

FCC / ISED RF Exposure Report

Product name : FLEXIDOME IP starlight 8000i
Applicant : Bosch Security Systems B.V.
FCC ID : 2ALVZ-NDE8000
ISED ID : 1249D-NDE8000

Test report No. : 170100199 MPE Ver 4.00

Laboratory information

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 Netherland

Testing Location

Test Site	Telefication BV
Test Site location	Edisonstraat 12a 6902 PK Zevenaar The Netherlands Tel. +31316583180 Fax. +31316583189
Test Site FCC	NL0001

Revision History

Version	Date	Remarks	By
v0.50	24-10-2018	Draft version	RvB
v1.00	24-10-2018	Release version	RvB
v2.00	26-10-2018	RSS-102 standard included	KR
v3.00	12-11-2018	Updated model naming	KR
v4.00	12-11-2018	Updated model naming	KR

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1 General Description

1.1 Applicant

Client name: Bosch Security Systems B.V.
Address: Torenallee 49, Eindhoven, The Netherlands
Zip code: 5617 BA
E-mail: Richard.greijmans@nl.bosch.com
Contact name: R. Greijmans

1.2 Manufacturer

Manufacturer name: Bosch Security Systems B.V.
Address: Torenallee 49, Eindhoven, The Netherlands
Zip code: 5617 BA
E-mail: Richard.greijmans@nl.bosch.com
Contact name: R. Greijmans

1.3 Tested Equipment Under Test (EUT)

Product name: FLEXIDOME IP starlight 8000i
Brand name: Bosch
Product type: Security camera
FCC ID: 2ALZV-NDE8000
ISED ID: 1249D-NDE8000
Model number: FLEXIDOME IP starlight 8000i
Variant Model(s): NDE-8502-R
NDE-8502-RT
NDE-8503-R
NDE-8503-RT
NDE-8504-R

Software version: v1.0
Hardware version: H12

1.4 MPE Calculation Method

Calculation method of RF Safety Distance:

$$PD = \frac{P_{out} * G}{4\pi r^2}$$

Where:

PD = Power Density in mW/cm^2

Pout = Output power in mW

G = Gain of antenna

R = Distance between observation point and centre of the radiator in cm

1.5 Antenna

Antenna type	FPC (flexible printed circuit board)
Antenna gain	1.61 dBi at 2.4 GHz

1.6 Calculation results

Frequency (MHz)	Max power (mW)	Antenna gain (numeric)	Distance (cm)	Power density (mW/cm^2)	FCC Limit (mW/cm^2)	ISED Limit (mW/cm^2)	Result
2412 - 2462	43.45	1.45	20	0.013	1	0.54	Pass

1.7 Limits

As specified in Table 1B of 47 CFR 1.1310 – Limits for Maximum Permissible Exposure (MPE), Limits for General Population/Uncontrolled Exposure.

Frequency Range (MHz)	Power Density (mW/cm^2)
300 - 1500	$f/1500$
1500 - 3000	1.0

Limits specified per RSS-102., Issue 5

Frequency Range (MHz)	Power Density (W/m^2)	Power Density (mW/cm^2)
300 - 6000	$0.02619 f^{0.6834}$	$mW/cm^2 = W/m^2 * 0.1$