



# 东莞市森岭智能科技有限公司

DONGGUAN SLEing INTEL-TECH CO., LTD

## 承 认 书

### SPECIFICATION APPROVAL SHEET

客 户 :

CUSTOMER

客 户 料 号 :

CUS PART NO

版次:

REV

X1

品 名 / 规 格 :

SPECIFICATION

2.4-2.5/5.15-5.85GHz

WIFI Antenna(RG178+SMA)

单重:

weight

供 方 料 号 :

SUP PART NO

SLEingA100020108-F51

日 期 :

DATE

2024.05.22

厂 商 核 准 :

SUP APPROVED

核准 APPROVED	审核 CHECKED	品保审核 QA CHECKED	承办 DESIGNED

客 户 核 准 :

CUS APPROVED

核准 APPROVED	审核 CHECKED	品保审核 QA CHECKED	承办 DESIGNED

## 东莞市森岭智能科技有限公司

DONGGUAN CITY SLEing INTEL-TECH CO., LTD

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东莞市森岭智能科技有限公司

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变更记录

MODIFICATION RECORD SHEET

版本 (REV.)	更改日期 (Modification date)	更改内容描述 (Summary of modification content)	拟制 (Signature)	批准 (Approval)
X1	2024.05.22	初版发行 (First Issue)	胡赵海 (Jerry)	朱正锐 (Jongrei)



承认书项目表 (Spec Item )

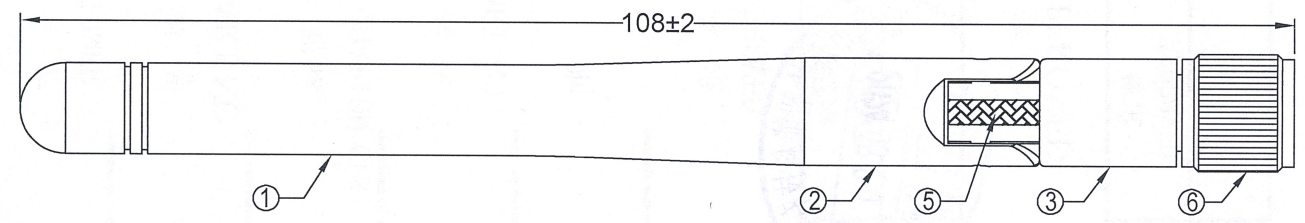
序号(NO.)	项目(Project)	备注(Remark)	页码(Page)
1	承认书封面 (Spec Cover)		1
2	变更记录 (MODIFICATION RECORD SHEET)		2
3	承认书项目表 (Spec Item )		3
4	工程成品图 (Drawing)		4
5	电性测试报告 (Test Reports )		5
6	S参数测试 (S Parameter Test)		6
7	测试设备 (Test Setup)		7
8	方向图(Patten)		8-9
9	测试效率(Test Efficiency)		10

Give clear indication of:

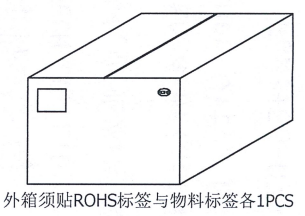
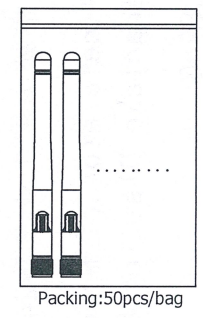
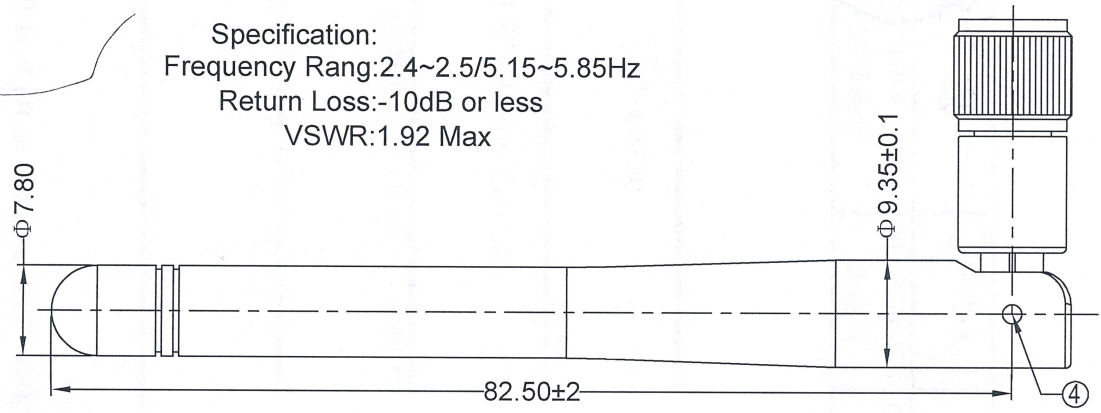
1. The contents of the acknowledgement shall be arranged in order according to the items in the check sheet.
2. The number of copies of the acceptance letter shall be printed according to the customer's requirements, and the SGS report shall be stamped with the engineering seal.
3. All materials shall be confirmed by the customer. Any material/process/changes that may affect product quality and environmental quality must be re-sent to the customer for confirmation before import.
4. SGS report is valid for one year.
5. According to the contents attached to the actual acknowledgement, check the check form: "Yes" is provided, "no" is provided according to customer requirements.



REV.	CONTENT	DATE
X1	Frist Sample	2024.05.22



Specification:  
 Frequency Rang:2.4~2.5/5.15~5.85Hz  
 Return Loss:-10dB or less  
 VSWR:1.92 Max



SLEing® 森岭 东莞市森岭智能科技有限公司 DONGGUAN SLEing INTEL-TECH CO.,LTD					CUSTOMER			
					PART NO			
TOLERANCE UNLESS OTHERWISE SPECIFIED ANGLES ±0.5° X. ±0.3 .XX ±0.05 XX. ±0.5 XXX. ±2.0					TITLE		RF ANTENNA	
					S.H P/NO		SLEingA100020108-F51	
UNIT:mm SHEET: 1/1 SCALE: 1/1					SIZE	DRAWN	CHECKED	APPROVED
					A4	Frms	张	张
6	Connector	SMA Straight Plug (塑胶头, 公头公针)		1				
5	Cable	RG-178,Transparency Brown,50Ω		1				
4	Rivet	POM,Color:Black		2				
3	Bottom Base	PC+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				



电性测试报告

Test Reports

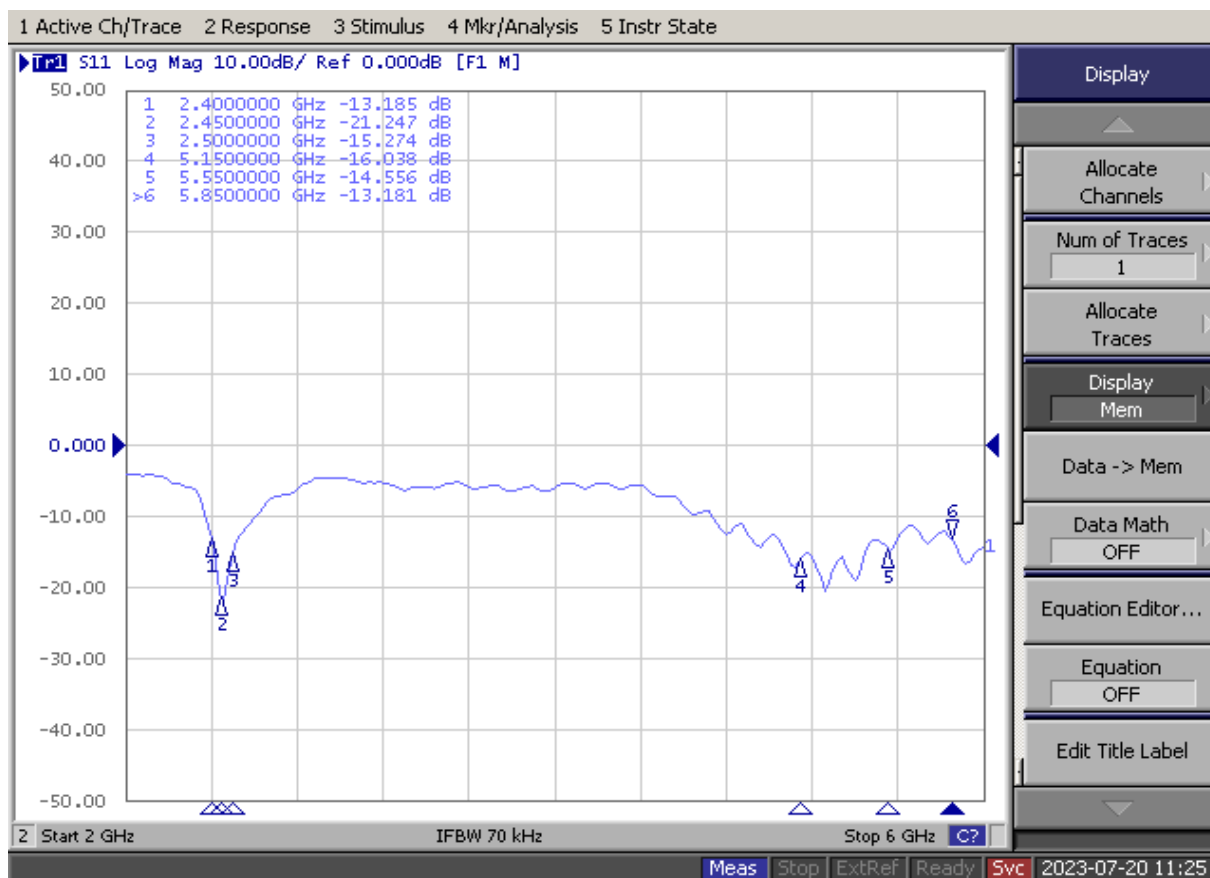
Electrical Properties	
Frequency	2.4-2.5/5.15-5.85GHz
Impedance	50 Ohm Nominal
V.S.W.R	≤1.92
Return Loss	-10dB Max
Radiation	Omni-directional
Gain (Peak)	2.4G:1.91 dBi/ 5.8G:1.94 dBi
Polarization	Linear, Vertical
Admitted Power	2 W
Connector	MHF
Physical Properties	
Antenna Material	TPE/PC+PBT
Cable Type	RG178
Operating Temp	-40°C-75°C
Storage Temp.	-40°C-75°C

## S参数测试 S Parameter Test

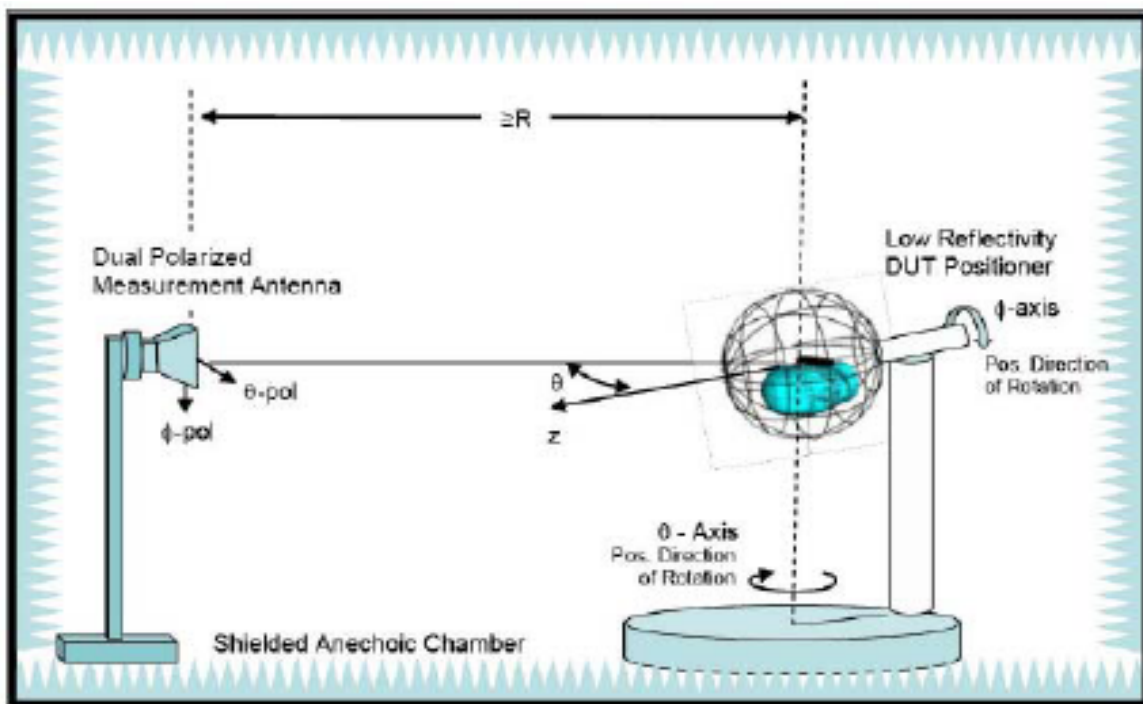
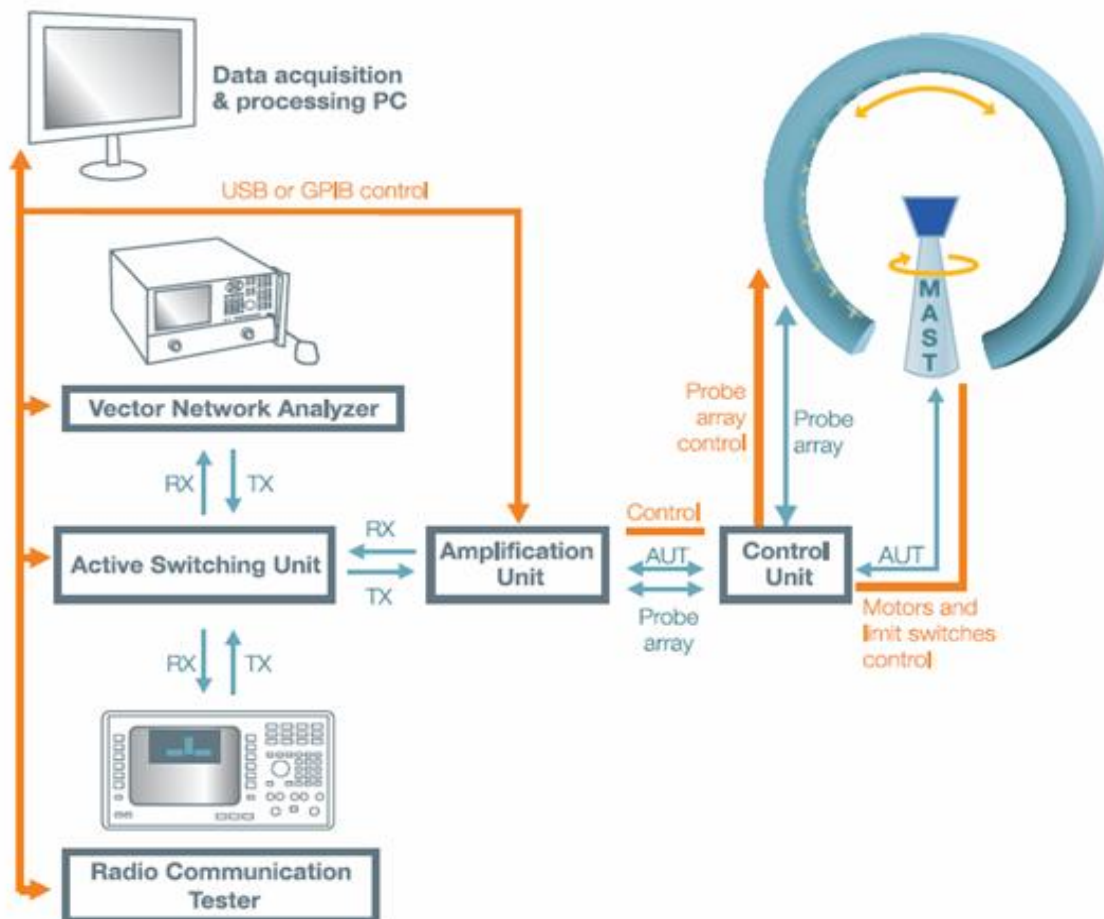
Agilent E5071C Network Analyzer



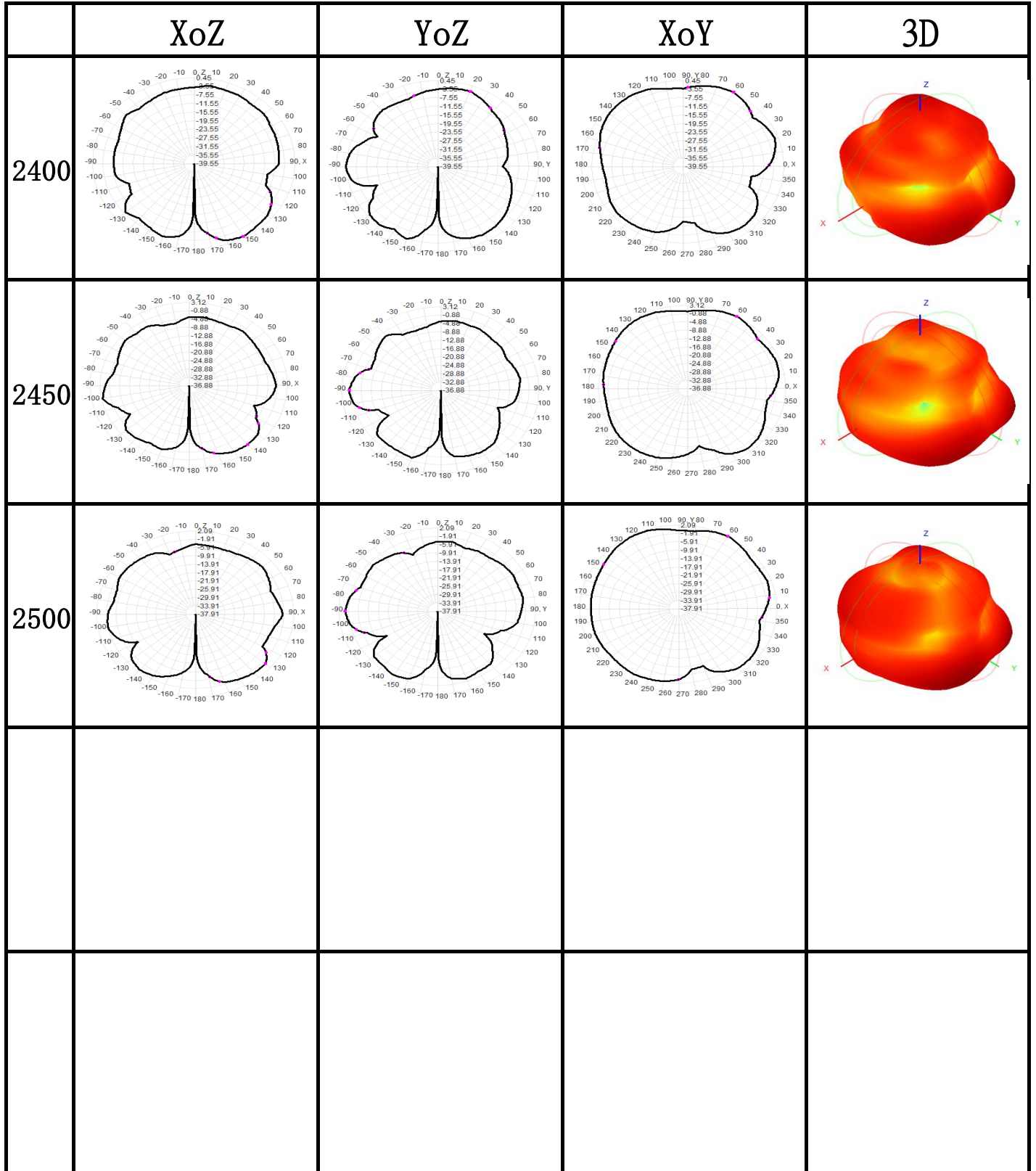
RF Antenna(Return Loss)



# 测试设备 Test Setup



方向图  
Patten





方向图  
Pattern

	XoZ	YoZ	XoY	3D
5150				
5550				
5850				



# 测试效率 Test Efficiency

<b>Frequency ID</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>
<b>Frequency (MHz)</b>	<b>2400</b>	<b>2410</b>	<b>2420</b>	<b>2430</b>	<b>2440</b>	<b>2450</b>	<b>2460</b>	<b>2470</b>	<b>2480</b>	<b>2490</b>	<b>2500</b>
<b>Gain (dBi)</b>	0.70	1.20	1.91	1.37	1.78	1.12	1.86	1.75	1.50	1.06	1.09
<b>Efficiency (%)</b>	<b>32.71</b>	<b>37.23</b>	<b>41.25</b>	<b>43.80</b>	<b>47.07</b>	<b>48.36</b>	<b>47.74</b>	<b>46.84</b>	<b>45.84</b>	<b>43.64</b>	<b>45.39</b>

<b>Frequency ID</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>	<b>17</b>	<b>18</b>	<b>19</b>
<b>Frequency (MHz)</b>	<b>5150</b>	<b>5200</b>	<b>5250</b>	<b>5300</b>	<b>5350</b>	<b>5400</b>	<b>5450</b>	<b>5500</b>
<b>Gain (dBi)</b>	1.03	1.80	1.14	1.26	1.94	1.44	1.47	1.04
<b>Efficiency (%)</b>	<b>57.74</b>	<b>55.77</b>	<b>62.49</b>	<b>62.32</b>	<b>54.88</b>	<b>64.28</b>	<b>59.84</b>	<b>60.97</b>

<b>Frequency ID</b>	<b>20</b>	<b>21</b>	<b>22</b>	<b>23</b>	<b>24</b>	<b>25</b>	<b>26</b>
<b>Frequency (MHz)</b>	<b>5550</b>	<b>5600</b>	<b>5650</b>	<b>5700</b>	<b>5750</b>	<b>5800</b>	<b>5850</b>
<b>Gain (dBi)</b>	1.23	1.16	1.08	1.77	1.26	1.56	1.88
<b>Efficiency (%)</b>	<b>58.95</b>	<b>55.25</b>	<b>59.48</b>	<b>57.32</b>	<b>58.58</b>	<b>60.27</b>	<b>59.81</b>