



DONGGUAN SLEing INTEL-TECH CO., LTD

## SPECIFICATION APPROVAL SHEET

客 户 :

CUSTOMER

CUS PART NO

REV

X1

SPECIFICATION

RF Antenna(Black)

2.4~2.5/5.15~5.85GHz 5dBi(SMA)

weight

SUP PART NO

SLEingA100070196-F47

DATE

2020.05.25

SUP APPROVED

APPROVED	CHECKED	QA CHECKED	DESIGNED
<i>Joey</i>	<i>H24</i>	<i>LSY</i>	<i>Xiaoy</i>

CUS APPROVED

APPROVED	CHECKED	QA CHECKED	DESIGNED

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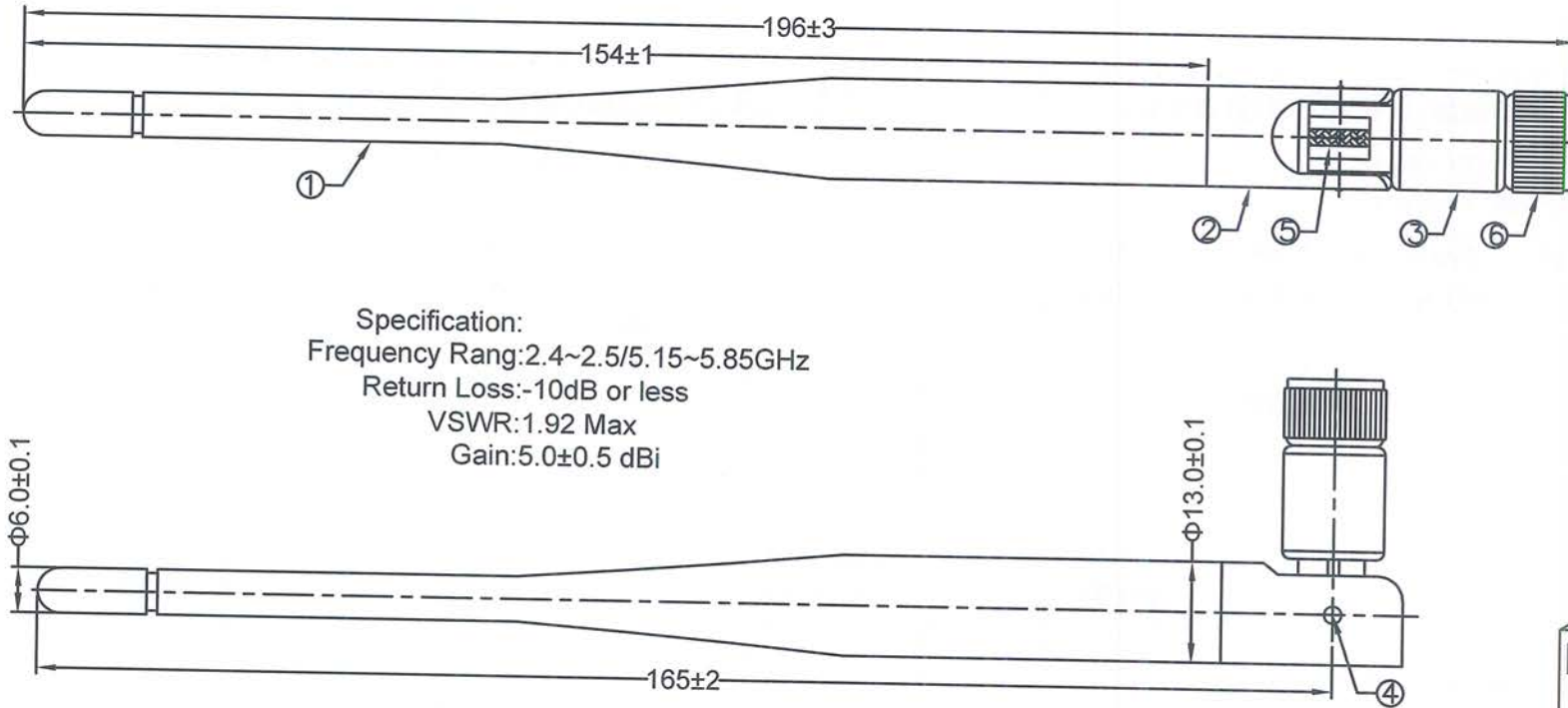
## Spec Item

NO.	Item	Remarks	page number
1	Spec Cover		1
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5	S Parameter Test		5
6	Patten		6-7
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8	Test Efficiency		9

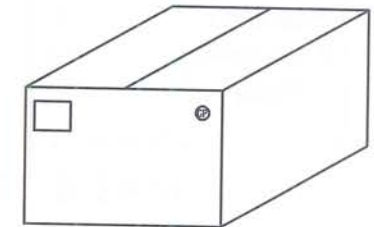
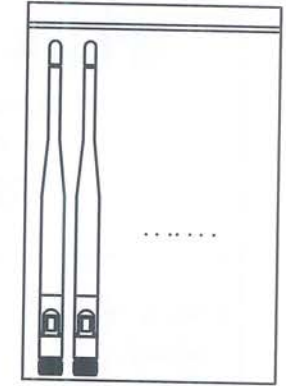
explain:

1. The contents of the letter of acknowledgment shall be arranged in order according to the items in the checklist.
2. The acknowledgment shall be printed according to the customer's requirements, and the SGS report shall be affixed with the engineering seal
3. After all materials have been confirmed by the customer, any material/process/change that may affect product quality and environmental quality must be renewed The samples can be imported only after being submitted to the customer for confirmation.
4. SGS report is valid for one year.
5. Check in the checklist according to the contents of the attachment to the actual letter of acknowledgment: "Yes" means provided, and "No" means provided according to the customer's requirements

REV.	CONTENT	DATE
X1	First Sample	2020.05.25



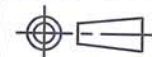
Specification:  
Frequency Rang:2.4~2.5/5.15~5.85GHz  
Return Loss:-10dB or less  
VSWR:1.92 Max  
Gain:5.0±0.5 dBi



The outer box shall be labeled with the GP label and the material label each 1PCS

6	Connector	SMA Straight Plug/Reverse for RG-178 Cable		1
5	Cable	RG-178,Transparency Brown,50Ω		1
4	Rivet	POM,Color:Black		1
3	Bottom Base	PBT,Color:Black		1
2	Upper Base	PC,Color:Black		1
1	Antenna Cap	TPE,Color:Black		1
NO	PART NAME	DESCRIPTION	REMARK	Q'TY

**SLEing®**  
DONGGUAN SLEing INTEL-TECH CO.,LTD



TOLERANCE UNLESS  
OTHERWISE SPECIFIED

UNIT:mm	ANGLES ±0.5°	X. ±0.3
SHEET: 1/1	.XX ±0.05	XX. ±0.5
SCALE: 1/1		XXX. ±2.0

CUSTOMER			
PART NO			
TITLE			
S.L P/NO			
SIZE	DRAWN	CHECKED	APPROVED
A4	X:ouy	H2U	Tommy



DONGGUAN SLEing INTEL-TECH CO., LTD

## Test Reports

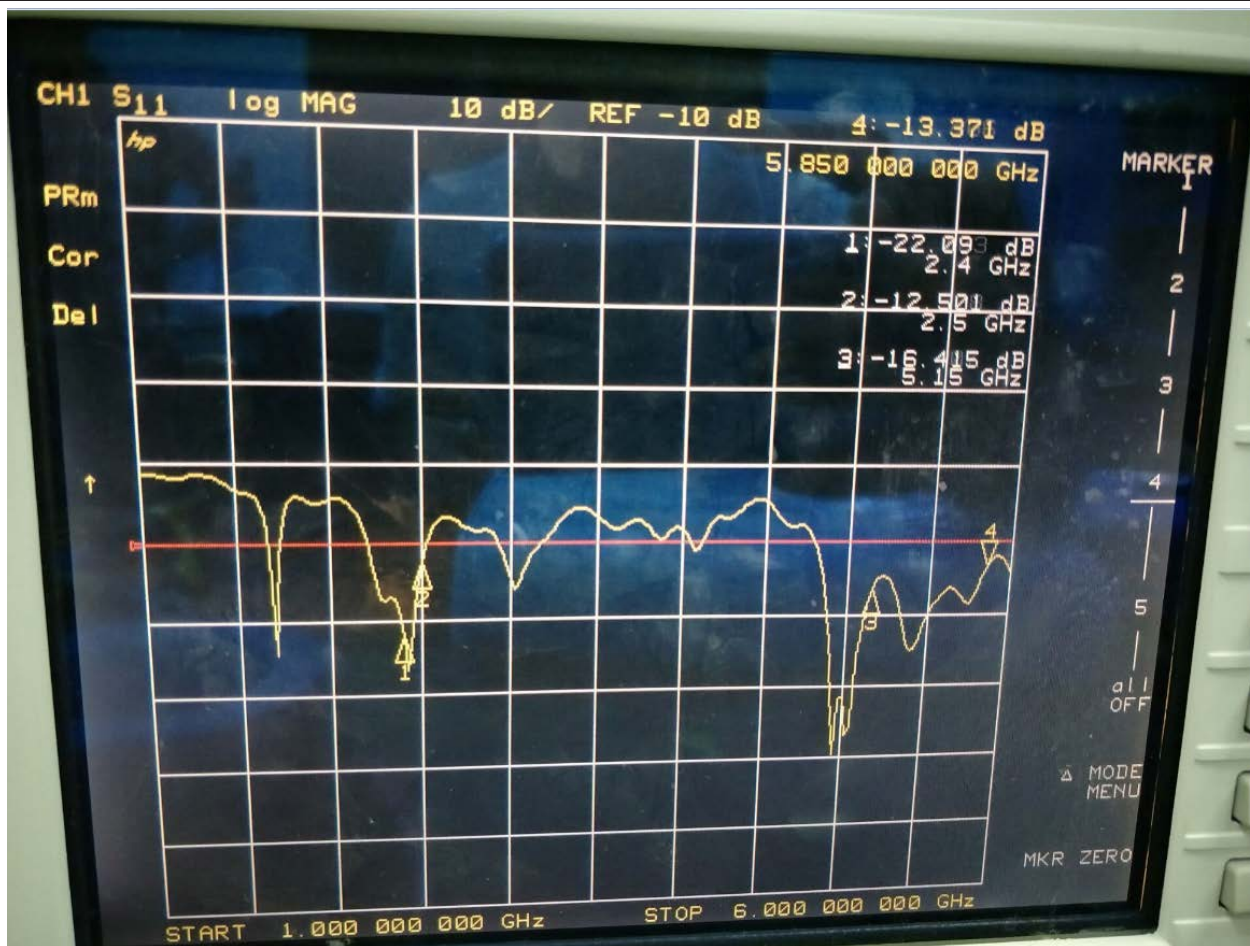
Electrical Properties	
Frequency	2.4-2.5/5.15-5.85GHz
Impedance	50 Ohm Nomina
V.S.W.R	$\leq 1.92$
Return Loss	-10 dB Max
Radiation	全向性(Omni-directional)
Gain	5.21 dBi
Polarization	Linear, Vertical
Admitted Power	2 W
Physical Properties	
Operating Temp	-20°C -75°C
Storage Temp	-20°C -75°C

## S Parameter Test

Agilent E5071C Network Analyzer



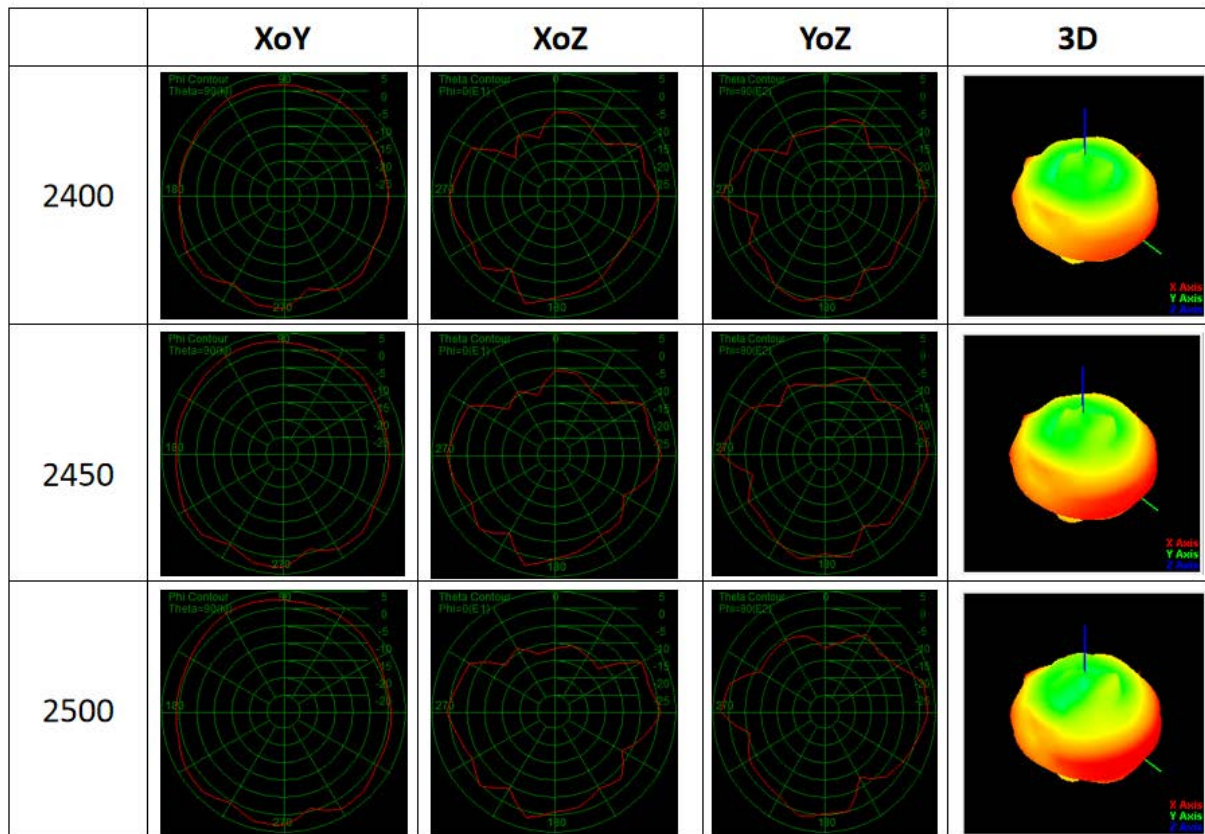
RF Antenna (NO. 1)





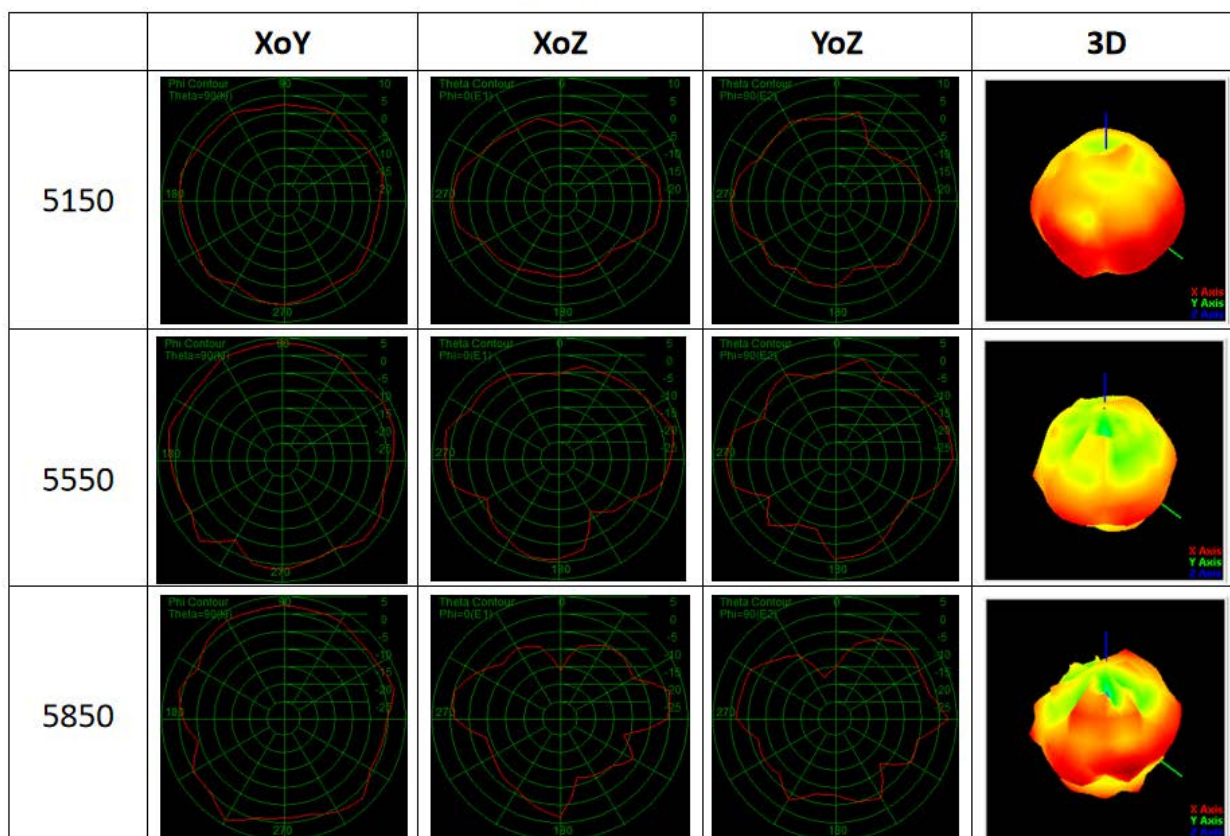
## Patten (2.4G)

Gain & Patterns test results 3D patterns

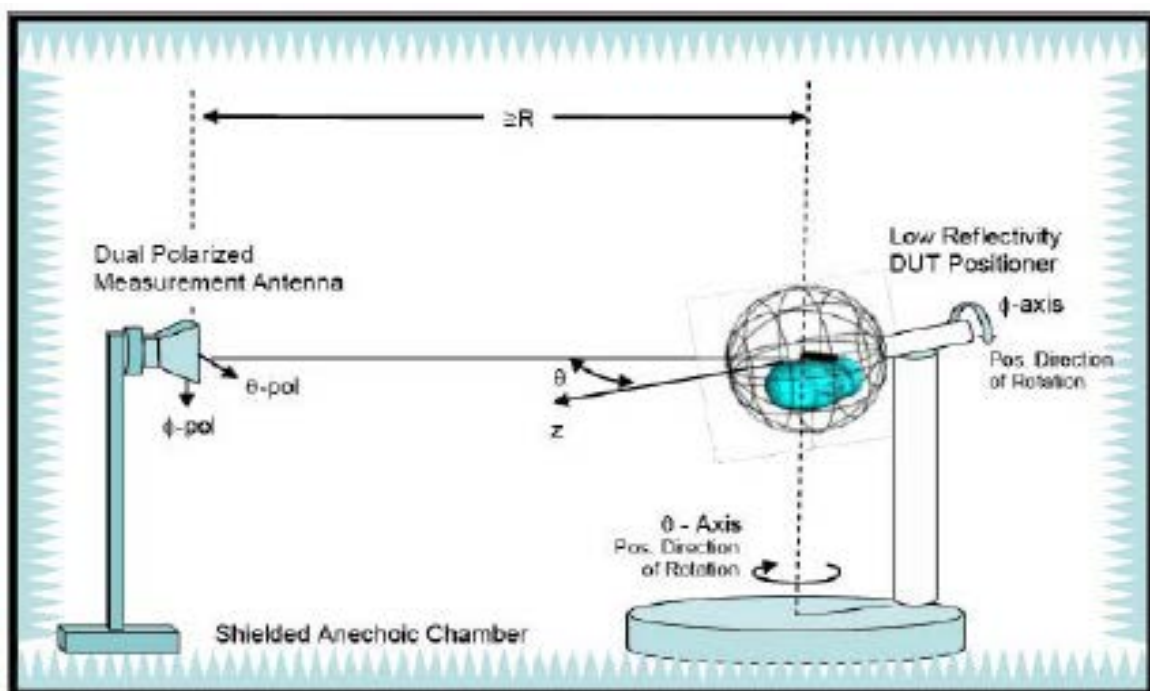
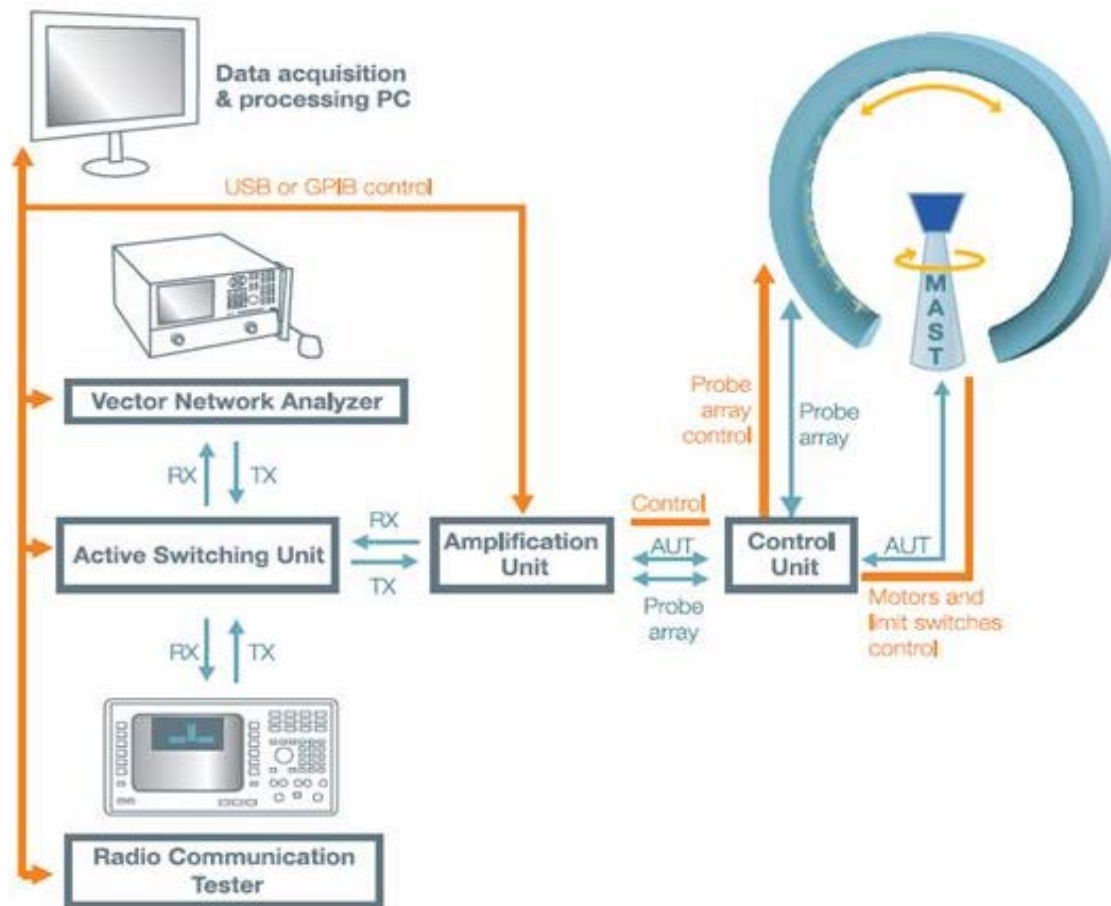


## Patten (5. 8G)

Gain & Patterns test results 3D patterns



## Test Setup





## Test Efficiency

Test Point ID	Freq. (MHz)	Gain (dBi)	Efficiency (%)
<u>1</u>	2400.0	4.60	68.7%
<u>2</u>	2410.0	4.28	67.1%
<u>3</u>	2420.0	4.76	69.8%
<u>4</u>	2430.0	4.65	68.4%
<u>5</u>	2440.0	4.39	67.8%
<u>6</u>	2450.0	4.58	69.3%
<u>7</u>	2460.0	4.43	68.5%
<u>8</u>	2470.0	4.57	67.9%
<u>9</u>	2480.0	4.54	69.4%
<u>10</u>	2490.0	4.64	68.7%
<u>11</u>	2500.0	4.44	67.6%
<u>12</u>	5150.0	4.95	68.2%
<u>13</u>	5200.0	4.78	66.5%
<u>14</u>	5250.0	5.08	67.4%
<u>15</u>	5300.0	4.89	69.1%
<u>16</u>	5350.0	4.67	68.4%
<u>17</u>	5400.0	4.76	67.6%
<u>18</u>	5450.0	4.44	68.6%
<u>19</u>	5500.0	5.06	69.1%
<u>20</u>	5550.0	5.19	68.9%
<u>21</u>	5600.0	5.05	67.5%
<u>22</u>	5650.0	5.21	68.2%
<u>23</u>	5700.0	5.15	67.6%
<u>24</u>	5750.0	4.90	68.4%
<u>25</u>	5800.0	5.09	69.8%
<u>26</u>	5850.0	5.16	67.9%
<u>27</u>	--	--	--
<u>28</u>			