

## RF Exposure Report

**Report No.:** SA190419C15

**FCC ID:** 2AJCX-BOSS-MINI1

**Test Model:** Yboss mini

**Series Model:** Yboss miniXX (where "Y" may be symbol and "X" may be any alphanumeric character, "-" or blank)

**Received Date:** Apr. 19, 2019

**Test Date:** May 06 ~ May 10, 2019

**Issued Date:** May 17, 2019

**Applicant:** Carel Industries s.p.a.

**Address:** Via dell Industria 11 35020 Brugine (PD) Italy

**Issued By:** Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch

**Lab Address:** No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan, R.O.C.

**Test Location:** No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City 33383, TAIWAN (R.O.C.)

**FCC Registration /  
Designation Number:** 788550 / TW0003



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### Release Control Record

Issue No.	Description	Date Issued
SA190419C15	Original release.	May 17, 2019

# 1 Certificate of Conformity

**Product:**  BOSS mini

**Brand:** CAREL

**Test Model:** Yboss mini

**Series Model:** Yboss miniXX (where "Y" may be symbol and "X" may be any alphanumeric character, "-" or blank) (Refer to note)

**Sample Status:** Engineering sample

**Applicant:** Carel Industries s.p.a.

**Test Date:** May 06 ~ May 10, 2019

**Standards:** FCC Part 2 (Section 2.1091)

KDB 447498 D01 General RF Exposure Guidance v06

IEEE C95.1-1992

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's RF characteristics under the conditions specified in this report.

**Prepared by :**  , **Date:** May 17, 2019  
Polly Chien / Specialist

**Approved by :**  , **Date:** May 17, 2019  
Bruce Chen / Project Engineer

Note: All models are listed as below. Model: Yboss mini (EUT1) was chosen for final test.

Brand	Model	Difference	
CAREL	Yboss mini	EUT1	i.MX 6Quad, DDR3 1066 MHz 2G, 16G Emmc, micro hdmi:1920*1080, M.2 WiFi module
		EUT2	i.MX 6 Dual-lite, DDR3 1066 MHz 1G, 8G Emmc
	Yboss miniXX	1. For marketing purpose only 2. Yboss miniXX (where "Y" may be symbol and "X" may be any alphanumeric character, "-" or blank)	

## 2 RF Exposure

### 2.1 Limits for Maximum Permissible Exposure (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm <sup>2</sup> )	Average Time (minutes)
Limits For General Population / Uncontrolled Exposure				
300-1500	...	...	F/1500	30
1500-100,000	...	...	1.0	30

F = Frequency in MHz

### 2.2 MPE Calculation Formula

$$P_d = (P_{out} \cdot G) / (4 \cdot \pi \cdot r^2)$$

where

$P_d$  = power density in mW/cm<sup>2</sup>

$P_{out}$  = output power to antenna in mW

$G$  = gain of antenna in linear scale

$\pi$  = 3.1416

$R$  = distance between observation point and center of the radiator in cm

### 2.3 Classification

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user. So, this device is classified as Mobile Device.

## 3 Calculation Result of Maximum Conducted Power

Frequency Band (MHz)	Max Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )
WLAN 2412~2462	16.91	2.89	20	0.019	1

Note: Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

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