



Antenna test report

HEYUAN XUNWEI MICROWAVE
COMMUNICATION CO.,LTD

RF: wangxinfeng

Date: 2023.01.08

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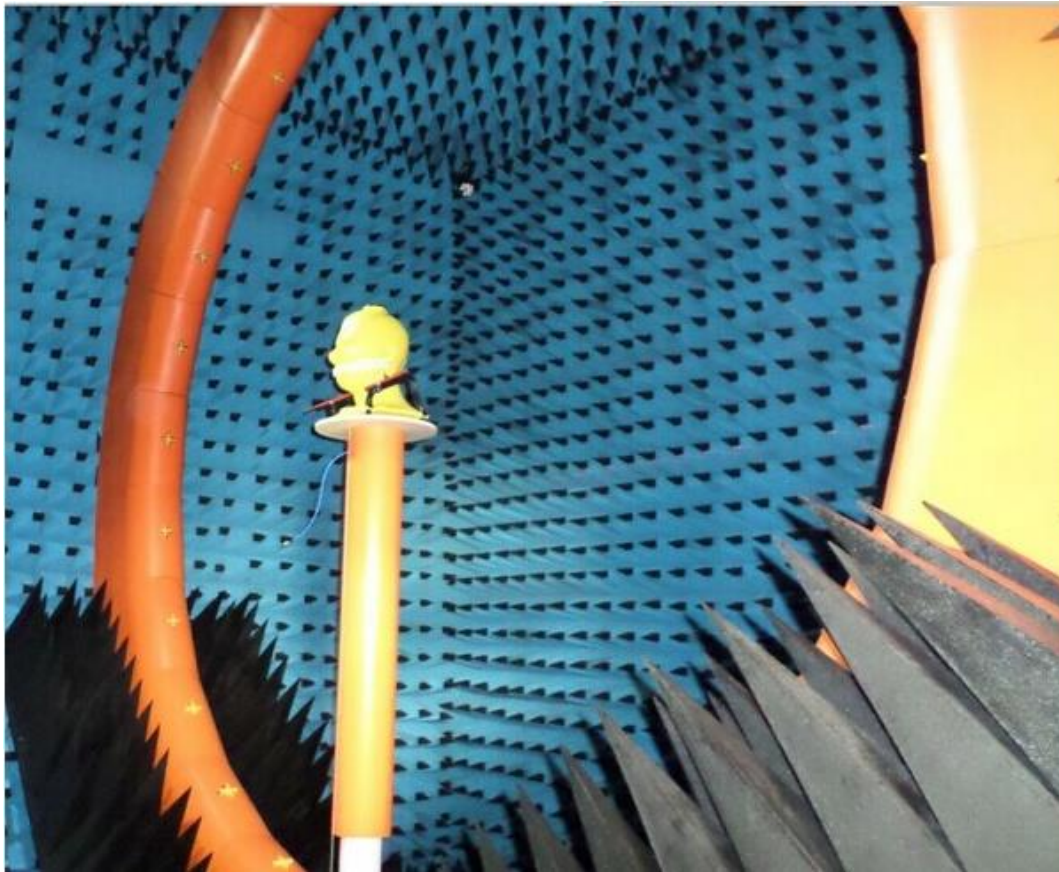
Antenna dimension drawing
test data

Test equipment

Wireless communications test set: CMW500

Network Analyzer: Agilent 5071B

Anechoic Chamber : SATIMO SG24

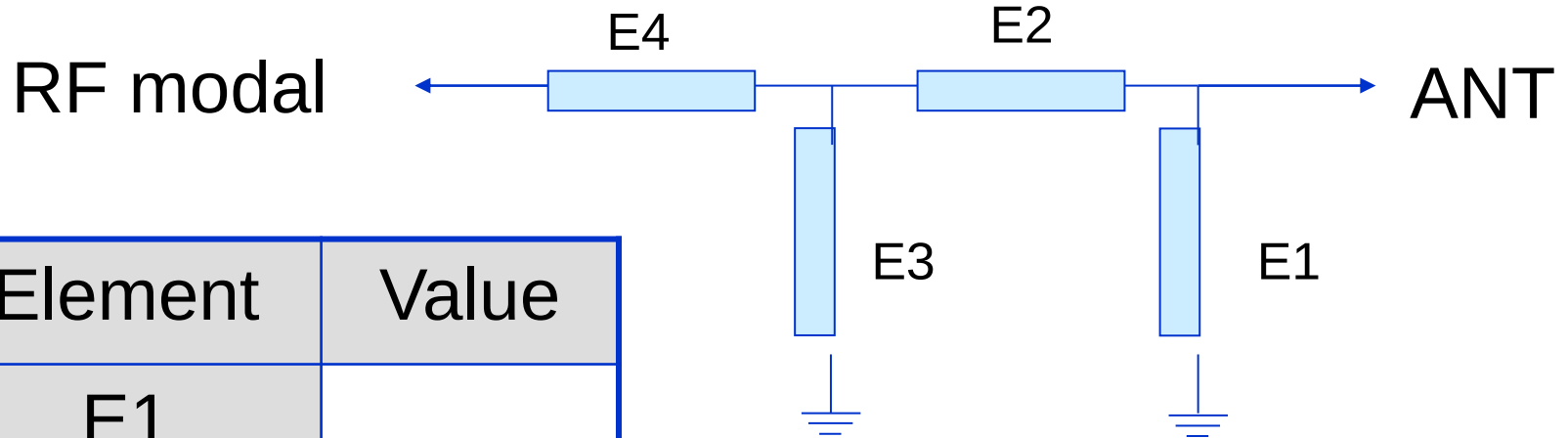


Antenna information

Customer	Gardena Inc
Antenna model	ANT 2
Antenna type	PCB

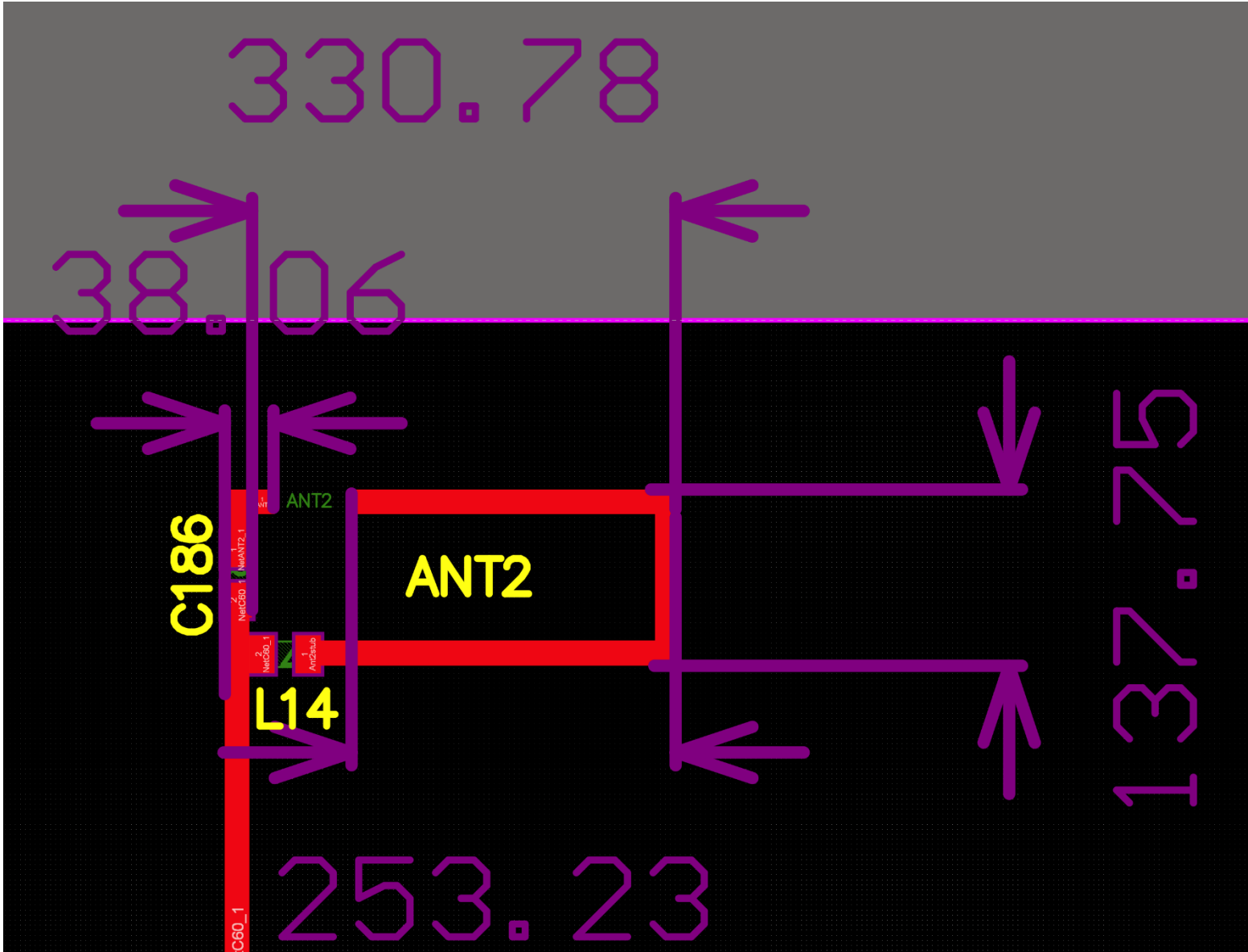
frequency range (MHz)	2400–2500	5000–6000
VSWR	<3. 5	<4. 0

Matching circuit (No modification)



Element	Value
E1	
E2	
E3	
E4	

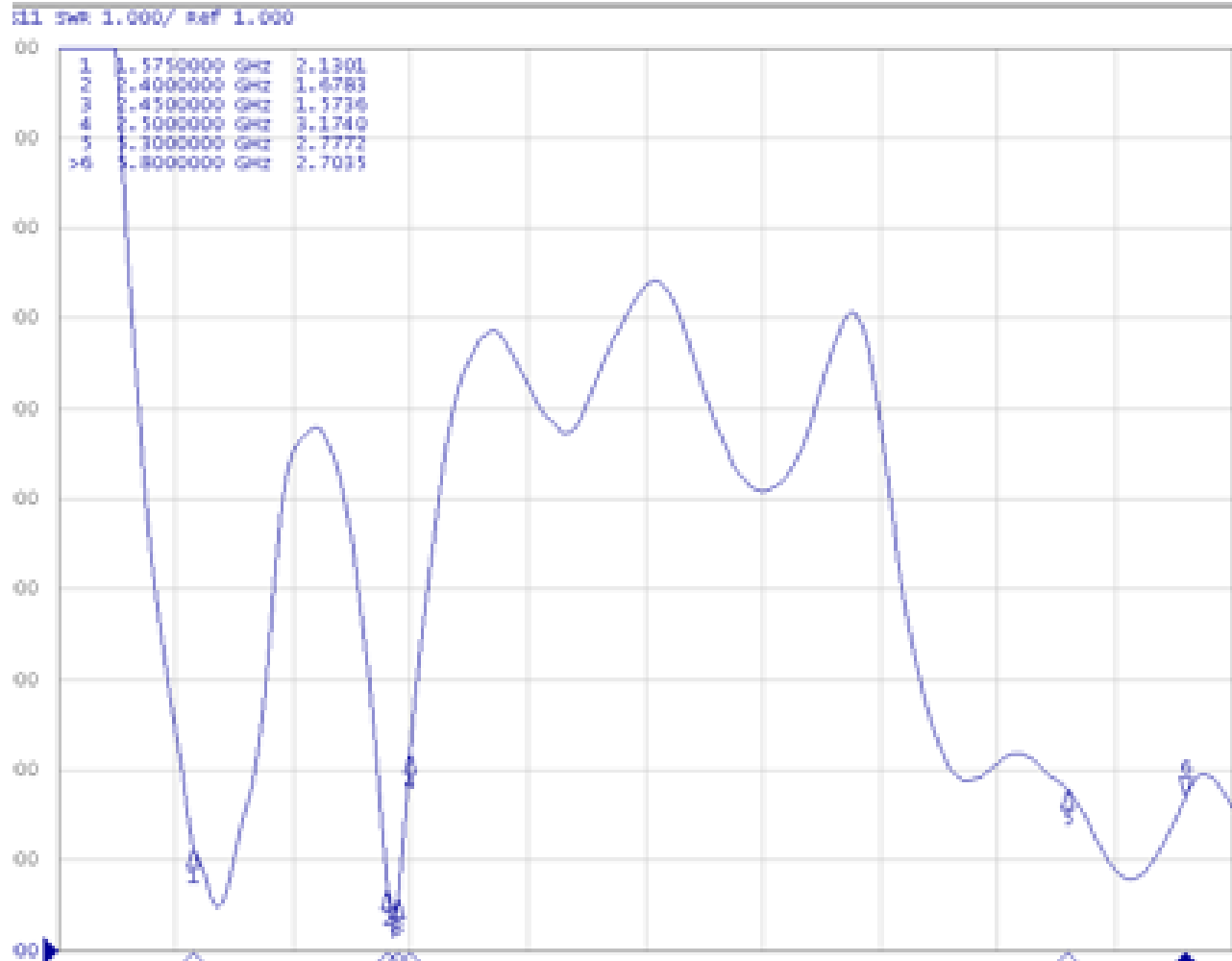
Antenna dimension drawing



test data

(Passive efficiency test data)

S11 parameters



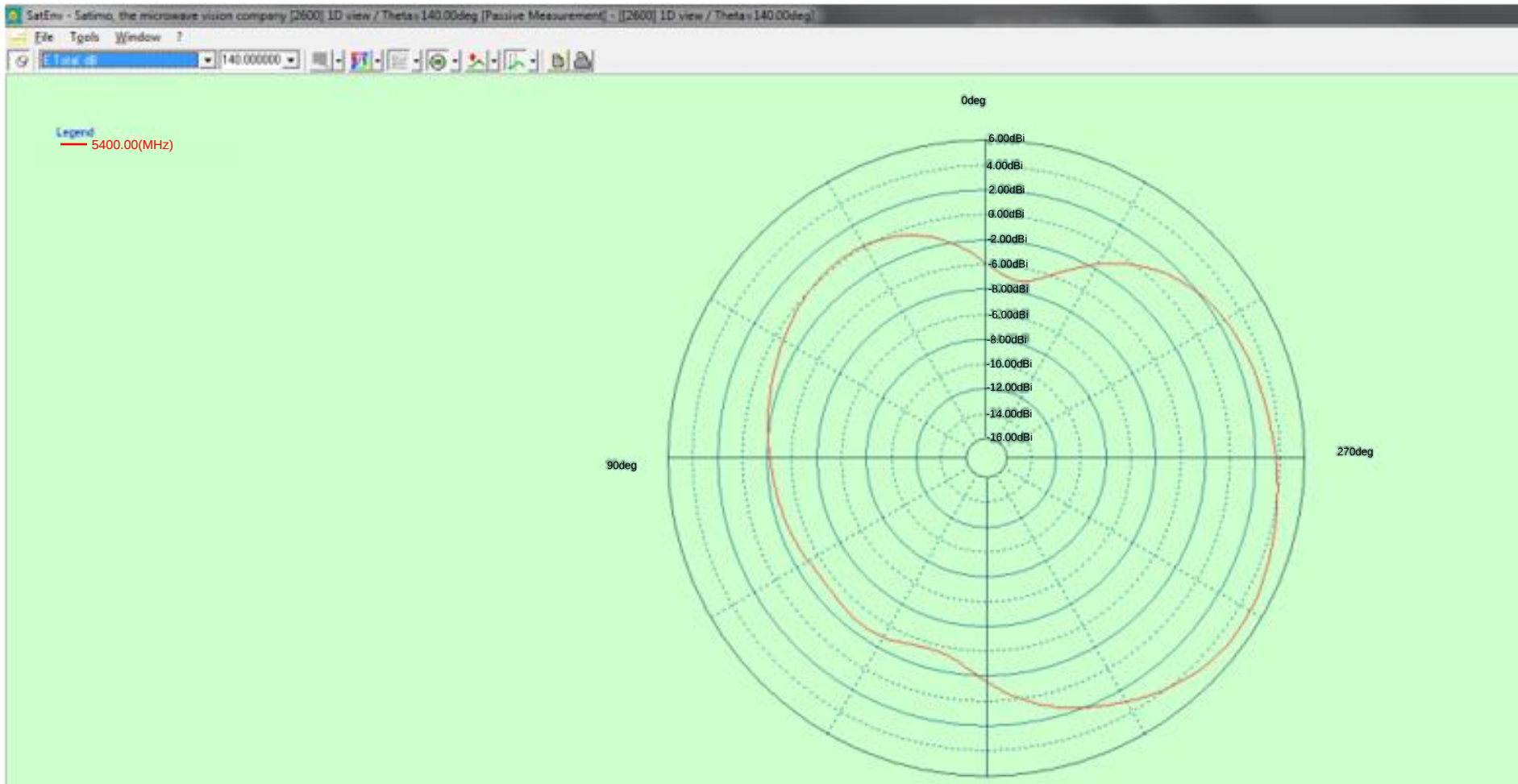
2.4G WIFI efficiency and gain

WIFI		
Frequency	Efficiency (%)	Gain Max (DBI)
2400MHZ	38.65%	3.52
2410MHZ	38.28%	3.52
2420MHZ	40.41%	3.60
2430MHZ	41.04%	3.53
2440MHZ	42.11%	3.55
2450MHZ	42.21%	3.51
2460MHZ	43.24%	3.42
2470MHZ	45.87%	3.45
2480MHZ	44.73%	3.47
2490MHZ	44.50%	3.52
2500MHZ	43.77%	3.53

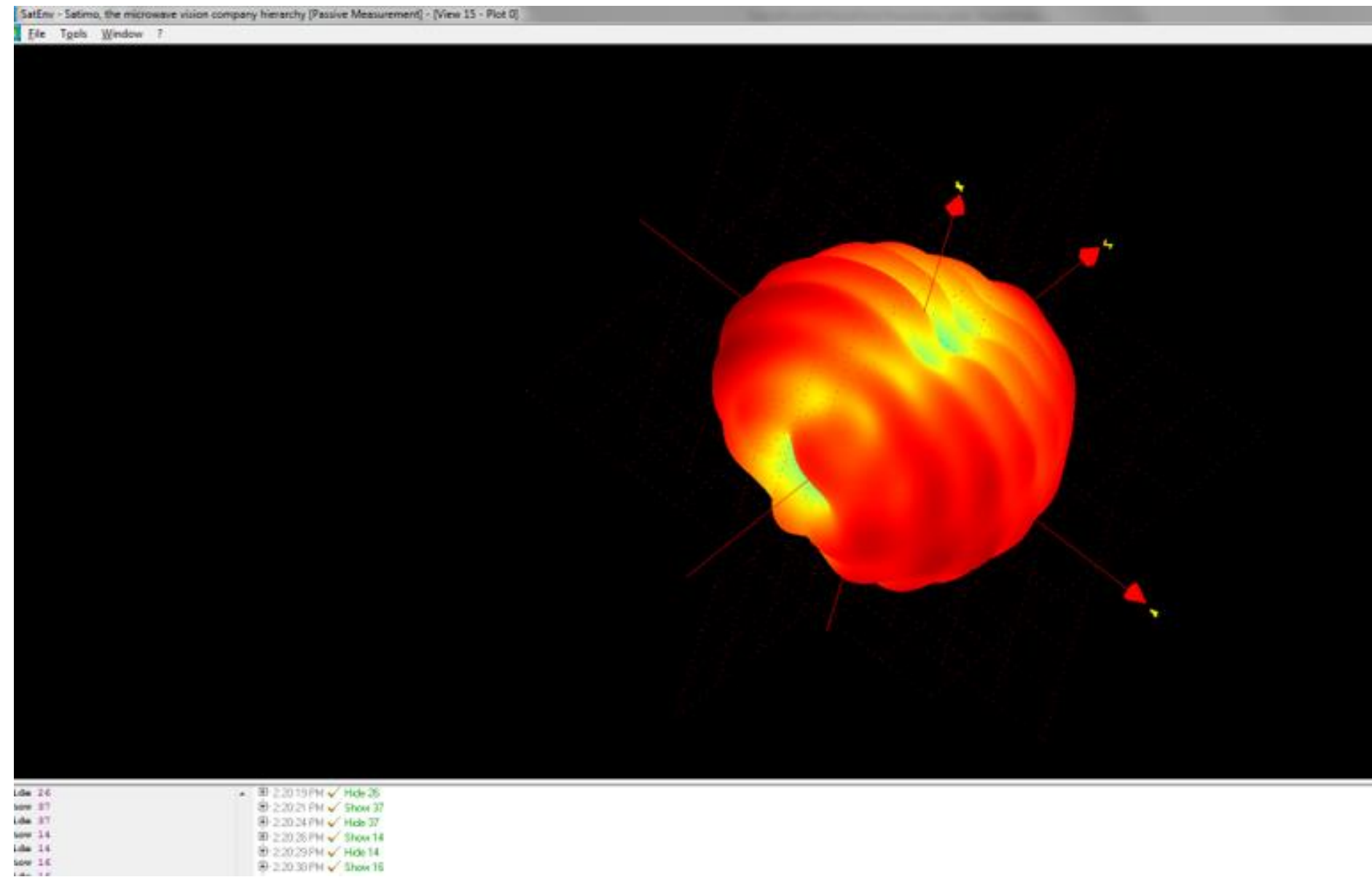
5G efficiency and gain

5G		
Frequency	Efficiency (%)	Gain Max (DBI)
5100MHZ	33.44	3.97
5150MHZ	33.47	4.1
5250MHZ	32.82	4.0
5300MHZ	32.30	3.96
5350MHZ	31.62	3.6
5400MHZ	37.97	4.39
5450MHZ	34.20	4.25
5500MHZ	29.71	2.91
5550MHZ	22.45	3.31
5650MHZ	22.13	2.29
5700MHZ	27.08	3.0
5750MHZ	23.42	2.2
5800MHZ	20.85	3.01
5850MHZ	26.01	1.83
5900MHZ	36.38	4.33

5G test direction map



5G test direction map

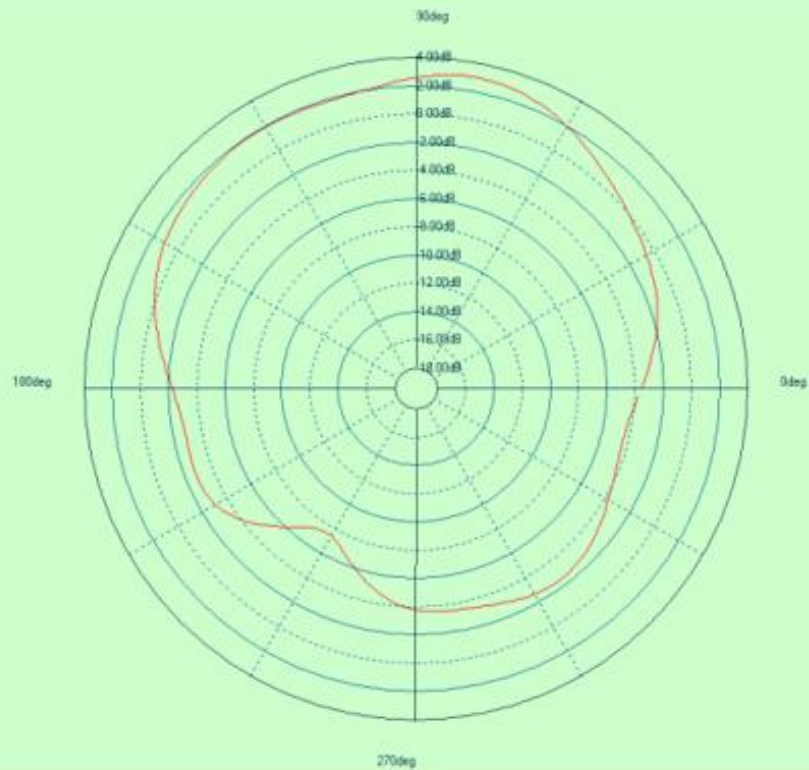


2.4G WIFI test direction map

SatEnv - Satimo, the microwave vision company [2684] 1D view / Theta: 30.00deg [Passive Measurement] - [2684] 1D view / Theta: 30.00deg

File Tools Window ?
G E Total: dB

Legend
— 2450.00(MHz)



0 6.52 Psi

WIFI test direction map

