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CETECOM ICT Services
consulting - testing - certification >>>



TEST REPORT

Test report no.: 1-3041-01-02/11-A

Testing laboratory

CETECOM ICT Services GmbH
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Accredited test laboratory:

The test laboratory (area of testing) is accredited according to DIN EN ISO/IEC 17025
DAkkS registration number: D-PL-12076-01-01

Area of Testing: Radio/Satellite Communications

Applicant

Oticon A/S
Kongebakken 9
2765 Smørum / DENMARK
Phone: +45 39 17 71 00
Fax: -/-
Contact: Jørgen Peter Hanuscheck
e-mail: jnp@oticon.dk
Phone: +45 39 13 85 38

Manufacturer

Oticon A/S
Kongebakken 9
2765 Smørum / DENMARK

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 8

Spectrum Management and Telecommunications - Radio Standards Specification
Low-power Licence-exempt Radiocommunication Devices (All Frequency Bands):
Category I Equipment

RSS – GEN Issue 3

General Requirements & Information for the Certification of Radio Apparatus under test
standards.

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

Test item

Kind of test item: Hearing aid

Model name: Rite 4

FCC ID: U28FURIT04

IC: 1350B-FURIT04

Frequency: 3.8 MHz

Power supply: 1.40 V DC by zinc - air battery / power supply

Temperature range: 0 °C to +35 °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 performed:

Marco Bertolino

Test report authorised:

p. o.

Stefan Bös

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2 General information

2.1 Notes

The test results of this test report relate exclusively to the test item specified in this test report. CETECOM ICT Services GmbH does not assume responsibility for any conclusions and generalisations drawn from the test results with regard to other specimens or samples of the type of the equipment represented by the test item. The test report may only be reproduced or published in full. Reproduction or publication of extracts from the report requires the prior written approval of CETECOM ICT Services GmbH.

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2.2 Application details

Date of receipt of order: 2011-02-07
 Date of receipt of test item: 2011-06-01
 Start of test: 2011-06-06
 End of test: 2011-06-06
 Person(s) present during the test: -/-

3 Test standard/s

Test standard	Version	Test standard description
47 CFR Part 15	2009-10	Title 47 of the Code of Federal Regulations; Chapter I Part 15 - Radio frequency devices
RSS - 210 Issue 8	2010-12	Spectrum Management and Telecommunications - Radio Standards Specification Low-power Licence-exempt Radiocommunication Devices (All Frequency Bands): Category I Equipment
RSS – GEN Issue 3	2010-12	General Requirements & Information for the Certification of Radio Apparatus under test standards.

4 Test environment

Temperature:	T_{nom}	+25 °C during room temperature tests
	T_{max}	+35 °C during high temperature test
	T_{min}	0 °C during low temperature test
Relative humidity content:	50 %	
Air pressure:	not relevant for this kind of testing	
Power supply:	V_{nom}	1.40 V DC by zinc - air battery / power supply
	V_{max}	1.54 V
	V_{min}	1.26 V

5 Test item

Kind of test item :	Hearing Aid Oticon Intiga
Type identification :	Rite 4
S/N serial number :	Radiated unit 1: 17875151 Radiated unit 2: 17875152 Radiated unit 3: 17875658 RX unit: 17875158
HW hardware status :	RF-Engine Block rev. 1 Motherboard rev. 5
SW software status :	FW 06-0.5.0. ver.1.02
Frequency band [MHz] (or fixed frequency) :	Radiated unit 1: 3.805 MHz Radiated unit 2: 3.803 MHz Radiated unit 3: 3.802 MHz
Type of modulation :	A1D
Number of channels :	1
Antenna :	Integrated coil antenna → for more information, please take a look at the annex – internal photos of the EUT.
Power supply :	1.40 V DC by zinc - air battery / power supply
Temperature range :	0°C to +35 °C

6 Test laboratories sub-contracted

None

7 Summary of measurement results



No deviations from the technical specifications were ascertained



There were deviations from the technical specifications ascertained

TC Identifier	Description	Verdict	Date	Remark
RF-Testing	CFR Part 15 RSS 210, Issue 8	Passed	2011-06-21	-/-

Test Specification Clause	Test Case	Temperature Conditions	Power Source Voltages	Pass	Fail	NA	NP	Results
§ 15.35 (c) / RSS-GEN Issue 3 Section 4.5	Timing of the transmitter (Duty cycle correction factor)	Nominal	Nominal	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	complies
§ 15.223 / RSS-210 Issue 8	Bandwidth of the modulated carrier	Nominal	Nominal	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	complies
§ 15.223 / RSS-210 Issue 8	Fieldstrength of fundamental	Nominal	Nominal	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	complies
§ 15.209 (a) / RSS-210 Issue 8	Fieldstrength of harmonics and spurious	Nominal	Nominal	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	complies
§ 15.109 / RSS-210 Issue 8	Receiver spurious emissions	Nominal	Nominal	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	complies
§ 15.107 / § 15.207	Conducted limits	Nominal	Nominal	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	-/-

Note: NA = Not Applicable; NP = Not Performed

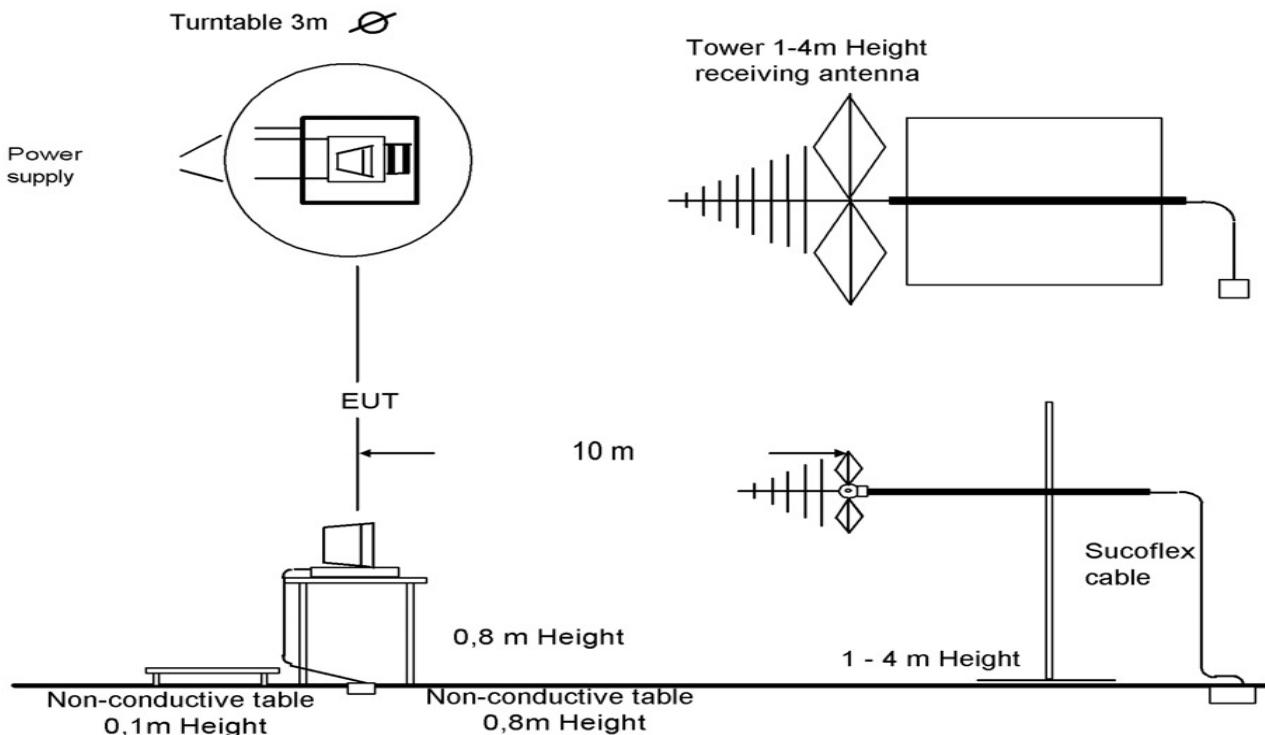
8 RF measurement testing

8.1 Description of test setup

8.1.1 Radiated measurements

The radiated measurements are performed in vertical and horizontal plane in the frequency range from 9 kHz to 25 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 confirmed with specifications ANSI C63.2-1996 and ANSI C63.4-2009. 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 analysers where the detector modes and resolution bandwidths over various frequency ranges are set according to requirement ANSI C63.4-2003. Antennas are confirmed with ANSI C63.2-1996 item 15.

Semi anechoic chamber



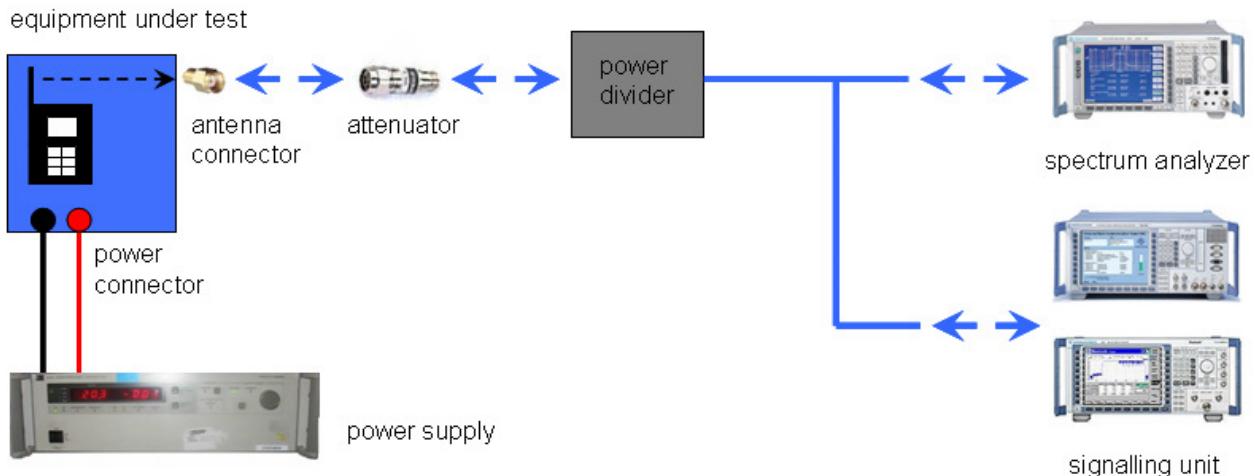
Picture 1: Diagram radiated measurements

9 kHz - 30 MHz:	active loop antenna
30 MHz – 1 GHz:	tri-log antenna
> 1 GHz:	horn antenna

The EUT is powered by an external power supply with nominal voltage. The signalling (if needed) is performed from outside the chamber with a signalling unit by air link using signalling antenna.

8.1.2 Conducted measurements

The EUT's RF signal is coupled out by the antenna connector which is supplied by the manufacturer. The signal is first 10dB attenuated before it is power divided (~6dB loss per branch). The measurement readings on the signalling unit/spectrum analyzer are corrected by the specific test set-up loss. The attenuator, power divider, and the spectrum analyzer are impedance matched on 50 Ohm.



Picture 2: Diagram conducted measurements

8.2 Additional comments

Reference documents: None

Special test descriptions:

Manufacturer statement:

The RF-carrier frequency in Oticons wireless hearing aids, targeted for 3.84 MHz, is in the current Fusion platform generated by an RC-oscillator in turn feeding an LC-tank circuit in the transceiver. In other words, there is NO stable crystal oscillator and NO closed phase lock loop keeping the oscillator frequency in place. Furthermore, due to tolerances of the self induction of the antenna coil, which is part of the RF-tank circuit, and tolerances of the parallel capacitors, the initial carrier frequency tolerance of the RF-carrier is about plus and minus 2.5%. Finally due to the configuration of the RF-carrier frequency generating parts as described above an uncorrelated temperature drift of about plus and minus 2% can be added to the initial tolerance, resulting in an overall frequency accuracy of about plus minus 4.5% worst case!

Note: The EUT with the maximum field strength was used to perform the radiated spurious emissions tests!

Configuration descriptions: None

8.3 RSP100 test report cover sheet / performance test data

Test Report Number	:	1-3041-01-02/11
Equipment Model Number	:	Rite 4
Certification Number	:	1350B-FURIT04
Manufacturer (complete Address)	:	Oticon A/S Kongebakken 9 2765 Smørum / DENMARK
Tested to radio standards specification no.	:	RSS 210, Issue 8, Annex 8
Open Area Test Site IC No.	:	IC 3462C-1
Frequency Range or fixed frequency	:	Radiated unit 1: 3.805 MHz Radiated unit 2: 3.803 MHz Radiated unit 3: 3.802 MHz
Field Strength [dBμV/m] (@ 30m)	:	Radiated unit 1: -11.0 Radiated unit 2: -10.5 Radiated unit 3: -11.5
Occupied bandwidth (99%-BW) [kHz]	:	357
Type of modulation	:	A1D
Emission Designator (TRC-43)	:	357KA1D
Antenna Information	:	Integrated coil antenna → for more information, please take a look at the annex – internal photos of the EUT.
Transmitter Spurious (worst case) [dBμV/m @ 10m]	:	30.2 @ 1 GHz (noise floor)
Receiver Spurious (worst case) [dBμV/m @ 3m]	:	30.0 @ 1 GHz (noise floor)

ATTESTATION:

DECLARATION OF COMPLIANCE:

I attest that the testing was performed or supervised by me; that the test measurements were made in accordance with the above-mentioned Industry Canada standard(s); and that the equipment identified in this application has been subjected to all the applicable test conditions specified in the Industry Canada standards and all of the requirements of the standard have been met.

Laboratory Manager:

2011-06-21	Marco Bertolino	
Date	Name	Signature

9 Measurement results

9.1 Timing of the transmitter

Measurement:

Measurement parameter	
Detector:	-/-
Sweep time:	-/-
Resolution bandwidth:	-/-
Video bandwidth:	-/-
Span:	-/-
Trace-Mode:	-/-

Limits:

FCC	IC
CFR Part SUBCLAUSE § 15.35 (c)	RSS-GEN Issue 3
Timing of the transmitter	
<p>(c) Unless otherwise specified, e.g. Section 15.255(b), when the radiated emission limits are expressed in terms of the average value of the emission, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum value. The exact method of calculating the average field strength shall be submitted with any application for certification or shall be retained in the measurement data file for equipment subject to notification or verification.</p>	

Duty cycle of the samples with test mode: 22%.

In normal use the duty cycle is approximately 2.5% (declared by the manufacturer).

Result: The result of the measurement is passed.

9.2 Bandwidth of the modulated carrier

Limits:

FCC	IC
CFR Part SUBCLAUSE § 15.223	RSS-210 Issue 8
Bandwidth of the modulated carrier	

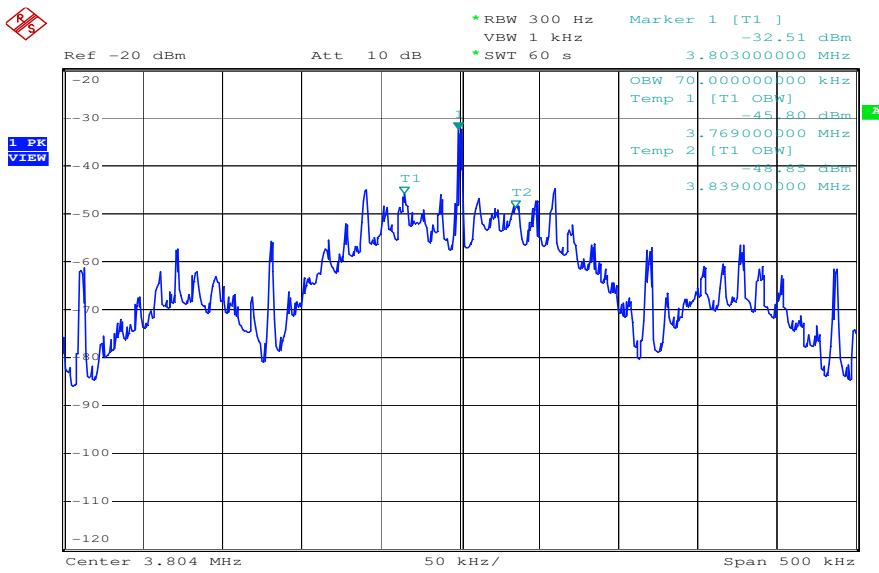
Measured with the integrated OBW-function of the spectrum analyser Rohde & Schwarz FSP30 (measurement criteria is the integrated power in %)

Result:

	Occupied Bandwidth
6 dB (75%)	70 kHz
20 dB (99%)	357 kHz

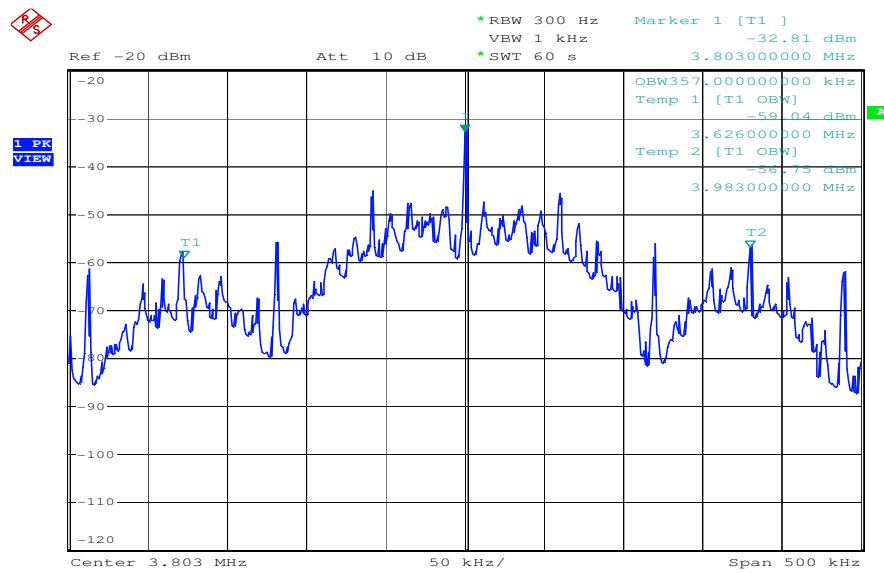
Plots of the measurement

Plot 1: 6dB (75%) – bandwidth



Date: 6.JUN.2011 17:48:17

Plot 2: 20dB (99%) – bandwidth



Date: 6.JUN.2011 17:49:51

9.3 Field strength of the fundamental

Measurement:

Measurement parameter	
Detector:	Quasi Peak (CISPR)
Resolution bandwidth:	10kHz
Trace-Mode:	Max Hold

Limits:

FCC	IC	
CFR Part SUBCLAUSE § 15.223	RSS-210 Issue 8	
Fundamental Frequency (MHz)	Field strength of Fundamental (µV/m)	Measurement distance (m)
1.705 – 10.0	[15] or [6dB-BW(kHz) / F(MHz) Whichever is higher]	30

Results:

TEST CONDITIONS		MAXIMUM POWER (dBµV/m)	
Frequency		3.8 MHz	3.8 MHz
EUT 117875151		at 1 m distance	at 30 m distance
T _{nom}	V _{nom}	49.0	-11.0
EUT 2: 17875152		at 1 m distance	at 30 m distance
T _{nom}	V _{nom}	49.5	-10.5
EUT 3: 17875658		at 1 m distance	at 30 m distance
T _{nom}	V _{nom}	48.5	-11.5
Measurement uncertainty		±3dB	

Recalculation to a measurement distance of 30m with a correction of 40 dB/decade.

Noise floor: 26.5dB μ V/m

***Calculation:**

Measured maximum field strength @ 1 m: 49.5 dB μ V/m

Correction factor from 1m to 10m: -40 dB (40 dB/decade)

49.5 dB μ V/m @ 1 meter - 40 dB = 9.5 dB μ V/m @ 10 meter

Correction factor from 1m to 30m: -60 dB (40 dB/decade)

49.5 dB μ V/m @ 1 meter - 60 dB = -10.5 dB μ V/m @ 30 meter

Result: The result of the measurement is passed.

9.4 Fieldstrength of the harmonics and spurious

Measurement:

Measurement parameter	
Detector:	Average / Quasi Peak
Sweep time:	Auto
Resolution bandwidth:	3 kHz - 120 kHz
Video bandwidth:	Comparable to RBW
Trace-Mode:	Max hold

Limits:

FCC	IC	
SUBCLAUSE § 15.209 (a)	RSS-210 Issue 8	
Field strength of the harmonics and spurious.		
Frequency (MHz)	Field strength (μ V/m)	Measurement distance (m)
0.009 – 0.490	2400/F(kHz)	300
0.490 – 1.705	24000/F(kHz)	30
1.705 – 30	30 (29.5 dB μ V/m)	30
30 – 88	100 (40 dB μ V/m)	3
88 – 216	150 (43.5 dB μ V/m)	3
216 – 960	200 (46 dB μ V/m)	3

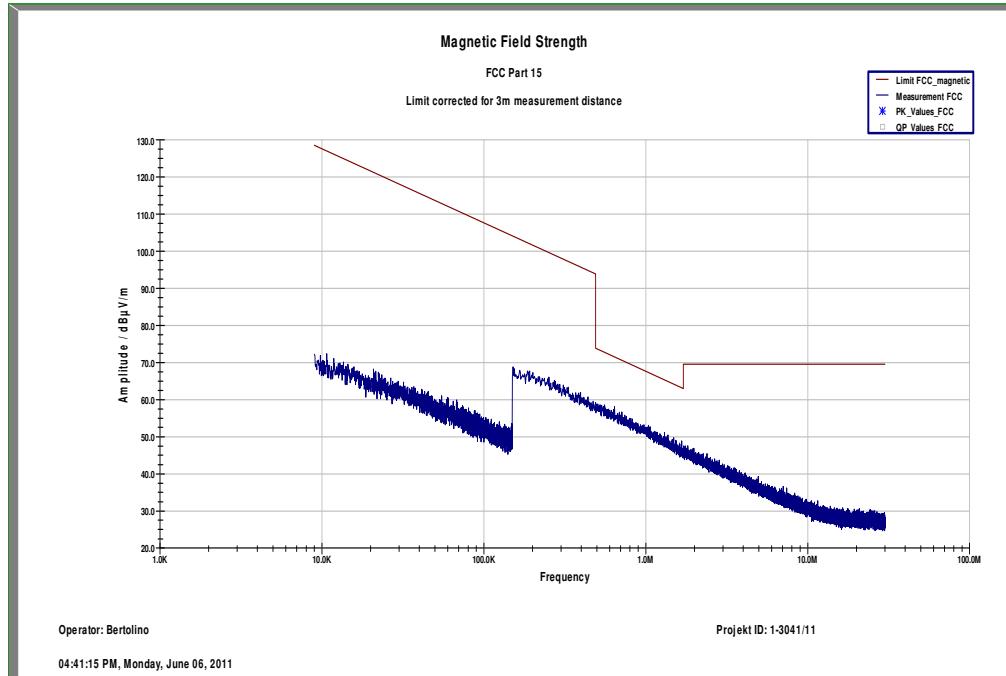
Result:

EMISSION LIMITATIONS				
f [MHz]	Detector	Limit max. allowed [dB μ V/m]	Amplitude of emission [dB μ V/m]	Results
No emissions detected!				

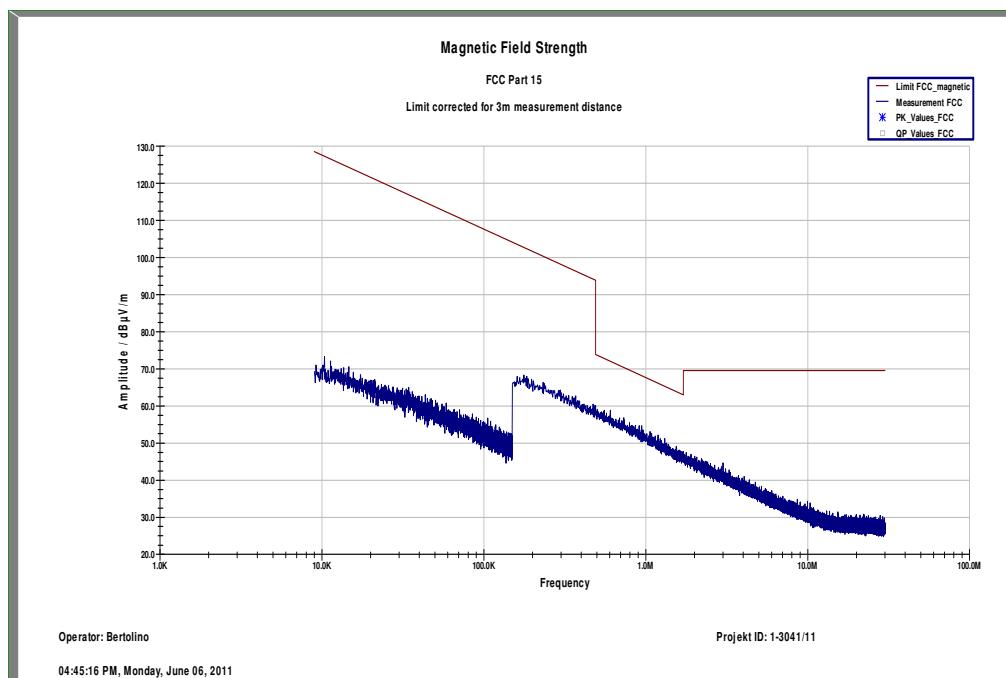
Result: The result of the measurement is passed.

Plots of the measurements: TX mode

Plot 1: 9 kHz – 30 MHz, magnetic emissions, loop antenna 0°



Plot 2: 9 kHz – 30 MHz, magnetic emissions, loop antenna 90°



Plot 3: 30 MHz – 1000 MHz, vertical & horizontal polarization

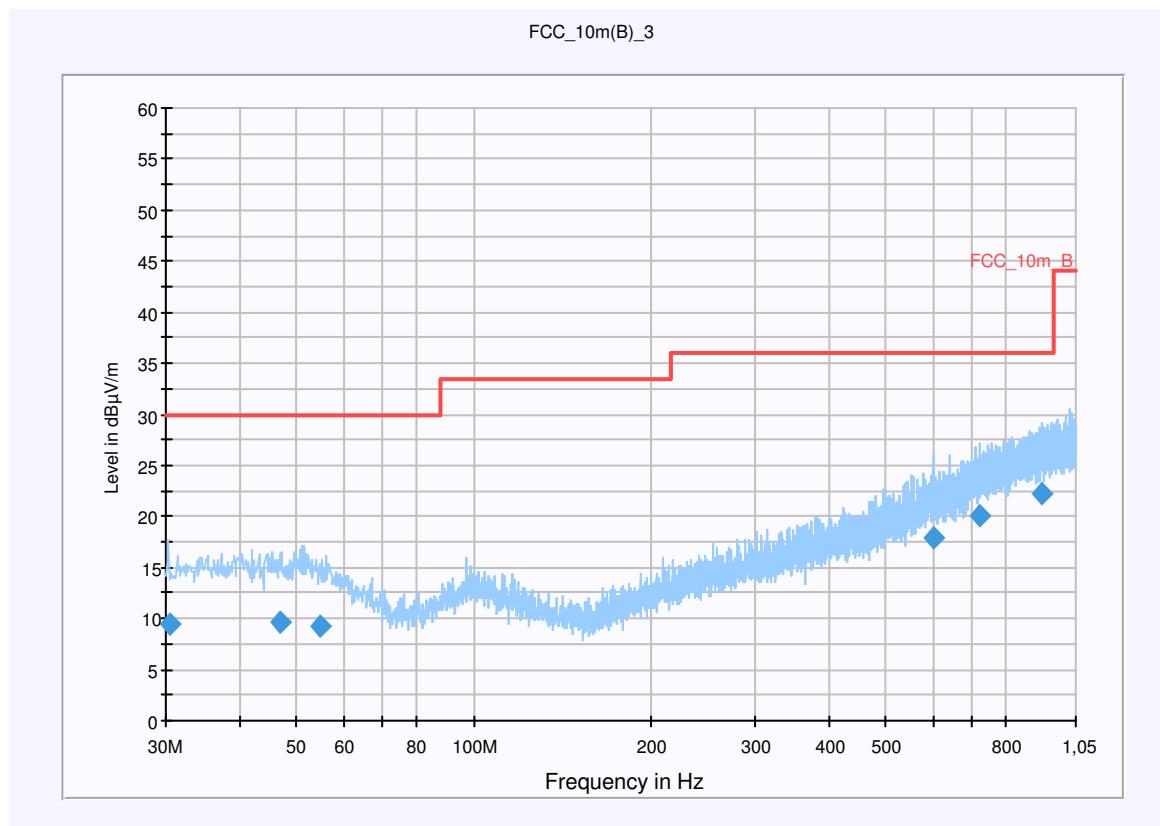
CETECOM ICT Services GmbH

Common Information

EUT: Hearing Aid Oticon Intiga
 Serial Number: 17875152
 Test Description: FCC part 15 class B @ 10 m
 Operating Conditions: TX
 Operator Name: Hennemann
 Comment: battery powered: 1,4 V

Scan Setup: STAN_Fin [EMI radiated]

Hardware Setup:	Electric Field (NOS) dB μ V/m			
Level Unit:				
Subrange	Detectors	IF Bandwidth	Meas. Time	Receiver
30 MHz - 2 GHz	QuasiPeak	120 kHz	15 s	Receiver



Final Result 1

Frequency (MHz)	QuasiPeak (dB μ V/m)	Meas. Time (ms)	Bandwidth (kHz)	Antenna height (cm)	Polarity	Turntable position (deg)	Corr. (dB)	Margin (dB)	Limit (dB μ V/m)	Comment
30.482968	9.4	15000.000	120.000	124.0	H	269.0	12.6	20.6	30.0	
46.717950	9.6	15000.000	120.000	155.0	V	94.0	13.3	20.4	30.0	
54.661500	9.2	15000.000	120.000	170.0	V	106.0	12.9	20.8	30.0	
604.185600	17.9	15000.000	120.000	170.0	H	186.0	20.8	18.1	36.0	
723.277200	20.0	15000.000	120.000	170.0	H	12.0	23.0	16.0	36.0	
922.174200	22.2	15000.000	120.000	170.0	V	260.0	25.3	13.8	36.0	

Hardware Setup: EMI radiated\Electric Field (NOS) - [EMI radiated]

Subrange 1	
Frequency Range:	30 MHz - 2 GHz
Receiver:	Receiver [ESCI 3] @ GPIB0 (ADR 20), SN 100083/003, FW 4.42
Signal Path:	without Notch FW 1.0
Antenna:	VULB 9163 SN 9163-295, FW --- Correction Table (vertical): VULP6113 Correction Table (horizontal): VULP6113 Correction Table: Cable_EN_1GHz (1005)
Antenna Tower:	Tower [EMCO 2090 Antenna Tower] @ GPIB0 (ADR 8), FW REV 3.12
Turntable:	Turntable [EMCO Turntable] @ GPIB0 (ADR 9), FW REV 3.12

EMC 32 Version 8.10.00

9.5 Receiver spurious emissions

Measurement:

Measurement parameter	
Detector:	Average / Quasi Peak
Sweep time:	Auto
Resolution bandwidth:	3 kHz - 120 kHz
Video bandwidth:	Comparable to RBW
Trace-Mode:	Max hold

Limits:

FCC	IC	
SUBCLAUSE § 15.109	RSS-210 Issue 8	
Field strength of the harmonics and spurious.		
Frequency (MHz)	Field strength (μ V/m)	Measurement distance (m)
0.009 – 0.490	2400/F(kHz)	300
0.490 – 1.705	24000/F(kHz)	30
1.705 – 30	30 (29.5 dB μ V/m)	30
30 – 88	100 (40 dB μ V/m)	3
88 – 216	150 (43.5 dB μ V/m)	3
216 – 960	200 (46 dB μ V/m)	3

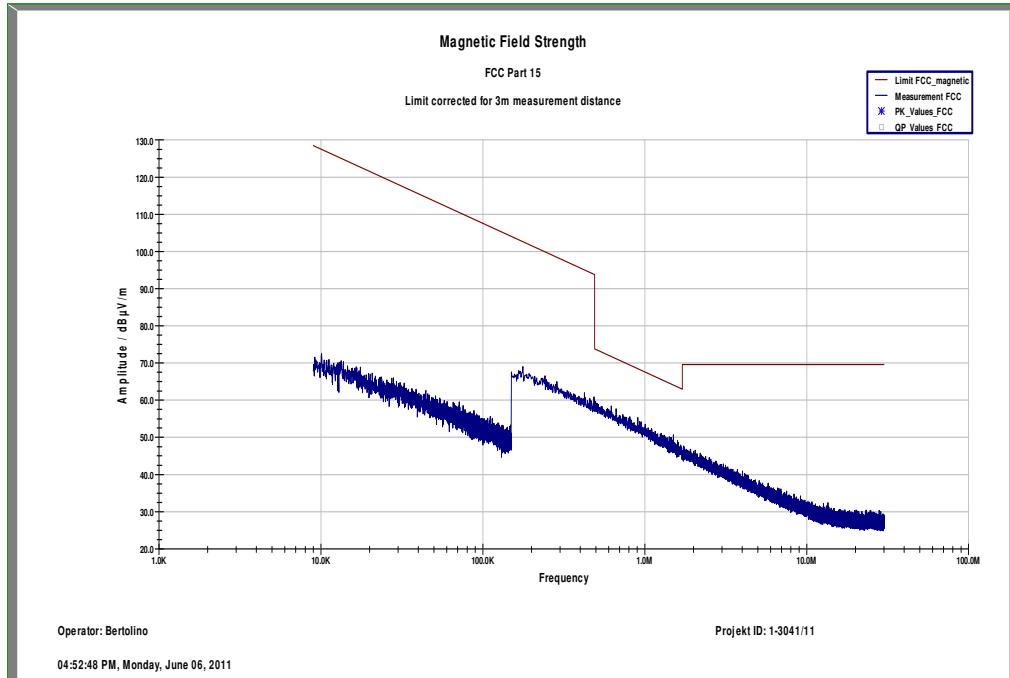
Result:

EMISSION LIMITATIONS				
f [MHz]	Detector	Limit max. allowed [dB μ V/m]	Amplitude of emission [dB μ V/m]	Results
No emissions detected!				

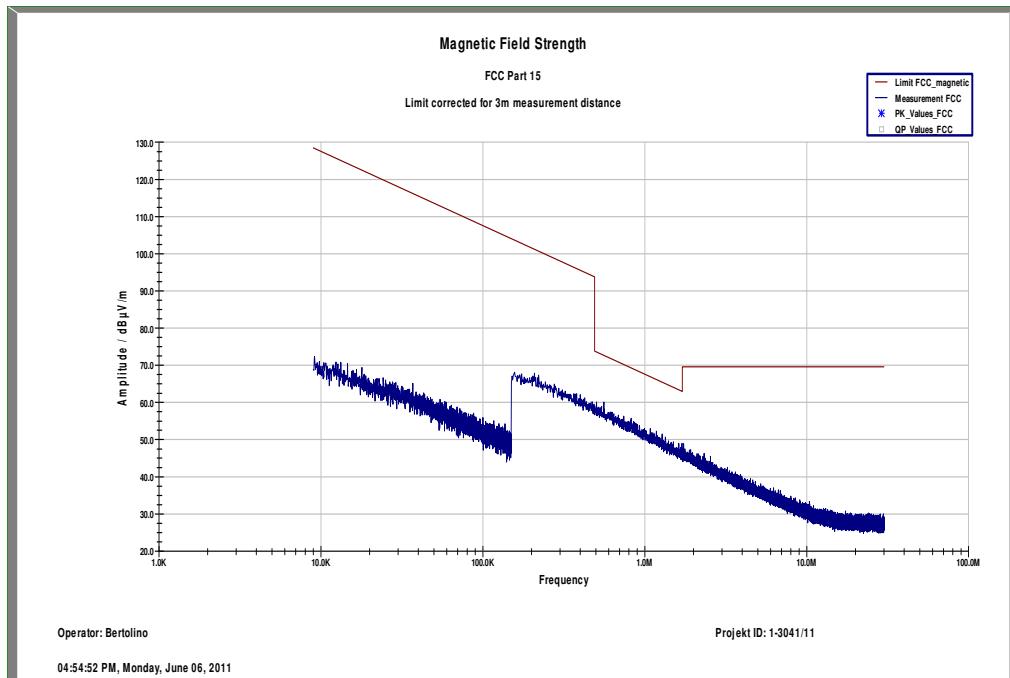
Result: The result of the measurement is passed.

Plots of the measurements: RX mode

Plot 1: 9 kHz – 30 MHz, magnetic emissions, loop antenna 0°



Plot 2: 9 kHz – 30 MHz, magnetic emissions, loop antenna 90°



Plot 3: 30 MHz – 1000 MHz, vertical & horizontal polarization

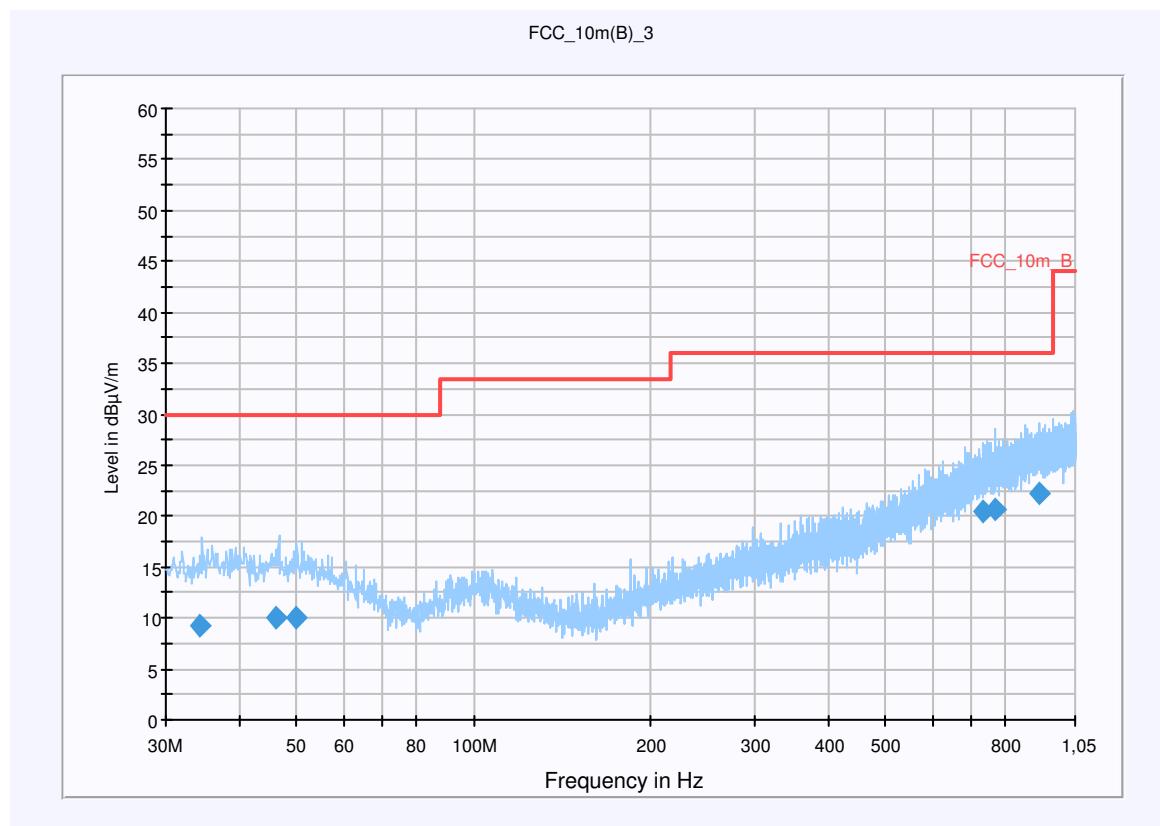
CETECOM ICT Services GmbH

Common Information

EUT: Hearing Aid Oticon Intiga
 Serial Number: S/N: 17875158
 Test Description: FCC part 15 class B @ 10 m
 Operating Conditions: RX
 Operator Name: Hennemann
 Comment: battery powered: 1,4 V

Scan Setup: STAN_Fin [EMI radiated]

Hardware Setup:	Electric Field (NOS)			
Level Unit:	dB μ V/m			
Subrange	Detectors	IF Bandwidth	Meas. Time	Receiver
30 MHz - 2 GHz	QuasiPeak	120 kHz	15 s	Receiver



Final Result 1

Frequency (MHz)	QuasiPeak (dB μ V/m)	Meas. Time (ms)	Bandwidth (kHz)	Antenna height (cm)	Polarity	Turntable position (deg)	Corr. (dB)	Margin (dB)	Limit (dB μ V/m)	Comment
34.297200	9.3	15000.000	120.000	170.0	V	-6.0	13.0	20.7	30.0	
46.284450	10.0	15000.000	120.000	106.0	V	86.0	13.3	20.0	30.0	
49.733250	10.0	15000.000	120.000	113.0	V	106.0	13.4	20.0	30.0	
734.047050	20.4	15000.000	120.000	170.0	V	106.0	23.3	15.6	36.0	
767.050800	20.7	15000.000	120.000	170.0	V	86.0	23.7	15.3	36.0	
914.371950	22.2	15000.000	120.000	170.0	V	95.0	25.2	13.8	36.0	

Hardware Setup: EMI radiated\Electric Field (NOS) - [EMI radiated]

Subrange 1	
Frequency Range:	30 MHz - 2 GHz
Receiver:	Receiver [ESCI 3] @ GPIB0 (ADR 20), SN 100083/003, FW 4.42
Signal Path:	without Notch FW 1.0
Antenna:	VULB 9163 SN 9163-295, FW --- Correction Table (vertical): VULP6113 Correction Table (horizontal): VULP6113 Correction Table: Cable_EN_1GHz (1005)
Antenna Tower:	Tower [EMCO 2090 Antenna Tower] @ GPIB0 (ADR 8), FW REV 3.12
Turntable:	Turntable [EMCO Turntable] @ GPIB0 (ADR 9), FW REV 3.12

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9.6 Conducted limits

Not applicable!

The EUT is battery powered only!

No possibility to connect to the mains power supply!

10 Test equipment and ancillaries used for tests

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 signalling 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 (Labor/Item).

No.	Lab / Item	Equipment	Type	Manufact.	Serial No.	INV. No Cetecom	Kind of Calibration	Last Calibration	Next Calibration
1	45	Switch-Unit	3488A	HP Meßtechnik	2719A14505	300000368	g		
2	50	DC power supply, 60Vdc, 50A, 1200 W	6032A	HP Meßtechnik	2920A04466	300000580	ne		
3	n. a.	software	SPS_PHE 1.4f	Spitzberger & Spieß	B5981; 5D1081;B5979	300000210	ne		
4	n. a.	EMI Test Receiver	ESCI 1166.5950.03	R&S	100083	300003312	k	05.01.2011	05.01.2013
5	n. a.	Analyzer-Reference-System (Harmonics and Flicker)	ARS 16/1	SPS	A3509 07/0 0205	300003314	k	31.07.2009	31.07.2011
6	n. a.	Amplifier	JS42-00502650-28-5A	MITEQ	1084532	300003379	ev		
7	n. a.	Antenna Tower	Model 2175	ETS-LINDGREN	64762	300003745	izw		
8	n. a.	Positioning Controller	Model 2090	ETS-LINDGREN	64672	300003746	izw		
9	n. a.	Turntable Interface-Box	Model 105637	ETS-LINDGREN	44583	300003747	izw		
10	n. a.	TRILOG Broadband Test-Antenna 30 MHz - 3 GHz	VULB9163	Schwarzbeck	295	300003787	k	01.04.2010	01.04.2012
11	n. a.	Spectrum-Analyzer	FSU26	R&S	200809	300003874	k	10.01.2011	10.01.2013
12	n. a.	Active Loop Antenna	6502	EMCO	2210	300001015	ne		
13	n. a.	Anechoic chamber	FAC 3/5m	MWB / TDK	87400/02	300000996		23.03.2009	
14	9	Artificial Mains 9 kHz to 30 MHz	ESH3-Z5	R&S	828576/020	300001210	Ve	06.01.2010	06.01.2012
15	n. a.	Relais Matrix	PSU	R&S	890167/024	300001168	ne		
16	n. a.	TILE-Software Emission	Quantum Change, Modell TILE-ICS/FULL	EMCO	none	300003451	ne		
17	n. a.	PSA Spectrum Analyzer 3 Hz - 26.5 GHz	E4440A	Agilent Technologies	MY48250080	300003812	k	08.09.2010	08.09.2012
18	n. a.	RF Filter Section 9kHz - 1GHz	N9039A	Agilent Technologies	MY48260003	300003825	vlKI!	08.09.2010	08.09.2012
19	n. a.	Spectrum Analyzer 9kHz to 30GHz - 140...+30dBm	FSP30	R&S	100886	300003575	k	07.09.2010	07.09.2012
20	n. a.	Loop Antenna 9 KHz - 30 MHz	HFH2-Z2	R&S	891847-35	300001169	ne		

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

Annex A Document history

Version	Applied changes	Date of release
-/-	Initial release (Draft version)	2011-06-07
1.0	Final version	2011-06-21
-A	Photos removed	2011-07-25

Annex B Further information

Glossary

DUT	-	Device under Test
EMC	-	Electromagnetic Compatibility
EUT	-	Equipment under Test
FCC	-	Federal Communication Commission
FCC ID	-	Company Identifier at FCC
HW	-	Hardware
IC	-	Industry Canada
Inv. No.	-	Inventory number
N/A	-	not applicable
S/N	-	Serial Number
SW	-	Software