Testing Report

Product Name: 1878

Issue Date: 2023. 2. 13

Engineer:	Date	2023.2.13
Auditor:	Date	2023.2.13
Approve	Date	2023.2.13

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1. General Information

1. 1 General information of testing institutions

Name	Shenzhen DBT Communication Device Co., Ltd
Address	Rm505, 8th building, Yungu 2nd period, pingshan No.1 Road, Xili Town,Nanshan District, ShenZhen, China
Tel	0755-83763273
E-mail	Dbt_yang@163.com
Equipment	1. RayZone 1800 2. Keysight E5071C

1.2 Test equipment



Satimo



E5071C



Cmw500



8960

Model No.	Manufacturer	Calibration date	Next calibration date
Satimo	RFI-LAB-RF-A00	2022.11 13	2023.11 13
Cmw500	ROHDE&SCHWAR		
8960	Agilent		
E5071C	Agilent		

1.3 Test environment

Temperature	25. 0*C			
Humidity	59%RH			
Pressure	100.12kPa			

1.4 Statement

- (1) The test results in the report are only applicable to the tested samples and the tested samples work under the environment described in the report
- (2) Any objection to this report shall be raised 30 days after formal confirmation of the report.
- (3) The report is invalid without the signature of the auditor and approver.

2. Sample Information

2.1 Client information

Name	Guangdong Transtek Medical Electronics Co., Ltd.
1 Address	Zone A, No. 105, _{Dong Li} Road, Torch Development District, zhongShan, Guangdong,China
Contacts	
Tel	
E-mail	

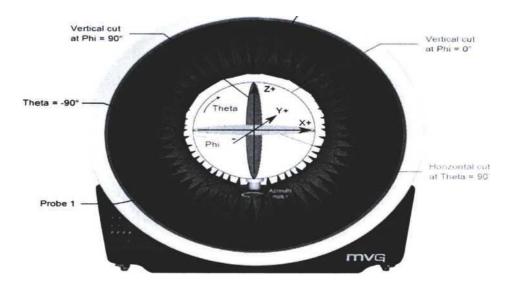
2.2 Description of EUT(S)

Product Name	2.4 GHz Antenna			
Antenna Size	13.5*7.5mm			
Antenna Type	PCB			
Test Item	VSWR; Gain; Efficiency; Radiation pattern			
Frequency Range	2400-2480MHZ			
Received Date	2023.2.13			
Test Date	2023.2.13			
Remark	i			

2.3 EUT appearance



2.4 DUT setup photo of free space OTA testing



3.Test Results

3.1 Test standard

Name	Parameter	Method	Standard no.
Mobile	VSWR	Generic	
Communication	Antenna gain	specification for	
antenna	Radiation pattern	antennas used in the	GB/T 9410-2008
		mobile	
		communications	
Antenna	Radiation efficiency	IEEE Standard	ANSI/IEEE Std
		Test Procedures for	149-1979
		Antennas	

3.2 Test uncertainty

The uncertainty was calculated on the basis of the GUM published by <u>ISO.using the</u> inclusion factor of K=2 and the 95% confidence level to express the extended uncertainty.

Item	Uncertainty
VSWR	±0.3
Antenna gain	+ 1dB
Radiation efficiency	±10%

3.3 Test data



3.3.1 S11 parameters

3.3.2 VSWR

Frequency/MHz	2400	2450	2500
VSWR	8.7926	9.2114	9.5124

3.3.3 Typical free space efficiency and gain

Frequency MHz	2400	2410	2420	2430	2440	2450	2460	2470	2480
Peak Gain dBi	-8.8	-10.11	-10.2	-10.99	-10.21	-10.31	-11.16	-11.46	-10.36
Efficiency %	4.33	3.19	3.09	2.64	3.02	2.89	2.51	2.35	2.88

