



# **EDIMAX BR6893MCX ARY121-0350-002-00 (Ant6)**

**Only Antenna  
(6GHz Peak Gain:2.95dBi 、  
Directional Gain: 8.95dBi)**

**Engineer : Ting  
Report date : 2022/03/13**



# Directional Gain

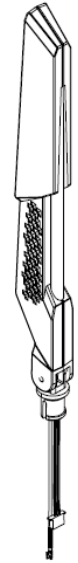
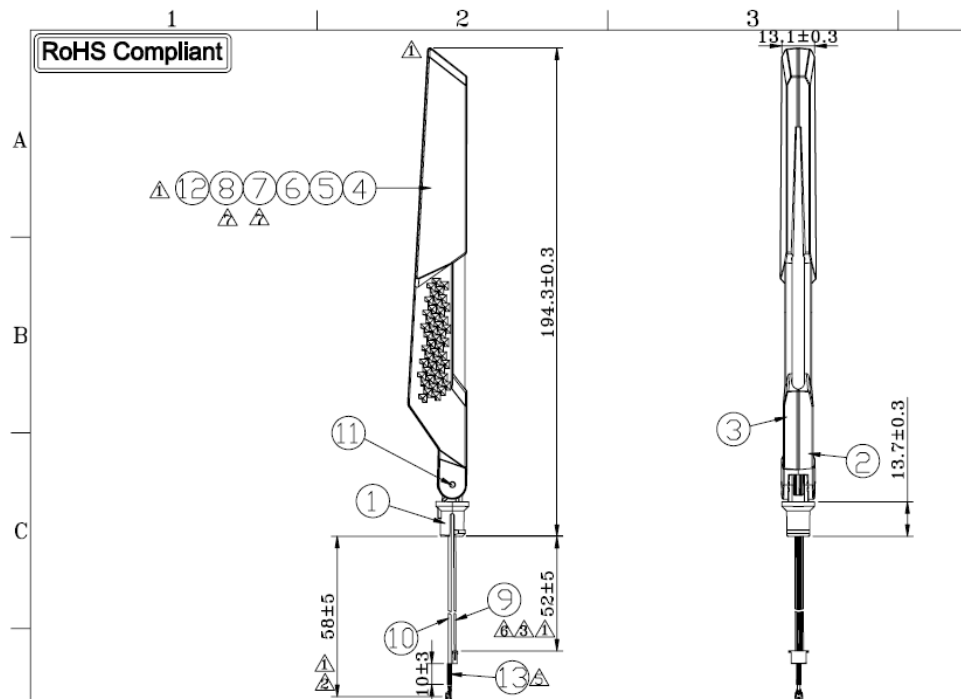
Directional Gain=

$$10 \log \left[ \frac{\left( 10^{\frac{G1}{20}} + 10^{\frac{G2}{20}} + \dots + 10^{\frac{Gn}{20}} \right)^2}{N_{ant}} \right] dBi$$

Category	Peak Gain(dBi)	Directional Gain (dBi)
Wi-Fi 2.4G	Ant1 2.46 Ant3 2.89	5.69
Wi-Fi 5G	Ant1 5.64 Ant3 5.49	8.58
Wi-Fi 6G	Ant2 2.32 Ant4 3.46 Ant5 2.94 Ant6 2.95	8.95

### Customer Drawing

REV	DATE	DESCRIPTION	NAME
A3	21.12.23	△MODIFY TOLERANCE	LIEF
A4	21.12.30	△MODIFY TOLERANCE	LIEF
A5	22.01.26	△MODIFY NOTE	WEN
A6	22.01.31	△MODIFY NOTE & CABLE LENGTH	WEN
A7	22.02.25	△MODIFY WIRE HARNESS LENGTH	LIEF
A8	22.03.11	△MODIFY COPPER TUBE	LIEF



NO.	ITEM	DESCRIPTION	QTY
D	⑬	HEAT SHRINK TUBE COLOR : WHITE	1
	⑫	HEAT SHRINK TUBE COLOR : BLACK △	1
	⑪	Fixed Pin Fixed Pin , Black Coating	2
	⑩	CABLE OD:1.37 , BLACK LOW LOSS COAXIAL CABLE WITH MHF I Plug For 1.37mm Cable △	1
	⑨	WIRE HARNESS OD:1.0mm , BLACK	1
	⑧	COPPER TUBE-2 BRASS	1
	⑦	COPPER TUBE-1 BRASS	1
	⑥	LIGHT PIPE ø:5mm , L:133.5mm	1
	⑤	LED SIZE:1.5*1.6*0.55mm	1
E	④	PCB PCB , FR-4	1
	③	COVER-2 COVER , Black	1
	②	COVER-1 COVER , Black	1
	①	BASE BASE, BLACK	1
NO.	ITEM	DESCRIPTION	QTY

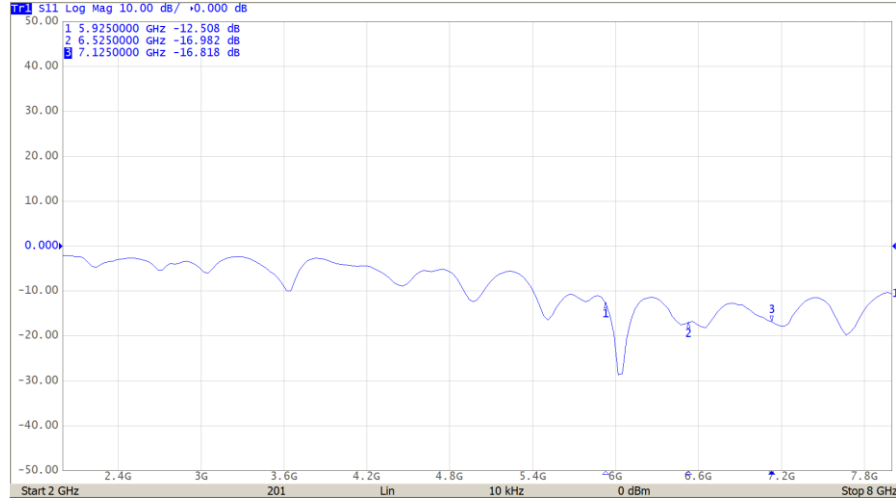
△ Note:  
 1.Frequency:5.925~7.125GHz  
 △ Peak Gain:2.95dBi(MAX) , V.S.W.R.:<2 (with case)  
 2.Efficiency:>63%(with case)  
 3.Impedance:50ohm

CUSTOMER NO.: 1680-00000701-50U			
PART NO.: ARY121-0350-002-00			
WIESON TECHNOLOGIES CO., LTD			
TITLE: WiFi Single 6G Antenna(ANT6)△			
DRAWN BY	LIEF	DRAWING NO.	
CHECKED BY		DRAWING SIZE	A4
APPROVED BY		UNIT	mm
SORTING NO.	WSC	PAGE	1 OF 1

# Antenna Specification

Ant6	Specification
Frequency(GHz)	5.925~7.125
Bandwidth	1.2GHz (Min.)
Return Loss	10 dB (Min.)
Polarization	Linear
Azimuth Bandwidth	Omni-directional
Peak Gain	2.95dBi (Max)
Impedance	50Ω
Material	Copper tube
Maximum Power	1W
V.S.W.R	2 : 1
Radiation	Omni directional
Efficiency	>63%
Connector	MHF
Cable type	OD:1.37
Operating Temperature	-10~60°C
Storage temp	-10~70°C

# Return Loss



Freq(MHz)	5925	6525	7125
S11(dB)	-12.5	-16.9	-16.8

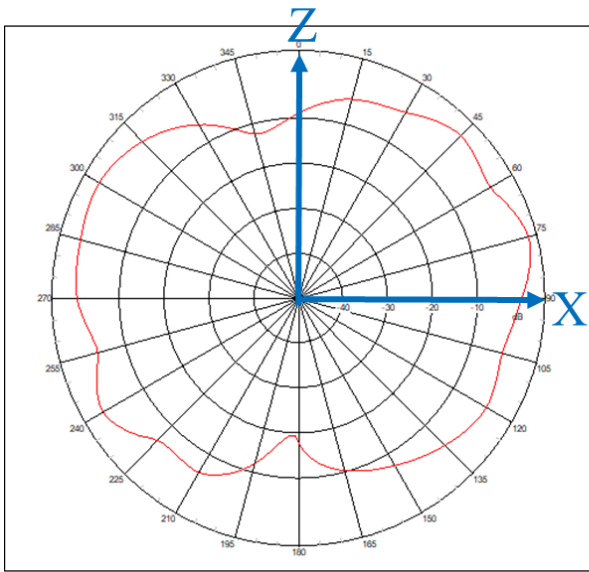
# 3D Gain Total

Freq(MHz)	Peak Gain(dBi)	3D-avg Gain(dBi)	Efficiency(%)
5925	2.95	-1.33	74
6150	2.45	-1.46	71
6250	2.64	-1.25	75
6350	2.64	-1.4	72
6450	2.89	-1.1	78
6550	1.66	-2.01	63
6650	1.83	-1.73	67
6750	1.87	-1.74	67
6850	1.92	-1.83	66
6950	2.92	-0.73	85
7125	1.95	-1.56	70

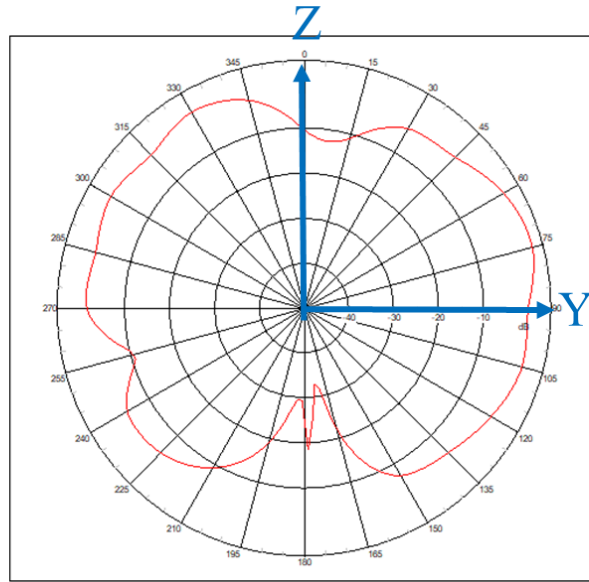
# Antenna Pattern Wieson

Frequency: 5925MHz

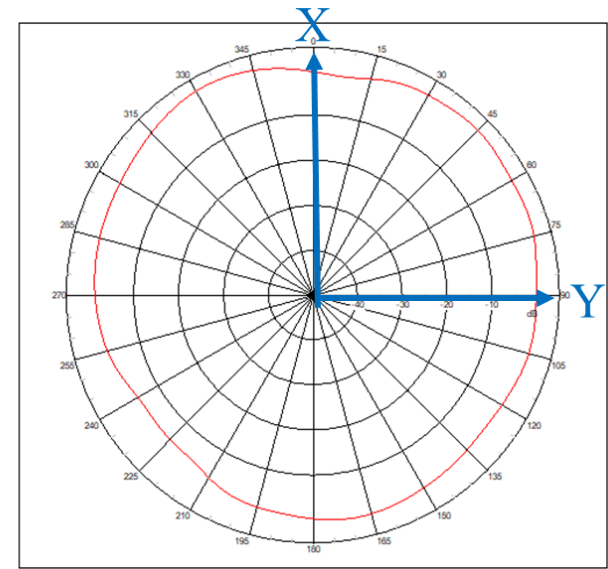
ZX-plane



YZ-plane



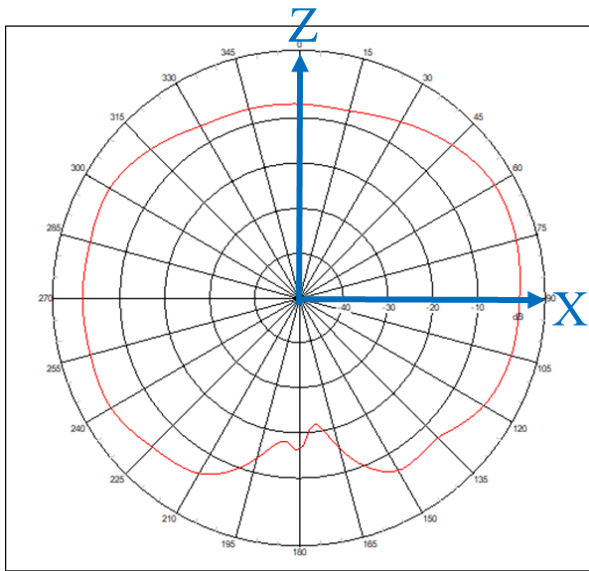
XY-plane



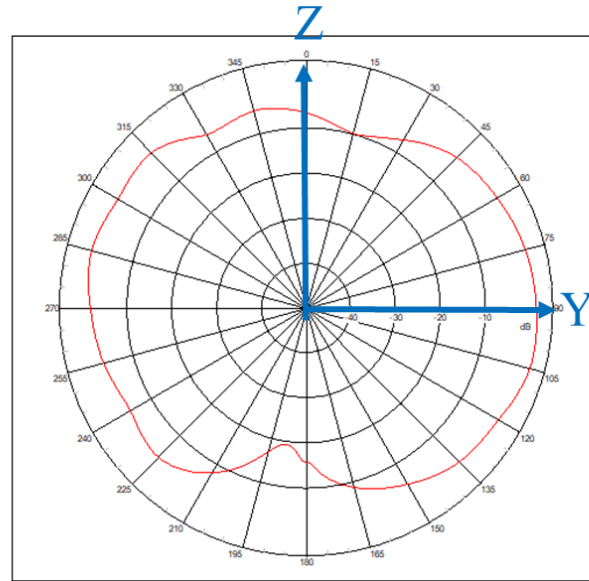
# Antenna Pattern Wieson

Frequency: 6550MHz

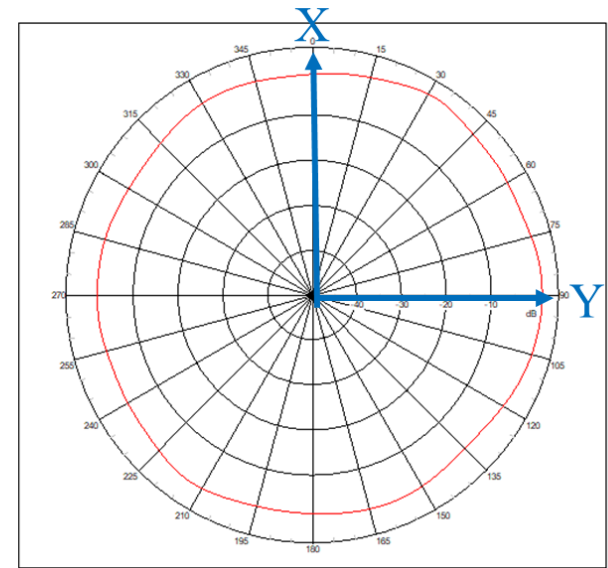
ZX-plane



YZ-plane



XY-plane

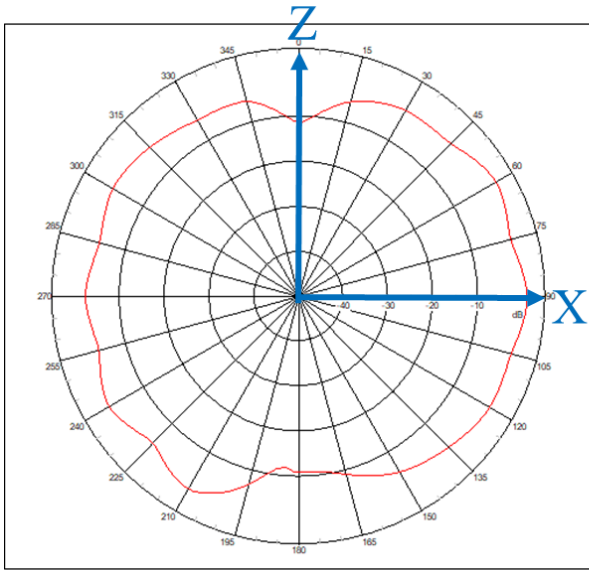




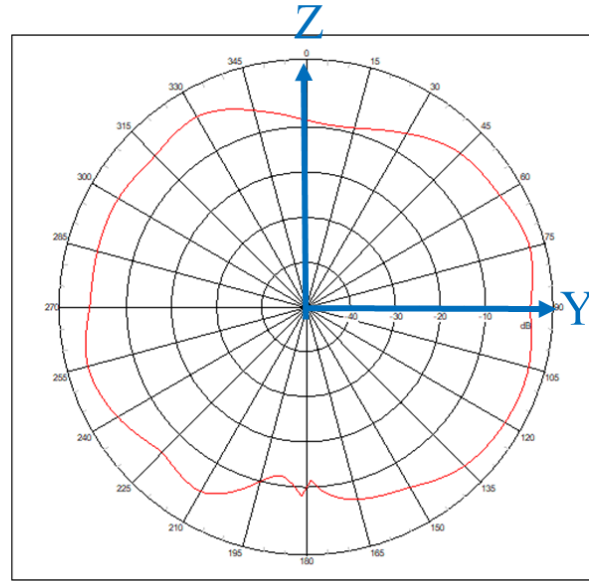
# Antenna Pattern Wieson

Frequency: 7125MHz

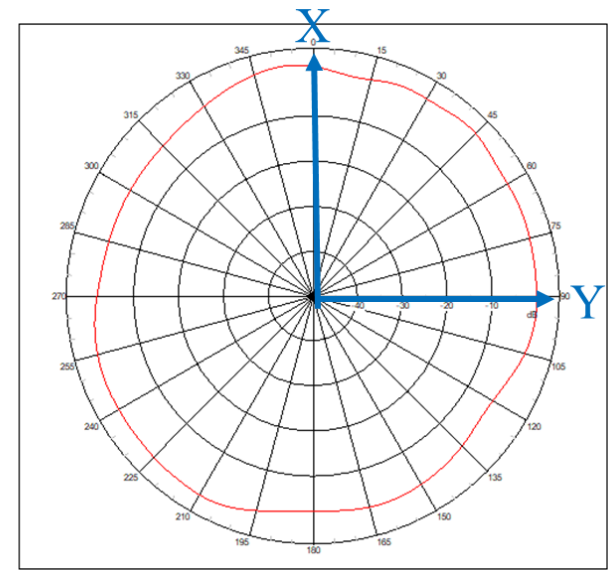
ZX-plane



YZ-plane



XY-plane





創造完美連結

MAKING THE PERFECT CONNECTION

[www.wieson.com](http://www.wieson.com)