

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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Table of Contents

Release Control Record	3
1 Certificate of Conformity	4
2 RF Exposure	5
2.1 Limits for Maximum Permissible Exposure (MPE).....	5
2.2 MPE Calculation Formula	5
2.3 Classification	5
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 : Pettie Chen , **Date:** Apr. 16, 2019
Pettie Chen / Senior Specialist

Approved by : Bruce Chen , **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/cm ²)	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 ²)*	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

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

where

P_d = power density in mW/cm²

P_{out} = output power to antenna in mW

G = gain of antenna in linear scale

π = 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/cm ²)	Limit (mW/cm ²)
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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