







TEST REPORT



Test report no.: 1-6634_23-01-16-D

Testing laboratory

cetecom advanced GmbH

Untertuerkheimer Strasse 6 – 10 66117 Saarbruecken / Germany Phone: + 49 681 5 98 - 0 Fax: + 49 681 5 98 - 9075

Internet: https://cetecomadvanced.com
e-mail: mail@cetecomadvanced.com

Accredited Testing Laboratory:

The testing laboratory (area of testing) is accredited according to DIN EN ISO/IEC 17025 (2018-03) by the Deutsche Akkreditierungsstelle GmbH

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

D-PL-12047-01-00.

ISED Testing Laboratory Recognized Listing Number: DE0001

FCC designation number: DE0002

Applicant

Cochlear Limited

1 University Avenue

Macquarie University NSW 2109 / AUSTRALIA

Phone: +61 296 116200 Contact: Annie Correra

e-mail: acorrera@cochlear.com

Manufacturer

Cochlear Limited

1 University Avenue

Macquarie University NSW 2109 / AUSTRALIA

Test standard/s

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

frequency devices

RSS - 210 Issue 11 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: Sound Processor in a Cochlear Implant System

Model name: CP1175
FCC ID: WTO-CP1175
ISED certification number: 8039A-CP1175

Frequency: 5.01MHz

Technology tested: 5 MHz Inductive Link

Antenna: N/A

Power supply: 3.7V (nominal)

Temperature: 22°C

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

l est report authorized:	l est performed:
	On behalf of
Christoph Schneider Lab Manager	Hans-Joachim Wolsdorfer Lab Manager
Radio Labs	Radio Labs



Table of contents

1	Table o	of contents	2
2	Genera	l information	3
	2.1 2.2 2.3	Notes and disclaimerApplication details	3
3	Test st	andard/s, references and accreditations	4
4	Reporti	ing statements of conformity – decision rule	5
5	Test er	vironment	6
6	Test ite	em	6
	6.1 6.2	General description	
7	Descrip	otion of the test setup	7
	7.1 7.2 7.3	Shielded semi anechoic chamber	10
8	Sequer	nce of testing	12
	8.1 8.2	Sequence of testing radiated spurious 9 kHz to 30 MHz	
9	Measu	rement uncertainty	14
10	Sum	nmary of measurement results	15
11	Add	itional comments	16
12	Mea	surement results	17
	12.1 12.2 12.3 12.4	Field strength of the fundamental Occupied bandwidth (99% bandwidth) Occupied bandwidth (6dB bandwidth) Field strength of the harmonics and spurious	. 19 . 20
13	Glos	ssary	25
14	Doc	ument history	26



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 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.

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 advanced GmbH.

The testing service provided by cetecom advanced GmbH has been rendered under the current "General Terms and Conditions for cetecom advanced GmbH".

cetecom advanced GmbH will not be liable for any loss or damage resulting from false, inaccurate, inappropriate or incomplete product information provided by the customer.

Under no circumstances does the cetecom advanced GmbH test report include any endorsement or warranty regarding the functionality, quality or performance of any other product or service provided.

Under no circumstances does the cetecom advanced GmbH test report include or imply any product or service warranties from cetecom advanced GmbH, including, without limitation, any implied warranties of merchantability, fitness for purpose, or non-infringement, all of which are expressly disclaimed by cetecom advanced GmbH.

All rights and remedies regarding vendor's products and services for which cetecom advanced GmbH has prepared this test report shall be provided by the party offering such products or services and not by cetecom advanced GmbH.

In no case this test report can be considered as a Letter of Approval.

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

This test report replaces the test report with the number 1-6634_23-01-16_C and dated 2024-10-02.

2.2 Application details

Date of receipt of order: 2023-08-04
Date of receipt of test item: 2023-08-17
Start of test:* 2023-08-18
End of test:* 2024-10-02
Person(s) present during the test: -/-

*Date of each measurement, if not shown in the plot, can be requested. Dates are stored in the measurement software.

2.3 Test laboratories sub-contracted

None

© cetecom advanced GmbH Page 3 of 26



3 Test standard/s, references and accreditations

Test standard	Date	Description
FCC - Title 47 CFR Part 15		FCC - Title 47 of the Code of Federal Regulations; Chapter I; Part 15 - Radio frequency devices
RSS - 210 Issue 11	June 2024	Spectrum Management and Telecommunications Radio Standards Specification - Licence-Exempt Radio Apparatus: Category I Equipment
RSS - Gen Issue 5 incl. Amendment 1 & 2	February 2021	Spectrum Management and Telecommunications Radio Standards Specification - General Requirements for Compliance 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

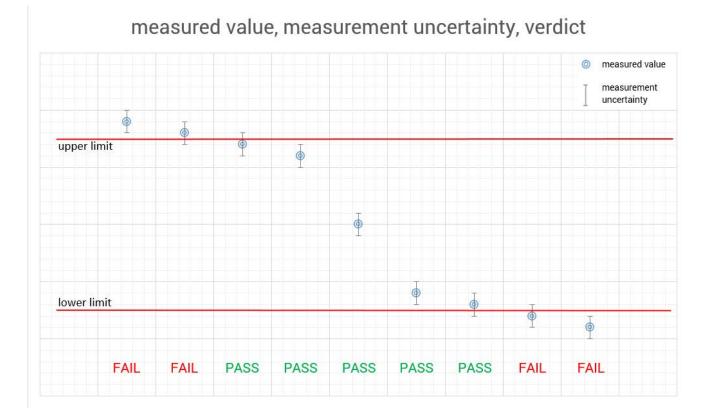
© cetecom advanced GmbH Page 4 of 26



4 Reporting statements of conformity – decision rule

Only the measured values related to their corresponding limits will be used to decide whether the equipment under test meets the requirements of the test standards listed in chapter 3.

The measurement uncertainty is mentioned in this test report, see chapter 9, but is not taken into account - neither to the limits nor to the measurement results. Measurement results with a smaller margin to the corresponding limits than the measurement uncertainty have a potential risk of more than 5% that the decision might be wrong."



© cetecom advanced GmbH Page 5 of 26



5 Test environment

Temperature	:	T_{nom}	+22 °C all tests performed at room temperature
Relative humidity content	:		55 %
Barometric pressure	:		1021 hpa
Power supply	:	V_{nom}	3.7 V (nominal)

6 Test item

6.1 General description

Kind of test item :	Sound Processor in a Cochlear Implant System
Model name :	CP1175
HMN :	-/-
PMN :	CP1175
HVIN :	CP1175
FVIN :	-/-
S/N serial number :	Rad. 1010201004762
Hardware status :	Build Y
Software status :	N/A
Firmware status :	1224A00!00#1111527
Frequency :	5.01MHz
Type of radio transmission: Use of frequency spectrum:	modulated carrier
Type of modulation :	proprietary
Number of channels :	1
Antenna :	N/A
Power supply :	3.7V (nominal)
Temperature :	22°C

6.2 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: 1-6634_23-01-01_AnnexA

1-6634_23-01-01_AnnexB 1-6634_23-01-01_AnnexD

© cetecom advanced GmbH Page 6 of 26



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).

Each block diagram listed can contain several test setup configurations. All devices belonging to a test setup are identified with the same letter syntax. For example: Column Setup and all devices with an A.

Agenda: Kind of Calibration

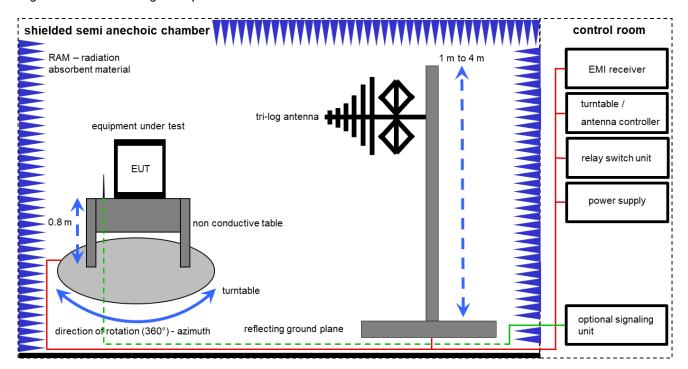
k	calibration / calibrated	EK	limited calibration
ne	not required (k, ev, izw, zw not required)	ZW	cyclical maintenance (external cyclical
			maintenance)
ev	periodic self verification	izw	internal cyclical maintenance
Ve	long-term stability recognized	g	blocked for accredited testing
vlkl!	Attention: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

© cetecom advanced GmbH Page 7 of 26



7.1 Shielded semi anechoic chamber

The radiated measurements are performed in vertical and horizontal plane in the frequency range from 30 MHz 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 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.



Measurement distance: tri-log antenna 10 meter

EMC32 software version: 10.59.00

FS = UR + CL + AF

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

Example calculation:

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

© cetecom advanced GmbH Page 8 of 26



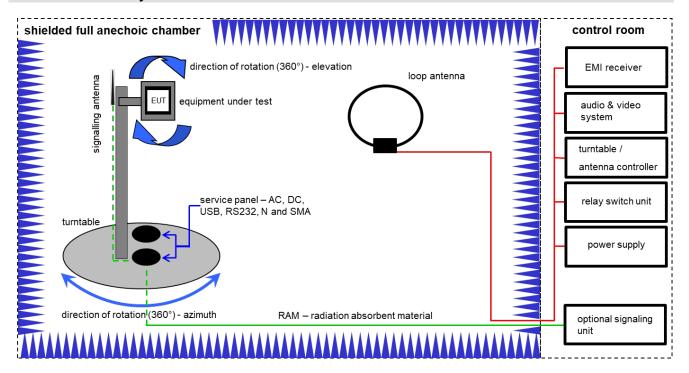
Equipment table:

No.	Setup	Equipment	Туре	Manufacturer	Serial No.	INV. No.	Kind of Calibration	Last Calibration	Next Calibration
1	А	Semi anechoic chamber	3000023	MWB AG	-/-	300000551	ne	-/-	-/-
2	Α	Antenna Tower	Model 2175	ETS-Lindgren	64762	300003745	izw	-/-	-/-
3	А	Positioning Controller	Model 2090	ETS-Lindgren	64672	300003746	izw	-/-	-/-
4	А	Turntable Interface- Box	Model 105637	ETS-Lindgren	44583	300003747	izw	-/-	-/-
5	А	TRILOG Broadband Test-Antenna 30 MHz - 3 GHz	VULB9163	Schwarzbeck Mess - Elektronik	318	300003696	vlKI!	30.09.2021	29.09.2023
6	Α	Turntable	2089-4.0	EMCO	-/-	300004394	ne	-/-	-/-
7	Α	PC	TecLine	F+W	-/-	300004388	ne	-/-	-/-
8	Α	EMI Test Receiver	ESR3	Rohde & Schwarz	102587	300005771	k	09.12.2022	31.12.2023

© cetecom advanced GmbH Page 9 of 26



7.2 Shielded fully anechoic chamber



Measurement distance: 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:

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 \(\mu V/m \))$

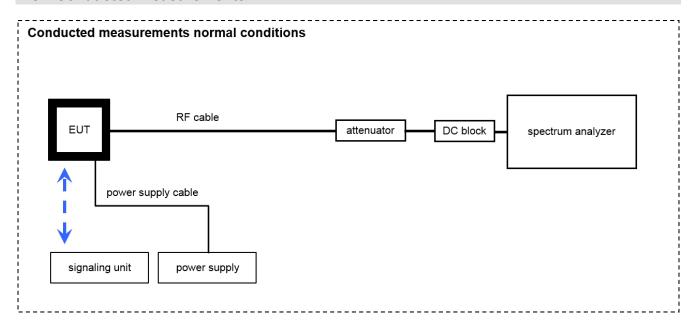
Equipment table:

No.	Setup	Equipment	Туре	Manufacturer	Serial No.	INV. No.	Kind of Calibration	Last Calibration	Next Calibration
1	А	Active Loop Antenna 9 kHz to 30 MHz	6502	EMCO	2210	300001015	vIKI!	02.08.2023	31.08.2025
2	Α	Switch / Control Unit	3488A	HP	*	300000199	ne	-/-	-/-
3	А	Computer	Intel Core i3 3220/3,3 GHz, Prozessor		2V2403033A54 21	300004591	ne	-/-	-/-
4	А	NEXIO EMV- Software	BAT EMC V3.21.0.32	EMCO		300004682	ne	-/-	-/-
5	А	EMI Test Receiver 20Hz- 26,5GHz	ESU26	R&S	100037	300003555	k	07.12.2022	31.12.2023
6	Α	Anechoic chamber		TDK		300003726	ne	-/-	-/-

© cetecom advanced GmbH Page 10 of 26



7.3 Conducted measurements



OP = AV + CA

(OP-output power; AV-analyzer value; CA-loss signal path)

Example calculation:

OP [dBm] = 6.0 [dBm] + 11.7 [dB] = 17.7 [dBm] (58.88 mW)

Equipment table:

Equipment table:

No.	Setup	Equipment	Туре	Manufacturer	Serial No.	INV. No.	Kind of Calibration	Last Calibration	Next Calibration
1	Α	Signal analyzer	FSW26	Rohde&Schwarz	101371	300005697	k	07.12.2023	31.12.2024
2	Α	Signal analyzer	FSV30	Rohde&Schwarz	104365	300005923	k	13.12.2022	31.12.2023
3	Α	Loop Antenna	-/-	ZEG TS Steinfurt	-/-	400001208	ev	-/-	-/-

© cetecom advanced GmbH Page 11 of 26



8 Sequence of testing

8.1 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, it is placed on a table with 0.8 m height.
- 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 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 pre-measurement are maximized by the software by rotating the turntable from 0° to 360°.
- Loop antenna is rotated about its vertical axis for maximum response at each azimuth about the EUT. (For certain applications, the loop antenna plane may also need to be positioned horizontally at the specified distance from the EUT)
- 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.

© cetecom advanced GmbH Page 12 of 26

^{*)} Note: The sequence will be repeated three times with different EUT orientations.



8.2 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.

© cetecom advanced GmbH Page 13 of 26



9 Measurement uncertainty

Measurement uncertai	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						

© cetecom advanced GmbH Page 14 of 26



10 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
	CFR Part 15			
RF-Testing	RSS Gen Issue 5	Passed	2024-10-21	-/-
	RSS 210 Issue 11			

Test specification clause	Test case	Temperature conditions	Power source conditions	С	NC	NA	NP	Remark
RSS Gen Issue 5 (6.7)	Occupied bandwidth 99% and x dB	Nominal	Nominal	\boxtimes				-/-
§ 15.209 RSS-210, B.3 a	Field strength of the fundamental	Nominal	Nominal	\boxtimes				-/-
§ 15.209 RSS Gen Issue 5 (6.13)	Field strength of the harmonics and spurious	Nominal	Nominal	\boxtimes				-/-
§15.107 §15.207 RSS Gen Issue 5 (7.2)	Conducted limits	Nominal	Nominal			\boxtimes		Battery powered only!

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

© cetecom advanced GmbH Page 15 of 26



11 Additional comments

Reference documents: none

Special test descriptions: none

Configuration descriptions: none

© cetecom advanced GmbH Page 16 of 26



12 Measurement results

12.1 Field strength of the fundamental

Measurement:

The maximum detected field strength for the carrier signal.

Measurement parameters		
Detector:	average	
Resolution bandwidth:	9 kHz	
Video bandwidth:	≥ 3x RBW	
Trace mode:	Max hold	
Used test setup	See sub clause 7.2 – A	
Measurement uncertainty:	See sub clause 9	

Limit:

FCC				
Frequency	Field strength	Measurement distance		
(MHz)	(μV/m)	(m)		
1.705 - 30.0	30 (29.54dBμV/m)	30		

IC				
Frequency (MHz)	Field strength (µV/m)	Measurement distance (m)		
1.705 – 10.0	15 (23.52 dBμV/m)	30		

- if the 6 dB bandwidth of the emission is less than 10% of the centre frequency, the field strength shall not exceed 15 μ V/m at 30 m or (the bandwidth of the device in kHz) divided by (the centre frequency of the device in MHz) μ V/m at 30 m, whichever is the higher level

6dB BW = 3.72 kHz (< 501 KHz) \rightarrow 15 μ V/m \rightarrow 23.52 dB μ V/m

Recalculation:

According to ANSI C63.10			
Frequency	Formula	Correction value	
5.01 MHz	$FS_{limit} = FS_{max} - 40 \log \left(\frac{d_{nearfield}}{d_{measure}}\right) - 20 \log \left(\frac{d_{timit}}{d_{nearfield}}\right)$ $FS_{limit} \qquad \text{is the calculation of field strength at the limit distance,} $ $\text{expressed in dB}_{\mu}V/m$ $FS_{max} \qquad \text{is the measured field strength, expressed in dB}_{\mu}V/m$ $d_{near field} \qquad \text{is the } \lambda/2\pi \text{ distance}$ $d_{measure} \qquad \text{is the distance of the measurement point from EUT}$ $d_{limit} \qquad \text{is the reference limit distance}$	-30.03 dB from 3 m to 30 m	

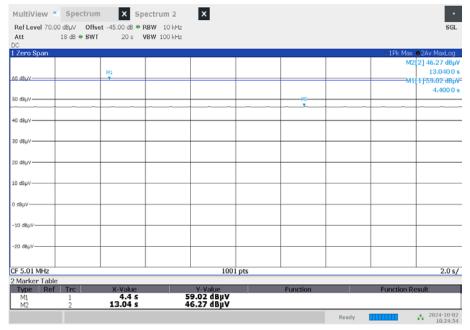
© cetecom advanced GmbH Page 17 of 26



Result:

Field strength of the fundamental				
Frequency 5.01 MHz				
Distance	@ 3 m	@ 30 m		
Management / and add at a divide	59.02 dBμV/m (pk)	28.99 dBμV/m (pk)		
Measured / calculated value	46.27 dBµV/m (avg)	16.24 dBµV/m (avg)		

Plot: peak to average measurement



10:24:54 RM 10/02/2024

© cetecom advanced GmbH Page 18 of 26



12.2 Occupied bandwidth (99% bandwidth)

Measurement:

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 chapter 7.3A	
Measurement uncertainty:	See chapter 9	

Limits:

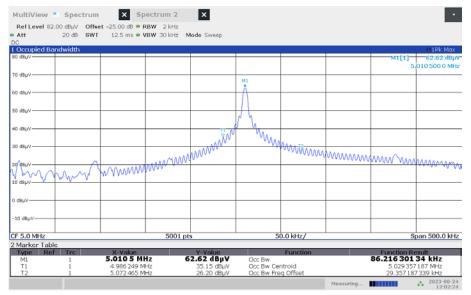
IC	
-/-	

Results:

TEST CONDITIONS	99 % bandwidth
EUT	
CP1175	86.21 kHz

Plots:

Plot 1: 99% bandwidth



12:02:25 PM 08/24/2023

© cetecom advanced GmbH Page 19 of 26



12.3 Occupied bandwidth (6dB bandwidth)

Measurement:

Measurement parameters		
Detector:	Peak	
Resolution bandwidth:	1 % - 5 % of the occupied bandwidth	
Video bandwidth:	≥ 3x RBW	
Trace mode:	Max hold	
Analyser function:	ndB down function	
Used test setup:	See chapter 7.3A	
Measurement uncertainty:	See chapter 9	

Limits:

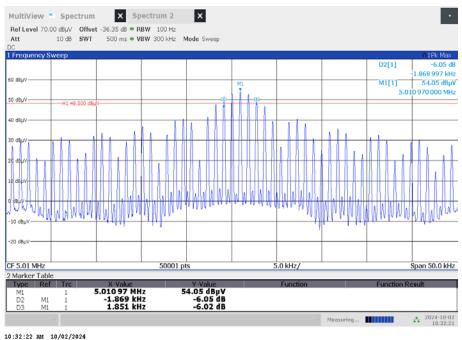
IC
-/-

Results:

TEST CONDITIONS	6 dB bandwidth
EUT	
CP1175	3.72 kHz

Plots:

Plot 1: 6dB bandwidth



© cetecom advanced GmbH Page 20 of 26



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 F > 30 MHz: 120 kHz		
Video bandwidth:	F < 150 kHz: 1 kHz 150 kHz > F > 30 MHz: 100 kHz F > 30 MHz: 300 kHz		
Span:	See plots!		
Trace-Mode:	Max hold		
Used test setup:	See chapter 7.1A, 7.2A		
Measurement uncertainty:	See chapter 9		

Limits:

FCC				
Frequency	Field strength	Measurement distance		
(MHz)	(μV/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		

	IC	
Frequency	Field strength	Measurement distance
(MHz)	(µA/m)	(m)
0.009 - 0.490	6.37/F (F in kHz)	300
0.490 - 1.705	63.7/F (F in kHz)	30
1.705 – 30	0.08 (-22 dBµA/m)	30

© cetecom advanced GmbH Page 21 of 26



Result:

Spurious emissions				
f / (MHz)	Detector	Limit max. allowed / (dBµV/m)	Amplitude of emission / (dBµV/m)	Results
no peaks detected				

for spurious emissions >30MHz see table below plot

Result: Passed

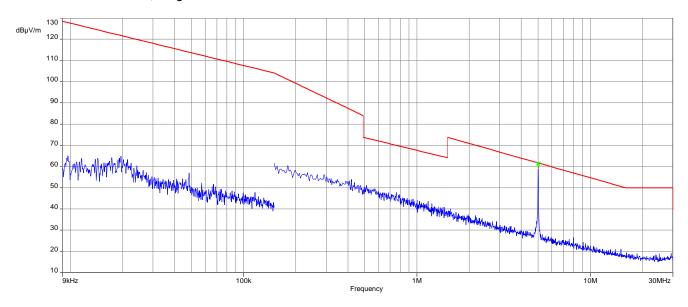
Note: The limit was recalculated with 20 dB / decade (Part 15.31) for all radiated spurious emissions 30 MHz to 1 GHz from 3 meter limit to a 10 meter distance. (40dB/decade for emissions < 30MHz)

© cetecom advanced GmbH Page 22 of 26

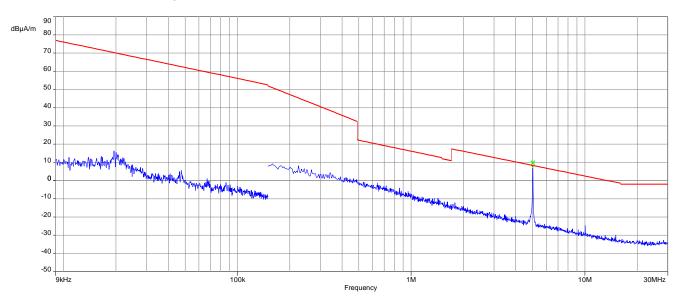


Plots: TX mode

Plot 1: 9 kHz - 30 MHz; magnetic FCC



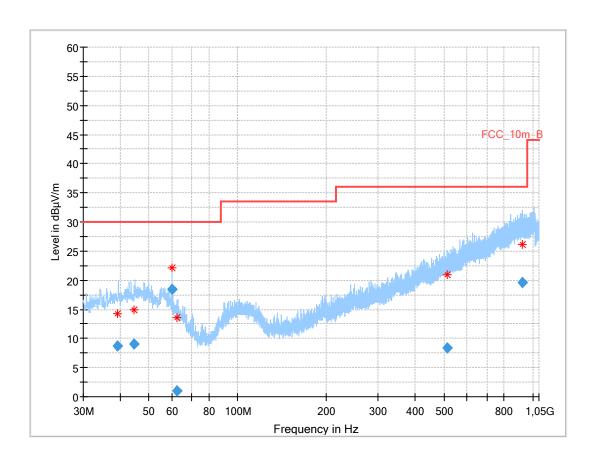
Plot 2: 9 kHz - 30 MHz; magnetic IC



© cetecom advanced GmbH Page 23 of 26



Plot 3: 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/m)
39.116	8.64	30.0	21.4	1000	120.0	393.0	٧	123	15
44.700	8.99	30.0	21.0	1000	120.0	370.0	Н	180	16
60.131	18.44	30.0	11.6	1000	120.0	317.0	V	81	14
62.470	0.96	30.0	29.0	1000	120.0	164.0	V	180	13
511.601	8.41	36.0	27.6	1000	120.0	400.0	Н	223	20
925.414	19.65	36.0	16.4	1000	120.0	127.0	V	290	26

© cetecom advanced GmbH Page 24 of 26



13 Glossary

EUT	Equipment under test
DUT	Device under test
UUT	Unit under test
GUE	GNSS User Equipment
ETSI	European Telecommunications Standards Institute
EN	European Standard
FCC	Federal Communications Commission
FCC ID	Company Identifier at FCC
IC	Industry Canada
PMN	Product marketing name
HMN	Host marketing name
HVIN	Hardware version identification number
FVIN	Firmware version identification number
EMC	Electromagnetic Compatibility
HW	Hardware
SW	Software
Inv. No.	Inventory number
S/N or SN	Serial number
С	Compliant
NC	Not compliant
NA	Not applicable
NP	Not performed
PP	Positive peak
QP	Quasi peak
AVG	Average
ОС	Operating channel
OCW	Operating channel bandwidth
OBW	Occupied bandwidth
ООВ	Out of band
DFS	Dynamic frequency selection
CAC	Channel availability check
OP	Occupancy period
NOP	Non occupancy period
DC	Duty cycle
PER	Packet error rate
CW	Clean wave
MC	Modulated carrier
WLAN	Wireless local area network
RLAN	Radio local area network
DSSS	Dynamic sequence spread spectrum
OFDM	Orthogonal frequency division multiplexing
FHSS	Frequency hopping spread spectrum
GNSS	Global Navigation Satellite System
C/N ₀	Carrier to noise-density ratio, expressed in dB-Hz

© cetecom advanced GmbH Page 25 of 26



14 Document history

Version	Applied changes	Date of release
-/-	Initial release	2023-10-27
Α	editorial changes	2023-11-20
В	editorial changes	2024-09-18
С	6dB bandwidth results added	2024-10-02
D	editorial changes	2024-10-21

© cetecom advanced GmbH Page 26 of 26