



# D-Link 530

## ARY196-3277-015-00

### Only Antenna

5GHz (Peak Gain: 3.2dBi 、  
Directional Gain:7.92dBi)

Engineer :Wade

Report date : 2023/04/13



# Directional Gain

Directional Gain=

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

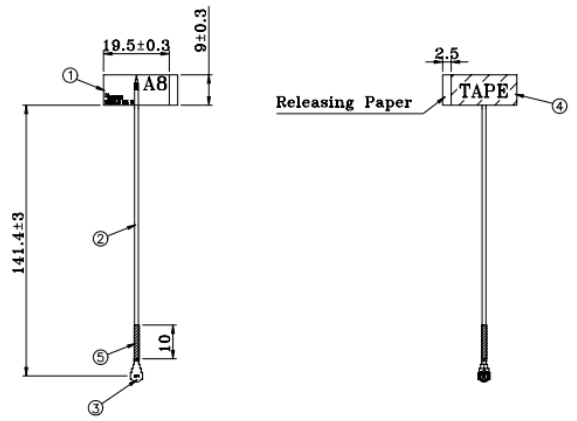
Category	Peak Gain(dBi)	Directional Gain (dBi)
Wi-Fi 5G	A8: 3.2 A9: 3.17 A10: 3.09	7.92

Customer Drawing

REV	DATE	DESCRIPTION	ECN NO.	NAME
A1	22.11.28	PROPOSAL		LIEF
A2	22.12.28	▲MODIFY CABLE COLOR		LIEF

RoHS Compliant

A  
B  
C  
D  
E



CUST NO.:

⑦								
⑥								
⑤	<b>H.S TUBE</b>	COLOR : RED , L : 10mm ▲						
④	<b>Tape</b>	G9000 , Size: 8.2 x 18.7mm	1					
③	<b>Connector</b>	MHF I Plug For 1.37mm Cable , Gold Plated	1	DRAWN BY	LIEF(WST)	DRAWING NO.	ARY196-3277-015-00	
②	<b>Cable</b>	1.37mm Low Loss Coaxial Cable , FEP White Jacket ▲	1	CHECKED BY		DRAWING SIZE	A4	
①	<b>PCB</b>	FR-4 , Size: 9 x 19.5 x 0.8mm	1	APPROVED BY		UNIT	mm	
NO.	ITEM	DESCRIPTION	QTY	SORTING NO.	WSC	PAGE	1 OF 1	

WIESON TECHNOLOGIES CO., LTD  
WIESON  
TITLE: ANTENNA 8

PART NO.: ARY196-3277-015-00

[ARTICLE:SR-83-32 V7]

A8

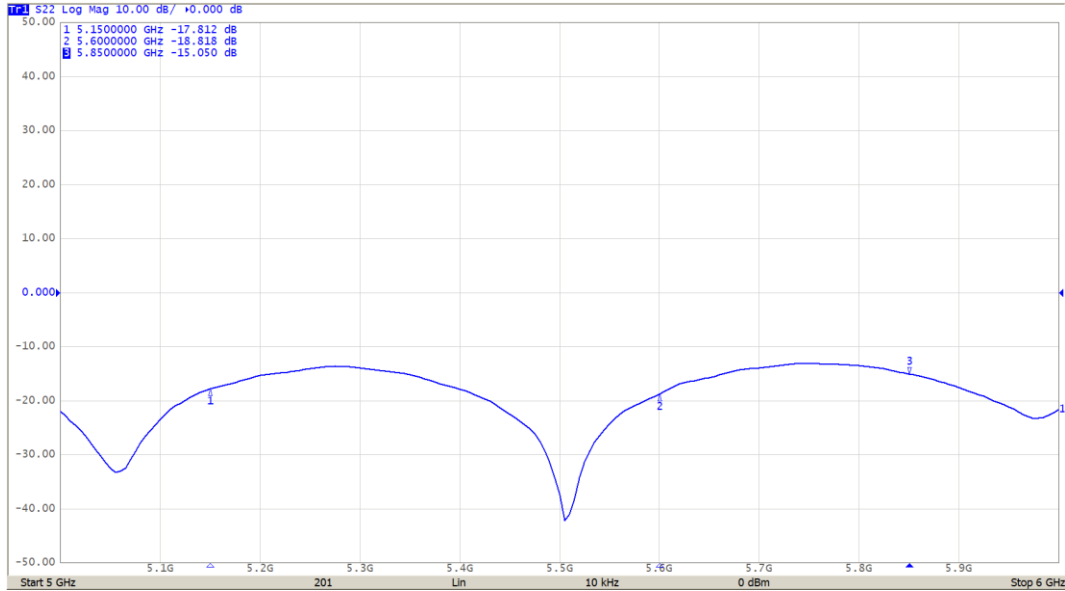
# Antenna specification



Item	Specification
Operating Frequency(GHz)	5.15-5.85
Bandwidth	700 MHz (Min.)
Return Loss	10dB (Min.)
Polarization	Linear
Azimuth Bandwidth	Omni-directional
Peak Gain	3.2dBi (Max.)
Impedance	50Ω
Material	PCB
Connector	MHF I
Cable type	O.D. 1.37 L/L
Maximum Power	1W
V.S.W.R	2 : 1
Radiation	Omni directional
Efficiency	55%(Max.)
Operating Temperature	-10~60°C
Storage temp	-10~70°C

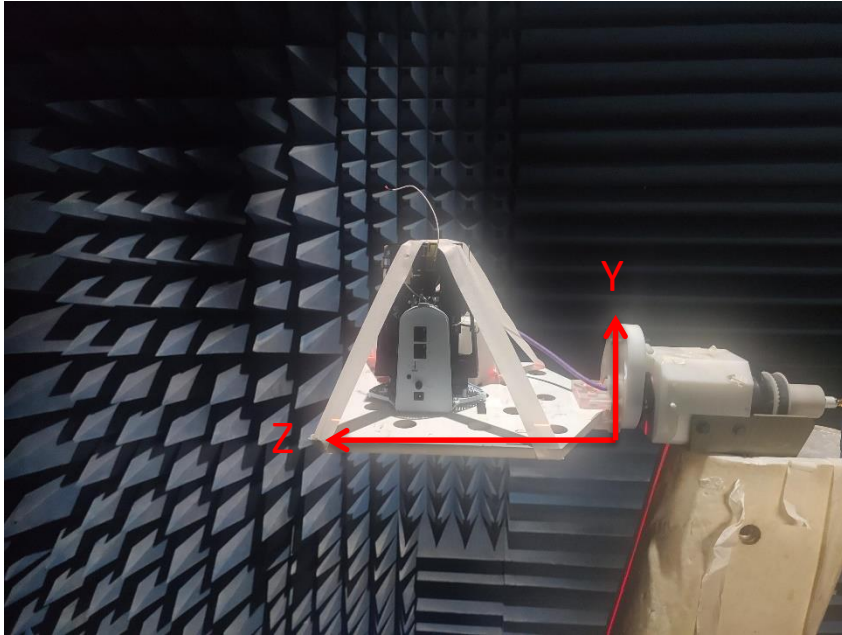
# S-Parameter

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Freq(MHz)	5150	5600	5850
S11(dB)	-17.8	-18.8	-15

# chamber measurement photo



A8

# 3D Gain Total



Freq(GHz)	Peak Gain(dBi)	3D-avg Gain(dBi)	Efficiency(%)
5.15	3.2	-3.03	50
5.25	2.9	-2.97	50
5.35	2.86	-2.8	52
5.47	2.53	-2.63	55
5.6	2.75	-2.7	54
5.725	2.79	-2.8	52
5.785	2.7	-2.87	52
5.85	1.88	-2.98	50

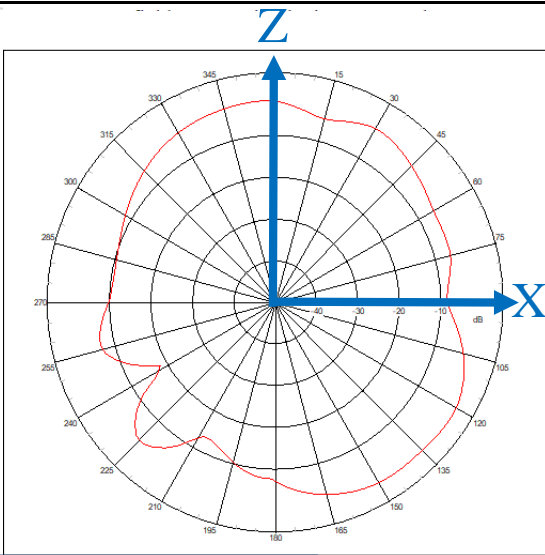
# Antenna Pattern

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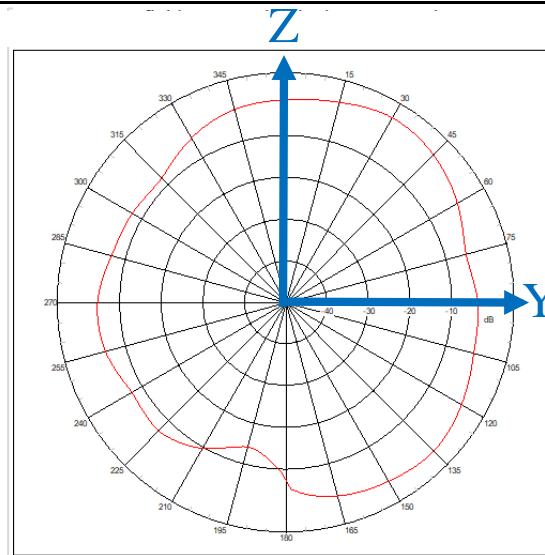
Frequency : 5600MHz

Freq(GHz)	Peak Gain(dBi)	3D-avg Gain(dBi)	Efficiency(%)
5.6	2.75	-2.7	54

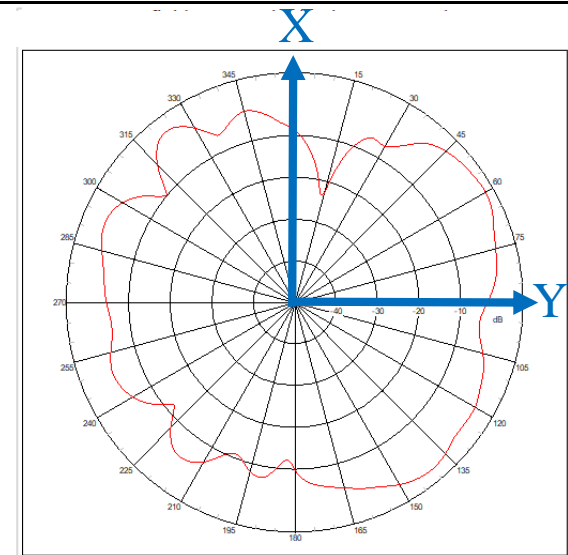
XZ-plane



YZ-plane



XY-plane



Far-field amplitude limits:

Max: 5dB

min: -50dB



創造完美連結

MAKING THE PERFECT CONNECTION

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