

# **RF Exposure Report**

Report No.: SA190315C13

FCC ID: LHJ-BL28RW001

Test Model: BL28RW-001

Received Date: Mar. 15, 2019

Test Date: Apr. 02 ~ Apr. 08, 2019

**Issued Date:** Apr. 16, 2019

**Applicant:** Continental Automotive Systems

Address: 21440 West Lake Cook Road Deer Park, IL 60010 United States

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 / 788550 / TW0003

**Designation Number:** 





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The report must not be used by the client to claim product certification, approval, or endorsement by TAF or any government agencies.

Report No.: SA190315C13 Page No. 1 / 5 Report Format Version: 6.1.1



# **Table of Contents**

Rele	ease Control Record	3
1	Certificate of Conformity	4
2	•	
	1 Limits for Maximum Permissible Exposure (MPE)	
	3 Classification	
3	Calculation Result of Maximum Conducted Power	5



# **Release Control Record**

Issue No.	Description	Date Issued
SA190315C13	Original release	Apr. 16, 2019



#### 1 Certificate of Conformity

Product: BL28RW-001 Module

**Brand:** Continental

Test Model: BL28RW-001

Sample Status: Engineering sample

**Applicant:** Continental Automotive Systems

**Test Date:** Apr. 02 ~ Apr. 08, 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: Apr. 16, 2019

Pettie Chen / Senior Specialist

Approved by: , Date: Apr. 16, 2019

Bruce Chen / Project Engineer



## 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/cm²)	Average Time (minutes)				
Limits For General Population / Uncontrolled Exposure								
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				

f = Frequency in MHz; \*Plane-wave equivalent power density

#### 2.2 MPE Calculation Formula

 $Pd = (Pout*G) / (4*pi*r^2)$ 

where

Pd = power density in mW/cm<sup>2</sup>

Pout = 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 22cm away from the body of the user. So, this device is classified as **Mobile Device**.

#### 3 Calculation Result of Maximum Conducted Power

Function	Frequency Band (MHz)	Max Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm²)	Limit (mW/cm <sup>2</sup> )
GSM 850	824.2-848.8	33.19	2	22	0.543	0.551
GSM 1900	1850.2-1909.8	29.74	2	22	0.245	1
WCDMA Band 2	1852.4-1907.6	23.60	2	22	0.060	1
WCDMA Band 4	1712.4-1752.6	23.81	2	22	0.063	1
WCDMA Band 5	826.4-846.6	24.26	2	22	0.069	0.551
LTE Band 2	1850.7-1909.3	23.35	2	22	0.056	1
LTE Band 5	824.7-848.3	24.49	2	22	0.073	0.551
LTE Band 4	1710.7-1754.3	23.75	2	22	0.062	1
LTE Band 7	2502.5-2567.5	23.66	2	22	0.061	1

Note: The Max Power = Max tune up power

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