

RF EXPOSURE REPORT

Applicant	Clarion Co., Ltd.
Address	6F, No.40, Guanri Road, Software Park Stage II, Xiamen, China

Manufacturer or Supplier	Clarion Co., Ltd.		
Address	6F, No.40, Guanri Road, Software Park Stage II, Xiamen, China		
Product	Audio Display		
Brand Name	Clarion		
Model	PP-4330		
Additional Model & Model Difference	N/A		
Date of tests	Aug. 27, 2020 ~ Sep. 24, 2020		
FCC Part 2 (Section 2.1091)			

KDB 447498 D01

IEEE C95.1

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

Tested by Madison Luo Assistant Manager / EMC Department	Approved by Chris Chen Manager / EMC Department			
Ann	Avris			
	Date: Oct. 09, 2020			
This report is governed by, and incorporates by reference, CPS Conditions of Service as posted at the date of issuance of this report at http://www.bureauveritas.com/home/about-us/our-business/cps/about-us/terms-conditions/and 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. 96, Guantai Road (Houjie Section), Houjie Town, Dongguan City, Guangdong Province. 523942. People's Republic of China.



Table of Contents

RELE	ASE CONTROL RECORD	3
	CERTIFICATION RF EXPOSURE LIMIT	
3.	MPE CALCULATION FORMULA	5
5.	ANTENNA GAIN	6
6.	CALCULATION RESULT OF MAXIMUM CONDUCTED POWER	6



RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
FM2008WDG0104	Original release	Oct. 09, 2020

Bureau Veritas Shenzhen Co., Ltd. Dongguan Branch No. 96, Guantai Road (Houjie Section), Houjie Town, Dongguan City, Guangdong Province. 523942. People's Republic of China.



1. CERTIFICATION

FCC ID:	WY2-PP4330		
PRODUCT:	Audio Display		
BRAND NAME:	Clarion		
MODEL NO.:	PP-4330		
ADDITIONAL NO.:	N/A		
APPLICANT:	Clarion Co., Ltd.		
STANDARDS:	FCC Part 2 (Section 2.1091)		
	KDB 447498 D01		
	IEEE C95.1		

Bureau Veritas Shenzhen Co., Ltd. Dongguan Branch No. 96, Guantai Road (Houjie Section), Houjie Town, Dongguan City, Guangdong Province. 523942. People's Republic of China.



2. RF EXPOSURE LIMIT

LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

FREQUENCY RANGE (MHz)	ELECTRIC FIELDMAGNETIC FIELDSTRENGTH (V/m)STRENGTH (A/m)		POWER DENSITY (mW/cm ²)	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

 $Pd = power density in mW/cm^2$

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**.



5. ANTENNA GAIN

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

Transmitter Circuit	Peak Gain (dBi)	Antenna Type	
Wi-Fi 2.4GHz	-0.38	PCB Antenna	
BT	0	PCB Antenna	

6. CALCULATION RESULT OF MAXIMUM CONDUCTED AV POWER

Mode	Frequency (MHz)	Target Power (dBm)	Tolerance (dBm)	Lower Tolerance (dBm)	Upper Tolerance (dBm)
GFSK	2402-2480	-1	+-2	-3	1
8DPSK	2402-2480	-1	+-2	-3	1
802.11b	2412-2462	13	+-2	11	15
802.11g	2412-2462	13	+-2	11	15
802.11n HT20	2412-2462	13	+-2	11	15

The tuned conducted Average Power (declared by client)

The measured conducted Average Power

Mode	Frequency (MHz)	Averaged Power (dBm)
GFSK	2402	-1.22
8DPSK	2402	-0.29
802.11b	2462	13.11
802.11g	2437	12.69
802.11n HT20	2437	12.38

No. 96, Guantai Road (Houjie Section), Houjie Town, Dongguan City, Guangdong Province. 523942. People's Republic of China.



FREQUENCY BAND (MHz)	MAX AVERAGE POWER (dBm)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/cm ²)	LIMIT (mW/cm²)
BT	1	0	20	0.000250	1
Wi-Fi 2.4GHz	15	-0.38	20	0.005763	1

CONCLUSION:

The BT and WIFI can transmit simultaneously, the formula of calculated the MPE is:

CPD1 / LPD1 + CPD2 / LPD2 +etc. < 1

CPD = Calculation power density

LPD = Limit of power density

(0.000250/1)+(0.005763/1) = 0.006013 < 1, which is less than the "1" limit.

--- END ---

Bureau Veritas Shenzhen Co., Ltd. Dongguan Branch

No. 96, Guantai Road (Houjie Section), Houjie Town, Dongguan City, Guangdong Province. 523942. People's Republic of China.