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TEST REPORT

Test report no.: 1-1708/16-01-09-A





Testing laboratory

CTC advanced GmbH

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Accredited Testing Laboratory:

The testing laboratory (area of testing) is accredited according to DIN EN ISO/IEC 17025 (2005) by the Deutsche Akkreditierungsstelle GmbH (DAkkS)

The accreditation is valid for the scope of testing procedures as stated in the accreditation certificate with

the registration number: D-PL-12076-01-01

Applicant

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Manufacturer

Sivantos GmbH

Henri-Dunant-Straße 100 91058 Erlangen / GERMANY

Test standard/s

47 CFR Part 15 Title 47 of the Code of Federal Regulations; Chapter I; Part 15 - Radio frequency

devices

RSS - 210 Issue 9 Spectrum Management and Telecommunications Radio Standards Specification -

Licence-Exempt Radio Apparatus: Category I Equipment

For further applied test standards please refer to section 3 of this test report.

Test Item

Kind of test item: **Remote Control** Model name: ConnexxAir FCC ID: SGI-PR02 IC: 267AB-PR02 Frequency: 1.705 to 10.0 MHz Technology tested: Modulated Carrier Antenna: Integrated T-coil antenna Power supply: 3.0 V to 4.2 V by battery

Temperature range: 0°C to +40°C



This test report is electronically signed and valid without handwriting signature. For verification of the electronic signatures, the public keys can be requested at the testing laboratory.

Test report authorized:	Test performed:
Tohias Wittenmeier	Rene Oelmann

Lab Manager

Radio Communications & EMC

Testing Manager Radio Communications & EMC



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2 General information

2.1 Notes and disclaimer

The test results of this test report relate exclusively to the test item specified in this test report. CTC advanced GmbH does not assume responsibility for any conclusions and generalizations drawn from the test results with regard to other specimens or samples of the type of the equipment represented by the test item.

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This test report replaces the test report with the number 1-1708/16-01-09 and dated 2017-04-19

2.2 Application details

Date of receipt of order: 2017-01-25
Date of receipt of test item: 2017-02-28
Start of test: 2017-02-28
End of test: 2017-03-07

Person(s) present during the test: -/-

2.3 Test laboratories sub-contracted

None



3 Test standard/s and references

Test standard	Date	Description
47 CFR Part 15		Title 47 of the Code of Federal Regulations; Chapter I; Part 15 - Radio frequency devices
RSS - 210 Issue 9	August 2016	Spectrum Management and Telecommunications Radio Standards Specification - Licence-Exempt Radio Apparatus: Category I Equipment
RSS - Gen Issue 4	November 2014	Spectrum Management and Telecommunications Radio Standards Specifications - General Requirements and Information for the Certification of Radio Apparatus
Guidance	Version	Description
ANSI C63.4-2014 ANSI C63.10-2013	-/-	American national standard for methods of measurement of radio- noise emissions from low-voltage electrical and electronic equipment in the range of 9 kHz to 40 GHz American national standard of procedures for compliance testing of unlicensed wireless devices



4 Test environment

Temperature		T _{nom} T _{max} T _{min}	+22 °C during room temperature tests +40 °C during high temperature tests 0 °C during low temperature tests
Relative humidity content	:		55 %
Barometric pressure			1021 hpa
Power supply		$\begin{matrix} V_{nom} \\ V_{max} \\ V_{min} \end{matrix}$	3.7 V by battery 4.2 V 3.0 V

5 Test item

5.1 General description

Kind of test item :	Remote Control
Type identification :	ConnexxAir
HMN :	-/-
PMN :	ConnexxAir
HVIN :	ConnexxAir
FVIN :	-/-
S/N serial number :	LN00253; LN00316
HW hardware status :	P1
SW software status :	0.7
Frequency band :	1.705 to 10.0 MHz
Type of radio transmission: Use of frequency spectrum:	modulated carrier
Type of modulation :	GFSK
Number of channels :	1
Antenna :	Integrated T-coil antenna
Power supply :	3.0 V to 4.2 V by battery
Temperature range :	0°C to +40°C

5.2 Additional information

The content of the following annexes is defined in the QA. It may be that not all of the listed annexes are necessary for this report, thus some values in between may be missing.

Test setup- and EUT-photos are included in test report: 1-1708/16-01-01_AnnexA

1-1708/16-01-01_AnnexB

1-1708/16-01-01_AnnexC



6 Description of the test setup

Typically, the calibrations of the test apparatus are commissioned to and performed by an accredited calibration laboratory. The calibration intervals are determined in accordance with the DIN EN ISO/IEC 17025. In addition to the external calibrations, the laboratory executes comparison measurements with other calibrated test systems or effective verifications. Weekly chamber inspections and range calibrations are performed. Where possible, RF generating and signaling equipment as well as measuring receivers and analyzers are connected to an external high-precision 10 MHz reference (GPS-based or rubidium frequency standard).

In order to simplify the identification of the equipment used at some special tests, some items of test equipment and ancillaries can be provided with an identifier or number in the equipment list below (Lab/Item).

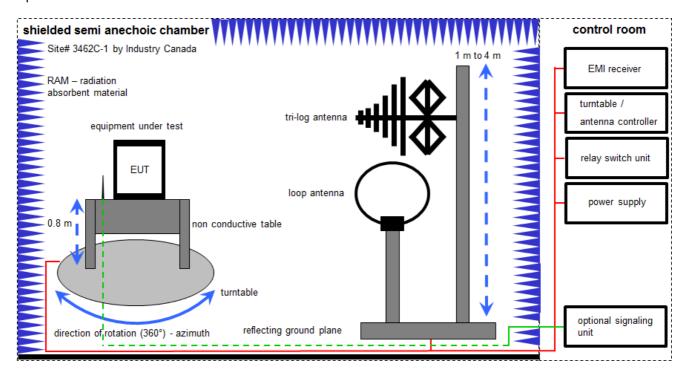
Agenda: Kind of Calibration

k	calibration / calibrated	EK	limited calibration
ne	not required (k, ev, izw, zw not required)	ZW	cyclical maintenance (external cyclical
			maintenance)
ev	periodic self verification	izw	internal cyclical maintenance
Ve	long-term stability recognized	g	blocked for accredited testing
vlkl!	Attention: extended calibration interval		
NK!	Attention: not calibrated	*)	next calibration ordered / currently in progress



6.1 Shielded semi anechoic chamber

The radiated measurements are performed in vertical and horizontal plane in the frequency range from 9 kHz to 1 GHz in semi-anechoic chambers. The EUT is positioned on a non-conductive support with a height of 0.80 m above a conductive ground plane that covers the whole chamber. The receiving antennas are conform to specification ANSI C63.10-2013, American National Standard for Testing Unlicensed Wireless Devices. These antennas can be moved over the height range between 1.0 m and 4.0 m in order to search for maximum field strength emitted from EUT. The measurement distances between EUT and receiving antennas are indicated in the test setups for the various frequency ranges. For each measurement, the EUT is rotated in all three axes until the maximum field strength is received. The wanted and unwanted emissions are received by spectrum analyzers where the detector modes and resolution bandwidths over various frequency ranges are set according to requirement ANSI C63.



Measurement distance: tri-log antenna 10 meter; loop antenna 10 meter / 3 meter

FS = UR + CL + AF

(FS-field strength; UR-voltage at the receiver; CL-loss of the cable; AF-antenna factor)

Example calculation:

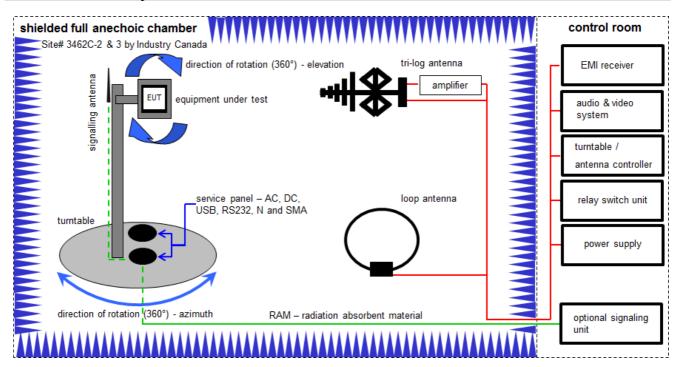
 $FS [dB\mu V/m] = 12.35 [dB\mu V/m] + 1.90 [dB] + 16.80 [dB/m] = 31.05 [dB\mu V/m] (35.69 \mu V/m)$

Equipment table:

No.	Lab / Item	Equipment	Туре	Manufacturer	Serial No.	INV. No.	Kind of Calibration	Last Calibration	Next Calibration
1	Α	Switch-Unit	3488A	HP	2719A14505	300000368	ev	-/-	-/-
2	Α	EMI Test Receiver	ESCI 3	R&S	100083	300003312	k	08.03.2016	08.03.2017
3	Α	Antenna Tower	Model 2175	ETS-Lindgren	64762	300003745	izw	-/-	-/-
4	Α	Positioning Controller	Model 2090	ETS-Lindgren	64672	300003746	izw	-/-	-/-
5	Α	Turntable Interface- Box	Model 105637	ETS-Lindgren	44583	300003747	izw	-/-	-/-
6	Α	TRILOG Broadband Test-Antenna 30 MHz - 3 GHz	VULB9163	Schwarzbeck	295	300003787	k	25.04.2016	25.04.2018



6.2 Shielded fully anechoic chamber



Measurement distance: tri-log antenna 3 meter; loop antenna 3 meter

FS = UR + CA + AF

(FS-field strength; UR-voltage at the receiver; CA-loss of the signal path; AF-antenna factor)

Example calculation:

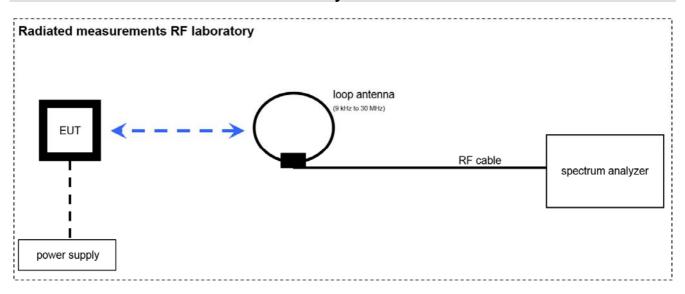
 $\overline{\text{FS [dB}\mu\text{V/m]}} = 40.0 \text{ [dB}\mu\text{V/m]} + (-35.8) \text{ [dB]} + 32.9 \text{ [dB/m]} = 37.1 \text{ [dB}\mu\text{V/m]} (71.61 \mu\text{V/m})$

Equipment table:

No.	Lab / Item	Equipment	Туре	Manufacturer	Serial No.	INV. No.	Kind of Calibration	Last Calibration	Next Calibration
1	А	DC power supply, 60Vdc, 50A, 1200 W	6032A	HP	2818A03450	300001040	Ve	20.01.2015	20.01.2018
2	Α	Anechoic chamber	FAC 3/5m	MWB / TDK	87400/02	300000996	ev	-/-	-/-
3	Α	Switch / Control Unit	3488A	HP	*	300000199	ne	-/-	-/-
4	Α	Active Loop Antenna 10 kHz to 30 MHz	6502	EMCO/2	8905-2342	300000256	k	24.06.2015	24.06.2017
5	А	EMI Test Receiver 20Hz- 26,5GHz	ESU26	R&S	100037	300003555	k	31.01.2017	30.01.2018
6	Α	TRILOG Broadband Test-Antenna 30 MHz - 3 GHz	VULB9163	Schwarzbeck	371	300003854	vIKI!	29.10.2014	29.10.2017
7	А	4U RF Switch Platform	L4491A	Agilent Technologies	MY50000037	300004509	ne	-/-	-/-
8	Α	NEXIO EMV- Software	BAT EMC V3.16.0.49	EMCO		300004682	ne	-/-	-/-
9	Α	PC	ExOne	F+W		300004703	ne	-/-	-/-



6.3 Radiated measurements RF laboratory



Equipment table:

No.	Lab / Item	Equipment	Туре	Manufacturer	Serial No.	INV. No.	Kind of Calibration	Last Calibration	Next Calibration
1	А	Power supply GPIB dc power supply, 0- 50 Vdc, 0-2 A	6633A	HP	2851A01222	300001530	vIKI!	31.01.2017	31.01.2020
2	Α	Spectrum Analyzer 9kHz - 30 GHz	FSP30	R&S	100623	300003464	Ve	31.01.2017	01.02.2019
3	Α	Loop Antenna		ZEG TS Steinfurt		400001208	ev	-/-	-/-



7 Sequence of testing

7.1 Sequence of testing radiated spurious 9 kHz to 30 MHz

Setup

- The equipment is set up to simulate normal operation mode as described in the user manual or defined by the manufacturer.
- If the EUT is a tabletop system, a 2-axis positioner with 1.5 m height is used.
- If the EUT is a floor standing device, it is placed directly on the turn table.
- Auxiliary equipment and cables are positioned to simulate normal operation conditions as described in ANSI C 63.4.
- The AC power port of the EUT (if available) is connected to a power outlet below the turntable.
- Measurement distance is 3 m (see ANSI C 63.4) see test details.
- EUT is set into operation.

Premeasurement

- The turntable rotates from 0° to 315° using 45° steps.
- The antenna height is 1.5 m.
- At each turntable position the analyzer sweeps with positive-peak detector to find the maximum of all emissions.

Final measurement

- Identified emissions during the premeasurement are maximized by the software by rotating the turntable from 0° to 360°. In case of the 2-axis positioner is used the elevation axis is also rotated from 0° to 360°.
- The final measurement is done in the position (turntable and elevation) causing the highest emissions with quasi-peak (as described in ANSI C 63.4).
- Final levels, frequency, measuring time, bandwidth, turntable position, correction factor, margin to the limit and limit will be recorded. A plot with the graph of the premeasurement and the limit is stored.



7.2 Sequence of testing radiated spurious 30 MHz to 1 GHz

Setup

- The equipment is set up to simulate normal operation mode as described in the user manual or defined by the manufacturer.
- If the EUT is a tabletop system, a table with 0.8 m height is used, which is placed on the ground plane.
- If the EUT is a floor standing device, it is placed on the ground plane with insulation between both.
- Auxiliary equipment and cables are positioned to simulate normal operation conditions as described in ANSI C 63.4.
- The AC power port of the EUT (if available) is connected to a power outlet below the turntable.
- Measurement distance is 10 m or 3 m (see ANSI C 63.4) see test details.
- EUT is set into operation.

Premeasurement

- The turntable rotates from 0° to 315° using 45° steps.
- The antenna is polarized vertical and horizontal.
- The antenna height changes from 1 m to 3 m.
- At each turntable position, antenna polarization and height the analyzer sweeps three times in peak to find the maximum of all emissions.

Final measurement

- The final measurement is performed for at least six highest peaks according to the requirements of the ANSI C63.4.
- Based on antenna and turntable positions at which the peak values are measured the software maximize the peaks by changing turntable position ± 45° and antenna height between 1 and 4 m.
- The final measurement is done with quasi-peak detector (as described in ANSI C 63.4).
- Final levels, frequency, measuring time, bandwidth, antenna height, antenna polarization, turntable angle, correction factor, margin to the limit and limit are recorded. A plot with the graph of the premeasurement with marked maximum final results and the limit is stored.



8 Measurement uncertainty

Measurement uncertainty							
Test case Uncertainty							
Occupied bandwidth	± used RBW						
Field strength of the fundamental	± 3 dB						
Field strength of the harmonics and spurious	± 3 dB						
Receiver spurious emissions and cabinet radiations	± 3 dB						
Conducted limits	± 2.6 dB						



9 Summary of measurement results

\boxtimes	No deviations from the technical specifications were ascertained
	There were deviations from the technical specifications ascertained
	This test report is only a partial test report. The content and verdict of the performed test cases are listed below.

TC Identifier	Description	Verdict	Date	Remark
DE Tostina	CFR Part 15 RSS 210 Issue 8	Soo tablel	2017-04-25	1
RF-Testing	RSS Gen Issue 4	See table! 2017-04-25	-/-	

Test specification clause	Test case	Temperature conditions Power source conditions		С	NC	NA	NP	Remark
RSS Gen Issue 4 (6.6)	Occupied bandwidth	Nominal	Nominal	\boxtimes				-/-
§ 15.209	Field strength of the fundamental	Nominal	Nominal	\boxtimes				-/-
§ 15.209 RSS Gen Issue 4 (6.13)	Field strength of the harmonics and spurious	Nominal	Nominal	\boxtimes				-/-
§ 15.109	Receiver spurious emissions and cabinet radiations	Nominal	Nominal	\boxtimes				-/-
§15.107 §15.207	Conducted limits	Nominal	Nominal			\boxtimes		Battery powered only!

Note: NA = Not applicable; NP = Not performed; C = Compliant; NC = Not compliant

10 Additional comments

Reference documents: None

Special test descriptions: None

Configuration descriptions: None



11 Measurement results

11.1 Occupied bandwidth

Measurement:

The emission bandwidth (x dB) is defined as the frequency range between two points, one above and one below the carrier frequency, at which the spectral density of the emission is attenuated x dB below the maximum in-band spectral density of the modulated signal.

Measurement parameters				
Detector:	Peak			
Resolution bandwidth:	1 % – 5 % of the occupied bandwidth			
Video bandwidth:	≥ 3x RBW			
Trace mode:	Max hold			
Analyser function:	99 % power function			
Used test setup:	See sub clause 6.3 – A			
Measurement uncertainty:	See sub clause 8			

Limit:

IC
for RSP-100 test report coversheet only

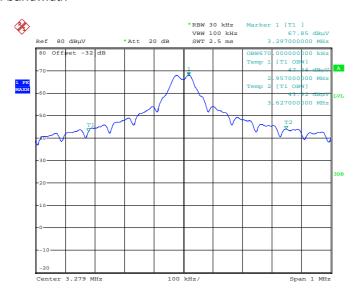
Result:

99% emission bandwidth	
670 kHz	



Plot:

Plot 1: 99 % emission bandwidth



NOP

Date: 8.MAR.2017 14:56:18



11.2 Field strength of the fundamental

Measurement:

The maximum detected field strength for the carrier signal.

Measurement parameters				
Detector:	Quasi peak / peak (worst case)			
Resolution bandwidth:	9 kHz			
Video bandwidth:	≥ 3x RBW			
Trace mode:	Max hold			
Used test setup	See sub clause 6.2			
Measurement uncertainty:	See sub clause 8			

Limit:

FCC & IC						
Frequency Field strength Measurement distance						
(MHz)	(dBµV/m)	(m)				
1.705 – 30.0	29.5	30				

Recalculation:

According to ANSI C63.10					
Frequency	Formula	Correction value			
3.28 MHz	$FS_{limit} = FS_{max} - 40 \log \left(\frac{d_{nearfield}}{d_{measure}}\right) - 20 \log \left(\frac{d_{limit}}{d_{nearfield}}\right)$ is the calculation of field strength at the limit distance, expressed in dBµV/m is the measured field strength, expressed in dBµV/m is the measured field strength, expressed in dBµV/m is the $\lambda/2\pi$ distance dimensional measure is the distance of the measurement point from EUT is the reference limit distance	-33.72 (3 to 30)			

Result:

Field strength of the fundamental					
Frequency 3.28 MHz					
Distance	@ 3 m @ 30 m				
Measured / calculated value (peak measurement)	61.3 dBµV/m	27.6 dBµV/m			
Measured / calculated value (QP measurement)	61.1 dBμV/m	27.4 dBμV/m			



11.3 Field strength of the harmonics and spurious

Measurement:

The maximum detected field strength for the harmonics and spurious.

Measurement parameters				
Detector:	Quasi peak / average or			
Detector.	peak (worst case – pre-scan)			
	F < 150 kHz: 200 Hz			
Resolution bandwidth:	150 kHz < F < 30 MHz: 9 kHz			
	30 MHz < F < 1 GHz: 120 kHz			
	F < 150 kHz: 1 kHz			
Video bandwidth:	150 kHz < F < 30 MHz: 100 kHz			
	30 MHz < F < 1 GHz: 300 kHz			
Trace mode:	Max hold			
Lload tost acture	9 kHz to 30 MHz: see sub clause 6.2 – A			
Used test setup:	30 MHz to 1 GHz: see sub clause 6.1 – A			
Measurement uncertainty:	See sub clause 8			

Limit:

FCC & IC						
Frequency Field strength		Measurement distance				
(MHz)	(dBµV/m)	(m)				
0.009 - 0.490	2400/F(kHz)	300				
0.490 – 1.705 24000/F(kHz)		30				
1.705 – 30	30 (29.5 dBμV/m)	30				
30 – 88	100 (40 dBμV/m)	3				
88 – 216	150 (43.5 dBμV/m)	3				
216 – 960	200 (46 dBμV/m)	3				

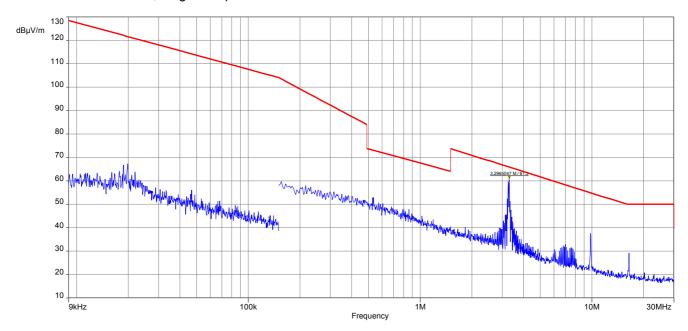
Result:

Detected emissions							
Frequency (MHz)	Detector	Resolution bandwidth (kHz)	Detected value				
All detected pe	All detected peak emissions below 30 MHz are more than 10 dB below the average limit.						
For emissions above 30 MHz, please look at the table below the 1 GHz plot.							



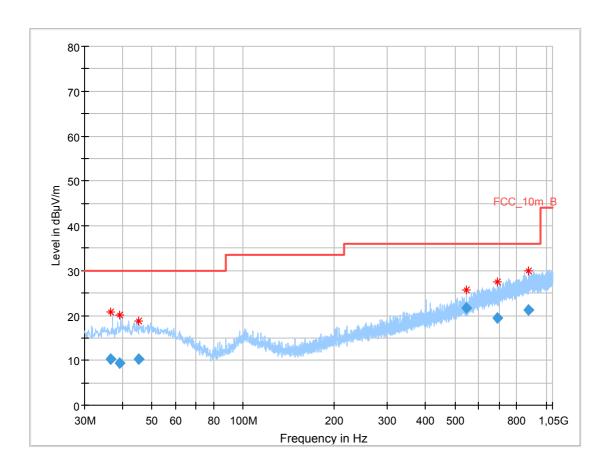
Plots:

Plot 1: 9 kHz - 30 MHz, magnetic spurious emissions





Plot 2: 30 MHz – 1 GHz, vertical and horizontal polarization



Final_Result

Frequency	QuasiPeak	Limit	Margin	Meas.	Bandwidth	Height	Pol	Azimuth	Corr.
(MHz)	(dBµV/m)	(dBµV/m)	(dB)	Time	(kHz)	(cm)		(deg)	(dB)
				(ms)					
36.629250	10.34	30.00	19.66	1000.0	120.000	170.0	٧	260.0	12.8
39.247800	9.42	30.00	20.58	1000.0	120.000	101.0	Н	80.0	13.1
45.225150	10.38	30.00	19.62	1000.0	120.000	98.0	Н	171.0	13.6
544.030500	21.70	36.00	14.30	1000.0	120.000	101.0	٧	-9.0	19.3
691.440450	19.45	36.00	16.55	1000.0	120.000	170.0	Н	170.0	21.5
876.748200	21.24	36.00	14.76	1000.0	120.000	170.0	Н	170.0	23.9



11.4 Receiver spurious emissions and cabinet radiations

Measurement:

The maximum detected field strength for the spurious.

Measurement parameters				
Detector:	Quasi peak / average or			
Detector.	peak (worst case – pre-scan)			
Resolution bandwidth:	30 MHz < F < 1 GHz: 120 kHz			
Video bandwidth:	30 MHz < F < 1 GHz: 300 kHz			
Trace mode:	Max hold			
Used test setup	30 MHz to 1 GHz: see sub clause 6.1 - A			
Measurement uncertainty:	See sub clause 8			

Limit:

FCC & IC					
Frequency	Field strength	Measurement distance			
(MHz)	(dBµV/m)	(m)			
30 – 88	100 (40 dBμV/m)	3			
88 – 216	150 (43.5 dBµV/m)	3			
216 – 960	200 (46 dBμV/m)	3			

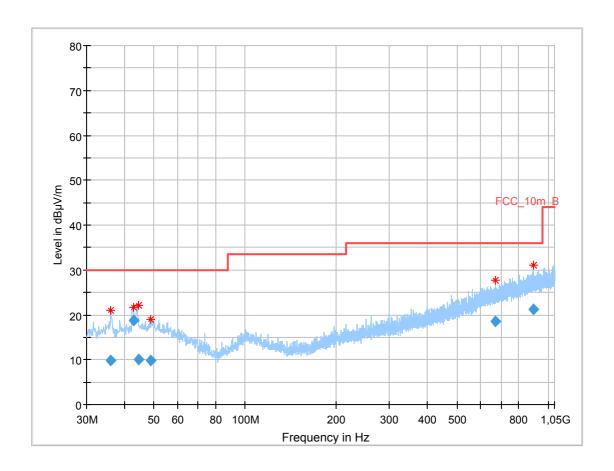
Result:

Detected emissions					
Frequency (MHz)	' '		Detected value		
Please look at the table below the 1 GHz plot.					



Plots:

Plot 1: 30 MHz – 1 GHz, vertical and horizontal polarization



Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
35.998800	9.83	30.00	20.17	1000.0	120.000	170.0	٧	100.0	12.8
42.899700	18.87	30.00	11.13	1000.0	120.000	100.0	٧	172.0	13.5
44.527200	10.04	30.00	19.96	1000.0	120.000	101.0	٧	81.0	13.6
48.858300	9.77	30.00	20.23	1000.0	120.000	170.0	٧	190.0	13.7
669.355650	18.46	36.00	17.54	1000.0	120.000	170.0	٧	262.0	21.3
891.591600	21.32	36.00	14.68	1000.0	120.000	101.0	٧	100.0	24.1



12 Observations

No observations except those reported with the single test cases have been made.



Annex A Document history

Version	Applied changes	Date of release	
	Initial release	2017-04-19	
-A	Correction of IC data	2017-04-25	

Annex B Further information

Glossary

AVG - Average

DUT - Device under test

EMC - Electromagnetic Compatibility

EN - European Standard EUT - Equipment under test

ETSI - European Telecommunications Standard Institute

FCC - Federal Communication Commission

FCC ID - Company Identifier at FCC

HW - Hardware

IC - Industry Canada
Inv. No. - Inventory number
N/A - Not applicable
PP - Positive peak
QP - Quasi peak
S/N - Serial number
SW - Software

PMN - Product marketing name HMN - Host marketing name

HVIN - Hardware version identification number FVIN - Firmware version identification number

OBW Occupied Bandwidth OC Operating Channel

OCW Operating Channel Bandwidth

OOB Out Of Band



Annex C Accreditation Certificate

first page

DAkkS Deutsche Akkreditierungsstelle GmbH Beliehene gemäß § 8 Absatz 1 AkkStelleG i.V.m. § 1 Absatz 1 AkkStelleGBV Unterzeichnerin der Multilateralen Abkommen von EA, ILAC und IAF zur gegenseitigen Anerkennung Akkreditierung Die Deutsche Akkreditierungsstelle GmbH bestätigt hiermit, dass das Prüflaborator CTC advanced GmbH Untertürkheimer Straße 6-10, 66117 Saarbrücken die Kompetenz nach DIN EN ISO/IEC 17025:2005 besitzt, Prüfungen in folgenden Bereichen durchzuführen: Funk
Mobiliumk (GSM / DCS) + OTA
Elektromagnetische Verträglichkeit (EMV)
Produktsicherheit
SAR / EMF
Umwelt
Umwelt
Smart Card Technology
Bluetooth*
Automotive
Wi-H-Services
Kanadische Anforderungen
Us-Anforderungen
Aksustik Die Akkreditierungsurkunde gilt nur in Verbindung mit dem Bescheid vom 25.11.2016 mit der Akkreditierungsnummer D-Pt-12076-01 und ist gültig bis 17.01.2018. Sie besteht aus diesem Dec der Rückseite des Deckblatts und der folgenden Anlage mit Insgesamt 63 Seiten. Registrierungsnummer der Urkunde: D-PL-12076-01-01 Frankfurt, 25.11.2016

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Deutsche Akkreditierungsstelle GmbH

Standort Frankfurt am Main Europa-Allee 52 60327 Frankfurt am Main

Die Akkreditierung erfolgte gemäß des Gesetzes über die Akkreditierungsstelle (AktöselleG) vom 31. Juli 2009 (BGBI. 1.5. 2625) sowie der Verordnung (EG) Nr. 765/2008 des Europälschen Parlamen und des Rates vom 9. Juli 2008 (Bert die Verschriften Grüe die Akkrediterung und Marküberwin 1m. Zusammenhang mit der Vermarktung von Produkten (Abl. 1.218 vom 9. Juli 2008, 5. 30). Die Dakksi ist Uterzeichherni der Muhillateralen Abkommen zur gegenseitigen Anerkennung der European co-operation for Aczreditation (EA), des International Aczreditation Forum (IAF) und der International Laboratory Aczerditation (CA), des International Aczreditation Forum (IAF) und der International Laboratory Aczerditation Cooperation (ILAC). Die Unterzeichner dieser Abkommu erkennen ihre Akkreditierungen gegenseitig an.

Der aktuelle Stand der Mitgliedschaft kann folgenden Webseiten entne EA: www.curopean-accreditation.org ILAC: www.llac.org ILAC: www.llac.org

Note:

The current certificate including annex can be received on request.