



Company: Roche Diagnostics Operations
Model Tested: 897
Report Number: 23449
DLS Project: 9116

166 South Carter, Genoa City, WI 53128

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, 5725 - 5875 MHz,
and 24.0 - 24.25 GHz.

THE FOLLOWING **MEETS** THE ABOVE TEST SPECIFICATION

FCC ID: WX3-801

Formal Name: Accu-Chek Guide Me
Kind of Equipment: Blood Glucose Meter
Frequency Range: 2402 to 2480 MHz
Test Configuration: Tabletop (handheld device)
Model Number(s): 897
Model(s) Tested: 897
Serial Number(s): Radiated: 89700000802
RF Conducted: 89700000765
Date of Tests: January 26 – February 2, 2018
Test Conducted For: Roche Diabetes Care
9115 Hague Road
Indianapolis, IN 46250-0457, USA

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.

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Company:
Model Tested:
Report Number:
DLS Project:

Roche Diagnostics Operations
897
23449
9116

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SIGNATURE PAGE

Tested By:

A handwritten signature in black ink, reading "Craig Brandt". The signature is written in a cursive style with a long horizontal stroke at the end.

Craig Brandt
Senior Test Engineer

Reviewed By:

A handwritten signature in black ink, reading "William Stumpf". The signature is written in a cursive style with a long horizontal stroke at the end.

William Stumpf
OATS Manager

Approved By:

A handwritten signature in black ink, reading "Brian J. Mattson". The signature is written in a cursive style with a long horizontal stroke at the end.

Brian Mattson
General Manager



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United States Department of Commerce
National Institute of Standards and Technology



Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 100276-0

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

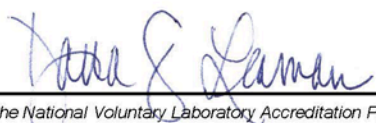
*is accredited by the National Voluntary Laboratory Accreditation Program for specific services,
listed on the Scope of Accreditation, for:*

Electromagnetic Compatibility & 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 Communiqué dated January 2009).*

2017-09-29 through 2018-09-30
Effective Dates




For the National Voluntary Laboratory Accreditation Program

**ELECTROMAGNETIC
COMPATIBILITY &
TELECOMMUNICATIONS**

NVLAP LAB CODE 100276-0

Emissions

Designation

Off-site test location

Description

D.L.S. Electronics performs radiated emissions testing at an additional location, 166 South Carter Street, Genoa City, WI 53128.



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1.0 Summary of Test Report

It was determined that the Roche Diabetes Care Accu-Chek Guide Me, model 897, complies 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?
15.31(e)	Supply Voltage Statement	N/A		Yes
15.203	Antenna Requirement Statement	N/A		Yes
15.35(c)	Duty Cycle	ANSI C63.10-2013 Section 11.6(b)	1	Informational
15.247(a)(2)	DTS Bandwidth	ANSI C63.10-2013 Sections 11.8 & 11.8.2	1	Yes
15.247(b)(3)	Fundamental Emission Output Power	ANSI C63.10-2013 Sections 11.9.1 & 11.9.1.1	1	Yes
15.247(e)	Maximum Power Spectral Density	ANSI C63.10-2013 Sections 11.10 & 11.10.2	1	Yes
15.247(d)	Operating Band-Edge Measurements – RF Conducted	ANSI C63.10-2013 Sections 11.11, 11.11.2 & 11.11.3	1	Yes
15.247(d) 15.205(a) 15.209(a)	Restricted Band-Edge Measurements - Radiated	ANSI C63.10-2013 Sections 11.12 & 11.12.1	2	Yes
15.247(d)	Emissions in Non-Restricted Frequency Bands – RF Conducted	ANSI C63.10-2013 Sections 11.11, 11.11.2 & 11.11.3	1	Yes
15.247(d) 15.205(a) 15.209(a)	Emissions in Restricted Frequency Bands – Radiated	ANSI C63.10-2013 Sections 11.12 & 11.12.1	2	Yes
15.207	AC Line Conducted Emissions	ANSI C63.10-2013 Section 6.2	3	Yes

Note 1: RF conducted measurement.

Note 2: Radiated emission measurement.

Note 3: AC line conducted emission measurement on representative host unit.



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2.0 Introduction

From January 26th through February 2nd, 2018, the Accu-Chek Guide Me, model 897, as provided from Roche Diabetes Care was 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, Innovation Science and Economic Development 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

FCC Registration #90531

4.0 Description of Test Sample

Description:

The device is a blood glucose monitor used by persons with diabetes to measure their blood glucose levels.

Type of Equipment / Frequency Range:

Blood Glucose Meter with Bluetooth – Low Energy (portable) / 2402-2480 MHz

Physical Dimensions of Equipment Under Test:

Length: 3 in., Width: 2 in., Height: 1 in.



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4.0 Description of Test Sample - continued

Power Source:

3 Volt DC (two 1.5 volt batteries)

Internal Frequencies:

16 MHz

Transmit / Receive Frequencies Used For Test Purpose:

Low channel: 2402 MHz, Middle channel: 2440 MHz, High channel: 2480 MHz

Type of Modulation(s) / Antenna Type:

GFSK / Antenna type F copper etched on the PWB (antenna gain 6.2 dBi)

Description of Circuit Board(s) / Part Number:

PCB, Main	1-101-0138-010 (v1.00)
BOM	004-UN01-010(v1.00)



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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.

Radiated 30 – 1000 MHz (Site 2)

Description	Manufacturer	Model Number	Serial Number	Frequency Range	Cal Date	Cal Due Dates
Receiver	Rohde & Schwarz	ESI 40	837808/006	20 Hz – 40 GHz	4-6-17	4-6-18
Preamplifier	Rohde & Schwarz	TS-PR10	032001/004	9 kHz – 1 GHz	11-22-17	11-22-18
Antenna	EMCO	3104C	00054892	20 MHz – 200 MHz	3-11-16	3-11-18
Antenna	Electro-Metrics	LPA-25	1205	200 MHz – 1 GHz	3-23-16	3-23-18
Cable	Beldin	9914	CBL-005	9 kHz-1 GHz	11-27-17	11-27-18
Cable	Beldin	9273	CBL-028	9 kHz-1 GHz	11-27-17	11-27-18
Cable	Manhattan/CDT	RG-223/U	CBL-051	9 kHz-1 GHz	11-27-17	11-27-18
Test Software	Rohde & Schwarz	ESK-1	V1.7.1	N/A	N/A	N/A

Radiated 1-26 GHz (Site G1)

Description	Manufacturer	Model Number	Serial Number	Frequency Range	Cal Date	Cal Due Dates
Receiver	Rohde & Schwarz	ESI 40	837808/005	20 Hz – 40 GHz	4-6-17	4-6-18
Preamp	Ciao	CA118-4010	101	1GHz-18GHz	1-8-18	1-8-19
Horn Antenna	Com-Power	AH-118	071127	1-18GHz	9-8-16	9-5-18
Filter- High-Pass	Q-Microwave	100462	2	4.2GHz-18GHz	7-7-17	7-7-18
Preamp	Miteq	AMF-8B-180265-40-10P-H/S	438727	18GHz-26GHz	5-11-17	5-11-18
Horn Antenna	EMCO	3116	2549	18 – 40GHz	9-2-16	9-2-18
High Pass Filter	K & L	50140 11SH10-18000/T40000-K-K	8	18-40 GHz	1-8-18	1-8-19
Cable	Micro-Coax	UFB311A	CBL-100	9 kHz-18 GHz	5-5-17	5-5-18
Cable	Micro-Coax	UFC142A	CBL-101	9 kHz-40 GHz	5-10-17	5-10-18
Cable	Pasternack	PE3C0666-24	CBL-103	9 kHz-40 GHz	5-10-17	5-10-18
Test Software	Rohde & Schwarz	ESK-1	V1.7.1	N/A	N/A	N/A



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5.0 Test Equipment - continued

RF Conducted / Other

Description	Manufacturer	Model Number	Serial Number	Frequency Range	Cal Date	Cal Due Dates
Receiver	Rohde & Schwarz	ESI 40	837808/005	20 Hz–40 GHz	4-6-17	4-6-18
Cable	Micro-Coax	UFC142A	CBL-093	9 kHz–40 GHz	5-10-17	5-10-18

6.0 Test Arrangements

Radiated Emissions Measurement Arrangement:

All radiated emission measurements were performed at D.L.S. Electronic Systems, Inc. and set up according to ANSI C63.10-2013, 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. See Appendix C for measurement uncertainty.

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

RF Conducted Emissions Measurement Arrangement:

All RF conducted emission measurements were performed at D.L.S. Electronic Systems, Inc. and set up according to ANSI C63.10-2013, 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. See Appendix C for measurement uncertainty.



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7.0 Test Conditions

Temperature and Humidity:

70°F at 27% RH unless otherwise noted on test data

Supply Voltage:

3 Volt (batteries)

8.0 Modifications Made To EUT For Compliance

None.

9.0 Additional Descriptions

The EUT was programmed for continuous transmission on Low, Mid, and High channels, with a 100% duty cycle.

For radiated emissions, the EUT with was rotated through 3 orthogonal axis to find worst-case.

A duty cycle reduction factor as expressed in FCC Section 15.35(c) was used in determining the unwanted emission level radiated at the upper restricted band edge as allowed per FCC KDB 558074 D01 DTS Meas Guidance v04. This worst-case duty cycle reduction factor was calculated to be 17.5 dB based on manufacturer's operational description. See next page for manufacturer's attestation regarding the duty cycle as it relates to the KDB allowance for reduction of levels based on maximum duty cycle.



MEMO
ROCHE

To: Whom it may concern:

Subject **Guide Me Manufacturer's Attestation Letter of Fixed Duty Cycle**

Date 05-Feb-2018

Roche Diabetes Care attests to the following for the Accu-Chek Guide Me Meter Model 897:

The duty cycle reduction factor expressed in 15.35(c) can be utilized for unwanted emissions (including spurious emissions) since the following conditions are satisfied:

1. the unwanted emission is temporally related to the fundamental emission (i.e. an intermodulation or harmonic product)
2. the unwanted emission falls into a restricted frequency band
3. the maximum duty cycle used in determining the reduction factor is "hardwired" such that under no condition can it be changed or modified by either the device or the end user.

Regards,

 05-Feb-2018

David Chandler
Sr. R&D Engineer



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10.0 FCC 15.31 (e) Supply Voltage Requirement statement

FCC 15.31 (e) - For intentional radiators, measurements of the variation of the input power or the radiated signal level of the fundamental frequency component of the emission, as appropriate, shall be performed with the supply voltage varied between 85% and 115% of the nominal rated supply voltage.

Compliance Statement: This device complies with the requirements of Part 15.31(e):

- ☒ This device is battery operated. All tests were performed using a new (or fully charged) battery.
- ☐ This device provides a constant regulated voltage to the RF circuitry regardless of supply voltage (see schematic diagrams).
- ☐ This device does not provide a constant regulated voltage to the RF circuitry regardless of supply voltage. Data has been supplied in this test report that supports compliance. Details:

11.0 FCC 15.203 Antenna Requirement 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.



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12.0 Results

Measurements were performed in accordance with CFR 47 Part 15 Subpart C Section 15.247 and ANSI C63.10-2013. Graphical and tabular data can be found in Appendix B at the end of this report.

13.0 Conclusion

The Roche Diabetes Care Accu-Chek Guide Me, model 897, tested from January 26th through February 2nd, 2018 **meets** the requirements of CFR 47 Part 15 Subpart C Section 15.247.



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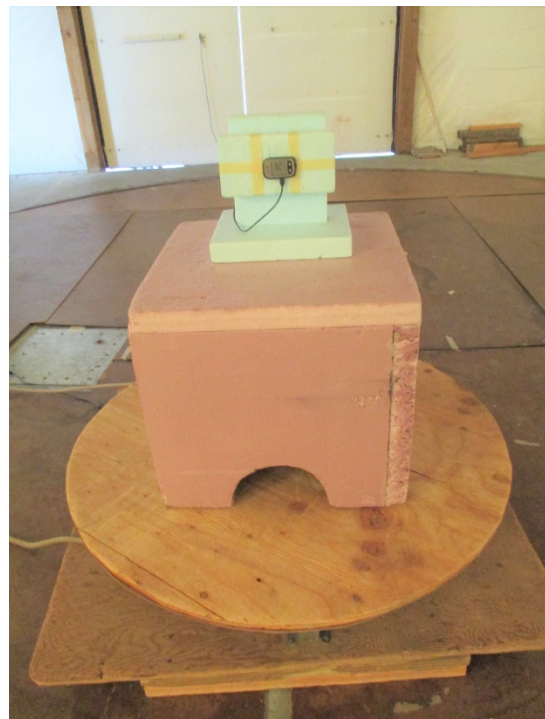
166 South Carter, Genoa City, WI 53128

Appendix A – Test Setup Photos

Radiated Emissions below 1 GHz – Position 1



Radiated Emissions below 1 GHz – Position 2



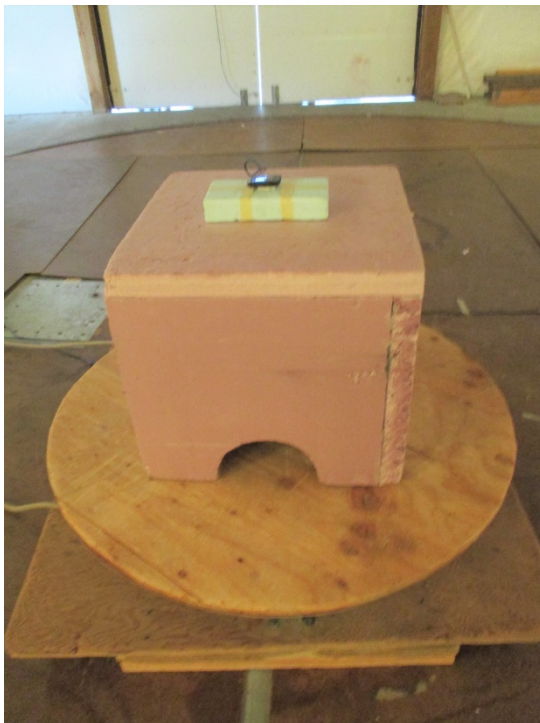


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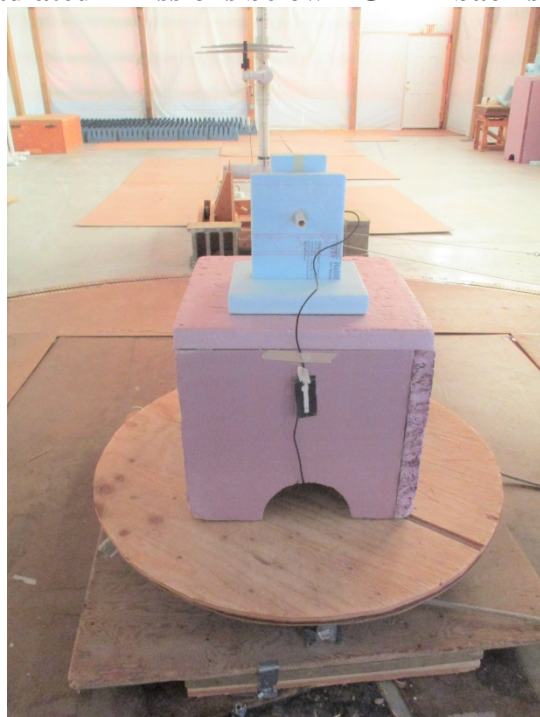
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Appendix A – Test Setup Photos - continued

Radiated Emissions below 1 GHz – Position 3



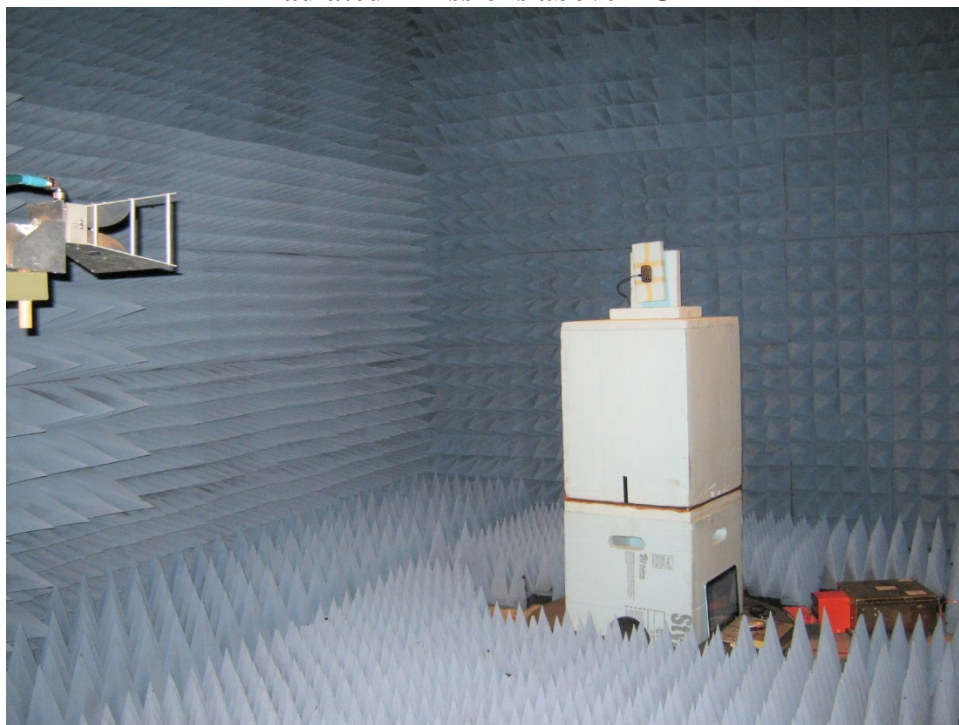
Radiated Emissions below 1 GHz – back side



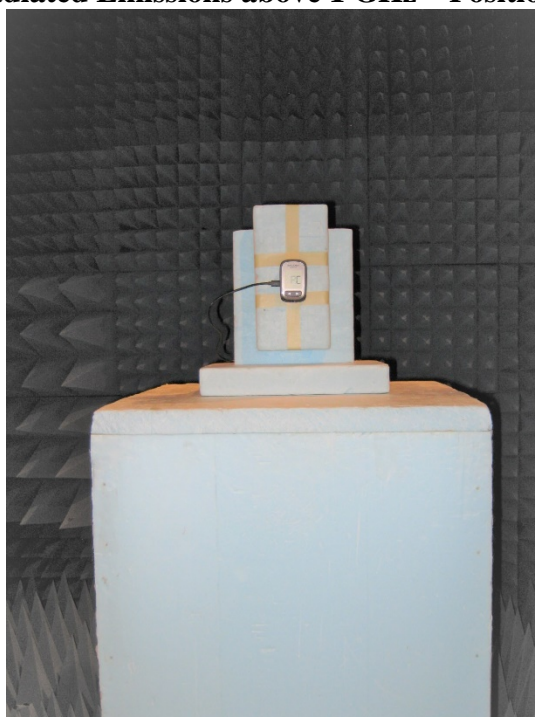
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Appendix A – Test Setup Photos - continued

Radiated Emissions above 1 GHz



Radiated Emissions above 1 GHz – Position 1





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Appendix A – Test Setup Photos - continued

Radiated Emissions above 1 GHz – Position 2



Radiated Emissions above 1 GHz – Position 3





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Appendix A – Test Setup Photos - continued

Radiated Emissions above 1 GHz – back side



RF Conducted





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Appendix A – Test Setup Photos - continued

AC Line Conducted – front



AC Line Conducted – back (1 of 2)





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Appendix A – Test Setup Photos - continued

AC Line Conducted – back (2 of 2)





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Appendix B – Measurement Data

B1.0 Duty Cycle during testing

Rule Part: Informative

Test Procedure: ANSI 63.10-2013, section 11.6(b)

Limit: Not Applicable

Results: Duty Cycle of test unit = 100%
Fixed Duty Cycle of production unit = 1.75%

Worst-case duty cycle reduction factor based on manufacturer's operational description:

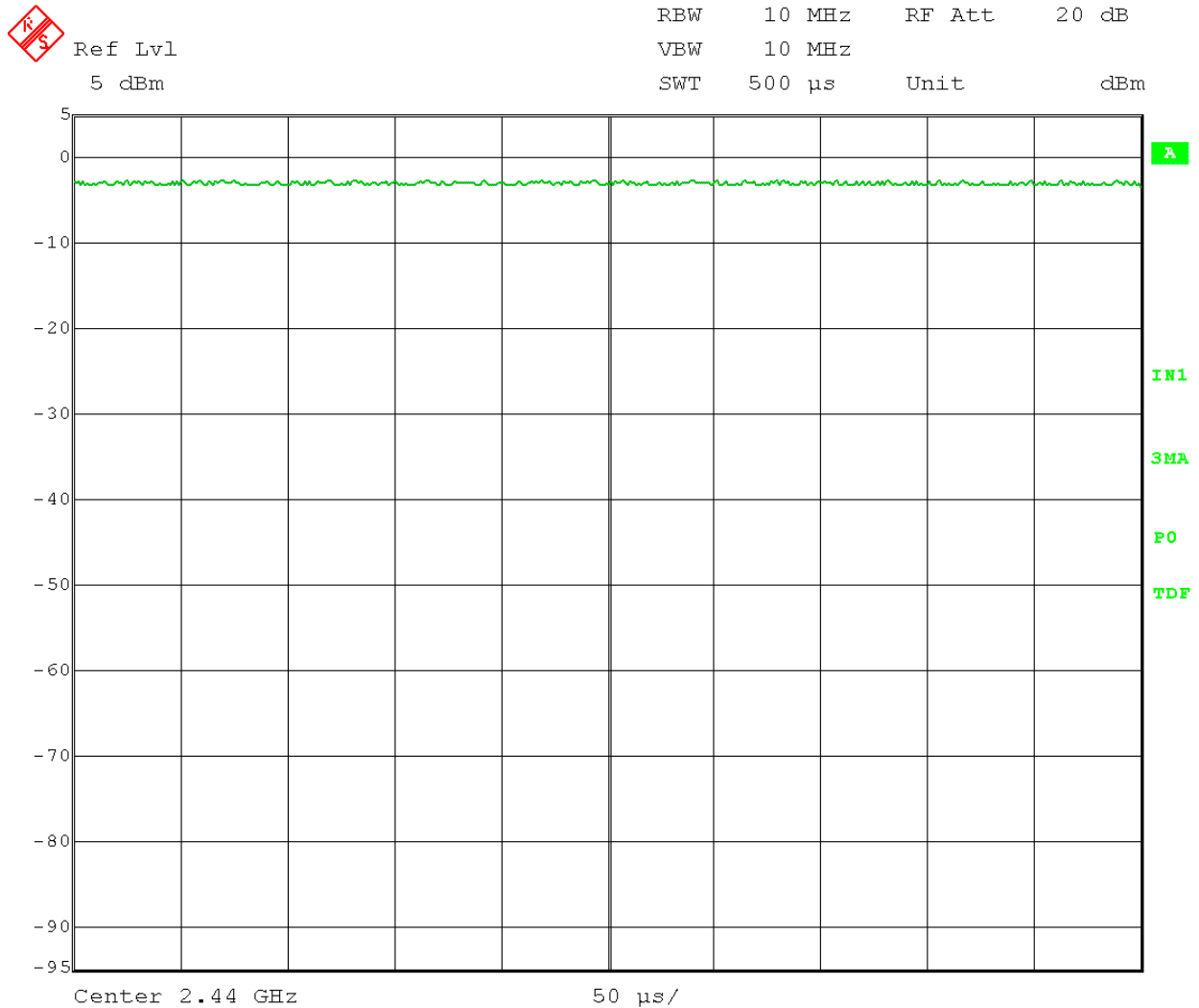
Longest ON time = 350 μ s once every 20 ms

Duty cycle $x = (350 \mu\text{s} / 20 \text{ ms}) = 0.0175 = 1.75\%$

RMS Duty Cycle Correction Factor = $10 \log (1/0.0175) = \mathbf{17.5 \text{ dB}}$

Test Date: 01-26-2018
Company: Roche Diagnostics Operations, Inc.
EUT: Accu-Chek Guide ME Meter
Test: Duty Cycle – special mode for testing purposes
Operator: Craig B; Project #9116

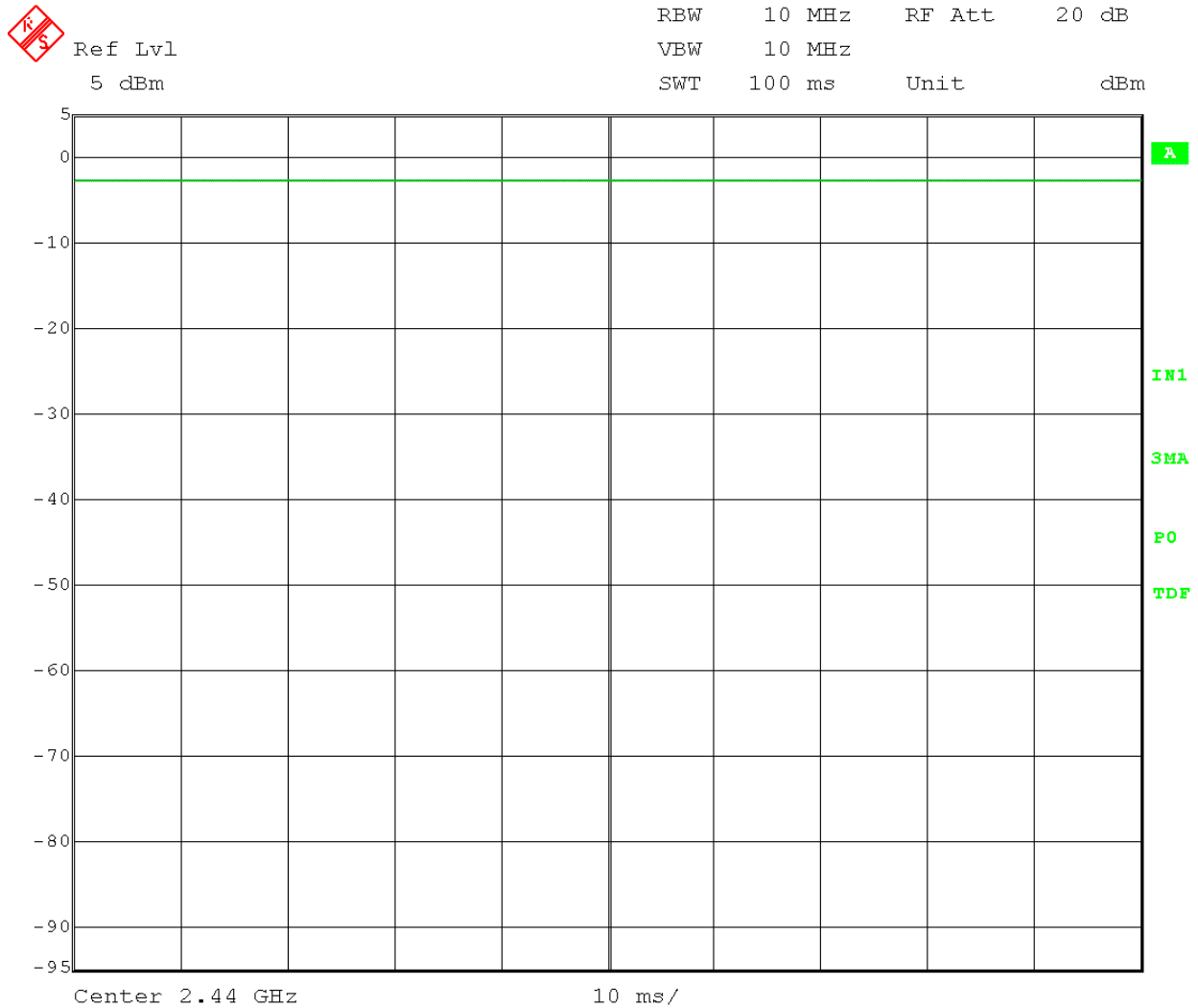
Comment: Duty Cycle = 100%



Date: 26.JAN.2018 10:28:58

Test Date: 01-26-2018
 Company: Roche Diagnostics Operations, Inc.
 EUT: Accu-Chek Guide ME Meter
 Test: Duty Cycle – special mode for testing purposes
 Operator: Craig B; Project #9116

Comment: Duty Cycle = 100%



Date: 26.JAN.2018 10:29:38



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Appendix B

B2.0 DTS Bandwidth (6 dB bandwidth)

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

Test Procedure: ANSI C63.10-2013, sections 11.8 & 11.8.2

Limit: Must be greater than 500 kHz.

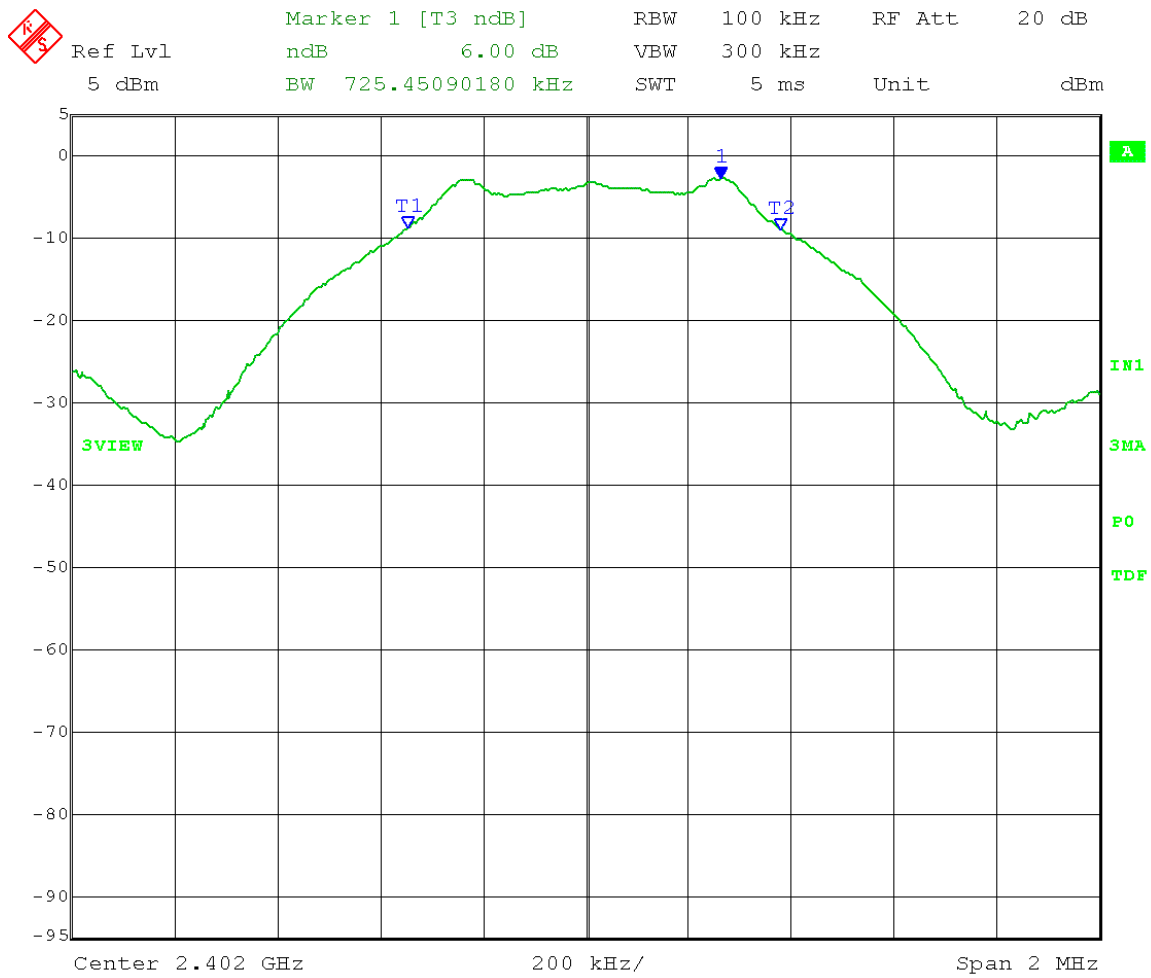
Results: Compliant
6 dB bandwidth = 717 kHz

Notes: The EUT was set to transmit at its maximum power with 100% duty cycle.
The EUT was tested at Low, Mid., and High Channels.

Test Date: 01-26-2018
Company: Roche Diagnostics Operations, Inc.
EUT: Accu-Chek Guide ME Meter
Test: DTS Bandwidth (6 dB)
Operator: Craig B; Project #9116

Comment: Low Channel: Frequency – 2.402 GHz

6 dB Bandwidth = 725 kHz

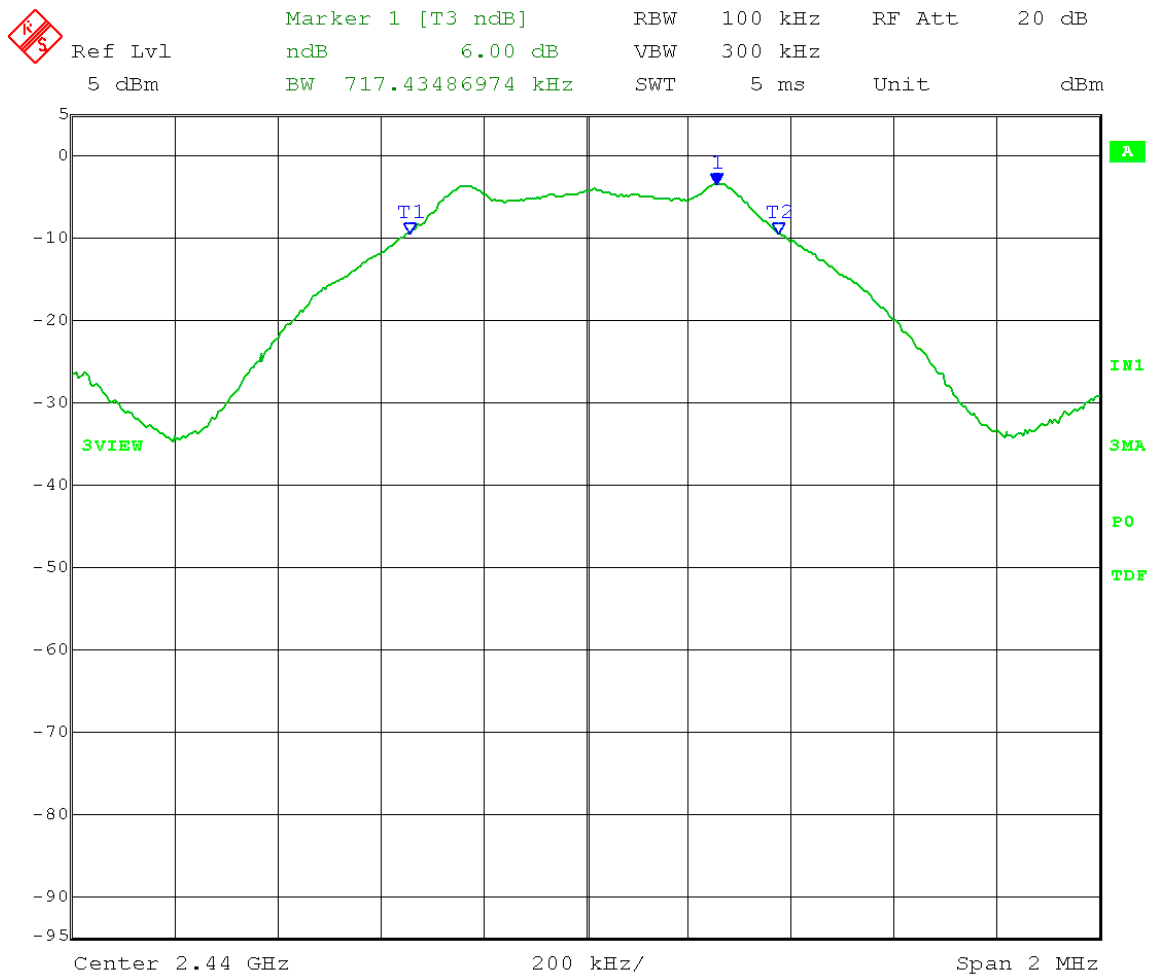


Date: 26.JAN.2018 10:46:07

Test Date: 01-26-2018
Company: Roche Diagnostics Operations, Inc.
EUT: Accu-Chek Guide ME Meter
Test: DTS Bandwidth (6 dB)
Operator: Craig B; Project #9116

Comment: Middle Channel: Frequency – 2.440 GHz

6 dB Bandwidth = 717 kHz

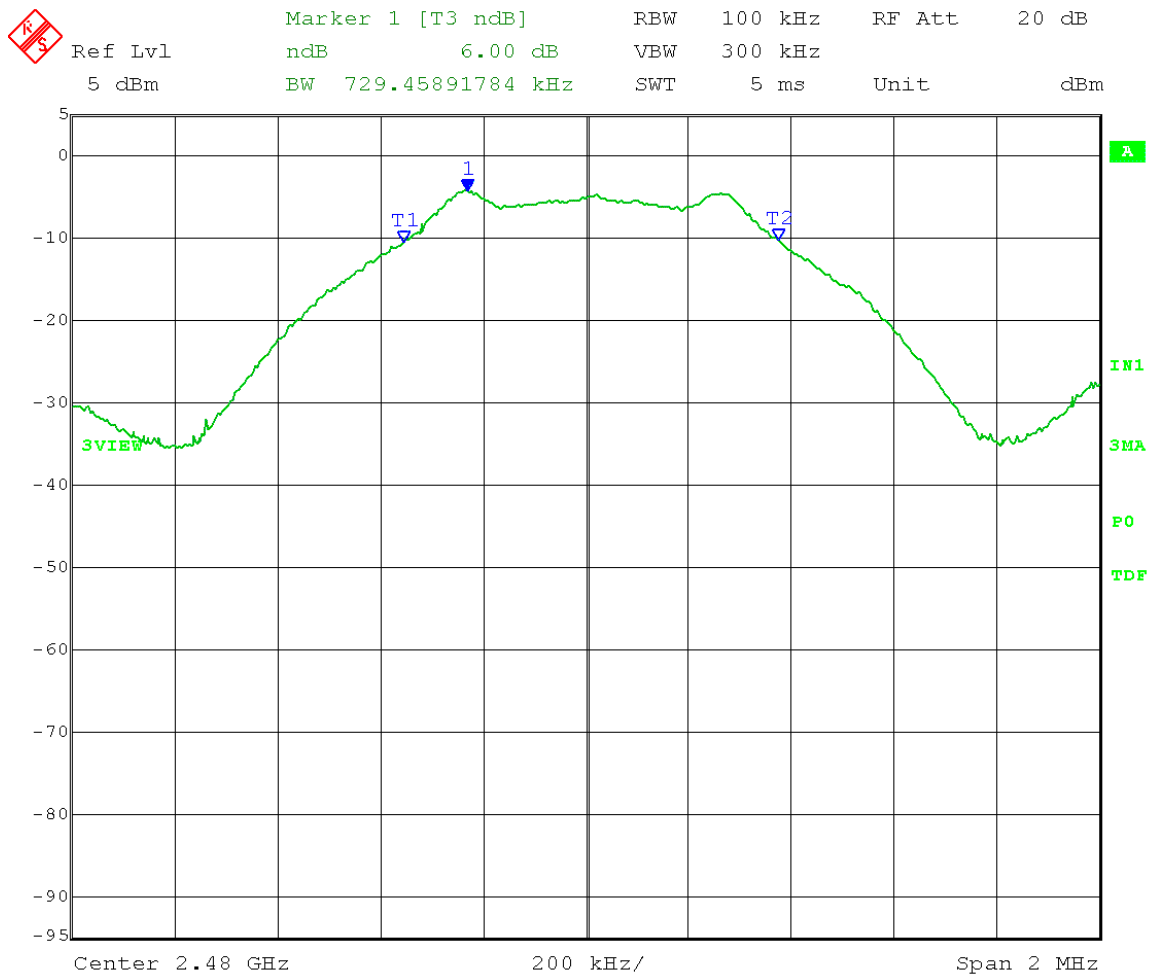


Date: 26.JAN.2018 10:49:22

Test Date: 01-26-2018
Company: Roche Diagnostics Operations, Inc.
EUT: Accu-Chek Guide ME Meter
Test: DTS Bandwidth (6 dB)
Operator: Craig B; Project #9116

Comment: High Channel: Frequency – 2.480 GHz

6 dB Bandwidth = 729 kHz



Date: 26.JAN.2018 10:43:51



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Appendix B

B3.0 Fundamental Emission Output Power

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

Test Procedure: ANSI C63.10-2013, sections 11.9.1 & 11.9.1.1

Limit: 1 Watt (30 dBm)

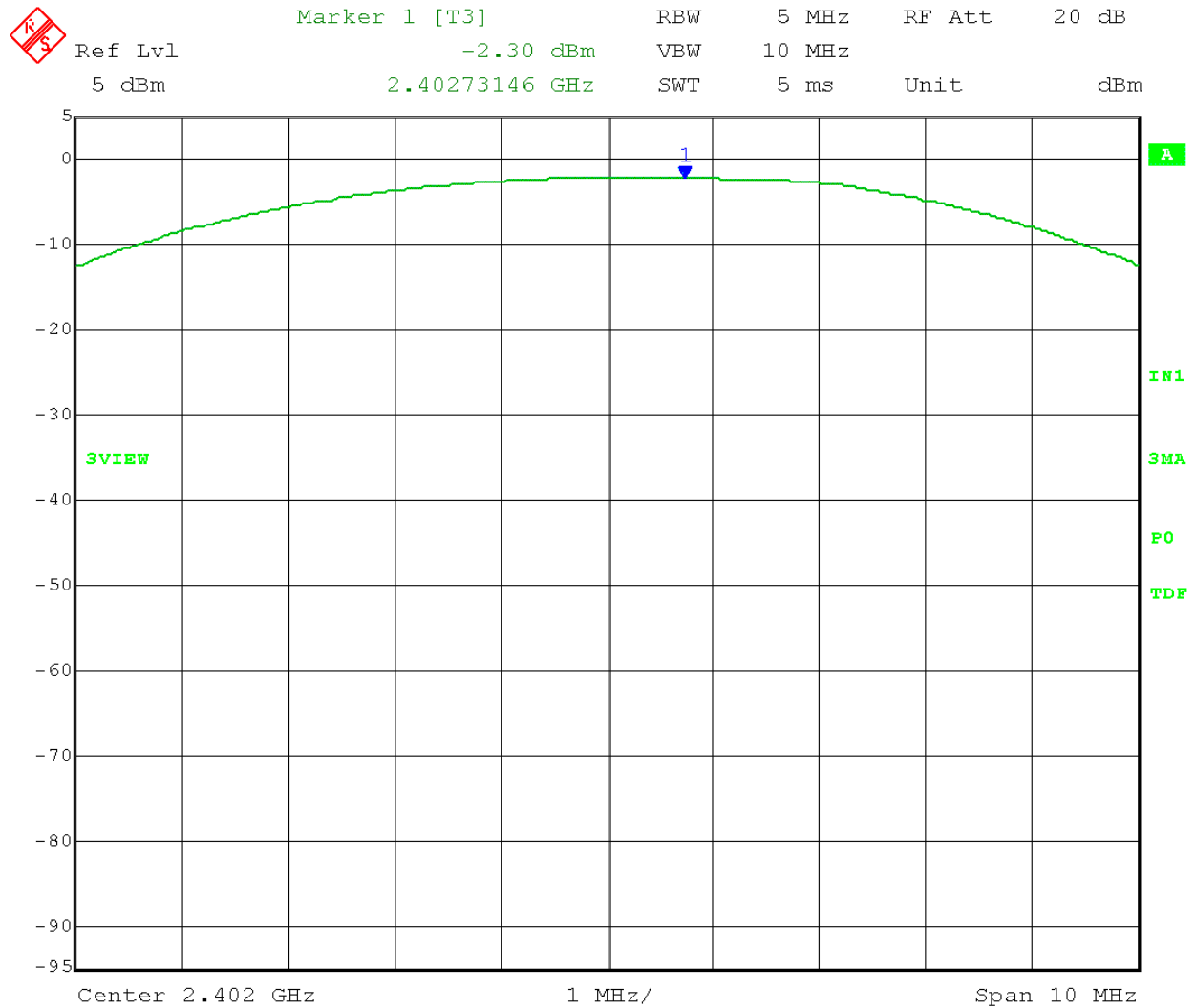
Results: Compliant
Maximum peak conducted output power = -2.30 dBm

Notes: This was an RF conducted measurement. The EUT was connected to the measuring equipment through a temporary external antenna connector. Cable loss was accounted for in the transducer factors set in the analyzer. The EUT was set to transmit continuously (100% Duty Cycle) at its maximum power level at the low, middle and high channels of the operating band. Peak Output power was measured with a spectrum analyzer.

Test Date: 01-26-2018
Company: Roche Diagnostics Operations, Inc.
EUT: Accu-Chek Guide ME Meter
Test: Output power - Conducted
Operator: Craig B; Project #9116

Comment: Power setting: 0
Low Channel (Channel 0): 2402 MHz

Peak Output Power = -2.30 dBm = 0.589 mW

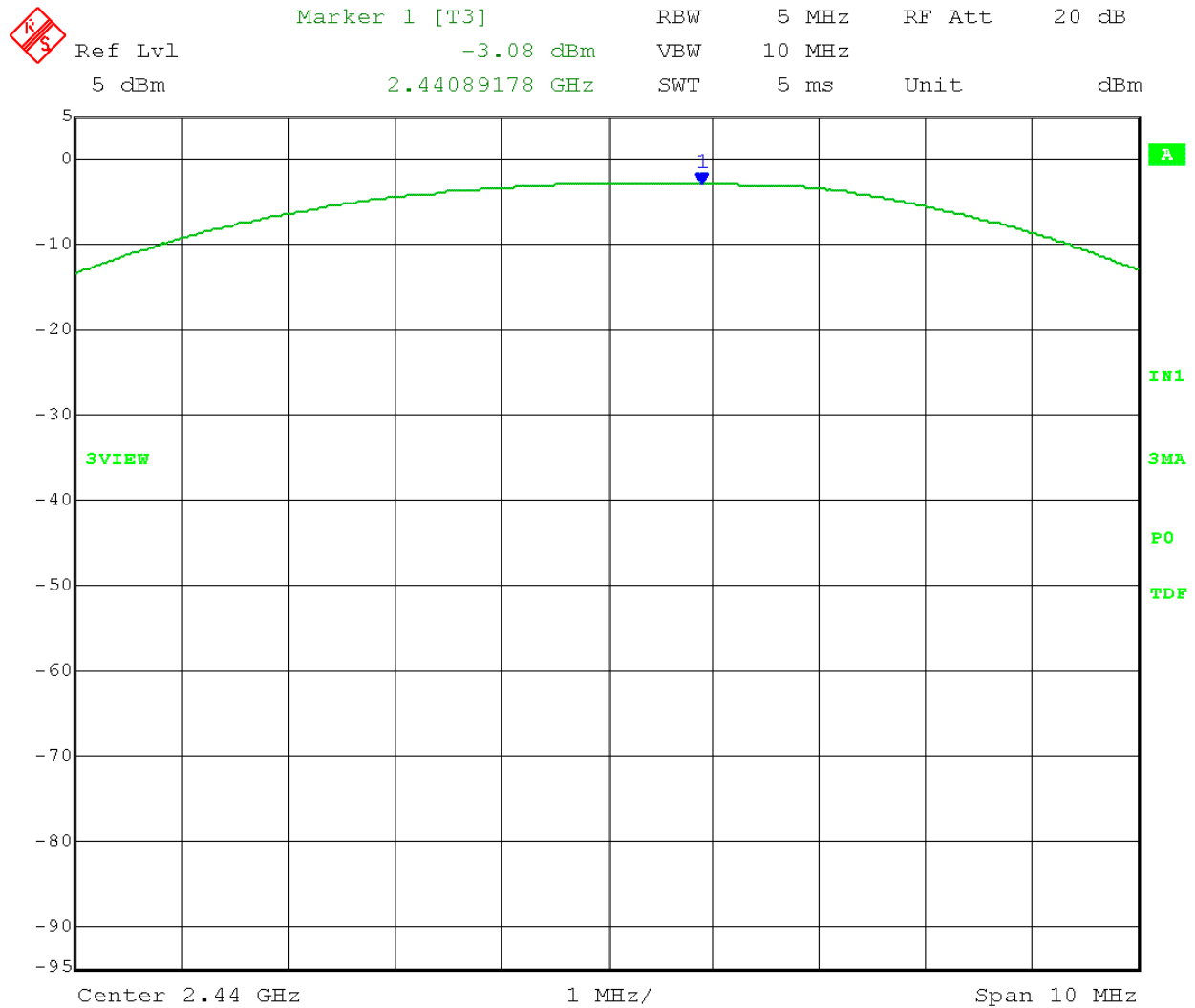


Date: 26.JAN.2018 10:36:33

Test Date: 01-26-2018
Company: Roche Diagnostics Operations, Inc.
EUT: Accu-Chek Guide ME Meter
Test: Output power - Conducted
Operator: Craig B; Project #9116

Comment: Power setting: 0
Mid Channel (Channel 19): 2440 MHz

Peak Output Power = -3.08 dBm = 0.492 mW

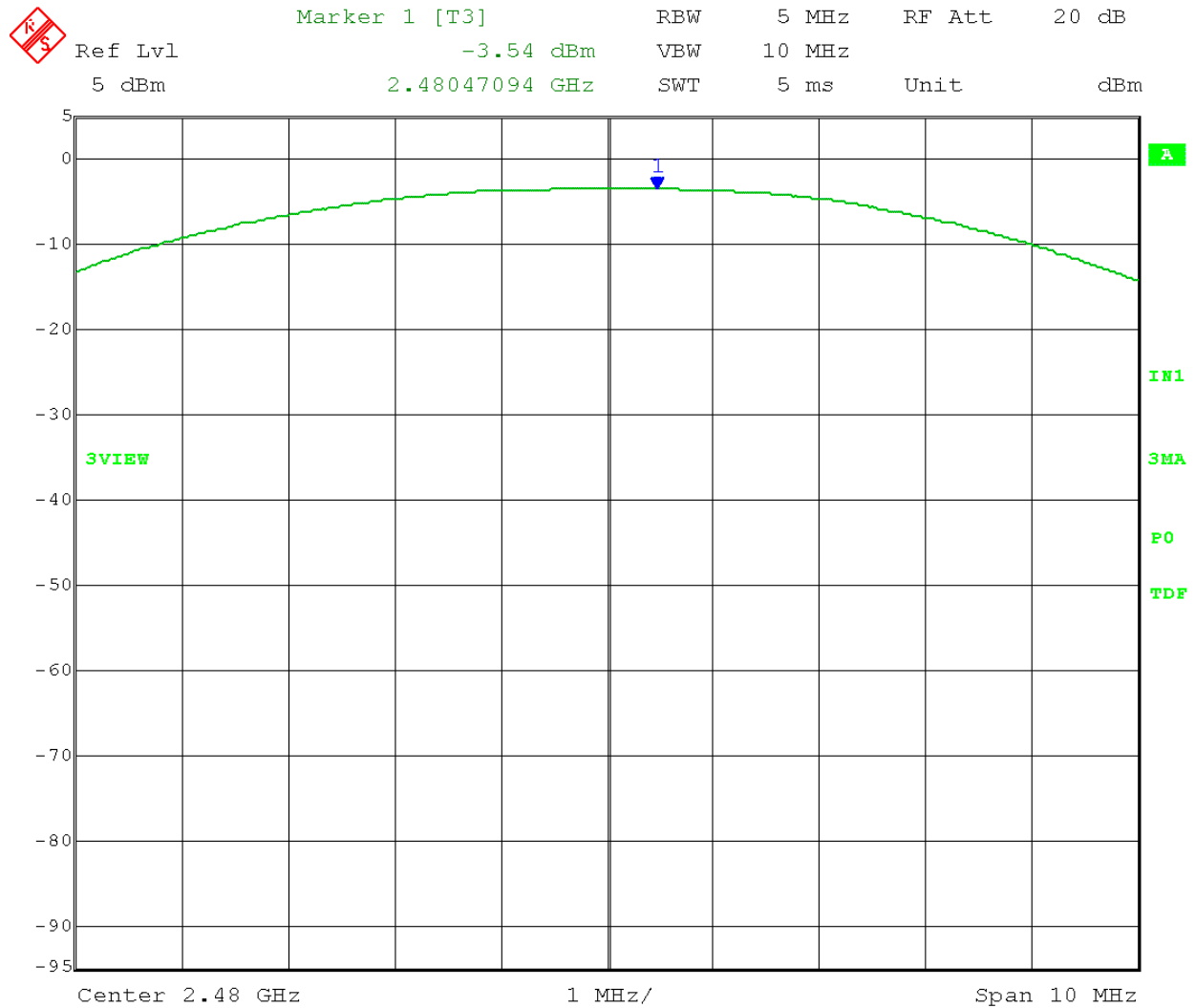


Date: 26.JAN.2018 10:31:30

Test Date: 01-26-2018
Company: Roche Diagnostics Operations, Inc.
EUT: Accu-Chek Guide ME Meter
Test: Output power - Conducted
Operator: Craig B; Project #9116

Comment: Power setting: 0
High Channel (Channel 39): 2480 MHz

Peak Output Power = -3.54 dBm = 0.443 mW



Date: 26.JAN.2018 10:38:43



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Appendix B

B4.0 Maximum Power Spectral Density

Rule Part: FCC Part 15.247(e)

Test Procedure: ANSI C63.10-2013, sections 11.10 & 11.10.2

Limit: +8 dBm / 3 kHz

Results: Compliant
Maximum peak power spectral density = -14.31 dBm / 3 kHz

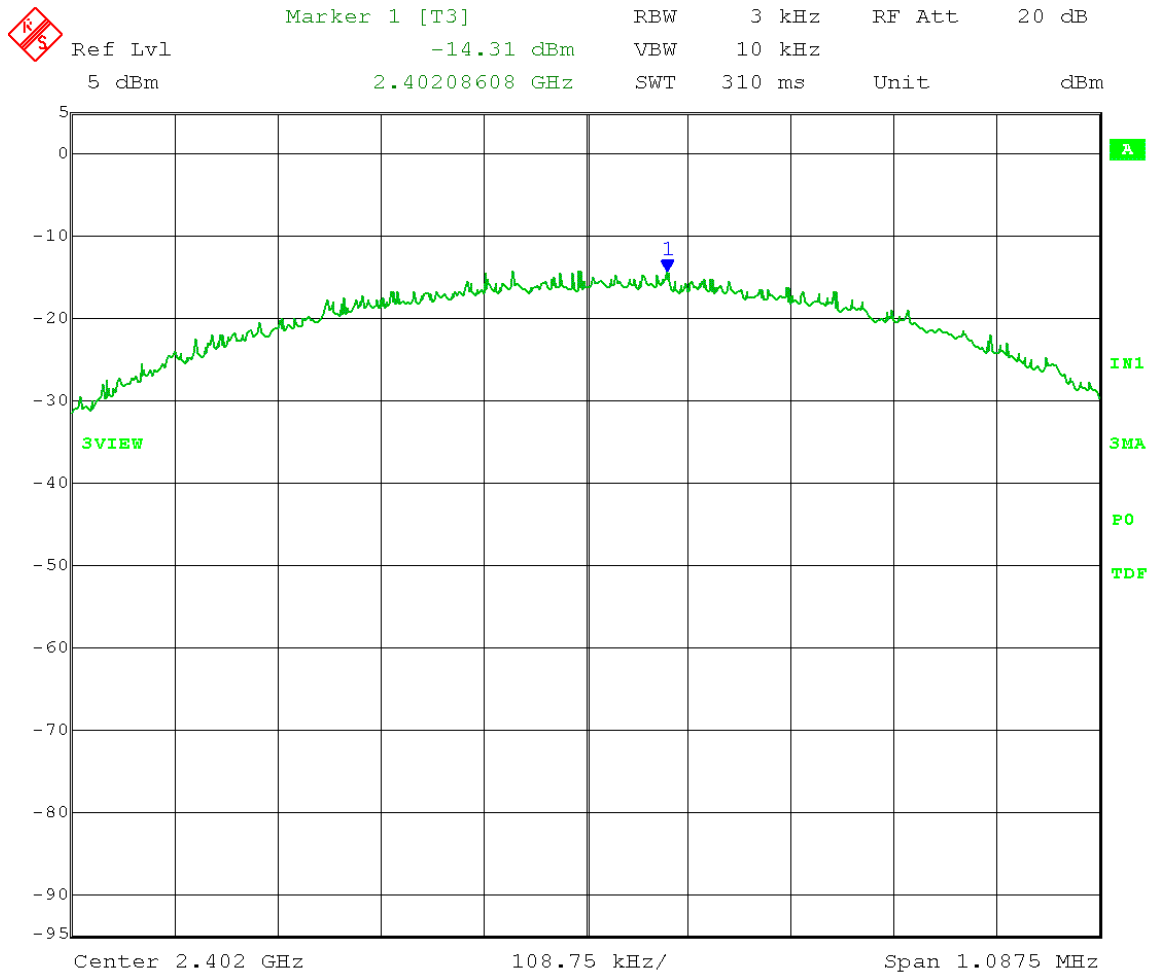
Notes: The EUT was set to transmit at its maximum power with 100% duty cycle. Low, Mid. & High Channels were tested. PSD Method PKPSD was used for this test.

Test Date: 01-26-2018
Company: Roche Diagnostics Operations, Inc.
EUT: Accu-Chek Guide ME Meter
Test: Maximum Power Spectral Density – RF Conducted
Operator: Craig B; Project #9116

Comment: Power setting: 0
RBW = 3 kHz
VBW $\geq 3 \times$ RBW
Span = 1.5 x DTS BW
Detector = Peak
Sweep = auto couple
Trace = max hold

Limit: **Low Channel: Frequency – 2.402 GHz**
8 dBm/3kHz

Peak PSD = -14.31 dBm/3kHz



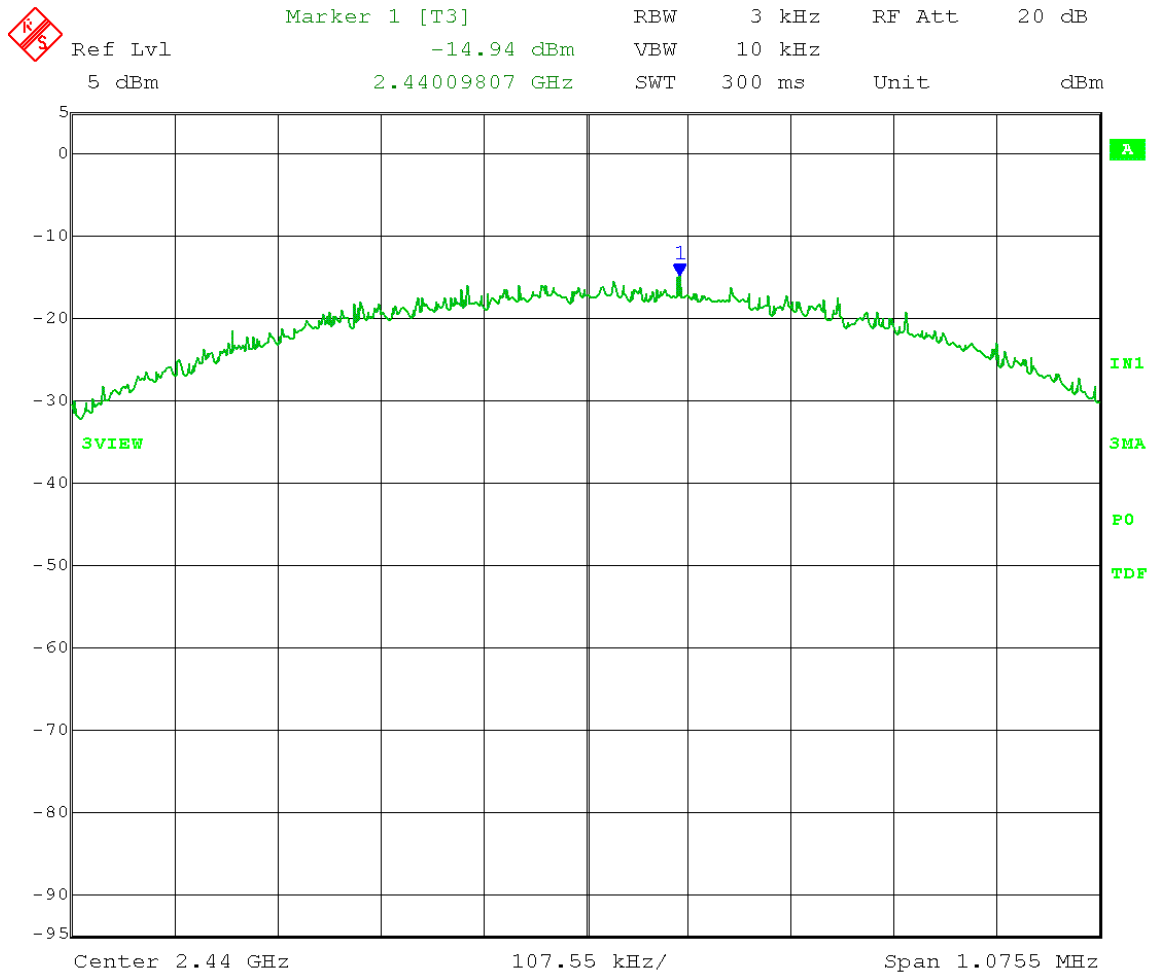
Date: 26.JAN.2018 11:55:42

Test Date: 01-26-2018
Company: Roche Diagnostics Operations, Inc.
EUT: Accu-Chek Guide ME Meter
Test: Maximum Power Spectral Density – RF Conducted
Operator: Craig B; Project #9116

Comment: Power setting: 0
RBW = 3 kHz
VBW $\geq 3 \times$ RBW
Span = 1.5 x DTS BW
Detector = Peak
Sweep = auto couple
Trace = max hold

Limit: **Mid Channel: Frequency – 2.440 GHz**
8 dBm/3kHz

Peak PSD = -14.94 dBm/3kHz



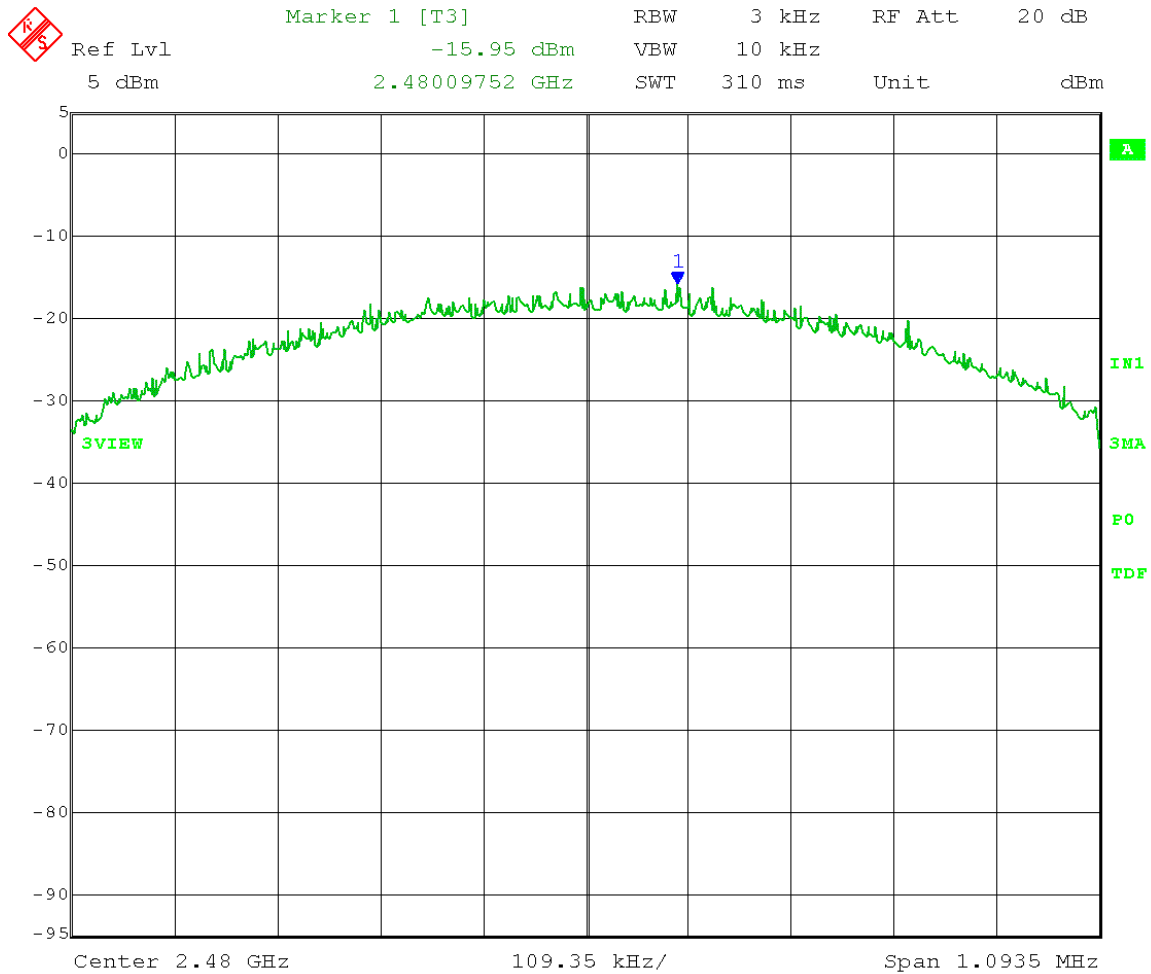
Date: 26.JAN.2018 11:50:22

Test Date: 01-26-2018
Company: Roche Diagnostics Operations, Inc.
EUT: Accu-Chek Guide ME Meter
Test: Maximum Power Spectral Density – RF Conducted
Operator: Craig B; Project #9116

Comment: Power setting: 0
RBW = 3 kHz
VBW $\geq 3 \times$ RBW
Span = 1.5 x DTS BW
Detector = Peak
Sweep = auto couple
Trace = max hold

Limit: High Channel: Frequency – 2.480 GHz
8 dBm/3kHz

Peak PSD = -15.95 dBm/3kHz



Date: 26.JAN.2018 11:45:56



Company:	Roche Diagnostics Operations
Model Tested:	897
Report Number:	23449
DLS Project:	9116

166 South Carter, Genoa City, WI 53128

Appendix B

B5.0 Operating Band-Edge – RF Conducted

Rule Part: FCC Part 15.247(d)

Test Procedure: ANSI C63.10-2013, sections 11.11, 11.11.2, and 11.11.3

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: This was an RF conducted measurement. The EUT was connected to the measuring equipment through a temporary external antenna connector. Cable loss was accounted for in the transducer factors set in the analyzer.

The EUT was set to transmit at its maximum power with 100% duty cycle at the low and high channels of the operating band.

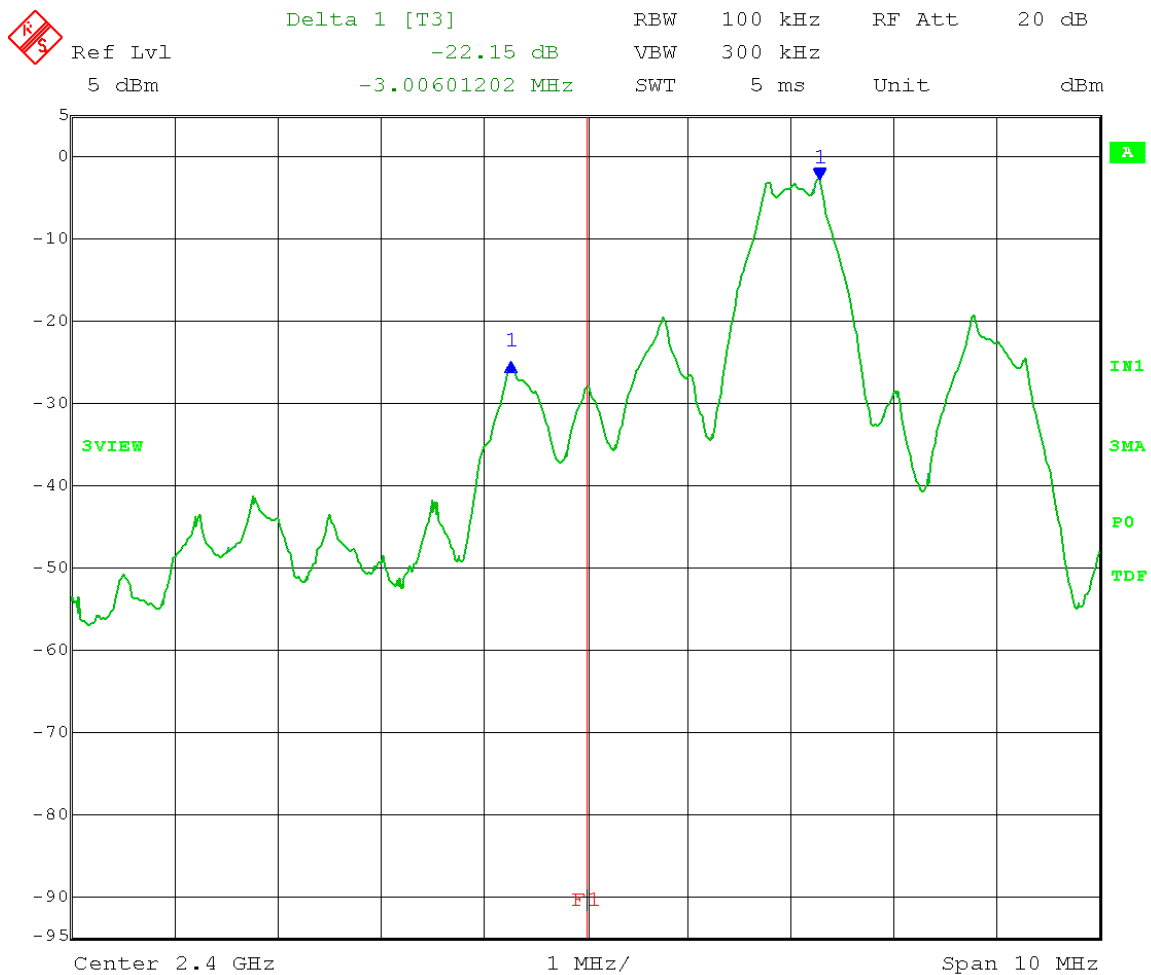
Test Date: 01-26-2018
Company: Roche Diagnostics Operations, Inc.
EUT: Accu-Chek Guide ME Meter
Test: Operating Band-Edge Measurement – RF conducted
Operator: Craig B; Project #9116

Comment: RBW = 100 kHz
VBW ≥ 300 kHz
Detector = Peak
Sweep = auto couple
Trace = max hold

Low Channel: Transmit = 2.402 GHz

Limit: Band-Edge > 20 dB Below Peak In-Band Emission

Band-Edge Frequency = 2.4 GHz



Date: 26.JAN.2018 11:21:04

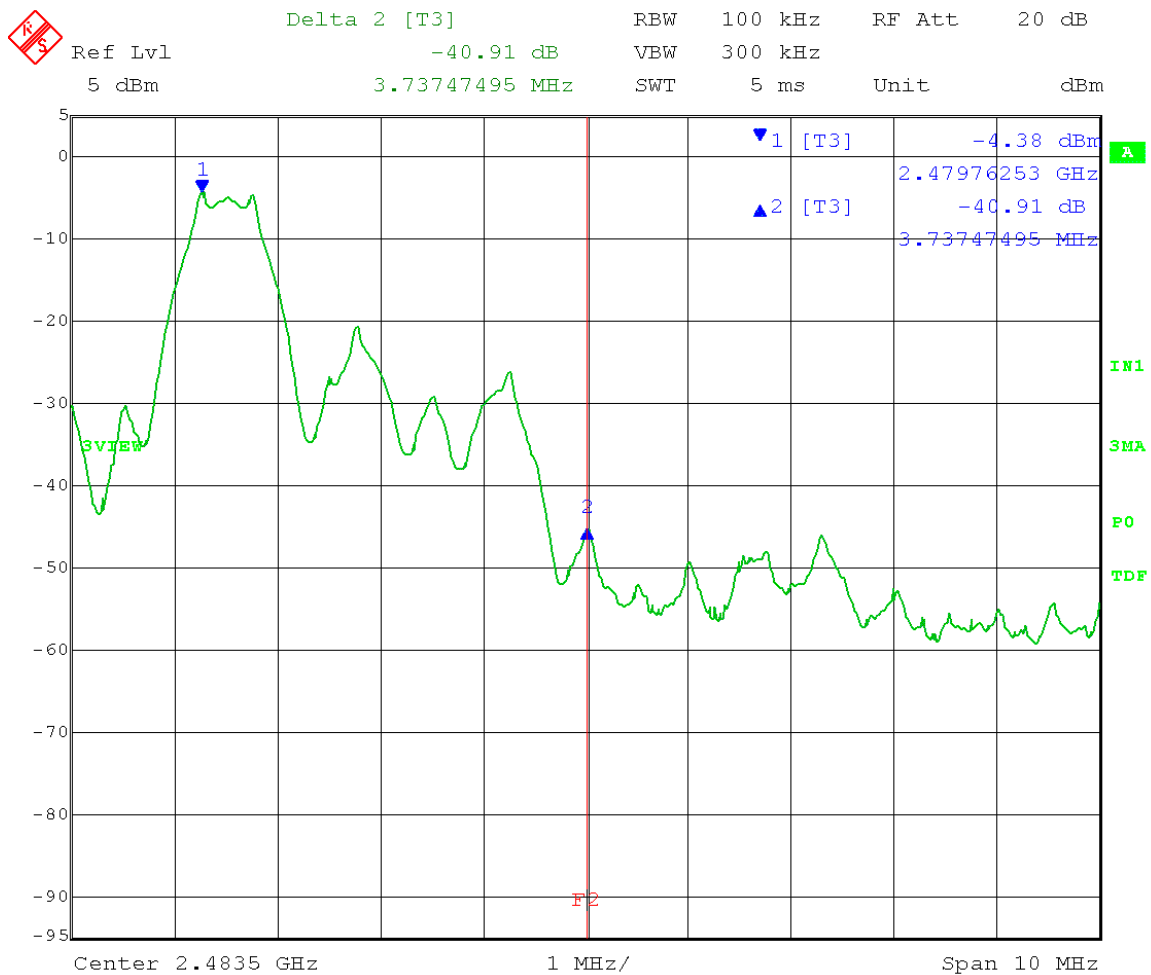
Test Date: 01-26-2018
Company: Roche Diagnostics Operations, Inc.
EUT: Accu-Chek Guide ME Meter
Test: Operating Band-Edge Measurement – RF conducted
Operator: Craig B; Project #9116

Comment: RBW = 100 kHz
VBW ≥ 300 kHz
Detector = Peak
Sweep = auto couple
Trace = max hold

High Channel: Transmit = 2.480 GHz

Limit: Band-Edge > 20 dB Below Peak In-Band Emission

Band-Edge Frequency = 2.4835 GHz



Date: 26.JAN.2018 11:25:56



Company:	Roche Diagnostics Operations
Model Tested:	897
Report Number:	23449
DLS Project:	9116

166 South Carter, Genoa City, WI 53128

Appendix B

B6.0 Restricted Band-Edge – Radiated

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

Test Procedure: ANSI C63.10-2013, sections 11.12 & 11.12.1

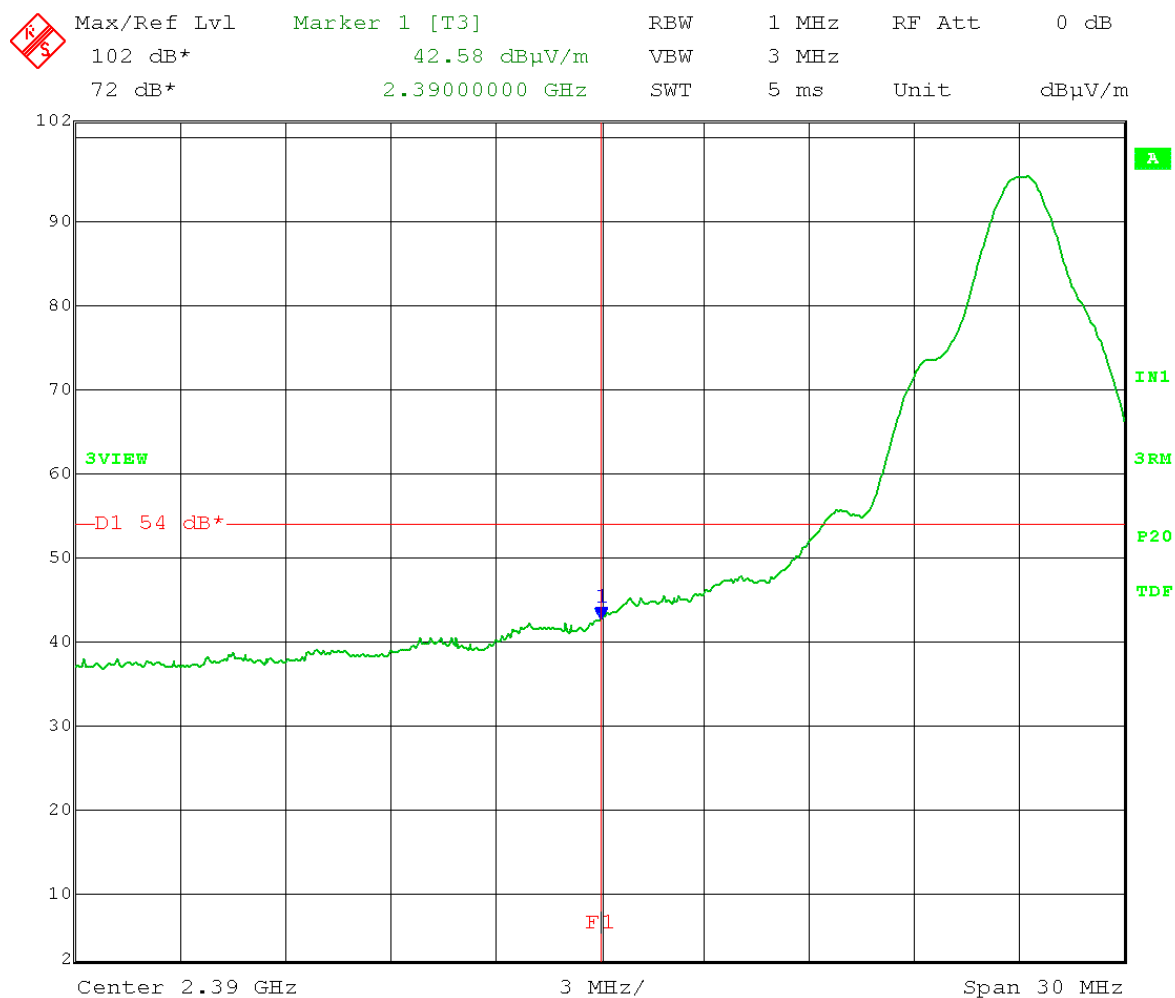
Limit: FCC 15.209

Results: Compliant

Notes: The EUT was set to transmit at its maximum power with 100% duty cycle at the low and high channels of the operating band.

Test Date: 01-26-2018
 Company: Roche Diagnostics Operations, Inc.
 EUT: Accu-Chek Guide ME Meter
 Test: Lower Restricted Band Edge – Radiated
 Operator: Craig B; Project #9116
 Comment: Low Channel: 2402 MHz

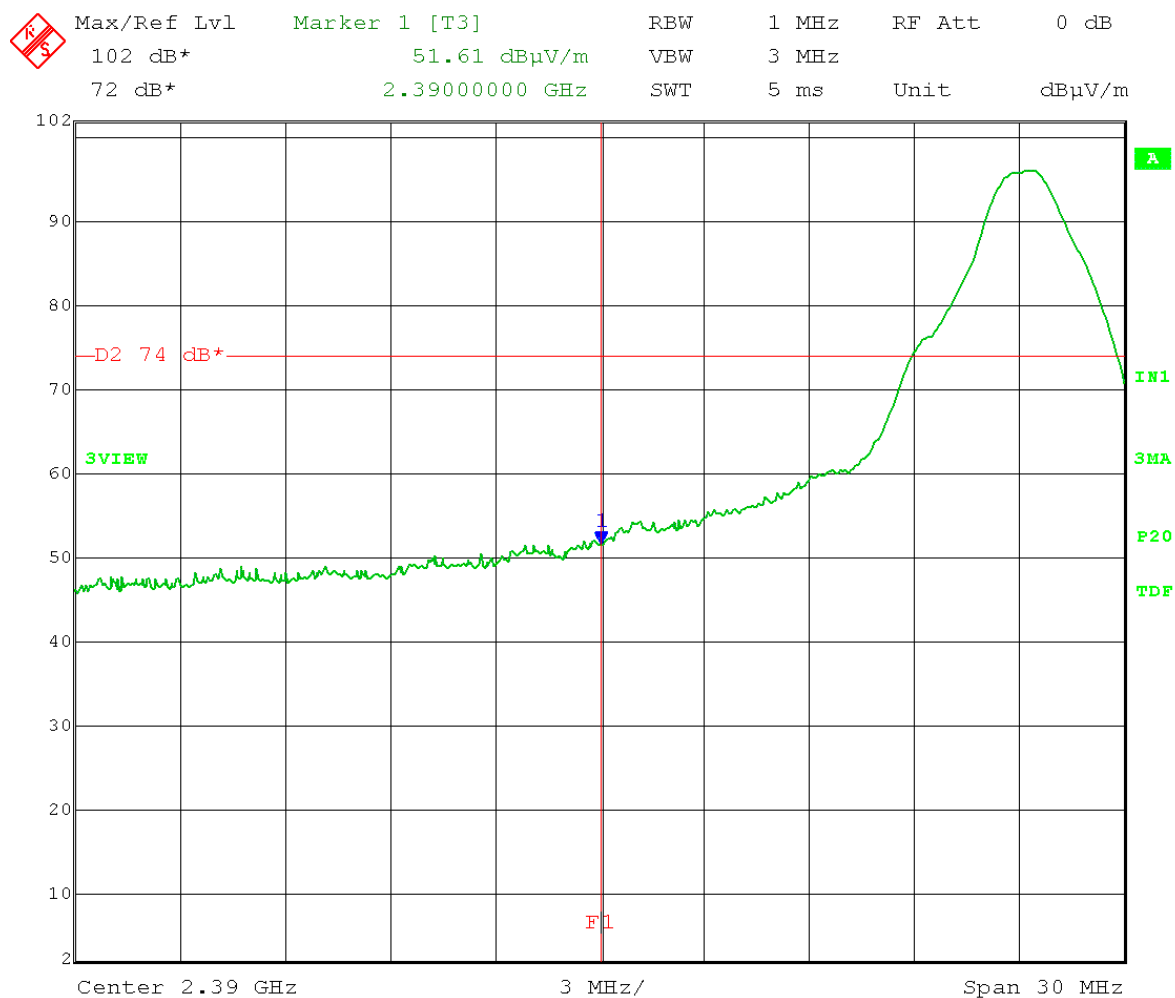
Polarization: Vertical
 Detector: RMS; max-hold
 Limit: Average



Date: 26.JAN.2018 15:29:08

Test Date: 01-26-2018
 Company: Roche Diagnostics Operations, Inc.
 EUT: Accu-Chek Guide ME Meter
 Test: Lower Restricted Band Edge – Radiated
 Operator: Craig B; Project #9116
 Comment: Low Channel: 2402 MHz

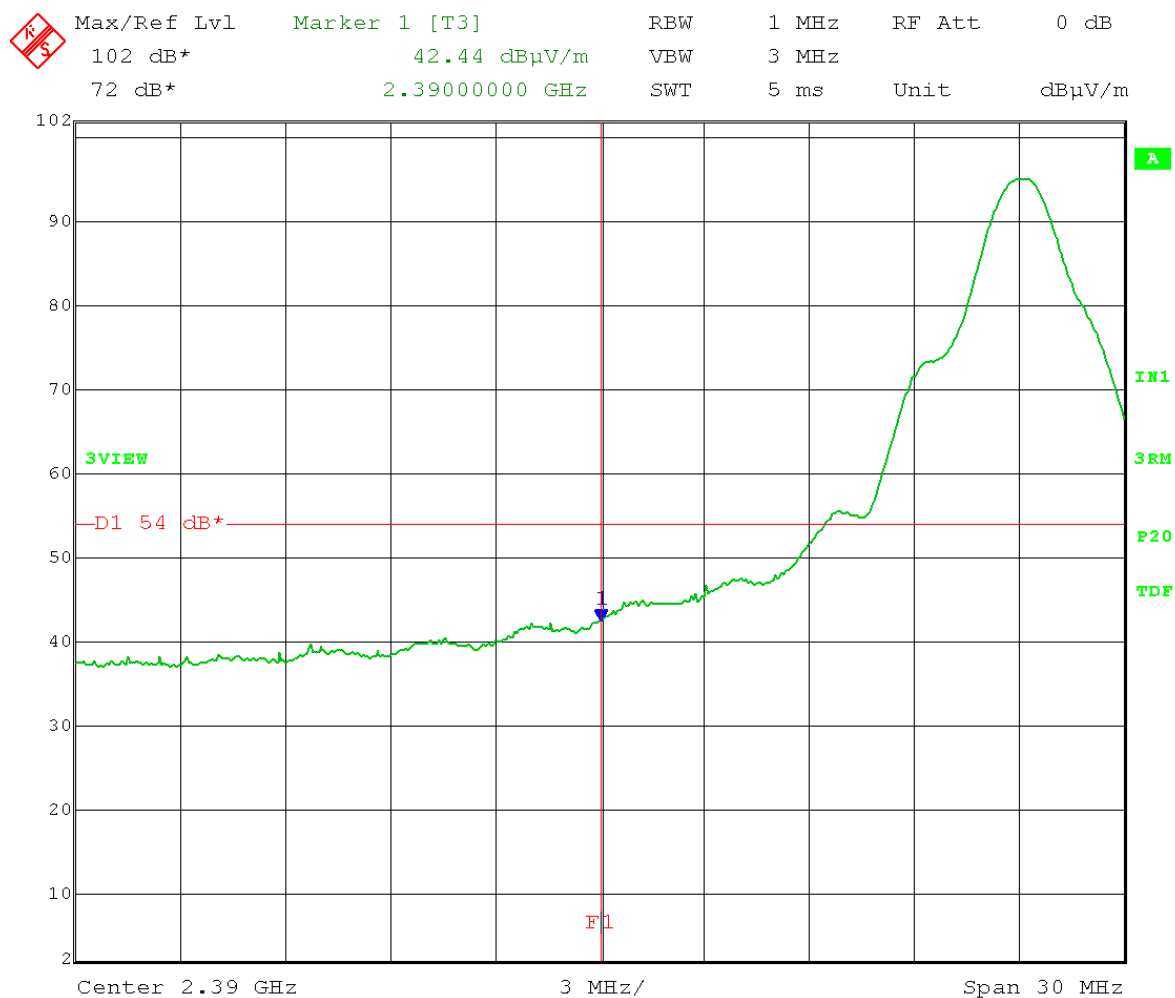
Polarization: Vertical
 Detector: Peak; max-hold
 Limit: Peak



Date: 26.JAN.2018 15:31:42

Test Date: 01-26-2018
Company: Roche Diagnostics Operations, Inc.
EUT: Accu-Chek Guide ME Meter
Test: Lower Restricted Band Edge – Radiated
Operator: Craig B; Project #9116
Comment: Low Channel: 2402 MHz

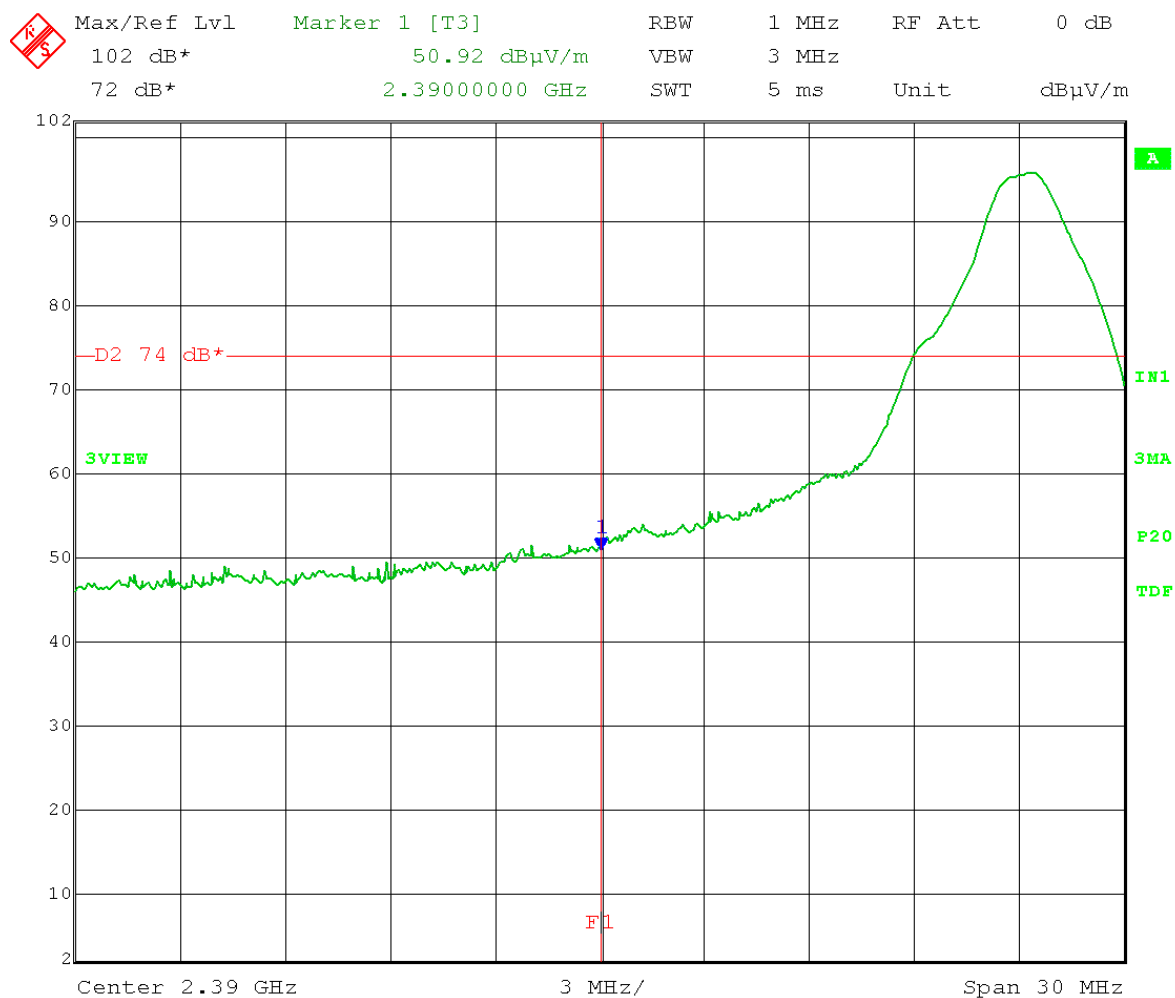
Polarization: Horizontal
Detector: RMS; max-hold
Limit: Average



Date: 26.JAN.2018 16:00:54

Test Date: 01-26-2018
 Company: Roche Diagnostics Operations, Inc.
 EUT: Accu-Chek Guide ME Meter
 Test: Lower Restricted Band Edge – Radiated
 Operator: Craig B; Project #9116
 Comment: Low Channel: 2402 MHz

Polarization: Horizontal
 Detector: Peak; max-hold
 Limit: Peak

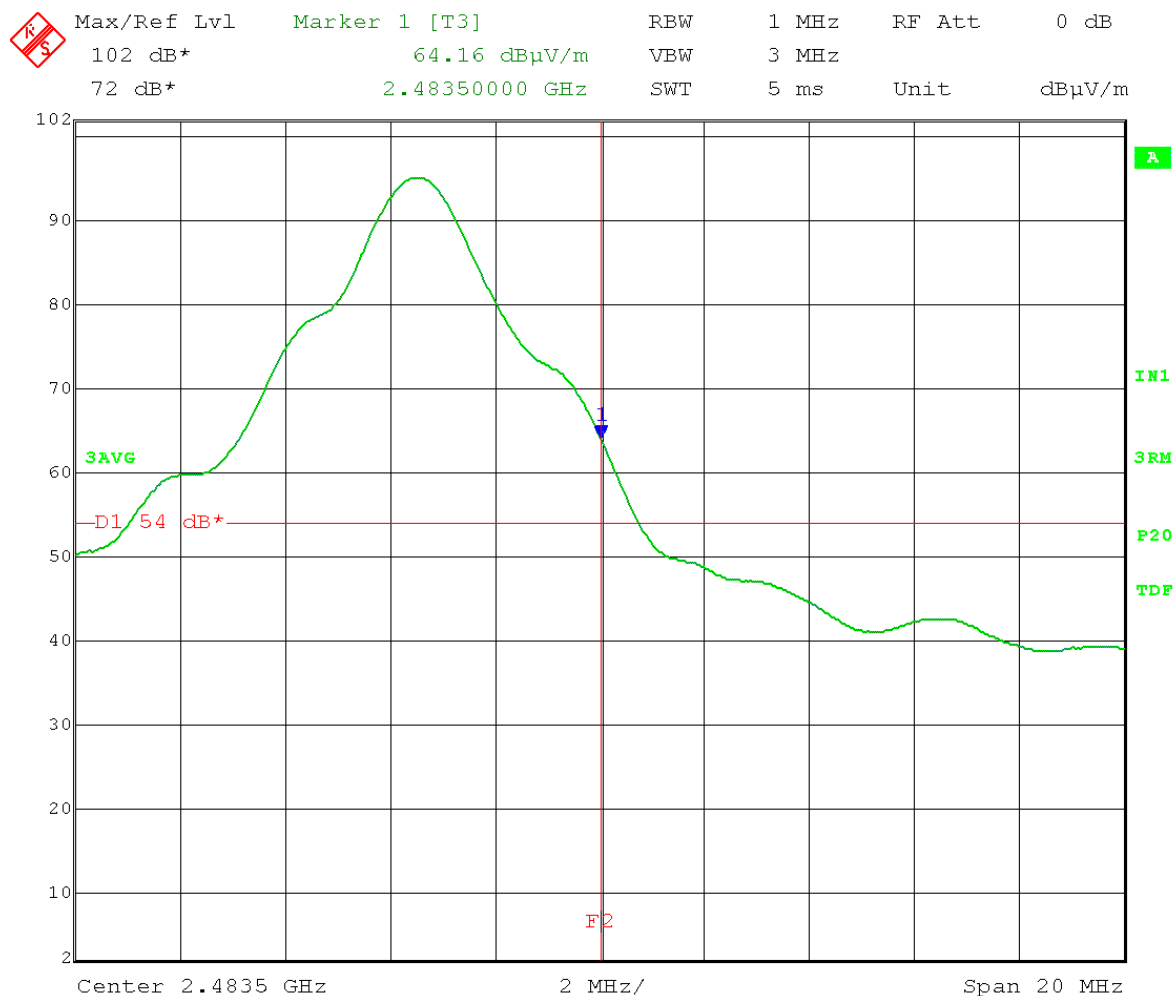


Date: 26.JAN.2018 16:01:57

Test Date: 01-31-2018
 Company: Roche Diagnostics Operations, Inc.
 EUT: Accu-Chek Guide ME Meter
 Test: Upper Restricted Band Edge – Radiated
 Operator: Craig B; Project #9116
 Comment: High Channel: 2480 MHz

Polarization: Vertical
 Detector: RMS; average 200 traces
 Limit: Average

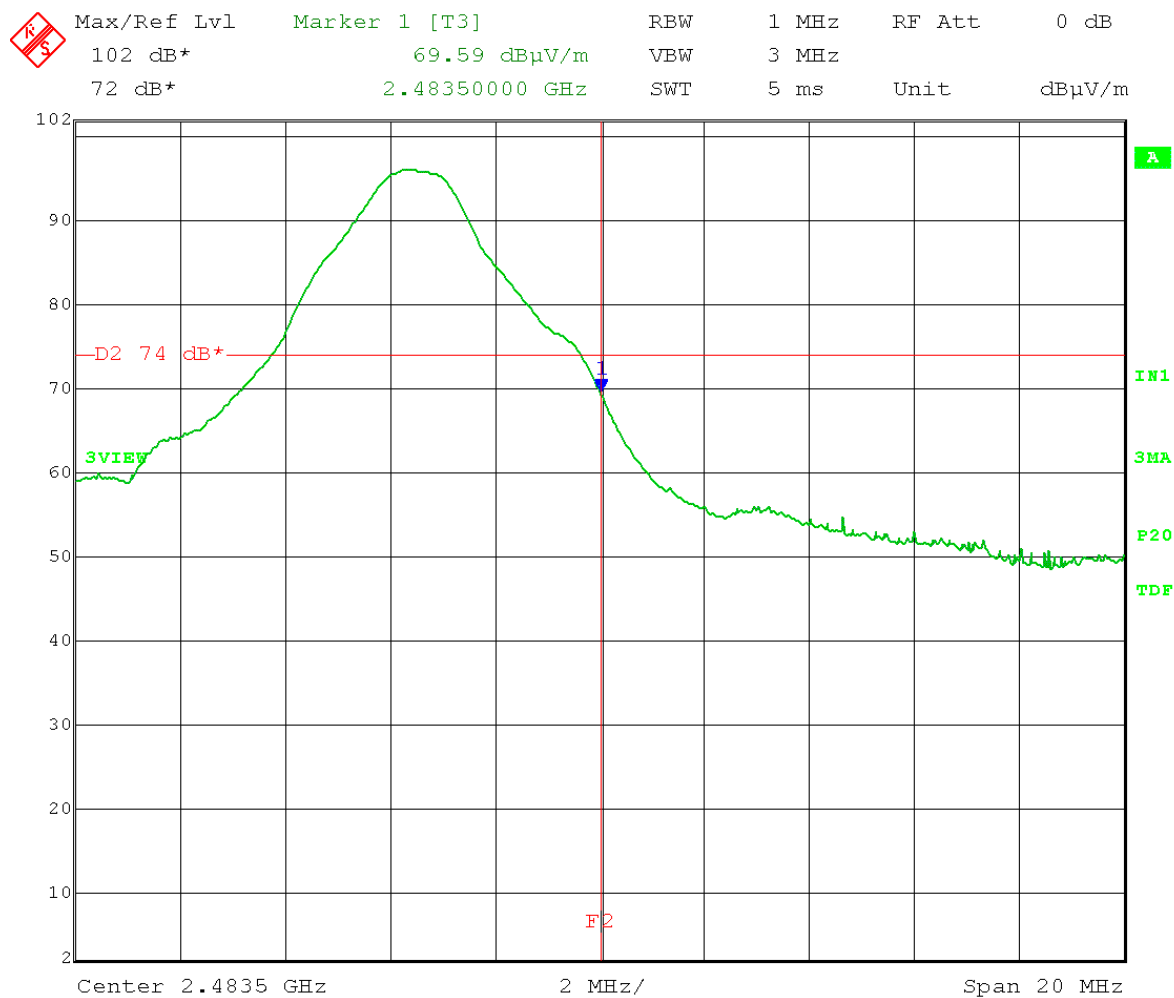
64.16 dBμV/m – 17.5 dB (duty cycle reduction per 15.31(c)) = **46.66**



Date: 31.JAN.2018 15:17:37

Test Date: 01-31-2018
 Company: Roche Diagnostics Operations, Inc.
 EUT: Accu-Chek Guide ME Meter
 Test: Upper Restricted Band Edge – Radiated
 Operator: Craig B; Project #9116
 Comment: High Channel: 2480 MHz

Polarization: Vertical
 Detector: Peak; max-hold
 Limit: Peak

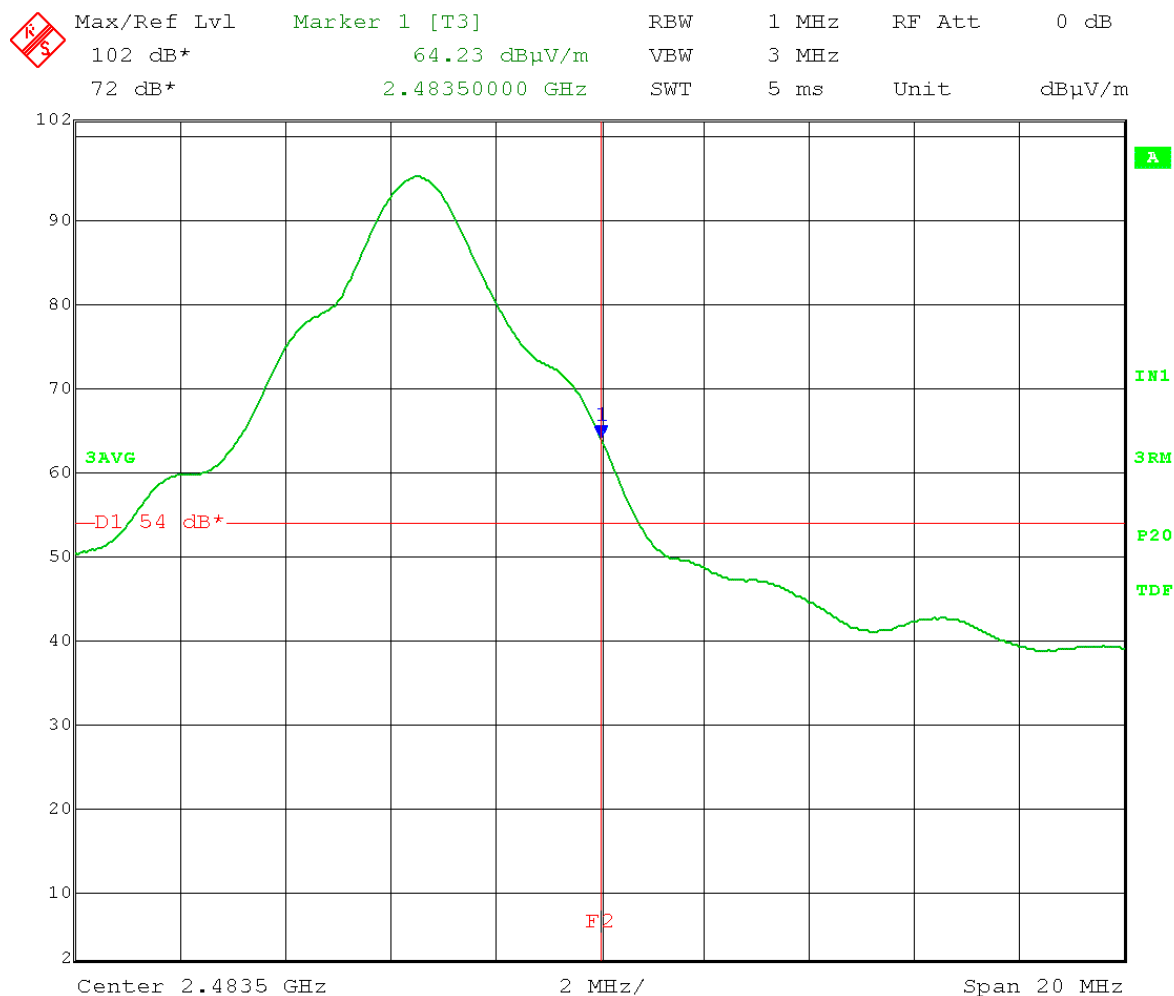


Date: 31.JAN.2018 15:20:03

Test Date: 01-31-2018
 Company: Roche Diagnostics Operations, Inc.
 EUT: Accu-Chek Guide ME Meter
 Test: Upper Restricted Band Edge – Radiated
 Operator: Craig B; Project #9116
 Comment: High Channel: 2480 MHz

Polarization: Horizontal
 Detector: RMS; average 200 traces
 Limit: Average

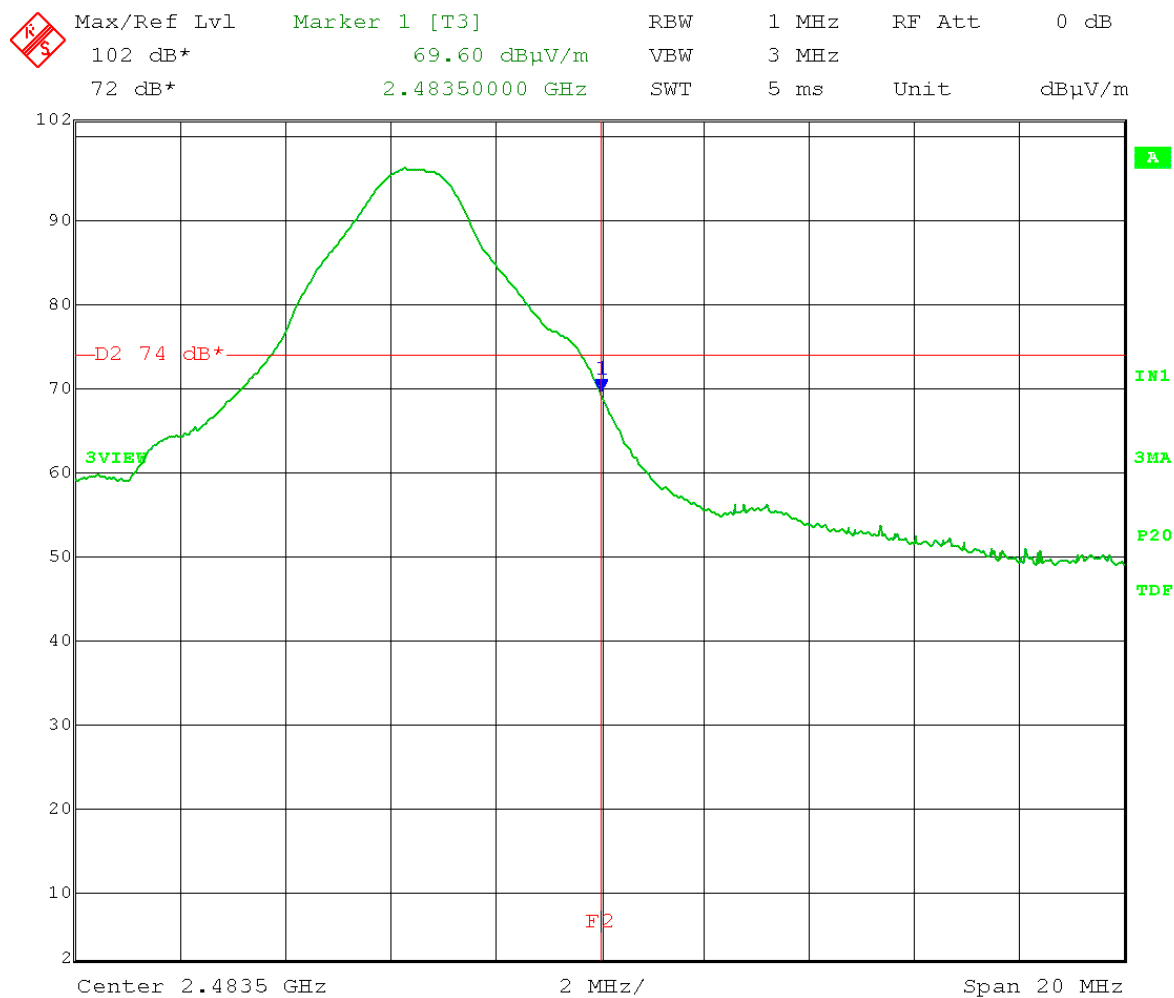
64.23 dBμV/m – 17.5 dB (duty cycle reduction per 15.31(c)) = **46.73**



Date: 31.JAN.2018 15:28:54

Test Date: 01-31-2018
 Company: Roche Diagnostics Operations, Inc.
 EUT: Accu-Chek Guide ME Meter
 Test: Upper Restricted Band Edge – Radiated
 Operator: Craig B; Project #9116
 Comment: High Channel: 2480 MHz

Polarization: Horizontal
 Detector: Peak; max-hold
 Limit: Peak



Date: 31.JAN.2018 15:42:53



Company:	Roche Diagnostics Operations
Model Tested:	897
Report Number:	23449
DLS Project:	9116

166 South Carter, Genoa City, WI 53128

Appendix B

B7.0 Emissions in Non-Restricted Frequency Bands – RF Conducted

Rule Part: FCC Part 15.247(d)

Test Procedure: ANSI C63.10-2013, sections 11.11, 11.11.1, 11.11.2, 11.11.3

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: This was an RF conducted measurement. The EUT was connected to the measuring equipment through a temporary external antenna connector. Cable loss was accounted for in the transducer factors set in the analyzer.

The EUT was set to transmit at its maximum power with 100% duty cycle at the low, middle and high channels of the operating band.
A peak detector was used for this test.

Test Date: 01-26-2018
Company: Roche Diagnostics Operations, Inc.
EUT: Accu-Chek Guide ME Meter
Test: Maximum Unwanted Emission Levels - Conducted
Operator: Craig B; Project #9116

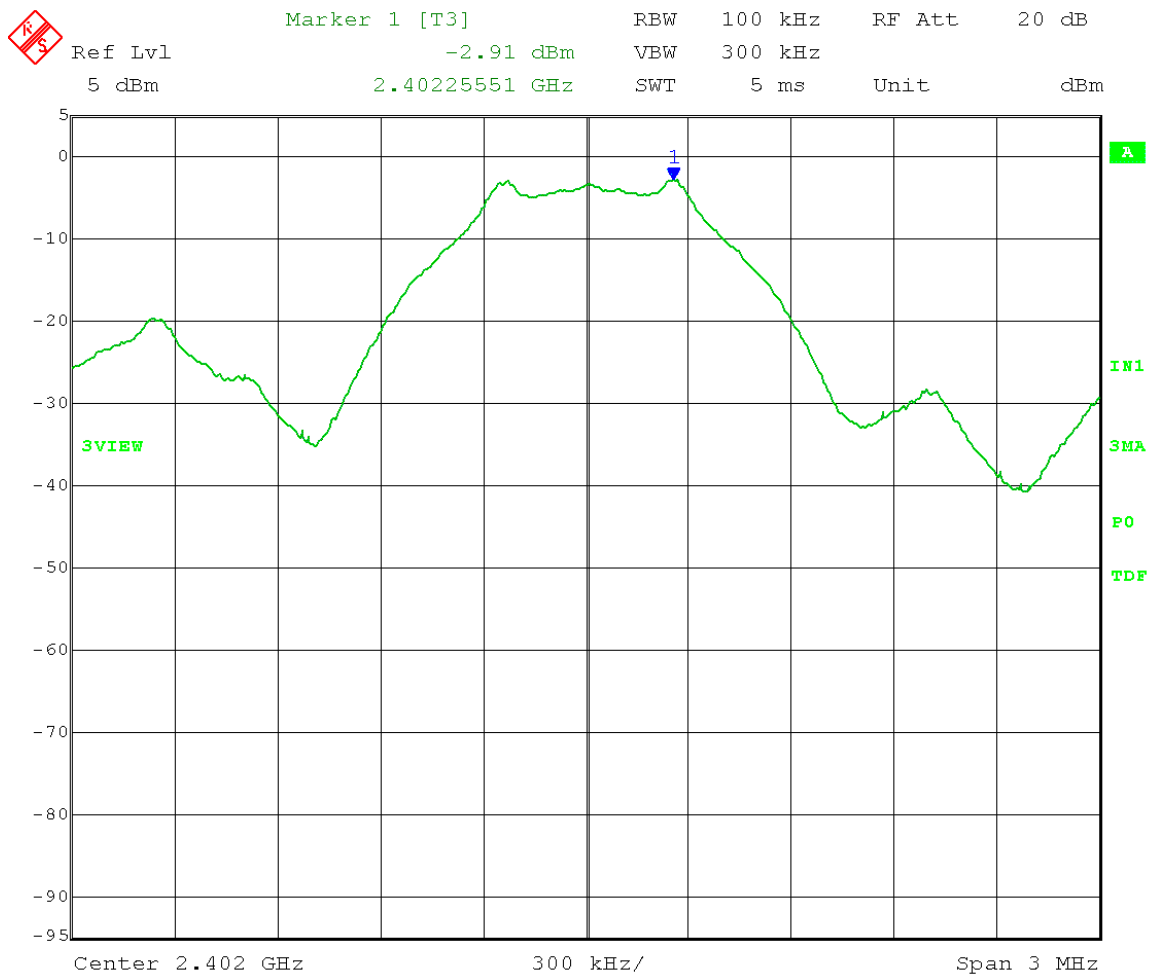
Comment: RBW = 100 kHz
VBW \geq 300 kHz
Span = 5-30% greater than EBW
Detector = Peak
Sweep = auto couple
Trace = max hold

Low Channel Transmit = 2.402 GHz

Power setting: 0

Reference Level measurement

Limit = -2.91 dBm - 20 dB = -22.91 dBm



Date: 26.JAN.2018 12:19:45

Test Date: 01-26-2018
Company: Roche Diagnostics Operations, Inc.
EUT: Accu-Chek Guide ME Meter
Test: Maximum Unwanted Emission Levels - Conducted
Operator: Craig B; Project #9116

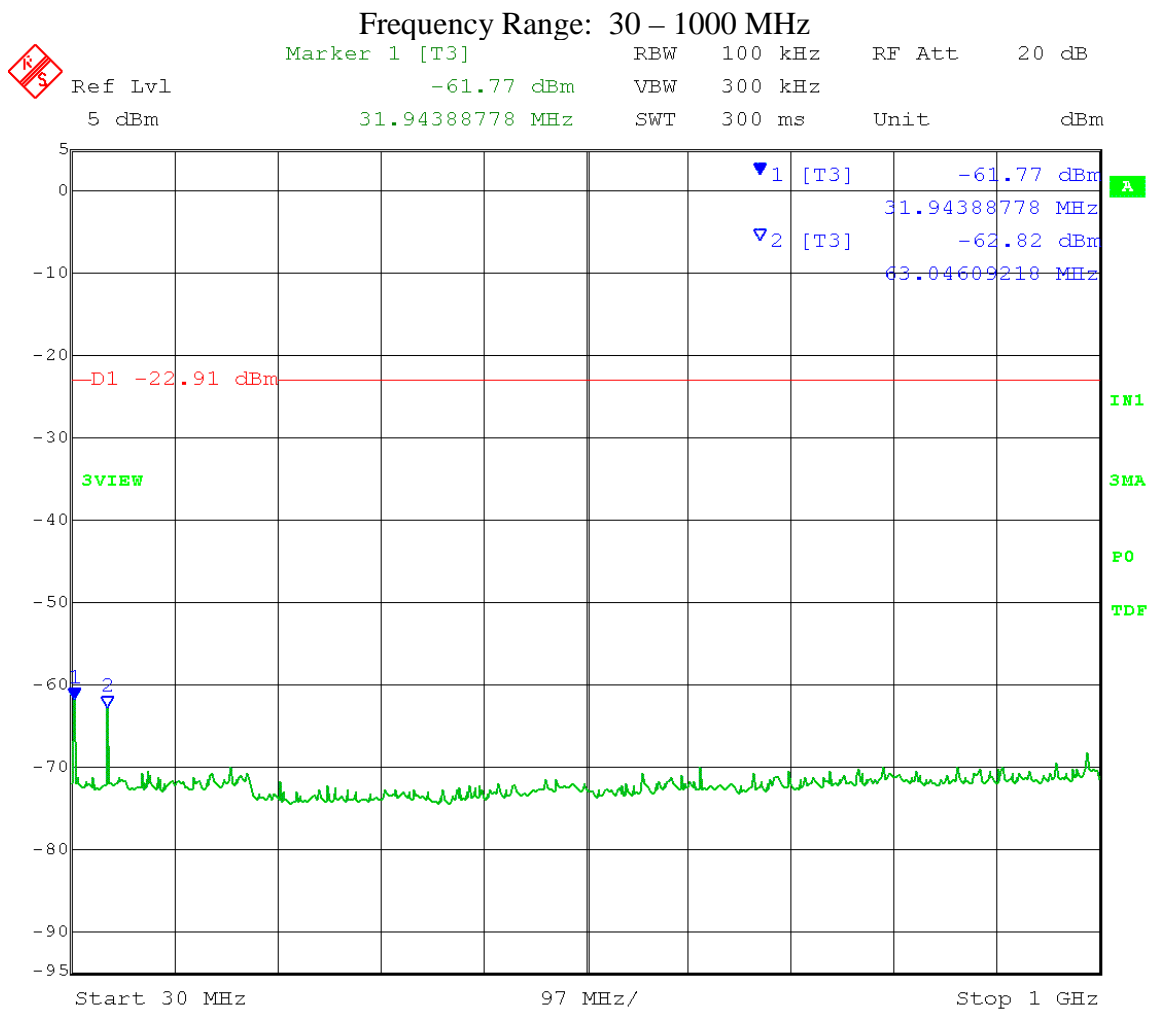
Comment: RBW = 100 kHz
VBW ≥ 300 kHz
Span = 5-30% greater than EBW
Detector = Peak
Sweep = auto couple
Trace = max hold

Low Channel Transmit = 2.402 GHz

Power setting: 0

Emission Level measurement

Limit = -2.91 dBm - 20 dB = -22.91 dBm



Date: 26.JAN.2018 12:31:29

Test Date: 01-26-2018
Company: Roche Diagnostics Operations, Inc.
EUT: Accu-Chek Guide ME Meter
Test: Maximum Unwanted Emission Levels - Conducted
Operator: Craig B; Project #9116

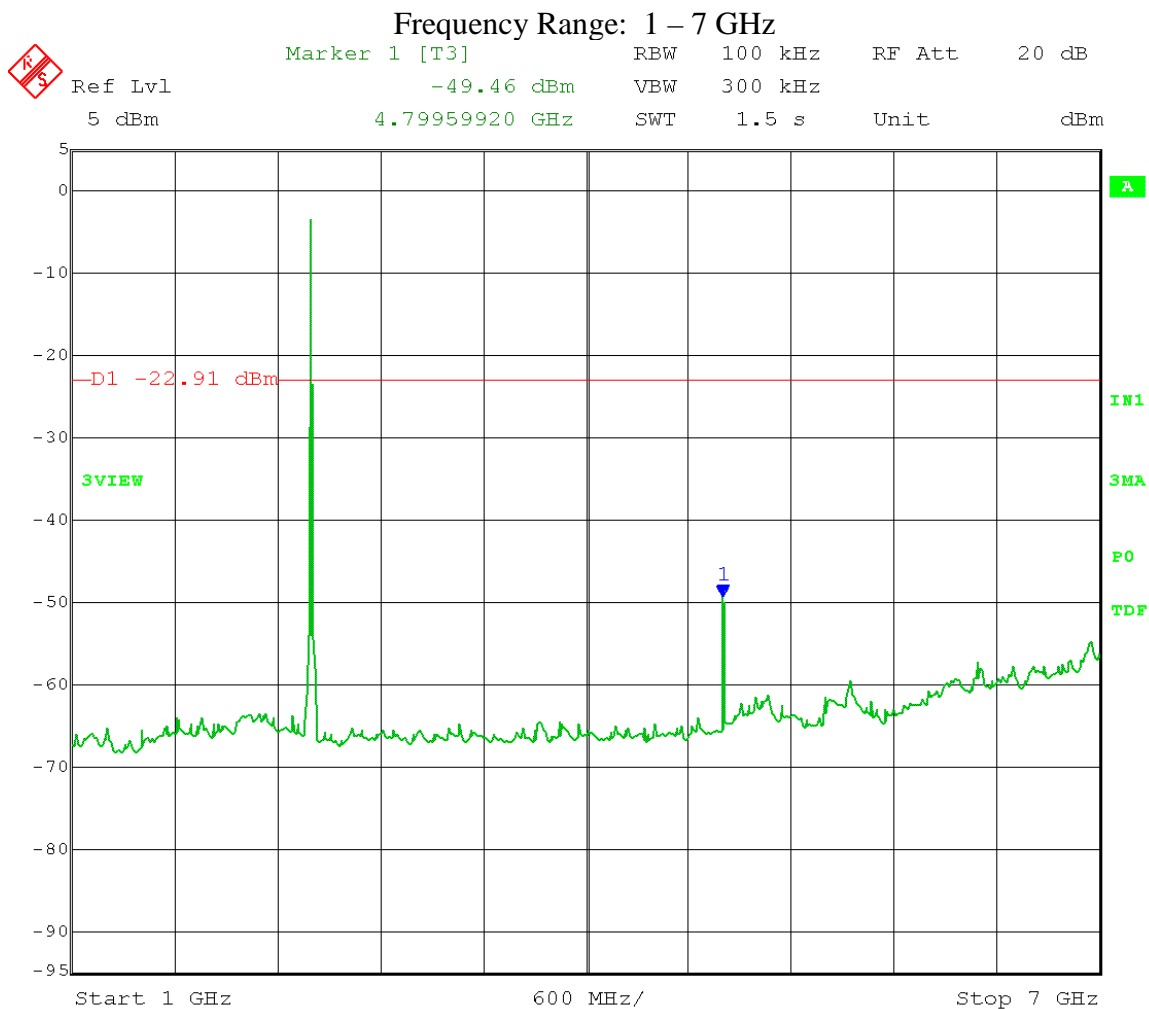
Comment: RBW = 100 kHz
VBW \geq 300 kHz
Span = 5-30% greater than EBW
Detector = Peak
Sweep = auto couple
Trace = max hold

Low Channel Transmit = 2.402 GHz

Power setting: 0

Emission Level measurement

Limit = -2.91 dBm - 20 dB = -22.91 dBm



Date: 26.JAN.2018 12:24:19

Test Date: 01-26-2018
Company: Roche Diagnostics Operations, Inc.
EUT: Accu-Chek Guide ME Meter
Test: Maximum Unwanted Emission Levels - Conducted
Operator: Craig B; Project #9116

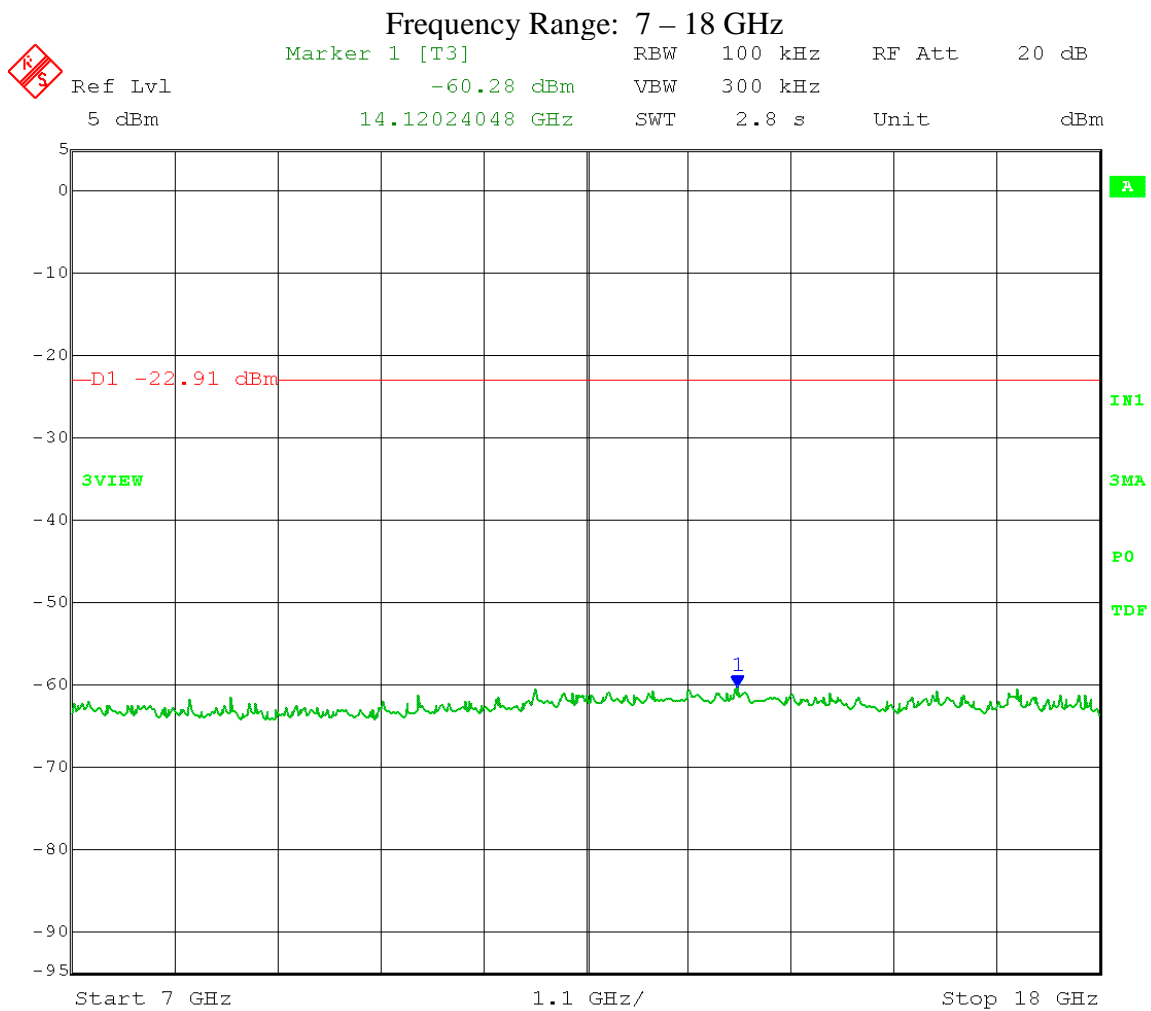
Comment: RBW = 100 kHz
VBW \geq 300 kHz
Span = 5-30% greater than EBW
Detector = Peak
Sweep = auto couple
Trace = max hold

Low Channel Transmit = 2.402 GHz

Power setting: 0

Emission Level measurement

Limit = -2.91 dBm - 20 dB = -22.91 dBm



Date: 26.JAN.2018 12:26:56

Test Date: 01-26-2018
Company: Roche Diagnostics Operations, Inc.
EUT: Accu-Chek Guide ME Meter
Test: Maximum Unwanted Emission Levels - Conducted
Operator: Craig B; Project #9116

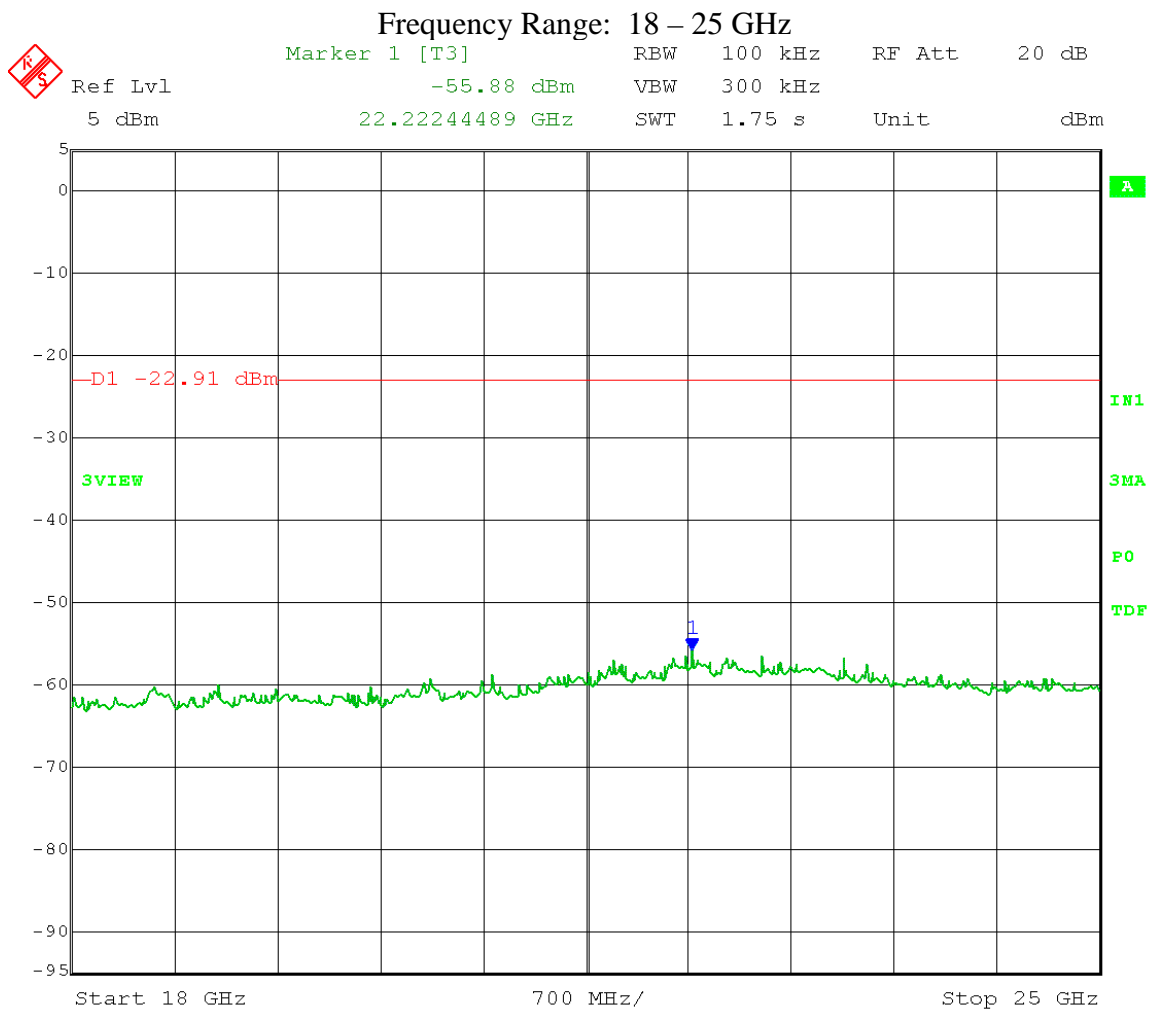
Comment: RBW = 100 kHz
VBW \geq 300 kHz
Span = 5-30% greater than EBW
Detector = Peak
Sweep = auto couple
Trace = max hold

Low Channel Transmit = 2.402 GHz

Power setting: 0

Emission Level measurement

Limit = -2.91 dBm - 20 dB = -22.91 dBm



Date: 26.JAN.2018 12:29:11

Test Date: 01-26-2018
Company: Roche Diagnostics Operations, Inc.
EUT: Accu-Chek Guide ME Meter
Test: Maximum Unwanted Emission Levels - Conducted
Operator: Craig B; Project #9116

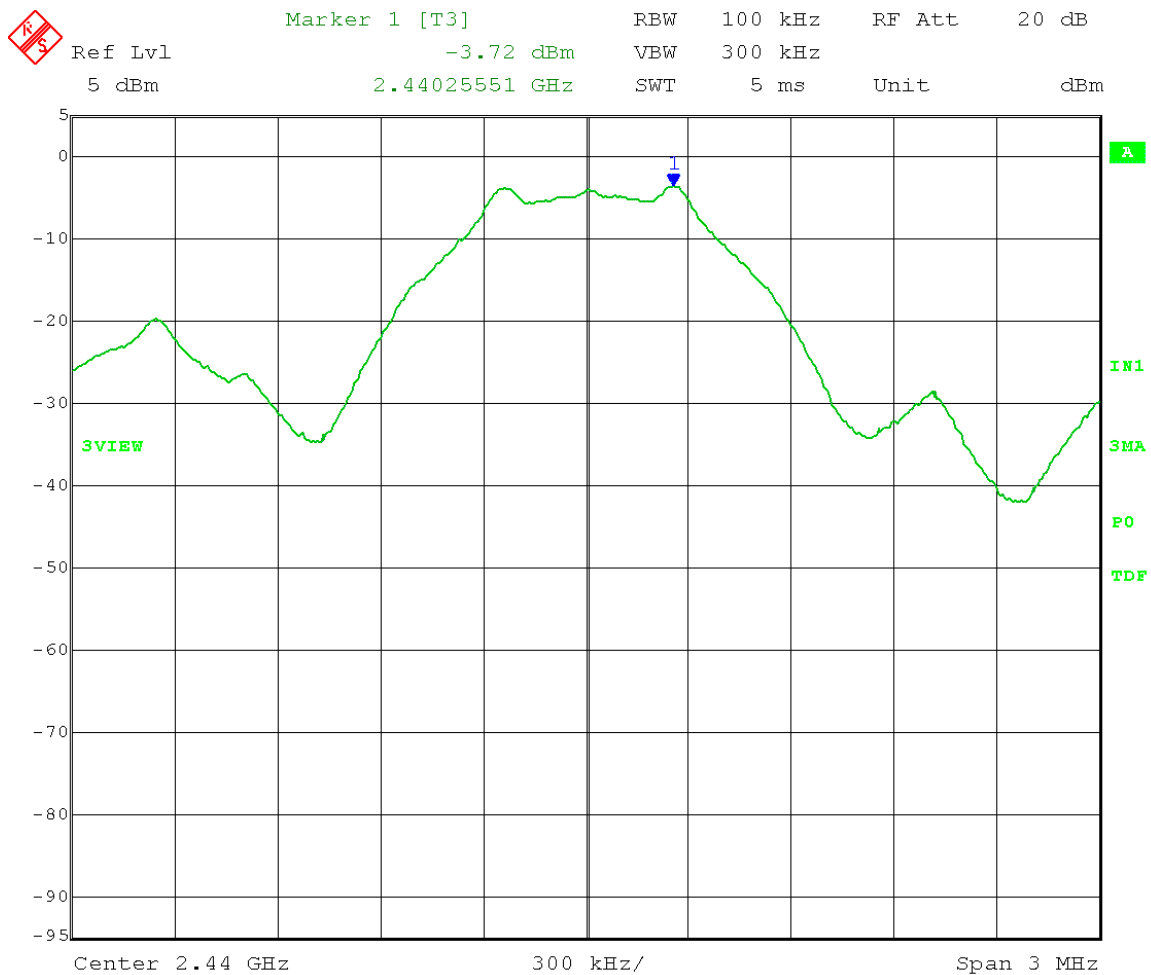
Comment: RBW = 100 kHz
VBW \geq 300 kHz
Span = 5-30% greater than EBW
Detector = Peak
Sweep = auto couple
Trace = max hold

Mid Channel Transmit = 2.440 GHz

Power setting: 0

Reference Level measurement

Limit = -3.72 dBm - 20 dB = -23.72 dBm



Date: 26.JAN.2018 12:34:32

Test Date: 01-26-2018
Company: Roche Diagnostics Operations, Inc.
EUT: Accu-Chek Guide ME Meter
Test: Maximum Unwanted Emission Levels - Conducted
Operator: Craig B; Project #9116

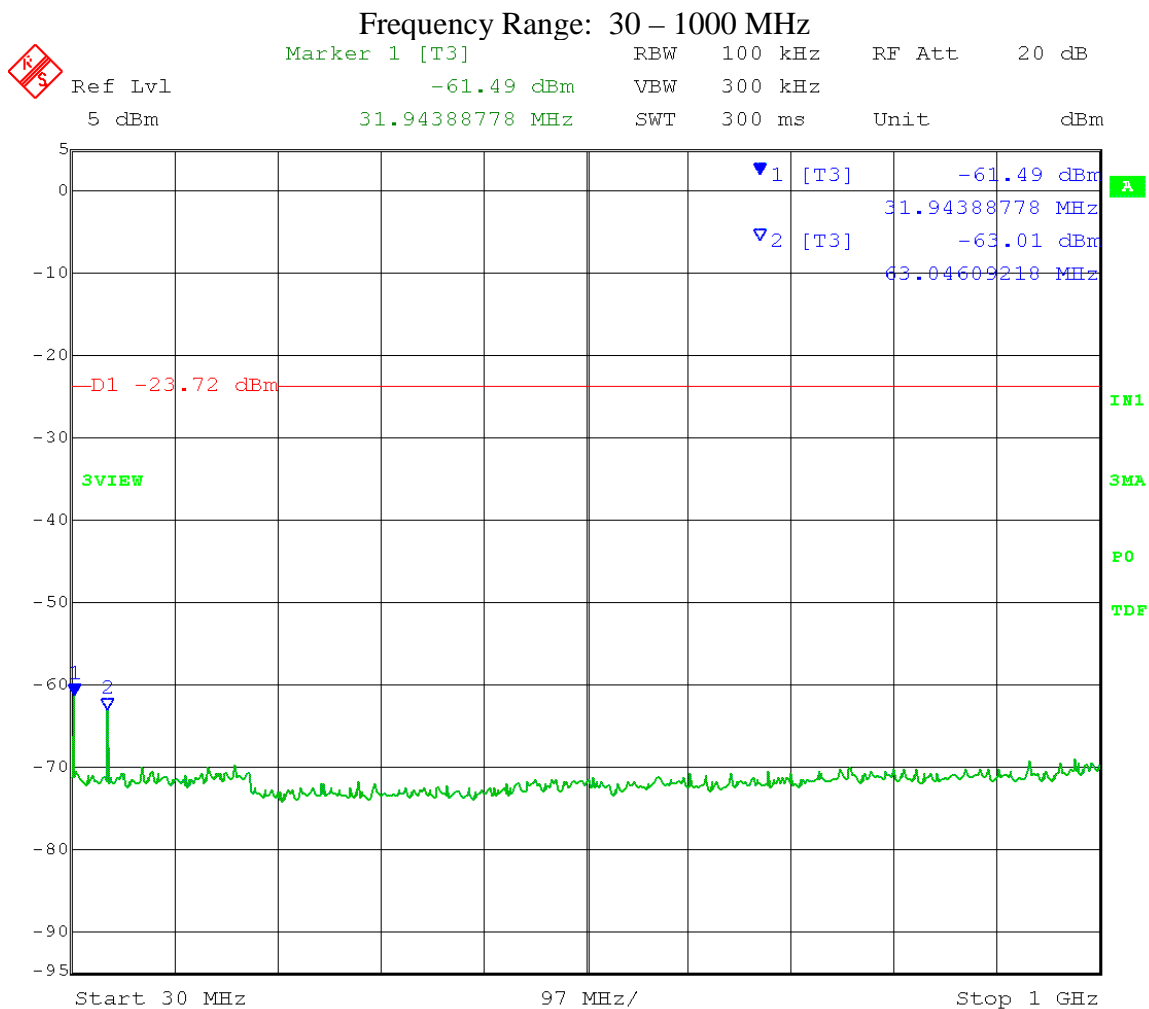
Comment: RBW = 100 kHz
VBW \geq 300 kHz
Span = 5-30% greater than EBW
Detector = Peak
Sweep = auto couple
Trace = max hold

Mid Channel Transmit = 2.440 GHz

Power setting: 0

Emission Level measurement

Limit = -3.72 dBm - 20 dB = -23.72 dBm



Date: 26.JAN.2018 13:33:57

Test Date: 01-26-2018
Company: Roche Diagnostics Operations, Inc.
EUT: Accu-Chek Guide ME Meter
Test: Maximum Unwanted Emission Levels - Conducted
Operator: Craig B; Project #9116

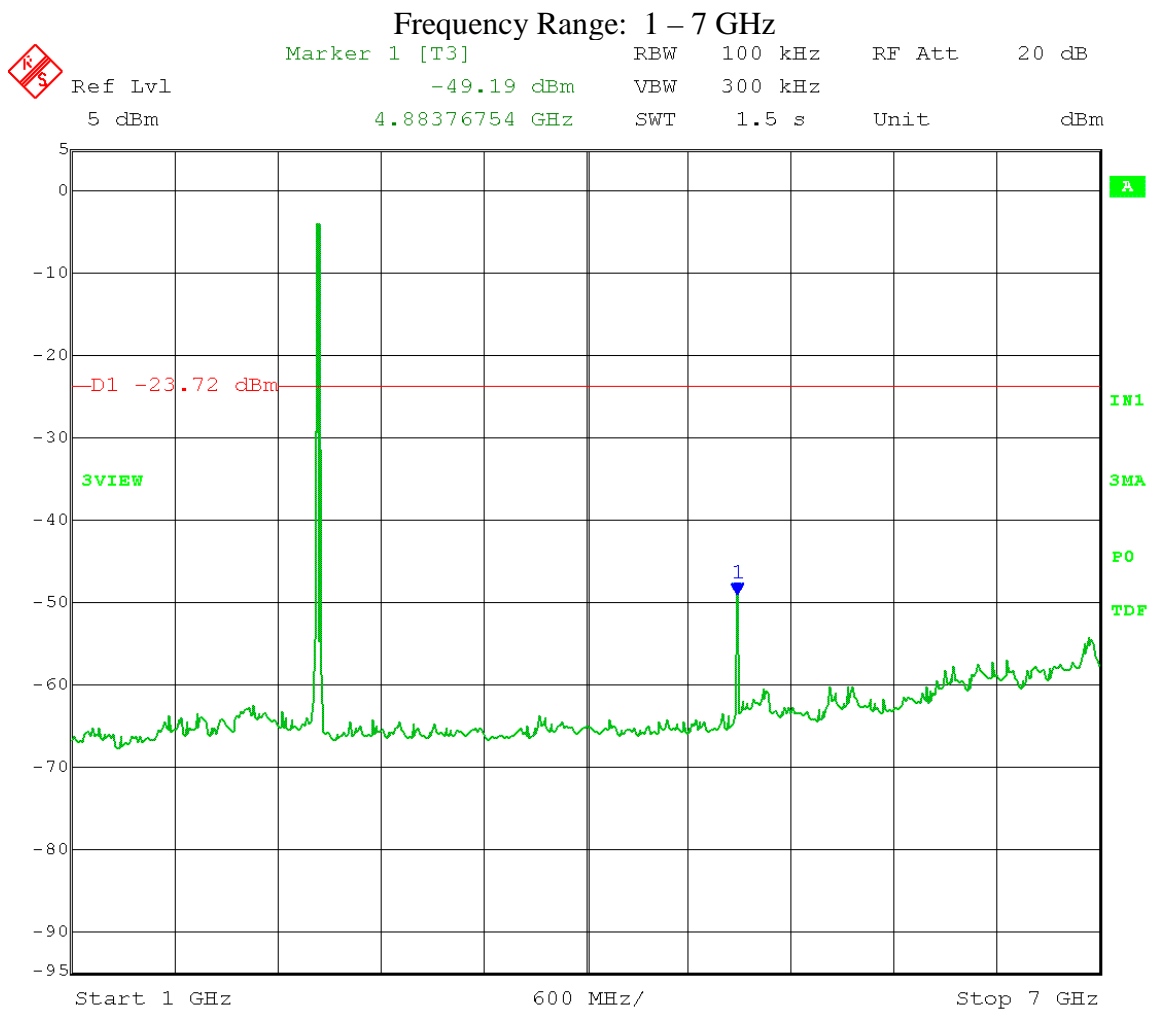
Comment: RBW = 100 kHz
VBW \geq 300 kHz
Span = 5-30% greater than EBW
Detector = Peak
Sweep = auto couple
Trace = max hold

Mid Channel Transmit = 2.440 GHz

Power setting: 0

Emission Level measurement

Limit = $-3.72 \text{ dBm} - 20 \text{ dB} = -23.72 \text{ dBm}$



Date: 26.JAN.2018 13:27:02

Test Date: 01-26-2018
Company: Roche Diagnostics Operations, Inc.
EUT: Accu-Chek Guide ME Meter
Test: Maximum Unwanted Emission Levels - Conducted
Operator: Craig B; Project #9116

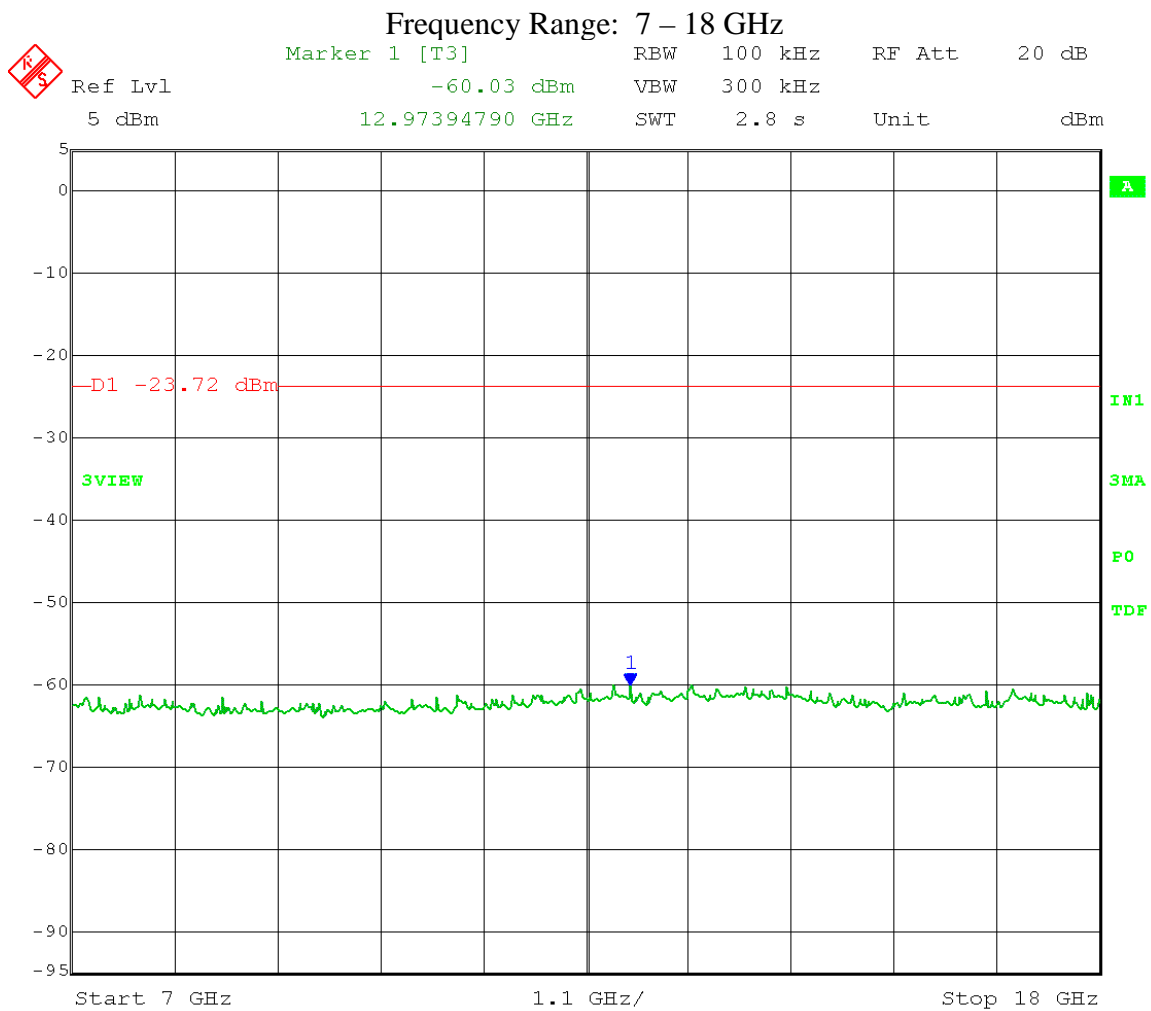
Comment: RBW = 100 kHz
VBW \geq 300 kHz
Span = 5-30% greater than EBW
Detector = Peak
Sweep = auto couple
Trace = max hold

Mid Channel Transmit = 2.440 GHz

Power setting: 0

Emission Level measurement

Limit = $-3.72 \text{ dBm} - 20 \text{ dB} = -23.72 \text{ dBm}$



Date: 26.JAN.2018 13:29:49

Test Date: 01-26-2018
Company: Roche Diagnostics Operations, Inc.
EUT: Accu-Chek Guide ME Meter
Test: Maximum Unwanted Emission Levels - Conducted
Operator: Craig B; Project #9116

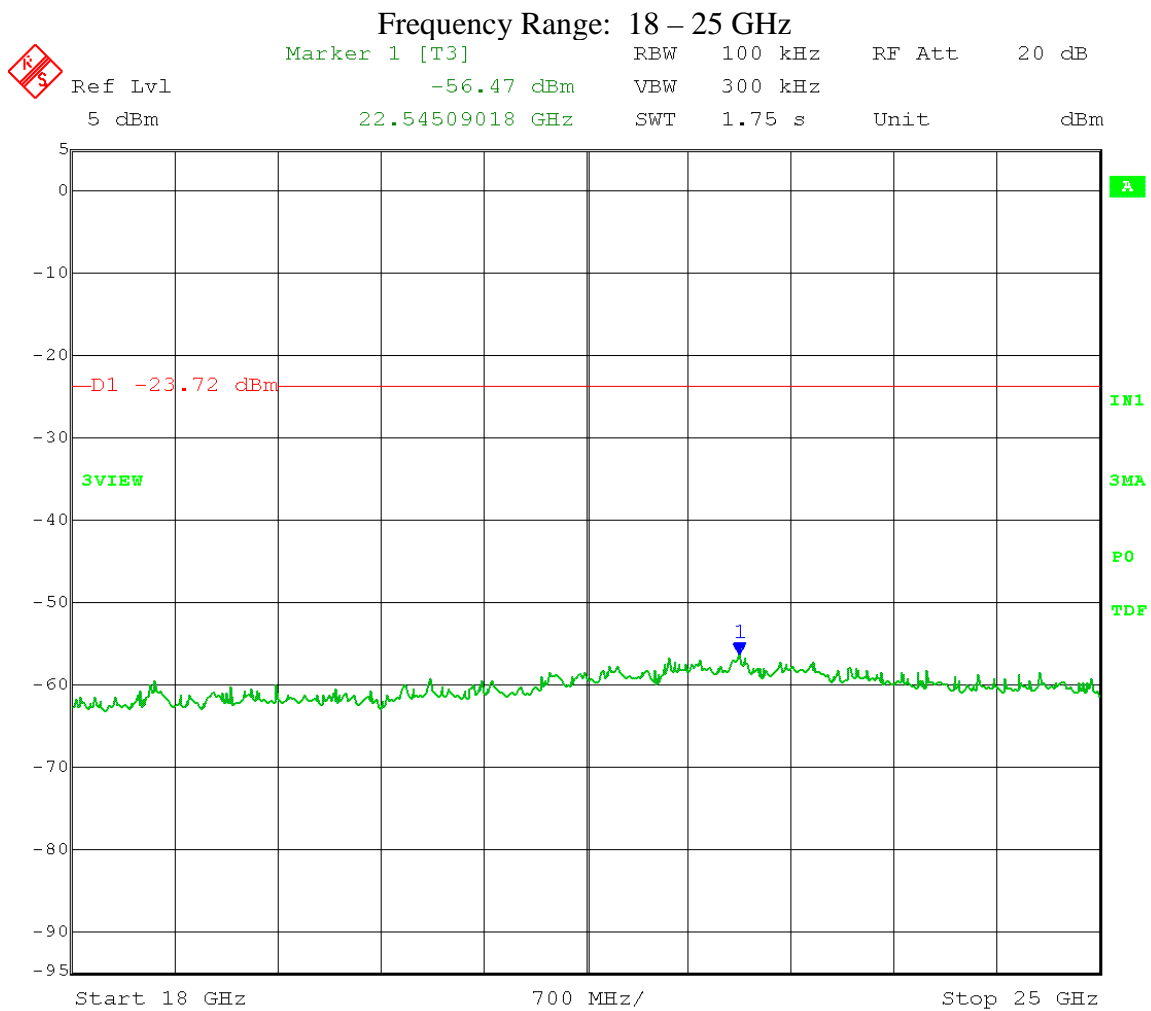
Comment: RBW = 100 kHz
VBW ≥ 300 kHz
Span = 5-30% greater than EBW
Detector = Peak
Sweep = auto couple
Trace = max hold

Mid Channel Transmit = 2.440 GHz

Power setting: 0

Emission Level measurement

Limit = -3.72 dBm - 20 dB = -23.72 dBm



Date: 26.JAN.2018 13:31:40

Test Date: 01-26-2018
Company: Roche Diagnostics Operations, Inc.
EUT: Accu-Chek Guide ME Meter
Test: Maximum Unwanted Emission Levels - Conducted
Operator: Craig B; Project #9116

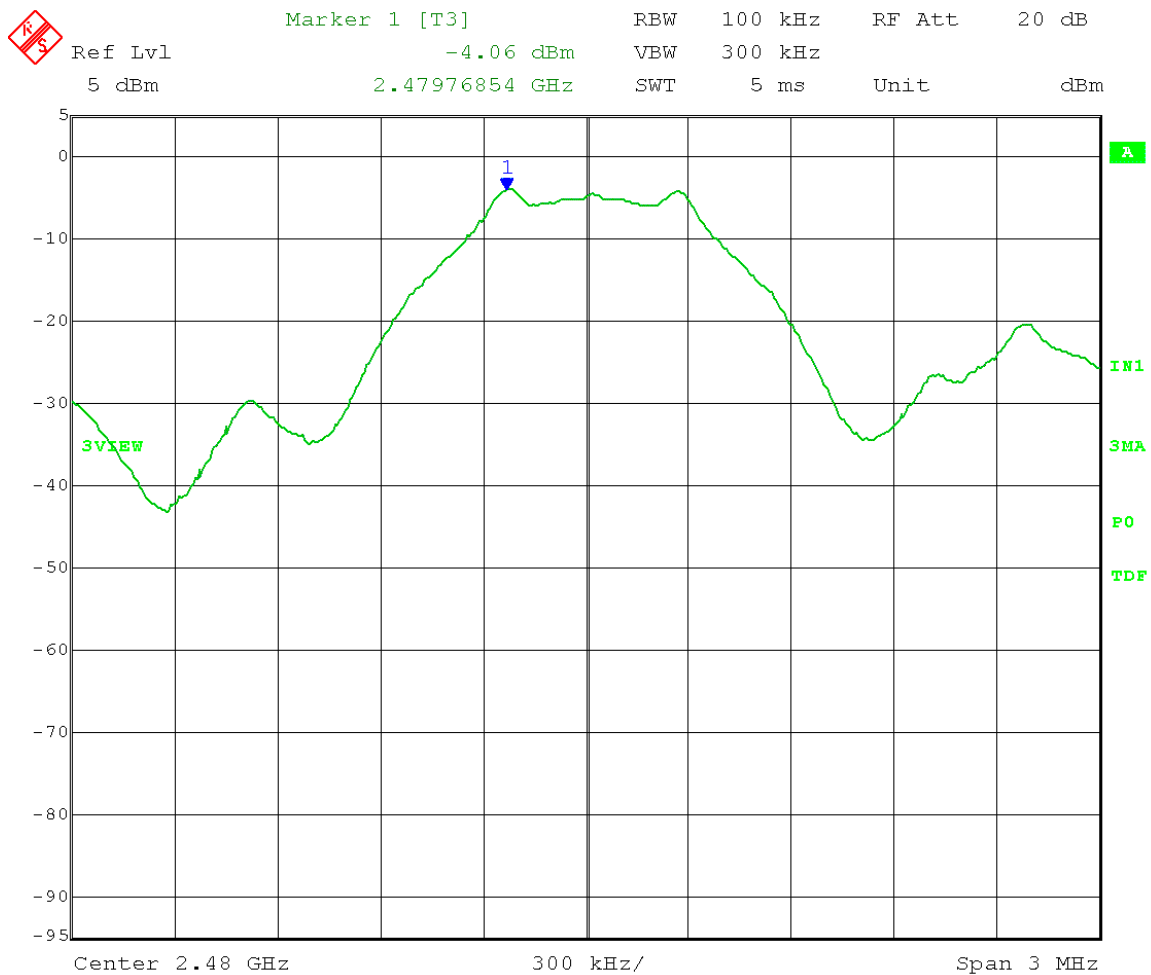
Comment: RBW = 100 kHz
VBW \geq 300 kHz
Span = 5-30% greater than EBW
Detector = Peak
Sweep = auto couple
Trace = max hold

High Channel Transmit = 2.480 GHz

Power setting: 0

Reference Level measurement

Limit = -4.06 dBm - 20 dB = -24.06 dBm



Date: 26.JAN.2018 13:39:52

Test Date: 01-26-2018
Company: Roche Diagnostics Operations, Inc.
EUT: Accu-Chek Guide ME Meter
Test: Maximum Unwanted Emission Levels - Conducted
Operator: Craig B; Project #9116

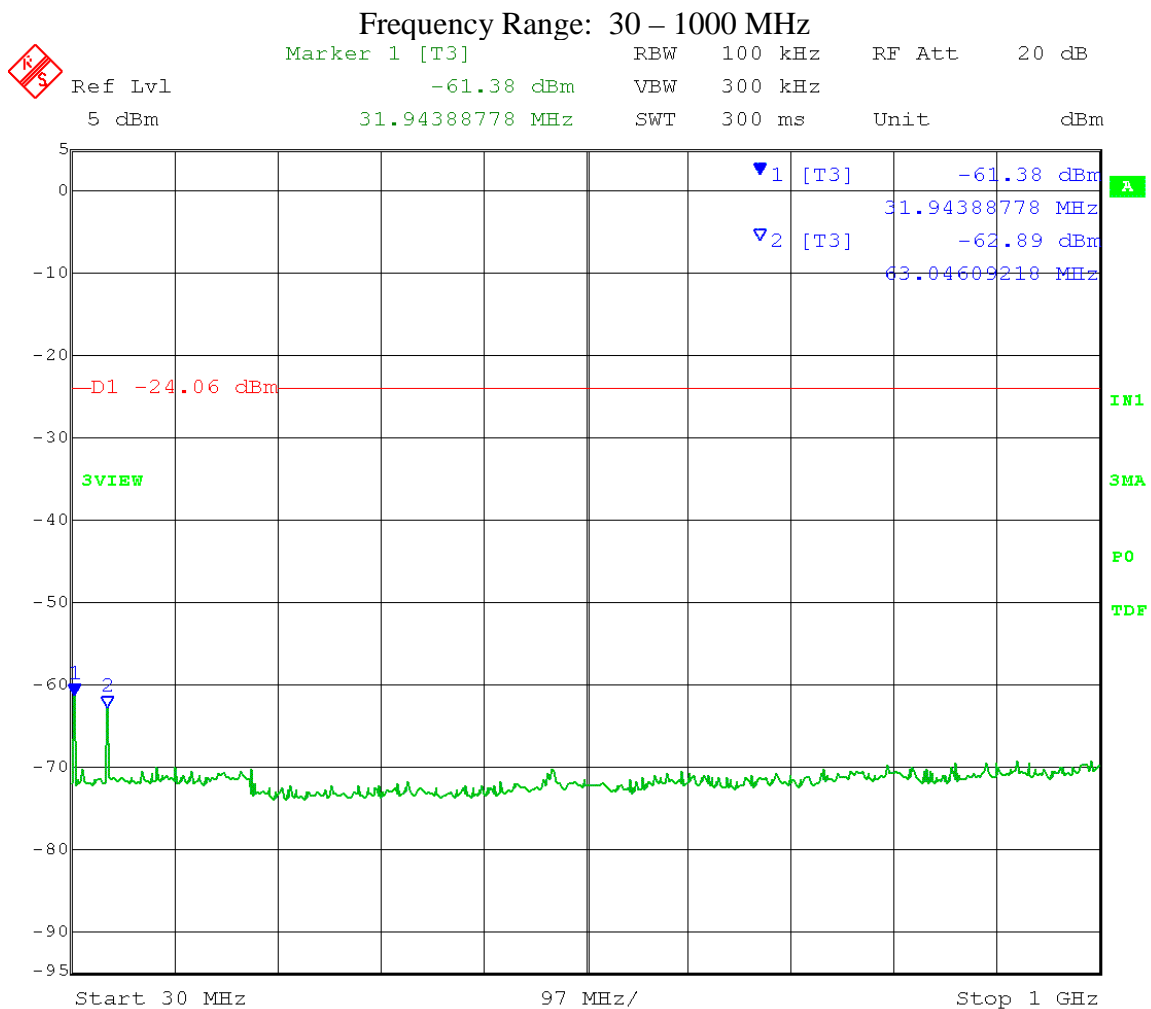
Comment: RBW = 100 kHz
VBW \geq 300 kHz
Span = 5-30% greater than EBW
Detector = Peak
Sweep = auto couple
Trace = max hold

High Channel Transmit = 2.480 GHz

Power setting: 0

Emission Level measurement

Limit = -4.06 dBm - 20 dB = -24.06 dBm



Date: 26.JAN.2018 13:52:08

Test Date: 01-26-2018
Company: Roche Diagnostics Operations, Inc.
EUT: Accu-Chek Guide ME Meter
Test: Maximum Unwanted Emission Levels - Conducted
Operator: Craig B; Project #9116

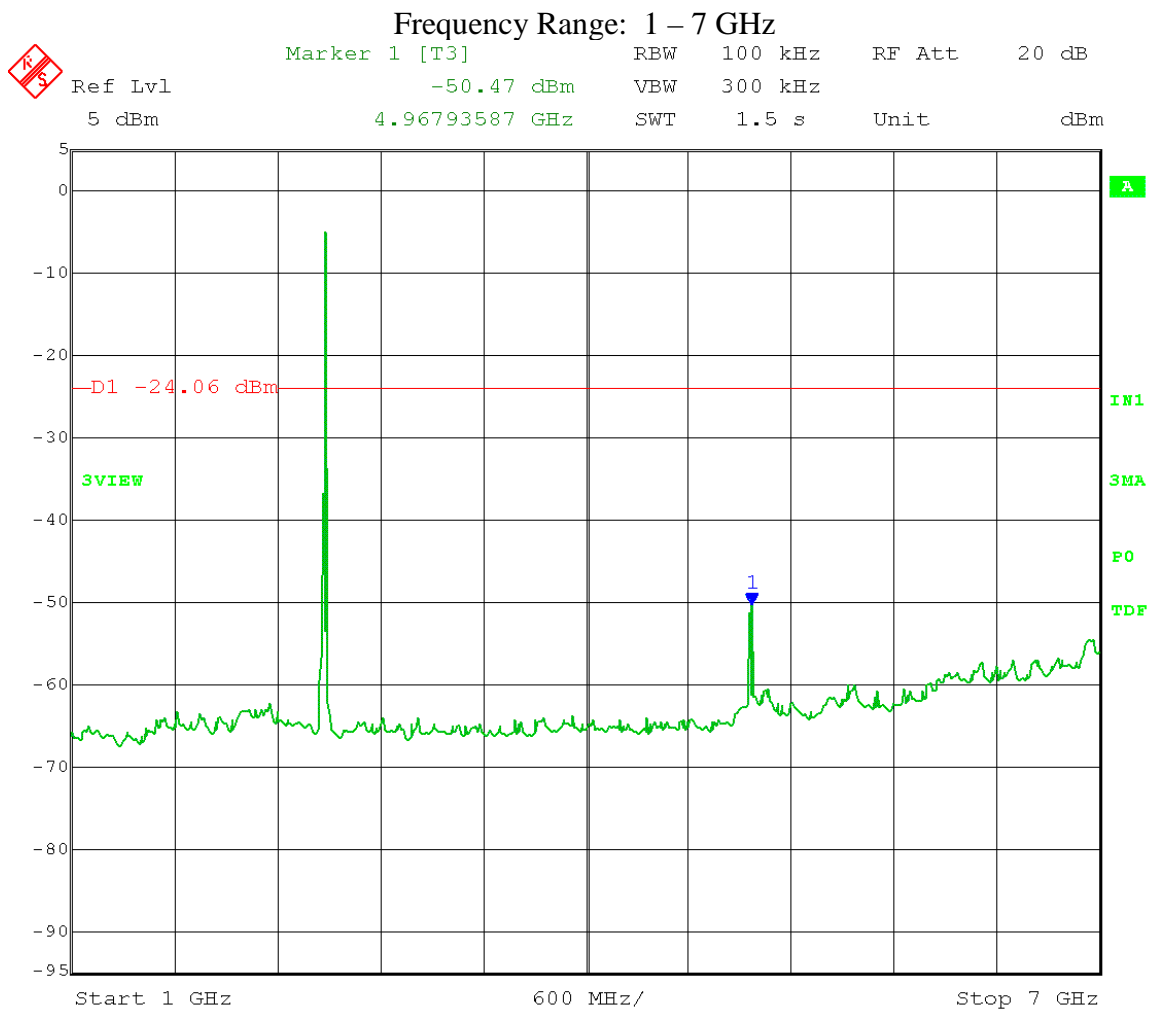
Comment: RBW = 100 kHz
VBW \geq 300 kHz
Span = 5-30% greater than EBW
Detector = Peak
Sweep = auto couple
Trace = max hold

High Channel Transmit = 2.480 GHz

Power setting: 0

Emission Level measurement

Limit = -4.06 dBm - 20 dB = -24.06 dBm



Date: 26.JAN.2018 13:43:12

Test Date: 01-26-2018
Company: Roche Diagnostics Operations, Inc.
EUT: Accu-Chek Guide ME Meter
Test: Maximum Unwanted Emission Levels - Conducted
Operator: Craig B; Project #9116

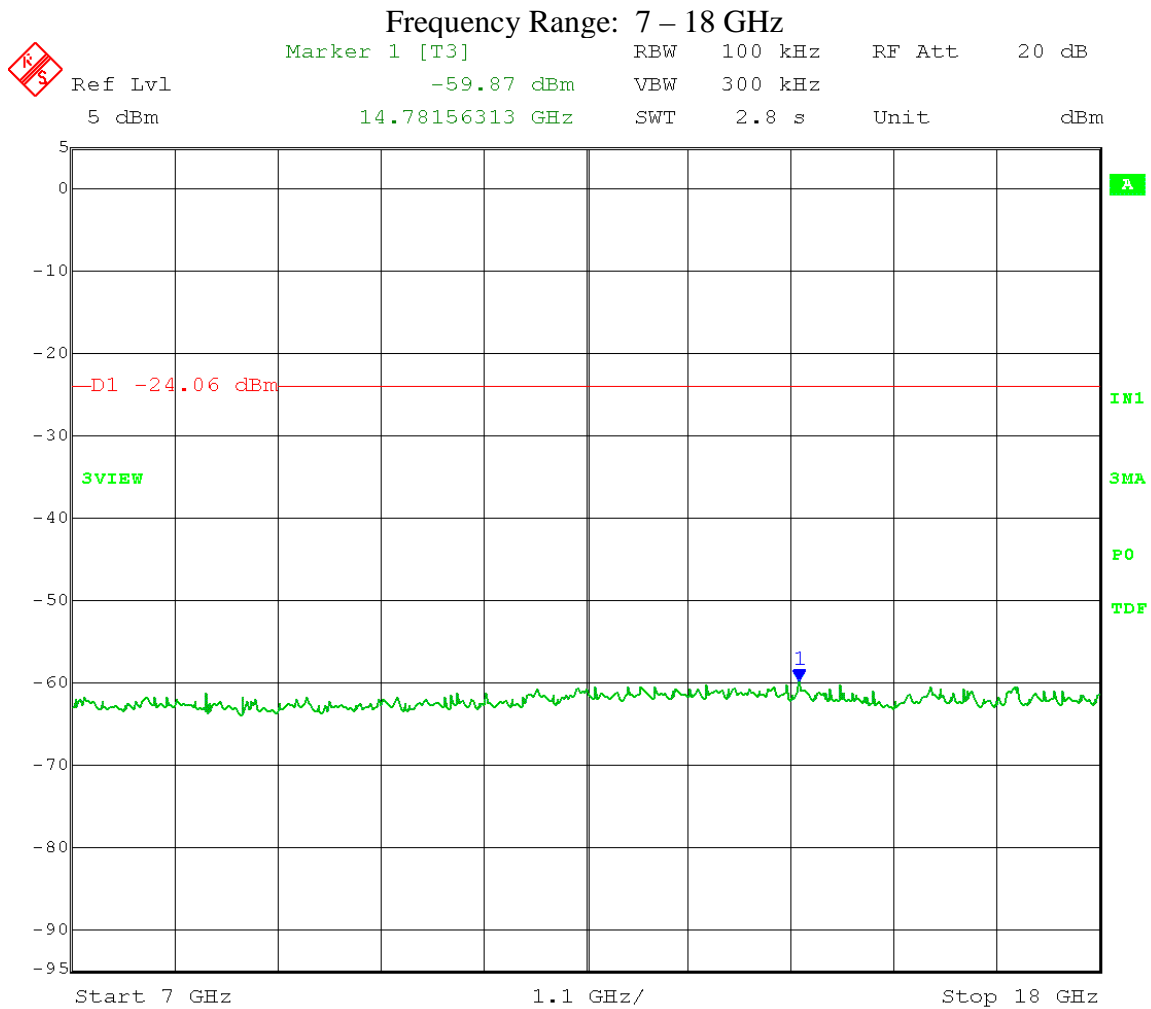
Comment: RBW = 100 kHz
VBW \geq 300 kHz
Span = 5-30% greater than EBW
Detector = Peak
Sweep = auto couple
Trace = max hold

High Channel Transmit = 2.480 GHz

Power setting: 0

Emission Level measurement

Limit = -4.06 dBm - 20 dB = -24.06 dBm



Date: 26.JAN.2018 13:46:54

Test Date: 01-26-2018
Company: Roche Diagnostics Operations, Inc.
EUT: Accu-Chek Guide ME Meter
Test: Maximum Unwanted Emission Levels - Conducted
Operator: Craig B; Project #9116

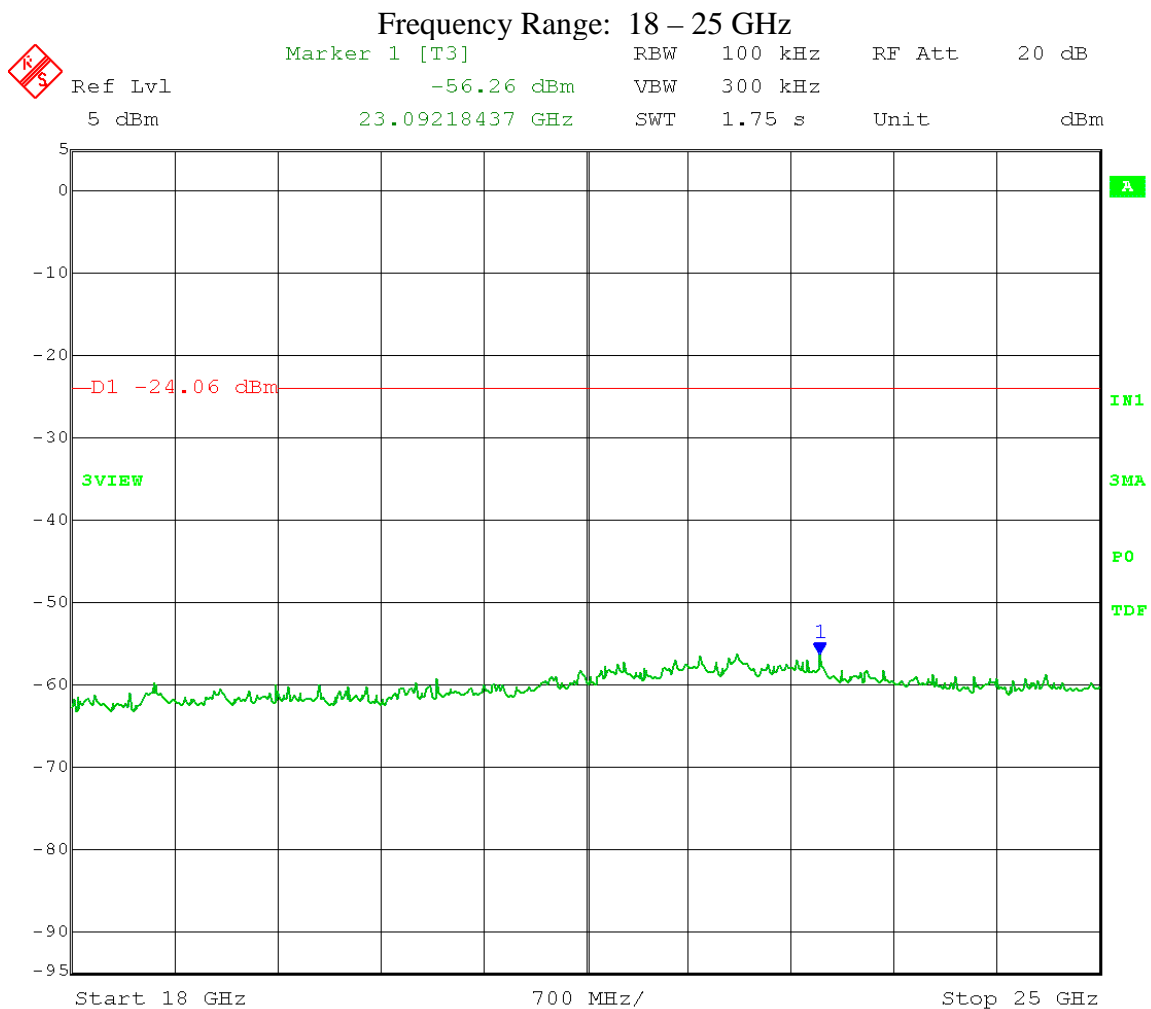
Comment: RBW = 100 kHz
VBW ≥ 300 kHz
Span = 5-30% greater than EBW
Detector = Peak
Sweep = auto couple
Trace = max hold

High Channel Transmit = 2.480 GHz

Power setting: 0

Emission Level measurement

Limit = -4.06 dBm – 20 dB = -24.06 dBm



Date: 26.JAN.2018 13:49:31



Company:	Roche Diagnostics Operations
Model Tested:	897
Report Number:	23449
DLS Project:	9116

166 South Carter, Genoa City, WI 53128

Appendix B

B8.0 Emissions in Restricted Frequency Bands – Radiated

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

Test Procedure: ANSI C63.10-2013, sections 11.12 & 11.12.1

Limit: FCC 15.209

Results: Compliant

Notes: The EUT was set to transmit at its maximum power with 100% duty cycle at the low, middle and high channels of the operating band. Peak measurements were taken with RBW = 1 MHz, VBW = 3 MHz. Average measurements were taken with RBW = 1 MHz, VBW = 3MHz.

Electric Field Strength

EUT: Accu-Chek Guide ME Meter
Manufacturer: Roche Diagnostics Operations
Operating Condition: 68 deg. F; 22% R.H.
Test Site: DLS Site 2
Operator: Craig B #9116
Test Specification: Radiated Emissions in Rstricted Frequency Bands
Comment: Continuous transmit; channels 0, 19, and 39
Date: 02-01-2018

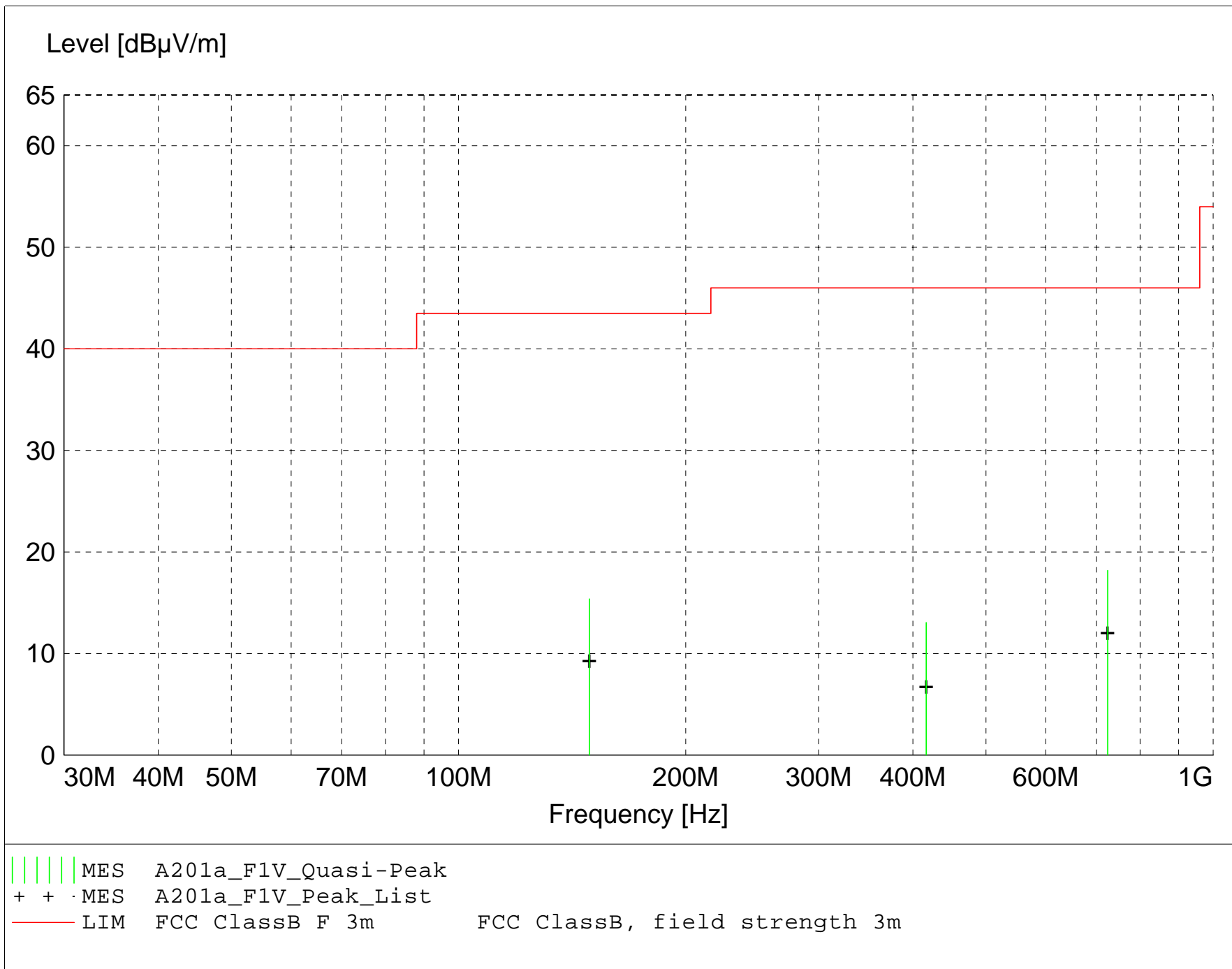
TEXT: "Vert 3 meters"

Short Description: Test Set-up

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

Equations:
$$\text{Total Level(dB}\mu\text{V/m)} = \text{Level(dB}\mu\text{V)} + \text{System Loss(dB)} + \text{Antenna Factor(dB}\mu\text{V/m)}$$
$$\text{Margin(dB)} = \text{Limit(dB}\mu\text{V/m)} - \text{Total Level(dB}\mu\text{V/m)}$$

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



MEASUREMENT RESULT: "A201a_F1V_Final"

2/1/2018 2:26PM

Frequency	Level	Antenna	System	Total	Limit	Margin	Height	EuT	Final	Comment
MHz	dBμV	Factor	Loss	Level			Ant.	Angle	Detector	
		dBμV/m	dB	dBμV/m	dBμV/m	dB	m	deg		
724.760000	16.58	21.39	-19.8	18.2	46.0	27.8	1.00	270	QUASI-PEAK	noise floor
149.110000	26.18	12.10	-22.9	15.4	43.5	28.1	1.00	0	QUASI-PEAK	noise floor
416.560000	18.34	16.13	-21.4	13.1	46.0	32.9	1.00	45	QUASI-PEAK	noise floor

Electric Field Strength

EUT: Accu-Chek Guide ME Meter
Manufacturer: Roche Diagnostics Operations
Operating Condition: 68 deg. F; 22% R.H.
Test Site: DLS Site 2
Operator: Craig B #9116
Test Specification: Radiated Emissions in Rstricted Frequency Bands
Comment: Continuous transmit; channels 0, 19, and 39
Date: 02-01-2018

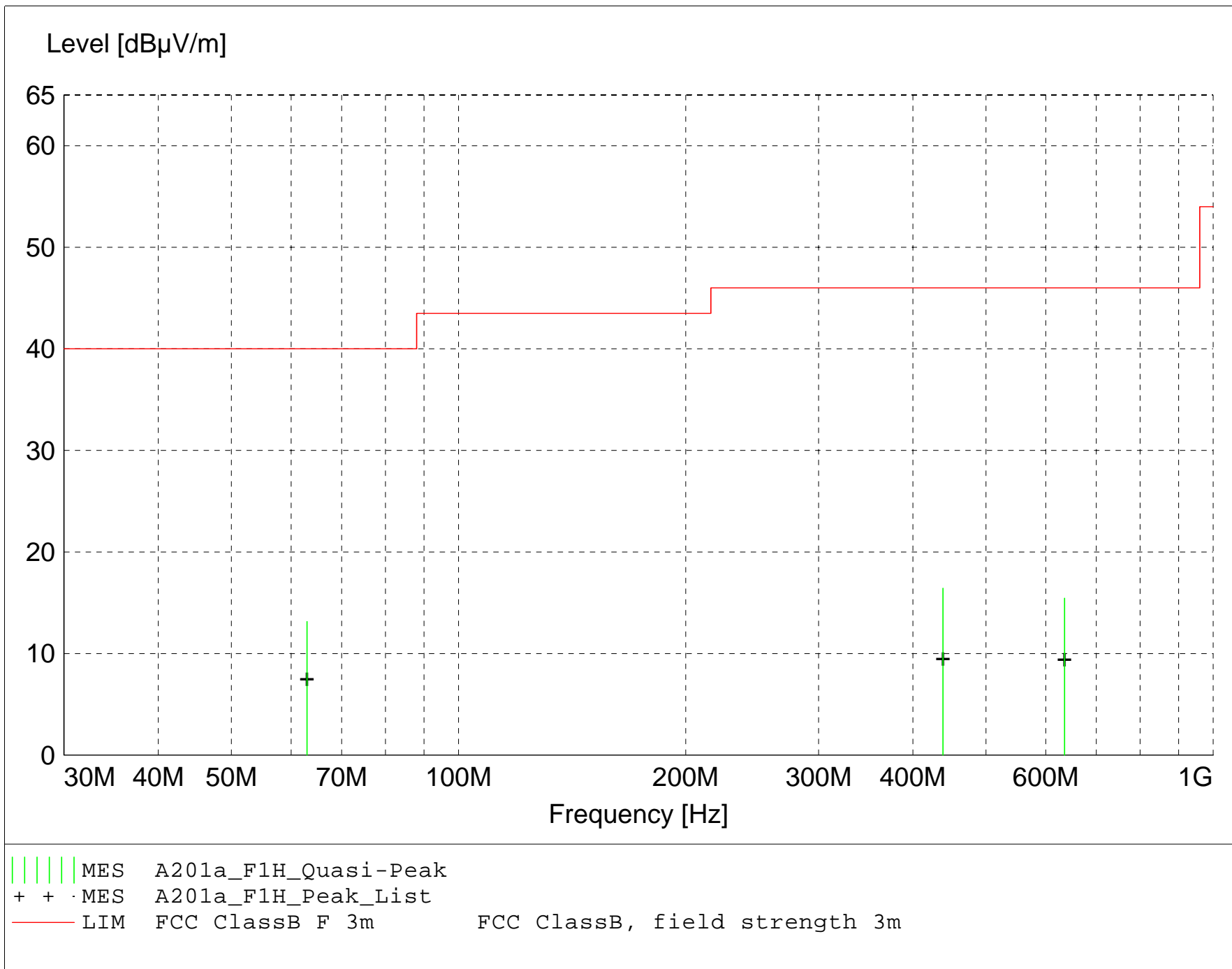
TEXT: "Horz 3 meters"

Short Description: Test Set-up

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

Equations:
$$\text{Total Level(dB}\mu\text{V/m)} = \text{Level(dB}\mu\text{V)} + \text{System Loss(dB)} + \text{Antenna Factor(dB}\mu\text{V/m)}$$
$$\text{Margin(dB)} = \text{Limit(dB}\mu\text{V/m)} - \text{Total Level(dB}\mu\text{V/m)}$$

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



MEASUREMENT RESULT: "A201a_F1H_Final"

2/1/2018 2:40PM

Frequency	Level	Antenna	System	Total	Limit	Margin	Height	EuT	Final	Comment
MHz	dBμV	Factor	Loss	Level			Ant.	Angle	Detector	
		dBμV/m	dB	dBμV/m	dBμV/m	dB	m	deg		
62.980000	27.63	9.21	-23.7	13.2	40.0	26.8	3.00	160	QUASI-PEAK	noise floor
438.500000	21.19	16.47	-21.2	16.4	46.0	29.6	1.90	40	QUASI-PEAK	None
635.240000	16.14	19.61	-20.3	15.5	46.0	30.5	2.00	135	QUASI-PEAK	noise floor

FCC Part 15.209

Electric Field Strength

EUT: Accu-Chek Guide ME Meter
Manufacturer: Roche Diagnostics Operations
Operating Condition: 70 deg F 27% R.H.
Test Site: DLS O.F. G1
Operator: Craig B; Project #9116
Test Specification: Radiated emissions in Restricted Frequency Bands
Comment: Continuous Tx; 100% duty cycle; Channels 0, 19, and 39
Date: 02-01-2018

TEXT: "Vert 3 meters"

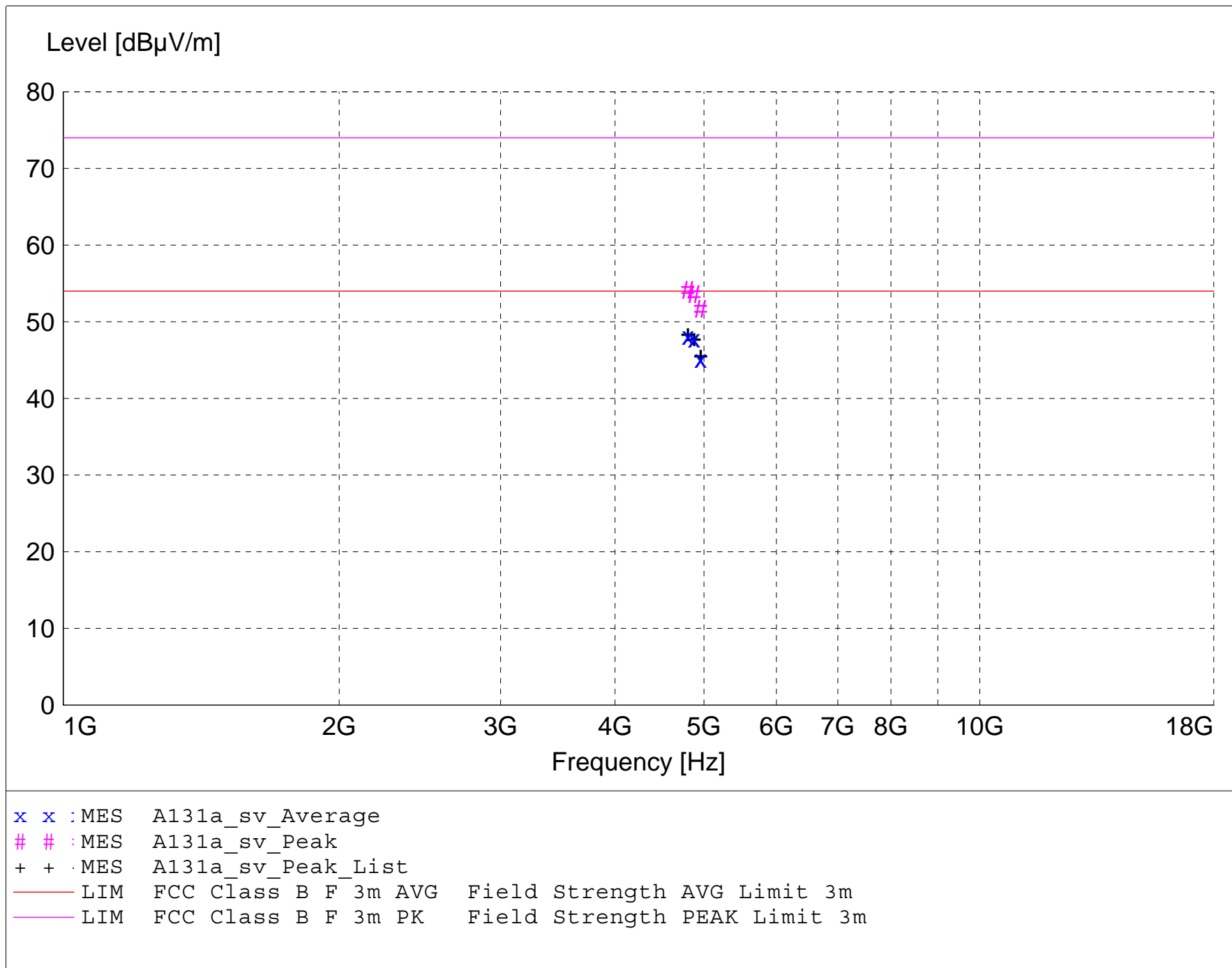
Short Description: Test Set-up

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

Sample Equations:
$$\begin{array}{rclclcl} \text{Total Level (dB}\mu\text{V/m)} & = & \text{Level (dB}\mu\text{V)} & + & \text{System Loss (dB)} & + & \text{Antenna Factor (dB}\mu\text{V/m)} \\ 24.6 & & = 35.51 & + & (-22.1) & + & 11.20 \end{array}$$

$$\begin{array}{rclcl} \text{Margin (dB)} & = & \text{Limit (dB}\mu\text{V/m)} & - & \text{Total Level (dB}\mu\text{V/m)} \\ 15.4 & = & 40 & - & 24.6 \end{array}$$

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 detector
 # Final maximized level using Peak detector
 - Background Scan Peak Detector (Optional)
 - Background Scan Average Detector (Optional)



MEASUREMENT RESULT: "A131a_sv_Final"

2/1/2018 9:48AM

Frequency	Level	Antenna	System	Total	Limit	Margin	Height	EuT	Final	Comment
MHz	dBμV	Factor	Loss	Level			Ant.	Angle	Detector	
		dBμV/m	dB	dBμV/m	dBμV/m	dB	m	deg		
4804.000000	51.36	33.04	-36.2	48.2	54.0	5.8	1.56	176	AVERAGE	Low ch
4880.000000	50.92	33.02	-36.1	47.8	54.0	6.2	1.55	173	AVERAGE	Mid ch
4960.000000	48.26	33.20	-36.3	45.1	54.0	8.9	1.52	170	AVERAGE	High ch
4804.000000	57.39	33.04	-36.2	54.2	74.0	19.8	1.56	176	MAX PEAK	Low ch
4880.000000	56.75	33.02	-36.1	53.6	74.0	20.4	1.55	173	MAX PEAK	Mid ch
4960.000000	54.78	33.20	-36.3	51.7	74.0	22.3	1.52	170	MAX PEAK	High ch

FCC Part 15.209

Electric Field Strength

EUT: Accu-Chek Guide ME Meter
Manufacturer: Roche Diagnostics Operations
Operating Condition: 70 deg F 26% R.H.
Test Site: DLS O.F. G1
Operator: Craig B; Project #9116
Test Specification: Radiated emissions in Restricted Frequency Bands
Comment: Continuous Tx; 100% duty cycle; Channels 0, 19, and 39
Date: 01-31-2018

TEXT: "Horz 3 meters"

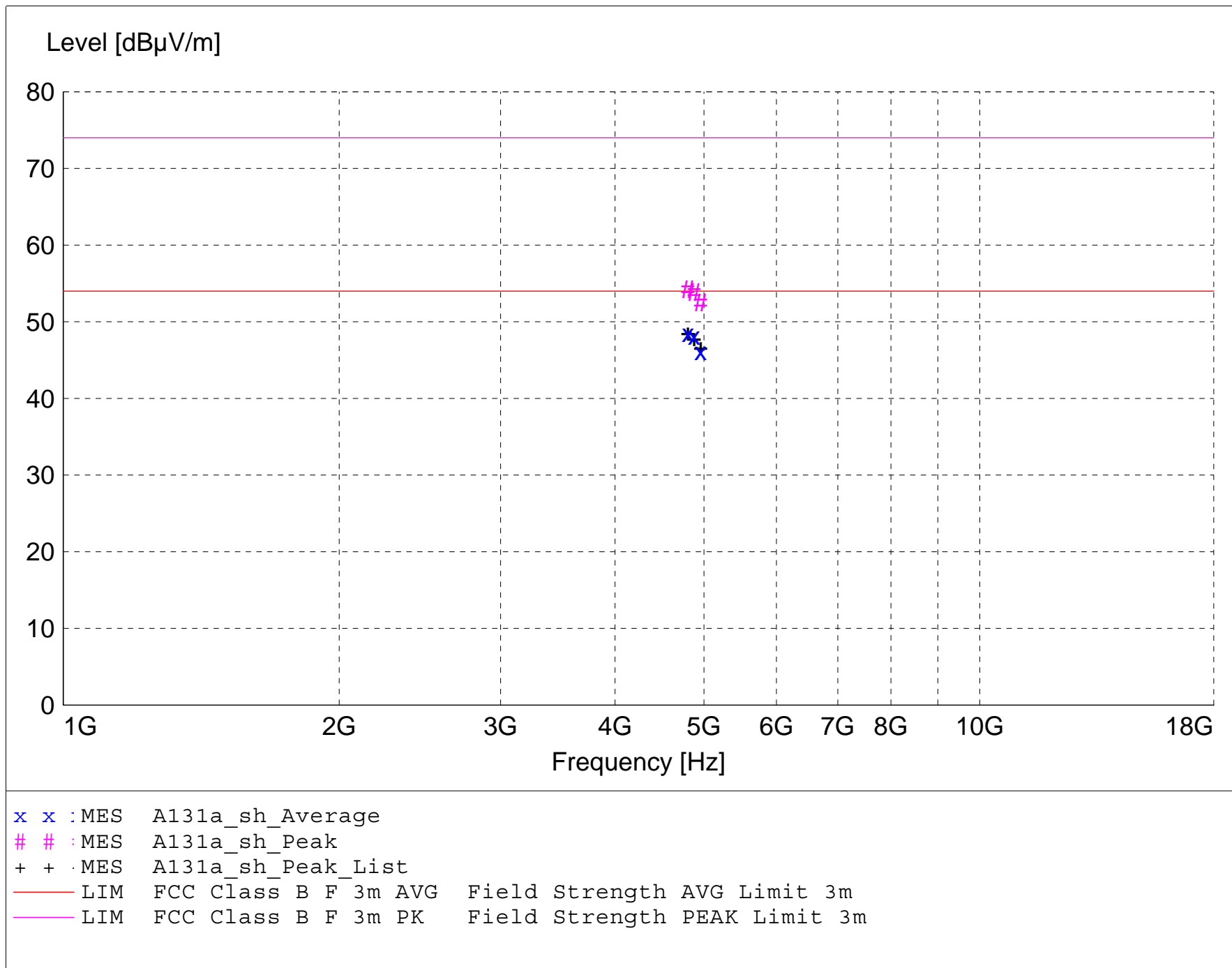
Short Description: Test Set-up

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

Sample Equations:
$$\begin{array}{rclclcl} \text{Total Level (dB}\mu\text{V/m)} & = & \text{Level (dB}\mu\text{V)} & + & \text{System Loss (dB)} & + & \text{Antenna Factor (dB}\mu\text{V/m)} \\ 24.6 & & = 35.51 & + & (-22.1) & + & 11.20 \end{array}$$

$$\begin{array}{rclcl} \text{Margin (dB)} & = & \text{Limit (dB}\mu\text{V/m)} & - & \text{Total Level (dB}\mu\text{V/m)} \\ 15.4 & = & 40 & - & 24.6 \end{array}$$

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 detector
 # Final maximized level using Peak detector
 - Background Scan Peak Detector (Optional)
 - Background Scan Average Detector (Optional)



MEASUREMENT RESULT: "A131a_sh_Final"

1/31/2018 3:45PM

Frequency	Level	Antenna	System	Total	Limit	Margin	Height	EuT	Final	Comment
MHz	dBμV	Factor	Loss	Level			Ant.	Angle	Detector	
		dBμV/m	dB	dBμV/m	dBμV/m	dB	m	deg		
4804.000000	51.75	33.04	-36.2	48.6	54.0	5.4	1.64	184	AVERAGE	Low ch
4880.000000	51.25	33.02	-36.1	48.1	54.0	5.9	1.34	198	AVERAGE	Mid ch
4960.000000	49.29	33.20	-36.3	46.2	54.0	7.8	1.55	194	AVERAGE	High ch
4804.000000	57.45	33.04	-36.2	54.3	74.0	19.7	1.64	184	MAX PEAK	Low ch
4880.000000	56.94	33.02	-36.1	53.8	74.0	20.2	1.34	198	MAX PEAK	Mid ch
4960.000000	55.61	33.20	-36.3	52.5	74.0	21.5	1.55	194	MAX PEAK	High ch

FCC Part 15.209

Electric Field Strength

EUT: Accu-Chek Guide ME Meter
Manufacturer: Roche Diagnostics Operations
Operating Condition: 70 deg F 26% R.H.
Test Site: DLS O.F. G1
Operator: Craig B; Project #9116
Test Specification: Radiated emissions in Restricted Frequency Bands
Comment: Continuous Tx; 100% duty cycle; Channels 0, 19, and 39
Date: 02-01-2018

TEXT: "Vert 1 meters"

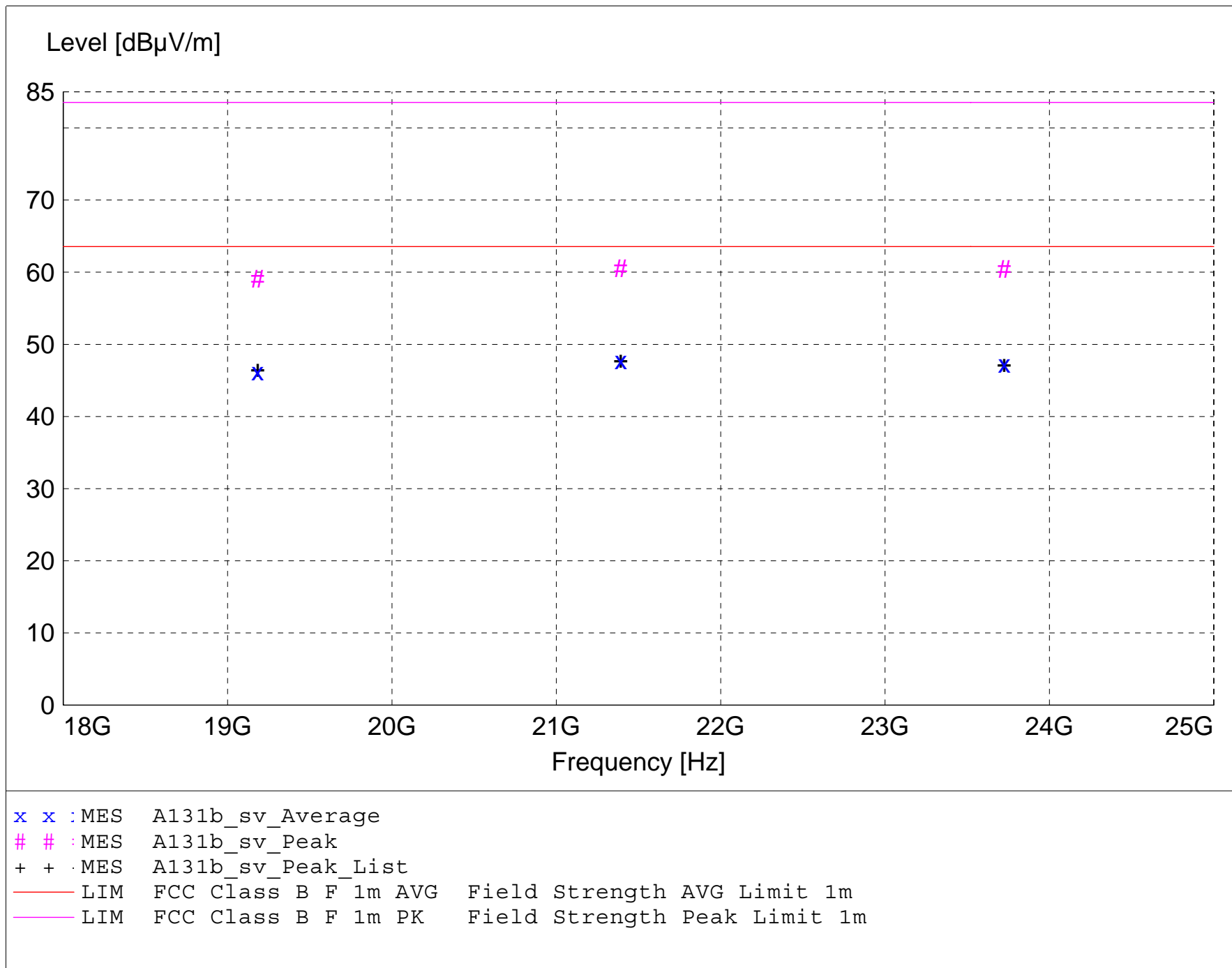
Short Description: Test Set-up

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

Sample Equations:
$$\begin{array}{rclclcl} \text{Total Level (dB}\mu\text{V/m)} & = & \text{Level (dB}\mu\text{V)} & + & \text{System Loss (dB)} & + & \text{Antenna Factor (dB}\mu\text{V/m)} \\ 24.6 & & = 35.51 & + & (-22.1) & + & 11.20 \end{array}$$

$$\begin{array}{rclcl} \text{Margin (dB)} & = & \text{Limit (dB}\mu\text{V/m)} & - & \text{Total Level (dB}\mu\text{V/m)} \\ 15.4 & = & 40 & - & 24.6 \end{array}$$

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 detector
 # Final maximized level using Peak detector



MEASUREMENT RESULT: "A131b_sv_Final"

2/1/2018 11:07AM

Frequency	Level	Antenna	System	Total	Limit	Margin	Height	EuT	Final	Comment
MHz	dBμV	Factor	Loss	Level			Ant.	Angle	Detector	
		dBμV/m	dB	dBμV/m	dBμV/m	dB	m	deg		
21392.000000	39.82	46.81	-38.9	47.8	63.5	15.8	1.50	0	AVERAGE	noise floor
23726.000000	40.60	46.34	-39.6	47.3	63.5	16.2	1.50	0	AVERAGE	noise floor
19182.800000	39.82	45.50	-39.1	46.2	63.5	17.3	1.50	0	AVERAGE	noise floor
21392.000000	52.61	46.81	-38.9	60.6	83.5	23.0	1.50	0	MAX PEAK	noise floor
23726.000000	53.68	46.34	-39.6	60.4	83.5	23.1	1.50	0	MAX PEAK	noise floor
19182.800000	52.74	45.50	-39.1	59.1	83.5	24.4	1.50	0	MAX PEAK	noise floor

FCC Part 15.209

Electric Field Strength

EUT: Accu-Chek Guide ME Meter
Manufacturer: Roche Diagnostics Operations
Operating Condition: 70 deg F 26% R.H.
Test Site: DLS O.F. G1
Operator: Craig B; Project #9116
Test Specification: Radiated emissions in Restricted Frequency Bands
Comment: Continuous Tx; 100% duty cycle; Channels 0, 19, and 39
Date: 02-01-2018

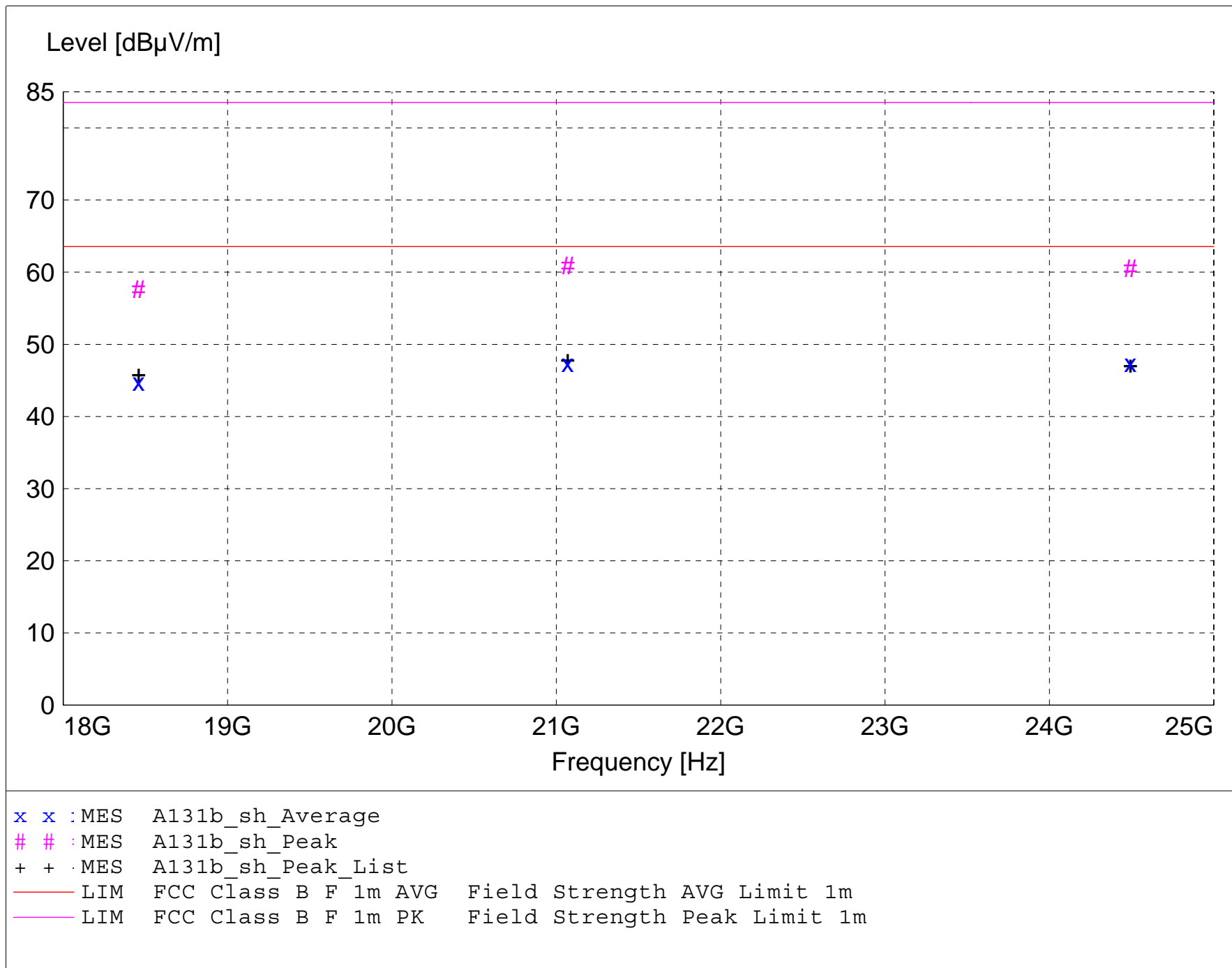
TEXT: "Horz 1 meters"

Short Description: Test Set-up

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

Sample Equations:
$$\begin{array}{rclclcl} \text{Total Level (dB}\mu\text{V/m)} & = & \text{Level (dB}\mu\text{V)} & + & \text{System Loss (dB)} & + & \text{Antenna Factor (dB}\mu\text{V/m)} \\ 24.6 & & = 35.51 & + & (-22.1) & + & 11.20 \end{array}$$
$$\begin{array}{rclcl} \text{Margin (dB)} & = & \text{Limit (dB}\mu\text{V/m)} & - & \text{Total Level (dB}\mu\text{V/m)} \\ 15.4 & = & 40 & - & 24.6 \end{array}$$

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 detector
Final maximized level using Peak detector



MEASUREMENT RESULT: "A131b_sh_Final"

2/1/2018 11:13AM

Frequency	Level	Antenna	System	Total	Limit	Margin	Height	EuT	Final	Comment
MHz	dBμV	Factor	Loss	Level			Ant.	Angle	Detector	
		dBμV/m	dB	dBμV/m	dBμV/m	dB	m	deg		
21069.600000	38.10	47.01	-37.7	47.4	63.5	16.2	1.50	0	AVERAGE	noise floor
24493.200000	40.49	46.32	-39.5	47.3	63.5	16.2	1.50	0	AVERAGE	noise floor
18458.400000	37.88	44.79	-37.9	44.8	63.5	18.7	1.50	0	AVERAGE	noise floor
21069.600000	51.67	47.01	-37.7	61.0	83.5	22.6	1.50	0	MAX PEAK	noise floor
24493.200000	53.68	46.32	-39.5	60.5	83.5	23.0	1.50	0	MAX PEAK	noise floor
18458.400000	50.74	44.79	-37.9	57.7	83.5	25.9	1.50	0	MAX PEAK	noise floor



Company:	Roche Diagnostics Operations
Model Tested:	897
Report Number:	23449
DLS Project:	9116

166 South Carter, Genoa City, WI 53128

Appendix B

B9.0 AC Line Conducted Emissions

Rule Part: FCC Part 15.207

Test Procedure: ANSI C63.10-2013, section 6.2

Limit: 15.207(a)

Results: Compliant

Notes: This was an AC Conducted emissions measurement. The EUT was connected to a computer via USB port as a computer peripheral. The EUT was put into continuous transmit mode for this test.

Host computer:	HP ENVY mb Notebook PC, SN: 5CG4362B3X
Power supply:	HP KTC HU10674-13027, SN: WDUVA0CEA9JVCN0C



Report issuing date : 02-02-2018

Standard : FCC Part 15.207
Test Type : Voltage Mains Test
Test Site : DLS Screen Room
Temperature : 70 °F
Humidity : 20 %
Test Specs : 120 V 60 Hz Line 1 Quasi-Peak
Operator : Craig B
DLS Project # : 9116
Result : Pass

EUT

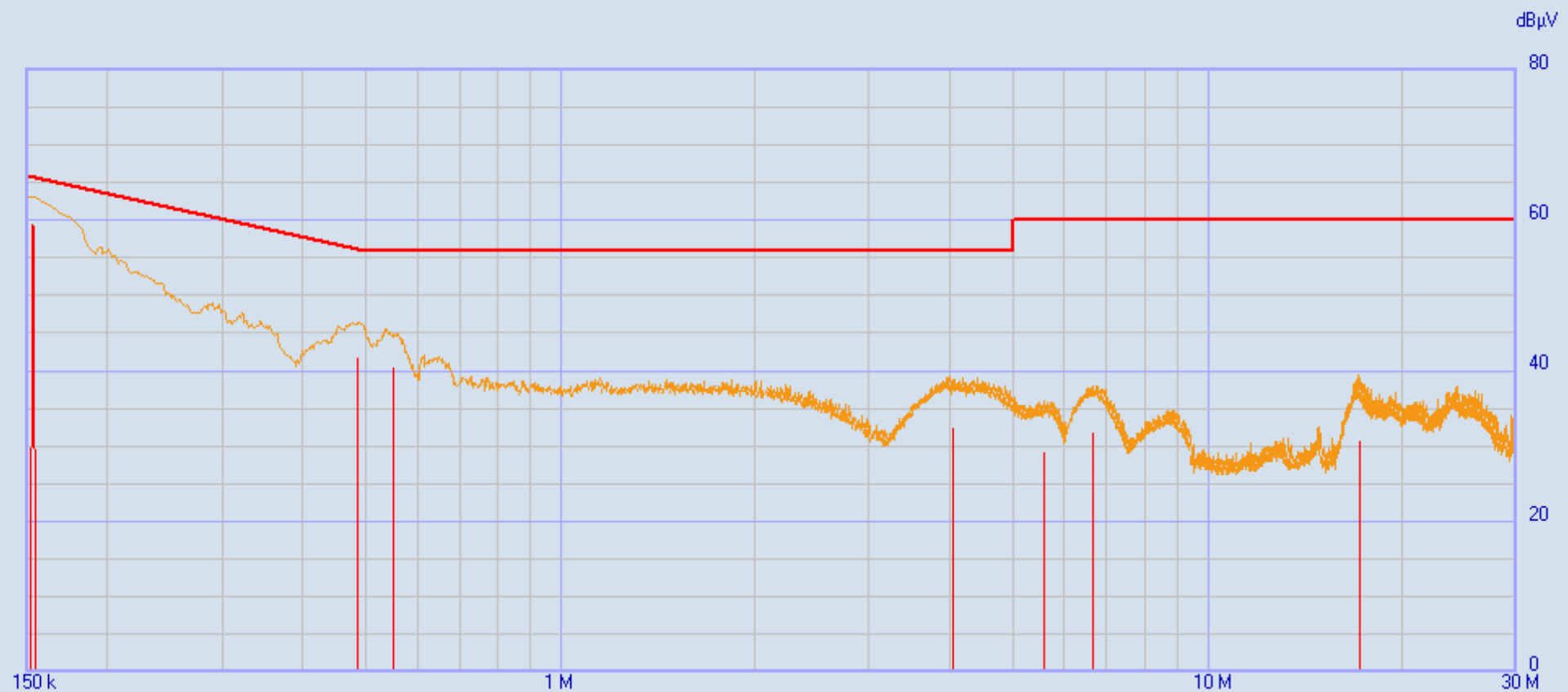
Manufacturer : Roche Diagnostics Operations
Model : Accu-Chek Guide ME Meter
Product : Medical diagnostic test meter
Notes :
Comments : Continuous transmit mode; Test performed on power supply of host computer

Testing Company : DLS Electronic Systems
Tel./Fax : 262-279-0210
Web site : <http://www.dlsemc.com>

Receiver Details

Model : PMM 9010F
Brand : Narda
S/N : 020WW40102
Last Calibration : 04/06/2017

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.



Roche Guide ME Tx 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	1500 ms	9 kHz	10	OFF	ON

Ancillary = General
Nr. of Worst = Infinite (2)

Limits:
FCC 15_207 QP

Factors:
LISN DLS#665
Cables 43 & 45
DLS#507 with CBL-035
DLS#592

Peak ———
QPeak ———

Roche Guide ME Tx L1_000 02/02/2018 08:50:23
 Rel. SW 2.22 (August 2015)
 Rel. FW 1.57 21/12/16
 Margin: 50 dB

	Frequency	QPeak	Limit	Delta	Factor	Factor	Factor	Factor
	[MHz]	[dBµV]	FCC 15_20.. [dBµV]	[dB]	LISN DLS#.. [dB]	Cables 43.. [dB]	DLS#507 w.. [dB]	DLS#592 [dB]
1	0.152045	59.42	65.89	-6.47	0.12	0.11	9.73	2.19
2	0.15409	59.21	65.78	-6.57	0.12	0.10	9.72	2.15
3	0.48538	41.69	56.25	-14.56	0.04	0.13	9.69	0.78
4	0.55082	40.33	56.00	-15.67	0.04	0.15	9.69	0.70
5	4.021185	32.37	56.00	-23.63	0.06	0.47	9.78	0.15
6	5.55698	29.11	60.00	-30.89	0.05	0.53	9.80	0.15
7	6.62447	31.75	60.00	-28.25	0.06	0.57	9.81	0.16
8	17.137815	30.56	60.00	-29.44	0.06	0.76	9.83	0.19



Report issuing date : 02-02-2018

Standard : FCC Part 15.207
Test Type : Voltage Mains Test
Test Site : DLS Screen Room
Temperature : 70 °F
Humidity : 20 %
Test Specs : 120 V 60 Hz Line 1 Average
Operator : Craig B
DLS Project # : 9116
Result : Pass

EUT

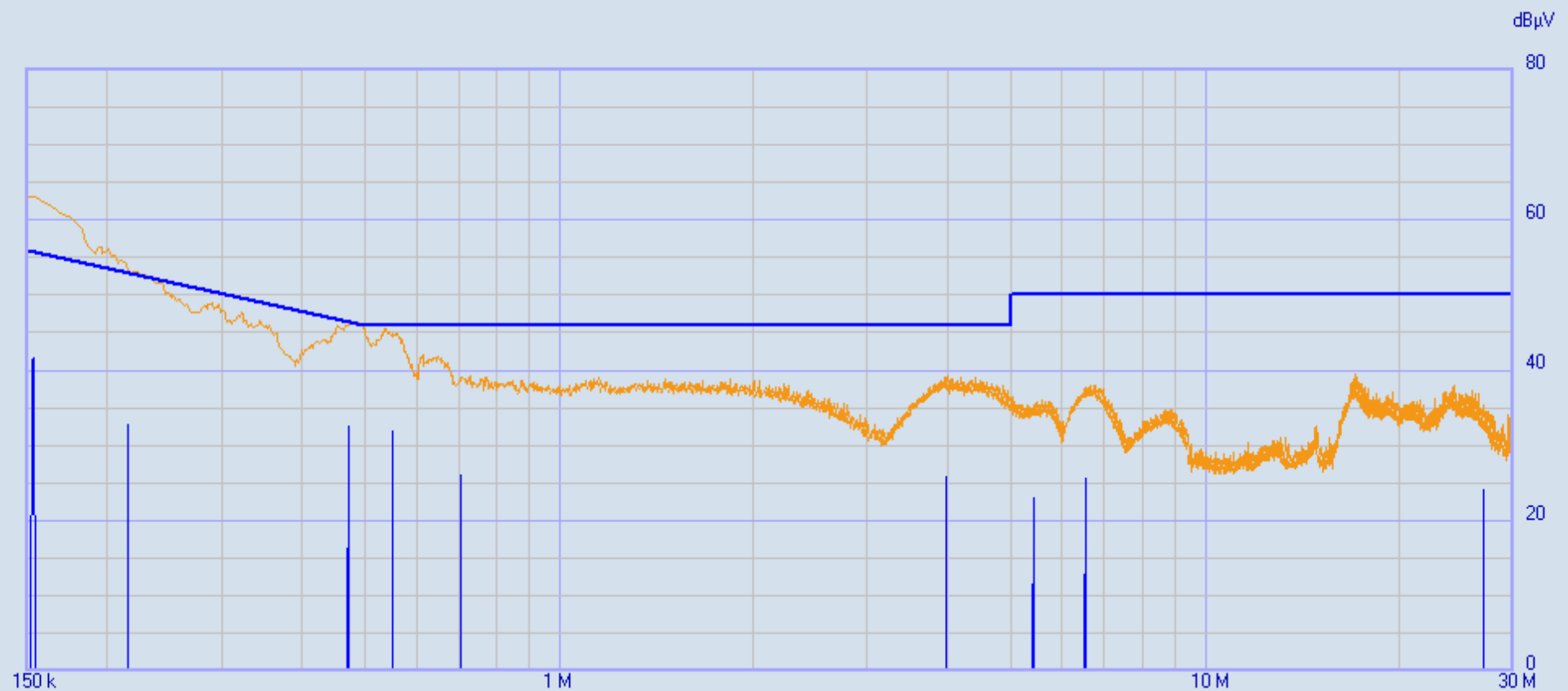
Manufacturer : Roche Diagnostics Operations
Model : Accu-Chek Guide ME Meter
Product : Medical diagnostic test meter
Notes :
Comments : Continuous transmit mode; Test performed on power supply of host computer

Testing Company : DLS Electronic Systems
Tel./Fax : 262-279-0210
Web site : <http://www.dlsemc.com>

Receiver Details

Model : PMM 9010F
Brand : Narda
S/N : 020WW40102
Last Calibration : 04/06/2017

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.



Roche Guide ME Tx L1_001

	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 C	1500 ms	9 kHz	10	OFF	ON

Ancillary = General
Nr. of Worst = Infinite (2)

Limits:
FCC 15_207 AV

Factors:
LISN DLS#665
Cables 43 & 45
DLS#507 with CBL-035
DLS#592

Peak ———
C-Avg ———

Roche Guide ME Tx L1_001 02/02/2018 08:55:12
 Rel. SW 2.22 (August 2015)
 Rel. FW 1.57 21/12/16
 Margin: 50 dB

Frequency	C-Avg	Limit	Delta	Factor	Factor	Factor	Factor
[MHz]	[dBµV]	FCC 15_20.. [dBµV]	[dB]	LISN DLS#.. [dB]	Cables 43.. [dB]	DLS#507 w.. [dB]	DLS#592 [dB]
1 0.152045	41.26	55.89	-14.63	0.12	0.11	9.73	2.19
2 0.15409	41.58	55.78	-14.20	0.12	0.10	9.72	2.15
3 0.21544	32.83	52.99	-20.16	0.10	0.08	9.73	1.63
4 0.471065	32.53	46.50	-13.97	0.05	0.13	9.69	0.81
5 0.55082	31.79	46.00	-14.21	0.04	0.15	9.69	0.70
6 0.704195	26.06	46.00	-19.94	0.04	0.18	9.69	0.53
7 3.97006	25.87	46.00	-20.13	0.06	0.47	9.78	0.15
8 5.399515	22.96	50.00	-27.04	0.05	0.52	9.80	0.16
9 6.503815	25.60	50.00	-24.40	0.06	0.57	9.81	0.16
10 26.80044	24.06	50.00	-25.94	0.19	0.96	9.89	0.35



Report issuing date : 02-02-2018

Standard : FCC Part 15.207
Test Type : Voltage Mains Test
Test Site : DLS Screen Room
Temperature : 70 °F
Humidity : 20 %
Test Specs : 120 V 60 Hz Line 2 Quasi-Peak
Operator : Craig B
DLS Project # : 9116
Result : Pass

EUT

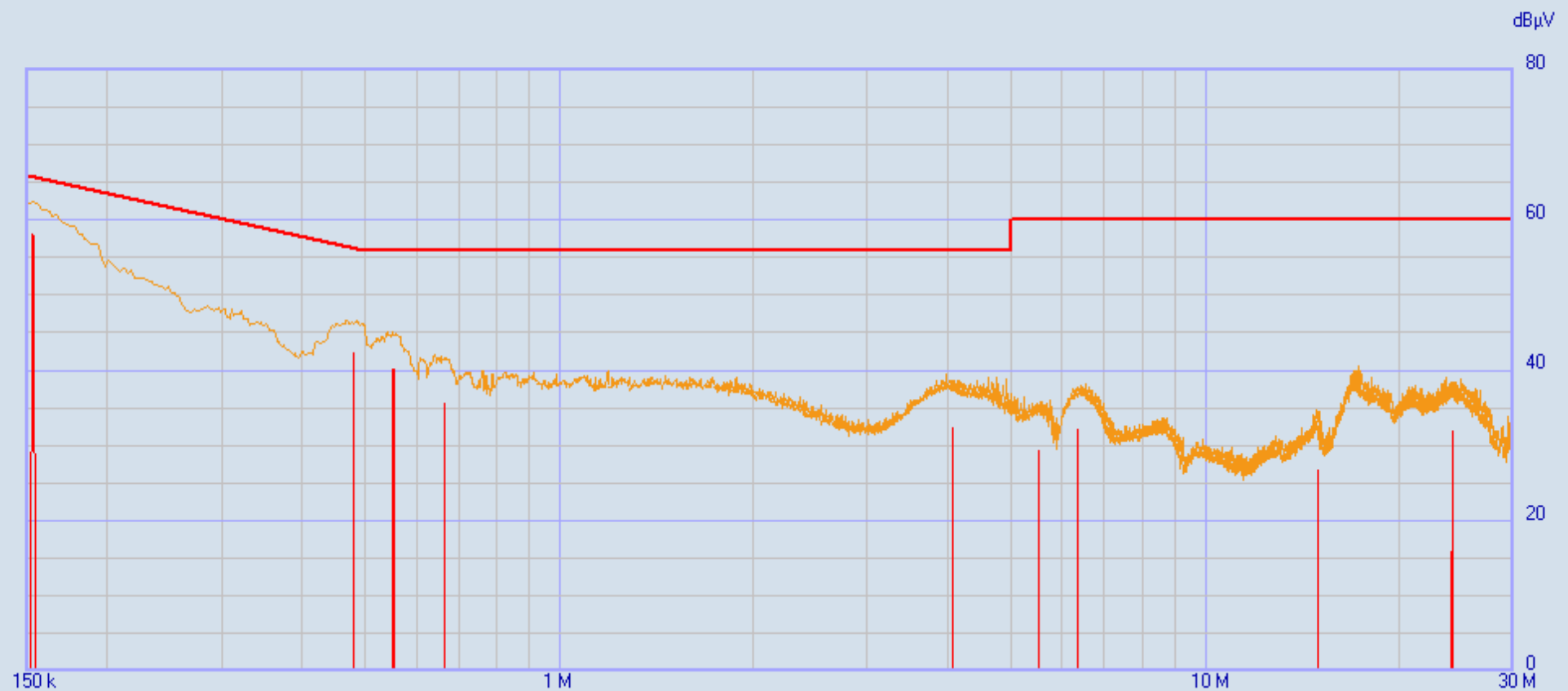
Manufacturer : Roche Diagnostics Operations
Model : Accu-Chek Guide ME Meter
Product : Medical diagnostic test meter
Notes :
Comments : Continuous transmit mode; Test performed on power supply of host computer

Testing Company : DLS Electronic Systems
Tel./Fax : 262-279-0210
Web site : <http://www.dlsemc.com>

Receiver Details

Model : PMM 9010F
Brand : Narda
S/N : 020WW40102
Last Calibration : 04/06/2017

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.



Roche Guide ME Tx L2_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	1500 ms	9 kHz	10	OFF	ON

Ancillary = General
Nr. of Worst = Infinite (2)

Limits:
FCC 15_207 QP

Factors:
LISN DLS#665
Cables 43 & 45
DLS#507 with CBL-035
DLS#592

Peak ———
QPeak ———

Roche Guide ME Tx L2_000 02/02/2018 09:00:33
 Rel. SW 2.22 (August 2015)
 Rel. FW 1.57 21/12/16
 Margin: 50 dB

	Frequency	QPeak	Limit	Delta	Factor	Factor	Factor	Factor
	[MHz]	[dBµV]	FCC 15_20.. [dBµV]	[dB]	LISN DLS#.. [dB]	Cables 43.. [dB]	DLS#507 w.. [dB]	DLS#592 [dB]
1	0.152045	58.05	65.89	-7.84	0.12	0.11	9.73	2.19
2	0.15409	57.92	65.78	-7.86	0.12	0.10	9.72	2.15
3	0.48129	42.26	56.32	-14.06	0.04	0.13	9.69	0.78
4	0.552865	40.22	56.00	-15.78	0.04	0.15	9.69	0.70
5	0.663295	35.48	56.00	-20.52	0.04	0.18	9.69	0.56
6	4.045725	32.26	56.00	-23.74	0.06	0.47	9.78	0.15
7	5.509945	29.19	60.00	-30.81	0.05	0.53	9.80	0.15
8	6.319765	32.03	60.00	-27.97	0.06	0.56	9.80	0.15
9	14.871955	26.70	60.00	-33.30	0.07	0.72	9.82	0.18
10	24.05605	31.87	60.00	-28.13	0.15	0.94	9.89	0.30



Report issuing date : 02-02-2018

Standard : FCC Part 15.207
Test Type : Voltage Mains Test
Test Site : DLS Screen Room
Temperature : 70 °F
Humidity : 20 %
Test Specs : 120 V 60 Hz Line 2 Average
Operator : Craig B
DLS Project # : 9116
Result : Pass

EUT

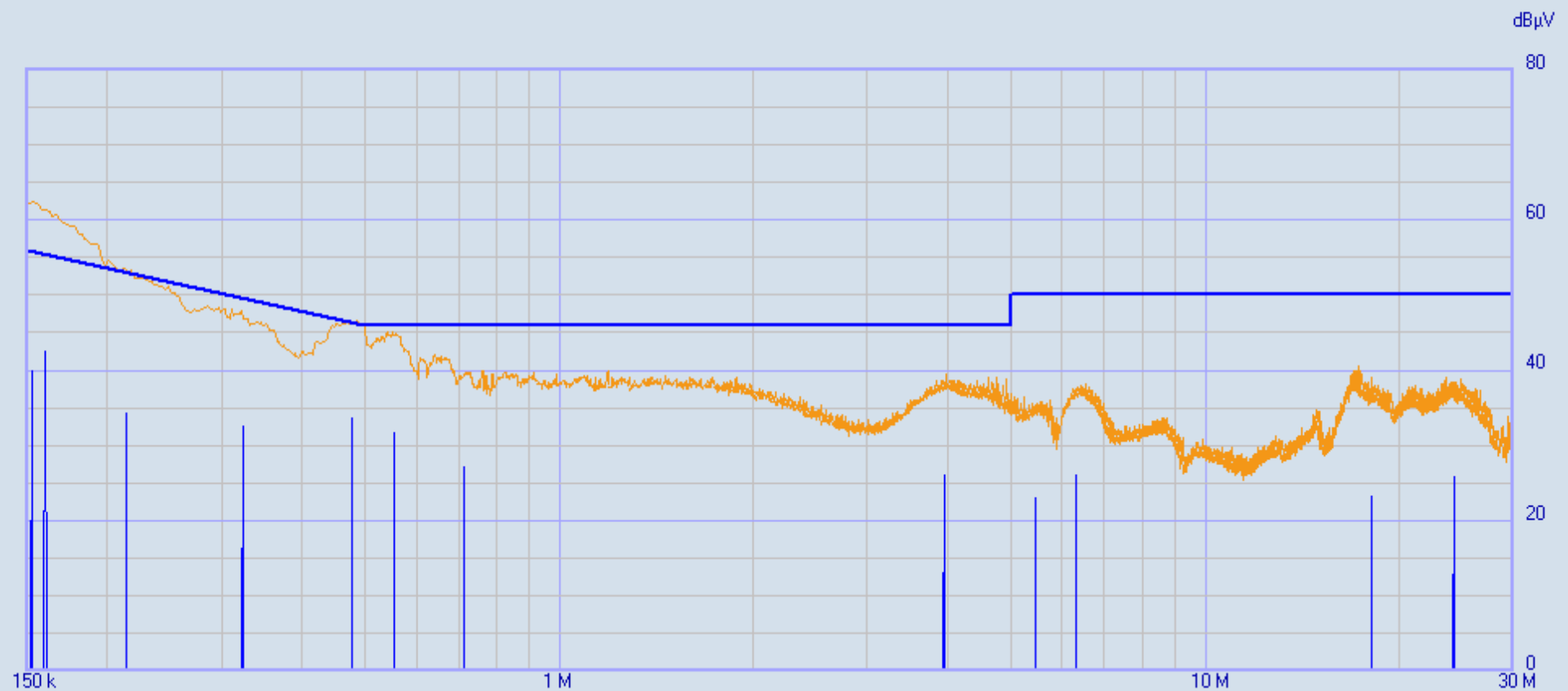
Manufacturer : Roche Diagnostics Operations
Model : Accu-Chek Guide ME Meter
Product : Medical diagnostic test meter
Notes :
Comments : Continuous transmit mode; Test performed on power supply of host computer

Testing Company : DLS Electronic Systems
Tel./Fax : 262-279-0210
Web site : <http://www.dlsemc.com>

Receiver Details

Model : PMM 9010F
Brand : Narda
S/N : 020WW40102
Last Calibration : 04/06/2017

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.



Roche Guide ME Tx L2_001

	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 C	1500 ms	9 kHz	10	OFF	ON

Ancillary = General
Nr. of Worst = Infinite (2)

Limits:
FCC 15_207 AV

Factors:
LISN DLS#665
Cables 43 & 45
DLS#507 with CBL-035
DLS#592

Peak ———
C-Avg ———

Roche Guide ME Tx L2_001 02/02/2018 09:02:37
 Rel. SW 2.22 (August 2015)
 Rel. FW 1.57 21/12/16
 Margin: 50 dB

	Frequency	C-Avg	Limit	Delta	Factor	Factor	Factor	Factor
	[MHz]	[dBµV]	FCC 15_20.. [dBµV]	[dB]	LISN DLS#.. [dB]	Cables 43.. [dB]	DLS#507 w.. [dB]	DLS#592 [dB]
1	0.152045	39.86	55.89	-16.03	0.12	0.11	9.73	2.19
2	0.160225	42.54	55.45	-12.91	0.12	0.08	9.70	2.03
3	0.213395	34.18	53.07	-18.89	0.10	0.08	9.73	1.65
4	0.323825	32.61	49.61	-17.00	0.08	0.08	9.72	1.15
5	0.479245	33.61	46.35	-12.74	0.04	0.13	9.69	0.79
6	0.55491	31.60	46.00	-14.40	0.04	0.15	9.69	0.69
7	0.71033	27.13	46.00	-18.87	0.04	0.18	9.69	0.52
8	3.927115	25.96	46.00	-20.04	0.06	0.47	9.77	0.15
9	5.45064	23.07	50.00	-26.93	0.05	0.52	9.80	0.16
10	6.282955	26.03	50.00	-23.97	0.06	0.56	9.80	0.15
11	18.000805	23.19	50.00	-26.81	0.07	0.78	9.84	0.20
12	24.111265	25.80	50.00	-24.20	0.15	0.94	9.89	0.30



Company:	Roche Diagnostics Operations
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Appendix C – Measurement Uncertainty

Compliance with the limits in this standard are based on the results of the compliance measurement. Our calculated measurement uncertainty including the measurement instrumentation, associated connections between the various instruments in the measurement chain, and other contributions, are provided in this section of the test report.

Parameter	Expanded Uncertainty (K=2)
Occupied Channel Bandwidth	+/-1.14%
RF Output Power, Conducted	+/-0.89dB
Unwanted Emissions, Conducted	+/-2.62dB
All Emissions, Radiated	+/-4.95dB
AC line conducted emissions	+/-2.10dB
DC and Low Frequency Voltages	+/-2.42%
Duty Cycle	+/-0.05%



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END OF REPORT

Revision #	Date	Comments	By
1.0	February 6, 2018	Initial Release	CB