

RF EXPOSURE REPORT

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

Manufacturer or Supplier	Faurecia Clarion Electronics Co., Ltd.
Address	7-2 Shintoshin, Chuo-ku, Saitama-shi, Saitama, 330-0081, Japan
Product	CAR AUDIO
Brand Name	CLARION
Model	P2202
Additional Model & Model Difference	N/A
Date of tests	Mar. 15, 2023 ~ Apr. 11, 2023

☒ **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 Andy Zhu Supervisor / EMC Department	Approved by Glyn He Assistant Manager / EMC Department
	

Date: Apr. 23, 2023

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Table of Contents

RELEASE CONTROL RECORD	3
1. CERTIFICATION.....	4
2. RF EXPOSURE LIMIT	5
3. MPE CALCULATION FORMULA.....	5
4. CLASSIFICATION	5
5. ANTENNA GAIN	6
6. CALCULATION RESULT OF MAXIMUM CONDUCTED POWER.....	6



Test Report No.: FM2303WDG0070

RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
FM2303WDG0070	Original release	Apr. 23, 2023

1. CERTIFICATION

FCC ID:	WY2P2202
PRODUCT:	CAR AUDIO
BRAND NAME:	CLARION
MODEL NO.:	P2202
ADDITIONAL NO.:	N/A
APPLICANT:	Faurecia Clarion Electronics (Xiamen) Co., Ltd.
STANDARDS:	FCC Part 2 (Section 2.1091)
	KDB 447498 D01
	IEEE C95.1

2. RF EXPOSURE LIMIT

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				
300-1500	...	...	F/1500	30
1500-100,000	...	...	1.0	30

F = Frequency in MHz

3. 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

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:

Function	Peak Gain (dBi)	Antenna Type
BT	2.7	FPC Antenna
WIFI	4.1	FPC 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)
GFSK	2402 ~ 2480	-1	+/-2	-3	1
8DPSK	2402 ~ 2480	-2	+/-2	-4	0
5GHz Wi-Fi (U-NII-3)	5725 ~ 5850	13	+/-2	11	15

The measured conducted Average Power

Mode	Frequency (MHz)	Averaged Power (dBm)
GFSK	2480	-0.93
8DPSK	2480	-1.38
5GHz Wi-Fi (U-NII-3)	5825	13.78

FREQUENCY BAND (MHz)	MAX AVERAGE POWER (dBm)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/cm ²)	LIMIT (mW/cm ²)
2402 ~ 2480	1	2.7	20	0.00047	1.0
5725 ~ 5850	15	4.1	20	0.01617	1.0

CONCLUSION:

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

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

CPD = Calculation power density

LPD = Limit of power density

Worst situation is $(0.00047/1) + (0.01617/1) = 0.017 < 1$, which is less than the "1" limit.

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