



SPECIFICATION FOR APPROVAL

CUSTOMER/PROJECT: _____

CUSTOMER P.N: _____

PRODUCT NAME: 2.4 &5.8 G

MODEL NO: 1Y048A

SPECIFICATION: _____

SUPPLIER AUTHORIZED SIGNATURE		
PREPARED	CHECKED	APPROVED
JENNY		

CUSTOMER AUTHORIZED SIGNATURE			
PM		QE	

Please return to us one copy of "SPECIFICATION FOR APPROVAL" with your approved signature.

ADD: No.358 Liuyuan RD., Baoshan Urban Industrial District., Shanghai, PR.China.

TEL: +86-21-66276925(26/29/35) - 615

Content

.. content	1
..1 Noun explanation	4
..2 Test equipment	4
..3 Working frequency band	4
..4 Test project	5
..4.1 VSWR plot	5
..4.2 Simth plot	5
..4.3 Radiation pattern	5
..4.4 Gain & Efficiency	5
..4.5 TRP&TIS	5
..5 Antenna parameter	5
..5.1 VSWR	5
..5.1.1 VSWR plot	5
..5.1.2 VSWR data	6
..5.2 Simth plot	6
..5.3 Radiation pattern	7
..5.3.1 H-plane	7
..5.3.2 E-plane	8-9
..5.4 UGain & Efficiency	10
..5.5 TRP&TIS	11
..6 Environmental treatment suggestions	11
..7 Impedance matching	11



.8 Antenna plan	12
.8.1 Antenna dimensional drawing	12
.8.2 Coaxial cable length drawing	12
.8.3 Connector drawing	12

1 Noun explanation

dBi	Decibel relative isotropic antenna
Tx	Transmit frequency
Rx	Receive frequency
TRP	Total Radiated Power
TIS	Total Isotropic Sensitivity
VSWR	Voltage Standing Wave Ratio
GSM	Global Service for Mobile communication
DCS	Digital Communication System
CDMA	Code Division Multiple Access
WCDMA	Wideband Code Division Multiple Access

2 Test equipment

network analyzer
Agilent8960
SATIMO64 chamber

3 Working frequency band

The yellow Identification is the using band

band	uplink	downlink
(2.4G)	2400MHz~2500MHz	
5.8G	5150MHz~5850MHz	

4 Test project

4.1 VSWR plot

4.2 Simth plot

4.3 Radiation pattern

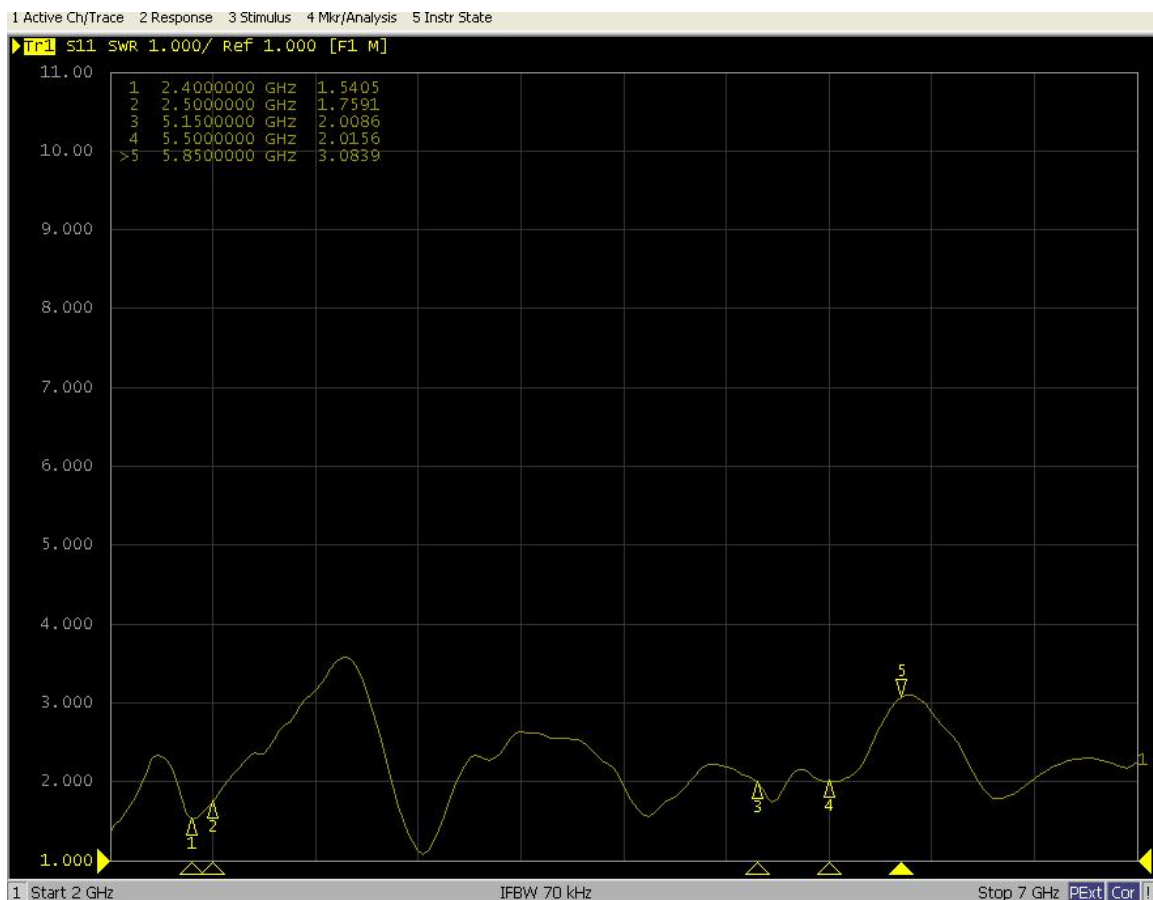
4.4 Gain & Efficiency

4.5 TRP&TIS

5 Antenna parameter

5.1 VSWR

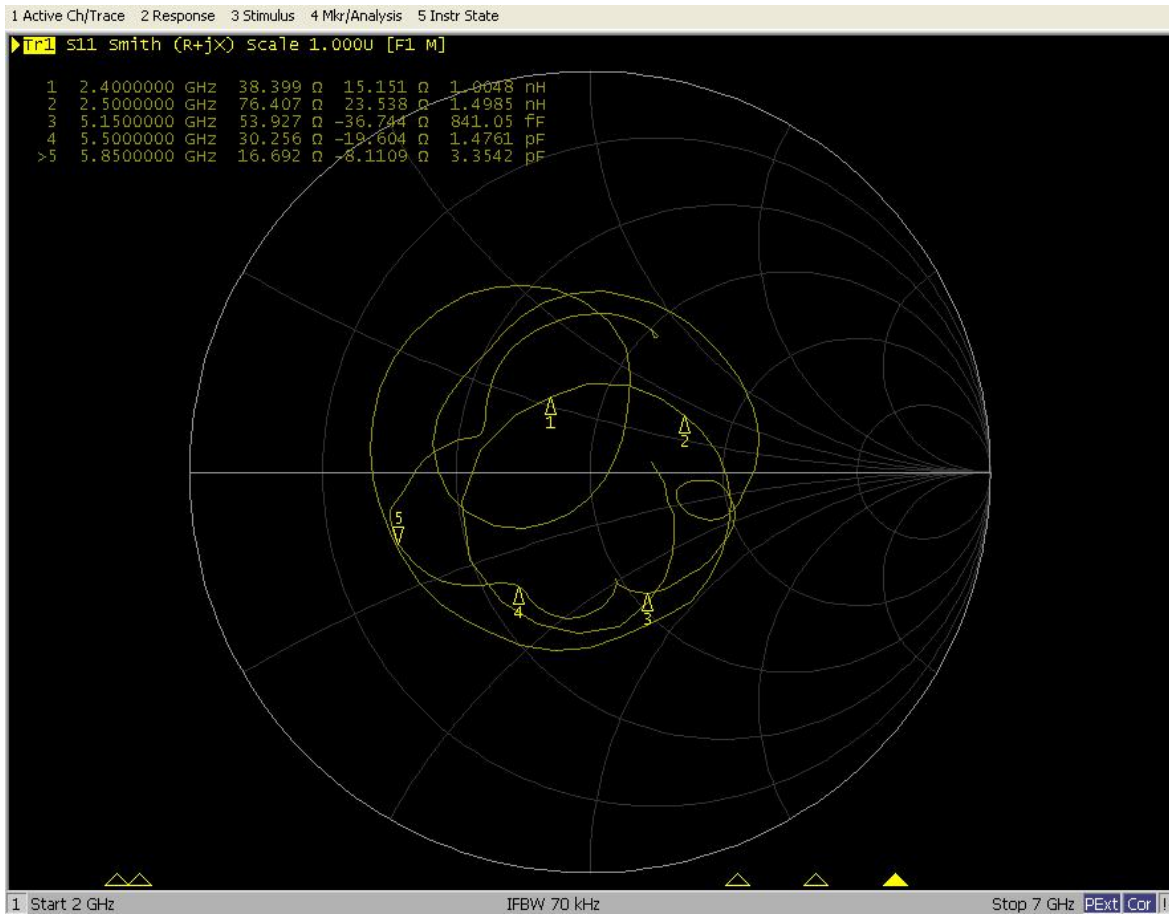
5.1.1 VSWR plot



5.1.2 VSWR data

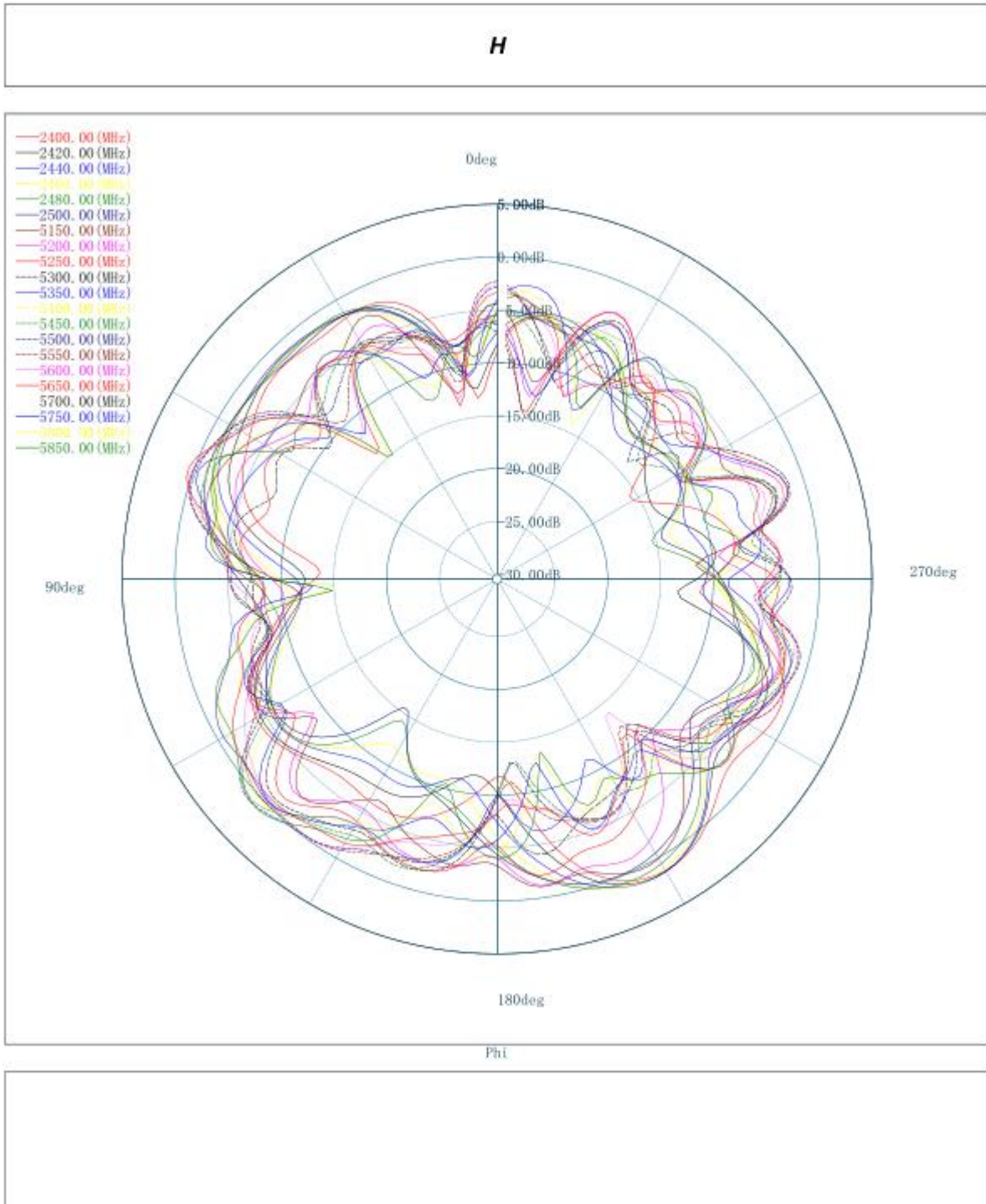
Freq/MHz	2400	2500	5150	5850
VSWR	1.5	1.7	2.0	3.0

5.2 Smith plot

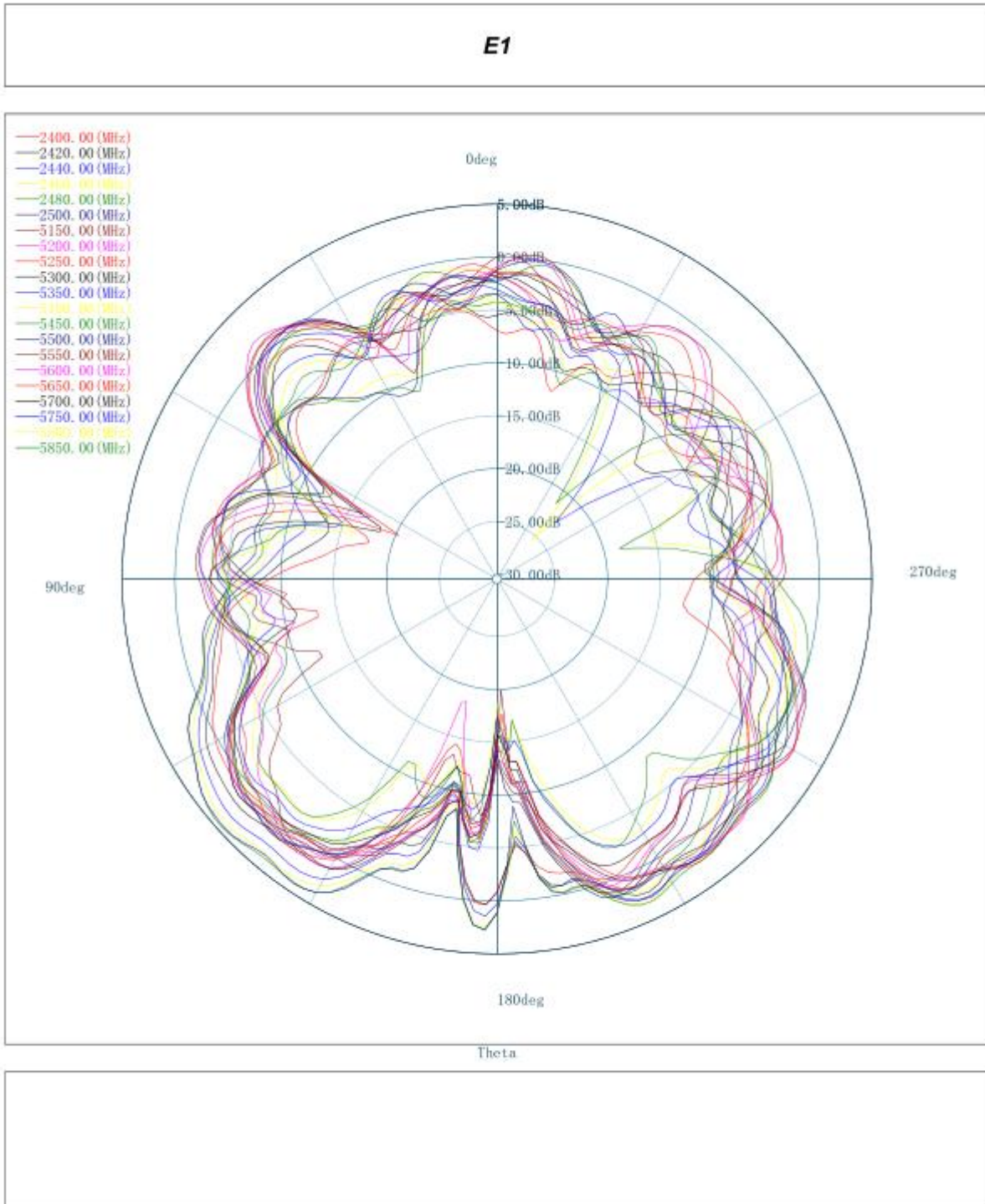


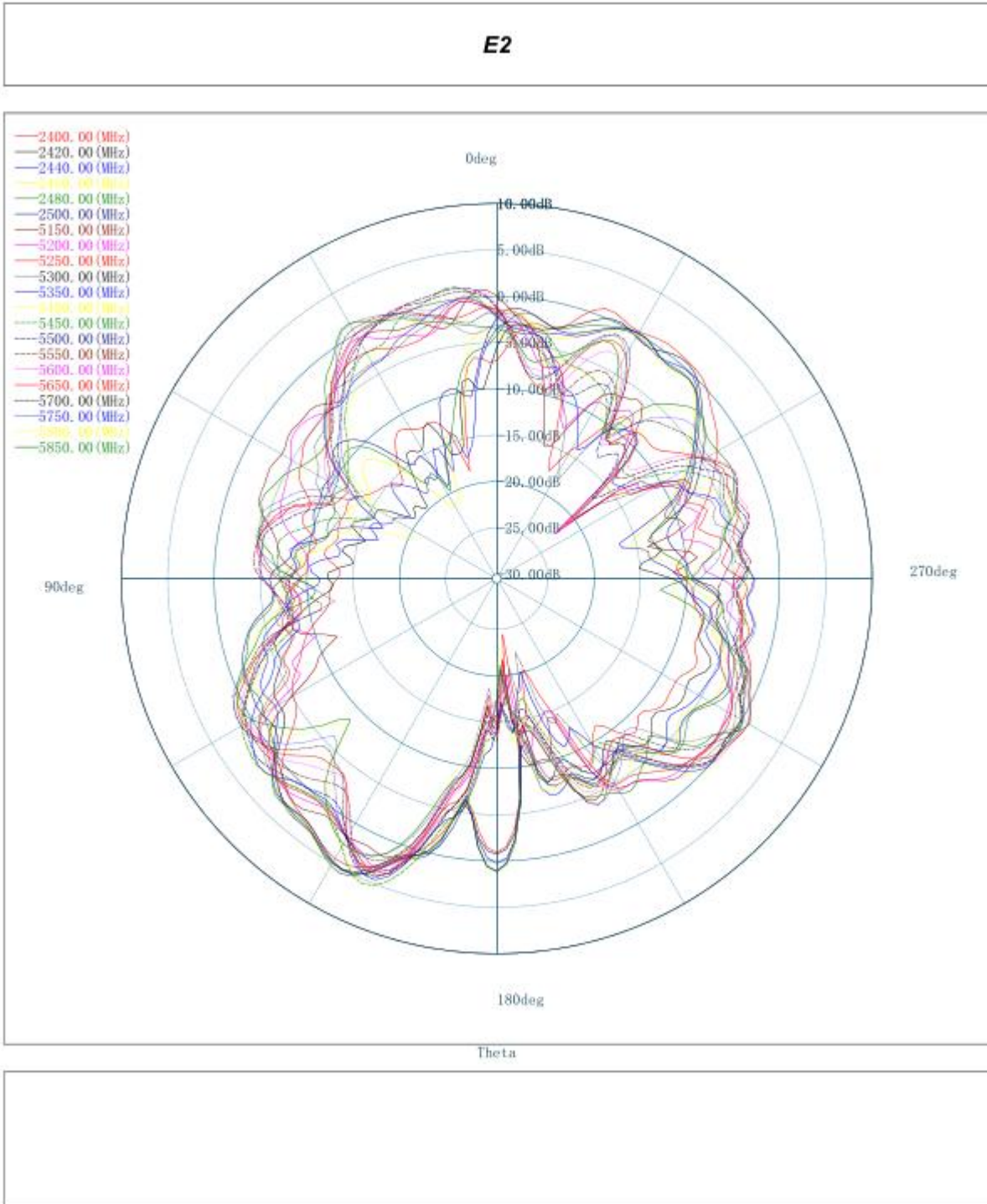
5.3 Radiation pattern

5.3.1 H-plane



5.3.2 E-plane





5.4 UGain & Efficiency

Frequency [Hz]	Efficiency	Gain [dBi]
2400000000	52%	3.479861002
2420000000	53%	4.067484721
2440000000	55%	4.535728648
2460000000	57%	4.416830354
2480000000	59%	4.252978997
2500000000	57%	4.214654357
5150000000	51%	3.826169869
5200000000	50%	4.125729547
5250000000	48%	4.339981643
5300000000	48%	4.259857497
5350000000	49%	4.477374458
5400000000	51%	4.660490911
5450000000	53%	4.760385679
5500000000	54%	4.087396284
5550000000	54%	4.048116637
5600000000	52%	3.942602826
5650000000	49%	3.447540676
5700000000	46%	3.479347683
5750000000	42%	3.146059759
5800000000	40%	3.070841747

802.11b (11mbps)		TX		RX	
	Channel	TRP	MAX	TIS	MAX
2.4G	1	11.58		-78.73	
	6	12.15		-77.85	
	11	12.26		-77.48	
802.11A(54mbps)		TX		RX	
	Channel	TRP	MAX	TIS	MAX
5.8G	149	12.01		-68.42	
	157	12.47		-67.46	
	165	12.02		-67.38	

6 Environmental treatment suggestions

Environment does not need treatment

7 Impedance matching

The matching circuit has not been changed

8 Antenna plan

