

**Report No.:** DDT-RE23060513-1E03

■Issued Date: Jul. 05, 2023

# RF EXPOSURE REPORT

### **FOR**

Applicant	••	Lorenz High Definition LLC	
Address		230 Rt 206 STE 401, Flanders, New Jersey, United States	
Equipment under Test	••	DC Signal Sensor	
Model No.	•	ZEN55 LR	
Trade Mark	•••	zooZ™	
FCC ID	••	2AZ2V-091821-ZEN52	
Manufacturer		Shenzhen ZVIDAR Technologies CO,.Ltd.	
Address	Room 468, Building F1, TCL Technologies Park, 1001, Zhongshanyuan Road, Shuguang Community, Xili Street Office, Nanshan District, Shenzhen City		

# Issued By: Dongguan Dongdian Testing Service Co., Ltd.

**Add.:** No. 17, Zongbu Road 2, Songshan Lake Sci&Tech, Industry Park, Dongguan City, Guangdong Province, China, 523808

**Tel.:** +86-0769-38826678, **E-mail:** ddt@dgddt.com, http://www.dgddt.com



# Table of Contents

	Test report declares		3
1.	General Information		
1.1.	Description of equipment		5
1.2.	Assess laboratory	 	5
2.	RF Exposure evaluation for FCC		6

# **Test Report Declare**

Applicant	• •	Lorenz High Definition LLC		
Address	:	230 Rt 206 STE 401, Flanders, New Jersey, United States		
<b>Equipment under Test</b>	:	DC Signal Sensor		
Model No.	:	ZEN55 LR		
Trade mark	:	<b>ZOO</b> Z <sup>M</sup>		
Manufacturer	1	Shenzhen ZVIDAR Technologies CO,.Ltd.		
Address	Room 468, Building F1, TCL Technologies Park, 1001, Zhongshanyuan Road, Shuguang Community, Xili Street C Nanshan District, Shenzhen City			

Standard Used: KDB447498 D01 General RF Exposure Guidance v06

#### We Declare:

The equipment described above is assessed by Dongguan Dongdian Testing Service Co., Ltd and in the configuration assessed the equipment complied with the standards specified above. The assessed results are contained in this report and Dongguan Dongdian Testing Service Co., Ltd is assumed of full responsibility for the accuracy and completeness of these assess.

After evaluation, our opinion is that the equipment In Accordance with above standard.

Report No.:	DDT-RE23060513-1E03		
Date of Receipt:	Jun. 05, 2023	Date of Test:	Jun. 07, 2023 ~ Jul. 01, 2023

Prepared By:

Jacky Huang/Engineer

Damon Hu/EMC Manager

Note: This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of Dongguan Dongdian Testing Service Co., Ltd.

# **Revision History**

Rev.	Revisions		Issue Date	Revised By
	Initial issue	(8)	Jul. 05, 2023	(8)
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# 1. General Information

## 1.1. Description of equipment

EUT Name	:	DC Signal Sensor
Model Number	:	ZEN55 LR
EUT function description	:	Please reference user manual of this device
Power Supply	:	AC 100-240V, 50/60Hz
Operation Frequency	A	908.40 - 920.00 MHz
Modulation	ŀ	2FSK, 2GFSK, OQPSK
Antenna Gain	:	-2.80 dBi
Sample Number	:	S23060513-01 for radiated, S23060513-02 for conducted

### 1.2. Assess laboratory

Dongguan Dongdian Testing Service Co., Ltd.

Add.: No. 17, Zongbu Road 2, Songshan Lake Sci&Tech, Industry Park, Dongguan City, Guangdong Province, China, 523808.

Tel.: +86-0769-38826678, http://www.dgddt.com, Email: ddt@dgddt.com.

CNAS Accreditation No. L6451; A2LA Accreditation Number: 3870.01

FCC Designation Number: CN1182, Test Firm Registration Number: 540522

Innovation, Science and Economic Development Canada Site Registration Number: 10288A

Conformity Assessment Body identifier: CN0048

VCCI facility registration number: C-20087, T-20088, R-20123, R-20155, G-20118

## 2. RF Exposure evaluation for FCC

According to 447498 D01 General RF Exposure Guidance v06

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)]  $\cdot [\sqrt{f(GHz)}] \le 3.0$  for 1-g SAR and  $\le 7.5$  for 10-g extremity SAR, where:

f(GHz) is the RF channel transmit frequency in GHz

Power and distance are rounded to the nearest mW and mm before calculation

The result is rounded to one decimal place for comparison

#### **Manufacturing Tolerance**

Channel (MHz)	908.40	908.42	912	916	920
Target (dBm)	-6.71*	-6.68*	8.18	-7.74*	7.80
Tolerance ±(dB)	1.5	1.5	1.5	1.5	1.5

Note: \* The results of dBm are calculate according to ANSI C63.10-2020 section 12.7.3 d) and e) and the results of dBµV/m are quoted from report: DDT-RE23060513-1E01.

#### **Estimation Result**

Worse case is as below: [912.00 MHz, 9.68 dBm, (9.29 mW) output power]

 $(2.93/5) \cdot [\sqrt{0.912}(GHz)] = 1.77 < 3.0 \text{ for } 1-g \text{ SAR}$ 

Then SAR evaluation is not required.

**END OF REPORT**