




Test Report No.: FM2108WDG0406



# RF EXPOSURE REPORT

Applicant	Bosch Security Systems Inc
Address	130 Perinton Parkway, Fairport, New York, 14450 United States

Manufacturer or Supplier	Bosch Security Systems Inc
Address	130 Perinton Parkway, Fairport, New York, 14450 United States
Product	EVERSE Powered Speaker
Brand Name	
Model	EVERSE 8
Additional Model & Model Difference	N/A
Date of tests	Nov. 02, 2021 ~ Nov. 05, 2021

- FCC Part 2 (Section 2.1091)
- KDB 447498 D01
- IEEE C95.1

**CONCLUSION: The submitted sample was found to COMPLY with the test requirement**

Tested by Eric Fang  
Project Engineer / EMC Department

Approved by Glyn He  
Assistant Manager / EMC Department



Date: Dec. 09, 2021

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VERITAS**

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## RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
FM2108WDG0406	Original release	Dec. 09, 2021


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## 1. CERTIFICATION

<b>FCC ID:</b>	ESVEVERSE
<b>PRODUCT:</b>	EVERSE Powered Speaker
<b>BRAND NAME:</b>	
<b>MODEL NO.:</b>	EVERSE 8
<b>ADDITIONAL NO.:</b>	N/A
<b>APPLICANT:</b>	Bosch Security Systems Inc
<b>STANDARDS:</b>	FCC Part 2 (Section 2.1091)
	KDB 447498 D01
	IEEE C95.1



## 2. RF EXPOSURE LIMIT

### LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

FREQUENCY RANGE (MHz)	ELECTRIC FIELD STRENGTH (V/m)	MAGNETIC FIELD STRENGTH (A/m)	POWER DENSITY (mW/cm <sup>2</sup> )	AVERAGE TIME (minutes)
<b>LIMITS FOR GENERAL POPULATION / UNCONTROLLED EXPOSURE</b>				
300-1500	...	...	F/1500	30
1500-100,000	...	...	1.0	30

F = Frequency in MHz

## 3. MPE CALCULATION FORMULA

$$Pd = (Pout * G) / (4 * pi * r^2)$$

where

Pd = power density in mW/cm<sup>2</sup>

Pout = output power to antenna in mW

G = gain of antenna in linear scale

Pi = 3.1416

R = distance between observation point and center of the radiator in cm

## 4. CLASSIFICATION

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user. So, this device is classified as **Mobile Device**.



## 5. ANTENNA GAIN

The antennas provided to the EUT, please refer to the following table:

Transmitter Circuit	Peak Gain (dBi)	Antenna Type
Chain 0	4	PCB Antenna

## 6. CALCULATION RESULT OF MAXIMUM CONDUCTED AV POWER

The tuned conducted Average Power (declared by client)

Mode	Frequency (MHz)	Target Power (dBm)	Tolerance (dBm)	Lower Tolerance (dBm)	Upper Tolerance (dBm)
GFSK	2402-2480	3	+2	1	5
8DPSK	2402-2480	3	+2	1	5
BT-LE 1M	2402-2480	0	+2	-2	2
BT-LE 2M	2402-2480	0	+2	-2	2

The measured conducted Average Power

Mode	Frequency (MHz)	Averaged Power (dBm)
GFSK	2402	3.81
8DPSK	2402	3.57
BT-LE 1M	2402	0.65
BT-LE 2M	2402	0.55

FREQUENCY BAND (MHz)	MAX AVERAGE POWER (dBm)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/cm <sup>2</sup> )	LIMIT (mW/cm <sup>2</sup> )
2402-2480	5	4	20	0.00158	1.0

--- END ---