

RF Exposure Evaluation

Project Number: 4348586

Report Number: 4348586EMC05

Report Number: 3

Client: United Technologies Electronic Controls Inc.

Equipment Under Test: Micro-Link 5 Controller

Model Number: ML5

FCC ID: 2AK6N-MICROLINK5

Applicable Standards: 47 CFR §§ 2.1091 and 2.1093;

FCC KDB 447498 D01 General RF Exposure Guidance v06

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.

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1 General Information

1.1 *Client Information*

Name: United Technologies Electronic Controls Inc.
Address: 3650 W Hwy 200 N
City, State, Zip, Country: Huntington, IN 46750 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*

Product Marketing Name (PMN): Micro-Link 5 Controller
Model Number (HVIN): ML5
Firmware Version (FVIN): 8.9.0.0.79
Serial Number: 3318W000118

Frequency Bands: 2400-2483.5 MHz
Antenna: PCB Trace Inverted F 4.54 dBi

Rated Voltage: 5 Vdc
Test Voltage: 5 Vdc

Sample Received Date: 8/7/2018
Dates of testing: 11/5/2018-12/17/2018

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 (mW/cm^2)

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	14.1	4.5	0.0	18.6	73	20	0.015	1.00	1%	Pass

3 Revision History

Revision Level	Description of changes	Revision Date
DRAFT	--	
0	Initial release	27 November 2018
1	Client changed to UTEC, FVIN added to section 1.3	2 April 2019
2	Added FCC ID	16 April 2019
3	Updated FVIN at client's request	6 May 2019