







EMC TEST REPORT FCC CFR Title 47 / Chapter I / Subchapter A / Part 15 / Subpart B ISED ICES-003 Issue 7	
Report Reference No	G0M-2302-1878-EF0115B-V01
Testing Laboratory	Eurofins Product Service GmbH
Address	Storkower Str. 38c 15526 Reichenwalde Germany
Accreditation	    <p> A2LA - Registration number: 1983.01 (ISED) ISED wireless device testing laboratory: CN 3470A DAkkS - Registration number : D-PL-12092-01-04 (FCC) FCC Filed Test Laboratory, Reg.-No.: 96970 </p>
Applicant	Leica Geosystems AG
Address	Heinrich-Wild-Strasse 9435 Heerbrugg SWITZERLAND
Test Specification Standard(s)	Title 47 CFR Part 15 Subpart B ISED ICES-Gen Issue 1 ; Amendment 1 (February 2021) ISED ICES-003 Issue 7 ANSI C63.4:2014+A1:2017
Non-Standard Test Method	None
Equipment under Test (EUT):	
Product Description	Remote Control
Model(s)	Leica RC10
Additional Model(s)	None
Brand Name(s)	Leica
Hardware Version(s)	V0302
Software Version(s)	Soft Device 7.20
FCC-ID	RFF-RC1BT
IC	3177A-RC1BT
Test Result	PASSED

Possible test case verdicts:		
required by standard but not tested	N/T	
not required by standard	N/R	
required by standard but not appl. to test object	N/A	
test object does meet the requirement	P(PASS)	
test object does not meet the requirement	F(FAIL)	
Testing:		
Date of receipt of test item	2023-02-27	
Report:		
Compiled by	Brahima Drabo	
Tested by (+ signature)	Brahima Drabo	
Responsible for Test (+ signature)	Stephan Liebich	
Approved by (+ signature) (Senior EMC Test Technician)	Matthias Handrik	
Date of Issue	2023-06-28	
Total number of pages	38	
General Remarks:		
<p>The test results presented in this report relate only to the object tested.</p> <p>The results contained in this report reflect the results for this particular model and serial number. It is the responsibility of the manufacturer to ensure that all production models meet the intent of the requirements detailed within this report.</p> <p>This report shall not be reproduced, except in full, without the written approval of the Issuing testing laboratory.</p>		
Statement concerning the uncertainty of the measurement systems used for decisions on conformity (decision rule):		
<p>The Decision Rule is applied on the basis of CISPR 16-4-2 and/or IEC 61000-4-x (TR 61000-1-6) and their national publications. These standards provide guidance on how to calculate and apply measurement uncertainty whilst providing maximum uncertainties allowance. In all cases due consideration will be given to ILAC-G8:09/2019.</p> <p>Compliance or non-compliance with a disturbance limit is determined in the following manner.</p> <ul style="list-style-type: none"> - If U_{lab} is less than or equal to U_{cisp}, then: compliance is deemed to occur if no measured disturbance level exceeds the disturbance limit; non-compliance is deemed to occur if any measured disturbance level exceeds the disturbance limit. - If U_{lab} is greater than U_{cisp}, then: compliance is deemed to occur if no measured disturbance level, increased by $(U_{lab} - U_{cisp})$, exceeds the disturbance limit; non-compliance is deemed to occur if any measured disturbance level, increased by $(U_{lab} - U_{cisp})$, exceeds the disturbance limit. <p>Where appropriate for the test, for example for EMC pulsed immunity tests, the laboratory has demonstrated, by calibrating its equipment and facilities, that it complies with the above requirements and therefore no allowance of uncertainties has been given to the tolerances.</p>		

Additional Comments:		
Additional variants have been declared by the manufacturer. The listed models were not tested, evaluated or assessed in no way.		
Additional Model 1	Product Type Description	Remote Control
	Model Name	Remote Control
	Brand Name (optional)	Hexagon
	Hardware Version	V0302
	Software Version	Soft Device 7.20

ABBREVIATIONS AND ACRONYMS

Acronyms	
Acronym	Description
EUT	Equipment Under Test
FCC	Federal Communications Commission
ISED	Innovation, Science and Economic Development Canada
T _{NOM}	Nominal operating temperature
V _{NOM}	Nominal supply voltage

VERSION HISTORY

Version History			
Version	Issue Date	Remarks	Revised By
01	2023-06-28	Initial Release	-

REPORT INDEX

1	Equipment (Test Item) Under Test.....	7
1.1	Equipment Ports.....	8
1.2	Equipment Photos - Internal.....	9
1.3	Equipment Photos - External.....	11
1.4	Support Equipment.....	15
1.5	Operational Modes.....	15
1.6	EUT Configuration.....	15
1.7	Sample emission level calculation.....	16
2	Result Summary.....	17
2.1	Test Conditions and Results - Radiated emissions acc. to ANSI C63.4.....	18
2.2	Test Conditions and Results - Conducted emissions acc. to ANSI C63.4.....	32
3	Measurement Uncertainty	38

1 Equipment (Test Item) Under Test

Description	Remote Control		
Intended Use	The Leica RC10 is a remote control for the iCON20/50 tablet.		
Model	Leica RC10		
Additional Model(s)	None		
Brand Name(s)	Leica		
Hardware Version(s)	V0302		
Software Version(s)	Soft Device 7.20		
Number of tested samples	1		
Sample Identification	EUT #	Sample-ID	Serial Number
	EUT 1	43424	2323840052
EUT Dimensions [cm]	5 x 13 x 2.5		
FCC-ID	RFF-RC1BT		
IC	3177A-RC1BT		
Class	Class B		
Equipment type	Table top		
Highest internal frequency [MHz]	2500		
Protective Earth	No		
Radio Module	Type	Bluetooth Low Energy (LE)	
	Model	nRF52832-QFAA-R	
	Manufacturer	Nordic	
	FCC-ID	unspecified	
	IC	unspecified	
Supply Voltage	V _{NOM}	3.6 V DC via internal rechargeable Lithium battery; 5 V DC via USB Type C connector	
AC/DC-Adaptor	None		
Manufacturer	Leica Geosystems AG Heinrich-Wild-Strasse 9435 Heerbrugg SWITZERLAND		
Factory	flex 28 Munkas ut 8660 Tab Hungary		

1.1 Equipment Ports

Name	Type	Attributes	Comment
USB 3.0	IO	Count: 1 Cable length [m]: 1.2 Direction: IO Service only: No Shielded: Yes	Type C connector; Charging only; cable shield connected to EUT and AC/DC- Adapter
Description:			
AC	AC mains power input/output port		
DC	DC power input/output port		
BAT	DC power input port connected to external battery		
IO	Input/Output port		
TP	Telecommunication port		
NE	Non-electrical port		

1.4 Support Equipment

Product Type	Device	Manufacturer	Model	Comment
AE	Laptop	Lenovo	Thinkpad	Windows 10 Pro; Intel® Core™ i5-5300U CPU @ 2.3GHz
AE	Dongle Nordic	Nordic Semiconductor	nRF52840	Customer Support Equipment: Sample ID: 43425
AE	AC / DC Adapter	Ktec Leica Geosystems K.K	KSA29A0500300D 5	Customer Support Equipment: Sample ID: 43162
CBL	USB cable	unspecified	unspecified	Customer Support Equipment: USB 3.0; Type C connector; 1.2 m
SW	nRF Connect for Desktop	Nordic Semiconductor	V4.0.4	Bluetooth connection monitoring (data transmission)
Description:				
AE	Auxiliary Equipment			
SIM	Simulator			
MON	Monitoring Equipment			
CBL	Connecting Cable			
SW	Software			
Comment: --				

1.5 Operational Modes

Mode #	Description
1	EUT is in status powering with internal battery and transmitting every second via Bluetooth LE connection to Laptop.
2	EUT is in status internal battery charging and transmitting every second via Bluetooth LE connection to Laptop.
Comment: --	

1.6 EUT Configuration

Configuration #	Description
1	EUT is powered via internal Lithium battery. Internal battery level is between 20 and 80 %. Bluetooth LE Dongle Nordic is connected with laptop via USB connection.
2	EUT is powered via AC/DC-Adapter. AC/DC-Adapter is powered via external power supply unit. EUT to AC/DC-Adapter via USB cable Internal battery level is between 20 and 80 %. Bluetooth LE Dongle Nordic is connected with laptop via USB connection.
Comment: --	

1.7 Sample emission level calculation

The following is a description of terms and a sample calculation, as appears in the radiated emissions data table. The numbers used in the calculation are for example only. There is no direct correlation to the specific data taken for the product described in this document:

Reading:

This is the reading obtained on the spectrum analyser in dBµV. Any external preamplifiers used are taken into account through internal analyser settings.

A.F.:

This is the antenna factor for the receiving antenna. It is a conversion factor, which converts electric fields strengths to voltages, which can be measured directly on the spectrum analyser. It is treated as a loss in dB. Cable losses have been included with the A.F. to simplify the calculations. The antenna factor is used in calculations as follows:

$$\text{Reading on Analyser (dB}\mu\text{V)} + \text{A.F. (dB/m)} = \text{Net field strength (dB}\mu\text{V/m)}$$

Net:

This is the net field strength measurement (as shown above).

Limit:

This is the FCC Class B radiated emission limit (in units of dBµV/m). The FCC limits are given in units of µV/m. The following formula is used to convert the units of µV/m to dBµV/m:

$$\text{Limit (dB}\mu\text{V/m)} = 20 \cdot \log(\mu\text{V/m})$$

Margin:

This is the margin of compliance below the FCC limit. The units are given in dB. A negative margin indicates the emission was below the limit. A positive margin indicates that the emission exceeds the limit.

Example only:

Reading + AF	= Net Reading	:	Net reading - FCC limit	= Margin
+21.5 dBµV + 26 dB/m	= 47.5 dBµV/m	:	47.5 dBµV/m - 57.0 dBµV/m	= -9.5 dB

2 Result Summary

Title 47 CFR Part 15B, ISED ICES-003 Issue 7				
Reference	Requirement	Reference Method	Result	Remarks
Emission				
FCC 15.109 ICES-003, 3.2.2	Radiated emissions	ANSI C63.4:2014 +A1:2017	PASS	--
FCC 15.107 ICES-003, 3.2.1	AC power line conducted emissions	ANSI C63.4:2014 +A1:2017	PASS	--
Comment: --				

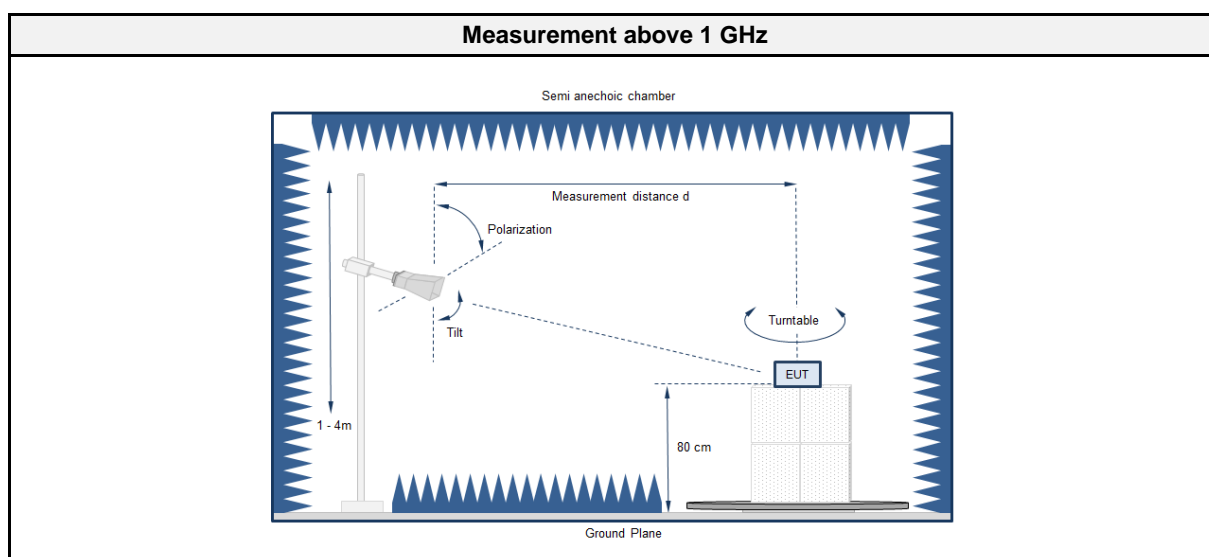
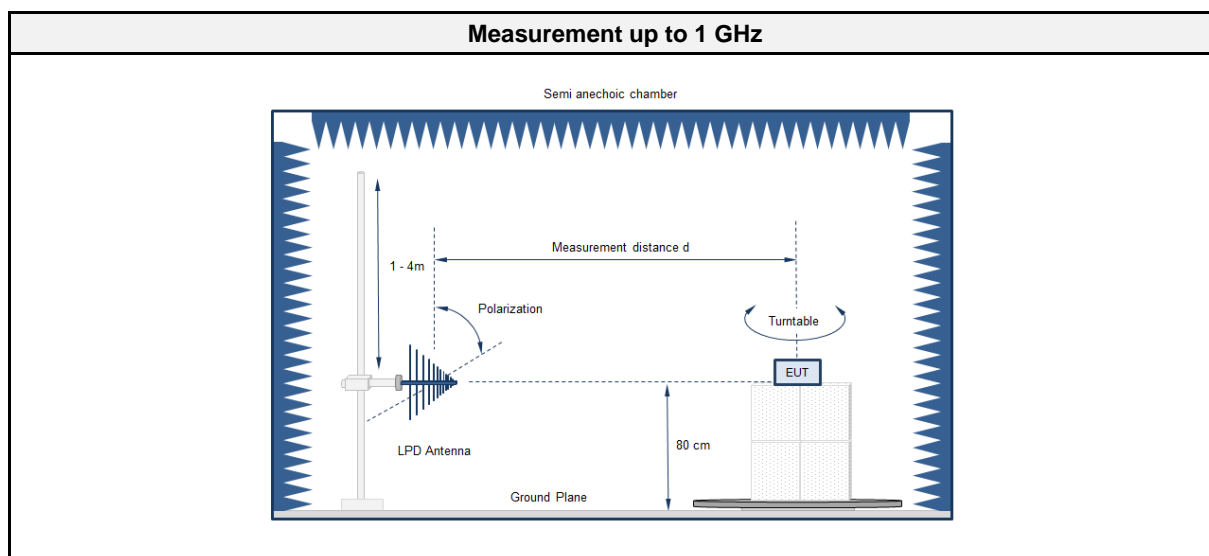
Possible Test Case Verdicts	
PASS	Test object does meet the requirements
FAIL	Test object does not meet the requirements
N/T	Required by standard but not tested
N/R	Not required by standard for the test object

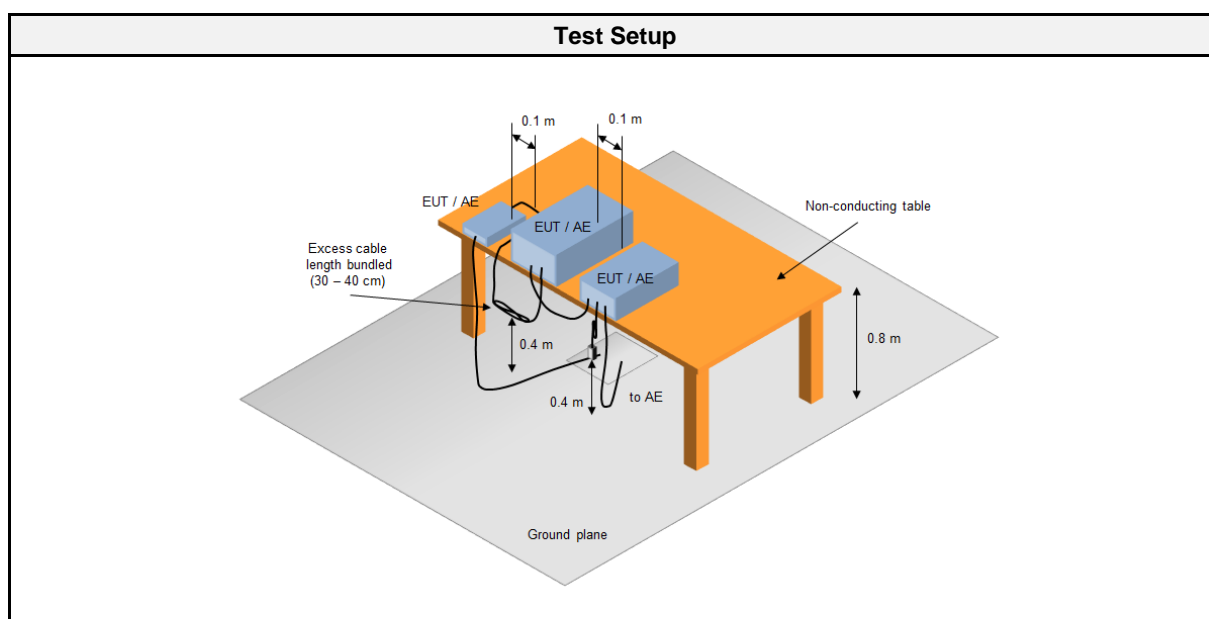
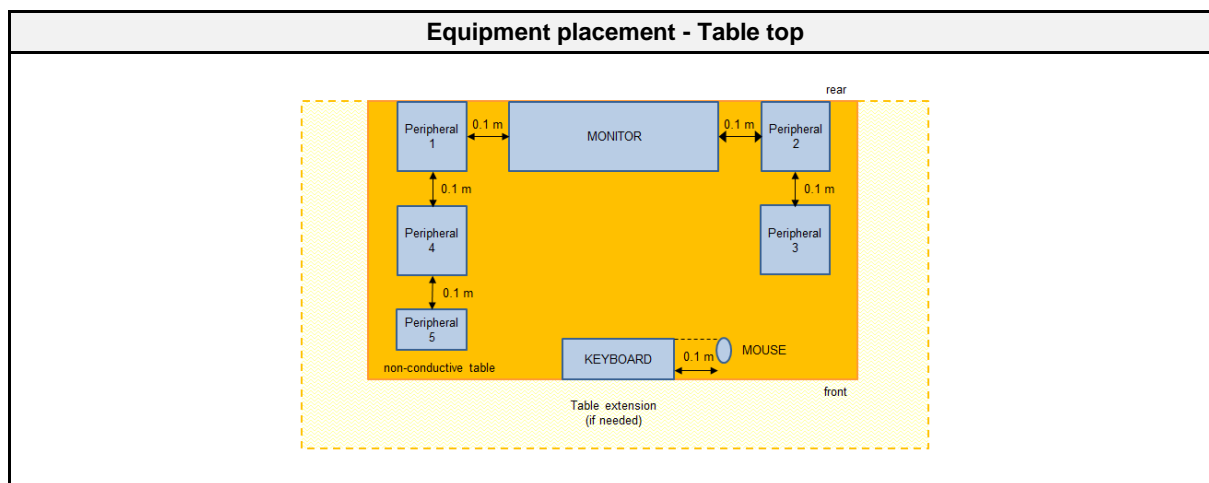
2.1 Test Conditions and Results - Radiated emissions acc. to ANSI C63.4

2.1.1 Information

Test Information	
Reference	FCC 15.109, ICES-003, 3.2.2
Reference method	ANSI C63.4:2014+A1:2017 Section 8
Equipment class	Class B
Equipment type	Table top
Highest internal frequency [MHz]	2500
Measurement range	30 MHz to 13000 MHz
Temperature [°C]	23 ±3
Humidity [%]	29 ±3
Operator	Brahima Drabo
Date	2023-04-28

2.1.2 Setup





2.1.3 Equipment

Test Software			
Description	Manufacturer	Name	Version
EMC Software	DARE Instruments	Radimation	2020.1.8

Test Equipment AC1					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Anechoic chamber (NSA)	Frankonia	AC1	EF00062	2022-11	2025-11
Anechoic chamber (SVSWR)	Frankonia	AC 1	EF01011	2022-11	2023-11
Programmable AC Source	Chroma ATE Inc.	61604	EF01068	2021-07	2023-07
EMI Test Receiver	Keysight	N9038A-526/WXP	EF01070	2023-02	2024-02
Horn Antenna	Schwarzbeck	BBHA9120D	EF00018	2022-12	2025-12
Trilog Broadband Antenna	Schwarzbeck	VULB 9168	EF01824	2022-10	2023-10
Climatic Sensor	Embedded Data Systems, LLC.	OW-ENV-THR	EF01122	2022-07	2023-07

2.1.4 Procedure

Exploratory measurement	
1.	The EUT was placed on a non-conductive table at a height of 0.8m.
2.	The EUT and support equipment, if needed, were set up to simulate typical usage.
3.	Cables, of type and length specified by the manufacturer, were connected to at least one port of each type and were terminated by a device or simulating load of actual usage.
4.	The antenna was placed at a distance of 3 or 10 m.
5.	The received signal was monitored at the measurement receiver.
6.	This procedure has to be performed in both antenna polarizations, horizontal and vertical.
7.	The arrangement of the equipment with the maximum emission level is shown on the setup picture at item 2.1.2

Final measurement	
1.	The EUT was placed on a 0.8 m non-conductive table at a 3 m distance from the receive antenna. The antenna output was connected to the measurement receiver.
2.	A biconical antenna was used for the frequency range 30 – 200 MHz, a logarithmic periodical antenna was used for the frequency range from 200 – 1000 MHz. Above one 1 GHz a Double Ridged Broadband Horn antenna was used. The antenna was placed on an adjustable height antenna mast.
3.	The EUT and cable arrangement were based on the exploratory measurement results.
4.	Emissions were maximized at each frequency by rotating the EUT and adjusting the receive antenna height and polarization. The maximum values were recorded.
5.	The test data of the worst-case conditions were recorded and shown on the next pages.

2.1.5 Limits

Class B @ 3 m		
Frequency [MHz]	Detector	Limit [dB μ V/m]
30 - 88	Quasi-peak	40
88 - 216	Quasi-peak	43.5
216 - 960	Quasi-peak	46
960 - 1000	Quasi-peak	54
> 1000	Peak	74
	Average	54

2.1.6 Results

Test Results			
Operational mode	EUT Configuration	Verdict	Remark
1	1	PASS	--
2	2	PASS	120 V AC / 60 Hz
Comment: AC Mains cable was 1.5 m long, USB cable is 1.2 m.			

2.1.7 Setup Photos

TEST SETUP – CONFIGURATION 1

TEST SETUP – CONFIGURATION 2

TEST SETUP 30 – 1000 MHz - CONFIGURATION 1**TEST SETUP 1 – 13 GHz - CONFIGURATION 1**

TEST SETUP 30 – 1000 MHz - CONFIGURATION 2**TEST SETUP 1 – 13 GHz - CONFIGURATION 2**

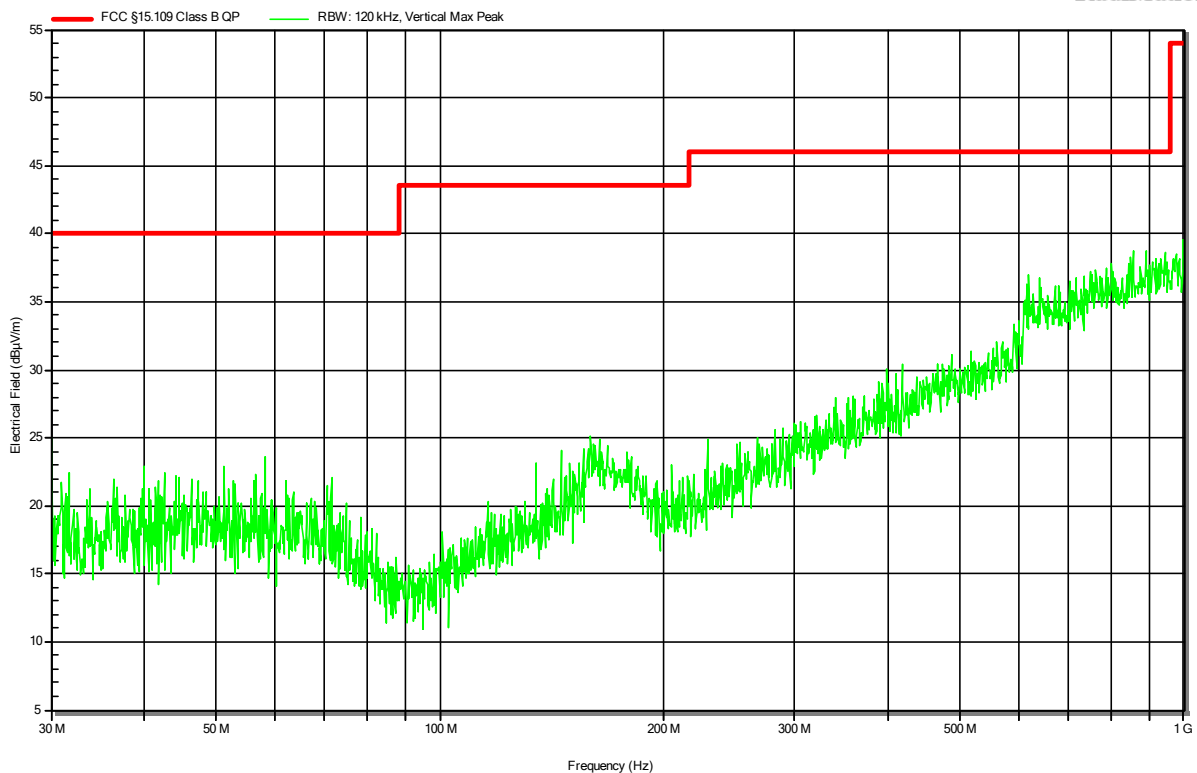
2.1.8 Records

**Radiated emissions
according to FCC part 15B**

Project Number:	G0M-2302-1878
Applicant:	Leica Geosystems AG
Model Description:	Remote Control
Model:	Leica RC10
Test Sample ID:	43424
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Drabo
Test Date:	2023-04-28
Operating Conditions:	ambient temperature: 23 °Celsius power input: 3.6 V DC via internal rechargeable Lithium battery
Antenna:	Schwarzbeck VULB 9168, Vertical
Measurement Distance:	3 m
Operational Mode:	Mode 1
EUT Configuration:	Configuration 1
Note 1:	-11°, 1 m

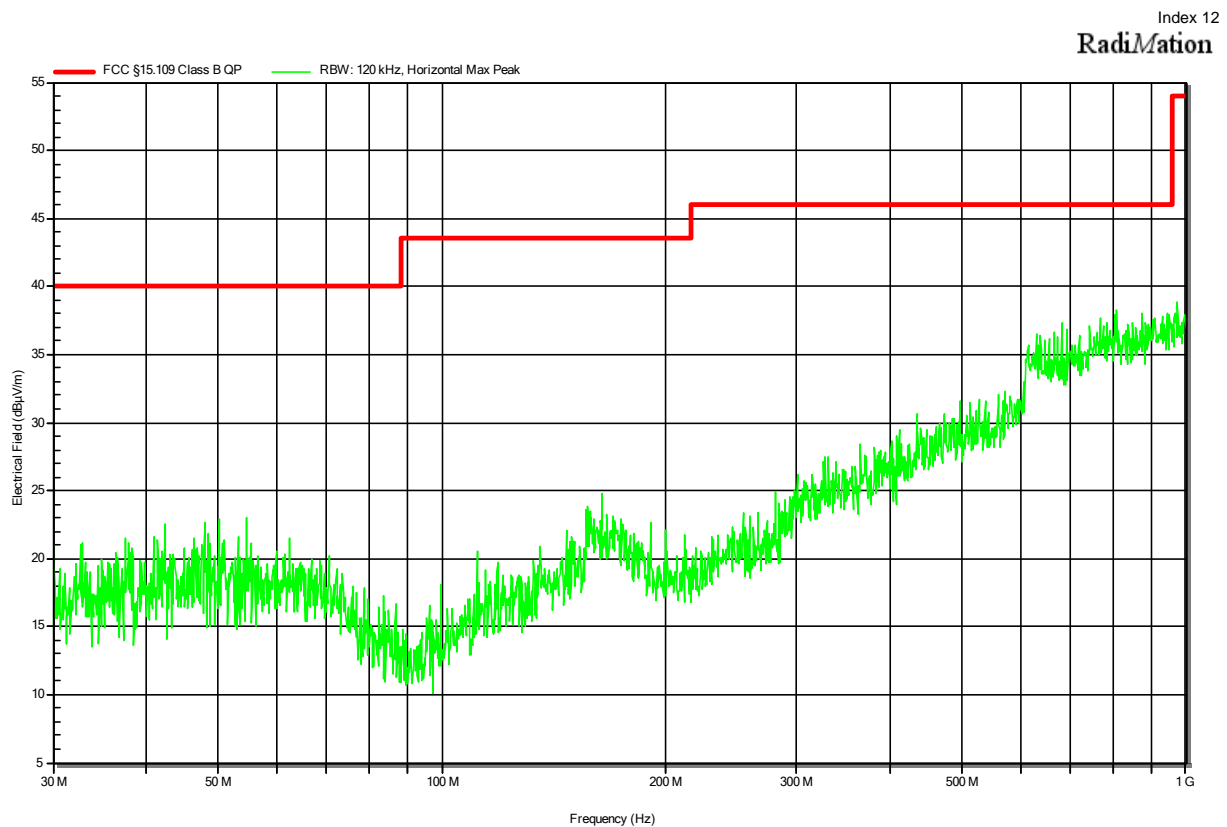
Index 13

RadiMation



Radiated emissions according to FCC part 15B

Project Number:	G0M-2302-1878
Applicant:	Leica Geosystems AG
Model Description:	Remote Control
Model:	Leica RC10
Test Sample ID:	43424
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Drabo
Test Date:	2023-04-28
Operating Conditions:	ambient temperature: 23 °Celsius power input: 3.6 V DC via internal rechargeable Lithium battery
Antenna:	Schwarzbeck VULB 9168, Horizontal
Measurement Distance:	3 m
Operational Mode:	Mode 1
EUT Configuration:	Configuration 1
Note 1:	0°, 1 m

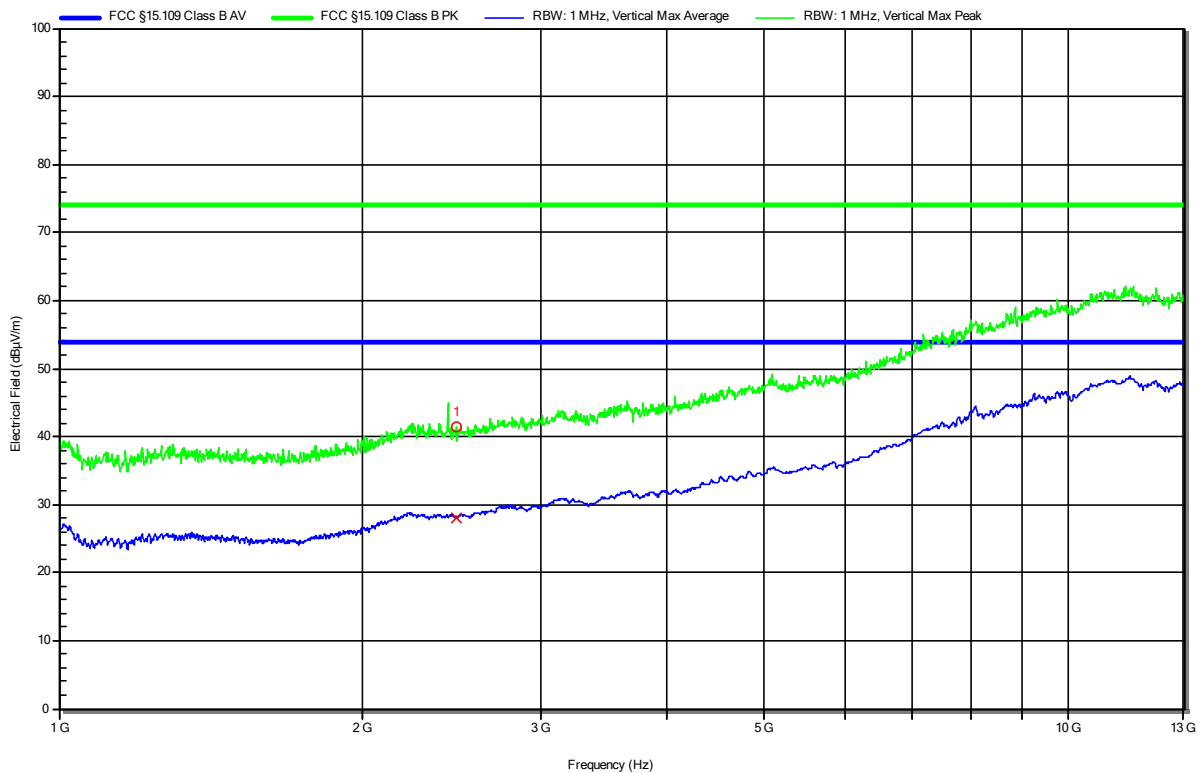


Radiated emissions according to FCC part 15B

Project Number: G0M-2302-1878
 Applicant: Leica Geosystems AG
 Model Description: Remote Control
 Model: Leica RC10
 Test Sample ID: 43424
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Drabo
 Test Date: 2023-04-28
 Operating Conditions: ambient temperature: 23 °Celsius
 power input: 3.6 V DC via internal rechargeable Lithium battery
 Antenna: Schwarzbeck BBHA 9120D, Vertical
 Measurement Distance: 3 m
 Operational Mode: Mode 1
 EUT Configuration: Configuration 1
 Note 1: --

Index 23

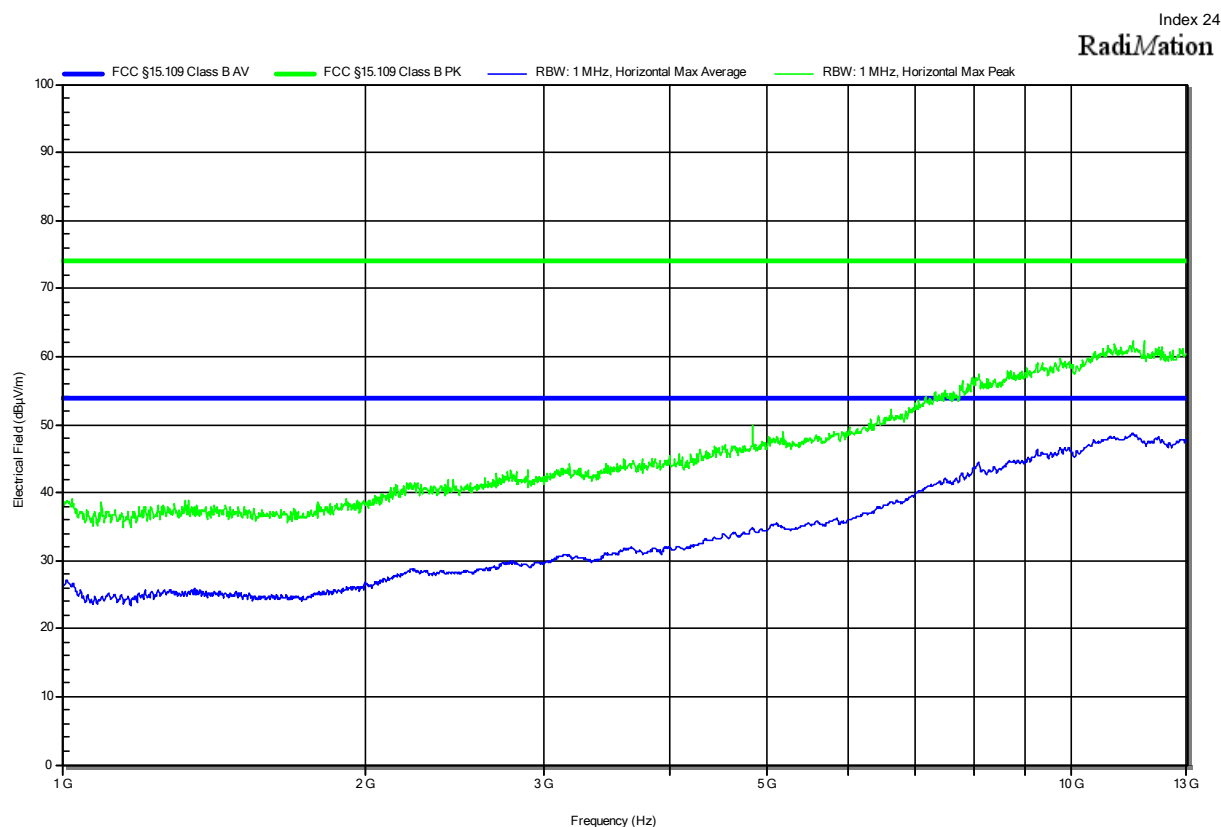
RadiMation



Peak Number	Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Angle	Height
1	2.478 GHz	2.4 GHz Bluetooth LE Carrier				0 degrees	1 m
Peak Number	Frequency	Average	Average Limit	Average Difference	Average Status	Angle	Height
1	2.478 GHz	2.4 GHz Bluetooth LE Carrier				0 degrees	1 m

Radiated emissions according to FCC part 15B

Project Number:	G0M-2302-1878
Applicant:	Leica Geosystems AG
Model Description:	Remote Control
Model:	Leica RC10
Test Sample ID:	43424
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Drabo
Test Date:	2023-04-28
Operating Conditions:	ambient temperature: 23 °Celsius power input: 3.6 V DC via internal rechargeable Lithium battery
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement Distance:	3 m
Operational Mode:	Mode 1
EUT Configuration:	Configuration 1
Note 1:	0°, 1 m

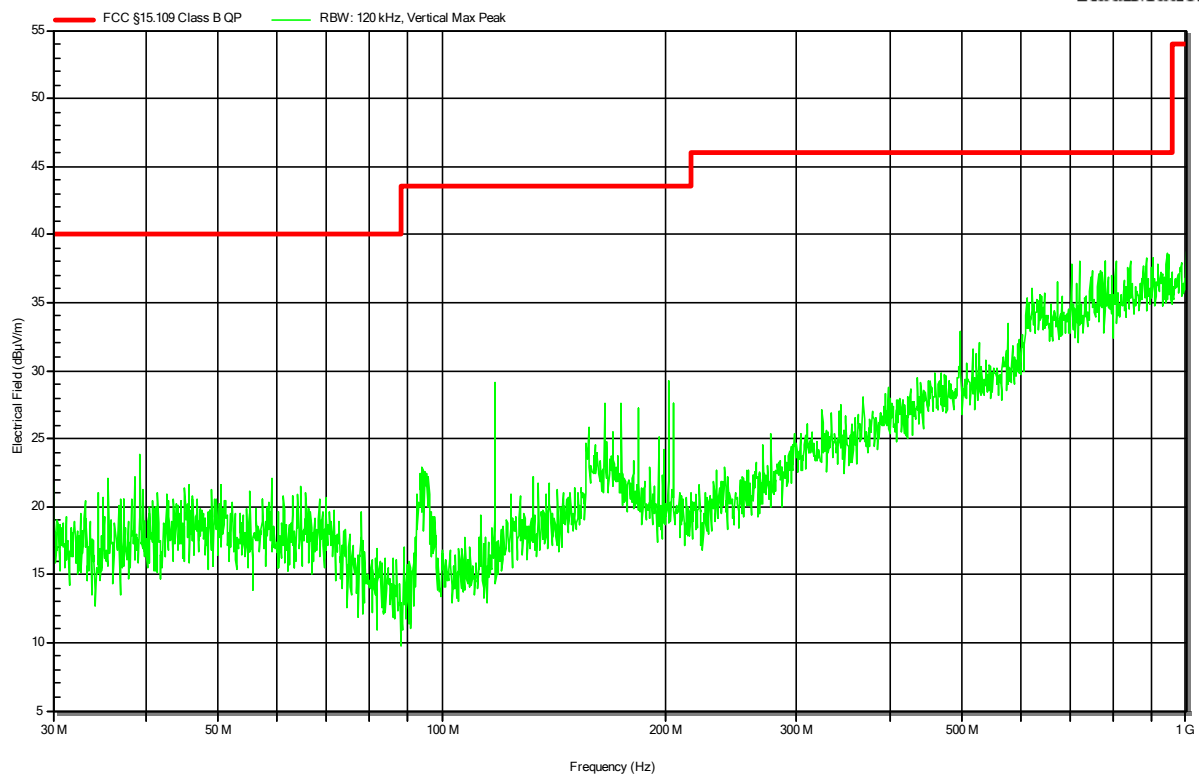


Radiated emissions according to FCC part 15B

Project Number: G0M-2302-1878
 Applicant: Leica Geosystems AG
 Model Description: Remote Control
 Model: Leica RC10
 Test Sample ID: 43424
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Drabo
 Test Date: 2023-04-28
 Operating Conditions: ambient temperature: 23 °Celsius
 power input: 120 V AC / 60 Hz
 Antenna: Schwarzbeck VULB 9168, Vertical
 Measurement Distance: 3 m
 Operational Mode: Mode 2
 EUT Configuration: Configuration 2
 Note 1: 64°, 1 m

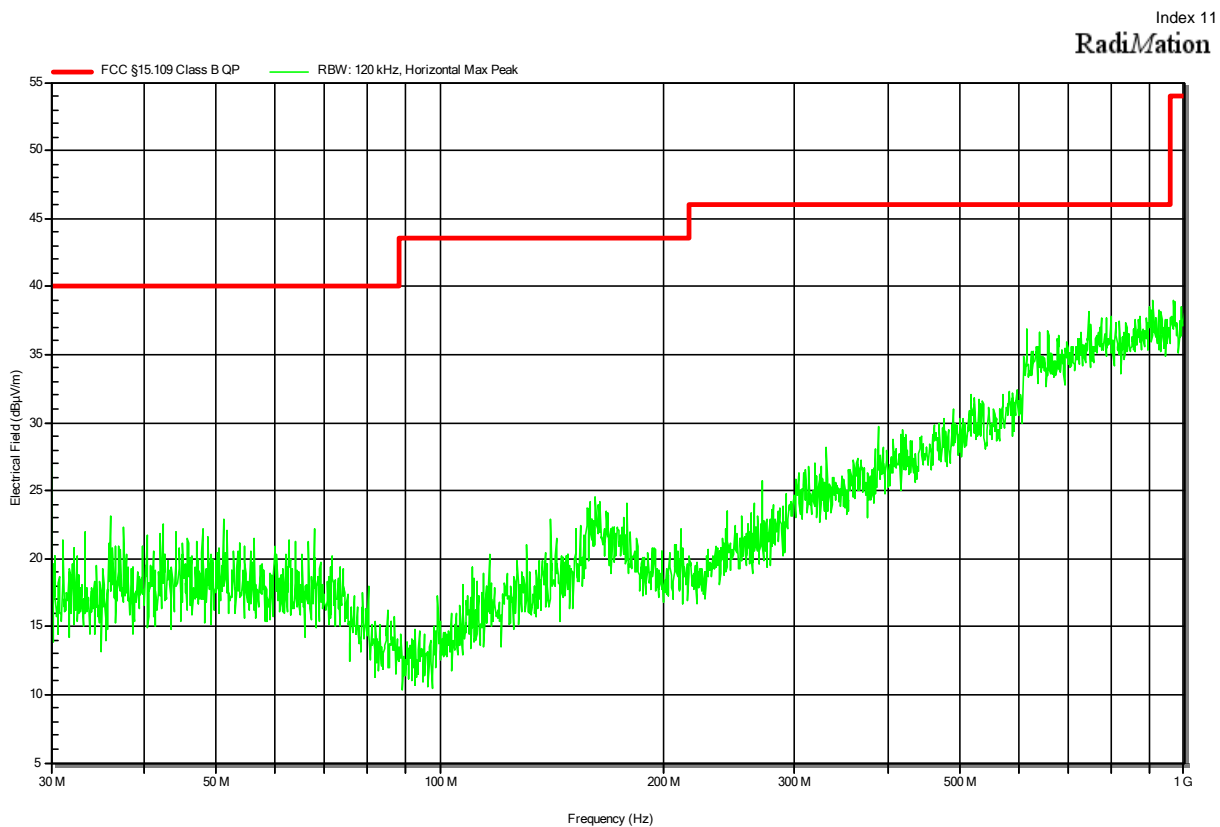
Index 9

RadiMation



Radiated emissions according to FCC part 15B

Project Number: G0M-2302-1878
 Applicant: Leica Geosystems AG
 Model Description: Remote Control
 Model: Leica RC10
 Test Sample ID: 43424
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Drabo
 Test Date: 2023-04-28
 Operating Conditions: ambient temperature: 23 °Celsius
 power input: 120 V AC / 60 Hz
 Antenna: Schwarzbeck VULB 9168, Horizontal
 Measurement Distance: 3 m
 Operational Mode: Mode 2
 EUT Configuration: Configuration 2
 Note 1: --

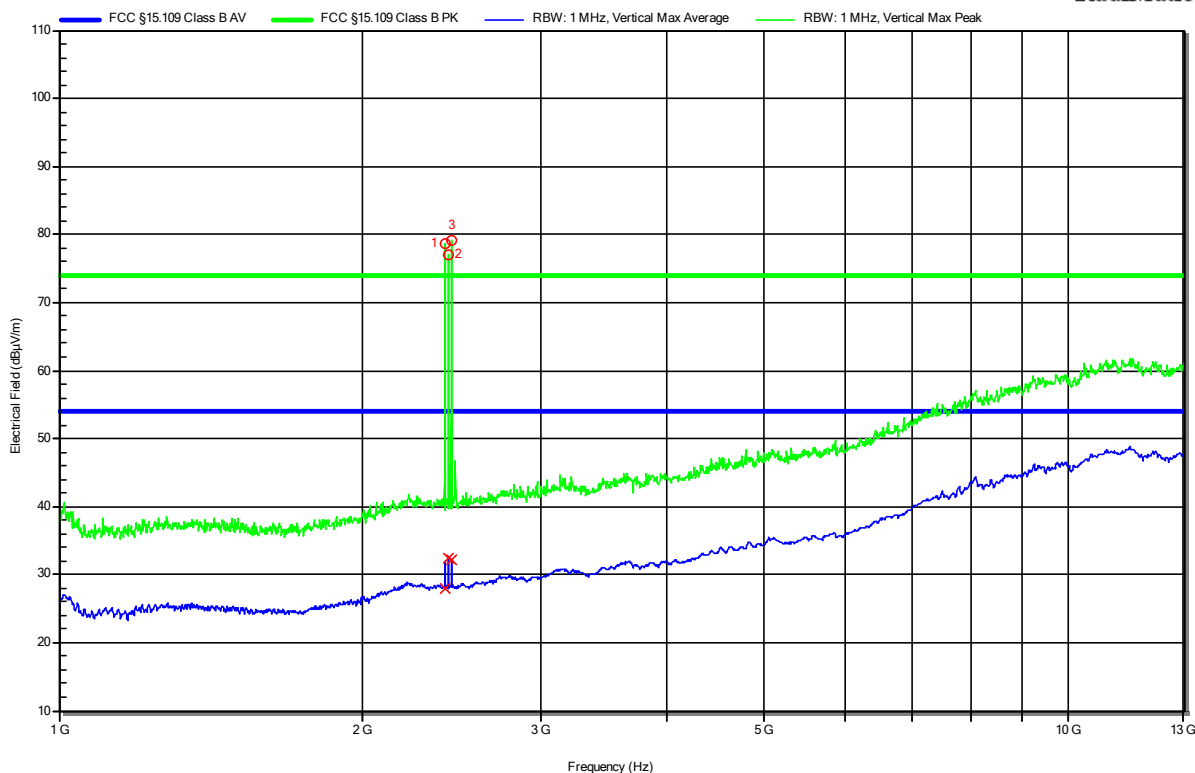


Radiated emissions according to FCC part 15B

Project Number: G0M-2302-1878
 Applicant: Leica Geosystems AG
 Model Description: Remote Control
 Model: Leica RC10
 Test Sample ID: 43424
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Drabo
 Test Date: 2023-04-28
 Operating Conditions: ambient temperature: 23 °Celsius
 power input: 120 V AC / 60 Hz
 Antenna: Schwarzbeck BBHA 9120D, Vertical
 Measurement Distance: 3 m
 Operational Mode: Mode 2
 EUT Configuration: Configuration 2
 Note 1: --

Index 25

RadiMation



Peak Number	Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Angle	Height
1	2.416 GHz	2.4 GHz Bluetooth LE Carrier				0 degrees	1 m
2	2.433 GHz	2.4 GHz Bluetooth LE Carrier				0 degrees	1 m
3	2.45 GHz	2.4 GHz Bluetooth LE Carrier				0 degrees	1 m

Peak Number	Frequency	Average	Average Limit	Average Difference	Average Status	Angle	Height
1	2.416 GHz	2.4 GHz Bluetooth LE Carrier				0 degrees	1 m
2	2.433 GHz	2.4 GHz Bluetooth LE Carrier				0 degrees	1 m
3	2.45 GHz	2.4 GHz Bluetooth LE Carrier				0 degrees	1 m

Test Report No.: G0M-2302-1878-EF0115B-V01

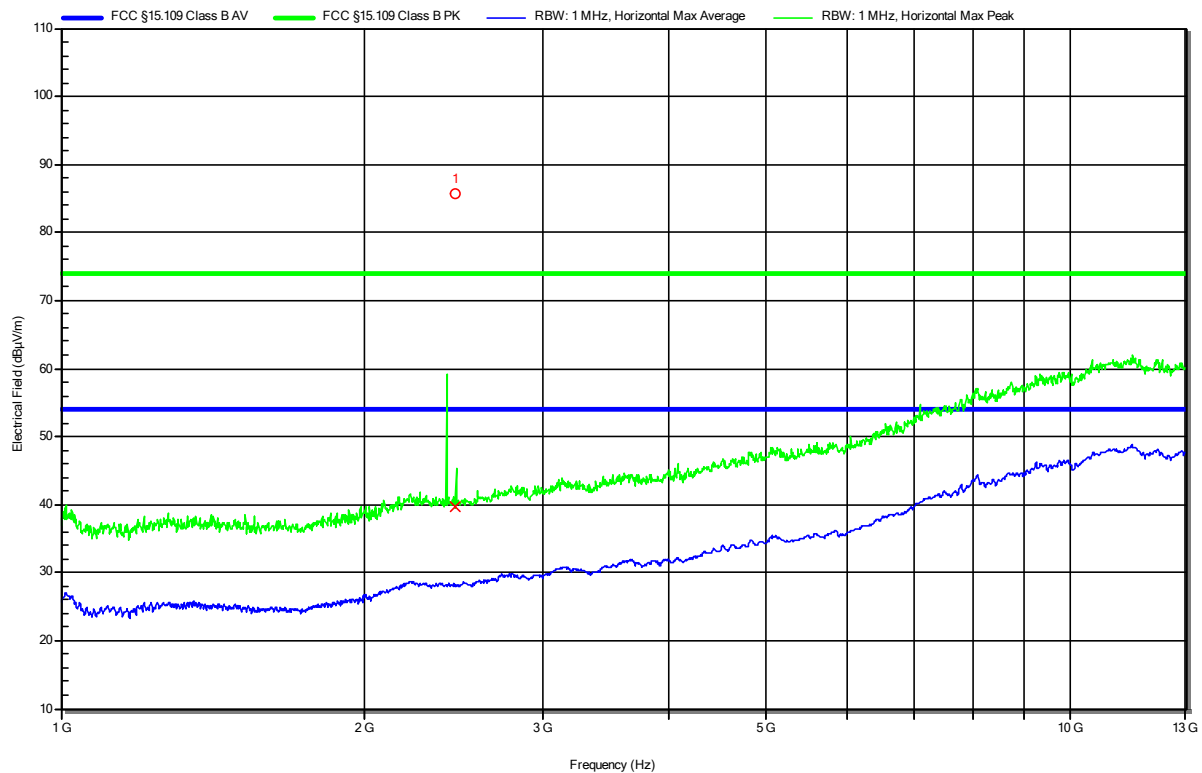
Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

Radiated emissions according to FCC part 15B

Project Number: G0M-2302-1878
 Applicant: Leica Geosystems AG
 Model Description: Remote Control
 Model: Leica RC10
 Test Sample ID: 43424
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Drabo
 Test Date: 2023-04-28
 Operating Conditions: ambient temperature: 23 °Celsius
 power input: 120 V AC / 60 Hz
 Antenna: Schwarzbeck BBHA 9120D, Horizontal
 Measurement Distance: 3 m
 Operational Mode: Mode 2
 EUT Configuration: Configuration 2
 Note 1: --

Index 26

RadiMation



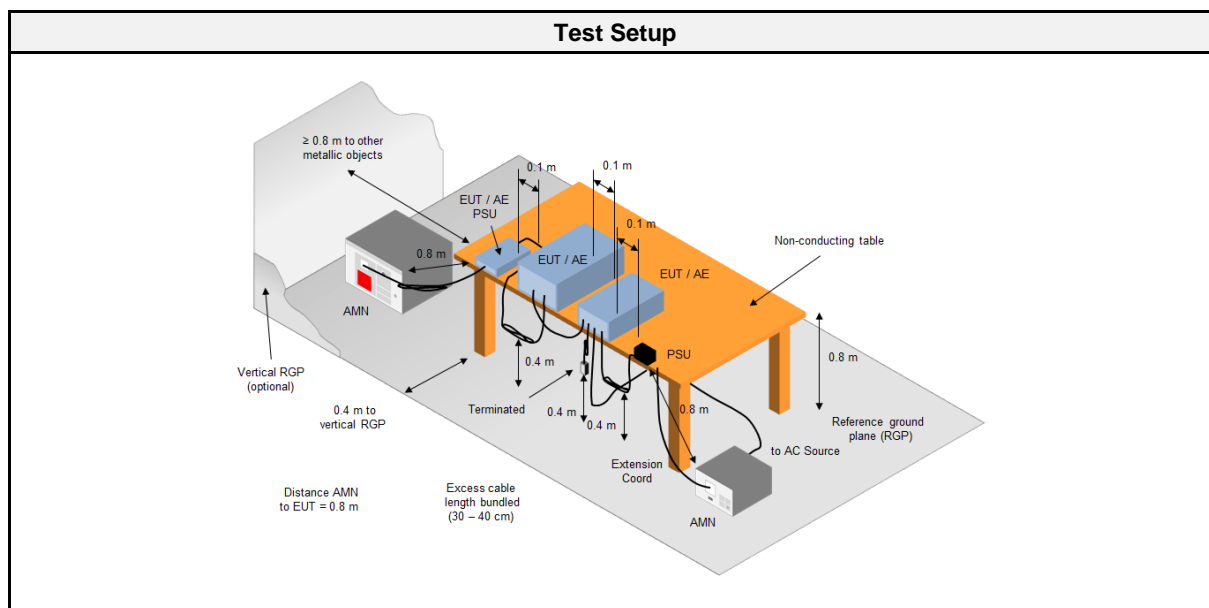
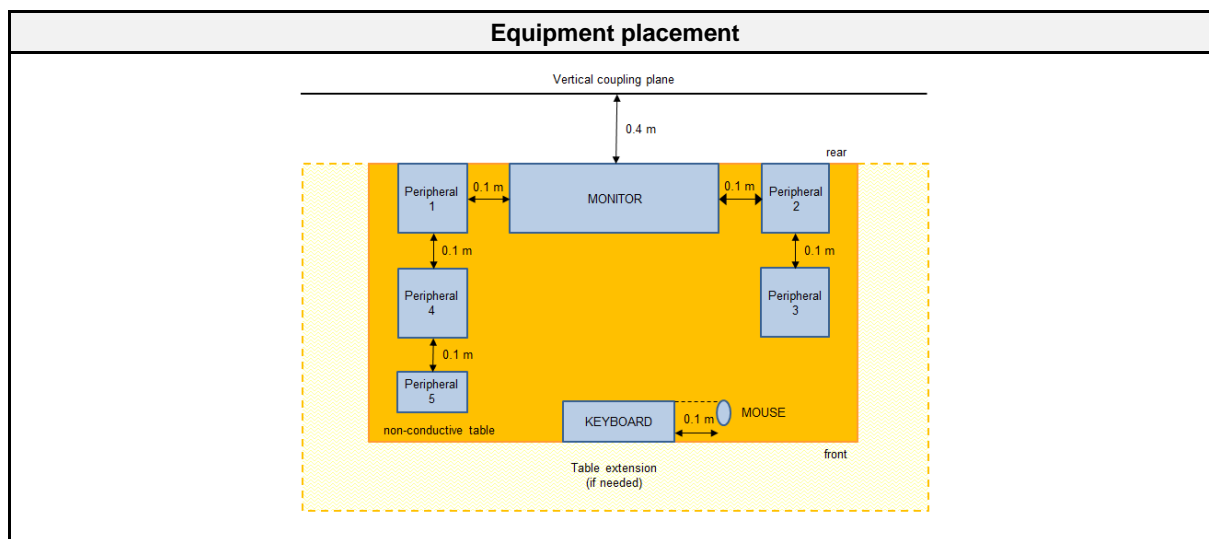
Peak Number	Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Angle	Height
1	2.457 GHz	2.4 GHz Bluetooth LE Carrier				0 degrees	1 m
Peak Number	Frequency	Average	Average Limit	Average Difference	Average Status	Angle	Height
1	2.457 GHz	2.4 GHz Bluetooth LE Carrier				0 degrees	1 m

2.2 Test Conditions and Results - Conducted emissions acc. to ANSI C63.4

2.2.1 Information

Test Information	
Reference	FCC 15.107, ICES-003, 3.2.1
Reference method	ANSI C63.4:2014+A1:2017 Section 12
Measurement range	150 kHz to 30 MHz
Equipment class	Class B
Equipment type	Table top
Temperature [°C]	23 ±3
Humidity [%]	29 ±3
Operator	Brahima Drabo
Date	2023-04-28

2.2.2 Setup



2.2.3 Equipment

Test Software			
Description	Manufacturer	Name	Version
EMC Software	DARE Instruments	Radimation	2020.1.8

Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Pulse Limiter	R&S	ESH3-Z2	EF01222	2021-07	2023-07
Artificial mains network	Rohde & Schwarz Vertriebs GmbH	ESH3-Z5	EF00036	2021-08	2023-08
EMI Test Receiver	R&S	ESR 7	EF00943	2022-07	2023-07
AC & DC Power Supply	Chroma ATE Inc.	61604	EF01380	2021-07	2023-07
LISN	Schwarzbeck	NSLK 8127 RC	EF01592	2021-07	2023-07
Climatic Sensor	Embedded Data Systems, LLC.	OW-ENV-THR	EF01122	2022-07	2023-07

2.2.4 Procedure

Exploratory measurement
<ol style="list-style-type: none"> 1. The EUT was placed on a non conductive table 0.8 m above the reference ground plane and 0.4 m away from the vertical conducting plane (ANSI C63.4: 2014 item 7.3.1) 2. The power cord that is normally supplied or recommended by the manufacturer was connected to the LISN. 3. The distance between the outer edge of the EUT and the LISN shall be set to 0.8 m. A longer power cord shall be bundled to this length (bundling shall not exceed 40 cm in length). 4. The LISN measurement port was connected to a measurement receiver 5. I/O cables were bundled not longer than 0.4 m 6. Measurement was performed in the frequency range 0.15 – 30MHz on each current-carrying conductor 7. To maximize the emissions the cable positions were manipulated 8. The worst configuration of EUT and cables is shown on a test setup picture at item 2.2.2

Final measurement
<ol style="list-style-type: none"> 1. The EUT was placed on a non conductive table 0.8 m above the reference ground plane and 0.4 m away from the vertical conducting plane (ANSI C63.4: 2014 item 7.3.1) 2. The power cord that is normally supplied or recommended by the manufacturer was connected to the LISN. 3. The distance between the outer edge of the EUT and the LISN shall be set to 0.8 m. A longer power cord shall be bundled to this length (bundling shall not exceed 40 cm in length). 4. The LISN measurement port was connected to a measurement receiver 5. The EUT and cable arrangement were based on the exploratory measurement results 6. The test data of the worst-case conditions were recorded and shown on the next pages

2.2.5 Limits

Class B		
Frequency [MHz]	Quasi-peak Limit [dBμV]	Average Limit [dBμV]
0.15 - 0.5	66 - 56 *	56 - 46 *
0.5 - 5	56	46
5 - 30	60	50
* Decreases with the logarithm of the frequency		

2.2.6 Results

AC power line conducted emissions					
Port	Coupling	Operational mode	EUT Configuration	Verdict	Remark
AC Mains	AMN	2	2	PASS	120 V AC / 60 Hz
Comment: AC Mains cable was 80 cm long, USB cable is 1.2 m.					

2.2.7 Setup Photos

TEST SETUP – AC Mains

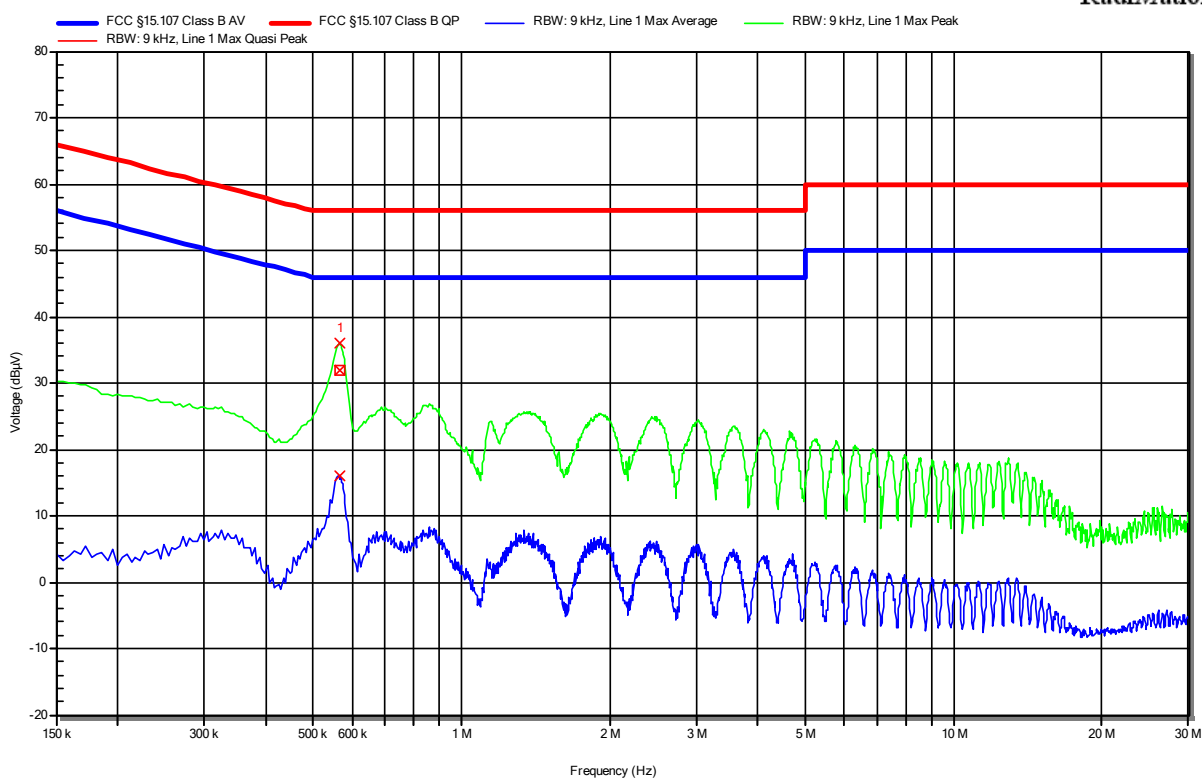
2.2.8 Records

Conducted emissions at the mains power port according to FCC part 15B

Project Number: G0M-2302-1878
 Applicant: Leica Geosystems AG
 Model Description: Remote Control
 Model: Leica RC10
 Test Sample ID: 43424
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Drabo
 Test Date: 2023-04-28
 Operating Conditions: ambient temperature: 23 °Celsius
 power input: 120 V AC / 60 Hz
 LISN: ESH3-Z5 (L)
 Operational Mode: Mode 2
 EUT Configuration: Configuration 2
 Applied to Port: AC Mains
 Note 1: --

Index 3

RadiMation



Peak Number	Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status	LISN
1	565.35 kHz	31.86 dBμV	56 dBμV	-24.14 dB	Pass	Line 1
Peak Number	Frequency	Average	Average Limit	Average Difference	Average Status	LISN
1	565.35 kHz	15.97 dBμV	46 dBμV	-30.03 dB	Pass	Line 1

Test Report No.: G0M-2302-1878-EF0115B-V01

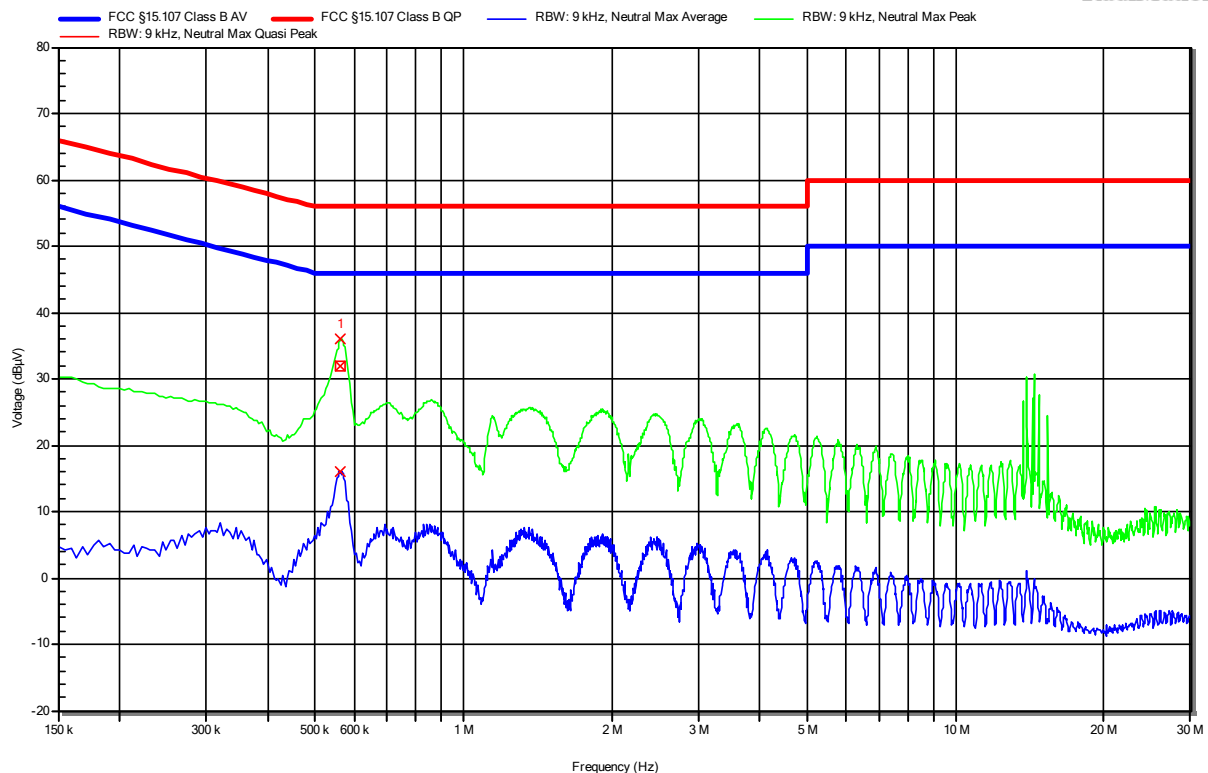
Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

Conducted emissions at the mains power port according to FCC part 15B

Project Number: G0M-2302-1878
 Applicant: Leica Geosystems AG
 Model Description: Remote Control
 Model: Leica RC10
 Test Sample ID: 43424
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Drabo
 Test Date: 2023-04-28
 Operating Conditions: ambient temperature: 23 °Celsius
 power input: 120 V AC / 60 Hz
 LISN: ESH3-Z5 (N)
 Operational Mode: Mode 2
 EUT Configuration: Configuration 2
 Applied to Port: AC Mains
 Note 1: --

Index 2

RadiMation



Peak Number	Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status	LISN
1	564 kHz	31.92 dBμV	56 dBμV	-24.08 dB	Pass	Neutral
Peak Number	Frequency	Average	Average Limit	Average Difference	Average Status	LISN
1	564 kHz	16.03 dBμV	46 dBμV	-29.97 dB	Pass	Neutral

Test Report No.: G0M-2302-1878-EF0115B-V01

Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

3 Measurement Uncertainty

All test measurements carried out are traceable to national standards. The uncertainty of the measurement at a confidence level of approximately 95%, with a coverage factor of 2.

Test Name	Measurement Uncertainty
Conducted emissions at the mains power port	150kHz to 30MHz, 3.35dB
Radiated Emission AC1	30MHz to 200MHz @ 3m, 5.1dB 200MHz to 1GHz @ 3m, 5.3dB >1GHz to 13GHz @3m, 5.95dB