

RF Exposure Report

Project Number: 3953917

Report Number: 3953917EMC04

Revision Level: 0

Client: Continental Automotive Systems, Inc.

Equipment Under Test: Wireless Modem Module with WiFi

Model Name: FANW

FCC ID: LHJ-FANW

IC ID: 2807E-FANW

Applicable Standards: FCC Part 15 Subpart C, § 15.247 / § 15.407

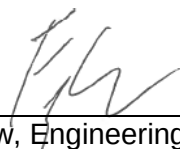
47 C.F.R. §§ 2.1091 and 2.1093; FCC KDB 447498

FCC OET Bulletin 65 Supplement

Report issued on: 19 May 2016

Test Result: Compliant

Tested by:


Fendy Liauw, Engineering Technician

Reviewed by:


Jeremy Pickens, Senior EMC Engineer

Remarks:

This report details the results of the testing carried out on one sample, the results contained in this test report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

This report may only be reproduced and distributed in full. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards. Any mention of SGS International Electrical Approvals or Testing done by SGS International Electrical Approvals in connection with distribution or use of the product described in this report must be approved by SGS international Electrical Approvals in writing.

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1 General Information

1.1 Client Information

Name: Continental Automotive System, Inc.
Address: 21440 West Lake Cook Road
City, State, Zip, Country: Deer Park, IL 60010, USA

1.2 Test Laboratory

Name: SGS North America, Inc.
Address: 620 Old Peachtree Road NW, Suite 100
City, State, Zip, Country: Suwanee, GA 30024, USA

Accrediting Body: A2LA
Type of lab: Testing Laboratory
Certificate Number: 3212.01

1.3 General Information of EUT

Type of Product: Wireless Modem Module w/ WiFi
Model Number: FANW
Serial Number: CM082715B000193
FCC ID: LHJ-FANW
IC ID: 2807E-FANW
IMEI Number: 004401810201935
Firmware Version: 10.01

Frequency Range: 2400-2483.5MHz / 5150 to 5250 MHz / 5725 to 5825MHz
Data Modes: 802.11b, 802.11g, 802.11a, 802.11n (HT20), 802.11n (HT40)
Antenna: Not specified – professional installation only

Rated Voltage: 10.2 – 13.8Vdc
Test Voltage: 12Vdc

Sample Received Date: 29 March 2016

1.4 Operating Modes and Conditions

For this assessment, the EUT's maximum power including the maximum tolerance was considered.

2 RF Exposure

2.1 Test Result

Test Description	Product Specific Standard	Test Result
RF Exposure	FCC Part 1.1310	Compliant

2.2 Test Method

Using the maximum power, the power density was calculated. Maximum antenna gain was assumed for this exercise.

2.3 Single transmission RF Exposure Levels

Band of Operation		Conducted Power w/tolerance dBm	Antenna Gain	Cable Loss	Average EIRP		Distance (R) cm	Power Density $EIRP_{avg}/(4\pi R^2)$ mW/cm ²	FCC mW/cm ²	% of Limit	Verdict
Type	MHz				dBm	mW					
WLAN 2.4	2400-2483.5	18.3	2.0	0.0	20.3	107	20	0.021	1.00	2%	Pass
WLAN 5 GHz (UNII-1)	5150-5250	15.8	2.0	0.0	17.8	60	20	0.012	1.00	1%	Pass
WLAN 5.8 GHz (UNII-3)	5725-5850	15.6	2.0	0.0	17.6	58	20	0.011	1.00	1%	Pass

3 Revision History

Revision Level	Description of changes	Revision Date
0	Initial release	19 May 2016