


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	 Electro-Voice
Model	EVERSE 8
Additional Model & Model Difference	EVERSE 12
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 Loren Luo
Project Engineer / EMC Department

Approved by Glyn He
Assistant Manager / EMC Department




Date: May 08, 2023

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Test Report No.: FM2302WDG0253

Table of Contents

RELEASE CONTROL RECORD	3
1. CERTIFICATION.....	4
2. RF EXPOSURE LIMIT	5
3. MPE CALCULATION FORMULA.....	5
4. CLASSIFICATION	5
5. ANTENNA GAIN	6
6. CALCULATION RESULT OF MAXIMUM CONDUCTED POWER.....	6



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Test Report No.: FM2302WDG0253

RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
FM2108WDG0406	Original release	Dec. 09, 2021
FM2302WDG0253	Based on the original report FM2108WDG0406 to updated: 1:Increase the appearance size of the product 2.Loudspeakers change from 8 "to 12" 3.Rechange the BT antenna model and antenna gain 4. Add additional model But it doesn't need to be retested after engineer evaluated.	May 08, 2023


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1. CERTIFICATION

FCC ID:	ESVEVERSE
PRODUCT:	EVERSE Powered Speaker
BRAND NAME:	
MODEL NO.:	EVERSE 8
ADDITIONAL NO.:	EVERSE 12
APPLICANT:	Bosch Security Systems Inc
STANDARDS:	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 ²)	AVERAGE TIME (minutes)
LIMITS FOR GENERAL POPULATION / UNCONTROLLED EXPOSURE				
300-1500	F/1500	30
1500-100,000	1.0	30

F = Frequency in MHz

3. MPE CALCULATION FORMULA

$$P_d = (P_{out} * G) / (4 * \pi * r^2)$$

where

P_d = power density in mW/cm²

P_{out} = output power to antenna in mW

G = gain of antenna in linear scale

π = 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	4.02	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 ²)	LIMIT (mW/cm ²)
2402-2480	5	4.02	20	0.00159	1.0

--- END ---