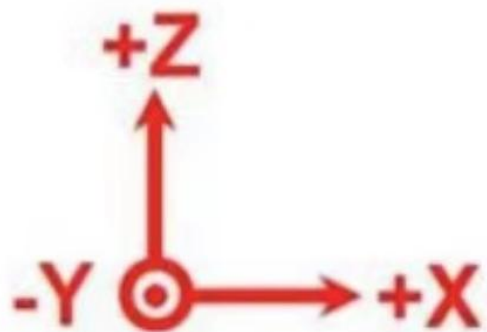


安克T86P2项目机器主天线有源及  
GPS/WiFi/测试报告  
AnkerT86p2 Project Machine main  
Antenna,GPS and WiFi Test report

# 目录 catalogue

- ❑ 暗室坐标及整机摆放 Chanbel room coordinates and whole machine placement
- ❑ WiFi天线附近环境处理 wifi Treatment of surrounding environment of antenna
- ❑ 匹配电路 Matching circuit
- ❑ 天线说明 Antenna description
- ❑ S11/效率增益 S11 / efficiency gain
- ❑ WIFI/2D/3D图 Wifi/2D/3D diagram
- ❑ 主天线S11 Main antenna S11
- ❑ 主天线无源效率/增益 Passive efficiency / gain of main antenna
- ❑ 分集天线S11 Diversity antenna S11
- ❑ 分集无源效率/增益 Diversity antenna passive efficiency / gain
- ❑ GPS天线S11/增益 GPS antenna S11 and gain

# Chamber coordinates and whole machine placement



- 图片见附件图一
- I. The picture is shown in figure 1 of
- the attachment.

# WiFi天线周边环境处理

# WiFi Treatment of surrounding environment of antenna



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- 图片见附件图二
- The picture is shown in figure 2 of
- the attachment.

# WIFI天线图片及天线类型

## wifi Antenna Pictures and types



WiFi天线 版本号: V4

天线类型: FPC+Cable

天线见附件: 图三

wifi Antenna Version number: V4

Antenna type: FPC+Cable

The picture is shown in figure 3 of the attachment

# 主天线图片及天线类型

## Main antenna picture antenna type



主天线版本号：V1

天线类型：FPC

天线见附件：图四

Main Antenna Version number: V1

Antenna type: FPC

The picture is shown in figure 4 of the attachment.

# 分集天线图片及天线类型

## Diversity antenna Pictures and types



分集天线版本号：V2

天线类型：FPC

天线见附件：图五

Diversity Antenna Version number: V2

Antenna type: FPC

The picture is shown in figure 5 of the attachment.

# GPS天线图片及天线类型

## GPS Antenna Pictures and types



GPS天线版本号：V1

天线类型：FPC

天线见附件：图六

GPS Antenna Version number: V1

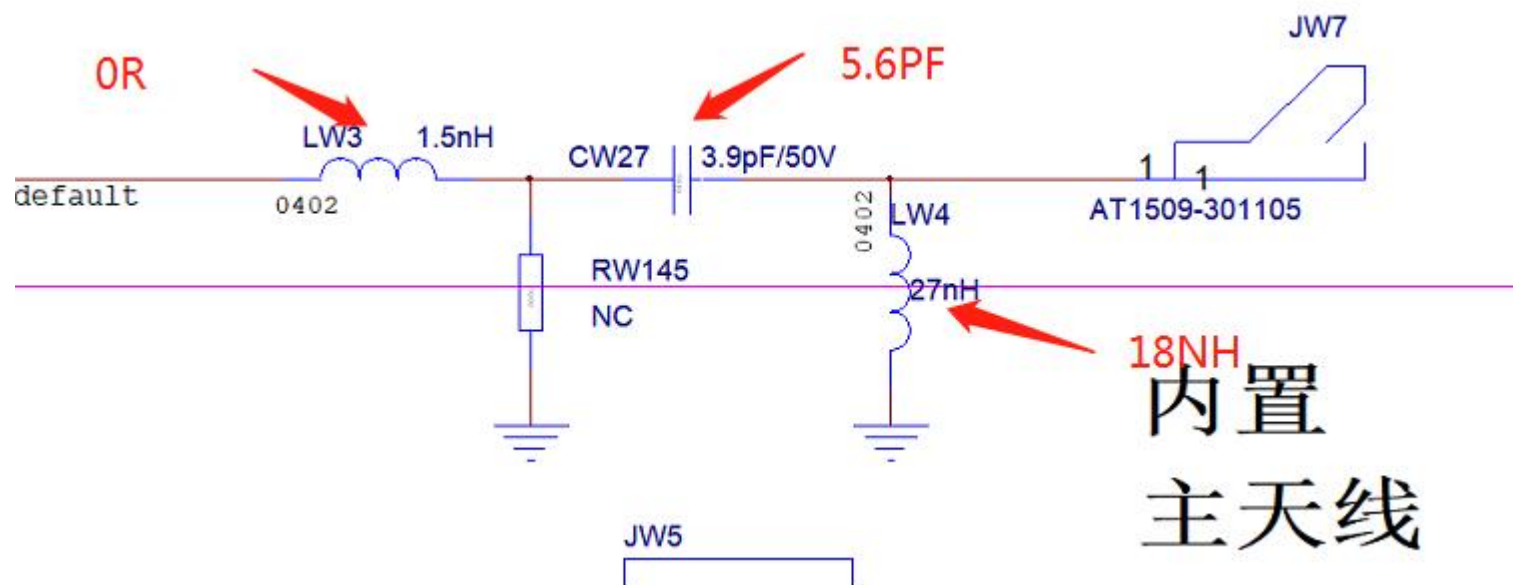
Antenna type: FPC

The picture is shown in figure 6 of the attachment.



# 主天线匹配

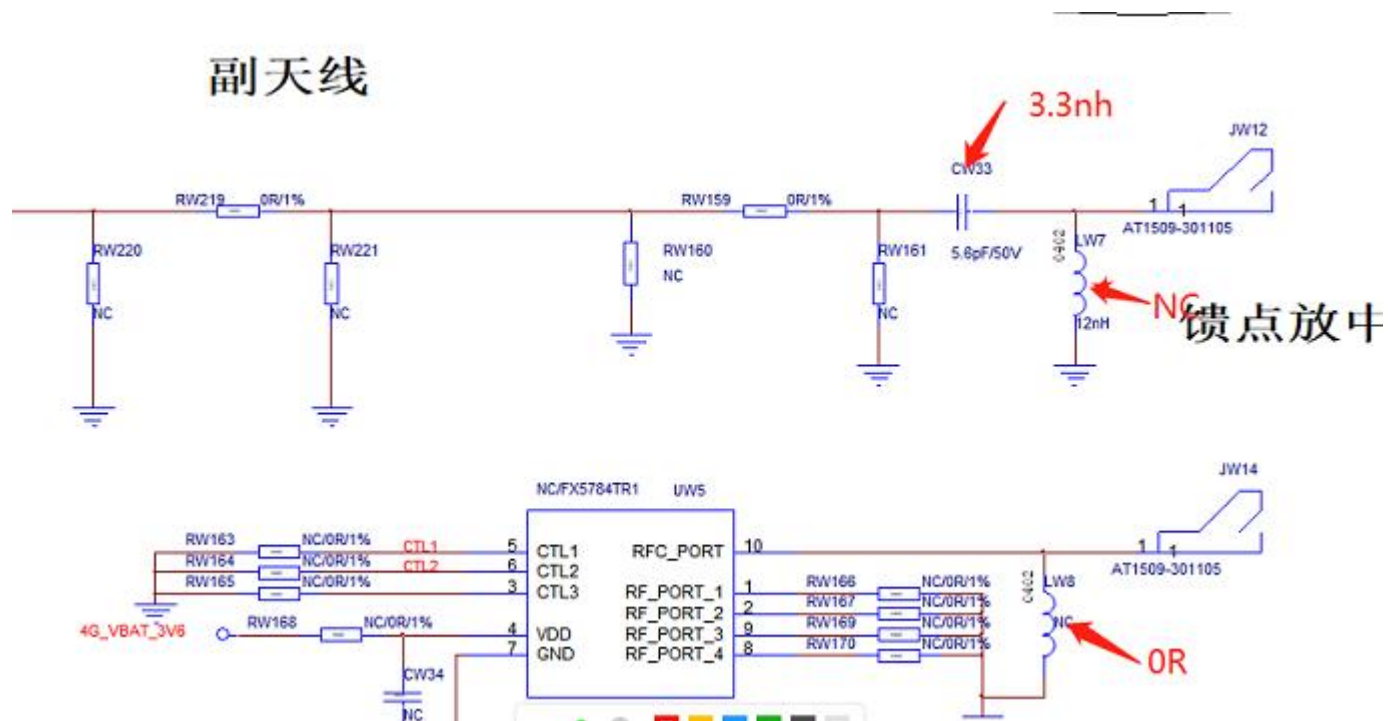
## Main antenna Matching circuit



# 分集天线匹配



### 副天线



# GPS天线WIFI天线

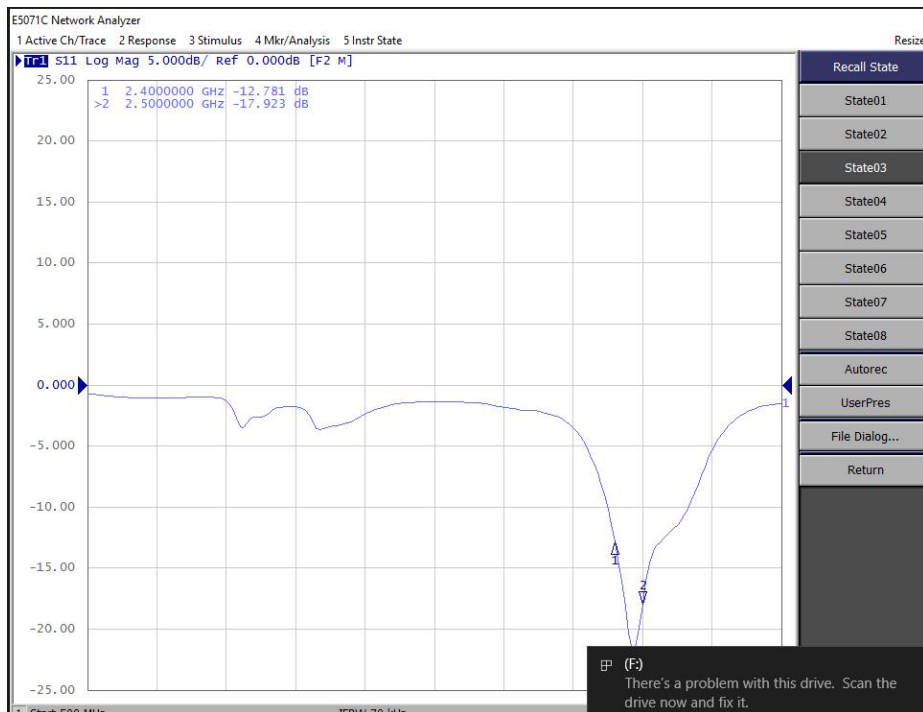
## GPS Antennawifi Antenna



GPS/WIFI天线匹配电路无更改，按  
主板原有匹配（0R）

GPS/WIFIAntenna Matching  
circuitNo Chan,Match according to  
the original motherboard(0R)

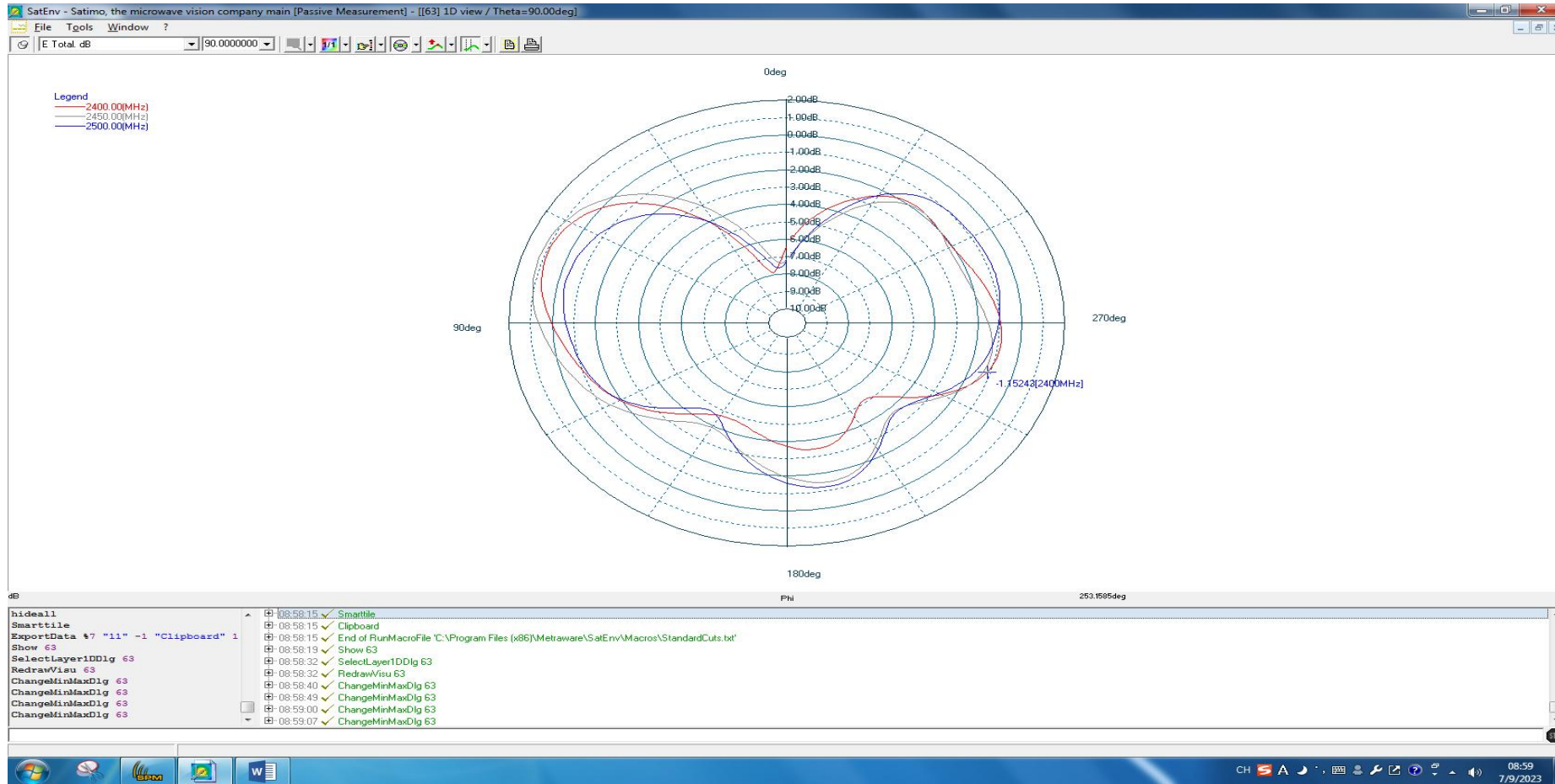
# wifi/S11



wifi

Frequency	Efficiency	Efficiency	Gain . dB
2.4E+09	53%	-2.80	2.14
2.41E+09	53%	-2.72	2.37
2.42E+09	56%	-2.52	2.57
2.43E+09	59%	-2.30	2.90
2.44E+09	61%	-2.18	3.35
2.45E+09	61%	-2.17	3.35
2.46E+09	61%	-2.18	3.35
2.47E+09	57%	-2.46	3.26
2.48E+09	58%	-2.39	3.05
2.49E+09	56%	-2.50	2.86
2.5E+09	56%	-2.51	2.86

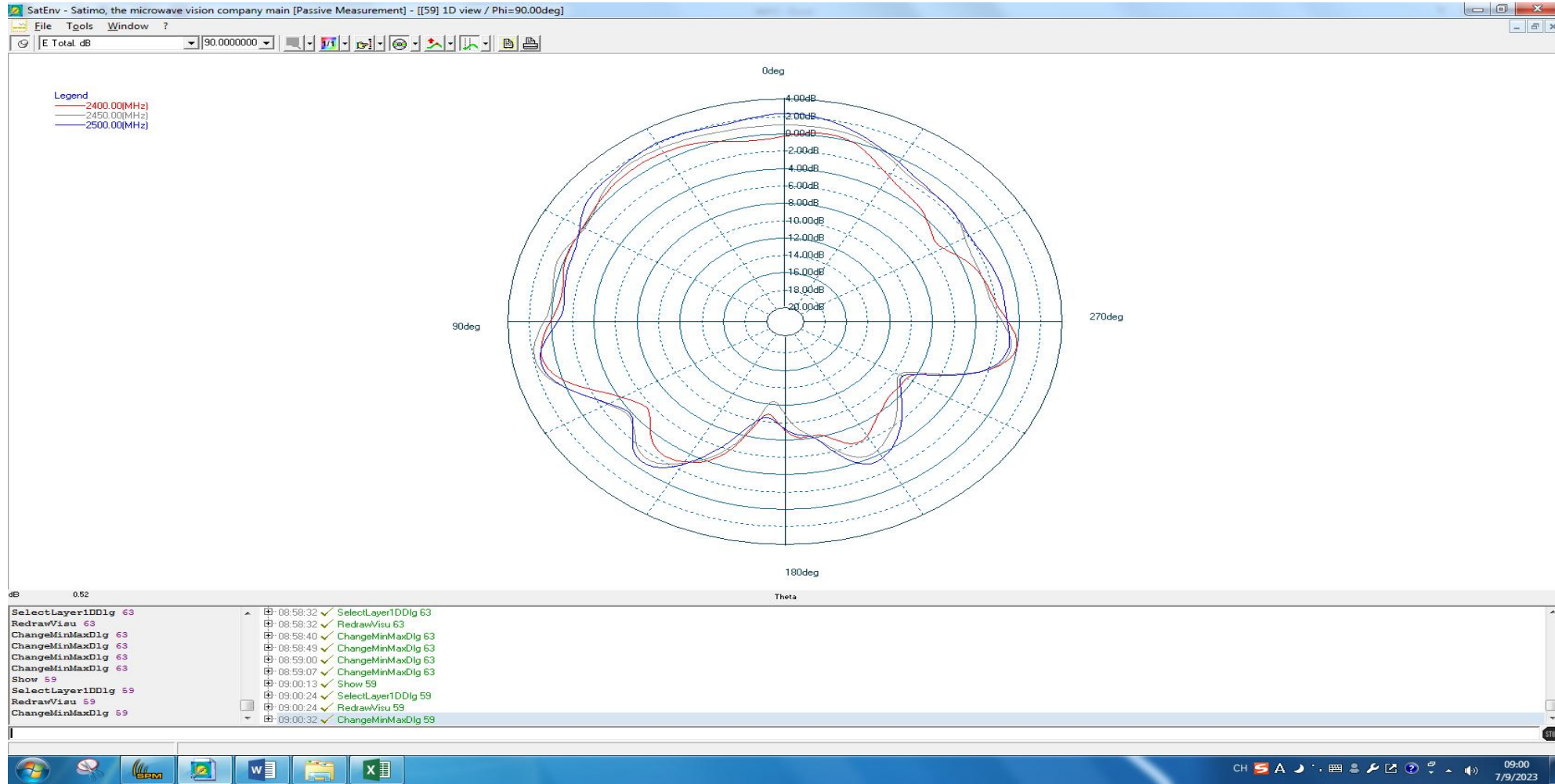
# WIFI: 2D



# WIFI: 2D

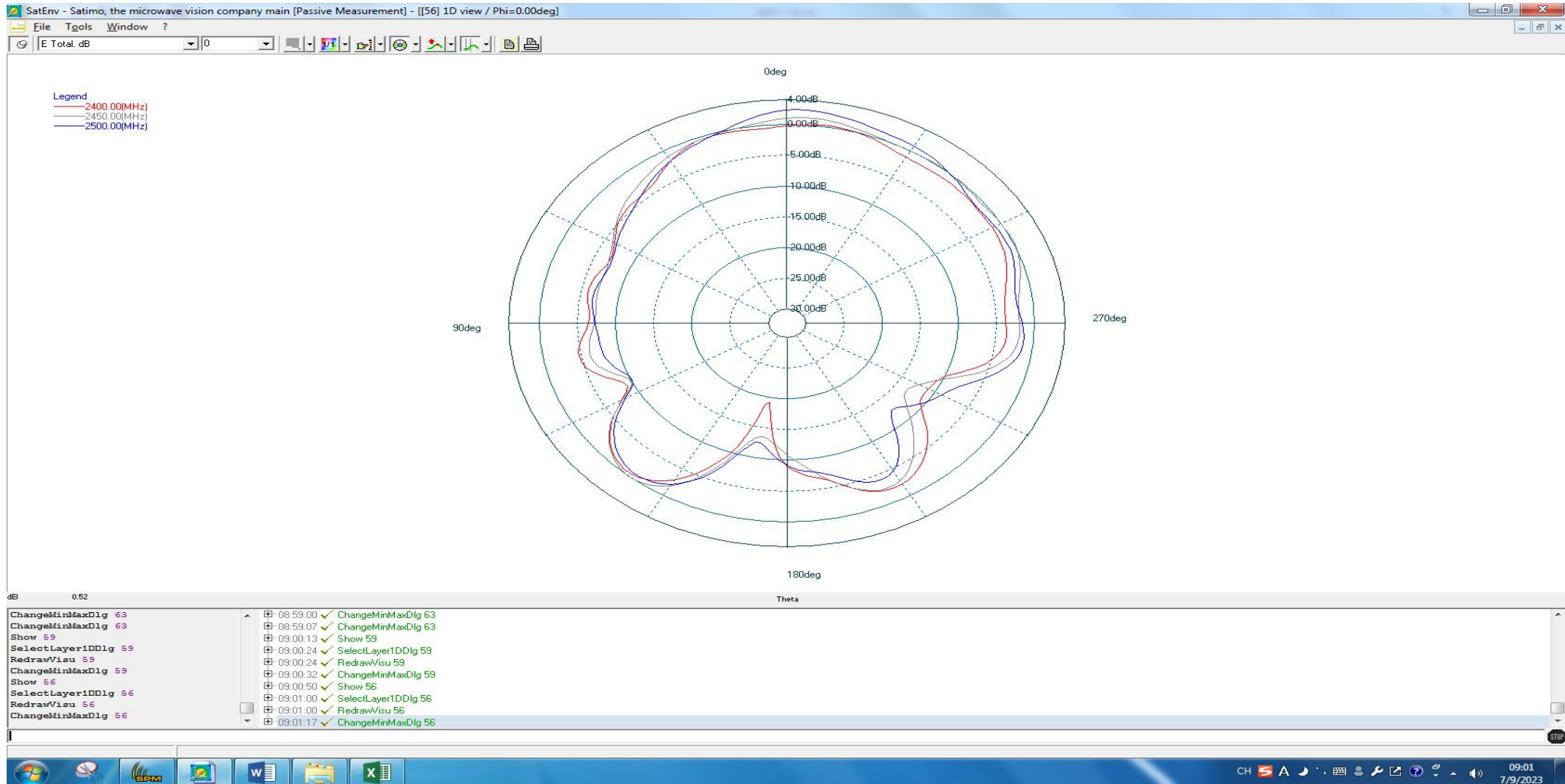


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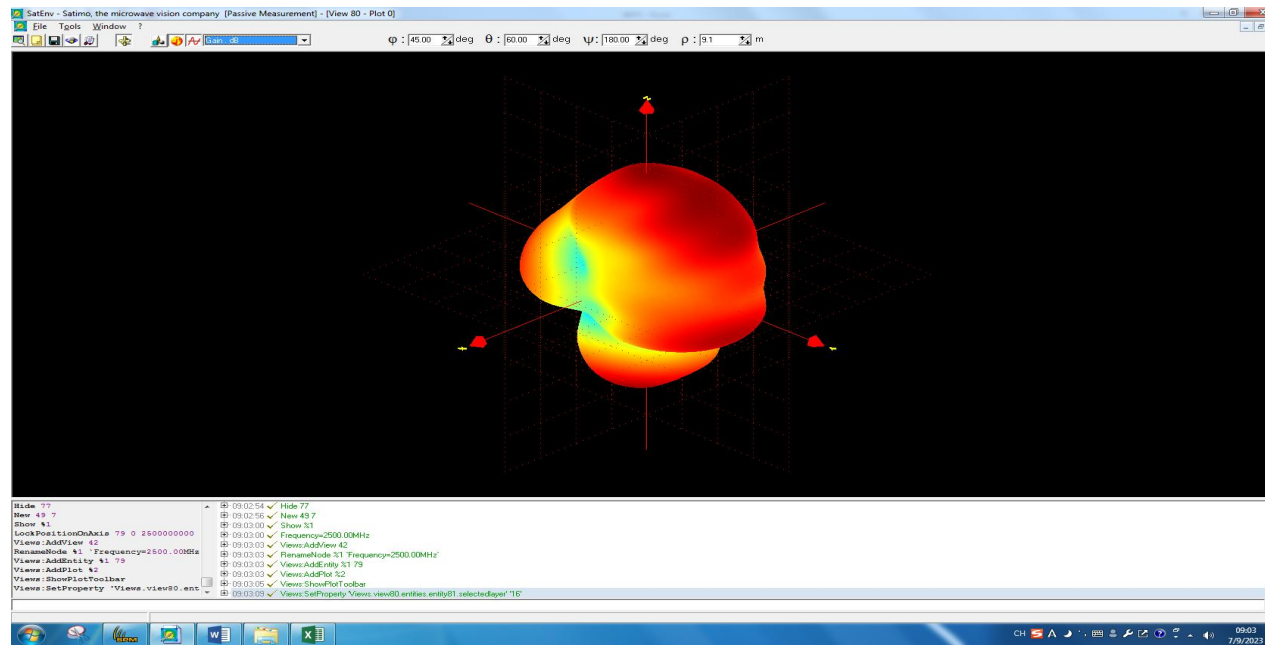
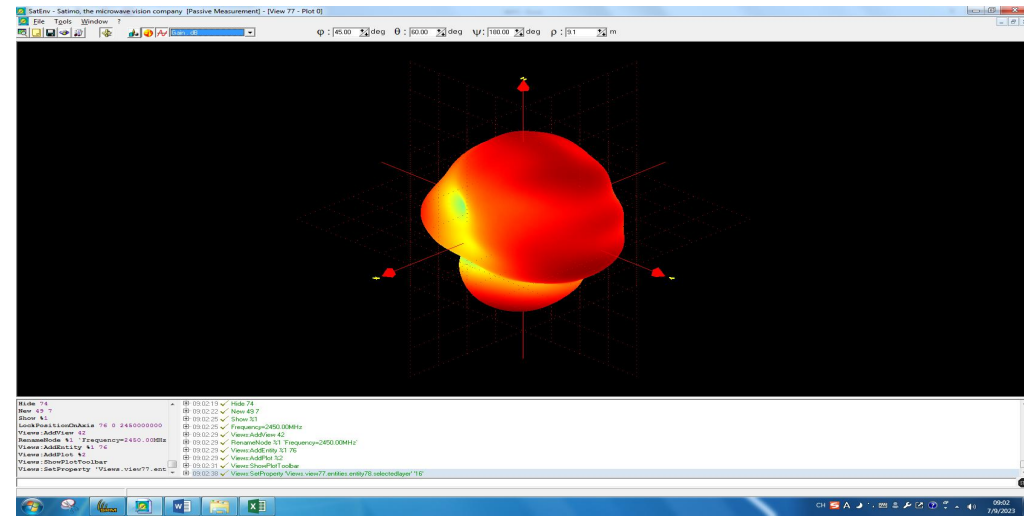
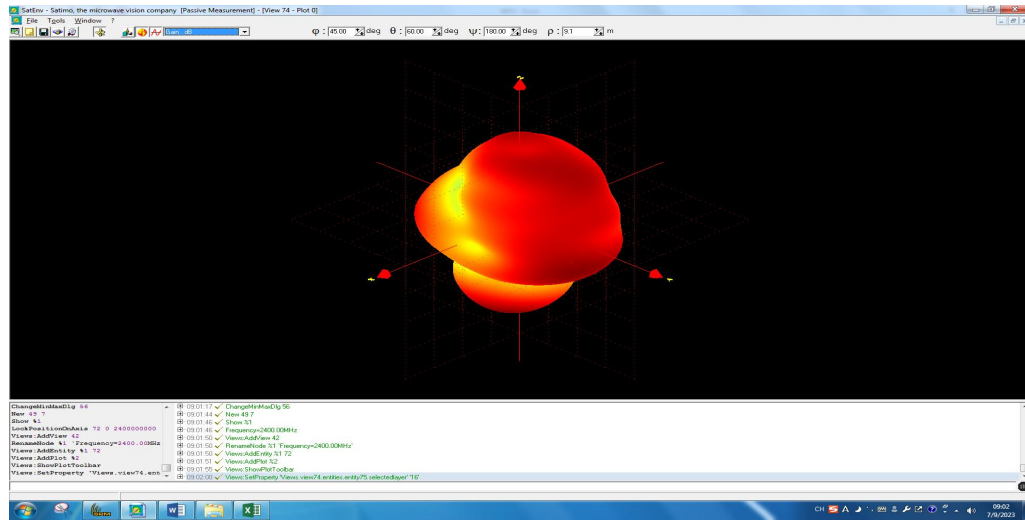




# WIFI: 2D



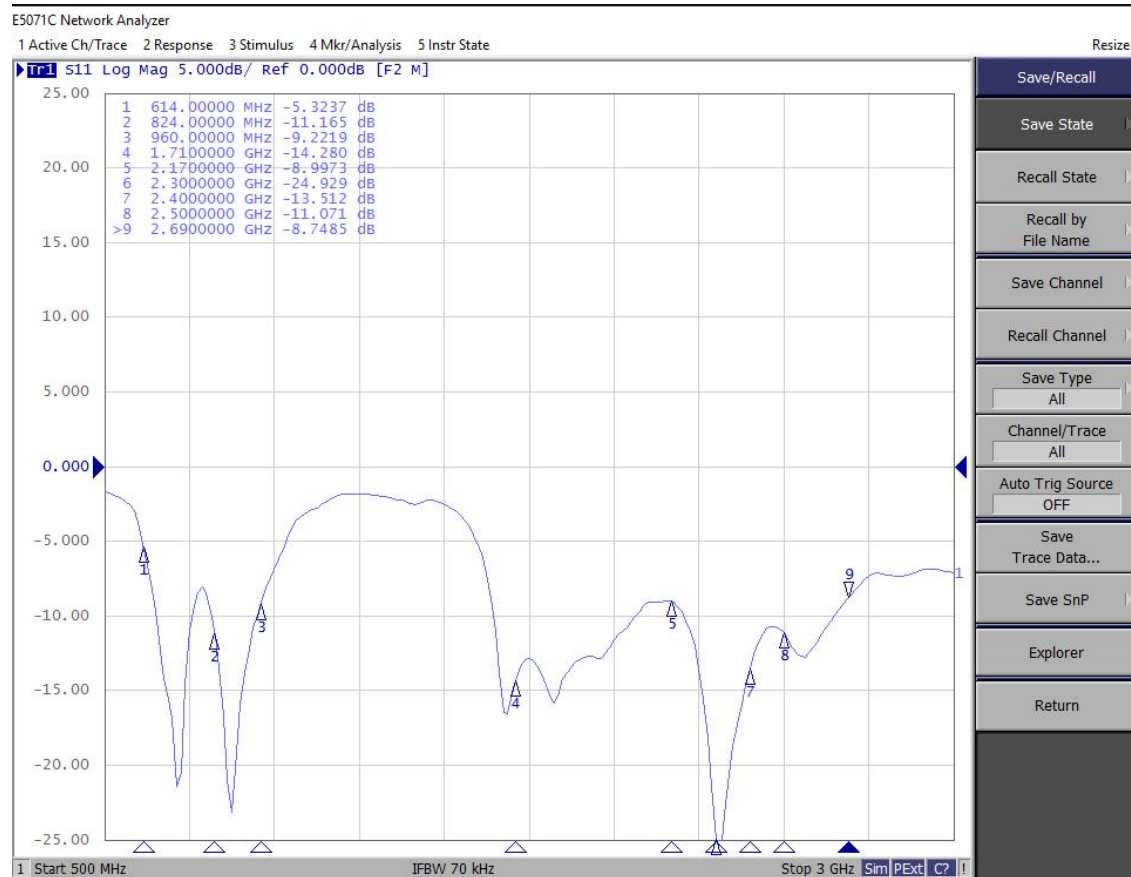
# WIFI: 3D





# 主天线S11

## Main antenna S11



# 主天线效率/增益

## Passive efficiency / gain of main antenna



Frequency	Efficiency	Efficiency	Gain . dB
600MHZ	17%	-7.61	-3.04
610MHZ	20%	-7.00	-2.50
620MHZ	21%	-6.78	-2.48
630MHZ	23%	-6.37	-1.69
640MHZ	26%	-5.85	-0.82
650MHZ	29%	-5.32	0.11
660MHZ	32%	-4.97	0.37
670MHZ	38%	-4.22	0.76
680MHZ	45%	-3.47	1.14
690MHZ	48%	-3.17	1.11
698MHZ	55%	-2.59	1.84
700MHZ	53%	-2.77	1.69
710MHZ	56%	-2.55	2.19
720MHZ	55%	-2.62	1.92
730MHZ	53%	-2.75	1.43
740MHZ	48%	-3.21	0.55
750MHZ	39%	-4.12	-0.44
760MHZ	37%	-4.30	-0.68
770MHZ	34%	-4.64	-0.90
780MHZ	32%	-4.99	-1.37
791MHZ	32%	-4.92	-0.92
800MHZ	34%	-4.63	-0.32
810MHZ	39%	-4.04	0.36
820MHZ	41%	-3.85	0.40
824MHZ	45%	-3.47	0.74
830MHZ	42%	-3.78	0.20
840MHZ	44%	-3.57	0.14
850MHZ	45%	-3.42	-0.12
860MHZ	47%	-3.27	-0.19
870MHZ	48%	-3.19	-0.25
880MHZ	49%	-3.09	-0.18
890MHZ	49%	-3.08	0.08
894MHZ	49%	-3.06	0.20
900MHZ	49%	-3.14	0.20
910MHZ	46%	-3.42	0.23
920MHZ	44%	-3.57	0.47
930MHZ	43%	-3.65	0.61
940MHZ	43%	-3.63	0.70
950MHZ	40%	-3.99	0.51
960MHZ	38%	-4.21	0.69
1700MHZ	42%	-3.78	1.43
1710MHZ	46%	-3.33	1.11
1720MHZ	48%	-3.22	1.27
1740MHZ	49%	-3.08	0.75
1760MHZ	56%	-2.53	1.87

1780MHZ	63%	-2.02	2.64
1800MHZ	63%	-2.02	2.36
1820MHZ	63%	-1.99	2.60
1840MHZ	62%	-2.06	2.61
1860MHZ	64%	-1.93	2.93
1880MHZ	63%	-1.98	2.99
1900MHZ	57%	-2.40	2.21
1920MHZ	57%	-2.45	2.42
1940MHZ	54%	-2.67	2.01
1960MHZ	52%	-2.83	1.63
1980MHZ	53%	-2.73	1.38
2000MHZ	56%	-2.51	2.20
2020MHZ	53%	-2.75	2.48
2040MHZ	52%	-2.83	2.35
2060MHZ	56%	-2.49	2.86
2080MHZ	53%	-2.74	2.84
2100MHZ	55%	-2.62	2.37
2120MHZ	55%	-2.57	2.41
2140MHZ	56%	-2.52	2.59
2160MHZ	55%	-2.61	2.35
2180MHZ	55%	-2.63	1.88
2200MHZ	57%	-2.46	2.23
2220MHZ	52%	-2.83	1.41
2240MHZ	56%	-2.55	2.07
2260MHZ	56%	-2.49	2.16
2280MHZ	58%	-2.36	2.30
2300MHZ	61%	-2.14	3.39
2320MHZ	61%	-2.11	3.54
2340MHZ	63%	-2.04	3.77
2360MHZ	63%	-1.98	4.04
2380MHZ	59%	-2.32	3.91
2400MHZ	60%	-2.25	3.54
2420MHZ	63%	-1.99	3.62
2440MHZ	65%	-1.84	3.80
2460MHZ	62%	-2.07	3.69
2480MHZ	66%	-1.80	4.13
2500MHZ	66%	-1.80	3.68
2520MHZ	64%	-1.93	3.31
2540MHZ	62%	-2.09	3.02
2560MHZ	59%	-2.26	2.49
2580MHZ	59%	-2.31	2.32
2600MHZ	55%	-2.57	2.40
2620MHZ	54%	-2.65	2.19
2640MHZ	53%	-2.75	1.82
2660MHZ	47%	-3.29	1.49
2680MHZ	48%	-3.19	1.47
2690MHZ	52%	-2.83	1.61

# 分集天线S11

## Diversity Antenna S11



# 分集天线无源效率/增益

# Diversity Antenna Passive efficiency / gain



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Frequency	Efficienc	Efficienc	Gain . dB
610MHZ	19%	-7.14	-7.86
620MHZ	24%	-6.16	-7.45
630MHZ	28%	-5.55	-7.03
640MHZ	33%	-4.77	-6.68
650MHZ	35%	-4.51	-5.38
660MHZ	34%	-4.67	-4.64
670MHZ	32%	-5.00	-3.55
680MHZ	26%	-5.78	-2.22
690MHZ	21%	-6.82	-1.36
698MHZ	22%	-6.65	-0.13
700MHZ	20%	-7.02	-0.06
710MHZ	19%	-7.13	1.29
720MHZ	18%	-7.39	1.84
730MHZ	19%	-7.30	1.87
740MHZ	21%	-6.82	1.23
750MHZ	23%	-6.42	0.51
760MHZ	24%	-6.24	-0.45
770MHZ	24%	-6.17	-0.57
780MHZ	24%	-6.19	-0.56
791MHZ	25%	-6.09	-0.73
800MHZ	26%	-5.93	-0.56
810MHZ	28%	-5.55	-0.56
820MHZ	28%	-5.52	-0.57
824MHZ	30%	-5.18	-0.64
830MHZ	28%	-5.50	-0.97
840MHZ	28%	-5.51	-2.08
850MHZ	27%	-5.63	-2.53
860MHZ	28%	-5.59	-2.68
870MHZ	28%	-5.58	-3.22
880MHZ	29%	-5.42	-3.94
890MHZ	29%	-5.37	-4.67
894MHZ	29%	-5.32	-5.01
900MHZ	30%	-5.27	-5.82
910MHZ	29%	-5.39	-6.34
920MHZ	27%	-5.67	-6.40
930MHZ	25%	-6.04	-6.31
940MHZ	23%	-6.35	-5.88
950MHZ	23%	-6.48	-5.68
960MHZ	20%	-7.08	-5.12
1700MHZ	33%	-4.81	-1.94
1710MHZ	30%	-5.21	-1.73
1720MHZ	30%	-5.18	-0.97
1740MHZ	33%	-4.80	0.18
1760MHZ	33%	-4.75	0.39

1780MHZ	31%	-5.11	0.83
1800MHZ	30%	-5.26	0.82
1820MHZ	30%	-5.18	0.84
1840MHZ	31%	-5.03	0.51
1860MHZ	31%	-5.08	0.70
1880MHZ	33%	-4.80	0.60
1900MHZ	30%	-5.21	-0.07
1920MHZ	30%	-5.18	0.24
1940MHZ	32%	-4.90	0.23
1960MHZ	33%	-4.84	0.36
1980MHZ	32%	-4.92	0.89
2000MHZ	36%	-4.43	1.05
2020MHZ	36%	-4.38	1.20
2040MHZ	38%	-4.22	0.87
2060MHZ	40%	-4.02	0.53
2080MHZ	37%	-4.28	1.26
2100MHZ	38%	-4.17	1.87
2120MHZ	46%	-3.36	1.57
2140MHZ	47%	-3.29	1.82
2160MHZ	48%	-3.21	2.55
2180MHZ	50%	-2.99	1.91
2200MHZ	50%	-3.04	2.11
2220MHZ	46%	-3.33	1.94
2240MHZ	46%	-3.40	1.86
2260MHZ	42%	-3.80	1.55
2280MHZ	41%	-3.86	1.26
2300MHZ	37%	-4.34	1.46
2320MHZ	31%	-5.08	1.54
2340MHZ	27%	-5.66	1.41
2360MHZ	27%	-5.71	1.94
2380MHZ	20%	-6.92	0.93
2400MHZ	20%	-7.08	0.38
2420MHZ	18%	-7.41	-0.61
2440MHZ	19%	-7.30	-0.91
2460MHZ	17%	-7.67	-1.67
2480MHZ	18%	-7.55	-2.12
2500MHZ	18%	-7.45	-2.49
2520MHZ	16%	-8.03	-3.50
2540MHZ	16%	-8.08	-3.12
2560MHZ	16%	-7.83	-2.69
2580MHZ	17%	-7.70	-2.51
2600MHZ	17%	-7.76	-2.74
2620MHZ	18%	-7.43	-2.48
2640MHZ	19%	-7.10	-2.22
2660MHZ	16%	-7.87	-3.32
2680MHZ	17%	-7.70	-3.24
2690MHZ	20%	-7.03	-2.46

# GPS天线S11/增益

## GPS Antenna S11/gain



GPS

Frequency	Efficienc	Efficienc	Gain . dB
1.55E+09	56%	-2.55	2.94
1.56E+09	58%	-2.35	3.14
1.56E+09	58%	-2.38	3.24
1.57E+09	58%	-2.38	3.40
1.57E+09	57%	-2.41	3.52
1.58E+09	59%	-2.33	3.75
1.58E+09	61%	-2.16	4.04
1.59E+09	61%	-2.16	4.13
1.59E+09	61%	-2.14	4.22
1.6E+09	60%	-2.22	4.25
1.6E+09	63%	-1.98	4.47

# Thank You

