DM76 Project antenna specification

Customer name: Shenzhen Domino Times Technology Co.,LTD

Customer name: DM76

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order number	edition	state	Start and end date	person liable	page number	remarks
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Catalogue

1. OVERVIEW **3**
1.1 SCOPE OF APPLICATION 3
1.2 PROJECT BASIC INFORMATION 3
2. TECHNICAL INDEX REQUIREMENTS **3**
2.2.1 INTRODUCTION OF TEST ITEMS AND EQUIPMENT 3
2.2.2 TEST INSTRUCTIONS 3
2.2.3 ANTENNA LOADING COIL 4
2.2.4 ANTENNA PASSIVE PARAMETERS 4
2.2.5 ANTENNA EFFICIENCY, GAIN-ARM 5
2.2.6 GPS DIRECTION MAP-ARM 5
2.2.7 BT DIRECTION MAP-ARM 6
2.2.8 GPS REAL-TIME SEARCH FOR STARS 6
2.2.9 ENVIRONMENTAL TREATMENT 7
3. ANTENNA SIZE DIAGRAM **8**
4. MANUFACTURER INFORMATION **8**

1. Overview

1.1 Scope of application

This requirement specifies the antenna technical requirements and material requirements specifications for DM76 products.

This requirement applies to the selection, testing and acceptance of DM76 antennas.

1.2 Project basic information

Antenna name:	**DM76**
Antenna frequency:	GPS+BT:1575.42MHz/2.4G
Antenna material:	/

2. Technical index requirements

2.2.1 Introduction of test items and equipment

inventory	test item	equipment
Active test	TRP,TIS	Integrated tester, microwave darkroom

2.2.2 Test instructions

Test tools: Agilent8960 instrument, R & SCMW500, full wave far field ETS dark room, high precision positioning system and its controller and computer with automatic test program

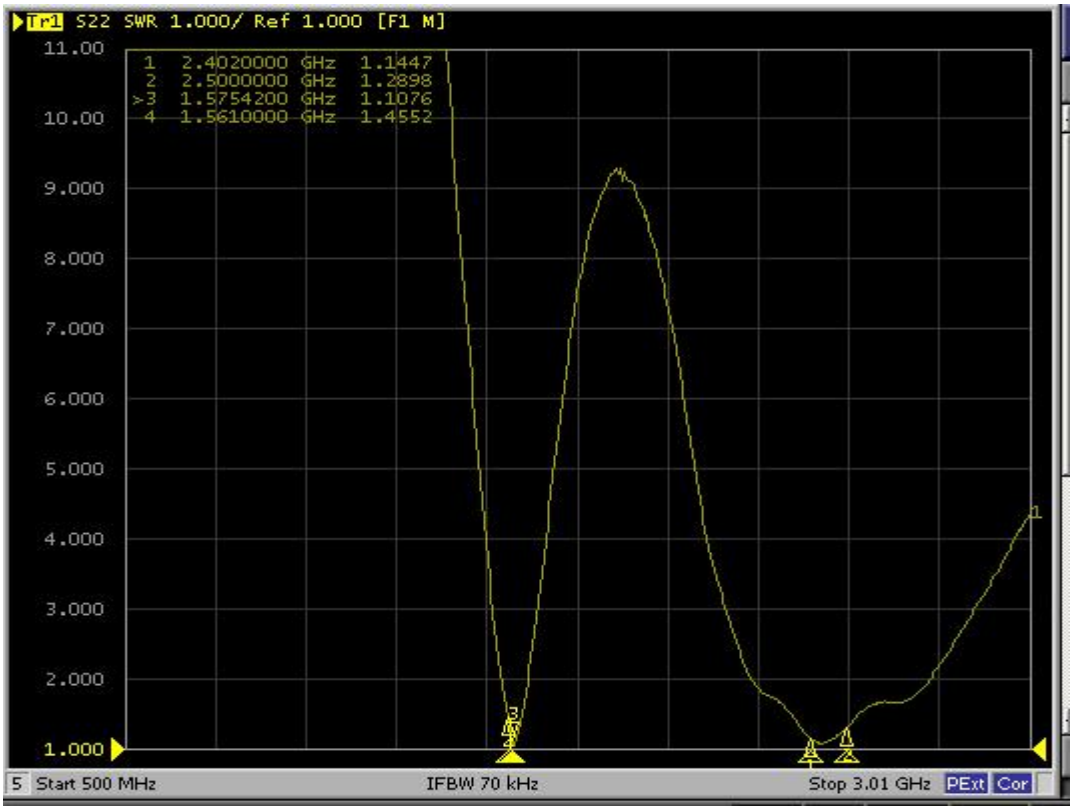
Test environment: temperature 22℃± 3℃, humidity 50% ± 15%

Test method: DUT is fixed in the center of the turntable on the same horizontal line as the center of the horn antenna.

The positioning system enables the DUT to rotate in the whole sphere to satisfy the high-precision 3 D positioning. Each RF instrument and turntable controller communicate with the PC with automatic test software through the GPIB interface.

2.2.3 Antenna loading coil

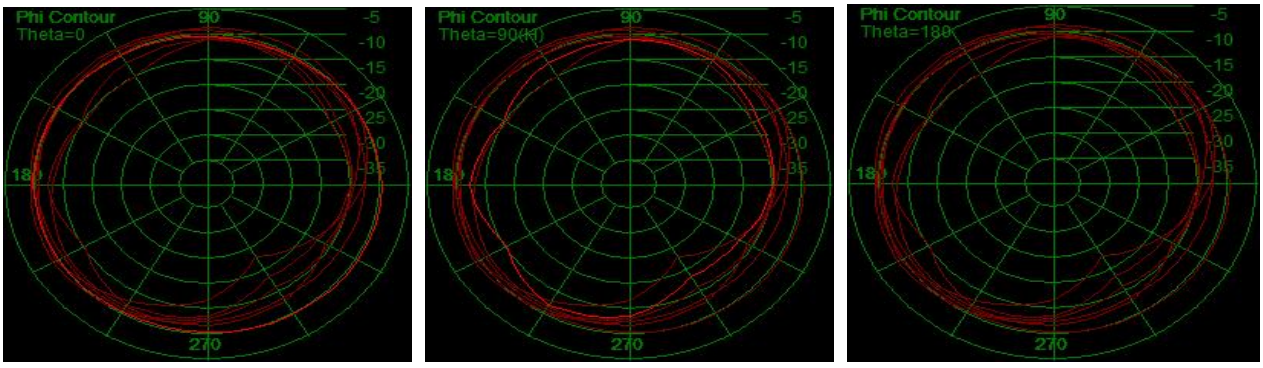
2.2.4 Antenna passive parameters

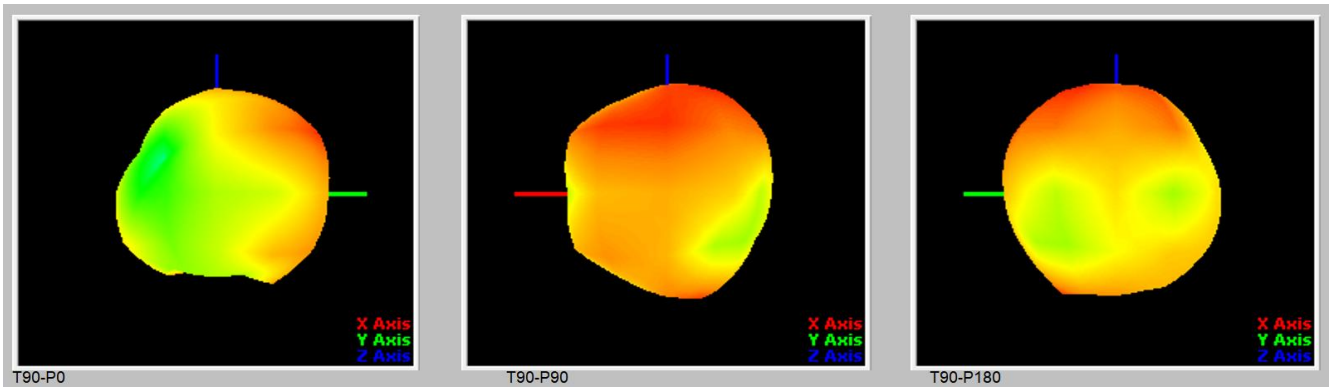


2.2.5 Antenna efficiency, gain-ARM

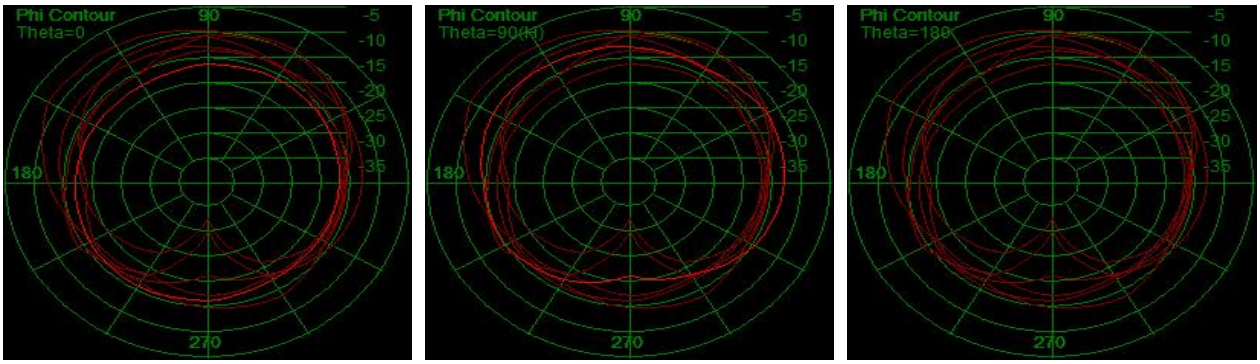
Freq (MHz)	Effi (%)	Gain (dBi)	Freq (MHz)	Effi (%)	Gain (dBi)
1550	4.5	-8.7	2400	3.4	-9.1
1560	4.8	-8.3	2420	3.8	-8.5
1570	5.2	-7.6	2440	4.2	-8.7
1575	5.7	-7.3	2450	4.7	-8.2
1580	5.1	-7.8	2460	4.1	-8.6
1590	4.6	-8.2	2480	3.6	-8.9

2.2.6 GPS direction map-ARM



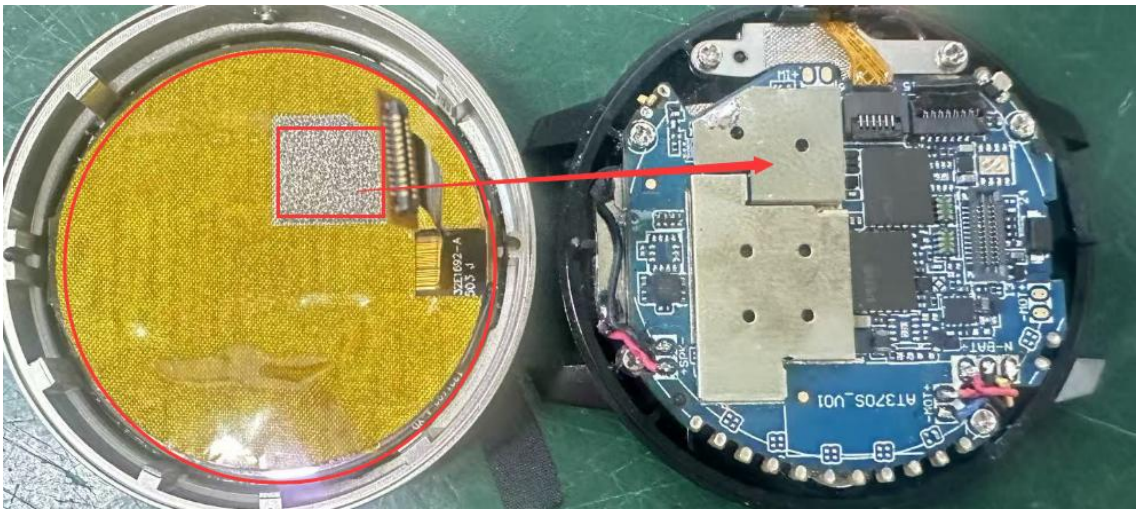


2.2.7 BT direction map-ARM

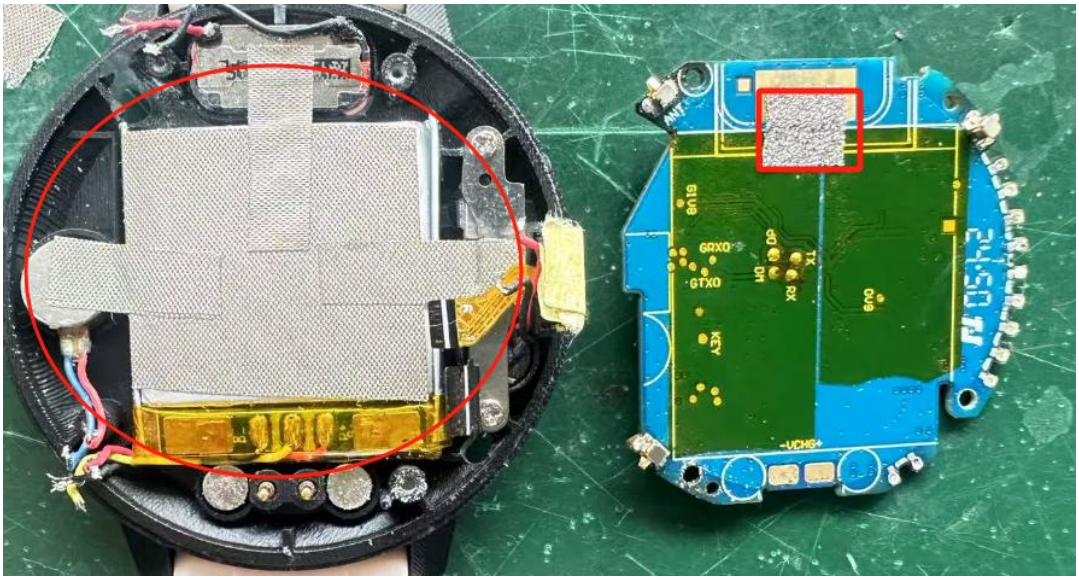


2.2.8 GPS real-time search for stars

2.2.9 Environmental treatment

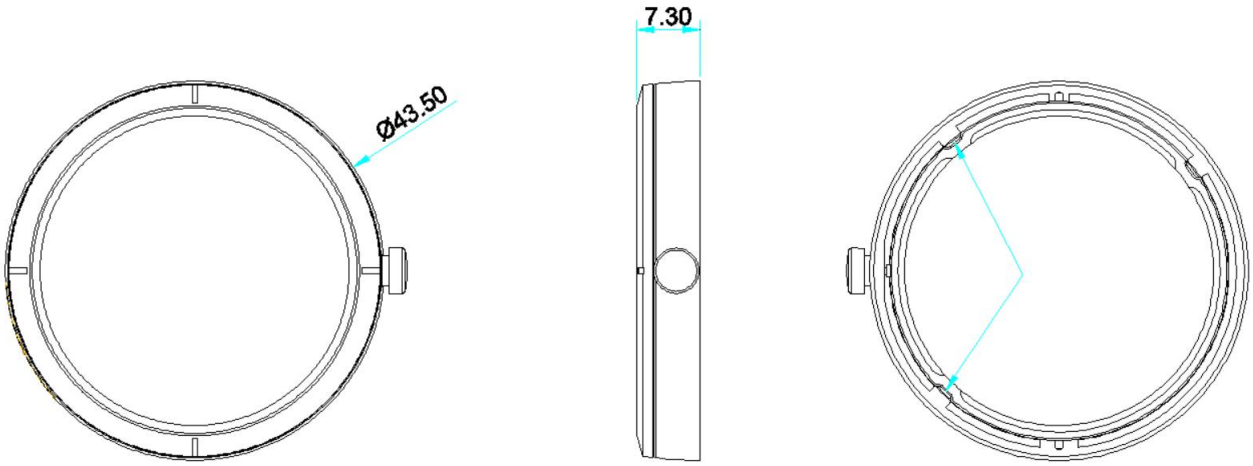


The screen line is screened with conductive cloth, and the screen and motherboard shielding cover are grounded



Motor, horn, steel plate, and battery conductive cloth connection and motherboard grounding

3. Antenna size diagram



4. Manufacturer information

Manufacturer: Shenzhen YushengCommunication Equipment Co.,LTD

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