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## Antenna Gain Test Report

Project No.: 4790171196

Client Name: Zwift Inc

Client Address: 111 W. Ocean Blvd, Suite 1800, Long Beach, CA 90802

Product Name: Zwift Click

Product Model: Z006

Manufacture: PCPARTNER (DONGGUAN) LTD  
SAN TUN MANAGEMENT ZONE  
HOUIJIE DONGGUAN GUANGDONG 523941 CN

Antenna Type: PCB

Antenna Size: 11.5 mm \* 4.2 mm

Project Engineer: James Qin

Test Engineer: Burt Hu

Test Standards: ANSI/IEEE std 149-2021

Date of Tested: 2023.6.9

Issued Date: 2023.6.9

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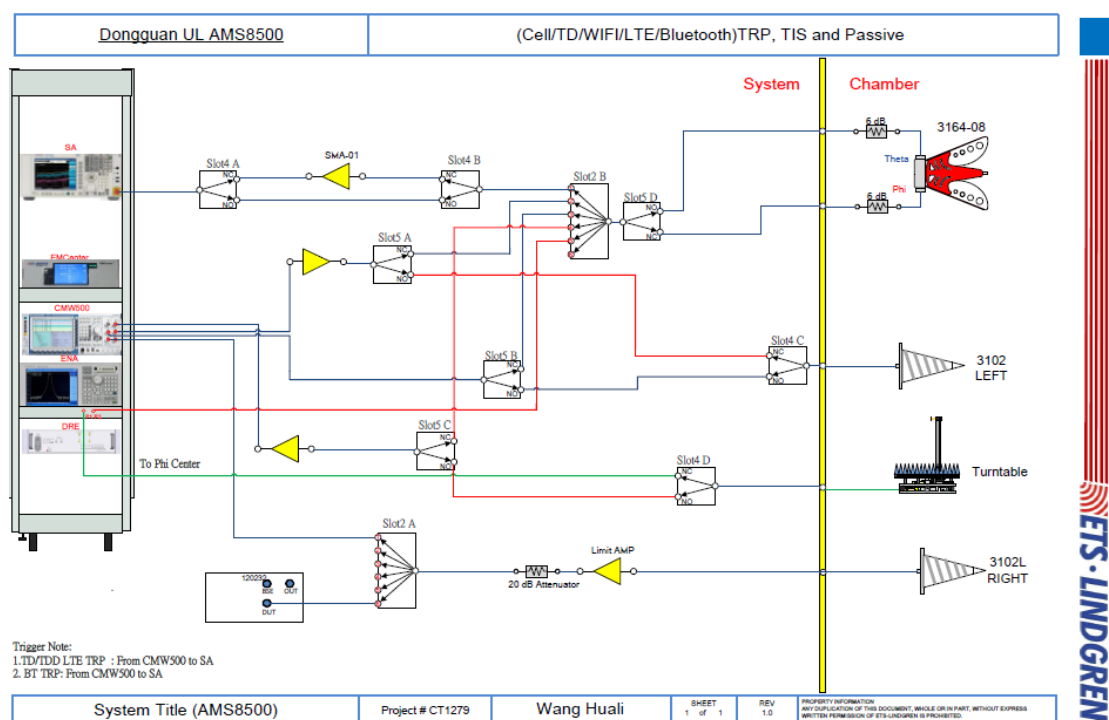
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## 1 Test Equipment Information

Equipment	Manufacturer	Mode No.	Serial No.	Cal date	Cal Due
Test Chamber	ETS-Lindgren	8500	/	/	/
Test Software	ETS-Lindgren	EMQuest V1.12	1496	/	/
Network Analyzer	Keysight	E5071C	MY46524531	2022.10.17	2023.10.16
EXA Singal Analyzer	Keysight	N9010A	MY55150514	2022.10.17	2023.10.16

## 2 Setup block diagram



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### 3 Test Temperature and Humidity

Temperature: 22.3°C

Humidity: 57.6%

### 4 Test Step Flow

- 1) Maintain the test ambient temperature of  $23 \pm 2$  C, the instrument is powered on and preheated for more than 30 minutes;
- 2) Turn on the darkroom power supply, connect the test cable, and set up the sample according to the standard;
- 3) Outline sets the test content objectives and conducts calibration tests;
- 4) Run the software, when the test is completed, export the corresponding test diagram and test data, and save to the corresponding directory.

### 5 Test Result

Frequency (MHz)	Efficiency (%)	Gain (dBi)
2400	41.04	2.64
2410	41.17	2.67
2420	41.74	2.70
2430	41.41	2.64
2440	40.11	2.47
2450	37.54	2.17
2460	34.37	1.83
2470	31.48	1.50
2480	28.93	1.12
2490	27.16	0.77
2500	25.58	0.42

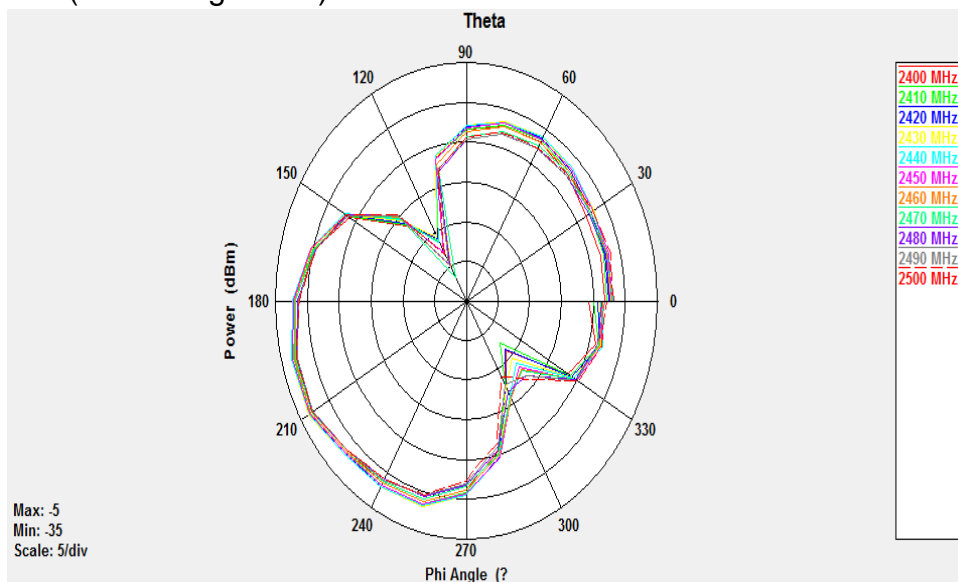
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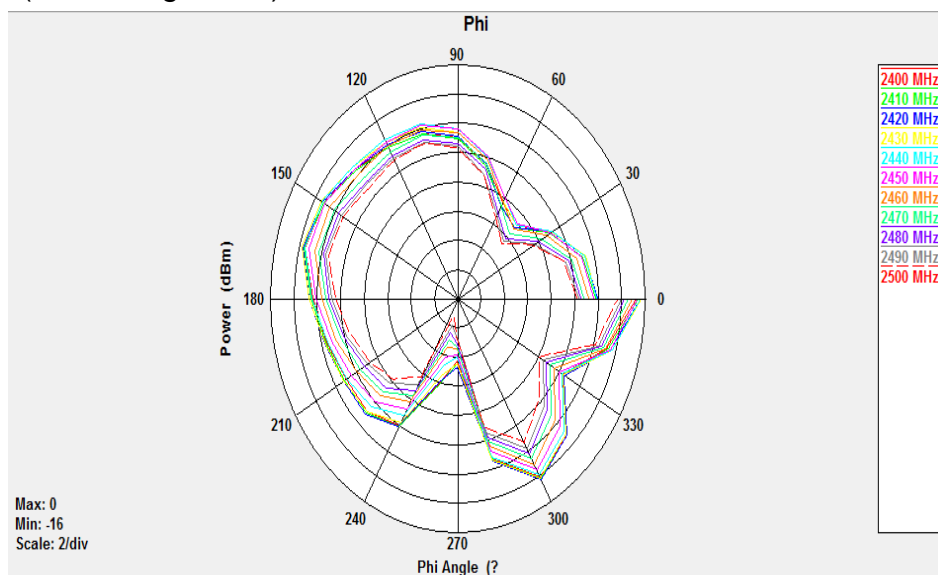


## Polarization Pattern Photos

### Theta Polarization(Theta Angle=90°)



### Phi Polarization(Theta Angle=90°)

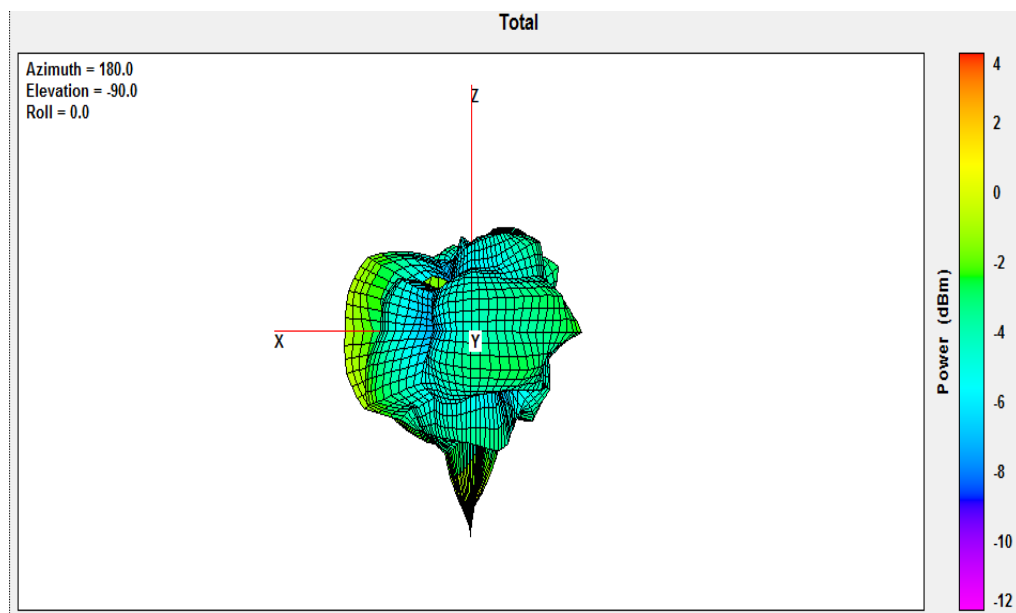
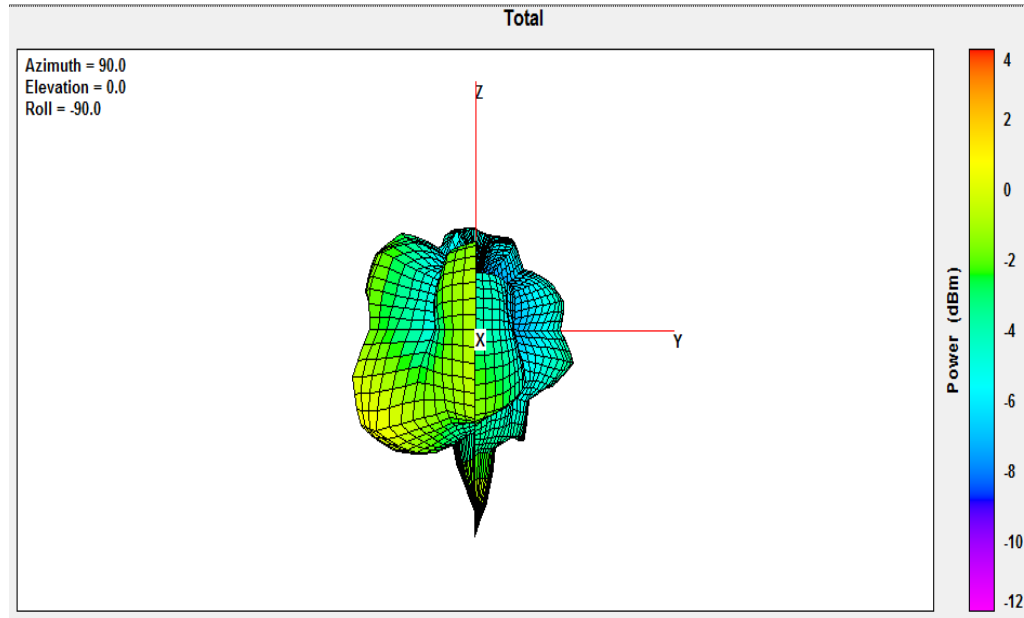


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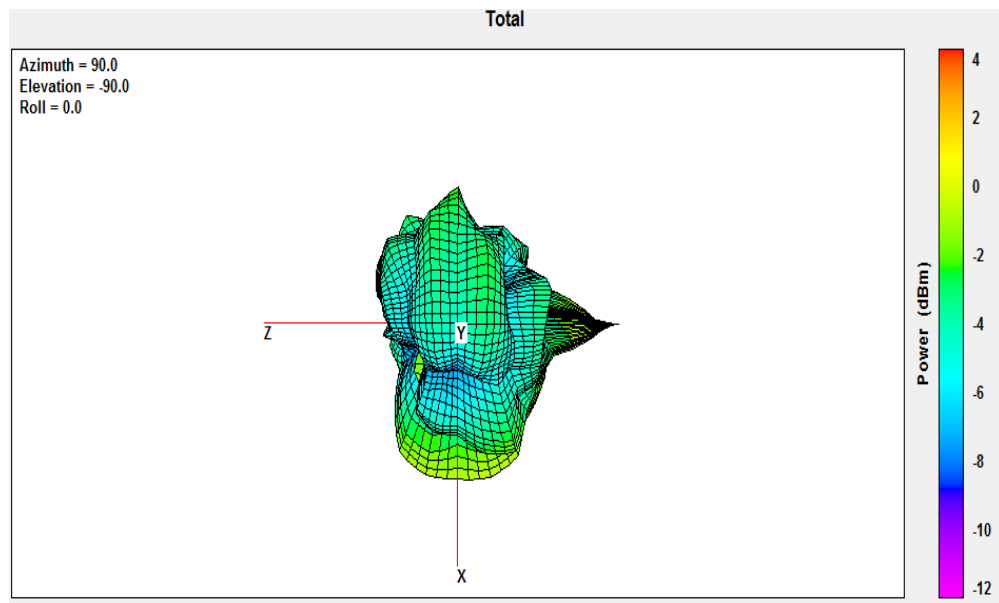


## Total 3D Plot(Fre.2420MHz)



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## 6 Photo



**END OF REPORT**

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