





EMC TEST REPORT Title 47 CFR Part 15B, ISED ICES-003 Issue 7	
Report Reference No	G0M-2011-9488-EF0115B-V02
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-003 Issue 7 ANSI C63.4:2014+A1:2017
Non-Standard Test Method	None
Equipment under Test (EUT):	
Product Description	UAV 3D measurement device
Model(s)	BLK2FLY
Additional Model(s)	None
Brand Name(s)	Leica Geosystems AG
Hardware Version(s)	Rev. D
Software Version(s)	0.13.0
FCC-ID	RFD-BLK2FLY
IC	3177A-BLK2FLY
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	2021-08-30	
Report:		
Compiled by	Matthias Handrik	
Tested by (+ signature) (Responsible for Test)	Matthias Handrik	
Approved by (+ signature) (Test Technician)	Andreas Pflug	
Date of Issue	2022-01-11	
Total number of pages	135	
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>		
Additional Comments:		

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	2021-11-09	Initial Release	-
02	2022-01-11	Replaced document: G0M-2011-9488-EF015B-V01 Replaced by: G0M-2011-9488-EF015B-V02 Reason: Corrected the supply voltage of Rechargeable Lithium battery. Additional measurement of 5V DC USB supply voltage.	M.Handrik

REPORT INDEX

1	Equipment (Test Item) Under Test.....	6
1.1	Equipment Ports.....	8
1.2	Equipment Photos - Internal.....	9
1.3	Equipment Photos - External.....	18
1.4	Support Equipment.....	23
1.5	Operational Modes.....	24
1.6	EUT Configuration.....	26
1.7	Sample emission level calculation.....	27
2	Result Summary.....	28
2.1	Test Conditions and Results - Radiated emissions acc. to ANSI C63.4.....	29
2.2	Test Conditions and Results - Conducted emissions acc. to ANSI C63.4.....	123
3	Measurement Uncertainty	135

1 Equipment (Test Item) Under Test

Description	UAV 3D measurement device	
Intendend use	The Leica BLK2FLY is an autonomous flying laser scanner with advanced obstacle avoidance for easy reality capture from the sky. The BLK2FLY includes WLAN and LTE communication channels to the tablet for nearly unlimited communication range during flight.	
Model	BLK2FLY	
Additional Model(s)	None	
Brand Name(s)	Leica Geosystems AG	
Serial Number(s)	EUT 1: 3000 102 EUT 2: 3000 103 EUT 3: 3000 104	
Sample-ID	EUT 1: 35554 EUT 2: 35854 EUT 3: 35709	
Hardware Version(s)	Rev. D	
Software Version(s)	0.13.0	
EUT Dimensions [cm]	60 x 60	
FCC-ID	RFD-BLK2FLY	
IC	3177A-BLK2FLY	
Class	Class B	
Equipment type	Table top	
Highest internal frequency [MHz]	63900	
Radio Module I	Type	IEEE 802.11 b, g, n / a, ac, n module
	Model	WCN3990
	Manufacturer	Qualcomm
	Hardware Version(s)	00M
	Software Version(s)	MPSS.AT.4.0.c2-01333-SDM845_GEN_PACK-1
	FCC-ID	unspecified
	IC	unspecified
Radio Module II	Type	Bluetooth Low Energy module
	Model	WCN3990
	Manufacturer	Qualcomm
	Hardware Version(s)	00M
	Software Version(s)	MPSS.AT.4.0.c2-01333-SDM845_GEN_PACK-1
	FCC-ID	unspecified
	IC	unspecified
Radio Module III	Type	GNSS module
	Model	ZED-F9P
	Manufacturer	U-blox
	Hardware Version(s)	02B
	Software Version(s)	HPG 1.13
	FCC-ID	unspecified
	IC	unspecified

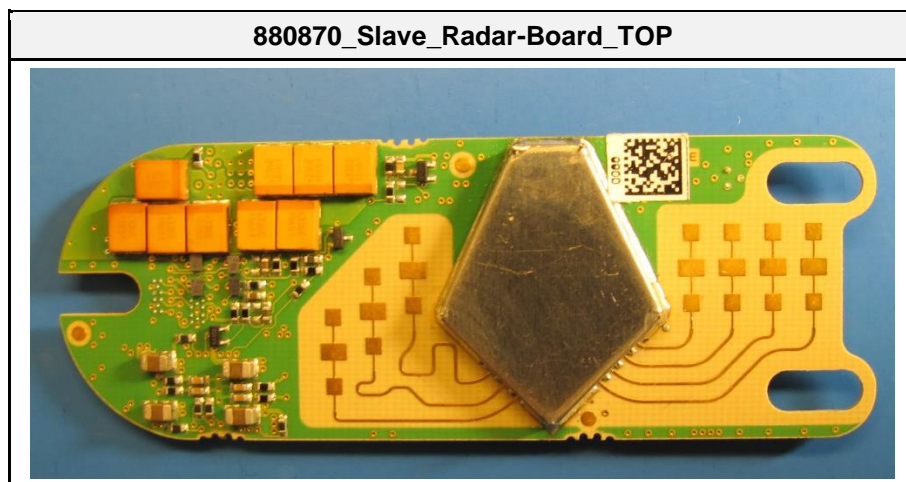
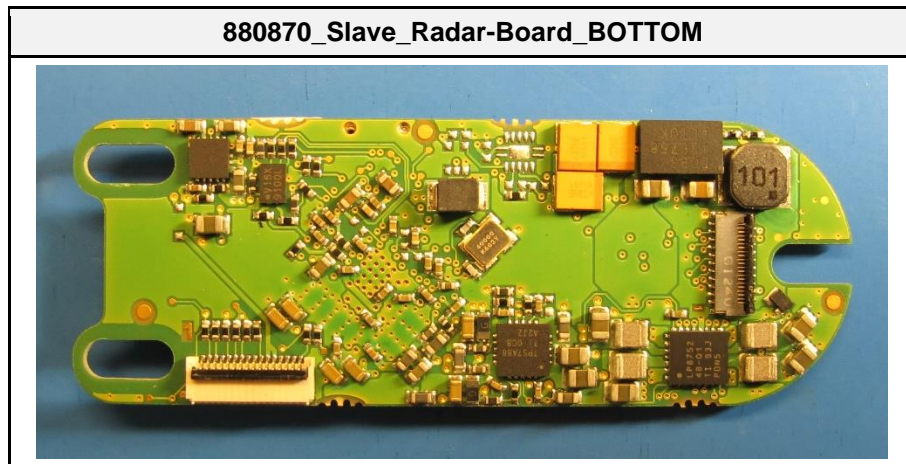
Radio Module IV	Type	Mobile communication module
	Model	AirPrime EM7565
	Manufacturer	Sierra Wireless
	Hardware Version(s)	OPC E-08, 0118(03)
	Software Version(s)	SWI9X50C_01.14.02.00, 12
	FCC-ID	unspecified
	IC	unspecified
Radio Module V	Type	Obstacle avoidance radar module
	Model	IWR6843AQQABLR
	Manufacturer	Texas Instruments
	Hardware Version(s)	Master: V-ACRSP-HEX-00-AE0 Slave: V-ACR-HEX-00-AE0
	Software Version(s)	FPGA: V-ACR_FWR-HEX-0502 IWR: V-ACR_IWR-HEX-0502
	FCC-ID	unspecified
	IC	unspecified
Supply Voltage	V _{NOM} Variant 1	14.8V DC (Rechargeable Lithium battery)
	V _{NOM} Variant 2	5 VDC (USB)
AC/DC-Adaptor	None	
Manufacturer	Leica Geosystems AG Heinrich-Wild-Strasse 9435 Heerbrugg SWITZERLAND	

1.1 Equipment Ports

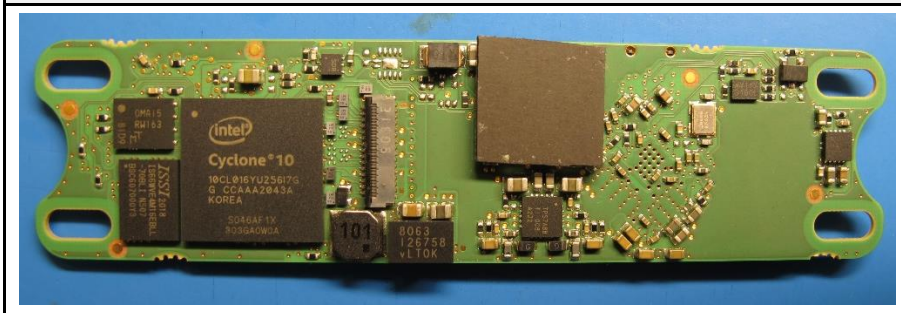
Name	Type	Attributes	Comment
USB C	I/O	Count: 1 Direction: IO Max. cable length [m]: 1.5m Shielded: Yes Service only: No	Shield connected on both side (EUT and Laptop)
Description:			
AC	AC mains power input/output port		
DC	DC power input/output port		
BAT	DC power input port connected to external battery		
IO	Input/Output port		
TP	Telecommunication port		
NE	Non-electrical port		

1.2 Equipment Photos - Internal

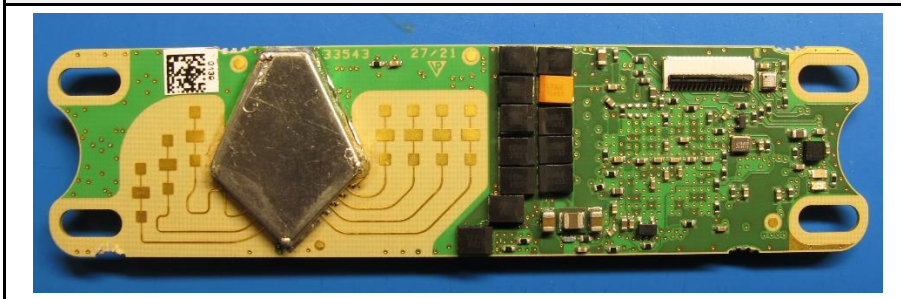
The numbers in the picture description are internal SAP number (from customer) of the individual boards.



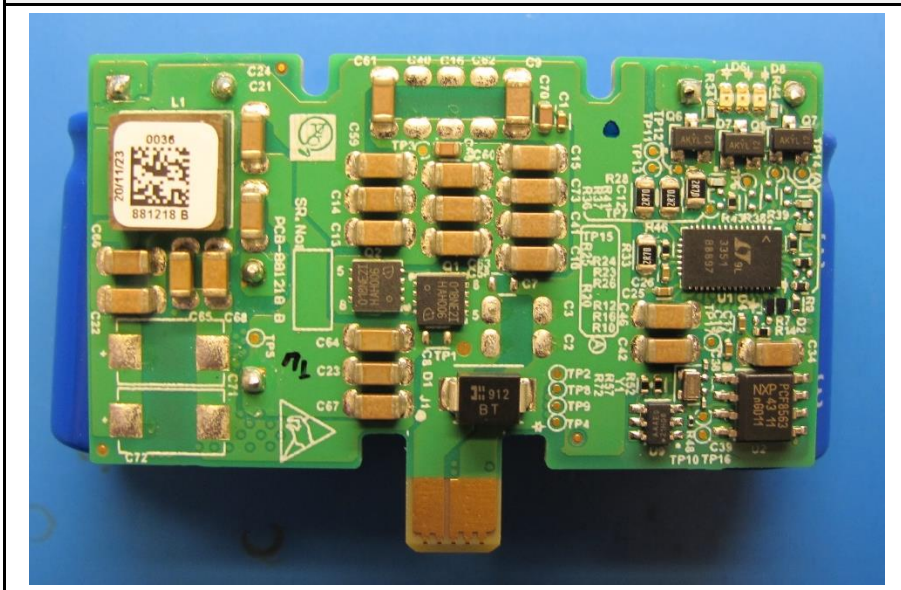
880880_Master_Radar-Board_BOTTOM



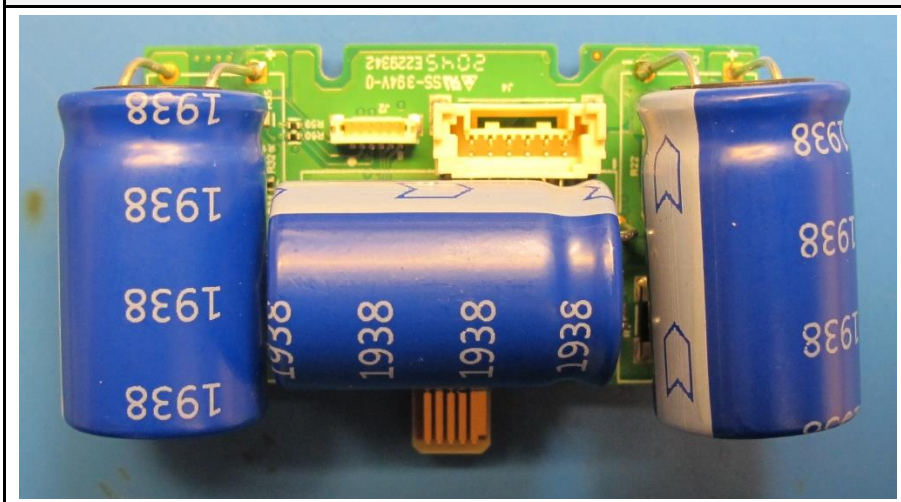
880880_Master_Radar-Board_TOP



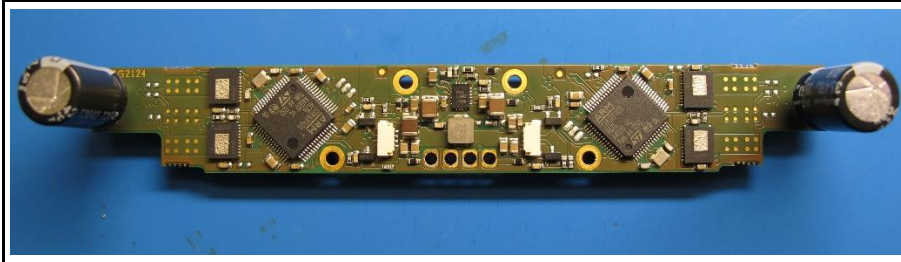
881218_Supercap-Board-TOP



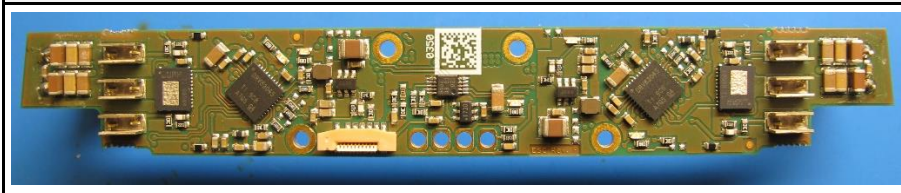
881218_Supercap-Board-BOTTOM



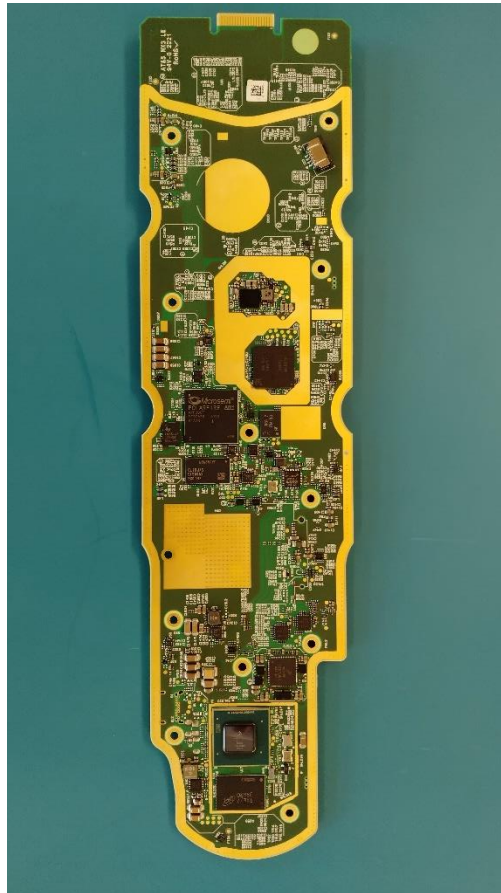
891019_ESC-Board_BOTTOM



891019_ESC-Board_TOP



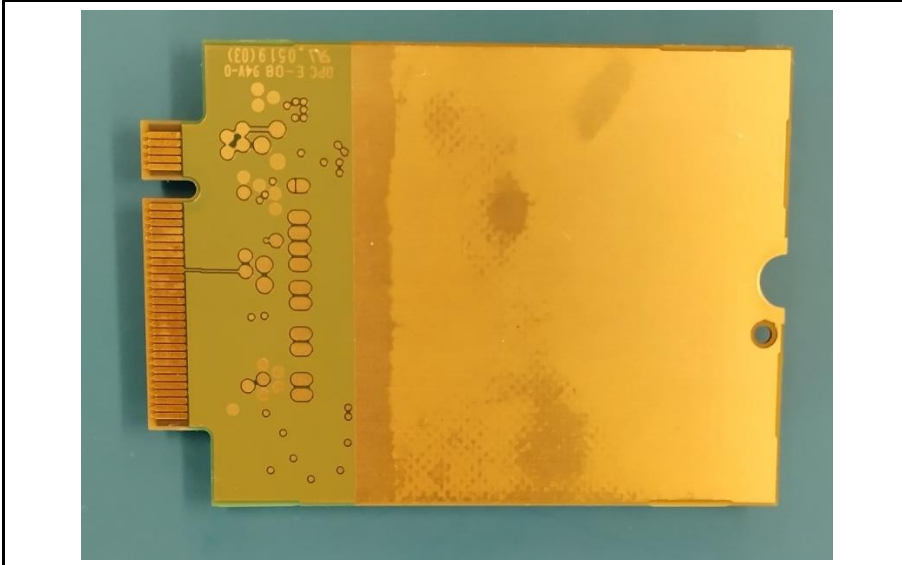
892583_mainboard_bottom



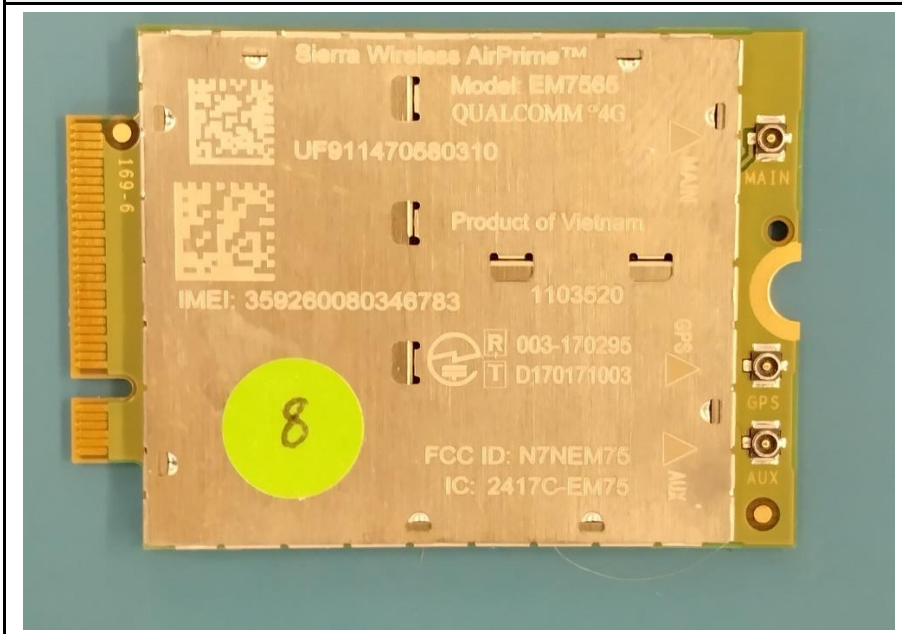
892583_mainboard_top



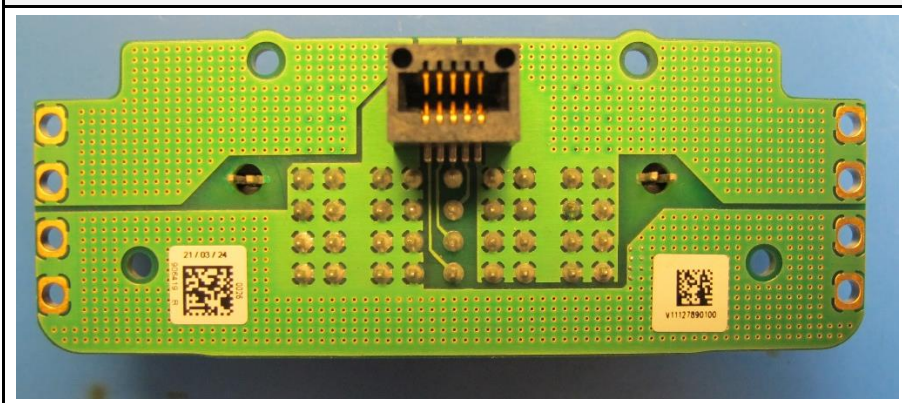
897756_LTE_bottom



897756_LTE_top



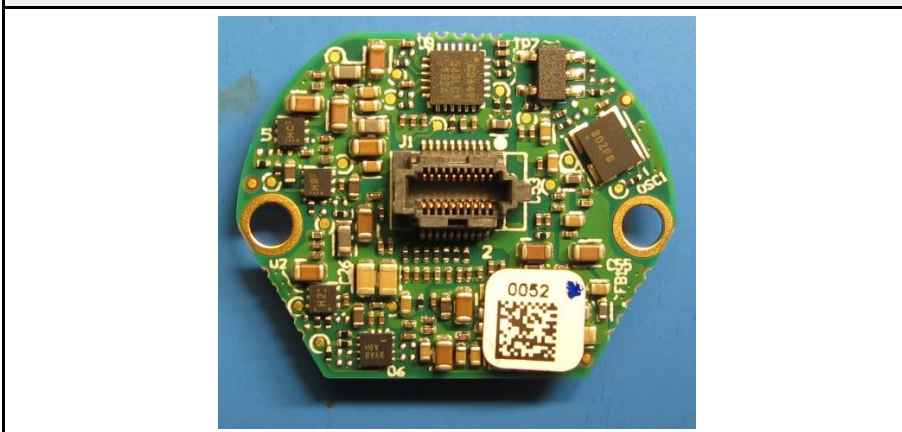
906419_Battery-Connector-Board_BOTTOM



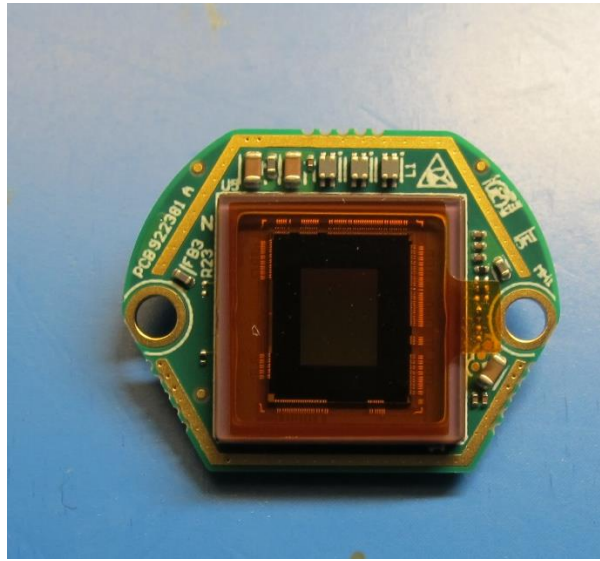
906419_Battery-Connector-Board_TOP



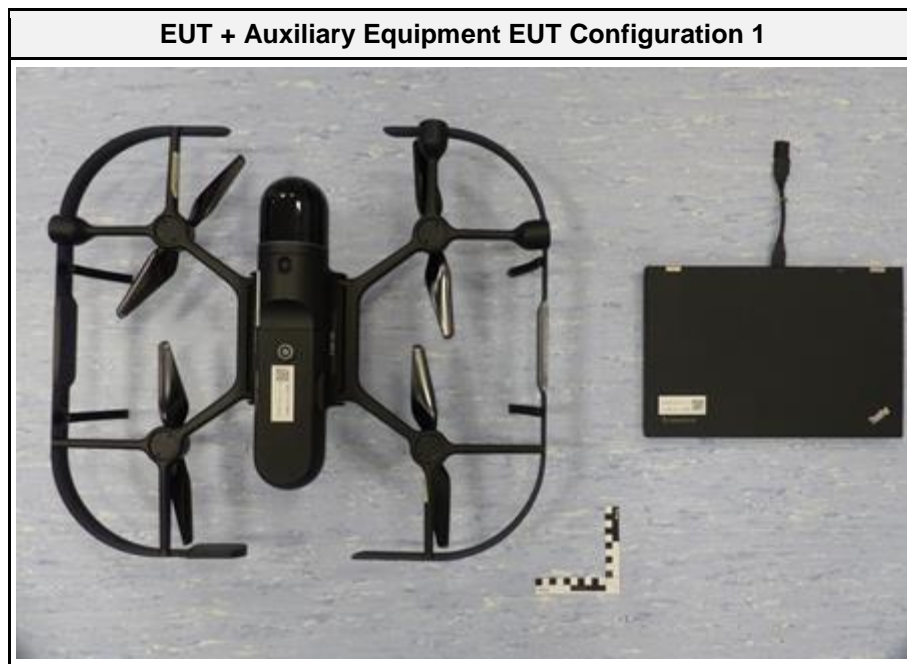
922381_Camera-Board_Portrait_BOTTOM



922381_Camera-Board_Portrait_TOP



1.3 Equipment Photos - External



EUT TOP



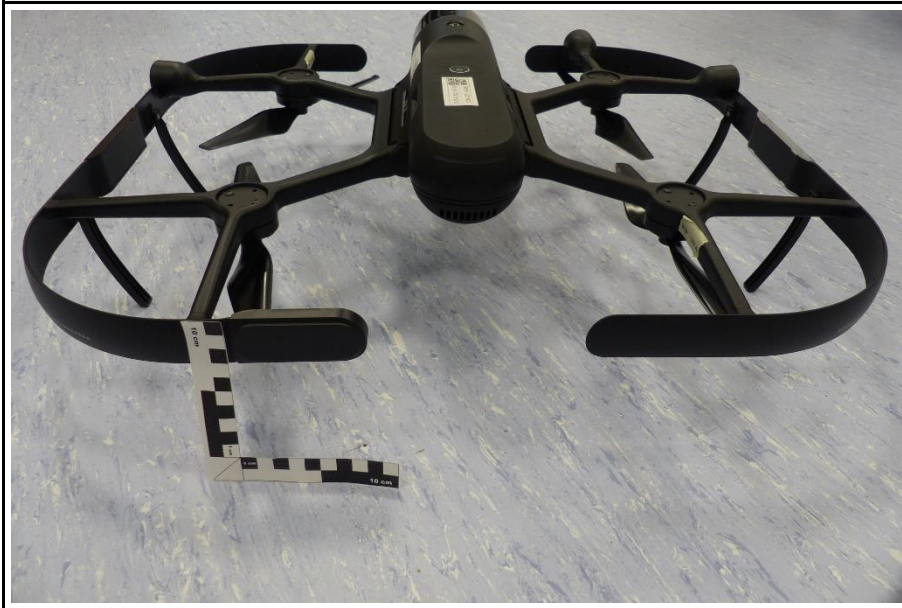
EUT BOTTOM



EUT RIGHT



EUT BACK



EUT LEFT



EUT FRONT



EUT without battery



EUT battery port



1.4 Support Equipment

Product Type	Device	Manufacturer	Model	Comment
AE	Laptop	lenovo	ThinkPad T420s	Customer Support Equipment
AE	AC/DC adaptor	lenovo	42T5292 / 42T5292:36200032	Customer Support Equipment for Laptop
AE	WLAN-USB	Netgear	A6100	Customer Support Equipment
AE	Software application	Leica	„oriole_emc_demo_application“	Customer Support Equipment
CBL	USB-C to USB-C	Leica	Art.No.: 938393 GEV288	Customer Support Equipment
CBL	USB-C to USB A	-	-	Customer Support Equipment Adaptor
AE	GPS Antenna + Amplifier	Hopf Elektronik GmbH + MiteQ Inc.	TYP 4490 + AFD3 015030-11	-
SIM	Universal Radio Communication Tester	R&S	CMU200	EF00305
SIM	Wideband Radio Communication Tester	R&S	CMW500	EF00677
AE	Smartphone	Samsung	S4	-
Description:				
AE	Auxiliary Equipment			
SIM	Simulator			
MON	Monitoring Equipment			
CBL	Connecting Cable			
Comment:				

1.5 Operational Modes

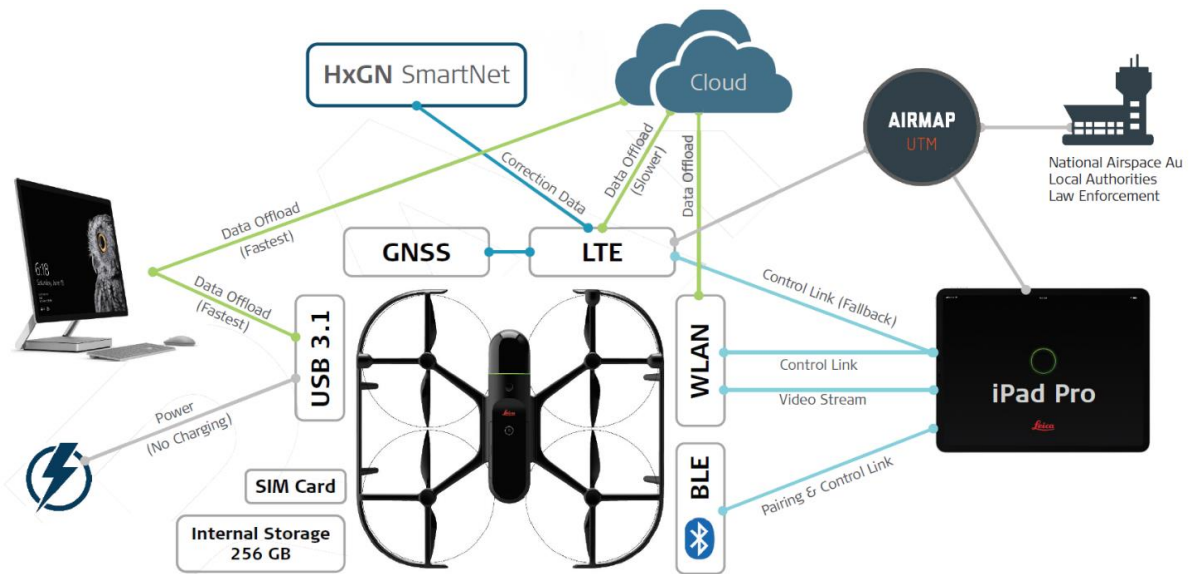
Mode #	Description
1	<p>EUT 1: Mobile communication connection to radio communication tester. UMTS FDD IV uplink Ch.: 1312: 1712.4MHz; downlink Ch.: 1537: 2112.4 MHz TPC: Pattern type "All 1"</p> <p>WLAN connection to Laptop. 2.4GHz WLAN RADAR "ON" LIDAR "ON" All 4 Motors operates with ca.: 1200rpm GNSS receive local position</p>
2	<p>EUT 1: Mobile communication connection to radio communication tester. LTE FDD 12 uplink Ch.: 23095: 707.5MHz; downlink Ch.: 5095: 737.5 MHz TX Power Control: Active TPC Setup "Max Power"</p> <p>WLAN connection to Laptop. 2.4GHz WLAN RADAR "ON" LIDAR "ON" All 4 Motors operates with ca.: 1200rpm GNSS receive local position</p>
3	<p>EUT 2: Mobile communication connection to radio communication tester. UMTS FDD IV uplink Ch.: 1312: 1712.4MHz; downlink Ch.: 1537: 2112.4 MHz TPC: Pattern type "All 1"</p> <p>WLAN connection to Laptop. 5GHz WLAN RADAR "ON" LIDAR "ON" All 4 Motors operates with ca.: 1200rpm GNSS receive local position Bluetooth LE connection to Smartphone via BLE scanner AP</p>
4	<p>EUT 2: Mobile communication connection to radio communication tester. LTE FDD 12 uplink Ch.: 23095: 707.5MHz; downlink Ch.: 5095: 737.5 MHz TX Power Control: Active TPC Setup "Max Power"</p> <p>WLAN connection to Laptop. 5GHz WLAN RADAR "ON" LIDAR "ON" All 4 Motors operates with ca.: 1200rpm GNSS receive local position</p>

5	EUT 2: Mobile communication connection to radio communication tester. LTE FDD 12 uplink Ch.: 23095: 707.5MHz; downlink Ch.: 5095: 737.5 MHz TX Power Control: Active TPC Setup "Max Power" WLAN connection to Laptop. 2.4GHz WLAN Without USB data traffic
6	EUT 2: 2.4GHz WLAN connection to Laptop. USB data traffic (Copy file in loop from laptop to EUT).
7	EUT 3: Mobile communication connection to radio communication tester. LTE FDD 12 uplink Ch.: 23095: 707.5MHz; downlink Ch.: 5095: 737.5 MHz TX Power Control: Active TPC Setup "Max Power" WLAN connection to Laptop. 5GHz WLAN Without USB data traffic
8	EUT 3: 5 GHz WLAN connection to Laptop. USB data traffic (Copy file in loop from laptop to EUT).
Comment:	

1.6 EUT Configuration

Configuration #	Description
1	<p>EUT assembled with battery: 14.8V DC.</p> <p>Operational modes on EUT are activated by WLAN connection from laptop to EUT. With software "oriole_emc_demo_application" can activated the modes:</p> <p>LIDAR: Laser scanner ON/OFF RADAR: ON/OFF MOTOR: OFF/ 1 (ca.: 1200rpm) / 2 (ca.: 7000rpm)</p> <p>With small scripts were visualised the:</p> <p>LIDAR data; Camera RGB data; WLAN ping; From every motor the rpm; For GNSS the number of visible satellites. Bluetooth LE connection to Smartphone via BLE scanner AP (nRF Connect)</p>
2	<p>EUT assembled with USB-C wire.</p> <p>USB-C wire connected with USB-C - USB-A adaptor to laptop.</p> <p>Laptop operates without AC/DC adaptor for Radiated Spurious Emission.</p>
Comment:	

Features



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:				

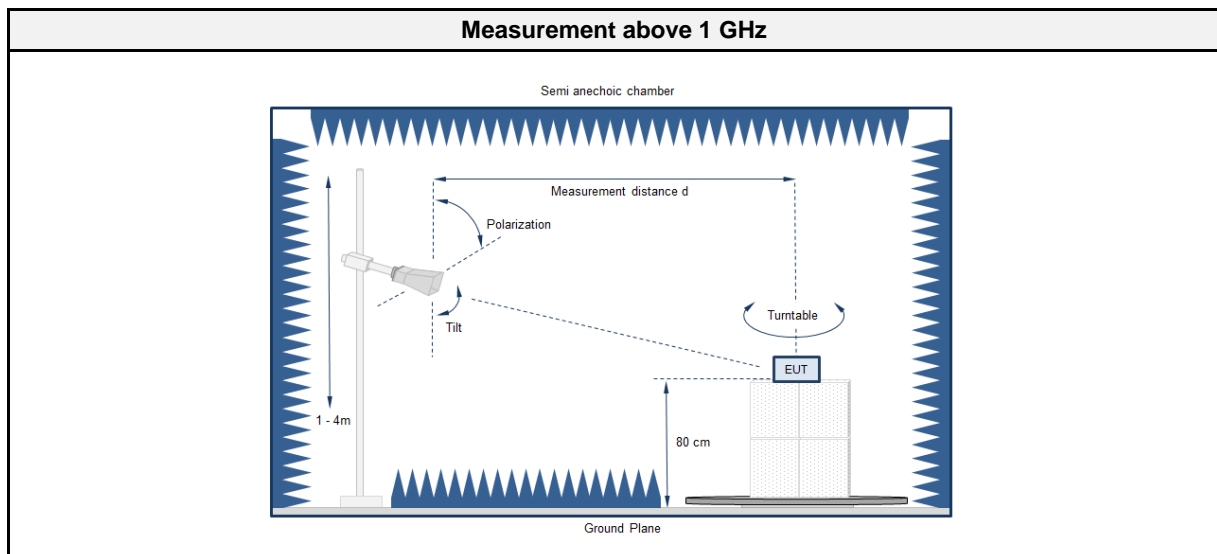
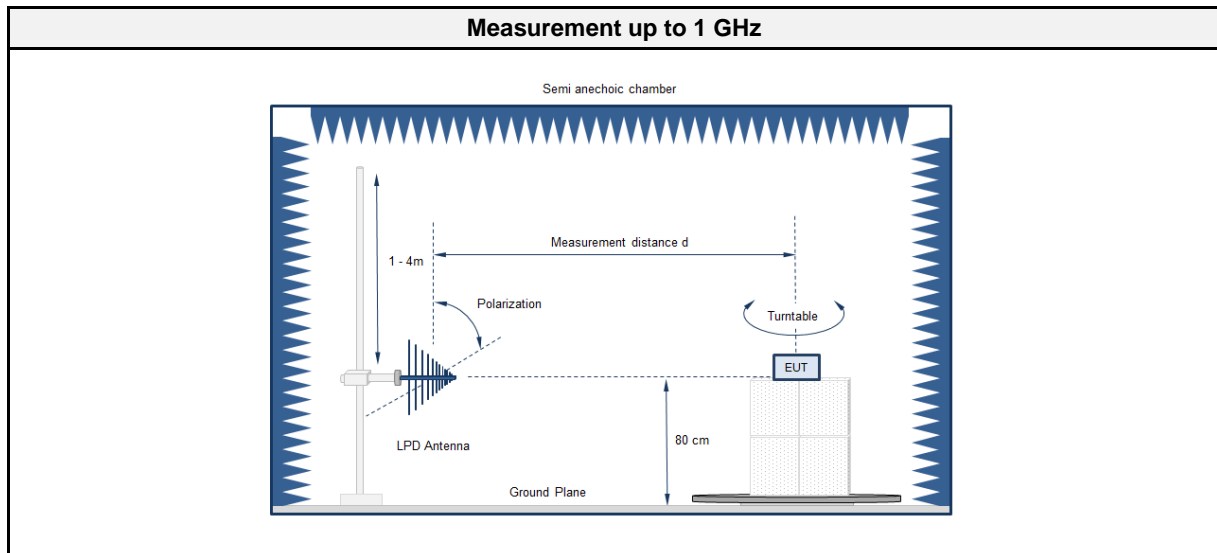
Possible Test Case Verdicts	
PASS	Test object does meet the requirements
FAIL	Test object does not meet the requirements
N/T	Required by standard but not tested
N/R	Not required by standard for the test object

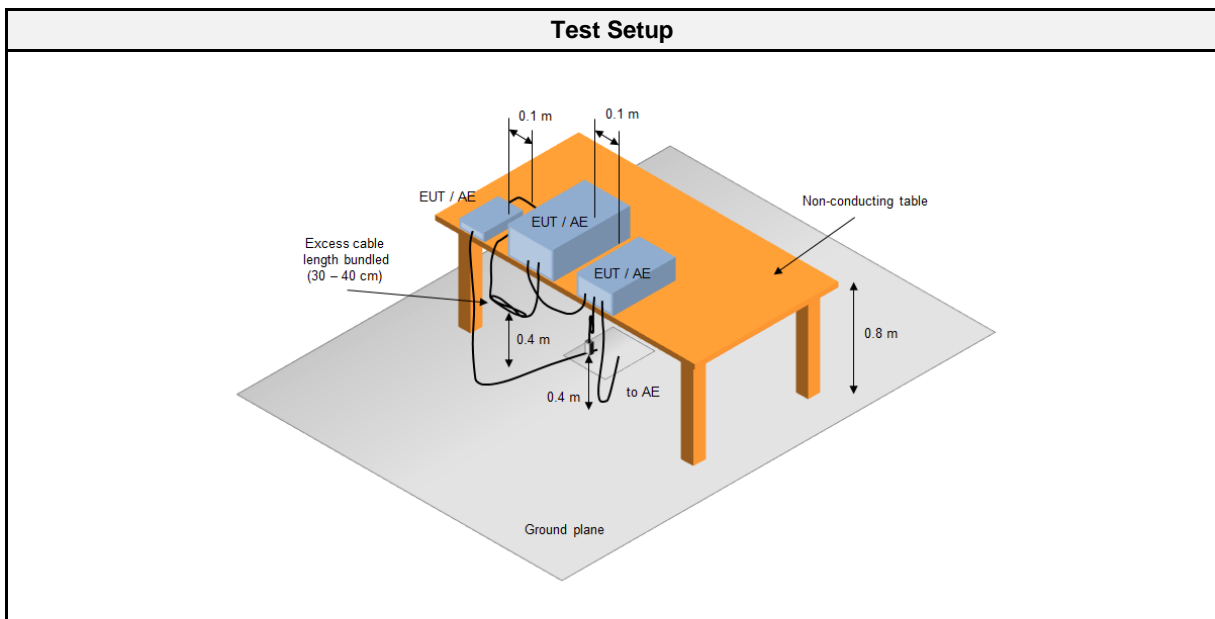
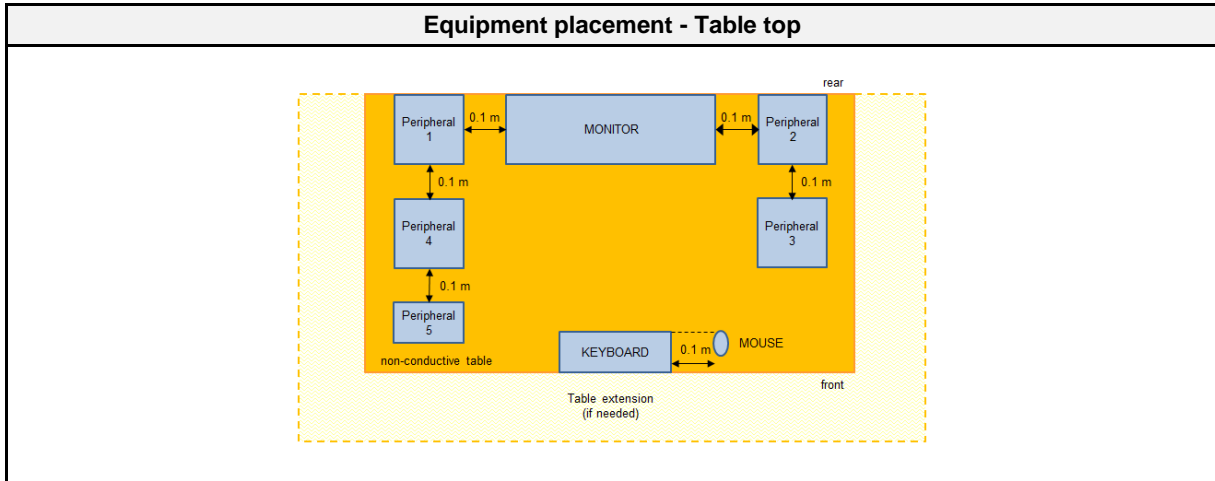
2.1 Test Conditions and Results - Radiated emissions acc. to ANSI C63.4

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]	63900
Measurement range	30 MHz to 40000 MHz
Temperature [°C]	22 ±3
Humidity [%]	51 ±3
Operator	Matthias Handrik
Date	2021-09-06 – 2021-09-16; 2021-11-26 – 2021-12-21

2.1.2 Setup





2.1.3 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
Anechoic chamber (NSA)	Frankonia	AC1	EF00062	2021-02	2024-02
Anechoic chamber (SVSWR)	Frankonia	AC 1	EF01011	2019-06	2022-06
Programmable AC Source	Chroma ATE Inc.	61604	EF01068	2021-07	2022-07
EMI Test Receiver	Keysight	N9038A-526/WXP	EF01070	2021-07	2022-07
Spectrum analyzer	Rohde & Schwarz Vertriebs GmbH	FSW43	EF00896	2021-07	2022-07
Spectrum analyzer	Rohde & Schwarz GmbH & Co. KG	FSU43	EF01631	2021-07	2022-07
Biconical Antenna	R&S	HK 116	EF00030	2021-05	2024-05
LPD Antenna	R&S	HL 223	EF00187	2019-05	2022-05
Horn Antenna	Schwarzbeck	BBHA9120D	EF00018	2019-10	2022-10
40GHz High Gain Antenna	Amplifier Research	AT4560	EF00302	2021-06	2023-06
40GHz Standard Standard Gain Horn Antenna with Amplifier	Flann Microwave Ltd	22240-25 Amp. CBL26402075	EF00301	2019-12	2022-12
Climatic Sensor	Embedded Data Systems, LLC.	2800100000254 17E	EF01054	2021-03	2022-03

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

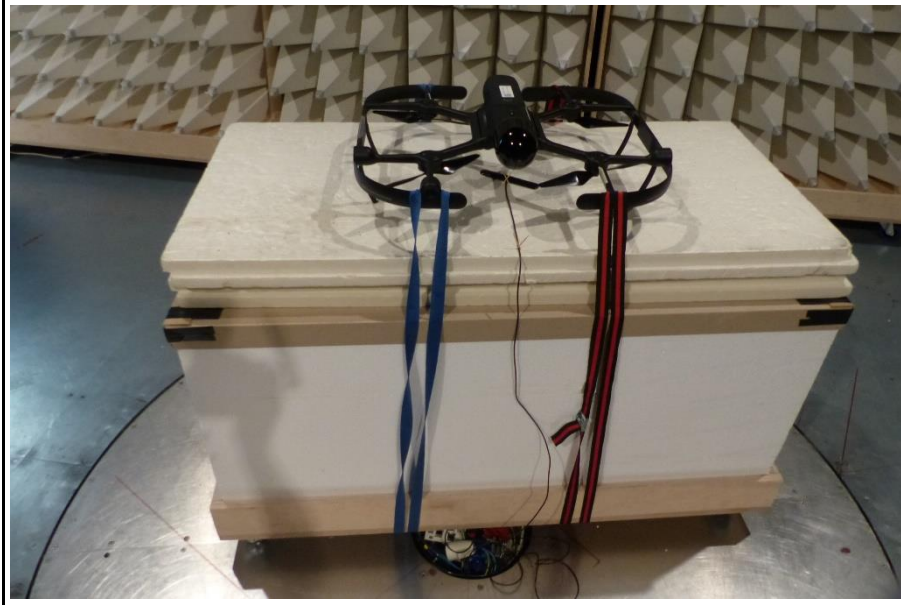
Class B @ 3 m		
Frequency [MHz]	Detector	Limit [dBµV/m]
30 - 88	Quasi-peak	40
88 - 216	Quasi-peak	43.5
216 - 960	Quasi-peak	46
960 - 1000	Quasi-peak	54
> 1000	Peak Average	74 54

2.1.6 Results

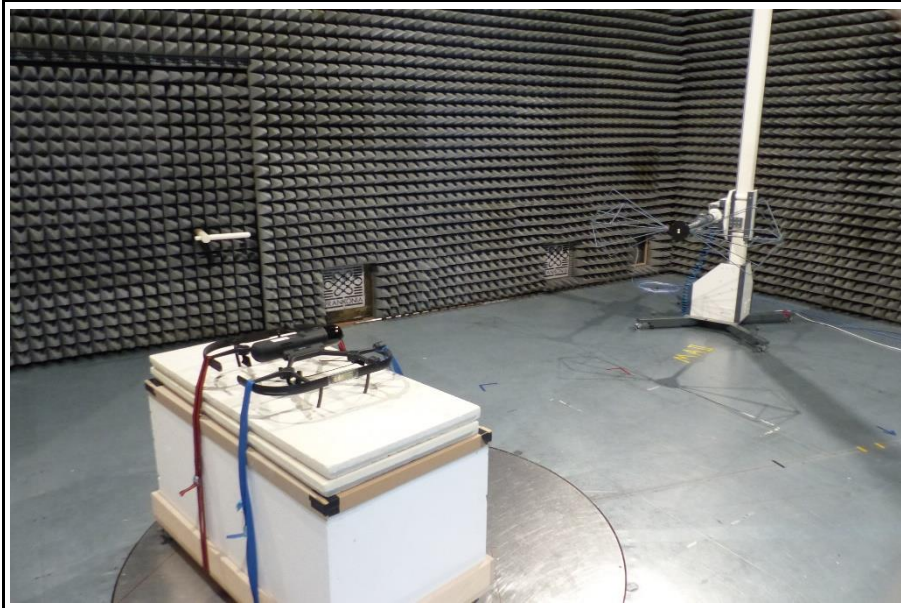
Test Results			
Operational mode	EUT Configuration	Verdict	Remark
1	1	PASS	1
2	1	PASS	2
3	1	PASS	1
4	1	PASS	2
5	2	PASS	2
6	2	PASS	2
7	2	PASS	2
8	2	PASS	2
Comment:			
1	after evaluation of worst case, measurement was performed with UMTS FDD IV		
2	after evaluation of worst case, measurement was performed with LTE FDD 12		

2.1.7 Setup Photos

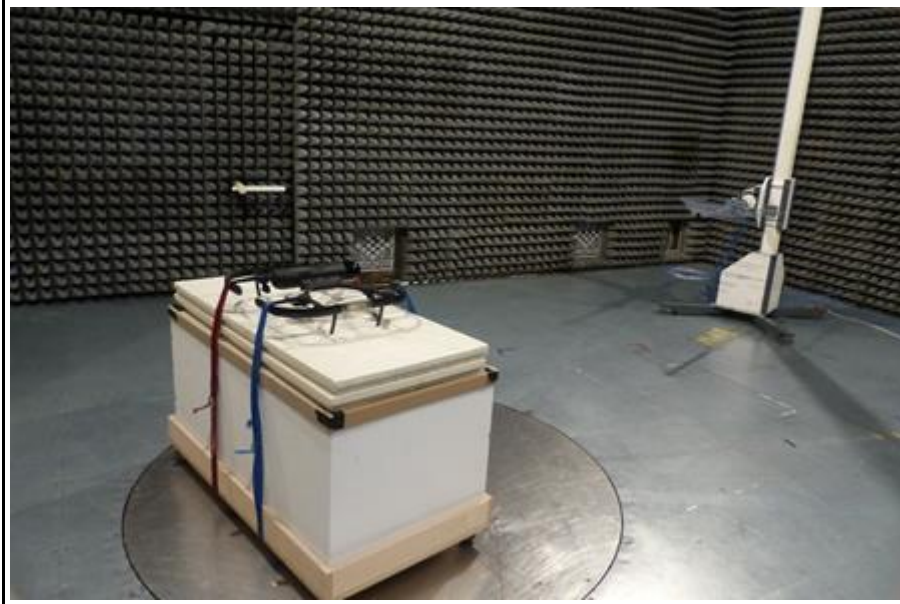
Test setup EUT Configuration 1



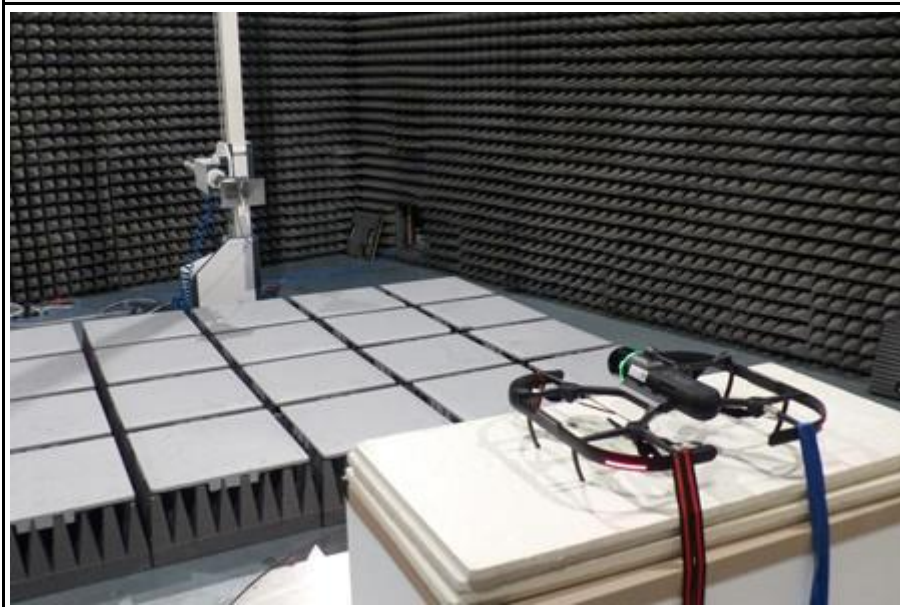
Test setup 30-200MHz EUT Configuration 1



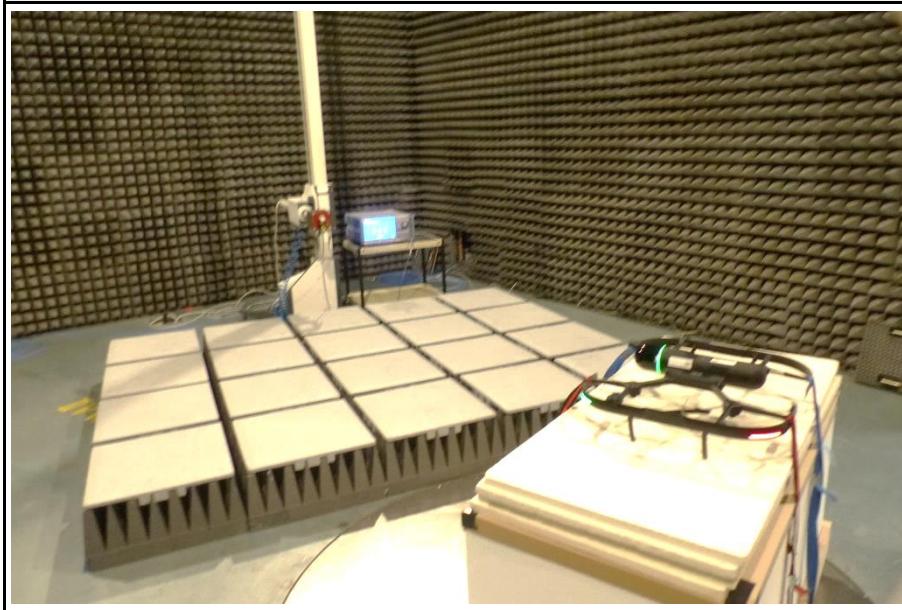
Test setup 200-1000MHz EUT Configuration 1



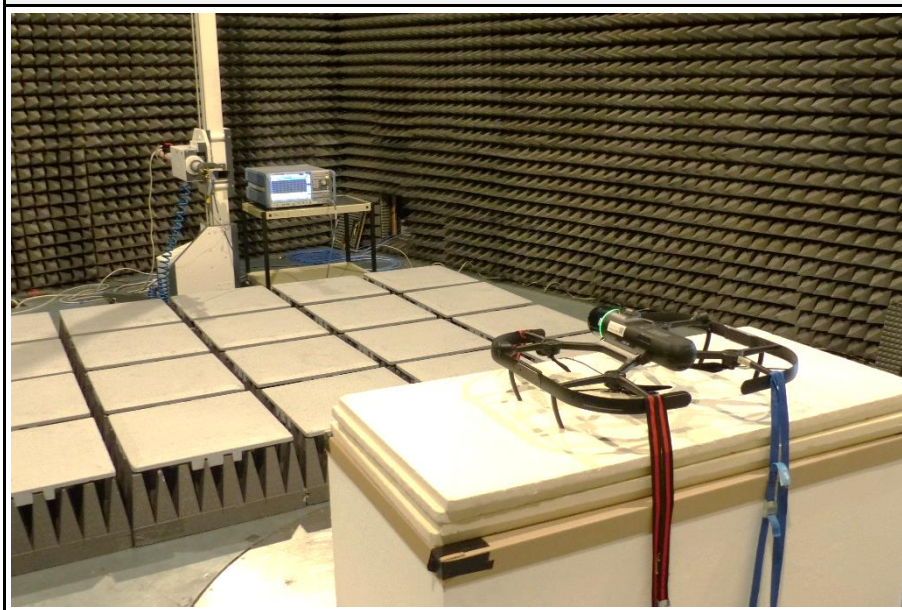
Test setup 1-17GHz EUT Configuration 1



Test setup 17-26.5GHz EUT Configuration 1



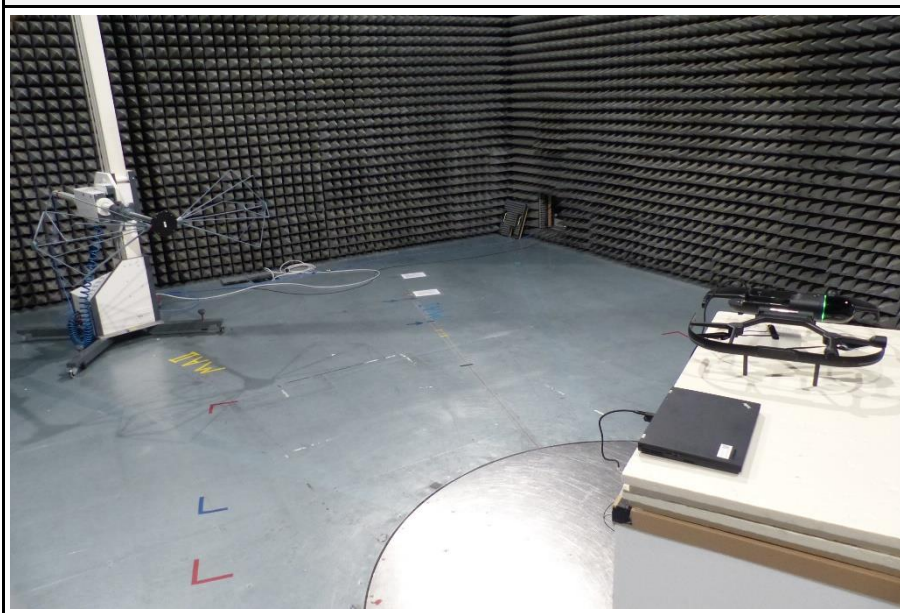
Test setup 26.5-40GHz EUT Configuration 1



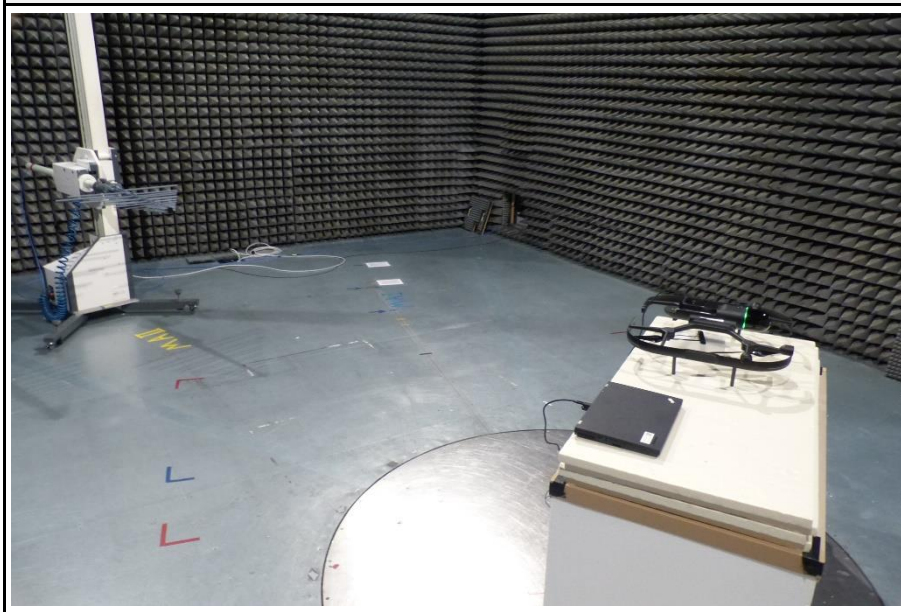
Test setup EUT Configuration 2



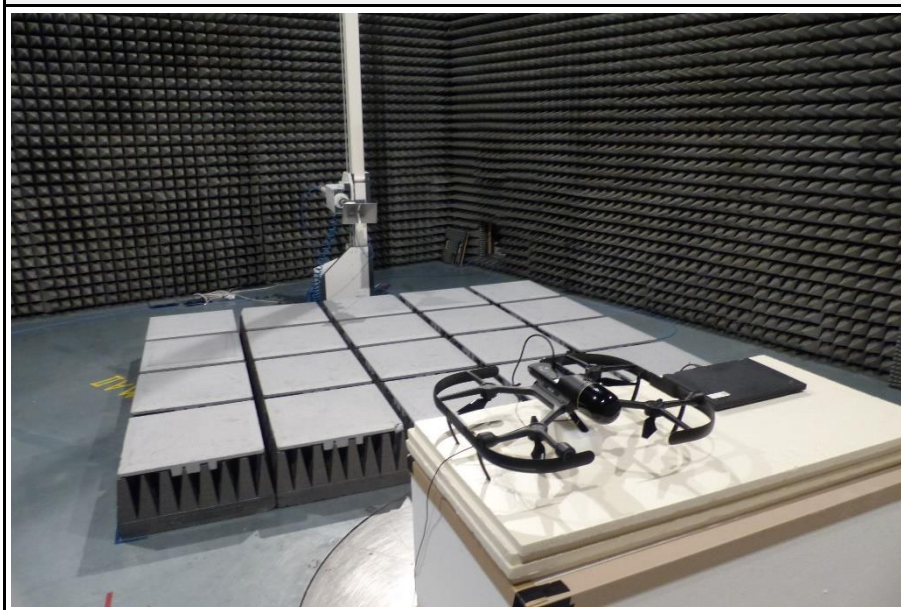
Test setup30-200MHz EUT Configuration 2



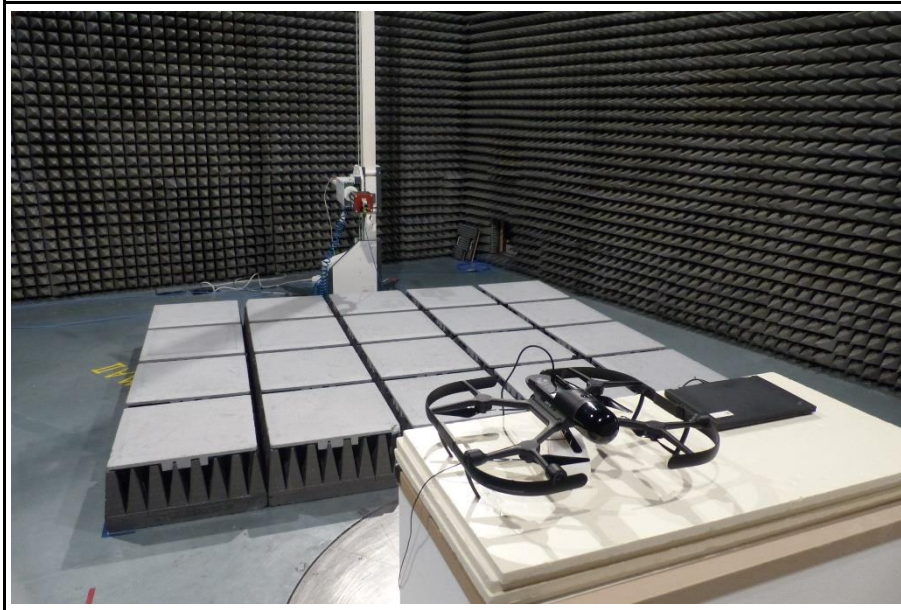
Test setup 200-1000MHz EUT Configuration 2



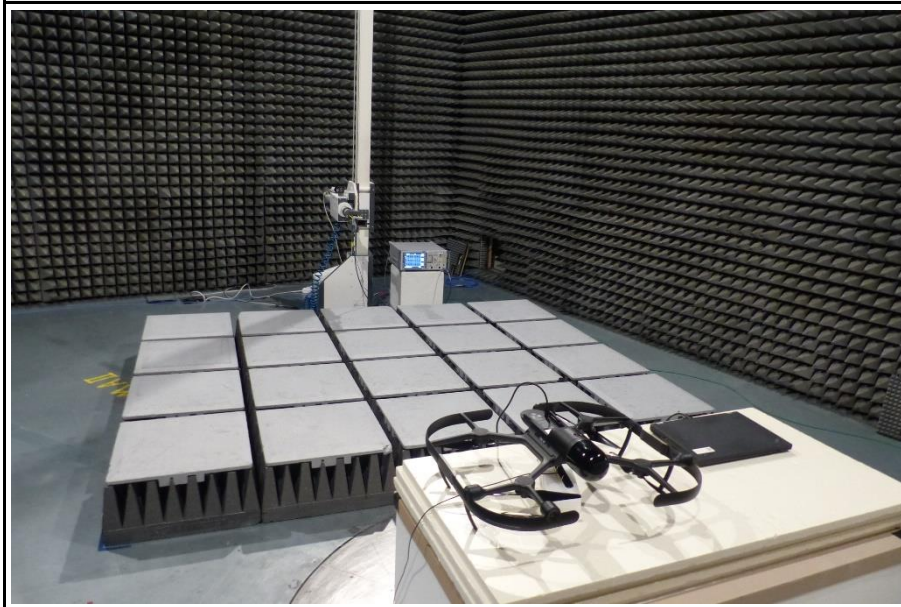
Test setup 1000-17000MHz EUT Configuration 2



Test setup 17000-26500MHz EUT Configuration 2



Test setup 26500-30000MHz EUT Configuration 2



2.1.8 Records

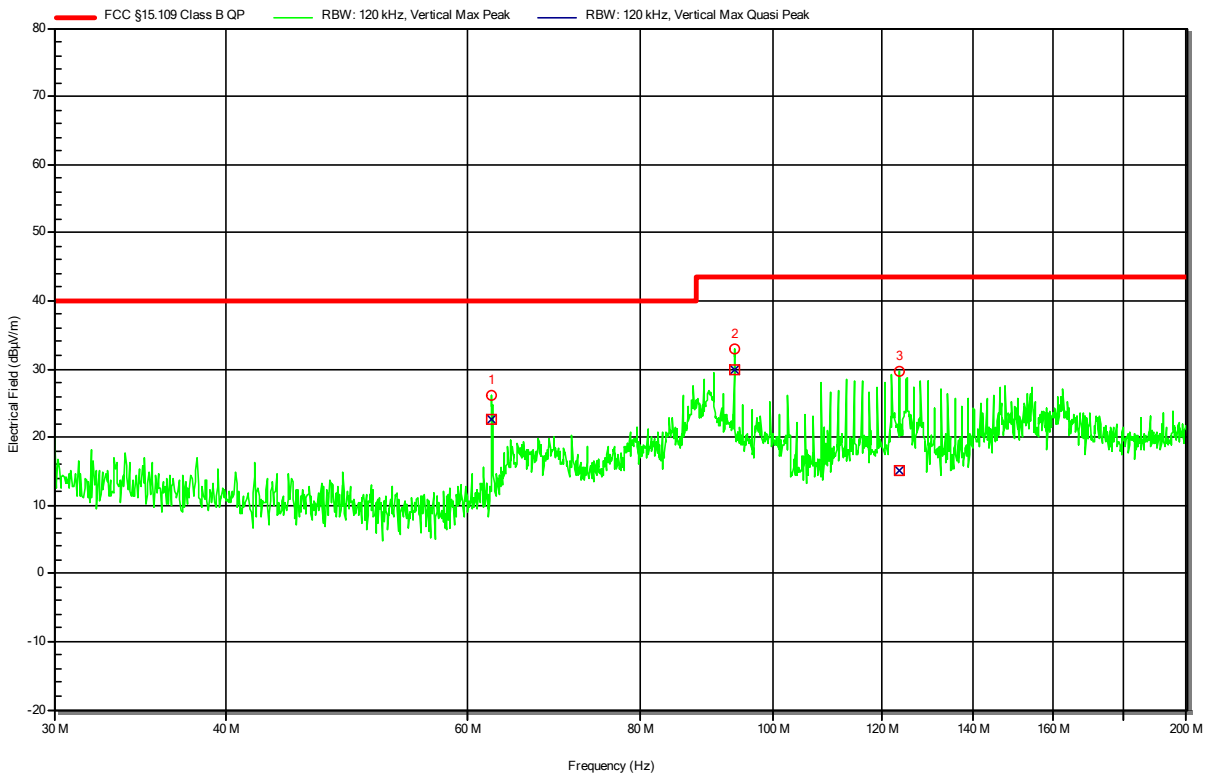
Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35554
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-09-22
 Operating Conditions: ambient temperature: 22 °Celsius
 power input: 14.8V DC
 Antenna: Rohde & Schwarz HK 116, Vertical
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 1

Note 1:

Index 73

RadiMation



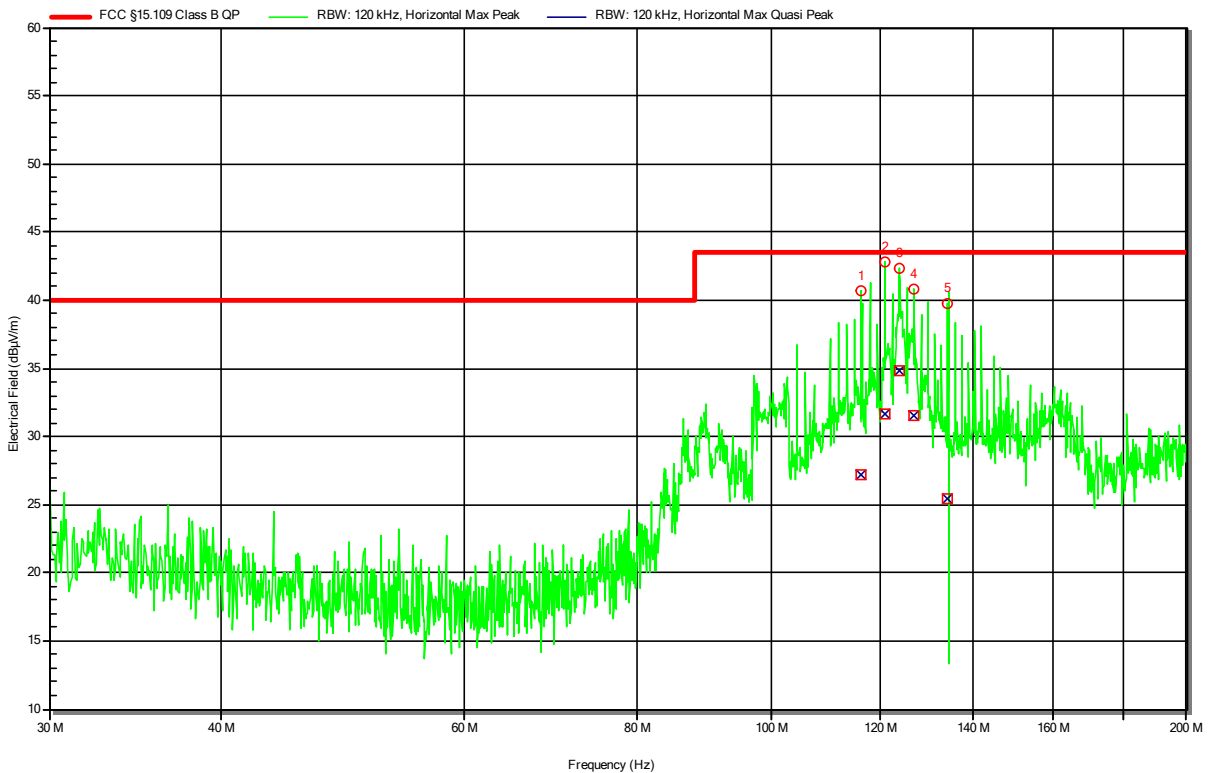
Peak Number	Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status	Angle	Height
1	62.493 MHz	22.68 dBµV/m	40 dBµV/m	-17.32 dB	Pass	154 degrees	1.7 m
2	93.755 MHz	29.89 dBµV/m	43.52 dBµV/m	-13.63 dB	Pass	154 degrees	1.7 m
3	123.533 MHz	15.09 dBµV/m	43.52 dBµV/m	-28.43 dB	Pass	154 degrees	1.7 m

Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35554
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-09-22
 Operating Conditions: ambient temperature: 22 °Celsius
 power input: 14.8V DC
 Antenna: Rohde & Schwarz HK 116, Horizontal
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 1
 Note 1:

Index 74

RadiMation



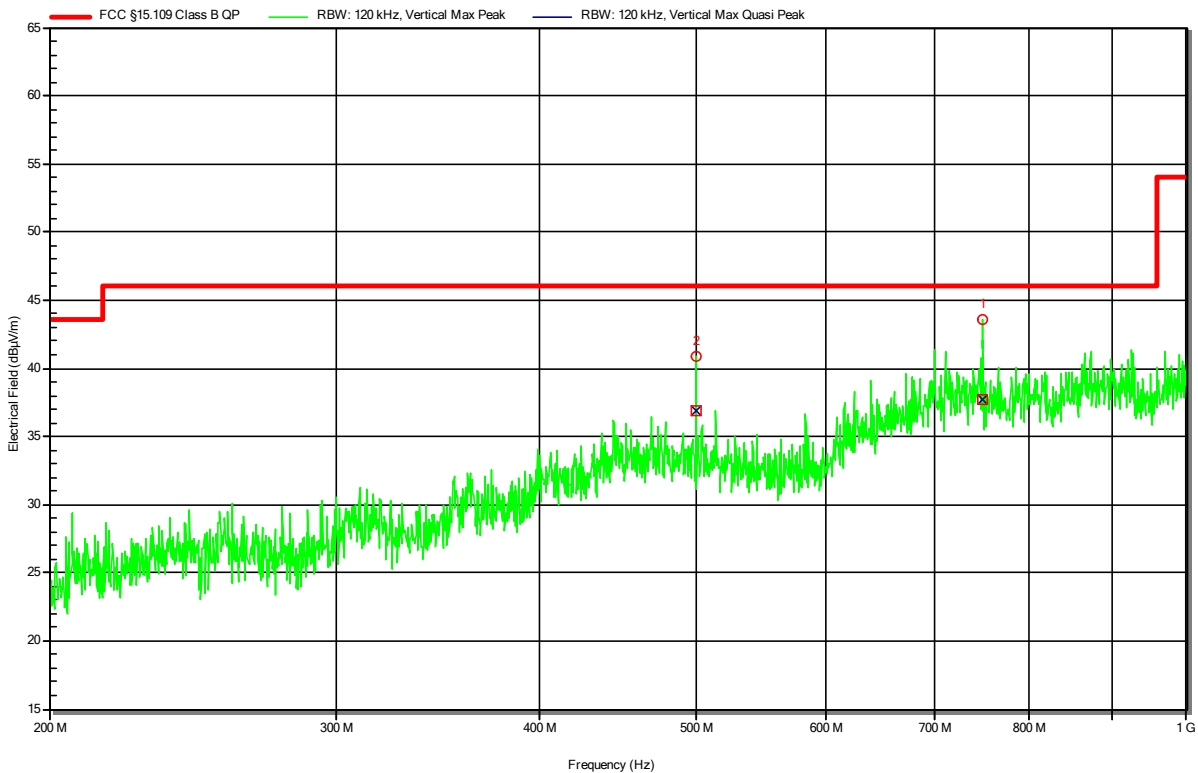
Peak Number	Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status	Angle	Height
1	116.303 MHz	27.14 dBµV/m	43.52 dBµV/m	-16.38 dB	Pass	150 degrees	2.5 m
2	120.939 MHz	31.66 dBµV/m	43.52 dBµV/m	-11.86 dB	Pass	150 degrees	2.5 m
3	123.917 MHz	34.82 dBµV/m	43.52 dBµV/m	-8.7 dB	Pass	150 degrees	2.5 m
4	126.818 MHz	31.51 dBµV/m	43.52 dBµV/m	-12.01 dB	Pass	150 degrees	2.5 m
5	134.312 MHz	25.45 dBµV/m	43.52 dBµV/m	-18.07 dB	Pass	150 degrees	2.5 m

Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35554
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-09-22
 Operating Conditions: ambient temperature: 22 °Celsius
 power input: 14.8V DC
 Antenna: Rohde & Schwarz HL 223, Vertical
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 1
 Note 1:

Index 76

RadiMation



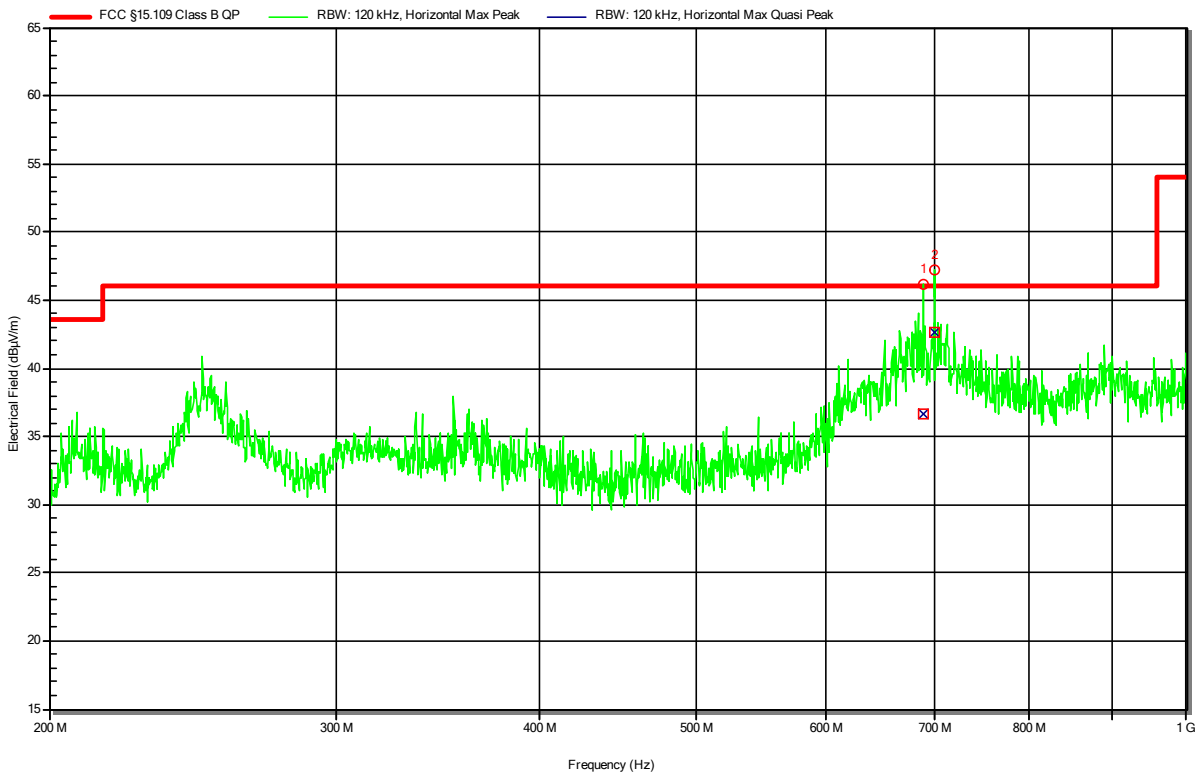
Peak Number	Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status	Angle	Height
1	749.979 MHz	37.74 dBµV/m	46.02 dBµV/m	-8.28 dB	Pass	180 degrees	1.7 m
2	499.988 MHz	36.9 dBµV/m	46.02 dBµV/m	-9.12 dB	Pass	180 degrees	1.7 m

Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35554
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-09-22
 Operating Conditions: ambient temperature: 22 °Celsius
 power input: 14.8V DC
 Antenna: Rohde & Schwarz HL 223, Horizontal
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 1
 Note 1:

Index 75

RadiMation



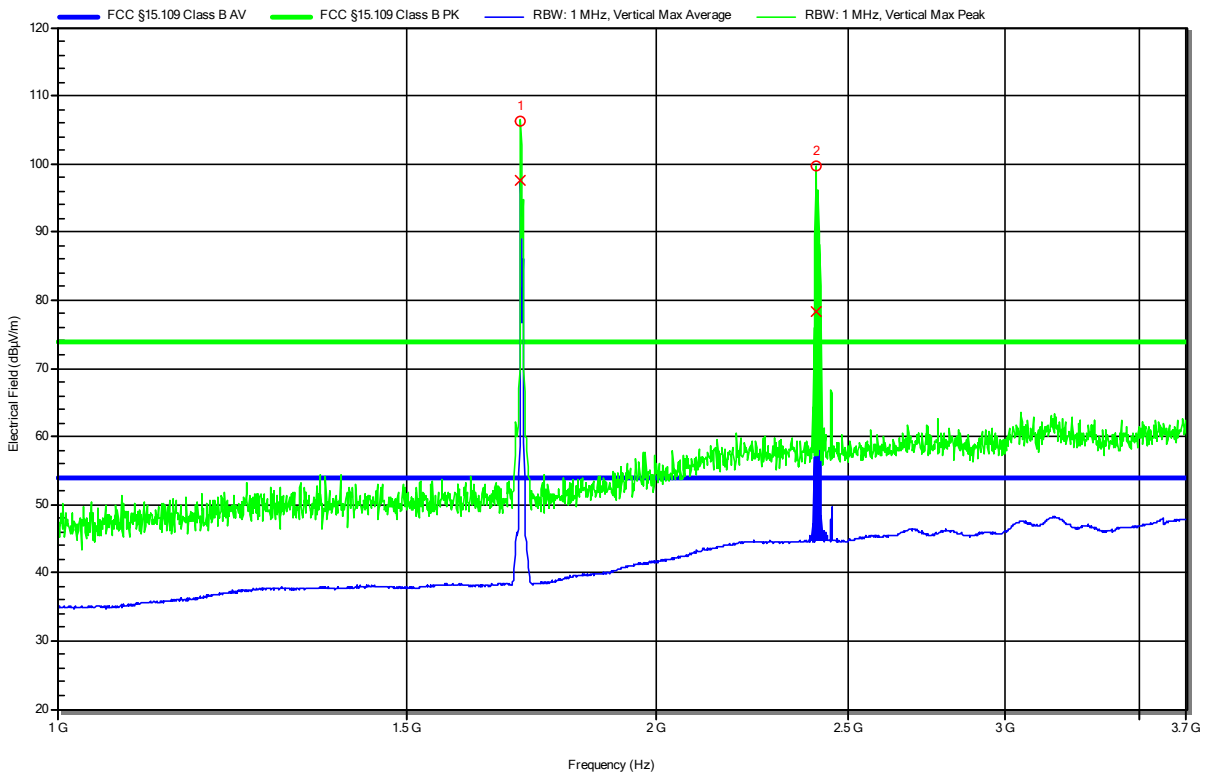
Peak Number	Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status	Angle	Height
1	689.283 MHz	36.63 dBµV/m	46.02 dBµV/m	-9.39 dB	Pass	-160 degrees	1 m
2	700 MHz	42.59 dBµV/m	46.02 dBµV/m	-3.43 dB	Pass	-160 degrees	1 m

Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35554
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-09-16
 Operating Conditions: ambient temperature: 22 °Celsius
 power input: 14.8V DC
 Antenna: Schwarzbeck BBHA 9120D, Vertical
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 1
 Note 1:

Index 53

RadiMation



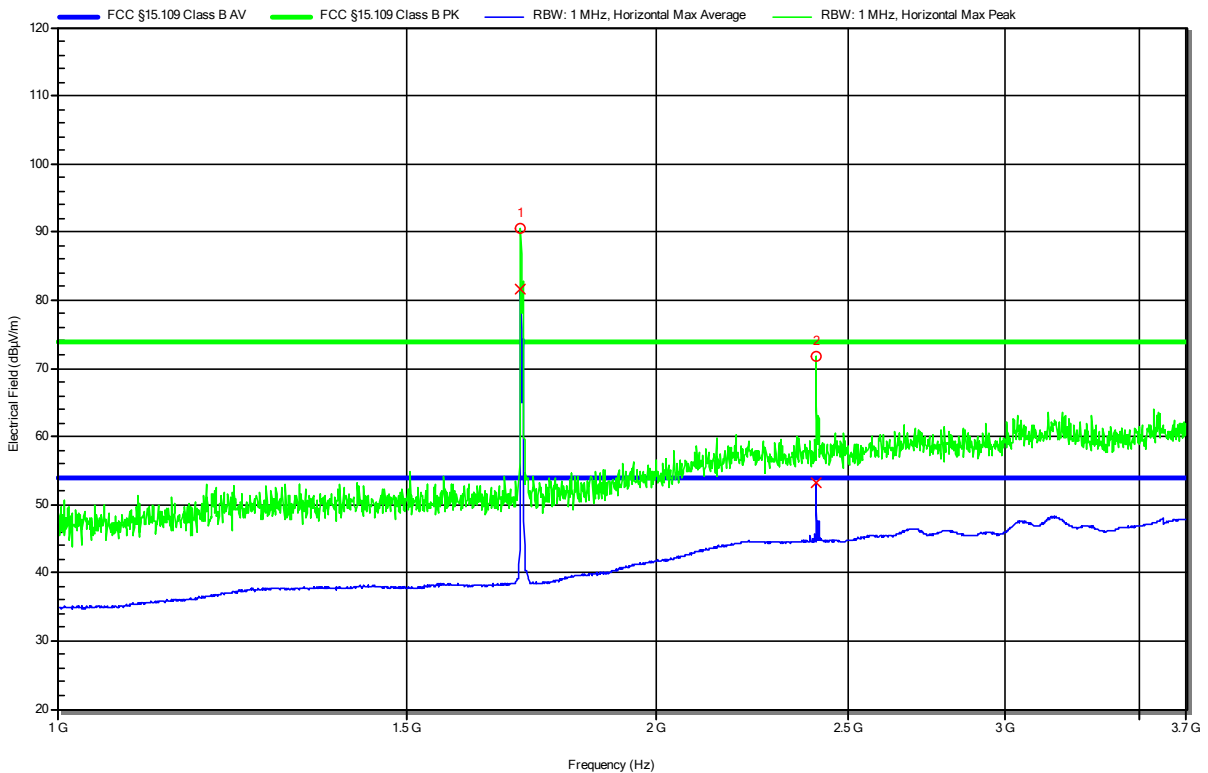
Peak Number	Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Angle	Height
1	1.711 GHz	106.38 dBµV/m	Mobile communication carrier				
2	2.411 GHz	99.63 dBµV/m	WLAN carrier				

Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35554
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-09-16
 Operating Conditions: ambient temperature: 22 °Celsius
 power input: 14.8V DC
 Antenna: Schwarzbeck BBHA 9120D, Horizontal
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 1
 Note 1:

Index 54

RadiMation



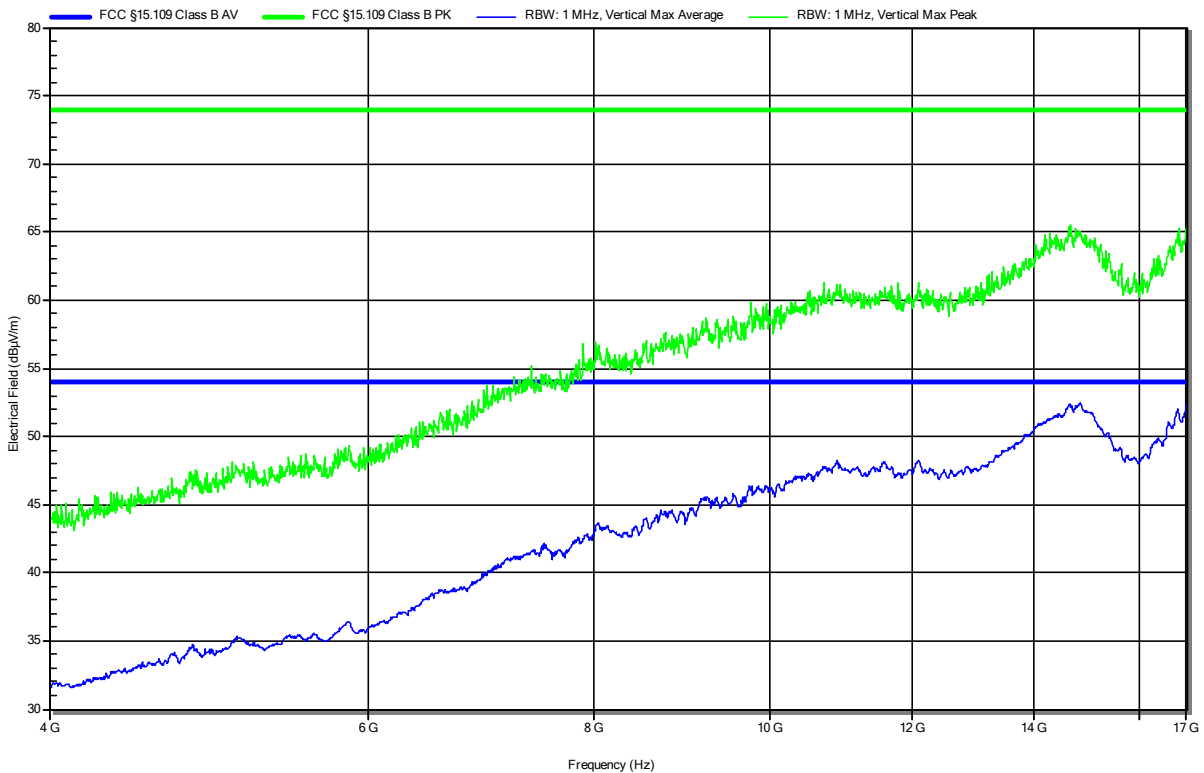
Peak Number	Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Angle	Height
1	1.711 GHz	Mobile communication carrier					
2	2.409 GHz	WLAN carrier					

Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35554
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-09-16
 Operating Conditions: ambient temperature: 22 °Celsius
 power input: 14.8V DC
 Antenna: Schwarzbeck BBHA 9120D, Vertical
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 1
 Note 1:

Index 60

RadiMation

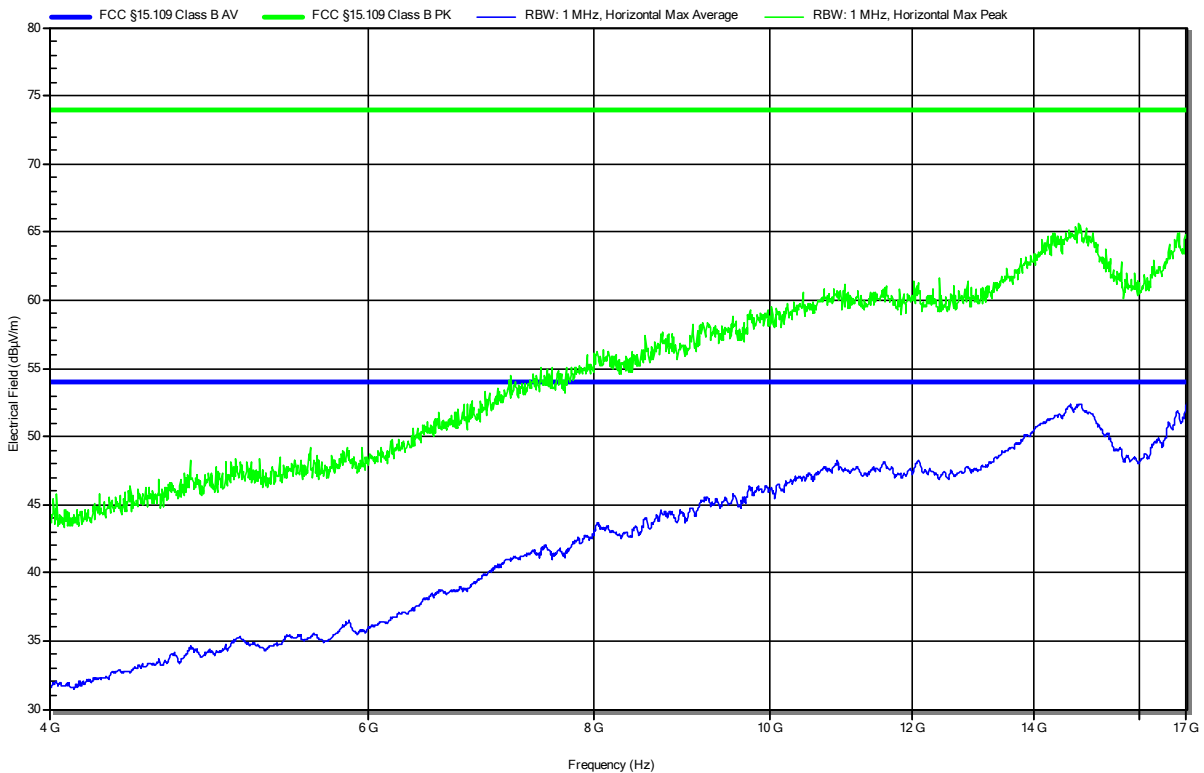


Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35554
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-09-16
 Operating Conditions: ambient temperature: 22 °Celsius
 power input: 14.8V DC
 Antenna: Schwarzbeck BBHA 9120D, Horizontal
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 1
 Note 1:

Index 59

RadiMation

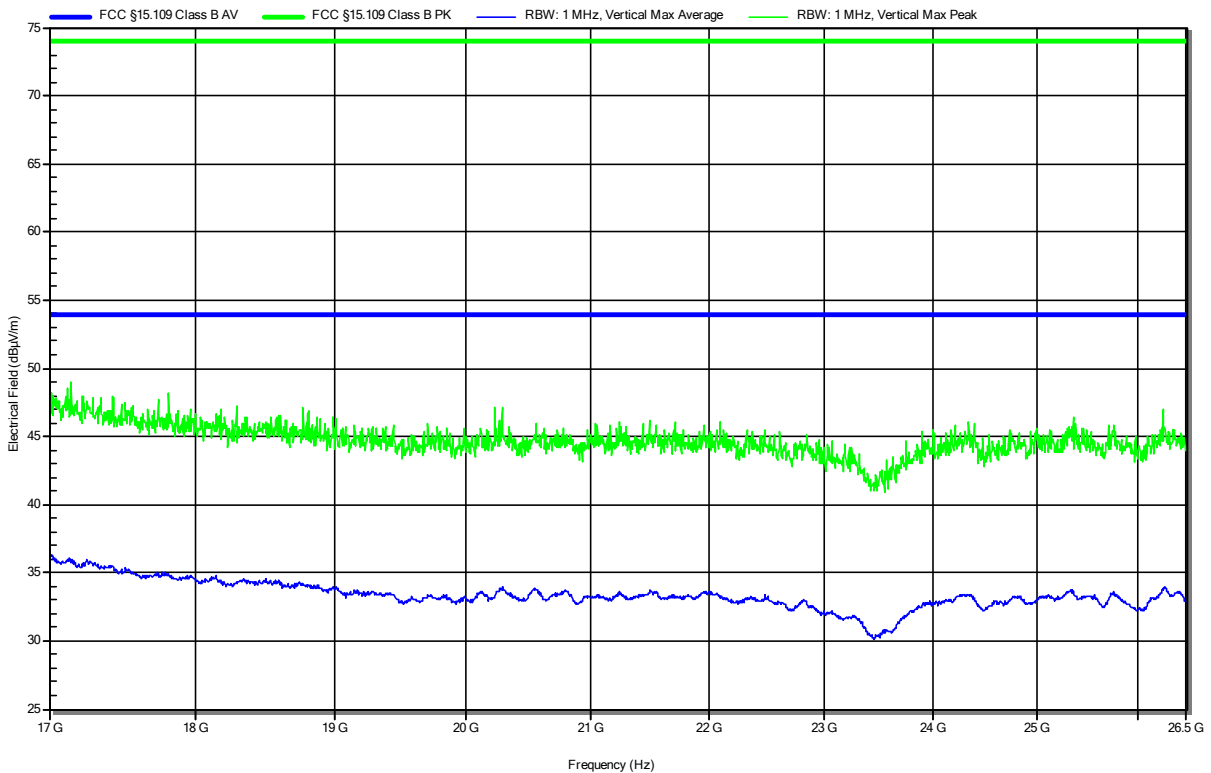


Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35554
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-09-14
 Operating Conditions: ambient temperature: 22 °Celsius
 power input: 14.8V DC
 Antenna: Configurable Antenna, Vertical
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 1
 Note 1:

Index 43

Radiation

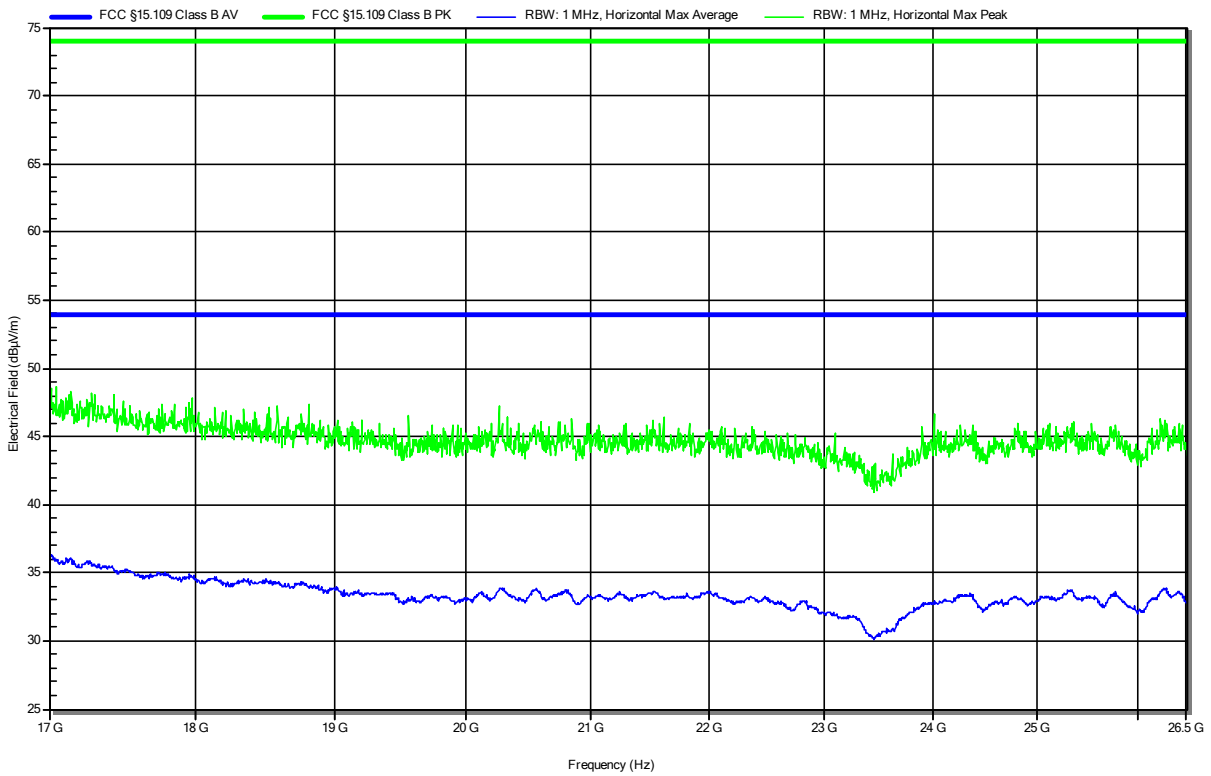


Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35554
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-09-14
 Operating Conditions: ambient temperature: 22 °Celsius
 power input: 14.8V DC
 Antenna: Configurable Antenna, Horizontal
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 1
 Note 1:

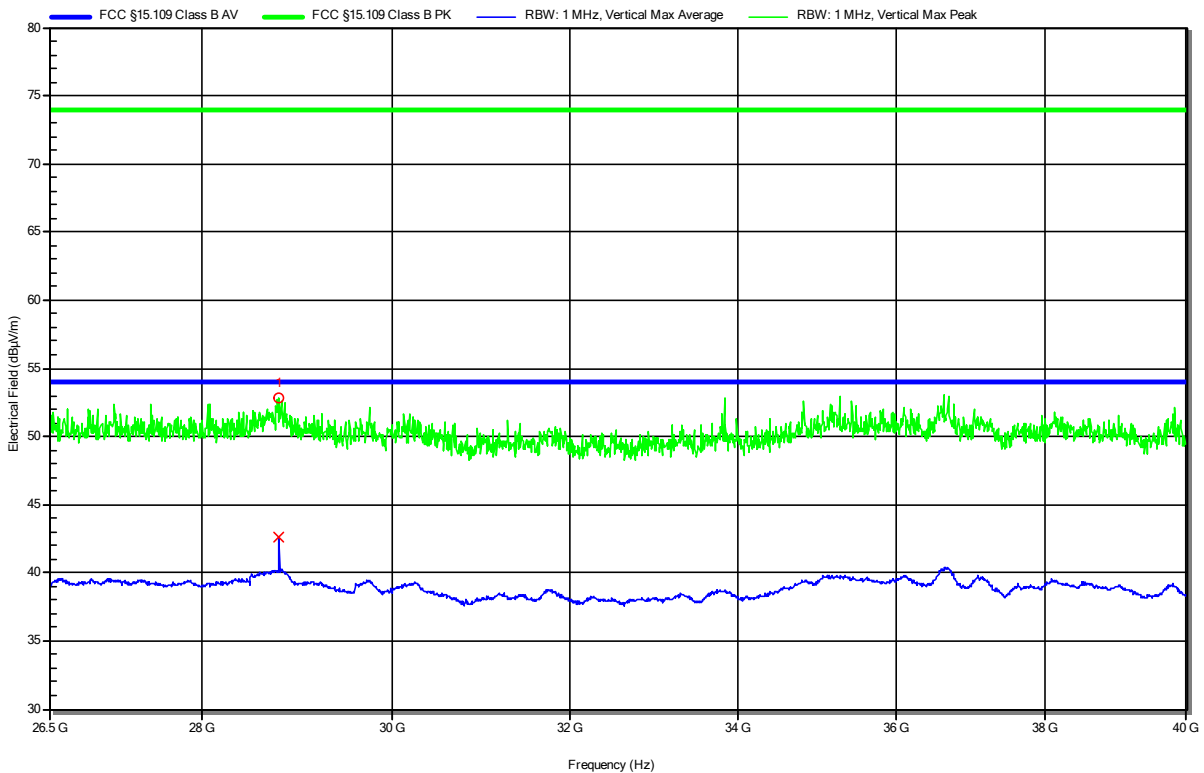
Index 42

RadiMation



Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35554
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-09-14
 Operating Conditions: ambient temperature: 22 °Celsius
 power input: 14.8V DC
 Antenna: Configurable Antenna, Vertical
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 1
 Note 1:



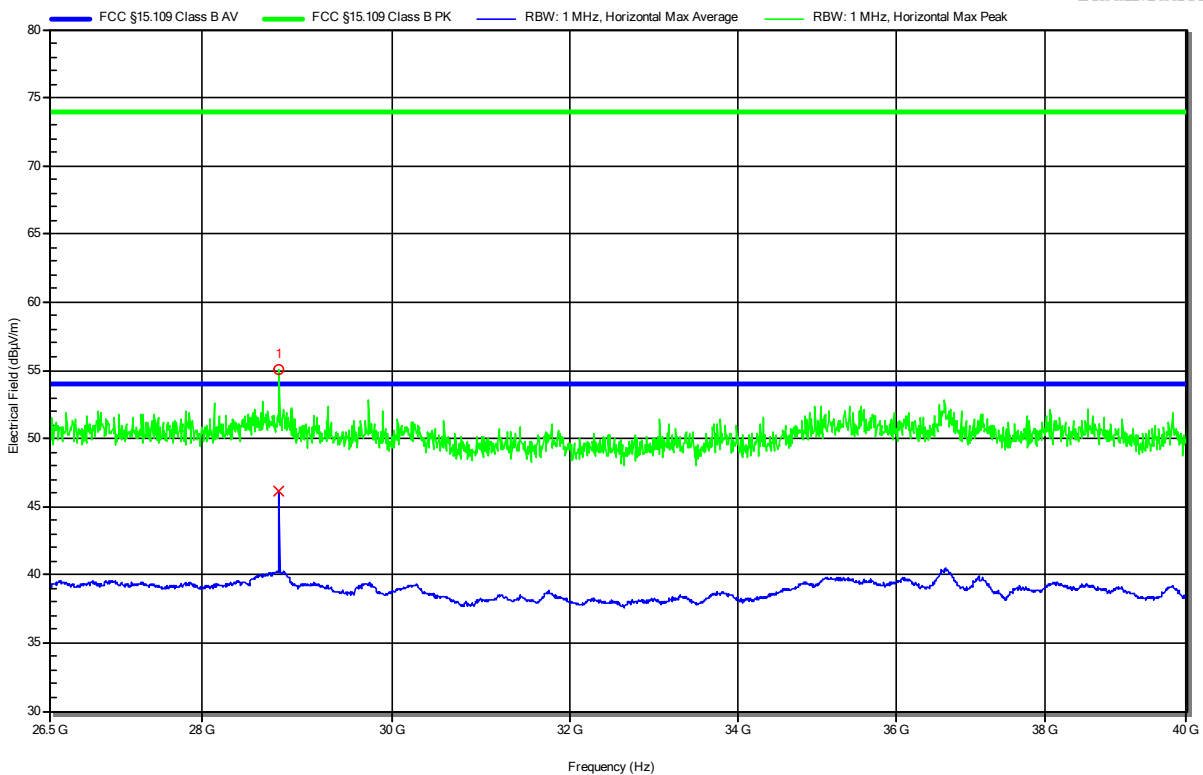
Peak Number	Frequency	Peak	Peak Limit	PeakDifference	Peak Status	Angle	Height
1	28.799 GHz	52.78 dBµV/m	74 dBµV/m	-21.22 dB	Pass	0 degrees	1 m
Peak Number	Frequency	Average	Average Limit	Average Difference	Average Status	Angle	Height
1	28.799 GHz	42.67 dBµV/m	53.98 dBµV/m	-11.31 dB	Pass	0 degrees	1 m

Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35554
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-09-14
 Operating Conditions: ambient temperature: 22 °Celsius
 power input: 14.8V DC
 Antenna: Configurable Antenna, Horizontal
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 1
 Note 1:

Index 33

Radiation



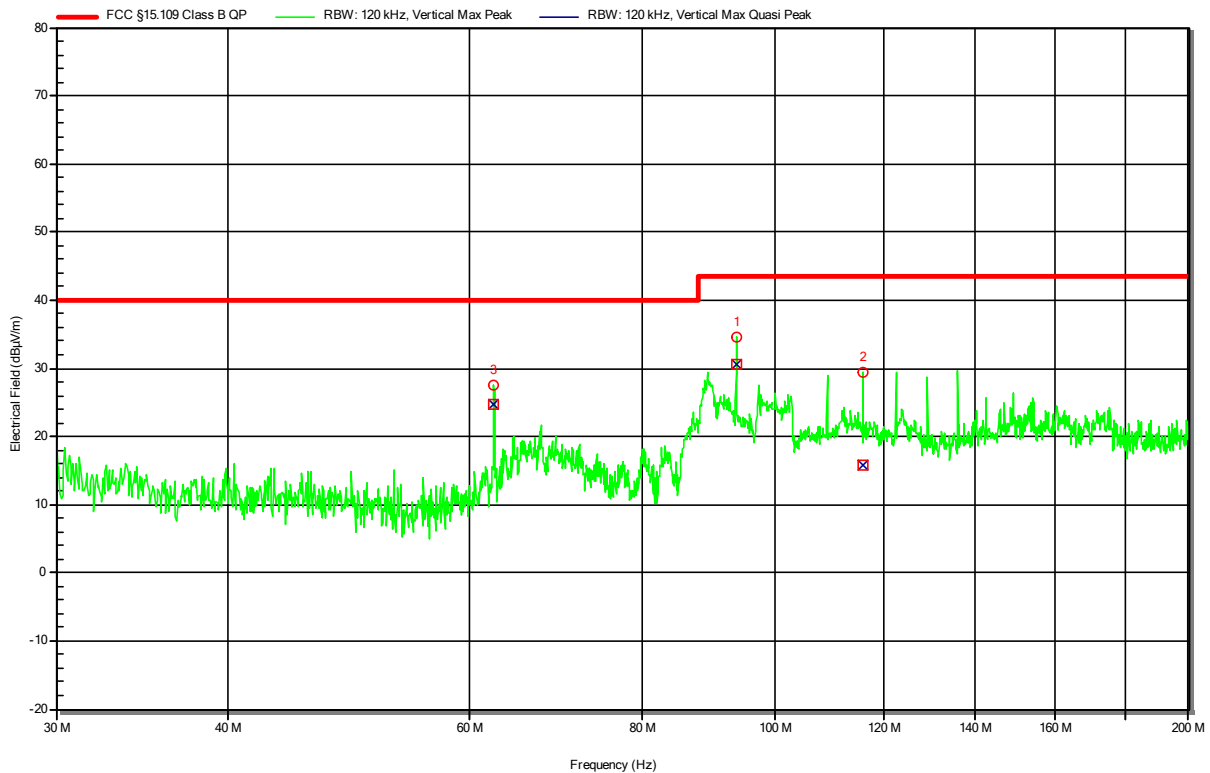
Peak Number	Frequency	Peak	Peak Limit	PeakDifference	Peak Status	Angle	Height
1	28.799 GHz	55.07 dBµV/m	74 dBµV/m	-18.93 dB	Pass	0 degrees	1 m
Peak Number	Frequency	Average	Average Limit	Average Difference	Average Status	Angle	Height
1	28.799 GHz	46.09 dBµV/m	53.98 dBµV/m	-7.89 dB	Pass	0 degrees	1 m

Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35554
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-09-22
 Operating Conditions: ambient temperature: 22 °Celsius
 power input: 14.8V DC
 Antenna: Rohde & Schwarz HK 116, Vertical
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 2
 1
 Note 1:

Index 79

RadiMation



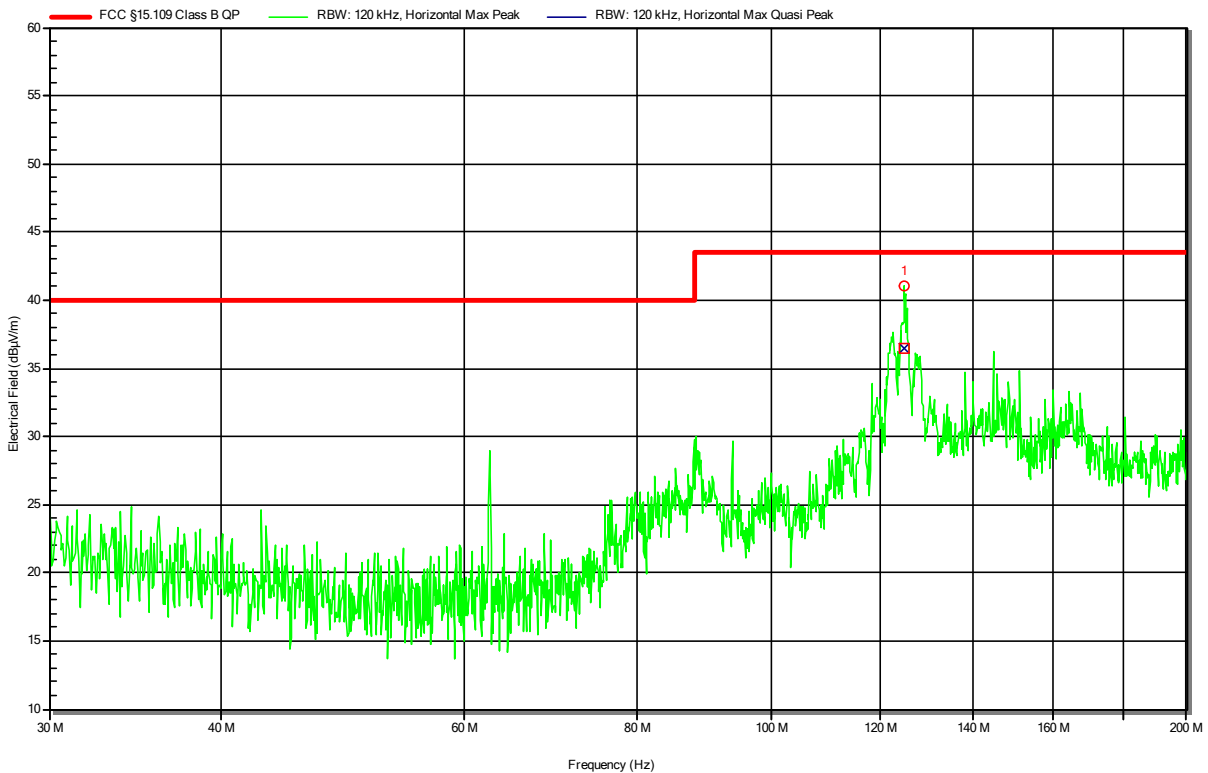
Peak Number	Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status	Angle	Height
1	93.749 MHz	30.66 dBµV/m	43.52 dBµV/m	-12.86 dB	Pass	102 degrees	1 m
2	115.787 MHz	15.74 dBµV/m	43.52 dBµV/m	-27.78 dB	Pass	102 degrees	1 m
3	62.505 MHz	24.71 dBµV/m	40 dBµV/m	-15.29 dB	Pass	102 degrees	1 m

Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35554
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-09-22
 Operating Conditions: ambient temperature: 22 °Celsius
 power input: 14.8V DC
 Antenna: Rohde & Schwarz HK 116, Horizontal
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 2
 1
 Note 1:

Index 80

RadiMation



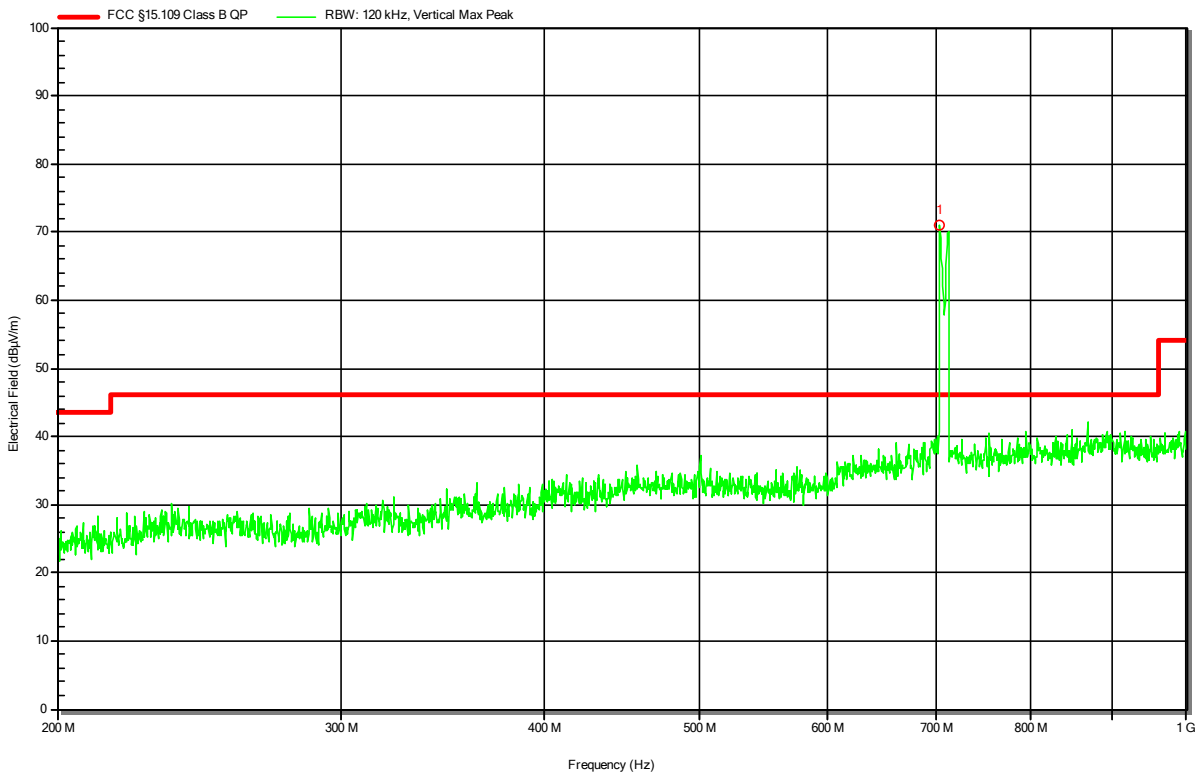
Peak Number	Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status	Angle	Height
1	124.998 MHz	36.52 dBµV/m	43.52 dBµV/m	-7 dB	Pass	-80 degrees	2.7 m

Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35554
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-09-22
 Operating Conditions: ambient temperature: 22 °Celsius
 power input: 14.8V DC
 Antenna: Rohde & Schwarz HL 223, Vertical
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 2
 Note 1: Notchfilter for Mobile communication

Index 77

RadiMation



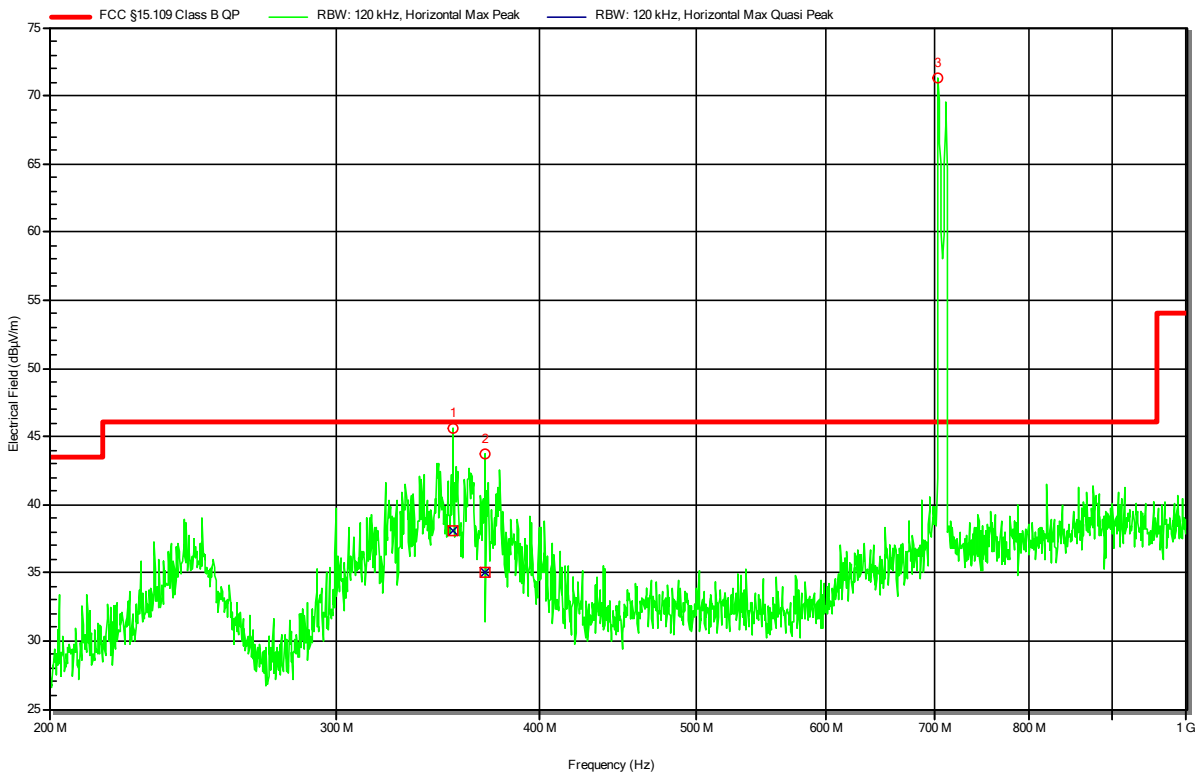
Peak Number	Frequency	Angle	Height
1	703.392 MHz	Mobile communication carrier	

Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35554
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-09-22
 Operating Conditions: ambient temperature: 22 °Celsius
 power input: 14.8V DC
 Antenna: Rohde & Schwarz HL 223, Horizontal
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 2
 Note 1: Notchfilter for Mobile communication

Index 78

RadiMation



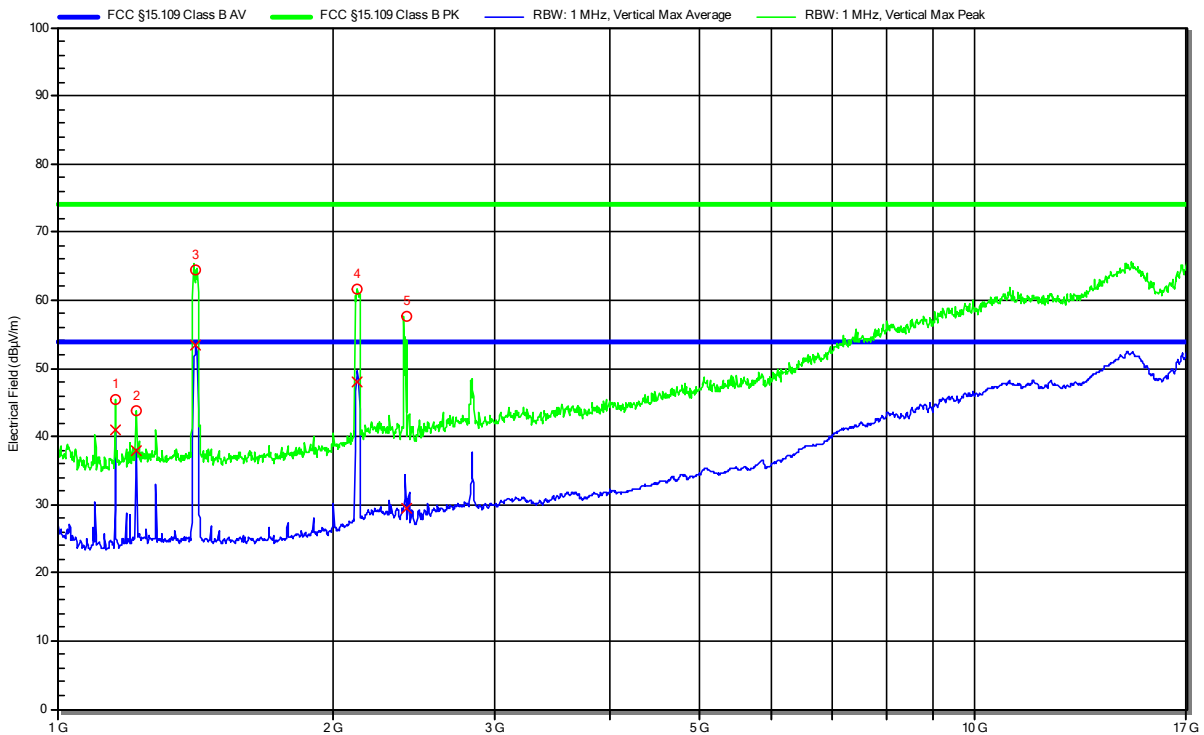
Peak Number	Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status	Angle	Height
1	354.188 MHz	38.07 dBµV/m	46.02 dBµV/m	-7.95 dB	Pass	-80 degrees	1 m
2	370.459 MHz	35.05 dBµV/m	46.02 dBµV/m	-10.97 dB	Pass	-80 degrees	1 m
3	703.392 MHz	Mobile communication carrier					

Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35554
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-09-16
 Operating Conditions: ambient temperature: 22 °Celsius
 power input: 14.8V DC
 Antenna: Schwarzbeck BBHA 9120D, Vertical
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 2
 1
 Note 1: Notchfilter for 2.4GHz ISM Band

Index 44

RadiMation



Peak Number	Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Angle	Height
1	1.157 GHz	45.33 dBµV/m	73.98 dBµV/m	-28.65 dB	Pass	-22 degrees	2.54 m
2	1.219 GHz	43.67 dBµV/m	73.98 dBµV/m	-30.31 dB	Pass	-22 degrees	2.54 m
3	1.415 GHz	2 nd harmonic Mobile communication					
4	2.119 GHz	3 rd harmonic Mobile communication					
5	2.4 GHz	WLAN carrier					

Peak Number	Frequency	Average	Average Limit	Average Difference	Average Status	Angle	Height
1	1.157 GHz	41.06 dBµV/m	53.98 dBµV/m	-12.92 dB	Pass	-22 degrees	2.54 m
2	1.219 GHz	38 dBµV/m	53.98 dBµV/m	-15.98 dB	Pass	-22 degrees	2.54 m
3	1.415 GHz	2 nd harmonic Mobile communication					
4	2.119 GHz	3 rd harmonic Mobile communication					
5	2.4 GHz	WLAN carrier					

Test Report No.: G0M-2011-9488-EF0115B-V02

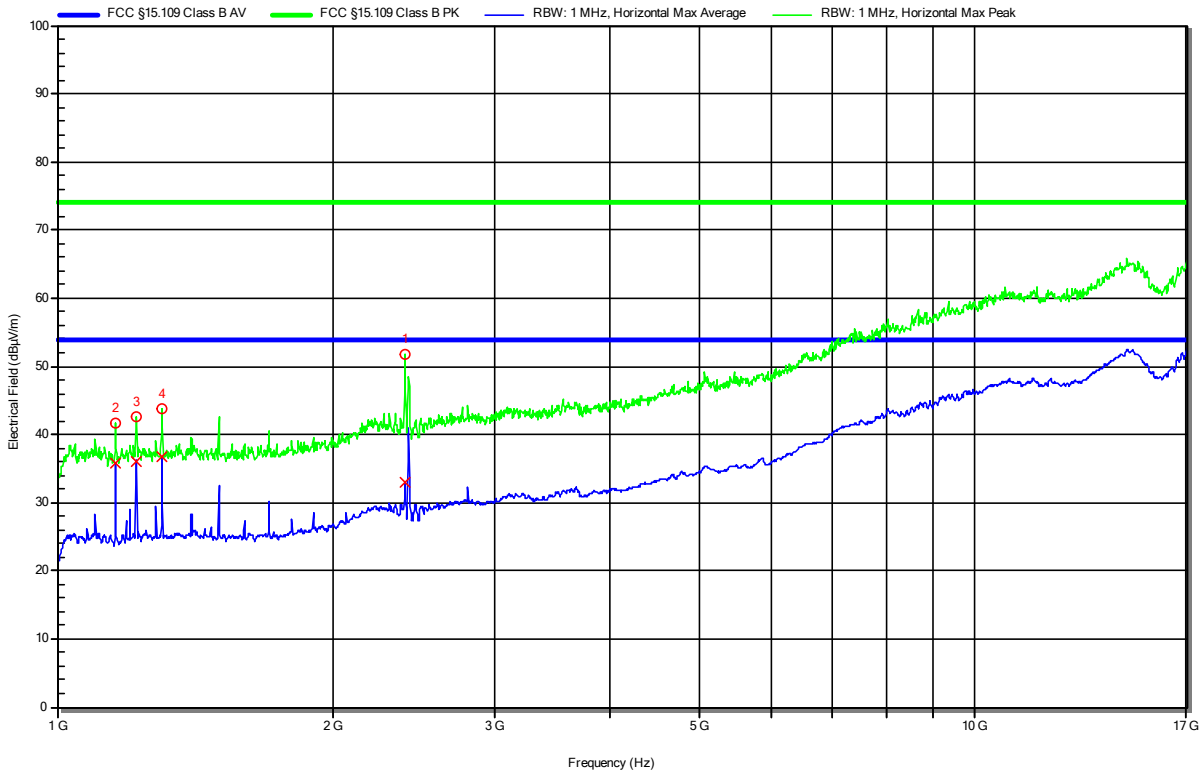
Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35554
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-09-16
 Operating Conditions: ambient temperature: 22 °Celsius
 power input: 14.8V DC
 Antenna: Schwarzbeck BBHA 9120D, Horizontal
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 2
 1
 Note 1: Notchfilter for 2.4GHz ISM Band

Index 47

RadiMation



Peak Number	Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Angle	Height
1	2.391 GHz	WLAN carrier					
2	1.157 GHz	41.69 dBµV/m	73.98 dBµV/m	-32.29 dB	Pass	-71 degrees	1 m
3	1.219 GHz	42.56 dBµV/m	73.98 dBµV/m	-31.42 dB	Pass	-71 degrees	1 m
4	1.3 GHz	43.76 dBµV/m	73.98 dBµV/m	-30.22 dB	Pass	-71 degrees	1 m

Peak Number	Frequency	Average	Average Limit	Average Difference	Average Status	Angle	Height
1	2.391 GHz	WLAN carrier					
2	1.157 GHz	35.71 dBµV/m	53.98 dBµV/m	-18.27 dB	Pass	-71 degrees	1 m
3	1.219 GHz	36.14 dBµV/m	53.98 dBµV/m	-17.84 dB	Pass	-71 degrees	1 m
4	1.3 GHz	36.72 dBµV/m	53.98 dBµV/m	-17.26 dB	Pass	-71 degrees	1 m

Test Report No.: G0M-2011-9488-EF0115B-V02

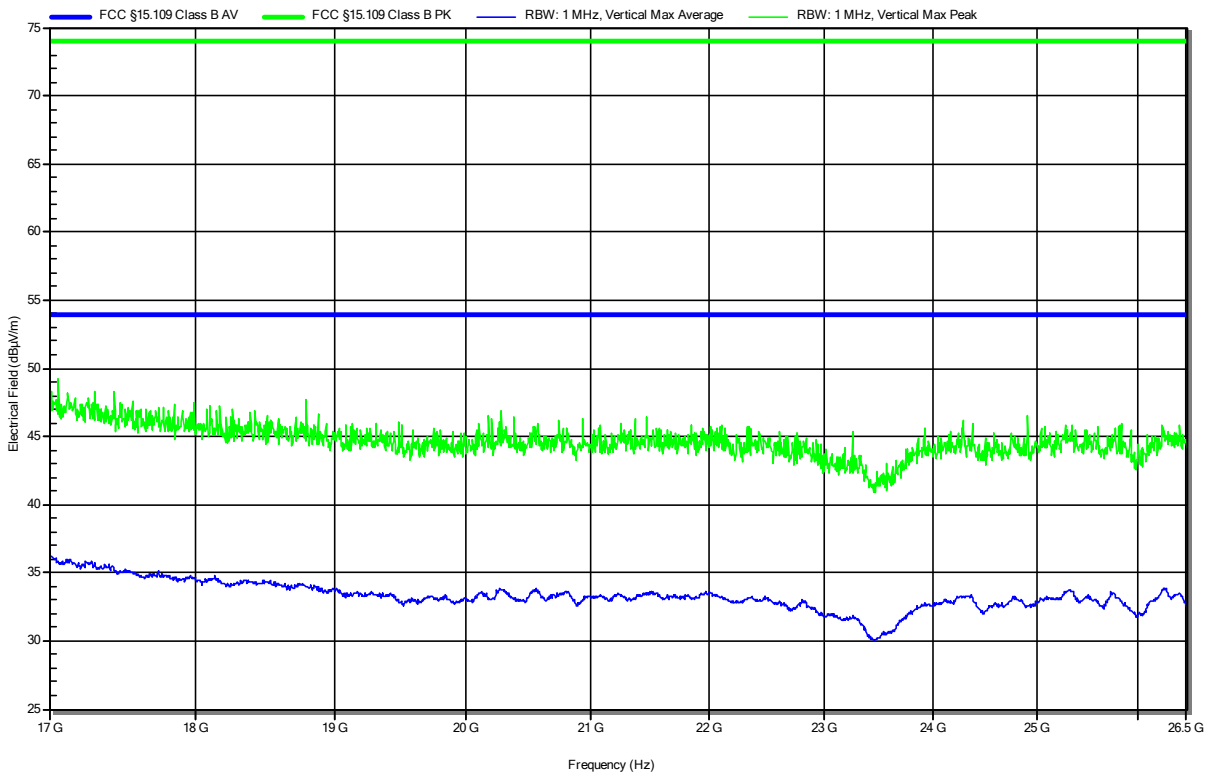
Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35554
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-09-14
 Operating Conditions: ambient temperature: 22 °Celsius
 power input: 14.8V DC
 Antenna: AT4560, Vertical
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 2
 1
 Note 1:

Index 39

Radiation

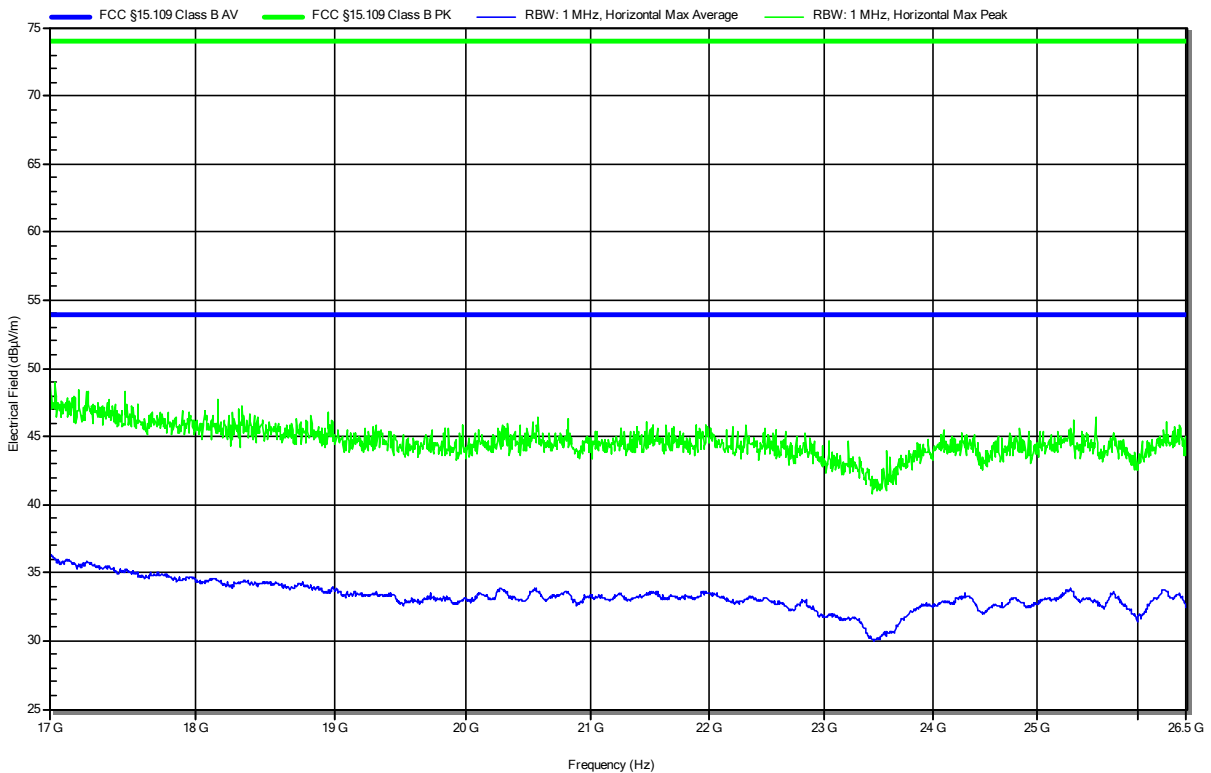


Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35554
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-09-14
 Operating Conditions: ambient temperature: 22 °Celsius
 power input: 14.8V DC
 Antenna: AT4560, Horizontal
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 2
 1
 Note 1:

Index 38

Radiation

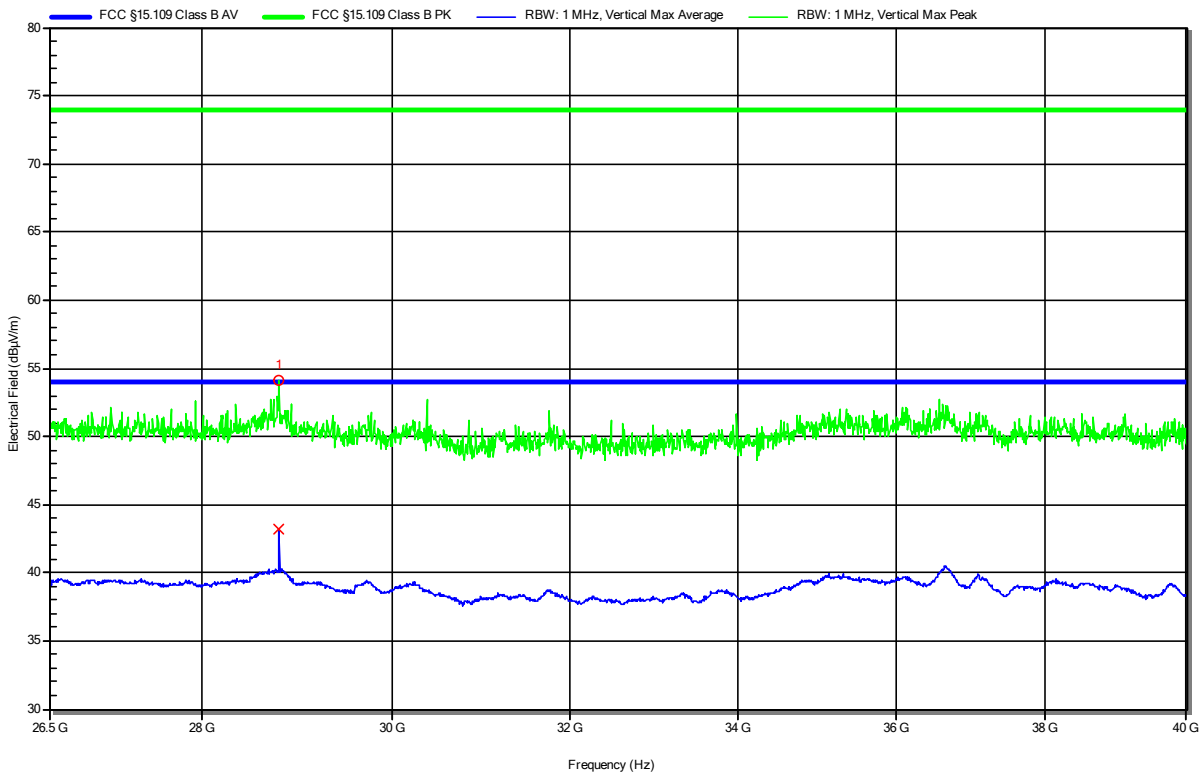


Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35554
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-09-14
 Operating Conditions: ambient temperature: 22 °Celsius
 power input: 14.8V DC
 Antenna: 22240-25 Amp. CBL26402075, Vertical
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 2
 1
 Note 1:

Index 31

Radiation



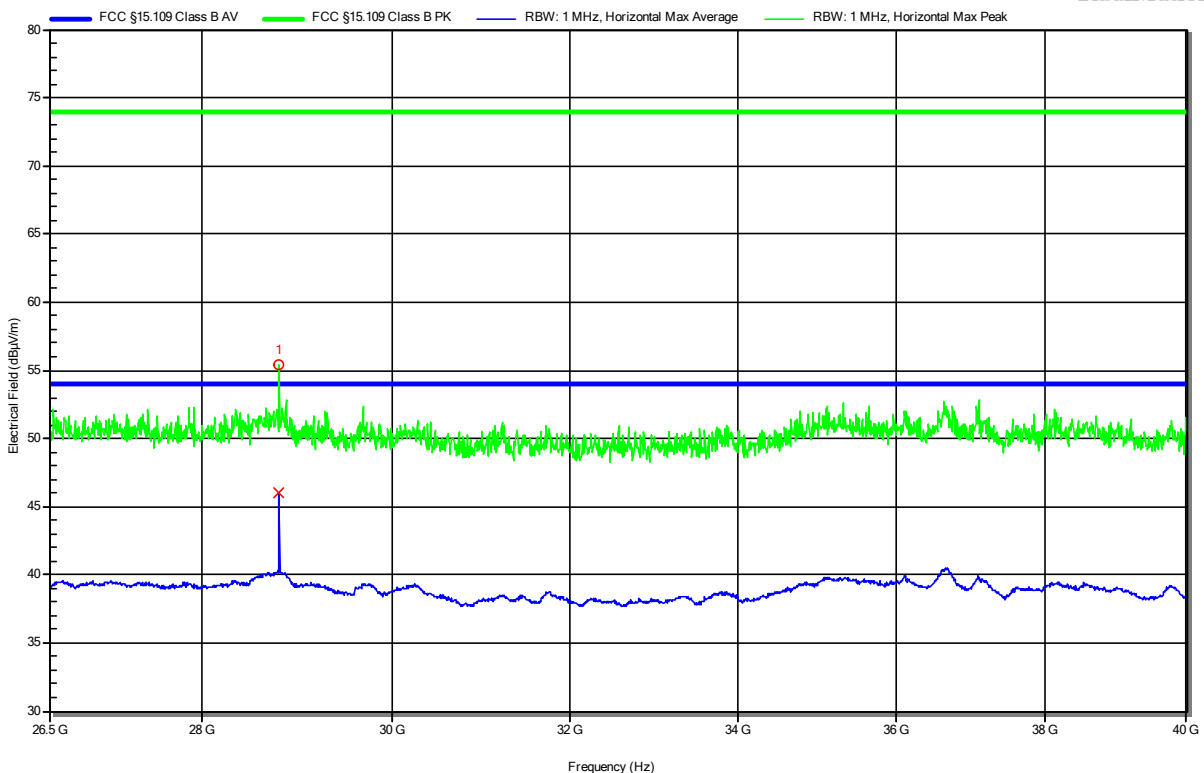
Peak Number	Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Angle	Height
1	28.799 GHz	54.07 dBµV	73.98 dBµV/m	-19.93 dB	Pass	-100 degrees	1 m
Peak Number	Frequency	Average	Average Limit	Average Difference	Average Status	Angle	Height
1	28.799 GHz	43.21 dBµV/m	53.98 dBµV/m	-10.77 dB	Pass	-100 degrees	1 m

Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35554
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-09-14
 Operating Conditions: ambient temperature: 22 °Celsius
 power input: 14.8V DC
 Antenna: 22240-25 Amp. CBL26402075, Horizontal
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 2
 1
 Note 1:

Index 30

Radiation



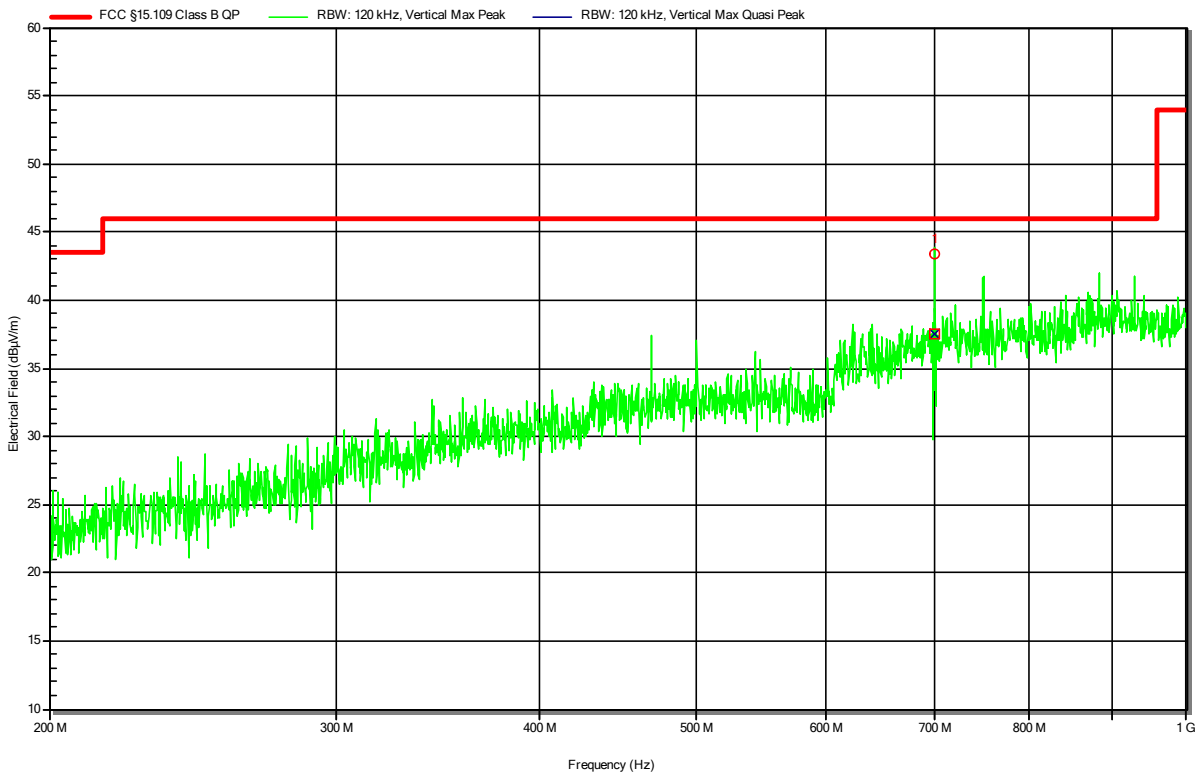
Peak Number	Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Angle	Height
1	28.799 GHz	55.38 dBµV	73.98 dBµV/m	-18.62 dB	Pass	-100 degrees	1 m
Peak Number	Frequency	Average	Average Limit	Average Difference	Average Status	Angle	Height
1	28.799 GHz	46 dBµV/m	53.98 dBµV/m	-7.98 dB	Pass	-95 degrees	1 m

Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35854
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-09-22
 Operating Conditions: ambient temperature: 22 °Celsius
 power input: 14.8V DC
 Antenna: Rohde & Schwarz HL 223, Vertical
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 3
 1
 Note 1:

Index 69

Radiation



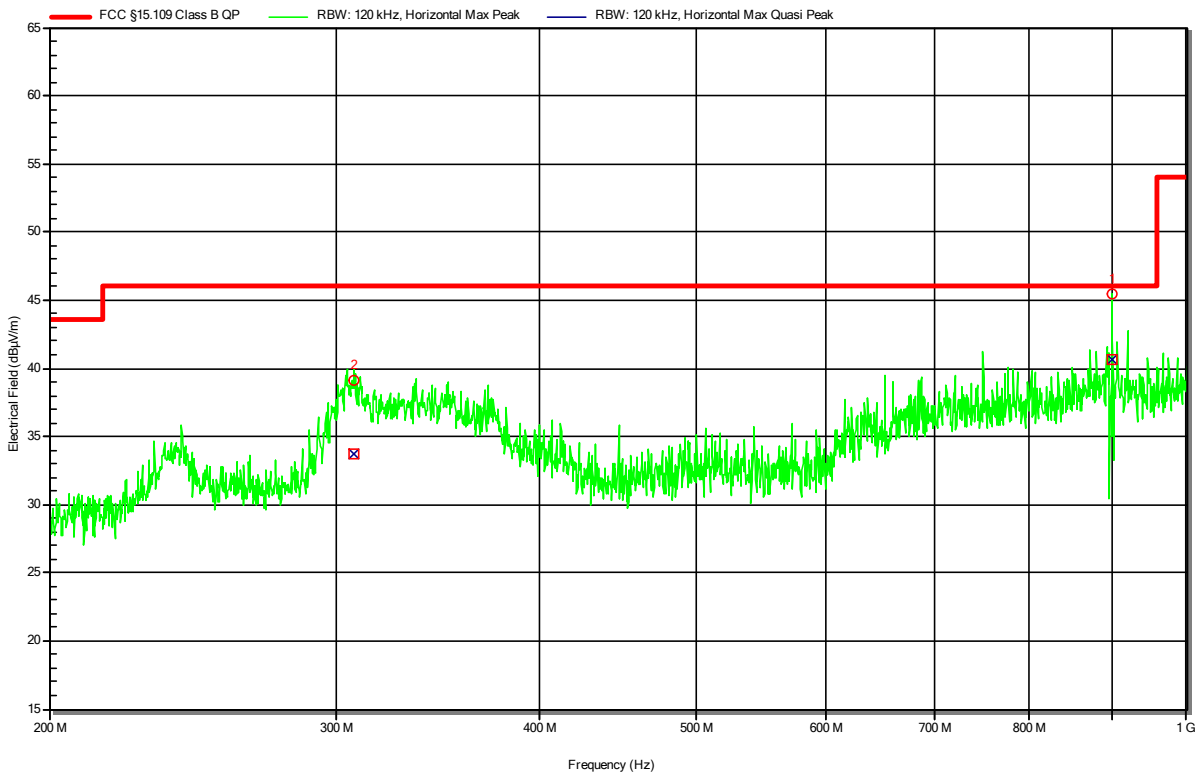
Peak Number	Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status	Angle	Height
1	699.96 MHz	37.51 dBµV/m	46.02 dBµV/m	-8.51 dB	Pass	180 degrees	1 m

Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35854
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-09-22
 Operating Conditions: ambient temperature: 22 °Celsius
 power input: 14.8V DC
 Antenna: Rohde & Schwarz HL 223, Horizontal
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 3
 1
 Note 1:

Index 70

RadiMation



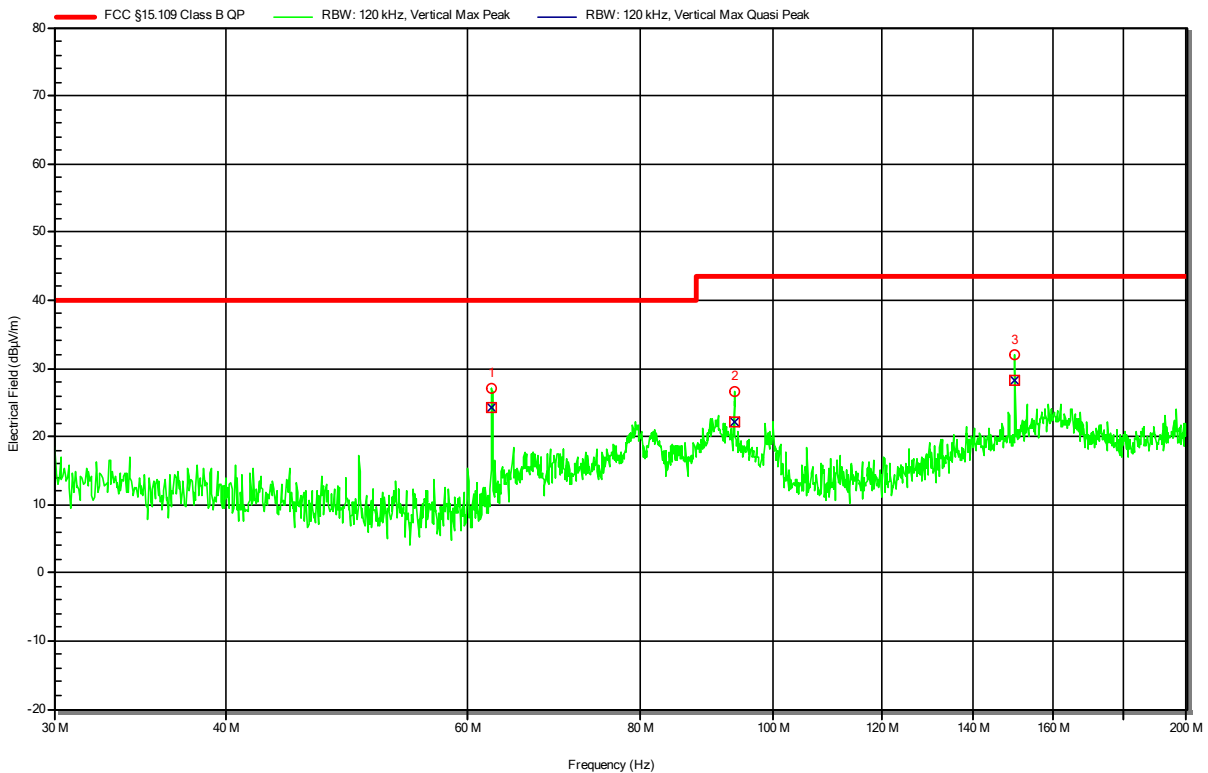
Peak Number	Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status	Angle	Height
1	900 MHz	40.6 dBµV/m	46.02 dBµV/m	-5.42 dB	Pass	55 degrees	1 m
2	307.685 MHz	33.76 dBµV/m	46.02 dBµV/m	-12.26 dB	Pass	55 degrees	1 m

Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35854
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-09-22
 Operating Conditions: ambient temperature: 22 °Celsius
 power input: 14.8V DC
 Antenna: Rohde & Schwarz HK 116, Vertical
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 3
 1
 Note 1:

Index 72

Radiation



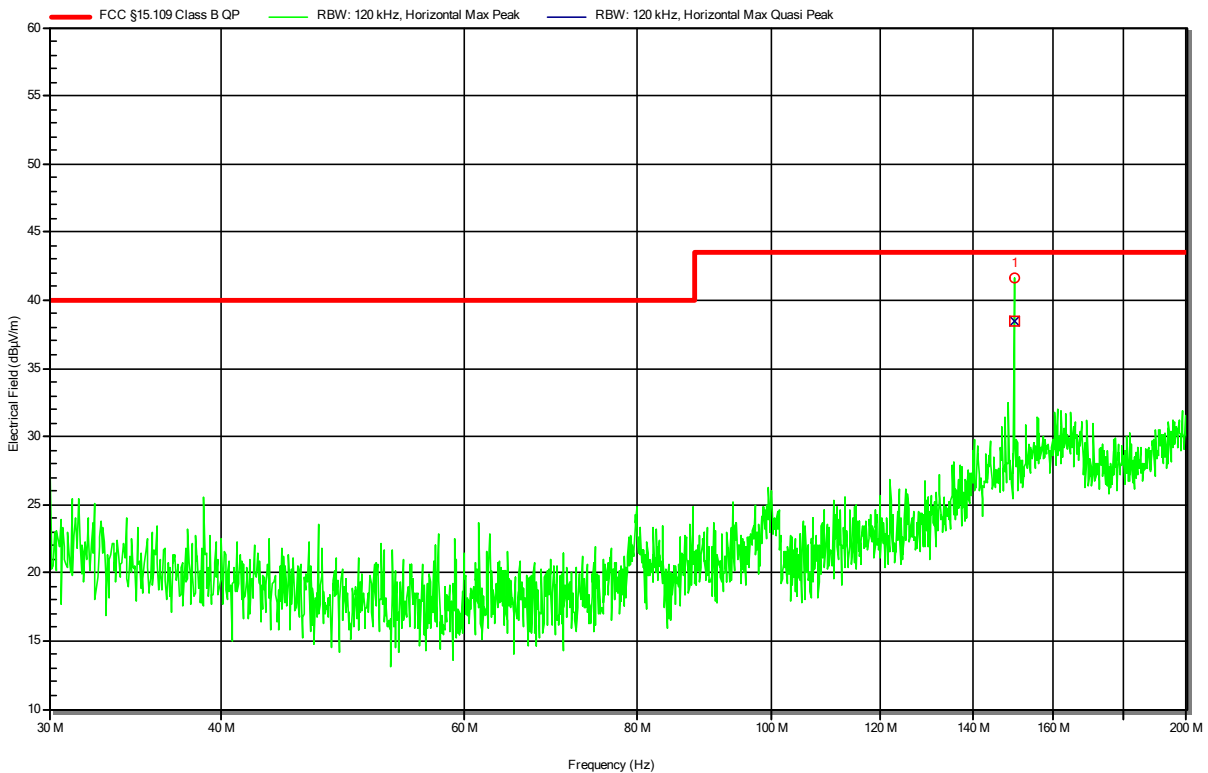
Peak Number	Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status	Angle	Height
1	62.499 MHz	24.21 dBµV/m	40 dBµV/m	-15.79 dB	Pass	180 degrees	1.7 m
2	93.761 MHz	22.1 dBµV/m	43.52 dBµV/m	-21.42 dB	Pass	180 degrees	1.7 m
3	150.003 MHz	28.15 dBµV/m	43.52 dBµV/m	-15.37 dB	Pass	180 degrees	1.7 m

Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35854
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-09-22
 Operating Conditions: ambient temperature: 22 °Celsius
 power input: 14.8V DC
 Antenna: Rohde & Schwarz HK 116, Horizontal
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 3
 1
 Note 1:

Index 71

Radiation



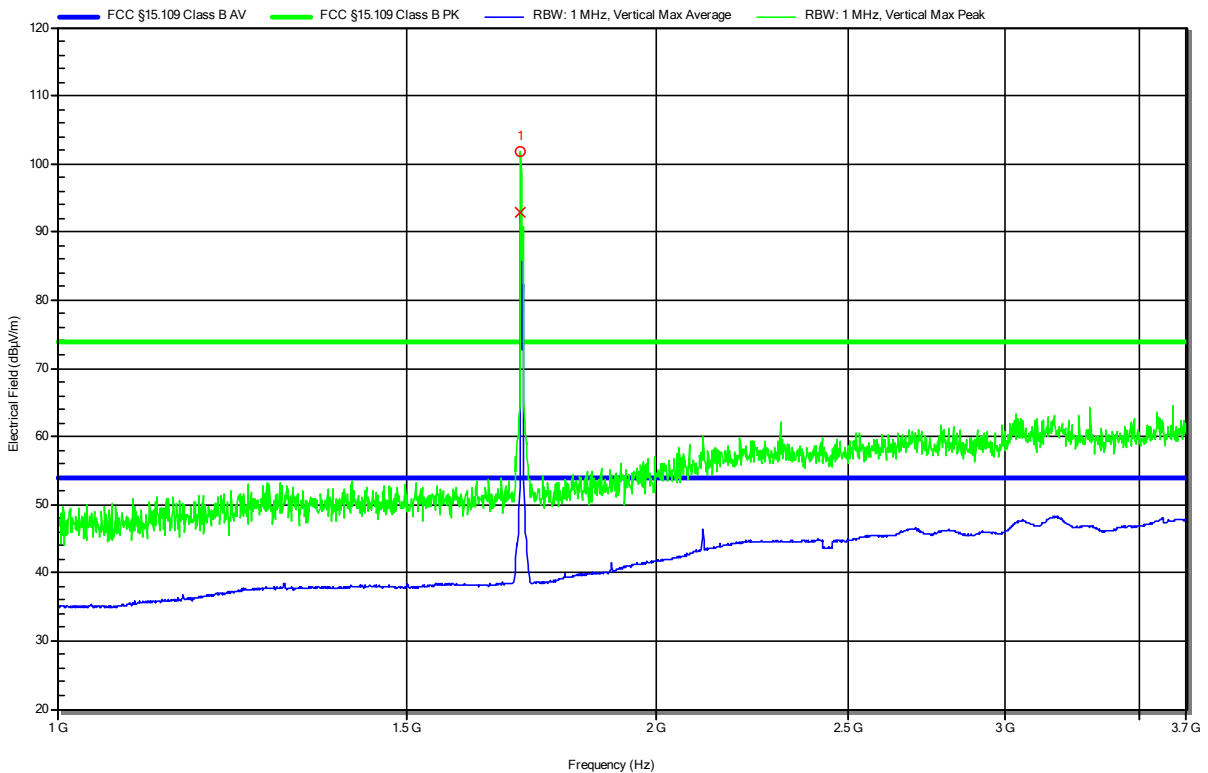
Peak Number	Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status	Angle	Height
1	150.003 MHz	38.51 dBµV/m	43.52 dBµV/m	-5.01 dB	Pass	-80 degrees	1 m

Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35854
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-09-16
 Operating Conditions: ambient temperature: 22 °Celsius
 power input: 14.8V DC
 Antenna: Schwarzbeck BBHA 9120D, Vertical
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 3
 1
 Note 1:

Index 56

RadiMation



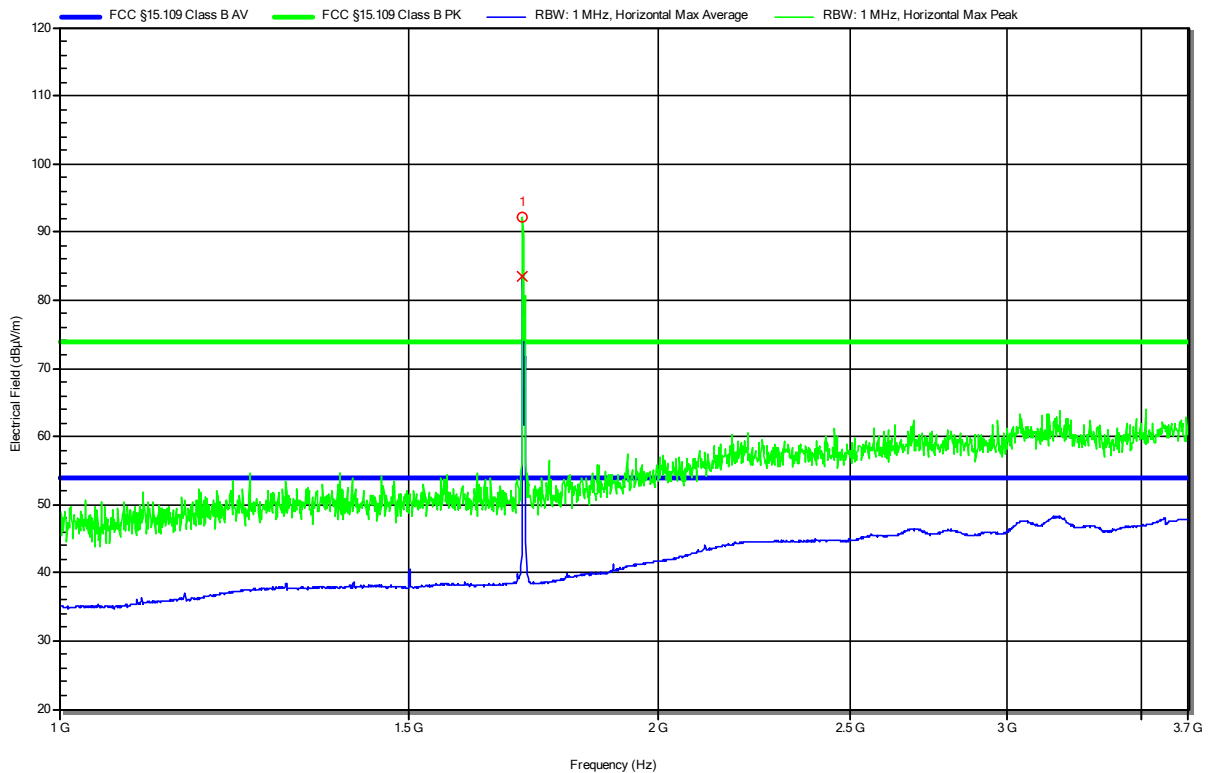
Peak Number	Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Angle	Height
1	1.711 GHz	Mobile communication tester					

Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35854
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-09-16
 Operating Conditions: ambient temperature: 22 °Celsius
 power input: 14.8V DC
 Antenna: Schwarzbeck BBHA 9120D, Horizontal
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 3
 1
 Note 1:

Index 55

RadiMation



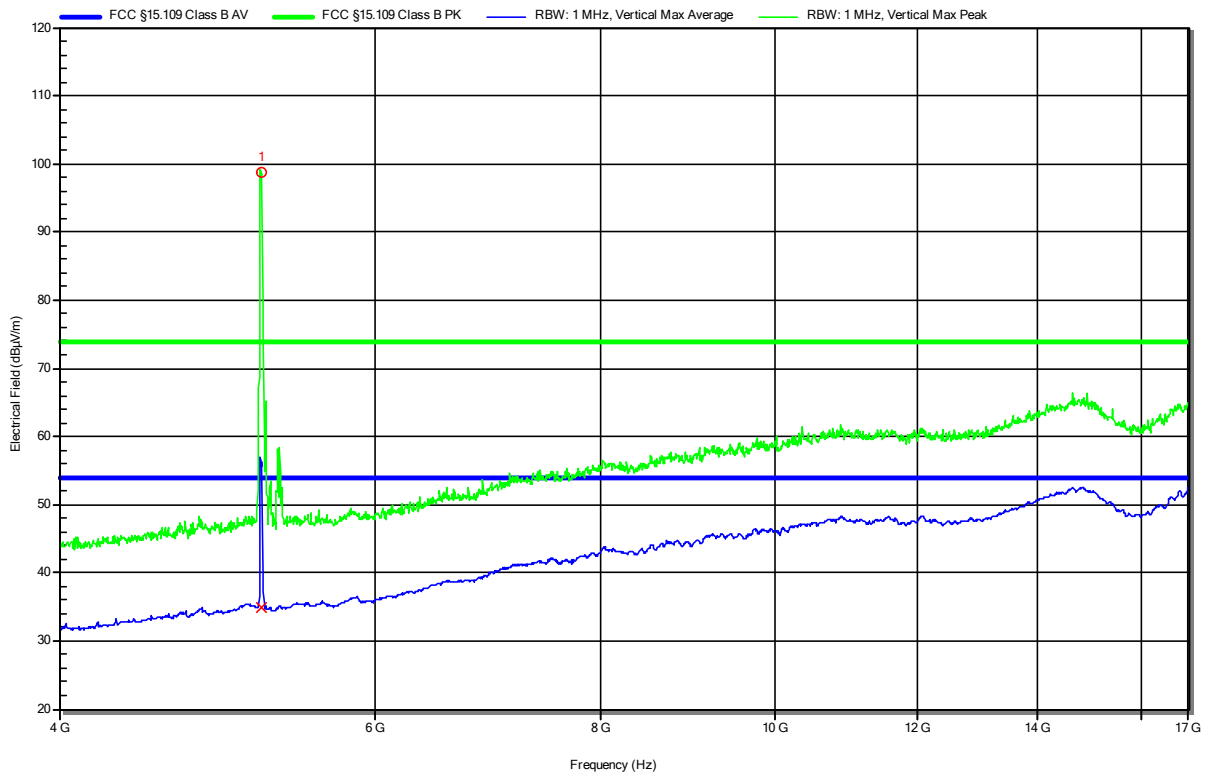
Peak Number	Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Angle	Height
1	1.711 GHz	Mobile communication tester					

Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35854
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-09-16
 Operating Conditions: ambient temperature: 22 °Celsius
 power input: 14.8V DC
 Antenna: Schwarzbeck BBHA 9120D, Vertical
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 3
 1
 Note 1:

Index 57

RadiMation



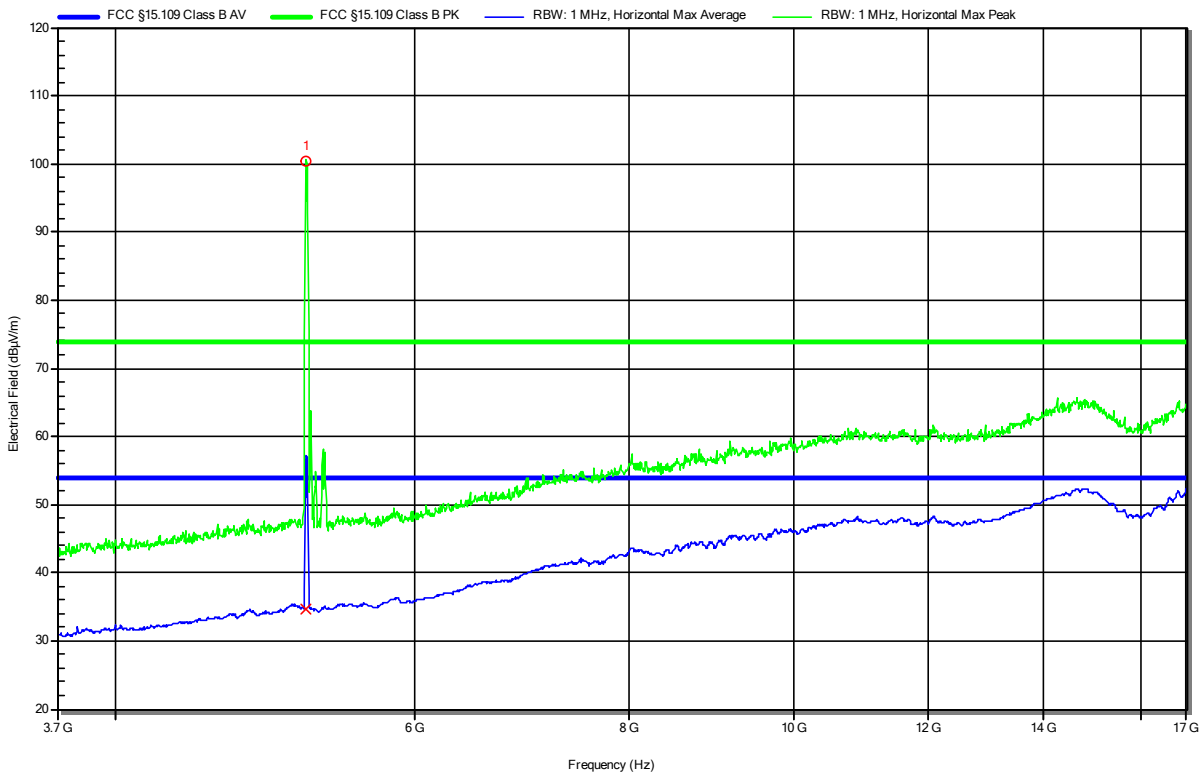
Peak Number	Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Angle	Height
1	5.18 GHz	WLAN carrier					

Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35854
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-09-16
 Operating Conditions: ambient temperature: 22 °Celsius
 power input: 14.8V DC
 Antenna: Schwarzbeck BBHA 9120D, Horizontal
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 3
 1
 Note 1:

Index 58

RadiMation



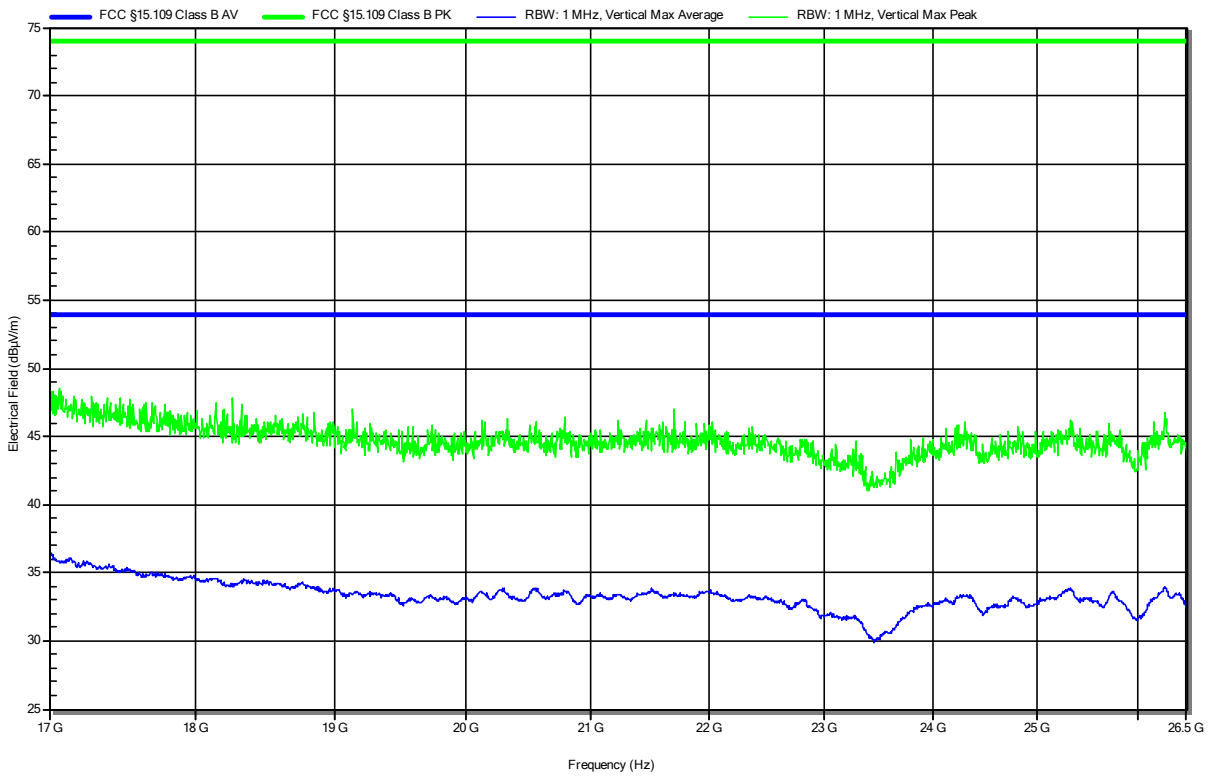
Peak Number	Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Angle	Height
1	5.179 GHz	WLAN carrier					

Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35854
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-09-14
 Operating Conditions: ambient temperature: 22 °Celsius
 power input: 14.8V DC
 Antenna: AT4560, Vertical
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 3
 Note 1:

Index 36

RadiMation

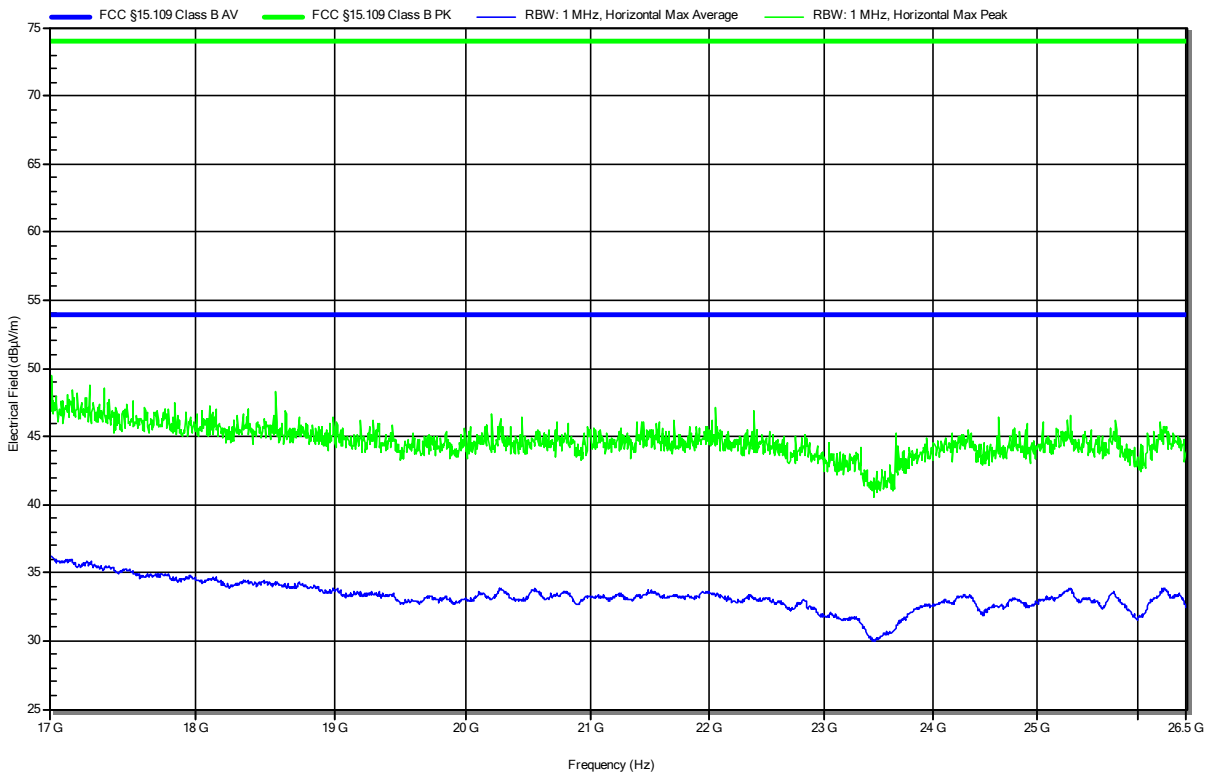


Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35854
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-09-14
 Operating Conditions: ambient temperature: 22 °Celsius
 power input: 14.8V DC
 Antenna: AT4560, Horizontal
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 3
 1
 Note 1:

Index 37

RadiMation

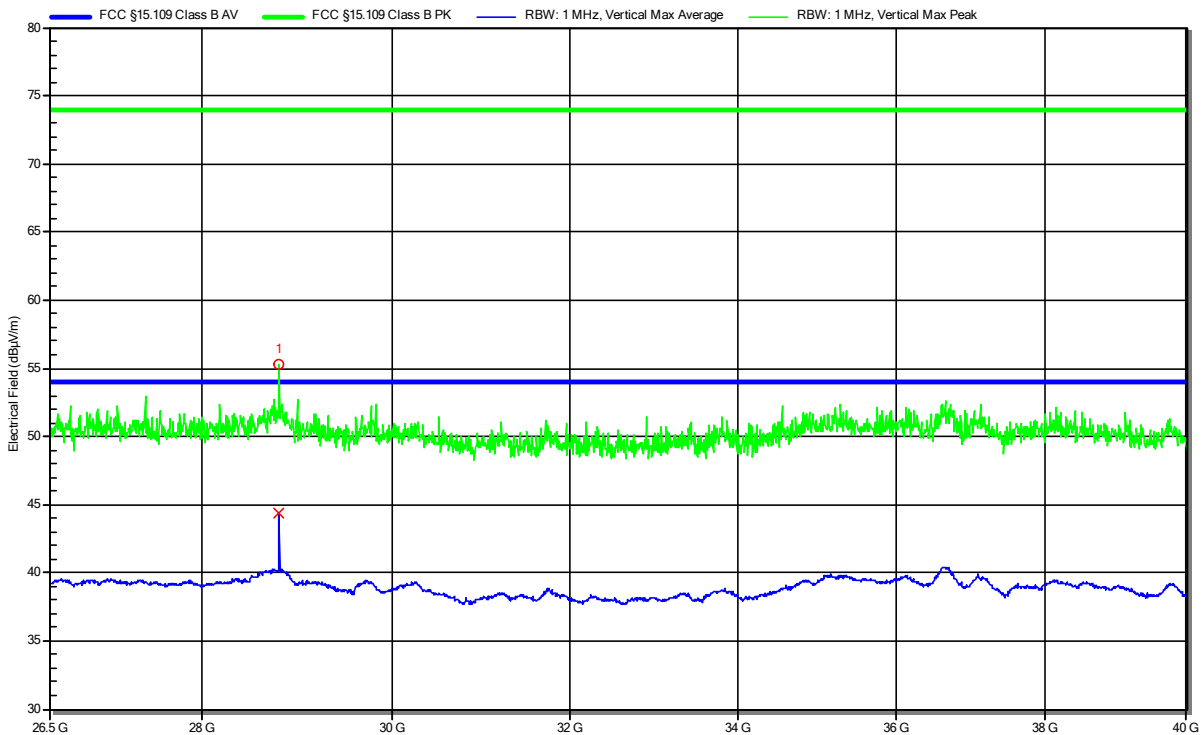


Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35854
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-09-14
 Operating Conditions: ambient temperature: 22 °Celsius
 power input: 14.8V DC
 Antenna: 22240-25 Amp. CBL26402075; antenna, Vertical
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 3
 1
 Note 1:

Index 35

RadiMation



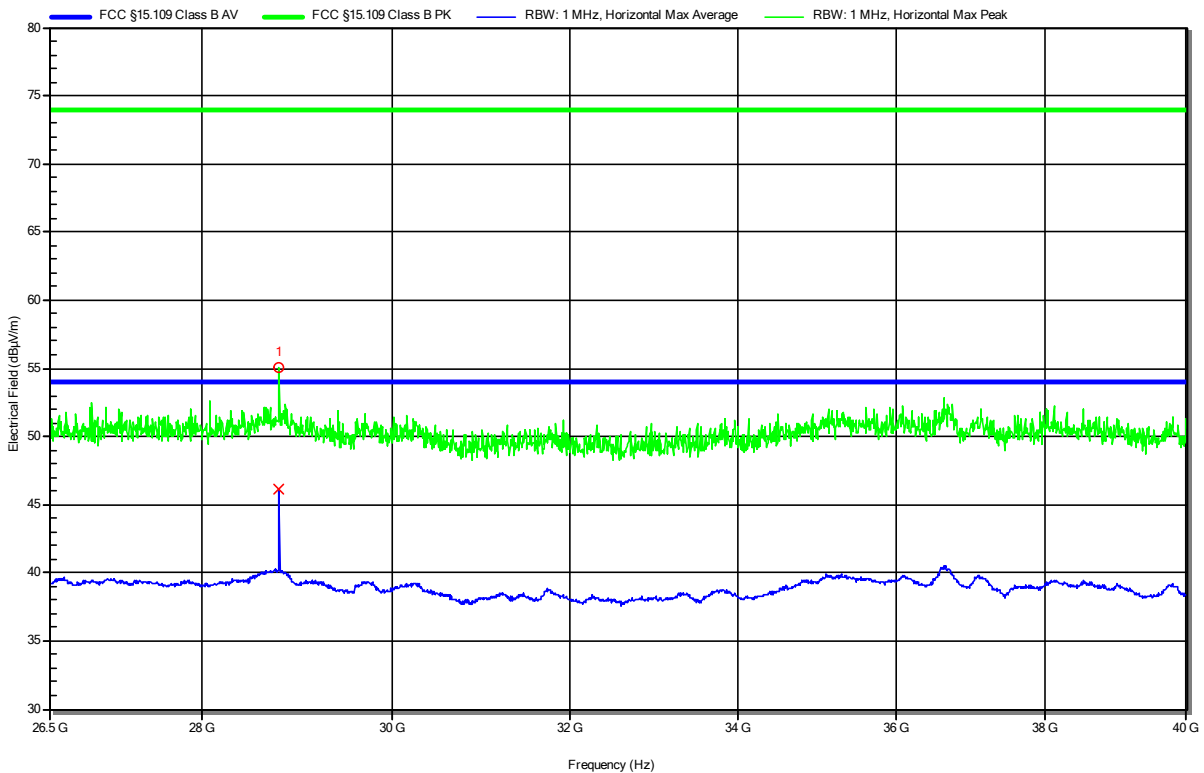
Peak Number	Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Angle	Height
1	28.799 GHz	55.33 dBµV/m	73.98	-18.67	PASS	0 degrees	1 m
Peak Number	Frequency	Average	Average Limit	Average Difference	Average Status	Angle	Height
1	28.799 GHz	44.32 dBµV/m	53.98 dBµV/m	-9.66 dB	Pass	0 degrees	1 m

Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35854
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-09-14
 Operating Conditions: ambient temperature: 22 °Celsius
 power input: 14.8V DC
 Antenna: 22240-25 Amp. CBL26402075, Horizontal
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 3
 1
 Note 1:

Index 34

Radiation



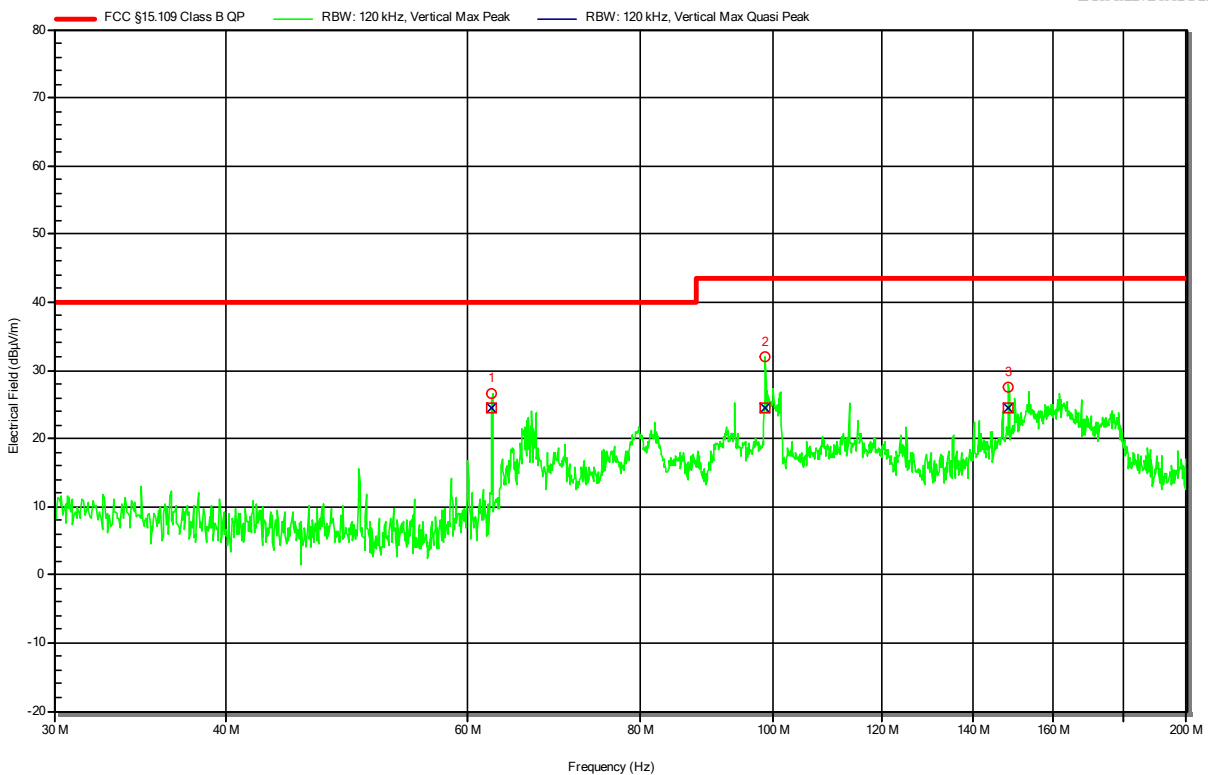
Peak Number	Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Angle	Height
1	28.799 GHz	55.02 dBµV/m	73.98	-18.98	PASS	0 degrees	1 m
Peak Number	Frequency	Average	Average Limit	Average Difference	Average Status	Angle	Height
1	28.799 GHz	46.17 dBµV/m	53.98 dBµV/m	-7.81 dB	Pass	0 degrees	1 m

Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35854
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-09-22
 Operating Conditions: ambient temperature: 22 °Celsius
 power input: 14.8V DC
 Antenna: Rohde & Schwarz HK 116, Vertical
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 4
 Note 1:

Index 64

RadiMation



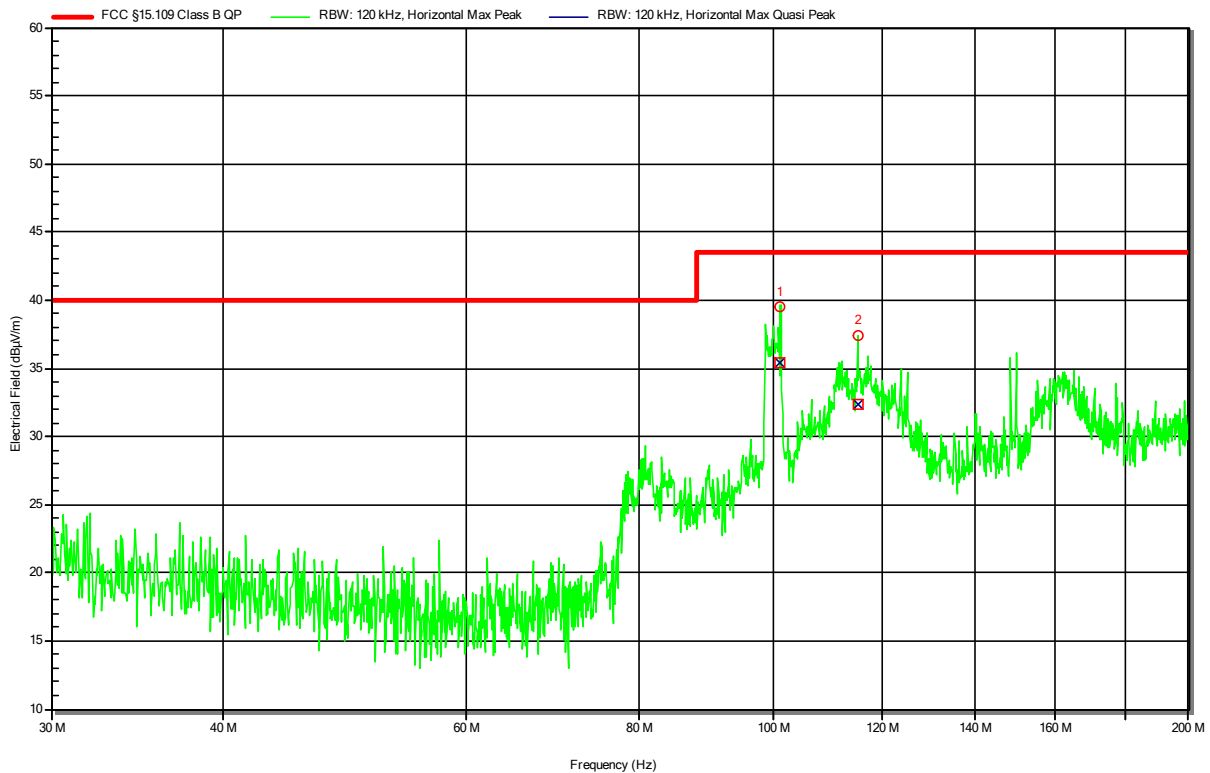
Peak Number	Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status	Angle	Height
1	62.499 MHz	24.5 dBµV/m	40 dBµV/m	-15.5 dB	Pass	134 degrees	1 m
2	98.799 MHz	24.55 dBµV/m	43.52 dBµV/m	-18.97 dB	Pass	134 degrees	1 m
3	148.496 MHz	24.41 dBµV/m	43.52 dBµV/m	-19.11 dB	Pass	134 degrees	1 m

Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35854
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-09-22
 Operating Conditions: ambient temperature: 22 °Celsius
 power input: 14.8V DC
 Antenna: Rohde & Schwarz HK 116, Horizontal
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 4
 1
 Note 1:

Index 65

Radiation



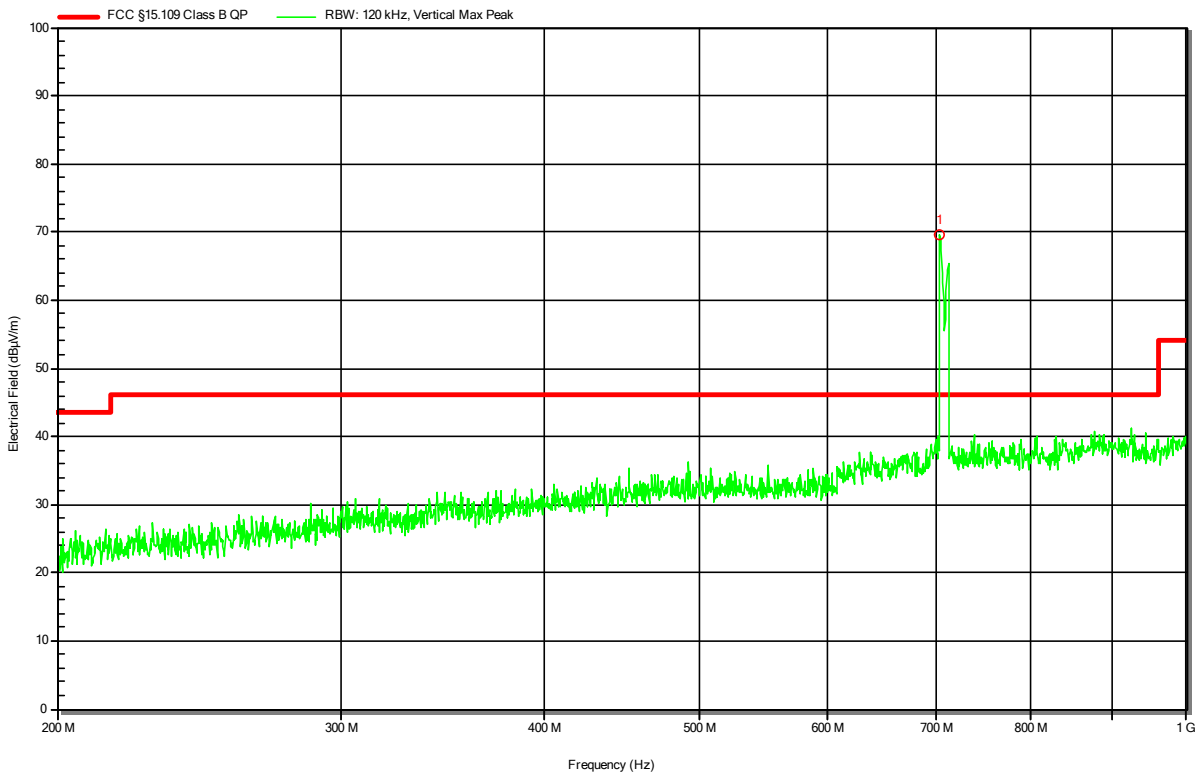
Peak Number	Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status	Angle	Height
1	101.225 MHz	35.35 dBµV/m	43.52 dBµV/m	-8.17 dB	Pass	180 degrees	1.7 m
2	115.186 MHz	32.39 dBµV/m	43.52 dBµV/m	-11.13 dB	Pass	180 degrees	1.7 m

Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35854
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-09-22
 Operating Conditions: ambient temperature: 22 °Celsius
 power input: 14.8V DC
 Antenna: Rohde & Schwarz HL 223, Vertical
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 4
 Note 1: Notchfilter for Mobile communication

Index 68

RadiMation



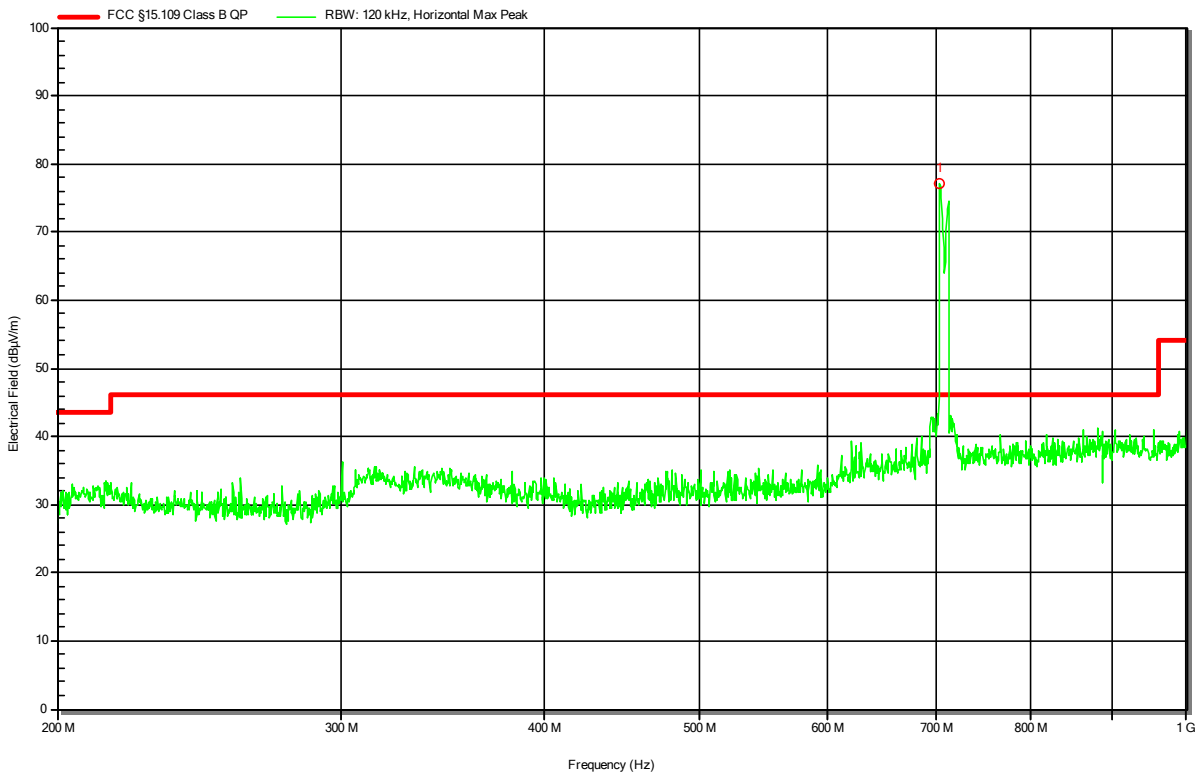
Peak Number	Frequency	Angle	Height
1	703.392 MHz	Mobile communication carrier	

Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35854
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-09-22
 Operating Conditions: ambient temperature: 22 °Celsius
 power input: 14.8V DC
 Antenna: Rohde & Schwarz HL 223, Horizontal
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 4
 Note 1: Notchfilter for Mobile communication

Index 67

RadiMation



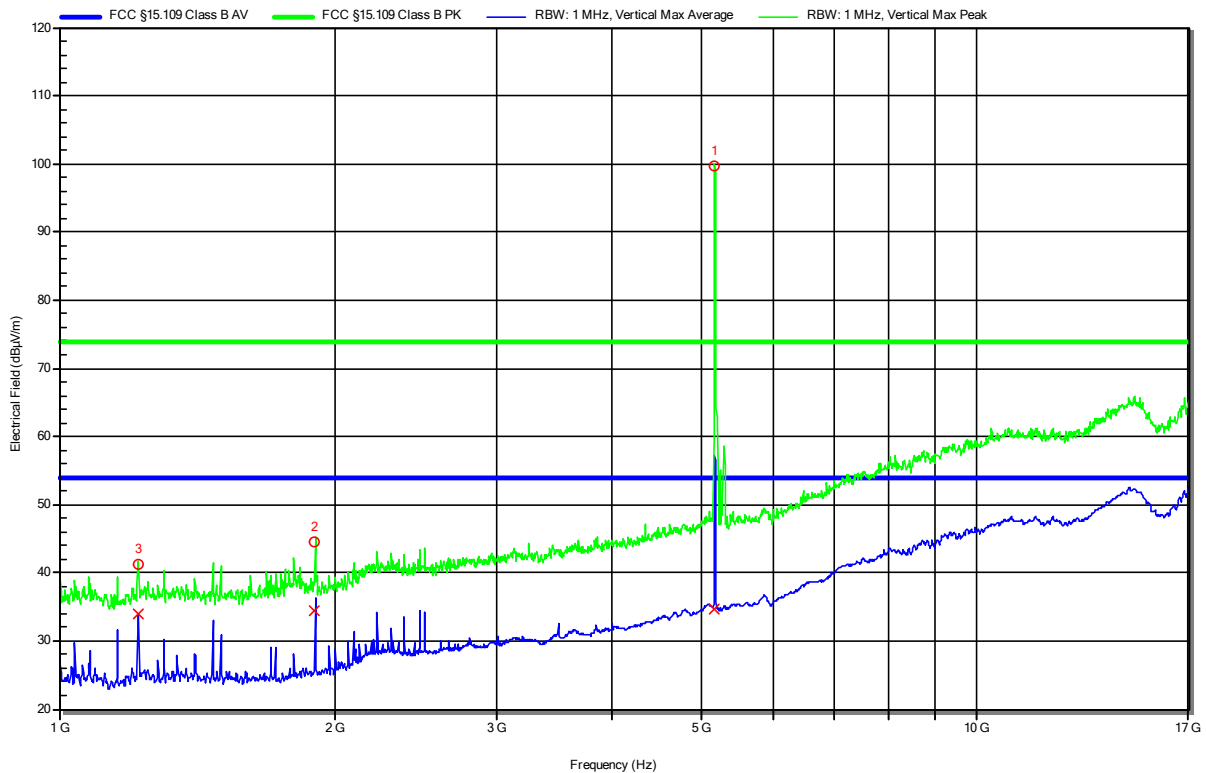
Peak Number	Frequency	Angle	Height
1	703.392 MHz	Mobile communication carrier	

Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35854
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-09-16
 Operating Conditions: ambient temperature: 22 °Celsius
 power input: 14.8V DC
 Antenna: Schwarzbeck BBHA 9120D, Vertical
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 4
 1
 Note 1:

Index 62

RadiMation



Peak Number	Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Angle	Height
1	5.178 GHz	WLAN carrier	73.98 dBµV/m	-29.47 dB	Pass	12 degrees	1.5 m
2	1.9 GHz	44.51 dBµV/m	73.98 dBµV/m	-32.72 dB	Pass	12 degrees	1.5 m
3	1.219 GHz	41.26 dBµV/m	73.98 dBµV/m	-32.72 dB	Pass	12 degrees	1.5 m

Peak Number	Frequency	Average	Average Limit	Average Difference	Average Status	Angle	Height
1	5.178 GHz	WLAN carrier	53.98 dBµV/m	-19.55 dB	Pass	12 degrees	1.5 m
2	1.9 GHz	34.43 dBµV/m	53.98 dBµV/m	-20.07 dB	Pass	12 degrees	1.5 m
3	1.219 GHz	33.91 dBµV/m	53.98 dBµV/m	-20.07 dB	Pass	12 degrees	1.5 m

Test Report No.: G0M-2011-9488-EF0115B-V02

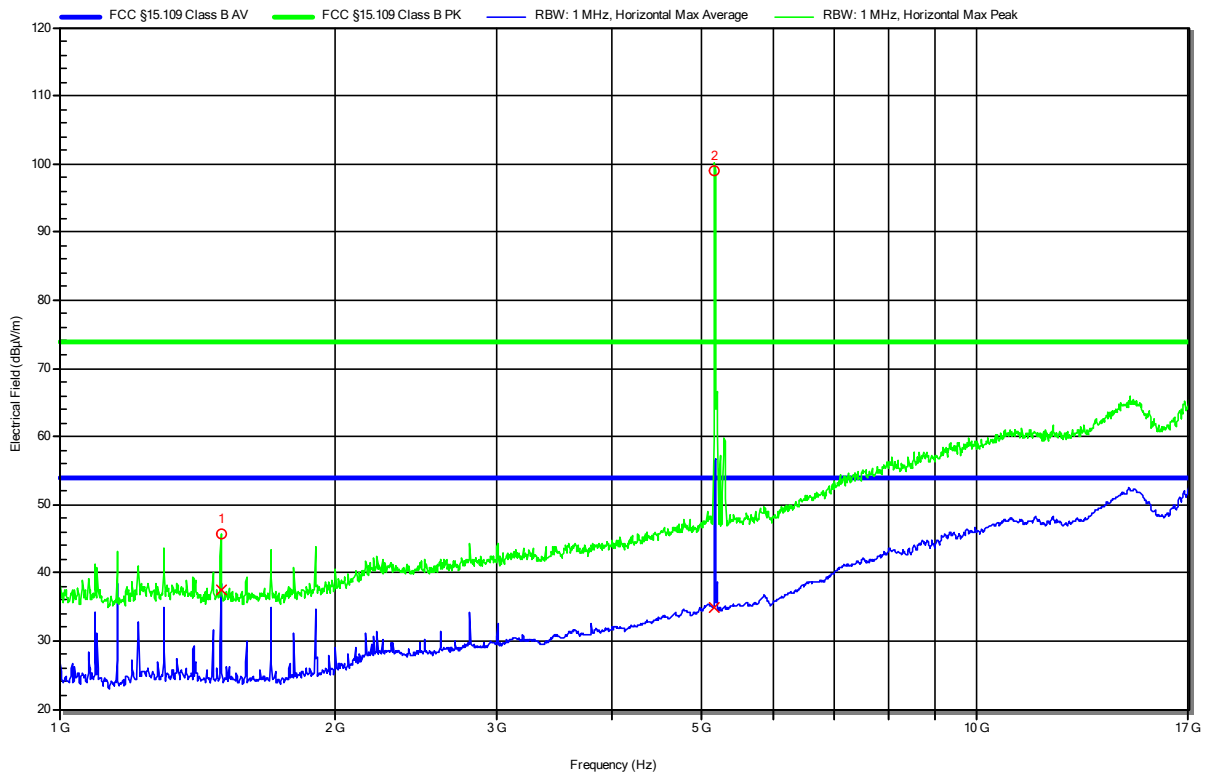
Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35854
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-09-16
 Operating Conditions: ambient temperature: 22 °Celsius
 power input: 14.8V DC
 Antenna: Schwarzbeck BBHA 9120D, Horizontal
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 4
 Note 1:

Index 63

Radiation



Peak Number	Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Angle	Height
1	1.5 GHz	45.62 dBµV/m	73.98 dBµV/m	-28.36 dB	Pass	-70 degrees	1 m
2	5.182 GHz	WLAN carrier					

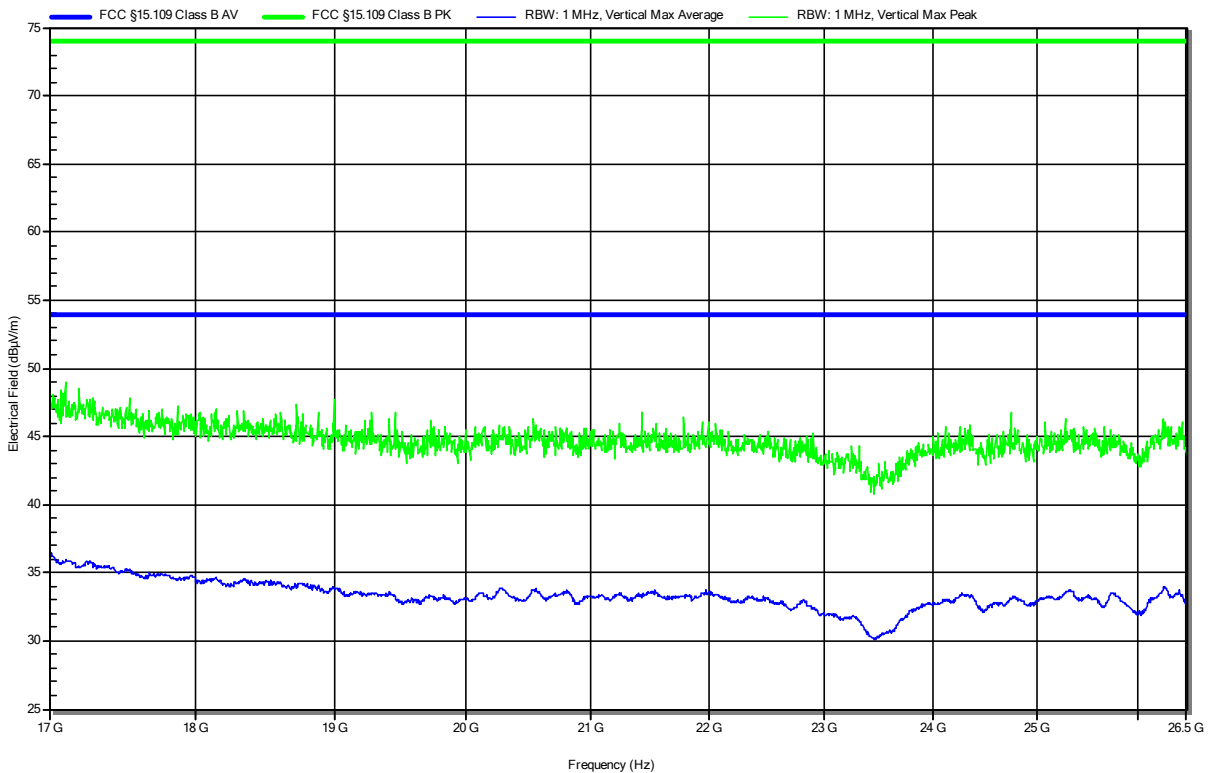
Peak Number	Frequency	Average	Average Limit	Average Difference	Average Status	Angle	Height
1	1.5 GHz	37.39 dBµV/m	53.98 dBµV/m	-16.59 dB	Pass	-70 degrees	1 m
2	5.182 GHz	WLAN carrier					

Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35854
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-09-14
 Operating Conditions: ambient temperature: 22 °Celsius
 power input: 14.8V DC
 Antenna: AT4560, Vertical
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 4
 Note 1:

Index 40

Radiation

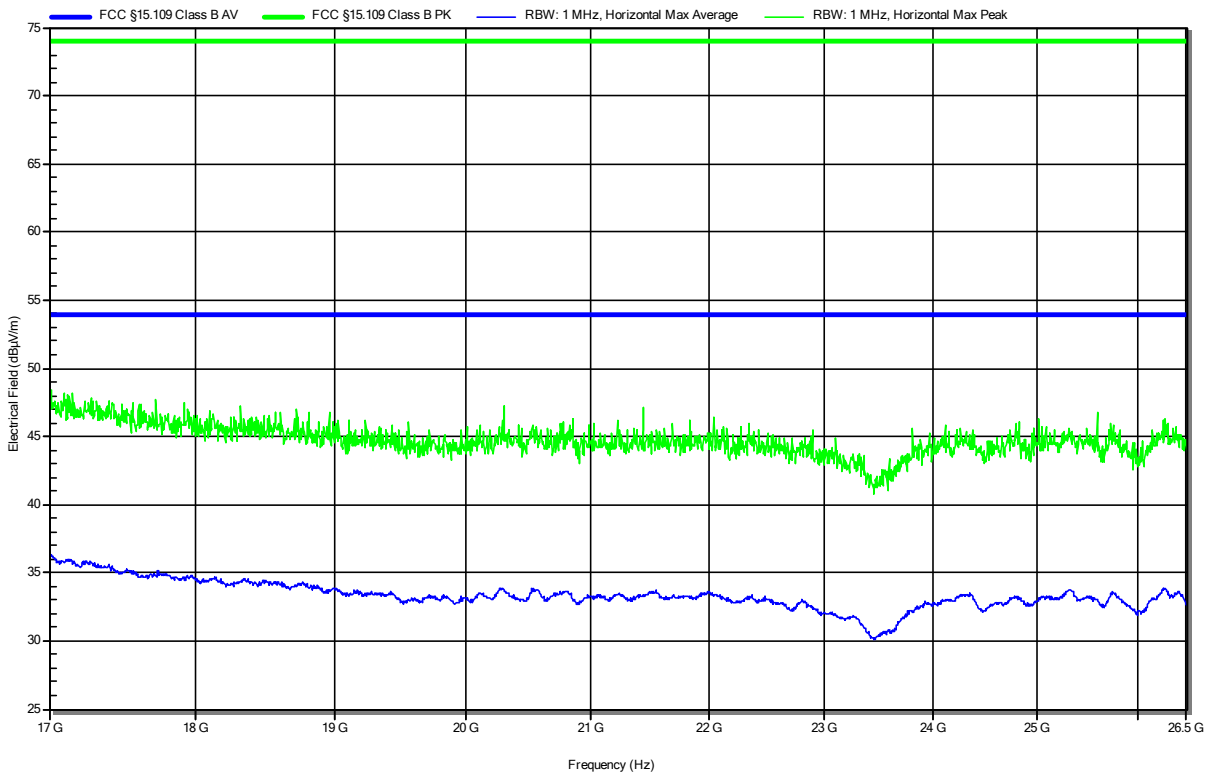


Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35854
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-09-14
 Operating Conditions: ambient temperature: 22 °Celsius
 power input: 14.8V DC
 Antenna: AT4560, Horizontal
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 4
 1
 Note 1:

Index 41

RadiMation

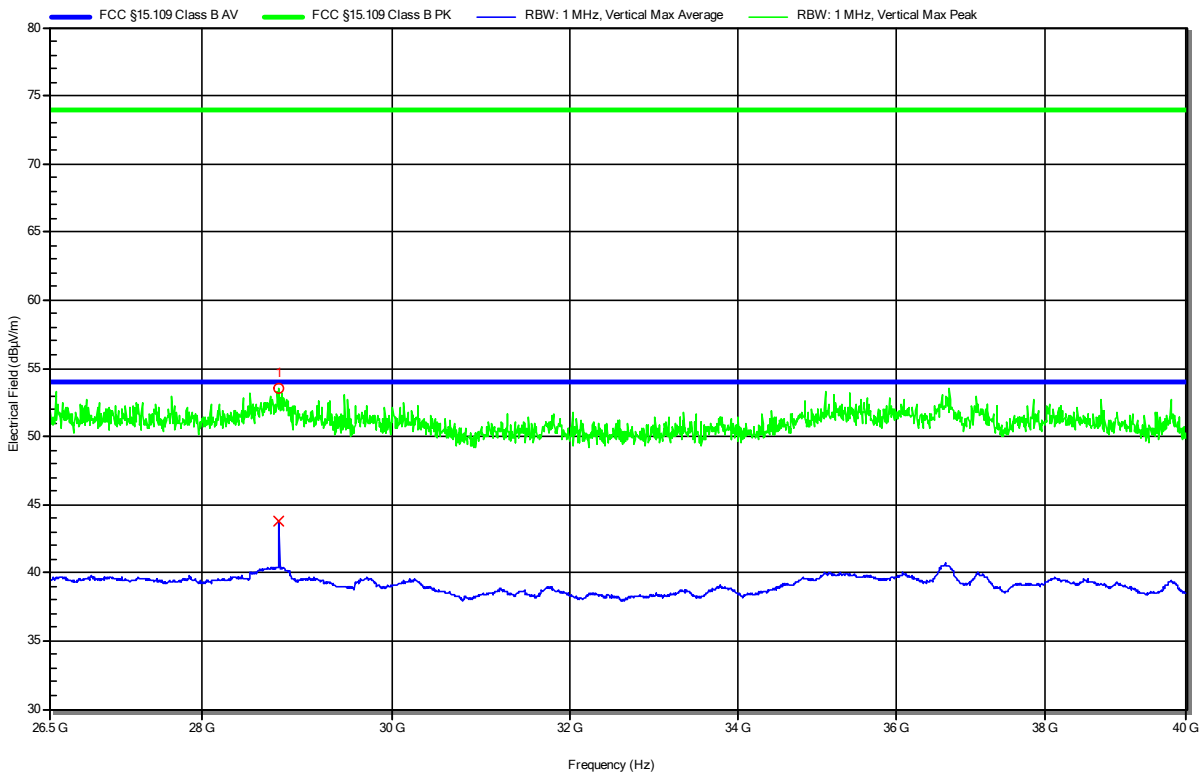


Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35854
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-09-14
 Operating Conditions: ambient temperature: 22 °Celsius
 power input: 14.8V DC
 Antenna: 22240-25 Amp. CBL26402075, Vertical
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 4
 1
 Note 1:

Index 28

Radiation



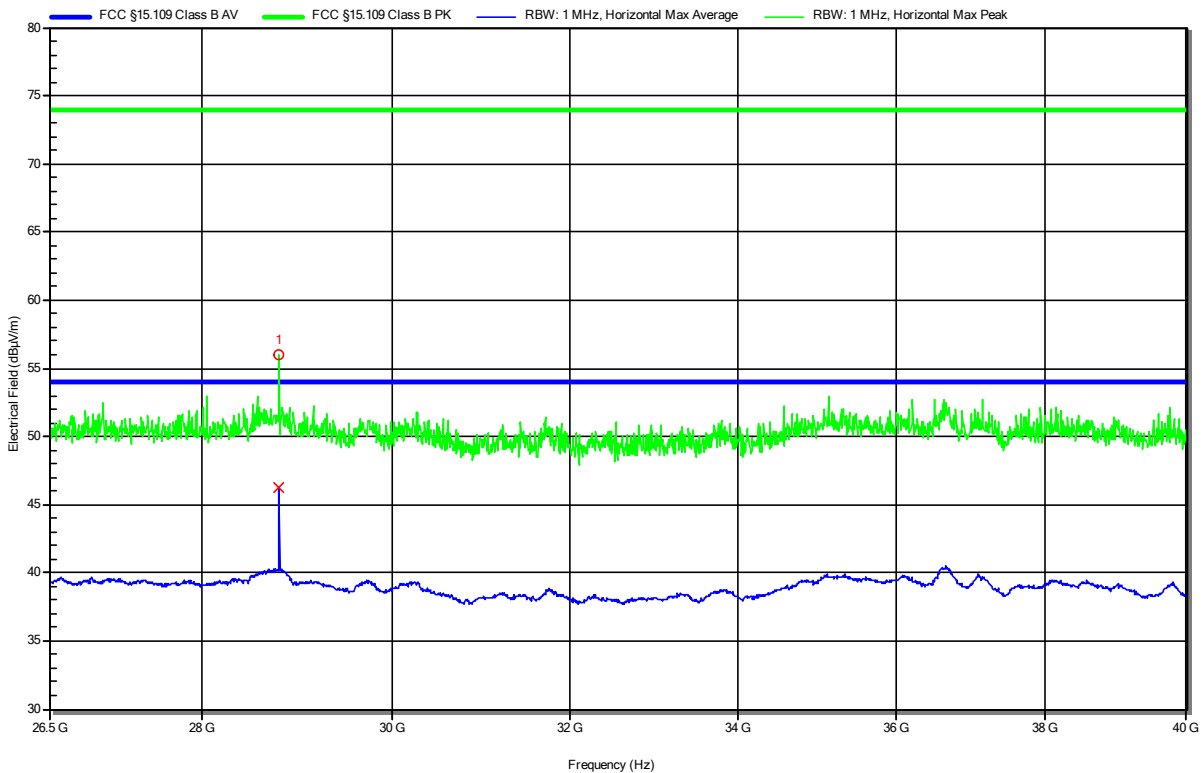
Peak Number	Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Angle	Height
1	28.799 GHz	53.48 dBµV/	73.98 dBµV/m	-20.52 dB	Pass	-100 degrees	1 m
Peak Number	Frequency	Average	Average Limit	Average Difference	Average Status	Angle	Height
1	28.799 GHz	43.78 dBµV/m	53.98 dBµV/m	-10.2 dB	Pass	-100 degrees	1 m

Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35854
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-09-14
 Operating Conditions: ambient temperature: 22 °Celsius
 power input: 14.8V DC
 Antenna: 22240-25 Amp. CBL26402075, Horizontal
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 4
 1
 Note 1:

Index 29

Radiation



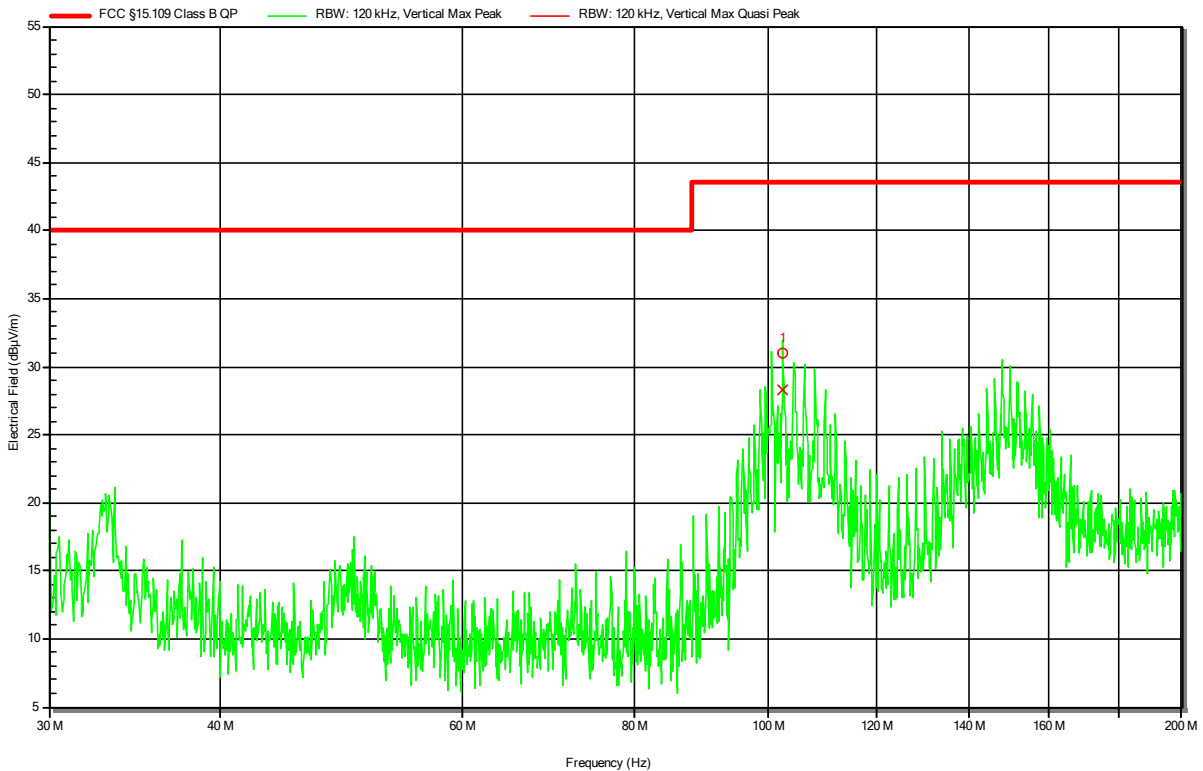
Peak Number	Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Angle	Height
1	28.799 GHz	56.05 dBµV/	73.98 dBµV/m	-17.95 dB	Pass	-95 degrees	1 m
Peak Number	Frequency	Average	Average Limit	Average Difference	Average Status	Angle	Height
1	28.799 GHz	46.28 dBµV/m	53.98 dBµV/m	-7.7 dB	Pass	-95 degrees	1 m

Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35854
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-12-20
 Operating Conditions: ambient temperature: 20 °Celsius
 power input: 5V DC via USB
 Antenna: Rohde & Schwarz HK 116, Vertical
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 6
 Note 1: 2

Index 106

RadiMation



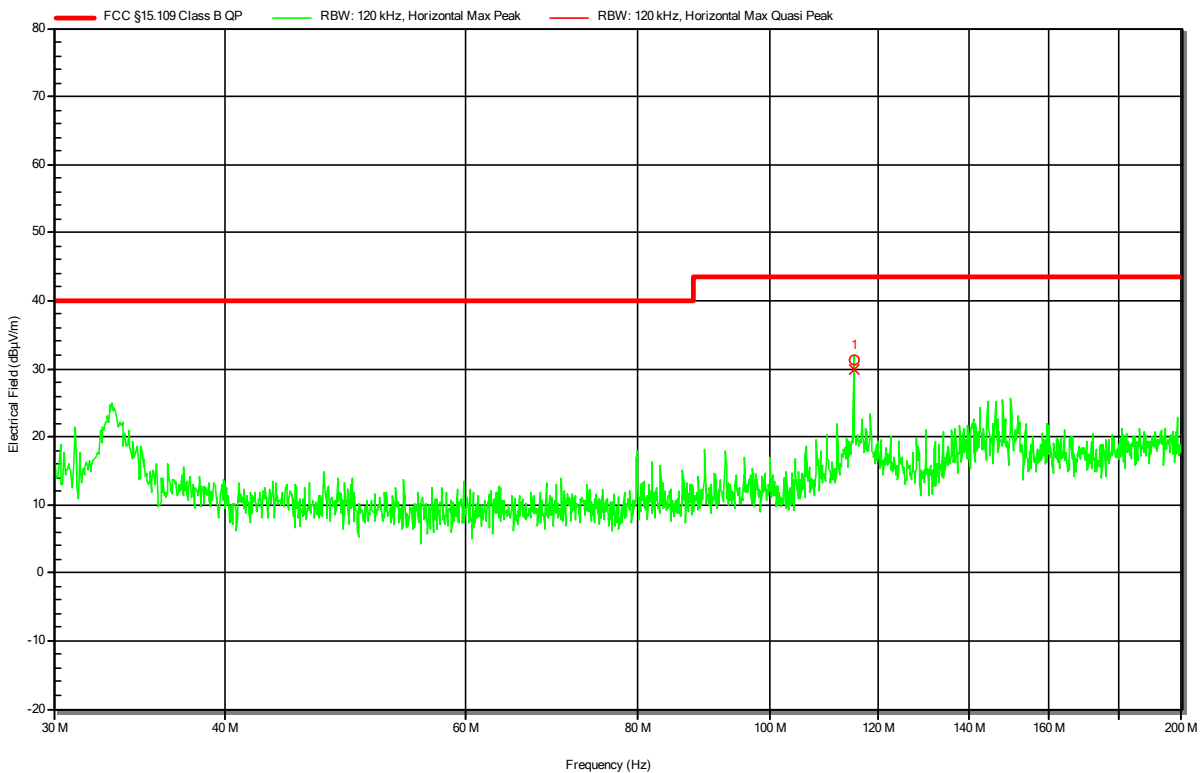
Peak Number	Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status	Angle	Height
1	102.492 MHz	28.25 dBµV/m	43.52 dBµV/m	-15.27 dB	Pass	-17 degrees	1 m

Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35854
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-12-20
 Operating Conditions: ambient temperature: 20 °Celsius
 power input: 5V DC via USB
 Antenna: Rohde & Schwarz HK 116, Horizontal
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 6
 2
 Note 1:

Index 107

RadiMation



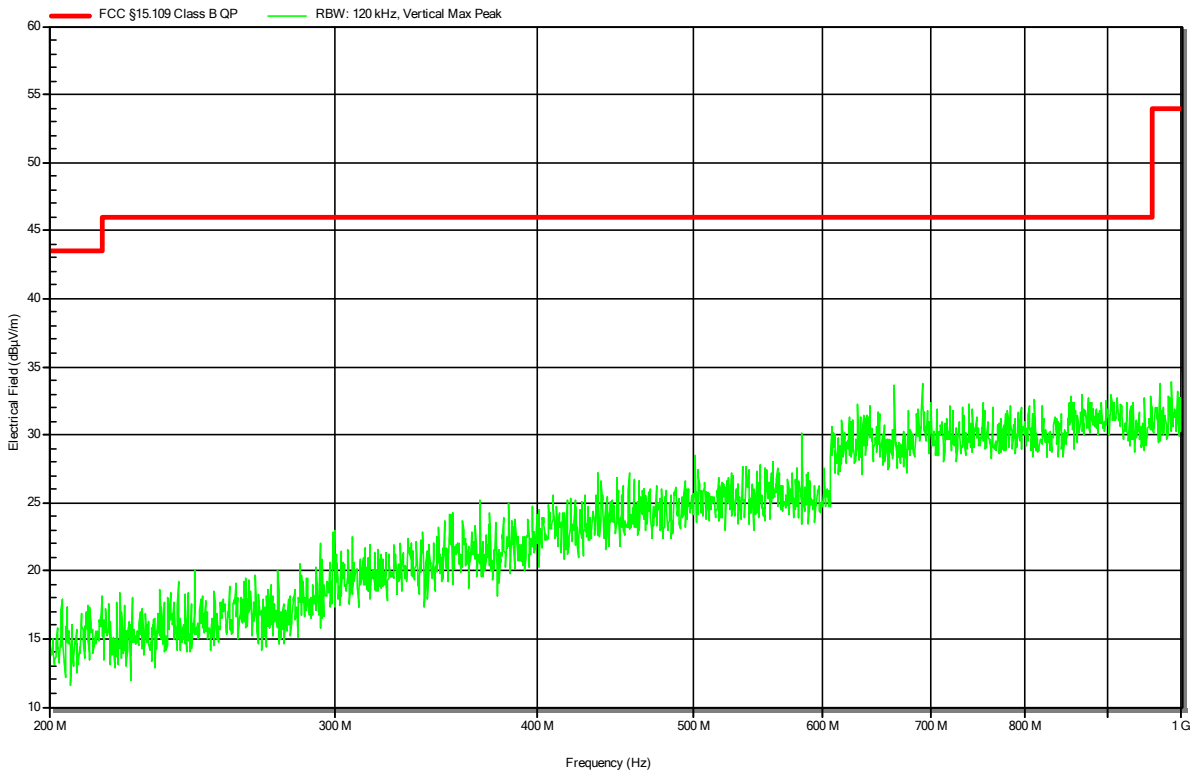
Peak Number	Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status	Angle	Height
1	115.204 MHz	29.78 dBµV/m	43.52 dBµV/m	-13.75 dB	Pass	-180 degrees	2.25 m

Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35854
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-12-20
 Operating Conditions: ambient temperature: 20 °Celsius
 power input: 5V DC via USB
 Antenna: Rohde & Schwarz HL 223, Vertical
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 6
 Note 1: 2

Index 117

RadiMation

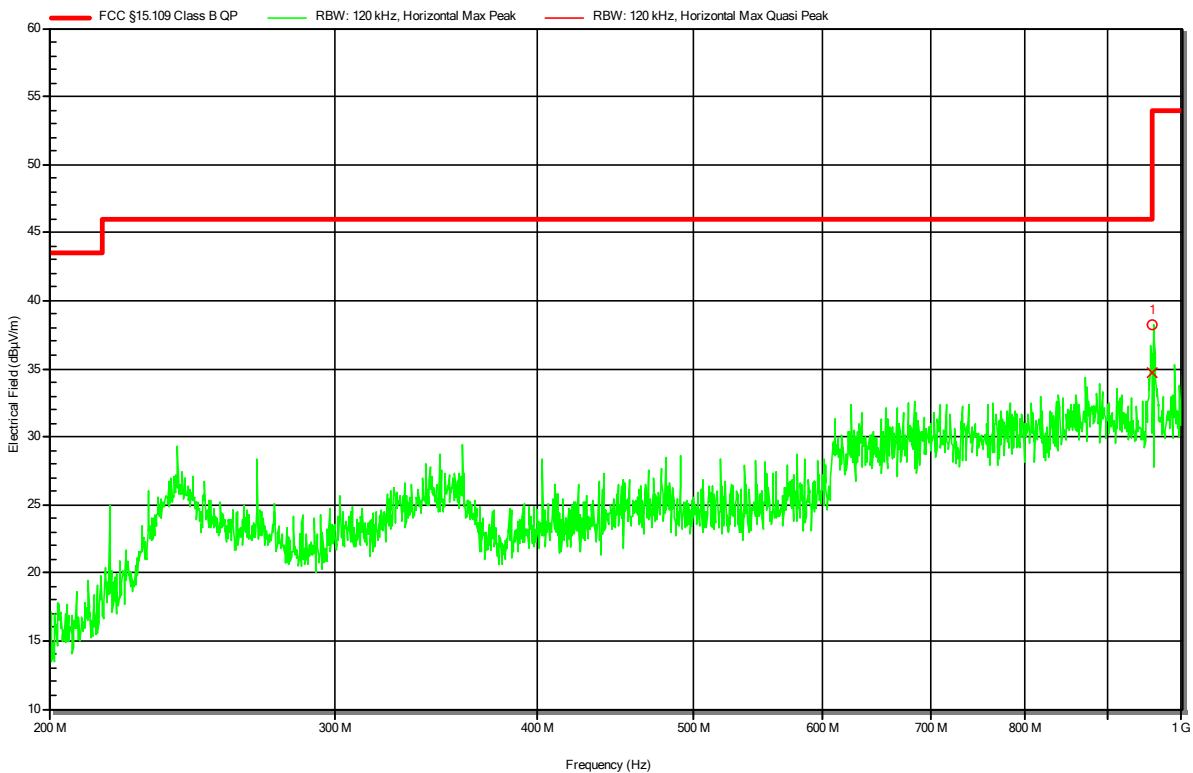


Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35854
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-12-20
 Operating Conditions: ambient temperature: 20 °Celsius
 power input: 5V DC via USB
 Antenna: Rohde & Schwarz HL 223, Horizontal
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 6
 2
 Note 1:

Index 116

RadiMation



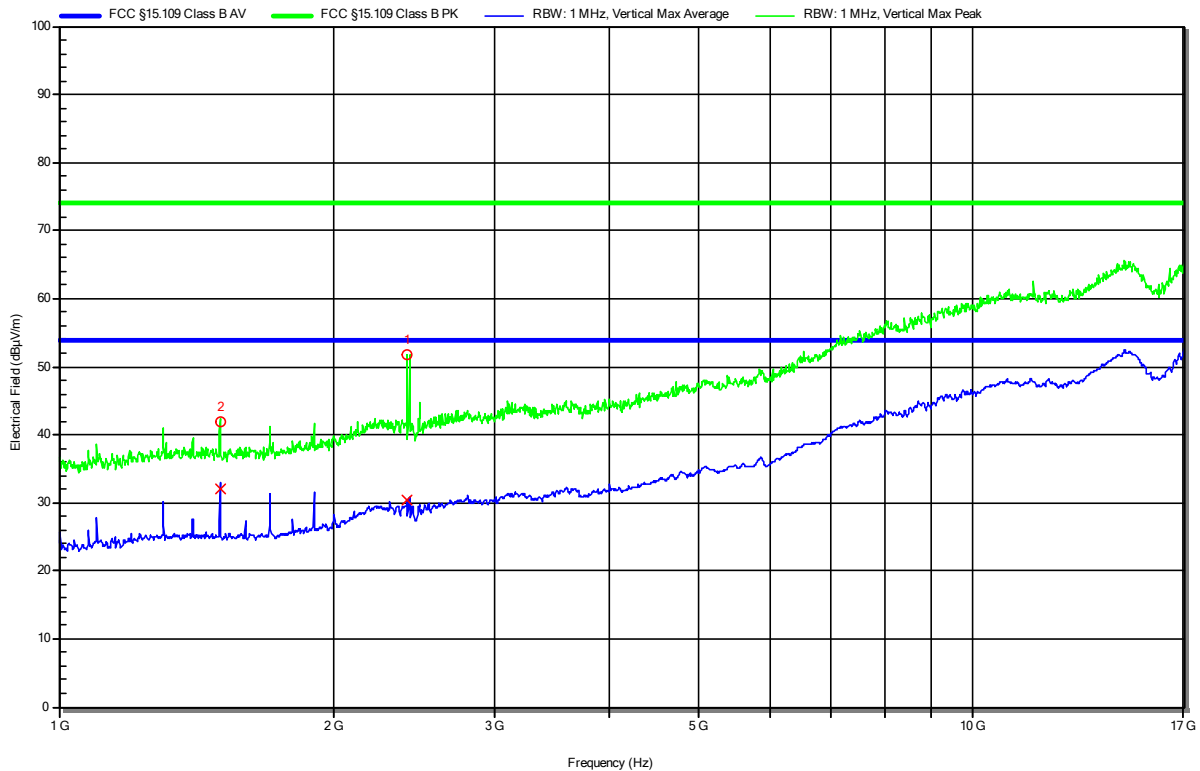
Peak Number	Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status	Angle	Height
1	960.012 MHz	34.68 dBµV/m	54 dBµV/m	-19.32 dB	Pass	-100 degrees	1 m

Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35854
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-12-21
 Operating Conditions: ambient temperature: 20 °Celsius
 power input: 5V DC via USB
 Antenna: Schwarzbeck BBHA 9120D, Vertical
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 6
 2
 Note 1: Notchfilter 2.4GHz

Index 147

RadiMation



Peak Number	Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Angle	Height
1	2.402 GHz	WLAN carrier					
2	1.5 GHz	41.97 dBµV/m	73.98 dBµV/m	-32.01 dB	Pass	0 degrees	1 m

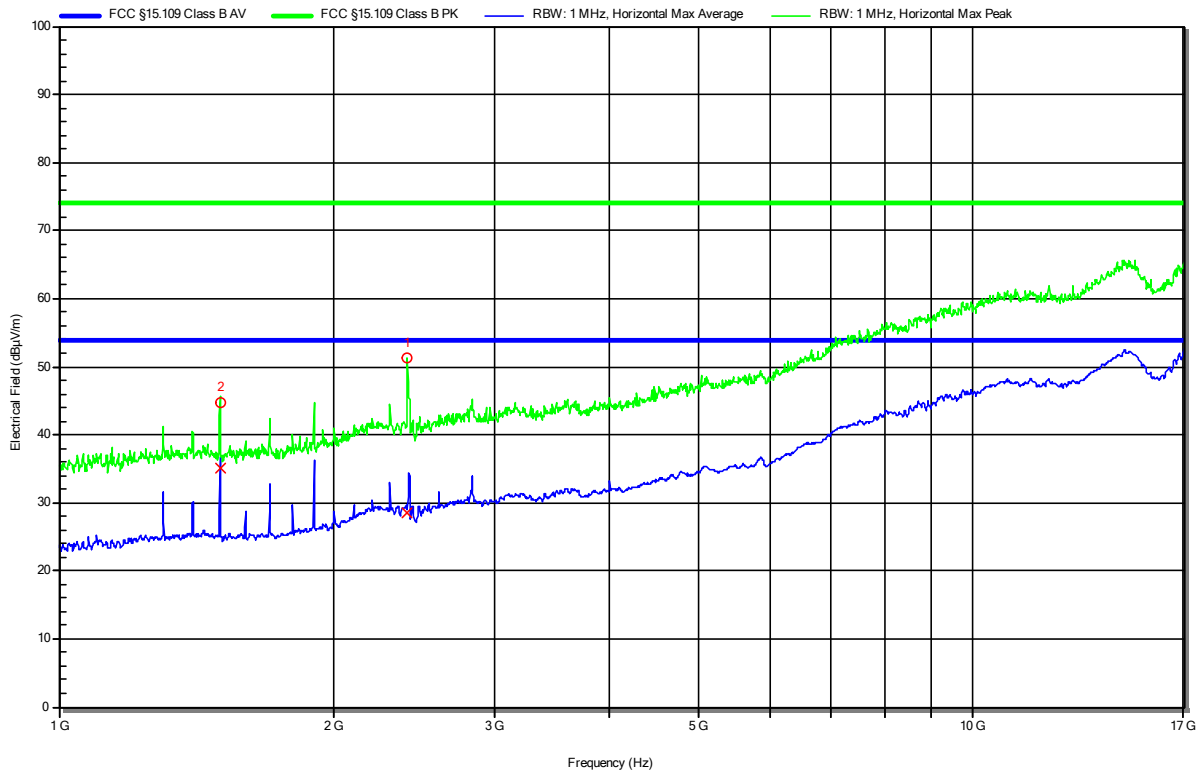
Peak Number	Frequency	Average	Average Limit	Average Difference	Average Status	Angle	Height
1	2.402 GHz	WLAN carrier					
2	1.5 GHz	32.1 dBµV/m	53.98 dBµV/m	-21.88 dB	Pass	0 degrees	1 m

Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35854
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-12-21
 Operating Conditions: ambient temperature: 20 °Celsius
 power input: 5V DC via USB
 Antenna: Schwarzbeck BBHA 9120D, Horizontal
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 6
 2
 Note 1: Notchfilter 2.4GHz

Index 146

RadiMation



Peak Number	Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Angle	Height
1	2.404 GHz	WLAN carrier					
2	1.5 GHz	44.83 dBµV/m	73.98 dBµV/m	-29.15 dB	Pass	0 degrees	1 m

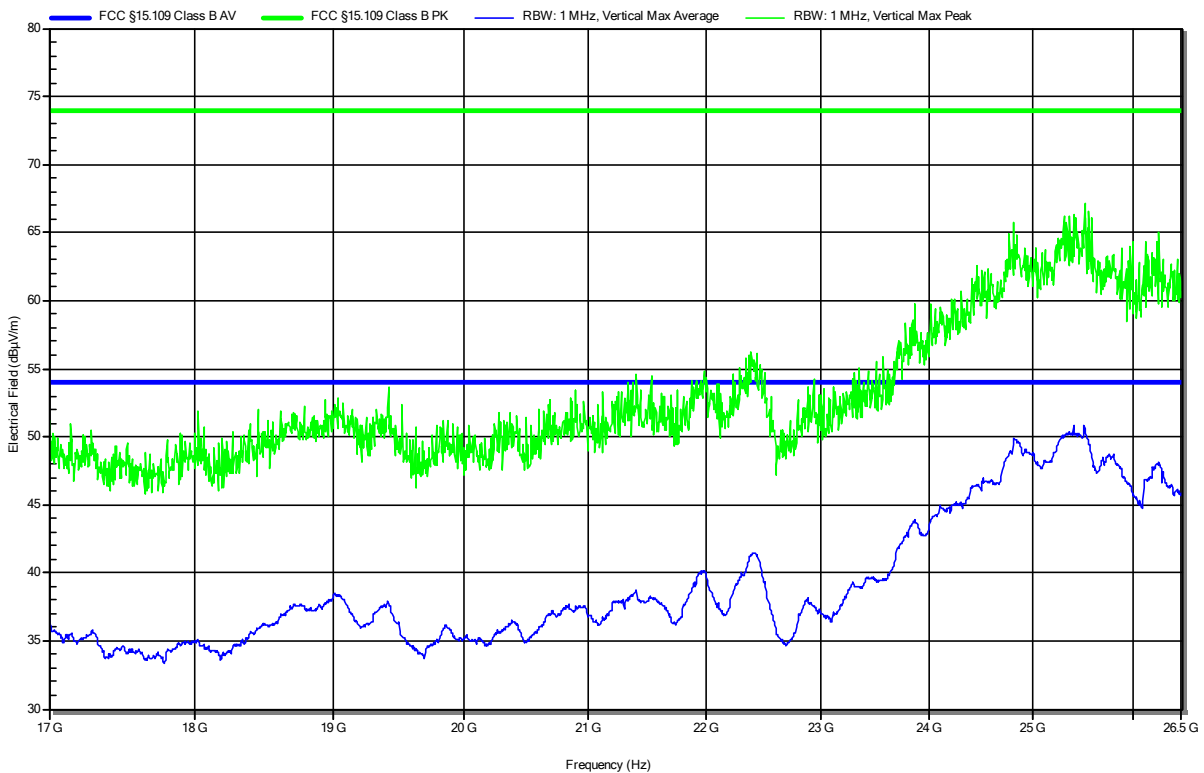
Peak Number	Frequency	Average	Average Limit	Average Difference	Average Status	Angle	Height
1	2.404 GHz	WLAN carrier					
2	1.5 GHz	35.04 dBµV/m	53.98 dBµV/m	-18.94 dB	Pass	0 degrees	1 m

Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35854
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-12-21
 Operating Conditions: ambient temperature: 20 °Celsius
 power input: 5V DC via USB
 Antenna: Amplifier Research AT4560, Vertical
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 6
 Note 1: 2

Index 135

RadiMation

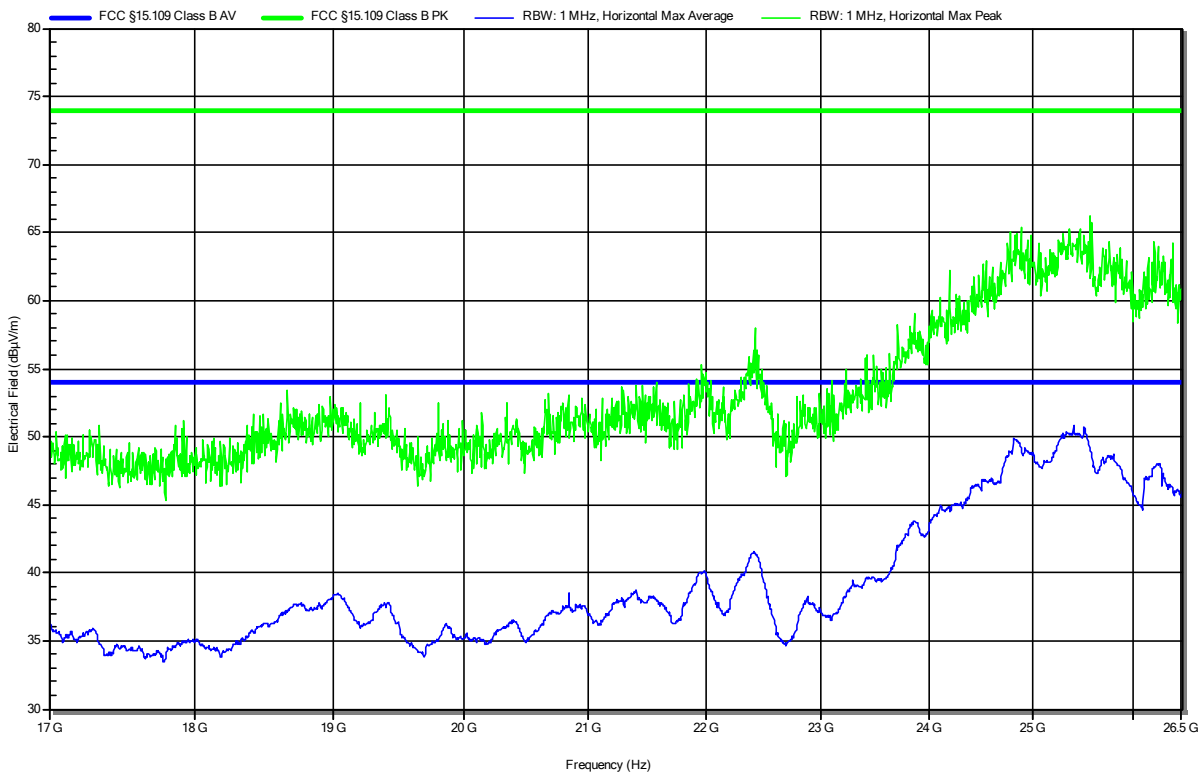


Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35854
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-12-21
 Operating Conditions: ambient temperature: 20 °Celsius
 power input: 5V DC via USB
 Antenna: Amplifier Research AT4560, Horizontal
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 6
 Note 1: 2

Index 136

RadiMation

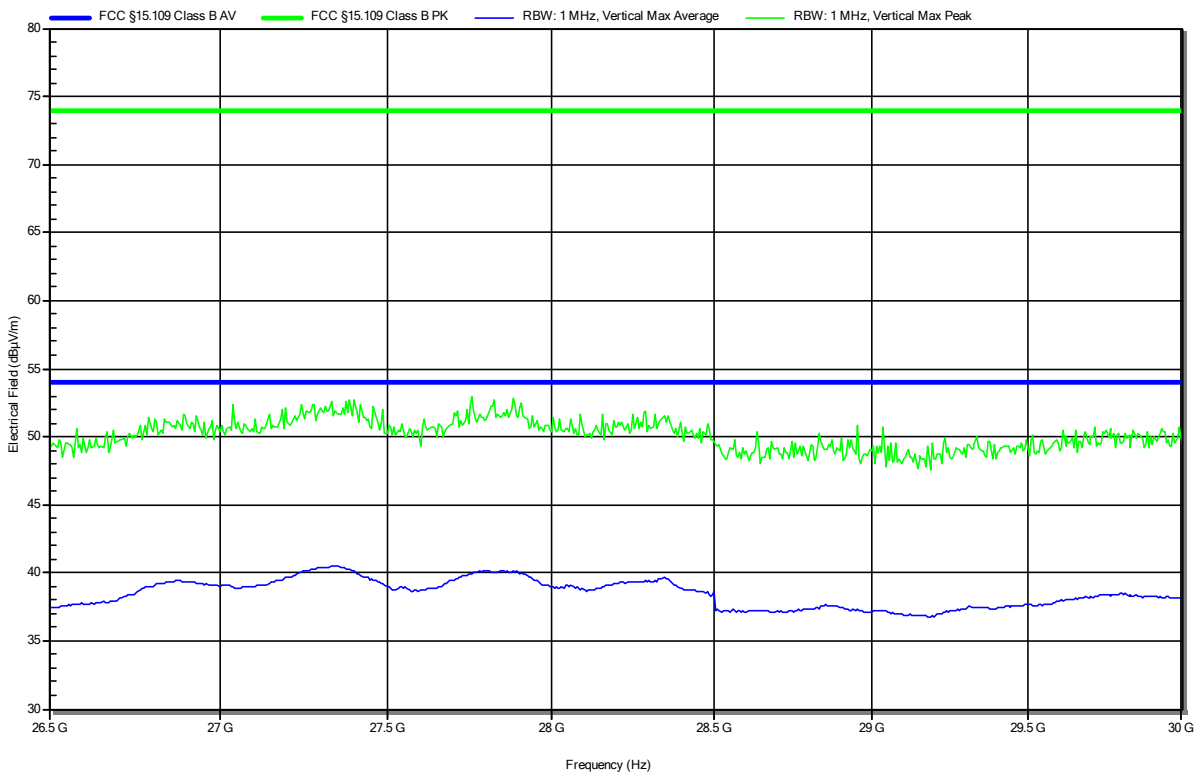


Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35854
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-12-21
 Operating Conditions: ambient temperature: 20 °Celsius
 power input: 5V DC via USB
 Antenna: CBL26402075; antenna, Vertical
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 6
 2
 Note 1:

Index 125

RadiMation

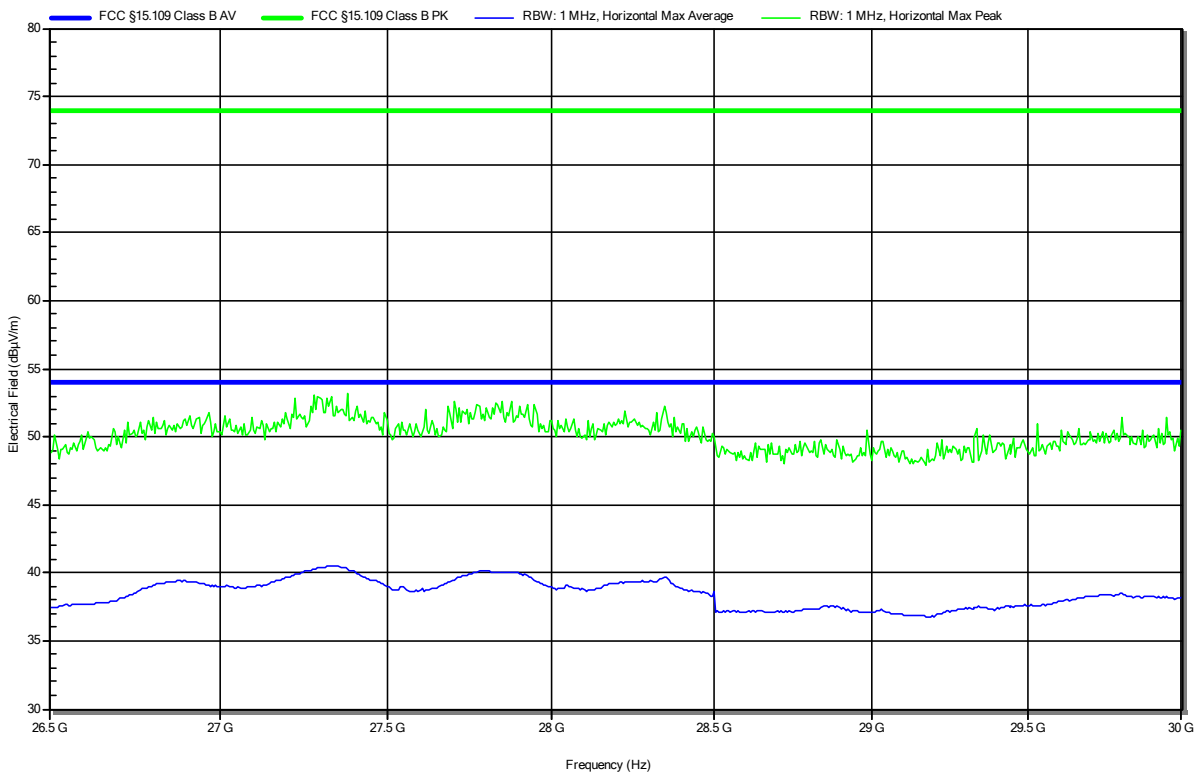


Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35854
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-12-21
 Operating Conditions: ambient temperature: 20 °Celsius
 power input: 5V DC via USB
 Antenna: CBL26402075, Horizontal
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 6
 Note 1: 2

Index 124

RadiMation

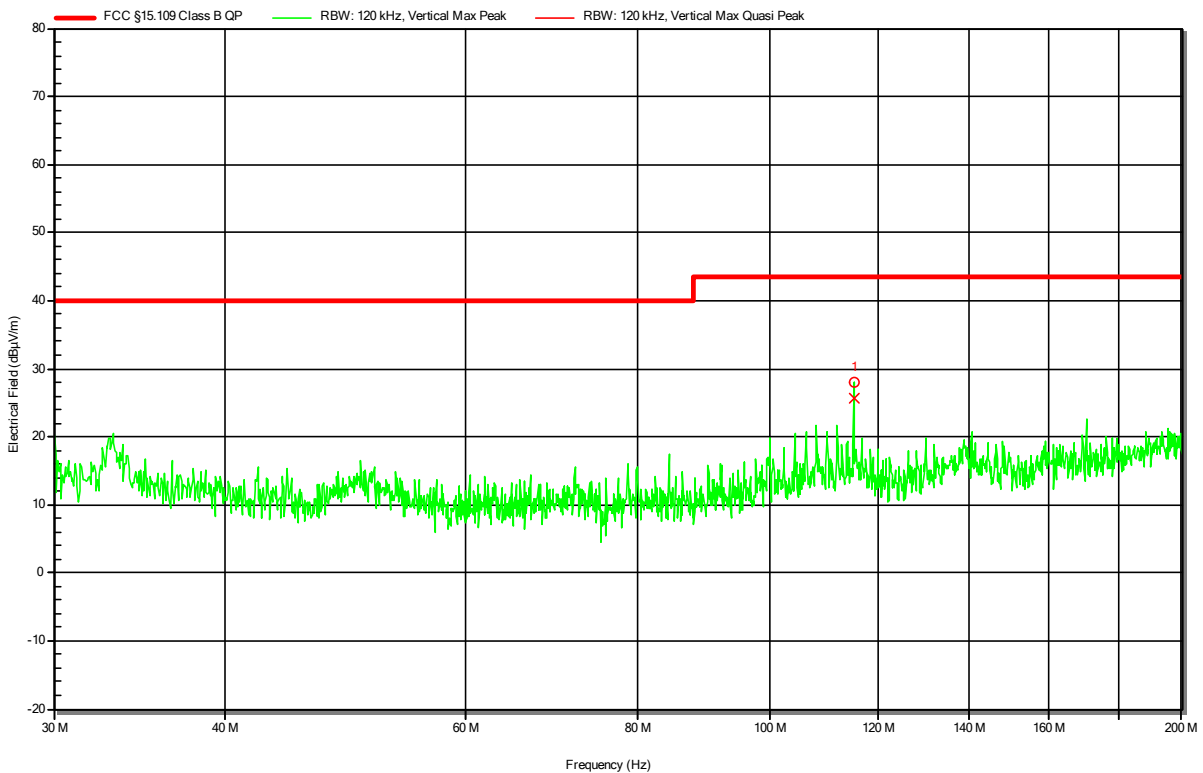


Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35854
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-12-20
 Operating Conditions: ambient temperature: 20 °Celsius
 power input: 5V DC via USB
 Antenna: Rohde & Schwarz HK 116, Vertical
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 5
 2
 Note 1:

Index 109

RadiMation



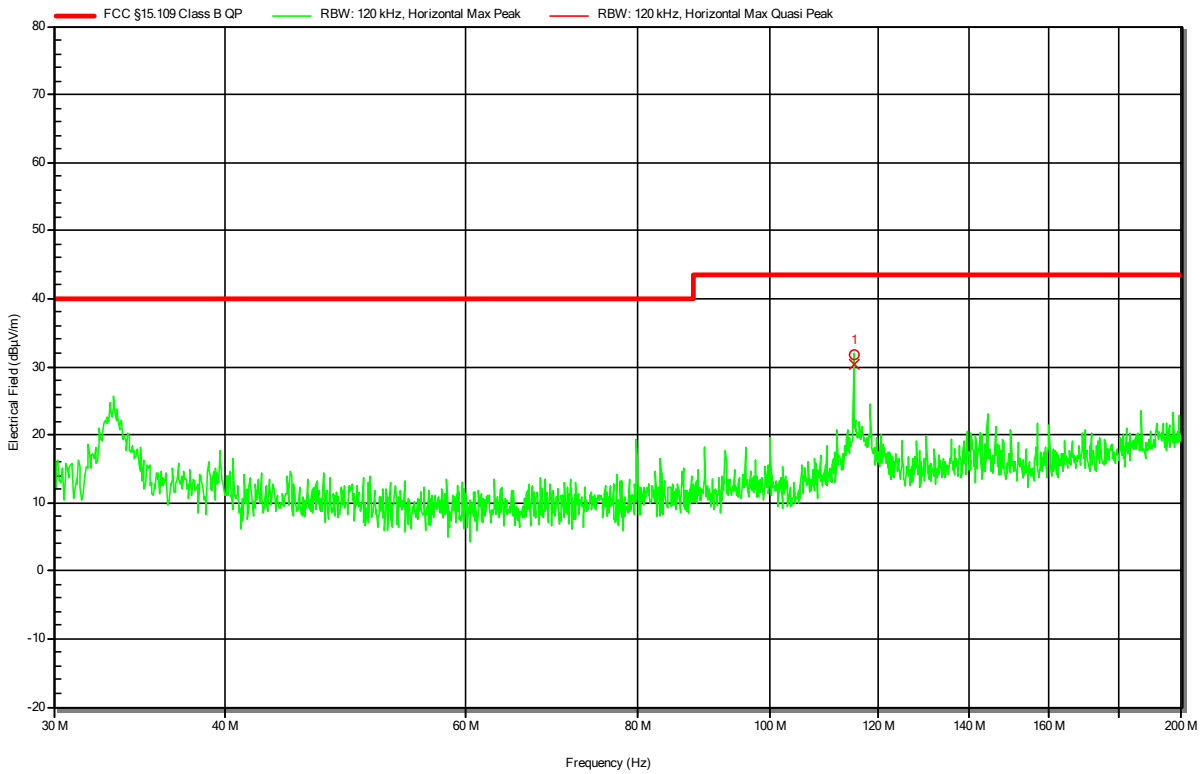
Peak Number	Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status	Angle	Height
1	115.204 MHz	25.73 dBµV/m	43.52 dBµV/m	-17.79 dB	Pass	-180 degrees	1 m

Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35854
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-12-20
 Operating Conditions: ambient temperature: 20 °Celsius
 power input: 5V DC via USB
 Antenna: Rohde & Schwarz HK 116, Horizontal
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 5
 2
 Note 1:

Index 108

RadiMation



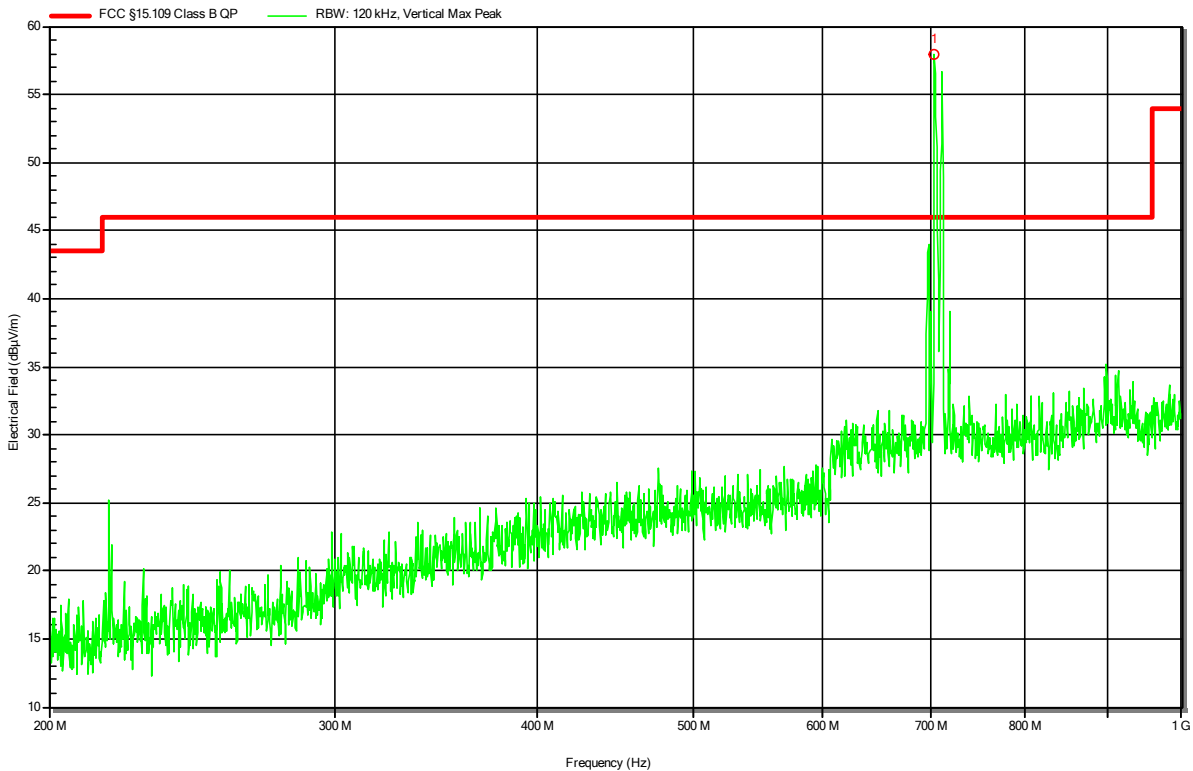
Peak Number	Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status	Angle	Height
1	115.198 MHz	30.24 dBµV/m	43.52 dBµV/m	-13.28 dB	Pass	180 degrees	1.90 m

Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35854
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-12-20
 Operating Conditions: ambient temperature: 20 °Celsius
 power input: 5V DC via USB
 Antenna: Rohde & Schwarz HL 223, Vertical
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 5
 2
 Note 1: Notchfilter for LTE FDD 12

Index 118

RadiMation



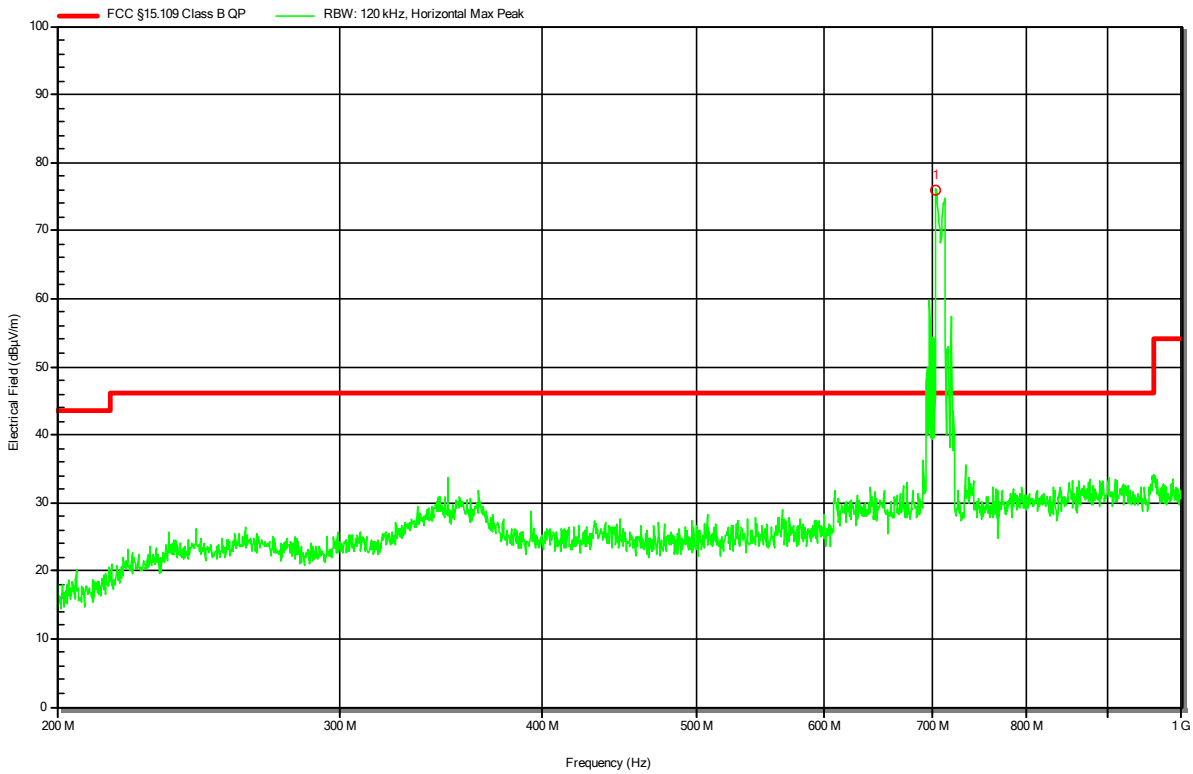
Peak Number	Frequency	Angle	Height
1	703.392 MHz	LTE carrier	

Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35854
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-12-20
 Operating Conditions: ambient temperature: 20 °Celsius
 power input: 5V DC via USB
 Antenna: Rohde & Schwarz HL 223, Horizontal
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 5
 Note 1: Notchfilter LTD FDD 12

Index 119

RadiMation



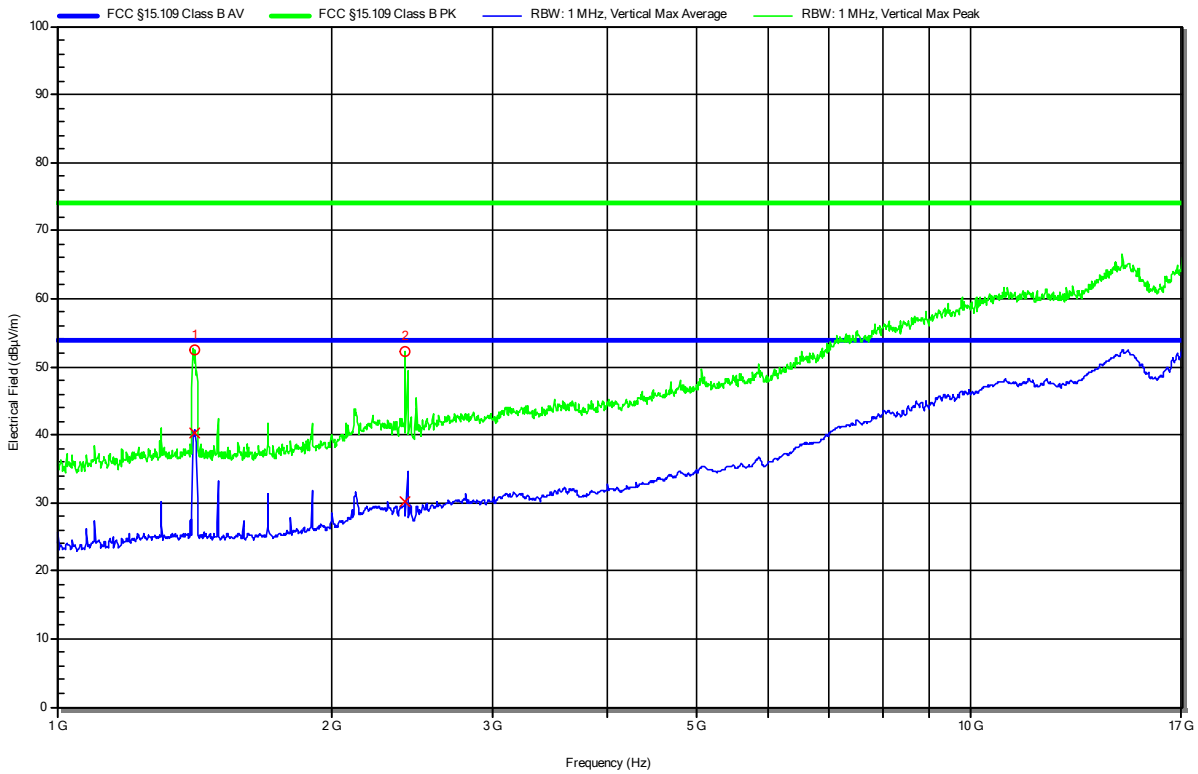
Peak Number	Frequency	Angle	Height
1	703.344 MHz	LTE carrier	

Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35854
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-12-21
 Operating Conditions: ambient temperature: 20 °Celsius
 power input: 5V DC via USB
 Antenna: Schwarzbeck BBHA 9120D, Vertical
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 5
 2
 Note 1: Notchfilter 2.4GHz

Index 144

RadiMation



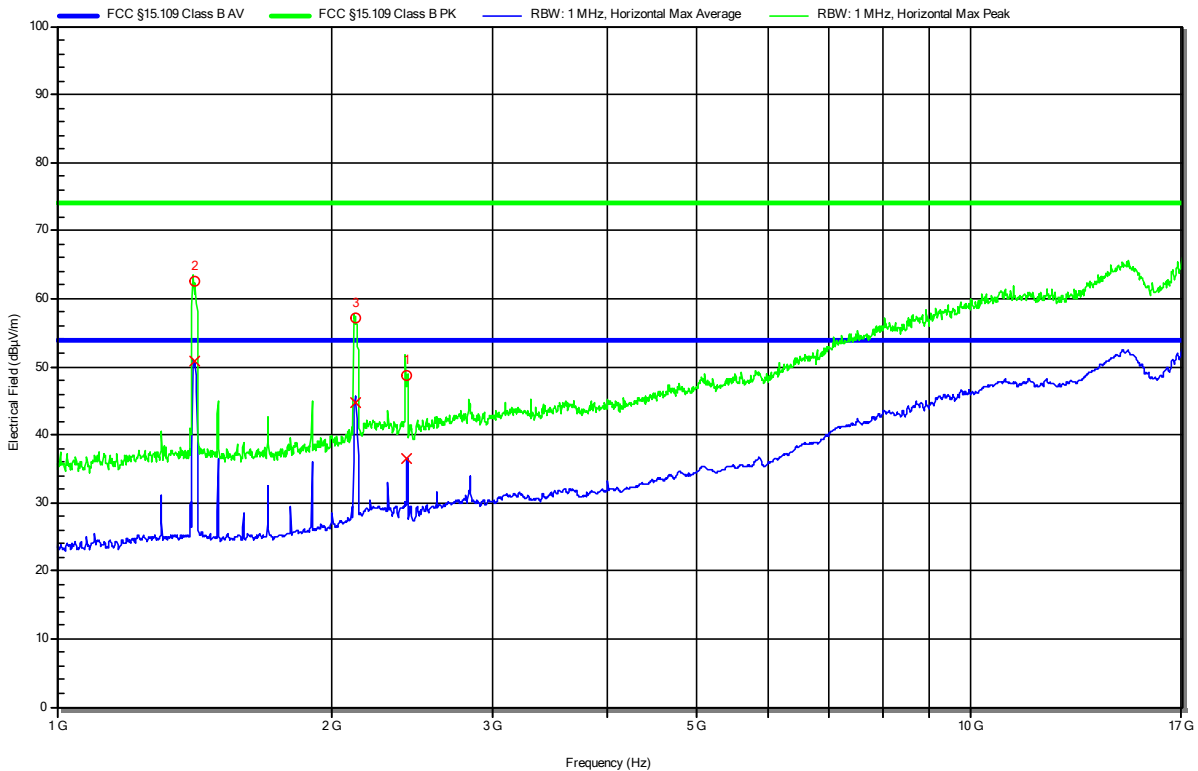
Peak Number	Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Angle	Height
1	1.415 GHz	LTE 2 nd harmonic					
2	2.402 GHz	WLAN carrier					

Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35854
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-12-21
 Operating Conditions: ambient temperature: 20 °Celsius
 power input: 5V DC via USB
 Antenna: Schwarzbeck BBHA 9120D, Horizontal
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 5
 Note 1: Notchfilter 2.4GHz

Index 145

RadiMation



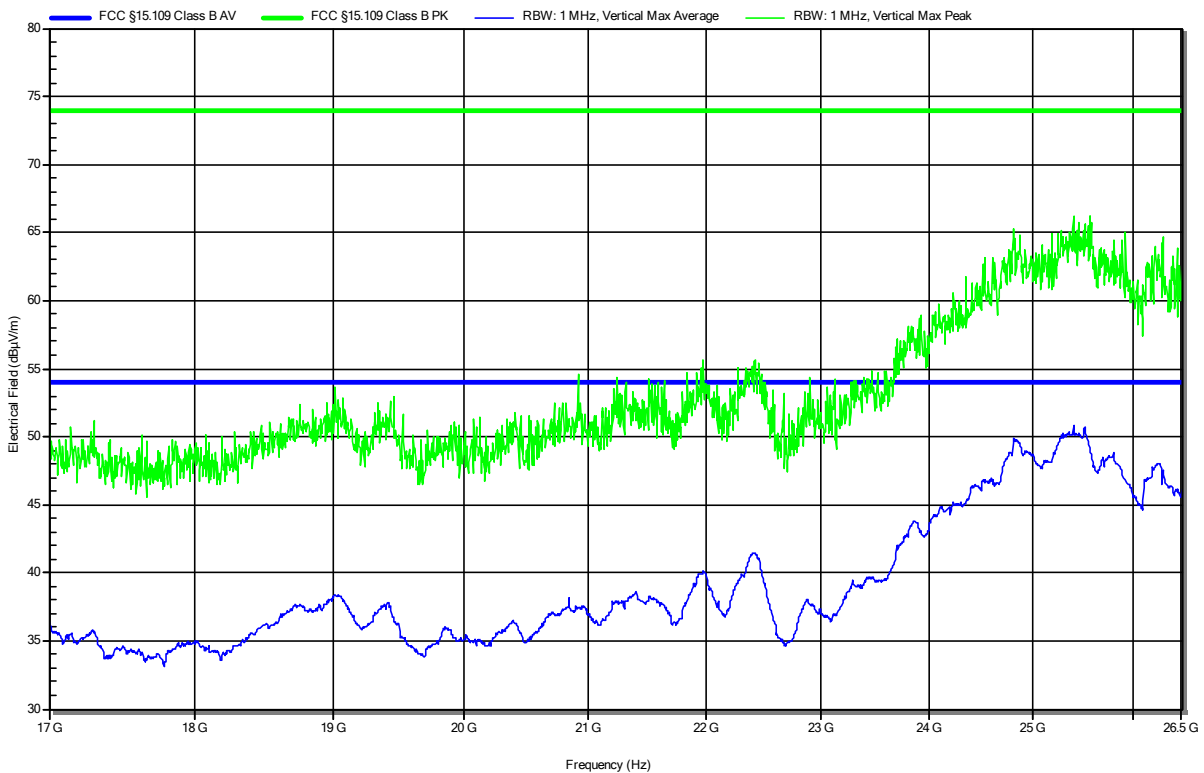
Peak Number	Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Angle	Height
1	2.414 GHz	WLAN carrier					
2	1.415 GHz	LTE 2 nd harmonic					
3	2.12 GHz	LTE 3 rd harmonic					

Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35854
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-12-21
 Operating Conditions: ambient temperature: 20 °Celsius
 power input: 5V DC via USB
 Antenna: Amplifier Research AT4560, Vertical
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 5
 2
 Note 1:

Index 138

RadiMation

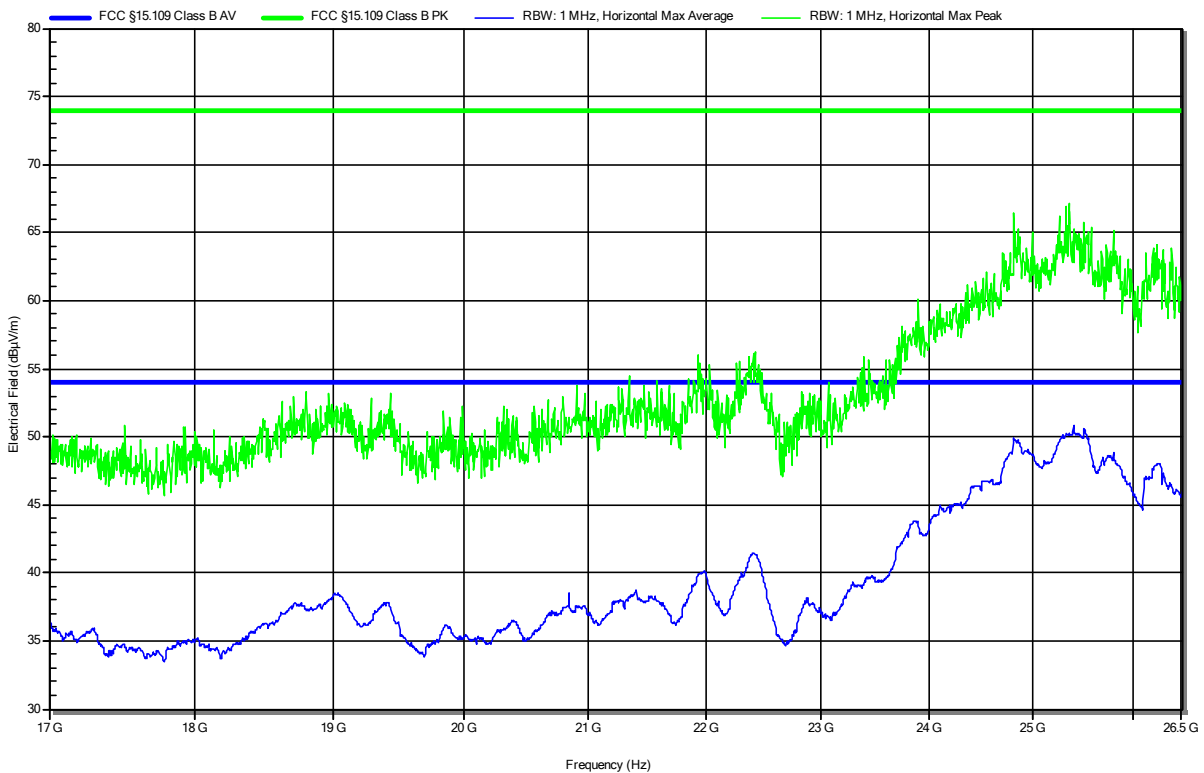


Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35854
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-12-21
 Operating Conditions: ambient temperature: 20 °Celsius
 power input: 5V DC via USB
 Antenna: Amplifier Research AT4560, Horizontal
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 5
 2
 Note 1:

Index 137

RadiMation

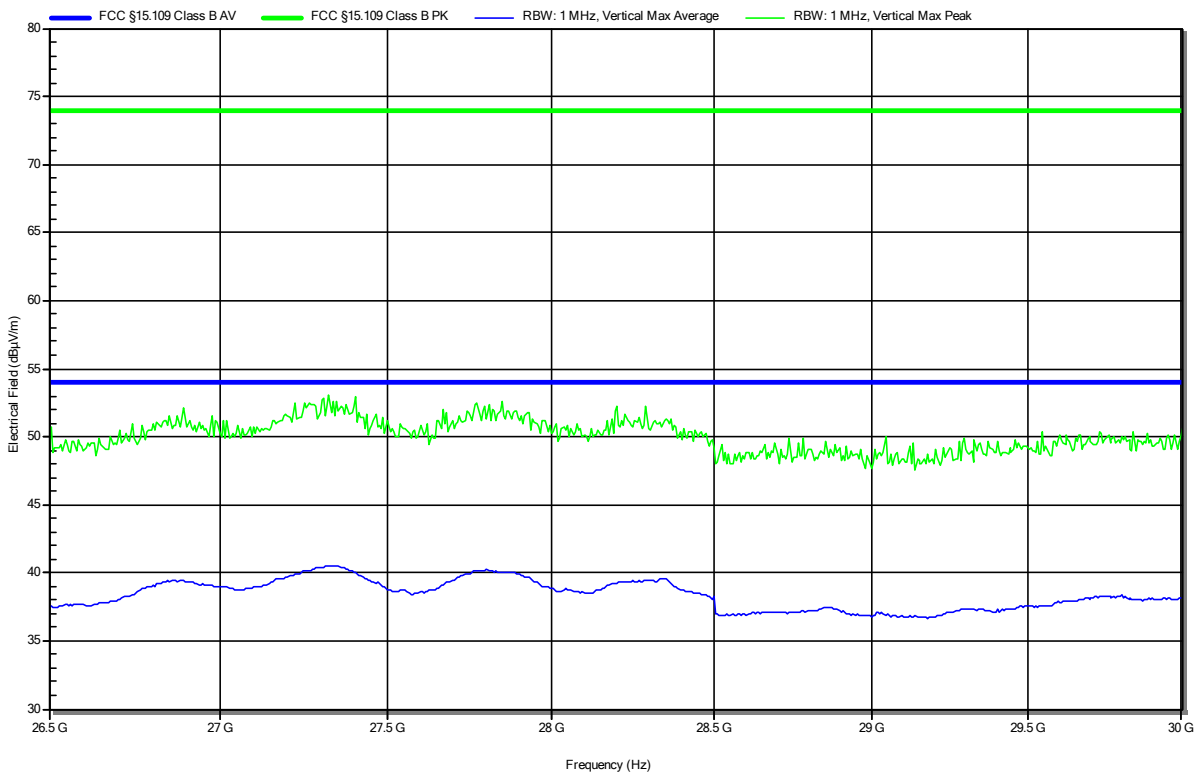


Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35854
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-12-21
 Operating Conditions: ambient temperature: 20 °Celsius
 power input: 5V DC via USB
 Antenna: CBL26402075, Vertical
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 5
 2
 Note 1:

Index 122

RadiMation

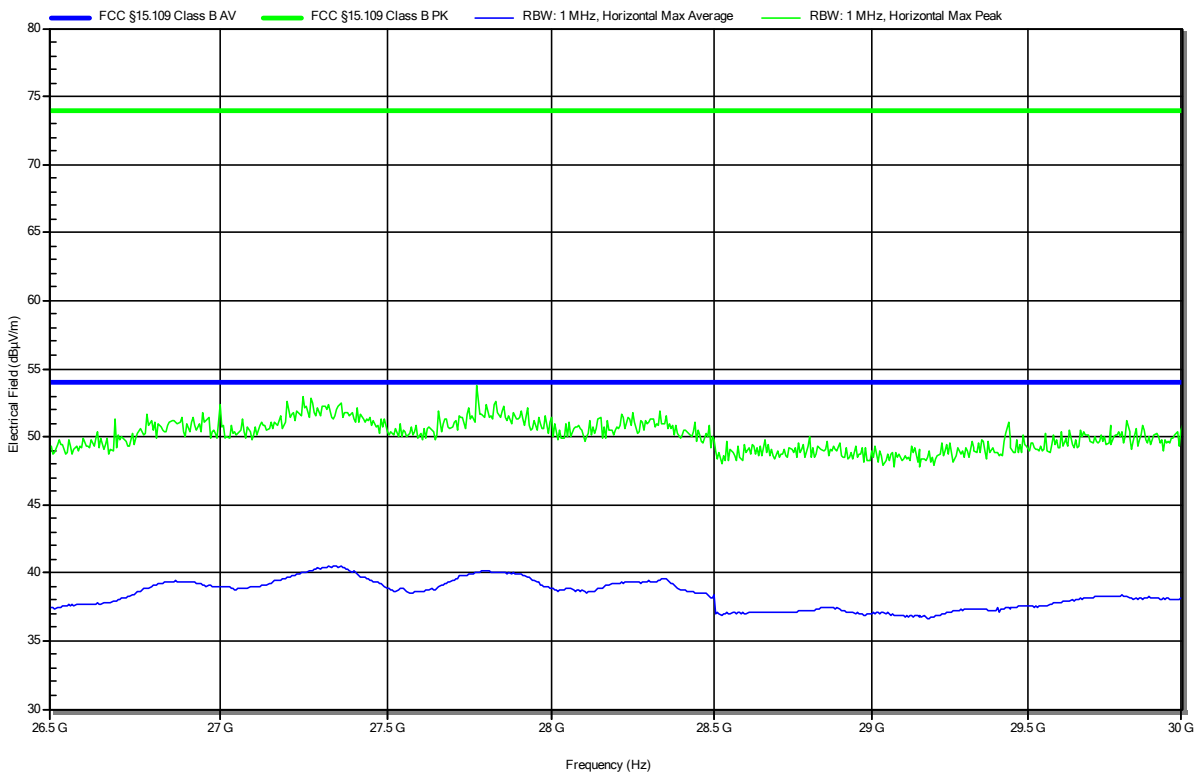


Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35854
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-12-21
 Operating Conditions: ambient temperature: 20 °Celsius
 power input: 5V DC via USB
 Antenna: CBL26402075, Horizontal
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 5
 2
 Note 1:

Index 123

RadiMation

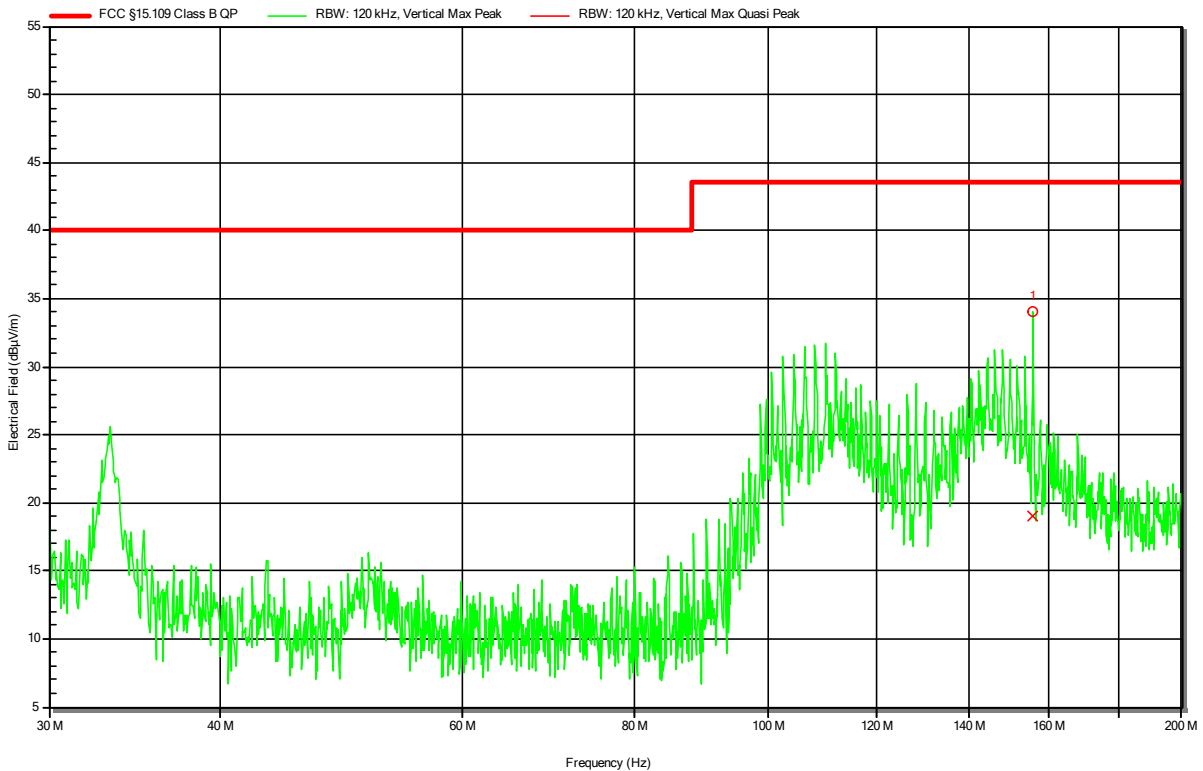


Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35709
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-12-20
 Operating Conditions: ambient temperature: 20 °Celsius
 power input: 5V DC via USB
 Antenna: Rohde & Schwarz HK 116, Vertical
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 8
 2
 Note 1:

Index 110

RadiMation



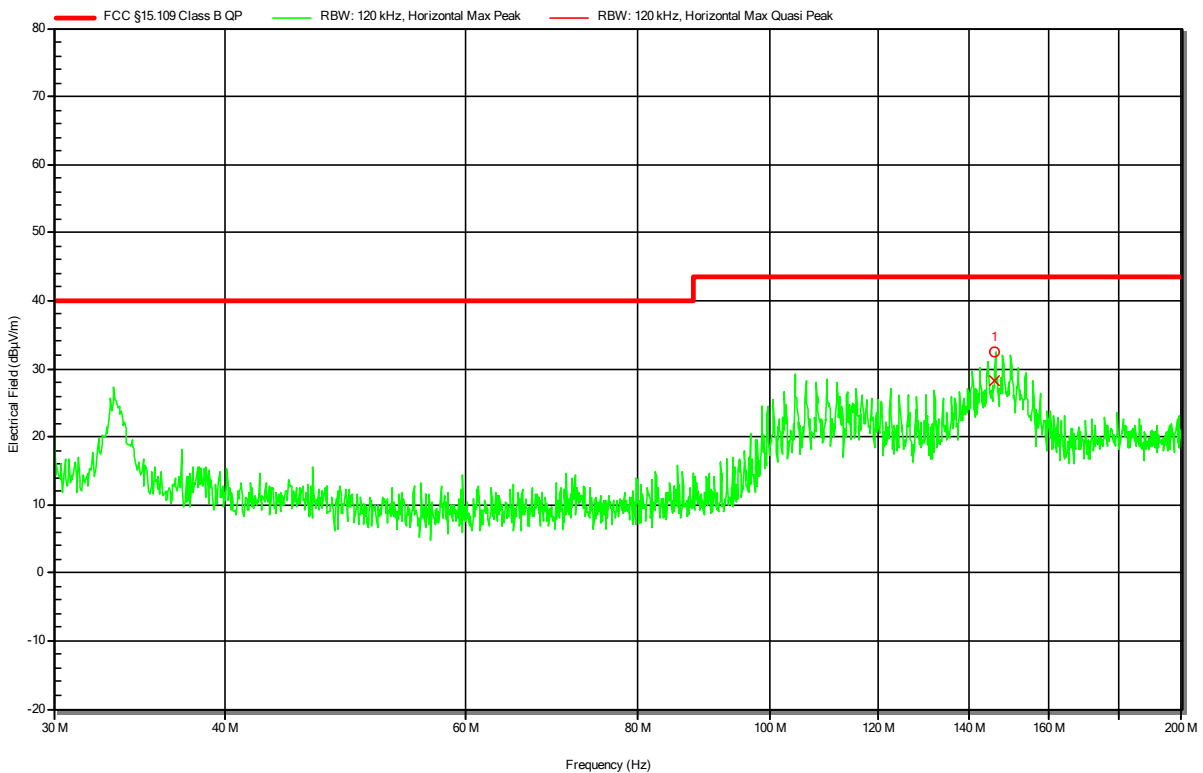
Peak Number	Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status	Angle	Height
1	155.984 MHz	19.06 dBµV/m	43.52 dBµV/m	-24.46 dB	Pass	0 degrees	1 m

Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35709
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-12-20
 Operating Conditions: ambient temperature: 20 °Celsius
 power input: 5V DC via USB
 Antenna: Rohde & Schwarz HK 116, Horizontal
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 8
 Note 1: 2

Index 111

RadiMation



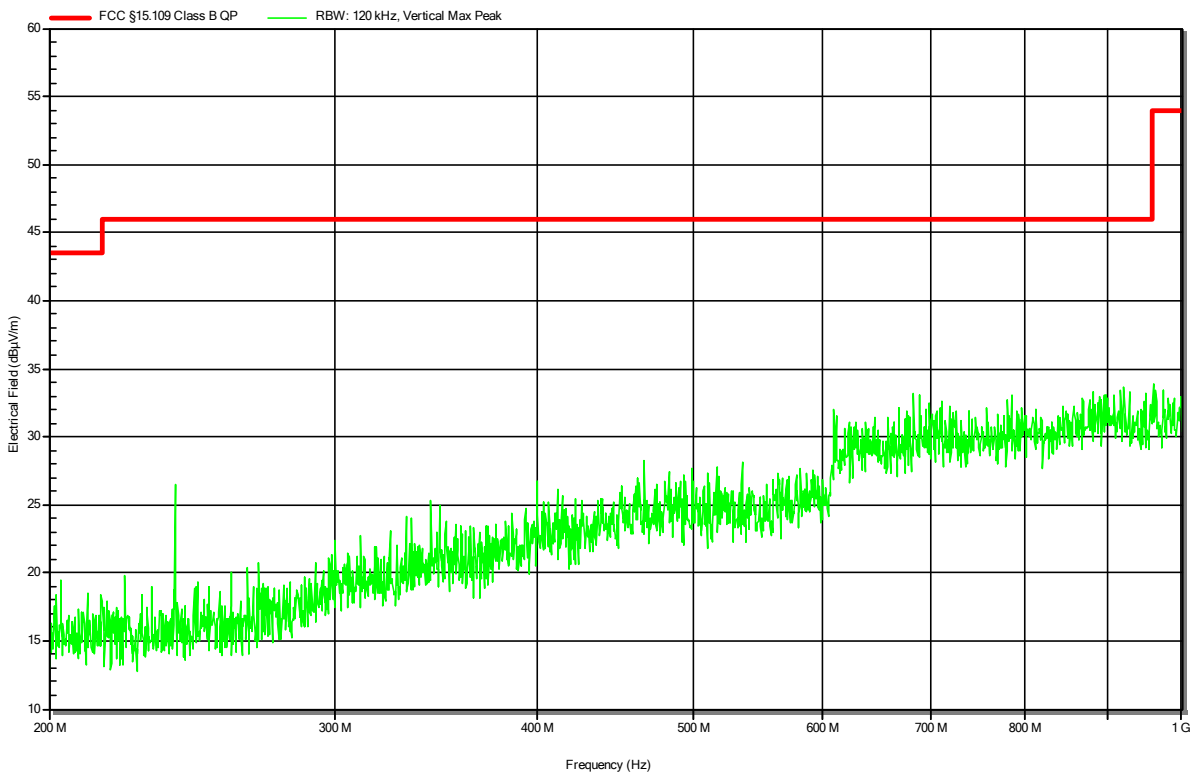
Peak Number	Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status	Angle	Height
1	146.148 MHz	28.34 dBµV/m	43.52 dBµV/m	-15.19 dB	Pass	114 degrees	2.26 m

Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35709
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-12-20
 Operating Conditions: ambient temperature: 20 °Celsius
 power input: 5V DC via USB
 Antenna: Rohde & Schwarz HL 223, Vertical
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 8
 Note 1: 2

Index 114

RadiMation

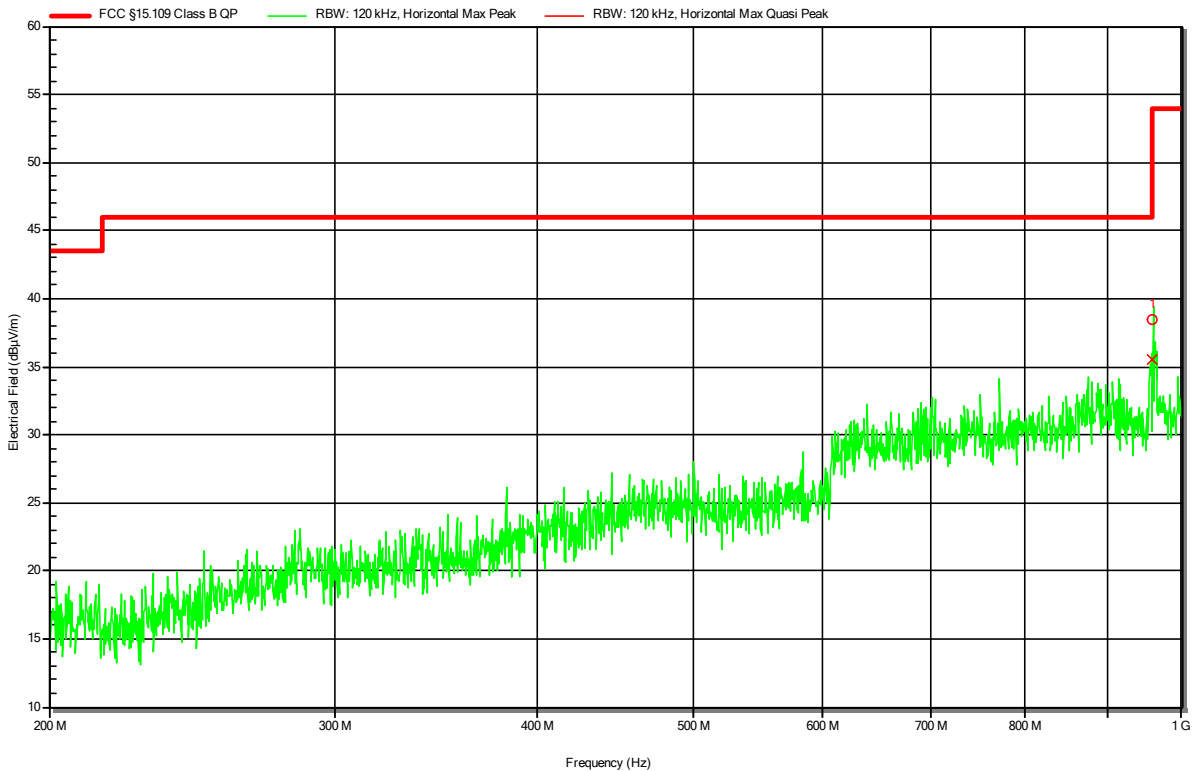


Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35709
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-12-20
 Operating Conditions: ambient temperature: 20 °Celsius
 power input: 5V DC via USB
 Antenna: Rohde & Schwarz HL 223, Horizontal
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 8
 Note 1: 2

Index 115

RadiMation

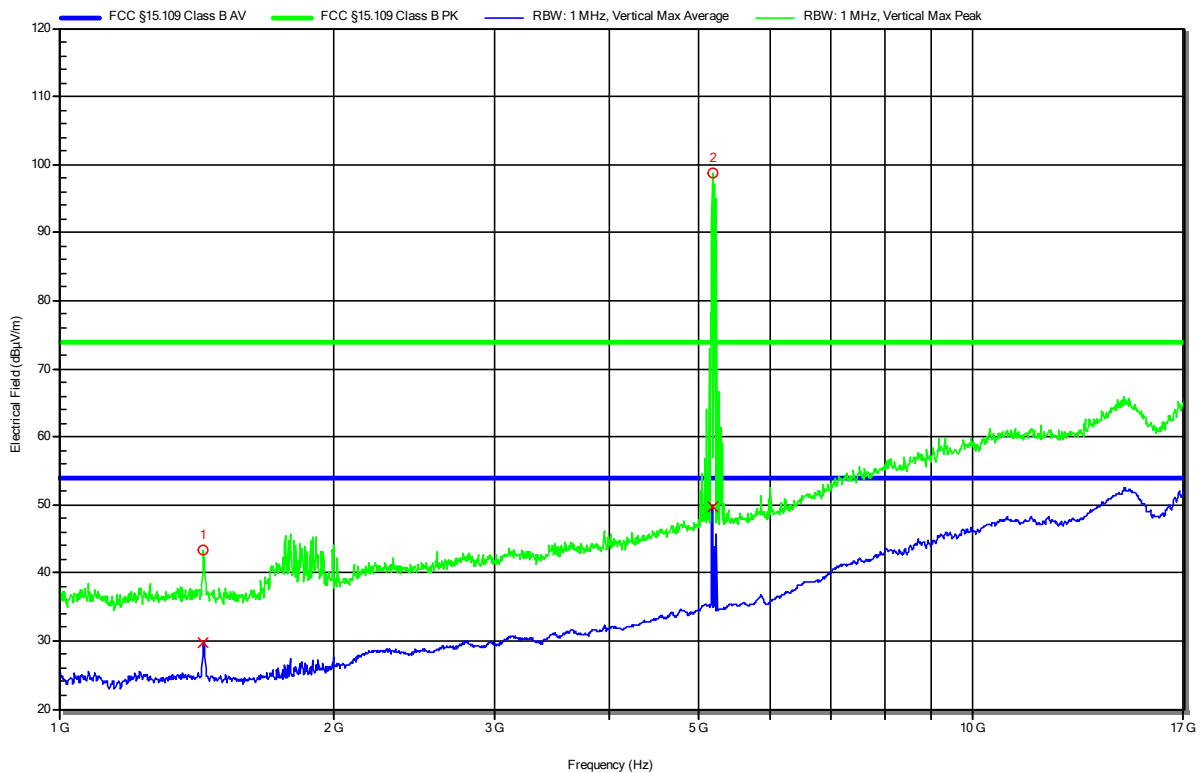


Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35709
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-12-21
 Operating Conditions: ambient temperature: 20 °Celsius
 power input: 5V DC via USB
 Antenna: Schwarzbeck BBHA 9120D, Vertical
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 8
 Note 1: 2

Index 139

RadiMation



Peak Number	Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Angle	Height
1	1.44 GHz	43.25 dBµV/m	73.98 dBµV/m	-30.73 dB	Pass	0 degrees	1 m
2	5.187 GHz	WLAN carrier					

Peak Number	Frequency	Average	Average Limit	Average Difference	Average Status	Angle	Height
1	1.44 GHz	29.66 dBµV/m	53.98 dBµV/m	-24.32 dB	Pass	0 degrees	1 m
2	5.187 GHz	WLAN carrier					

Test Report No.: G0M-2011-9488-EF0115B-V02

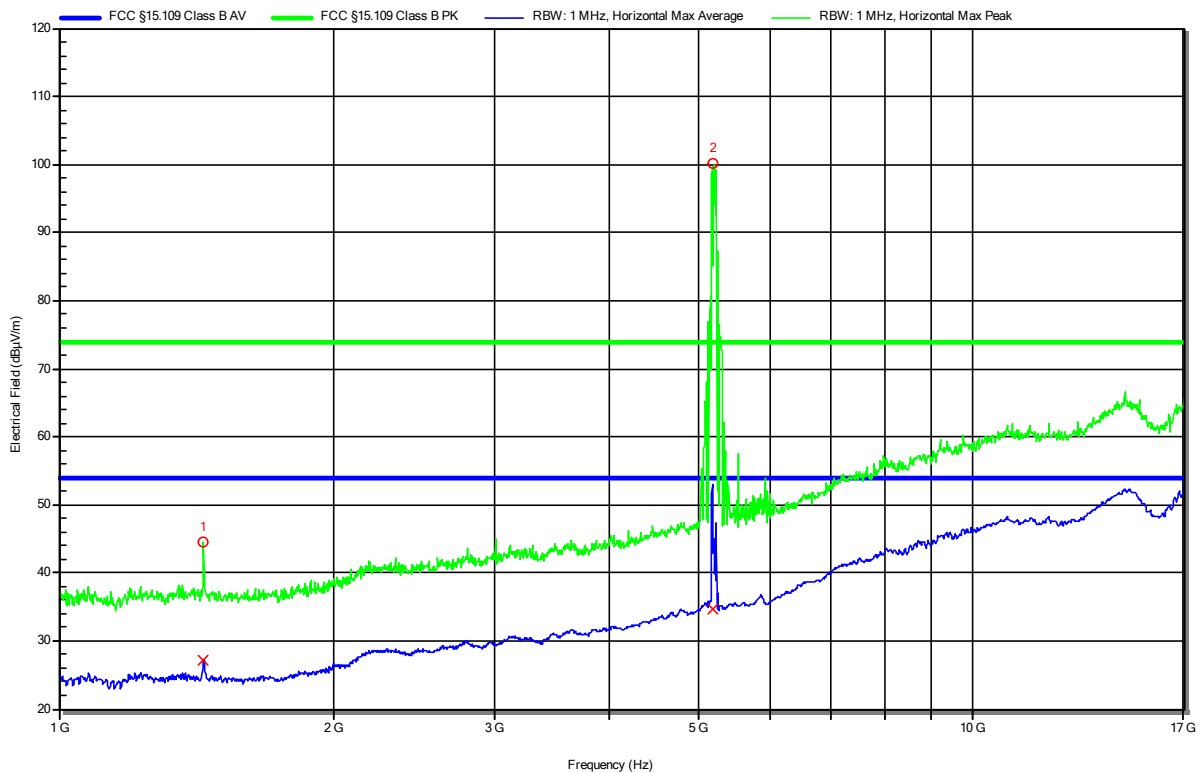
Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35709
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-12-21
 Operating Conditions: ambient temperature: 20 °Celsius
 power input: 5V DC via USB
 Antenna: Schwarzbeck BBHA 9120D, Horizontal
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 8
 2
 Note 1:

Index 141

RadiMation



Peak Number	Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Angle	Height
1	1.44 GHz	44.6 dBµV/m	73.98 dBµV/m	-29.38 dB	Pass	0 degrees	1 m
2	5.204 GHz	WLAN carrier					

Peak Number	Frequency	Average	Average Limit	Average Difference	Average Status	Angle	Height
1	1.44 GHz	27.25 dBµV/m	53.98 dBµV/m	-26.73 dB	Pass	0 degrees	1 m
2	5.204 GHz	WLAN carrier					

Test Report No.: G0M-2011-9488-EF0115B-V02

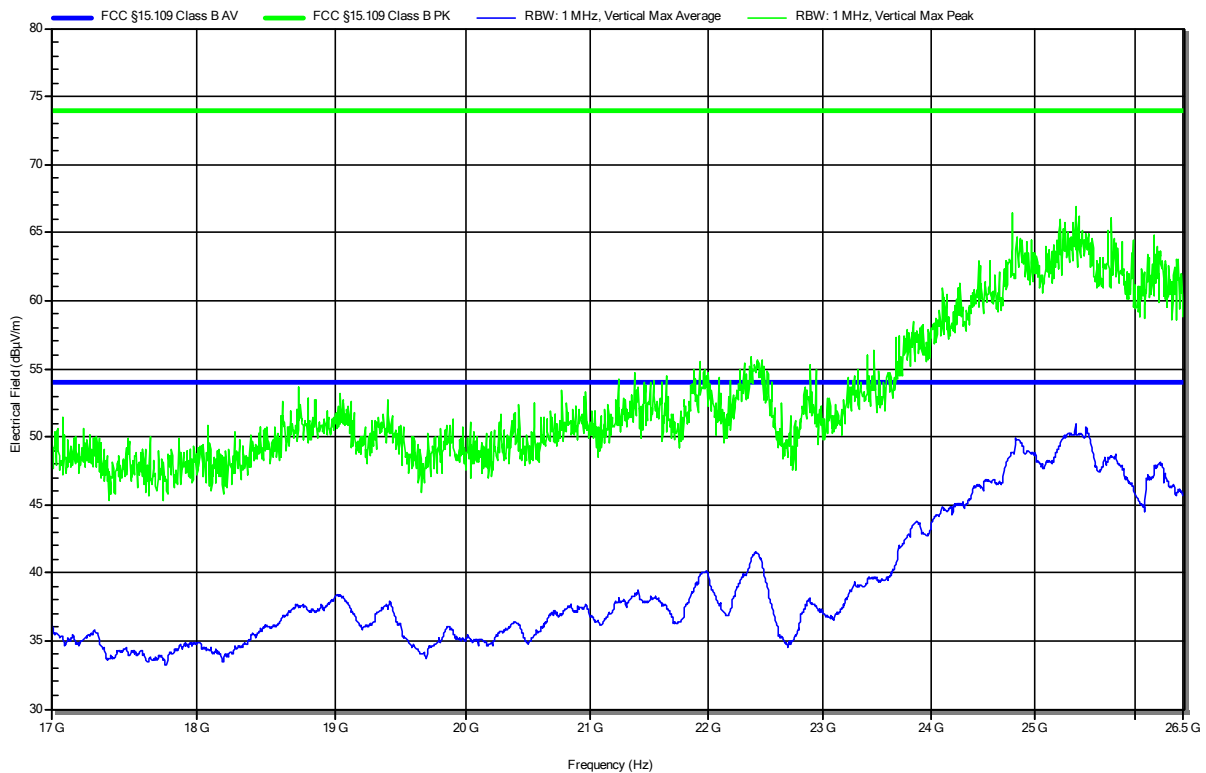
Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35709
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-12-21
 Operating Conditions: ambient temperature: 20 °Celsius
 power input: 5V DC via USB
 Antenna: Amplifier Research AT4560, Vertical
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 8
 Note 1: 2

Index 134

RadiMation

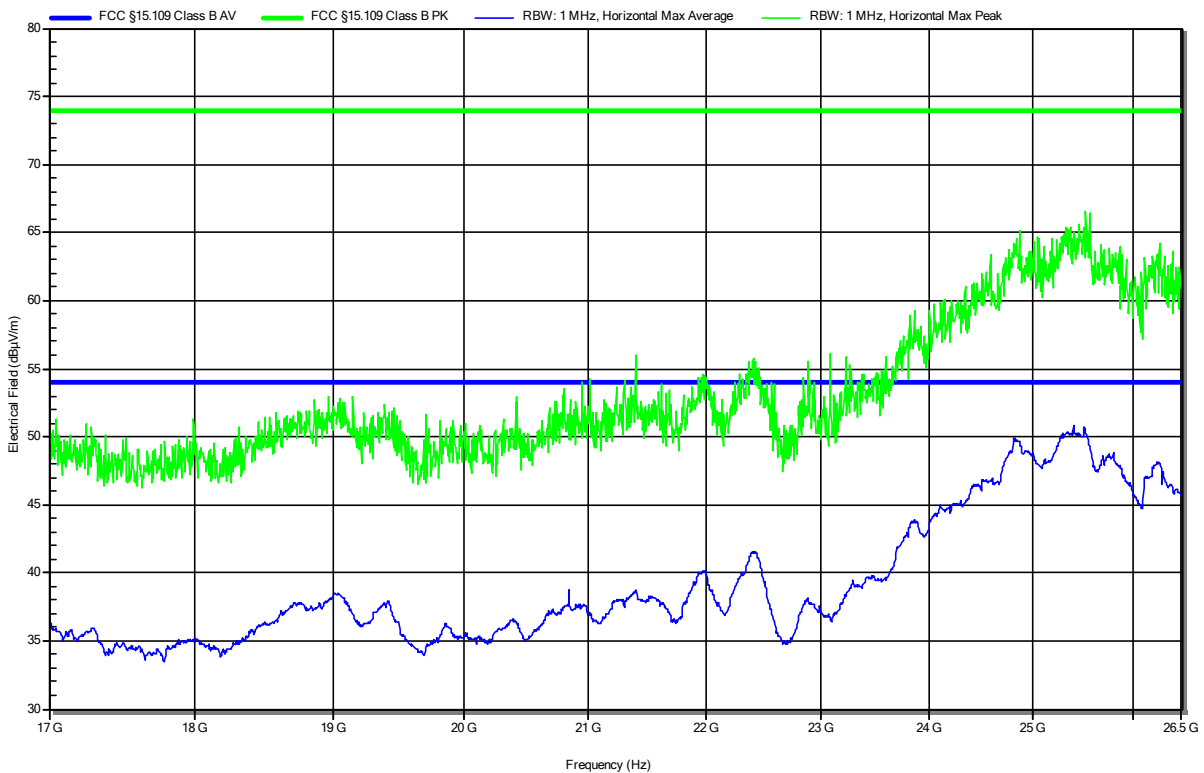


Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35709
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-12-21
 Operating Conditions: ambient temperature: 20 °Celsius
 power input: 5V DC via USB
 Antenna: Amplifier Research AT4560, Horizontal
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 8
 Note 1:

Index 133

RadiMation

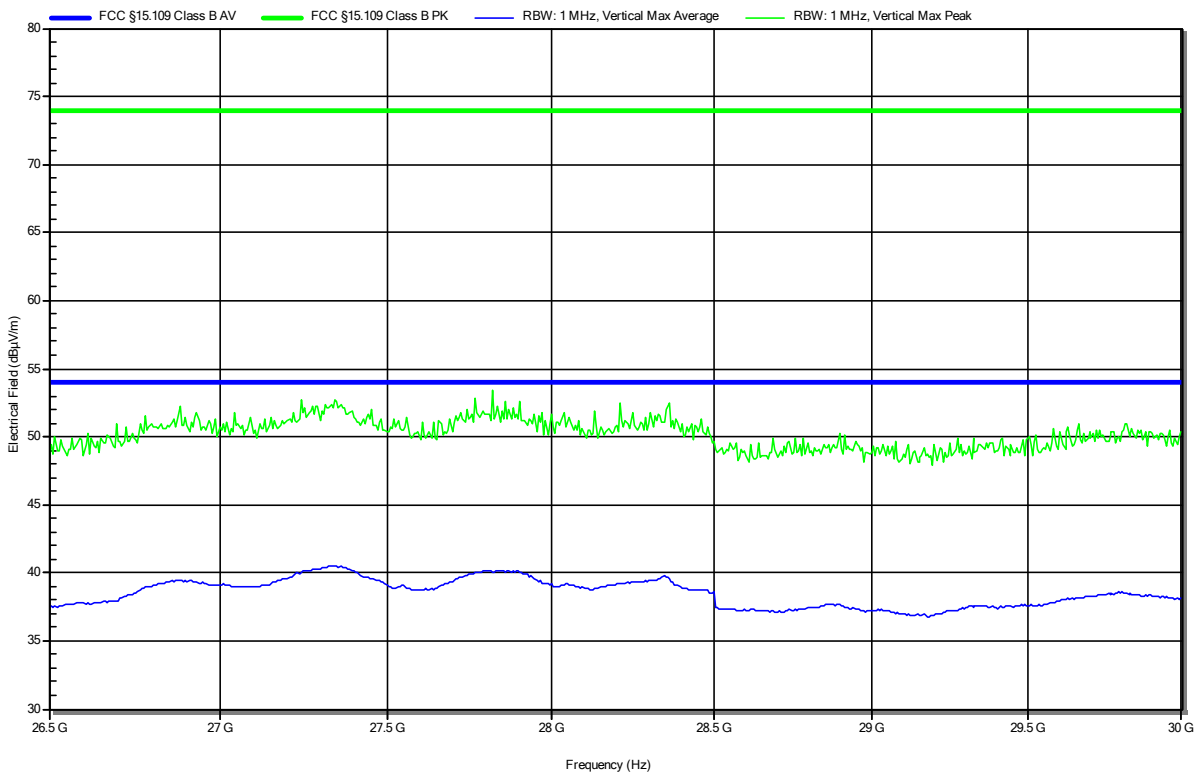


Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35709
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-12-21
 Operating Conditions: ambient temperature: 20 °Celsius
 power input: 5V DC via USB
 Antenna: CBL26402075, Vertical
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 8
 Note 1:

Index 127

RadiMation

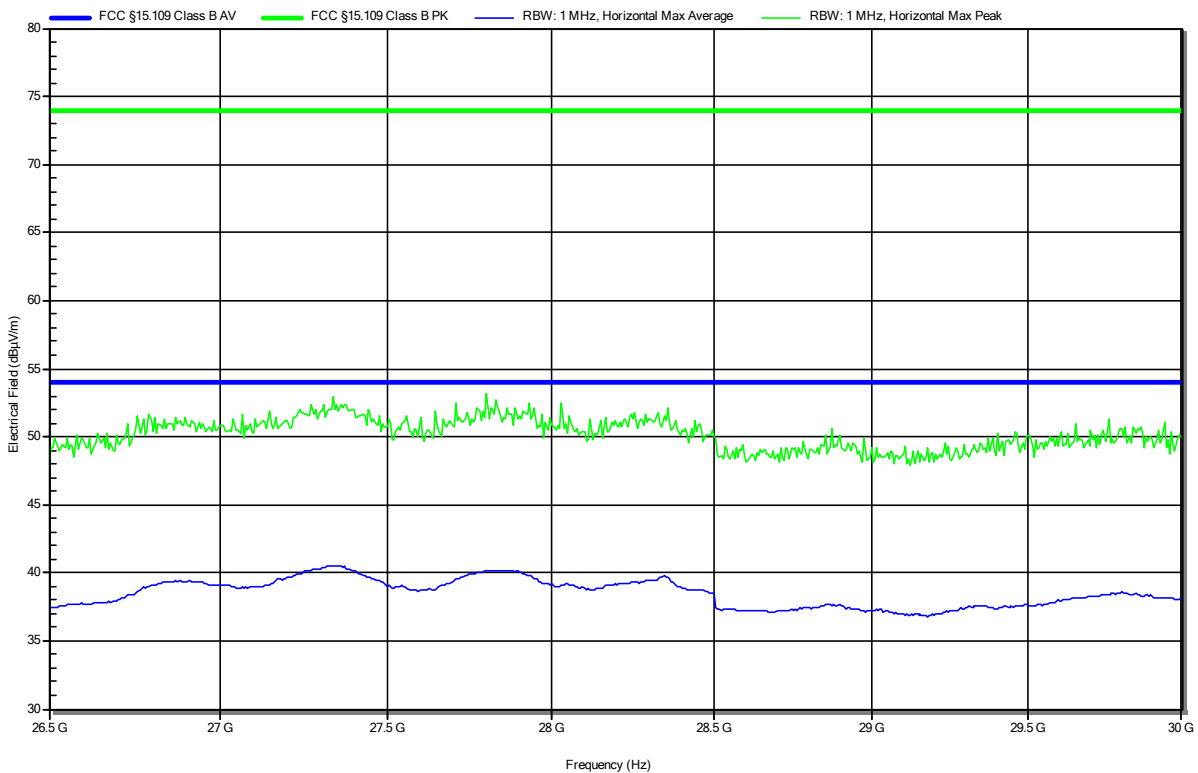


Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35709
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-12-21
 Operating Conditions: ambient temperature: 20 °Celsius
 power input: 5V DC via USB
 Antenna: CBL26402075, Horizontal
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 8
 Note 1:

Index 128

RadiMation

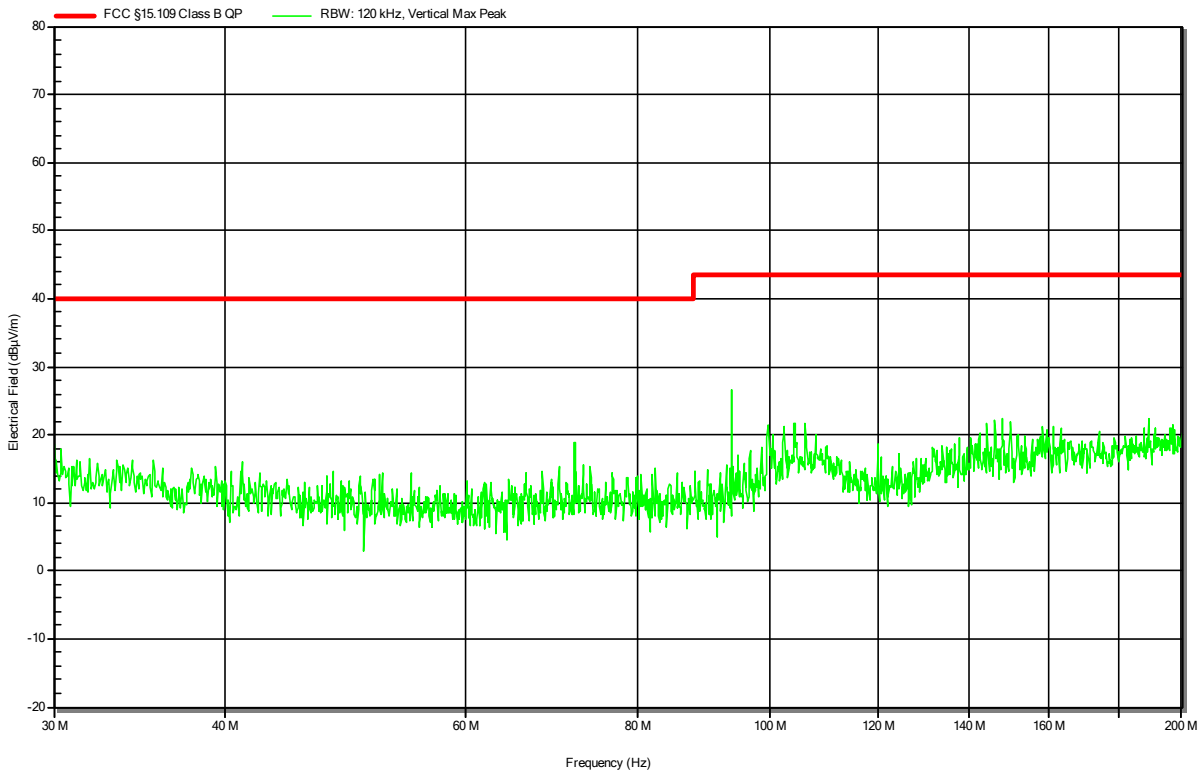


Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35709
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-12-20
 Operating Conditions: ambient temperature: 20 °Celsius
 power input: 5V DC via USB
 Antenna: Rohde & Schwarz HK 116, Vertical
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 7
 Note 1: 2

Index 113

RadiMation

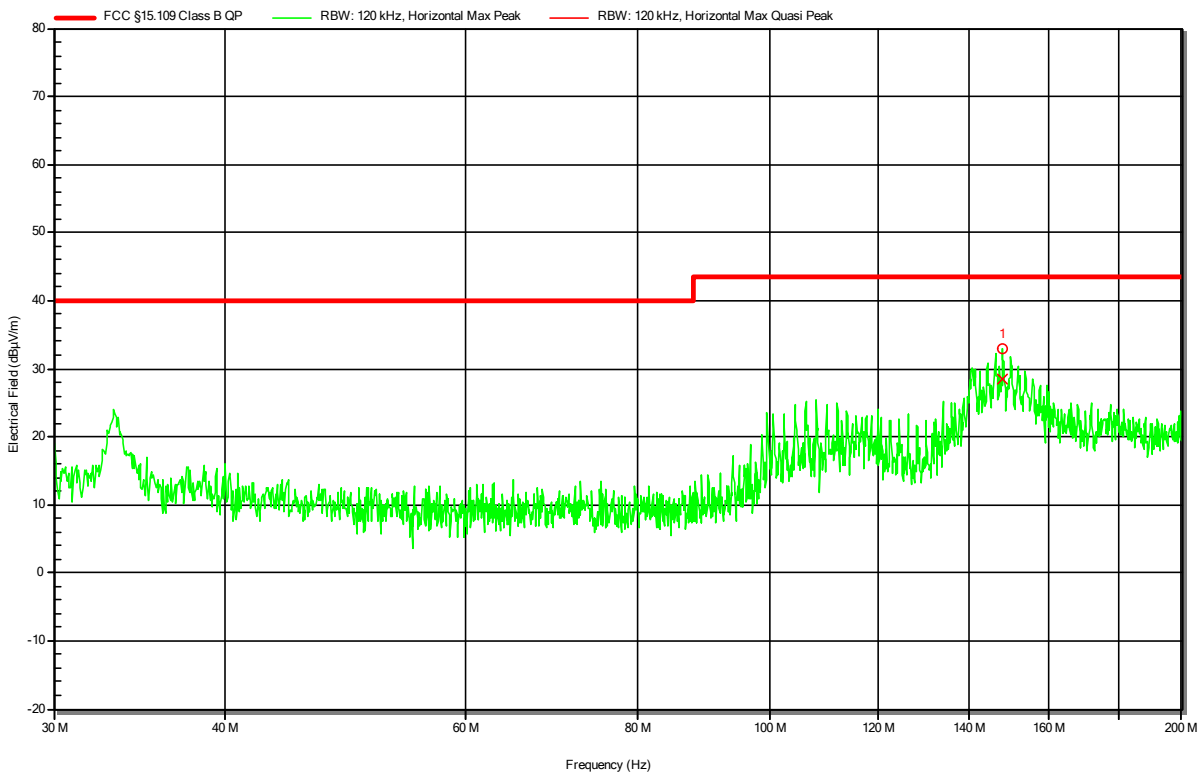


Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35709
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-12-20
 Operating Conditions: ambient temperature: 20 °Celsius
 power input: 5V DC via USB
 Antenna: Rohde & Schwarz HK 116, Horizontal
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 7
 Note 1: 2

Index 112

RadiMation



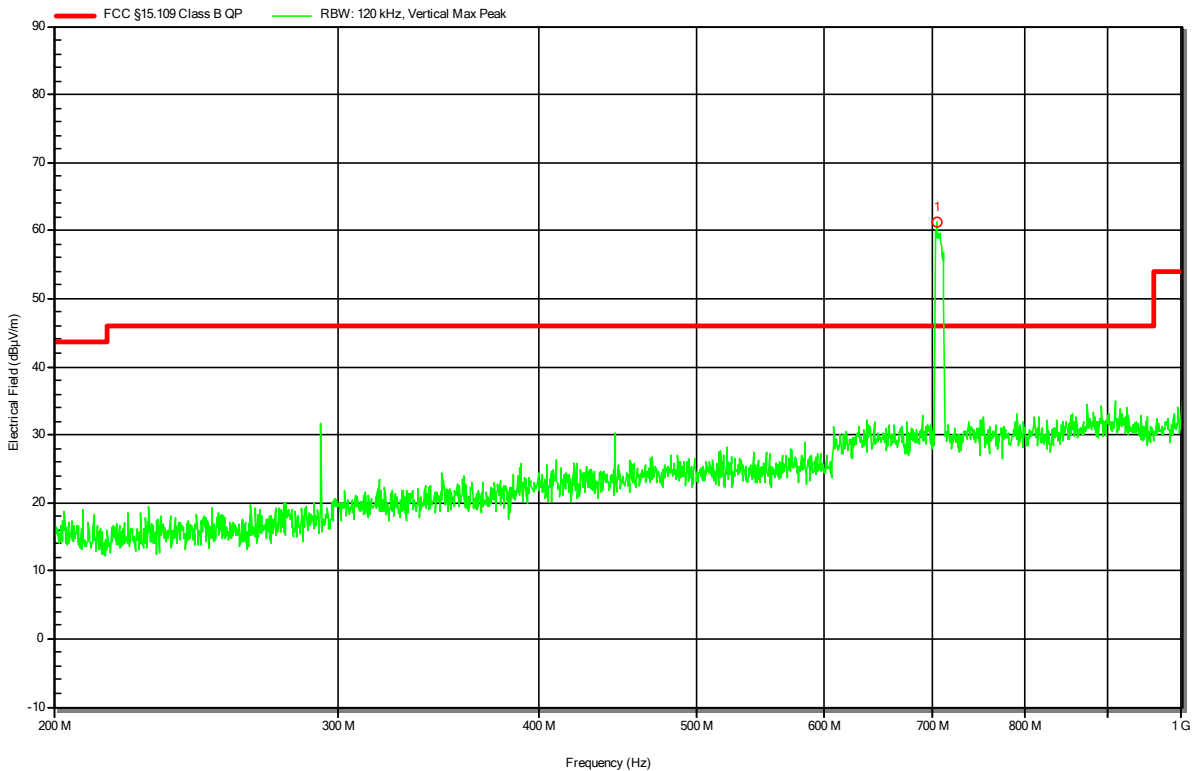
Peak Number	Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status	Angle	Height
1	148.003 MHz	28.5 dBµV/m	43.52 dBµV/m	-15.02 dB	Pass	122 degrees	1.75 m

Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35709
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-12-20
 Operating Conditions: ambient temperature: 20 °Celsius
 power input: 5V DC via USB
 Antenna: Rohde & Schwarz HL 223, Vertical
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 7
 2
 Note 1: Notchfilter LTE FDD 12

Index 121

RadiMation



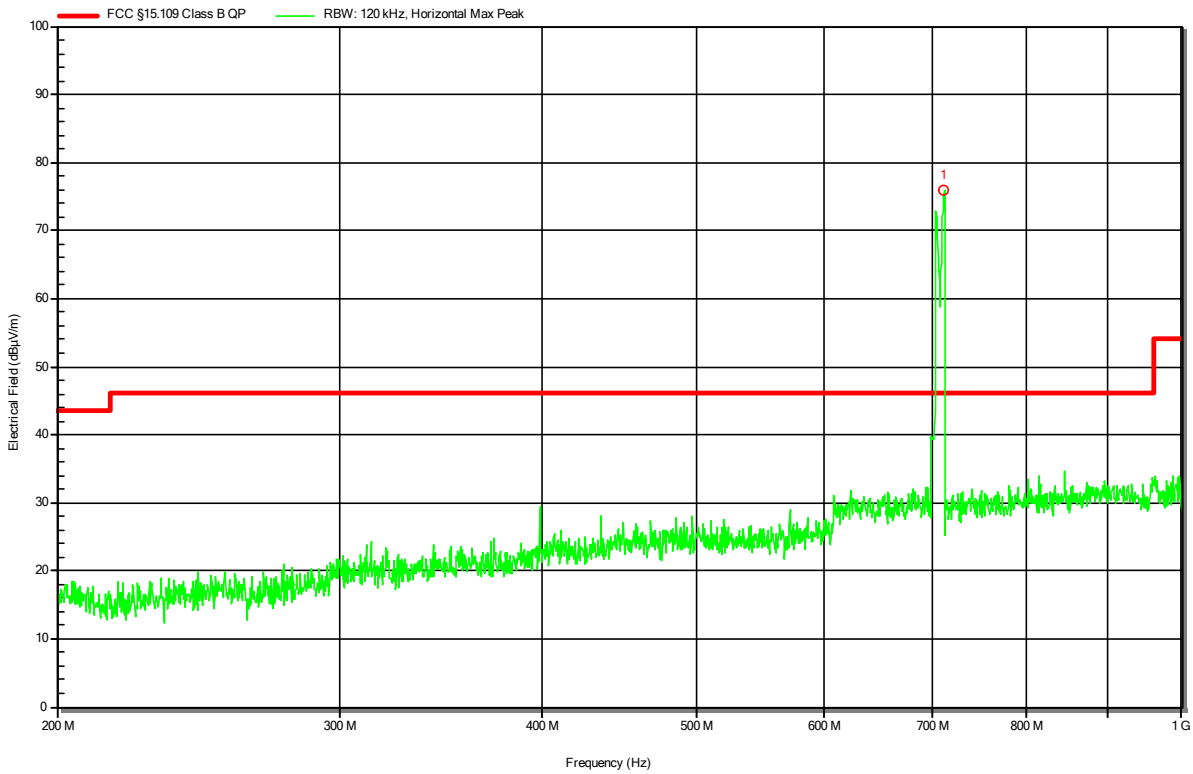
Peak Number	Frequency	Angle	Height
1	705.374 MHz	LTE carrier	

Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35709
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-12-20
 Operating Conditions: ambient temperature: 20 °Celsius
 power input: 5V DC via USB
 Antenna: Rohde & Schwarz HL 223, Horizontal
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 7
 2
 Note 1: Notchfilter LTE FDD 12

Index 120

RadiMation



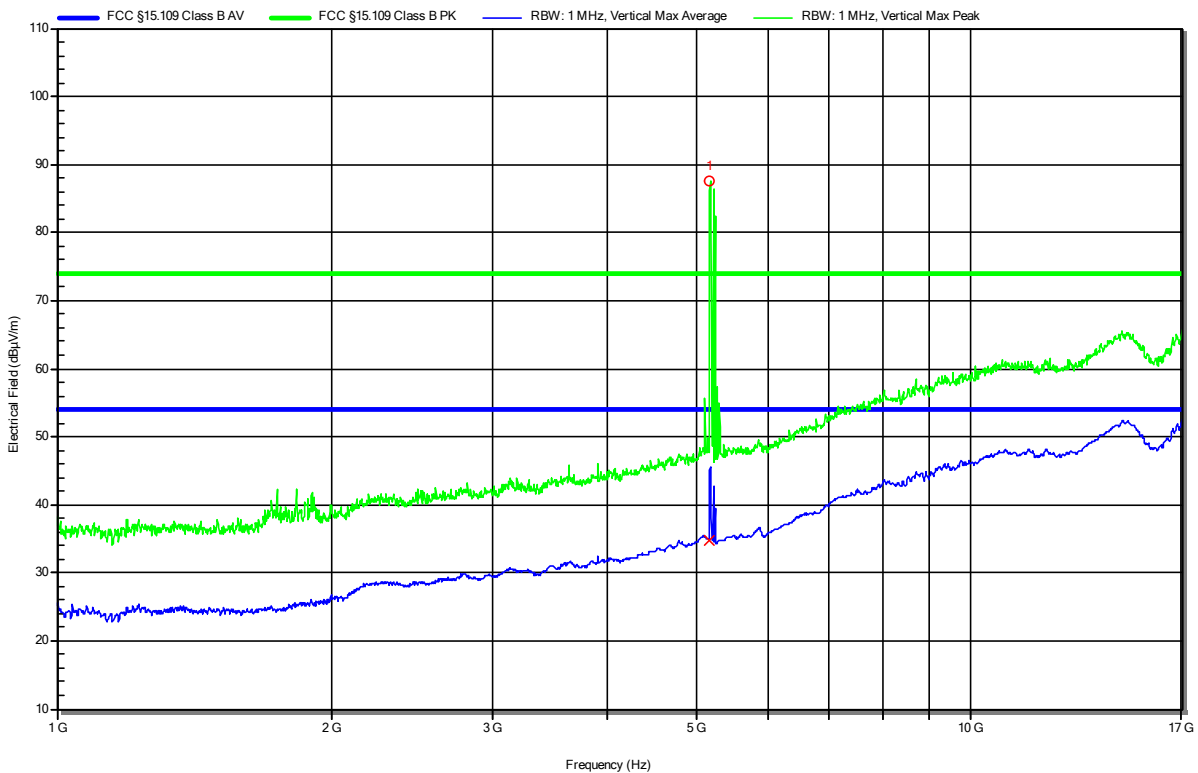
Peak Number	Frequency	Angle	Height
1	711.455 MHz	LTE carrier	

Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35709
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-12-21
 Operating Conditions: ambient temperature: 20 °Celsius
 power input: 5V DC via USB
 Antenna: Schwarzbeck BBHA 9120D, Vertical
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 7
 2
 Note 1:

Index 143

RadiMation



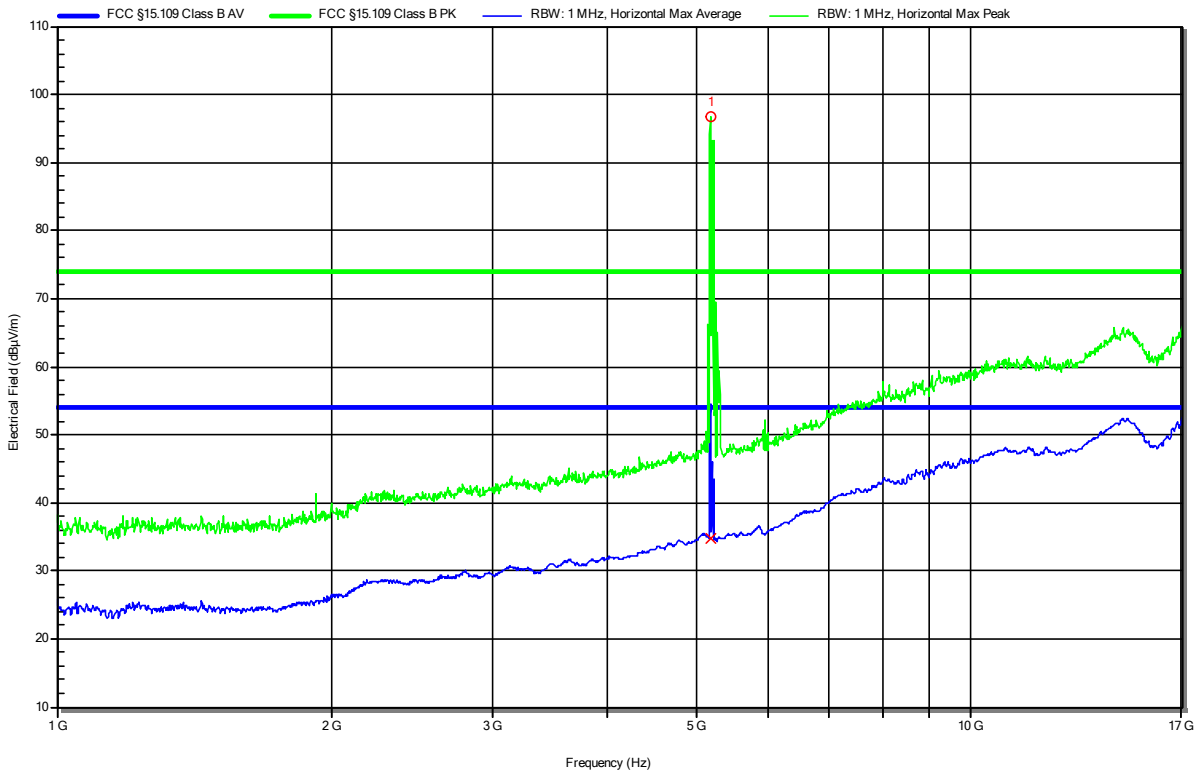
Peak Number	Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Angle	Height
1	5.181 GHz	WLAN carrier					

Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35709
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-12-21
 Operating Conditions: ambient temperature: 20 °Celsius
 power input: 5V DC via USB
 Antenna: Schwarzbeck BBHA 9120D, Horizontal
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 7
 2
 Note 1:

Index 142

RadiMation



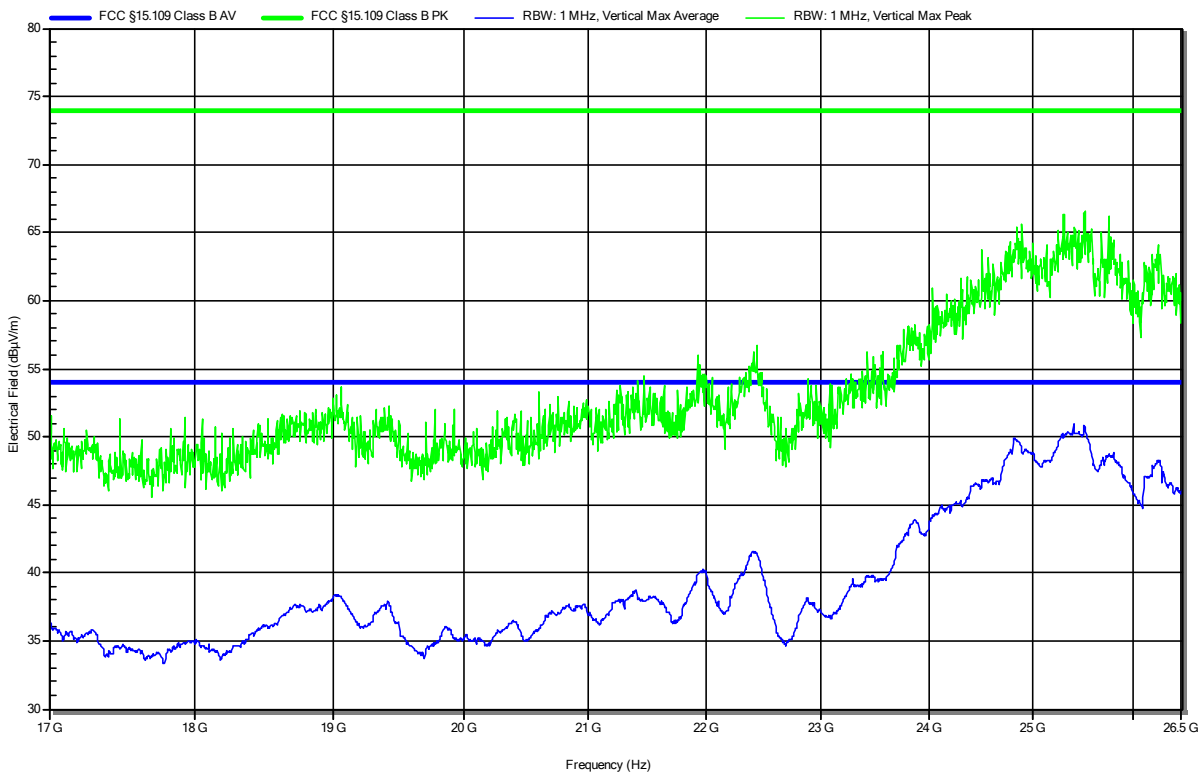
Peak Number	Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Angle	Height
1	5.185 GHz	WLAN carrier					

Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35709
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-12-21
 Operating Conditions: ambient temperature: 20 °Celsius
 power input: 5V DC via USB
 Antenna: Amplifier Research AT4560, Vertical
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 7
 Note 1: 2

Index 131

RadiMation

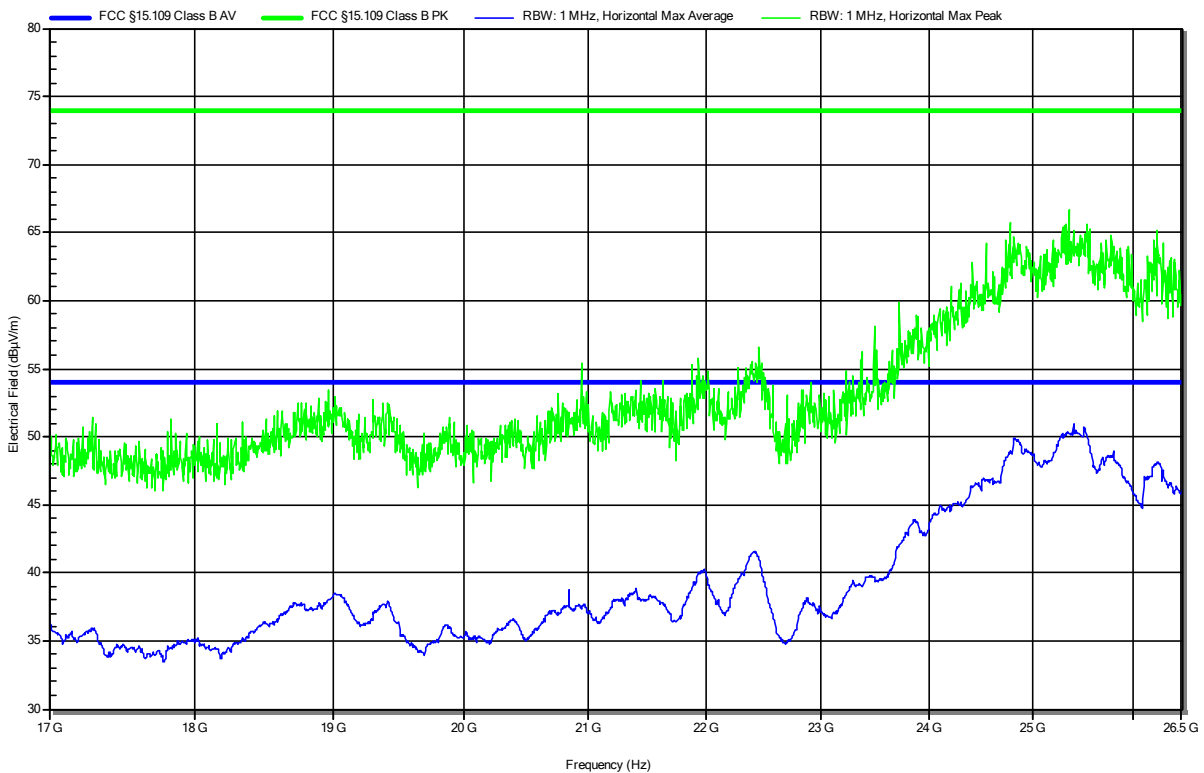


Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35709
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-12-21
 Operating Conditions: ambient temperature: 20 °Celsius
 power input: 5V DC via USB
 Antenna: Amplifier Research AT4560, Horizontal
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 7
 2
 Note 1:

Index 132

RadiMation

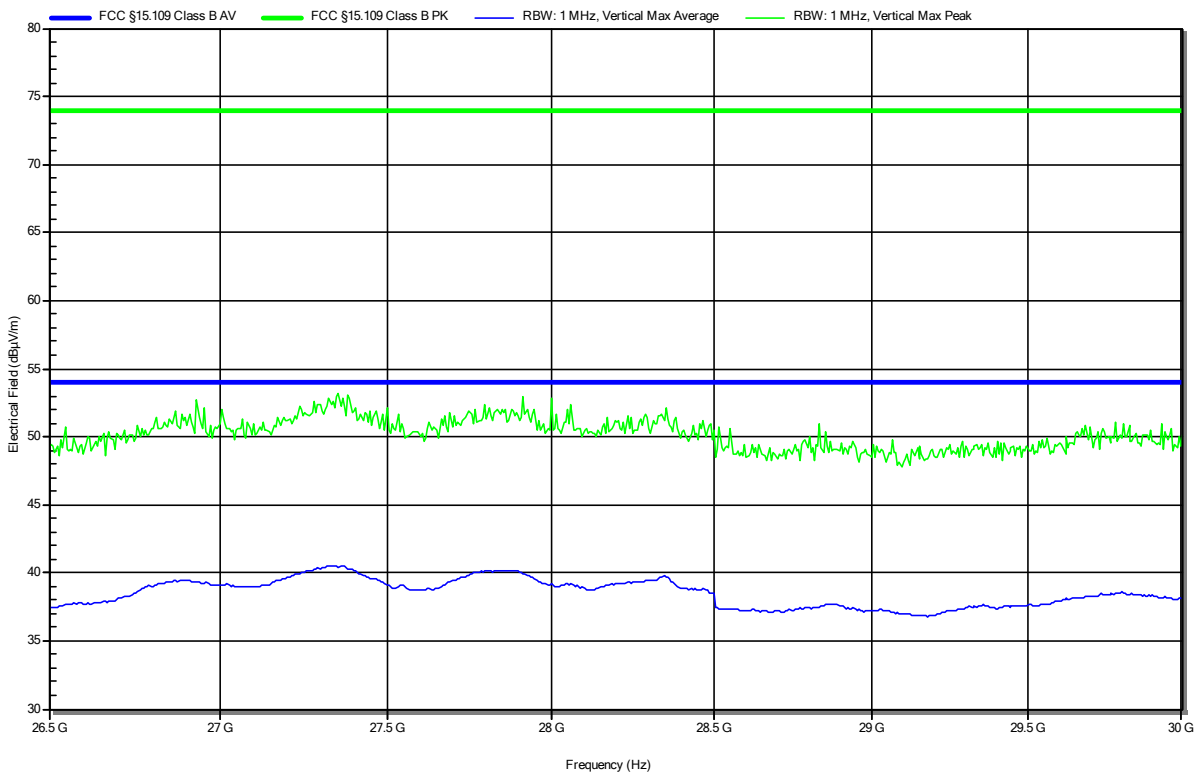


Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35709
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-12-21
 Operating Conditions: ambient temperature: 20 °Celsius
 power input: 5V DC via USB
 Antenna: CBL26402075, Vertical
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 7
 2
 Note 1:

Index 130

RadiMation

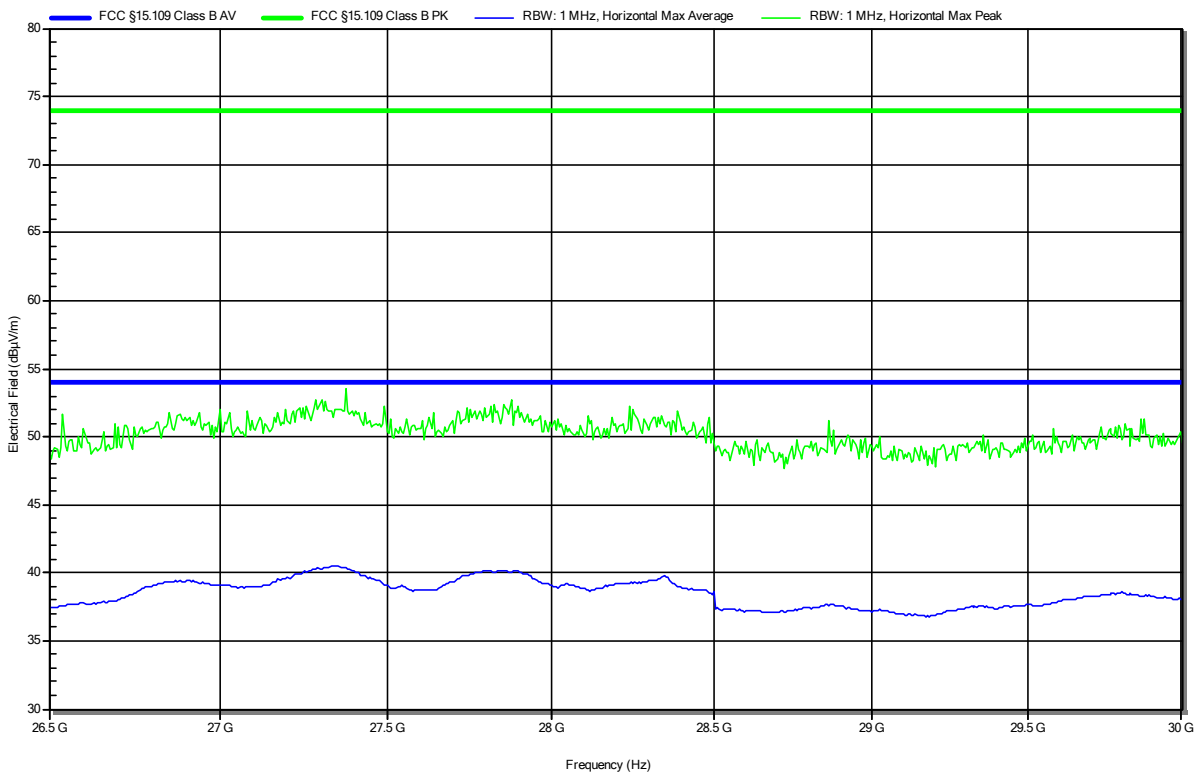


Radiated emissions according to FCC part 15B

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35709
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-12-21
 Operating Conditions: ambient temperature: 20 °Celsius
 power input: 5V DC via USB
 Antenna: CBL26402075, Horizontal
 Measurement Distance: 3m
 Operational Mode & EUT Configuration: 7
 2
 Note 1:

Index 129

RadiMation

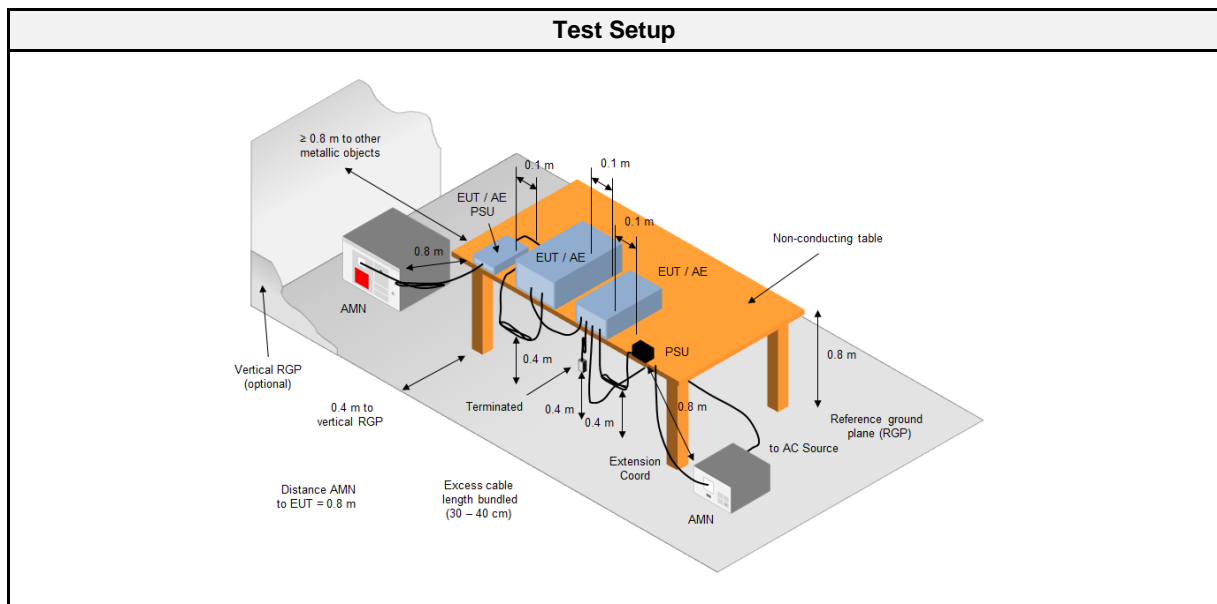
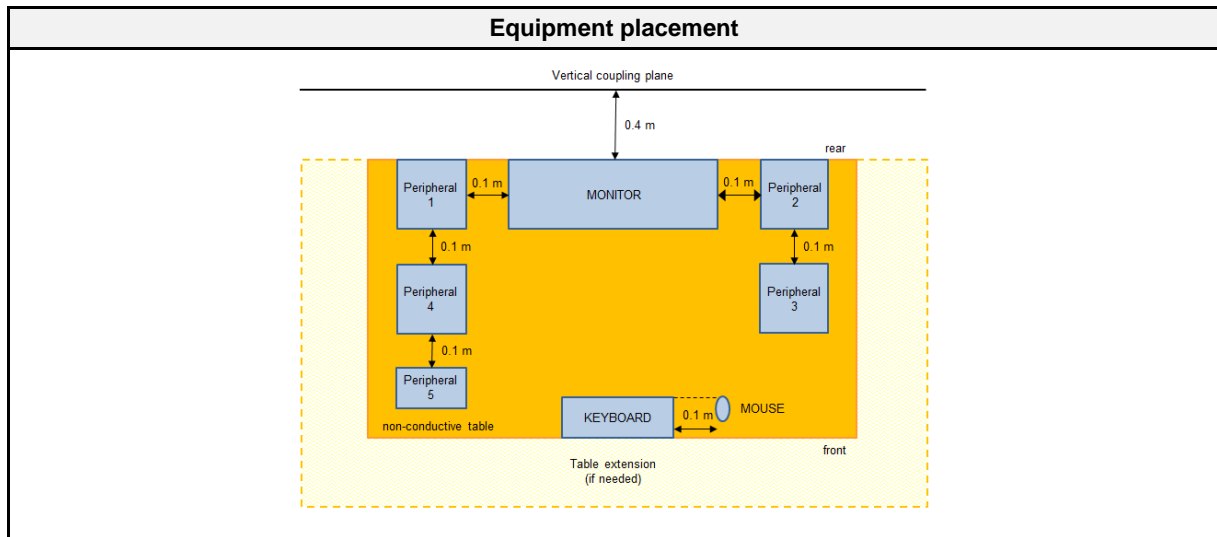


2.2 Test Conditions and Results - Conducted emissions acc. to ANSI C63.4

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]	22 ±3
Humidity [%]	30 ±3
Operator	Matthias Handrik
Date	2021-12-01 – 2021-12-02

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
AMN	Schwarzbeck	NSLK 8127	EF01592	2021-07	2022-07
Pulse Limiter	R&S	ESH3-Z2	EF01063	2021-07	2022-07
EMI Test Receiver	R&S	ESR 7	EF00943	2021-08	2022-08
Climatic Sensor	Embedded Data Systems, LLC.	2800100000254 17E	EF01054	2021-03	2022-03

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

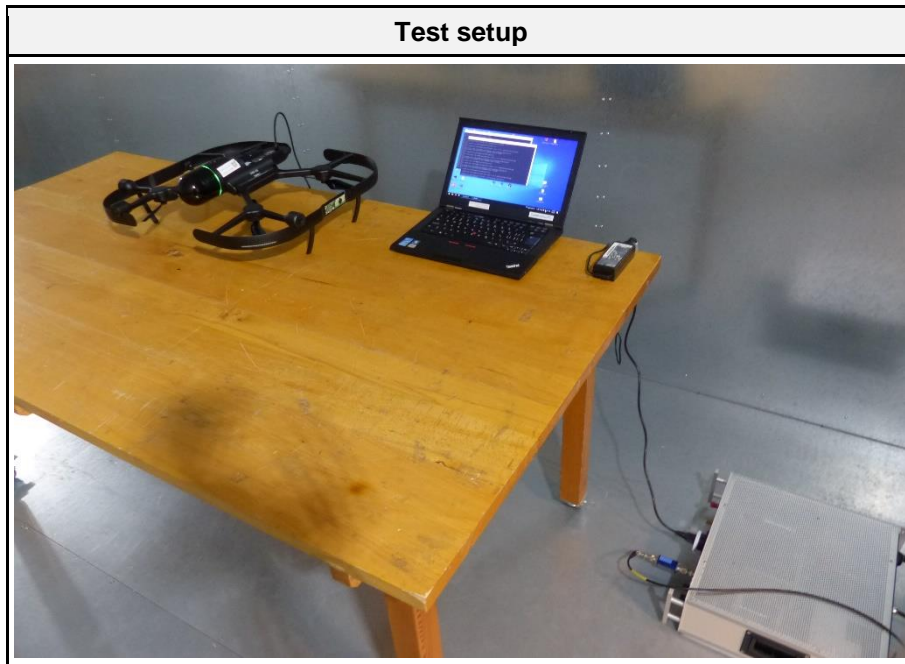
2.2.5 Limits

Class B		
Frequency [MHz]	Quasi-peak Limit [dB μ V]	Average Limit [dB μ V]
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
Power	AMN	5	2	PASS	1
Power	AMN	6	2	PASS	1
Power	AMN	7	2	PASS	1
Power	AMN	8	2	PASS	1
Comment: 1 AC/DC adaptor operates with 30W during measurement.					

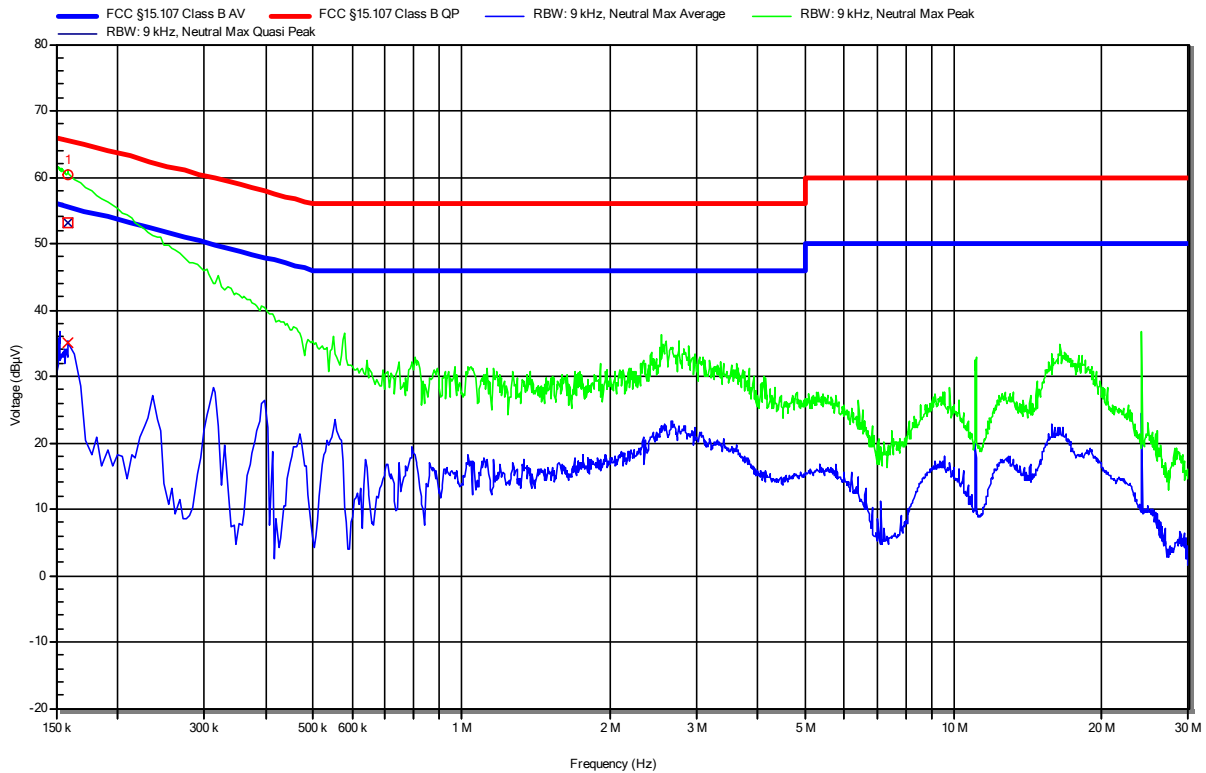
2.2.7 Setup Photos



2.2.8 Records

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

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35854
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-12-01
 Operating Conditions: ambient temperature: 22 °Celsius
 power input: 120V AC / 60Hz (AC/DC adapto)r
 LISN: Schwarzbeck NSLK 8127 RC N
 Operational Mode & EUT Configuration: 5
 Applied to Port: AC-mains
 Note 1: 30W

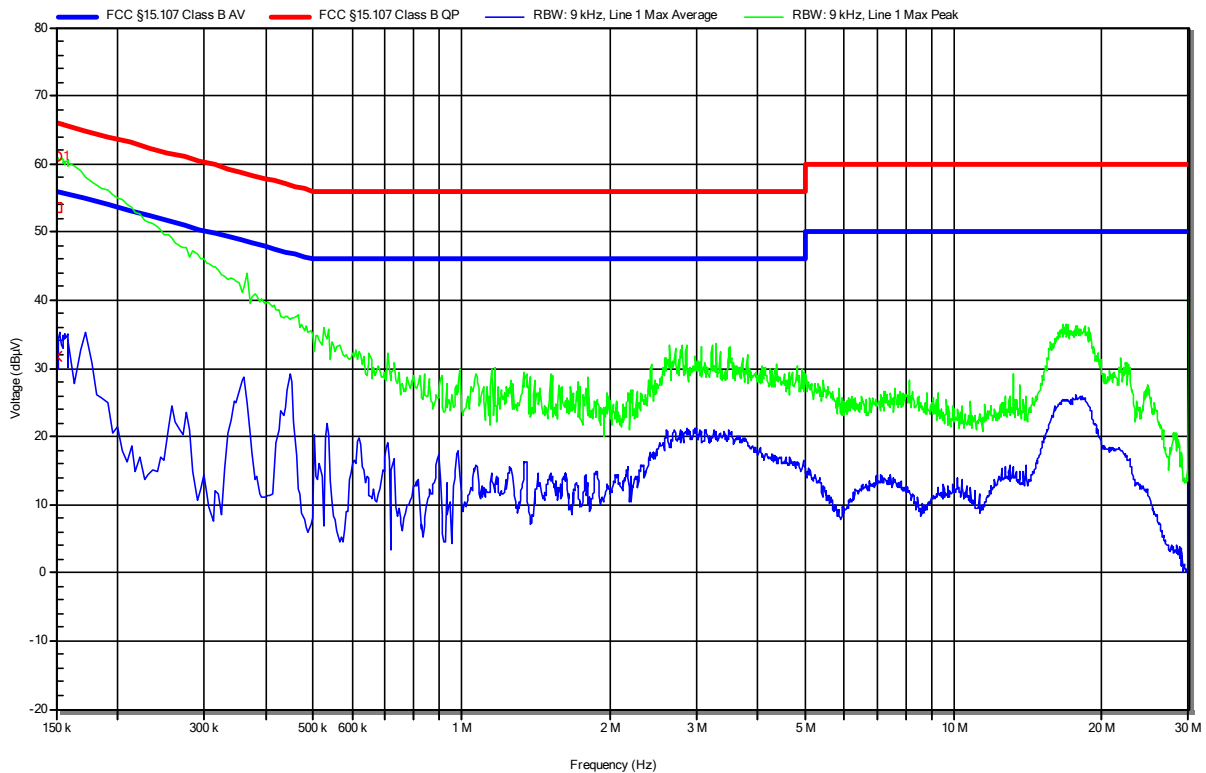


Peak Number	Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status	LISN
1	159 kHz	53.13 dBµV	65.52 dBµV	-12.39 dB	Pass	Neutral
Peak Number	Frequency	Average	Average Limit	Average Difference	Average Status	LISN
1	159 kHz	35.13 dBµV	55.52 dBµV	-20.39 dB	Pass	Neutral

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

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35854
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-12-01
 Operating Conditions: ambient temperature: 22 °Celsius
 power input: 120V AC / 60Hz (AC/DC adaptor)
 LISN: Schwarzbeck NSLK 8127 RC L
 Operational Mode & EUT Configuration: 5
 Applied to Port: AC-mains
 Note 1:

Index 86
RadiMation



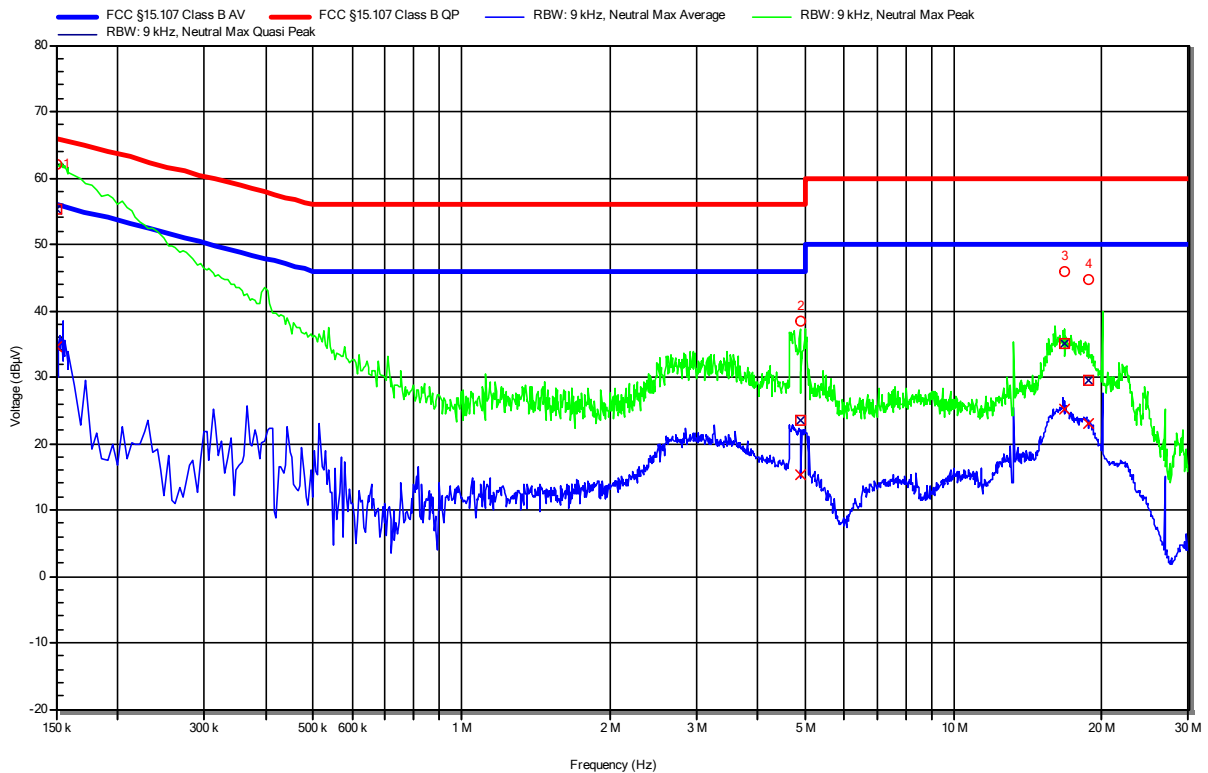
Peak Number	Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status	LISN
1	150 kHz	53.55 dBµV	66 dBµV	-12.45 dB	Pass	Line 1
Peak Number	Frequency	Average	Average Limit	Average Difference	Average Status	LISN
1	150 kHz	31.84 dBµV	56 dBµV	-24.16 dB	Pass	Line 1

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

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35854
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-12-02
 Operating Conditions: ambient temperature: 22 °Celsius
 power input: 120V AC / 60Hz (AC/DC adaptor)
 LISN: Schwarzbeck NSLK 8127 RC N
 Operational Mode & EUT Configuration: 6
 Applied to Port: AC-mains
 Note 1:

Index 98

Radiation



Peak Number	Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status	LISN
1	150 kHz	55.29 dBµV	66 dBµV	-10.71 dB	Pass	Neutral
2	4.893 MHz	23.53 dBµV	56 dBµV	-32.47 dB	Pass	Neutral
3	16.841 MHz	35.15 dBµV	60 dBµV	-24.85 dB	Pass	Neutral
4	18.762 MHz	29.4 dBµV	60 dBµV	-30.6 dB	Pass	Neutral
Peak Number	Frequency	Average	Average Limit	Average Difference	Average Status	LISN
1	150 kHz	34.52 dBµV	56 dBµV	-21.48 dB	Pass	Neutral
2	4.893 MHz	15.19 dBµV	46 dBµV	-30.81 dB	Pass	Neutral
3	16.841 MHz	25.16 dBµV	50 dBµV	-24.84 dB	Pass	Neutral
4	18.762 MHz	22.89 dBµV	50 dBµV	-27.11 dB	Pass	Neutral

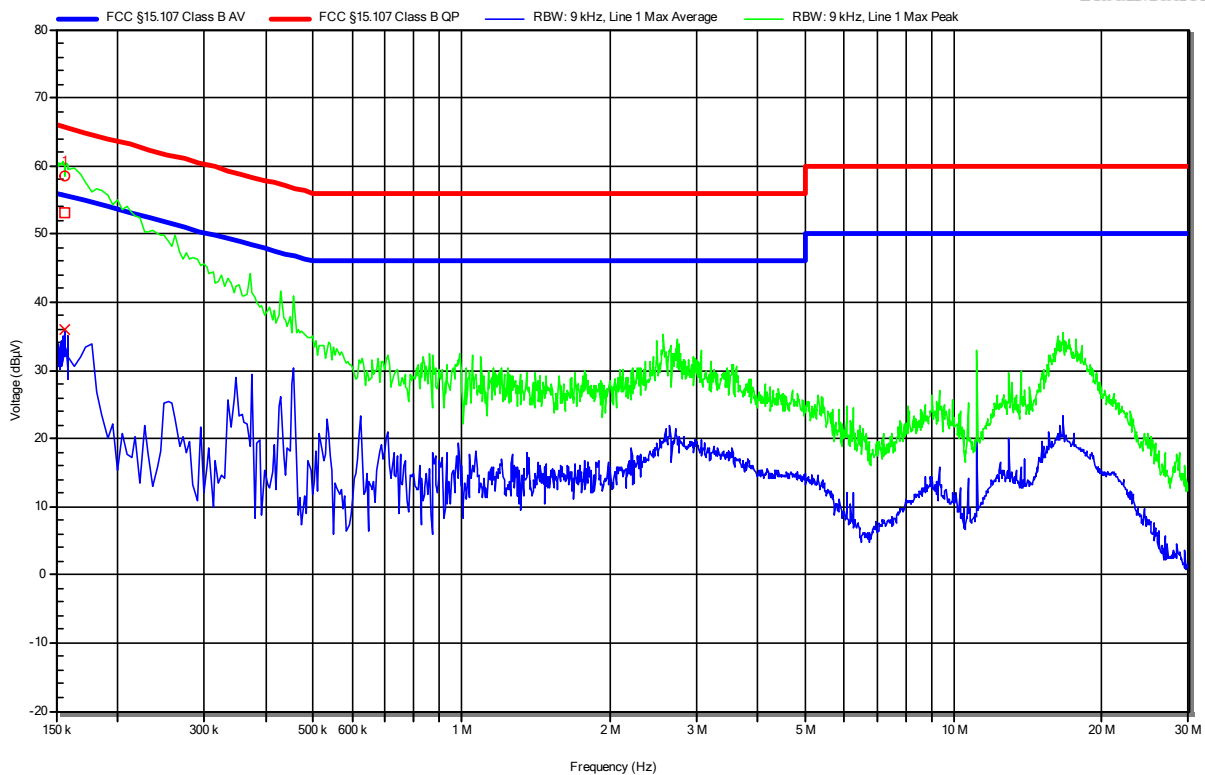
Test Report No.: G0M-2011-9488-EF0115B-V02

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-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35854
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-12-02
 Operating Conditions: ambient temperature: 22 °Celsius
 power input: 120V AC / 60Hz (AC/DC adaptor)
 LISN: Schwarzbeck NSLK 8127 RC L
 Operational Mode & EUT Configuration: 6
 Applied to Port: AC-mains
 Note 1:

Index 102



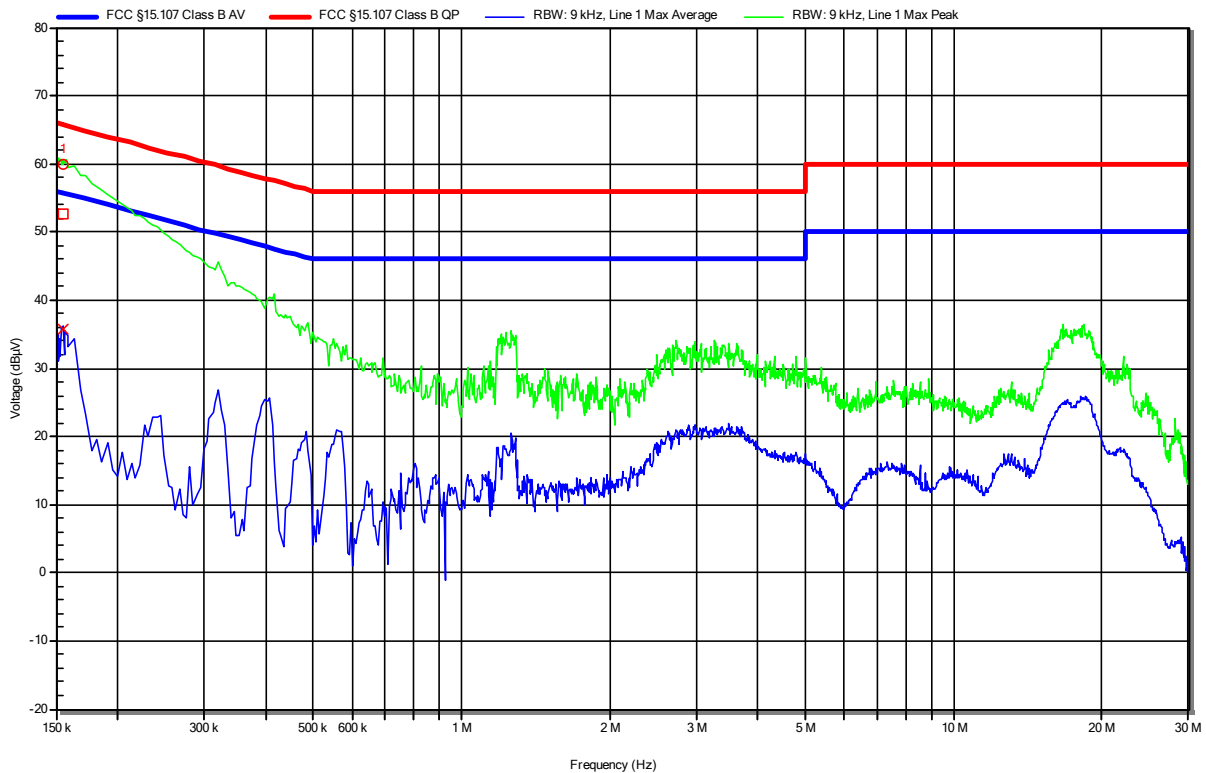
Peak Number	Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status	LISN
1	156.3 kHz	53.07 dBµV	65.66 dBµV	-12.58 dB	Pass	Line 1
Peak Number	Frequency	Average	Average Limit	Average Difference	Average Status	LISN
1	156.3 kHz	36.03 dBµV	55.66 dBµV	-19.62 dB	Pass	Line 1

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

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35709
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-12-01
 Operating Conditions: ambient temperature: 22 °Celsius
 power input: 120V AC / 60Hz (AC/DC adaptor)
 LISN: Schwarzbeck NSLK 8127 RC L
 Operational Mode & EUT Configuration: 7
 Applied to Port: AC-mains
 Note 1:

Index 87

Radiation



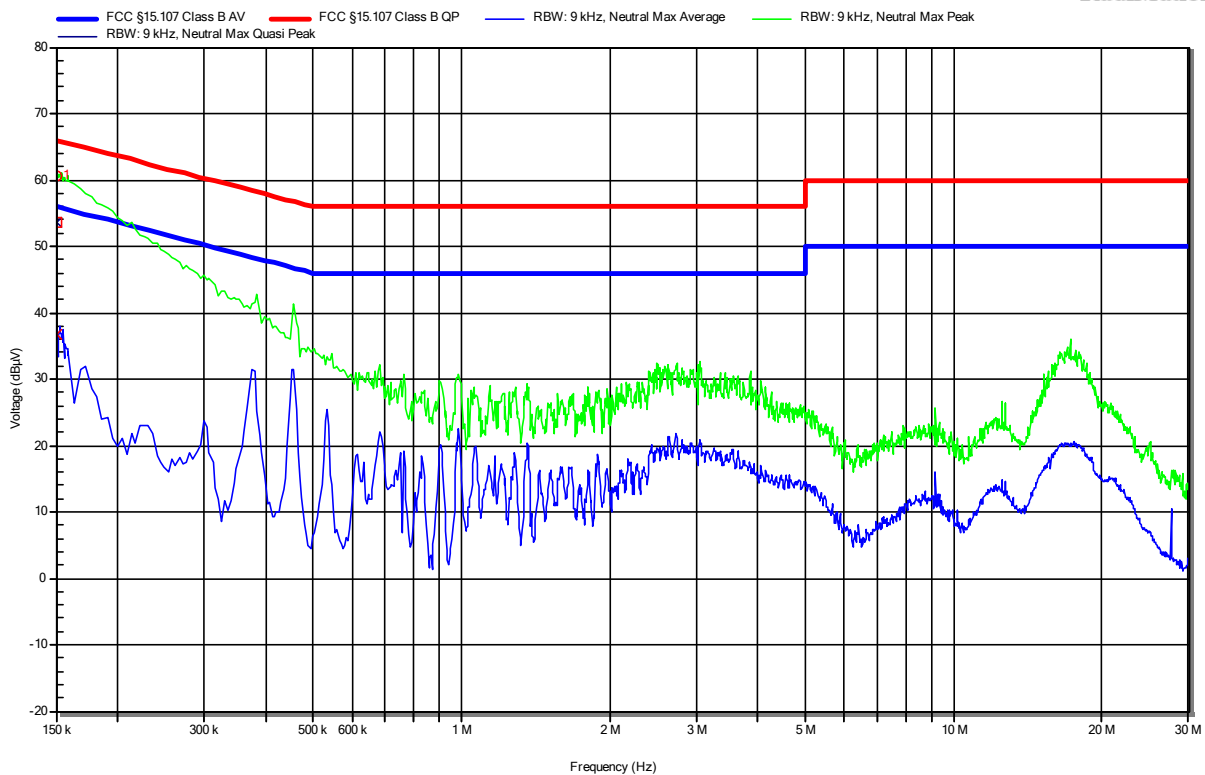
Peak Number	Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status	LISN
1	154.95 kHz	52.68 dBµV	65.73 dBµV	-13.05 dB	Pass	Line 1
Peak Number	Frequency	Average	Average Limit	Average Difference	Average Status	LISN
1	154.95 kHz	35.75 dBµV	55.73 dBµV	-19.98 dB	Pass	Line 1

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

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35709
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-12-01
 Operating Conditions: ambient temperature: 22 °Celsius
 power input: 120V AC / 60Hz (AC/DC adaptor)
 LISN: Schwarzbeck NSLK 8127 RC N
 Operational Mode & EUT Configuration: 7
 Applied to Port: AC-mains
 Note 1:

Index 88

Radiation

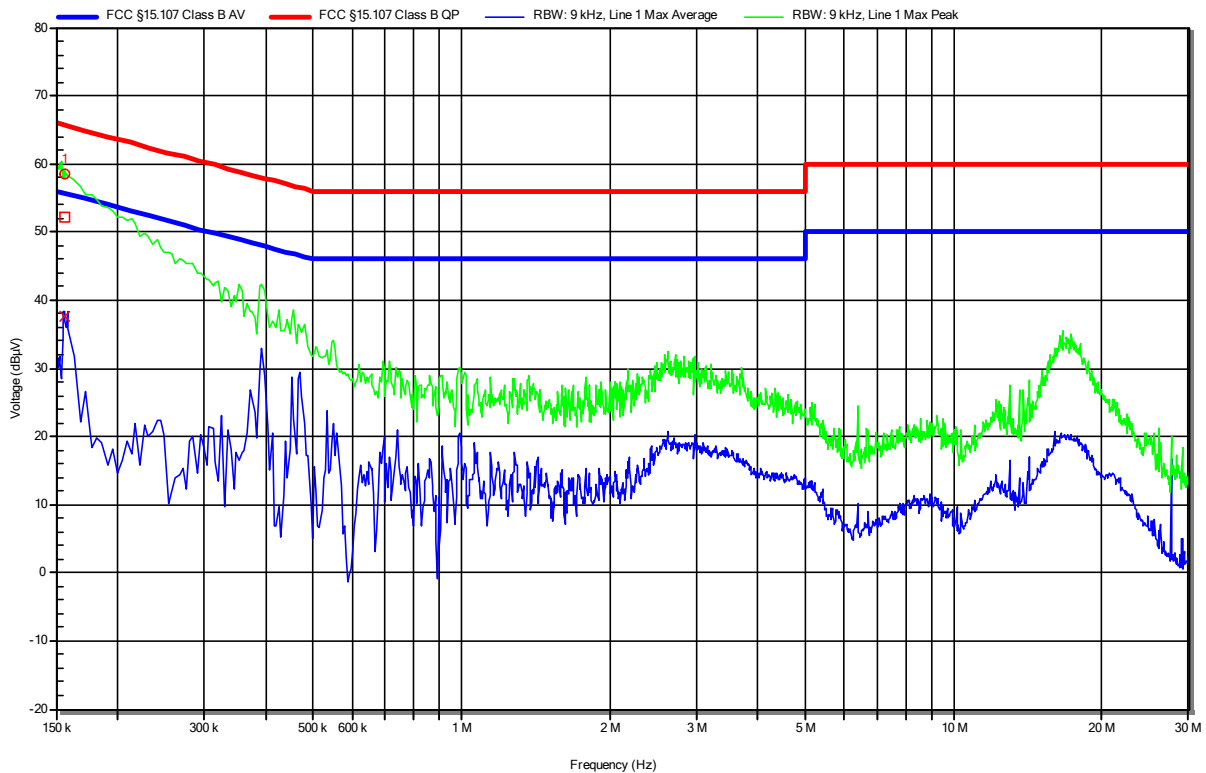


Peak Number	Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status	LISN
1	150 kHz	53.65 dBµV	66 dBµV	-12.35 dB	Pass	Neutral
Peak Number	Frequency	Average	Average Limit	Average Difference	Average Status	LISN
1	150 kHz	36.63 dBµV	56 dBµV	-19.37 dB	Pass	Neutral

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

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35709
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-12-02
 Operating Conditions: ambient temperature: 22 °Celsius
 power input: 120V AC / 60Hz (AC/DC adaptor)
 LISN: Schwarzbeck NSLK 8127 RC L
 Operational Mode & EUT Configuration: 8
 Applied to Port: AC-mains
 Note 1:

Index 103

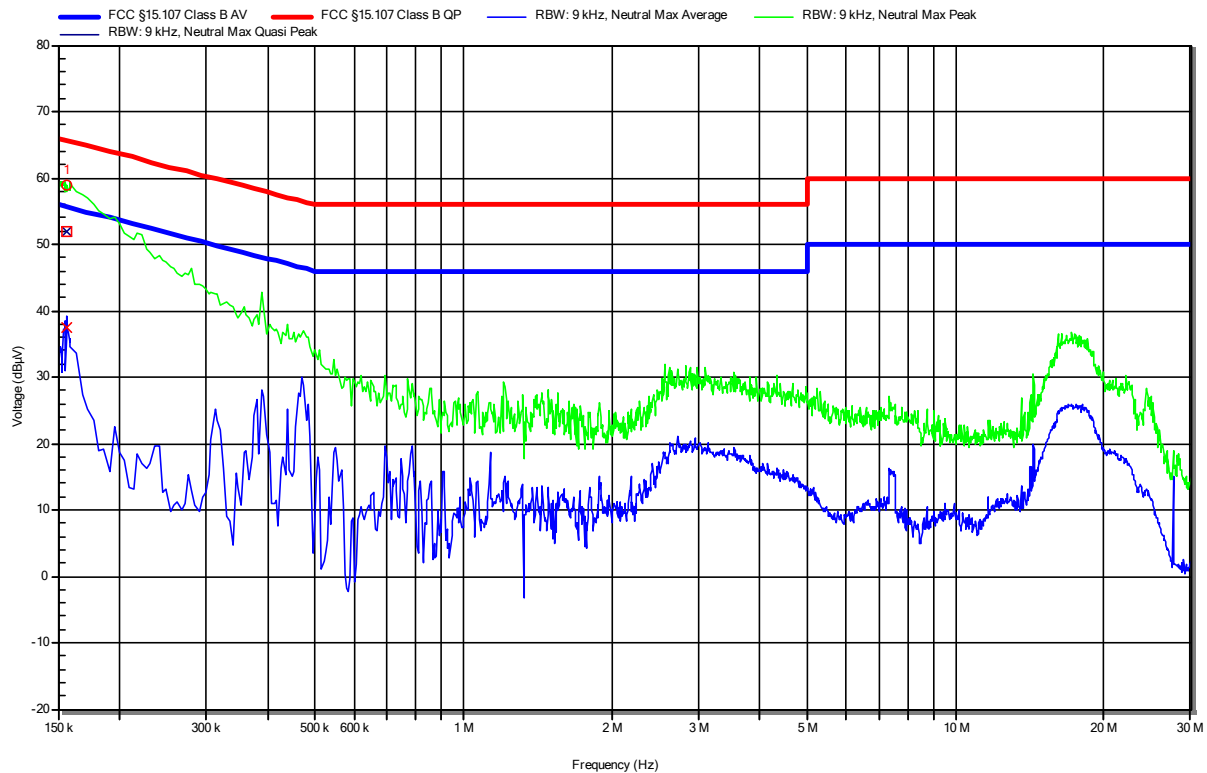


Peak Number	Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status	LISN
1	156.3 kHz	52.1 dBµV	65.66 dBµV	-13.55 dB	Pass	Line 1
Peak Number	Frequency	Average	Average Limit	Average Difference	Average Status	LISN
1	156.3 kHz	37.68 dBµV	55.66 dBµV	-17.97 dB	Pass	Line 1

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

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 35709
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Date: 2021-12-02
 Operating Conditions: ambient temperature: 22 °Celsius
 power input: 120V AC / 60Hz (AC/DC adaptor)
 LISN: Schwarzbeck NSLK 8127 RC N
 Operational Mode & EUT Configuration: 8
 Applied to Port: AC-mains
 Note 1:

Index 104



Peak Number	Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status	LISN
1	156.75 kHz	51.82 dBµV	65.63 dBµV	-13.82 dB	Pass	Neutral
Peak Number	Frequency	Average	Average Limit	Average Difference	Average Status	LISN
1	156.75 kHz	37.52 dBµV	55.63 dBµV	-18.11 dB	Pass	Neutral

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	30MHz to 200MHz @ 3m, 5.1dB 200MHz to 1GHz @ 3m, 5.3dB >1GHz to 18GHz @3m, 5.95dB