

RADIO REPORT FCC 47 CFR Part 15E Unlicensed National Information Infrastructure Devices in the 5 GHz Bands	
Report Reference No	G0M-2011-9488-TFC407WF-V01
Testing Laboratory	Eurofins Product Service GmbH
Address	Storkower Str. 38c 15526 Reichenwalde Germany
Accreditation	 DAKKS - Registration number : D-PL-12092-01-04 FCC Filed Test Laboratory, Reg.-No.: 96970
Applicant	Leica Geosystems AG
Address	Heinrich-Wild-Strasse 9435 Heerbrugg SWITZERLAND
Test Specification	47 CFR Part 15E
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
Test Result	PASSED

Possible test case verdicts:		
Required by standard but not tested	N/T	
Not required by standard	N/R	
Not applicable to EUT	N/A	
Test object does meet the requirement	P(PASS)	
Test object does not meet the requirement	F(FAIL)	
Testing:		
Test Lab Temperature	20 - 23 °C	
Test Lab Humidity	32 – 38 %	
Date of receipt of test item	2021-07-19	
Report:		
Compiled by	Toralf Jahn	
Tested by (+ signature) (Responsible for Test)	Toralf Jahn	
Tested by (+ signature)	Jens Degenhardt	
Approved by (+ signature) (Test Lab Engineer)	Wilfried Treffke	
Date of Issue	2022-01-07	
Total number of pages	380	
General Remarks:		
The test results presented in this report relate only to the object tested. The results contained in this report reflect the results for this particular model and serial number. It is the responsibility of the manufacturer to ensure that all production models meet the intent of the requirements detailed within this report. This report shall not be reproduced, except in full, without the written approval of the Issuing testing laboratory.		
Additional Comments:		

VERSION HISTORY

Version History			
Version	Issue Date	Remarks	Revised By
01	2022-01-07	Initial Release	

ABBREVIATIONS AND ACRONYMS

Acronyms	
Acronym	Description
BPSK	Binary Phase Shift Keying
EIRP	Equivalent Isotropic Radiated Power
EUT	Equipment Under Test
FCC	Federal Communications Commission
HT	High Throughput
IEEE 802.11	MAC and PHY Layer for WiFi
OFDM	Orthogonal Frequency Division Multiplexing
QAM	Quadrature Amplitude Modulation
QPSK	Quadrature Phase Shift Keying
RBW	Resolution bandwidth
RMS	Root mean square
TPC	Transmit Power Control
VBW	Video bandwidth
VHT	Very High Throughput

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1 Equipment (Test Item) Under Test

Description	UAV 3D measurement device	
Model	BLK2FLY	
Additional Model(s)	None	
Brand Name(s)	Leica Geosystems AG	
Serial Number(s)	Conducted: None (Sample ID 34982) Frequency stability: None (Sample ID 36793) Radiated: 3000102 (Sample ID 35554) USB-Mode: 3000104 (Sample ID 35709)	
Hardware Version(s)	Rev. D	
Software Version(s)	0.13.0	
FCC-ID	RFD-BLK2FLY	
Equipment type	End Product	
Device type	Client	
Radio type	Transceiver	
Assigned frequency bands	5150 - 5250 MHz 5250 - 5350 MHz 5470 - 5725 MHz	
Radio technology	IEEE 802.11a IEEE 802.11n (HT20) IEEE 802.11n (HT40) IEEE 802.11ac (VHT20) IEEE 802.11ac (VHT40) IEEE 802.11ac (VHT80)	
Modulation	BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM	
Number of antenna ports	2	
Transmit power control	Yes	
Antenna 1	Type	External
	Model	SZ1784V
	Manufacturer	Pulse
	Gain	2.2 dBi (manufacturer declaration)
Antenna 2	Type	External
	Model	SZ1679W
	Manufacturer	Pulse
	Gain	4.8 dBi (manufacturer declaration)
Supply Voltage	V _{NOM}	14.8 V
	V _{MIN}	13.6 V
	V _{MAX}	17.2 V
Operating Temperature	T _{NOM}	25 °C
	T _{MIN}	5 °C
	T _{MAX}	35 °C
Battery supply	Yes	
AC/DC-Adaptor	None	
Manufacturer	Leica Geosystems AG Heinrich-Wild-Strasse 9435 Heerbrugg SWITZERLAND	

1.1 Photos – Equipment External

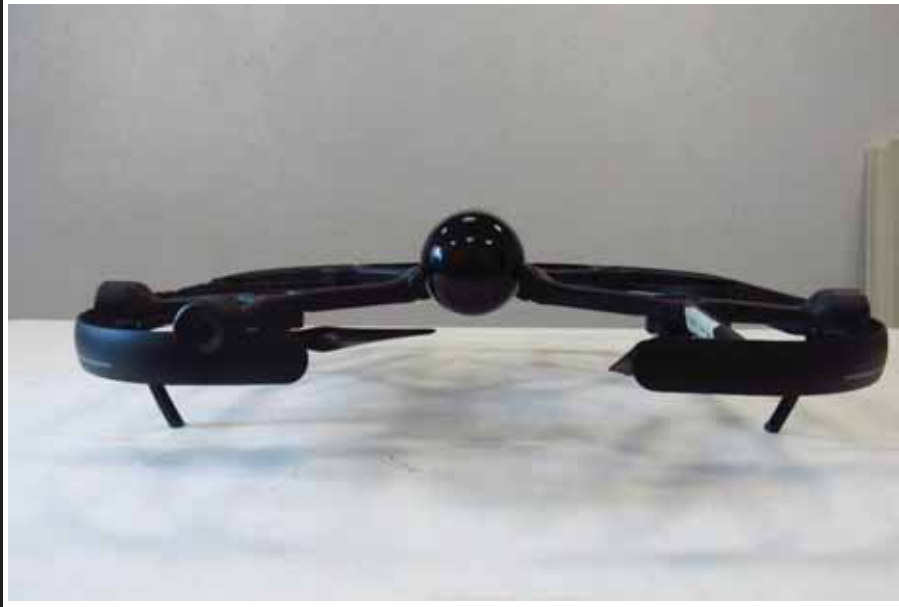
01 Top View



02 Bottom View



03 Front View



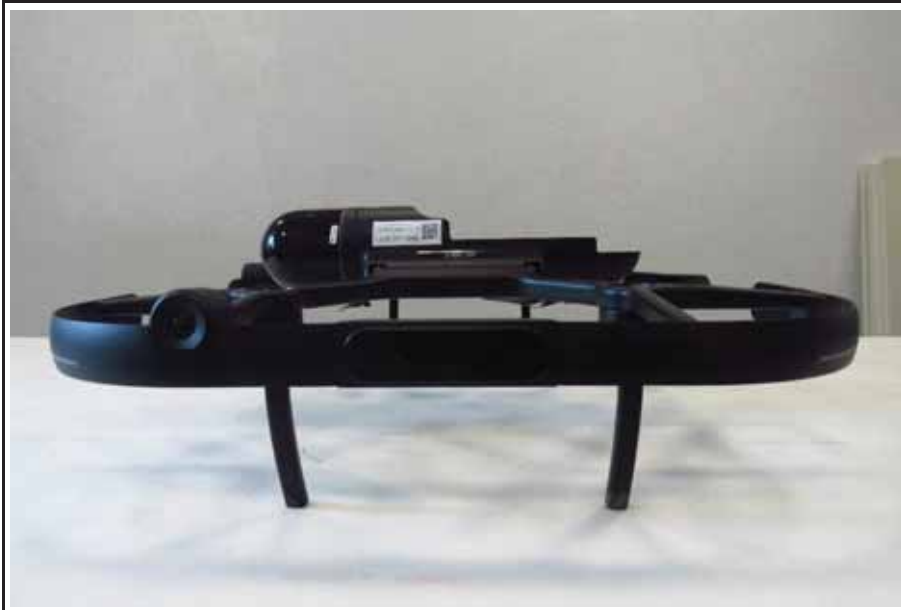
04 Rear View



05 Right View

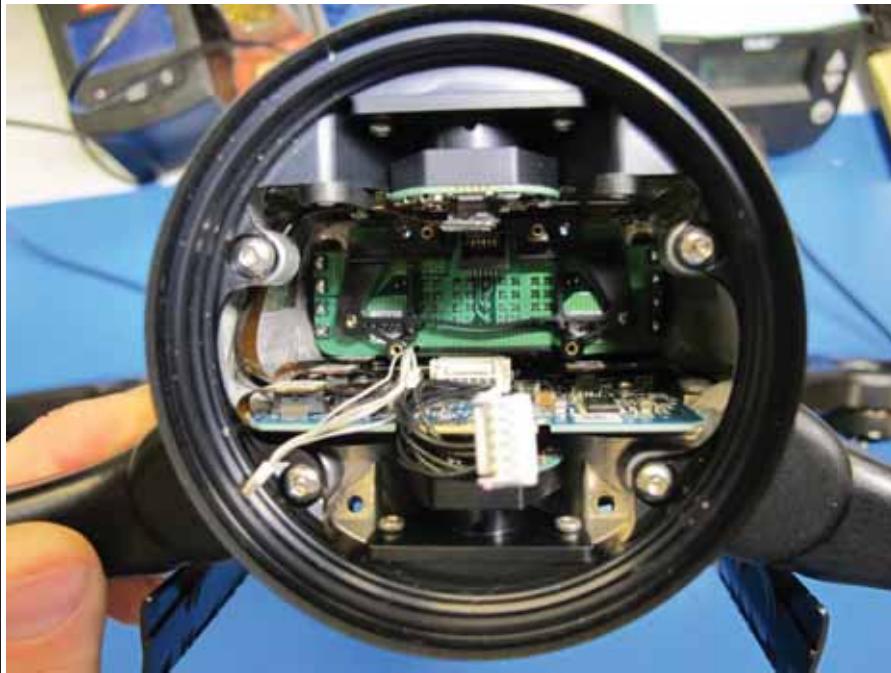


06 Left View



1.2 Photos – Equipment Internal

Mainbody-Front_excl_Supercap-Board



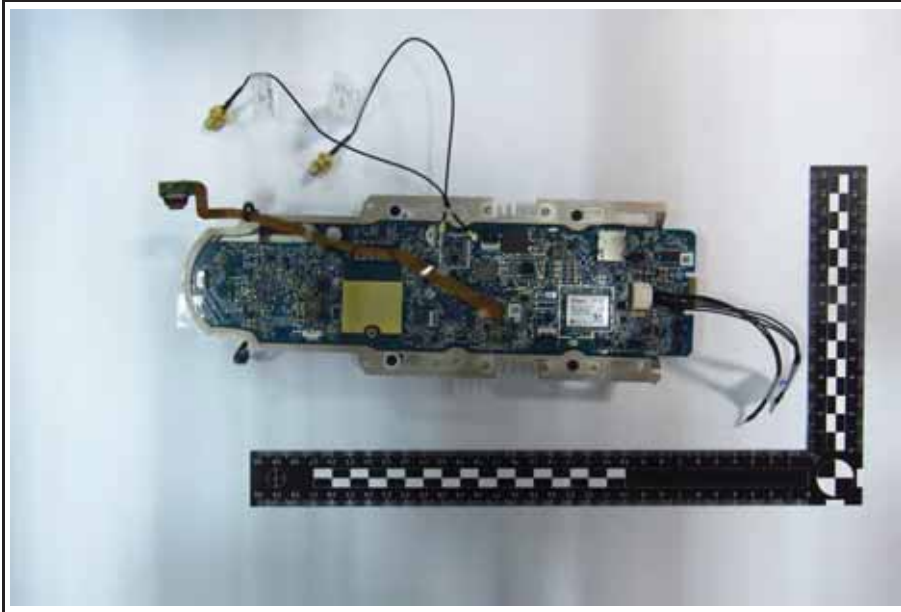
Note: Photo provided by customer

Mainbody-Front_incl_Supercap-Board

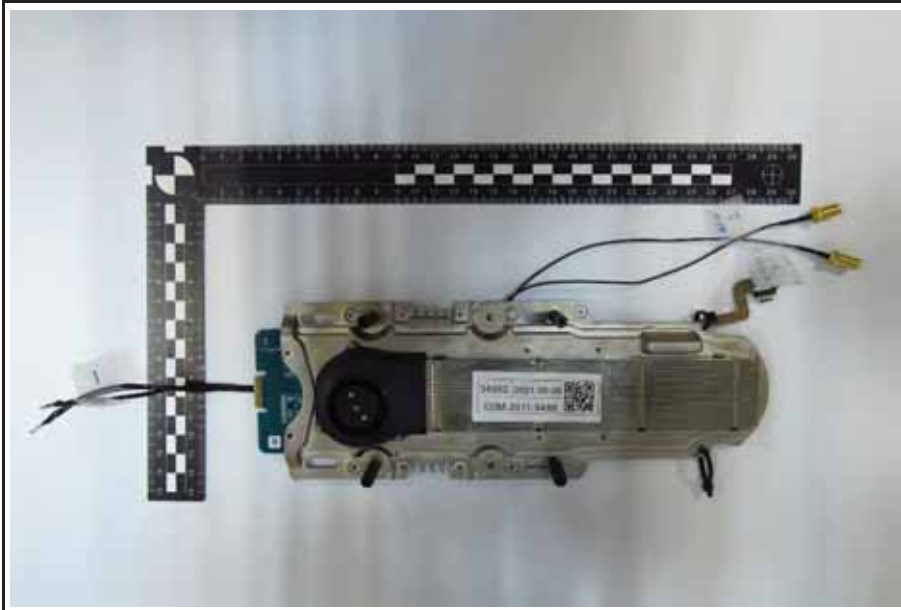


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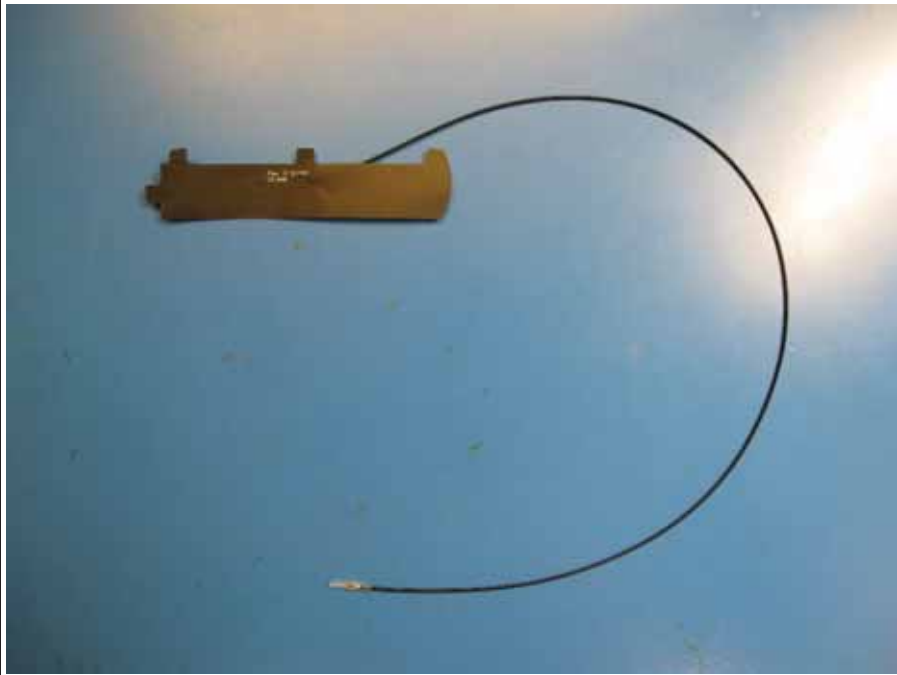
07 Conducted WLAN Sample1



08 Conducted WLAN Sample2

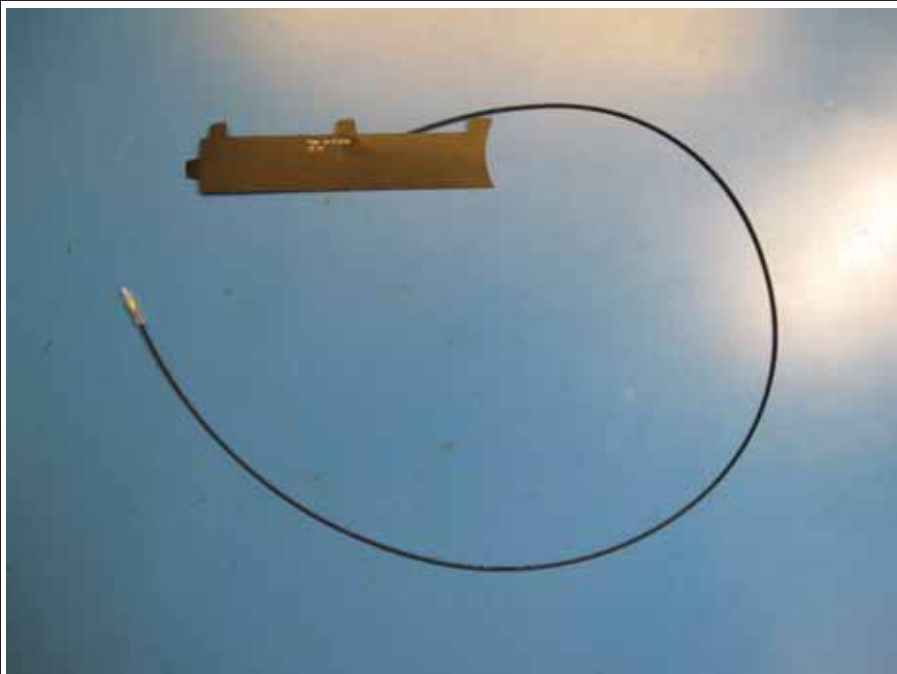


890108_LTE-Main_OVERVIEW



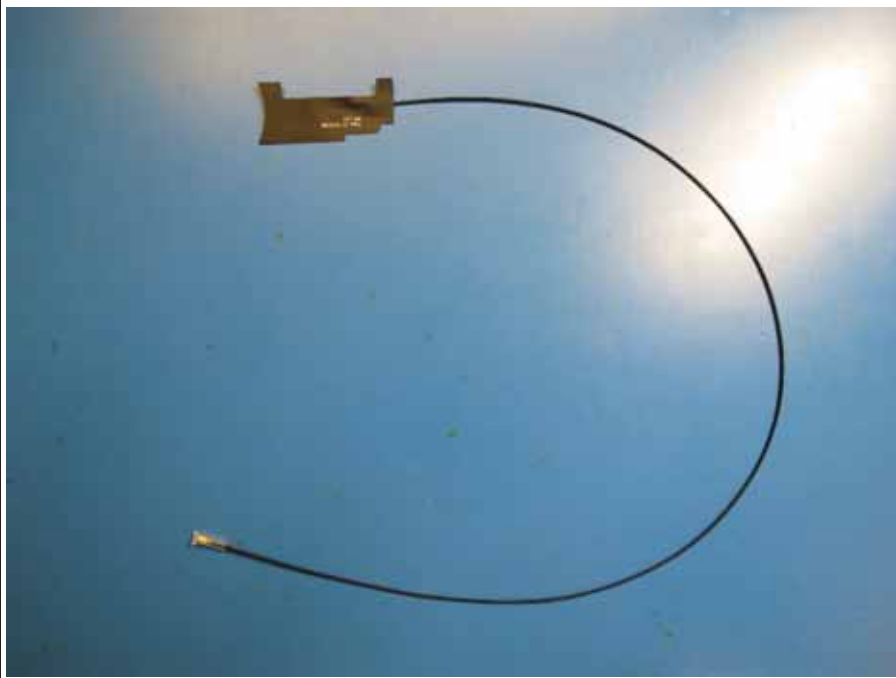
Note: Photo provided by customer

891349_LTE-Div_OVERVIEW



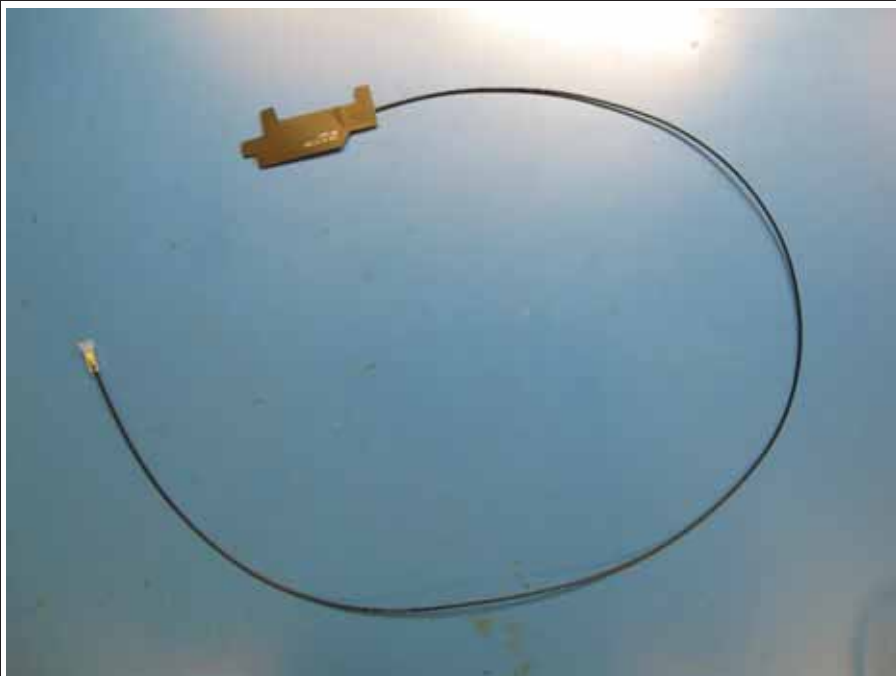
Note: Photo provided by customer

896802_Wifi-Left_OVERVIEW



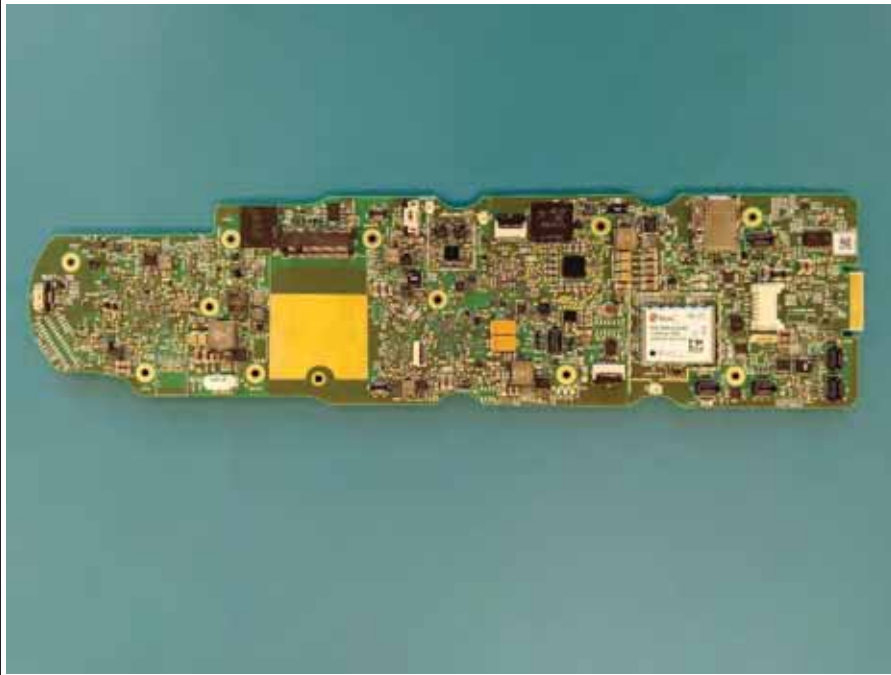
Note: Photo provided by customer

896802_Wifi-Right_OVERVIEW



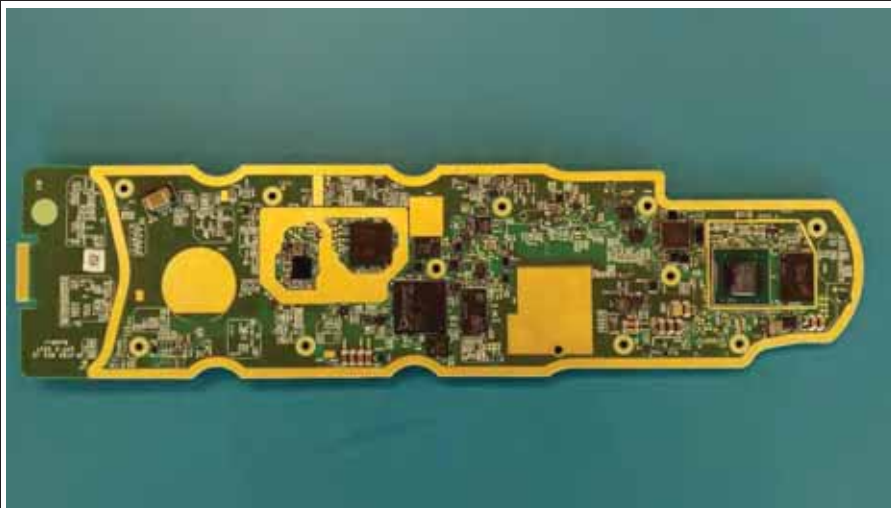
Note: Photo provided by customer

892583_mainboard_top



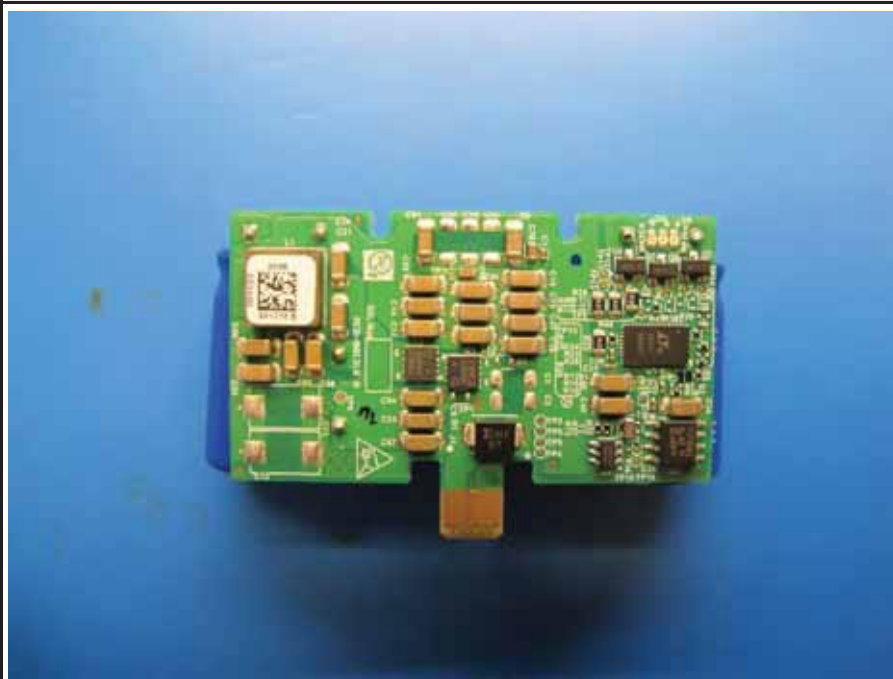
Note: Photo provided by customer

892583_mainboard_bottom



Note: Photo provided by customer

881218_Supercap-Board-TOP



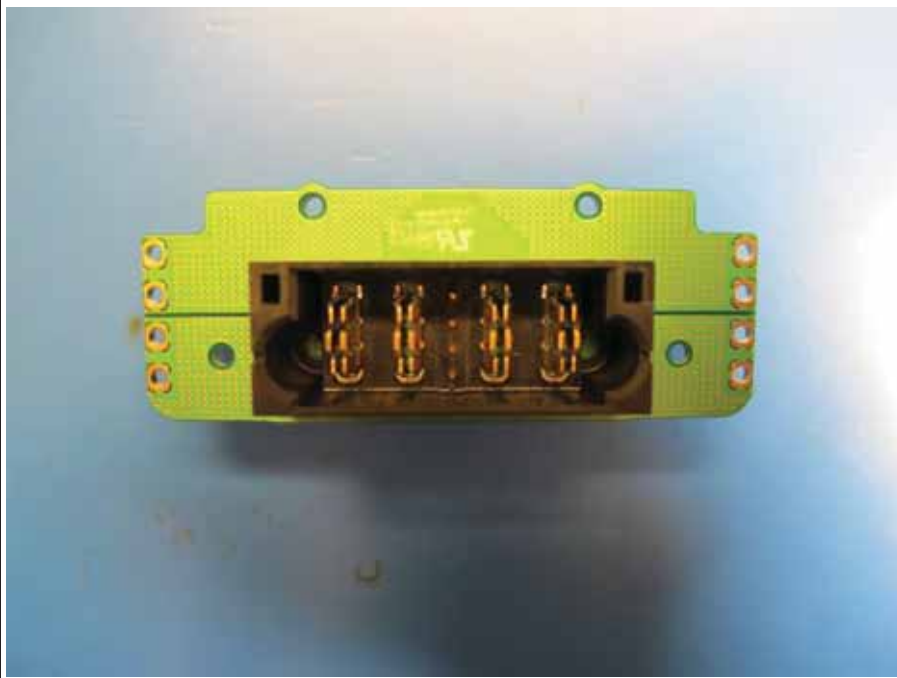
Note: Photo provided by customer

881218_Supercap-Board-BOTTOM



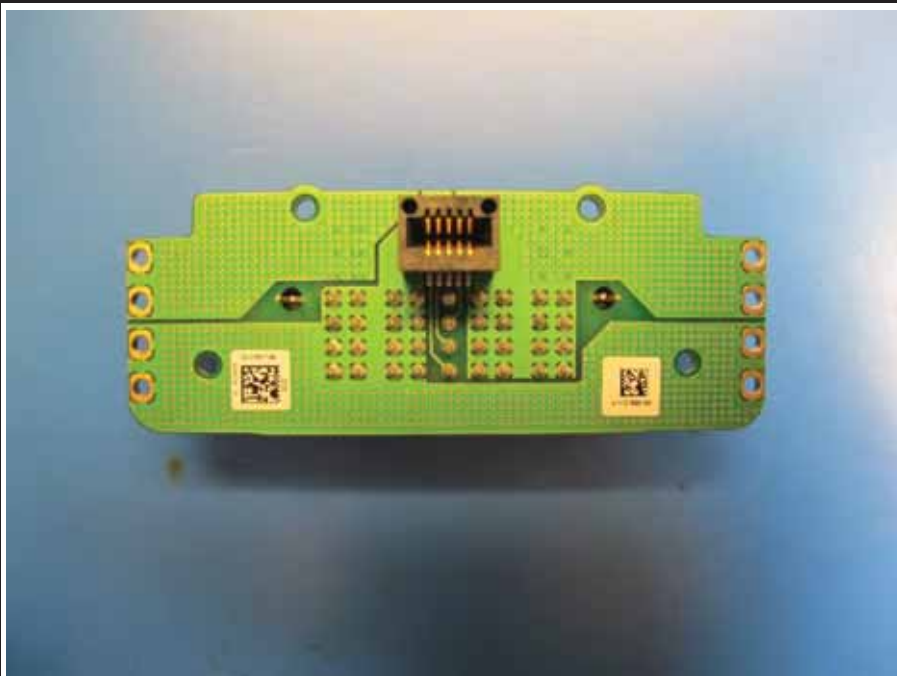
Note: Photo provided by customer

906419_Battery-Connector-Board_TOP



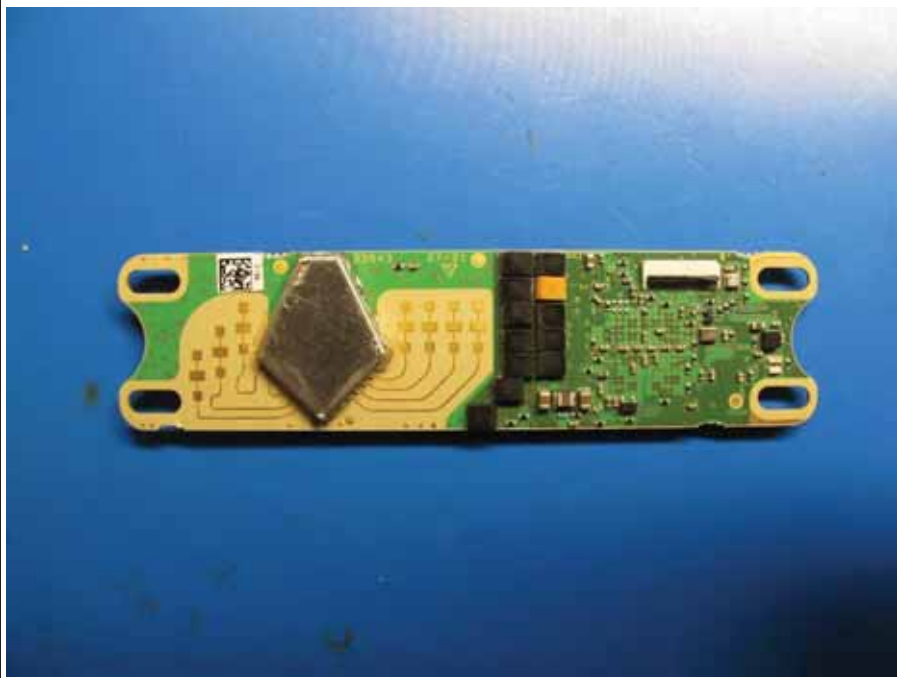
Note: Photo provided by customer

906419_Battery-Connector-Board_BOTTOM



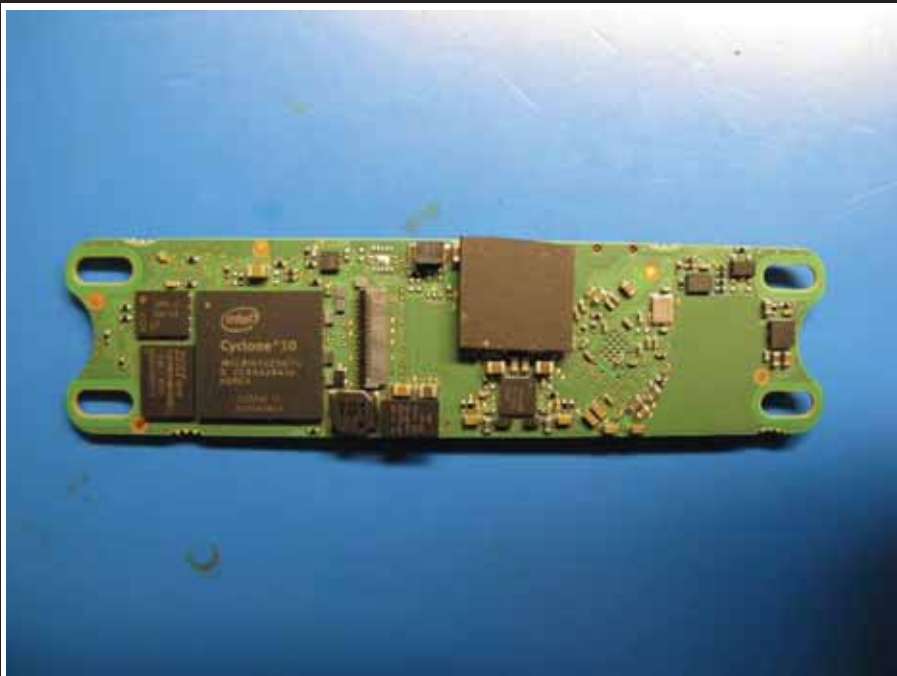
Note: Photo provided by customer

880880_Master_Radar-Board_TOP



Note: Photo provided by customer

880880_Master_Radar-Board_BOTTOM



Note: Photo provided by customer

880870_Slave_Radar-Board_TOP



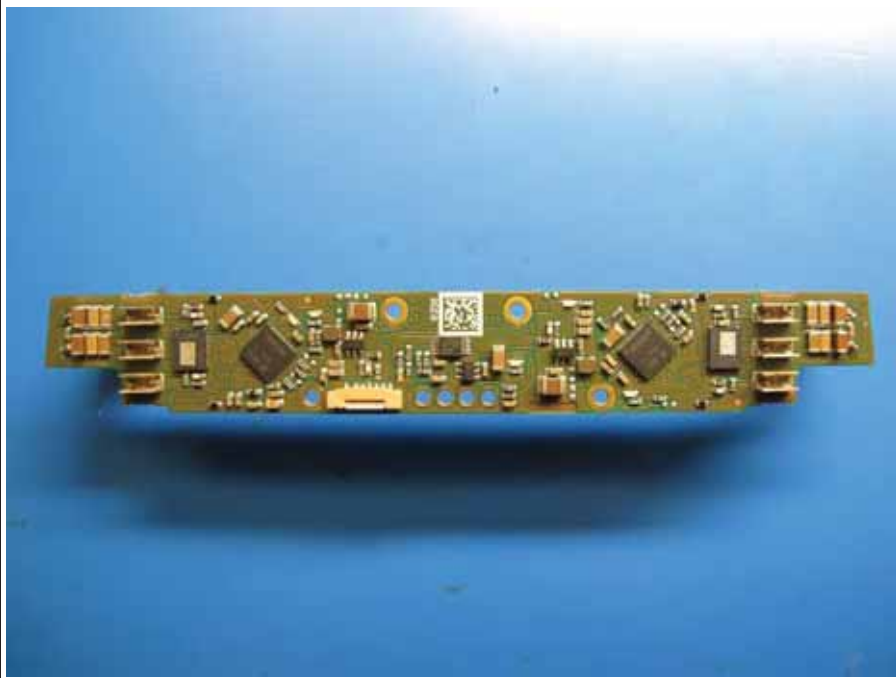
Note: Photo provided by customer

880870_Slave_Radar-Board_BOTTOM



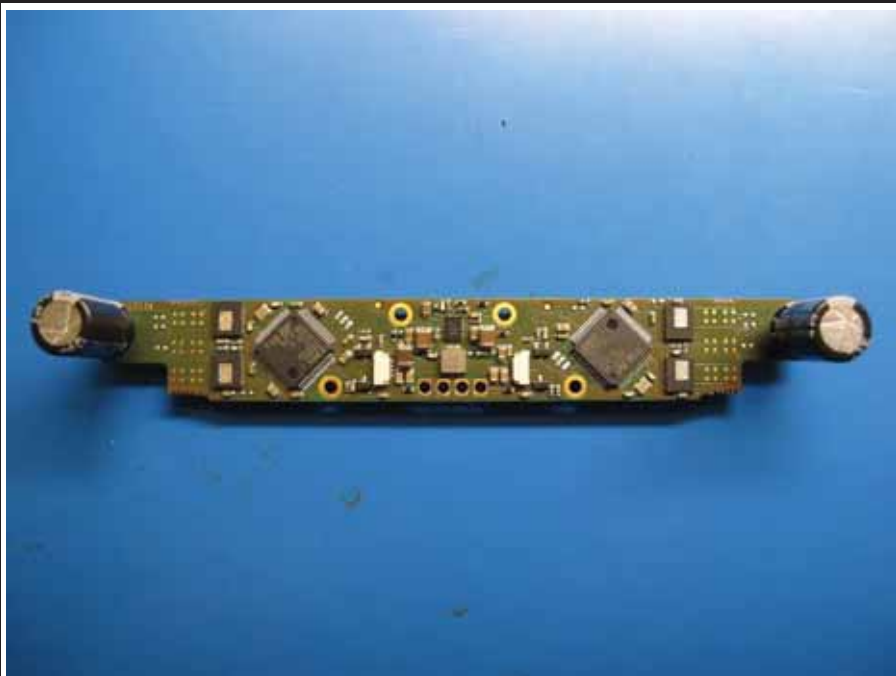
Note: Photo provided by customer

891019_ESC-Board_TOP



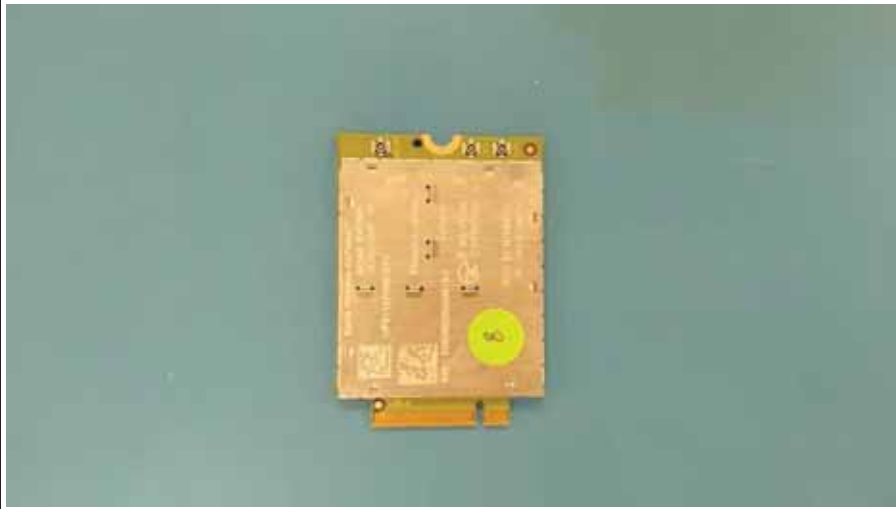
Note: Photo provided by customer

891019_ESC-Board_BOTTOM



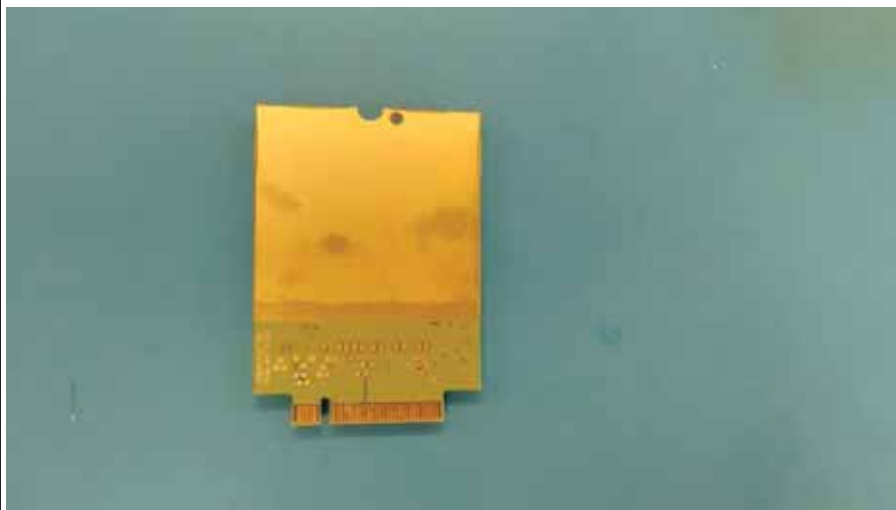
Note: Photo provided by customer

897756_LTE_top



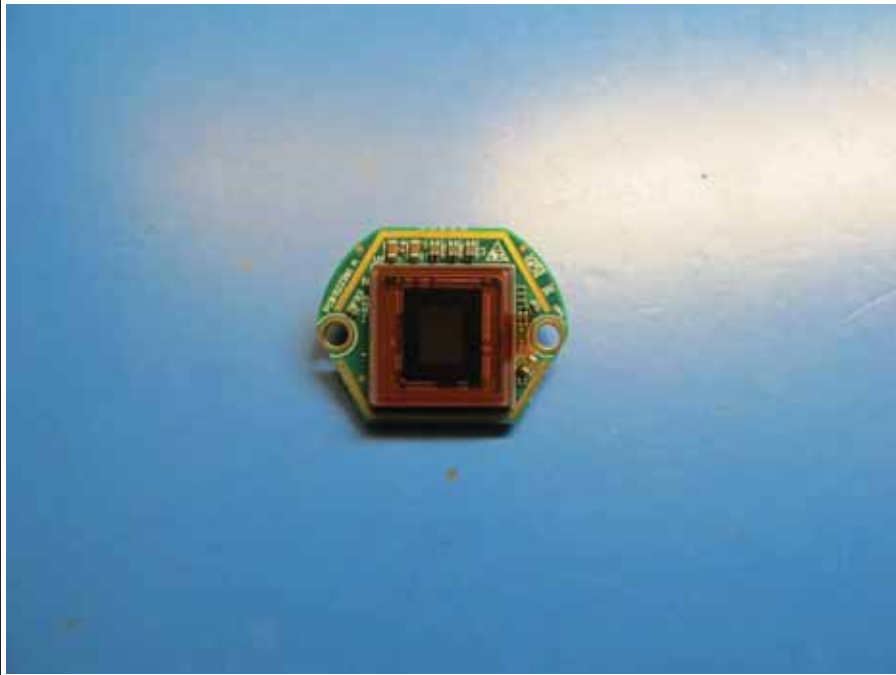
Note: Photo provided by customer

897756_LTE_bottom



Note: Photo provided by customer

922381_Camera-Board_Portrait_TOP



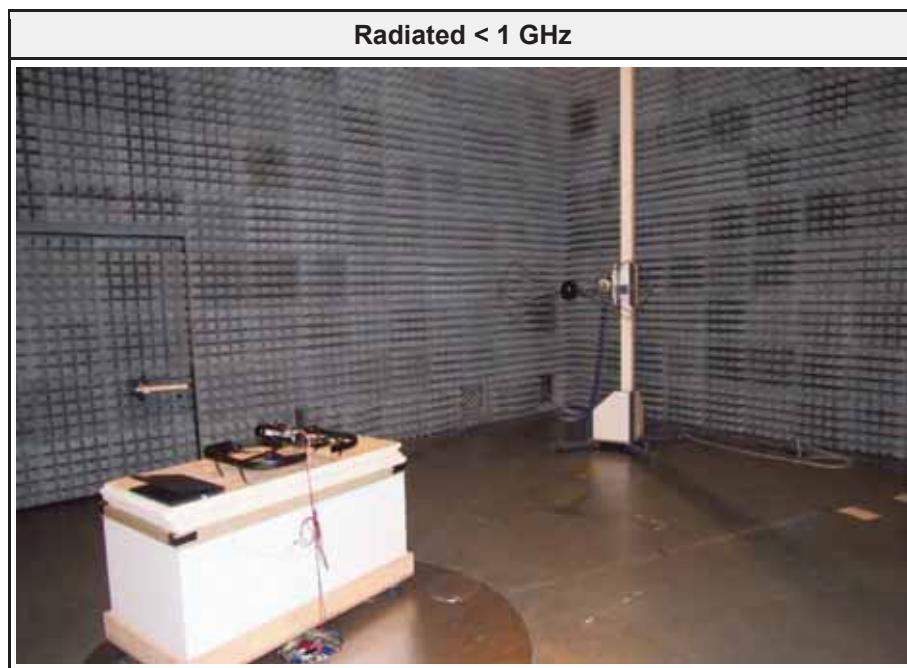
Note: Photo provided by customer

922381_Camera-Board_Portrait_BOTTOM

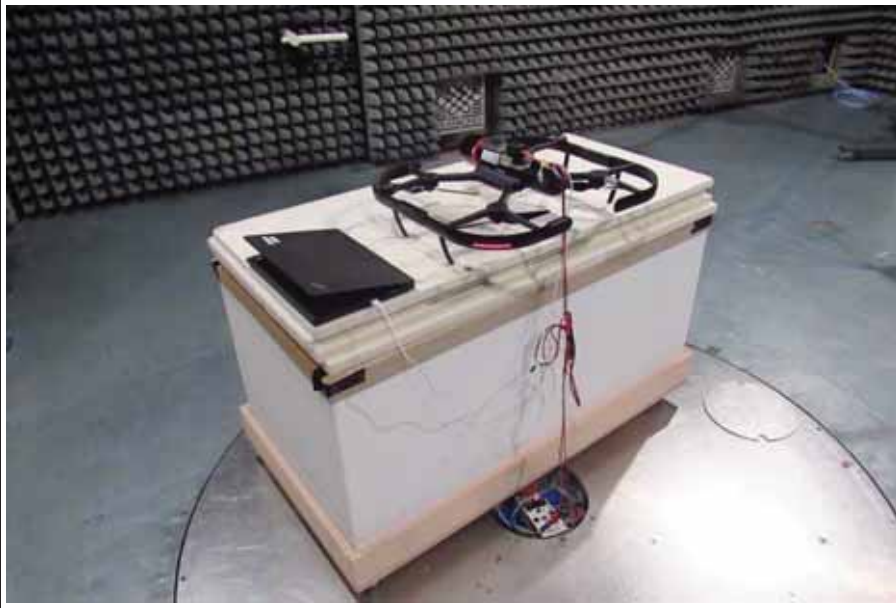


Note: Photo provided by customer

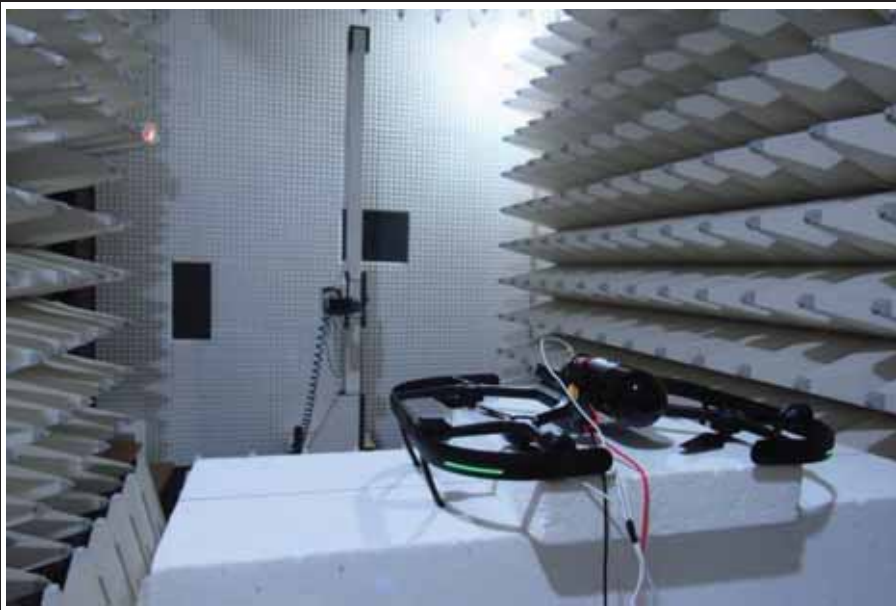
1.3 Photos – Test Setup



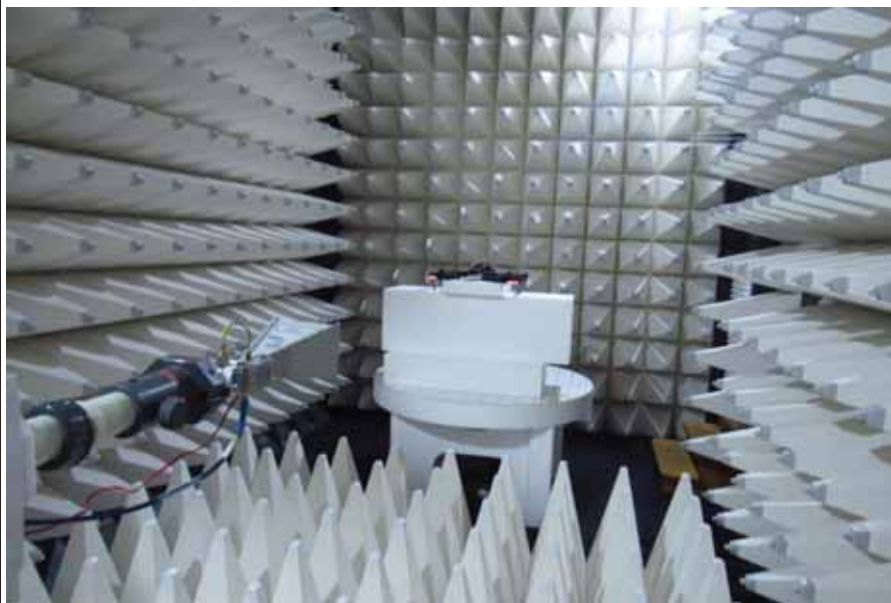
Radiated < 1 GHz



Radiated > 1 GHz



Radiated > 1 GHz



AC Powerline



1.4 Support Equipment

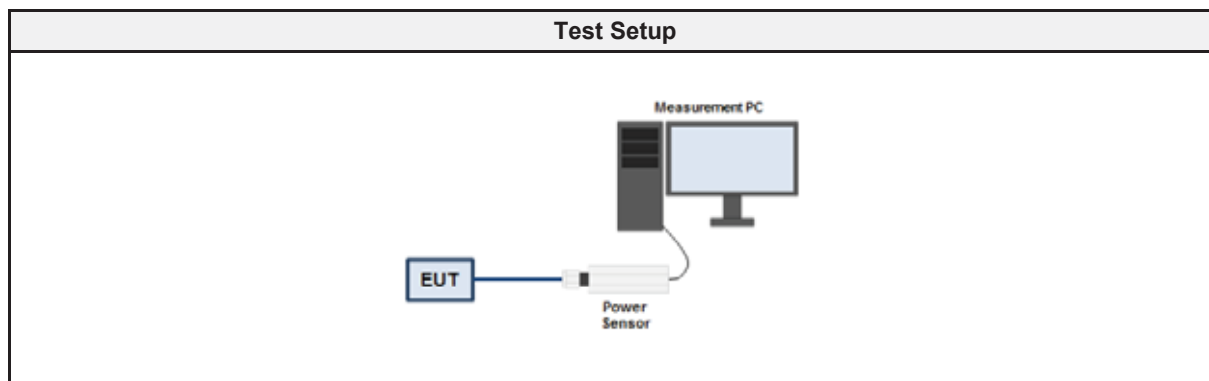
Product Type	Device	Manufacturer	Model	Comment
SFT	Test software	Qualcomm	QRCT 4.0	To enabeling test modes
AE	Laptop	Lenovo	T420s	To enabeling test modes
AE	AC Adapter	Lenovo	42T5292	For laptop
CBL	USB cable	Unspecified	USB 3	To enabeling test modes
Description:				
AE	Auxiliary Equipment			
SIM	Simulator			
CBL	Connecting Cable			
SFT	Software			
Comment:				

1.5 Test mode data rate evaluation

1.5.1 Information

Test Information	
Measurement Method	KDB 789033 E

1.5.2 Setup



1.5.3 Equipment

Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Power Sensor	ETS-Lindgren	7002-006	EF00934	2021-07	2022-07
Power Sensor	ETS-Lindgren	7002-006	EF00935	2021-07	2022-07

1.5.4 Procedure

Test Procedure
1. EUT set to test mode on the first supported channel for each modulation and data rate 2. The conducted power is measured with a wide band power sensor 3. The power is measured for all data rates/modulations supported by the EUT 4. The data rate with the highest output power for each technology is selected for test mode

1.5.5 Results

OFDM - 5180 MHz							
Output power [dBm] - Antenna 1							
6 Mbps	9 Mbps	12 Mbps	18 Mbps	24 Mbps	36 Mbps	48 Mbps	54 Mbps
17.7	17.7	17.7	18.6	18.5	17.8	17.8	17.9
Output power [dBm] - Antenna 2							
6 Mbps	9 Mbps	12 Mbps	18 Mbps	24 Mbps	36 Mbps	48 Mbps	54 Mbps
17.3	17.3	17.2	18.0	18.0	17.3	17.3	17.3
Comment: Antenna 1 was found as worst case for 1 simultaneous Tx.							

HT20 - 5180 MHz							
Output power [dBm] - Antenna 1							
MCS 0	MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7
17.6	17.6	18.4	18.4	17.8	17.8	17.8	17.8
Output power [dBm] - Antenna 1+2							
MCS 8	MCS 9	MCS 10	MCS 11	MCS 12	MCS 13	MCS 14	MCS 15
20.1	20.1	20.9	21.1	20.3	20.3	20.2	20.3

HT40 - 5190 MHz							
Output power [dBm] - Antenna 1							
MCS 0	MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7
18.0	18.0	17.9	18.0	17.9	17.9	17.9	17.9
Output power [dBm] - Antenna 1+2							
MCS 8	MCS 9	MCS 10	MCS 11	MCS 12	MCS 13	MCS 14	MCS 15
20.5	20.5	20.5	20.4	20.5	20.5	20.5	20.4

VHT20 - 5180 MHz									
Output power [dBm] - Antenna 1									
MCS 0	MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7	MCS 8	MCS 9
17.5	17.5	18.3	18.3	17.7	17.8	17.7	17.7	17.7	*
Output power [dBm] - Antenna 1+2									
MCS 0	MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7	MCS 8	MCS 9
20.1	20.1	20.9	20.9	20.2	20.3	20.3	20.2	20.2	*
* No transmission									

VHT40 - 5190 MHz									
Output power [dBm] - Antenna 1									
MCS 0	MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7	MCS 8	MCS 9
18.0	18.0	18.0	17.9	18.0	18.0	17.9	17.9	17.9	18.0
Output power [dBm] - Antenna 1+2									
MCS 0	MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7	MCS 8	MCS 9
20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.4	20.5	20.5

VHT80 - 5210 MHz									
Output power [dBm] - Antenna 1									
MCS 0	MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7	MCS 8	MCS 9
17.9	17.6	17.7	17.7	17.9	17.9	17.9	17.9	17.9	17.9
Output power [dBm] - Antenna 1+2									
MCS 0	MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7	MCS 8	MCS 9
20.5	20.0	20.2	20.2	20.4	20.4	20.4	20.5	20.5	20.4

1.6 Test mode duty cycle evaluation

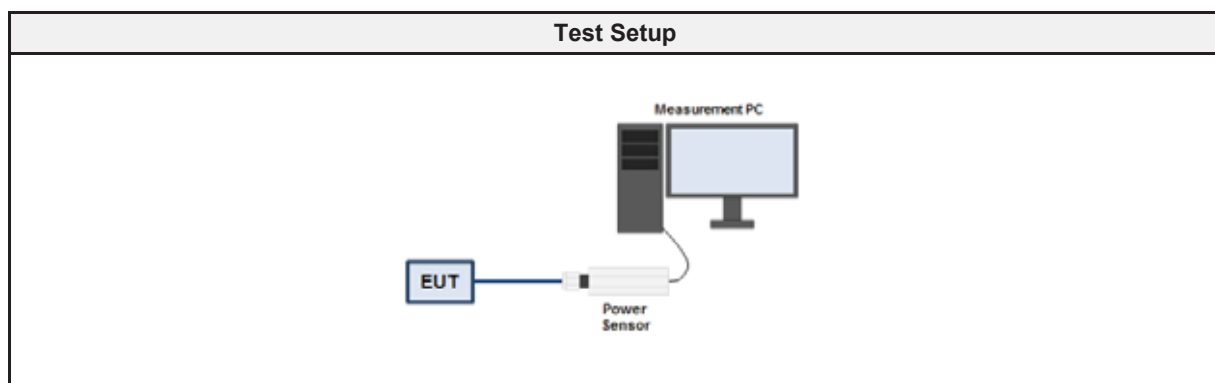
1.6.1 Information

Test Information	
Measurement Method	ANSI C63.10 12.2

1.6.2 Requirements

Requirements	
Duty cycle	Duty cycle correction
$\geq 98 \%$	No correction required
$< 98 \%$	Correction required ($10 \times \log_{10}(1/DC)$)

1.6.3 Setup



1.6.4 Equipment

Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Power Sensor	ETS-Lindgren	7002-006	EF00934	2021-07	2022-07

1.6.5 Procedure

Test Procedure
1. EUT set to test mode 2. Sweep time is set long enough to capture at least 5 bursts 3. The maximum burst duration T_{ON} is measured 4. The minimum idle duration T_{OFF} is measured 5. The duty cycle is calculated by $DC = T_{ON} / (T_{ON} + T_{OFF})$ 6. The duty cycle correction is calculated by $DC = 10 \times \log_{10}(T_{ON} / (T_{ON} + T_{OFF}))$

1.6.6 Results

Duty Cycle Results				
Mode	Channel [MHz]	Data rate	Duty Cycle	Correction Factor [dB]
OFDM	5180	18 Mbps	0.95	-0.22
HT20	5180	MCS 3	0.92	-0.36
HT40	5190	MCS 0	0.95	-0.22
VHT20	5180	MCS 2	0.95	-0.22
VHT40	5190	MCS 0	0.95	-0.22
VHT80	5210	MCS 0	0.92	-0.36

1.7 Test Modes

Mode	Description
OFDM (IEEE 802.11a)	Mode = Transmit Bandwidth = 20 MHz Duty cycle = 95% Power setting = 16 Data rate = 18 Mbps
HT20 (IEEE 802.11n)	Mode = Transmit Bandwidth = 20 MHz Duty cycle = 92% Power setting (1 Simultaneous Tx) = 16 Power setting (2 Simultaneous Tx) = 16 MCS (1 Simultaneous Tx) = 3 MCS (2 Simultaneous Tx) = 11
HT40 (IEEE 802.11n)	Mode = Transmit Bandwidth = 40 MHz Duty cycle = 95% Power setting (1 Simultaneous Tx) = 16 Power setting (2 Simultaneous Tx) = 16 MCS (1 Simultaneous Tx) = 0 MCS (2 Simultaneous Tx) = 8
VHT20 (IEEE 802.11ac)	Mode = Transmit Bandwidth = 20 MHz Duty cycle = 95% Power setting (1 Simultaneous Tx) = 16 Power setting (2 Simultaneous Tx) = 16 MCS (1 Simultaneous Tx) = 2 MCS (2 Simultaneous Tx) = 2
VHT40 (IEEE 802.11ac)	Mode = Transmit Bandwidth = 40 MHz Duty cycle = 95% Power setting (1 Simultaneous Tx) = 16 Power setting (2 Simultaneous Tx) = 16 MCS (1 Simultaneous Tx) = 0 MCS (2 Simultaneous Tx) = 0
VHT80 (IEEE 802.11ac)	Mode = Transmit Bandwidth = 80 MHz Duty cycle = 92% Power setting (1 Simultaneous Tx) = 16 Power setting (2 Simultaneous Tx) = 16 MCS (1 Simultaneous Tx) = 0 MCS (2 Simultaneous Tx) = 0
USB	Mode = Transmit Bandwidth = 20 MHz Duty cycle = 92% Power setting = 16 (5470 – 5725 MHz, 1 and 2 Simultaneous Tx) MCS (2 Simultaneous Tx) = 11 Connected via USB cable, Laptop, AC Adapter to AC Power Line
Comment: The above settings were found as worst case during pre-tests.	

1.8 Test Frequencies

Designator	Mode	Channel	Frequency [MHz]
F1	Tx / Rx	36	5180
F2	Tx / Rx	40	5200
F3	Tx / Rx	48	5240
F4	Tx / Rx	36+40	5190
F5	Tx / Rx	44+48	5230
F6	Tx / Rx	36+40+44+48	5210
F7	Tx / Rx	52	5260
F8	Tx / Rx	56	5280
F9	Tx / Rx	64	5320
F10	Tx / Rx	52+56	5270
F11	Tx / Rx	60+64	5310
F12	Tx / Rx	52+56+60+64	5290
F13	Tx / Rx	100	5500
F14	Tx / Rx	120	5600
F15	Tx / Rx	140	5700
F16	Tx / Rx	100+104	5510
F17	Tx / Rx	116+120	5630
F18	Tx / Rx	132+136	5670
F19	Tx / Rx	100+104+108+112	5530
F20	Tx / Rx	116+120+124+128	5610

1.9 Sample emission level calculation

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

Reading:

This is the reading obtained on the spectrum analyzer in dB μ V. Any external preamplifiers used are taken into account through internal analyzer settings.

A.F.:

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

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

Net:

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

Limit:

This is the FCC Class B radiated emission limit (in units of dB μ V/m). The FCC limits are given in units of μ V/m. The following formula is used to convert the units of μ V/m to dB μ V/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 dB μ V + 26 dB/m	= 47.5 dB μ V/m	:	47.5 dB μ V/m - 57.0 dB μ V/m	= -9.5 dB

1.10 Normative References

References	
Designator	Reference
KDB 789033	KDB 789033 D02 v02r01
ANSI C63.10	ANSI C63.10:2013

2 Result Summary

FCC 47 CFR Part 15E				
Product Standard Reference	Requirement	Reference Method	Result	Remarks
FCC 15.407(e)	6 dB bandwidth	KDB 789033 C.2	N/R	Only required in 5725-5850 MHz band.
FCC 15.407(a)(2),(a)(5),(h)(2)	26 dB bandwidth	KDB 789033 C.1	PASS	No limit. Basis for other measurements.
FCC 15.407(a)	Maximum output power	KDB 789033 E	PASS	
FCC 15.407(a)	Transmit power control	KDB 789033 E	N/R	Required in 5250-5350 and 5470-5725 MHz bands. Not required for EIRP < 500 mW.
FCC 15.407(a)	Power spectral density	KDB 789033 F	PASS	
FCC 15.407(g)	Frequency stability	ANSI C63.10 6.8	PASS	
FCC 15.207	AC power line conducted emissions	ANSI C63.10 6.2	PASS	
FCC 15.407(b)	Transmitter radiated emissions	KDB 789033 G	PASS	
FCC 15.407(a)	Radiation pattern	KDB 789033 H	N/R	Required for outdoor access points
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

3 Test Conditions and Results

3.1 Test Conditions and Results - 26 dB emission bandwidth

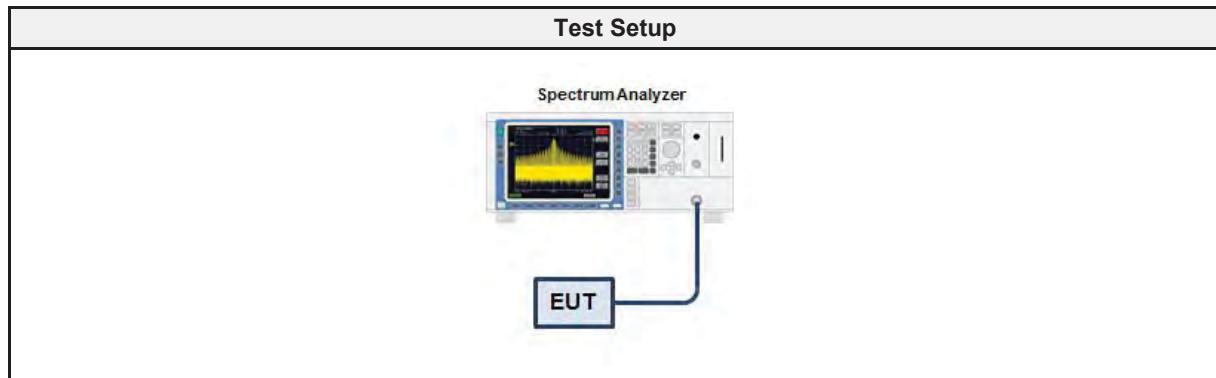
3.1.1 Information

Test Information	
Reference	FCC 15.407(a)(2),(a)(5),(h)(2)
Measurement Method	KDB 789033 C.1
Operator	Toralf Jahn
Date	2021-09-20
Measurement uncertainty	±1.26 %

3.1.2 Limits

Limits
None, used to determine power limit and necessary DFS functionality

3.1.3 Setup



3.1.4 Equipment

Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum Analyzer	R&S	FSW 43	EF00896	2021-07	2022-07

3.1.5 Procedure

Test Procedure
1. EUT transmitter is activated in test mode under normal conditions 2. The spectrum analyzer is set to peak detection and maximum hold with a span twice the nominal channel bandwidth 3. The resolution bandwidth is set to approximately 1% of the emission bandwidth and video bandwidth $\geq$ RBW 4. The peak of the emission spectrum is determined 5. The left most frequency that corresponds to an emission level 26 dB below the maximum is determined 6. The right most frequency that corresponds to an emission level 26 dB below the maximum is determined 7. The 26 dB bandwidth is calculated from the two edge frequencies 8. The RBW is corrected and the measurement is repeated if needed

3.1.6 Results

Test Results - 5150 - 5250 MHz – 26 dB BW							
Mode	Channel	Frequency [MHz]	Nominal BW [MHz]	BW Upper Edge Port 1 [MHz]	BW Port 1 [MHz]	BW Upper Edge Port 2 [MHz]	BW Port 2 [MHz]
OFDM	36	5180	20	-	19.230	-	-
OFDM	40	5200	20	-	19.665	-	-
OFDM	48	5240	20	5250.065	19.695	5249.780	19.455
HT20	36	5180	20	-	20.610	-	-
HT20	40	5200	20	-	20.685	-	-
HT20	48	5240	20	5250.350	20.640	20.670	5250.365
HT40	36+40	5190	40	-	41.310	-	-
HT40	44+48	5230	40	5250.910	41.730	5251.060	41.970
VHT20	36	5180	20	-	20.670	-	-
VHT20	40	5200	20	-	20.220	-	-
VHT20	48	5240	20	5250.380	20.685	5250.350	20.415
VHT40	36+40	5190	40	-	41.490	-	-
VHT40	44+48	5230	40	5250.850	41.580	5250.790	41.700
VHT80	36+40+44+48	5210	80	5251.940	83.280	5252.180	84.000

Test Results - 5150 - 5250 MHz – 99% BW							
Mode	Channel	Frequency [MHz]	Nominal BW [MHz]	BW Upper Edge Port 1 [MHz]	BW Port 1 [MHz]	BW Upper Edge Port 2 [MHz]	BW Port 2 [MHz]
OFDM	48	5240	20	5248.385	16.618	5248.392	16.632
HT20	48	5240	20	5248.995	17.825	5248.999	17.830
HT40	44+48	5230	40	5248.268	36.348	5248.252	36.356
VHT20	48	5240	20	5248.994	17.818	5248.997	17.822
VHT40	44+48	5230	40	5248.267	36.357	5248.262	36.351
VHT80	36+40+44+48	5210	80	5247.988	75.595	5247.958	75.566

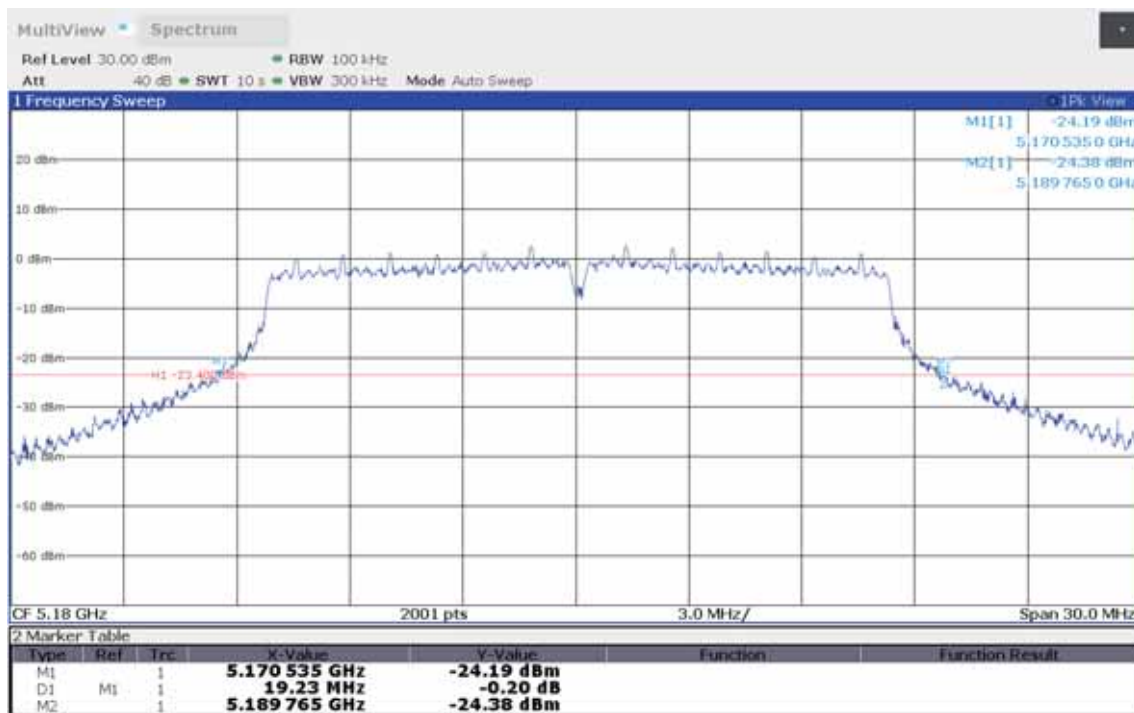
Comment: If the Emission Bandwidth (26 dB) does not fall entirely in the band, Occupied Bandwidth (99 %) can be used instead to determine if DFS testing is required for this band.

Test Results - 5250 - 5350 MHz – 26 dB BW				
Mode	Channel	Frequency [MHz]	Nominal BW [MHz]	BW Port 1 [MHz]
OFDM	52	5260	20	19.440
OFDM	56	5280	20	19.215
OFDM	64	5320	20	19.215
HT20	52	5260	20	20.325
HT20	56	5280	20	20.490
HT20	64	5320	20	20.205
HT40	52+56	5270	40	41.850
HT40	60+64	5310	40	41.370
VHT20	52	5260	20	20.730
VHT20	56	5280	20	20.625
VHT20	64	5320	20	20.265
VHT40	52+56	5270	40	41.940
VHT40	60+64	5310	40	41.370
VHT80	52+56+60+64	5290	80	83.880

Test Results - 5470 - 5725 MHz – 26 dB BW				
Mode	Channel	Frequency [MHz]	Nominal BW [MHz]	BW Port 1 [MHz]
OFDM	100	5500	20	19.140
OFDM	120	5600	20	19.830
OFDM	140	5700	20	20.175
HT20	100	5500	20	20.655
HT20	120	5600	20	20.730
HT20	140	5700	20	21.945
HT40	100+104	5510	40	41.700
HT40	116+120	5590	40	41.610
HT40	132+136	5670	40	41.970
VHT20	100	5500	20	20.310
VHT20	120	5600	20	20.460
VHT20	140	5700	20	21.330
VHT40	100+104	5510	40	41.670
VHT40	116+120	5590	40	41.640
VHT40	132+136	5670	40	41.670
VHT80	100+104+108+112	5530	80	83.460
VHT80	116+120+124+128	5610	80	83.640

26 dB Bandwidth

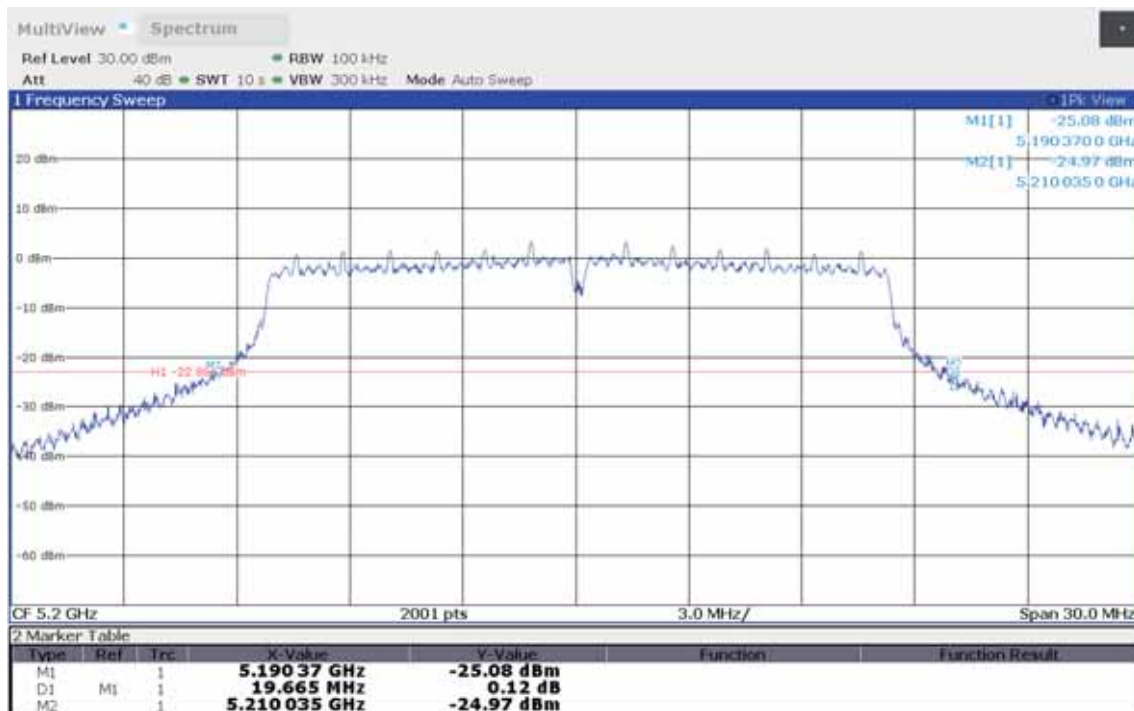
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 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.8.1 Option 1
 Operational Mode: IEEE 802.11a, Channel: 36, 5180 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-09-20
 Antenna Port: 1
 Lower Frequency [MHz]: 5170.535
 Upper Frequency [MHz]: 5189.765
 26 dB Bandwidth [MHz]: 19.230



14:57:08 20.09.2021

26 dB Bandwidth

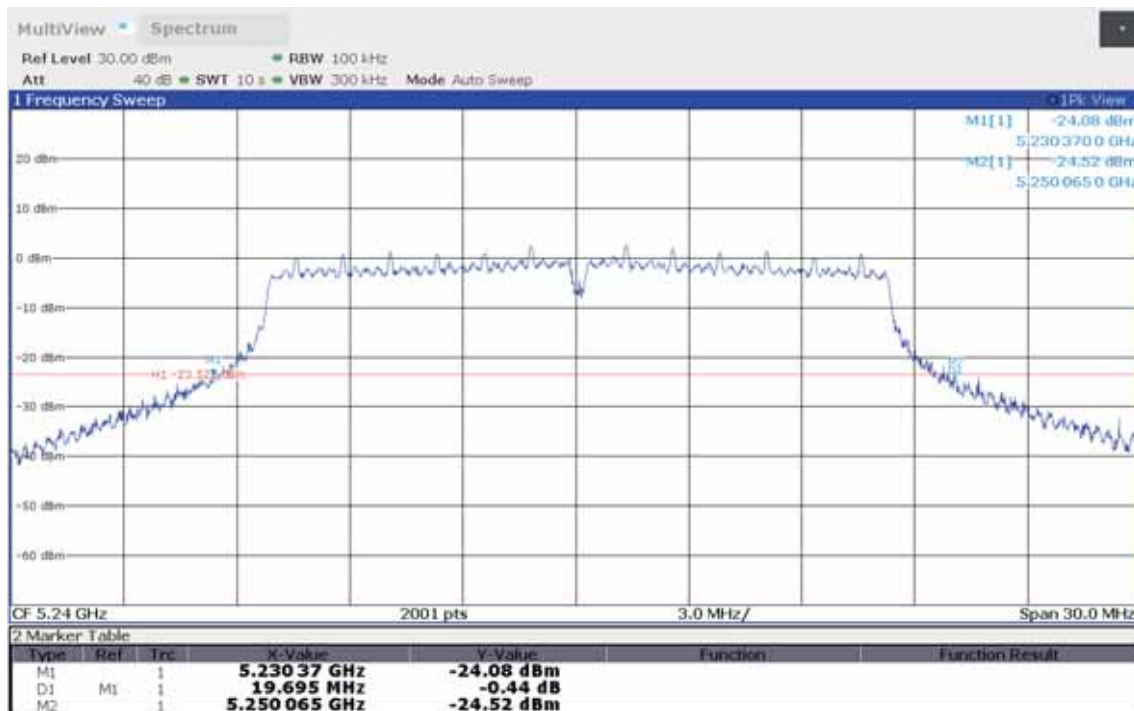
Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.8.1 Option 1
 Operational Mode: IEEE 802.11a, Channel: 40, 5200 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-09-20
 Antenna Port: 1
 Lower Frequency [MHz]: 5190.370
 Upper Frequency [MHz]: 5210.035
 26 dB Bandwidth [MHz]: 19.665



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26 dB Bandwidth

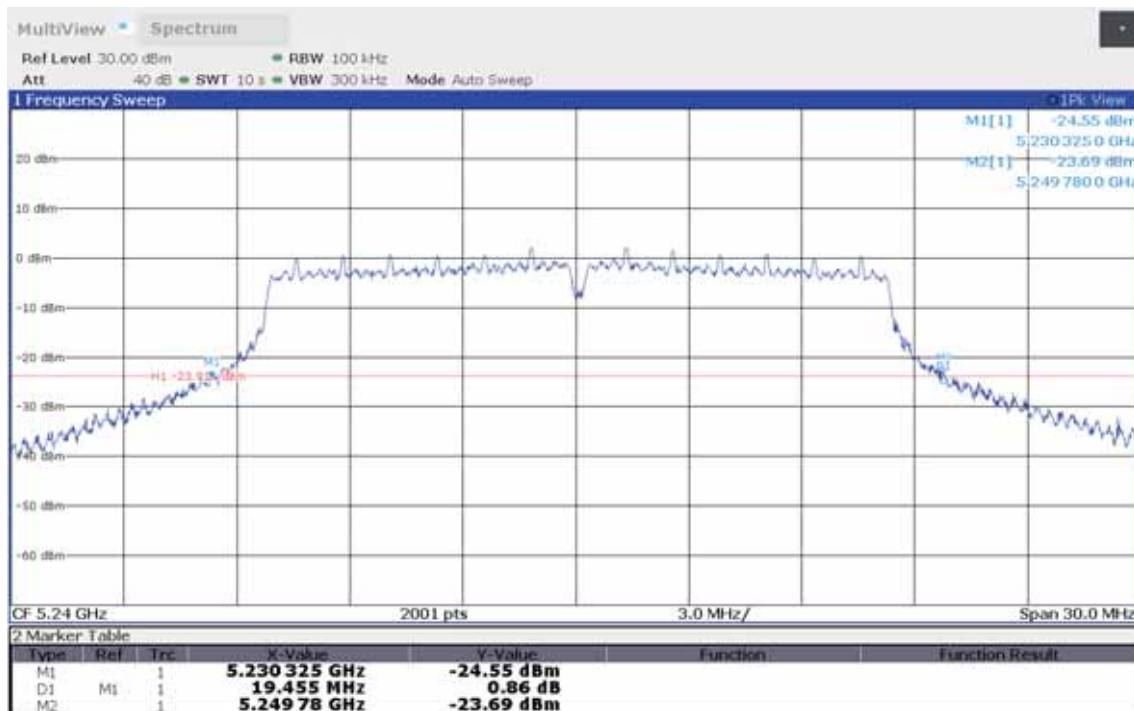
Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.8.1 Option 1
 Operational Mode: IEEE 802.11a, Channel: 48, 5240 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-09-20
 Antenna Port: 1
 Lower Frequency [MHz]: 5230.370
 Upper Frequency [MHz]: 5250.065
 26 dB Bandwidth [MHz]: 19.695



14:59:57 20.09.2021

26 dB Bandwidth

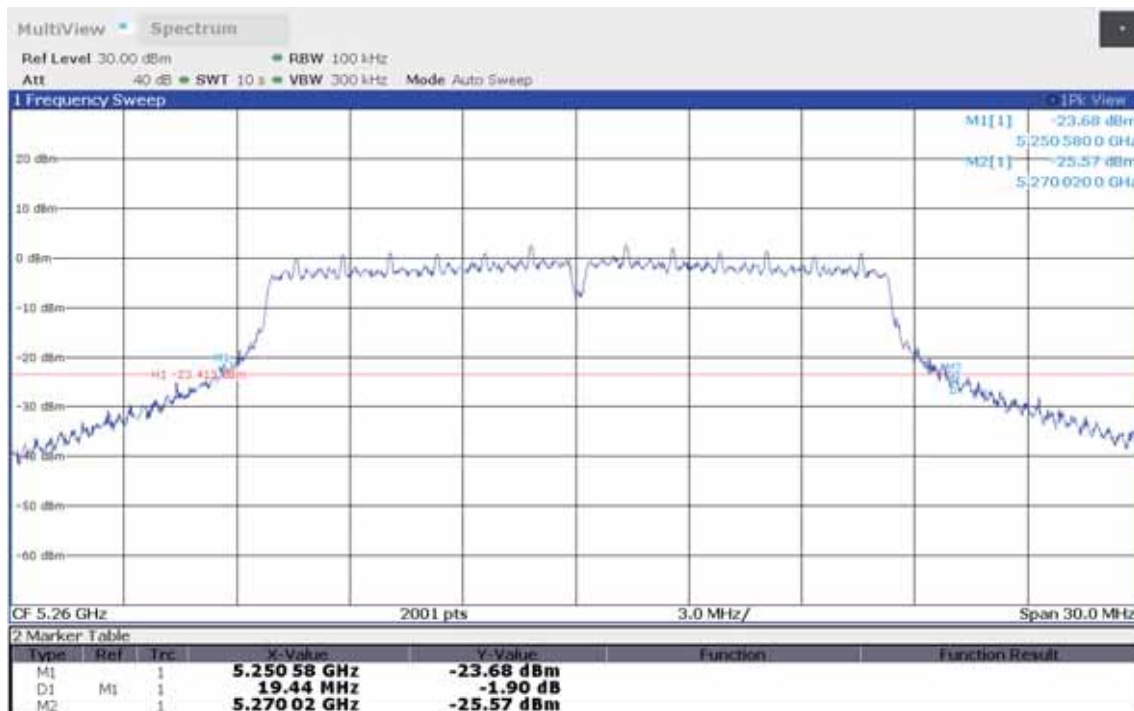
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 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.8.1 Option 1
 Operational Mode: IEEE 802.11a, Channel: 48, 5240 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-09-20
 Antenna Port: 2
 Lower Frequency [MHz]: 5230.325
 Upper Frequency [MHz]: 5249.780
 26 dB Bandwidth [MHz]: 19.455



15:02:26 20.09.2021

26 dB Bandwidth

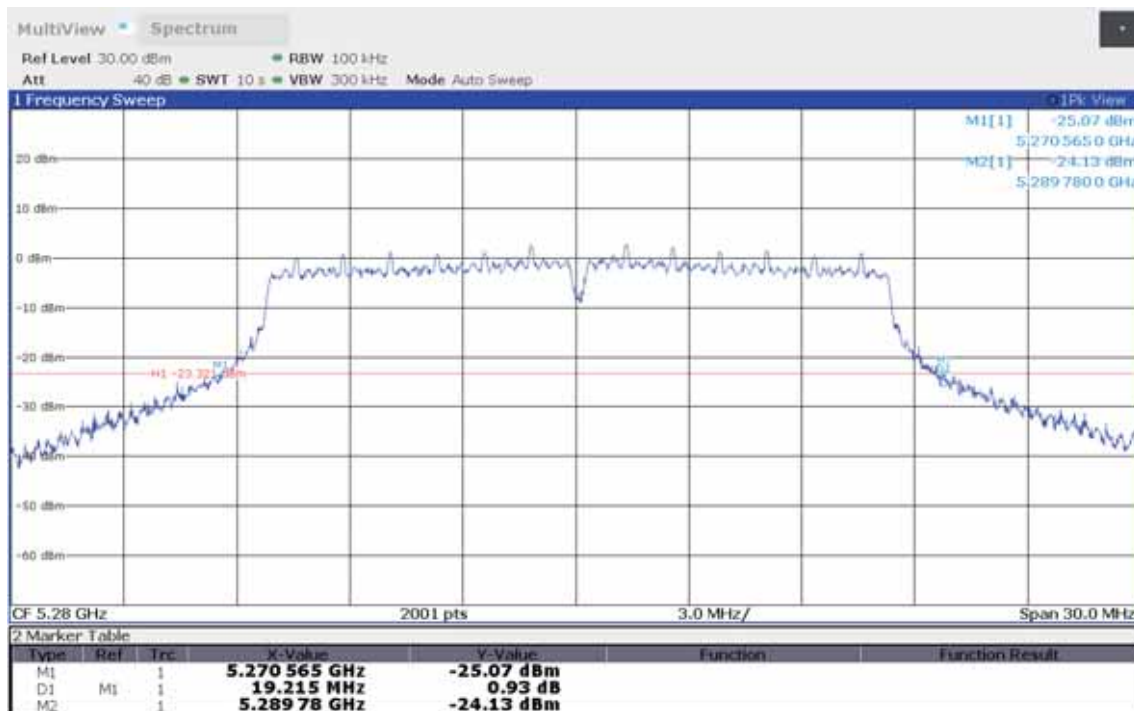
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 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.8.1 Option 1
 Operational Mode: IEEE 802.11a, Channel: 52, 5260 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-09-20
 Antenna Port: 1
 Lower Frequency [MHz]: 5250.580
 Upper Frequency [MHz]: 5270.020
 26 dB Bandwidth [MHz]: 19.440



15:04:48 20.09.2021

26 dB Bandwidth

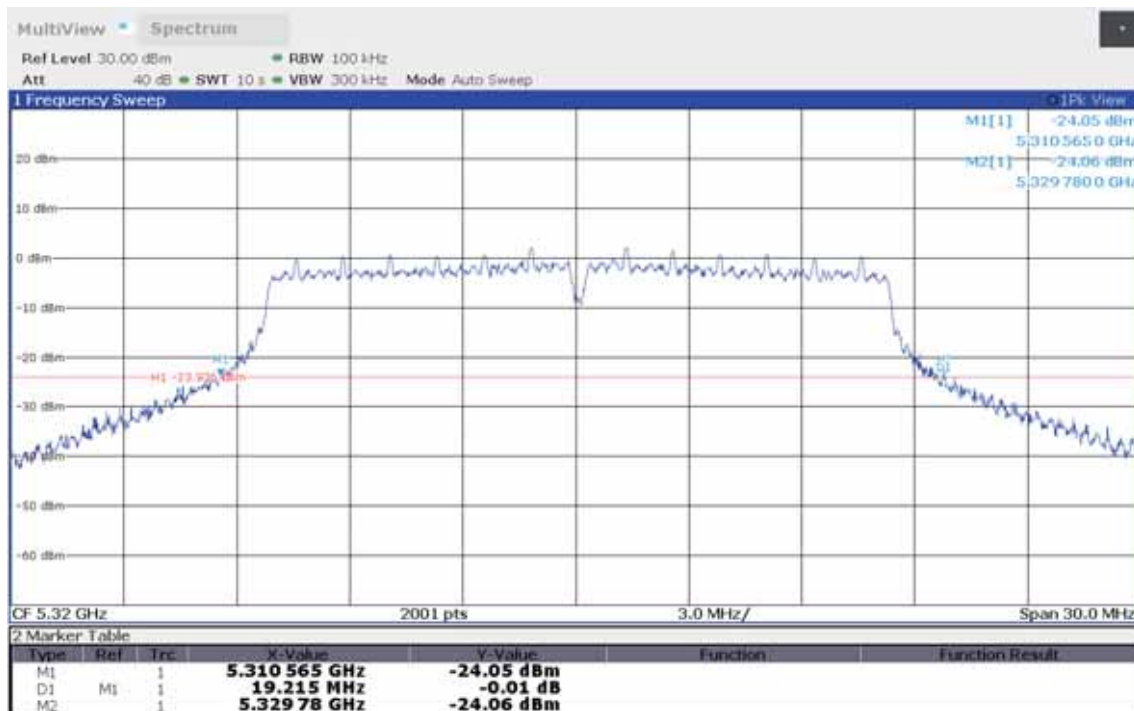
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 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.8.1 Option 1
 Operational Mode: IEEE 802.11a, Channel: 56, 5280 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-09-20
 Antenna Port: 1
 Lower Frequency [MHz]: 5270.565
 Upper Frequency [MHz]: 5289.780
 26 dB Bandwidth [MHz]: 19.215



15:05:44 20.09.2021

26 dB Bandwidth

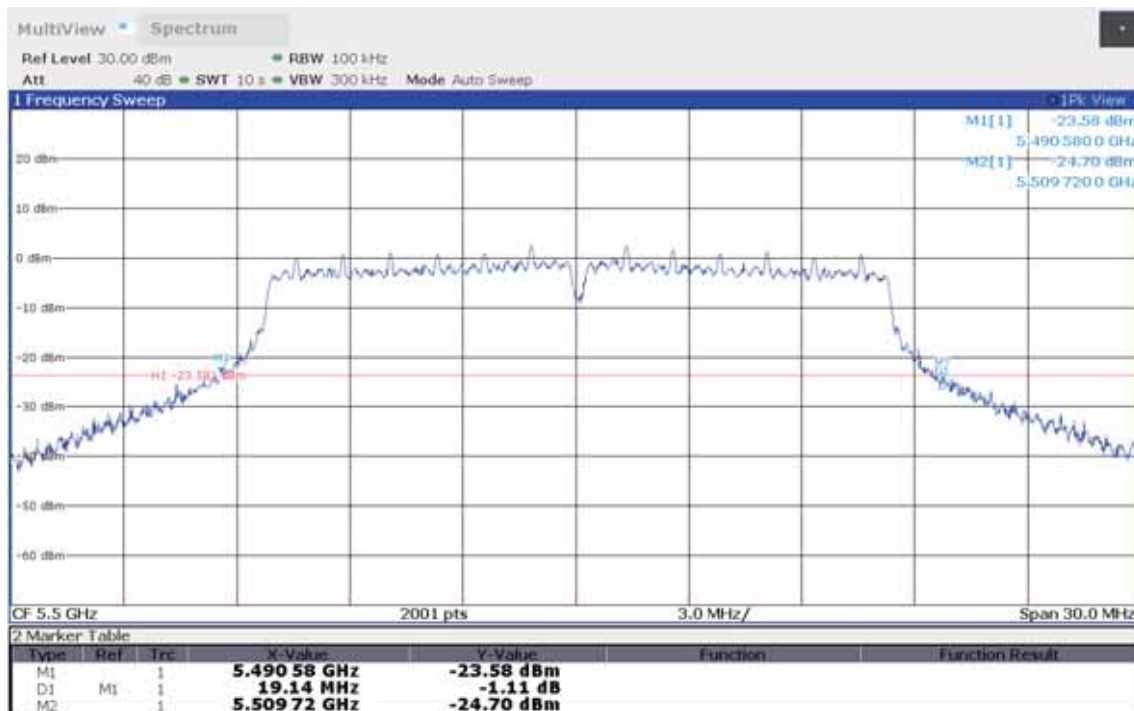
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 Applicant: Leica Geosystems AG
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 Model: BLK2FLY
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 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.8.1 Option 1
 Operational Mode: IEEE 802.11a, Channel: 64, 5320 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-09-20
 Antenna Port: 1
 Lower Frequency [MHz]: 5310.565
 Upper Frequency [MHz]: 5329.780
 26 dB Bandwidth [MHz]: 19.215



15:08:33 20.09.2021

26 dB Bandwidth

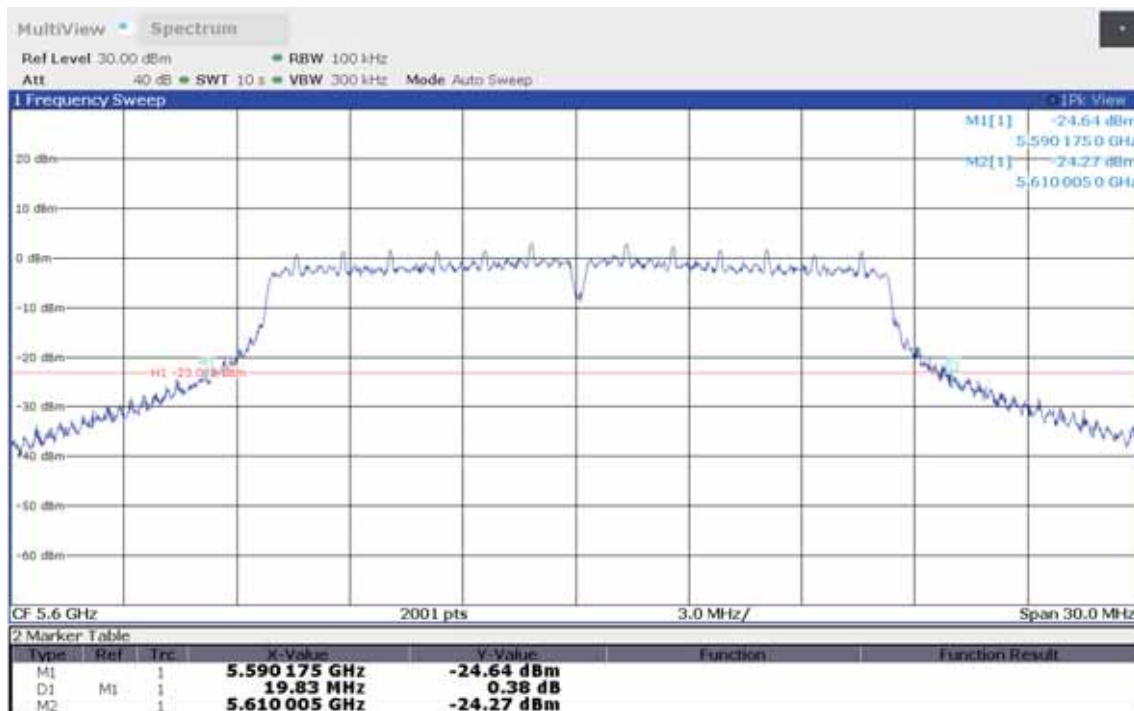
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 Applicant: Leica Geosystems AG
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 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.8.1 Option 1
 Operational Mode: IEEE 802.11a, Channel: 100, 5500 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-09-20
 Antenna Port: 1
 Lower Frequency [MHz]: 5490.580
 Upper Frequency [MHz]: 5509.720
 26 dB Bandwidth [MHz]: 19.140



15:09:47 20.09.2021

26 dB Bandwidth

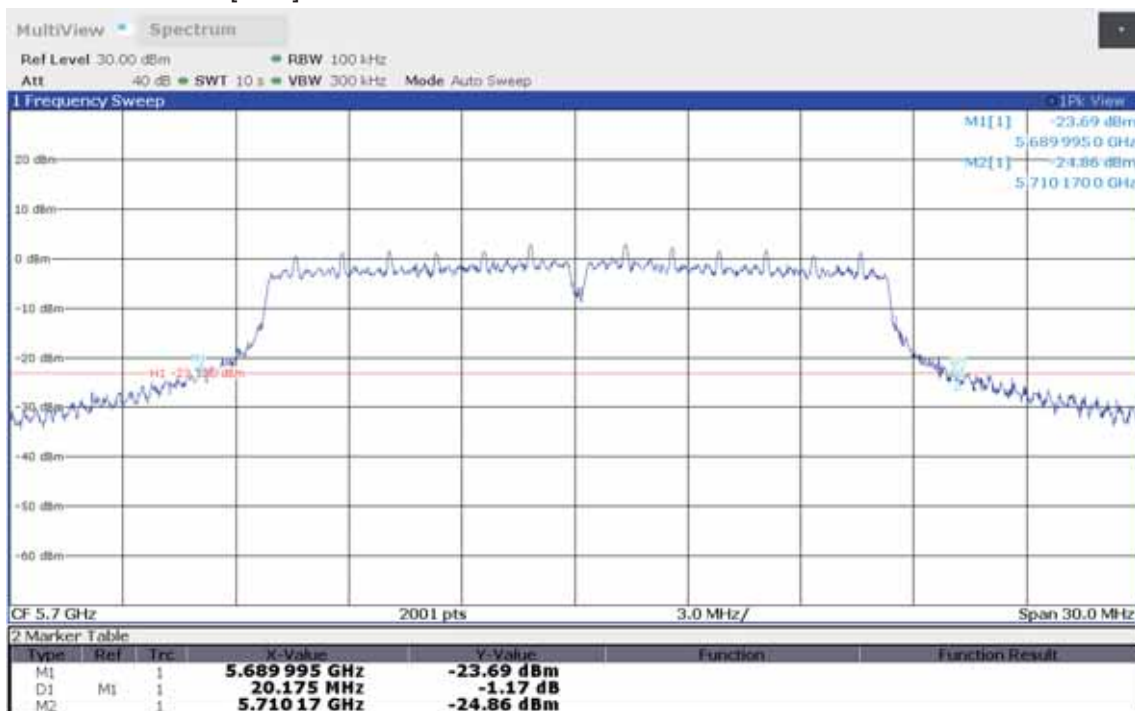
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 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.8.1 Option 1
 Operational Mode: IEEE 802.11a, Channel: 120, 5600 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-09-20
 Antenna Port: 1
 Lower Frequency [MHz]: 5590.175
 Upper Frequency [MHz]: 5610.005
 26 dB Bandwidth [MHz]: 19.830



15:11:22 20.09.2021

26 dB Bandwidth

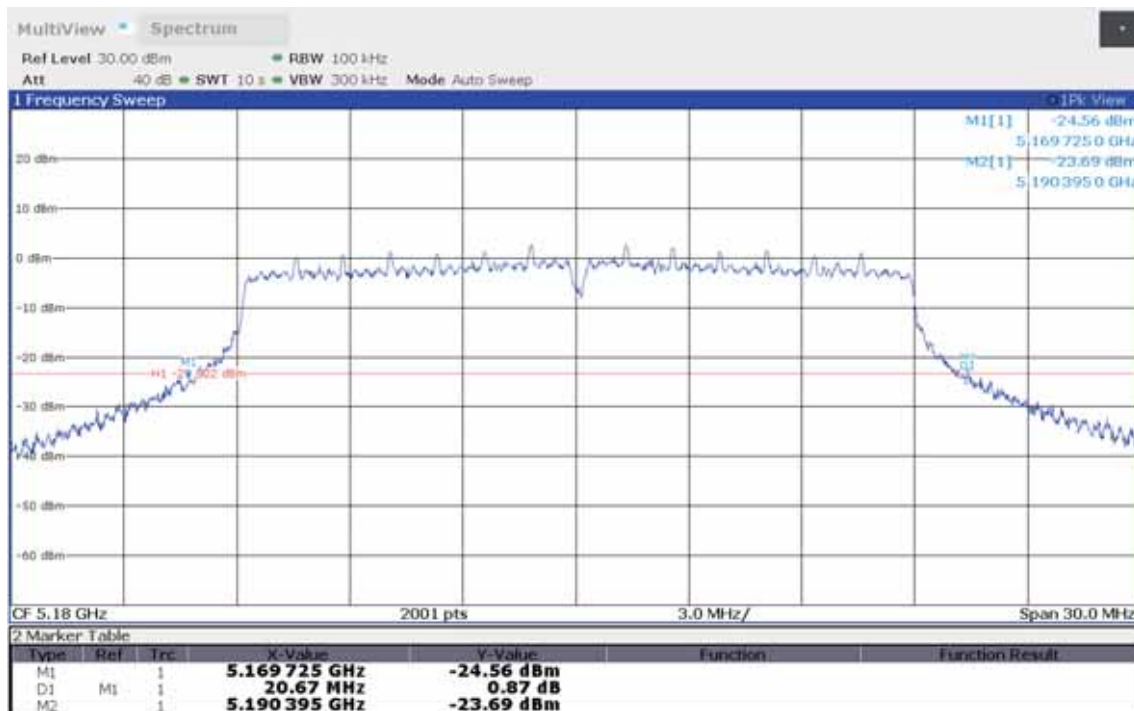
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 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.8.1 Option 1
 Operational Mode: IEEE 802.11a, Channel: 140, 5700 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-09-24
 Antenna Port: 1
 Lower Frequency [MHz]: 5689.995
 Upper Frequency [MHz]: 5710.170
 26 dB Bandwidth [MHz]: 20.175



14:35:22 24.09.2021

26 dB Bandwidth

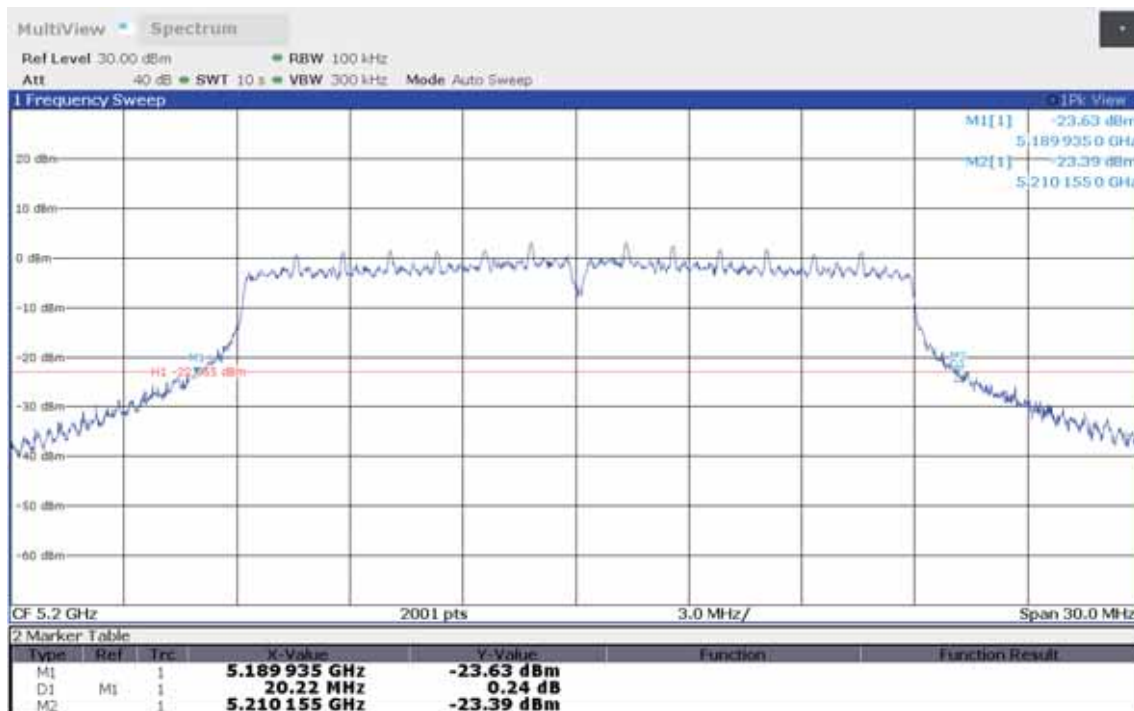
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 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.8.1 Option 1
 Operational Mode: IEEE 802.11ac (VHT20), Channel: 36, 5180 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-09-29
 Antenna Port: 1
 Lower Frequency [MHz]: 5169.725
 Upper Frequency [MHz]: 5190.395
 26 dB Bandwidth [MHz]: 20.670



11:50:08 29.09.2021

26 dB Bandwidth

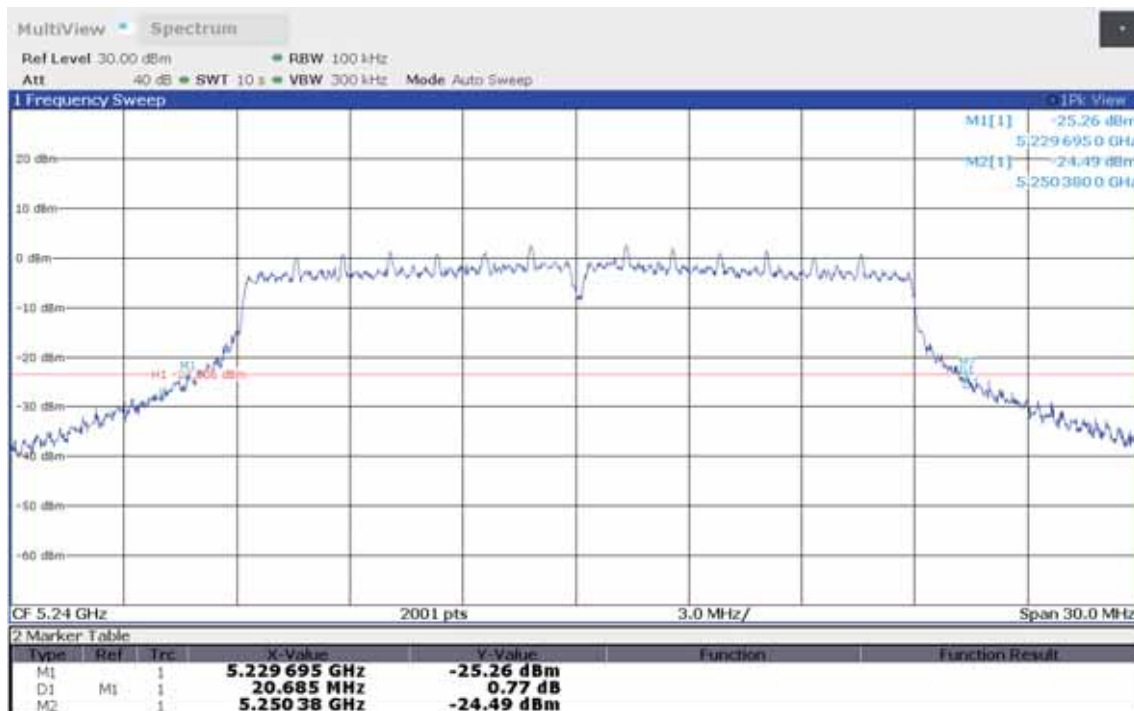
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 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
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 Reference Method: ANSI C63.10:2013, Section 11.8.1 Option 1
 Operational Mode: IEEE 802.11ac (VHT20), Channel: 40, 5200 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-09-29
 Antenna Port: 1
 Lower Frequency [MHz]: 5189.935
 Upper Frequency [MHz]: 5210.155
 26 dB Bandwidth [MHz]: 20.220



11:51:05 29.09.2021

26 dB Bandwidth

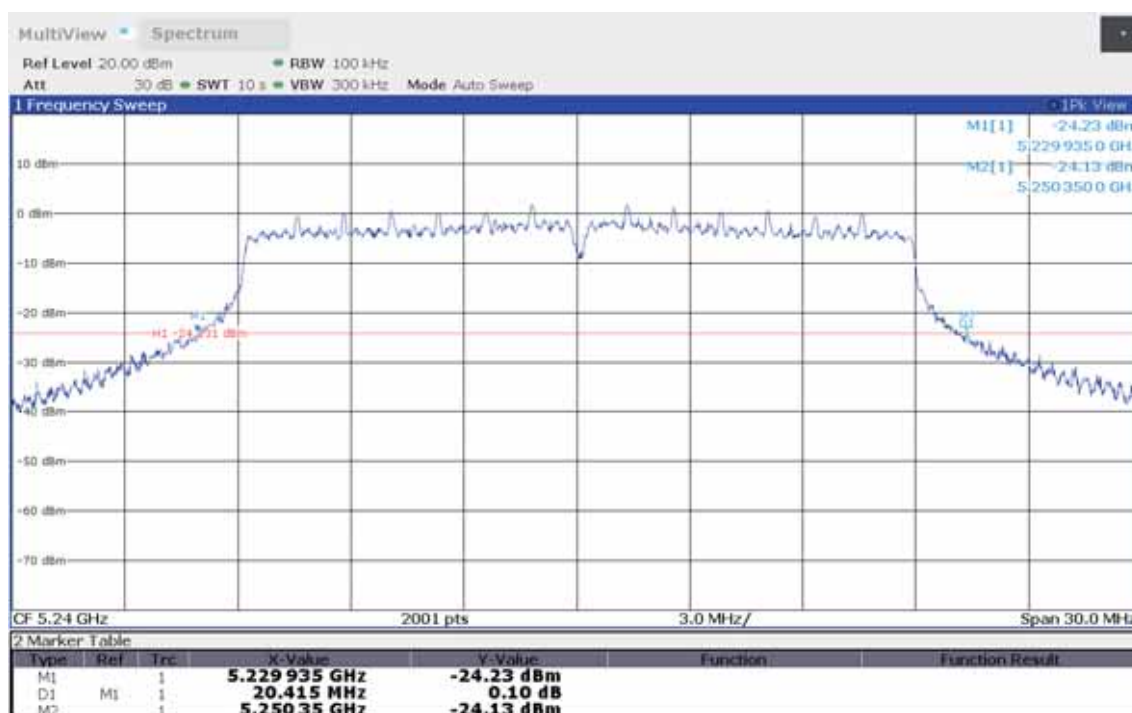
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 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.8.1 Option 1
 Operational Mode: IEEE 802.11ac (VHT20), Channel: 48, 5240 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-09-29
 Antenna Port: 1
 Lower Frequency [MHz]: 5229.695
 Upper Frequency [MHz]: 5250.380
 26 dB Bandwidth [MHz]: 20.685



11:52:46 29.09.2021

26 dB Bandwidth

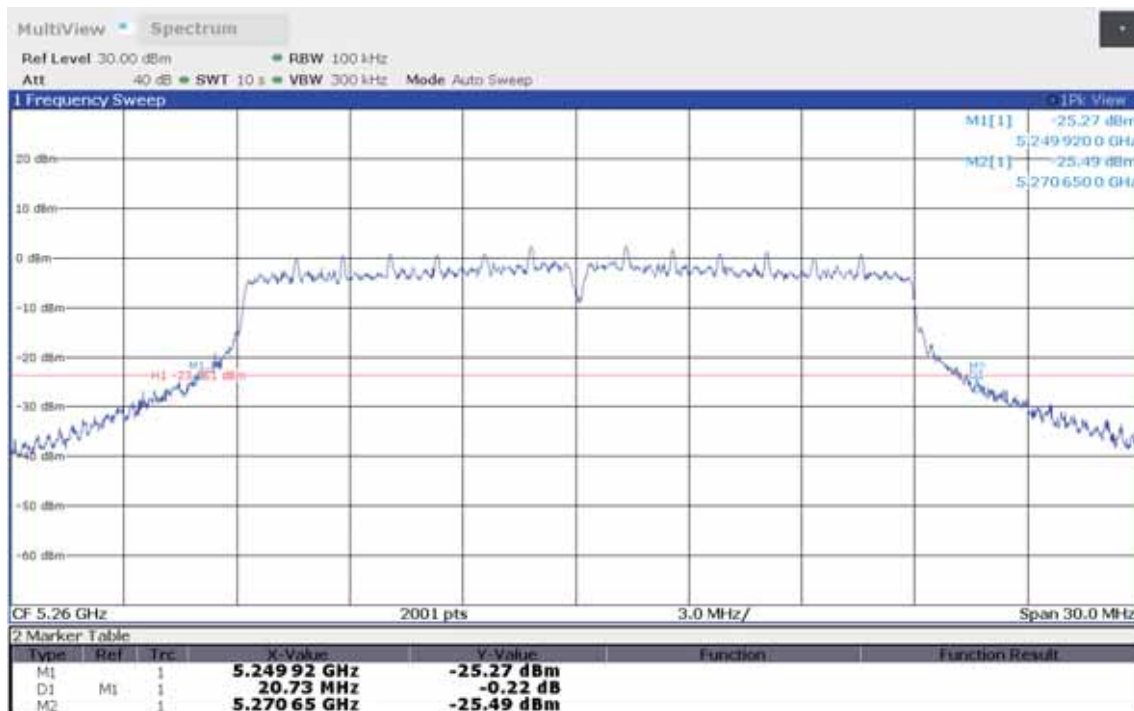
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 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.8.1 Option 1
 Operational Mode: IEEE 802.11ac (VHT20), Channel: 48, 5240 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-09-29
 Antenna Port: 2
 Lower Frequency [MHz]: 5229.935
 Upper Frequency [MHz]: 5250.350
 26 dB Bandwidth [MHz]: 20.415



11:54:05 29.09.2021

26 dB Bandwidth

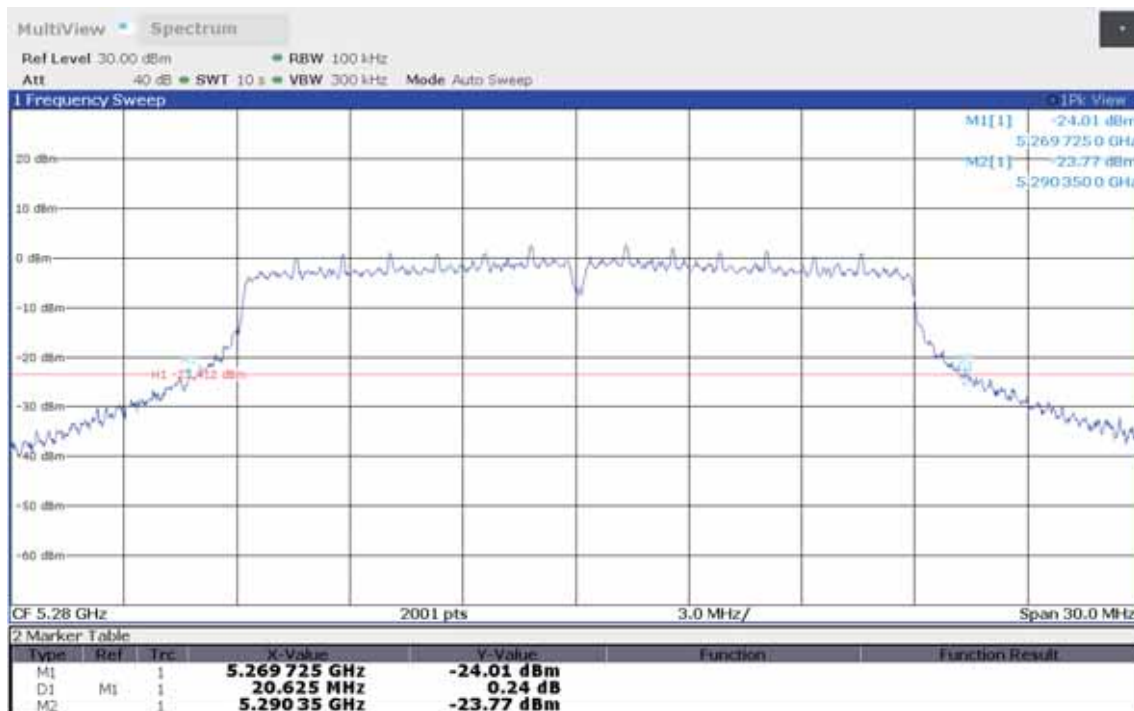
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 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.8.1 Option 1
 Operational Mode: IEEE 802.11ac (VHT20), Channel: 52, 5260 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-09-29
 Antenna Port: 1
 Lower Frequency [MHz]: 5249.920
 Upper Frequency [MHz]: 5270.650
 26 dB Bandwidth [MHz]: 20.730



11:55:37 29.09.2021

26 dB Bandwidth

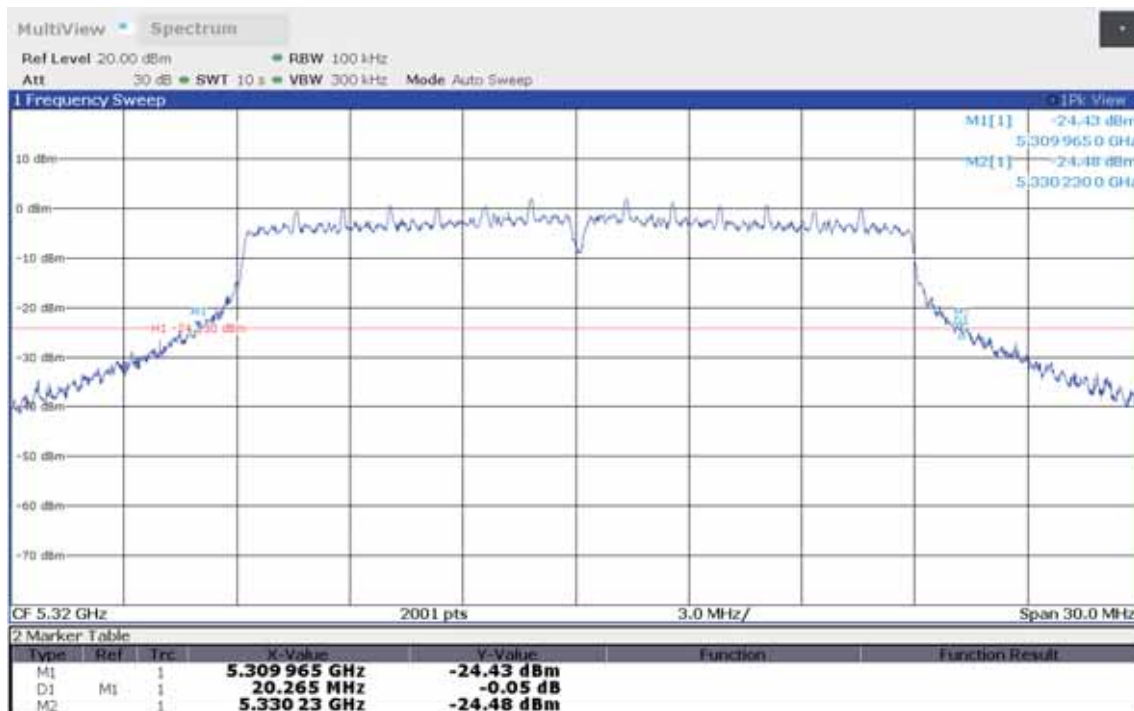
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 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.8.1 Option 1
 Operational Mode: IEEE 802.11ac (VHT20), Channel: 56, 5280 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-09-29
 Antenna Port: 1
 Lower Frequency [MHz]: 5269.725
 Upper Frequency [MHz]: 5290.350
 26 dB Bandwidth [MHz]: 20.625



11:58:43 29.09.2021

26 dB Bandwidth

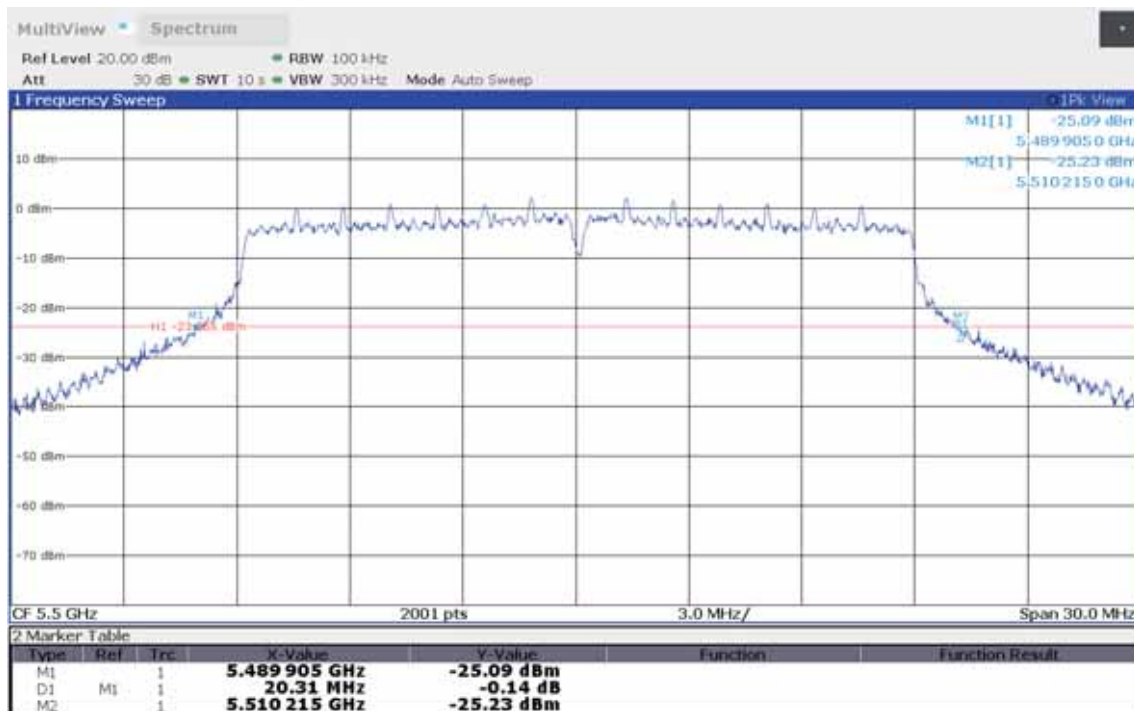
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 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.8.1 Option 1
 Operational Mode: IEEE 802.11ac (VHT20), Channel: 64, 5320 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-09-29
 Antenna Port: 1
 Lower Frequency [MHz]: 5309.965
 Upper Frequency [MHz]: 5330.230
 26 dB Bandwidth [MHz]: 20.265



11:59:52 29.09.2021

26 dB Bandwidth

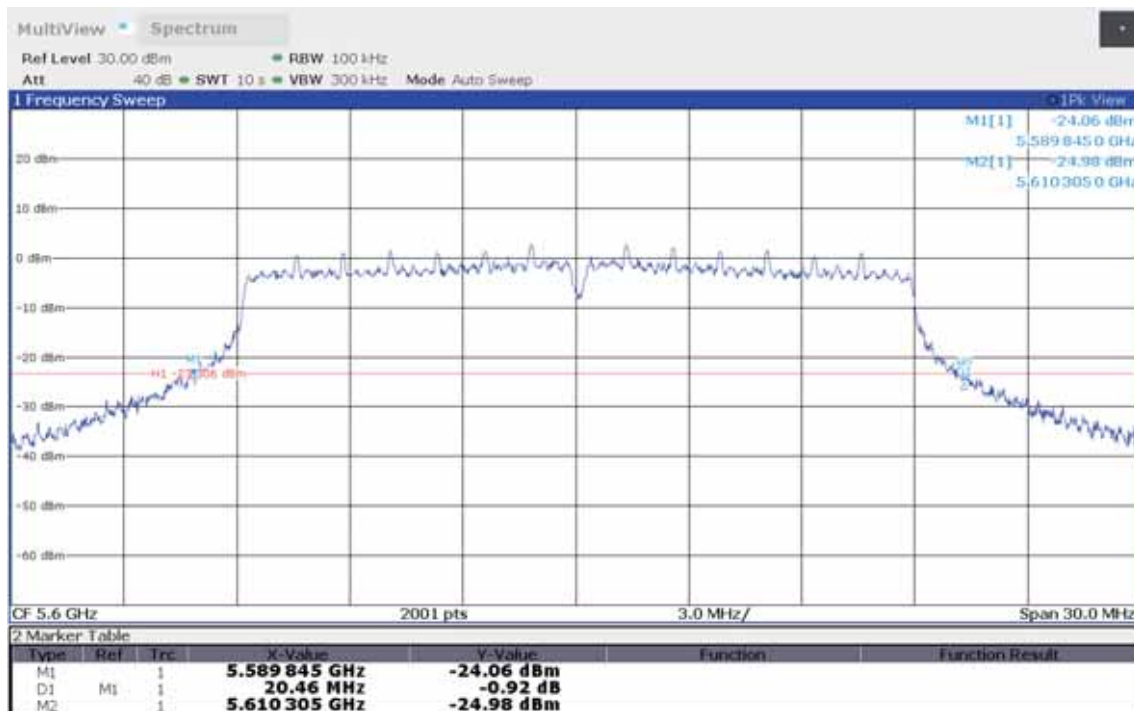
Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.8.1 Option 1
 Operational Mode: IEEE 802.11ac (VHT20), Channel: 100, 5500 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-09-29
 Antenna Port: 1
 Lower Frequency [MHz]: 5489.905
 Upper Frequency [MHz]: 5510.215
 26 dB Bandwidth [MHz]: 20.310



12:50:14 29.09.2021

26 dB Bandwidth

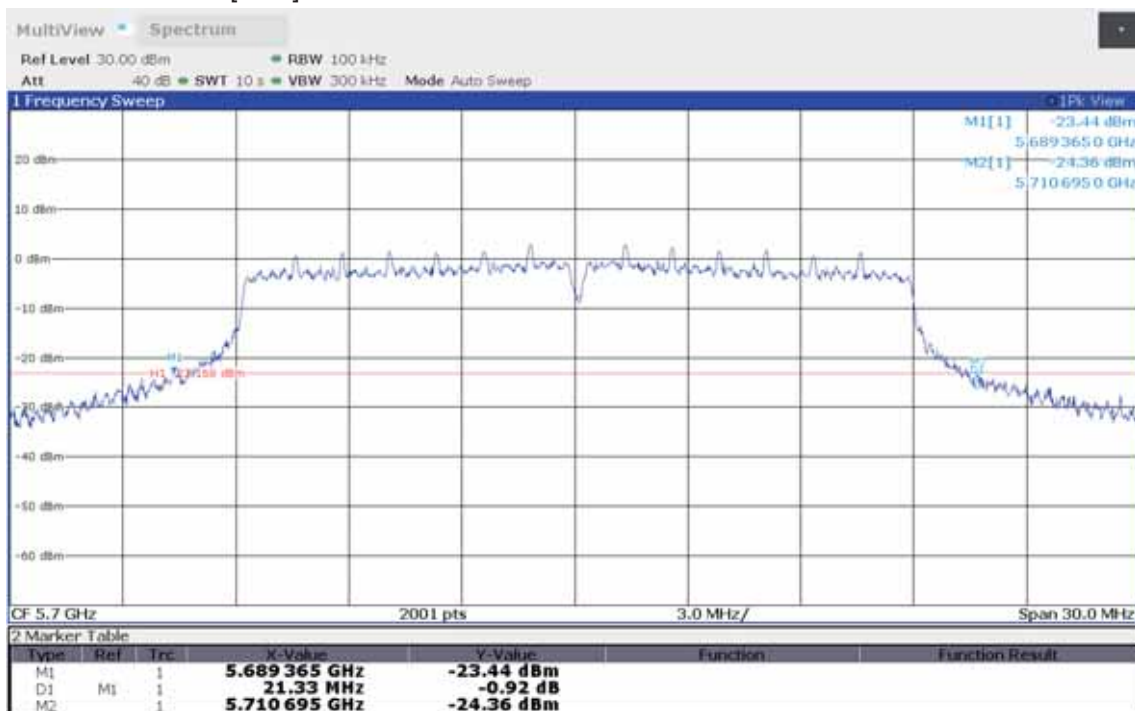
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 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.8.1 Option 1
 Operational Mode: IEEE 802.11ac (VHT20), Channel: 120, 5600 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-09-29
 Antenna Port: 1
 Lower Frequency [MHz]: 5589.845
 Upper Frequency [MHz]: 5610.305
 26 dB Bandwidth [MHz]: 20.460



12:51:27 29.09.2021

26 dB Bandwidth

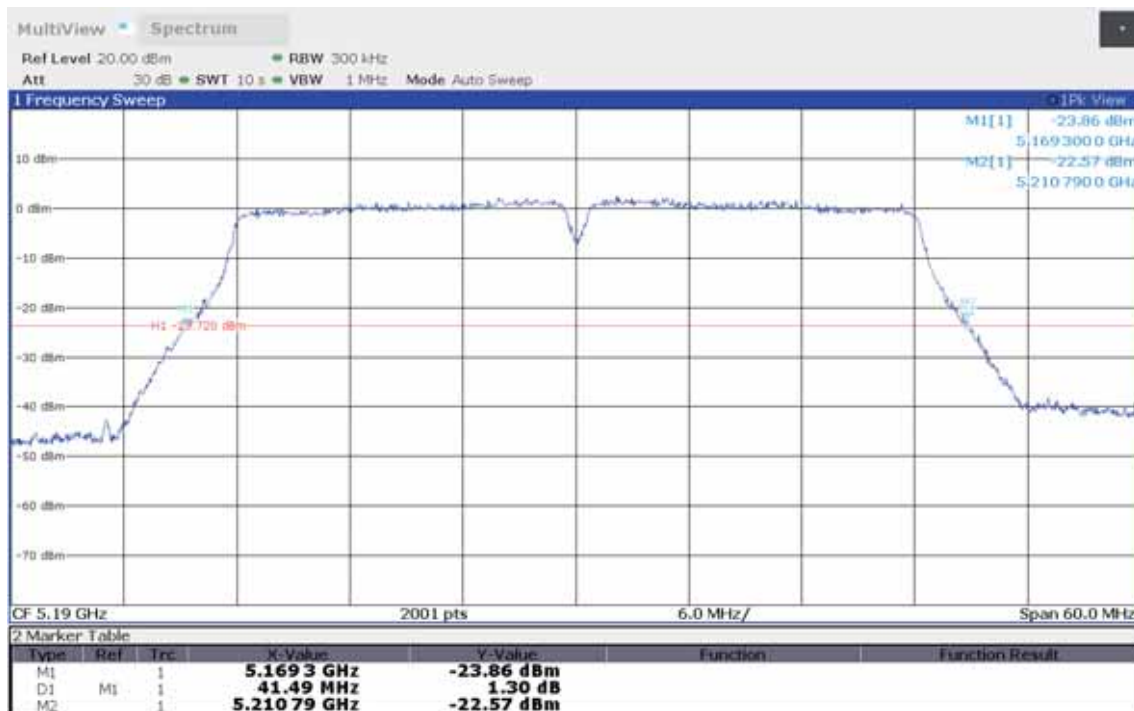
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 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.8.1 Option 1
 Operational Mode: IEEE 802.11ac (VHT20), Channel: 140, 5700 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-09-29
 Antenna Port: 1
 Lower Frequency [MHz]: 5689.365
 Upper Frequency [MHz]: 5710.695
 26 dB Bandwidth [MHz]: 21.330



12:52:26 29.09.2021

26 dB Bandwidth

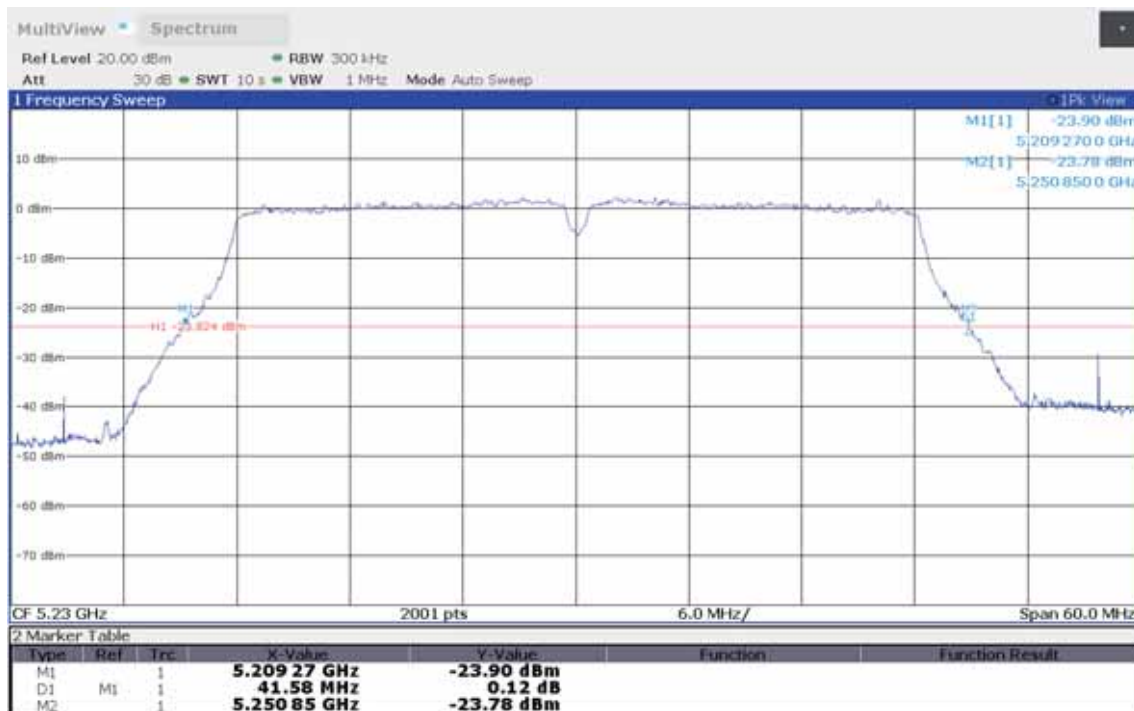
Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.8.1 Option 1
 Operational Mode: IEEE 802.11ac (VHT40), Channel: 38, 5190 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-09-29
 Antenna Port: 1
 Lower Frequency [MHz]: 5169.300
 Upper Frequency [MHz]: 5210.790
 26 dB Bandwidth [MHz]: 41.490



12:54:46 29.09.2021

26 dB Bandwidth

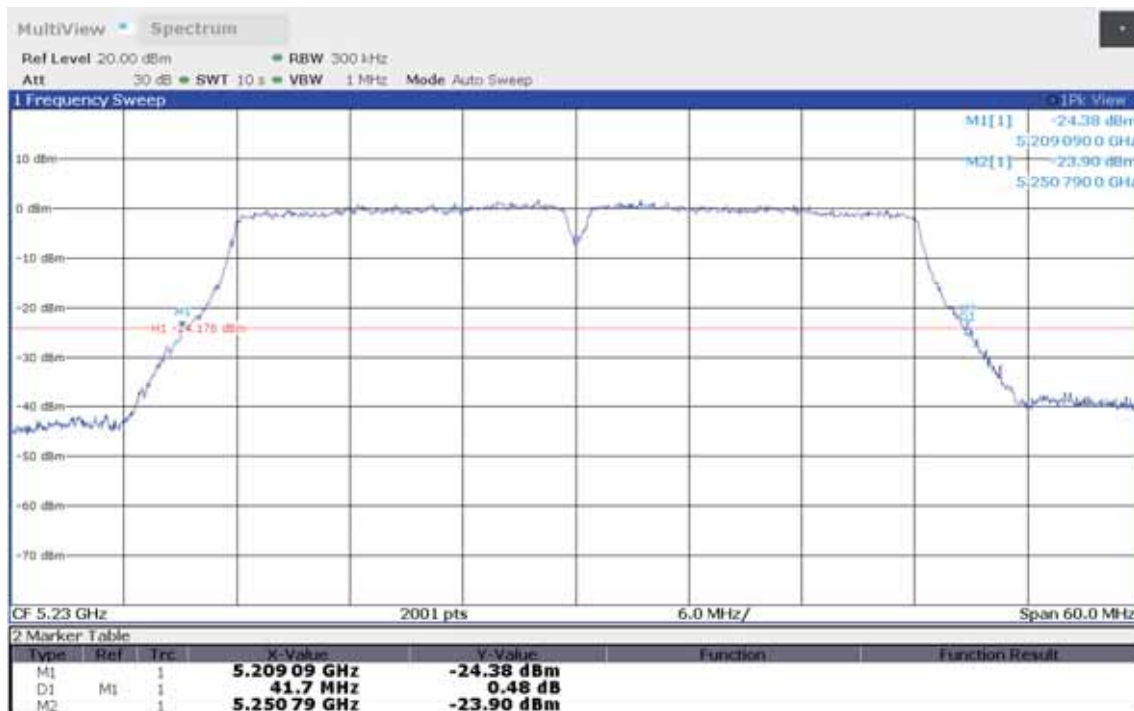
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 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.8.1 Option 1
 Operational Mode: IEEE 802.11ac (VHT40), Channel: 46, 5230 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-09-29
 Antenna Port: 1
 Lower Frequency [MHz]: 5209.270
 Upper Frequency [MHz]: 5250.850
 26 dB Bandwidth [MHz]: 41.580



13:08:13 29.09.2021

26 dB Bandwidth

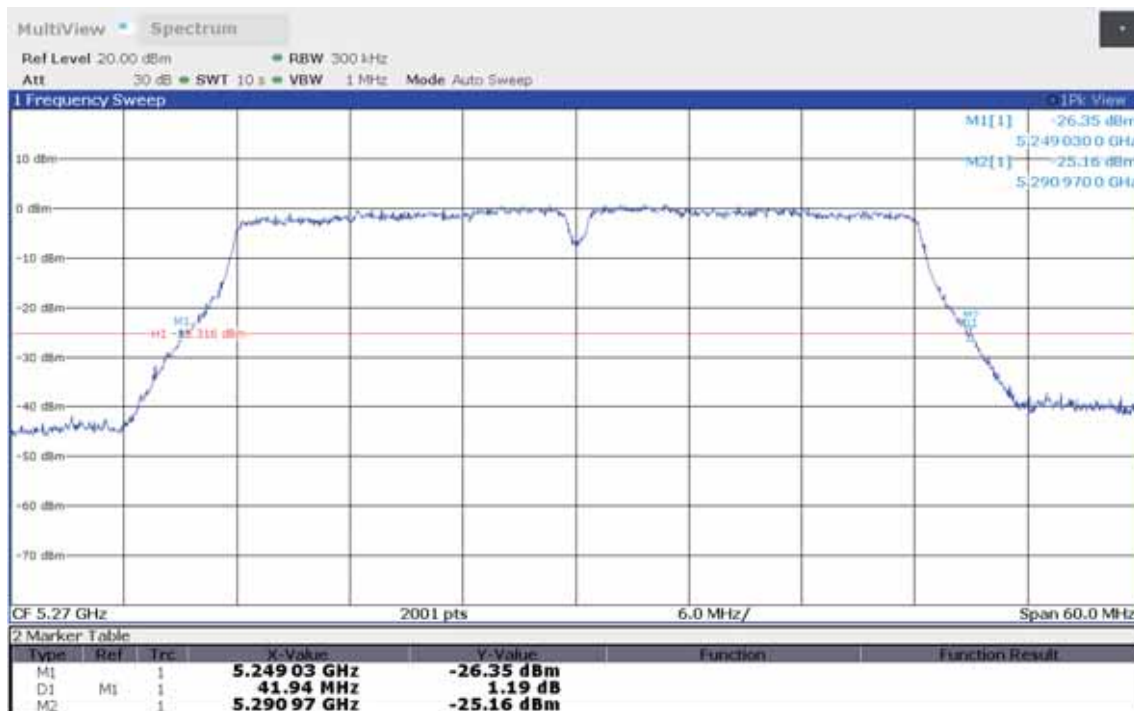
Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.8.1 Option 1
 Operational Mode: IEEE 802.11ac (VHT40), Channel: 46, 5230 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-09-29
 Antenna Port: 2
 Lower Frequency [MHz]: 5209.090
 Upper Frequency [MHz]: 5250.790
 26 dB Bandwidth [MHz]: 41.700



13:12:02 29.09.2021

26 dB Bandwidth

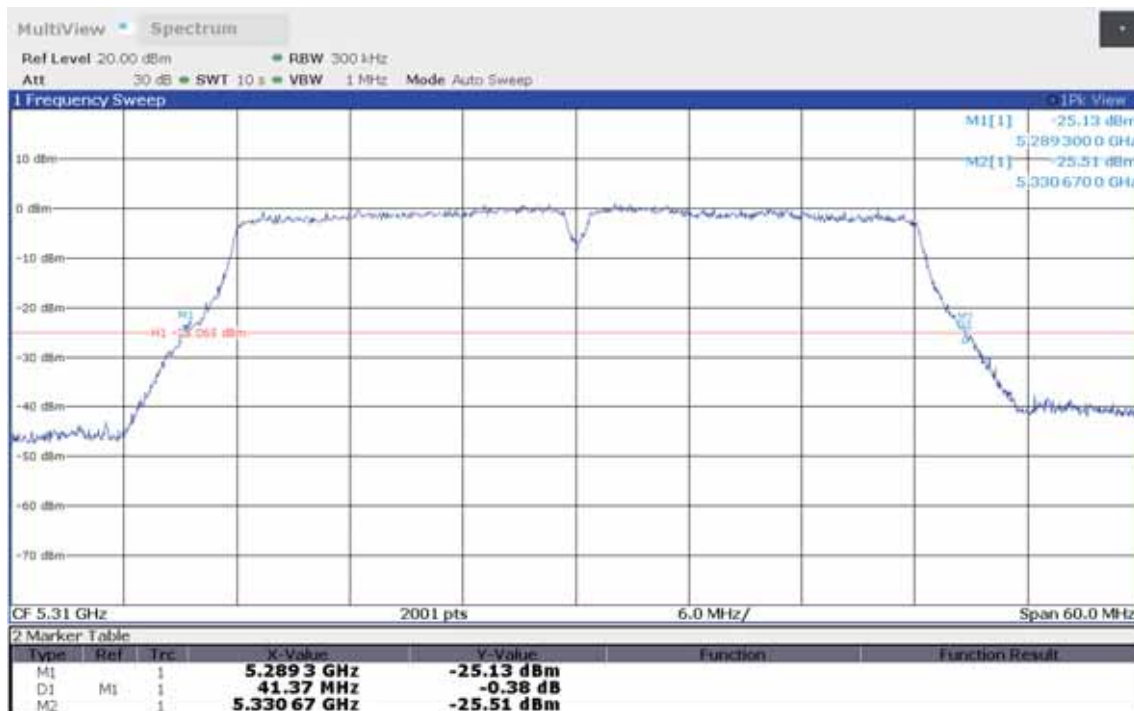
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 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.8.1 Option 1
 Operational Mode: IEEE 802.11ac (VHT40), Channel: 54, 5270 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-09-29
 Antenna Port: 1
 Lower Frequency [MHz]: 5249.030
 Upper Frequency [MHz]: 5290.970
 26 dB Bandwidth [MHz]: 41.940



13:13:09 29.09.2021

26 dB Bandwidth

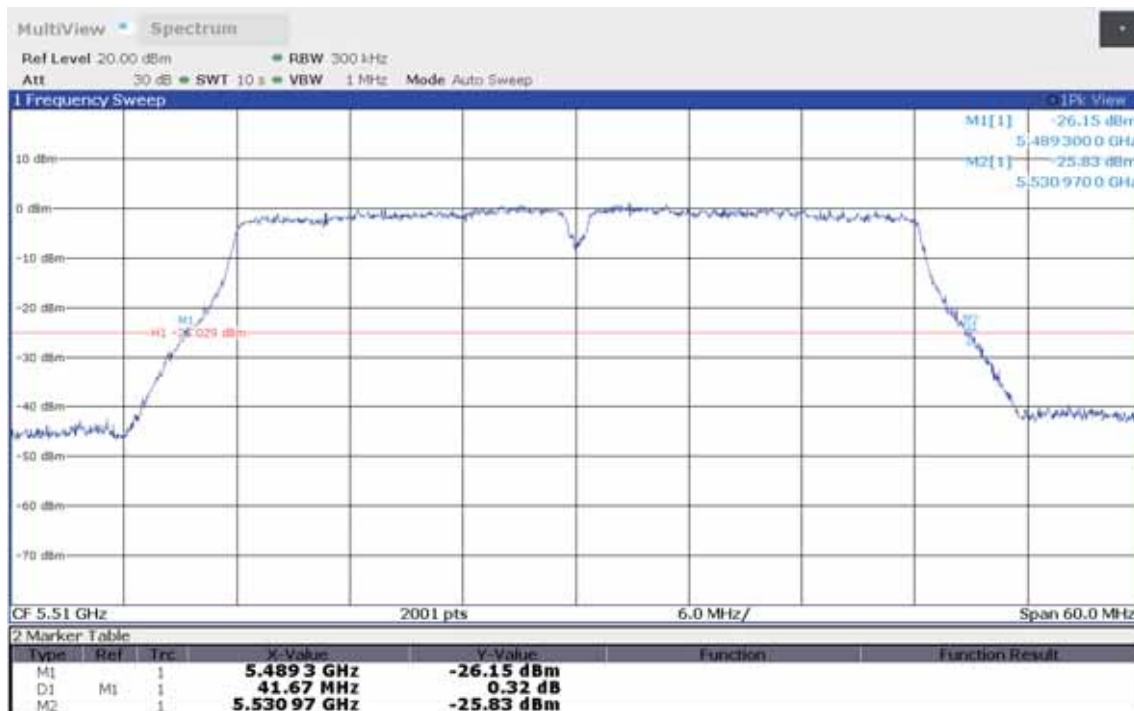
Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.8.1 Option 1
 Operational Mode: IEEE 802.11ac (VHT40), Channel: 62, 5310 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-09-29
 Antenna Port: 1
 Lower Frequency [MHz]: 5289.300
 Upper Frequency [MHz]: 5330.670
 26 dB Bandwidth [MHz]: 41.370



13:14:00 29.09.2021

26 dB Bandwidth

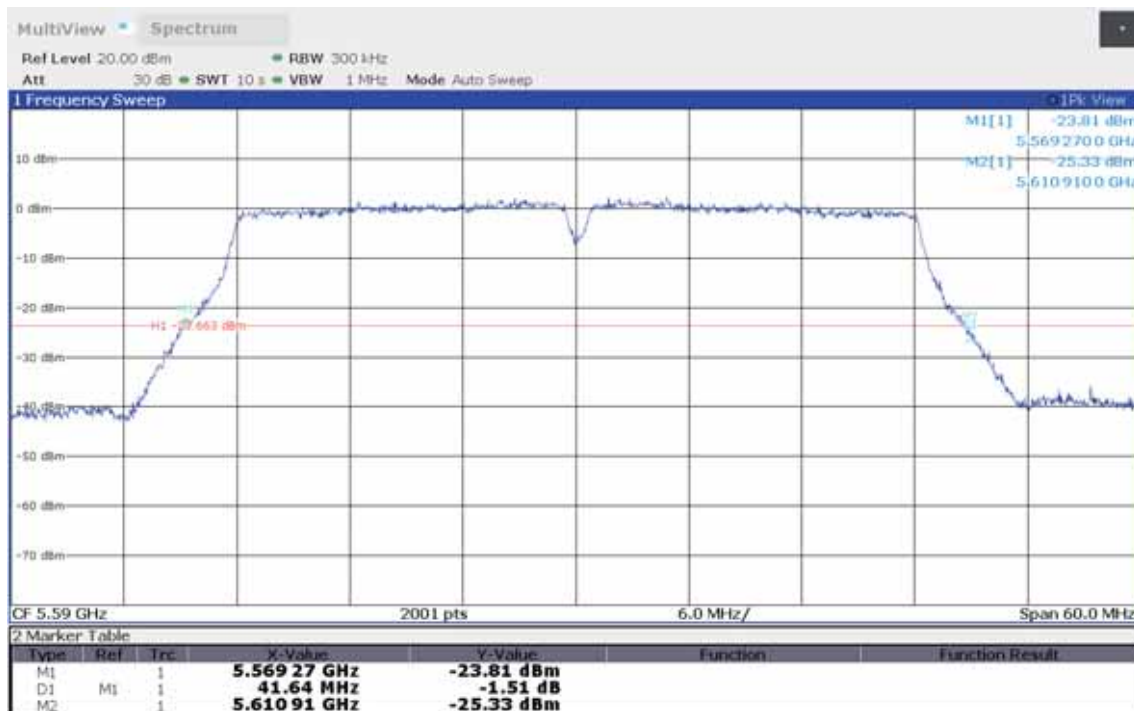
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 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.8.1 Option 1
 Operational Mode: IEEE 802.11ac (VHT40), Channel: 102, 5510 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-09-29
 Antenna Port: 1
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 Upper Frequency [MHz]: 5530.970
 26 dB Bandwidth [MHz]: 41.670



13:14:55 29.09.2021

26 dB Bandwidth

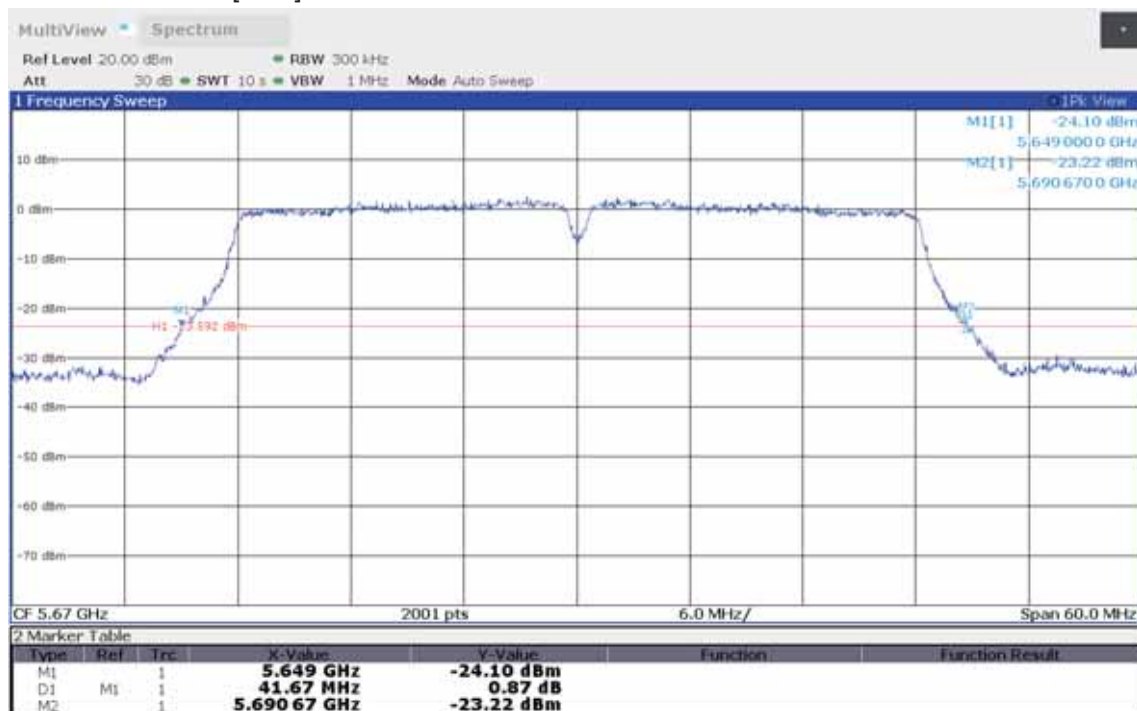
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 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.8.1 Option 1
 Operational Mode: IEEE 802.11ac (VHT40), Channel: 118, 5590 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-09-29
 Antenna Port: 1
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 Upper Frequency [MHz]: 5610.910
 26 dB Bandwidth [MHz]: 41.640



13:15:55 29.09.2021

26 dB Bandwidth

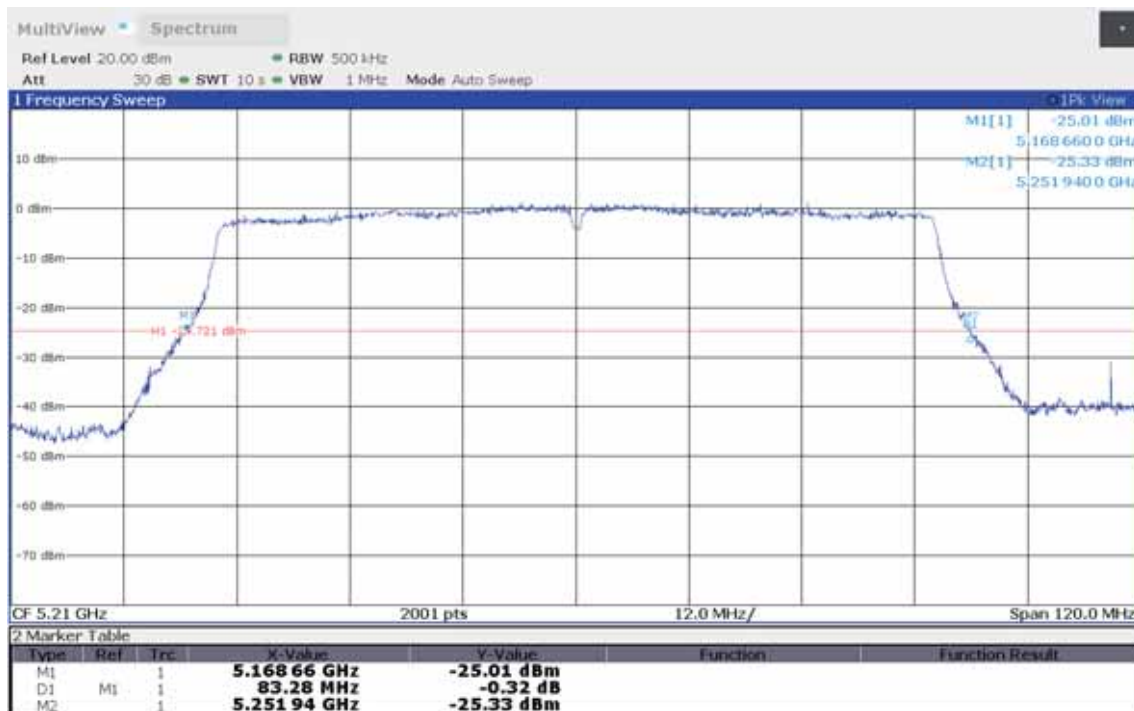
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 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.8.1 Option 1
 Operational Mode: IEEE 802.11ac (VHT40), Channel: 134, 5670 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-09-29
 Antenna Port: 1
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 Upper Frequency [MHz]: 5690.670
 26 dB Bandwidth [MHz]: 41.670



13:16:45 29.09.2021

26 dB Bandwidth

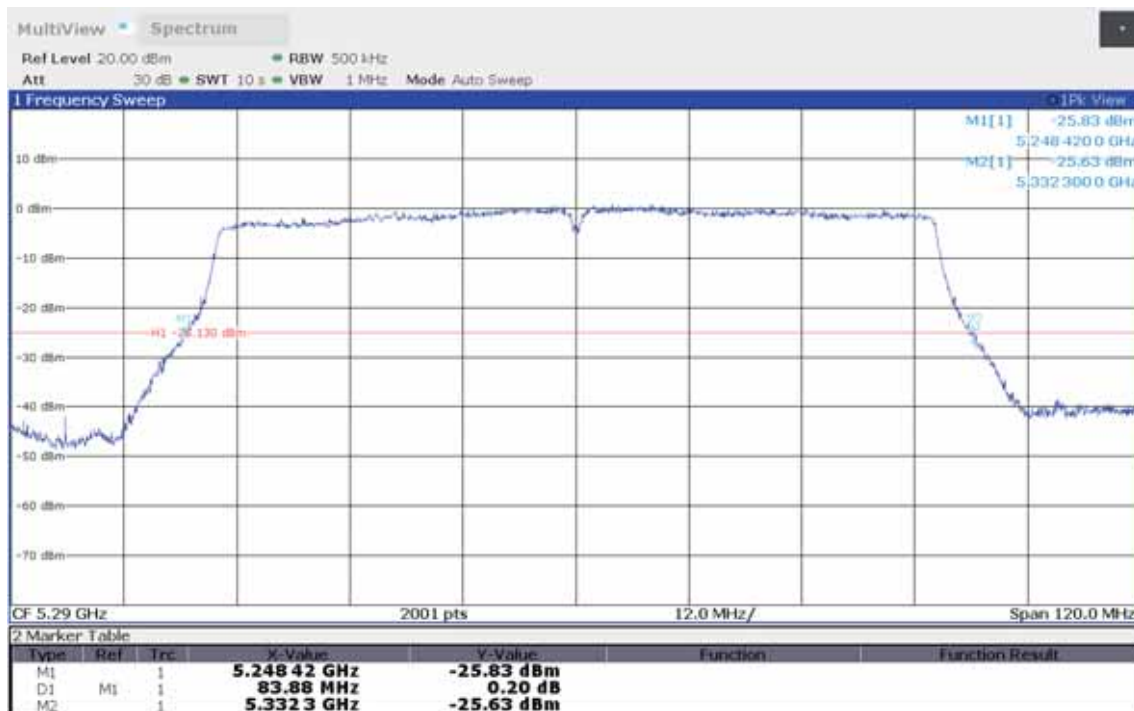
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 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.8.1 Option 1
 Operational Mode: IEEE 802.11ac (VHT80), Channel: 42, 5210 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-09-29
 Antenna Port: 1
 Lower Frequency [MHz]: 5168.660
 Upper Frequency [MHz]: 5251.940
 26 dB Bandwidth [MHz]: 83.280



13:20:12 29.09.2021

26 dB Bandwidth

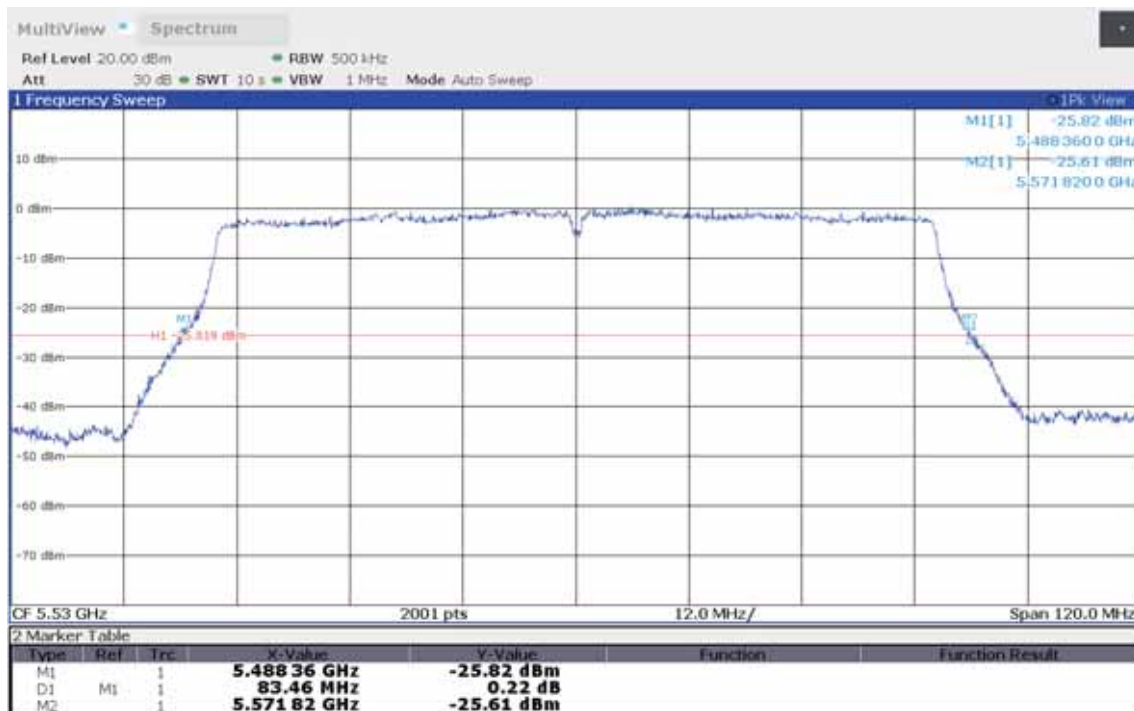
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 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.8.1 Option 1
 Operational Mode: IEEE 802.11ac (VHT80), Channel: 58, 5290 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-09-29
 Antenna Port: 1
 Lower Frequency [MHz]: 5248.420
 Upper Frequency [MHz]: 5332.300
 26 dB Bandwidth [MHz]: 83.880



13:21:29 29.09.2021

26 dB Bandwidth

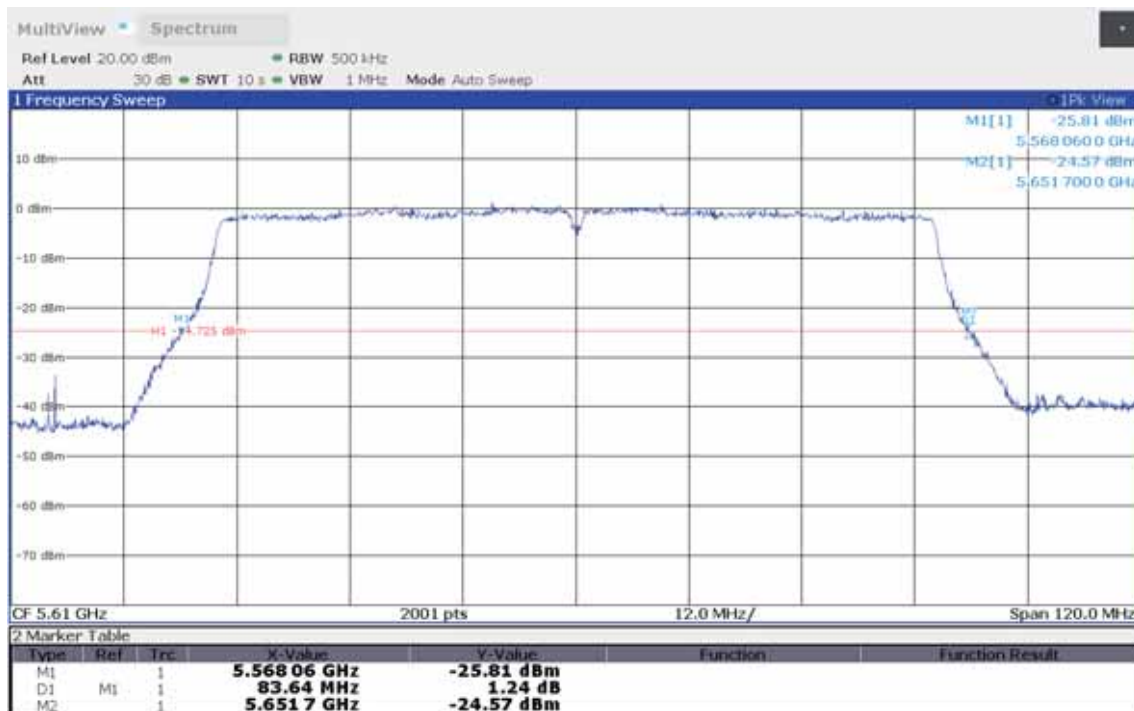
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 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.8.1 Option 1
 Operational Mode: IEEE 802.11ac (VHT80), Channel: 106, 5530 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-09-29
 Antenna Port: 1
 Lower Frequency [MHz]: 5488.360
 Upper Frequency [MHz]: 5571.820
 26 dB Bandwidth [MHz]: 83.460



13:22:28 29.09.2021

26 dB Bandwidth

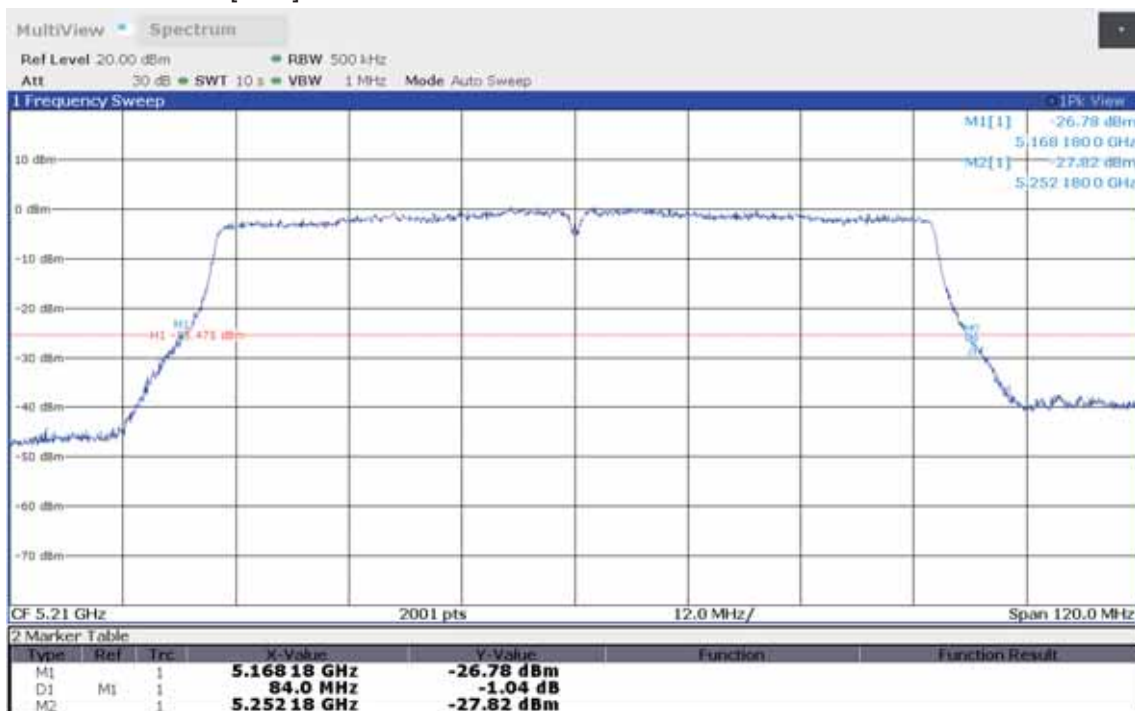
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 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.8.1 Option 1
 Operational Mode: IEEE 802.11ac (VHT80), Channel: 122, 5610 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-09-29
 Antenna Port: 1
 Lower Frequency [MHz]: 5568.060
 Upper Frequency [MHz]: 5651.700
 26 dB Bandwidth [MHz]: 83.640



13:23:20 29.09.2021

26 dB Bandwidth

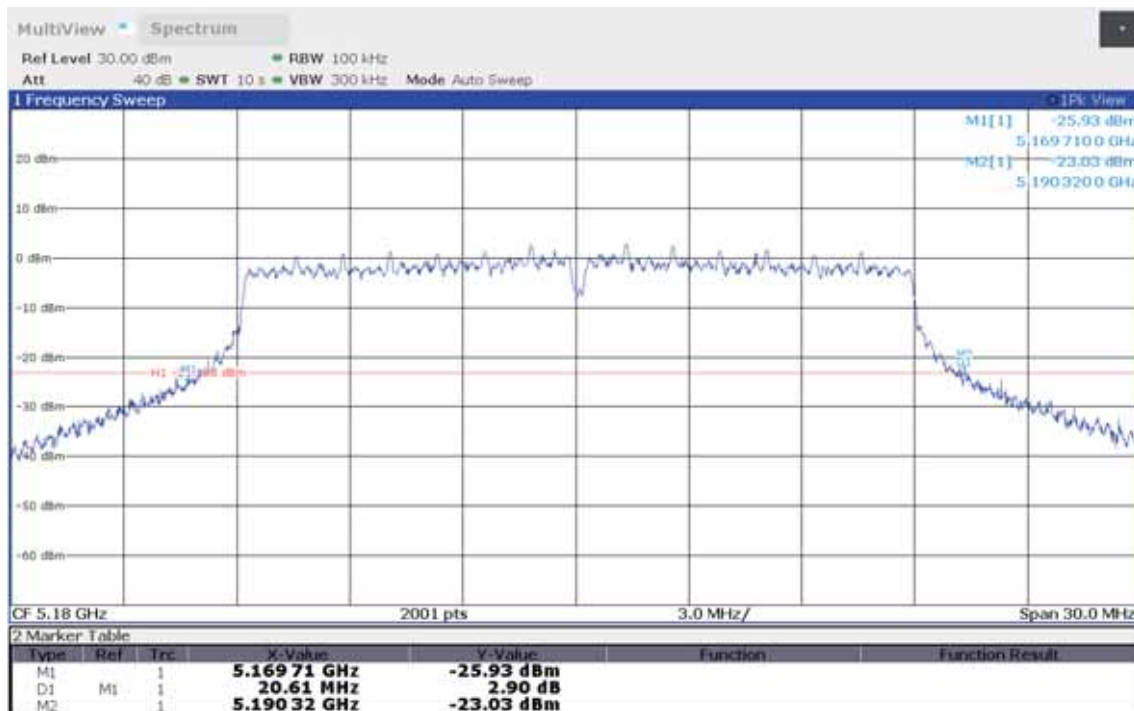
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 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.8.1 Option 1
 Operational Mode: IEEE 802.11ac (VHT80), Channel: 42, 5210 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-09-29
 Antenna Port: 2
 Lower Frequency [MHz]: 5168.180
 Upper Frequency [MHz]: 5252.180
 26 dB Bandwidth [MHz]: 84.000



13:24:50 29.09.2021

26 dB Bandwidth

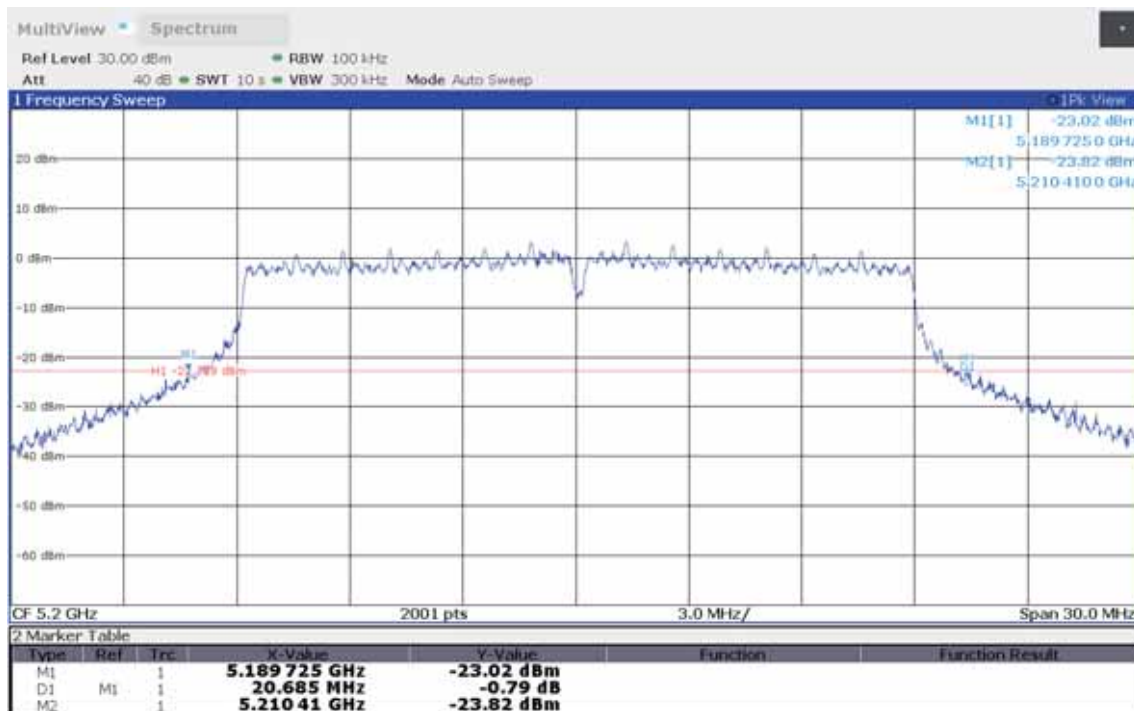
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 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.8.1 Option 1
 Operational Mode: IEEE 802.11n (HT20), Channel: 36, 5180 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-09-29
 Antenna Port: 1
 Lower Frequency [MHz]: 5169.710
 Upper Frequency [MHz]: 5190.320
 26 dB Bandwidth [MHz]: 20.610



11:02:30 29.09.2021

26 dB Bandwidth

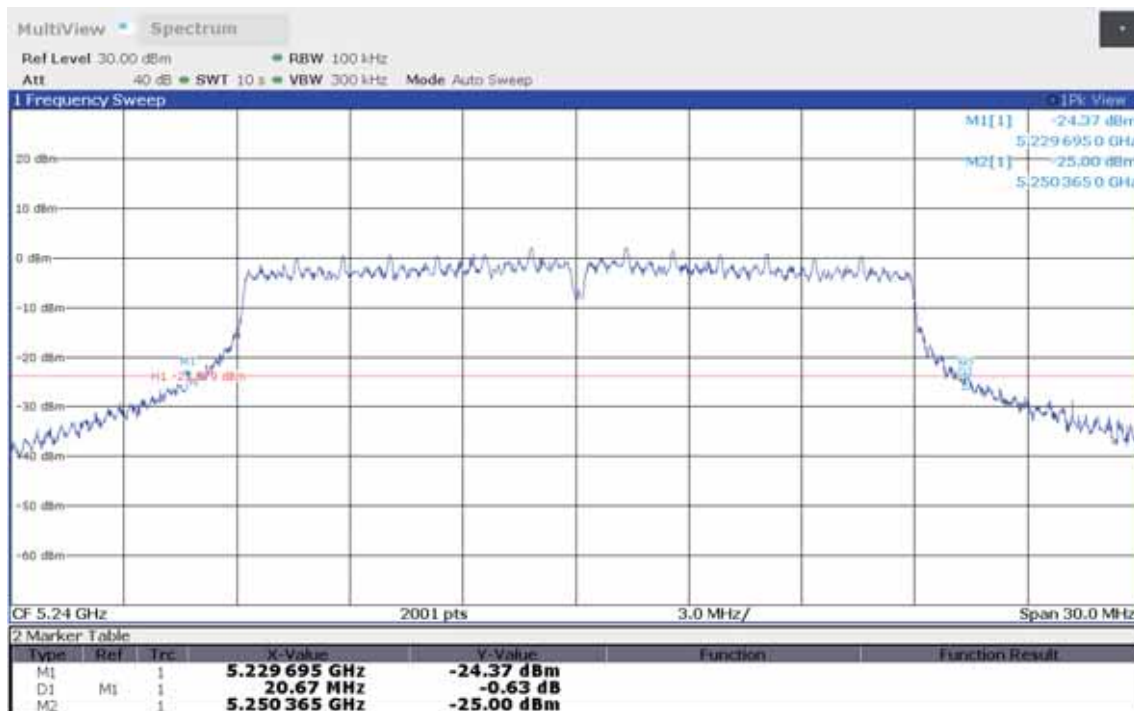
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 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.8.1 Option 1
 Operational Mode: IEEE 802.11n (HT20), Channel: 40, 5200 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-09-29
 Antenna Port: 1
 Lower Frequency [MHz]: 5189.725
 Upper Frequency [MHz]: 5210.410
 26 dB Bandwidth [MHz]: 20.685



11:03:51 29.09.2021

26 dB Bandwidth

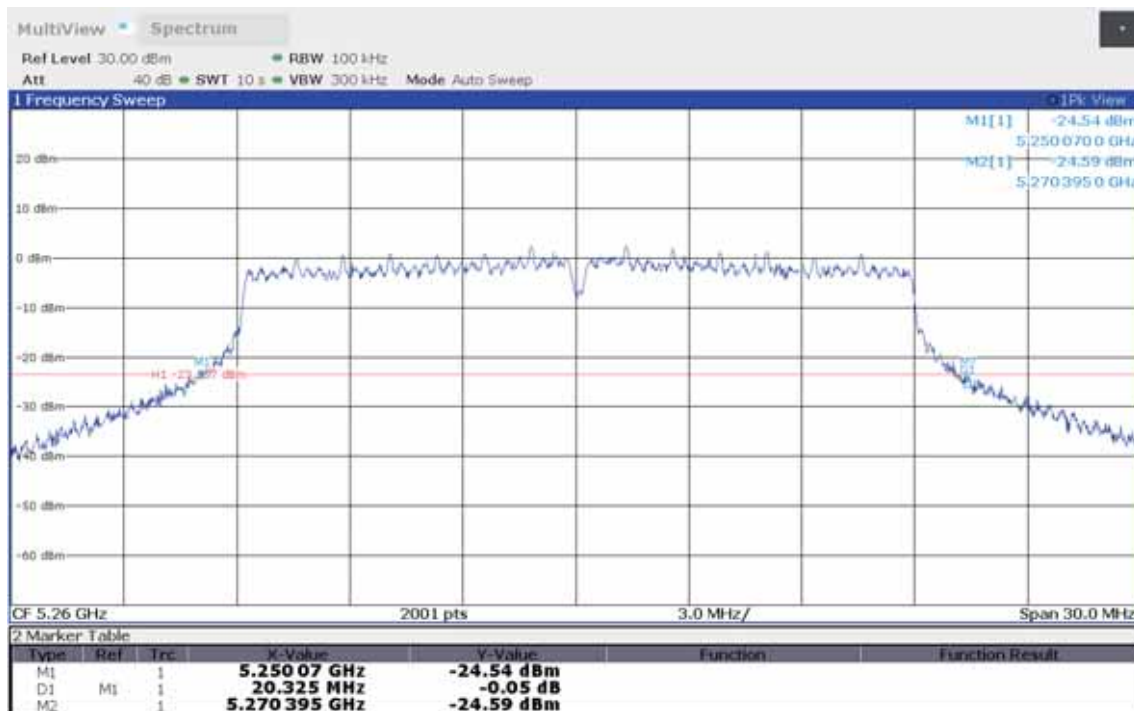
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 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.8.1 Option 1
 Operational Mode: IEEE 802.11n (HT20), Channel: 48, 5240 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-09-29
 Antenna Port: 2
 Lower Frequency [MHz]: 5229.695
 Upper Frequency [MHz]: 5250.365
 26 dB Bandwidth [MHz]: 20.670



11:19:43 29.09.2021

26 dB Bandwidth

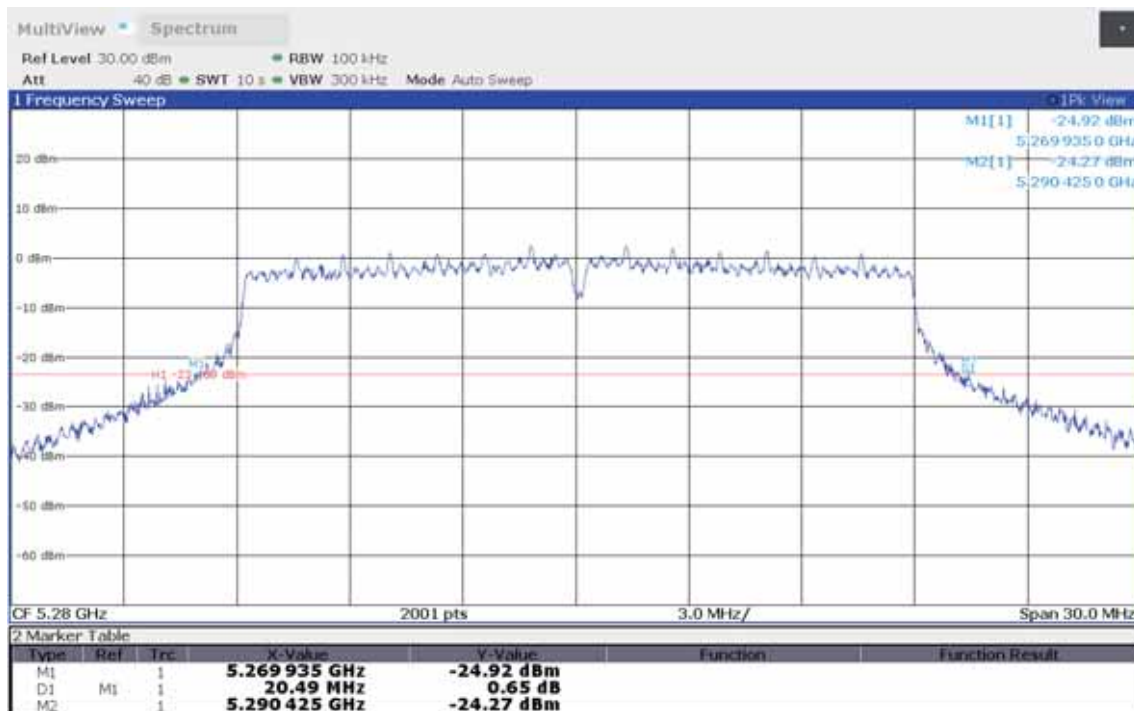
Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.8.1 Option 1
 Operational Mode: IEEE 802.11n (HT20), Channel: 52, 5260 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-09-29
 Antenna Port: 1
 Lower Frequency [MHz]: 5250.070
 Upper Frequency [MHz]: 5270.395
 26 dB Bandwidth [MHz]: 20.325



11:23:15 29.09.2021

26 dB Bandwidth

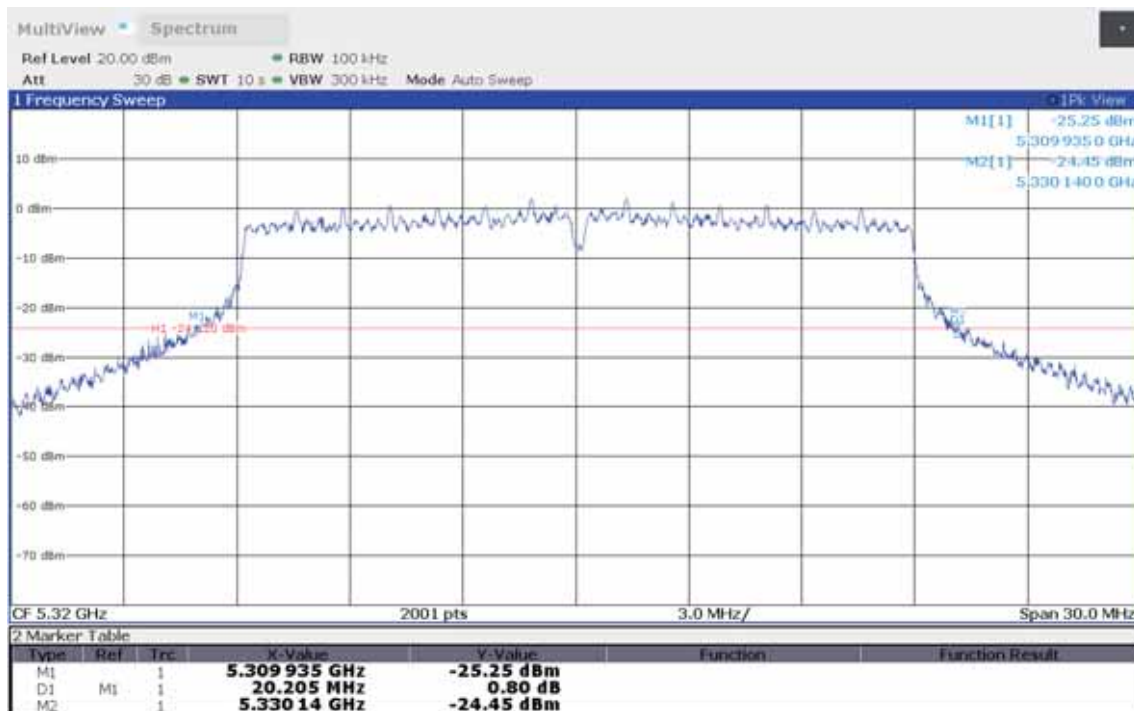
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 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.8.1 Option 1
 Operational Mode: IEEE 802.11n (HT20), Channel: 56, 5280 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-09-29
 Antenna Port: 1
 Lower Frequency [MHz]: 5269.935
 Upper Frequency [MHz]: 5290.425
 26 dB Bandwidth [MHz]: 20.490



11:24:05 29.09.2021

26 dB Bandwidth

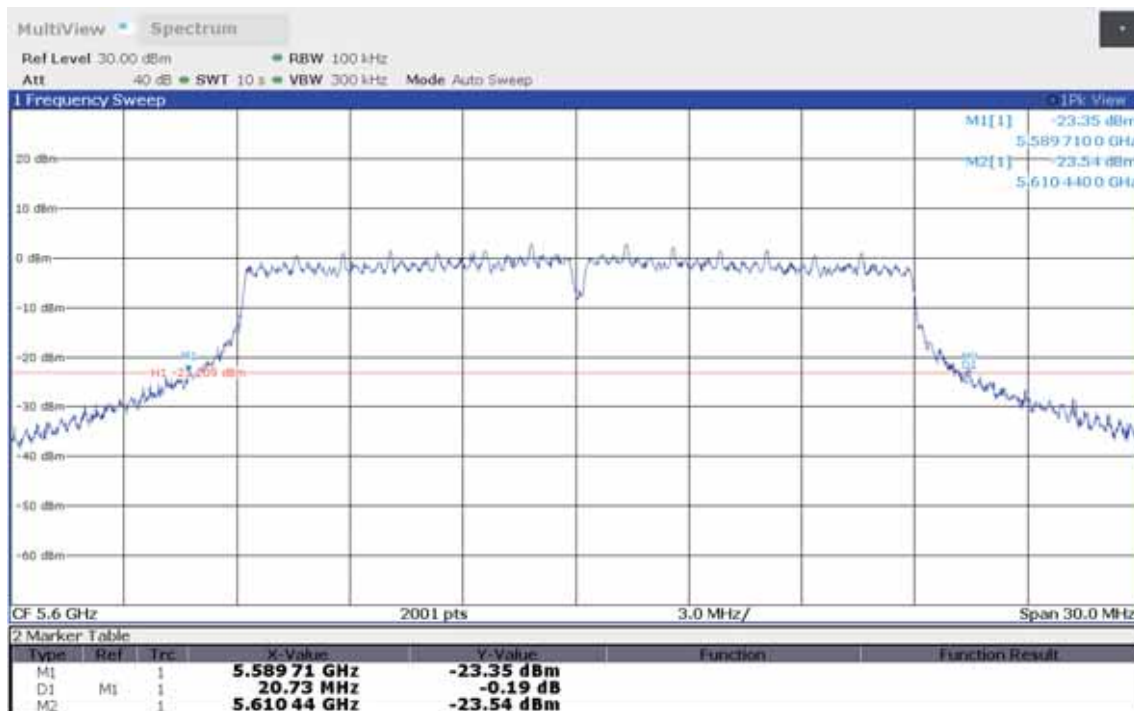
Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.8.1 Option 1
 Operational Mode: IEEE 802.11n (HT20), Channel: 64, 5320 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-09-29
 Antenna Port: 1
 Lower Frequency [MHz]: 5309.935
 Upper Frequency [MHz]: 5330.140
 26 dB Bandwidth [MHz]: 20.205



11:24:55 29.09.2021

26 dB Bandwidth

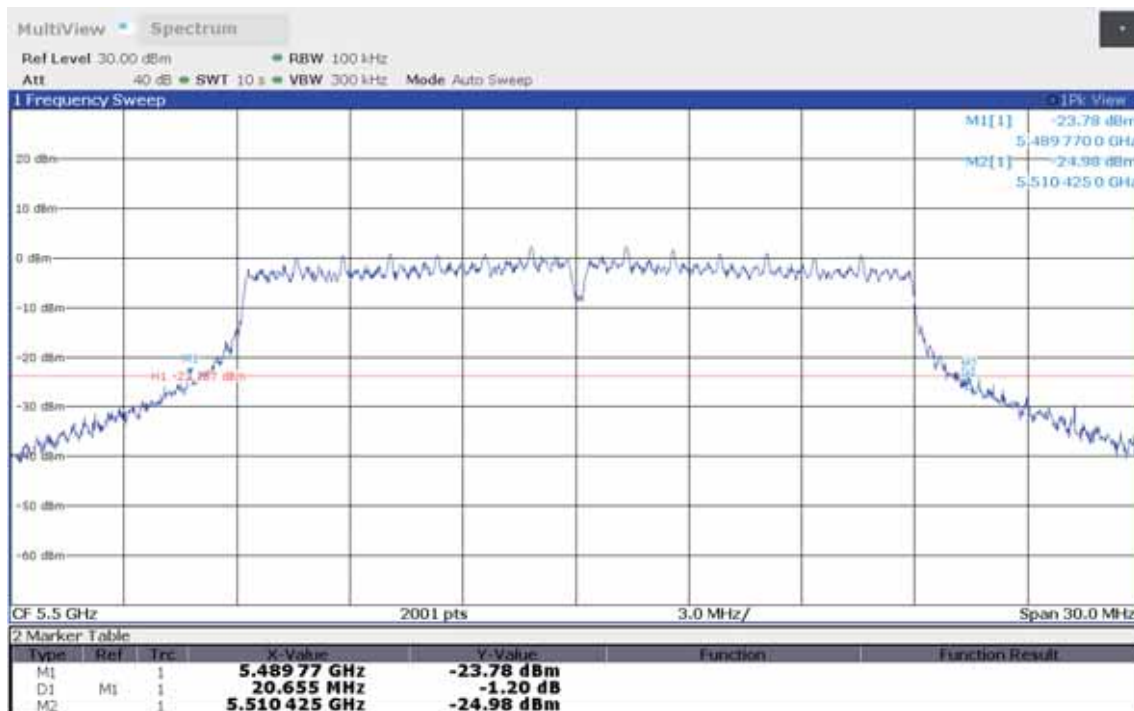
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 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.8.1 Option 1
 Operational Mode: IEEE 802.11n (HT20), Channel: 120, 5600 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-09-29
 Antenna Port: 1
 Lower Frequency [MHz]: 5589.710
 Upper Frequency [MHz]: 5610.440
 26 dB Bandwidth [MHz]: 20.730



11:27:34 29.09.2021

26 dB Bandwidth

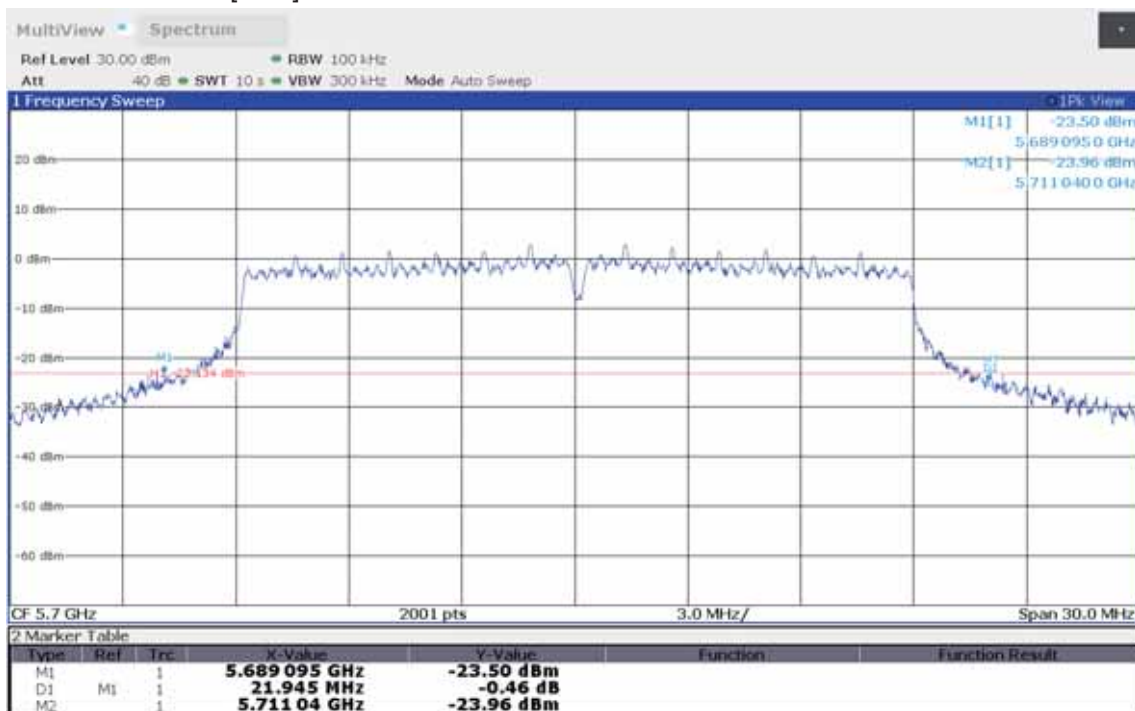
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 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.8.1 Option 1
 Operational Mode: IEEE 802.11n (HT20), Channel: 100, 5500 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-09-29
 Antenna Port: 1
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 Upper Frequency [MHz]: 5510.425
 26 dB Bandwidth [MHz]: 20.655



11:30:16 29.09.2021

26 dB Bandwidth

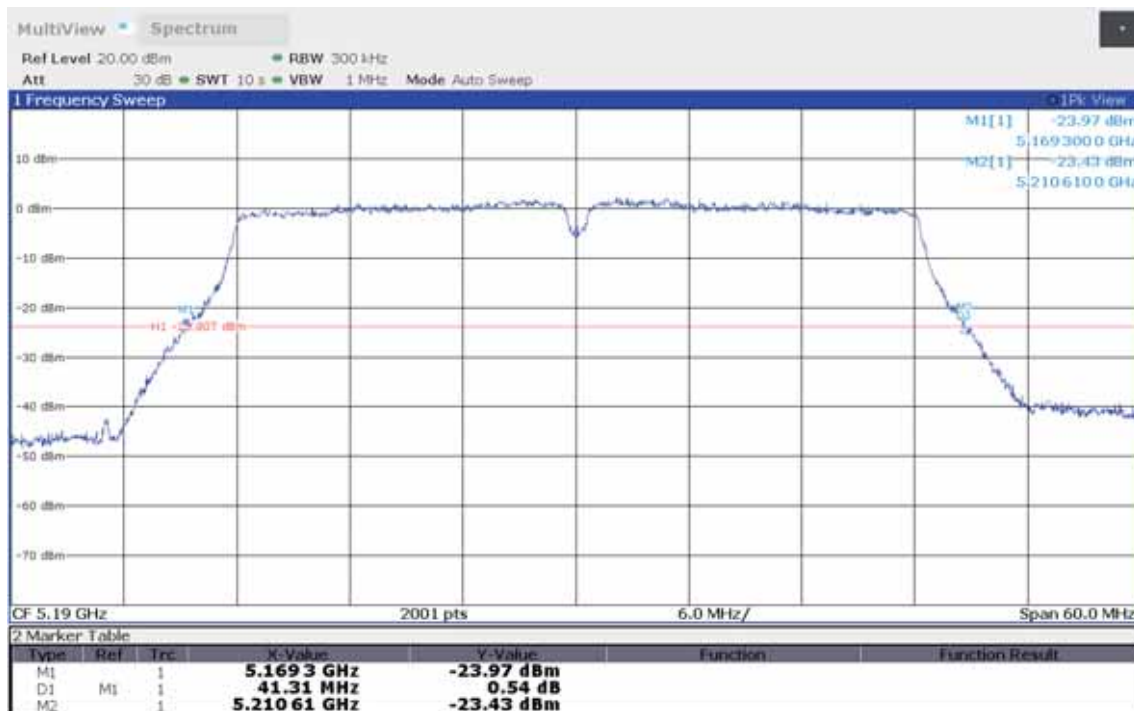
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 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.8.1 Option 1
 Operational Mode: IEEE 802.11n (HT20), Channel: 140, 5700 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-09-29
 Antenna Port: 1
 Lower Frequency [MHz]: 5689.095
 Upper Frequency [MHz]: 5711.040
 26 dB Bandwidth [MHz]: 21.945



11:31:21 29.09.2021

26 dB Bandwidth

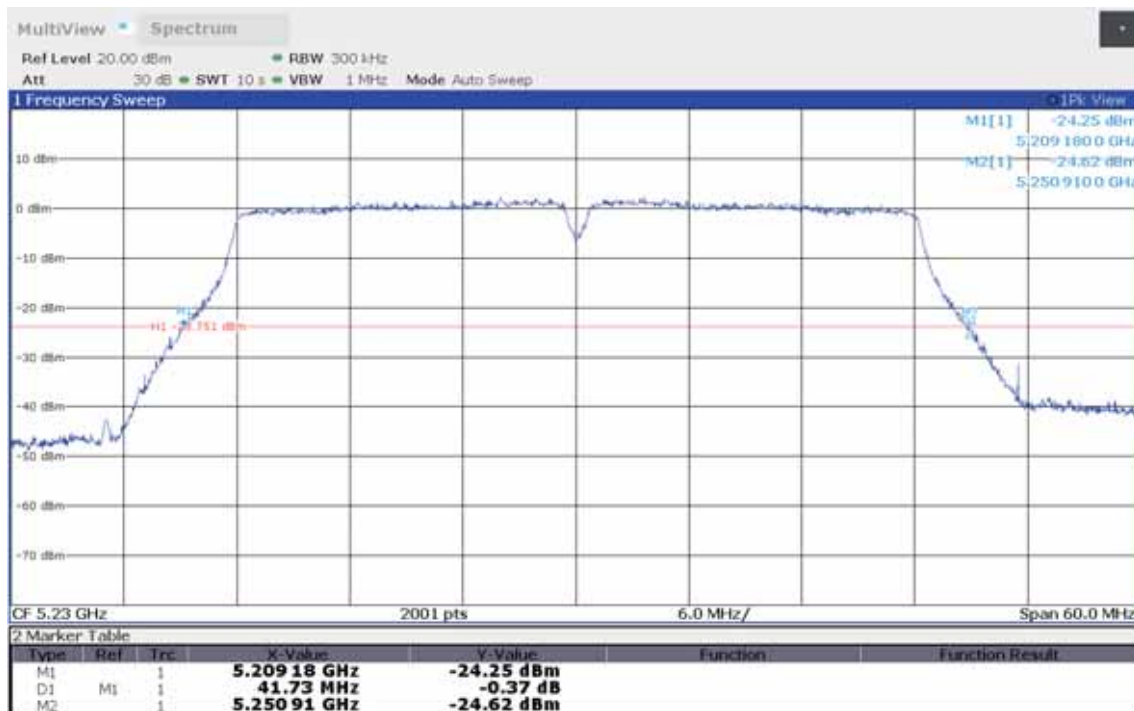
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 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.8.1 Option 1
 Operational Mode: IEEE 802.11n (HT40), Channel: 38, 5190 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-09-29
 Antenna Port: 1
 Lower Frequency [MHz]: 5169.300
 Upper Frequency [MHz]: 5210.610
 26 dB Bandwidth [MHz]: 41.310



11:34:39 29.09.2021

26 dB Bandwidth

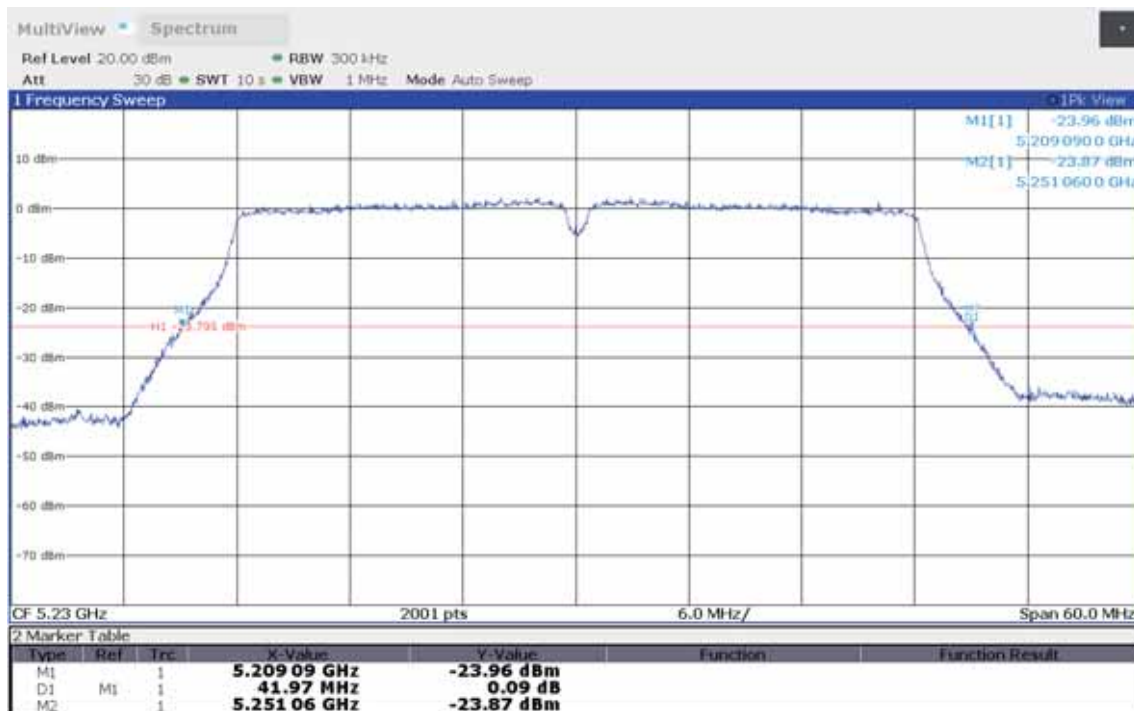
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 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.8.1 Option 1
 Operational Mode: IEEE 802.11n (HT40), Channel: 46, 5230 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-09-29
 Antenna Port: 1
 Lower Frequency [MHz]: 5209.180
 Upper Frequency [MHz]: 5250.910
 26 dB Bandwidth [MHz]: 41.730



11:35:50 29.09.2021

26 dB Bandwidth

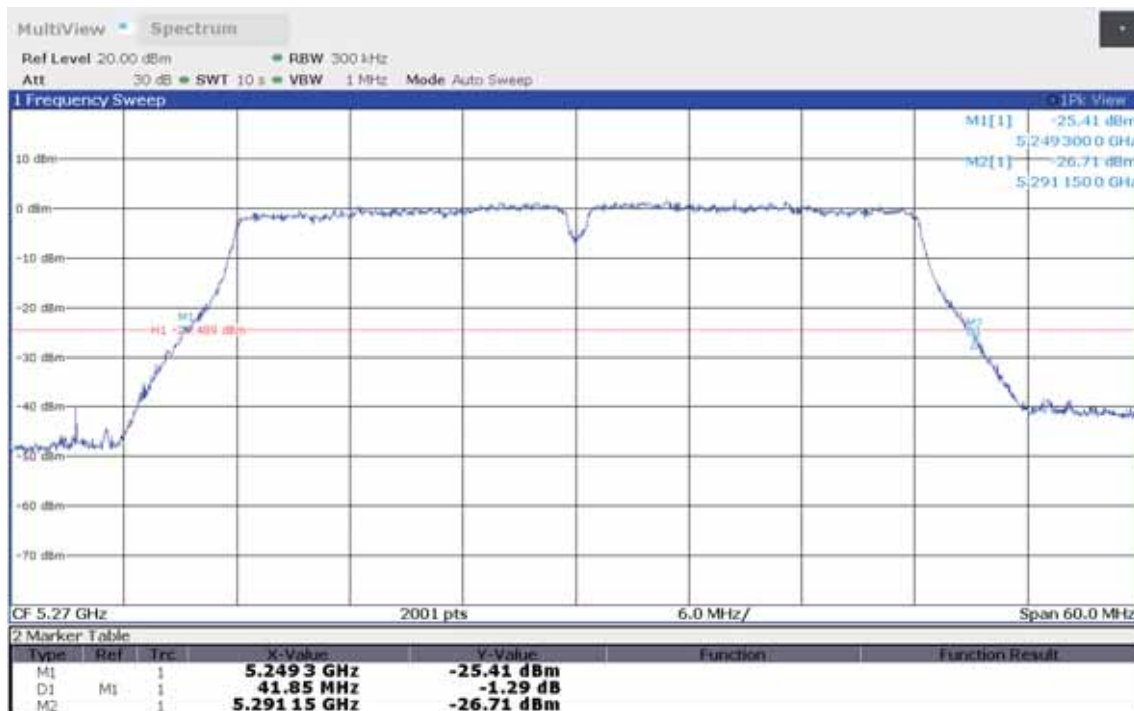
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 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.8.1 Option 1
 Operational Mode: IEEE 802.11n (HT40), Channel: 46, 5230 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-09-29
 Antenna Port: 2
 Lower Frequency [MHz]: 5209.090
 Upper Frequency [MHz]: 5251.060
 26 dB Bandwidth [MHz]: 41.970



11:38:49 29.09.2021

26 dB Bandwidth

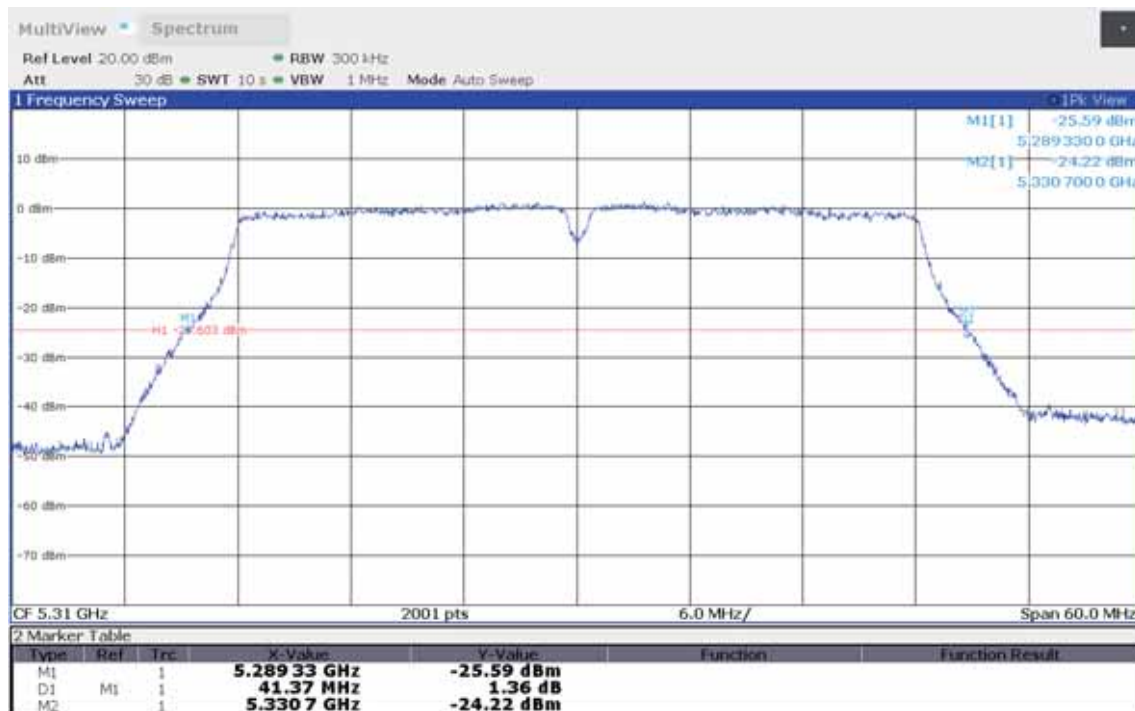
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 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.8.1 Option 1
 Operational Mode: IEEE 802.11n (HT40), Channel: 54, 5270 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-09-29
 Antenna Port: 1
 Lower Frequency [MHz]: 5249.300
 Upper Frequency [MHz]: 5291.150
 26 dB Bandwidth [MHz]: 41.850



11:40:45 29.09.2021

26 dB Bandwidth

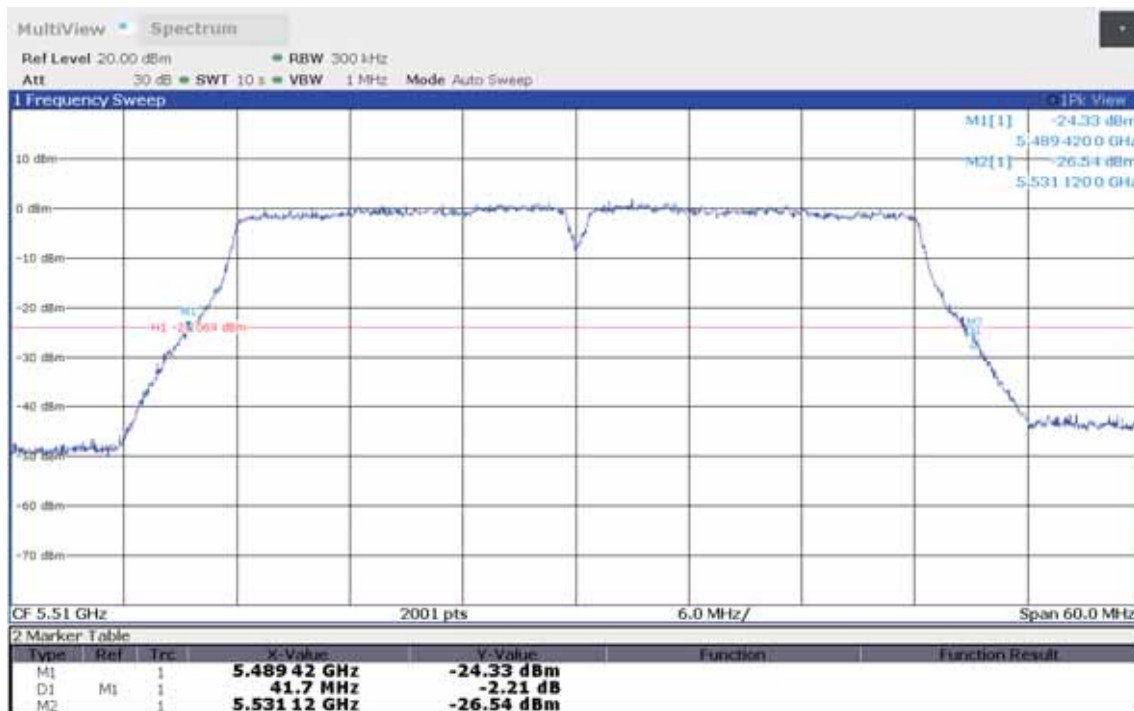
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 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.8.1 Option 1
 Operational Mode: IEEE 802.11n (HT40), Channel: 62, 5310 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-09-29
 Antenna Port: 1
 Lower Frequency [MHz]: 5289.330
 Upper Frequency [MHz]: 5330.700
 26 dB Bandwidth [MHz]: 41.370



11:41:44 29.09.2021

26 dB Bandwidth

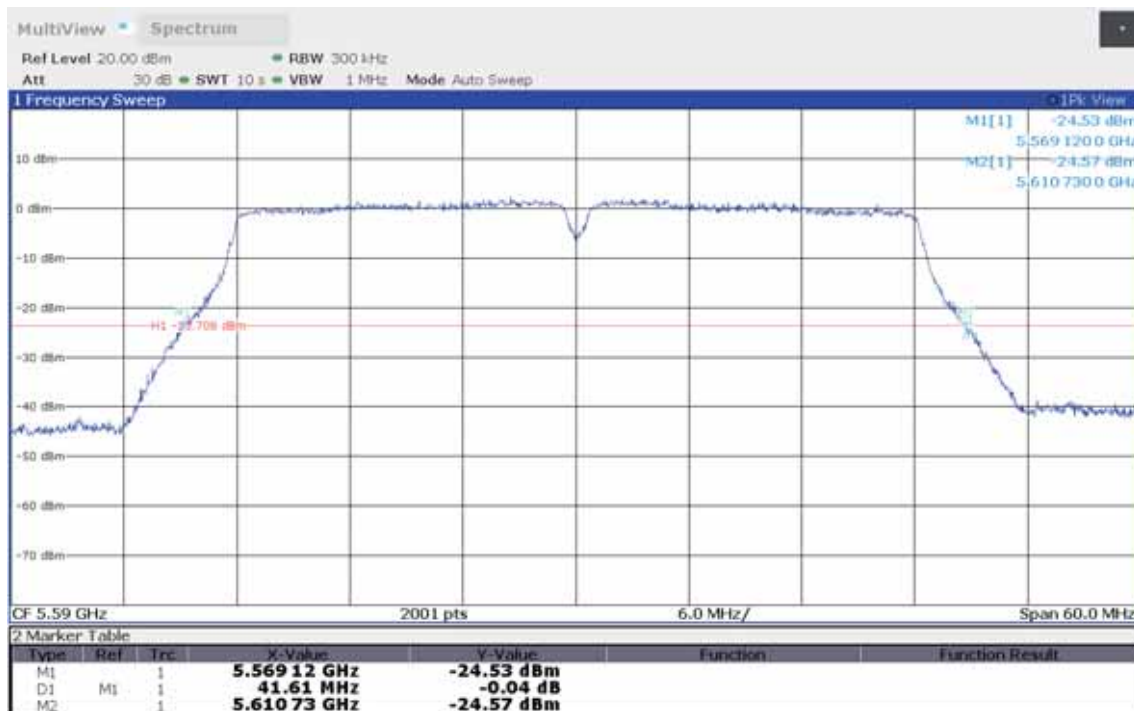
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 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.8.1 Option 1
 Operational Mode: IEEE 802.11n (HT40), Channel: 102, 5510 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-09-29
 Antenna Port: 1
 Lower Frequency [MHz]: 5489.420
 Upper Frequency [MHz]: 5531.120
 26 dB Bandwidth [MHz]: 41.700



11:42:43 29.09.2021

26 dB Bandwidth

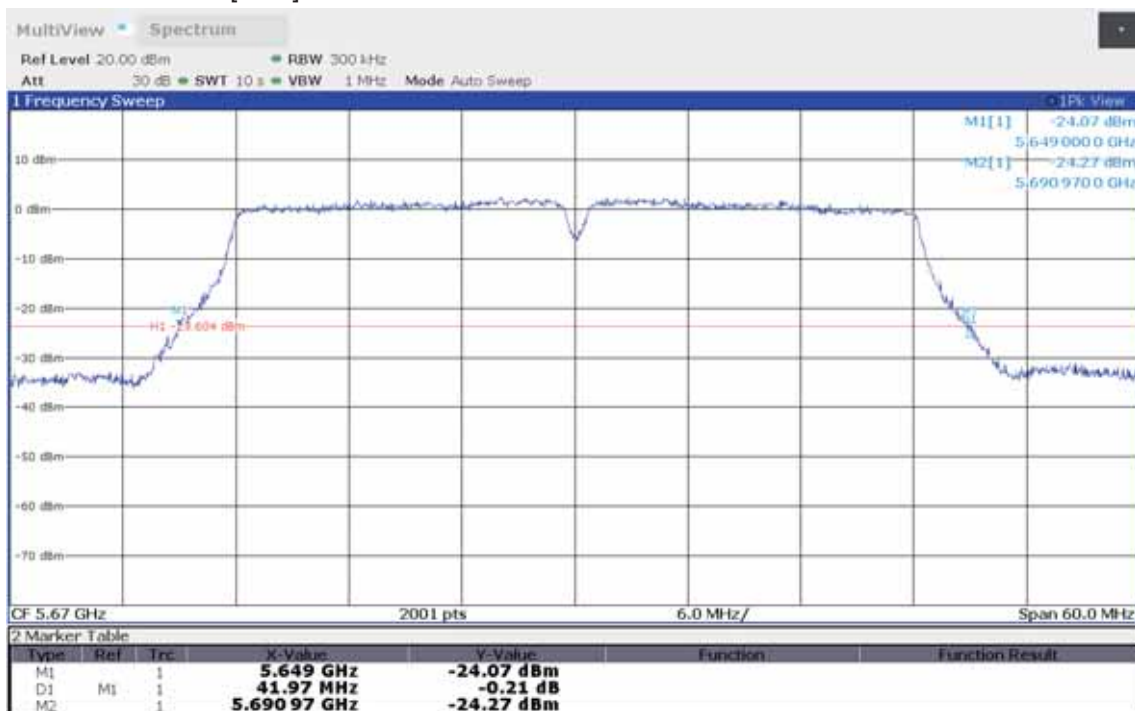
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 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.8.1 Option 1
 Operational Mode: IEEE 802.11n (HT40), Channel: 118, 5590 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-09-29
 Antenna Port: 1
 Lower Frequency [MHz]: 5569.120
 Upper Frequency [MHz]: 5610.730
 26 dB Bandwidth [MHz]: 41.610



11:43:50 29.09.2021

26 dB Bandwidth

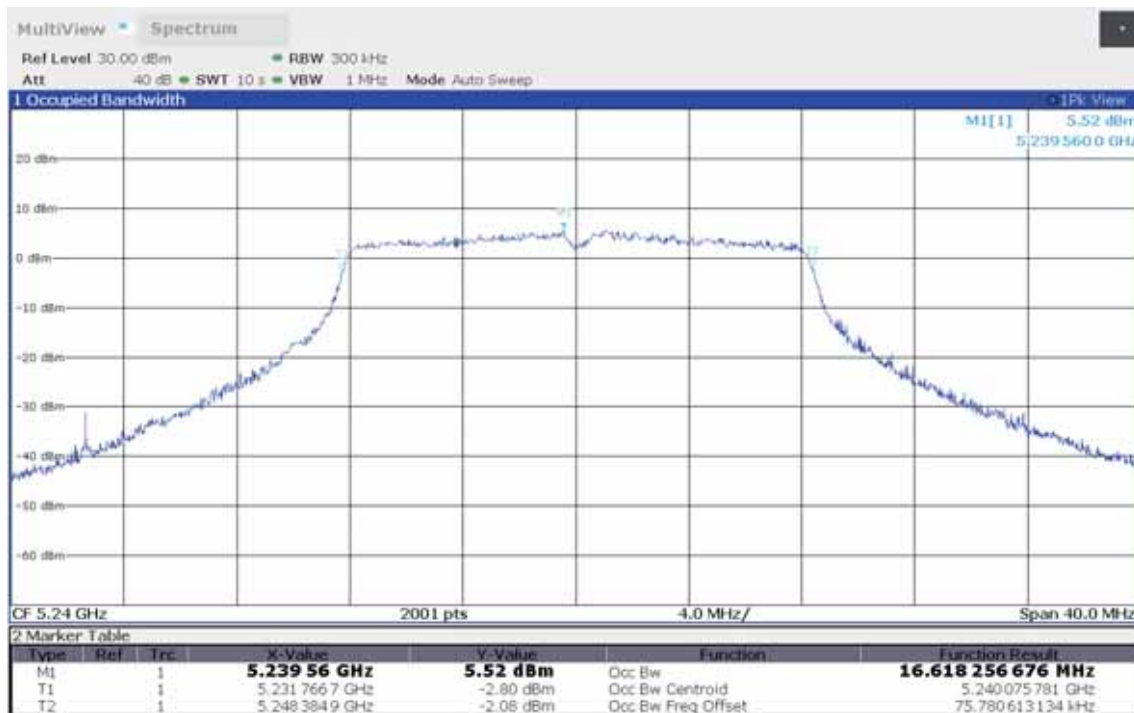
Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.8.1 Option 1
 Operational Mode: IEEE 802.11n (HT40), Channel: 134, 5670 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-09-29
 Antenna Port: 1
 Lower Frequency [MHz]: 5649.000
 Upper Frequency [MHz]: 5690.970
 26 dB Bandwidth [MHz]: 41.970



11:44:57 29.09.2021

Occupied Bandwidth

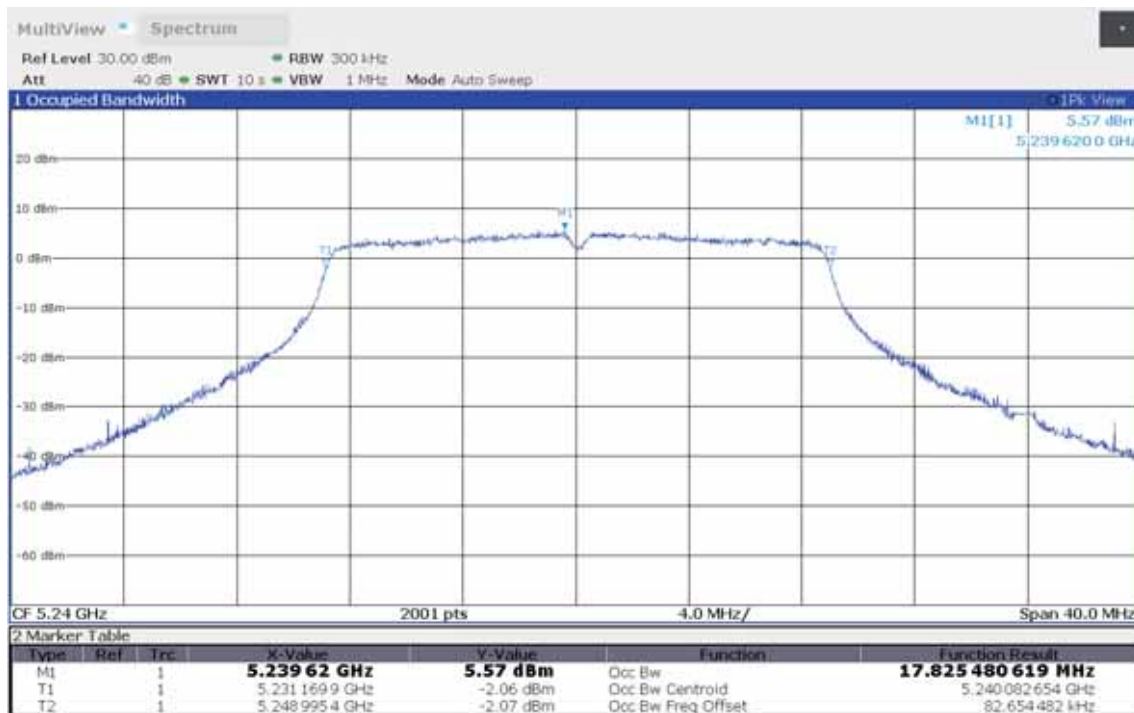
Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: RSS-247
 Reference Method: ANSI C63.10:2013, Section 6.9.3
 Operational Mode: IEEE 802.11a, Channel: 48, 5240 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-09-29
 Antenna Port: 1
 Occ. Bandwidth Lower Edge [MHz]: 5231.767
 Occ. Bandwidth Upper Edge [MHz]: 5248.385
 Occupied Bandwidth [MHz]: 16.618



14:01:39 29.09.2021

Occupied Bandwidth

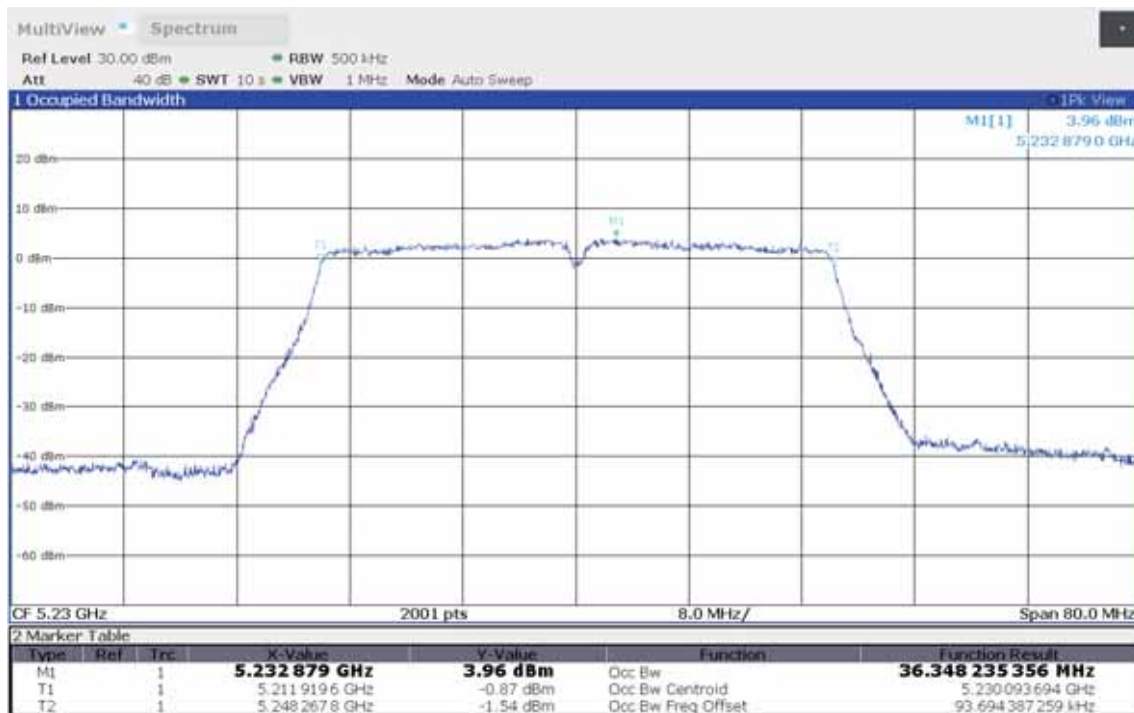
Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: RSS-247
 Reference Method: ANSI C63.10:2013, Section 6.9.3
 Operational Mode: IEEE 802.11n (HT20), Channel: 48, 5240 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-09-29
 Antenna Port: 1
 Occ. Bandwidth Lower Edge [MHz]: 5231.170
 Occ. Bandwidth Upper Edge [MHz]: 5248.995
 Occupied Bandwidth [MHz]: 17.825



14:19:10 29.09.2021

Occupied Bandwidth

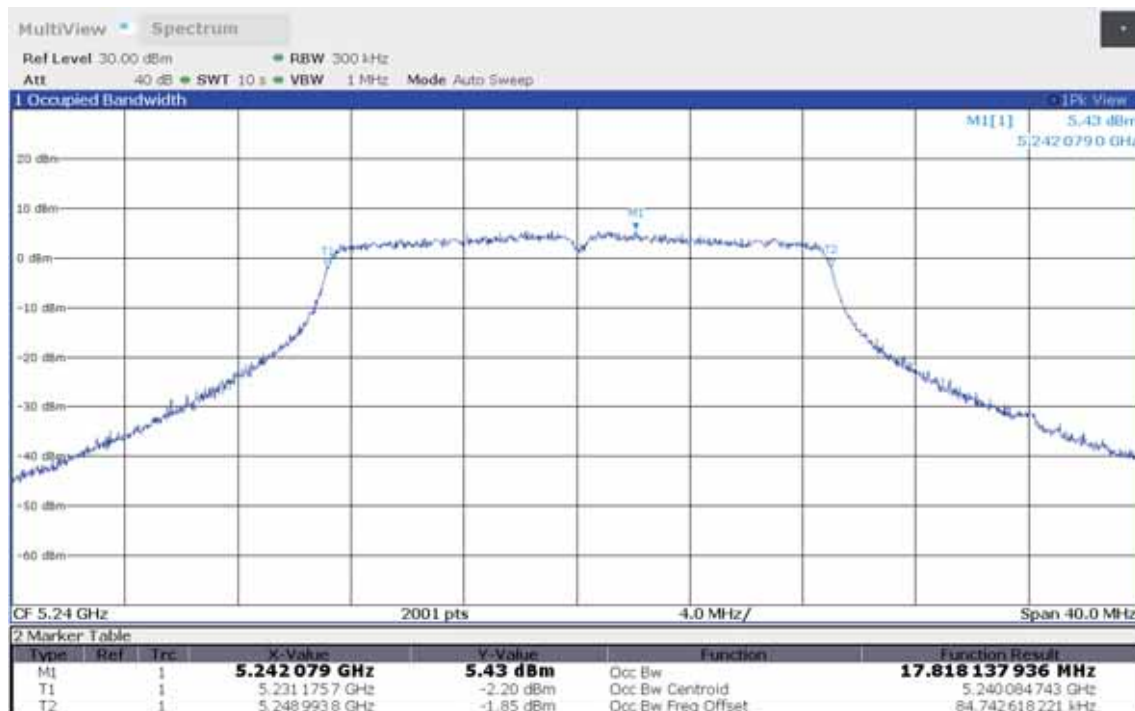
Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: RSS-247
 Reference Method: ANSI C63.10:2013, Section 6.9.3
 Operational Mode: IEEE 802.11n (HT40), Channel: 46, 5230 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-09-29
 Antenna Port: 1
 Occ. Bandwidth Lower Edge [MHz]: 5211.920
 Occ. Bandwidth Upper Edge [MHz]: 5248.268
 Occupied Bandwidth [MHz]: 36.348



14:33:24 29.09.2021

Occupied Bandwidth

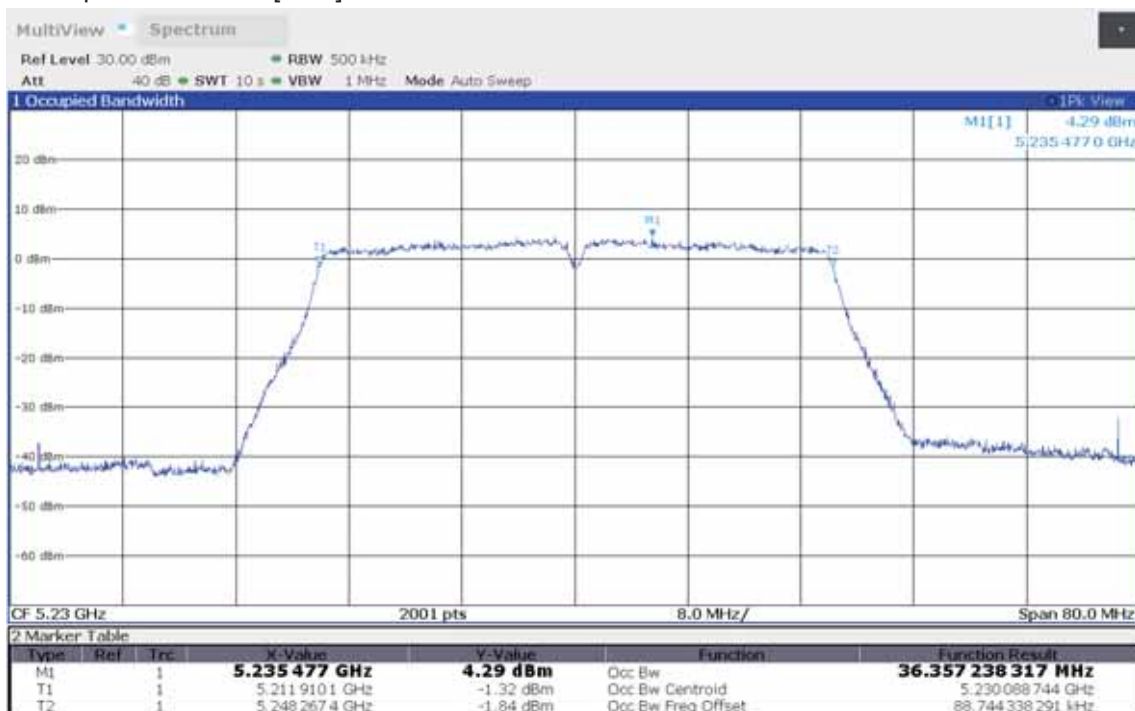
Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: RSS-247
 Reference Method: ANSI C63.10:2013, Section 6.9.3
 Operational Mode: IEEE 802.11ac (VHT20), Channel: 48, 5240 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-09-29
 Antenna Port: 1
 Occ. Bandwidth Lower Edge [MHz]: 5231.176
 Occ. Bandwidth Upper Edge [MHz]: 5248.994
 Occupied Bandwidth [MHz]: 17.818



14:52:39 29.09.2021

Occupied Bandwidth

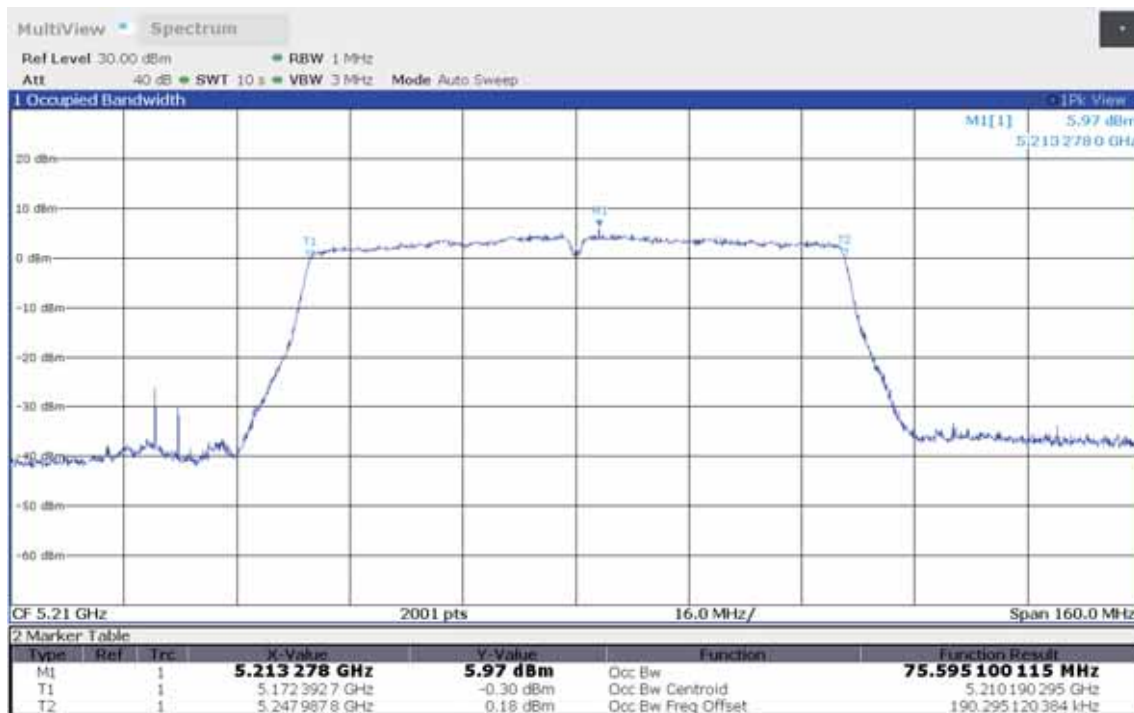
Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: RSS-247
 Reference Method: ANSI C63.10:2013, Section 6.9.3
 Operational Mode: IEEE 802.11ac (VHT40), Channel: 46, 5230 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-09-30
 Antenna Port: 1
 Occ. Bandwidth Lower Edge [MHz]: 5211.910
 Occ. Bandwidth Upper Edge [MHz]: 5248.267
 Occupied Bandwidth [MHz]: 36.357



08:22:06 30.09.2021

Occupied Bandwidth

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: RSS-247
 Reference Method: ANSI C63.10:2013, Section 6.9.3
 Operational Mode: IEEE 802.11ac (VHT80), Channel: 42, 5210 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-09-30
 Antenna Port: 1
 Occ. Bandwidth Lower Edge [MHz]: 5172.393
 Occ. Bandwidth Upper Edge [MHz]: 5247.988
 Occupied Bandwidth [MHz]: 75.595



08:37:47 30.09.2021

3.2 Test Conditions and Results - Maximum output power

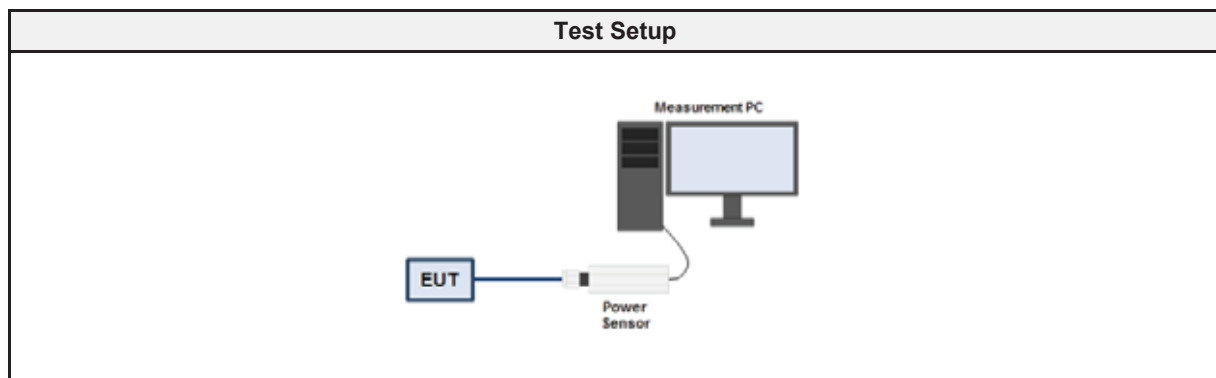
3.2.1 Information

Test Information	
Reference	FCC 15.407(a)
Measurement Method	KDB 789033 E
Operator	Toralf Jahn
Date	2021-09-30
Measurement uncertainty	±1.59 %

3.2.2 Limits

Limits			
Frequency band	Condition	Power limit	Maximum antenna gain ¹
5150 - 5250 MHz	Access point, indoor	1 W/30 dBm	6 dBi
5150 - 5250 MHz	Access point, outdoor	1 W/30 dBm	6 dBi
5150 - 5250 MHz	Access point, fixed point to point	1 W/30 dBm	23 dBi
5150 - 5250 MHz	Client	250 mW/24 dBm	6 dBi
5250 - 5350 MHz	-	Minimum of 250 mW/24 dBm or 11 dBm + 10*Log ₁₀ (BW ³)	6 dBi
5470 - 5725 MHz	-	Minimum of 250 mW/24 dBm or 11 dBm + 10*Log ₁₀ (BW ³)	6 dBi
5725 - 5850 MHz	-	1 W/30 dBm ²	6 dBi
Note 1: The maximum output power must be reduced by the amount in dB that the gain exceeds the maximum allowed gain			
Note 2: Fixed point to point applications are excluded from power reduction according to Note 1			
Note 3: BW is the 26 dB bandwidth in MHz			

3.2.3 Setup



3.2.4 Equipment

Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Power sensor	ETS-Lindgren	7002-006	EF00934	2021-07	2022-07
Power sensor	ETS-Lindgren	7002-006	EF00935	2021-07	2022-07

3.2.5 Procedure

Test Procedure								
- One wide band power sensor is connected to each antenna port of the EUT - EUT transmitter is activated in test mode under normal conditions - The output power is measured simultaneously at all antenna ports if supported - The maximum power level is determined								

3.2.6 Results

Test Results - 5150 - 5250 MHz								
Mode	Channel	Frequen cy [MHz]	Nominal BW [MHz]	Power Port 1 [dBm]	Power Port 2 [dBm]	Total Power 2 simultan.Tx [dBm]	Limit [dBm]	Verdict
OFDM	36	5180	20	18.2	18.0	-	24.0	PASS
OFDM	40	5200	20	18.5	18.0	-	24.0	PASS
OFDM	48	5240	20	18.5	17.8	-	24.0	PASS
HT20	36	5180	20	-	-	21.2	24.0	PASS
HT20	40	5200	20	-	-	21.2	24.0	PASS
HT20	48	5240	20	-	-	21.0	24.0	PASS
HT40	36+40	5190	40	-	-	20.8	24.0	PASS
HT40	44+48	5230	40	-	-	20.7	24.0	PASS
VHT20	36	5180	20	-	-	21.2	24.0	PASS
VHT20	40	5200	20	-	-	21.2	24.0	PASS
VHT20	48	5240	20	-	-	21.0	24.0	PASS
VHT40	36+40	5190	40	-	-	20.8	24.0	PASS
VHT40	44+48	5230	40	-	-	20.6	24.0	PASS
VHT80	36+40+44 +48	5210	80	-	-	20.4	24.0	PASS

Test Results - 5250 - 5350 MHz								
Mode	Channel	Frequen cy [MHz]	Nominal BW [MHz]	Power Port 1 [dBm]	Power Port 2 [dBm]	Total Power 2 simultan.Tx [dBm]	Limit [dBm]	Verdict
OFDM	52	5260	20	18.2	17.6	-	23.9	PASS
OFDM	56	5280	20	18.0	17.4	-	23.8	PASS
OFDM	64	5320	20	17.5	17.0	-	23.8	PASS
HT20	52	5260	20	-	-	20.7	24.0	PASS
HT20	56	5280	20	-	-	20.4	24.0	PASS
HT20	64	5320	20	-	-	19.7	24.0	PASS
HT40	52+56	5270	40	-	-	20.1	24.0	PASS
HT40	60+64	5310	40	-	-	19.3	24.0	PASS
VHT20	52	5260	20	-	-	20.7	24.0	PASS
VHT20	56	5280	20	-	-	20.4	24.0	PASS
VHT20	64	5320	20	-	-	19.5	24.0	PASS
VHT40	52+56	5270	40	-	-	19.1	24.0	PASS
VHT40	60+64	5310	40	-	-	19.3	24.0	PASS
VHT80	52+56+60 +64	5290	80	-	-	19.3	24.0	PASS

Test Results - 5470 - 5725 MHz								
Mode	Channel	Frequency [MHz]	Nominal BW [MHz]	Power Port 1 [dBm]	Power Port 2 [dBm]	Total Power 2 simultan.Tx [dBm]	Limit [dBm]	Verdict
OFDM	100	5500	20	17.0	16.7	-	23.8	PASS
OFDM	120	5600	20	17.4	17.4	-	24.0	PASS
OFDM	140	5700	20	17.4	17.3	-	24.0	PASS
HT20	100	5500	20	-	-	18.9	24.0	PASS
HT20	120	5600	20	-	-	19.9	24.0	PASS
HT20	140	5700	20	-	-	19.9	24.0	PASS
HT40	100+104	5510	40	-	-	18.3	24.0	PASS
HT40	116+120	5590	40	-	-	19.4	24.0	PASS
HT40	132+136	5670	40	-	-	19.8	24.0	PASS
VHT20	100	5500	20	-	-	18.6	24.0	PASS
VHT20	120	5600	20	-	-	19.9	24.0	PASS
VHT20	140	5700	20	-	-	19.4	24.0	PASS
VHT40	100+104	5510	40	-	-	18.3	24.0	PASS
VHT40	116+120	5590	40	-	-	19.4	24.0	PASS
VHT40	132+136	5670	40	-	-	19.8	24.0	PASS
VHT80	100+104+108+112	5530	80	-	-	17.8	24.0	PASS
VHT80	116+120+124+128	5610	80	-	-	19.1	24.0	PASS

3.3 Test Conditions and Results - Power spectral density

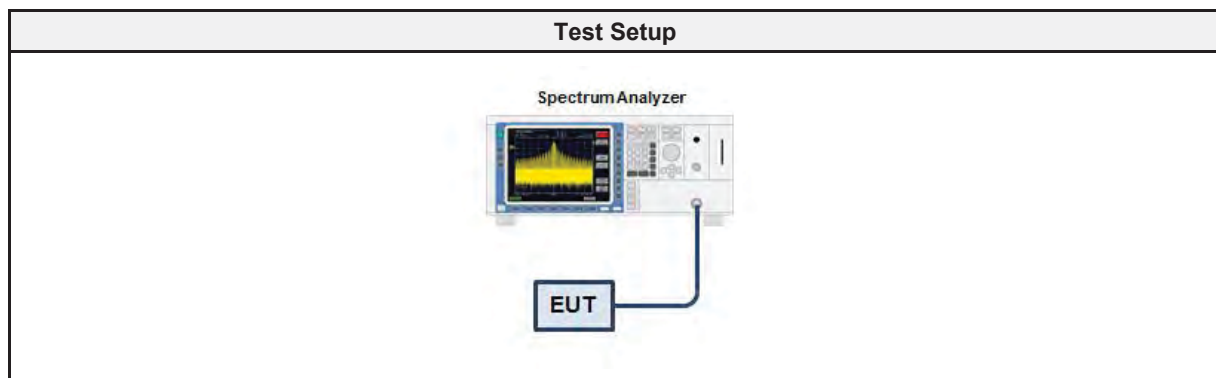
3.3.1 Information

Test Information	
Reference	FCC 15.407(a)
Measurement Method	KDB 789033 F
Operator	Toralf Jahn
Date	2021-10-01
Measurement uncertainty	±2.86 %

3.3.2 Limits

Limits			
Frequency band	Condition	PSD limit	Maximum antenna gain ¹
5150 - 5250 MHz	Access point, indoor	17 dBm/MHz	6 dBi
5150 - 5250 MHz	Access point, outdoor	17 dBm/MHz	6 dBi
5150 - 5250 MHz	Access point, fixed point to point	17 dBm/MHz	23 dBi
5150 - 5250 MHz	Client	11 dBm/MHz	6 dBi
5250 - 5350 MHz	All devices	11 dBm/MHz	6 dBi
5470 - 5725 MHz	All devices	11 dBm/MHz	6 dBi
5725 - 5850 MHz	All devices	30 dBm/500 kHz	6 dBi
Note 1: The power density limit must be reduced by the amount in dB that the gain exceeds the maximum allowed gain			

3.3.3 Setup



3.3.4 Equipment

Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum Analyzer	R&S	FSW 43	EF00896	2021-07	2022-07

3.3.5 Procedure

Test Procedure	
1.	EUT transmitter is activated in test mode under normal conditions
2.	The spectrum analyzer is set to rms detection with a span over the emission bandwidth
3.	The resolution bandwidth is set to 1 MHz / 500 kHz and video bandwidth to ≥ 3 MHz
4.	The number of sweep points is set $\geq 2 \times \text{span} / \text{RBW}$ and the sweep time is set to auto
5.	Trace averaging is set to 100
6.	The maximum of the emission envelope is determined simultaneously at all antenna ports if supported
7.	The gated trigger function is used to correct for duty cycle

3.3.6 Results

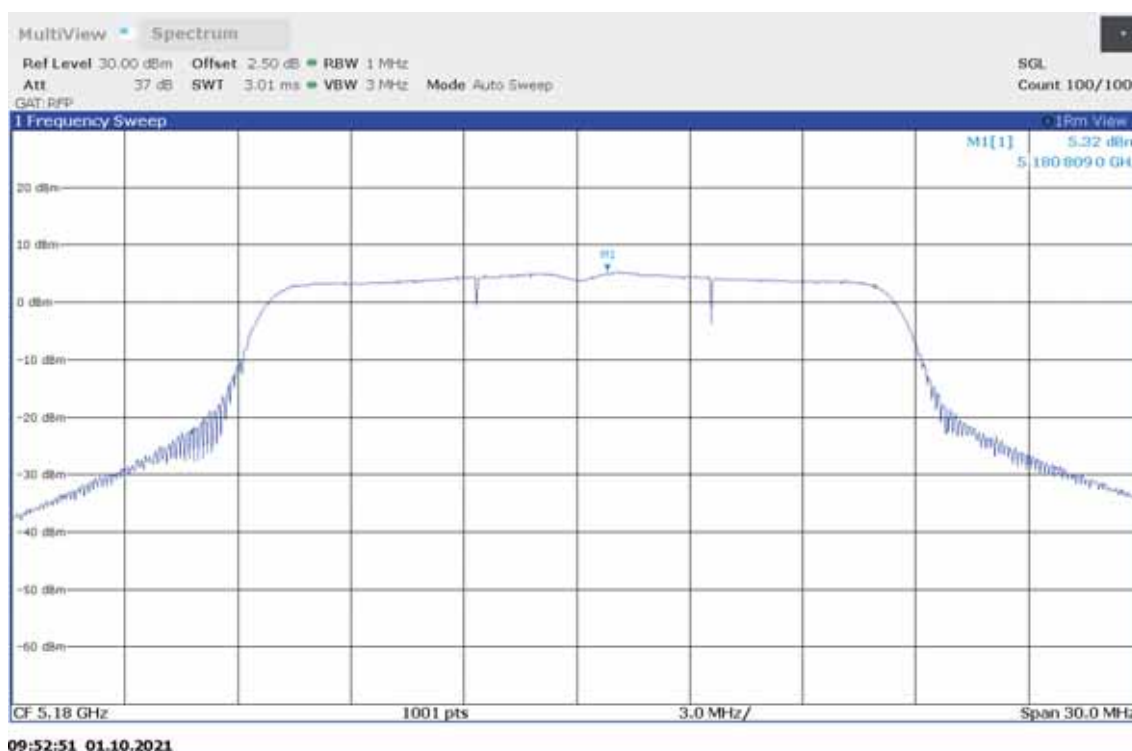
Test Results - 5150 - 5250 MHz								
Mode	Channel	Frequency [MHz]	Nominal BW [MHz]	PSD Port 1 [dBm/RBW]	PSD Port 2 [dBm/RBW]	Total PSD 2 simultan. Tx [dBm/RBW]	Limit [dBm/RBW]	Verdict
OFDM	36	5180	20	5.319	-	-	11	PASS
OFDM	40	5200	20	5.686	-	-	11	PASS
OFDM	48	5240	20	5.237	-	-	11	PASS
HT20	36	5180	20	-	-	8.164	11	PASS
HT20	40	5200	20	-	-	8.585	11	PASS
HT20	48	5240	20	-	-	7.880	11	PASS
HT40	36+40	5190	40	-	-	4.624	11	PASS
HT40	44+48	5230	40	-	-	4.285	11	PASS
VHT20	36	5180	20	-	-	7.464	11	PASS
VHT20	40	5200	20	-	-	7.702	11	PASS
VHT20	48	5240	20	-	-	7.200	11	PASS
VHT40	36+40	5190	40	-	-	4.463	11	PASS
VHT40	44+48	5230	40	-	-	4.395	11	PASS
VHT80	36+40+44+48	5210	80	-	-	0.459	11	PASS
Comment: For one simultaneous Tx the worst case antenna port was measured.								

Test Results - 5250 - 5350 MHz								
Mode	Channel	Frequency [MHz]	Nominal BW [MHz]	PSD Port 1 [dBm/RBW]	PSD Port 2 [dBm/RBW]	Total PSD 2 simultan. Tx [dBm/RBW]	Limit [dBm/RBW]	Verdict
OFDM	52	5260	20	5.082	-	-	11	PASS
OFDM	56	5280	20	5.203	-	-	11	PASS
OFDM	64	5320	20	4.631	-	-	11	PASS
HT20	52	5260	20	-	-	7.506	11	PASS
HT20	56	5280	20	-	-	7.680	11	PASS
HT20	64	5320	20	-	-	7.321	11	PASS
HT40	52+56	5270	40	-	-	3.965	11	PASS
HT40	60+64	5310	40	-	-	3.567	11	PASS
VHT20	52	5260	20	-	-	6.858	11	PASS
VHT20	56	5280	20	-	-	7.128	11	PASS
VHT20	64	5320	20	-	-	6.654	11	PASS
VHT40	52+56	5270	40	-	-	3.770	11	PASS
VHT40	60+64	5310	40	-	-	3.158	11	PASS
VHT80	52+56+60+64	5290	80	-	-	0.316	11	PASS
Comment: For one simultaneous Tx the worst case antenna port was measured.								

Test Results - 5470 - 5725 MHz								
Mode	Channel	Frequency [MHz]	Nominal BW [MHz]	PSD Port 1 [dBm/RBW]	PSD Port 2 [dBm/RBW]	Total PSD 2 simultan. Tx [dBm/RBW]	Limit [dBm/RBW]	Verdict
OFDM	100	5500	20	4.667	-	-	11	PASS
OFDM	120	5600	20	5.221	-	-	11	PASS
OFDM	140	5700	20	5.245	-	-	11	PASS
HT20	100	5500	20	-	-	7.583	11	PASS
HT20	120	5600	20	-	-	8.462	11	PASS
HT20	144	5700	20	-	-	8.127	11	PASS
HT40	100+104	5510	40	-	-	3.752	11	PASS
HT40	116+120	5590	40	-	-	4.659	11	PASS
HT40	132+136	5670	40	-	-	5.119	11	PASS
VHT20	100	5500	20	-	-	7.246	11	PASS
VHT20	120	5600	20	-	-	7.620	11	PASS
VHT20	140	5700	20	-	-	7.225	11	PASS
VHT40	100+104	5510	40	-	-	3.675	11	PASS
VHT40	116+120	5590	40	-	-	4.613	11	PASS
VHT40	132+136	5670	40	-	-	4.905	11	PASS
VHT80	100+104+108+112	5530	80	-	-	0.352	11	PASS
VHT80	116+120+124+128	5610	80	-	-	0.739	11	PASS
Comment: For one simultaneous Tx the worst case antenna port was measured.								

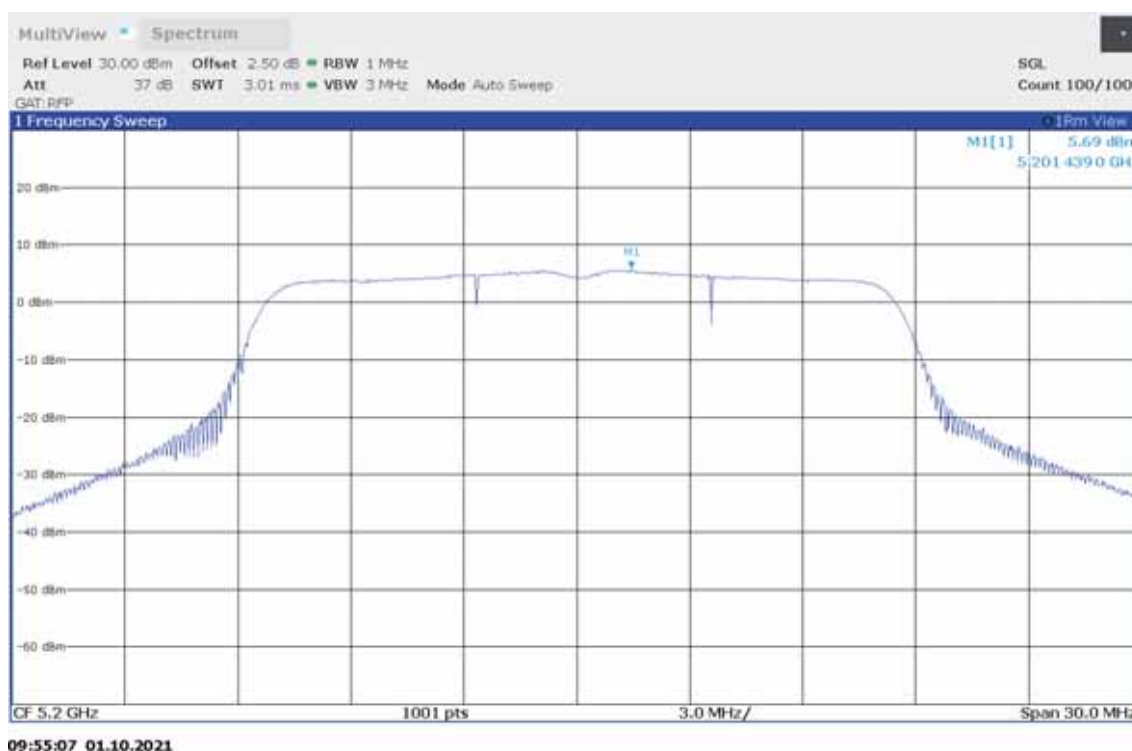
Maximum Power Spectral Density

Project Number:	G0M-2011-9488
Applicant:	Leica Geosystems AG
Model Description:	UAV 3D measurement device
Model:	BLK2FLY
Test Sample ID:	34982
Reference Standards:	FCC 15.407, RSS-247
Reference Method:	ANSI C63.10:2013, Section 12.5; KDB 789033 v02r02, Section F
Operational Mode:	IEEE 802.11a, Channel: 36, 5180 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Toralf Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2021-10-01
Number of Antenna Ports:	1
Antenna Port(s):	1
Maximum Frequency [MHz]:	5180.809
Spectral Density [dBm/RBW]:	5.319
Resolution Bandwidth [MHz]:	1



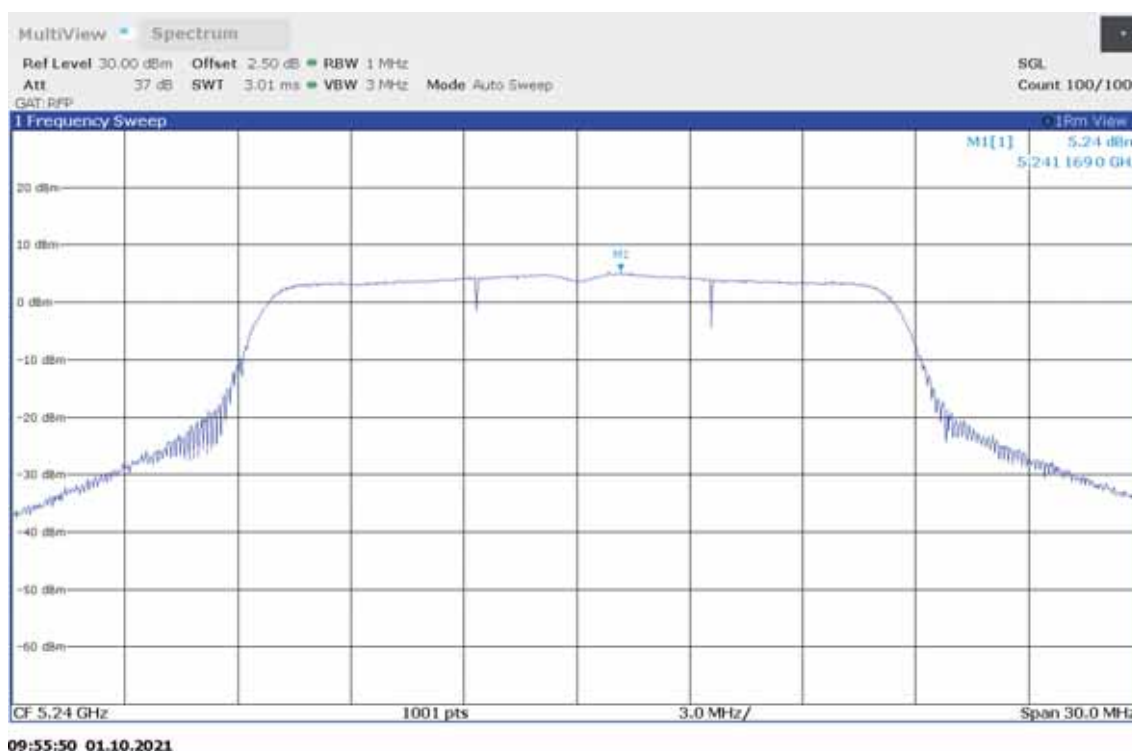
Maximum Power Spectral Density

Project Number:	G0M-2011-9488
Applicant:	Leica Geosystems AG
Model Description:	UAV 3D measurement device
Model:	BLK2FLY
Test Sample ID:	34982
Reference Standards:	FCC 15.407, RSS-247
Reference Method:	ANSI C63.10:2013, Section 12.5; KDB 789033 v02r02, Section F
Operational Mode:	IEEE 802.11a, Channel: 40, 5200 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Toralf Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2021-10-01
Number of Antenna Ports:	1
Antenna Port(s):	1
Maximum Frequency [MHz]:	5201.439
Spectral Density [dBm/RBW]:	5.686
Resolution Bandwidth [MHz]:	1

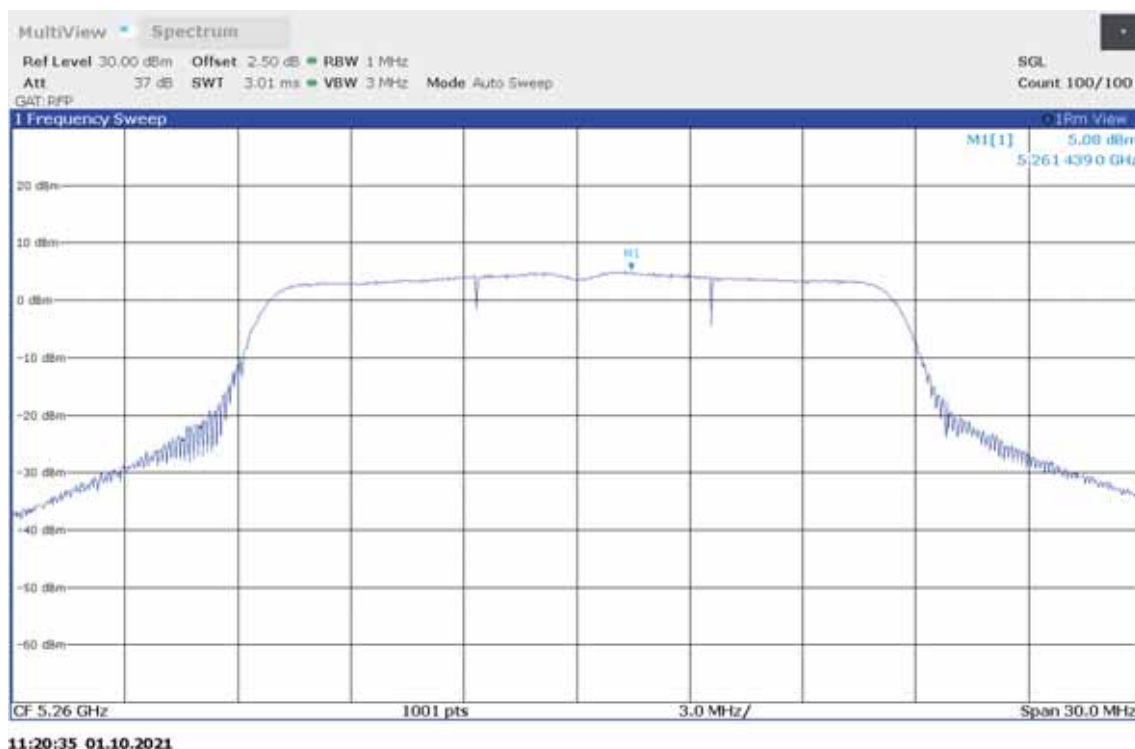


Maximum Power Spectral Density

Project Number:	G0M-2011-9488
Applicant:	Leica Geosystems AG
Model Description:	UAV 3D measurement device
Model:	BLK2FLY
Test Sample ID:	34982
Reference Standards:	FCC 15.407, RSS-247
Reference Method:	ANSI C63.10:2013, Section 12.5; KDB 789033 v02r02, Section F
Operational Mode:	IEEE 802.11a, Channel: 48, 5240 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Toralf Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2021-10-01
Number of Antenna Ports:	1
Antenna Port(s):	1
Maximum Frequency [MHz]:	5241.169
Spectral Density [dBm/RBW]:	5.237
Resolution Bandwidth [MHz]:	1

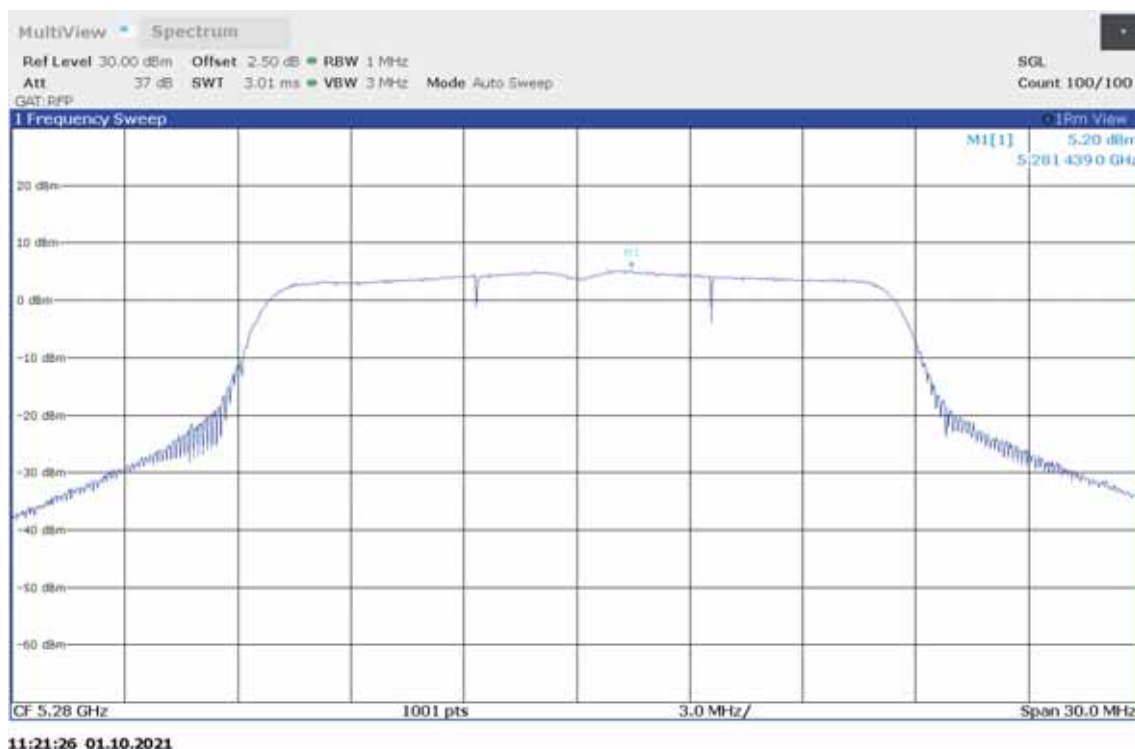


Project Number:	G0M-2011-9488
Applicant:	Leica Geosystems AG
Model Description:	UAV 3D measurement device
Model:	BLK2FLY
Test Sample ID:	34982
Reference Standards:	FCC 15.407, RSS-247
Reference Method:	ANSI C63.10:2013, Section 12.5; KDB 789033 v02r02, Section F
Operational Mode:	IEEE 802.11a, Channel: 52, 5260 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Toralf Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2021-10-01
Number of Antenna Ports:	1
Antenna Port(s):	1
Maximum Frequency [MHz]:	5261.439
Spectral Density [dBm/RBW]:	5.082
Resolution Bandwidth [MHz]:	1



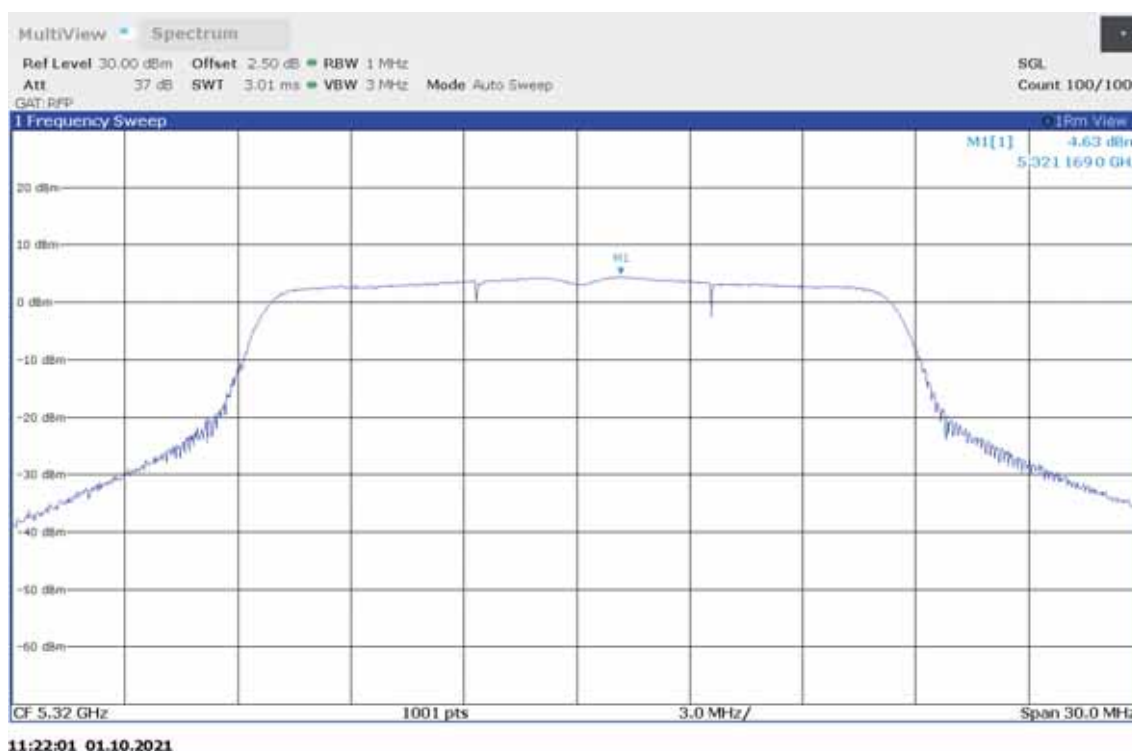
Maximum Power Spectral Density

Project Number:	G0M-2011-9488
Applicant:	Leica Geosystems AG
Model Description:	UAV 3D measurement device
Model:	BLK2FLY
Test Sample ID:	34982
Reference Standards:	FCC 15.407, RSS-247
Reference Method:	ANSI C63.10:2013, Section 12.5; KDB 789033 v02r02, Section F
Operational Mode:	IEEE 802.11a, Channel: 56, 5280 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Toralf Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2021-10-01
Number of Antenna Ports:	1
Antenna Port(s):	1
Maximum Frequency [MHz]:	5281.439
Spectral Density [dBm/RBW]:	5.203
Resolution Bandwidth [MHz]:	1



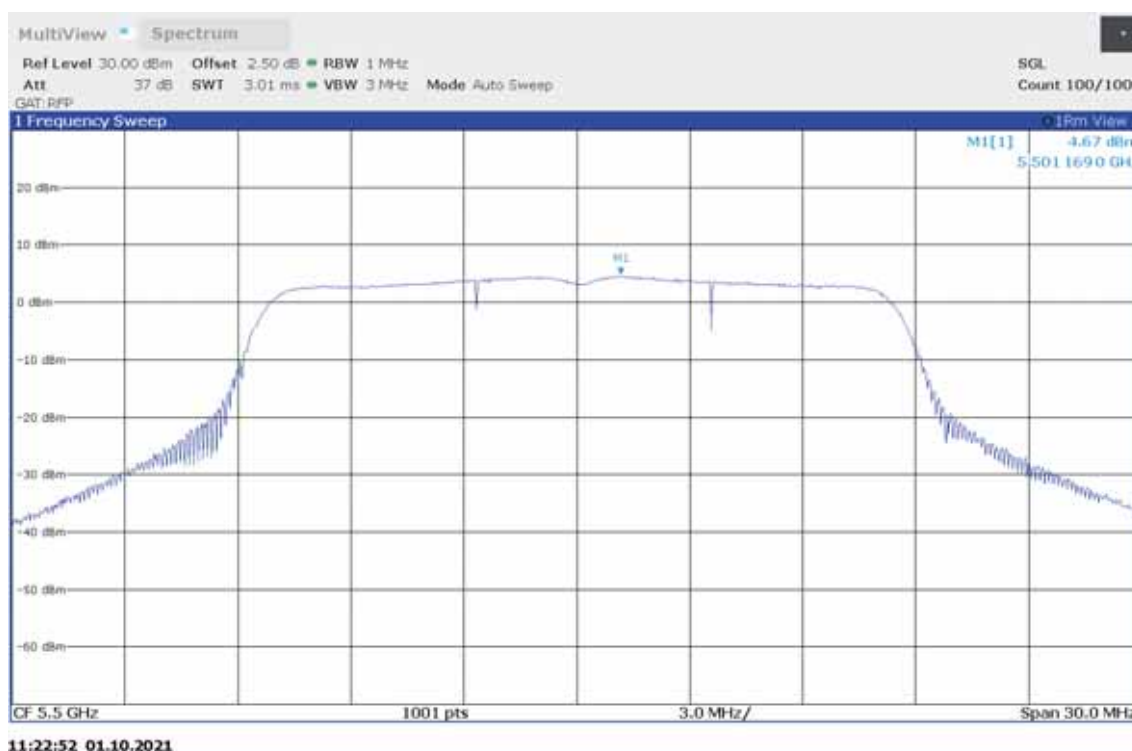
Maximum Power Spectral Density

Project Number:	G0M-2011-9488
Applicant:	Leica Geosystems AG
Model Description:	UAV 3D measurement device
Model:	BLK2FLY
Test Sample ID:	34982
Reference Standards:	FCC 15.407, RSS-247
Reference Method:	ANSI C63.10:2013, Section 12.5; KDB 789033 v02r02, Section F
Operational Mode:	IEEE 802.11a, Channel: 64, 5320 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Toralf Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2021-10-01
Number of Antenna Ports:	1
Antenna Port(s):	1
Maximum Frequency [MHz]:	5321.169
Spectral Density [dBm/RBW]:	4.631
Resolution Bandwidth [MHz]:	1



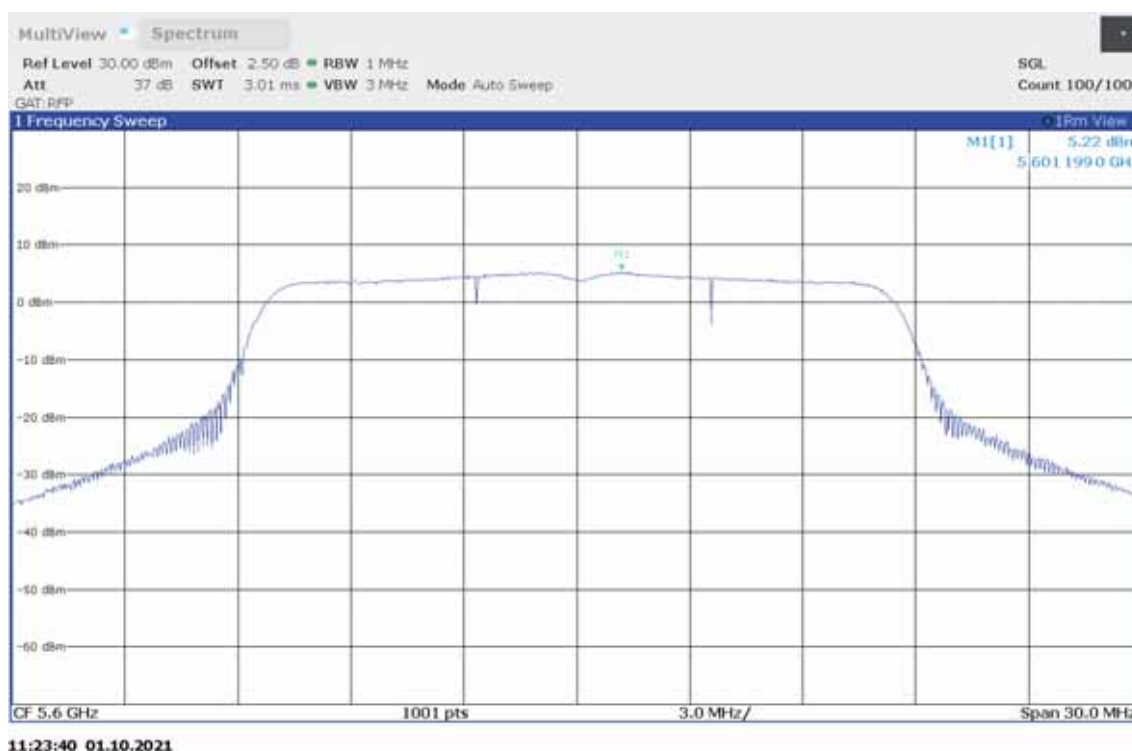
Maximum Power Spectral Density

Project Number:	G0M-2011-9488
Applicant:	Leica Geosystems AG
Model Description:	UAV 3D measurement device
Model:	BLK2FLY
Test Sample ID:	34982
Reference Standards:	FCC 15.407, RSS-247
Reference Method:	ANSI C63.10:2013, Section 12.5; KDB 789033 v02r02, Section F
Operational Mode:	IEEE 802.11a, Channel: 100, 5500 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Toralf Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2021-10-01
Number of Antenna Ports:	1
Antenna Port(s):	1
Maximum Frequency [MHz]:	5501.169
Spectral Density [dBm/RBW]:	4.667
Resolution Bandwidth [MHz]:	1



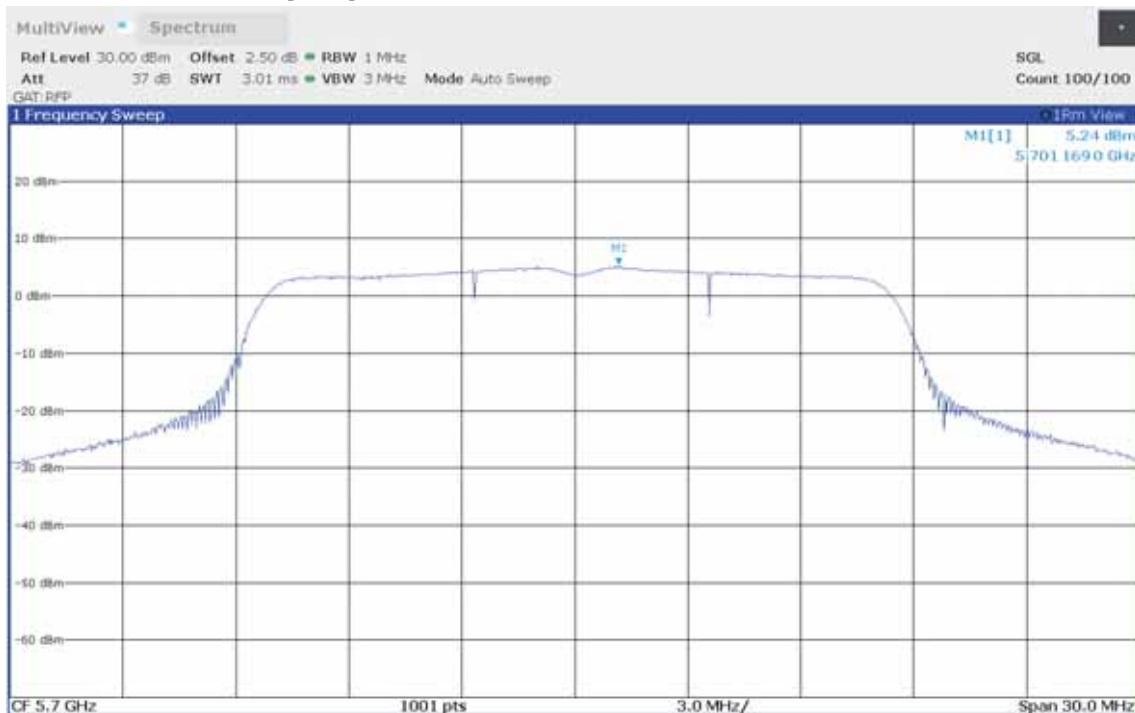
Maximum Power Spectral Density

Project Number:	G0M-2011-9488
Applicant:	Leica Geosystems AG
Model Description:	UAV 3D measurement device
Model:	BLK2FLY
Test Sample ID:	34982
Reference Standards:	FCC 15.407, RSS-247
Reference Method:	ANSI C63.10:2013, Section 12.5; KDB 789033 v02r02, Section F
Operational Mode:	IEEE 802.11a, Channel: 120, 5600 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Toralf Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2021-10-01
Number of Antenna Ports:	1
Antenna Port(s):	1
Maximum Frequency [MHz]:	5601.199
Spectral Density [dBm/RBW]:	5.221
Resolution Bandwidth [MHz]:	1



Maximum Power Spectral Density

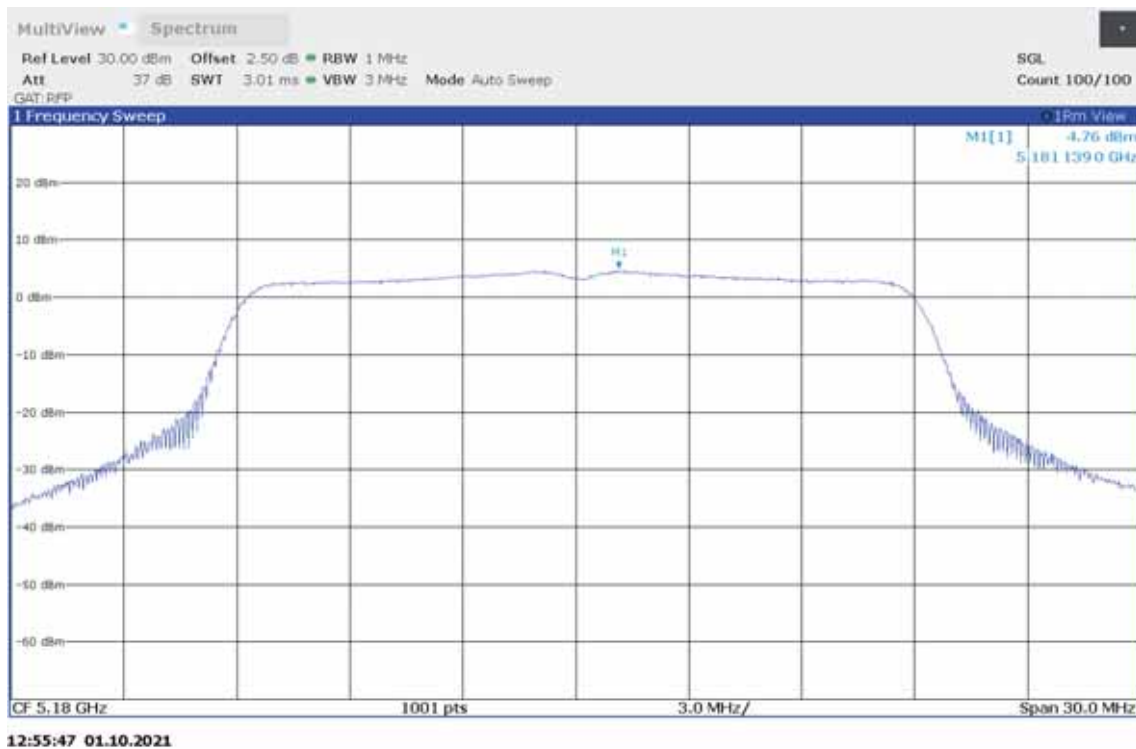
Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 12.5; KDB 789033 v02r02, Section F
 Operational Mode: IEEE 802.11a, Channel: 140, 5700 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-10-01
 Number of Antenna Ports: 1
 Antenna Port(s): 1
 Maximum Frequency [MHz]: 5701.169
 Spectral Density [dBm/RBW]: 5.245
 Resolution Bandwidth [MHz]: 1

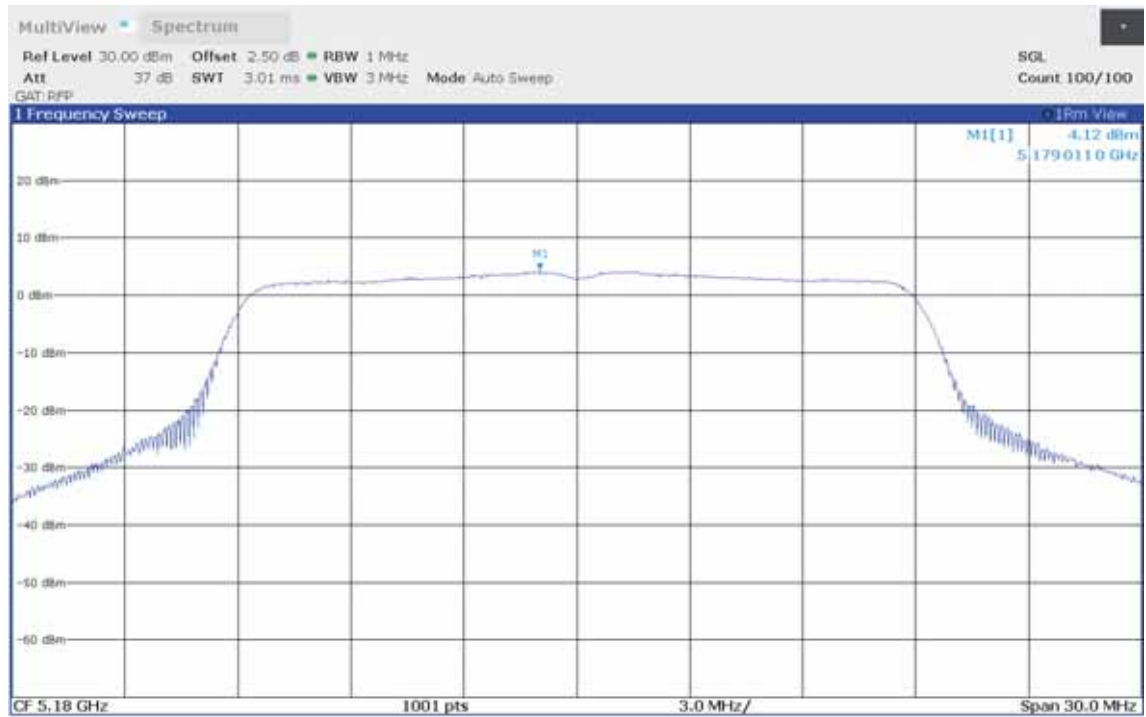


11:24:14 01.10.2021

Maximum Power Spectral Density

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 12.5; KDB 789033 v02r02, Section F
 Operational Mode: IEEE 802.11ac (VHT20), Channel: 36, 5180 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-10-01
 Number of Antenna Ports: 2
 Antenna Port(s): 1+2
 Maximum Frequency 1 [MHz]: 5181.139
 Spectral Density 1 [dBm/RBW]: 4.765
 Maximum Frequency 2 [MHz]: 5179.011
 Spectral Density 2 [dBm/RBW]: 4.118
 Total Spectral Density [dBm/RBW]: 7.464
 Resolution Bandwidth [MHz]: 1

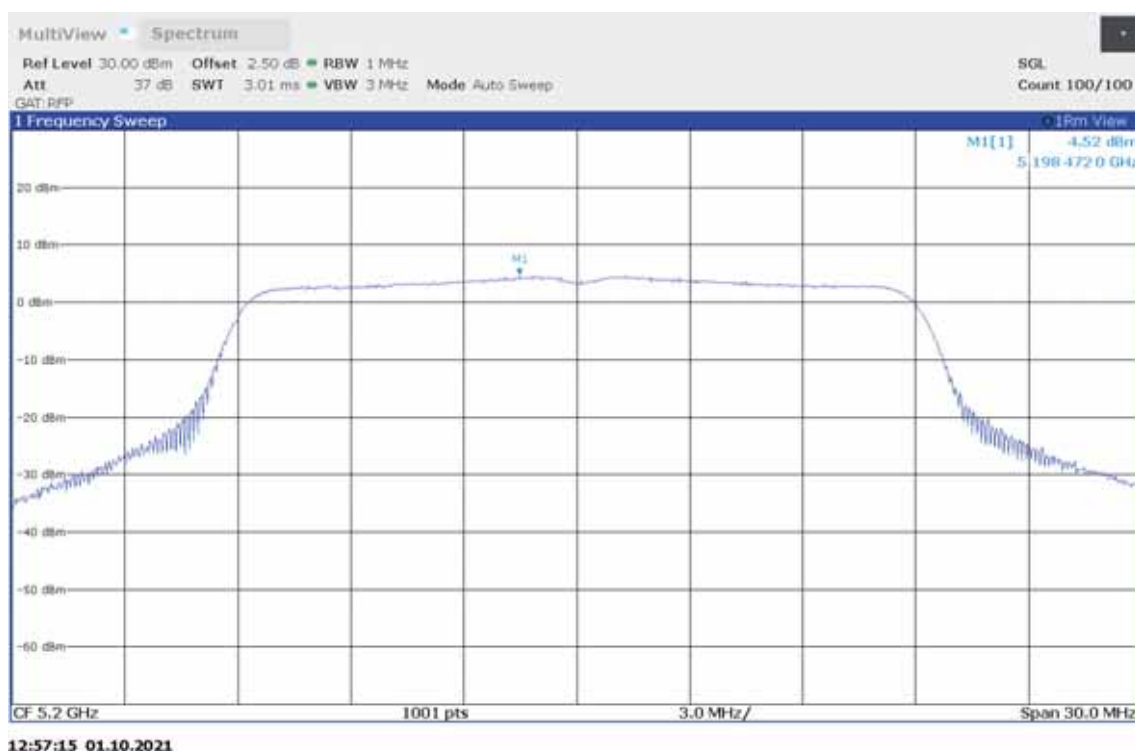


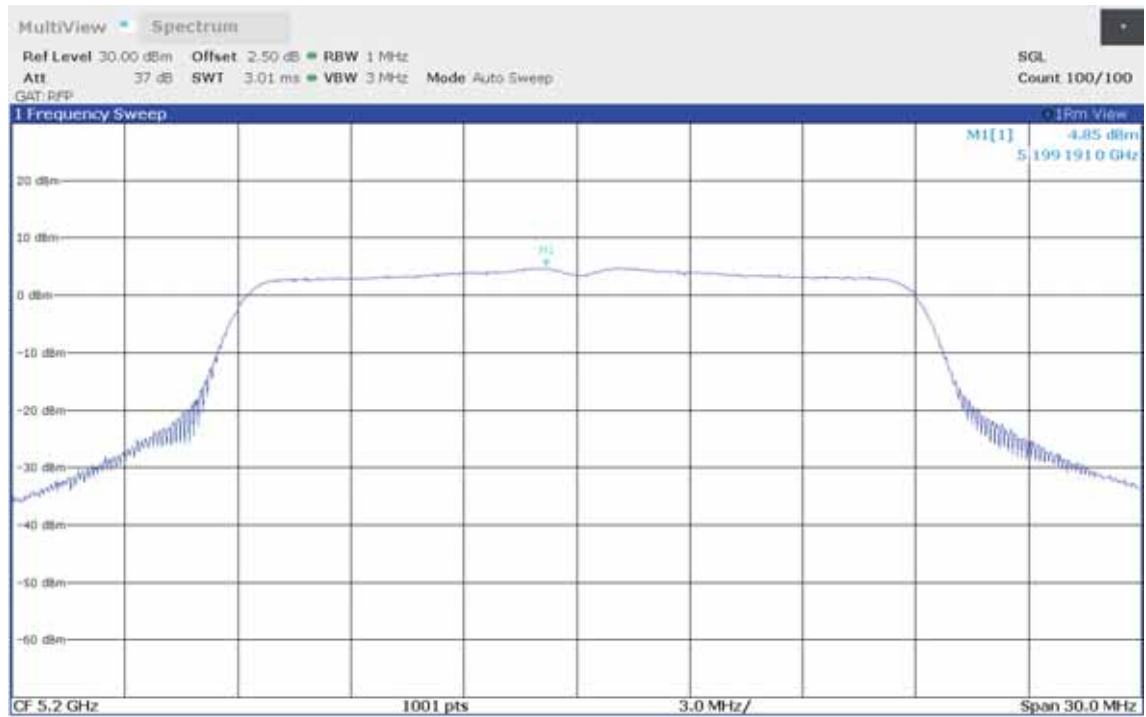


12:56:13 01.10.2021

Maximum Power Spectral Density

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 12.5; KDB 789033 v02r02, Section F
 Operational Mode: IEEE 802.11ac (VHT20), Channel: 40, 5200 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-10-01
 Number of Antenna Ports: 2
 Antenna Port(s): 1+2
 Maximum Frequency 1 [MHz]: 5198.472
 Spectral Density 1 [dBm/RBW]: 4.525
 Maximum Frequency 2 [MHz]: 5199.191
 Spectral Density 2 [dBm/RBW]: 4.853
 Total Spectral Density [dBm/RBW]: 7.702
 Resolution Bandwidth [MHz]: 1

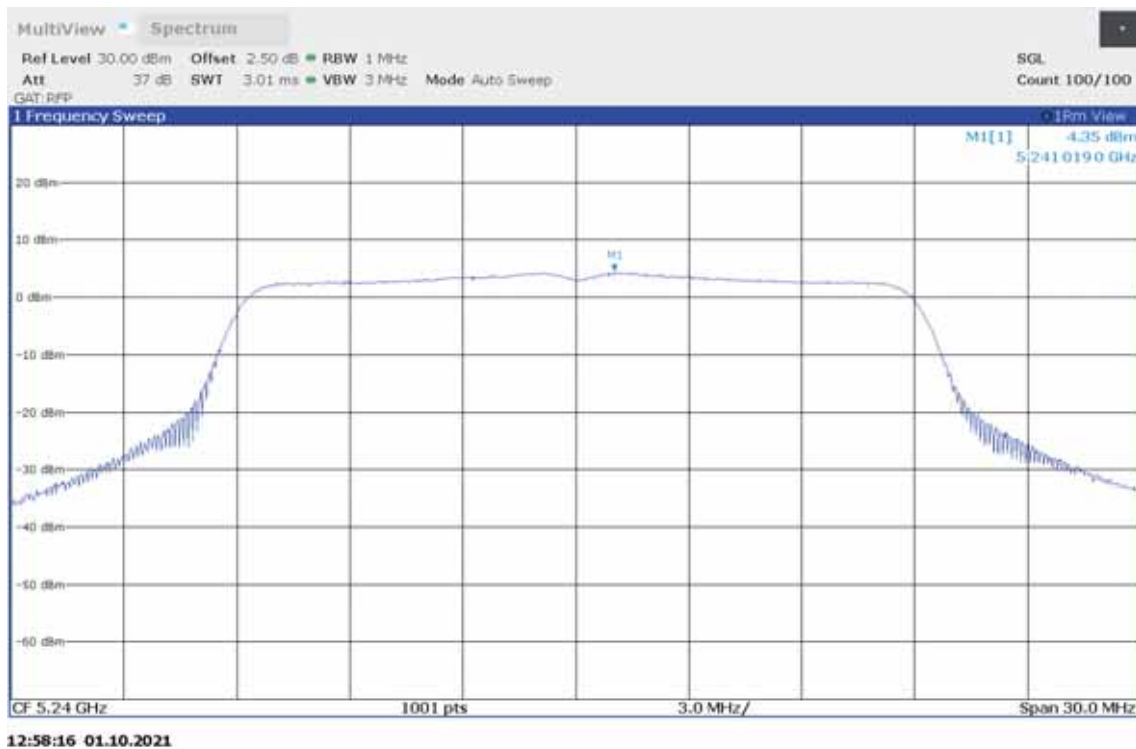


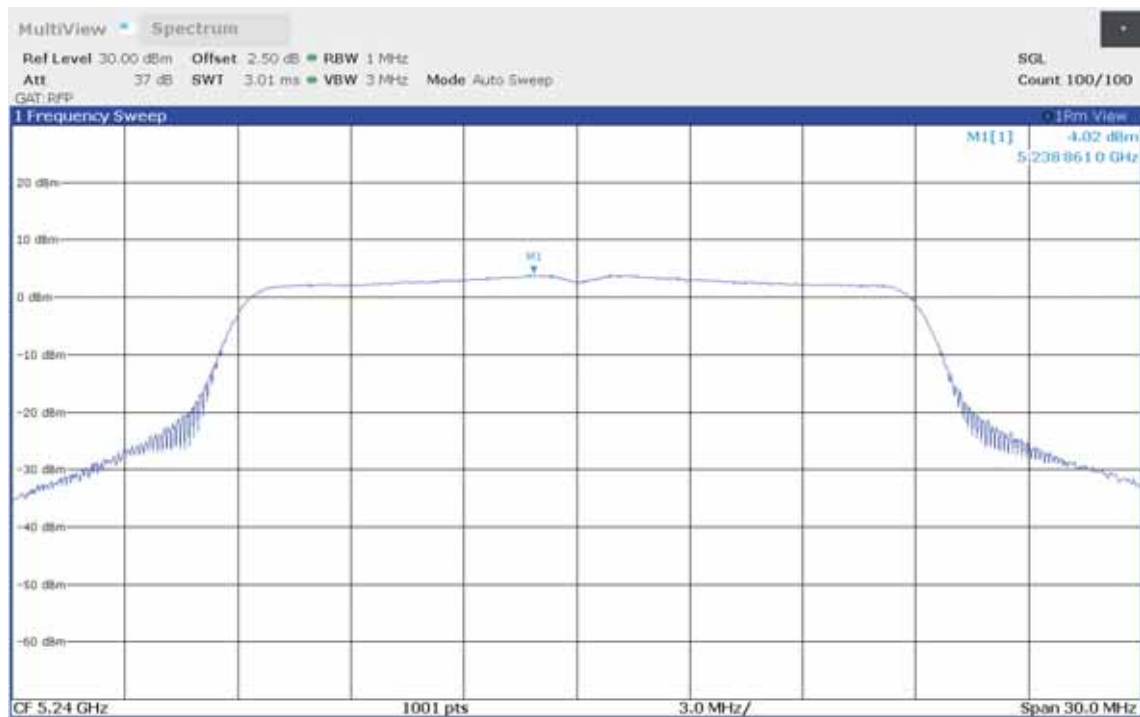


12:57:38 01.10.2021

Maximum Power Spectral Density

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 12.5; KDB 789033 v02r02, Section F
 Operational Mode: IEEE 802.11ac (VHT20), Channel: 48, 5240 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-10-01
 Number of Antenna Ports: 2
 Antenna Port(s): 1+2
 Maximum Frequency 1 [MHz]: 5241.019
 Spectral Density 1 [dBm/RBW]: 4.349
 Maximum Frequency 2 [MHz]: 5238.861
 Spectral Density 2 [dBm/RBW]: 4.025
 Total Spectral Density [dBm/RBW]: 7.200
 Resolution Bandwidth [MHz]: 1

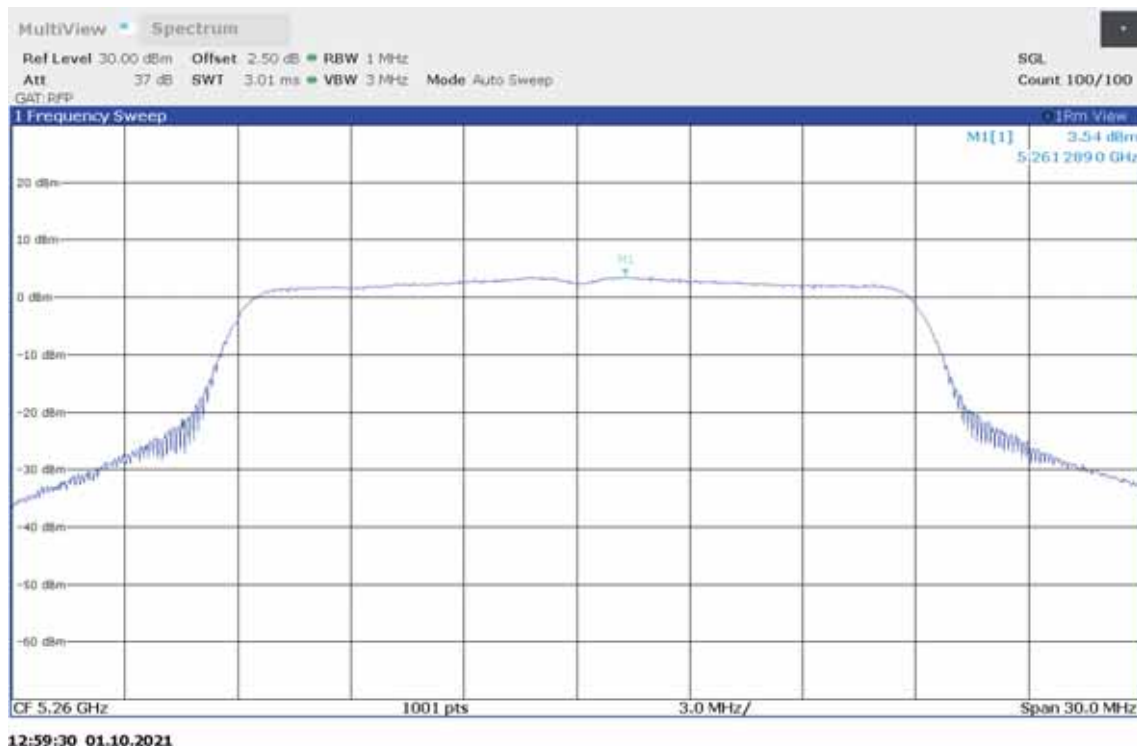


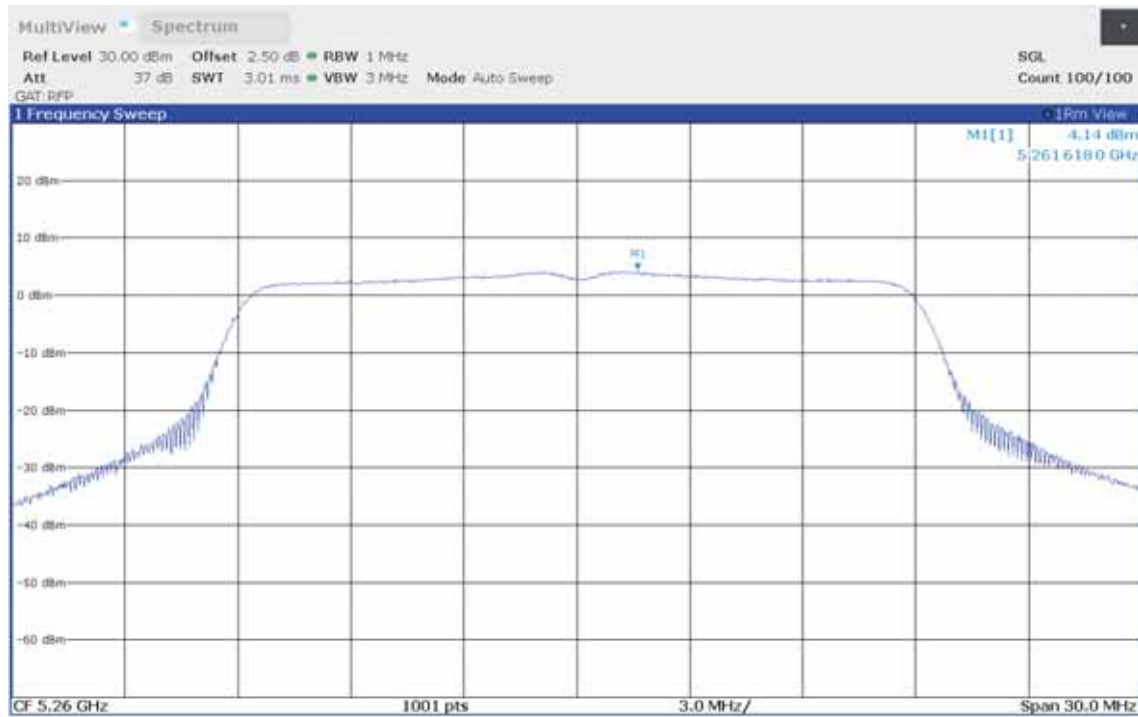


12:58:40 01.10.2021

Maximum Power Spectral Density

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 12.5; KDB 789033 v02r02, Section F
 Operational Mode: IEEE 802.11ac (VHT20), Channel: 52, 5260 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-10-01
 Number of Antenna Ports: 2
 Antenna Port(s): 1+2
 Maximum Frequency 1 [MHz]: 5261.289
 Spectral Density 1 [dBm/RBW]: 3.536
 Maximum Frequency 2 [MHz]: 5261.618
 Spectral Density 2 [dBm/RBW]: 4.138
 Total Spectral Density [dBm/RBW]: 6.858
 Resolution Bandwidth [MHz]: 1

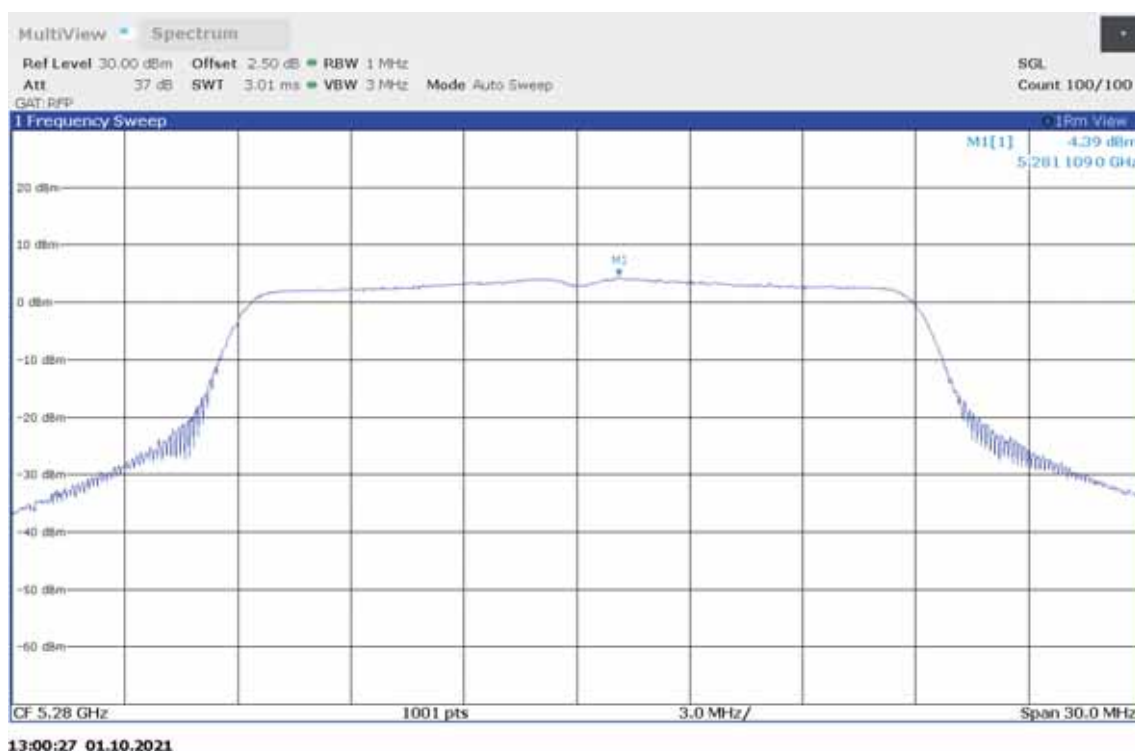


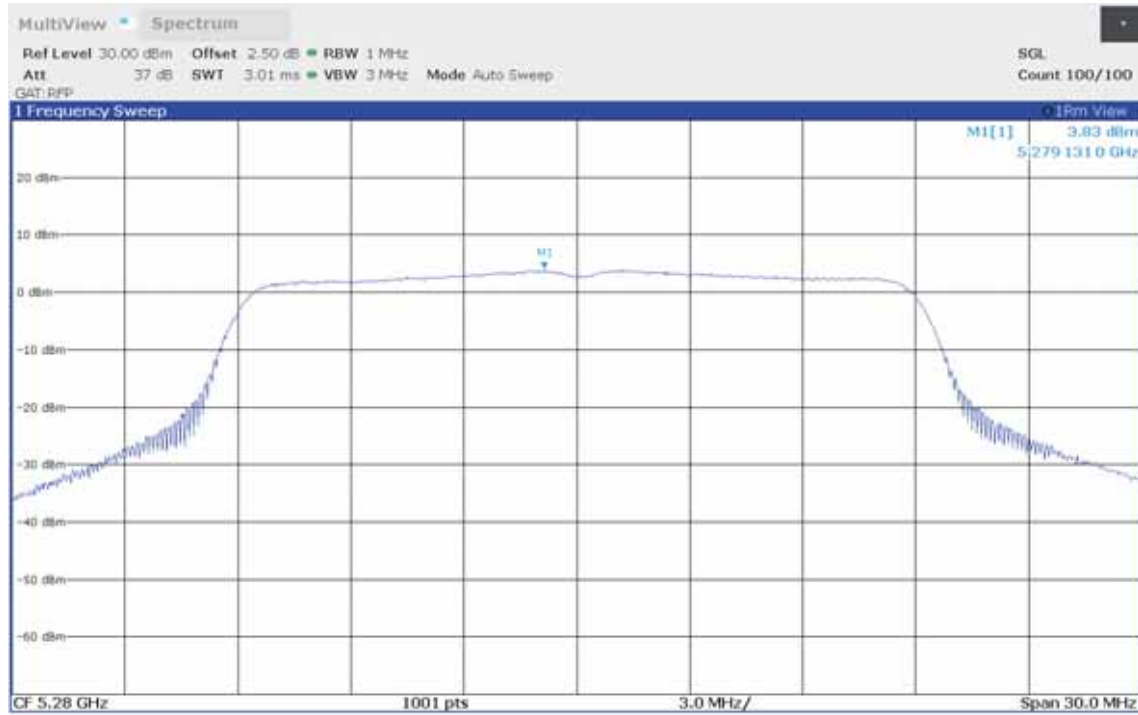


12:59:50 01.10.2021

Maximum Power Spectral Density

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 12.5; KDB 789033 v02r02, Section F
 Operational Mode: IEEE 802.11ac (VHT20), Channel: 56, 5280 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-10-01
 Number of Antenna Ports: 2
 Antenna Port(s): 1+2
 Maximum Frequency 1 [MHz]: 5281.109
 Spectral Density 1 [dBm/RBW]: 4.388
 Maximum Frequency 2 [MHz]: 5279.131
 Spectral Density 2 [dBm/RBW]: 3.830
 Total Spectral Density [dBm/RBW]: 7.128
 Resolution Bandwidth [MHz]: 1

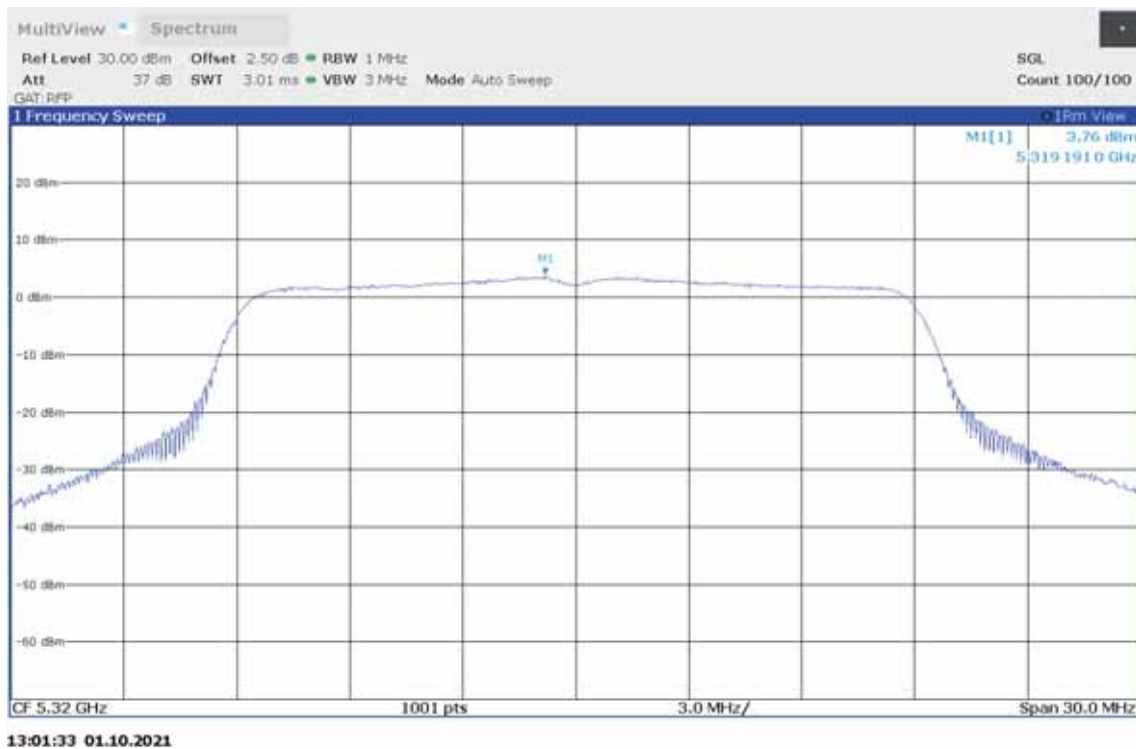


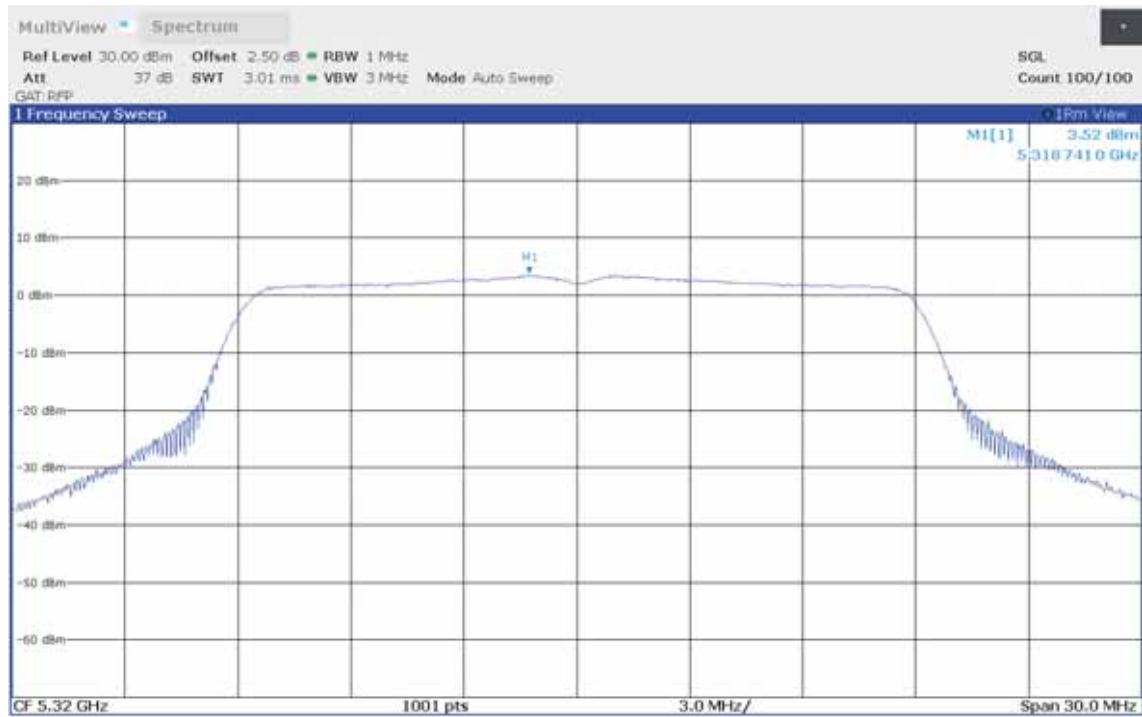


13:00:53 01.10.2021

Maximum Power Spectral Density

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 12.5; KDB 789033 v02r02, Section F
 Operational Mode: IEEE 802.11ac (VHT20), Channel: 64, 5320 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-10-01
 Number of Antenna Ports: 2
 Antenna Port(s): 1+2
 Maximum Frequency 1 [MHz]: 5319.191
 Spectral Density 1 [dBm/RBW]: 3.759
 Maximum Frequency 2 [MHz]: 5318.741
 Spectral Density 2 [dBm/RBW]: 3.525
 Total Spectral Density [dBm/RBW]: 6.654
 Resolution Bandwidth [MHz]: 1

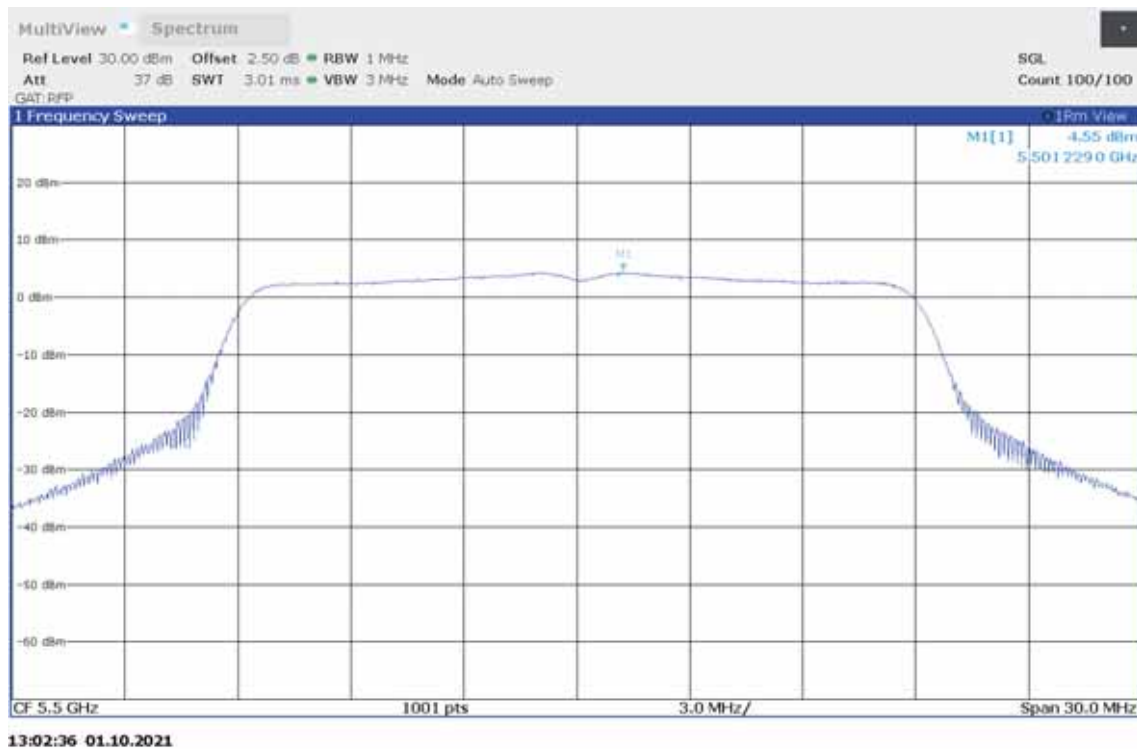


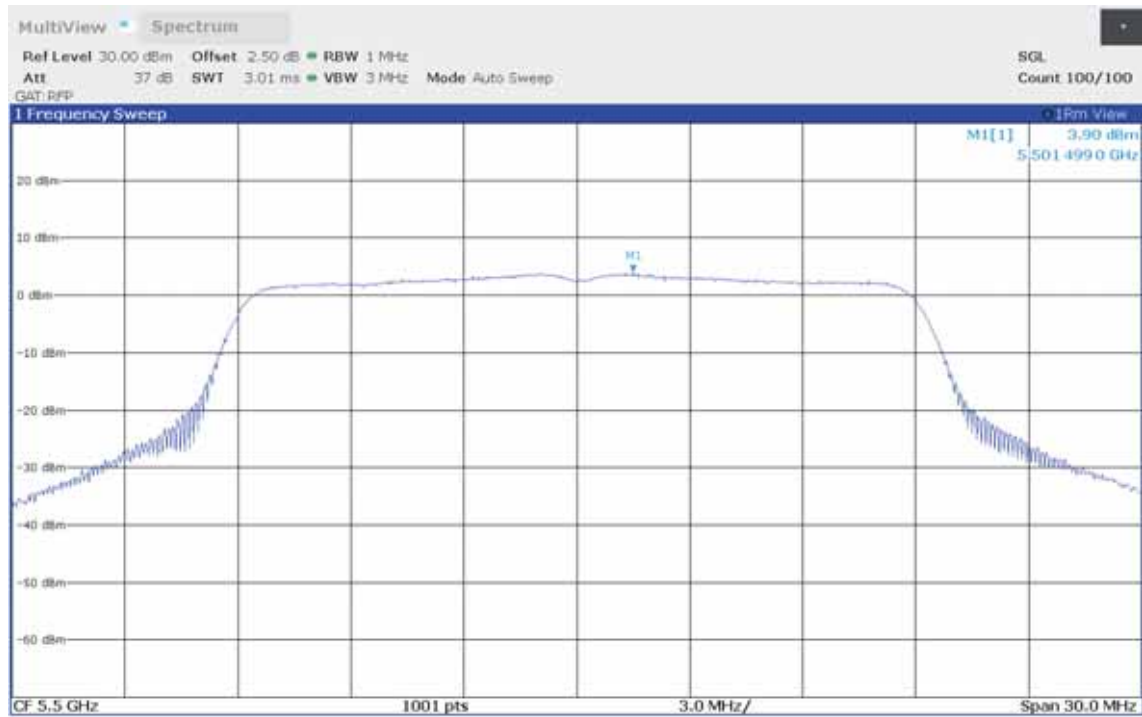


13:01:52 01.10.2021

Maximum Power Spectral Density

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 12.5; KDB 789033 v02r02, Section F
 Operational Mode: IEEE 802.11ac (VHT20), Channel: 100, 5500 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-10-01
 Number of Antenna Ports: 2
 Antenna Port(s): 1+2
 Maximum Frequency 1 [MHz]: 5501.229
 Spectral Density 1 [dBm/RBW]: 4.546
 Maximum Frequency 2 [MHz]: 5501.499
 Spectral Density 2 [dBm/RBW]: 3.901
 Total Spectral Density [dBm/RBW]: 7.246
 Resolution Bandwidth [MHz]: 1

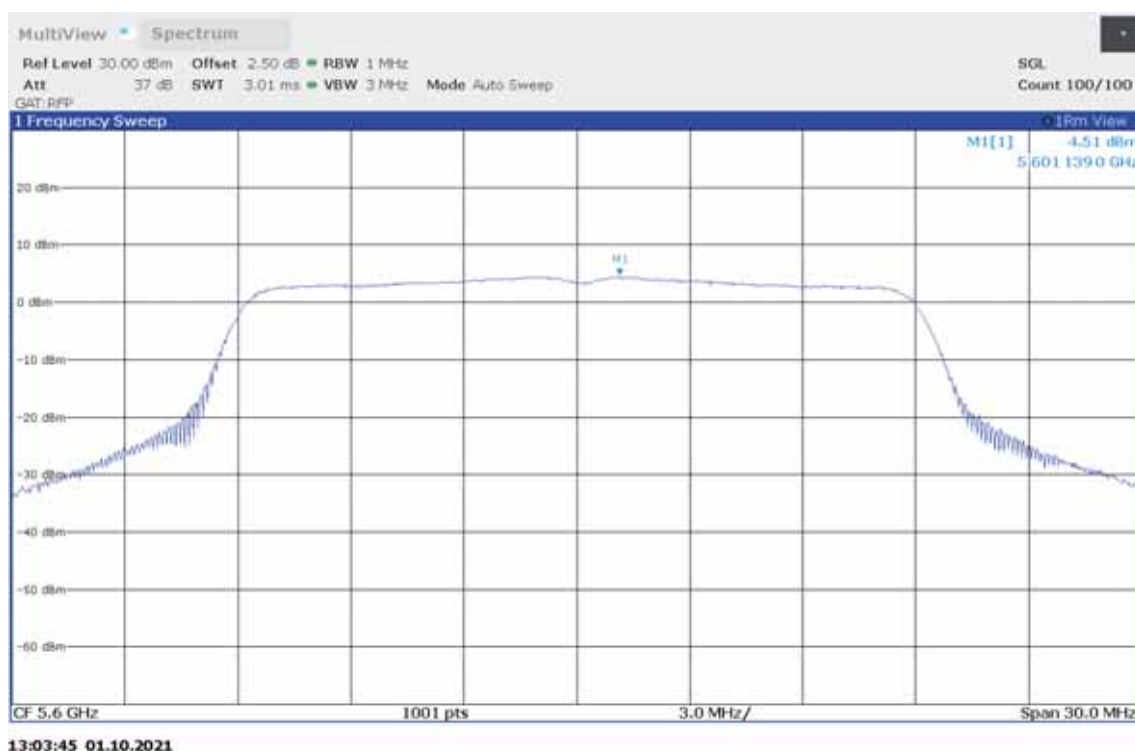


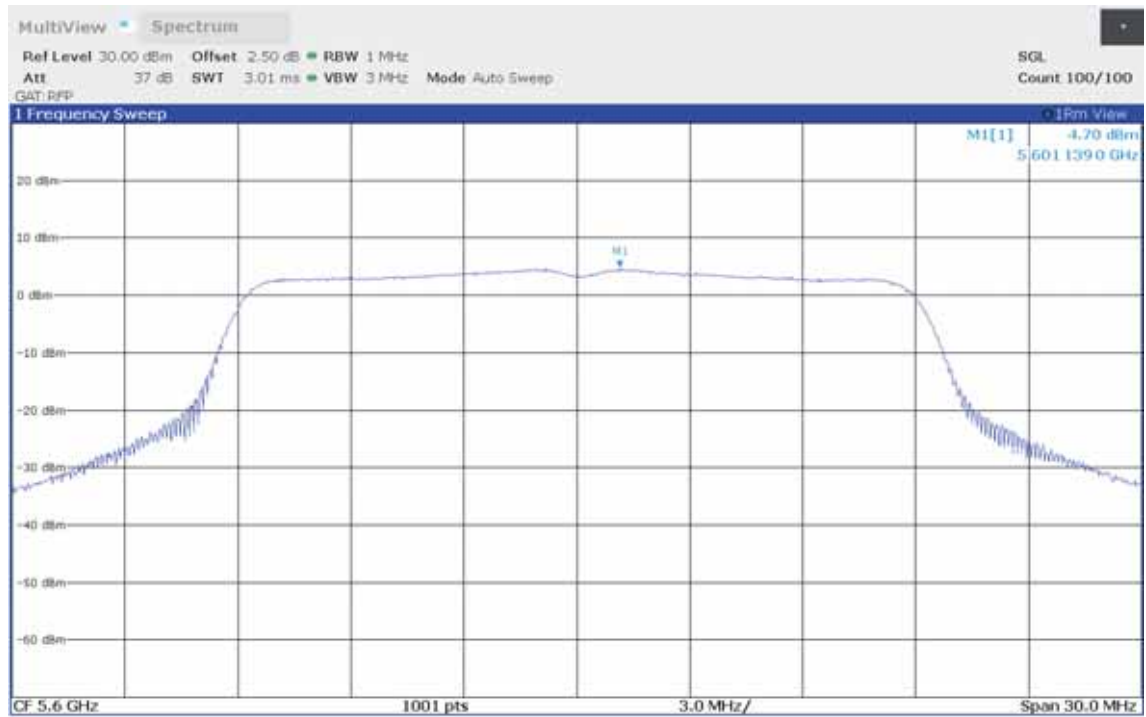


13:03:03 01.10.2021

Maximum Power Spectral Density

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 12.5; KDB 789033 v02r02, Section F
 Operational Mode: IEEE 802.11ac (VHT20), Channel: 120, 5600 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-10-01
 Number of Antenna Ports: 2
 Antenna Port(s): 1+2
 Maximum Frequency 1 [MHz]: 5601.139
 Spectral Density 1 [dBm/RBW]: 4.514
 Maximum Frequency 2 [MHz]: 5601.139
 Spectral Density 2 [dBm/RBW]: 4.703
 Total Spectral Density [dBm/RBW]: 7.620
 Resolution Bandwidth [MHz]: 1

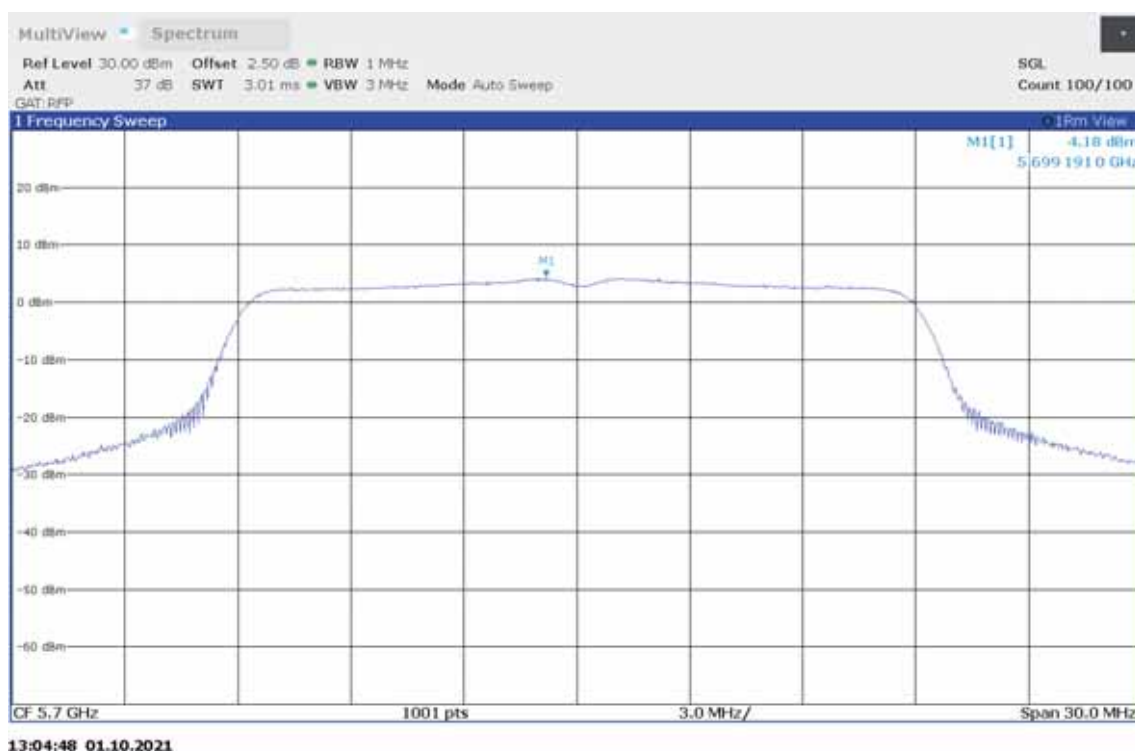




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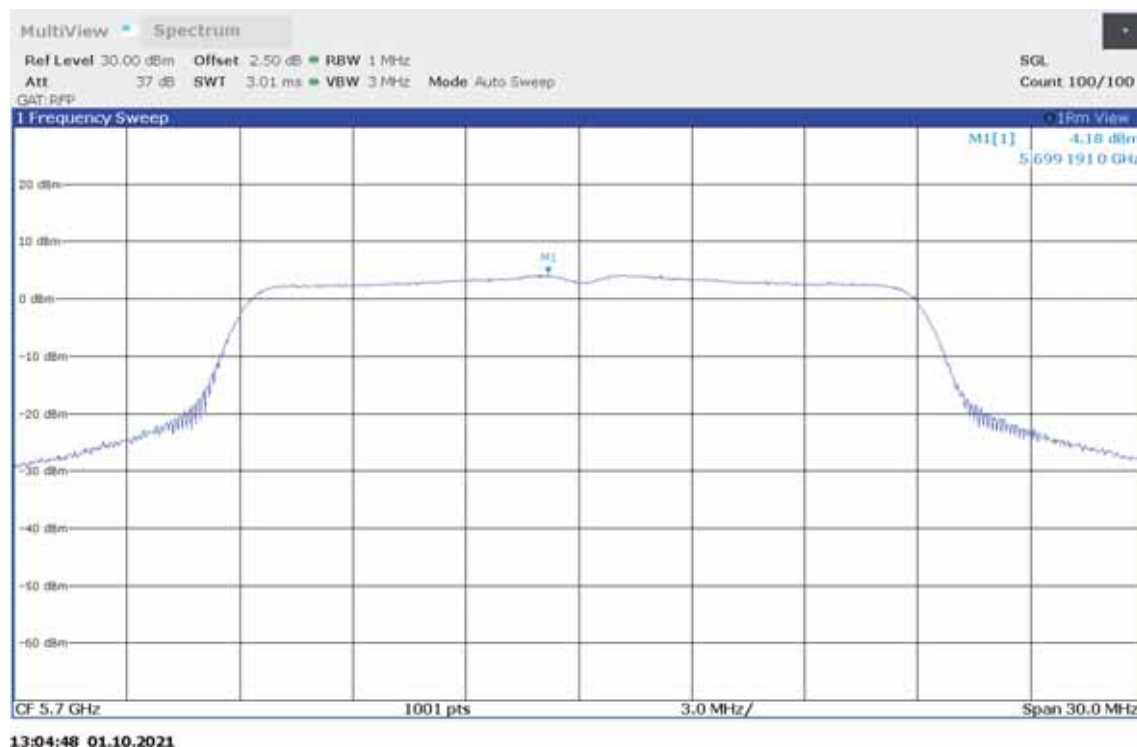
Maximum Power Spectral Density

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 12.5; KDB 789033 v02r02, Section F
 Operational Mode: IEEE 802.11ac (VHT20), Channel: 140, 5700 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-10-01
 Number of Antenna Ports: 2
 Antenna Port(s): 1+2
 Maximum Frequency 1 [MHz]: 5699.191
 Spectral Density 1 [dBm/RBW]: 4.180
 Maximum Frequency 2 [MHz]: 5698.861
 Spectral Density 2 [dBm/RBW]: 4.250
 Total Spectral Density [dBm/RBW]: 7.225
 Resolution Bandwidth [MHz]: 1



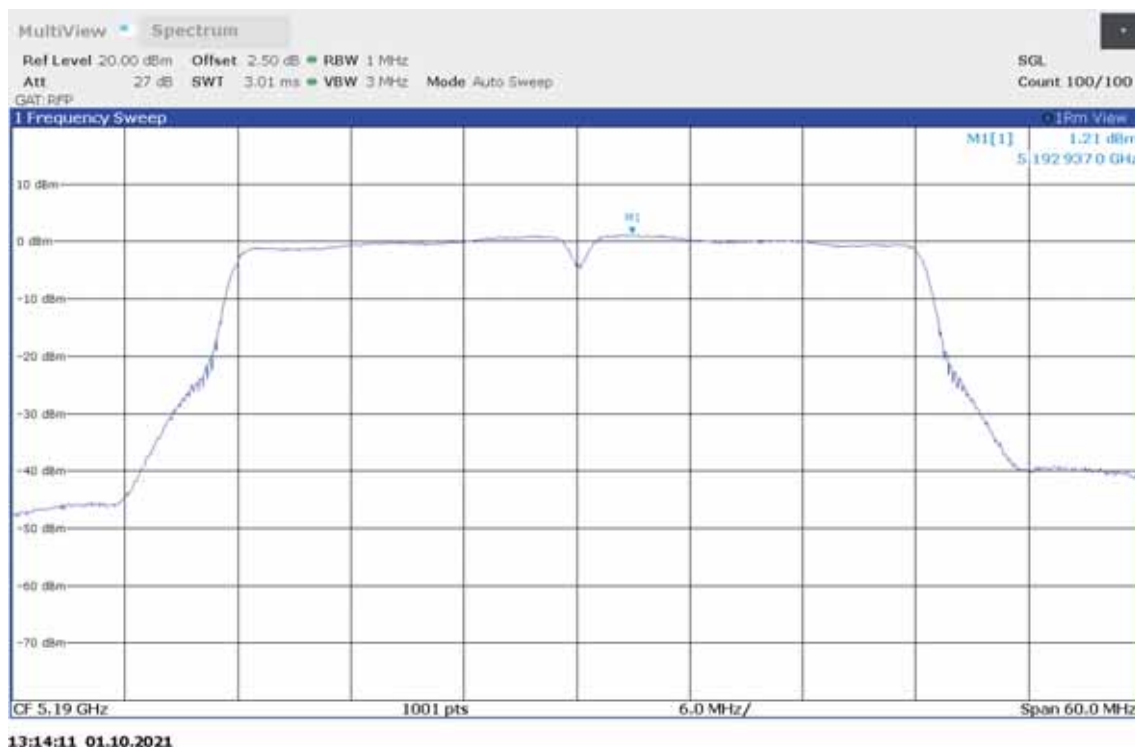
Maximum Power Spectral Density

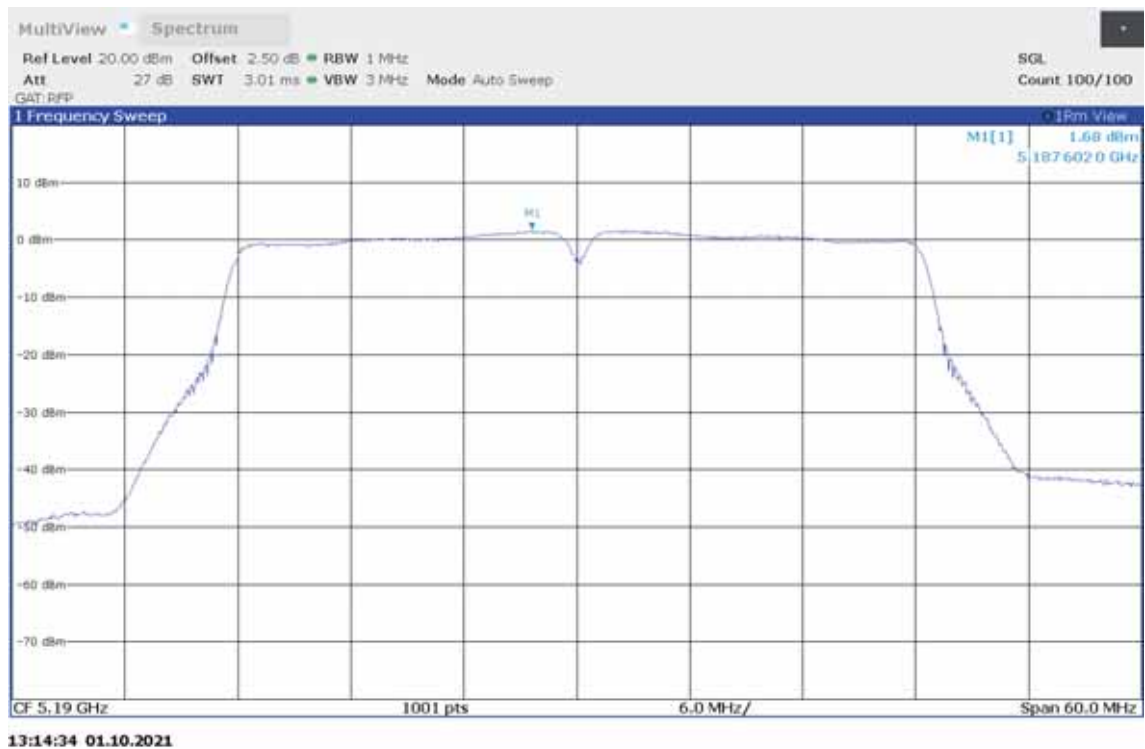
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 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 12.5; KDB 789033 v02r02, Section F
 Operational Mode: IEEE 802.11ac (VHT20), Channel: 140, 5700 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-10-01
 Number of Antenna Ports: 2
 Antenna Port(s): 1+2
 Maximum Frequency 1 [MHz]: 5699.191
 Spectral Density 1 [dBm/RBW]: 4.180
 Maximum Frequency 2 [MHz]: 5698.861
 Spectral Density 2 [dBm/RBW]: 4.250
 Total Spectral Density [dBm/RBW]: 7.225
 Resolution Bandwidth [MHz]: 1



Maximum Power Spectral Density

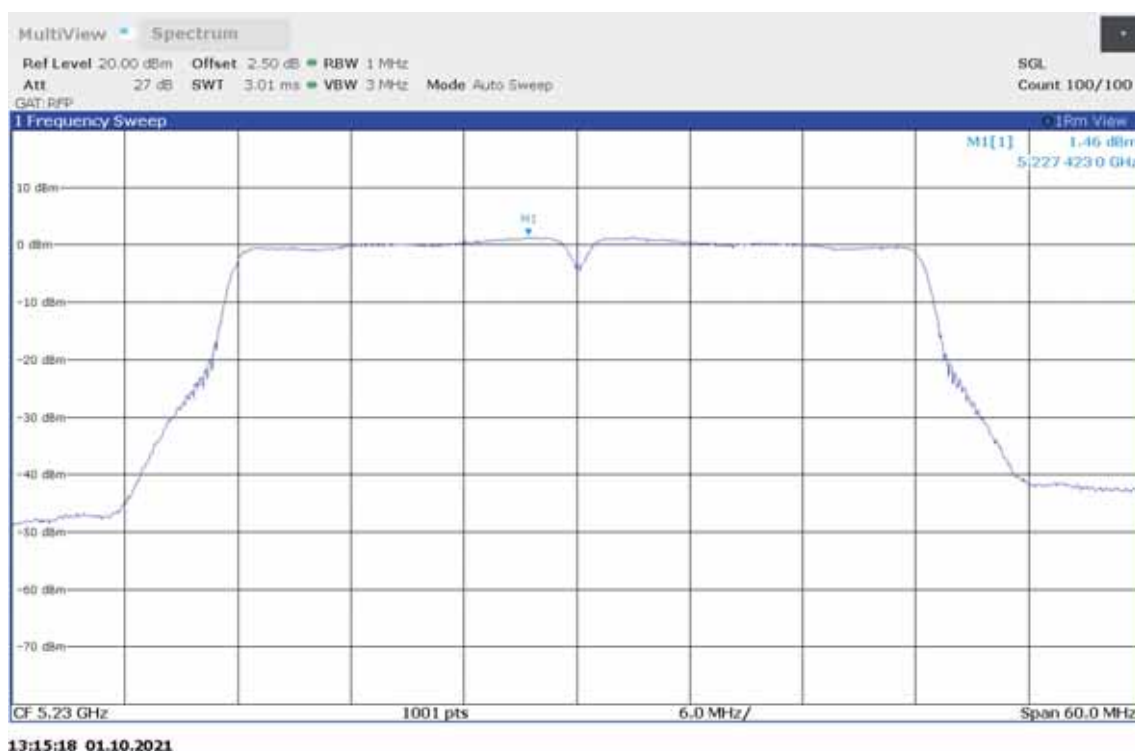
Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 12.5; KDB 789033 v02r02, Section F
 Operational Mode: IEEE 802.11ac (VHT40), Channel: 38, 5190 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-10-01
 Number of Antenna Ports: 2
 Antenna Port(s): 1+2
 Maximum Frequency 1 [MHz]: 5192.937
 Spectral Density 1 [dBm/RBW]: 1.210
 Maximum Frequency 2 [MHz]: 5187.602
 Spectral Density 2 [dBm/RBW]: 1.683
 Total Spectral Density [dBm/RBW]: 4.463
 Resolution Bandwidth [MHz]: 1

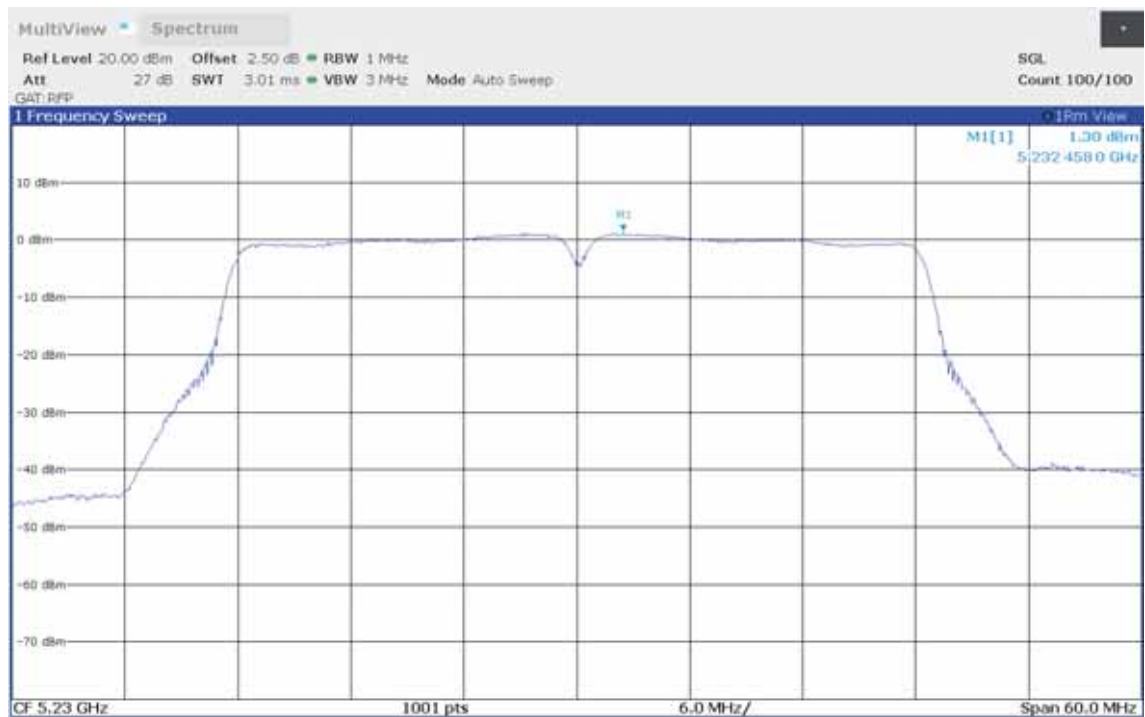




Maximum Power Spectral Density

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 12.5; KDB 789033 v02r02, Section F
 Operational Mode: IEEE 802.11ac (VHT40), Channel: 46, 5230 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-10-01
 Number of Antenna Ports: 2
 Antenna Port(s): 1+2
 Maximum Frequency 1 [MHz]: 5227.423
 Spectral Density 1 [dBm/RBW]: 1.463
 Maximum Frequency 2 [MHz]: 5232.458
 Spectral Density 2 [dBm/RBW]: 1.305
 Total Spectral Density [dBm/RBW]: 4.395
 Resolution Bandwidth [MHz]: 1

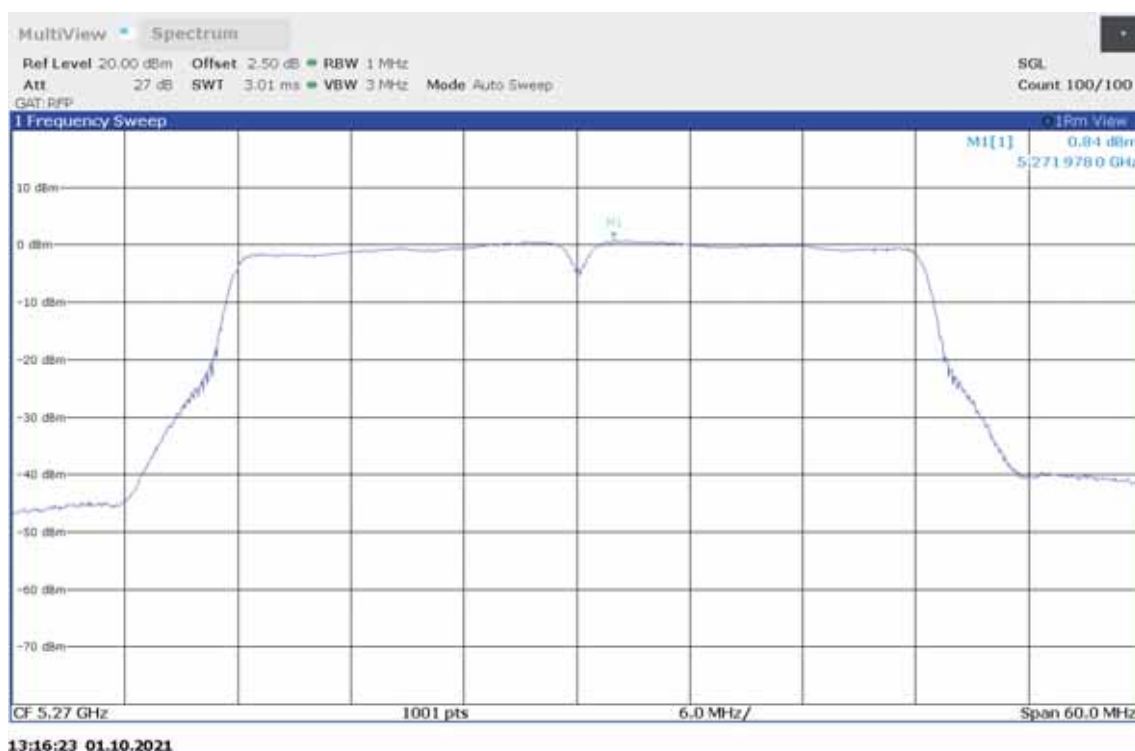


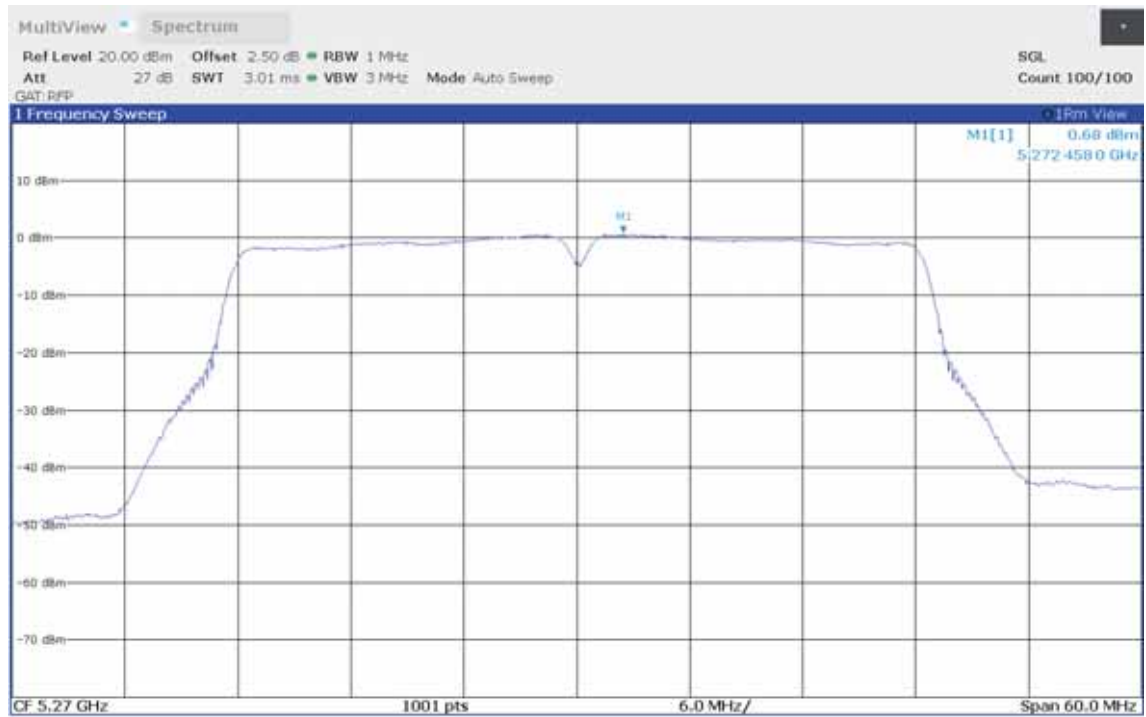


13:15:38 01.10.2021

Maximum Power Spectral Density

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 12.5; KDB 789033 v02r02, Section F
 Operational Mode: IEEE 802.11ac (VHT40), Channel: 54, 5270 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-10-01
 Number of Antenna Ports: 2
 Antenna Port(s): 1+2
 Maximum Frequency 1 [MHz]: 5271.978
 Spectral Density 1 [dBm/RBW]: 0.837
 Maximum Frequency 2 [MHz]: 5272.458
 Spectral Density 2 [dBm/RBW]: 0.682
 Total Spectral Density [dBm/RBW]: 3.770
 Resolution Bandwidth [MHz]: 1

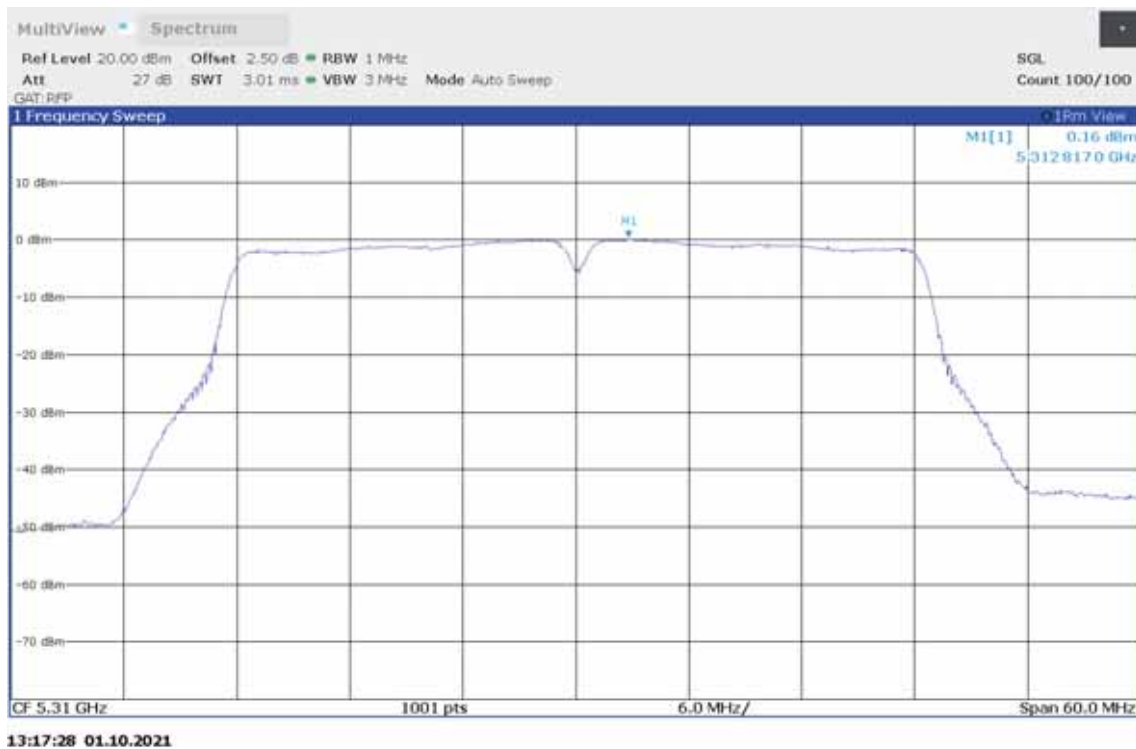


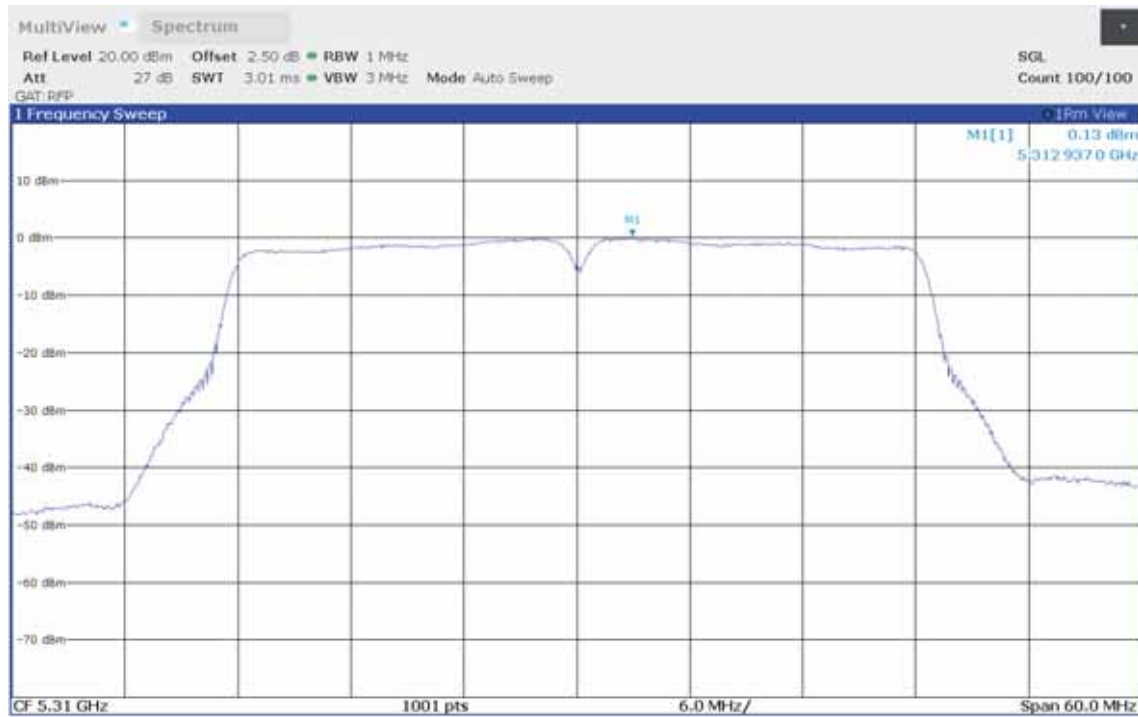


13:16:45 01.10.2021

Maximum Power Spectral Density

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 12.5; KDB 789033 v02r02, Section F
 Operational Mode: IEEE 802.11ac (VHT40), Channel: 62, 5310 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-10-01
 Number of Antenna Ports: 2
 Antenna Port(s): 1+2
 Maximum Frequency 1 [MHz]: 5312.817
 Spectral Density 1 [dBm/RBW]: 0.163
 Maximum Frequency 2 [MHz]: 5312.937
 Spectral Density 2 [dBm/RBW]: 0.132
 Total Spectral Density [dBm/RBW]: 3.158
 Resolution Bandwidth [MHz]: 1

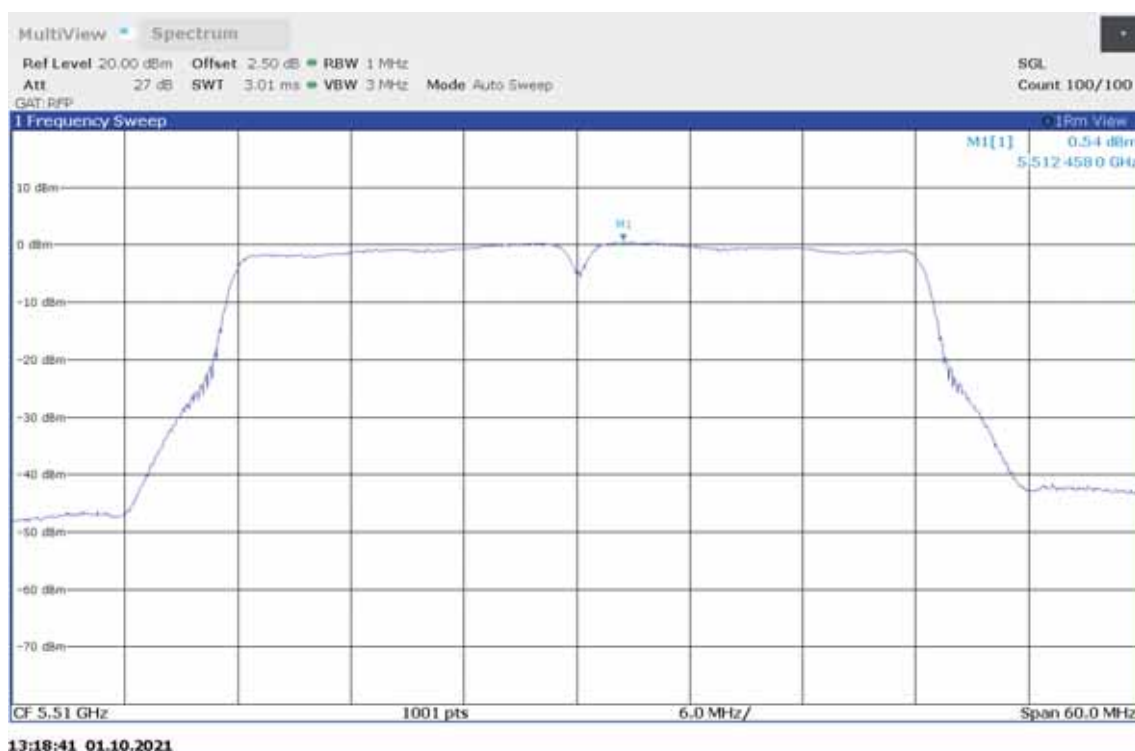


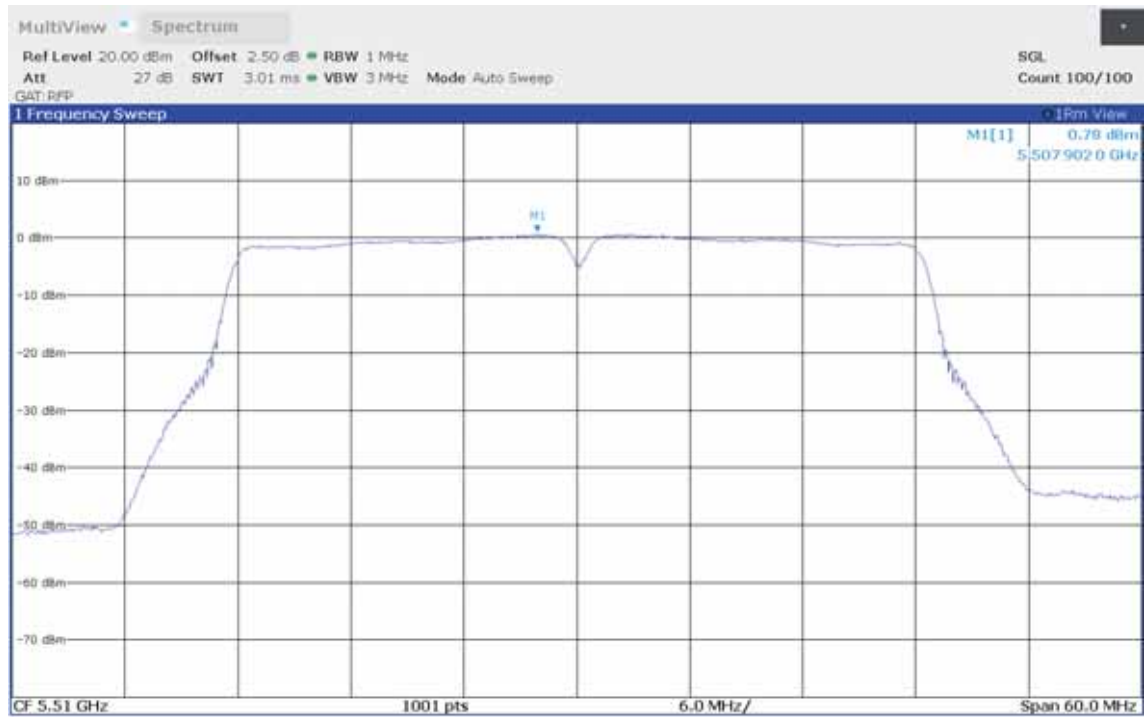


13:17:52 01.10.2021

Maximum Power Spectral Density

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 12.5; KDB 789033 v02r02, Section F
 Operational Mode: IEEE 802.11ac (VHT40), Channel: 102, 5510 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-10-01
 Number of Antenna Ports: 2
 Antenna Port(s): 1+2
 Maximum Frequency 1 [MHz]: 5512.458
 Spectral Density 1 [dBm/RBW]: 0.541
 Maximum Frequency 2 [MHz]: 5507.902
 Spectral Density 2 [dBm/RBW]: 0.785
 Total Spectral Density [dBm/RBW]: 3.675
 Resolution Bandwidth [MHz]: 1

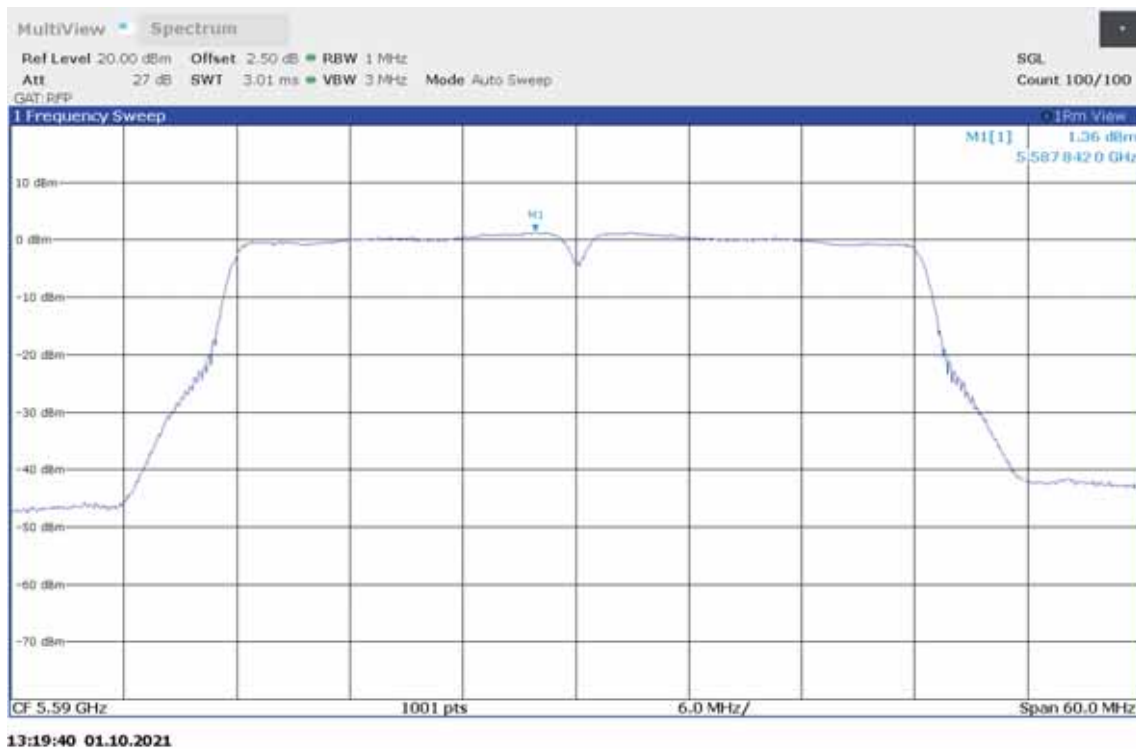


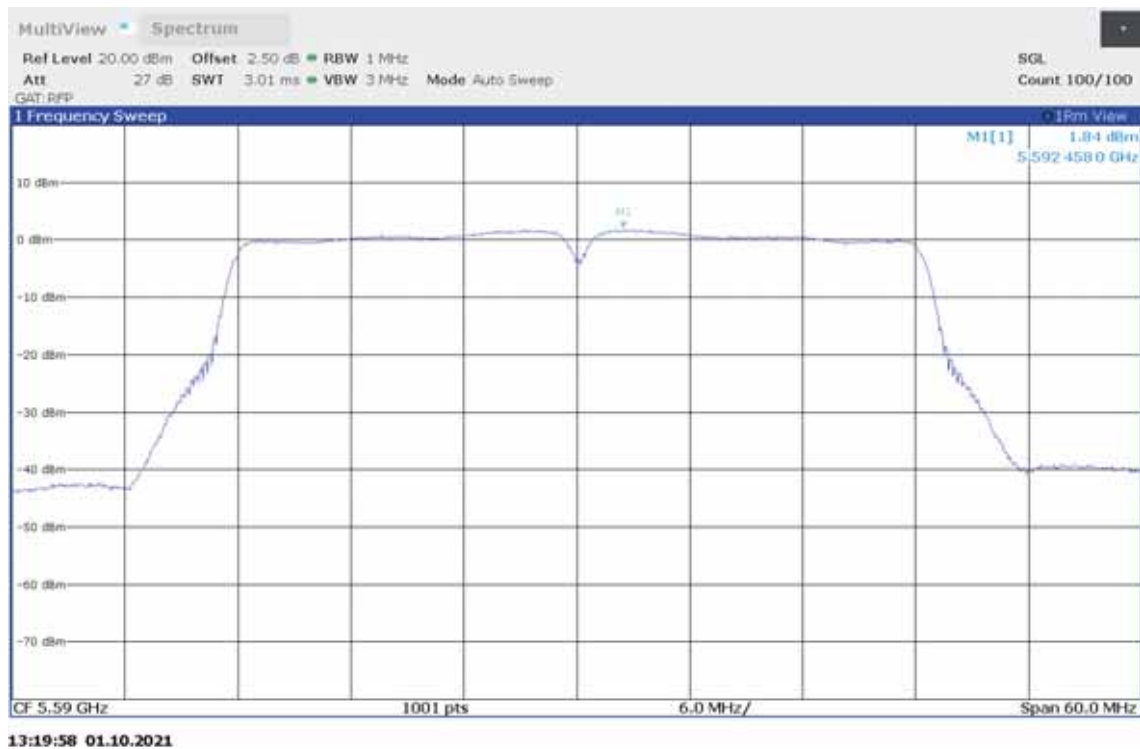


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Maximum Power Spectral Density

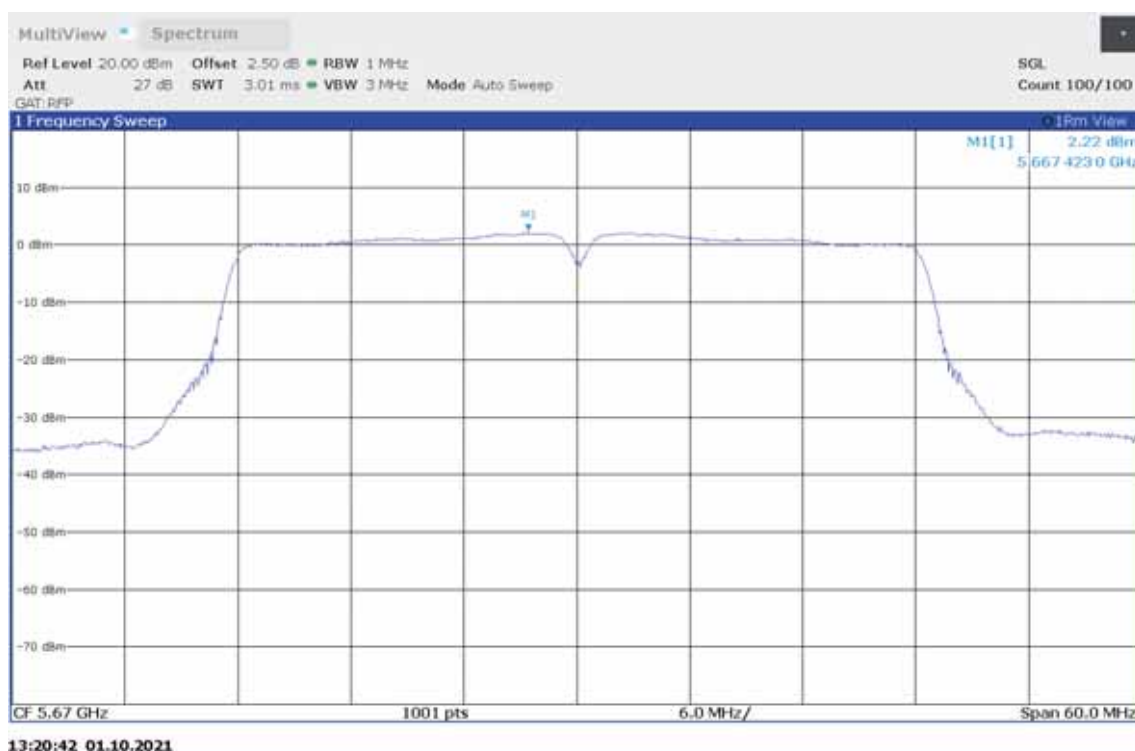
Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 12.5; KDB 789033 v02r02, Section F
 Operational Mode: IEEE 802.11ac (VHT40), Channel: 118, 5590 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-10-01
 Number of Antenna Ports: 2
 Antenna Port(s): 1+2
 Maximum Frequency 1 [MHz]: 5587.842
 Spectral Density 1 [dBm/RBW]: 1.357
 Maximum Frequency 2 [MHz]: 5592.458
 Spectral Density 2 [dBm/RBW]: 1.835
 Total Spectral Density [dBm/RBW]: 4.613
 Resolution Bandwidth [MHz]: 1





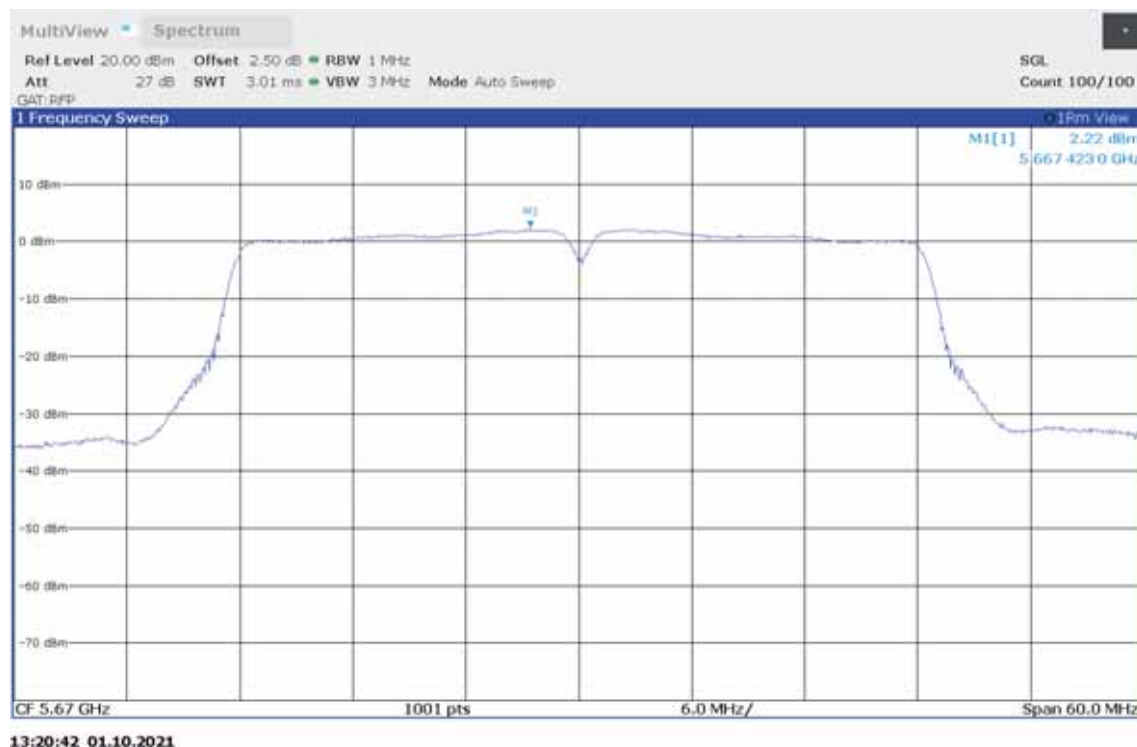
Maximum Power Spectral Density

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 12.5; KDB 789033 v02r02, Section F
 Operational Mode: IEEE 802.11ac (VHT40), Channel: 134, 5670 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-10-01
 Number of Antenna Ports: 2
 Antenna Port(s): 1+2
 Maximum Frequency 1 [MHz]: 5667.423
 Spectral Density 1 [dBm/RBW]: 2.223
 Maximum Frequency 2 [MHz]: 5666.464
 Spectral Density 2 [dBm/RBW]: 1.539
 Total Spectral Density [dBm/RBW]: 4.905
 Resolution Bandwidth [MHz]: 1



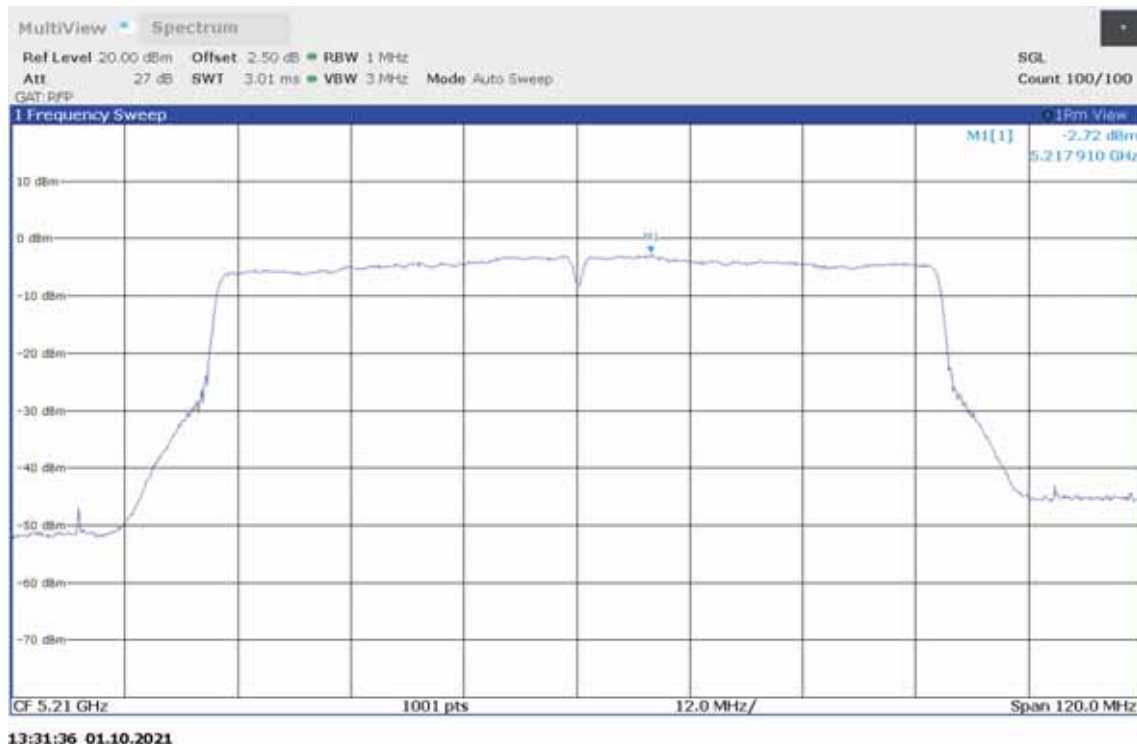
Maximum Power Spectral Density

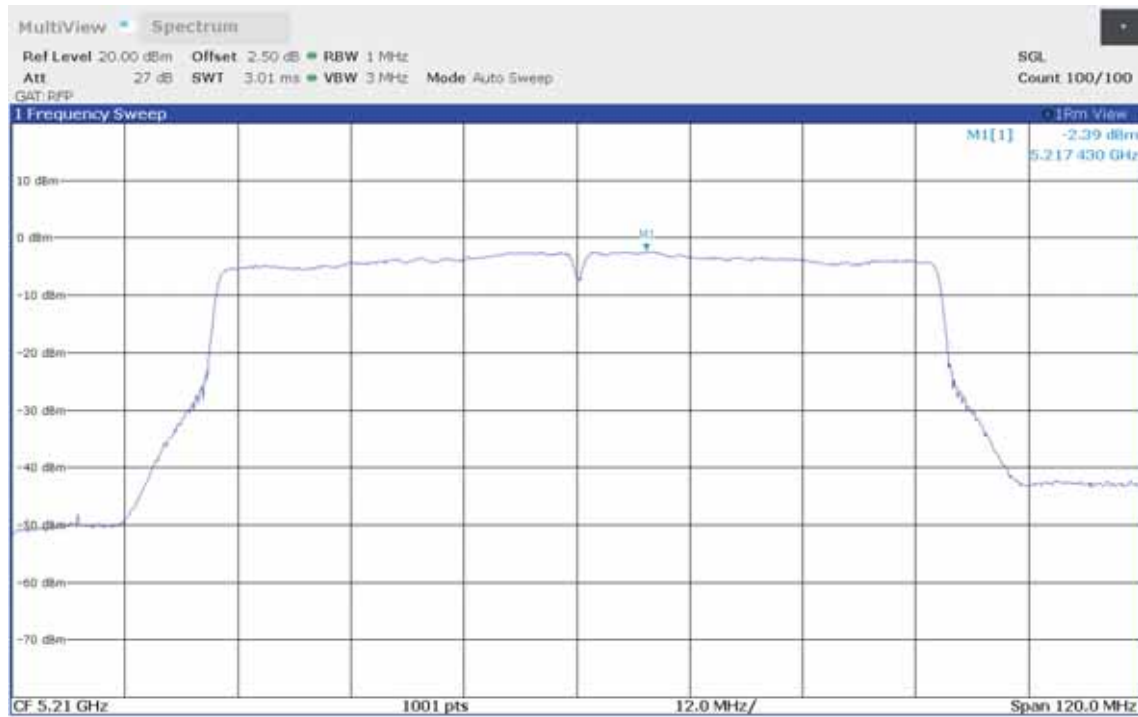
Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 12.5; KDB 789033 v02r02, Section F
 Operational Mode: IEEE 802.11ac (VHT40), Channel: 134, 5670 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-10-01
 Number of Antenna Ports: 2
 Antenna Port(s): 1+2
 Maximum Frequency 1 [MHz]: 5667.423
 Spectral Density 1 [dBm/RBW]: 2.223
 Maximum Frequency 2 [MHz]: 5666.464
 Spectral Density 2 [dBm/RBW]: 1.539
 Total Spectral Density [dBm/RBW]: 4.905
 Resolution Bandwidth [MHz]: 1



Maximum Power Spectral Density

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 12.5; KDB 789033 v02r02, Section F
 Operational Mode: IEEE 802.11ac (VHT80), Channel: 42, 5210 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-10-01
 Number of Antenna Ports: 2
 Antenna Port(s): 1+2
 Maximum Frequency 1 [MHz]: 5217.910
 Spectral Density 1 [dBm/RBW]: -2.722
 Maximum Frequency 2 [MHz]: 5217.430
 Spectral Density 2 [dBm/RBW]: -2.387
 Total Spectral Density [dBm/RBW]: 0.459
 Resolution Bandwidth [MHz]: 1

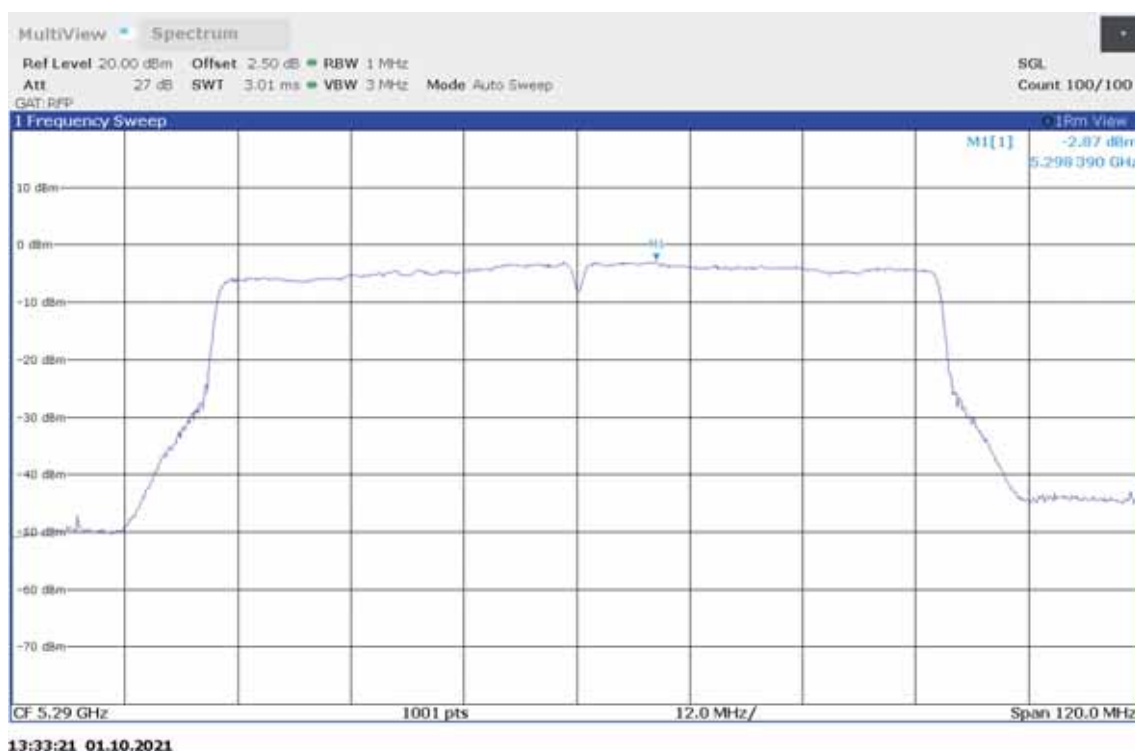


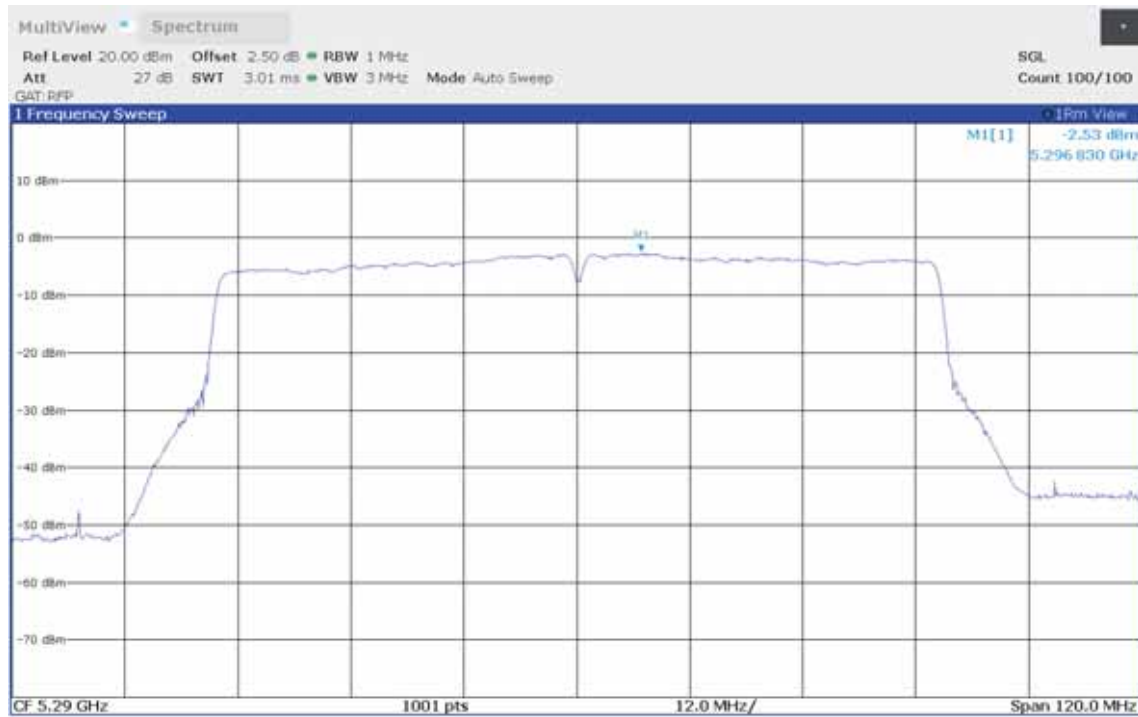


13:32:01 01.10.2021

Maximum Power Spectral Density

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 12.5; KDB 789033 v02r02, Section F
 Operational Mode: IEEE 802.11ac (VHT80), Channel: 58, 5290 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-10-01
 Number of Antenna Ports: 2
 Antenna Port(s): 1+2
 Maximum Frequency 1 [MHz]: 5298.390
 Spectral Density 1 [dBm/RBW]: -2.871
 Maximum Frequency 2 [MHz]: 5296.830
 Spectral Density 2 [dBm/RBW]: -2.525
 Total Spectral Density [dBm/RBW]: 0.316
 Resolution Bandwidth [MHz]: 1

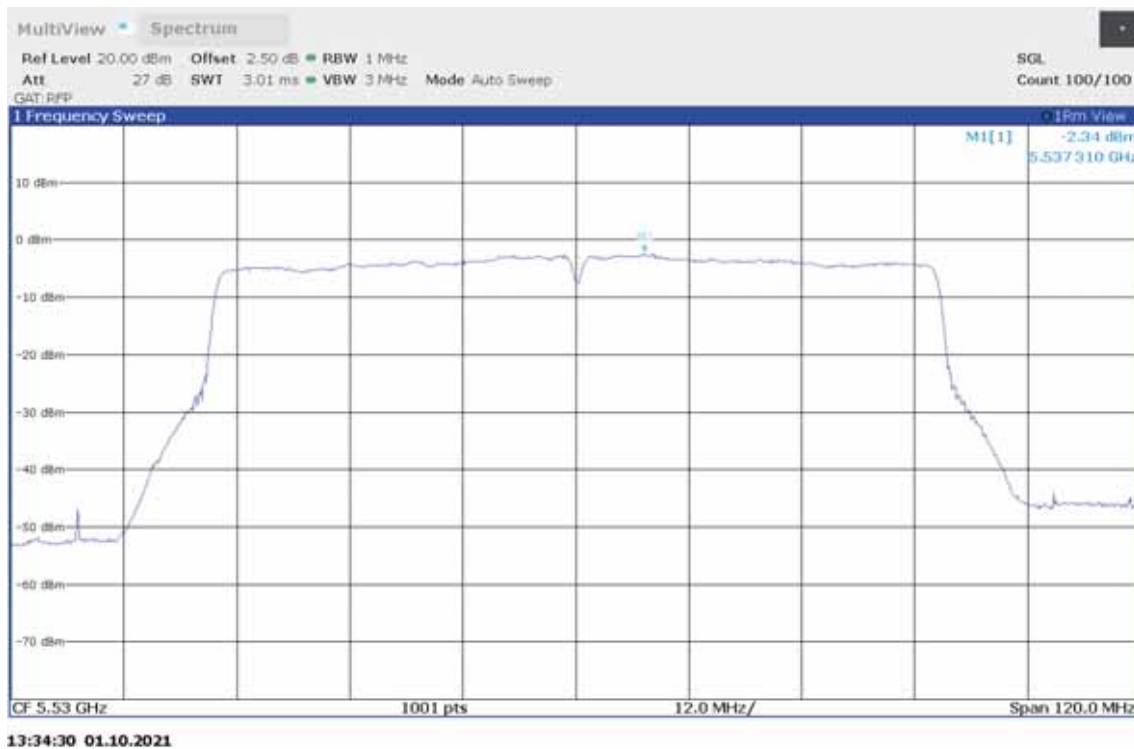


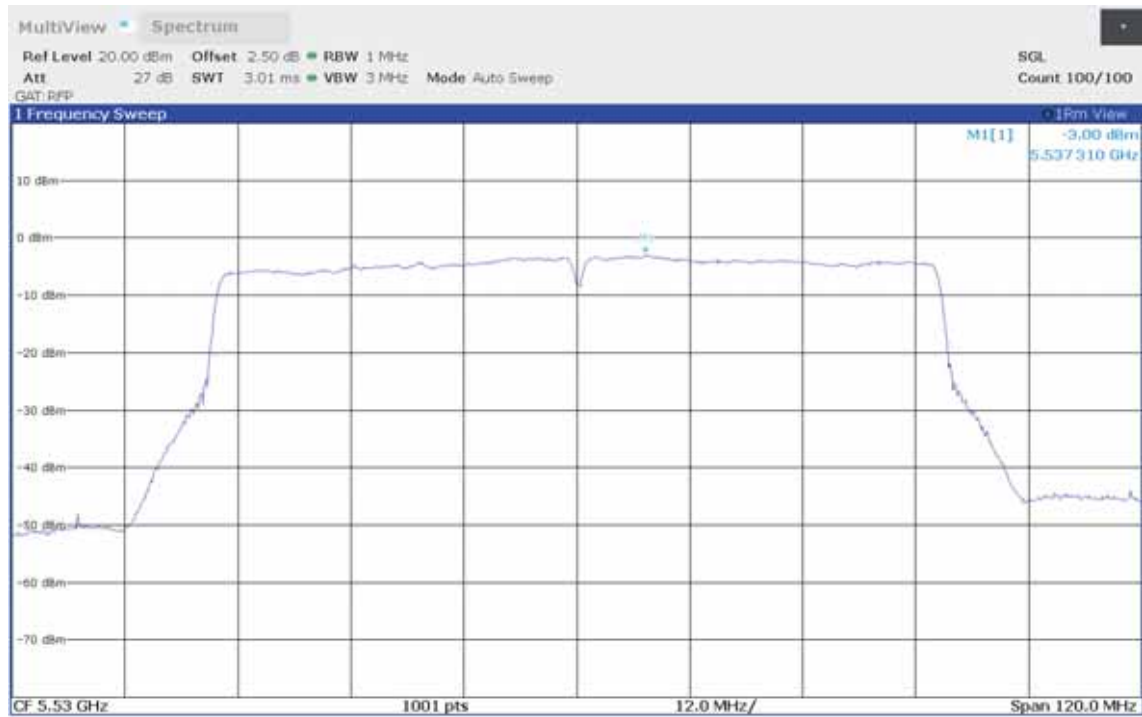


13:33:39 01.10.2021

Maximum Power Spectral Density

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 12.5; KDB 789033 v02r02, Section F
 Operational Mode: IEEE 802.11ac (VHT80), Channel: 106, 5530 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-10-01
 Number of Antenna Ports: 2
 Antenna Port(s): 1+2
 Maximum Frequency 1 [MHz]: 5537.310
 Spectral Density 1 [dBm/RBW]: -2.337
 Maximum Frequency 2 [MHz]: 5537.310
 Spectral Density 2 [dBm/RBW]: -3.005
 Total Spectral Density [dBm/RBW]: 0.352
 Resolution Bandwidth [MHz]: 1

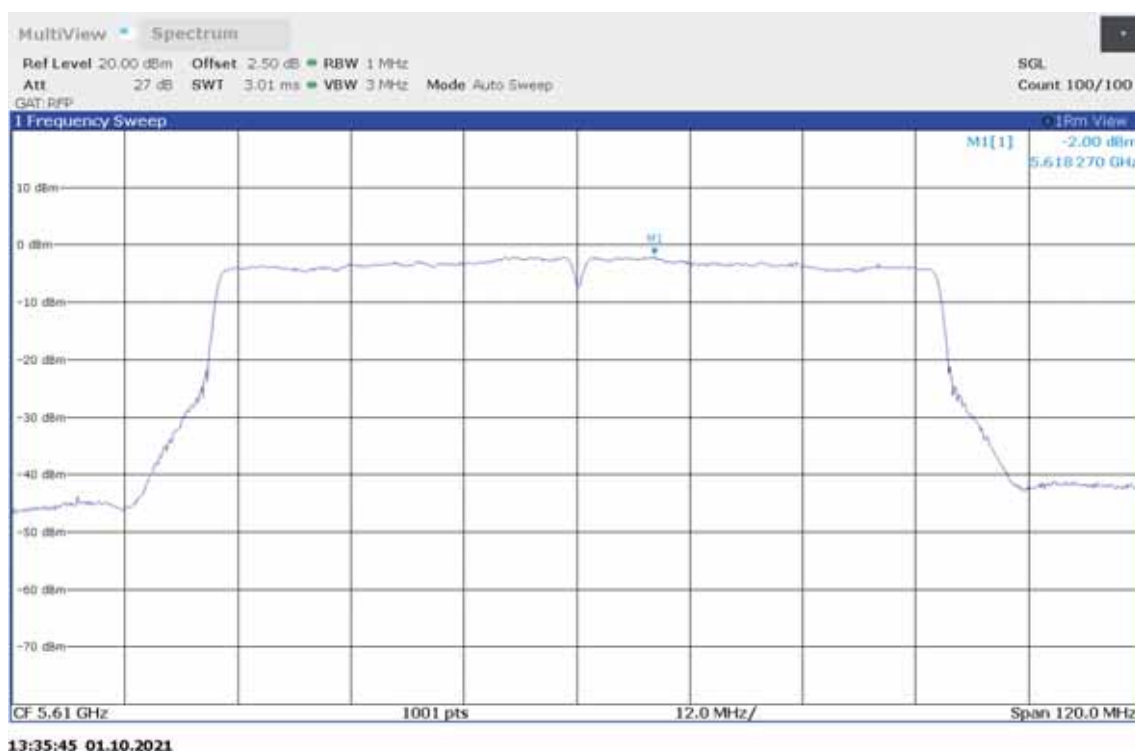




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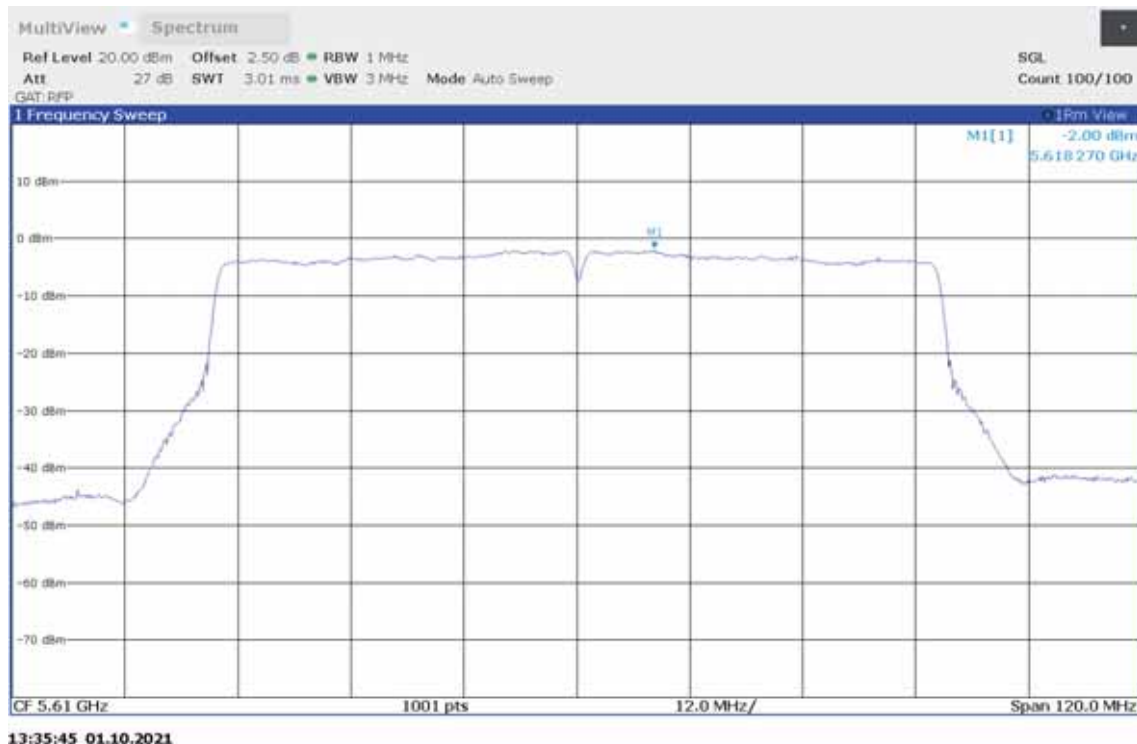
Maximum Power Spectral Density

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 12.5; KDB 789033 v02r02, Section F
 Operational Mode: IEEE 802.11ac (VHT80), Channel: 122, 5610 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-10-01
 Number of Antenna Ports: 2
 Antenna Port(s): 1+2
 Maximum Frequency 1 [MHz]: 5618.270
 Spectral Density 1 [dBm/RBW]: -2.003
 Maximum Frequency 2 [MHz]: 5614.560
 Spectral Density 2 [dBm/RBW]: -2.557
 Total Spectral Density [dBm/RBW]: 0.739
 Resolution Bandwidth [MHz]: 1



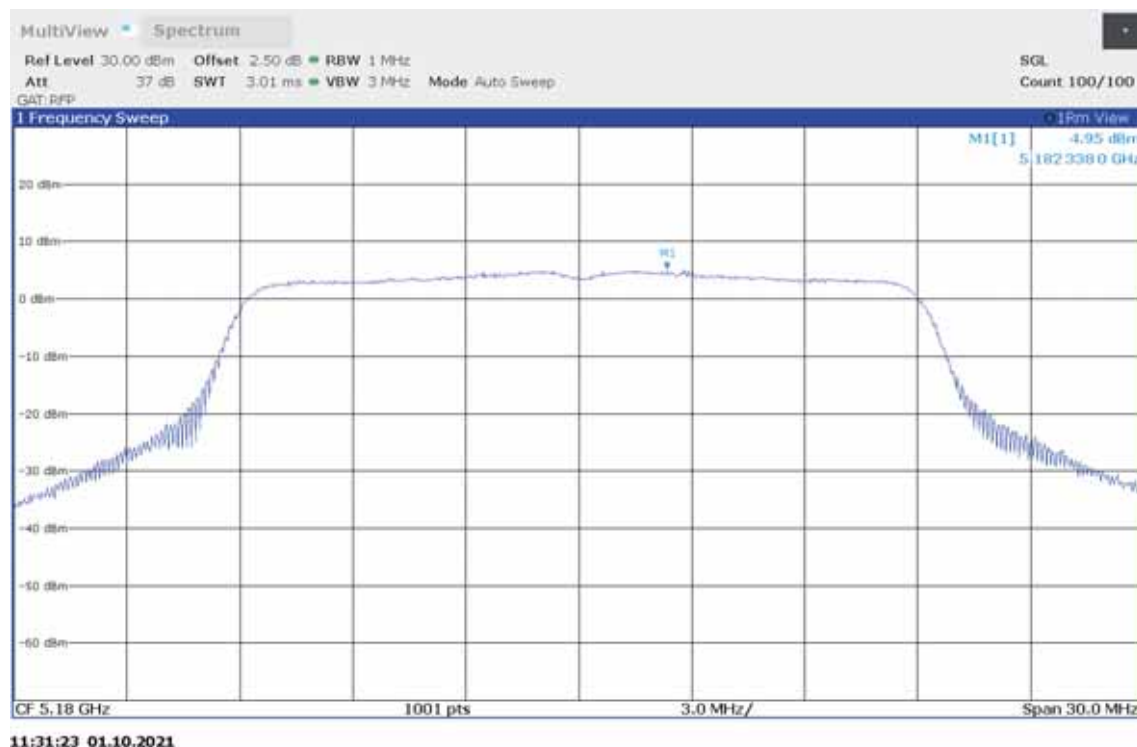
Maximum Power Spectral Density

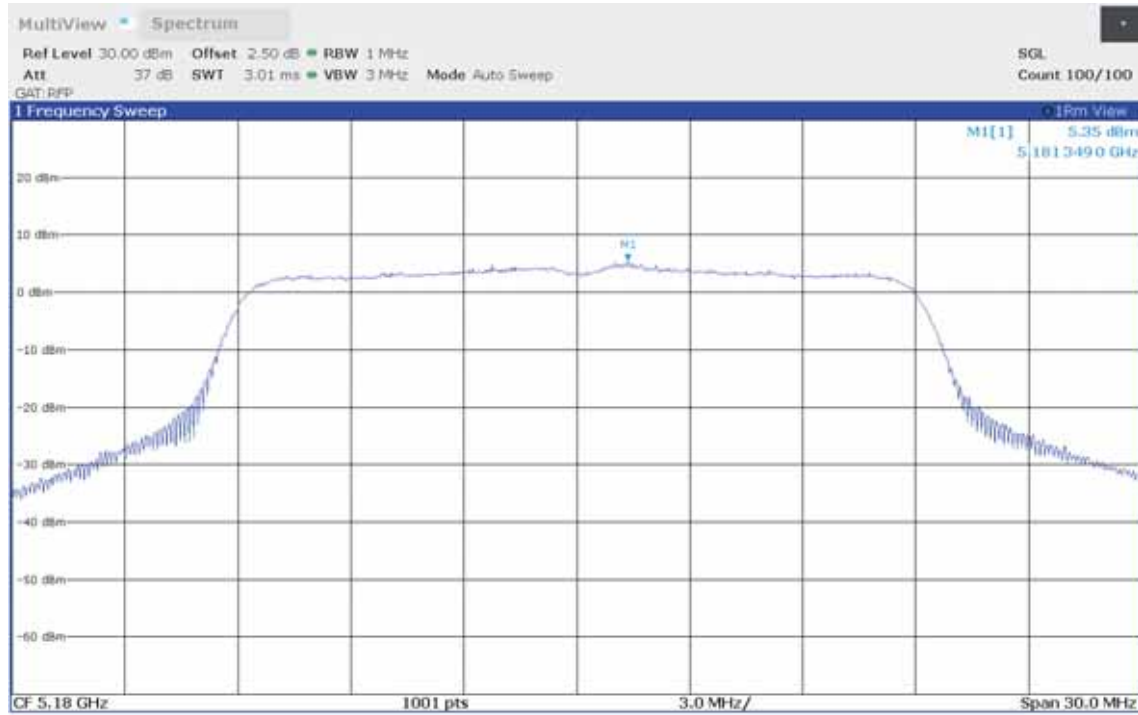
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 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 12.5; KDB 789033 v02r02, Section F
 Operational Mode: IEEE 802.11ac (VHT80), Channel: 122, 5610 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-10-01
 Number of Antenna Ports: 2
 Antenna Port(s): 1+2
 Maximum Frequency 1 [MHz]: 5618.270
 Spectral Density 1 [dBm/RBW]: -2.003
 Maximum Frequency 2 [MHz]: 5614.560
 Spectral Density 2 [dBm/RBW]: -2.557
 Total Spectral Density [dBm/RBW]: 0.739
 Resolution Bandwidth [MHz]: 1



Maximum Power Spectral Density

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 12.5; KDB 789033 v02r02, Section F
 Operational Mode: IEEE 802.11n (HT20), Channel: 36, 5180 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-10-01
 Number of Antenna Ports: 2
 Antenna Port(s): 1+2
 Maximum Frequency 1 [MHz]: 5182.338
 Spectral Density 1 [dBm/RBW]: 4.950
 Maximum Frequency 2 [MHz]: 5181.349
 Spectral Density 2 [dBm/RBW]: 5.348
 Total Spectral Density [dBm/RBW]: 8.164
 Resolution Bandwidth [MHz]: 1

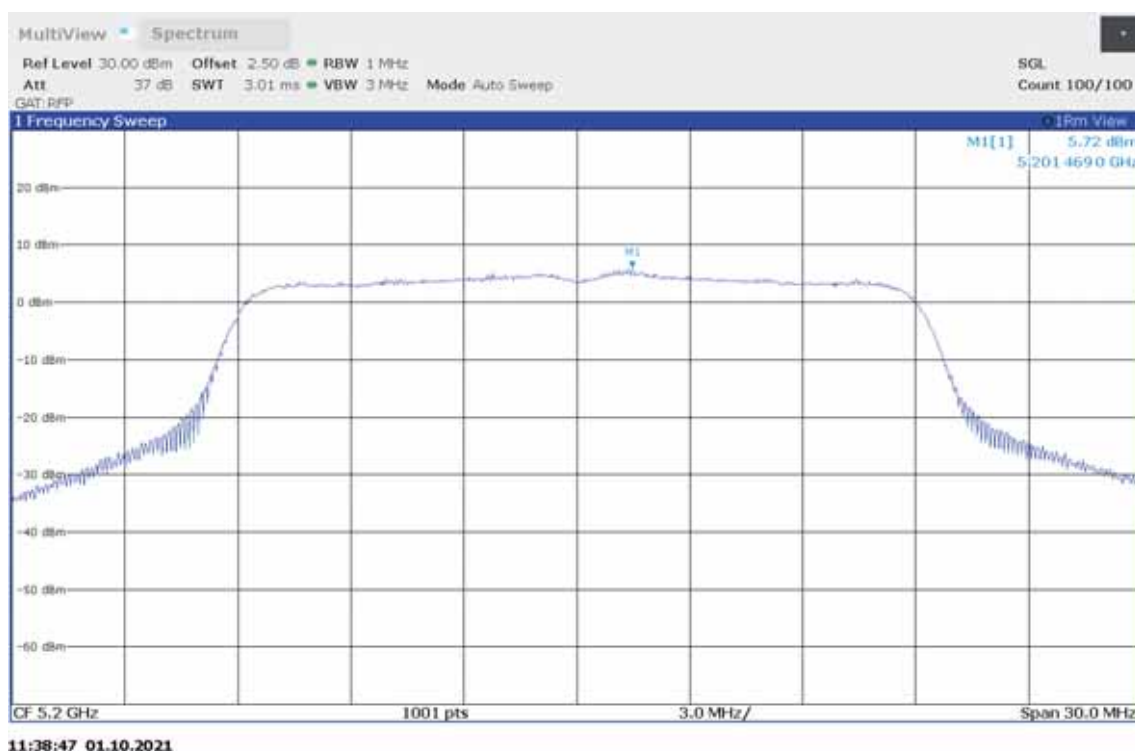


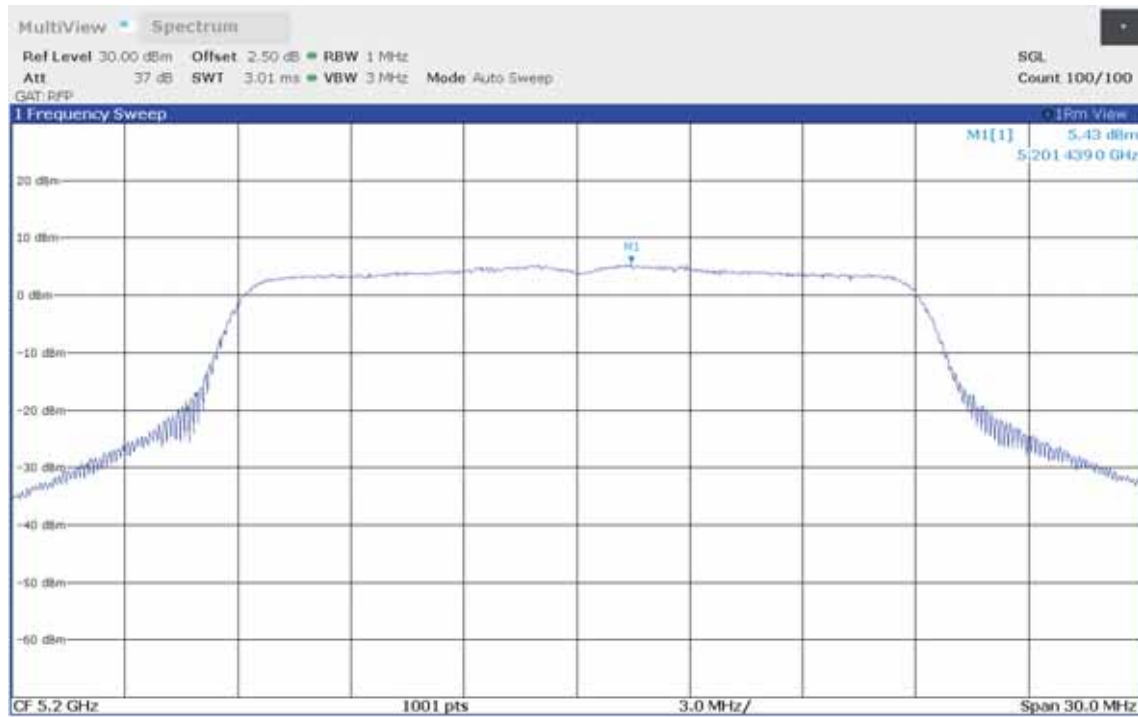


11:33:55 01.10.2021

Maximum Power Spectral Density

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 12.5; KDB 789033 v02r02, Section F
 Operational Mode: IEEE 802.11n (HT20), Channel: 40, 5200 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-10-01
 Number of Antenna Ports: 2
 Antenna Port(s): 1+2
 Maximum Frequency 1 [MHz]: 5201.469
 Spectral Density 1 [dBm/RBW]: 5.716
 Maximum Frequency 2 [MHz]: 5201.439
 Spectral Density 2 [dBm/RBW]: 5.429
 Total Spectral Density [dBm/RBW]: 8.585
 Resolution Bandwidth [MHz]: 1

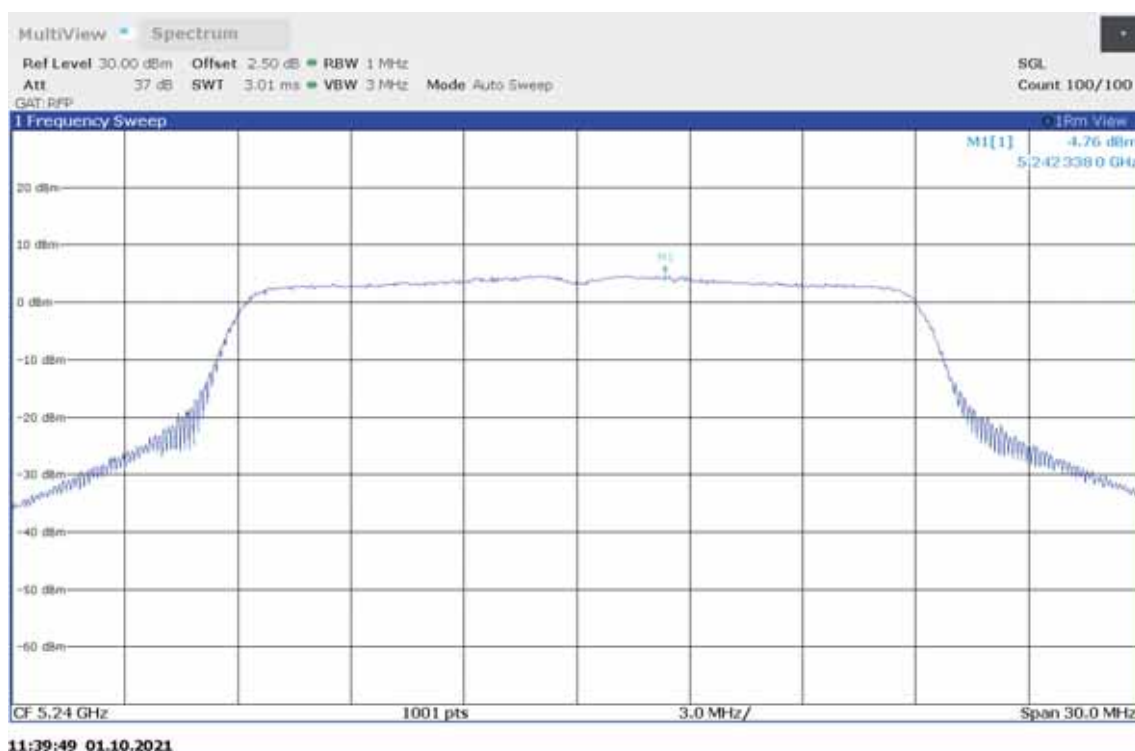


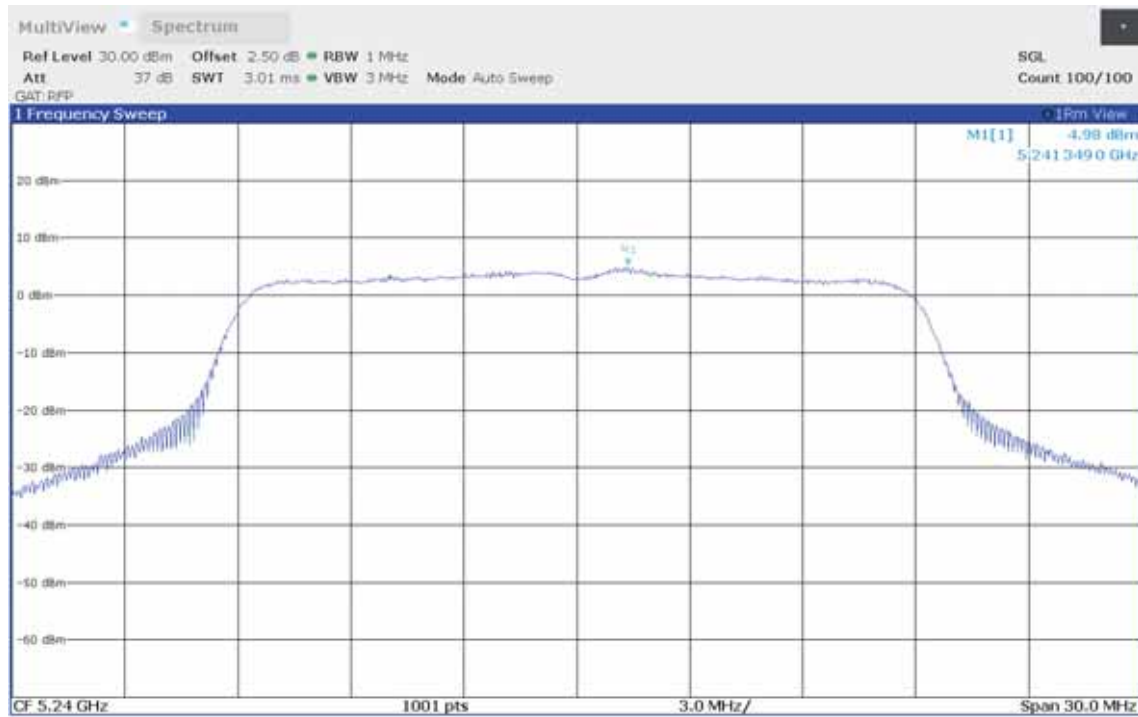


11:39:09 01.10.2021

Maximum Power Spectral Density

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 12.5; KDB 789033 v02r02, Section F
 Operational Mode: IEEE 802.11n (HT20), Channel: 48, 5240 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-10-01
 Number of Antenna Ports: 2
 Antenna Port(s): 1+2
 Maximum Frequency 1 [MHz]: 5242.338
 Spectral Density 1 [dBm/RBW]: 4.761
 Maximum Frequency 2 [MHz]: 5241.349
 Spectral Density 2 [dBm/RBW]: 4.976
 Total Spectral Density [dBm/RBW]: 7.880
 Resolution Bandwidth [MHz]: 1

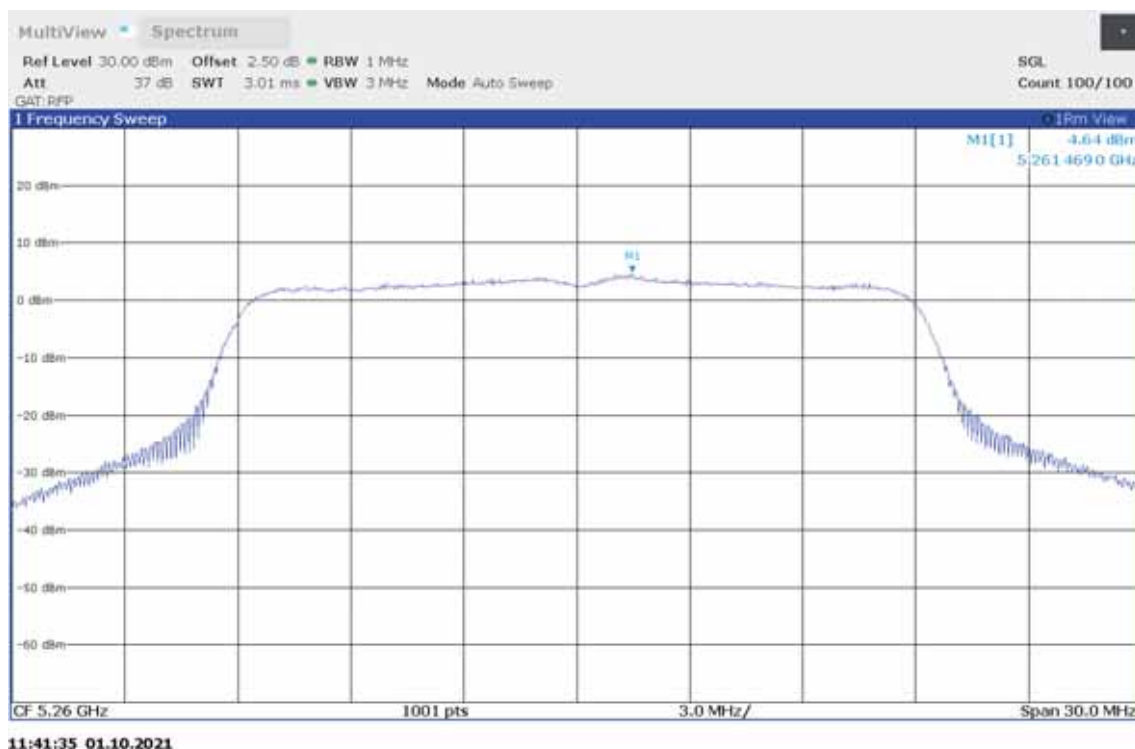


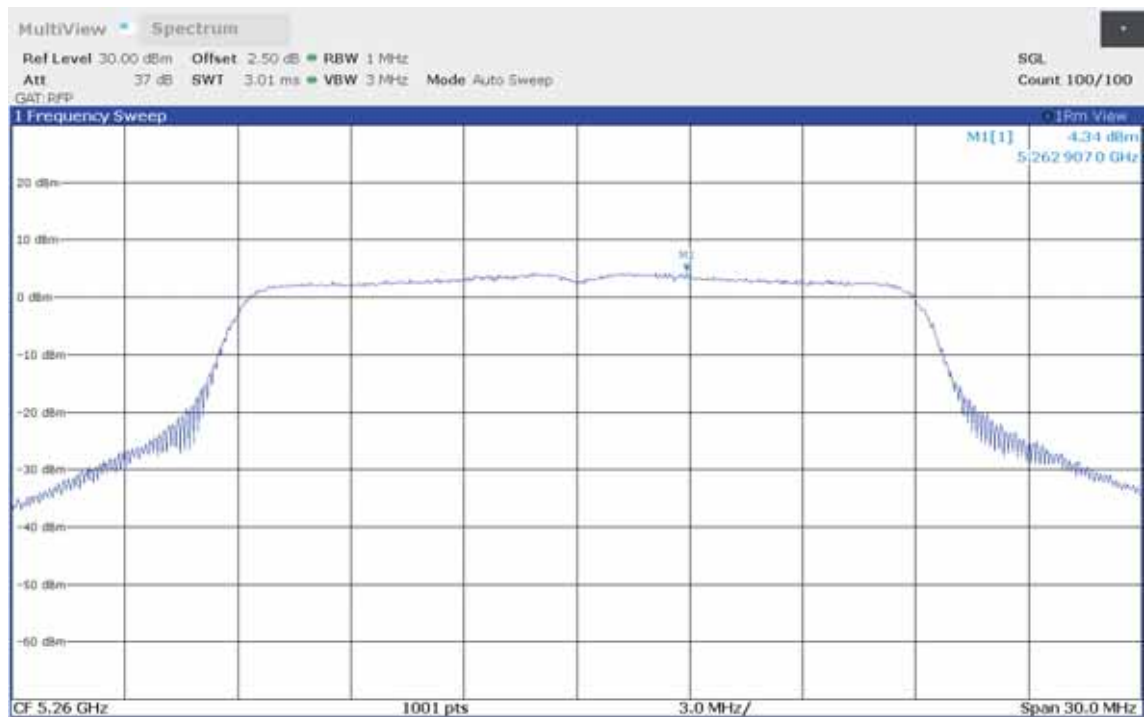


11:40:38 01.10.2021

Maximum Power Spectral Density

Project Number:	G0M-2011-9488
Applicant:	Leica Geosystems AG
Model Description:	UAV 3D measurement device
Model:	BLK2FLY
Test Sample ID:	34982
Reference Standards:	FCC 15.407, RSS-247
Reference Method:	ANSI C63.10:2013, Section 12.5; KDB 789033 v02r02, Section F
Operational Mode:	IEEE 802.11n (HT20), Channel: 52, 5260 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Toralf Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2021-10-01
Number of Antenna Ports:	2
Antenna Port(s):	1+2
Maximum Frequency 1 [MHz]:	5261.469
Spectral Density 1 [dBm/RBW]:	4.644
Maximum Frequency 2 [MHz]:	5262.907
Spectral Density 2 [dBm/RBW]:	4.342
Total Spectral Density [dBm/RBW]:	7.506
Resolution Bandwidth [MHz]:	1

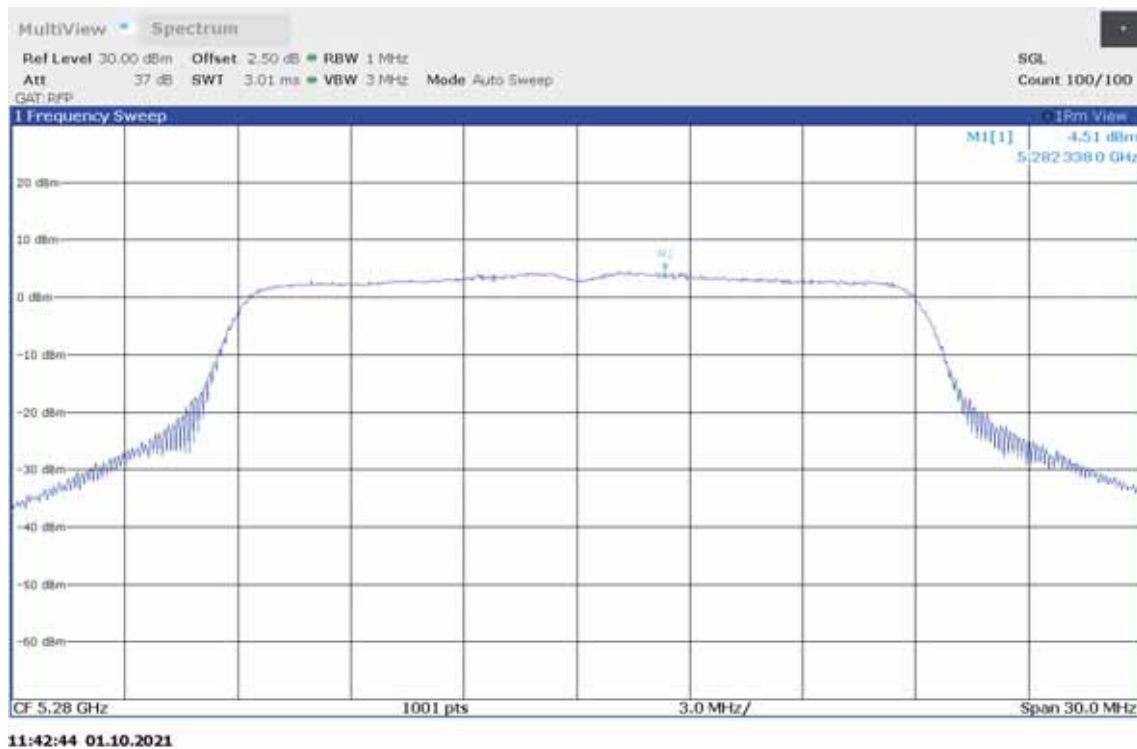


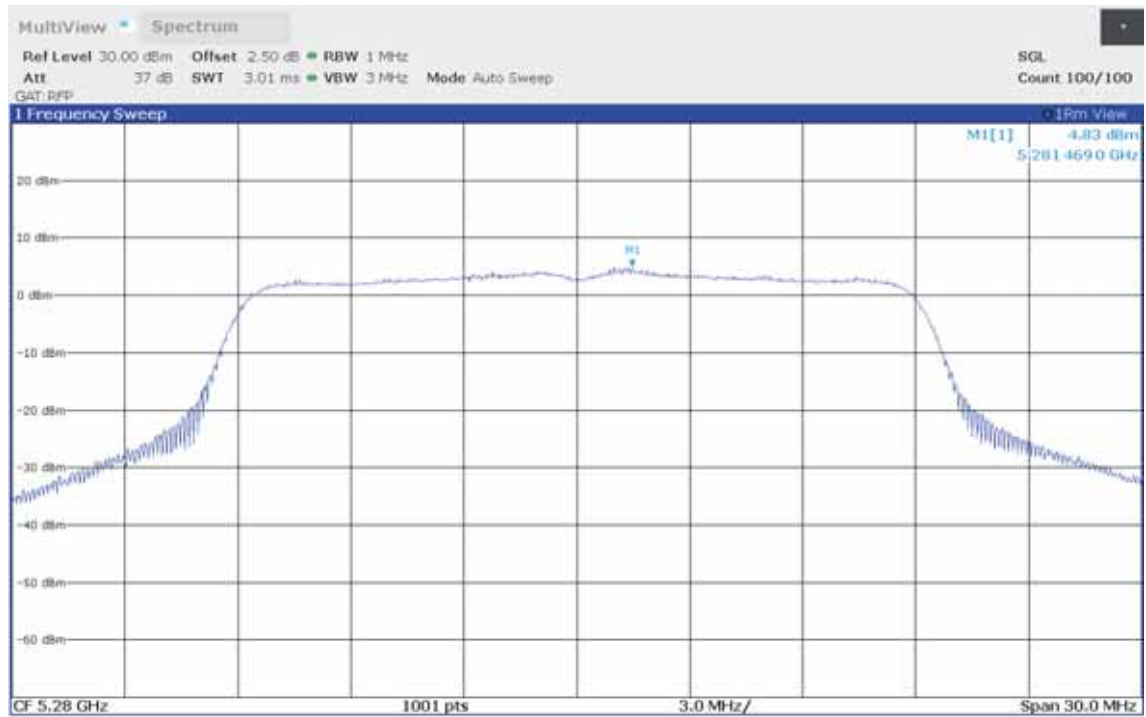


11:41:59 01.10.2021

Maximum Power Spectral Density

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 12.5; KDB 789033 v02r02, Section F
 Operational Mode: IEEE 802.11n (HT20), Channel: 56, 5280 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-10-01
 Number of Antenna Ports: 2
 Antenna Port(s): 1+2
 Maximum Frequency 1 [MHz]: 5282.338
 Spectral Density 1 [dBm/RBW]: 4.506
 Maximum Frequency 2 [MHz]: 5281.469
 Spectral Density 2 [dBm/RBW]: 4.827
 Total Spectral Density [dBm/RBW]: 7.680
 Resolution Bandwidth [MHz]: 1

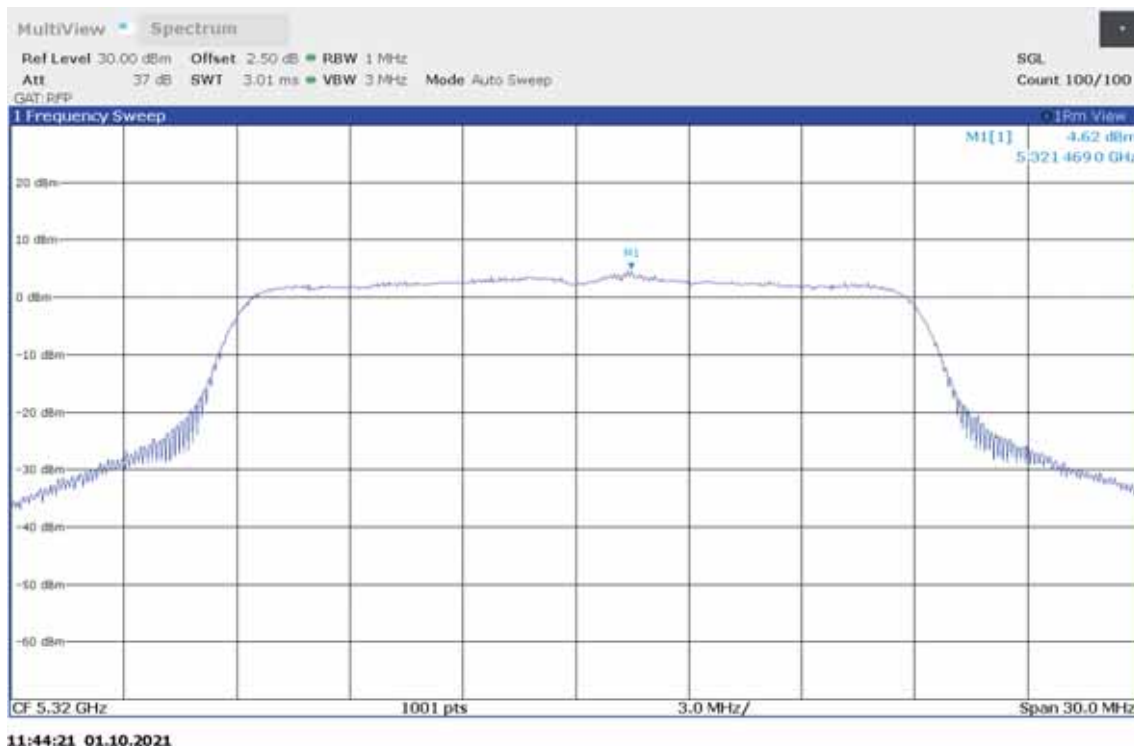


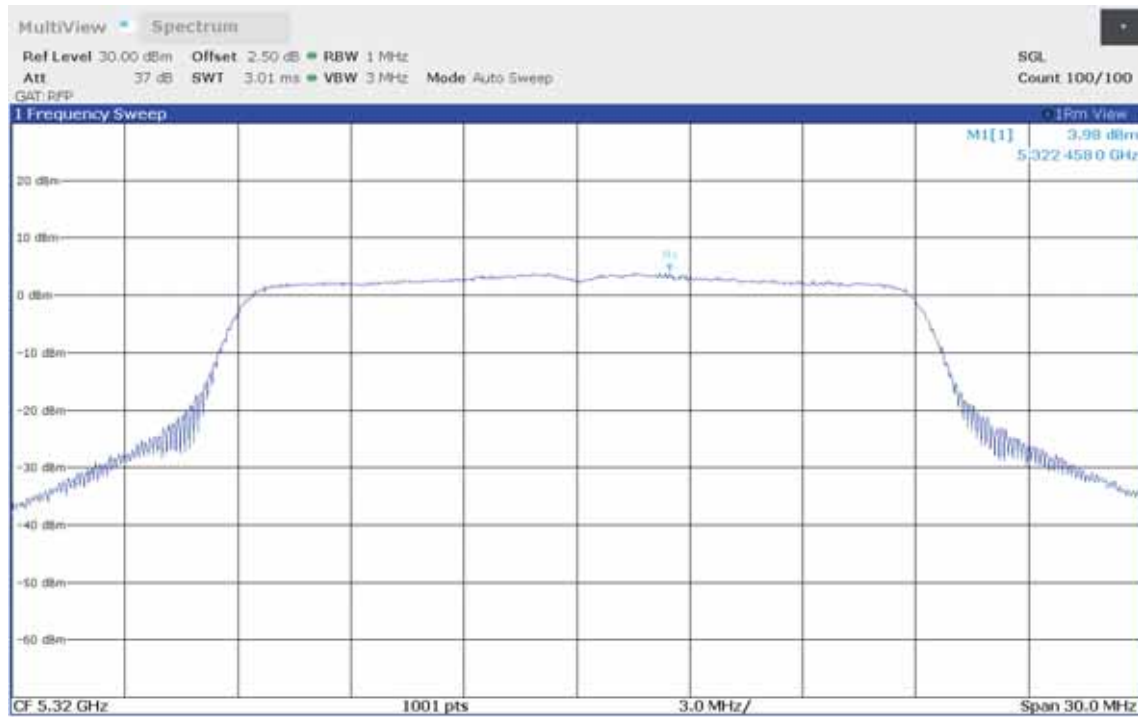


11:43:10 01.10.2021

Maximum Power Spectral Density

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 12.5; KDB 789033 v02r02, Section F
 Operational Mode: IEEE 802.11n (HT20), Channel: 64, 5320 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-10-01
 Number of Antenna Ports: 2
 Antenna Port(s): 1+2
 Maximum Frequency 1 [MHz]: 5321.469
 Spectral Density 1 [dBm/RBW]: 4.616
 Maximum Frequency 2 [MHz]: 5322.458
 Spectral Density 2 [dBm/RBW]: 3.983
 Total Spectral Density [dBm/RBW]: 7.321
 Resolution Bandwidth [MHz]: 1

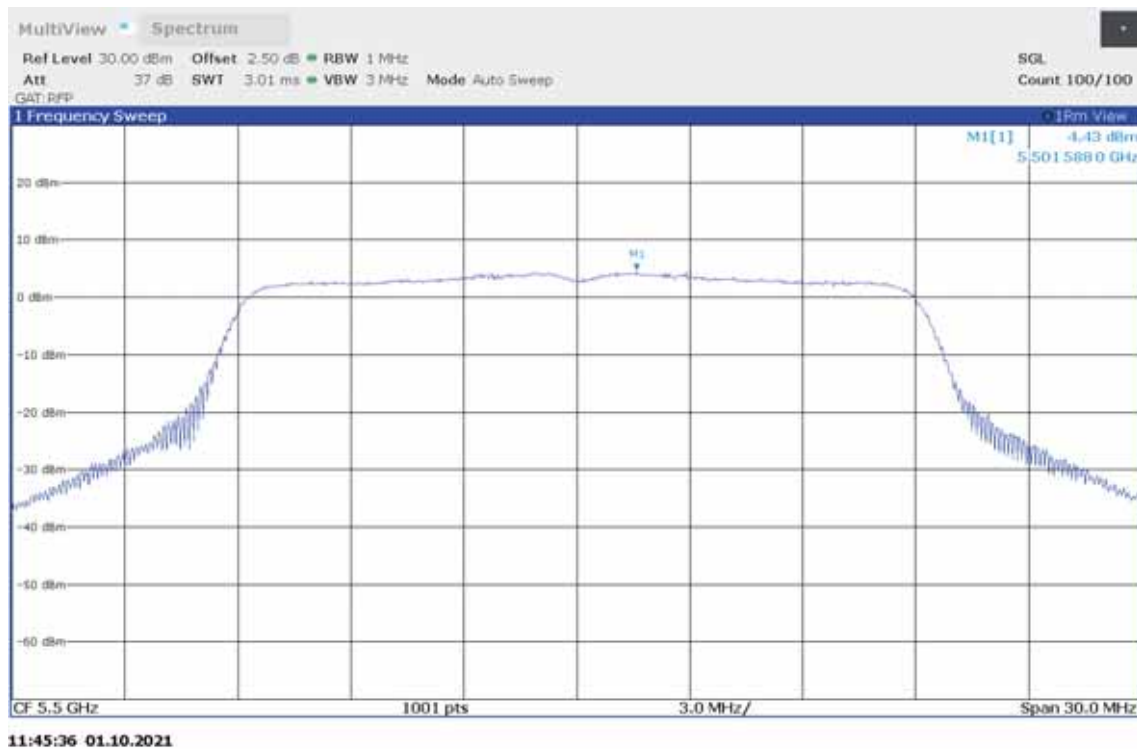


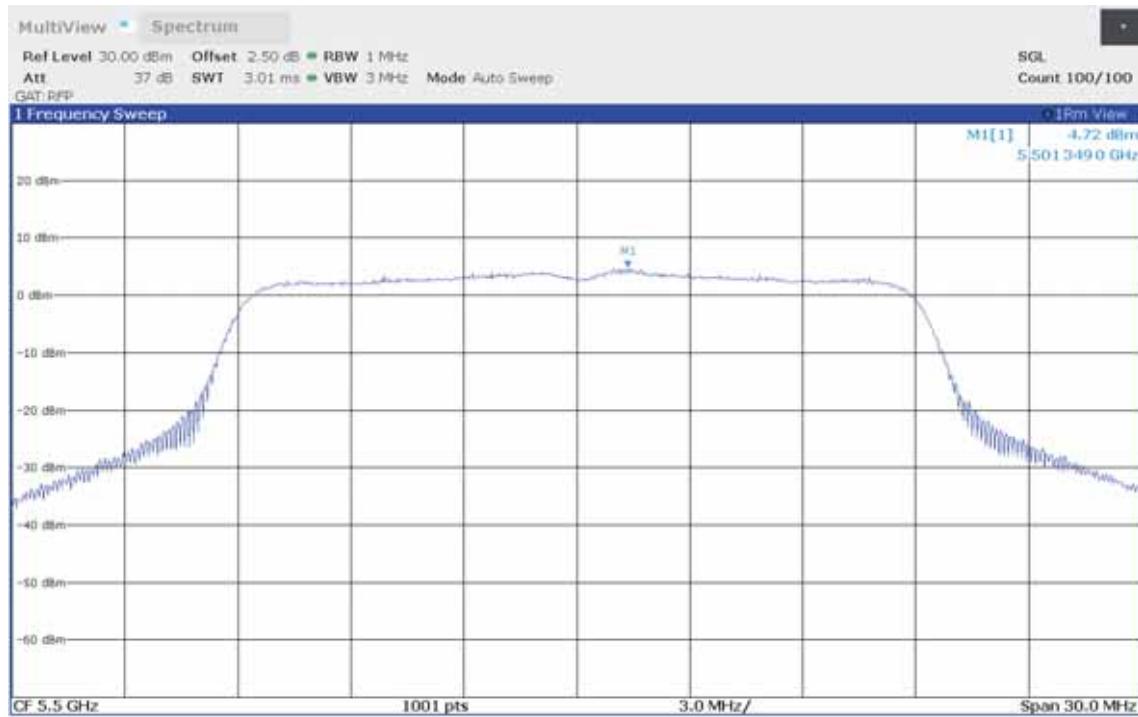


11:44:43 01.10.2021

Maximum Power Spectral Density

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 12.5; KDB 789033 v02r02, Section F
 Operational Mode: IEEE 802.11n (HT20), Channel: 100, 5500 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-10-01
 Number of Antenna Ports: 2
 Antenna Port(s): 1+2
 Maximum Frequency 1 [MHz]: 5501.588
 Spectral Density 1 [dBm/RBW]: 4.426
 Maximum Frequency 2 [MHz]: 5501.349
 Spectral Density 2 [dBm/RBW]: 4.715
 Total Spectral Density [dBm/RBW]: 7.583
 Resolution Bandwidth [MHz]: 1

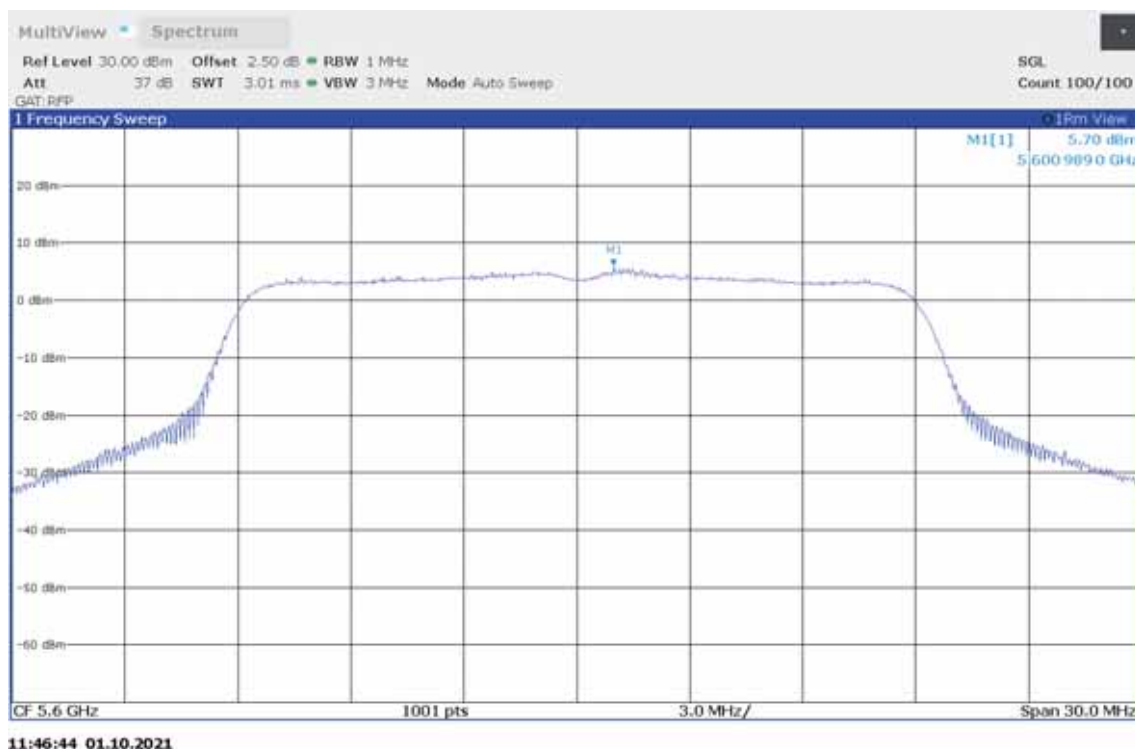


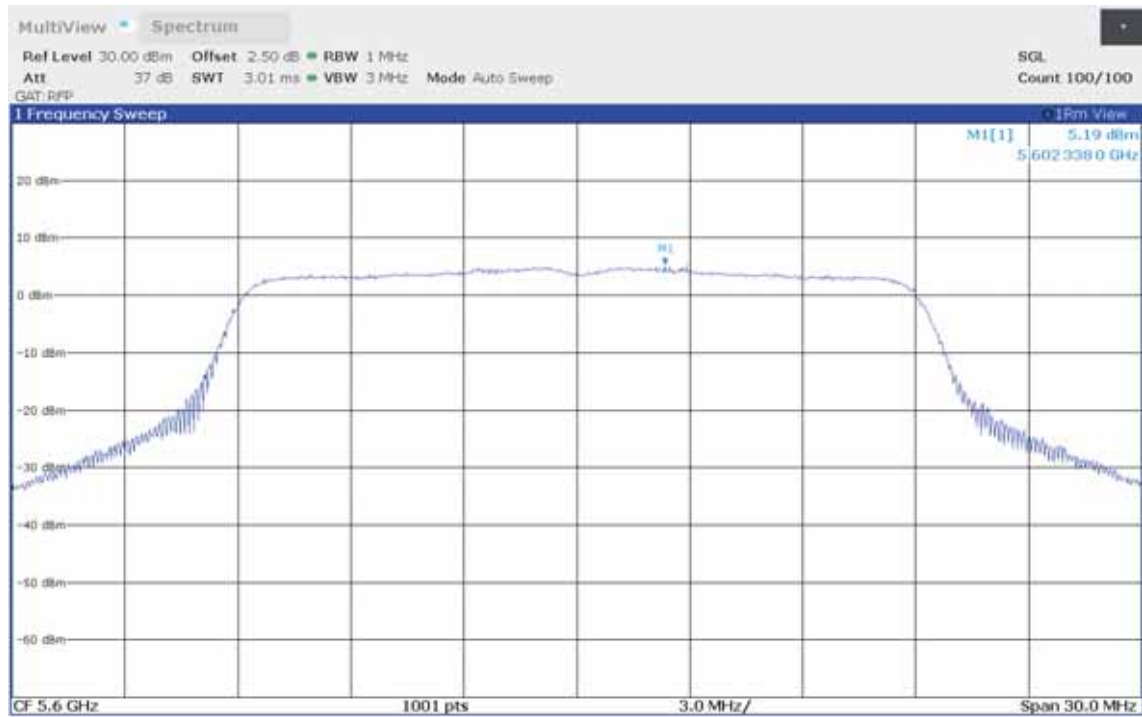


11:45:59 01.10.2021

Maximum Power Spectral Density

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 12.5; KDB 789033 v02r02, Section F
 Operational Mode: IEEE 802.11n (HT20), Channel: 120, 5600 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-10-01
 Number of Antenna Ports: 2
 Antenna Port(s): 1+2
 Maximum Frequency 1 [MHz]: 5600.989
 Spectral Density 1 [dBm/RBW]: 5.703
 Maximum Frequency 2 [MHz]: 5602.338
 Spectral Density 2 [dBm/RBW]: 5.185
 Total Spectral Density [dBm/RBW]: 8.462
 Resolution Bandwidth [MHz]: 1

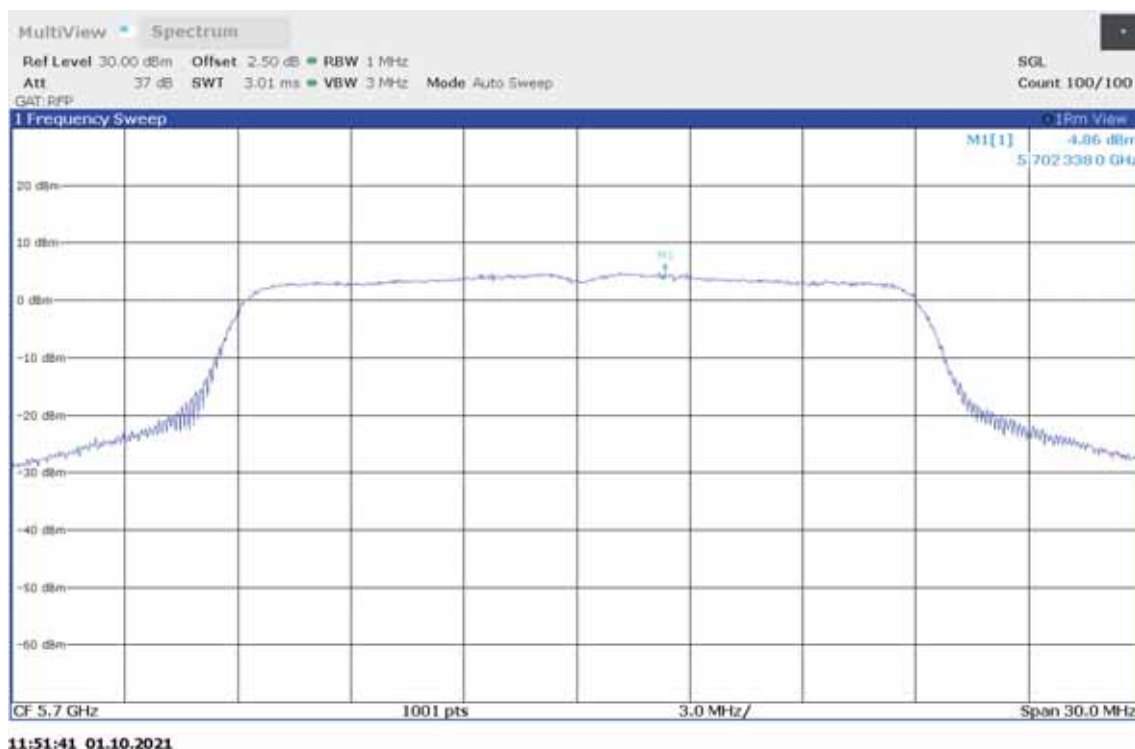




11:47:11 01.10.2021

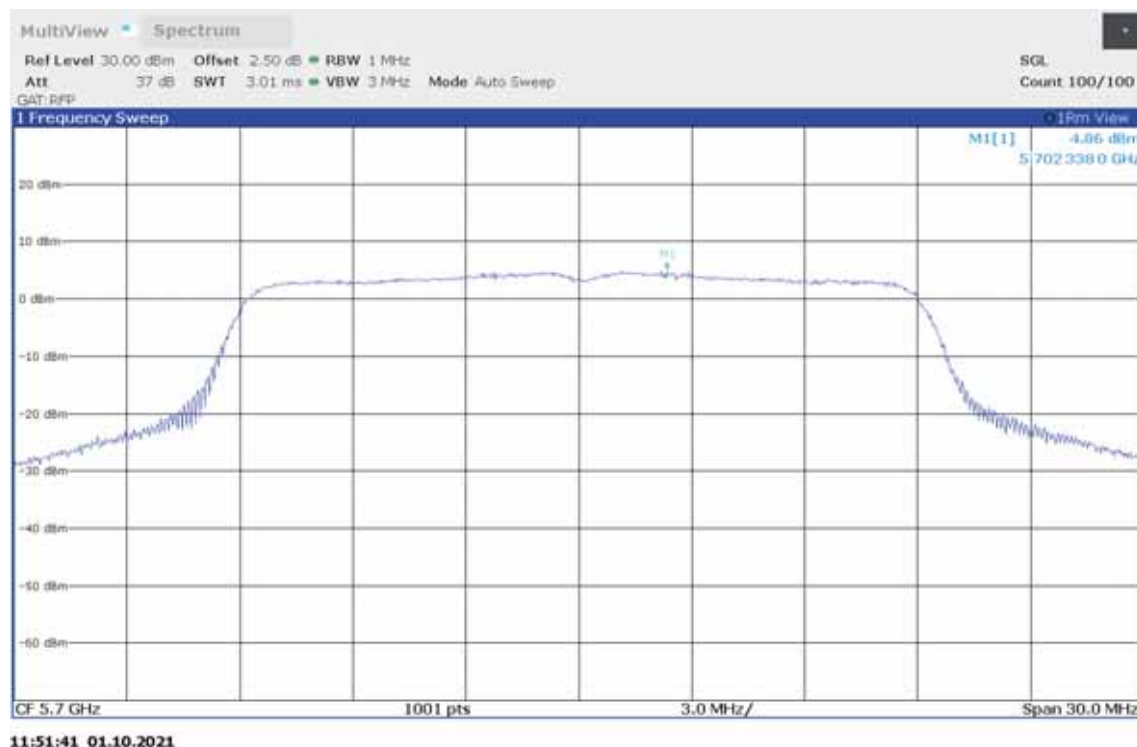
Maximum Power Spectral Density

Project Number:	G0M-2011-9488
Applicant:	Leica Geosystems AG
Model Description:	UAV 3D measurement device
Model:	BLK2FLY
Test Sample ID:	34982
Reference Standards:	FCC 15.407, RSS-247
Reference Method:	ANSI C63.10:2013, Section 12.5; KDB 789033 v02r02, Section F
Operational Mode:	IEEE 802.11n (HT20), Channel: 140, 5700 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Toralf Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2021-10-01
Number of Antenna Ports:	2
Antenna Port(s):	1+2
Maximum Frequency 1 [MHz]:	5702.338
Spectral Density 1 [dBm/RBW]:	4.857
Maximum Frequency 2 [MHz]:	5701.469
Spectral Density 2 [dBm/RBW]:	5.362
Total Spectral Density [dBm/RBW]:	8.127
Resolution Bandwidth [MHz]:	1



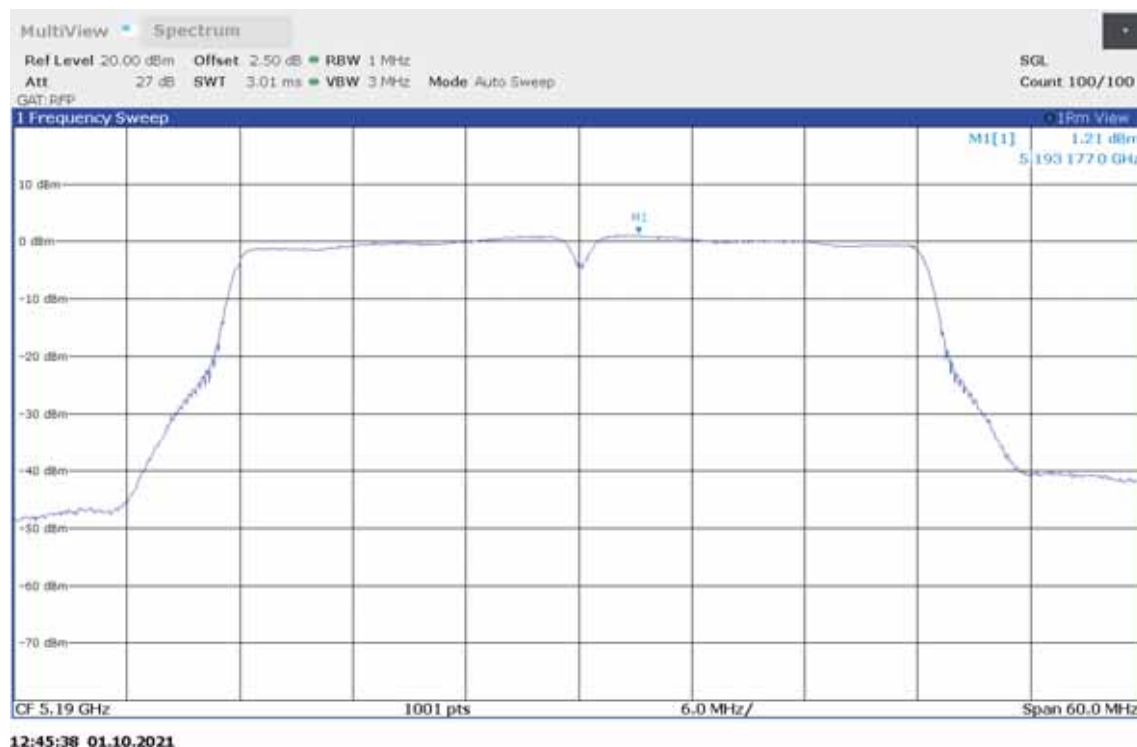
Maximum Power Spectral Density

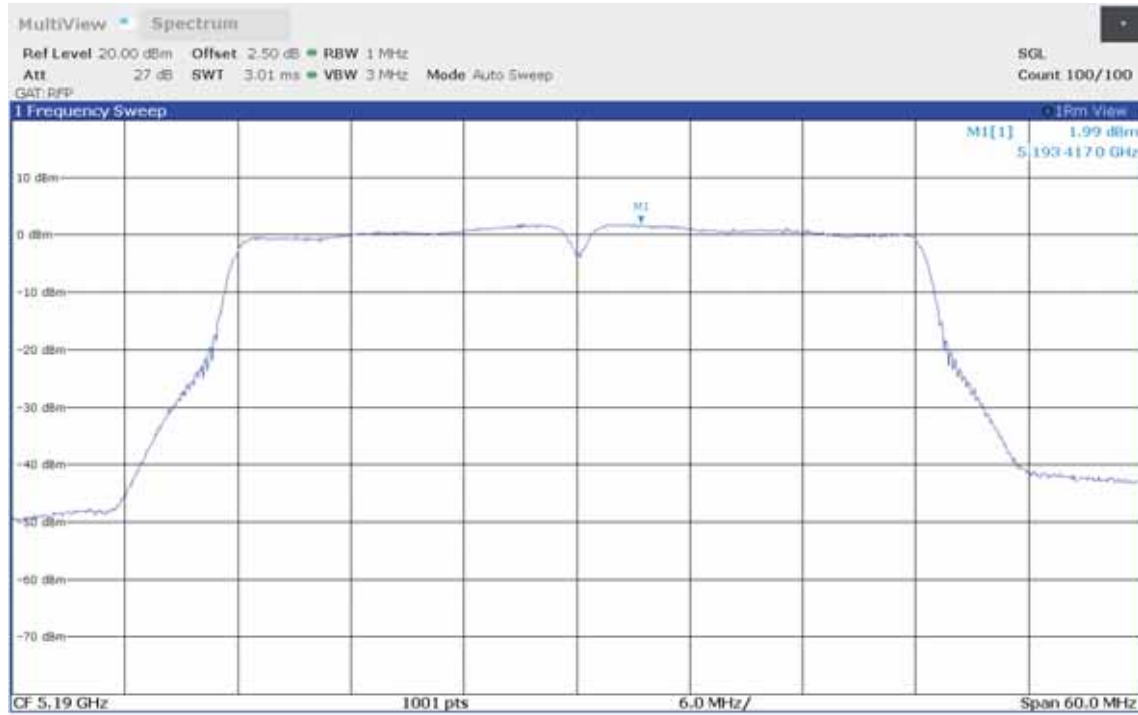
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Applicant:	Leica Geosystems AG
Model Description:	UAV 3D measurement device
Model:	BLK2FLY
Test Sample ID:	34982
Reference Standards:	FCC 15.407, RSS-247
Reference Method:	ANSI C63.10:2013, Section 12.5; KDB 789033 v02r02, Section F
Operational Mode:	IEEE 802.11n (HT20), Channel: 140, 5700 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Toralf Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2021-10-01
Number of Antenna Ports:	2
Antenna Port(s):	1+2
Maximum Frequency 1 [MHz]:	5702.338
Spectral Density 1 [dBm/RBW]:	4.857
Maximum Frequency 2 [MHz]:	5701.469
Spectral Density 2 [dBm/RBW]:	5.362
Total Spectral Density [dBm/RBW]:	8.127
Resolution Bandwidth [MHz]:	1



Maximum Power Spectral Density

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 12.5; KDB 789033 v02r02, Section F
 Operational Mode: IEEE 802.11n (HT40), Channel: 38, 5190 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-10-01
 Number of Antenna Ports: 2
 Antenna Port(s): 1+2
 Maximum Frequency 1 [MHz]: 5193.177
 Spectral Density 1 [dBm/RBW]: 1.208
 Maximum Frequency 2 [MHz]: 5193.417
 Spectral Density 2 [dBm/RBW]: 1.985
 Total Spectral Density [dBm/RBW]: 4.624
 Resolution Bandwidth [MHz]: 1

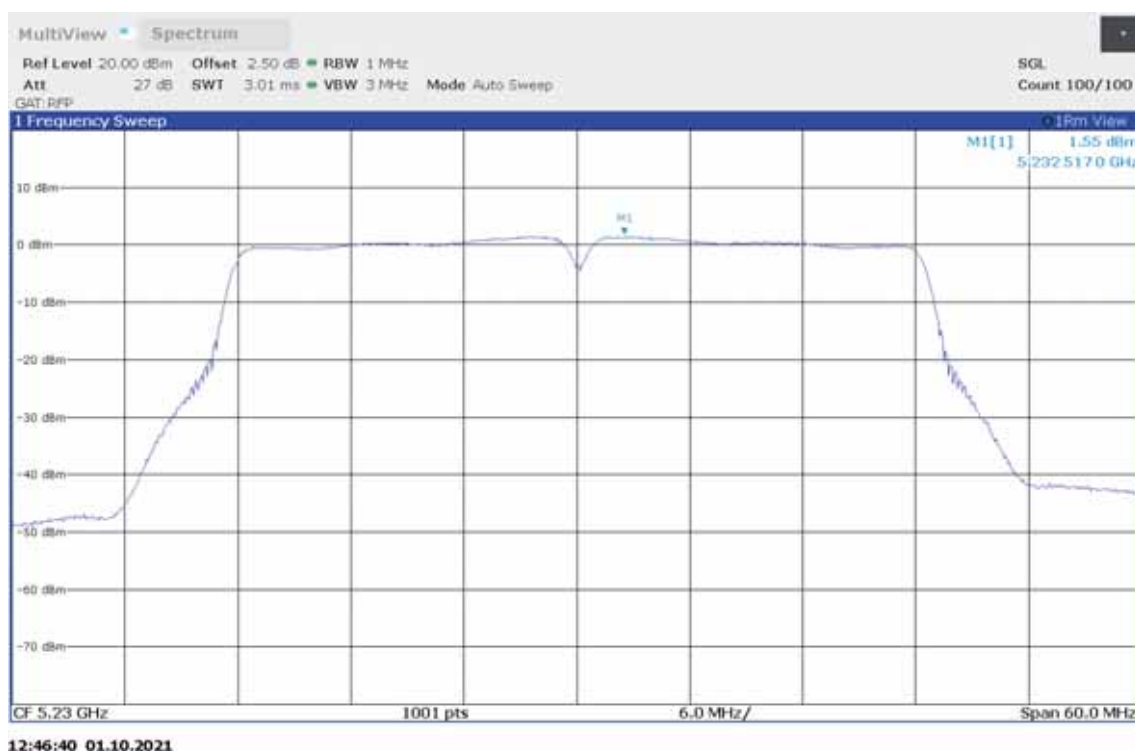


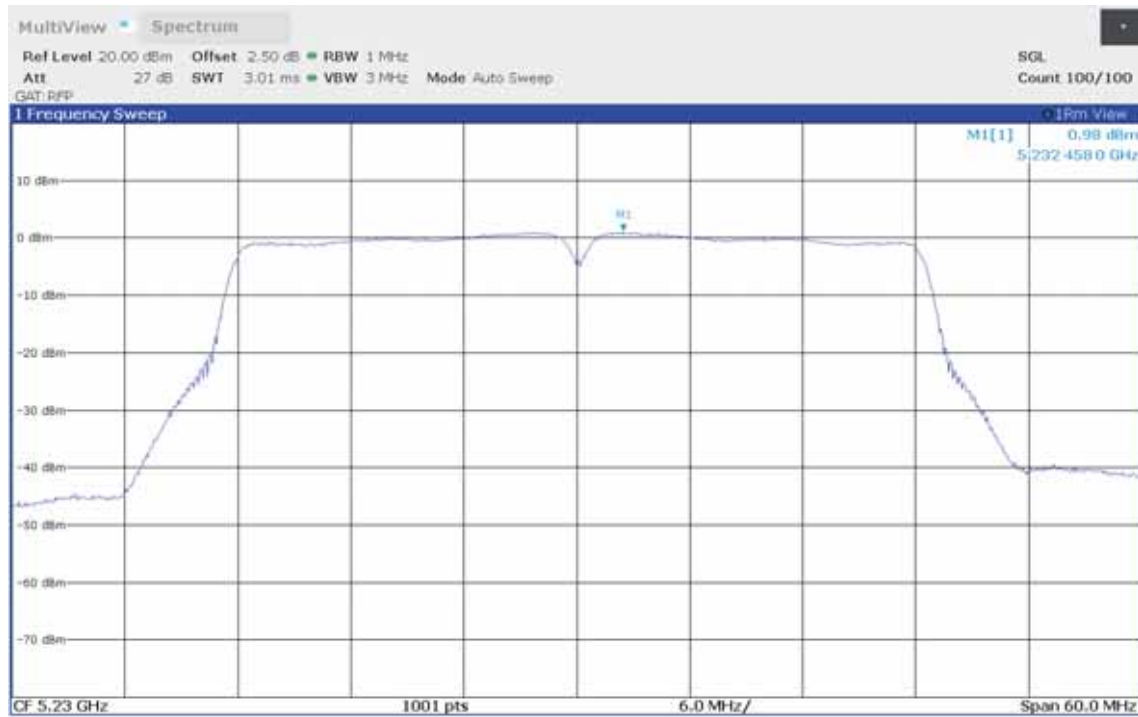


12:46:03 01.10.2021

Maximum Power Spectral Density

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 12.5; KDB 789033 v02r02, Section F
 Operational Mode: IEEE 802.11n (HT40), Channel: 46, 5230 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-10-01
 Number of Antenna Ports: 2
 Antenna Port(s): 1+2
 Maximum Frequency 1 [MHz]: 5232.517
 Spectral Density 1 [dBm/RBW]: 1.550
 Maximum Frequency 2 [MHz]: 5232.458
 Spectral Density 2 [dBm/RBW]: 0.980
 Total Spectral Density [dBm/RBW]: 4.285
 Resolution Bandwidth [MHz]: 1

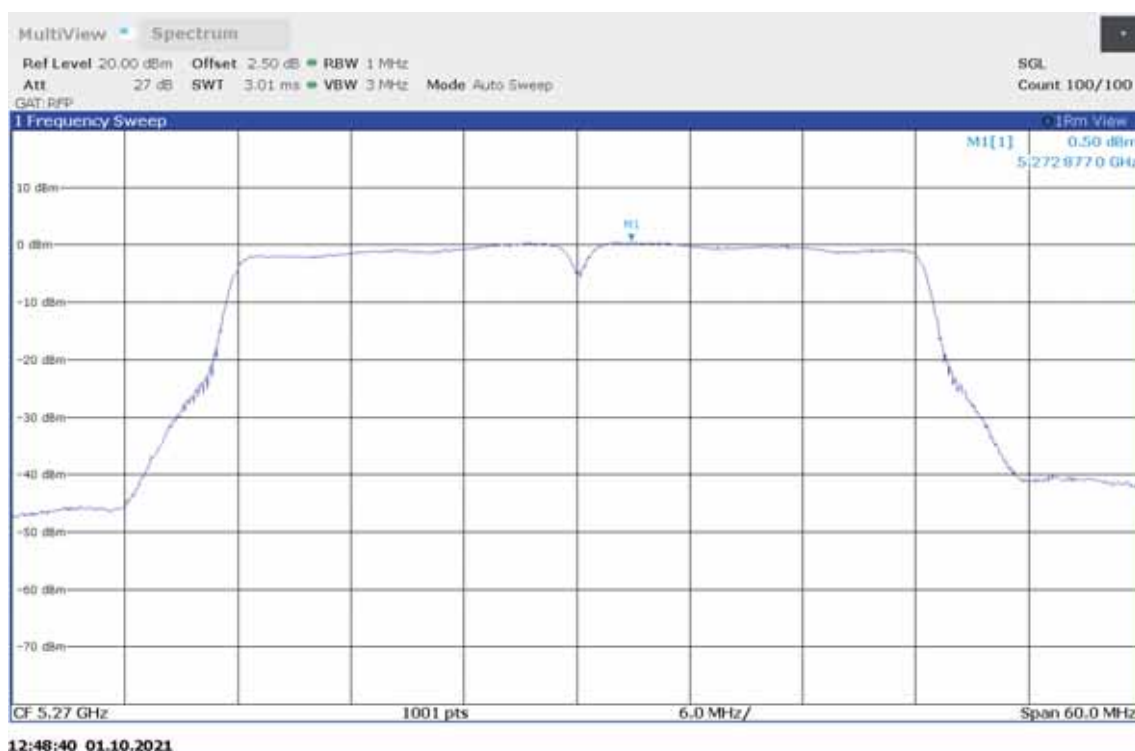


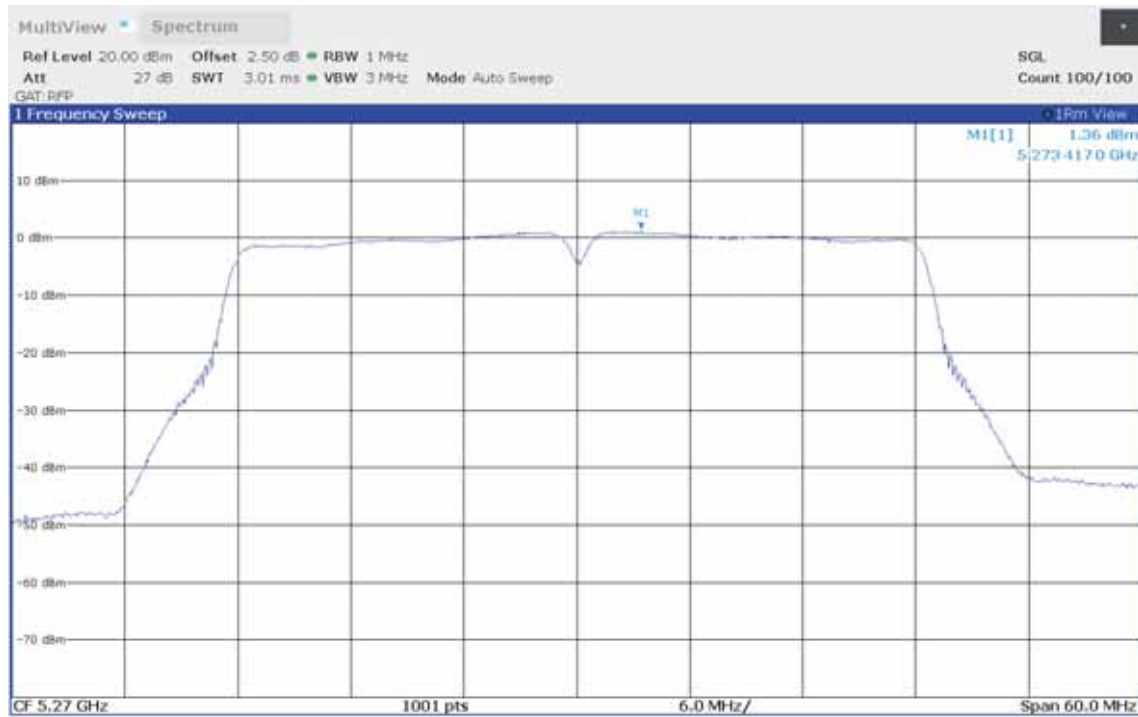


12:47:08 01.10.2021

Maximum Power Spectral Density

Project Number:	G0M-2011-9488
Applicant:	Leica Geosystems AG
Model Description:	UAV 3D measurement device
Model:	BLK2FLY
Test Sample ID:	34982
Reference Standards:	FCC 15.407, RSS-247
Reference Method:	ANSI C63.10:2013, Section 12.5; KDB 789033 v02r02, Section F
Operational Mode:	IEEE 802.11n (HT40), Channel: 54, 5270 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Toralf Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2021-10-01
Number of Antenna Ports:	2
Antenna Port(s):	1+2
Maximum Frequency 1 [MHz]:	5272.877
Spectral Density 1 [dBm/RBW]:	0.505
Maximum Frequency 2 [MHz]:	5273.417
Spectral Density 2 [dBm/RBW]:	1.363
Total Spectral Density [dBm/RBW]:	3.965
Resolution Bandwidth [MHz]:	1

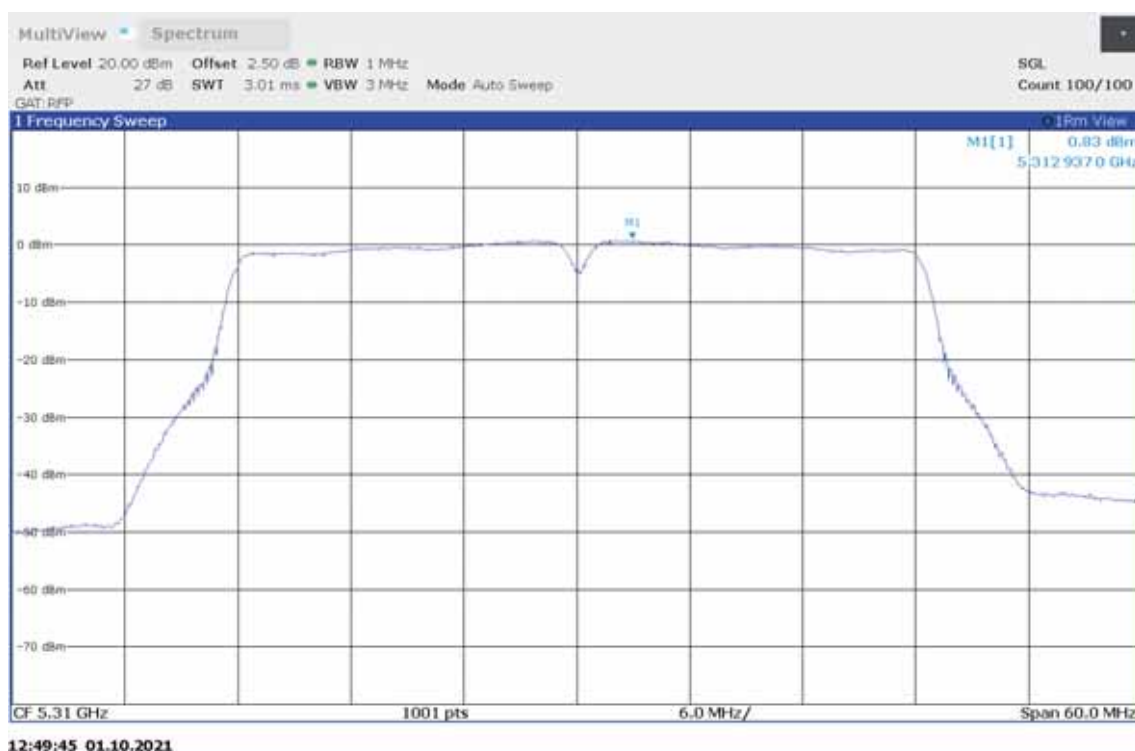


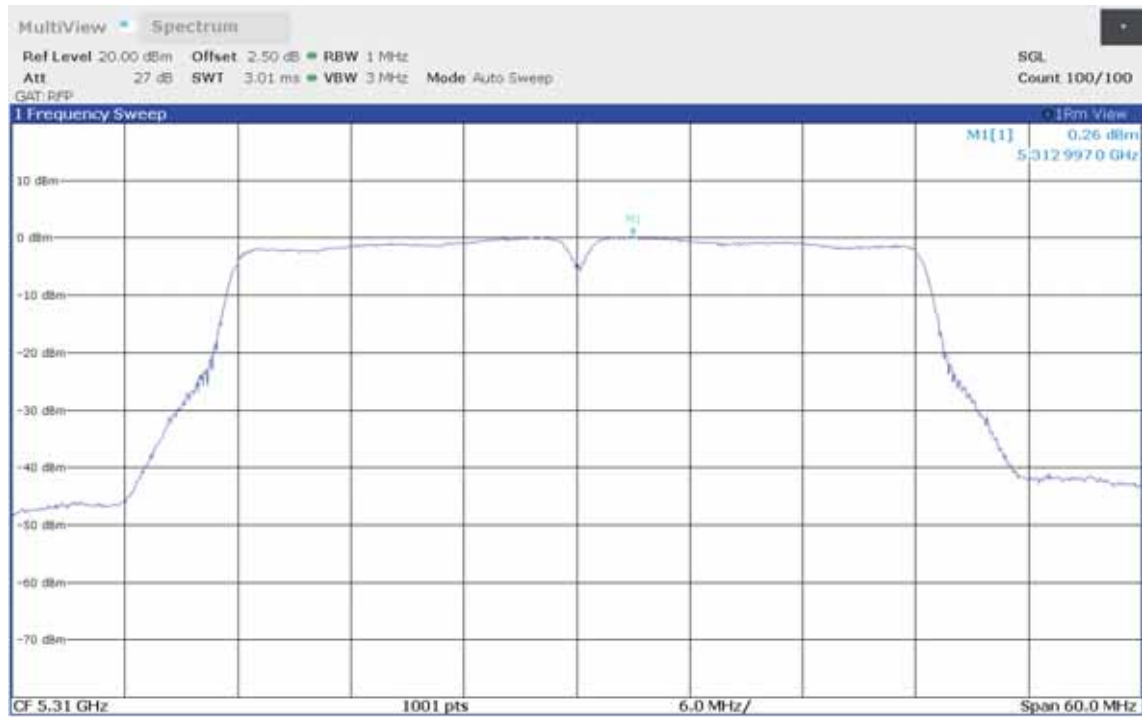


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Maximum Power Spectral Density

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 12.5; KDB 789033 v02r02, Section F
 Operational Mode: IEEE 802.11n (HT40), Channel: 62, 5310 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-10-01
 Number of Antenna Ports: 2
 Antenna Port(s): 1+2
 Maximum Frequency 1 [MHz]: 5312.937
 Spectral Density 1 [dBm/RBW]: 0.830
 Maximum Frequency 2 [MHz]: 5312.997
 Spectral Density 2 [dBm/RBW]: 0.264
 Total Spectral Density [dBm/RBW]: 3.567
 Resolution Bandwidth [MHz]: 1

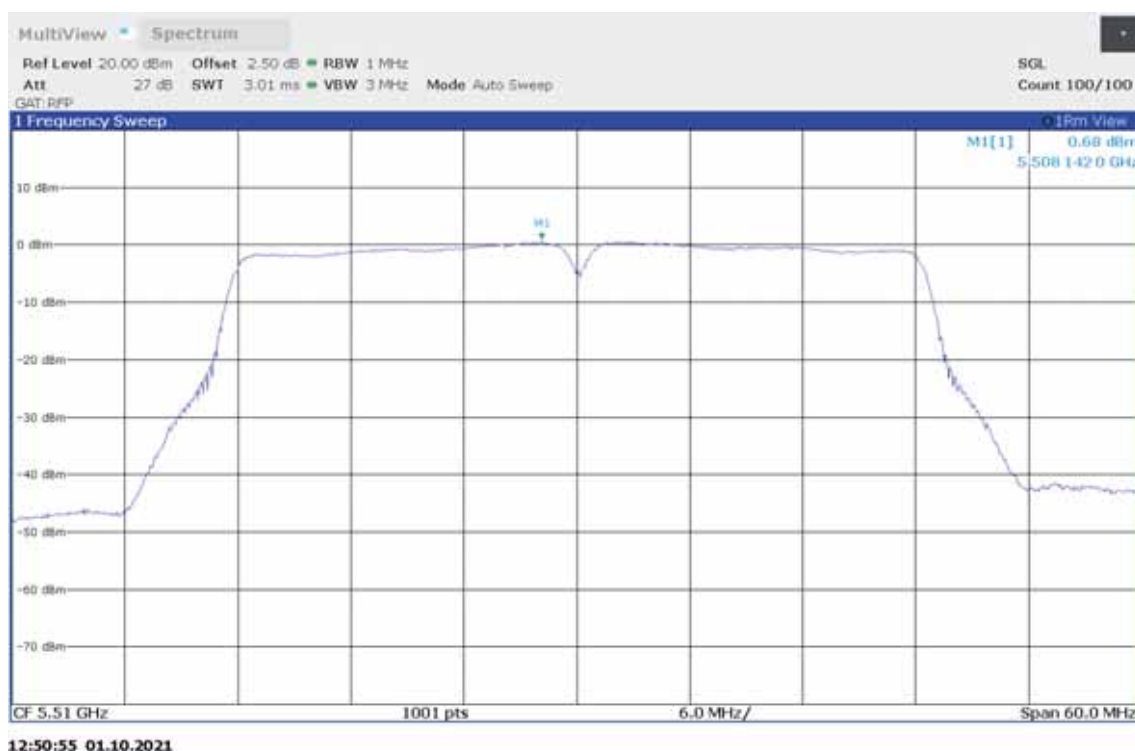


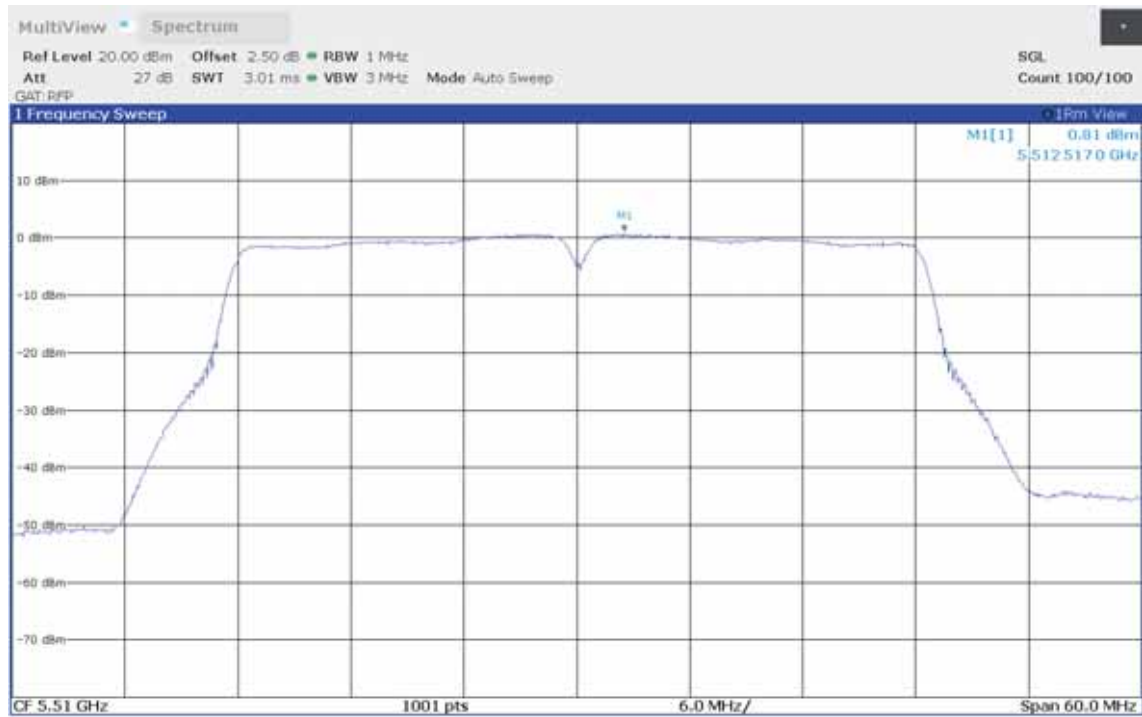


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Maximum Power Spectral Density

Project Number:	G0M-2011-9488
Applicant:	Leica Geosystems AG
Model Description:	UAV 3D measurement device
Model:	BLK2FLY
Test Sample ID:	34982
Reference Standards:	FCC 15.407, RSS-247
Reference Method:	ANSI C63.10:2013, Section 12.5; KDB 789033 v02r02, Section F
Operational Mode:	IEEE 802.11n (HT40), Channel: 102, 5510 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Toralf Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2021-10-01
Number of Antenna Ports:	2
Antenna Port(s):	1+2
Maximum Frequency 1 [MHz]:	5508.142
Spectral Density 1 [dBm/RBW]:	0.678
Maximum Frequency 2 [MHz]:	5512.517
Spectral Density 2 [dBm/RBW]:	0.805
Total Spectral Density [dBm/RBW]:	3.752
Resolution Bandwidth [MHz]:	1

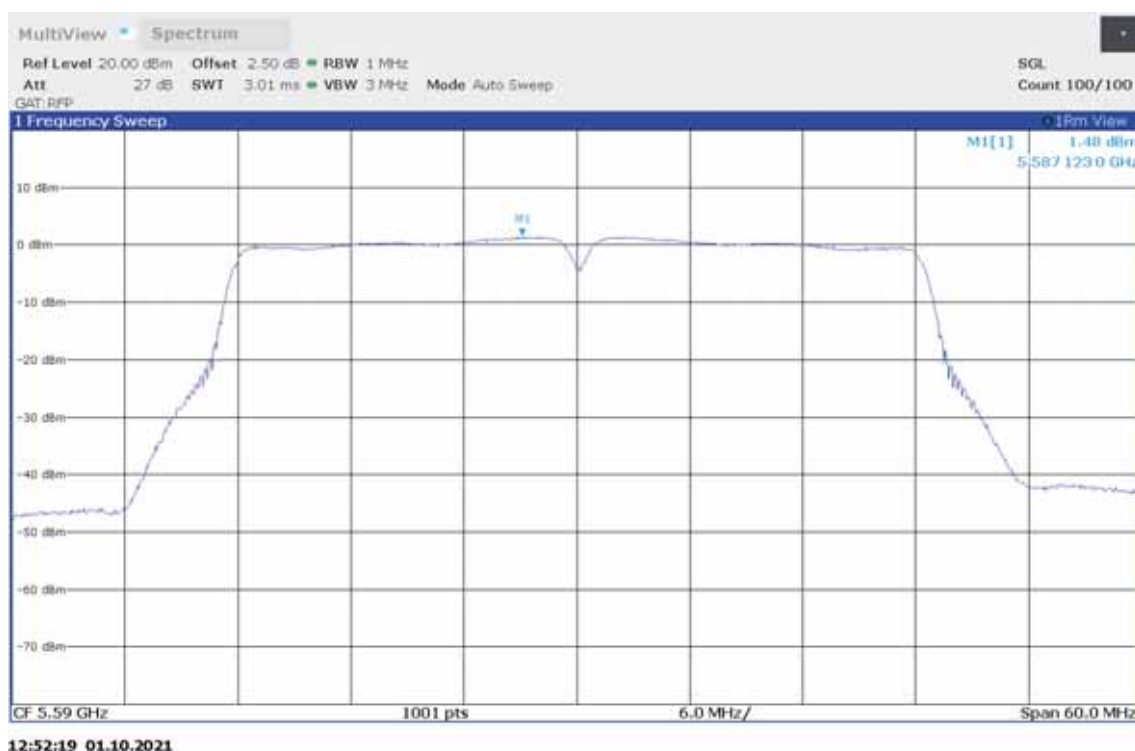


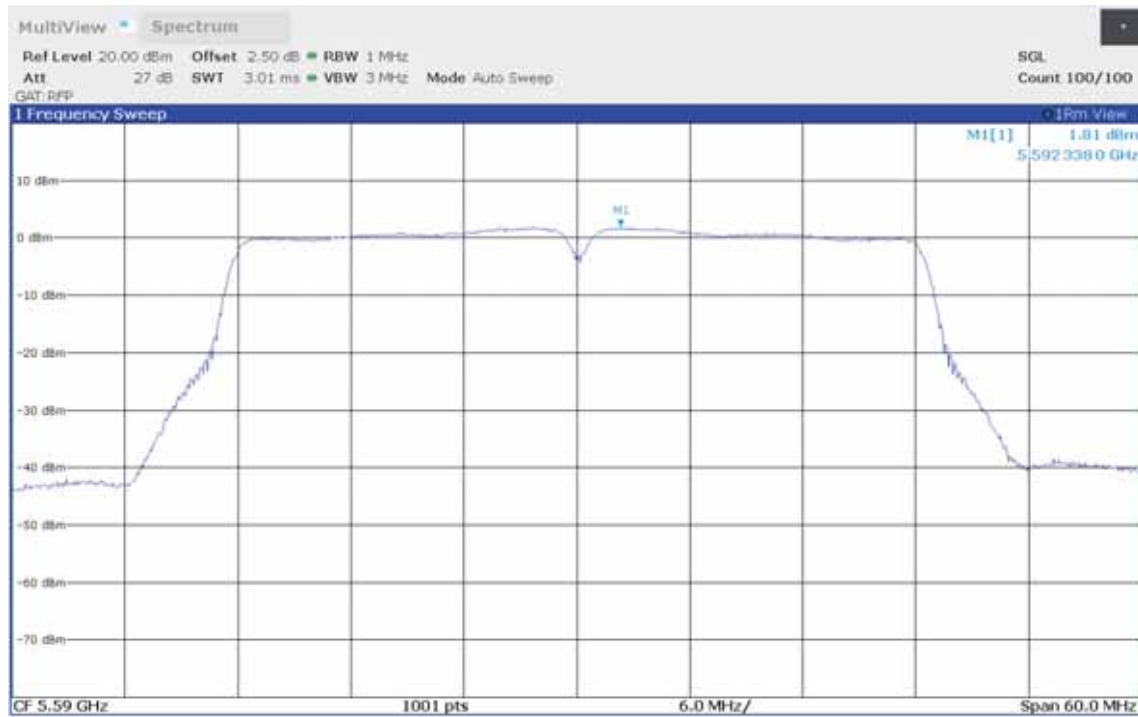


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Maximum Power Spectral Density

Project Number:	G0M-2011-9488
Applicant:	Leica Geosystems AG
Model Description:	UAV 3D measurement device
Model:	BLK2FLY
Test Sample ID:	34982
Reference Standards:	FCC 15.407, RSS-247
Reference Method:	ANSI C63.10:2013, Section 12.5; KDB 789033 v02r02, Section F
Operational Mode:	IEEE 802.11n (HT40), Channel: 118, 5590 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Toralf Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2021-10-01
Number of Antenna Ports:	2
Antenna Port(s):	1+2
Maximum Frequency 1 [MHz]:	5587.123
Spectral Density 1 [dBm/RBW]:	1.482
Maximum Frequency 2 [MHz]:	5592.338
Spectral Density 2 [dBm/RBW]:	1.810
Total Spectral Density [dBm/RBW]:	4.659
Resolution Bandwidth [MHz]:	1

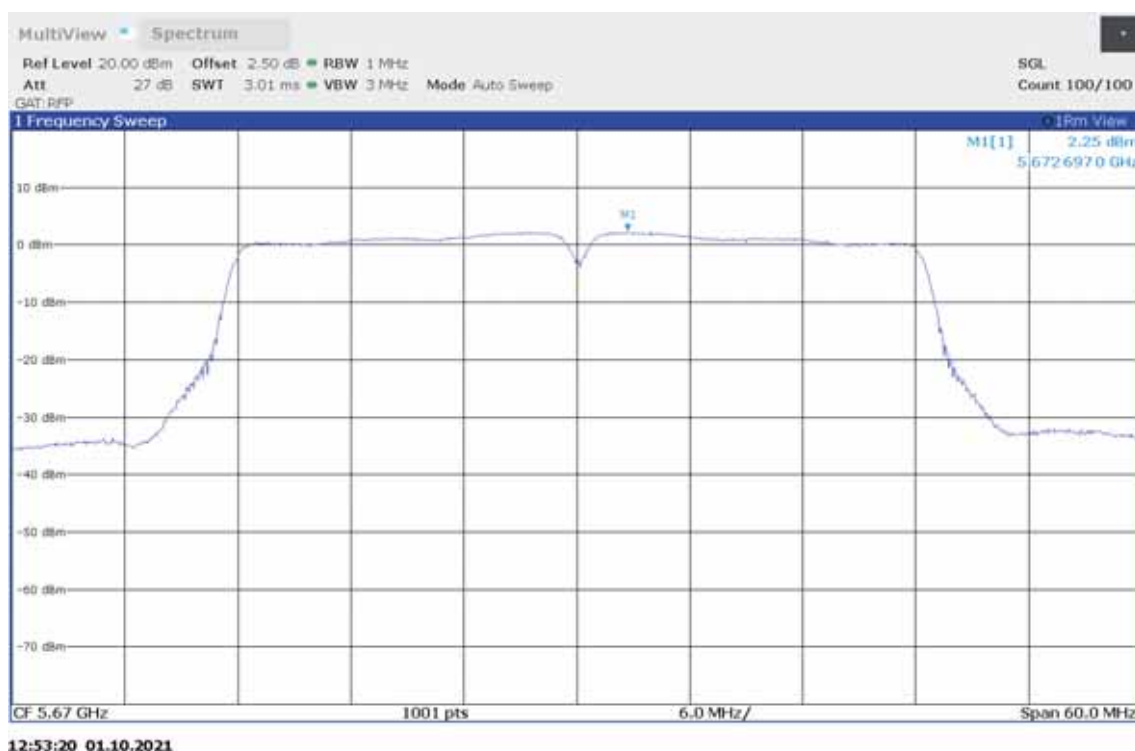




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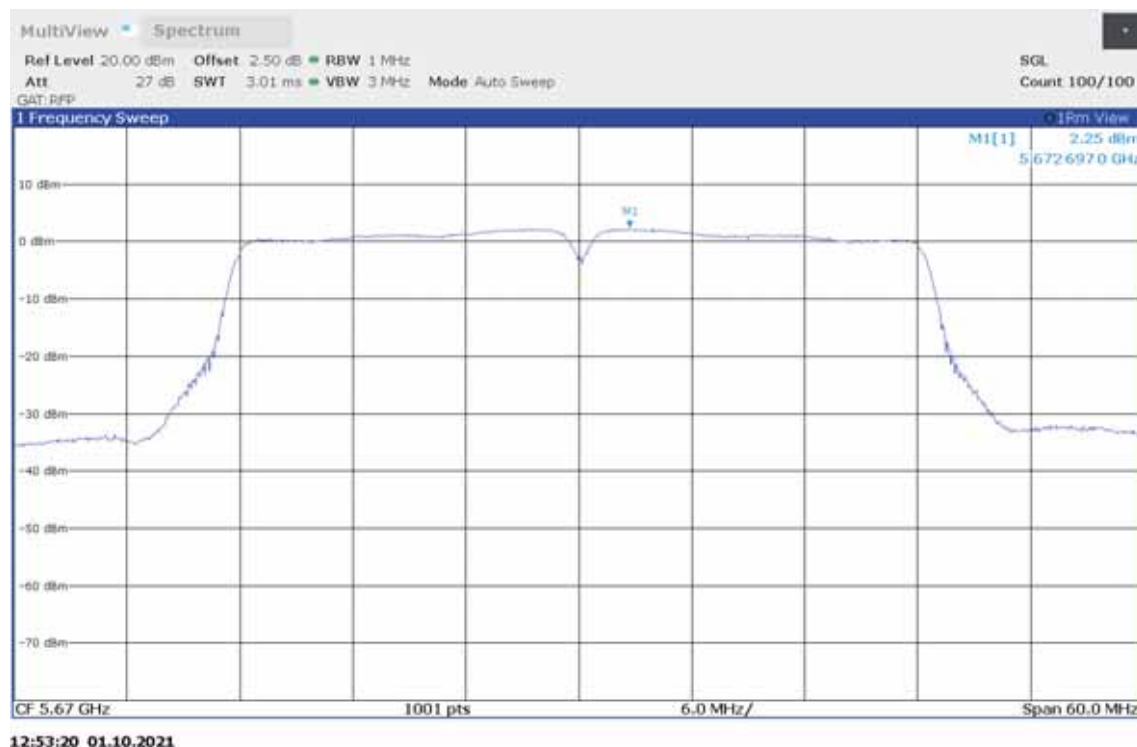
Maximum Power Spectral Density

Project Number: G0M-2011-9488
 Applicant: Leica Geosystems AG
 Model Description: UAV 3D measurement device
 Model: BLK2FLY
 Test Sample ID: 34982
 Reference Standards: FCC 15.407, RSS-247
 Reference Method: ANSI C63.10:2013, Section 12.5; KDB 789033 v02r02, Section F
 Operational Mode: IEEE 802.11n (HT40), Channel: 134, 5670 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Toralf Jahn
 Test Site: Eurofins Product Service GmbH
 Test Date: 2021-10-01
 Number of Antenna Ports: 2
 Antenna Port(s): 1+2
 Maximum Frequency 1 [MHz]: 5672.697
 Spectral Density 1 [dBm/RBW]: 2.248
 Maximum Frequency 2 [MHz]: 5667.902
 Spectral Density 2 [dBm/RBW]: 1.964
 Total Spectral Density [dBm/RBW]: 5.119
 Resolution Bandwidth [MHz]: 1



Maximum Power Spectral Density

Project Number:	G0M-2011-9488
Applicant:	Leica Geosystems AG
Model Description:	UAV 3D measurement device
Model:	BLK2FLY
Test Sample ID:	34982
Reference Standards:	FCC 15.407, RSS-247
Reference Method:	ANSI C63.10:2013, Section 12.5; KDB 789033 v02r02, Section F
Operational Mode:	IEEE 802.11n (HT40), Channel: 134, 5670 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Toralf Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2021-10-01
Number of Antenna Ports:	2
Antenna Port(s):	1+2
Maximum Frequency 1 [MHz]:	5672.697
Spectral Density 1 [dBm/RBW]:	2.248
Maximum Frequency 2 [MHz]:	5667.902
Spectral Density 2 [dBm/RBW]:	1.964
Total Spectral Density [dBm/RBW]:	5.119
Resolution Bandwidth [MHz]:	1



3.4 Test Conditions and Results - Frequency stability

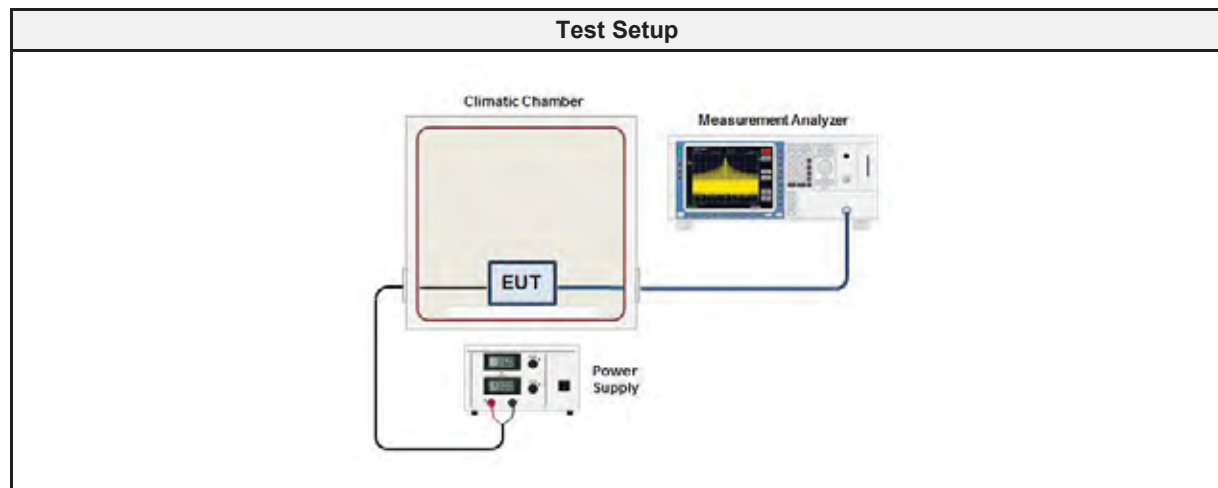
3.4.1 Information

Test Information	
Reference	FCC 15.407(g), KDB 789033 A.3
Measurement Method	ANSI C63.10 6.8
Operator	Toralf Jahn
Date	2021-11-04
Measurement uncertainty	±0.06 ppm

3.4.2 Limits

Limits
Emission is maintained within the band of operation under all conditions of normal operation; The frequency deviation combined with the 26 dB bandwidth edges must be within the assigned frequency band

3.4.3 Setup



3.4.4 Equipment

Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum Analyzer	R&S	FSW 43	EF00896	2021-07	2022-07
Climatic chamber	Vötsch	VT 4010	EF00134	2021-06	2022-06

3.4.5 Procedure

Test Procedure with respect to ambient temperature	
1.	The EUT is turned off and placed inside the temperature chamber
2.	The temperature chamber is set to the highest operating temperature
3.	The EUT is turned on at nominal supply voltage and the carrier frequency is measured at startup, at 2 minutes, 5 minutes and 10 minutes after EUT is energized
4.	The EUT is turned off again
5.	The temperature of the chamber is lowered by 10 °C
6.	The carrier frequency measurement is repeated after temperature has stabilized
7.	The procedure is repeated until the lowest operating temperature is reached

Test Procedure when varying supply voltage	
1.	The EUT is supplied with nominal supply voltage or a fully charged battery at room temperature (15 to 25 °C)
2.	The carrier frequency is measured
3.	The procedure is repeated at 85 % and 115 % of the nominal supply voltage or at the battery endpoint for battery operated equipment

Test Procedure of carrier frequency measurement	
1.	The emission spectrum is measured using a resolution band width of 100 kHz with peak detection and maximum hold
2.	The peak of the emission spectrum is determined
3.	The left most frequency f_1 10 dB below the peak emission is searched
4.	The right most frequency f_2 10 dB below the peak emission is searched
5.	The center frequency is calculated from $f_c = (f_1 + f_2) / 2$
6.	The center frequency and the deviation from the nominal center frequency are recorded

3.4.6 Results

Test Results - 5180 MHz - Variation of ambient temperature						
Channel	Nominal Frequency [MHz]	Voltage [V]	Temperature [°C]	Time after activation	Frequency [MHz]	Deviation [kHz]
36	5180	14.8	35	0	5180.005424	5.424
36	5180	14.8	35	2	5180.005560	5.560
36	5180	14.8	35	5	5180.005697	5.697
36	5180	14.8	35	10	5180.005789	5.789
36	5180	14.8	30	0	5180.012928	12.928
36	5180	14.8	30	2	5180.012404	12.404
36	5180	14.8	30	5	5180.000000	12.263
36	5180	14.8	30	10	5180.012431	12.431
36	5180	14.8	20	0	5180.007075	7.075
36	5180	14.8	20	2	5180.003752	3.752
36	5180	14.8	20	5	5180.003263	3.263
36	5180	14.8	20	10	5180.003019	3.019
36	5180	14.8	10	0	5180.042306	42.306
36	5180	14.8	10	2	5180.042143	42.143
36	5180	14.8	10	5	5180.042284	42.284
36	5180	14.8	10	10	5180.042462	42.462
36	5180	14.8	5	0	5180.050680	50.680
36	5180	14.8	5	2	5180.050282	50.282
36	5180	14.8	5	5	5180.049965	49.965
36	5180	14.8	5	10	5180.049122	49.122

Test Results - 5180 MHz - Variation of supply voltage					
Channel	Nominal Frequency [MHz]	Voltage [V]	Temperature [°C]	Frequency [MHz]	Deviation [kHz]
36	5180	14.8	20	5180.007075	7.075
36	5180	13.6	20	5180.004428	4.428

3.5 Test Conditions and Results - AC power line conducted emissions

3.5.1 Information

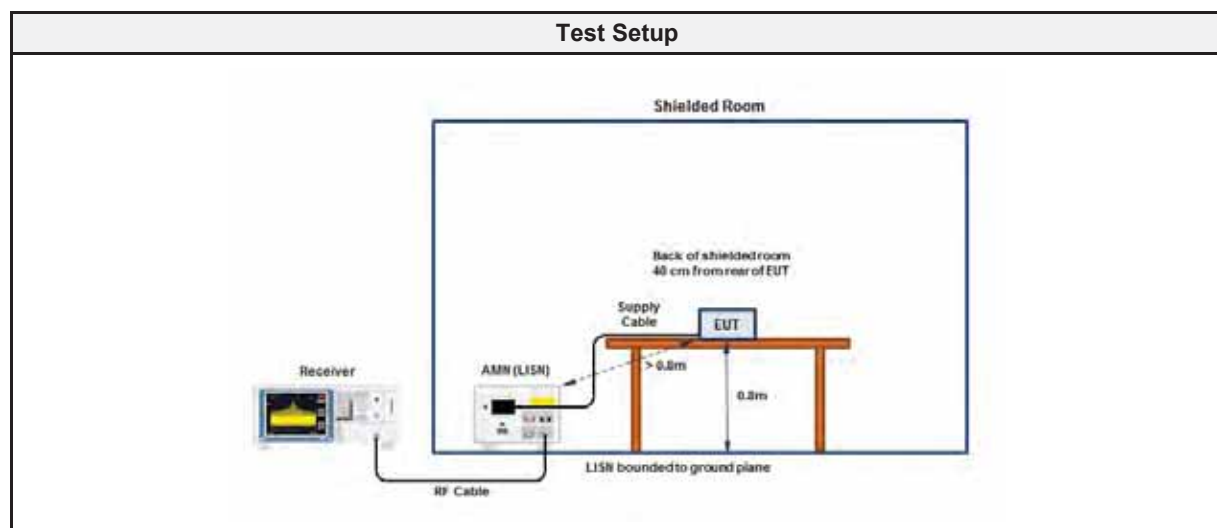
Test Information	
Reference	FCC 15.207
Measurement Method	ANSI C63.10 6.2
Operator	Toralf Jahn
Date	2021-11-16
Measurement uncertainty	±3.82 %

3.5.2 Limits

Limits		
Frequency [MHz]	Quasi-Peak [dBμV]	Average [dBμV]
0.15 - 0.5	66 - 56*	56 - 46*
0.5 - 5	56	46
5 - 30	60	50

* Limit decreases linearly with the logarithm of the frequency

3.5.3 Setup



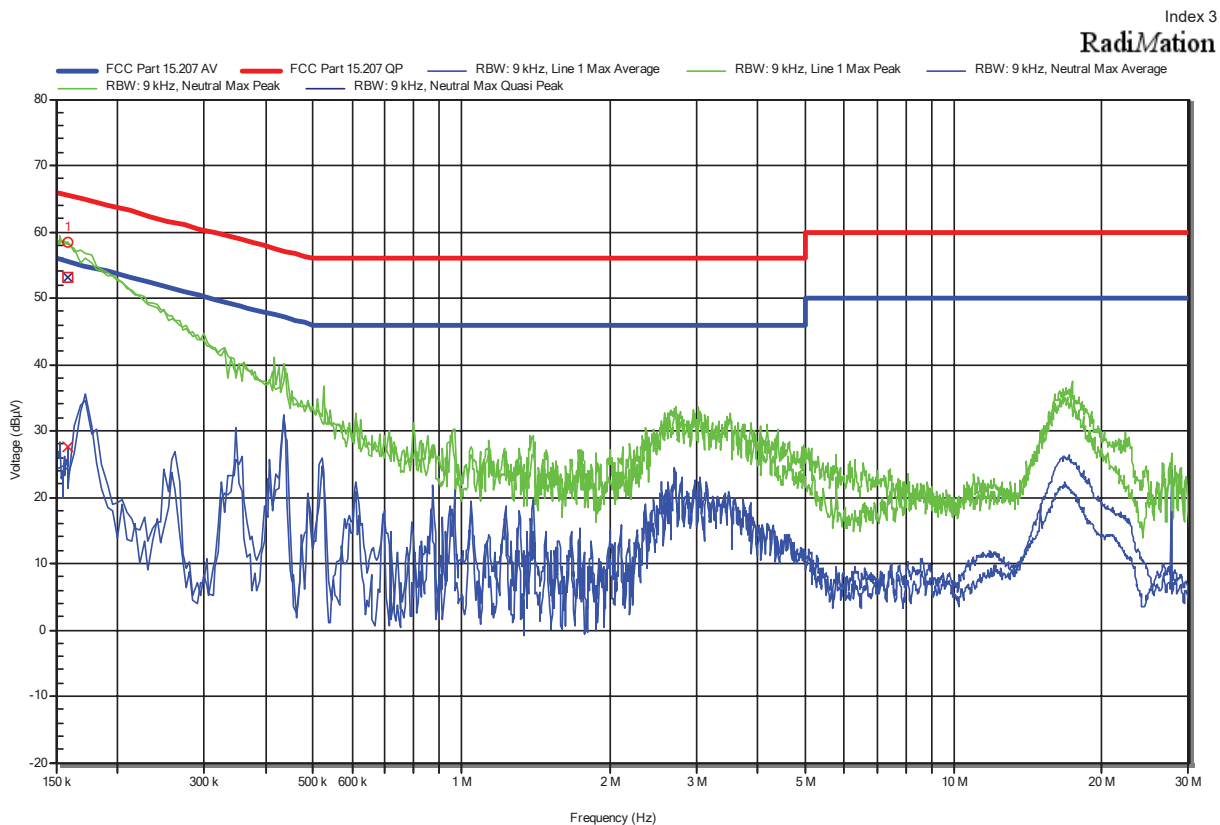
3.5.4 Equipment

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

Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
EMI Test Receiver	R&S	ESR7	EF00943	2021-08	2022-08
LISN	Schwarzbeck	NSLK 8127 RC	EF01592	2021-07	2022-07

Conducted emissions at the mains power port according to FCC Part C 15.207

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. Jahn
 Test Date: 2021-11-16
 Operating Conditions: ambient temperature: 24 °Celsius
 power input: 14.8 VDC via Laptop 120 VAC
 LISN: Schwarzbeck NSLK 8127 RC N
 Operational Mode & EUT Configuration: USB-Mode WLAN 5 GHz
 Applied to Port: USB
 Note 1:



Peak Number	Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status	LISN
1	158.55 kHz	53.12 dBµV	65.54 dBµV	-12.42 dB	Pass	Neutral
Peak Number	Frequency	Average	Average Limit	Average Difference	Average Status	LISN
1	158.55 kHz	27.54 dBµV	55.54 dBµV	-28 dB	Pass	Neutral

3.6 Test Conditions and Results - Transmitter radiated emissions

3.6.1 Information

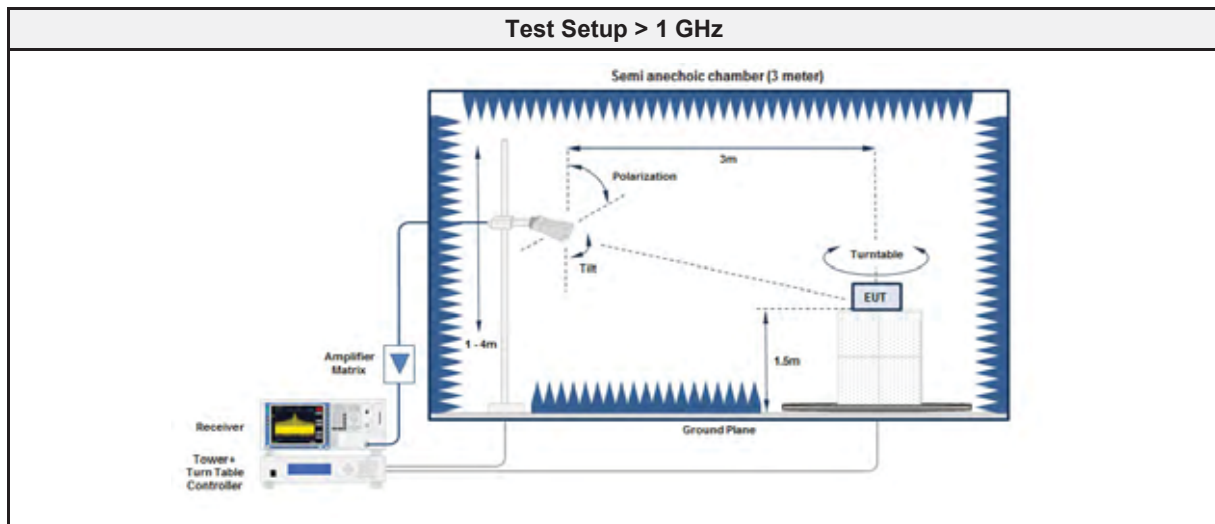
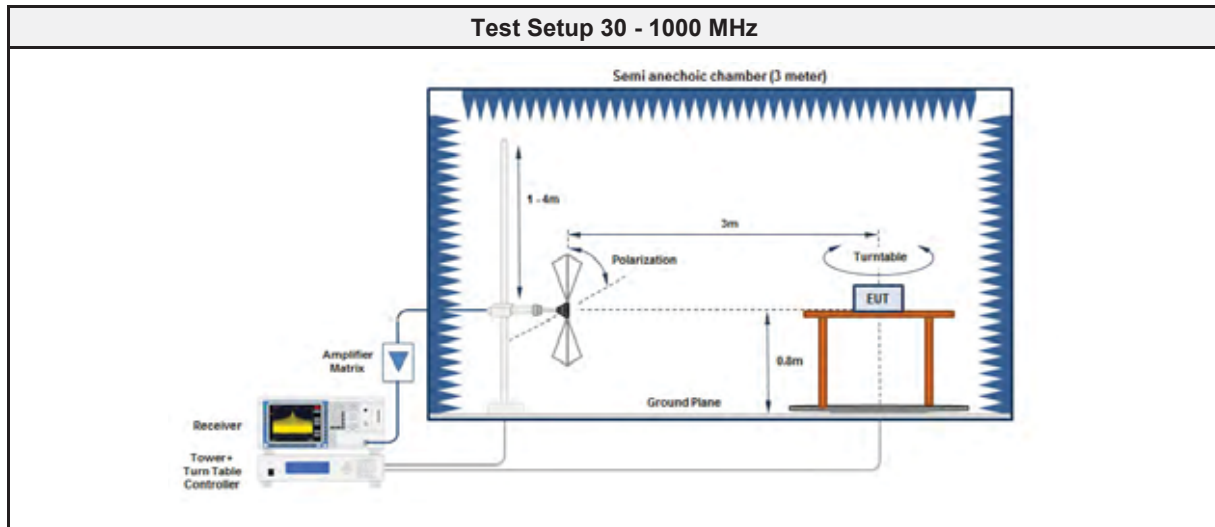
Test Information	
Reference	FCC 15.407(b)
Measurement Method	KDB 789033 G
Operator	Jens Degenhardt
Date	2021-11-04
Measurement uncertainty	±5.1 %

3.6.2 Limits

Limits - Restricted frequency bands and below 1 GHz			
Frequency [MHz]	Detector	Field strength [μV/m]	Measurement distance [m]
30 - 88	Quasi-Peak	100	3
88 - 216	Quasi-Peak	150	3
216 - 960	Quasi-Peak	200	3
960 - 1000	Quasi-Peak	500	3
>1000	Average	500	3

Limits - Outside restricted frequency bands above 1 GHz			
Frequency band [MHz]	Power limit [dBm EIRP]	Field strength limit [dBμV/m]	Measurement distance [m]
5150 - 5250	-27 dBm/MHz	68.2	3
5250 - 5350	-27 dBm/MHz	68.2	3
5470 - 5725	-27 dBm/MHz	68.2	3
5725 - 5850	-27 dBm/MHz @ ±75 MHz from band edge	68.2	3
5725 - 5850	10 to -27 dBm/MHz @ ±25 to ±75 MHz from band edge	105.2 to 68.2	3
5725 - 5850	15.6 to 10 dBm/MHz @ ±5 to ±25 MHz from band edge	110.8 to 105.2	3
5725 - 5850	27 to 15.6 dBm/MHz @ ±0 to ±5 MHz from band edge	122.2 to 110.8	3

3.6.3 Setup



3.6.4 Equipment

Test Software			
Description	Manufacturer	Name	Version
EMC Software	DARE Instruments	RadiMation	2016.1.10

Test Equipment 30 MHz - 1000 MHz					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Anechoic Chamber	Frankonia	AC1	EF00062	2021-02	2024-02
Measurement Receiver	Agilent	N9038A-526/WXP	EF01070	2021-07	2022-07
Antenna	R&S	HK 116	EF00030	2021-05	2024-05
Antenna	R&S	HL 223	EF00187	2019-05	2022-05

Test Equipment > 1 GHz					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Anechoic chamber	Frankonia	AC 2	EF01616	2021-09	2022-09
Spectrum analyzer	R&S	FSU43	EF01631	2021-07	2022-07
Antenna	Schwarzbeck	BBHA 9120D	EF01153	2020-11	2021-11
Antenna	Schwarzbeck	HWRD 650	EF01679	2021-03	2022-03
Antenna	Amplifier Research	AT4560	EF00302	2021-06	2023-06
Antenna	Flann Microwave Ltd	22240-25 Amp. CBL26402075	EF00301	2019-12	2022-12

3.6.5 Procedure

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

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

3.6.6 Results

Test Results – OFDM						
Channel [MHz]	Emission [MHz]	Level [dBμV/m]	Det.	Pol.	Limit [dBμV/m]	Margin [dB]
5180	112.2437	25.30	qpk	ver	43.50	-18.19
5180	125.935	30.70	qpk	hor	43.50	-12.80
5180	135.0693	26.70	qpk	hor	43.50	-16.85
5180	249.982	41.52	qpk	hor	46.00	-04.48
5180	252.007	31.30	pk	ver	46.00	-14.70
5320	112.8742	24.50	qpk	ver	43.50	-18.98
5320	123.7491	31.30	qpk	hor	43.50	-12.20
5320	132.8023	29.80	pk	hor	43.50	-13.77
5320	132.8023	23.50	qpk	hor	43.50	-20.02
5320	249.131	34.97	pk	ver	46.00	-11.03
5320	250.27	40.97	qpk	hor	46.00	-05.03
5500	112.0876	22.70	qpk	ver	43.50	-20.78
5500	123.4849	30.80	qpk	hor	43.50	-12.68
5500	249.97	39.98	qpk	hor	46.00	-06.02
5600	111.5231	25.00	qpk	ver	43.50	-18.56
5600	117.6842	23.50	qpk	hor	43.50	-20.06
5600	123.7851	30.80	qpk	hor	43.50	-12.73
5600	135.7351	22.70	qpk	hor	43.50	-20.79
5600	244.458	35.30	pk	ver	46.00	-10.70
5600	249.994	39.95	qpk	hor	46.00	-06.05
5700	110.7665	24.00	qpk	ver	43.50	-19.50
5700	123.3769	31.40	qpk	hor	43.50	-12.14
5700	246.016	34.54	pk	ver	46.00	-11.46
5700	251.348	38.54	qpk	hor	46.00	-07.46
5180	10360	42.60	pk	ver	68.20	-25.60
5240	10482	45.06	pk	ver	68.20	-23.14
5320	1599	42.38	pk	ver	74.00	-31.62
5320	10642	42.18	pk	ver	54.00	-11.82
5500	5459	39.13	pk	hor	74.00	-34.87
5500	5459	33.83	RMS	hor	54.00	-20.17
5500	11006	42.95	pk	ver	54.00	-11.05
5600	5459	53.60	pk	hor	74.00	-20.40
5600	5459	37.95	RMS	hor	54.00	-16.05
5600	11203	60.68	pk	ver	74.00	-13.32
5600	11203	49.49	RMS	ver	54.00	-04.51
5700	5725	58.29	pk	hor	68.20	-09.91
5700	5725	49.33	RMS	hor	68.20	-18.87
5700	11401	65.45	pk	hor	74.00	-08.55

Test Results – HT20						
Channel [MHz]	Emission [MHz]	Level [dBµV/m]	Det.	Pol.	Limit [dBµV/m]	Margin [dB]
5180	5109	46.35	pk	ver	74.00	-27.65
5180	5109	36.06	RMS	ver	54.00	-17.94
5180	5123	53.26	pk	ver	74.00	-20.74
5180	5123	40.53	RMS	ver	54.00	-13.47
5180	5130	52.23	pk	hor	74.00	-21.77
5180	5130	41.63	RMS	hor	54.00	-12.37
5180	5142	47.36	pk	hor	74.00	-26.64
5180	5142	38.63	RMS	hor	54.00	-15.37
5180	5143	56.19	pk	hor	74.00	-17.81
5180	5143	40.09	RMS	hor	54.00	-13.91
5180	5147	53.47	pk	hor	74.00	-20.53
5180	5147	42.52	RMS	hor	54.00	-11.48
5180	10360	42.21	pk	ver	68.20	-25.99
5180	23762	46.08	pk	hor	74.00	-27.92
5180	23762	37.90	RMS	hor	54.00	-16.10
5180	39892	57.27	pk	ver	74.00	-16.73
5180	39892	46.87	RMS	ver	54.00	-07.13
5240	6987	49.51	pk	ver	68.20	-18.69
5240	10201	42.86	pk	ver	68.20	-25.34
5240	10476	42.72	pk	ver	68.20	-25.48
5240	12001	44.12	pk	hor	74.00	-29.88
5240	19585	46.55	pk	hor	74.00	-27.45
5240	19585	37.68	RMS	hor	54.00	-16.32
5320	5351	54.55	pk	hor	74.00	-19.45
5320	5351	49.82	RMS	hor	54.00	-04.18
5320	5376	53.50	pk	hor	74.00	-20.50
5320	5376	43.10	RMS	hor	54.00	-10.90
5320	10634	41.40	pk	ver	74.00	-32.60
5500	1996	43.78	pk	ver	68.20	-24.42
5600	1442	40.63	pk	ver	74.00	-33.37
5700	3230	42.60	pk	ver	68.20	-25.60
5700	3230	33.80	RMS	ver	68.20	-34.40
5700	4650	44.08	pk	ver	74.00	-29.92
5700	4650	35.63	RMS	ver	54.00	-18.37
5700	5725	63.36	pk	hor	68.20	-04.84
5700	5725	51.84	RMS	hor	68.20	-16.36
5700	5745	45.85	pk	ver	68.20	-22.35
5700	5745	36.55	RMS	ver	68.20	-31.65
5700	11402	41.01	pk	ver	74.00	-32.99

Test Results – VHT40						
Channel [MHz]	Emission [MHz]	Level [dBμV/m]	Det.	Pol.	Limit [dBμV/m]	Margin [dB]
5190	112.9342	24.30	qpk	ver	43.50	-19.18
5190	123.7131	31.00	qpk	hor	43.50	-12.54
5190	135.807	22.70	qpk	hor	43.50	-20.78
5190	250.569	39.61	qpk	hor	46.00	-06.39
5190	251.528	32.51	pk	ver	46.00	-13.49
5230	112.706	23.90	qpk	ver	43.50	-19.58
5230	115.1861	25.80	qpk	hor	43.50	-17.75
5230	123.7851	31.10	qpk	hor	43.50	-12.45
5230	128.4271	28.00	qpk	hor	43.50	-15.56
5230	248.772	38.55	qpk	hor	46.00	-07.45
5230	251.3	27.93	qpk	ver	46.00	-18.07
5310	117.624	22.20	qpk	hor	43.50	-21.34
5310	123.647	30.70	qpk	hor	43.50	-12.82
5310	132.5645	23.80	qpk	hor	43.50	-19.77
5310	249.0754	40.10	qpk	hor	46.00	-05.93
5310	250.449	33.77	pk	ver	46.00	-12.23
5590	111.409	33.90	pk	ver	43.50	-09.62
5590	111.409	22.60	qpk	ver	43.50	-20.90
5590	123.7972	35.10	pk	hor	43.50	-08.46
5590	123.7972	30.70	qpk	hor	43.50	-12.80
5590	250.09	32.58	pk	ver	46.00	-13.42
5590	250.138	43.79	pk	hor	46.00	-02.21
5590	250.138	38.14	qpk	hor	46.00	-07.86
5590	111.1567	33.30	pk	ver	43.50	-10.22
5590	111.1567	23.70	qpk	ver	43.50	-19.83
5590	121.2752	35.00	pk	hor	43.50	-08.48
5590	121.2752	26.60	qpk	hor	43.50	-16.94
5590	123.7131	35.40	pk	hor	43.50	-08.08
5590	123.7131	30.90	qpk	hor	43.50	-12.58
5590	133.4891	36.00	pk	hor	43.50	-07.49
5590	133.4891	22.80	qpk	hor	43.50	-20.68
5590	249.011	33.27	pk	ver	46.00	-12.73
5590	250.1627	44.30	pk	hor	46.00	-01.70
5590	250.1627	39.90	qpk	hor	46.00	-06.13
5670	112.2978	34.30	pk	ver	43.50	-09.22
5670	112.2978	23.70	qpk	ver	43.50	-19.77
5670	123.6711	35.90	pk	hor	43.50	-07.60
5670	123.6711	30.40	qpk	hor	43.50	-13.10
5670	250.401	42.60	pk	hor	46.00	-03.40
5670	250.401	37.71	qpk	hor	46.00	-08.29
5670	250.569	32.75	pk	ver	46.00	-13.25

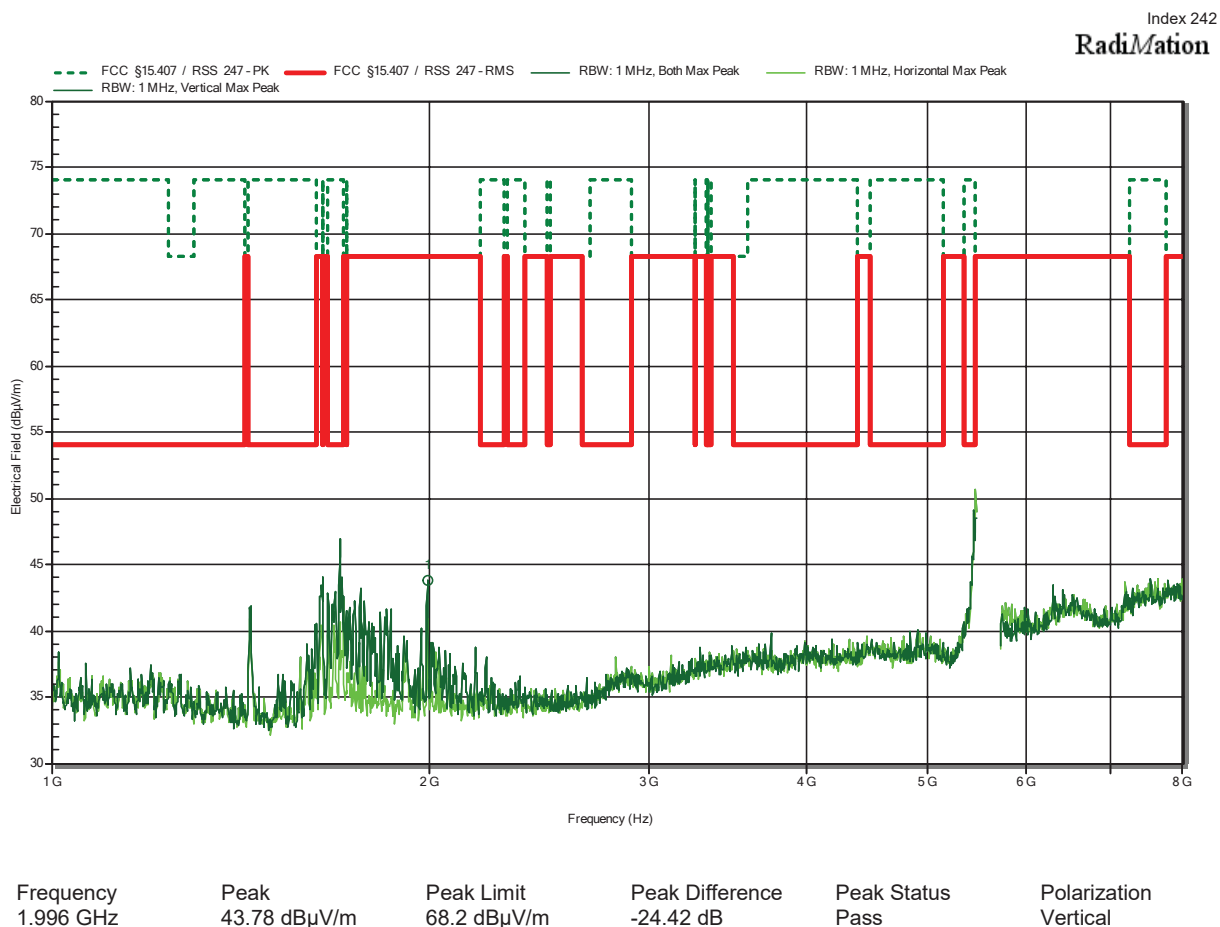
Test Results – VHT40						
Channel [MHz]	Emission [MHz]	Level [dBµV/m]	Det.	Pol.	Limit [dBµV/m]	Margin [dB]
5190	5413	53.78	pk	ver	74.00	-20.22
5190	5413	46.89	RMS	ver	54.00	-07.11
5190	5415	50.54	pk	hor	74.00	-23.46
5190	5415	44.11	RMS	hor	54.00	-09.89
5190	10385	41.66	pk	ver	68.20	-26.54
5230	5145	51.45	pk	ver	74.00	-22.55
5230	5145	39.38	RMS	ver	54.00	-14.62
5230	5365	46.63	pk	ver	74.00	-27.37
5230	5453	53.73	pk	ver	74.00	-20.27
5230	5453	46.75	RMS	ver	54.00	-07.25
5230	10459	42.70	pk	ver	68.20	-25.50
5310	5351	56.11	pk	ver	74.00	-17.89
5310	5351	48.24	RMS	ver	54.00	-05.76
5310	5401	47.80	pk	ver	74.00	-26.20
5310	5401	40.59	RMS	ver	54.00	-13.41
5310	10614	41.17	pk	ver	74.00	-32.83
5670	5735	58.41	pk	hor	68.20	-09.79
5670	5735	42.50	RMS	hor	68.20	-25.70
5670	11340	64.20	pk	ver	74.00	-09.80
5670	11340	50.75	RMS	ver	54.00	-03.25
5510	11028	40.50	pk	ver	74.00	-33.50
5590	11186	58.51	pk	ver	74.00	-15.49
5590	11186	46.52	RMS	ver	54.00	-07.48

Test Results – VHT80						
Channel [MHz]	Emission [MHz]	Level [dBµV/m]	Det.	Pol.	Limit [dBµV/m]	Margin [dB]
5210	123.701	31.00	qpk	hor	43.50	-12.51
5210	135.0213	25.30	qpk	hor	43.50	-18.26
5210	137.8848	22.40	qpk	hor	43.50	-21.16
5210	248.292	38.70	qpk	hor	46.00	-07.30
5210	250.809	32.92	pk	ver	46.00	-13.08
5210	5145	43.42	RMS	ver	54.00	-10.58
5210	10436	41.79	pk	ver	68.20	-26.41
5290	121.9476	31.10	qpk	hor	43.50	-12.46
5290	124.4937	34.40	qpk	hor	43.50	-09.16
5290	129.1116	30.30	qpk	hor	43.50	-13.18
5290	134.0537	25.70	qpk	hor	43.50	-17.79
5290	137.0802	24.40	qpk	hor	43.50	-19.15
5290	249.97	33.51	pk	ver	46.00	-12.49
5290	1686	35.13	RMS	ver	54.00	-18.87
5290	4982	30.60	RMS	ver	54.00	-23.40
5290	5351	51.91	RMS	hor	54.00	-02.09
5290	5400	36.29	RMS	hor	54.00	-17.71
5290	10597	40.00	pk	ver	68.20	-28.20
5530	113.3606	24.60	qpk	ver	43.50	-18.92
5530	123.7431	31.00	qpk	hor	43.50	-12.51
5530	128.5111	27.20	qpk	hor	43.50	-16.32
5530	134.5641	23.20	qpk	hor	43.50	-20.30
5530	137.5733	22.40	qpk	hor	43.50	-21.10
5530	249.838	38.07	qpk	hor	46.00	-07.93
5530	251.768	27.47	qpk	ver	46.00	-18.53
5530	1440	43.51	RMS	hor	54.00	-10.49
5530	5455	42.86	RMS	ver	54.00	-11.14
5530	5460	41.12	RMS	ver	54.00	-12.88
5530	11087	41.53	pk	ver	74.00	-32.47
5670	123.719	31.00	qpk	hor	43.50	-12.53
5670	135.681	22.20	qpk	hor	43.50	-21.30
5610	111.4569	22.10	qpk	ver	43.50	-21.37
5610	246.495	37.76	qpk	hor	46.00	-08.24
5610	250.006	37.21	qpk	ver	46.00	-08.79
5610	11240	56.19	pk	ver	74.00	-17.81
5590	5813	49.89	pk	hor	68.20	-18.31

ANNEX A Transmitter spurious emissions

Radiated Spurious Emissions according to FCC 47 e-CFR § 15.407

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. Degenhardt
 Measurement software: RadiMation, version 2020.1.8
 Test Conditions: Tnom: 22 °Celsius, Vnom: 14.8 VDC
 Antenna: Schwarzbeck BBHA 9120B
 Measurement distance: 3 m
 Mode: Tx; 5500MHz, HT20
 Test Date: 2021-11-19
 Note:

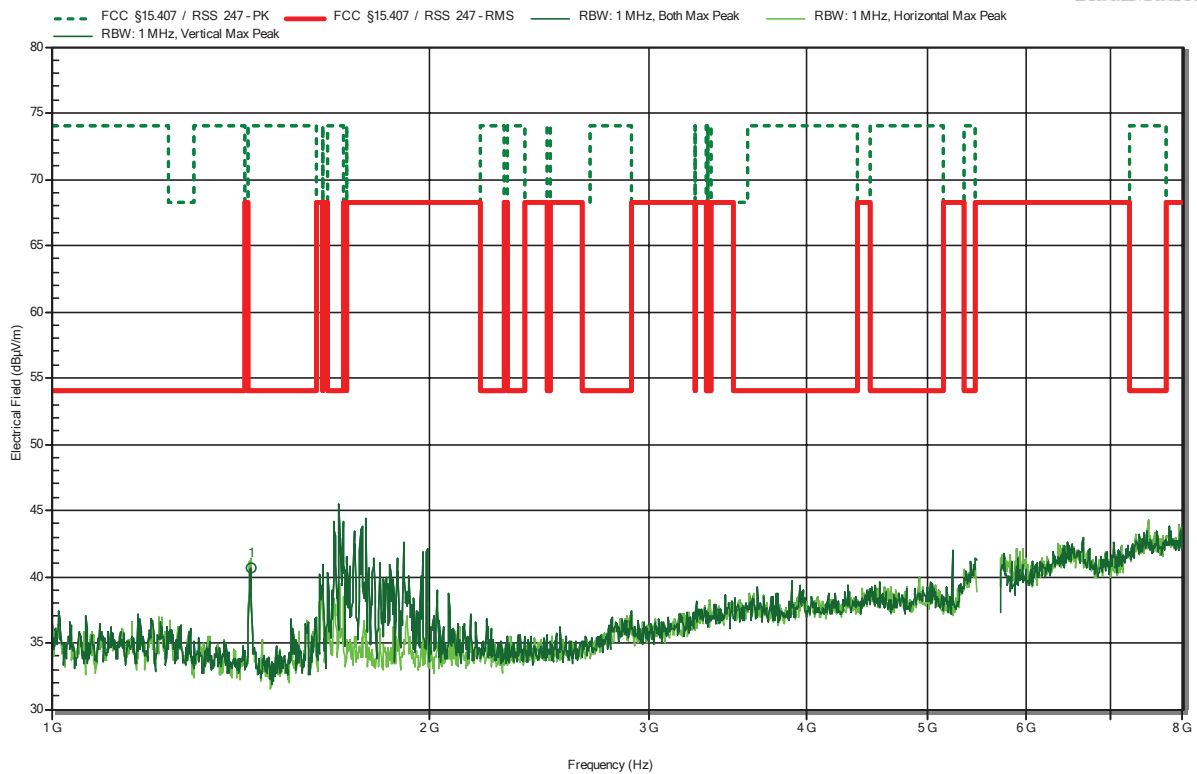


Radiated Spurious Emissions according to FCC 47 e-CFR § 15.407

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. Degenhardt
 Measurement software: RadiMation, version 2020.1.8
 Test Conditions: Tnom: 22 °Celsius, Vnom: 14.8 VDC
 Antenna: Schwarzbeck BBHA 9120B
 Measurement distance: 3 m
 Mode: Tx; 5600MHz, HT20
 Test Date: 2021-11-19
 Note:

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RadiMation



Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Polarization
1.442 GHz	40.63 dBμV/m	74 dBμV/m	-33.37 dB	Pass	Vertical