

## FCC MPE evaluation Report

Product name : NFC driver incl. antenna  
Applicant : Bosch Security Systems B.V.  
FCC ID : UX8-DCNM-FIDP  
IC : 1249D-DCNMFIDP

Test report No. : P000158766 05 Ver 1.10

## Laboratory information

### Accreditation

*Telefication complies with the accreditation criteria for test laboratories as laid down in ISO/IEC 17025:2017. The accreditation covers the quality system of the laboratory as well as the specific activities as described in the authorized annex bearing the accreditation number L021 and is granted on 30 November 1990 by the Dutch Council For Accreditation (RvA: Raad voor Accreditatie).*

Telefication is designated by the FCC as an Accredited Test Firm for compliance testing of equipment subject to Certification under Parts 15 & 18. The Designation number is: NL0001.

Telefication is a Wireless Device Testing laboratory recognized by Innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements.  
The Industry Canada company number for Telefication is: 4173A.

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### Documentation

The test report must always be reproduced in full; reproduction of an excerpt only is subject to written approval of the testing laboratory. The documentation of the testing performed on the tested devices is archived for 10 years at Telefication Netherlands.

### Testing Location

<b>Test Site</b>	Kiwa Telefication BV
<b>Test Site location</b>	Wilmersdorf 50 7327 AC Apeldoorn The Netherlands  Tel. +31 88998 3393
<b>Test Site FCC</b>	NL0001
<b>CABID</b>	NL0001

## Revision History

Version	Date	Remarks	By
V0.50	07-11-2022	Draft version	PS
V1.00	09-11-2022	Release version	PS
V1.10	08-12-2022	Revised version <ul style="list-style-type: none"><li>FCC ID changed</li></ul>	PS

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## 1 General Description

### 1.1 Applicant

**Client name:** Bosch Security Systems B.V.  
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**Zip code:** 5617 BA  
**Telephone:** +31 40 2577 044  
**E-mail:** Roel.vanzon@nl.bosch.com  
**Contact name:** Mr. Roel van Zon

### 1.2 Manufacturer

**Manufacturer name:** Bosch Security Systems B.V.  
**Address:** Torenallee 49  
**Zip code:** 5617 BA  
**Telephone:** +31 40 2577 044  
**E-mail:** Roel.vanzon@nl.bosch.com  
**Contact name:** Mr. Roel van Zon

### 1.3 Tested Equipment Under Test (EUT)

**Product name:** NFC panel  
**Brand name:** Bosch  
**FCC ID:** UX8-DCNM-FIDP  
**IC:** 1249D-DCNMFIDP  
**Product type:** NFC driver incl. antenna  
**Model:** DCNM-FIDP  
**Software version:** --  
**Hardware version:** --

## 1.4 MPE Measurement Evaluation

### 1.4.1 Maximum electric field strength

The electric field strength measurement result is given below.

Technology	Electric field strength (V/m)* at 3 m distance
NFC	0.0000126

\* from Telefication test report no: P000158766 01 Ver 1.00

### 1.4.2 MPE Limits (acc. to 47 CFR part 1 § 1.1310(e) (1) table 1)

Limits for occupational/controlled exposure

Frequency Range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm <sup>2</sup> )	Averaging time (minutes)
0.3 – 3.0	614	1.63	100 (see note 1)	≤6
3.0 – 30	1842/f	4.89/f	900/f <sup>2</sup> (see note 1)	≤6
30 – 300	61.4	0.163	1.0	≤6
300 – 1500	--	--	f/300	≤6
1500 – 100000	--	--	5	≤6

Limits for general population/uncontrolled exposure

Frequency Range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm <sup>2</sup> )	Averaging time (minutes)
0.3 – 1.34	614	1.63	100 (see note 1)	≤30
1.34 – 30	824/f	2.19/f	180/f <sup>2</sup> (see note 1)	≤30
30 – 300	27.5	0.073	0.2	≤30
300 – 1500	--	--	f/1500	≤30
1500 – 100000	--	--	1.0	≤30

Notes :

f = frequency in MHz

1: plane wave equivalent power density

### 1.4.3 MPE calculation

For general population/uncontrolled exposure

#### Calculation results

Technology	Frequency (MHz)	Electric field strength (V/m) at 3 m distance	Calculated field strength (V/m) at 3 mm distance	MPE limit (V/m)
NFC	13.56	0.0000126	12.589*	60.77

\*40 dB/dec extrapolation applied

### 1.5 Summary

The MPE calculated result meets the MPE limit

<-----END OF REPORT----->