

深圳市天联凌科技有限公司

Shenzhen SKYLink Technology Co.,Ltd

Antenna specification

编号: SLS0A2023020801

customer name: Naner Intelligence

project name: 86S

product description: PCB Antenna

Product part number: 86S. C113. 70B. 1

version: V2.0

Date: 2023-02-08

engineering	purchase	acknowledge
Andy Wang	Alan Huang	Lcuy Lu

● Specification overview

electrical characteristics	
Frq	2400MHz ~2500MHz
SVWR	<2.0
efficiency	>40%
Gain	2.3 dbi
Impedance	50 Ohm
Polarization	Line
Material and mechanical properties	
Materials	PCB hardness plank
Wire type	wire diameter1.13
Connector Types	Primary terminal
drawing size	See the drawing for details
Screen printing method	white character with black background
environmental characteristics	
storage temperature	- 30 °C ~ + 85 °C
welding temperature	280±5°C dipping time:10s
	320±5°C 2-3s

Address: 5D, 5th Floor, Building L, No. 26, Lane 2, Liuxian 1st Road, Baoan District 71, Shenzhen

● Test equipment and conditions

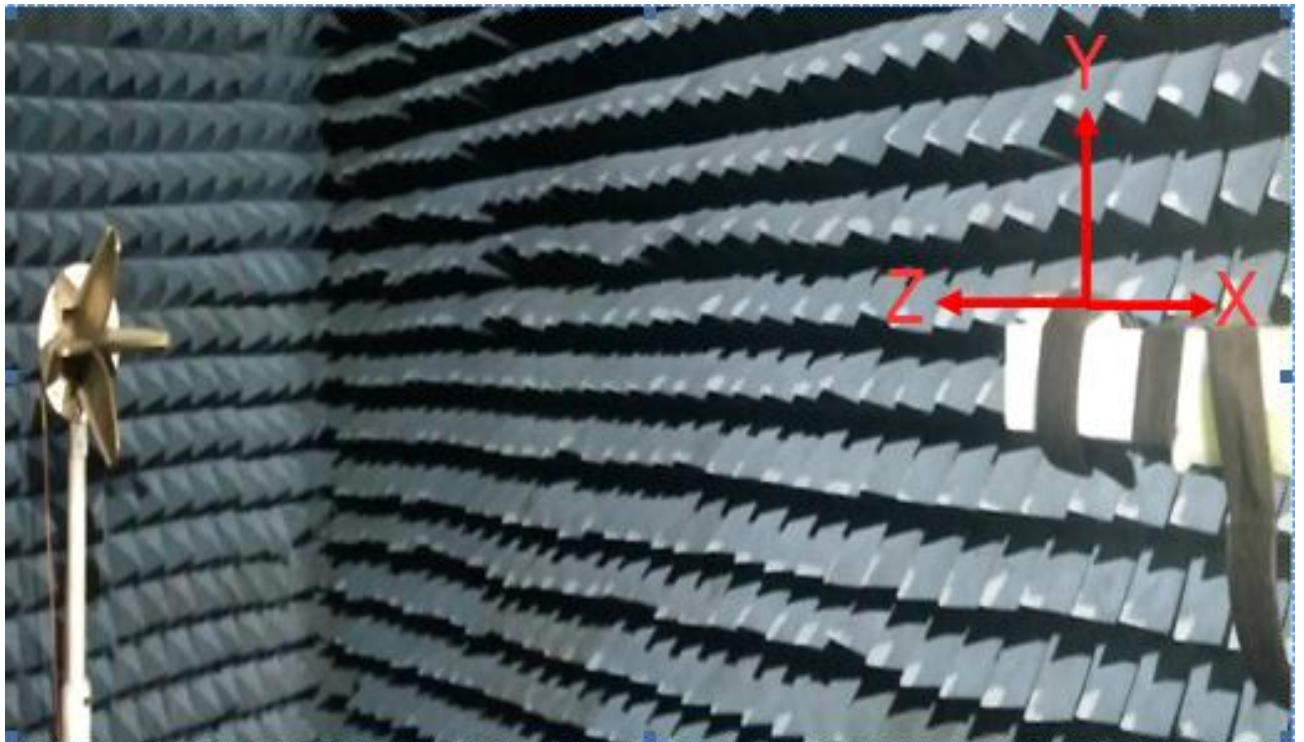
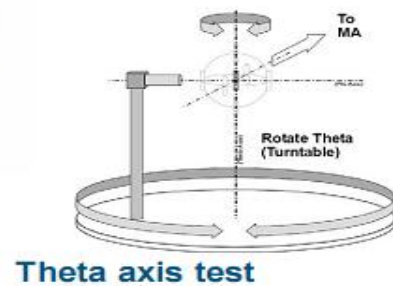
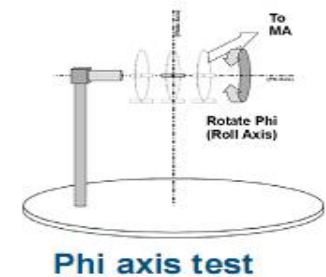
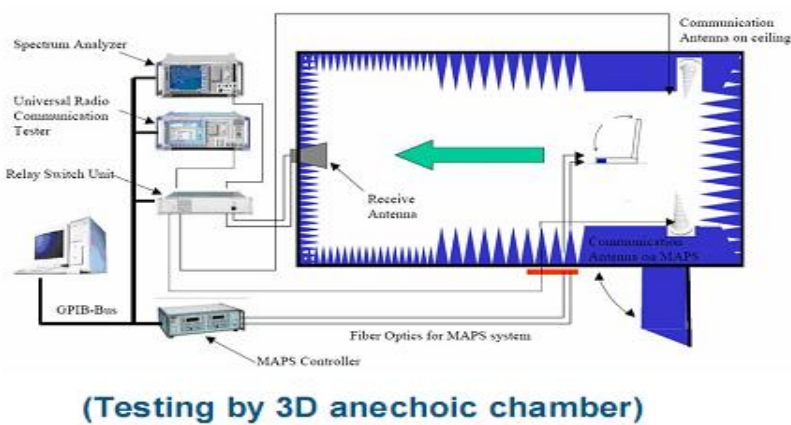
1. network analyzer :

Agilent 8753D Agilent 5071B

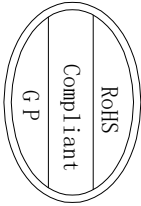
Communication test equipment

Agilent E5515C R&S CMW500

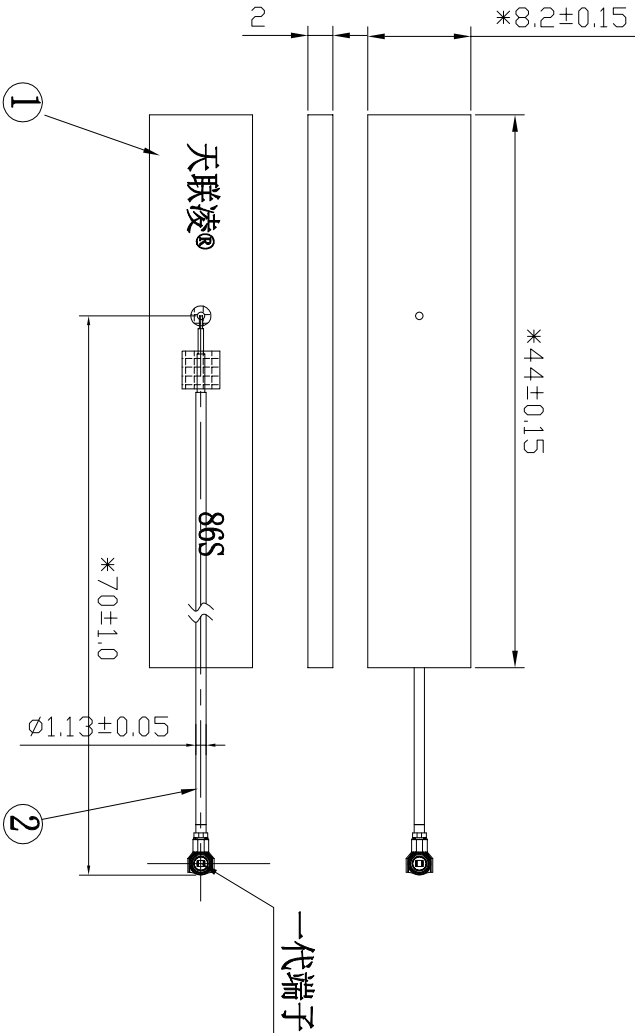
2. 3D test system



Address: 5D, 5th Floor, Building L, No. 26, Lane 2, Liuxian 1st Road, Baoan District 71, Shenzhen



南尔智能



unit: mm

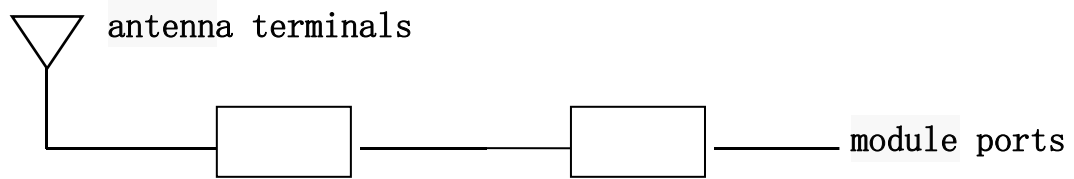
注:

1. “*”为重点尺寸；
2. 未标注尺寸请依图纸；
3. Pb、Hg、Cr+6、PBBS、PBDEs各项小于1000PPM，Cd小于100PPM。

深 圳 天 联 凌 科 技 有 限 公 司			SHEN ZHEN SKYlink CO., LTD		
Third Angle		Project	二合一天线		
0~10	±0.05	○	0.02	Part Name	Designed by
10~18	±0.10	◎	∅0.03	Part No.	86S.C113.70B.1
18~30	±0.12	⊥	0.02	Material	Checked by
30~40	±0.15	∇	0.04		RF
40~	±0.20	Angle	±0.5°	DWG No.	Approved by
Location				Unit	mm
				Scale	1:1
				Rev	A

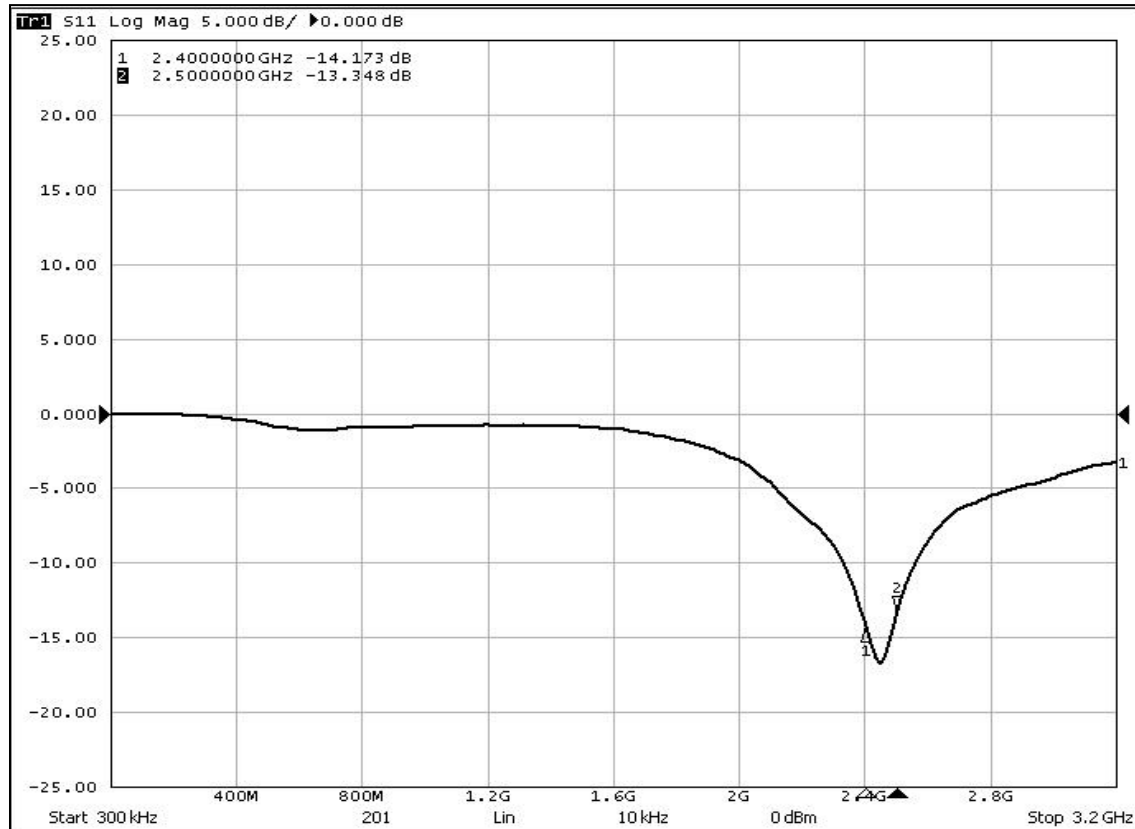
1	2	3	4	5	6	7	8
A							
B							
C							
D							
Rev	Description		Date	Remark			
A	New drawing						
1	2	3	4	5	6	7	8

● building-out circuit



● Passive test report

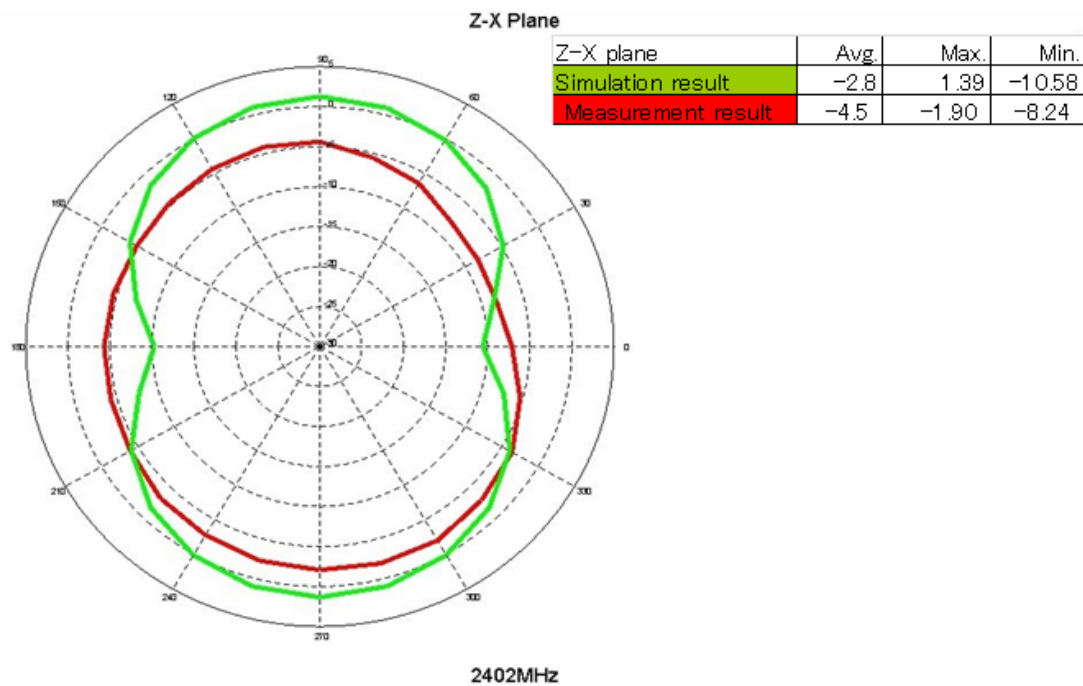
S11图



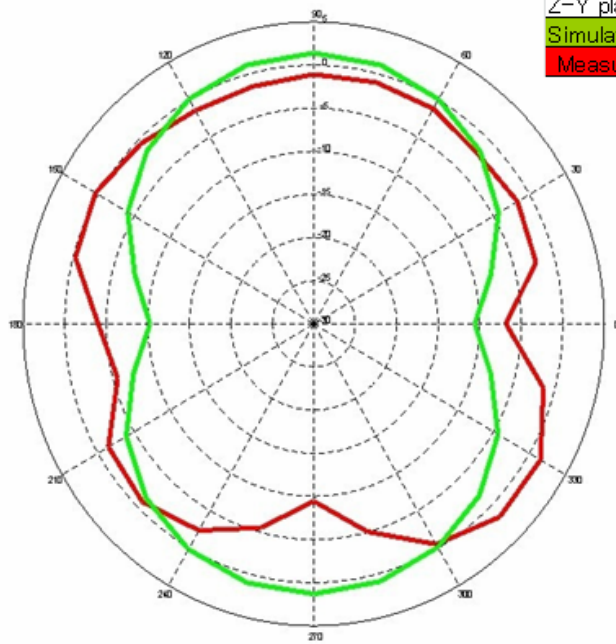
Antenna plate	PCB Antenna
Antenna peak gain	2.3 dBi
Frequency range	2.402MHz~2.480MHz
Connect type	Direct Connect

Antenna Radiation Pattern

Radiation pattern @2.402GHz



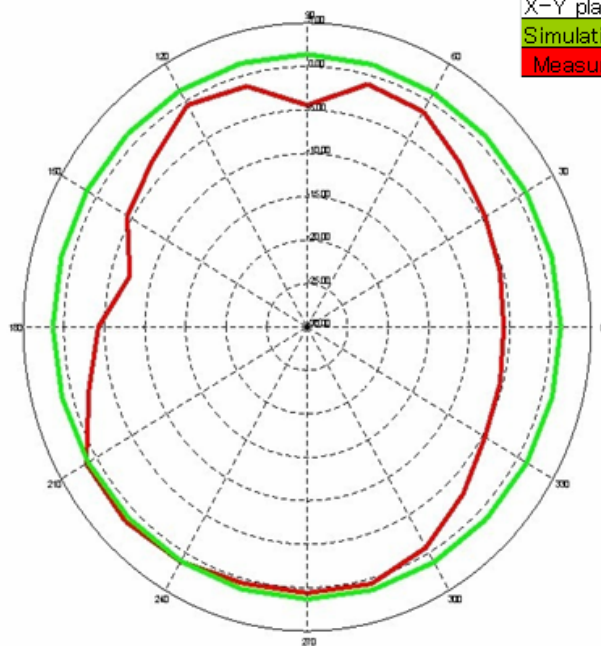
Z-Y Plane



Z-Y plane	Avg.	Max.	Min.
Simulation result	-2.8	1.45	-10.58
Measurement result	-2.1	1.7	-9.42

2402MHz

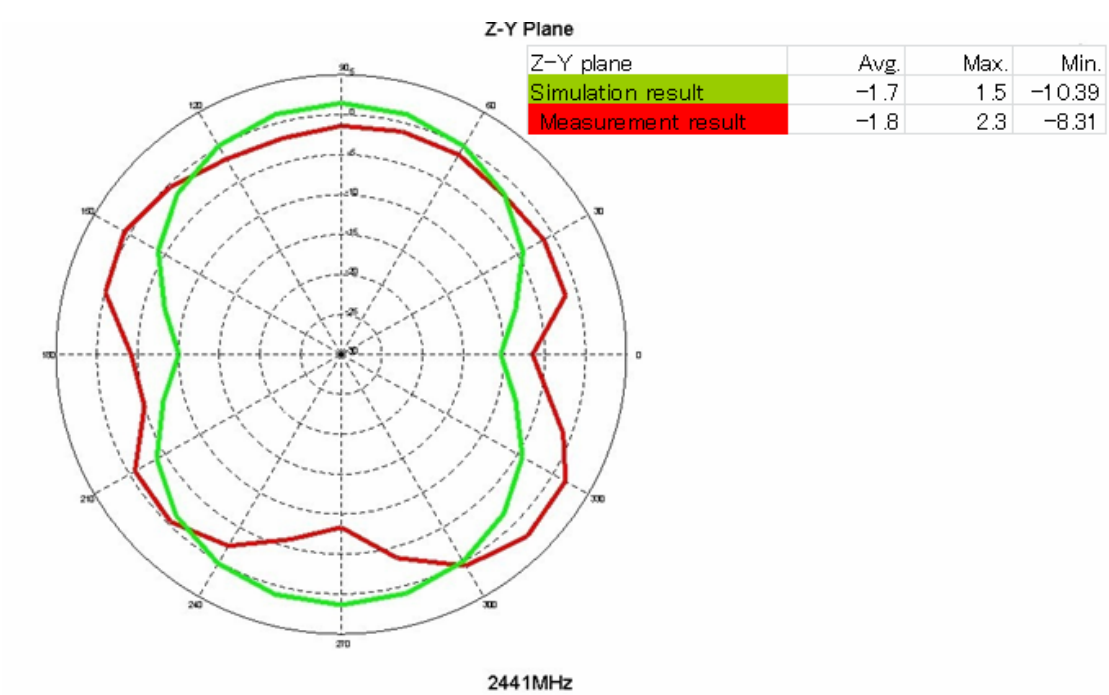
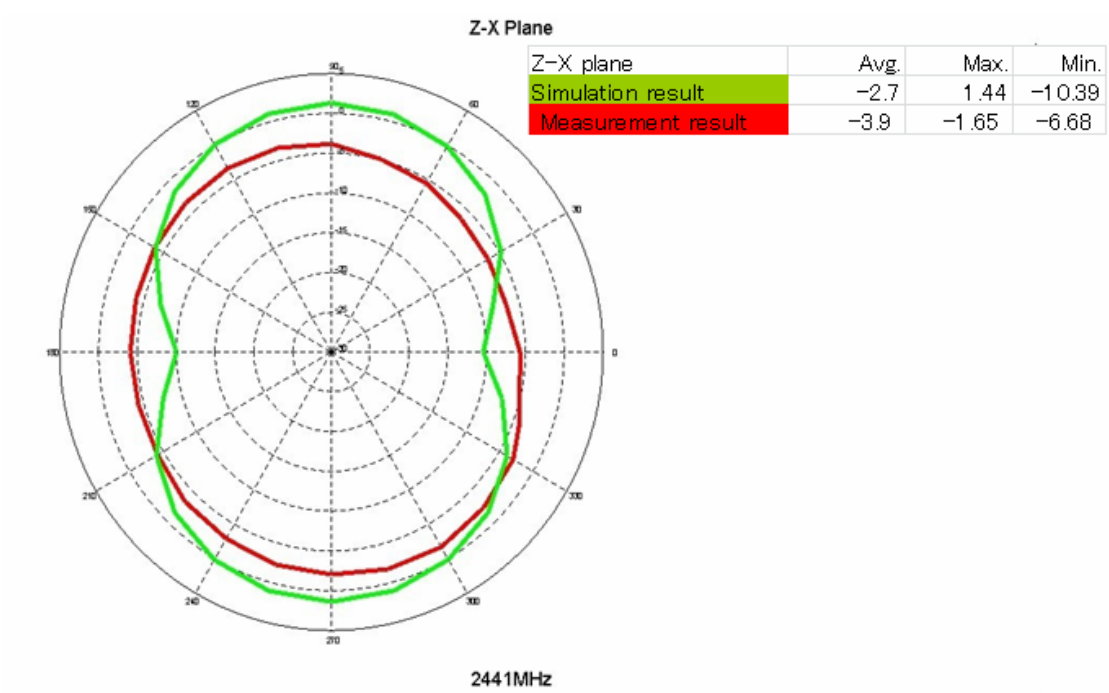
X-Y Plane

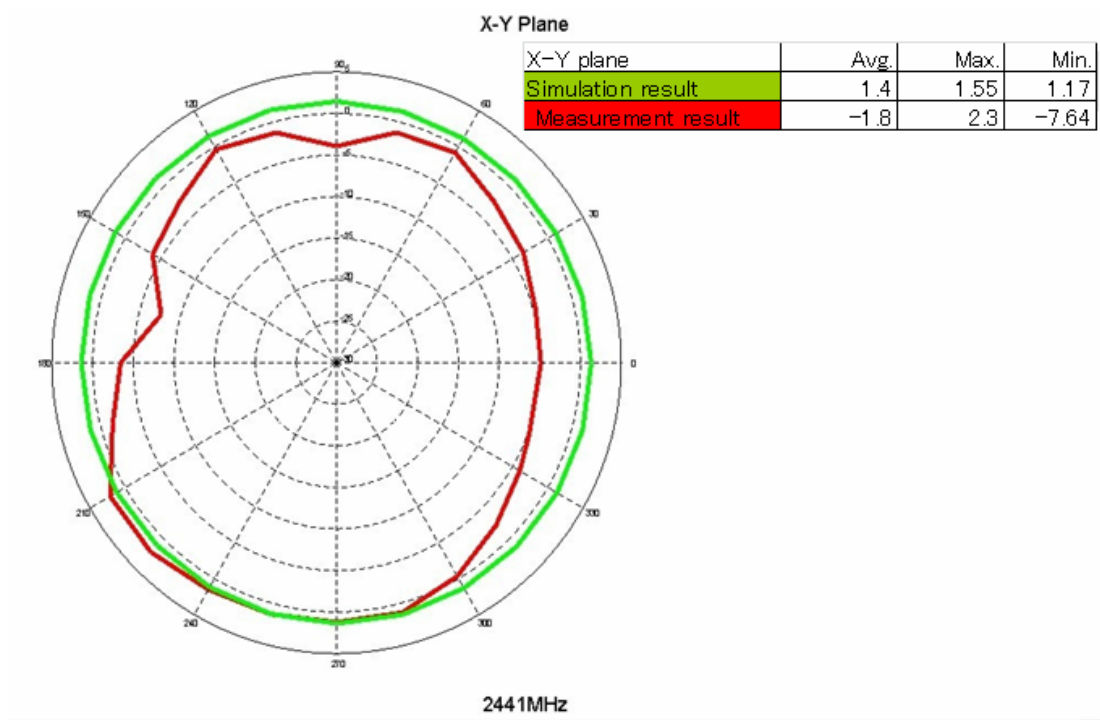


X-Y plane	Avg.	Max.	Min.
Simulation result	1.3	1.5	1.15
Measurement result	-2.3	1.7	-7.34

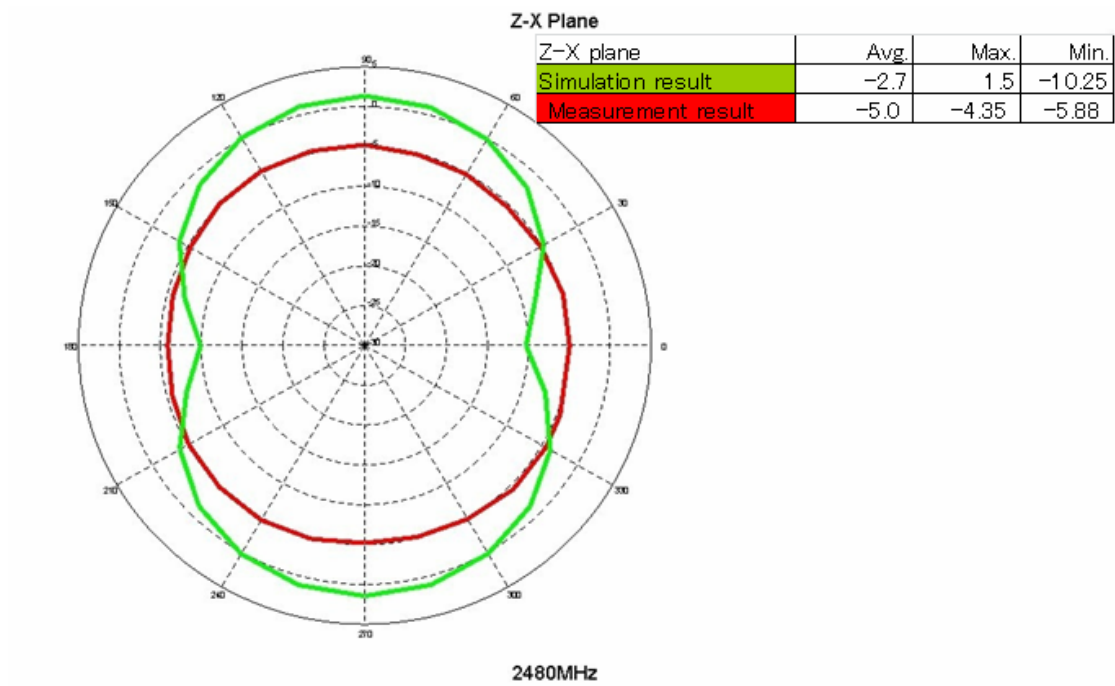
2402MHz

Radiation pattern @2.441GHz



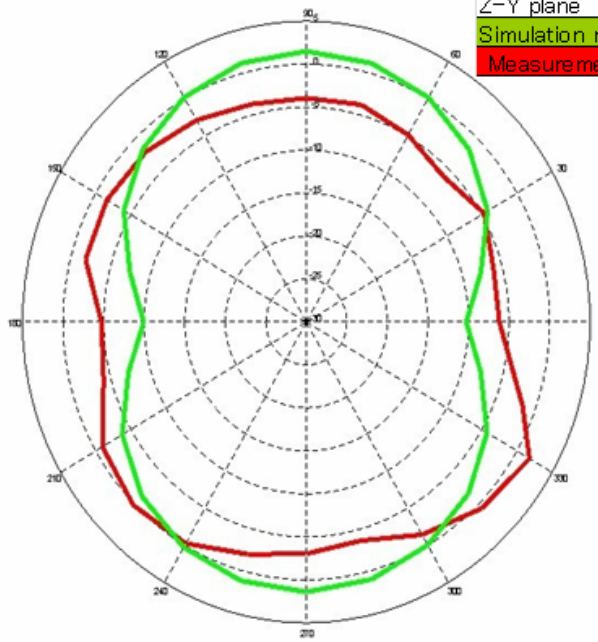


Radiation pattern @2.480GHz



Z-Y Plane

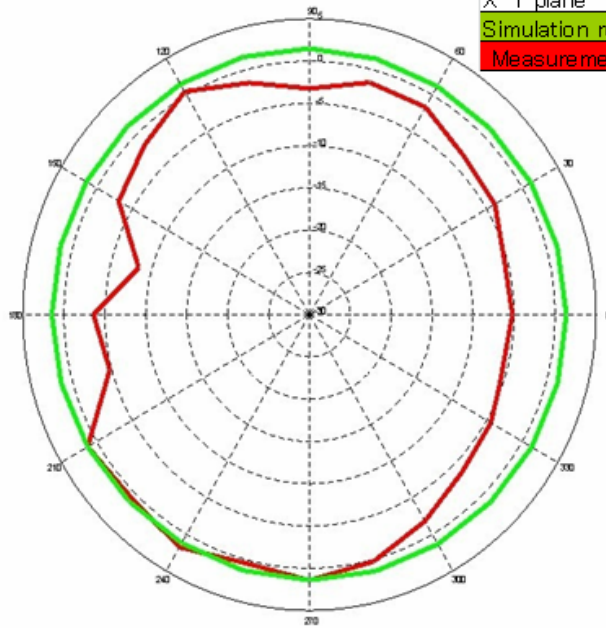
Z-Y plane	Avg.	Max.	Min.
Simulation result	-2.7	1.55	-10.25
Measurement result	-2.8	1.82	-6.16



2480MHz

X-Y Plane

X-Y plane	Avg.	Max.	Min.
Simulation result	1.4	1.61	1.22
Measurement result	-2.3	1.82	-8.38



2480MHz