



D-Link 530

ARY196-3277-013-00

Only Antenna

2GHz (Peak Gain: 1.75dBi 、
Directional Gain:5.17dBi)

Engineer :Wade

Report date : 2023/04/13



Directional Gain

Directional Gain=

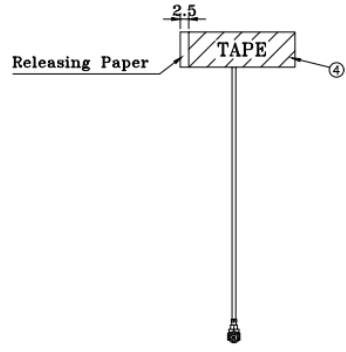
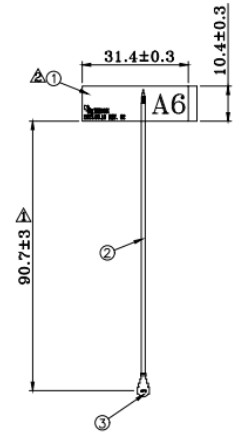
$$10 \log \left[\frac{\left(10^{\frac{G1}{20}} + 10^{\frac{G2}{20}} + \dots + 10^{\frac{Gn}{20}} \right)^2}{N_{ant}} \right] dBi$$

Category	Peak Gain(dBi)	Directional Gain (dBi)
Wi-Fi 2.4G	A6: 1.75 A7: 1.94	5.17

RoHS Compliant

REV	DATE	DESCRIPTION	ECN NO.	NAME
A1	22.11.28	PROPOSAL		LIEF
A2	22.12.28	△ Modify Cable Length		DAVID
A3	23.03.10	△ Modify LAYOUT		LIEF

A
B
C
D
E



CUST NO.:

⑦							
⑥							
⑤							
④	Tape	G9000 , Size: 9.6 x 30.6mm△	1				
③	Connector	MHF I Plug For 1.37mm Cable , Gold Plated	1	DRAWN BY	LIEF(WST)	DRAWING NO.	ARY196-3277-013-00
②	Cable	1.37mm Low Loss Coaxial Cable , FEP White Jacket △	1	CHECKED BY		DRAWING SIZE	A4
①	PCB	FR-4 , Size: 10.4 x 31.4 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 6

PART NO.: ARY196-3277-013-00

[ARTICLE:SR-83-32 V7]

A6

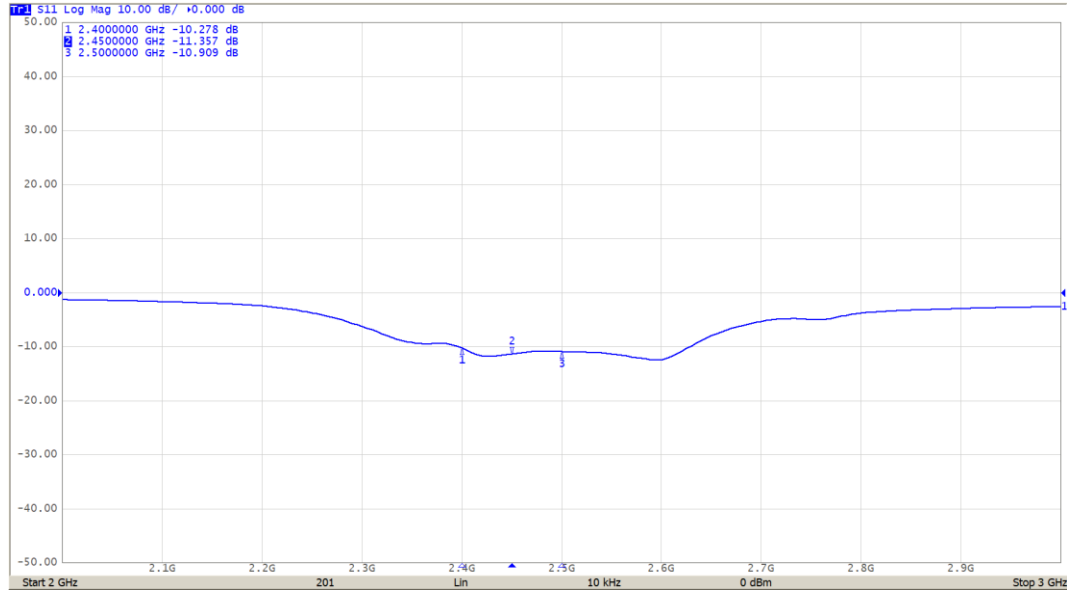
Antenna specification



Item	Specification
Operating Frequency(GHz)	2.4-2.5
Bandwidth	100 MHz (Min.)
Return Loss	10dB (Min.)
Polarization	Linear
Azimuth Bandwidth	Omni-directional
Peak Gain	1.75dBi (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	53%(Max.)
Operating Temperature	-10~60°C
Storage temp	-10~70°C

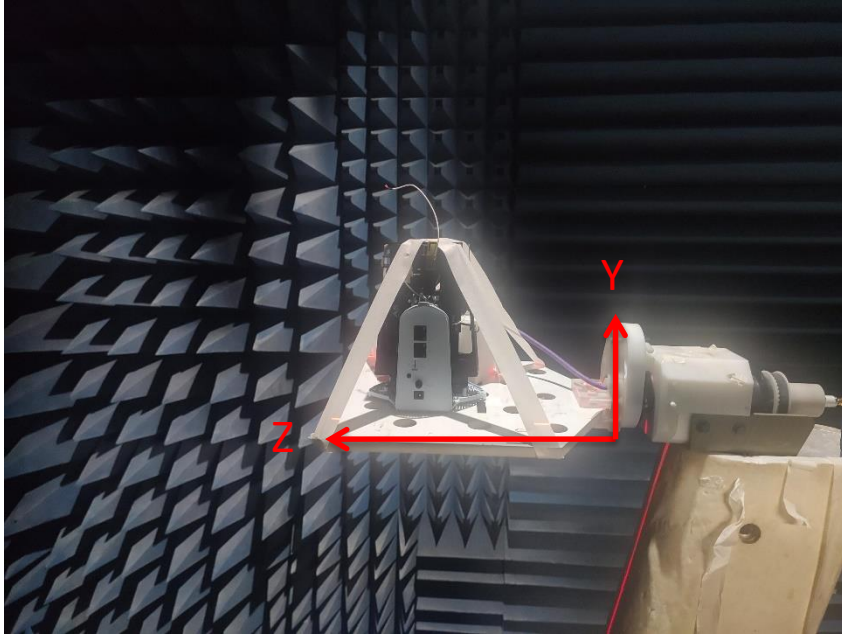
S-Parameter

A6



Freq(MHz)	2400	2450	2500
S11(dB)	-10.2	-11.3	-10.9

chamber measurement photo



A6

3D Gain Total



Freq(GHz)	Peak Gain(dBi)	3D-avg Gain(dBi)	Efficiency(%)
2.4	1.75	-3.03	50
2.41	1.62	-3.02	50
2.42	1.61	-2.9	51
2.43	1.43	-2.95	51
2.44	1.39	-2.87	52
2.45	1.21	-2.92	51
2.46	1.24	-2.76	53
2.47	1.01	-2.87	52
2.48	0.81	-2.95	51
2.49	0.55	-2.98	50
2.5	0.17	-2.98	50

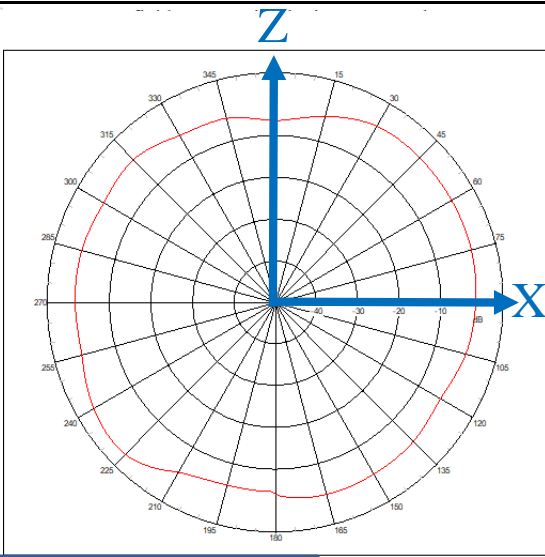
Antenna Pattern

A6

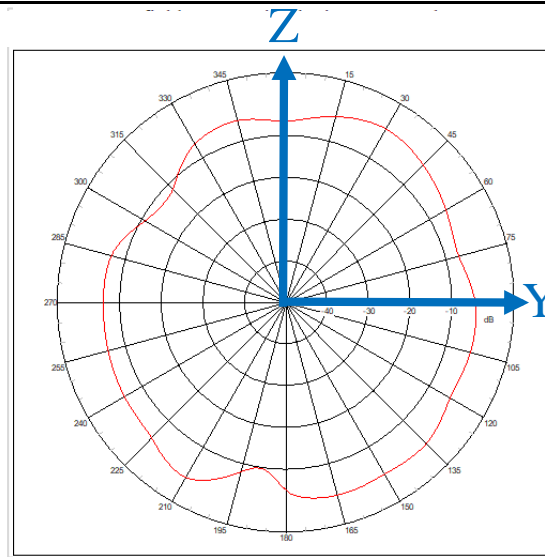
Frequency : 2450MHz

Freq(GHz)	Peak Gain(dBi)	3D-avg Gain(dBi)	Efficiency(%)
2.45	1.21	-2.92	51

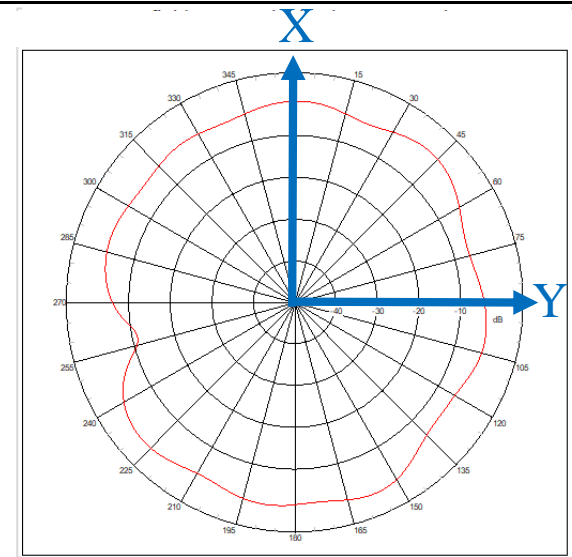
XZ-plane



YZ-plane



XY-plane



Far-field amplitude limits:

Max: 5dB

min: -50dB



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MAKING THE PERFECT CONNECTION

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