

**CETECOM™**

**CETECOM ICT Services**  
consulting - testing - certification >>>

## TEST REPORT

Test report no.: 1-0264/15-01-02-A



Deutsche  
Akkreditierungsstelle  
D-PL-12076-01-00

### Testing laboratory

**CETECOM ICT Services 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-12076-01-00

### Applicant

**Sivantos Pte Ltd.**

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Singapore 139959 / SINGAPORE

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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 8

Spectrum Management and Telecommunications Radio Standards Specification - Licence-exempt Radio Apparatus (All Frequency Bands): Category I Equipment

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

### Test Item

**Kind of test item:** BTE (behind the ear) hearing instrument

**Model name:** Orion P

**FCC ID:** SGI-WL002BTE

**IC:** 267AB-WL002

**Frequency:** 3.28 MHz

**Technology tested:** proprietary

**Antenna:** Integrated antenna

**Power supply:** 1.0 V to 1.5 V DC by Battery

**Temperature range:** 0°C to +55°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:

Andreas Luckenbill  
Lab Manager  
Radio Communications & EMC

### Test performed:

Christoph Schneider  
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. CETECOM ICT Services 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 1-0264/15-01-02 and dated 2015-10-19**

### 2.2 Application details

Date of receipt of order:	2015-09-17
Date of receipt of test item:	2015-09-14
Start of test:	2015-09-23
End of test:	2015-09-28
Person(s) present during the test:	-/-

### 3 Test standard/s

Test standard	Date	Test standard description
47 CFR Part 15		Title 47 of the Code of Federal Regulations; Chapter I; Part 15 - Radio frequency devices
RSS - 210 Issue 8	December 2010	Spectrum Management and Telecommunications Radio Standards Specification - Licence-exempt Radio Apparatus (All Frequency Bands): Category I Equipment
RSS - 210 Issue 8 Amendment 1	February 2015	RSS-210, Amendment 1 — Licence-Exempt, Low-Power Radio Apparatus Operating in the Television Bands (February 2015)
RSS - Gen Issue 4	November 2014	Spectrum Management and Telecommunications Radio Standards Specifications - General Requirements and Information for the Certification of Radio Apparatus

#### 3.1 Measurement guidance

ANSI C63.4-2014	-/-	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
ANSI C63.10-2013	-/-	American national standard of procedures for compliance testing of unlicensed wireless devices

## 4 Test environment

Temperature	:	$T_{nom}$ +22 °C during room temperature tests $T_{max}$ +55 °C during high temperature tests $T_{min}$ -20 °C during low temperature tests
Relative humidity content	:	55 %
Barometric pressure	:	not relevant for this kind of testing
Power supply	:	$V_{nom}$ 1.45 V DC $V_{max}$ -/- V $V_{min}$ -/- V

## 5 Test item

### 5.1 General description

Kind of test item	:	BTE (behind the ear) hearing instrument
Type identification	:	Orion P
PMN	:	Orion P
HVIN	:	Pure_500, Pure_700, Explorer_500P
FVIN	:	1.3.49.0
HMN	:	n.a.
S/N serial number	:	ZG 77470
HW hardware status	:	DD.FE
SW software status	:	n.a.
Firmware Version	:	1.3.49.0
Frequency band	:	3.28 MHz
Type of radio transmission	:	TDMA
Use of frequency spectrum	:	
Type of modulation	:	BPSK
Number of channels	:	1
Antenna	:	Integrated antenna
Power supply	:	1.0 V to 1.5 V DC by Battery
Temperature range	:	0°C to +55°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:

- 1-0264/15-01-01\_AnnexA
- 1-0264/15-01-01\_AnnexB
- 1-0264/15-01-01\_AnnexD

## 6 Test laboratories sub-contracted

None

## 7 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).

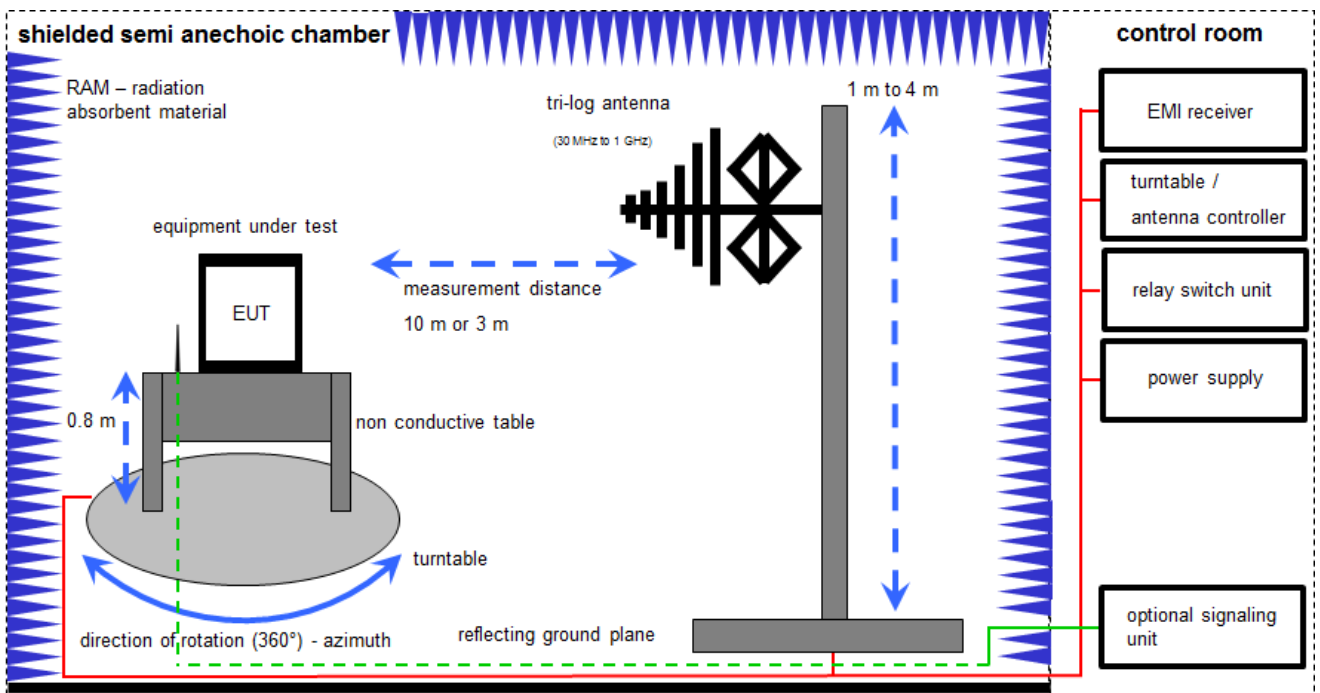
In order to simplify the identification of the equipment used at some special tests, some items of test equipment and ancillaries can be provided with an identifier or number in the equipment list below (Lab/Item).

### **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
v/k!	Attention: extended calibration interval		
NK!	Attention: not calibrated	*)	next calibration ordered / currently in progress

## 7.1 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 confirmed with specifications ANSI C63. 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.



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

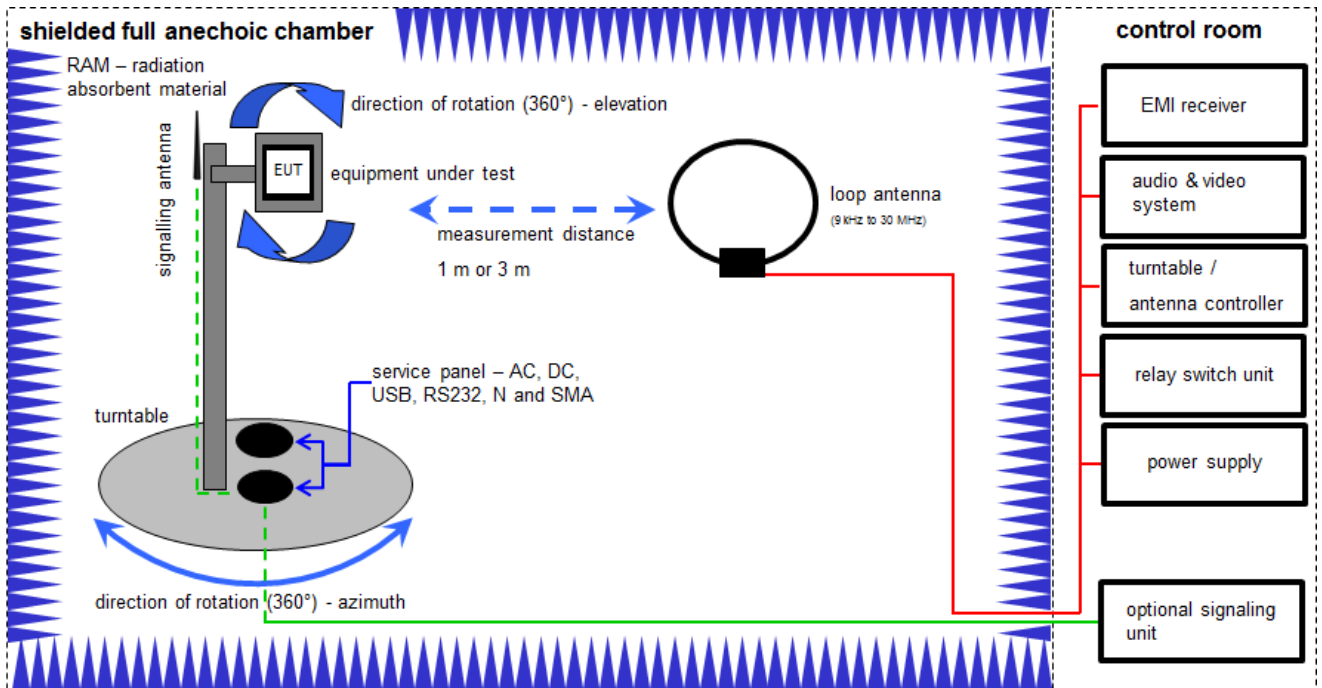
Example calculation:

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	Type	Manufacturer	Serial No.	INV. No Cetecom	Kind of Calibration	Last Calibration	Next Calibration
1	A	Switch-Unit	3488A	HP	2719A14505	300000368	ev		
2	A	RF-Filter-section	85420E	HP	3427A00162	300002214	k	27.11.2006	
3	A	EMI Test Receiver	ESCI 3	R&S	100083	300003312	k	26.01.2015	26.01.2016
4	A	Antenna Tower	Model 2175	ETS-Lindgren	64762	300003745	izw		
5	A	Positioning Controller	Model 2090	ETS-Lindgren	64672	300003746	izw		
6	A	Turntable Interface-Box	Model 105637	ETS-Lindgren	44583	300003747	izw		
7	A	TRILOG Broadband Test-Antenna 30 MHz - 3 GHz	VULB9163	Schwarzbeck	295	300003787	k	22.04.2014	22.04.2016

## 7.2 Shielded fully anechoic chamber



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

Example calculation:

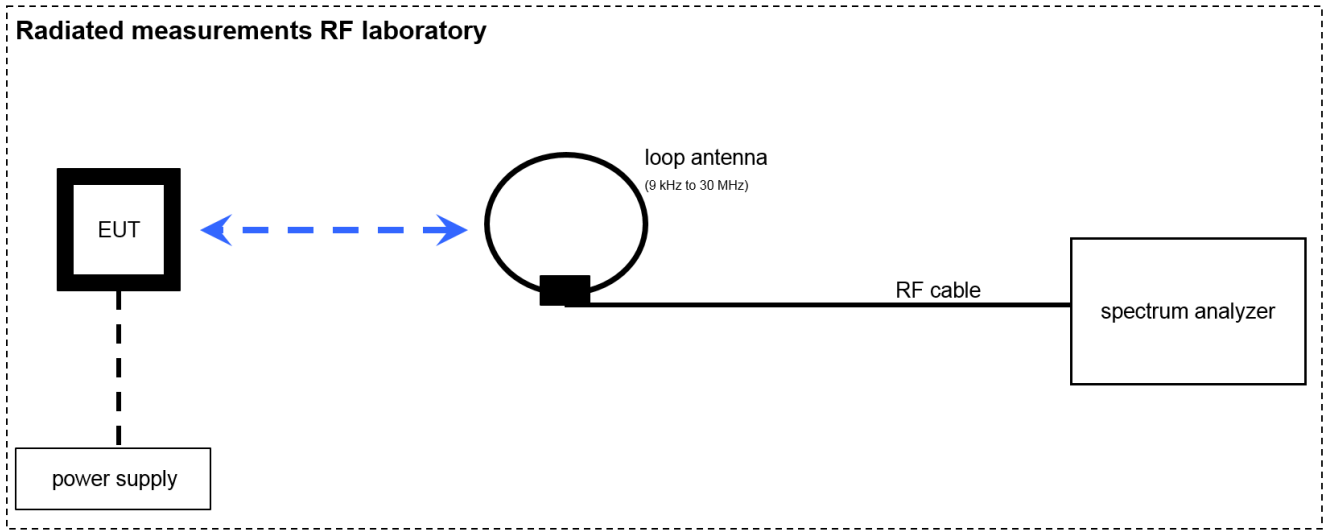
$$FS [dB\mu V/m] = 40.0 [dB\mu V/m] + (-35.8) [dB] + 32.9 [dB/m] = 37.1 [dB\mu V/m] (71.61 \mu V/m)$$

**Equipment table:**

No.	Lab / Item	Equipment	Type	Manufacturer	Serial No.	INV. No Cetecom	Kind of Calibration	Last Calibration	Next Calibration
1	A	Switch / Control Unit	3488A	HP	*	300000199	ne		
2	A	Active Loop Antenna 10 kHz to 30 MHz	6502	EMCO/2	8905-2342	300000256	k	24.06.2015	24.06.2017
3	A	MXE EMI Receiver 20 Hz to 26,5 GHz	N9038A	Agilent Technologies	MY51210197	300004405	k	06.03.2015	06.03.2016
4	A	4U RF Switch Platform	L4491A	Agilent Technologies	MY50000037	300004509	ne		



### 7.3 Radiated measurements RF laboratory



**Equipment table:**

No.	Lab / Item	Equipment	Type	Manufacturer	Serial No.	INV. No Cetecom	Kind of Calibration	Last Calibration	Next Calibration
1	A	EMI Test Receiver 9 kHz - 3 GHz incl. Preselector	ESPI3	R&S	101713	300004059	k	23.01.2015	23.01.2016
2	A	Loop Antenna	ESPI3	ZEG TS Steinfurt	101713	400001208	ev		
3	A	RF Cable BNC	RG58	Huber & Suhner	101713	400001209	ev		

**8 Measurement uncertainty**

Measurement uncertainty	
Test case	Uncertainty
6dB bandwidth	$\pm 5$ kHz
Occupied bandwidth	$\pm 5$ kHz
Field strength of the fundamental	$\pm 3$ dB
Field strength of the harmonics and spurious emissions below 30 MHz	$\pm 3$ dB
Field strength of the harmonics and spurious emissions 30 MHz to 1 GHz	$\pm 3$ dB

## 9 Sequence of testing

### 9.1 Sequence of testing 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.

## 9.2 Sequence of testing 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  $\pm 45^\circ$  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.

**10 Summary of measurement results**

<input checked="" type="checkbox"/>	No deviations from the technical specifications were ascertained
<input type="checkbox"/>	There were deviations from the technical specifications ascertained
<input type="checkbox"/>	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
RF-Testing	CFR Part 15 RSS 210 Issue 8 RSS Gen Issue 4	See table!	2016-04-05	-/-

Test Specification Clause	Test Case	Temperature Conditions	Power Source Voltages	C	NC	NA	NP	Remark
§ 15.223(a) RSS-210 Issue 8	Fieldstrength of Fundamental	Nominal	Nominal	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-/-
§ 15.223(a) RSS-210 Issue 8	Emission bandwidth 6 dB bandwidth	Nominal	Nominal	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-/-
RSS-GEN Issue 4	Occupied bandwidth 99 % bandwidth	Nominal	Nominal	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-/-
§ 15.209 & RSS-210 Issue 8	Fieldstrength of harmonics and spurious	Nominal	Nominal	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-/-
§ 15.109 RSS Gen Issue 4 (6.13)	Receiver spurious emissions and cabinet radiations	Nominal	Nominal	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-/-
§15.107 §15.207	Conducted limits	Nominal	Nominal	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-/-

**Note:** C = Compliant; NC = Not compliant; NA = Not Applicable; NP = Not Performed

## 11 Additional comments

Reference documents: None

Special test descriptions: None

Configuration descriptions: None

Additional information: None

## 12 Measurement results

### 12.1 Field strength of the fundamental

**Measurement:**

Measurement parameter	
Detector:	Peak / AVG
Sweep time:	-/-
Resolution bandwidth:	1 MHz
Video bandwidth:	≥ RBW
Span:	-/-
Trace-Mode:	Max Hold
Used equipment:	See chapter 7.2 A
Measurement uncertainty:	See chapter 8

**Limits:**

FCC	IC
<p>The field strength of any emission within the band 1.705-10.0 MHz shall not exceed 100 microvolts/meter at a distance of 30 meters. However, if the bandwidth (6 dB bandwidth) of the emission is less than 10% of the center frequency, the field strength shall not exceed 15 microvolts/meter or (the bandwidth of the device in kHz) divided by (the center frequency of the device in MHz) microvolts/meter at a distance of 30 meters, whichever is the higher level</p>	
<p>The 6 dB Bandwidth (126 kHz) is less than 10% of the center frequency (328 kHz).                      The bandwidth of the device in kHz divided by the center frequency in MHz = 126 / 3.28 = 38.42</p> <p>Max. field strength at a distance of 30 meters: 38.42 μV/m (31.69 dBμV/m)</p>	

**Recalculation:**

According to ANSI C63.10		
Frequency	Formula	Correction value
3.28 MHz	$FS_{limit} = FS_{max} - 40 \log\left(\frac{d_{near\ field}}{d_{measure}}\right) - 20 \log\left(\frac{d_{limit}}{d_{near\ field}}\right)$ <p> <math>FS_{limit}</math> is the calculation of field strength at the limit distance, expressed in dBμV/m  <math>FS_{max}</math> is the measured field strength, expressed in dBμV/m  <math>d_{near\ field}</math> is the <math>\lambda/2\pi</math> distance  <math>d_{measure}</math> is the distance of the measurement point from EUT  <math>d_{limit}</math> is the reference limit distance                     </p>	$FS_{limit} = FS_{max} - 52.8\ dB$

**Result:**

Field strength of the fundamental		
Frequency	3.28 MHz	
Distance	@ 1 m	@ 30 m
Measured / calculated value	31.97 dBμV/m	-20.83 dBμV/m

**12.2 Emission bandwidth (6 dB bandwidth)****Measurement:**

Measurement parameter	
Detector:	Peak
Sweep time:	60 s
Resolution bandwidth:	300 Hz
Video bandwidth:	300 Hz
Span:	3 MHz
Trace-Mode:	Max Hold
Used equipment:	See chapter 7.3 A
Measurement uncertainty:	See chapter 8

**Limits:**

FCC
For the purposes of this Section, bandwidth is determined at the points 6 dB down from the modulated carrier

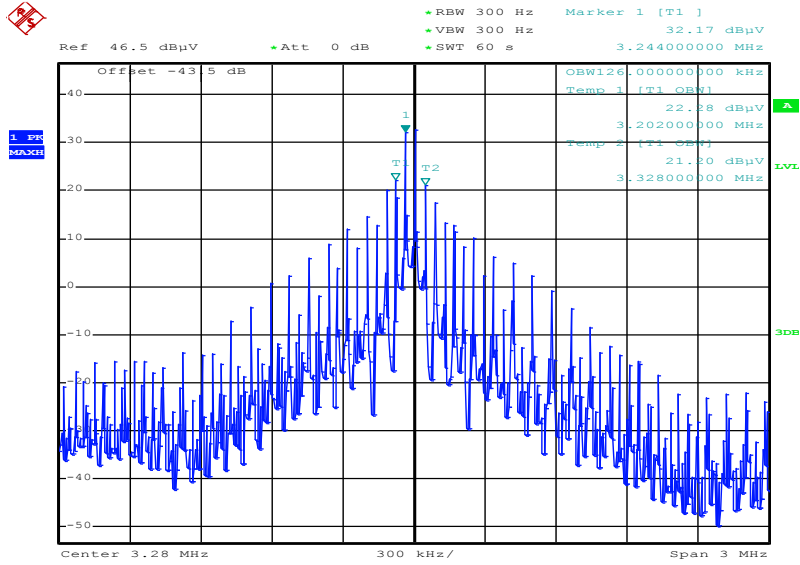
**Results:**

6dB emission bandwidth
126 kHz



**Plots:**

**Plot 1: 6 dB bandwidth**



Date: 22.SEP.2015 13:52:45

**12.3 Occupied bandwidth (99% bandwidth)****Measurement:**

Measurement parameter	
Detector:	Peak
Resolution bandwidth:	1 % – 5 % of the occupied bandwidth
Video bandwidth:	≥ 3x RBW
Trace mode:	Max hold
Analyser function:	99 % power function
Used equipment:	See chapter 7.3 A
Measurement uncertainty:	See chapter 8

**Limits:**

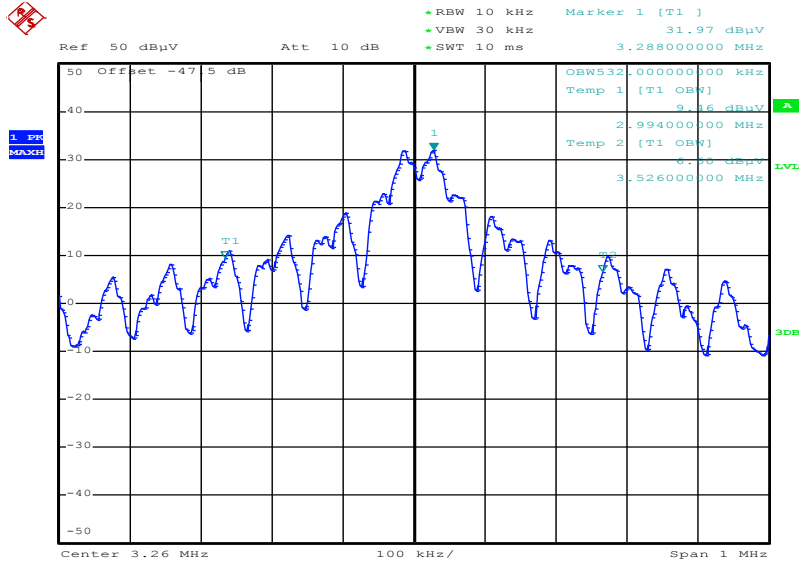
IC
-/-

**Results:**

99% emission bandwidth
532 kHz

**Plots:**

**Plot 1: 99% bandwidth**



Date: 22.SEP.2015 13:58:46

## 12.4 Field strength of the harmonics and spurious

### Measurement:

Measurement parameter	
Detector:	Average / Quasi Peak
Sweep time:	Auto
Resolution bandwidth:	F < 150 kHz: 200 Hz 150 kHz > F > 30 MHz: 9 kHz    9 kHz F > 30 MHz: 120 kHz
Video bandwidth:	F < 150 kHz: 1 kHz 150 kHz > F > 30 MHz: 100 kHz    9 kHz F > 30 MHz: 300 kHz
Span:	See plots!
Trace-Mode:	Max hold
Used equipment:	See chapter 7.1 A / 7.2 A
Measurement uncertainty:	See chapter 8

### Limits:

FCC		IC	
Field strength of the harmonics and spurious.			
Frequency / (MHz)	Field strength / ( $\mu\text{V/m}$ )	Measurement distance / (m)	
0.0009 – 0.490	2400/F(kHz)	300	
0.490 – 1.705	24000/F(kHz)	30	
1.705 – 30	30 (29.5 dB $\mu\text{V/m}$ )	30	
30 – 88	100 (40 dB $\mu\text{V/m}$ )	3	
88 – 216	150 (43.5 dB $\mu\text{V/m}$ )	3	
216 – 960	200 (46 dB $\mu\text{V/m}$ )	3	

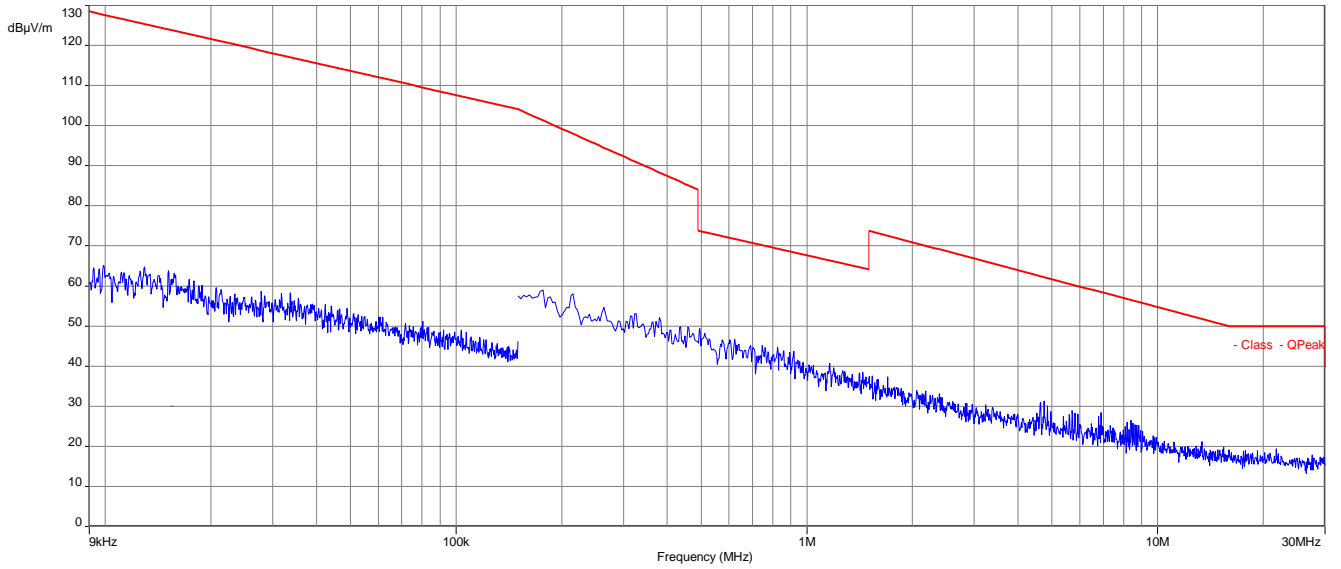
### Result:

Spurious emissions				
f / (MHz)	Detector	Limit max. allowed / (dB $\mu\text{V/m}$ )	Amplitude of emission / (dB $\mu\text{V/m}$ )	Results
All detected peaks are more than 10dB below the limit.				

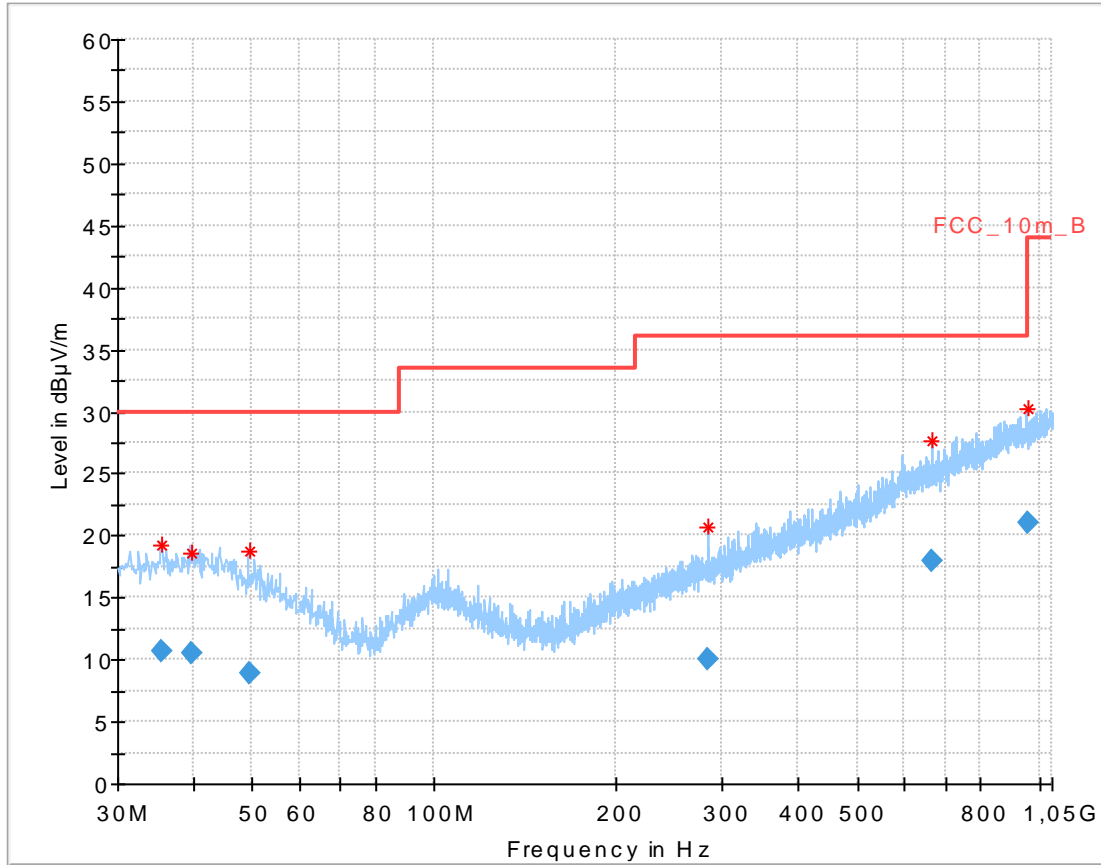
**Note:** The limit was recalculated with 20 dB / decade (Part 15.31) for all radiated spurious emissions 30 MHz to 1 GHz from 3 meter limit to a 10 meter distance. (40dB/decade for emissions < 30MHz)

**Plots:** TX mode

**Plot 1:** 9 kHz – 30 MHz; magnetic



Plot 2: 30 MHz – 1000 MHz, vertical and horizontal polarization

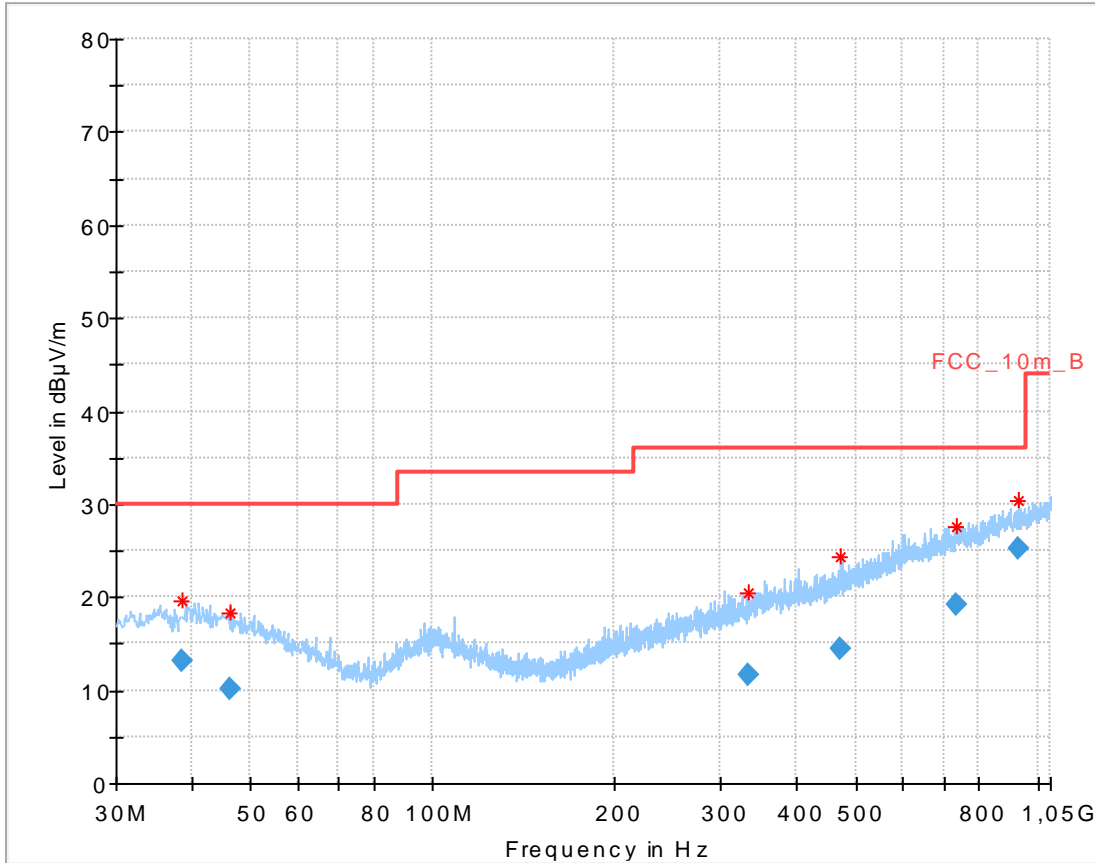


**Final Result**

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
35.588400	10.60	30.00	19.40	1000.0	120.000	272.0	V	40	13.8
39.840450	10.51	30.00	19.49	1000.0	120.000	272.0	H	280	14.0
49.540950	8.82	30.00	21.18	1000.0	120.000	271.0	H	52	12.8
283.139100	9.96	36.00	26.04	1000.0	120.000	171.0	V	162	14.1
665.398500	18.03	36.00	17.97	1000.0	120.000	349.0	V	53	21.2
954.745200	21.09	36.00	14.91	1000.0	120.000	172.0	H	297	24.3

**Plots:** Idle mode

**Plot 1:** 30 MHz – 1000 MHz, 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)
38.707500	13.19	30.00	16.81	1000.0	120.000	101.0	V	338	14.0
46.299900	10.07	30.00	19.93	1000.0	120.000	101.0	V	338	13.5
333.024000	11.74	36.00	24.26	1000.0	120.000	170.0	V	326	15.5
471.842700	14.37	36.00	21.63	1000.0	120.000	170.0	H	161	18.1
731.410350	19.18	36.00	16.82	1000.0	120.000	101.0	V	187	22.3
927.421500	25.29	36.00	10.71	1000.0	120.000	98.0	V	241	24.2

### 13 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	2015-10-19
-A	Editorial changes	2016-04-05

**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

**Annex C Accreditation Certificate**

Front side of certificate

Back side of certificate



Deutsche Akkreditierungsstelle GmbH

Bellehene gemäß § 8 Absatz 1 AkkStelleG i.V.m. § 1 Absatz 1 AkkStelleGBV  
 Unterzeichnerin der Multilateralen Abkommen  
 von EA, ILAC und IAFC zur gegenseitigen Anerkennung

**Akkreditierung**



Die Deutsche Akkreditierungsstelle GmbH bestätigt hiermit, dass das Prüflaboratorium

**CETECOM ICT Services GmbH**  
 Untertürkheimer Straße 6-10, 66117 Saarbrücken

die Kompetenz nach DIN EN ISO/IEC 17025:2005 besitzt, Prüfungen in folgenden Bereichen durchzuführen:

- Drahtgebundene Kommunikation einschließlich xDSL
- VoIP und DECT
- Akustik
- Funk einschließlich WLAN
- Short Range Devices (SRD)
- RFID
- WiFiMax und Richtfunk
- Mobilefunk (GSM / GPRS, Over the Air (OTA) Performance)
- Elektromagnetische Verträglichkeit (EMV) einschließlich Automotive
- Produktsicherheit
- SAR und Hearing Aid Compatibility (HAC)
- Umweltsimulation
- Smart Card Terminals
- Bluetooth
- Wi-Fi Services

Die Akkreditierungsurkunde gilt nur in Verbindung mit dem Bescheid vom 07.03.2014 mit der Akkreditierungsnummer D-PL-12076-01 und ist gültig 17.01.2018. Sie besteht aus diesem Deckblatt, der Rückseite des Deckblatts und der folgenden Anlage mit insgesamt 77 Seiten.

Registrierungsnummer der Urkunde: D-PL-12076-01-00

Frankfurt am Main, 07.03.2014

Stabschefin der Abteilung

im Auftrag D-PL-12076-01-00 Ralf Egner  
 Abteilungsleiter

Deutsche Akkreditierungsstelle GmbH

Standort Berlin  
 Spittelmarkt 10  
 10117 Berlin

Standort Frankfurt am Main  
 Gartenstraße 6  
 60594 Frankfurt am Main

Standort Braunschweig  
 Bundesallee 100  
 38115 Braunschweig

Die auszugsweise Veröffentlichung der Akkreditierungsurkunde bedarf der vorherigen schriftlichen Zustimmung der Deutsche Akkreditierungsstelle GmbH (DAkkS). Ausgenommen davon ist die separate Weiterverbreitung des Deckblattes durch die umseitig genannte Konformitätsbewertungsstelle in unveränderter Form.

Es darf nicht der Anschein erweckt werden, dass sich die Akkreditierung auch auf Bereiche erstreckt, die über den durch die DAkkS bestätigten Akkreditierungsbereich hinausgehen.

Die Akkreditierung erfolgte gemäß des Gesetzes über die Akkreditierungsstellen (AkkStelleG) vom 31. Juli 2009 (BfNR. 15. 7025) sowie der Verordnung (EG) Nr. 765/2008 des Europäischen Parlaments und des Rates vom 9. Juli 2008 über die Vorschriften für die Akkreditierung und Marktüberwachung im Zusammenhang mit der Vermarktung von Produkten (AbL. L 218 vom 9. Juli 2008, S. 30). Die DAkkS ist Unterzeichnerin der Multilateralen Abkommen zur gegenseitigen Anerkennung der European Conformity Assessment (EA), des International Accreditation Forum (IAF) und der International Laboratory Accreditation Cooperation (ILAC). Die Unterzeichner dieser Abkommen erkennen ihre Akkreditierungen gegenseitig an.

Der aktuelle Stand der Mitgliedschaft kann folgenden Webseiten entnommen werden:  
 EA: [www.european-accreditation.org](http://www.european-accreditation.org)  
 IAF: [www.iaf.or.jp](http://www.iaf.or.jp)  
 ILAC: [www.ilac.net](http://www.ilac.net)

**Note:**

The current certificate including annex may be received from CETECOM ICT Services on request.