

FCC RF EXPOSURE REPORT

FCC ID: 2BE2UCMT2391F128

Project No. : 2312C185
Equipment : sub-1GHz soc transceiver
Brand Name : CMOSTEK
Test Model : CMT2391F128-EQR
Series Model : N/A
Applicant : Shenzhen Hope Microelectronics Co., Ltd.
Address : 30th floor of 8th Building, C Zone, Vanke Cloud City, Xili Sub-district, Nanshan, Shenzhen, GD, China
Manufacturer : Shenzhen Hope Microelectronics Co., Ltd.
Address : 30th floor of 8th Building, C Zone, Vanke Cloud City, Xili Sub-district, Nanshan, Shenzhen, GD, China
Factory : Shenzhen Hope Microelectronics Co., Ltd.
Address : 30th floor of 8th Building, C Zone, Vanke Cloud City, Xili Sub-district, Nanshan, Shenzhen, GD, China
Date of Receipt : Jan. 09, 2024
Date of Test : Jan. 12, 2024 ~ Feb. 03, 2024
Issued Date : Mar. 18, 2024
Report Version : R00
Test Sample : Engineering Sample No.: DG20240109170
Standard(s) : FCC Guidelines for Human Exposure IEEE C95.1 & FCC Part 2.1091
FCC Title 47 Part 2.1091

The above equipment has been tested and found compliance with the requirement of the relative standards by BTL Inc.

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REPORT ISSUED HISTORY

Report No.	Version	Description	Issued Date	Note
BTL-FCCP-2-2312C185	R00	Original Report.	Mar. 18, 2024	Valid

1. MPE CALCULATION METHOD

Calculation Method of RF Safety Distance:

$$S = \frac{PG}{4\pi r^2} = \frac{EIRP}{4\pi r^2}$$

where:

S = power density

P = power input to the antenna

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna

2. ANTENNA SPECIFICATION

Ant.	Manufacturer	Model Name	Antenna Type	Connector	Gain (dBi)
1	SHEN ZHEN GERBOLE ELEC. TECHNOLOGY CO. , LTD	TLB-433-J-3800E	Dipole	SMA/J	2.15

Note: The antenna gain is provided by the manufacturer.

3. TEST RESULTS

Antenna Gain (dBi)	Antenna Gain (numeric)	Max. Peak Output Power (dBm)	Max. Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
2.15	1.6406	-16.88	0.0205	0.00001	1	Complies

Note:

- 1) For 433.8MHz: 78.42dB μ V/m=-16.88dBm
- 2) The calculated distance is 20 cm.

End of Test Report