

Prüfbericht-Nr.: <i>Test report no.:</i>	DE221W84 001	Auftrags-Nr.: <i>Order no.:</i>	168378550 P00257266	Seite 1 von 13 <i>Page 1 of 13</i>
Kunden-Referenz-Nr.: <i>Client reference no.:</i>	N/A	Auftragsdatum: <i>Order date:</i>	2022-06-22	
Auftraggeber: <i>Client:</i>	KERLINK SA 1, Rue Jacqueline Auriol 35235 Thorigne-Fouillard FRANCE			
Prüfgegenstand: <i>Test item:</i>	Wirnet™ iZeptoCell			
Bezeichnung / Typ-Nr.: <i>Identification / Type no.:</i>	PDTIOT-IZEC900 (Trademark: Kerlink)			
Auftrags-Inhalt: <i>Order content:</i>	Test Report			
Prüfgrundlage: <i>Test specification:</i>	47 CFR Part 15 Subpart B		ICES-003 Issue 7 October 2020	
Wareneingangsdatum: <i>Date of sample receipt:</i>	2022-06-27	Please refer to Photo Document		
Prüfmuster-Nr.: <i>Test sample no.:</i>	A003283029-001~020			
Prüfzeitraum: <i>Testing period:</i>	2022-07-29 – 2022-08-01			
Ort der Prüfung: <i>Place of testing:</i>	TÜV Rheinland (Shenzhen) Co., Ltd.			
Prüflaboratorium: <i>Testing laboratory:</i>	TÜV Rheinland (Shenzhen) Co., Ltd.			
Prüfergebnis*: <i>Test result*:</i>	Pass			
geprüft von: <i>tested by:</i>	X  Lin Lin		genehmigt von: <i>authorized by:</i>	X  Hardy Suo
Datum: <i>Date:</i>	2022-08-11		Ausstellungsdatum: <i>Issue date:</i>	2022-08-18
Stellung / Position:	Sachverständige(r)/Expert		Stellung / Position:	Sachverständige(r)/Expert
Sonstiges / Other:	FCC ID: 2AFYS-KLKZEC900 IC: 20637-KLKZEC900 HVIN: PDTIOT-IZEC900			
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 P(ass) = entspricht o.g. Prüfgrundlage(n)	2 = gut F(ail) = entspricht nicht o.g. Prüfgrundlage(n)	3 = befriedigend F(ail) = entspricht nicht o.g. Prüfgrundlage(n)	4 = ausreichend N/A = nicht anwendbar
* Legend:	1 = very good P(ass) = passed a.m. test specification(s)	2 = good F(ail) = failed a.m. test specification(s)	3 = satisfactory F(ail) = failed a.m. test specification(s)	4 = sufficient N/A = not applicable
5 = mangelhaft N/T = nicht getestet				
5 = poor 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>				

V05

Prüfbericht - Nr.: DE221W84 001
Test Report No.:

Seite 2 von 13
Page 2 of 13

TEST SUMMARY

5.1.1. CONDUCTED EMISSION FOR CFR 47 PART15 SUBPART B SECTION 15.107(A)

RESULT: Pass

5.2.1. RADIATED EMISSION FOR CFR 47 PART15 SUBPART B SECTION 15.109(A)

RESULT: Pass

Contents

1.	GENERAL REMARKS	4
1.1.	COMPLEMENTARY MATERIALS	4
1.2.	TEST STANDARD(S)	4
1.3.	LIST OF DOCUMENT CHANGE	4
2.	TEST SITES	4
2.1.	TEST FACILITIES	4
2.2.	TEST DATE.....	5
2.3.	LIST OF TEST AND MEASUREMENT INSTRUMENTS.....	5
2.4.	TRACEABILITY	6
2.5.	CALIBRATION	6
2.6.	LOCATION OF ORIGINAL DATA.....	6
2.7.	STATUS OF FACILITY USED FOR TESTING.....	6
3.	GENERAL PRODUCT INFORMATION	7
3.1.	PRODUCT FUNCTION AND INTENDED USE	7
3.2.	RATING AND SYSTEM DETAILS.....	7
3.3.	INDEPENDENT OPERATION MODES	8
3.4.	NOISE GENERATING AND NOISE SUPPRESSING PARTS	8
3.5.	SUBMITTED DOCUMENTS.....	8
4.	TEST SET-UP AND OPERATION MODES	9
4.1.	PRINCIPLE OF CONFIGURATION SELECTION.....	9
4.2.	TEST OPERATION AND TEST SOFTWARE	9
4.3.	SPECIAL ACCESSORIES AND AUXILIARY EQUIPMENT	9
4.4.	COUNTERMEASURES TO ACHIEVE EMC COMPLIANCE.....	9
4.5.	TEST SETUP DIAGRAM	10
5.	TEST RESULTS EMISSION	11
5.1.	EMISSION IN THE FREQUENCY RANGE UP TO 30 MHz	11
5.1.1.	<i>Conducted Emission for CFR 47 Part15 Subpart B Section 15.107(a)</i>	<i>11</i>
5.2.	EMISSION IN THE FREQUENCY RANGE ABOVE 30 MHz	12
5.2.1.	<i>Radiated Emission for CFR 47 Part15 Subpart B Section 15.109(a)</i>	<i>12</i>
6.	MEASUREMENT UNCERTAINTY.....	13
7.	LIST OF TABLES	13

1. GENERAL REMARKS

1.1. Complementary Materials

All attachments are integral parts of this test report. This applies especially to the following appendix:

Appendix A: Test Results of EMC

Appendix B: Photographs of the Test Set-up

1.2. Test Standard(s)

Applied Rules: 47 CFR Part 15 Subpart B
Test Method: ANSI C63.4-2014

ICES-003 Issue 7

1.3. List of Document Change

No.	Report No.	Description
1	DE221W84 001	First released.

2. TEST SITES

2.1. Test Facilities

TÜV Rheinland (Shenzhen) Co., Ltd.

(FCC Registration No.: 694916 & IC Registration Number: 25069)

Address: No. 362, Huanguan Road Middle, Longhua District, Shenzhen 518110, P.R. China

2.2. Test Date

Date of test: 2022-07-29 to 2022-08-01

2.3. List of Test and Measurement Instruments

Table 1: List of Test and Measurement Equipment

Conducted Emissions				
Equipment	Manufacturer	Model No.	Serial No.	Cal. Until
EMI Test Receiver	R&S	ESR3	102680	2023-02-27
Artificial Mains Network	R&S	ENV216	101445	2023-02-27
EMC32 test software	R&S	EMC32(Ver.10.50.00)	N/A	N/A
Radiated Emission (10m chamber)				
Equipment	Manufacturer	Model No.	Serial No.	Cal. Until
10m SAC	ETS-Lindgren	SAC10	CT001632-Q1399	2024-03-01
EMI Test Receiver 1	R&S	ESR7	102022	2022-08-10
EMI Test Receiver 2	R&S	ESR7	102023	2022-08-10
Bilog Antenna 1	TESEQ	CBL6112D	51321	2022-08-08
Bilog Antenna 2	TESEQ	CBL6112D	51322	2023-07-07
Preamplifier 1 (30-1000MHz)	SCHWARZBECK	BBV9745	115	2022-08-13
Preamplifier 2 (30-1000MHz)	EMCI	EMC9135-P	980629	2022-08-13
EMC32 test software	R&S	EMC32(Ver.10.50.00)	N/A	N/A
Radiated Emission (3m chamber)				
Equipment	Manufacturer	Model No.	Serial No.	Cal. Until
3m SAC	ETS-Lindgren	SAC3	CT001632-Q1362	2024-04-26
EMI Test Receiver	R&S	ESR7	102111	2022-12-01
Horn Antenna	R&S	HF907	102706	2022-08-07
Preamplifier (1-18GHz)	FIT	SCU-18F	180077	2022-08-13
EMC32 test software	R&S	EMC32(Ver.10.50.00)	N/A	N/A

2.4. Traceability

All measurement equipment calibrations are traceable to NIM (National Institute of Metrology) or where calibration is performed in other countries, to equivalent nationally recognized standards organizations.

2.5. Calibration

Equipment requiring calibration is calibrated periodically by the manufacturer or according to manufacturer's specifications. Additionally all equipment is verified for proper performance on a regular basis using in house standards or comparisons.

2.6. Location of Original Data

The original copies of all test data taken during actual testing were attached in this report and delivered to the applicant. A copy has been retained in the TÜV Rheinland (Shenzhen) file for certification follow-up purposes.

2.7. Status of Facility Used for Testing

The TÜV Rheinland (Shenzhen) Co., Ltd. facility located at No. 362, Huanguan Road Middle, Longhua District, Shenzhen 518110, P.R. China is listed on the US Federal Communications Commission list of facilities approved to perform measurements.

3. GENERAL PRODUCT INFORMATION

3.1. Product Function and Intended Use

The EUT is 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. The Wirnet™ iZeptoCell is based on LoRa® technology. It is compatible and interoperable with existing LoRaWAN LPWAN.

The certified module has been integrated into the EUT. The EUT contains transmitter module ME310G1-WW (FCC ID: RI7ME310G1WW and IC: 5131A-ME310G1WW).

For details refer to the User Manual.

3.2. Rating and System details

Table 2: Rating of EUT

General Information of EUT	Description
Kind of Equipment	Wirnet™ iZeptoCell
Type Designation	PDTIOT-IZEC900
Trademark	Kerlink
FCC ID	2AFYS-KLKZEC900
IC	20637-KLKZEC900
HVIN	PDTIOT-IZEC900
Hardware Version	V2C
Operating Voltage	USB operated (DC 4.5V~5.5V)

Table 3: Technical Specification of EUT

Technical Specification of Lora DTS	
Characteristic	Description
Type of Modulation	Lora
Data Rate	SF7 – SF12 / DR8 – DR13
Channel Number	8 channels
Channel Separation	600 KHz
Occupied Bandwidth	500 KHz
Technical Specification of Lora Hybrid	
Characteristic	Description
Frequency Range	903.9MHz - 905.3MHz
Type of Modulation	Lora
Data Rate	SF9 / DR1
Channel Number	8 channels
Channel Separation	200 KHz
Occupied Bandwidth	125 KHz

Technical Specification of Lora Hybrid	
Characteristic	Description
Operating Frequency	904.6MHz
Type of Modulation	Lora
Data Rate	SF11 / DR9
Channel Number	1 channel
Occupied Bandwidth	500 KHz
Technical Specification of LTE IoT Module	
Characteristic	Description
Certified Module	ME310G1-WW
FCC ID:	RI7ME310G1WW
IC:	5131A-ME310G1WW
Operated Modes	GPRS/EGPRS, eMTC and NB-IoT
Operational Frequency Band(s)	GPRS/EGPRS: GSM 850, PCS 1900 eMTC: Band 2/4/5/12/13/25/26/66/85 NB-IoT: Band 2/4/5/12/13/25/26/66/71/85
Rated RF Output Power	GPRS 850: Class 4 GPRS 1900: Class 1 EGPRS 850/1900: E2 eMTC and NB-IoT: Class 3 (except NB-IoT Band 71) NB-IoT Band 71: Class 5
Antenna Type	Internal Antenna
Antenna Gain	3.0 dBi for 824-960 MHz 3.0 dBi for 1710-2170 MHz

3.3. Independent Operation Modes

The basic operation modes are:

- A. On, LoRA SF7_500K_925.7MHz and eMTC Band 5 operating
- B. Idle
- C. Off

3.4. Noise Generating and Noise Suppressing Parts

Refer to the Circuit Diagram.

3.5. Submitted Documents

- | | |
|---|--|
| ☒ User Manual | ☒ Rating Label |
| ☒ Circuit Diagram | ☒ PCB Layout |
| ☒ Block Diagram | ☒ Photo Document |
| ☒ Schematics | ☒ Parts List |
| ☐ Model Difference Letter | |

4. TEST SET-UP AND OPERATION MODES

4.1. Principle of Configuration Selection

Emission: The equipment under test (EUT) was configured to measure its highest possible radiation level. The test modes were adapted accordingly in reference to the instructions for use.

4.2. Test Operation and Test Software

Test operation refers to test setup in chapter 5&6.

According to clause 3.1, all tests were performed on model PDTIOT-IZEC900 in this report.

4.3. Special Accessories and Auxiliary Equipment

Table 4: Auxiliary Equipment and Accessories used during test

Description	Manufacturer	Model	S/N
Laptop PC	Dell	E5430	9V28XY1
Wirnet iFemtoCell-evolution 915	Kerlink	PDTIOT-IFE04	005DGa010003
AC/DC power supply	CUI	SMI10-5-V-I38	/
3m USB-A extender cable	Assmann WSW	A-USB30AM-30AF-300	/
3m USB-A to USB-C cable	ACAL BFI	ACCA-21186	/
3m S/FTP Ethernet cable	RS PRO	411-497	/

4.4. Countermeasures to achieve EMC Compliance

The test sample which has been tested contained the noise suppression parts as described in the Constructional Data Form or the Technical Construction File. No additional measures were employed to achieve compliance.

4.5. Test Setup Diagram

Diagram of Measurement Configuration for Radiation Test (Below 1GHz)

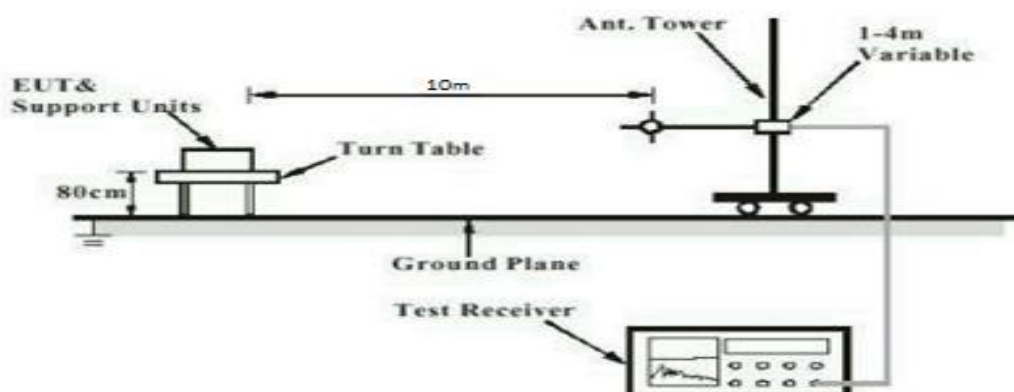


Diagram of Measurement Configuration for Radiation Test (Above 1GHz)

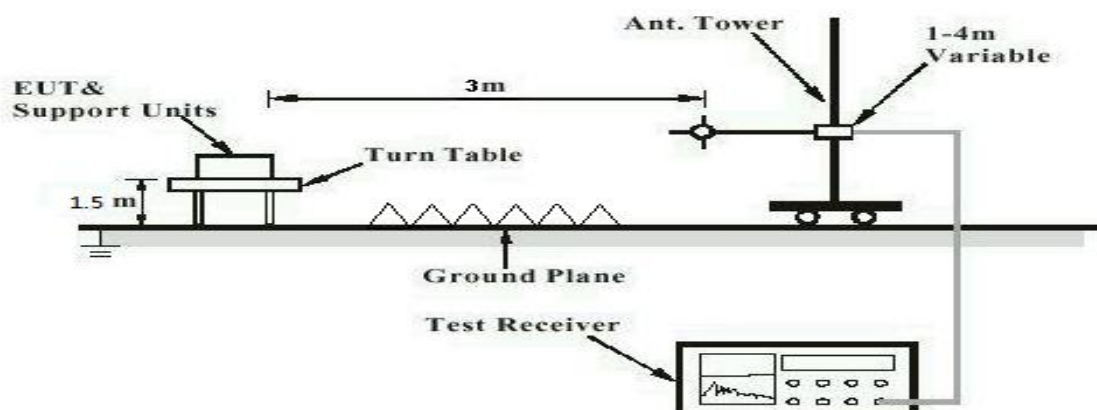
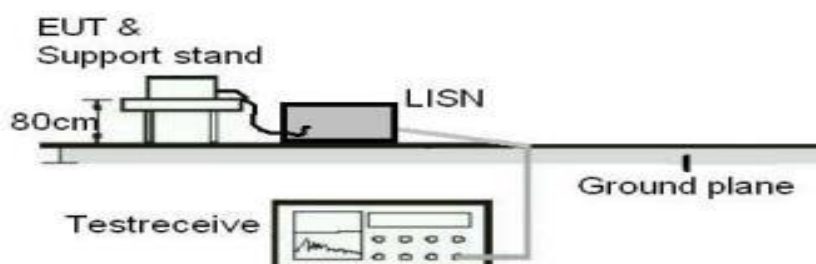


Diagram of Measurement Configuration for Mains Conduction Measurement



5. TEST RESULTS EMISSION

5.1. Emission in the Frequency Range up to 30 MHz

5.1.1. CONDUCTED EMISSION FOR CFR 47 PART15 SUBPART B SECTION 15.107(A)

RESULT:**Pass**

Date of testing	:	2022-07-29
Test specification	:	47 CFR Part 15 Subpart B Section 15.107(a) ICES-003 Issue 7
Frequency range	:	0.15 – 30MHz
Classification	:	Class B
Test procedure	:	ANSI C63.4:2014
Kind of test site	:	Shielded room

Test setup

Input Voltage	:	DC 5V from USB port
Operation mode	:	A
Ambient temperature	:	23.7 °C
Relative humidity	:	53.4 %
Atmospheric pressure	:	101 kPa

Refer to attached Appendix A for details.

5.2. Emission in the Frequency Range above 30 MHz

5.2.1. RADIATED EMISSION FOR CFR 47 PART15 SUBPART B SECTION 15.109(A)

RESULT:**Pass**

Date of testing	:	2022-08-01
Test standard	:	47 CFR Part 15 Subpart B Section 15.109(a) ICES-003 Issue 7
Frequency range	:	30 - 1000MHz, 1- 6GHz
Classification	:	Class B
Test procedure	:	ANSI C63.4:2014
Kind of test site	:	10m Semi-anechoic Chamber for Below 1GHz 3m Semi-anechoic Chamber for Above 1GHz

Test setup

Input Voltage	:	DC 5V from USB port
Operation mode	:	A
Ambient temperature	:	Refer to appendix for details
Relative humidity	:	Refer to appendix for details
Atmospheric pressure	:	Refer to appendix for details

Refer to attached Appendix A for details.

6. MEASUREMENT UNCERTAINTY

For a 95% confidence level, the measurement expanded uncertainties for defined systems, in accordance with the recommendations of ISO/IEC 17025 are:

Table 5: Measurement Uncertainty

Test	Parameters	uncertainty
Conducted Emission	Level accuracy(9kHz to 150kHz)	± 3.70 dB
	Level accuracy (150kHz to 30MHz)	± 3.30 dB
Radiated Emission (3m SAC)	Level accuracy (30MHz to 1000MHz)	± 4.52 dB
	Level accuracy (above 1000MHz)	± 4.37 dB
Radiated Emission (10m SAC)	Level accuracy (30MHz to 1000MHz)	± 4.66 dB
	Level accuracy (above 1000MHz)	± 4.35 dB

7. LIST OF TABLES

Table 1: List of Test and Measurement Equipment	5
Table 2: Rating of EUT	7
Table 3: Technical Specification of EUT	7
Table 4: Auxiliary Equipment and Accessories used during test	9
Table 5: Measurement Uncertainty	13

===== END OF APPENDIX =====

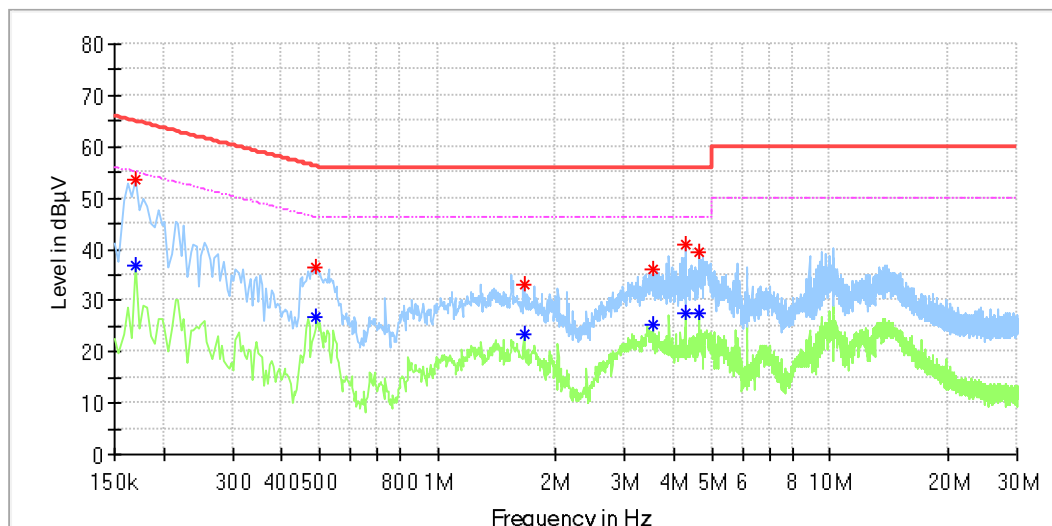
Appendix A: Test Results of EMC

APPENDIX A: TEST RESULTS OF EMC	1
APPENDIX A.1: TEST PLOTS OF CONDUCTED EMISSIONS ON AC MAINS	2
APPENDIX A.2: TEST PLOTS OF RADIATED EMISSION, BELOW 1GHz	4
APPENDIX A.3: TEST PLOTS OF RADIATED EMISSION, ABOVE 1GHz	6

Appendix A.1: Test Plots of Conducted Emissions on AC Mains

EUT Information

EUT Name:	Wirnet™ iZeptoCell
Order No:	168378550
Model:	PDTIOT-IZEC900
Test mode:	LoRA SF7_500K_925.7MHz + eMTC Band 5
Test Voltage:	DC 5V via PC
Test By:/Review By:	Mac Xie/Gary Chen
Test Standard:	FCC Part 15B
Tem./Hum./Pressure:	23.7°C/50.4%/101kPa
Remark:	SR2

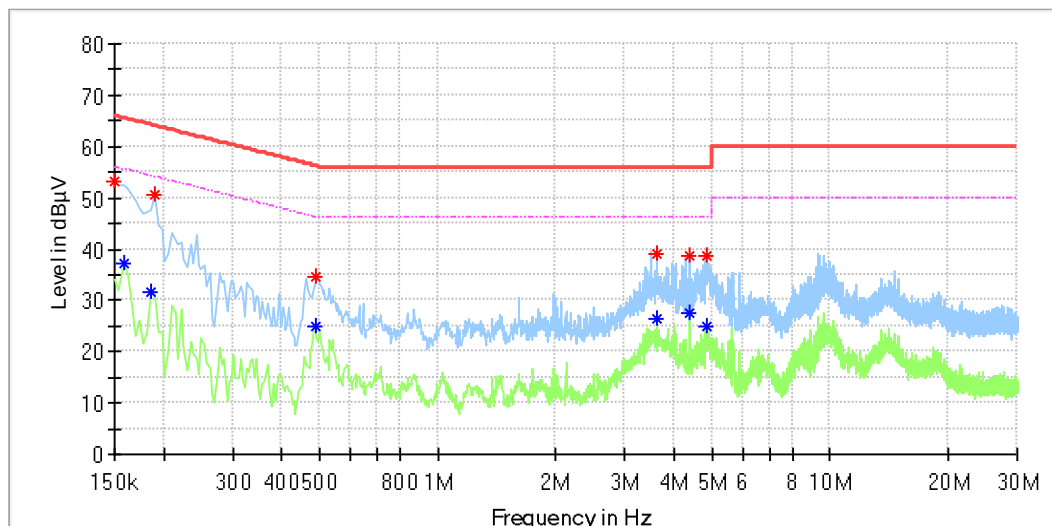


Critical Freqs

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.170000	53.41	---	64.96	11.55	L1	9.9
0.170000	---	36.93	54.96	18.03	L1	9.9
0.486000	36.43	---	56.24	19.80	L1	10.0
0.490000	---	26.98	46.17	19.19	L1	10.0
1.658000	---	23.51	46.00	22.49	L1	10.1
1.658000	33.06	---	56.00	22.94	L1	10.1
3.530000	---	25.17	46.00	20.84	L1	10.2
3.530000	36.12	---	56.00	19.88	L1	10.2
4.270000	40.79	---	56.00	15.21	L1	10.2
4.270000	---	27.56	46.00	18.44	L1	10.2
4.650000	---	27.52	46.00	18.48	L1	10.2
4.650000	39.48	---	56.00	16.52	L1	10.2

EUT Information

EUT Name: Wirnet™ iZeptoCell
Order No: 168378550
Model: PDTIOT-IZEC900
Test mode: LoRA SF7_500K_925.7MHz + eMTC Band 5
Test Voltage: DC 5V via PC
Test By:/Review By: Mac Xie/Gary Chen
Test Standard: FCC Part 15B
Tem./Hum./Pressure: 23.7°C/50.4%/101kPa
Remark: SR2



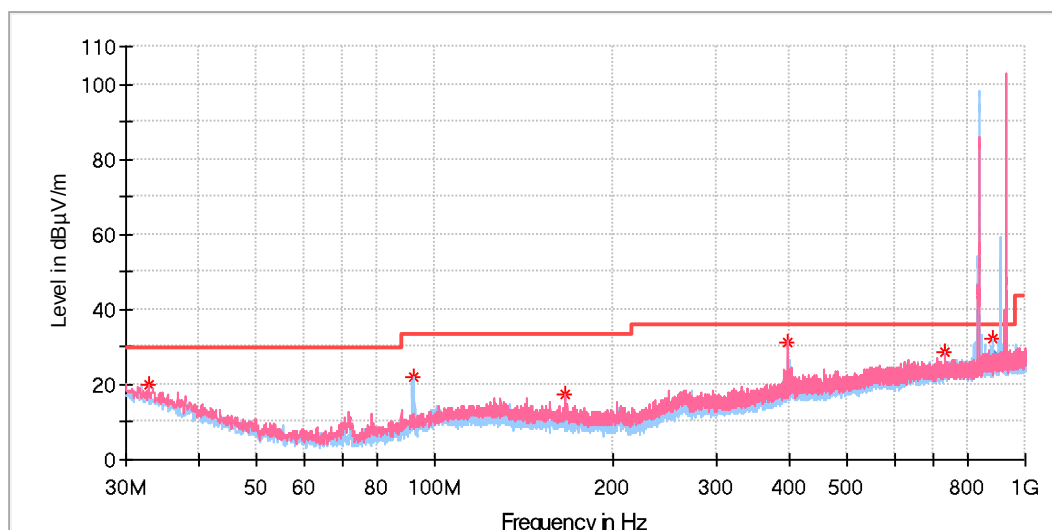
Critical Freqs

Frequency (MHz)	MaxPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)
0.150000	53.38	---	66.00	12.62	N	9.8
0.158000	---	37.35	55.57	18.21	N	9.8
0.186000	---	31.75	54.21	22.47	N	9.8
0.190000	50.55	---	64.04	13.49	N	9.8
0.486000	---	24.91	46.24	21.32	N	9.8
0.490000	34.54	---	56.17	21.63	N	9.8
3.626000	---	26.23	46.00	19.77	N	9.9
3.626000	38.97	---	56.00	17.03	N	9.9
4.390000	---	27.52	46.00	18.48	N	9.9
4.390000	38.56	---	56.00	17.44	N	9.9
4.854000	---	24.94	46.00	21.06	N	9.9
4.854000	38.88	---	56.00	17.12	N	9.9

Appendix A.2: Test Plots of Radiated Emission, Below 1GHz

EUT Information

EUT Name: Wirnet™ iZeptoCell
Order Number: 168378550
Model: PDTIOT-IZEC900
Test Mode: LoRA SF7_500K_925.7MHz + eMTC Band 5
Test Voltage: DC 5V via PC
Standard: FCC Part 15B
Test By:/Review By: Mac Xie/Gary Chen
Tem./Hum./Pressure: 24.2°C/49.3%/101kPa
Remark: 10m Chamber



Remark: The highest waveform in the figure is fundamental and/or harmonics frequency of LoRA and eMTC signals.

Critical_Freqs

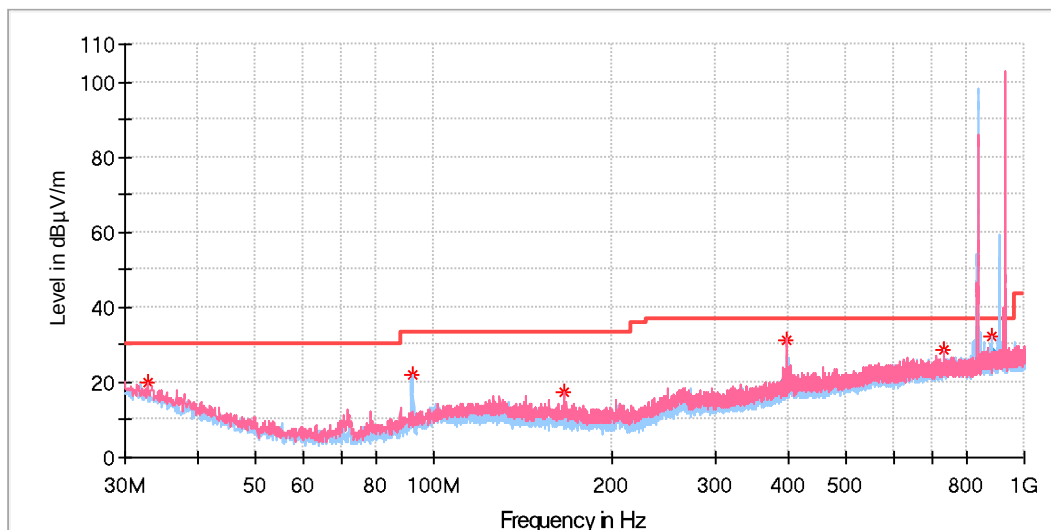
Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
32.748333	19.73	29.50	9.77	200.0	V	184.0	-6.0
92.026111	22.11	33.10	10.99	200.0	H	269.0	-18.5
166.554444	17.44	33.10	15.66	200.0	V	269.0	-11.9
395.813333	31.35	35.60	4.25	100.0	V	190.0	-4.7
729.639444	28.69	35.60	6.91	200.0	H	121.0	-4.8
883.182778	32.21	35.60	3.39	100.0	H	137.0	-3.4

Final_Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth h (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
395.813333	19.15	35.60	16.45	1000.0	120.000	100.0	V	190.	-4.7
883.182778	26.81	35.60	8.79	1000.0	120.000	100.0	H	136.	-3.4

EUT Information

EUT Name: Wirnet™ iZeptoCell
Order Number: 168378550
Model: PDTIOT-IZEC900
Test Mode: LoRA SF7_500K_925.7MHz + eMTC Band 5
Test Voltage: DC 5V via PC
Standard: ICES-003
Test By:/Review By: Mac Xie/Gary Chen
Tem./Hum./Pressure: 24.2°C/49.3%/101kPa
Remark: 10m Chamber



Remark: The highest waveform in the figure is fundamental and/or harmonics frequency of LoRA and eMTC signals.

Critical_Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
32.748333	19.73	30.00	10.27	200.0	V	184.0	-6.0
92.026111	22.11	33.10	10.99	200.0	H	269.0	-18.5
166.554444	17.44	33.10	15.66	200.0	V	269.0	-11.9
395.813333	31.35	37.00	5.65	100.0	V	190.0	-4.7
729.639444	28.69	37.00	8.31	200.0	H	121.0	-4.8
883.182778	32.21	37.00	4.79	100.0	H	137.0	-3.4

Final_Result

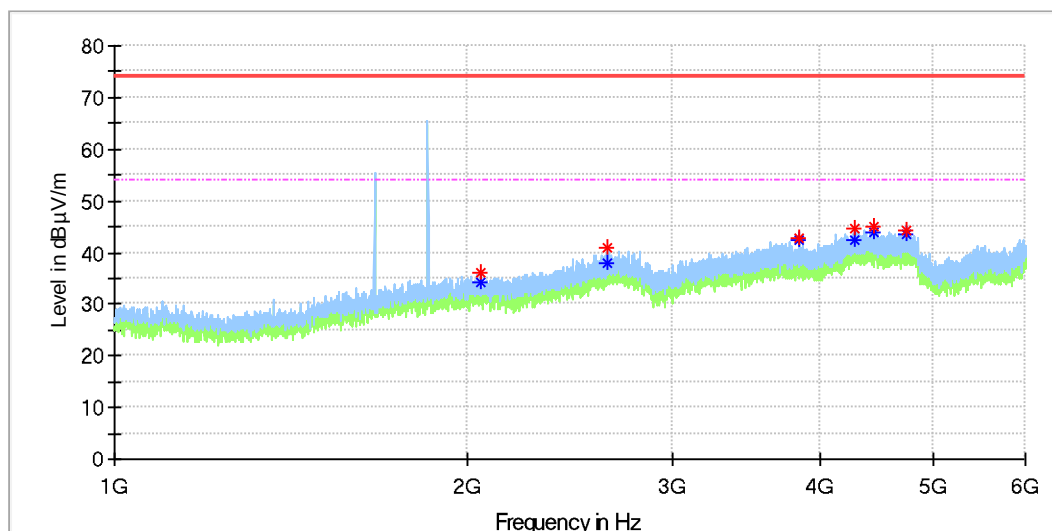
Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
395.813333	19.15	37.00	17.85	1000.0	120.000	100.0	V	190.	-4.7
883.182778	26.81	37.00	10.19	1000.0	120.000	100.0	H	136.	-3.4

Appendix A.3: Test Plots of Radiated Emission, Above 1GHz

Note: Testing was carried out within frequency range 30MHz to the 5th harmonics. The measurement results above 6GHz were greater than 20dB below the limit, so only record the test result within the 30MHz to 6GHz.

EUT Information

EUT Name:	Wirnet™ iZeptoCell
Order No:	168378550
Model:	PDTIOT-IZEC900
Test Mode:	LoRA SF7_500K_925.7MHz + eMTC Band 5
Test Voltage:	DC 5V via PC
Standard:	FCC Part 15B
Test By:/Review By:	Mac Xie/Gary Chen
Tem./Hum./Pressure:	24.1°C/51.3%/101kPa
Remark:	3m chamber



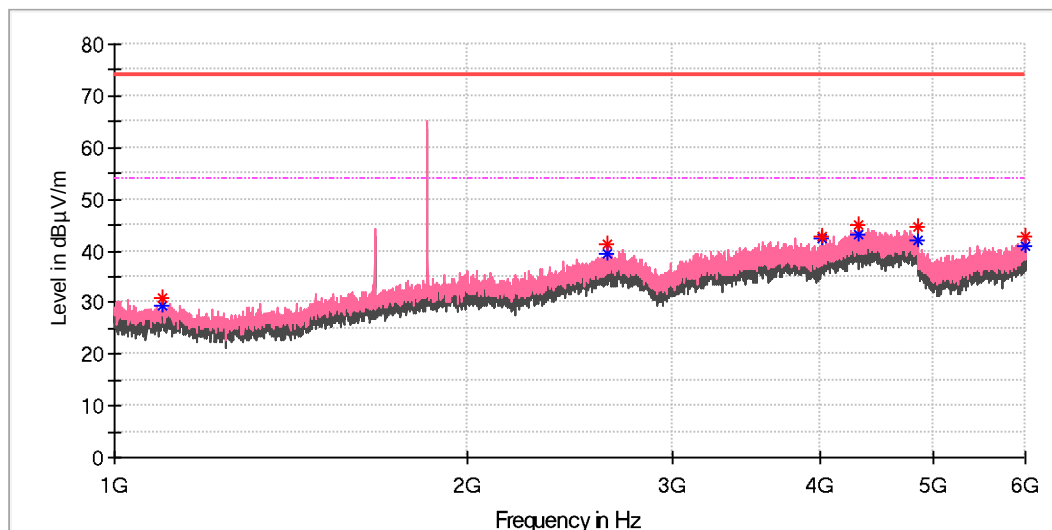
Remark: The highest waveform in the figure is fundamental and/or harmonics frequency of LoRA and eMTC signals.

Critical_Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2053.000000	36.15	---	74.00	37.85	100.0	H	241.0	-7.4
2053.000000	---	34.15	54.00	19.85	100.0	H	241.0	-7.4
2641.000000	40.76	---	74.00	33.24	100.0	H	246.0	-3.3
2641.000000	---	38.00	54.00	16.00	100.0	H	246.0	-3.3
3845.000000	---	42.26	54.00	11.74	100.0	H	199.0	0.0
3845.000000	42.79	---	74.00	31.21	100.0	H	199.0	0.0
4293.000000	44.64	---	74.00	29.36	100.0	H	211.0	2.2
4293.000000	---	42.29	54.00	11.71	100.0	H	211.0	2.2
4458.500000	45.08	---	74.00	28.92	100.0	H	344.0	2.0
4458.500000	---	43.99	54.00	10.01	100.0	H	344.0	2.0
4743.000000	---	43.45	54.00	10.55	100.0	H	78.0	2.8
4743.000000	44.25	---	74.00	29.75	100.0	H	78.0	2.8

EUT Information

EUT Name: Wirnet™ iZeptoCell
Order No: 168378550
Model: PDTIOT-IZEC900
Test Mode: LoRA SF7_500K_925.7MHz + eMTC Band 5
Test Voltage: DC 5V via PC
Standard: FCC Part 15B
Test By:/Review By: Mac Xie/Gary Chen
Tem./Hum./Pressure: 24.1°C/51.3%/101kPa
Remark: 3m chamber



Remark: The highest waveform in the figure is fundamental and/or harmonics frequency of LoRA and eMTC signals.

Critical_Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1100.000000	---	29.56	54.00	24.44	100.0	V	350.0	-12.2
1100.000000	30.77	---	74.00	43.23	100.0	V	350.0	-12.2
2641.000000	---	39.26	54.00	14.74	100.0	V	231.0	-3.3
2641.000000	41.39	---	74.00	32.61	100.0	V	231.0	-3.3
4027.500000	42.95	---	74.00	31.05	100.0	V	343.0	0.2
4027.500000	---	42.26	54.00	11.74	100.0	V	343.0	0.2
4318.500000	---	43.09	54.00	10.91	100.0	V	145.0	2.2
4318.500000	44.86	---	74.00	29.14	100.0	V	145.0	2.2
4851.500000	---	42.06	54.00	11.94	100.0	V	34.0	1.6
4851.500000	44.65	---	74.00	29.35	100.0	V	34.0	1.6
5996.000000	---	40.87	54.00	13.13	100.0	V	330.0	2.4
5996.500000	42.72	---	74.00	31.28	100.0	V	247.0	2.4

===== End of Appendix =====