

# 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<sup>2</sup>)

Type	Band of Operation		Conducted Power w/tolerance dBm	Antenna Gain	Cable Loss	Average EIRP		Distance (R) cm	Power Density EIRP <sub>Avg</sub> /(4πR <sup>2</sup> ) mW/cm <sup>2</sup>	FCC mW/cm <sup>2</sup>	% of Limit	Verdict
	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