



## FCC RF EXPOSURE REPORT

*For*

**Wifi Gateway**  
**MODEL NUMBER: GTW0000WT0**

**FCC ID: 2AJCX-LEGWW**

**REPORT NUMBER: 4788097701-2**

**ISSUE DATE: September 29, 2017**

*Prepared for*

**CAREL INDUSTRIES S.p.A.**  
**via dell'Industria, 11 - 35020 Brugine, PD – ITALY**

*Prepared by*

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Revision History

Rev.	Issue Date	Revisions	Revised By
--	09/29/17	Initial Issue	

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## 1. ATTESTATION OF TEST RESULTS

### Applicant Information

Company Name: CAREL INDUSTRIES S.p.A.  
Address: via dell'Industria, 11 - 35020 Brugine, PD – ITALY

### Manufacturer Information

Company Name: CAREL INDUSTRIES S.p.A.  
Address: via dell'Industria, 11 - 35020 Brugine, PD – ITALY

### Factory Information

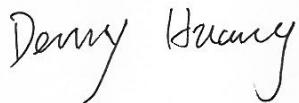
Company Name: CAREL INDUSTRIES S.p.A.  
Address: via dell'Industria, 11 - 35020 Brugine, PD – ITALY

### EUT Description

Product Name: Wifi Gateway  
Brand Name: CAREL  
Model Name: GTW0000WT0  
Date Tested: September 01, 2017 ~ September 22, 2017

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
FCC 47CFR§2.1091	Complies

Tested By:



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Denny Huang  
Engineer Project Associate

Checked By:



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Shawn Wen  
Laboratory Leader

Approved By:



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Stephen Guo  
Laboratory Manager

## 2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091.

## 3. FACILITIES AND ACCREDITATION

Test Location	Dongguan Dongdian Testing Service Co., Ltd
Address	No. 17, Zongbu Road 2, Songshan Lake Sci&Tech Park, Dongguan City, Guangdong Province, 523808, China
Accreditation Certificate	<p>Dongguan Dongdian Testing Service Co., Ltd. EMC Laboratory has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025: 2005 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing. Valid time is until January 31, 2018.</p> <p>Dongguan Dongdian Testing Service Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is maintained in our files. Registration 270092, Renewal date March 11, 2015, valid time is until March 11, 2018.</p> <p>The 3m Alternate Test Site of Dongguan Dongdian Testing Service Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for the performance of radiated measurements with Registration No. 10288A on April 23, 2015, valid time is until April 23, 2018.</p>

## 4. REQUIREMENT

### LIMIT AND CALCULATION METHOD

Systems operating under the provisions of FCC 47 CFR section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as mobile device whereby a distance of 0.2m normally can be maintained between the user and the device, and below RF Permissible Exposure limit shall comply with.

Limits for General Population/Uncontrolled Exposure

### RF EXPOSURE LIMIT

Frequency Range (MHz)	E-field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm <sup>2</sup> )	Averaging Time  E  <sup>2</sup> ,  H  <sup>2</sup> or S (Minutes)
0.3 -- 1.34	614	1.63	(100)*	30
1.34 -- 30	824/f	2.19/f	(180/f <sup>2</sup> )*	30
30 -- 300	27.5	0.073	0.2	30
300 -- 1500	--	--	f/1500	30
1500 -- 100,000	--	--	1.0	30

### CALCULATION METHOD

$$S = PG/4\pi R^2$$

Where:

S=power density

P=power input to antenna

G=power gain of the antenna in the direction of interest relative to an isotropic radiator

R=distance to the center of radiation of the antenna

## **CALCULATED RESULTS**

WiFi Mode(WORST-CASE)					
Frequency	Output Power	Output Power	Power Density	Limit	Test Result
MHz	dBm	mW	mW/cm <sup>2</sup>	mW/cm <sup>2</sup>	--
2412~2462	18	63.1	0.028	1.0	Complies

Note: 1. Antenna Gain=3.47dBi (Numeric 2.22),  $\pi=3.141$ .  
2. The power comes from turn up power which declared by customer.  
3. The minimum separation distance of the device is greater than 20 cm.  
4. Calculate by WORST-CASE mode.  
5. Owing to the maximum Calculated Result is below the limit, so it deemed to comply with the basic restrictions without testing which means that no SAR is required.  
6. EUT has an external antenna with a non-standard antenna connector.

## **END OF REPORT**