

FCC RF EXPOSURE REPORT

FCC ID: 2A5LO-VL7M19K

Project No. : 2509C303
Equipment : Wireless Router
Brand Name : Tozed Kangwei
Test Model : ZLT W19B6M
Model Name : ZLT W19B6M, VL7M19K
Hardware Version : 7.823.901
Software Version : V1.0
Applicant : Tozed Kangwei Tech Co., Ltd
Address : Room 1301, No. 37, Jinlong, Nansha Street, Xiangjiang Financial Business Center, Nansha District, Guangzhou, Guangdong, China
Manufacturer : Tozed Kangwei Tech Co., Ltd
Address : Room 1301, No. 37, Jinlong, Nansha Street, Xiangjiang Financial Business Center, Nansha District, Guangzhou, Guangdong, China
Factory : Tozed Kangwei Tech Co., Ltd
Address : Room 1301, No. 37, Jinlong, Nansha Street, Xiangjiang Financial Business Center, Nansha District, Guangzhou, Guangdong, China
Date of Receipt : Sep. 19, 2025
Date of Test : Sep. 19, 2025 ~ Nov. 28, 2025
Issued Date : Dec. 10, 2025
Test Sample : Engineering Sample No.: DG920250918138 for 6GHz, DG920250918140 and DG920250918138 for others.
Standard(s) : FCC Guidelines for Human Exposure IEEE C95.1 & FCC Part 2.1091
FCC Title 47 Part 2.1091 & KDB 447498 D01 v06

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

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REVISION HISTORY

Report No.	Version	Description	Issued Date	Note
BTL-FCCP-4-2509C303	R00	Original Report.	Dec. 02, 2025	Invalid
BTL-FCCP-4-2509C303	R01	It is a revision of the report BTL-FCCP-4-2509C303 R00, with the following revisions: a. Updated antenna type & connector information in page 3-4. b. Updated 2.4G WIFI antenna 3 gain information in page 3. c. Added antenna 5 information in page 4. This is a newly released report, replacing the BTL-FCCP-4-2509C303 R00 report.	Dec. 10, 2025	Valid

1. MPE CALCULATION METHOD

Calculation Method of RF Safety Distance:

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

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

For 2.4GHz:

Ant.	Brand	P/N	Antenna Type	Connector	Gain (dBi)
1	TOZED	N12-9623-R0A	PCB	IPEX	5.92
2	TOZED	N12-9624-R0A	PCB	IPEX	4.44
3	TOZED	N12-9625-R0A	PCB	IPEX	5.53
4	TOZED	N12-9626-R0A	PCB	IPEX	3.58

Note:

1) This EUT supports CDD, and Directional gain = $G_{ANT} + \text{Array Gain}$.

For power measurements, Array Gain=0dB ($N_{ANT} \leq 4$), so the Directional gain=5.9

2) The antenna gain is provided by the manufacturer.

For 5GHz:

Ant.	Brand	P/N	Antenna Type	Connector	Gain (dBi)
1	TOZED	N12-9623-R0A	PCB	IPEX	6.58
2	TOZED	N12-9624-R0A	PCB	IPEX	4.79
3	TOZED	N12-9625-R0A	PCB	IPEX	5.23
4	TOZED	N12-9626-R0A	PCB	IPEX	4.66
5	TOZED	N12-9627-R0A	PCB	IPEX	4.17

Note:

1) This EUT supports CDD, and Directional gain = $G_{ANT} + \text{Array Gain}$.

For power measurements, Array Gain=0dB ($N_{ANT} \leq 4$), so the Directional gain=6.58.

2) Antenna 5 is the DFS detection antenna.

3) The antenna gain is provided by the manufacturer.

For 6GHz:

Ant.	Brand	Model Name	Antenna Type	Connector	Frequency Range (MHz)	Gain (dBi)
1	TOZED	N12-9628-R0A	PCB	IPEX	5925-6425	4.53
					6425-6525	4.53
					6525-6875	4.53
					6875-7125	4.53
2	TOZED	N12-9629-R0A	PCB	IPEX	5925-6425	4.97
					6425-6525	4.97
					6525-6875	4.97
					6875-7125	4.97
3	TOZED	N12-9630-R0A	PCB	IPEX	5925-6425	5.2
					6425-6525	5.2
					6525-6875	5.2
					6875-7125	5.2
4	TOZED	N12-9631-R0A	PCB	IPEX	5925-6425	5.28
					6425-6525	5.28
					6525-6875	5.28
					6875-7125	5.28
5	TOZED	N12-9632-R0A	PCB	IPEX	5925-6425	5.16
					6425-6525	5.16
					6525-6875	5.16
					6875-7125	5.16

Note:

- 1) This EUT supports CDD, and Directional gain = $G_{ANT} + \text{Array Gain}$.
For power measurements, Array Gain=0dB ($N_{ANT} \leq 4$), so the Directional gain=5.28.
- 2) Antenna 5 is the receive antenna.
- 3) The antenna gain is provided by the manufacturer.

3. CALCULATED RESULT

For 2.4GHz:

Antenna Gain (dBi)	Antenna Gain (numeric)	Max. Output Power (dBm)	Max. Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
5.92	3.9084	26.48	444.6313	0.3457	1	Complies

For 5GHz:

Antenna Gain (dBi)	Antenna Gain (numeric)	Max. Output Power (dBm)	Max. Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
6.58	4.5499	28.23	665.2732	0.6022	1	Complies

For 6GHz:

Max. e.i.r.p. (dBm)	Max. e.i.r.p. (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
20.77	119.3988	0.0238	1	Complies

For the max simultaneous transmission MPE:

Ratio			Total	Limit of Ratio	Test Result
2.4GHz	5GHz	6GHz			
0.3457	0.6022	0.0238	0.9717	1	Complies

Note:

(1) The calculated distance is 20 cm.

(2) Ratio=Power Density (S) (mW/cm²)/Limit of Power Density (S) (mW/cm²)

End of Test Report