



Antenna Specification

Antenna Manufacturer Company Name: Wieson Technologies Co., LTD.

Antenna Manufacturer Company Address: 15F, No.237, Sec.1, Datong Rd., Xizhi Dist., New Taipei City 221006, Taiwan

Antenna Model: ARY196-0232-043-00

Antenna Type: PCB antenna

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: 2.55	5.17

A7

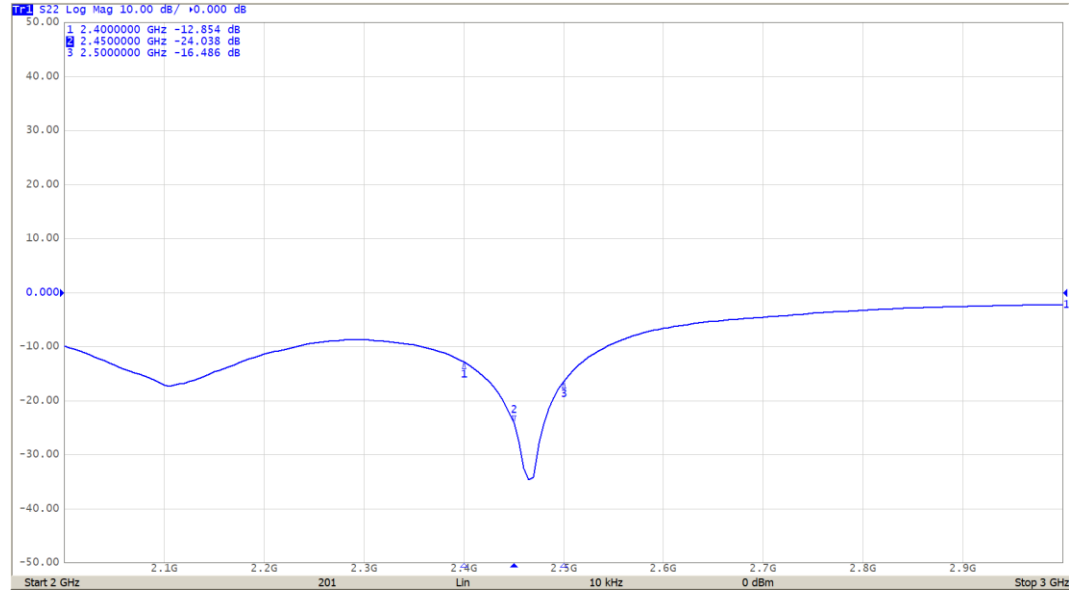
Antenna specification



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	2.55dBi (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	57%(Max.)
Operating Temperature	-10~60°C
Storage temp	-10~70°C

S-Parameter

A7



Freq(MHz)	2400	2450	2500
S11(dB)	-12.8	-24	-16.4

A7

3D Gain Total



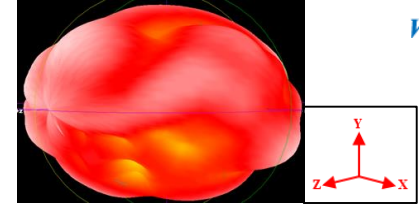
Freq(GHz)	Peak Gain(dBi)	3D-avg Gain(dBi)	Efficiency(%)
2.4	1.84	-2.97	50
2.41	2.01	-2.88	52
2.42	2.22	-2.79	53
2.43	2.33	-2.71	54
2.44	2.47	-2.57	55
2.45	2.55	-2.45	57
2.46	2.44	-2.48	56
2.47	2.36	-2.5	56
2.48	1.99	-2.79	53
2.49	1.81	-2.91	51
2.5	1.73	-2.84	52

Antenna Pattern

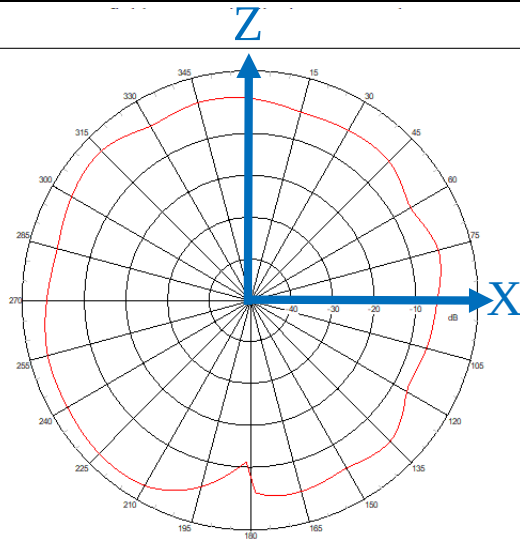
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Frequency : 2450MHz

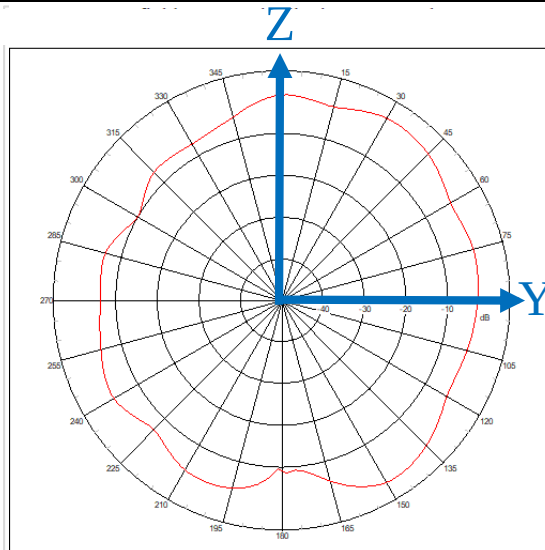
Freq(GHz)	Peak Gain(dBi)	3D-avg Gain(dBi)	Efficiency(%)
2.45	2.55	-2.45	57



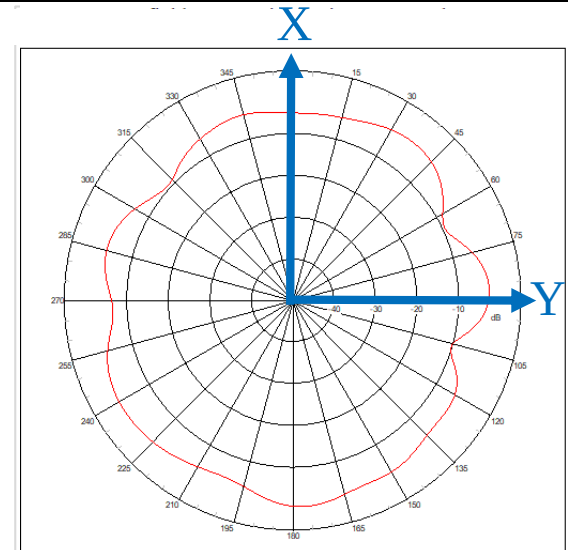
XZ-plane



YZ-plane



XY-plane



Far-field amplitude limits:

Max: 5dB

min: -50dB