RADIO REPORT

FCC 47 CFR Part 15C
ISED Canada RSS-247

Frequency hopping systems operating within the 902.0 MHz - 928.0 MHz band

Report Reference No	G0M-2403-2482-TFC247FH-V03
Testing Laboratory	Eurofins Product Service GmbH
Address	Storkower Str. 38c 15526 Reichenwalde Germany
Accreditation	DAkkS - Registration number : D-PL-12092-01-03 (ISED) ISED Testing Laboratory site: 3470A DAkkS - Registration number : D-PL-12092-01-04 (FCC) FCC Filed Test Laboratory, Reg.-No.: 96970
Applicant	Atlas Copco Airpower N.V.
Address	Boomsesteenweg 957 2610 Antwerpen, Wilrijk Belgien
Test Specification	47 CFR Part 15C RSS-247, Issue 3, 2023-08 RSS-Gen, Issue 5, Amendment 2, 2021-02
Non-Standard Test Method	None
Equipment under Test (EUT):	
Product Description	Machine mounted device, wireless interface for compressor machines
Model(s)	SBP
Additional Model(s)	None
Brand Name(s)	Wuxi Origin Industry Service Co., Ltd
Hardware Version(s)	NVG_04
Software Version(s)	navigator_2024.04.08.1_rnd
FCC ID	UXQGWSBPA
IC	6712B-GWSBPA
Test Result	**PASSED**

Possible test case verdicts:		
Required by standard but not tested	N/T	
Not required by standard	N/R	
Not applicable to EUT	N/A	
Test object does meet the requirement	P(PASS)	
Test object does not meet the requirement	F(FAIL)	
Testing:		
Test Lab Temperature	20 °C - 30 °C	
Test Lab Humidity	25 % - 55 %	
Date of receipt of test item	2024-04-15	
Report:		
Compiled by	Ehsan Sohrabi	
Tested by (+ signature) (Responsible for Test)	Ehsan Sohrabi	E. Sohrabi
Approved by (+ signature) (Senior Expert)	Radwan Jaafar	
Date of Issue	2025-04-04	
Total number of pages	77	
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:		
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VERSION HISTORY

Version History			
Version	Issue Date	Remarks	Revised By
01	2024-07-04	Initial Release	--
02	2024-11-20	Replaced document: G0M-2403-2482-TFC247FH-V01 Replaced by: G0M-2403-2482-TFC247FH-V02 Reason: • Brand name added	E. Sohrabi
03	2025-04-04	Replaced document: G0M-2403-2482-TFC247FH-V02 Replaced by: G0M-2403-2482-TFC247FH-V03 Reason: • Change of the Manufacturer	E. Sohrabi

ABBREVIATIONS AND ACRONYMS

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

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1 Equipment (Test Item) Under Test

Description	Machine mounted device, wireless interface for compressor machines		
Model	SBP		
Additional Model(s)	None		
Brand Name(s)	Wuxi Origin Industry Service Co., Ltd		
Sample Identification	EUT #	Sample-ID	Serial Number
	EUT 1	Conducted: 48228 Radiated: 48227	NVGPCBA1841760022 NVGPCBA1841760037
Hardware Version(s)	NVG_04		
Software Version(s)	navigator_2024.04.08.1_rnd		
PMN	SBP		
HVIN	NVG_04		
FVIN	navigator_2024.04.08.1_rnd		
HMN	SBP		
FCC ID	UXQGWSBPA		
IC	6712B-GWSBPA		
Equipment type	End Product		
Radio type	Transceiver		
Assigned frequency bands	902.0 MHz - 928.0 MHz		
Radio technology	FHSS		
Modulation	2-GFSK		
Number of antenna ports	2		
Antenna	Type	Integrated antenna	
	Model	Flex	
	Manufacturer	Suntak	
	Gain	-2.5 dBi (customer declaration)	
Supply Voltage	V_{NOM}	24 VDC	
Operating Temperature	T_{NOM}	25 °C	
AC/DC-Adaptor	None		
Manufacturer	Wuxi Origin Industry Service Co., Ltd No. 7, Lihe East Road, Hongshan Subdistrict, Xinwu District 214111 Wuxi City China		

1.3 Support Equipment

Product Type	Device	Manufacturer	Model	Comment
AE	Power Supply	--	--	To power the EUT
AE	LapTop	Lenovo	--	To connect to the EUT
CBL	M12 adapter cable	Haltian Oy	--	To connect the EUT to power supply and laptop
SFT	Tera term	--	--	For EUT configuration
Description:				
AE	Auxiliary Equipment			
SIM	Simulator			
CBL	Connecting Cable			
SFT	Software			
Comment:				

1.4 Test Modes

Mode	Description
Transmit	Mode = Transmit Modulation = 2GFSK Duty cycle = 100 % Power = 14dBm
Receive	Mode = Receive Modulation = 2GFSK
Transmit (Hopping)	Mode = Transmit Modulation = 2GFSK Power = 14dBm
Comment: Power setting is declared by customer in the software	

1.5 Test Frequencies

Designator	Mode	Channel	Frequency [MHz]
F1	Tx / Rx	1	902.97
F2	Tx / Rx	2	914.97
F3	Tx / Rx	3	926.97

1.6 Sample emission level calculation

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

Reading:

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

A.F.:

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

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

Net:

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

Margin:

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

Field strength limit:

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

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

Example only for radiated field strength:

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

2 Result Summary

FCC 47 CFR Part 15C, ISED RSS-247				
Product Standard Reference	**Requirement**	**Reference Method**	**Result**	**Remarks**
ISED RSS-Gen, Issue 5 A2 (section 6.7)	Occupied Bandwidth	ANSI C63.10-2013	PASS	Informational only
FCC § 15.247(a)(1) ISED RSS-247 § 5.1 Issue 3	20 dB Bandwidth	ANSI C63.10-2013	PASS	--
FCC § 15.247(a)(1)(i) ISED RSS-247, Issue 3 (section 5.1)	Number of hopping frequencies	ANSI C63.10-2013	PASS	--
FCC § 15.247(a)(1) ISED RSS-247, Issue 3 (section 5.1)	Frequency hopping channel separation	ANSI C63.10-2013	PASS	--
FCC § 15.247(a)(1)(i) ISED RSS-247, Issue 3 (section 5.1)	Time of occupancy (Dwell time)	ANSI C63.10-2013	PASS	--
FCC § 15.247(b) ISED RSS-247, Issue 3 (section 5.4)	Maximum peak conducted power	ANSI C63.10-2013	PASS	--
FCC § 15.207 ISED RSS-247, Issue 3 (section 3.1)	AC power line conducted emissions	ANSI C63.10-2013	N/R	Note 1
FCC § 15.247(d) ISED RSS-247, Issue 3 (section 5.5)	Band edge compliance	ANSI C63.10-2013	PASS	--
FCC § 15.247(d) ISED RSS-247, Issue 3 (section 5.5)	Conducted spurious emissions	ANSI C63.10-2013	PASS	--
FCC § 15.247(d) FCC § 15.209 ISED RSS-Gen, Issue 5 A2 (section 6.13)	Transmitter radiated spurious emissions	ANSI C63.10-2013	PASS	--
ISED RSS-247, Issue 3 (section 3.1)	Receiver radiated spurious emissions	ANSI C63.4-2014	PASS	--
Note 1: According the applicant declaration, the EUT does not powered (directly or indirectly) via AC-Mains				
Comment: The Decision Rule is applied on the basis of ETSI TR 102 273 and ETSI TR 100 028. These standards provide guidance on how to calculate and apply measurement uncertainty whilst providing maximum uncertainties allowance. In all cases due consideration will be given to ILAC-G8:09/2019. Where a result is considered conditional in respect of its proximity to the limit line, the customer would be made aware of situation so that they can make an informed decision on how to proceed.				

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

3 Test Conditions and Results

3.1 Test Conditions and Results - Occupied bandwidth

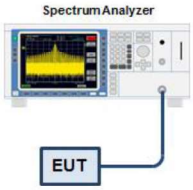
3.1.1 Information

Test Information	
Reference	ISED RSS-Gen, Issue 5 A2 (section 6.7)
Measurement Method	ANSI C63.10 6.9.3
Measurement Uncertainty	± 1.26 %
Test Sample ID	48228
Operator	Ehsan Sohrabi
Date	2024-04-24

3.1.2 Limits

Limits
None (Informational only)

3.1.3 Setup

Test Setup


3.1.4 Equipment

Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum analyzer	R&S	FSU43	EF01631	2023-08	2024-08
Cable (CAABA)	Gigalane	GIGALANE 1730	EF00779	2024-04	2025-04

3.1.5 Procedure

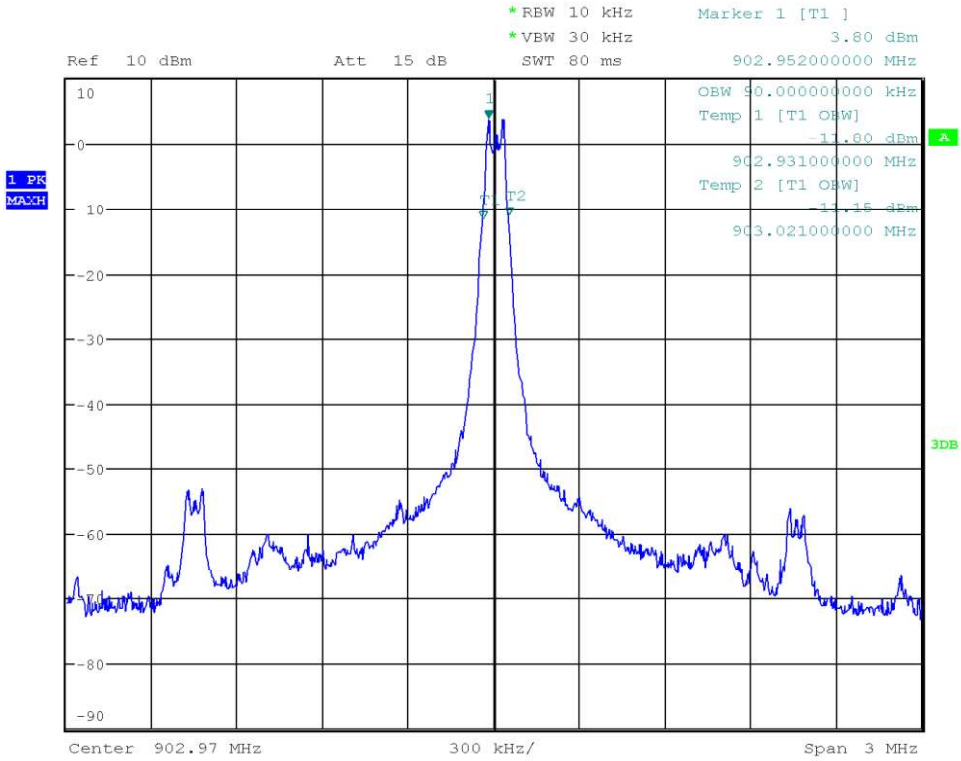
Test Procedure
1. EUT transmitter is activated in test mode under normal conditions 2. The spectrum analyzer is set to peak detection and maximum hold with a span twice the emission spectrum 3. The resolution bandwidth is set to the range of 1 % to 5 % of the occupied bandwidth 4. The occupied bandwidth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

3.1.6 Results

Test Results		
Mode	Frequency [MHz]	Bandwidth [MHz]
Transmit	902.97	0.090
Transmit	914.97	0.096
Transmit	926.97	0.096

Occupied Bandwidth

Project Number:	G0M-2403-2482
Applicant:	Eurofins Electric & Electronics Finland Oy
Model Description:	Machine mounted device, wireless interface for compressor machines
Model:	SBP
Test Sample ID:	48228
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 6.9.3
Operational Mode:	2-GFSK, Channel: 902.97 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Ehsan Sohrabi
Test Site:	Eurofins Product Service GmbH
Test Date:	2024-04-24
Occupied Bandwidth [MHz]:	0.090



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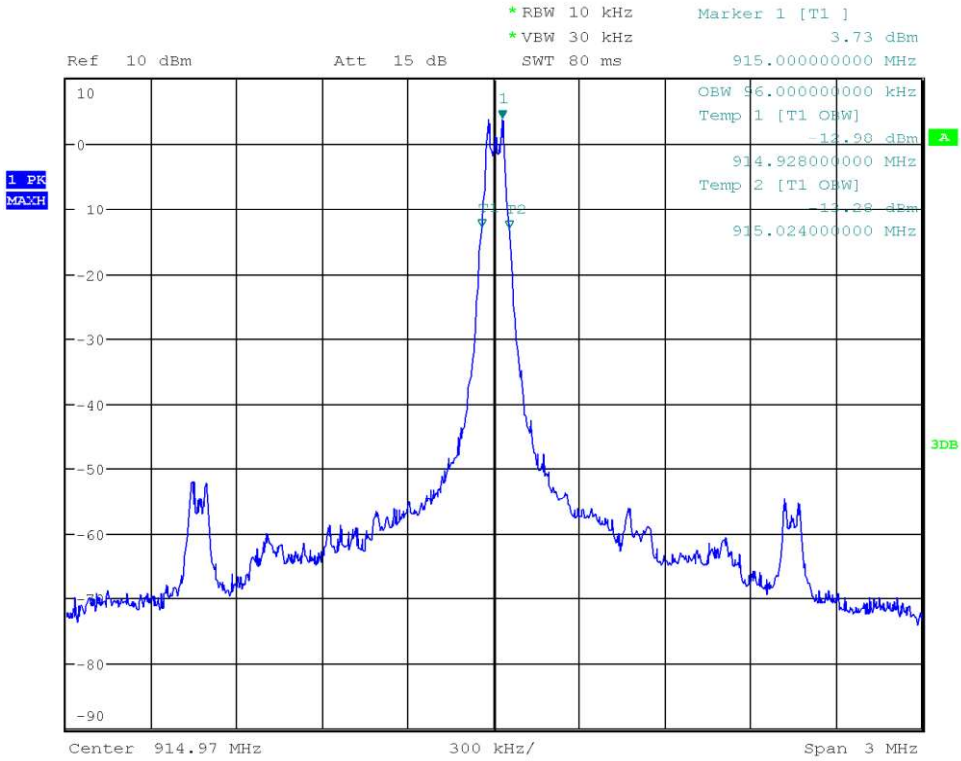
Occupied Bandwidth

Project Number:	G0M-2403-2482
Applicant:	Eurofins Electric & Electronics Finland Oy
Model Description:	Machine mounted device, wireless interface for compressor machines
Model:	SBP
Test Sample ID:	48228
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 6.9.3
Operational Mode:	2-GFSK, Channel: 914.97 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Ehsan Sohrabi
Test Site:	Eurofins Product Service GmbH
Test Date:	2024-04-24
Occupied Bandwidth [MHz]:	0.096



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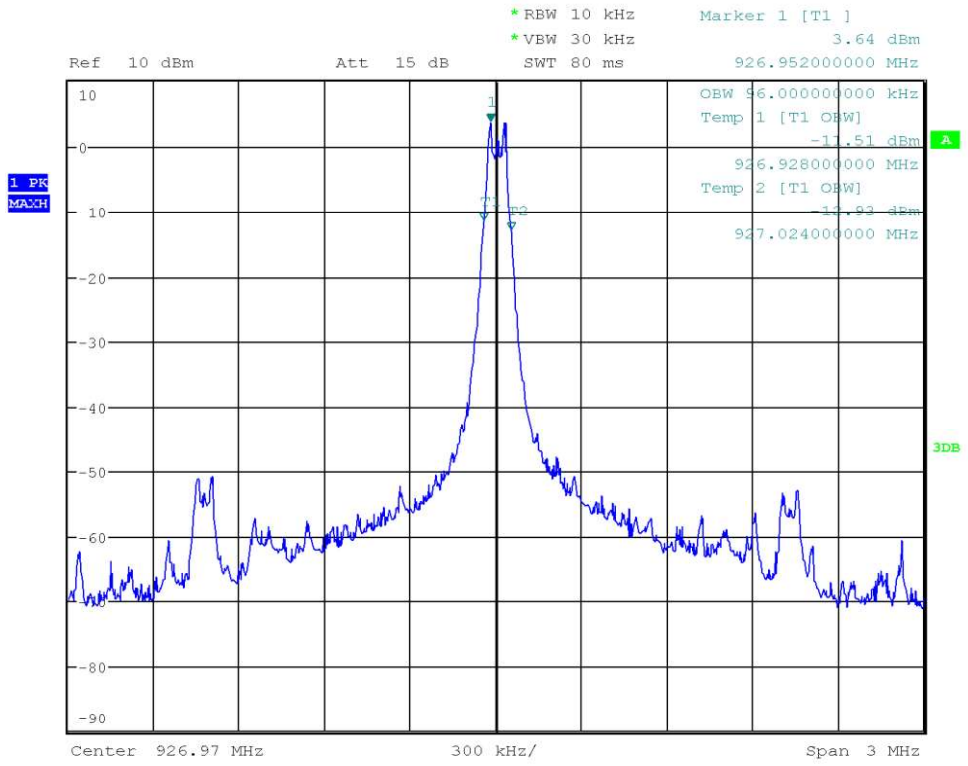
Occupied Bandwidth

Project Number:	G0M-2403-2482
Applicant:	Eurofins Electric & Electronics Finland Oy
Model Description:	Machine mounted device, wireless interface for compressor machines
Model:	SBP
Test Sample ID:	48228
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 6.9.3
Operational Mode:	2-GFSK, Channel: 926.97 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Ehsan Sohrabi
Test Site:	Eurofins Product Service GmbH
Test Date:	2024-04-24
Occupied Bandwidth [MHz]:	0.096



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3.2 Test Conditions and Results - 20 dB bandwidth

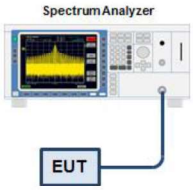
3.2.1 Information

Test Information	
Reference	FCC 15.247(a)(1) / ISED RSS-247 5.1
Measurement Method	ANSI C63.10 6.9.2
Measurement Uncertainty	± 1.26 %
Test Sample ID	48228
Operator	Ehsan Sohrabi
Date	2024-04-24

3.2.2 Limits

Limits	
Number of hopping channels ≥ 50 Time of occupancy ≤ 0.4 s within 20 s	20 dB BW < 250 kHz
Number of hopping channels ≥ 25 Time of occupancy ≤ 0.4 s within 10 s	250 kHz ≤ 20 dB BW < 500 kHz

3.2.3 Setup

Test Setup


3.2.4 Equipment

Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum analyzer	R&S	FSU43	EF01631	2023-08	2024-08
Cable (CAABA)	Gigalane	GIGALANE 1730	EF00779	2024-04	2025-04

3.2.5 Procedure

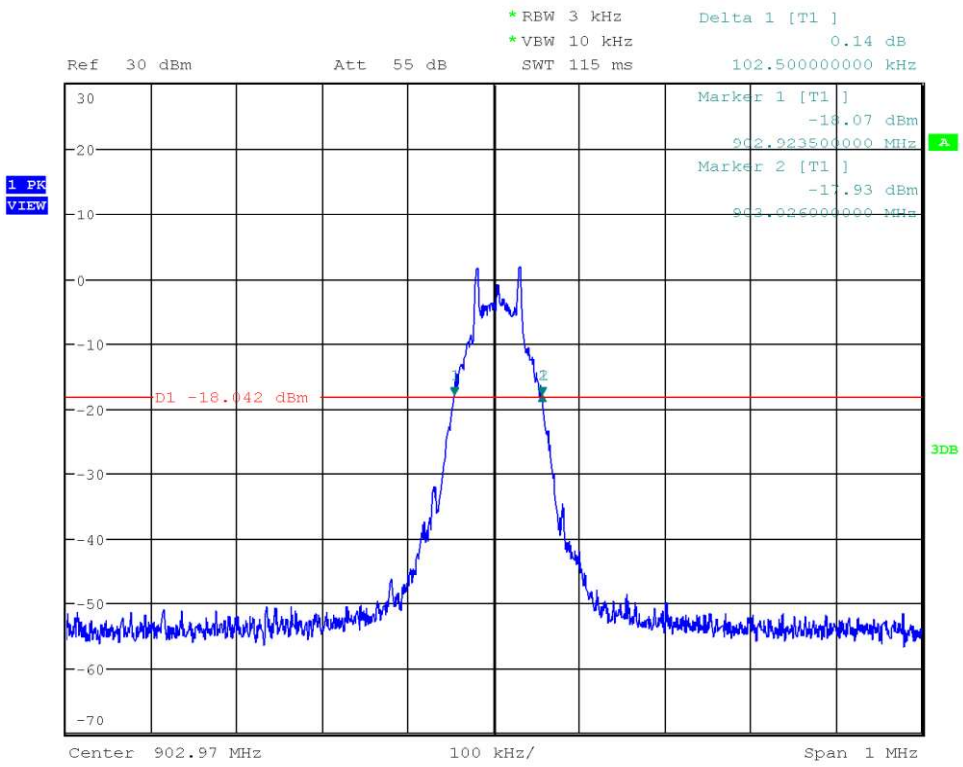
Test Procedure
1. EUT set to test mode (Communication tester is used if needed) 2. Span set to at least twice the emission spectrum 3. Detector set to peak and max hold 4. Envelope peak value of emission spectrum is selected 5. Marker on envelope of spectrum is set to level of -20 dB to the left of the peak 6. Marker on envelope of spectrum is set to level of -20 dB to the right of the peak 7. 20dB Bandwidth is determined by marker frequency separation

3.2.6 Results

Test Results		
Mode	Frequency [MHz]	Bandwidth [MHz]
Transmit	902.97	0.102
Transmit	914.97	0.103
Transmit	926.97	0.103

20 dB Bandwidth

Project Number:	G0M-2403-2482
Applicant:	Eurofins Electric & Electronics Finland Oy
Model Description:	Machine mounted device, wireless interface for compressor machines
Model:	SBP
Test Sample ID:	48228
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 6.9.2
Operational Mode:	2-GFSK, single, Channel: 902.97 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Ehsan Sohrabi
Test Site:	Eurofins Product Service GmbH
Test Date:	2024-04-24
Lower Frequency [MHz]:	902.923
Upper Frequency [MHz]:	903.026
20 dB Bandwidth [kHz]:	102



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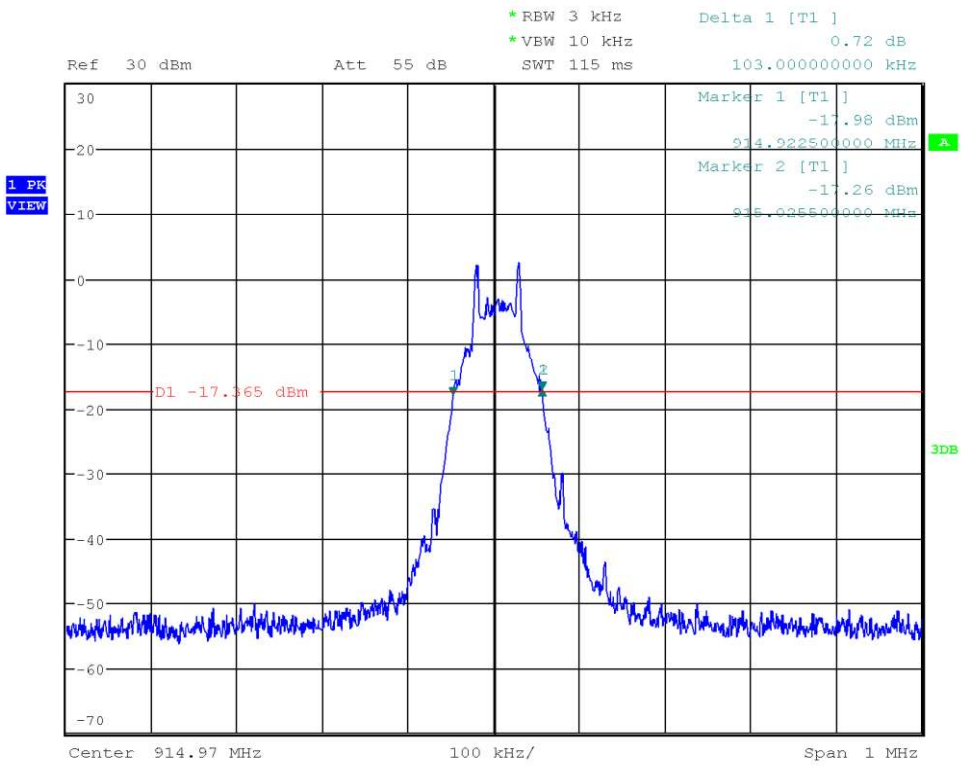
20 dB Bandwidth

Project Number:	G0M-2403-2482
Applicant:	Eurofins Electric & Electronics Finland Oy
Model Description:	Machine mounted device, wireless interface for compressor machines
Model:	SBP
Test Sample ID:	48228
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 6.9.2
Operational Mode:	2-GFSK, single, Channel: 914.97 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Ehsan Sohrabi
Test Site:	Eurofins Product Service GmbH
Test Date:	2024-04-24
Lower Frequency [MHz]:	914.923
Upper Frequency [MHz]:	915.025
20 dB Bandwidth [kHz]:	103



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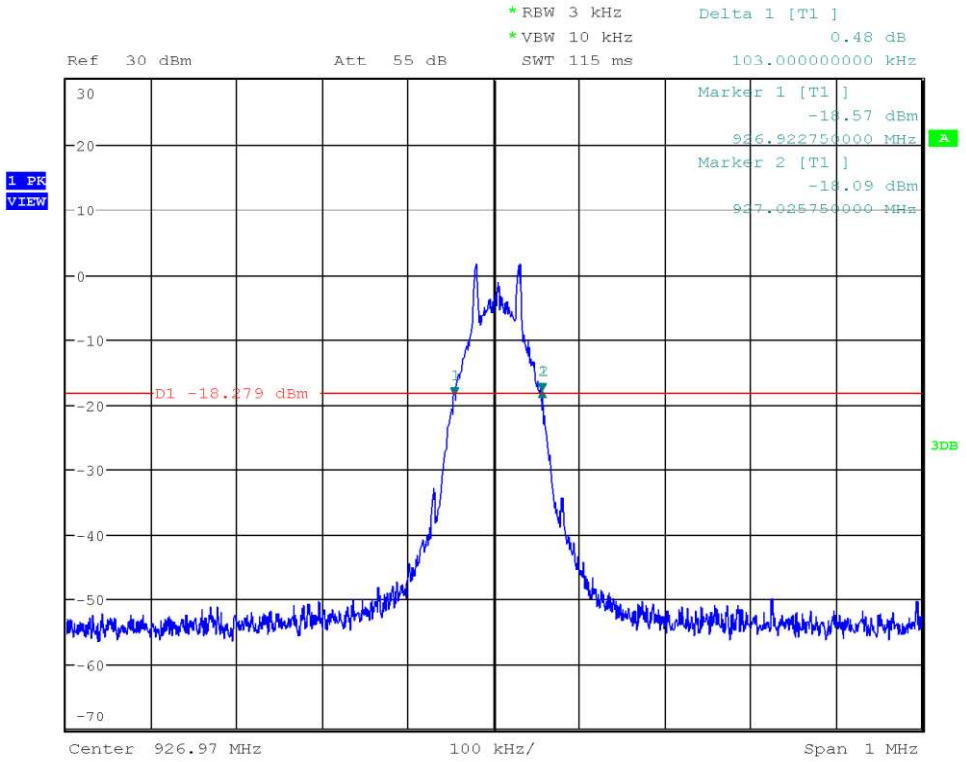
20 dB Bandwidth

Project Number:	G0M-2403-2482
Applicant:	Eurofins Electric & Electronics Finland Oy
Model Description:	Machine mounted device, wireless interface for compressor machines
Model:	SBP
Test Sample ID:	48228
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 6.9.2
Operational Mode:	2-GFSK, single, Channel: 926.97 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Ehsan Sohrabi
Test Site:	Eurofins Product Service GmbH
Test Date:	2024-04-24
Lower Frequency [MHz]:	926.923
Upper Frequency [MHz]:	927.026
20 dB Bandwidth [kHz]:	103



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3.3 Test Conditions and Results - Number of hopping frequencies

3.3.1 Information

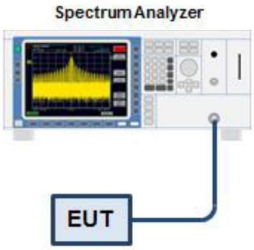
Test Information	
Reference	FCC § 15.247(a)(1)(i); ISED RSS-247, Issue 3 (section 5.1)
Measurement Method	ANSI C63.10 7.8.3
Operator	Ehsan Sohrabi
Date	2024-04-25

3.3.2 Limits

Limits	
Condition	Number of hopping channels
20 dB BW < 250 kHz Time of occupancy ≤ 0.4 s within 20 s	Number of hopping channels ≥ 50
250 kHz ≤ 20 dB BW < 500 kHz Time of occupancy ≤ 0.4 s within 10 s	Number of hopping channels ≥ 25

3.3.3 Setup

Test Setup



3.3.4 Equipment

Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum analyzer	R&S	FSU43	EF01631	2023-08	2024-08
Cable (CAABA)	Gigalane	GIGALANE 1730	EF00779	2024-04	2025-04

3.3.5 Procedure

Test Procedure

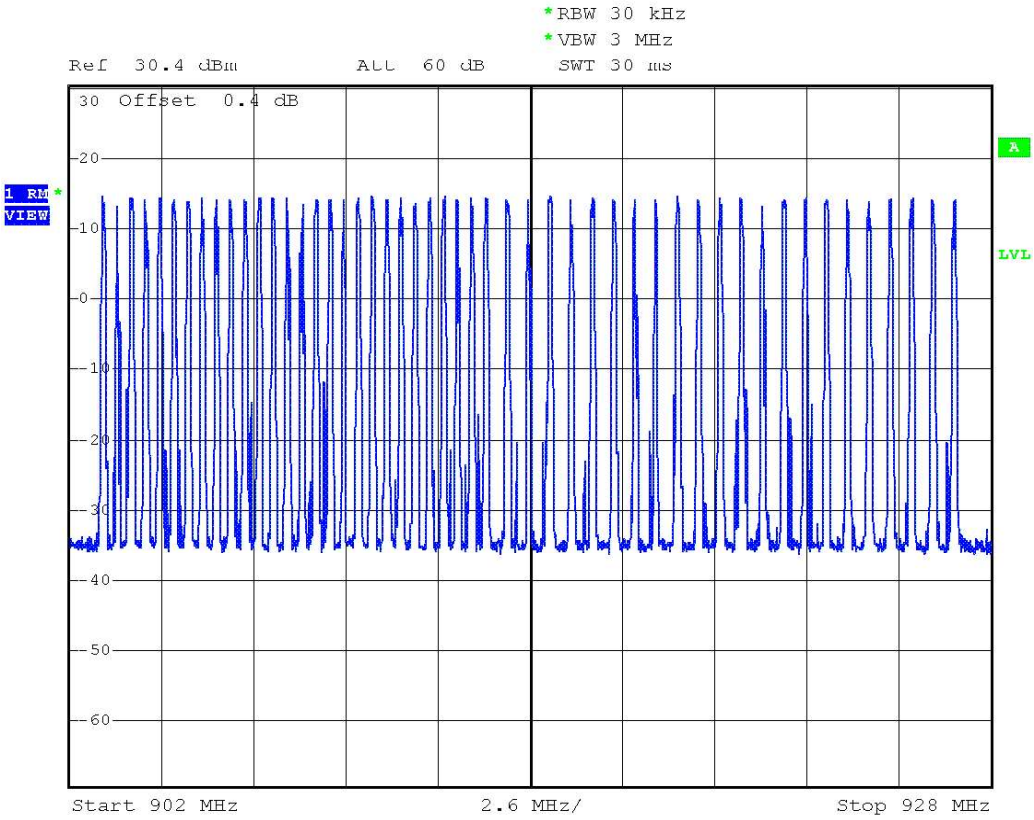
1. EUT set to test mode (Communication tester is used if needed)
2. Span set to measurement frequency range
3. Detector set to peak and max hold
4. Resolution bandwidth is set small enough to resolve hopping channel emission spectra
5. The number of peaks is counted to determine number of hopping frequencies

3.3.6 Results

Test Results		
Number of hopping frequencies	Limit	Verdict
77	50	PASS

Number of hopping frequencies

Project Number:	G0M-2403-2482
Applicant:	Eurofins Electric & Electronics Finland Oy
Model Description:	Machine mounted device, wireless interface for compressor machines
Model:	SBP
Test Sample ID:	48228
Reference Standards:	FCC 15.247 (a)(1)(i)
Reference Method:	ANSI C63.10:2013 7.8.3
Operational Mode:	2-GFSK, Hopping Mode
Operating Conditions:	Tnom/Vnom
Operator:	Ehsan Sohrabi
Test Site:	Eurofins Product Service GmbH
Test Date:	2024-04-25
Number of Hopping Channels:	77
Limit:	at least 50
Verdict:	Pass



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3.4 Test Conditions and Results - Frequency hopping channel separation

3.4.1 Information

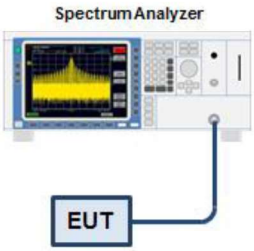
Test Information	
Reference	FCC § 15.247(a)(1); ISED RSS-247, Issue 3 (section 5.1)
Measurement Method	ANSI C63.10 7.8.4
Measurement Uncertainty	± 3.14 %
Operator	Ehsan Sohrabi
Date	2024-04-25

3.4.2 Limits

Limit
≥ 25 kHz or 20 dB bandwidth, whichever is greater

3.4.3 Setup

Test Setup



3.4.4 Equipment

Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum analyzer	R&S	FSU43	EF01631	2023-08	2024-08
Cable (CAABA)	Gigalane	GIGALANE 1730	EF00779	2024-04	2025-04

3.4.5 Procedure

Test Procedure

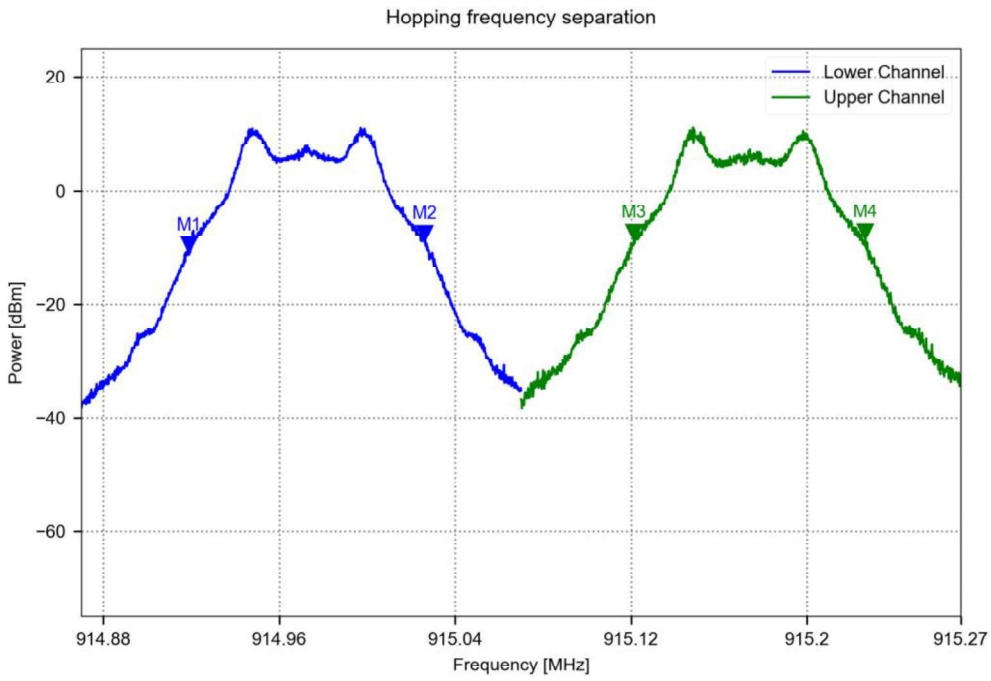
1. EUT set to test mode (Communication tester is used if needed)
2. Span set to measurement frequency range
3. Detector set to peak and max hold
4. Resolution bandwidth is set small enough to resolve hopping channel emission spectra
5. The two adjacent channel peaks are marked
6. Channel separation is determined from frequency separation of markers

3.4.6 Results

Test Results		
Channel separation [kHz]	Limit [kHz]	Verdict
201	≥103	PASS

Hopping frequency separation

Project Number:	G0M-2403-2482
Applicant:	Eurofins Electric & Electronics Finland Oy
Model Description:	Machine mounted device, wireless interface for compressor machines
Model:	SBP
Test Sample ID:	48228
Reference Standards:	FCC 15.247(a)(1)
Reference Method:	ANSI C63.10:2013 7.8.2
Operational Mode:	other, 2-GFSK, Channels: 914.97 + 915.17 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Ehsan Sohrabi
Test Site:	Eurofins Product Service GmbH
Test Date:	2024-04-25
Lower Frequency (M1) [MHz]:	914.919
Upper Frequency (M2) [MHz]:	915.026
Lower Frequency (M3) [MHz]:	915.121
Upper Frequency (M4) [MHz]:	915.226
Lower center Frequency [MHz]:	914.973
Upper center Frequency [MHz]:	915.174
Hopping Frequency Separation [MHz]:	0.201



3.5 Test Conditions and Results - Time of occupancy (Dwell time)

3.5.1 Information

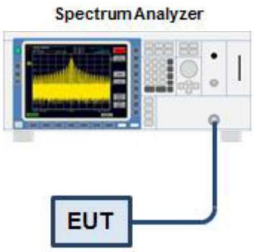
Test Information	
Reference	FCC § 15.247(a)(1)(i); ISED RSS-247, Issue 3 (section 5.1)
Measurement Method	ANSI C63.10 7.8.2
Measurement Uncertainty	± 78.53 %
Operator	Ehsan Sohrabi
Date	2024-04-25

3.5.2 Limits

Limits	
Condition	Limit
20 dB BW < 250 kHz Number of hopping channels ≥ 50	Time of occupancy ≤ 0.4 s within 20 s
250 kHz ≤ 20 dB BW < 500 kHz Number of hopping channels ≥ 25	Time of occupancy ≤ 0.4 s within 10 s

3.5.3 Setup

Test Setup



3.5.4 Equipment

Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum analyzer	R&S	FSU43	EF01631	2023-08	2024-08
Cable (CAABA)	Gigalane	GIGALANE 1730	EF00779	2024-04	2025-04

3.5.5 Procedure

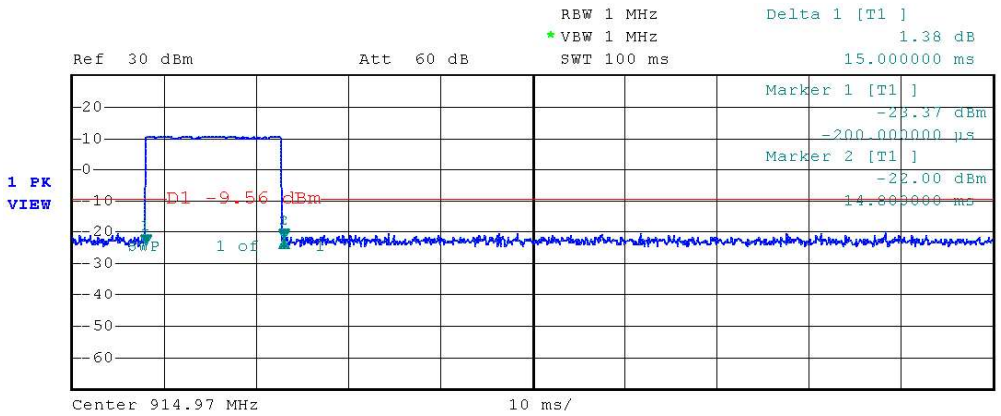
Test Procedure	
1.	EUT set to test hopping mode (Communication tester is used if needed)
2.	Analyzer span is set to zero span
3.	Detector set to peak and max hold
4.	RBW is set to 100 kHz and VBW to 300 kHz
5.	The sweep time is set to capture one single dwell time
6.	Trigger is set to video trigger
7.	A marker is set to the start and end positions of the burst
8.	The dwell time is determined from the marker difference
9.	Another sweep is initiated without trigger and sweep time set to the observation time
10.	The number of hops is counted
11.	The total time of occupancy is calculated from the dwell time per hop multiplied by the number of hops

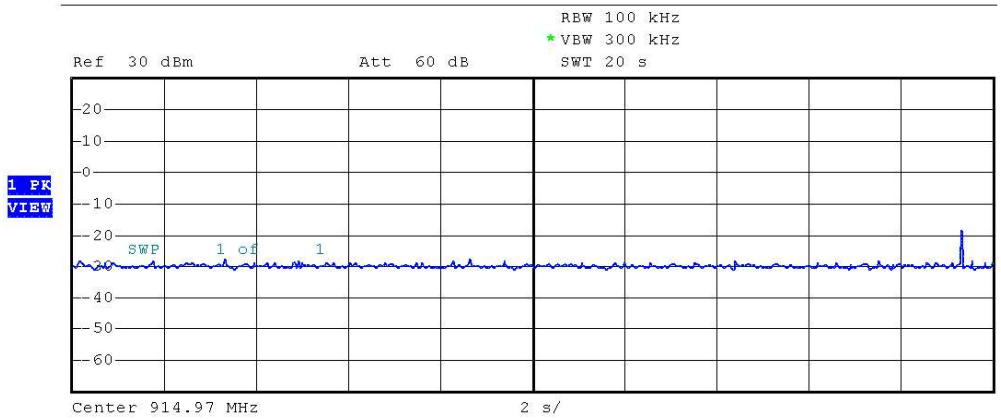
3.5.6 Results

Test Results					
Observation Period [s]	Number of Hops	Dwell time per Hop [s]	Time of occupancy [s]	Limit [s]	Margin [s]
20	1	0.015	0.015	0.4	-0.385

Time of occupancy

Project Number:	G0M-2403-2482
Applicant:	Eurofins Electric & Electronics Finland Oy
Model Description:	Machine mounted device, wireless interface for compressor machines
Model:	SBP
Test Sample ID:	48228
Reference Method:	ANSI C63.10:2013 7.8.4
Operational Mode:	2-GFSK, 200KHz, Hopping mode
Operating Conditions:	Tnom/Vnom
Operator:	Ehsan Sohrabi
Test Site:	Eurofins Product Service GmbH
Test Date:	2024-04-25
Dwell Time per Hop [ms]:	15.000
Number of Hops:	1
Time of occupancy [s]:	0.015





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3.6 Test Conditions and Results - Maximum peak conducted output power

3.6.1 Information

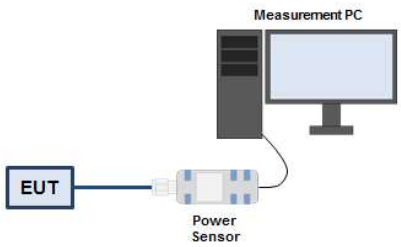
Test Information	
Reference	FCC § 15.247(b); ISED RSS-247, Issue 3 (section 5.4)
Measurement Method	ANSI C63.10 7.8.5
Measurement Uncertainty	± 2.86 dB
Operator	Ehsan Sohrabi
Date	2024-04-19

3.6.2 Limits

Limits	
Condition	Limit
Number of hopping channels ≥ 50	1 W (30 dBm)
50 > Number of hopping channels ≥ 25	0.25 W (24 dBm)

3.6.3 Setup

Test Setup



3.6.4 Equipment

Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Power sensor	ETS-Lindgren	7002-006	EF00934	2023-08	2024-08

3.6.5 Procedure

Test Procedure

1. EUT set to test mode (Communication tester is used if needed)
2. The EUT antenna port is connected to a wideband power sensor
3. The peak power is measured with the power sensor
4. If the EUT has more than one transmit chain the procedure is repeated for each transmit chain and the power is summed up

3.6.6 Results

Test Results				
Channel [MHz]	Power [dBm]	Power [W]	Limit [W]	Verdict
902.97	14.5	0.028	1.0	PASS
914.97	14.4	0.027	1.0	PASS
926.97	14.4	0.027	1.0	PASS

3.7 Test Conditions and Results - Band-edge compliance

3.7.1 Information

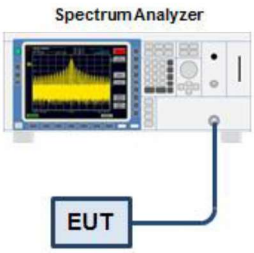
Test Information	
Reference	FCC § 15.247(d); ISED RSS-247, Issue 3 (section 5.5)
Measurement Uncertainty	± 3.64 dB
Measurement Method	ANSI C63.10 11.13
Operator	Ehsan Sohrabi
Date	2024-04-25

3.7.2 Limits

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

3.7.3 Setup

Test Setup



3.7.4 Equipment

Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum analyzer	R&S	FSU43	EF01631	2023-08	2024-08
Cable (CAABA)	Gigalane	GIGALANE 1730	EF00779	2024-04	2025-04

3.7.5 Procedure

Test Procedure

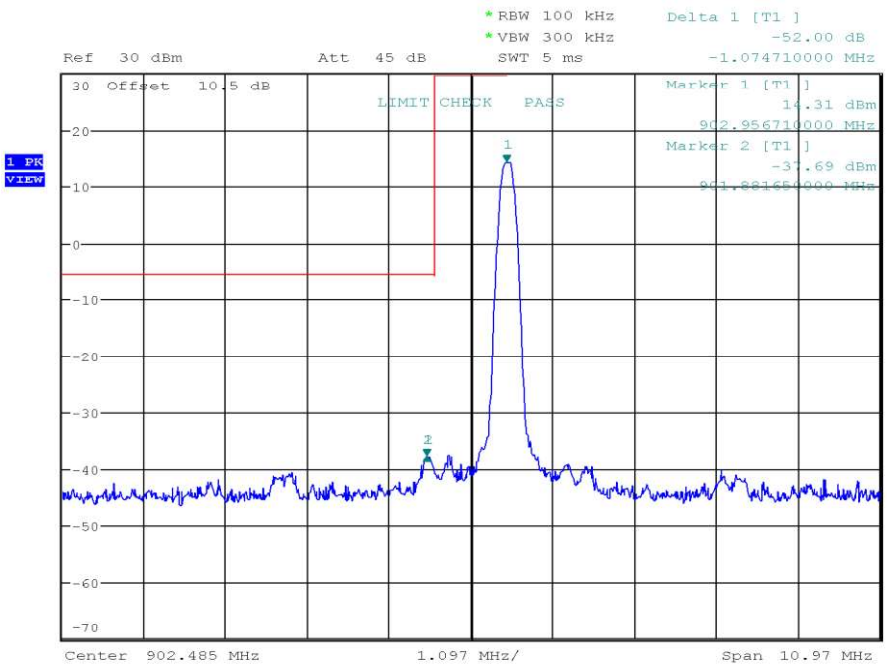
1. EUT set to test mode (Communication tester is used if needed)
2. Span set around lower band edge and detector is set to peak and max hold
3. Resolution bandwidth is set to 100 kHz
4. Markers are set to peak emission levels within frequency band and outside frequency band
5. Band edge attenuation is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

3.7.6 Results

Test Results				
Mode	Channel [MHz]	Out-of-band Attenuation [dB]	Limit [dB]	Verdict
Single	902.97	-52.0	-20	PASS
Single	926.97	-49.55	-20	PASS
Hopping	902.97	-51.53	-20	PASS
Hopping	926.97	-51.92	-20	PASS

Emissions in nonrestricted frequency bands at the Band-edge

Project Number:	G0M-2403-2482
Applicant:	Eurofins Electric & Electronics Finland Oy
Model Description:	Machine mounted device, wireless interface for compressor machines
Model:	SBP
Test Sample ID:	48228
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 6.10
Operational Mode:	single frequency, Channel: 902.97 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Ehsan Sohrabi
Test Site:	Eurofins Product Service GmbH
Test Date:	2024-04-24
Band-edge	Lower
In-band Frequency [MHz]:	902.957
Max. in-band Level [dBm/100 kHz]:	14.309
Out-of-band Frequency [MHz]:	901.882
Max. out-of-band Level [dBm/100 kHz]:	-37.691
Attenuation [dB]:	-52.0



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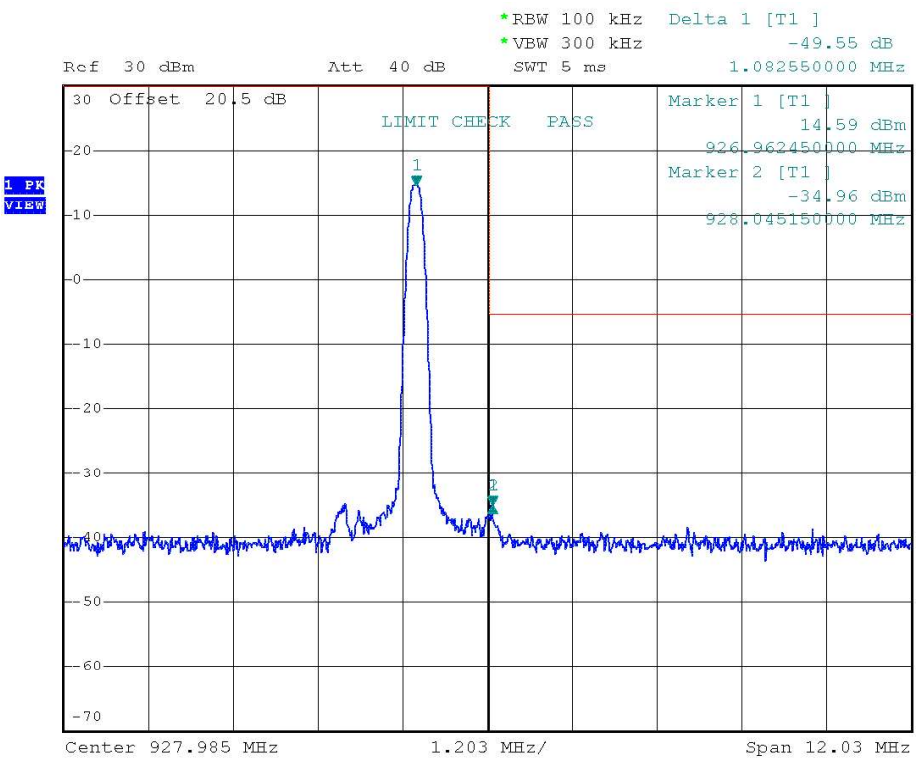
Emissions in nonrestricted frequency bands at the Band-edge

Project Number:	G0M-2403-2482
Applicant:	Eurofins Electric & Electronics Finland Oy
Model Description:	Machine mounted device, wireless interface for compressor machines
Model:	SBP
Test Sample ID:	48228
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 6.10
Operational Mode:	single frequency, Channel: 926.97 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Ehsan Sohrabi
Test Site:	Eurofins Product Service GmbH
Test Date:	2024-04-25
Band-edge	Upper
In-band Frequency [MHz]:	926.962
Max. in-band Level [dBm/100 kHz]:	14.589
Out-of-band Frequency [MHz]:	928.045
Max. out-of-band Level [dBm/100 kHz]:	-34.963
Attenuation [dB]:	-49.55



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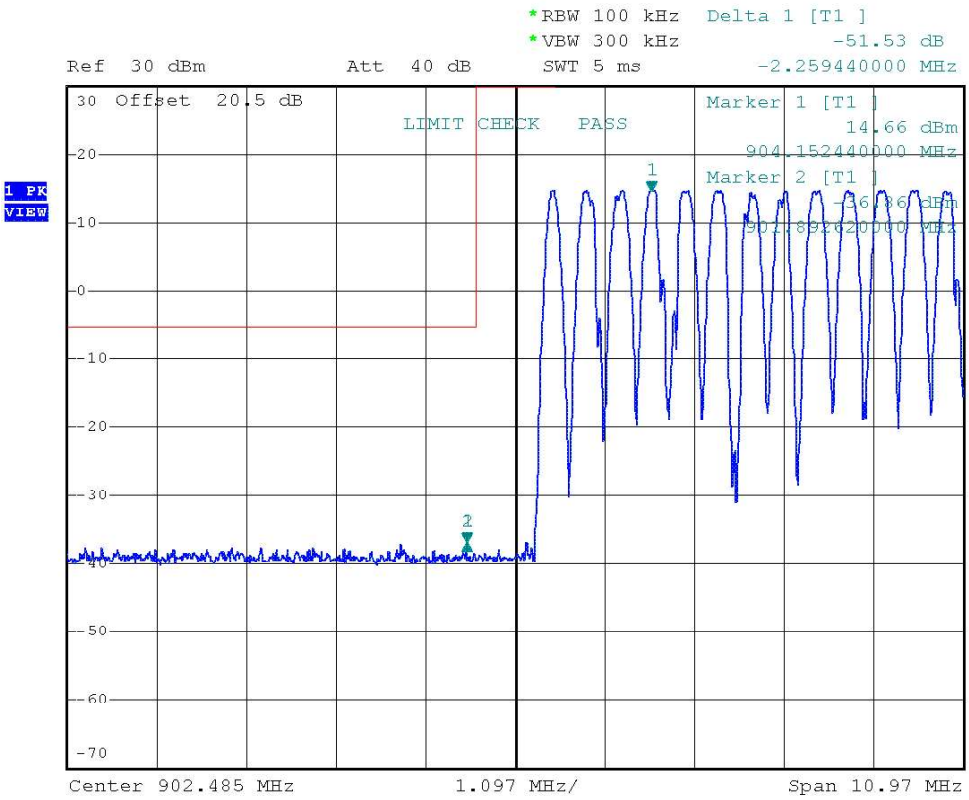
Emissions in nonrestricted frequency bands at the Band-edge

Project Number:	G0M-2403-2482
Applicant:	Eurofins Electric & Electronics Finland Oy
Model Description:	Machine mounted device, wireless interface for compressor machines
Model:	SBP
Test Sample ID:	48228
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 6.10
Operational Mode:	hopping mode, Channel: 902.97 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Ehsan Sohrabi
Test Site:	Eurofins Product Service GmbH
Test Date:	2024-04-25
Band-edge	Lower
In-band Frequency [MHz]:	904.152
Max. in-band Level [dBm/100 kHz]:	14.664
Out-of-band Frequency [MHz]:	901.893
Max. out-of-band Level [dBm/100 kHz]:	-36.861
Attenuation [dB]:	-51.53



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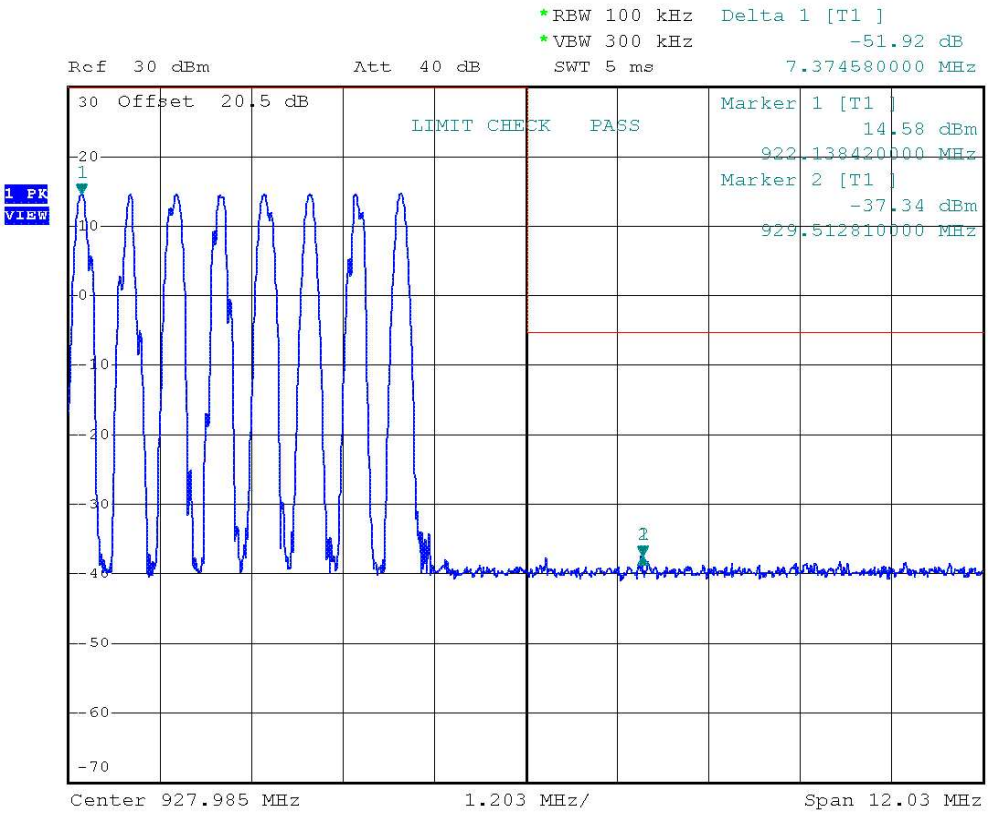
Emissions in nonrestricted frequency bands at the Band-edge

Project Number:	G0M-2403-2482
Applicant:	Eurofins Electric & Electronics Finland Oy
Model Description:	Machine mounted device, wireless interface for compressor machines
Model:	SBP
Test Sample ID:	48228
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 6.10
Operational Mode:	hopping mode, Channel: 926.97 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Ehsan Sohrabi
Test Site:	Eurofins Product Service GmbH
Test Date:	2024-04-25
Band-edge	Upper
In-band Frequency [MHz]:	922.138
Max. in-band Level [dBm/100 kHz]:	14.581
Out-of-band Frequency [MHz]:	929.513
Max. out-of-band Level [dBm/100 kHz]:	-37.338
Attenuation [dB]:	-51.92



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3.8 Test Conditions and Results - Conducted spurious emissions

3.8.1 Information

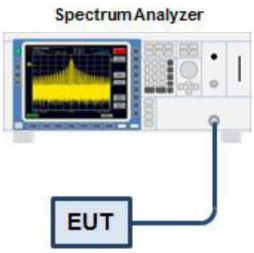
Test Information	
Reference	FCC § 15.247(d); ISED RSS-247, Issue 3 (section 5.5)
Measurement Uncertainty	± 4.25 dB
Measurement Method	ANSI C63.10 11.11
Operator	Ehsan Sohrabi
Date	2024-04-25

3.8.2 Limits

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

3.8.3 Setup

Test Setup



3.8.4 Equipment

Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum analyzer	R&S	FSU43	EF01631	2023-08	2024-08
Cable (CAABA)	Gigalane	GIGALANE 1730	EF00779	2024-04	2025-04

3.8.5 Procedure

Test Procedure

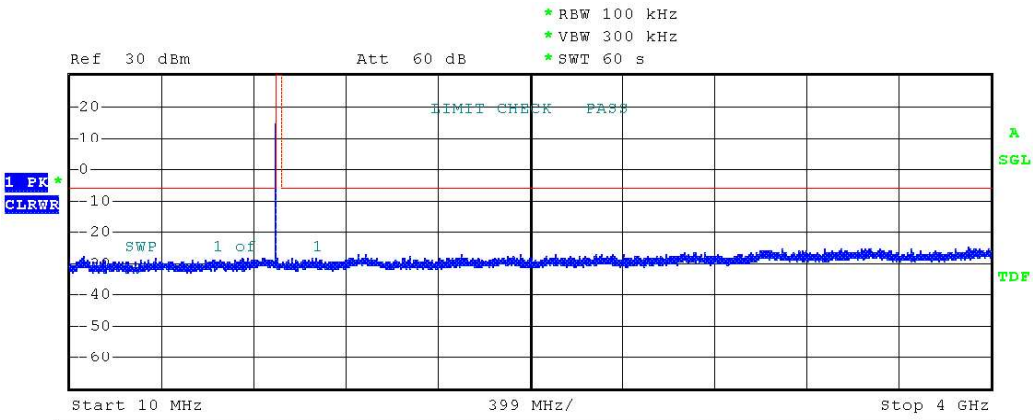
1. EUT set to test mode (Communication tester is used if needed)
2. Span set around lower band edge and detector is set to peak and max hold
3. Resolution bandwidth is set to 100 kHz
4. Markers are set to peak emission levels outside frequency band

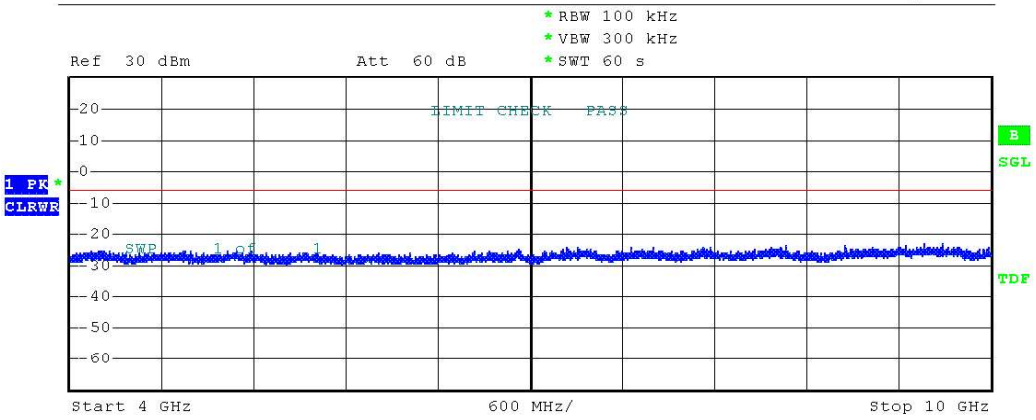
3.8.6 Results

Test Results		
Mode	Channel [MHz]	Verdict
Transmit	902.97	PASS
Transmit	914.97	PASS
Transmit	926.97	PASS

Conducted Spurious Emissions

Project Number:	G0M-2403-2482
Applicant:	Eurofins Electric & Electronics Finland Oy
Model Description:	Machine mounted device, wireless interface for compressor machines
Model:	SBP
Test Sample ID:	48228
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 11.11
Operational Mode:	2-GFSK, Channel: 902.97 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Ehsan Sohrabi
Test Site:	Eurofins Product Service GmbH
Test Date:	2024-04-25
Max. in-band Frequency [MHz]:	903.0
Max. in-band Level [dBm/100 kHz]:	14.3
Out-of-band Limit [dBm/100 kHz]:	-5.7





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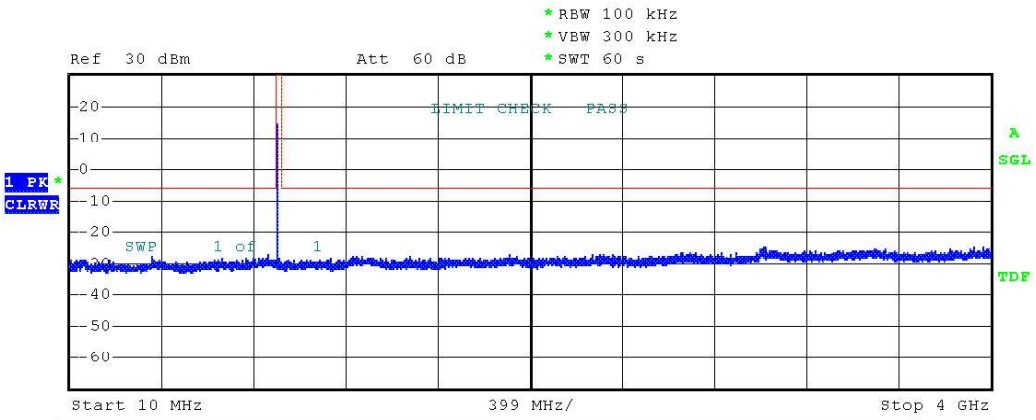
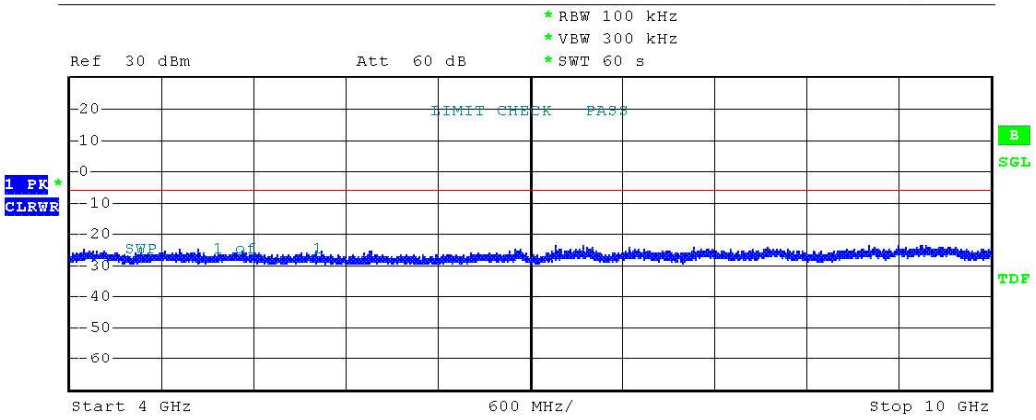
Conducted Spurious Emissions

Project Number:	G0M-2403-2482
Applicant:	Eurofins Electric & Electronics Finland Oy
Model Description:	Machine mounted device, wireless interface for compressor machines
Model:	SBP
Test Sample ID:	48228
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 11.11
Operational Mode:	2-GFSK, Channel: 914.97 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Ehsan Sohrabi
Test Site:	Eurofins Product Service GmbH
Test Date:	2024-04-25
Max. in-band Frequency [MHz]:	915.0
Max. in-band Level [dBm/100 kHz]:	14.3
Out-of-band Limit [dBm/100 kHz]:	-5.7





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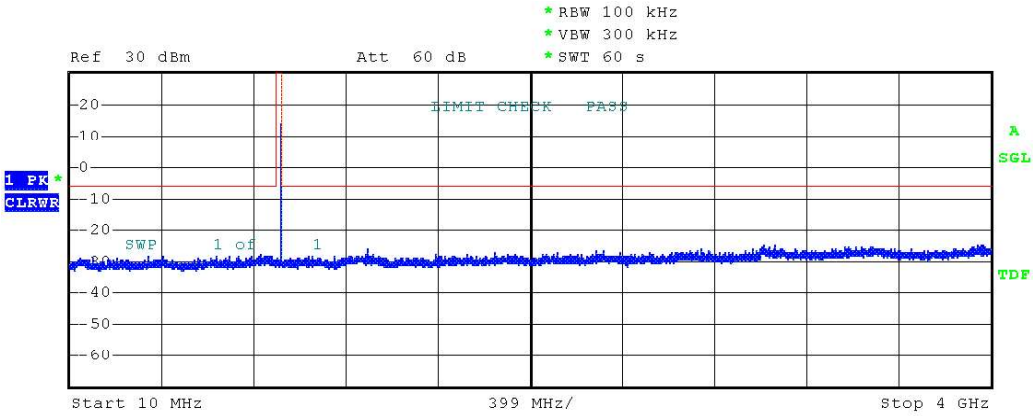
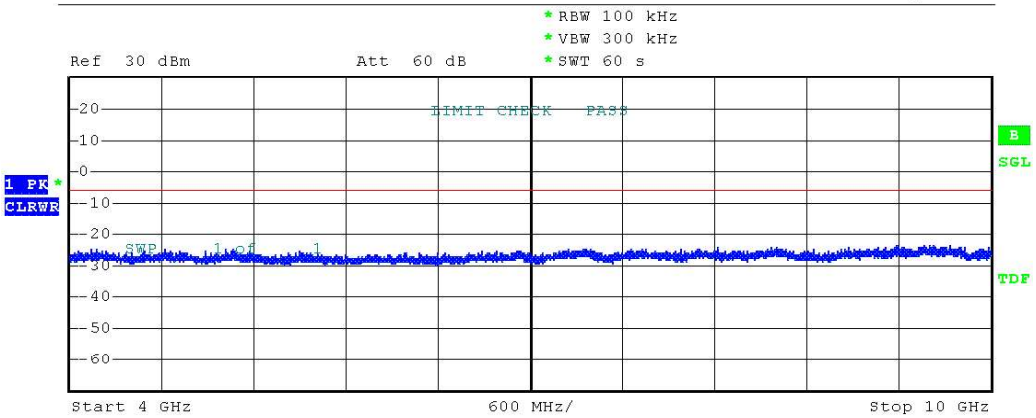
Conducted Spurious Emissions

Project Number:	G0M-2403-2482
Applicant:	Eurofins Electric & Electronics Finland Oy
Model Description:	Machine mounted device, wireless interface for compressor machines
Model:	SBP
Test Sample ID:	48228
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 11.11
Operational Mode:	2-GFSK, Channel: 926.97 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Ehsan Sohrabi
Test Site:	Eurofins Product Service GmbH
Test Date:	2024-04-25
Max. in-band Frequency [MHz]:	927.0
Max. in-band Level [dBm/100 kHz]:	14.2
Out-of-band Limit [dBm/100 kHz]:	-5.8





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3.9 Test Conditions and Results - Transmitter radiated emissions

3.9.1 Information

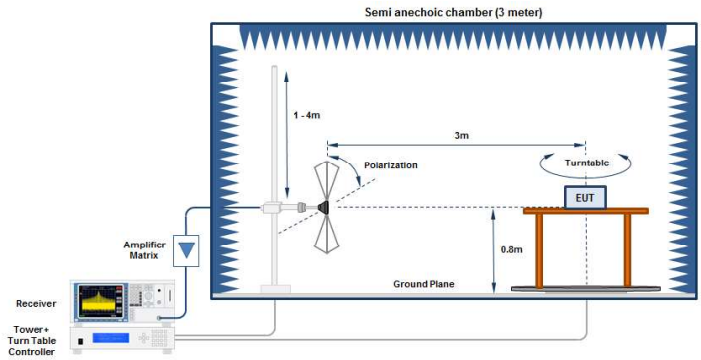
Test Information	
Reference	FCC § 15.247(d); FCC § 15.209; ISED RSS-Gen, Issue 5 A2 (section 6.13)
Measurement Uncertainty	± 5.95 dB
Measurement Method	ANSI C63.10 6.4, 6.5, 6.6, 11.12
Operator	Ehsan Sohrabi
Date	2024-05-02 - 2024-05-03

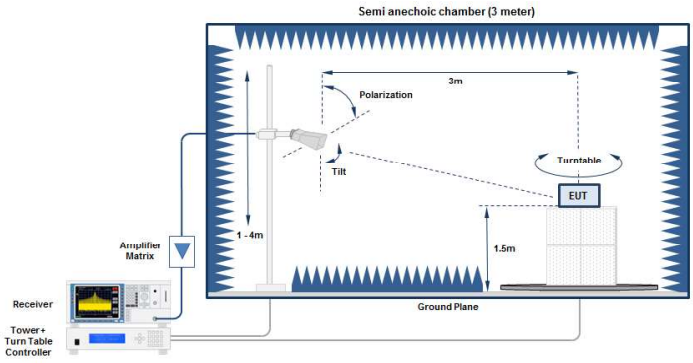
3.9.2 Limits

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

3.9.3 Setup

Test Setup 30 MHz - 1000 MHz



Test Setup > 1 GHz


3.9.4 Equipment

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

Test Equipment 30 MHz - 1000 MHz					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Anechoic Chamber	Frankonia	AC1	EF00062	2022-11	2025-11
EMI Test Receiver	Rohde & Schwarz Vertriebs GmbH	ESU26	EF00887	2024-01	2025-01
Antenna	Schwarzbeck	VULB 9168	EF01824	2022-10	2025-10

Test Equipment > 1 GHz					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Anechoic Chamber	Frankonia	AC2	EF01616	2023-12	2024-12
Spectrum Analyzer	Frankonia	FSW 43	EF00896	2023-08	2024-08
Antenna	Schwarzbeck	BBHA 9120B	EF01678	2021-03	2024-05
Antenna	Schwarzbeck	HWRD 650	EF01679	2021-03	2024-05

3.9.5 Procedure

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

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

3.9.6 Results

Test Results						
Channel [MHz]	Emission [MHz]	Level [dBµV/m]	Det.	Pol.	Limit [dBµV/m]	Margin [dB]
902.97	2708.8	36.14	pk	ver	74.00	-37.86
902.97	2708.8	30.21	avg	ver	54.00	-23.79
902.97	8401	53.12	pk	ver	74.00	-20.88
902.97	8401	47.11	avg	ver	54.00	-06.89
914.97	8400	52.65	pk	ver	74.00	-21.35
914.97	8400	47.13	avg	ver	54.00	-06.87
926.97	4634.7	37.12	pk	ver	74.00	-36.88
926.97	4634.7	32.30	avg	ver	54.00	-21.70
926.97	8400	53.26	pk	ver	74.00	-20.74
926.97	8400	47.16	avg	ver	54.00	-06.84

3.10 Test Conditions and Results - Receiver radiated emissions

3.10.1 Information

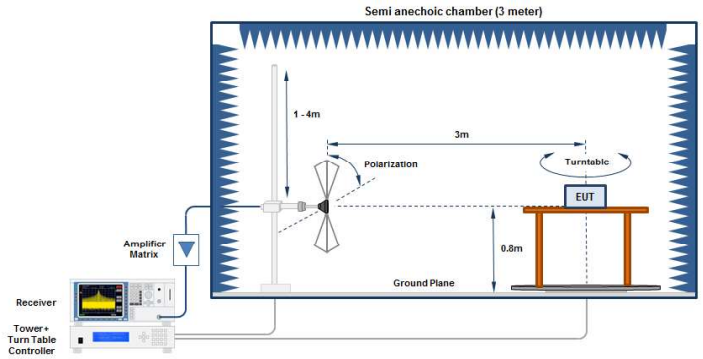
Test Information	
Reference	ISED RSS-247, Issue 3 (section 3.1)
Measurement Uncertainty	± 5.95 dB
Measurement Method	ANSI C63.4-2014 8.1-8.3
Operator	Ehsan Sohrabi
Date	2024-05-02

3.10.2 Limits

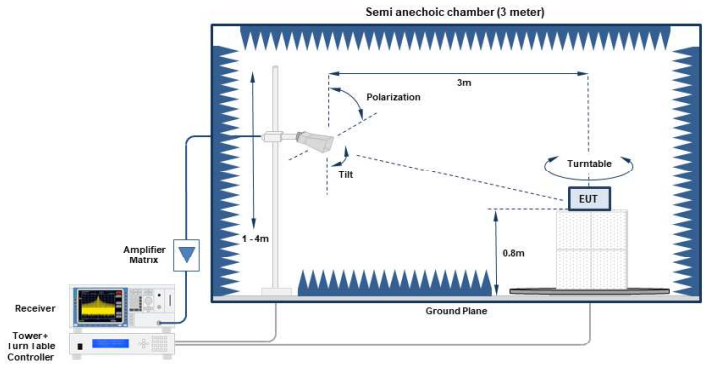
Limits			
Frequency range [MHz]	Detector	Field strength [µV/m]	Measurement distance [m]
30 - 88	Quasi-Peak	100	3
88 - 216	Quasi-Peak	150	3
216 - 960	Quasi-Peak	200	3
960 - 1000	Quasi-Peak	500	3
>1000	Average	500	3

3.10.3 Setup

Test Setup 30 MHz - 1000 MHz



Test Setup > 1 GHz



3.10.4 Equipment

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

Test Equipment 30 MHz - 1000 MHz					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Anechoic Chamber	Frankonia	AC1	EF00062	2022-11	2025-11
EMI Test Receiver	Rohde & Schwarz Vertriebs GmbH	ESU26	EF00887	2024-01	2025-01
Antenna	Schwarzbeck	VULB 9168	EF01824	2022-10	2025-10

Test Equipment > 1 GHz					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Anechoic Chamber	Frankonia	AC1	EF00062	2022-11	2025-11
EMI Test Receiver	Rohde & Schwarz Vertriebs GmbH	ESU26	EF00887	2024-01	2025-01
Antenna	Schwarzbeck	BBHA 9120D	EF01561	2021-11	2024-11

3.10.5 Procedure

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

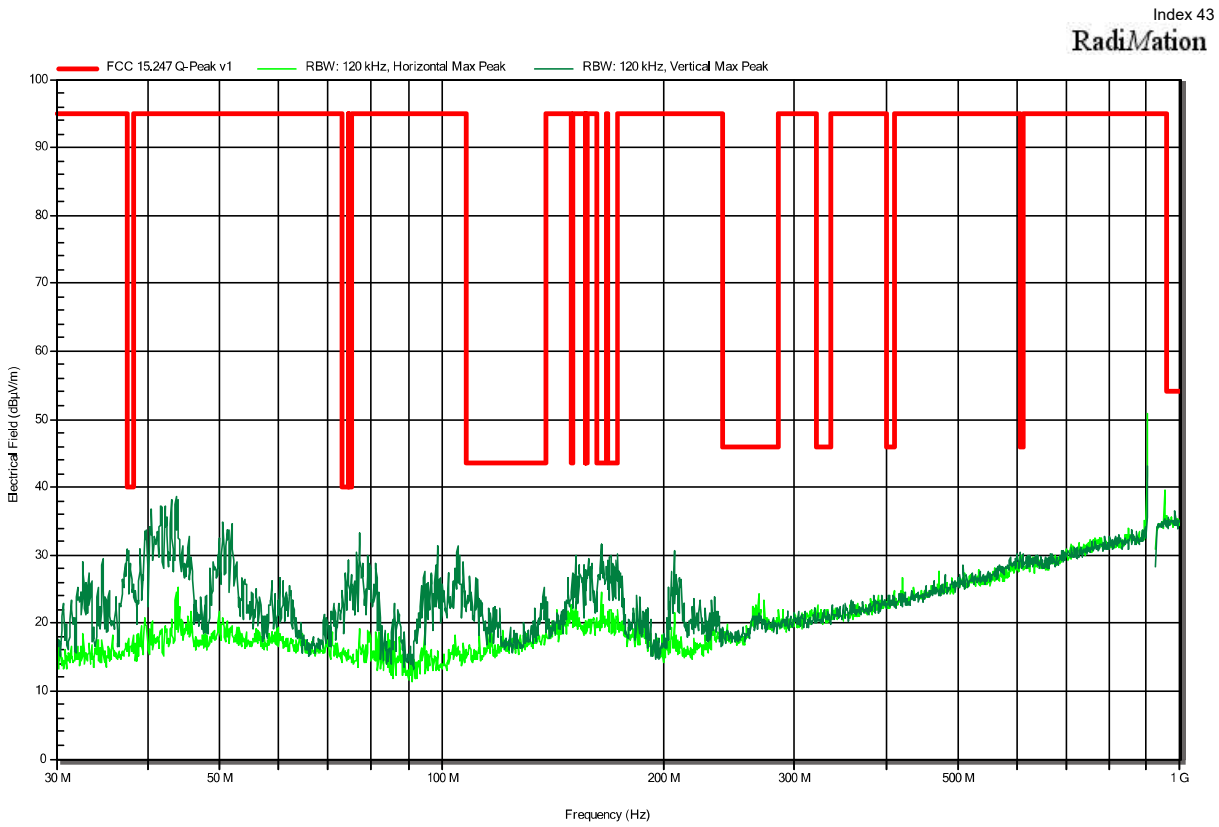
3.10.6 Results

Test Results						
Channel [MHz]	Emission [MHz]	Level [dBµV/m]	Det.	Pol.	Limit [dBµV/m]	Margin [dB]
914.97	911.827	34.90	pk	hor	46.00	-11.10
926.97	3283	12.35	pk	ver	74.00	-61.65
926.97	3283	01.57	avg	ver	53.98	-52.41

ANNEX A Transmitter spurious emissions

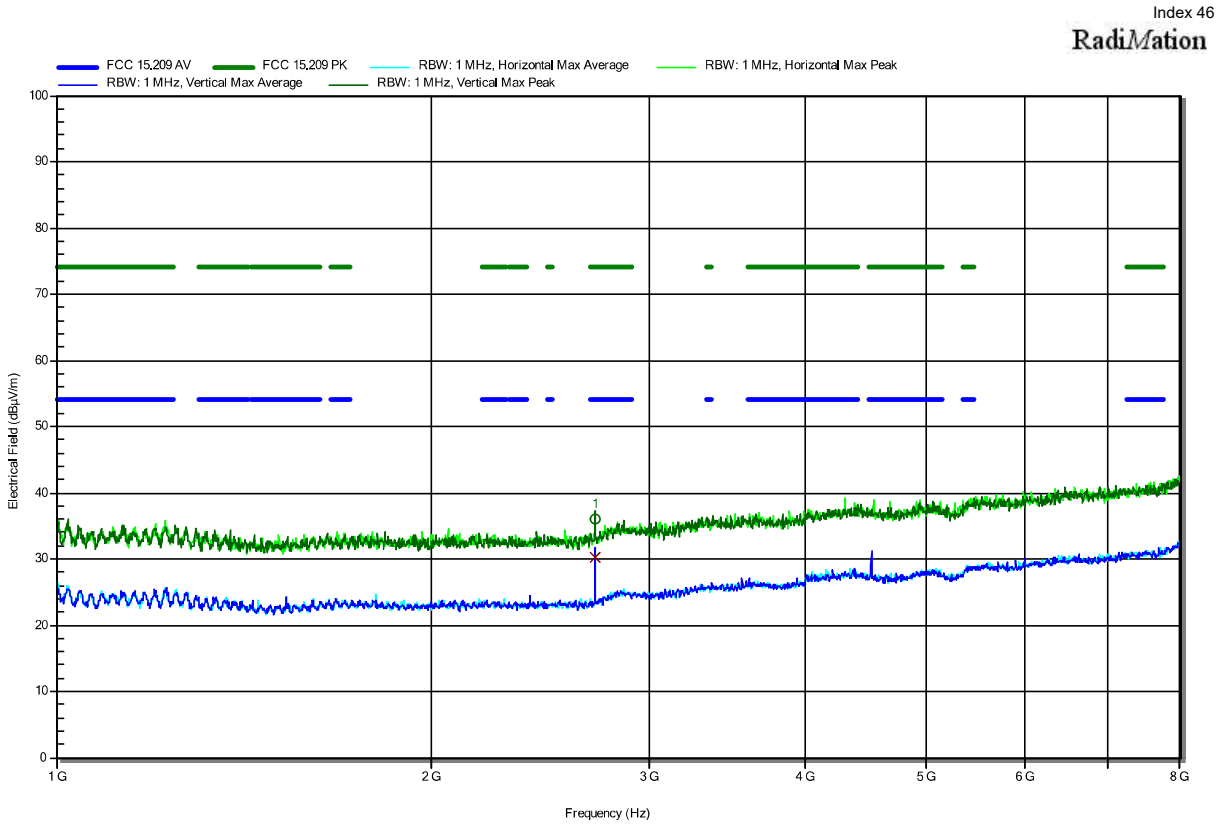
Radiated Spurious Emissions according to 47 CFR Part 15.247

Project Number:	G0M-2403-2482
Applicant:	Eurofins Electric & Electronics Finland Oy
Model Description:	Machine mounted device, wireless interface for compressor machines
Model:	SBP
Test Sample ID:	48227
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Sohrabi
Measurement software:	RadiMation, version 2020.1.8
Test Conditions:	Tnom: 24 °Celsius, Vnom:
Antenna:	Schwarzbeck VULB 9168
Measurement distance:	3 m
Mode:	Tx; CH= 902.97 MHz, OCW=200 KHz, Power level= 14
Test Date:	2024-05-02



Radiated Spurious Emissions according to 47 CFR Part 15.247

Project Number:	G0M-2403-2482
Applicant:	Eurofins Electric & Electronics Finland Oy
Model Description:	Machine mounted device, wireless interface for compressor machines
Model:	SBP
Test Sample ID:	48227
Test Site:	Eurofins Product Service GmbH
Operator:	Ehsan Sohrabi
Measurement software:	RadiMation, version 2020.1.8
Test Conditions:	Tnom: 22 °Celsius, Vnom:
Antenna:	Schwarzbeck BBHA 9120B
Measurement distance:	3 m
Mode:	Tx; CH= 902.97 MHz, OCW=200 KHz, Power level= 14
Test Date:	2024-05-03

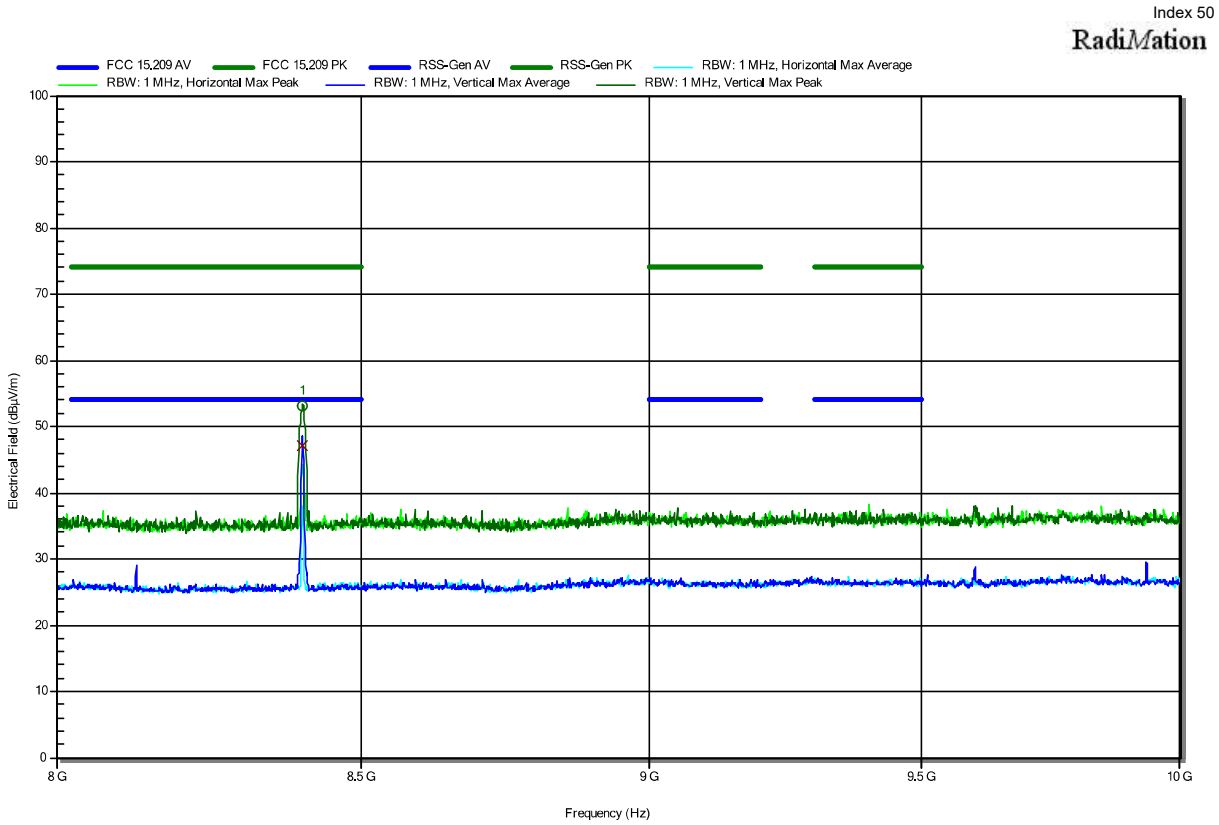


Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Polarization
2.7088 GHz	36.14 dBµV/m	74 dBµV/m	-37.86 dB	Pass	Vertical

Frequency	Average	Average Limit	Average Difference	Average Status	Polarization
2.7088 GHz	30.21 dBµV/m	54 dBµV/m	-23.79 dB	Pass	Vertical

Radiated Spurious Emissions according to 47 CFR Part 15.247

Project Number:	G0M-2403-2482
Applicant:	Eurofins Electric & Electronics Finland Oy
Model Description:	Machine mounted device, wireless interface for compressor machines
Model:	SBP
Test Sample ID:	48227
Test Site:	Eurofins Product Service GmbH
Operator:	Ehsan Sohrabi
Measurement software:	RadiMation, version 2020.1.8
Test Conditions:	Tnom: 22 °Celsius, Vnom:
Antenna:	Schwarzbeck HWRD 650
Measurement distance:	3 m
Mode:	Tx; CH= 902.97 MHz, OCW=200 KHz, Power level= 14
Test Date:	2024-05-03

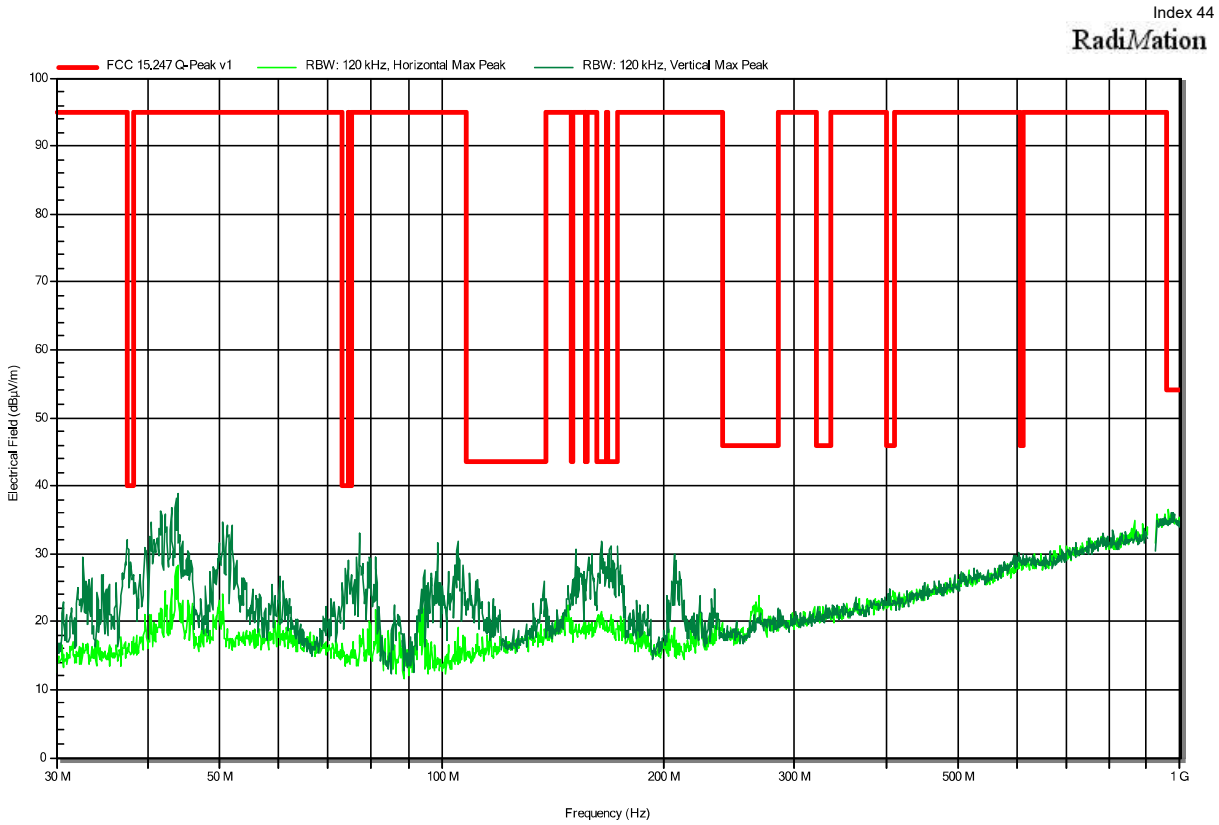


Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Polarization
8.401 GHz	53.12 dBµV/m	74 dBµV/m	-20.88 dB	Pass	Vertical

Frequency	Average	Average Limit	Average Difference	Average Status	Polarization
8.401 GHz	47.11 dBµV/m	54 dBµV/m	-6.89 dB	Pass	Vertical

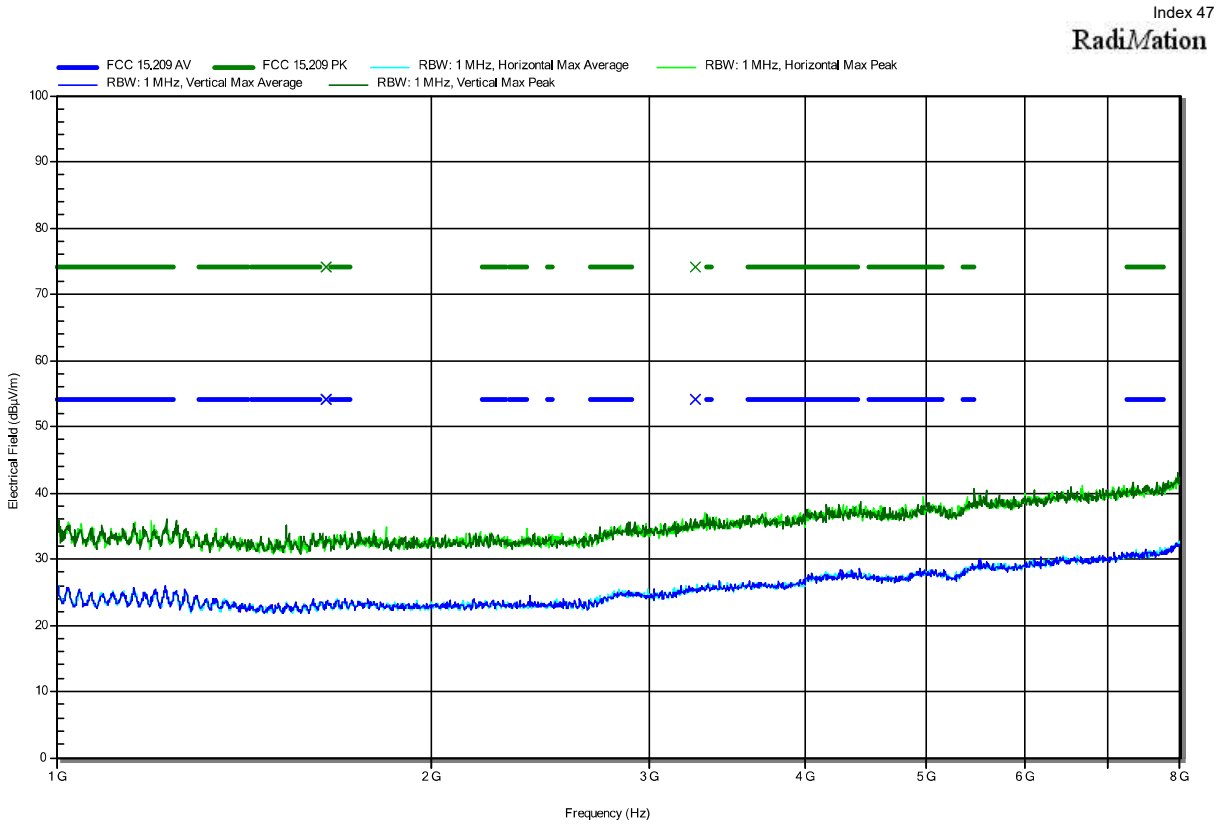
Radiated Spurious Emissions according to 47 CFR Part 15.247

Project Number:	G0M-2403-2482
Applicant:	Eurofins Electric & Electronics Finland Oy
Model Description:	Machine mounted device, wireless interface for compressor machines
Model:	SBP
Test Sample ID:	48227
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Sohrabi
Measurement software:	RadiMation, version 2020.1.8
Test Conditions:	Tnom: 24 °Celsius, Vnom:
Antenna:	Schwarzbeck VULB 9168
Measurement distance:	3 m
Mode:	Tx; CH= 914.97 MHz, OCW=200 KHz, Power level= 14
Test Date:	2024-05-02



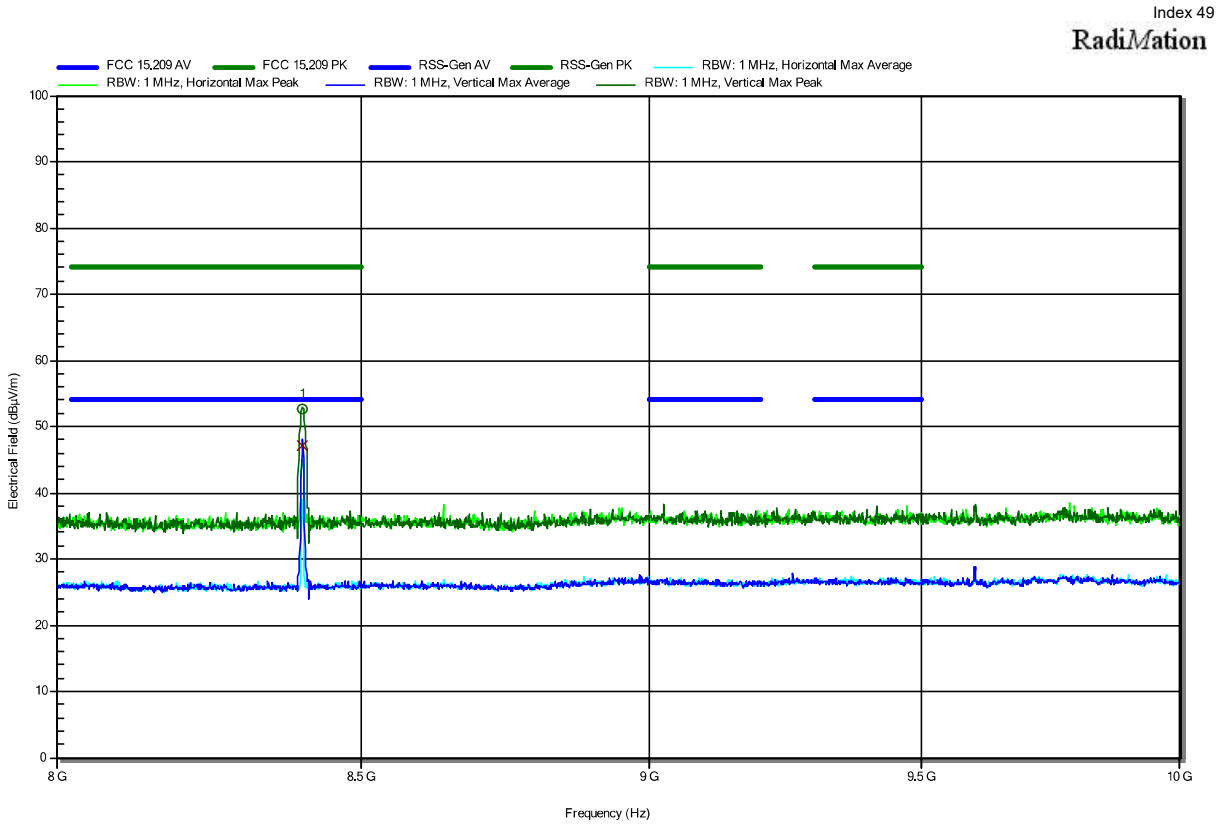
Radiated Spurious Emissions according to 47 CFR Part 15.247

Project Number:	G0M-2403-2482
Applicant:	Eurofins Electric & Electronics Finland Oy
Model Description:	Machine mounted device, wireless interface for compressor machines
Model:	SBP
Test Sample ID:	48227
Test Site:	Eurofins Product Service GmbH
Operator:	Ehsan Sohrabi
Measurement software:	RadiMation, version 2020.1.8
Test Conditions:	Tnom: 22 °Celsius, Vnom:
Antenna:	Schwarzbeck BBHA 9120B
Measurement distance:	3 m
Mode:	Tx; CH= 914.97 MHz, OCW=200 KHz, Power level= 14
Test Date:	2024-05-03



Radiated Spurious Emissions according to 47 CFR Part 15.247

Project Number:	G0M-2403-2482
Applicant:	Eurofins Electric & Electronics Finland Oy
Model Description:	Machine mounted device, wireless interface for compressor machines
Model:	SBP
Test Sample ID:	48227
Test Site:	Eurofins Product Service GmbH
Operator:	Ehsan Sohrabi
Measurement software:	RadiMation, version 2020.1.8
Test Conditions:	Tnom: 22 °Celsius, Vnom:
Antenna:	Schwarzbeck HWRD 650
Measurement distance:	3 m
Mode:	Tx; CH= 914.97 MHz, OCW=200 KHz, Power level= 14
Test Date:	2024-05-03

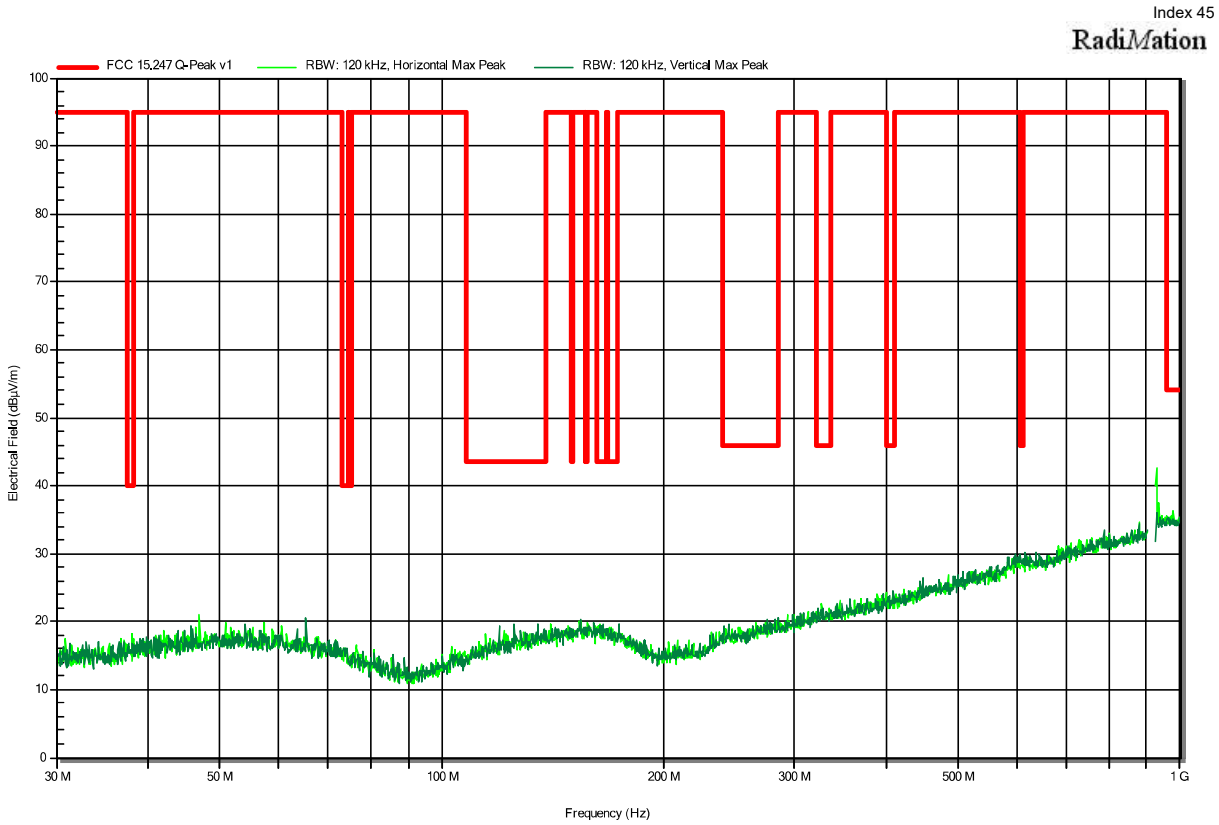


Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Polarization
8.4 GHz	52.65 dBµV/m	74 dBµV/m	-21.35 dB	Pass	Vertical

Frequency	Average	Average Limit	Average Difference	Average Status	Polarization
8.4 GHz	47.13 dBµV/m	54 dBµV/m	-6.87 dB	Pass	Vertical

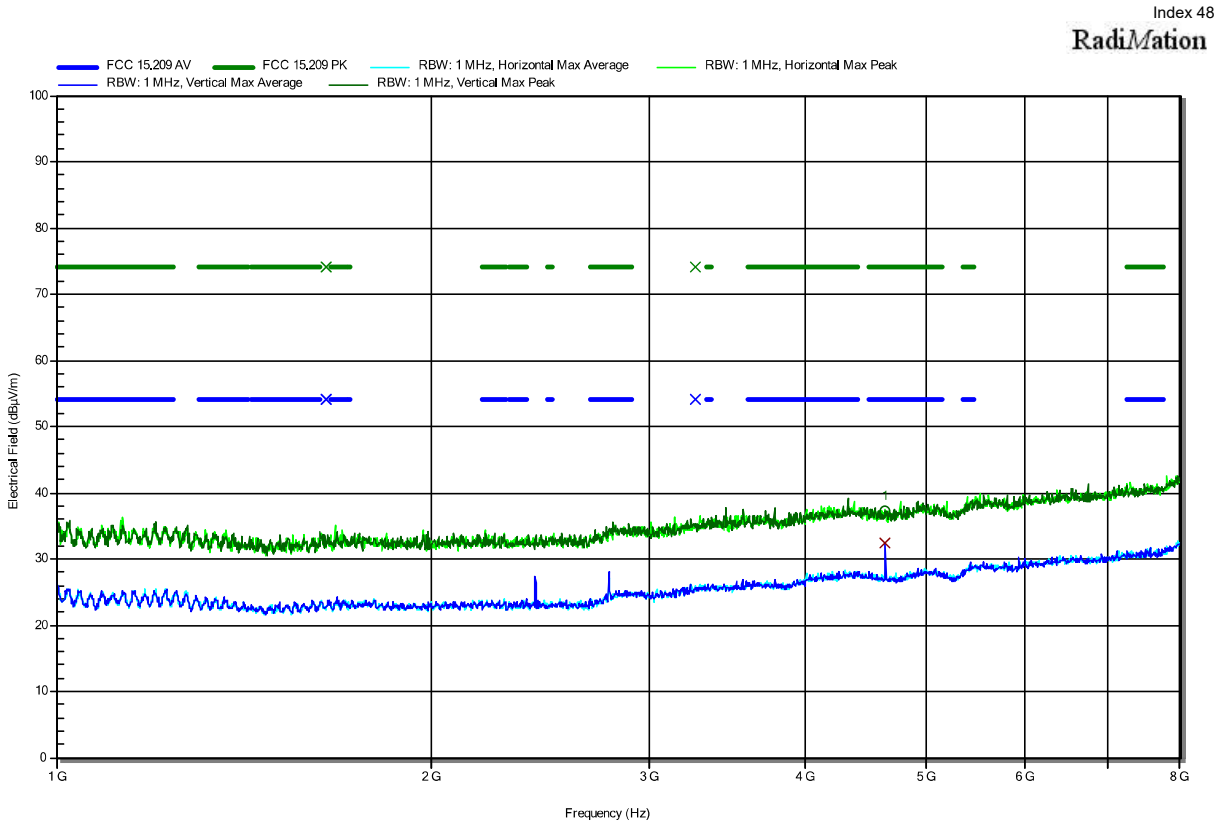
Radiated Spurious Emissions according to 47 CFR Part 15.247

Project Number:	G0M-2403-2482
Applicant:	Eurofins Electric & Electronics Finland Oy
Model Description:	Machine mounted device, wireless interface for compressor machines
Model:	SBP
Test Sample ID:	48227
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Sohrabi
Measurement software:	RadiMation, version 2020.1.8
Test Conditions:	Tnom: 24 °Celsius, Vnom:
Antenna:	Schwarzbeck VULB 9168
Measurement distance:	3 m
Mode:	Tx; CH= 926.97 MHz, OCW=200 KHz, Power level= 14
Test Date:	2024-05-02



Radiated Spurious Emissions according to 47 CFR Part 15.247

Project Number:	G0M-2403-2482
Applicant:	Eurofins Electric & Electronics Finland Oy
Model Description:	Machine mounted device, wireless interface for compressor machines
Model:	SBP
Test Sample ID:	48227
Test Site:	Eurofins Product Service GmbH
Operator:	Ehsan Sohrabi
Measurement software:	RadiMation, version 2020.1.8
Test Conditions:	Tnom: 22 °Celsius, Vnom:
Antenna:	Schwarzbeck BBHA 9120B
Measurement distance:	3 m
Mode:	Tx; CH= 926.97 MHz, OCW=200 KHz, Power level= 14
Test Date:	2024-05-03

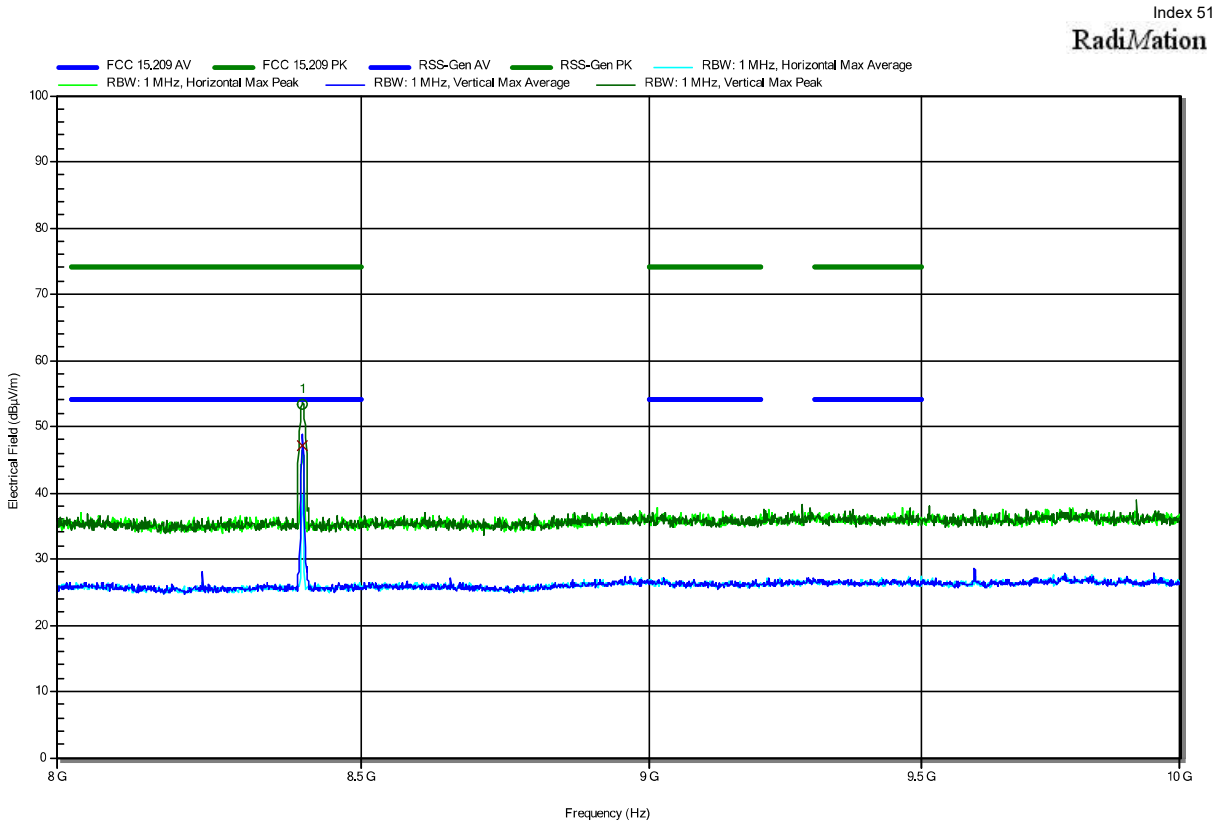


Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Polarization
4.6347 GHz	37.12 dBµV/m	74 dBµV/m	-36.88 dB	Pass	Vertical

Frequency	Average	Average Limit	Average Difference	Average Status	Polarization
4.6347 GHz	32.3 dBµV/m	54 dBµV/m	-21.7 dB	Pass	Vertical

Radiated Spurious Emissions according to 47 CFR Part 15.247

Project Number:	G0M-2403-2482
Applicant:	Eurofins Electric & Electronics Finland Oy
Model Description:	Machine mounted device, wireless interface for compressor machines
Model:	SBP
Test Sample ID:	48227
Test Site:	Eurofins Product Service GmbH
Operator:	Ehsan Sohrabi
Measurement software:	RadiMation, version 2020.1.8
Test Conditions:	Tnom: 22 °Celsius, Vnom:
Antenna:	Schwarzbeck HWRD 650
Measurement distance:	3 m
Mode:	Tx; CH= 926.97 MHz, OCW=200 KHz, Power level= 14
Test Date:	2024-05-03



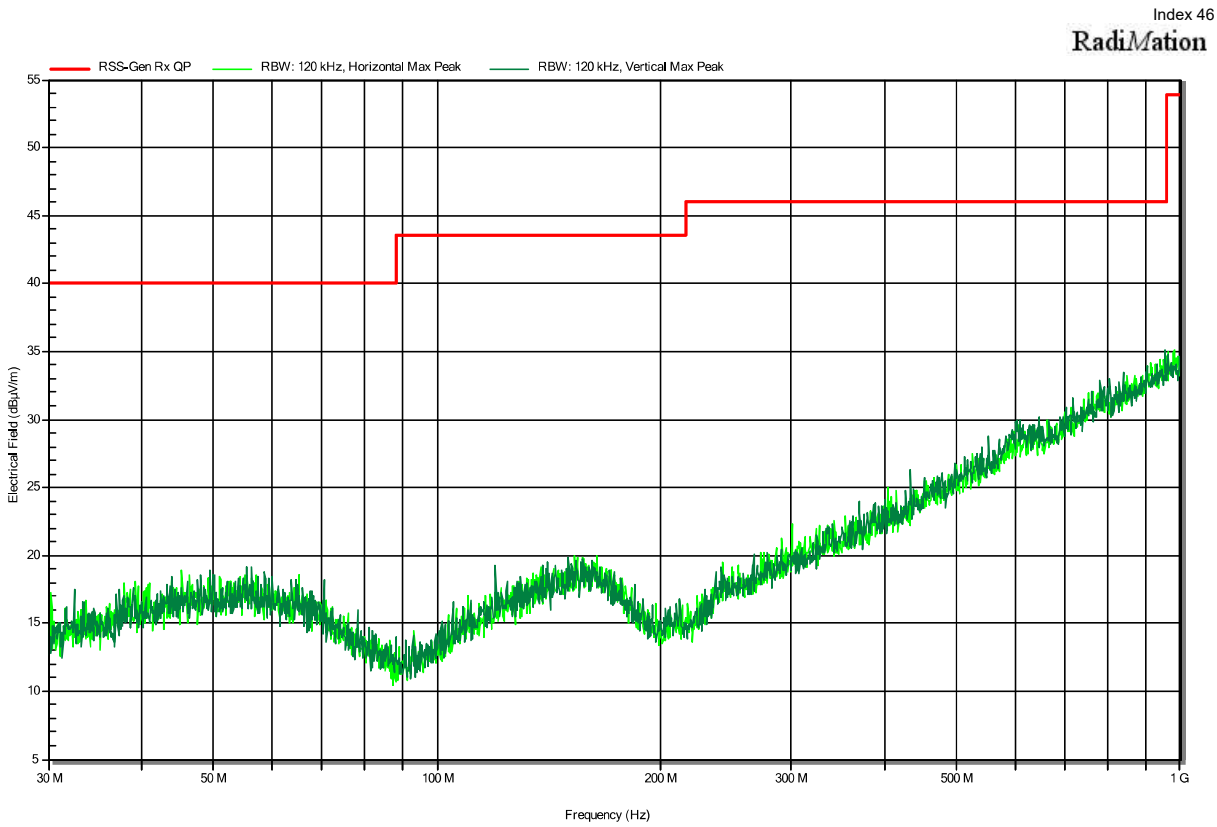
Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Polarization
8.4 GHz	53.26 dBµV/m	74 dBµV/m	-20.74 dB	Pass	Vertical

Frequency	Average	Average Limit	Average Difference	Average Status	Polarization
8.4 GHz	47.16 dBµV/m	54 dBµV/m	-6.84 dB	Pass	Vertical

ANNEX B Receiver spurious emissions

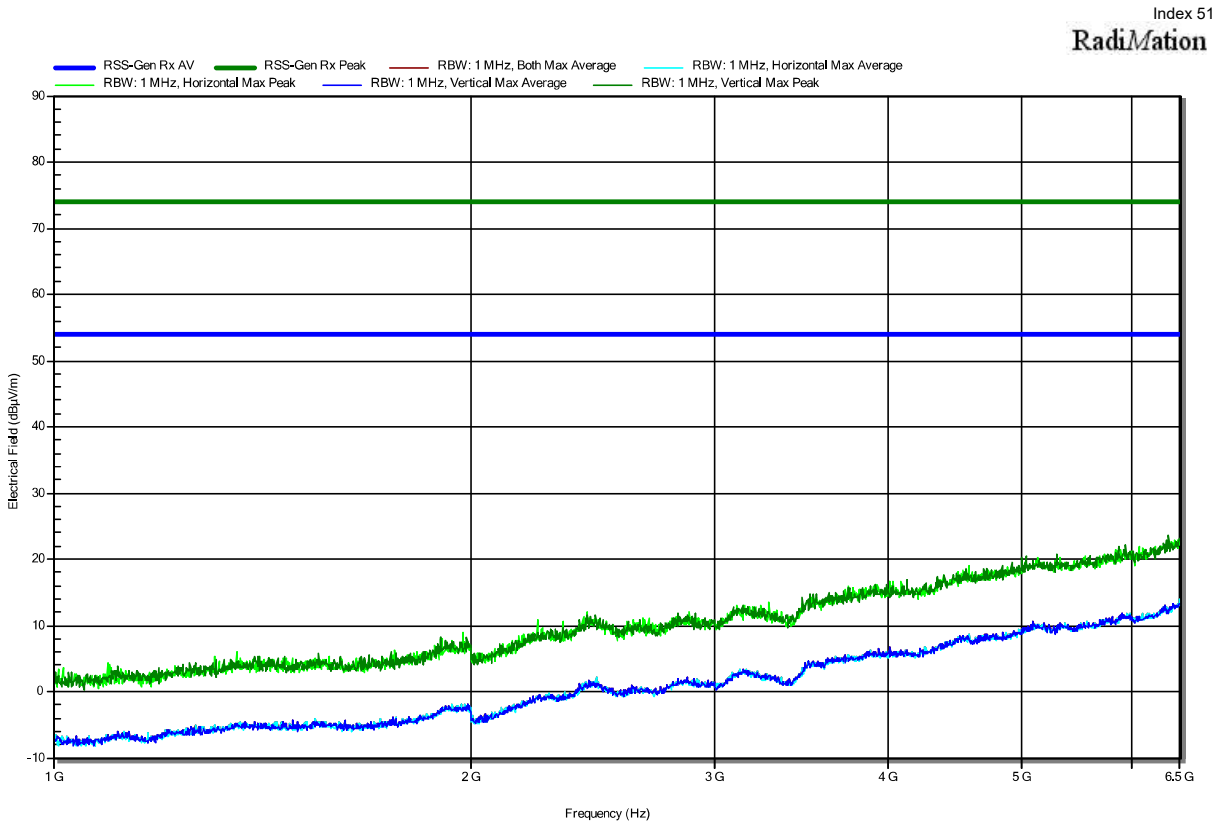
Radiated Spurious Emissions according to RSS-247 Issue 2

Project Number:	G0M-2403-2482
Applicant:	Eurofins Electric & Electronics Finland Oy
Model Description:	Machine mounted device, wireless interface for compressor machines
Model:	SBP
Test Sample ID:	48227
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Sohrabi
Measurement software:	RadiMation, version 2020.1.8
Test Conditions:	Tnom: 24 °Celsius, Vnom:
Antenna:	Schwarzbeck VULB 9168
Measurement distance:	3 m
Mode:	Rx; CH= 902.97 MHz, OCW=200 KHz
Test Date:	2024-05-02
Note:	EUT horizontal



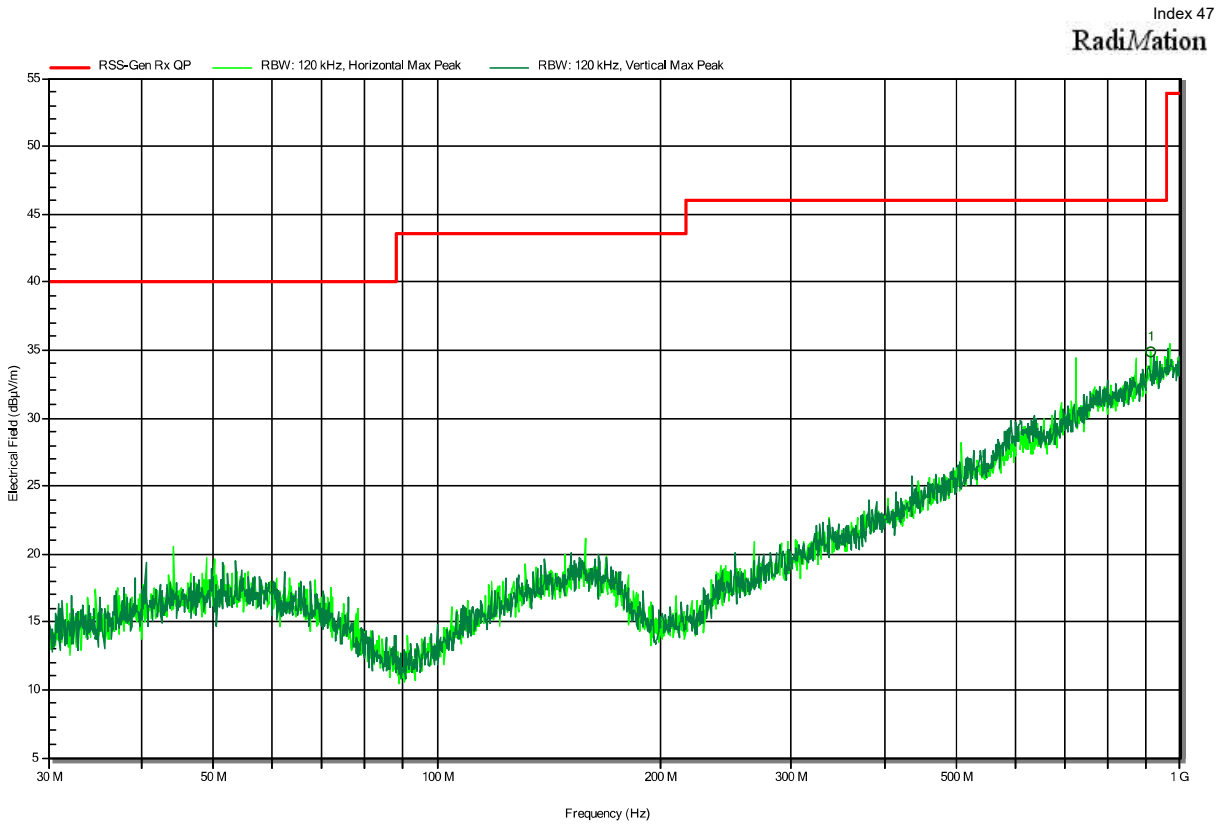
Radiated Spurious Emissions according to RSS-247 Issue 2

Project Number:	G0M-2403-2482
Applicant:	Eurofins Electric & Electronics Finland Oy
Model Description:	Machine mounted device, wireless interface for compressor machines
Model:	SBP
Test Sample ID:	48227
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Sohrabi
Measurement software:	RadiMation, version 2020.1.8
Test Conditions:	Tnom: 24 °Celsius, Vnom:
Antenna:	Schwarzbeck BBHA 9120D
Measurement distance:	3 m
Mode:	Rx; CH= 902.97 MHz, OCW=200 KHz
Test Date:	2024-05-02
Note:	



Radiated Spurious Emissions according to RSS-247 Issue 2

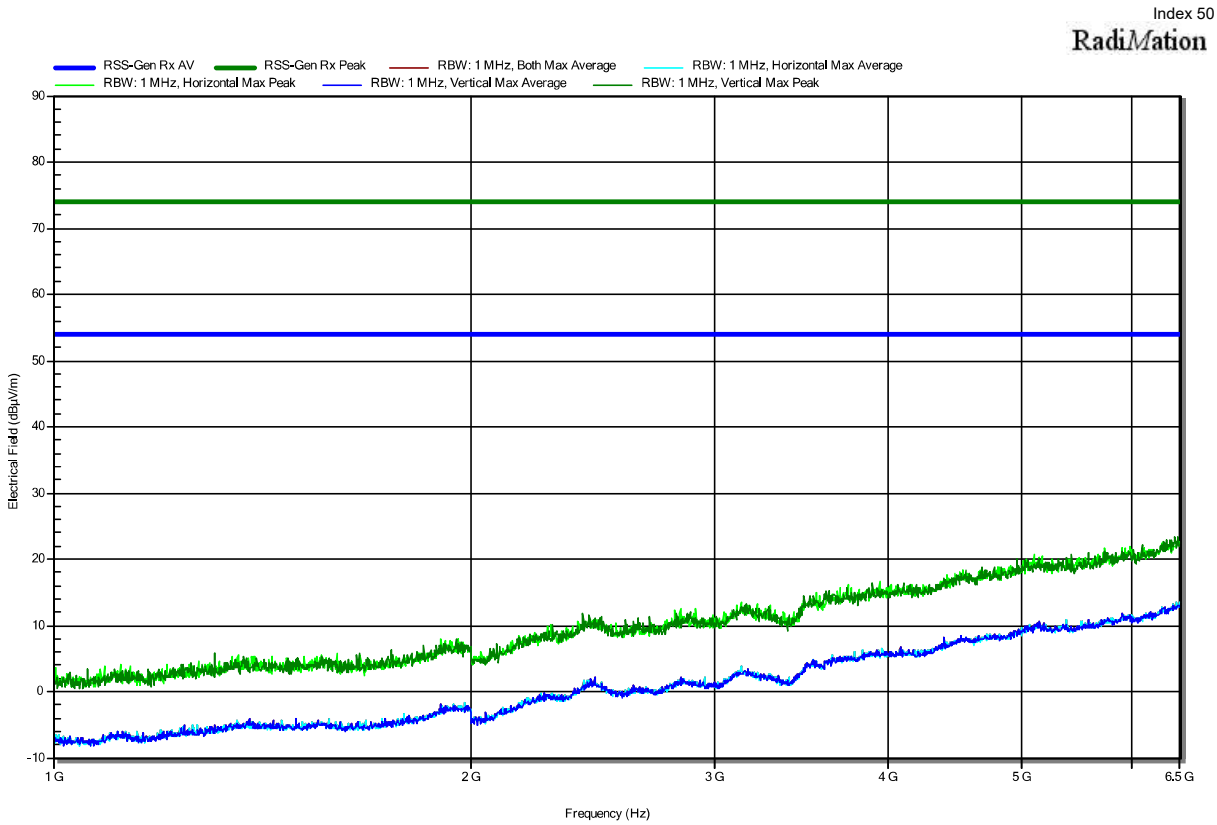
Project Number:	G0M-2403-2482
Applicant:	Eurofins Electric & Electronics Finland Oy
Model Description:	Machine mounted device, wireless interface for compressor machines
Model:	SBP
Test Sample ID:	48227
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Sohrabi
Measurement software:	RadiMation, version 2020.1.8
Test Conditions:	Tnom: 24 °Celsius, Vnom:
Antenna:	Schwarzbeck VULB 9168
Measurement distance:	3 m
Mode:	Rx; CH= 914.97 MHz, OCW=200 KHz
Test Date:	2024-05-02
Note:	EUT horizontal



Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Polarization
911.827 MHz	34.9 dBµV/m	46 dBµV/m	-11.1 dB	Pass	Horizontal

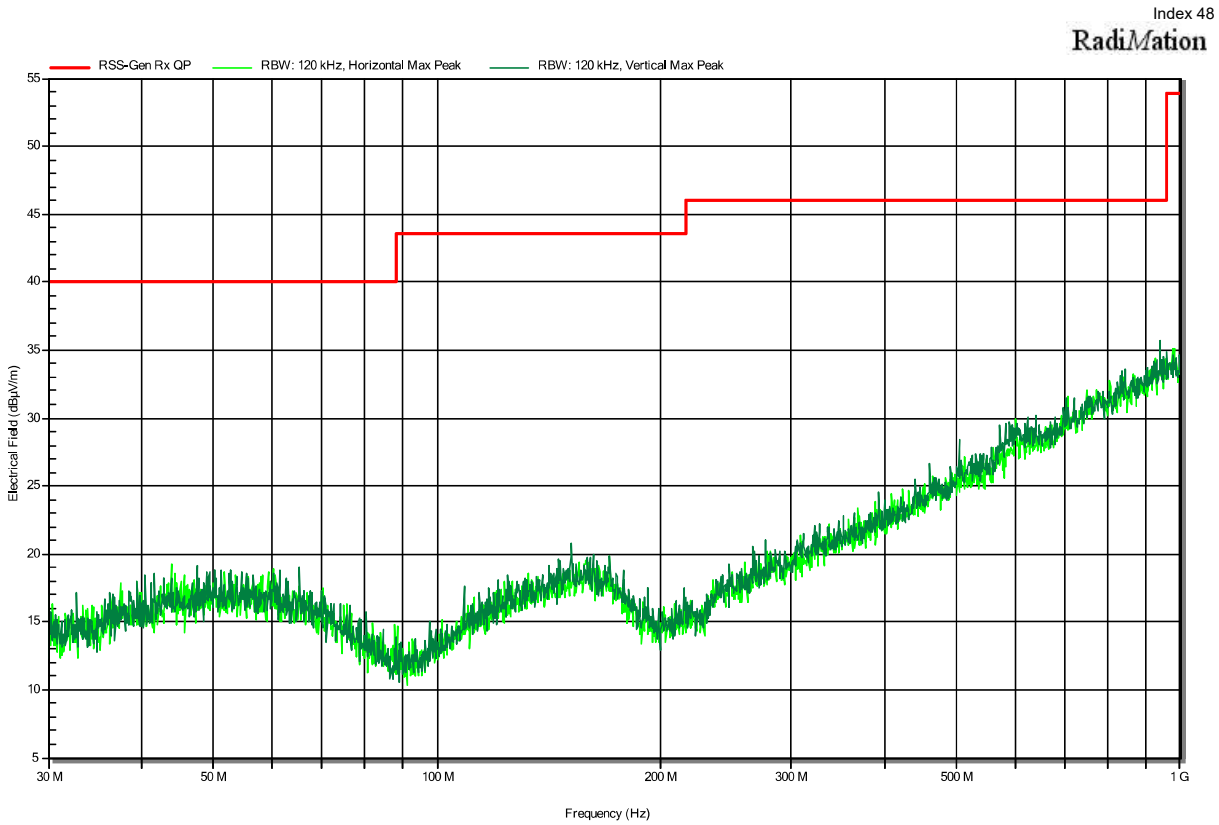
Radiated Spurious Emissions according to RSS-247 Issue 2

Project Number:	G0M-2403-2482
Applicant:	Eurofins Electric & Electronics Finland Oy
Model Description:	Machine mounted device, wireless interface for compressor machines
Model:	SBP
Test Sample ID:	48227
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Sohrabi
Measurement software:	RadiMation, version 2020.1.8
Test Conditions:	Tnom: 24 °Celsius, Vnom:
Antenna:	Schwarzbeck BBHA 9120D
Measurement distance:	3 m
Mode:	Rx; CH= 914.97 MHz, OCW=200 KHz
Test Date:	2024-05-02
Note:	



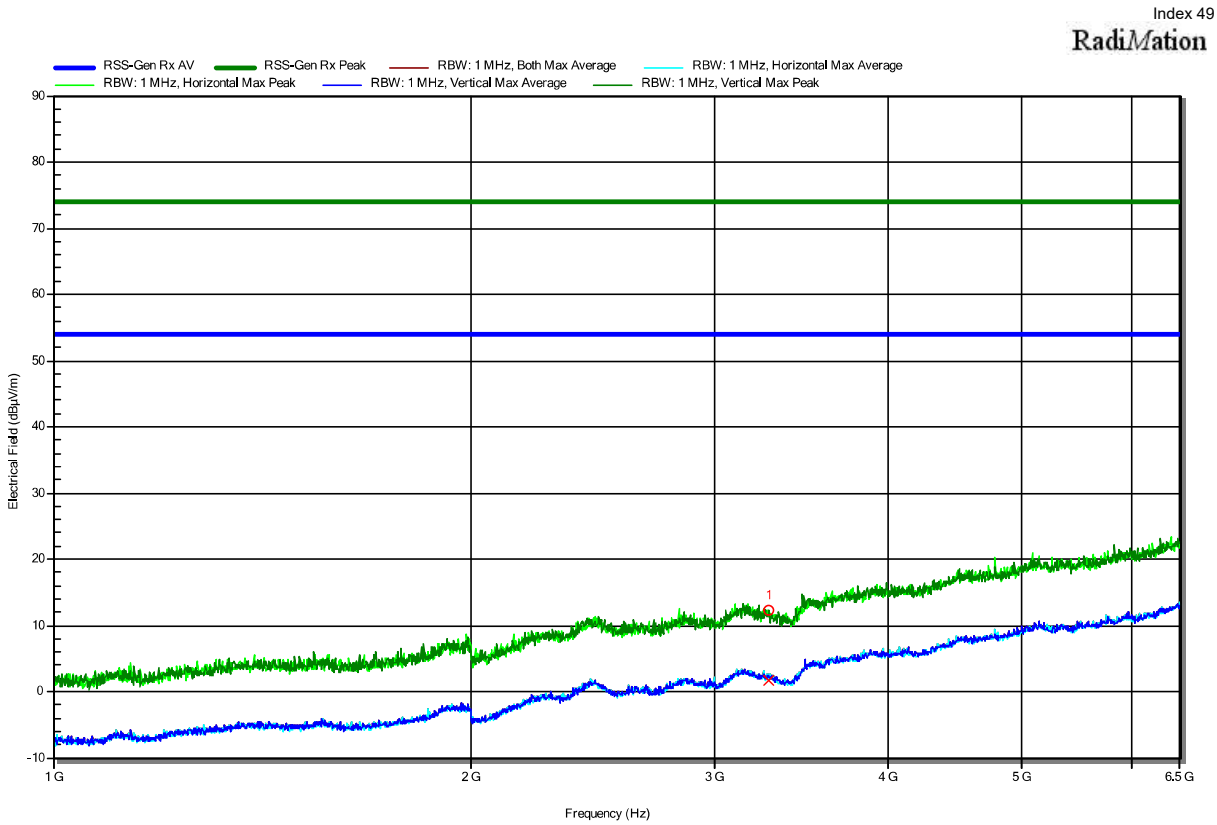
Radiated Spurious Emissions according to RSS-247 Issue 2

Project Number:	G0M-2403-2482
Applicant:	Eurofins Electric & Electronics Finland Oy
Model Description:	Machine mounted device, wireless interface for compressor machines
Model:	SBP
Test Sample ID:	48227
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Sohrabi
Measurement software:	RadiMation, version 2020.1.8
Test Conditions:	Tnom: 24 °Celsius, Vnom:
Antenna:	Schwarzbeck VULB 9168
Measurement distance:	3 m
Mode:	Rx; CH= 926.97 MHz, OCW=200 KHz
Test Date:	2024-05-02
Note:	EUT horizontal



Radiated Spurious Emissions according to RSS-247 Issue 2

Project Number:	G0M-2403-2482
Applicant:	Eurofins Electric & Electronics Finland Oy
Model Description:	Machine mounted device, wireless interface for compressor machines
Model:	SBP
Test Sample ID:	48227
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Sohrabi
Measurement software:	RadiMation, version 2020.1.8
Test Conditions:	Tnom: 24 °Celsius, Vnom:
Antenna:	Schwarzbeck BBHA 9120D
Measurement distance:	3 m
Mode:	Rx; CH= 926.97 MHz, OCW=200 KHz
Test Date:	2024-05-02
Note:	



Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Polarization
3.283 GHz	12.35 dBµV/m	74 dBµV/m	-61.65 dB	Pass	Vertical

Frequency	Average	Average Limit	Average Difference	Average Status	Polarization
3.283 GHz	1.57 dBµV/m	53.98 dBµV/m	-52.41 dB	Pass	Vertical

========= End of The Test Report ========