



# RF EXPOSURE Test Report

**Report No.:** MTi240315016-01E2

**Date of issue:** 2024-08-23

**Applicant:** Elitech Technology, Inc.

**Product:** Disposable iot logger

**Model(s):** Glog 5, Glog 5-T, Glog 5-TH, Glog 5-TE, Glog 5-THE,  
Glog 5-TLE

**FCC ID:** 2ATVW-GIOG-5

Shenzhen Microtest Co., Ltd.


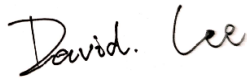

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# Instructions

1. The report shall not be partially reproduced without the written consent of the laboratory;
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5. Any objection to this report shall be submitted to the laboratory within 15 days from the date of receipt of the report.



<b>Test Result Certification</b>	
<b>Applicant:</b>	Elitech Technology, Inc.
Address:	1551 McCarthy Blvd, Suite 112, Milpitas, CA 95035
<b>Manufacturer:</b>	Jiangsu Jingchuang Electronics Co., Ltd
Address:	The third Industrial Park, 21 Zhujiang East Road, High-tech Industrial Development Zone, Xuzhou, Jiangsu CHINA
<b>Product description</b>	
Product name:	Disposable iot logger
Trademark:	Elitech
Model name:	Glog 5
Serial Model:	Glog 5-T, Glog 5-TH, Glog 5-TE, Glog 5-THE, Glog 5-TLE
Standards:	N/A
Test procedure:	KDB 447498 D01 v06
<b>Date of Test</b>	
Date of test:	2024-04-17 to 2024-08-23
Test result:	Pass

<b>Test Engineer</b>	:	
		(Maleah Deng)
<b>Reviewed By</b>	:	
		(David Lee)
<b>Approved By</b>	:	
		(Leon Chen)

## RF EXPOSURE EVALUATION

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) Radiation as specified in §1.1307(b)

Limits for Maximum Permissible Exposure (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm <sup>2</sup> )	Averaging time (minutes)
<b>(A) Limits for Occupational/Controlled Exposure</b>				
0.3-3.0	614	1.63	*100	6
3.0-30	1842/f	4.89/f	*900/f <sup>2</sup>	6
30-300	61.4	0.163	1.0	6
300-1,500			f/300	6
1,500-100,000			5	6
<b>(B) Limits for General Population/Uncontrolled Exposure</b>				
0.3-1.34	614	1.63	*100	30
1.34-30	824/f	2.19/f	*180/f <sup>2</sup>	30
30-300	27.5	0.073	0.2	30
300-1,500			f/1500	30
1,500-100,000			1.0	30

f = frequency in MHz \* = Plane-wave equivalent power density

### MPE Calculation Method

Friis transmission formula:  $P_d = (P_{out} * G) / (4 * \pi * R^2)$

Where

$P_d$  = Power density in mW/cm<sup>2</sup>

$P_{out}$  = output power to antenna in mW

G = Numeric gain of the antenna relative to isotropic antenna

$\pi$  = 3.1415926

R = distance between observation point and center of the radiator in cm (20cm)

$P_d$  the limit of MPE, 1mW/cm<sup>2</sup>. If we know the maximum gain of the antenna and total power input to the antenna, through the calculation, we will know the distance where the MPE limit is reached.

## Measurement Result

### GPRS850/GPRS1900:

Operation frequency:

GSM850: 824.2MHz~848.8MHz

GSM1900: 1850.2 - 1909.8 MHz

ANT Gain:

GSM850 Gain: 0.64 dBi

GSM1900 Gain: 1.78 dBi

### LTE:

Operation frequency:

LTE FDD Band 2: 1850.7 – 1909.3MHz

LTE FDD Band 4: 1710.7 – 1754.3MHz

LTE FDD Band 5: 824.7 – 848.3MHz

LTE FDD Band 7: 2502.5 – 2567.5MHz

LTE FDD Band 12: 699.7 – 715.3MHz

LTE FDD Band 13: 779.5 – 784.5MHz

LTE FDD Band 26(90S): 814 – 824 MHz

LTE FDD Band 26(22): 824 – 849 MHz

LTE TDD Band 38: 2572.5 – 2617.5MHz

LTE TDD Band 40: 2302.5 – 2397.5MHz

LTE TDD Band 41: 2498.5 – 2687.5MHz

LTE TDD Band 66: 1710.7 – 1779.3MHz

ANT Gain:

LTE FDD Band 2: 0.72 dBi

LTE FDD Band 4: 0.66 dBi

LTE FDD Band 5: 0.62 dBi

LTE FDD Band 7: 1.44 dBi

LTE FDD Band 12: -2.28 dBi

LTE FDD Band 13: 0.56 dBi

LTE FDD Band 26: 0.64 dBi

LTE TDD Band 38: 0.76 dBi

LTE TDD Band 40: 2.09 dBi

LTE TDD Band 41: 1.69 dBi

LTE TDD Band 66: 1.3 dBi

Channel Freq. (MHz)	modulation	conducted power (dBm)	Max Tune-up power (dBm)	Max		Antenna Gain Numeric	Evaluation result at 20cm Power density(mW/cm <sup>2</sup> )	Power density Limits (mW/cm <sup>2</sup> )
				tune-up power				
				(dBm)	(mW)			
848.8	GPRS850	31.29	31±1	32	1584.893	1.16	0.36537	0.56
1850.2	GPRS1900	29.82	30±1	31	1258.925	1.51	0.37734	1
848.8	EGPRS850	26.88	26±1	27	501.187	1.16	0.11554	0.56
1850.2	EGPRS1900	26.85	26±1	27	501.187	1.51	0.15022	1



Channel Freq. (MHz)	modulation	conducted power (dBm)	Max Tune-up power (dBm)	Max		Antenna Gain Numeric	Evaluation result at 20cm Power density(mW/cm <sup>2</sup> )	Power density Limits (mW/cm <sup>2</sup> )
				tune-up power				
				(dBm)	(dBm)	(dBm)	(mW)	
1857.5	Band2	24.96	24±1	25	316.228	1.18	0.07426	1
1712.5	Band4	24.25	24±1	25	316.228	1.16	0.07324	1
836.5	Band5	23.55	23±1	24	199.526	1.15	0.05764	0.55
2535	Band7	24.22	24±1	25	316.228	1.39	0.08765	1
707.5	Band12	24.43	24±1	25	316.228	0.59	0.03722	0.47
779.5	Band13	22.00	22±1	23	199.526	1.14	0.04516	0.51
816.5	Band26 (Part 90S)	23.55	23±1	24	251.189	1.16	0.0579	0.54
826.5	Band26 (Part 22)	23.58	23±1	24	251.189	1.16	0.0579	0.55
2595	Band38	24.65	24±1	25	316.228	1.19	0.07494	1
2302.5	Band40	24.34	24±1	25	316.228	1.62	0.10180	1
2501	Band41	25.72	25±1	26	398.107	1.48	0.11688	1
1715	Band66	26.06	26±1	27	501.187	1.35	0.13450	1

**Conclusion:**

For the max result:  $0.36537 \leq 0.56$  test exclusion threshold, No SAR is required.

**----END OF REPORT----**