

EMF TEST REPORT

Test Report No. : OT-209-RWD-011
Reception No. : 2008003257
Applicant : Continental Automotive Systems Corporation
Address : 45-29, Saeum-ro, Icheon-si, Gyeonggi-Do, Korea
Manufacturer : Continental Automotive Systems Corporation
Address : 45-29, Saeum-ro, Icheon-si, Gyeonggi-Do, Korea
Type of Equipment : Smart Key Fob
FCC ID. : SY5MQ4FGE03
Model Name : SVI-MQ4FGE03
Multiple Model Name : N/A
Serial number : N/A
Total page of Report : 7 pages (including this page)
Date of Incoming : August 26, 2020
Date of issue : September 08, 2020

SUMMARY

The equipment complies with the regulation; *FCC PART 15 SUBPART C Section 15.209 and Section 15.231*

This test report only contains the result of a single test of the sample supplied for the examination.

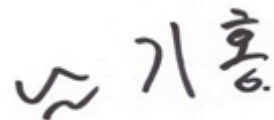
It is not a generally valid assessment of the features of the respective products of the mass-production.



Tested by
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Revision History

Rev. No.	Issue Report No.	Issued Date	Revisions	Section Affected
0	OT-209-RWD-011	September 08, 2020	Initial Issue	All

1. VERIFICATION OF COMPLIANCE

Applicant : Continental Automotive Systems Corporation
Address : 45-29, Saeum-ro, Icheon-si, Gyeonggi-Do, Korea
Contact Person : S. M. Jang / Representative
Telephone No. : 82-31-645-4864
FCC ID : SY5MQ4FGE03
Model Name : SVI-MQ4FGE03
Serial Number : N/A

EQUIPMENT CLASS	DSC - Part 15, Security/Remote Control Transmitter
E.U.T. DESCRIPTION	Smart Key Fob
THIS REPORT CONCERNS	Original Grant
MEASUREMENT PROCEDURES	ANSI C63.10: 2013
TYPE OF EQUIPMENT TESTED	Pre-Production
KIND OF EQUIPMENT AUTHORIZATION REQUESTED	Certification
EQUIPMENT WILL BE OPERATED UNDER IC RULES PART(S)	FCC PART 15 SUBPART C Section 15.209 and Section 15.231
Modifications on the Equipment to Achieve Compliance	None
Final Test was Conducted On	3 m, Semi Anechoic Chamber

-. The above equipment was tested by ONETECH Corp. for compliance with the requirement set forth in the FCC Rules and Regulations. This said equipment in the configuration described in this report, shows the maximum emission levels emanating from equipment are within the compliance requirements.

2. GENERAL INFORMATION

2.1 Product Description

The Continental Automotive Systems Corporation, Model: SVI-MQ4FGE03 (referred to as the EUT in this report) is a Transmitter that it controls locking and unlocking the door of a vehicle. Product specification information described herein was obtained from product data sheet or user's manual.

CHASSIS TYPE	Plastic
TX FREQUENCY	433.92 MHz
RX FREQUENCY	125 kHz
MAX. RF OUTPUT POWER	84.60 dB μ V/m
MODULATION	FSK
LIST OF EACH OSC. OR CRY. FREQ.(FREQ. $\geq$ 1 MHz)	27.6 MHz
DUTY CYCLE FACTOR	9.68 dB (Duty Cycle : 32.8 %)
ANTENNA TYPE	Built-in on the PCB in EUT
ANTEENA GAIN	-24.14 dBi
RATED SUPPLY VOLTAGE	DC 3 V from the battery

2.2 Alternative type(s)/model(s); also covered by this test report.

-. None

3. EUT MODIFICATIONS

-. None

4. RF Exposure Evaluation

4.1 Standard Applicable

According to 1.1307 (b)(1), systems operating under the provisions of this section shall be operated in a manner that ensure that the public is not exposed to radio frequency energy level in excess of the Commission's guideline.

According to the procedure, KDB 447498 D06, the standalone SAR test exclusion threshold is

$$[(\text{Max. Power of channel, including tune-up tolerance, mW})/(\text{Mim. test separation distance, mm})] \times [\sqrt{f(\text{GHz})}] < 3$$

4.2 EUT Description

Operating Frequency Band	TX: 433.92 MHz RX: 125 kHz
MAX. RF OUTPUT POWER	84.60 dBμV/m
Antenna Gain	-24.14 dBi
Exposure Evaluation Applied	☐ MPE ☐ SAR ☒ SAR Exemption

4.3 Test Result of SAR Exclusion for Portable Devices

$[(\text{Max. Power of channel, including tune-up tolerance, mW})/(\text{Min. test separation distance, mm})] \times [\sqrt{f(\text{GHz})}]$

$$= (2.69/5) \times \sqrt{0.43392} = 0.35 < 3$$

Conclusion: The SAR test exclusion threshold is less than 3, so the device meets the RF Exposure Requirement and excluded SAR Test.

Frequency (MHz)	Target Power W/tolerance (dBm)	Max tune up power (dBm)	Max tune up power (mW)	Separation distance (mm)	RF exposure
433.92	3.80 ± 0.5	4.30	2.69	5	0.35