FORCE Technology Test Report

TEST Reg. no. 19

Radio parameter test of Smart Sense

Performed for Anticimex Innovation Center A/S

Project no.: 118-29270-1
Page 1 of 37

17 September 2018

FORCE Technology
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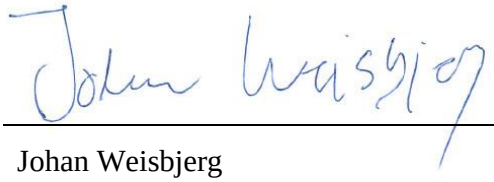
Title	Radio parameter test of Smart Sense
Test object	Smart Sense
Project no.	118-29270-1
Test period	03 to 06 September 2018
Client	Anticimex Innovation Center A/S Skovgårdsvej 25 3200 Helsinge Denmark Tel.: +45 4820 7337
Contact person	Teis Lübcke Frantzen E-mail: Teis.Frantzen@Anticimex.com
Manufacturer	Anticimex Innovation Center A/S
Specifications	FCC 47 CFR 15.247, DTS (Digital Transmission System) FCC 47 CFR 15 Subpart B, Class B
Results	The test objects were found to be in compliance with the specifications
Test personnel	Johan Weisbjerg
Test site	Venlighedsvej 4, 2970 Hørsholm, Denmark

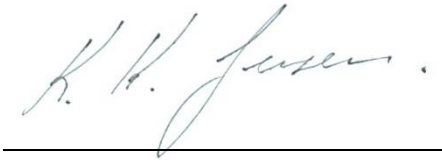
Date 17 September 2018

Project Manager



Johan Weisbjerg
Specialist, EMC
FORCE Technology

Responsible



Karsten Kruse Jensen
Head of Department
FORCE Technology

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1. Summary of tests

Tests	Test methods	Specification	Results
Measurement of maximum conducted output power	ANSI C63.10:2013	47 CFR Part 15C Subpart 15.247(b)(3)	Passed
Measurement of 6 dB bandwidth	ANSI C63.10:2013	47 CFR Part 15C Subpart 15.247(a)(2)	Passed
Measurement of 20 dB bandwidth	ANSI C63.10:2013	47 CFR Part 15C Subpart 15.215(c)	Passed
Measurement of Power spectral density	ANSI C63.10:2013	47 CFR Part 15C Subpart 15.247(e)	Passed
Measurement of conducted spurious emission	ANSI C63.10:2013	47 CFR Part 15C Subpart 15.247(d)	Passed
Measurement of radio frequency voltage on mains	ANSI C63.10:2013	47 CFR Part 15B&C Subpart 15.107 & 15.207	Passed
Measurement of radiated emission; restricted bands	ANSI C63.10:2013	47 CFR Part 15 B&C Subpart 15.109 & 15.209	Passed

The given result is based on a shared risk principle with respect to the measurement uncertainty.

Conclusion

The test objects mentioned in this report meet the requirements of the standard stated below, with respect to the tests listed above.

- FCC 47 CFR 15.247, DTS (Digital Transmission System)
- FCC 47 CFR 15 Subpart B, Class B.

The test results relate only to the objects tested.

2. Test objects and auxiliary equipment

2.1 Test objects

Photo 2.1.1 Test objects.

Test object 2.1.1

Name of test object	Smart Sense
Model / type	400201
Part no.	-
Serial no.	56034007
FCC ID	2AOFP-400201
Manufacturer	Anticimex Innovation Center A/S
Supply voltage	5 VDC
Software version	2.42
Hardware version	E0044-109
Cycle time	Continuous Tx / < 1 sec
Highest frequency generated or used	920 MHz
Comment	TX mode
Received	Date: 30 August 2018. Status: Test object sampled and provided by customer.

Test object 2.1.2

Name of test object	Smart Sense
Model / type	400201
Part no.	-
Serial no.	56034008
FCC ID	2AOFP-400201
Manufacturer	Anticimex Innovation Center A/S
Supply voltage	5 VDC
Software version	2.42
Hardware version	E0044-109
Cycle time	-
Highest frequency generated or used	920 MHz
Comment	Other mode
Received	Date: 30 August 2018. Status: Test object sampled and provided by customer.

Test object 2.1.3

Name of test object	Smart Sense
Model / type	400201
Part no.	-
Serial no.	56034009
FCC ID	2AOFP-400201
Manufacturer	Anticimex Innovation Center A/S
Supply voltage	5 VDC
Software version	2.42
Hardware version	E0044-109
Cycle time	-
Highest frequency generated or used	920 MHz
Comment	TX conducted
Received	Date: 30 August 2018. Status: Test object sampled and provided by customer.

2.2 Auxiliary equipment

Auxiliary equipment 2.2.1

Name of test object	Smart Connect Power Supply
Model / type	SK02G-0500300Z
Part no.	-
Serial no.	-
FCC ID	-
Manufacturer	STARWELL
Supply voltage	100-240 VAC
Highest frequency generated or used	-
Comment	-
Received	Date: 30 August 2018. Status: Test object sampled and provided by customer.

Auxiliary equipment 2.2.2

Name of test object	Smart Connect Power Supply
Model / type	SK02G-0500300Z
Part no.	-
Serial no.	-
FCC ID	-
Manufacturer	STARWELL
Supply voltage	100-240 VAC
Highest frequency generated or used	-
Comment	-
Received	Date: 30 August 2018. Status: Test object sampled and provided by customer.

3. General test conditions

3.1 Test set-up during test

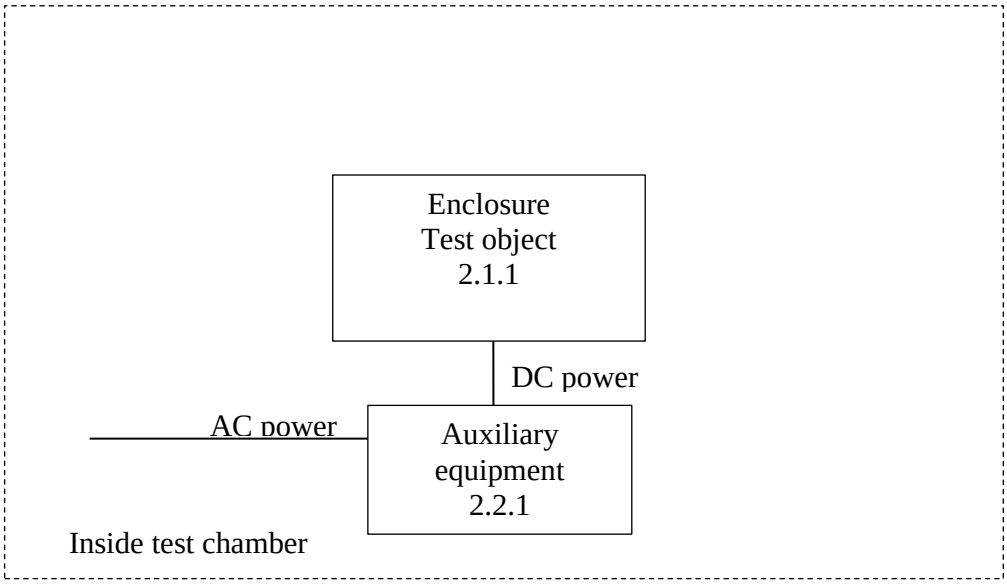


Figure 3.1.1 Block diagram of test object.

Table 3.1.2 Port specification

Port name	Port type	Comment	Shielded cable	Unshielded cable	Max. length Pls. tick x		
					< 3 m	< 30 m	≥ 30 m
Cabinet	Enclosure	-none-	-	-	-	-	-
AC power	AC Power			X	X		

3.1.1 Description of test set-up

The test object 2.1.1. Smart Sense can be floor mounted for Cockroaches and wall mounted for Moth.

There are two test modes:

1. (Normal) - Normal mode: Operation mode – the device is active during the test and the radio module is deactivated (not transmitting).
2. (TX on) - The SRD radio is continuously transmitting in the 902-928 MHz band at 920 MHz.

3.1.2 Description and intended use of test object

Smart Sense gives an early warning of infestation, and activity trend can be followed on WisePlan. A PIR sensor detect insects by having the insects pass over a plate that is heated electrically to detect the presence of insects. The insects are captured by a glue board and attracted by a pheromone.

Smart Sense can detect the presence of moth and cockroaches. It communicates using a wireless mesh network (920 MHz) using a single Atmel AT86RF212B IC. The device is part of the connect family and can communicate/transmit data via a Smart Connect to WisePlan

3.1.3 Nominal power consumption

5 VDC, 180 mA supplied via mains AC/DC power converter.

3.2 Test sequence

The tests described in this test report were performed in the following sequence:

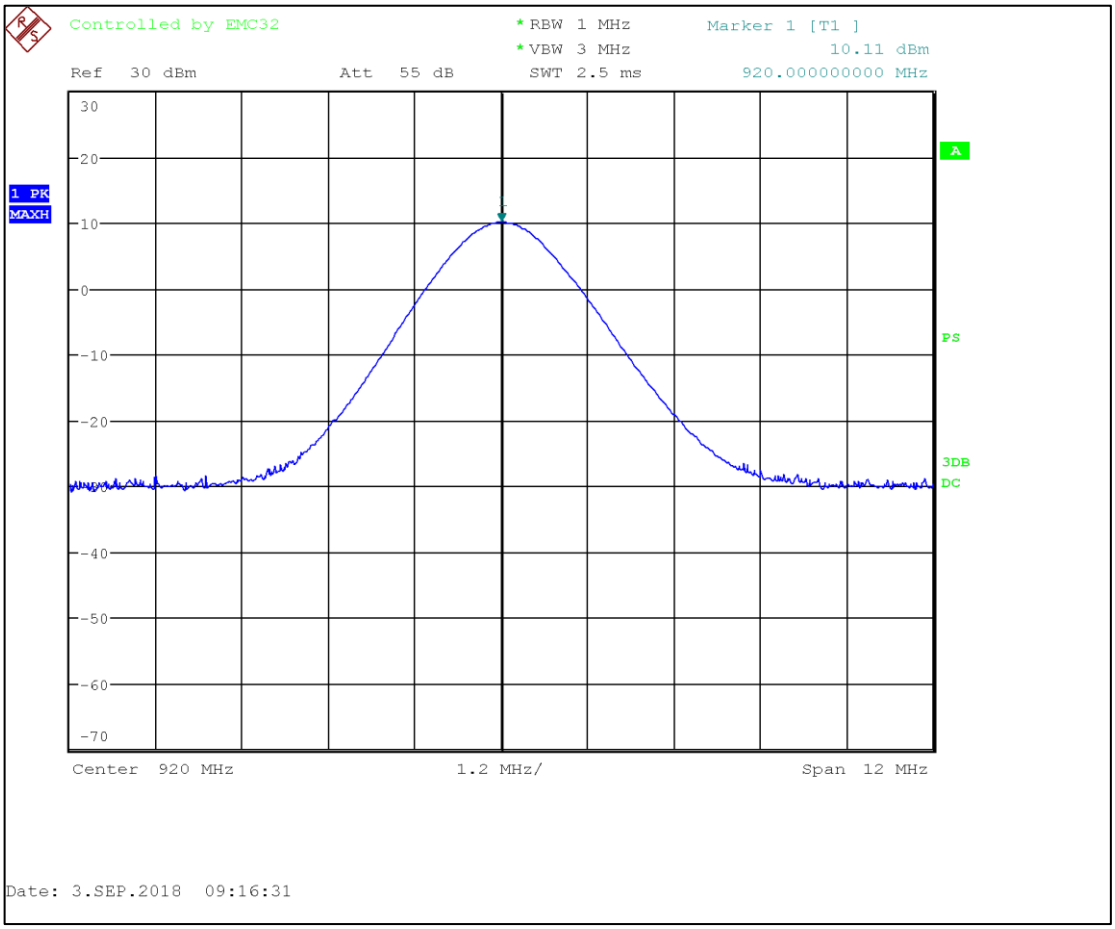
1. Measurement of conducted spurious emissions
2. Measurement of 6 dB bandwidth
3. Measurement of 20 dB bandwidth
4. Measurement of maximum conducted output power
5. Measurement of power spectral density conducted
6. Measurement of radiated emission (below 1 GHz)
7. Measurement of radiated emission (above 1 GHz)
8. Measurement of radio frequency voltage on mains

4. Test results

4.1 Measurement of maximum conducted output power

Test object	Smart Sense	Sheet	PROF-1
Type	400201	Project no.	118-29270-1
Serial no.	56034009	Date	03 Sep. 2018
Client	Anticimex Innovation Center A/S	Initials	JOW
Specification	See section 1 - Summary of tests		

Test method Characteristics	ANSI C63.10:2013 Procedures for testing DTS devices	Temperature Humidity	24 °C 51 % RH
Test equipm.	SRD lab Hørsholm 49600	Uncertainty	1.1 dB
SA Settings	RBW: 1 MHz, VBW: 3 MHz, SPAN: 12 MHz, DET: Peak, CF: 920, Trace: Max. hold		



Comments Operating frequency: 920 MHz.

Test object	Smart Sense	Sheet	PROF-2
Type	400201	Project no.	118-29270-1
Serial no.	56034009	Date	03 Sep. 2018
Client	Anticimex Innovation Center A/S	Initials	JOW
Specification	See section 1 - Summary of tests		

Test method Characteristics	ANSI C63.10:2013 Procedures for testing DTS devices	Temperature Humidity	24 °C 51 % RH
Test equipm.	SRD lab Hørsholm 49600	Uncertainty:	1.1 dB
SA Settings	RBW: 1 MHz, VBW: 3 MHz, SPAN: 12 MHz, DET: Peak, CF: 920, Trace: Max. hold		

Operating frequency [MHz]	Conducted peak measurement [dBm]	Limit [dBm]	Remarks
920.01	10.11	30 (1 Watts)	Passed
Note 1: None			

Test result	The measured maximum conducted output power is within limit
Test port	Antenna connector
Test frequency	920 MHz
Test mode	Continuous Tx - normal modulation
Condition	Normal
Compliant	Yes
Comments	None

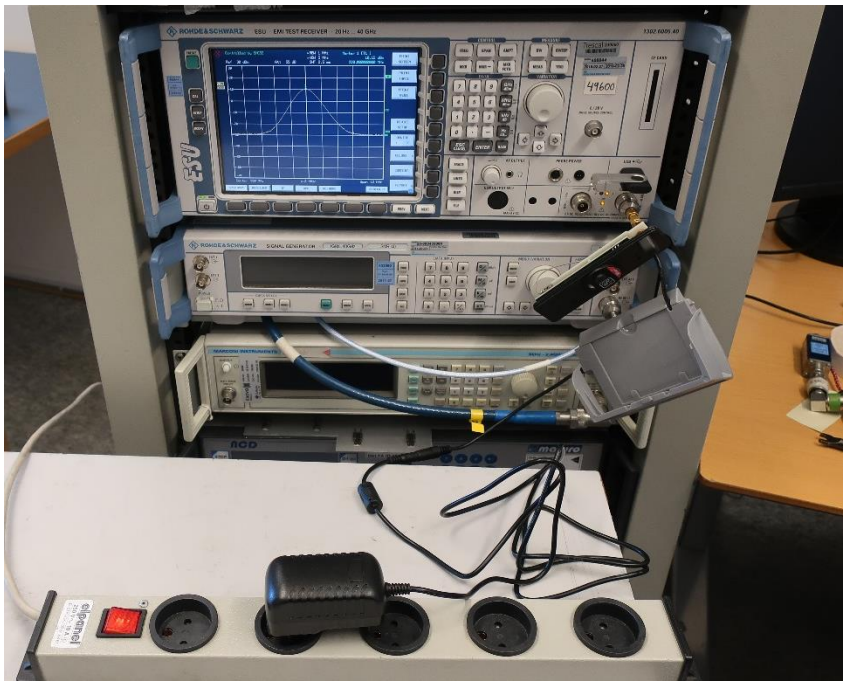
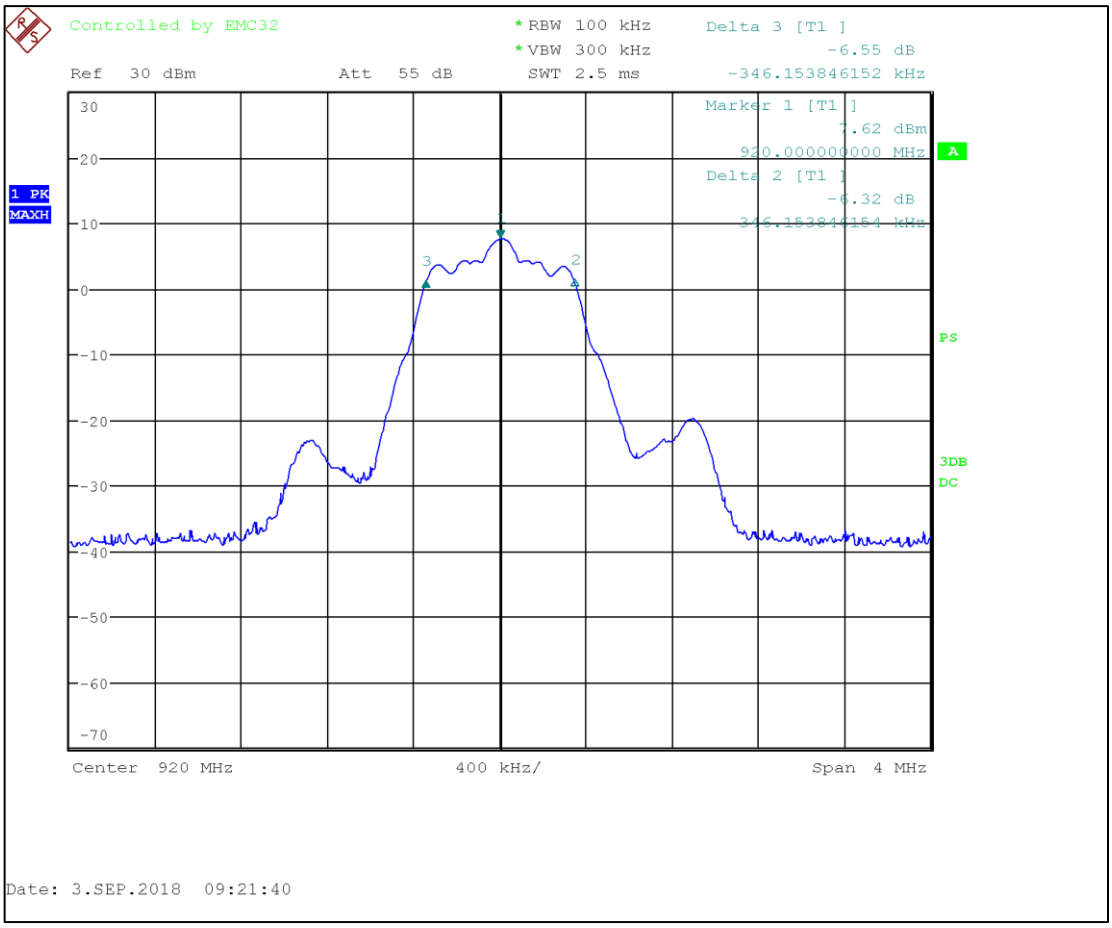


Photo 4.1.1 Test set-up regarding measurement of maximum conducted output power.

4.2 Measurement of 6 dB bandwidth

Test object	Smart Sense	Sheet	PROF-3
Type	400201	Project no.	118-29270-1
Serial no.	56034009	Date	03 Sep. 2018
Client	Anticimex Innovation Center A/S	Initials	JOW
Specification	See section 1 - Summary of tests		

Test method Characteristics	ANSI C63.10:2013 Procedures for testing DTS devices	Temperature Humidity	24 °C 51 % RH
Test equipm.	SRD lab Hørsholm 49600	Uncertainty	1.1 dB
SA Settings	RBW: 100 kHz, VBW: 300 kHz, SPAN: 4 MHz, DET: Peak, CF: 920, Trace: Max. hold		



Comments Operating frequency: 920 MHz.

Test object	Smart Sense	Sheet	PROF-4
Type	400201	Project no.	118-29270-1
Serial no.	56034009	Date	03 Sep. 2018
Client	Anticimex Innovation Center A/S	Initials	JOW
Specification	See section 1 - Summary of tests		

Test method Characteristics	ANSI C63.10:2013 Procedures for testing DTS devices	Temperature Humidity	24 °C 51 % RH
Test equipm.	SRD lab Hørsholm 49600 49740	Uncertainty:	1.1 dB
SA Settings	RBW: 100 kHz, VBW: 300 kHz, SPAN: 4 MHz, DET: Peak, CF: 920, Trace: Max. hold		

Operating frequency [MHz]	Low frequency [MHz]	High frequency [MHz]	6 dB bandwidth [kHz]	Limit [kHz]	Remarks
920	919.65	920.34	692.3	≥ 500	Passed
Note 1: None					

Band edge criteria	The minimum 6 dB bandwidth shall be ≥ 500 kHz
Test result	The measured 6 dB bandwidth was within limit
Test port	Antenna connector
Test frequency	920 MHz
Test mode	Continuous Tx - normal modulation
Condition	Normal
Compliant	Yes
Comments	None

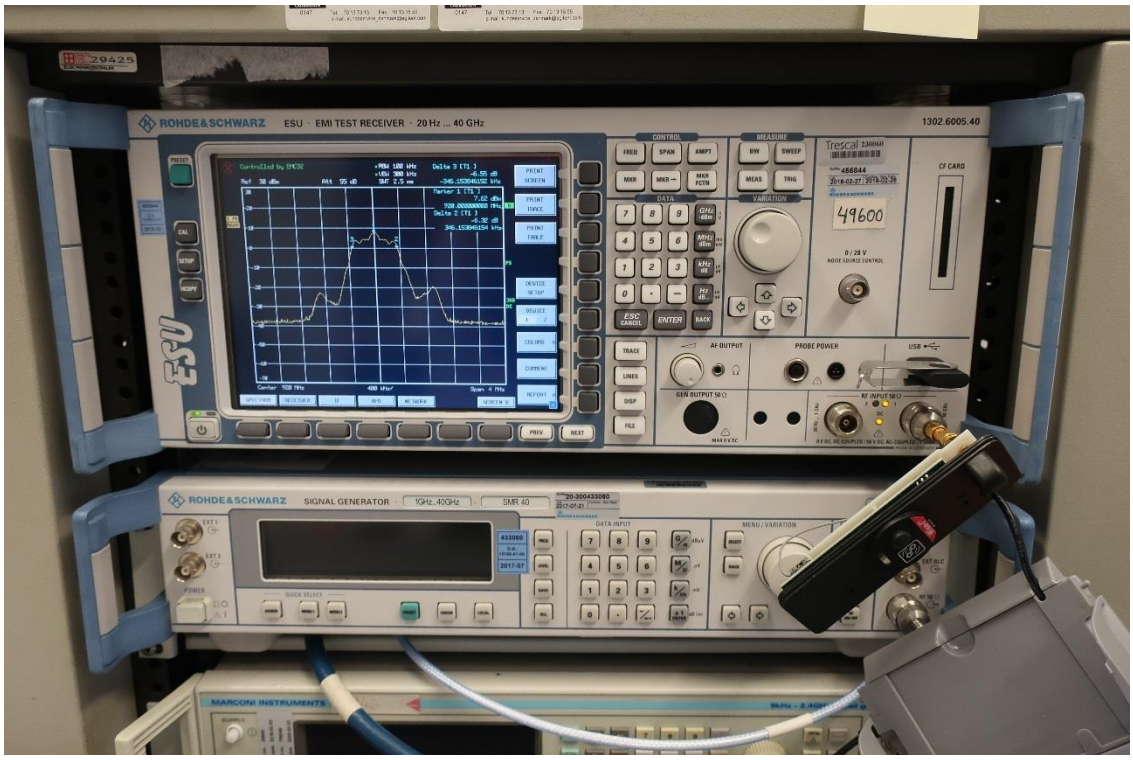
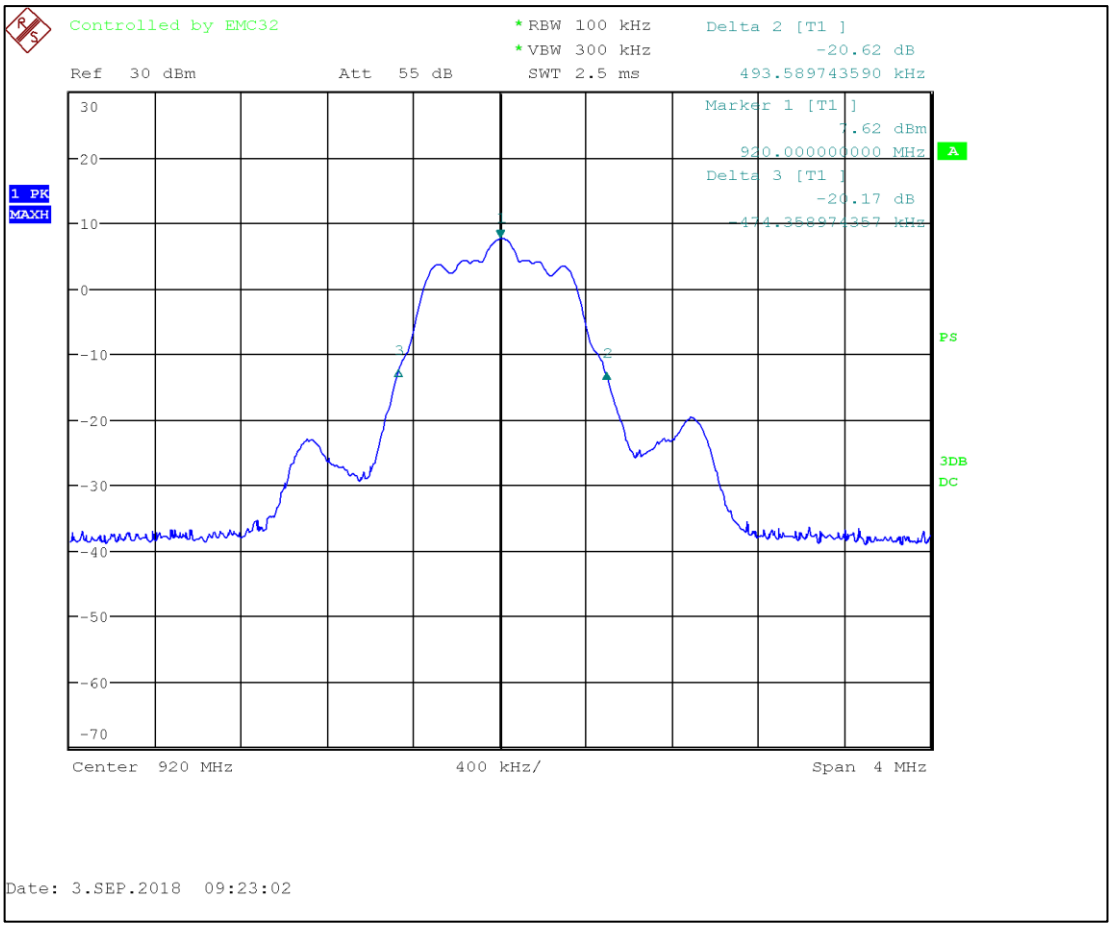


Photo 4.2.1 Test set-up regarding measurement of 6 dB bandwidth.

4.3 Measurement of 20 dB bandwidth

Test object	Smart Sense	Sheet	PROF-5
Type	400201	Project no.	118-29270-1
Serial no.	56034009	Date	03 Sep. 2018
Client	Anticimex Innovation Center A/S	Initials	JOW
Specification	See section 1 - Summary of tests		

Test method Characteristics	ANSI C63.10:2013 Procedures for testing DTS devices	Temperature Humidity	24 °C 51 % RH
Test equipm.	SRD lab Hørsholm 49600	Uncertainty	1.1 dB
SA Settings	RBW: 100 kHz, VBW: 300 kHz, SPAN: 4 MHz, DET: Peak, CF: 920 MHz, Trace: Max. hold		



Comments Operating frequency: 920 MHz.

Test object	Smart Sense	Sheet	PROF-6
Type	400201	Project no.	118-29270-1
Serial no.	44008275	Date	03 Sep. 2018
Client	Anticimex Innovation Center A/S	Initials	JOW
Specification	See section 1 - Summary of tests		

Test method Characteristics	ANSI C63.10:2013 Procedures for testing DTS devices	Temperature Humidity	24 °C 51 % RH
Test equipm.	SRD lab Hørsholm 49600	Uncertainty:	1.1 dB
SA Settings	RBW: 100 kHz, VBW: 300 kHz, SPAN:4 MHz, DET: Peak, CF: 920 MHz, Trace: Max. hold		

Operating frequency [MHz]	Low frequency [MHz]	High frequency [MHz]	Remarks
920	919.506	920.474	-

Operating frequency [MHz]	Measured [MHz]	Limit [MHz]	Remarks
Lowest frequency	919.506	902	Passed
Highest frequency	920.474	928	Passed

Band edge criteria	20 dB bandwidth
Test result	The measured 20 dBc bandwidth was within limit
Test port	Antenna connector
Test frequency	920 MHz
Test mode	Continuous Tx - normal modulation
Condition	Normal
Compliant	Yes
Comments	None

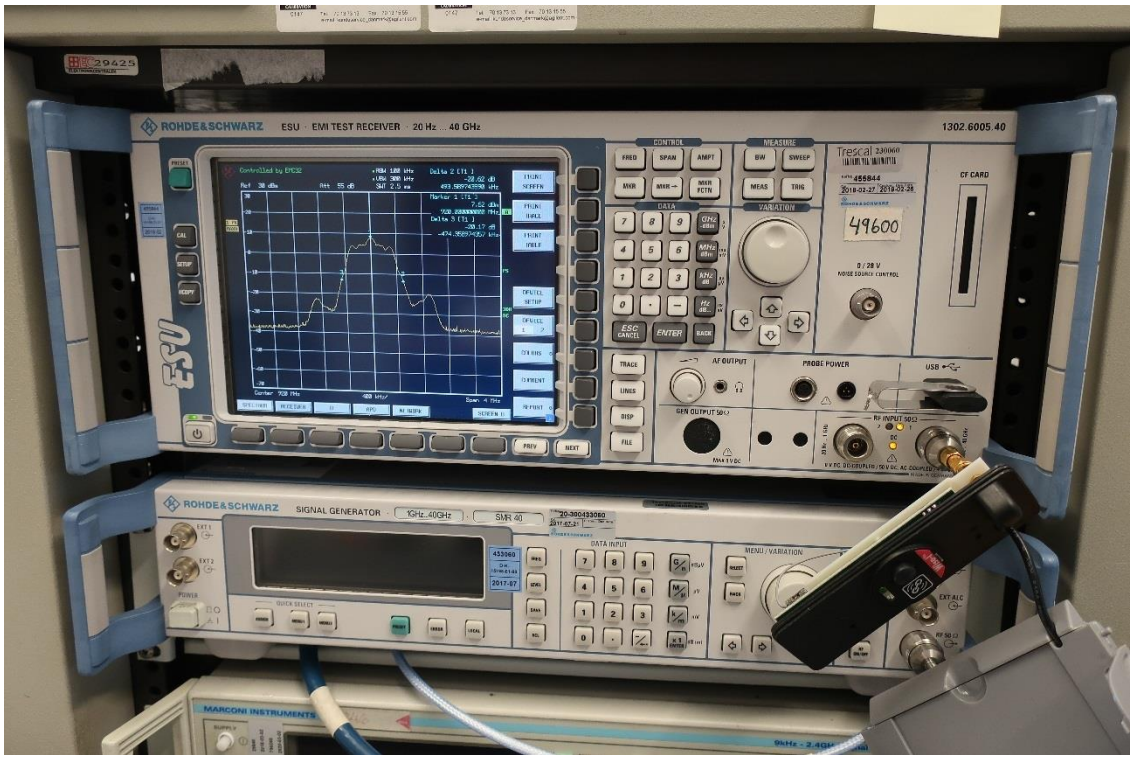
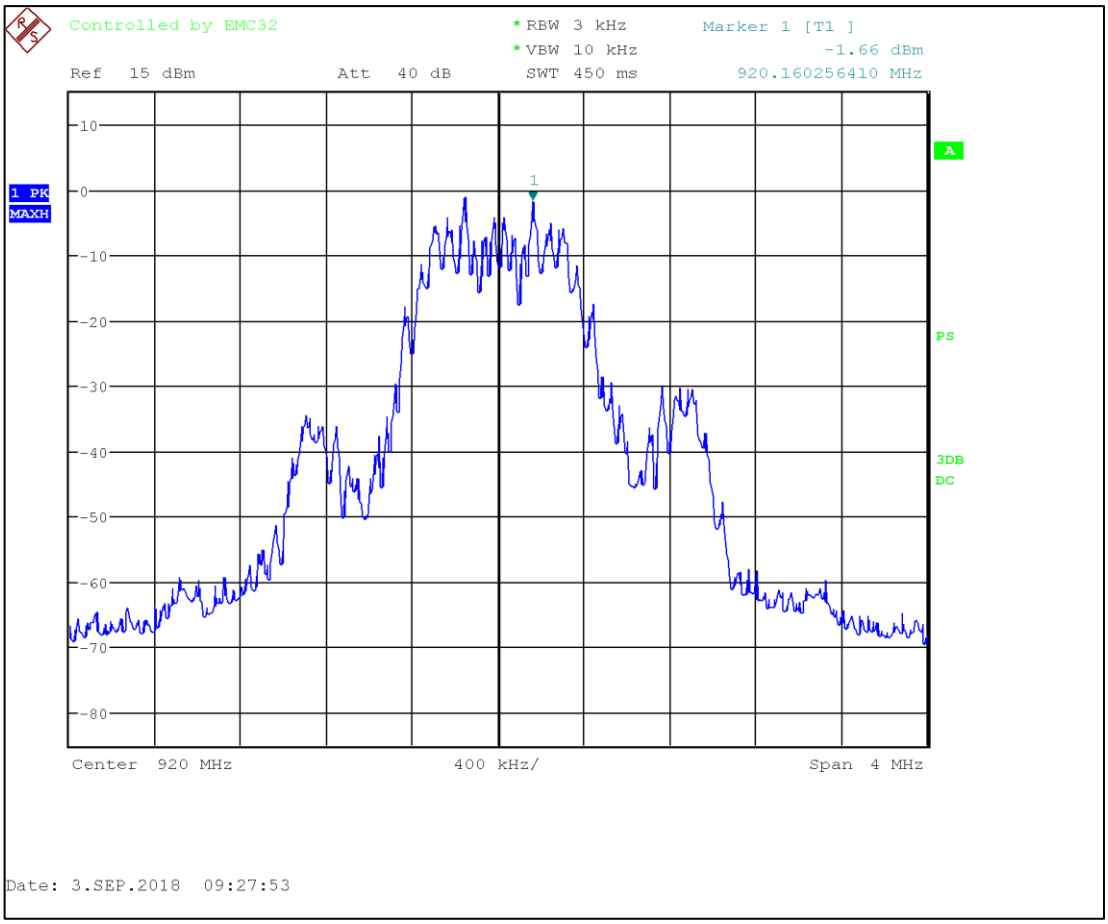


Photo 4.3.1 Test set-up regarding measurement of 20 dB bandwidth.

4.4 Measurement of power spectral density conducted

Test object	Smart Sense	Sheet	PROF-7
Type	400201	Project no.	118-29270-1
Serial no.	56034009	Date	03 Sep. 2018
Client	Anticimex Innovation Center A/S	Initials	JOW
Specification	See section 1 - Summary of tests		

Test method Characteristics	ANSI C63.10:2013 Procedures for testing DTS devices	Temperature Humidity	24 °C 51 % RH
Test equipm.	SRD lab Hørsholm 49600	Uncertainty	1.1 dB
SA Settings	RBW: 3 kHz, VBW: 10 kHz, SPAN: 4 MHz, DET: Peak, CF: 920, Trace: Max. hold		



Comments Operating frequency: 920 MHz.

Test object	Smart Sense	Sheet	PROF-8
Type	400201	Project no.	118-29270-1
Serial no.	44008275	Date	03 Sep. 2018
Client	Anticimex Innovation Center A/S	Initials	JOW
Specification	See section 1 - Summary of tests		

Test method Characteristics	ANSI C63.10:2013 Procedures for testing DTS devices	Temperature Humidity	24 °C 51 % RH
Test equipm.	SRD lab Hørsholm 49600	Uncertainty	1.1 dB
SA Settings	RBW: 3 kHz, VBW: 10 kHz, SPAN: 4 MHz, DET: Peak, CF: 920, Trace: Max. hold		

Operating Frequency [MHz]	Measured Power [dBm]	Limit [dBm]	Remarks
919.83	-1.66	8	Passed

Test result	The measured power spectral density was within the limit
Test Port	Antenna connector
Test frequency	920 MHz
Test mode	Continuous Tx - normal modulation
Condition	Normal
Compliant	Yes
Comments	None

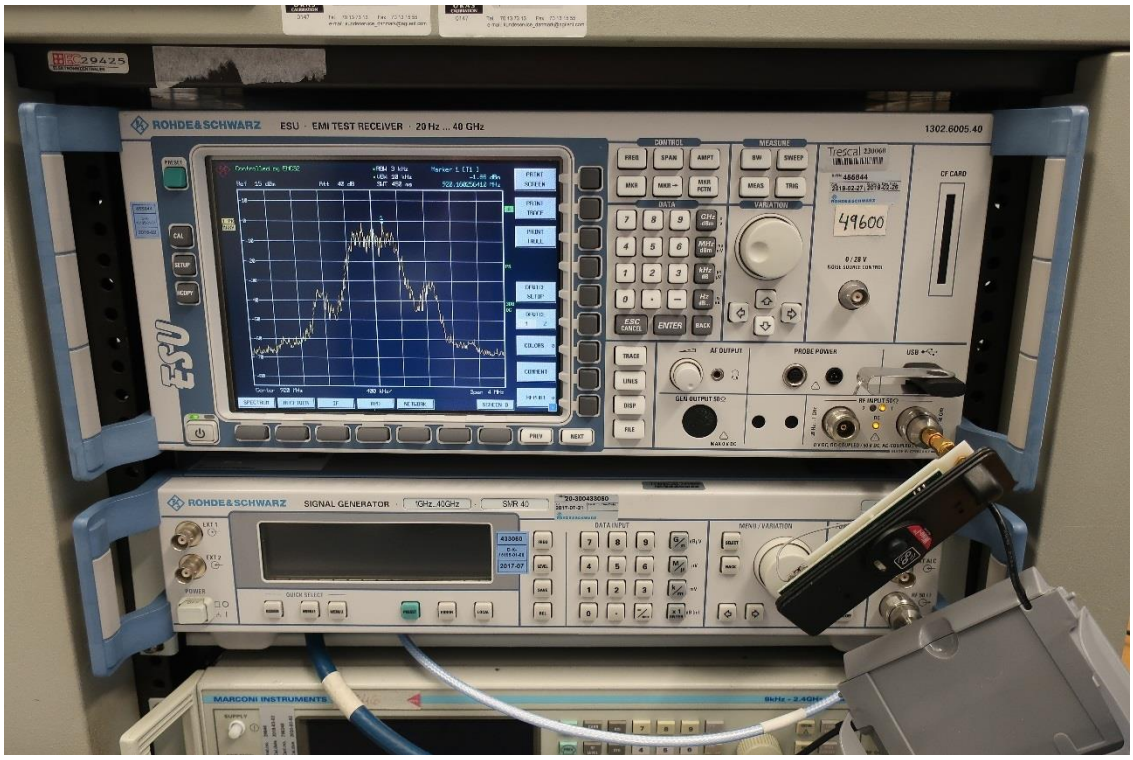
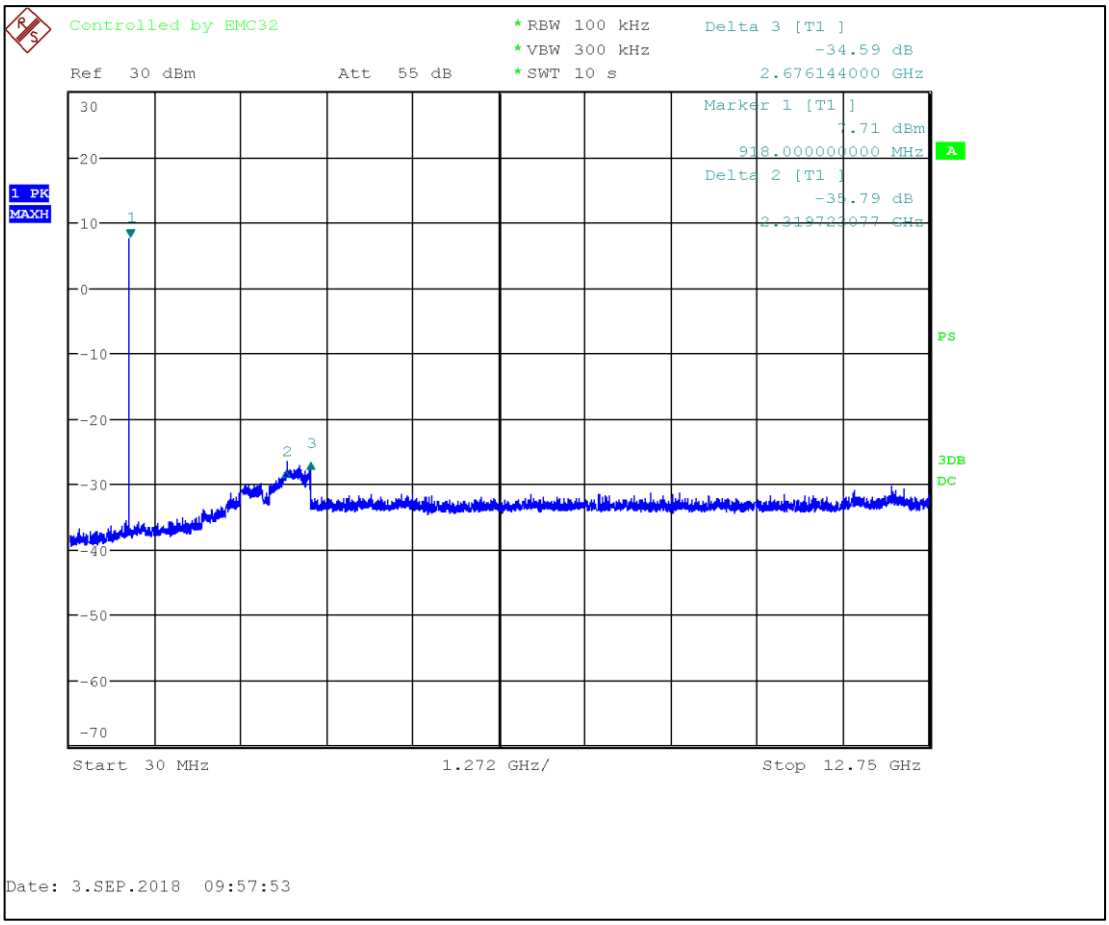


Photo 4.4.1 Test set-up regarding measurement of power spectral density conducted.

4.5 Measurement of conducted spurious emissions

Test object	Smart Sense	Sheet	PROF-9
Type	400201	Project no.	118-29270-1
Serial no.	56034009	Date	03 Sep. 2018
Client	Anticimex Innovation Center A/S	Initials	JOW
Specification	See section 1 - Summary of tests	Frequency	30-12750 MHz

Test method Characteristics	ANSI C63.10:2013 Procedures for testing DTS devices	Temperature Humidity	24 °C 51 % RH
Test equipm.	SRD lab Hørsholm 49600	Uncertainty	1.1 dB
SA Settings	RBW: 100 kHz, VBW: 300 kHz, DET: Peak, Trace: Max. hold		



Comments None

Test object	Smart Sense	Sheet	PROF-10
Type	400201	Project no.	118-29270-1
Serial no.	56034009	Date	03 Sep 2018
Client	Anticimex Innovation Center A/S	Initials	JOW
Specification	See section 1 - Summary of tests	Frequency	30-12750 MHz

Test method Characteristics	ANSI C63.10:2013 Procedures for testing DTS devices	Temperature Humidity	24 °C 51 % RH
Test equipm.	SRD lab Hørsholm 49600	Uncertainty:	1.1 dB
SA Settings	RBW: 100 kHz, VBW: 300 kHz, DET: Peak, Trace: Max. hold		

Frequency [MHz]	Peak measurement [dBc]	Limit [dBc]	Remarks
2319.72	35.79	>20	Passed
2676.14	34.59	>20	Passed

Test result	The measured conducted spurious emissions are within limit
Test port	Antenna connector
Test frequency	920 MHz
Test mode	Continuous Tx - normal modulation
Condition	Normal
Compliant	Yes
Comments	None

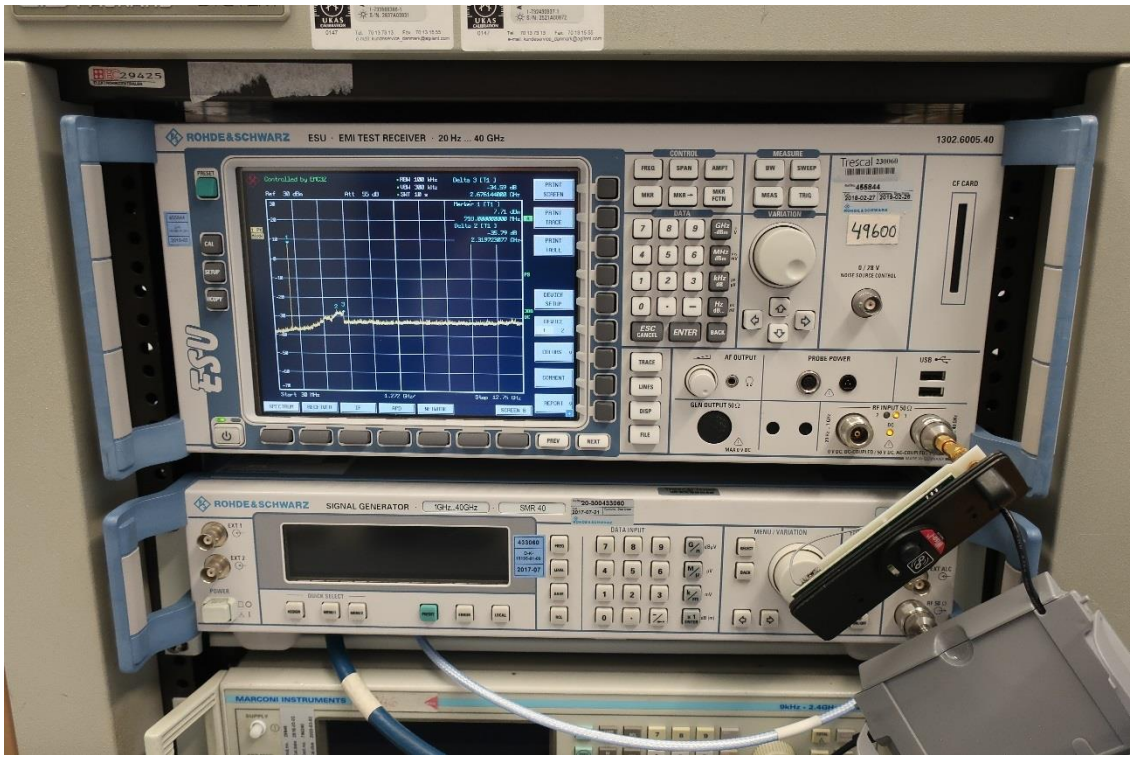
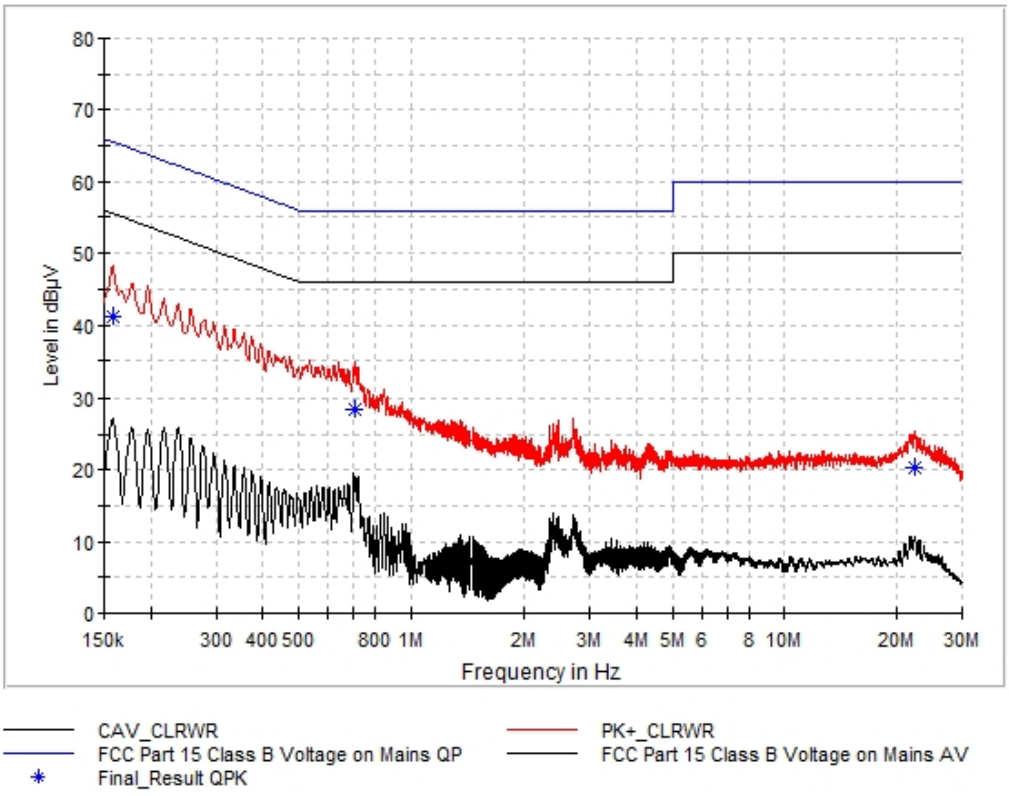


Photo 4.5.1 Test set-up regarding measurement of conducted spurious emissions.

4.6 Measurement of radio frequency voltage on mains

Test object	Smart Sense	Sheet	CE-1
Type	400201	Project no.	118-29270-1
Serial no.	56034007	Date	06 Sep. 2018
Client	Anticimex Innovation Center A/S	Initials	JOW
Specification	See section 1 Summary of tests	Frequency	0.15-30 MHz

Test method Characteristics	ANSI C63.10:2013 Artificial mains network: 50 Ω, 50 µH	Temperature Humidity	22 °C 68 % RH
Detector	Peak and average	Bandwidth	9 kHz
Test equipm.	EMI room Hørsholm 49900 49429 49043 49457 29978 29680 49568	Uncertainty	2.7 dB



Test object	Smart Sense	Sheet	CE-2
Type	400201	Project no.	118-29270-1
Serial no.	56034007	Date	06 Sep. 2018
Client	Anticimex Innovation Center A/S	Initials	JOW
Specification	See section 1 Summary of tests	Frequency	0.15-30 MHz

Test method Characteristics	ANSI C63.10:2013 Artificial mains network: 50 Ω, 50 µH	Temperature Humidity	22 °C 68 % RH
Detector	Peak and average	Bandwidth	9 kHz
Test equipm.	EMI room Hørsholm 49900 49429 49043 49457 29978 29680 49568	Uncertainty	2.7 dB

Frequency (MHz)	QuasiPeak (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	PE	Corr. (dB)
0.16	41.17	65.5	24.34	5000	9.0	N	FLO	10
0.71	28.47	56.0	27.53	5000	9.0	L1	FLO	10
22.38	20.40	60.0	39.60	5000	9.0	N	FLO	13

Line under test Maximum of Line and Neutral

Test result The measured voltages were below the limit

Compliant Yes

Comments Mains voltage: 120 VAC

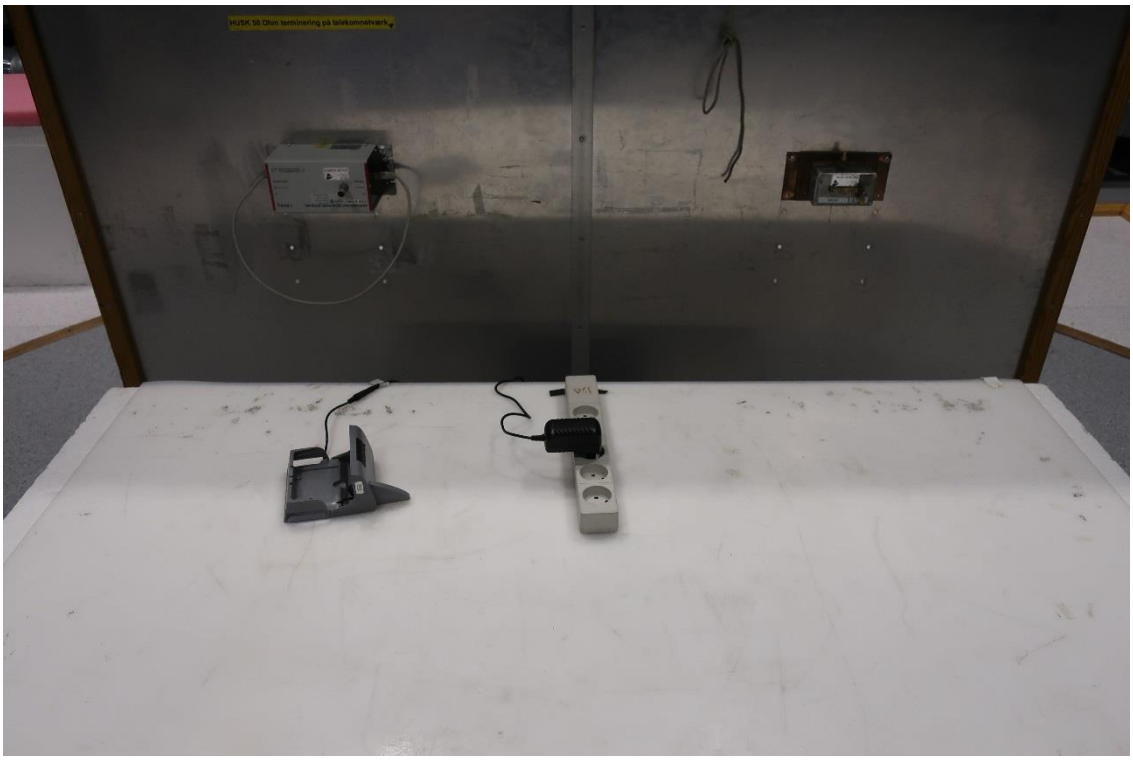


Photo 4.6.1 Test set-up regarding measurement of radio frequency voltage on mains.

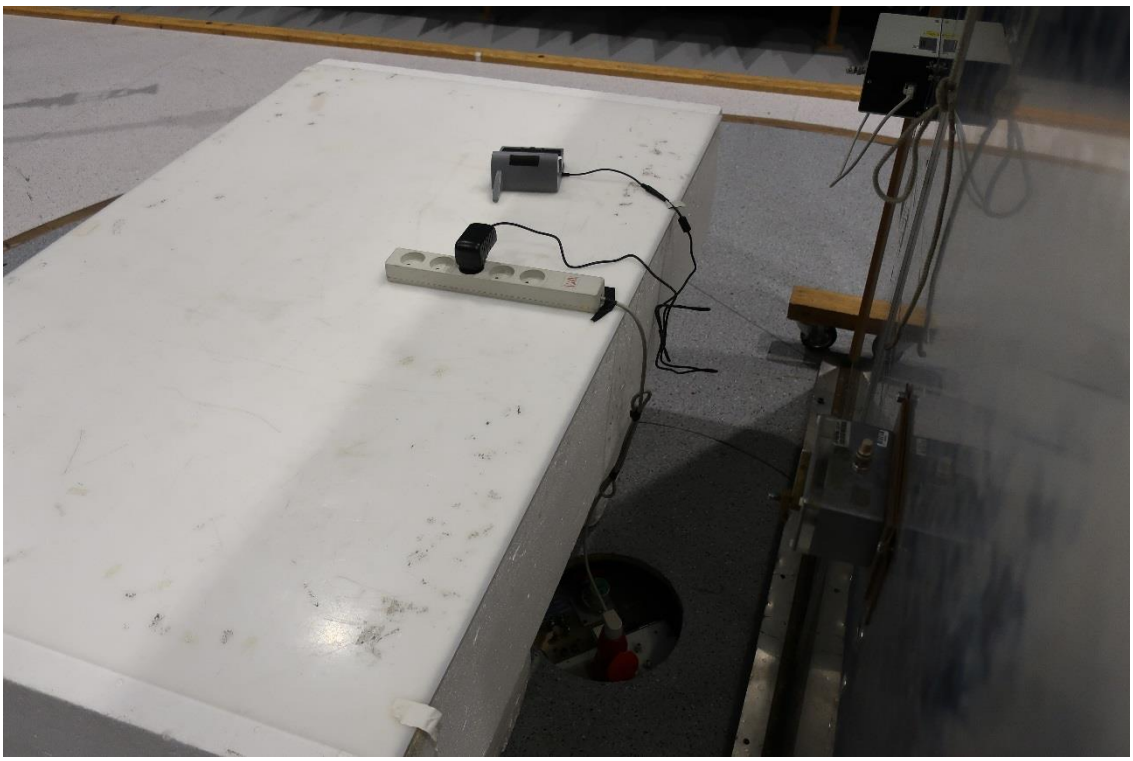
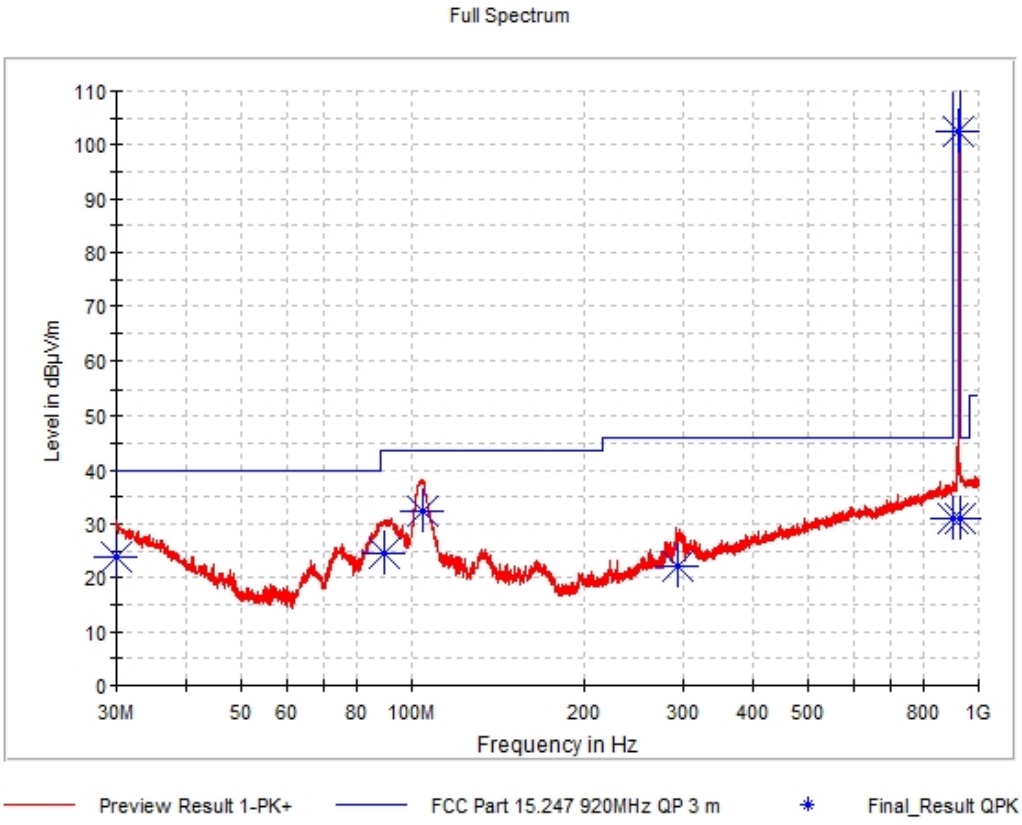


Photo 4.6.2 Test set-up regarding measurement of radio frequency voltage on mains.

4.7 Measurement of radiated emission (below 1 GHz)

Test object	Smart Sense	Sheet	RE_Spur-1
Type	400201	Project no.	118-29270-1
Serial no.	Combination of 56034007 and 56034008	Date	06 Sep. 2018
Client	Anticimex Innovation Center A/S	Initials	JOW
Specification	See section 1 - Summary of tests	Frequency	30-1000 MHz

Test method Characteristics	ANSI C63.10:2013 Complete search, antenna distance 3 m	Temperature Humidity	23 °C 65 % RH
Detector	Peak and quasi peak	Bandwidth	120 kHz
Test equipm.	EMI room Hørsholm 49900 49704 49590 49817 49808 29797	Uncertainty	5.0 dB



Comments Continuous Tx - normal modulation.

Test object	Smart Sense	Sheet	RE_Spur-2
Type	400201	Project no.	118-29270-1
Serial no.	Combination of 56034007 and 56034008	Date	06 Sep. 2018
Client	Anticimex Innovation Center A/S	Initials	JOW
Specification	See section 1 - Summary of tests	Frequency	30-1000 MHz

Test method Characteristics	ANSI C63.10:2013 Complete search, antenna distance 3 m	Temperature Humidity	23 °C 65 % RH
Detector	Quasi peak	Bandwidth	120 kHz
Test equipm.	EMI room Hørsholm 49900 49704 49590 49817 49808 29797	Uncertainty	5.0 dB

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
30.03	23.86	40.0	16.14	15000	120.0	112.0	V	106
89.28	24.51	43.5	18.99	15000	120.0	105.0	V	46
104.94	32.43	43.5	11.07	15000	120.0	111.0	V	127
294.27	22.30	46.0	23.70	15000	120.0	104.0	H	191
902.00	31.12	46.0	14.88	15000	120.0	157.0	H	272
919.98	102.56	In band	In band	15000	120.0	112.0	H	301
928.00	31.12	46.0	14.88	15000	120.0	387.0	V	126

Test result: The measured field strengths are below the limit

Test Port: Enclosure

Test frequency: 920 MHz

Test mode: Pool test of:

- Continuous TX - normal modulation
- Other mode – radio inactive

Condition: Normal

Compliant: Yes

Comments: Final maximal measurements by variation of turntable azimuth, antenna height, and antenna polarisation

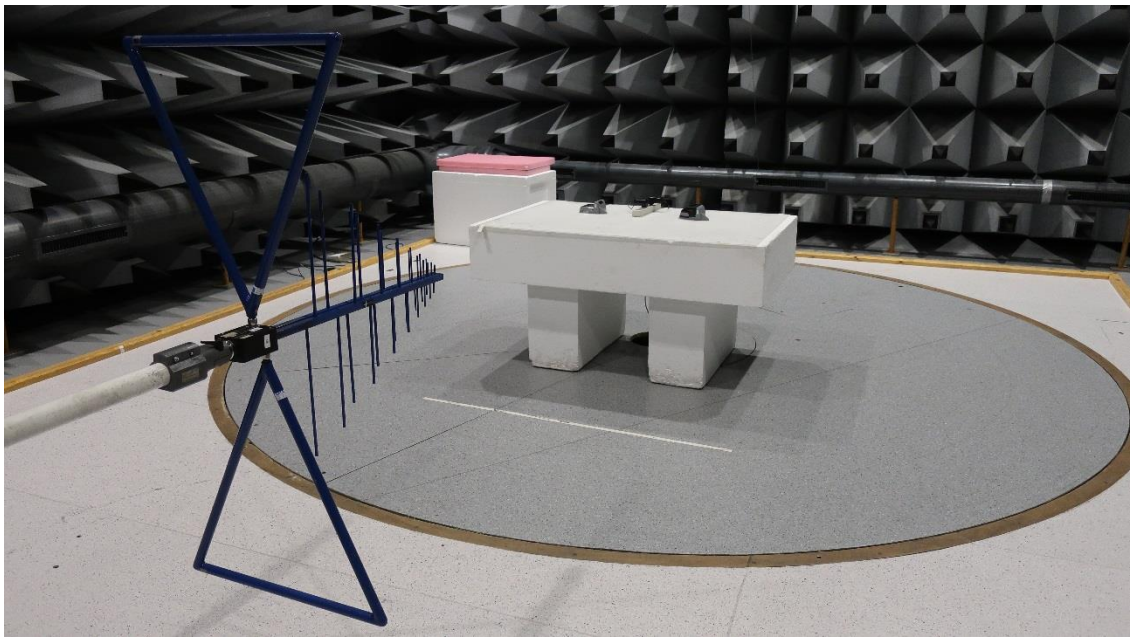


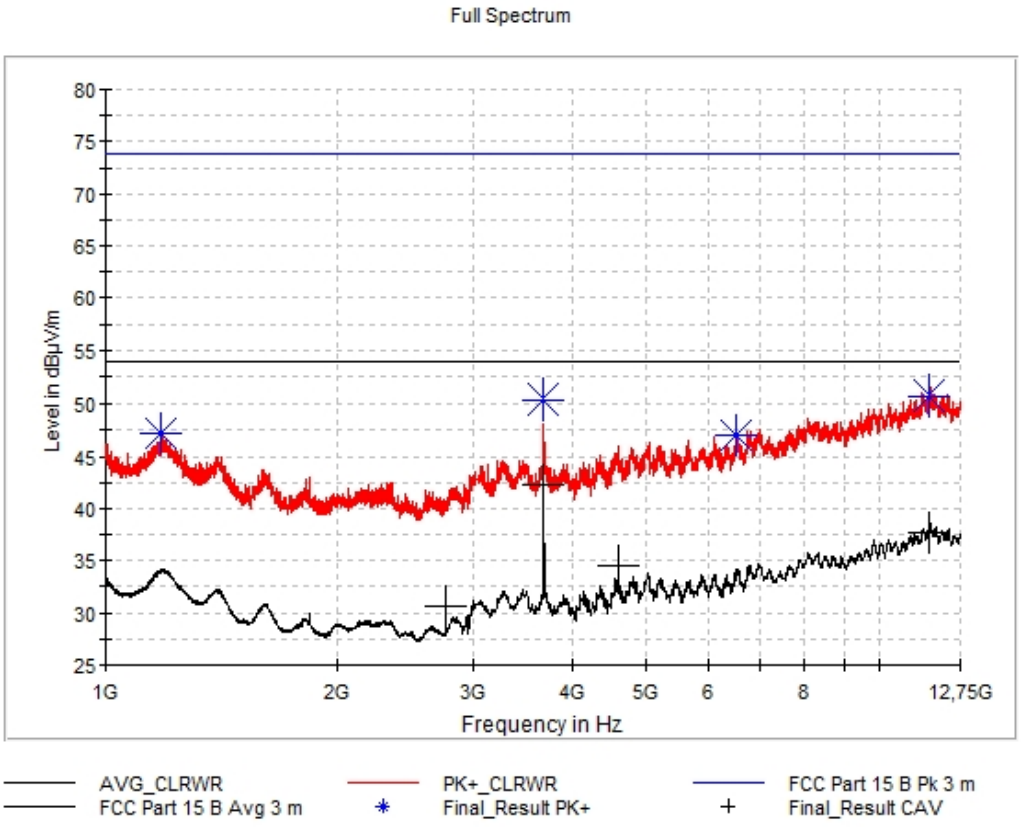
Photo 4.7.1 Test set-up regarding measurement of radiated emission (below 1 GHz).

Photo 4.7.2 Test setup regarding measurement of radiated emission (below 1 GHz).

4.8 Measurement of radiated emission (above 1 GHz)

Test object	Smart Sense	Sheet	RE_Spur-3
Type	400201	Project no.	118-29270-1
Serial no.	Combination of 56034007 and 56034008	Date	06 Sep 2018
Client	Anticimex Innovation Center A/S	Initials	JOW
Specification	See section 1 - Summary of tests	Frequency	1-12.75 GHz

Test method Characteristics	ANSI C63.10:2013 Complete search, antenna distance 3 m.	Temperature Humidity	22 °C 65 % RH
Detector	Peak and average	Bandwidth	1 MHz
Test equipm.	EMI room Hørsholm 49900 49625 49869 49870 49624	Uncertainty	4.9 dB



Comments Continuous Tx - normal modulation.

Test object	Smart Sense	Sheet	RE_Spur-4
Type	400201	Project no.	118-29270-1
Serial no.	Combination of 56034007 and 56034008	Date	06 Sep. 2018
Client	Anticimex Innovation Center A/S	Initials	JOW
Specification	See section 1 - Summary of tests	Frequency	1-12.75 GHz

Test method Characteristics	ANSI C63.10:2013 Complete search, antenna distance 3 m	Temperature Humidity	22 °C 65 % RH
Detector	Peak and average	Bandwidth	1 MHz
Test equipm.	EMI room Hørsholm 49900 49625 49869 49870 49624	Uncertainty	4.9 dB

Frequency (MHz)	MaxPeak (dBµV/m)	CAverage (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol
1180.50	47.22	---	73.9	26.68	15000	1000.0	349.0	V
2760.00	---	30.60	53.9	23.30	15000	1000.0	100.0	H
3680.00	50.30	---	73.9	23.60	15000	1000.0	138.0	V
3680.00	---	42.29	53.9	11.61	15000	1000.0	153.0	V
4600.00	---	34.57	53.9	19.33	15000	1000.0	106.0	H
6545.50	46.96	---	73.9	26.94	15000	1000.0	100.0	V
11613.25	---	37.61	53.9	16.29	15000	1000.0	250.0	V
11631.75	50.68	---	73.9	23.22	15000	1000.0	224.0	H

Test result	The measured field strengths are below the limit
Test Port	Enclosure
Test frequency	920 MHz
Test mode	Continuous Tx - normal modulation
Condition	Normal
Compliant	Yes
Comments	Final maximal measurements by variation of turntable azimuth, antenna height, and antenna polarisation

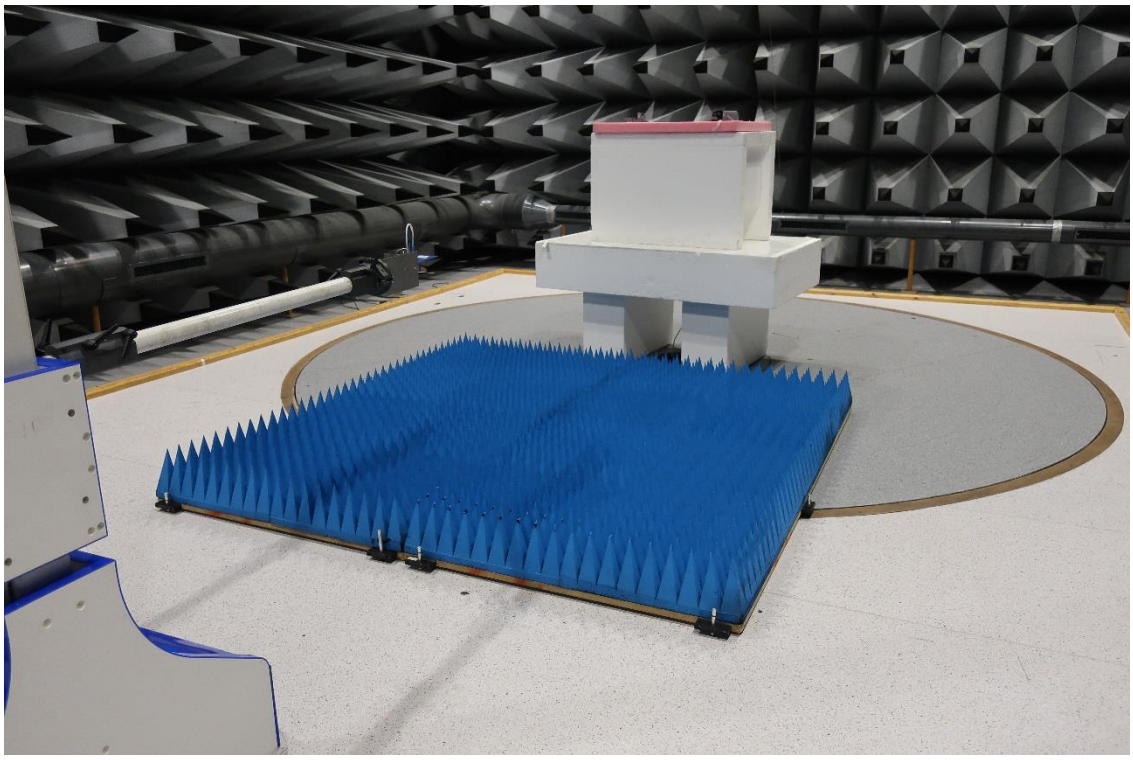


Photo 4.8.1 Test setup regarding measurement of radiated emission (above 1 GHz).

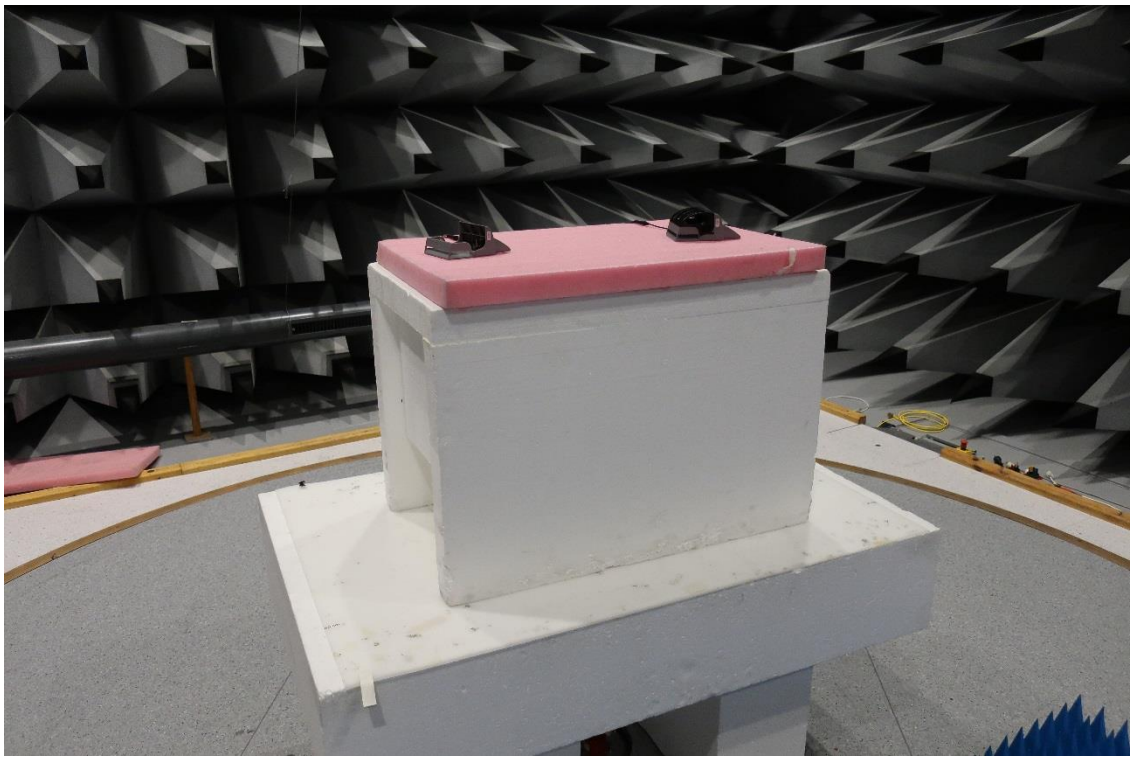


Photo 4.8.2 Test setup regarding measurement of radiated emission (above 1 GHz).

5. National registrations and accreditations

5.1 DANAK Accreditation

Organization: Danish Accreditation and Metrology Fund - DANAK, see www.danak.dk and www.ilac.org

Registration Number: 19

Area Number: C

DANAK is part of ILAC (International Laboratory Accreditation Cooperation) including its MRA (Mutual Recognition Arrangement). The MRA includes the Australian NATA and Canadian SCC.

5.2 FCC Registrations

Organization: Federal Communications Commission, USA

Registration Number: 913950

Facilities: EMC room 2 Hørsholm (EMC-2)
EMC room 3 Hørsholm (EMC-3)
EMC room 4 Hørsholm (EMC-4)
EMI room Hørsholm (EMC-5)

5.3 VCCI Registrations

Organization: Voluntary Control Council for Interference by Information Technology, Japan

Member Number: 910

Facilities:

EMC room 3 Hørsholm (EMC-3):	C-12532 and T-11548
EMI room Hørsholm (EMC-5):	R-11180, C-10706 T-11550 and G-10470

5.4 IC Registrations

Organization: Industry Canada, Certification and Engineering Bureau

Registration Number: IC4187A-5

Facilities: EMI room Hørsholm (EMC-5)

6. List of instruments

No	Description	Manufacturer	Type no	Cal. date	Cal. exp.
29680	IMPULSE VOLTAGE LIMITER (N)	ROHDE & SCHWARZ	ESH3/Z2	07-05-2018	07-05-2019
29797	BILOG ANTENNA, 30-2000 MHz	CHASE ELECTRICS LTD	CBL 6111A	22-06-2017	22-06-2019
29978	CABLE#34, RG 223, 40 m, COND. EMISSION, ROOM 5	SUHNER	RG 223/U	02-11-2017	02-11-2018
49043	COAXIAL SWITCH ROOM 5 (EMI)	RLC ELECTRONICS	SM-3-N	02-11-2017	02-11-2018
49429	CABLE 2 m N-Nangle		RG214U	02-11-2017	02-11-2018
49457	CABLE 3 m BNC-BNC	SUHNER	RG 223/U	02-11-2017	02-11-2018
49568	ARTIFICIAL MAINS NETWORK	ROHDE&SCHWARZ	ESH2/Z5	15-09-2017	15-09-2018
49590	CABLE, LOW-LOSS uWAVE CABLE, N-N, 8.0 m "EMI"	SUHNER	SUCOFLEX 104 PB	02-11-2017	02-11-2018
49600	SPECTRUM ANALYZER / MEASUREMENT RECEIVER	ROHDE & SCHWARZ	ESU40	27-02-2018	27-02-2019
49624	DUAL RIDGE HORN ANTENNA – 1 GHz – 26 GHz (2 GHz – 32 GHz)	SATIMO	SH2000	01-03-2018	01-03-2021
49625	SRD COAX SWITCH MATRIX USED IN 1GHZ TO 26 GHz SRD ANTENNASYSTEM	DELTA	COAX SWITCH MATRIX	24-05-2018	24-05-2019
49704	CABLE 3 m SMA-N	SUHNER	SUCOFLEX104	04-11-2017	04-11-2018
49808	ATTENUATOR, DC-12.4 GHz, 6 dB	HUBER-SUHNER	6806.17A	09-03-2018	09-03-2019
49817	CABLE, LOW-LOSS uWAVE CABLE, N-N, 8.0 m "EMI"	SUHNER	SUCOFLEX 104 PB	02-11-2017	02-11-2018
49869	CABLE 3 M PC3.5 MALE-FEMALE SUCOFLEX 126	HUBER+SUHNER		05-04-2018	05-04-2019
49870	CABLE 13 M PC3.5 MALE-MALE SUCOFLEX 126EA	HUBER+SUHNER		05-04-2018	05-04-2019
49900	SPECTRUM ANALYZER / MEASUREMENT RECEIVER	ROHDE & SCHWARZ	ESW26	03-05-2018	03-05-2019