



Prüfbericht-Nr.: <i>Test Report No.:</i>	DE21CJKO 001	Auftrags-Nr.: <i>Order No.:</i>	1092552_10	Seite 1 von 64 <i>Page 1 of 64</i>	
Kunden-Referenz-Nr.: <i>Client Reference No.:</i>	—	Auftragsdatum: <i>Order date:</i>	07.07.2021		
Auftraggeber: <i>Client:</i>	Kerlink, 1 rue Jacqueline Auriol, 35235 Thorigne-Fouillard, France				
Prüfgegenstand: <i>Test item:</i>	LoRa Gateway				
Bezeichnung / Typ-Nr.: <i>Identification / Type No.:</i>	Wirnet iZeptocell PDTIOT-IZEE900				
Auftrags-Inhalt: <i>Order content:</i>	Prüfung der elektromagnetischen Verträglichkeit EMV / Test of electromagnetic compatibility EMC				
Prüfgrundlage: <i>Test specification:</i>	Komplettprüfung / Complete test FCC Part 15 Subpart B ICES-003 (Issue 7)				
Wareneingangsdatum: <i>Date of receipt:</i>	27.09.2021	Photos see Appendix to this report (Appendix A to DE21CJKO 001)			
Prüfmuster-Nr.: <i>Test sample No.:</i>	A003136187-007				
Prüfzeitraum: <i>Testing period:</i>	26.10.2021 – 17.11.2021				
Ort der Prüfung: <i>Place of testing:</i>	Nürnberg / Nuremberg				
Prüflaboratorium: <i>Testing laboratory:</i>	EMV Labor / EMC test lab				
Prüfergebnis*: <i>Test result*:</i>	PASS				
geprüft von: <i>tested by:</i>		authorized by: <i>genehmigt von:</i>			
Datum: <i>Date:</i>	17.11.2021	Ausstelldatum: <i>Issue date:</i>	17.11.2021 Patrick Reusch		
Stellung / Position	Sachverständige(r)/Expert	Stellung / Position	Head of Laboratory		
Sonstiges / Other:	—				
Zustand des Prüfgegenstandes bei Anlieferung: <i>Condition of the test item at delivery:</i>	Prüfmuster vollständig und unbeschädigt <i>Test item complete and undamaged</i>				
* Legende:	1 = sehr gut	2 = gut	3 = befriedigend	4 = ausreichend	5 = mangelhaft
Legend:	1 = very good	2 = good	3 = satisfactory	4 = sufficient	5 = poor
	P(ass) = entspricht o.g. Prüfgrundlage(n)	F(ail) = entspricht nicht o.g. Prüfgrundlage(n)	N/A = nicht anwendbar	N/T = nicht getestet	
	P(ass) = passed a.m. test specification(s)	F(ail) = failed a.m. test specification(s)	N/A = not applicable	N/T = not tested	
Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens. <i>This test report only relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.</i>					

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Anmerkungen
Remarks

1	<p>Alle eingesetzten Prüfmittel waren zum angegebenen Prüfzeitraum gemäß eines festgelegten Kalibrierungsprogramms unseres Prüfhauses kalibriert. Sie entsprechen den in den Prüfprogrammen hinterlegten Anforderungen. Die Rückverfolgbarkeit der eingesetzten Prüfmittel ist durch die Einhaltung der Regelungen unseres Managementsystems gegeben.</p> <p>Detaillierte Informationen bezüglich Prüfkonditionen, Prüfequipment und Messunsicherheiten sind im Prüflabor vorhanden und können auf Wunsch bereitgestellt werden.</p> <p><i>The equipment used during the specified testing period was calibrated according to our test laboratory calibration program. The equipment fulfils the requirements included in the relevant standards. The traceability of the test equipment used is ensured by compliance with the regulations of our management system.</i></p> <p><i>Detailed information regarding test conditions, equipment and measurement uncertainty is available in the test laboratory and could be provided on request.</i></p>
2	<p>Wie vertraglich vereinbart, wurde dieses Dokument nur digital unterzeichnet. Der TÜV Rheinland hat nicht überprüft, welche rechtlichen oder sonstigen diesbezüglichen Anforderungen für dieses Dokument gelten. Diese Überprüfung liegt in der Verantwortung des Benutzers dieses Dokuments. Auf Verlangen des Kunden kann der TÜV Rheinland die Gültigkeit der digitalen Signatur durch ein gesondertes Dokument bestätigen. Diese Anfrage ist an unseren Vertrieb zu richten. Eine Umweltgebühr für einen solchen zusätzlichen Service wird erhoben.</p> <p><i>As contractually agreed, this document has been signed digitally only. TUV Rheinland has not verified and unable to verify which legal or other pertaining requirements are applicable for this document. Such verification is within the responsibility of the user of this document. Upon request by its client, TUV Rheinland can confirm the validity of the digital signature by a separate document. Such request shall be addressed to our Sales department. An environmental fee for such additional service will be charged.</i></p>
3	<p>Prüfklausel mit der Note * wurden an qualifizierte Unterauftragnehmer vergeben und sind unter der jeweiligen Prüfklausel des Berichts beschrieben. Abweichungen von Prüfspezifikation(en) oder Kundenanforderungen sind in der jeweiligen Prüfklausel im Bericht aufgeführt.</p> <p><i>Test clauses with remark of * are subcontracted to qualified subcontractors and described under the respective test clause in the report.</i></p> <p><i>Deviations of testing specification(s) or customer requirements are listed in specific test clause in the report.</i></p>
4	<p>Die Messunsicherheit der in diesem Prüfbericht aufgeführten Messverfahren wird nicht in die Einhaltung der jeweiligen Grenzwerte / Betriebsbedingungen mit einbezogen. Für Emissionsprüfungen gelten die Anforderungen CISPR 16-4-2:2011-06 in aktueller Form.</p> <p><i>The measurement uncertainty of the measurement procedures listed in this test report does not include the compliance of the respective limit values / operating conditions. For emission tests the requirements, CISPR 16-4-2:2011-06 apply in their current form.</i></p>

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- 5** Sofern mit dem Kunden keine abweichende Regelung getroffen wurde, wird eine Konformitätsbewertung grundsätzlich auf Basis der angewendeten Normen durchgeführt.
Auf Kundenwunsch wird die Aussage zur Konformität des in diesem Prüfbericht geprüften Produktes nach den Kriterien/Anforderungen der angewendeten Normen durchgeführt.
Davon abweichende Bewertungsbedingungen werden in den jeweiligen Kapiteln gesondert dokumentiert.
- Unless otherwise agreed with the customer, a conformity assessment is always carried out based on the applied standards.*
At the customer's request, the statement on the conformity of the product tested in this test report is carried out according to the criteria/requirements of the applied standards.
Evaluation conditions deviating from these are documented separately in the respective chapters.

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Produktbeschreibung
Product description

6	Baugleiche Modelle <i>Identical types</i>	—
7	Beschreibung <i>Description</i>	The Wirnet iZeptocell gateway is part of the global Long-Range Radio fixed network to provide M2M connectivity link between low power end-point and Internet Access
8	Seriennummer <i>Serial number</i>	—
9	Hersteller <i>Manufacturer</i>	identisch mit Auftraggeber / same as applicant
10	Bemessungsspannung <i>Rated voltage</i>	DUT Input: 5 V Power Supply Input: 100-240 V
11	Bemessungsfrequenz <i>Rated frequency</i>	DUT: DC Power Supply: 50/60 Hz
12	Bemessungsstrom <i>Rated current</i>	—
13	Bemessungsleistung <i>Rated power consumption</i>	3.5W
14	Prüflingstyp <i>Equipment type</i>	Sonstiges/Other
15	Geräteklasse <i>Equipment category</i>	Class B
16	Anzahl der Phasen <i>Number of phases</i>	1
17	Schutzklasse <i>Protection class</i>	II - Schutzisolierung/Double insulated
18	Hardwareversion <i>Hardware version</i>	V4B
19	Softwareversion <i>Software version</i>	KEROS 5.2-beta1-20210913040327
20	Abmessungen <i>Dimensions</i>	76.0 x 68.5 x 31.8 mm
21	Gewicht <i>Weight</i>	70g

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Produktbeschreibung
Product description

22	Sonstiges <i>Other</i>	Nach technischer Prüfung wurde die geprüfte Konfiguration als ausreichend repräsentativ für die Beurteilung angesehen. Bei den nachfolgend gelisteten Geräten kann davon ausgegangen werden, dass sie sich das Prüfergebnis nicht wesentlich von den tatsächlich geprüften Werten unterscheiden wird. / <i>After technical examination, the tested device was regarded as sufficiently representative for the assessment. For the devices listed below, it can be assumed that the test result will not differ significantly from the values actually tested.</i>
23	Prüfmusterbereitstellung <i>Test sample obtaining</i>	<input checked="" type="checkbox"/> Sending by customer <input type="checkbox"/> Sampling by TÜV Rheinland Group <input type="checkbox"/> others:

Bilder / Pictures

Photos see Appendix to this report (Appendix A to DE21CJKO 001)

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24	Funkstörspannung <i>Conducted voltage emissions</i> 47 CFR FCC Part 15 Subpart B Section 15.107	<i>Details in protocol number:</i> 1271 <i>Operating mode:</i> Ein / On <i>EUT:</i> Wirnet iZeptocell PDTIOT-IZEE900 (A003136187-007) <i>Terminals:</i> Netzleitung / Supply line Remarks: —	P <input checked="" type="checkbox"/> F <input type="checkbox"/> N/A <input type="checkbox"/> N/T <input type="checkbox"/>
25	Funkstörspannung <i>Conducted voltage emissions</i> ICES-003:2020 (Issue 7)	<i>Details in protocol number:</i> 1284 <i>Operating mode:</i> Ein / On 240V/50Hz <i>EUT:</i> Wirnet iZeptocell PDTIOT-IZEE900 (A003136187-007) <i>Terminals:</i> Netzleitung / Supply line Remarks: —	P <input checked="" type="checkbox"/> F <input type="checkbox"/> N/A <input type="checkbox"/> N/T <input type="checkbox"/>
26	Funkstörspannung <i>Conducted voltage emissions</i> 47 CFR FCC Part 15 Subpart B Section 15.107	<i>Details in protocol number:</i> 1285 <i>Operating mode:</i> Ein / On 240V/50Hz <i>EUT:</i> Wirnet iZeptocell PDTIOT-IZEE900 (A003136187-007) <i>Terminals:</i> Netzleitung / Supply line Remarks: —	P <input checked="" type="checkbox"/> F <input type="checkbox"/> N/A <input type="checkbox"/> N/T <input type="checkbox"/>

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27	Funkstörspannung <i>Conducted voltage emissions</i> ICES-003:2020 (Issue 7)	<i>Details in protocol number:</i> 1286 <i>Operating mode:</i> Ein / On 240V/50Hz <i>EUT:</i> Wirnet iZeptocell PDTIOT-IZEE900 (A003136187-007) <i>Terminals:</i> Netzleitung / Supply line <i>Remarks:</i> —	P <input checked="" type="checkbox"/> F <input type="checkbox"/> N/A <input type="checkbox"/> N/T <input type="checkbox"/>
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Limits

47 CFR FCC Part 15 Subpart B section §15.107

Except for Class A digital devices, for equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table, as measured using a 50 μ H/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the band edges.

Frequency [MHz]	Quasi-peak [dB(μ V)]	Average [dB(μ V)]
0.15 – 0.5	66 to 56*	56 to 46*
0.5 – 5	56	46
5 – 30	60	50

*Decreases linearly with the logarithm of the frequency.

For a Class A digital device that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table, as measured using a 50 μ H/50 ohms LISN. Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequency ranges.

Frequency [MHz]	Quasi-peak [dB(μ V)]	Average [dB(μ V)]
0.15 – 0.5	79	66
0.5 – 30	73	60

ICES-003 section 3.2.1

Frequency [MHz]	Class A Quasi-peak [dB μ V]	Class A Average [dB μ V]	Class B Quasi-peak [dB μ V]	Class B Average [dB μ V]
0.15 – 0.5	79	66	66 to 56*	56 to 46*
0.5 – 5	73	60	56	46
5 – 30	73	60	60	50

*Decreases linearly with the logarithm of the frequency.

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<p>Method of measurement of conducted emission</p> <p>Floor-standing equipment was placed on a non-conducting support (up to 15 cm) over the reference ground plane. Tabletop equipment was placed on a table at a height of 0.8 m above the reference ground plane. All equipment was minimum 0.4 m away from the conducting walls of a shielded room. The Artificial Mains Network (AMN) was placed 0.8 m away from the boundary of the unit under test and bonded to the ground reference plane. All other units of the EUT and associated equipment were at least 0.8 m from the AMN. Supporting units were connected to other AMN if necessary. A pre-scan was made with peak and average-detector on all mains lines at the output of the AMN. The whole required frequency range was investigated for maximum conducted interferences. After data reduction, a final measurement of the highest emissions was made with quasi-peak and average detector with a measurement time of at least 1 s per single frequency.</p>			
<p>28</p>	<p>Funkstörfeldstärke <i>Radiated disturbance</i> 47 CFR FCC Part 15 Section 15.109</p>	<p><i>Details in protocol number:</i> 1282</p> <p><i>Operating mode:</i> Ein / On</p> <p><i>EUT:</i> Wirnet iZeptocell PDTIOT-IZEE900 (A003136187-007)</p> <p><i>Terminals:</i> Gehäuse / Enclosure</p> <p><i>Remarks:</i></p>	<p>P <input checked="" type="checkbox"/></p> <p>F <input type="checkbox"/></p> <p>N/A <input type="checkbox"/></p> <p>N/T <input type="checkbox"/></p>
<p>29</p>	<p>Funkstörfeldstärke <i>Radiated disturbance</i> ICES-003:2020 (Issue 7)</p>	<p><i>Details in protocol number:</i> 1277</p> <p><i>Operating mode:</i> Ein / On</p> <p><i>EUT:</i> Wirnet iZeptocell PDTIOT-IZEE900 (A003136187-007)</p> <p><i>Terminals:</i> Gehäuse / Enclosure</p> <p><i>Remarks:</i></p>	<p>P <input checked="" type="checkbox"/></p> <p>F <input type="checkbox"/></p> <p>N/A <input type="checkbox"/></p> <p>N/T <input type="checkbox"/></p>

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30	<p>Funkstörfeldstärke (> 1 GHz) Radiated disturbance (> 1 GHz) 47 CFR FCC Part 15 Section 15.109</p>	<p>Details in protocol number: 1283</p> <p>Operating mode: Ein / On</p> <p>EUT: Wirnet iZeptocell PDTIOT-IZEE900 (A003136187-007)</p> <p>Terminals: Gehäuse / Enclosure</p> <p>Remarks:</p>	<p>P <input checked="" type="checkbox"/></p> <p>F <input type="checkbox"/></p> <p>N/A <input type="checkbox"/></p> <p>N/T <input type="checkbox"/></p>										
31	<p>Funkstörfeldstärke (> 1 GHz) Radiated disturbance (> 1 GHz) ICES-003:2020 (Issue 7)</p>	<p>Details in protocol number: 1281</p> <p>Operating mode: Ein / On</p> <p>EUT: Wirnet iZeptocell PDTIOT-IZEE900 (A003136187-007)</p> <p>Terminals: Gehäuse / Enclosure</p> <p>Remarks:</p>	<p>P <input checked="" type="checkbox"/></p> <p>F <input type="checkbox"/></p> <p>N/A <input type="checkbox"/></p> <p>N/T <input type="checkbox"/></p>										
<p>Limits</p> <p>47 CFR FCC Part 15 Subpart B section §15.109 Except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values</p> <table border="1" data-bbox="261 1518 681 1747"> <thead> <tr> <th>Frequency [MHz]</th> <th>Quasi-peak [dB(µV)/m]</th> </tr> </thead> <tbody> <tr> <td>30 – 88</td> <td>40</td> </tr> <tr> <td>88 – 216</td> <td>43.5</td> </tr> <tr> <td>216 – 960</td> <td>46</td> </tr> <tr> <td>Above 960</td> <td>54</td> </tr> </tbody> </table> <p>The field strength of radiated emissions from a Class A digital device, as determined at a distance of 10 meters, shall not exceed the following, using measurement instrumentation employing a CISPR quasi-peak detector.</p>				Frequency [MHz]	Quasi-peak [dB(µV)/m]	30 – 88	40	88 – 216	43.5	216 – 960	46	Above 960	54
Frequency [MHz]	Quasi-peak [dB(µV)/m]												
30 – 88	40												
88 – 216	43.5												
216 – 960	46												
Above 960	54												

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Frequency [MHz]	Quasi-peak [dB(μV)/m]
30 – 88	39.1
88 – 216	43.5
216 – 960	46.4
Above 960	49.5

Note: For frequencies above 1000 MHz, the radiated emission limits are based on the use of measurement instrumentation employing an average detector function. When average radiated emission measurements are specified, there also is a limit on the peak level of the radio frequency emissions which is 20 dB above the maximum permitted average emission limit. (see § 15.35 Measurement detector functions and bandwidths)

As an alternative to the radiated emission limits shown above, digital devices may be shown to comply with the standards contained in Third Edition of the International Special Committee on Radio Interference (CISPR), Pub. 22 (acc. §15.109 (g)).

The field strength of radiated emissions from Class B devices at a distance of 10 meters shall not exceed the following values

Frequency [MHz]	Quasi-peak [dB(μV)/m]
30 – 230	30
230 - 1000	37

The field strength of radiated emissions from Class A devices at a distance of 10 meters shall not exceed the following values

Frequency [MHz]	Quasi-peak [dB(μV)/m]
30 – 230	40
230 - 1000	47

ICES-003 section 3.2.2

Radiated emissions limits (30 MHz to 1 GHz)

Frequency [MHz]	Class A (3 m) Quasi-peak [dB(μV)/m]	Class A (10 m) Quasi-peak [dB(μV)/m]	Class B (3 m) Quasi-peak [dB(μV)/m]	Class B (10 m) Quasi-peak [dB(μV)/m]
30 – 88	50.0	40.0	40.0	30.0
88 – 216	54.0	43.5	43.5	33.1
216 – 230	56.9	46.4	46.0	35.6
230 – 960	57.0	47.0	47.0	37.0
960 – 1000	60.0	49.5	54.0	43.5

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Radiated emission limits at 3 m distance (at and above 1 GHz)

Frequency [GHz]	Class A Average [dB(μV)/m]	Class A Peak [dB(μV)/m]	Class B Average [dB(μV)/m]	Class B Peak [dB(μV)/m]
1 – F _M	60	80	54	74

The highest measurement frequency, F_M, in GHz, shall be determined as

Highest internal frequency (F _x)	Highest measurement frequency (F _M)
F _x ≤ 108 MHz	1 GHz
108 MHz < F _x ≤ 500 MHz	2 GHz
500 MHz < F _x ≤ 1 GHz	5 GHz
F _x > 1 GHz	5 x F _x up to a maximum of 40 GHz

F_x is the highest fundamental frequency generated and/or used in the ITE or digital apparatus under test. These limit levels apply for a measurement distance of 3 m. If using a different measurement distance, the measured levels shall be extrapolated to the 3 m limit distance using a factor of 20 dB per decade of distance. The measurement distance shall place the measurement antenna in the far field of the ITE or digital apparatus under test.

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Method of measurement of radiated emission

Measurements were made in a 10-meter semi-anechoic chamber that complies to ANSI C63.4:2014. Floor-standing equipment was placed on a non-conducting support (0.1 ± 0.01) m over the reference ground plane. Tabletop equipment was placed on a table at a height of (0.8 ± 0.05) m above the reference ground plane. Preliminary measurements were performed with a receiver employing a peak detector at an antenna to EUT distance of 10 m or 3 m (as defined in the standard). The EUT was rotated in 45° steps for frequencies below 1 GHz and 22.5° steps for frequencies over 1GHz about its azimuth to determine the position of the highest emissions. The measurement antenna was adjusted between 1 m and 4 m above ground to find the maximum signal strength. These measurements were done and in both horizontal and vertical polarizations. After this, final measurements with a receiver employing a quasi-peak detector for frequencies below 1 GHz and with a peak and an average detector for frequencies above 1 GHz were performed by rotating the EUT by 360° and adjusting the receive antenna height from 1 m to 4 m. All frequencies were investigated in both horizontal and vertical antenna polarity. For frequencies over 1 GHz floor absorbers were used between antenna and EUT to fulfil the SVSWR requirements.

The whole required frequency range was investigated for maximum radiated interferences. After data reduction, a final measurement of the highest emissions was made with quasi-peak, peak and average detector with a measurement time of at least 1 s per single frequency.

The emission limits are calculated from the field strength limit of this section using this formula:

$$Emission\ level\ \left(\frac{dB\mu V}{m}\right) = 20\ log\ Emission\ level\ \left(\frac{\mu V}{m}\right)$$

When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade as per §15.31(f)(1). For this documentation a distance extrapolation factor was added to the limit that was calculated using this formula:

$$Emission\ limit_{new}\ \left(\frac{dB\mu V}{m}\right) = Emission\ limit_{old} + 20\ log\ \left(\frac{d_1}{d_2}\right)$$

Where

d_1 : old distance (e. g. 3 m)

d_2 : new distance (e. g. 10 m)

The field strength is calculated by adding the antenna factor and cable loss. The basic equation with a sample calculation is as follows:

$$E = U + AF + CA$$

Where

E : Field strength

U : Receiver reading

AF : Antenna factor

CA : Cable loss

For example:

Frequency (MHz)	Receiver reading U (dBμV)	Correction antenna factor AF + cable loss CA (dB)	Field strength E (dBμV/m)
320	15.9	15.8	31.7

ANLAGE zum Prüfbericht-Nr.: DE21CJKO 001
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ZUSATZDOKUMENTATION
ADDITIONAL DOCUMENTATION

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ZUSATZDOKUMENTATION
ADDITIONAL DOCUMENTATION

32 Akkreditierungen und Anerkennungen
Accreditations & Endorsements

US Federal Communications Commission

TUV Rheinland LGA Products GmbH located at, Tillystraße 2, 90431 Nuremberg is recognized by the Bundesnetzagentur (Federal Network Agency for Electricity, Gas, Telecommunications, Post and Railway) as conformity assessment body.

FCC designation number	DE0016
Bundesnetzagentur registration number	BNetzA-CAB-17/21-16

The measurement facilities are also recognized by Innovation, Science and Economic Development (ISED) Canada to test to Canadian radio equipment requirements.

Company Number	11235A
CAB Identifier	DE0018

33 Angewendete Standards
Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- *Title 47 CFR FCC Part 15 Subpart B*
- *ANSI C63.4-2014 (Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9kHz to 40GHz)*
- *ICES-003:2020 (Issue 7) (Information Technology Equipment (Including Digital Apparatus) — Limits and Methods of Measurement)*

The test setup and test was done according to: ANSI C63.4-2014.

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34 Testkonfiguration
Equipment used during test

Prüfgegenstand
Equipment under test

Nr. No.	Produktart Product type	Hersteller Manufacturer	Modell Model	Kommentare Comments
1	LoRa Gateway	identisch mit Auftraggeber / same as applicant	Wirnet iZeptocell PDTIOT-IZEE900	—
2	Power Adapter	—	SMI5-5-V-I38	—
3	USB Cabel	—	—	—

Hilfsmittel / Peripherie
Auxiliary Equipment / Peripherals

Nr. No.	Produktart Product type	Hersteller Manufacturer	Modell Model	Kommentare Comments
1	Ethernet Switch	—	—	—

35 Ein-/Ausgabeanschlüsse
Input/Output ports

Nr. No.	Name	Art* Type*	Kabel- länge Cable length	Kabel geschirmt Cable shielded	Kommentare Comments
1	Enclosure	N/E	—	—	None
2	Main Supply (power adapter)	AC	—	—	None
3	Main Supply (DUT)	DC	200 cm	—	USB
4	RJ45	I/O	—	—	None

* AC = AC Power Port
DC = DC Power Port
N/E = Non-Electrical
I/O = Signal Input or Output Port (Not Involved in Process Control)
TP = Telecommunication Ports

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36 Interne Betriebsfrequenzen
Internal operating frequencies

Nr. <i>No.</i>	Frequenz <i>Frequency</i>	Beschreibung <i>Description</i>
1	f= 902 – 928 MHz	LoRa

For an unintentional radiator, including a digital device, the spectrum shall be investigated from the lowest radio frequency signal generated or used in the device, without going below the lowest frequency for which a radiated emission limit is specified, up to the frequency shown in the following table:

Highest frequency generated or used in the device or on which the device operates or tunes (MHz)	Upper frequency of measurement range (MHz)
Below 1.705.....	30
1.705–108	1000
108–500	2000
500–1000	5000
Above 1000	5th harmonic of the highest frequency or 40 GHz, whichever is lower.

37 Betriebsarten
Operating modes

The EUT has been connected with peripherals pursuant ANSI C63.4 and was operated in a configuration to maximize its emission characteristics in a typical application.

Nr. <i>No.</i>	Beschreibung <i>Description</i>
1	Ein / On (EUT is turned on in receive mode, Ethernet port active, Supply voltage 120V/60Hz)
2	Ein / On 240V/50Hz (EUT is turned on in receive mode, Ethernet port active, Supply voltage 240V/50Hz)

Detaillierte Informationen finden Sie im entsprechenden Protokoll. / *For details see the corresponding protocol*

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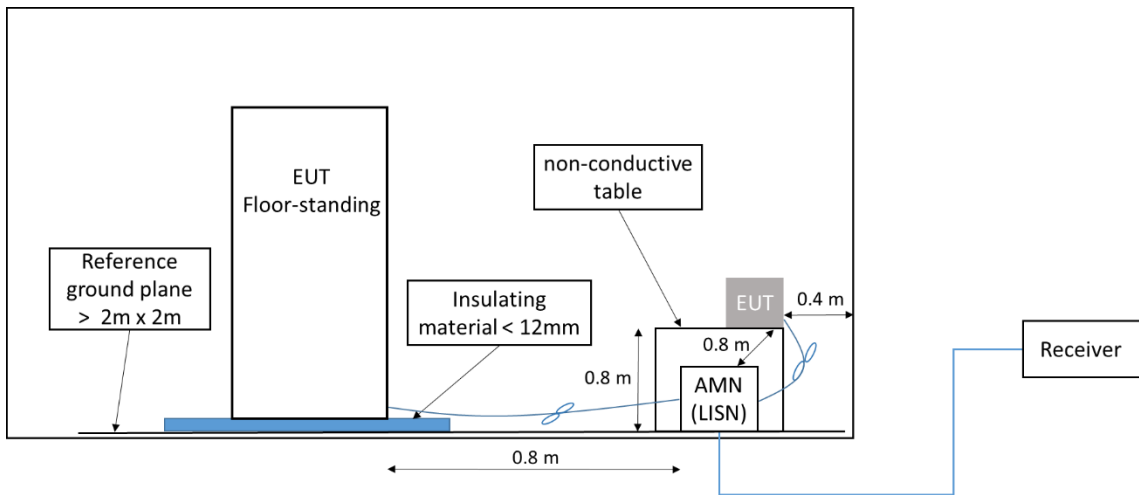
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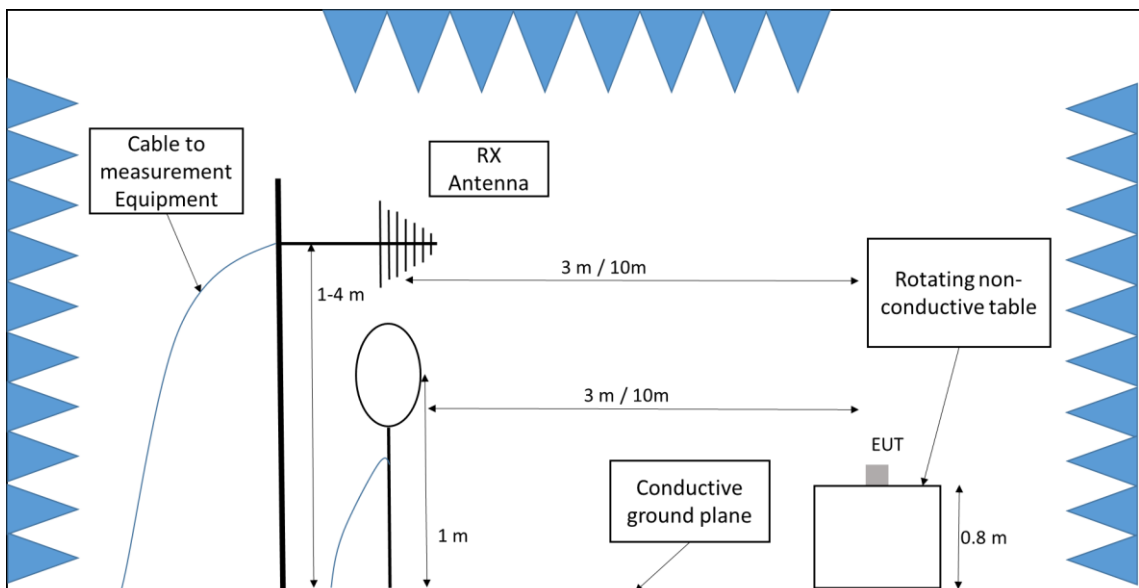
38	Besondere EMV-Massnahmen <i>Special EMC measures</i>
	EMV-Maßnahmen zur Erfüllung der Emissionsanforderungen <i>EMC measures to fulfill emission requirements</i> <ul style="list-style-type: none">- Keine / none EMV-Maßnahmen zur Erfüllung der Störfestigkeitsanforderungen <i>EMC measures to fulfill immunity requirements</i> <ul style="list-style-type: none">- Keine / none Weitere EMV-Maßnahmen <i>Further EMC measures</i> <ul style="list-style-type: none">- Keine / none
39	Prüfaufbau <i>EUT configuration</i>
	<p>Der Prüfaufbau erfolgte entsprechend den Angaben der genannten EMV-Normen.</p> <p>Die Messungen und Tests wurden unter "worst case"-Bedingungen durchgeführt, d.h. es wurden typische Anordnungen und Betriebszustände gewählt bzw. angenommen, die maximale Störaussendung und Störempfindlichkeit vermuten lassen (sogenannte "Ungünstigste Konfiguration").</p> <p>Einzelheiten der Geräteeinstellungen sind u.a. der Fotodokumentation zu entnehmen.</p> <p>Soweit nicht anders angegeben, gelten diese Angaben für alle nachfolgenden Messungen.</p> <p><i>The test setup was made in accordance with mentioned EMC standards.</i></p> <p><i>Measurements and tests were executed under "worst case" conditions. Typical EUT arrangements or operating modes were chosen or assumed which let suspect maximum emission or susceptibility (a so called "unfavourable configuration").</i></p> <p><i>Details of test setup or adjustments are (particularly) shown inside the photo documentation.</i></p> <p><i>Unless otherwise stated, these statements apply to all subsequent tests.</i></p>

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40 Leitungsgebundene Störemissionen
Conducted emission (9kHz – 30 MHz) acc. ANSI C63.4

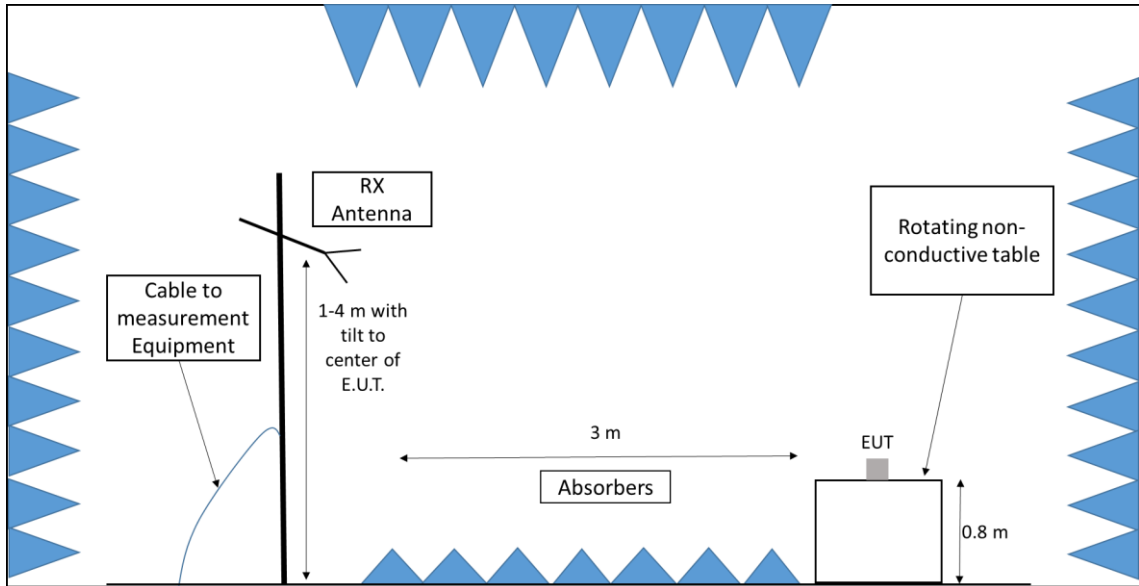


41 Gestrahlte Störaussendungen
Field strength measurement (9 kHz – 30 MHz) with loop antenna
Field strength measurement (30 MHz – 1000 MHz) with log-per antenna acc. ANSI C63.4



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42 Gestrahlte Störaussendungen
 Field strength measurement (>1 GHz) horn antenna acc. ANSI C63.4



43 Klimatische Bedingungen
 Climatic conditions

Umgebungstemperatur <i>Ambient Temperature</i>	15 - 35 °C
Relative Luftfeuchte <i>Relative Humidity</i>	30 - 60 %
Luftdruck <i>Air pressure</i>	860 - 1060 mbar

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44 Aussage zur Messunsicherheit
Statement of the measurement uncertainty

Die in diesem Dokument genannten Daten und Ergebnisse sind wahr und genau. Der Leser wird darauf hingewiesen, dass innerhalb der Kalibrierungsgrenzen der Geräte und Einrichtungen Fehler auftreten können. Die Messunsicherheit wurde für alle Prüfungen in diesem Prüfbericht gemäß CISPR 16-4 "Anforderungen an Geräte und Einrichtungen sowie Festlegung der Verfahren zur Messung der hochfrequenten Störaussendung (Funkstörungen) und Störfestigkeit – Teil 4-2: Unsicherheiten, Statistik und Modelle zur Ableitung von Grenzwerten (Störmodell) – Messgeräte-Unsicherheit" berechnet und ist im Qualitätssicherungssystem gemäß ISO / IEC 17025 dokumentiert. Darüber hinaus können Veränderungen bei den Bauteilen und im Herstellungsprozess zu einer zusätzlichen Abweichung führen.

Der Hersteller ist alleine verantwortlich dafür, dass zukünftige Geräte die einschlägigen Normen und Standards einhalten.

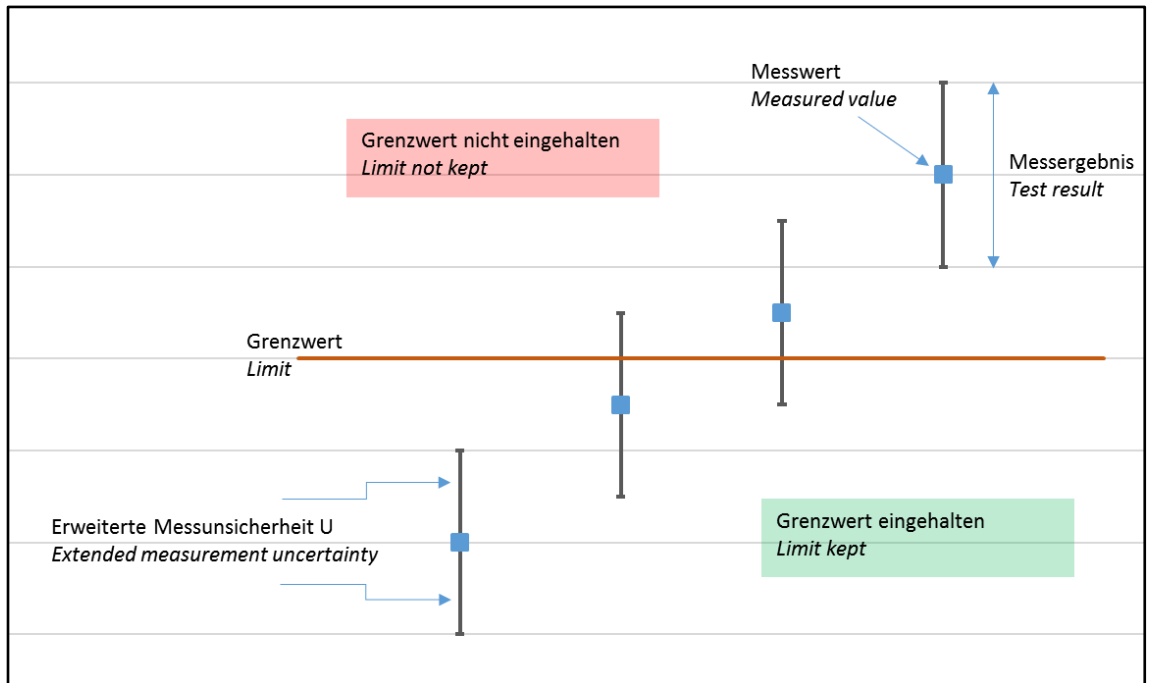
The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. to CISPR 16-4 "Specification for radio disturbance and immunity measuring apparatus and methods – Part 4: Uncertainty in EMC Measurements" and is documented in the quality system acc. to ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation.

The manufacturer has the sole responsibility of continued compliance of the device.

Measurement procedure	U _{Lab}
Measurement of conducted emissions at the power supply connection to LISN in the frequency range 9 kHz – 150 kHz	2.3 dB
Measurement of conducted emissions at the power supply connection to LISN in the frequency range 150 kHz – 30 MHz	2.2 dB
Measurement of conducted emissions at the power supply connection with voltage probes in the frequency range 9 kHz – 30 MHz	2.0 dB
Measurement of the magnetic field strength in the frequency range 9 kHz – 30 MHz in 3 m/10 m distance	1.6 dB
Measurement of the field strength in the frequency range 30 MHz – 1000 MHz in 3 m/10 m distance	4.5 dB
Measurement of the field strength in the frequency range 1 GHz – 6 GHz in 3 m distance	5.0 dB
Measurement of the field strength in the frequency range 6 GHz – 40 GHz in 3 m distance	5.3 dB

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45 Beispiel zur Interpretation von Messergebnissen
Example for interpretation of measuring results



Messwert Measured value	Grenzwert Limit	Erweiterte Messunsicherheit Extended measurement uncertainty (k=2)	Messergebnis Test result
48.9 dBµV @ 16.5 MHz	50 dBµV	2.2 dB	46.7 dBµV – 51.1 dBµV

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Protokollnummer <i>Protocol number</i>	1271
Funktstörspannung <i>Conducted voltage emissions</i>	PASS
Datum des Tests <i>Test date</i>	28.10.2021
Angewendete Norm <i>Applied Standard</i>	FCC Part 15 Subpart B
Prüfmethode <i>Test method</i>	ANSI C63.4-2014
Temperatur (°C) <i>Temperature</i>	14 - 25
Luftfeuchte (% rH) <i>Humidity</i>	30 - 60
Luftdruck (mbar) <i>Air pressure</i>	860 - 1060
Bearbeiter <i>Tested by</i>	A. Bustati
Modellbezeichnung <i>Model</i>	Wirnet iZeptocell PDTIOT-IZEE900
Prüfmuster-Nr. <i>Test sample No.:</i>	A003136187-007
Betriebsart <i>Operating mode</i>	Ein / On
Anschlüsse <i>Tested terminals</i>	Netzleitung / Supply line
Bemerkung <i>Remarks</i>	—
Prüfsoftware <i>Testing software</i>	2021.0.15.1

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Verwendete Prüfmittel
Used test equipment

Typ	Hersteller <i>Manufacturer</i>	Modell	ID	Kalibriert am <i>Last calibration</i>	Kalibriert bis <i>Next calibration</i>
Impulsbegrenzer 10 dB <i>Limitor</i>	Rohde & Schwarz	ESH3-Z2	2732546	11.02.2021	11.02.2023
Netznachbildung <i>LISN</i>	Rohde & Schwarz	ESH2-Z5	2731908	23.06.2021	23.06.2024
Messempfänger <i>Receiver</i>	Rohde & Schwarz	ESU 26	2723865	10.09.2021	10.09.2022
Schirmkabine <i>Shielded room</i>	TDK	SR 2	—	—	—

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Prüfparameter zu Funkstörspannung

#1271

Test parameter of Conducted voltage emissions

Conducted voltage emissions, A003136187-007, Wirnet iZeptocell PDTIOT-IZEE900

Startfrequenz <i>Start Frequency</i>	Stopfrequenz <i>Stop Frequency</i>	Schrittweite <i>Frequency step</i>	Anschluss <i>Terminal</i>	Durchlaufzeit <i>Sweep time</i>	ZF-Bandbreite <i>IF bandwidth</i>
150kHz	30MHz	3kHz	Phase 1	10 ms	9kHz

Startfrequenz <i>Start Frequency</i>	Stopfrequenz <i>Stop Frequency</i>	Schrittweite <i>Frequency step</i>	Anschluss <i>Terminal</i>	Durchlaufzeit <i>Sweep time</i>	ZF-Bandbreite <i>IF bandwidth</i>
150kHz	30MHz	3kHz	Neutral	10 ms	9kHz

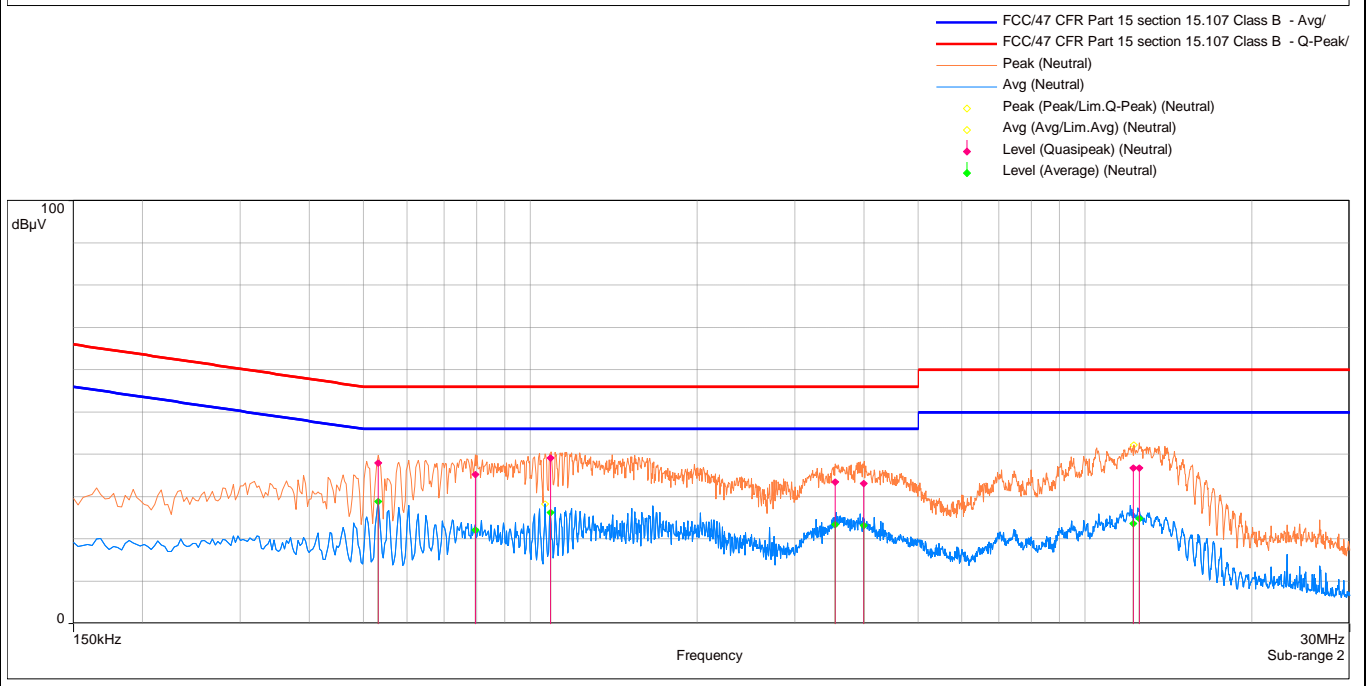
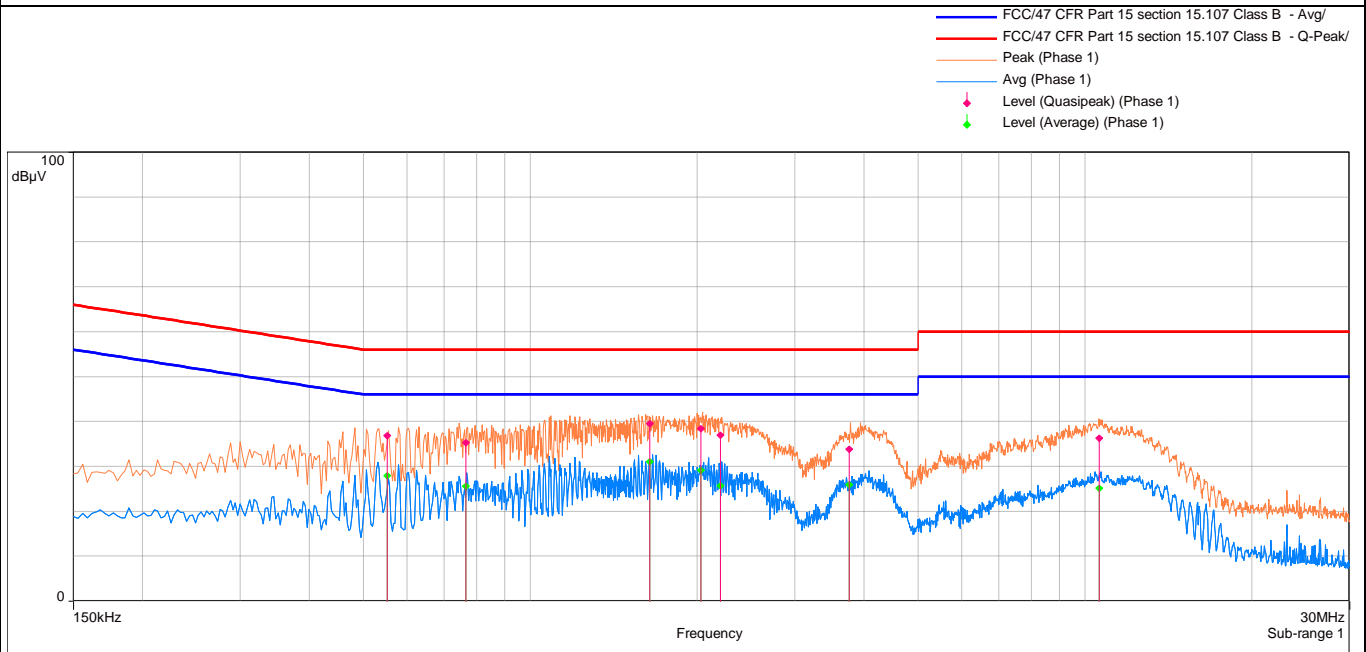
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Messdiagramme zu Funkstörspannung

Graphical presentation of Conducted voltage emissions

Conducted voltage emissions, A003136187-007, Wirnet iZeptocell PDTIOT-IZEE900



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Messdaten zu Funkstörspannung

#1271

Measurement data of Conducted voltage emissions

Conducted voltage emissions, A003136187-007, Wirnet iZeptocell PDTIOT-IZEE900

Average (14)

Frequency (MHz)	SR	Level (dBµV)	Limit (dBµV)	Margin (dB)	Pos	Meas.Time (s)	Comments	Correction (dB)
0.5535	1	27.94	46.00	-18.06	Phase 1	1.00	Pass	10.05
0.76425	1	25.63	46.00	-20.37	Phase 1	1.00	Pass	10.07
1.6395	1	31.13	46.00	-14.87	Phase 1	1.00	Pass	10.15
2.028	1	29.26	46.00	-16.74	Phase 1	1.00	Pass	10.15
2.20275	1	25.71	46.00	-20.29	Phase 1	1.00	Pass	10.15
3.7575	1	26.00	46.00	-20.00	Phase 1	1.00	Pass	10.16
10.60875	1	25.26	50.00	-24.74	Phase 1	1.00	Pass	10.20
0.531	2	28.88	46.00	-17.12	Neutral	1.00	Pass	10.05
0.795	2	22.16	46.00	-23.84	Neutral	1.00	Pass	10.05
1.0845	2	26.32	46.00	-19.68	Neutral	1.00	Pass	10.05
3.54075	2	23.41	46.00	-22.59	Neutral	1.00	Pass	10.16
3.99	2	23.18	46.00	-22.82	Neutral	1.00	Pass	10.16
12.2205	2	23.71	50.00	-26.29	Neutral	1.00	Pass	10.32
12.53325	2	24.87	50.00	-25.13	Neutral	1.00	Pass	10.34

Quasipeak (14)

Frequency (MHz)	SR	Level (dBµV)	Limit (dBµV)	Margin (dB)	Pos	Meas.Time (s)	Comments	Correction (dB)
0.5535	1	36.91	56.00	-19.09	Phase 1	1.00	Pass	10.05
0.76425	1	35.36	56.00	-20.64	Phase 1	1.00	Pass	10.07
1.6395	1	39.54	56.00	-16.46	Phase 1	1.00	Pass	10.15
2.028	1	38.47	56.00	-17.53	Phase 1	1.00	Pass	10.15
2.20275	1	36.97	56.00	-19.03	Phase 1	1.00	Pass	10.15
3.7575	1	33.92	56.00	-22.08	Phase 1	1.00	Pass	10.16
10.60875	1	36.35	60.00	-23.65	Phase 1	1.00	Pass	10.20
0.531	2	37.98	56.00	-18.02	Neutral	1.00	Pass	10.05
0.795	2	35.28	56.00	-20.72	Neutral	1.00	Pass	10.05
1.0845	2	39.18	56.00	-16.82	Neutral	1.00	Pass	10.05
3.54075	2	33.52	56.00	-22.48	Neutral	1.00	Pass	10.16
3.99	2	33.10	56.00	-22.90	Neutral	1.00	Pass	10.16
12.2205	2	36.86	60.00	-23.14	Neutral	1.00	Pass	10.32
12.53325	2	36.80	60.00	-23.20	Neutral	1.00	Pass	10.34

Bemerkungen / Remarks:

Margin value = Measurement value – Limit value

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Protokollnummer <i>Protocol number</i>	1284
Funktstörspannung <i>Conducted voltage emissions</i>	PASS
Datum des Tests <i>Test date</i>	28.10.2021
Angewendete Norm <i>Applied Standard</i>	ICES-003:2020 (Issue 7)
Prüfmethode <i>Test method</i>	ANSI C63.4-2014
Temperatur (°C) <i>Temperature</i>	14 - 25
Luftfeuchte (% rH) <i>Humidity</i>	30 - 60
Luftdruck (mbar) <i>Air pressure</i>	860 - 1060
Bearbeiter <i>Tested by</i>	A. Bustati
Modellbezeichnung <i>Model</i>	Wirnet iZeptocell PDTIOT-IZEE900
Prüfmuster-Nr. <i>Test sample No.:</i>	A003136187-007
Betriebsart <i>Operating mode</i>	Ein / On
Anschlüsse <i>Tested terminals</i>	Netzleitung / Supply line
Bemerkung <i>Remarks</i>	—
Prüfsoftware <i>Testing software</i>	2021.0.15.1

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Verwendete Prüfmittel
Used test equipment

Typ	Hersteller <i>Manufacturer</i>	Modell	ID	Kalibriert am <i>Last calibration</i>	Kalibriert bis <i>Next calibration</i>
Impulsbegrenzer 10 dB <i>Limitor</i>	Rohde & Schwarz	ESH3-Z2	2732546	11.02.2021	11.02.2023
Netznachbildung <i>LISN</i>	Rohde & Schwarz	ESH2-Z5	2731908	23.06.2021	23.06.2024
Messempfänger <i>Receiver</i>	Rohde & Schwarz	ESU 26	2723865	10.09.2021	10.09.2022
Schirmkabine <i>Shielded room</i>	TDK	SR 2	—	—	—

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Prüfparameter zu Funkstörspannung

#1284

Test parameter of Conducted voltage emissions

Conducted voltage emissions, A003136187-007, Wirnet iZeptocell PDTIOT-IZEE900

Startfrequenz <i>Start Frequency</i>	Stopfrequenz <i>Stop Frequency</i>	Schrittweite <i>Frequency step</i>	Anschluss <i>Terminal</i>	Durchlaufzeit <i>Sweep time</i>	ZF-Bandbreite <i>IF bandwidth</i>
150kHz	30MHz	3kHz	Phase 1	10 ms	9kHz

Startfrequenz <i>Start Frequency</i>	Stopfrequenz <i>Stop Frequency</i>	Schrittweite <i>Frequency step</i>	Anschluss <i>Terminal</i>	Durchlaufzeit <i>Sweep time</i>	ZF-Bandbreite <i>IF bandwidth</i>
150kHz	30MHz	3kHz	Neutral	10 ms	9kHz

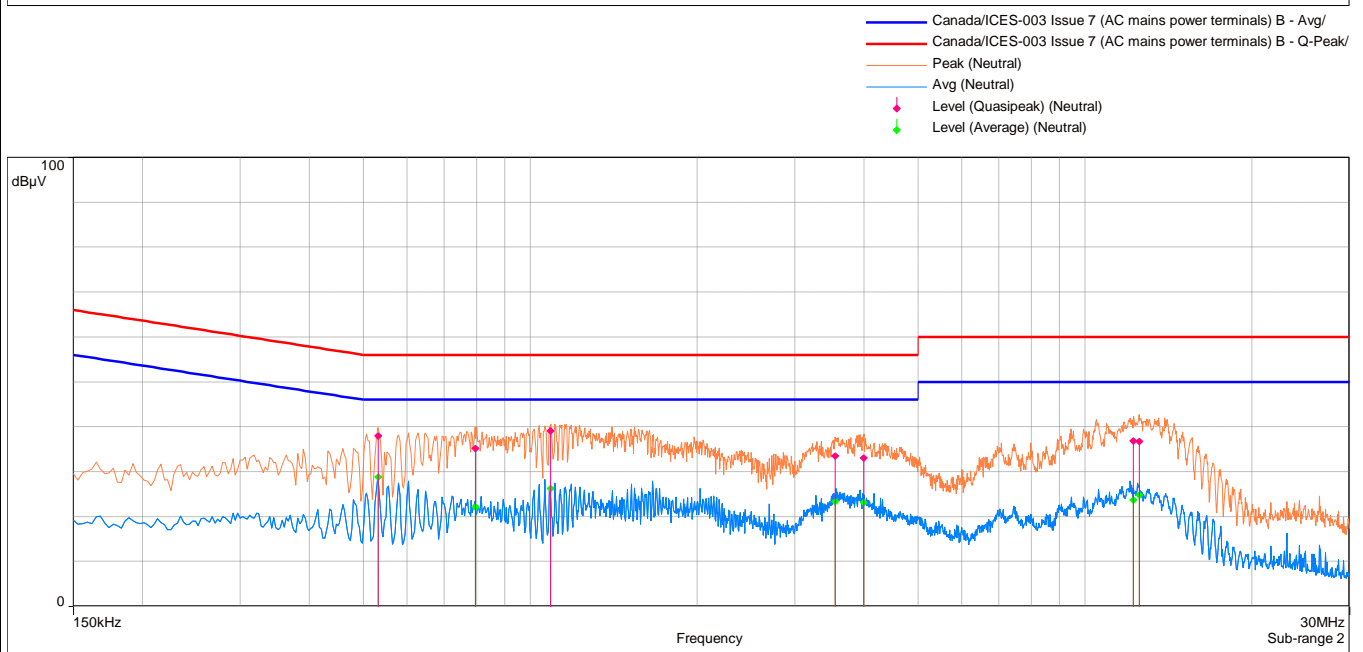
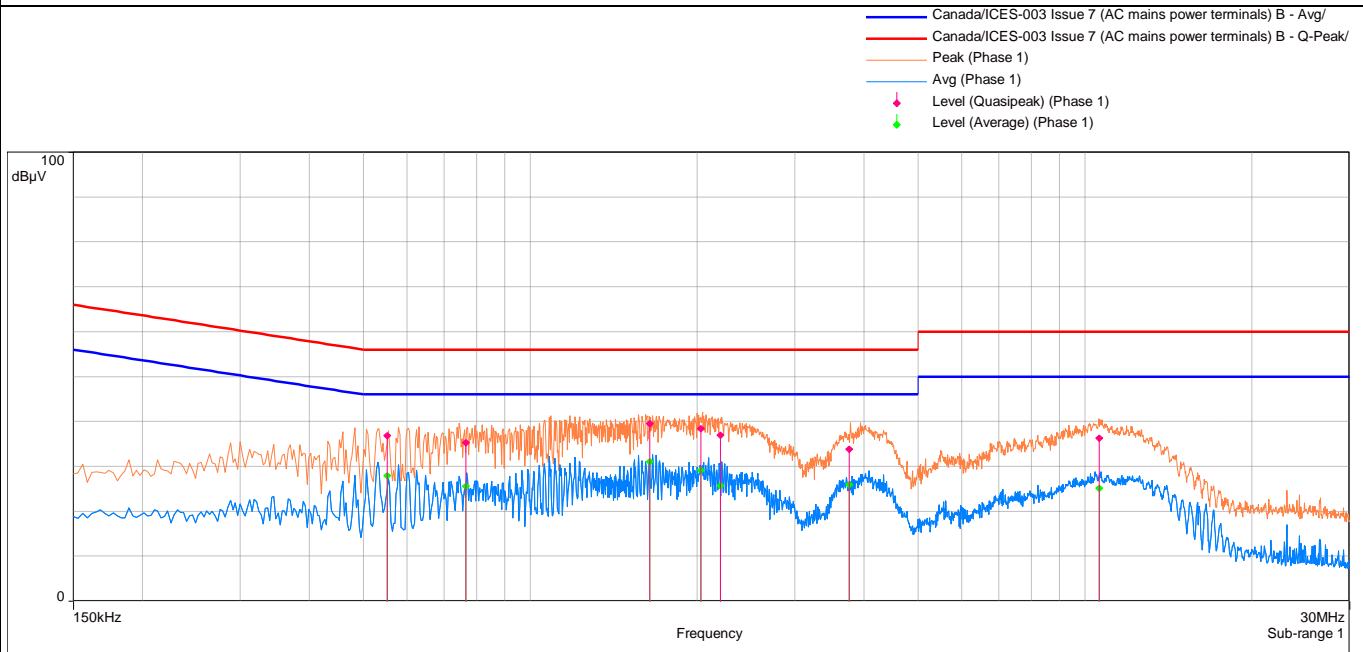
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Messdiagramme zu Funkstörspannung

Graphical presentation of Conducted voltage emissions

Conducted voltage emissions, A003136187-007, Wirnet iZeptocell PDTIOT-IZEE900



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Messdaten zu Funkstörspannung

#1284

Measurement data of Conducted voltage emissions

Conducted voltage emissions, A003136187-007, Wirnet iZeptocell PDTIOT-IZEE900

Average (14)

Frequency (MHz)	SR	Level (dBµV)	Limit (dBµV)	Margin (dB)	Pos	Meas.Time (s)	Comments	Correction (dB)
0.5535	1	27.94	46.00	-18.06	Phase 1	1.00	Pass	10.05
0.76425	1	25.63	46.00	-20.37	Phase 1	1.00	Pass	10.07
1.6395	1	31.13	46.00	-14.87	Phase 1	1.00	Pass	10.15
2.028	1	29.26	46.00	-16.74	Phase 1	1.00	Pass	10.15
2.20275	1	25.71	46.00	-20.29	Phase 1	1.00	Pass	10.15
3.7575	1	26.00	46.00	-20.00	Phase 1	1.00	Pass	10.16
10.60875	1	25.26	50.00	-24.74	Phase 1	1.00	Pass	10.20
0.531	2	28.88	46.00	-17.12	Neutral	1.00	Pass	10.05
0.795	2	22.16	46.00	-23.84	Neutral	1.00	Pass	10.05
1.0845	2	26.32	46.00	-19.68	Neutral	1.00	Pass	10.05
3.54075	2	23.41	46.00	-22.59	Neutral	1.00	Pass	10.16
3.99	2	23.18	46.00	-22.82	Neutral	1.00	Pass	10.16
12.2205	2	23.71	50.00	-26.29	Neutral	1.00	Pass	10.32
12.53325	2	24.87	50.00	-25.13	Neutral	1.00	Pass	10.34

Quasipeak (14)

Frequency (MHz)	SR	Level (dBµV)	Limit (dBµV)	Margin (dB)	Pos	Meas.Time (s)	Comments	Correction (dB)
0.5535	1	36.91	56.00	-19.09	Phase 1	1.00	Pass	10.05
0.76425	1	35.36	56.00	-20.64	Phase 1	1.00	Pass	10.07
1.6395	1	39.54	56.00	-16.46	Phase 1	1.00	Pass	10.15
2.028	1	38.47	56.00	-17.53	Phase 1	1.00	Pass	10.15
2.20275	1	36.97	56.00	-19.03	Phase 1	1.00	Pass	10.15
3.7575	1	33.92	56.00	-22.08	Phase 1	1.00	Pass	10.16
10.60875	1	36.35	60.00	-23.65	Phase 1	1.00	Pass	10.20
0.531	2	37.98	56.00	-18.02	Neutral	1.00	Pass	10.05
0.795	2	35.28	56.00	-20.72	Neutral	1.00	Pass	10.05
1.0845	2	39.18	56.00	-16.82	Neutral	1.00	Pass	10.05
3.54075	2	33.52	56.00	-22.48	Neutral	1.00	Pass	10.16
3.99	2	33.10	56.00	-22.90	Neutral	1.00	Pass	10.16
12.2205	2	36.86	60.00	-23.14	Neutral	1.00	Pass	10.32
12.53325	2	36.80	60.00	-23.20	Neutral	1.00	Pass	10.34

Bemerkungen / Remarks:

Margin value = Measurement value – Limit value

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Protokollnummer <i>Protocol number</i>	1285
Funktstörspannung 240V/50Hz <i>Conducted voltage emissions 240V/50Hz</i>	PASS
Datum des Tests <i>Test date</i>	17.11.2021
Angewendete Norm <i>Applied Standard</i>	FCC Part 15 Subpart B
Prüfmethode <i>Test method</i>	ANSI C63.4-2014
Temperatur (°C) <i>Temperature</i>	14 - 25
Luftfeuchte (% rH) <i>Humidity</i>	30 - 60
Luftdruck (mbar) <i>Air pressure</i>	860 - 1060
Bearbeiter <i>Tested by</i>	A. Bustati
Modellbezeichnung <i>Model</i>	Wirnet iZeptocell PDTIOT-IZEE900
Prüfmuster-Nr. <i>Test sample No.:</i>	A003136187-007
Betriebsart <i>Operating mode</i>	Ein / On 240V/50Hz
Anschlüsse <i>Tested terminals</i>	Netzleitung / Supply line
Bemerkung <i>Remarks</i>	—
Prüfsoftware <i>Testing software</i>	2021.0.15.1

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Verwendete Prüfmittel
 Used test equipment

Typ	Hersteller <i>Manufacturer</i>	Modell	ID	Kalibriert am <i>Last calibration</i>	Kalibriert bis <i>Next calibration</i>
Impulsbegrenzer 10 dB <i>Limitor</i>	Rohde & Schwarz	ESH3-Z2	2732546	11.02.2021	11.02.2023
Netznachbildung <i>LISN</i>	Rohde & Schwarz	ESH2-Z5	2731908	23.06.2021	23.06.2024
Messempfänger <i>Receiver</i>	Rohde & Schwarz	ESU 26	2723865	10.09.2021	10.09.2022
Schirmkabine <i>Shielded room</i>	TDK	SR 2	—	—	—

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Prüfparameter zu Funkstörspannung

#1285

Test parameter of Conducted voltage emissions

Conducted voltage emissions 240V/50Hz, A003136187-007, Wirnet iZeptocell PDTIOT-IZEE900

Startfrequenz <i>Start Frequency</i>	Stopfrequenz <i>Stop Frequency</i>	Schrittweite <i>Frequency step</i>	Anschluss <i>Terminal</i>	Durchlaufzeit <i>Sweep time</i>	ZF-Bandbreite <i>IF bandwidth</i>
150kHz	30MHz	3kHz	Phase 1	10 ms	9kHz

Startfrequenz <i>Start Frequency</i>	Stopfrequenz <i>Stop Frequency</i>	Schrittweite <i>Frequency step</i>	Anschluss <i>Terminal</i>	Durchlaufzeit <i>Sweep time</i>	ZF-Bandbreite <i>IF bandwidth</i>
150kHz	30MHz	3kHz	Neutral	10 ms	9kHz

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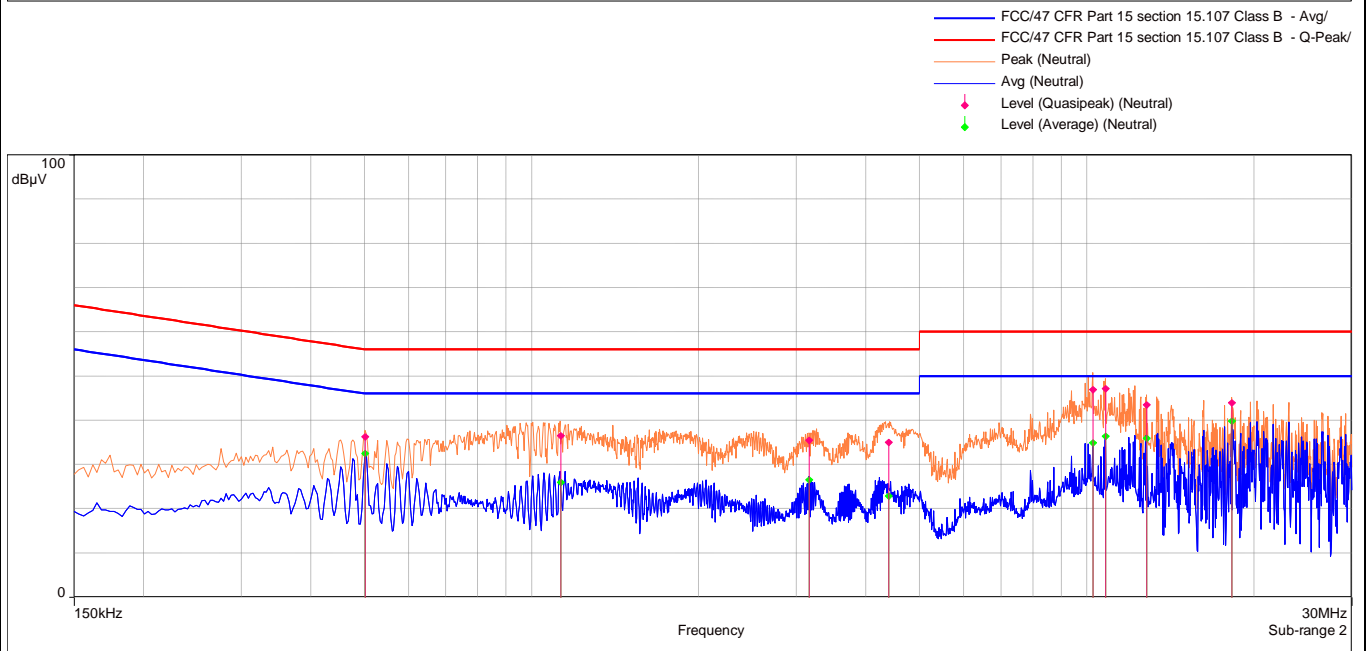
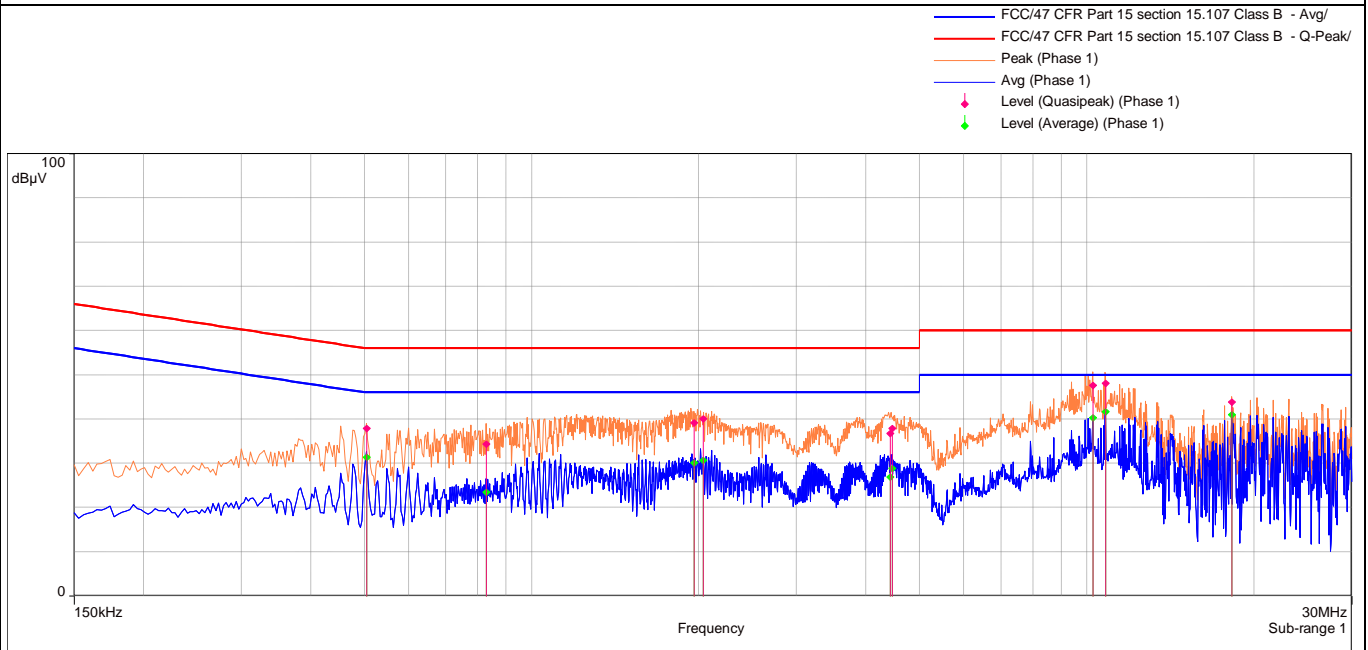
ZUSATZDOKUMENTATION
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Messdiagramme zu Funkstörspannung

#1285

Graphical presentation of Conducted voltage emissions

Conducted voltage emissions 240V/50Hz, A003136187-007, Wirnet iZeptocell PDTIOT-IZEE900



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Messdaten zu Funkstörspannung

#1285

Measurement data of Conducted voltage emissions

Conducted voltage emissions 240V/50Hz, A003136187-007, Wirnet iZeptocell PDTIOT-IZEE900

Average (17)

Frequency (MHz)	SR	Level (dBµV)	Limit (dBµV)	Margin (dB)	Pos	Meas.Time (s)	Correction (dB)
0.504	1	31.45	46.00	-14.55	Phase 1	1.00	10.05
0.828	1	23.45	46.00	-22.55	Phase 1	1.00	10.09
1.9605	1	30.10	46.00	-15.90	Phase 1	1.00	10.15
2.0355	1	30.71	46.00	-15.29	Phase 1	1.00	10.15
4.41975	1	26.89	46.00	-19.11	Phase 1	1.00	10.16
4.458	1	28.88	46.00	-17.12	Phase 1	1.00	10.16
10.242	1	40.37	50.00	-9.63	Phase 1	1.00	10.20
10.794	1	41.76	50.00	-8.24	Phase 1	1.00	10.20
18.243	1	41.05	50.00	-8.95	Phase 1	1.00	10.35
0.501	2	32.59	46.00	-13.41	Neutral	1.00	10.05
1.12725	2	25.98	46.00	-20.02	Neutral	1.00	10.06
3.159	2	26.59	46.00	-19.41	Neutral	1.00	10.15
4.3935	2	22.90	46.00	-23.10	Neutral	1.00	10.16
10.24275	2	34.96	50.00	-15.04	Neutral	1.00	10.30
10.794	2	36.38	50.00	-13.62	Neutral	1.00	10.30
12.80775	2	36.00	50.00	-14.00	Neutral	1.00	10.36
18.243	2	39.88	50.00	-10.12	Neutral	1.00	10.45

Quasipeak (17)

Frequency (MHz)	SR	Level (dBµV)	Limit (dBµV)	Margin (dB)	Pos	Meas.Time (s)	Correction (dB)
0.504	1	37.89	56.00	-18.11	Phase 1	1.00	10.05
0.828	1	34.32	56.00	-21.68	Phase 1	1.00	10.09
1.9605	1	39.15	56.00	-16.85	Phase 1	1.00	10.15
2.0355	1	40.09	56.00	-15.91	Phase 1	1.00	10.15
4.41975	1	36.83	56.00	-19.17	Phase 1	1.00	10.16
4.458	1	37.91	56.00	-18.09	Phase 1	1.00	10.16
10.242	1	47.71	60.00	-12.29	Phase 1	1.00	10.20
10.794	1	48.16	60.00	-11.84	Phase 1	1.00	10.20
18.243	1	43.91	60.00	-16.09	Phase 1	1.00	10.35
0.501	2	36.34	56.00	-19.66	Neutral	1.00	10.05
1.12725	2	36.53	56.00	-19.47	Neutral	1.00	10.06
3.159	2	35.48	56.00	-20.52	Neutral	1.00	10.15
4.3935	2	35.07	56.00	-20.93	Neutral	1.00	10.16
10.24275	2	46.95	60.00	-13.05	Neutral	1.00	10.30
10.794	2	47.15	60.00	-12.85	Neutral	1.00	10.30
12.80775	2	43.54	60.00	-16.46	Neutral	1.00	10.36
18.243	2	43.99	60.00	-16.01	Neutral	1.00	10.45

Bemerkungen / Remarks:

Margin value = Measurement value – Limit value

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Protokollnummer <i>Protocol number</i>	1286
Funktstörspannung 240V/50Hz <i>Conducted voltage emissions 240V/50Hz</i>	PASS
Datum des Tests <i>Test date</i>	17.11.2021
Angewendete Norm <i>Applied Standard</i>	ICES-003:2020 (Issue 7)
Prüfmethode <i>Test method</i>	ANSI C63.4-2014
Temperatur (°C) <i>Temperature</i>	14 - 25
Luftfeuchte (% rH) <i>Humidity</i>	30 - 60
Luftdruck (mbar) <i>Air pressure</i>	860 - 1060
Bearbeiter <i>Tested by</i>	A. Bustati
Modellbezeichnung <i>Model</i>	Wirnet iZeptocell PDTIOT-IZEE900
Prüfmuster-Nr. <i>Test sample No.:</i>	A003136187-007
Betriebsart <i>Operating mode</i>	Ein / On 240V/50Hz
Anschlüsse <i>Tested terminals</i>	Netzleitung / Supply line
Bemerkung <i>Remarks</i>	—
Prüfsoftware <i>Testing software</i>	2021.0.15.1

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Verwendete Prüfmittel
Used test equipment

Typ	Hersteller <i>Manufacturer</i>	Modell	ID	Kalibriert am <i>Last calibration</i>	Kalibriert bis <i>Next calibration</i>
Impulsbegrenzer 10 dB <i>Limitor</i>	Rohde & Schwarz	ESH3-Z2	2732546	11.02.2021	11.02.2023
Netznachbildung <i>LISN</i>	Rohde & Schwarz	ESH2-Z5	2731908	23.06.2021	23.06.2024
Messempfänger <i>Receiver</i>	Rohde & Schwarz	ESU 26	2723865	10.09.2021	10.09.2022
Schirmkabine <i>Shielded room</i>	TDK	SR 2	—	—	—

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Prüfparameter zu Funkstörspannung

#1286

Test parameter of Conducted voltage emissions

Conducted voltage emissions 240V/50Hz, A003136187-007, Wirnet iZeptocell PDTIOT-IZEE900

Startfrequenz <i>Start Frequency</i>	Stopfrequenz <i>Stop Frequency</i>	Schrittweite <i>Frequency step</i>	Anschluss <i>Terminal</i>	Durchlaufzeit <i>Sweep time</i>	ZF-Bandbreite <i>IF bandwidth</i>
150kHz	30MHz	3kHz	Phase 1	10 ms	9kHz

Startfrequenz <i>Start Frequency</i>	Stopfrequenz <i>Stop Frequency</i>	Schrittweite <i>Frequency step</i>	Anschluss <i>Terminal</i>	Durchlaufzeit <i>Sweep time</i>	ZF-Bandbreite <i>IF bandwidth</i>
150kHz	30MHz	3kHz	Neutral	10 ms	9kHz

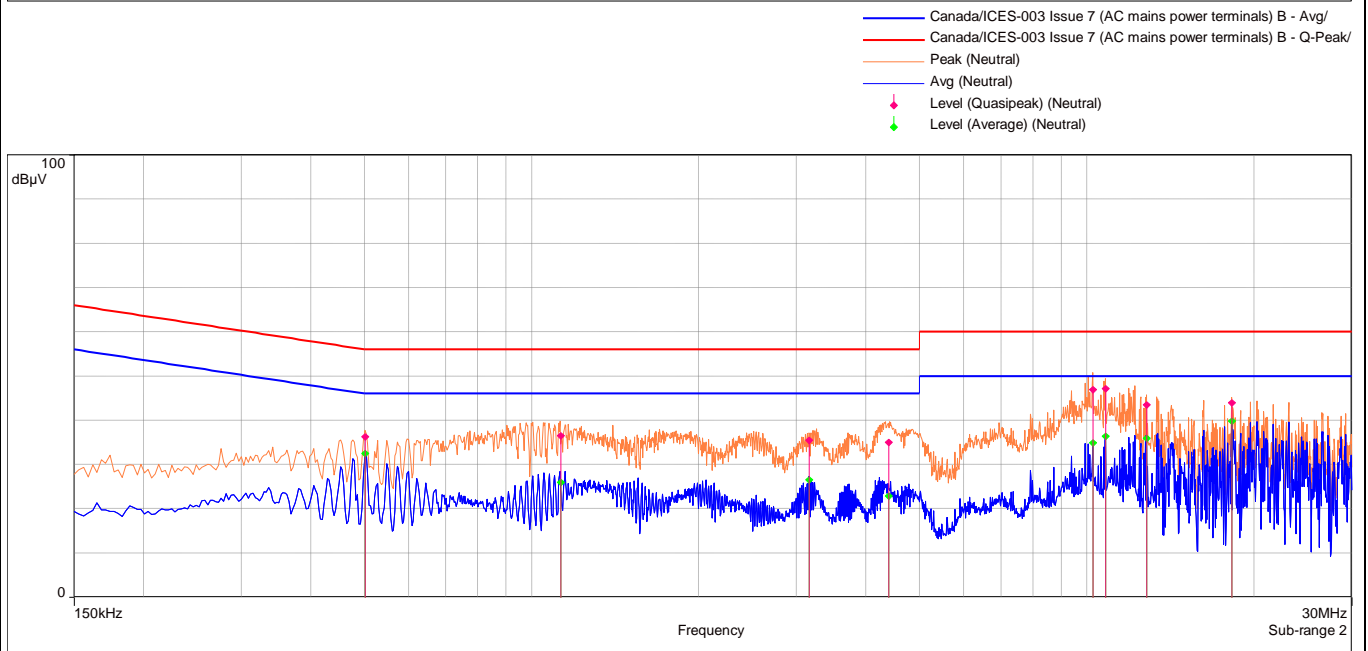
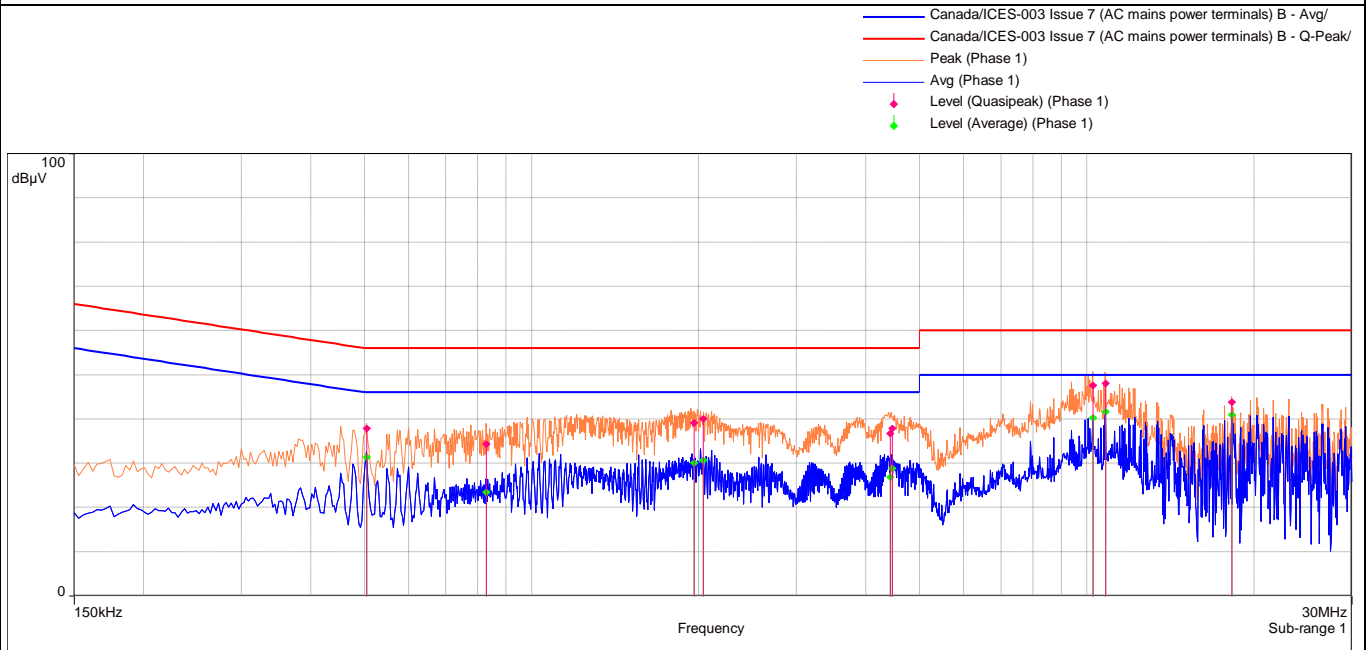
ZUSATZDOKUMENTATION
ADDITIONAL DOCUMENTATION

#1286

Messdiagramme zu Funkstörspannung

Graphical presentation of Conducted voltage emissions

Conducted voltage emissions 240V/50Hz, A003136187-007, Wirnet iZeptocell PDTIOT-IZEE900



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Messdaten zu Funkstörspannung

#1286

Measurement data of Conducted voltage emissions

Conducted voltage emissions 240V/50Hz, A003136187-007, Wirnet iZeptocell PDTIOT-IZEE900

Average (17)

Frequency (MHz)	SR	Level (dBµV)	Limit (dBµV)	Margin (dB)	Pos	Meas.Time (s)	Correction (dB)
0.504	1	31.45	46.00	-14.55	Phase 1	1.00	10.05
0.828	1	23.45	46.00	-22.55	Phase 1	1.00	10.09
1.9605	1	30.10	46.00	-15.90	Phase 1	1.00	10.15
2.0355	1	30.71	46.00	-15.29	Phase 1	1.00	10.15
4.41975	1	26.89	46.00	-19.11	Phase 1	1.00	10.16
4.458	1	28.88	46.00	-17.12	Phase 1	1.00	10.16
10.242	1	40.37	50.00	-9.63	Phase 1	1.00	10.20
10.794	1	41.76	50.00	-8.24	Phase 1	1.00	10.20
18.243	1	41.05	50.00	-8.95	Phase 1	1.00	10.35
0.501	2	32.59	46.00	-13.41	Neutral	1.00	10.05
1.12725	2	25.98	46.00	-20.02	Neutral	1.00	10.06
3.159	2	26.59	46.00	-19.41	Neutral	1.00	10.15
4.3935	2	22.90	46.00	-23.10	Neutral	1.00	10.16
10.24275	2	34.96	50.00	-15.04	Neutral	1.00	10.30
10.794	2	36.38	50.00	-13.62	Neutral	1.00	10.30
12.80775	2	36.00	50.00	-14.00	Neutral	1.00	10.36
18.243	2	39.88	50.00	-10.12	Neutral	1.00	10.45

Quasipeak (17)

Frequency (MHz)	SR	Level (dBµV)	Limit (dBµV)	Margin (dB)	Pos	Meas.Time (s)	Correction (dB)
0.504	1	37.89	56.00	-18.11	Phase 1	1.00	10.05
0.828	1	34.32	56.00	-21.68	Phase 1	1.00	10.09
1.9605	1	39.15	56.00	-16.85	Phase 1	1.00	10.15
2.0355	1	40.09	56.00	-15.91	Phase 1	1.00	10.15
4.41975	1	36.83	56.00	-19.17	Phase 1	1.00	10.16
4.458	1	37.91	56.00	-18.09	Phase 1	1.00	10.16
10.242	1	47.71	60.00	-12.29	Phase 1	1.00	10.20
10.794	1	48.16	60.00	-11.84	Phase 1	1.00	10.20
18.243	1	43.91	60.00	-16.09	Phase 1	1.00	10.35
0.501	2	36.34	56.00	-19.66	Neutral	1.00	10.05
1.12725	2	36.53	56.00	-19.47	Neutral	1.00	10.06
3.159	2	35.48	56.00	-20.52	Neutral	1.00	10.15
4.3935	2	35.07	56.00	-20.93	Neutral	1.00	10.16
10.24275	2	46.95	60.00	-13.05	Neutral	1.00	10.30
10.794	2	47.15	60.00	-12.85	Neutral	1.00	10.30
12.80775	2	43.54	60.00	-16.46	Neutral	1.00	10.36
18.243	2	43.99	60.00	-16.01	Neutral	1.00	10.45

Bemerkungen / Remarks:

Margin value = Measurement value – Limit value

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Protokollnummer <i>Protocol number</i>	1282
Funktörfeldstärke <i>Radiated disturbance</i>	PASS
Datum des Tests <i>Test date</i>	26.10.2021
Angewendete Norm <i>Applied Standard</i>	47 CFR FCC Part 15 Section 15.109
Prüfmethode <i>Test method</i>	ANSI C63.4-2014
Temperatur (°C) <i>Temperature</i>	15 - 35
Luftfeuchte (% rH) <i>Humidity</i>	30 - 60
Luftdruck (mbar) <i>Air pressure</i>	860 - 1060
Bearbeiter <i>Tested by</i>	A. Bustati
Modellbezeichnung <i>Model</i>	Wirnet iZeptocell PDTIOT-IZEE900
Prüfmuster-Nr. <i>Test sample No.:</i>	A003136187-007
Betriebsart <i>Operating mode</i>	Ein / On
Anschlüsse <i>Tested terminals</i>	Gehäuse / Enclosure
Bemerkung <i>Remarks</i>	—
Prüfsoftware <i>Testing software</i>	2021.0.15.1

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Verwendete Prüfmittel
Used test equipment

Typ	Hersteller <i>Manufacturer</i>	Modell	ID	Kalibriert am <i>Last calibration</i>	Kalibriert bis <i>Next calibration</i>
Absorberhalle <i>Anechoic chamber</i>	TDK	SAC 10 (NSA 30-1000MHz)	2728861	03.04.2020	03.04.2023
Messantenne <i>Antenna</i>	Schwarzbeck	VULB 9168	2728915	07.11.2019	07.11.2022
Messempfänger <i>Receiver</i>	Rohde & Schwarz	ESU 26	2728898	17.08.2021	17.08.2022

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Prüfparameter zu Funkstörfeldstärke

#1282

Test parameter of Radiated disturbance

Radiated disturbance, A003136187-007, Wirnet iZeptocell PDTIOT-IZEE900

Startfrequenz <i>Start Frequency</i>	Stopfrequenz <i>Stop Frequency</i>	Schrittweite <i>Frequency step</i>	Anschluss <i>Terminal</i>	Durchlaufzeit <i>Sweep time</i>	ZF-Bandbreite <i>IF bandwidth</i>
30MHz	1GHz	30kHz	Horizontal	20 ms	120kHz

Startfrequenz <i>Start Frequency</i>	Stopfrequenz <i>Stop Frequency</i>	Schrittweite <i>Frequency step</i>	Anschluss <i>Terminal</i>	Durchlaufzeit <i>Sweep time</i>	ZF-Bandbreite <i>IF bandwidth</i>
30MHz	1GHz	30kHz	Vertical	20 ms	120kHz

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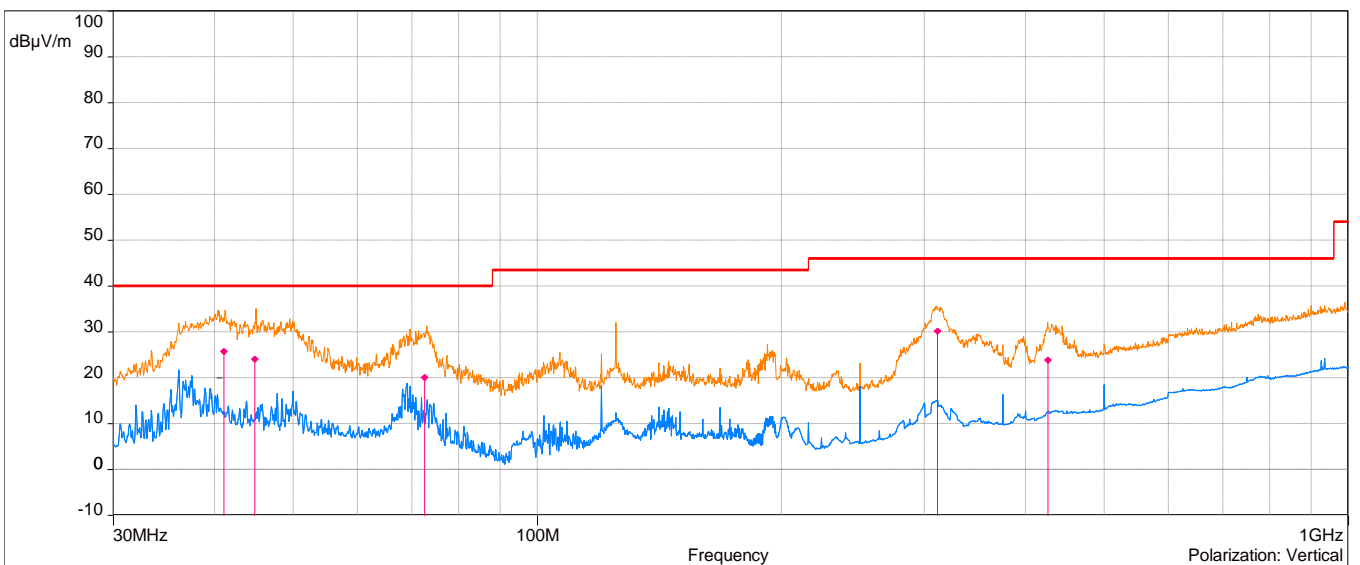
Messdiagramme zu Funkstörfeldstärke

#1282

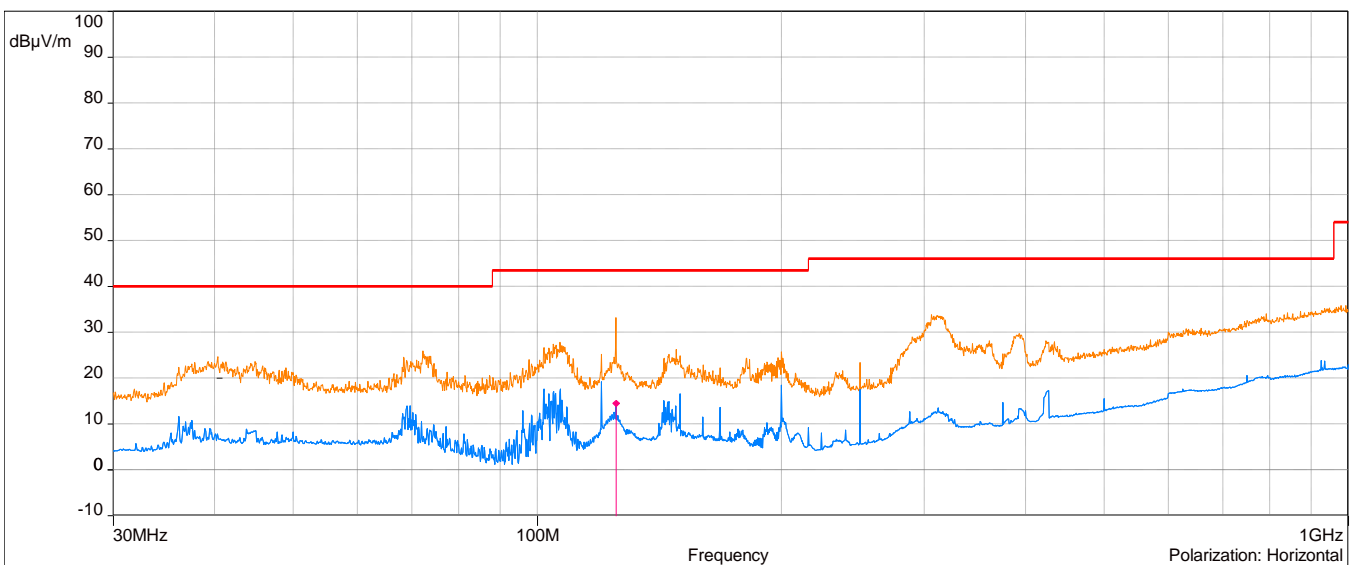
Graphical presentation of Radiated disturbance

Radiated disturbance, A003136187-007, Wirnet iZeptocell PDTIOT-IZEE900

- FCC/47 CFR Part 15 section 15.109 B - Average/3.0m/
- FCC/47 CFR Part 15 section 15.109 B - QPeak/3.0m/
- FCC/47 CFR Part 15 section 15.109 B - Peak/3.0m/
- Peak (Vertical)
- Avg (Vertical)
- ♦ Level (Quasipeak) (Vertical)



- FCC/47 CFR Part 15 section 15.109 B - Average/3.0m/
- FCC/47 CFR Part 15 section 15.109 B - QPeak/3.0m/
- FCC/47 CFR Part 15 section 15.109 B - Peak/3.0m/
- Peak (Horizontal)
- Avg (Horizontal)
- ♦ Level (Quasipeak) (Horizontal)



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Messdaten zu Funkstörfeldstärke

#1282

Measurement data of Radiated disturbance

Radiated disturbance, A003136187-007, Wirnet iZeptocell PDTIOT-IZEE900

Quasipeak (6)

Frequency (MHz)	SR	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pos	Height	Azimuth	Meas. Time (s)	Correction (dB)
125.01	1	14.54	43.50	-28.96	Horizontal	2.20	272.80	1.00	12.71
41.04	2	25.83	40.00	-14.17	Vertical	1.28	185.00	1.00	13.96
44.79	2	24.16	40.00	-15.84	Vertical	1.07	181.40	1.00	14.32
72.54	2	20.08	40.00	-19.92	Vertical	1.03	89.60	1.00	12.25
311.28	2	30.25	46.00	-15.75	Vertical	1.72	323.00	1.00	15.89
426.27	2	23.86	46.00	-22.14	Vertical	1.03	0.60	1.00	18.67

Bemerkungen / Remarks:

Margin value = Measurement value – Limit value

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Protokollnummer <i>Protocol number</i>	<u>1277</u>
Funkstörfeldstärke <i>Radiated disturbance</i>	PASS
Datum des Tests <i>Test date</i>	26.10.2021
Angewendete Norm <i>Applied Standard</i>	ICES-003:2020 (Issue 7)
Prüfmethode <i>Test method</i>	ANSI C63.4-2014
Temperatur (°C) <i>Temperature</i>	15 - 35
Luftfeuchte (% rH) <i>Humidity</i>	30 - 60
Luftdruck (mbar) <i>Air pressure</i>	860 - 1060
Bearbeiter <i>Tested by</i>	A. Bustati
Modellbezeichnung <i>Model</i>	Wirnet iZeptocell PDTIOT-IZEE900
Prüfmuster-Nr. <i>Test sample No.:</i>	A003136187-007
Betriebsart <i>Operating mode</i>	Ein / On
Anschlüsse <i>Tested terminals</i>	Gehäuse / Enclosure
Bemerkung <i>Remarks</i>	—
Prüfsoftware <i>Testing software</i>	2021.0.15.1

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Verwendete Prüfmittel
Used test equipment

Typ	Hersteller <i>Manufacturer</i>	Modell	ID	Kalibriert am <i>Last calibration</i>	Kalibriert bis <i>Next calibration</i>
Absorberhalle <i>Anechoic chamber</i>	TDK	SAC 10 (NSA 30-1000MHz)	2728861	03.04.2020	03.04.2023
Messantenne <i>Antenna</i>	Schwarzbeck	VULB 9168	2728915	07.11.2019	07.11.2022
Messempfänger <i>Receiver</i>	Rohde & Schwarz	ESU 26	2728898	17.08.2021	17.08.2022

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Prüfparameter zu Funkstörfeldstärke

#1277

Test parameter of Radiated disturbance

Radiated disturbance, A003136187-007, Wirnet iZeptocell PDTIOT-IZEE900

Startfrequenz <i>Start Frequency</i>	Stopfrequenz <i>Stop Frequency</i>	Schrittweite <i>Frequency step</i>	Anschluss <i>Terminal</i>	Durchlaufzeit <i>Sweep time</i>	ZF-Bandbreite <i>IF bandwidth</i>
30MHz	1GHz	30kHz	Horizontal	20 ms	120kHz

Startfrequenz <i>Start Frequency</i>	Stopfrequenz <i>Stop Frequency</i>	Schrittweite <i>Frequency step</i>	Anschluss <i>Terminal</i>	Durchlaufzeit <i>Sweep time</i>	ZF-Bandbreite <i>IF bandwidth</i>
30MHz	1GHz	30kHz	Vertical	20 ms	120kHz

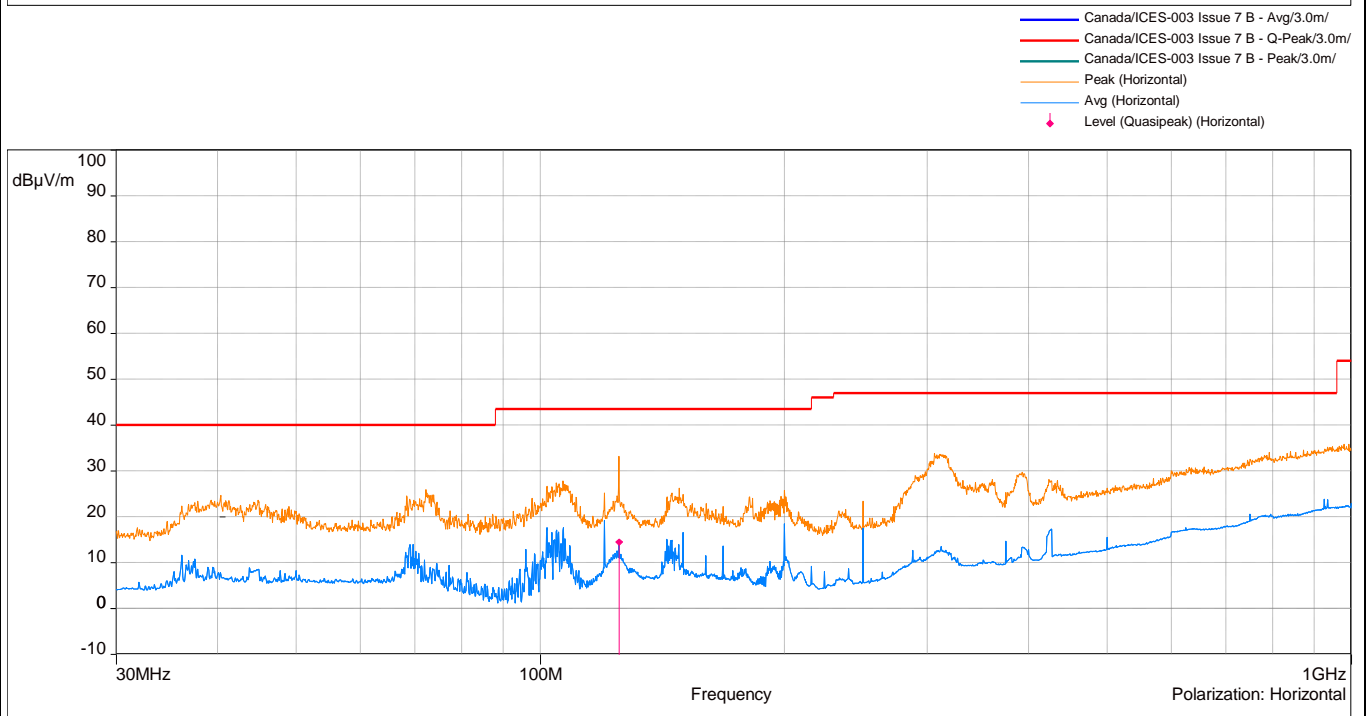
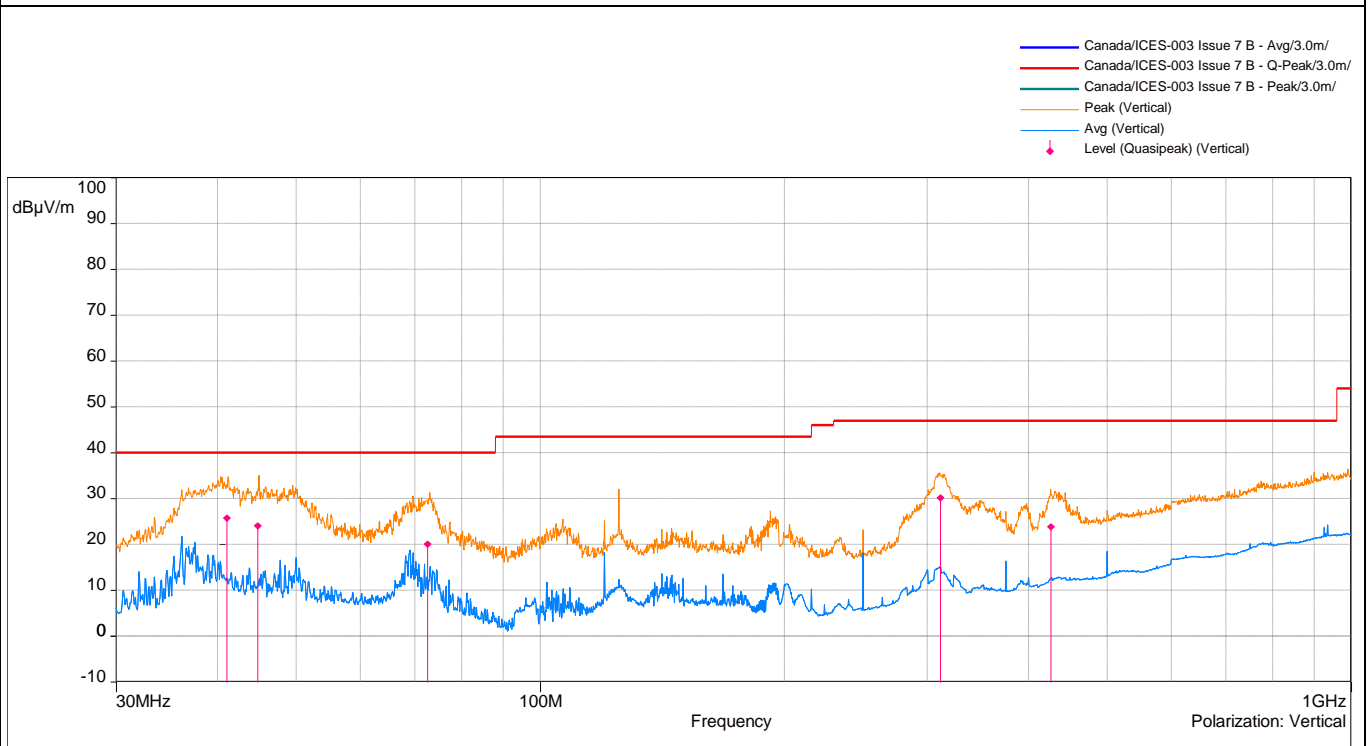
ZUSATZDOKUMENTATION
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Messdiagramme zu Funkstörfeldstärke

#1277

Graphical presentation of Radiated disturbance

Radiated disturbance, A003136187-007, Wirnet iZeptocell PDTIOT-IZEE900



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ZUSATZDOKUMENTATION
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Messdaten zu Funkstörfeldstärke

#1277

Measurement data of Radiated disturbance

Radiated disturbance, A003136187-007, Wirnet iZeptocell PDTIOT-IZEE900

Quasipeak (6)

Frequency (MHz)	SR	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pos	Height	Azimuth	Meas. Time (s)	Correction (dB)
125.01	1	14.54	43.50	-28.96	Horizontal	2.20	272.80	1.00	12.71
41.04	2	25.83	40.00	-14.17	Vertical	1.28	185.00	1.00	13.96
44.79	2	24.16	40.00	-15.84	Vertical	1.07	181.40	1.00	14.32
72.54	2	20.08	40.00	-19.92	Vertical	1.03	89.60	1.00	12.25
311.28	2	30.25	47.00	-16.75	Vertical	1.72	323.00	1.00	15.89
426.27	2	23.86	47.00	-23.14	Vertical	1.03	0.60	1.00	18.67

—

Bemerkungen / Remarks:

Margin value = Measurement value – Limit value

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ZUSATZDOKUMENTATION
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Protokollnummer <i>Protocol number</i>	1283
Funkstörfeldstärke (> 1 GHz) <i>Radiated disturbance (> 1 GHz)</i>	PASS
Datum des Tests <i>Test date</i>	26.10.2021
Angewendete Norm <i>Applied Standard</i>	FCC Part 15 Subpart B
Prüfmethode <i>Test method</i>	ANSI C63.4-2014
Temperatur (°C) <i>Temperature</i>	15 - 35
Luftfeuchte (% rH) <i>Humidity</i>	30 - 60
Luftdruck (mbar) <i>Air pressure</i>	860 - 1060
Bearbeiter <i>Tested by</i>	A. Bustati
Modellbezeichnung <i>Model</i>	Wirnet iZeptocell PDTIOT-IZEE900
Prüfmuster-Nr. <i>Test sample No.:</i>	A003136187-007
Betriebsart <i>Operating mode</i>	Ein / On
Anschlüsse <i>Tested terminals</i>	Gehäuse / Enclosure
Bemerkung <i>Remarks</i>	—
Prüfsoftware <i>Testing software</i>	2021.0.15.1

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Verwendete Prüfmittel
Used test equipment

Typ	Hersteller <i>Manufacturer</i>	Modell	ID	Kalibriert am <i>Last calibration</i>	Kalibriert bis <i>Next calibration</i>
Absorberhalle <i>Anechoic chamber</i>	TDK	SAC 10 (SVSWR 1-40GHz)	2766607	03.04.2020	03.04.2023
Messantenne <i>Antenna</i>	EMCO	3115	2728607	10.02.2020	10.02.2023
Vorverstärker <i>Preamplifier</i>	Schwarzbeck	BBV 9718	2731378	27.10.2020	27.10.2022
Messempfänger <i>Receiver</i>	Rohde & Schwarz	ESU 26	2728898	17.08.2021	17.08.2022

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Prüfparameter zu Funkstörfeldstärke (> 1 GHz)

#1283

Test parameter of Radiated disturbance (> 1 GHz)

Radiated disturbance (> 1 GHz), A003136187-007, Wirnet iZeptocell PDTIOT-IZEE900

Startfrequenz <i>Start Frequency</i>	Stopfrequenz <i>Stop Frequency</i>	Schrittweite <i>Frequency step</i>	Anschluss <i>Terminal</i>	Durchlaufzeit <i>Sweep time</i>	ZF-Bandbreite <i>IF bandwidth</i>
1GHz	5GHz	250kHz	Horizontal	5 ms	1MHz

Startfrequenz <i>Start Frequency</i>	Stopfrequenz <i>Stop Frequency</i>	Schrittweite <i>Frequency step</i>	Anschluss <i>Terminal</i>	Durchlaufzeit <i>Sweep time</i>	ZF-Bandbreite <i>IF bandwidth</i>
1GHz	5GHz	250kHz	Vertical	5 ms	1MHz

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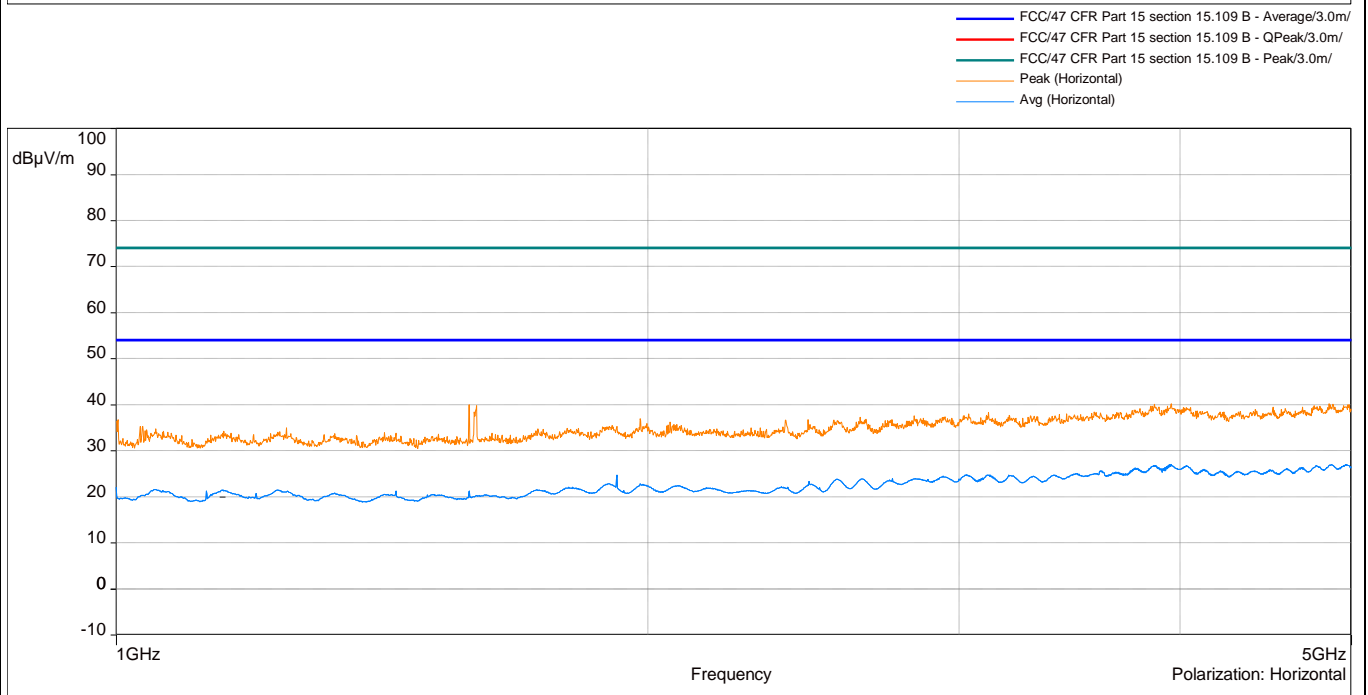
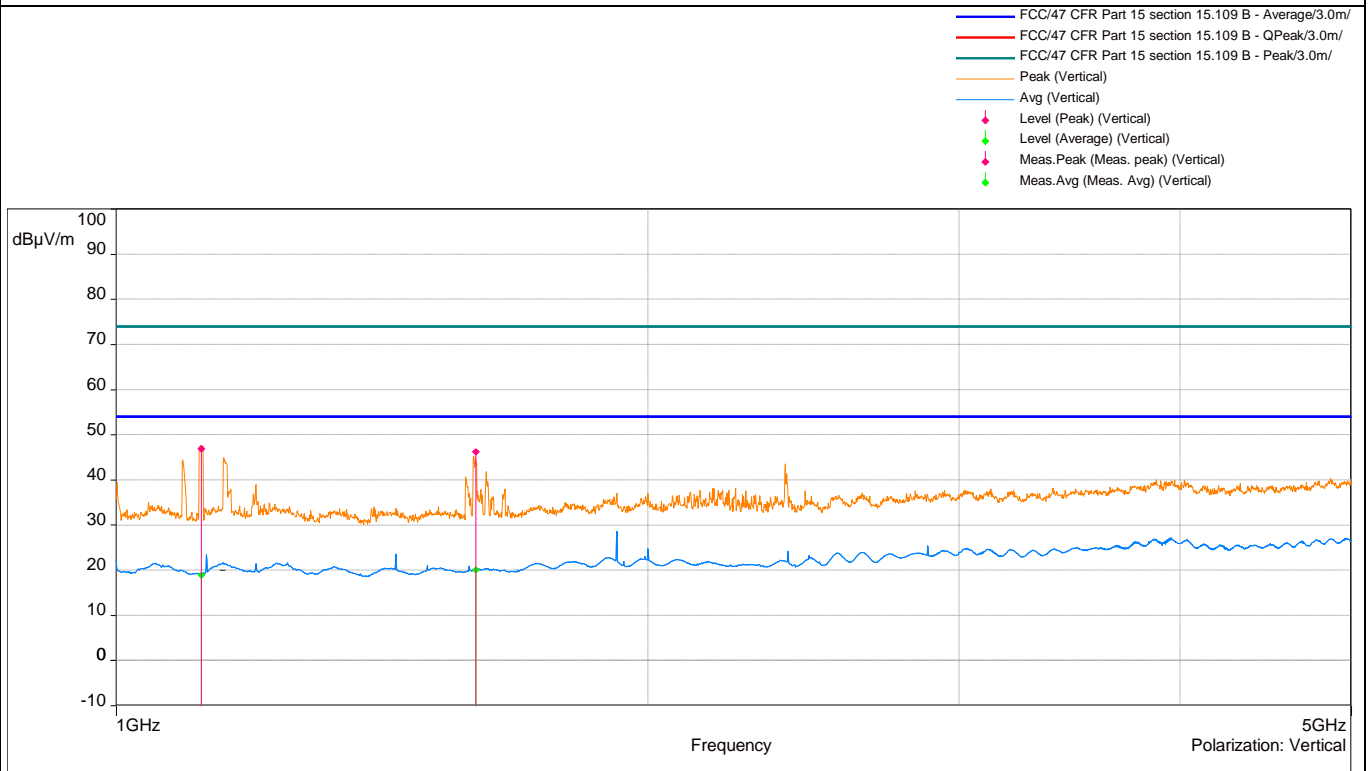
ZUSATZDOKUMENTATION
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Messdiagramme zu Funkstörfeldstärke (> 1 GHz)

#1283

Graphical presentation of Radiated disturbance (> 1 GHz)

Radiated disturbance (> 1 GHz), A003136187-007, Wirnet iZeptocell PDTIOT-IZEE900



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Messdaten zu Funkstörfeldstärke (> 1 GHz)

#1283

Measurement data of Radiated disturbance (> 1 GHz)

Radiated disturbance (> 1 GHz), A003136187-007, Wirnet iZeptocell PDTIOT-IZEE900

Average (2)

Frequency (MHz)	SR	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pos	Height	Azimuth	Meas.Time (s)	Correction (dB)
1114.370192	2	18.99	54.00	-35.01	Vertical	1.72	132.9	1.00	-7.34
1597.5	2	20.14	54.00	-33.86	Vertical	2.92	121.30	1.00	-6.32

Peak (2)

Frequency (MHz)	SR	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pos	Height	Azimuth	Meas.Time (s)	Correction (dB)
1114.370192	2	46.92	74.00	-27.08	Vertical	1.72	132.9	1.00	-7.34
1597.5	2	46.31	74.00	-27.69	Vertical	2.92	121.30	1.00	-6.32

Bemerkungen / Remarks:

Margin value = Measurement value – Limit value

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Protokollnummer <i>Protocol number</i>	1281
Funkstörfeldstärke (> 1 GHz) <i>Radiated disturbance (> 1 GHz)</i>	PASS
Datum des Tests <i>Test date</i>	26.10.2021
Angewendete Norm <i>Applied Standard</i>	ICES-003:2020 (Issue 7)
Prüfmethode <i>Test method</i>	ANSI C63.4-2014
Temperatur (°C) <i>Temperature</i>	15 - 35
Luftfeuchte (% rH) <i>Humidity</i>	30 - 60
Luftdruck (mbar) <i>Air pressure</i>	860 - 1060
Bearbeiter <i>Tested by</i>	A. Bustati
Modellbezeichnung <i>Model</i>	Wirnet iZeptocell PDTIOT-IZEE900
Prüfmuster-Nr. <i>Test sample No.:</i>	A003136187-007
Betriebsart <i>Operating mode</i>	Ein / On
Anschlüsse <i>Tested terminals</i>	Gehäuse / Enclosure
Bemerkung <i>Remarks</i>	—
Prüfsoftware <i>Testing software</i>	2021.0.15.1

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ZUSATZDOKUMENTATION
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Verwendete Prüfmittel
Used test equipment

Typ	Hersteller <i>Manufacturer</i>	Modell	ID	Kalibriert am <i>Last calibration</i>	Kalibriert bis <i>Next calibration</i>
Absorberhalle <i>Anechoic chamber</i>	TDK	SAC 10 (SVSWR 1-40GHz)	2766607	03.04.2020	03.04.2023
Messantenne <i>Antenna</i>	EMCO	3115	2728607	10.02.2020	10.02.2023
Vorverstärker <i>Preamplifier</i>	Schwarzbeck	BBV 9718	2731378	27.10.2020	27.10.2022
Messempfänger <i>Receiver</i>	Rohde & Schwarz	ESU 26	2728898	17.08.2021	17.08.2022

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Prüfparameter zu Funkstörfeldstärke (> 1 GHz)

#1281

Test parameter of Radiated disturbance (> 1 GHz)

Radiated disturbance (> 1 GHz), A003136187-007, Wirnet iZeptocell PDTIOT-IZEE900

Startfrequenz <i>Start Frequency</i>	Stopfrequenz <i>Stop Frequency</i>	Schrittweite <i>Frequency step</i>	Anschluss <i>Terminal</i>	Durchlaufzeit <i>Sweep time</i>	ZF-Bandbreite <i>IF bandwidth</i>
1GHz	5GHz	250kHz	Horizontal	5 ms	1MHz

Startfrequenz <i>Start Frequency</i>	Stopfrequenz <i>Stop Frequency</i>	Schrittweite <i>Frequency step</i>	Anschluss <i>Terminal</i>	Durchlaufzeit <i>Sweep time</i>	ZF-Bandbreite <i>IF bandwidth</i>
1GHz	5GHz	250kHz	Vertical	5 ms	1MHz

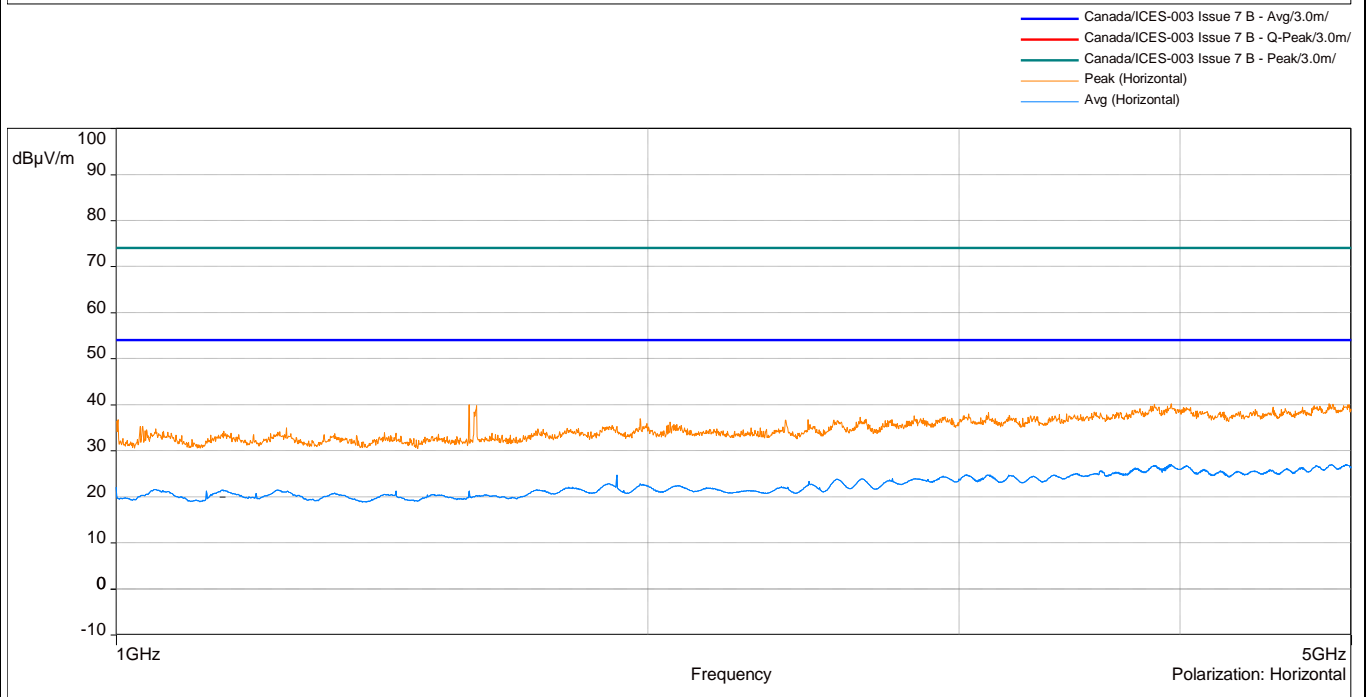
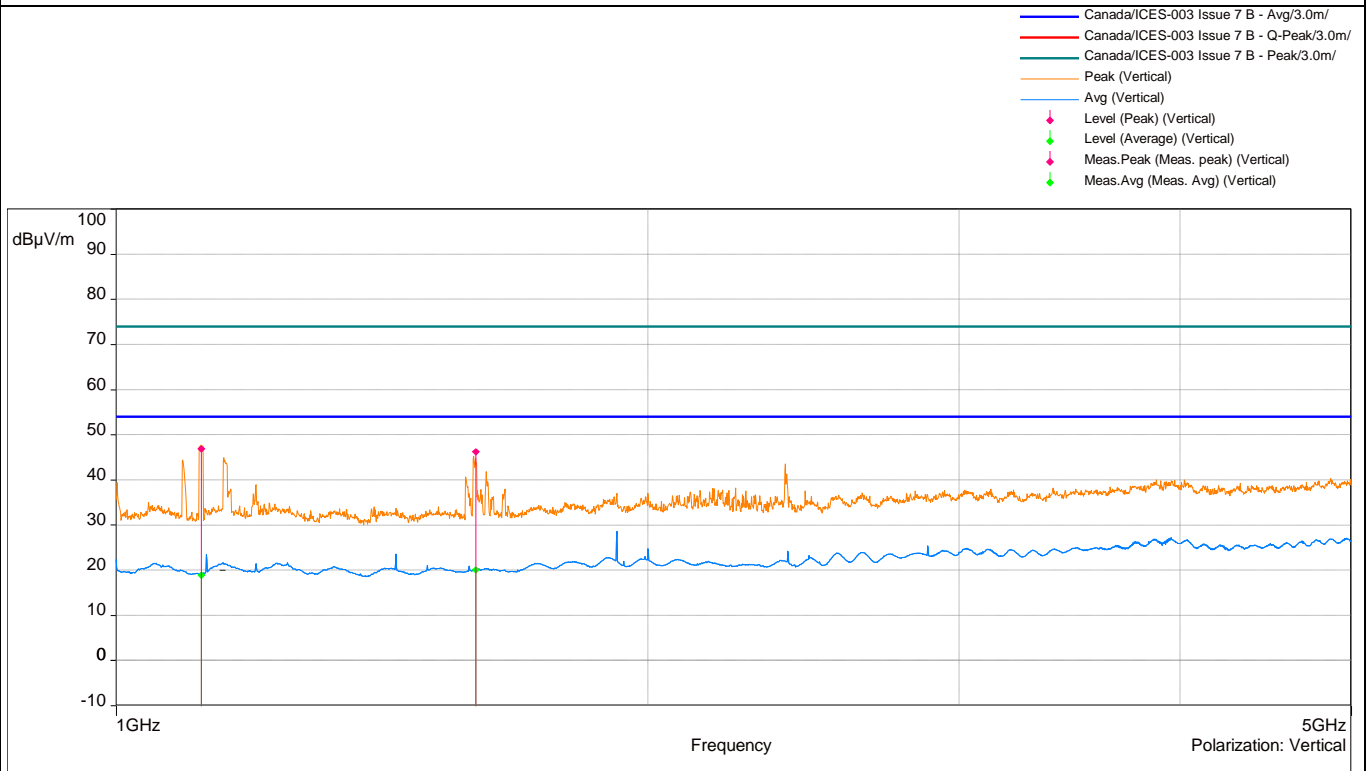
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Messdiagramme zu Funkstörfeldstärke (> 1 GHz)

#1281

Graphical presentation of Radiated disturbance (> 1 GHz)

Radiated disturbance (> 1 GHz), A003136187-007, Wirnet iZeptocell PDTIOT-IZEE900



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Messdaten zu Funkstörfeldstärke (> 1 GHz)

#1281

Measurement data of Radiated disturbance (> 1 GHz)

Radiated disturbance (> 1 GHz), A003136187-007, Wirnet iZeptocell PDTIOT-IZEE900

Average (2)

Frequency (MHz)	SR	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pos	Height	Azimuth	Meas.Time (s)	Correction (dB)
1114.370192	2	18.99	54.00	-35.01	Vertical	1.72	132.9	1.00	-7.34
1597.5	2	20.14	54.00	-33.86	Vertical	2.92	121.30	1.00	-6.32

Peak (2)

Frequency (MHz)	SR	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pos	Height	Azimuth	Meas.Time (s)	Correction (dB)
1114.370192	2	46.92	74.00	-27.08	Vertical	1.72	132.9	1.00	-7.34
1597.5	2	46.31	74.00	-27.69	Vertical	2.92	121.30	1.00	-6.32

Bemerkungen / Remarks:

Margin value = Measurement value – Limit value

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Änderungsverzeichnis
Change history

Rev. No.	List of changes	Date Author
001	First edition (DE21CJKO 001)	2021-11-17 Alaa Bustati

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End of test report