eurofins | Product Service

RADIO REPORT

FCC 47 CFR Part 15C
ISED Canada RSS-247

Digital transmission systems operating within the 2400.0 MHz - 2483.5 MHz band

Report Reference No	G0M-2303-1996-TFC247BL-V01
Testing Laboratory	Eurofins Product Service GmbH
Address	Storkower Str. 38c 15526 Reichenwalde Germany
Accreditation	DAkkS - Registration number : D-PL-12092-01-03 (ISED) ISED Testing Laboratory site: 3470A DAkkS - Registration number : D-PL-12092-01-04 (FCC) FCC Filed Test Laboratory, Reg.-No.: 96970
Applicant	Leica Geosystems AG
Address	Heinrich-Wild-Strasse 9435 Heerbrugg SWITZERLAND
Test Specification	47 CFR Part 15C RSS-247, Issue 3, 2023-08 RSS-Gen, Issue 5, Amendment 2, 2021-02
Non-Standard Test Method	None
Equipment under Test (EUT):	
Product Description	Laser Distance Meter
Model(s)	Leica Disto X6
Additional Model(s)	None
Brand Name(s)	Leica Geosystems AG
Hardware Version(s)	V0801-G
Software Version(s)	1.0.0
FCC ID	RFF-LD6BT
IC	3177A-LD6BT
Test Result	**PASSED**

Possible test case verdicts:		
Required by standard but not tested	N/T	
Not required by standard	N/R	
Not applicable to EUT	N/A	
Test object does meet the requirement	P(PASS)	
Test object does not meet the requirement	F(FAIL)	
Testing:		
Test Lab Temperature	20 °C - 30 °C	
Test Lab Humidity	25 % - 55 %	
Date of receipt of test item	2023-07-27	
Report:		
Compiled by	Azamat Ibraimov	
Supervised by (+ signature) (Responsible for Test)	Burkhard Pudell	
Approved by (+ signature) (Test Lab Engineer)	Wilfried Treffke	
Date of Issue	2024-02-05	
Total number of pages	108	
General Remarks:		
The test results presented in this report relate only to the object tested. **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.** This report shall not be reproduced, except in full, without the written approval of the Issuing testing laboratory.		
Additional Comments:		
None		

ADDITIONAL VARIANTS

Additional Variants (not tested and not evaluated variants)		
Not-tested Variant	**Description**	
1	Product Type Description	Laser Distance Meter
	Model name	Leica Disto D5
	Brand name	Leica Geosystems AG
	Hardware Version	V0801-G
	Software Version	1.0.0
	HVIN	Leica Disto D5
	PMN	Leica Disto D5
	FVIN	N/A
	HMN	N/A
Comment: Those named additional variants above have not been tested. Those additional variants of the series have been declared by the manufacturer. The test report explicitly states that those variants were neither tested nor assessed nor evaluated.		

VERSION HISTORY

Version History			
Version	Issue Date	Remarks	Revised By
01	2024-02-05	Initial Release	--

ABBREVIATIONS AND ACRONYMS

Acronyms	
Acronym	Description
EUT	Equipment Under Test
FCC	Federal Communications Commission
ISED	Innovation, Science and Economic Development Canada
RBW	Resolution bandwidth
RMS	Root mean square
VBW	Video bandwidth
V_{NOM}	Nominal supply voltage

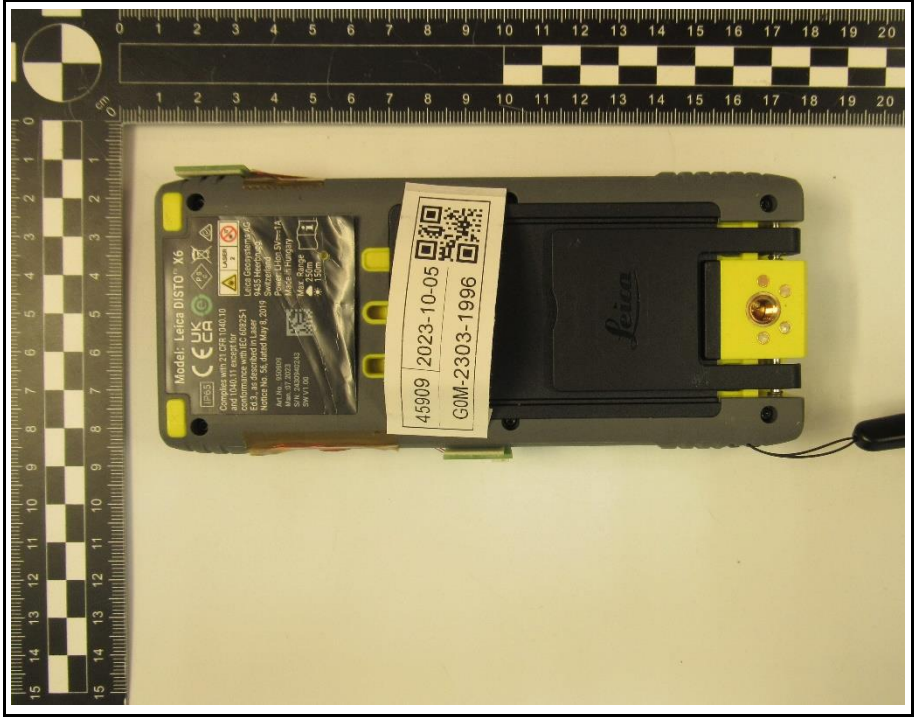
REPORT INDEX

1 Equipment (Test Item) Under Test

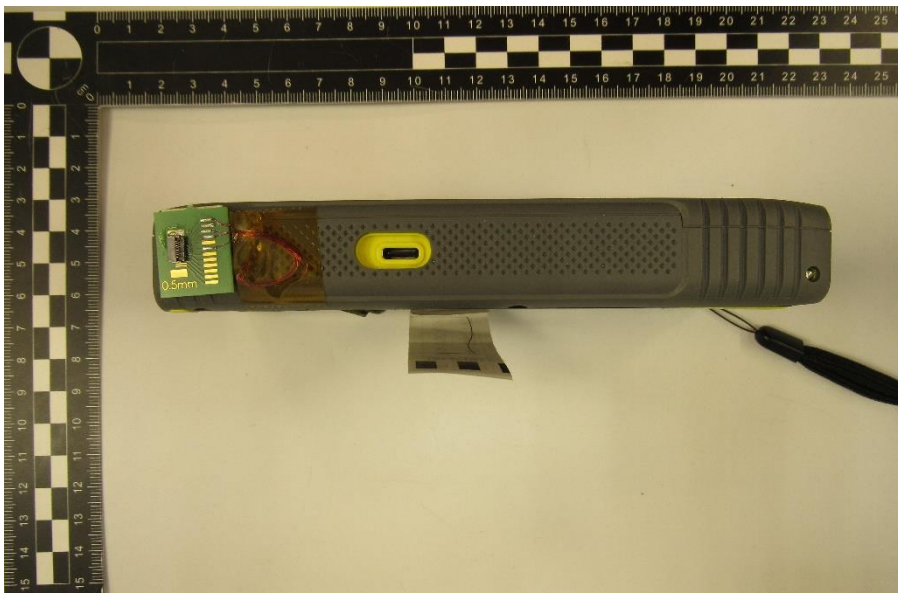
Description	Laser Distance Meter		
Model	Leica Disto X6		
Additional Model(s)	None		
Brand Name(s)	Leica Geosystems AG		
Serial Number(s)	2430940243 (radiated) 2430940237 (conducted)		
Test Sample Id(s)	45910 (conducted) 45909 (radiated)		
Hardware Version(s)	V0801-G		
Software Version(s)	1.0.0		
PMN	Leica Disto X6		
HVIN	Leica Disto X6		
FVIN	N/A		
HMN	N/A		
FCC ID	RFF-LD6BT		
IC	3177A-LD6BT		
Equipment type	End Product		
Radio type	Transceiver		
Assigned frequency bands	2400.0 MHz - 2483.5 MHz		
Radio technology	Bluetooth LE 4.2		
Bluetooth Specification	LE 1M PHY		Yes
	LE 2M PHY		Yes
	LE Coded PHY S=8 (125 kbit)		No
	LE Coded PHY S=2 (500 kbit)		No
	Stable Modulation Index - Transmitter		No
	Stable Modulation Index - Receiver		No
Modulation	GFSK		
Number of antenna ports	1		
Antenna	Type	Ceramic chip antenna	
	Model	2450AT18B100	
	Manufacturer	Johanson Technology	
	Gain	0.5 dBi	
Supply Voltage	V_{NOM}	5 VDC	
Operating Temperature	T_{NOM}	25 °C	
AC/DC-Adaptor	Model	KSAS0060500100D5U	
	Vendor	Ktec	
	Input	100 – 240 V AC, 50/60 Hz, 0.18 A	
	Output	5.0 V DC, 1.0 A	
Manufacturer	Leica Geosystems AG Heinrich-Wild-Strasse 9435 Heerbrugg SWITZERLAND		

1.1 Photos – Equipment External

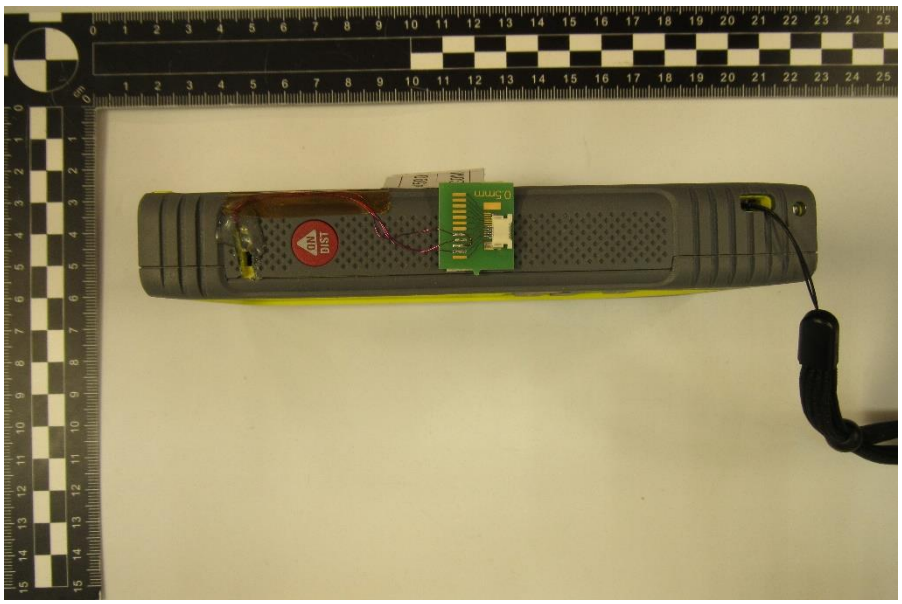
EUT top view


EUT bottom view


EUT left side



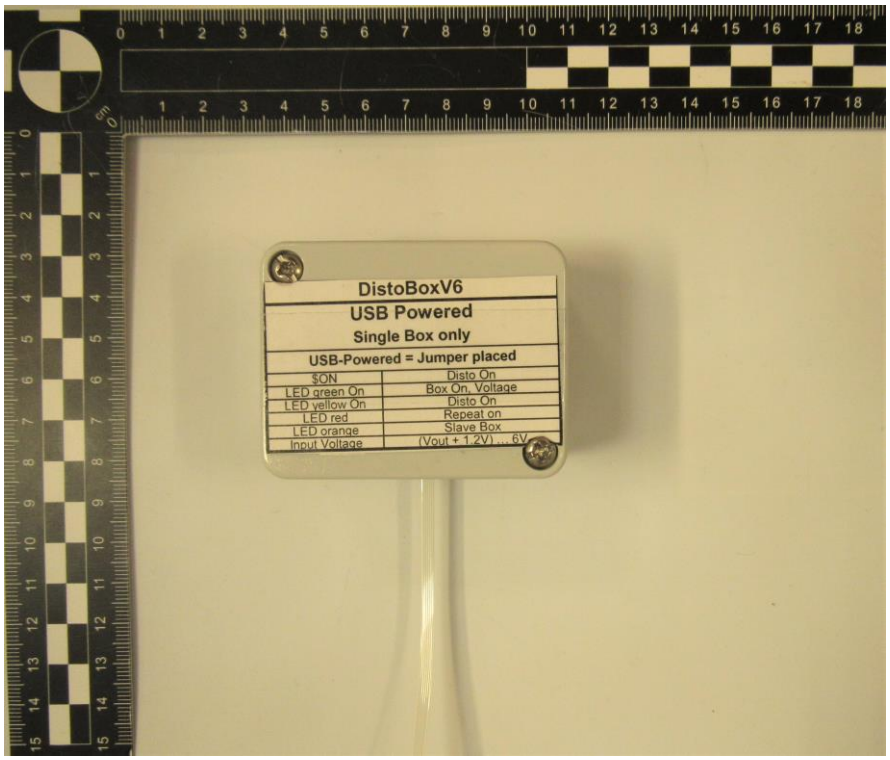
EUT right side



Conducted sample


Additional model

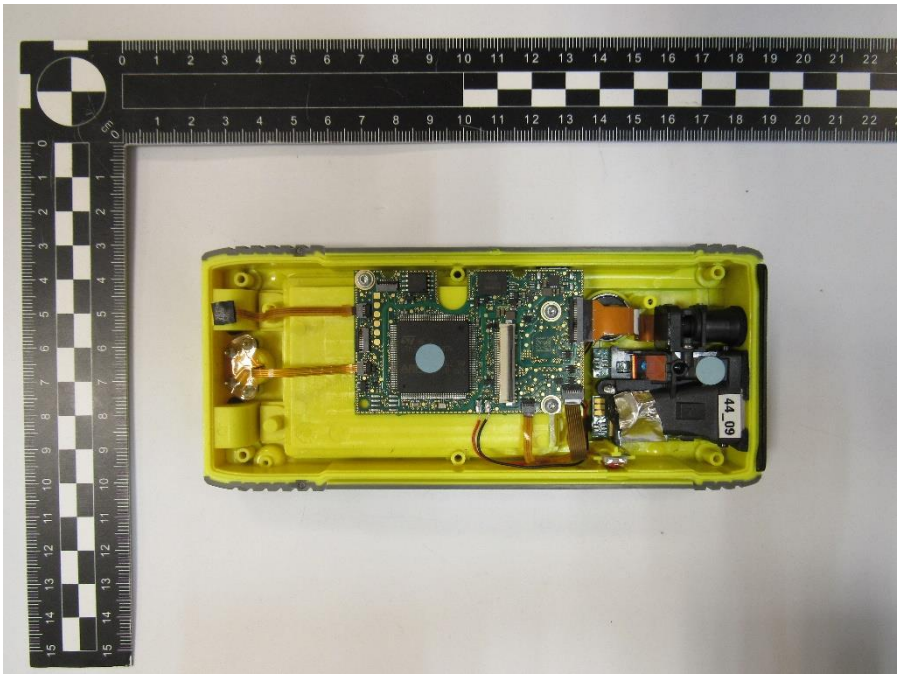

DistoBox

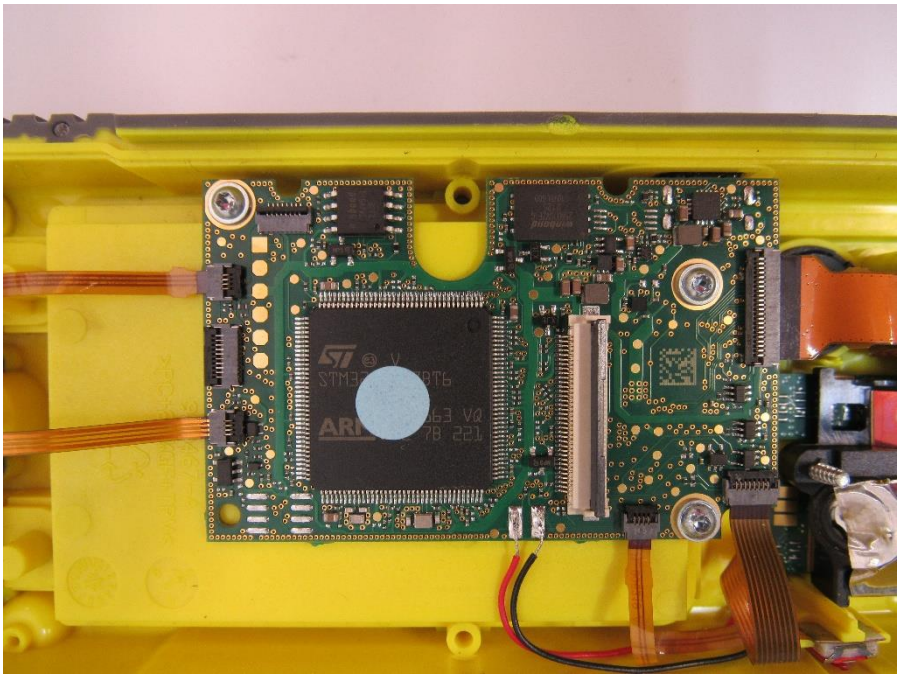


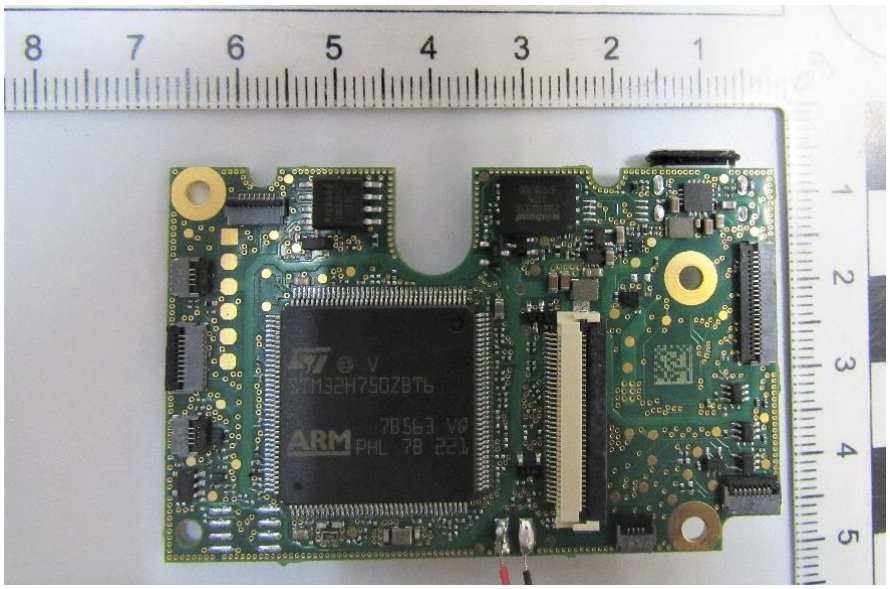
AC/DC adapter

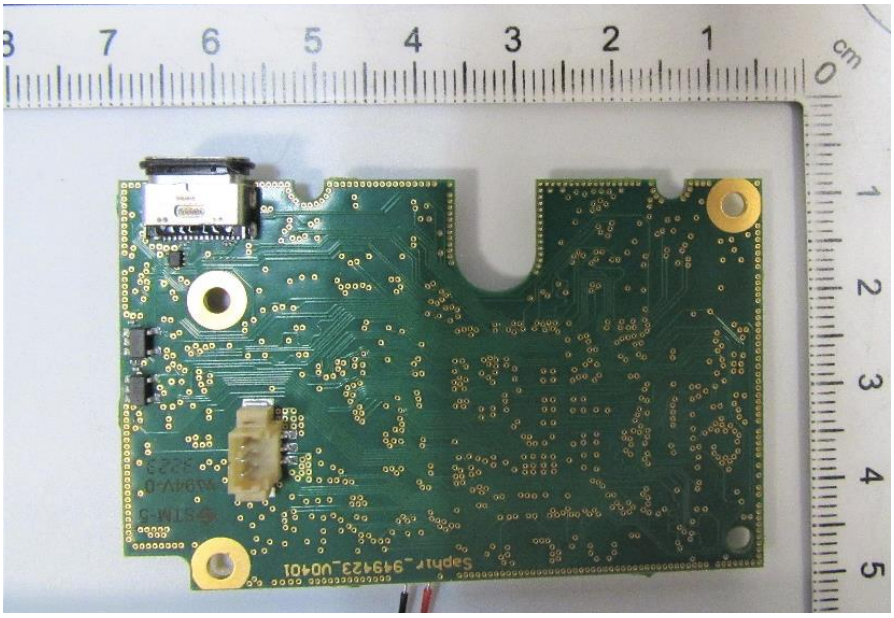
Test setup


1.2 Photos – Equipment Internal

Internal


Internal


PCB photo


PCB photo


1.3 Support Equipment

Product Type	Device	Manufacturer	Model	Comment
AE	Notebook	Lenovo	YNN0B9318008	For configuring test modes
AE	USB Powered Box	-	DistoBoxV6	
CBL	USB cable	-	-	
CBL	Data cable	-	-	
AE	AC/DC Adapter	Ktec	P3113	For charging EUT
SFT	Hercules_3-2-8	HWgroup	-	For test mode activation
SFT	nRF Connector	Nordic Semiconductor	-	
Description:				
AE	Auxiliary Equipment			
SIM	Simulator			
CBL	Connecting Cable			
SFT	Software			
Comment: --				

1.4 Test Modes

Mode	Description
1 Mbps	Mode = Transmit Modulation = GFSK Packet Type = PRBS9 Packet Length =229 Bytes Spreading = None Duty cycle = 62.7 % Pmax = 4 dBm
2 Mbps	Mode = Transmit Modulation = GFSK Packet Type = PRBS9 Packet Length =250 Bytes Spreading = None Duty cycle = 49.6 % Pmax = 4 dBm
Receive	Mode = Receive
Comment: The above settings were found as worst case during pre-tests. Conducted peak/average output power was evaluated to determine the worst case settings.	

1.5 Test Frequencies

Designator	Mode	Channel	Frequency [MHz]
F1	Tx / Rx	0	2402
F2	Tx / Rx	19	2440
F3	Tx / Rx	39	2480

1.6 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 analyzer in dBµV. Any external preamplifiers used are taken into account through internal analyzer 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 analyzer. 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:

Reading on Analyzer (dBµV) + A.F. (dB/m) = Net field strength (dBµV/m)

Net:

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

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.

Field strength 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:

Field strength limit (dBµV/m) = 20 · log (µV/m)

Example only for radiated field strength:

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

2 Result Summary

FCC 47 CFR Part 15C, ISED RSS-247				
Product Standard Reference	**Requirement**	**Reference Method**	**Result**	**Remarks**
ISED RSS-Gen, Issue 5 A2 (section 6.7)	Occupied Bandwidth	ANSI C63.10-2013	N/R	Informational only
FCC § 15.247(a)(2) ISED RSS-247, Issue 3 (section 5.2)	6 dB Bandwidth	ANSI C63.10-2013	PASS	--
FCC § 15.247(b) ISED RSS-247, Issue 3 (section 5.4)	Maximum peak conducted power	ANSI C63.10-2013	PASS	--
FCC § 15.247(e) ISED RSS-247, Issue 3 (section 5.2)	Power spectral density	ANSI C63.10-2013	PASS	--
FCC § 15.207 ISED RSS-247, Issue 3 (section 3.1)	AC power line conducted emissions	ANSI C63.10-2013	PASS	--
FCC § 15.247(d) ISED RSS-247, Issue 3 (section 5.5)	Band edge compliance	ANSI C63.10-2013	PASS	--
FCC § 15.247(d) ISED RSS-247, Issue 3 (section 5.5)	Conducted spurious emissions	ANSI C63.10-2013	PASS	--
FCC § 15.247(d) FCC § 15.209 ISED RSS-Gen, Issue 5 A2 (section 6.13)	Transmitter radiated spurious emissions	ANSI C63.10-2013	PASS	--
ISED RSS-247, Issue 3 (section 3.1)	Receiver radiated spurious emissions	ANSI C63.4-2014	PASS	--
Comment: The Decision Rule is applied on the basis of ETSI TR 102 273 and ETSI TR 100 028. 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. Where a result is considered conditional in respect of its proximity to the limit line, the customer would be made aware of situation so that they can make an informed decision on how to proceed.				

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

3 Test Conditions and Results

3.1 Test Conditions and Results - Occupied bandwidth

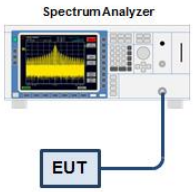
3.1.1 Information

Test Information	
Reference	ISED RSS-Gen, Issue 5 A2 (section 6.7)
Measurement Method	ANSI C63.10 6.9.3
Measurement Uncertainty	± 1.26 %
Test Sample ID	45910
Operator	Azamat Ibraimov
Date	2023-10-12

3.1.2 Limits

Limits
None (Informational only)

3.1.3 Setup

Test Setup


3.1.4 Equipment

Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum analyzer	Rohde & Schwarz GmbH & Co. KG	FSU43	EF01631	2023-08	2024-08
Cable (CAABC)	Gigalane	GIGALANE 1730	EF00779	2023-03	2024-03

3.1.5 Procedure

Test Procedure
1. EUT transmitter is activated in test mode under normal conditions 2. The spectrum analyzer is set to peak detection and maximum hold with a span twice the emission spectrum 3. The resolution bandwidth is set to the range of 1 % to 5 % of the occupied bandwidth 4. The occupied bandwidth is measured with the build-in analyzer function

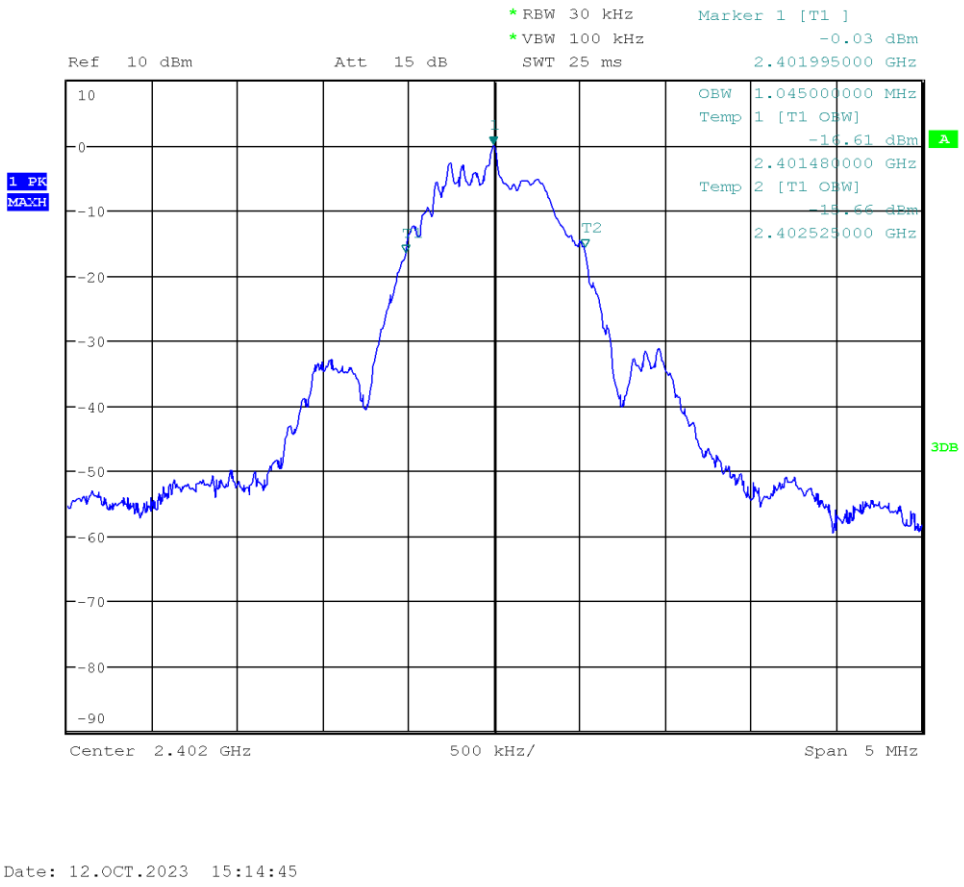
3.1.6 Results

Test Results 1 Mbps		
Mode	Frequency [MHz]	Bandwidth [MHz]
GFSK	2402	1.045
GFSK	2440	1.050
GFSK	2480	1.045

Test Results 2 Mbps		
Mode	Frequency [MHz]	Bandwidth [MHz]
GFSK	2402	2.060
GFSK	2440	2.060
GFSK	2480	2.065

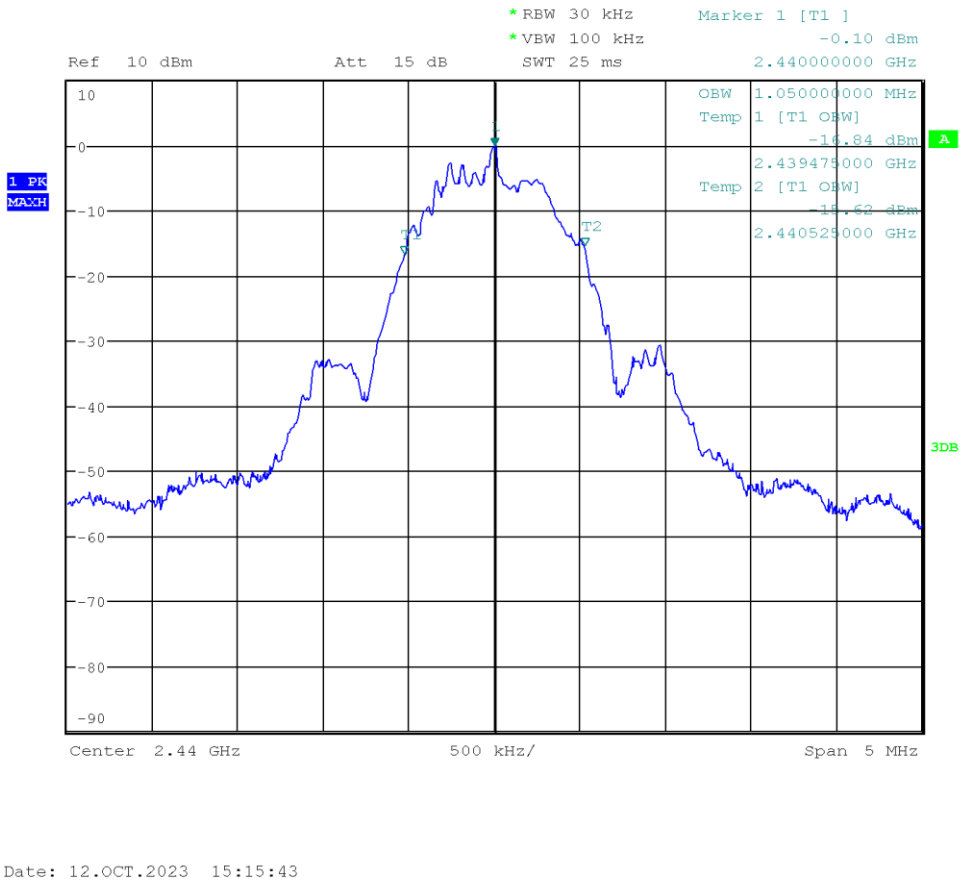
Occupied Bandwidth

Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45910
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 6.9.3
Operational Mode:	GFSK, Channel: 0, 2402 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Azamat Ibraimov
Test Site:	Eurofins Product Service GmbH
Test Date:	2023-10-12
Note:	1 Mbps
Occupied Bandwidth [MHz]:	1.045



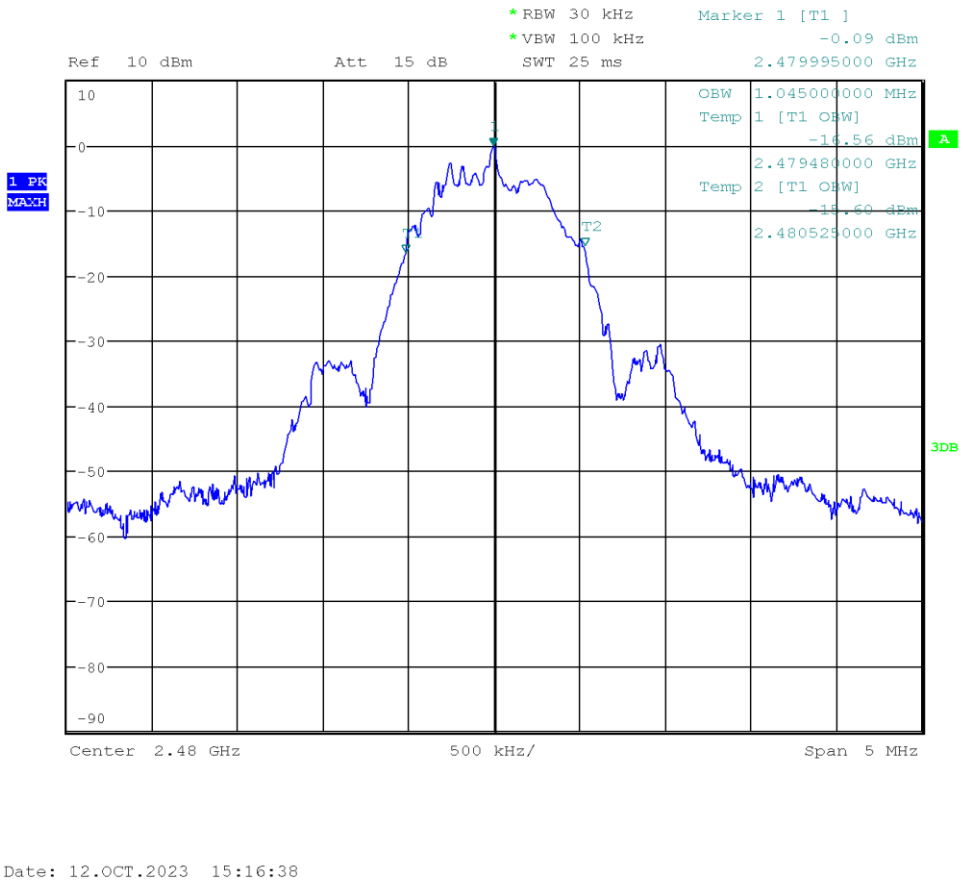
Occupied Bandwidth

Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45910
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 6.9.3
Operational Mode:	GFSK, Channel: 19, 2440 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Azamat Ibraimov
Test Site:	Eurofins Product Service GmbH
Test Date:	2023-10-12
Note:	1 Mbps
Occupied Bandwidth [MHz]:	1.050



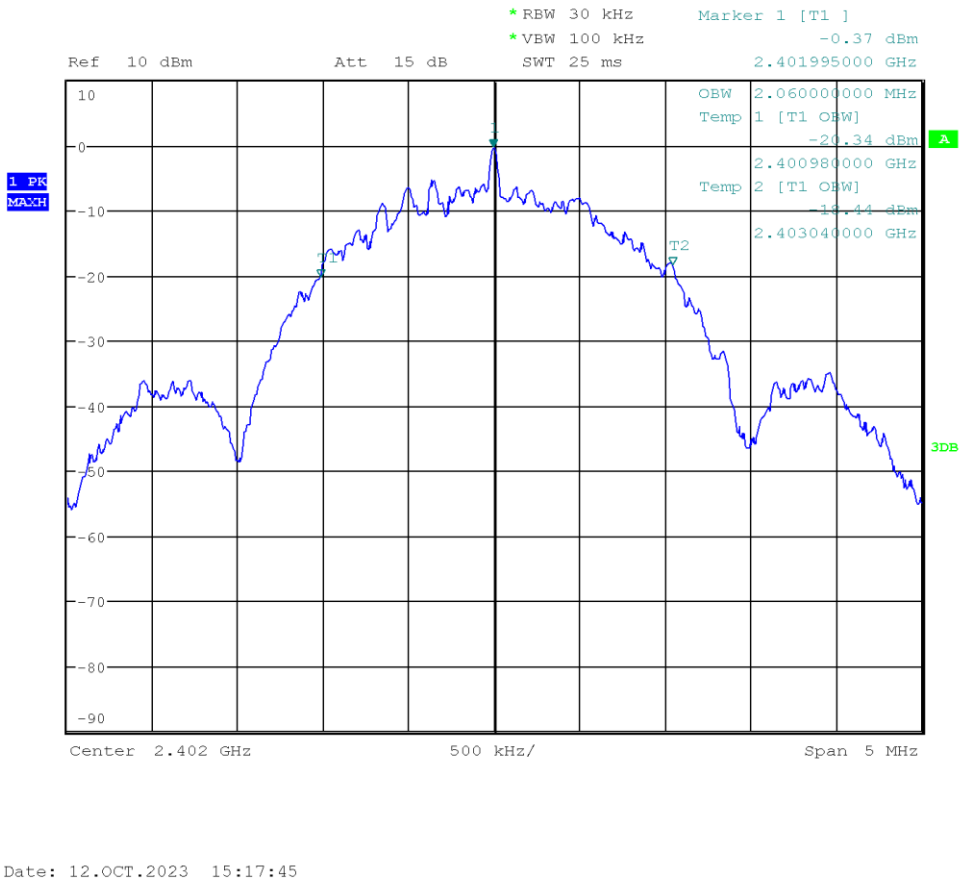
Occupied Bandwidth

Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45910
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 6.9.3
Operational Mode:	GFSK, Channel: 39, 2480 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Azamat Ibraimov
Test Site:	Eurofins Product Service GmbH
Test Date:	2023-10-12
Note:	1 Mbps
Occupied Bandwidth [MHz]:	1.045



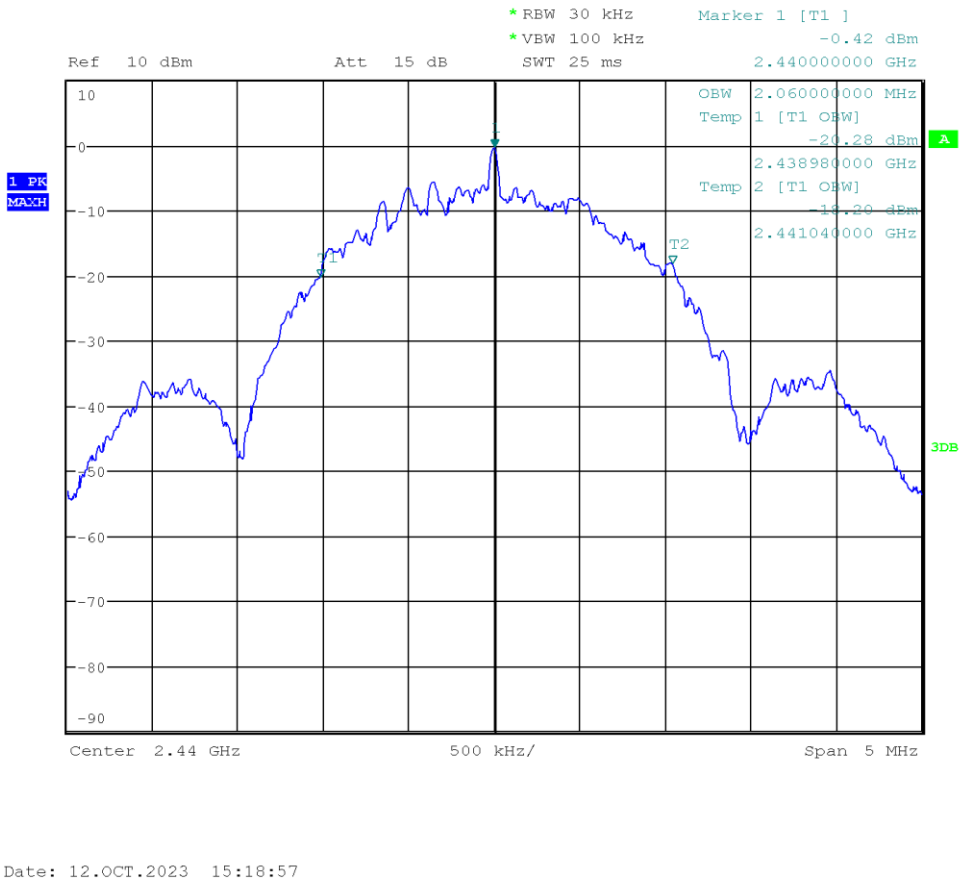
Occupied Bandwidth

Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45910
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 6.9.3
Operational Mode:	GFSK, Channel: 0, 2402 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Azamat Ibraimov
Test Site:	Eurofins Product Service GmbH
Test Date:	2023-10-12
Note:	2 Mbps
Occupied Bandwidth [MHz]:	2.060



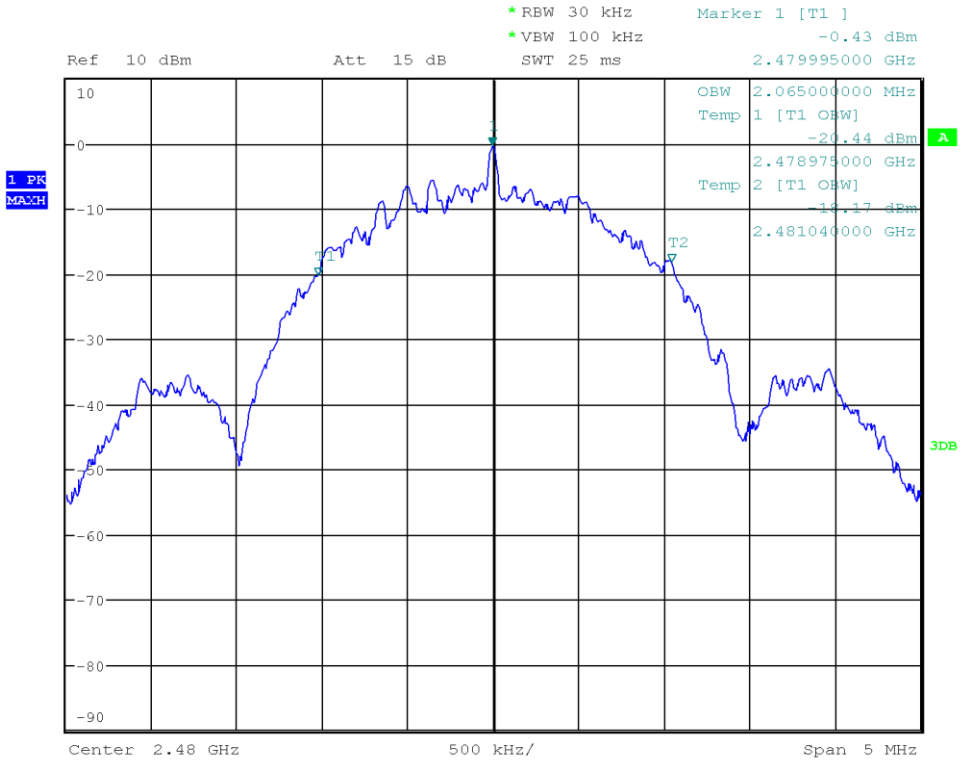
Occupied Bandwidth

Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45910
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 6.9.3
Operational Mode:	GFSK, Channel: 19, 2440 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Azamat Ibraimov
Test Site:	Eurofins Product Service GmbH
Test Date:	2023-10-12
Note:	2 Mbps
Occupied Bandwidth [MHz]:	2.060



Occupied Bandwidth

Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45910
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 6.9.3
Operational Mode:	GFSK, Channel: 39, 2480 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Azamat Ibraimov
Test Site:	Eurofins Product Service GmbH
Test Date:	2023-10-12
Note:	2 Mbps
Occupied Bandwidth [MHz]:	2.065



3.2 Test Conditions and Results - 6 dB bandwidth

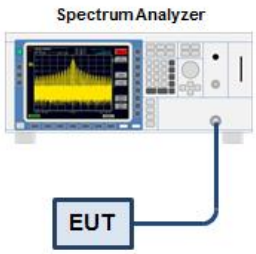
3.2.1 Information

Test Information	
Reference	FCC § 15.247(a)(2); ISED RSS-247, Issue 3 (section 5.2)
Measurement Method	ANSI C63.10 11.8
Measurement Uncertainty	± 1.26 %
Operator	Azamat Ibraimov
Date	2023-10-12

3.2.2 Limits

Limits
≥ 500kHz

3.2.3 Setup

Test Setup


3.2.4 Equipment

Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum analyzer	Rohde & Schwarz GmbH & Co. KG	FSU43	EF01631	2023-08	2024-08
Cable (CAABC)	Gigalane	GIGALANE 1730	EF00779	2023-03	2024-03

3.2.5 Procedure

Test Procedure
1. EUT set to test mode 2. Span set to at least twice the emission spectrum 3. Detector set to peak and max hold and RBW is set to 100 kHz 4. Envelope peak value of emission spectrum is selected 5. Marker on envelope of spectrum is set to level of -6 dB to the left of the peak 6. Marker on envelope of spectrum is set to level of -6 dB to the right of the peak 7. 6 dB Bandwidth is determined by marker frequency separation

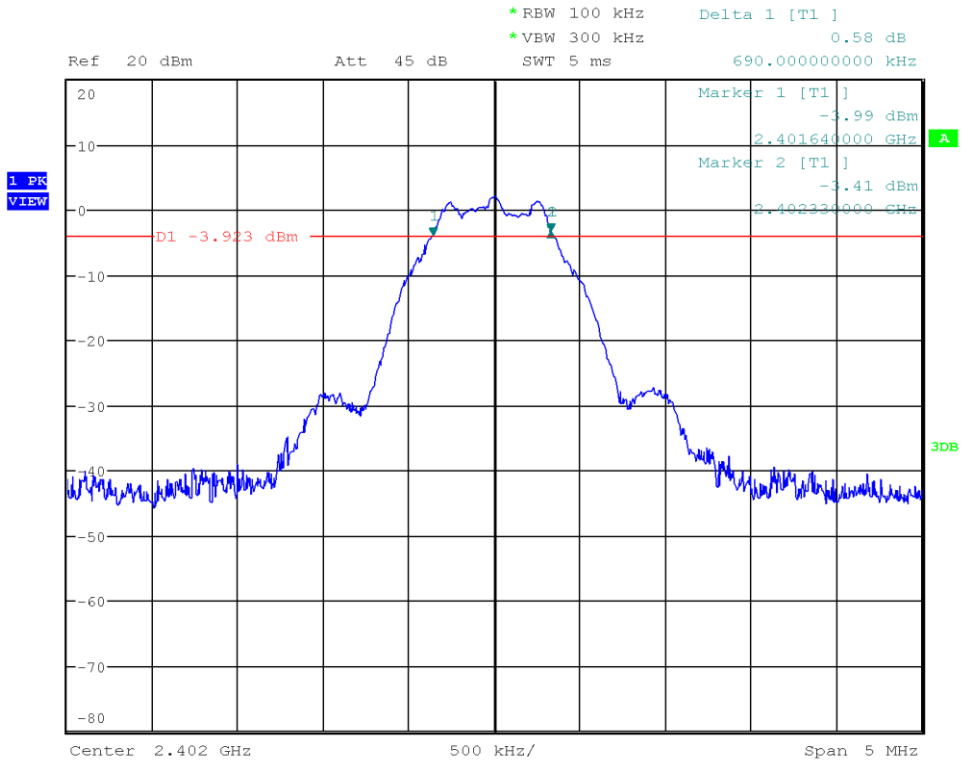
3.2.6 Results

Test Results 1 Mbps				
Mode	Frequency [MHz]	Bandwidth [kHz]	Limit [kHz]	Verdict
GFSK	2402	690	≥ 500	PASS
GFSK	2440	700	≥ 500	PASS
GFSK	2480	695	≥ 500	PASS

Test Results 2 Mbps				
Mode	Frequency [MHz]	Bandwidth [kHz]	Limit [kHz]	Verdict
GFSK	2402	1140	≥ 500	PASS
GFSK	2440	1140	≥ 500	PASS
GFSK	2480	1120	≥ 500	PASS

DTS (6 dB) Bandwidth

Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45910
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 11.8.1 Option 1
Operational Mode:	GFSK, Channel: 0, 2402 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Azamat Ibraimov
Test Site:	Eurofins Product Service GmbH
Test Date:	2023-10-12
Note:	1 Mbps
Lower Frequency [MHz]:	2401.640
Upper Frequency [MHz]:	2402.330
6 dB Bandwidth [kHz]:	690



DTS (6 dB) Bandwidth

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Model:	Leica Disto X6
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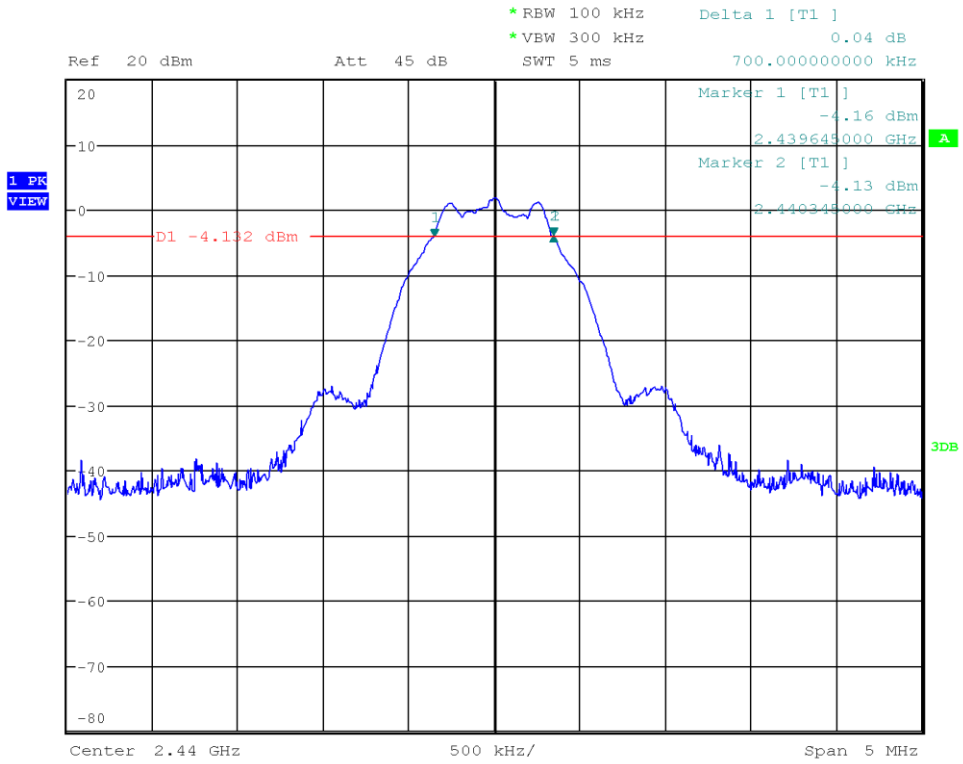
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 11.8.1 Option 1
Operational Mode:	GFSK, Channel: 19, 2440 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Azamat Ibraimov
Test Site:	Eurofins Product Service GmbH
Test Date:	2023-10-12
Note:	1 Mbps
Lower Frequency [MHz]:	2439.645
Upper Frequency [MHz]:	2440.345
6 dB Bandwidth [kHz]:	700



DTS (6 dB) Bandwidth

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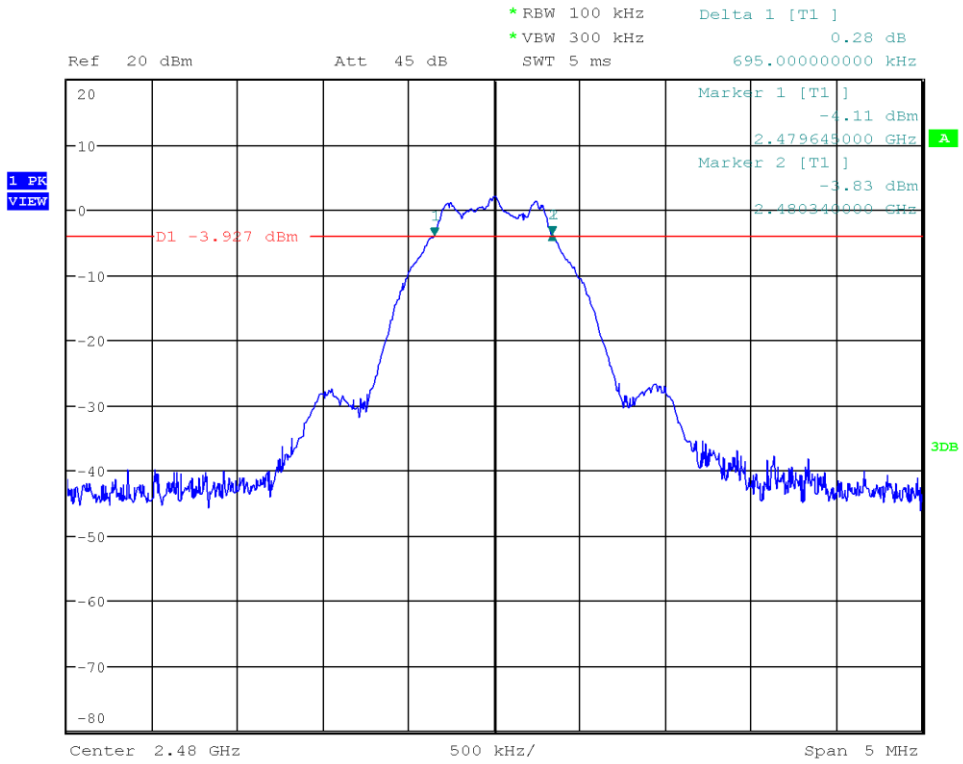
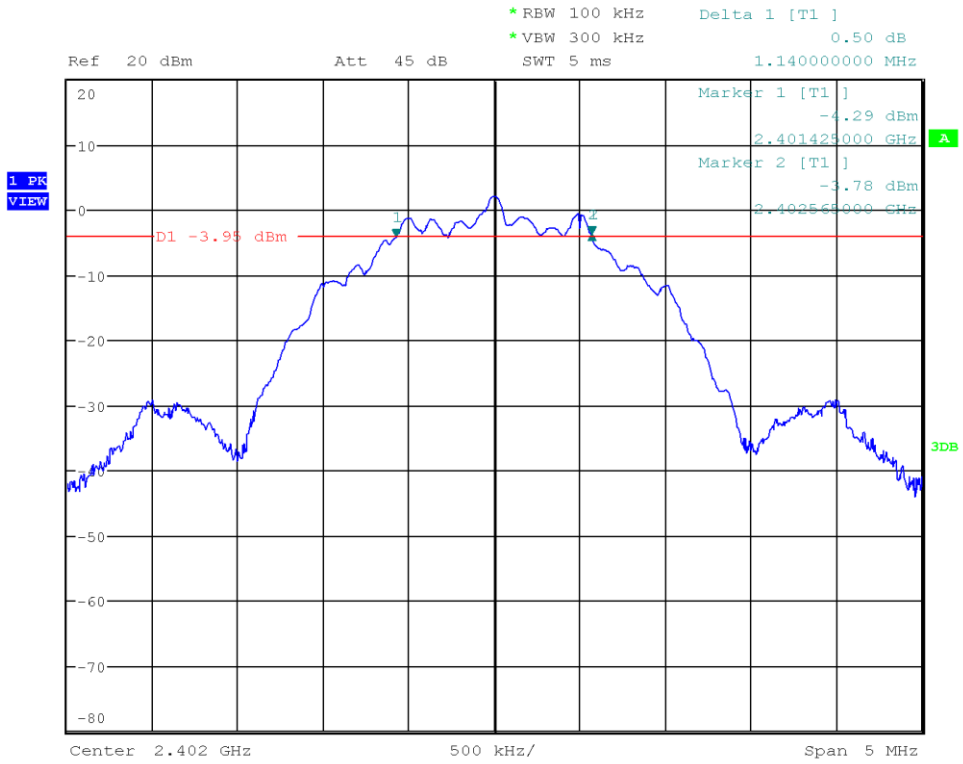
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45910
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 11.8.1 Option 1
Operational Mode:	GFSK, Channel: 39, 2480 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Azamat Ibraimov
Test Site:	Eurofins Product Service GmbH
Test Date:	2023-10-12
Note:	1 Mbps
Lower Frequency [MHz]:	2479.645
Upper Frequency [MHz]:	2480.340
6 dB Bandwidth [kHz]:	695



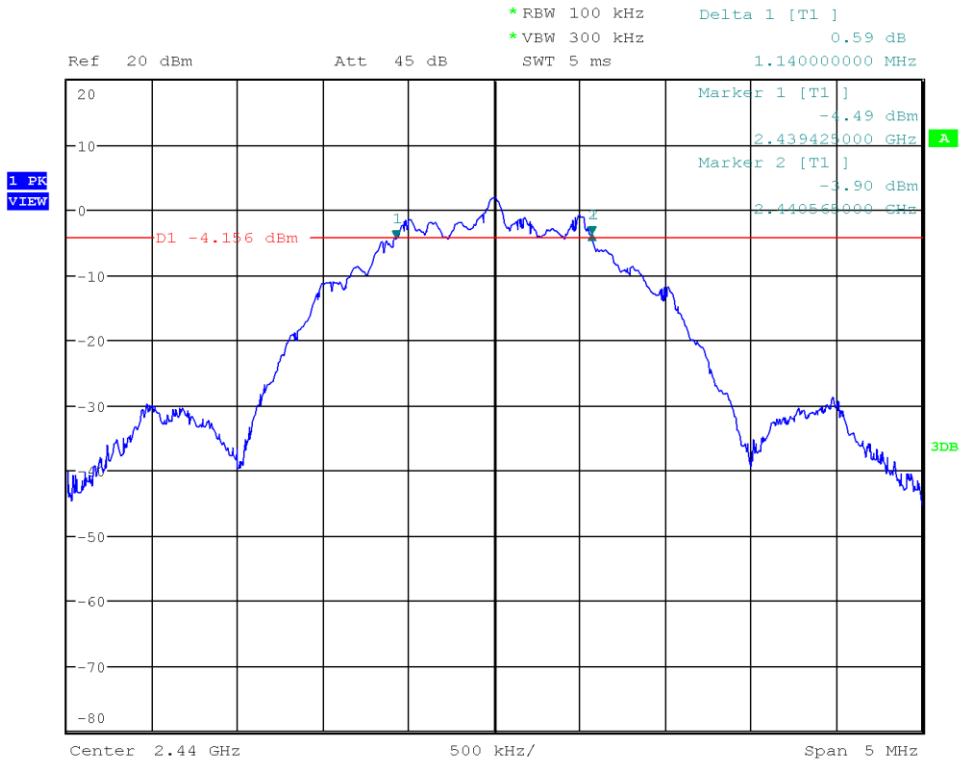
DTS (6 dB) Bandwidth

Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45910
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 11.8.1 Option 1
Operational Mode:	GFSK, Channel: 0, 2402 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Azamat Ibraimov
Test Site:	Eurofins Product Service GmbH
Test Date:	2023-10-12
Note:	2 Mbps
Lower Frequency [MHz]:	2401.425
Upper Frequency [MHz]:	2402.565
6 dB Bandwidth [kHz]:	1140



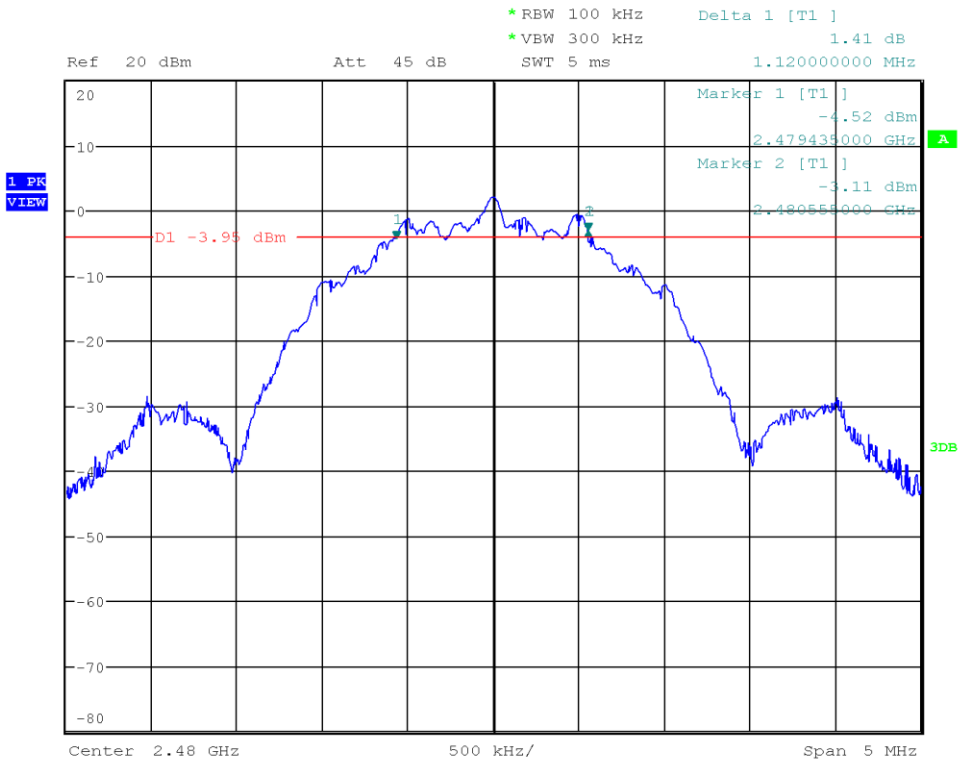
DTS (6 dB) Bandwidth

Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45910
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 11.8.1 Option 1
Operational Mode:	GFSK, Channel: 19, 2440 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Azamat Ibraimov
Test Site:	Eurofins Product Service GmbH
Test Date:	2023-10-12
Note:	2 Mbps
Lower Frequency [MHz]:	2439.425
Upper Frequency [MHz]:	2440.565
6 dB Bandwidth [kHz]:	1140



DTS (6 dB) Bandwidth

Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45910
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 11.8.1 Option 1
Operational Mode:	GFSK, Channel: 39, 2480 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Azamat Ibraimov
Test Site:	Eurofins Product Service GmbH
Test Date:	2023-10-12
Note:	2 Mbps
Lower Frequency [MHz]:	2479.435
Upper Frequency [MHz]:	2480.555
6 dB Bandwidth [kHz]:	1120



Date: 12.OCT.2023 15:30:11

3.3 Test Conditions and Results - Maximum peak conducted output power

3.3.1 Information

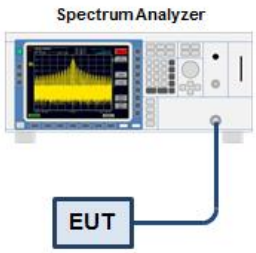
Test Information	
Reference	FCC § 15.247(b); ISED RSS-247, Issue 3 (section 5.4)
Measurement Method	ANSI C63.10 11.9.1
Measurement Uncertainty	± 2.86 dB
Operator	Azamat Ibraimov
Date	2023-10-12

3.3.2 Limits

Limits
1 W (30 dBm)
The conducted output power limit specified above is based on the use of antennas with directional gains that do not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in the table, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

3.3.3 Setup

Test Setup



3.3.4 Equipment

Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum analyzer	Rohde & Schwarz GmbH & Co. KG	FSU43	EF01631	2023-08	2024-08
Cable (CAABC)	Gigalane	GIGALANE 1730	EF00779	2023-03	2024-03

3.3.5 Procedure

Test Procedure
1. EUT set to test mode (Communication tester is used if needed) 2. Analyzer resolution bandwidth is set ≥ DTS bandwidth 3. Detector set to peak and max hold 4. Sweep time is set to auto 5. After the trace has stabilized a marker is set to peak of envelope

3.3.6 Results

Test Results 1 Mbps				
Channel [MHz]	Power [dBm]	Power [W]	Limit [W]	Verdict
2402	3.080	0.0020	1.0	PASS
2440	2.897	0.0019	1.0	PASS
2480	3.075	0.0020	1.0	PASS

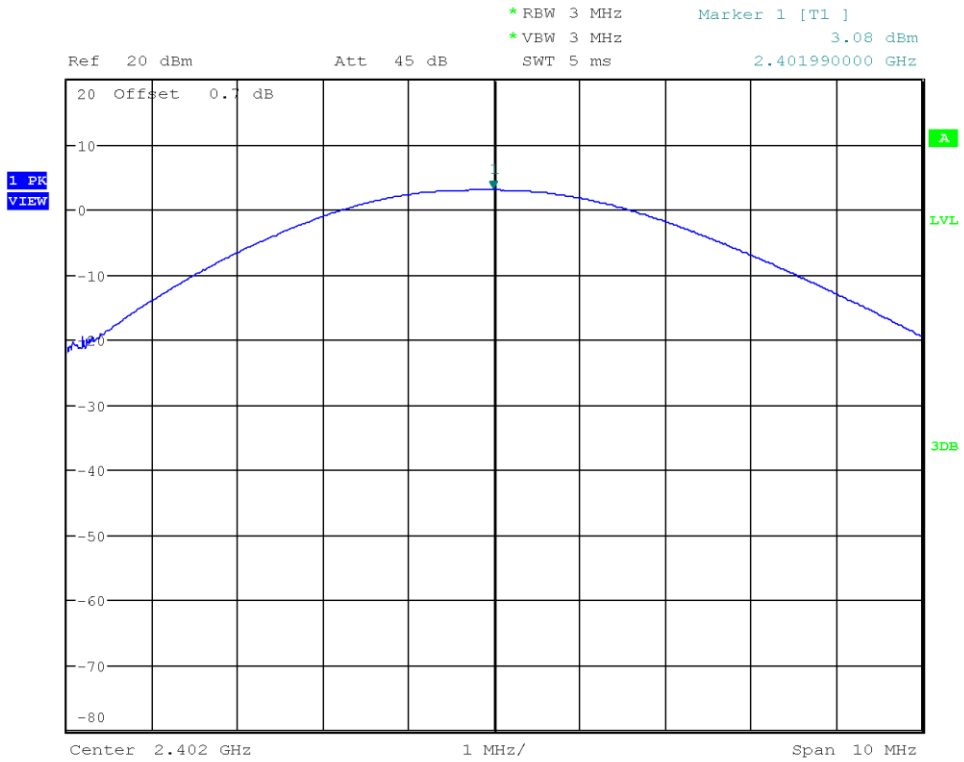
Test Results 2 Mbps				
Channel [MHz]	Power [dBm]	Power [W]	Limit [W]	Verdict
2402	3.099	0.0020	1.0	PASS
2440	2.897	0.0019	1.0	PASS
2480	3.163	0.0021	1.0	PASS

Test Results 1 Mbps - ISED							
Channel [MHz]	Conducted Power [dBm]	Conducted Power [W]	Conducted Limit [W]	EIRP Power [dBm]	EIRP Power [W]	EIRP Limit [W]	Verdict
2402	3.080	0.0020	1.0	3.580	0.0023	4.0	PASS
2440	2.897	0.0019	1.0	3.397	0.0022	4.0	PASS
2480	3.075	0.0020	1.0	3.575	0.0023	4.0	PASS
Comment: --							

Test Results 2 Mbps - ISED							
Channel [MHz]	Conducted Power [dBm]	Conducted Power [W]	Conducted Limit [W]	EIRP Power [dBm]	EIRP Power [W]	EIRP Limit [W]	Verdict
2402	3.099	0.0020	1.0	3.599	0.0023	4.0	PASS
2440	2.897	0.0019	1.0	3.397	0.0022	4.0	PASS
2480	3.163	0.0021	1.0	3.663	0.0023	4.0	PASS
Comment: --							

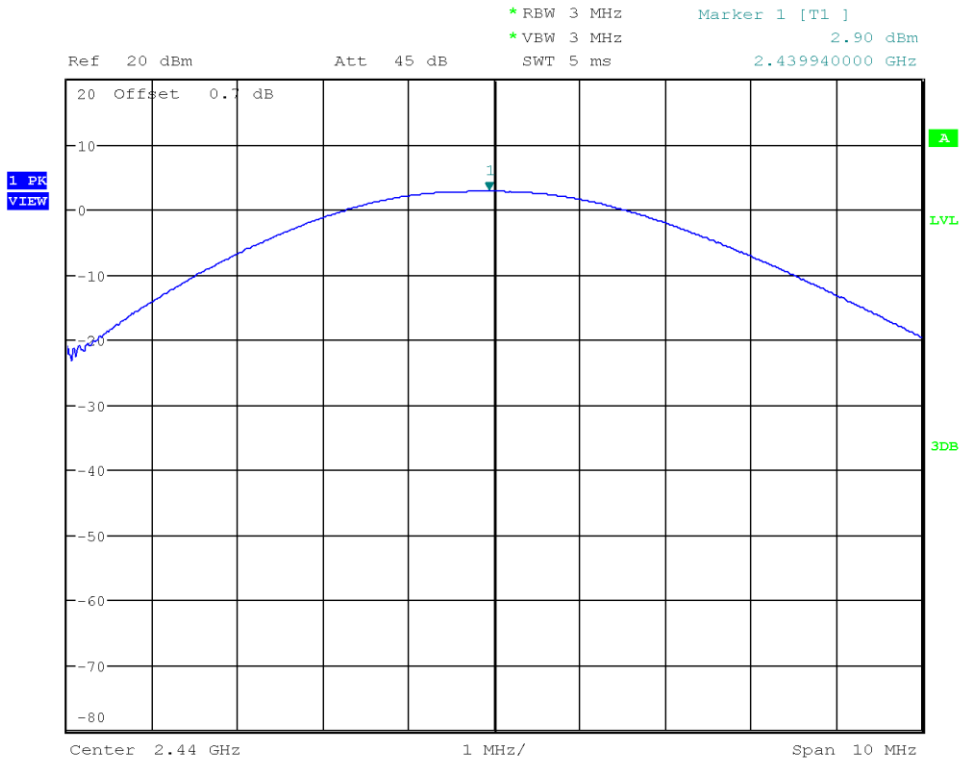
Peak Conducted Output Power

Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45910
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 11.9.1.1
Operational Mode:	GFSK, Channel: 0, 2402 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Azamat Ibraimov
Test Site:	Eurofins Product Service GmbH
Test Date:	2023-10-12
Note:	1 Mbps
Peak Power [dBm]:	3.080
Peak Power [W]:	0.0020



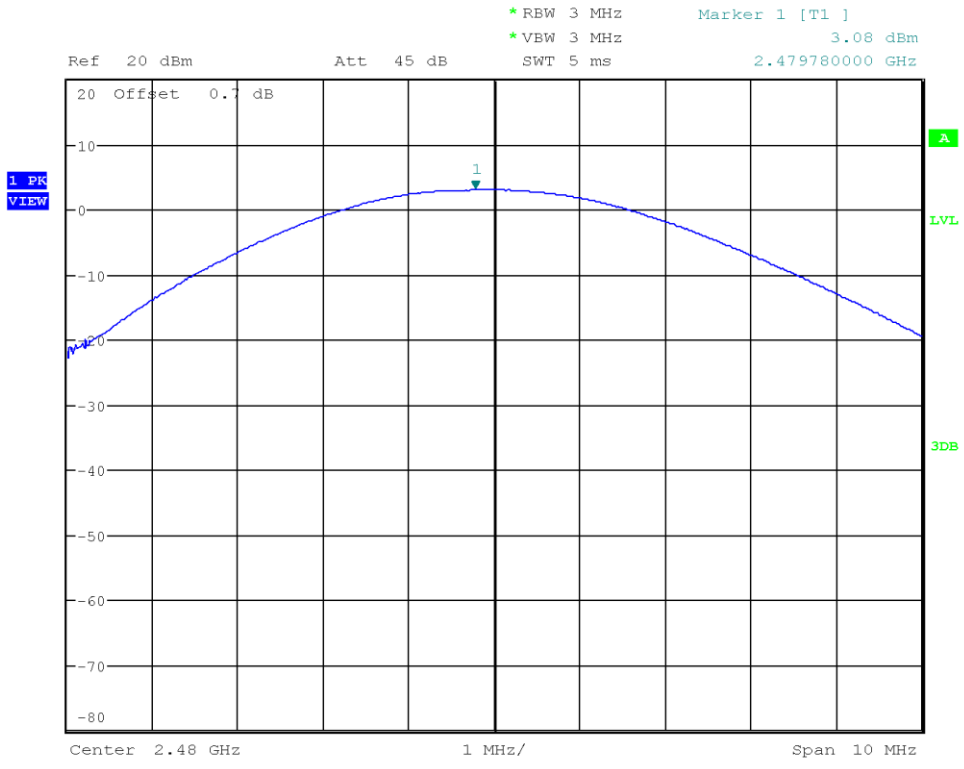
Peak Conducted Output Power

Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45910
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 11.9.1.1
Operational Mode:	GFSK, Channel: 19, 2440 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Azamat Ibraimov
Test Site:	Eurofins Product Service GmbH
Test Date:	2023-10-12
Note:	1 Mbps
Peak Power [dBm]:	2.897
Peak Power [W]:	0.0019



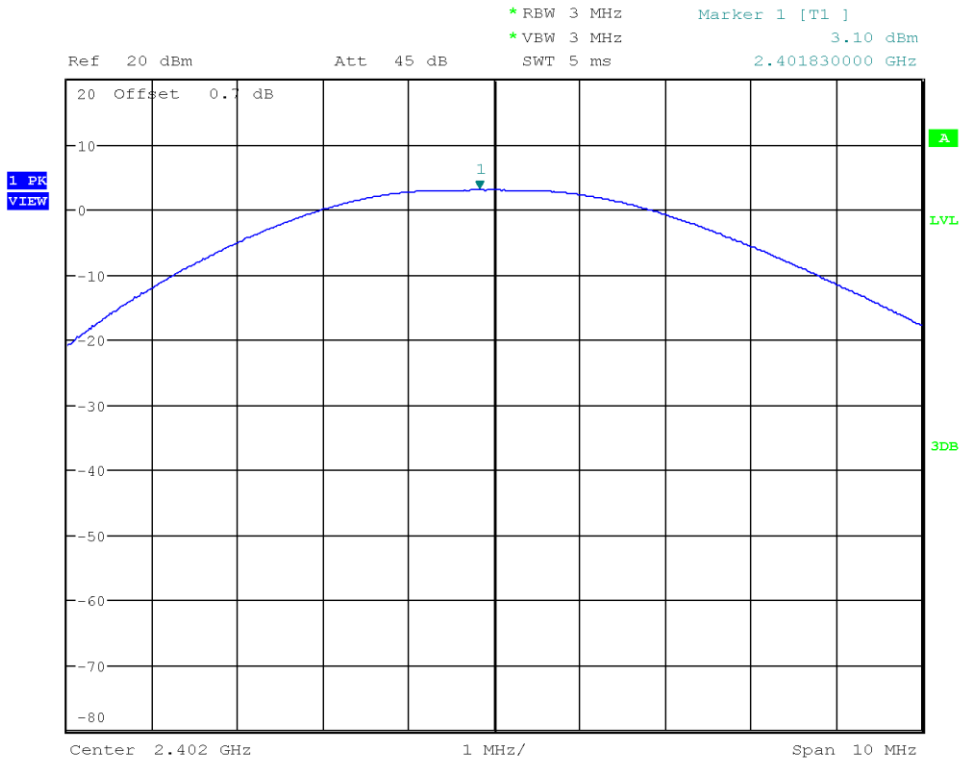
Peak Conducted Output Power

Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45910
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 11.9.1.1
Operational Mode:	GFSK, Channel: 39, 2480 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Azamat Ibraimov
Test Site:	Eurofins Product Service GmbH
Test Date:	2023-10-12
Note:	1 Mbps
Peak Power [dBm]:	3.075
Peak Power [W]:	0.0020



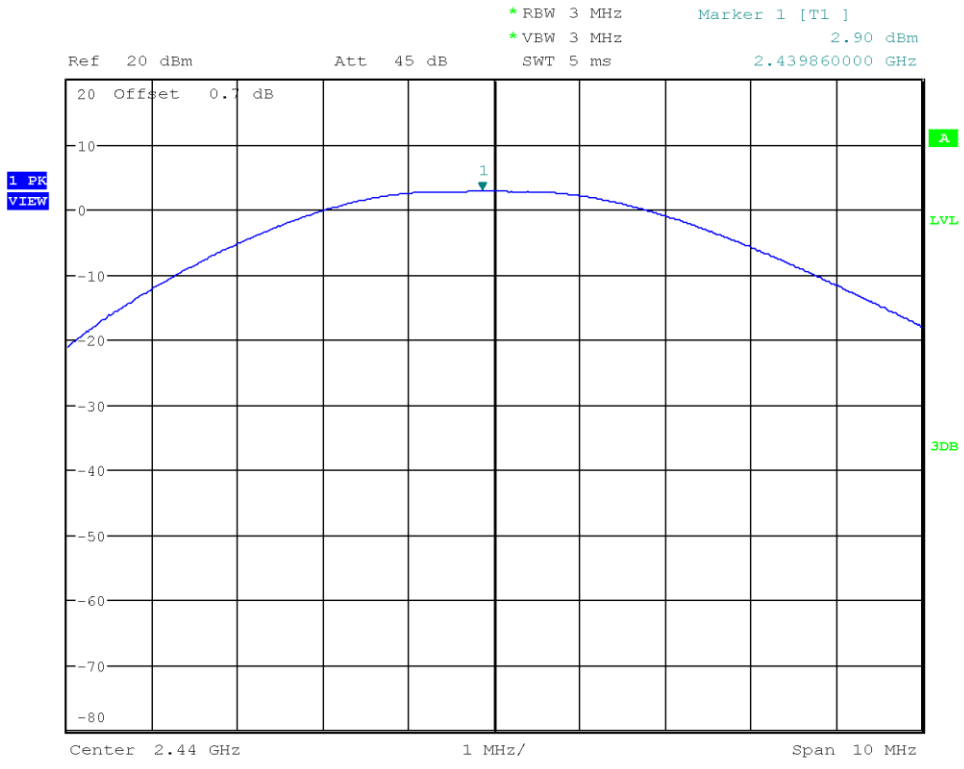
Peak Conducted Output Power

Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45910
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 11.9.1.1
Operational Mode:	GFSK, Channel: 0, 2402 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Azamat Ibraimov
Test Site:	Eurofins Product Service GmbH
Test Date:	2023-10-12
Note:	2 Mbps
Peak Power [dBm]:	3.099
Peak Power [W]:	0.0020



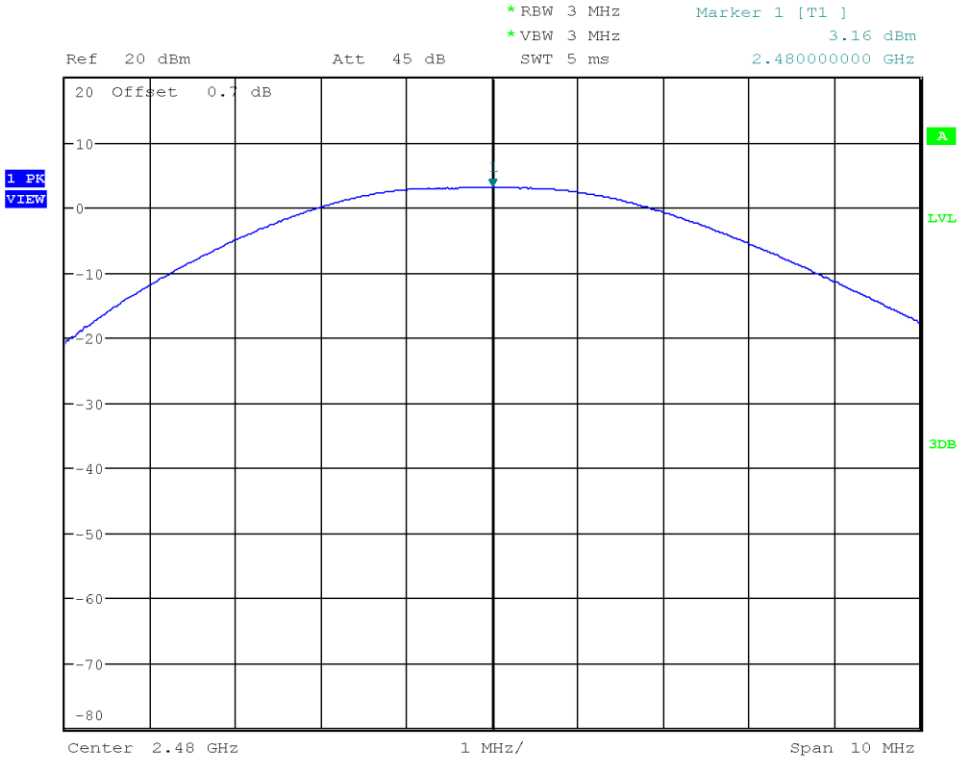
Peak Conducted Output Power

Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45910
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 11.9.1.1
Operational Mode:	GFSK, Channel: 19, 2440 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Azamat Ibraimov
Test Site:	Eurofins Product Service GmbH
Test Date:	2023-10-12
Note:	2 Mbps
Peak Power [dBm]:	2.897
Peak Power [W]:	0.0019



Peak Conducted Output Power

Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45910
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 11.9.1.1
Operational Mode:	GFSK, Channel: 39, 2480 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Azamat Ibraimov
Test Site:	Eurofins Product Service GmbH
Test Date:	2023-10-12
Note:	2 Mbps
Peak Power [dBm]:	3.163
Peak Power [W]:	0.0021



3.4 Test Conditions and Results - Power spectral density

3.4.1 Information

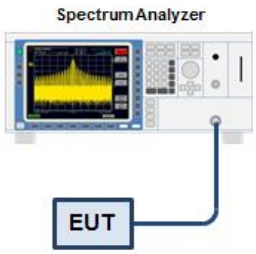
Test Information	
Reference	FCC § 15.247(e); ISED RSS-247, Issue 3 (section 5.2)
Measurement Method	ANSI C63.10 11.10.2, 14.3.2
Measurement Uncertainty	± 2.86 dB
Operator	Azamat Ibraimov
Date	2023-10-12

3.4.2 Limits

Limits
8 dBm / 3 kHz

3.4.3 Setup

Test Setup



3.4.4 Equipment

Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum analyzer	Rohde & Schwarz GmbH & Co. KG	FSU43	EF01631	2023-08	2024-08
Cable (CAABC)	Gigalane	GIGALANE 1730	EF00779	2023-03	2024-03

3.4.5 Procedure

Test Procedure

1. EUT set to test mode
2. The analyzer is set to DTS channel center frequency with a span of 1.5 times the DTS bandwidth
3. The RBW is set to 100 kHz with VBW ≥ RBW and the detector is set to peak with max hold
4. After the trace has stabilized a marker is set to the envelope maximum
5. If the power spectral density is above the limit the RBW is reduced (not lower than 3 kHz) and the measurement is repeated
6. If the EUT has more than one transmit chain the procedure is repeated for each transmit chain

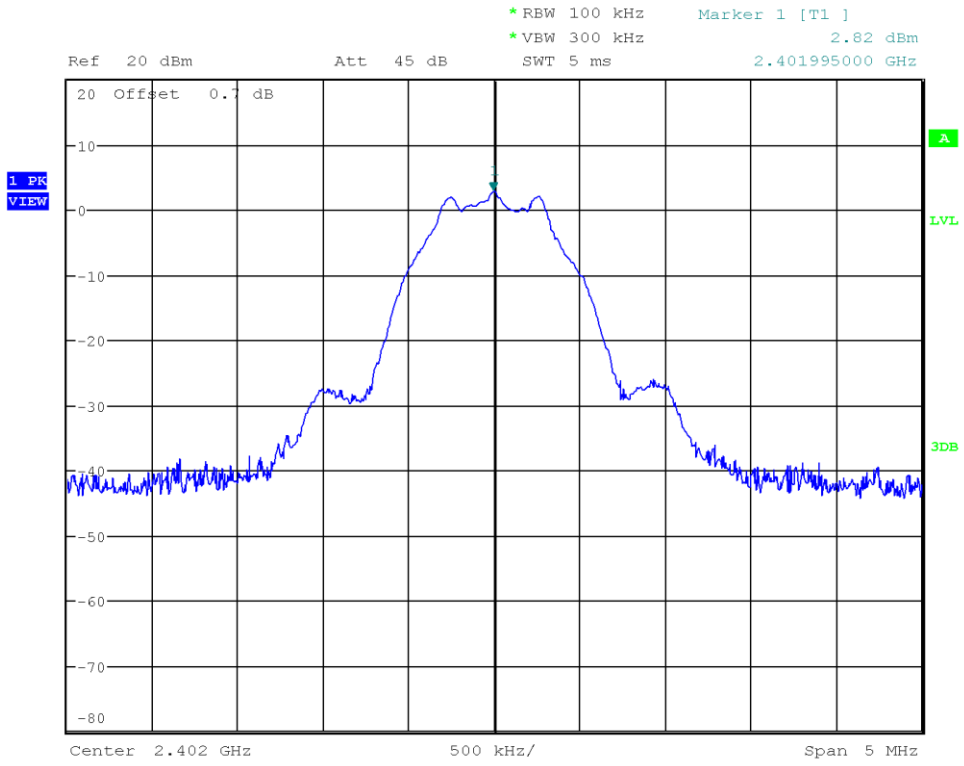
3.4.6 Results

Test Results 1 Mbps			
Channel [MHz]	PSD [dBm/RBW]	Limit [dBm/3kHz]	Verdict
2402	2.825	8.0	PASS
2440	2.641	8.0	PASS
2480	2.794	8.0	PASS
RBW = 100 kHz			

Test Results 2 Mbps			
Channel [MHz]	PSD [dBm/RBW]	Limit [dBm/3kHz]	Verdict
2402	2.774	8.0	PASS
2440	2.617	8.0	PASS
2480	2.582	8.0	PASS
RBW = 100 kHz			

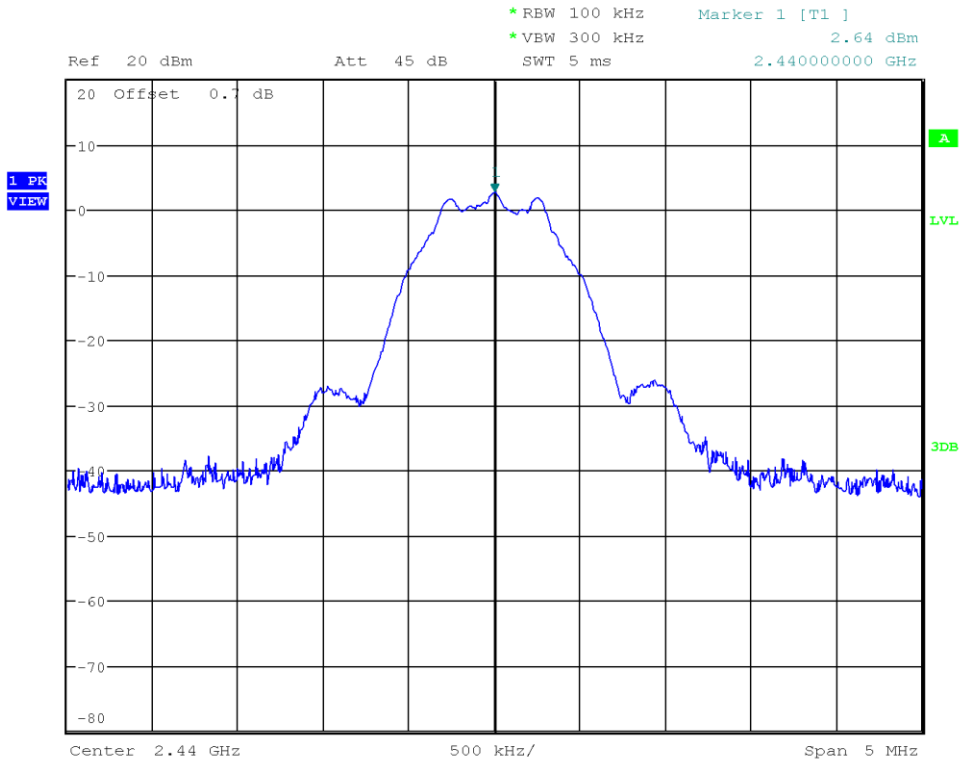
Peak Power Spectral Density

Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45910
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 11.10.2
Operational Mode:	GFSK, Channel: 0, 2402 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Azamat Ibraimov
Test Site:	Eurofins Product Service GmbH
Test Date:	2023-10-12
Note:	1 Mbps
Peak Frequency [MHz]:	2401.995
Spectral Density [dBm/RBW]:	2.825
Resolution Bandwidth [kHz]:	100 kHz



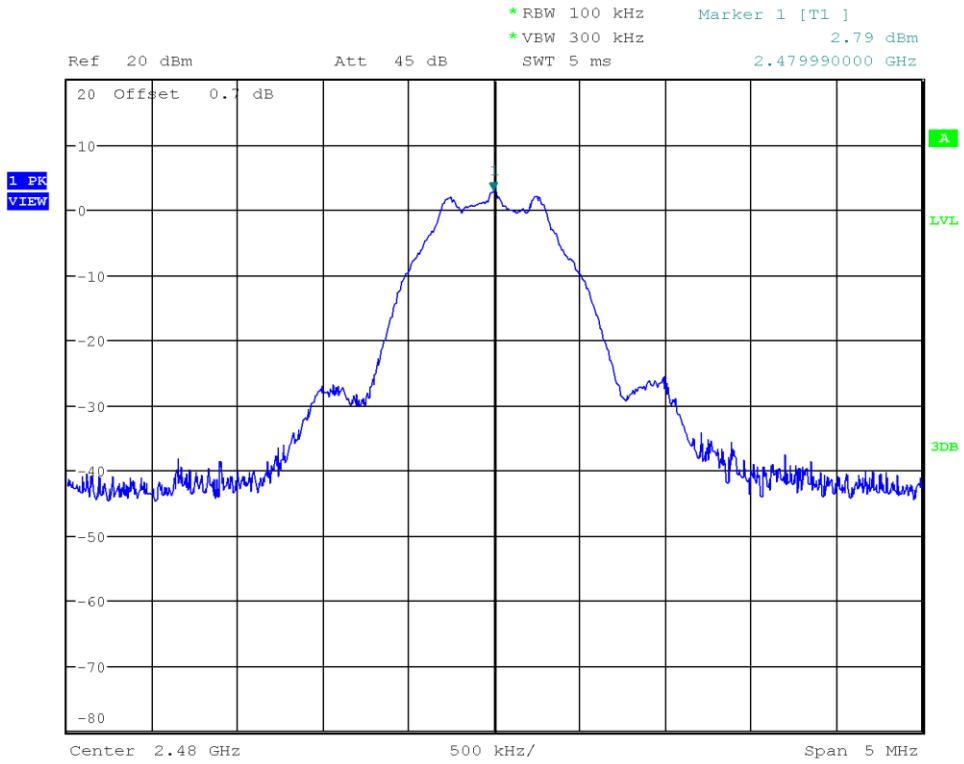
Peak Power Spectral Density

Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45910
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 11.10.2
Operational Mode:	GFSK, Channel: 19, 2440 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Azamat Ibraimov
Test Site:	Eurofins Product Service GmbH
Test Date:	2023-10-12
Note:	1 Mbps
Peak Frequency [MHz]:	2440.000
Spectral Density [dBm/RBW]:	2.641
Resolution Bandwidth [kHz]:	100 kHz



Peak Power Spectral Density

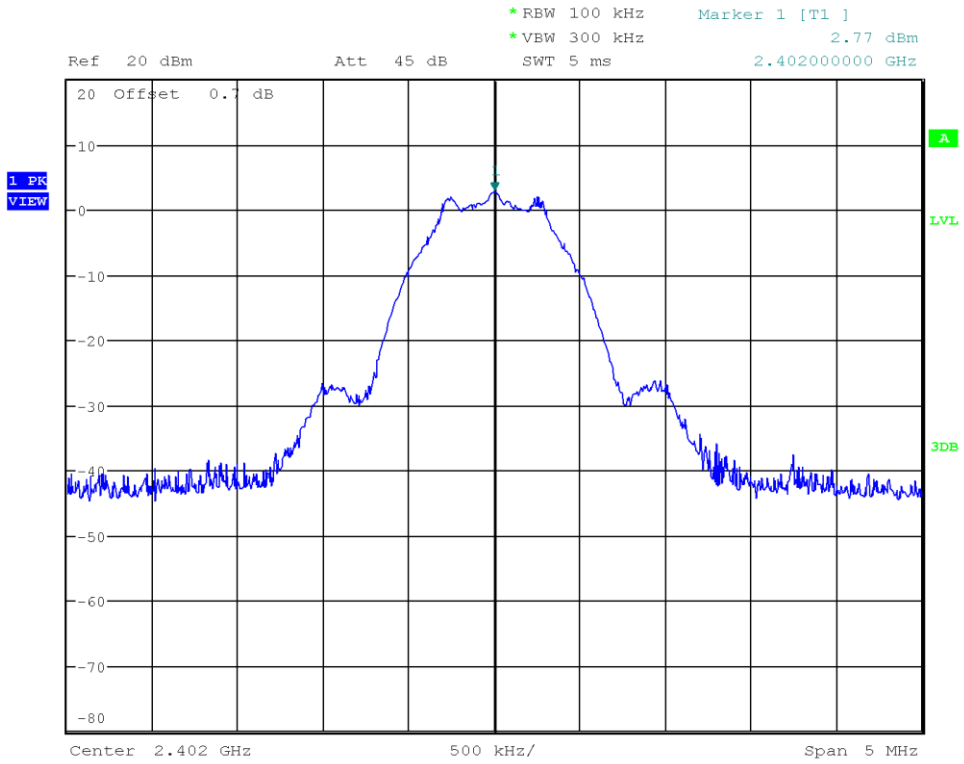
Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45910
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 11.10.2
Operational Mode:	GFSK, Channel: 39, 2480 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Azamat Ibraimov
Test Site:	Eurofins Product Service GmbH
Test Date:	2023-10-12
Note:	1 Mbps
Peak Frequency [MHz]:	2479.990
Spectral Density [dBm/RBW]:	2.794
Resolution Bandwidth [kHz]:	100 kHz



Date: 12.OCT.2023 16:43:00

Peak Power Spectral Density

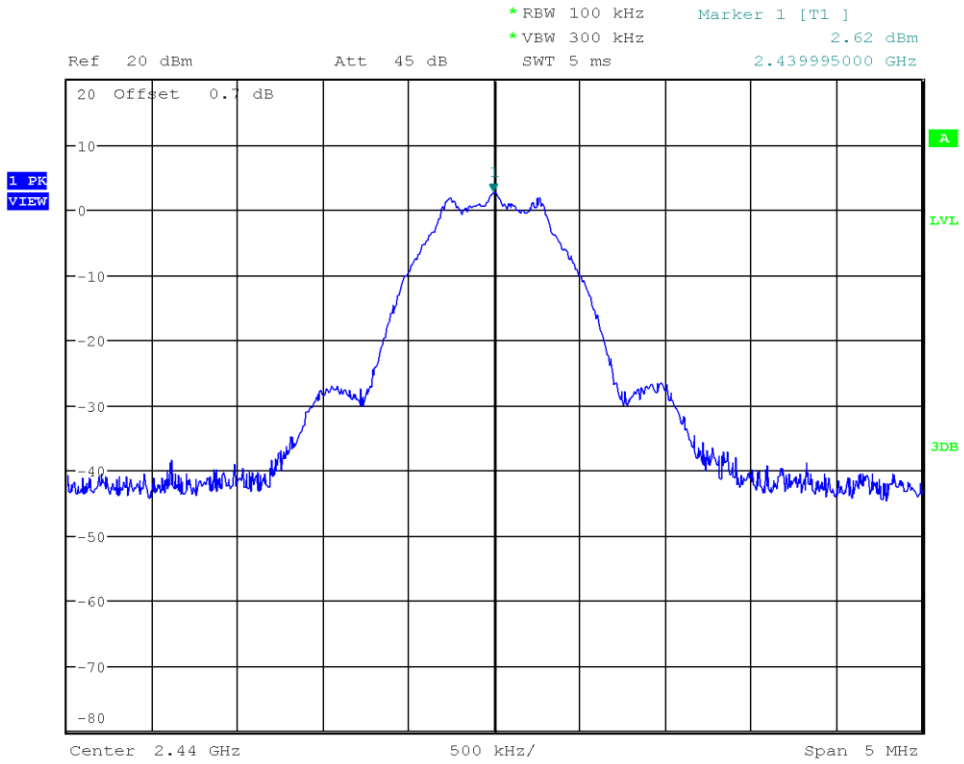
Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45910
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 11.10.2
Operational Mode:	GFSK, Channel: 0, 2402 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Azamat Ibraimov
Test Site:	Eurofins Product Service GmbH
Test Date:	2023-10-12
Note:	2 Mbps
Peak Frequency [MHz]:	2402.000
Spectral Density [dBm/RBW]:	2.774
Resolution Bandwidth [kHz]:	100 kHz



Date: 12.OCT.2023 16:43:48

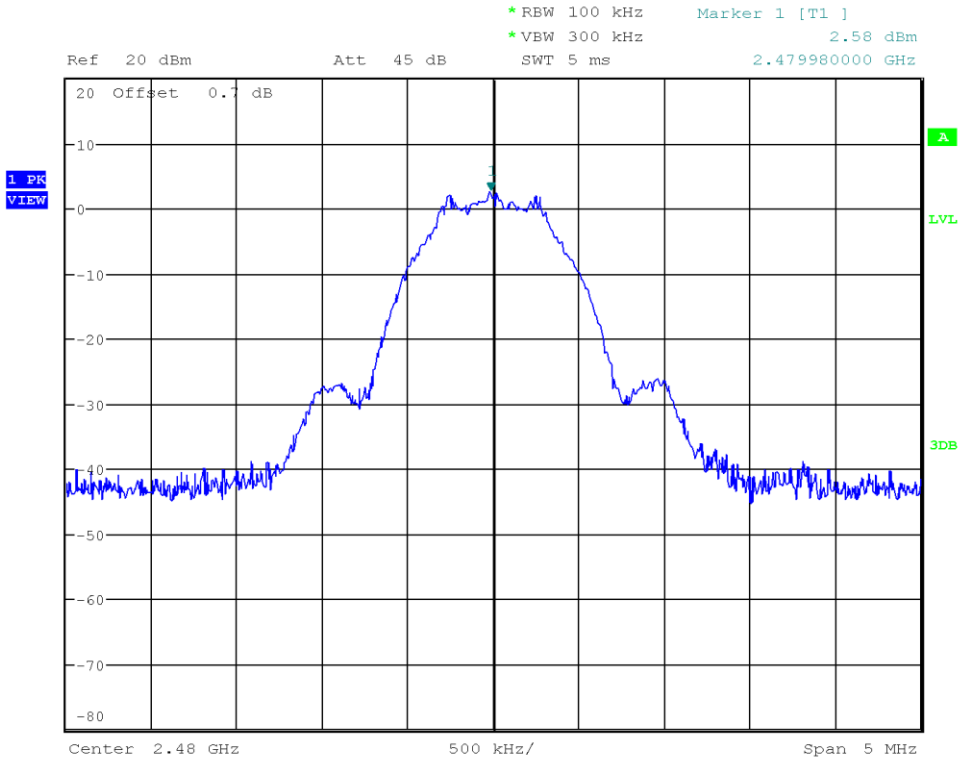
Peak Power Spectral Density

Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45910
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 11.10.2
Operational Mode:	GFSK, Channel: 19, 2440 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Azamat Ibraimov
Test Site:	Eurofins Product Service GmbH
Test Date:	2023-10-12
Note:	2 Mbps
Peak Frequency [MHz]:	2439.995
Spectral Density [dBm/RBW]:	2.617
Resolution Bandwidth [kHz]:	100 kHz



Peak Power Spectral Density

Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45910
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 11.10.2
Operational Mode:	GFSK, Channel: 39, 2480 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Azamat Ibraimov
Test Site:	Eurofins Product Service GmbH
Test Date:	2023-10-12
Note:	2 Mbps
Peak Frequency [MHz]:	2479.980
Spectral Density [dBm/RBW]:	2.582
Resolution Bandwidth [kHz]:	100 kHz



Date: 12.OCT.2023 16:45:06

3.5 Test Conditions and Results - AC powerline conducted emissions

3.5.1 Information

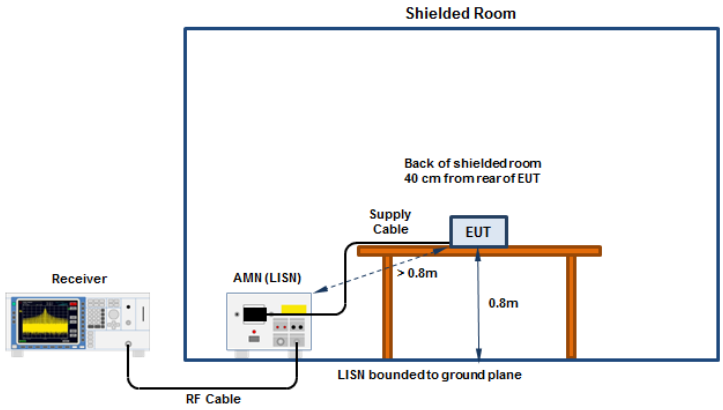
Test Information	
Reference	FCC § 15.207; ISED RSS-247, Issue 3 (section 3.1)
Measurement Method	ANSI C63.10 6.2
Measurement Uncertainty	± 3.82 dB
Operator	Azamat Ibraimov
Date	2023-10-17

3.5.2 Limits

Limits		
Frequency [MHz]	Quasi-Peak [dBµV]	Average [dBµV]
0.15 - 0.5	66 - 56*	56 - 46*
0.5 - 5	56	46
5 - 30	60	50
* Limit decreases linearly with the logarithm of the frequency		

3.5.3 Setup

Test Setup

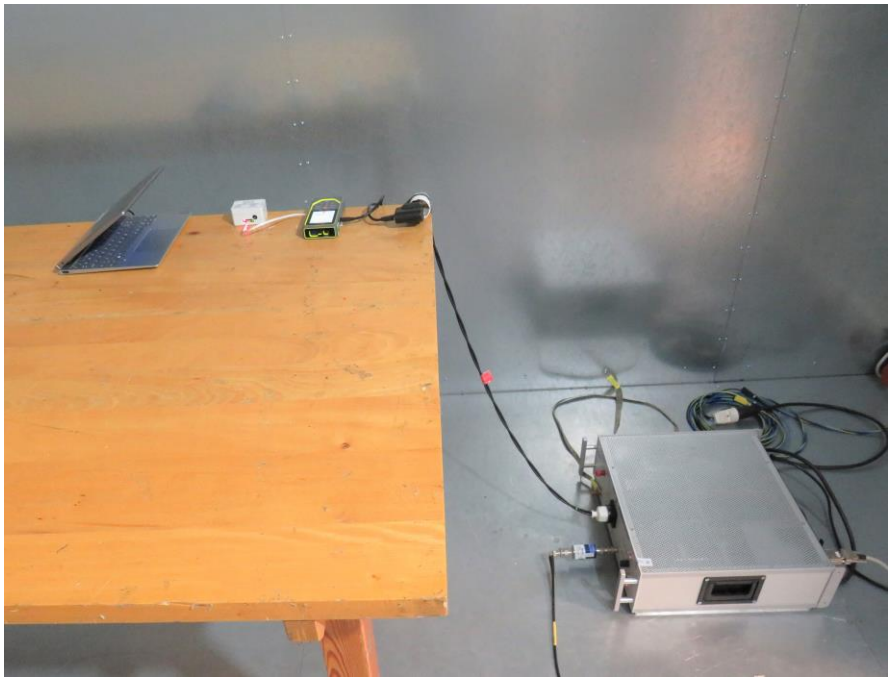


3.5.4 Equipment

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

Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
EMI Test Receiver	R&S	ESR7	EF00943	2023-08	2024-08
Pulse Limiter	R&S	ESH3-Z2	EF01222	2023-08	2025-08
LISN	Schwarzbeck	NSLK 8127 RC	EF01592	2023-06	2024-06

3.5.5 Setup Photos

Setup for measurements 150 kHz - 30 MHz


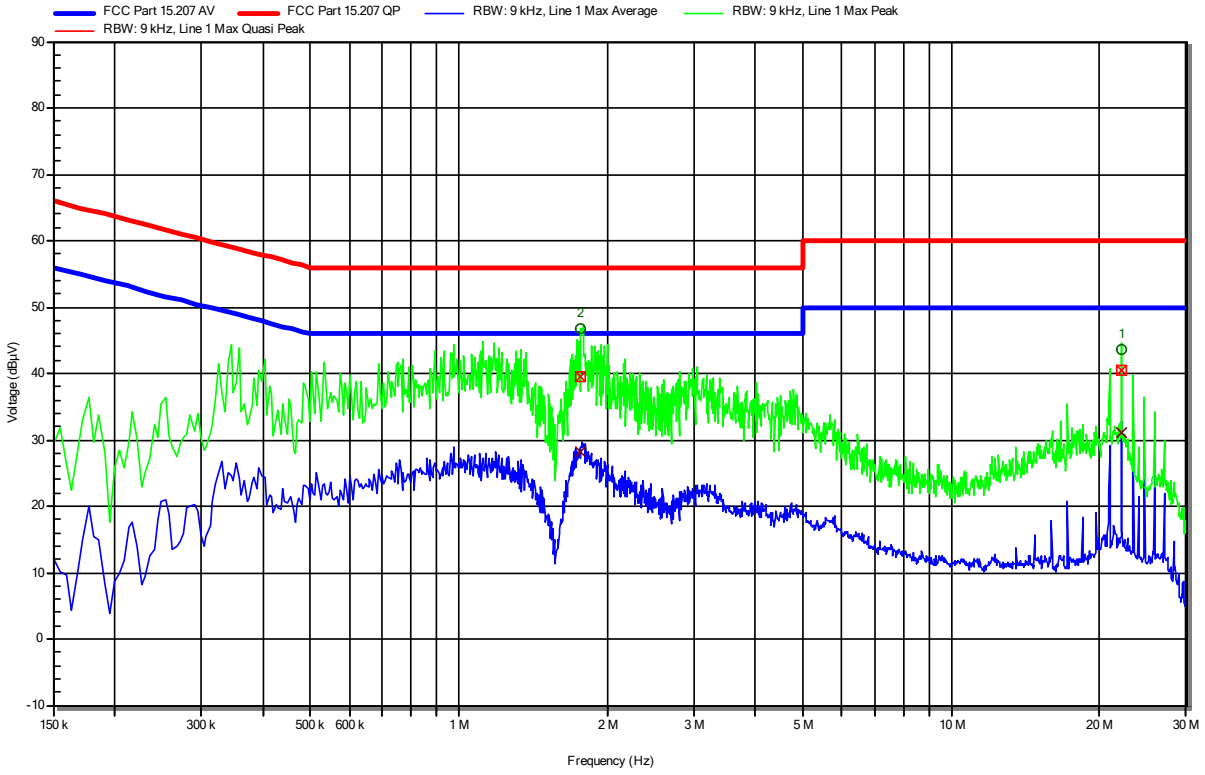
EUT Test Setup


Conducted emissions at the mains power port according to 47 CFR Part 15.247, RSS-247

Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45909
Test Site:	Eurofins Product Service GmbH
Operator:	Ibraimov Azamat
Test Date:	2023-10-17
Operating Conditions:	ambient temperature: 22 °Celsius power input: 5 VDC
LISN:	Schwarzbeck NSLK 8127 RC L1
Operational Mode:	BLE_CH 19_1 Mbps
EUT Configuration:	
Applied to Port:	120 VAC / 60 Hz

Index 53

RadiMation

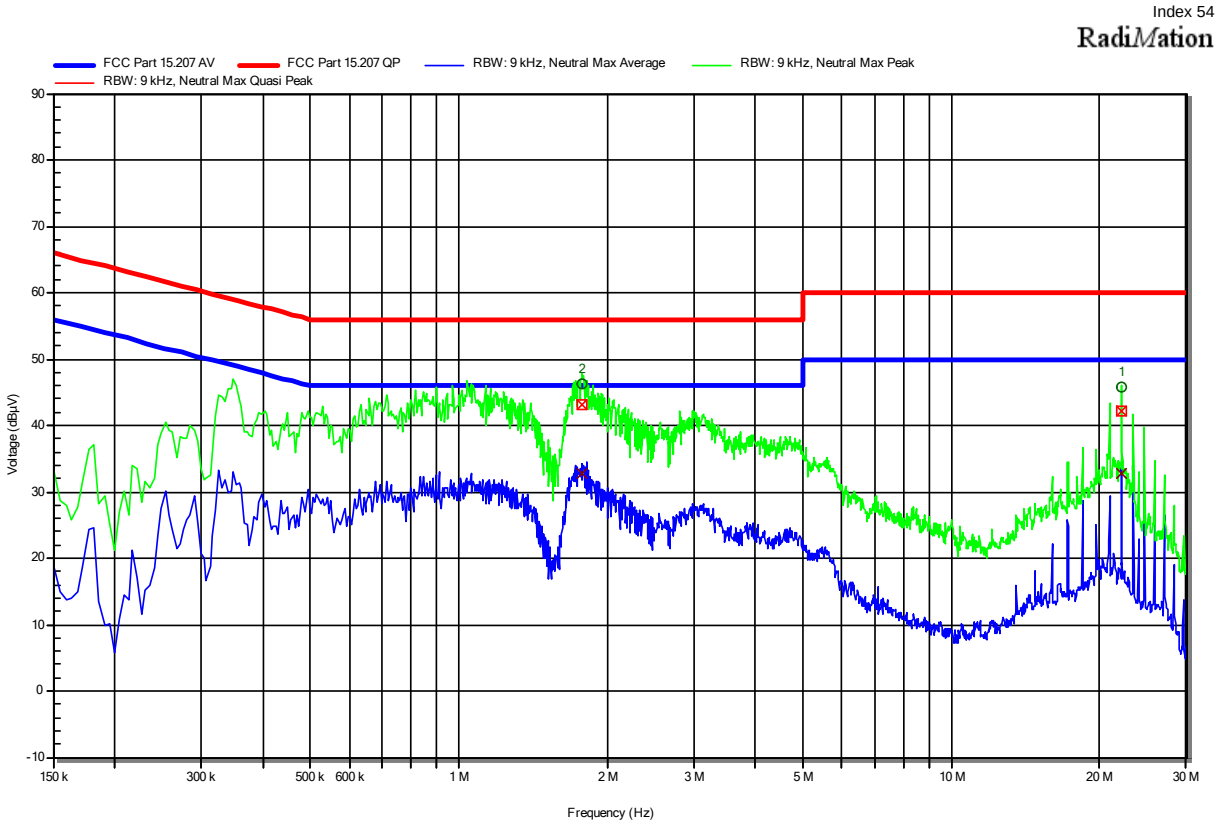


Peak Number	Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status	LISN
1	22.135 MHz	40.58 dBµV	60 dBµV	-19.42 dB	Pass	Line 1
2	1.77 MHz	39.51 dBµV	56 dBµV	-16.49 dB	Pass	Line 1

Peak Number	Frequency	Average	Average Limit	Average Difference	Average Status	LISN
1	22.135 MHz	31 dBµV	50 dBµV	-19 dB	Pass	Line 1
2	1.77 MHz	28.1 dBµV	46 dBµV	-17.9 dB	Pass	Line 1

Conducted emissions at the mains power port according to 47 CFR Part 15.247, RSS-247

Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45909
Test Site:	Eurofins Product Service GmbH
Operator:	Ibraimov Azamat
Test Date:	2023-10-17
Operating Conditions:	ambient temperature: 22 °Celsius power input: 5 VDC
LISN:	Schwarzbeck NSLK 8127 RC N
Operational Mode:	BLE_ CH 19_1 Mbps
EUT Configuration:	
Applied to Port:	120 VAC / 60 Hz



Peak Number	Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status	LISN
1	22.147 MHz	42.2 dBµV	60 dBµV	-17.8 dB	Pass	Neutral
2	1.779 MHz	43.06 dBµV	56 dBµV	-12.94 dB	Pass	Neutral

Peak Number	Frequency	Average	Average Limit	Average Difference	Average Status	LISN
1	22.147 MHz	32.69 dBµV	50 dBµV	-17.31 dB	Pass	Neutral
2	1.779 MHz	32.68 dBµV	46 dBµV	-13.32 dB	Pass	Neutral

3.6 Test Conditions and Results - Band-edge compliance

3.6.1 Information

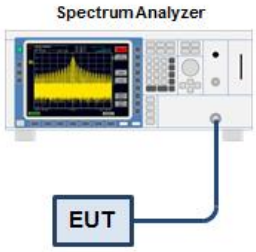
Test Information	
Reference	FCC § 15.247(d); ISED RSS-247, Issue 3 (section 5.5)
Measurement Uncertainty	± 3.64 dB
Measurement Method	ANSI C63.10 11.13
Operator	Azamat Ibraimov
Date	2023-10-12

3.6.2 Limits

Limits	
Power Measurement	Out-of-band attenuation [dB]
Peak	20
RMS	30

3.6.3 Setup

Test Setup



3.6.4 Equipment

Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum analyzer	Rohde & Schwarz GmbH & Co. KG	FSU43	EF01631	2023-08	2024-08
Cable (CAABC)	Gigalane	GIGALANE 1730	EF00779	2023-03	2024-03

3.6.5 Procedure

Test Procedure

1. EUT set to test mode (Communication tester is used if needed)
2. Span set around lower band edge and detector is set to peak and max hold
3. Resolution bandwidth is set to 100 kHz
4. Markers are set to peak emission levels within frequency band and outside frequency band
5. Band edge attenuation is determined from level difference

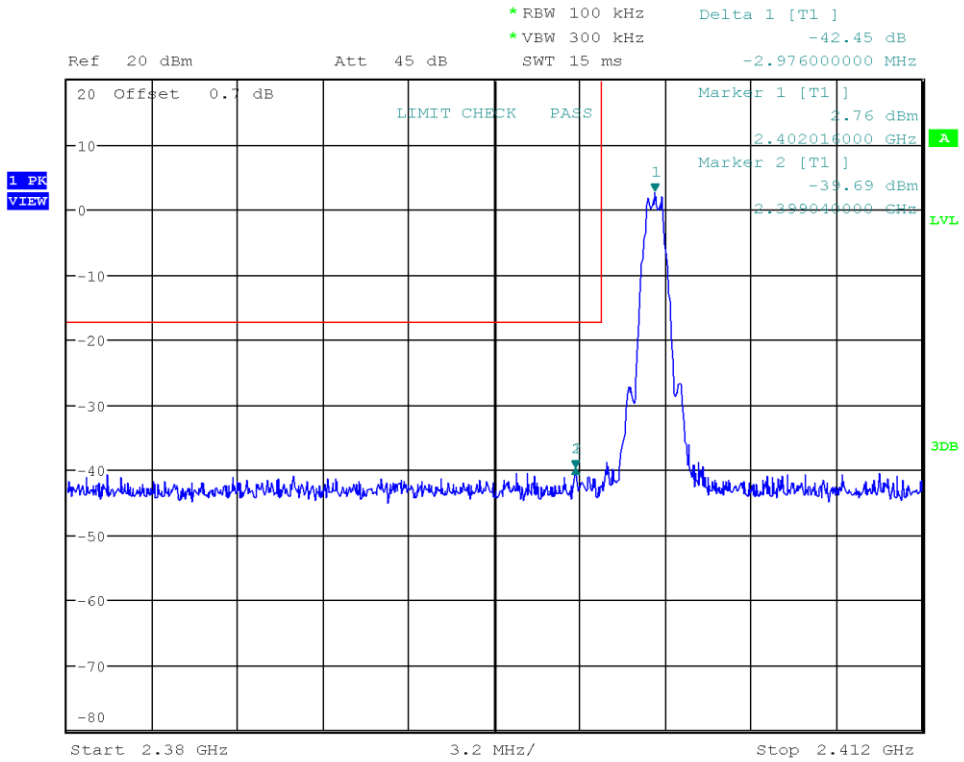
3.6.6 Results

Test Results 1 Mbps				
Mode	Channel [MHz]	Out-of-band Attenuation [dB]	Limit [dB]	Verdict
GFSK	2402	-42.45	-20	PASS
GFSK	2480	-42.75	-20	PASS

Test Results 2 Mbps				
Mode	Channel [MHz]	Out-of-band Attenuation [dB]	Limit [dB]	Verdict
GFSK	2402	-32.04	-20	PASS
GFSK	2480	-42.34	-20	PASS

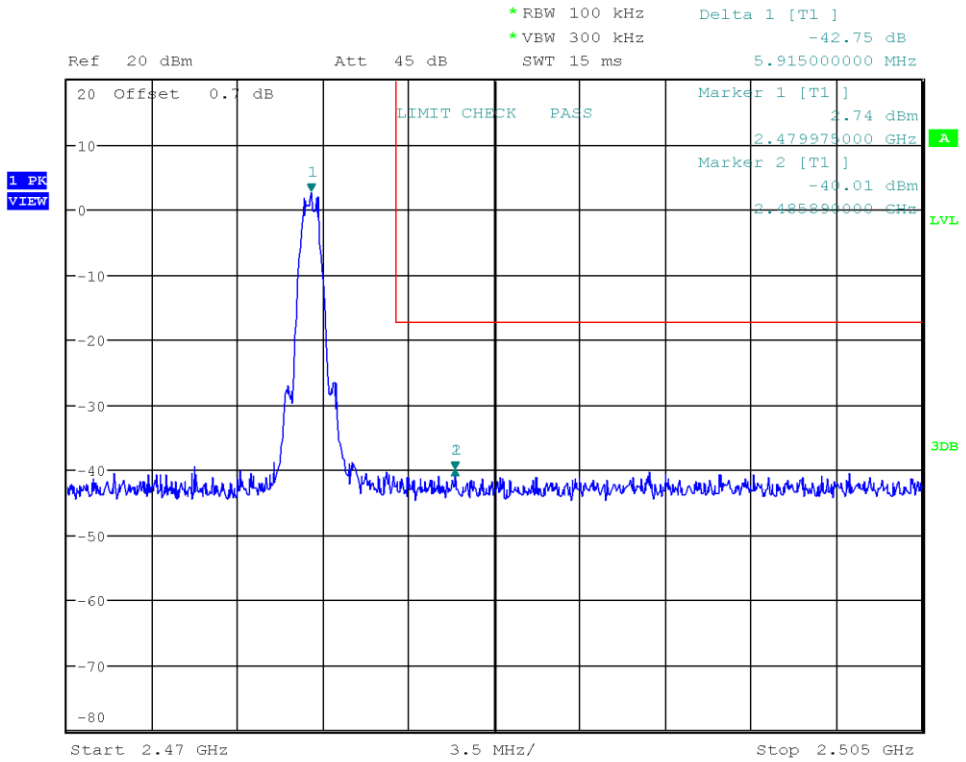
Emissions in nonrestricted frequency bands at the Band-edge

Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45910
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 7.8.6, 6.10.4
Operating Conditions:	Tnom/Vnom
Operator:	Azamat Ibraimov
Test Site:	Eurofins Product Service GmbH
Test Date:	2023-10-12
Note:	1 Mbps
Band-edge	Lower
In-band Frequency [MHz]:	2402.016
Max. in-band Level [dBm/100 kHz]:	2.758
Out-of-band Frequency [MHz]:	2399.04
Max. out-of-band Level [dBm/100 kHz]:	-39.695
Attenuation [dB]:	-42.45



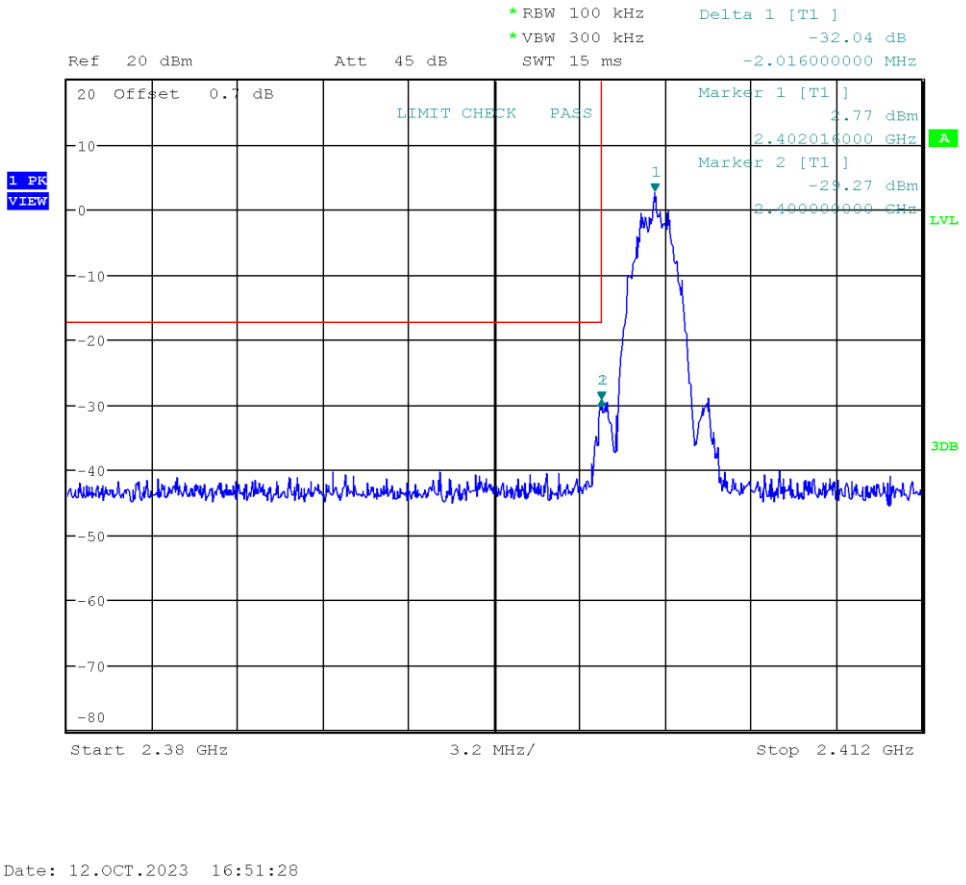
Emissions in nonrestricted frequency bands at the Band-edge

Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45910
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 7.8.6, 6.10.4
Operating Conditions:	Tnom/Vnom
Operator:	Azamat Ibraimov
Test Site:	Eurofins Product Service GmbH
Test Date:	2023-10-12
Note:	1 Mbps
Band-edge	Upper
In-band Frequency [MHz]:	2479.975
Max. in-band Level [dBm/100 kHz]:	2.737
Out-of-band Frequency [MHz]:	2485.89
Max. out-of-band Level [dBm/100 kHz]:	-40.008
Attenuation [dB]:	-42.75



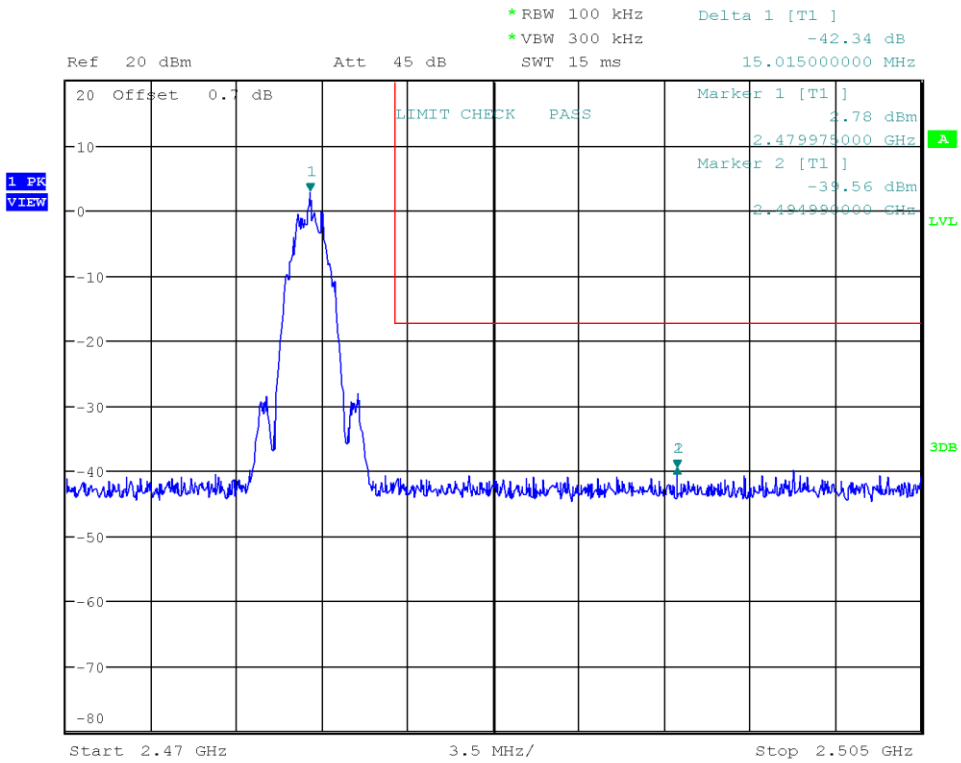
Emissions in nonrestricted frequency bands at the Band-edge

Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45910
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 7.8.6, 6.10.4
Operating Conditions:	Tnom/Vnom
Operator:	Azamat Ibraimov
Test Site:	Eurofins Product Service GmbH
Test Date:	2023-10-12
Note:	2 Mbps
Band-edge	Lower
In-band Frequency [MHz]:	2402.016
Max. in-band Level [dBm/100 kHz]:	2.768
Out-of-band Frequency [MHz]:	2400.0
Max. out-of-band Level [dBm/100 kHz]:	-29.273
Attenuation [dB]:	-32.04



Emissions in nonrestricted frequency bands at the Band-edge

Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45910
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 7.8.6, 6.10.4
Operating Conditions:	Tnom/Vnom
Operator:	Azamat Ibraimov
Test Site:	Eurofins Product Service GmbH
Test Date:	2023-10-12
Note:	2 Mbps
Band-edge	Upper
In-band Frequency [MHz]:	2479.975
Max. in-band Level [dBm/100 kHz]:	2.777
Out-of-band Frequency [MHz]:	2494.99
Max. out-of-band Level [dBm/100 kHz]:	-39.559
Attenuation [dB]:	-42.34



Date: 12.OCT.2023 16:52:14

3.7 Test Conditions and Results - Conducted spurious emissions

3.7.1 Information

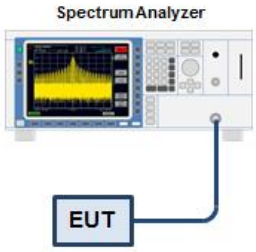
Test Information	
Reference	FCC § 15.247(d); ISED RSS-247, Issue 3 (section 5.5)
Measurement Uncertainty	± 4.25 dB
Measurement Method	ANSI C63.10 11.11
Operator	Azamat Ibraimov
Date	2023-10-12

3.7.2 Limits

Limits	
Power Measurement	Out-of-band attenuation [dB]
Peak	20
RMS	30

3.7.3 Setup

Test Setup



3.7.4 Equipment

Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum analyzer	Rohde & Schwarz GmbH & Co. KG	FSU43	EF01631	2023-08	2024-08
Cable (CAABC)	Gigalane	GIGALANE 1730	EF00779	2023-03	2024-03

3.7.5 Procedure

Test Procedure

1. EUT set to test mode (Communication tester is used if needed)
2. Span set around lower band edge and detector is set to peak and max hold
3. Resolution bandwidth is set to 100 kHz
4. Markers are set to peak emission levels outside frequency band

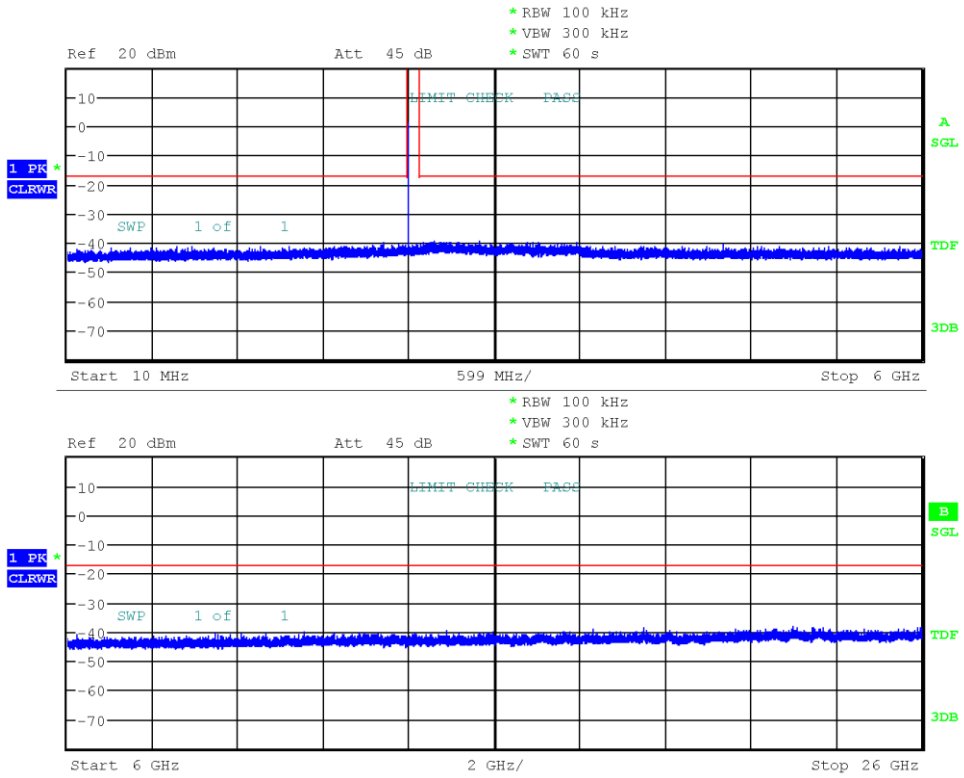
3.7.6 Results

Test Results 1 Mbps		
Mode	Channel [MHz]	Verdict
GFSK	2402	PASS
GFSK	2440	PASS
GFSK	2480	PASS

Test Results 2 Mbps		
Mode	Channel [MHz]	Verdict
GFSK	2402	PASS
GFSK	2440	PASS
GFSK	2480	PASS

Conducted Spurious Emissions

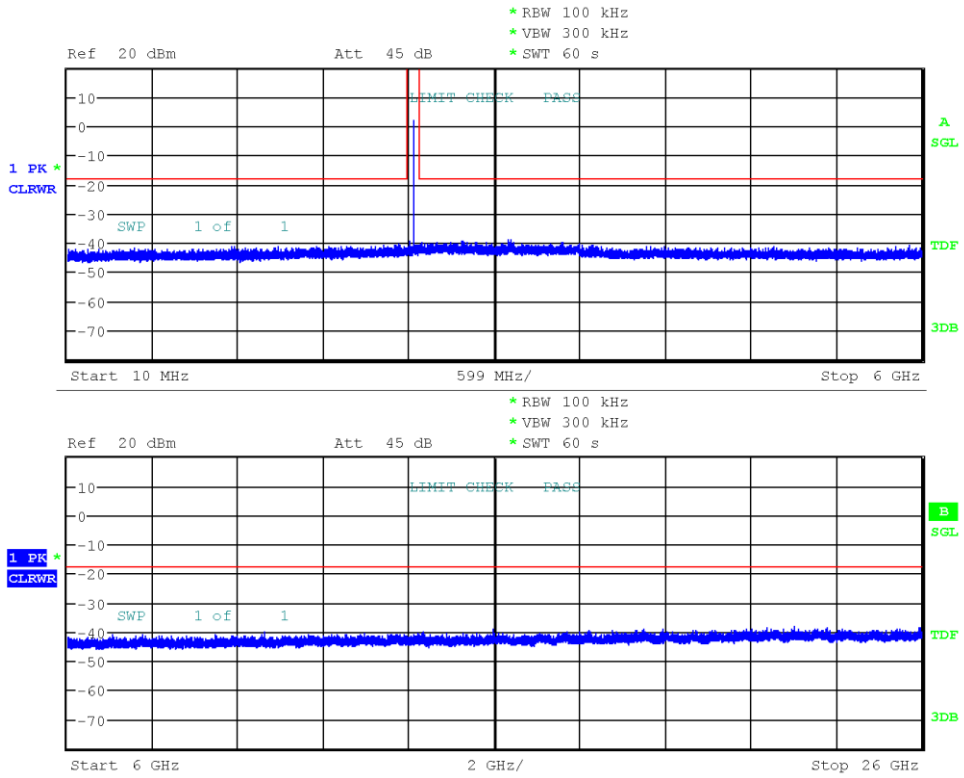
Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45910
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 11.11
Operational Mode:	GFSK, Channel: 0, 2402 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Azamat Ibraimov
Test Site:	Eurofins Product Service GmbH
Test Date:	2023-10-12
Note:	1 Mbps
Max. in-band Frequency [MHz]:	2402.0
Max. in-band Level [dBm/100 kHz]:	2.6
Out-of-band Limit [dBm/100 kHz]:	-17.4



Date: 12.OCT.2023 17:04:42

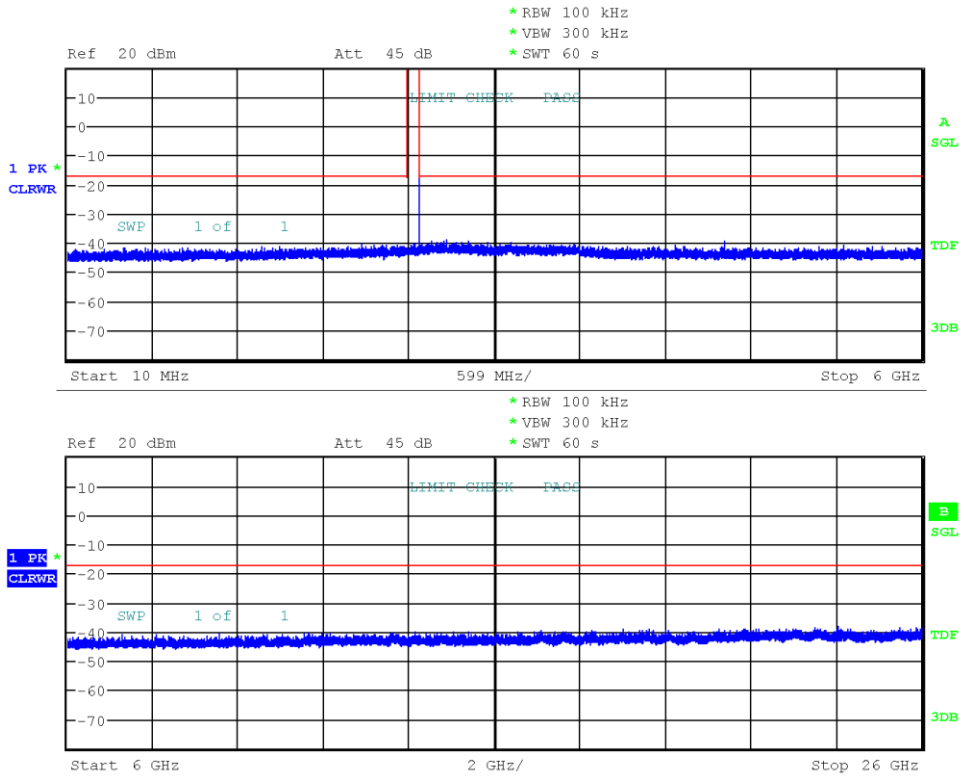
Conducted Spurious Emissions

Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45910
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 11.11
Operational Mode:	GFSK, Channel: 19, 2440 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Azamat Ibraimov
Test Site:	Eurofins Product Service GmbH
Test Date:	2023-10-12
Note:	1 Mbps
Max. in-band Frequency [MHz]:	2440.0
Max. in-band Level [dBm/100 kHz]:	2.5
Out-of-band Limit [dBm/100 kHz]:	-17.5



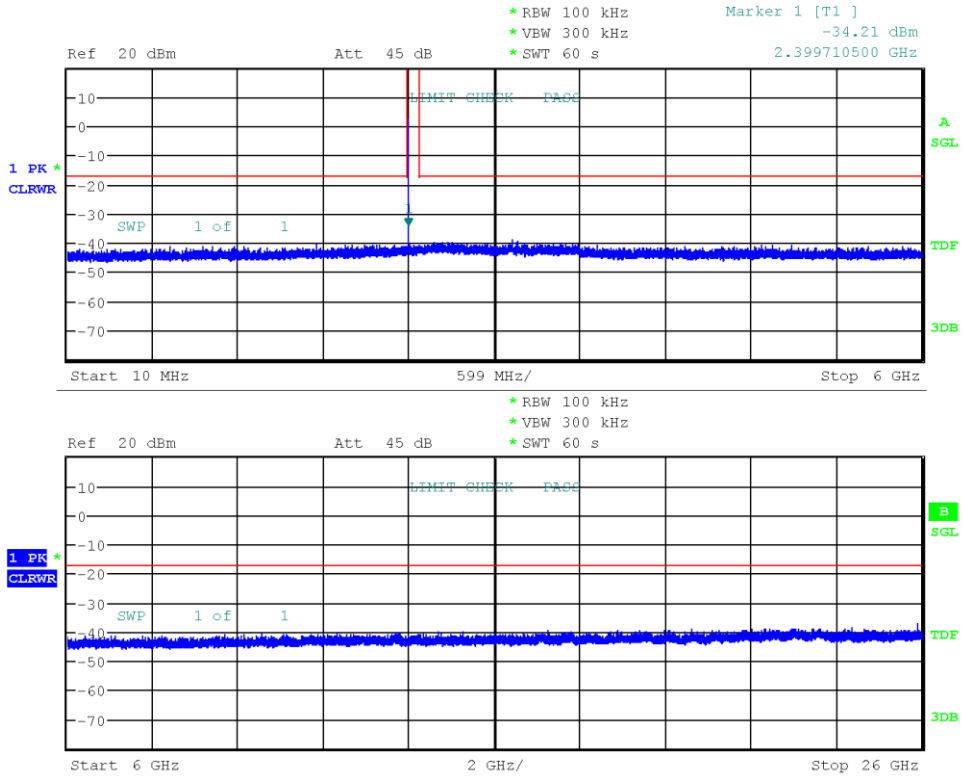
Conducted Spurious Emissions

Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45910
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 11.11
Operational Mode:	GFSK, Channel: 39, 2480 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Azamat Ibraimov
Test Site:	Eurofins Product Service GmbH
Test Date:	2023-10-12
Note:	1 Mbps
Max. in-band Frequency [MHz]:	2480.0
Max. in-band Level [dBm/100 kHz]:	2.7
Out-of-band Limit [dBm/100 kHz]:	-17.3



Conducted Spurious Emissions

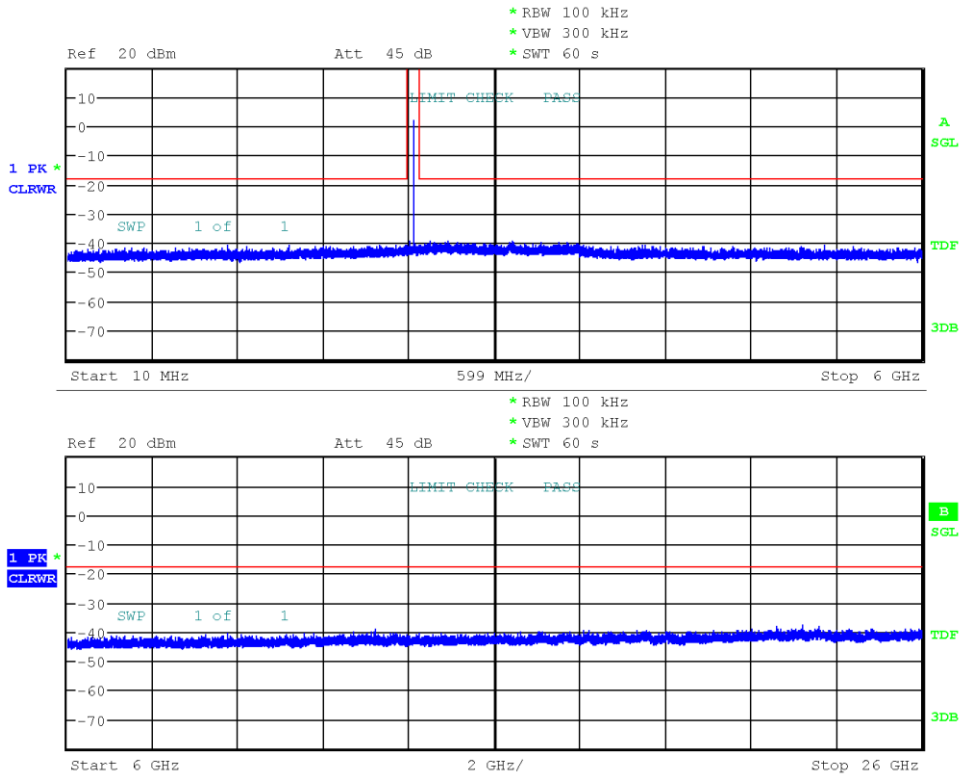
Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45910
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 11.11
Operational Mode:	GFSK, Channel: 0, 2402 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Azamat Ibraimov
Test Site:	Eurofins Product Service GmbH
Test Date:	2023-10-12
Note:	2 Mbps
Max. in-band Frequency [MHz]:	2402.0
Max. in-band Level [dBm/100 kHz]:	2.7
Out-of-band Limit [dBm/100 kHz]:	-17.3



Date: 12.OCT.2023 17:17:14

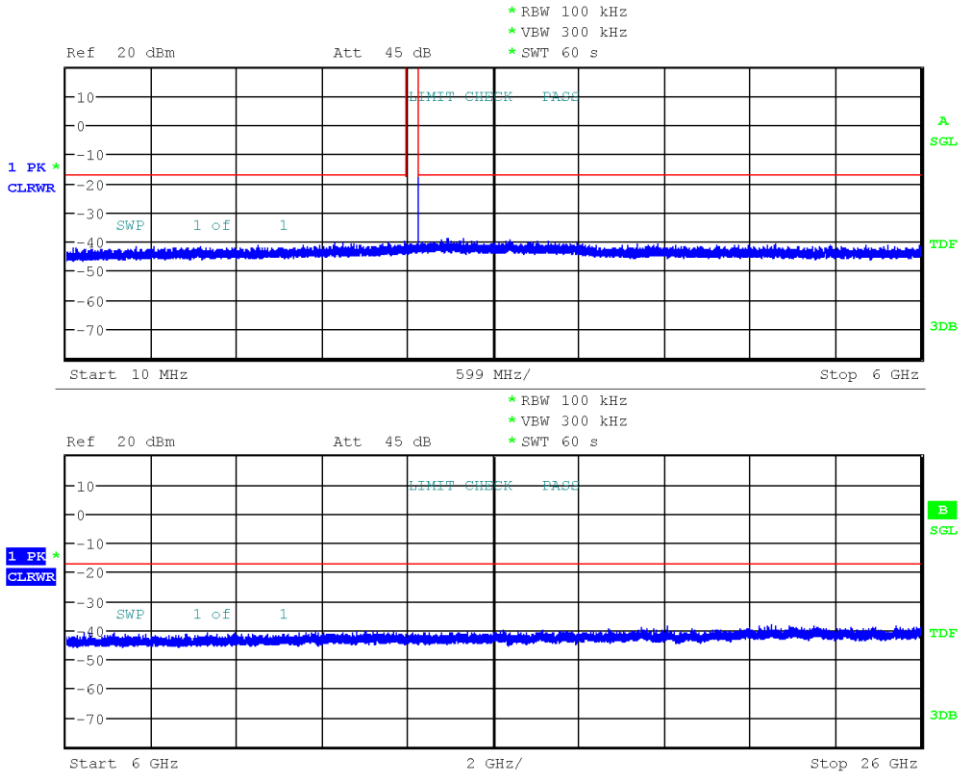
Conducted Spurious Emissions

Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45910
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 11.11
Operational Mode:	GFSK, Channel: 19, 2440 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Azamat Ibraimov
Test Site:	Eurofins Product Service GmbH
Test Date:	2023-10-12
Note:	2 Mbps
Max. in-band Frequency [MHz]:	2440.0
Max. in-band Level [dBm/100 kHz]:	2.5
Out-of-band Limit [dBm/100 kHz]:	-17.5



Conducted Spurious Emissions

Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45910
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 11.11
Operational Mode:	GFSK, Channel: 39, 2480 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Azamat Ibraimov
Test Site:	Eurofins Product Service GmbH
Test Date:	2023-10-12
Note:	2 Mbps
Max. in-band Frequency [MHz]:	2480.0
Max. in-band Level [dBm/100 kHz]:	2.7
Out-of-band Limit [dBm/100 kHz]:	-17.3



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3.8 Test Conditions and Results - Transmitter radiated emissions

3.8.1 Information

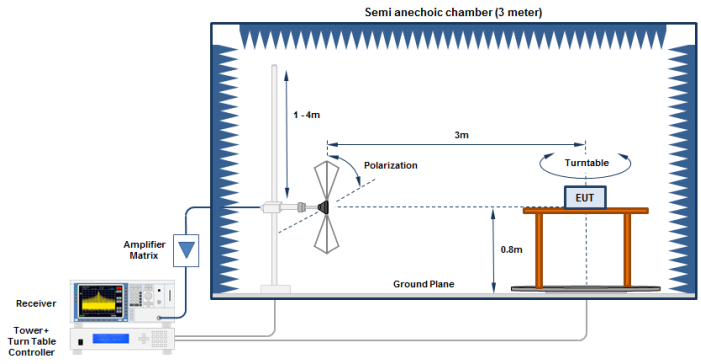
Test Information	
Reference	FCC § 15.247(d); FCC § 15.209; ISED RSS-Gen, Issue 5 A2 (section 6.13)
Measurement Uncertainty	± 5.95 dB
Measurement Method	ANSI C63.10 6.4, 6.5, 6.6, 11.12
Operator	Azamat Ibraimov
Date	2023-10-18

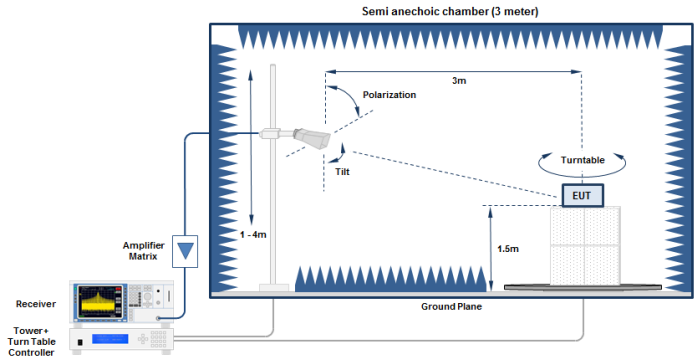
3.8.2 Limits

Limits			
Frequency range [MHz]	Detector	Field strength [µV/m]	Measurement distance [m]
0.009 - 0.09	Average	2400/F[kHz]	300
0.09 - 0.110	Quasi-Peak	2400/F[kHz]	300
0.110 - 0.490	Average	2400/F[kHz]	300
0.490 - 1.705	Quasi-Peak	24000/F[kHz]	30
1.705 - 30.0	Quasi-Peak	30	30
30 - 88	Quasi-Peak	100	3
88 - 216	Quasi-Peak	150	3
216 - 960	Quasi-Peak	200	3
960 - 1000	Quasi-Peak	500	3
>1000	Average	500	3

3.8.3 Setup

Test Setup 30 MHz - 1000 MHz



Test Setup > 1 GHz


3.8.4 Equipment

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

Test Equipment 30 MHz - 1000 MHz					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Anechoic Chamber	Frankonia	AC1	EF00062	2022-11	2025-11
EMI Test Receiver	Rohde & Schwarz Vertriebs GmbH	ESU8	EF00379	2023-08	2024-08
Antenna	Schwarzbeck	VULB 9168	EF01824	2022-10	2023-10

Test Equipment > 1 GHz					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Anechoic Chamber	Frankonia	AC2	EF01616	2022-10	2023-10
Spectrum analyzer	R&S	FSW43	EF00896	2023-08	2024-08
Antenna	Schwarzbeck	BBHA 9120B	EF01678	2021-03	2024-03
Antenna	Schwarzbeck	HWRD 650	EF01679	2021-03	2024-03
Antenna	Amplifier Research	AT4560	EF00302	2021-06	2023-06

3.8.5 Procedure

Test Procedure 30 MHz - 1000 MHz
1. EUT is placed on a non conducting support at the center of a turn table 0.8 m above the ground
2. EUT set to test mode
3. The receiver is set to peak detection with max hold
4. The EUT is rotated through 360° and the height of the antenna is varied from 1 m to 4 m
5. All significant emissions are measured again using the corresponding final detector

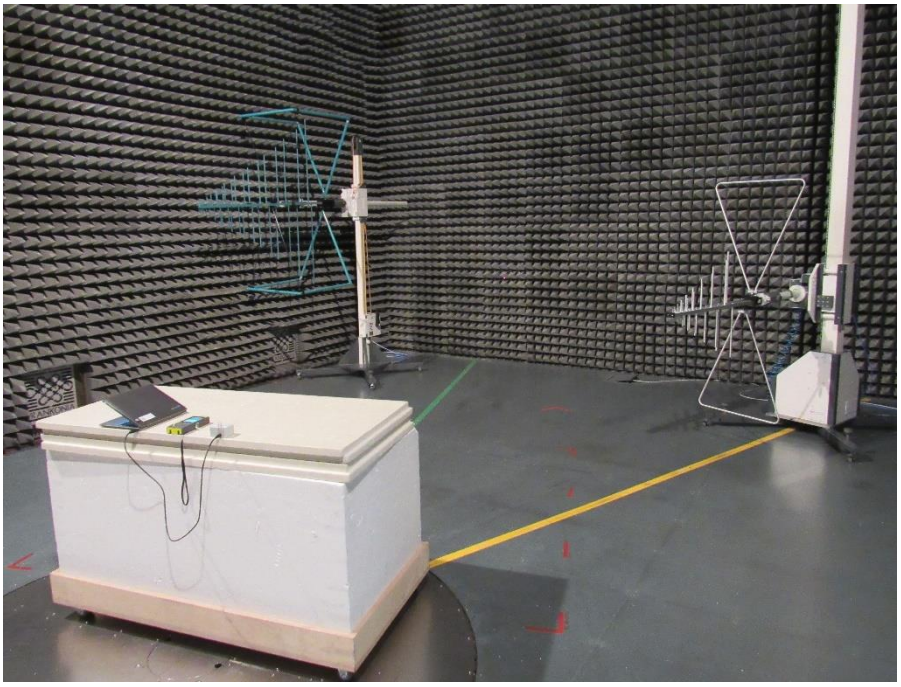
Test Procedure > 1 GHz
1. EUT is placed on a non conducting support at the center of a turn table 1.5 m above the ground
2. EUT set to test mode
3. The receiver is set to peak detection with max hold
4. The EUT is rotated through 360° and the height of the antenna is varied from 1 m to 4 m
5. All significant emissions are measured again using the corresponding final detector

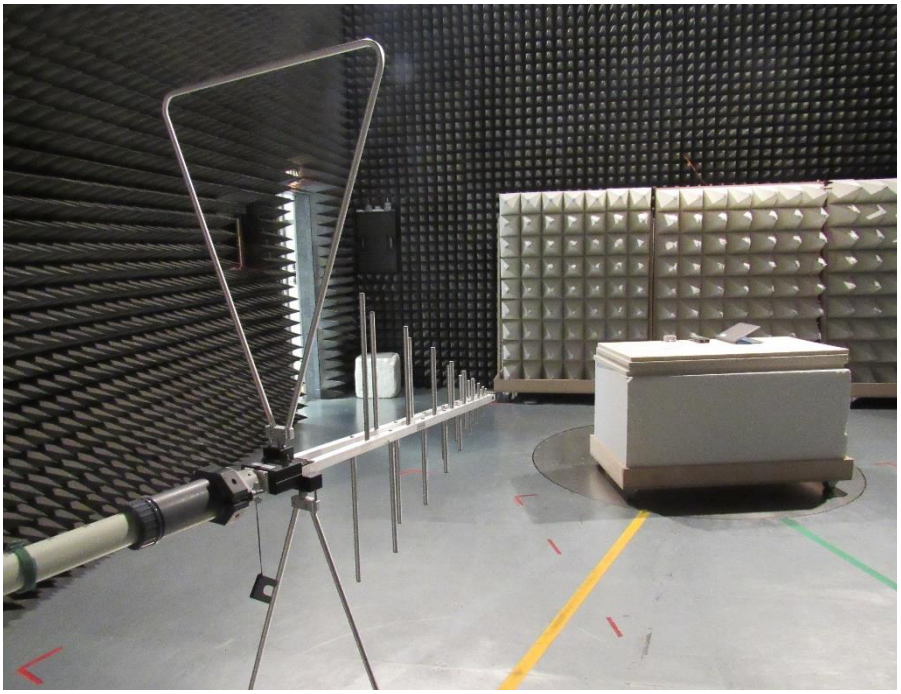
3.8.6 Results

Test Results 1 Mbps						
Channel [MHz]	Emission [MHz]	Level [dBµV/m]	Det.	Pol.	Limit [dBµV/m]	Margin [dB]
2402	116.9149	33.00	qpk	ver	43.50	-10.56
2402	128.606	34.90	qpk	ver	43.50	-08.62
2402	4803.9	50.09	avg	hor	54.00	-03.91
2402	5119.7	37.32	avg	ver	54.00	-16.68
2480	116.912	34.30	pk	ver	43.50	-09.21
2480	128.6167	33.70	qpk	ver	43.50	-09.81
2480	2311.9	36.68	avg	hor	54.00	-17.32
2480	4879.5	41.07	avg	ver	54.00	-12.93
2480	116.912	34.90	pk	ver	43.50	-08.61
2480	128.5843	33.40	pk	ver	43.50	-10.11
2480	2352	34.43	avg	ver	54.00	-19.57
2480	4960	39.37	avg	ver	54.00	-14.63

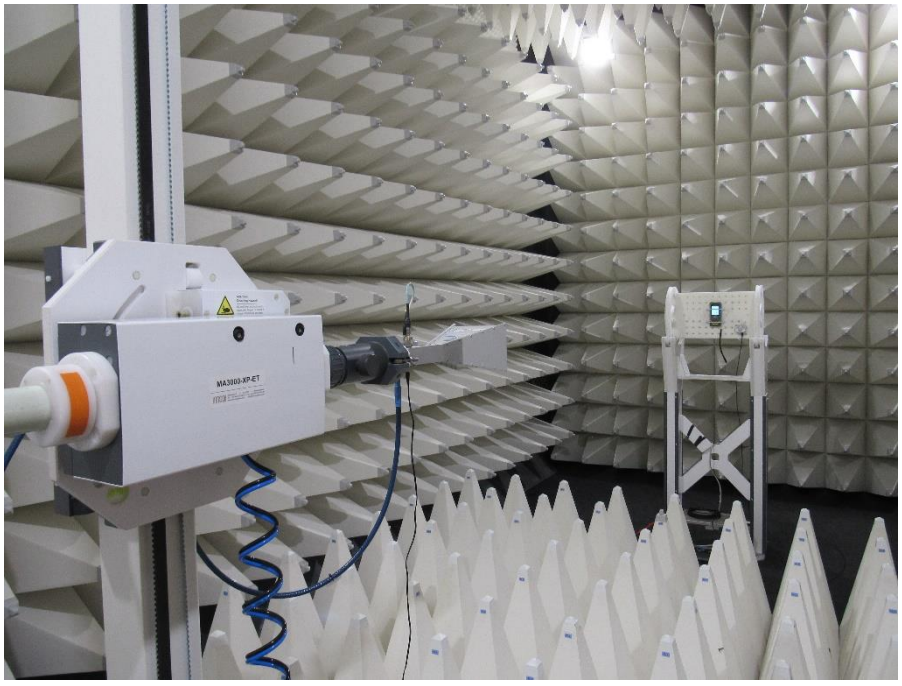
Test Results 2 Mbps						
Channel [MHz]	Emission [MHz]	Level [dBµV/m]	Det.	Pol.	Limit [dBµV/m]	Margin [dB]
2402	116.912	35.30	qpk	ver	43.50	-08.20
2402	128.6167	33.90	qpk	ver	43.50	-09.58
2402	4803.9	47.61	avg	hor	54.00	-06.39
2480	128.6167	35.00	qpk	hor	43.50	-08.50
2480	2311.9	34.27	avg	hor	54.00	-19.73
2480	4880.3	38.56	avg	ver	54.00	-15.44
2480	116.912	32.80	pk	ver	43.50	-10.74
2480	128.6167	34.90	qpk	hor	43.50	-08.62
2480	2352	39.25	avg	ver	54.00	-14.75
2480	4960	37.45	avg	ver	54.00	-16.55

3.8.7 Setup Photos

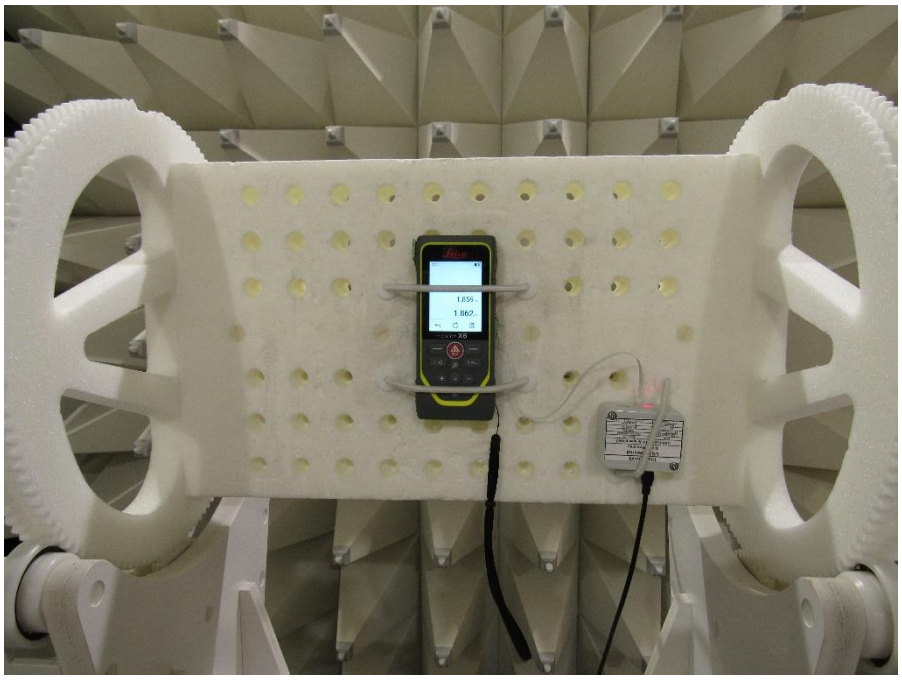
Setup for measurements below 1 GHz


Setup for measurements below 1 GHz


Setup for measurements above 1 GHz



EUT Test Setup above 1 GHz



3.9 Test Conditions and Results - Receiver radiated emissions

3.9.1 Information

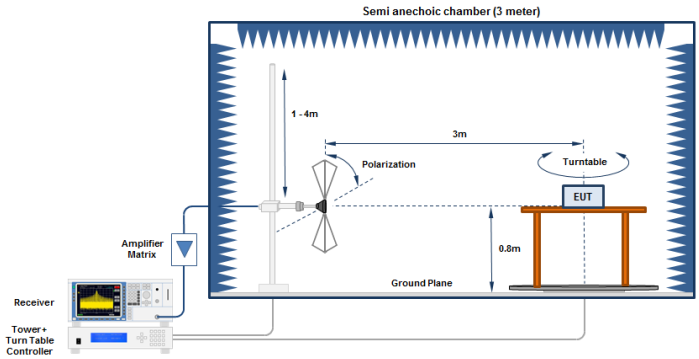
Test Information	
Reference	ISED RSS-247, Issue 3 (section 3.1)
Measurement Uncertainty	± 5.95 dB
Measurement Method	ANSI C63.4-2014 8.1-8.3
Operator	Azamat Ibraimov
Date	2023-10-20

3.9.2 Limits

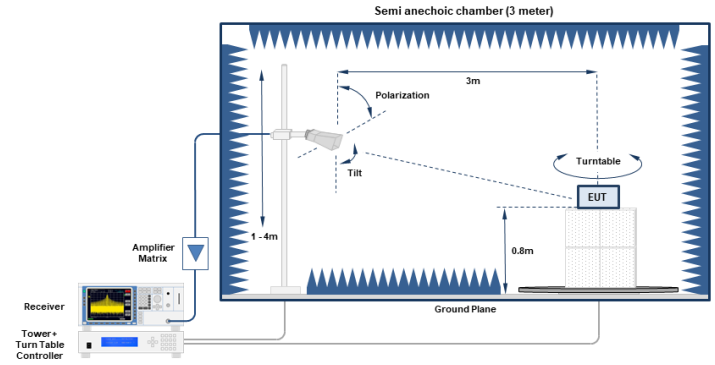
Limits			
Frequency range [MHz]	Detector	Field strength [µV/m]	Measurement distance [m]
30 - 88	Quasi-Peak	100	3
88 - 216	Quasi-Peak	150	3
216 - 960	Quasi-Peak	200	3
960 - 1000	Quasi-Peak	500	3
>1000	Average	500	3

3.9.3 Setup

Test Setup 30 MHz - 1000 MHz



Test Setup > 1 GHz



3.9.4 Equipment

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

Test Equipment 30 MHz - 1000 MHz					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Anechoic Chamber	Frankonia	AC1	EF00062	2022-11	2025-11
EMI Test Receiver	Rohde & Schwarz Vertriebs GmbH	ESU8	EF00379	2023-08	2024-08
Antenna	Schwarzbeck	VULB 9168	EF01824	2022-10	2023-10

Test Equipment > 1 GHz					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Anechoic Chamber	Frankonia	AC1	EF01011	2022-11	2023-11
Spectrum analyzer	Rohde & Schwarz GmbH & Co. KG	FSU43	EF01631	2023-08	2024-08
Antenna	Schwarzbeck	BBHA 9120D	EF01561	2021-11	2024-11
Antenna	Schwarzbeck	HWRD 650	EF01679	2021-03	2024-03

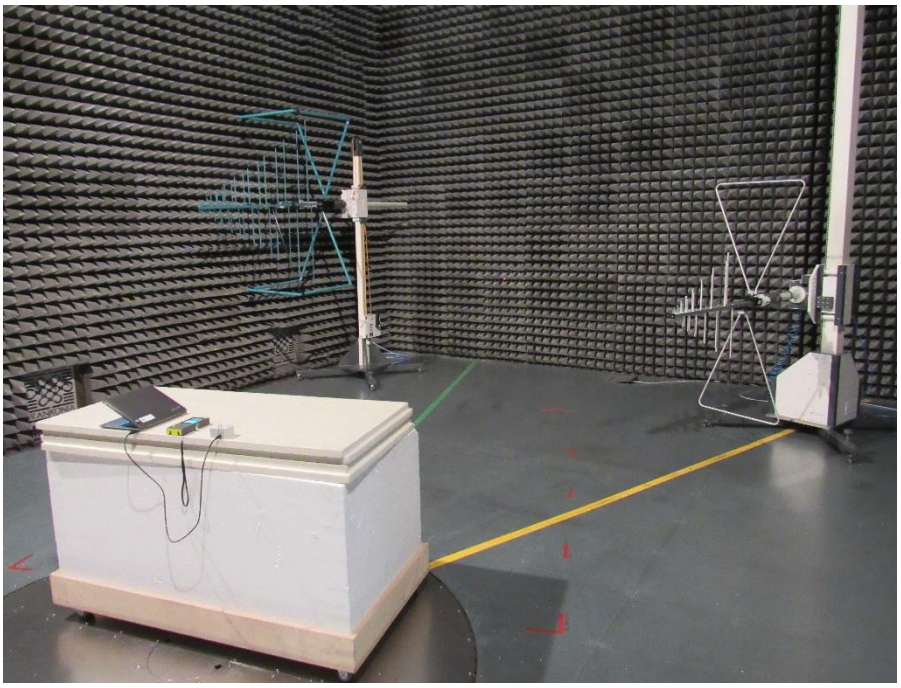
3.9.5 Procedure

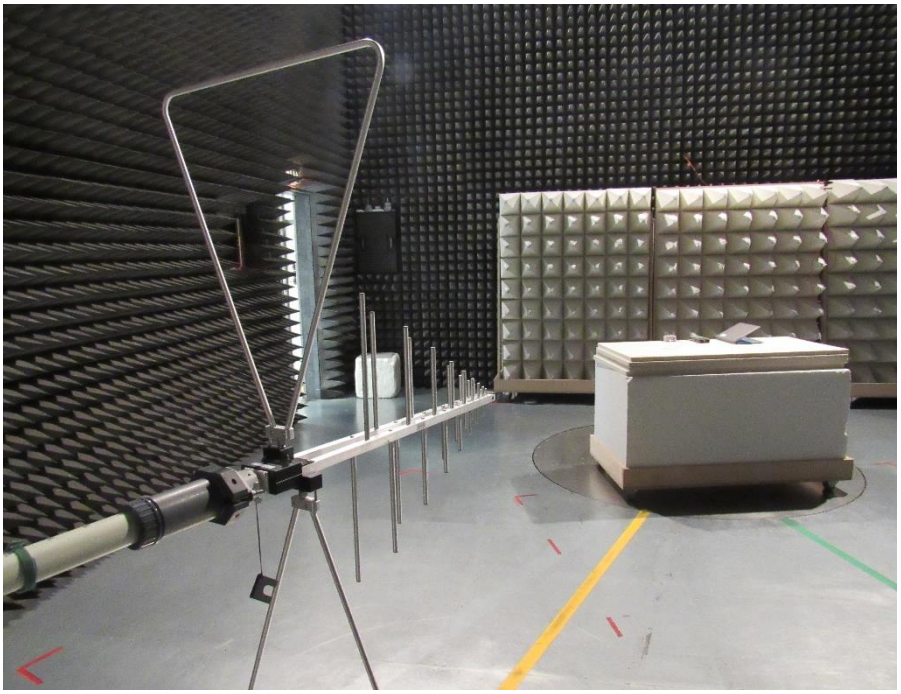
Test Procedure
1. EUT is placed on a non conducting support at the center of a turn table 0.8 m above the ground
2. EUT is set to test mode
3. The receiver is set to peak detection with max hold
4. The EUT is rotated through 360° and the height of the antenna is varied from 1 m to 4 m
5. All significant emissions are measured again using the corresponding final detector

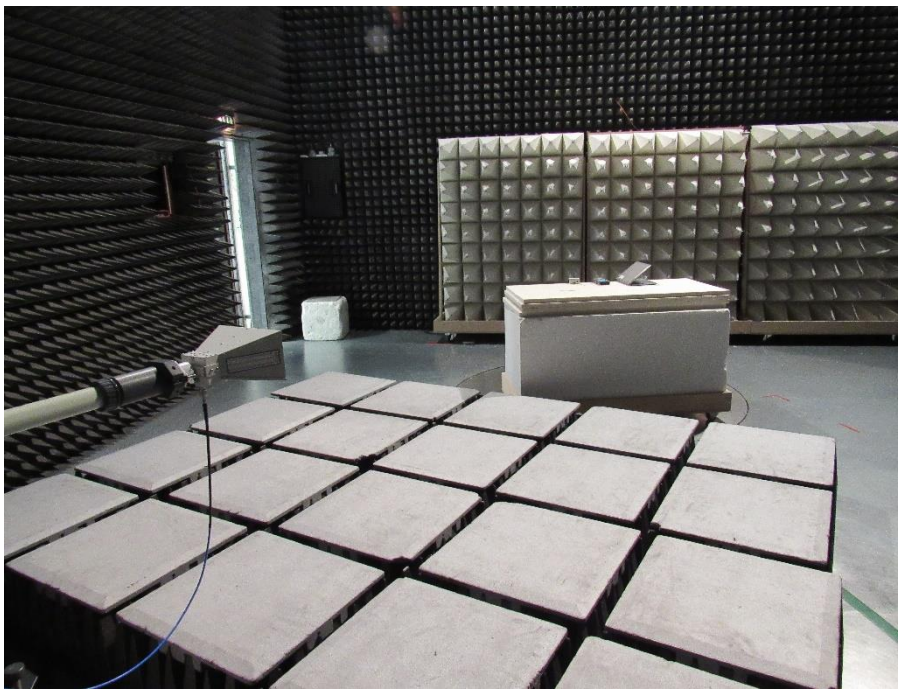
3.9.6 Results

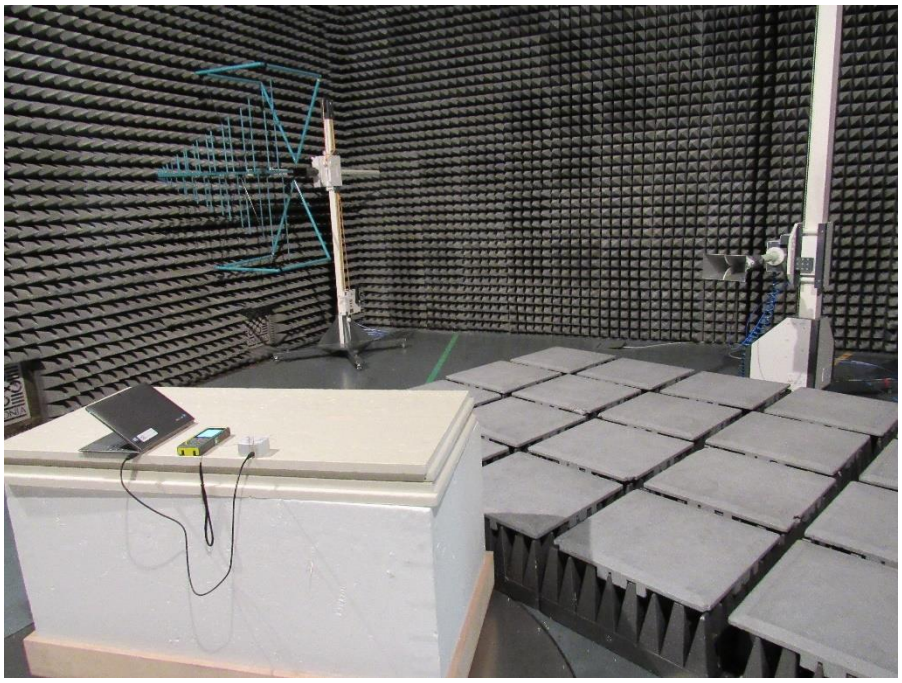
Test Results						
Channel [MHz]	Emission [MHz]	Level [dBµV/m]	Det.	Pol.	Limit [dBµV/m]	Margin [dB]
2440	128.5843	38.00	qpk	ver	43.50	-05.53
2440	1920	41.58	pk	ver	74.00	-32.42
2440	1920	39.56	avg	ver	53.98	-14.42

3.9.7 Setup Photos

Setup for measurements below 1 GHz


Setup for measurements below 1 GHz


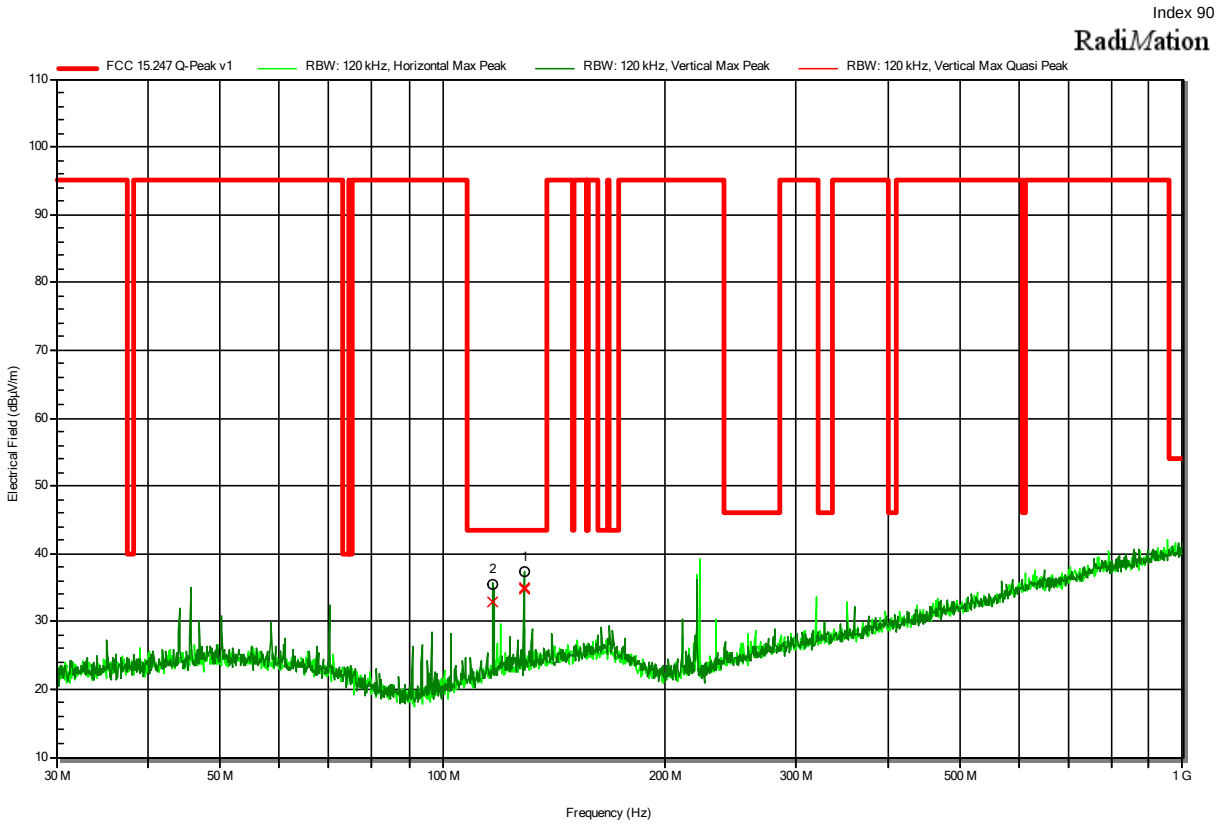
Setup for measurements above 1 GHz


Setup for measurements above 1 GHz


ANNEX A Transmitter spurious emissions

Radiated Spurious Emissions according to 47 CFR Part 15.247

Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45909
Test Site:	Eurofins Product Service GmbH
Operator:	A.Ibraimov
Measurement software:	RadiMation, version 2020.1.8
Test Conditions:	Tnom: 22 °Celsius, Vnom: 5 VDC
Antenna:	Schwarzbeck VULB 9168
Measurement distance:	3 m
Mode:	Tx; BLE_CH 0_1 Mbps_P = 4 dbm
Test Date:	2023-10-20
Note:	



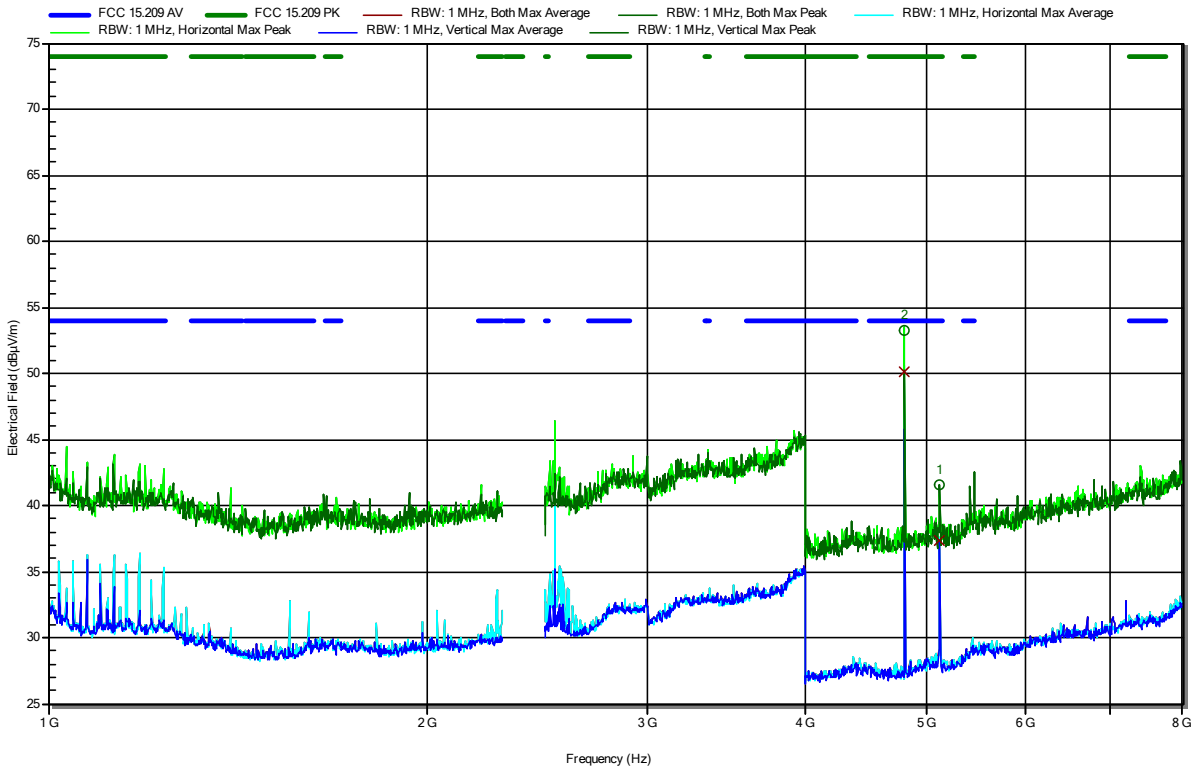
Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status	Polarization
116.9149 MHz	33 dBµV/m	43.5 dBµV/m	-10.56 dB	Pass	Vertical
128.606 MHz	34.9 dBµV/m	43.5 dBµV/m	-8.62 dB	Pass	Vertical

Radiated Spurious Emissions according to 47 CFR Part 15.247

Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45909
Test Site:	Eurofins Product Service GmbH
Operator:	Ibraimov Azamat
Measurement software:	RadiMation, version 2020.1.8
Test Conditions:	Tnom: 22 °Celsius, Vnom: 5 VDC
Antenna:	Schwarzbeck BBHA 9120B
Measurement distance:	3 m
Mode:	Tx; BLE_CH 0_1 Mbps_P = 4 dbm
Test Date:	2023-10-18
Note:	

Index 71

RadiMation



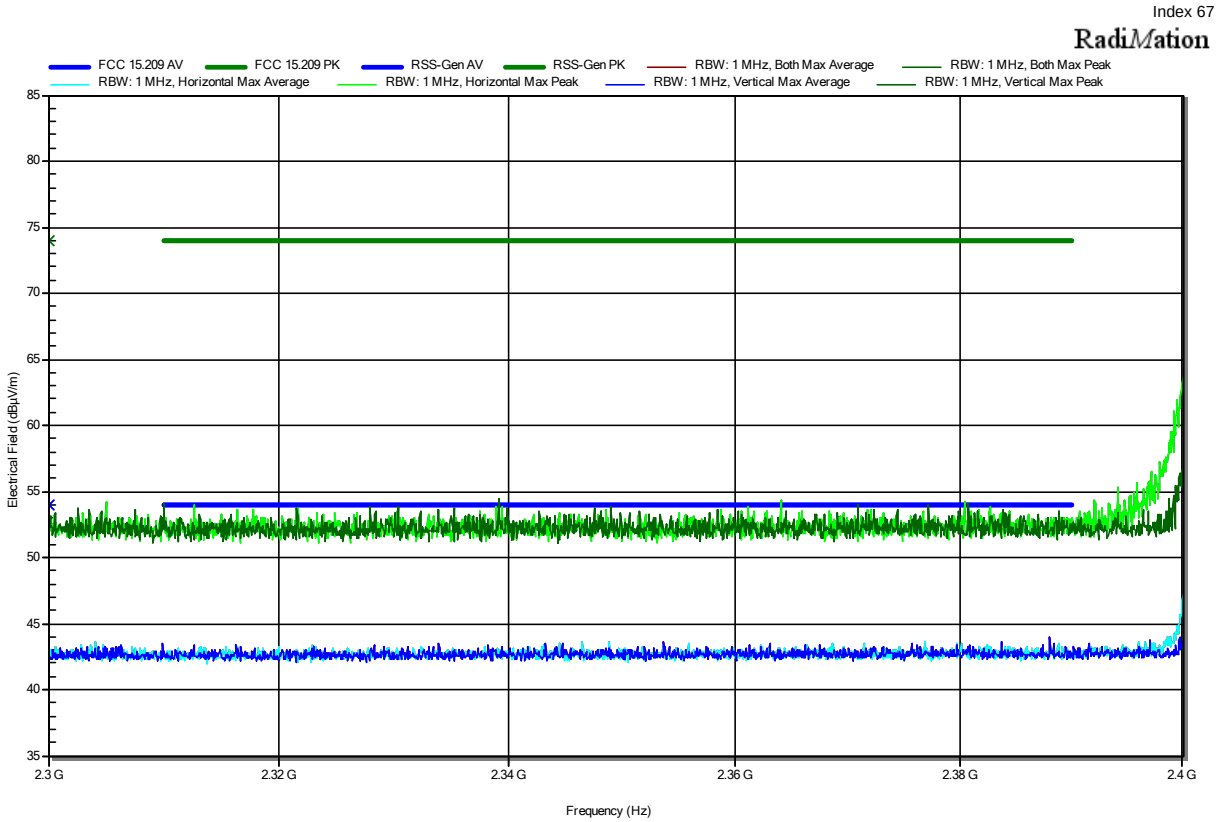
Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Polarization
4.8039 GHz	53.26 dBµV/m	74 dBµV/m	-20.74 dB	Pass	Horizontal
5.1197 GHz	41.51 dBµV/m	74 dBµV/m	-32.49 dB	Pass	Vertical

Frequency	Average	Average Limit	Average Difference	Average Status	Polarization
4.8039 GHz	50.09 dBµV/m	54 dBµV/m	-3.91 dB	Pass	Horizontal
5.1197 GHz	37.32 dBµV/m	54 dBµV/m	-16.68 dB	Pass	Vertical

Radiated Spurious Emissions according to 47 CFR Part 15.247

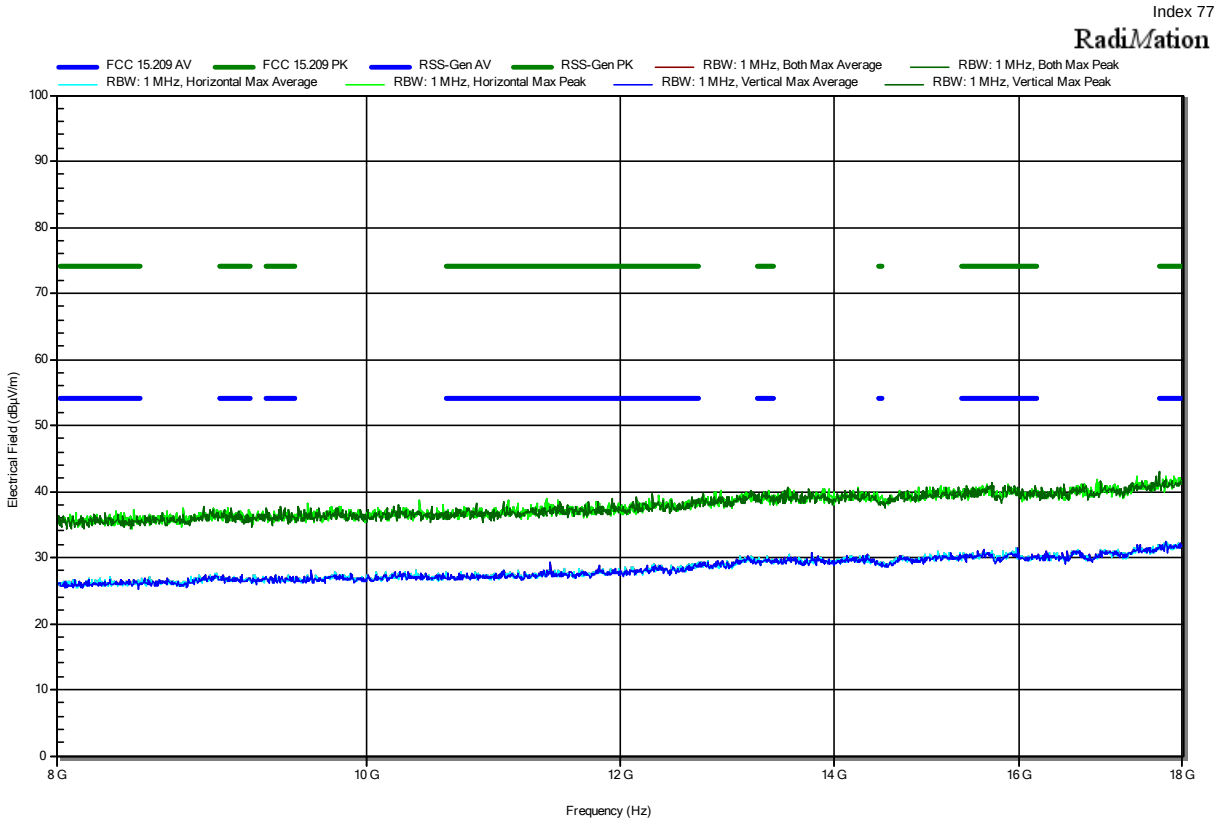
Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45909
Test Site:	Eurofins Product Service GmbH
Operator:	Ibraimov Azamat
Measurement software:	RadiMation, version 2020.1.8
Test Conditions:	Tnom: 22 °Celsius, Vnom: 5 VDC
Antenna:	Schwarzbeck BBHA 9120B
Measurement distance:	3 m
Mode:	Tx; BLE_CH 0_1 Mbps_P = 4 dbm
Test Date:	2023-10-18
Note:	lower bandedge

Index 67



Radiated Spurious Emissions according to 47 CFR Part 15.247

Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45909
Test Site:	Eurofins Product Service GmbH
Operator:	Ibraimov Azamat
Measurement software:	RadiMation, version 2020.1.8
Test Conditions:	Tnom: 22 °Celsius, Vnom: 5 VDC
Antenna:	Schwarzbeck HWRD 650
Measurement distance:	3 m
Mode:	Tx; BLE_CH 0_1 Mbps_P = 4 dbm
Test Date:	2023-10-18
Note:	

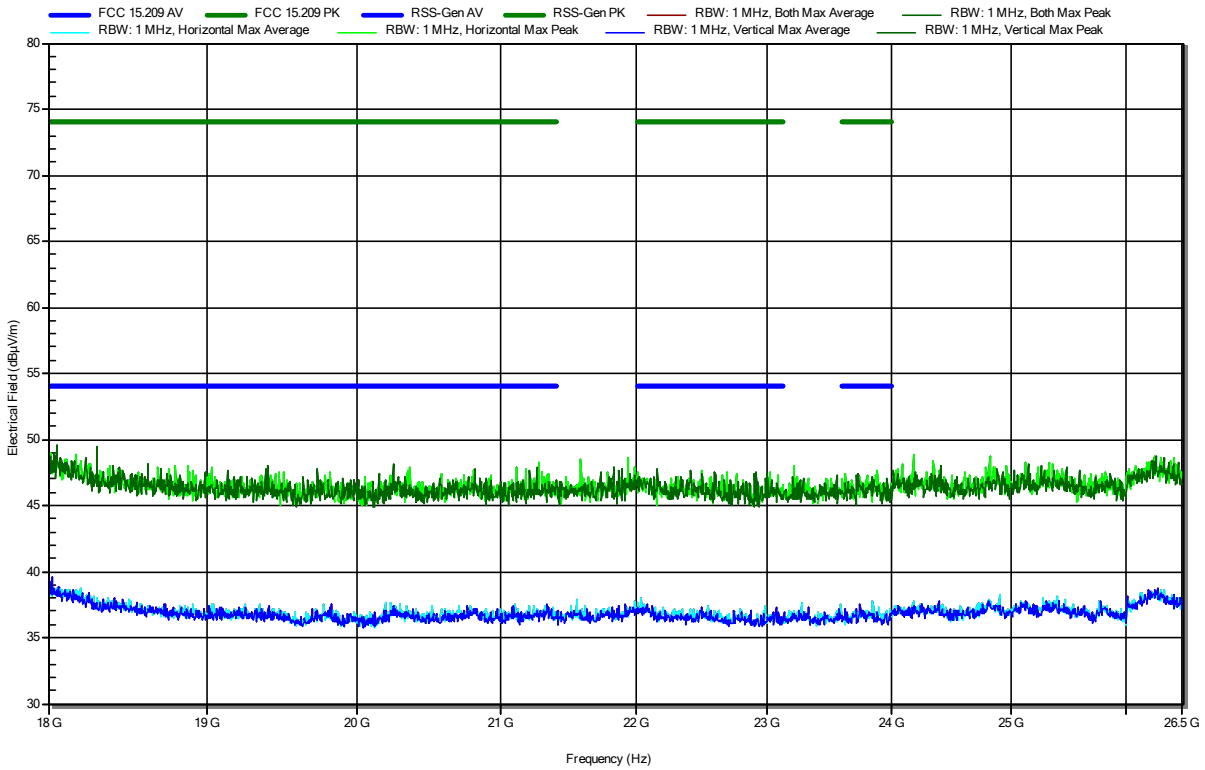


Radiated Spurious Emissions according to 47 CFR Part 15.247

Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45909
Test Site:	Eurofins Product Service GmbH
Operator:	Ibraimov Azamat
Measurement software:	RadiMation, version 2020.1.8
Test Conditions:	Tnom: 22 °Celsius, Vnom: 5 VDC
Antenna:	Amplifier Research AT4560
Measurement distance:	3 m
Mode:	Tx; BLE_CH 0_1 Mbps_P = 4 dbm
Test Date:	2023-10-18
Note:	

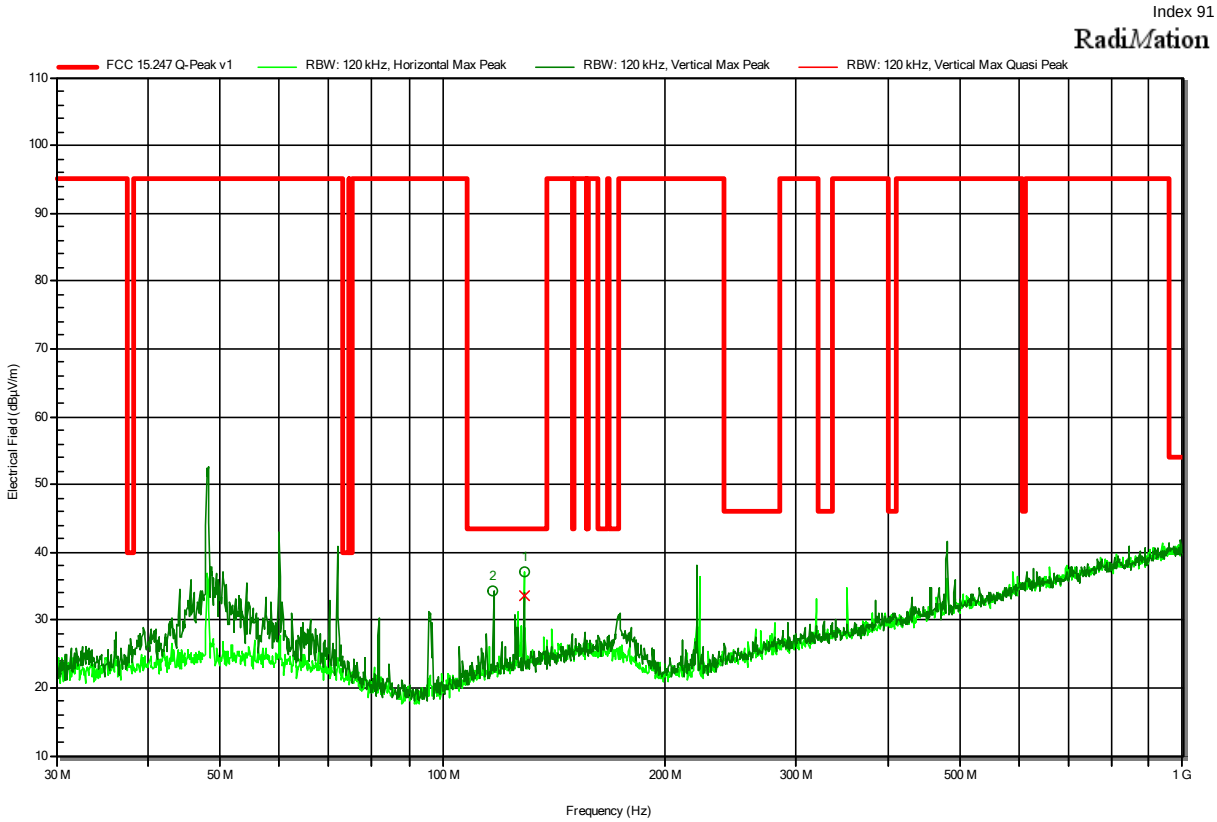
Index 83

RadiMation



Radiated Spurious Emissions according to 47 CFR Part 15.247

Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45909
Test Site:	Eurofins Product Service GmbH
Operator:	A.Ibraimov
Measurement software:	RadiMation, version 2020.1.8
Test Conditions:	Tnom: 22 °Celsius, Vnom: 5 VDC
Antenna:	Schwarzbeck VULB 9168
Measurement distance:	3 m
Mode:	Tx; BLE_CH 19_1 Mbps_P = 4 dbm
Test Date:	2023-10-20
Note:	



Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Polarization
116.912 MHz	34.3 dBµV/m	43.5 dBµV/m	-9.21 dB	Pass	Vertical

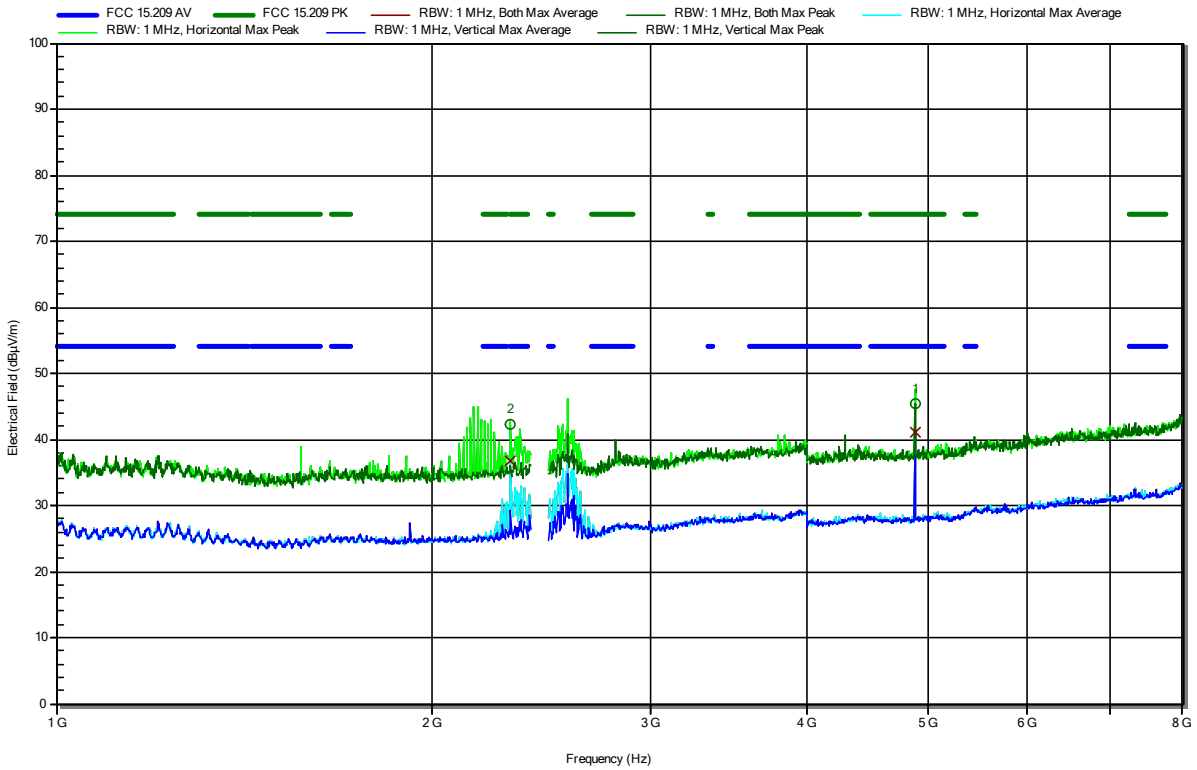
Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status	Polarization
128.6167 MHz	33.7 dBµV/m	43.5 dBµV/m	-9.81 dB	Pass	Vertical

Radiated Spurious Emissions according to 47 CFR Part 15.247

Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45909
Test Site:	Eurofins Product Service GmbH
Operator:	Ibraimov Azamat
Measurement software:	RadiMation, version 2020.1.8
Test Conditions:	Tnom: 22 °Celsius, Vnom: 5 VDC
Antenna:	Schwarzbeck BBHA 9120B
Measurement distance:	3 m
Mode:	Tx; BLE_CH 19_1 Mbps_P = 4 dbm
Test Date:	2023-10-18
Note:	

Index 69

RadiMation

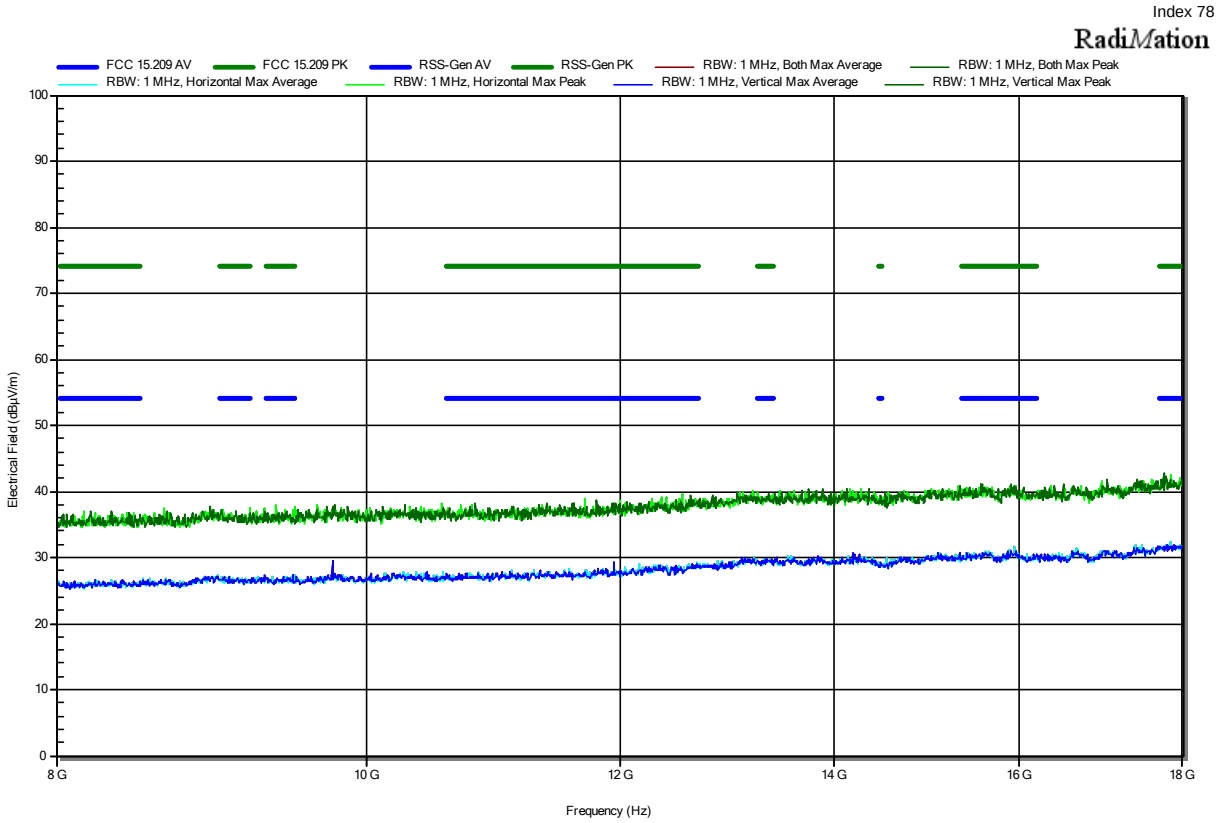


Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Polarization
2.3119 GHz	42.19 dBµV/m	74 dBµV/m	-31.81 dB	Pass	Horizontal
4.8795 GHz	45.35 dBµV/m	74 dBµV/m	-28.65 dB	Pass	Vertical

Frequency	Average	Average Limit	Average Difference	Average Status	Polarization
2.3119 GHz	36.68 dBµV/m	54 dBµV/m	-17.32 dB	Pass	Horizontal
4.8795 GHz	41.07 dBµV/m	54 dBµV/m	-12.93 dB	Pass	Vertical

Radiated Spurious Emissions according to 47 CFR Part 15.247

Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45909
Test Site:	Eurofins Product Service GmbH
Operator:	Ibraimov Azamat
Measurement software:	RadiMation, version 2020.1.8
Test Conditions:	Tnom: 22 °Celsius, Vnom: 5 VDC
Antenna:	Schwarzbeck HWRD 650
Measurement distance:	3 m
Mode:	Tx; BLE_CH 19_1 Mbps_P = 4 dbm
Test Date:	2023-10-18
Note:	

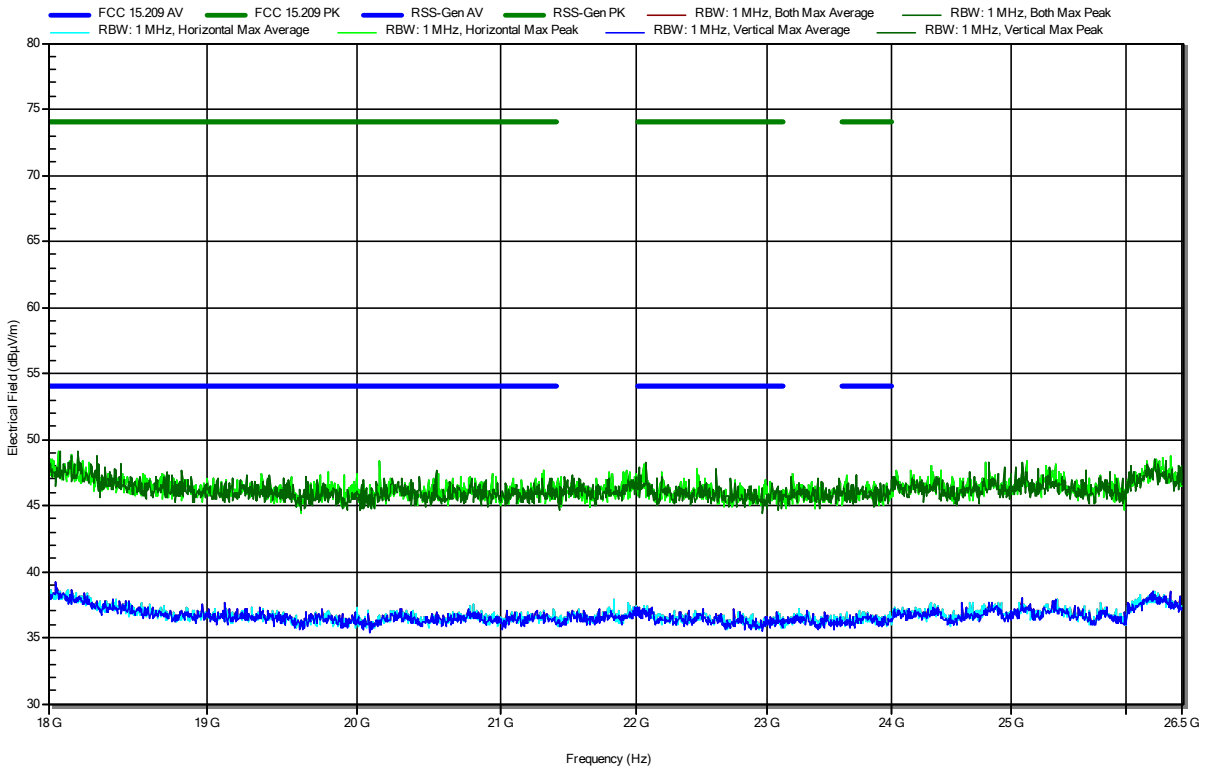


Radiated Spurious Emissions according to 47 CFR Part 15.247

Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45909
Test Site:	Eurofins Product Service GmbH
Operator:	Ibraimov Azamat
Measurement software:	RadiMation, version 2020.1.8
Test Conditions:	Tnom: 22 °Celsius, Vnom: 5 VDC
Antenna:	Amplifier Research AT4560
Measurement distance:	3 m
Mode:	Tx; BLE_CH 19_1 Mbps_P = 4 dbm
Test Date:	2023-10-18
Note:	

Index 84

RadiMation

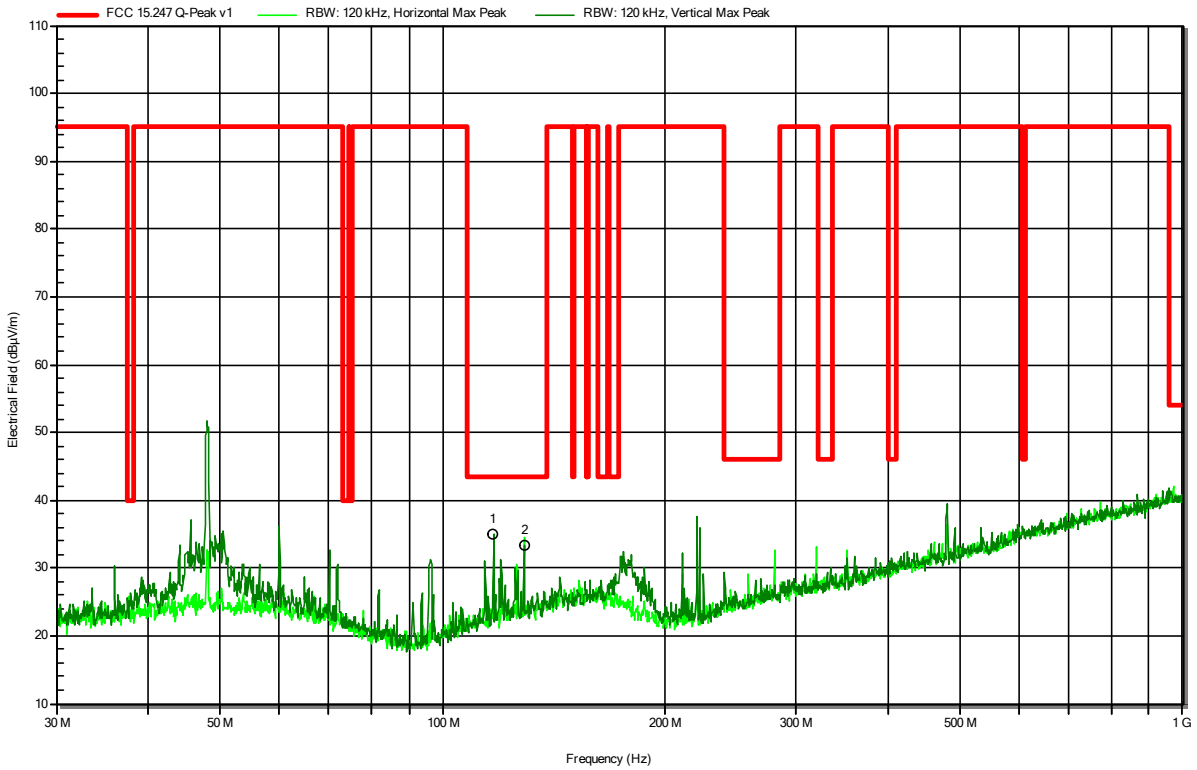


Radiated Spurious Emissions according to 47 CFR Part 15.247

Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45909
Test Site:	Eurofins Product Service GmbH
Operator:	A.Ibraimov
Measurement software:	RadiMation, version 2020.1.8
Test Conditions:	Tnom: 22 °Celsius, Vnom: 5 VDC
Antenna:	Schwarzbeck VULB 9168
Measurement distance:	3 m
Mode:	Tx; BLE_CH 39_1 Mbps_P = 4 dbm
Test Date:	2023-10-20
Note:	

Index 92

RadiMation

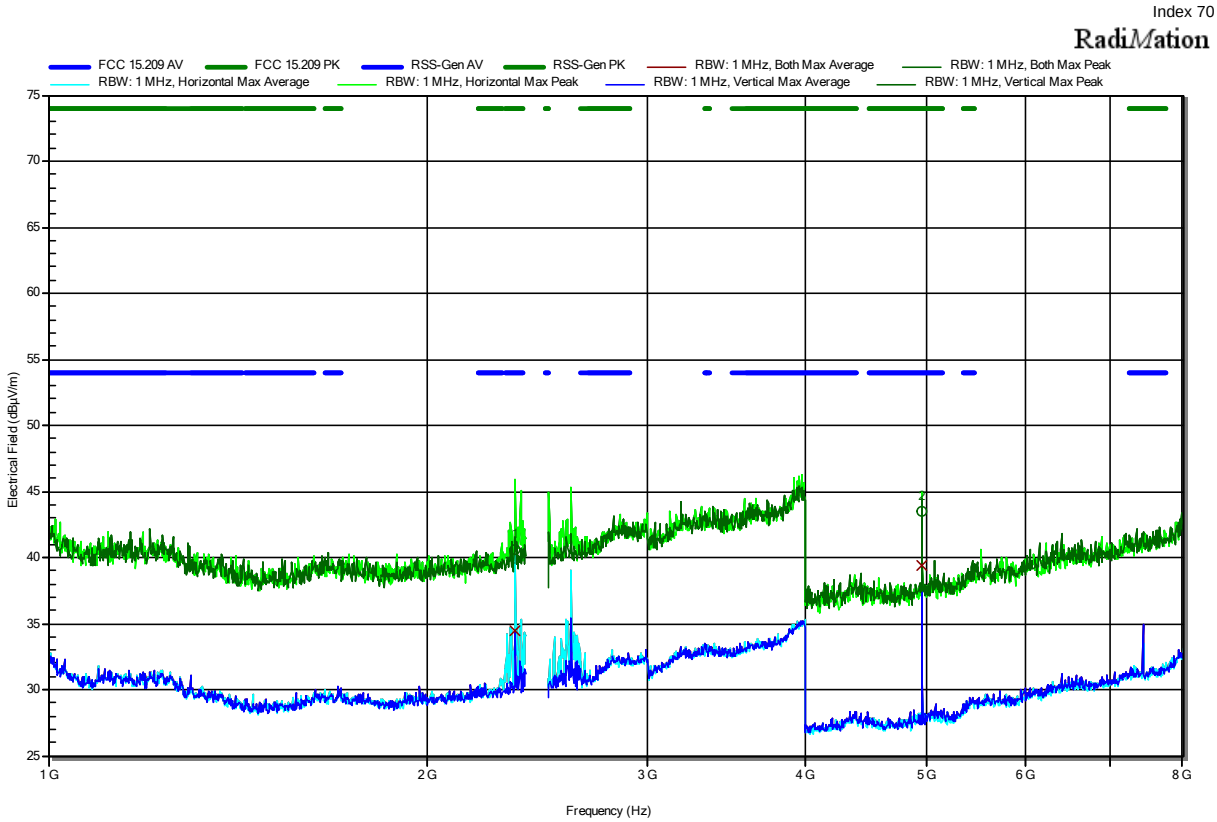


Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Polarization
116.912 MHz	34.9 dBµV/m	43.5 dBµV/m	-8.61 dB	Pass	Vertical
128.5843 MHz	33.4 dBµV/m	43.5 dBµV/m	-10.11 dB	Pass	Vertical

Radiated Spurious Emissions according to 47 CFR Part 15.247

Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45909
Test Site:	Eurofins Product Service GmbH
Operator:	Ibraimov Azamat
Measurement software:	RadiMation, version 2020.1.8
Test Conditions:	Tnom: 22 °Celsius, Vnom: 5 VDC
Antenna:	Schwarzbeck BBHA 9120B
Measurement distance:	3 m
Mode:	Tx; BLE_CH 39_1 Mbps_P = 4 dbm
Test Date:	2023-10-18
Note:	

Index 70



Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Polarization
2.352 GHz	40.62 dBµV/m	74 dBµV/m	-33.38 dB	Pass	Vertical
4.96 GHz	43.45 dBµV/m	74 dBµV/m	-30.55 dB	Pass	Vertical

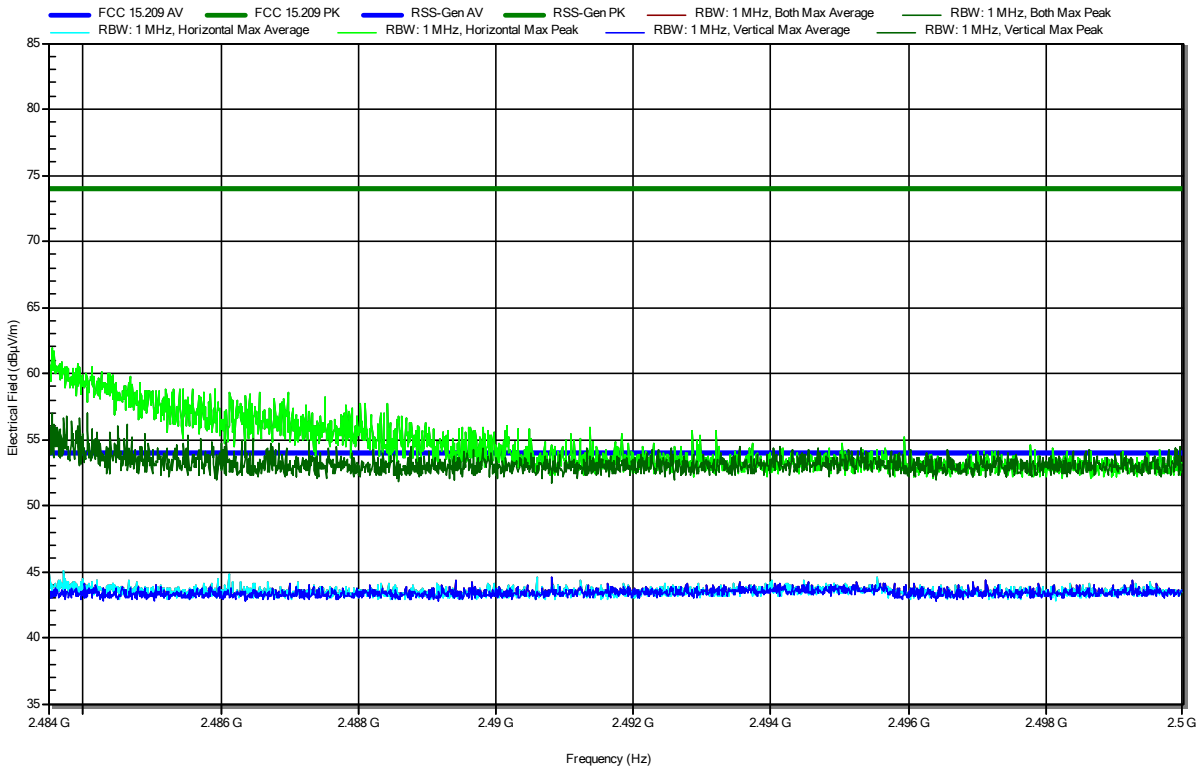
Frequency	Average	Average Limit	Average Difference	Average Status	Polarization
2.352 GHz	34.43 dBµV/m	54 dBµV/m	-19.57 dB	Pass	Vertical
4.96 GHz	39.37 dBµV/m	54 dBµV/m	-14.63 dB	Pass	Vertical

Radiated Spurious Emissions according to 47 CFR Part 15.247

Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45909
Test Site:	Eurofins Product Service GmbH
Operator:	Ibraimov Azamat
Measurement software:	RadiMation, version 2020.1.8
Test Conditions:	Tnom: 22 °Celsius, Vnom: 5 VDC
Antenna:	Schwarzbeck BBHA 9120B
Measurement distance:	3 m
Mode:	Tx; BLE_CH 39_1 Mbps_P = 4 dbm
Test Date:	2023-10-18
Note:	upper bandedge

Index 68

RadiMation

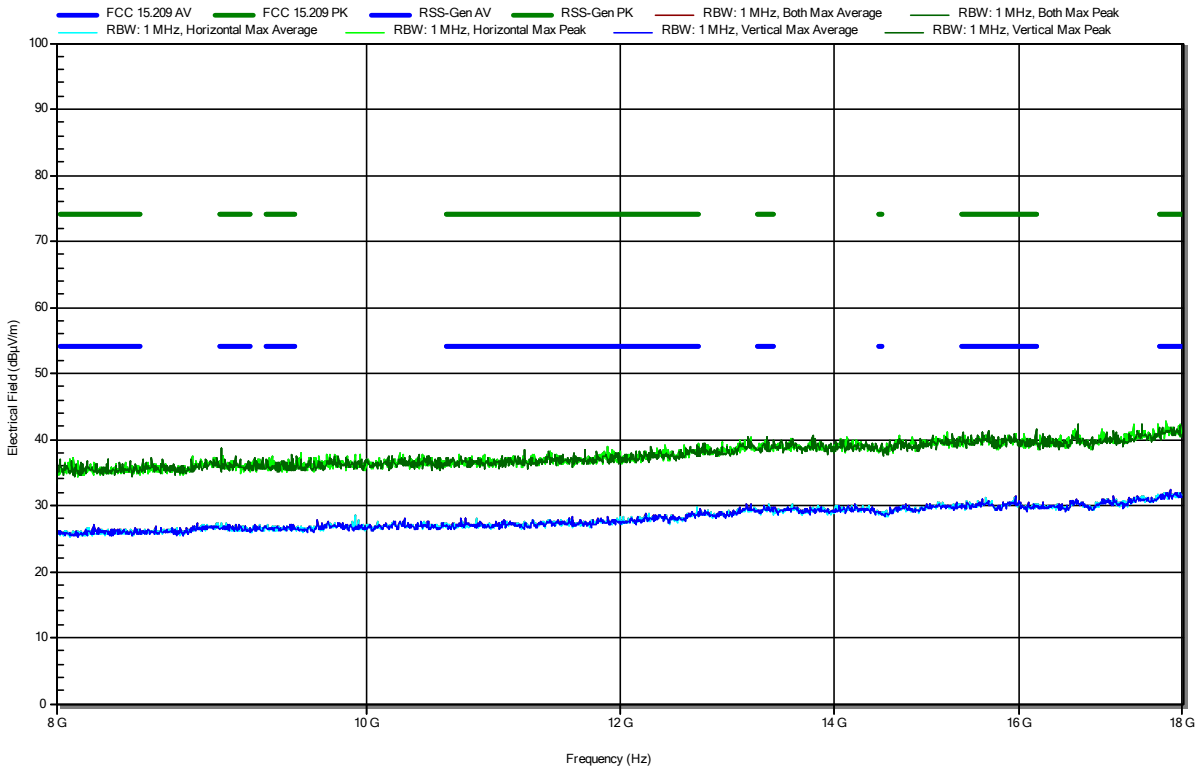


Radiated Spurious Emissions according to 47 CFR Part 15.247

Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45909
Test Site:	Eurofins Product Service GmbH
Operator:	Ibraimov Azamat
Measurement software:	RadiMation, version 2020.1.8
Test Conditions:	Tnom: 22 °Celsius, Vnom: 5 VDC
Antenna:	Schwarzbeck HWRD 650
Measurement distance:	3 m
Mode:	Tx; BLE_CH 39_1 Mbps_P = 4 dbm
Test Date:	2023-10-18
Note:	

Index 79

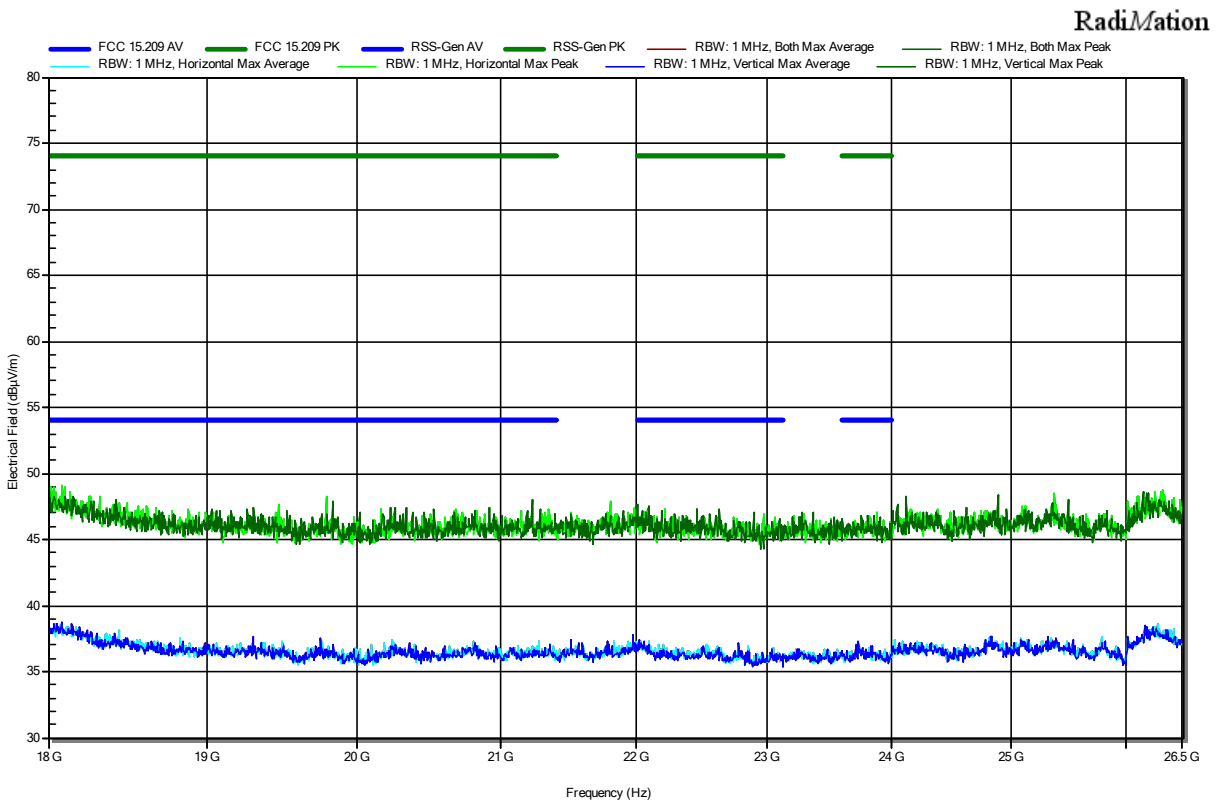
RadiMation



Radiated Spurious Emissions according to 47 CFR Part 15.247

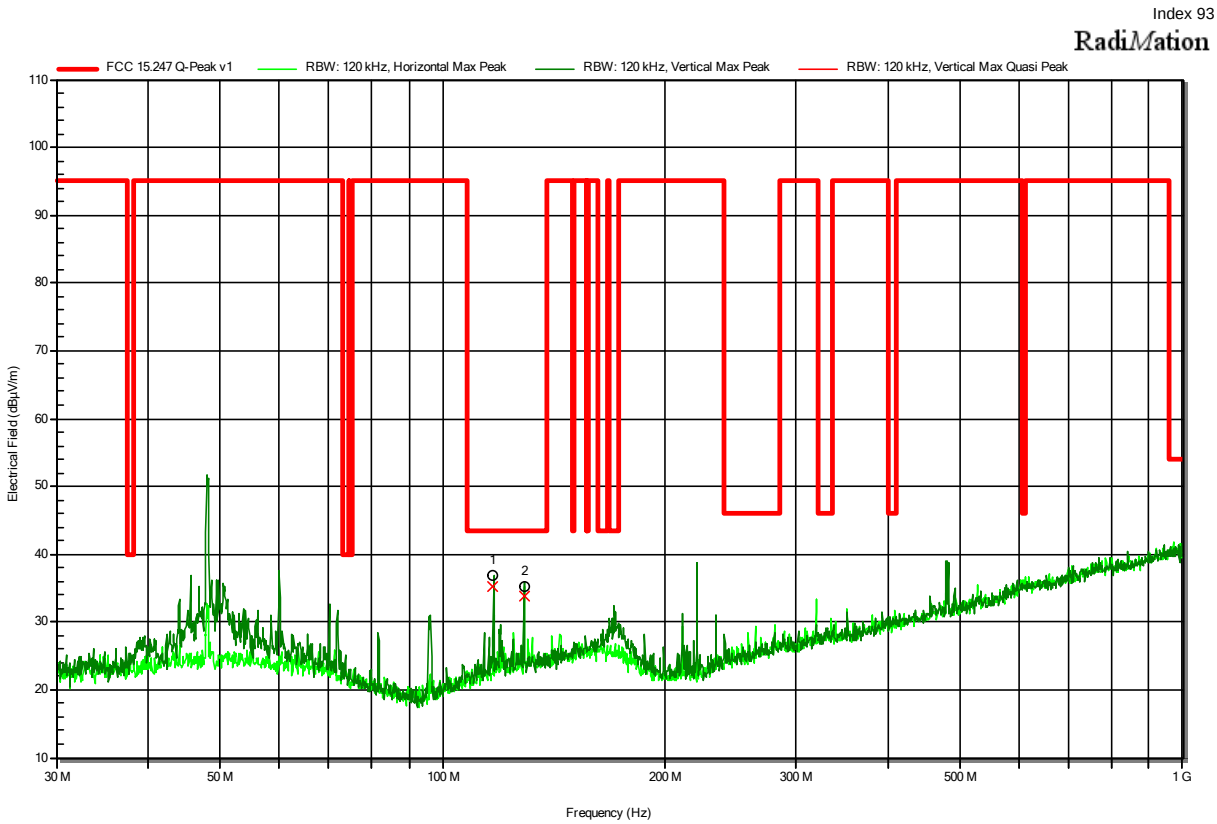
Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45909
Test Site:	Eurofins Product Service GmbH
Operator:	Ibraimov Azamat
Measurement software:	RadiMation, version 2020.1.8
Test Conditions:	Tnom: 22 °Celsius, Vnom: 5 VDC
Antenna:	Amplifier Research AT4560
Measurement distance:	3 m
Mode:	Tx; BLE_CH 39_1 Mbps_P = 4 dbm
Test Date:	2023-10-18
Note:	

Index 85



Radiated Spurious Emissions according to 47 CFR Part 15.247

Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45909
Test Site:	Eurofins Product Service GmbH
Operator:	A.Ibraimov
Measurement software:	RadiMation, version 2020.1.8
Test Conditions:	Tnom: 22 °Celsius, Vnom: 5 VDC
Antenna:	Schwarzbeck VULB 9168
Measurement distance:	3 m
Mode:	Tx; BLE_CH 0_2 Mbps_P = 4 dbm
Test Date:	2023-10-20
Note:	



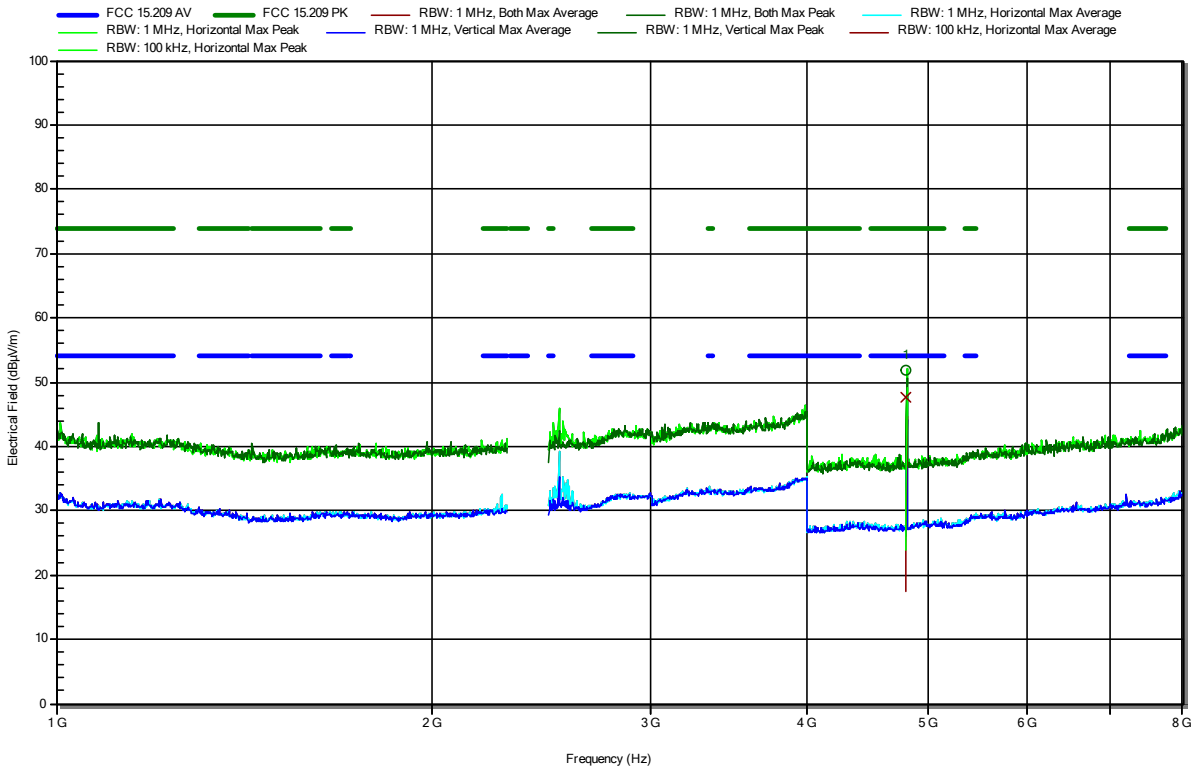
Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status	Polarization
116.912 MHz	35.3 dBµV/m	43.5 dBµV/m	-8.2 dB	Pass	Vertical
128.6167 MHz	33.9 dBµV/m	43.5 dBµV/m	-9.58 dB	Pass	Vertical

Radiated Spurious Emissions according to 47 CFR Part 15.247

Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45909
Test Site:	Eurofins Product Service GmbH
Operator:	Ibraimov Azamat
Measurement software:	RadiMation, version 2020.1.8
Test Conditions:	Tnom: 22 °Celsius, Vnom: 5 VDC
Antenna:	Schwarzbeck BBHA 9120B
Measurement distance:	3 m
Mode:	Tx; BLE_CH 0_2 Mbps_P = 4 dbm
Test Date:	2023-10-18
Note:	

Index 72

RadiMation



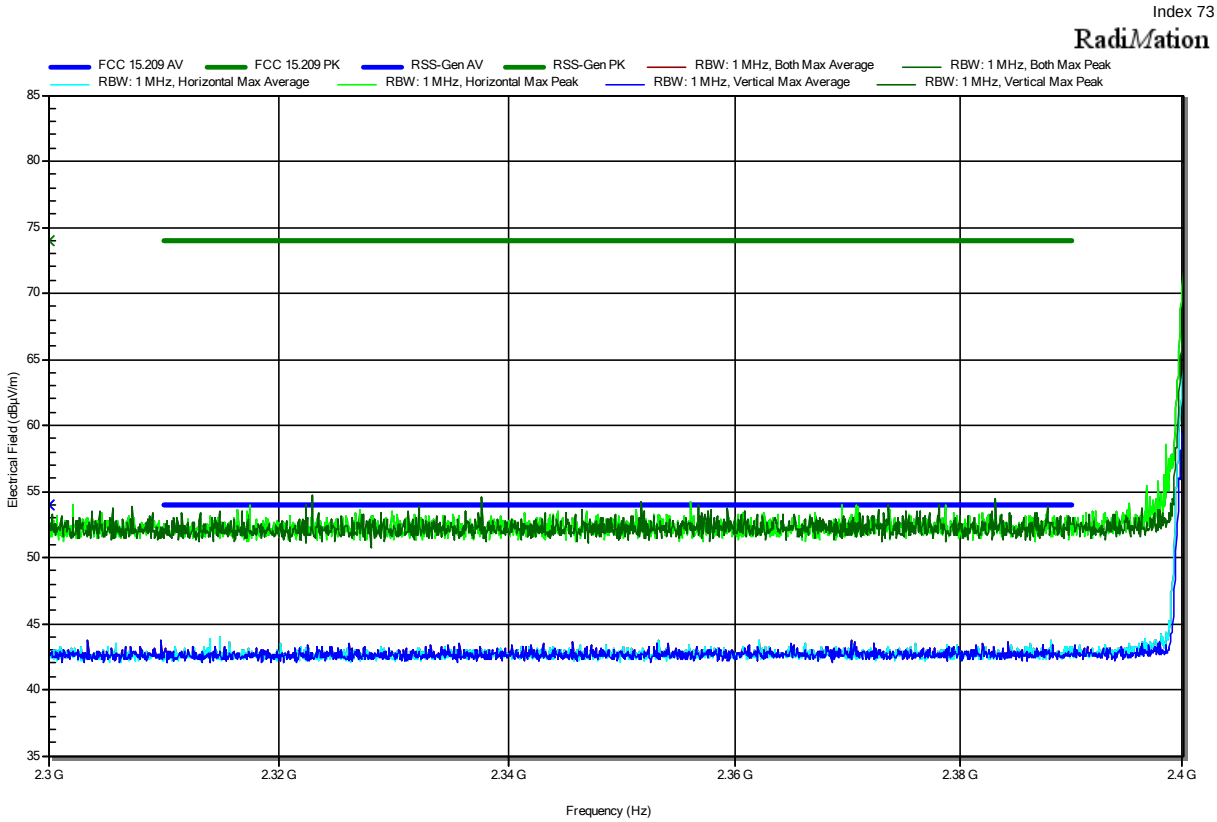
Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Polarization
4.8039 GHz	51.91 dBµV/m	74 dBµV/m	-22.09 dB	Pass	Horizontal

Frequency	Average	Average Limit	Average Difference	Average Status	Polarization
4.8039 GHz	47.61 dBµV/m	54 dBµV/m	-6.39 dB	Pass	Horizontal

Radiated Spurious Emissions according to 47 CFR Part 15.247

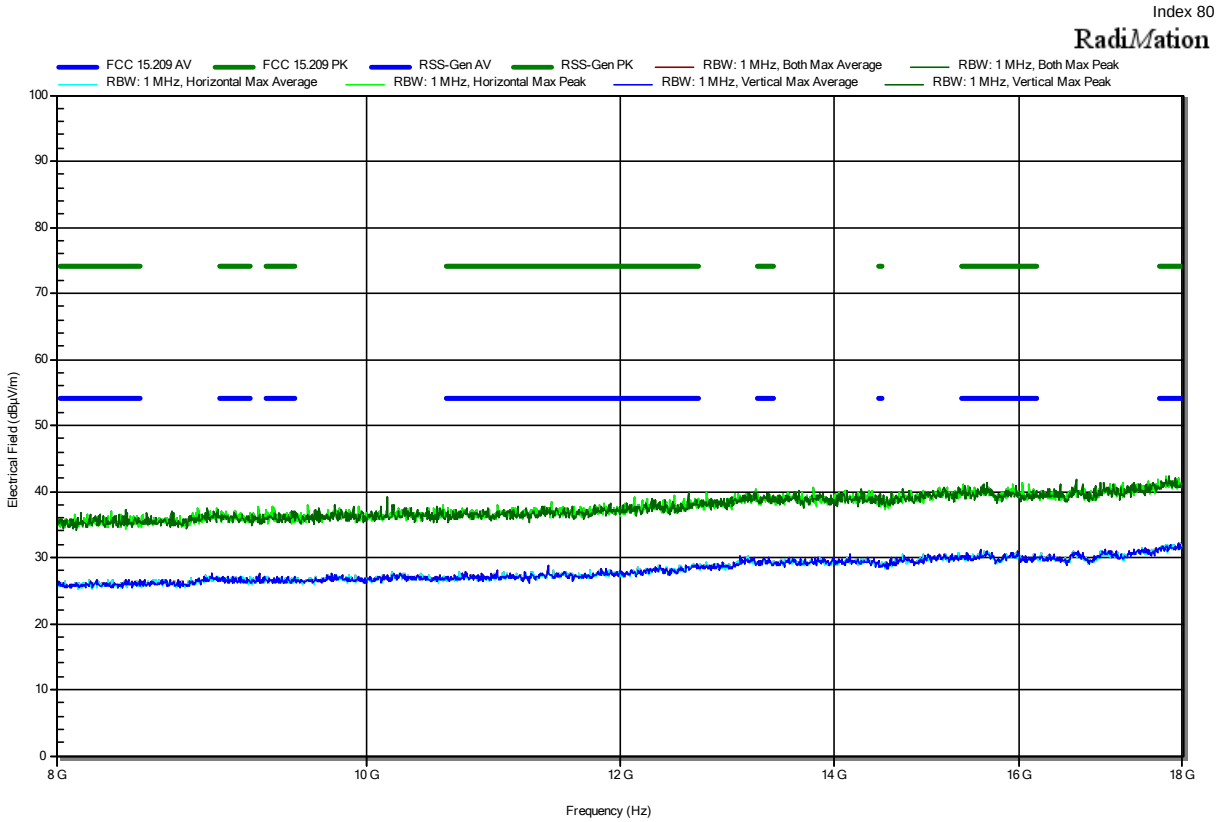
Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45909
Test Site:	Eurofins Product Service GmbH
Operator:	Ibraimov Azamat
Measurement software:	RadiMation, version 2020.1.8
Test Conditions:	Tnom: 22 °Celsius, Vnom: 5 VDC
Antenna:	Schwarzbeck BBHA 9120B
Measurement distance:	3 m
Mode:	Tx; BLE_CH 0_2 Mbps_P = 4 dbm
Test Date:	2023-10-18
Note:	lower bandedge

Index 73



Radiated Spurious Emissions according to 47 CFR Part 15.247

Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45909
Test Site:	Eurofins Product Service GmbH
Operator:	Ibraimov Azamat
Measurement software:	RadiMation, version 2020.1.8
Test Conditions:	Tnom: 22 °Celsius, Vnom: 5 VDC
Antenna:	Schwarzbeck HWRD 650
Measurement distance:	3 m
Mode:	Tx; BLE_CH 0_2 Mbps_P = 4 dbm
Test Date:	2023-10-18
Note:	

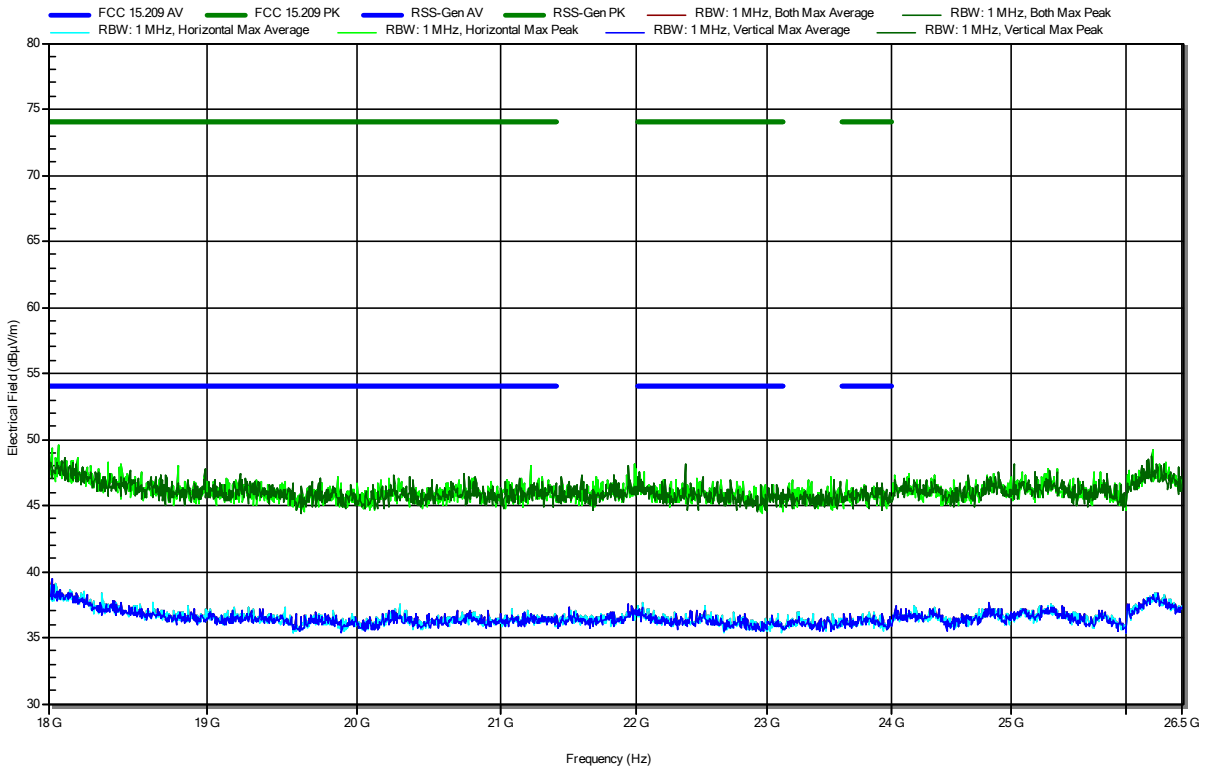


Radiated Spurious Emissions according to 47 CFR Part 15.247

Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45909
Test Site:	Eurofins Product Service GmbH
Operator:	Ibraimov Azamat
Measurement software:	RadiMation, version 2020.1.8
Test Conditions:	Tnom: 22 °Celsius, Vnom: 5 VDC
Antenna:	Amplifier Research AT4560
Measurement distance:	3 m
Mode:	Tx; BLE_CH 0_2 Mbps_P = 4 dbm
Test Date:	2023-10-18
Note:	

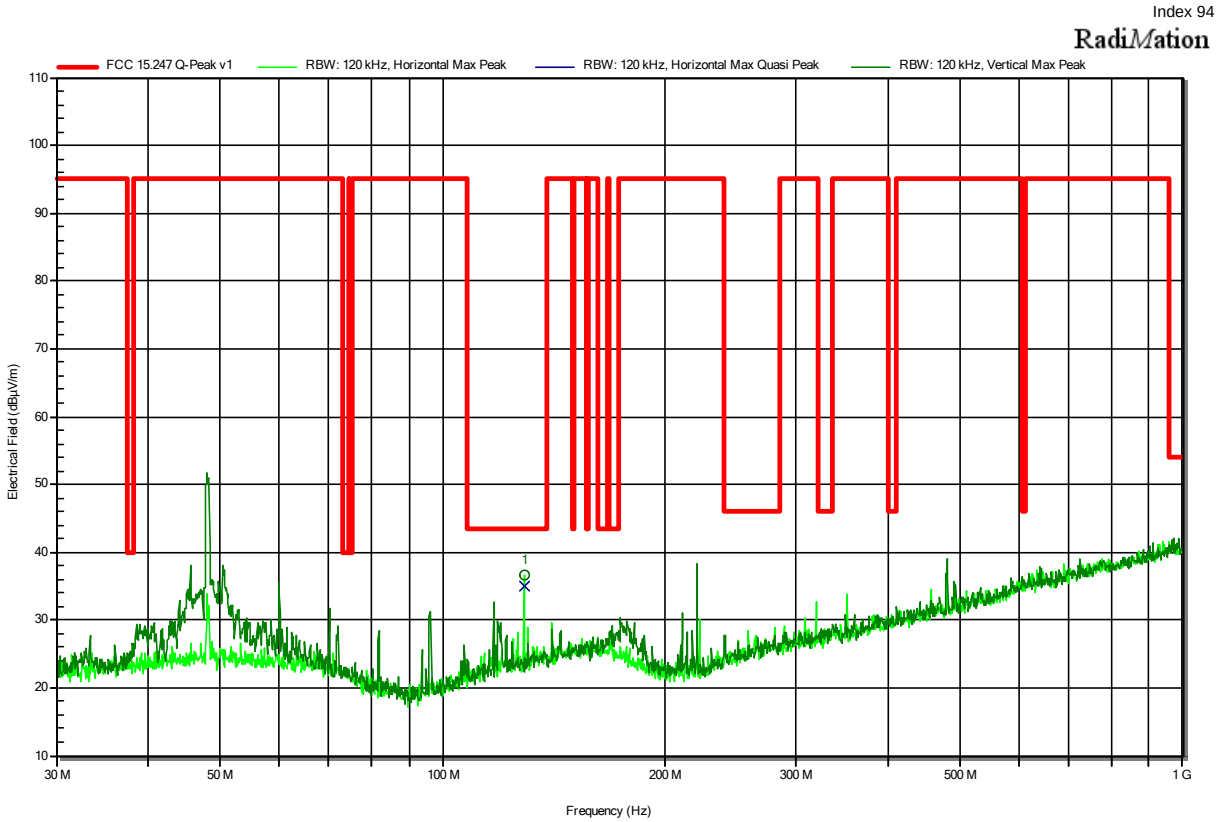
Index 86

RadiMation



Radiated Spurious Emissions according to 47 CFR Part 15.247

Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45909
Test Site:	Eurofins Product Service GmbH
Operator:	A.Ibraimov
Measurement software:	RadiMation, version 2020.1.8
Test Conditions:	Tnom: 22 °Celsius, Vnom: 5 VDC
Antenna:	Schwarzbeck VULB 9168
Measurement distance:	3 m
Mode:	Tx; BLE_CH 19_2 Mbps_P = 4 dbm
Test Date:	2023-10-20
Note:	



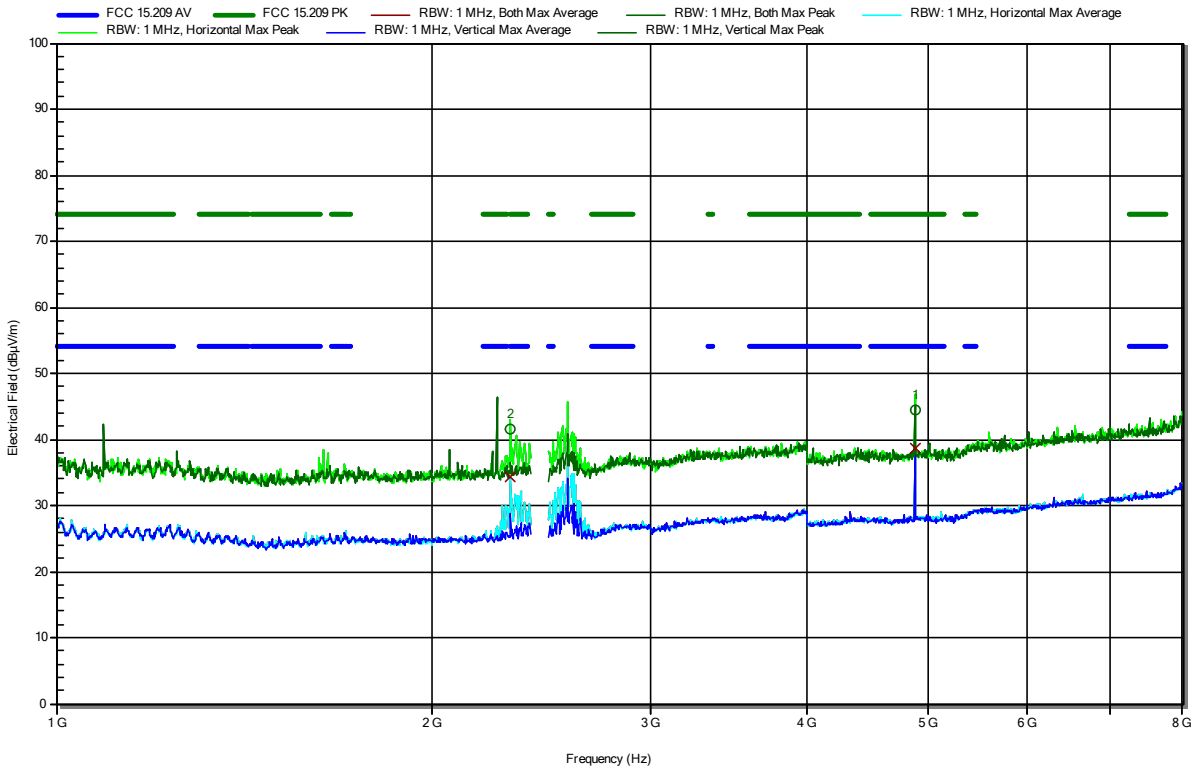
Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status	Polarization
128.6167 MHz	35 dBµV/m	43.5 dBµV/m	-8.5 dB	Pass	Horizontal

Radiated Spurious Emissions according to 47 CFR Part 15.247

Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45909
Test Site:	Eurofins Product Service GmbH
Operator:	Ibraimov Azamat
Measurement software:	RadiMation, version 2020.1.8
Test Conditions:	Tnom: 22 °Celsius, Vnom: 5 VDC
Antenna:	Schwarzbeck BBHA 9120B
Measurement distance:	3 m
Mode:	Tx; BLE_CH 19_2 Mbps_P = 4 dbm
Test Date:	2023-10-18
Note:	

Index 74

RadiMation

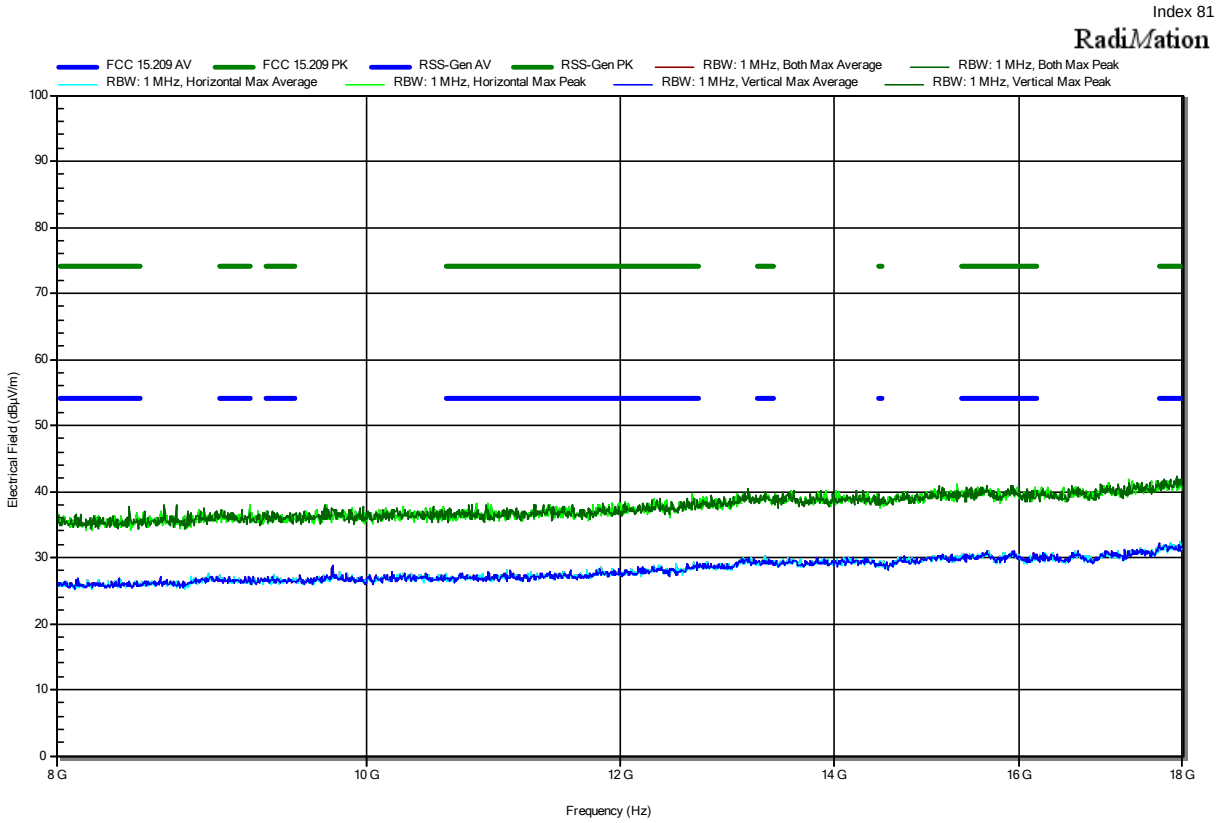


Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Polarization
2.3119 GHz	41.68 dBµV/m	74 dBµV/m	-32.32 dB	Pass	Horizontal
4.8803 GHz	44.43 dBµV/m	74 dBµV/m	-29.57 dB	Pass	Vertical

Frequency	Average	Average Limit	Average Difference	Average Status	Polarization
2.3119 GHz	34.27 dBµV/m	54 dBµV/m	-19.73 dB	Pass	Horizontal
4.8803 GHz	38.56 dBµV/m	54 dBµV/m	-15.44 dB	Pass	Vertical

Radiated Spurious Emissions according to 47 CFR Part 15.247

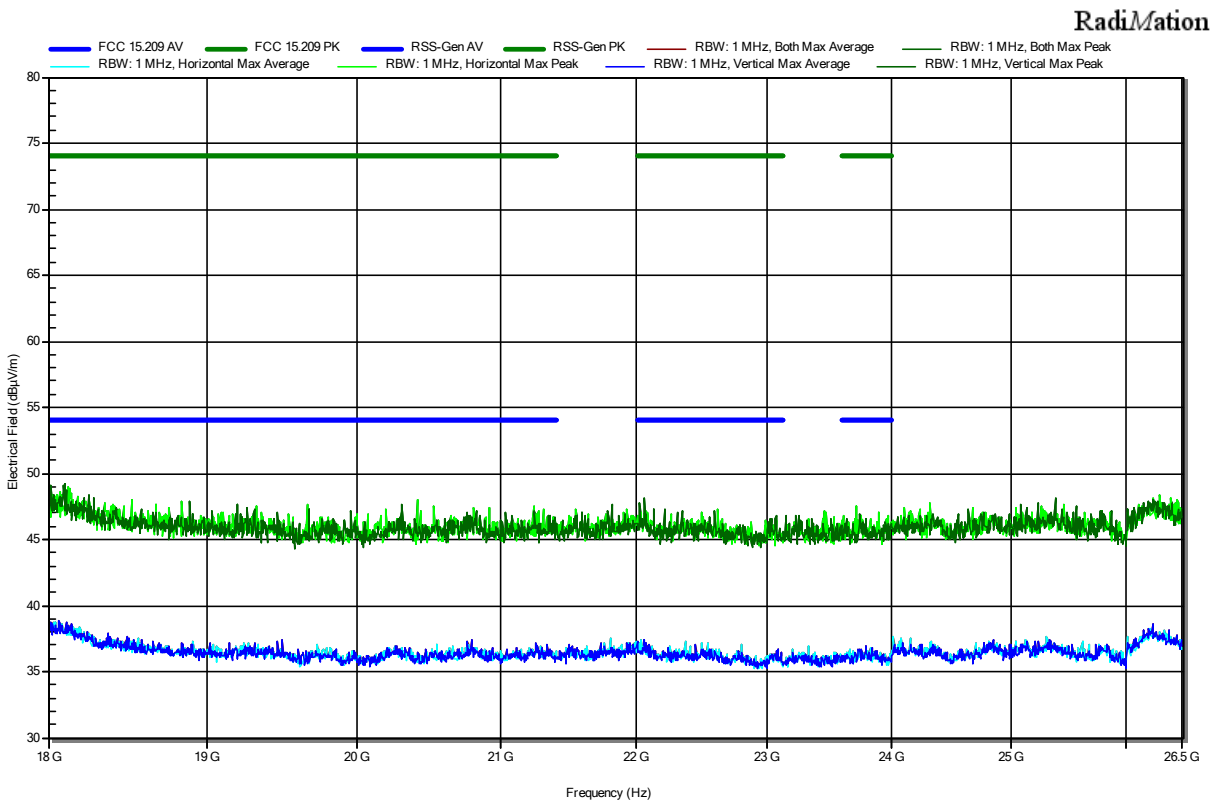
Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45909
Test Site:	Eurofins Product Service GmbH
Operator:	Ibraimov Azamat
Measurement software:	RadiMation, version 2020.1.8
Test Conditions:	Tnom: 22 °Celsius, Vnom: 5 VDC
Antenna:	Schwarzbeck HWRD 650
Measurement distance:	3 m
Mode:	Tx; BLE_CH 19_2 Mbps_P = 4 dbm
Test Date:	2023-10-18
Note:	



Radiated Spurious Emissions according to 47 CFR Part 15.247

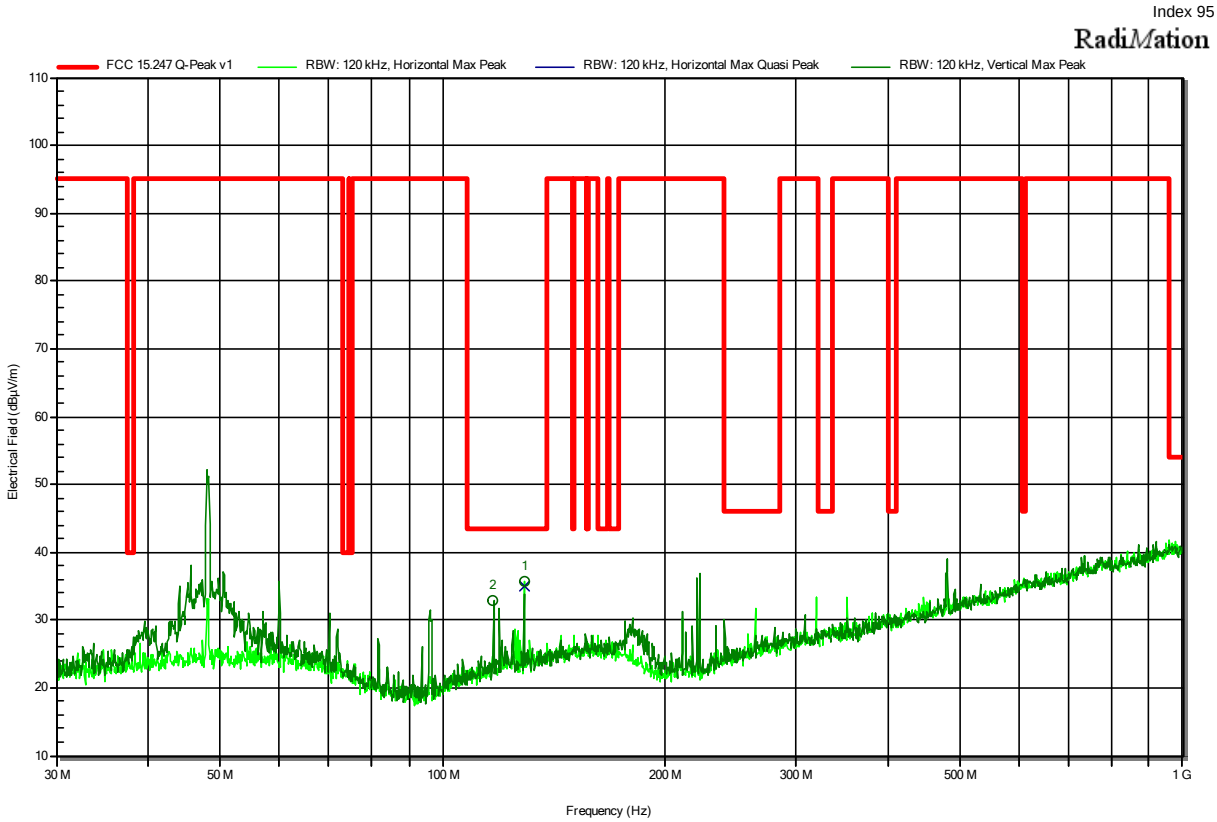
Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45909
Test Site:	Eurofins Product Service GmbH
Operator:	Ibraimov Azamat
Measurement software:	RadiMation, version 2020.1.8
Test Conditions:	Tnom: 22 °Celsius, Vnom: 5 VDC
Antenna:	Amplifier Research AT4560
Measurement distance:	3 m
Mode:	Tx; BLE_CH 19_2 Mbps_P = 4 dbm
Test Date:	2023-10-18
Note:	

Index 87



Radiated Spurious Emissions according to 47 CFR Part 15.247

Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45909
Test Site:	Eurofins Product Service GmbH
Operator:	A.Ibraimov
Measurement software:	RadiMation, version 2020.1.8
Test Conditions:	Tnom: 22 °Celsius, Vnom: 5 VDC
Antenna:	Schwarzbeck VULB 9168
Measurement distance:	3 m
Mode:	Tx; BLE_CH 39_2 Mbps_P = 4 dbm
Test Date:	2023-10-20
Note:	



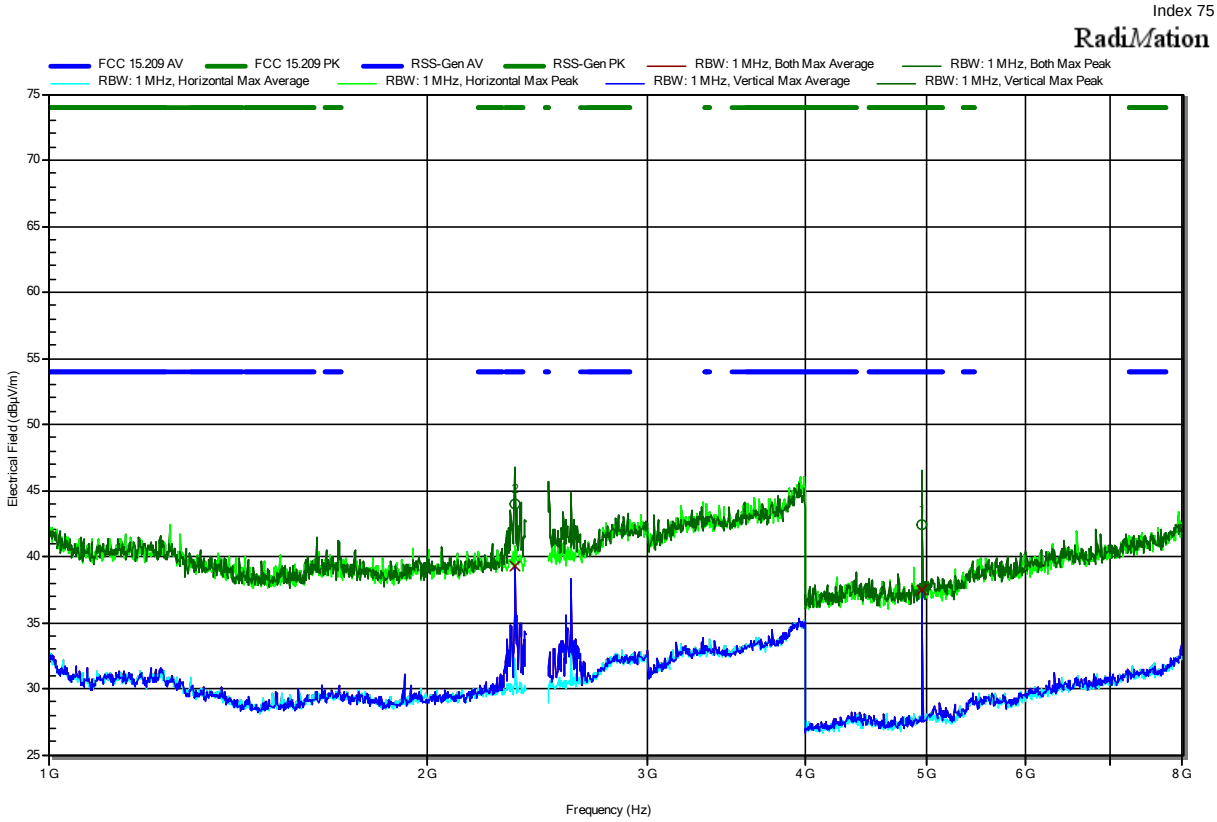
Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Polarization
116.912 MHz	32.8 dBµV/m	43.5 dBµV/m	-10.74 dB	Pass	Vertical

Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status	Polarization
128.6167 MHz	34.9 dBµV/m	43.5 dBµV/m	-8.62 dB	Pass	Horizontal

Radiated Spurious Emissions according to 47 CFR Part 15.247

Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45909
Test Site:	Eurofins Product Service GmbH
Operator:	Ibraimov Azamat
Measurement software:	RadiMation, version 2020.1.8
Test Conditions:	Tnom: 22 °Celsius, Vnom: 5 VDC
Antenna:	Schwarzbeck BBHA 9120B
Measurement distance:	3 m
Mode:	Tx; BLE_CH 39_2 Mbps_P = 4 dbm
Test Date:	2023-10-18
Note:	

Index 75



Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Polarization
2.352 GHz	44.01 dBµV/m	74 dBµV/m	-29.99 dB	Pass	Vertical
4.96 GHz	42.44 dBµV/m	74 dBµV/m	-31.56 dB	Pass	Vertical

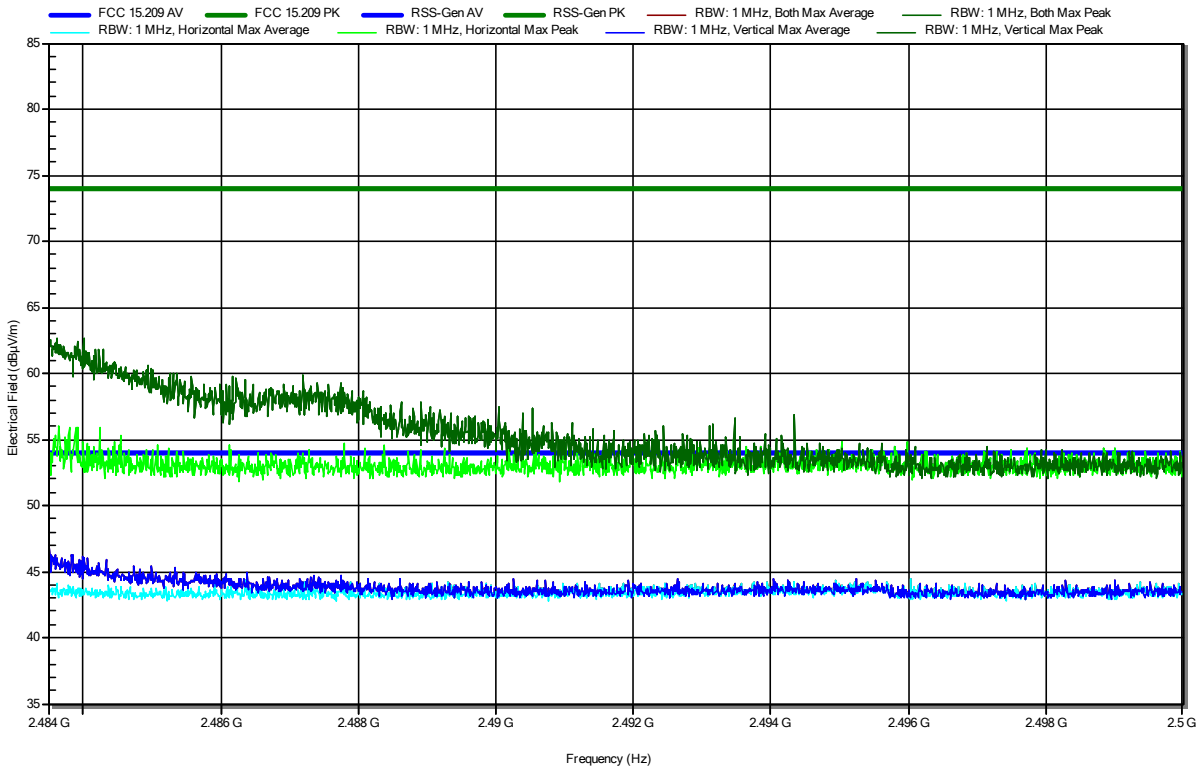
Frequency	Average	Average Limit	Average Difference	Average Status	Polarization
2.352 GHz	39.25 dBµV/m	54 dBµV/m	-14.75 dB	Pass	Vertical
4.96 GHz	37.45 dBµV/m	54 dBµV/m	-16.55 dB	Pass	Vertical

Radiated Spurious Emissions according to 47 CFR Part 15.247

Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45909
Test Site:	Eurofins Product Service GmbH
Operator:	Ibraimov Azamat
Measurement software:	RadiMation, version 2020.1.8
Test Conditions:	Tnom: 22 °Celsius, Vnom: 5 VDC
Antenna:	Schwarzbeck BBHA 9120B
Measurement distance:	3 m
Mode:	Tx; BLE_CH 39_2 Mbps_P = 4 dbm
Test Date:	2023-10-18
Note:	upper bandedge

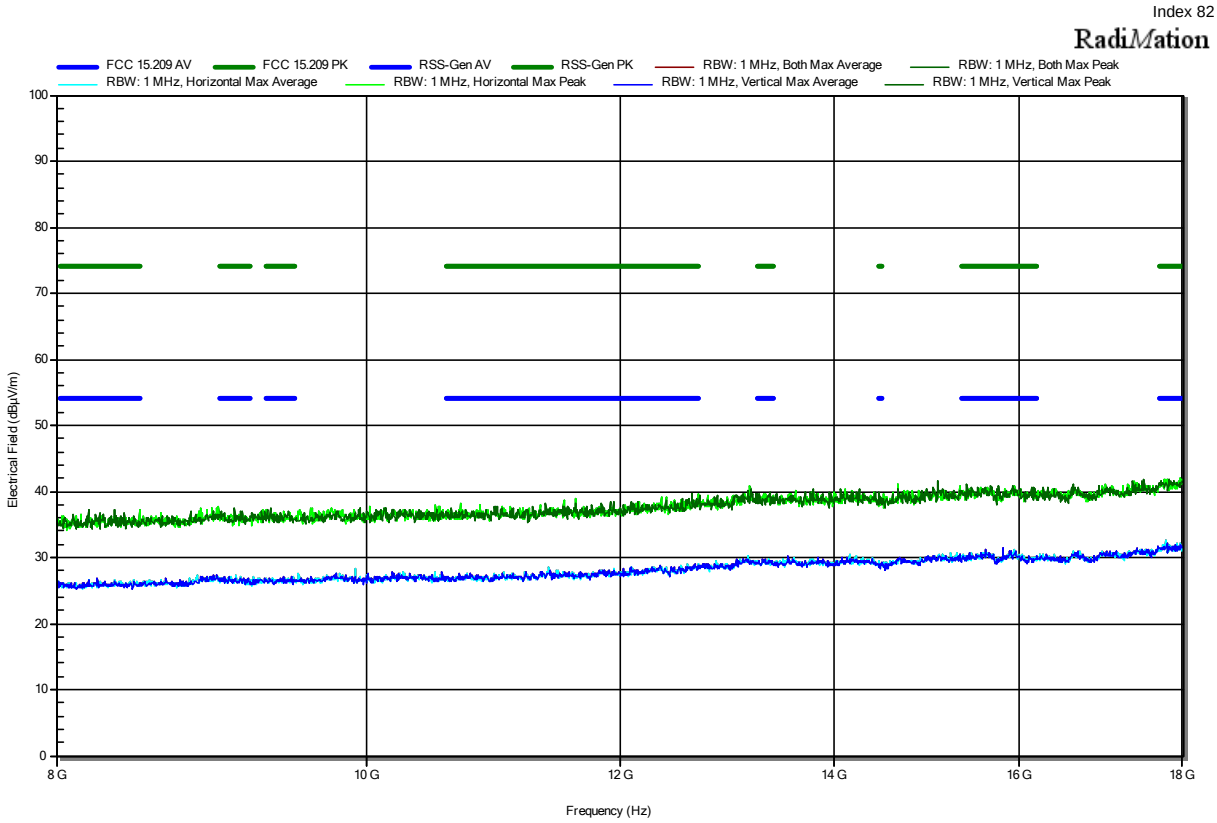
Index 76

RadiMation



Radiated Spurious Emissions according to 47 CFR Part 15.247

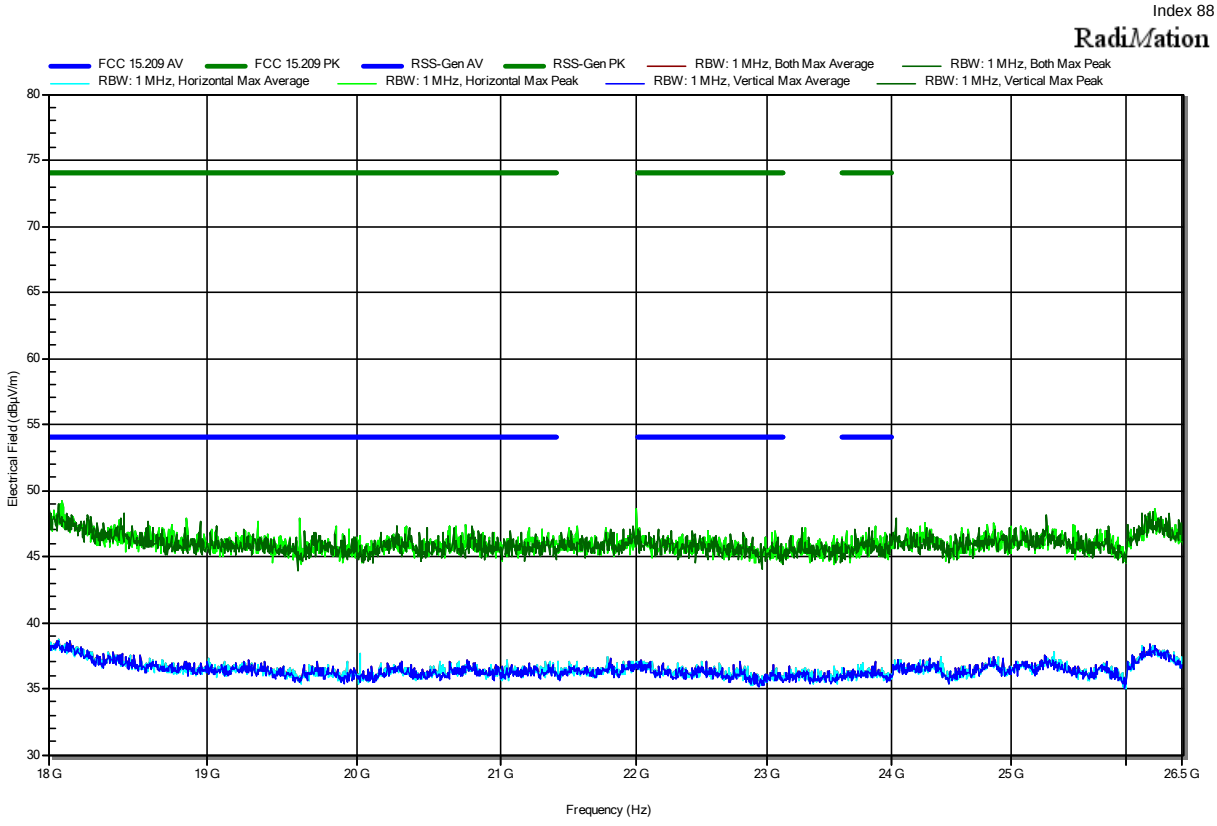
Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45909
Test Site:	Eurofins Product Service GmbH
Operator:	Ibraimov Azamat
Measurement software:	RadiMation, version 2020.1.8
Test Conditions:	Tnom: 22 °Celsius, Vnom: 5 VDC
Antenna:	Schwarzbeck HWRD 650
Measurement distance:	3 m
Mode:	Tx; BLE_CH 39_2 Mbps_P = 4 dbm
Test Date:	2023-10-18
Note:	



Radiated Spurious Emissions according to 47 CFR Part 15.247

Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45909
Test Site:	Eurofins Product Service GmbH
Operator:	Ibraimov Azamat
Measurement software:	RadiMation, version 2020.1.8
Test Conditions:	Tnom: 22 °Celsius, Vnom: 5 VDC
Antenna:	Amplifier Research AT4560
Measurement distance:	3 m
Mode:	Tx; BLE_CH 39_2 Mbps_P = 4 dbm
Test Date:	2023-10-18
Note:	

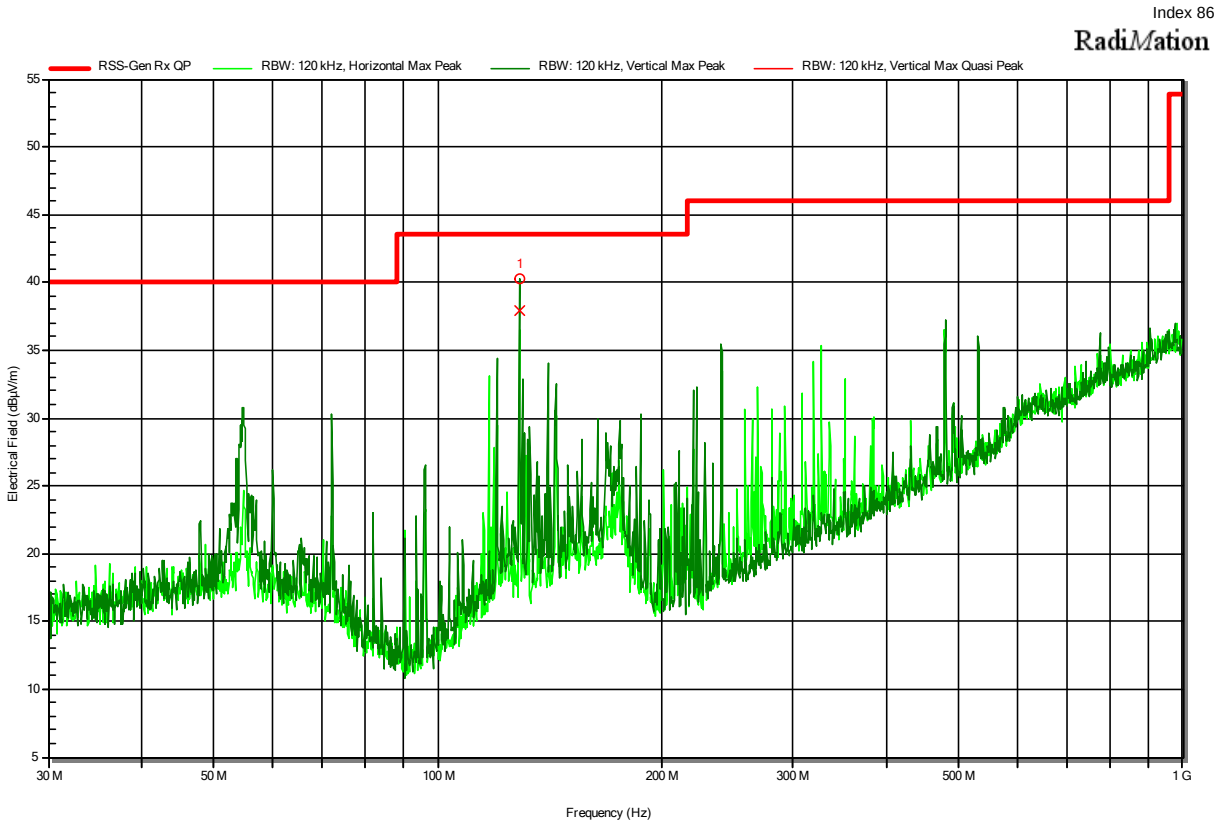
Index 88



ANNEX B Receiver spurious emissions

Radiated Spurious Emissions according to FCC 15.247

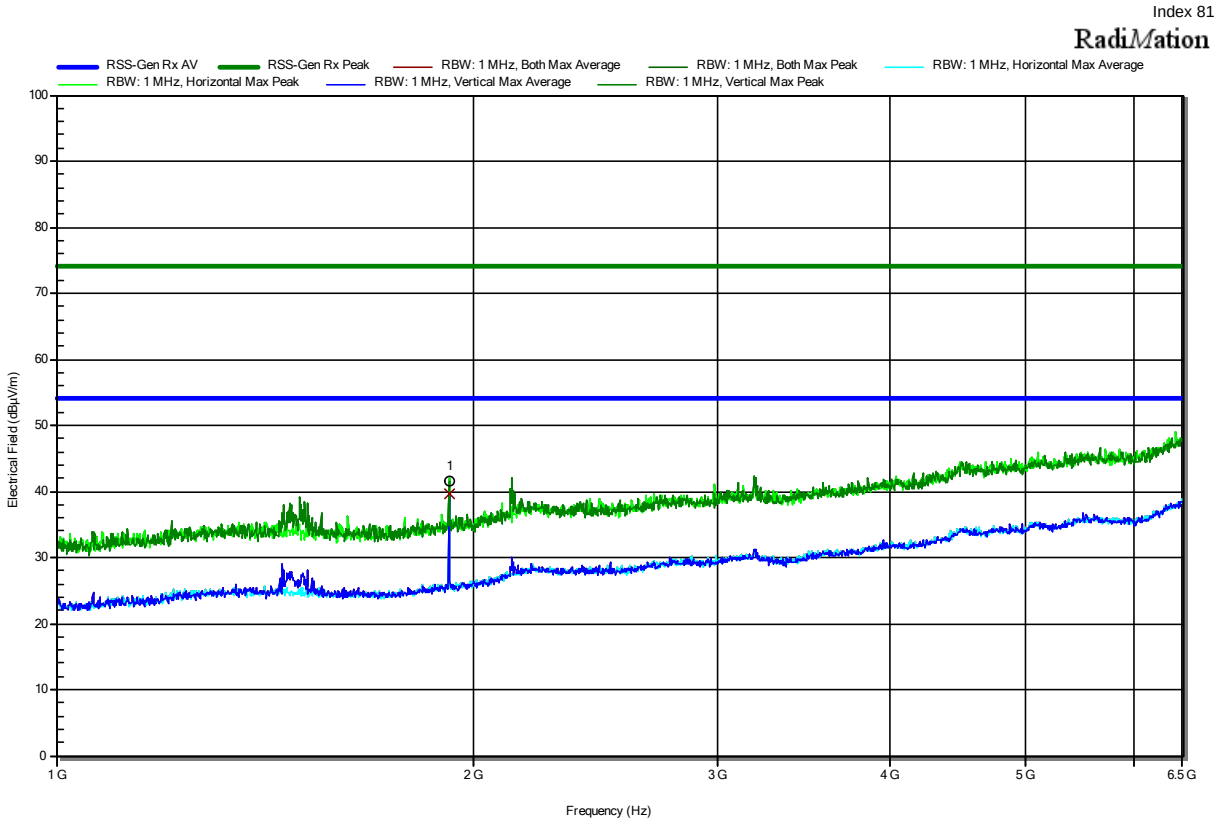
Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45909
Test Site:	Eurofins Product Service GmbH
Operator:	A.Ibraimov
Measurement software:	RadiMation, version 2020.1.8
Test Conditions:	Tnom: 22 °Celsius, Vnom: 5 VDC
Antenna:	Schwarzbeck VULB 9168
Measurement distance:	3 m
Mode:	Rx; BLE_Ch 19_1 Mbps
Test Date:	2023-10-20
Note:	



Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status	Polarization
128.5843 MHz	38 dBµV/m	43.5 dBµV/m	-5.53 dB	Pass	Vertical

Radiated Spurious Emissions according to FCC 15.247

Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45909
Test Site:	Eurofins Product Service GmbH
Operator:	A.Ibraimov
Measurement software:	RadiMation, version 2020.1.8
Test Conditions:	Tnom: 22 °Celsius, Vnom: 5 VDC
Antenna:	Schwarzbeck BBHA 9120D
Measurement distance:	3 m
Mode:	Rx; BLE_Ch 19_1 Mbps
Test Date:	2023-10-20
Note:	



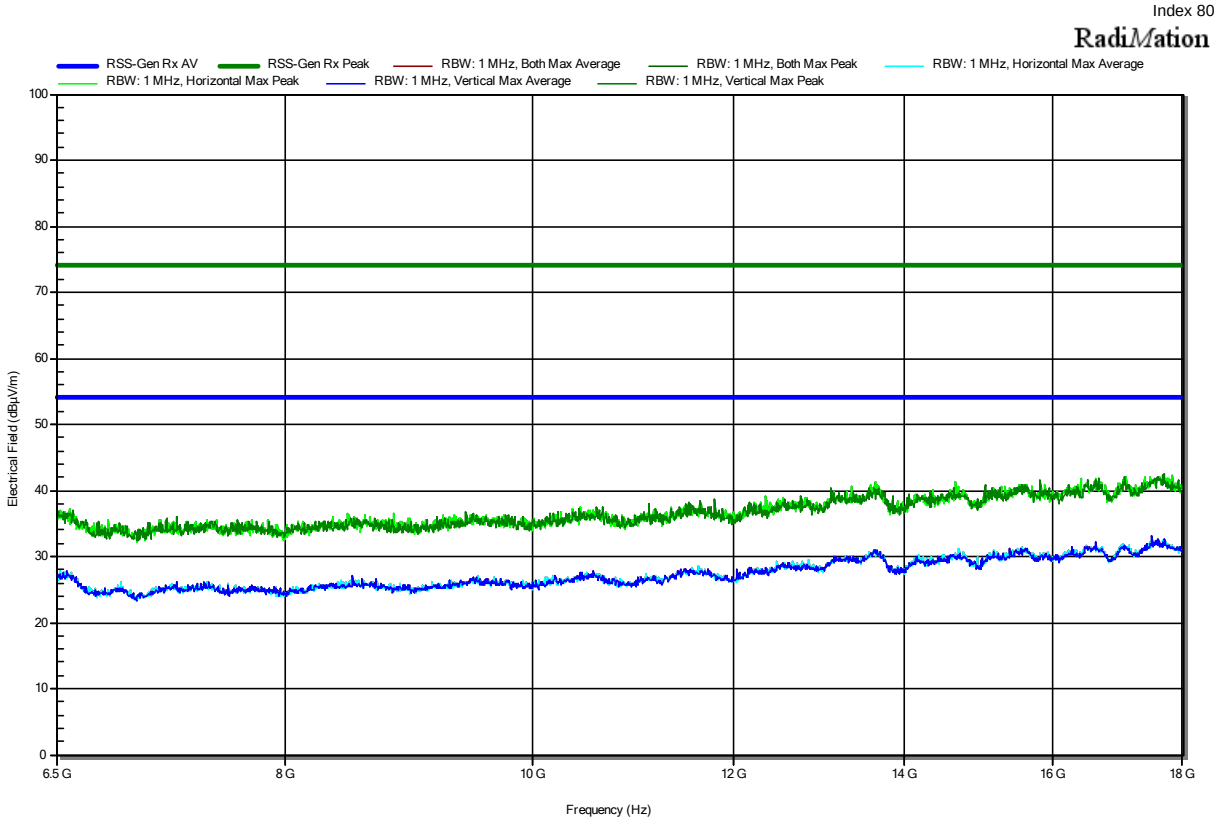
Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Polarization
1.92 GHz	41.58 dBµV/m	74 dBµV/m	-32.42 dB	Pass	Vertical

Frequency	Average	Average Limit	Average Difference	Average Status	Polarization
1.92 GHz	39.56 dBµV/m	53.98 dBµV/m	-14.42 dB	Pass	Vertical

Radiated Spurious Emissions according to FCC 15.247

Project Number:	G0M-2303-1996
Applicant:	Leica Geosystems AG
Model Description:	Laser Distance Meter
Model:	Leica Disto X6
Test Sample ID:	45909
Test Site:	Eurofins Product Service GmbH
Operator:	A.Ibraimov
Measurement software:	RadiMation, version 2020.1.8
Test Conditions:	Tnom: 22 °Celsius, Vnom: 5 VDC
Antenna:	Schwarzbeck HWRD 650
Measurement distance:	3 m
Mode:	Rx; BLE_Ch 19_1 Mbps
Test Date:	2023-10-20
Note:	

Index 80



= = = END OF TEST REPORT = = =