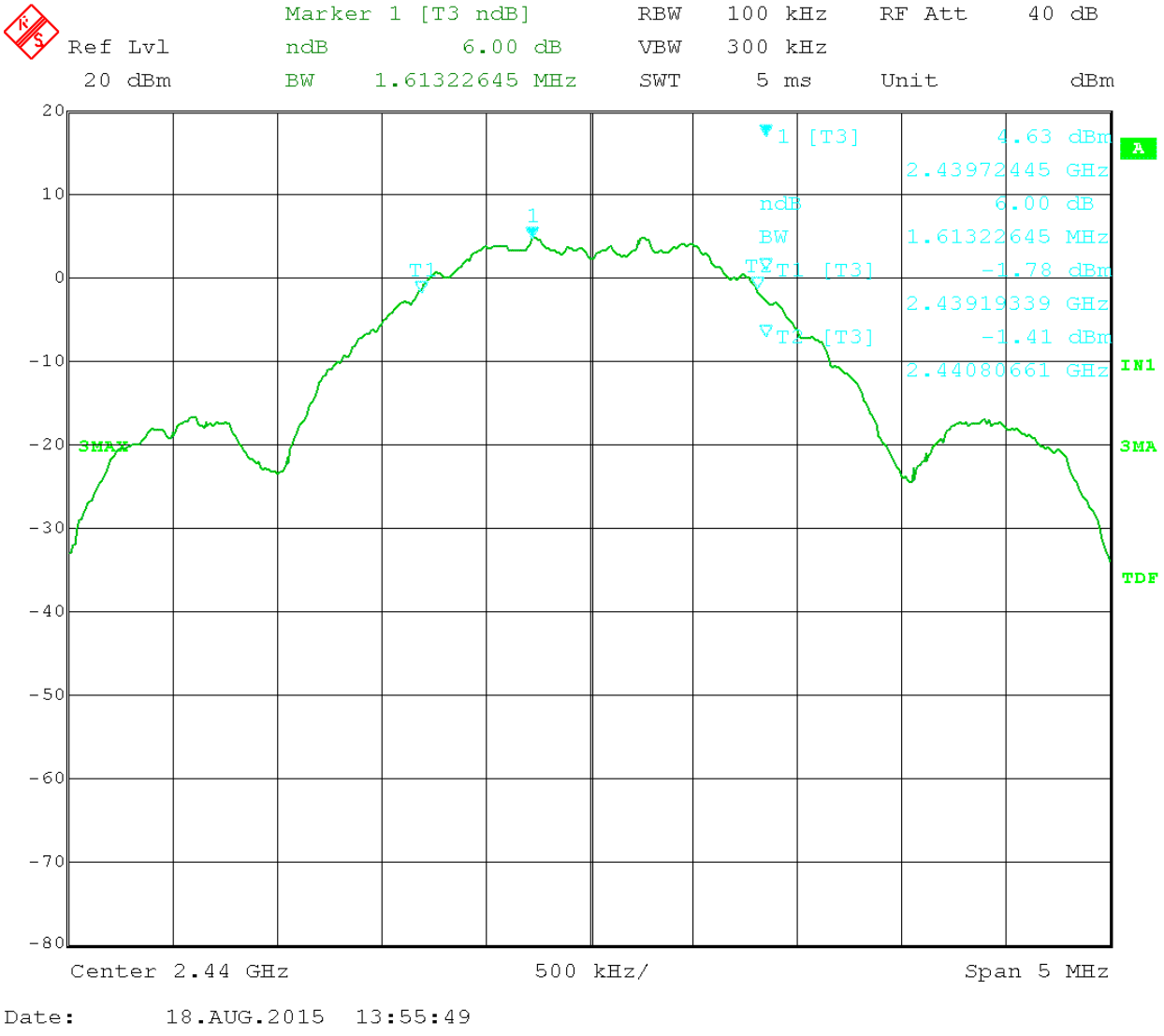


DLS ELECTRONIC SYSTEMS, INC.
166 South Carter, Genoa City, WI 53128

Test Date: 08-18-2015
Company: RFT Technologies
EUT: Quick Response Premier Router/Gateway
Test: 6 dB Bandwidth - Conducted – 15.247 (a)(2)
Operator: Paul L

Comment: Mid Channel – Ch.18 2.440 GHz

6 dB Bandwidth = 1.613 MHz

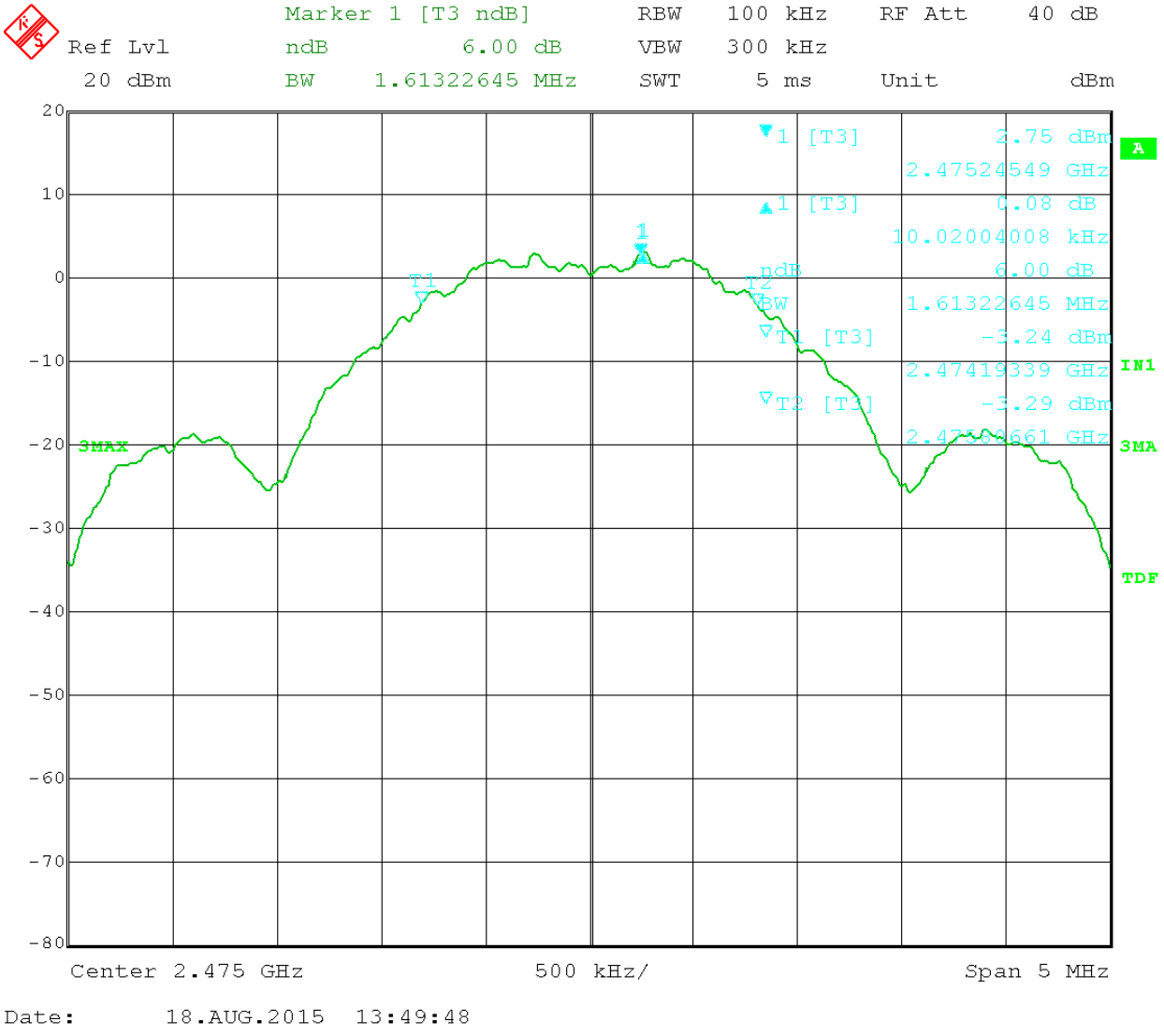


DLS ELECTRONIC SYSTEMS, INC.
166 South Carter, Genoa City, WI 53128

Test Date: 08-18-2015
Company: RFT Technologies
EUT: Quick Response Premier Router/Gateway
Test: 6 dB Bandwidth - Conducted – 15.247 (a)(2)
Operator: Paul L

Comment: High Channel – Ch.25 2.475 GHz

6 dB Bandwidth = 1.613 MHz



Appendix B – Measurement Data

B2.0 Maximum Peak Conducted Output Power

Rule Part: FCC Pt. 15.247(b) (3)

Test Procedure: FCC KDB 558074 D01 DTS Meas Guidance v03r03, ANSI C63.4-2014 and ANSI C63.10-2013

Limit: 1 Watt (30 dBm)

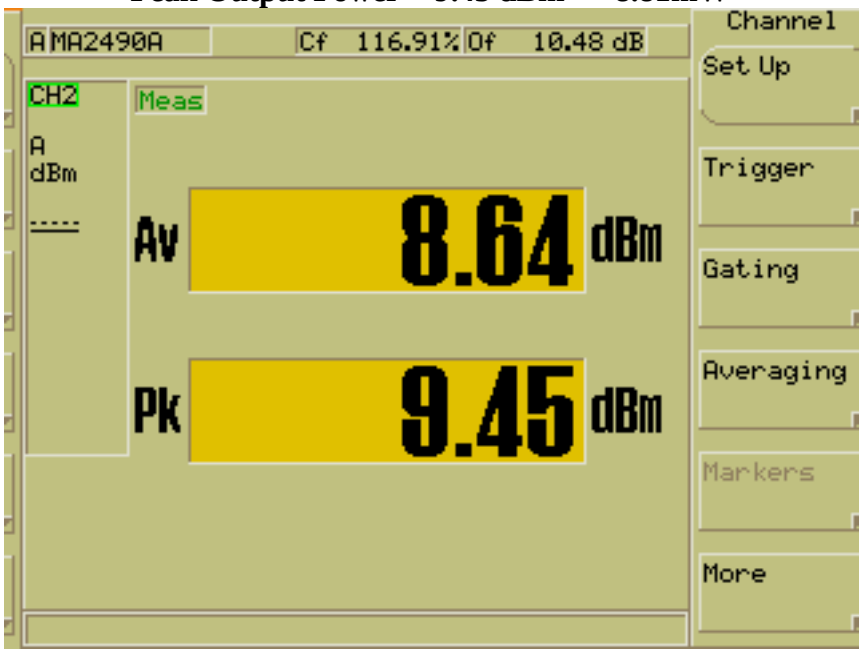
Results: Compliant

Notes: This was an RF conducted measurement. The EUT was connected to the measuring equipment through the external antenna connector. Cable loss and attenuation was accounted for in the transducer factors set in the analyzer.
The EUT was set to transmit continuously at its maximum power level at the low, middle and high channels of the operating band.
PKPM1 method was used for this test. Peak Output power was measured with a broadband power meter and power sensor.

Test Date: 08-19-2015
Company: RFT Technologies
EUT: Quick Response Premier Router/Gateway
Test: Peak Power Output - Conducted – 15.247 (b)(3)
Operator: Paul L

Comment: Low Channel – Ch.11 2.405 GHz

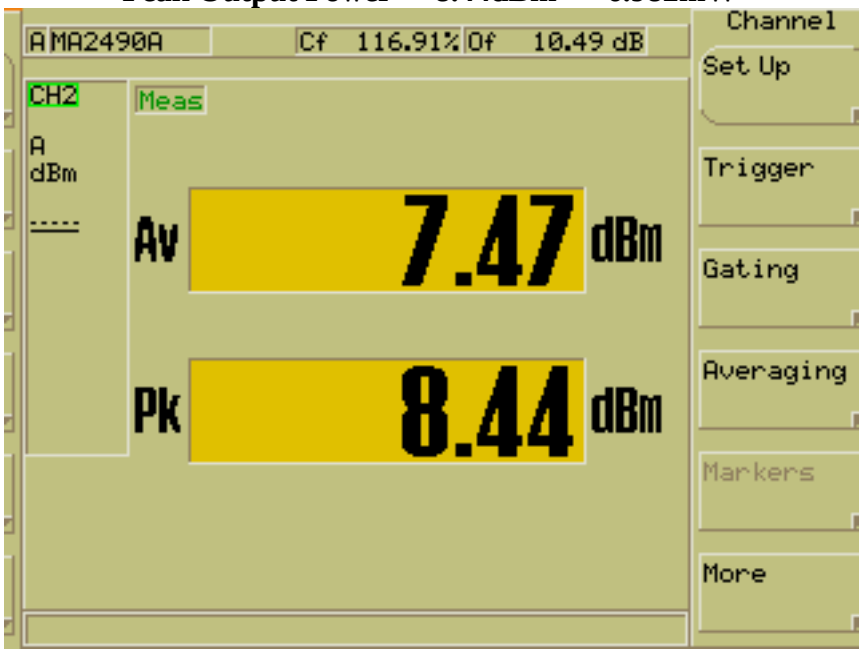
Peak Output Power = 9.45 dBm = 8.81mW



Test Date: 08-19-2015
Company: RFT Technologies
EUT: Quick Response Premier Router/Gateway
Test: Peak Power Output - Conducted – 15.247 (b)(3)
Operator: Paul L

Comment: Mid Channel – Ch.18 2.440 GHz

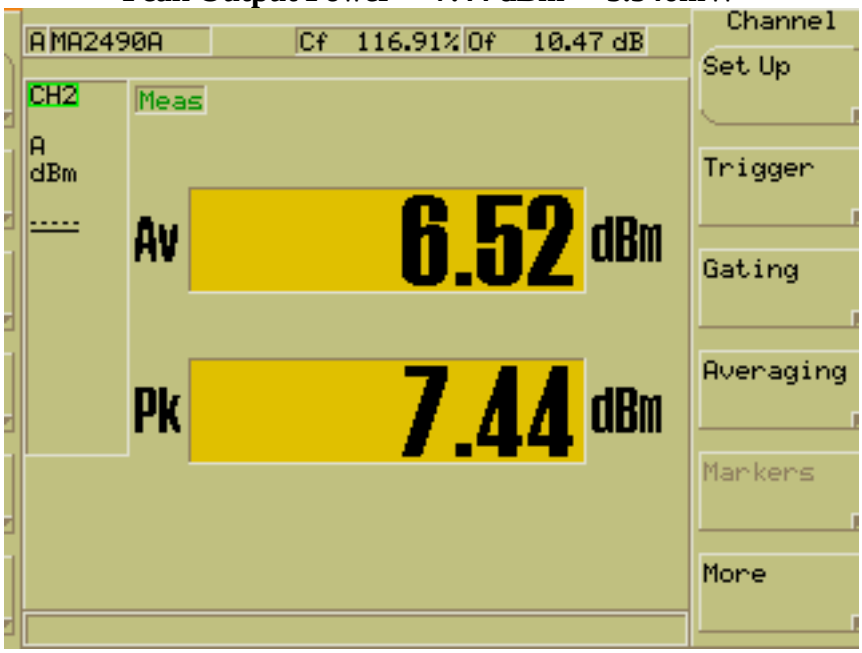
Peak Output Power = 8.44dBm = 6.982mW



Test Date: 08-19-2015
Company: RFT Technologies
EUT: Quick Response Premier Router/Gateway
Test: Peak Power Output - Conducted – 15.247 (b)(3)
Operator: Paul L

Comment: High Channel – Ch. 25 2.475 GHz

Peak Output Power = 7.44 dBm = 5.546mW



Appendix B – Measurement Data

B3.0 Band Edge Emissions

Rule Part: FCC Pt.15.247(d)

Test Procedure: FCC KDB 558074 D01 DTS Meas Guidance v03r03, ANSI C63.4-2014 and ANSI C63.10-2013

Limit: 20 dB down from the highest emission level within the authorized band as measured with a 100 kHz RBW. (Device complies with Power Option 1).

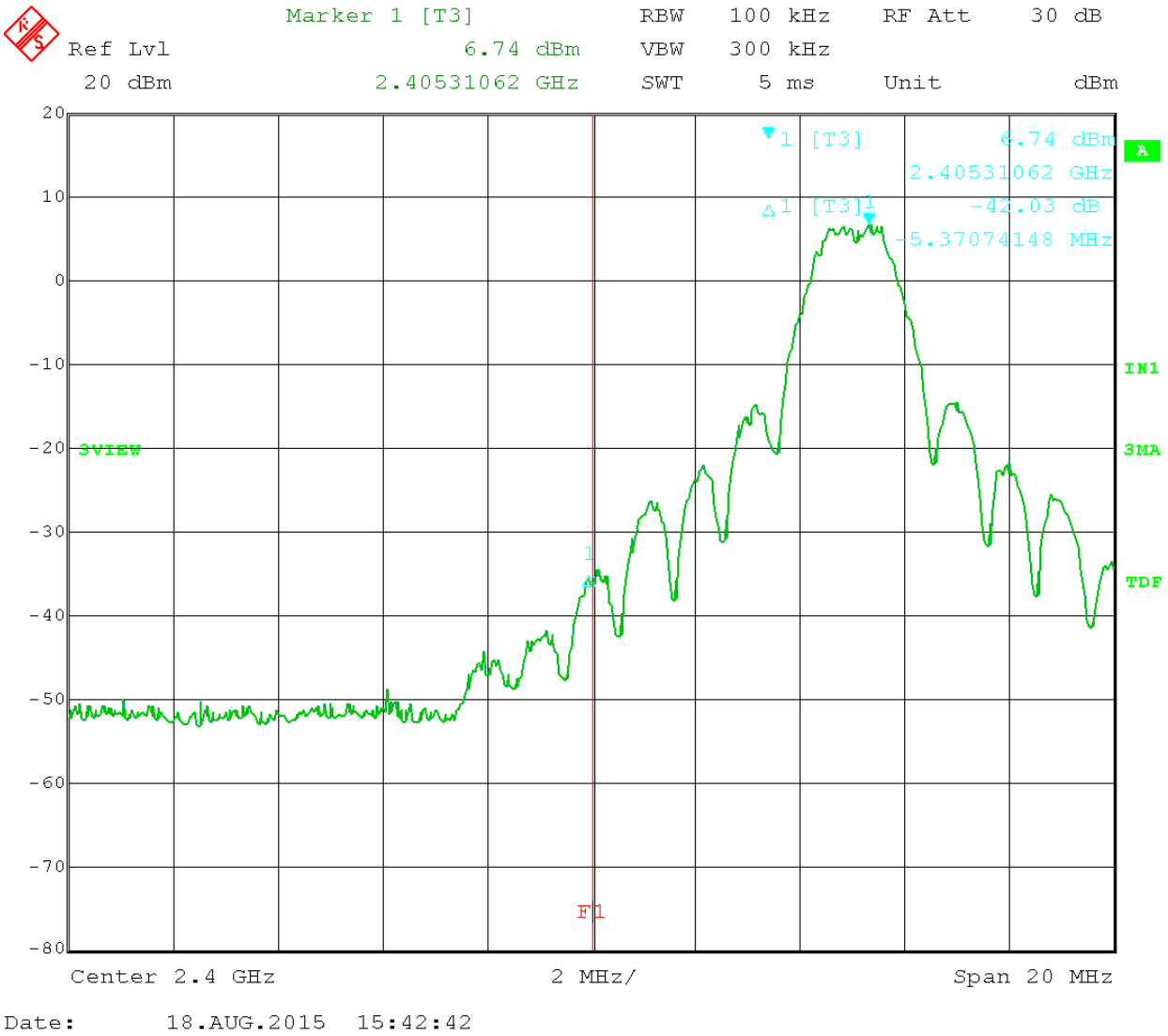
Results: Compliant

Notes: The EUT was set to transmit at its maximum power, maximum data rate, and maximum duty cycle (100%). This was a conducted measurement.

Test Date: 08-18-2015
Company: RFT Technologies
EUT: Quick Response Premier Router/Gateway
Test: Low Band-Edge Compliance - Conducted – 15.247 (d)
Operator: Paul L

Comment: Low Channel – Ch.11 2.405 GHz

Band-Edge Frequency = 2.400 GHz
Band-Edge > 20 dB Below Peak In-Band Emission



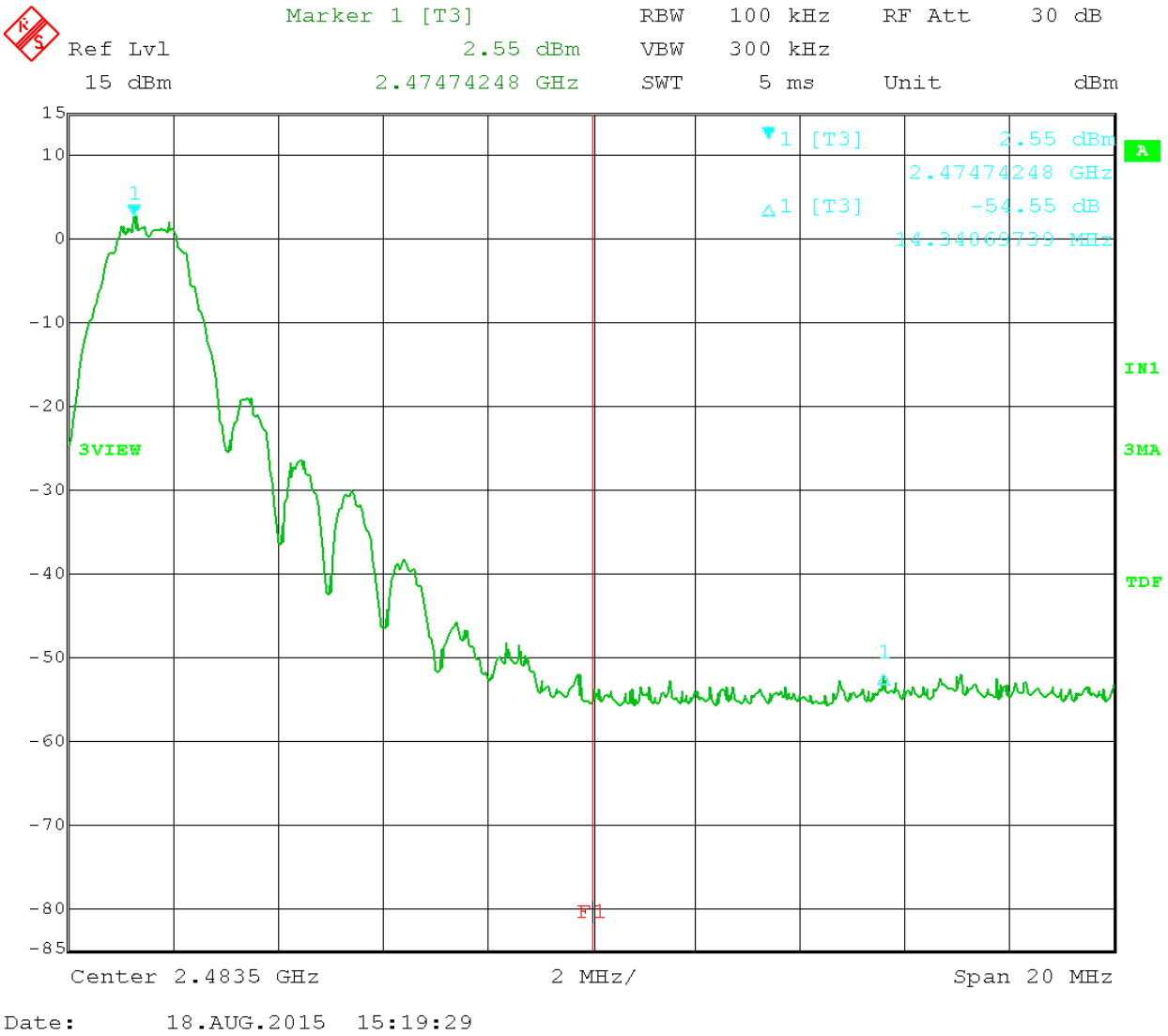
166 South Carter, Genoa City, WI 53128

Company: RF Technologies, Inc.
Models Tested: 0800-0550 and 0800-0551
Report Number: 20829
Project Number: 7072

Test Date: 08-18--2015
Company: RFT Technologies
EUT: Quick Response Premier Router/Gateway
Test: High Band-Edge Compliance - Conducted – 15.247 (d)
Operator: Paul L

Comment: High Channel – Ch.25 2.475 GHz

Band-Edge Frequency = 2.4835 GHz
Band-Edge > 20 dB Below Peak In-Band Emission



Appendix B – Measurement Data

B4.0 RF Conducted Spurious Emissions

Rule Part: FCC Part 15.247(d)

Test Procedure: FCC KDB 558074 D01 DTS Meas Guidance v03r03, ANSI C63.4-2014 and ANSI C63.10-2013

Limit: 20 dB down from the highest emission level within the authorized band as measured with a 100 kHz RBW. (Device complies with Power Option 1).

Results: Compliant

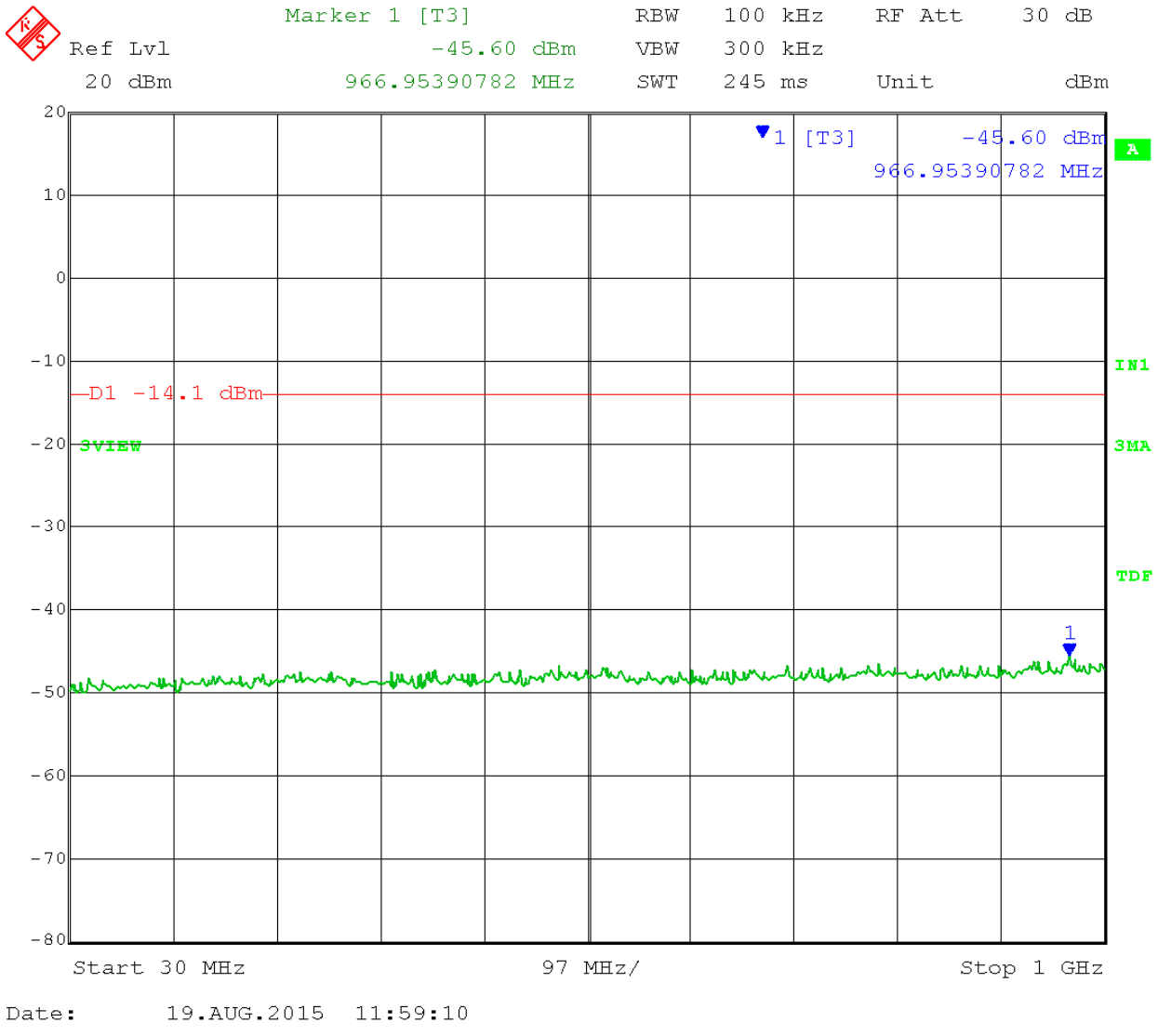
Notes: The EUT was set to transmit at its maximum power, maximum data rate, and maximum duty cycle (100%). A peak detector was used for this test.

Test Date: 08-19-2015
Company: RFT Technologies
EUT: Quick Response Premier Router/Gateway
Test: Spurious Emissions - Conducted – 15.247 (d)
Operator: Paul L

Comment: Low Channel – Ch.11 2.405 GHz

Frequency Range: 30 to 1000 MHz
Limit = -14.1 dBm

All Spurious Emissions at Least 20 dB below Peak Level of In Band Frequency

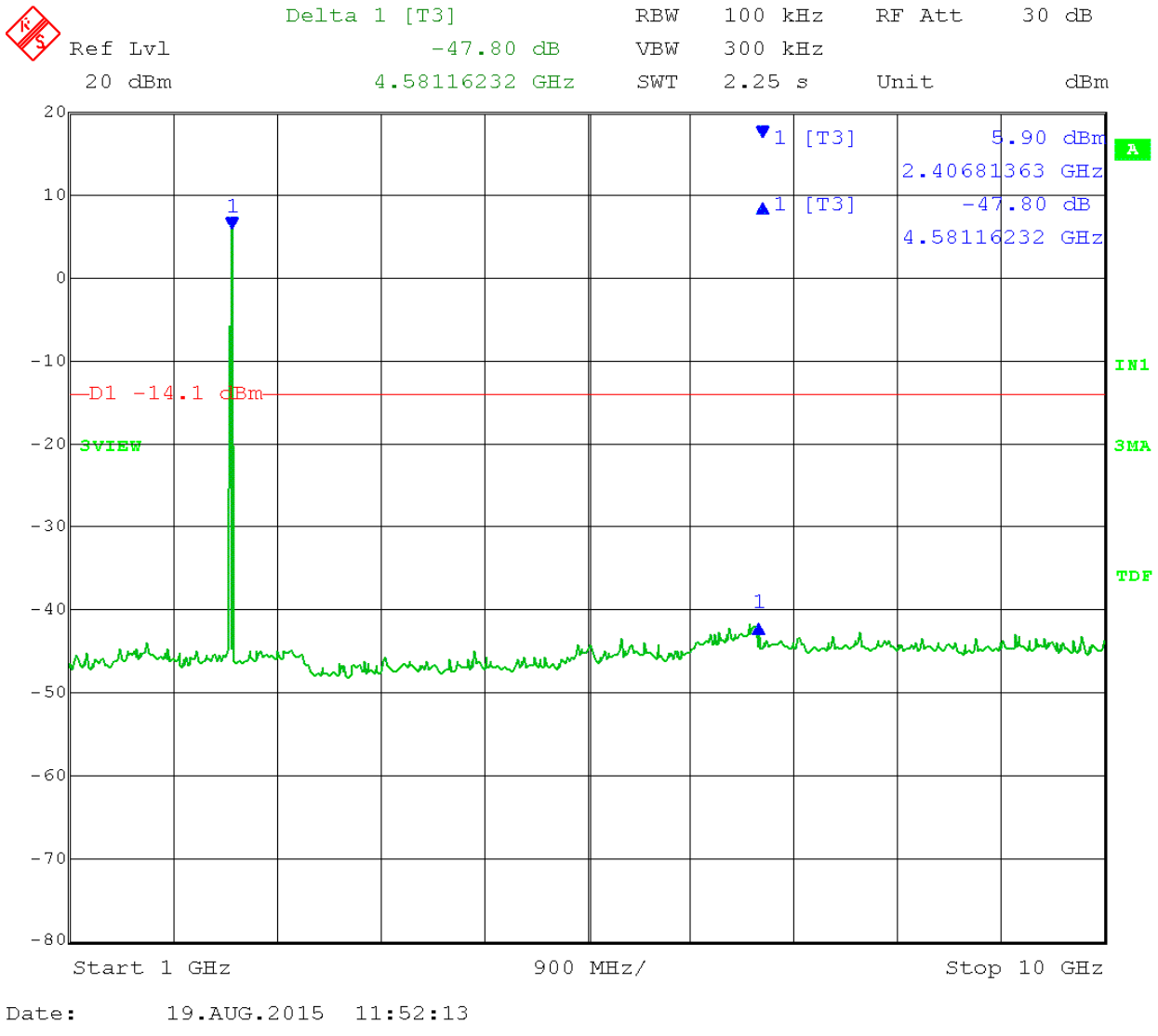


Test Date: 08-19-2015
Company: RFT Technologies
EUT: Quick Response Premier Router/Gateway
Test: Spurious Emissions - Conducted – 15.247 (d)
Operator: Paul L

Comment: Low Channel – Ch.11 2.405 GHz

Frequency Range: 1GHz to 10GHz
Limit = -14.1 dBm

All Spurious Emissions at Least 20 dB below Peak Level of In Band Frequency

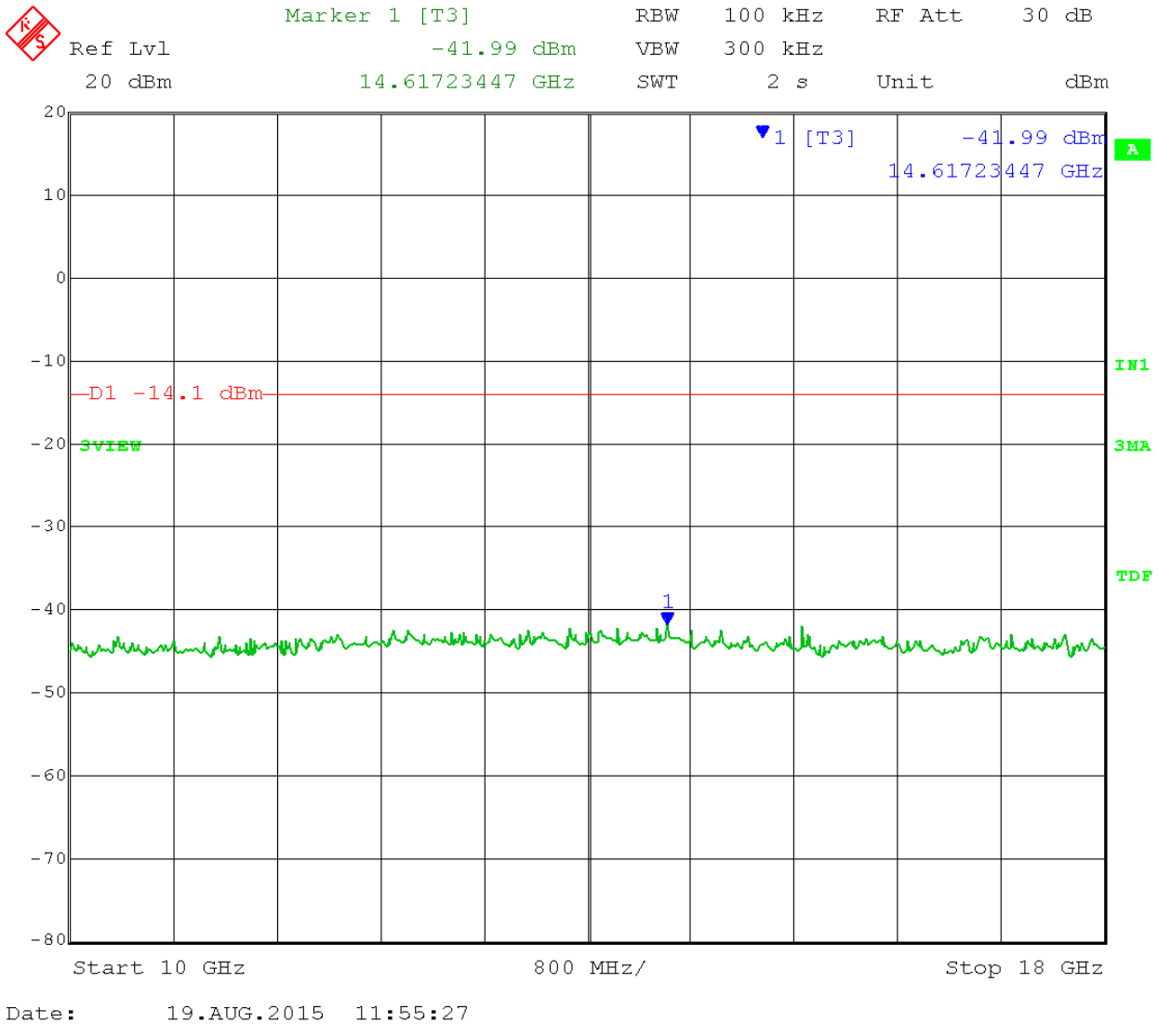


Test Date: 08-19-2015
Company: RFT Technologies
EUT: Quick Response Premier Router/Gateway
Test: Spurious Emissions - Conducted – 15.247 (d)
Operator: Paul L

Comment: Low Channel – Ch.11 2.405 GHz

Frequency Range: 10GHz to 18GHz
Limit = -14.1dBm

All Spurious Emissions at Least 20 dB below Peak Level of In Band Frequency

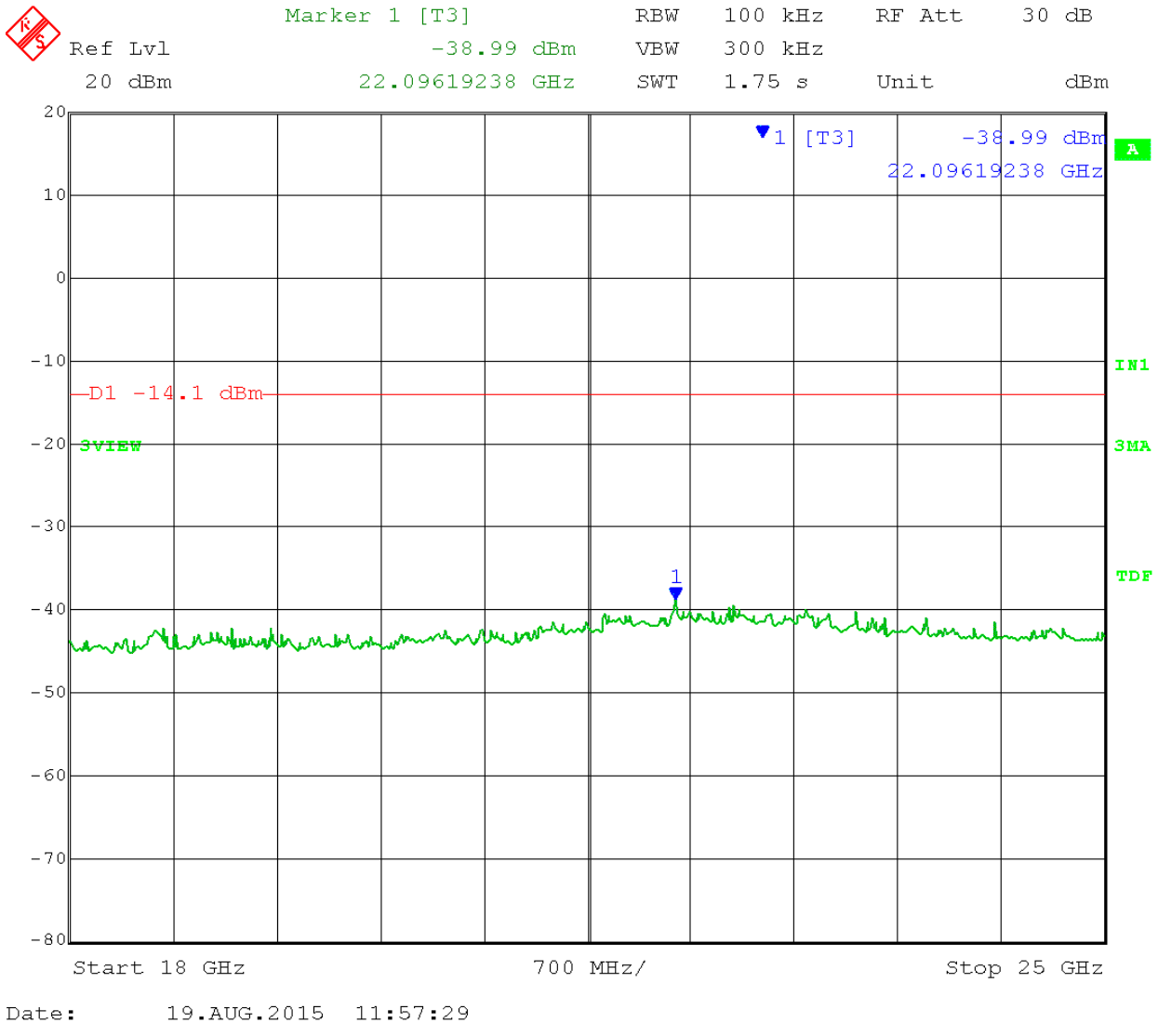


Test Date: 08-19-2015
Company: RFT Technologies
EUT: Quick Response Premier Router/Gateway
Test: Spurious Emissions - Conducted – 15.247 (d)
Operator: Paul L

Comment: Low Channel –Ch.11 2.405 GHz

Frequency Range: 18GHz to 25GHz
Limit = -14.1 dBm

All Spurious Emissions at Least 20 dB below Peak Level of In Band Frequency

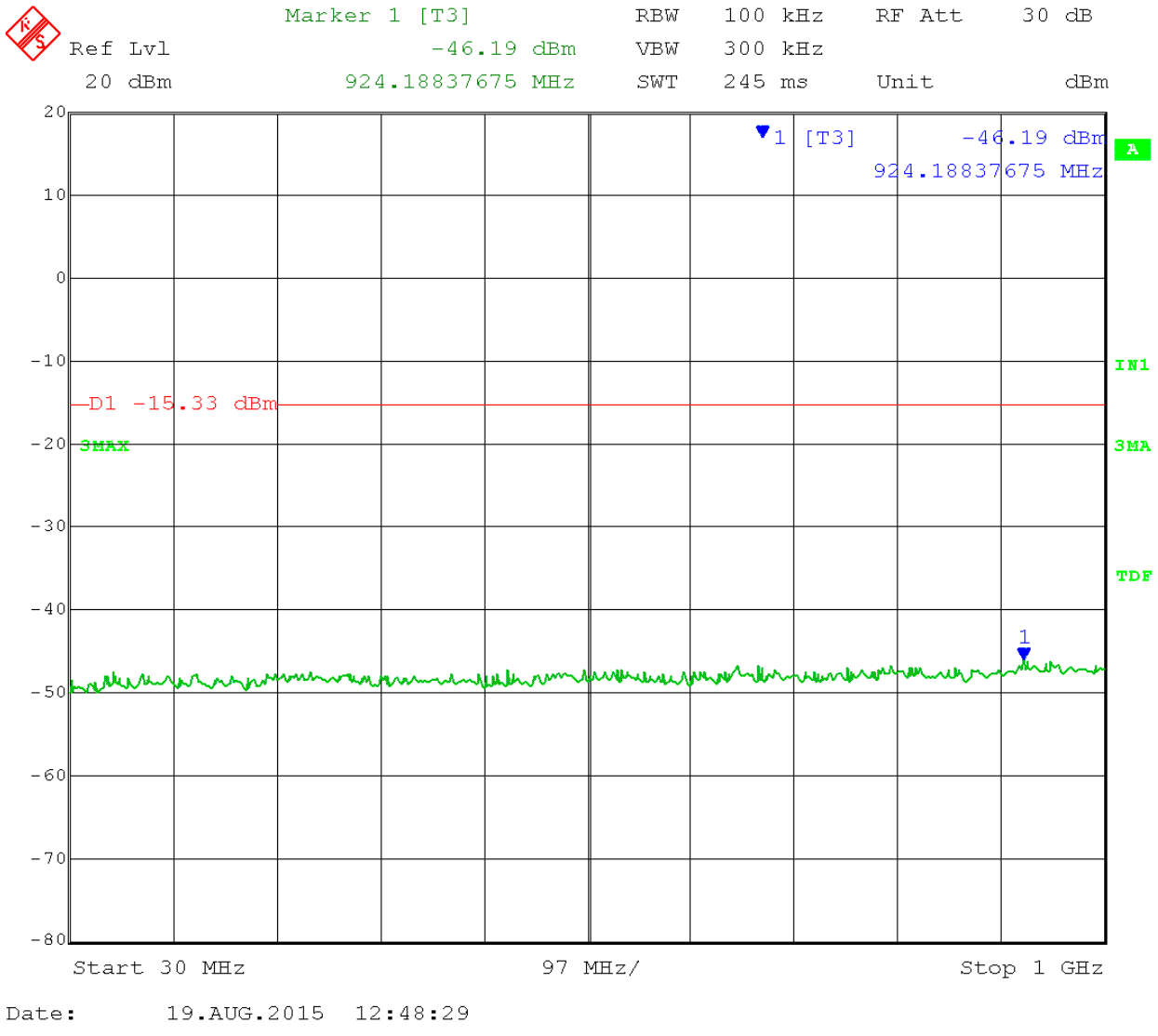


Test Date: 08-19-2015
Company: RFT Technologies
EUT: Quick Response Premier Router/Gateway
Test: Spurious Emissions - Conducted – 15.247 (d)
Operator: Paul L

Comment: Mid Channel – Ch.18 2.440 GHz

Frequency Range: 30 to 1000 MHz
Limit = -15.33dBm

All Spurious Emissions at Least 20 dB below Peak Level of In Band Frequency

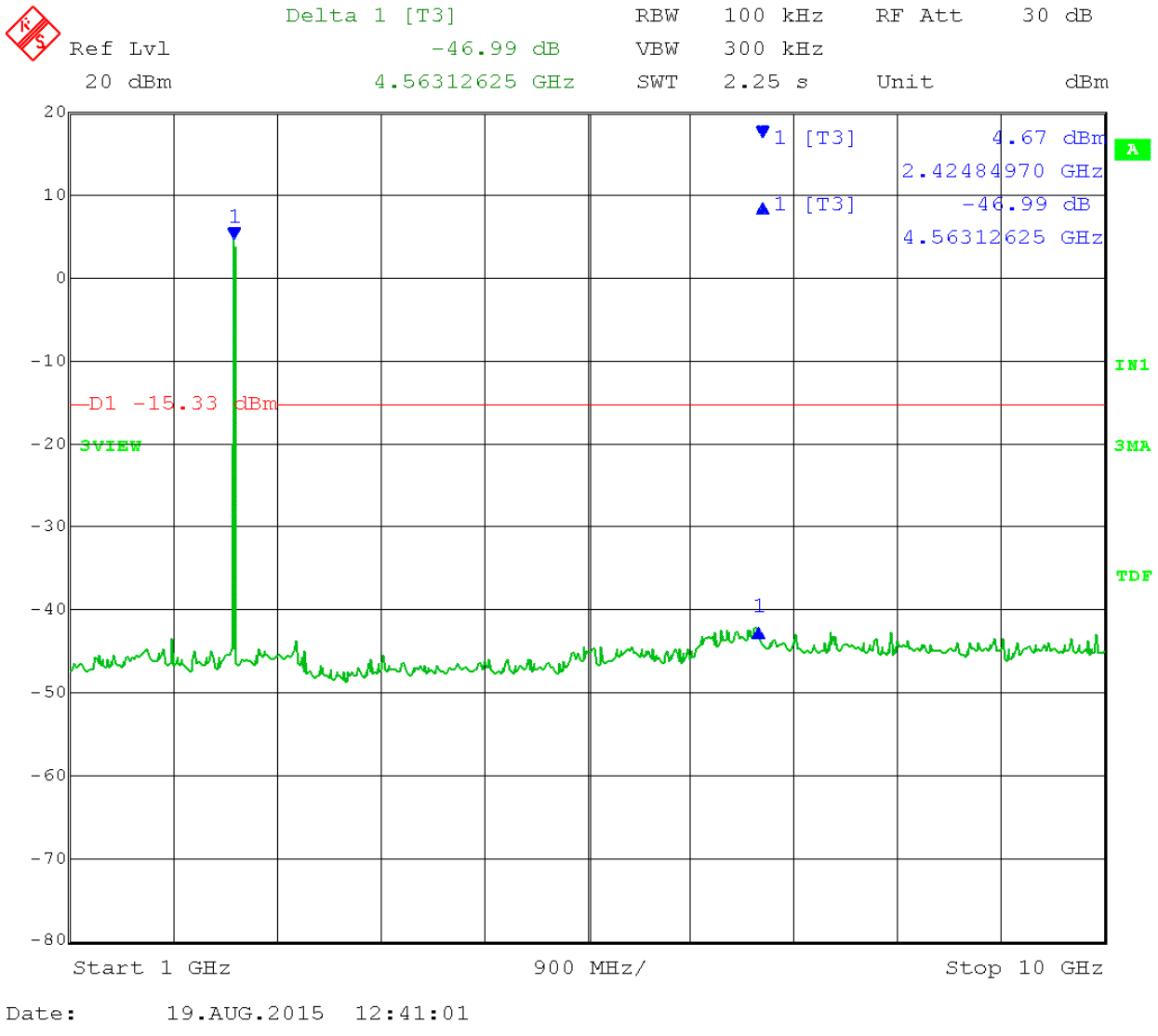


Test Date: 08-19-2015
Company: RFT Technologies
EUT: Quick Response Premier Router/Gateway
Test: Spurious Emissions - Conducted – 15.247 (d)
Operator: Paul L

Comment: Mid Channel – Ch.18 2.440 GHz

Frequency Range: 1GHz to 10GHz
Limit = -15.33 dBm

All Spurious Emissions at Least 20 dB below Peak Level of In Band Frequency

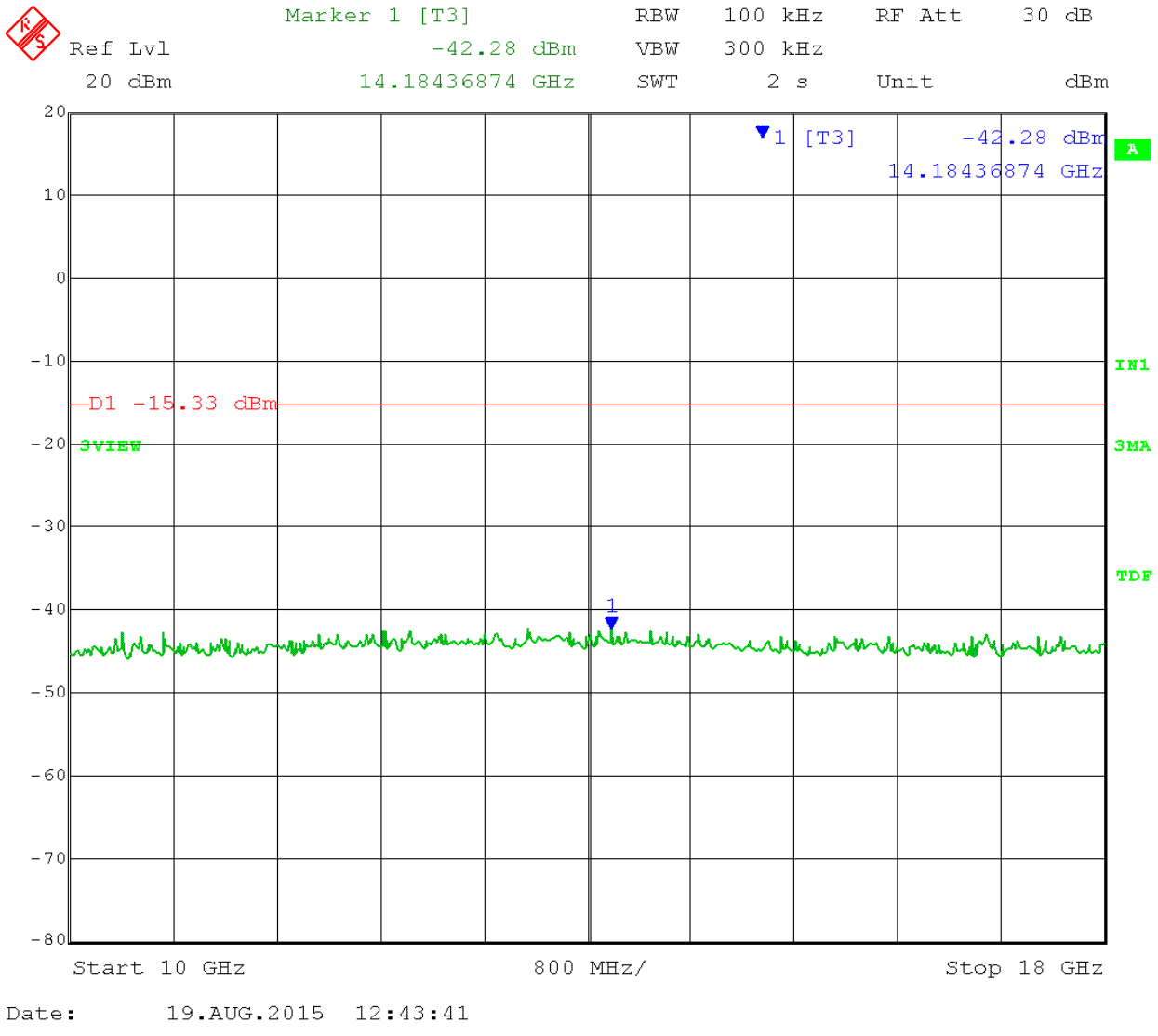


Test Date: 08-19-2015
Company: RFT Technologies
EUT: Quick Response Premier Router/Gateway
Test: Spurious Emissions - Conducted – 15.247 (d)
Operator: Paul L

Comment: Mid Channel – Ch.18 2.440 GHz

Frequency Range: 10GHz to 18GHz
Limit = -15.33dBm

All Spurious Emissions at Least 20 dB below Peak Level of In Band Frequency

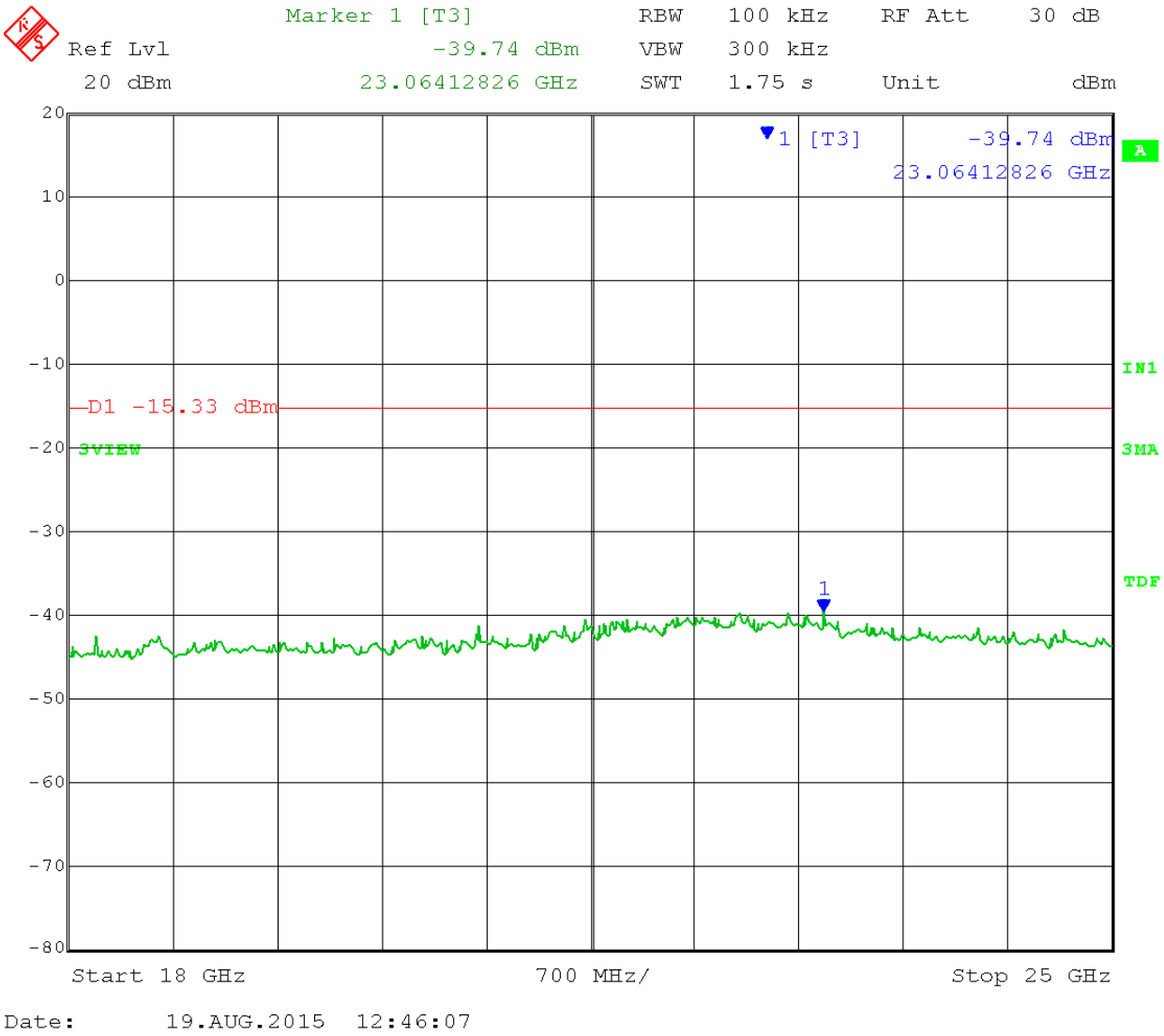


Test Date: 08-19-2015
Company: RFT Technologies
EUT: Quick Response Premier Router/Gateway
Test: Spurious Emissions - Conducted – 15.247 (d)
Operator: Paul L

Comment: Mid Channel – Ch.18 2.440 GHz

Frequency Range: 18GHz to 25GHz
Limit = -15.33dBm

All Spurious Emissions at Least 20 dB below Peak Level of In Band Frequency

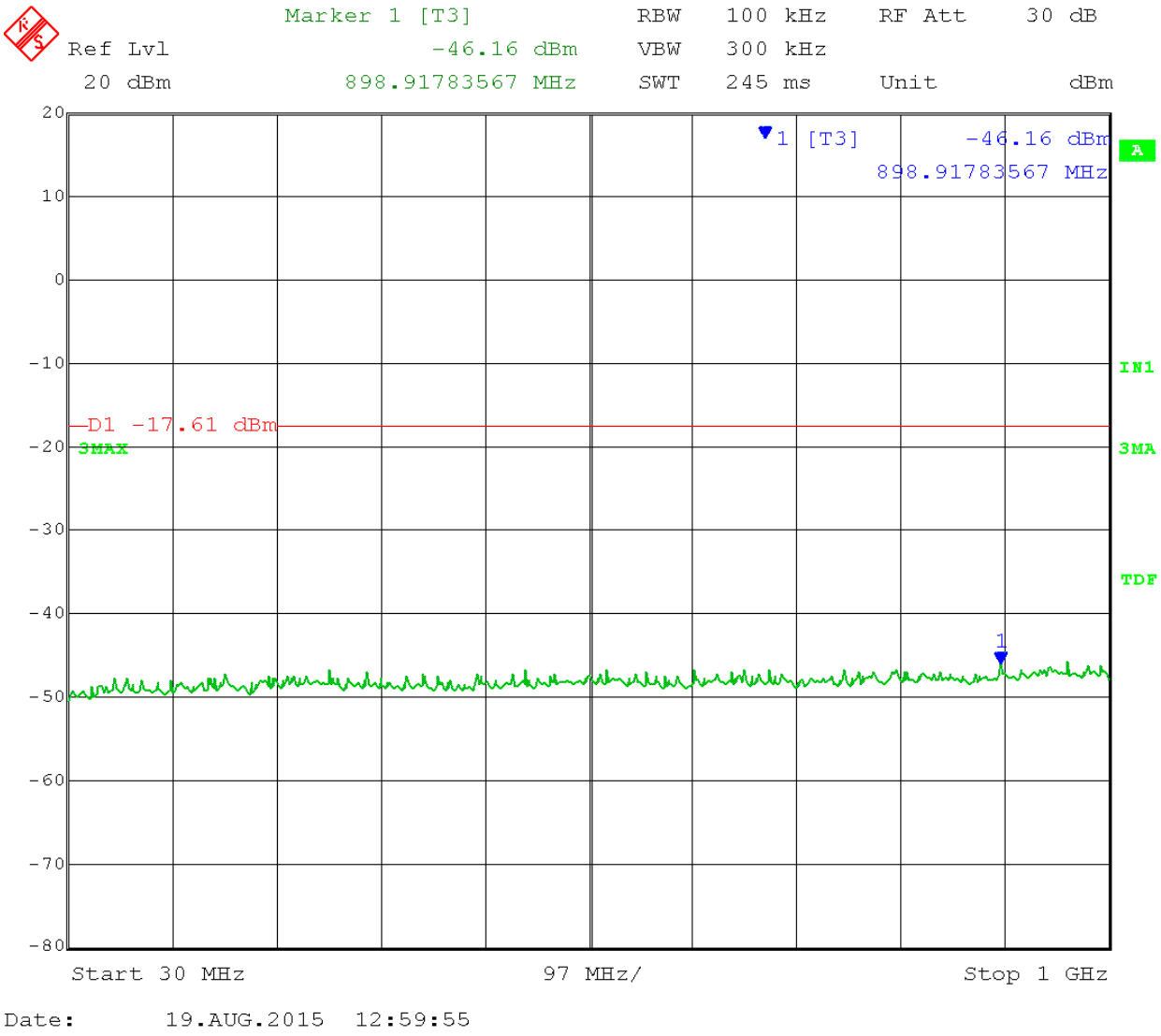


Test Date: 08-19-2015
Company: RFT Technologies
EUT: Quick Response Premier Router/Gateway
Test: Spurious Emissions - Conducted – 15.247 (d)
Operator: Paul L

Comment: High Channel – Ch.25 2.475 GHz

Frequency Range: 30 to 1000 MHz
Limit = -17.61 dBm

All Spurious Emissions at Least 20 dB below Peak Level of In Band Frequency

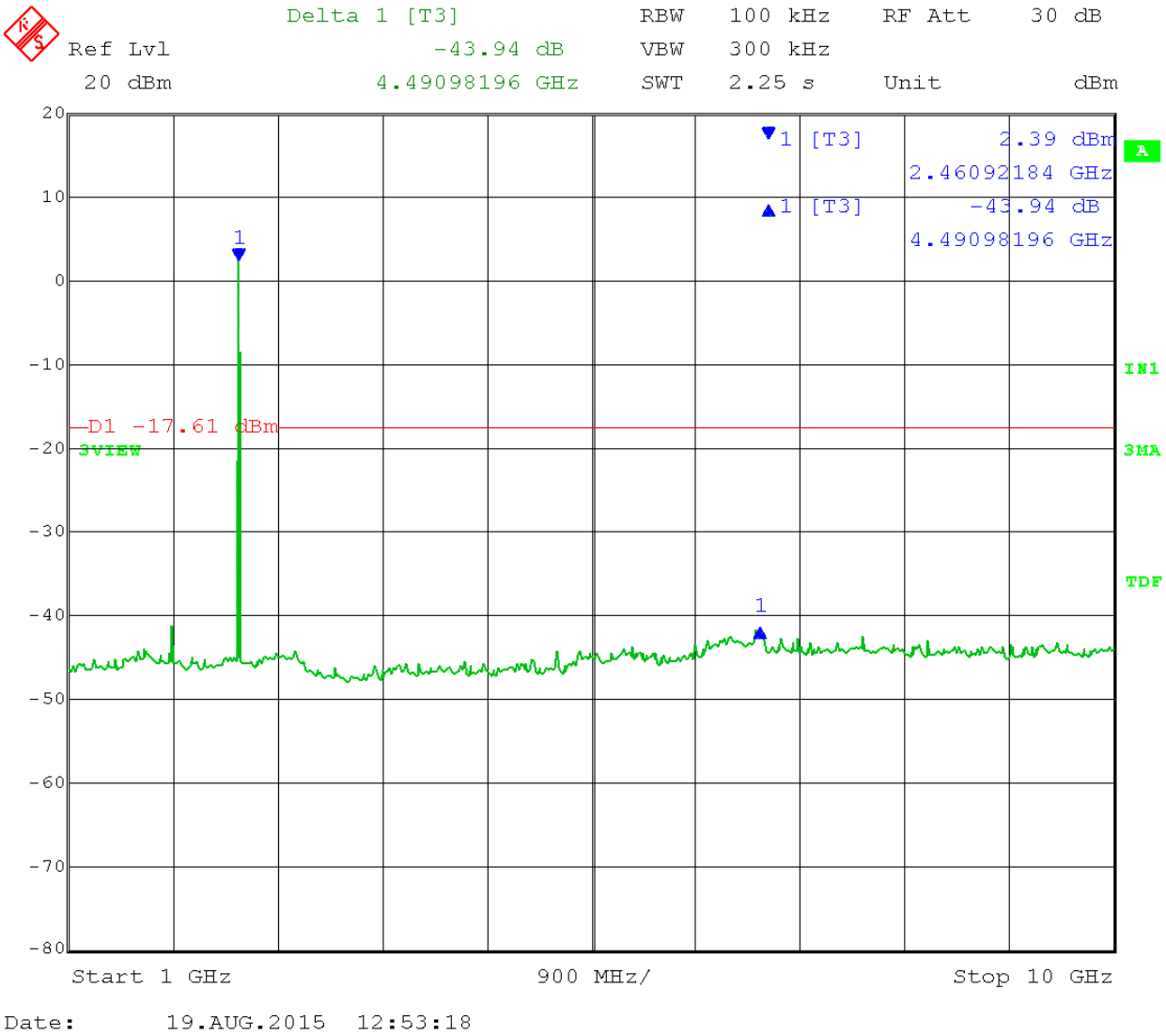


Test Date: 08-19-2015
Company: RFT Technologies
EUT: Quick Response Premier Router/Gateway
Test: Spurious Emissions - Conducted – 15.247 (d)
Operator: Paul L

Comment: High Channel – Ch.25 2.475 GHz

Frequency Range: 1GHz to 10GHz
Limit = -17.61dbm

All Spurious Emissions at Least 20 dB below Peak Level of In Band Frequency



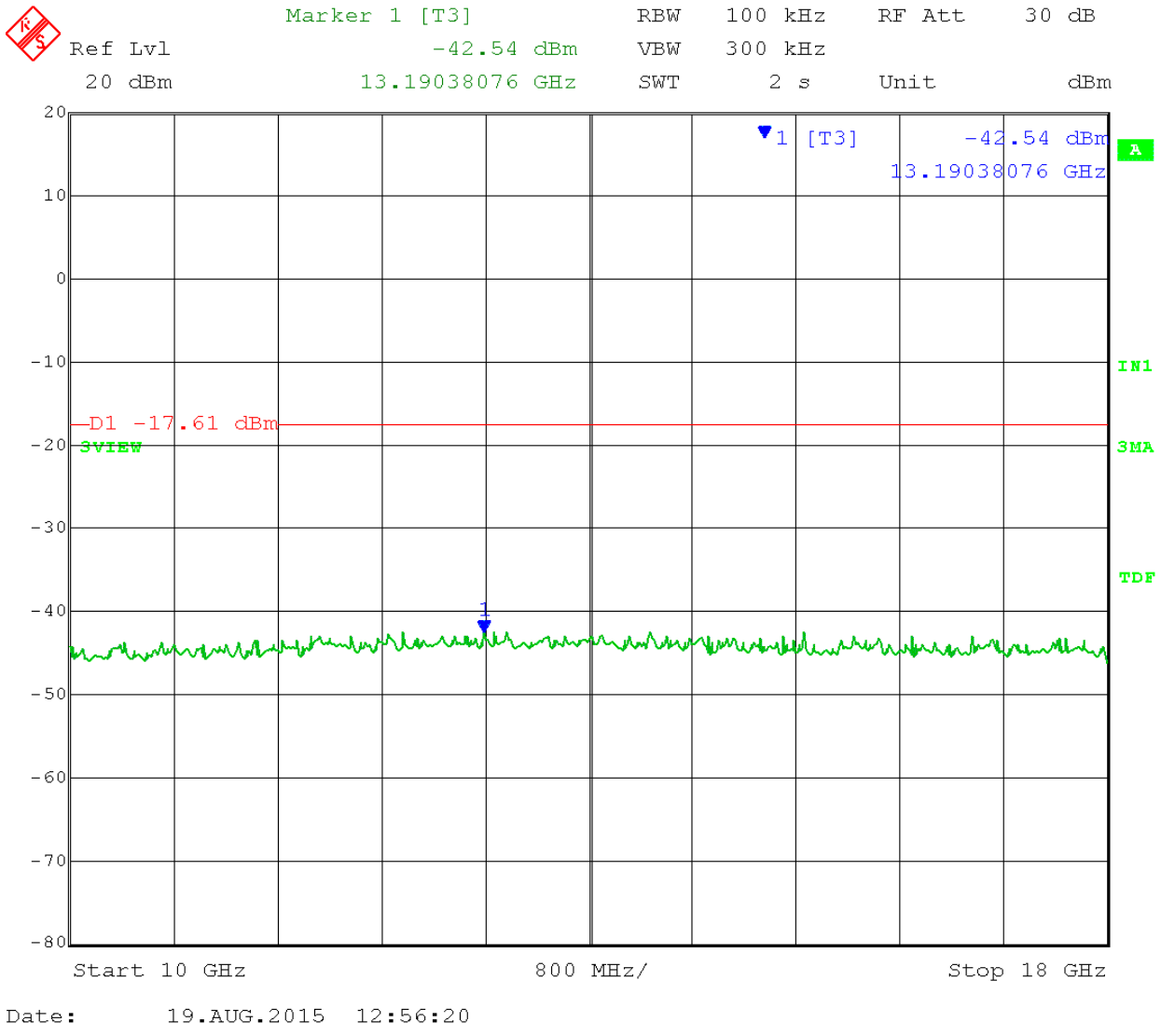
Date: 19.AUG.2015 12:53:18

Test Date: 08-19-2015
Company: RFT Technologies
EUT: Quick Response Premier Router/Gateway
Test: Spurious Emissions - Conducted – 15.247 (d)
Operator: Paul L

Comment: High Channel – Ch.25 2.475 GHz

Frequency Range: 10GHz to 18GHz
Limit = -17.61 dBm

All Spurious Emissions at Least 20 dB below Peak Level of In Band Frequency

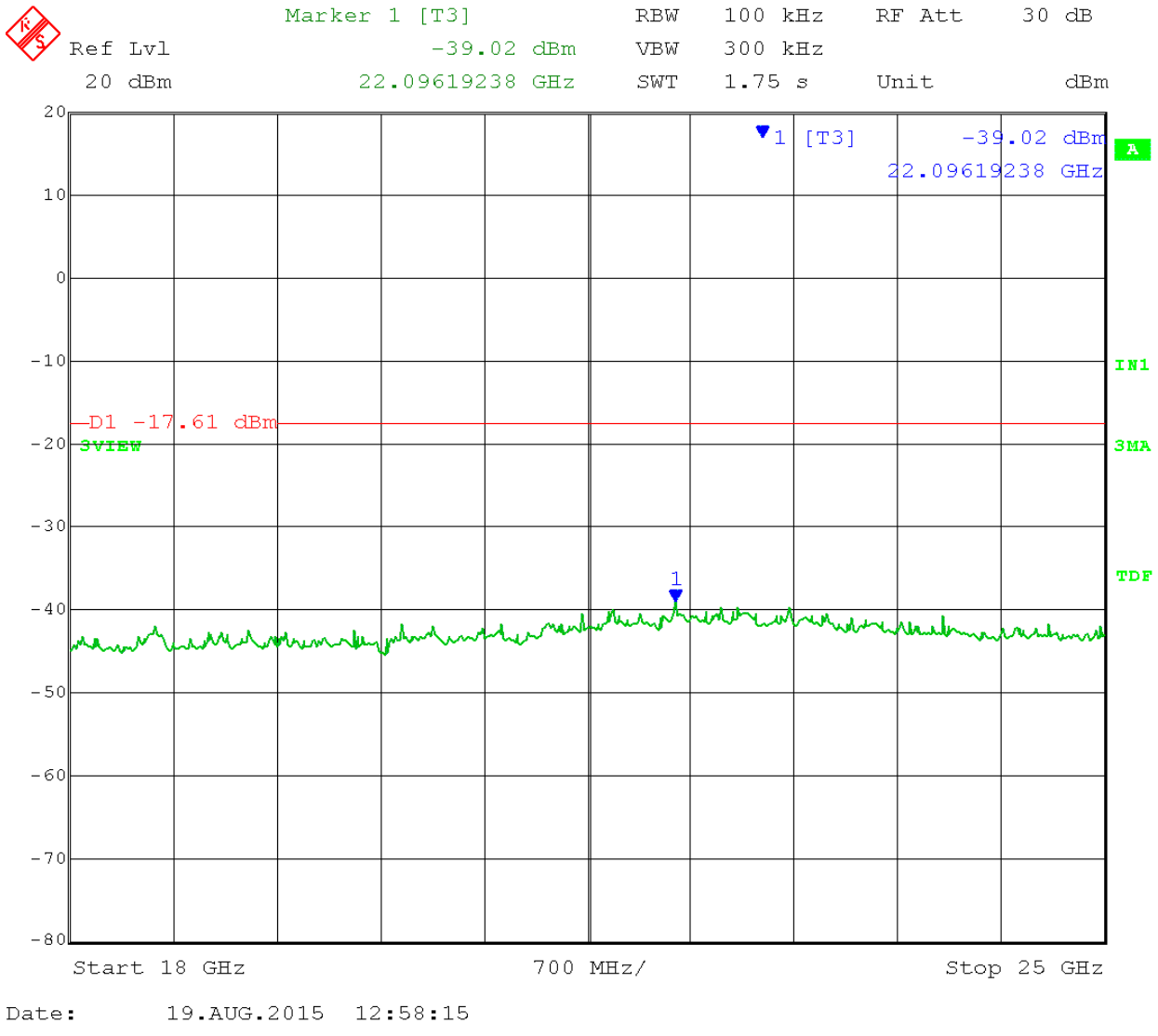


Test Date: 08-19-2015
Company: RFT Technologies
EUT: Quick Response Premier Router/Gateway
Test: Spurious Emissions - Conducted – 15.247 (d)
Operator: Paul L

Comment: High Channel – Ch.25 2.475 GHz

Frequency Range: 18GHz to 25GHz
Limit = -17.61 dBm

All Spurious Emissions at Least 20 dB below Peak Level of In Band Frequency



Date: 19.AUG.2015 12:58:15

Appendix B – Measurement Data

B5.0 Radiated Spurious Emissions

Rule Part: 15.247(d); 15.209

Test Procedure: ANSI C63.4-2014

Limit: FCC 15.109 / 15.209:

Results: Compliant

Notes: The measurement bandwidth on the receiver was set 120 kHz from 30 to 1000 MHz, and 1 MHz above 1 GHz. The detector was set to Quasi-Peak below 1 GHz and both Peak and RMS above 1 GHz. The test distance was 3 meters.

FCC Part 15.209

Electric Field Strength

EUT: Quick Response Router/Gateway Model 0800-0550
Manufacturer: RFT Technologies
Operating Condition: 66 deg. F; 59% R.H.
Test Site: DLS Site 2
Operator: Paul L #7072
Test Specification: Internal Antenna Min. Ch 2405MHz
Comment: Modulated Carrier Continuous Transmit
Date: 08-21-2015

TEXT: "Horz 3 meters"

Short Description: Test Set-up

Test Set-up: EUT Measured at 3 Meters with HORIZONTAL Antenna Polarization

Equations: Total Level(dBµV/m) = Level(dBµV) + System Loss(dB) + Antenna Factor(dBµV/m)

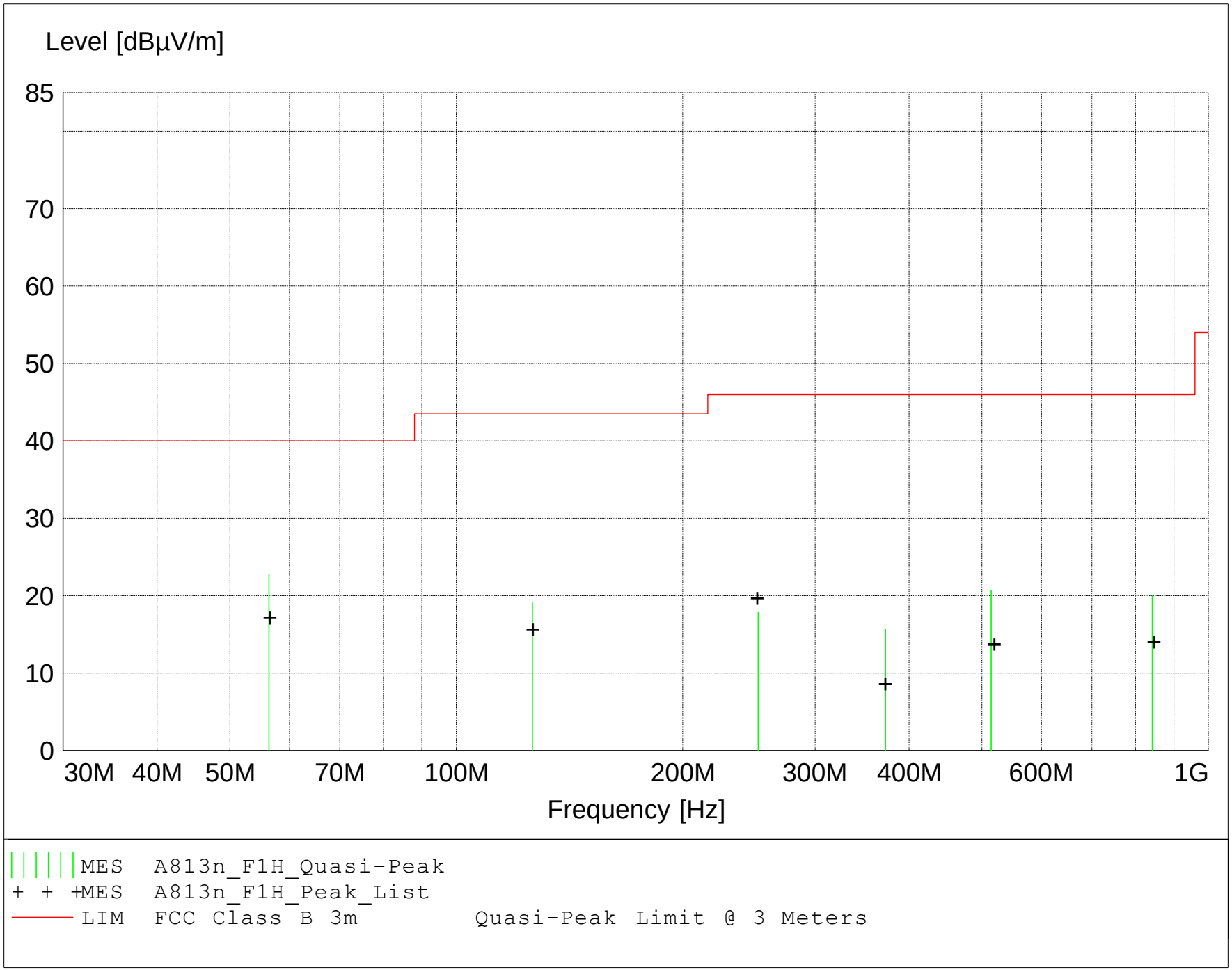
Margin(dB) = Limit(dBµV/m) - Total Level(dBµV/m)

Graph Markers: + Frequency marker (Level of marker not related to final level)

| Final maximized level using Quasi-Peak detector

X Final maximized level using Average dector

Final maximized level using Peak detector


Level [dBµV/m]
85
70
60
50
40
30
20
10
0
30M
40M
50M
70M
100M
200M
300M
400M
600M
1G
Frequency [Hz]
MES A813n_F1H_Quasi-Peak
MES A813n_F1H_Peak_List
LIM FCC Class B 3m
Quasi-Peak Limit @ 3 Meters

MEASUREMENT RESULT: "A813n_F1H_Final"

8/21/2015 10:19AM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
56.350000	36.09	10.80	-24.1	22.8	40.0	17.2	4.00	0	QUASI-PEAK	noise floor
126.200000	29.86	12.74	-23.4	19.2	43.5	24.3	4.00	0	QUASI-PEAK	noise floor
514.400000	23.26	18.70	-21.2	20.8	46.0	25.2	4.00	0	QUASI-PEAK	noise floor
842.400000	17.12	22.30	-19.3	20.1	46.0	25.9	4.00	0	QUASI-PEAK	noise floor
252.050000	28.00	12.38	-22.5	17.9	46.0	28.1	4.00	0	QUASI-PEAK	noise floor
372.050000	22.47	15.06	-21.8	15.7	46.0	30.3	4.00	0	QUASI-PEAK	noise floor

FCC Part 15.209

Electric Field Strength

EUT: Quick Response Router/Gateway Model 0800-0550
Manufacturer: RFT Technologies
Operating Condition: 66 deg. F; 59% R.H.
Test Site: DLS Site 2
Operator: Paul L #7072
Test Specification: Internal Antenna Min. Ch 2405MHz
Comment: Modulated Carrier Continuous Transmit
Date: 08-21-2015

TEXT: "Vert 3 meters"

Short Description: Test Set-up

Test Set-up: EUT Measured at 3 Meters with VERTICAL Antenna Polarization

Equations: Total Level(dBµV/m) = Level(dBµV) + System Loss(dB) + Antenna Factor(dBµV/m)

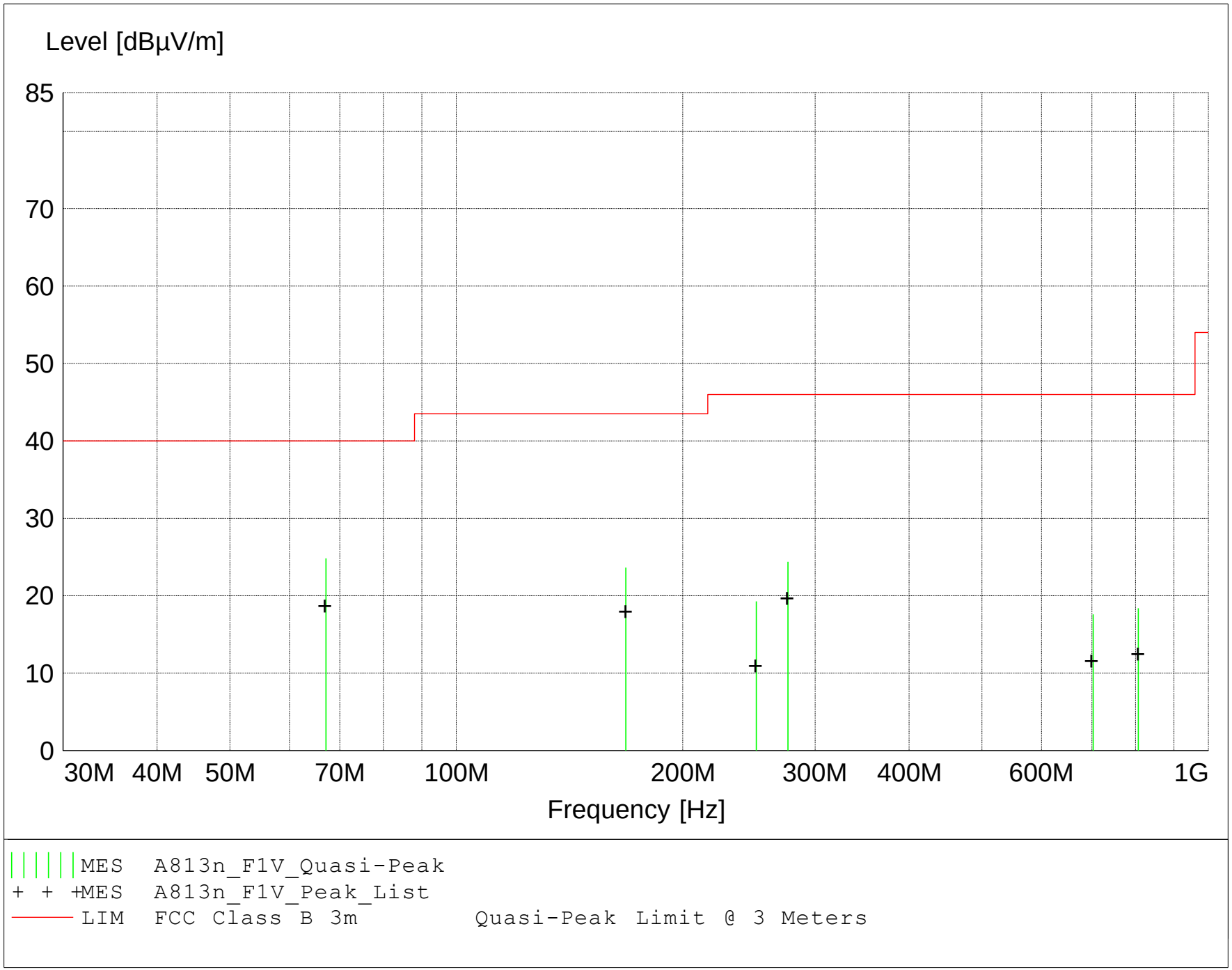
Margin(dB) = Limit(dBµV/m) - Total Level(dBµV/m)

Graph Markers: + Frequency marker (Level of marker not related to final level)

| Final maximized level using Quasi-Peak detector

X Final maximized level using Average dector

Final maximized level using Peak detector


Level [dBµV/m]
85
70
60
50
40
30
20
10
0
30M
40M
50M
70M
100M
200M
300M
400M
600M
1G
Frequency [Hz]
MES A813n_F1V_Quasi-Peak
MES A813n_F1V_Peak_List
LIM FCC Class B 3m Quasi-Peak Limit @ 3 Meters

MEASUREMENT RESULT: "A813n_F1V_Final"

8/21/2015 9:54AM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
67.100000	40.73	7.98	-23.9	24.8	40.0	15.2	1.00	0	QUASI-PEAK	noise floor
168.050000	32.41	14.11	-22.9	23.6	43.5	19.9	1.00	0	QUASI-PEAK	noise floor
276.050000	33.25	13.42	-22.3	24.4	46.0	21.6	1.00	0	QUASI-PEAK	noise floor
250.600000	29.47	12.32	-22.5	19.3	46.0	26.7	1.00	0	QUASI-PEAK	noise floor
807.000000	16.39	21.74	-19.8	18.4	46.0	27.6	1.00	0	QUASI-PEAK	noise floor
702.950000	16.71	21.04	-20.2	17.6	46.0	28.4	1.00	0	QUASI-PEAK	noise floor

FCC Part 15.209

Electric Field Strength

EUT: Quick Response Router/Gateway Model 0800-0550
Manufacturer: RFT Technologies
Operating Condition: 66 deg. F; 59% R.H.
Test Site: DLS Site 2
Operator: Paul L #7072
Test Specification: Internal Antenna Mid. Ch 2440MHz
Comment: Modulated Carrier Continuous Transmit
Date: 08-21-2015

TEXT: "Horz 3 meters"

Short Description: Test Set-up

Test Set-up: EUT Measured at 3 Meters with HORIZONTAL Antenna Polarization

Equations: Total Level(dBµV/m) = Level(dBµV) + System Loss(dB) + Antenna Factor(dBµV/m)

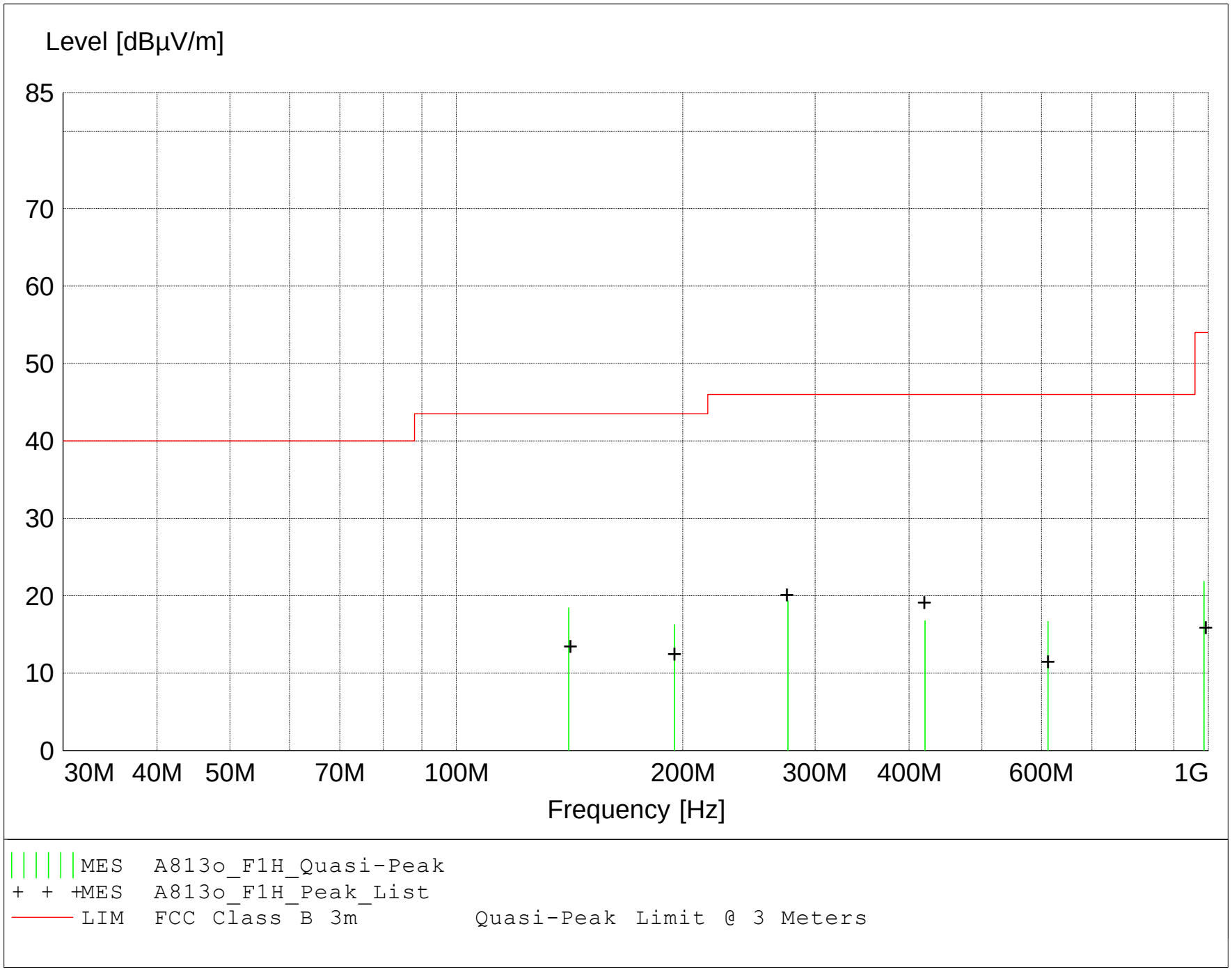
Margin(dB) = Limit(dBµV/m) - Total Level(dBµV/m)

Graph Markers: + Frequency marker (Level of marker not related to final level)

| Final maximized level using Quasi-Peak detector

X Final maximized level using Average dector

Final maximized level using Peak detector


Level [dBµV/m]
85
70
60
50
40
30
20
10
0
30M
40M
50M
70M
100M
200M
300M
400M
600M
1G
Frequency [Hz]
MES A813o_F1H_Quasi-Peak
MES A813o_F1H_Peak_List
LIM FCC Class B 3m Quasi-Peak Limit @ 3 Meters

MEASUREMENT RESULT: "A813o_F1H_Final"

8/21/2015 11:22AM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
141.150000	29.43	12.29	-23.3	18.5	43.5	25.0	4.00	0	QUASI-PEAK	noise floor
276.050000	28.24	13.42	-22.3	19.4	46.0	26.6	4.00	0	QUASI-PEAK	noise floor
195.000000	21.52	17.60	-22.8	16.3	43.5	27.2	4.00	0	QUASI-PEAK	noise floor
420.050000	22.20	16.20	-21.6	16.8	46.0	29.2	4.00	0	QUASI-PEAK	noise floor
612.000000	17.99	19.48	-20.7	16.7	46.0	29.3	4.00	0	QUASI-PEAK	noise floor
986.800000	15.70	24.34	-18.2	21.9	54.0	32.1	4.00	0	QUASI-PEAK	noise floor

FCC Part 15.209

Electric Field Strength

EUT: Quick Response Router/Gateway Model 0800-0550
Manufacturer: RFT Technologies
Operating Condition: 66 deg. F; 59% R.H.
Test Site: DLS Site 2
Operator: Paul L #7072
Test Specification: Internal Antenna Mid. Ch 2440MHz
Comment: Modulated Carrier Continuous Transmit
Date: 08-21-2015

TEXT: "Vert 3 meters"

Short Description: Test Set-up

Test Set-up: EUT Measured at 3 Meters with VERTICAL Antenna Polarization

Equations: Total Level(dBµV/m) = Level(dBµV) + System Loss(dB) + Antenna Factor(dBµV/m)

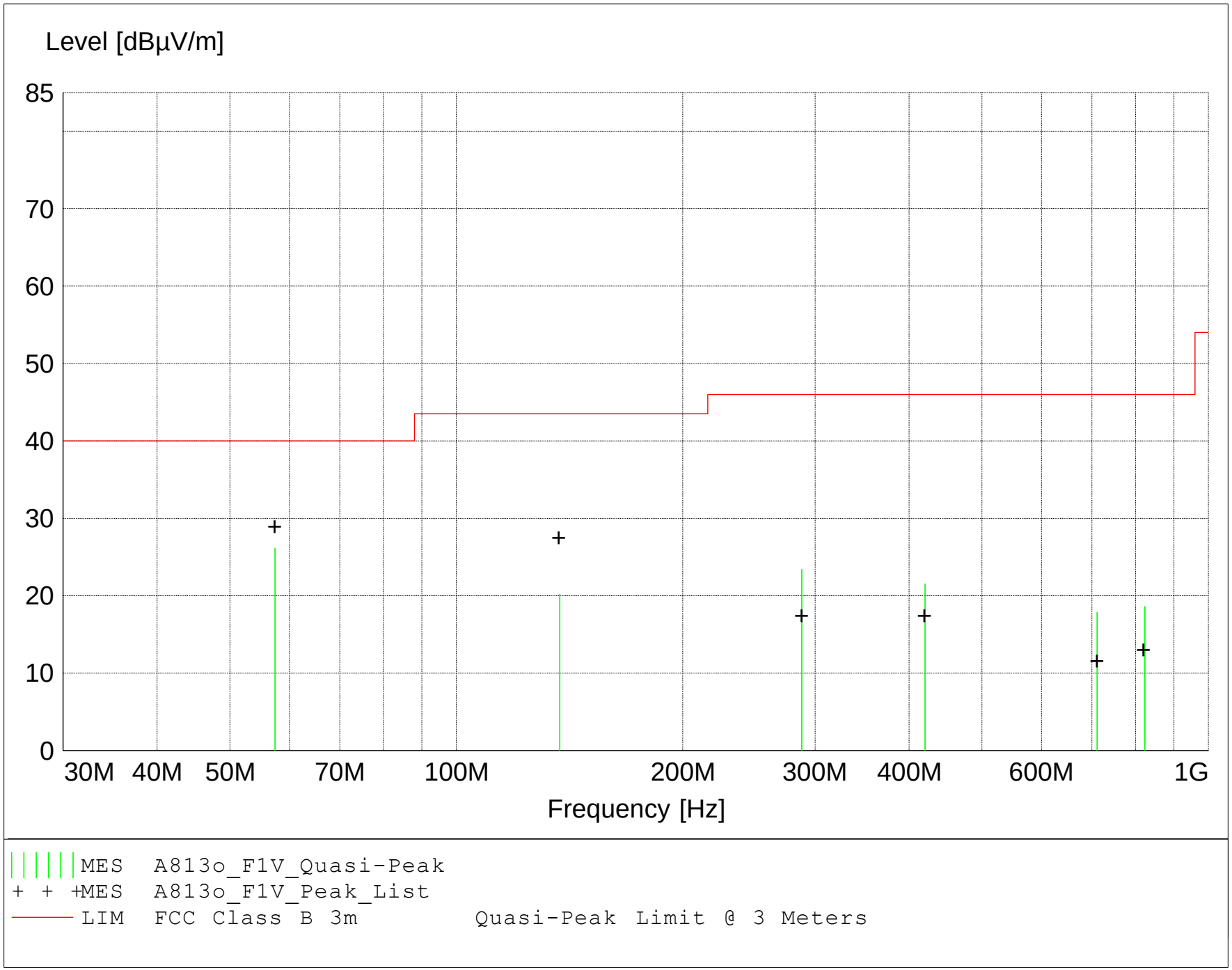
Margin(dB) = Limit(dBµV/m) - Total Level(dBµV/m)

Graph Markers: + Frequency marker (Level of marker not related to final level)

| Final maximized level using Quasi-Peak detector

X Final maximized level using Average dector

Final maximized level using Peak detector


Level [dBµV/m]
85
70
60
50
40
30
20
10
0
30M
40M
50M
70M
100M
200M
300M
400M
600M
1G
Frequency [Hz]
MES A813o_F1V_Quasi-Peak
MES A813o_F1V_Peak_List
LIM FCC Class B 3m
Quasi-Peak Limit @ 3 Meters

MEASUREMENT RESULT: "A813o_F1V_Final"

8/21/2015 11:04AM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
57.400000	39.66	10.56	-24.0	26.2	40.0	13.8	1.00	0	QUASI-PEAK	noise floor
288.050000	31.67	13.92	-22.2	23.4	46.0	22.6	1.00	0	QUASI-PEAK	noise floor
137.250000	31.03	12.48	-23.3	20.2	43.5	23.3	1.00	0	QUASI-PEAK	noise floor
420.050000	26.98	16.20	-21.6	21.6	46.0	24.4	1.00	0	QUASI-PEAK	noise floor
823.400000	16.22	22.03	-19.6	18.6	46.0	27.4	1.00	0	QUASI-PEAK	noise floor
711.350000	16.90	21.10	-20.1	17.9	46.0	28.1	1.00	0	QUASI-PEAK	noise floor

FCC Part 15.209

Electric Field Strength

EUT: Quick Response Router/Gateway Model 0800-0550
Manufacturer: RFT Technologies
Operating Condition: 66 deg. F; 59% R.H.
Test Site: DLS Site 2
Operator: Paul L #7072
Test Specification: Internal Antenna Max. Ch 2475MHz
Comment: Modulated Carrier Continuous Transmit
Date: 08-21-2015

TEXT: "Horz 3 meters"

Short Description: Test Set-up

Test Set-up: EUT Measured at 3 Meters with HORIZONTAL Antenna Polarization

Equations: Total Level(dBµV/m) = Level(dBµV) + System Loss(dB) + Antenna Factor(dBµV/m)

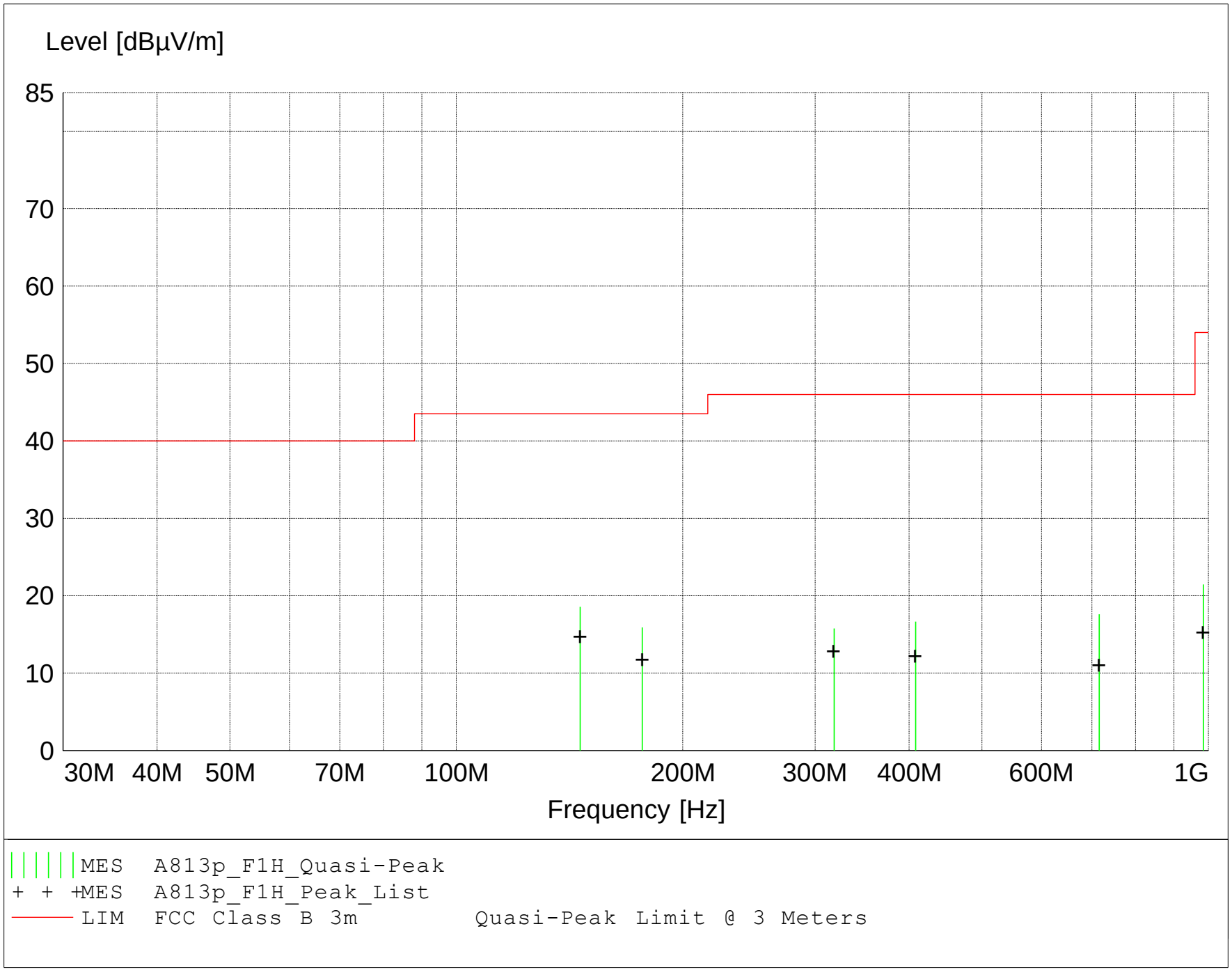
Margin(dB) = Limit(dBµV/m) - Total Level(dBµV/m)

Graph Markers: + Frequency marker (Level of marker not related to final level)

| Final maximized level using Quasi-Peak detector

X Final maximized level using Average dector

Final maximized level using Peak detector


Level [dBµV/m]
85
70
60
50
40
30
20
10
0
30M
40M
50M
70M
100M
200M
300M
400M
600M
1G
Frequency [Hz]
MES A813p_F1H_Quasi-Peak
MES A813p_F1H_Peak_List
LIM FCC Class B 3m
Quasi-Peak Limit @ 3 Meters

MEASUREMENT RESULT: "A813p_F1H_Final"

8/21/2015 1:00PM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
146.100000	29.64	12.10	-23.2	18.6	43.5	24.9	4.00	0	QUASI-PEAK	noise floor
176.700000	23.32	15.47	-22.9	15.9	43.5	27.6	4.00	0	QUASI-PEAK	noise floor
716.150000	16.61	21.12	-20.1	17.6	46.0	28.4	4.00	0	QUASI-PEAK	noise floor
408.100000	22.52	15.76	-21.6	16.7	46.0	29.3	4.00	0	QUASI-PEAK	noise floor
318.000000	23.33	14.58	-22.1	15.8	46.0	30.2	4.00	0	QUASI-PEAK	noise floor
984.950000	15.32	24.30	-18.1	21.5	54.0	32.5	4.00	0	QUASI-PEAK	noise floor

FCC Part 15.209

Electric Field Strength

EUT: Quick Response Router/Gateway Model 0800-0550
Manufacturer: RFT Technologies
Operating Condition: 66 deg. F; 59% R.H.
Test Site: DLS Site 2
Operator: Paul L #7072
Test Specification: Internal Antenna Max. Ch 2475MHz
Comment: Modulated Carrier Continuous Transmit
Date: 08-21-2015

TEXT: "Vert 3 meters"

Short Description: Test Set-up

Test Set-up: EUT Measured at 3 Meters with VERTICAL Antenna Polarization

Equations: Total Level(dBµV/m) = Level(dBµV) + System Loss(dB) + Antenna Factor(dBµV/m)

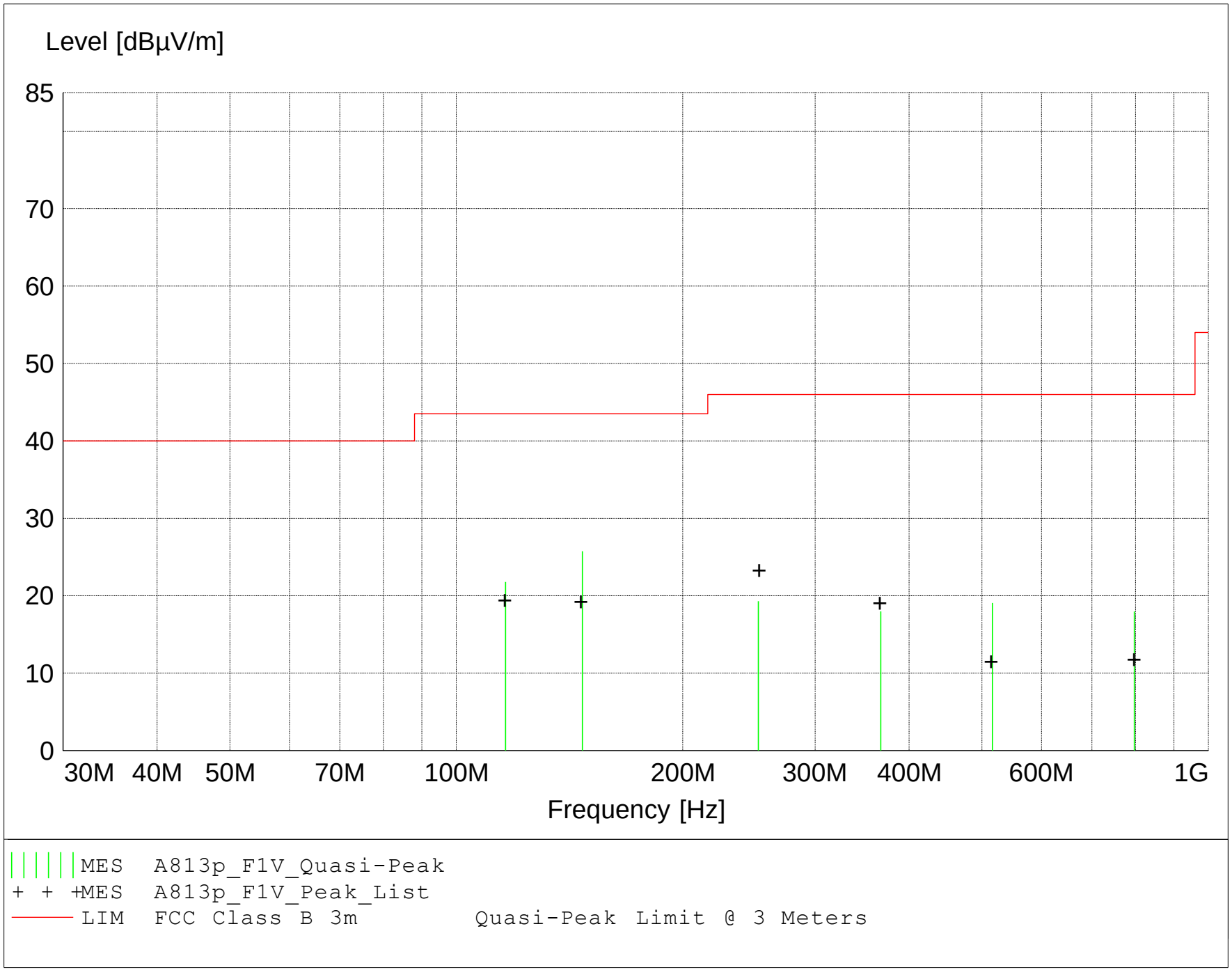
Margin(dB) = Limit(dBµV/m) - Total Level(dBµV/m)

Graph Markers: + Frequency marker (Level of marker not related to final level)

| Final maximized level using Quasi-Peak detector

X Final maximized level using Average dector

Final maximized level using Peak detector


Level [dBµV/m]
85
70
60
50
40
30
20
10
0
30M
40M
50M
70M
100M
200M
300M
400M
600M
1G
Frequency [Hz]
MES A813p_F1V_Quasi-Peak
MES A813p_F1V_Peak_List
LIM FCC Class B 3m Quasi-Peak Limit @ 3 Meters

MEASUREMENT RESULT: "A813p_F1V_Final"

8/21/2015 12:52PM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
147.100000	36.78	12.10	-23.1	25.7	43.5	17.8	1.00	0	QUASI-PEAK	noise floor
116.250000	32.64	12.50	-23.4	21.8	43.5	21.7	1.00	0	QUASI-PEAK	noise floor
252.100000	29.43	12.38	-22.5	19.3	46.0	26.7	1.00	0	QUASI-PEAK	noise floor
516.100000	21.63	18.63	-21.2	19.1	46.0	26.9	1.00	0	QUASI-PEAK	noise floor
366.700000	24.76	15.03	-21.8	18.0	46.0	28.0	1.00	0	QUASI-PEAK	noise floor
797.000000	15.80	21.86	-19.7	18.0	46.0	28.0	1.00	0	QUASI-PEAK	noise floor

FCC Part 15.247

Electric Field Strength

EUT: Quick Response Router/Gateway Model 0800-0550
Manufacturer: RFT Technologies
Operating Condition: 72 deg. F; 56% R.H.
Test Site: DLS Site 2
Operator: Paul L #7072
Test Specification: Internal Antenna Min. Ch 2405MHz
Comment: Modulated Carrier Continuous Transmit
Date: 08-17-2015

TEXT: "Horz 3 meters"

Short Description: Test Set-up

Test Set-up: EUT Measured at 3 Meters with HORIZONTAL Antenna Polarization

Equations: Total Level(dBµV/m) = Level(dBµV) + System Loss(dB) + Antenna Factor(dBµV/m)

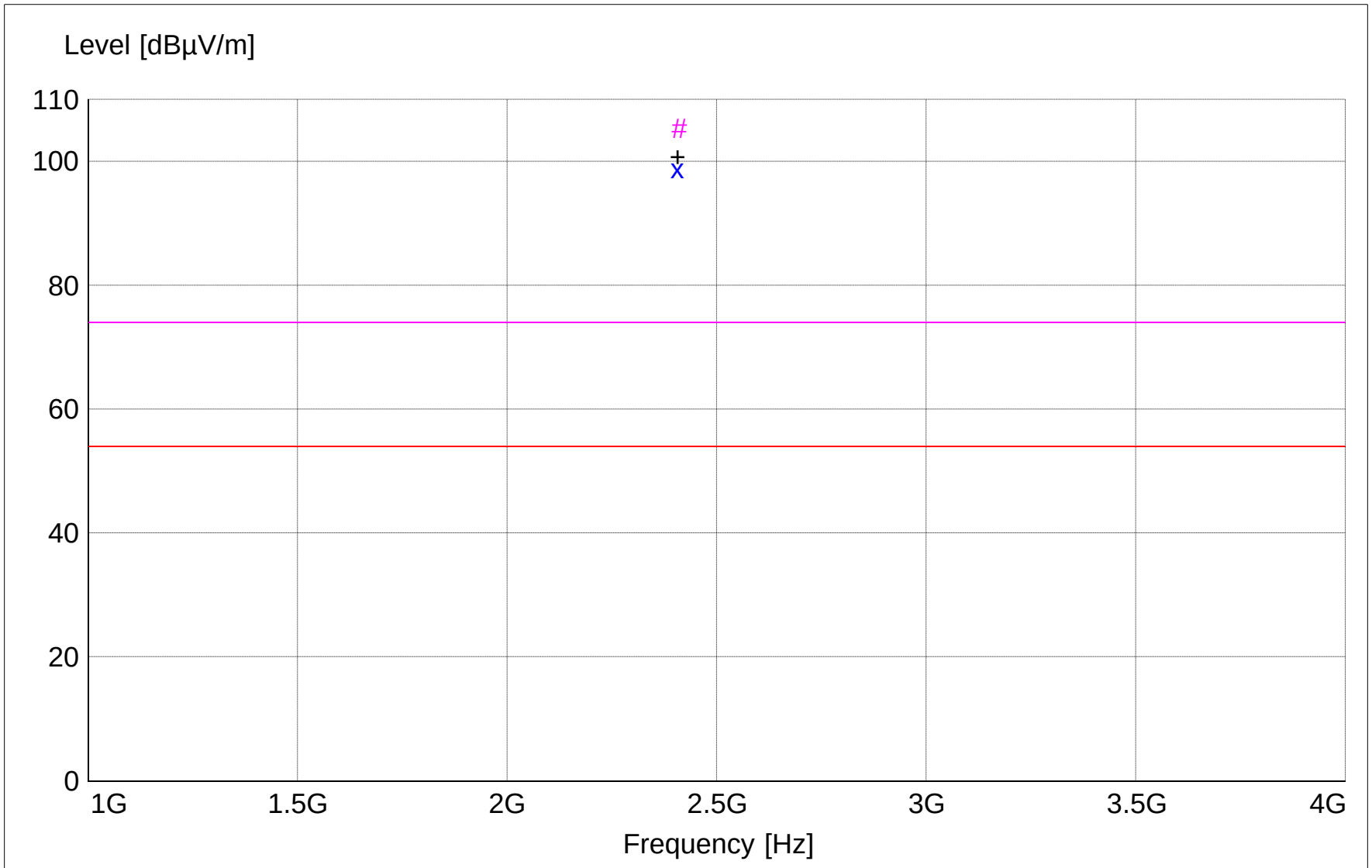
Margin(dB) = Limit(dBµV/m) - Total Level(dBµV/m)

Graph Markers: + Frequency marker (Level of marker not related to final level)

| Final maximized level using Quasi-Peak detector

X Final maximized level using Average dector

Final maximized level using Peak detector



x x xMES A813g_sh_Average
MES A813g_sh_Peak
+ + +MES A813g_sh_Peak_List
——— LIM FCC Class B F 3m AVG Field Strength AVG Limit 3m
——— LIM FCC Class B F 3m PK Field Strength PEAK Limit 3m

MEASUREMENT RESULT: "A813g_sh_Final"

8/17/2015 3:06PM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
2405.600000	69.03	28.30	1.6	98.9	54.0	-44.9	1.50	180	RMS	Fundamental
2405.600000	75.45	28.30	1.6	105.3	74.0	-31.3	1.50	180	MAX PEAK	Fundamental

FCC Part 15.247

Electric Field Strength

EUT: Quick Response Router/Gateway Model 0800-0550
Manufacturer: RFT Technologies
Operating Condition: 72 deg. F; 56% R.H.
Test Site: DLS Site 2
Operator: Paul L #7072
Test Specification: Internal Antenna Min. Ch 2405MHz
Comment: Modulated Carrier Continuous Transmit
Date: 08-17-2015

TEXT: "Vert 3 meters"

Short Description: Test Set-up

Test Set-up: EUT Measured at 3 Meters with VERTICAL Antenna Polarization

Equations: Total Level(dBµV/m) = Level(dBµV) + System Loss(dB) + Antenna Factor(dBµV/m)

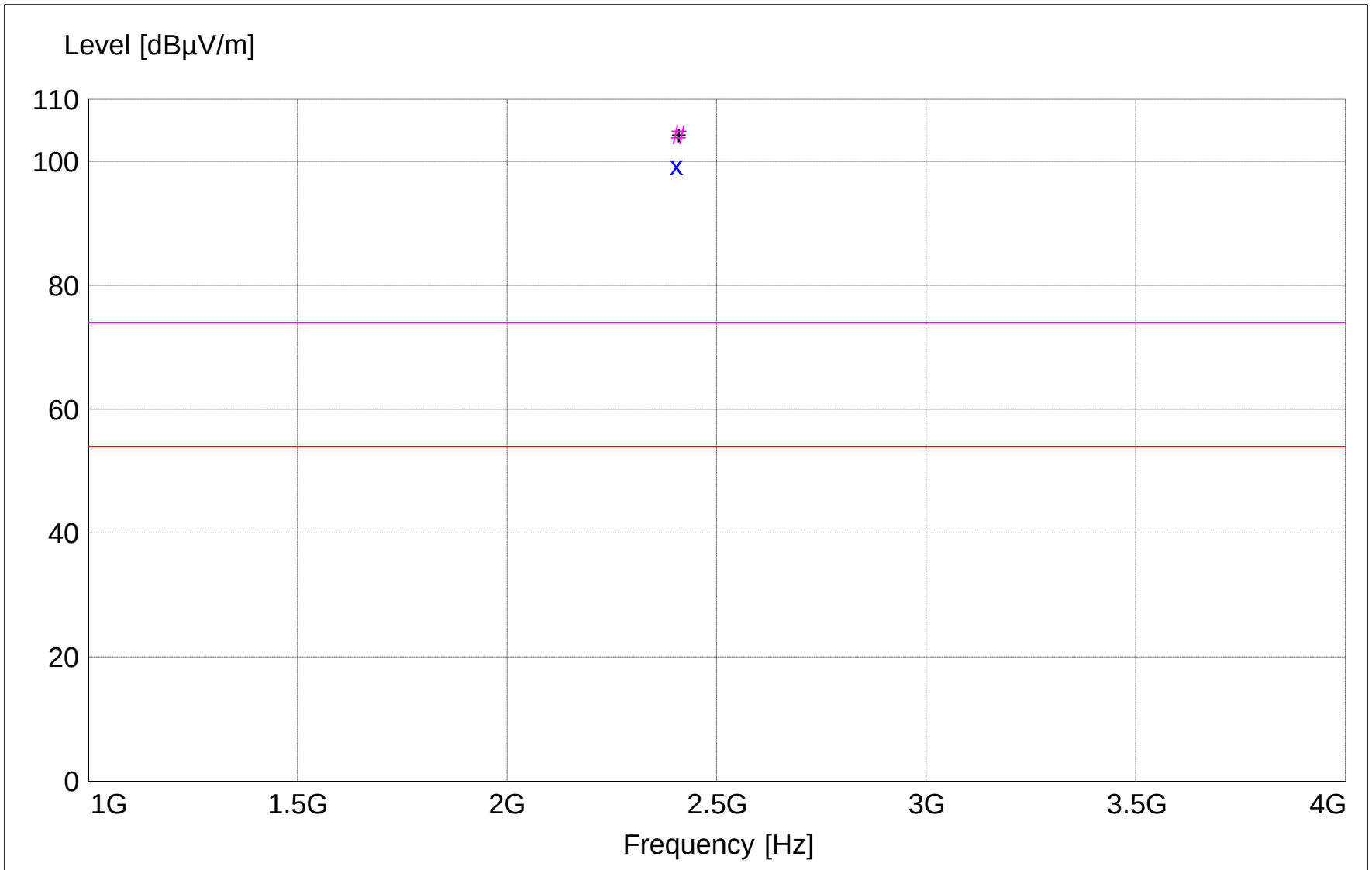
Margin(dB) = Limit(dBµV/m) - Total Level(dBµV/m)

Graph Markers: + Frequency marker (Level of marker not related to final level)

| Final maximized level using Quasi-Peak detector

X Final maximized level using Average dector

Final maximized level using Peak detector



x x xMES A813g_sv_Average
MES A813g_sv_Peak
+ + +MES A813g_sv_Peak_List
——— LIM FCC Class B F 3m AVG Field Strength AVG Limit 3m
——— LIM FCC Class B F 3m PK Field Strength PEAK Limit 3m

MEASUREMENT RESULT: "A813g_sv_Final"

8/17/2015 3:17PM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
2404.400000	69.57	28.29	1.6	99.4	54.0	-45.4	1.50	178	RMS	Fundamental
2404.400000	74.59	28.29	1.6	104.5	74.0	-30.5	1.50	178	MAX PEAK	Fundamental

FCC Part 15.247

Electric Field Strength

EUT: Quick Response Router/Gateway Model 0800-0550
Manufacturer: RFT Technologies
Operating Condition: 72 deg. F; 56% R.H.
Test Site: DLS Site 2
Operator: Paul L #7072
Test Specification: Internal Antenna Mid. Ch 2440MHz
Comment: Modulated Carrier Continuous Transmit
Date: 08-17-2015

TEXT: "Horz 3 meters"

Short Description: Test Set-up

Test Set-up: EUT Measured at 3 Meters with HORIZONTAL Antenna Polarization

Equations: Total Level(dBµV/m) = Level(dBµV) + System Loss(dB) + Antenna Factor(dBµV/m)

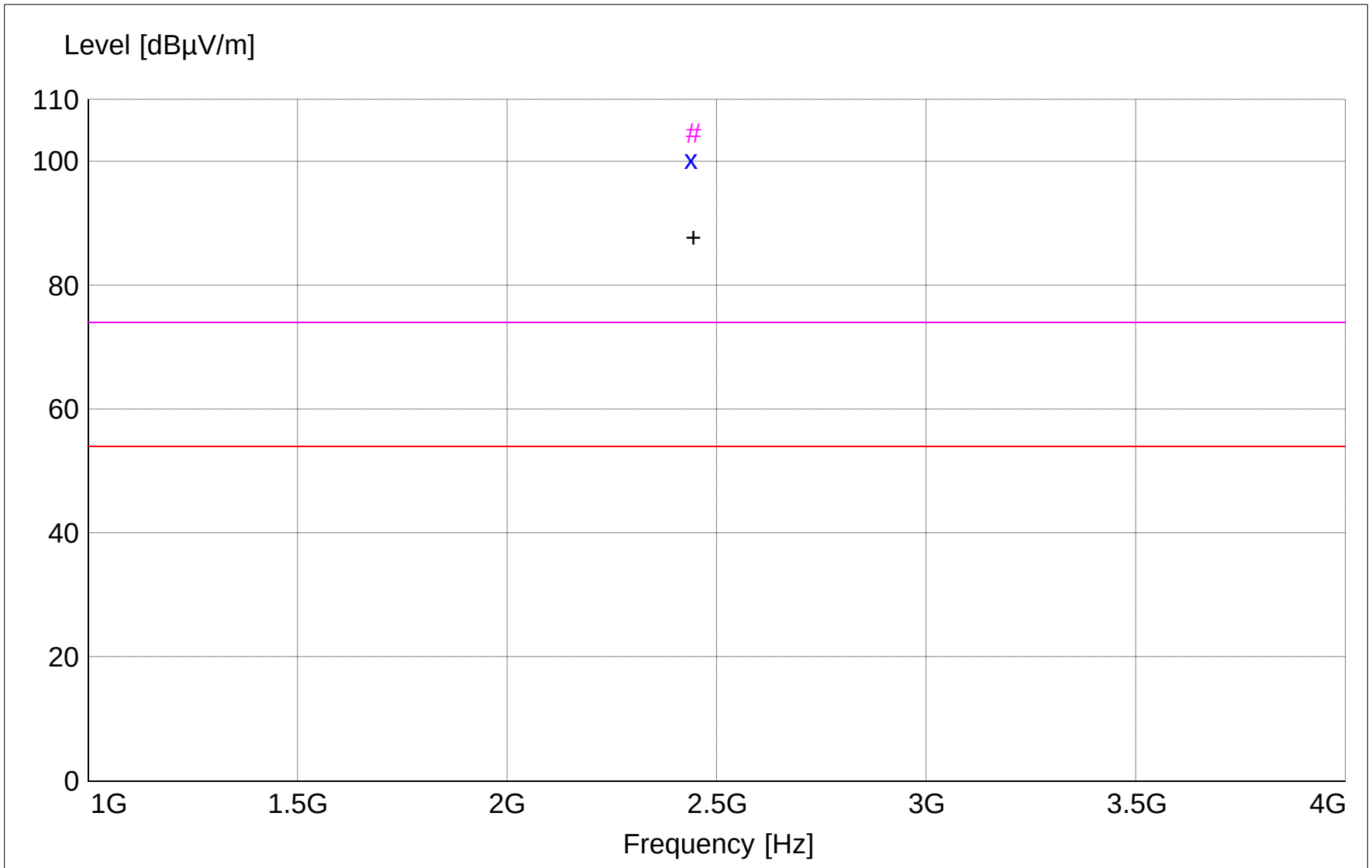
Margin(dB) = Limit(dBµV/m) - Total Level(dBµV/m)

Graph Markers: + Frequency marker (Level of marker not related to final level)

| Final maximized level using Quasi-Peak detector

X Final maximized level using Average dector

Final maximized level using Peak detector



x x xMES A813h_sh_Average
MES A813h_sh_Peak
+ + +MES A813h_sh_Peak_List
——— LIM FCC Class B F 3m AVG Field Strength AVG Limit 3m
——— LIM FCC Class B F 3m PK Field Strength PEAK Limit 3m

MEASUREMENT RESULT: "A813h_sh_Final"

8/17/2015 3:32PM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
2439.600000	70.51	28.38	1.6	100.4	54.0	-46.4	1.50	225	RMS	Fundamental
2439.600000	74.66	28.38	1.6	104.6	74.0	-30.6	1.50	225	MAX PEAK	Fundamental

FCC Part 15.247

Electric Field Strength

EUT: Quick Response Router/Gateway Model 0800-0550
Manufacturer: RFT Technologies
Operating Condition: 72 deg. F; 56% R.H.
Test Site: DLS Site 2
Operator: Paul L #7072
Test Specification: Internal Antenna Mid. Ch 2440MHz
Comment: Modulated Carrier Continuous Transmit
Date: 08-17-2015

TEXT: "Vert 3 meters"

Short Description: Test Set-up

Test Set-up: EUT Measured at 3 Meters with VERTICAL Antenna Polarization

Equations: Total Level(dBµV/m) = Level(dBµV) + System Loss(dB) + Antenna Factor(dBµV/m)

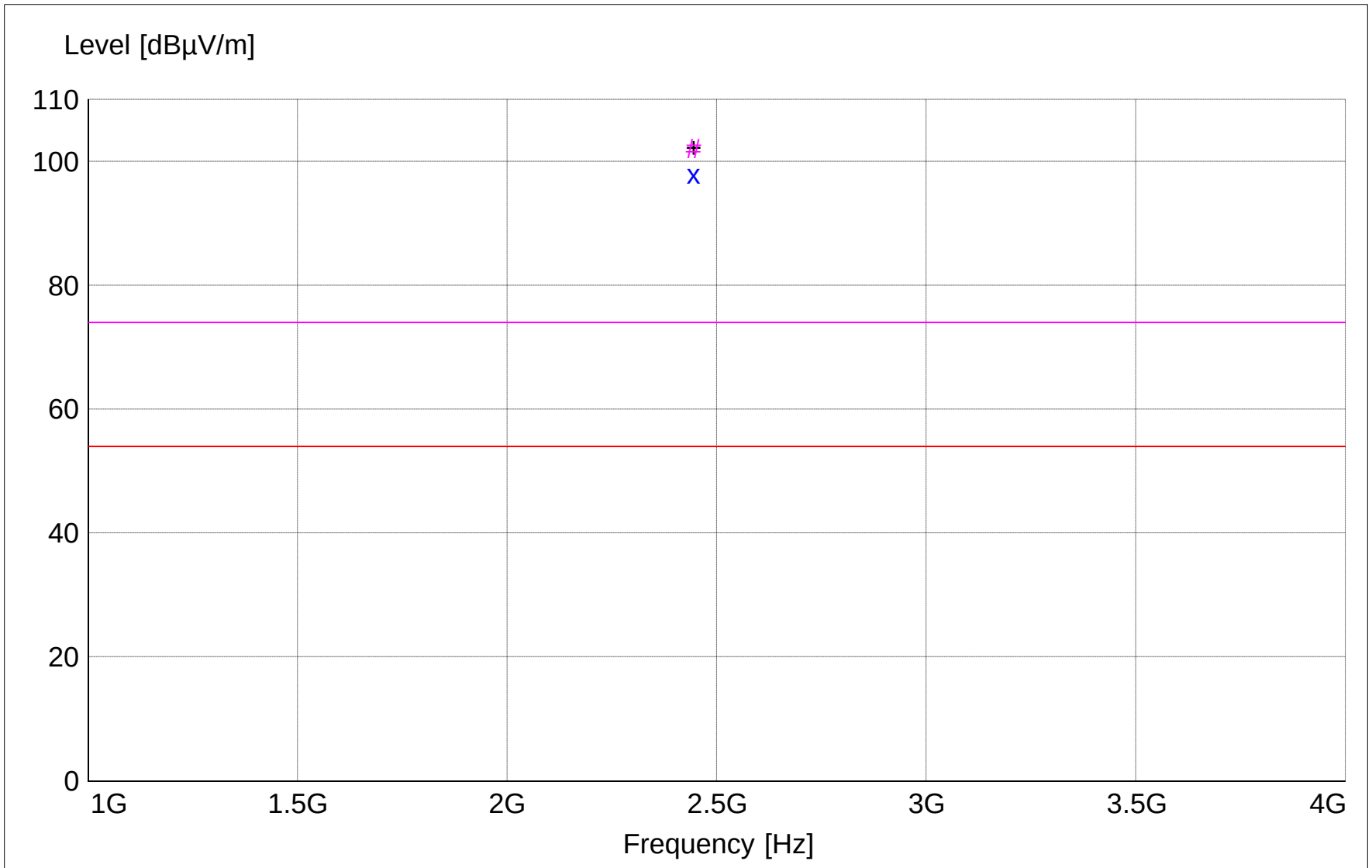
Margin(dB) = Limit(dBµV/m) - Total Level(dBµV/m)

Graph Markers: + Frequency marker (Level of marker not related to final level)

| Final maximized level using Quasi-Peak detector

X Final maximized level using Average dector

Final maximized level using Peak detector



x x xMES A813h_sv_Average
MES A813h_sv_Peak
+ + +MES A813h_sv_Peak_List
——— LIM FCC Class B F 3m AVG Field Strength AVG Limit 3m
——— LIM FCC Class B F 3m PK Field Strength PEAK Limit 3m

MEASUREMENT RESULT: "A813h_sv_Final"

8/17/2015 3:25PM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
2439.600000	68.06	28.38	1.6	98.0	54.0	-44.0	1.75	135	RMS	Fundamental
2439.600000	72.08	28.38	1.6	102.0	74.0	-28.0	1.75	135	MAX PEAK	Fundamental

FCC Part 15.247

Electric Field Strength

EUT: Quick Response Router/Gateway Model 0800-0550
Manufacturer: RFT Technologies
Operating Condition: 72 deg. F; 56% R.H.
Test Site: DLS Site 2
Operator: Paul L #7072
Test Specification: Internal Antenna Max. Ch 2475MHz
Comment: Modulated Carrier Continuous Transmit
Date: 08-17-2015

TEXT: "Horz 3 meters"

Short Description: Test Set-up

Test Set-up: EUT Measured at 3 Meters with HORIZONTAL Antenna Polarization

Equations: Total Level(dBµV/m) = Level(dBµV) + System Loss(dB) + Antenna Factor(dBµV/m)

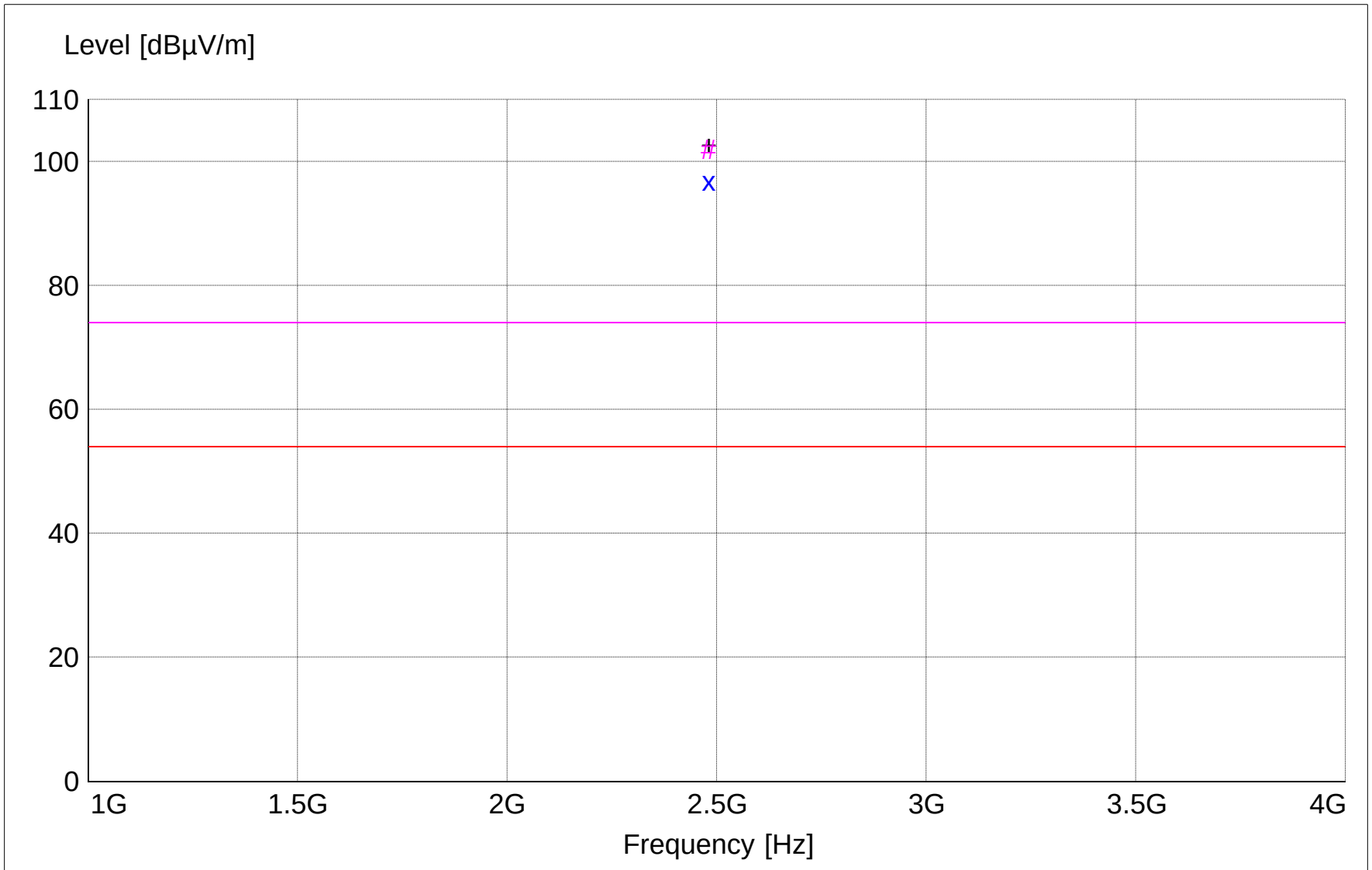
Margin(dB) = Limit(dBµV/m) - Total Level(dBµV/m)

Graph Markers: + Frequency marker (Level of marker not related to final level)

| Final maximized level using Quasi-Peak detector

X Final maximized level using Average dector

Final maximized level using Peak detector



x x xMES A813i_sh_Average
MES A813i_sh_Peak
+ + +MES A813i_sh_Peak_List
——— LIM FCC Class B F 3m AVG Field Strength AVG Limit 3m
——— LIM FCC Class B F 3m PK Field Strength PEAK Limit 3m

MEASUREMENT RESULT: "A813i_sh_Final"

8/17/2015 3:42PM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
2475.600000	66.81	28.46	1.6	96.8	54.0	-42.8	1.50	180	RMS	Fundamental
2475.600000	71.90	28.46	1.6	101.9	74.0	-27.9	1.50	180	MAX PEAK	Fundamental

FCC Part 15.247

Electric Field Strength

EUT: Quick Response Router/Gateway Model 0800-0550
Manufacturer: RFT Technologies
Operating Condition: 72 deg. F; 56% R.H.
Test Site: DLS Site 2
Operator: Paul L #7072
Test Specification: Internal Antenna Max. Ch 2475MHz
Comment: Modulated Carrier Continuous Transmit
Date: 08-17-2015

TEXT: "Vert 3 meters"

Short Description: Test Set-up

Test Set-up: EUT Measured at 3 Meters with VERTICAL Antenna Polarization

Equations: Total Level(dBµV/m) = Level(dBµV) + System Loss(dB) + Antenna Factor(dBµV/m)

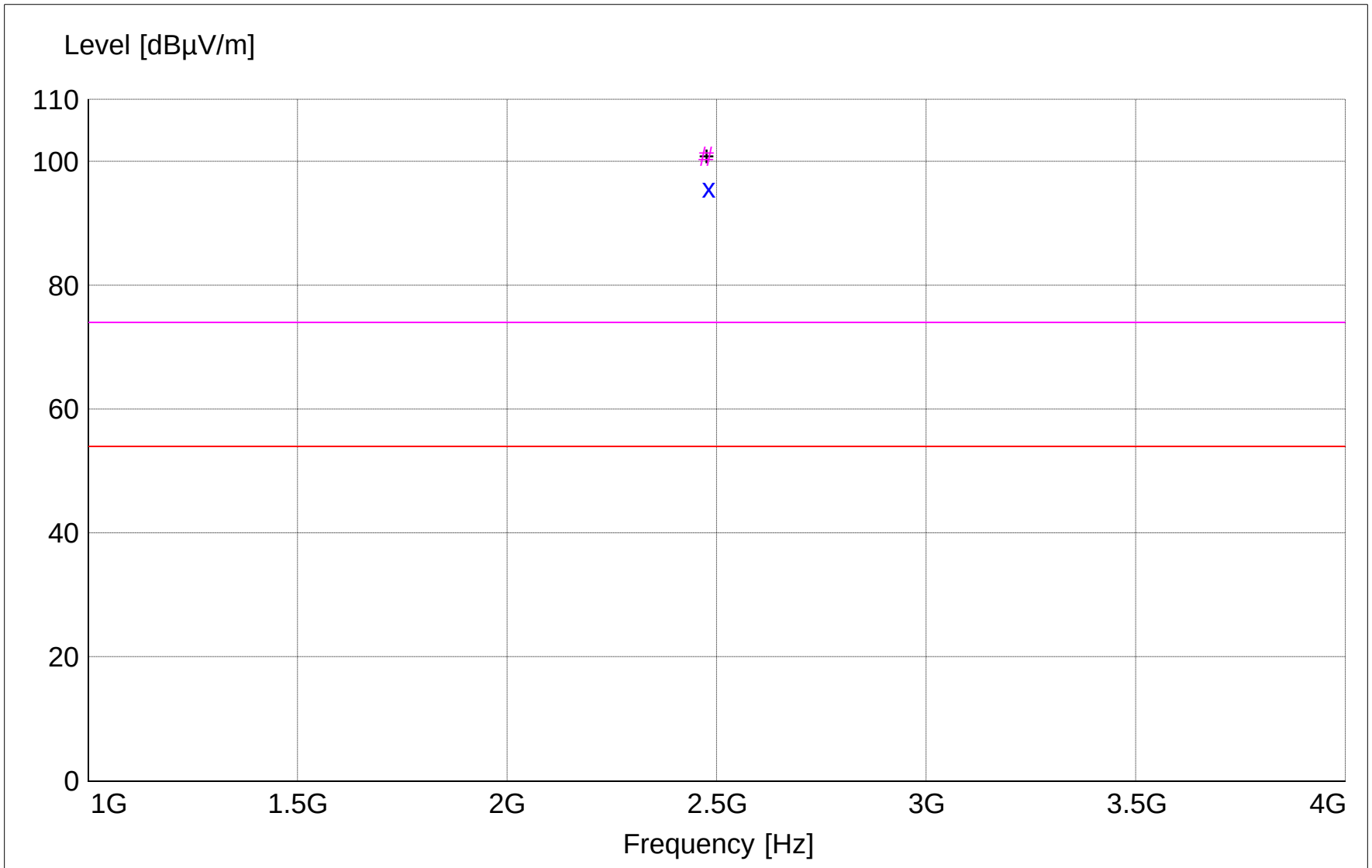
Margin(dB) = Limit(dBµV/m) - Total Level(dBµV/m)

Graph Markers: + Frequency marker (Level of marker not related to final level)

| Final maximized level using Quasi-Peak detector

X Final maximized level using Average dector

Final maximized level using Peak detector



x x xMES A813i_sv_Average
MES A813i_sv_Peak
+ + +MES A813i_sv_Peak_List
——— LIM FCC Class B F 3m AVG Field Strength AVG Limit 3m
——— LIM FCC Class B F 3m PK Field Strength PEAK Limit 3m

MEASUREMENT RESULT: "A813i_sv_Final"

8/17/2015 3:53PM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
2475.600000	65.59	28.46	1.6	95.6	54.0	-41.6	1.50	270	RMS	Fundamental
2475.600000	70.80	28.46	1.6	100.8	74.0	-26.8	1.50	270	MAX PEAK	Fundamental

FCC Part 15.209

Electric Field Strength

EUT: Quick Response Router/Gateway Model 0800-0551
Manufacturer: RFT Technologies
Operating Condition: 66 deg. F; 59% R.H.
Test Site: DLS Site 2
Operator: Paul L #7072
Test Specification: External High Gain Antenna Min. Ch 2405MHz
Comment: Modulated Carrier Continuous Transmit
Date: 08-20-2015

TEXT: "Horz 3 meters"

Short Description: Test Set-up

Test Set-up: EUT Measured at 3 Meters with HORIZONTAL Antenna Polarization

Equations: Total Level(dBµV/m) = Level(dBµV) + System Loss(dB) + Antenna Factor(dBµV/m)

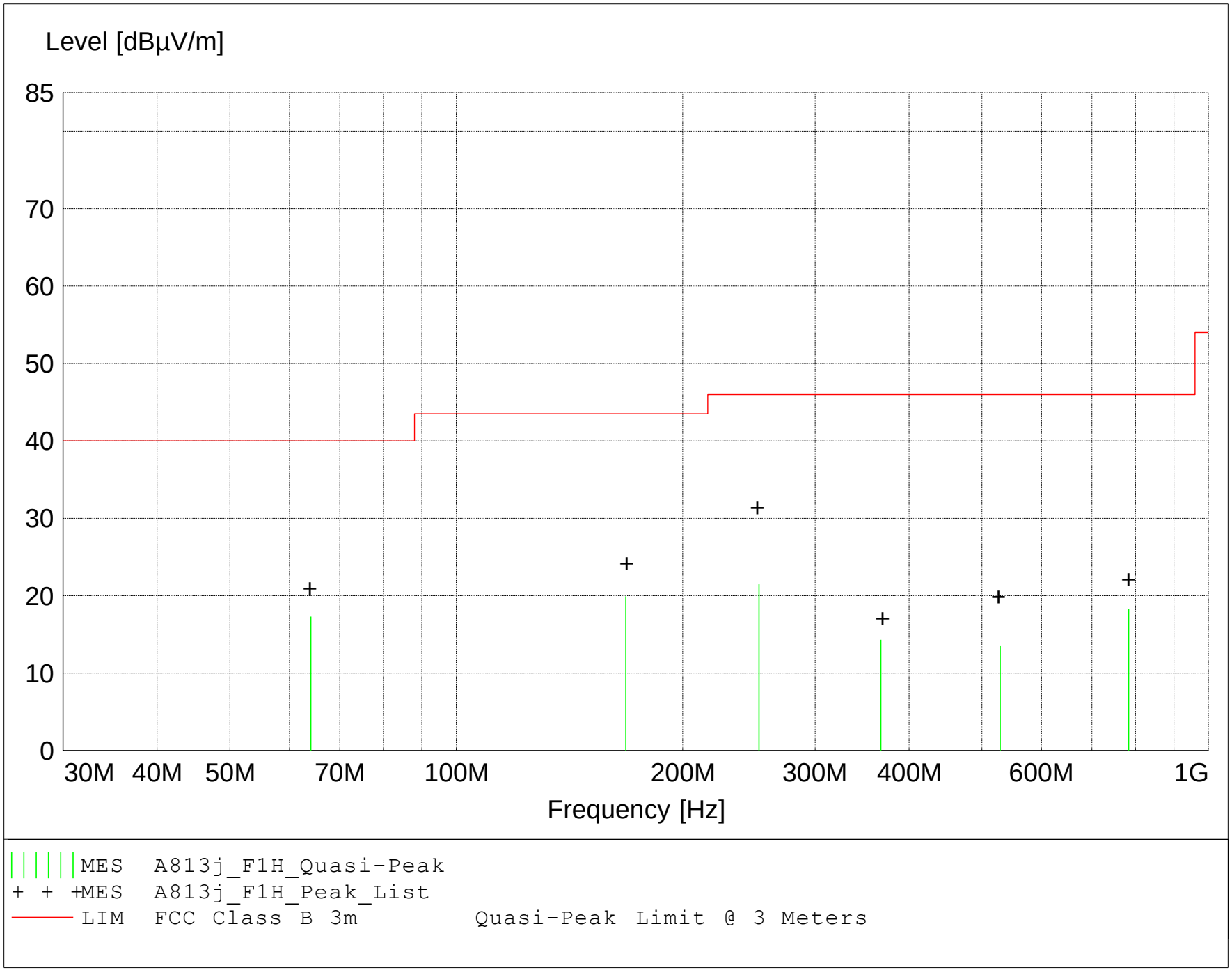
Margin(dB) = Limit(dBµV/m) - Total Level(dBµV/m)

Graph Markers: + Frequency marker (Level of marker not related to final level)

| Final maximized level using Quasi-Peak detector

X Final maximized level using Average dector

Final maximized level using Peak detector


Level [dBµV/m]
85
70
60
50
40
30
20
10
0
30M
40M
50M
70M
100M
200M
300M
400M
600M
1G
Frequency [Hz]
MES A813j_F1H_Quasi-Peak
MES A813j_F1H_Peak_List
LIM FCC Class B 3m Quasi-Peak Limit @ 3 Meters

MEASUREMENT RESULT: "A813j_F1H_Final"

8/20/2015 12:50PM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
64.050000	32.26	8.98	-23.9	17.3	40.0	22.7	4.00	0	QUASI-PEAK	noise floor
168.050000	28.71	14.11	-22.9	19.9	43.5	23.6	4.00	235	QUASI-PEAK	noise floor
252.600000	31.58	12.40	-22.5	21.5	46.0	24.5	4.00	0	QUASI-PEAK	noise floor
783.400000	16.43	21.67	-19.8	18.3	46.0	27.7	4.00	0	QUASI-PEAK	noise floor
366.750000	21.08	15.04	-21.8	14.3	46.0	31.7	4.00	0	QUASI-PEAK	noise floor
528.600000	16.45	18.20	-21.1	13.6	46.0	32.4	4.00	0	QUASI-PEAK	noise floor

FCC Part 15.209

Electric Field Strength

EUT: Quick Response Router/Gateway Model 0800-0551
Manufacturer: RFT Technologies
Operating Condition: 66 deg. F; 59% R.H.
Test Site: DLS Site 2
Operator: Paul L #7072
Test Specification: External High Gain Antenna Min. Ch 2405MHz
Comment: Modulated Carrier Continuous Transmit
Date: 08-20-2015

TEXT: "Vert 3 meters"

Short Description: Test Set-up

Test Set-up: EUT Measured at 3 Meters with VERTICAL Antenna Polarization

Equations: Total Level(dBµV/m) = Level(dBµV) + System Loss(dB) + Antenna Factor(dBµV/m)

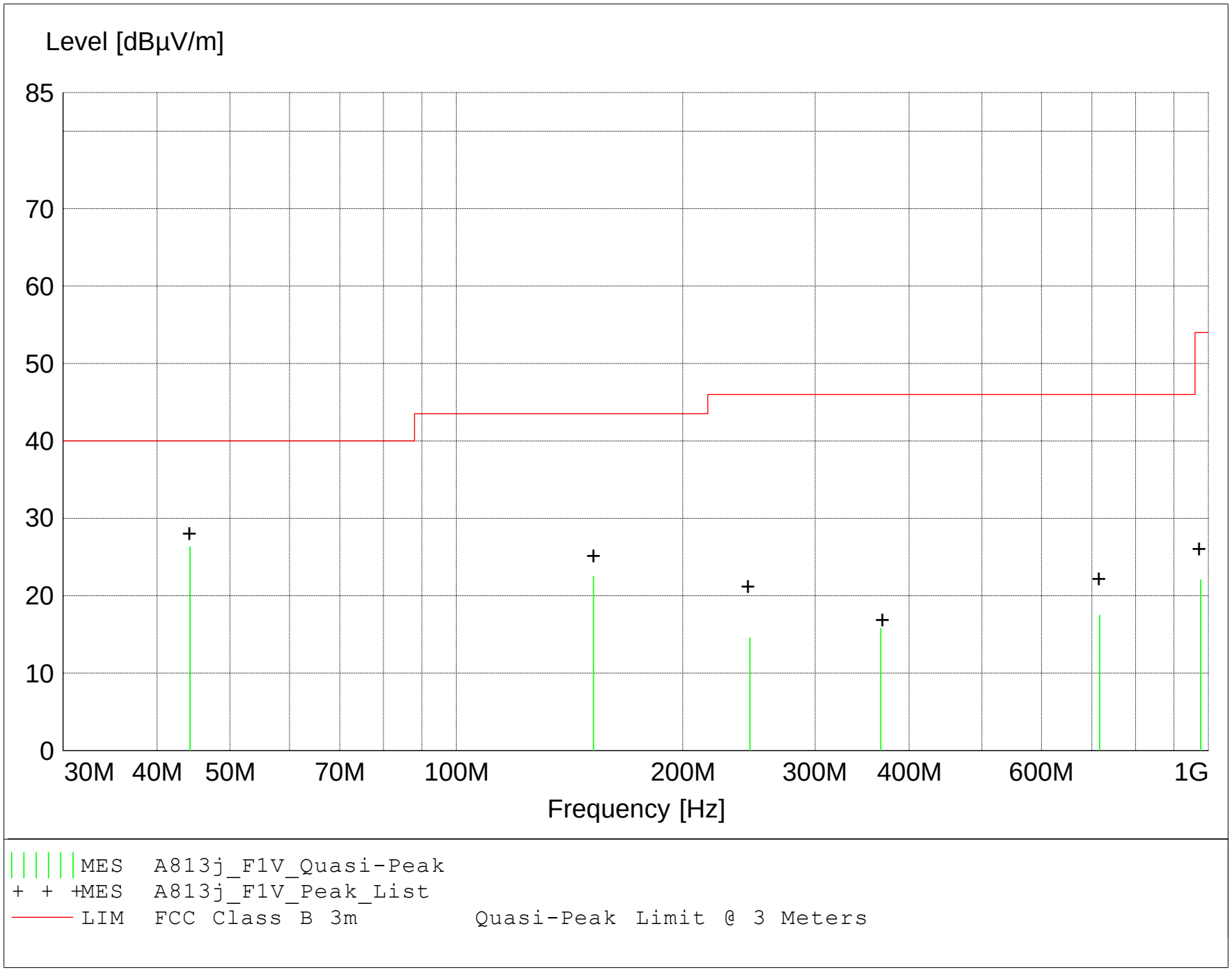
Margin(dB) = Limit(dBµV/m) - Total Level(dBµV/m)

Graph Markers: + Frequency marker (Level of marker not related to final level)

| Final maximized level using Quasi-Peak detector

X Final maximized level using Average dector

Final maximized level using Peak detector


Level [dBµV/m]
85
70
60
50
40
30
20
10
0
30M
40M
50M
70M
100M
200M
300M
400M
600M
1G
Frequency [Hz]
MES A813j_F1V_Quasi-Peak
MES A813j_F1V_Peak_List
LIM FCC Class B 3m Quasi-Peak Limit @ 3 Meters

MEASUREMENT RESULT: "A813j_F1V_Final"

8/20/2015 12:32PM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
44.250000	38.67	11.90	-24.2	26.4	40.0	13.6	1.00	0	QUASI-PEAK	noise Floor
152.150000	33.45	12.12	-23.0	22.5	43.5	21.0	1.00	0	QUASI-PEAK	noise Floor
716.800000	16.52	21.14	-20.1	17.5	46.0	28.5	1.00	0	QUASI-PEAK	noise floor
366.650000	22.62	15.03	-21.8	15.8	46.0	30.2	1.00	0	QUASI-PEAK	noise floor
245.700000	25.10	12.04	-22.5	14.6	46.0	31.4	1.00	0	QUASI-PEAK	noise floor
976.850000	16.12	24.07	-18.1	22.1	54.0	31.9	1.00	0	QUASI-PEAK	noise floor

FCC Part 15.209

Electric Field Strength

EUT: Quick Response Router/Gateway Model 0800-0551
Manufacturer: RFT Technologies
Operating Condition: 66 deg. F; 59% R.H.
Test Site: DLS Site 2
Operator: Paul L #7072
Test Specification: External High Gain Antenna Mid. Ch 2440MHz
Comment: Modulated Carrier Continuous Transmit
Date: 08-20-2015

TEXT: "Horz 3 meters"

Short Description: Test Set-up

Test Set-up: EUT Measured at 3 Meters with HORIZONTAL Antenna Polarization

Equations: Total Level(dBµV/m) = Level(dBµV) + System Loss(dB) + Antenna Factor(dBµV/m)

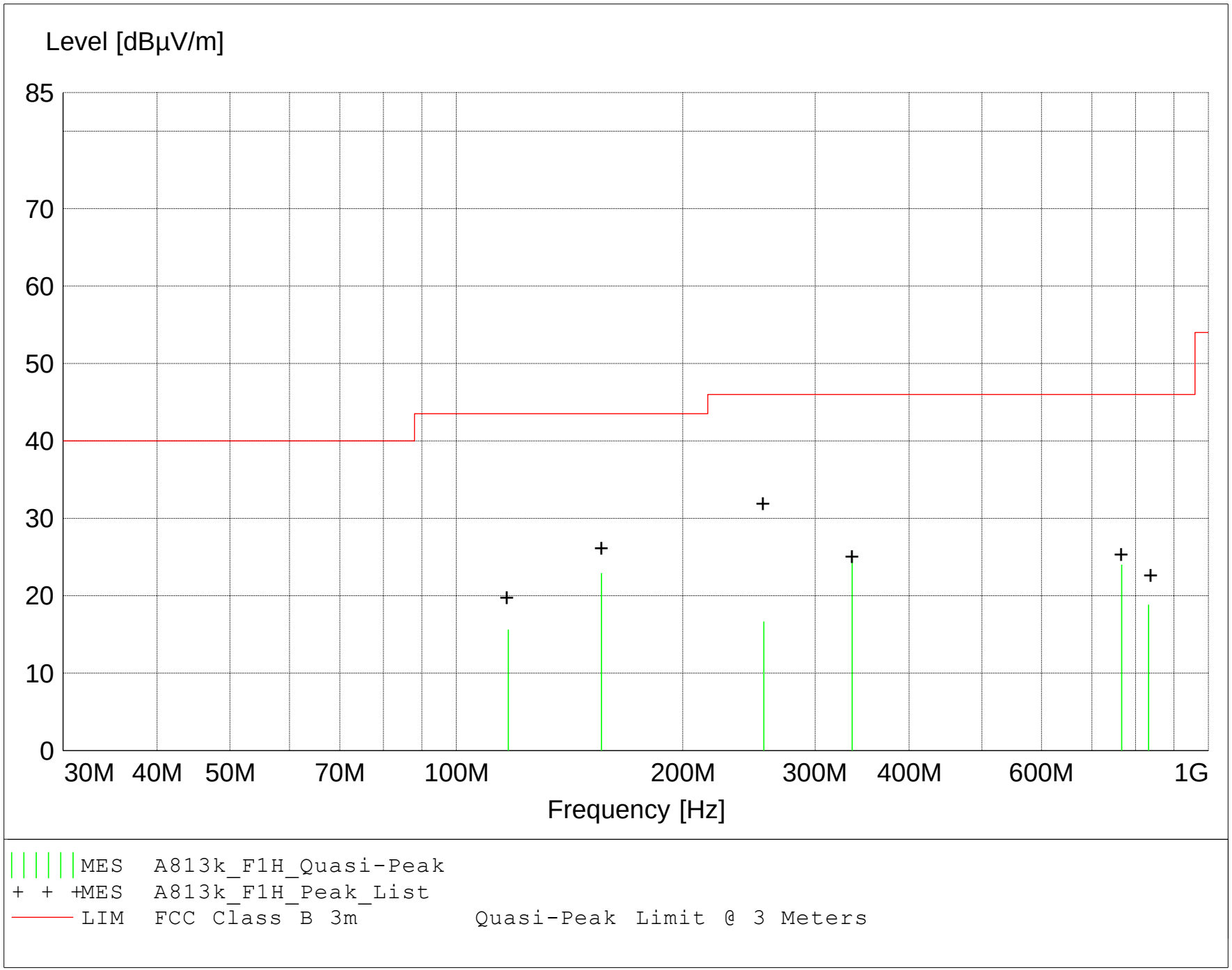
Margin(dB) = Limit(dBµV/m) - Total Level(dBµV/m)

Graph Markers: + Frequency marker (Level of marker not related to final level)

| Final maximized level using Quasi-Peak detector

X Final maximized level using Average dector

Final maximized level using Peak detector


Level [dBµV/m]
85
70
60
50
40
30
20
10
0
30M
40M
50M
70M
100M
200M
300M
400M
600M
1G
Frequency [Hz]
MES A813k_F1H_Quasi-Peak
MES A813k_F1H_Peak_List
LIM FCC Class B 3m
Quasi-Peak Limit @ 3 Meters

MEASUREMENT RESULT: "A813k_F1H_Final"

8/20/2015 2:12PM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
156.000000	33.48	12.40	-23.0	22.9	43.5	20.6	4.00	135	QUASI-PEAK	noise floor
336.050000	31.93	14.74	-22.0	24.7	46.0	21.3	4.00	0	QUASI-PEAK	noise floor
766.800000	22.16	21.67	-19.8	24.0	46.0	22.0	4.00	0	QUASI-PEAK	noise floor
832.550000	16.21	22.10	-19.5	18.8	46.0	27.2	4.00	0	QUASI-PEAK	noise floor
117.250000	26.48	12.53	-23.4	15.6	43.5	27.9	4.00	0	QUASI-PEAK	noise floor
256.350000	26.57	12.58	-22.5	16.7	46.0	29.3	4.00	0	QUASI-PEAK	noise floor

FCC Part 15.209

Electric Field Strength

EUT: Quick Response Router/Gateway Model 0800-0551
Manufacturer: RFT Technologies
Operating Condition: 66 deg. F; 59% R.H.
Test Site: DLS Site 2
Operator: Paul L #7072
Test Specification: External High Gain Antenna Mid. Ch 2440MHz
Comment: Modulated Carrier Continuous Transmit
Date: 08-20-2015

TEXT: "Vert 3 meters"

Short Description: Test Set-up

Test Set-up: EUT Measured at 3 Meters with VERTICAL Antenna Polarization

Equations: Total Level(dBµV/m) = Level(dBµV) + System Loss(dB) + Antenna Factor(dBµV/m)

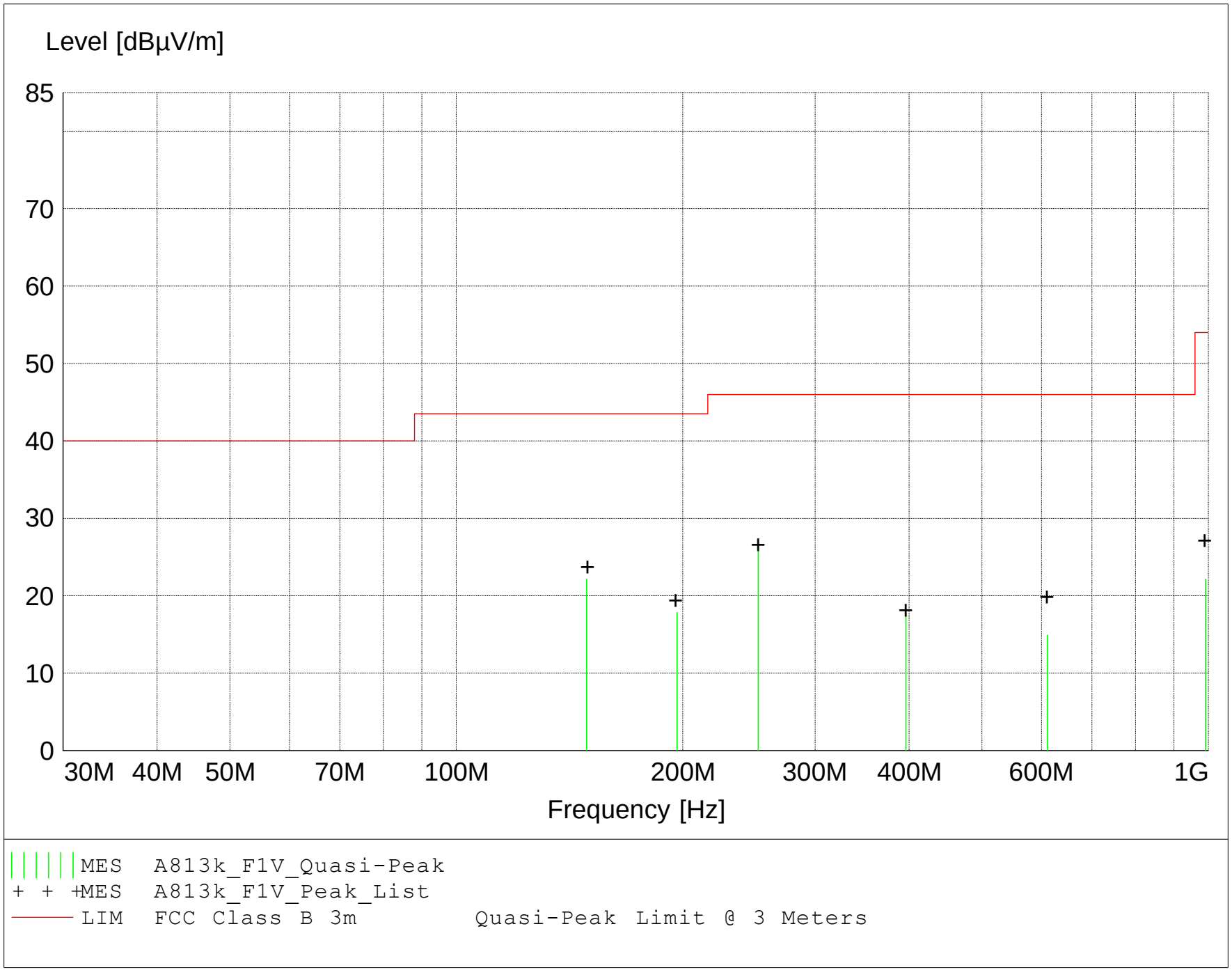
Margin(dB) = Limit(dBµV/m) - Total Level(dBµV/m)

Graph Markers: + Frequency marker (Level of marker not related to final level)

| Final maximized level using Quasi-Peak detector

X Final maximized level using Average dector

Final maximized level using Peak detector


Level [dBµV/m]
85
70
60
50
40
30
20
10
0
30M
40M
50M
70M
100M
200M
300M
400M
600M
1G
Frequency [Hz]
MES A813k_F1V_Quasi-Peak
MES A813k_F1V_Peak_List
LIM FCC Class B 3m Quasi-Peak Limit @ 3 Meters

MEASUREMENT RESULT: "A813k_F1V_Final"

8/20/2015 1:54PM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
252.050000	36.82	12.38	-22.5	26.7	46.0	19.3	1.00	0	QUASI-PEAK	noise floor
149.050000	33.17	12.10	-23.1	22.2	43.5	21.3	1.00	0	QUASI-PEAK	noise floor
196.600000	23.08	17.60	-22.8	17.9	43.5	25.6	1.00	0	QUASI-PEAK	noise floor
396.050000	23.55	15.70	-21.7	17.5	46.0	28.5	1.00	0	QUASI-PEAK	noise floor
610.750000	16.28	19.43	-20.7	15.0	46.0	31.0	1.00	0	QUASI-PEAK	noise floor
991.200000	15.92	24.42	-18.1	22.2	54.0	31.8	1.00	0	QUASI-PEAK	noise floor

FCC Part 15.209

Electric Field Strength

EUT: Quick Response Router/Gateway Model 0800-0551
Manufacturer: RFT Technologies
Operating Condition: 66 deg. F; 59% R.H.
Test Site: DLS Site 2
Operator: Paul L #7072
Test Specification: External High Gain Antenna Max. Ch 2475MHz
Comment: Modulated Carrier Continuous Transmit
Date: 08-20-2015

TEXT: "Horz 3 meters"

Short Description: Test Set-up

Test Set-up: EUT Measured at 3 Meters with HORIZONTAL Antenna Polarization

Equations: Total Level(dBµV/m) = Level(dBµV) + System Loss(dB) + Antenna Factor(dBµV/m)

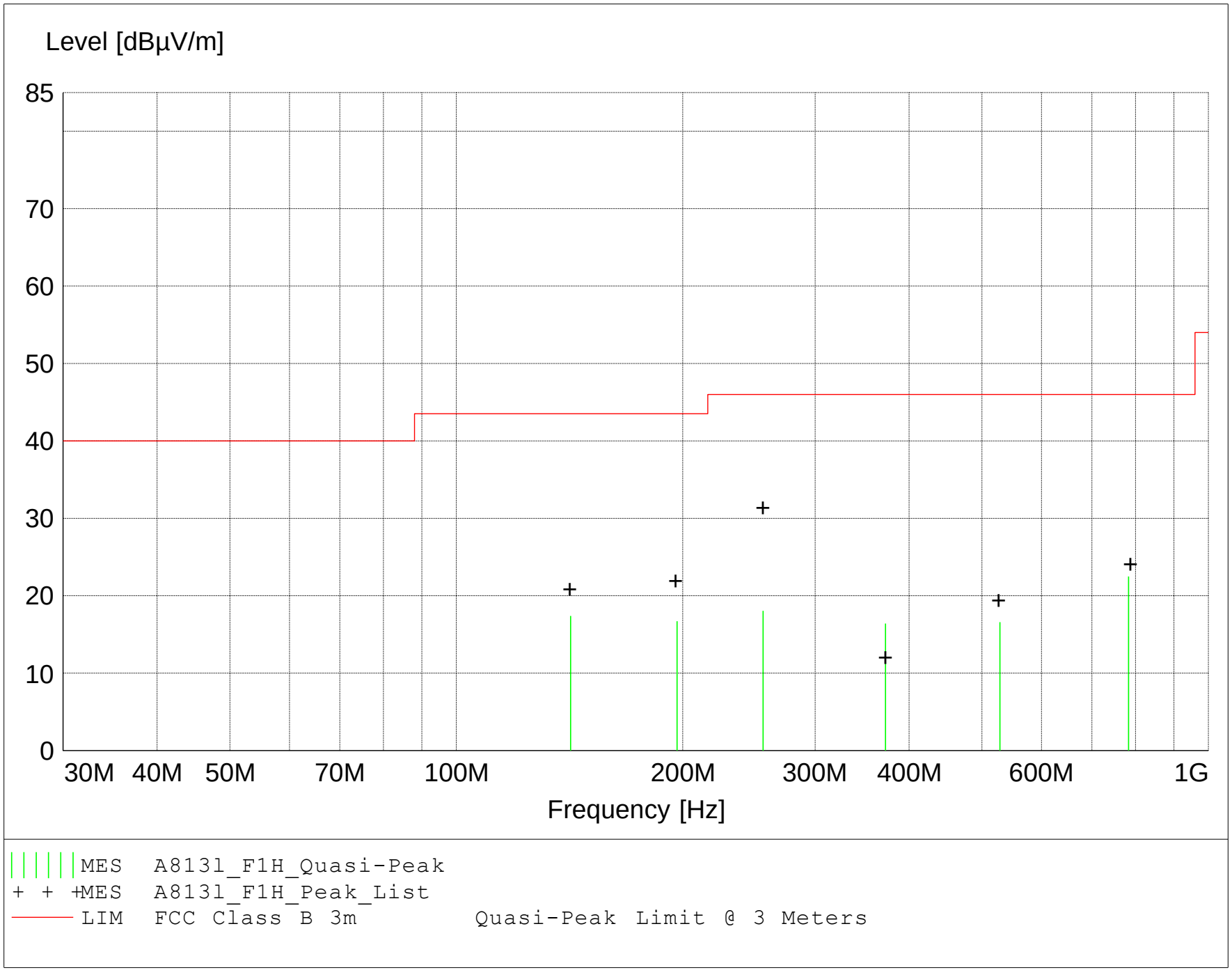
Margin(dB) = Limit(dBµV/m) - Total Level(dBµV/m)

Graph Markers: + Frequency marker (Level of marker not related to final level)

| Final maximized level using Quasi-Peak detector

X Final maximized level using Average dector

Final maximized level using Peak detector


Level [dBµV/m]
85
70
60
50
40
30
20
10
0
30M
40M
50M
70M
100M
200M
300M
400M
600M
1G
Frequency [Hz]
MES A813l_F1H_Quasi-Peak
MES A813l_F1H_Peak_List
LIM FCC Class B 3m Quasi-Peak Limit @ 3 Meters

MEASUREMENT RESULT: "A813l_F1H_Final"

8/20/2015 3:17PM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
783.100000	20.59	21.66	-19.8	22.5	46.0	23.5	4.00	0	QUASI-PEAK	noise floor
141.900000	28.42	12.21	-23.2	17.4	43.5	26.1	1.00	0	QUASI-PEAK	noise floor
196.600000	21.92	17.60	-22.8	16.7	43.5	26.8	1.00	0	QUASI-PEAK	noise floor
255.850000	27.98	12.55	-22.5	18.0	46.0	28.0	4.00	0	QUASI-PEAK	noise floor
528.100000	19.48	18.20	-21.1	16.6	46.0	29.4	4.00	0	QUASI-PEAK	noise floor
372.100000	23.16	15.06	-21.8	16.4	46.0	29.6	4.00	0	QUASI-PEAK	noise floor

FCC Part 15.209

Electric Field Strength

EUT: Quick Response Router/Gateway Model 0800-0551
Manufacturer: RFT Technologies
Operating Condition: 66 deg. F; 59% R.H.
Test Site: DLS Site 2
Operator: Paul L #7072
Test Specification: External High Gain Antenna Max. Ch 2475MHz
Comment: Modulated Carrier Continuous Transmit
Date: 08-20-2015

TEXT: "Vert 3 meters"

Short Description: Test Set-up

Test Set-up: EUT Measured at 3 Meters with VERTICAL Antenna Polarization

Equations: Total Level(dBµV/m) = Level(dBµV) + System Loss(dB) + Antenna Factor(dBµV/m)

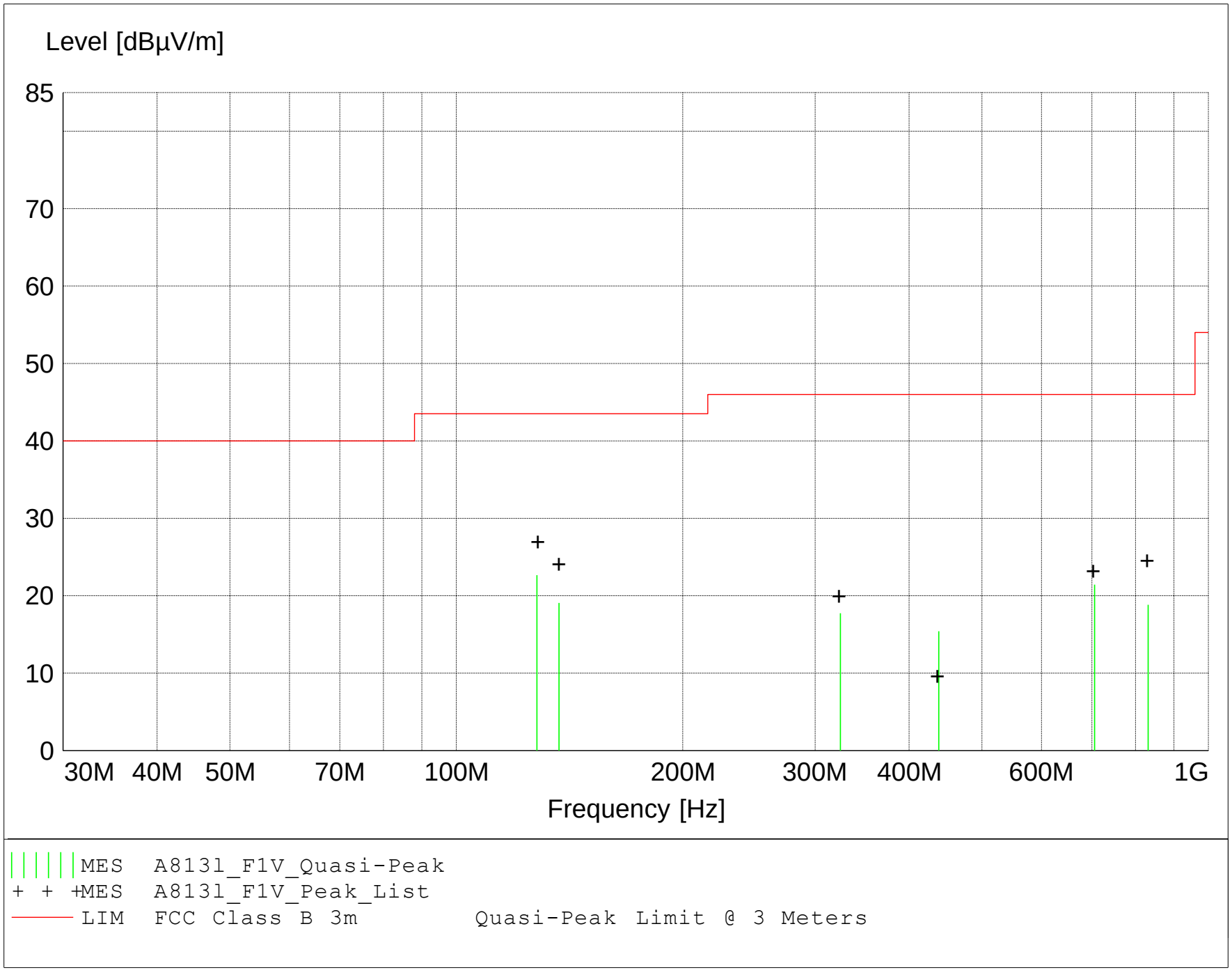
Margin(dB) = Limit(dBµV/m) - Total Level(dBµV/m)

Graph Markers: + Frequency marker (Level of marker not related to final level)

| Final maximized level using Quasi-Peak detector

X Final maximized level using Average dector

Final maximized level using Peak detector


Level [dBµV/m]
85
70
60
50
40
30
20
10
0
30M
40M
50M
70M
100M
200M
300M
400M
600M
1G
Frequency [Hz]
MES A813l_F1V_Quasi-Peak
MES A813l_F1V_Peak_List
LIM FCC Class B 3m
Quasi-Peak Limit @ 3 Meters

MEASUREMENT RESULT: "A813l_F1V_Final"

8/20/2015 2:56PM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
128.000000	33.41	12.60	-23.4	22.7	43.5	20.8	1.00	0	QUASI-PEAK	noise floor
136.900000	29.88	12.49	-23.3	19.1	43.5	24.4	1.00	0	QUASI-PEAK	noise floor
705.850000	20.57	21.02	-20.2	21.4	46.0	24.6	1.00	0	QUASI-PEAK	noise floor
831.600000	16.26	22.06	-19.5	18.8	46.0	27.2	1.00	0	QUASI-PEAK	noise floor
324.050000	25.31	14.50	-22.1	17.7	46.0	28.3	1.00	0	QUASI-PEAK	noise floor
438.000000	20.46	16.46	-21.5	15.4	46.0	30.6	1.00	0	QUASI-PEAK	noise floor

FCC Part 15.247

Electric Field Strength

EUT: Quick Response Router/Gateway Model 0800-0551
Manufacturer: RFT Technologies
Operating Condition: 74 deg F 56% R.H.
Test Site: DLS O.F. G1
Operator: Paul L - DLS# 7207
Test Specification: External High Gain Antenna Min. Ch 2405MHz
Comment: Modulated Carrier Continuous Transmit
Date: 08-14-2015

TEXT: "Horz 3 meters"

Short Description: Test Set-up

Test Set-up: EUT Measured at 3 Meters with HORIZONTAL Antenna Polarization

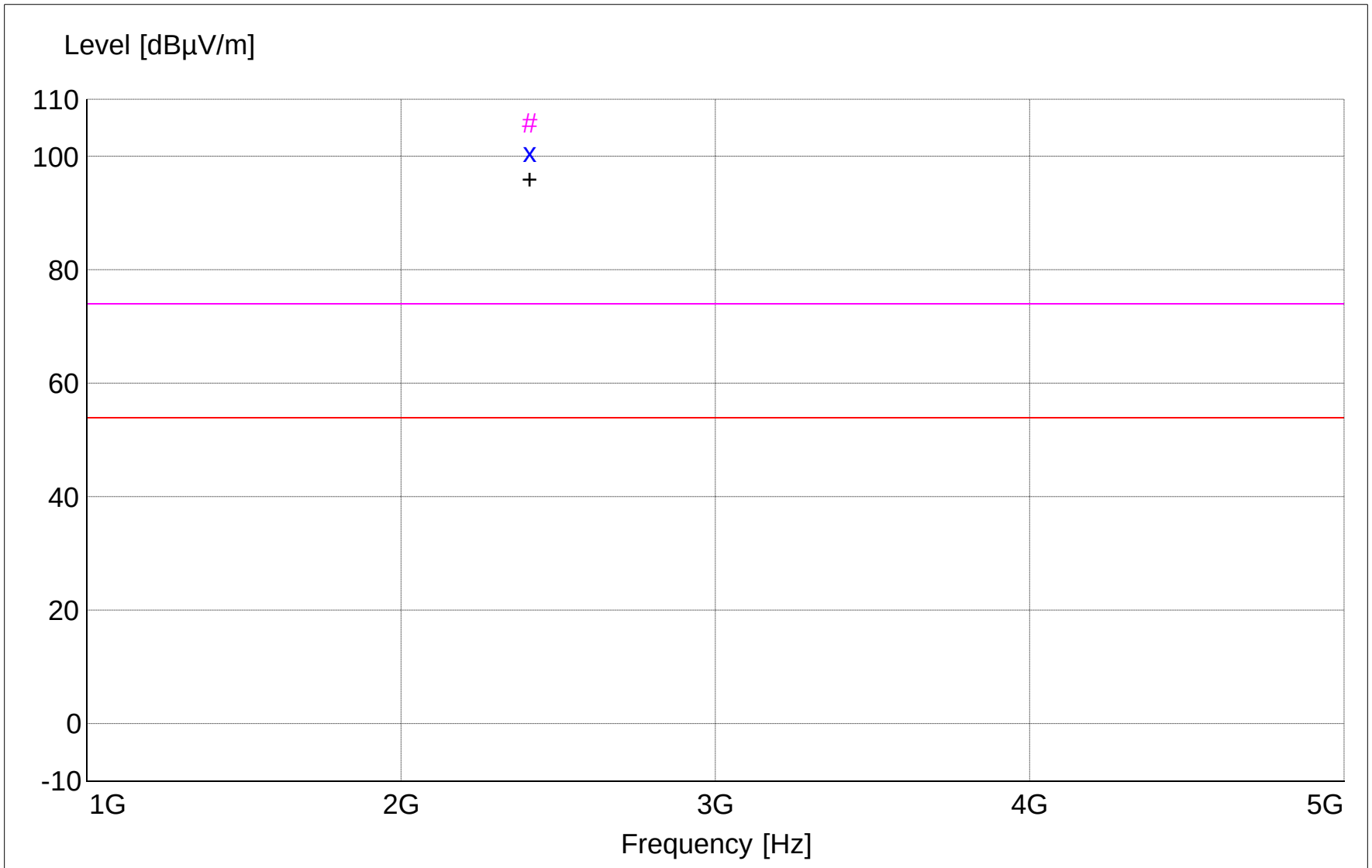
Sample Equations:

Total Level(dBµV/m)	= Level(dBµV)	+ System Loss(dB)	+ Antenna Factor(dBµV/m)
24.6	= 35.51	+ (-22.1)	+ 11.20

Margin(dB)	= Limit(dBµV/m)	- Total Level(dBµV/m)
15.4	= 40	- 24.6

Graph Markers:

+	Frequency marker (Level of marker not related to final level)
|	Final maximized level using Quasi-Peak detector
X	Final maximized level using Average dector
#	Final maximized level using Peak detector
-	Background Scan Peak Detector (Optional)
-	Background Scan Average Detector (Optional)



x x x MES A813h_sh_Average
MES A813h_sh_Peak
+ + + MES A813h_sh_Peak_List
——— LIM FCC Class B F 3m AVG Field Strength AVG Limit 3m
——— LIM FCC Class B F 3m PK Field Strength PEAK Limit 3m

MEASUREMENT RESULT: "A813h_sh_Final"

8/14/2015 11:19AM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
2405.600000	70.84	28.32	1.5	100.7	54.0	-46.7	1.02	4	RMS	Fundamental
2405.600000	75.96	28.32	1.5	105.8	74.0	-31.8	1.02	4	MAX PEAK	Fundamental

FCC Part 15.247

Electric Field Strength

EUT: Quick Response Router/Gateway Model 0800-0551
Manufacturer: RFT Technologies
Operating Condition: 74 deg F 56% R.H.
Test Site: DLS O.F. G1
Operator: Paul L - DLS# 7207
Test Specification: External High Gain Antenna Min. Ch 2405MHz
Comment: Modulated Carrier Continuous Transmit
Date: 08-14-2015

TEXT: "Vert 3 meters"

Short Description: Test Set-up

Test Set-up: EUT Measured at 3 Meters with VERTICAL Antenna Polarization

Sample Equations: Total Level(dBµV/m) = Level(dBµV) + System Loss(dB) + Antenna Factor(dBµV/m)
24.6 = 35.51 + (-22.1) + 11.20

Margin(dB) = Limit(dBµV/m) - Total Level(dBµV/m)
15.4 = 40 - 24.6

Graph Markers: + Frequency marker (Level of marker not related to final level)

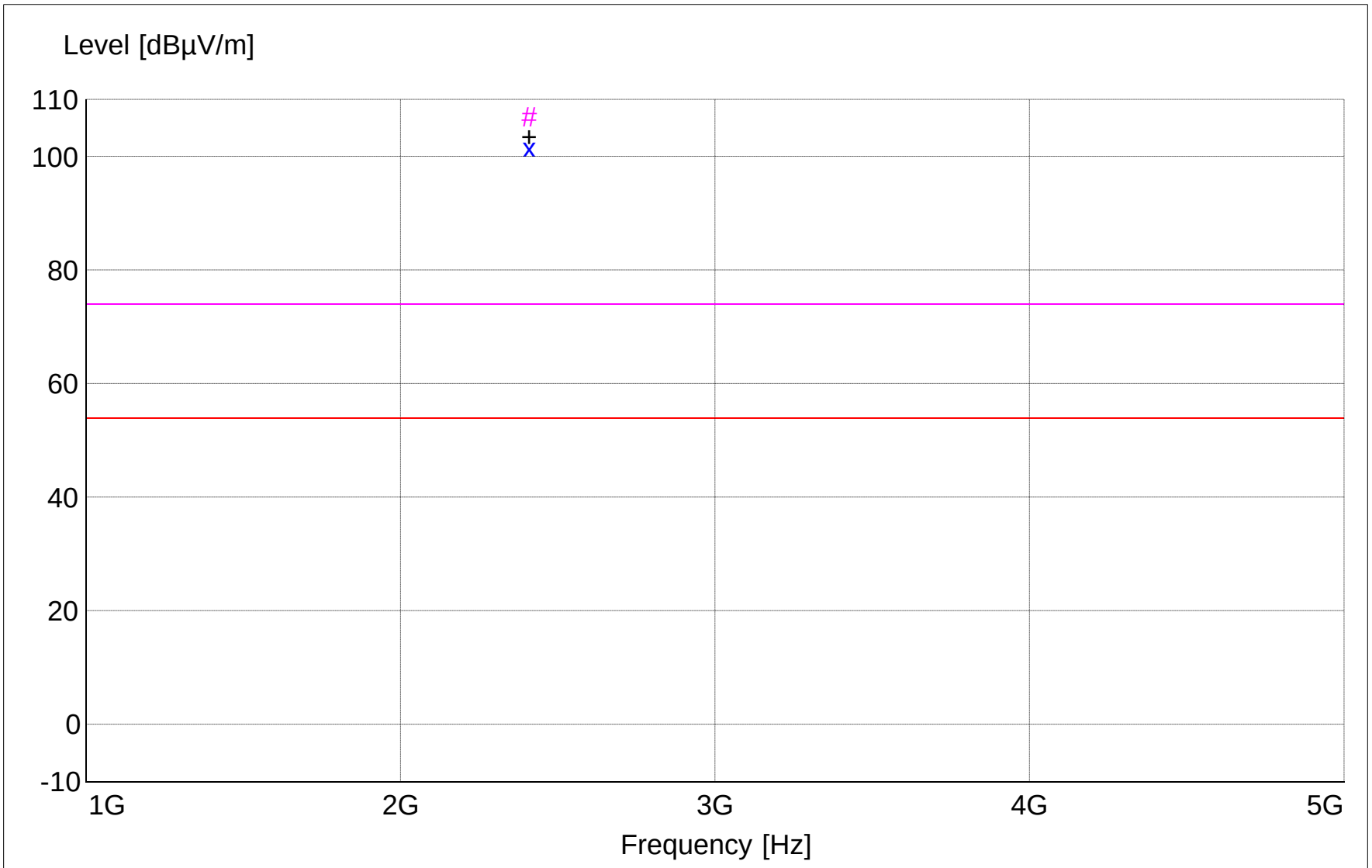
| Final maximized level using Quasi-Peak detector

X Final maximized level using Average dector

Final maximized level using Peak detector

- Background Scan Peak Detector (Optional)

- Background Scan Average Detector (Optional)



x x x MES A813h_sv_Average
MES A813h_sv_Peak
+ + + MES A813h_sv_Peak_List
——— LIM FCC Class B F 3m AVG Field Strength AVG Limit 3m
——— LIM FCC Class B F 3m PK Field Strength PEAK Limit 3m

MEASUREMENT RESULT: "A813h_sv_Final"

8/14/2015 11:11AM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
2405.600000	71.62	28.32	1.5	101.5	54.0	-47.5	1.87	358	RMS	Fundamental
2405.600000	77.01	28.32	1.5	106.9	74.0	-32.9	1.87	358	MAX PEAK	Fundamental

FCC Part 15.247

Electric Field Strength

EUT: Quick Response Router/Gateway Model 0800-0551
Manufacturer: RFT Technologies
Operating Condition: 74 deg F 56% R.H.
Test Site: DLS O.F. G1
Operator: Paul L - DLS# 7207
Test Specification: External High Gain Antenna Mid. Ch 2440MHz
Comment: Modulated Carrier Continuous Transmit
Date: 08-14-2015

TEXT: "Horz 3 meters"

Short Description: Test Set-up

Test Set-up: EUT Measured at 3 Meters with HORIZONTAL Antenna Polarization

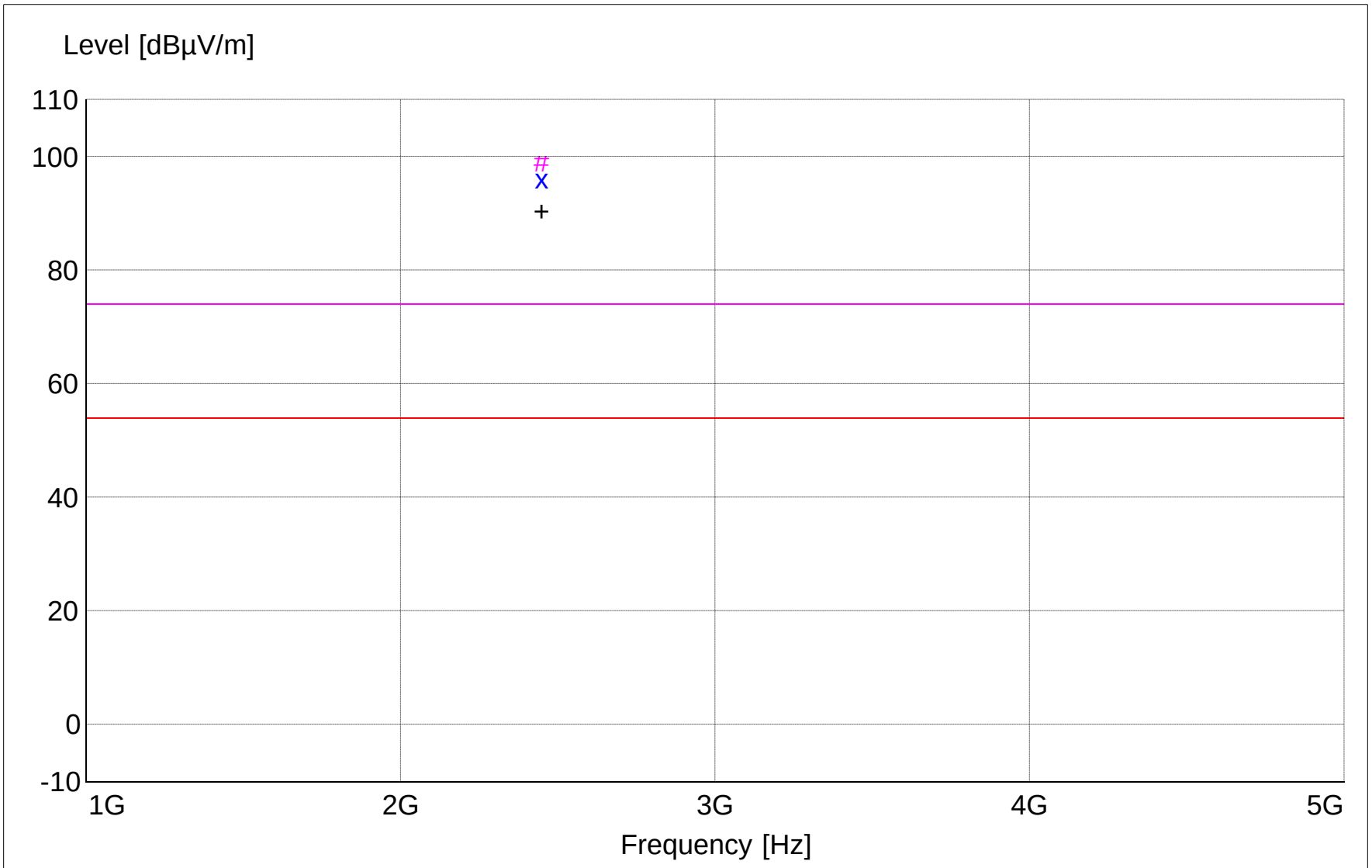
Sample Equations:

Total Level(dBµV/m)	= Level(dBµV)	+ System Loss(dB)	+ Antenna Factor(dBµV/m)
24.6	= 35.51	+ (-22.1)	+ 11.20

Margin(dB)	= Limit(dBµV/m)	- Total Level(dBµV/m)
15.4	= 40	- 24.6

Graph Markers:

+	Frequency marker (Level of marker not related to final level)
|	Final maximized level using Quasi-Peak detector
X	Final maximized level using Average dector
#	Final maximized level using Peak detector
-	Background Scan Peak Detector (Optional)
-	Background Scan Average Detector (Optional)



x x x MES A813i_sh_Average
MES A813i_sh_Peak
+ + + MES A813i_sh_Peak_List
——— LIM FCC Class B F 3m AVG Field Strength AVG Limit 3m
——— LIM FCC Class B F 3m PK Field Strength PEAK Limit 3m

MEASUREMENT RESULT: "A813i_sh_Final"

8/14/2015 10:51AM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
2445.200000	66.07	28.45	1.5	96.1	54.0	-42.1	1.18	200	RMS	Fundamental
2445.200000	68.96	28.45	1.5	99.0	74.0	-25.0	1.18	200	MAX PEAK	Fundamental

FCC Part 15.247

Electric Field Strength

EUT: Quick Response Router/Gateway Model 0800-0551
Manufacturer: RFT Technologies
Operating Condition: 74 deg F 56% R.H.
Test Site: DLS O.F. G1
Operator: Paul L - DLS# 7207
Test Specification: External High Gain Antenna Mid. Ch 2440MHz
Comment: Modulated Carrier Continuous Transmit
Date: 08-14-2015

TEXT: "Vert 3 meters"

Short Description: Test Set-up

Test Set-up: EUT Measured at 3 Meters with VERTICAL Antenna Polarization

Sample Equations: Total Level(dBµV/m) = Level(dBµV) + System Loss(dB) + Antenna Factor(dBµV/m)
24.6 = 35.51 + (-22.1) + 11.20

Margin(dB) = Limit(dBµV/m) - Total Level(dBµV/m)
15.4 = 40 - 24.6

Graph Markers: + Frequency marker (Level of marker not related to final level)

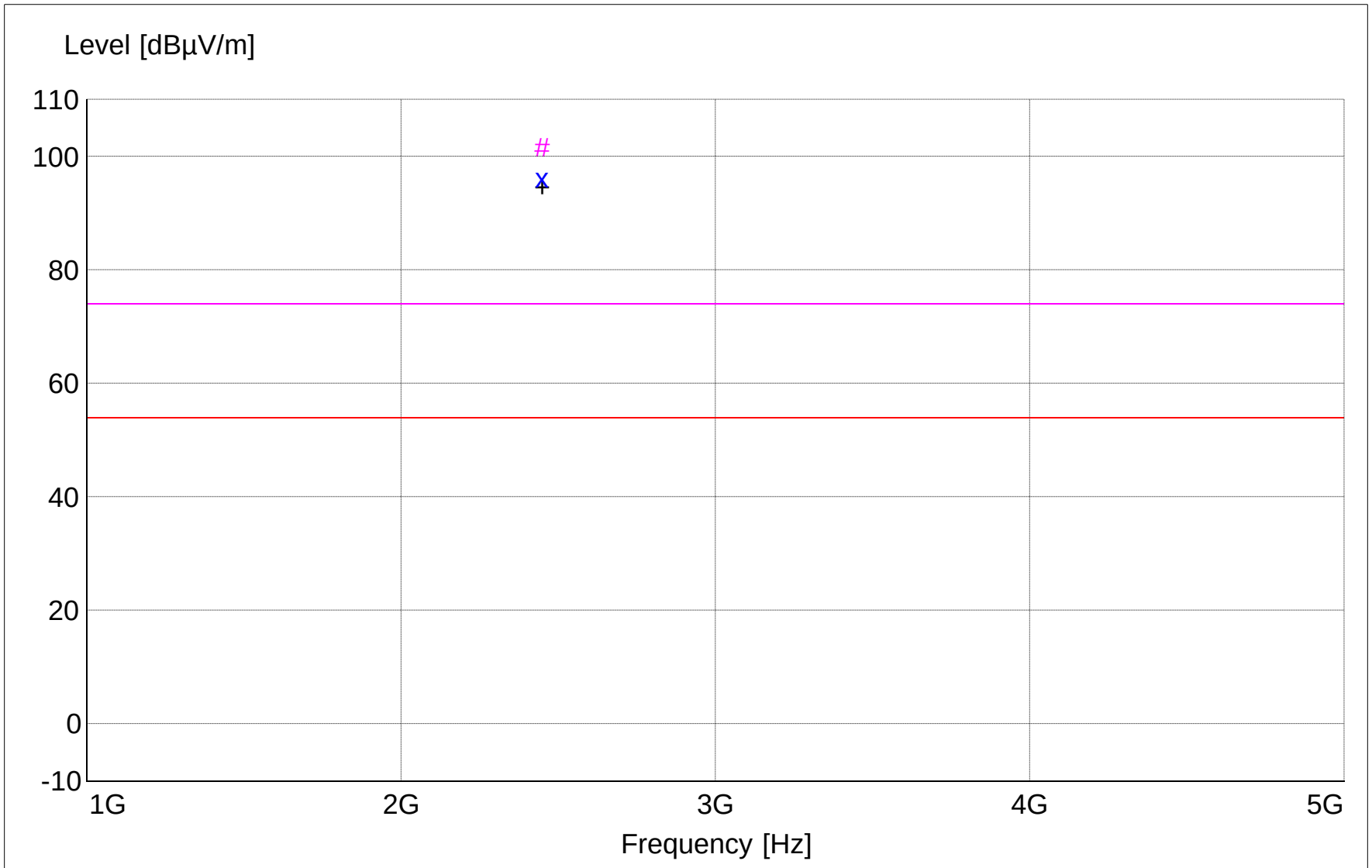
| Final maximized level using Quasi-Peak detector

X Final maximized level using Average dector

Final maximized level using Peak detector

- Background Scan Peak Detector (Optional)

- Background Scan Average Detector (Optional)



x x x MES A813i_sv_Average
MES A813i_sv_Peak
+ + + MES A813i_sv_Peak_List
——— LIM FCC Class B F 3m AVG Field Strength AVG Limit 3m
——— LIM FCC Class B F 3m PK Field Strength PEAK Limit 3m

MEASUREMENT RESULT: "A813i_sv_Final"

8/14/2015 10:59AM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
2445.600000	66.07	28.45	1.5	96.1	54.0	-42.1	1.21	297	RMS	Fundamental
2445.600000	71.52	28.45	1.5	101.5	74.0	-27.5	1.21	297	MAX PEAK	Fundamental

FCC Part 15.247

Electric Field Strength

EUT: Quick Response Router/Gateway Model 0800-0551
Manufacturer: RFT Technologies
Operating Condition: 74 deg F 56% R.H.
Test Site: DLS O.F. G1
Operator: Paul L - DLS# 7207
Test Specification: External High Gain Antenna Max. Ch 2475MHz
Comment: Modulated Carrier Continuous Transmit
Date: 08-14-2015

TEXT: "Horz 3 meters"

Short Description: Test Set-up

Test Set-up: EUT Measured at 3 Meters with HORIZONTAL Antenna Polarization

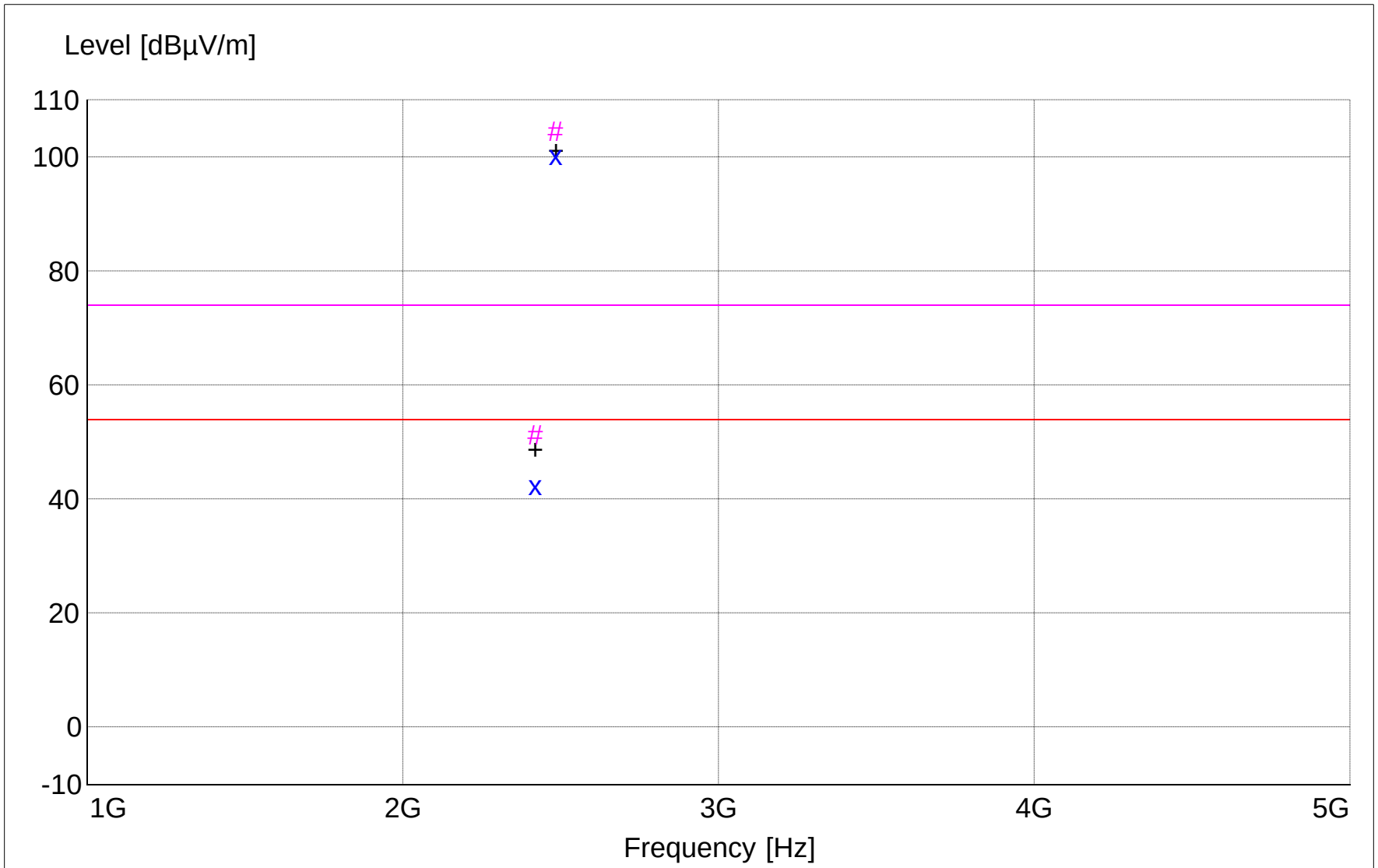
Sample Equations:

Total Level(dBµV/m)	= Level(dBµV)	+ System Loss(dB)	+ Antenna Factor(dBµV/m)
24.6	= 35.51	+ (-22.1)	+ 11.20

Margin(dB)	= Limit(dBµV/m)	- Total Level(dBµV/m)
15.4	= 40	- 24.6

Graph Markers:

+	Frequency marker (Level of marker not related to final level)
|	Final maximized level using Quasi-Peak detector
X	Final maximized level using Average dector
#	Final maximized level using Peak detector
-	Background Scan Peak Detector (Optional)
-	Background Scan Average Detector (Optional)



x x x MES A813j_sh_Average
MES A813j_sh_Peak
+ + + MES A813j_sh_Peak_List
——— LIM FCC Class B F 3m AVG Field Strength AVG Limit 3m
——— LIM FCC Class B F 3m PK Field Strength PEAK Limit 3m

MEASUREMENT RESULT: "A813j_sh_Final"

8/14/2015 11:39AM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
2480.400000	70.16	28.57	1.6	100.3	54.0	-46.3	1.92	354	RMS	Fundamental
2480.400000	74.32	28.57	1.6	104.4	74.0	-30.4	1.92	354	MAX PEAK	Fundamental
2416.400000	12.47	28.36	1.5	42.4	54.0	11.6	1.92	355	RMS	None
2416.400000	21.42	28.36	1.5	51.3	74.0	22.7	1.92	355	MAX PEAK	None

FCC Part 15.247

Electric Field Strength

EUT: Quick Response Router/Gateway Model 0800-0551
Manufacturer: RFT Technologies
Operating Condition: 74 deg F 56% R.H.
Test Site: DLS O.F. G1
Operator: Paul L - DLS# 7207
Test Specification: External High Gain Antenna Max. Ch 2475MHz
Comment: Modulated Carrier Continuous Transmit
Date: 08-14-2015

TEXT: "Vert 3 meters"

Short Description: Test Set-up

Test Set-up: EUT Measured at 3 Meters with VERTICAL Antenna Polarization

Sample Equations: Total Level(dBµV/m) = Level(dBµV) + System Loss(dB) + Antenna Factor(dBµV/m)
24.6 = 35.51 + (-22.1) + 11.20

Margin(dB) = Limit(dBµV/m) - Total Level(dBµV/m)
15.4 = 40 - 24.6

Graph Markers: + Frequency marker (Level of marker not related to final level)

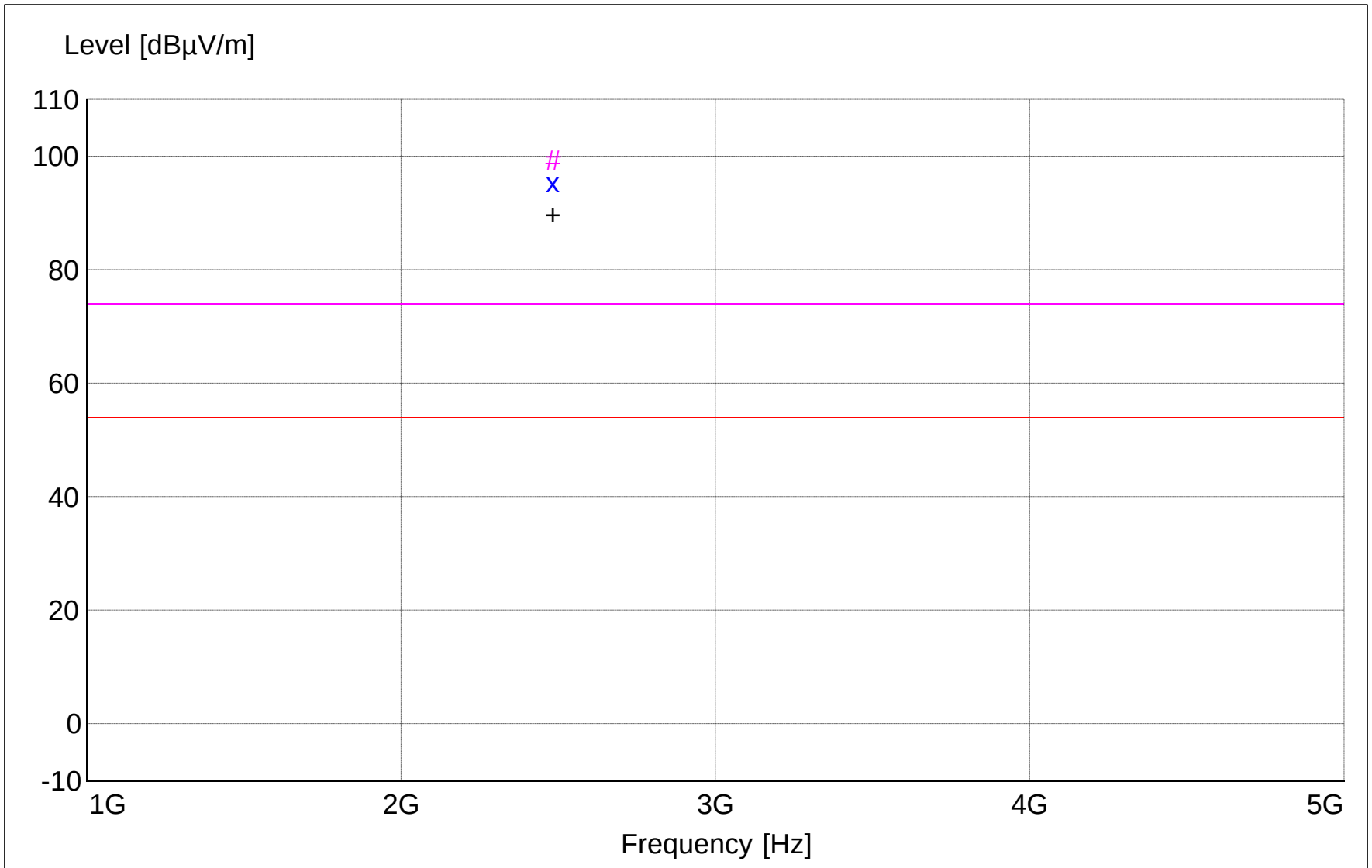
| Final maximized level using Quasi-Peak detector

X Final maximized level using Average dector

Final maximized level using Peak detector

- Background Scan Peak Detector (Optional)

- Background Scan Average Detector (Optional)



x x x MES A813j_sv_Average
MES A813j_sv_Peak
+ + + MES A813j_sv_Peak_List
——— LIM FCC Class B F 3m AVG Field Strength AVG Limit 3m
——— LIM FCC Class B F 3m PK Field Strength PEAK Limit 3m

MEASUREMENT RESULT: "A813j_sv_Final"

8/14/2015 11:48AM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
2479.600000	65.20	28.56	1.6	95.3	54.0	-41.3	1.00	253	RMS	Fundamental
2479.600000	69.27	28.56	1.6	99.4	74.0	-25.4	1.00	253	MAX PEAK	Fundamental

Appendix B – Measurement Data

B6.0 Radiated Emissions in Restricted Bands

Rule Part: FCC Part 15.247(d), FCC Part 15.205 and FCC Part 15.209

Test Procedure: FCC KDB 558074 D01 DTS Meas Guidance v03r03, ANSI C63.4-2014 and ANSI C63.10-2013

Limit: FCC Part 15.209

Results: Compliant

Notes: The EUT was set to transmit continuously at its maximum power and maximum data rate. Peak measurements were taken with RBW = 1 MHz, VBW = 3 MHz. RMS measurements were taken with RBW = 1 MHz, VBW = 3MHz.

FCC Part 15.247

Electric Field Strength

EUT: Quick Response Router/Gateway Model 0800-0550
Manufacturer: RFT Technologies
Operating Condition: 73 deg F 55% R.H.
Test Site: DLS O.F. G1
Operator: Paul L - DLS# 7072
Test Specification: Internal Antenna Min. Ch 2405MHz
Comment: Modulated Carrier Continuous Transmit
Date: 08-13-2015

TEXT: "Horz 3 meters"

Short Description: Test Set-up

Test Set-up: EUT Measured at 3 Meters with HORIZONTAL Antenna Polarization

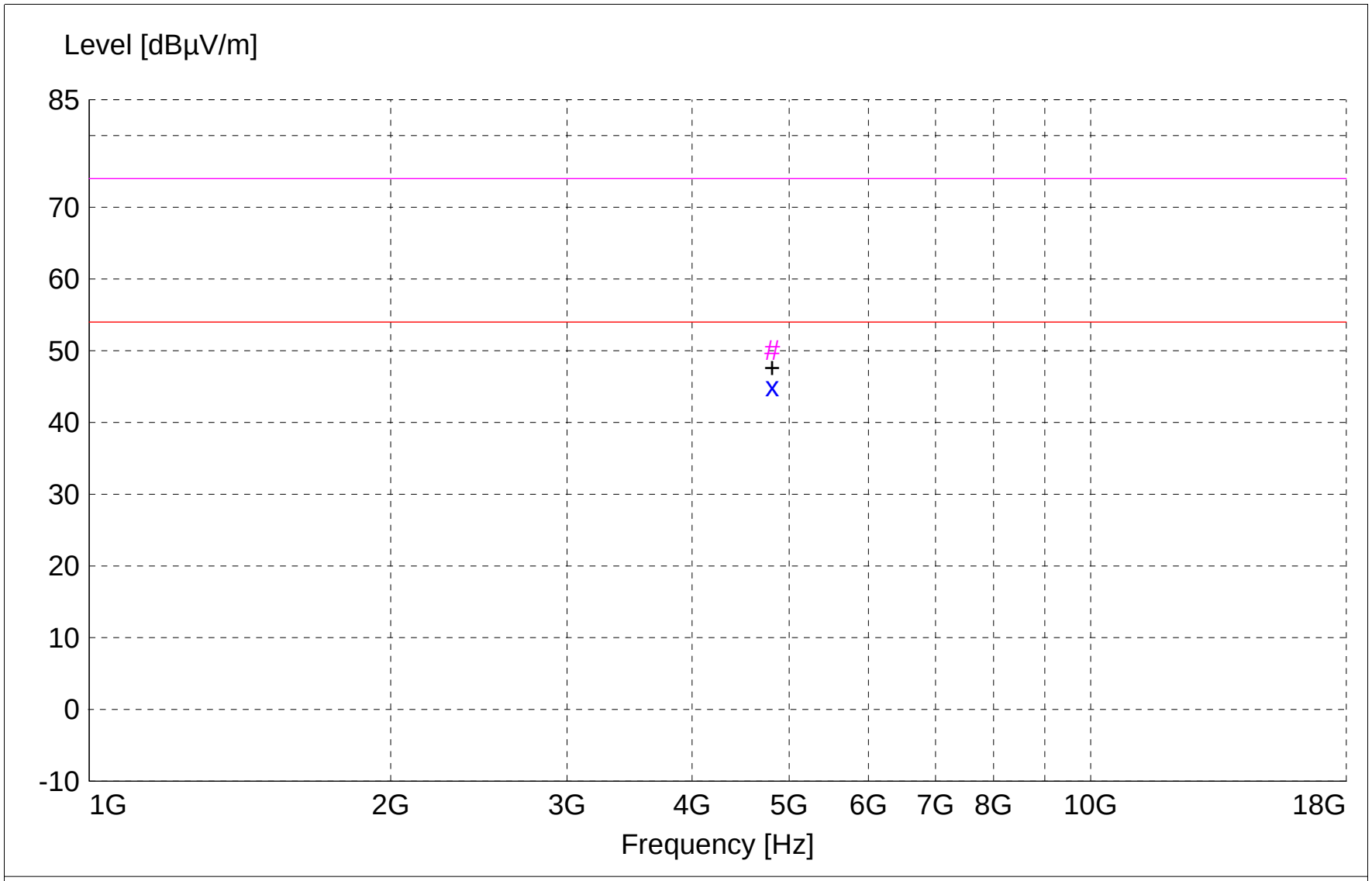
Sample Equations:

Total Level(dBµV/m)	= Level(dBµV)	+ System Loss(dB)	+ Antenna Factor(dBµV/m)
24.6	= 35.51	+ (-22.1)	+ 11.20

Margin(dB)	= Limit(dBµV/m)	- Total Level(dBµV/m)
15.4	= 40	- 24.6

Graph Markers:

+	Frequency marker (Level of marker not related to final level)
|	Final maximized level using Quasi-Peak detector
X	Final maximized level using Average dector
#	Final maximized level using Peak detector
-	Background Scan Peak Detector (Optional)
-	Background Scan Average Detector (Optional)



x x : MES A813e_sh_Average
: MES A813e_sh_Peak
+ + : MES A813e_sh_Peak_List
——— LIM FCC Class B F 3m AVG Field Strength AVG Limit 3m
——— LIM FCC Class B F 3m PK Field Strength PEAK Limit 3m

MEASUREMENT RESULT: "A813e_sh_Final"

8/13/2015 1:57PM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector		Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg			
4810.000000	48.76	33.01	-36.7	45.0	54.0	9.0	1.80	196	RMS	RB	2nd Harmonic
4810.000000	53.79	33.01	-36.7	50.1	74.0	23.9	1.80	196	MAX PEAK	RB	2nd Harmonic

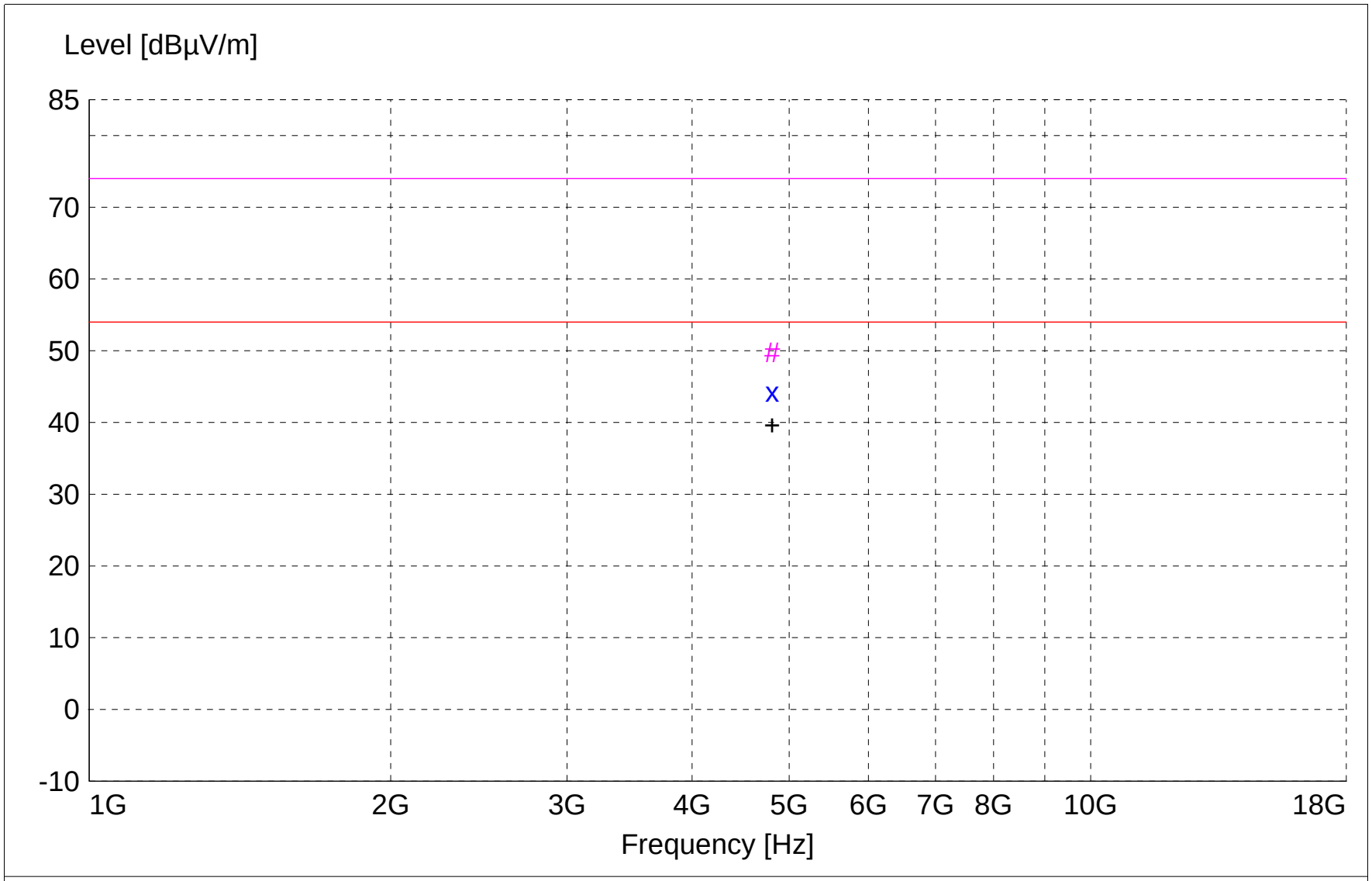
FCC Part 15.247

Electric Field Strength

```
EUT:                  Quick Response Router/Gateway Model 0800-0550
Manufacturer:         RFT Technologies
Operating Condition:  73 deg F  55% R.H.
Test Site:            DLS O.F. G1
Operator:             Paul L  -  DLS# 7072
Test Specification:   Internal Antenna  Min. Ch 2405MHz
Comment:              Modulated Carrier Continuous Transmit
                      Date:  08-13-2015
```

TEXT: "Vert 3 meters"

```
  Short Description:            Test Set-up


Test Set-up:    EUT Measured at 3 Meters with VERTICAL Antenna Polarization


Sample Equations:   Total Level(dBµV/m) = Level(dBµV) + System Loss(dB) + Antenna Factor(dBµV/m)
                    24.6                = 35.51       + (-22.1)         + 11.20

                    Margin(dB)  = Limit(dBµV/m) - Total Level(dBµV/m)
                    15.4        = 40            - 24.6


Graph Markers:  +       Frequency marker (Level of marker not related to final level)

                |       Final maximized level using Quasi-Peak detector

                X       Final maximized level using Average dector

                #       Final maximized level using Peak detector

                -       Background Scan Peak Detector (Optional)

                -       Background Scan Average Detector (Optional)
```



x x : MES A813e_sv_Average
: MES A813e_sv_Peak
+ + : MES A813e_sv_Peak_List
——— LIM FCC Class B F 3m AVG Field Strength AVG Limit 3m
——— LIM FCC Class B F 3m PK Field Strength PEAK Limit 3m

MEASUREMENT RESULT: "A813e_sv_Final"

8/13/2015 2:08PM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
4810.200000	47.98	33.01	-36.7	44.3	54.0	9.7	1.70	182	RMS	RB 2nd Harmonic
4810.200000	53.53	33.01	-36.7	49.8	74.0	24.2	1.70	182	MAX PEAK	RB 2nd Harmonic

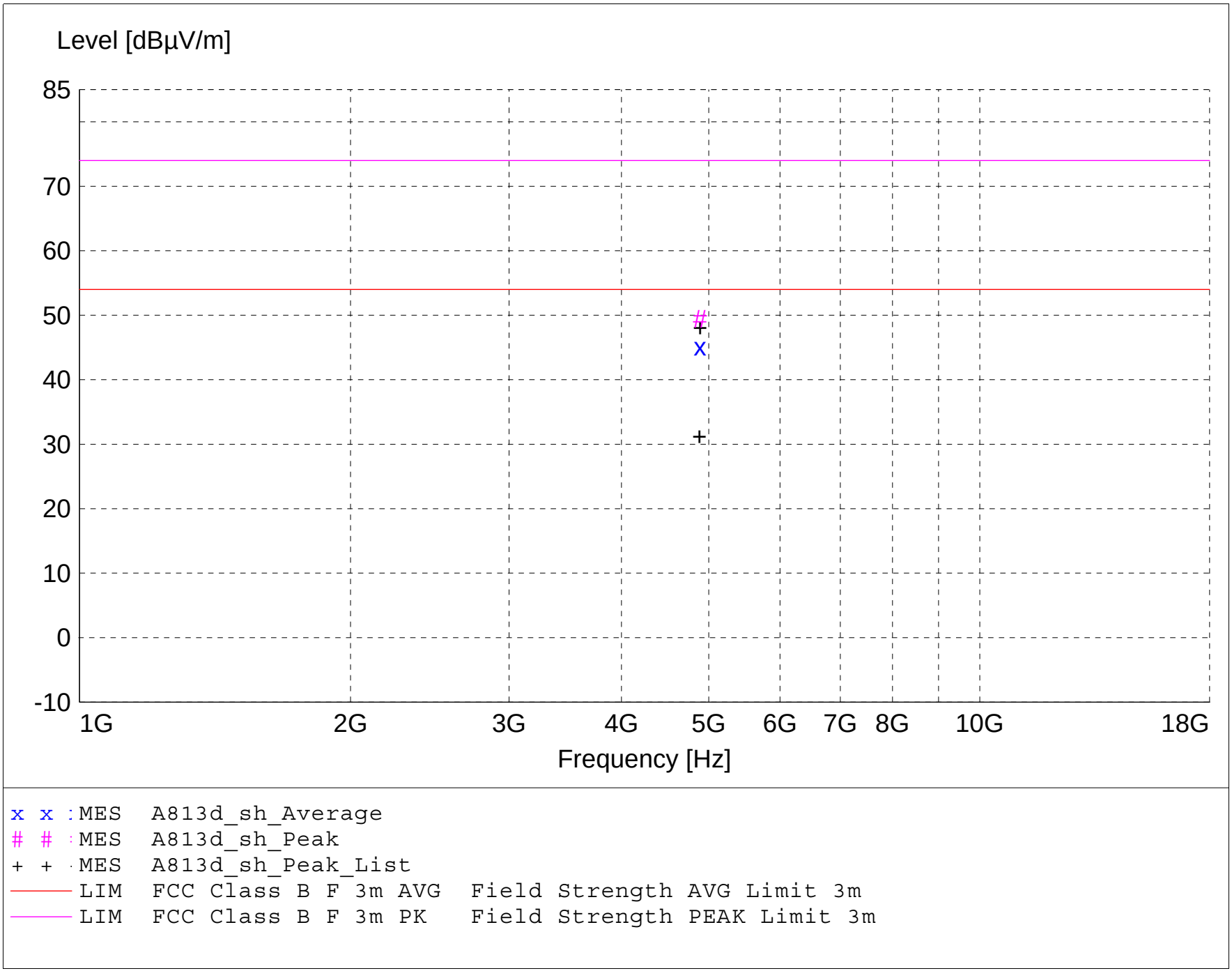
FCC Part 15.247

Electric Field Strength

```
EUT:                  Quick Response Router/Gateway Model 0800-0550
Manufacturer:         RFT Technologies
Operating Condition:  73 deg F  55% R.H.
Test Site:            DLS O.F. G1
Operator:             Paul L  -  DLS# 7072
Test Specification:   Internal Antenna  Mid. Ch 2440MHz
Comment:              Modulated Carrier Continuous Transmit
                      Date:  08-13-2015
```

TEXT: "Horz 3 meters"

```
  Short Description:            Test Set-up


Test Set-up:    EUT Measured at 3 Meters with HORIZONTAL Antenna Polarization


Sample Equations:   Total Level(dBµV/m) = Level(dBµV) + System Loss(dB) + Antenna Factor(dBµV/m)
                    24.6                = 35.51       + (-22.1)         + 11.20

                    Margin(dB)  = Limit(dBµV/m) - Total Level(dBµV/m)
                    15.4        = 40            - 24.6


Graph Markers:  +       Frequency marker (Level of marker not related to final level)

                |       Final maximized level using Quasi-Peak detector

                X       Final maximized level using Average dector

                #       Final maximized level using Peak detector

                -       Background Scan Peak Detector (Optional)

                -       Background Scan Average Detector (Optional)
```



x x : MES A813d_sh_Average
: MES A813d_sh_Peak
+ + : MES A813d_sh_Peak_List
——— LIM FCC Class B F 3m AVG Field Strength AVG Limit 3m
——— LIM FCC Class B F 3m PK Field Strength PEAK Limit 3m

MEASUREMENT RESULT: "A813d_sh_Final"

8/13/2015 1:41PM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector		Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg			
4890.000000	48.71	33.08	-36.6	45.2	54.0	8.8	1.80	196	RMS	RB	2nd Harmonic
4890.000000	53.00	33.08	-36.6	49.5	74.0	24.6	1.80	196	MAX PEAK	RB	2nd Harmonic

FCC Part 15.247

Electric Field Strength

EUT: Quick Response Router/Gateway Model 0800-0550
Manufacturer: RFT Technologies
Operating Condition: 73 deg F 55% R.H.
Test Site: DLS O.F. G1
Operator: Paul L - DLS# 7072
Test Specification: Internal Antenna Mid. Ch 2440MHz
Comment: Modulated Carrier Continuous Transmit
Date: 08-13-2015

TEXT: "Vert 3 meters"

Short Description: Test Set-up

Test Set-up: EUT Measured at 3 Meters with VERTICAL Antenna Polarization

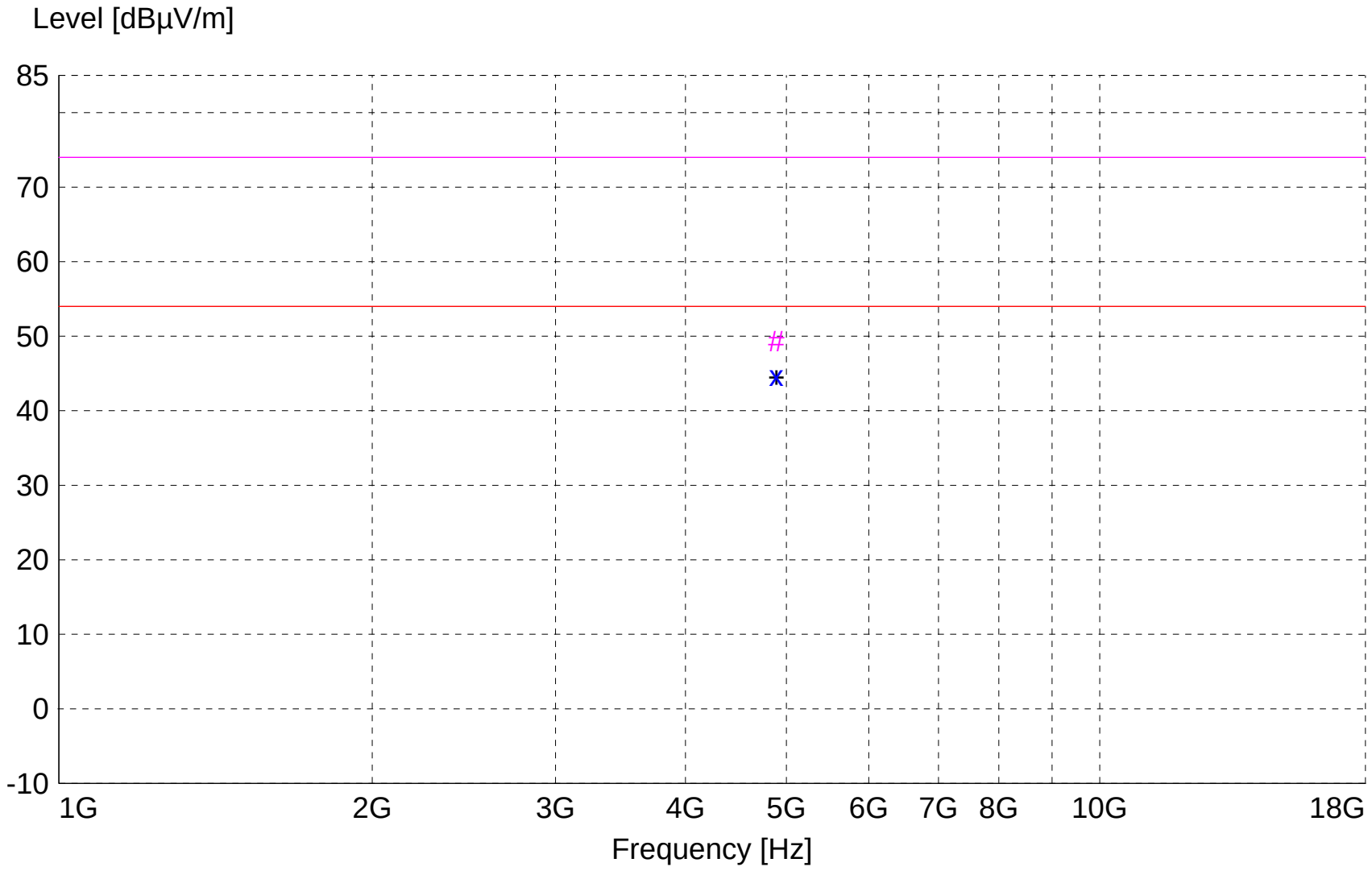
Sample Equations:

Total Level(dBµV/m)	= Level(dBµV)	+ System Loss(dB)	+ Antenna Factor(dBµV/m)
24.6	= 35.51	+ (-22.1)	+ 11.20

Margin(dB)	= Limit(dBµV/m)	- Total Level(dBµV/m)
15.4	= 40	- 24.6

Graph Markers:

+	Frequency marker (Level of marker not related to final level)
|	Final maximized level using Quasi-Peak detector
X	Final maximized level using Average dector
#	Final maximized level using Peak detector
-	Background Scan Peak Detector (Optional)
-	Background Scan Average Detector (Optional)



x x : MES A813d_sv_Average
: MES A813d_sv_Peak
+ + : MES A813d_sv_Peak_List
——— LIM FCC Class B F 3m AVG Field Strength AVG Limit 3m
——— LIM FCC Class B F 3m PK Field Strength PEAK Limit 3m

MEASUREMENT RESULT: "A813d_sv_Final"

8/13/2015 12:53PM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector		Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg			
4890.000000	48.25	33.08	-36.6	44.7	54.0	9.3	1.78	182	RMS	RB	2nd Harmonic
4890.000000	52.87	33.08	-36.6	49.3	74.0	24.7	1.78	182	MAX PEAK	RB	2nd Harmonic

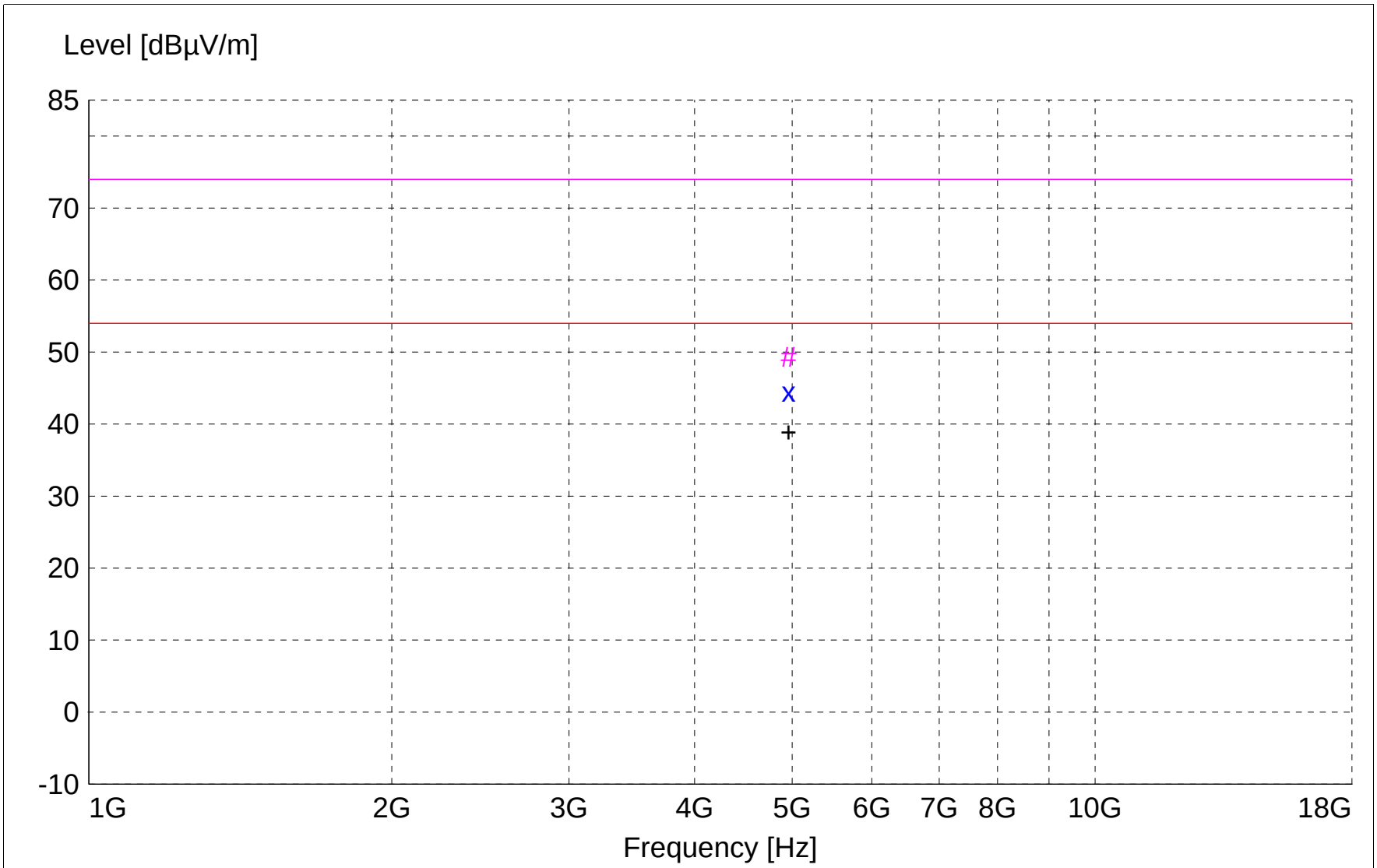
FCC Part 15.247

Electric Field Strength

```
EUT:                  Quick Response Router/Gateway Model 0800-0550
Manufacturer:         RFT Technologies
Operating Condition:  73 deg F  55% R.H.
Test Site:            DLS O.F. G1
Operator:             Paul L  -  DLS# 7072
Test Specification:   Internal Antenna  Max. Ch 2475MHz
Comment:              Modulated Carrier Continuous Transmit
                      Date:  08-13-2015
```

TEXT: "Horz 3 meters"

```
  Short Description:            Test Set-up


Test Set-up:    EUT Measured at 3 Meters with HORIZONTAL Antenna Polarization


Sample Equations:   Total Level(dBµV/m) = Level(dBµV) + System Loss(dB) + Antenna Factor(dBµV/m)
                    24.6                = 35.51       + (-22.1)         + 11.20

                    Margin(dB)  = Limit(dBµV/m) - Total Level(dBµV/m)
                    15.4        = 40            - 24.6


Graph Markers:  +       Frequency marker (Level of marker not related to final level)

                |       Final maximized level using Quasi-Peak detector

                X       Final maximized level using Average dector

                #       Final maximized level using Peak detector

                -       Background Scan Peak Detector (Optional)

                -       Background Scan Average Detector (Optional)
```



x x : MES A813f_sh_Average
: MES A813f_sh_Peak
+ + : MES A813f_sh_Peak_List
——— LIM FCC Class B F 3m AVG Field Strength AVG Limit 3m
——— LIM FCC Class B F 3m PK Field Strength PEAK Limit 3m

MEASUREMENT RESULT: "A813f_sh_Final"

8/13/2015 3:08PM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
4960.000000	47.85	33.19	-36.6	44.4	54.0	9.6	1.67	190	RMS	RB 2nd Harmonic
4960.000000	52.77	33.19	-36.6	49.4	74.0	24.7	1.67	190	MAX PEAK	RB 2nd Harmonic

FCC Part 15.247

Electric Field Strength

EUT: Quick Response Router/Gateway Model 0800-0550
Manufacturer: RFT Technologies
Operating Condition: 73 deg F 55% R.H.
Test Site: DLS O.F. G1
Operator: Paul L - DLS# 7072
Test Specification: Internal Antenna Max. Ch 2475MHz
Comment: Modulated Carrier Continuous Transmit
Date: 08-13-2015

TEXT: "Vert 3 meters"

Short Description: Test Set-up

Test Set-up: EUT Measured at 3 Meters with VERTICAL Antenna Polarization

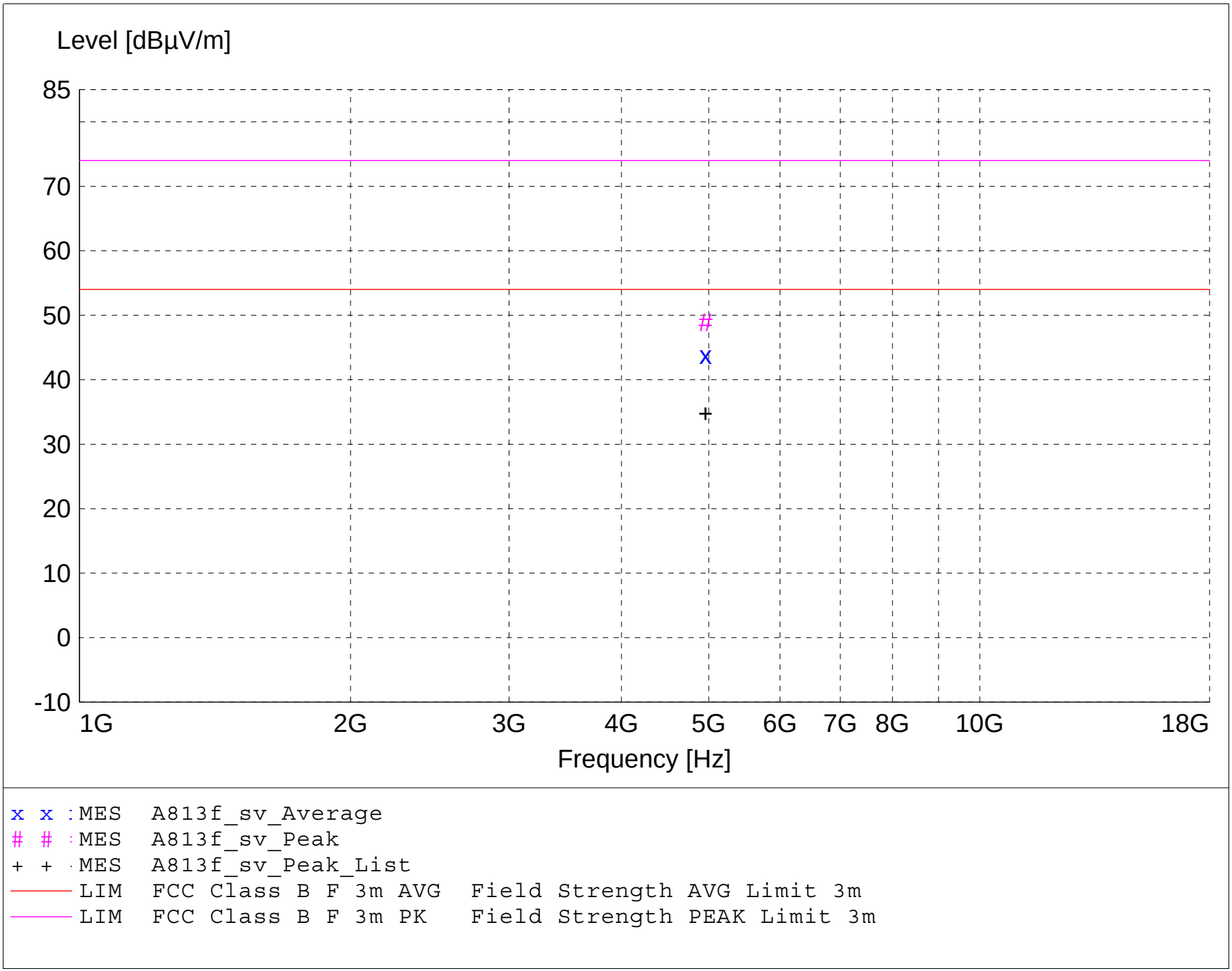
Sample Equations:

Total Level(dBµV/m)	= Level(dBµV)	+ System Loss(dB)	+ Antenna Factor(dBµV/m)
24.6	= 35.51	+ (-22.1)	+ 11.20

Margin(dB)	= Limit(dBµV/m)	- Total Level(dBµV/m)
15.4	= 40	- 24.6

Graph Markers:

+	Frequency marker (Level of marker not related to final level)
|	Final maximized level using Quasi-Peak detector
X	Final maximized level using Average dector
#	Final maximized level using Peak detector
-	Background Scan Peak Detector (Optional)
-	Background Scan Average Detector (Optional)



x x : MES A813f_sv_Average
: MES A813f_sv_Peak
+ + : MES A813f_sv_Peak_List
——— LIM FCC Class B F 3m AVG Field Strength AVG Limit 3m
——— LIM FCC Class B F 3m PK Field Strength PEAK Limit 3m

MEASUREMENT RESULT: "A813f_sv_Final"

8/13/2015 2:34PM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
4960.000000	47.25	33.19	-36.6	43.8	54.0	10.2	1.67	184	RMS	RB 2nd Harmonic
4960.000000	52.37	33.19	-36.6	49.0	74.0	25.1	1.67	184	MAX PEAK	RB 2nd Harmonic

FCC Part 15.247

Electric Field Strength

EUT: Quick Response Router/Gateway Model 0800-0550
Manufacturer: RFT Technologies
Operating Condition: 72 deg. F; 56% R.H.
Test Site: DLS Site 2
Operator: Paul L #7072
Test Specification: Internal Antenna Min. Ch 2405MHz
Comment: Modulated Carrier Continuous Transmit
Date: 08-17-2015

TEXT: "Horz 1 meters"

Short Description: Test Set-up

Test Set-up: EUT Measured at 1 Meters with HORIZONTAL Antenna Polarization

Equations: Total Level(dBµV/m) = Level(dBµV) + System Loss(dB) + Antenna Factor(dBµV/m)

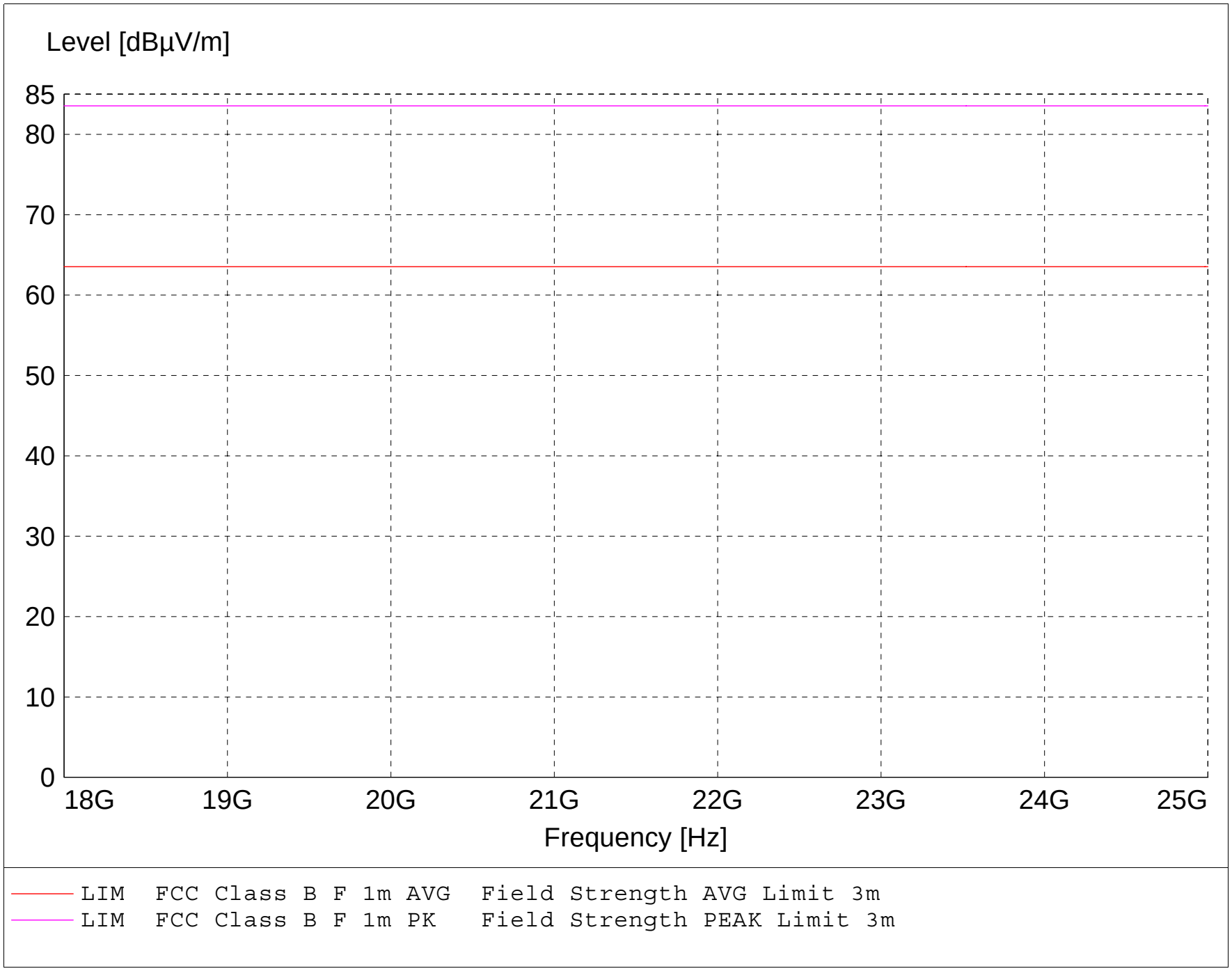
Margin(dB) = Limit(dBµV/m) - Total Level(dBµV/m)

Graph Markers: + Frequency marker (Level of marker not related to final level)

| Final maximized level using Quasi-Peak detector

X Final maximized level using Average dector

Final maximized level using Peak detector


Level [dBµV/m]
85
80
70
60
50
40
30
20
10
0
18G
19G
20G
21G
22G
23G
24G
25G
Frequency [Hz]
LIM FCC Class B F 1m AVG Field Strength AVG Limit 3m
LIM FCC Class B F 1m PK Field Strength PEAK Limit 3m

FCC Part 15.247

Electric Field Strength

EUT: Quick Response Router/Gateway Model 0800-0550
Manufacturer: RFT Technologies
Operating Condition: 72 deg. F; 56% R.H.
Test Site: DLS Site 2
Operator: Paul L #7072
Test Specification: Internal Antenna Min. Ch 2405MHz
Comment: Modulated Carrier Continuous Transmit
Date: 08-17-2015

TEXT: "Vert 1 meters"

Short Description: Test Set-up

Test Set-up: EUT Measured at 1 Meters with VERTICAL Antenna Polarization

Equations: Total Level(dBµV/m) = Level(dBµV) + System Loss(dB) + Antenna Factor(dBµV/m)

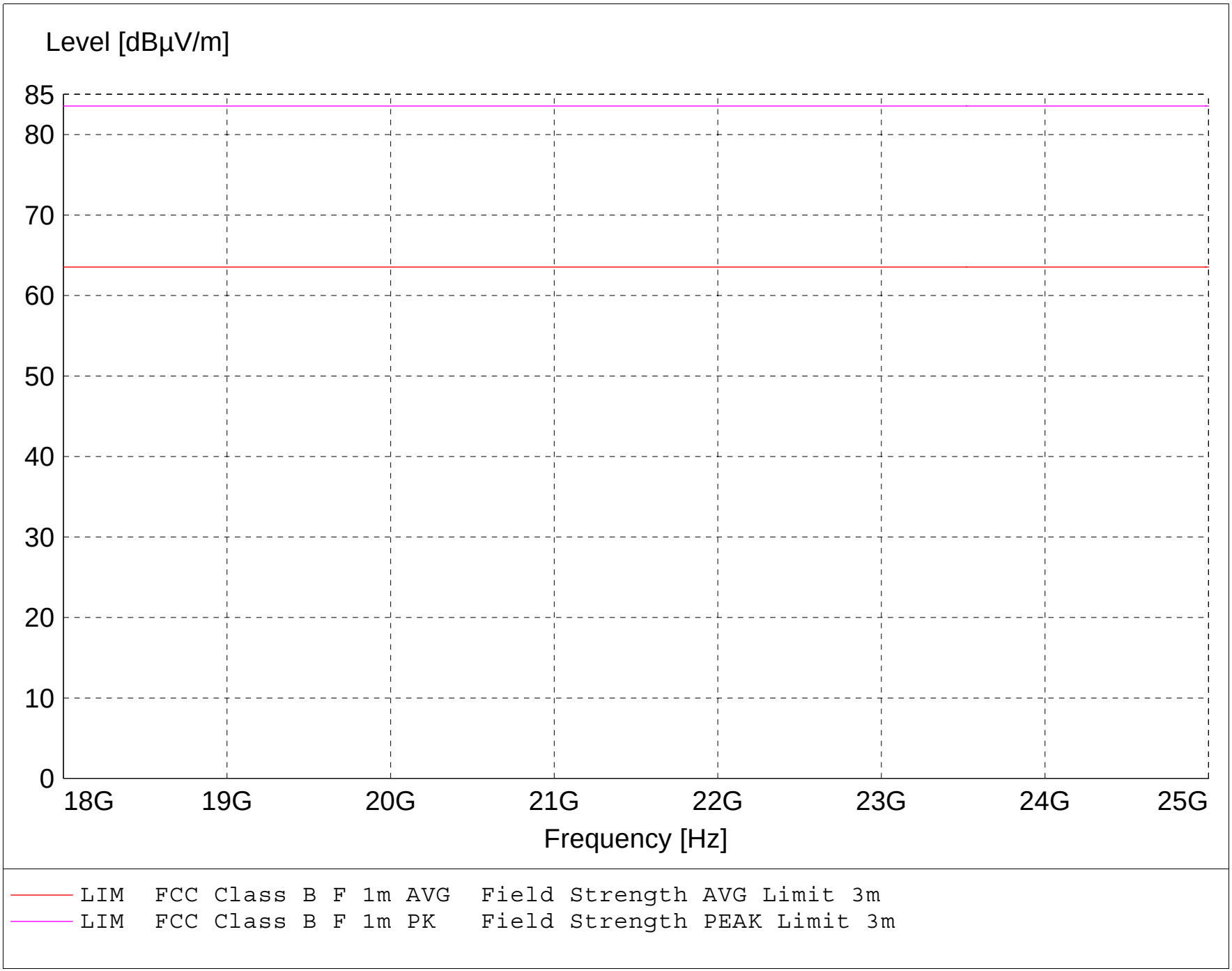
Margin(dB) = Limit(dBµV/m) - Total Level(dBµV/m)

Graph Markers: + Frequency marker (Level of marker not related to final level)

| Final maximized level using Quasi-Peak detector

X Final maximized level using Average dector

Final maximized level using Peak detector


Level [dBµV/m]
85
80
70
60
50
40
30
20
10
0
18G
19G
20G
21G
22G
23G
24G
25G
Frequency [Hz]
LIM FCC Class B F 1m AVG Field Strength AVG Limit 3m
LIM FCC Class B F 1m PK Field Strength PEAK Limit 3m

FCC Part 15.247

Electric Field Strength

EUT: Quick Response Router/Gateway Model 0800-0550
Manufacturer: RFT Technologies
Operating Condition: 72 deg. F; 56% R.H.
Test Site: DLS Site 2
Operator: Paul L #7072
Test Specification: Internal Antenna Mid. Ch 2440MHz
Comment: Modulated Carrier Continuous Transmit
Date: 08-17-2015

TEXT: "Horz 1 meters"

Short Description: Test Set-up

Test Set-up: EUT Measured at 1 Meters with HORIZONTAL Antenna Polarization

Equations: Total Level(dBµV/m) = Level(dBµV) + System Loss(dB) + Antenna Factor(dBµV/m)

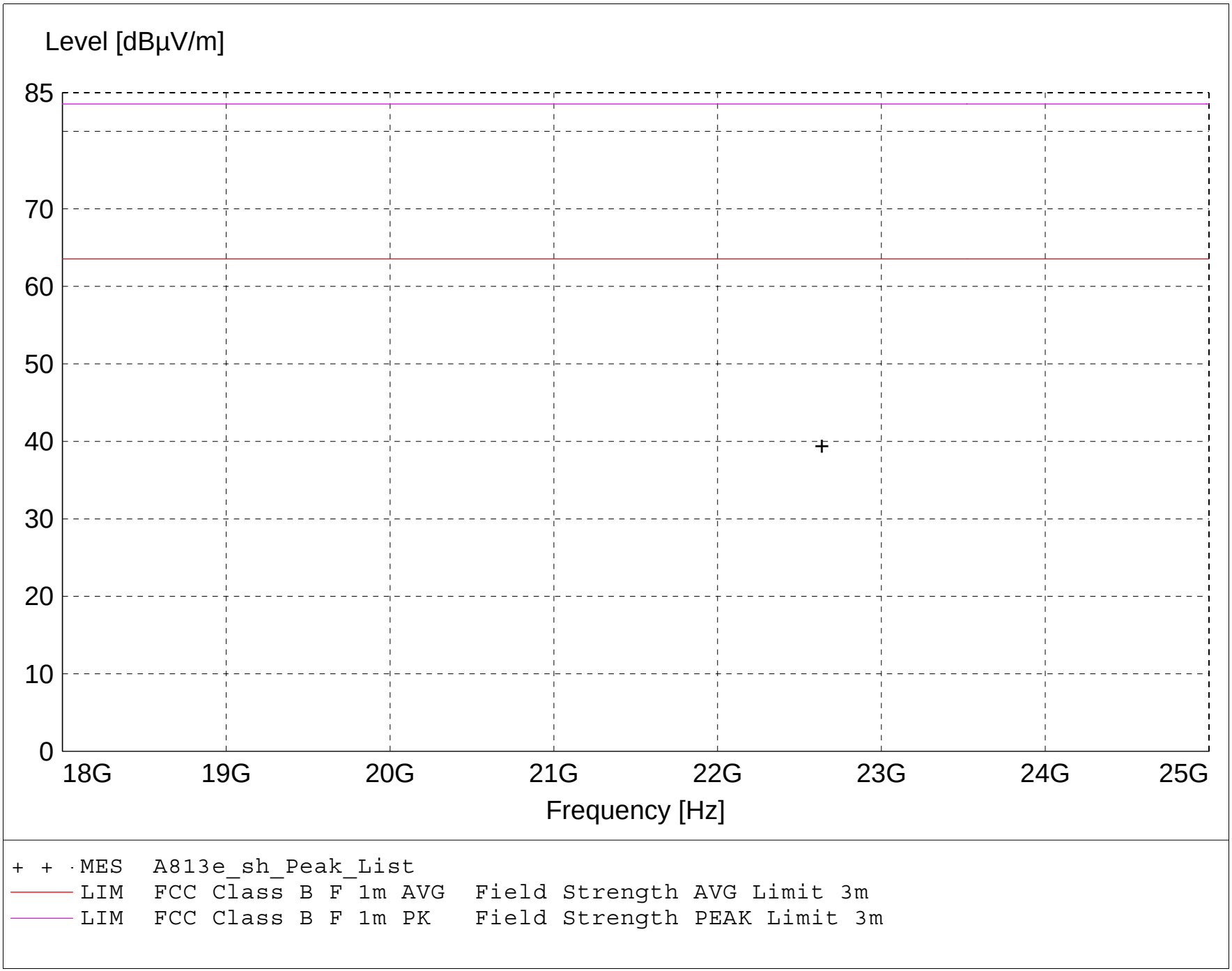
Margin(dB) = Limit(dBµV/m) - Total Level(dBµV/m)

Graph Markers: + Frequency marker (Level of marker not related to final level)

| Final maximized level using Quasi-Peak detector

X Final maximized level using Average dector

Final maximized level using Peak detector



+ + MES A813e_sh_Peak_List
LIM FCC Class B F 1m AVG Field Strength AVG Limit 3m
LIM FCC Class B F 1m PK Field Strength PEAK Limit 3m

MEASUREMENT RESULT: "A813e_sh_Final"

8/17/2015 1:39PM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
0.000000	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0		

FCC Part 15.247

Electric Field Strength

EUT: Quick Response Router/Gateway Model 0800-0550
Manufacturer: RFT Technologies
Operating Condition: 72 deg. F; 56% R.H.
Test Site: DLS Site 2
Operator: Paul L #7072
Test Specification: Internal Antenna Mid. Ch 2440MHz
Comment: Modulated Carrier Continuous Transmit
Date: 08-17-2015

TEXT: "Vert 1 meters"

Short Description: Test Set-up

Test Set-up: EUT Measured at 1 Meters with VERTICAL Antenna Polarization

Equations: Total Level(dBµV/m) = Level(dBµV) + System Loss(dB) + Antenna Factor(dBµV/m)

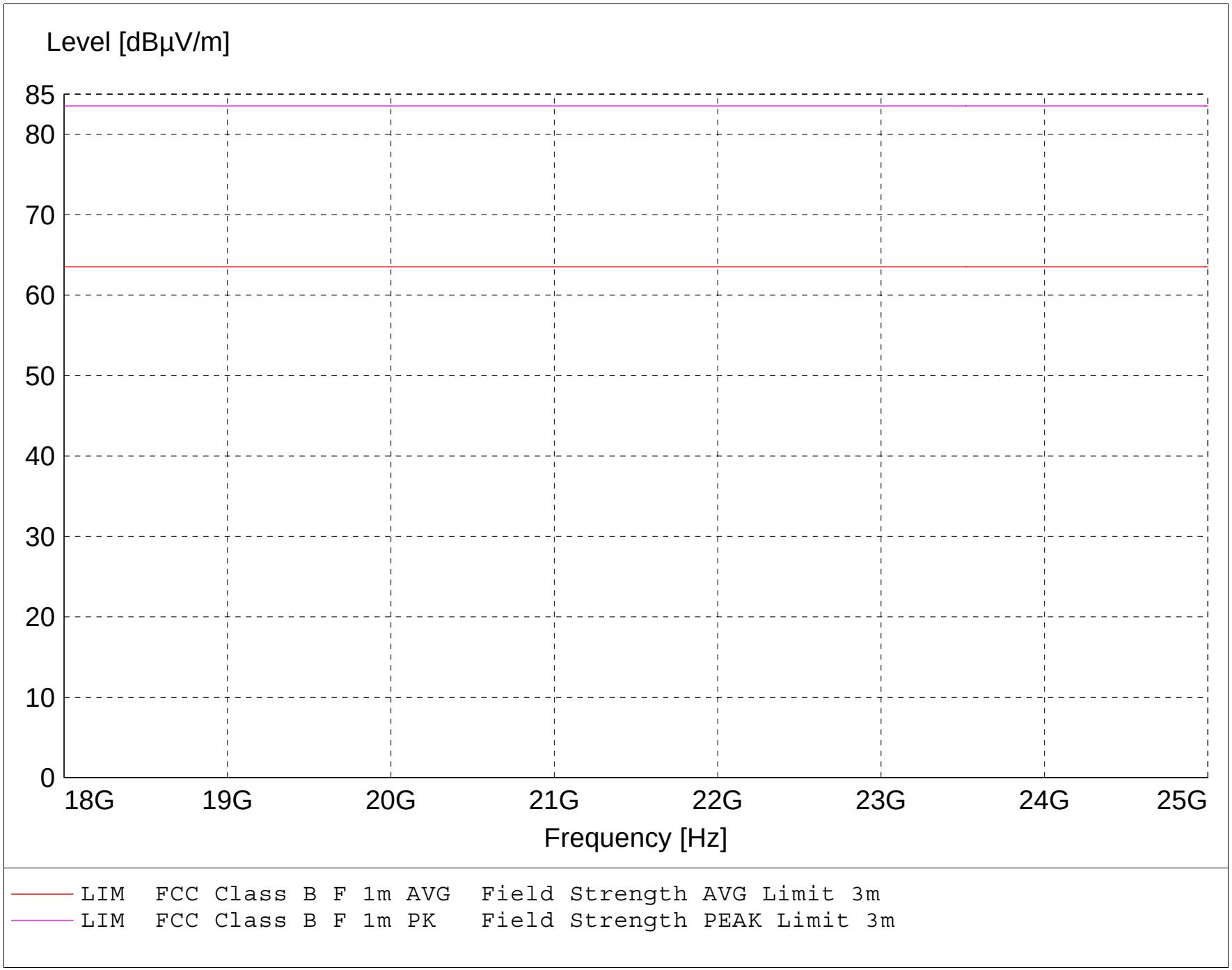
Margin(dB) = Limit(dBµV/m) - Total Level(dBµV/m)

Graph Markers: + Frequency marker (Level of marker not related to final level)

| Final maximized level using Quasi-Peak detector

X Final maximized level using Average dector

Final maximized level using Peak detector


Level [dBµV/m]
85
80
70
60
50
40
30
20
10
0
18G
19G
20G
21G
22G
23G
24G
25G
Frequency [Hz]
LIM FCC Class B F 1m AVG Field Strength AVG Limit 3m
LIM FCC Class B F 1m PK Field Strength PEAK Limit 3m

FCC Part 15.247

Electric Field Strength

EUT: Quick Response Router/Gateway Model 0800-0550
Manufacturer: RFT Technologies
Operating Condition: 72 deg. F; 56% R.H.
Test Site: DLS Site 2
Operator: Paul L #7072
Test Specification: Internal Antenna Max. Ch 2475MHz
Comment: Modulated Carrier Continuous Transmit
Date: 08-17-2015

TEXT: "Horz 1 meters"

Short Description: Test Set-up

Test Set-up: EUT Measured at 1 Meters with HORIZONTAL Antenna Polarization

Equations: Total Level(dBµV/m) = Level(dBµV) + System Loss(dB) + Antenna Factor(dBµV/m)

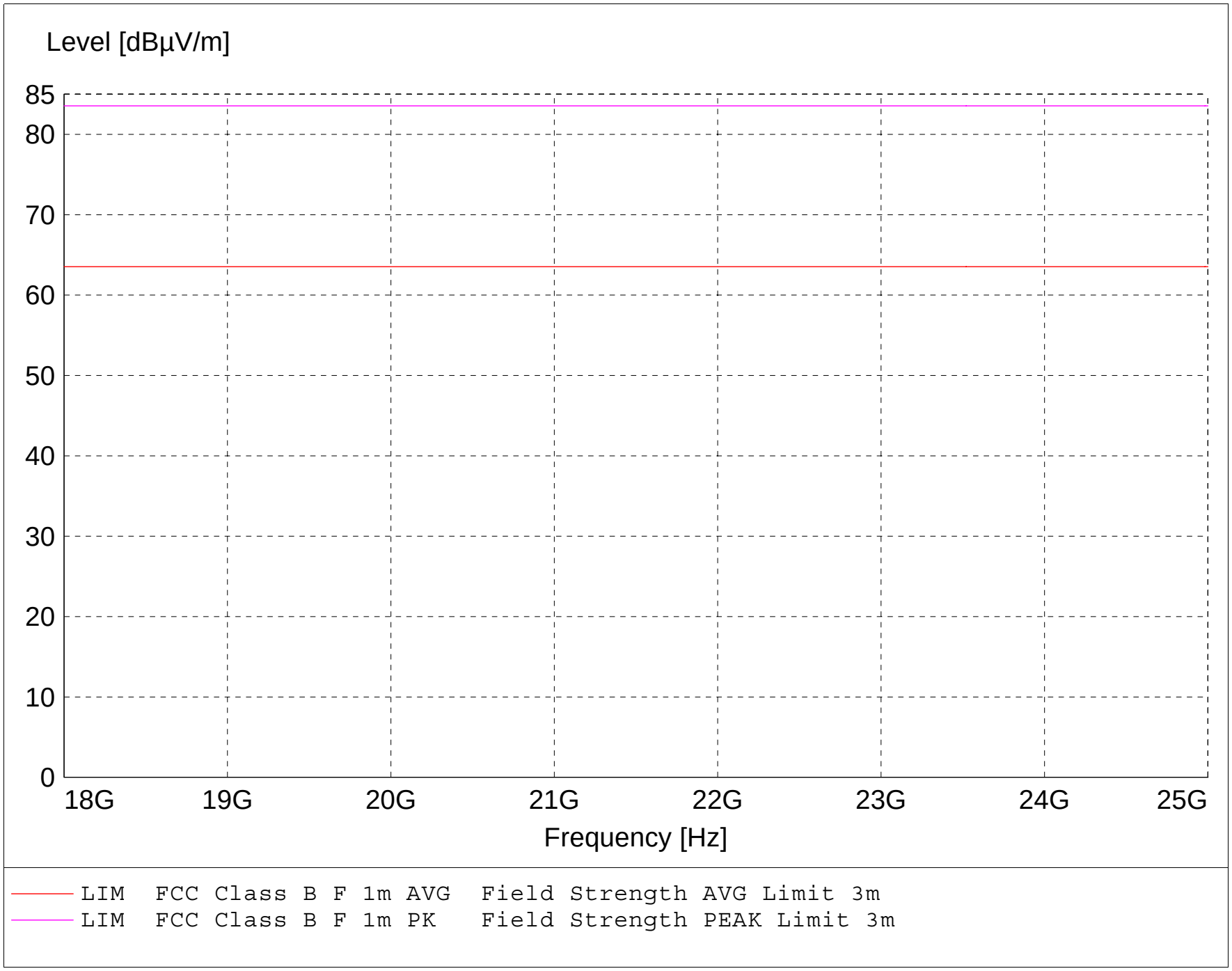
Margin(dB) = Limit(dBµV/m) - Total Level(dBµV/m)

Graph Markers: + Frequency marker (Level of marker not related to final level)

| Final maximized level using Quasi-Peak detector

X Final maximized level using Average dector

Final maximized level using Peak detector


Level [dBµV/m]
85
80
70
60
50
40
30
20
10
0
18G
19G
20G
21G
22G
23G
24G
25G
Frequency [Hz]
LIM FCC Class B F 1m AVG Field Strength AVG Limit 3m
LIM FCC Class B F 1m PK Field Strength PEAK Limit 3m

FCC Part 15.247

Electric Field Strength

EUT: Quick Response Router/Gateway Model 0800-0550
Manufacturer: RFT Technologies
Operating Condition: 72 deg. F; 56% R.H.
Test Site: DLS Site 2
Operator: Paul L #7072
Test Specification: Internal Antenna Max. Ch 2475MHz
Comment: Modulated Carrier Continuous Transmit
Date: 08-17-2015

TEXT: "Vert 1 meters"

Short Description: Test Set-up

Test Set-up: EUT Measured at 1 Meters with VERTICAL Antenna Polarization

Equations: Total Level(dBµV/m) = Level(dBµV) + System Loss(dB) + Antenna Factor(dBµV/m)

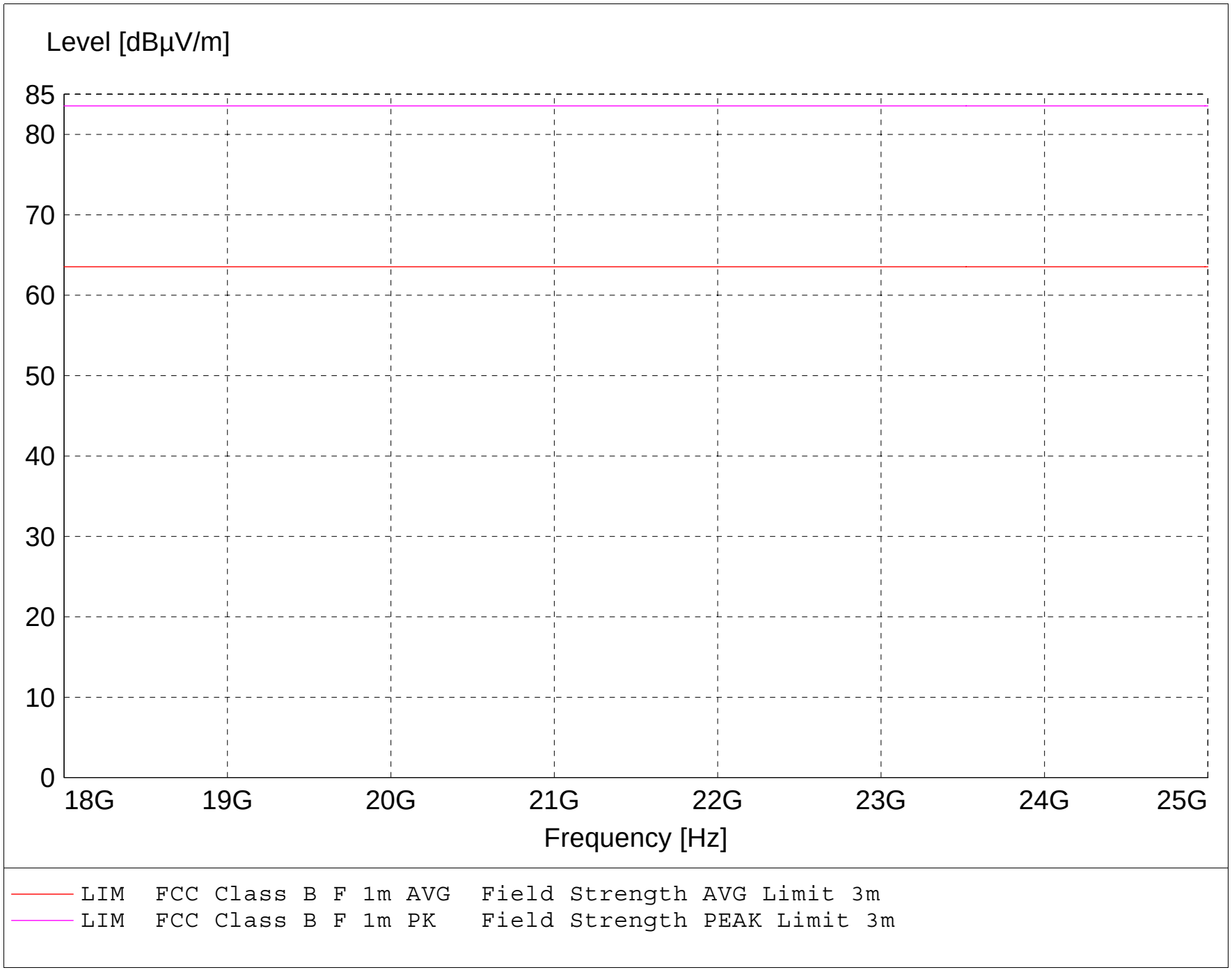
Margin(dB) = Limit(dBµV/m) - Total Level(dBµV/m)

Graph Markers: + Frequency marker (Level of marker not related to final level)

| Final maximized level using Quasi-Peak detector

X Final maximized level using Average dector

Final maximized level using Peak detector


Level [dBµV/m]
85
80
70
60
50
40
30
20
10
0
18G
19G
20G
21G
22G
23G
24G
25G
Frequency [Hz]
LIM FCC Class B F 1m AVG Field Strength AVG Limit 3m
LIM FCC Class B F 1m PK Field Strength PEAK Limit 3m

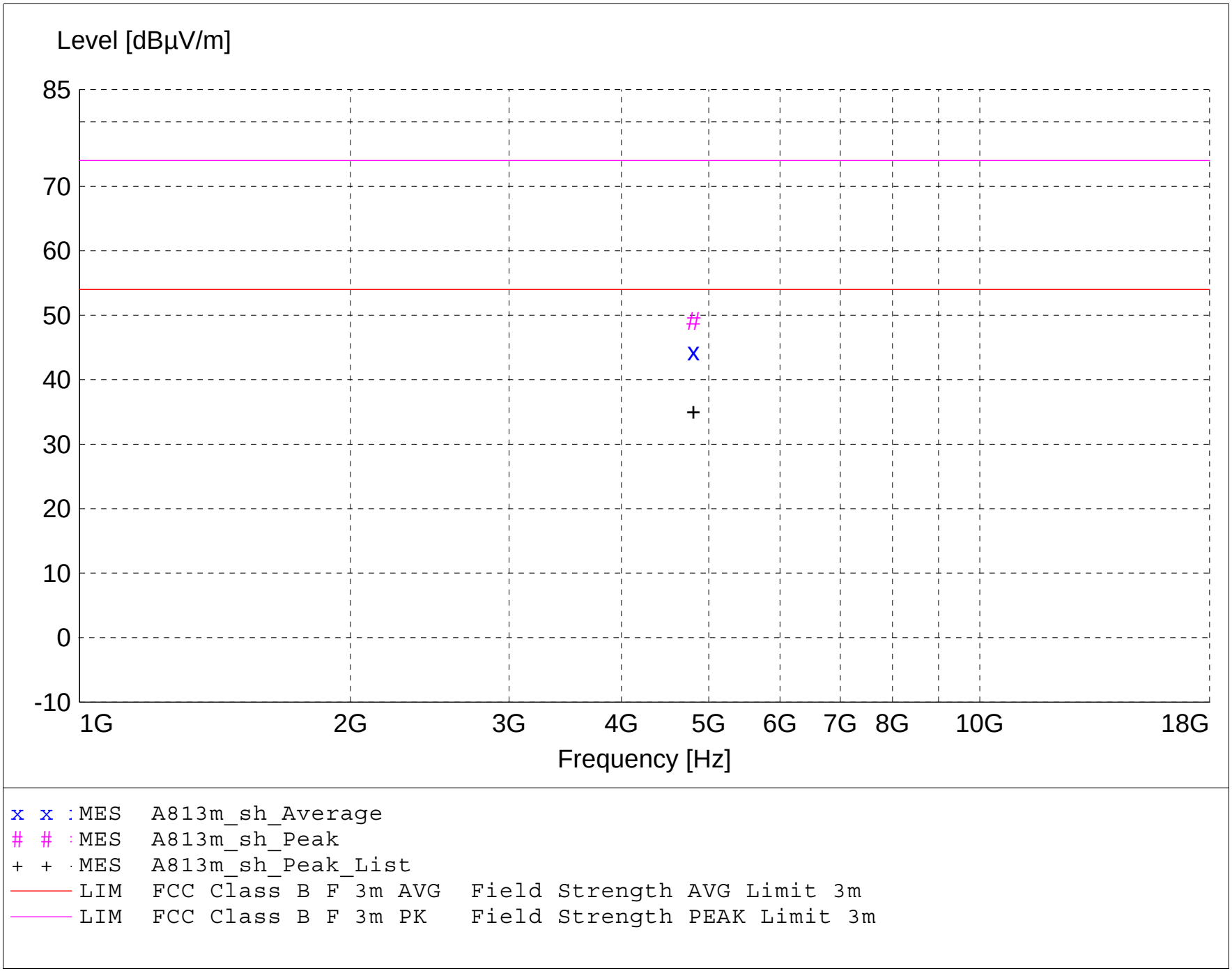
FCC Part 15.247

Electric Field Strength

```
EUT:                  Quick Response Router/Gateway Model 0800-0551
Manufacturer:         RFT Technologies
Operating Condition:  74 deg F  56% R.H.
Test Site:            DLS O.F. G1
Operator:             Paul L  -  DLS# 7072
Test Specification:   External High Gain Antenna  Min. Ch 2405MHz
Comment:              Modulated Carrier Continuous Transmit
                      Date:  08-14-2015
```

TEXT: "Horz 3 meters"

```
  Short Description:            Test Set-up


Test Set-up:    EUT Measured at 3 Meters with HORIZONTAL Antenna Polarization


Sample Equations:   Total Level(dBµV/m) = Level(dBµV) + System Loss(dB) + Antenna Factor(dBµV/m)
                    24.6                = 35.51       + (-22.1)         + 11.20

                    Margin(dB)  = Limit(dBµV/m) - Total Level(dBµV/m)
                    15.4        = 40            - 24.6


Graph Markers:  +       Frequency marker (Level of marker not related to final level)

                |       Final maximized level using Quasi-Peak detector

                X       Final maximized level using Average dector

                #       Final maximized level using Peak detector

                -       Background Scan Peak Detector (Optional)

                -       Background Scan Average Detector (Optional)
```



x x : MES A813m_sh_Average
: MES A813m_sh_Peak
+ + : MES A813m_sh_Peak_List
——— LIM FCC Class B F 3m AVG Field Strength AVG Limit 3m
——— LIM FCC Class B F 3m PK Field Strength PEAK Limit 3m

MEASUREMENT RESULT: "A813m_sh_Final"

8/14/2015 3:02PM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
4810.000000	47.81	33.01	-36.4	44.4	54.0	9.6	1.56	183	RMS	RB 2nd Harmonic
4810.000000	52.60	33.01	-36.4	49.2	74.0	24.8	1.56	183	MAX PEAK	RB 2nd Harmonic

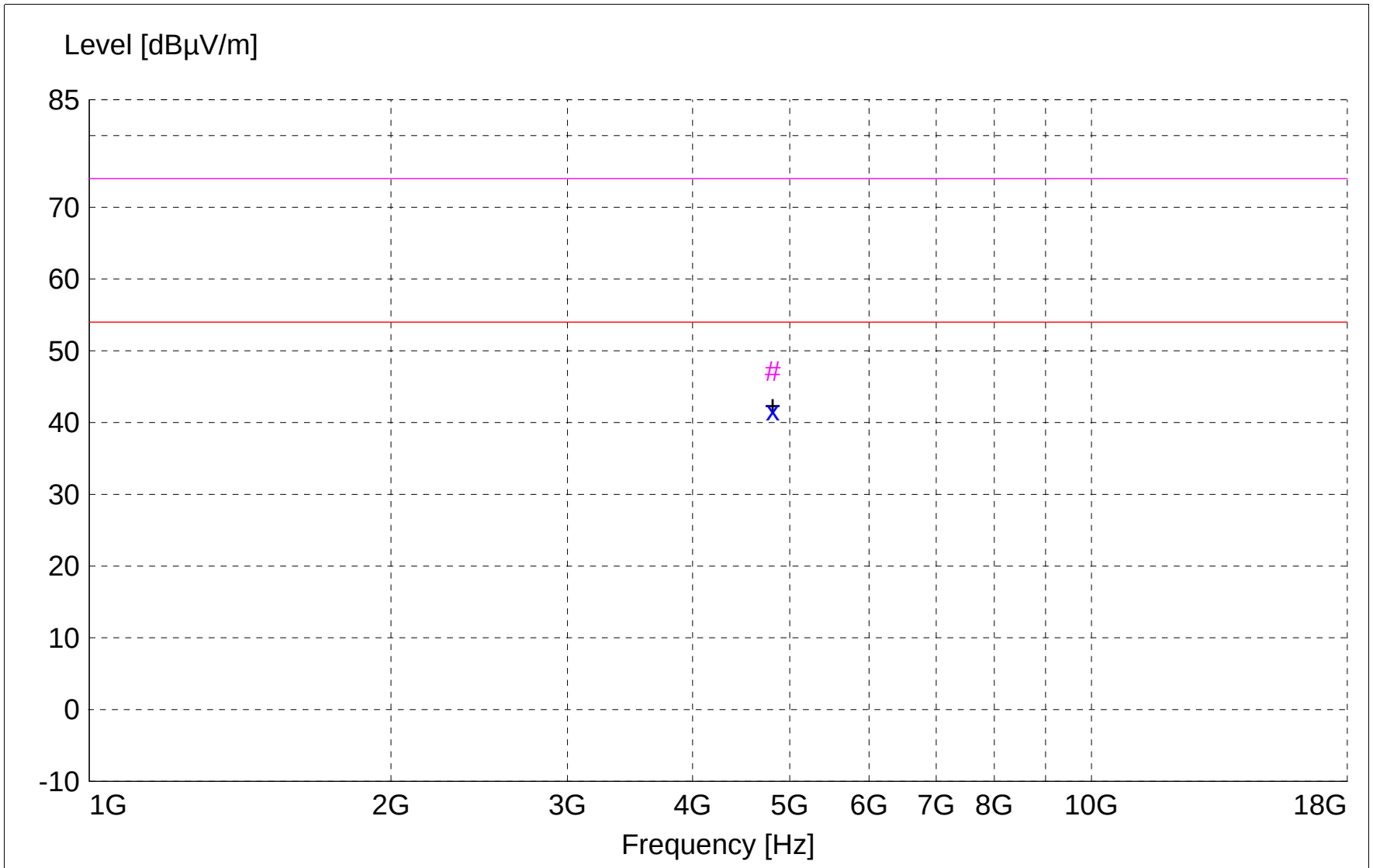
FCC Part 15.247

Electric Field Strength

```
EUT:                  Quick Response Router/Gateway Model 0800-0551
Manufacturer:         RFT Technologies
Operating Condition:  74 deg F  56% R.H.
Test Site:            DLS O.F. G1
Operator:             Paul L  -  DLS# 7072
Test Specification:   External High Gain Antenna  Min. Ch 2405MHz
Comment:              Modulated Carrier Continuous Transmit
                      Date:  08-14-2015
```

TEXT: "Vert 3 meters"

```
  Short Description:            Test Set-up


Test Set-up:    EUT Measured at 3 Meters with VERTICAL Antenna Polarization


Sample Equations:   Total Level(dBµV/m) = Level(dBµV) + System Loss(dB) + Antenna Factor(dBµV/m)
                    24.6                = 35.51       + (-22.1)         + 11.20

                    Margin(dB)  = Limit(dBµV/m) - Total Level(dBµV/m)
                    15.4        = 40            - 24.6


Graph Markers:  +       Frequency marker (Level of marker not related to final level)

                |       Final maximized level using Quasi-Peak detector

                X       Final maximized level using Average dector

                #       Final maximized level using Peak detector

                -       Background Scan Peak Detector (Optional)

                -       Background Scan Average Detector (Optional)
```



x x : MES A813m_sv_Average
: MES A813m_sv_Peak
+ + : MES A813m_sv_Peak_List
——— LIM FCC Class B F 3m AVG Field Strength AVG Limit 3m
——— LIM FCC Class B F 3m PK Field Strength PEAK Limit 3m

MEASUREMENT RESULT: "A813m_sv_Final"

8/14/2015 2:42PM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
4810.000000	45.10	33.01	-36.4	41.7	54.0	12.3	1.41	191	RMS	RB 2nd Harmonic
4810.000000	50.57	33.01	-36.4	47.1	74.0	26.9	1.41	191	MAX PEAK	RB 2nd Harmonic

FCC Part 15.247

Electric Field Strength

EUT: Quick Response Router/Gateway Model 0800-0551
Manufacturer: RFT Technologies
Operating Condition: 74 deg F 56% R.H.
Test Site: DLS O.F. G1
Operator: Paul L - DLS# 7072
Test Specification: External High Gain Antenna Mid. Ch 2440MHz
Comment: Modulated Carrier Continuous Transmit
Date: 08-14-2015

TEXT: "Horz 3 meters"

Short Description: Test Set-up

Test Set-up: EUT Measured at 3 Meters with HORIZONTAL Antenna Polarization

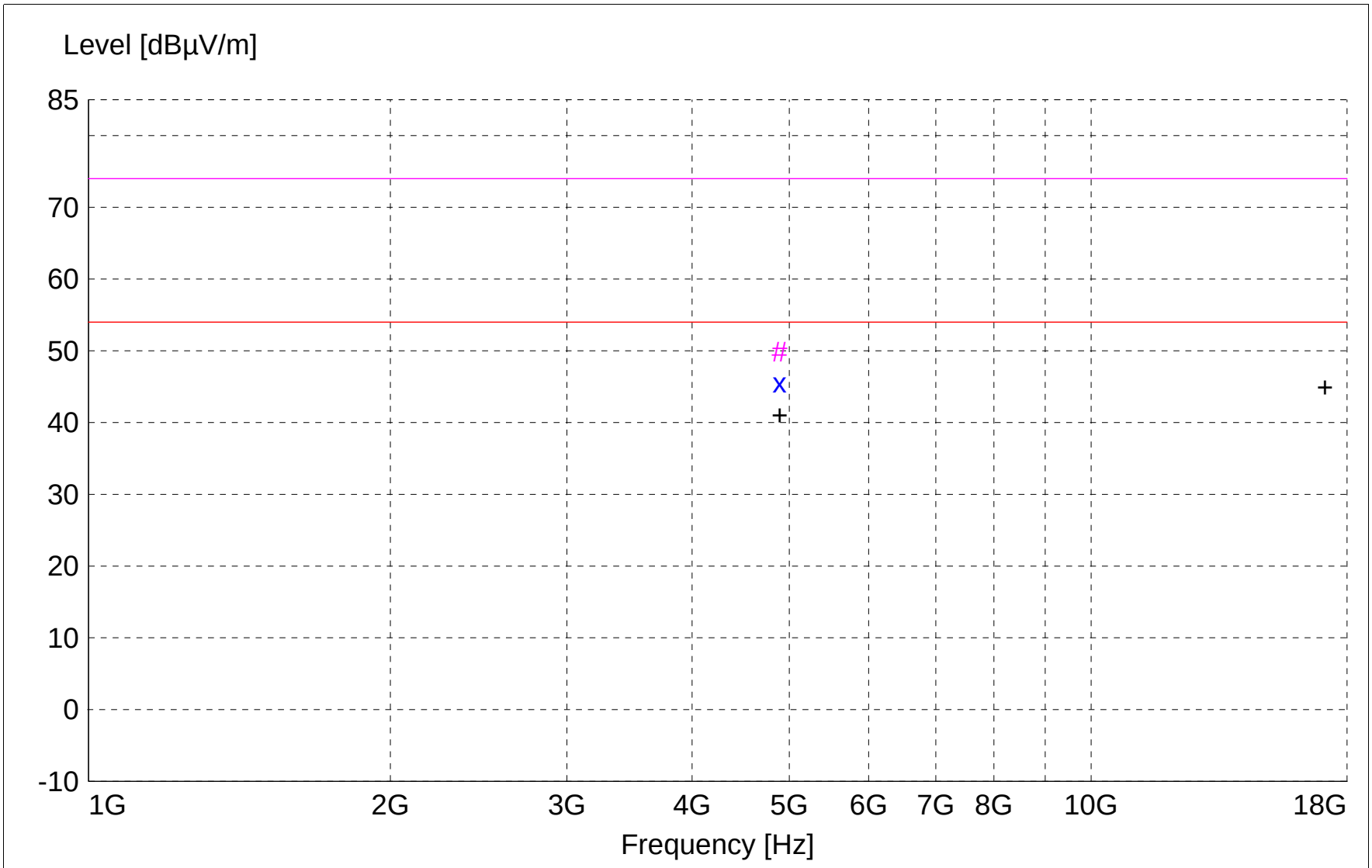
Sample Equations:

Total Level(dBµV/m)	= Level(dBµV)	+ System Loss(dB)	+ Antenna Factor(dBµV/m)
24.6	= 35.51	+ (-22.1)	+ 11.20

Margin(dB)	= Limit(dBµV/m)	- Total Level(dBµV/m)
15.4	= 40	- 24.6

Graph Markers:

+	Frequency marker (Level of marker not related to final level)
|	Final maximized level using Quasi-Peak detector
X	Final maximized level using Average dector
#	Final maximized level using Peak detector
-	Background Scan Peak Detector (Optional)
-	Background Scan Average Detector (Optional)



x x : MES A813l_sh_Average
: MES A813l_sh_Peak
+ + : MES A813l_sh_Peak_List
——— LIM FCC Class B F 3m AVG Field Strength AVG Limit 3m
——— LIM FCC Class B F 3m PK Field Strength PEAK Limit 3m

MEASUREMENT RESULT: "A813l_sh_Final"

8/14/2015 2:13PM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
4890.000000	49.02	33.08	-36.6	45.5	54.0	8.5	1.62	196	RMS	RB 2nd Harmonic
4890.000000	53.36	33.08	-36.6	49.9	74.0	24.1	1.62	196	MAX PEAK	RB 2nd Harmonic

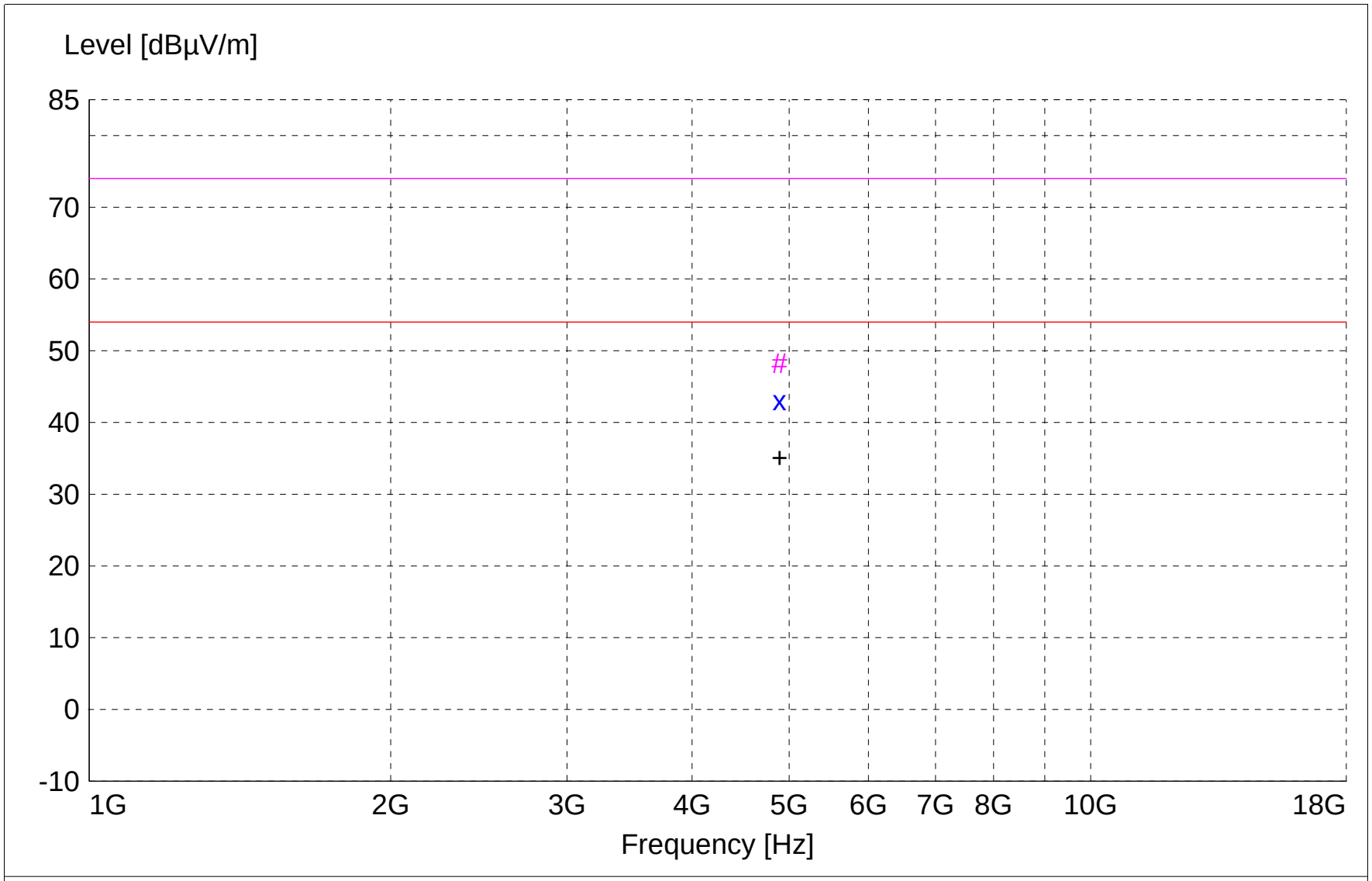
FCC Part 15.247

Electric Field Strength

```
EUT:                  Quick Response Router/Gateway Model 0800-0551
Manufacturer:         RFT Technologies
Operating Condition:  74 deg F  56% R.H.
Test Site:            DLS O.F. G1
Operator:             Paul L  -  DLS# 7072
Test Specification:   External High Gain Antenna  Mid. Ch 2440MHz
Comment:              Modulated Carrier Continuous Transmit
                      Date:  08-14-2015
```

TEXT: "Vert 3 meters"

```
  Short Description:            Test Set-up


Test Set-up:    EUT Measured at 3 Meters with VERTICAL Antenna Polarization


Sample Equations:   Total Level(dBµV/m) = Level(dBµV) + System Loss(dB) + Antenna Factor(dBµV/m)
                    24.6                = 35.51       + (-22.1)         + 11.20

                    Margin(dB)  = Limit(dBµV/m) - Total Level(dBµV/m)
                    15.4        = 40            - 24.6


Graph Markers:  +       Frequency marker (Level of marker not related to final level)

                |       Final maximized level using Quasi-Peak detector

                X       Final maximized level using Average dector

                #       Final maximized level using Peak detector

                -       Background Scan Peak Detector (Optional)

                -       Background Scan Average Detector (Optional)
```



x x : MES A813l_sv_Average
: MES A813l_sv_Peak
+ + : MES A813l_sv_Peak_List
——— LIM FCC Class B F 3m AVG Field Strength AVG Limit 3m
——— LIM FCC Class B F 3m PK Field Strength PEAK Limit 3m

MEASUREMENT RESULT: "A813l_sv_Final"

8/14/2015 2:22PM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
4890.000000	46.56	33.08	-36.6	43.1	54.0	10.9	1.13	184	RMS	RB 2nd Harmonic
4890.000000	51.77	33.08	-36.6	48.3	74.0	25.7	1.13	184	MAX PEAK	RB 2nd Harmonic

FCC Part 15.247

Electric Field Strength

EUT: Quick Response Router/Gateway Model 0800-0551
Manufacturer: RFT Technologies
Operating Condition: 74 deg F 56% R.H.
Test Site: DLS O.F. G1
Operator: Paul L - DLS# 7072
Test Specification: External High Gain Antenna Max. Ch 2475MHz
Comment: Modulated Carrier Continuous Transmit
Date: 08-14-2015

TEXT: "Horz 3 meters"

Short Description: Test Set-up

Test Set-up: EUT Measured at 3 Meters with HORIZONTAL Antenna Polarization

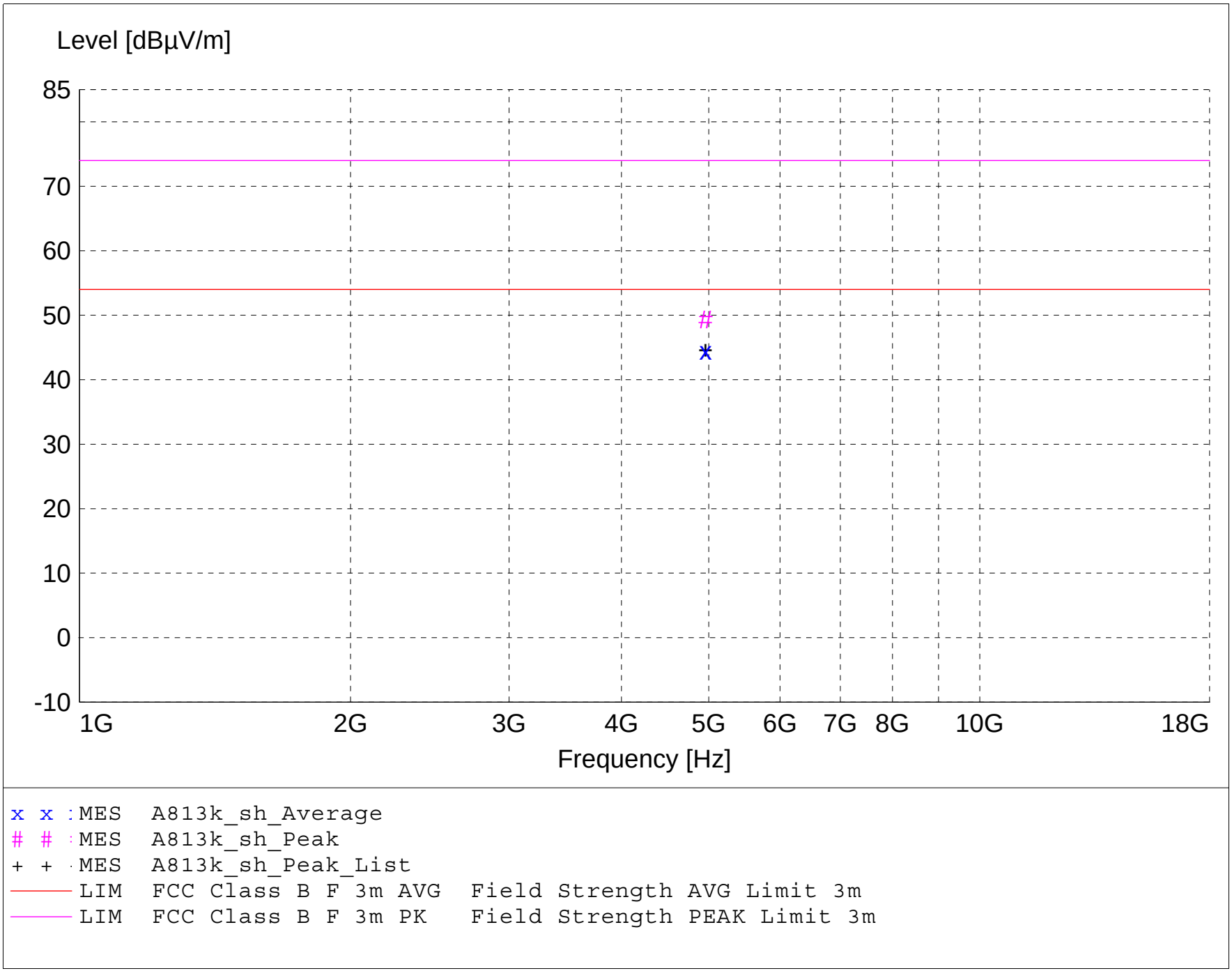
Sample Equations:

Total Level(dBµV/m)	= Level(dBµV)	+ System Loss(dB)	+ Antenna Factor(dBµV/m)
24.6	= 35.51	+ (-22.1)	+ 11.20

Margin(dB)	= Limit(dBµV/m)	- Total Level(dBµV/m)
15.4	= 40	- 24.6

Graph Markers:

+	Frequency marker (Level of marker not related to final level)
|	Final maximized level using Quasi-Peak detector
X	Final maximized level using Average dector
#	Final maximized level using Peak detector
-	Background Scan Peak Detector (Optional)
-	Background Scan Average Detector (Optional)



x x : MES A813k_sh_Average
: MES A813k_sh_Peak
+ + : MES A813k_sh_Peak_List
——— LIM FCC Class B F 3m AVG Field Strength AVG Limit 3m
——— LIM FCC Class B F 3m PK Field Strength PEAK Limit 3m

MEASUREMENT RESULT: "A813k_sh_Final"

8/14/2015 1:28PM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
4960.000000	47.73	33.19	-36.5	44.5	54.0	9.5	1.65	194	AVERAGE	RB 2nd Harmonic
4960.000000	52.64	33.19	-36.5	49.4	74.0	24.6	1.65	194	MAX PEAK	RB 2nd Harmonic

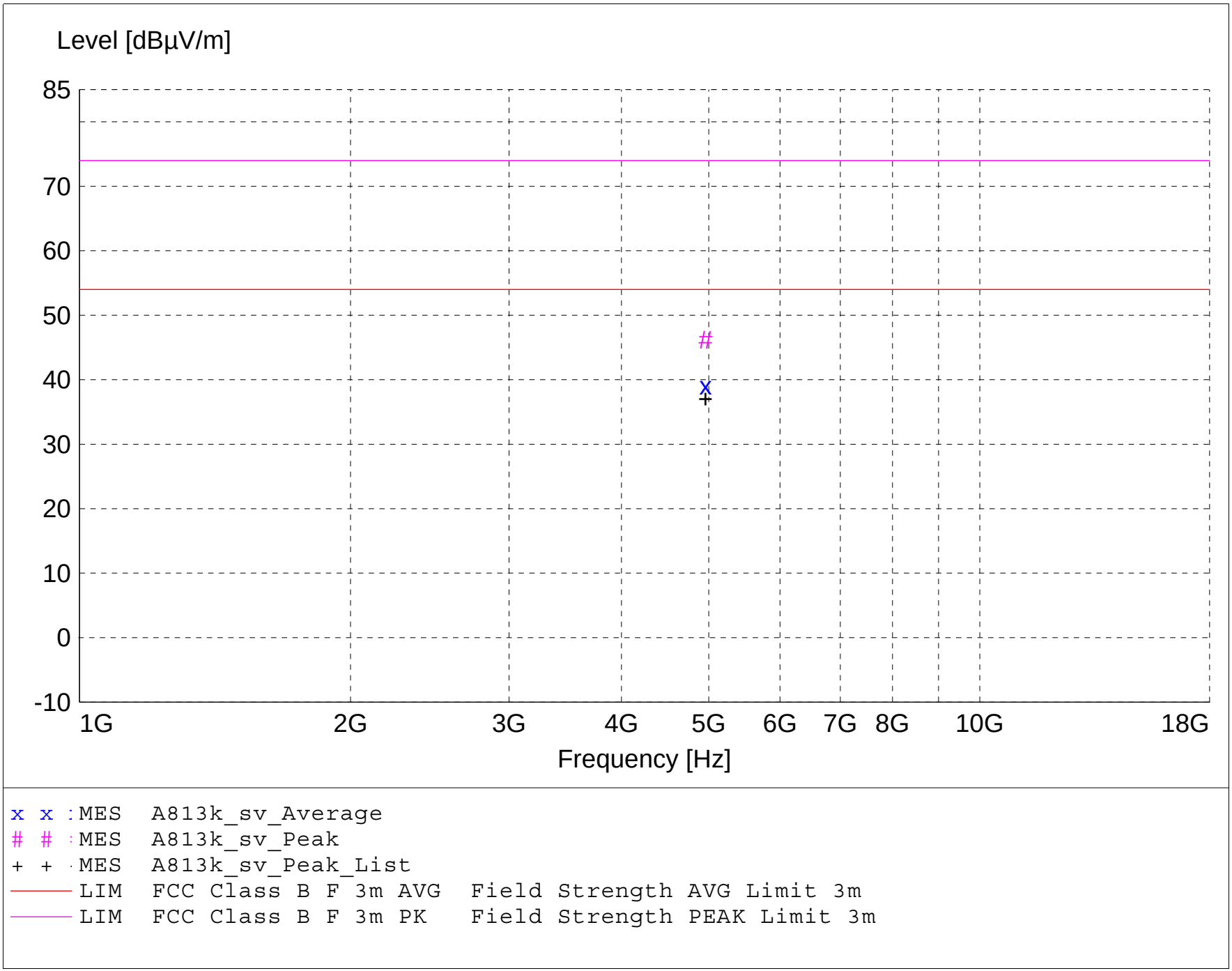
FCC Part 15.247

Electric Field Strength

```
EUT:                  Quick Response Router/Gateway Model 0800-0551
Manufacturer:         RFT Technologies
Operating Condition:  74 deg F  56% R.H.
Test Site:            DLS O.F. G1
Operator:             Paul L  -  DLS# 7072
Test Specification:   External High Gain Antenna  Max. Ch 2475MHz
Comment:              Modulated Carrier Continuous Transmit
                      Date:  08-14-2015
```

TEXT: "Vert 3 meters"

```
  Short Description:            Test Set-up


Test Set-up:    EUT Measured at 3 Meters with VERTICAL Antenna Polarization


Sample Equations:   Total Level(dBµV/m) = Level(dBµV) + System Loss(dB) + Antenna Factor(dBµV/m)
                    24.6                = 35.51       + (-22.1)         + 11.20

                    Margin(dB)  = Limit(dBµV/m) - Total Level(dBµV/m)
                    15.4        = 40            - 24.6


Graph Markers:  +       Frequency marker (Level of marker not related to final level)

                |       Final maximized level using Quasi-Peak detector

                X       Final maximized level using Average dector

                #       Final maximized level using Peak detector

                -       Background Scan Peak Detector (Optional)

                -       Background Scan Average Detector (Optional)
```


Level [dBµV/m]
85
70
60
50
40
30
20
10
0
-10
1G
2G
3G
4G
5G
6G
7G
8G
10G
18G
Frequency [Hz]
x x : MES A813k_sv_Average
: MES A813k_sv_Peak
+ + : MES A813k_sv_Peak_List
LIM FCC Class B F 3m AVG Field Strength AVG Limit 3m
LIM FCC Class B F 3m PK Field Strength PEAK Limit 3m

MEASUREMENT RESULT: "A813k_sv_Final"

8/14/2015 12:50PM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
4960.000000	42.29	33.19	-36.5	39.0	54.0	15.0	1.13	190	RMS	RB 2nd Harmonic
4960.000000	49.51	33.19	-36.5	46.2	74.0	27.8	1.13	190	MAX PEAK	RB 2nd Harmonic

FCC Part 15.247

Electric Field Strength

EUT: Quick Response Router/Gateway Model 0800-0551
Manufacturer: RFT Technologies
Operating Condition: 72 deg. F; 56% R.H.
Test Site: DLS Site 2
Operator: Paul L #7072
Test Specification: External High Gain Antenna Min. Ch 2405MHz
Comment: Modulated Carrier Continuous Transmit
Date: 08-17-2015

TEXT: "Horz 1 meters"

Short Description: Test Set-up

Test Set-up: EUT Measured at 1 Meters with HORIZONTAL Antenna Polarization

Equations: Total Level(dBµV/m) = Level(dBµV) + System Loss(dB) + Antenna Factor(dBµV/m)

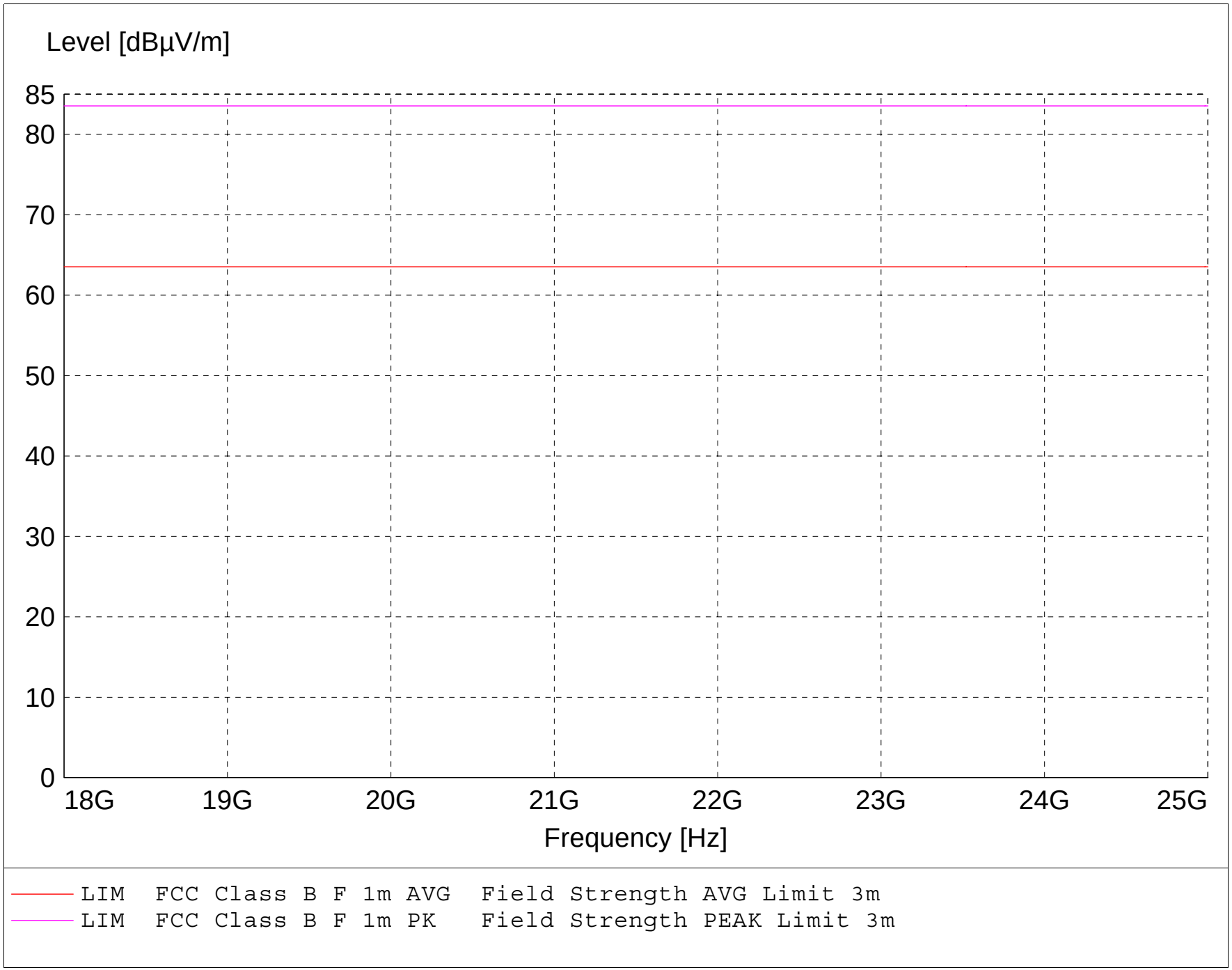
Margin(dB) = Limit(dBµV/m) - Total Level(dBµV/m)

Graph Markers: + Frequency marker (Level of marker not related to final level)

| Final maximized level using Quasi-Peak detector

X Final maximized level using Average dector

Final maximized level using Peak detector


Level [dBµV/m]
85
80
70
60
50
40
30
20
10
0
18G
19G
20G
21G
22G
23G
24G
25G
Frequency [Hz]
LIM FCC Class B F 1m AVG Field Strength AVG Limit 3m
LIM FCC Class B F 1m PK Field Strength PEAK Limit 3m

FCC Part 15.247

Electric Field Strength

EUT: Quick Response Router/Gateway Model 0800-0551
Manufacturer: RFT Technologies
Operating Condition: 72 deg. F; 56% R.H.
Test Site: DLS Site 2
Operator: Paul L #7072
Test Specification: External High Gain Antenna Min. Ch 2405MHz
Comment: Modulated Carrier Continuous Transmit
Date: 08-17-2015

TEXT: "Vert 1 meters"

Short Description: Test Set-up

Test Set-up: EUT Measured at 1 Meters with VERTICAL Antenna Polarization

Equations: Total Level(dBµV/m) = Level(dBµV) + System Loss(dB) + Antenna Factor(dBµV/m)

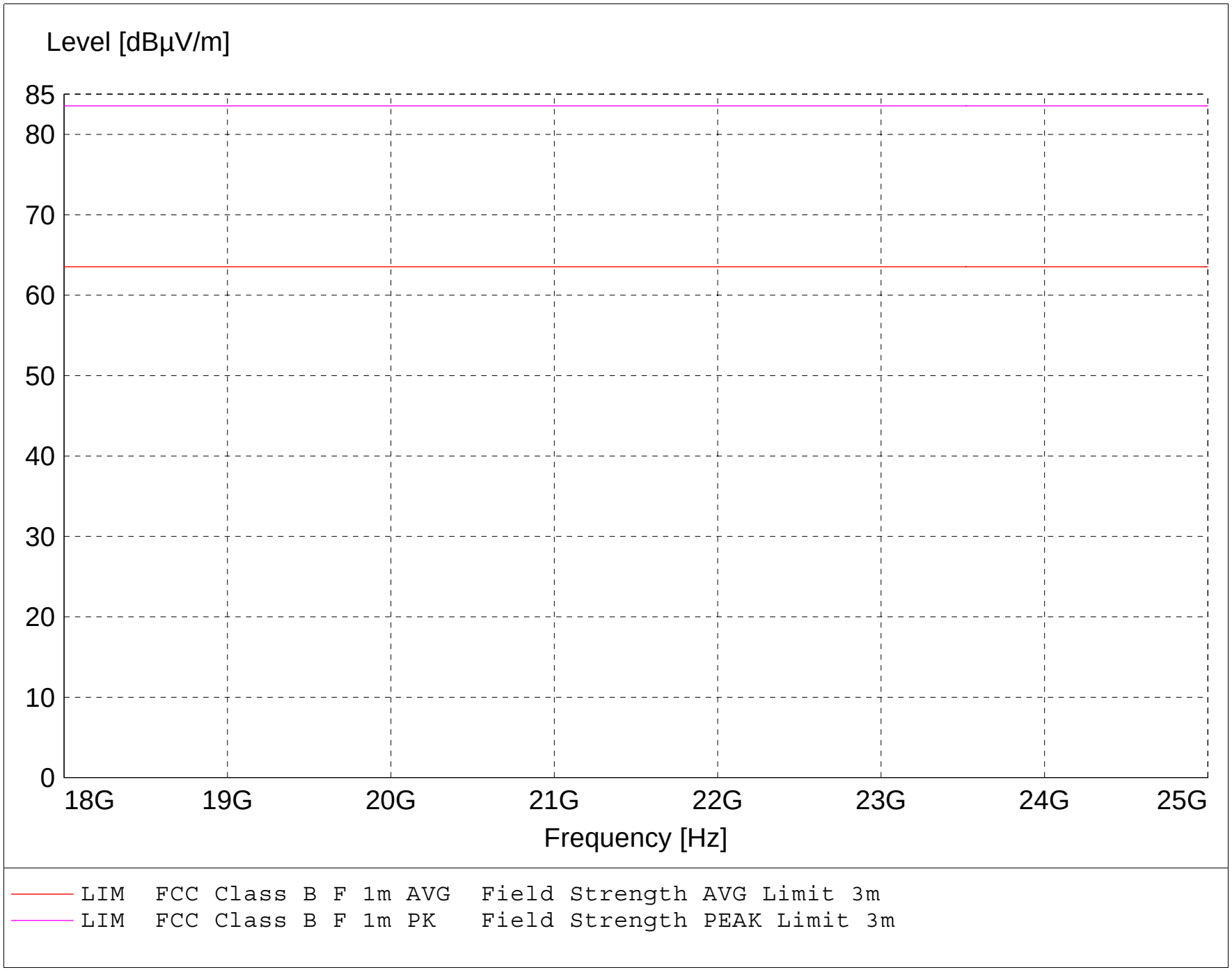
Margin(dB) = Limit(dBµV/m) - Total Level(dBµV/m)

Graph Markers: + Frequency marker (Level of marker not related to final level)

| Final maximized level using Quasi-Peak detector

X Final maximized level using Average dector

Final maximized level using Peak detector


Level [dBµV/m]
85
80
70
60
50
40
30
20
10
0
18G
19G
20G
21G
22G
23G
24G
25G
Frequency [Hz]
LIM FCC Class B F 1m AVG Field Strength AVG Limit 3m
LIM FCC Class B F 1m PK Field Strength PEAK Limit 3m

FCC Part 15.247

Electric Field Strength

EUT: Quick Response Router/Gateway Model 0800-0551
Manufacturer: RFT Technologies
Operating Condition: 72 deg. F; 56% R.H.
Test Site: DLS Site 2
Operator: Paul L #7072
Test Specification: External High Gain Antenna Mid. Ch 2440MHz
Comment: Modulated Carrier Continuous Transmit
Date: 08-17-2015

TEXT: "Horz 1 meters"

Short Description: Test Set-up

Test Set-up: EUT Measured at 1 Meters with HORIZONTAL Antenna Polarization

Equations: Total Level(dBµV/m) = Level(dBµV) + System Loss(dB) + Antenna Factor(dBµV/m)

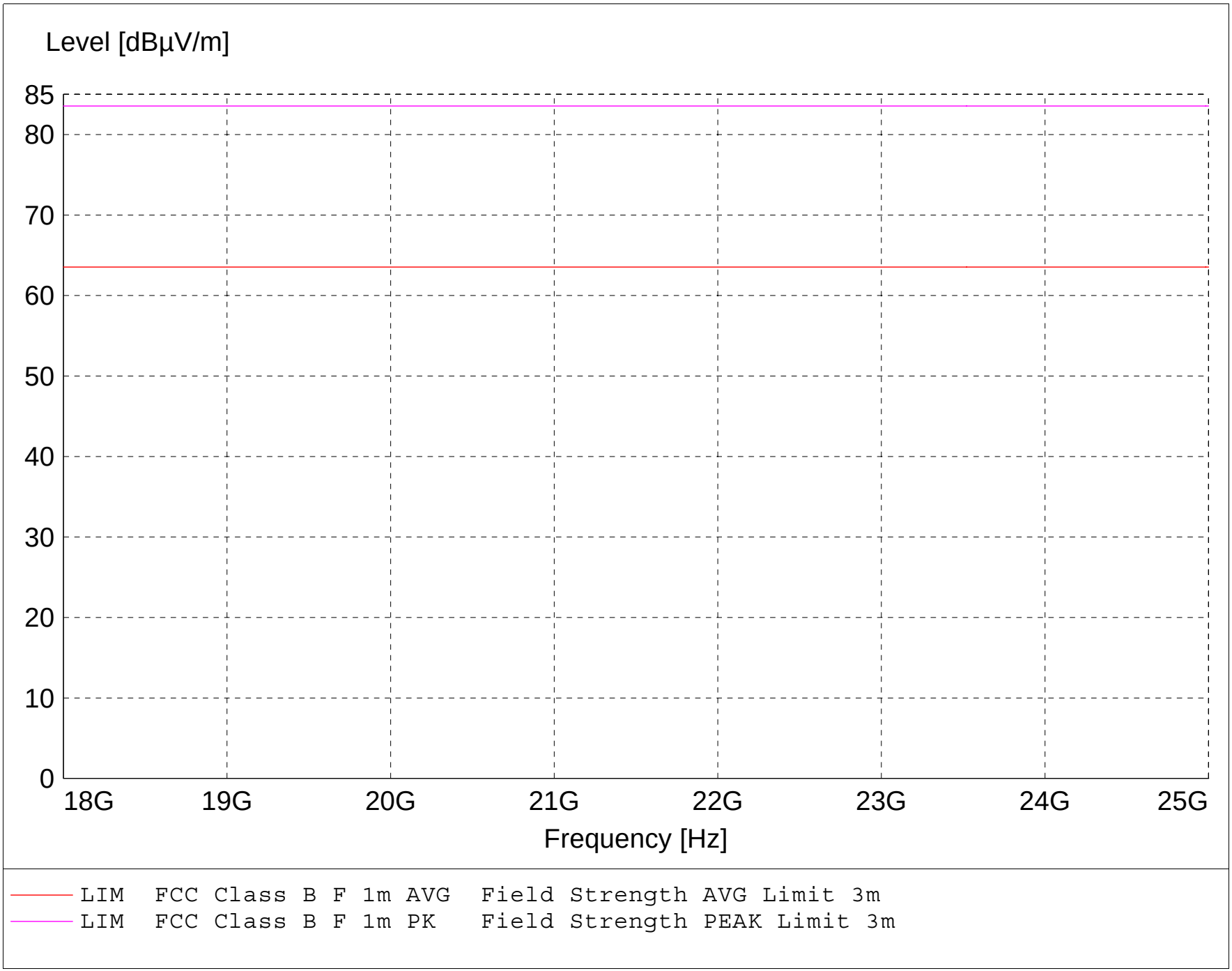
Margin(dB) = Limit(dBµV/m) - Total Level(dBµV/m)

Graph Markers: + Frequency marker (Level of marker not related to final level)

| Final maximized level using Quasi-Peak detector

X Final maximized level using Average dector

Final maximized level using Peak detector


Level [dBµV/m]
85
80
70
60
50
40
30
20
10
0
18G
19G
20G
21G
22G
23G
24G
25G
Frequency [Hz]
LIM FCC Class B F 1m AVG Field Strength AVG Limit 3m
LIM FCC Class B F 1m PK Field Strength PEAK Limit 3m

FCC Part 15.247

Electric Field Strength

EUT: Quick Response Router/Gateway Model 0800-0551
Manufacturer: RFT Technologies
Operating Condition: 72 deg. F; 56% R.H.
Test Site: DLS Site 2
Operator: Paul L #7072
Test Specification: External High Gain Antenna Mid. Ch 2440MHz
Comment: Modulated Carrier Continuous Transmit
Date: 08-17-2015

TEXT: "Vert 1 meters"

Short Description: Test Set-up

Test Set-up: EUT Measured at 1 Meters with VERTICAL Antenna Polarization

Equations: Total Level(dBµV/m) = Level(dBµV) + System Loss(dB) + Antenna Factor(dBµV/m)

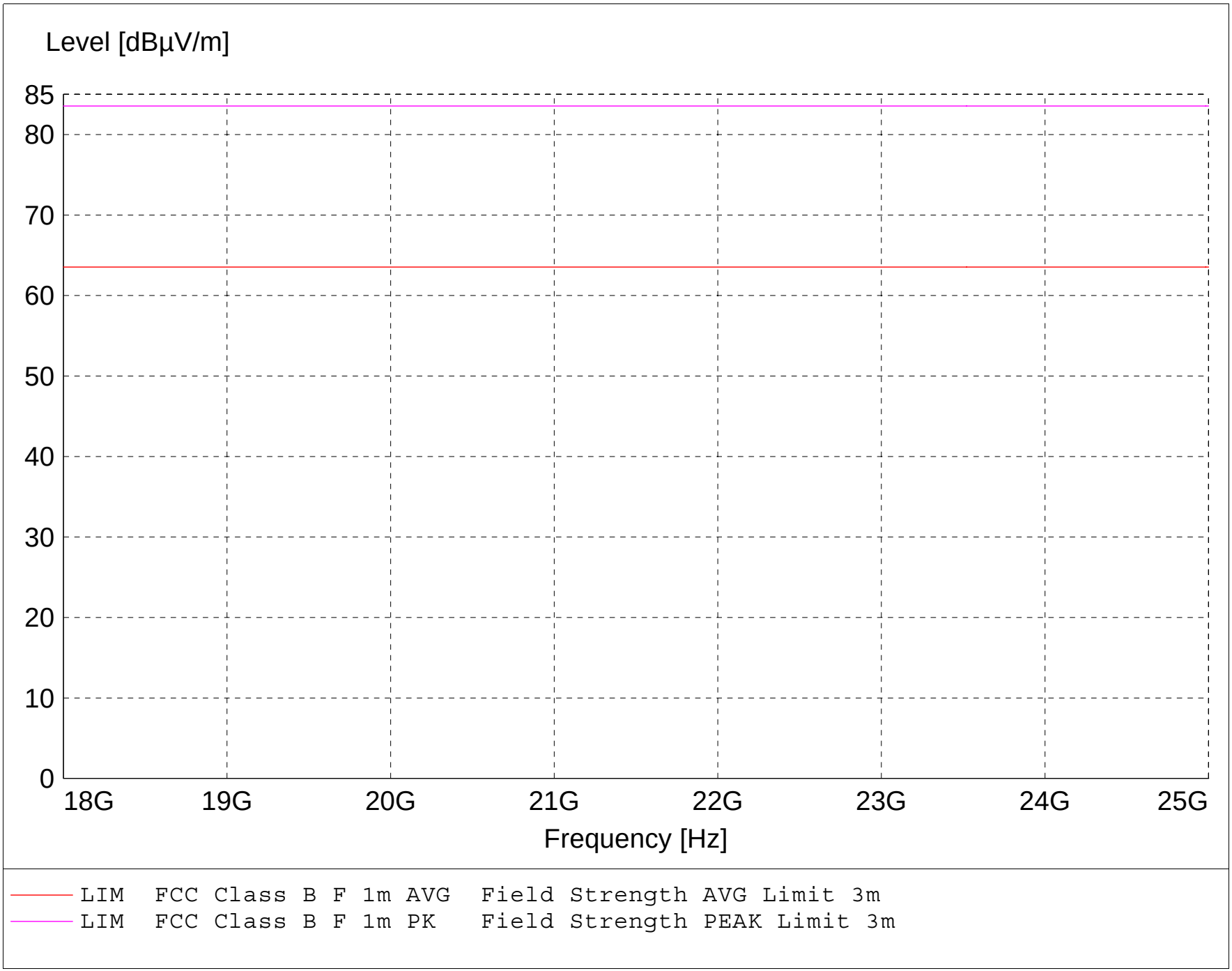
Margin(dB) = Limit(dBµV/m) - Total Level(dBµV/m)

Graph Markers: + Frequency marker (Level of marker not related to final level)

| Final maximized level using Quasi-Peak detector

X Final maximized level using Average dector

Final maximized level using Peak detector


Level [dBµV/m]
85
80
70
60
50
40
30
20
10
0
18G
19G
20G
21G
22G
23G
24G
25G
Frequency [Hz]
LIM FCC Class B F 1m AVG Field Strength AVG Limit 3m
LIM FCC Class B F 1m PK Field Strength PEAK Limit 3m

FCC Part 15.247

Electric Field Strength

EUT: Quick Response Router/Gateway Model 0800-0551
Manufacturer: RFT Technologies
Operating Condition: 72 deg. F; 56% R.H.
Test Site: DLS Site 2
Operator: Paul L #7072
Test Specification: External High Gain Antenna Max. Ch 2475MHz
Comment: Modulated Carrier Continuous Transmit
Date: 08-17-2015

TEXT: "Horz 1 meters"

Short Description: Test Set-up

Test Set-up: EUT Measured at 1 Meters with HORIZONTAL Antenna Polarization

Equations: Total Level(dBµV/m) = Level(dBµV) + System Loss(dB) + Antenna Factor(dBµV/m)

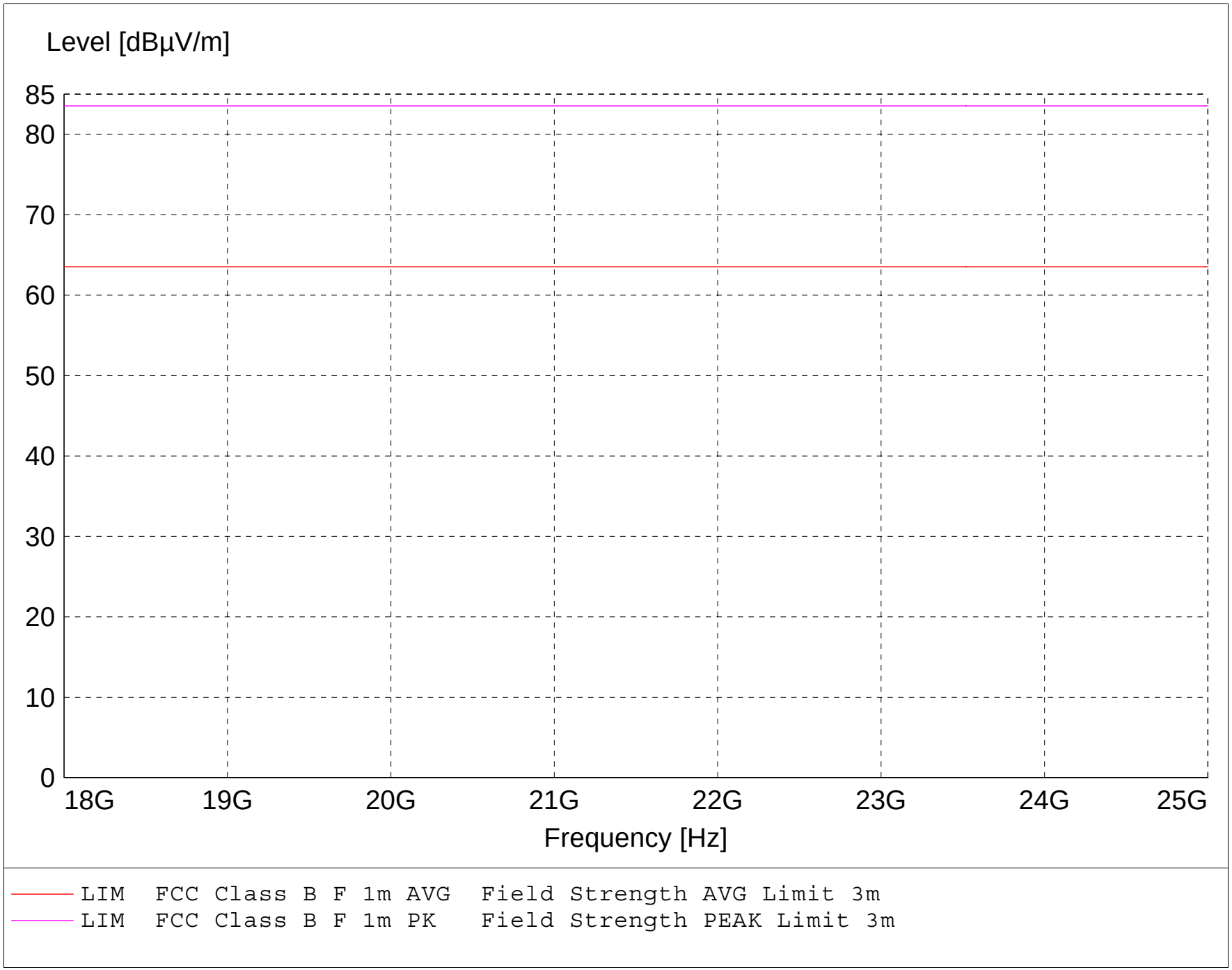
Margin(dB) = Limit(dBµV/m) - Total Level(dBµV/m)

Graph Markers: + Frequency marker (Level of marker not related to final level)

| Final maximized level using Quasi-Peak detector

X Final maximized level using Average dector

Final maximized level using Peak detector


Level [dBµV/m]
85
80
70
60
50
40
30
20
10
0
18G
19G
20G
21G
22G
23G
24G
25G
Frequency [Hz]
LIM FCC Class B F 1m AVG Field Strength AVG Limit 3m
LIM FCC Class B F 1m PK Field Strength PEAK Limit 3m

FCC Part 15.247

Electric Field Strength

EUT: Quick Response Router/Gateway Model 0800-0551
Manufacturer: RFT Technologies
Operating Condition: 72 deg. F; 56% R.H.
Test Site: DLS Site 2
Operator: Paul L #7072
Test Specification: External High Gain Antenna Max. Ch 2475MHz
Comment: Modulated Carrier Continuous Transmit
Date: 08-17-2015

TEXT: "Vert 1 meters"

Short Description: Test Set-up

Test Set-up: EUT Measured at 1 Meters with VERTICAL Antenna Polarization

Equations: Total Level(dBµV/m) = Level(dBµV) + System Loss(dB) + Antenna Factor(dBµV/m)

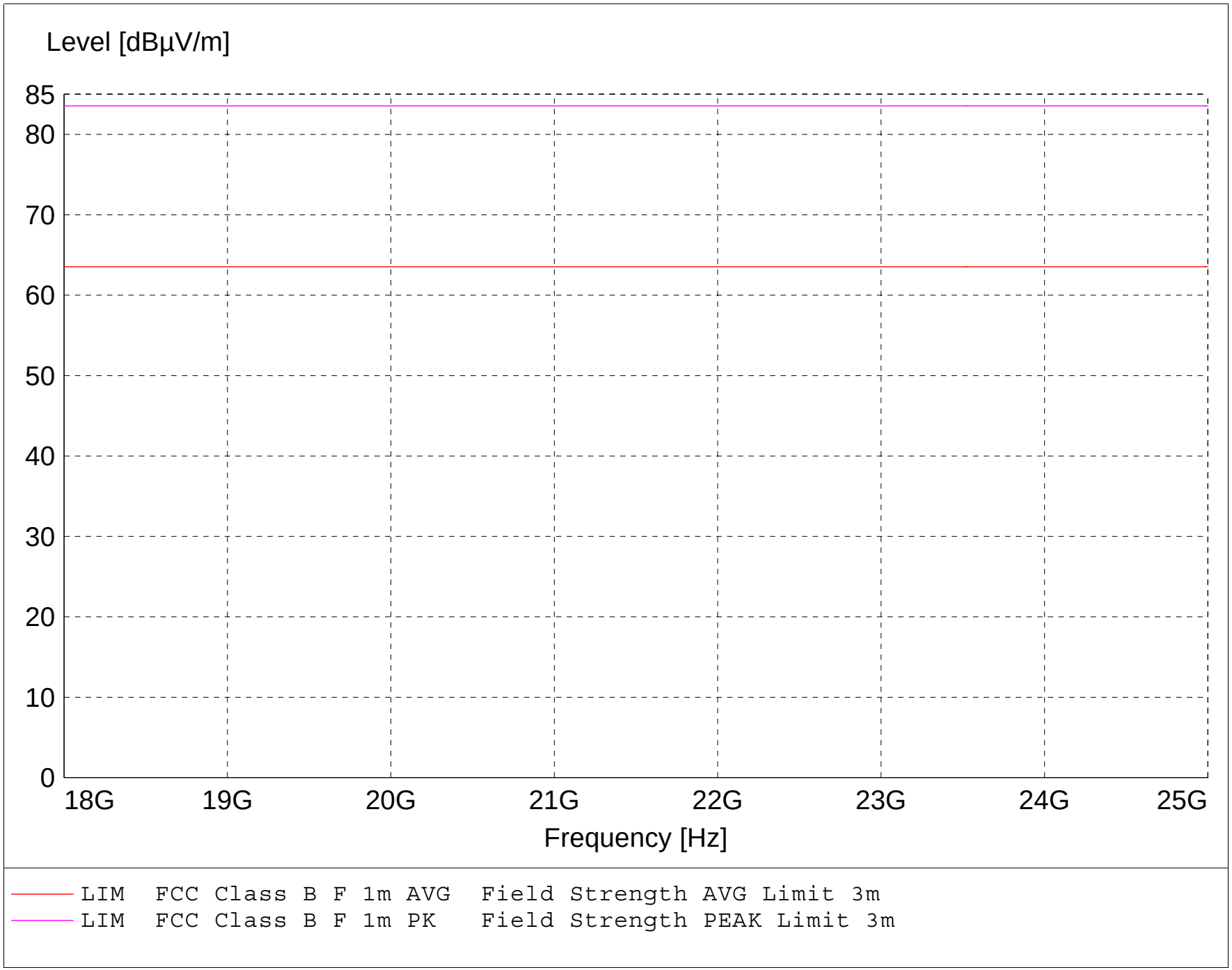
Margin(dB) = Limit(dBµV/m) - Total Level(dBµV/m)

Graph Markers: + Frequency marker (Level of marker not related to final level)

| Final maximized level using Quasi-Peak detector

X Final maximized level using Average dector

Final maximized level using Peak detector


Level [dBµV/m]
85
80
70
60
50
40
30
20
10
0
18G
19G
20G
21G
22G
23G
24G
25G
Frequency [Hz]
LIM FCC Class B F 1m AVG Field Strength AVG Limit 3m
LIM FCC Class B F 1m PK Field Strength PEAK Limit 3m

Appendix B – Measurement Data

B7.0 Radiated Restricted Band Edge Emissions

Rule Part: FCC Part 15.247(d) and FCC Part 15.205

Test Procedure: FCC KDB 558074 D01 DTS Meas Guidance v03r03 and FCC Publication Number 913591

Limit: FCC Part 15.209

Results: Compliant

Notes: The EUT was set to transmit continuously at its maximum power and maximum data rate. Peak measurements were taken with RBW = 1 MHz, VBW = 3 MHz. Average measurements were taken with RBW = 1 MHz, VBW = 3 MHz.

Band edge compliance for the upper and lower band-edge was determined using the Peak Detector with max. hold and RMS Averaging with 100 sweeps per FCC Part 15.209 limits. The measurement was made at the restricted band.

Test Date: 08-27-2015

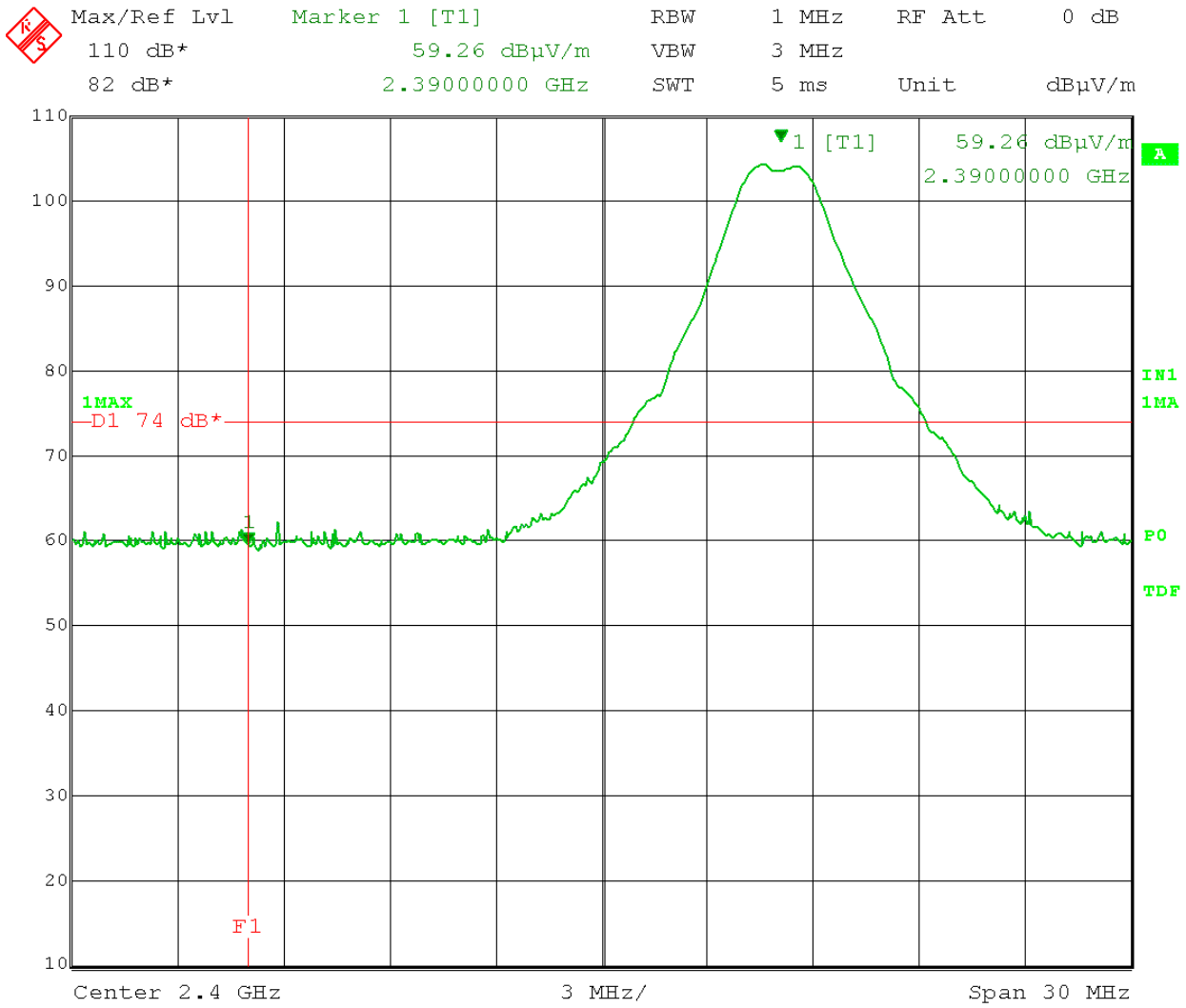
Company: RF Technologies

EUT: Quick Response Premiere Router/Gateway Model: 0800-0550

Test: Low Band-Edge Radiated - Peak

Operator: Paul L

Comment: Low Channel: Frequency- 2405MHz



Date: 27.AUG.2015 15:04:09

Test Date: 08-27-2015

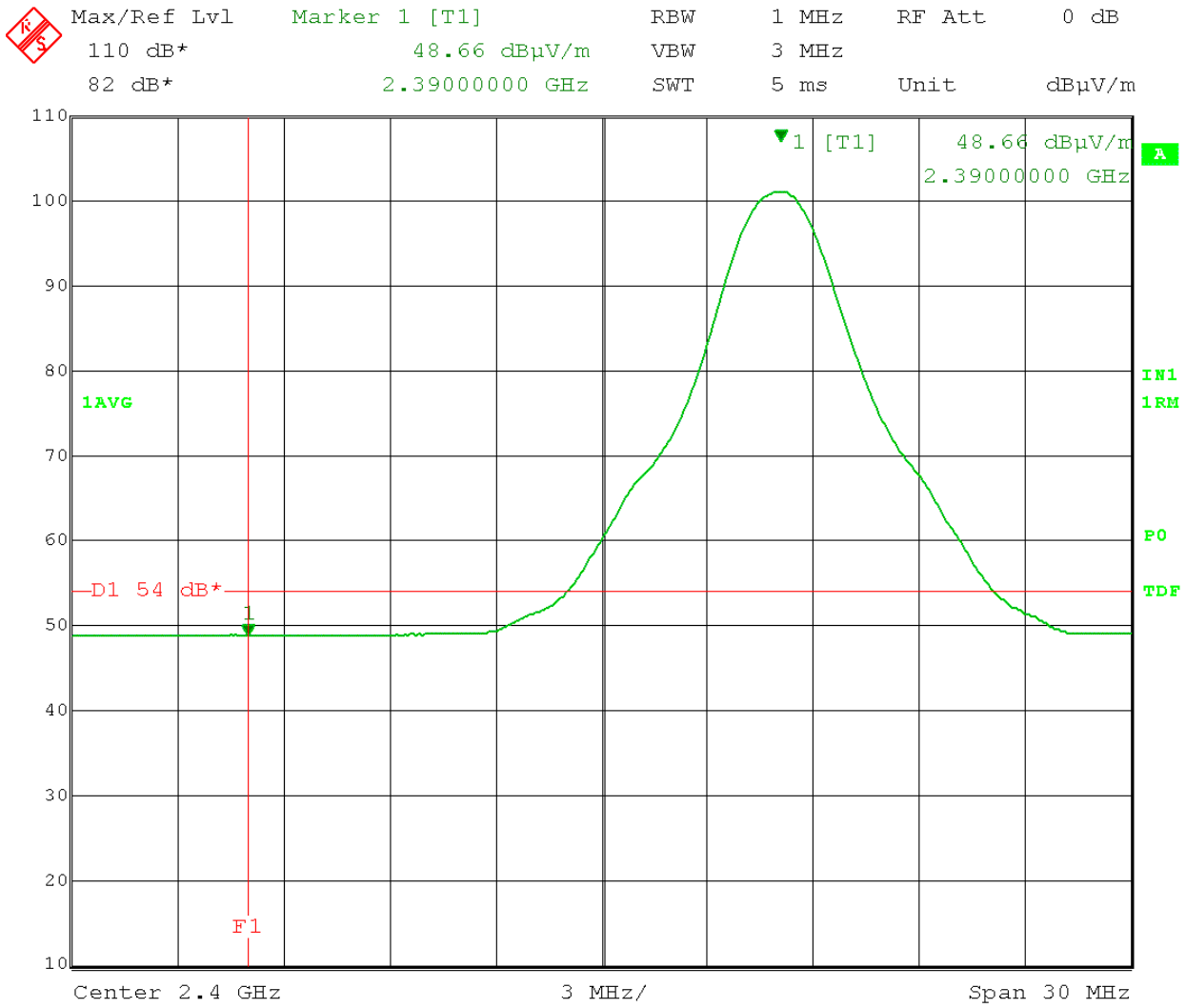
Company: RF Technologies

EUT: Quick Response Premiere Router/Gateway Model: 0800-0550

Test: Low Band-Edge Radiated - RMS 100sweeps

Operator: Paul L

Comment: Low Channel: Frequency- 2405MHz



Date: 27.AUG.2015 15:07:55

Test Date: 08-27-2015

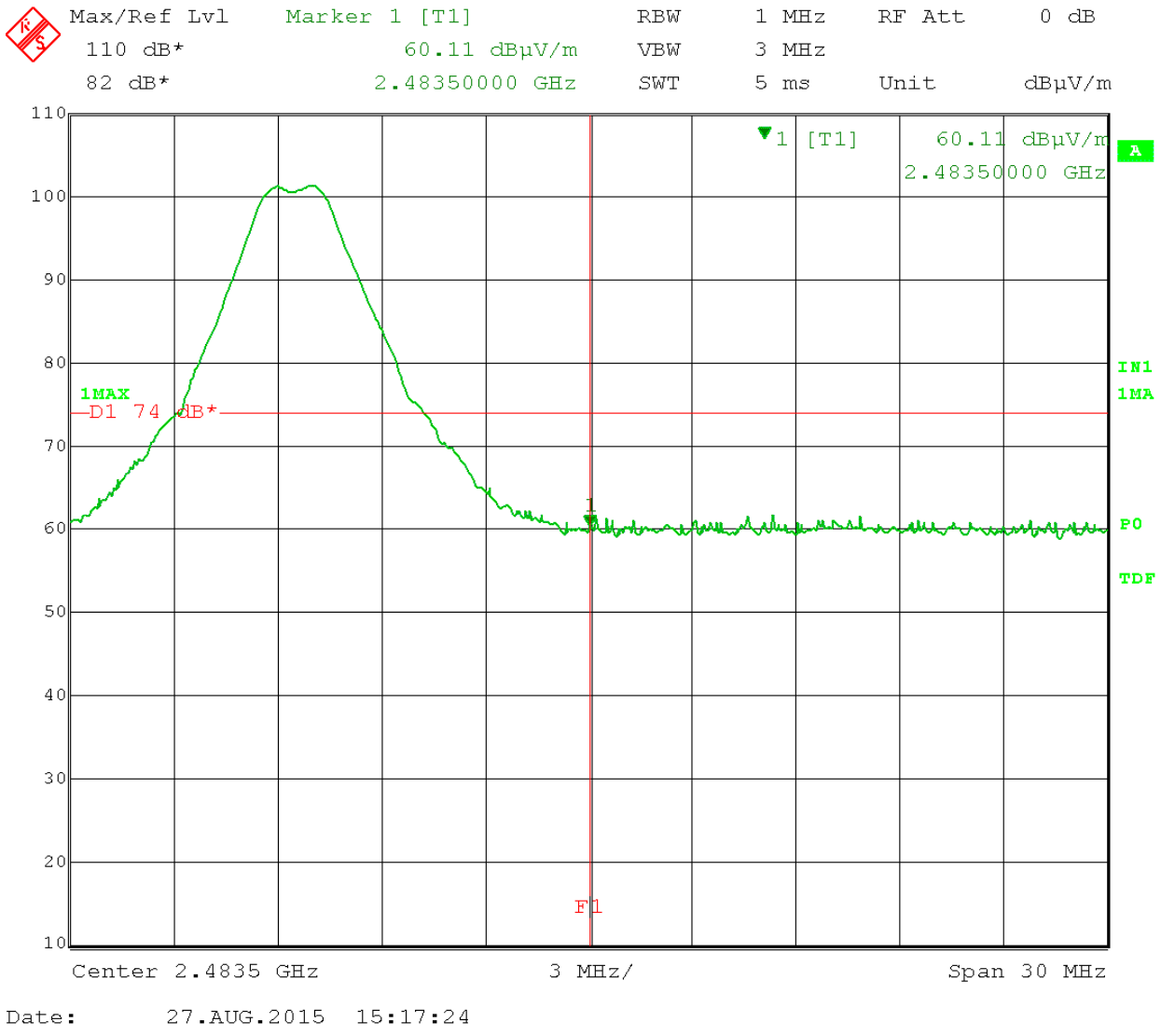
Company: RF Technologies

EUT: Quick Response Premiere Router/Gateway Model: 0800-0550

Test: High Band-Edge Radiated -Peak

Operator: Paul L

Comment: High Channel: Frequency- 2475MHz



Test Date: 08-27-2015

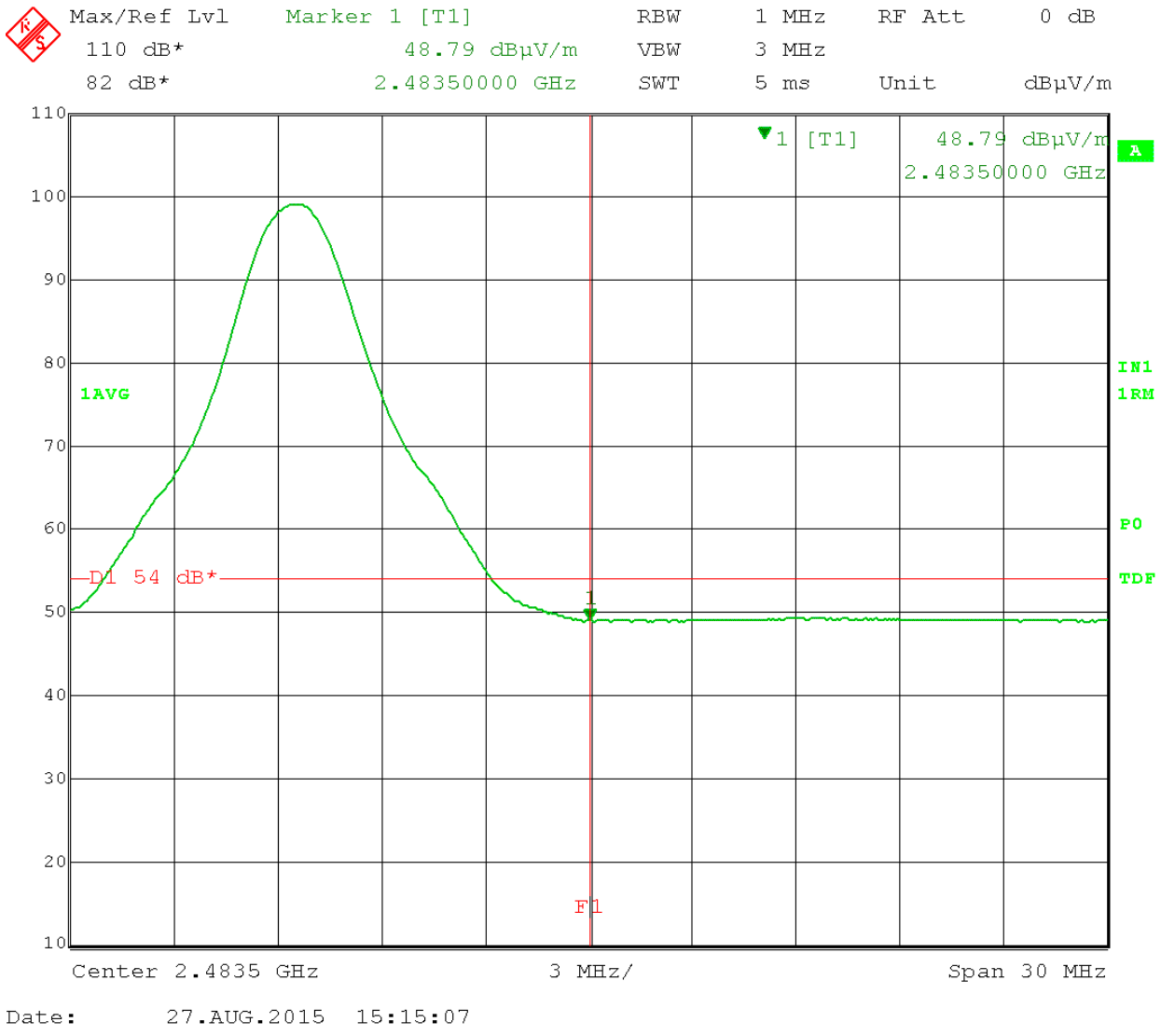
Company: RF Technologies

EUT: Quick Response Premiere Router/Gateway Model: 0800-0550

Test: High Band-Edge Radiated -RMS 100 sweeps

Operator: Paul L

Comment: High Channel: Frequency- 2475MHz



Date: 27.AUG.2015 15:15:07

Test Date: 08-27-2015

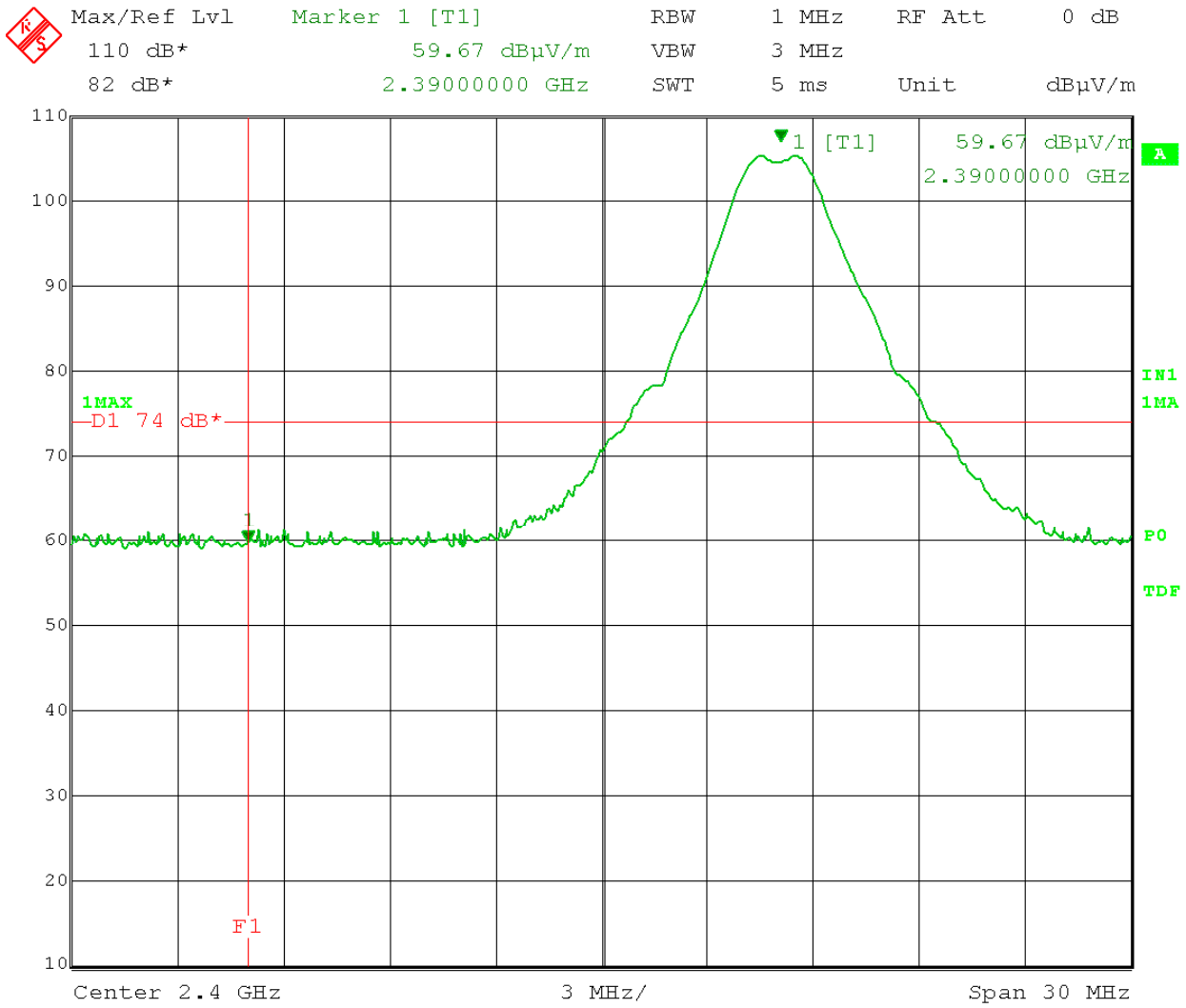
Company: RF Technologies

EUT: Quick Response Premiere Router/Gateway Model: 0800-0551

Test: Low Band-Edge Radiated - Peak

Operator: Paul L

Comment: Low Channel: Frequency- 2405MHz



Date: 27.AUG.2015 14:49:21

Test Date: 08-27-2015

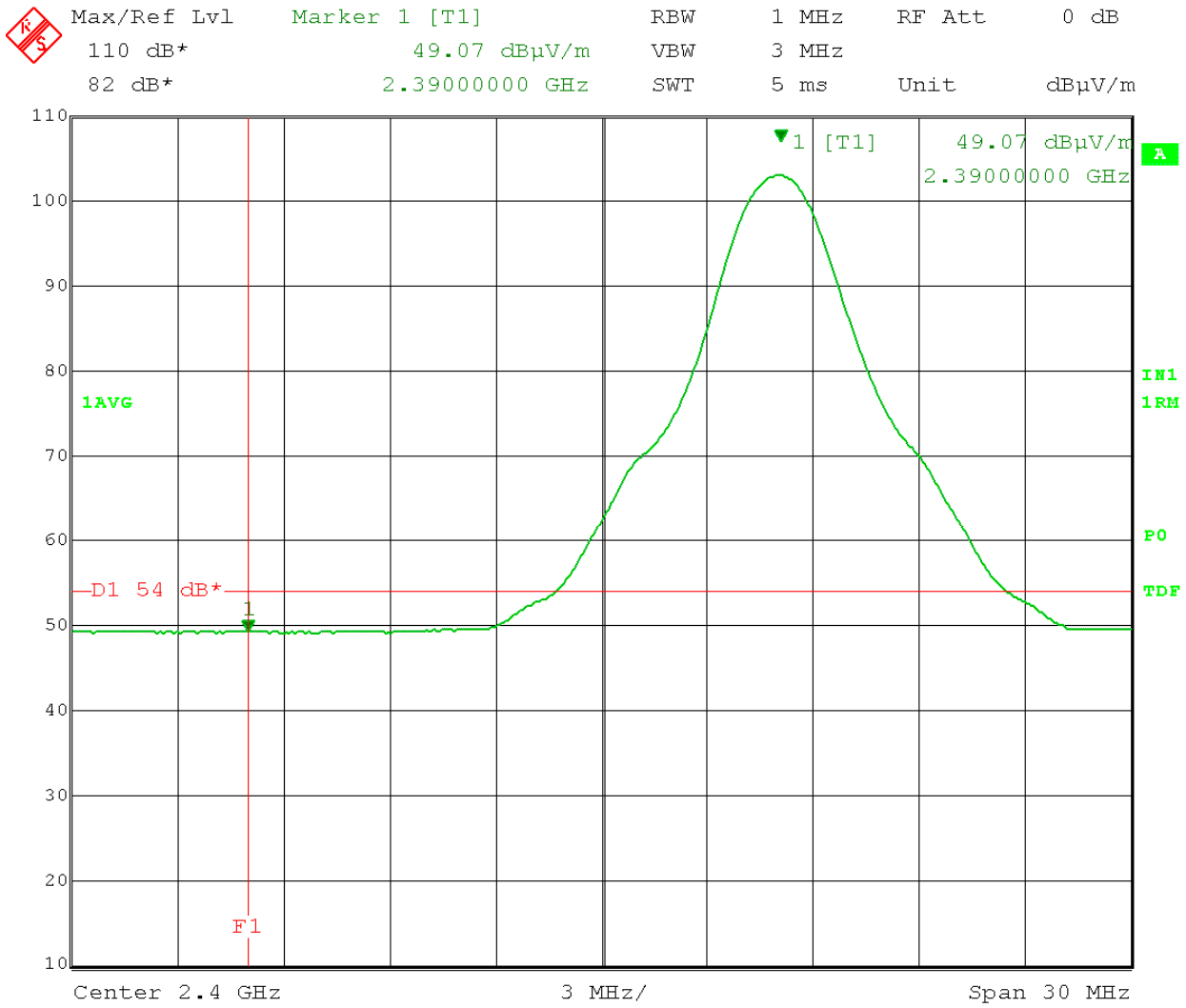
Company: RF Technologies

EUT: Quick Response Premiere Router/Gateway Model: 0800-0551

Test: Low Band-Edge Radiated - RMS 100sweeps

Operator: Paul L

Comment: Low Channel: Frequency- 2405MHz



Date: 27.AUG.2015 14:46:24

Test Date: 08-27-2015

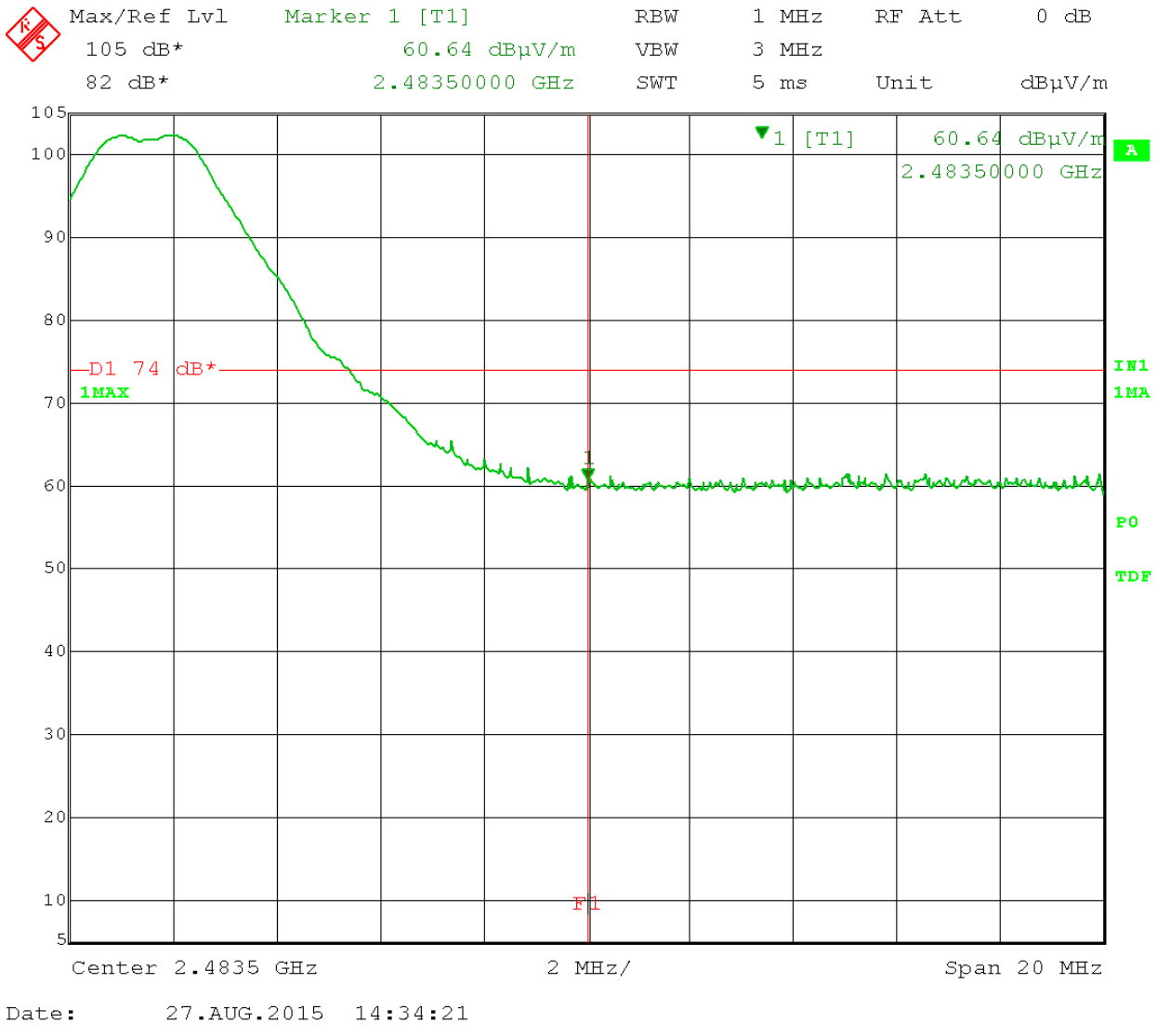
Company: RF Technologies

EUT: Quick Response Premiere Router/Gateway Model: 0800-0551

Test: High Band-Edge Radiated -Peak

Operator: Paul L

Comment: High Channel: Frequency- 2475MHz



Date: 27.AUG.2015 14:34:21

Test Date: 08-27-2015

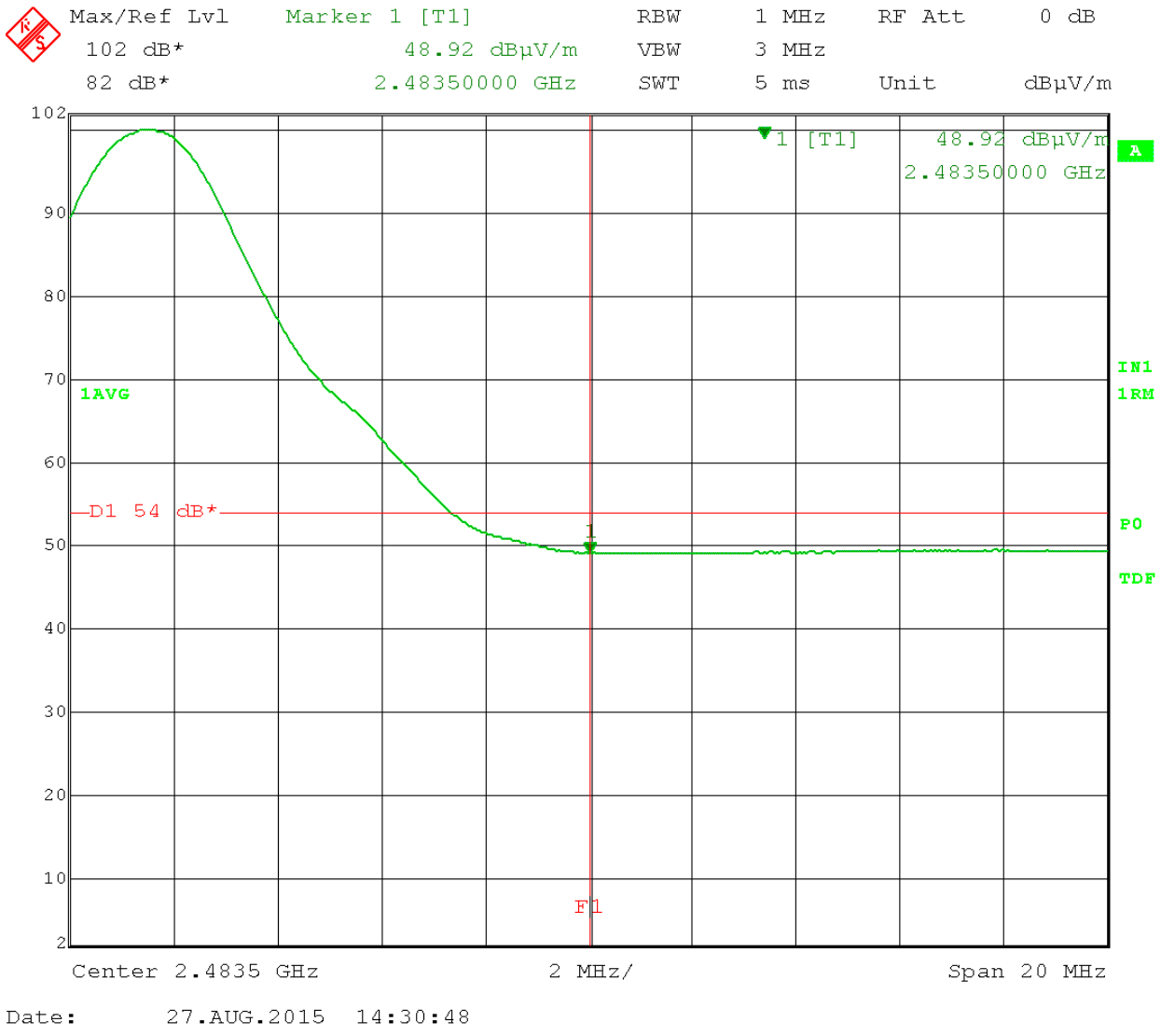
Company: RF Technologies

EUT: Quick Response Premiere Router/Gateway Model: 0800-0551

Test: High Band-Edge Radiated -RMS 100 sweeps

Operator: Paul L

Comment: High Channel: Frequency- 2475MHz



Appendix B – Measurement Data

B8.0 Peak Power Spectral Density

Rule Part: FCC Part 15.247(e)

Test Procedure: FCC KDB 558074 D01 DTS Meas Guidance v03r03, ANSI C63.4-2014 and ANSI C63.10-2013

Limit: +8 dBm/3kHz

Results: Compliant

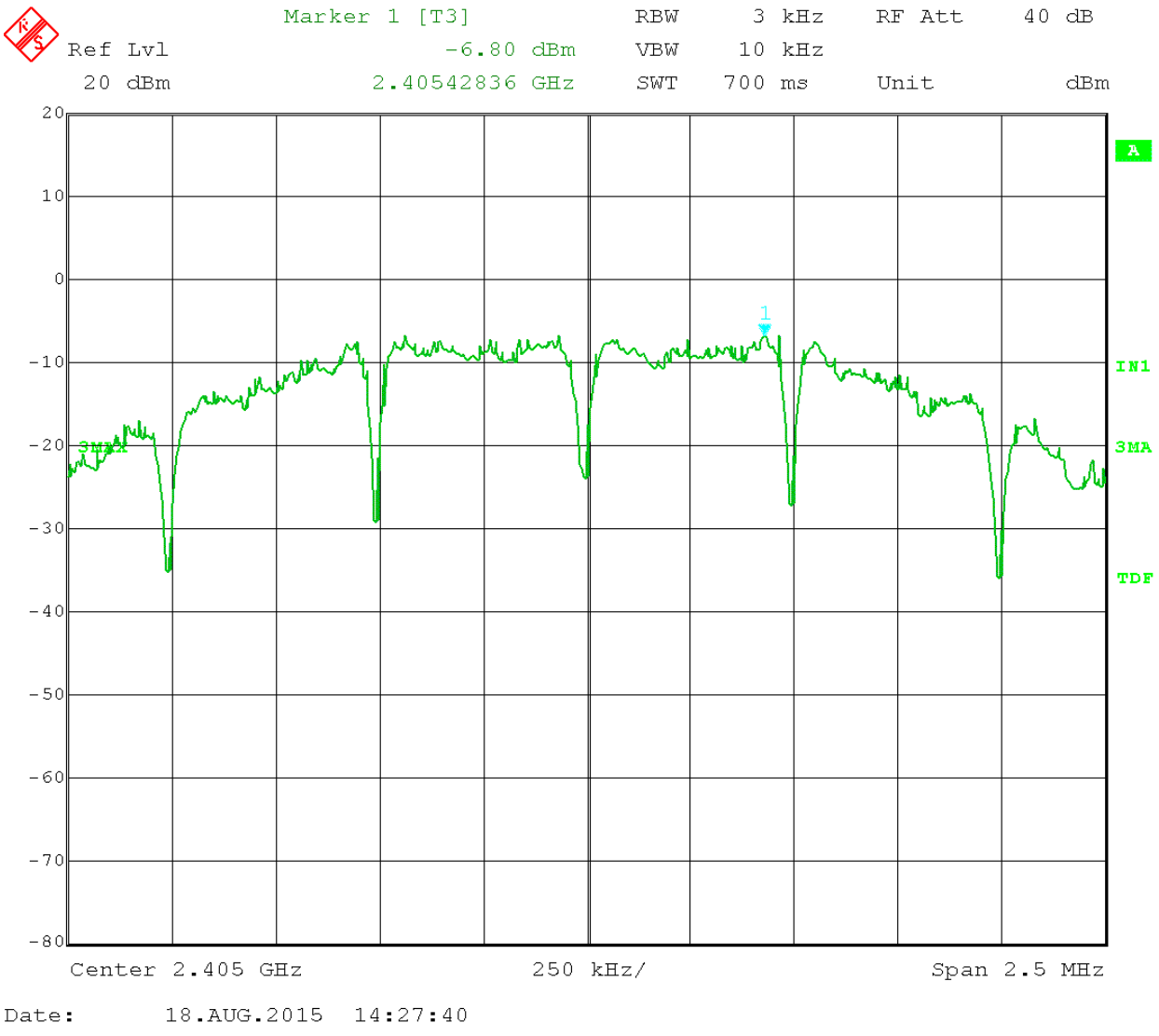
Notes: The EUT was set to transmit at its maximum power, maximum data rate, and maximum duty cycle (100%). PSD Method PKPSD was used for this test.

166 South Carter, Genoa City, WI 53128

Test Date: 08-18-2015
Company: RFT Technologies
EUT: Quick Response Premier Router/Gateway
Test: Peak Power Spectral Density - Conducted – 15.247 (e)
Operator: Paul L

Comment: Low Channel –Ch.11 2.405 GHz

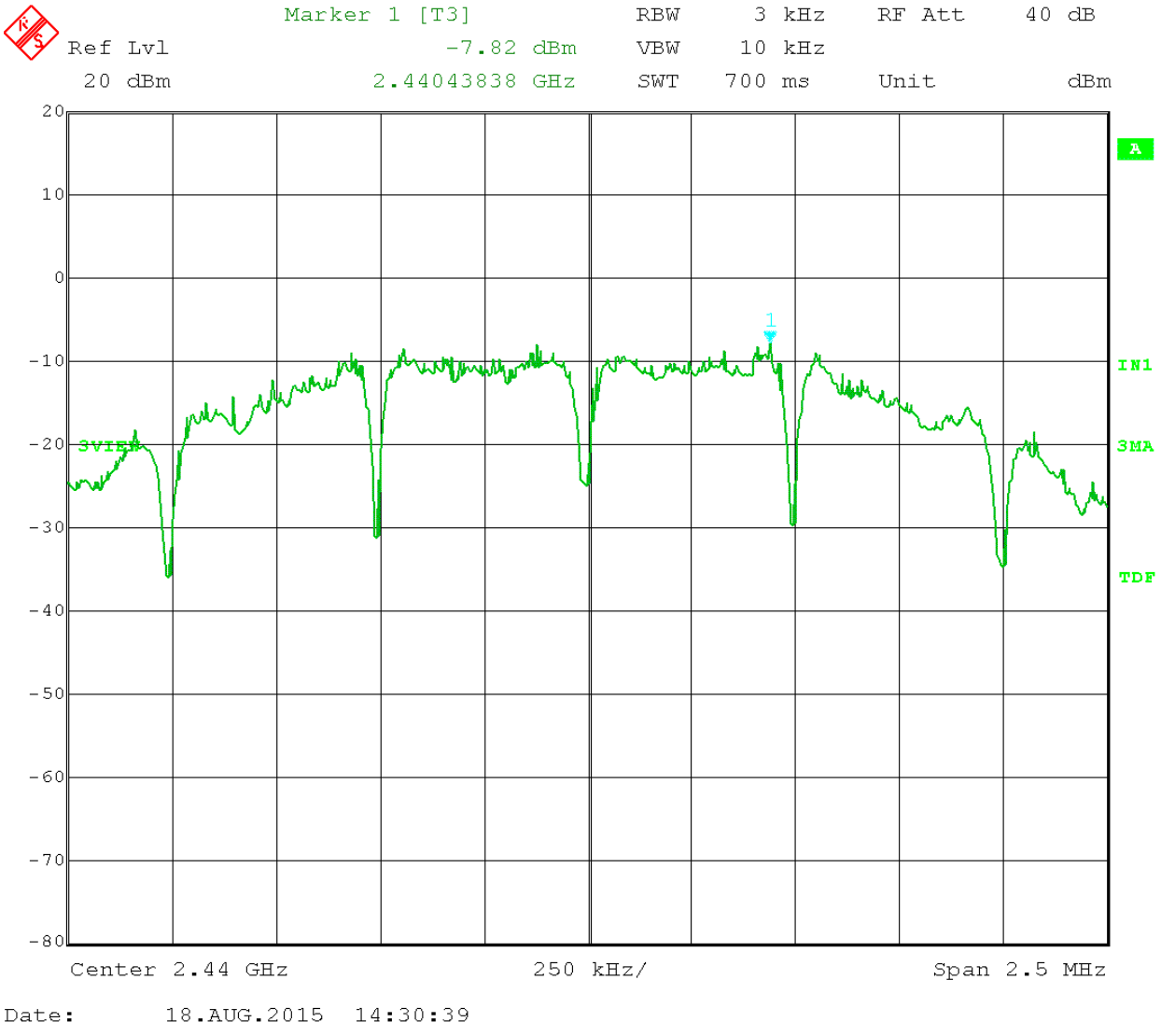
Power in 3 kHz Bandwidth = -6.80 dBm



Test Date: 08-18-2015
Company: RFT Technologies
EUT: Quick Response Premier Router/Gateway
Test: Peak Power Spectral Density - Conducted – 15.247 (e)
Operator: Paul L

Comment: Mid Channel –Ch.18 2.440 GHz

Power in 3 kHz Bandwidth = -7.82 dBm

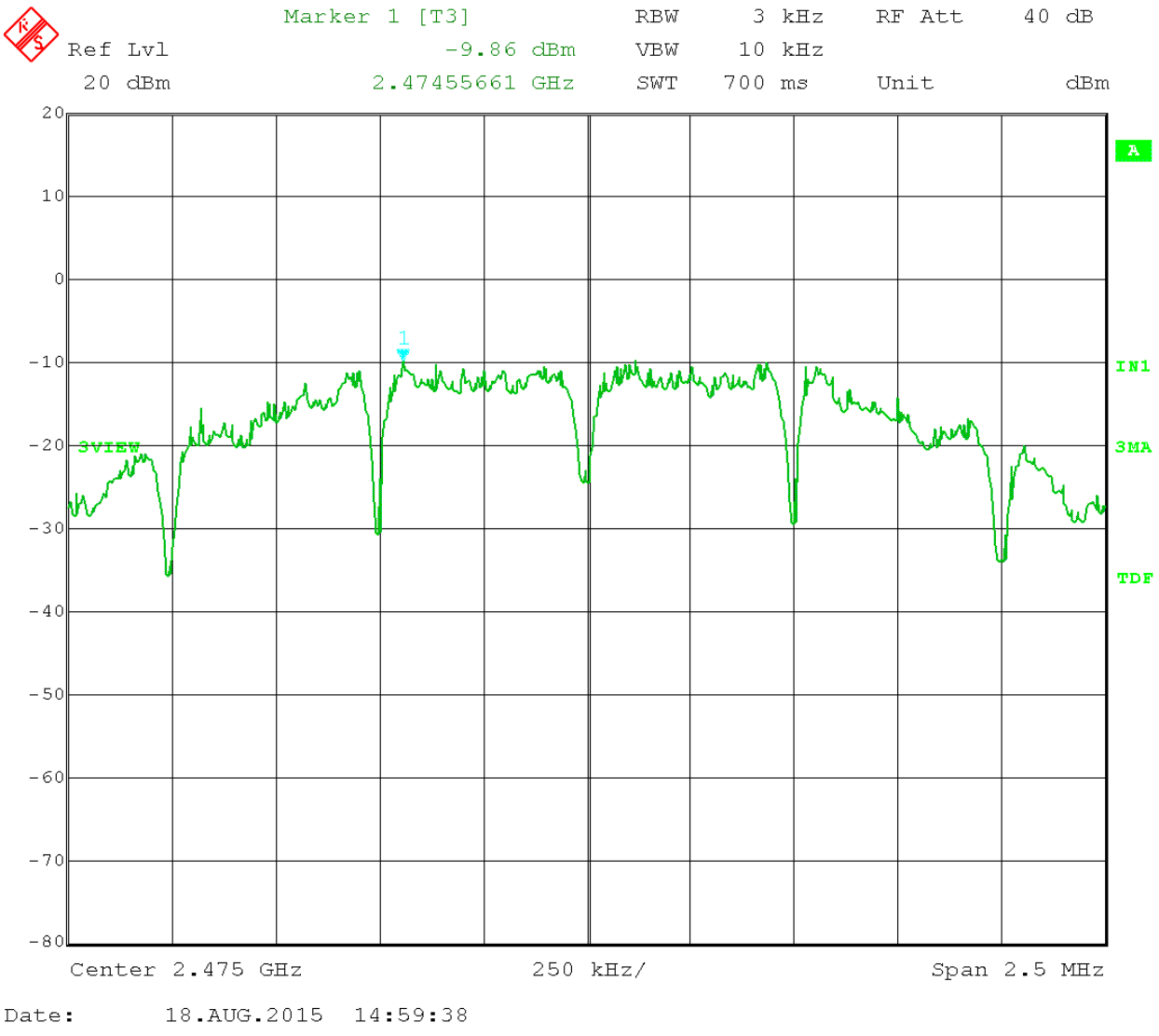


166 South Carter, Genoa City, WI 53128

Test Date: 08-18-2015
Company: RFT Technologies
EUT: Quick Response Premier Router/Gateway
Test: Peak Power Spectral Density - Conducted – 15.247 (e)
Operator: Paul L

Comment: High Channel –Ch.25 2.475 GHz

Power in 3 kHz Bandwidth = -9.86 dBm



Appendix B – Measurement Data

B9.0 AC Line Conducted Emissions

Rule Part: FCC Pt.15.207(a)

Test Procedure: ANSI C63.4-2014

Limit: FCC Pt.15.207(a)

Results: Compliant

Notes: This was an AC Power Line Conducted emissions measurement.
The EUT was powered from a central power supply provided by RF Technologies, Inc. with an input of 120 VAC 60 Hz.

PMM NARDA REPORT: 7072 RF Technologies 0550 MidCh L1

Report issuing date : 07-29-2015

Standard : FCC Pt15.207
Type : Voltage Mains
Test Site : DLS O.F. Screen Room
Temperature : 72 °F
Humidity : 54 %
Test Specs : Line 1; Average
Operator : Paul L
DLS Project # : 7072
Result : Pass

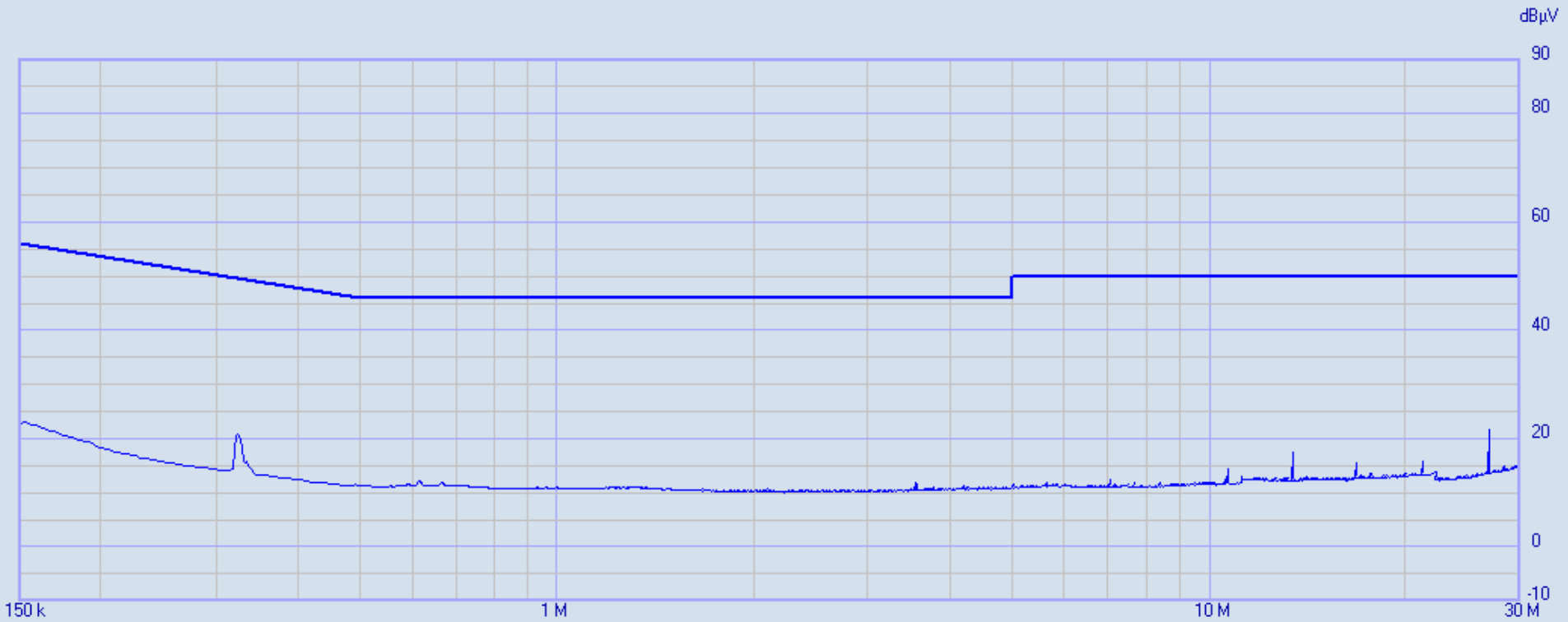
EUT

Manufacturer : RF Technologies
Model : Quick Response Premiere Router Gateway Model 0800-0550
Product : Zigbee Transceiver
Notes : 120V 60hz Modulated Carrier Continuous Transmit Mid Ch.2440MHz
---
Testing Company : DLS Electronic Systems, Inc.
Telephone : 262-279-0210
Web site : http://www.dlsemc.com

Receiver Details

Model : PMM 9010F
Brand : Narda
S/N : 020WW40102
Last Calibration : 06/25/2015

NOTE: The column in the table that is labeled "delta" shows the margin in dB with respect to the limit. A negative number indicates the level of the emission is under the limit by the given value, while a positive number indicates the emission level is above the limit by the given value.



7072 RF Technologies 0445 MidCh L1

	Start [MHz]	Stop [MHz]	Step	Detector	Hold Time	RBW	Min Att	Pre Amp	Pre Sel	Prompt start	Ancillary
1	0.15	30	AUTO (2.045 kHz)	P Q C	1000 ms	9 kHz	10	OFF	ON	...	...

Ancillary = L3 PMM

Limits:
FCC Class B V AV

Factors:
LISN DLS#128
E-M L705
DLS#592
Cables 43 & 45

C-Avg

7072 RF Technologies 0550 MidCh L1 20/08/2015 08:22:20
Rel. SW 2.19 (July 2014)
Rel. FW 1.44 15/05/14
Margin: 33 dB

	Frequency [MHz]	C-Avg [dBµV]	Limit FCC Class.. [dBµV]	Delta [dB]	Factor LISN DLS#.. [dB]	Factor E-M L705 [dB]	Factor DLS#592 [dB]	Factor Cables 43.. [dB]
1	0.152045	22.98	55.89	-32.91	1.64	9.65	2.09	0.04
2	0.319735	17.75	49.71	-31.96	0.65	9.72	1.15	0.11
3	0.32178	20.53	49.66	-29.13	0.65	9.72	1.14	0.11
4	0.323825	20.82	49.61	-28.79	0.64	9.72	1.14	0.11
5	0.32587	20.65	49.56	-28.91	0.64	9.72	1.13	0.11
6	0.327915	18.47	49.50	-31.03	0.64	9.72	1.12	0.11
7	13.444545	17.56	50.00	-32.44	0.32	9.81	0.19	0.67
8	26.912915	21.67	50.00	-28.33	0.41	9.88	0.32	0.97

PMM NARDA REPORT: 7072 RF Technologies 0550 MidCh L1

Report issuing date : 07-29-2015

Standard : FCC Pt15.207
Type : Voltage Mains
Test Site : DLS O.F. Screen Room
Temperature : 72 °F
Humidity : 54 %
Test Specs : Line 1; QP
Operator : Paul L
DLS Project # : 7072
Result : Pass

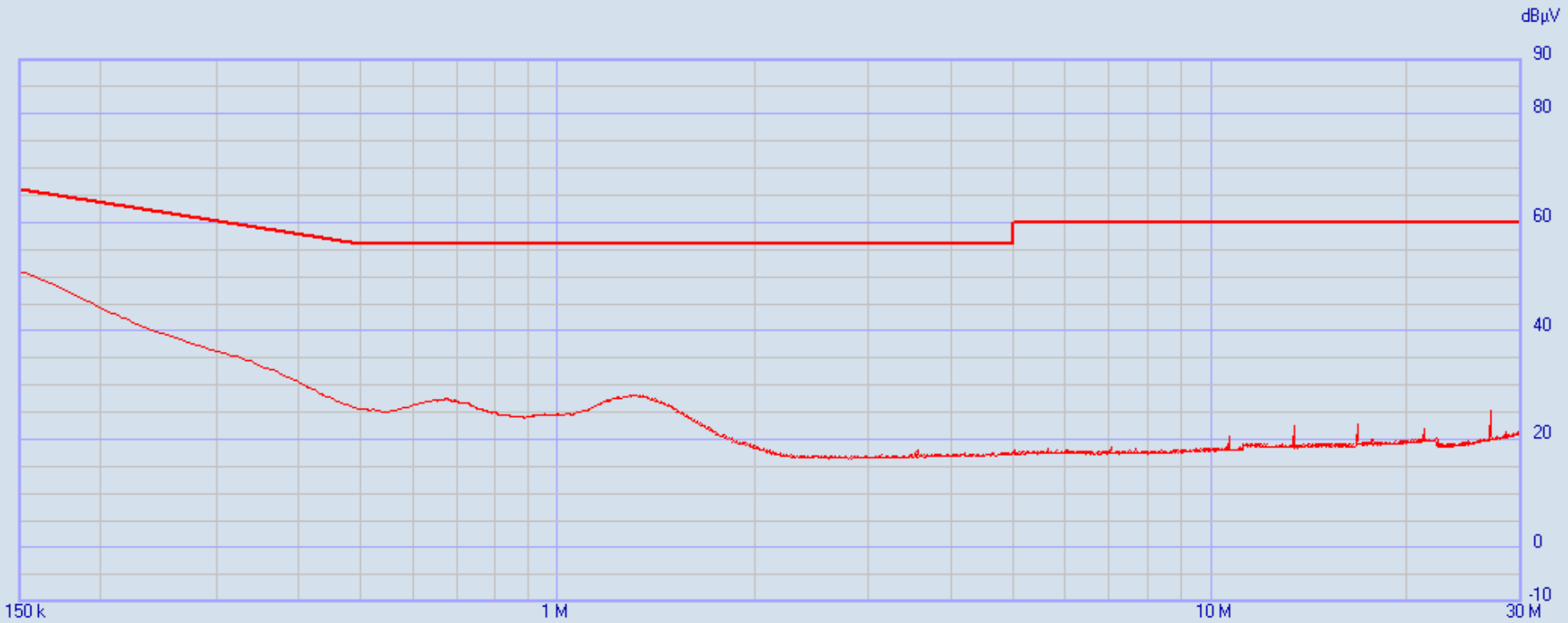
EUT

Manufacturer : RF Technologies
Model : Quick Response Premiere Router Gateway Model 0800-0550
Product : Zigbee Transceiver
Notes : 120V 60hz Modulated Carrier Continuous Transmit Mid Ch.2440MHz
---
Testing Company : DLS Electronic Systems, Inc.
Telephone : 262-279-0210
Web site : http://www.dlsemc.com

Receiver Details

Model : PMM 9010F
Brand : Narda
S/N : 020WW40102
Last Calibration : 06/25/2015

NOTE: The column in the table that is labeled "delta" shows the margin in dB with respect to the limit. A negative number indicates the level of the emission is under the limit by the given value, while a positive number indicates the emission level is above the limit by the given value.



7072 RF Technologies 0445 MidCh L1

	Start [MHz]	Stop [MHz]	Step	Detector	Hold Time	RBW	Min Att	Pre Amp	Pre Sel	Prompt start	Ancillary
1	0.15	30	AUTO (2.045 kHz)	P Q C	1000 ms	9 kHz	10	OFF	ON	...	...

Ancillary = L3 PMM

Limits:
FCC Class B V QP

Factors:
LISN DLS#128
E-M L705
DLS#592
Cables 43 & 45

QPeak

7072 RF Technologies 0550 MidCh L1 20/08/2015 08:22:20
Rel. SW 2.19 (July 2014)
Rel. FW 1.44 15/05/14
Margin: 17 dB

	Frequency [MHz]	QPeak [dBµV]	Limit FCC Class.. [dBµV]	Delta [dB]	Factor LISN DLS#.. [dB]	Factor E-M L705 [dB]	Factor DLS#592 [dB]	Factor Cables 43.. [dB]
1	0.15	50.72	66.00	-15.28	1.67	9.64	2.12	0.03
2	0.152045	50.84	65.89	-15.05	1.64	9.65	2.09	0.04
3	0.15409	50.58	65.78	-15.20	1.61	9.66	2.07	0.04
4	0.156135	50.30	65.67	-15.37	1.59	9.67	2.04	0.04
5	0.15818	50.03	65.56	-15.53	1.56	9.67	2.02	0.05
6	0.160225	49.75	65.45	-15.70	1.54	9.68	1.99	0.05
7	0.16227	49.46	65.35	-15.89	1.51	9.69	1.97	0.06
8	0.164315	49.14	65.24	-16.10	1.48	9.70	1.94	0.06
9	0.16636	48.82	65.14	-16.32	1.46	9.71	1.92	0.07
10	0.168405	48.49	65.04	-16.55	1.43	9.71	1.90	0.07
11	0.17045	48.16	64.94	-16.78	1.40	9.71	1.88	0.08
12	0.172495	47.86	64.84	-16.98	1.38	9.71	1.86	0.08

PMM NARDA REPORT: 7072 RF Technologies 0550 MidCh L2

Report issuing date : 07-29-2015

Standard : FCC Pt.15.207
Type : Voltage Mains
Test Site : DLS O.F. Screen Room
Temperature : 72 °F
Humidity : 54 %
Test Specs : Line 2; Average
Operator : Paul L
DLS Project # : 7072
Result : Pass

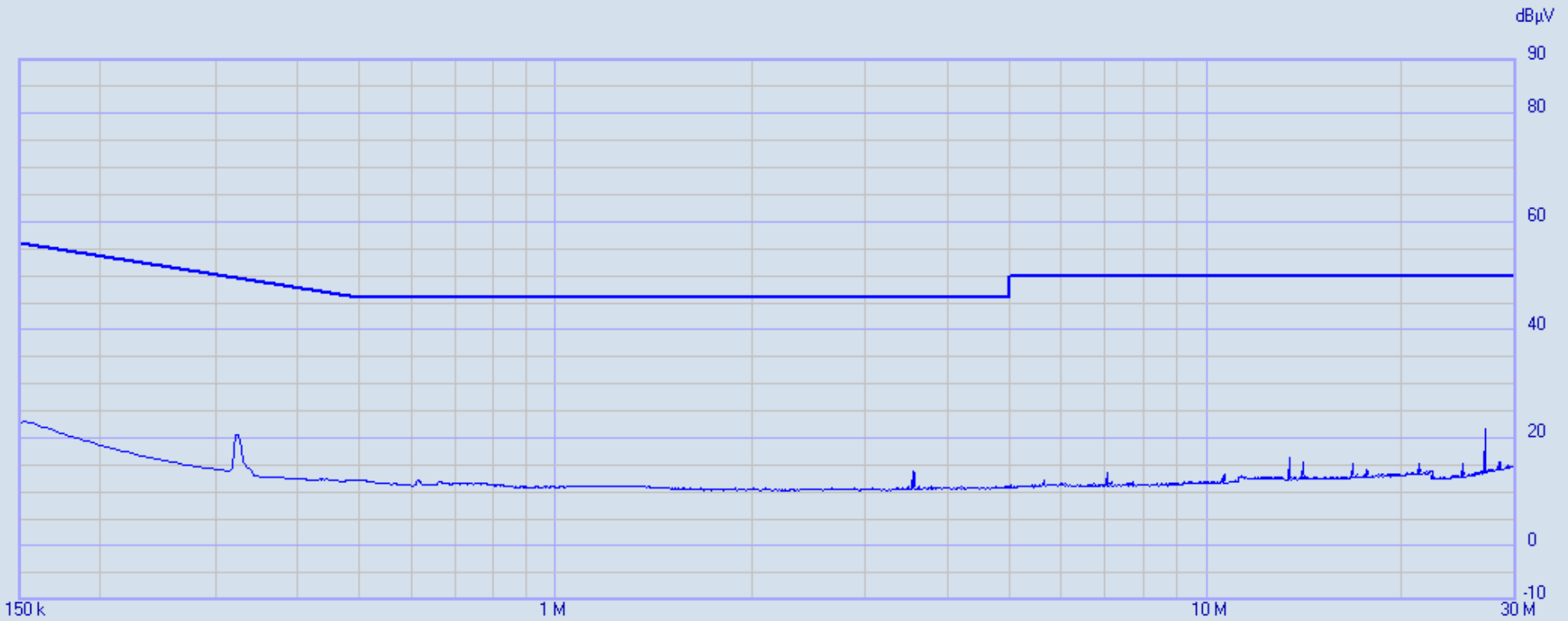
EUT

Manufacturer : RF Technologies
Model : Quick Response Premiere Router Gateway Model 0800-0550
Product : Zigbee Transceiver
Notes : 120V 60hz Modulated Carrier Continuous Transmit Mid Ch.2440MHz
---
Testing Company : DLS Electronic Systems, Inc.
Telephone : 262-279-0210
Web site : http://www.dlsemc.com

Receiver Details

Model : PMM 9010F
Brand : Narda
S/N : 020WW40102
Last Calibration : 06/25/2015

NOTE: The column in the table that is labeled "delta" shows the margin in dB with respect to the limit. A negative number indicates the level of the emission is under the limit by the given value, while a positive number indicates the emission level is above the limit by the given value.



7072 RF Technologies 0445 MidCh L2

	Start [MHz]	Stop [MHz]	Step	Detector	Hold Time	RBW	Min Att	Pre Amp	Pre Sel	Prompt start	Ancillary
1	0.15	30	AUTO (2.045 kHz)	P Q C	1000 ms	9 kHz	10	OFF	ON	...	...

Ancillary = L3 PMM

Limits:
FCC Class B V AV

Factors:
LISN DLS#128
E-M L705
DLS#592
Cables 43 & 45

C-Avg

7072 RF Technologies 0550 MidCh L2 20/08/2015 08:35:17

Rel. SW 2.19 (July 2014)
Rel. FW 1.44 15/05/14
Margin: 33 dB

	Frequency [MHz]	C-Avg [dBµV]	Limit FCC Class.. [dBµV]	Delta [dB]	Factor LISN DLS#.. [dB]	Factor E-M L705 [dB]	Factor DLS#592 [dB]	Factor Cables 43.. [dB]
1	0.152045	23.02	55.89	-32.87	1.64	9.65	2.09	0.04
2	0.15409	22.85	55.78	-32.93	1.61	9.66	2.07	0.04
3	0.319735	18.01	49.71	-31.70	0.65	9.72	1.15	0.11
4	0.32178	20.47	49.66	-29.19	0.65	9.72	1.14	0.11
5	0.323825	20.65	49.61	-28.96	0.64	9.72	1.14	0.11
6	0.32587	20.43	49.56	-29.13	0.64	9.72	1.13	0.11
7	0.327915	18.09	49.50	-31.41	0.64	9.72	1.12	0.11
8	3.538565	13.83	46.00	-32.17	0.28	9.75	0.18	0.33
9	3.54061	13.45	46.00	-32.55	0.28	9.75	0.18	0.33
10	3.55697	13.45	46.00	-32.55	0.28	9.75	0.18	0.33
11	26.912915	21.52	50.00	-28.48	0.41	9.88	0.32	0.97

PMM NARDA REPORT: 7072 RF Technologies 0550 MidCh L2

Report issuing date : 07-29-2015

Standard : FCC Pt.15.207
Type : Voltage Mains
Test Site : DLS O.F. Screen Room
Temperature : 72 °F
Humidity : 54 %
Test Specs : Line 2; QP
Operator : Paul L
DLS Project # : 7072
Result : Pass

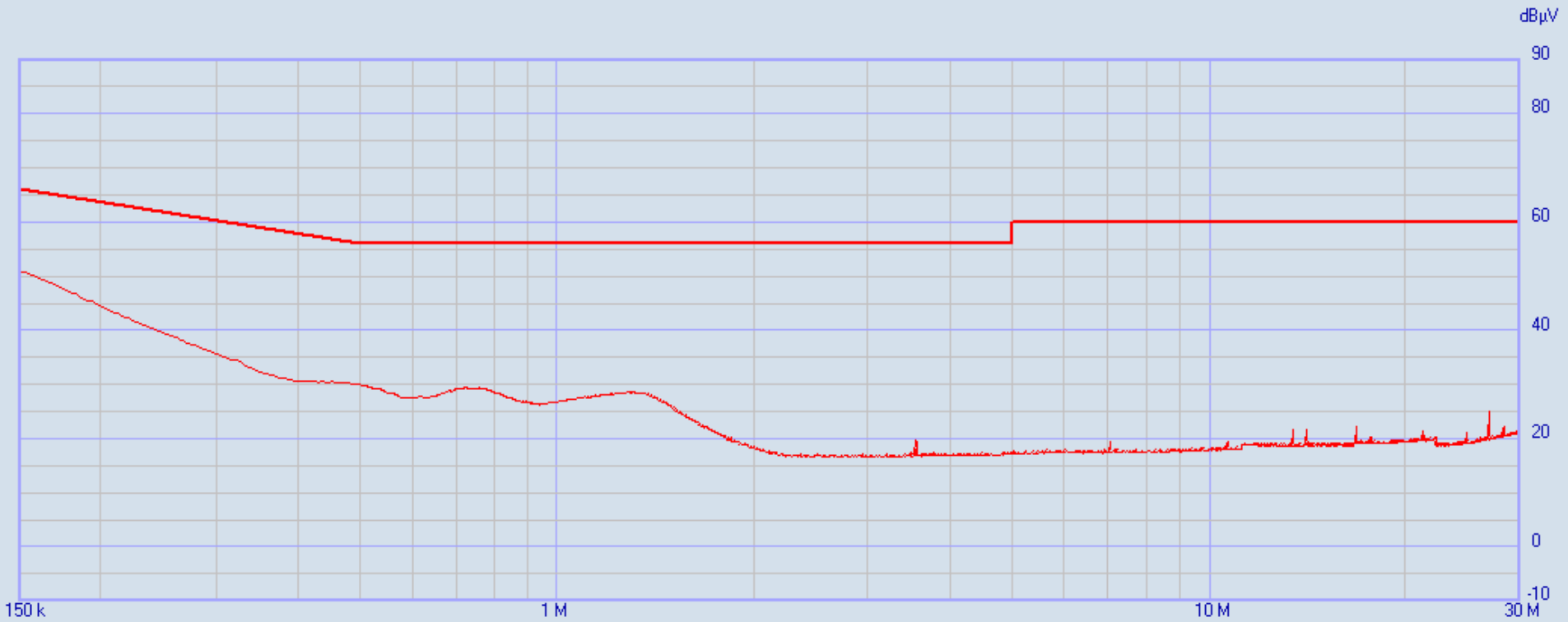
EUT

Manufacturer : RF Technologies
Model : Quick Response Premiere Router Gateway Model 0800-0550
Product : Zigbee Transceiver
Notes : 120V 60hz Modulated Carrier Continuous Transmit Mid Ch.2440MHz
---
Testing Company : DLS Electronic Systems, Inc.
Telephone : 262-279-0210
Web site : http://www.dlsemc.com

Receiver Details

Model : PMM 9010F
Brand : Narda
S/N : 020WW40102
Last Calibration : 06/25/2015

NOTE: The column in the table that is labeled "delta" shows the margin in dB with respect to the limit. A negative number indicates the level of the emission is under the limit by the given value, while a positive number indicates the emission level is above the limit by the given value.



7072 RF Technologies 0445 MidCh L2

	Start [MHz]	Stop [MHz]	Step	Detector	Hold Time	RBW	Min Att	Pre Amp	Pre Sel	Prompt start	Ancillary
1	0.15	30	AUTO (2.045 kHz)	P Q C	1000 ms	9 kHz	10	OFF	ON	...	...

Ancillary = L3 PMM

Limits:
FCC Class B V QP

Factors:
LISN DLS#128
E-M L705
DLS#592
Cables 43 & 45

QPeak

7072 RF Technologies 0550 MidCh L2 20/08/2015 08:35:17

Rel. SW 2.19 (July 2014)
Rel. FW 1.44 15/05/14
Margin: 17 dB

	Frequency [MHz]	QPeak [dBµV]	Limit FCC Class.. [dBµV]	Delta [dB]	Factor LISN DLS#.. [dB]	Factor E-M L705 [dB]	Factor DLS#592 [dB]	Factor Cables 43.. [dB]
1	0.15	50.68	66.00	-15.32	1.67	9.64	2.12	0.03
2	0.152045	50.81	65.89	-15.08	1.64	9.65	2.09	0.04
3	0.15409	50.56	65.78	-15.22	1.61	9.66	2.07	0.04
4	0.156135	50.29	65.67	-15.38	1.59	9.67	2.04	0.04
5	0.15818	50.02	65.56	-15.54	1.56	9.67	2.02	0.05
6	0.160225	49.75	65.45	-15.70	1.54	9.68	1.99	0.05
7	0.16227	49.46	65.35	-15.89	1.51	9.69	1.97	0.06
8	0.164315	49.14	65.24	-16.10	1.48	9.70	1.94	0.06
9	0.16636	48.82	65.14	-16.32	1.46	9.71	1.92	0.07
10	0.168405	48.50	65.04	-16.54	1.43	9.71	1.90	0.07
11	0.17045	48.20	64.94	-16.74	1.40	9.71	1.88	0.08
12	0.172495	47.93	64.84	-16.91	1.38	9.71	1.86	0.08

PMM NARDA REPORT: 7072 RF Technologies 0551 MidCh L1_000

Report issuing date : 07-29-2015

Standard : FCC Pt.15.207
Test Type : Voltage Mains
Test Site : DLS O.F. Screen Room
Temperature : 73 °F
Humidity : 54 %
Test Specs : Line 1; Average
Operator : Paul L
DLS Project # : 7072
Result : Pass

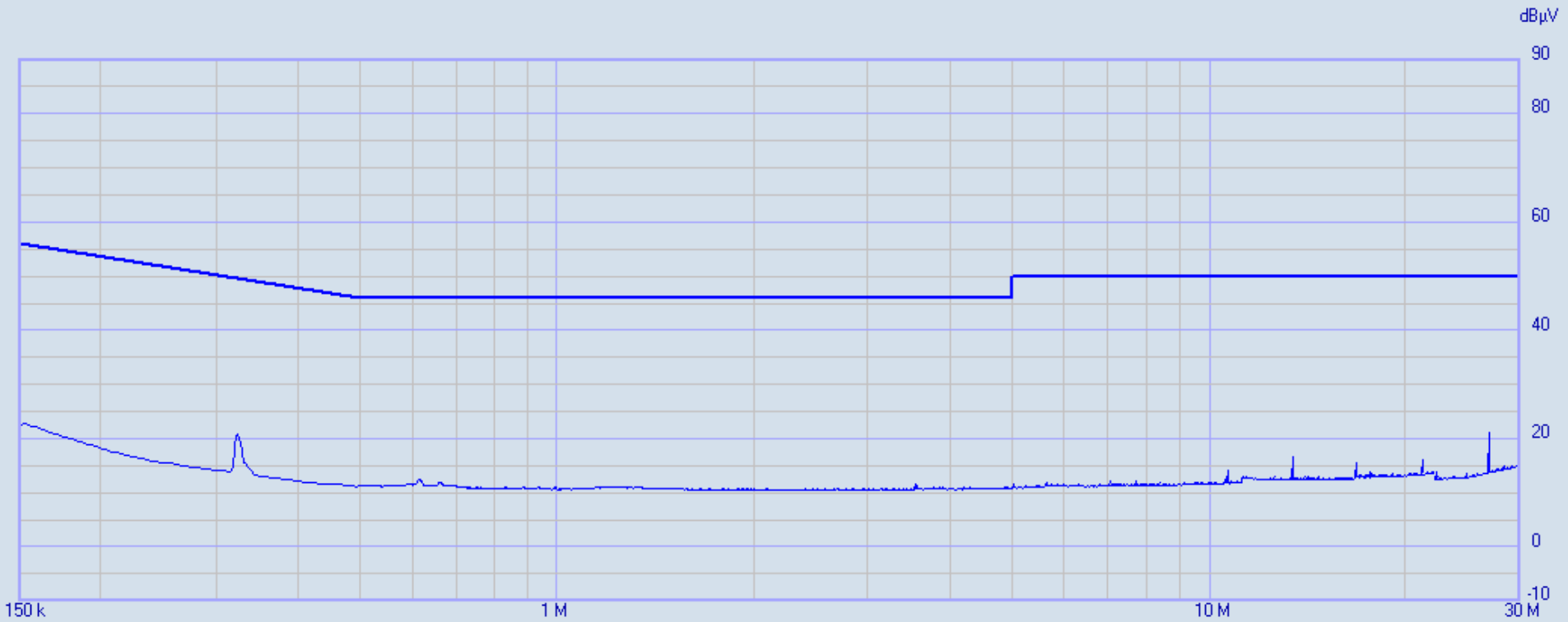
EUT

Manufacturer : RF Technologies
Model : Quick Response Premiere Router Gateway Model 0800-0551
Product : Zigbee Transceiver
Notes : 120V 60hz Modulated Carrier Continuous Transmit on Ch.18 2440MHz
---
Testing Company : DLS Electronic Systems, Inc.
Telephone : 262-279-0210
Web site : http://www.dlsemc.com

Receiver Details

Model : PMM 9010F
Brand : Narda
S/N : 020WW40102
Last Calibration : 06/25/2015

NOTE: The column in the table that is labeled "delta" shows the margin in dB with respect to the limit. A negative number indicates the level of the emission is under the limit by the given value, while a positive number indicates the emission level is above the limit by the given value.



7072 RF Technologies 0446 MidCh L1_000

	Start [MHz]	Stop [MHz]	Step	Detector	Hold Time	RBW	Min Att	Pre Amp	Pre Sel	Prompt start	Ancillary
1	0.15	30	AUTO (2.045 kHz)	P Q C	1000 ms	9 kHz	10	OFF	ON	...	...

Ancillary = L3 PMM
Nr. of Worst = Infinite (3)

Limits:
FCC Class B V AV

Factors:
LISN DLS#128
E-M L705
DLS#592
Cables 43 & 45

C-Avg

7072 RF Technologies 0551 MidCh L1_000 19/08/2015 14:45:39

Rel. SW 2.19 (July 2014)
Rel. FW 1.44 15/05/14
Margin: 33 dB

	Frequency [MHz]	C-Avg [dBµV]	Limit FCC Class.. [dBµV]	Delta [dB]	Factor LISN DLS#.. [dB]	Factor E-M L705 [dB]	Factor DLS#592 [dB]	Factor Cables 43.. [dB]
1	0.319735	18.43	49.71	-31.28	0.65	9.72	1.15	0.11
2	0.32178	20.57	49.66	-29.09	0.65	9.72	1.14	0.11
3	0.323825	20.69	49.61	-28.92	0.64	9.72	1.14	0.11
4	0.32587	20.38	49.56	-29.18	0.64	9.72	1.13	0.11
5	0.327915	17.87	49.50	-31.63	0.64	9.72	1.12	0.11
6	26.912915	21.18	50.00	-28.82	0.41	9.88	0.32	0.97

PMM NARDA REPORT: 7072 RF Technologies 0551 MidCh L1_000

Report issuing date : 07-29-2015

Standard : FCC Pt.15.207
Test Type : Voltage Mains
Test Site : DLS O.F. Screen Room
Temperature : 73 °F
Humidity : 54 %
Test Specs : Line 1; QP
Operator : Paul L
DLS Project # : 7072
Result : Pass

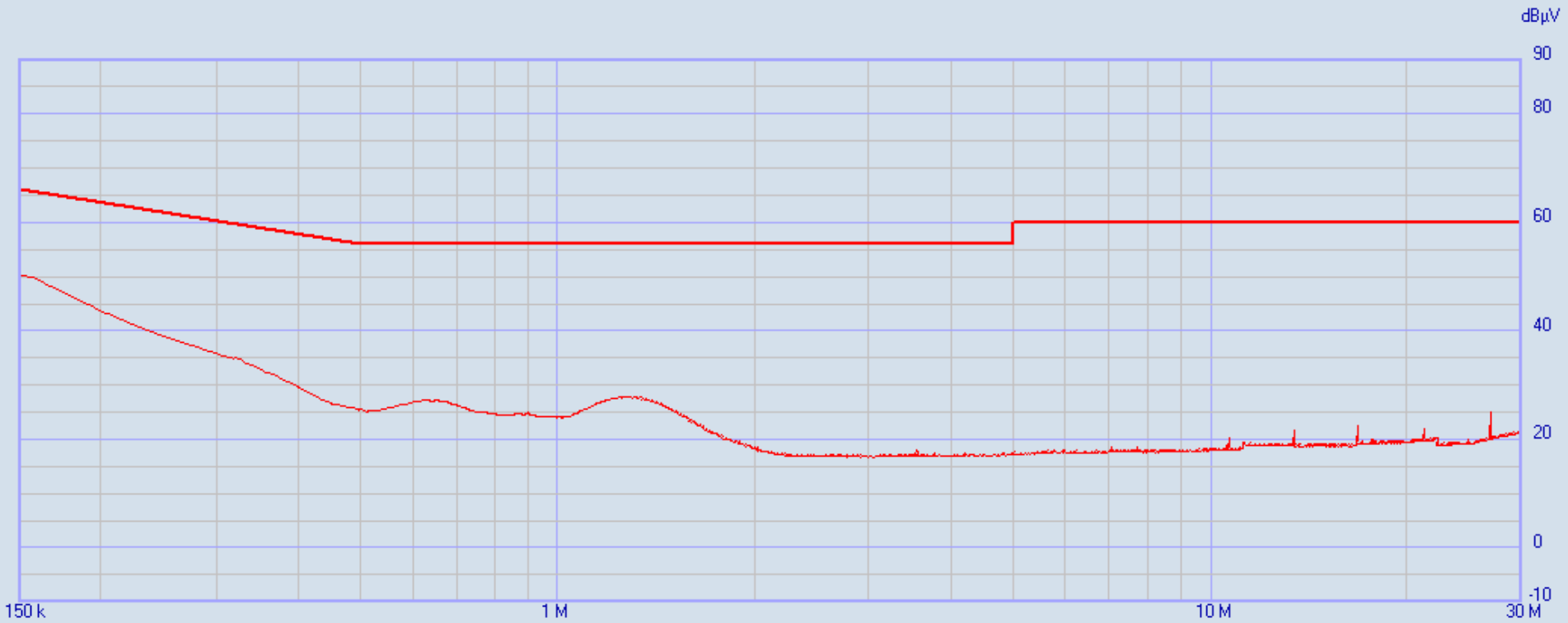
EUT

Manufacturer : RF Technologies
Model : Quick Response Premiere Router Gateway Model 0800-0551
Product : Zigbee Transceiver
Notes : 120V 60hz Modulated Carrier Continuous Transmit on Ch.18 2440MHz
---
Testing Company : DLS Electronic Systems, Inc.
Telephone : 262-279-0210
Web site : http://www.dlsemc.com

Receiver Details

Model : PMM 9010F
Brand : Narda
S/N : 020WW40102
Last Calibration : 06/25/2015

NOTE: The column in the table that is labeled "delta" shows the margin in dB with respect to the limit. A negative number indicates the level of the emission is under the limit by the given value, while a positive number indicates the emission level is above the limit by the given value.



7072 RF Technologies 0446 MidCh L1_000

	Start [MHz]	Stop [MHz]	Step	Detector	Hold Time	RBW	Min Att	Pre Amp	Pre Sel	Prompt start	Ancillary
1	0.15	30	AUTO (2.045 kHz)	P Q C	1000 ms	9 kHz	10	OFF	ON	...	...

Ancillary = L3 PMM
Nr. of Worst = Infinite (3)
Limits:
FCC Class B V QP

Factors:
LISN DLS#128
E-M L705
DLS#592
Cables 43 & 45

QPeak

7072 RF Technologies 0551 MidCh L1_000 19/08/2015 14:45:39

Rel. SW 2.19 (July 2014)
Rel. FW 1.44 15/05/14
Margin: 17 dB

	Frequency [MHz]	QPeak [dBµV]	Limit FCC Class.. [dBµV]	Delta [dB]	Factor LISN DLS#.. [dB]	Factor E-M L705 [dB]	Factor DLS#592 [dB]	Factor Cables 43.. [dB]
1	0.15	50.13	66.00	-15.87	1.67	9.64	2.12	0.03
2	0.152045	50.28	65.89	-15.61	1.64	9.65	2.09	0.04
3	0.15409	50.03	65.78	-15.75	1.61	9.66	2.07	0.04
4	0.156135	49.77	65.67	-15.90	1.59	9.67	2.04	0.04
5	0.15818	49.50	65.56	-16.06	1.56	9.67	2.02	0.05
6	0.160225	49.22	65.45	-16.23	1.54	9.68	1.99	0.05
7	0.16227	48.93	65.35	-16.42	1.51	9.69	1.97	0.06
8	0.164315	48.61	65.24	-16.63	1.48	9.70	1.94	0.06
9	0.16636	48.27	65.14	-16.87	1.46	9.71	1.92	0.07

PMM NARDA REPORT: 7072 RF Technologies 0551 MidCh L2

Report issuing date : 07-29-2015

Standard : FCC Pt.15.207
Test Type : Voltage Mains
Test Site : DLS O.F. Screen Room
Temperature : 73 °F
Humidity : 54 %
Test Specs : Line 2; Average
Operator : Paul L
DLS Project # : 7072
Result : Pass

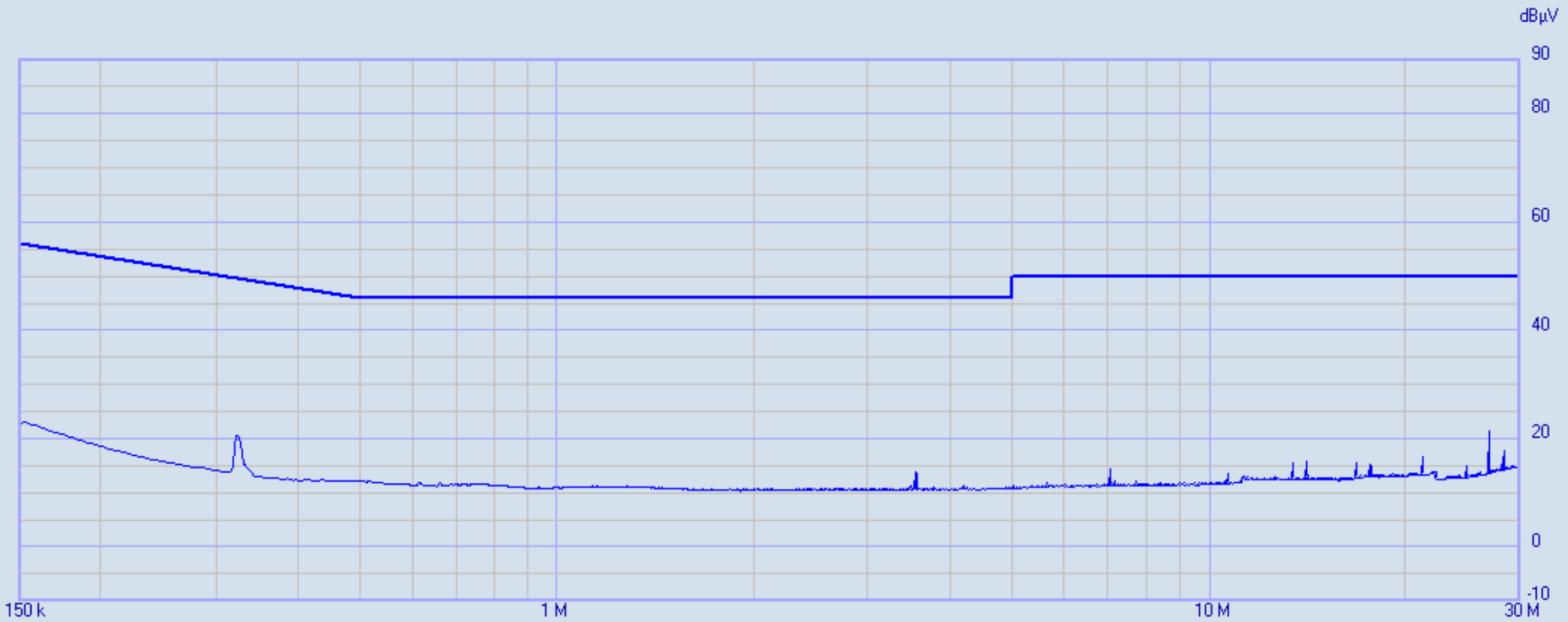
EUT

Manufacturer : RF Technologies
Model : Quick Response Premiere Router Gateway Model 0800-0551
Product : Zigbee Transceiver
Notes : 120V 60hz Modulated Carrier Continuous Transmit on Ch.18 2440MHz
---
Testing Company : DLS Electronic Systems, Inc.
Telephone : 262-279-0210
Web site : http://www.dlsemc.com

Receiver Details

Model : PMM 9010F
Brand : Narda
S/N : 020WW40102
Last Calibration : 06/25/2015

NOTE: The column in the table that is labeled "delta" shows the margin in dB with respect to the limit. A negative number indicates the level of the emission is under the limit by the given value, while a positive number indicates the emission level is above the limit by the given value.



7072 RF Technologies 0446 MidCh L2

	Start [MHz]	Stop [MHz]	Step	Detector	Hold Time	RBW	Min Att	Pre Amp	Pre Sel	Prompt start	Ancillary
1	0.15	30	AUTO (2.045 kHz)	P Q C	1000 ms	9 kHz	10	OFF	ON	...	...

Ancillary = L3 PMM

Limits:
FCC Class B V AV

Factors:
LISN DLS#128
E-M L705
DLS#592
Cables 43 & 45

C-Avg

7072 RF Technologies 0551 MidCh L2 19/08/2015 15:16:26

Rel. SW 2.19 (July 2014)
Rel. FW 1.44 15/05/14
Margin: 33 dB

	Frequency [MHz]	C-Avg [dBµV]	Limit FCC Class.. [dBµV]	Delta [dB]	Factor LISN DLS#.. [dB]	Factor E-M L705 [dB]	Factor DLS#592 [dB]	Factor Cables 43.. [dB]
1	0.152045	22.99	55.89	-32.90	1.64	9.65	2.09	0.04
2	0.15409	22.80	55.78	-32.98	1.61	9.66	2.07	0.04
3	0.319735	18.58	49.71	-31.13	0.65	9.72	1.15	0.11
4	0.32178	20.44	49.66	-29.22	0.65	9.72	1.14	0.11
5	0.323825	20.53	49.61	-29.08	0.64	9.72	1.14	0.11
6	0.32587	20.12	49.56	-29.44	0.64	9.72	1.13	0.11
7	0.327915	17.35	49.50	-32.15	0.64	9.72	1.12	0.11
8	3.538565	13.96	46.00	-32.04	0.28	9.75	0.18	0.33
9	3.54061	13.58	46.00	-32.42	0.28	9.75	0.18	0.33
10	3.55697	13.58	46.00	-32.42	0.28	9.75	0.18	0.33
11	26.912915	21.46	50.00	-28.54	0.41	9.88	0.32	0.97
12	28.377135	17.72	50.00	-32.28	0.41	9.86	0.34	0.97

PMM NARDA REPORT: 7072 RF Technologies 0551 MidCh L2

Report issuing date : 07-29-2015

Standard : FCC Pt.15.207
Test Type : Voltage Mains
Test Site : DLS O.F. Screen Room
Temperature : 73 °F
Humidity : 54 %
Test Specs : Line 2; QP
Operator : Paul L
DLS Project # : 7072
Result : Pass

EUT

Manufacturer : RF Technologies
Model : Quick Response Premiere Router Gateway Model 0800-0551
Product : Zigbee Transceiver
Notes : 120V 60hz Modulated Carrier Continuous Transmit on Ch.18 2440MHz
---
Testing Company : DLS Electronic Systems, Inc.
Telephone : 262-279-0210
Web site : http://www.dlsemc.com

Receiver Details

Model : PMM 9010F
Brand : Narda
S/N : 020WW40102
Last Calibration : 06/25/2015

NOTE: The column in the table that is labeled "delta" shows the margin in dB with respect to the limit. A negative number indicates the level of the emission is under the limit by the given value, while a positive number indicates the emission level is above the limit by the given value.

7072 RF Technologies 0446 MidCh L2

	Start [MHz]	Stop [MHz]	Step	Detector	Hold Time	RBW	Min Att	Pre Amp	Pre Sel	Prompt start	Ancillary
1	0.15	30	AUTO (2.045 kHz)	P Q C	1000 ms	9 kHz	10	OFF	ON	...	...

Ancillary = L3 PMM

Limits:
FCC Class B V QP

Factors:
LISN DLS#128
E-M L705
DLS#592
Cables 43 & 45

QPeak

7072 RF Technologies 0551 MidCh L2 19/08/2015 15:16:26

Rel. SW 2.19 (July 2014)
Rel. FW 1.44 15/05/14
Margin: 17 dB

	Frequency [MHz]	QPeak [dBµV]	Limit FCC Class.. [dBµV]	Delta [dB]	Factor LISN DLS#.. [dB]	Factor E-M L705 [dB]	Factor DLS#592 [dB]	Factor Cables 43.. [dB]
1	0.15	50.60	66.00	-15.40	1.67	9.64	2.12	0.03
2	0.152045	50.74	65.89	-15.15	1.64	9.65	2.09	0.04
3	0.15409	50.48	65.78	-15.30	1.61	9.66	2.07	0.04
4	0.156135	50.21	65.67	-15.46	1.59	9.67	2.04	0.04
5	0.15818	49.94	65.56	-15.62	1.56	9.67	2.02	0.05
6	0.160225	49.65	65.45	-15.80	1.54	9.68	1.99	0.05
7	0.16227	49.35	65.35	-16.00	1.51	9.69	1.97	0.06
8	0.164315	49.01	65.24	-16.23	1.48	9.70	1.94	0.06
9	0.16636	48.67	65.14	-16.47	1.46	9.71	1.92	0.07
10	0.168405	48.34	65.04	-16.70	1.43	9.71	1.90	0.07
11	0.17045	48.05	64.94	-16.89	1.40	9.71	1.88	0.08

Appendix B – Measurement Data

B10.0 Duty Cycle of test unit

Rule Part: FCC Part15.247

Test Procedure: FCC KDB 558074 D01 DTS Meas Guidance v03r03

Limit: Not Applicable

Results: Duty Cycle = 100% over a 5 ms period
Duty Cycle Correction = 0.0 dB

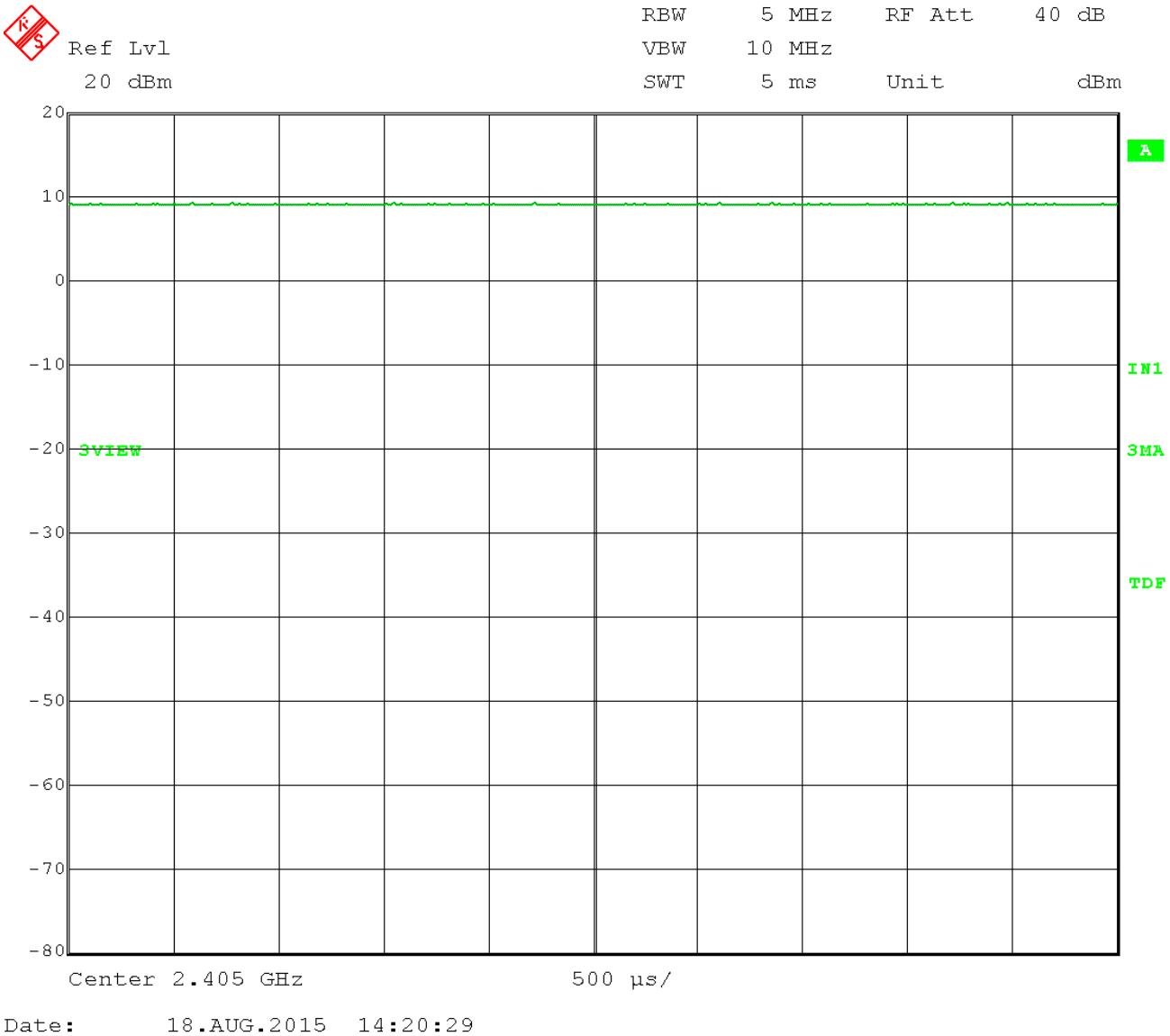
Sample Equations: Total on Time = 5 ms during 5 ms Sweep
20 log (100 / 100) = 0
Duty Cycle Correction Factor = 0 dB

ELECTRONIC SYSTEMS, INC.
166 South Carter, Genoa City, WI 53128

Test Date: 08-18-2015
Company: RFT Technologies
EUT: Quick Response Premier Router/Gateway 0800-0551
Test: Duty Cycle - Conducted – 15.247 (a)(2)
Operator: Paul L

Comment: Low Channel – Ch.11 2.405 GHz

Comment: Duty cycle x = 100% Continuous transmit



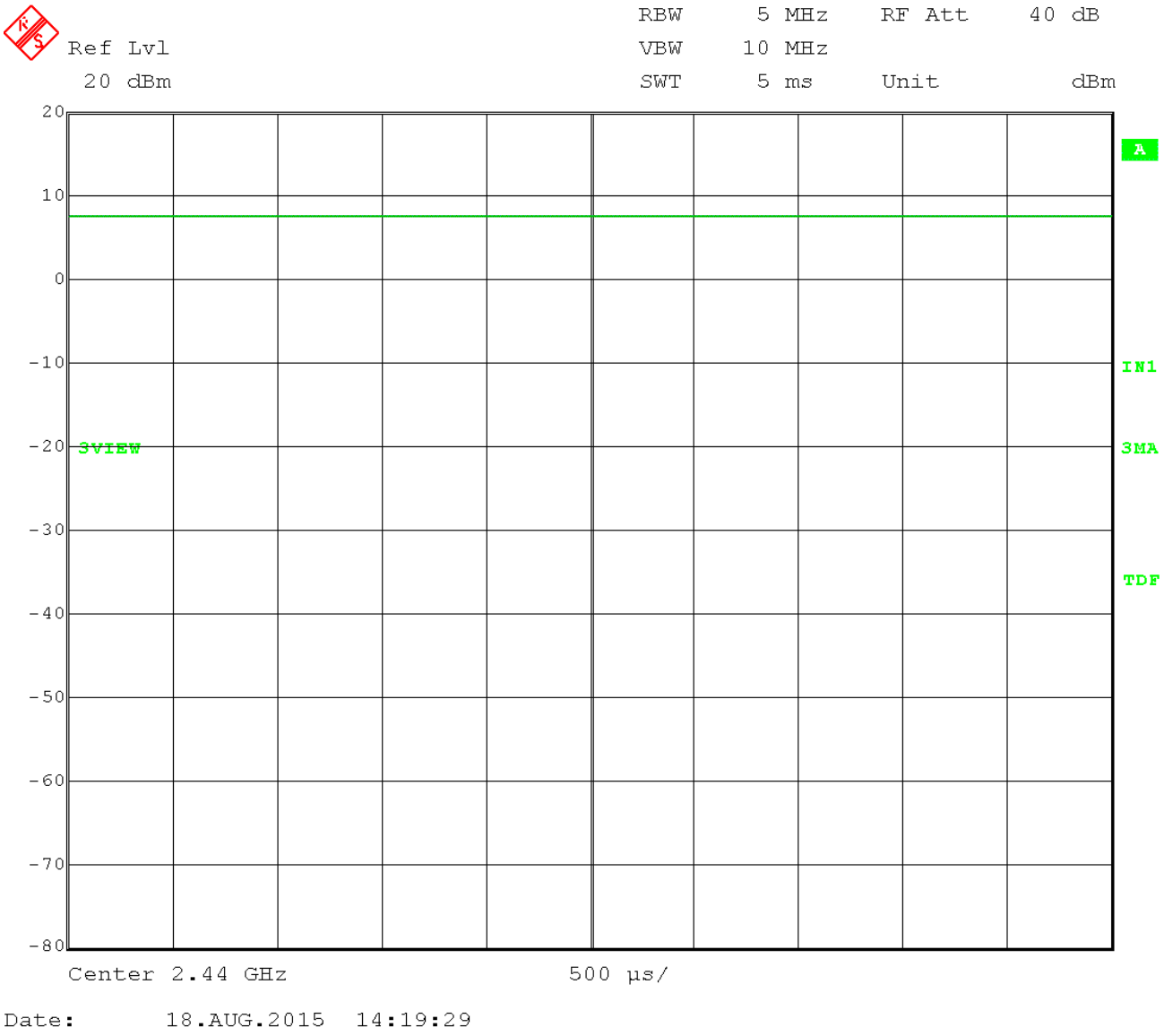
Date: 18.AUG.2015 14:20:29

166 South Carter, Genoa City, WI 53128

Test Date: 08-18-2015
Company: RFT Technologies
EUT: Quick Response Premier Router/Gateway 0800-0551
Test: Duty Cycle - Conducted – 15.247 (a)(2)
Operator: Paul L

Comment: Mid Channel – Ch.18 2.440 GHz

Comment: Duty cycle x = 100% Continuous transmit

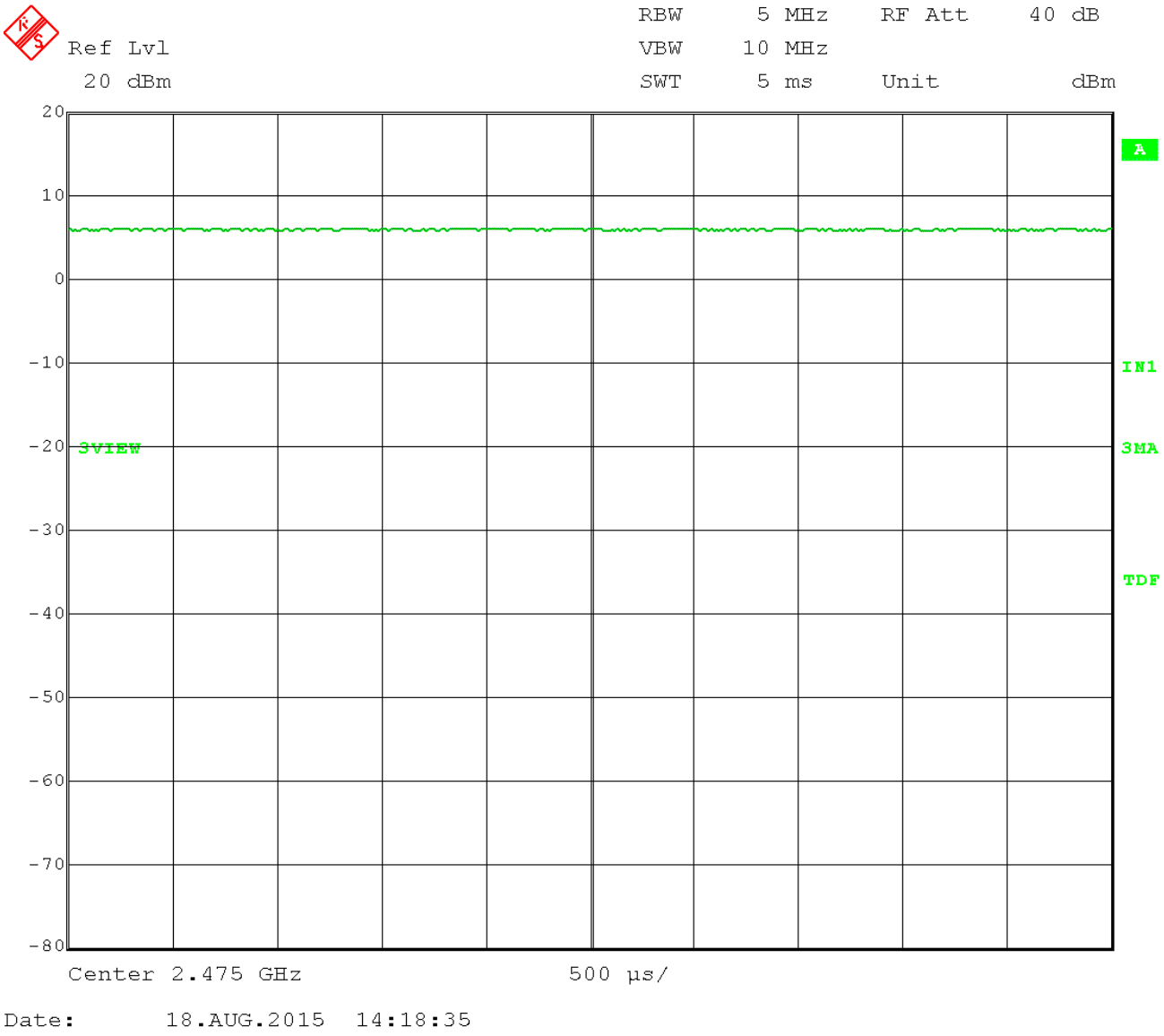


166 South Carter, Genoa City, WI 53128

Test Date: 08-18-2015
Company: RFT Technologies
EUT: Quick Response Premier Router/Gateway 0800-0551
Test: Duty Cycle - Conducted – 15.247 (a)(2)
Operator: Paul L

Comment: High Channel – Ch.24 2.475 GHz

Comment: Duty cycle x = 100% Continuous transmit



Date: 18.AUG.2015 14:18:35

END OF REPORT

Revision #	Date	Comments	By
1.0	08-25-2015	Preliminary Release	JS
1.1	08-26-2015	Minor edits	JS
1.2	08-31-2015	Added Radiated Band Edge data	JS