

TEST REPORT

Test Report No.: UL-RPT-RP11892783-616A

Manufacturer : Kontakt Micro-Location Sp. z o. o.

Model No. : Beacon Pro

FCC ID : 2ADAO-BPRO-V110

Technology : Bluetooth – Low Energy

Test Standard(s) : FCC Parts 15.209(a) & 15.247

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- 2. The results in this report apply only to the sample(s) tested.
- 3. The sample tested is in compliance with the above standard(s).
- 4. The test results in this report are traceable to the national or international standards.

5. Version 1.0.

Date of Issue: 11 December 2017

Checked by:

Ian Watch

willows.

Senior Engineer, Radio Laboratory

Company Signatory:

Sarah Williams

Senior Engineer, Radio Laboratory

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SERIAL NO: UL-RPT-RP11892783-616A

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1. Customer Information

Company Name:	Kontakt Micro-Location Sp. z o. o.
Address:	Stoczniowców 3 30-709 Kraków Poland

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2. Summary of Testing

2.1. General Information

Specification Reference:	47CFR15.247
Specification Title:	Code of Federal Regulations Volume 47 (Telecommunications): Part 15 Subpart C (Intentional Radiators) - Section 15.247
Specification Reference:	47CFR15.209
Specification Title:	Code of Federal Regulations Volume 47 (Telecommunications): Part 15 Subpart C (Intentional Radiators) - Section 15.209
Site Registration:	209735
Location of Testing:	UL VS LTD, Unit 3 Horizon, Wade Road, Kingsland Business Park, Basingstoke, Hampshire, RG24 8AH, United Kingdom
Test Dates:	06 October 2017 to 20 November 2017

2.2. Summary of Test Results

FCC Reference (47CFR)	Measurement	Result
Part 15.247(a)(2)	Transmitter Minimum 6 dB Bandwidth	②
Part 15.35(c)	Transmitter Duty Cycle	Note 1
Part 15.247(b)(3)	Transmitter Maximum Peak Output Power	②
Part 15.247(e)	Transmitter Power Spectral Density	Note 2
Part 15.247(d)/15.209(a)	Transmitter Radiated Emissions	Ø
Part 15.247(d)/15.209(a)	Transmitter Band Edge Radiated Emissions	Ø
Key to Results		·
	ot comply	

Note(s):

- 1. The measurement was performed to assist in the calculation of the level of the emissions. The EUT cannot transmit continuously and sweep triggering/signal gating cannot be implemented.
- 2. In accordance with FCC KDB 558074 Section 10.1, PSD measurements are not required if the maximum conducted output power is less than the PSD limit of 8 dBm / 3 kHz.

 The PSD level is therefore deemed to be equal to the measured output power.

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2.3. Methods and Procedures

Reference:	ANSI C63.10-2013
Title:	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices
Reference:	KDB 558074 D01 DTS Meas Guidance v04 April 5, 2017
Title:	Guidance for Performing Compliance Measurements on Digital Transmission Systems (DTS) Operating Under Section 15.247

2.4. Deviations from the Test Specification

For the measurements contained within this test report, there were no deviations from, additions to, or exclusions from the test specification identified above.

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3. Equipment Under Test (EUT)

3.1. Identification of Equipment Under Test (EUT)

Brand Name:	Kontakt.io
Model Name or Number:	Beacon Pro
Test Sample Serial Number:	2 (Radiated sample)
Hardware Version:	1.1
Software Version:	1.9.2
FCC ID:	2ADAO-BPRO-V110

Brand Name:	Kontakt.io
Model Name or Number:	Beacon Pro
Test Sample Serial Number:	3 (Conducted sample with RF port)
Hardware Version:	1.1
Software Version:	1.9.2
FCC ID:	2ADAO-BPRO-V110

3.2. Description of EUT

The Equipment Under Test was a *Bluetooth* Low Energy advertising device. Power is supplied by three CR2477 coin batteries.

3.3. Modifications Incorporated in the EUT

No modifications were applied to the EUT during testing.

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3.4. Additional Information Related to Testing

Technology Tested:	Bluetooth Low Energy (Digital Transmission System)			
Type of Unit:	Transceiver	Transceiver		
Channel Spacing:	2 MHz	2 MHz		
Modulation:	GFSK	GFSK		
Data Rate:	1 Mbit/s	1 Mbit/s		
Power Supply Requirement(s):	Nominal	Nominal 3.0 VDC		
Antenna Gain:	2.5 dBi	2.5 dBi		
Transmit Frequency Range:	2402 MHz to 2480 M	2402 MHz to 2480 MHz		
Transmit Channels Tested:	Channel ID	RF Channel	Channel Frequency (MHz)	
	Bottom	0	2402	
	Middle	19	2440	
	Тор	39	2480	

3.5. Support Equipment

The following support equipment was used to exercise the EUT during testing:

Description:	Laptop PC
Brand Name:	Lenovo
Model Name or Number:	L440
Serial Number:	R9-019EA414/04

Description:	USB to UART to USB convertor	
Brand Name:	Silicon labs	
Model Name or Number:	CP2104 Mini	
Serial Number:	Not marked or stated	

Description:	USB Cable. Length 1.0 metre	
Brand Name:	Not marked or stated	
Model Name or Number:	Not marked or stated	
Serial Number:	Not marked or stated	

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4. Operation and Monitoring of the EUT during Testing

4.1. Operating Modes

The EUT was tested in the following operating mode(s):

• Transmitting at maximum power in *Bluetooth* LE mode with a modulated carrier, maximum data length available and Pseudorandom Bit Sequence 9 on bottom, middle or top channel as required.

4.2. Configuration and Peripherals

The EUT was tested in the following configuration(s):

- The EUT was controlled in test mode with a laptop PC and a test software application using commands supplied by the customer. Channels, packet lengths and other settings were then set using this software application as required. The customer supplied two documents which detailed how to configure the EUT these were called 'Kontakt Beacon Pro certification test kit operating manual v1.0.pdf' and 'Bluetooth Direct Test Mode command example.pdf' dated 29 September 2017.
- The conducted sample was used for 6 dB bandwidth, duty cycle and maximum peak output power tests.
- The radiated sample was used for radiated spurious emissions tests.
- Powered by three fully charged AA batteries. The battery voltage was monitored throughout testing.

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5. Measurements, Examinations and Derived Results

5.1. General Comments

Measurement uncertainties are evaluated in accordance with current best practice. Our reported expanded uncertainties are based on standard uncertainties, which are multiplied by an appropriate coverage factor to provide a statistical confidence level of approximately 95%. Please refer to Section 6. Measurement Uncertainty for details.

In accordance with UKAS requirements all the measurement equipment is on a calibration schedule. All equipment was within the calibration period on the date of testing.

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5.2. Test Results

5.2.1. Transmitter Minimum 6 dB Bandwidth

Test Summary:

Test Engineers:	Stefan Ho & Victor Carmon	Test Date:	06 October 2017
Test Sample Serial Number:	3		

FCC Reference:	Part 15.247(a)(2)
Test Method Used:	FCC KDB 558074 Section 8.1 Option 1

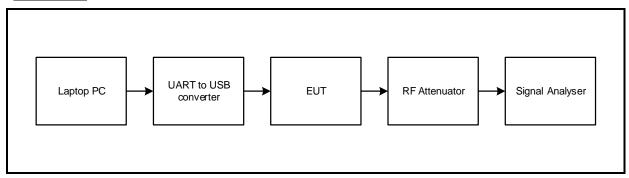
Environmental Conditions:

Temperature (°C):	25
Relative Humidity (%):	39

Note(s):

- 6 dB DTS bandwidth tests were performed using a signal analyser in accordance with FCC KDB 558074
 Section 8.1 Option 1 measurement procedure. The signal analyser resolution bandwidth was set to 100
 kHz and video bandwidth 300 kHz. A peak detector was used, sweep time was set to auto and the trace
 mode was Max Hold. The DTS bandwidth was measured at 6 dB down from the peak of the signal.
- 2. The signal analyser was connected to the RF port on the EUT using suitable attenuation and RF cable.

Test setup:

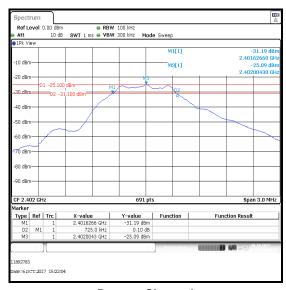


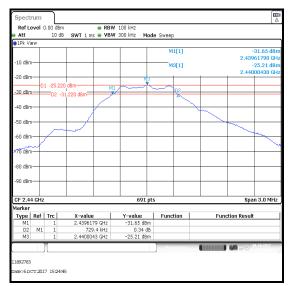
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Transmitter Minimum 6 dB Bandwidth (continued)

Results:

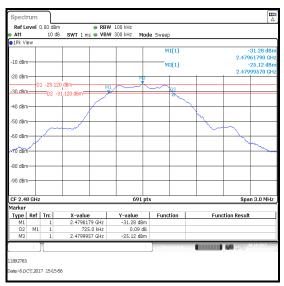
Channel	6 dB Bandwidth (kHz)	Limit (kHz)	Margin (kHz)	Result
Bottom	725.000	≥500	225.000	Complied
Middle	729.400	≥500	229.400	Complied
Тор	725.000	≥500	225.000	Complied





Bottom Channel

Middle Channel



Top Channel

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Transmitter Minimum 6 dB Bandwidth (continued)

Test Equipment Used:

Asset No.	Instrument	Manufacturer	Type No.	Serial No.	Date Calibration Due	Cal. Interval (Months)
M2002	Thermohygrometer	Testo	608-H1	45041825	22 Feb 2018	12
M1873	Signal Analyzer	Rohde & Schwarz	FSV30	103074	13 Jun 2018	12
A2528	Attenuator	AtlanTecRF	AN18W5-20	832828#3	Calibrated before use	-
G0614	Signal Generator	Rohde & Schwarz	SMB100A	177687	08 May 2020	36

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5.2.2. Transmitter Duty Cycle

Test Summary:

Test Engineer:	Andrew Edwards	Test Date:	23 October 2017
Test Sample Serial Number:	3		

FCC Reference:	Part 15.35(c)
Test Method Used:	FCC KDB 558074 Section 6.0

Environmental Conditions:

Temperature (°C):	25
Relative Humidity (%):	55

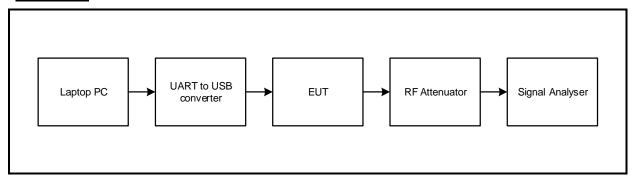
Note(s):

1. In order to assist with the determination of the average level of fundamental and spurious emissions field strength, measurements were made of duty cycle to determine the transmission duration and the silent period time of the transmitter. The transmitter on time and period were measured using a signal analyser in the time domain and duty cycle calculated as shown below:

10 log (1 / (On Time / [Period or 100 ms whichever is the lesser])).

$$10 \log (1/(392/626) = 2.0 dB$$

Test setup:



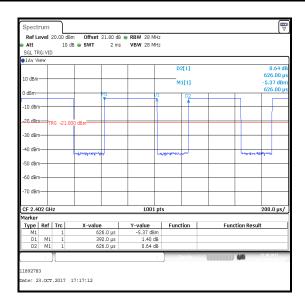
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Transmitter Duty Cycle (continued)

Results:

Pulse Duration	Period	Duty Cycle
(μs)	(µs)	(dB)
392	626	2.0



Test Equipment Used:

Asset No.	Instrument	Manufacturer	Type No.	Serial No.	Date Calibration Due	Cal. Interval (Months)
M2005	Thermohygrometer	Testo	608-H1	45046700	22 Feb 2018	12
M1996	Signal Analyser	Rohde & Schwarz	FSV13	100975	22 Nov 2017	12
A2520	Attenuator	AtlanTecRF	AN18-20	832797#1	Calibrated before use	-
M1804	Signal Generator	Rohde & Schwarz	SMP22	100026	03 Feb 2018	24

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5.2.3. Transmitter Maximum Peak Output Power

Test Summary:

Test Engineer:	Andrew Edwards	Test Date:	20 November 2017
Test Sample Serial Number:	3		

FCC Reference:	Part 15.247(b)(3)
Test Method Used:	FCC KDB 558074 Section 9.1.1

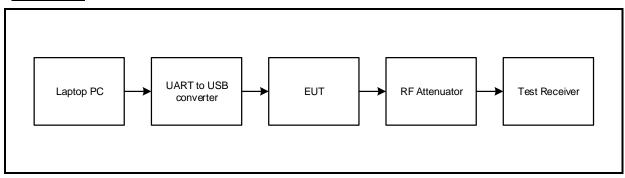
Environmental Conditions:

Temperature (°C):	23
Relative Humidity (%):	40

Note(s):

- 1. Conducted power tests were performed using a test receiver in accordance with FCC KDB 558074 Section 9.1.1 option 1 with the RBW > DTS bandwidth procedure.
- 2. The test receiver resolution bandwidth was set to 1 MHz and video bandwidth of 3 MHz. A peak detector was used, sweep time was set to auto and trace mode was Max Hold. The span was set to 3 MHz. A marker was placed at the peak of the signal and the results recorded in the table below.
- 3. The test receiver was connected to the RF port on the EUT using suitable attenuation and RF cable. An RF level offset was entered on the test receiver to compensate for the loss of the attenuator and RF cable.
- 4. The conducted power was added to the declared antenna gain to obtain the EIRP.

Test setup:



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Transmitter Maximum Peak Output Power (continued)

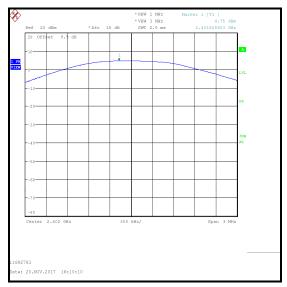
Results:

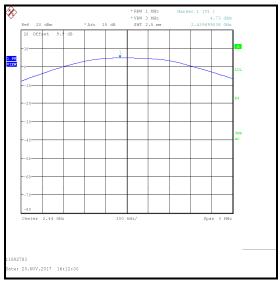
Channel	Conducted Peak Power (dBm)	Conducted Peak Power Limit (dBm)	Margin (dB)	Result
Bottom	4.8	30.0	25.2	Complied
Middle	4.7	30.0	25.3	Complied
Тор	4.6	30.0	25.4	Complied

Channel	Conducted Peak Power (dBm)	Declared Antenna Gain (dBi)	EIRP (dBm)	De Facto EIRP Limit (dBm)	Margin (dB)	Result
Bottom	4.8	2.5	7.3	36.0	28.7	Complied
Middle	4.7	2.5	7.2	36.0	28.8	Complied
Тор	4.6	2.5	7.1	36.0	28.9	Complied

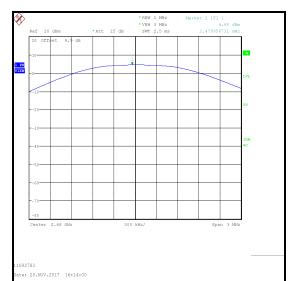
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Transmitter Maximum Peak Output Power (continued)





Bottom Channel



Top Channel

Middle Channel

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Transmitter Maximum Peak Output Power (continued)

Test Equipment Used:

Asset No.	Instrument	Manufacturer	Type No.	Serial No.	Date Calibration Due	Cal. Interval (Months)
M1569	Thermohygrometer	JM Handelspunkt	30.5015.13	Not stated	22 Feb 2018	12
M1874	Test Receiver	Rohde & Schwarz	ESU26	100553	21 Nov 2017	12
A2523	Attenuator	AtlanTecRF	AN18W5-10	832827#1	Calibrated before use	-
G0614	Signal Generator	Rohde & Schwarz	SMB100A	177687	08 May 2020	36

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5.2.4. Transmitter Radiated Emissions

Test Summary:

Test Engineer:	Doug Freegard	Test Date:	26 October 2017
Test Sample Serial Number:	2		

FCC Reference:	Parts 15.247(d) & 15.209(a)
Test Method Used:	ANSI C63.10 Sections 6.3 and 6.5
Frequency Range	30 MHz to 1000 MHz

Environmental Conditions:

Temperature (°C):	24
Relative Humidity (%):	52

Note(s):

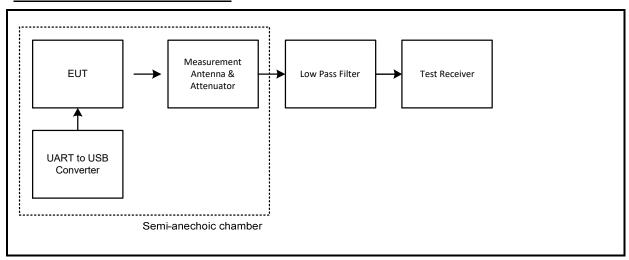
- The preliminary scans showed similar emission levels below 1 GHz, for each channel of operation.
 Therefore final radiated emissions measurements were performed with the EUT set to the middle channel only.
- 2. All emissions shown on the pre-scans were investigated and found to be ambient, or > 20 dB below the appropriate limit or below the noise floor of the measurement system. Therefore the highest peak noise floor reading of the measuring receiver was recorded in the table below.
- 3. Measurements below 1 GHz were performed in a semi-anechoic chamber (Asset Number K0017) at a distance of 3 metres. The EUT was placed at a height of 80 cm above the reference ground plane in the centre of the chamber turntable. Maximum emission levels were determined by height searching the measurement antenna over the range 1 metre to 4 metres.
- 4. Pre-scans were performed and markers placed on the highest measured levels. The test receiver resolution bandwidth was set to 120 kHz and video bandwidth 500 kHz. A peak detector was used, sweep time was set to auto and trace mode was Max Hold.

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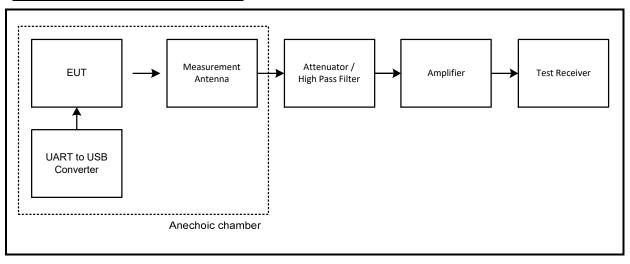
Transmitter Radiated Emissions (continued)

Test setup for radiated measurements:

Semi-anechoic chamber < 1 GHz:



Anechoic chamber 1 GHz to 8 GHz:

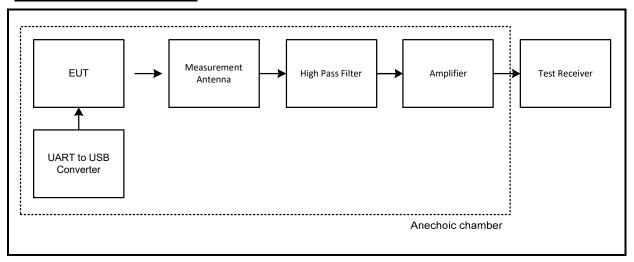


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Transmitter Radiated Emissions (continued)

Test setup for radiated measurements:

Anechoic chamber > 8 GHz:



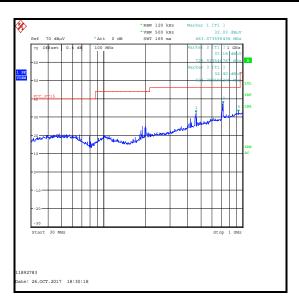
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Transmitter Radiated Emissions (continued)

Results: Middle Channel

Frequency	Antenna	Level	Limit	Margin	Result
(MHz)	Polarity	(dBμV/m)	(dBμV/m)	(dB)	
934.790	Vertical	32.4	46.0	13.6	Complied



Test Equipment Used:

Asset No.	Instrument	Manufacturer	Type No.	Serial No.	Date Calibration Due	Cal. Interval (Months)
M2003	Thermohygrometer	Testo	608-H1	45046641	22 Feb 2018	12
K0017	3m RSE Chamber	Rainford EMC	N/A	N/A	14 Feb 2018	12
M1995	Test Receiver	Rohde & Schwarz	ESU40	100428	13 Apr 2018	12
A2888	Antenna	Schwarzbeck	VULB 9163	9163-941	25 Apr 2018	12
A2147	Attenuator	AtlanTecRF	AN18-06	09020206-06	25 Apr 2018	12
A2131	Low Pass Filter	AtlanTecRF	AFL-02000	JFB1004-002	27 Feb 2018	12

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Transmitter Radiated Emissions (continued)

Test Summary:

Test Engineer:	Doug Freegard	Test Dates:	25 October 2017 & 26 October 2017
Test Sample Serial Number:	2		

FCC Reference:	Parts 15.247(d) & 15.209(a)
Test Method Used:	FCC KDB 558074 Sections 11 & 12 referencing ANSI C63.10 Sections 6.3 and 6.6
Frequency Range	1 GHz to 25 GHz

Environmental Conditions:

Temperature (°C):	24 to 28
Relative Humidity (%):	50 to 52

Note(s):

- 1. The final measured value, for the given emission, in the table below incorporates the calibrated antenna factor and cable loss.
- 2. All emissions shown on the pre-scan plots were investigated and found to be ambient or >20 dB below the applicable limit or below the measurement system noise floor. Therefore the highest peak and average noise floor reading of the measurement system was recorded as shown in the tables below.
- 3. The emission shown on the 1 GHz to 3 GHz plot is the EUT fundamental.
- 4. Pre-scans above 1 GHz were performed in a fully anechoic chamber (Asset Number K0017) at a distance of 3 metres. The EUT was placed at a height of 1.5 metres above the test chamber floor in the centre of the chamber turntable. All measurement antennas were placed at a fixed height of 1.5 metres above the test chamber floor, in line with the EUT.
- 5. Pre-scans were performed and a marker placed on the highest measured level of the appropriate plot. The test receiver resolution bandwidth was set to 1 MHz and video bandwidth 3 MHz. The sweep time was set to auto.

Results: Peak

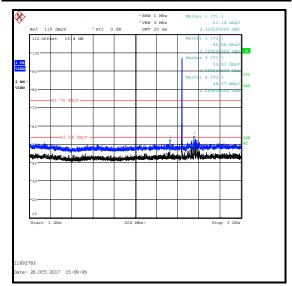
Frequency	Antenna	Level	Limit	Margin	Result
(MHz)	Polarity	(dBμV/m)	(dBμV/m)	(dB)	
17769.500	Vertical	54.7	74.0	19.3	Complied

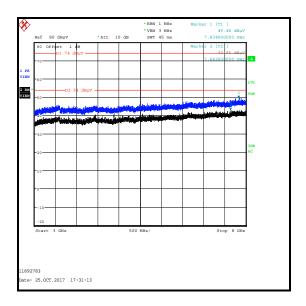
Results: Average

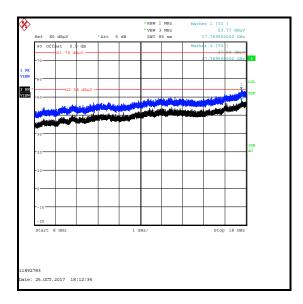
Frequency	Antenna	Level	Limit	Margin	Result
(MHz)	Polarity	(dBμV/m)	(dBμV/m)	(dB)	
17769.500	Vertical	47.7	54.0	6.3	Complied

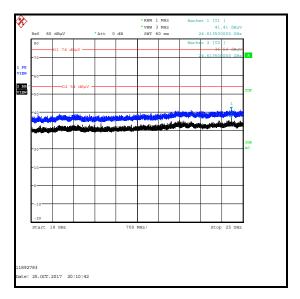
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Transmitter Radiated Emissions (continued)









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Transmitter Radiated Emissions (continued)

Test Equipment Used:

Asset No.	Instrument	Manufacturer	Type No.	Serial No.	Date Calibration Due	Cal. Interval (Months)
M2003	Thermohygrometer	Testo	608-H1	45046641	22 Feb 2018	12
K0017	3m RSE Chamber	Rainford EMC	N/A	N/A	14 Feb 2018	12
M1995	Test Receiver	Rohde & Schwarz	ESU40	100428	13 Apr 2018	12
A2863	Pre Amplifier	Agilent	8449B	3008A02100	11 Apr 2018	12
A2891	Pre Amplifier	Schwarzbeck	BBV 9718	9718-306	11 Apr 2018	12
A2889	Antenna	Schwarzbeck	BBHA 9120 B	BBHA 9120 B 653	11 Apr 2018	12
A2890	Antenna	Schwarzbeck	HWRD 750	014	11 Apr 2018	12
A2892	Antenna	Schwarzbeck	BBHA 9170	9170-727	11 Apr 2018	12
A2916	Attenuator	AtlanTecRF	AN18W5-10	832827#1	03 Mar 2018	12
A2914	High Pass Filter	AtlanTecRF	AFH-03000	2155	06 Mar 2018	12
A2947	High Pass Filter	AtlanTecRF	AFH-07000	1601900001	18 May 2018	12

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5.2.5. Transmitter Band Edge Radiated Emissions

Test Summary:

Test Engineer:	Doug Freegard	Test Dates:	24 October 2017 & 25 October 2017
Test Sample Serial Number:	2		

FCC Reference:	Parts 15.247(d) & 15.209(a)
Test Method Used:	KDB 558074 Section 11 & 12

Environmental Conditions:

Temperature (°C):	24
Relative Humidity (%):	50

Note(s):

- 1. The final measured value, for the given emission, in the table below incorporates the calibrated antenna factor and cable loss.
- 2. The maximum peak conducted output power was previously measured. In accordance with FCC KDB 558074 Section 11.1(a), the lower band edge measurement was performed with a peak detector and the -20 dBc limit applied.
- 3. As the lower band edge is adjacent to a non-restricted band, only peak measurements are required. In accordance with FCC KDB 558074 Section 11.1, the test method in Section 11.3 was followed: the test receiver resolution bandwidth was set to 100 kHz and video bandwidth 300 kHz. A peak detector was used, sweep time was set to auto and trace mode was Max Hold. The test receiver was left to sweep for a sufficient length of time in order to maximise the carrier level and out-of-band emissions. A marker and corresponding reference level line were placed on the peak of the carrier. As the maximum peak conducted output power was measured using a peak detector in accordance with FCC KDB 558074 Section 9.1.1 an out-of-band limit line was placed 20 dB (FCC KDB 558074 Section 11.1(a)) below the peak level. A marker was placed on the band edge spot frequencies. Marker frequency and levels were recorded in the table below.
- 4. As the upper band edge is adjacent to a restricted band both peak and average measurements were recorded by placing a marker at the edge of the band. For peak measurements, the test receiver resolution bandwidth was set to 1 MHz and the video bandwidth 3 MHz. A peak detector was used, sweep time was set to auto and trace mode was Max Hold. For average measurements, the test receiver resolution bandwidth was set to 1 MHz and the video bandwidth 3 MHz. An RMS detector was used, sweep time was set to auto and trace mode was trace averaging over 300 sweeps. A marker was placed on the band edge spot frequencies and a second marker placed on the highest emission level in the adjacent restricted band of operation (where a higher level emission was present). Marker frequencies and levels were recorded.
- 5. There is a restricted band 10 MHz below the lower band edge. The test receiver was set up as follows: the RBW set to 1 MHz, the VBW set to 3 MHz, with the sweep time set to auto couple. Peak and average measurements were performed with peak and RMS detectors respectively. Markers were placed on the highest point on each trace.

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Transmitter Band Edge Radiated Emissions (continued)

Results: Lower Band edge / Peak

Frequency	Level	-20 dBc Limit	Margin	Result
(MHz)	(dBµV/m)	(dBµV/m)	(dB)	
2400.000	50.2	76.5	26.3	Complied

Results: Upper Band edge / Peak

Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
2483.500	57.3	74.0	16.7	Complied

Results: Upper Band edge / Average

Frequency (MHz)	Level (dBμV/m)	Duty Cycle correction (dB)	Corrected Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
2483.500	41.5	2.0	43.5	54.0	10.5	Complied

Results: 2310 MHz to 2390 MHz Restricted Band / Peak

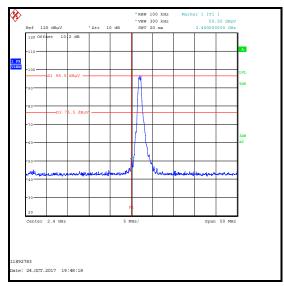
Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
2347.179	53.7	74.0	20.3	Complied

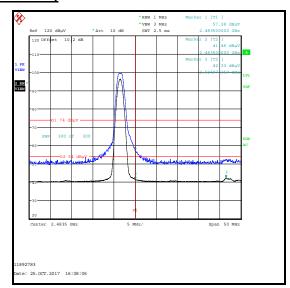
Results: 2310 MHz to 2390 MHz Restricted Band / Average

Frequency (MHz)	Level (dBμV/m)	Correction Factor (dB)	Corrected Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
2333.077	41.1	2.0	43.1	54.0	10.9	Complied

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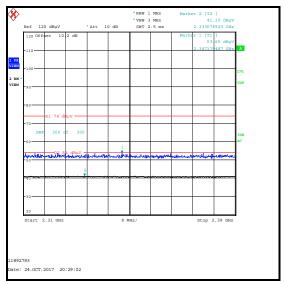
Transmitter Band Edge Radiated Emissions (continued)





Lower Band Edge

Upper Band Edge



2310 MHz to 2390 MHz Restricted Band

Test Equipment Used:

Asset No.	Instrument	Manufacturer	Туре No.	Serial No.	Date Calibration Due	Cal. Interval (Months)
M2003	Thermohygrometer	Testo	608-H1	45046641	22 Feb 2018	12
K0017	3m RSE Chamber	Rainford EMC	N/A	N/A	14 Feb 2018	12
A2863	Pre Amplifier	Rohde & Schwarz	ESU40	100428	13 Apr 2018	12
M1995	Test Receiver	Agilent	8449B	3008A02100	11 Apr 2018	12
A2889	Antenna	Schwarzbeck	BBHA 9120 B	BBHA 9120 B 653	11 Apr 2018	12
A2916	Attenuator	AtlanTecRF	AN18W5-10	832827#1	03 Mar 2018	12

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6. Measurement Uncertainty

No measurement or test can ever be perfect and the imperfections give rise to error of measurement in the results. Consequently the result of a measurement is only an approximation to the value measured (the specific quantity subject to measurement) and is only complete when accompanied by a statement of the uncertainty of the approximation.

The expression of uncertainty of a measurement result allows realistic comparison of results with reference values and limits given in specifications and standards.

The uncertainty of the result may need to be taken into account when interpreting the measurement results.

The reported expanded uncertainties below are based on a standard uncertainty multiplied by an appropriate coverage factor such that a confidence level of approximately 95% is maintained. For the purposes of this document "approximately" is interpreted as meaning "effectively" or "for most practical purposes".

Measurement Type	Range	Confidence Level (%)	Calculated Uncertainty
Conducted Maximum Peak Output Power	2.4 GHz to 2.4835 GHz	95%	±1.13 dB
Minimum 6 dB Bandwidth	2.4 GHz to 2.4835 GHz	95%	±4.59 %
Duty Cycle	2.4 GHz to 2.4835 GHz	95%	±1.14 %
Radiated Spurious Emissions	30 MHz to 1 GHz	95%	±5.65 dB
Radiated Spurious Emissions	1 GHz to 25 GHz	95%	±2.94 dB

The methods used to calculate the above uncertainties are in line with those recommended within the various measurement specifications. Where measurement specifications do not include guidelines for the evaluation of measurement uncertainty the published guidance of the appropriate accreditation body is followed.

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7. Report Revision History

Version Number	Revision Details		
	Page No(s)	Clause	Details
1.0	-	-	Initial Version

--- END OF REPORT ---

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