

Prüfbericht-Nr.: <i>Test report no.:</i>	CN25X0NE 001	Auftrags-Nr.: <i>Order no.:</i>	158319199 Seite 1 von 78 Page 1 of 78
Kunden-Referenz-Nr.: <i>Client reference no.:</i>	N/A	Auftragsdatum: <i>Order date:</i>	2025-11-18
Auftraggeber: <i>Client:</i>	XC Tracer GmbH Junkerngasse 53, 3011 Bern, Switzerland		
Prüfgegenstand: <i>Test item:</i>	GPS Device with LoRa Connectivity		
Bezeichnung / Typ-Nr.: <i>Identification / Type no.:</i>	XC Tracer Maxx III		
Auftrags-Inhalt: <i>Order content:</i>	FCC Certification		
Prüfgrundlage: <i>Test specification:</i>	FCC Part 15 Subpart C		
Wareneingangsdatum: <i>Date of sample receipt:</i>	2025-11-18		
Prüfmuster-Nr.: <i>Test sample no.:</i>	A004119750-001		
Prüfzeitraum: <i>Testing period:</i>	2025-11-18 - 2025-12-20		
Ort der Prüfung: <i>Place of testing:</i>	Hong Kong		
Prüflaboratorium: <i>Testing laboratory:</i>	TÜV Rheinland Hong Kong Ltd.		
Prüfergebnis*: <i>Test result*:</i>	Pass		
geprüft von: <i>tested by:</i>	X 	genehmigt von: <i>authorized by:</i>	X 
Datum: <i>Date:</i>	2026-01-14 Wooga Wu	Ausstellungsdatum: <i>Issue date:</i>	2026-01-14 Billy Yip
Stellung / Position:	Assistant Test Engineer	Stellung / Position:	Authorizer
Sonstiges / <i>Other:</i>	"Decision Rule" document announced in our website (https://www.tuv.com/landingpage/en/qm-gcn/) describes the statement of conformity and its rule of enforcement for test results are applicable throughout this test report. FCC ID: 2AVOQ04		
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: P(ass) = entspricht o.g. Prüfgrundlage(n) F(ail) = entspricht nicht o.g. Prüfgrundlage(n) N/A = nicht anwendbar N/T = nicht * Legend: 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 above mentioned 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>			

Prüfbericht-Nr.:
Test report no.:

CN25X0NE 001

Seite 2 von 78
Page 2 of 78

Anmerkungen Remarks

1	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. Detaillierte Informationen bezüglich Prüfkonditionen, Prüfequipment und Messunsicherheiten sind im Prüflabor vorhanden und können auf Wunsch bereitgestellt werden. <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. Detailed information regarding test conditions, equipment and measurement uncertainty is available in the test laboratory and could be provided on request.</i>
2	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. Informationen zur Verifizierung der Authentizität unserer Dokumente erhalten Sie auf folgender Webseite: go.tuv.com/digital-signature <i>As contractually agreed, this document has been signed digitally only. TÜV 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, TÜV 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. For information on verifying the authenticity of our documents, please visit the following website: go.tuv.com/digital-signature</i>
3	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. <i>Test clauses with remark of * are subcontracted to qualified subcontractors and described under the respective test clause in the report.</i> <i>Deviations of testing specification(s) or customer requirements are listed in specific test clause in the report.</i>
4	Die Entscheidungsregel für Konformitätserklärungen basierend auf numerischen Messergebnissen in diesem Prüfbericht basiert auf der "Null-Grenzwert-Regel" und der "Einfachen Akzeptanz" gemäß ILAC G8:2019 und IEC Guide 115:2021, es sei denn, in der auf Seite 1 dieses Berichts genannten angewandten Norm ist etwas anderes festgelegt oder vom Kunden gewünscht. Dies bedeutet, dass die Messunsicherheit nicht berücksichtigt wird und daher auch nicht im Prüfbericht angegeben wird. Zu weiteren Informationen bezüglich des Risikos durch diese Entscheidungsregel siehe ILAC G8:2019. <i>The decision rule for statements of conformity, based on numerical measurement results, in this test report is based on the "Zero Guard Band Rule" and "Simple Acceptance" in accordance with ILAC G8:2019 and IEC Guide 115:2021, unless otherwise specified in the applied standard mentioned on Page 1 of this report or requested by the customer. This means that measurement uncertainty is not taken in account and hence also not declared in the test report. For additional information to the resulting risk based of this decision rule please refer to ILAC G8:2019.</i>

Prüfbericht-Nr.: <i>Test report no.:</i>		CN25X0NE 001	Seite 3 von 78 Page 3 of 78
Absatz <i>Clause</i>	Anforderungen - Prüfungen / <i>Requirements - Tests</i>	Messergebnisse – Bemerkungen/ <i>Measuring results - Remarks</i>	Ergebnis <i>Result</i>

Table of Content

Page

Cover Page	1
Table of Content	2
Product Information	5
Manufacturers declarations	5
Product function and intended use.....	5
Submitted documents	5
Independent Operation Modes	5
Related Submittal(s) Grants.....	5
Remark	5
Test Set-up and Operation Mode	6
Principle of Configuration Selection	6
Test Operation and Test Software	6
Special Accessories and Auxiliary Equipment	6
Countermeasures to achieve EMC Compliance	6
Test Methodology	7
Radiated Emission	7
Field Strength Calculation.....	7
Conducted Emission Calculation	7
Test Setup Diagram	8
Test Facility	10
Test Laboratory Information	10
List of Test and Measurement Instruments	11
Measurement Uncertainty	12
Results FCC Part 15 - Subpart C	13
Common to DTS & FHSS.....	13
FCC 15.203 – Antenna Requirement 1	Pass..... 13
FCC 15.204 – Antenna Requirement 2	Pass..... 13
FCC 15.207 – Conducted Emission on AC Mains	Pass..... 14
Digital Modulation System (DTS)	16
FCC 15.247 (a)(2) – 6dB Bandwidth Measurement	Pass..... 16
FCC 15.247(b)(3) – Maximum Peak Conducted Output Power	Pass..... 16
FCC 15.247(e) – Power Spectral Density	Pass..... 17
FCC 15.247(d) – Spurious Conducted Emissions.....	Pass..... 17
FCC 15.205 – Radiated Emissions in Restricted Frequency Bands.....	Pass..... 18
Frequency Hopping Spread Spectrum (FHSS)	20
FCC 15.247 (a)(1)(i) – 20dB Bandwidth	Pass..... 20
FCC 15.247 (a)(1)(i) – Carrier Frequency Separation	Pass..... 20
FCC 15.247 (a)(1)(i) – Number of Hopping Frequency.....	Pass..... 21
FCC 15.247 (a)(1)(i) – Time of Occupancy.....	Pass..... 21
FCC 15.247 (a) – Hopping Sequence.....	Pass..... 22
FCC 15.247 (a) – Equal Hopping Frequency Use.....	Pass..... 22
FCC 15.247 (a) – Receiver Input Bandwidth	Pass..... 22

Prüfbericht-Nr.: <i>Test report no.:</i>		CN25X0NE 001	Seite 4 von 78 Page 4 of 78
Absatz <i>Clause</i>	Anforderungen - Prüfungen / <i>Requirements - Tests</i>	Messergebnisse – Bemerkungen/ <i>Measuring results - Remarks</i>	Ergebnis <i>Result</i>

FCC 15.247 (a) – Receiver Hopping Capability	Pass	22
FCC 15.247(b)(2) – Maximum Peak Conducted Output Power	Pass	23
FCC 15.247(d) – Spurious Conducted Emissions	Pass	23
FCC 15.205 – Radiated Emissions in Restricted Frequency Bands	Pass	24
Appendix 1 – Test Results		27
Appendix 2 – Test Setup		63
Appendix 3 – EUT External Photos		69
Appendix 4 – EUT Internal Photos		73
Appendix 5 – RF Exposure information		76

Prüfbericht-Nr.: <i>Test report no.:</i>		CN25X0NE 001		Seite 5 von 78 Page 5 of 78
Absatz <i>Clause</i>	Anforderungen - Prüfungen / <i>Requirements - Tests</i>	Messergebnisse – Bemerkungen/ <i>Measuring results - Remarks</i>	Ergebnis <i>Result</i>	

Product Information

Manufacturers declarations

Bluetooth Radio	Transceiver	
Operating frequency range	902.6 - 927.4 MHz	920.8 MHz
Type of modulation	FHSS modulation	DSSS modulation
Number of channels	64	1
Channel separation	200 KHz	n/a
Type of antenna	Internal PCB Antenna	
Antenna gain (dBi)	0.0	
Power level	fix	
General		
Type of equipment	Standalone Device	
Connection to public utility power line	Yes	
Nominal voltage	V _{nom} : 3.7 VDC (Battery) V _{nom} : 5.0 VDC (USB-C)	
Independent Operation Modes	Transceiver	

Product function and intended use

The equipment under test (EUT) is a LoRa Radio Module. It is powered by battery.

FCC ID: 2AVOQ04

Models	Product description
XC Tracer Maxx III	GPS Device with LoRa Connectivity

Submitted documents

Circuit Diagram
Block Diagram
Technical Description
User manual
Label

Independent Operation Modes

The basic operation modes are:

- Transceiver mode.

For further information refer to User Manual

Related Submittal(s) Grants

This is a single application for certification of the transmitter.

Remark

During the test, channel and power controlling software provided by the customer was used to control the operating channel as well as the output power level. The RF output power was selected according to the instruction given by the manufacturer. The setting of the RF output power expected by the customer shall be fixed on the firmware of the end product.

Prüfbericht-Nr.: <i>Test report no.:</i>		CN25X0NE 001		Seite 6 von 78 Page 6 of 78
Absatz <i>Clause</i>	Anforderungen - Prüfungen / <i>Requirements - Tests</i>	Messergebnisse – Bemerkungen/ <i>Measuring results - Remarks</i>	Ergebnis <i>Result</i>	

Test Set-up and Operation Mode

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.

Test Operation and Test Software

Test operation should refer to test methodology.

- Test mode samples with maximum RF output power and duty cycle and capable to transmit continuously at the lowest, middle and highest frequency channels is provided by the applicant for the testing.

Special Accessories and Auxiliary Equipment

The product has been tested together with the following additional accessories:

Item	Manufacturer	Model	S/N
Adaptor	Sony	AC-0051	---
Adaptor	LG	MCS-H05UR	---

Countermeasures to achieve EMC Compliance

- None

Prüfbericht-Nr.: Test report no.:		CN25X0NE 001	Seite 7 von 78 Page 7 of 78
Absatz Clause	Anforderungen - Prüfungen / Requirements - Tests	Messergebnisse – Bemerkungen/ Measuring results - Remarks	Ergebnis Result

Test Methodology

Radiated Emission

The radiated emission measurements of the transmitter part were performed according to the procedures in ANSI C63.10-2020.

For measurement below 1GHz - the equipment under test (EUT) was placed at the middle of the 80 cm height turntable. For measurement above 1GHz - the EUT was placed at the middle of the 1.5 m height turntable and RF absorbing material was placed on ground plane between turntable and measuring antenna. During the testing, the EUT was operated standalone and arranged for maximum emissions. The EUT was tested in three orthogonal planes.

The investigation is performed with the EUT rotated 360 °, the antenna height scanned between 1m and 4m, and the antenna rotated to repeat the measurements for both the horizontal and vertical antenna polarizations. Repeat the measurement steps until the maximum emissions were obtained.

All radiated tests were performed at an antenna to EUT with 3 meters distance, unless stated otherwise in particular parts of this test report.

Field Strength Calculation

The field strength at 3 m was established by adding the meter reading of the spectrum analyzer to the factors associated with antenna correction factor, cable loss, preamplifiers and filter attenuation.

The equation is expressed as follow:

$$FS = R + AF + CF + FA - PA$$

Where

- FS = Field Strength in dBuV/m at 3 meters.
- R = Reading of Spectrum Analyzer in dBuV.
- AF = Antenna Factor in dB.
- CF = Cable Attenuation Factor in dB.
- FA = Filter Attenuation Factor in dB.
- PA = Preamplifier Factor in dB.

FA and PA are only be used for the measuring frequency above 1 GHz.

Conducted Emission Calculation

Receiver reading R_r (dBμV)
LISN insertion loss L_I (dB)
Cable loss C_I (dB)

$$\text{Result (dBμV)} = R_r + L_I + C_I$$

Sample: $R_r = 40.2 \text{ dBμV}$

$L_I = 10.2 \text{ dB}$

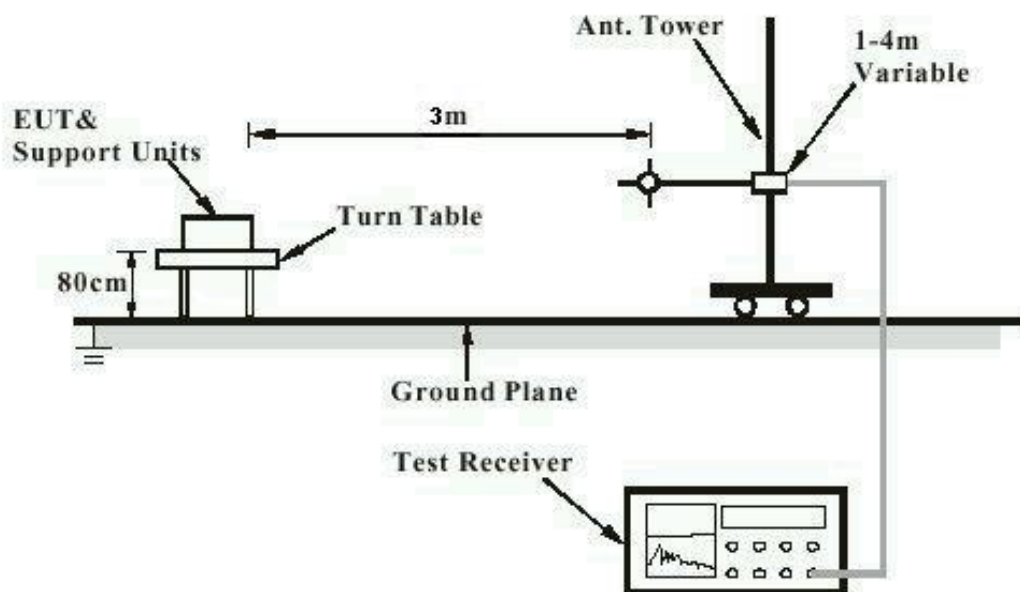
$C_I = 0.3 \text{ dB}$

$$\text{Result} = 40.2 + 10.2 + 0.3 = 50.7 \text{ dBμV}$$

Prüfbericht-Nr.: <i>Test report no.:</i>	CN25X0NE 001	Seite 8 von 78 Page 8 of 78	
Absatz <i>Clause</i>	Anforderungen - Prüfungen / <i>Requirements - Tests</i>	Messergebnisse – Bemerkungen/ <i>Measuring results - Remarks</i>	Ergebnis <i>Result</i>

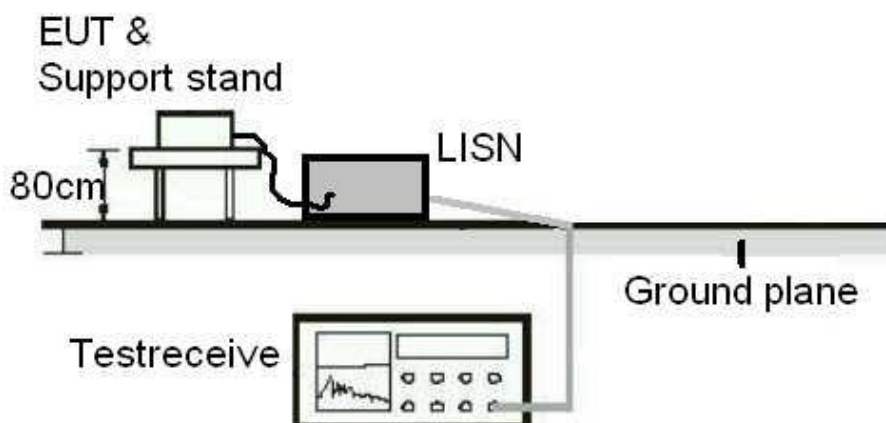
Test Setup Diagram

Diagram of Measurement Configuration for Radiation Test



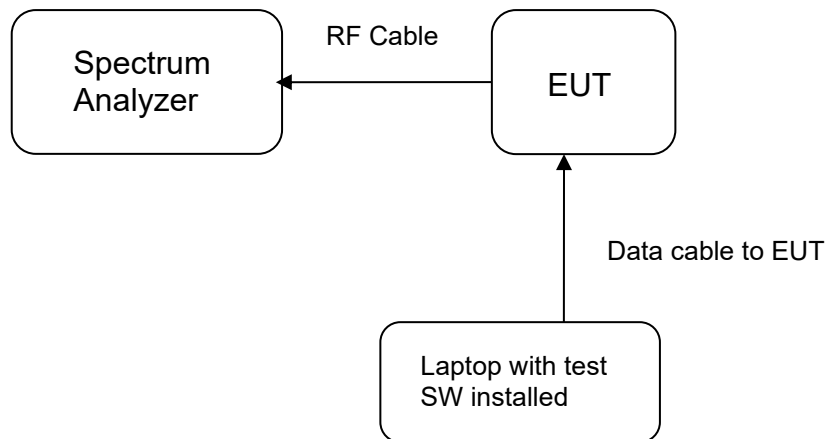
Note: Measurements above 1 GHz are done with a table height of 1.5m. In addition, there is RF absorbing material on the floor of the test site for above 1GHz measurement.

Diagram of Measurement Equipment Configuration for Mains Conduction Measurement (if applicable)



Prüfbericht-Nr.: <i>Test report no.:</i>		CN25X0NE 001		Seite 9 von 78 Page 9 of 78
Absatz <i>Clause</i>	Anforderungen - Prüfungen / <i>Requirements - Tests</i>	Messergebnisse – Bemerkungen/ <i>Measuring results - Remarks</i>	Ergebnis <i>Result</i>	

Diagram of Equipment Configuration for Antenna-port Conducted Measurement (if applicable)



Prüfbericht-Nr.: <i>Test report no.:</i>		CN25X0NE 001		Seite 10 von 78 Page 10 of 78
Absatz <i>Clause</i>	Anforderungen - Prüfungen / <i>Requirements - Tests</i>	Messergebnisse – Bemerkungen/ <i>Measuring results - Remarks</i>	Ergebnis <i>Result</i>	

Test Facility

Test Laboratory Information

TÜV Rheinland Hong Kong Ltd.

Address: 3-4/F, Fou Wah Industrial Building, 10-16 Pun Shan Street, Tsuen Wan, N.T., Hong Kong

Tel.: +852 2192 1000

Fax: +852 2192 1001

Email: service-gc@tuv.com

The test facility is recognized or accredited by the following organizations:

FCC

Designation Number : HK0013

Hong Kong Productivity Council

Address: LG1/F, HKPC Building 78 Tat Chee Avenue, Kowloon, Hong Kong

Tel.: +852 2788 6396

Fax: +852 2788 5405

Email: emc@hkpc.org

The test facility is recognized or accredited by the following organizations:

FCC

Designation Number : HK0012

Prüfbericht-Nr.: <i>Test report no.:</i>		CN25X0NE 001		Seite 11 von 78 Page 11 of 78
Absatz <i>Clause</i>	Anforderungen - Prüfungen / <i>Requirements - Tests</i>	Messergebnisse – Bemerkungen/ <i>Measuring results - Remarks</i>	Ergebnis <i>Result</i>	

List of Test and Measurement Instruments

Hong Kong Productivity Council

Radiated Emission

Equipment	Manufacturer	Type	Cal. Date	Due Date
Multi-functional Anechoic Chamber (NSA)	Albatross	---	2025-01-06	2026-01-06
Multi-functional Anechoic Chamber (VSWR)	Albatross	---	2025-01-06	2026-01-06
Test Receiver	Rohde & Schwarz	ESU40	2025-03-21	2026-03-21
Double-Ridged Waveguide Horn	EMCO	3117	2024-11-21	2026-03-21
Bi-conical Antenna	Rohde & Schwarz	HK116	2024-10-24	2026-02-24
Log Periodic Antenna	Rohde & Schwarz	HL223	2024-10-25	2026-02-25
Cable	SF118/11N/11N /12000MM	Huber+Suhner	2025-01-06	2027-01-06
Microwave amplifier	COM-POWER Corporation	PAM-118A	2025-03-04	2026-03-04
High Pass Filter	Trilithic	23042	2025-10-30	2027-10-30
Double-Ridged Waveguide Horn	EMCO	3116	2024-11-30	2026-03-30
High Frequency Cable	Pasternack	PE3VNA4001-3M	2025-06-12	2027-06-12
Preamplifier 18GHz to 40GHz	A.H. Systems, Inc. Corporation	PAM-1840VH	2025-01-27	2026-01-27
Band Reject Filter	Micro-Tronics	Brm13026	2025-10-30	2027-10-30

TÜV Rheinland Hong Kong Ltd.

Conducted Emission on AC mains port

Equipment	Manufacturer	Type	Cal. Date	Due Date
EMI Test Receiver	R & S	ESR3	2025-09-26	2026-09-26
Two-Line V-network	R & S	ENV216	2025-11-03	2026-11-03
RF Shielded Cable	RG223	Teseq	2025-08-12	2026-08-12
Test Software	Rohde & Schwarz	Software version: EMC32 V9.26.01		

Radio Test

Equipment	Manufacturer	Type	Cal. Date	Due Date
Spectrum Analyzer	R & S	FSV40	2025-08-07	2026-08-07

Prüfbericht-Nr.: <i>Test report no.:</i>		CN25X0NE 001		Seite 12 von 78 Page 12 of 78
Absatz <i>Clause</i>	Anforderungen - Prüfungen / <i>Requirements - Tests</i>	Messergebnisse – Bemerkungen/ <i>Measuring results - Remarks</i>	Ergebnis <i>Result</i>	

Measurement Uncertainty

The estimated combined standard uncertainty for powerline conducted emissions measurements is $\pm 3.22\text{dB}$.

The estimated combined standard uncertainty for radiated emissions measurements is $\pm 2.44\text{dB}$ (9kHz to 30MHz) and $\pm 5.92\text{dB}$ (30MHz to 1000MHz) and is $\pm 4.92\text{dB}$ (1GHz to 18GHz).

The estimated combined standard uncertainty for antenna conducted emission is $\pm 1.94\text{dB}$

The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor of $k=2$, which for the level of confidence is approximately 95%.

Prüfbericht-Nr.: Test report no.:		CN25X0NE 001	Seite 13 von 78 Page 13 of 78
Absatz Clause	Anforderungen - Prüfungen / Requirements - Tests	Messergebnisse – Bemerkungen/ Measuring results - Remarks	Ergebnis Result

Results FCC Part 15 - Subpart C

Common to DTS & FHSS

FCC 15.203 – Antenna Requirement 1		Pass
Requirements:	No antenna other than that furnished by the responsible party shall be used with the device	
Results:	a) Antenna type	Internal PCB Antenna
	b) Manufacturer and model no.:	N/A
	c) Peak Gain:	0.0 dBi
Verdict:	Pass	

FCC 15.204 – Antenna Requirement 2		Pass
Requirements:	An intentional radiator may be operated only with the antenna with which it is authorized. If an antenna is marketed with the intentional radiator, it shall be of a type which is authorized with the intentional radiator.	
Results:	Only one integral antenna can be used.	
Verdict:	Pass	

Prüfbericht-Nr.:
Test report no.:

CN25X0NE 001

Seite 14 von 78
Page 14 of 78

Absatz Clause	Anforderungen - Prüfungen / Requirements - Tests	Messergebnisse – Bemerkungen/ Measuring results - Remarks	Ergebnis Result
------------------	---	--	--------------------

FCC 15.207 – Conducted Emission on AC Mains

Pass

Test method : ANSI C63.10-2020
Test date : 2025-12-15
Mode of operation : TX mode
Port of testing : AC Mains input port of power supply
Supply voltage : 120VAC 60Hz
Temperature : 20.5°C
Humidity : 49.6%

Requirement: FCC 15.207(a)

Results: For test protocols please refer to Appendix 1

Mode: USB-C, DTS 920.8 MHz Live measurement

Frequency (MHz)	Quasi-peak (dBµV)	Limit QP (dBµV)	Average (dBµV)	Limit AV (dBµV)	Verdict
0.168	41.8	65.0	23.6	55.0	Pass
0.584	25.8	56.0	18.0	46.0	Pass
17.601	18.5	60.0	13.6	50.0	Pass

Mode: USB-C, DTS 920.8 MHz Neutral measurement

Frequency (MHz)	Quasi-peak (dBµV)	Limit QP (dBµV)	Average (dBµV)	Limit AV (dBµV)	Verdict
0.168	39.7	65.0	20.8	55.0	Pass
0.566	25.0	56.0	13.2	46.0	Pass
17.619	17.8	60.0	10.6	50.0	Pass

Mode: USB-C, FHSS 902.6 MHz Live measurement

Frequency (MHz)	Quasi-peak (dBµV)	Limit QP (dBµV)	Average (dBµV)	Limit AV (dBµV)	Verdict
0.159	37.9	65.5	19.6	55.5	Pass
0.578	22.9	56.0	16.7	46.0	Pass
17.624	17.5	60.0	12.7	50.0	Pass

Mode: USB-C, FHSS 902.6 MHz Neutral measurement

Frequency (MHz)	Quasi-peak (dBµV)	Limit QP (dBµV)	Average (dBµV)	Limit AV (dBµV)	Verdict
0.161	37.7	65.4	18.7	55.3	Pass
0.575	23.4	56.0	10.7	46.0	Pass
17.621	16.2	60.0	10.0	50.0	Pass

Prüfbericht-Nr.:
Test report no.:

CN25X0NE 001

Seite 15 von 78
Page 15 of 78

Absatz Clause	Anforderungen - Prüfungen / Requirements - Tests	Messergebnisse – Bemerkungen/ Measuring results - Remarks	Ergebnis Result
------------------	---	--	--------------------

Mode: USB-C, FHSS 914.6 MHz		Live measurement			
Frequency (MHz)	Quasi-peak (dBµV)	Limit QP (dBµV)	Average (dBµV)	Limit AV (dBµV)	Verdict
0.152	37.5	65.9	18.5	55.9	Pass
0.584	21.5	56.0	15.4	46.0	Pass
18.168	16.9	60.0	12.2	50.0	Pass
Mode: USB-C, FHSS 914.6 MHz		Neutral measurement			
Frequency (MHz)	Quasi-peak (dBµV)	Limit QP (dBµV)	Average (dBµV)	Limit AV (dBµV)	Verdict
0.152	37.0	65.9	18.0	55.9	Pass
0.584	22.5	56.0	10.2	46.0	Pass
0.834	12.7	56.0	3.0	46.0	Pass
Mode: USB-C, FHSS 927.4 MHz		Live measurement			
Frequency (MHz)	Quasi-peak (dBµV)	Limit QP (dBµV)	Average (dBµV)	Limit AV (dBµV)	Verdict
0.152	36.6	65.9	17.4	55.9	Pass
0.582	21.2	56.0	14.3	46.0	Pass
0.832	9.9	56.0	3.2	46.0	Pass
Mode: USB-C, FHSS 927.4 MHz		Neutral measurement			
Frequency (MHz)	Quasi-peak (dBµV)	Limit QP (dBµV)	Average (dBµV)	Limit AV (dBµV)	Verdict
0.152	36.1	65.9	16.8	55.9	Pass
0.580	22.5	56.0	9.5	46.0	Pass
0.832	12.0	56.0	2.9	46.0	Pass
Remarks: Pre-scan has been conducted to determine the worst-case mode from all possible combinations between available modulations and data rate. The radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150kHz to 30MHz does not exceed the limits. For test Results plots refer to Appendix 1, page 2.					

Prüfbericht-Nr.: <i>Test report no.:</i>		CN25X0NE 001		Seite 16 von 78 Page 16 of 78
Absatz <i>Clause</i>	Anforderungen - Prüfungen / <i>Requirements - Tests</i>	Messergebnisse – Bemerkungen/ <i>Measuring results - Remarks</i>	Ergebnis <i>Result</i>	

Digital Modulation System (DTS)

FCC 15.247 (a)(2) – 6dB Bandwidth Measurement				Pass
Test method	: ANSI C63.10-2020			
Test date	: 2025-12-16			
Mode of operation	: Tx mode			
Port of testing	: Temporary antenna port			
Supply voltage	: USB-C, 120 VAC, 60Hz			
Temperature	: 20.5°C			
Humidity	: 48.3%			
Requirement:	Systems using digital modulation techniques may operate in the 902 – 928 MHz, 2400 – 2483.5 MHz, and 5725 – 5850 MHz bands. The minimum 6dB bandwidth shall be at least 500kHz.			
Results:	For test protocols please refer to Appendix 1			
Channel Frequency (MHz)	6 dB left (MHz)	6 dB right (MHz)	6dB bandwidth (kHz)	Limit (kHz)
920.8	920.505	921.130	625.529	≥ 500

FCC 15.247(b)(3) – Maximum Peak Conducted Output Power				Pass
Test method	: ANSI C63.10-2020			
Test date	: 2025-12-15			
Mode of operation	: Tx mode			
Port of testing	: Temporary antenna port			
Supply voltage	: USB-C, 120 VAC, 60Hz			
Temperature	: 20.5°C			
Humidity	: 48.3%			
Requirement:	For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850MHz bands: 1 Watt (30dBm)			
Results:	For test protocols please refer to Appendix 1			
Frequency (MHz)	Measured Output Power (dBm)	Limit (dBm)	Verdict	
920.8	13.76	30	Pass	

Prüfbericht-Nr.: <i>Test report no.:</i>		CN25X0NE 001		Seite 17 von 78 Page 17 of 78
Absatz <i>Clause</i>	Anforderungen - Prüfungen / <i>Requirements - Tests</i>	Messergebnisse – Bemerkungen/ <i>Measuring results - Remarks</i>	Ergebnis <i>Result</i>	

FCC 15.247(e) – Power Spectral Density			Pass
Test method : ANSI C63.10-2020 Test date : 2025-12-15 Mode of operation : Tx mode Port of testing : Temporary antenna port Supply voltage : USB-C, 120 VAC, 60Hz Temperature : 20.5°C Humidity : 48.3%			
Requirement: For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.			
Results: For test protocols refer to Appendix 1			
Frequency (MHz)	Maximum Power Spectral Density (dBm)	Limit (dBm)	Verdict
920.8	7.19	8.0	Pass

FCC 15.247(d) – Spurious Conducted Emissions				Pass		
Test method : ANSI C63.10-2020 Test date : 2025-12-15 Mode of operation : Tx mode Port of testing : Temporary antenna port Supply voltage : USB-C, 120 VAC, 60Hz Temperature : 20.5°C Humidity : 48.3%						
Requirement:		In any 100kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.				
Results:		Pre-scan has been conducted to determine the worst-case mode from all possible combinations between available modulations and data rate. Only the worst case is shown below. For test protocols refer to Appendix 1				
Operating frequency (MHz)	Spurious frequency (MHz)	Spurious level (dBm)	Reference value (dBm)	Limit (dBm)	Margin (dB)	Verdict
920.8	No Peak Found	---	---	---	---	Pass

Prüfbericht-Nr.:
Test report no.:

CN25X0NE 001

Seite 18 von 78
Page 18 of 78

Absatz Clause	Anforderungen - Prüfungen / Requirements - Tests	Messergebnisse – Bemerkungen/ Measuring results - Remarks	Ergebnis Result
------------------	---	--	--------------------

FCC 15.205 – Radiated Emissions in Restricted Frequency Bands

Pass

Test method : ANSI C63.10-2020
Test date : 2025-12-15
Mode of operation : Tx mode
Port of testing : Temporary antenna port
Frequency range : 9 kHz – 10 GHz
Supply voltage : 1) Battery, 3.7 VDC;
2) USB-C, 120 VAC, 60Hz
Temperature : 22.4°C
Humidity : 52.3%

Requirement: In any 100kHz bandwidth outside the frequency band at least 20dB below the highest level of the desired power. In addition, radiated emissions which fall in the restricted bands must also comply with the radiated emission general limits.

Results: Pre-scan has been conducted to determine the worst-case mode from all possible combinations between available modulations and data rate.
All three transmit frequency modes comply with the field strength within the restricted bands. There is no spurious found below 30MHz.

Mode: Battery, 920.8 MHz TX

Vertical Polarization

Frequency MHz	Level dBuV/m	Limit/ Detector dBuV/m
191.996	20.3	43.5 / QP
671.985	30.6	46.0 / QP
1841.596	46.0	74.0 / PK
1841.596	37.1	54.0 / AV
2762.395	45.4	74.0 / PK
2762.395	35.3	54.0 / AV

Mode: Battery, 920.8 MHz TX

Horizontal Polarization

Frequency MHz	Level dBuV/m	Limit/ Detector dBuV/m
191.996	23.1	43.5 / QP
671.985	36.0	46.0 / QP
1841.596	57.3	74.0 / PK
1841.596	50.3	54.0 / AV
2762.395	52.3	74.0 / PK
2762.395	44.1	54.0 / AV

Prüfbericht-Nr.:
Test report no.:

CN25X0NE 001

Seite 19 von 78
Page 19 of 78

Absatz <i>Clause</i>	Anforderungen - Prüfungen / <i>Requirements - Tests</i>	Messergebnisse – Bemerkungen/ <i>Measuring results - Remarks</i>	Ergebnis <i>Result</i>
--------------------------------	---	--	----------------------------------

Mode: USB-C, 920.8 MHz TX		Vertical Polarization	
Frequency MHz	Level dBuV/m	Limit/ Detector dBuV/m	
43.500	24.4	40.0 / QP	
479.989	31.9	46.0 / QP	
1841.596	54.2	74.0 / PK	
1841.596	47.1	54.0 / AV	
2762.395	46.3	74.0 / PK	
2762.395	36.7	54.0 / AV	
Mode: USB-C, 920.8 MHz TX		Horizontal Polarization	
Frequency MHz	Level dBuV/m	Limit/ Detector dBuV/m	
191.996	23.0	43.5 / QP	
479.989	36.3	46.0 / QP	
1841.596	59.3	74.0 / PK	
1841.596	52.1	54.0 / AV	
2762.395	50.8	74.0 / PK	
2762.395	42.6	54.0 / AV	

Prüfbericht-Nr.: Test report no.:		CN25X0NE 001		Seite 20 von 78 Page 20 of 78
Absatz Clause	Anforderungen - Prüfungen / Requirements - Tests	Messergebnisse – Bemerkungen/ Measuring results - Remarks	Ergebnis Result	

Frequency Hopping Spread Spectrum (FHSS)

FCC 15.247 (a)(1)(i) – 20dB Bandwidth					Pass
Test method	: ANSI C63.10 – 2020				
Test date	: 2025-12-15				
Mode of operation	: Tx mode				
Port of testing	: Temporary antenna port				
Supply voltage	: USB-C, 120 VAC, 60Hz				
Temperature	: 20.5°C				
Humidity	: 48.3%				
Requirement:	The intentional radiators must be designed to ensure that the 20dB bandwidth of the emission, is contained within the frequency band designated in the rule section under which the equipment is operated.				
Results:	Pre-scan has been conducted to determine the worst-case mode from all possible combinations between available modulations and packet types. For test protocols refer to Appendix 1.				
Frequency (MHz)	20 dB left (MHz)	Limit (MHz)	20 dB right (MHz)	Limit (MHz)	20dB bandwidth (kHz)
902.6	902.513	> 902	902.720	< 928	207.29
914.6	914.515	> 902	914.721	< 928	206.29
927.4	927.314	> 902	927.521	< 928	207.79

FCC 15.247 (a)(1)(i) – Carrier Frequency Separation		Pass
Test method	: ANSI C63.10 – 2020	
Test date	: 2025-12-15	
Mode of operation	: Tx mode (hopping on)	
Port of testing	: Temporary antenna port	
Supply voltage	: USB-C, 120 VAC, 60Hz	
Temperature	: 20.5°C	
Humidity	: 48.3%	
Requirement: Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater.		
Results: The centre frequencies of the hopping channels are separated by more than the 20dB bandwidth. For test protocols please refer to Appendix 1.		
Channel Separation (kHz)	Limit (kHz)	Verdict
400.9	207.79	Pass
Note: The limit is maximum of the 20dB bandwidth: 207.79kHz		

Prüfbericht-Nr.:
Test report no.:

CN25X0NE 001

Seite 21 von 78
Page 21 of 78

Absatz Clause	Anforderungen - Prüfungen / Requirements - Tests	Messergebnisse – Bemerkungen/ Measuring results - Remarks	Ergebnis Result
------------------	---	--	--------------------

FCC 15.247 (a)(1)(i) – Number of Hopping Frequency

Pass

Test method : ANSI C63.10 – 2020
Test date : 2025-12-15
Mode of operation : Tx mode (hopping on)
Port of testing : Temporary antenna port
Supply voltage : USB-C, 120 VAC, 60Hz
Temperature : 20.5°C
Humidity : 48.3%

Requirement: For frequency hopping systems operating in the 902-928 MHz band: if the 20 dB bandwidth of the hopping channel is less than 250 kHz, the system shall use at least 50 hopping frequencies.

Results: Measured quantity of hopping channel is greater than 15 channels. For test protocols please refer to Appendix 1.

No. of hopping channels	Limit	Verdict
63	50	Pass

FCC 15.247 (a)(1)(i) – Time of Occupancy

Pass

Test method : ANSI C63.10 – 2020
Test date : 2025-12-15
Mode of operation : Tx mode (hopping on)
Port of testing : Temporary antenna port
Supply voltage : USB-C, 120 VAC, 60Hz
Temperature : 20.5°C
Humidity : 48.3%

Requirement: For frequency hopping systems operating in the 902-928 MHz band: if the 20 dB bandwidth of the hopping channel is less than 250 kHz, the average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 20 second period

Results: Pre-scan has been conducted to determine the worst-case mode from all possible combinations between available modulations and packet types.
For test protocols please refer to Appendix 1.

Frequency (MHz)	No. of Pulse in sweep time	Pulse width (ms)	Measured dwell time (s)	Limit (s)	Verdict
902.6	1	5.173	0.005	< 0.4	Pass
914.6	1	5.152	0.005	< 0.4	Pass
927.4	1	5.167	0.005	< 0.4	Pass

Note:
Dwell Time = Pulse width x Number of Pulse in the Period
Period = 20 seconds

Prüfbericht-Nr.: <i>Test report no.:</i>		CN25X0NE 001		Seite 22 von 78 Page 22 of 78
Absatz <i>Clause</i>	Anforderungen - Prüfungen / <i>Requirements - Tests</i>	Messergebnisse – Bemerkungen/ <i>Measuring results - Remarks</i>	Ergebnis <i>Result</i>	

FCC 15.247 (a) – Hopping Sequence	Pass
The system radio frequency (RF) bandwidth is equal to the channel bandwidth multiplied by the number of channels in the hop set. The hop set shall be such that the near-term distribution of frequencies appears random, with sequential hops randomly distributed in both direction and magnitude of change in the hop set, while the long-term distribution appears evenly distributed.	
Refer to LoRa Specification	

FCC 15.247 (a) – Equal Hopping Frequency Use	Pass
Each of the transmitter's hopping channels is used equally on average. The system radio frequency (RF) bandwidth is equal to the channel bandwidth multiplied by the number of channels in the hop set. The hop set shall be such that the near-term distribution of frequencies appears random, with sequential hops randomly distributed in both direction and magnitude of change in the hop set, while the long-term distribution appears evenly distributed.	
Refer to LoRa Specification	

FCC 15.247 (a) – Receiver Input Bandwidth	Pass
The associated receiver(s) complies with the requirement that its input bandwidth matches the bandwidth of the transmitted signal.	
Refer to LoRa Specification	

FCC 15.247 (a) – Receiver Hopping Capability	Pass
The associated receiver has the ability to shift frequencies in synchronisation with the transmitted signals.	
Refer to LoRa Specification	

Prüfbericht-Nr.:
Test report no.:

CN25X0NE 001

Seite 23 von 78
Page 23 of 78

Absatz Clause	Anforderungen - Prüfungen / Requirements - Tests	Messergebnisse – Bemerkungen/ Measuring results - Remarks	Ergebnis Result
------------------	---	--	--------------------

FCC 15.247(b)(2) – Maximum Peak Conducted Output Power

Pass

Test method : ANSI C63.10 – 2020
Test date : 2025-12-15
Mode of operation : Tx mode
Port of testing : Temporary antenna port
Supply voltage : USB-C, 120 VAC, 60Hz
Temperature : 20.5°C
Humidity : 48.3%

Requirement: For frequency hopping systems operating in the 902-928 MHz band: 1 watt for systems employing at least 50 hopping channels; 0.25 watts for systems employing less than 50 hopping channels, but at least 25 hopping channels.

Results: For test protocols please refer to Appendix 1.

Frequency (MHz)	Measured output power (dBm)	Limit (W)	Limit (dBm)	Verdict
902.6	14.06	1	30	Pass
914.6	13.85	1	30	Pass
927.4	13.53	1	30	Pass

FCC 15.247(d) – Spurious Conducted Emissions

Pass

Test method : ANSI C63.10 – 2020
Test date : 2025-12-15
Mode of operation : Tx mode
Port of testing : Temporary antenna port
Supply voltage : USB-C, 120 VAC, 60Hz
Temperature : 20.5°C
Humidity : 48.3%

Requirement: In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.

Results: Pre-scan has been conducted to determine the worst-case mode from all possible combinations between available modulations and data rate.
Test results of 100kHz Bandwidth of Frequency Band Edge by Conducted method is compliance with the requirement. For test protocols refer to Appendix 1.

Operating frequency (MHz)	Spurious frequency (MHz)	Spurious Level (dBm)	Reference value (dBm)	Limit (dBm)	Margin (dB)	Verdict
902.6	No peak found	---	---	---	---	Pass
914.6	No peak found	---	---	---	---	Pass
927.4	No peak found	---	---	---	---	Pass

Prüfbericht-Nr.:
Test report no.:

CN25X0NE 001

Seite 24 von 78
Page 24 of 78

Absatz Clause	Anforderungen - Prüfungen / Requirements - Tests	Messergebnisse – Bemerkungen/ Measuring results - Remarks	Ergebnis Result
------------------	---	--	--------------------

FCC 15.205 – Radiated Emissions in Restricted Frequency Bands

Pass

Test method : ANSI C63.10 – 2020
Test date : 2025-12-15
Mode of operation : Tx mode
Port of testing : Temporary antenna port
Frequency range : 9kHz - 10GHz
Supply voltage : 1) Battery, 3.7 VDC;
2) USB-C, 120 VAC, 60Hz
Temperature : 22.4°C
Humidity : 52.3%

Requirement: In any 100kHz bandwidth outside the frequency band at least 20dB below the highest level of the desired power. In addition, radiated emissions which fall in the restricted bands must also comply with the radiated emission general limits.

Results: Pre-scan has been conducted to determine the worst-case mode from all possible combinations between available modulations and data rate.
All three transmit frequency modes comply with the field strength within the restricted bands. There is no spurious found below 30MHz.

Mode: Battery, 902.6 MHz TX

Vertical Polarization

Frequency MHz	Level dBuV/m	Limit / Detector dBuV/m
191.996	17.4	43.5 / QP
843.980	25.3	46.0 / QP
1805.196	48.2	74.0 / PK
1805.196	32.0	54.0 / AV
2707.796	46.1	74.0 / PK
2707.796	30.6	54.0 / AV

Mode: Battery, 902.6 MHz TX

Horizontal Polarization

Frequency MHz	Level dBuV/m	Limit / Detector dBuV/m
191.996	21.4	43.5 / QP
668.090	30.3	46.0 / QP
1805.196	58.0	74.0 / PK
1805.196	40.8	54.0 / AV
2707.796	49.3	74.0 / PK
2707.796	33.3	54.0 / AV

Mode: USB-C, 902.6 MHz TX

Vertical Polarization

Frequency MHz	Level dBuV/m	Limit / Detector dBuV/m
43.410	24.4	40.0 / QP
479.989	34.2	46.0 / QP
1805.196	46.6	74.0 / PK
1805.196	30.8	54.0 / AV
2707.794	46.0	74.0 / PK
2707.794	30.5	54.0 / AV

Prüfbericht-Nr.:
Test report no.:

CN25X0NE 001

Seite 25 von 78
Page 25 of 78

Absatz Clause	Anforderungen - Prüfungen / Requirements - Tests	Messergebnisse – Bemerkungen/ Measuring results - Remarks	Ergebnis Result
------------------	---	--	--------------------

Mode: USB-C, 902.6 MHz TX			Horizontal Polarization
Frequency MHz	Level dBuV/m	Limit / Detector dBuV/m	
153.720	22.0	43.5 / QP	
479.989	32.2	46.0 / QP	
1805.196	52.2	74.0 / PK	
1805.196	35.6	54.0 / AV	
2707.796	48.5	74.0 / PK	
2707.796	32.7	54.0 / AV	
Mode: Battery, 914.6 MHz TX			Vertical Polarization
Frequency MHz	Level dBuV/m	Limit / Detector dBuV/m	
187.050	13.7	43.5 / QP	
861.260	25.9	46.0 / QP	
1829.196	44.4	74.0 / PK	
1829.196	29.1	54.0 / AV	
2743.794	44.2	74.0 / PK	
2743.794	29.8	54.0 / AV	
Mode: Battery, 914.6 MHz TX			Horizontal Polarization
Frequency MHz	Level dBuV/m	Limit / Detector dBuV/m	
34.980	10.3	40.0 / QP	
843.920	33.6	46.0 / QP	
1829.196	50.0	74.0 / PK	
1829.196	34.0	54.0 / AV	
2743.793	51.0	74.0 / PK	
2743.793	35.0	54.0 / AV	
Mode: USB-C, 914.6 MHz TX			Vertical Polarization
Frequency MHz	Level dBuV/m	Limit / Detector dBuV/m	
47.850	23.5	40.0 / QP	
479.989	28.2	46.0 / QP	
1829.196	53.8	74.0 / PK	
1829.196	37.1	54.0 / AV	
2743.794	46.0	74.0 / PK	
2743.794	30.5	54.0 / AV	
Mode: USB-C, 914.6 MHz TX			Horizontal Polarization
Frequency MHz	Level dBuV/m	Limit / Detector dBuV/m	
155.850	22.1	43.5 / QP	
841.970	33.8	46.0 / QP	
1829.196	57.7	74.0 / PK	
1829.196	40.8	54.0 / AV	
2743.794	50.0	74.0 / PK	
2743.794	34.5	54.0 / AV	

Prüfbericht-Nr.:
Test report no.:

CN25X0NE 001

Seite 26 von 78
Page 26 of 78

Absatz Clause	Anforderungen - Prüfungen / Requirements - Tests	Messergebnisse – Bemerkungen/ Measuring results - Remarks	Ergebnis Result
------------------	---	--	--------------------

Mode: Battery, 927.4 MHz TX			Vertical Polarization
Frequency MHz	Level dBuV/m	Limit / Detector dBuV/m	
191.995	18.9	43.5 / QP	
599.987	28.6	46.0 / QP	
1854.796	48.3	74.0 / PK	
1854.796	32.0	54.0 / AV	
2782.195	45.4	74.0 / PK	
2782.195	29.8	54.0 / AV	
Mode: Battery, 927.4 MHz TX			Horizontal Polarization
Frequency MHz	Level dBuV/m	Limit / Detector dBuV/m	
191.995	23.2	43.5 / QP	
671.985	32.6	46.0 / QP	
1854.796	58.6	74.0 / PK	
1854.796	41.6	54.0 / AV	
2782.195	53.4	74.0 / PK	
2782.195	36.9	54.0 / AV	
Mode: USB-C, 927.4 MHz TX			Vertical Polarization
Frequency MHz	Level dBuV/m	Limit / Detector dBuV/m	
47.430	25.7	40.0 / QP	
191.995	26.8	43.5 / QP	
479.990	33.7	46.0 / QP	
1854.796	58.2	74.0 / PK	
1854.796	41.2	54.0 / AV	
2782.195	46.9	74.0 / PK	
2782.195	32.0	54.0 / AV	
Mode: USB-C, 927.4 MHz TX			Horizontal Polarization
Frequency MHz	Level dBuV/m	Limit / Detector dBuV/m	
191.995	27.1	43.5 / QP	
479.990	35.0	46.0 / QP	
1854.796	63.0	74.0 / PK	
1854.796	46.0	54.0 / AV	
2782.195	52.8	74.0 / PK	
2782.195	36.6	54.0 / AV	

Prüfbericht-Nr.: <i>Test report no.:</i>		CN25X0NE 001		Seite 27 von 78 Page 27 of 78
Absatz <i>Clause</i>	Anforderungen - Prüfungen / <i>Requirements - Tests</i>	Messergebnisse – Bemerkungen/ <i>Measuring results - Remarks</i>	Ergebnis <i>Result</i>	

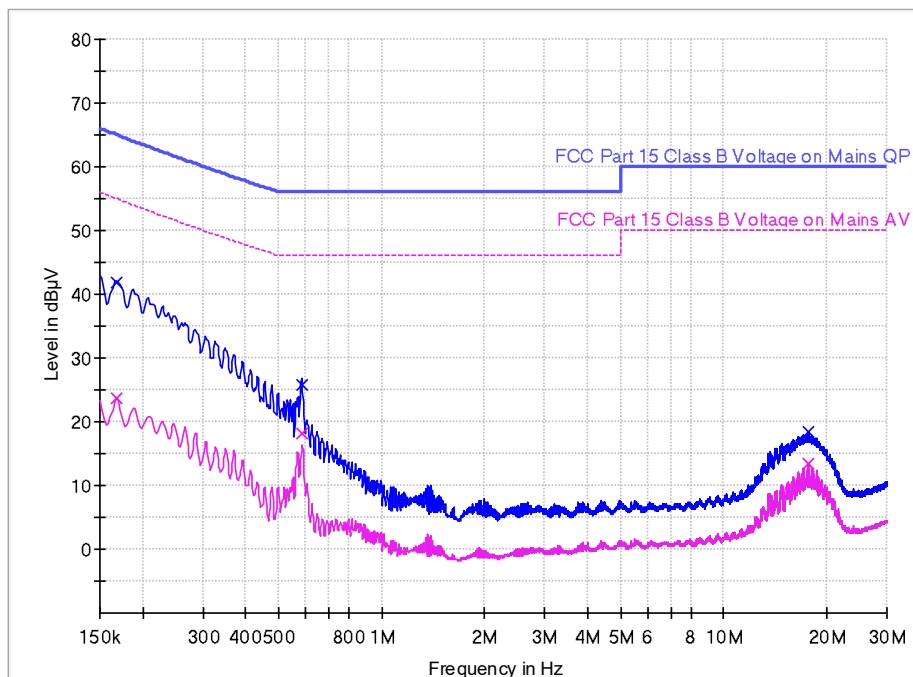
Appendix 1

Test Results

Prüfbericht-Nr.: Test report no.:	CN25X0NE 001	Seite 28 von 78 Page 28 of 78
Absatz Clause	Anforderungen - Prüfungen / Requirements - Tests	Messergebnisse – Bemerkungen/ Measuring results - Remarks
		Ergebnis Result

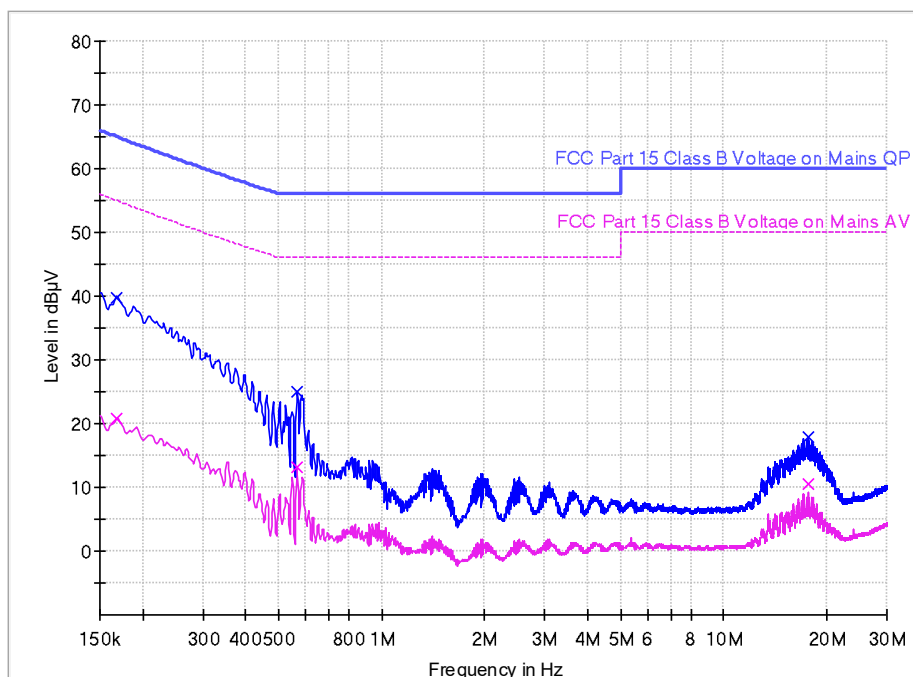
Test results of Conducted Emission on AC Mains

Conducted Emission (150 kHz - 30 MHz) - Cont TDS (QP+AV)



Mode: USB-C, DTS 920.8 MHz, Line: L1

Conducted Emission (150 kHz - 30 MHz) - Cont TDS (QP+AV)



Mode: USB-C, DTS 920.8 MHz, Line: N

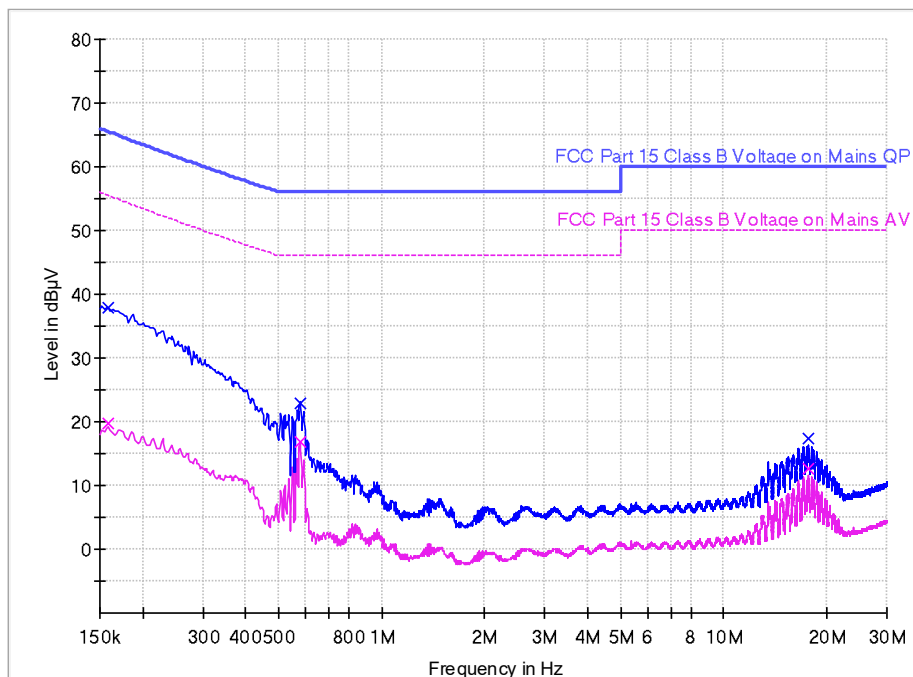
Prüfbericht-Nr.:
Test report no.:

CN25X0NE 001

Seite 29 von 78
Page 29 of 78

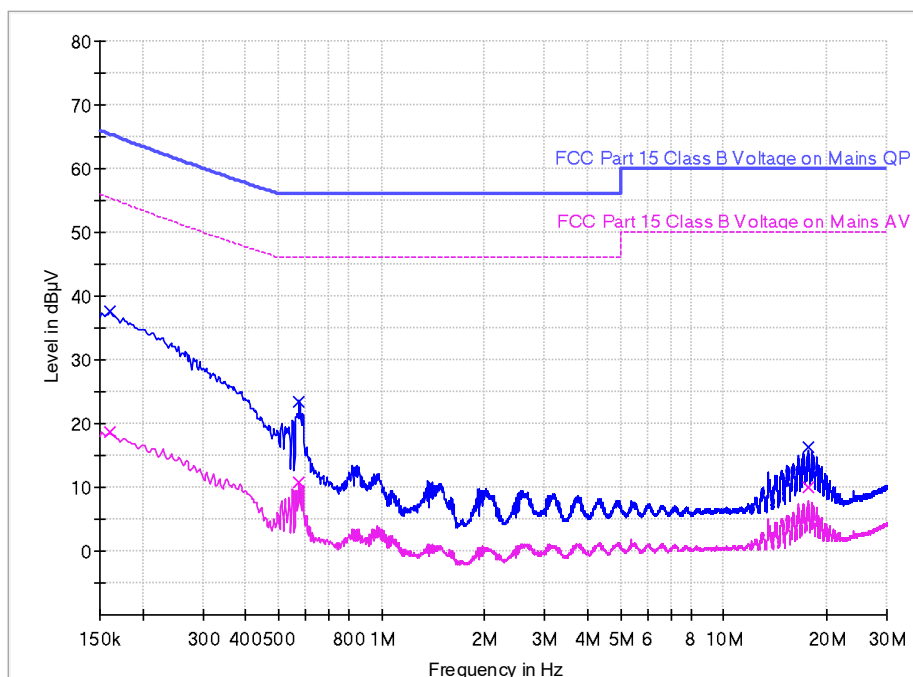
Absatz Clause	Anforderungen - Prüfungen / Requirements - Tests	Messergebnisse – Bemerkungen/ Measuring results - Remarks	Ergebnis Result
------------------	---	--	--------------------

Conducted Emission (150 kHz - 30 MHz) - Cont TDS (QP+AV)



Mode: USB-C, FHSS 902.6 MHz, Line: L1

Conducted Emission (150 kHz - 30 MHz) - Cont TDS (QP+AV)



Mode: USB-C, FHSS 902.6 MHz, Line: N

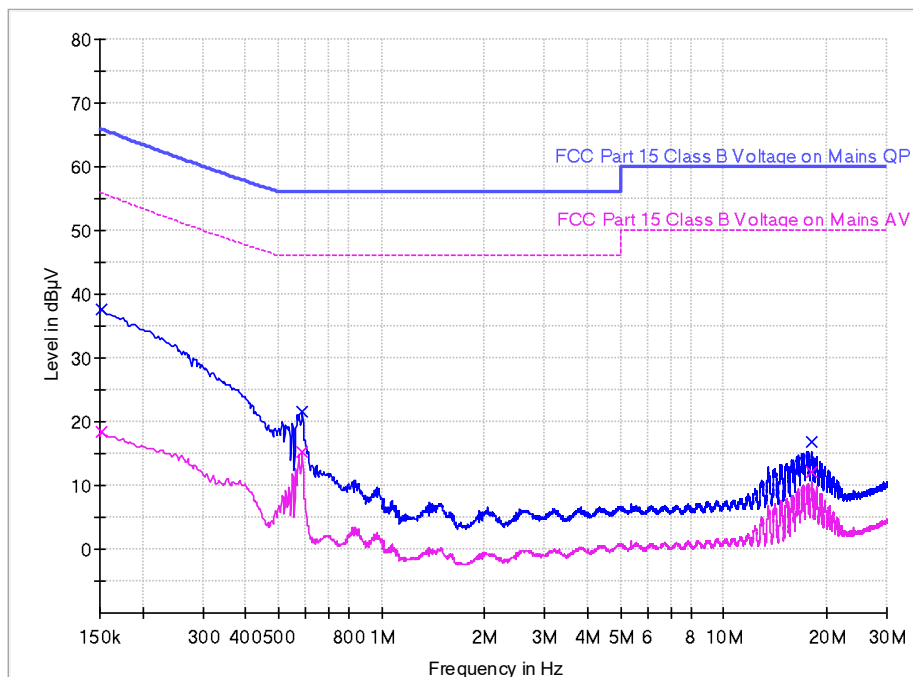
Prüfbericht-Nr.:
Test report no.:

CN25X0NE 001

Seite 30 von 78
Page 30 of 78

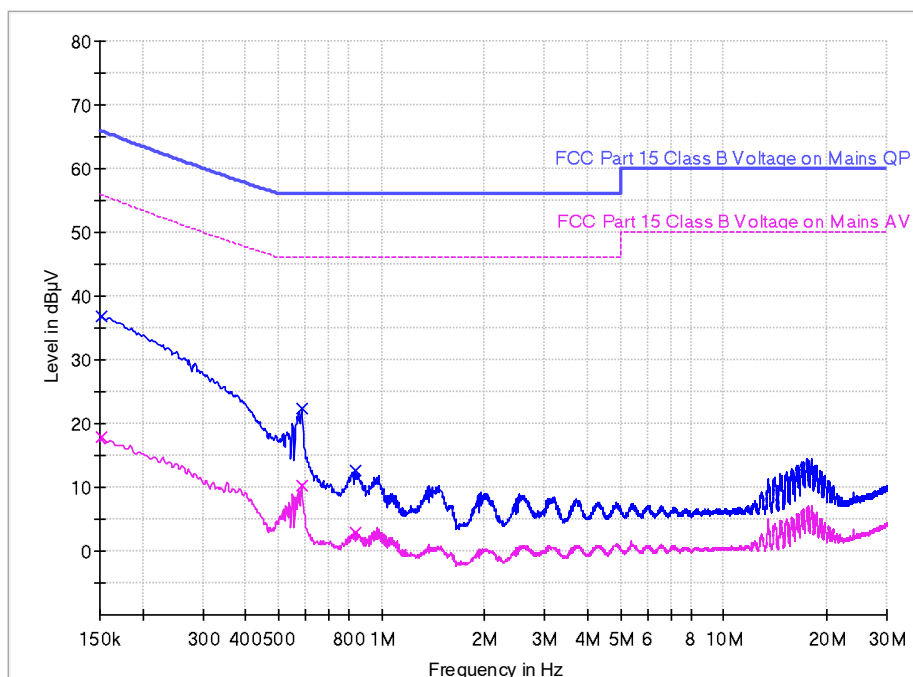
Absatz Clause	Anforderungen - Prüfungen / Requirements - Tests	Messergebnisse – Bemerkungen/ Measuring results - Remarks	Ergebnis Result
------------------	---	--	--------------------

Conducted Emission (150 kHz - 30 MHz) - Cont TDS (QP+AV)



Mode: USB-C, FHSS 914.6 MHz, Line: L1

Conducted Emission (150 kHz - 30 MHz) - Cont TDS (QP+AV)



Mode: USB-C, FHSS 914.6 MHz, Line: N

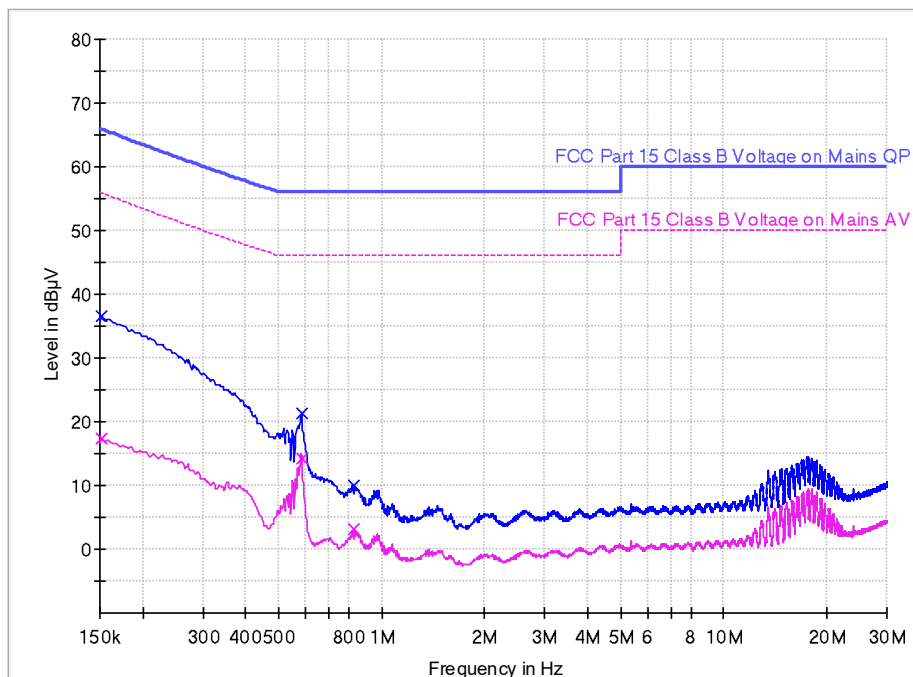
Prüfbericht-Nr.:
Test report no.:

CN25X0NE 001

Seite 31 von 78
Page 31 of 78

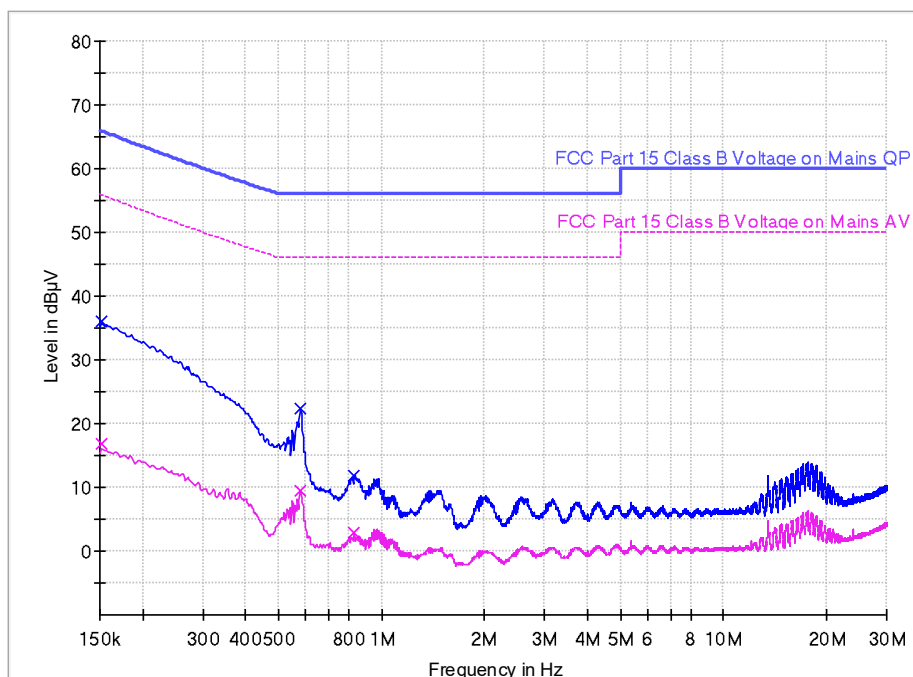
Absatz Clause	Anforderungen - Prüfungen / Requirements - Tests	Messergebnisse – Bemerkungen/ Measuring results - Remarks	Ergebnis Result
------------------	---	--	--------------------

Conducted Emission (150 kHz - 30 MHz) - Cont TDS (QP+AV)



Mode: USB-C, FHSS 927.4 MHz, Line: L1

Conducted Emission (150 kHz - 30 MHz) - Cont TDS (QP+AV)



Mode: USB-C, FHSS 927.4 MHz, Line: N

Prüfbericht-Nr.:
Test report no.:

CN25X0NE 001

Seite 32 von 78
Page 32 of 78

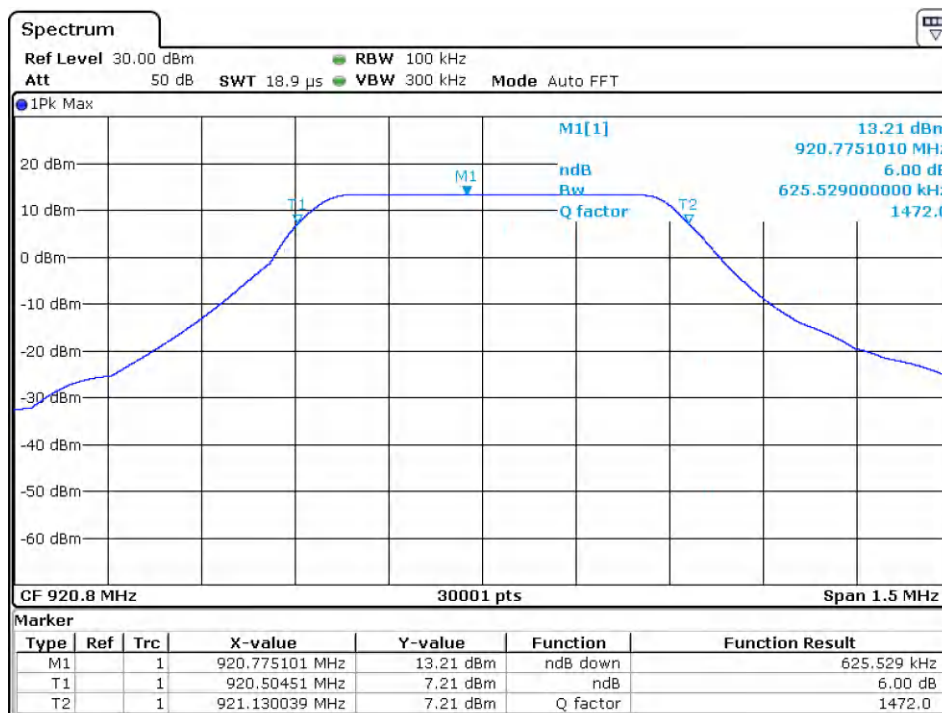
Absatz
Clause

Anforderungen - Prüfungen /
Requirements - Tests

Messergebnisse – Bemerkungen/
Measuring results - Remarks

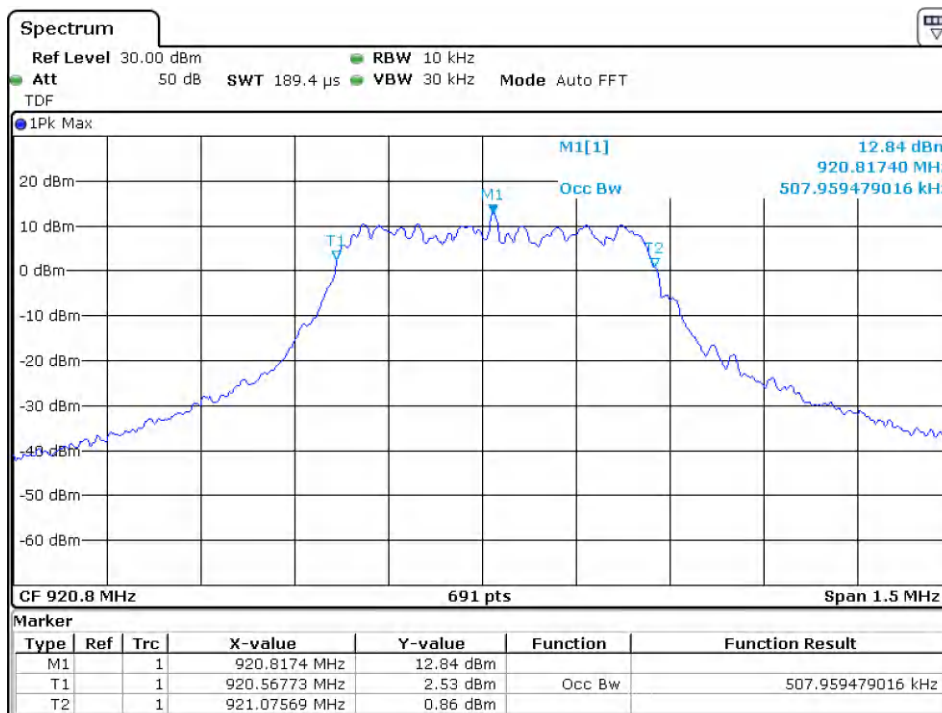
Ergebnis
Result

Test results of 6 dB Bandwidth Measurement



Date: 16.DEC.2025 16:36:47

TX Frequency DTS 920.8MHz



Date: 16.DEC.2025 16:37:47

TX Frequency DTS 920.8MHz , OBW measurement

Prüfbericht-Nr.:
Test report no.:

CN25X0NE 001

Seite 33 von 78
Page 33 of 78

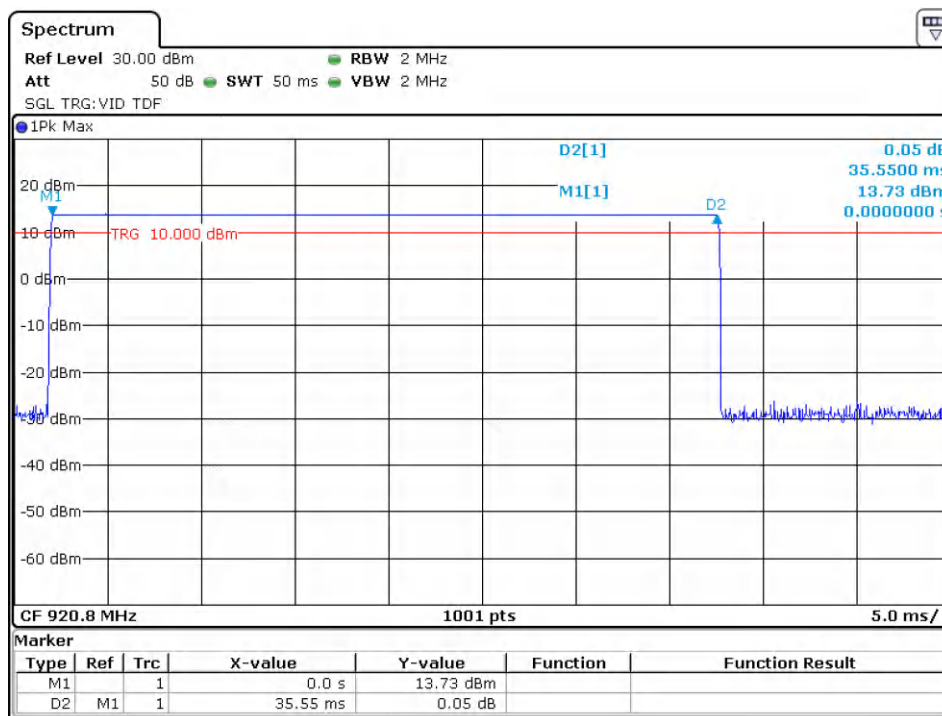
Absatz
Clause

Anforderungen - Prüfungen /
Requirements - Tests

Messergebnisse – Bemerkungen/
Measuring results - Remarks

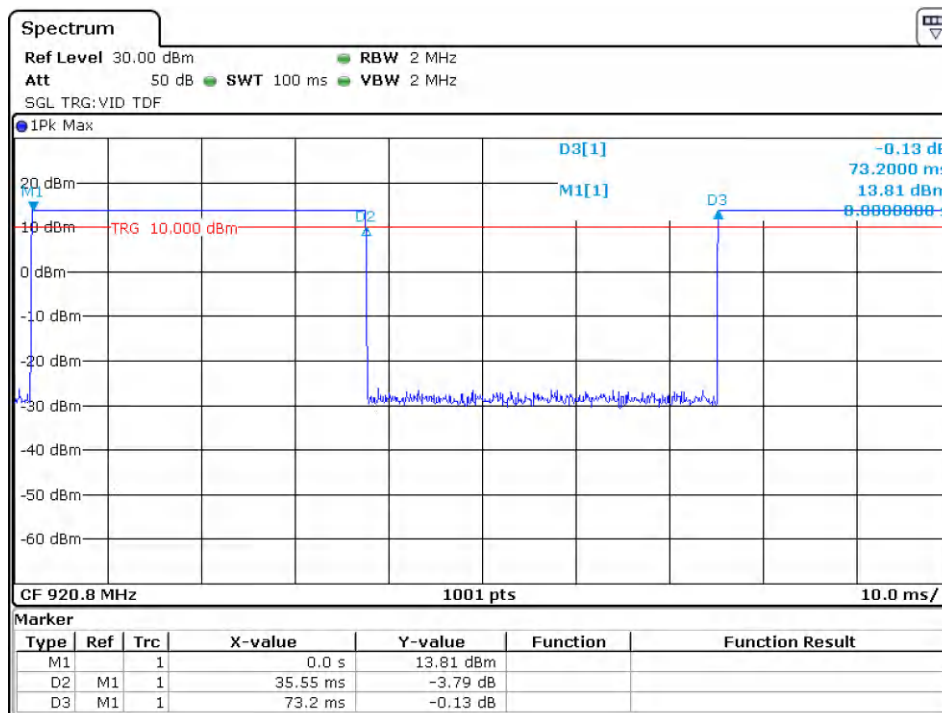
Ergebnis
Result

Test results of Duty Cycle



Date: 15.DEC.2025 14:48:52

TX Frequency DTS 920.8MHz, On Time

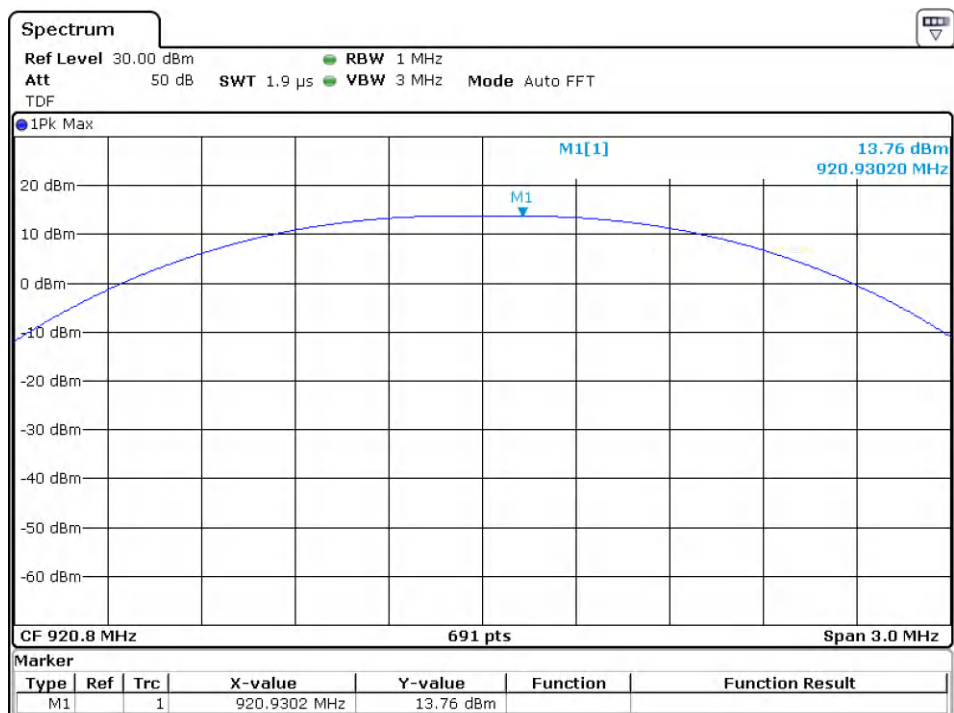


Date: 15.DEC.2025 14:50:09

TX Frequency DTS 920.8MHz, Period

Prüfbericht-Nr.: Test report no.:		CN25X0NE 001		Seite 34 von 78 Page 34 of 78
Absatz Clause	Anforderungen - Prüfungen / Requirements - Tests		Messergebnisse – Bemerkungen/ Measuring results - Remarks	Ergebnis Result

Test results of Maximum Peak Conducted Output Power

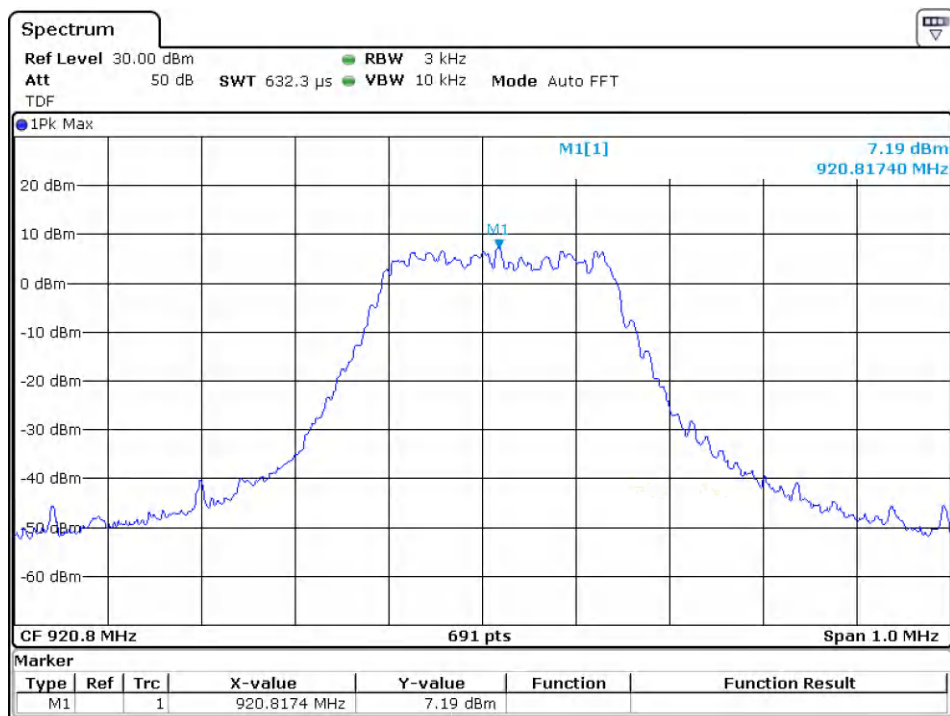


Date: 15.DEC.2025 14:51:57

TX Frequency DTS 920.8MHz

Prüfbericht-Nr.: <i>Test report no.:</i>		CN25X0NE 001	Seite 35 von 78 <i>Page 35 of 78</i>
Absatz <i>Clause</i>	Anforderungen - Prüfungen / <i>Requirements - Tests</i>	Messergebnisse – Bemerkungen/ <i>Measuring results - Remarks</i>	Ergebnis <i>Result</i>

Test results of Power Spectral Density



Date: 15.DEC.2025 14:53:04

TX Frequency DTS 920.8MHz

Prüfbericht-Nr.:
Test report no.:

CN25X0NE 001

Seite 36 von 78
Page 36 of 78

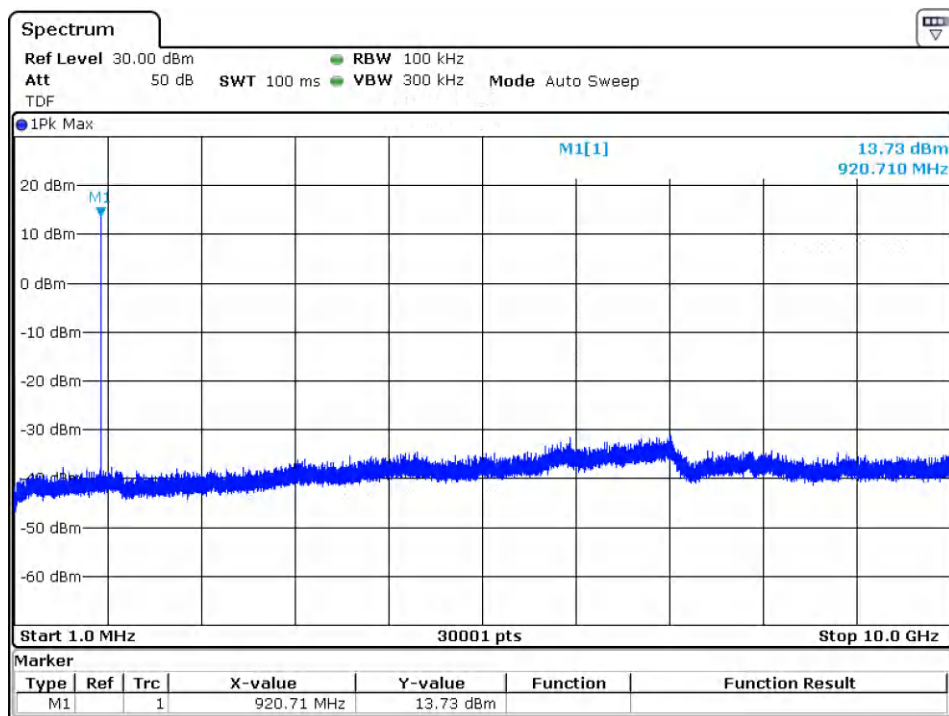
Absatz
Clause

Anforderungen - Prüfungen /
Requirements - Tests

Messergebnisse – Bemerkungen/
Measuring results - Remarks

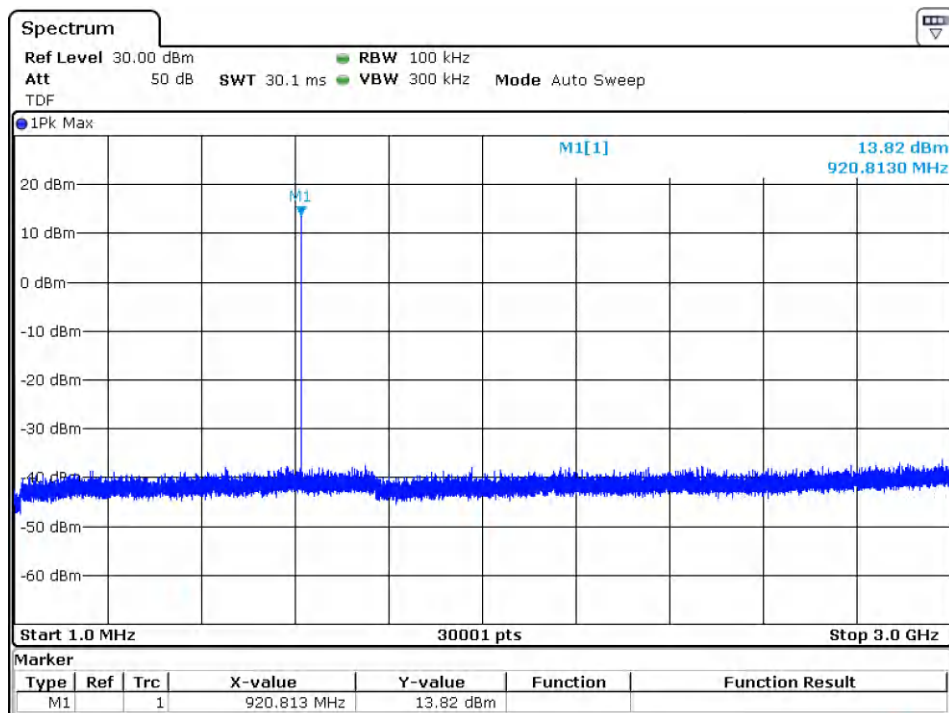
Ergebnis
Result

Test results of Spurious Conducted Emissions



Date: 15.DEC.2025 15:02:12

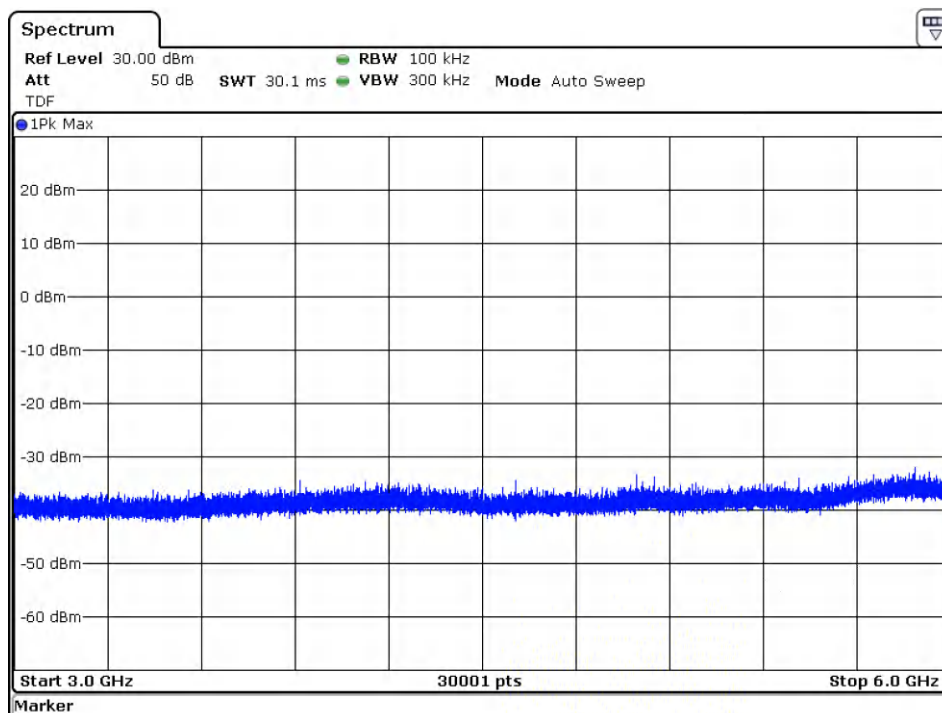
TX Frequency DTS 920.8MHz _ 1M~10GHz Pre-scan



Date: 15.DEC.2025 15:02:43

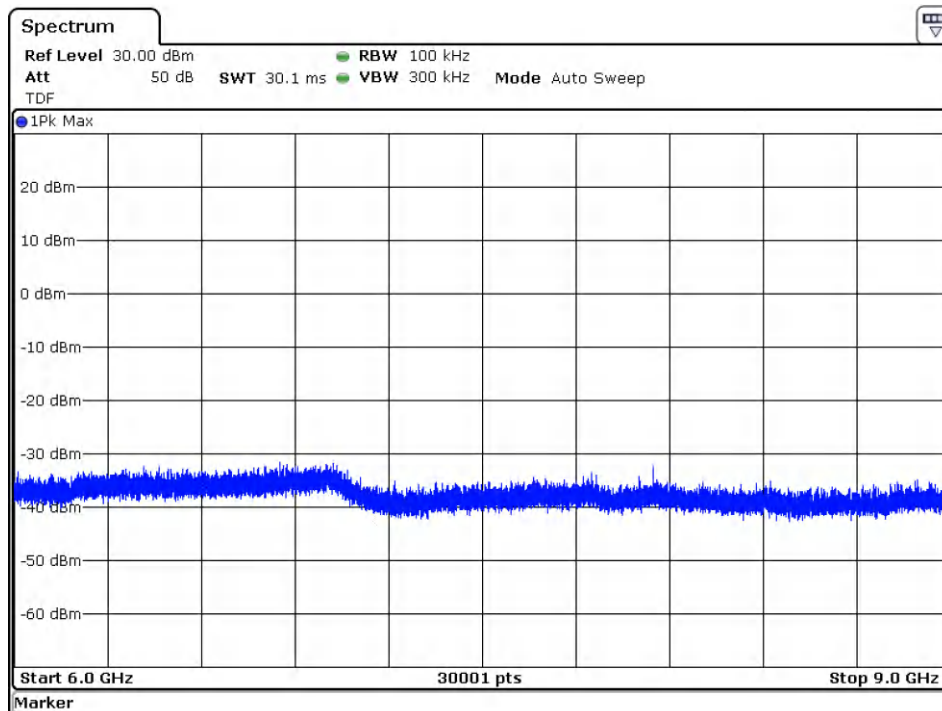
TX Frequency DTS 920.8MHz _ 1M~3GHz

Prüfbericht-Nr.: Test report no.:		CN25X0NE 001	Seite 37 von 78 Page 37 of 78
Absatz Clause	Anforderungen - Prüfungen / Requirements - Tests	Messergebnisse – Bemerkungen/ Measuring results - Remarks	Ergebnis Result



Date: 15.DEC.2025 15:03:02

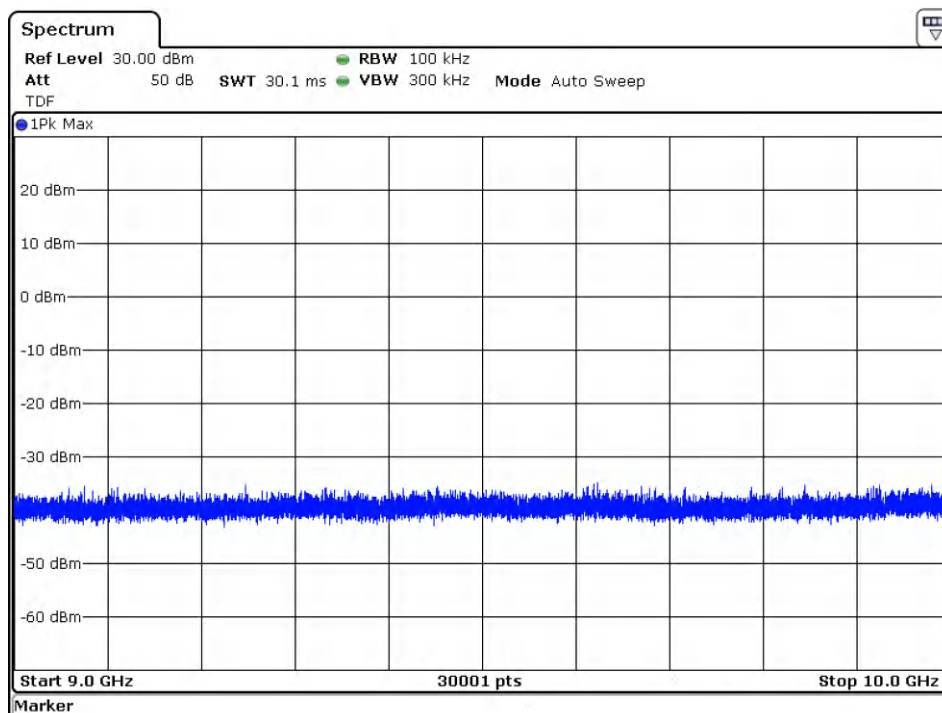
TX Frequency DTS 920.8MHz _ 3G~6GHz



Date: 15.DEC.2025 15:03:26

TX Frequency DTS 920.8MHz _ 6G~9GHz

Prüfbericht-Nr.: Test report no.:		CN25X0NE 001	Seite 38 von 78 Page 38 of 78
Absatz Clause	Anforderungen - Prüfungen / Requirements - Tests	Messergebnisse – Bemerkungen/ Measuring results - Remarks	Ergebnis Result



Date: 15.DEC.2025 15:03:44

TX Frequency DTS 920.8MHz _ 9G~10GHz

Prüfbericht-Nr.:
Test report no.:

CN25X0NE 001

Seite 39 von 78
Page 39 of 78

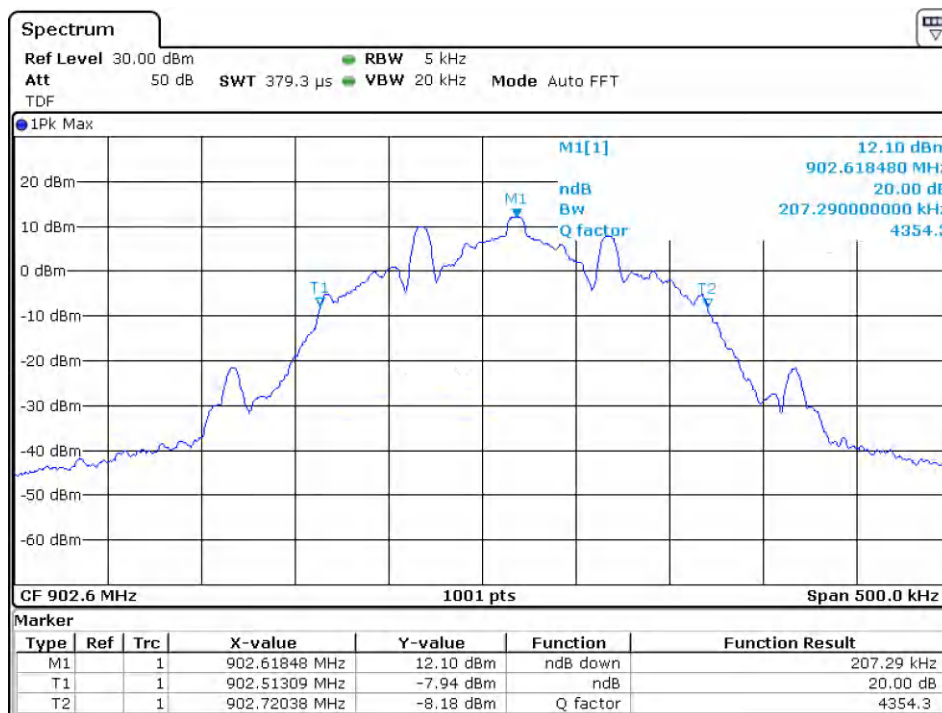
Absatz
Clause

Anforderungen - Prüfungen /
Requirements - Tests

Messergebnisse – Bemerkungen/
Measuring results - Remarks

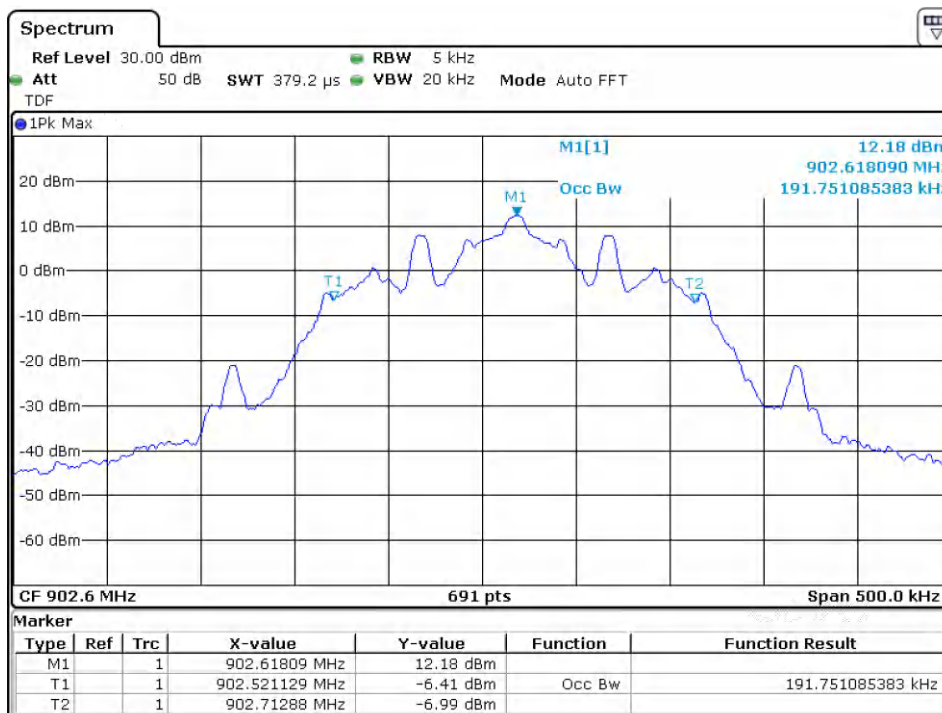
Ergebnis
Result

Test results of 20 dB Bandwidth Measurement



Date: 15.DEC.2025 15:06:59

TX Frequency FHSS 902.6MHz



Date: 15.DEC.2025 15:09:59

TX Frequency FHSS 902.6MHz, OBW measurement

Prüfbericht-Nr.:
Test report no.:

CN25X0NE 001

Seite 40 von 78
Page 40 of 78

Absatz
Clause

Anforderungen - Prüfungen /
Requirements - Tests

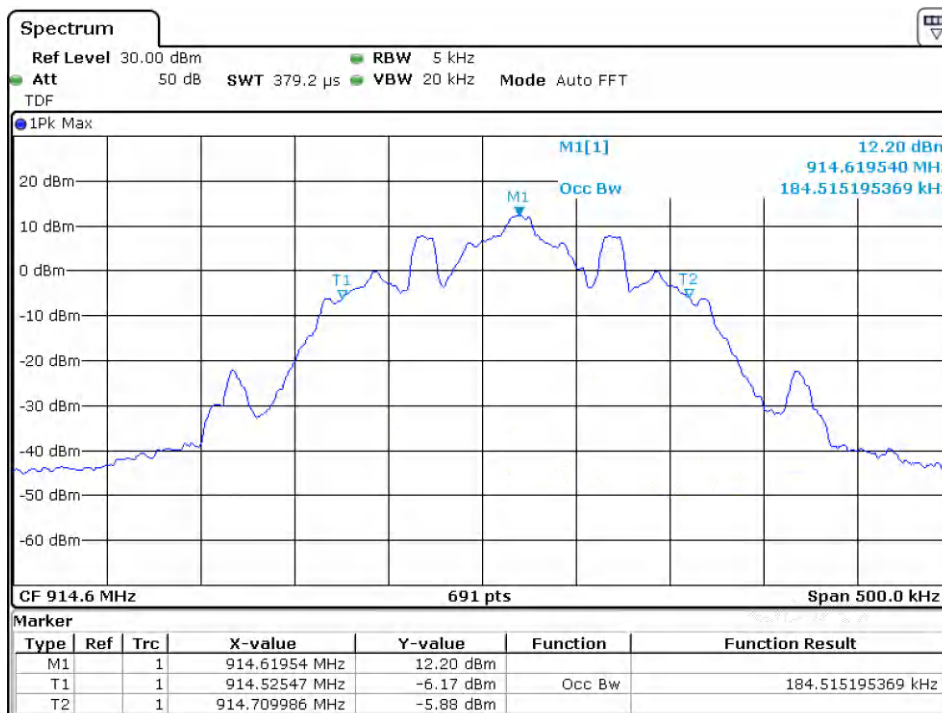
Messergebnisse – Bemerkungen/
Measuring results - Remarks

Ergebnis
Result



Date: 15.DEC.2025 15:08:31

TX Frequency FHSS 914.6MHz



Date: 15.DEC.2025 15:12:01

TX Frequency FHSS 914.6MHz, OBW measurement

Prüfbericht-Nr.:
Test report no.:

CN25X0NE 001

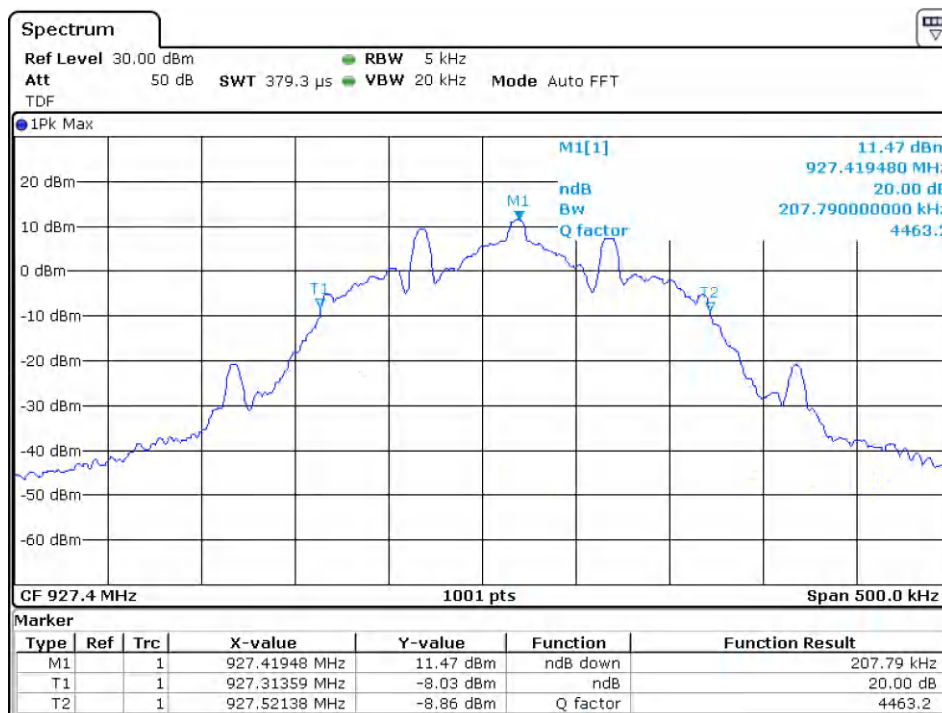
Seite 41 von 78
Page 41 of 78

Absatz
Clause

Anforderungen - Prüfungen /
Requirements - Tests

Messergebnisse – Bemerkungen/
Measuring results - Remarks

Ergebnis
Result



Date: 15.DEC.2025 15:09:32

TX Frequency FHSS 927.4MHz



Date: 15.DEC.2025 15:12:51

TX Frequency FHSS 927.4MHz, OBW measurement

Prüfbericht-Nr.:
Test report no.:

CN25X0NE 001

Seite 42 von 78
Page 42 of 78

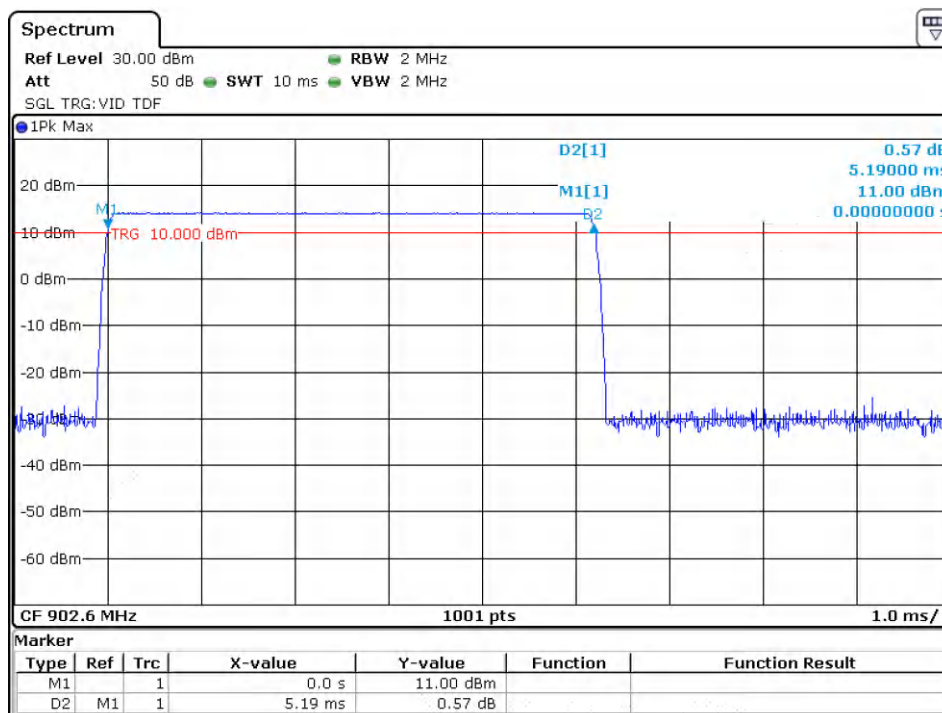
Absatz
Clause

Anforderungen - Prüfungen /
Requirements - Tests

Messergebnisse – Bemerkungen/
Measuring results - Remarks

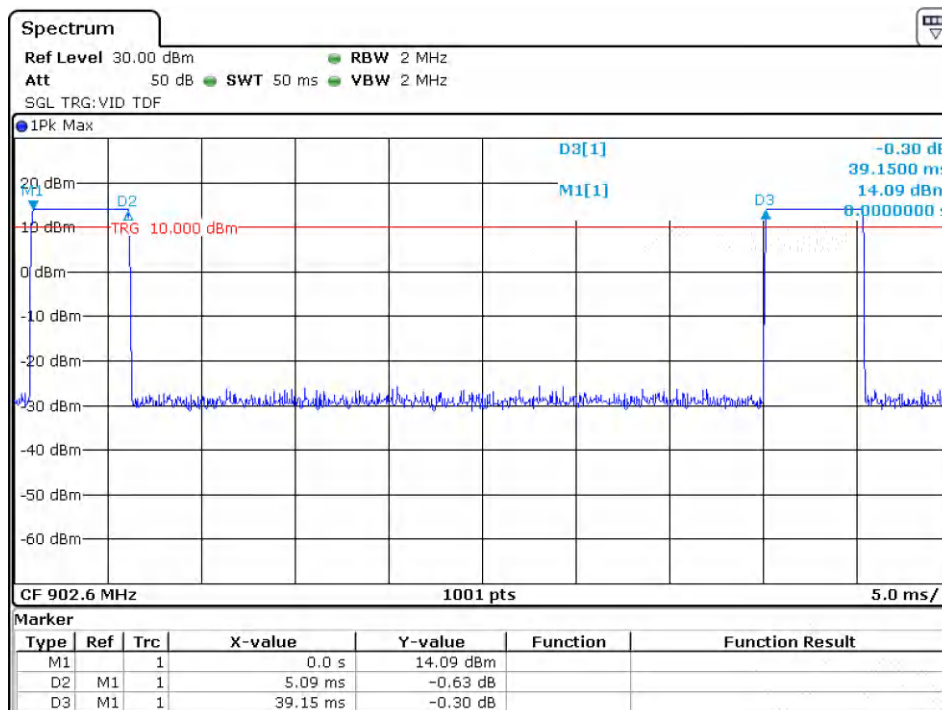
Ergebnis
Result

Test results of Duty Cycle



Date: 15.DEC.2025 15:13:42

TX Frequency FHSS 902.6MHz, On Time



Date: 15.DEC.2025 15:15:12

TX Frequency FHSS 902.6MHz, Period

Prüfbericht-Nr.:
Test report no.:

CN25X0NE 001

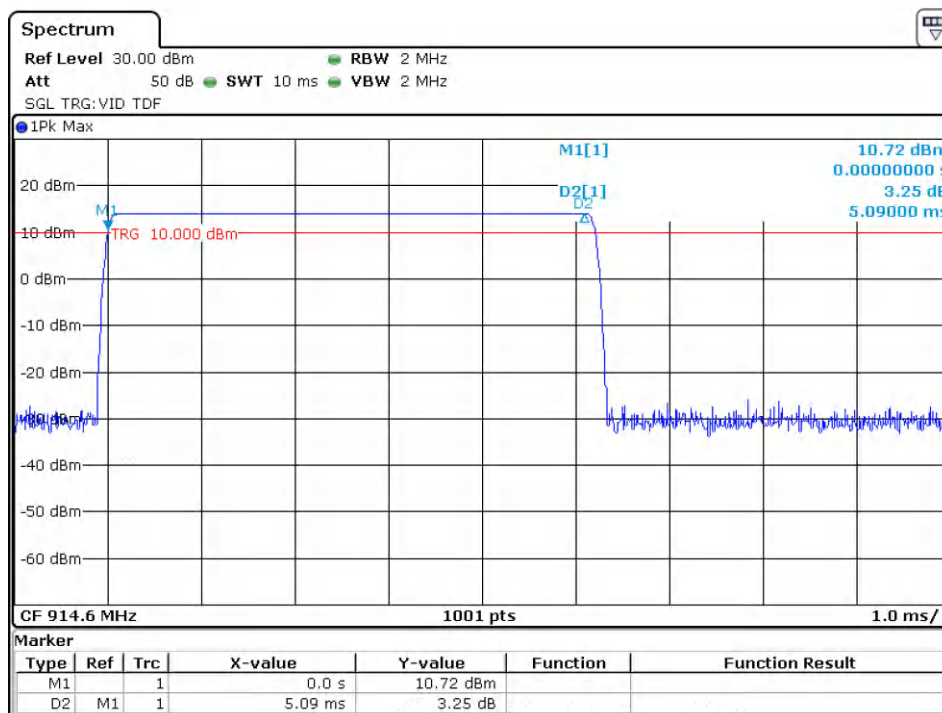
Seite 43 von 78
Page 43 of 78

Absatz
Clause

Anforderungen - Prüfungen /
Requirements - Tests

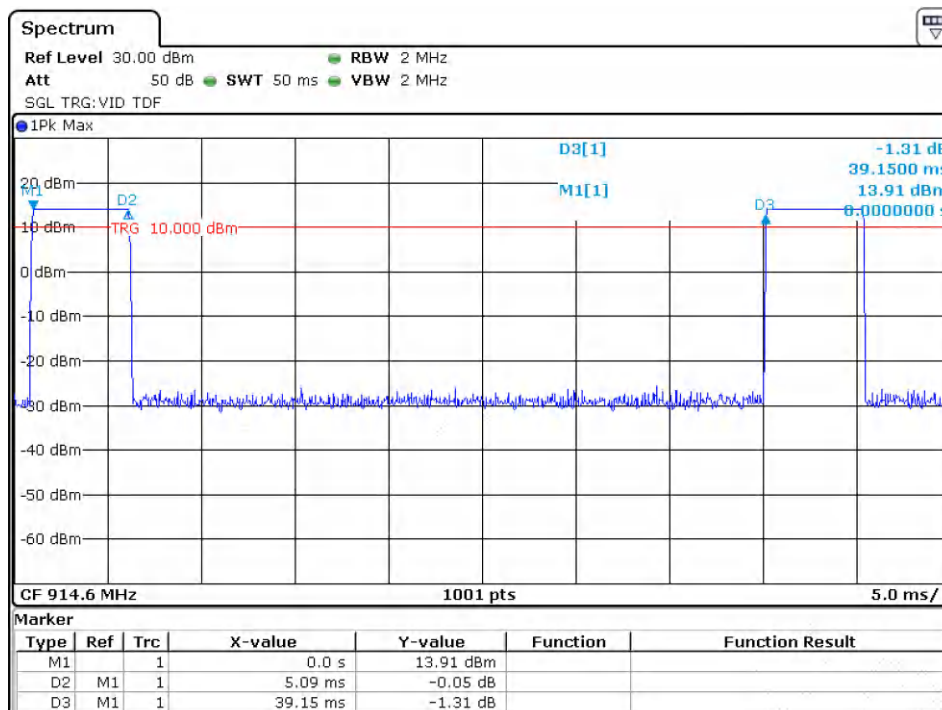
Messergebnisse – Bemerkungen/
Measuring results - Remarks

Ergebnis
Result



Date: 15.DEC.2025 15:19:32

TX Frequency FHSS 914.6MHz, On Time



Date: 15.DEC.2025 15:20:43

TX Frequency FHSS 914.6MHz, Period

Prüfbericht-Nr.:
Test report no.:

CN25X0NE 001

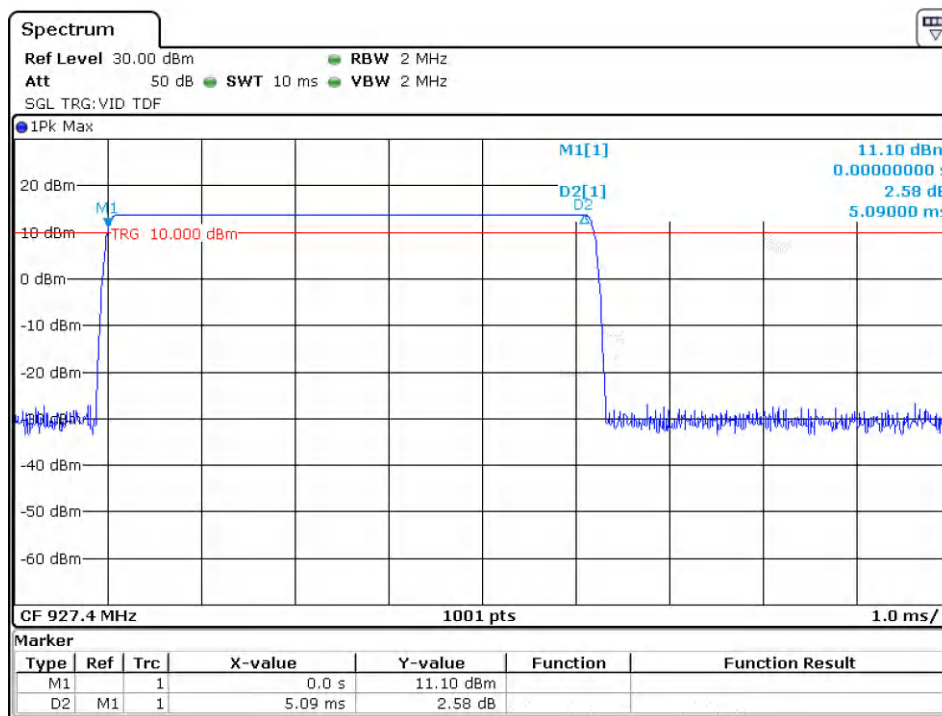
Seite 44 von 78
Page 44 of 78

Absatz
Clause

Anforderungen - Prüfungen /
Requirements - Tests

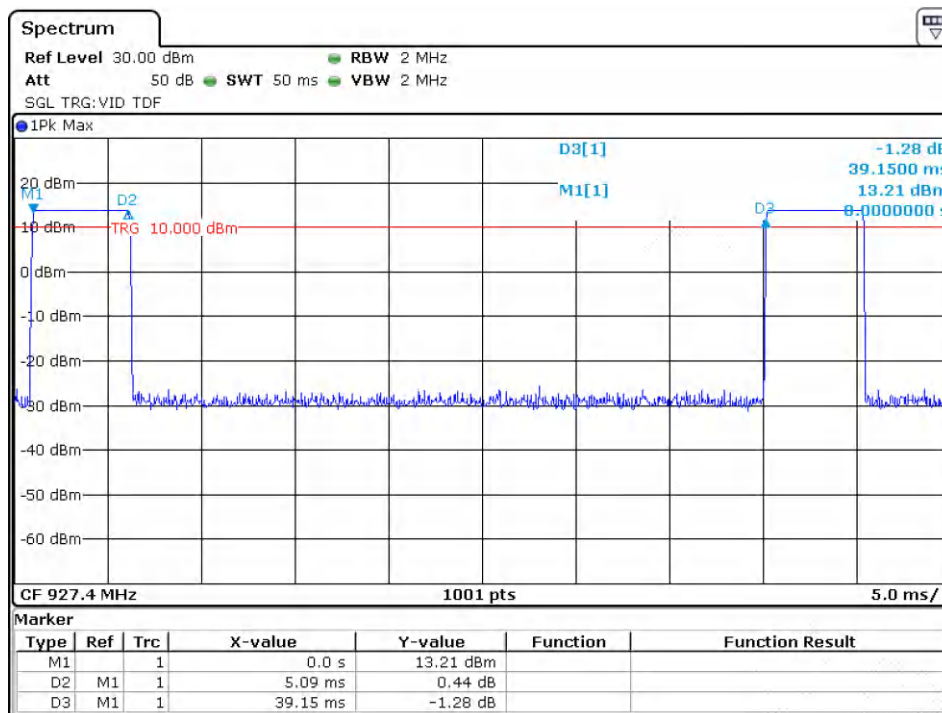
Messergebnisse – Bemerkungen/
Measuring results - Remarks

Ergebnis
Result



Date: 15.DEC.2025 15:26:35

TX Frequency FHSS 927.4MHz, On Time



Date: 15.DEC.2025 15:27:07

TX Frequency FHSS 927.4MHz, Period

Prüfbericht-Nr.:
Test report no.:

CN25X0NE 001

Seite 45 von 78
Page 45 of 78

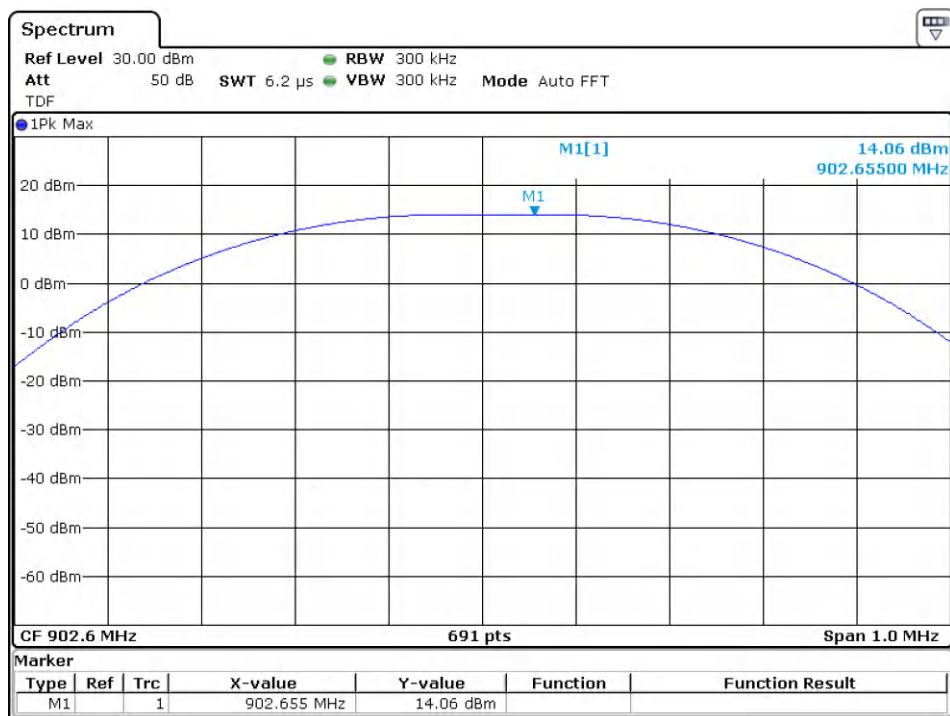
Absatz
Clause

Anforderungen - Prüfungen /
Requirements - Tests

Messergebnisse – Bemerkungen/
Measuring results - Remarks

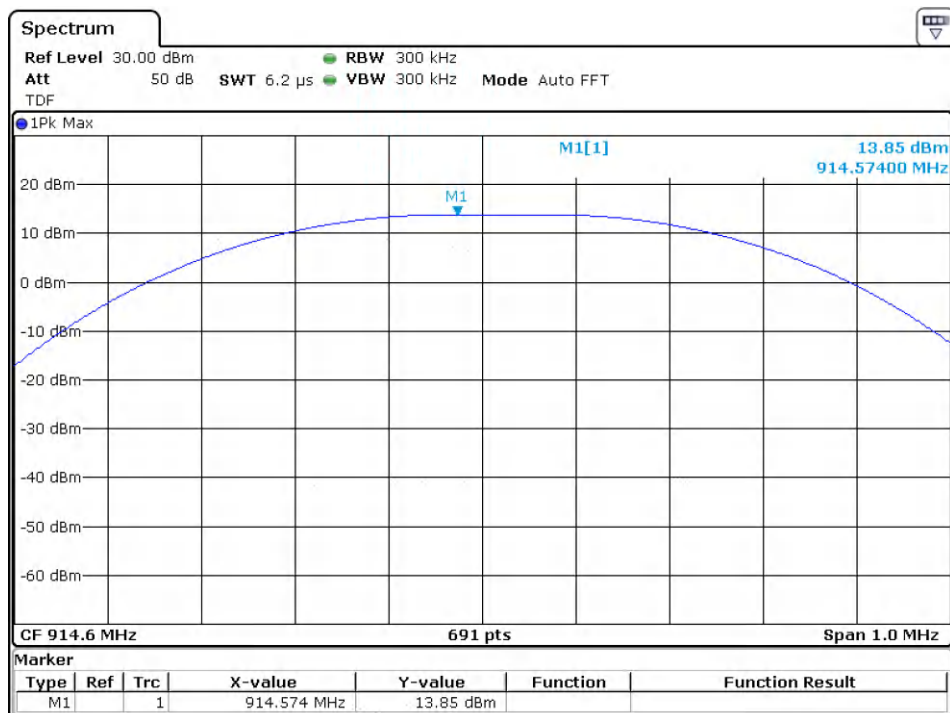
Ergebnis
Result

Test results of Maximum Peak Conducted Output Power



Date: 15.DEC.2025 15:28:47

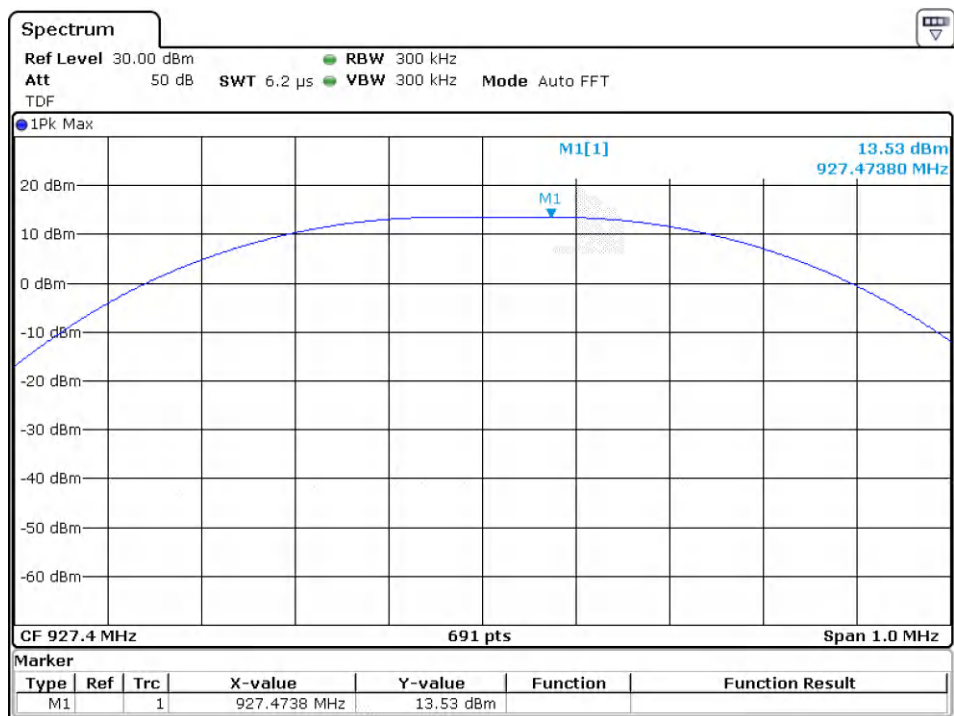
TX Frequency FHSS 902.6MHz



Date: 15.DEC.2025 15:29:31

TX Frequency FHSS 914.6MHz

Prüfbericht-Nr.: Test report no.:		CN25X0NE 001		Seite 46 von 78 Page 46 of 78
Absatz Clause	Anforderungen - Prüfungen / Requirements - Tests		Messergebnisse – Bemerkungen/ Measuring results - Remarks	Ergebnis Result



Date: 15.DEC.2025 15:30:35

TX Frequency FHSS 927.4MHz

Prüfbericht-Nr.:
Test report no.:

CN25X0NE 001

Seite 47 von 78
Page 47 of 78

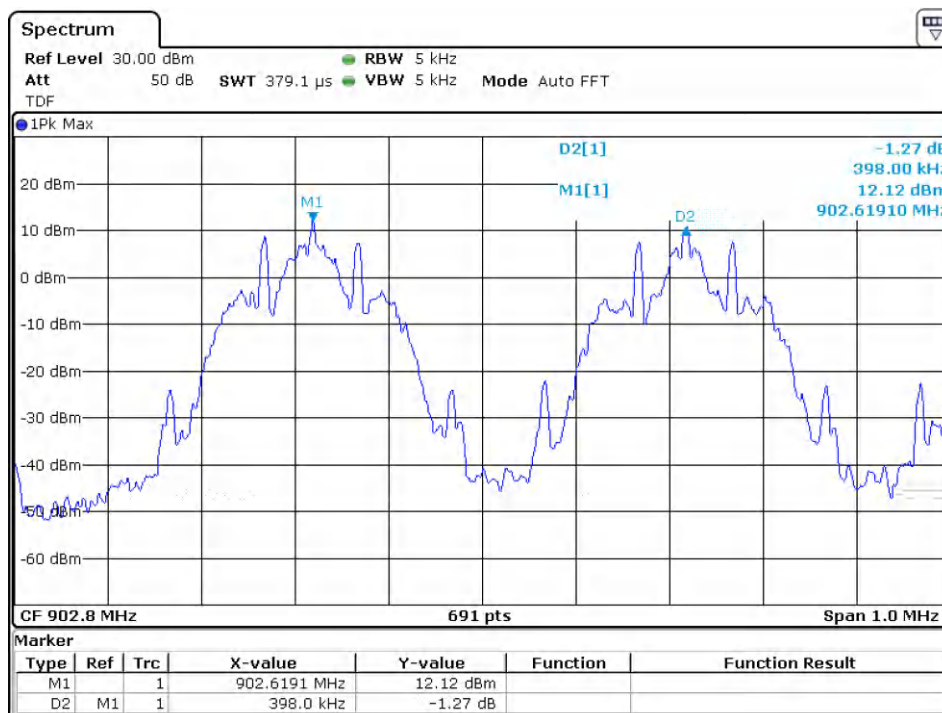
Absatz
Clause

Anforderungen - Prüfungen /
Requirements - Tests

Messergebnisse – Bemerkungen/
Measuring results - Remarks

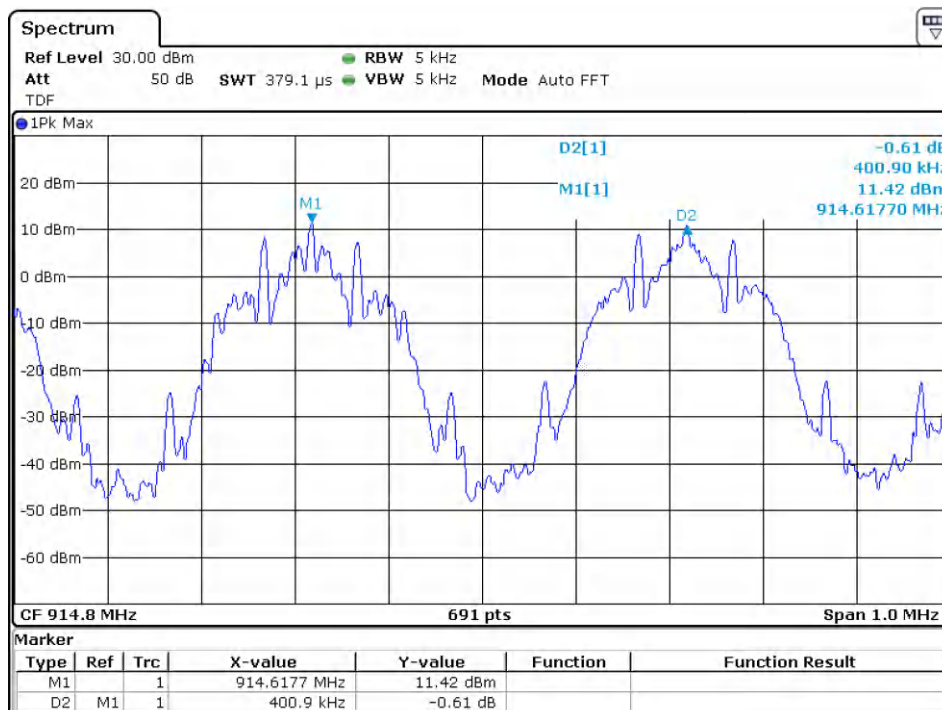
Ergebnis
Result

Test results of Carrier Frequency Separation



Date: 15.DEC.2025 15:44:26

TX Frequency FHSS 902.6MHz, Hopping on



Date: 15.DEC.2025 15:46:46

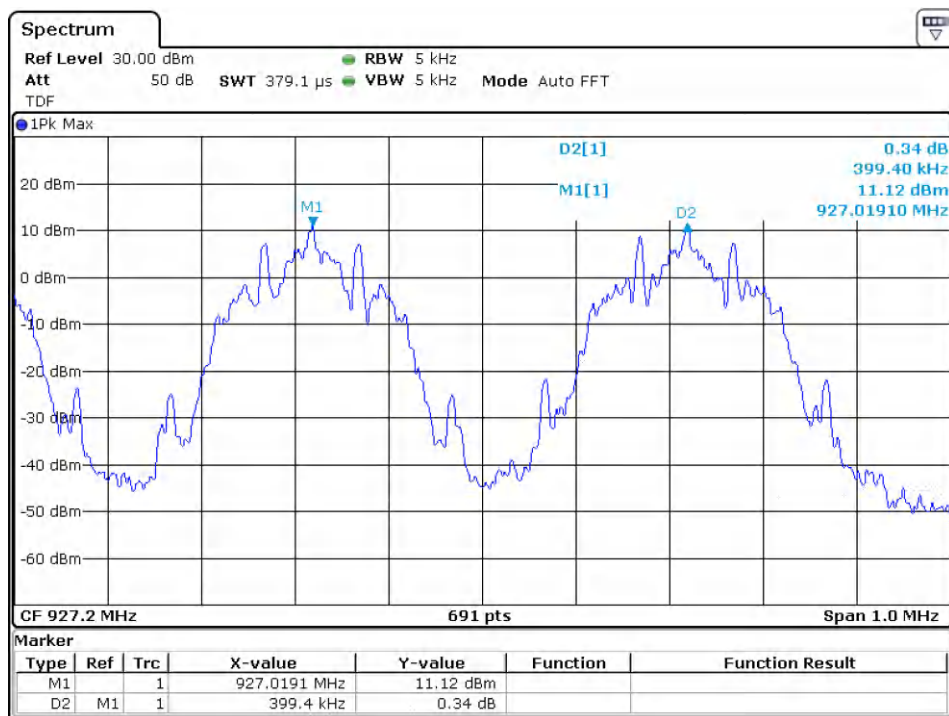
TX Frequency FHSS 914.6MHz, Hopping on

Prüfbericht-Nr.:
Test report no.:

CN25X0NE 001

Seite 48 von 78
Page 48 of 78

Absatz Clause	Anforderungen - Prüfungen / Requirements - Tests	Messergebnisse – Bemerkungen/ Measuring results - Remarks	Ergebnis Result
------------------	---	--	--------------------



Date: 15.DEC.2025 15:50:14

TX Frequency FHSS 927.4MHz, Hopping on

Prüfbericht-Nr.:
Test report no.:

CN25X0NE 001

Seite 49 von 78
Page 49 of 78

Absatz Clause	Anforderungen - Prüfungen / Requirements - Tests	Messergebnisse – Bemerkungen/ Measuring results - Remarks	Ergebnis Result
------------------	---	--	--------------------

Number of Hopping Frequency



Date: 15.DEC.2025 15:58:08

TX Frequency FHSS, Hopping on

Prüfbericht-Nr.:
Test report no.:

CN25X0NE 001

Seite 50 von 78
Page 50 of 78

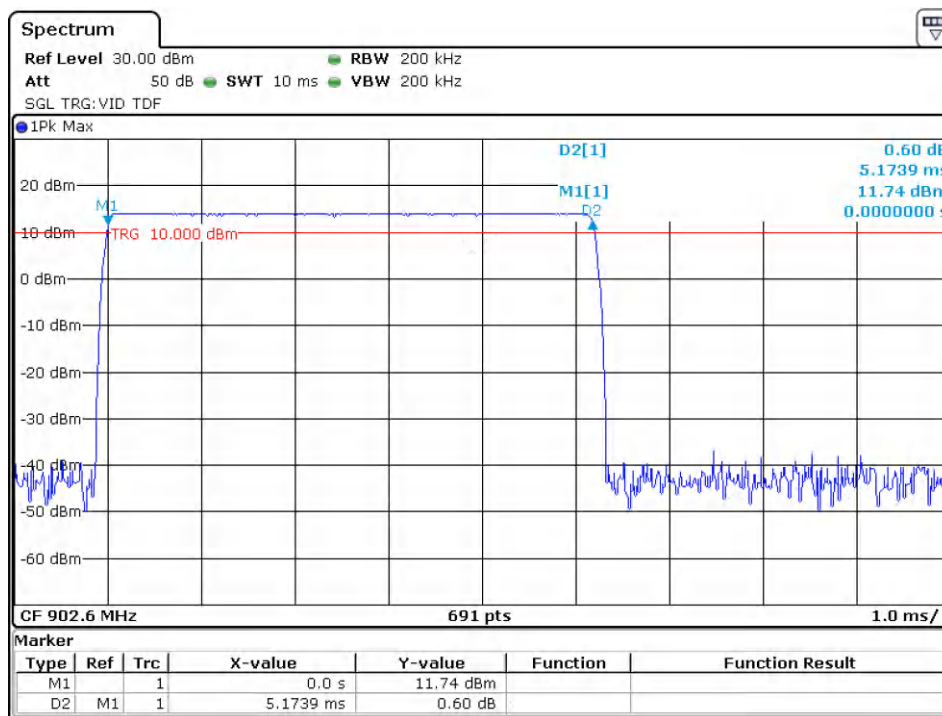
Absatz
Clause

Anforderungen - Prüfungen /
Requirements - Tests

Messergebnisse – Bemerkungen/
Measuring results - Remarks

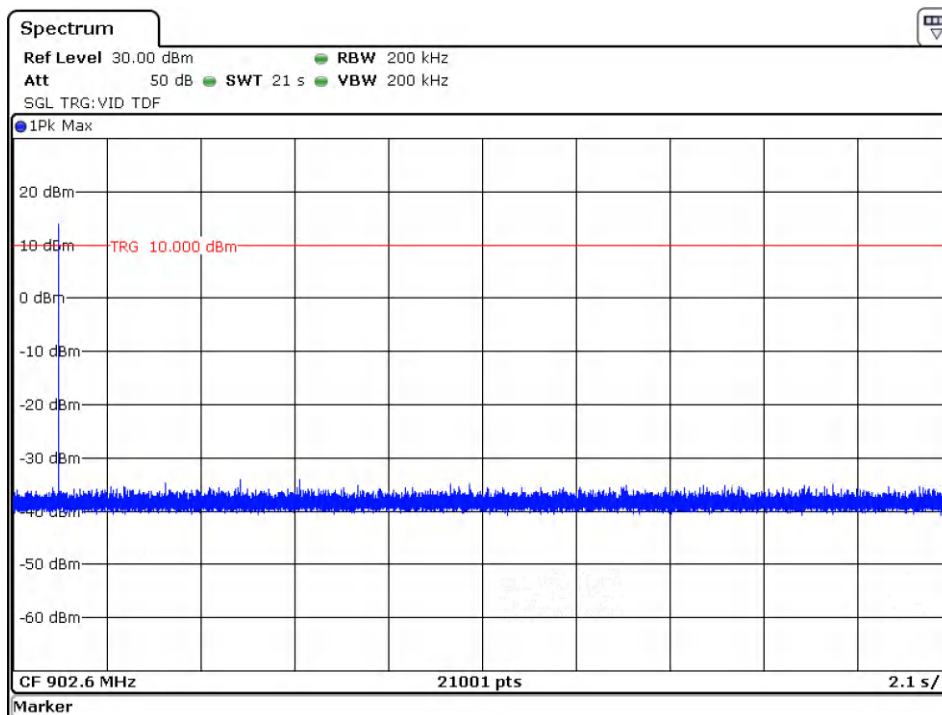
Ergebnis
Result

Time of Occupancy



Date: 15.DEC.2025 16:04:29

TX Frequency FHSS 902.6MHz, On Time



Date: 15.DEC.2025 16:11:33

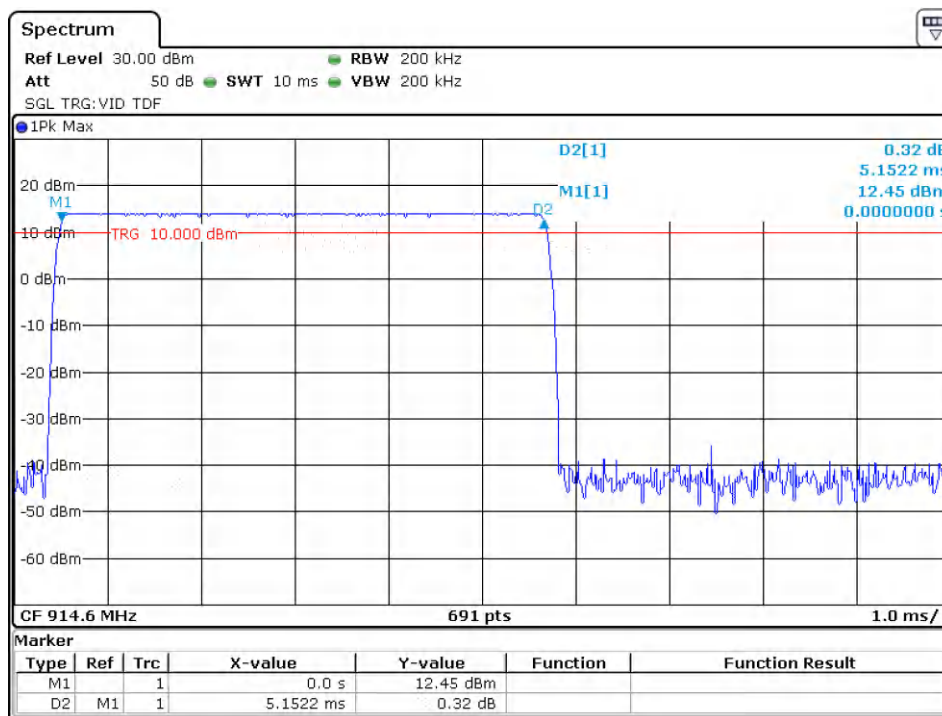
TX Frequency FHSS 902.6MHz, Period of 20s

Prüfbericht-Nr.:
Test report no.:

CN25X0NE 001

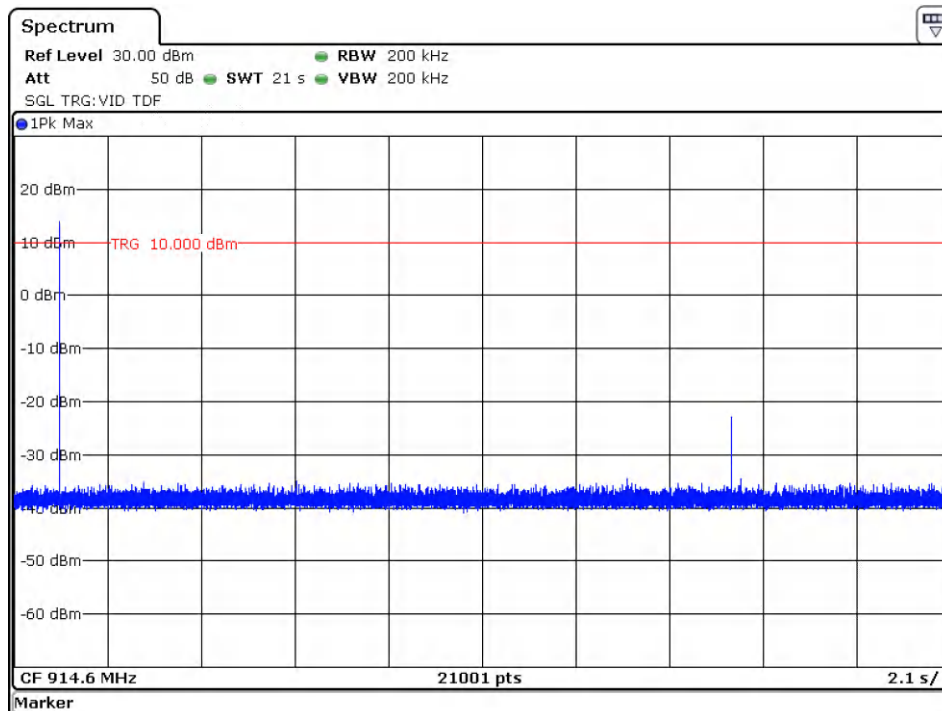
Seite 51 von 78
Page 51 of 78

Absatz Clause	Anforderungen - Prüfungen / Requirements - Tests	Messergebnisse – Bemerkungen/ Measuring results - Remarks	Ergebnis Result
------------------	---	--	--------------------



Date: 15.DEC.2025 16:35:58

TX Frequency FHSS 914.6MHz, On Time



Date: 15.DEC.2025 16:14:21

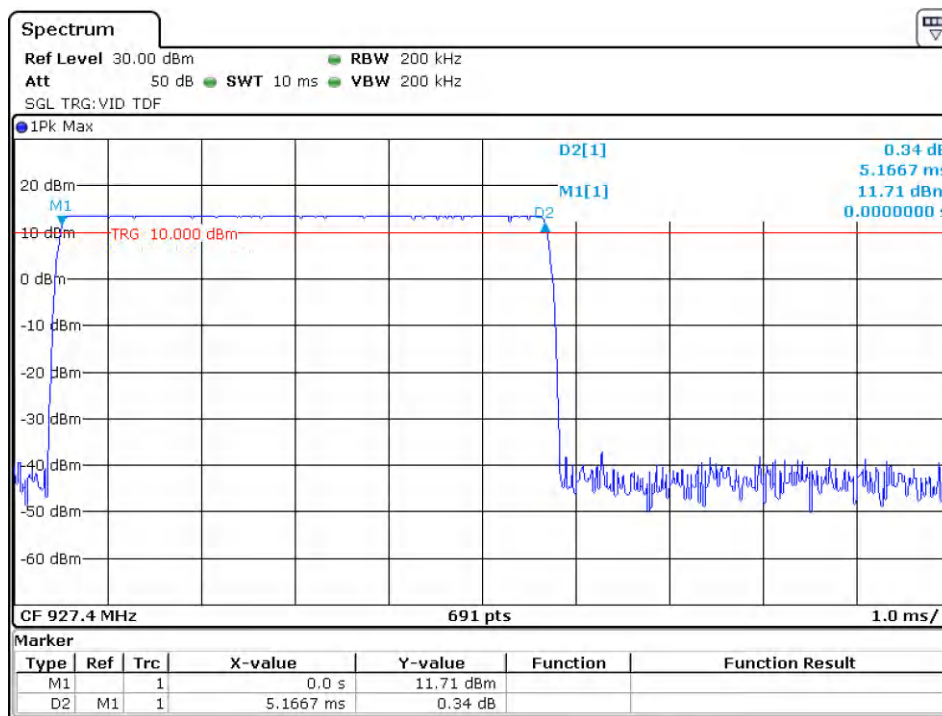
TX Frequency FHSS 914.6MHz, Period of 20s

Prüfbericht-Nr.:
Test report no.:

CN25X0NE 001

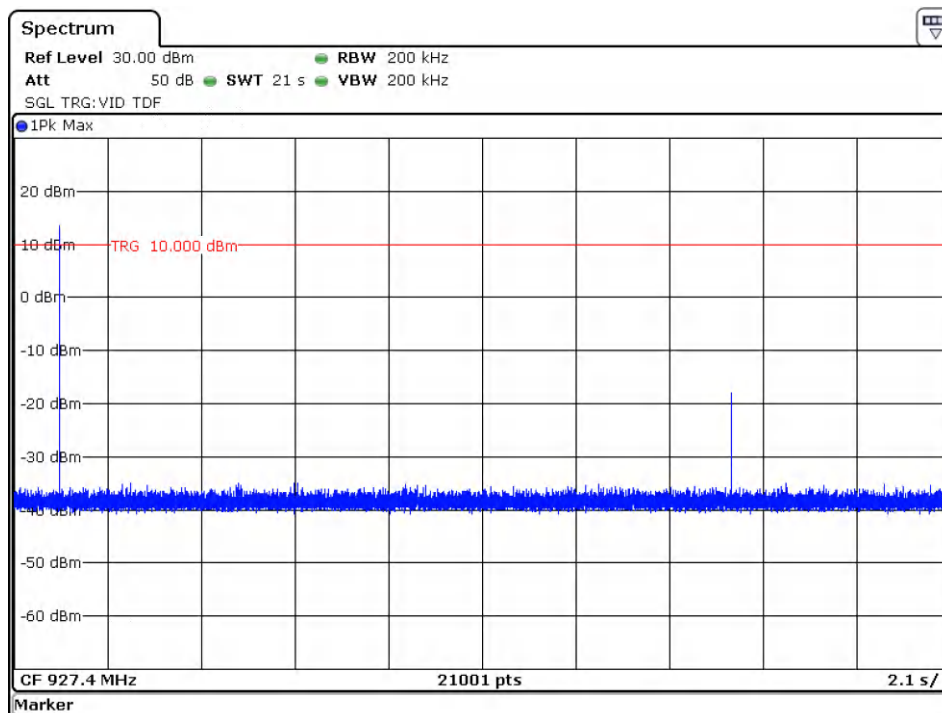
Seite 52 von 78
Page 52 of 78

Absatz Clause	Anforderungen - Prüfungen / Requirements - Tests	Messergebnisse – Bemerkungen/ Measuring results - Remarks	Ergebnis Result
------------------	---	--	--------------------



Date: 15.DEC.2025 16:28:55

TX Frequency FHSS 927.4MHz, On Time



Date: 15.DEC.2025 16:15:43

TX Frequency FHSS 927.4MHz, Period of 20s

Prüfbericht-Nr.:
Test report no.:

CN25X0NE 001

Seite 53 von 78
Page 53 of 78

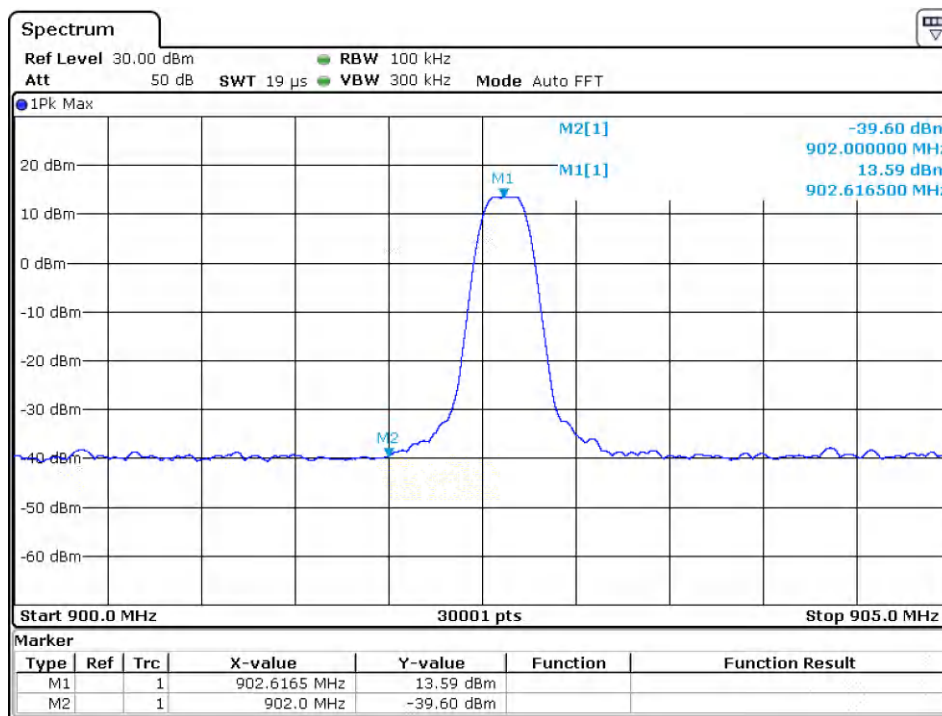
Absatz
Clause

Anforderungen - Prüfungen /
Requirements - Tests

Messergebnisse – Bemerkungen/
Measuring results - Remarks

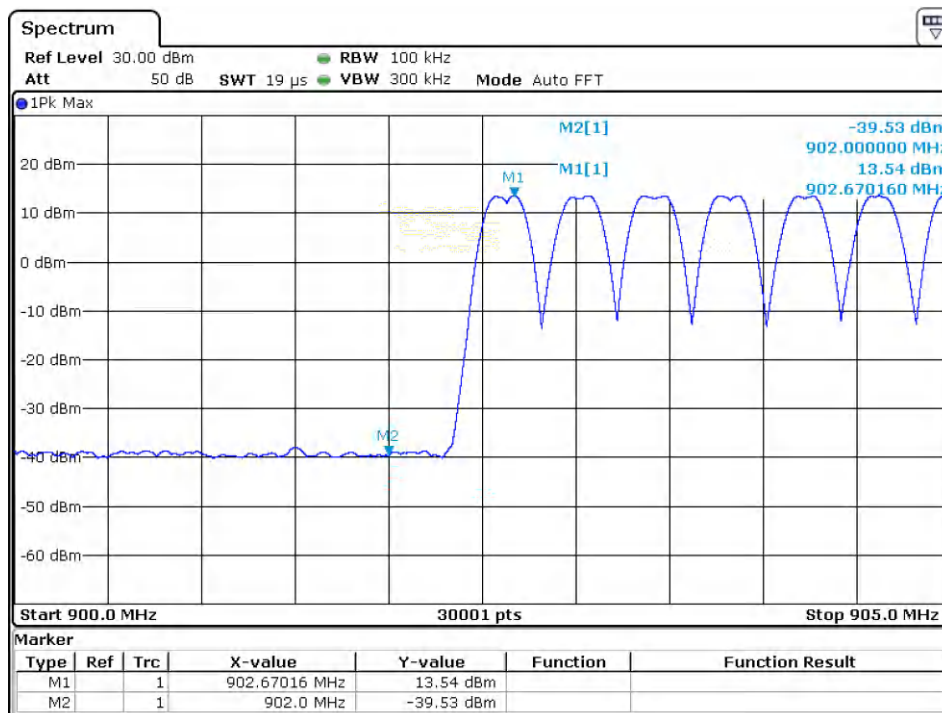
Ergebnis
Result

Spurious Conducted Emissions



Date: 15.DEC.2025 16:46:01

TX Frequency FHSS 902.6MHz _ Band Edge, Hopping off



Date: 15.DEC.2025 17:06:08

TX Frequency FHSS 902.6MHz _ Band Edge, Hopping on

Prüfbericht-Nr.:
Test report no.:

CN25X0NE 001

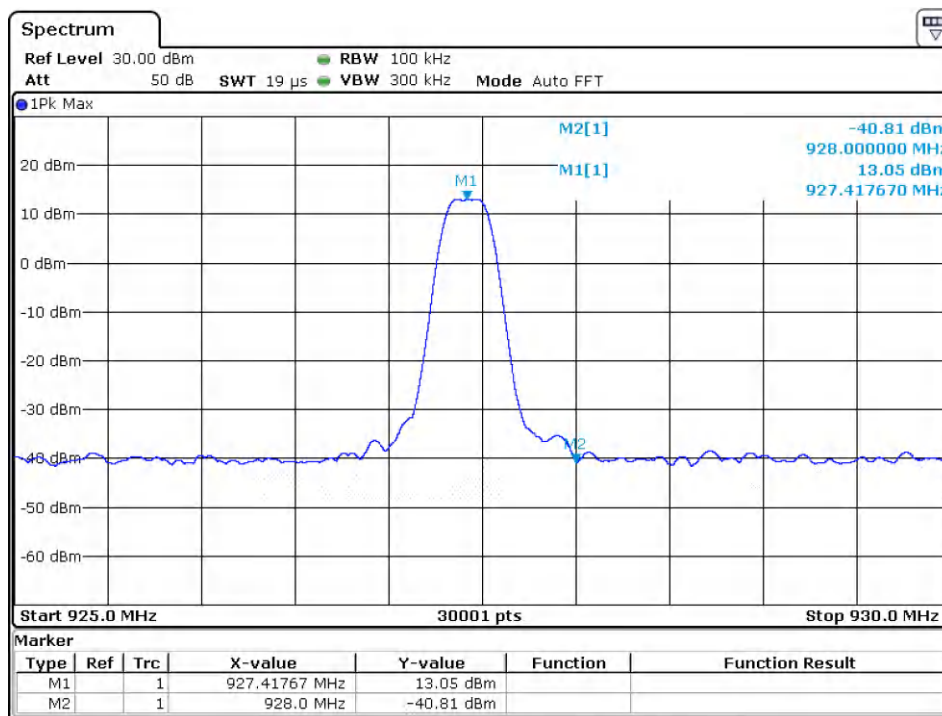
Seite 54 von 78
Page 54 of 78

Absatz
Clause

Anforderungen - Prüfungen /
Requirements - Tests

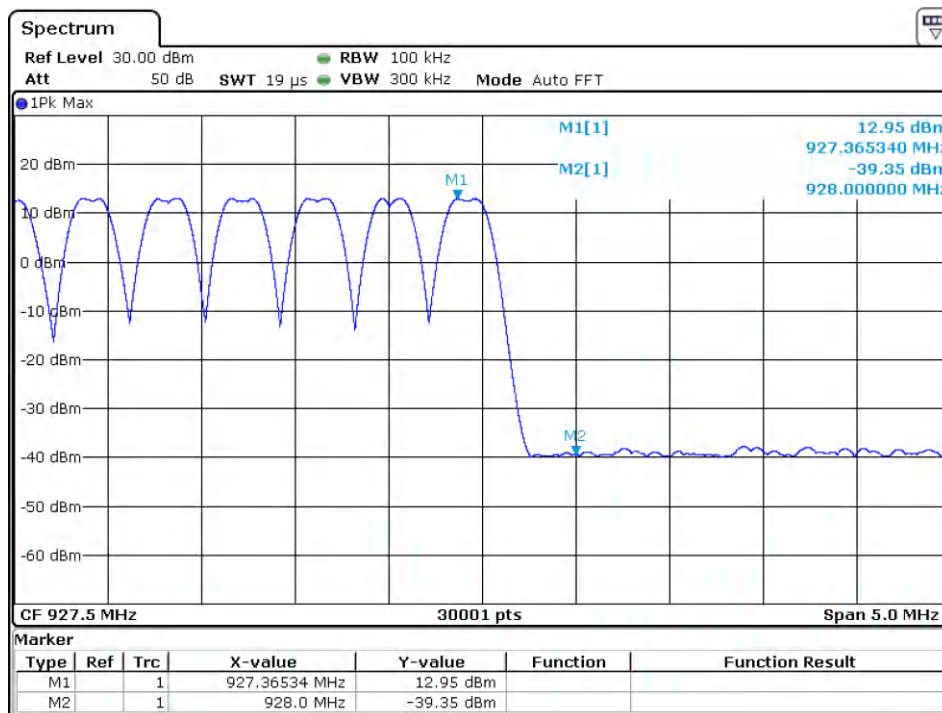
Messergebnisse – Bemerkungen/
Measuring results - Remarks

Ergebnis
Result



Date: 15.DEC.2025 16:54:19

TX Frequency FHSS 927.4MHz _ Band Edge, Hopping off



Date: 15.DEC.2025 17:01:01

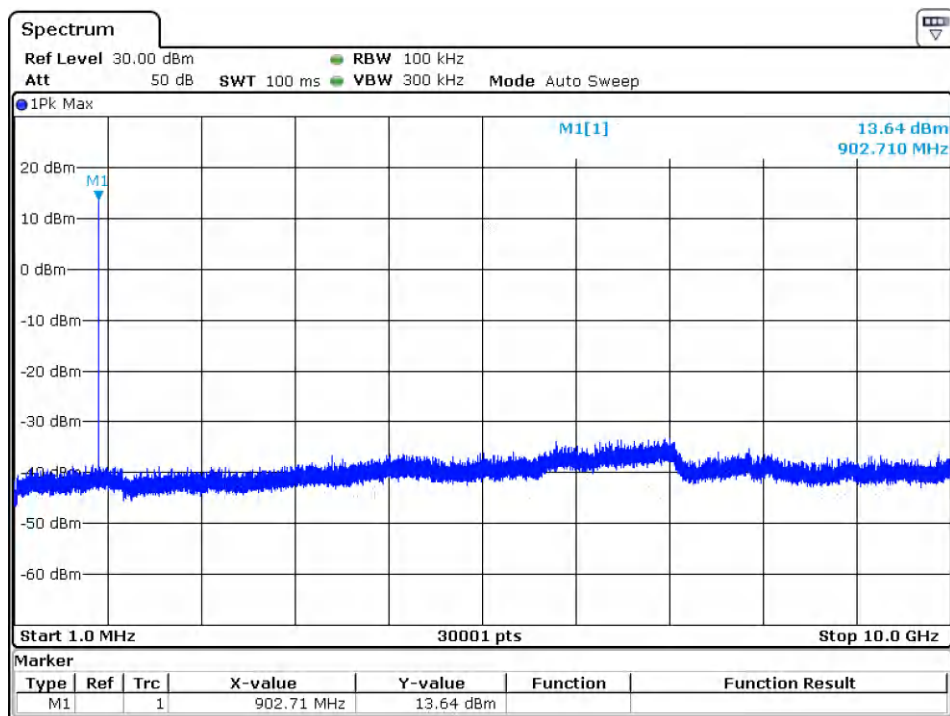
TX Frequency FHSS 927.4MHz _ Band Edge, Hopping on

Prüfbericht-Nr.:
Test report no.:

CN25X0NE 001

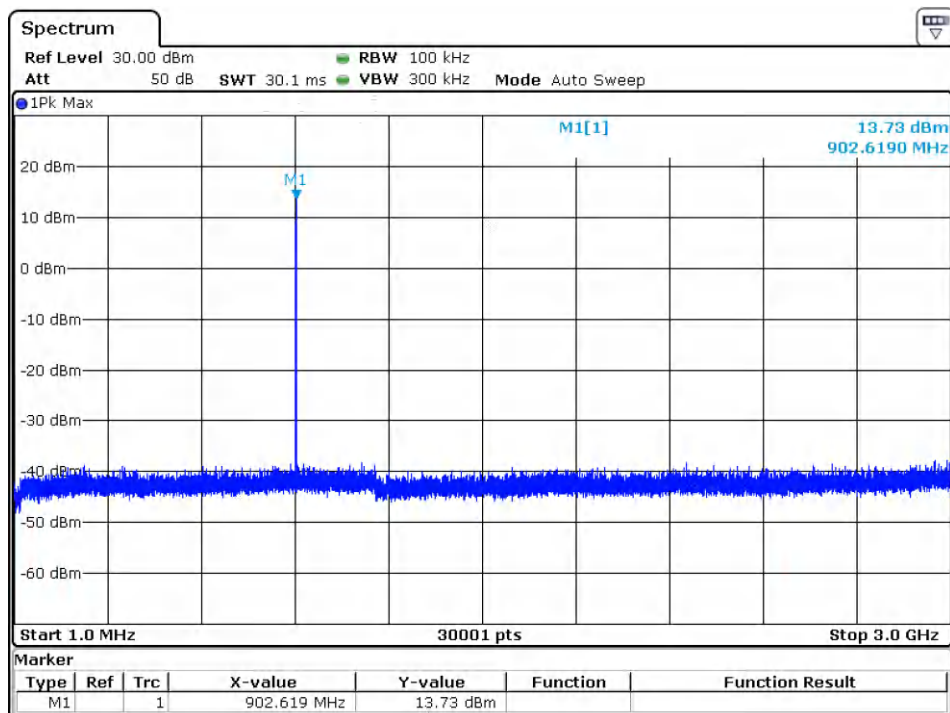
Seite 55 von 78
Page 55 of 78

Absatz Clause	Anforderungen - Prüfungen / Requirements - Tests	Messergebnisse – Bemerkungen/ Measuring results - Remarks	Ergebnis Result
------------------	---	--	--------------------



Date: 15.DEC.2025 16:42:32

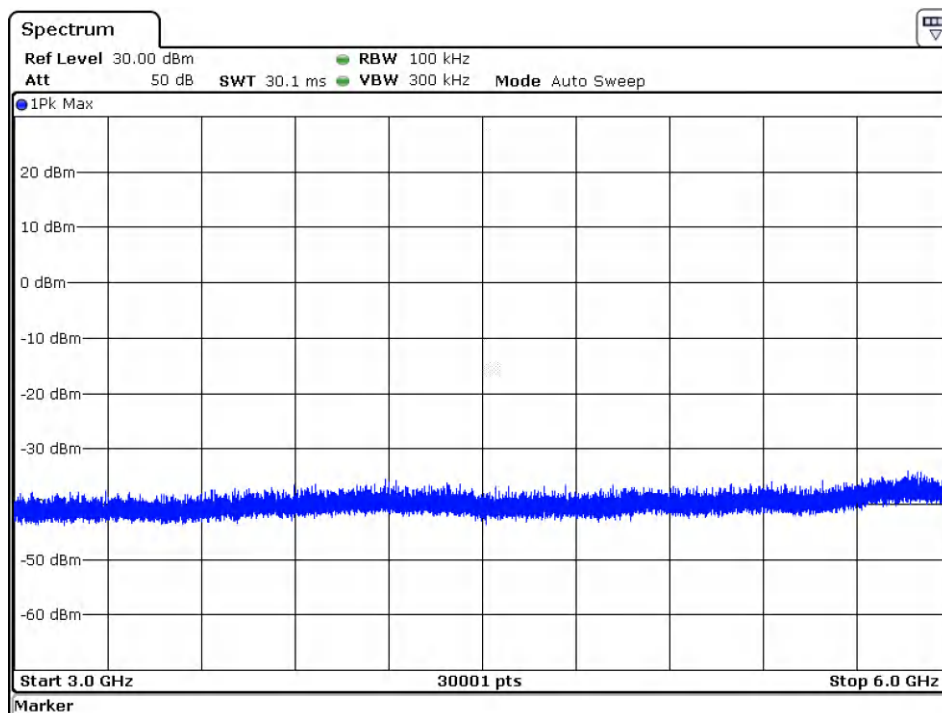
TX Frequency FHSS 902.6MHz _ 1M~10GHz Pre-scan



Date: 15.DEC.2025 16:42:59

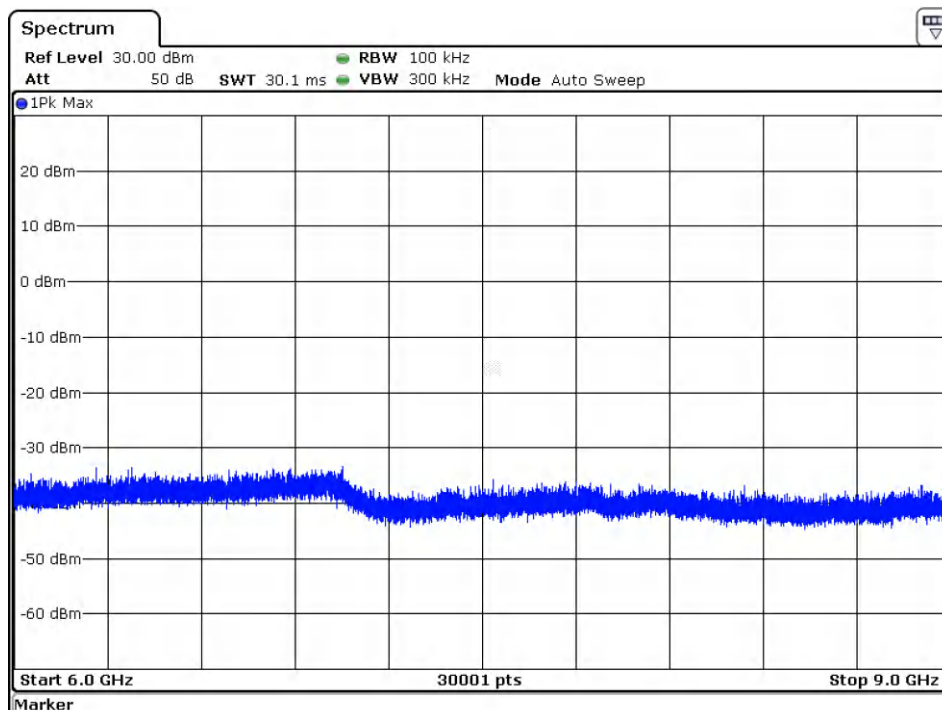
TX Frequency FHSS 902.6MHz _ 1M~3GHz

Prüfbericht-Nr.: Test report no.:		CN25X0NE 001		Seite 56 von 78 Page 56 of 78
Absatz Clause	Anforderungen - Prüfungen / Requirements - Tests	Messergebnisse – Bemerkungen/ Measuring results - Remarks	Ergebnis Result	



Date: 15.DEC.2025 16:43:23

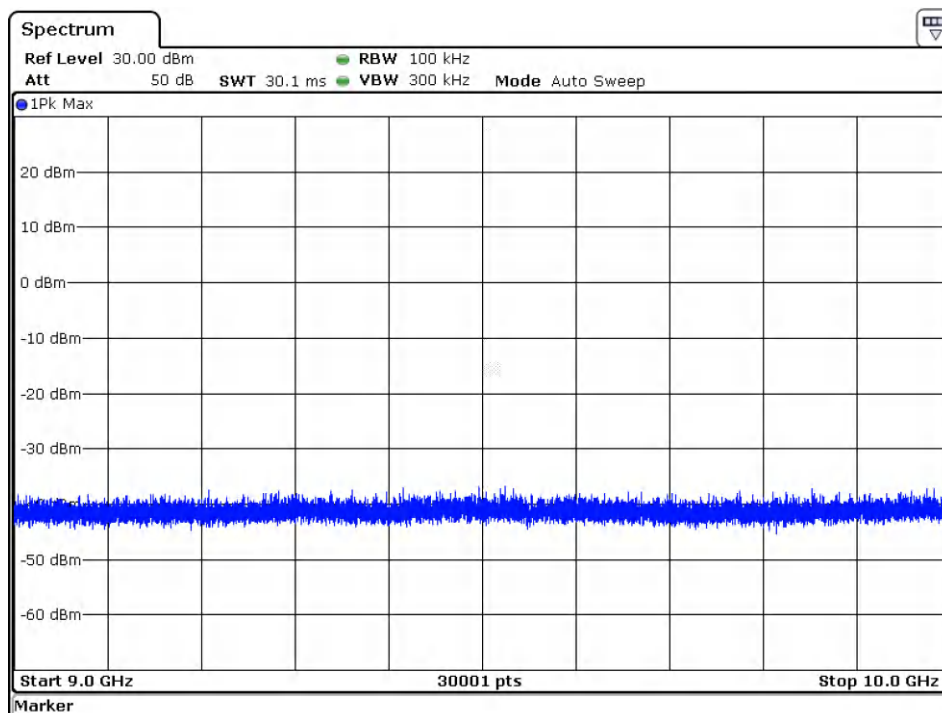
TX Frequency FHSS 902.6MHz _ 3G~6GHz



Date: 15.DEC.2025 16:43:49

TX Frequency FHSS 902.6MHz _ 6G~9GHz

Prüfbericht-Nr.: Test report no.:		CN25X0NE 001	Seite 57 von 78 Page 57 of 78
Absatz Clause	Anforderungen - Prüfungen / Requirements - Tests	Messergebnisse – Bemerkungen/ Measuring results - Remarks	Ergebnis Result



Date: 15.DEC.2025 16:44:09

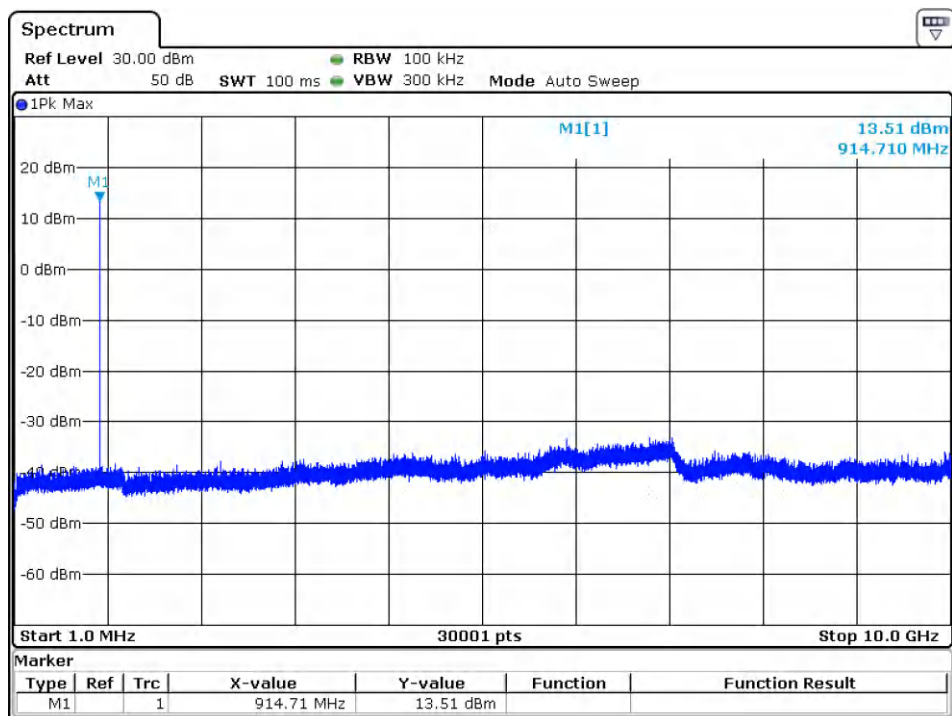
TX Frequency FHSS 902.6MHz _ 9G~10GHz

Prüfbericht-Nr.:
Test report no.:

CN25X0NE 001

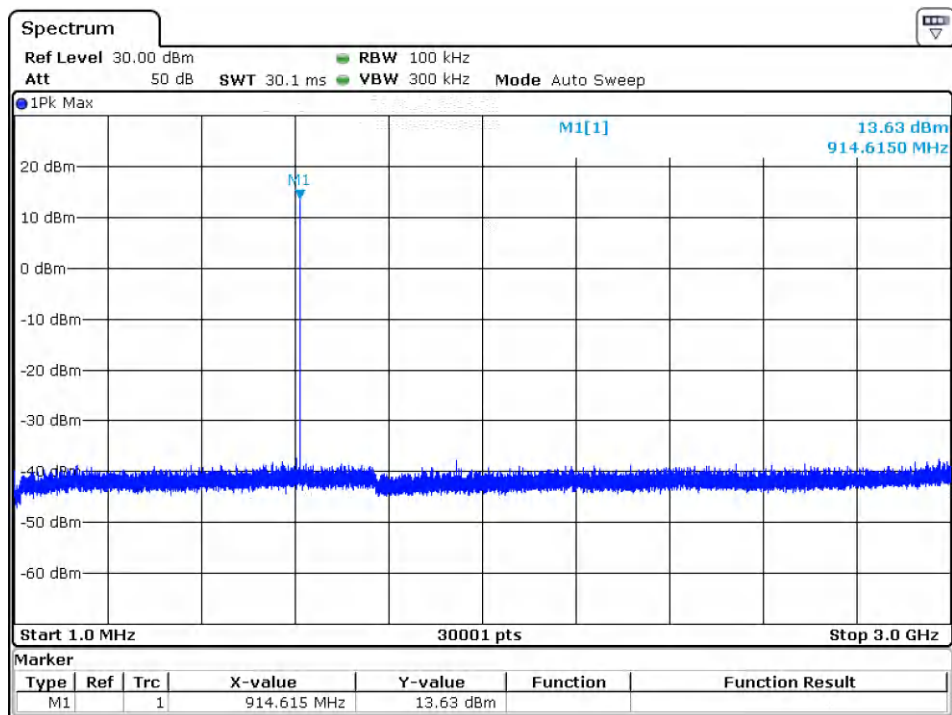
Seite 58 von 78
Page 58 of 78

Absatz Clause	Anforderungen - Prüfungen / Requirements - Tests	Messergebnisse – Bemerkungen/ Measuring results - Remarks	Ergebnis Result
------------------	---	--	--------------------



Date: 15.DEC.2025 16:47:24

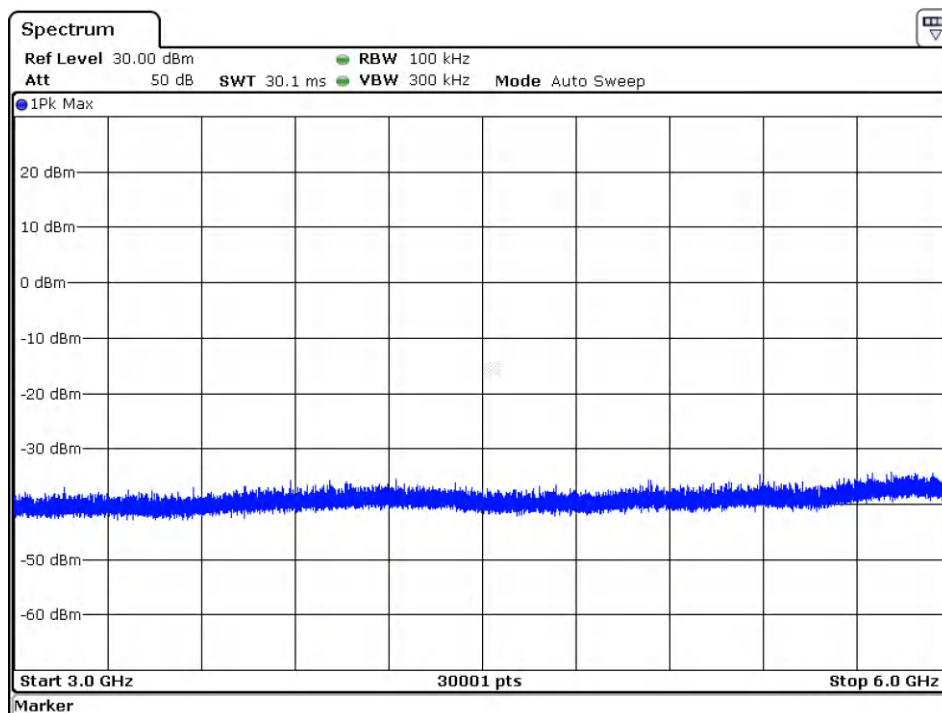
TX Frequency FHSS 914.6MHz _ 1M~10GHz Pre-scan



Date: 15.DEC.2025 16:48:09

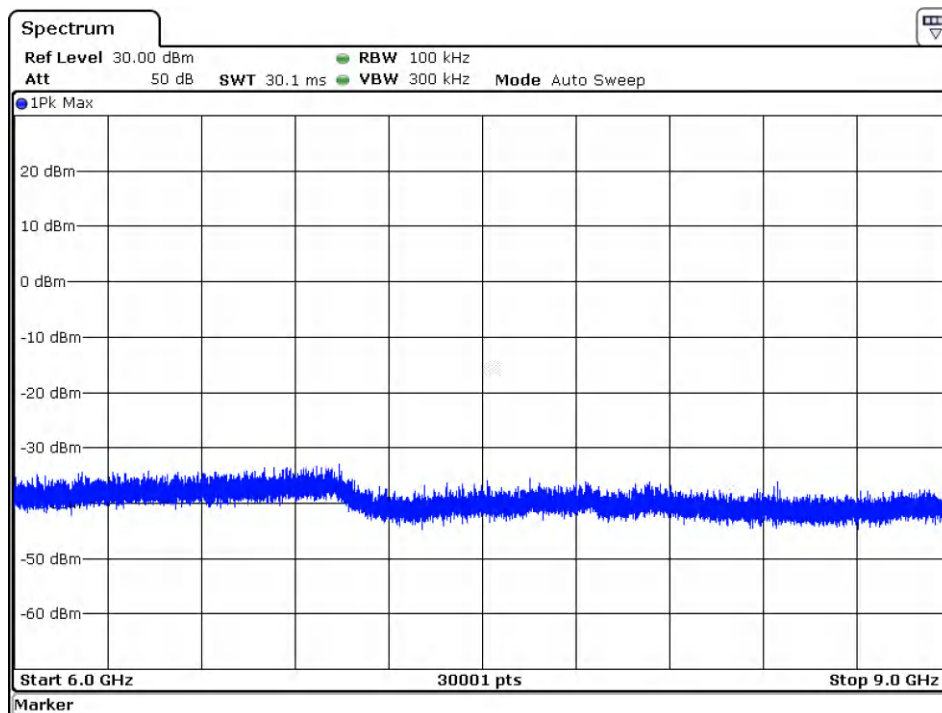
TX Frequency FHSS 914.6MHz _ 1M~3GHz

Prüfbericht-Nr.: Test report no.:		CN25X0NE 001		Seite 59 von 78 Page 59 of 78
Absatz Clause	Anforderungen - Prüfungen / Requirements - Tests	Messergebnisse – Bemerkungen/ Measuring results - Remarks	Ergebnis Result	



Date: 15.DEC.2025 16:48:41

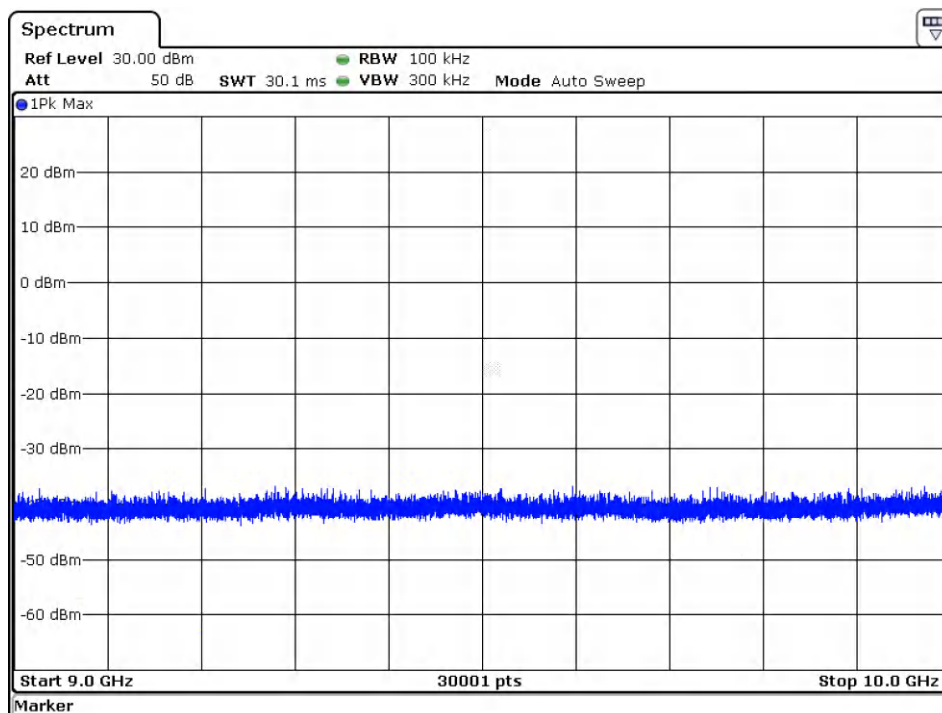
TX Frequency FHSS 914.6MHz _ 3G~6GHz



Date: 15.DEC.2025 16:49:05

TX Frequency FHSS 914.6MHz _ 6G~9GHz

Prüfbericht-Nr.: Test report no.:		CN25X0NE 001	Seite 60 von 78 Page 60 of 78
Absatz Clause	Anforderungen - Prüfungen / Requirements - Tests	Messergebnisse – Bemerkungen/ Measuring results - Remarks	Ergebnis Result



Date: 15.DEC.2025 16:49:31

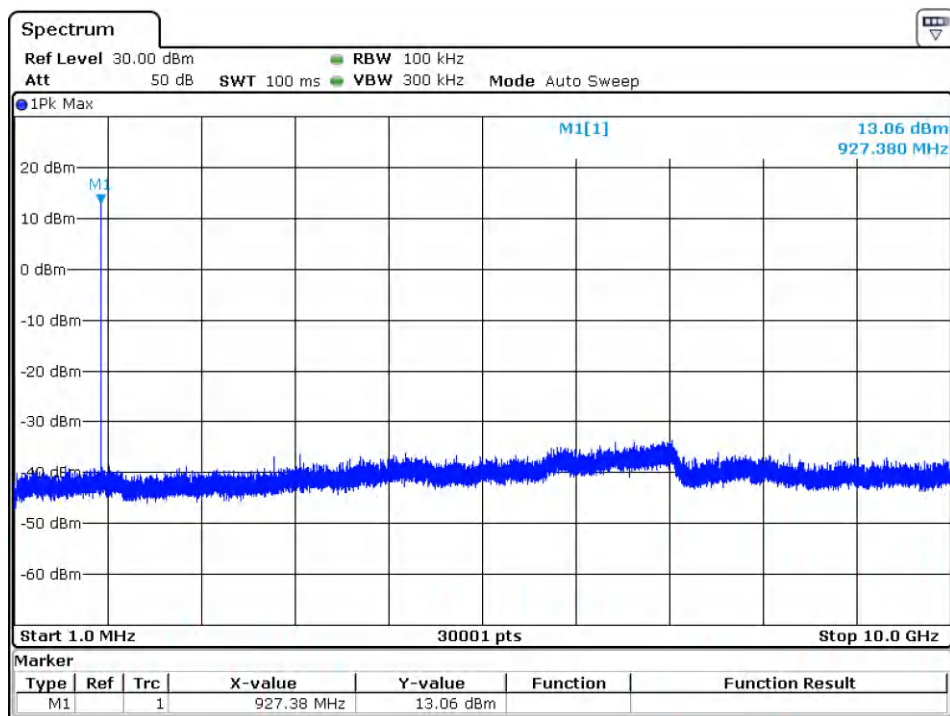
TX Frequency FHSS 914.6MHz _ 9G~10GHz

Prüfbericht-Nr.:
Test report no.:

CN25X0NE 001

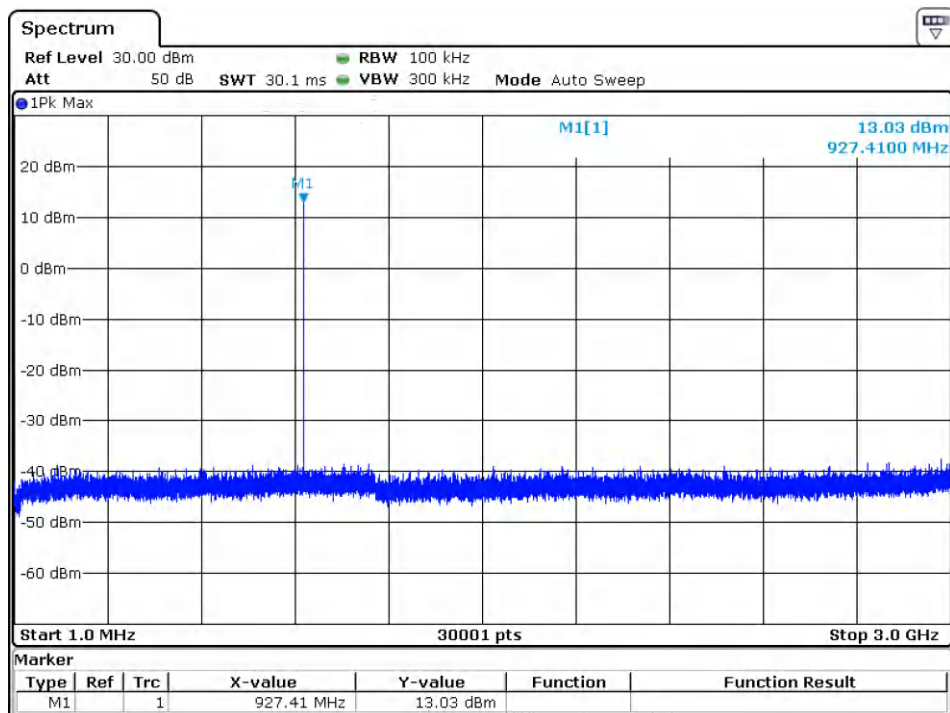
Seite 61 von 78
Page 61 of 78

Absatz Clause	Anforderungen - Prüfungen / Requirements - Tests	Messergebnisse – Bemerkungen/ Measuring results - Remarks	Ergebnis Result
------------------	---	--	--------------------



Date: 15.DEC.2025 16:51:12

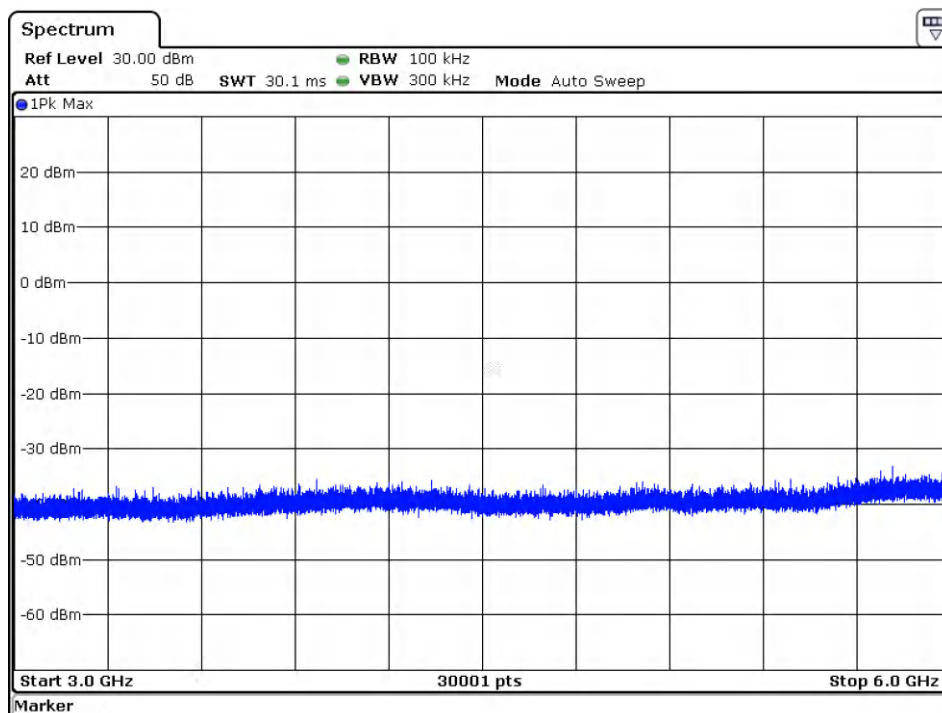
TX Frequency FHSS 927.4MHz _ 1M~10GHz Pre-scan



Date: 15.DEC.2025 16:51:32

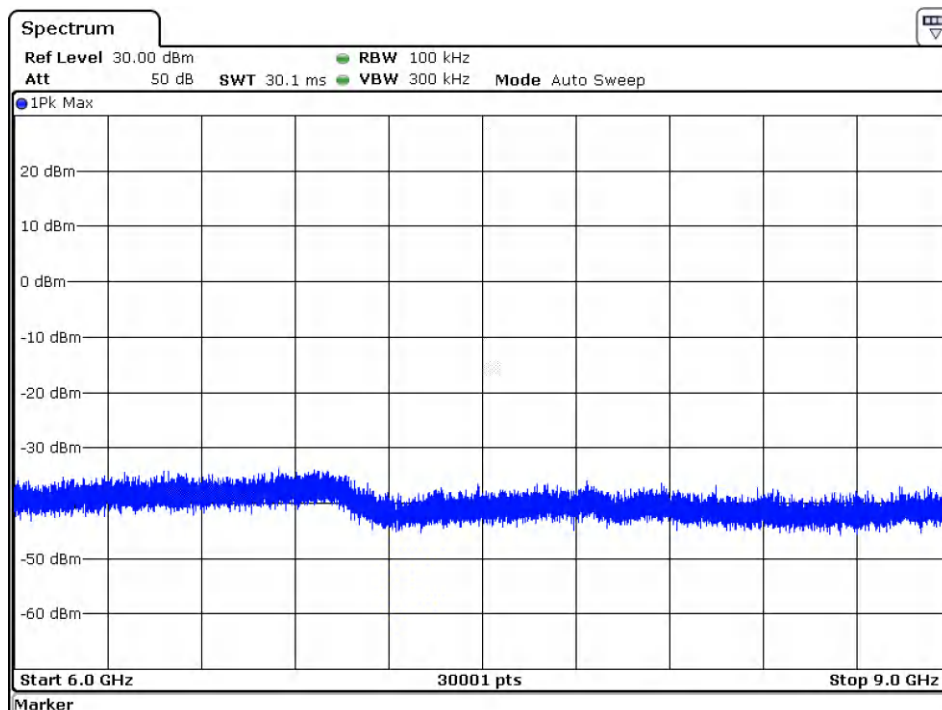
TX Frequency FHSS 927.4MHz _ 1M~3GHz

Prüfbericht-Nr.: Test report no.:		CN25X0NE 001		Seite 62 von 78 Page 62 of 78
Absatz Clause	Anforderungen - Prüfungen / Requirements - Tests	Messergebnisse – Bemerkungen/ Measuring results - Remarks	Ergebnis Result	



Date: 15.DEC.2025 16:52:02

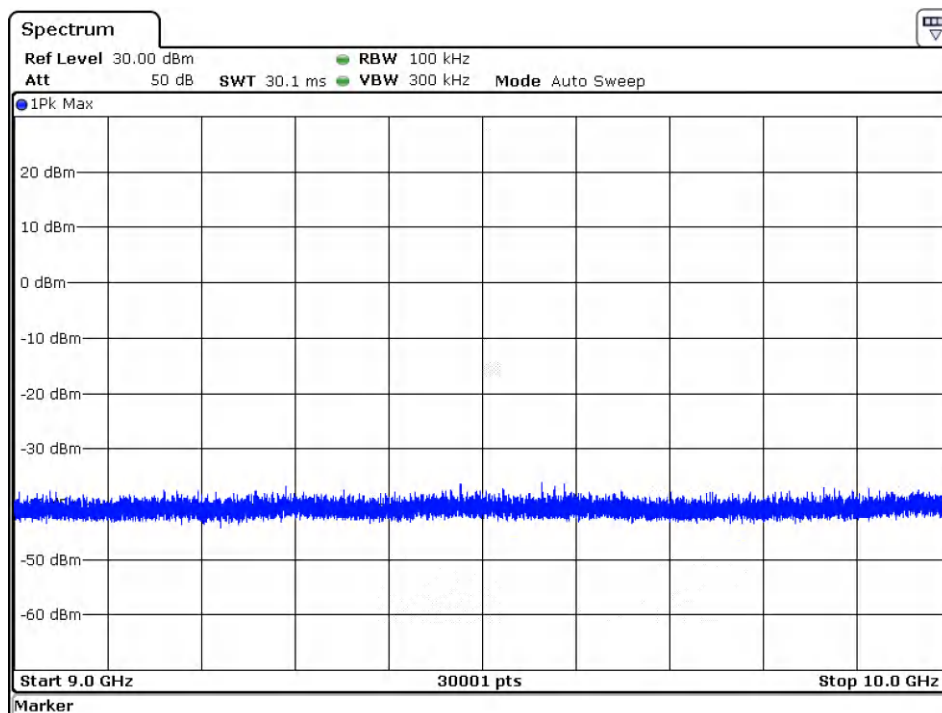
TX Frequency FHSS 927.4MHz _ 3G~6GHz



Date: 15.DEC.2025 16:52:19

TX Frequency FHSS 927.4MHz _ 6G~9GHz

Prüfbericht-Nr.: Test report no.:		CN25X0NE 001	Seite 63 von 78 Page 63 of 78
Absatz Clause	Anforderungen - Prüfungen / Requirements - Tests	Messergebnisse – Bemerkungen/ Measuring results - Remarks	Ergebnis Result



Date: 15.DEC.2025 16:52:43

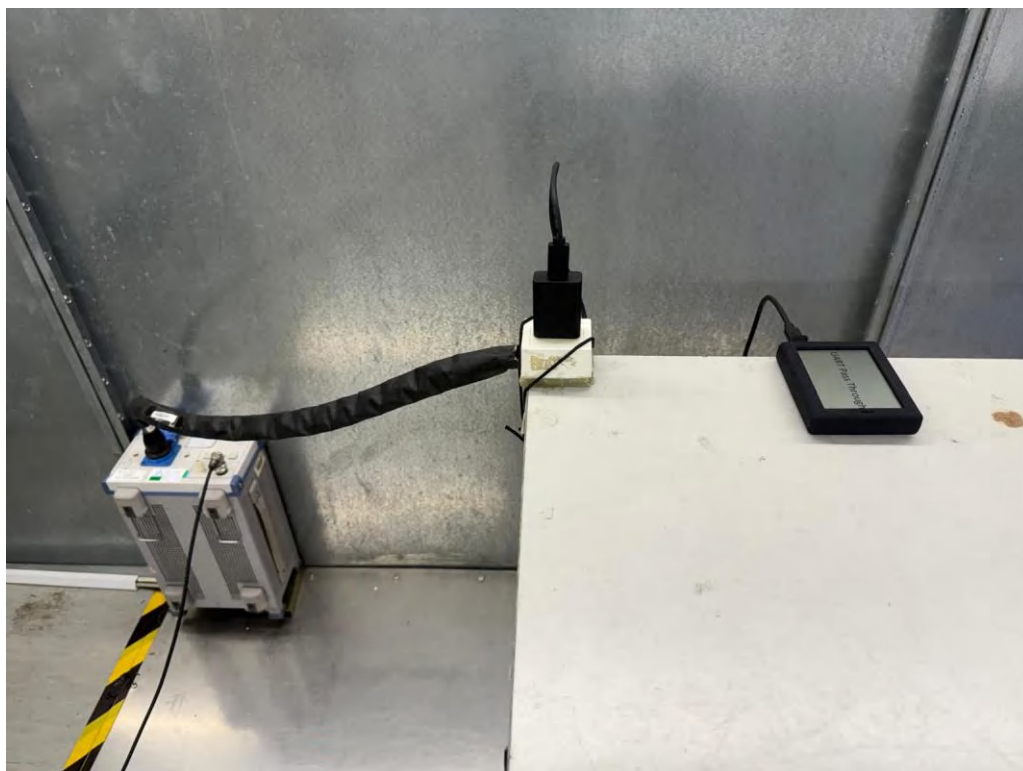
TX Frequency FHSS 927.4MHz _ 9G~10GHz

Prüfbericht-Nr.: <i>Test report no.:</i>		CN25X0NE 001		Seite 64 von 78 Page 64 of 78
Absatz <i>Clause</i>	Anforderungen - Prüfungen / <i>Requirements - Tests</i>	Messergebnisse – Bemerkungen/ <i>Measuring results - Remarks</i>	Ergebnis <i>Result</i>	

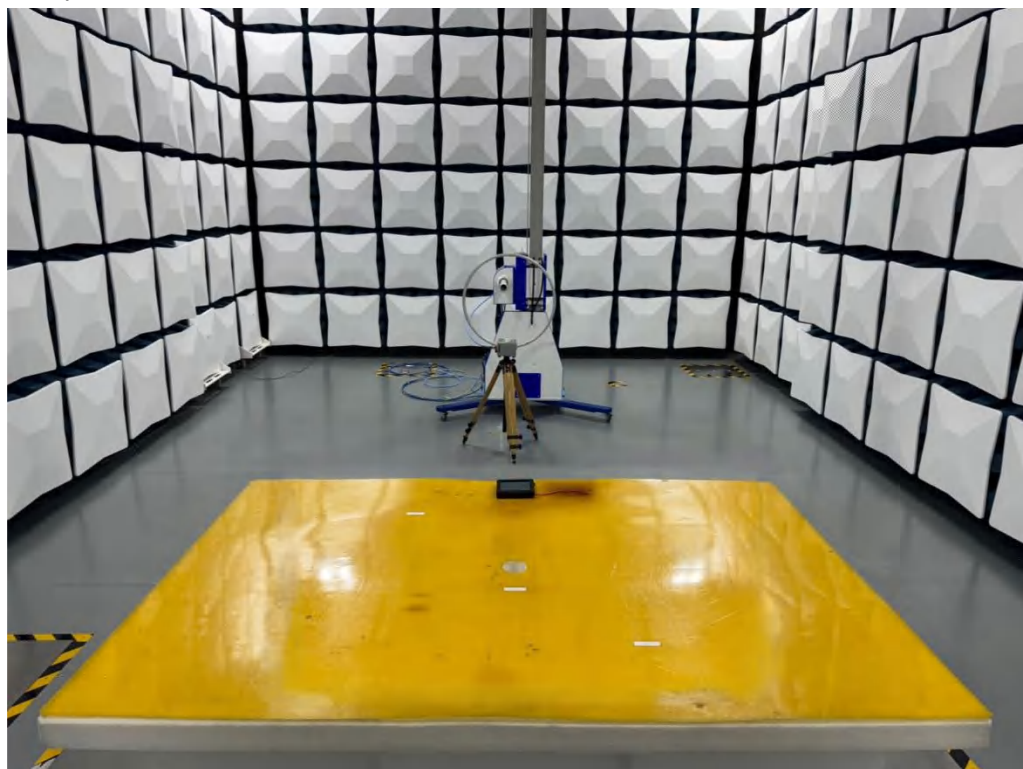
Appendix 2

Test Setup Photos

Prüfbericht-Nr.: Test report no.:		CN25X0NE 001		Seite 65 von 78 Page 65 of 78
Absatz Clause	Anforderungen - Prüfungen / Requirements - Tests	Messergebnisse – Bemerkungen/ Measuring results - Remarks	Ergebnis Result	

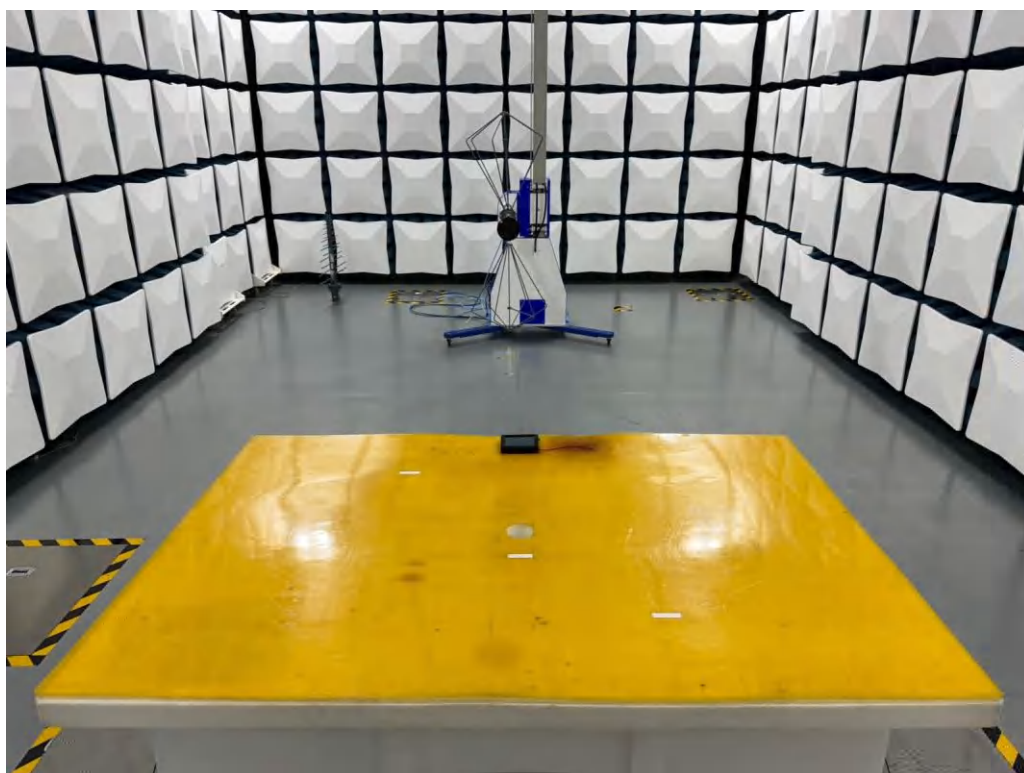


Set-up for Conducted Emission on AC Mains



Set-up for Radiated Emission (9kHz-30MHz, Battery operated)

Prüfbericht-Nr.: Test report no.:		CN25X0NE 001		Seite 66 von 78 Page 66 of 78
Absatz Clause	Anforderungen - Prüfungen / Requirements - Tests	Messergebnisse – Bemerkungen/ Measuring results - Remarks	Ergebnis Result	

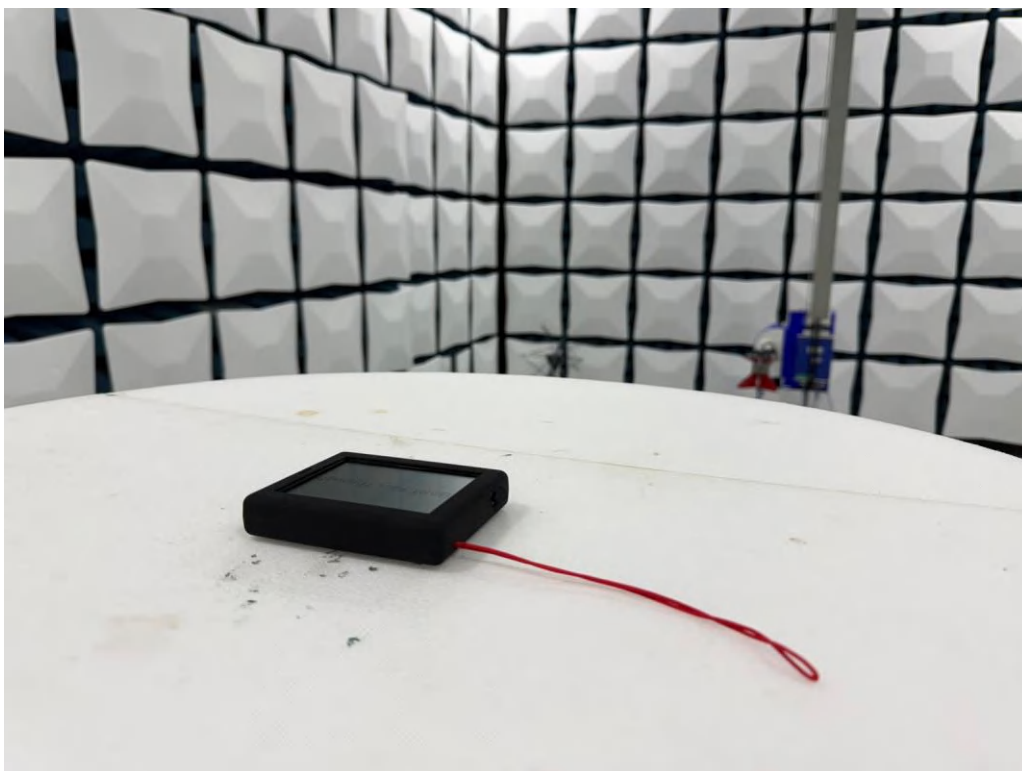


Set-up for Radiated Emission (30MHz-200MHz, Battery operated)

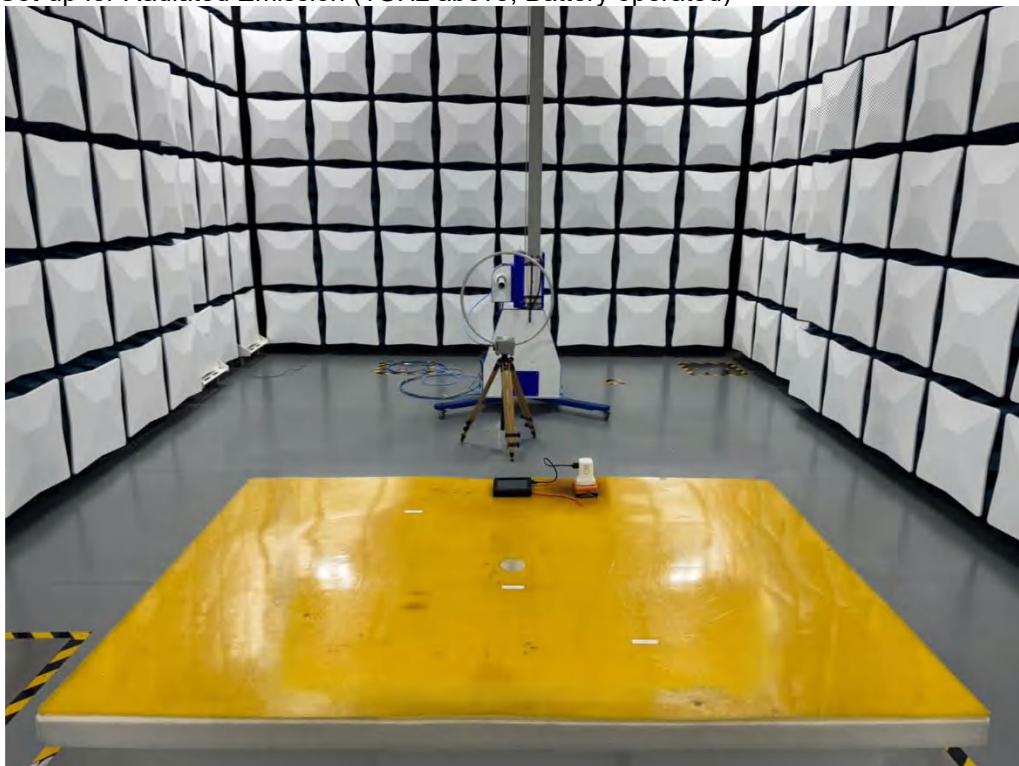


Set-up for Radiated Emission (200MHz-1000MHz, Battery operated)

Prüfbericht-Nr.: Test report no.:		CN25X0NE 001		Seite 67 von 78 Page 67 of 78
Absatz Clause	Anforderungen - Prüfungen / Requirements - Tests	Messergebnisse – Bemerkungen/ Measuring results - Remarks	Ergebnis Result	

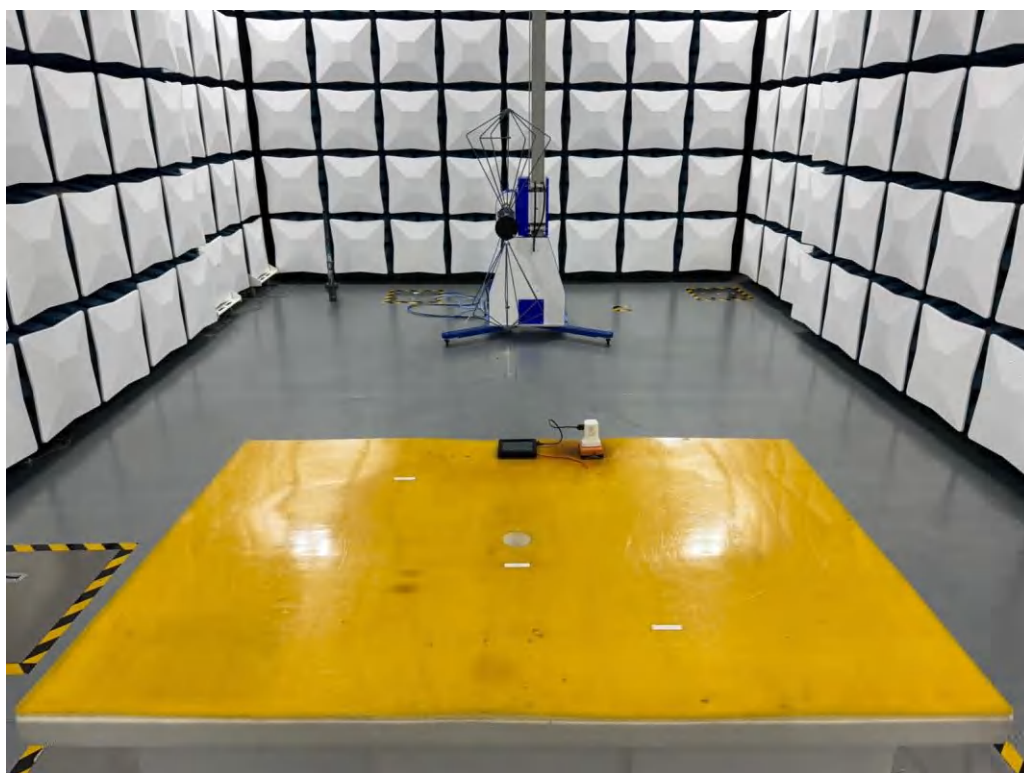


Set-up for Radiated Emission (1GHz above, Battery operated)

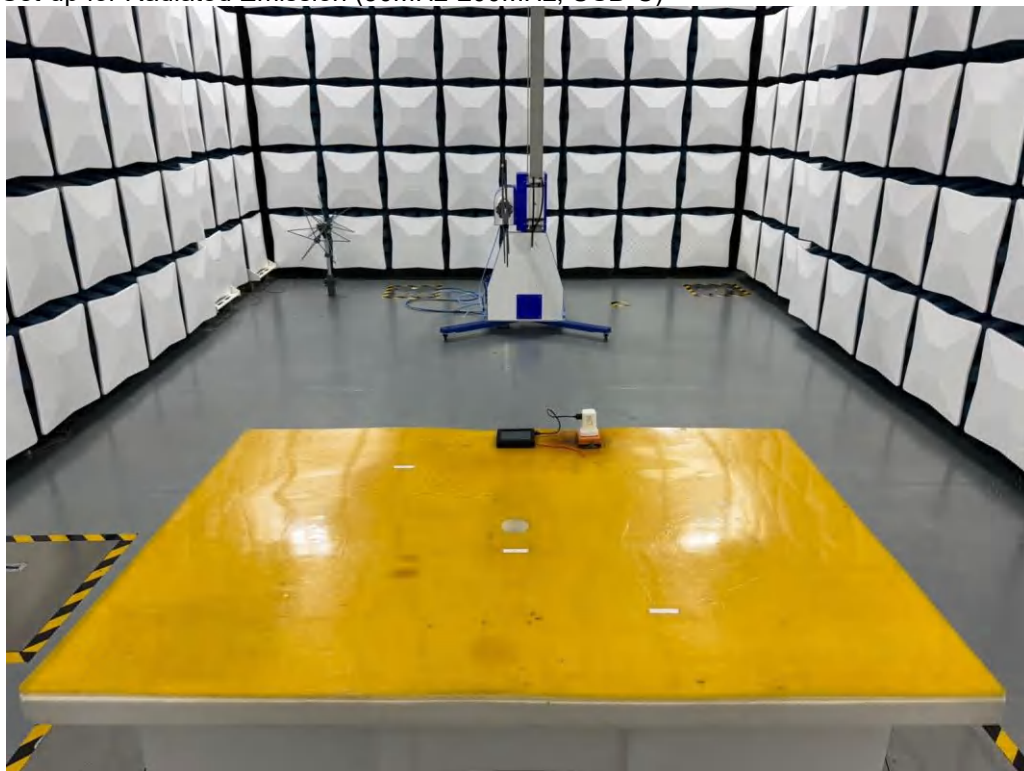


Set-up for Radiated Emission (9kHz-30MHz, USB-C)

Prüfbericht-Nr.: Test report no.:		CN25X0NE 001		Seite 68 von 78 Page 68 of 78
Absatz Clause	Anforderungen - Prüfungen / Requirements - Tests	Messergebnisse – Bemerkungen/ Measuring results - Remarks	Ergebnis Result	

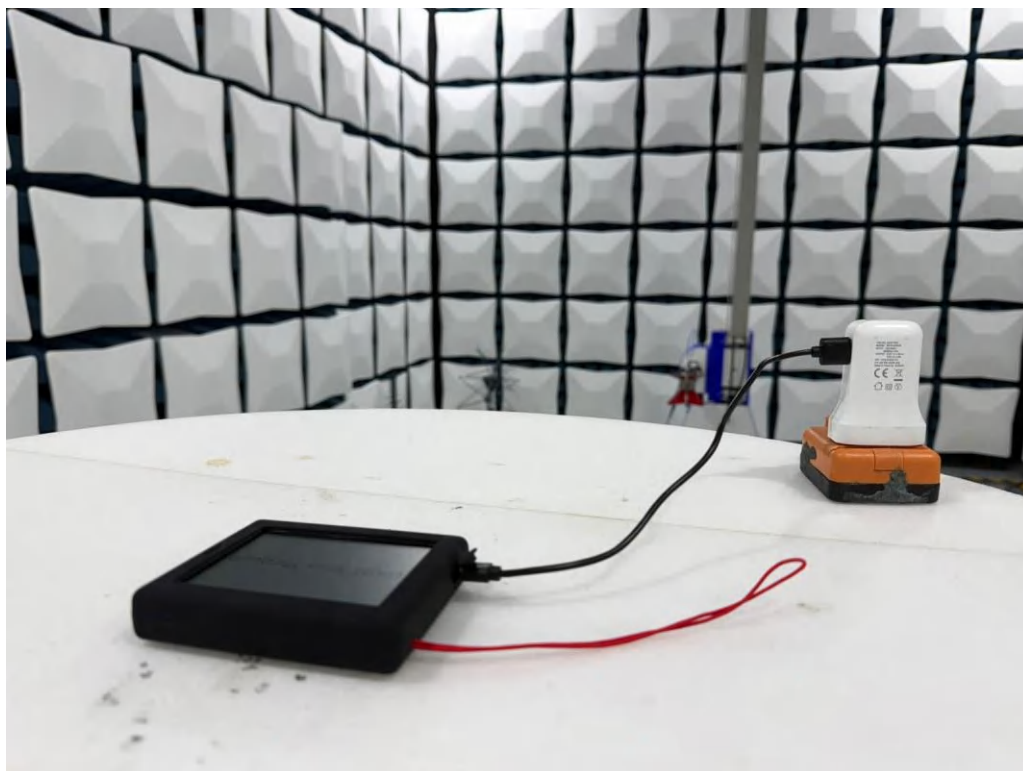


Set-up for Radiated Emission (30MHz-200MHz, USB-C)



Set-up for Radiated Emission (200MHz-1000MHz, USB-C)

Prüfbericht-Nr.: <i>Test report no.:</i>		CN25X0NE 001		Seite 69 von 78 Page 69 of 78
Absatz <i>Clause</i>	Anforderungen - Prüfungen / <i>Requirements - Tests</i>	Messergebnisse – Bemerkungen/ <i>Measuring results - Remarks</i>	Ergebnis <i>Result</i>	



Set-up for Radiated Emission (1GHz above, USB-C)

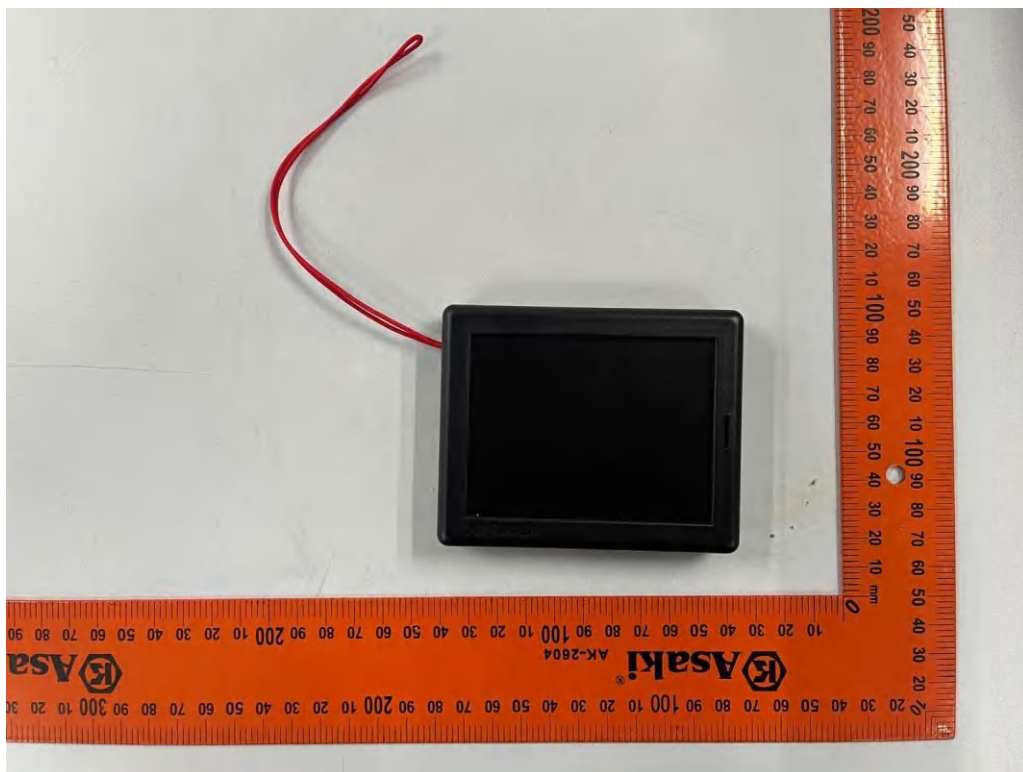
Prüfbericht-Nr.: <i>Test report no.:</i>		CN25X0NE 001		Seite 70 von 78 Page 70 of 78
Absatz <i>Clause</i>	Anforderungen - Prüfungen / <i>Requirements - Tests</i>	Messergebnisse – Bemerkungen/ <i>Measuring results - Remarks</i>	Ergebnis <i>Result</i>	

Appendix 3

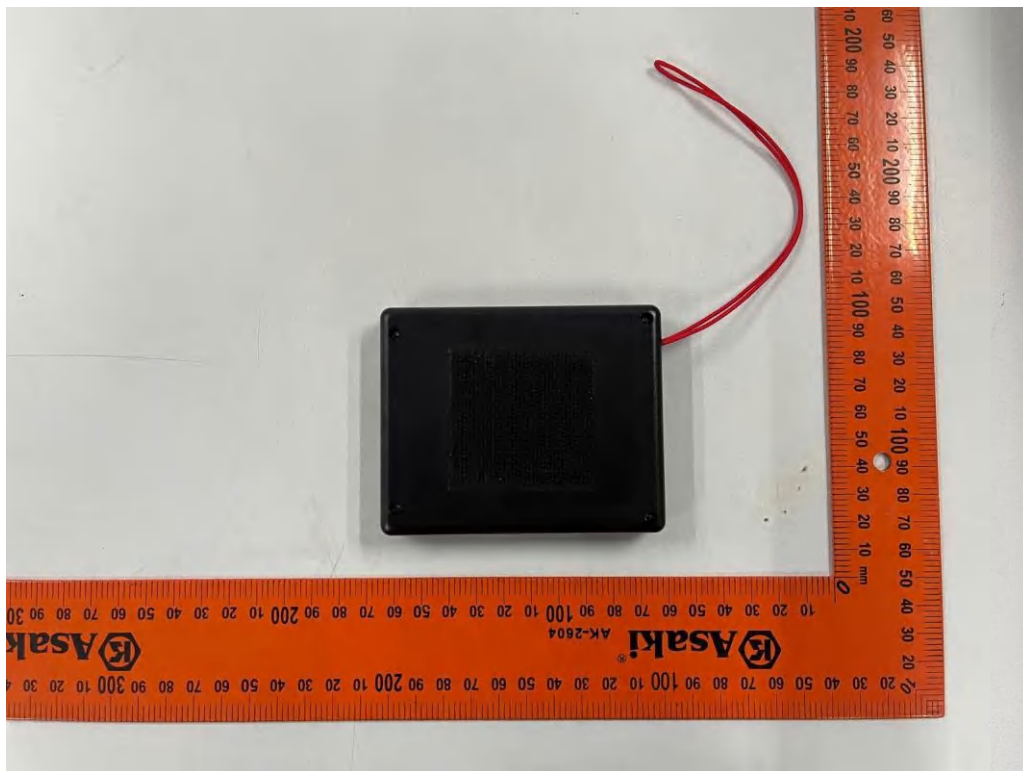
EUT External Photos

FCC ID: 2AVOQ04

Prüfbericht-Nr.: Test report no.:		CN25X0NE 001		Seite 71 von 78 Page 71 of 78
Absatz Clause	Anforderungen - Prüfungen / Requirements - Tests	Messergebnisse – Bemerkungen/ Measuring results - Remarks	Ergebnis Result	



External View



External View

Prüfbericht-Nr.: Test report no.:		CN25X0NE 001	Seite 72 von 78 Page 72 of 78
Absatz Clause	Anforderungen - Prüfungen / Requirements - Tests	Messergebnisse – Bemerkungen/ Measuring results - Remarks	Ergebnis Result

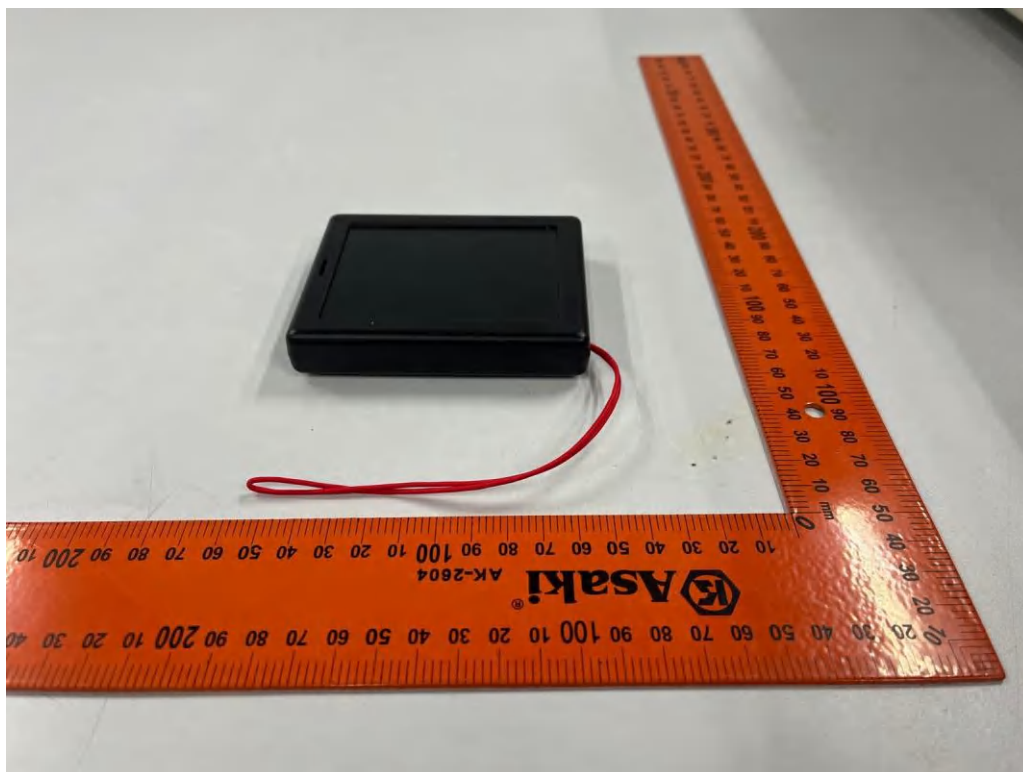


External View



External View

Prüfbericht-Nr.: Test report no.:		CN25X0NE 001		Seite 73 von 78 Page 73 of 78
Absatz Clause	Anforderungen - Prüfungen / Requirements - Tests	Messergebnisse – Bemerkungen/ Measuring results - Remarks	Ergebnis Result	



External View



External View

Prüfbericht-Nr.: <i>Test report no.:</i>		CN25X0NE 001		Seite 74 von 78 Page 74 of 78
Absatz <i>Clause</i>	Anforderungen - Prüfungen / <i>Requirements - Tests</i>	Messergebnisse – Bemerkungen/ <i>Measuring results - Remarks</i>	Ergebnis <i>Result</i>	

Appendix 4

EUT Internal Photos

FCC ID: 2AVOQ04

Prüfbericht-Nr.: Test report no.:		CN25X0NE 001		Seite 75 von 78 Page 75 of 78
Absatz <i>Clause</i>	Anforderungen - Prüfungen / <i>Requirements - Tests</i>	Messergebnisse – Bemerkungen/ <i>Measuring results - Remarks</i>	Ergebnis <i>Result</i>	

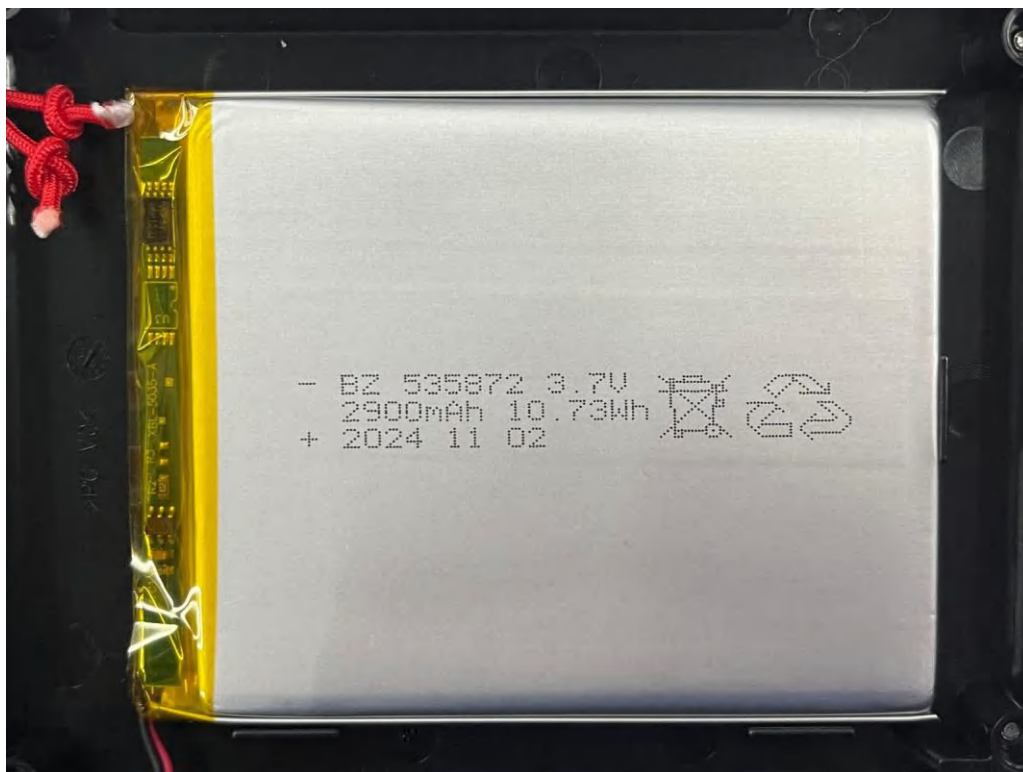


Internal View



Internal View

Prüfbericht-Nr.: Test report no.:		CN25X0NE 001	Seite 76 von 78 Page 76 of 78
Absatz Clause	Anforderungen - Prüfungen / Requirements - Tests	Messergebnisse – Bemerkungen/ Measuring results - Remarks	Ergebnis Result



Internal View

Prüfbericht-Nr.: <i>Test report no.:</i>		CN25X0NE 001		Seite 77 von 78 Page 77 of 78
Absatz <i>Clause</i>	Anforderungen - Prüfungen / <i>Requirements - Tests</i>	Messergebnisse – Bemerkungen/ <i>Measuring results - Remarks</i>	Ergebnis <i>Result</i>	

Appendix 5

RF Exposure Information

FCC ID: 2AVOQ04

Prüfbericht-Nr.: <i>Test report no.:</i>		CN25X0NE 001		Seite 78 von 78 Page 78 of 78
Absatz <i>Clause</i>	Anforderungen - Prüfungen / <i>Requirements - Tests</i>	Messergebnisse – Bemerkungen/ <i>Measuring results - Remarks</i>	Ergebnis <i>Result</i>	

Time-averaged maximum conducted output power

Frequency (MHz)	Maximum output power (dBm)	Pulse duration (ms)	Period (ms)	10 log (1 / D) (dB)	Time-averaged maximum conducted output power	
					(dBm)	(mW)
920.8	13.76	35.6	73.2	3.13	10.63	11.561
902.6	14.06	5.1	39.2	8.86	5.20	3.311
914.6	13.85	5.1	39.2	8.86	4.99	3.155
927.4	13.53	5.1	39.2	8.86	4.67	2.931

Note:

- The maximum peak field strength was taken from table of "Subclause 15.247(b)(3) – Maximum Peak Conducted Output Power".
- Time-averaged maximum conducted output power is calculated by subtracting [10 log (1 / D)] dB from maximum output power, where D is duty cycle, 1 / D = period / pulse duration

For FCC

According to KDB 447498 D01:

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at *test separation distances* ≤ 5 mm are determined by:

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}]$
≤ 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, where

- f(GHz) is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison
- 3.0 and 7.5 are referred to as the numeric thresholds in step 2 below

Result:

$$(11.561/5) \cdot \sqrt{0.9208} = 2.219 < 3.0$$

$$(3.311/5) \cdot \sqrt{0.9026} = 0.629 < 3.0$$

$$(3.155/5) \cdot \sqrt{0.9146} = 0.603 < 3.0$$

$$(2.931/5) \cdot \sqrt{0.9274} = 0.565 < 3.0$$

Conclusion: No SAR is required.