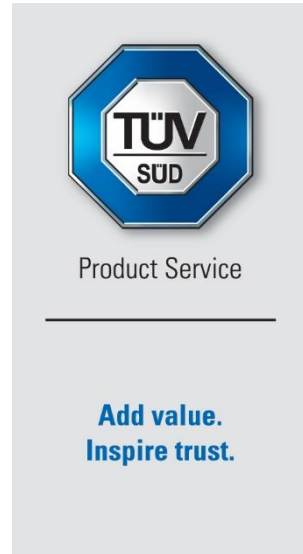


Report on the FCC and IC Testing of the  
Siemens AG  
Access Control Reader  
Model: Simatic RF1170R  
In accordance with FCC 47 CFR Part 15 C  
and ISED RSS-210 and ISED RSS-Gen

Prepared for: Siemens AG  
DI PA DCP R&D 1  
Gleiwitzer Str. 555  
90475 Nürnberg, Germany



**COMMERCIAL-IN-CONFIDENCE**

FCC ID: NXW-RF1170R  
IC: 267X-RF1170R

Date: 2022-07-04  
Document Number: TR-713276197-02 | Revision 1

RESPONSIBLE FOR	NAME	DATE	SIGNATURE
Project Management	Martin Steindl	2023-07-04	<i>Steindl Martin</i> SIGN-ID 807379
Authorised Signatory	Matthias Stumpe	2023-07-05	<i>Stumpe</i> SIGN-ID 807980

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

**Engineering Statement:**

This measurement 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 with FCC 47 CFR Part 15 C and ISED RSS-210 and RSS-GEN.

The sample tested was found to comply with the requirements defined in the applied rules.

RESPONSIBLE FOR	NAME	DATE	SIGNATURE
Testing	Martin Steindl	2023-07-04	<i>Steindl Martin</i> SIGN-ID 807381

Laboratory Accreditation DAkkS Reg. No. D-PL-11321-11-02 DAkkS Reg. No. D-PL-11321-11-03	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:2021 and ISED RSS-210:2019 and ISED RSS-Gen:2019

**DISCLAIMER AND COPYRIGHT**  
This non-binding report has been prepared by TÜV SÜD Product Service with all reasonable skill and care. The document is confidential to the potential Client and TÜV SÜD Product Service. No part of this document may be reproduced without the prior written approval of TÜV SÜD Product Service. © 2023 TÜV SÜD Product Service.

Trade Register Munich  
HRB 85742  
VAT ID No. DE129484267  
Information pursuant to Section 2(1)  
DL-InfoV (Germany) at  
www.tuvsud.com/imprint

Managing Directors:  
Walter Reitmaier (Sprecher / CEO)  
Patrick van Welij

Phone: +49 (0) 9421 55 22-0  
Fax: +49 (0) 9421 55 22-99  
www.tuvsud.com

TÜV SÜD Product Service GmbH  
Äußere Frühlingsstraße 45  
94315 Straubing  
Germany



## Content

1	Report Summary .....	2
1.1	Modification Report.....	2
1.2	Introduction .....	2
1.3	Brief Summary of Results.....	3
1.4	Product Information .....	4
1.5	Test Configuration .....	5
1.6	Modes of Operation .....	5
1.7	EUT Modifications Record.....	5
1.8	Test Location .....	6
2	Test Details.....	7
2.1	Bandwidth of Signal.....	7
2.2	Radiated Emissions.....	10
2.3	Temperature Stability .....	18
3	Measurement Uncertainty .....	21
Annex A	Photographs of Test Setups .....	2 pages
Annex B	External photos of EUT .....	3 pages
Annex C	Internal photos of EUT.....	4 pages



# 1 Report Summary

## 1.1 Modification Report

Alterations and additions of this report will be issued to the holders of each copy in the form of a complete document.

<i>Revision</i>	<i>Description of changes</i>	<i>Date of Issue</i>
0	First Issue	2023-02-07
1	Added spectrum mask and calculation of additional correction Added IDs for FCC and IC; deleted reference to obsolete module Updated marking plate	2023-07-04

**Table 1: Report of Modifications**

## 1.2 Introduction

<i>Applicant</i>	Siemens AG DI PA DCP R&D 1 Gleiwitzer Str. 555 90475 Nürnberg, Germany
<i>Manufacturer</i>	Siemens AG 76181 Karlsruhe, Germany
<i>Model Number(s)</i>	Simatic RF1170R
<i>FCC ID:</i>	NXW-RF1170R
<i>IC:</i>	267X-RF1170R
<i>Serial Number(s)</i>	Prototype
<i>Hardware Version(s)</i>	Prototype
<i>Software Version(s)</i>	Prototype
<i>Number of Samples Tested</i>	1
<i>Test Specification(s) / Issue / Date</i>	FCC 47 CFR Part 15 C : 2019 and ISED RSS-210, Issue 10, Amd. 1 : 2019 ISED RSS-Gen, Issue 5, Amd. 1 : 2019
<i>Test Plan/Issue/Date</i>	---
<i>Order Number</i>	9707341357
<i>Date</i>	2022-10-22
<i>Date of Receipt of EUT</i>	2023-01-09
<i>Start of Test</i>	2023-01-10
<i>Finish of Test</i>	2023-02-03
<i>Name of Engineer(s)</i>	M. Steindl; A. Fink
<i>Related Document(s)</i>	ANSI C63.10:2013



### 1.3 Brief Summary of Results

A brief summary of the tests carried out in accordance with FCC 47 CFR Part 15 C and ISED RSS-210 and RSS-Gen is shown below.

<i>Section</i>	<i>Specification Clause</i>	<i>Test Description</i>	<i>Result</i>
	15.203	Antenna requirement	Pass Integrated antenna
2.1	15.215(c)	Bandwidth of Signal	Pass
	15.209, 15.225	Radiated Emissions	Pass
2.3	15.225(e)	Frequency Tolerance	Pass

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

<i>Section</i>	<i>Specification Clause</i>	<i>Test Description</i>	<i>Result</i>
2.2	7.3, B.6.a	Radiated Emissions	Pass
2.3	B.6 b.	Frequency Tolerance	Pass

**Table 3: Results according to ISED RSS-210**

<i>Section</i>	<i>Specification Clause</i>	<i>Test Description</i>	<i>Result</i>
2.1	6.7	Bandwidth of Signal	Pass
2.2	8.9, 8.10	Radiated Emissions	Pass
2.3	6.11	Frequency Tolerance	Pass

**Table 4: Results according to ISED RSS-Gen**



## 1.4 Product Information

### 1.4.1 Technical Description

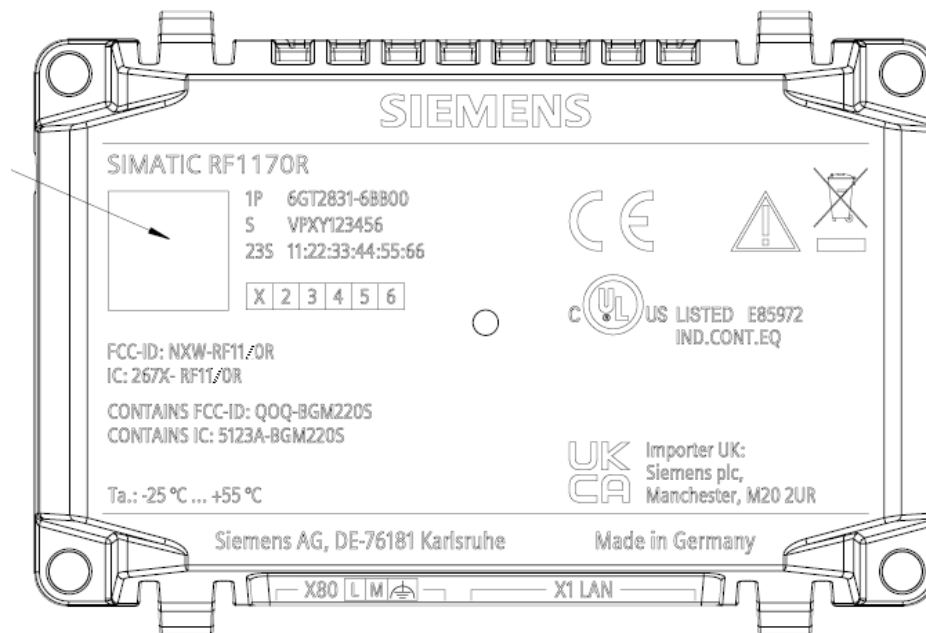
*Frequency Band:* 13.110 – 14010 MHz

*Emission designator:* A1D

*Supply Voltage:* 24 V / PoE

*Supply Frequency:* 0 Hz

*Highest clock frequency (non-radio part):* 1000 MHz



Marking plate

### 1.4.2 EUT Ports / Cables identification

Port	Max Cable Length specified	Usage	Screened
DC supply	N/A	DC supply	No
Ethernet	N/A	Telecommunication	Yes

Table 5



### 1.4.3 List of support devices

<i>Description</i>	<i>Type designation</i>	<i>Serial No. or ID</i>	<i>Manufacturer</i>
Switching Power Supply	POE20U-56(G)	Rev. C	Phihong

Table 6

### 1.4.4 Modules in EUT

<i>Type designation</i>	<i>Manufacturer</i>	<i>FCC ID</i>	<i>IC</i>
BGM220S22A	Silicon Labs	QOQ-BGM220S	5123A-BGM220S

Table 7

## 1.5 Test Configuration

The applicant provided a test software to control the EUT over ethernet interface.

## 1.6 Modes of Operation

The test was performed with maximum power reading a transponder tag

## 1.7 EUT Modifications Record

The table below details modifications made to the EUT during the test programme.  
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
1	As applied by customer	Siemens AG	2023-02-03

Table 8



Product Service

## 1.8 Test Location

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

Test Name	Name of Engineer(s)
Bandwidth of Signal	M. Steindl
Radiated Emissions	M. Steindl; A. Fink
Frequency Tolerance	M. Steindl

**Office Address:**

Äußere Frühlingstraße 45  
94315 Straubing  
Germany



## 2 Test Details

### 2.1 Bandwidth of Signal

#### 2.1.1 Specification Reference

FCC 47 CFR Part 15 C, Clause 15.215(c)  
ISED RSS-Gen, Clause 6.7

#### 2.1.2 Equipment under Test and Modification State

Simatic RF1170R; Modification State 0

#### 2.1.3 Date of Test

2023-02-03

#### 2.1.4 Environmental Conditions

Ambient Temperature	20 °C
Relative Humidity	35 %

#### 2.1.5 Specification Limits

No limitation – Bandwidth noted

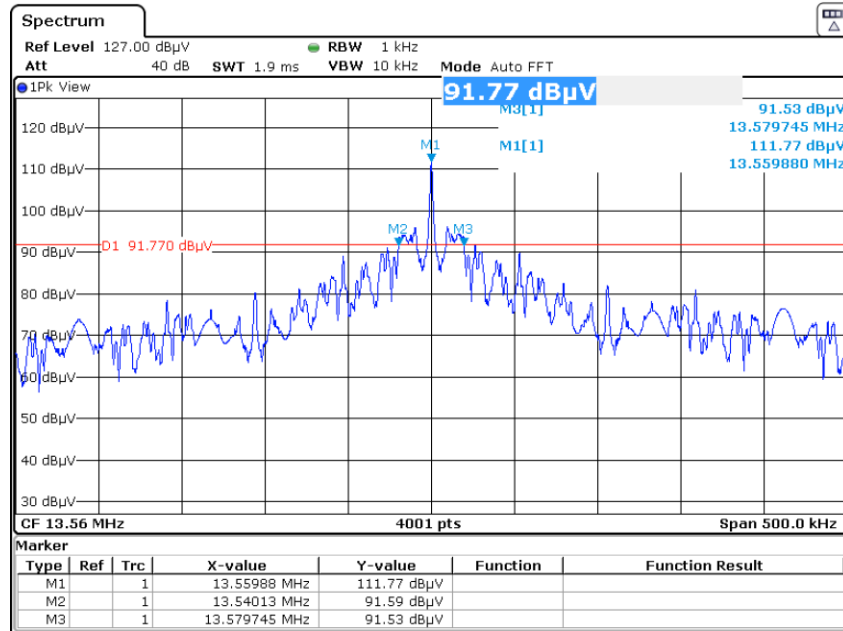
#### 2.1.6 Test Method

The test was performed according to ANSI C63.10, clauses 6.9  
See section 2.2 of this test report for details.





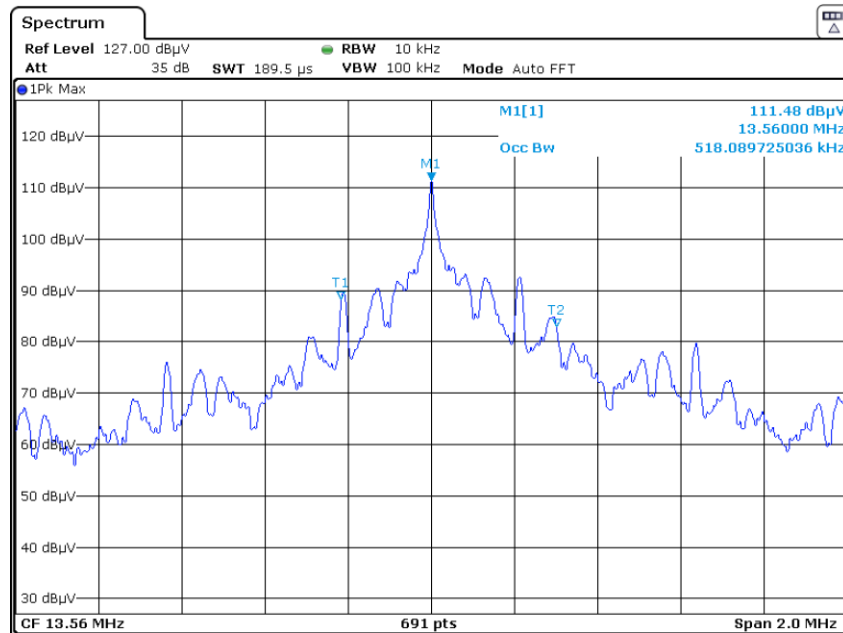
## 2.1.7 Test Results



Date: 3.FEB.2023 09:25:57

Center frequency	20 dB Bandwidth
13.56 MHz	39.615 kHz

Table 9: 20 dB bandwidth



Date: 3.FEB.2023 09:22:24

Centre Frequency	99% Bandwidth
13.56 MHz	518.089725 kHz

Table 10: 99% bandwidth

### 2.1.8 Test Location and Test Equipment

The test was carried out in radio test laboratory

Instrument	Manufacturer	Type No	TE No	Calibration Period (months)	Calibration Due
Signal and spectrum analyzer	FSV40	FSV40	20219	24	2024-02-29

Table 11



## **2.2 Radiated Emissions**

### **2.2.1 Specification Reference**

FCC 47 CFR Part 15 C, Clauses 15.205, 15.209 and 15.225  
ISED RSS-210, Clause 7.7 and B.6  
ISED RSS-Gen, Clauses 8.9 and 8.10

### **2.2.2 Equipment under Test and Modification State**

Simatic RF1170R; Modification State 0  
Simatic RF1170R; Modification State 1

### **2.2.3 Date of Test**

2023-01-09 and 2023-02-02

### **2.2.4 Environmental Conditions**

Ambient Temperature	19 °C
Relative Humidity	37 %



## 2.2.5 Specification Limits

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 – 13.110	30	0.08	-21.94	30	29.54
13.110 – 13.410	30	0.283	-11.0	106	40.5
13.410 – 13.553	30	0.891	-1.0	334	50.5
13.553 – 13.567	30	42.26	32.5	15848	84
13.567 – 13.710	30	0.891	-1.0	334	50.5
13.710 – 14.010	30	0.283	-11.0	106	40.5
14.010 - 30	30	0.08	-21.94	30	29.54
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 12 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).

## 2.2.6 Test Method

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

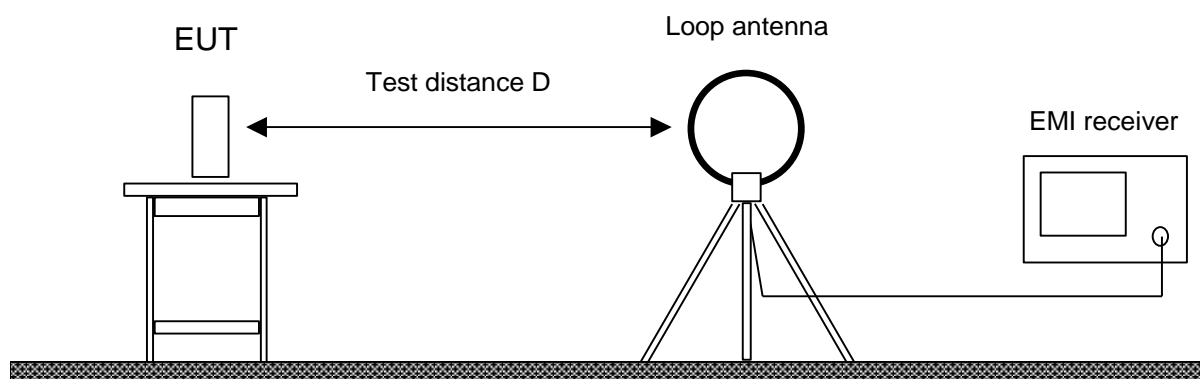
Prescans are performed in six positions of the EUT to get the full spectrum of emission caused by the EUT with the measuring antenna raised and lowered from 1 m to 4 m with vertical and horizontal polarisation to find the combination of table position, antenna height and antenna polarisation for the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

### 2.2.6.1 Frequency range 9 kHz – 30 MHz

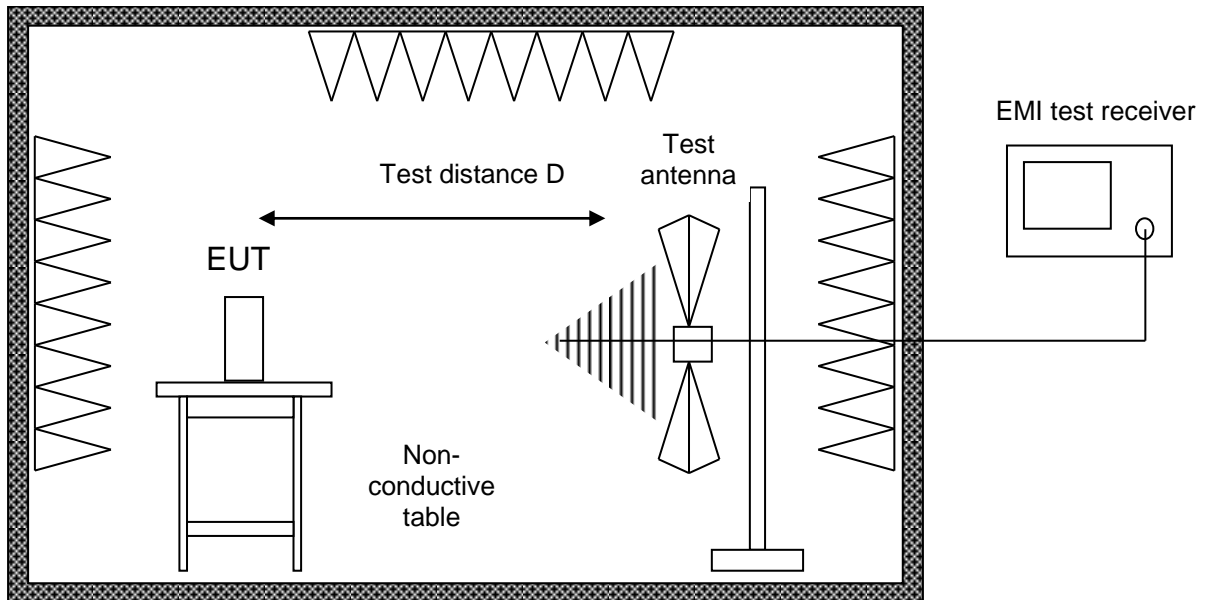


The EUT was placed on a non-conductive table, 0.8 m above the ground.

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.

### 2.2.6.2 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.



## 2.2.7 Test Results

<i>Frequency range</i>	<i>Limit applied</i>	<i>Test distance</i>
9 kHz – 1 GHz	15.209; 15.225	3 m

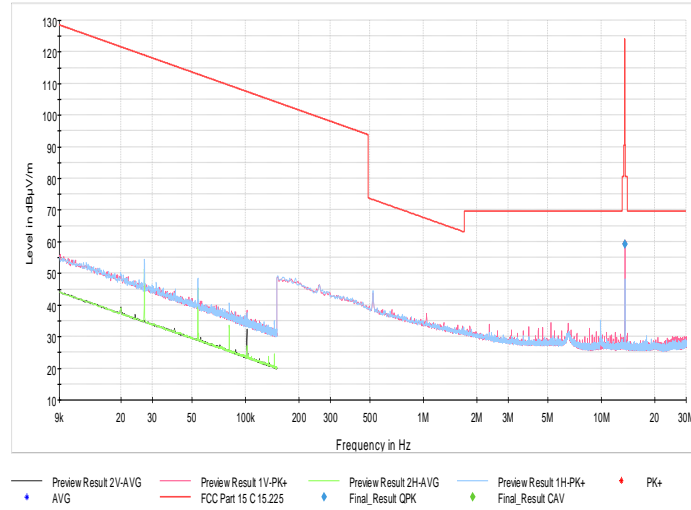
**Table 13**

### Sample calculation:

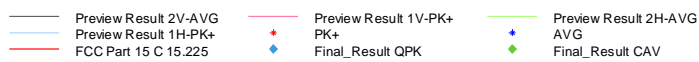
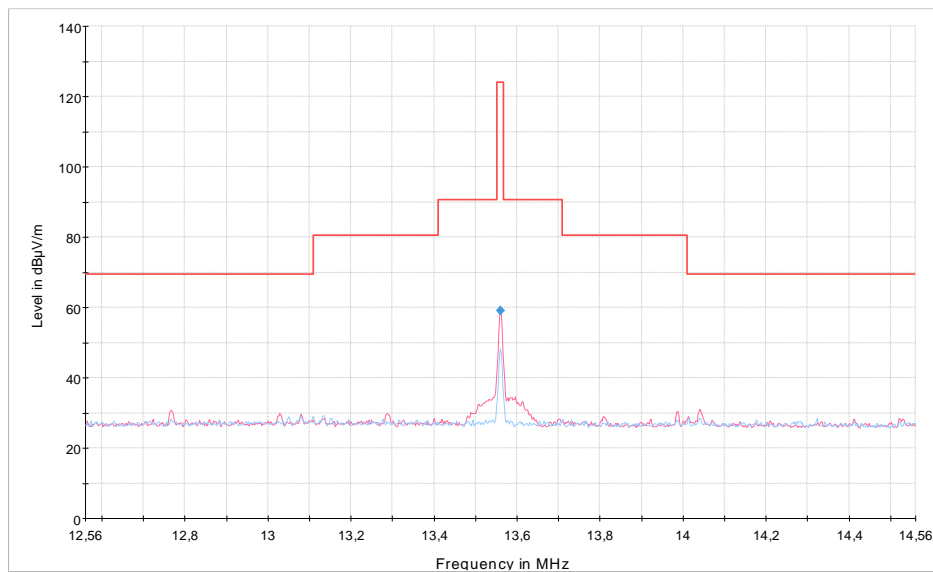
$$\text{Final Value (dB}\mu\text{V/m)} = \text{Reading Value (dB}\mu\text{V)} + (\text{Cable attenuation (dB)} \\ + \text{Antenna Transducer (dB(1/m))})$$

Additional correction of limit in the frequency range 9 – 490 kHz (300 m to 3 m): +80.0 dB

Additional correction of limit in the frequency range 490 kHz – 30 MHz (30 m to 3 m): +40.0 dB

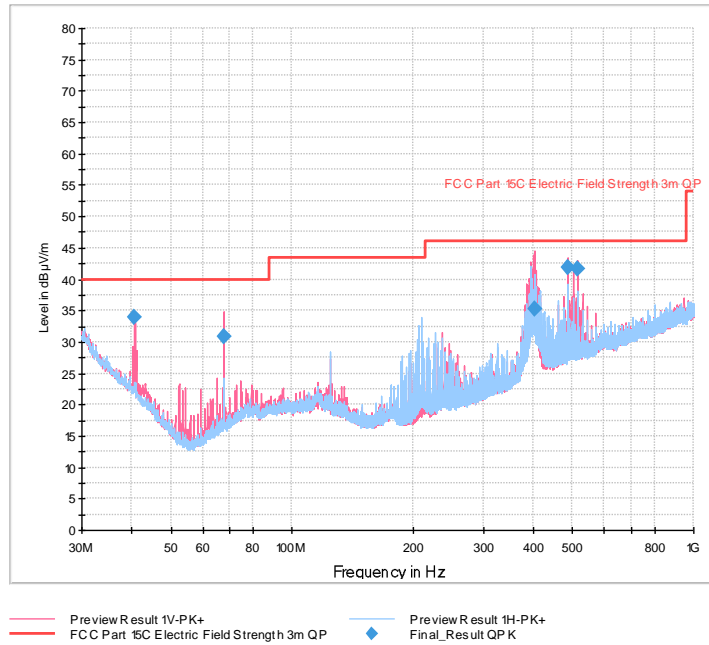


Frequency MHz	QuasiPeak dBµV/m	CAverage dBµV/m	Limit dBµV/m	Margin dB	Meas. Time ms	Bandwidth kHz	Height cm	Pol	Azimuth deg	Corr. dB/m
13.560000	59.15		124.00	64.85	1000.0	9.000	100.0	V	-44.0	18.9



Spectrum Mask





Frequency MHz	QuasiPeak dBµV/m	Limit dBµV/m	Margin dB	Meas. Time ms	Bandwidth kHz	Height cm	Pol	Azimuth deg	Corr. dB/m
40.680000	33.92	40.00	6.08	1000	120	100.0	V	99.0	19.2
67.800000	30.96	40.00	9.04	1000	120	219.0	V	-64.0	14.0
403.020000	35.25	46.02	10.77	1000	120	137.0	V	-123.0	22.4
488.160000	41.84	46.02	4.18	1000	120	100.0	V	201.0	24.6
515.280000	41.68	46.02	4.34	1000	120	100.0	V	190.0	25.0



## 2.2.8 Test Location and Test Equipment

The test was carried out in semi anechoic room, cabin No. 11

Instrument	Manufacturer	Type No	TE No	Calibration Period (months)	Calibration Due
EMC test receiver	Rohde & Schwarz	ESW44	39897	12	2023-04-30
Loop antenna	Schwarzbeck	FMZB 1519B	44334	36	2023-01-31
ULTRALOG antenna	Rohde & Schwarz	HL562E	39969	36	2025-03-31
Fixed attenuator	Aeroflex	Model. 6 dB	39632	36	2026-01-31
Semi anechoic room	Frankonia	Cabin No. 11	42961		
EMC measurement software	Rohde & Schwarz	EMC 32 V11.50	42986		

**Table 14**



## 2.3 Temperature Stability

### 2.3.1 Specification Reference

FCC 47 CFR Part 15 E, Clause 15.225(e)  
ISSED RSS-210, Clause B.6 b.  
ISED RSS-Gen, Clause 6.11

### 2.3.2 Equipment under Test and Modification State

Simatic RF1170R; Modification State 0

### 2.3.3 Date of Test

2023-01-10

### 2.3.4 Environmental Conditions

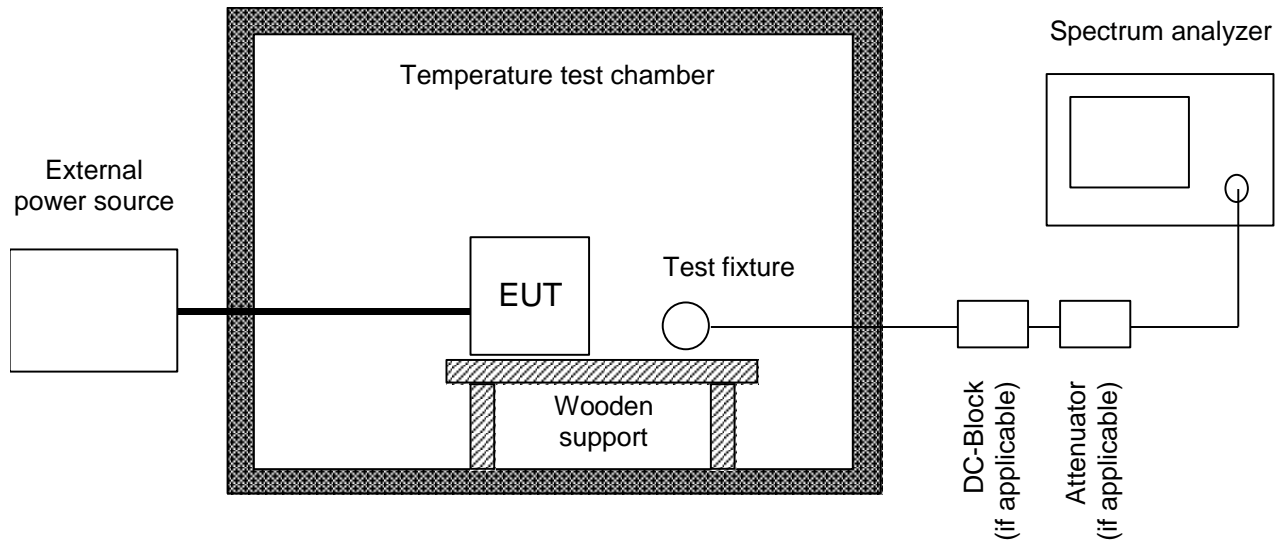
Ambient Temperature	20 °C
Relative Humidity	39 %

### 2.3.5 Specification Limits

The frequency tolerance of the carrier signal shall be maintained within  $\pm 0.01$  % of the operating frequency over a temperature variation of  $-20$  °C to  $+50$  °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. For battery operated equipment, the equipment tests shall be performed using a new battery.

### 2.3.6 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  $-20\text{ }^{\circ}\text{C}$  to  $+50\text{ }^{\circ}\text{C}$  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  $20\text{ }^{\circ}\text{C}$ . 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 ( $50\ \Omega$ ) 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.



### 2.3.7 Test Results

Temperature	Supply Voltage	Frequency	Frequency drift	
-20 °C	24 V	13.560065 MHz	0.070 kHz	5.20 ppm
-10 °C	24 V	13.560031 MHz	0.036 kHz	2.67 ppm
0 °C	24 V	13.560027 MHz	0.033 kHz	2.42 ppm
10 °C	24 V	13.560003 MHz	0.009 kHz	0.63 ppm
20 °C	21.6 V	13.559992 MHz	-0.003 kHz	-0.19 ppm
20 °C	24 V	13.559995 MHz	0.000 kHz	0.00 ppm
20 °C	PoE	13.559959 MHz	-0.036 kHz	-2.65 ppm
20 °C	26.4V	13.559973 MHz	-0.021 kHz	-1.58 ppm
30 °C	24 V	13.559993 MHz	-0.002 kHz	-0.15 ppm
40 °C	24 V	13.560007 MHz	0.013 kHz	0.93 ppm
50 °C	24 V	13.560070 MHz	0.076 kHz	5.57 ppm

Table 15

### 2.3.8 Test Location and Test Equipment

The test was carried out in radio test laboratory

Instrument	Manufacturer	Type No	TE No	Calibration Period (months)	Calibration Due
Signal and spectrum analyzer	FSV40	FSV40	20219	24	2024-02-29
Temperature test chamber	Feutron	KPK200-2	19868	24	2023-02-28

Table 16



### 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 17 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 <sup>-7</sup>
The expanded uncertainty reported according to ETSI TR 100 028:2001 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 18 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.



<i>Test Name</i>	<i>Expanded Uncertainty</i>
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 <sup>-7</sup>

**Table 19 Decision Rule: Maximum allowed measurement uncertainty**