

Report on the FCC and IC Testing of the Siemens AG

Model: SIMATIC RTLS4460T

In accordance with FCC 47 CFR Part 15 C,
ISED RSS-247 and ISED RSS-GEN

Prepared for: Siemens AG
76181 Karlsruhe
Germany

FCC ID: SCFNANOPAN5375V5
IC: 267X-MN5375V5



Product Service

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Inspire trust.

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Date: 2026-02-24

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RESPONSIBLE FOR	NAME	DATE	SIGNATURE
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Signatures in this approval box have checked this document in line with the requirements of TÜV SÜD Product Service document control rules.

Engineering Statement:

The measurements shown in this report were made in accordance with the procedures described on test pages. All reported testing was carried out on a sample equipment to demonstrate limited compliance with FCC 47 CFR Part 15 C and ISED RSS-247 and RSS-GEN. The sample tested was found to comply with the requirements defined in the applied rules.

RESPONSIBLE FOR	NAME	DATE	SIGNATURE
Testing	Alexander Deese	2026-02-24	 SIGN-ID 1110814

Laboratory Accreditation

DAkkS Reg. No. D-PL-11321-11-03

DAkkS Reg. No. D-PL-11321-11-04

Laboratory recognition

Registration No. BNetzA-CAB-16/21-15

Industry Canada test site registration

3050A-2

Executive Statement:

A sample of this product was tested and found to be compliant with FCC 47 CFR Part 15 C:2023 and ISED RSS-247 Issue 4, 2025 and RSS-GEN Issue 5, Amd. 1, 2019, Amd. 2, 2021



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1 Report Summary

1.1 Modification Report

Alternations and additions to this report will be issued to the holders of each copy in the form of a complete document. Current version replaces all previous versions.

<i>Revision</i>	<i>Description of changes</i>	<i>Date of Issue</i>
0	First Issue	2025-09-03
1	FCC ID corrected.	2026-01-12
2	Module and host model number added, section 1.2. Antenna connector type corrected, section 2.1. Plots for bandwidth added, section 2.2. Plot for output power added, section 2.3. Plot for power spectral density added, section 2.4. Plots for band edges added, section 2.5. Plots for restricted band added, section 2.6.	2026-01-28
3	Measurement details added, sections 2.2.7, 2.3.7, 2.4.7, 2.5.7. Non Restricted Band measurements added, section 2.6.	2026-02-04
4	Output power measurement repeated with peak detector, section 2.3. Non Restricted Band measurements corrected, section 2.6.	2026-02-16
5	HVIN added	2026-02-18
6	Power spectral density measurement repeated with peak detector.	2026-02-24

Table 1: Report of Modifications



1.2 Introduction

Applicant	Siemens AG
Manufacturer	Siemens AG
Host Model Number(s)	SIMATIC RTLS4460T
Module Model Number(s)	MN5375V5
HVIN	MN5375V5
MLFB Number(s)	6GT2700-6CE02
Serial Number(s)	17:85:10:02:CA:9C, VPN5428201
Hardware Version(s)	FS:02
Software Version(s)	---
Number of Samples Tested	1
Test Specification(s) /	FCC 47 CFR Part 15 C : 2023
Issue / Date	ISED RSS-247, Issue 4 : 2025
	ISED RSS-GEN, Issue 5, Amd. 1 : 2019, Amd. 2 : 2021
Test Plan/Issue/Date	---
Order Number	9708960787
Date	2025-01-31
Date of Receipt of EUT	2025-01-23
Start of Test	2025-03-04
Finish of Test	2026-02-24
Name of Engineer(s)	Alex Fink, Alexander Deese
Related Document(s)	ANSI C63.4: 2014, ANSI C63.10: 2020
	FCC 47 CFR Part 2 J : 2024
	KDB 558074 D01 V05R02



1.3 Brief Summary of Results

A brief summary of the tests carried out in accordance with FCC 47 CFR Part 15 C, ISED RSS-247 and ISED RSS-GEN is shown below.

Section	Specification Clause	Test Description	Result
2.1	15.203, 15.247(b)	Antenna requirement	Pass
2.2	15.247(a)(2)	Emission Bandwidth	Pass
2.3	15.247(b)(3)	Output Power	Pass
2.4	15.247(e)	Power Spectral Density	Pass
2.5	15.247(d)	Frequency Band Edge	Pass
2.6	15.247(d), 15.205, 15.209	Spurious Emissions	Pass
2.8	15.207	Conducted Emissions on Mains Terminals	Pass

Table 2: Results according to FCC 47 CFR Part 15 C

Section	Specification Clause	Test Description	Result
2.2	5.2 a.	Emission Bandwidth	Pass
2.3	5.4 d.	Output Power	Pass
2.4	5.2 b.	Power Spectral Density	Pass
2.5	5.5	Frequency Band Edge	Pass
2.6	5.5	Spurious Emissions	Pass

Table 3: Results according to ISED RSS-247

Section	Specification Clause	Test Description	Result
2.2	6.7	Emission Bandwidth	Pass
2.6	8.9, 8.10	Spurious Emissions	Pass
2.7	8.11	Frequency Stability	Pass
2.8	8.8	Conducted Emissions on Mains Terminals	Pass

Table 4: Results according to RSS-Gen



1.4 Product Information

1.4.1 Technical Description

RTLS Transponder

Frequency Band 2400 MHz to 2483.5 MHz
Number of frequency channels: 1

Supply Voltage: 24 V (10 V to 30 V)
Supply Frequency: DC

1.4.2 List of Antennas

<i>Manufacturer</i>	<i>Model</i>	<i>Antenna im- pedance</i>	<i>Antenna Type</i>	<i>Antenna gain</i>
Huber+Suhner	SWA-0825/360/5/30/V	50 Ω	Railway rooftop antenna	5 dBi
Siemens (PROCOM)	6GT2706-0CA00	50 Ω	Rod antenna	0 dBi

Table 5: List of antennas

1.5 Test Configuration

24 V DC power supplied.

1.6 Modes of Operation

Test Case 1:

Antenna: Huber + Suhner

Continuously transmitting at 2440 MHz with a Bandwidth of 80 MHz.

Test Case 2:

Antenna: Procom

Continuously transmitting at 2440 MHz with a Bandwidth of 80 MHz.

1.7 Deviations from Standard



1.8 EUT Modifications Record

The table below details modifications made to the EUT during the test program.
The modifications incorporated during each test are recorded on the appropriate test pages.

Modification State	Description of Modification still fitted to EUT	Modification Fitted By	Date Modification Fitted
0	As supplied by the customer	Not Applicable	Not Applicable

Table 6

1.9 Test Location

TÜV SÜD Product Service conducted the following tests at our Straubing test laboratory:

Test Name	Name of Engineer(s)
Configuration according to 1.5 and 1.6	
Antenna requirement	Alexander Deese
Emission Bandwidth	Alex Fink
Output Power	Alex Fink
Power Spectral Density	Alex Fink
Frequency Band Edge	Alex Fink
Spurious Emissions	Alex Fink, Alexander Deese
Conducted Emissions on Mains Terminals	Alexander Deese
Frequency Stability	Alex Fink

Office Address:

Äußere Frühlingstraße 45
94315 Straubing
Germany



2 Test Details

2.1 Antenna requirement

2.1.1 Specification Reference

FCC 47 CFR Part 15 C, Clauses 15.203, 15.247(b)

2.1.2 Equipment under Test and Modification State

SIMATIC RTLS4460T; S/N 17:85:10:02:CA:9C; Modification state 0

2.1.3 Date of Test

2025-03-04

2.1.4 Specification Limits

FCC 47 CFR 15.203

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some fields disturbance sensors, or to other intentional radiators which must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits are not exceeded.

FCC 47 CFR 15.247(b)

Except for point-to-point operation and multiple directional beams, if the transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.



Product Service

2.1.5 Test Results

Antenna connector type: R-SMA
Antenna connector impedance: 50 Ω

<i>Manufacturer</i>	<i>Model</i>	<i>Antenna impedance</i>	<i>Antenna Type</i>	<i>Antenna gain</i>	<i>Result</i>
Huber+Suhner	SWA-0825/360/5/30/V	50 Ω	Railway rooftop antenna	5 dBi	Pass
Siemens (PRO-COM)	6GT2706-0CA00	50 Ω	Rod antenna	0 dBi	Pass



2.2 Emission Bandwidth

2.2.1 Specification Reference

FCC 47 CFR Part 15 C, Clause 15.247(a)(2)
ISED RSS-247, Clause 5.2 a.
ISED RSS-Gen, Clause 6.7

2.2.2 Equipment under Test and Modification State

SIMATIC RTLS4460T; S/N 17:85:10:02:CA:9C; Modification state 0

2.2.3 Date of Test

2025-03-15

2.2.4 Environmental Conditions

Ambient Temperature	21 °C
Relative Humidity	34 %

2.2.5 Specification Limits

For systems using digital modulation techniques, operating in the 902 MHz – 928 MHz, 2400 MHz – 2483.5 MHz and/or 5725 MHz – 5850 MHz bands, the minimum 6 dB bandwidth shall be at least 500 kHz

ISED RSS-GEN:

The occupied (99 %) bandwidth shall be reported for all equipment in addition to the specified bandwidth required in the applicable RSS.

2.2.6 Test Method

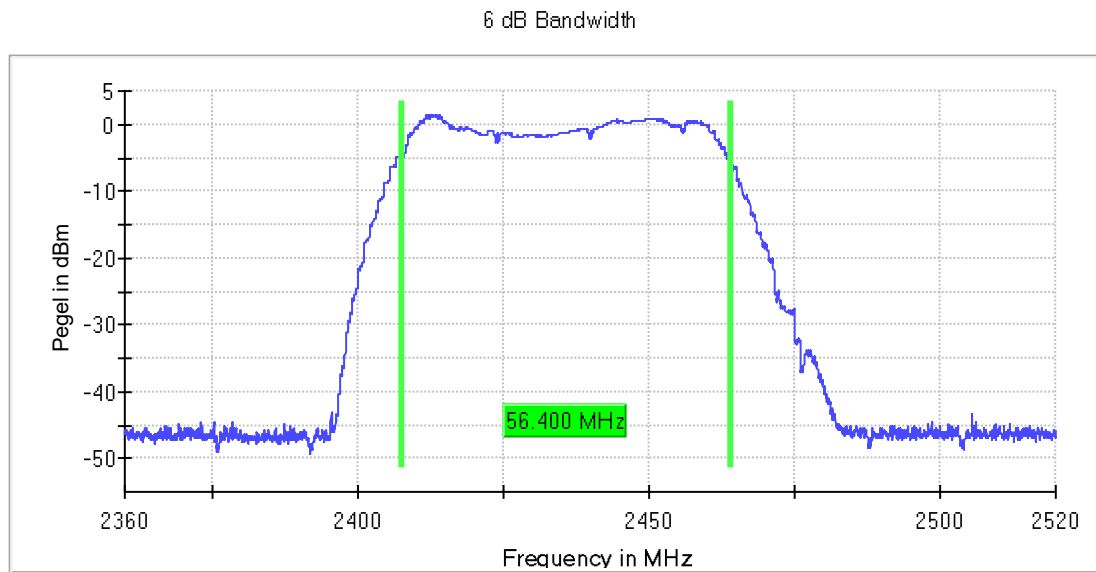
The test was performed according to ANSI C63.10, clauses 6.9.3 and 11.8.1



2.2.7 Test Results

Frequency Channel	6 dB Bandwidth (MHz)	Limit (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2440 MHz	56.4	0.500	2407.625	2464.025

Table 7: 6 dB bandwidth

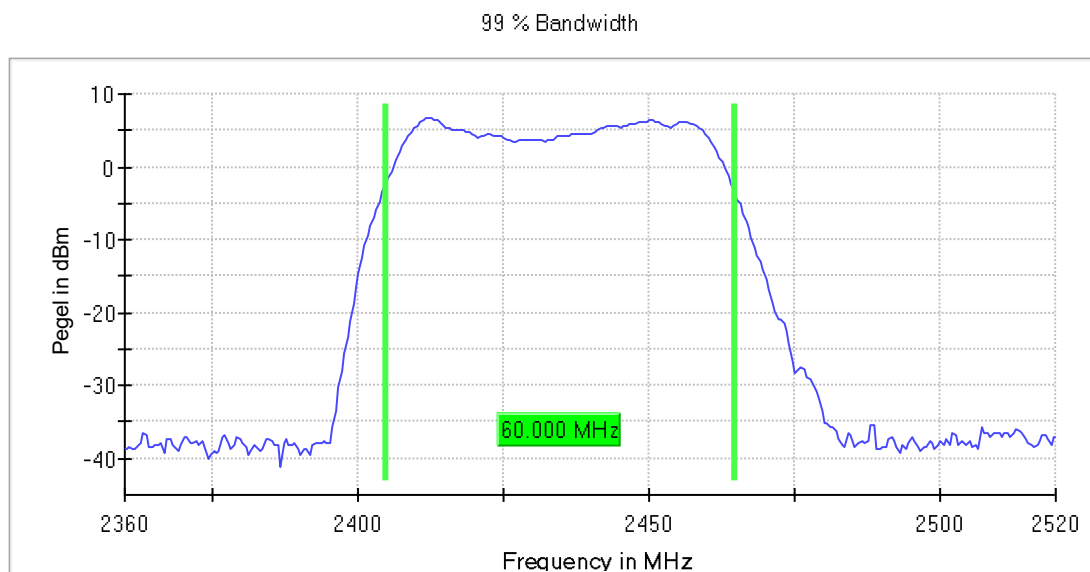


Setting	Instrument Value	Target Value
Start Frequency	2.36000 GHz	2.36000 GHz
Stop Frequency	2.52000 GHz	2.52000 GHz
Span	160.000 MHz	160.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	3200	~ 3200
Sweeptime	189.453 μ s	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamplifier	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	90 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.32 dB	0.50 dB



Frequency Channel	99% Bandwidth (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2440 MHz	60.0	2404.750	2464.750

Table 8: 99% bandwidth



Setting	Instrument Value	Target Value
Start Frequency	2.36000 GHz	2.36000 GHz
Stop Frequency	2.52000 GHz	2.52000 GHz
Span	160.000 MHz	160.000 MHz
RBW	1.000 MHz	≥ 800.000 kHz
VBW	3.000 MHz	≥ 3.000 MHz
SweepPoints	320	~ 320
SweepTime	22.875 μ s	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	5 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.07 dB	0.30 dB



2.2.8 Test Location and Test Equipment

The test was carried out in the test laboratory:

Instrument	Manufacturer	Type No	TE No	Calibra- tion Pe- riod (months)	Calibration Due
Signal and Spectrum Analysator	Rohde & Schwarz	FSV40	20219	24	2026-03-31
Switching device	Rohde & Schwarz	OSP120	20248	36	2026-07-31
Switching device	Rohde & Schwarz	OSP120	38807	36	2026-08-31
Climatic test chamber	ESPEC	PL-4J	38958	18	2026-09-06

Table 9



2.3 Output Power

2.3.1 Specification Reference

FCC 47 CFR Part 15 C, Clause 15.247(b)(3)
ISED RSS-247, Clause 5.4 d.

2.3.2 Equipment under Test and Modification State

SIMATIC RTLS4460T; S/N 17:85:10:02:CA:9C; Modification state 0

2.3.3 Date of Test

2026-02-16

2.3.4 Environmental Conditions

Ambient Temperature	21 °C
Relative Humidity	32 %

2.3.5 Specification Limits

The maximum conducted output power shall not exceed 1 W (30 dBm).

2.3.6 Test Method

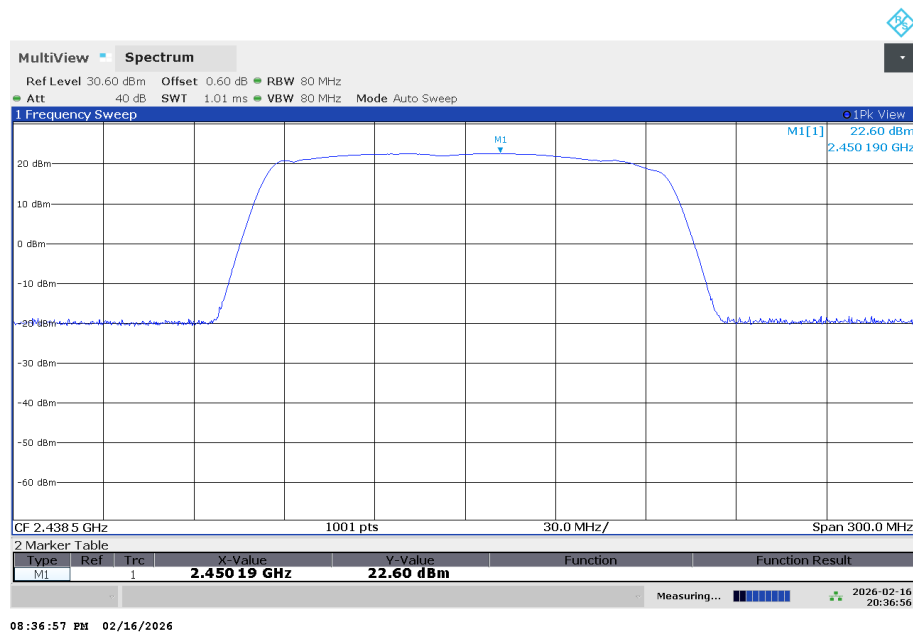
The test was performed according to ANSI C63.10, section 11.9.1.1.



2.3.7 Test Results

Frequency Channel	Detector	Conducted Output Power (dBm)	Limit (dBm)
2440 MHz	Peak	22.60	30.0

Table 10: Conducted Output Power



2.3.8 Test Location and Test Equipment

The test was carried out in the test laboratory:

Instrument	Manufacturer	Type No	TE No	Calibration Period (months)	Calibration Due
Signal and Spectrum Analysator	Rohde & Schwarz	FSW43	53496	12	2026-04-30

Table 11



2.4 Power Spectral Density

2.4.1 Specification Reference

FCC 47 CFR Part 15 C, Clause 15.247(e)
ISED RSS-247, Clause 5.2 b.

2.4.2 Equipment under Test and Modification State

SIMATIC RTLS4460T; S/N 17:85:10:02:CA:9C; Modification state 0

2.4.3 Date of Test

2026-02-24

2.4.4 Environmental Conditions

Ambient Temperature	22 °C
Relative Humidity	37 %

2.4.5 Specification Limits

FCC 47 CFR, section 15.257(e)

ISED RSS-247, Clause 5.2.(b)

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.

The same method (detector) of determining the conducted output power shall be used to determine the power spectral density.

2.4.6 Test Method

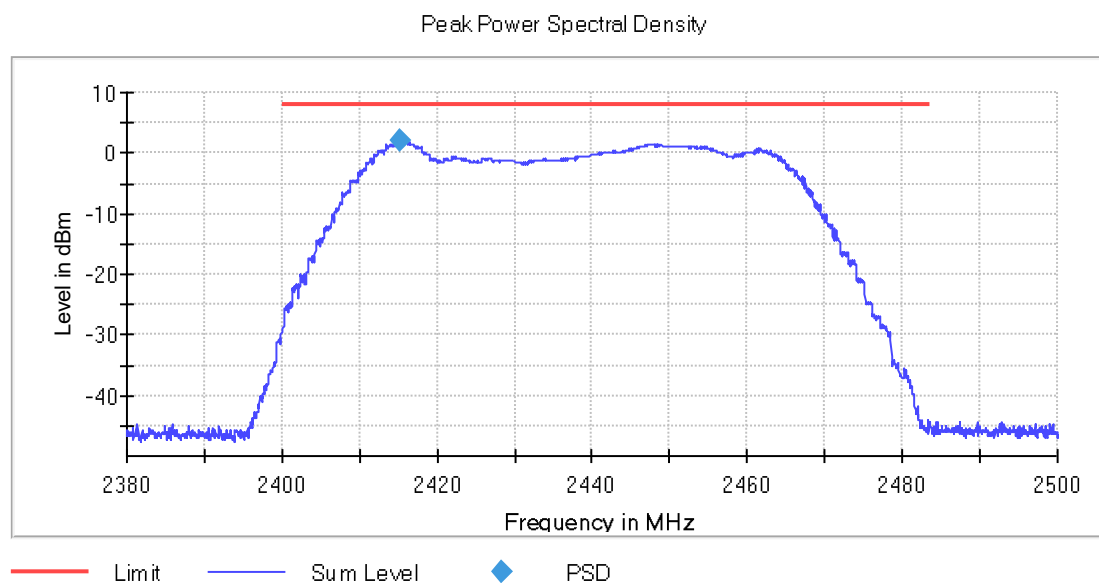
The test was performed according to ANSI C63.10, section 11.10



2.4.7 Test Results

Frequency Channel	Detector	Spectral Power Density (dBm)	Limit (dBm)
2440 MHz	Peak	2.010	8.0

Table 12: Spectral Power Density



Setting	Instrument Value	Target Value
Start Frequency	2.38000 GHz	2.38000 GHz
Stop Frequency	2.50000 GHz	2.50000 GHz
Span	120.000 MHz	120.000 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	2400	~ 2400
SweepTime	2.400 ms	AUTO
Reference Level	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	Sweep
Preamplifier	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	86 / max. 150	max. 150
Stable	2 / 2	2
Max Stable Difference	0.35 dB	0.50 dB



Product Service

2.4.8 Test Location and Test Equipment

The test was carried out in the test laboratory:

Instrument	Manufacturer	Type No	TE No	Calibra- tion Pe- riod (months)	Calibration Due
Signal and Spectrum Analysator	Rohde & Schwarz	FSV40	20219	24	2026-03-31
Switching device	Rohde & Schwarz	OSP120	20248	36	2026-07-31
Switching device	Rohde & Schwarz	OSP120	38807	36	2026-08-31
Climatic test chamber	ESPEC	PL-4J	38958	18	2026-09-06

Table 13



2.5 Frequency Band Edge

2.5.1 Specification Reference

FCC 47 CFR Part 15 C, Clause 15.247(d)
ISED RSS-247, Clause 5.5

2.5.2 Equipment under Test and Modification State

SIMATIC RTLS4460T; S/N 17:85:10:02:CA:9C; Modification state 0

2.5.3 Date of Test

2025-03-15

2.5.4 Environmental Conditions

Ambient Temperature	21 °C
Relative Humidity	34 %

2.5.5 Specification Limits

In any 100 kHz bandwidth outside the frequency band in which the device is operating, the RF power that is produced shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of desired power, based on either conducted or radiated measurement, provided that the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of root-mean-square averaging over a time interval, as permitted, the attenuation required shall be 30 dB instead of 20 dB. Attenuation below the general field strength limits is not required.

In addition, radiated emissions which fall in the restricted bands must also comply with the radiated emission limits.

2.5.6 Test Method

The test was performed according to ANSI C63.10, sections 11.11

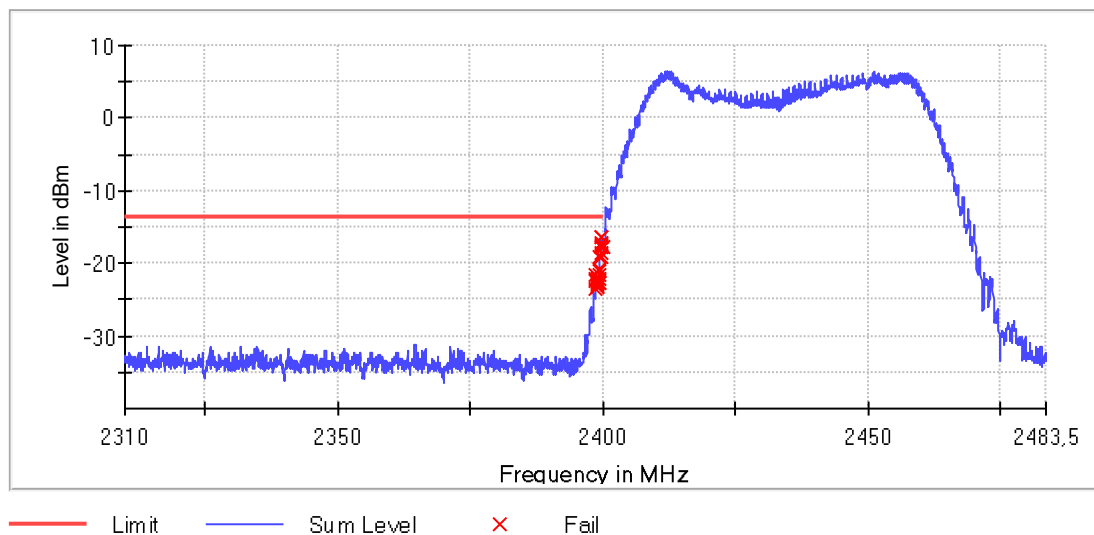


2.5.7 Test Results

Band Edge Low:

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
2399.775000	-16.3	2.8	-13.5	PASS
2399.725000	-16.3	2.8	-13.5	PASS
2399.925000	-17.3	3.8	-13.5	PASS
2399.875000	-17.4	3.9	-13.5	PASS
2399.825000	-17.7	4.2	-13.5	PASS
2399.975000	-17.8	4.2	-13.5	PASS
2399.675000	-17.8	4.3	-13.5	PASS
2399.625000	-18.6	5.0	-13.5	PASS
2399.575000	-19.1	5.6	-13.5	PASS
2399.525000	-19.2	5.6	-13.5	PASS
2399.475000	-20.8	7.3	-13.5	PASS
2399.425000	-21.0	7.5	-13.5	PASS
2399.375000	-21.7	8.1	-13.5	PASS
2398.775000	-21.7	8.2	-13.5	PASS
2398.725000	-22.0	8.5	-13.5	PASS
2398.825000	-22.1	8.6	-13.5	PASS
2399.325000	-22.2	8.7	-13.5	PASS
2398.675000	-22.4	8.8	-13.5	PASS
2398.875000	-22.5	9.0	-13.5	PASS
2399.275000	-22.6	9.1	-13.5	PASS
2398.925000	-22.7	9.1	-13.5	PASS
2399.225000	-22.7	9.1	-13.5	PASS
2398.975000	-23.0	9.5	-13.5	PASS
2399.175000	-23.3	9.8	-13.5	PASS
2399.025000	-23.3	9.8	-13.5	PASS
2398.625000	-23.4	9.9	-13.5	PASS

Band Edge





Inband Peak

Frequency (MHz)	Level (dBm)
2412.175000	6.5

Measurement 1

Setting	Instrument Value	Target Value
Start Frequency	2.31000 GHz	2.31000 GHz
Stop Frequency	2.40000 GHz	2.40000 GHz
Span	90.000 MHz	90.000 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1800	~ 1800
SweepTime	113.672 μ s	AUTO
Reference Level	30.000 dBm	30.000 dBm
Attenuation	50.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	12 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.01 dB	0.50 dB

Measurement 2

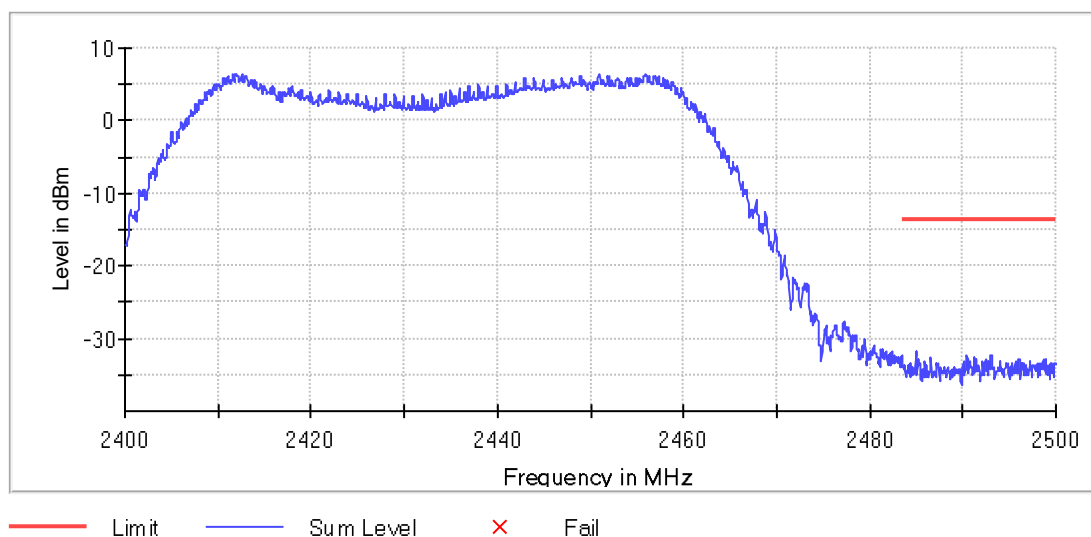
Setting	Instrument Value	Target Value
Start Frequency	2.40000 GHz	2.40000 GHz
Stop Frequency	2.48350 GHz	2.48350 GHz
Span	83.500 MHz	83.500 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1670	~ 1670
SweepTime	94.727 μ s	AUTO
Reference Level	30.000 dBm	30.000 dBm
Attenuation	50.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	19 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.46 dB	0.50 dB



Band Edge High:

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
2484.975000	-31.9	18.3	-13.5	PASS
2490.425000	-32.2	18.7	-13.5	PASS
2493.075000	-32.3	18.7	-13.5	PASS
2493.025000	-32.3	18.8	-13.5	PASS
2484.925000	-32.4	18.9	-13.5	PASS
2486.525000	-32.6	19.0	-13.5	PASS
2486.575000	-32.6	19.1	-13.5	PASS
2491.275000	-32.7	19.2	-13.5	PASS
2490.475000	-32.7	19.2	-13.5	PASS
2498.925000	-32.8	19.3	-13.5	PASS
2485.225000	-32.9	19.3	-13.5	PASS
2495.975000	-32.9	19.3	-13.5	PASS
2491.225000	-32.9	19.4	-13.5	PASS
2492.425000	-32.9	19.4	-13.5	PASS
2491.425000	-32.9	19.4	-13.5	PASS

Band Edge





Inband Peak

Frequency (MHz)	Level (dBm)
2450.975000	6.5

Measurement 1

Setting	Instrument Value	Target Value
Start Frequency	2.40000 GHz	2.40000 GHz
Stop Frequency	2.48350 GHz	2.48350 GHz
Span	83.500 MHz	83.500 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	1670	~ 1670
SweepTime	94.727 µs	AUTO
Reference Level	30.000 dBm	30.000 dBm
Attenuation	50.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	26 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.41 dB	0.50 dB

Measurement 2

Setting	Instrument Value	Target Value
Start Frequency	2.48350 GHz	2.48350 GHz
Stop Frequency	2.50000 GHz	2.50000 GHz
Span	16.500 MHz	16.500 MHz
RBW	100.000 kHz	<= 100.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	330	~ 330
SweepTime	18.945 µs	AUTO
Reference Level	30.000 dBm	30.000 dBm
Attenuation	50.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	4 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB



Product Service

2.5.8 Test Location and Test Equipment

The test was carried out in the test laboratory:

Instrument	Manufacturer	Type No	TE No	Calibra- tion Pe- riod (months)	Calibration Due
Signal and Spectrum Analysator	Rohde & Schwarz	FSV40	20219	24	2026-03-31
Switching device	Rohde & Schwarz	OSP120	20248	36	2026-07-31
Switching device	Rohde & Schwarz	OSP120	38807	36	2026-08-31
Climatic test chamber	ESPEC	PL-4J	38958	18	2026-09-06

Table 14



2.6 Spurious emissions

2.6.1 Specification Reference

FCC 47 CFR Part 15 C, Clause 15.205, 15.209, 15.247(d)
ISED RSS-247, Clause 5.5
ISED RSS-Gen, Clauses 8.9 and 8.10

2.6.2 Equipment under Test and Modification State

SIMATIC RTLS4460T; S/N 17:85:10:02:CA:9C; Modification state 0

2.6.3 Date of Test

2025-02-15 to 2026-02-16

2.6.4 Environmental Conditions

Ambient Temperature	23 °C
Relative Humidity	28 %

2.6.5 Specification Limits

In any 100 kHz bandwidth outside the frequency band in which the device is operating, the RF power that is produced shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of desired power, based on either conducted or radiated measurement, provided that the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of root-mean-square averaging over a time interval, as permitted, the attenuation required shall be 30 dB instead of 20 dB. Attenuation below the general field strength limits is not required.

In addition, radiated emissions which fall in the restricted bands must also comply with the radiated emission limits.



General radiated emission limits:					
Frequency Range (MHz)	Test distance (m)	Field strength		Field strength	
		($\mu\text{A}/\text{m}$)	($\text{dB}\mu\text{A}/\text{m}$)	($\mu\text{V}/\text{m}$)	($\text{dB}\mu\text{V}/\text{m}$)
0.009 – 0.49	300	$6.37 / f$	$20*\lg(6.37 / f)$	$2400 / f$	$20*\lg(2400 / f)$
0.49 – 1.705	30	$63.7 / f$	$20*\lg(63.7 / f)$	$24000 / f$	$20*\lg(24000 / f)$
1.705 – 30	30	0.08	$20*\lg(0.08 / f)$	30	$20*\lg(30 / f)$
30 – 88	3	---	--	100	40
88 – 216	3	--	--	150	43.5
126 – 960	3	--	--	200	46
above 960	3	--	--	500	54
Note 1: f in kHz					

Table 15 General radiated emission limits

At frequencies at or above 30 MHz, measurements may be performed at distance other than what is specified provided: measurements are not made in the near field except where it can be shown that near field measurements are appropriate due to the characteristics of the device; and it can be demonstrated that the signal levels needed to be measured at the distance employed can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 m, unless it can be further demonstrated that measurements at a distance of 30 m or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse linear-distance for field strength measurements; inverse-linear-distance-squared for power density measurements).

At frequencies below 30 MHz, measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field. Pending the development of an appropriate measurement procedure for measurements performed below 30 MHz, when performing measurements at a closer distance than specified, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade).

2.6.6 Test Method

The test was performed according to ANSI C63.10, sections 11.11 and 11.12

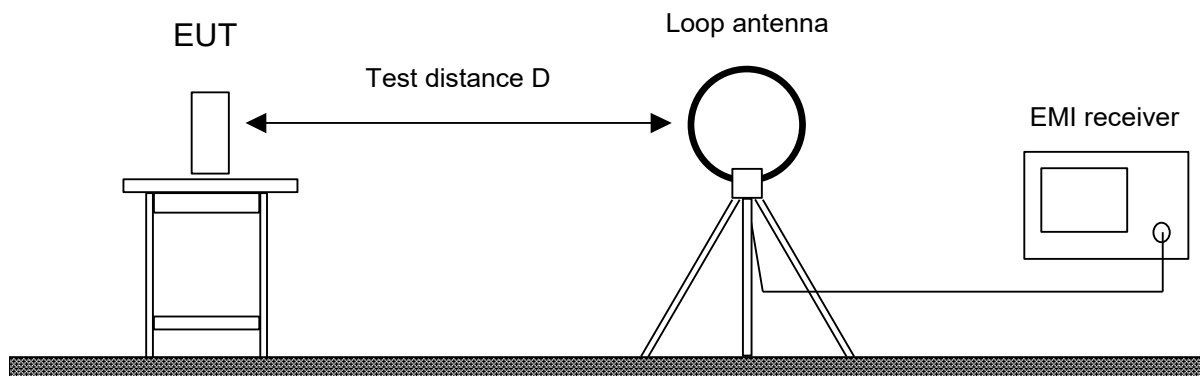
Prescans are performed in six positions of the EUT to get the full spectrum of emission caused by the EUT with the measuring antenna raised and lowered from 1 m to 4 m with vertical and horizontal polarisation to find the combination of table position, antenna height and antenna polarisation for the maximum emission levels.

Data reduction is applied to these results to select those levels having less margin than 10 dB or exceeding the limit using subranges and limited number of maximums.

Further maximisation for adjusting the maximum position is following.

Equipment and cables are placed and moved within the range of position likely to find their maximum emissions.

2.6.6.1 Frequency range 9 kHz – 30 MHz

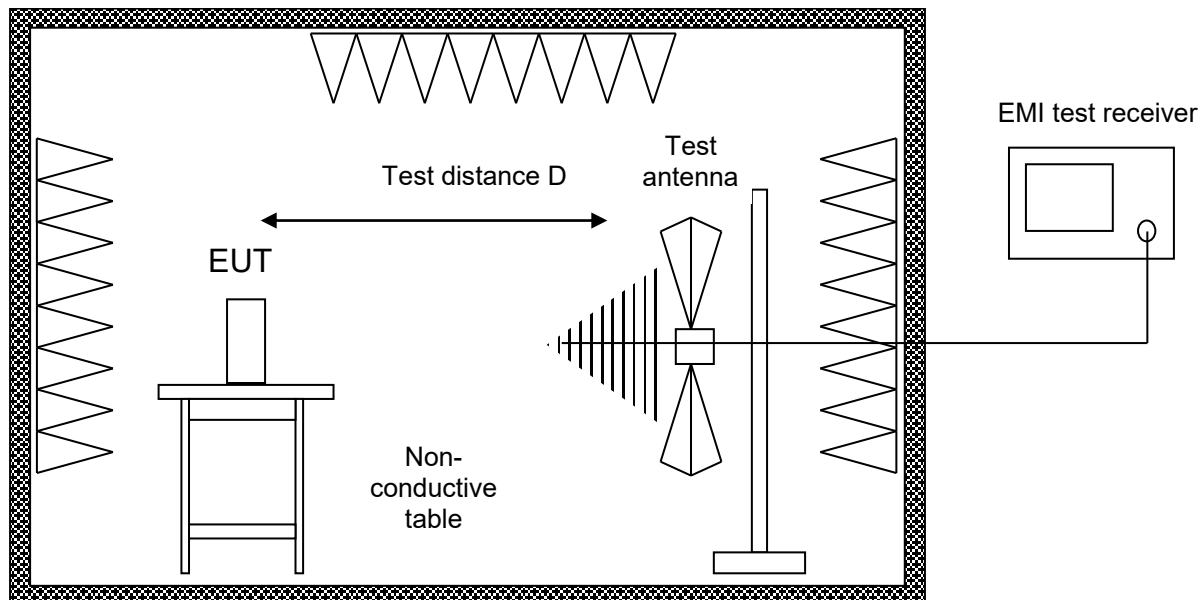


The EUT was placed on a non-conductive table, 0.8 m above the ground.

Radiated emissions in the frequency 9 kHz – 30 MHz is measured within a semi-anechoic room with an active loop antenna with the measurement detector set to peak. In addition in the frequency range 9 kHz to 490 kHz also an average detector was used. The measurement bandwidth of the receiver was set to 300 Hz in the frequency range 9 kHz to 150 kHz and 10 kHz in the frequency range 150 kHz to 30 MHz. Prescans were performed in six positions of the EUT.

For final measurements the detector was set to CISPR quasi-peak and in addition to CISPR average in the frequency range 9 kHz to 490 kHz with a resolution bandwidth 200 Hz in the frequency range 9 kHz to 150 kHz and 9 kHz in the frequency range 150 kHz to 30 MHz. Final tests were performed immediately after a final frequency and zoom (for drifting disturbances) and maximum adjustment.

2.6.6.2 Frequency range 30 MHz – 1 GHz



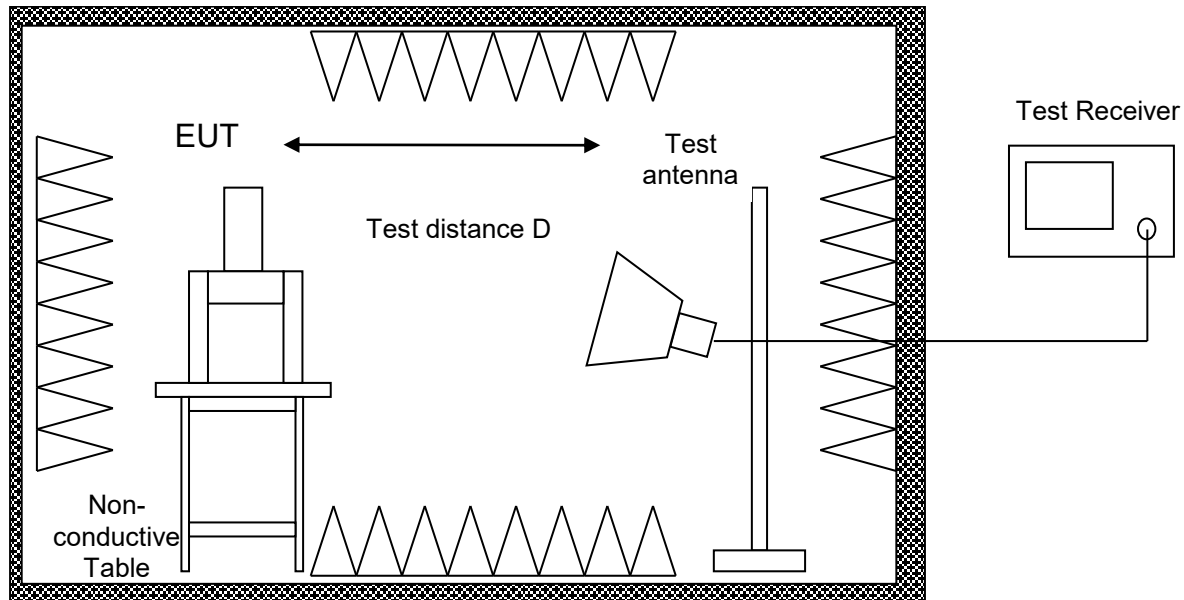
Alternate test site (semi anechoic room)

The EUT was placed on a non-conductive table, 0.8 m above the ground plane. Radiated emissions in the frequency range 30 MHz – 1 GHz are measured within a semi-anechoic room with a groundplane complying with the NSA requirements of ANSI C63.4. for alternative test sites. A linear polarised logarithmic periodic antenna combined with a 4:1 broadband dipole ("Trilog broadband antenna") is used.

For prescan tests the test receiver is set to peak-detector with a bandwidth of 120 kHz.

With the measurement bandwidth of the test receiver set to 120 kHz CISPR quasi-peak detector is selected for final measurements following immediately after a final frequency zoom (for drifting disturbances) and maximum adjustment.

2.6.6.3 Frequency range above 1 GHz



Fully anechoic room

The EUT was placed on a non-conductive table, 1.5 m above the ground plane

Radiated emission tests above 1 GHz are performed in a fully anechoic room with the S_{VSWR} requirements of ANSI C63.4. Measurements are performed both in the horizontal and vertical planes of polarisation using a test receiver with the detector function set to peak and average and the resolution bandwidth set to 1 MHz. Testing above 1 GHz is performed with horn antennas with the EUT in boresight of the antenna.

For prescan tests the test receiver is set to peak- and average-detector with a bandwidth of 1 MHz.

With the measurement bandwidth of the test receiver set to 1 MHz and peak- and CISPR average-detector is selected for final measurements following immediately after a final frequency zoom (for drifting disturbances) and maximum adjustment.



2.6.7 Test Results

<i>Frequency range</i>	<i>Limit applied</i>	<i>Test distance</i>
9 kHz – 30 MHz	15.209, RSS Gen	3 m
30 MHz – 1 GHz	15.209, RSS Gen	3 m
1 GHz – 6 GHz	15.209, RSS Gen	3 m
6 GHz – 18 GHz	15.209, RSS Gen	1 m

Table 16

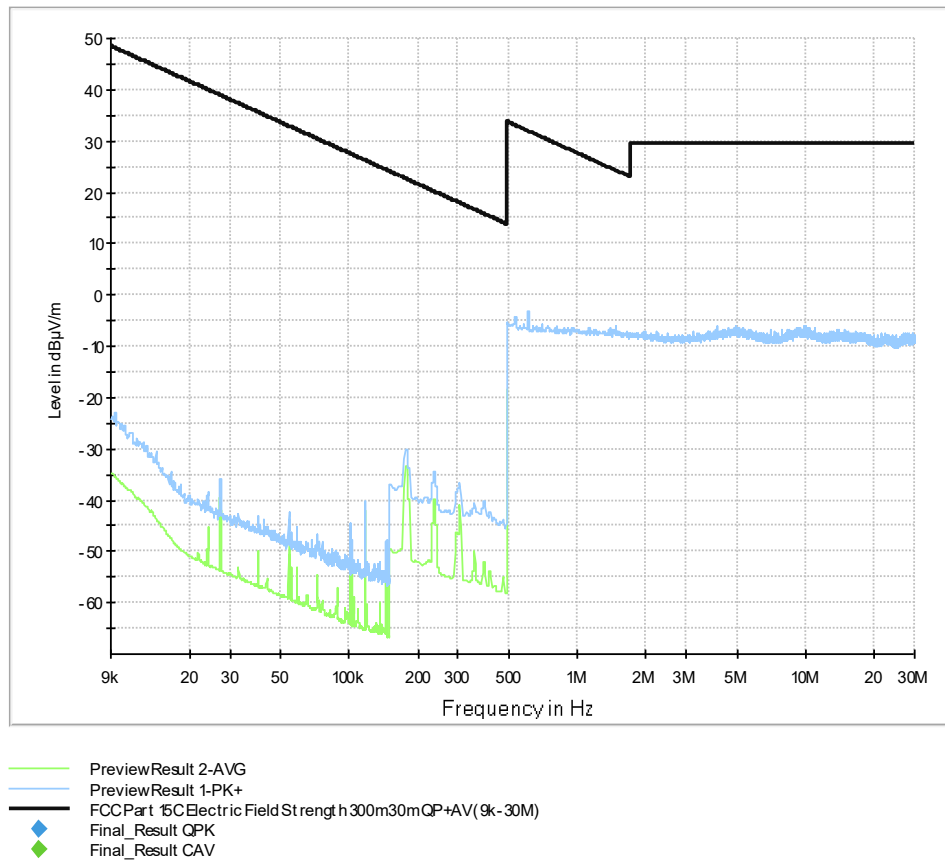
Sample calculation:

Final Value (dB μ V/m) = Reading Value (dB μ V) + (Cable attenuation (dB)
+ Antenna Transducer (dB(1/m)))



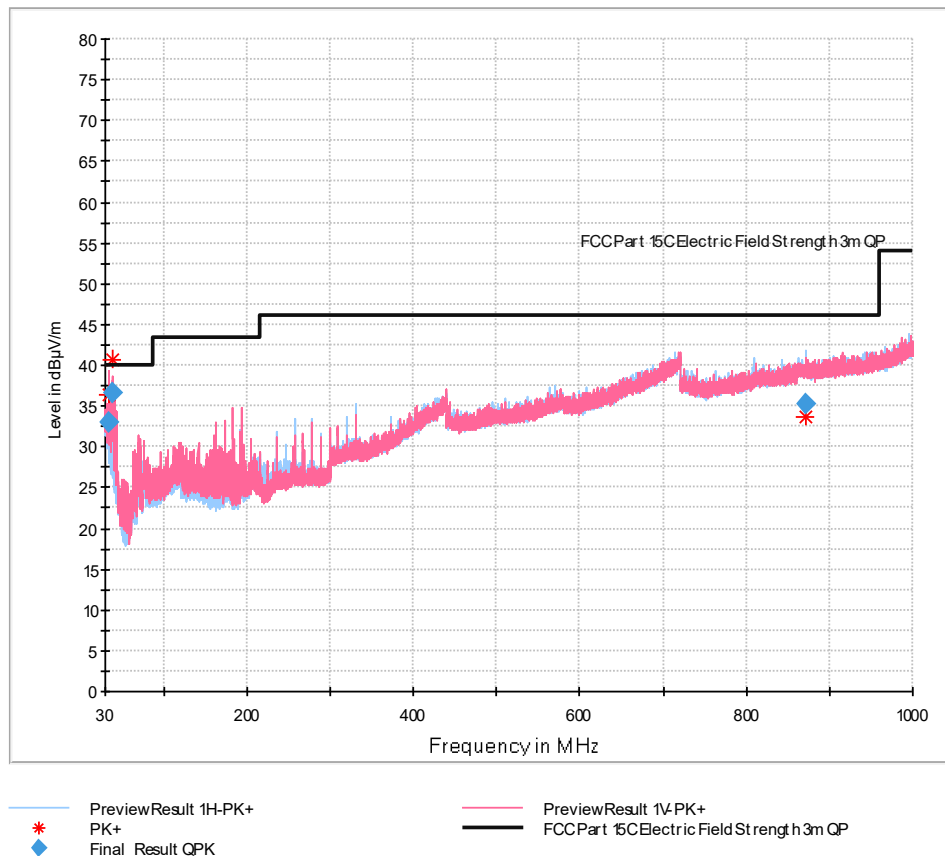
Product Service

Test Case 1:



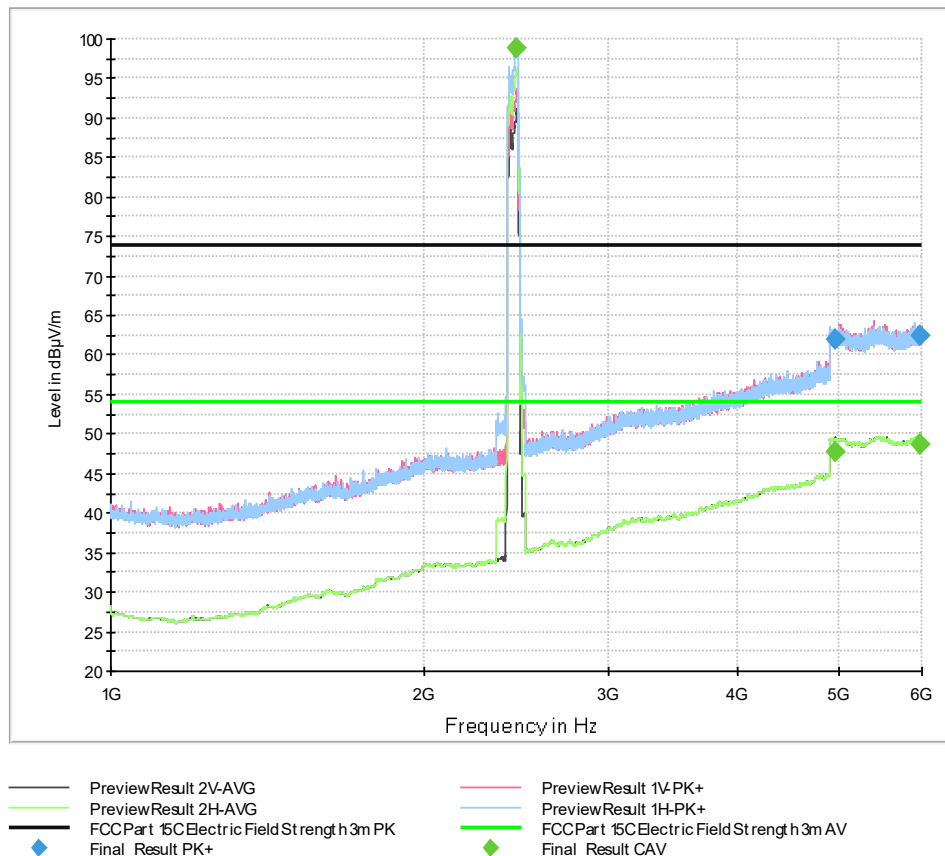


Product Service



Final Results:

Frequency MHz	QuasiPeak dBµV/m	Limit dBµV/m	Margin dB	Meas. Time ms	Band- width kHz	Height cm	Pol	Azi- muth deg	Corr. dB/m
34.620000	33.07	40.00	6.93	1000.0	120.000	100.0	V	130.0	22.6
38.280000	36.68	40.00	3.32	1000.0	120.000	104.0	V	145.0	20.5
871.140000	35.18	46.02	24.84	1000.0	120.000	138.0	H	55.0	30.0



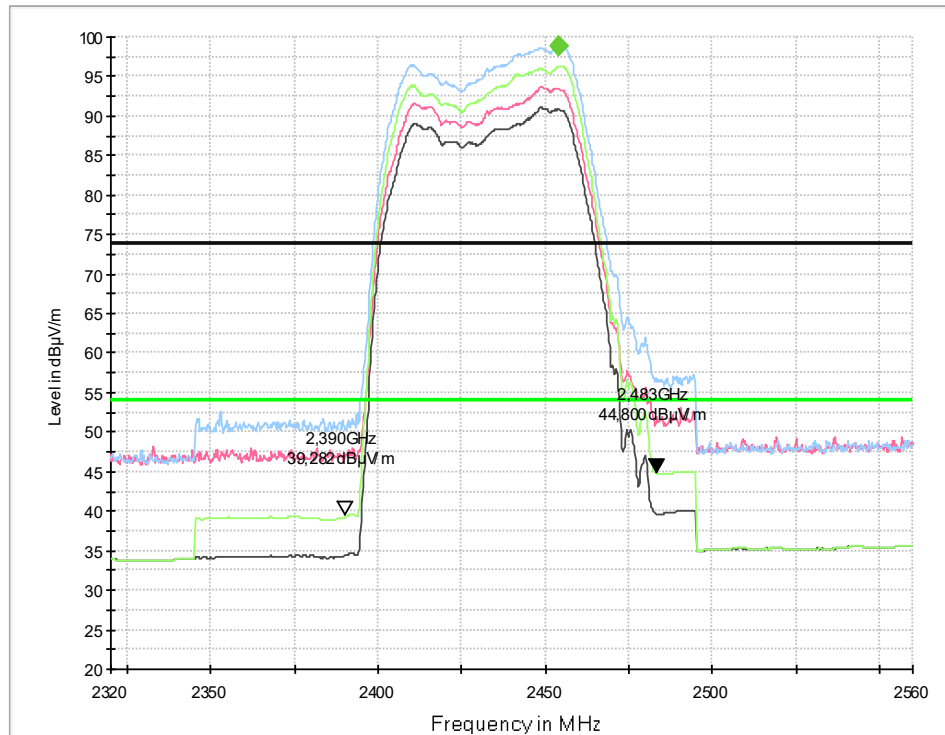
Final Results:

Frequency MHz	Max- Peak dBμV/m	CAver- age dBμV/m	Limit dBμV/m	Mar- gin dB	Meas. Time ms	Band- width kHz	Height cm	Pol	Azi- muth deg	Corr. dB/m
2454.000000	101.66	---	*	*	1000.0	1000.000	125.0	H	-30.0	34.0
2454.000000	---	98.94	*	*	1000.0	1000.000	125.0	H	-30.0	34.0
4952.750000	---	47.79	53.98	6.19	1000.0	1000.000	302.0	V	155.0	42.0
4952.750000	61.88	---	73.98	12.10	1000.0	1000.000	302.0	V	155.0	42.0
5968.500000	62.36	---	73.98	11.62	1000.0	1000.000	112.0	V	242.0	43.0
5968.500000	---	48.67	53.98	5.31	1000.0	1000.000	112.0	V	242.0	43.0

*: Intentional radiation not evaluated.



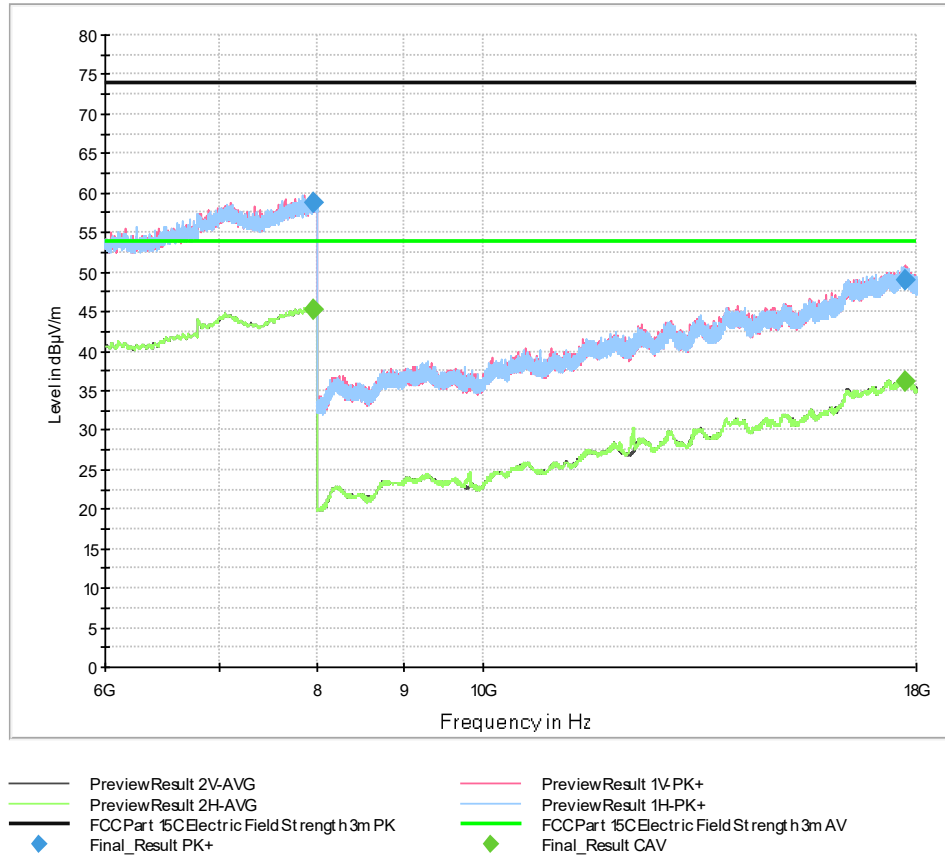
Product Service



— PreviewResult 2V-AVG	— PreviewResult 1V-PK+
— PreviewResult 2H-AVG	— PreviewResult 1H-PK+
— FCCPart 15CElectric Field Strength 3m PK	— FCCPart 15CElectric Field Strength 3m AV
◆ Final_Result PK+	◆ Final_Result CAV



Product Service

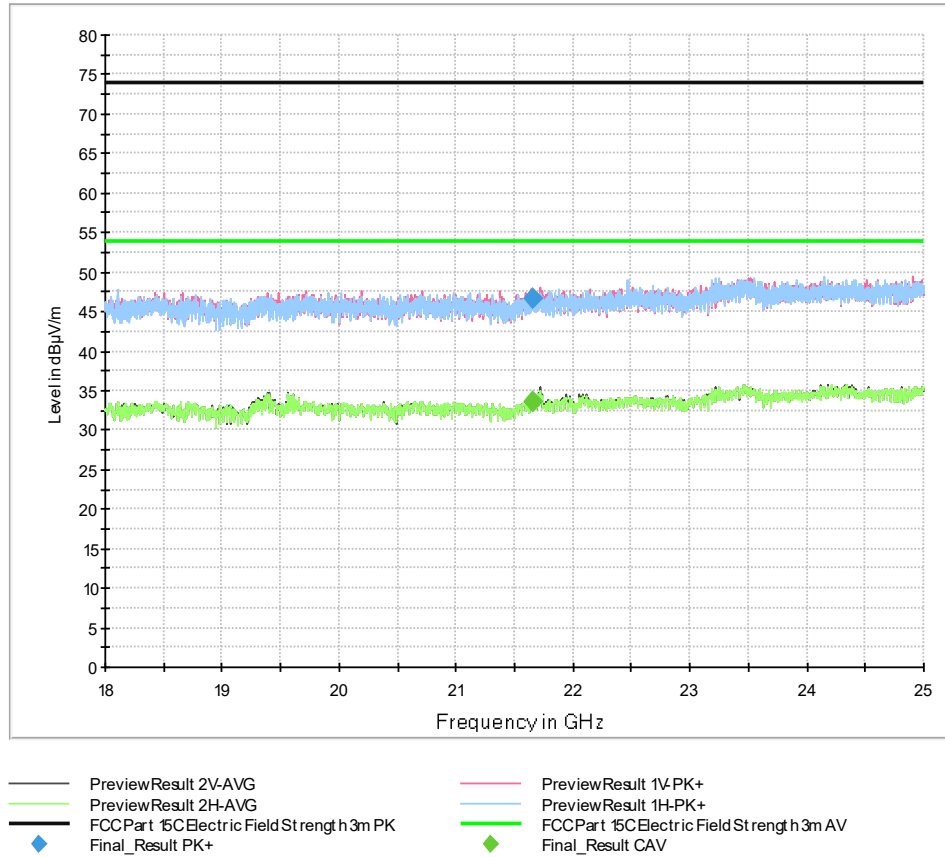


Final Results:

Frequency MHz	Max- Peak dBμV/m	CAver- age dBμV/m	Limit dBμV/m	Mar- gin dB	Meas. Time ms	Band- width kHz	Height cm	Pol	Azi- muth deg	Corr. dB/m
7964.000000	---	45.29	53.98	8.69	1000.0	1000.000	216.0	V	114.0	36.3
7964.000000	58.84	---	73.98	15.14	1000.0	1000.000	216.0	V	114.0	36.3
17740.000000	---	36.13	53.98	17.85	1000.0	1000.000	157.0	V	87.0	48.5
17740.000000	48.88	---	73.98	25.10	1000.0	1000.000	157.0	V	87.0	48.5



Product Service

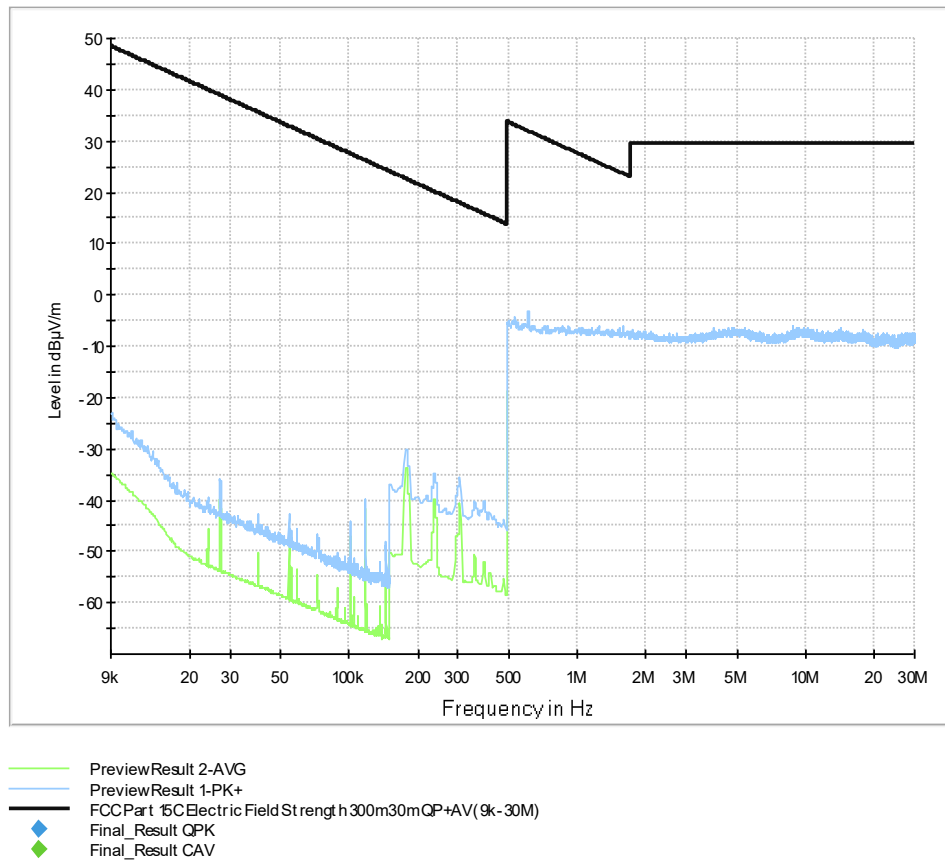


Final Results:

Frequency MHz	Max- Peak dBμV/m	CAver- age dBμV/m	Limit dBμV/m	Mar- gin dB	Meas. Time ms	Band- width kHz	Height cm	Pol	Azi- muth deg	Corr. dB/m
21652.250000	---	33.62	53.98	20.36	1000.0	1000.000	350.0	V	-51.0	26.0
21652.250000	46.69	---	73.98	27.29	1000.0	1000.000	350.0	V	-51.0	26.0

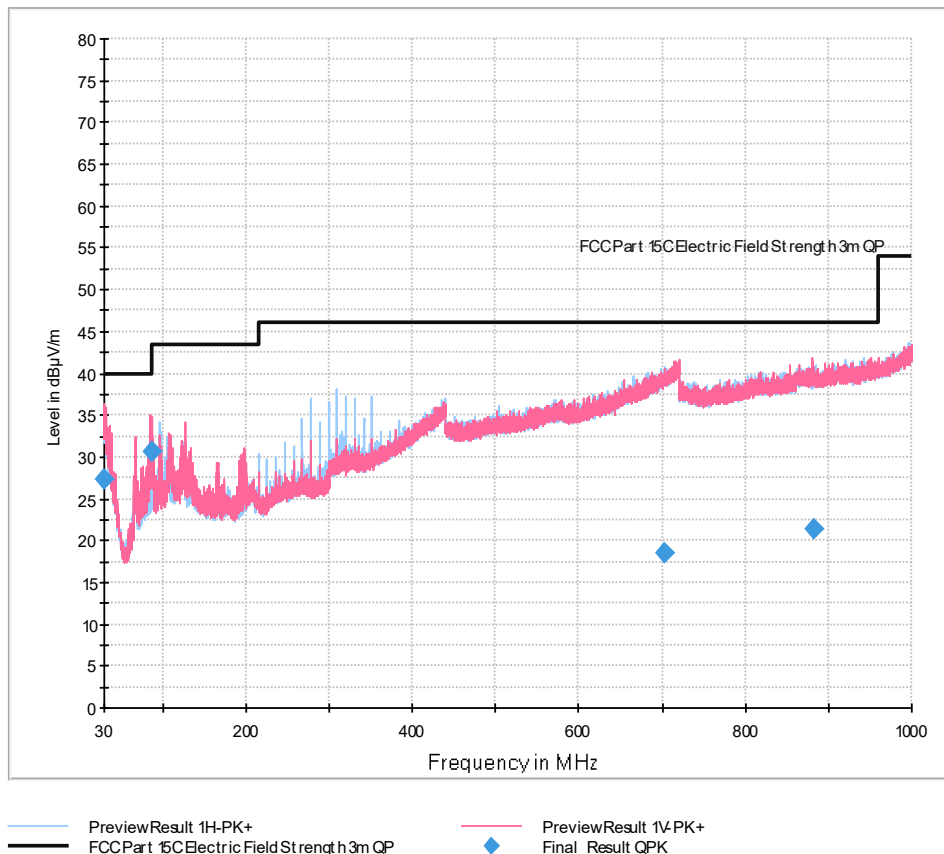


Test Case 2:





Product Service

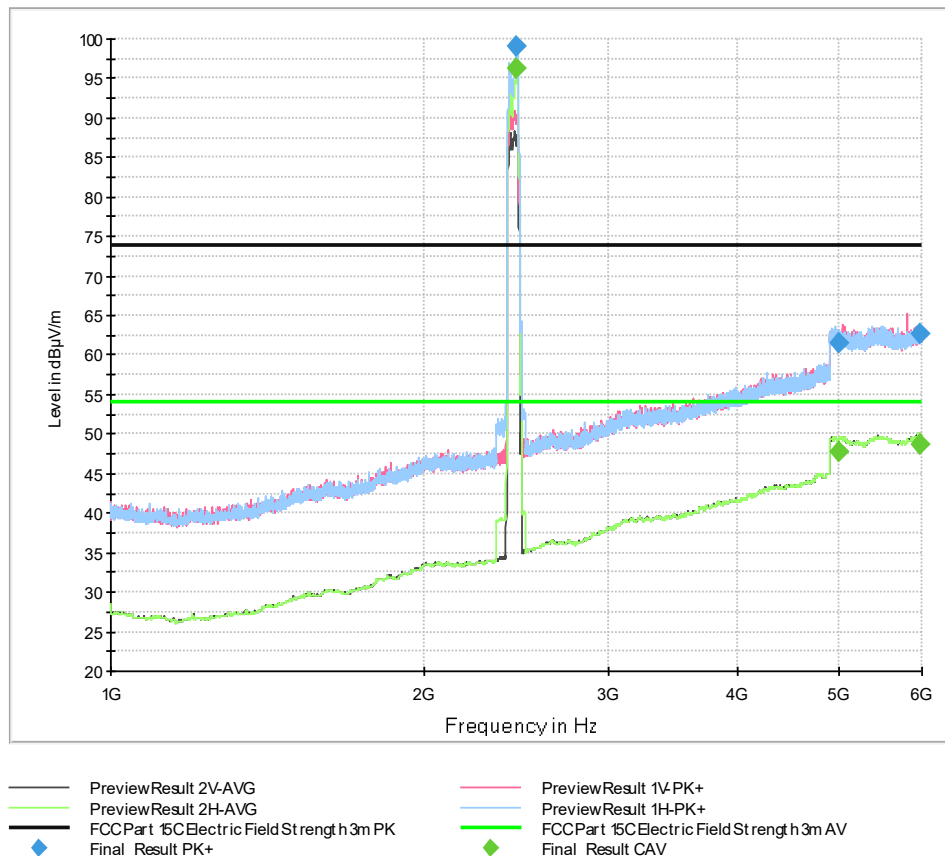


Final Results:

Frequency MHz	QuasiPeak dBµV/m	Limit dBµV/m	Margin dB	Meas. Time ms	Band- width kHz	Height cm	Pol	Azi- muth deg	Corr. dB/m
31.020000	27.37	40.00	12.63	1000.0	120.000	100.0	V	132.0	24.6
86.640000	30.63	40.00	9.37	1000.0	120.000	112.0	V	-50.0	16.3
702.180000	18.52	46.02	27.50	1000.0	120.000	333.0	H	219.0	27.9
882.300000	21.29	46.02	24.73	1000.0	120.000	392.0	V	-45.0	30.2



Product Service

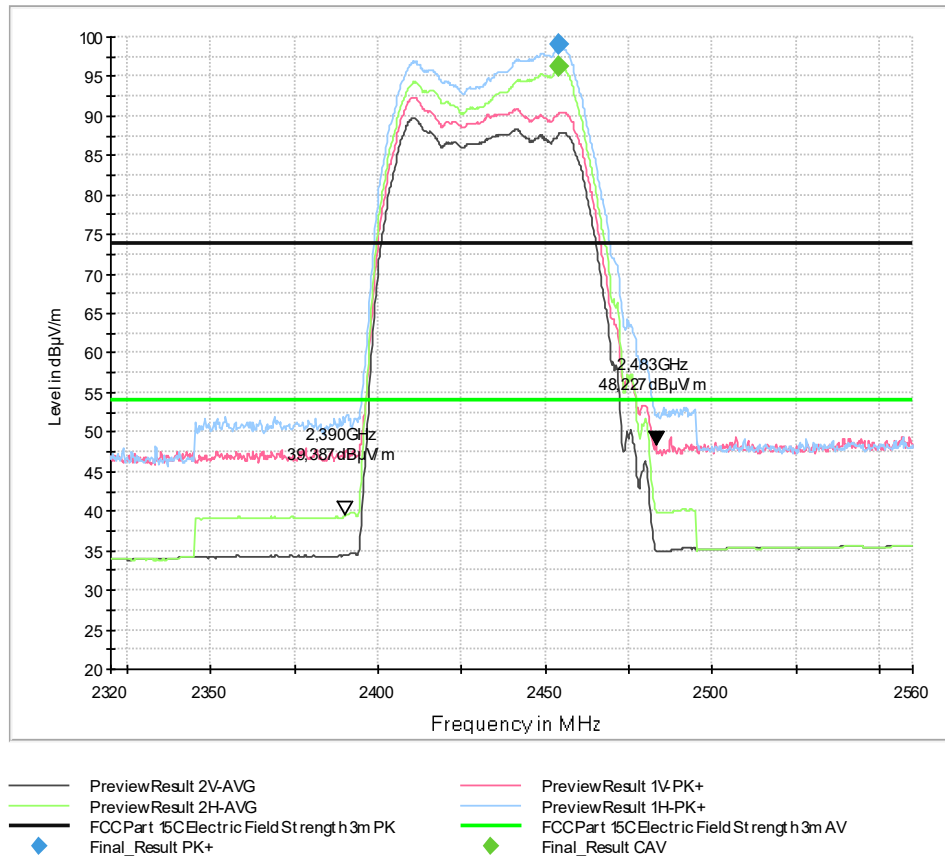


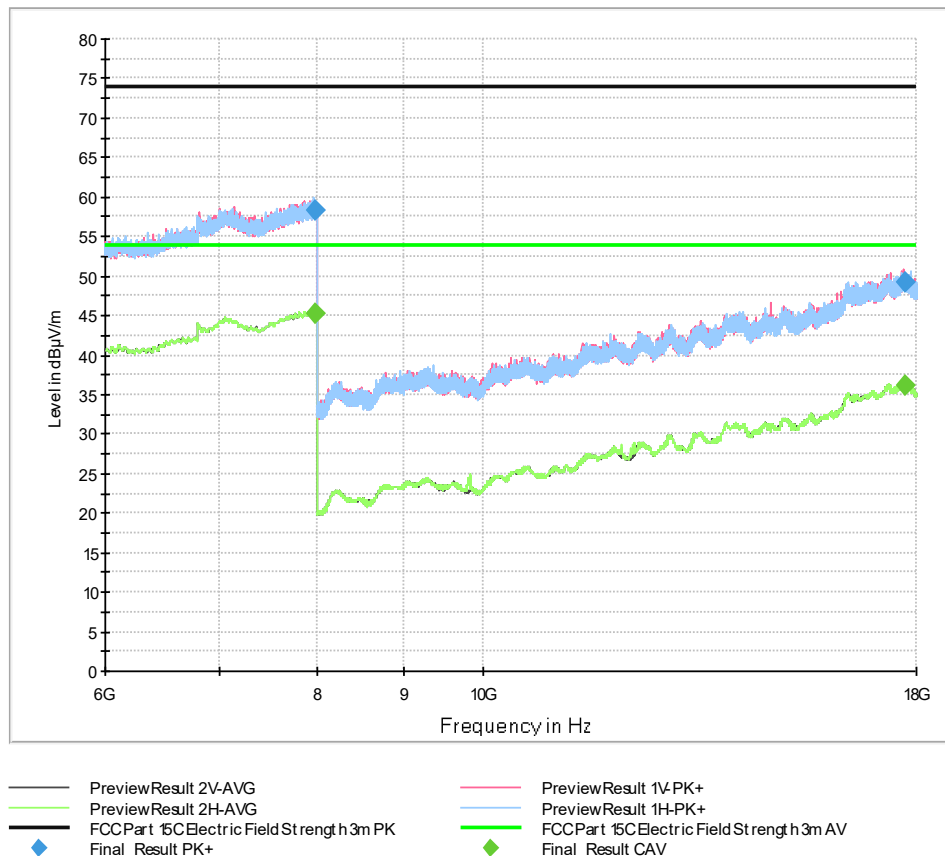
Final Results:

Frequency MHz	Max- Peak dBμV/m	CAver- age dBμV/m	Limit dBμV/m	Mar- gin dB	Meas. Time ms	Band- width kHz	Height cm	Pol	Azi- muth deg	Corr. dB/m
2454.000000	---	96.31	*	*	1000.0	1000.000	109.0	H	-62.0	34.0
2454.000000	99.04	---	*	*	1000.0	1000.000	109.0	H	-62.0	34.0
5003.750000	61.61	---	73.98	12.37	1000.0	1000.000	116.0	V	0.0	42.0
5003.750000	---	47.76	53.98	6.22	1000.0	1000.000	116.0	V	0.0	42.0
5964.250000	62.59	---	73.98	11.39	1000.0	1000.000	125.0	V	53.0	43.0
5964.250000	---	48.67	53.98	5.31	1000.0	1000.000	125.0	V	53.0	43.0



Product Service



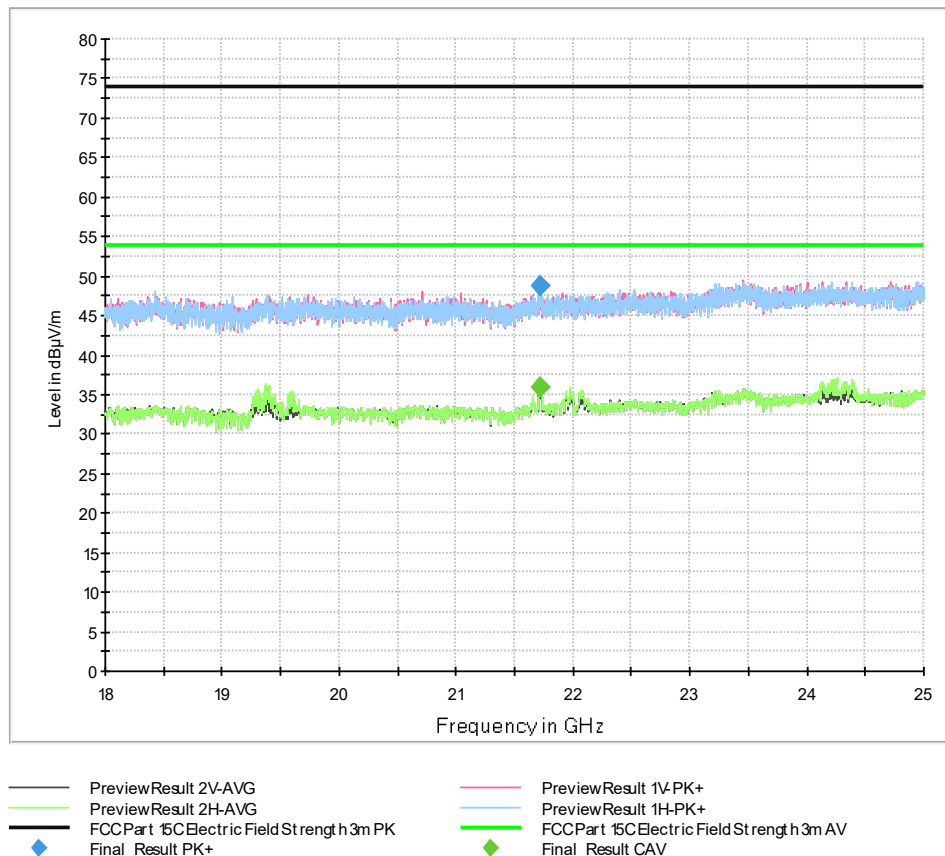


Final Results:

Frequency MHz	Max-Peak dBμV/m	CAverage dBμV/m	Limit dBμV/m	Margin dB	Meas. Time ms	Band- width kHz	Height cm	Pol	Azi- muth deg	Corr. dB
7966.750000	58.33	---	73.98	15.65	1000.0	1000.000	117.0	V	72.0	36.3
7966.750000	---	45.35	53.98	8.63	1000.0	1000.000	117.0	V	72.0	36.3
17724.000000	49.31	---	73.98	24.67	1000.0	1000.000	201.0	V	-29.0	48.5
17724.000000	---	36.04	53.98	17.94	1000.0	1000.000	201.0	V	-29.0	48.5



Product Service



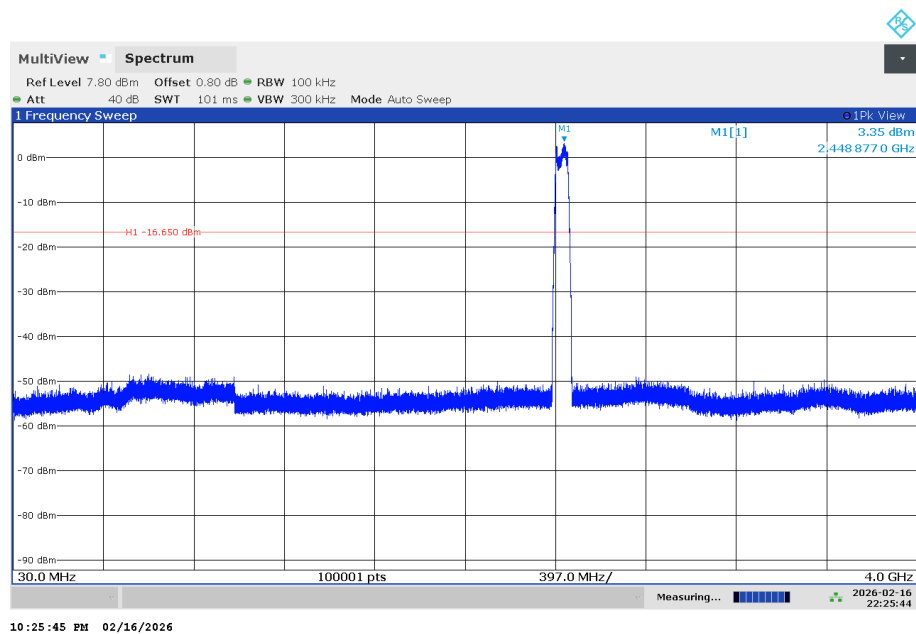
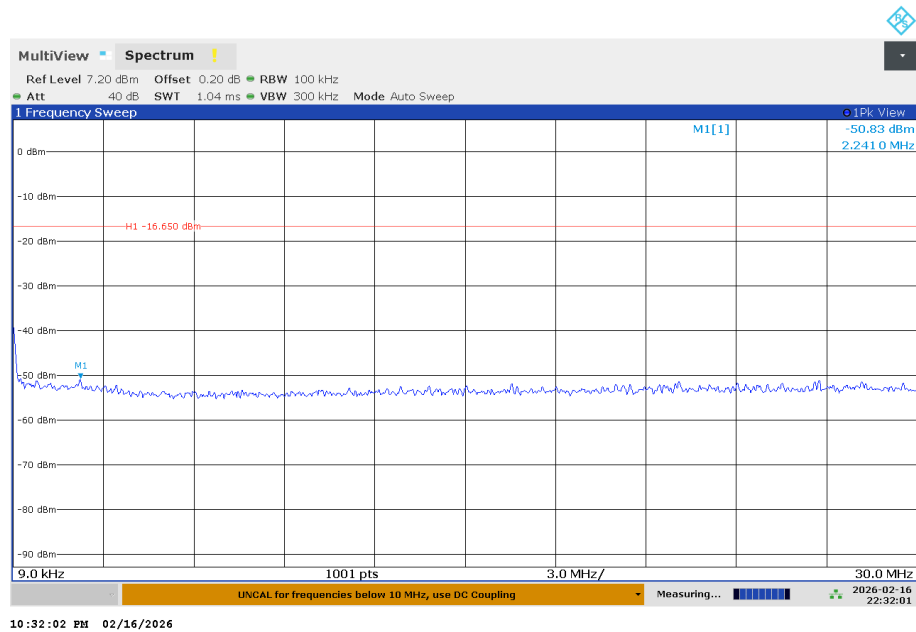
Final Results:

Frequency MHz	Max-Peak dBμV/m	CAverage dBμV/m	Limit dBμV/m	Margin dB	Meas. Time ms	Bandwidth kHz	Height cm	Pol	Azi-muth deg	Corr. dB/m
21718.750000	---	35.91	53.98	18.07	1000.0	1000.000	188.0	V	-27.0	26.1
21718.750000	48.66	---	73.98	25.32	1000.0	1000.000	188.0	V	-27.0	26.1



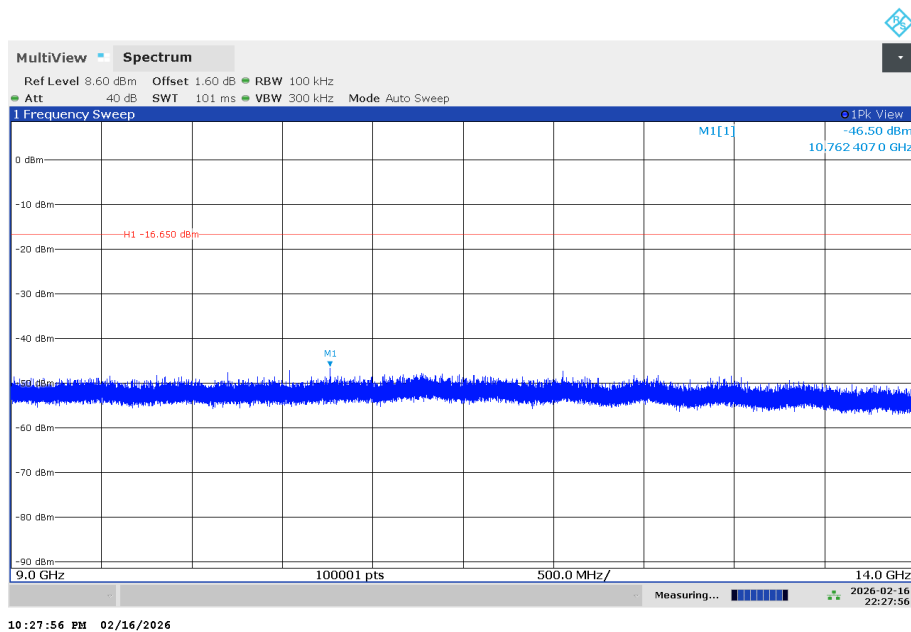
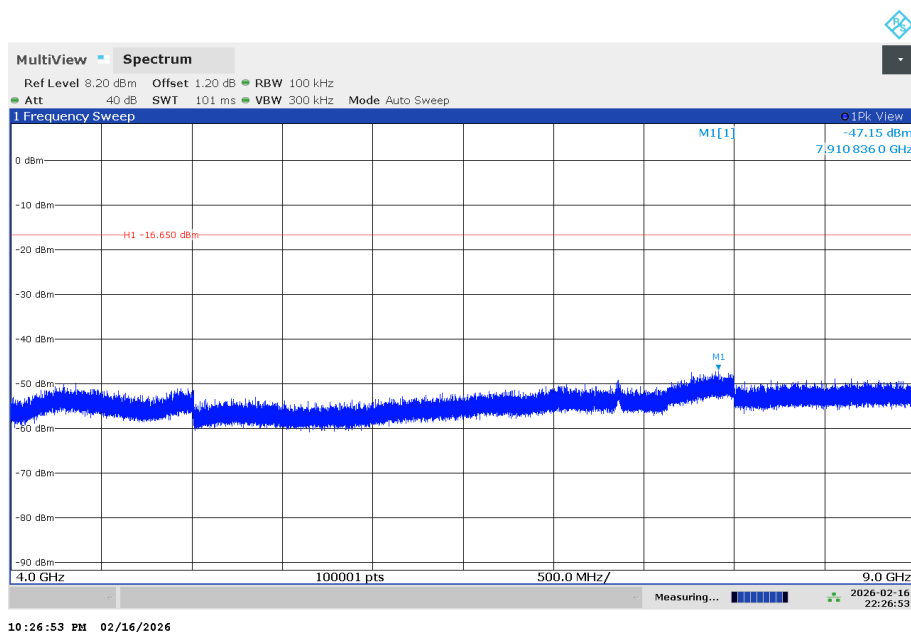
Product Service

Non Restricted Band (conducted):



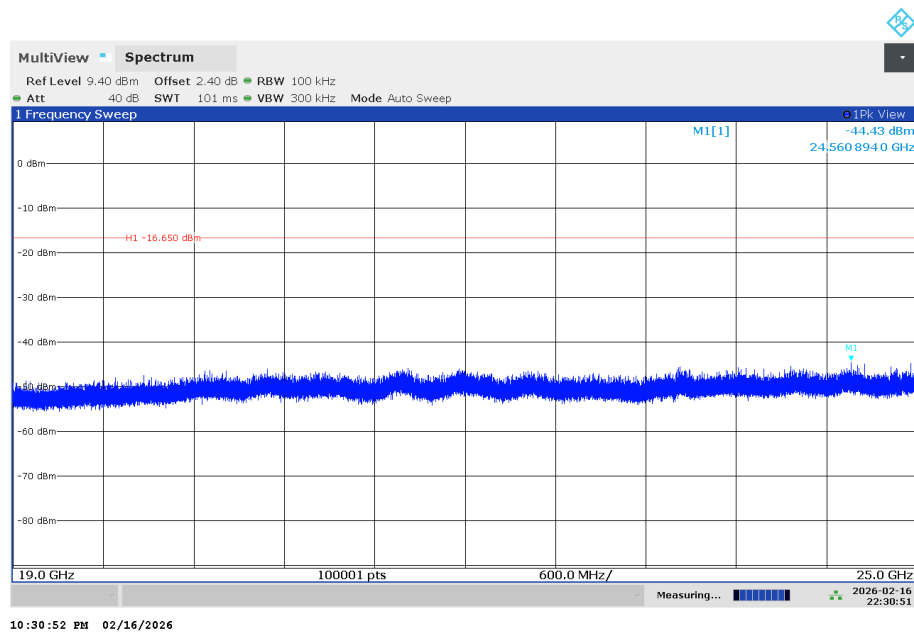
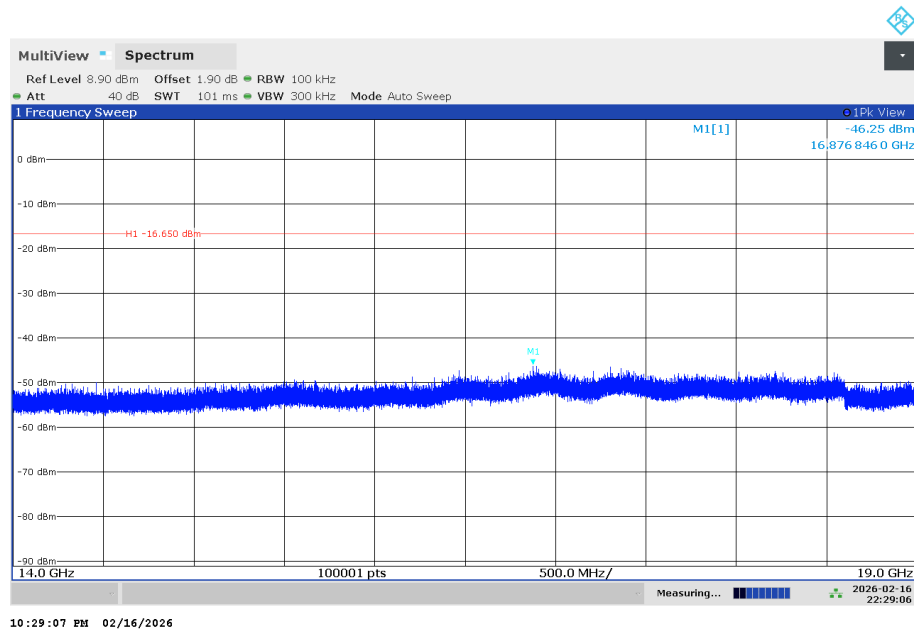


Product Service





Product Service





2.6.8 Test Location and Test Equipment

The test was carried out in semi anechoic room no. 11:

Instrument	Manufacturer	Type No	TE No	Calibration Period (months)	Calibration Due
EMI test receiver	Rohde & Schwarz	ESW44	74060	12	2026-01-31
Signal and Spectrum Analysator	Rohde & Schwarz	FSW43	53496	12	2026-04-30
Loop antenna	Schwarzbeck	FMZB 1519 C	75256	36	2028-01-31
ULTRALOG Antenna	Rohde & Schwarz	HL562E	61486	36	2026-04-30
Double ridged horn antenna	Rohde & Schwarz	HF907	40089	24	2026-11-30
Horn antenna with preamplifier	Rohde & Schwarz	A-INFOMW LB-180400H-KF + TS-LNA 1840	43661	24	2027-01-31
Semi anechoic room	Frankonia	Cabin no. 11	42961	24	2026-09-30
EMC measurement software	Rohde & Schwarz	EMC32 Emission K11 – V11.50	42986	---	---

Table 17



2.7 Temperature Stability

2.7.1 Specification Reference

ISED RSS-Gen, Clause 6.11, 8.11

2.7.2 Equipment under Test and Modification State

SIMATIC RTLS4460T; S/N 17:85:10:02:CA:9C; Modification state 0

2.7.3 Date of Test

2025-03-15

2.7.4 Environmental Conditions

Ambient Temperature	21 °C
Relative Humidity	34 %

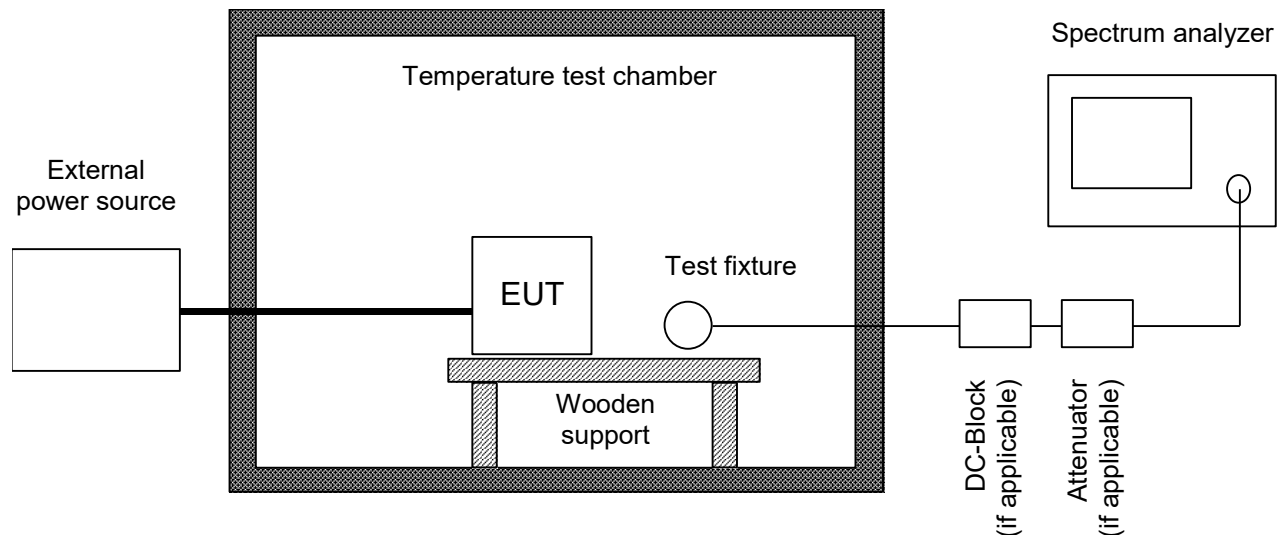
2.7.5 Specification Limits

If the stability of the license-exempt radio apparatus is not specified in the applicable RSS, the fundamental emissions of the radio apparatus should be kept within at least the central 80 % of its permitted operating frequency band in order to minimize the possibility of out-of-band operation. In additions, its occupied bandwidth shall be entirely outside the restricted bands and the prohibited TV bands of 85 MHz – 72 MHz, 76 MHz – 88 MHz, 174 MHz – 216 MHz, and 470 MHz – 602 MHz, unless otherwise indicated.



2.7.6 Test Method

The test was performed according to ANSI C63.10, section 6.8.



The frequency tolerance of the carrier signal is measured over a temperature variation of -20°C to $+50^{\circ}\text{C}$ at normal supply voltage, and for a variation in the primary supply voltage from 85 % to 115 % of the rated supply voltage at a temperature of 20°C . Temperature and voltage range may vary if the manufacturer states another temperature or voltage range.

If the EUT provides an antenna connector the spectrum analyzer is connected to this port. If required, a resistive matching network equal to the impedance specified or employed for the antenna is used as well as a DC block and appropriate (50 Ω) attenuators. In case where the EUT does not provide an antenna connector or a test fixture is used.

For battery operated equipment, the test is performed using a new battery. Alternatively, an external supply voltage can be used and is at least set to:

- The maximum battery voltage as delivered by a new battery or 115 % of the battery nominal voltage;
- The battery nominal voltage
- 85 % of the battery nominal voltage
- The battery operating end point voltage which shall be specified by the equipment manufacturer.

The EUT is operating providing an unmodulated carrier for frequency error tests. The peak detector of the spectrum analyzer is selected and resolution as well as video bandwidth are set to values appropriate to shape of the spectrum of the EUT. The frequency counter mode of the spectrum analyzer is used to maximize the accuracy of the measured frequency tolerance.

If an unmodulated carrier is not available a significant and stable point of the spectrum is selected and the span is reduced to a value that delivers an accuracy which shall be better than 1 % of the maximum frequency tolerance allowed for the carrier signal. This method may be performed as long as the margin to the frequency tolerance is larger than the uncertainty of the measured frequency tolerance.



2.7.7 Test Results

<i>Temperature</i>	<i>Supply Voltage</i>	<i>Frequency drift</i>
20 °C	24 V	-5.25 MHz
20 °C	10 V	0.50 MHz
20 °C	30 V	-1.75 MHz
- 40 °C	24 V	0.75 MHz
70 °C	24 V	1,75 MHz

Table 18

2.7.8 Test Location and Test Equipment

The test was carried out in the test laboratory:

Instrument	Manufacturer	Type No	TE No	Calibra- tion Pe- riod (months)	Calibration Due
Signal and Spectrum Analysator	Rohde & Schwarz	FSV40	20219	24	2026-03-31
Switching device	Rohde & Schwarz	OSP120	20248	36	2026-07-31
Switching device	Rohde & Schwarz	OSP120	38807	36	2026-08-31
Climatic test chamber	ESPEC	PL-4J	38958	18	2026-09-06

Table 19



2.8 Conducted Emissions on Mains Terminals

2.8.1 Specification Reference

FCC 47 CFR Part 15 C, Clause 15.207
ISED RSS-Gen, Clause 8.8

2.8.2 Equipment under Test and Modification State

SIMATIC RTLS4460T; S/N 17:85:10:02:CA:9C; Modification state 0

2.8.3 Date of Test

2025-04-01

2.8.4 Environmental Conditions

Ambient Temperature 22 °C
Relative Humidity 33 %

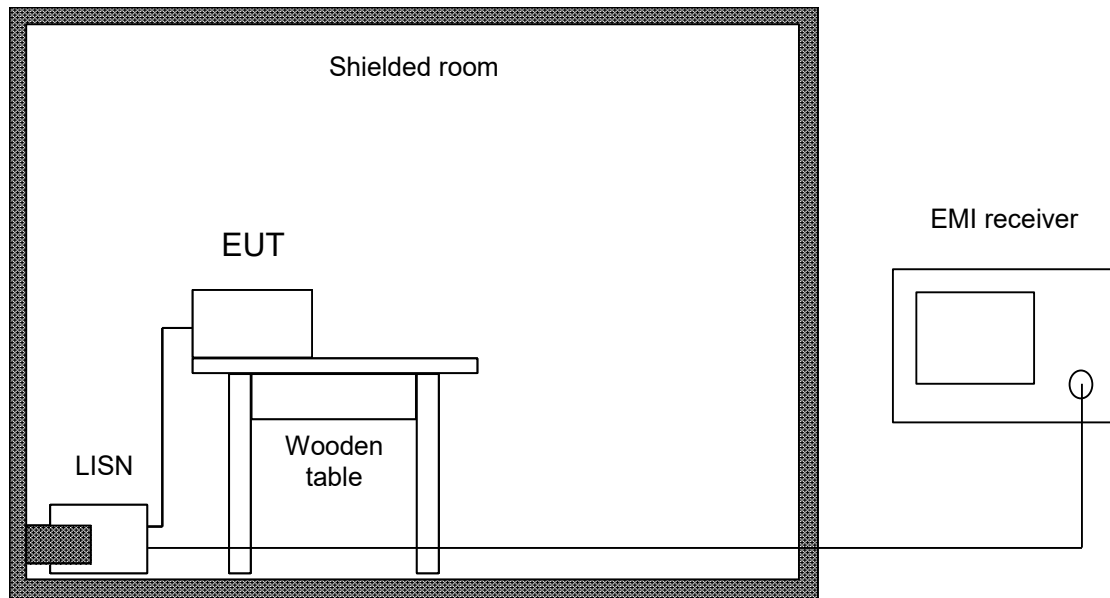
2.8.5 Specification Limits

Required Specification Limits (Class B)			
Line Under Test	Frequency Range (MHz)	Quasi-peak (dBμV)	Average (dBμV)
AC Power Port	0.15 to 0.5	66 to 56*	56 to 46*
	0.5 to 5	56	46
	5 to 30	60	50
Supplementary information: *Decreases with the logarithm of the frequency.			

Table 20 Emission limits

2.8.6 Test Method

The test was performed according to ANSI C63.10, section 6.2.



The EUT was placed on a non-conductive table 0.8 m above a reference ground plane and 0.4 m away from a vertical coupling plane.

All power was connected to the EUT through an Line Impedance Stabilization Network (LISN). Conducted disturbance voltage measurements on mains lines were made at the output of the LISN. The LISN was placed 0.8 m from the boundary of the EUT and bounded to the reference ground plane. To simplify testing with quasi-peak and linear average (cisp-average) detector the following procedure is used:

First the whole spectrum of emission caused by the equipment under test (EUT) is recorded with the detectors set to peak and average using CISPR bandwidth of 10 kHz. After that all emission levels having less margin than 10 dB to or exceeding the average limit are retested with the detectors set to quasi-peak and average. If the average limit is kept with quasi-peak levels measurement with average detector is optional. In cases of emission levels between quasi-peak and average limit an additional measurement with average detector has to be performed.

According to ANSI C63.10, section 6.2.5, testing of intentional radiators with frequencies below 30 MHz shall be performed using a suitable dummy load connected to the antenna output terminals. Otherwise the tests shall be performed with the integral or a representative antenna and, if adjustable, fully extended. Testing with a dummy load may be necessary to distinguish (unintentional) conducted emissions on the supply lines from (intentional) emissions radiated by the antenna and coupling directly to supply lines and/or LISN. The usage of a dummy load has to be stated in the appropriate test record(s) and notes should be added to clarify the test setup.

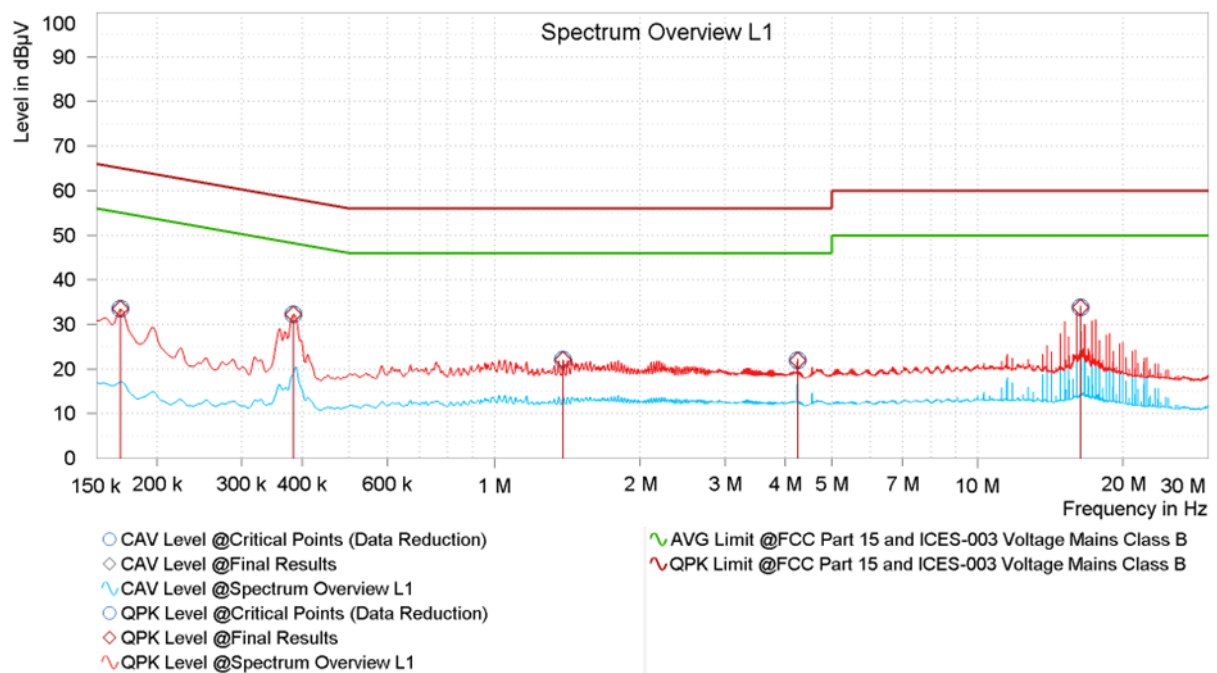


2.8.7 Test Results

Sample calculation:

$$\text{Final Value (dB}\mu\text{V)} = \text{Reading Value (dB}\mu\text{V)} + (\text{Cable attenuation (dB)} + \text{LISN Transducer (dB)})$$

Line L1:

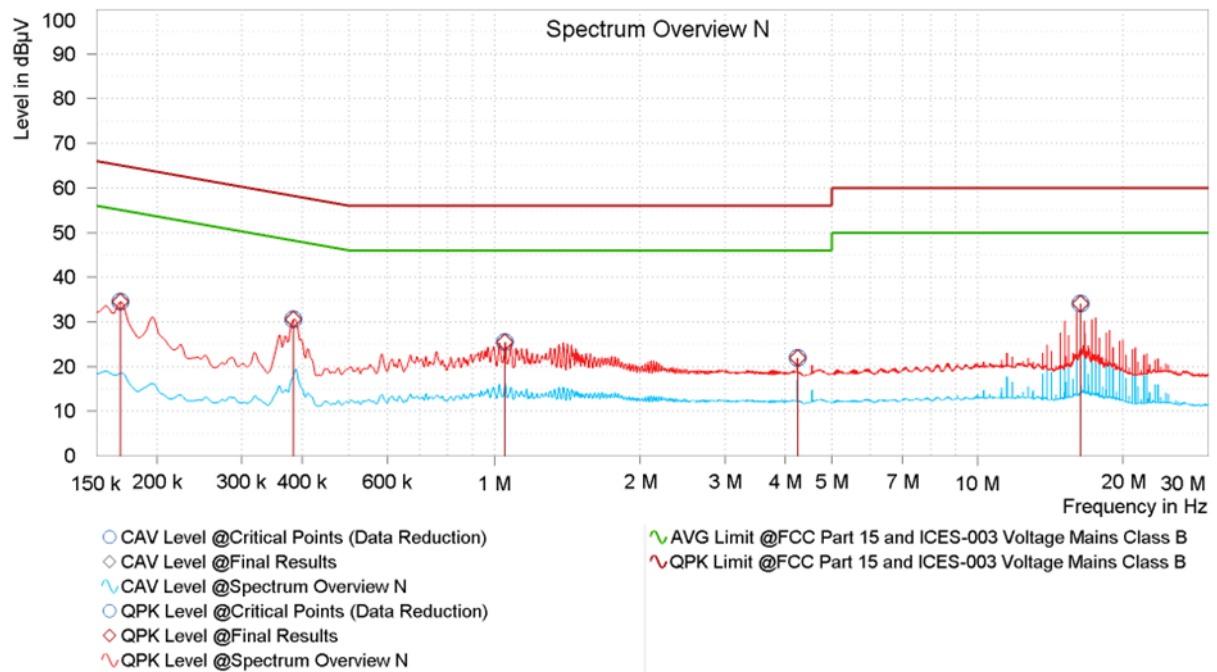


Frequency [MHz]	QPK Level [dB μ V]	QPK Limit [dB μ V]	QPK Margin [dB]	CAV: AVG Limit [dB μ V]	Correction [dB]	Line	Meas. BW [kHz]	Meas. Time [s]
0.168	33.45	65.06	31.61	55.06	10.07	L1	9.000	15.000
0.384	32.27	58.19	25.92	48.19	10.09	L1	9.000	15.000
1.388	22.02	56.00	33.98	46.00	10.12	L1	9.000	15.000
4.238	21.96	56.00	34.04	46.00	10.15	L1	9.000	15.000
16.352	33.85	60.00	26.15	50.00	10.25	L1	9.000	15.000



Product Service

Line N:



Frequency [MHz]	QPK Level [dBµV]	QPK Limit [dBµV]	QPK Margin [dB]	CAV: AVG Limit [dBµV]	Correction [dB]	Line	Meas. BW [kHz]	Meas. Time [s]
0.168	34.57	65.06	30.48	55.06	10.07	N	9.000	15.000
0.384	30.61	58.19	27.59	48.19	10.09	N	9.000	15.000
1.052	25.47	56.00	30.53	46.00	10.13	N	9.000	15.000
4.238	21.96	56.00	34.04	46.00	10.15	N	9.000	15.000
16.350	34.03	60.00	25.97	50.00	10.25	N	9.000	15.000



2.8.8 Test Location and Test Equipment

The test was carried out in shielded cabin no. 9:

Instrument	Manufacturer	Type No	TE No	Calibra- tion Pe- riod (months)	Calibration Due
V-network	Rohde & Schwarz	ENV216	39908	12	2025-05-31
EMI test receiver	Rohde & Schwarz	EPL1000	67137	12	2025-05-31
ELEKTRA measurement software	Rohde & Schwarz	ELEKTRA K9 Emission – V5.10.0	68260	---	---

Table 21



3 Measurement Uncertainty

For a 95% confidence level, the measurement uncertainties for defined systems are:

<i>Radio Interference Emission Testing</i>		
<i>Test Name</i>	<i>kp</i>	<i>Expanded Uncertainty</i>
Conducted Voltage Emission		
9 kHz to 150 kHz (50Ω/50μH AMN)	2	± 3.8 dB
150 kHz to 30 MHz (50Ω/50μH AMN)	2	± 3.4 dB
100 kHz to 200 MHz (50Ω/5μH AMN)	2	± 3.6 dB
Discontinuous Conducted Emission		
9 kHz to 150 kHz (50Ω/50μH AMN)	2	± 3.8 dB
150 kHz to 30 MHz (50Ω/50μH AMN)	2	± 3.4 dB
Conducted Current Emission		
9 kHz to 200 MHz	2	± 3.5 dB
Magnetic Fieldstrength		
9 kHz to 30 MHz (with loop antenna)	2	± 3.9 dB
9 kHz to 30 MHz (large-loop antenna 2 m)	2	± 3.5 dB
Radiated Emission		
30 MHz to 300 MHz	2	± 4.9 dB
300 MHz to 1 GHz	2	± 5.0 dB
1 GHz to 6 GHz	2	± 4.6 dB
Test distance 10 m		
30 MHz to 300 MHz	2	± 4.9 dB
300 MHz to 1 GHz	2	± 4.9 dB
The expanded uncertainty reported according to CISPR16-4-2: 2011 + A1 + A2 + Cor1 is based on a standard uncertainty multiplied by a coverage factor of $k_p = 2$, providing a level of confidence of $p = 95.45\%$		

Table 22 Measurement uncertainty based on CISPR 16-4-2



<i>Radio Interference Emission Testing</i>		
<i>Test Name</i>	<i>kp</i>	<i>Expanded Uncertainty</i>
Occupied Bandwidth	2	± 5 %
Conducted Power		
9 kHz ≤ f < 30 MHz	2	± 1.0 dB
30 MHz ≤ f < 1 GHz	2	± 1.5 dB
1 GHz ≤ f ≤ 40 GHz	2	± 2.5 dB
1 MS/s power sensor (TS8997)	2	± 1.5 dB
Occupied Bandwidth	2	± 5 %
Power Spectral Density	2	± 3.0 dB
Radiated Power		
25 MHz – 6 GHz	1.96	±4.4 dB
1 GHz – 18 GHz	1.96	±4.7 dB
18 GHz – 40 GHz	1.96	±4.9 dB
40 GHz – 325 GHz	1.96	±6.1 dB
Conducted Spurious Emissions	2	± 3.0 dB
Radiated Spurious Emissions	2	± 6.0 dB
Voltage		
DC	2	± 1.0 %
AC	2	± 2.0 %
Time (automatic)	2	± 5 %
Frequency	2	± 10 ⁻⁷
The expanded uncertainty reported according to ETSI TR 100 028:2001 is based on a standard uncertainty multiplied by a coverage factor of kp = 2, providing a level of confidence of p = 95.45%		

Table 23 Measurement uncertainty based on ETSI TR 100 028

The measurement uncertainty in the laboratory is less than or equal to the maximum measurement uncertainty according to CISPR16-4-2: 2011 + A1 + A2 + Cor1 (U_{CISPR}) and as specified in the test report below. This normative regulation means that the measured value is also the value to be assessed in relation to the limit value.



Test Name	Expanded Uncertainty
Occupied Bandwidth	±5 %
Conducted Power	
9 kHz ≤ f < 30 MHz	±1.0 dB
30 MHz ≤ f < 1 GHz	±1.5 dB
1 GHz ≤ f ≤ 40 GHz	±2.5 dB
1 MS/s power sensor (2.4 / 5 GHz band)	±1.5 dB
Power Spectral Density	±3.0 dB
Radiated Power	
25 MHz – 26.5 GHz	±6.0 dB
26.5 GHz – 66 GHz	±8.0 dB
40 GHz – 325 GHz	±10.0 dB
Conducted Spurious Emissions	±3.0 dB
Radiated Field Strength 9 kHz – 40 GHz	±6.0 dB
Voltage	
DC	± 1.0 %
AC	± 2.0 %
Time (automatic)	± 5 %
Frequency	± 10 ⁻⁷

Table 24 Decision Rule: Maximum allowed measurement uncertainty

END OF TEST REPORT