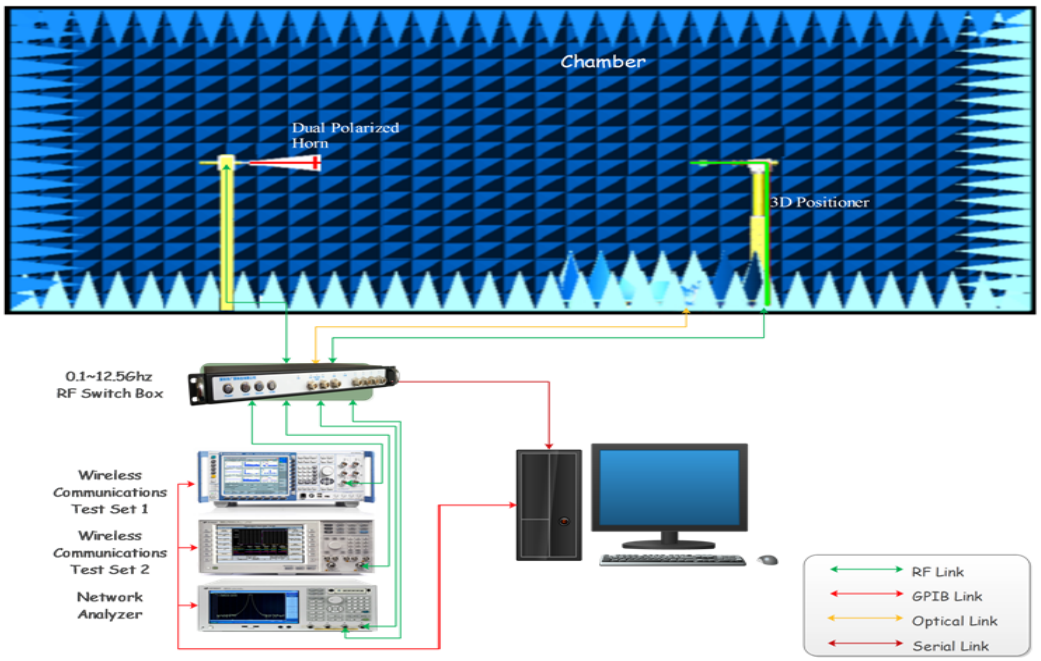
WS681 antenna report

Test Address	Shenzhen3Good Wireless Communications CO.,LTD Room501,Jinfulai Building,No.49-1,Dabao Road,Baoan District,Shenzhen
Test Date	May 5(th), 2023
Test Instrument	vector network analyzer -Agilent Technologies E5071B

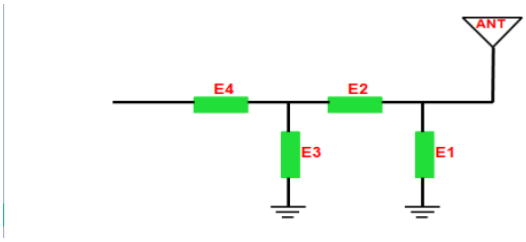
Facility description Measurement procedure



Antenna information

Customer	Boat of wealth
Antenna Model	WS681A
Antenna Type	PIFA Antenna

Matching circuits

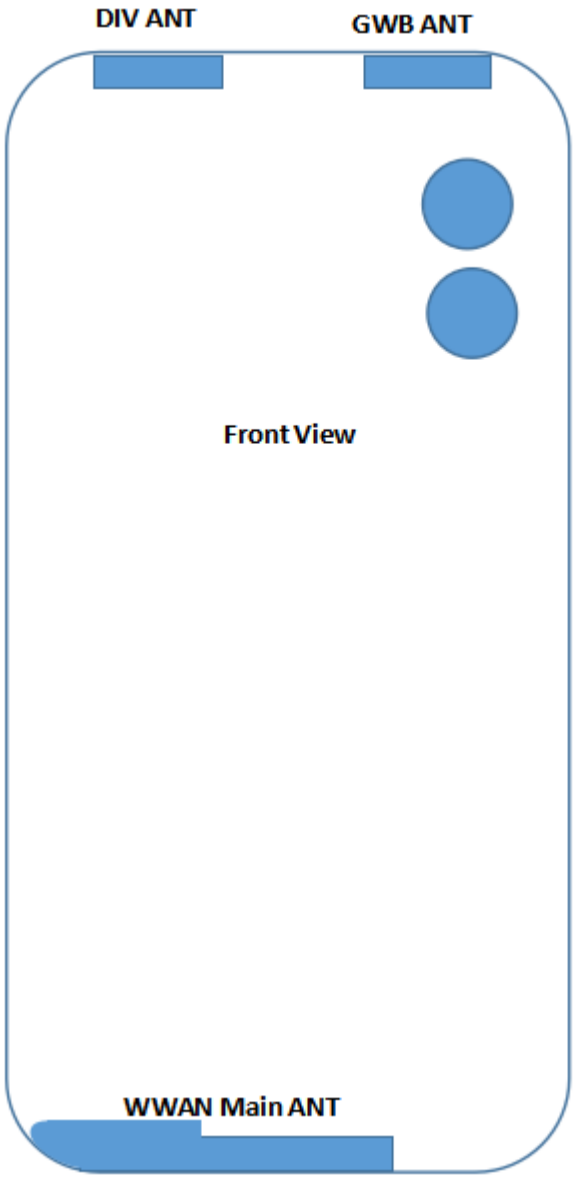


Main Antenna		Aux Antenna	
Element	Value	Element	Value
E1(0402)		E1(0402)	
E2(0402)		E2(0402)	
E3(0402)		E3(0402)	
E4(0402)			

Passive performance figure

Frequency(MHZ)	617~960	1710~2690
VSWR	＜3.5	＜3.5

Antenna position picture



All of Implementation antenna

Main antenna(Antenna Label:A):

LTE B5/B7/B12/B17/B28AB/B71 RX&TX

B1/B2/B3/B4/RX

WCDMA B5/B8 RX&TX

B1/B2/B4 RX

GSM B5/B8 RX&TX

B2/B3 RX

DIV antenna(Antenna Label:B):

LTE B1/B2/B3/B4/B66 RX&TX

WCDMA B2/B4 RX&TX

GSM B2/B3 RX&TX

WiFi-B/BT 2.4~2.5GHZ/WIFI-A5150~5850MHZ& GPS: 1575.42 MHz ;

Antenna Max. Peak Gain:

EGSM900:-0.8dBi

GSM850: -0.4dBi

DCS1800: -0.9dBi

PCS1900：-0.3dBi

WCDMA2100: -1.5dBi

WCDMA1900:-0.3dBi

WCDMA1700: -0.9dBi

WCDMA900: -0.8dBi

WCDMA850: -0.4dBi

LTE-B1: -1.5dBi

LTE-B2: -0.3dBi

LTE-B3: -0.9dBi

LTE-B4: -0.9dBi

LTE-B5: -0.4dBi

LTE-B7: -0.4dBi

LTE-B12: -0.7dBi

LTE-B17: -0.7dBi

LTE-B28: -0.7dBi

LTE-B66: -0.9dBi

LTE-B71:- 2.6dBi

WIFI-2.4G/BT:0.6dBi

WIFI-5G:-1.32dBi

GPS:1.3dBi

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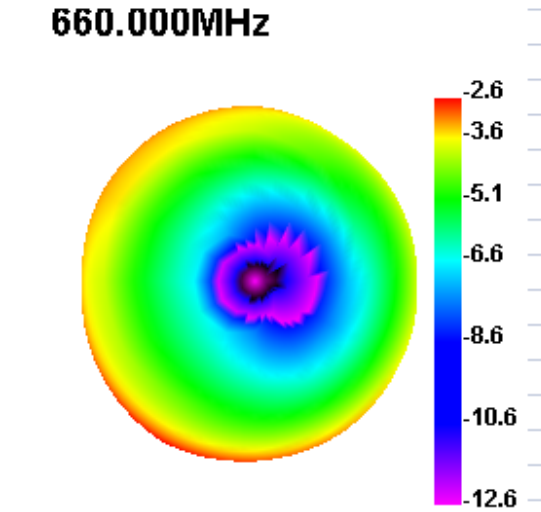
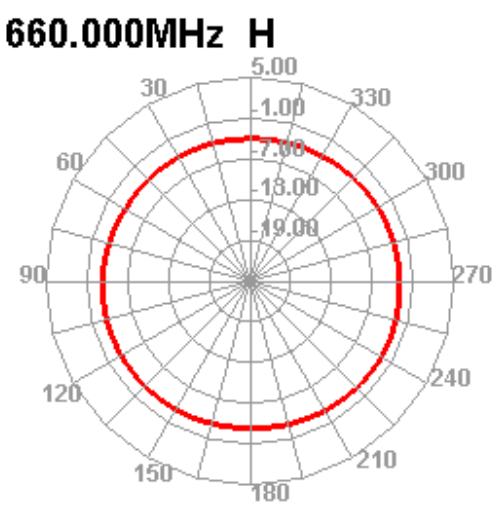
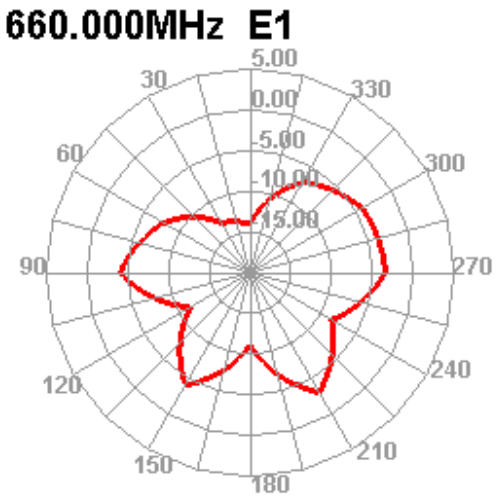
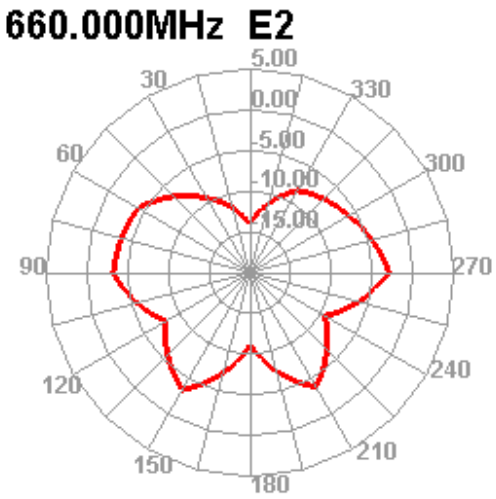
3-D Patten Plots

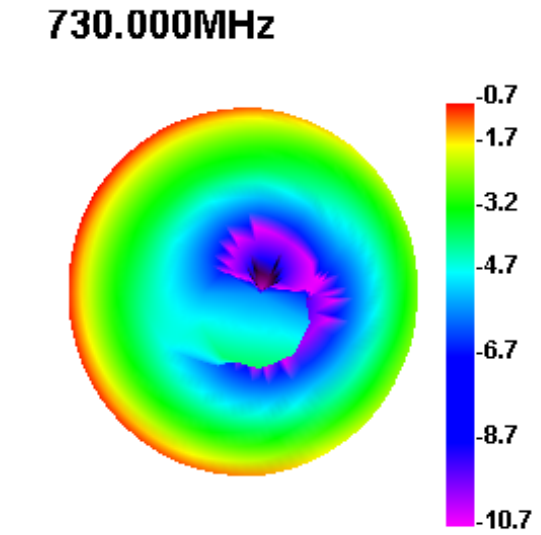
Main ANT：







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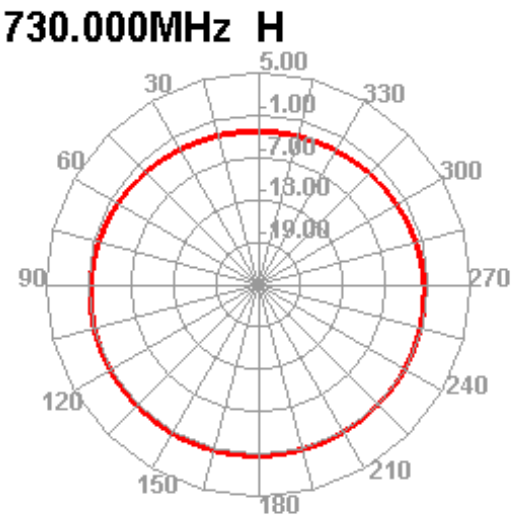
-1.7
-3.2
-4.7
-6.7
-8.7
-10.7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5.00
1.00
-3.00
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-19.00
30
330
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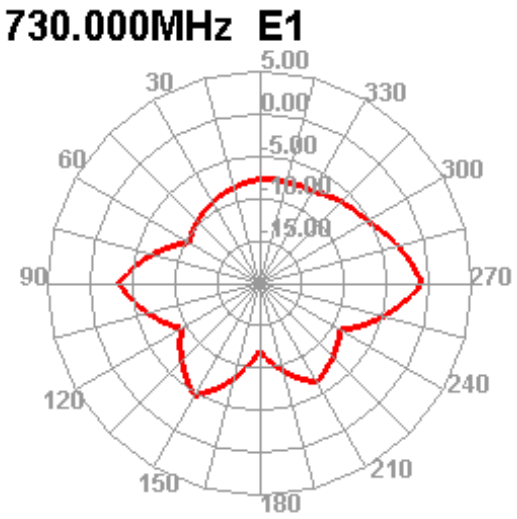
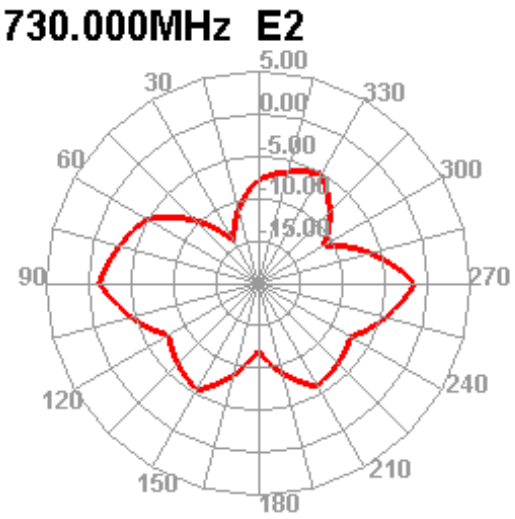
300
90
270
120
240
150
210
180


730.000MHz E1
5.00
0.00
-5.00
-10.00
-15.00
30
330
60
300
90
270
120
240
150
210
180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-10.00
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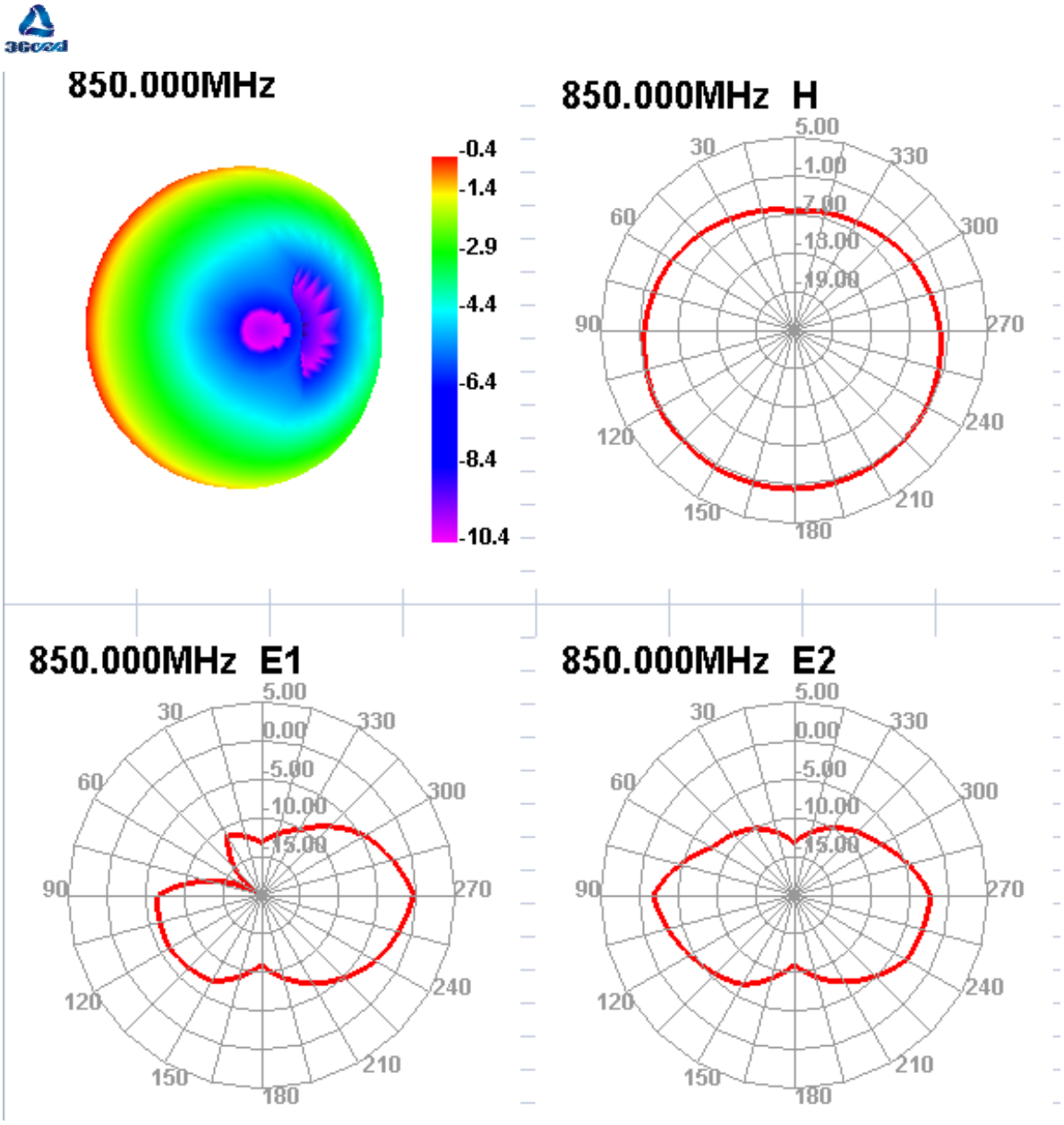
30
330
60
300
90
270
120
240
150
210
180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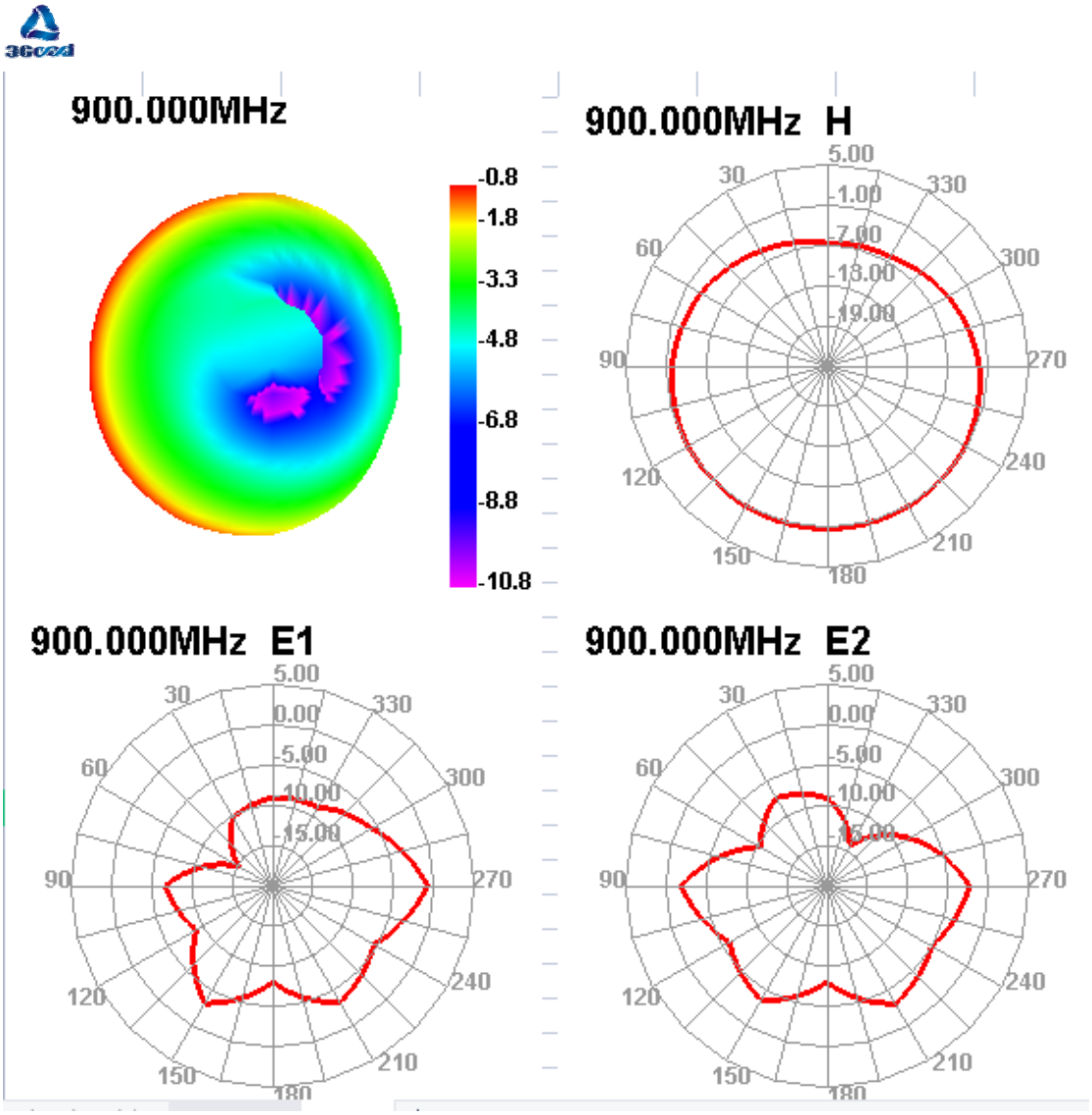
-2.9
-4.4
-6.4
-8.4
-10.4
850.000MHz H
5.00
1.00
-3.00
-13.00
-19.00
30
330
60
300
90
270
120
240
150
210
180
850.000MHz E1
5.00
0.00
-5.00
-10.00
-15.00
850.000MHz E2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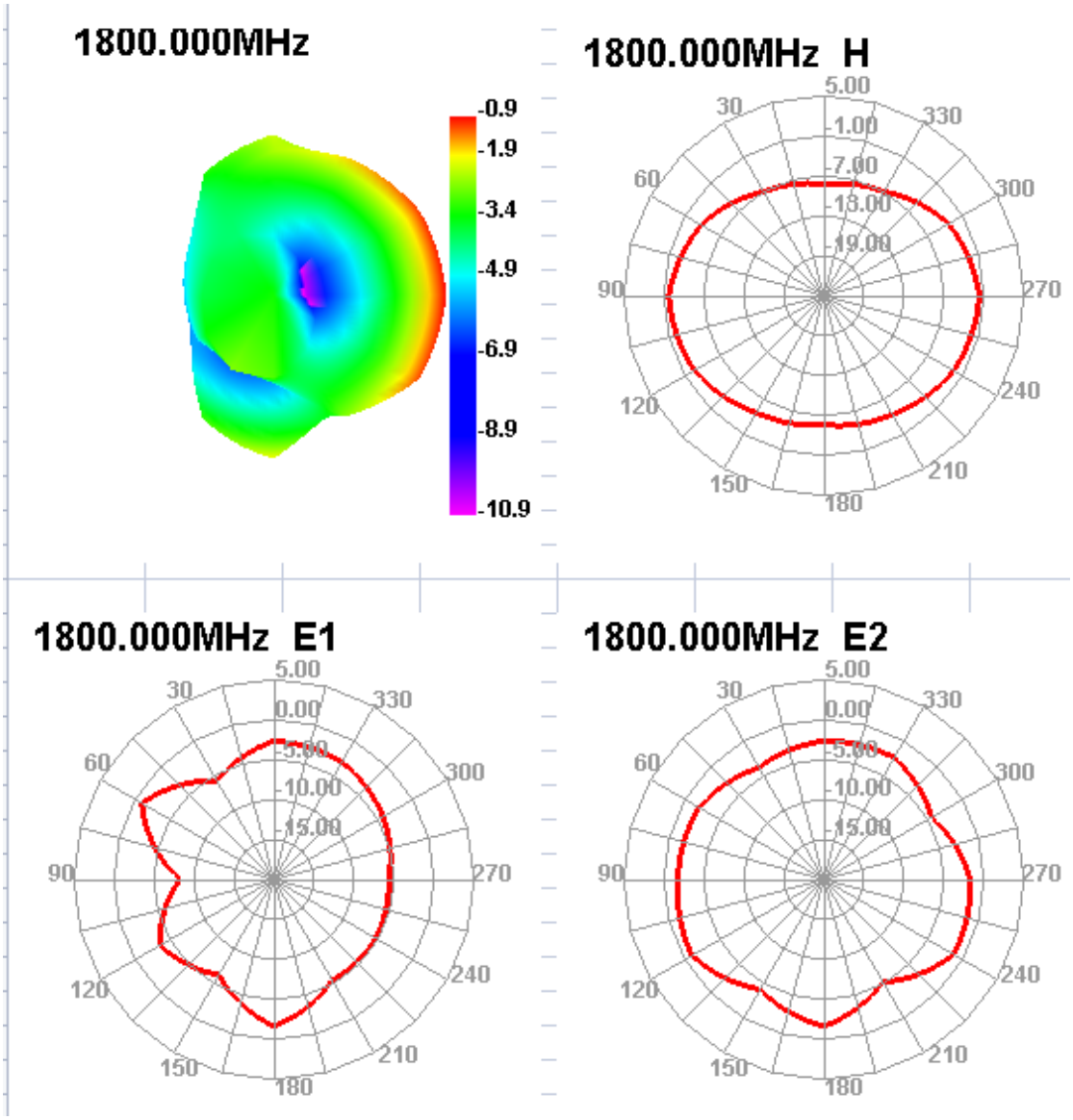
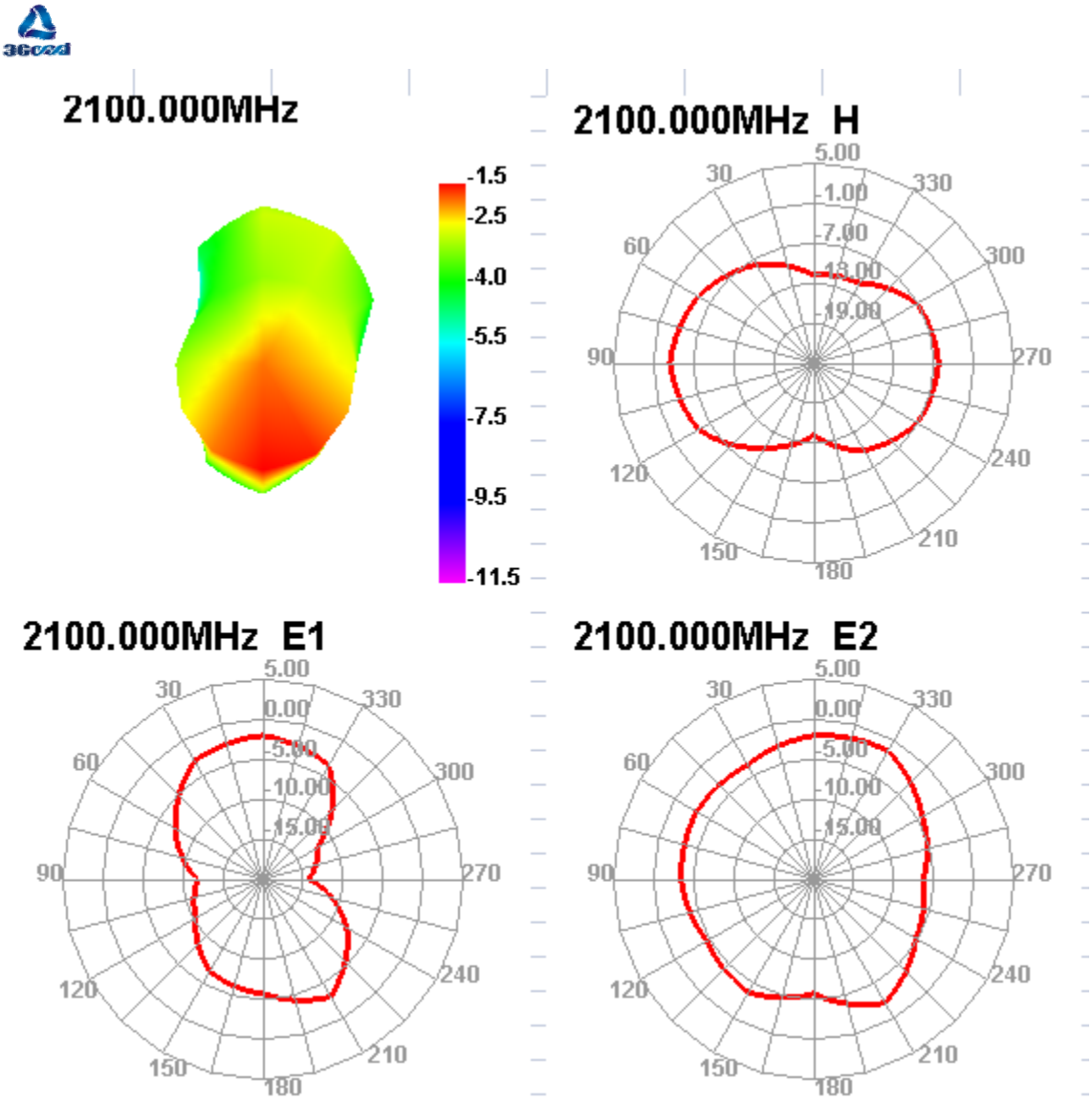
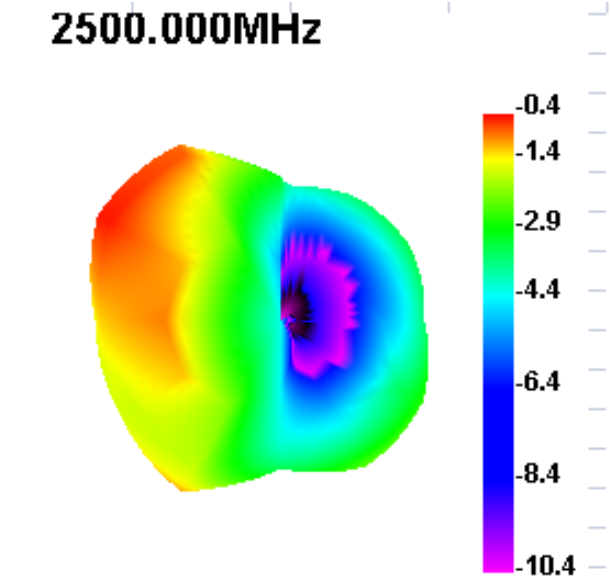
-4.8
-6.8
-8.8
-10.8
900.000MHz H
5.00
1.00
-3.00
-7.00
-11.00
-15.00
-19.00
30
330
60
300
90
270
120
240
150
210
180
900.000MHz E1
5.00
0.00
-5.00
-10.00
-15.00
30
330
60
300
90
270
120
240
150
210
180
900.000MHz E2
5.00
0.00
-5.00
-10.00
-15.00
30
330
60
300
90
270
120
240
150
210
180

DIV ANT：


1800.000MHz
-0.9
-1.9
-3.4
-4.9
-6.9
-8.9
-10.9
1800.000MHz H
5.00
1.00
-3.00
-7.00
-11.00
-15.00
-19.00
30
330
60
300
90
270
120
240
150
210
180
1800.000MHz E1
5.00
0.00
-5.00
-10.00
-15.00
1800.000MHz E2


2100.000MHz
-1.5
-2.5
-4.0
-5.5
-7.5
-9.5
-11.5
2100.000MHz H
5.00
1.00
-3.00
-7.00
-11.00
-15.00
-19.00
30
330
60
300
90
270
120
240
150
210
180
2100.000MHz E1
5.00
0.00
-5.00
-10.00
-15.00
2100.000MHz E2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-2.9
-4.4
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-8.4
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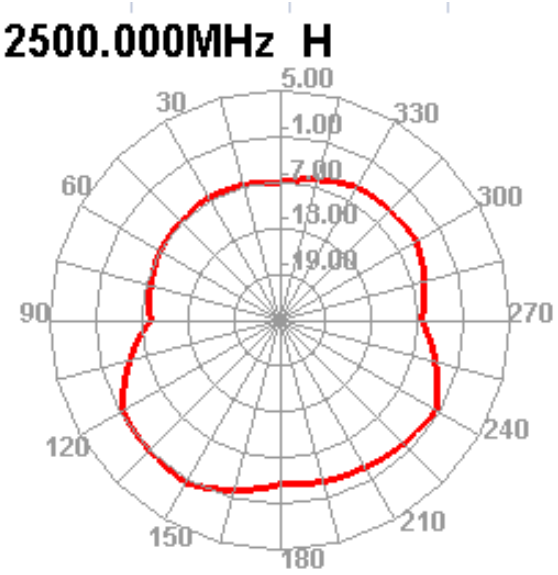
2500.000MHz H
5.00
1.00
-3.00
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30
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300
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240
150
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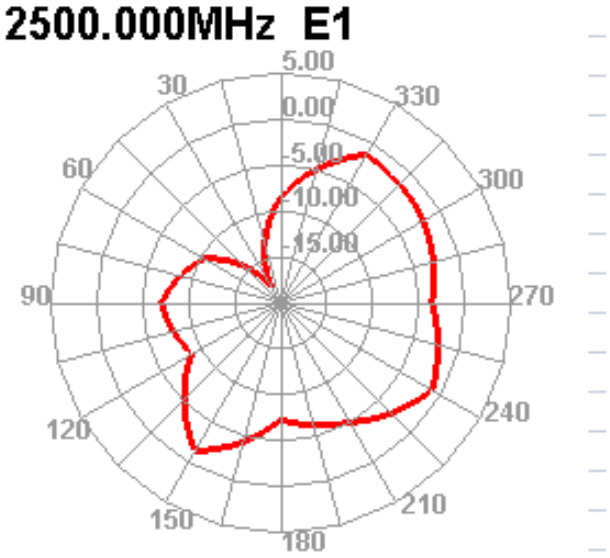
180


2500.000MHz E1
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0.00
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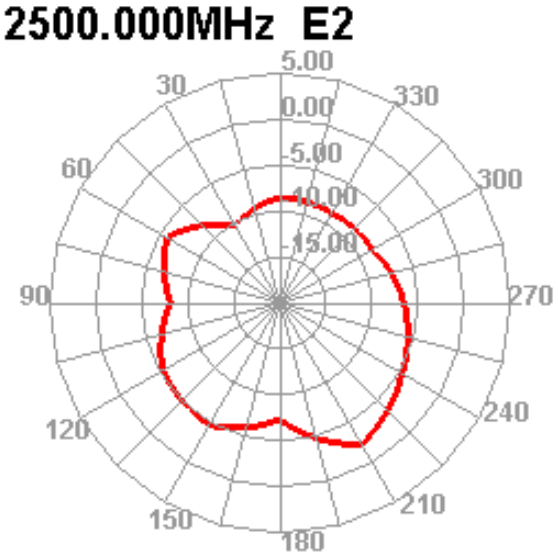
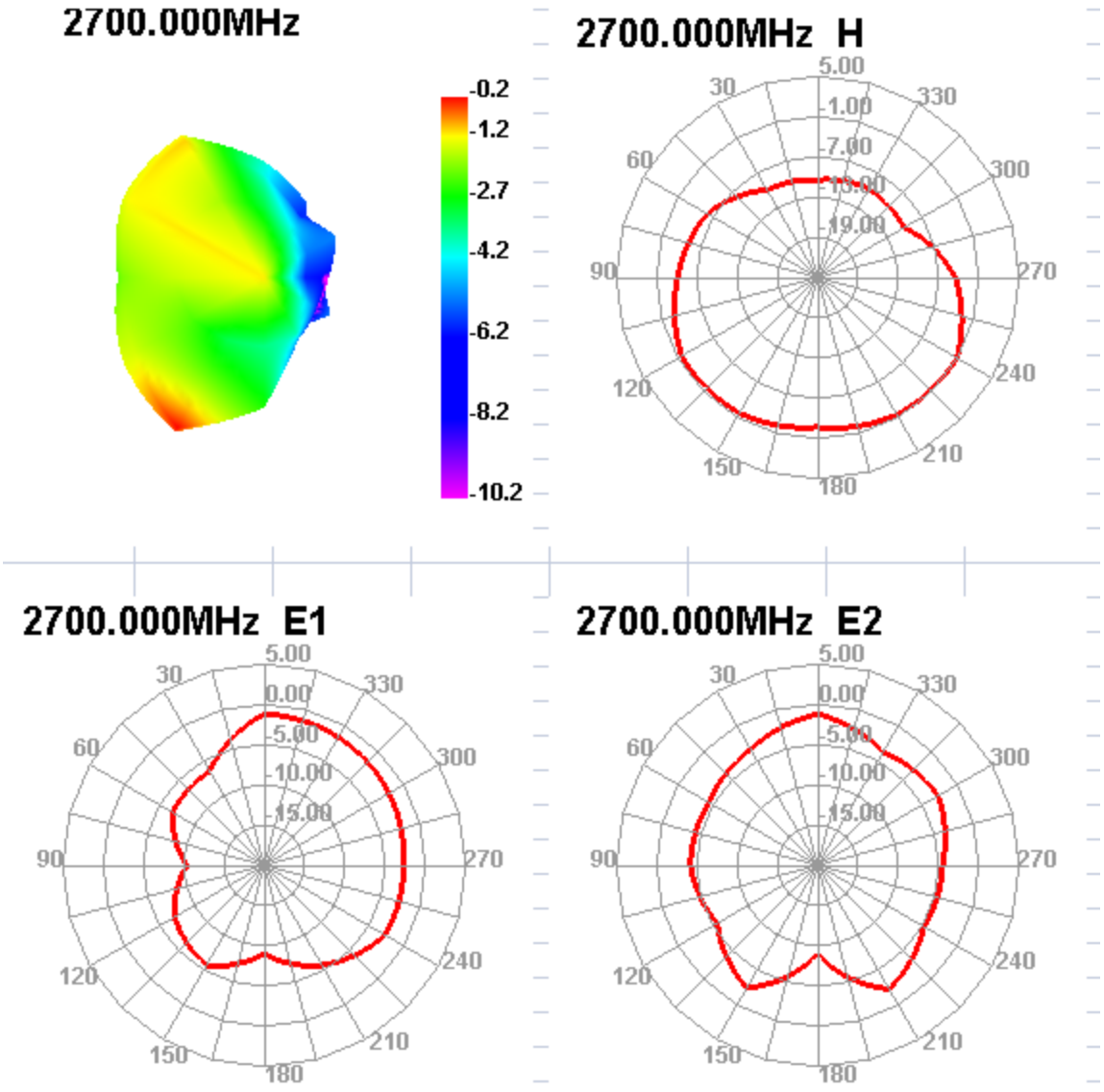
-10.00
-15.00
30
330
60
300
90
270
120
240
150
210
180


2500.000MHz E2
5.00
0.00
-5.00
-10.00
-15.00
30
330
60
300
90
270
120
240
150
210
180


2700.000MHz
-0.2
-1.2
-2.7
-4.2
-6.2
-8.2
-10.2
2700.000MHz H
5.00
1.00
-3.00
-7.00
-11.00
-15.00
-19.00
30
330
60
300
90
270
120
240
150
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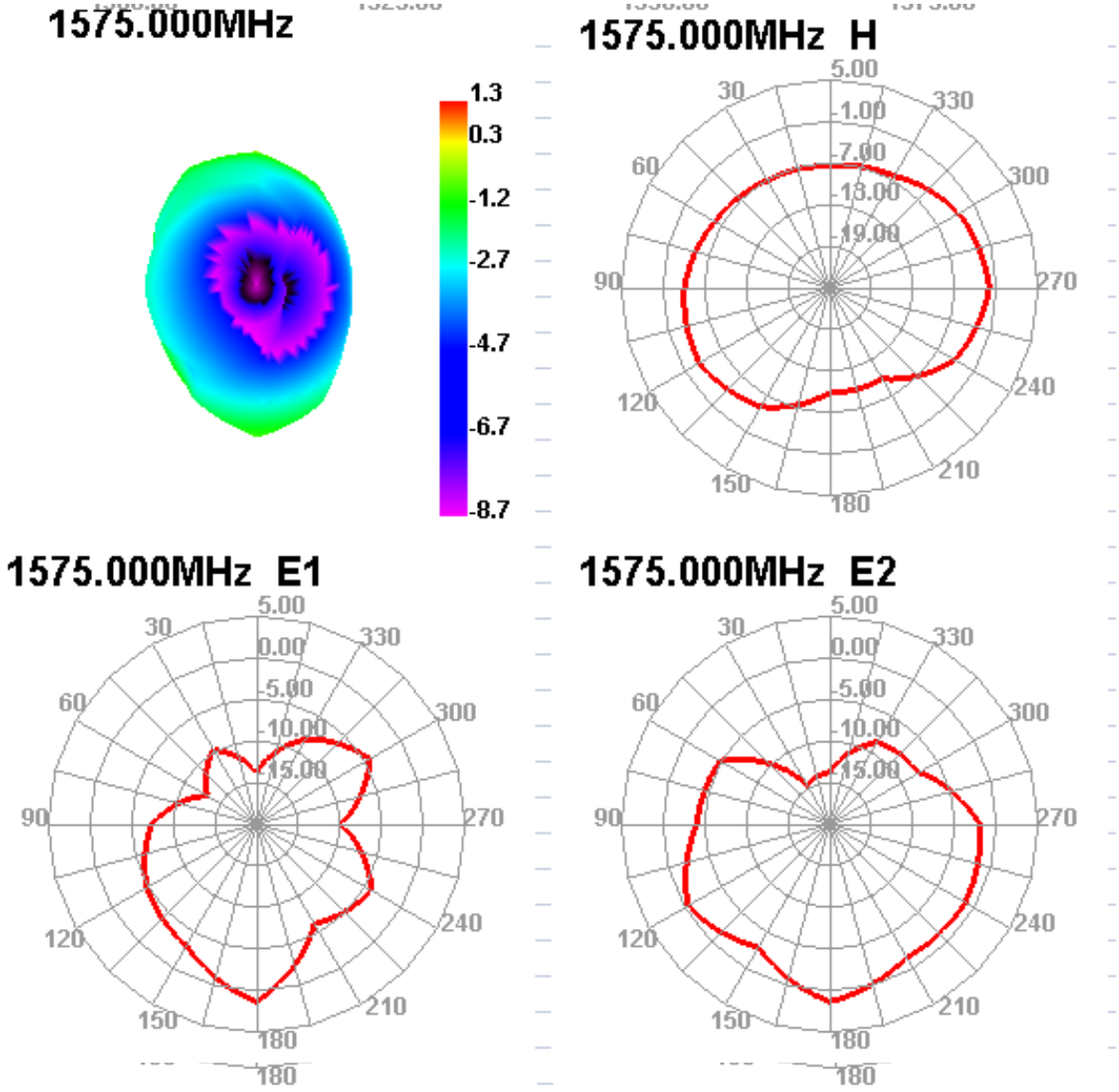
180
2700.000MHz E1
5.00
0.00
-5.00
-10.00
-15.00
2700.000MHz E2

GWB ANT：


1575.000MHz
1.3
0.3
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-2.7
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1575.000MHz H
5.00
1.00
-3.00
-7.00
-11.00
-15.00
-19.00
30
330
60
300
90
270
120
240
150
210
180
1575.000MHz E1
5.00
0.00
-5.00
-10.00
-15.00
30
330
60
300
90
270
120
240
150
210
180
1575.000MHz E2
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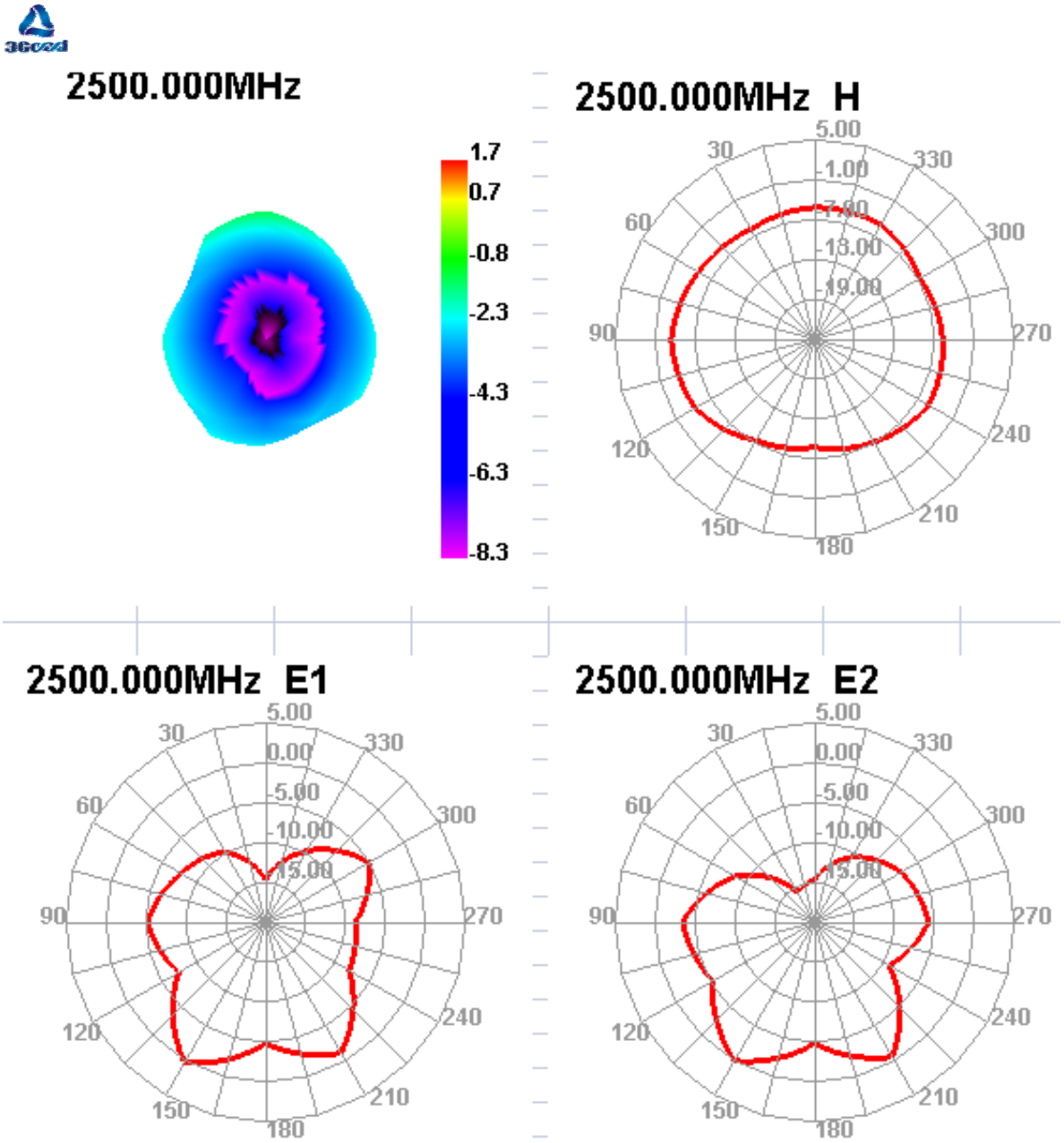
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2500.000MHz H
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1.00
-3.00
-7.00
-11.00
-15.00
-19.00
30
330
60
300
90
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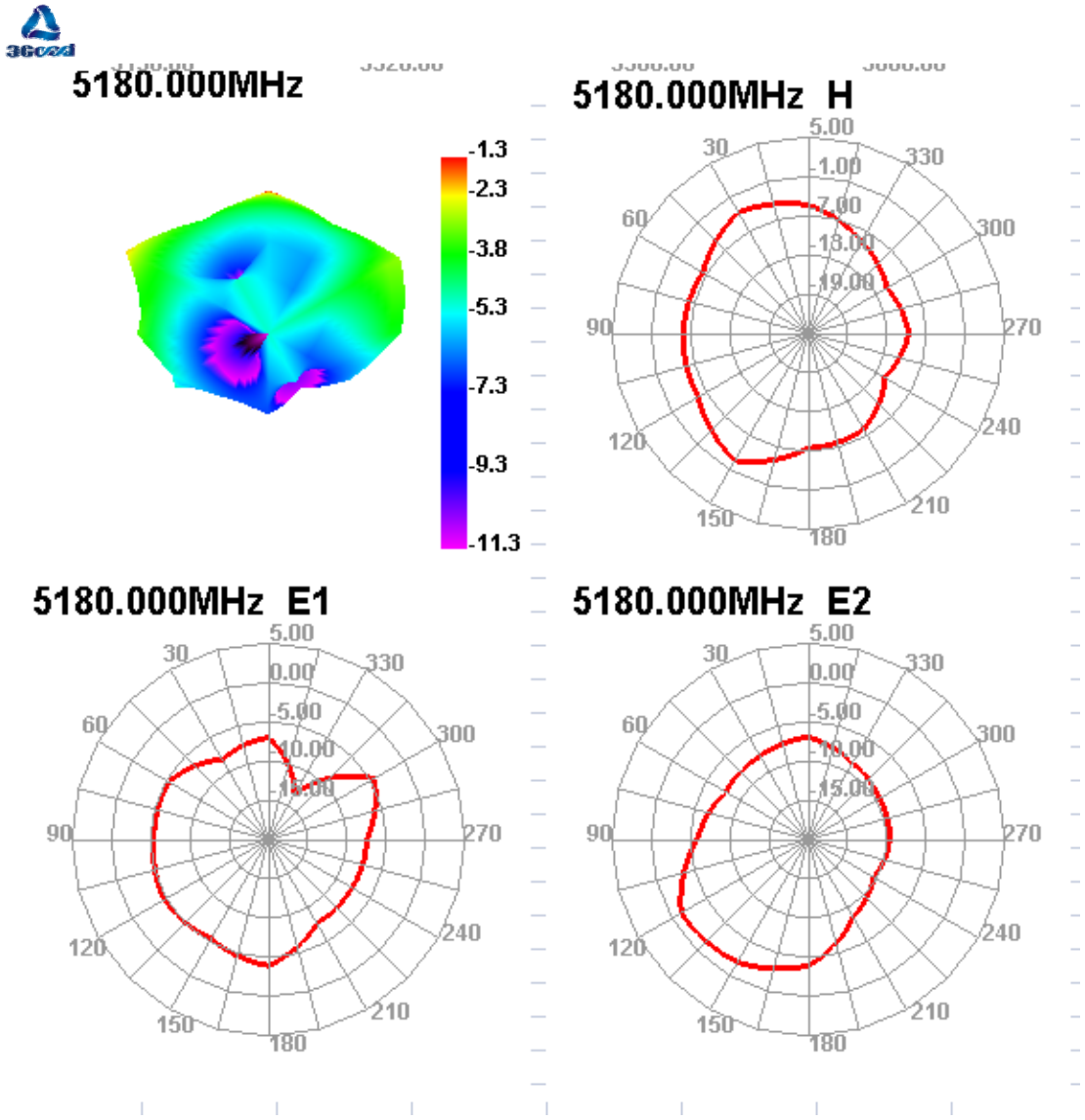
2500.000MHz E2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-2.3
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-5.3
-7.3
-9.3
-11.3
5180.000MHz H
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1.00
-3.00
-7.00
-11.00
-15.00
-19.00
30
330
60
300
90
270
120
240
150
210
180
5180.000MHz E1
5.00
0.00
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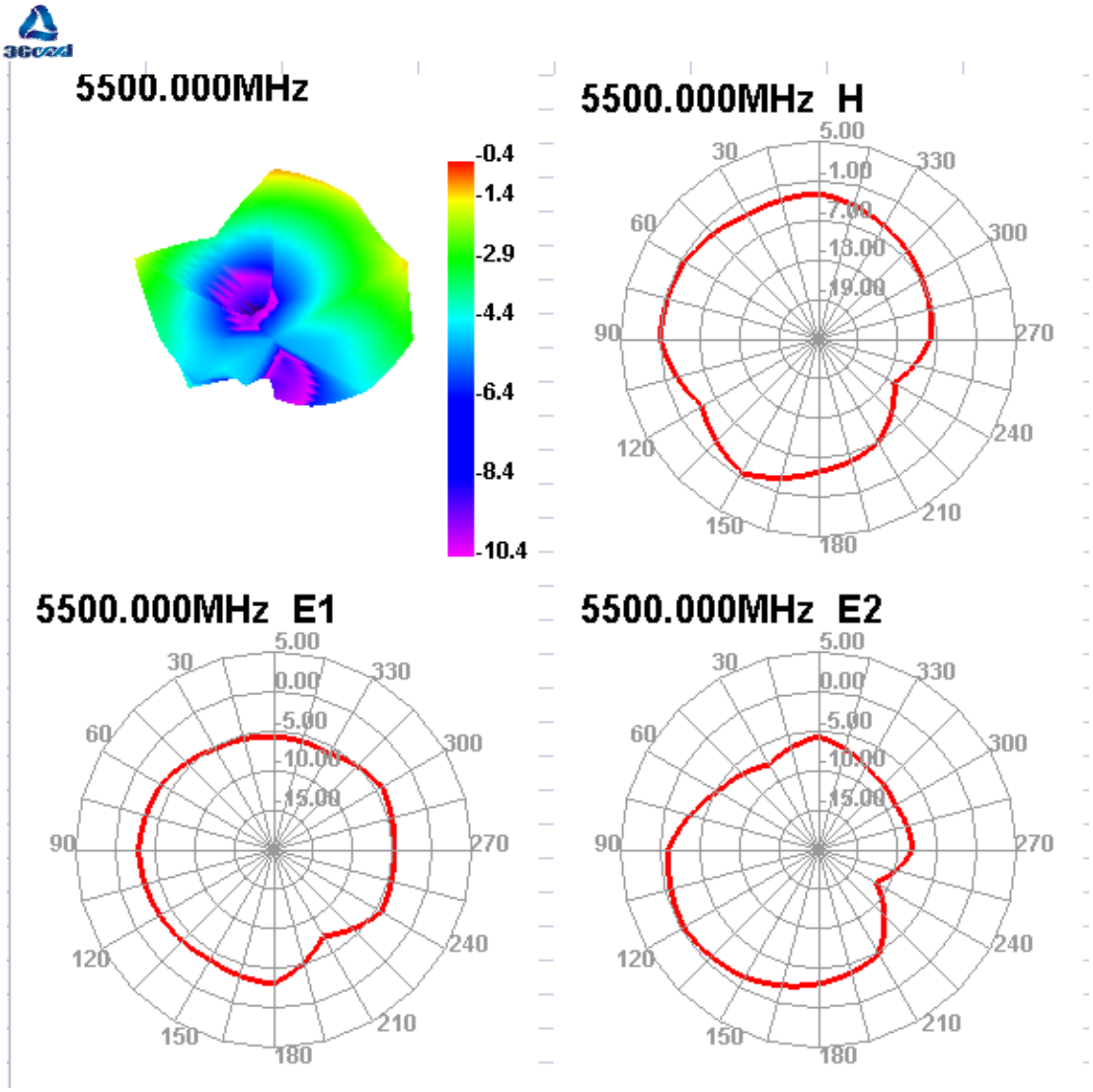
-15.00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-0.4
-1.4
-2.9
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-8.4
-10.4
5500.000MHz H
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1.00
-3.00
-7.00
-11.00
-15.00
-19.00
30
330
60
300
90
270
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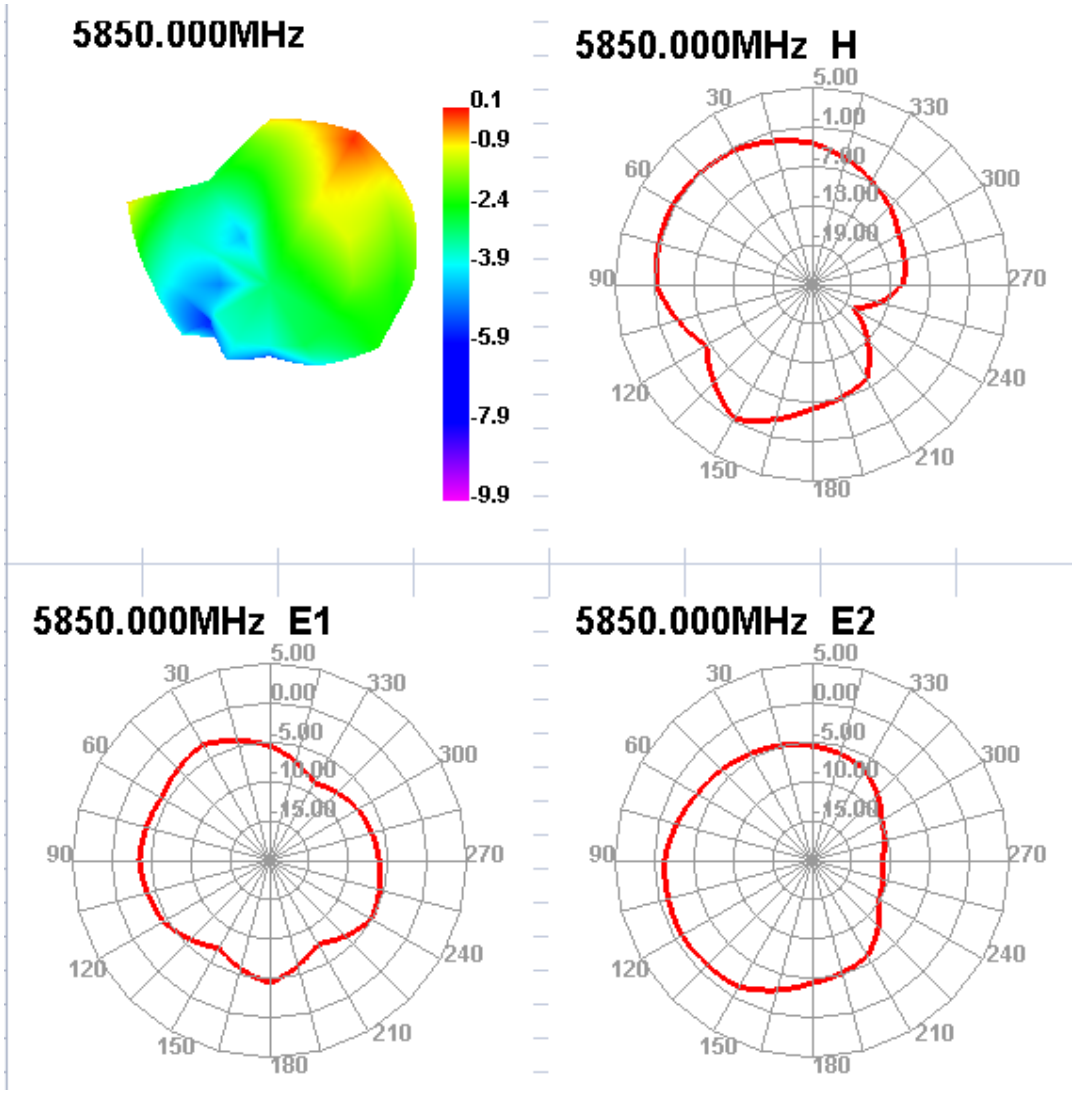
5500.000MHz E2



test engineer：