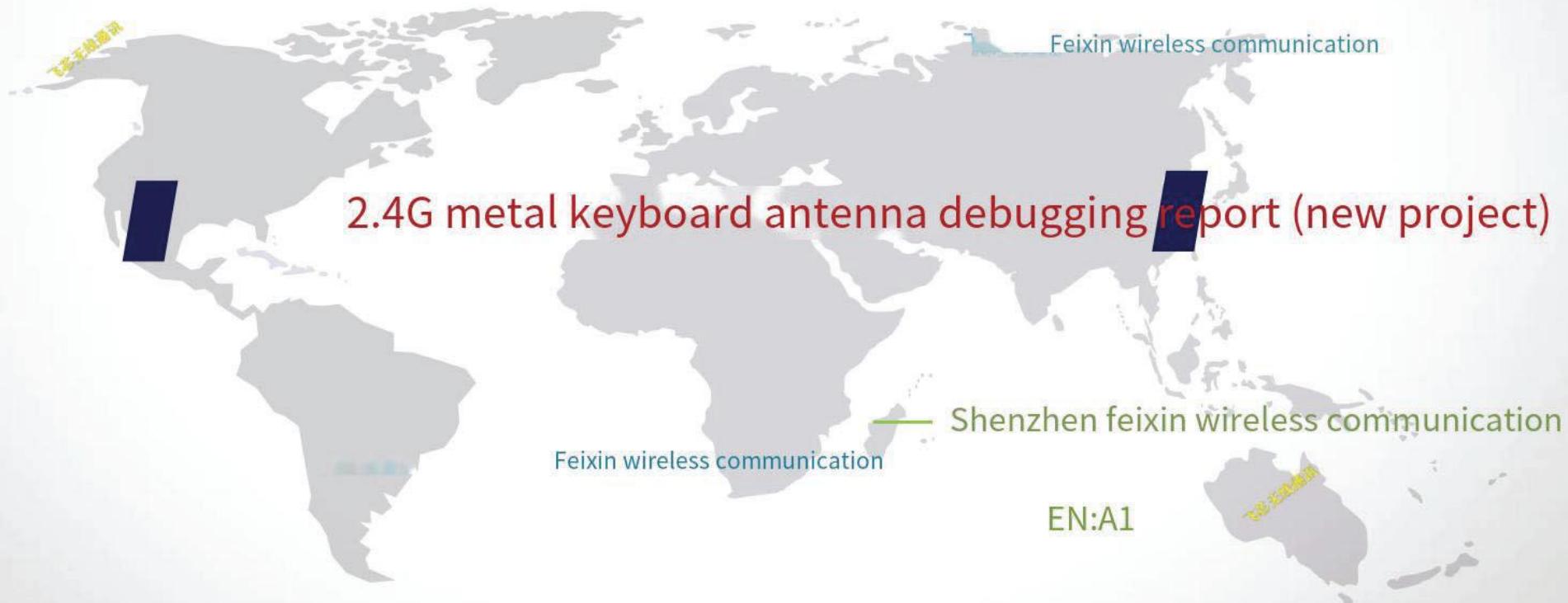




Shenzhen feixin wireless communication co., ltd
Shenzhen Feixin Wireless Communication Co., Ltd.

2.4G metal keyboard antenna debugging report (new project)



Overview of the whole machine:



Overview:

The whole machine is currently equipped with FPC antenna;

Operating frequency: 2400—2500MHZ.

strict

condense

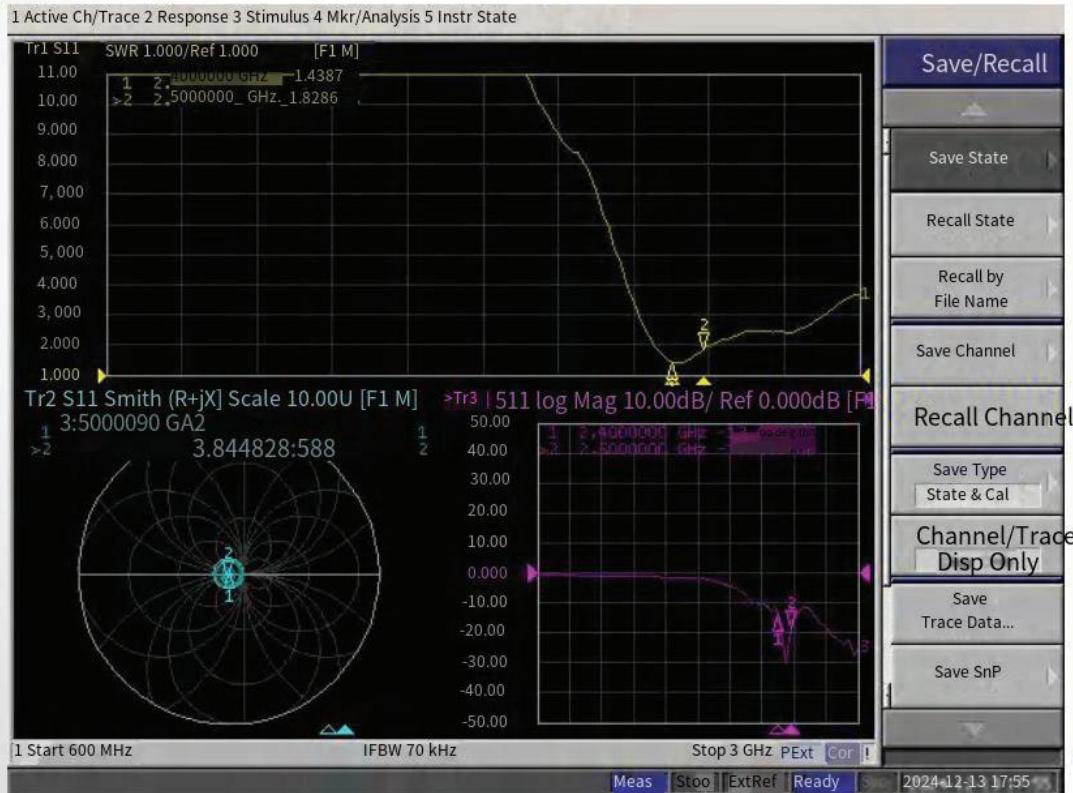
2

explore

innovate

S11 test data

S11 (VSWR、Return loss、Smith) 数据



Test Point ID	Freq. (MHz)	Gain (dBi)	Efficiency cy(%)
one	2400.0	1.07	47.9%
2	2410.0	0.78	42.6%
3	2420.0	1.60	49.1%
four	2430.0	1.17	44.0%
five	2440.0	2.00	50.4%
six	2450.0	2.03	49.9%
seven	2460.0	2.37	50.0%
eight	2470.0	2.44	49.7%
9	2480.0	2.43	46.8%
10	2490.0	2.73	50.2%
11	2500.0	2.51	45.9%

Note: The greater the efficiency percentage value and gain value, the better the antenna.

strict

condense

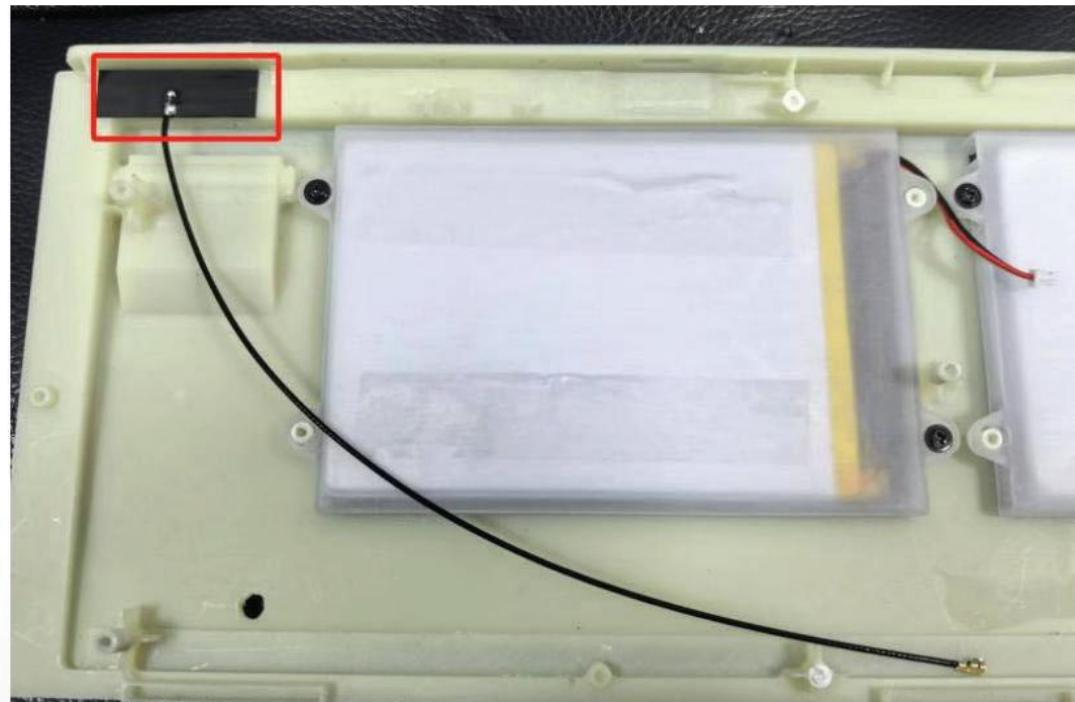
90

explore

innovate

Antenna design layout position:

The antenna description has been modified.



Description: antenna connecting wire 1.13 black wire | 200mm 1st generation IPEX terminal

strict

condense

four

explore

innovate

Antenna Test Report (Passive-BW)

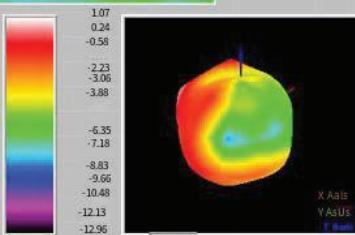
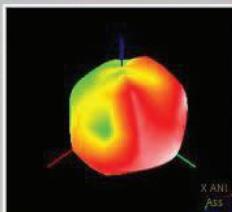
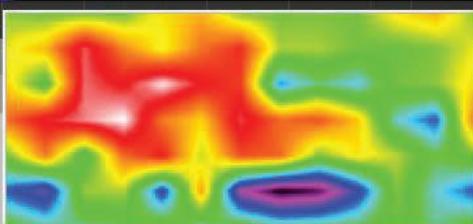
Date: 2024/12/14

Comments:
This antenna is good. Yeah!

Test Point ID	Freq. (MHz)	TRP (dBm)	Gain (dBi)	Directivity (dBi)	Efficiency (%)	Efficiency (dB)	Max (dBm)	Theta of Max	Phi of Max	Min (dBm)	Theta of Min	Phi of Min	Avg (dBm)	Max/Min (dB)	Max/Avg (dB)	Min/Avg (dB)
one	2410.0	2410.00	1.00	4.46	49.0%	-3.76	90	90	90	14.26	150	210	-3.17	14.07	4.71	-0.56
2	2410.0	2410.00	0.78	4.46	49.6%	-3.71	0.78	60	120	14.28	150	210	-4.17	15.06	4.94	-10.11
three	2420.0	2420.00	1.60	4.69	49.1%	-3.08	1.60	60	120	-14.27	150	210	-3.54	15.87	5.14	-10.72
four	2430.0	2430.00	1.17	4.74	44.0%	-3.57	1.17	90	90	-14.84	150	210	-4.01	16.01	5.18	-10.83
five	2440.0	2440.00	2.00	4.98	50.4%	-2.97	2.00	90	90	-14.50	150	210	-3.43	16.51	5.43	-11.07
six	2450.0	2450.00	2.03	5.05	49.9%	-3.02	2.03	90	90	-14.36	150	210	-3.46	16.38	5.49	-10.90
seven	2460.0	2460.00	2.37	5.38	50.0%	-3.01	2.37	90	90	-14.22	150	210	-3.45	16.59	5.82	-10.77
eight	2470.0	2470.00	2.44	5.47	49.7%	-3.03	2.44	90	90	-14.02	150	210	-3.45	16.45	5.89	-10.56
nine	2480.0	2480.00	2.43	5.73	46.8%	-3.30	2.43	90	90	-14.57	150	210	-3.72	17.00	6.15	-10.85
10	2490.0	2490.00	2.73	5.72	50.2%	-3.00	2.73	90	90	-14.58	150	210	-3.39	17.30	6.12	-11.19
11	2500.0	2500.00	2.51	5.89	45.9%	-3.38	2.51	90	90	-15.56	150	210	-3.77	18.07	6.27	-11.79

[Go to Cover Page](#)

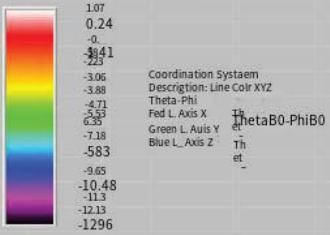
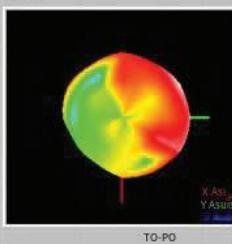
Passiva - Freq 2400.00MHz



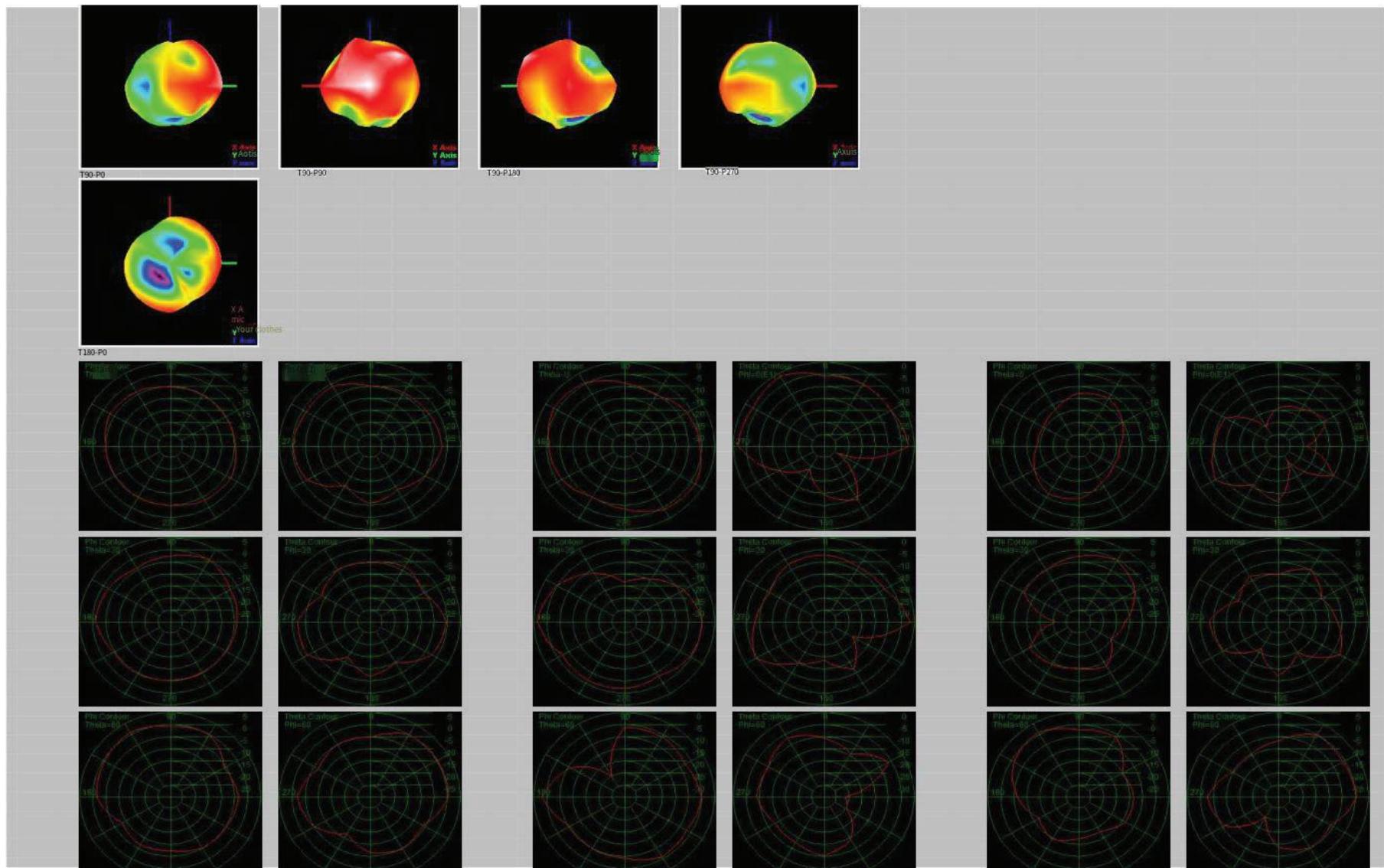
-14

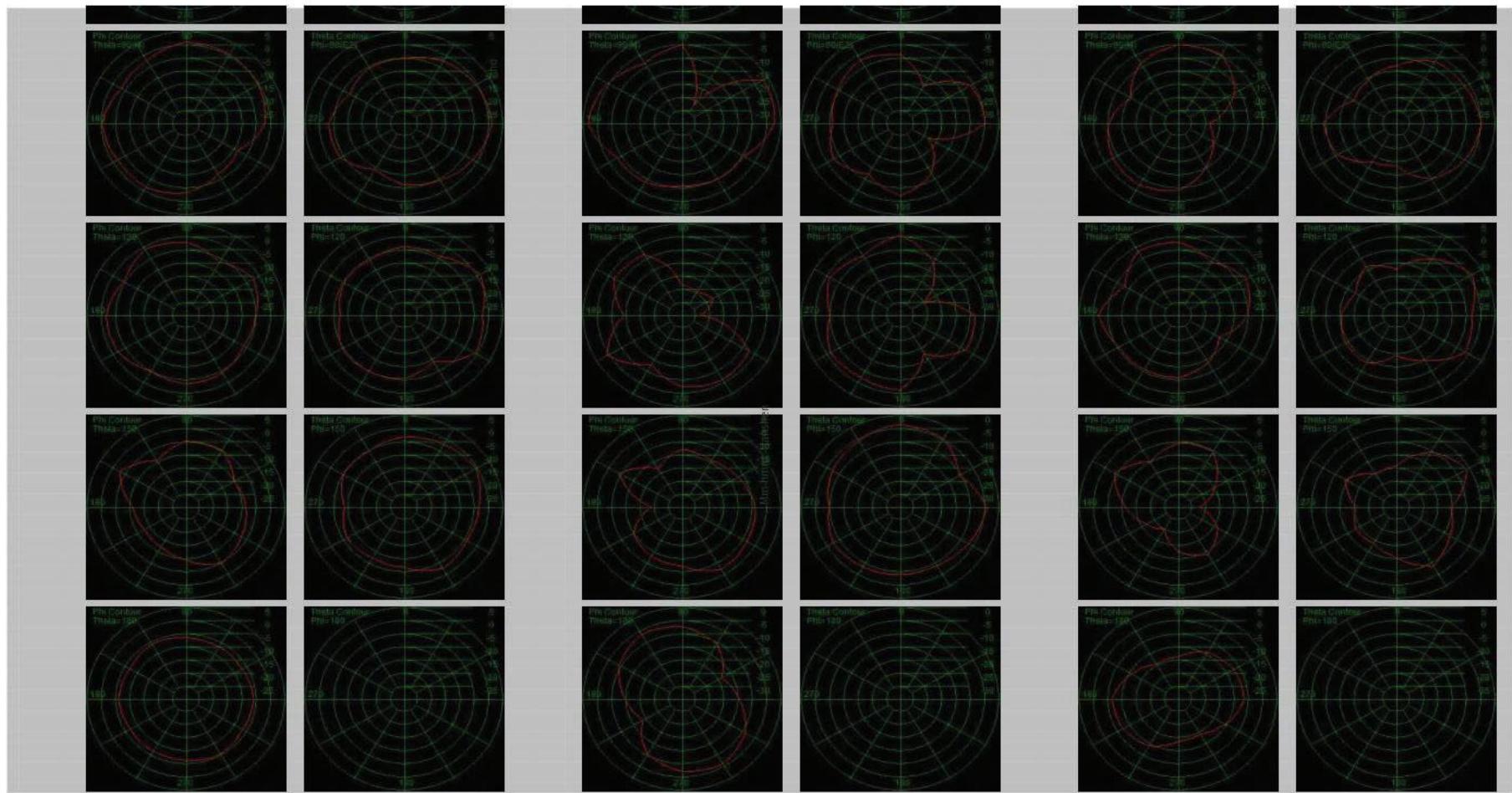
4.

T45-P225



T45-P225







Thank you



Shenzhen Company: 3rd Floor, Building A, Changjing Robot Industrial Park, Huanguan Middle Road, Guanhu Street, Longhua District, Shenzhen

Shanghai Company: Room 202, Building 16, No.618 Dingyuan Road, Songjiang District, Shanghai.

<http://www.flxant.com>