

## RF EXPOSURE REPORT

Applicant	TCL Technoly Electronics(Huizhou) Co., Ltd
Address	Section 37, Zhongkai High-tech Development Zone, Huizhou City, Guang Dong Province, China 516006

Manufacturer or Supplier	CL Technoly Electronics(Huizhou) Co., Ltd			
Address	Section 37, Zhongkai High-tech Development Zone, Huizhou City, Guang Dong Province, China 516006			
Product	Wireless Module			
Brand Name	N/A			
Model	TWM-CC8520			
Additional Model & Model Difference	N/A			
Date of tests	Sep. 09, 2019 ~ Sep. 30, 2019			

- **⋈** KDB 447498 D01
- **⊠** IEEE C95.1

#### CONCLUSION: The submitted sample was found to COMPLY with the test requirement

Tested by Tom Chen Project Engineer / EMC Department	Approved by Glyn He Supervisor/ EMC Department

Date: Oct. 28, 2019

This report is governed by, and incorporates by reference, CPS Conditions of Service as posted at the date of issuance of this report at <a href="http://www.bureauveritas.com/home/about-us/our-business/cps/about-us/terms-conditions/and">http://www.bureauveritas.com/home/about-us/our-business/cps/about-us/terms-conditions/and</a> is intended for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. Measurement uncertainty is only provided upon request for accredited tests. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence or if you require measurement uncertainty; provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute you unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents.

Bureau Veritas Shenzhen Co., Ltd. Dongguan Branch

No. 34, Chenwulu Section, Guantai Rd., Houjie Town, Dongguan City, Guangdong 523942, China Tel: +86 769 8998 2098 Fax: +86 769 8593 1080



# **Table of Contents**

RELE	EASE CONTROL RECORD	3
1.	CERTIFICATION	4
	RF EXPOSURE LIMIT	
	MPE CALCULATION FORMULA	
	CLASSIFICATION	
	ANTENNA GAIN	
6	CALCULATION RESULT OF MAXIMUM CONDUCTED POWER	6

Tel: +86 769 8998 2098 Fax: +86 769 8593 1080

Email: <a href="mailto:customerservice.dg@cn.bureauveritas.com">customerservice.dg@cn.bureauveritas.com</a>



### **RELEASE CONTROL RECORD**

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
FM190909N038-1	Original release	Oct. 28, 2019

Tel: +86 769 8998 2098 Fax: +86 769 8593 1080



### 1. CERTIFICATION

FCC ID:	ZVA15
PRODUCT:	Wireless Module
BRAND NAME:	N/A
MODEL NO.:	TWM-CC8520
ADDITIONAL NO.:	N/A
APPLICANT: TCL Technoly Electronics(Huizhou) Co., Ltd	
STANDARDS:	FCC Part 2 (Section 2.1091)
	KDB 447498 D01
	IEEE C95.1

Tel: +86 769 8998 2098 Fax: +86 769 8593 1080



#### 2. RF EXPOSURE LIMIT

#### LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

FREQUENCY RANGE (MHz)	ELECTRIC FIELD MAGNETIC FIELD STRENGTH (V/m) STRENGTH (A/m)		POWER DENSITY (mW/cm²)	AVERAGE TIME (minutes)	
LIMITS FOR GENERAL POPULATION / UNCONTROLLED EXPOSURE					
300-1500			F/1500	30	
1500-100,000			1.0	30	

F = Frequency in MHz

#### 3. 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

#### 4. 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**.

Tel: +86 769 8998 2098 Fax: +86 769 8593 1080

Email: <u>customerservice.dg@cn.bureauveritas.com</u>

Page 5 of 6



#### 5. ANTENNA GAIN

The antennas provided to the EUT, please refer to the following table:

Transmitter Circuit	Peak Gain (dBi)	Antenna Type
Chain 0	3.62	PCB Antenna

#### 6. CALCULATION RESULT OF MAXIMUM CONDUCTED AV POWER

The tuned conducted Average Power (declared by client)

Mode	Frequency (MHz)	Target Power (dBm)	Tolerance (dBm)	Lower Tolerance (dBm)	Upper Tolerance (dBm)
FSK	2406-2474	10	+-2	8	12

The measured conducted Average Power

Mode	Frequency (MHz)	Averaged Power (dBm)
FSK	2406	10.68

FREQUENCY BAND (MHz)	MAX AVERAGE POWER (dBm)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/cm²)	LIMIT (mW/cm²)
2406-2474	12	3.62	20	0.0072565	1.0

--- END ---

Tel: +86 769 8998 2098 Fax: +86 769 8593 1080