
Antenna Specification

Electrical Specification

Model	Meander line
Frequency Range(MHz)	2402-2480
Bandwidth (MHz)	79
VSWR	≤ 2
Gain (dBi)	2.50
Input Impedance(Ω)	50
Polarization Type	Linear
Antenna Length(mm)	29mm
Pattern	Omni-directional
Antenna type	PCB antenna
MANUFACTURER	ShenZhen Belon Solutions Co.,Ltd

Address: Room 901-902,9F, Block A, Building 2, Shenzhen International Innovation Valley,
Xingke 1st Road, Xili Street, Nanshan District, Shenzhen, China

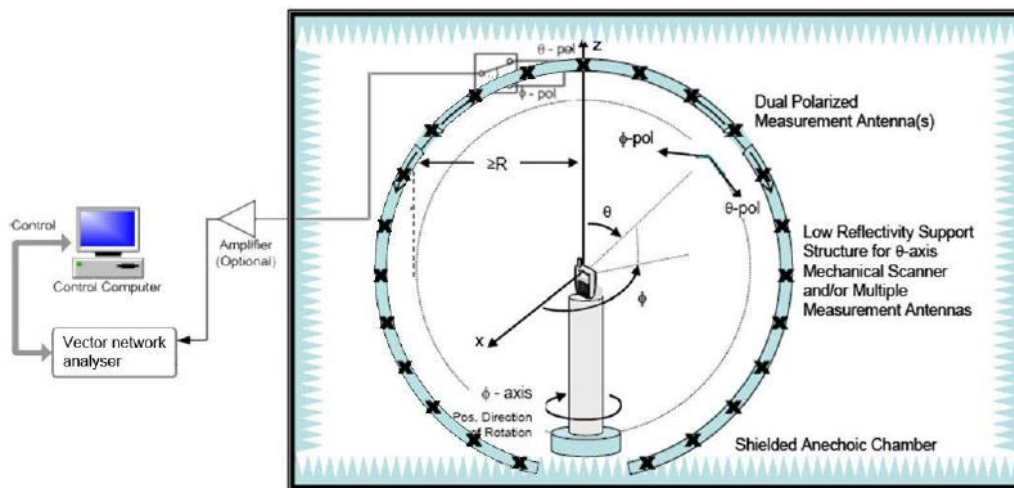
Equipment under Test

No.	EUT status
1#	intact

Test method

Test 5 antennas under Standard IEEE149-1979 and record the test results(first test results).

Test Setup



Test Equipment List

Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
Vector Network Analyzer	Agilent	E5071C	MY46103472	2018.1.25	2019.1.25
5*5*5 Full Anechoic Chamber	SATIMO	5*5*5	CN-1307-555	2018.09.28	2019.09.28
SG24 Multi-probe Antenna Measurement System	SATIMO	SG24-L	1101855-0001	2018.12.4	2019.12.4

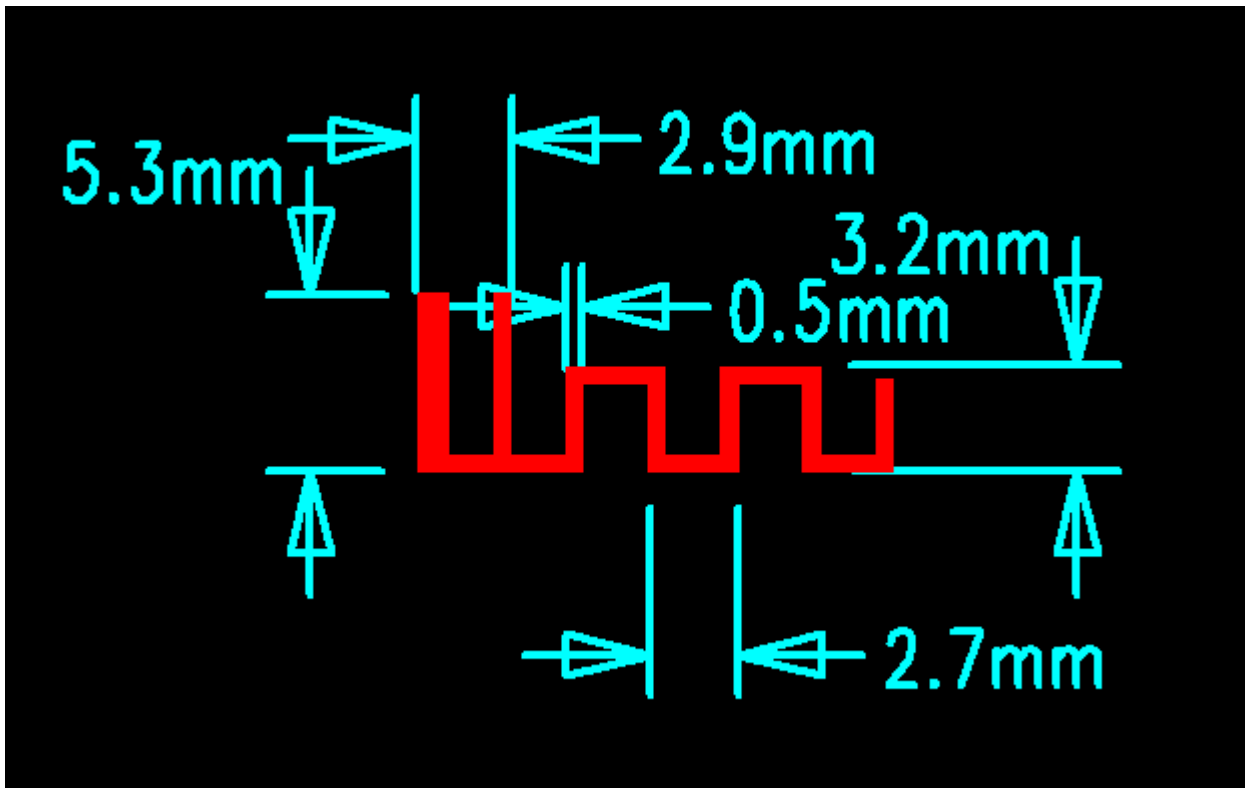
Test Uncertainty

Item	Uncertainty
Gain	$\pm 0.5\text{dB}$

Gain&Efficiency

frequency (MHz)	gain (dB)	mingain (dB)	CO Gain (dB)	CP Gain (dB)	efficiency (dB)	efficiency
2400	0.27	-12.26	-0.46	-0.96	-3.2	47.85%
2410	0.08	-12	-0.67	-1.28	-3.52	44.47%
2420	0.67	-10.78	-0.08	-0.53	-3.09	49.09%
2430	0.88	-10.13	0.13	-0.16	-3.07	49.30%
2440	1.14	-9.53	0.32	0.17	-3.01	49.95%
2450	1.5	-8.82	0.69	0.61	-2.75	53.08%
2460	1.67	-8.71	0.82	0.8	-2.67	54.10%
2470	2.04	-8.46	1.08	1.07	-2.4	57.57%
2480	2.5	-8.2	1.37	1.32	-2.02	62.86%
2490	2.23	-8.71	0.88	0.8	-2.33	58.50%
2500	2.65	-8.43	1.17	1.01	-1.86	65.14%
2510	2.88	-8.33	1.18	1.01	-1.66	68.29%
2520	2.99	-8.38	1.04	0.82	-1.57	69.70%
2530	3.26	-8.16	1.26	0.91	-1.2	75.93%
2540	3.2	-8.22	1.23	0.83	-1.15	76.65%
2550	3.11	-8.22	1.3	0.76	-1.13	77.12%
2560	3.29	-8.18	1.67	1.06	-0.88	81.67%
2570	3.17	-8.36	1.81	1.15	-0.91	81.14%
2580	2.73	-8.78	1.82	1.18	-1.2	75.81%
2590	2.99	-8.72	2.41	1.85	-0.92	80.93%
2600	2.65	-9.22	2.37	1.83	-1.27	74.73%

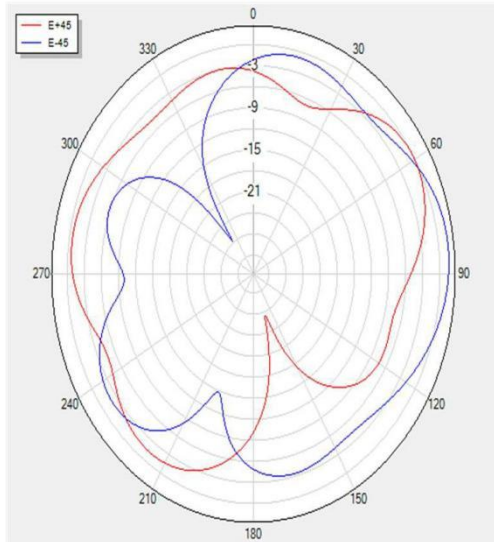
Dimension



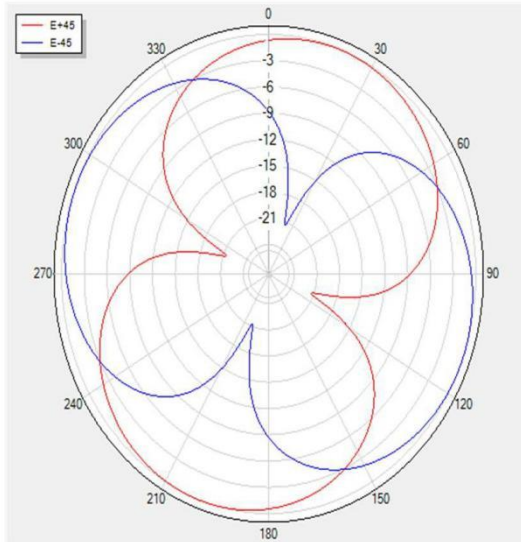
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PolarGraphs (2400/2440/2480MHz)

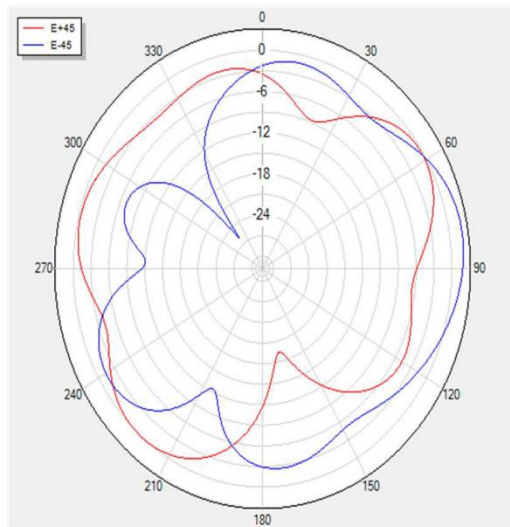
H Theta=90 freq=2400MHz



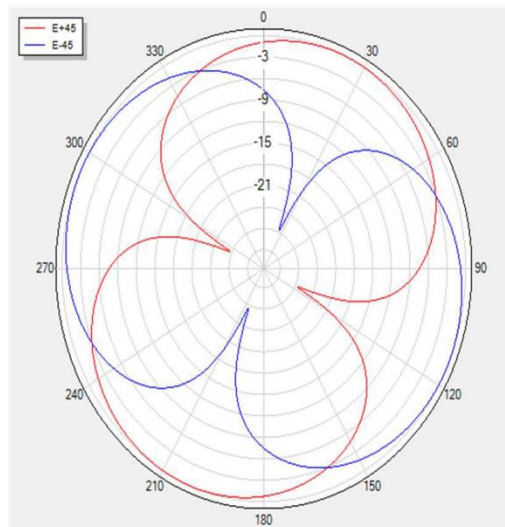
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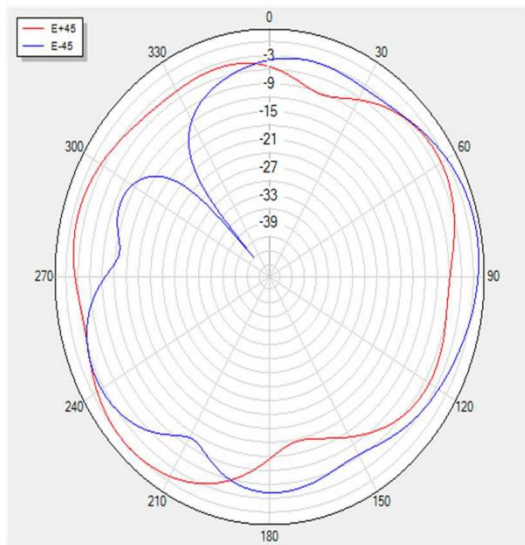
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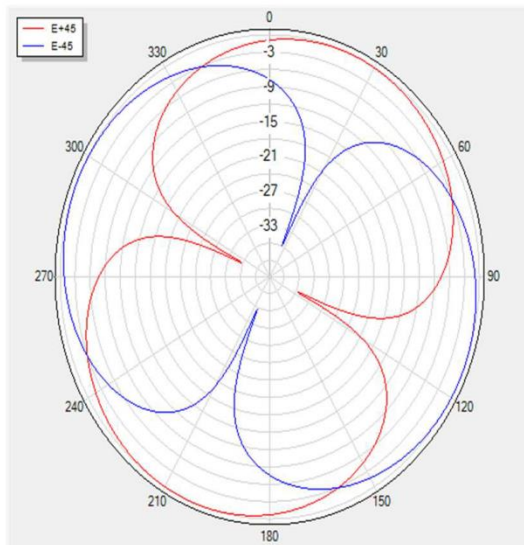
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H Theta=90 freq=2480MHz

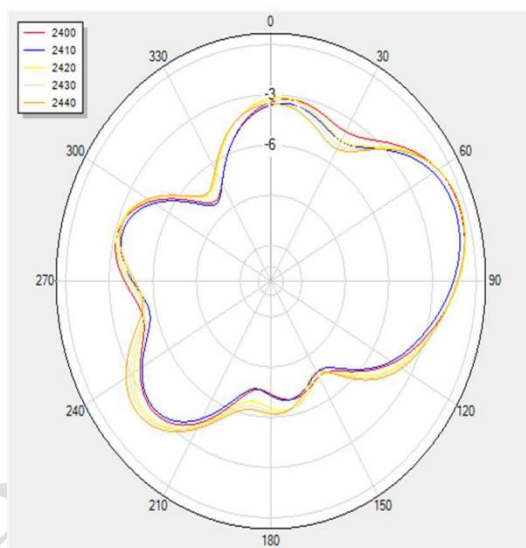


H Theta=0 freq=2480MHz

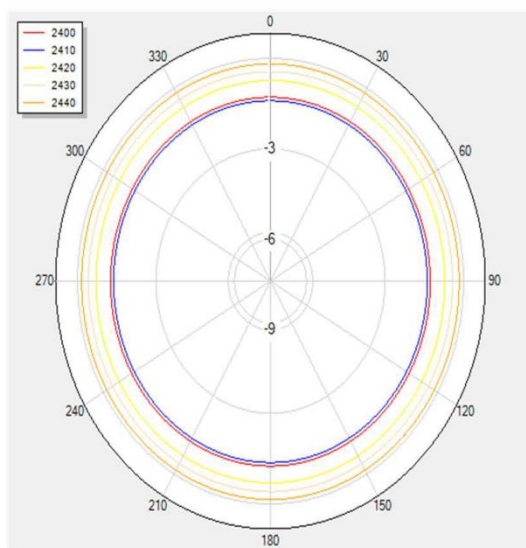


EttotalGraphs

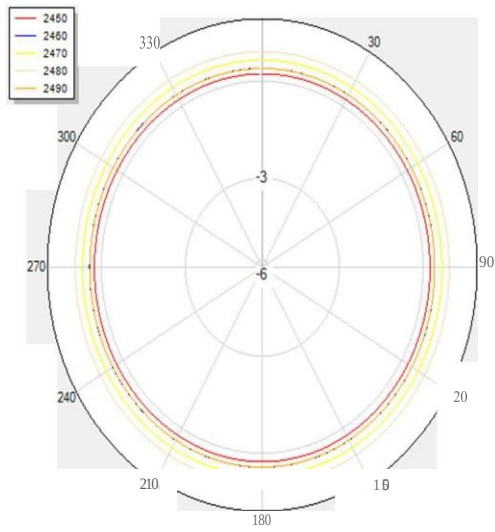
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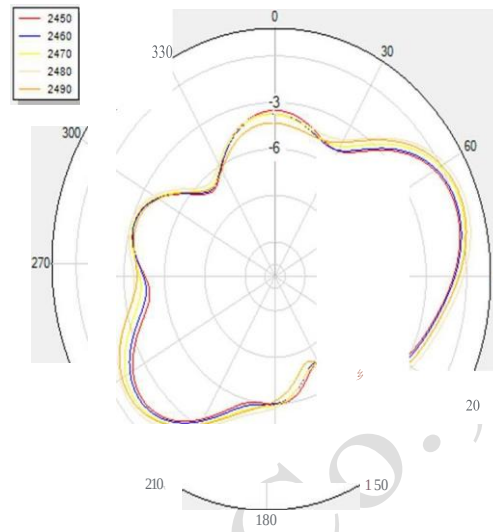
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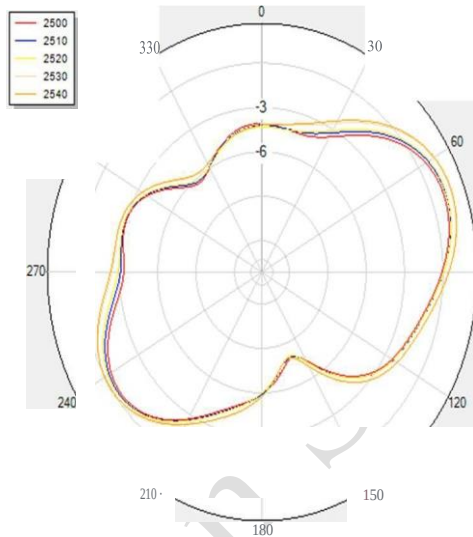
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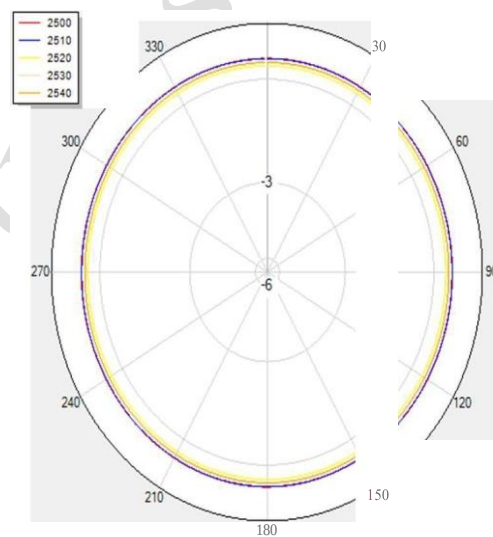
H Theta=90



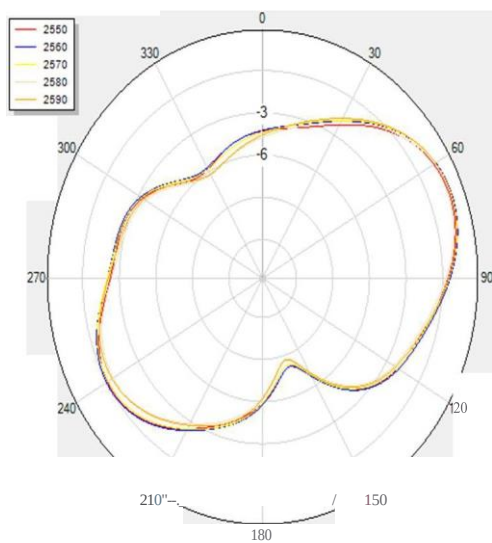
H Theta=90



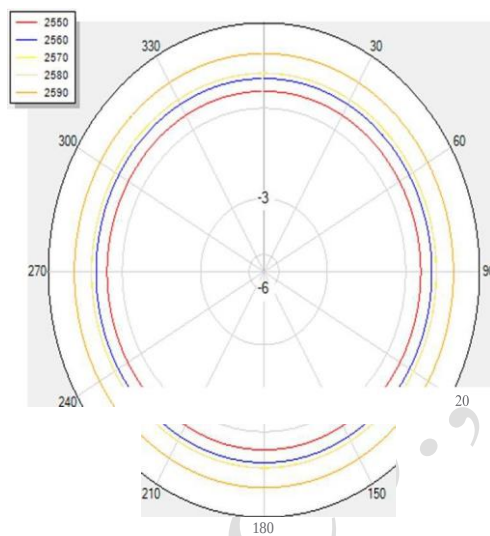
H Theta=0



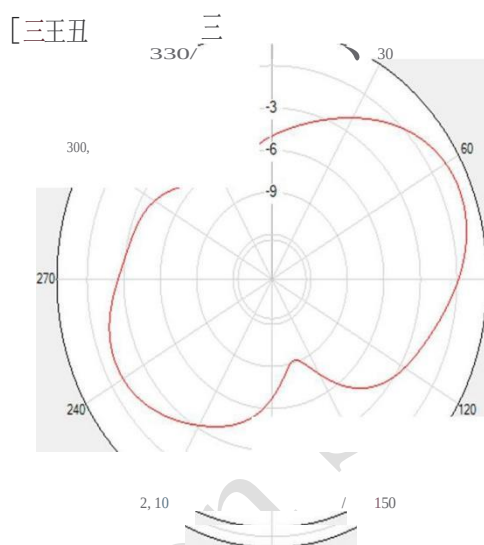
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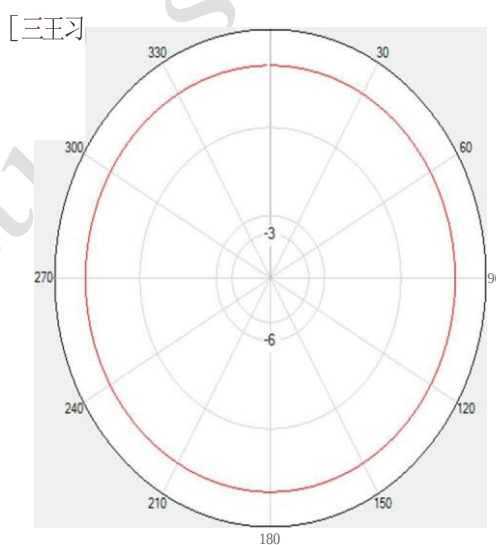
HTheta=0



HTheta=90

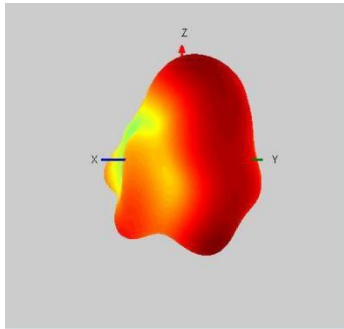


HTheta=0

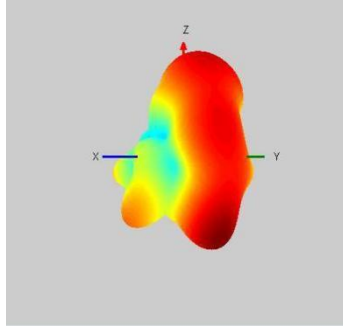


Radiation Pattern 3D

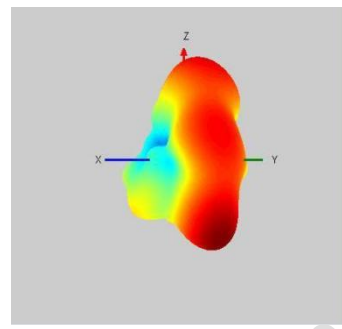
2402MHZ



2441MHZ



2483MHZ



Belon Solutions Co., Ltd
