

OTA TEST REPORT



Applicant Shenzhen General Test System Co., Ltd

ProductRayZone1800

Issue DateJanuary 31st,2023

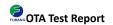
DOSKING Antenna Test Reporttested the above equipment in accordance with the requirements in **ANTI/IEEE Std 149-2008**. The test results show that the equipment tested is capable of demonstrating compliance with the Requirements as documented in this report.

Prepared by: Mushao Chen

Approved by: Meidui Chen

DOSKING Antenna Test Report

1. Test Laboratory



1.1 Notes of the Test report

This report shall not be reproduced in full or partial. The results documented in this report applyonly to the tested sample, under the conditions and modes of operation as described herein. Measurement Uncertainties were not taken into account and are published for informational purposes only. This report is written to support regulatory compliance of applicable standards stated above.

1.2 Test facility

GTS1800 Microwave Anechoic Chamber: testing frequency ranges from 600 MHz to 6 GHz.

1.3 Testing Location

Company: DOSKING Antenna Test Report

Contact: Mushao Chen

Telephone: 13126483572

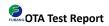
1.4 Laboratory Environment

Temperature	Min.= 19°C, Max.=25°C	
Relative humidity	Min.=40%, Max.=72%	
Shield effect	0.6-7GHz	>100dB
Ground resistance	<0.5Ω	

2. General Description of Equipment under Test

2.1 Applicant and Manufacturer information

Applicant Name	DOSKING Antenna Test Report	
Applicant address	403, West Block, Ganghong Science and Technology Building, Building 2, Private Enterprise Science and Technology Park, University Town, Nanshan District, Shenzhen, China	



Manufacturer Name	Shenzhen General Test System Co., Ltd	
Manufacturer address	Building C-A7 Suite 805,2190 Liuxian Avenue, Nanshan District,	
	Shenzhen, P.R. China	

2.2 General information

EUT Description		
Product Name	RayZone1800	
Model	GTS-ANT D-H	
HW Version	RayZone1800 V1.0	
SW Version	MaxSign 100	
Antenna Type	PCB Antenna	
Antenna Manufacturer	Shenzhen General Test System Co., Ltd	
Test Frequency	700MHz-5.8GHz	

2.3 Applied Standards

According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

Test Method: ANSI/IEEE Std 149-2008

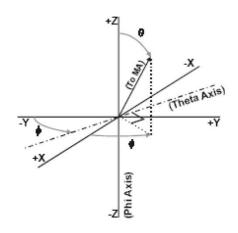
3. Test Conditions

3.1 Test Configuration

The method is used to measure the antenna 3D GAIN of EUT in OTA qualified anechoic chamber. Equipment Under Test(EUT) geometry centre vertical projection at the centre of platform, the distance from EUT to measurement antenna is 1m.

3.2Test Measurement

Spherical coordinate system



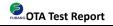
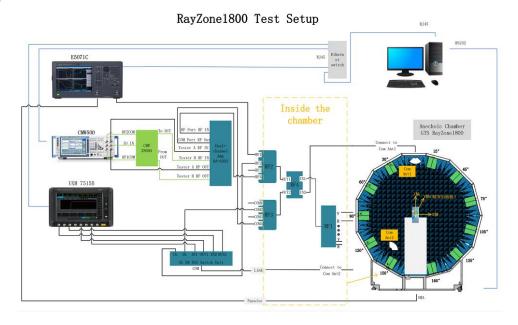


Figure 1 Test coordinate system

Note: Theta is from 0-180degree.Phi is from EUT and record the Date, the step of rotation is 15 degree.

Test Setup



4. Test Results

WIFI/BT

BT/WIFI2.4		
Freq	Effi	Gain
(MHz)	(%)	(dBi)
2400	31.6	-0. 15
2410	31. 35	-0.95
2420	31	-0.98
2430	31.89	-0.69
2440	32.64	-0.74
2450	33. 93	-0.49
2460	35.82	-0. 16
2470	35. 42	-0.22
2480	36.88	-0.09
2490	35. 5	-0.2
2500	35. 29	-0. 25

WIFI5G		
Freq	Effi	Gain
(MHz)	(%)	(dBi)
5150	31.6	-4. 98
5200	31. 35	-5.95
5250	31	-5. 98
5300	31.89	-5. 69
5350	32.64	-5. 74
5400	33. 93	-5. 49
5450	35. 82	-5. 16
5500	35. 42	-5. 22
5600	36.88	-5. 09
5650	35. 5	-5.2
5700	35. 29	-5. 25
5750	38.89	-5. 89
5800	38. 45	-5. 58
5850	40.36	-5. 45

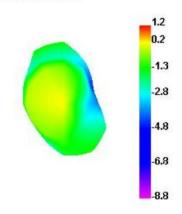


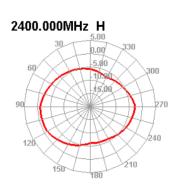
5. Equipment List

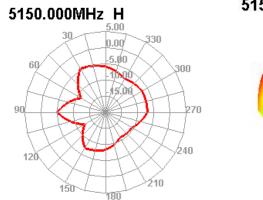
Type of Equipment	Manufacture	Model Number
Network Analyzer	Key sight	E5071C
Switch control System	GTS	RayZone1800
Software	GTS	MaxSign 100Patten
		Measurement software

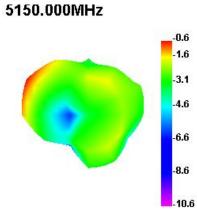
ANNEX A 3-D Patten Plots

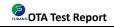
2400.000MHz

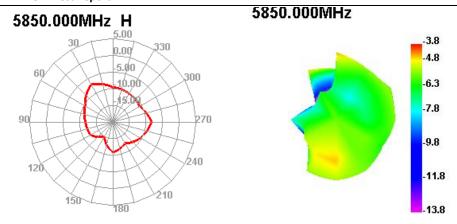








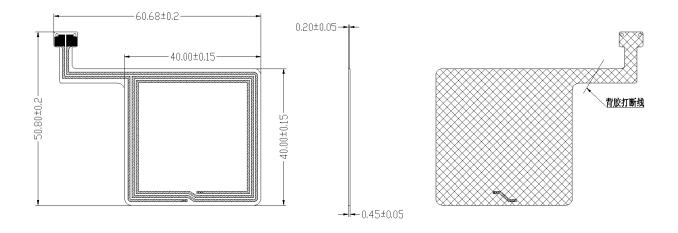






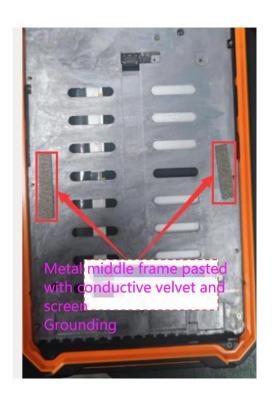


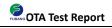
NFC ANT

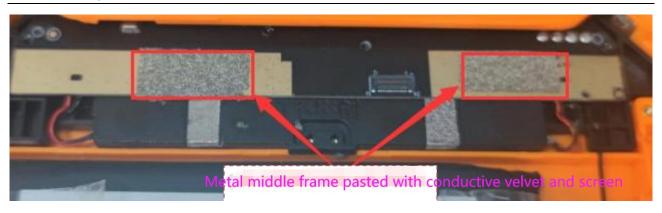


ANNEX B: The EUT Appearance and Test Configuration

B.1 EUT Appearance







B.2 Test Configuration

