

MPE test report

According to the standard:

CFR 47 FCC PART 15

Equipment under test:

ZB5SKR01

RFID compact station

FCC ID: Y7HZB5SK

Company:

SCHNEIDER ELECTRIC INDUSTRIES

Distribution: Mr CORAZZA

(Company: Schneider Electric Industries)

Number of pages: 5

Ed.	Date	Modified Page(s)	Technical Verification and Quality Approval	
			Name and Function	Visa
0	27-Apr-21	Creation	T. LEDRESSEUR, Radio Technician	

Duplication of this document is only permitted for an integral photographic facsimile. It includes the number of pages referenced here above.

This document is the result of testing a specimen or a sample of the product submitted. It does not imply an assessment of the conformity of the whole manufactured products of the tested sample.



DESIGNATION OF PRODUCT: ZB5SKR01 RFID compact station

Serial number (S/N): Without

Reference / model (P/N): ZB5SKR01

Software version: 1.05

MANUFACTURER: SCHNEIDER ELECTRIC INDUSTRIES

COMPANY SUBMITTING THE PRODUCT:

Company: SCHNEIDER ELECTRIC INDUSTRIES

Address: BLD SALVADOR ALLENDE
ZONE INDUSTRIELLE N°3
BP660
16340 L'ISLE D' ESPAGNAC
FRANCE

Responsible: Mr CORAZZA

Person present during the tests: Mr LAVIGNE (the first day)

DATE(S) OF TEST: From 7-Oct-20 to 29-Jun-21

TESTING LOCATION: EMITECH ANGERS laboratory at JUIGNE SUR LOIRE (49) FRANCE
FCC Accredited under US-EU MRA Designation Number: FR0009
Test Firm Registration Number: 873677

TESTED BY: S. LOUIS

VISA:



WRITTEN BY: S. LOUIS

CONTENTS

	<i>TITLE</i>	<i>PAGE</i>
1.	<i>INTRODUCTION.....</i>	<i>4</i>
2.	<i>PRODUCT DESCRIPTION</i>	<i>4</i>
3.	<i>NORMATIVE REFERENCE.....</i>	<i>5</i>
4.	<i>RF EXPOSURE.....</i>	<i>5</i>

1. INTRODUCTION

This report presents the results of radio test carried out on the following radio equipment: **ZB5SKR01 RFID compact station**, in accordance with normative reference.

The device under test integrates a RFID Radio part.

2. PRODUCT DESCRIPTION

Class:	B
Utilization:	Tag and barcode reader
Antenna type and gain:	integrated antenna, 0dBi
Operating frequency band:	From 13.110 MHz to 14.010 MHz
Channel spacing:	Not concerned
Modulation:	ASK
Power source:	24Vdc

Power level, frequency range and channels characteristics are not user adjustable.
The details pictures of the product and the circuit boards are joined with this file.

3. **NORMATIVE REFERENCE**

The standards and testing methods related throughout this report are those listed below.

They are applied on the whole test report even though the extensions (version, date and amendment) are not repeated.

CFR 47 (2020)	Radio Frequency Devices
ANSI C63.10	2013 Procedures for Compliance Testing of Unlicensed Wireless Devices.
447498 D01 General RF Exposure Guidance v06	RF Exposure procedures and equipment authorization policies for mobile and portable equipment
OET BULLETIN 65	Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields

4. **RF EXPOSURE**

MPE

Maximum measured power = 41.14 dB μ V/m = 0.0000433 mW at 13.56 MHz

with $P = (E \times d)^2 / (30 \times G_p)$ with $d = 10\text{ m}$ and $G_p = 1$

In accordance with KDB 447498 D01 General RF Exposure Guidance v06:

$$PSD = EIRP / (4 \times \pi \times R^2)$$

$$\Rightarrow 0.0000339 / (4 \times \pi \times (20\text{ cm})^2) = 0.0000000861\text{ mW/cm}^2 \text{ (limit = } 0.978\text{ mW/cm}^2 \text{)}$$

The equipment fulfils the requirements on power density for general population/uncontrolled exposure and therefore fulfils the requirements of 47 CFR §1.1310.