

Antenna Acknowledgement

Dongguan Hanyi Electronics Co., Ltd

Company address: No. 25, Puxin Lake Center 2nd Road,
Tangxia Town, Dongguan City

Hanyi Item No: 5G-320mm-VS200

Specification Description: 5G-VS200, line length L: 310mm

Customer Name:

Customer Item Number:

Factory signature:

Write	Examine	Approval

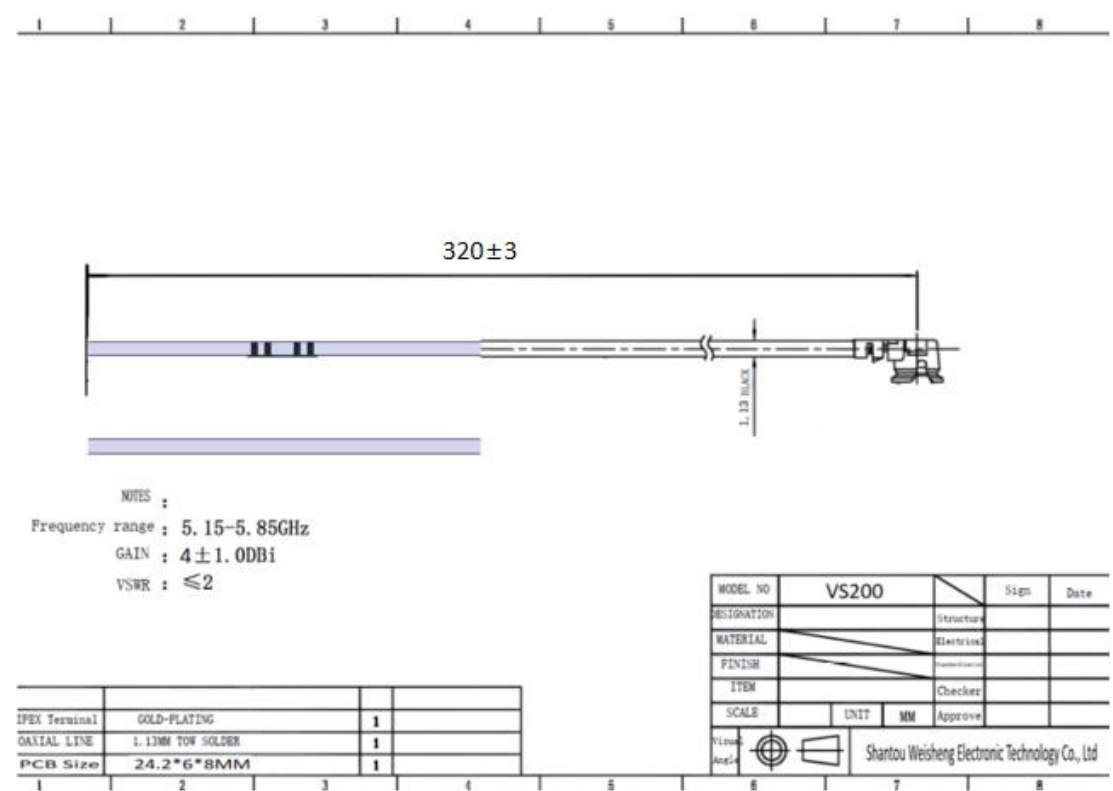
Customer Acknowledgement Signature:

Check	Examine	Approval

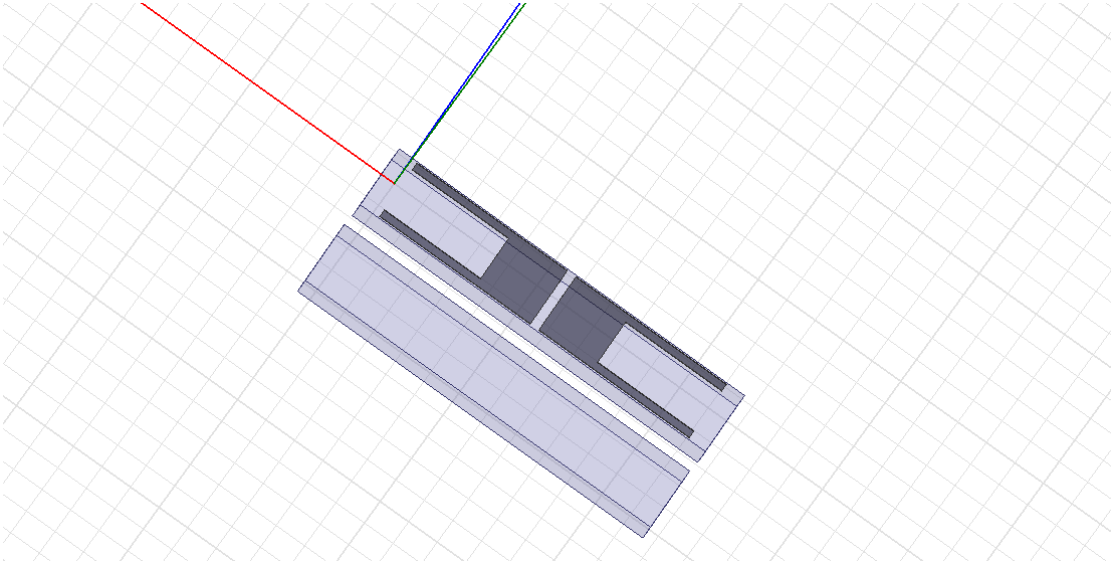
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3 Product Picture



尺寸图



结构图

4 Specification)

Parameter	
Frequency	5150-5850MHz
Impedance	50 Ω
VSWR	≤ 2
Connector	Generation 1 terminal
Gain	≥ 3.7 dBi
Mechanical Parameter	
Length	320 ± 3 mm
Cable	/
Salt Spray Test	24H
Environment Parameter	
Operation Temperature	-20°C~65°C
Storage Temperature	-30°C~75°C

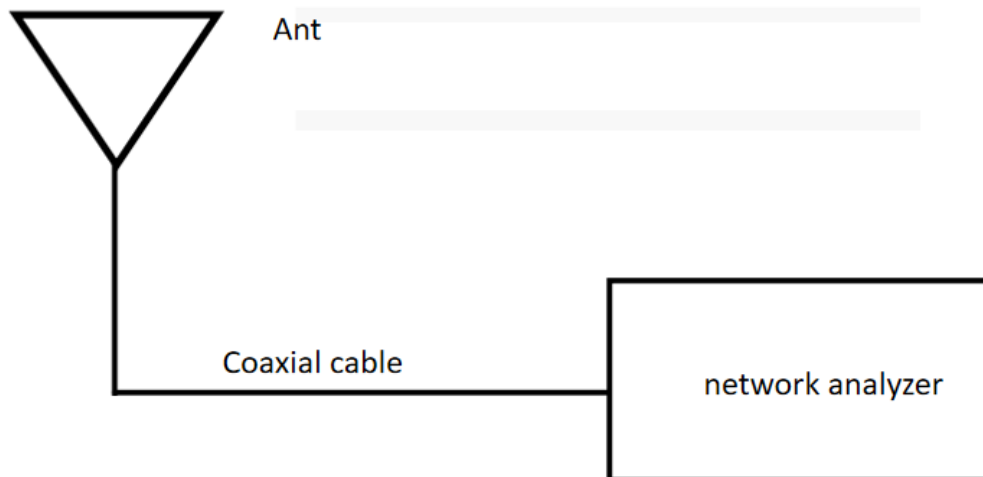
5 Test Equipment & Conditions

5.1 VSWR Test

5.1.1 Test equipment

Agilent5071C Network Analyzer.

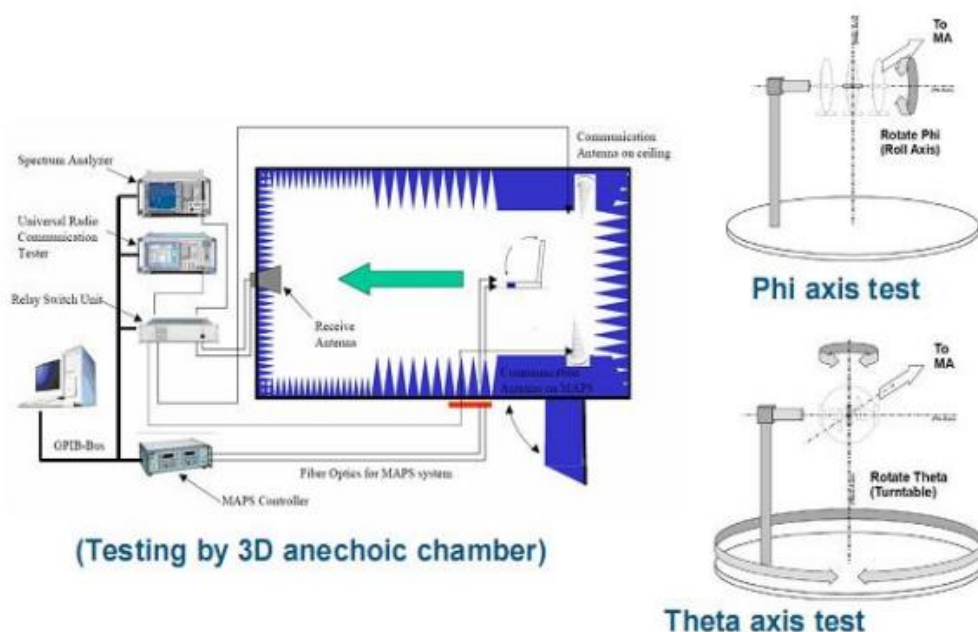
5.1.2 Test system



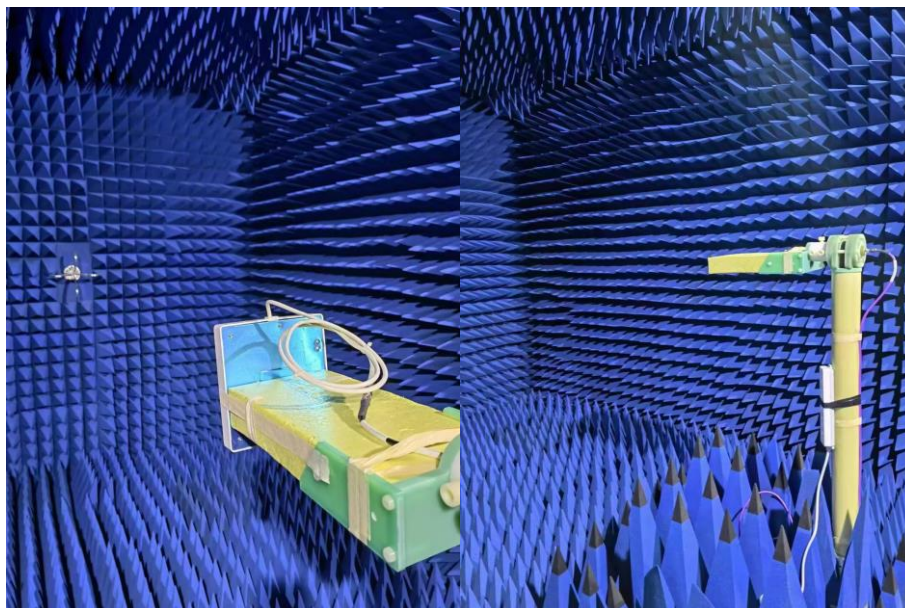
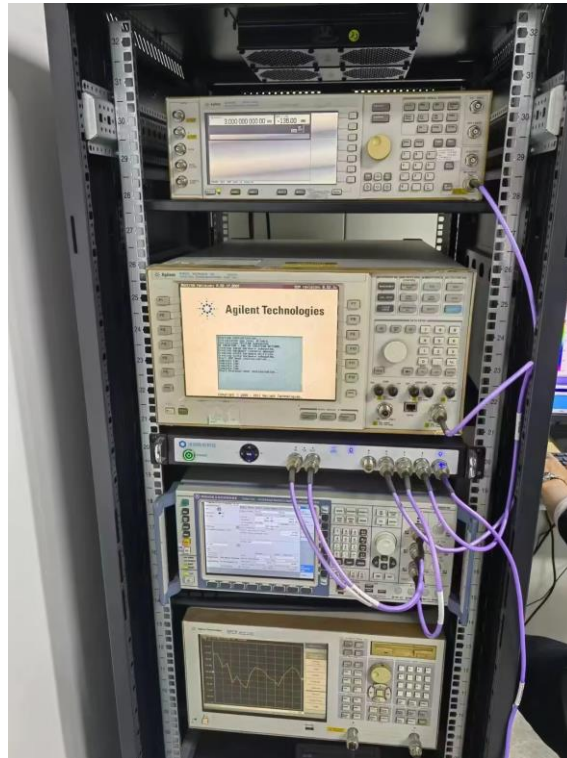
Antenna standing wave test equipment is connected in sequence:
Agilent 5071C network analyzer → test cable → antenna.

5.2 Radiation Pattern test

5.2.1 3D Chamber Test System



5.2.2 Radiation Pattern test environment

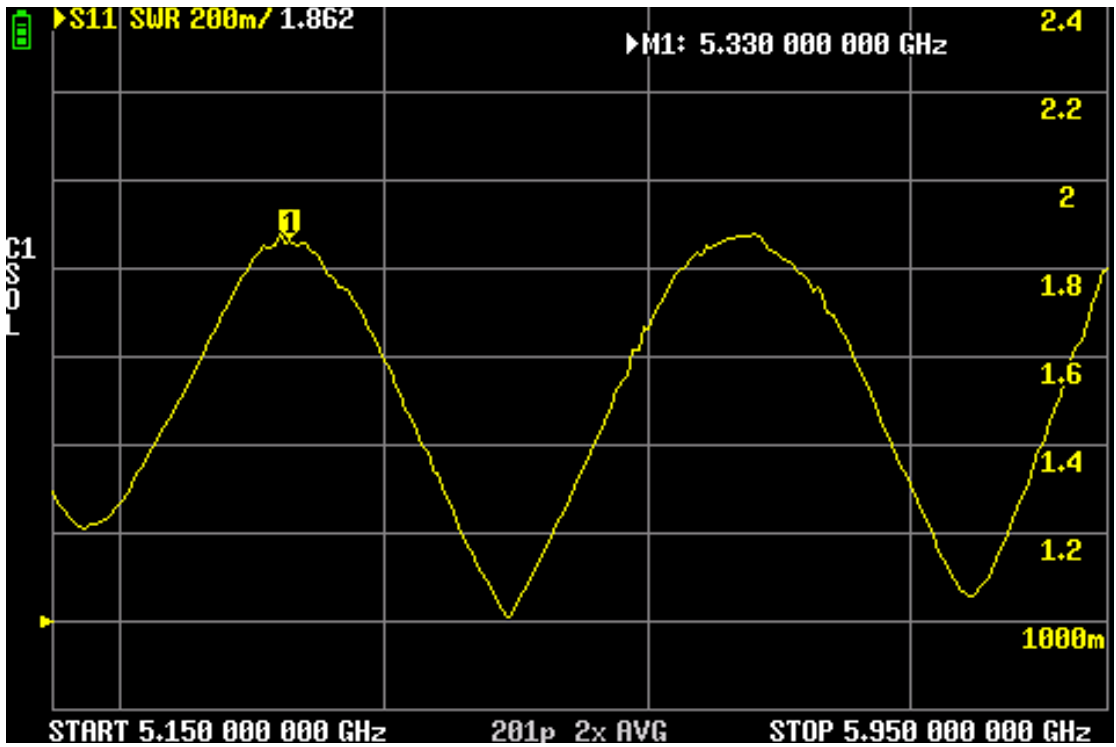


LR microwave anechoic chamber: The test frequency range is 400MHz to 6GHz, and in a spherical quiet zone with a diameter of 40cm, the anechoic chamber provides a reflectivity of less than - 90dB in the range of 400MHz to 6GHz.

6. Radiation Report

6.1 VSWR

6.1.1 VSWR Test waveform

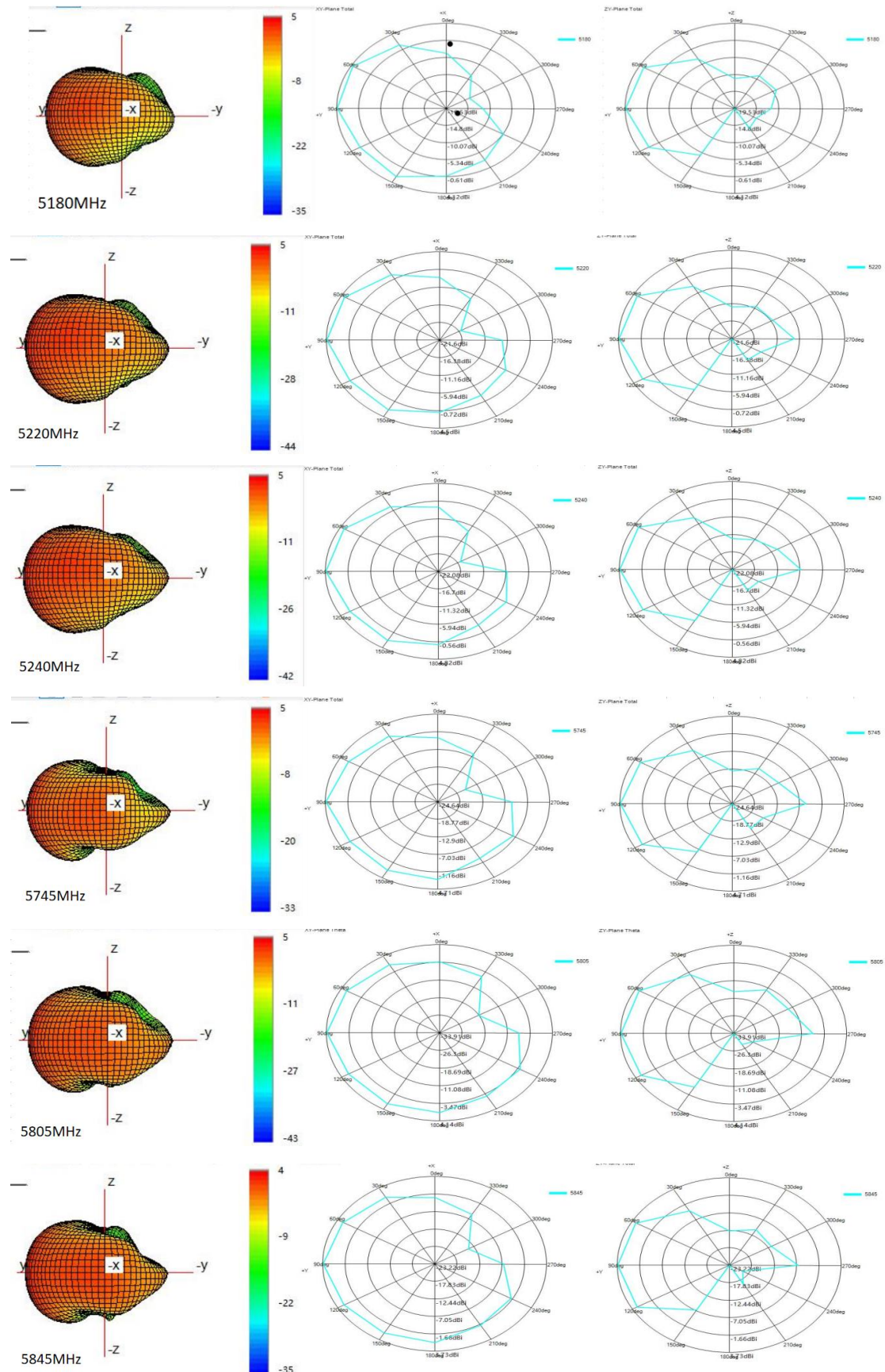


6.1.2 VSWR test result

Frequency	5150-5850MHz
VSWR	≤2

6.2 Radiation Pattern

6.2.1 Radiation Pattern



6.2.2 Radiation Pattern test result

Frequency MHz	Gain dBi	Effi %
5180	4.12	60.05
5220	4.50	63.71
5240	4.82	66.64
5745	4.71	59.73
5805	4.17	56.65
5845	3.73	57.45

7 Reliability Report**7.1 Constant Temperature and Humidity Test**

Project	Constant Temperature and Humidity Test		Check ID																
Product Name	VS200		quantity:5PCS																
Date Of Test: 2023-10-24			Date of Complete: 2023-10-25																
Equipment For Test 1. Programmable Constant Temperature And Humidity Test Box. 2. 8753ES Network Analyser.																			
Condition For Test 1. Under room temperature, 65% humidity. 2. Under 80° , 85%~90% humidity , 2 hour per circulation, total 24 hours.																			
Test Result																			
Standard 1、Shedding-free, Non-cracking, No separation on the surface of metal ;Non-fading, Non-cracking, Non-deforming on the surface of nonmetal. 2、Test result meet the technical requirements.																			
<table border="1"> <thead> <tr> <th>Project</th> <th>Before Test</th> <th>After Test</th> <th>Problem</th> <th>Result</th> </tr> </thead> <tbody> <tr> <td>Appearance</td> <td>shedding-free, Non-cracking, No separation</td> <td>Non-fading, Non-cracking, Non-deforming</td> <td>Void</td> <td>Pass</td> </tr> <tr> <td>performance</td> <td>VSWR Pass</td> <td>VSWR Pass</td> <td>Void</td> <td>Pass</td> </tr> </tbody> </table>					Project	Before Test	After Test	Problem	Result	Appearance	shedding-free, Non-cracking, No separation	Non-fading, Non-cracking, Non-deforming	Void	Pass	performance	VSWR Pass	VSWR Pass	Void	Pass
Project	Before Test	After Test	Problem	Result															
Appearance	shedding-free, Non-cracking, No separation	Non-fading, Non-cracking, Non-deforming	Void	Pass															
performance	VSWR Pass	VSWR Pass	Void	Pass															
Result:		☒ PASS	☐ FAIL	☐ Unable to judge															
Tested by: Liu Jie		Reviewed by: Li Fei	Approved by: Zhang Yunchun																

7.2 Salt Spray Test

Project	Salt Spray Test	Test ID																		
Project Name	VS200	quantity: 5PCS																		
Date of test: 2023-10-26		Date of complete:2023-10-28																		
Test equipment: 1.HL-60-SS Salt Spray Test Tester.																				
Test Condition: 1.35±2℃ in the salt spray test box; 22~30℃ in the laboratory 2.PH=6.5/7.2, the concentration of the sodium chloride decade to 50 ±10g/L after 24 hours on per 80 square centimeter.																				
Result: Pass																				
<table><tr><td>Number</td><td>(Result</td><td>Problem</td></tr><tr><td>1</td><td>Pass</td><td>Void</td></tr><tr><td>2</td><td>Pass</td><td>Void</td></tr><tr><td>3</td><td>Pass</td><td>Void</td></tr><tr><td>4</td><td>Pass</td><td>Void</td></tr><tr><td>5</td><td>Pass</td><td>Void</td></tr></table>			Number	(Result	Problem	1	Pass	Void	2	Pass	Void	3	Pass	Void	4	Pass	Void	5	Pass	Void
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2	Pass	Void																		
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5	Pass	Void																		
Result: ☒ PASS ☐ FAIL ☐ Unable to judge																				
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