Q520 Project antenna material requirements specification

Customer name:Guoheng Intelligent Technology (Huizhou) Co., LTD

Customer name: Q520

Product name: DONGLE antenna

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The Supplier acknowledges the signature of the following documents:

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The demander the result: □ qualified □ unqualified			
Development & Design Engineer / Date	SQE Engineer / Date	Purchasing Leader / Date	Development Manager approval / date

Catalogue

1. Overview

1.1 Scope of application

This requirement specifies the antenna technical requirements and material requirements specifications for Q520 products.

This requirement applies to the selection, testing and acceptance of Q520 antenna.

1.2 Project basic information

Antenna name:	**Q520**
Antenna frequency:	BT ： 2400-2500MHZ
Antenna material:	DONGLE

2. Technical index requirements

2.1 Introduction of test items and equipment

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

2.2 Active Reporting

2.2.1 Test instructions

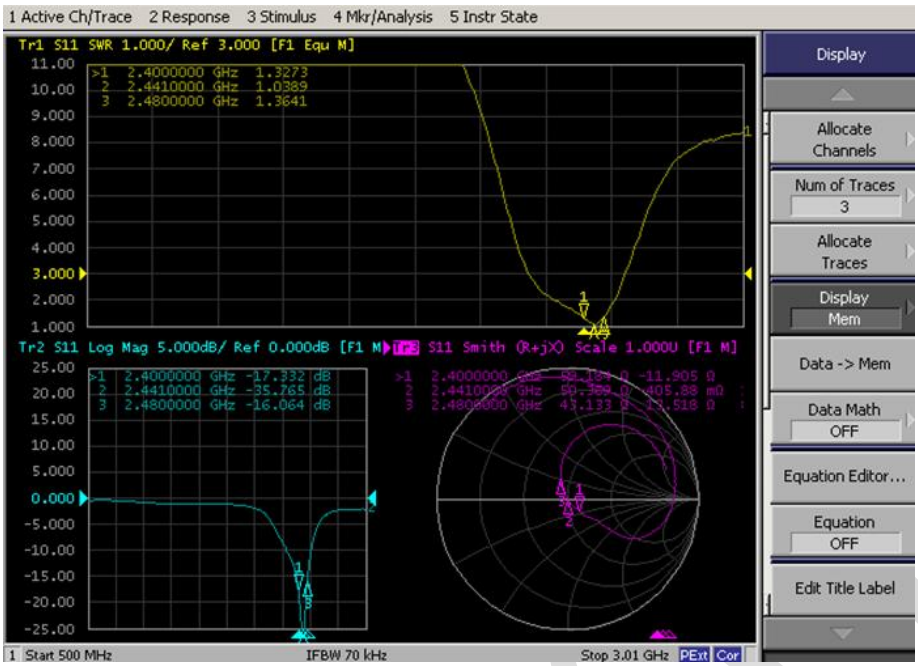
Test tools: Agilent8960 instrument, R & S CMW500, full wave far field ETS dark room, high precisio n positioning system and its controller and computer with automatic test program

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

Test method: DUT is fixed in the center of the turntable with H plane, 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.

2.2.2 S11-dangle



Dongle Plugged into the laptop

2.2.3 Antenna Efficiency and Gain-dangle

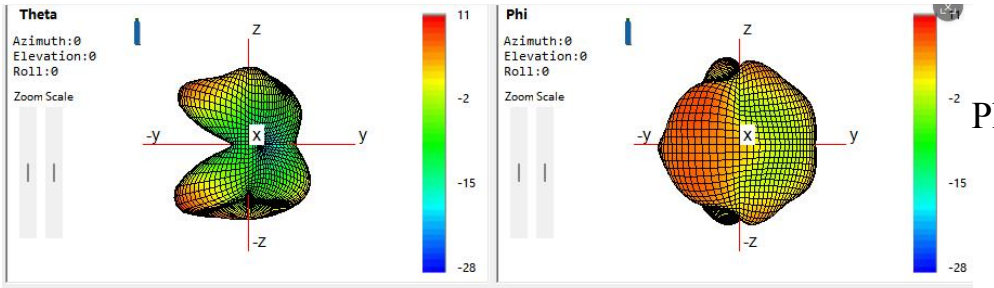
Freq(MHz)	Effi(%)	Gain(dBi)
2400	44.50%	1.29
2410	44.70%	1.31
2420	45.60%	1.38
2430	46.90%	1.44
2440	47.20%	1.59
2450	48.40%	1.55
2460	47.60%	1.51
2470	47.30%	1.47
2480	47.00%	1.45
2490	46.60%	1.39
2500	46.20%	1.33

2.2.4 Antenna OTA-dangle

Channe 1	TRP (dBm)	TIS (dBm)
0	7.13	-90.23
39	7.37	-90.86
78	7.49	-90.94

Dongle Plugged into the laptop

2.2.5 Apple Image-dongle



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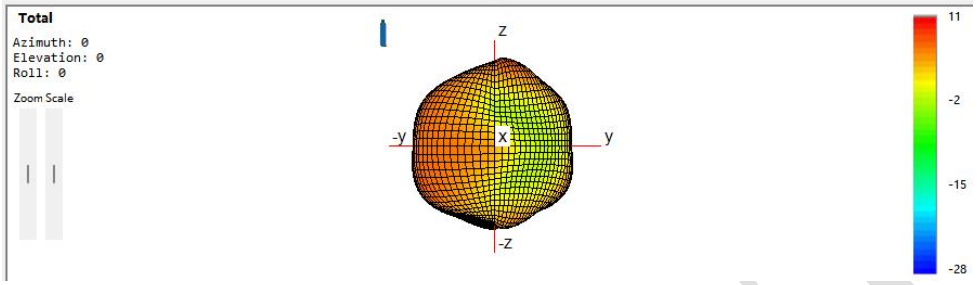

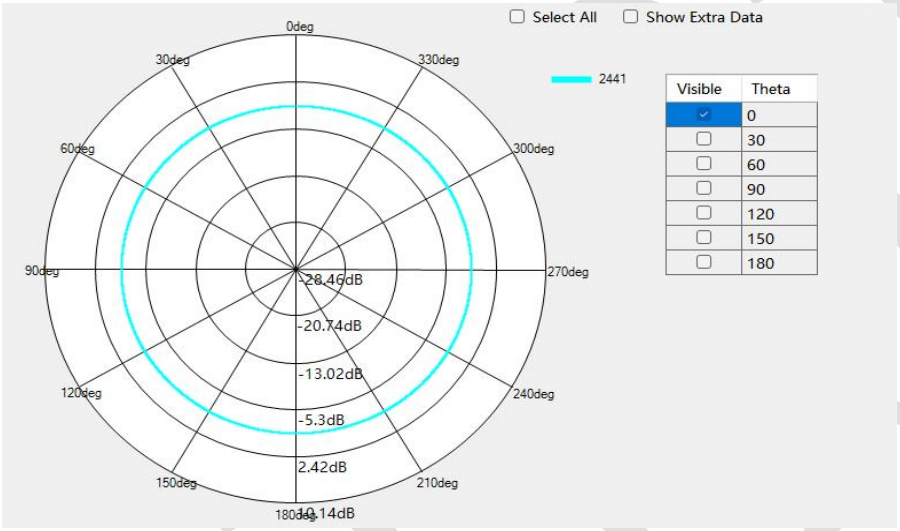

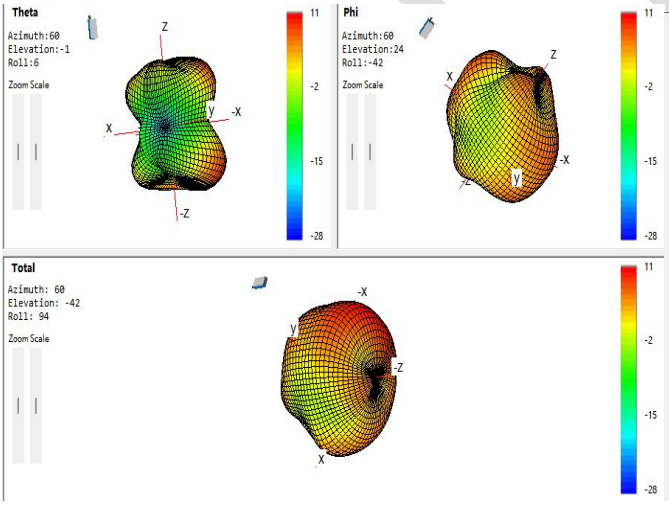

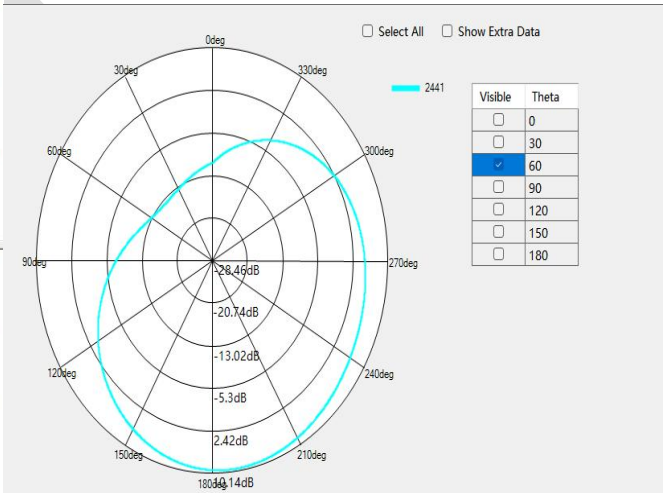

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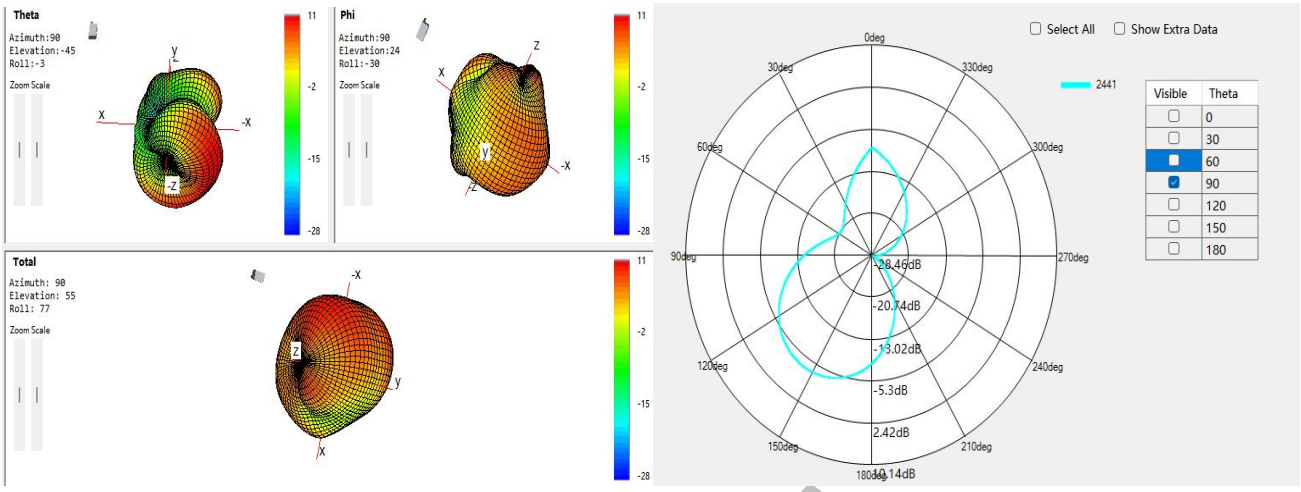

Theta=90

2.2.5 Antenna manufacturer

Shenzhen Yusheng Communication Equipment Co., LTD

4th Floor, Building 2, Nantai Yunchuang Valley Park, southeast side of the intersection of Guangming Avenue and Dongchang Road, Guangming District, Shenzhen