FCC RF EXPOSURE REPORT

FCC ID: 2AC23-WT84R2600

Project No.	:	1809C134A
Equipment	:	WIFI+BT Module
Brand Name	:	GSD
Test Model	:	WT84R2600
Series Model	:	N/A
Applicant	:	Hui Zhou Gaoshengda Technology Co., LTD
Address	:	NO.75 Zhongkai Development Area, Huizhou, Guangdong
Manufacturer	:	Hui Zhou Gaoshengda Technology Co., LTD
Address	:	NO.75 Zhongkai Development Area, Huizhou, Guangdong
Factory	:	Hui Zhou Gaoshengda Technology Co., LTD
Address	:	NO.75 Zhongkai Development Area, Huizhou, Guangdong
Date of Receipt	:	Sep. 23, 2018
Date of Test	:	Sep. 24, 2018 ~ Oct. 13, 2019
Issued Date	:	Oct. 28, 2019
Report Version	:	R00
Test Sample	:	Engineering Sample No.: DG201909248
Standard(s)	:	FCC Guidelines for Human Exposure IEEE C95.1 FCC Title 47 Part 2.1091, OET Bulletin 65 Supplement C

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 Version	Description	Issued Date
R00	Original Issue	Oct. 28, 2019

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

Antenna Specification:

For BT & BT LE:

Ant.	Brand	P/N	Antenna Type	Connector	Gain (dBi)
1	GSD	WC0D-60	PIFA	N/A	1.72

For 2.4GHz:

Ant.	Brand	P/N	Antenna Type	Connector	Gain (dBi)
1	GSD	G.5.13.WF0FAXXXXX	PIFA	N/A	1.88
2	GSD	G.5.13.WF0FBXXXXX	PIFA	N/A	1.88

Note:
The EUT incorporates a MIMO function. Physically, the EUT provides two completed transmitters and receivers (2T2R). So Directional gain =10log[$(10^{G1/20}+10^{G2/20}+...10^{GN/20})^2$/N]dBi, that is Directional gain=10log [$(10^{1.88/20}+10^{1.88/20})^2$/2]dBi =4.89.

2. TEST RESULTS

Tune up tolerance(dBm)		
BT	LE	2.4GHz
±2	±2	±2

For BT:

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
1.72	1.4859	10.83	12.1060	0.00358	1	Complies

For BT LE:

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
1.72	1.4859	8.64	7.3114	0.00216	1	Complies

For 2.4GHz:

Directional Gain (dBi)	Directional 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
4.89	3.0832	28.74	748.1695	0.45915	1	Complies

For the max simultaneous transmission MPE:

Power Density (S) (mW/cm^2)	Power Density (S) (mW/cm^2)	Total	Limit of Power Density (S) (mW/cm^2)	Test Result
BT+BT LE	2.4GHz			
0.00358	0.45915	0.46273	1	Complies

Note: The calculated distance is 20 cm.
Output power including tune up tolerance(tune up tolerance: ±2 dBm).

End of Test Report