



# 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: ARY196-0232-0345-00

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 5G	A8: 3.2 A9: 3.17 A10: 3.09	7.92

A9

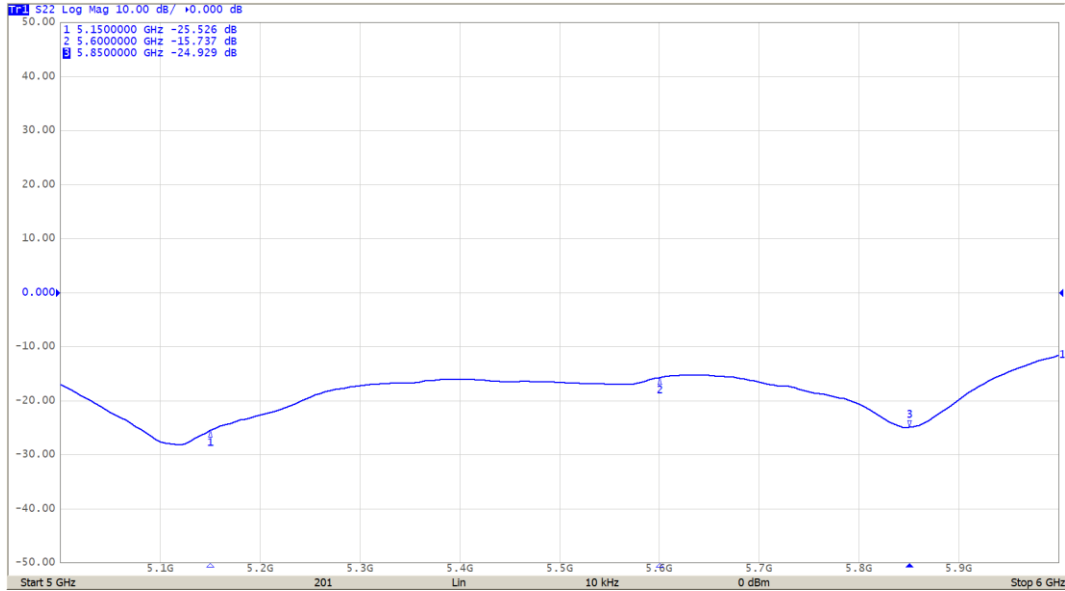
# Antenna specification



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	3.17dBi (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	61%(Max.)
Operating Temperature	-10~60°C
Storage temp	-10~70°C

# S-Parameter

A9



Freq(MHz)	5150	5600	5850
S11(dB)	-25.5	-15.7	-24.9

A9

# 3D Gain Total



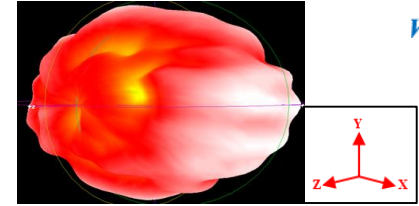
Freq(GHz)	Peak Gain(dBi)	3D-avg Gain(dBi)	Efficiency(%)
5.15	3.17	-2.13	61
5.25	3	-2.14	61
5.35	1.64	-2.72	53
5.47	2.18	-2.82	52
5.6	3.08	-2.32	59
5.725	1.74	-2.45	57
5.785	1.84	-2.31	59
5.85	1.77	-2.46	57

# Antenna Pattern

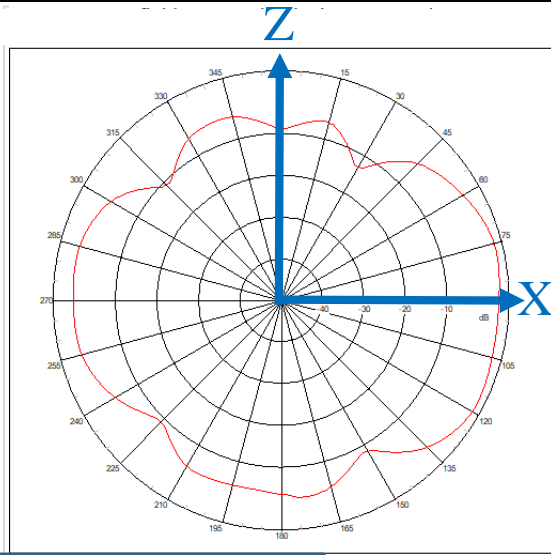
A9

Frequency : 5600MHz

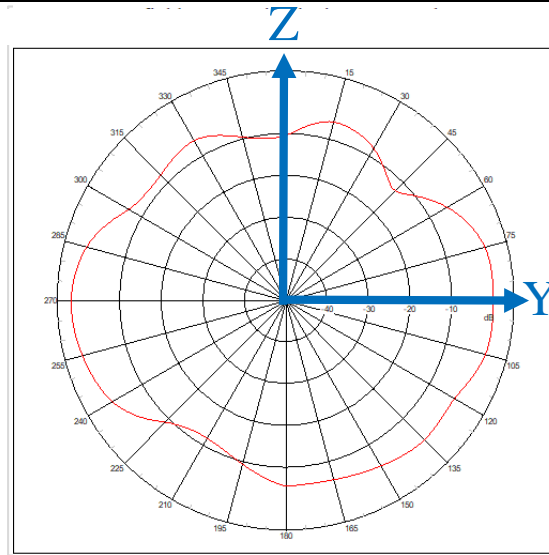
Freq(GHz)	Peak Gain(dBi)	3D-avg Gain(dBi)	Efficiency(%)
5.6	3.08	-2.32	59



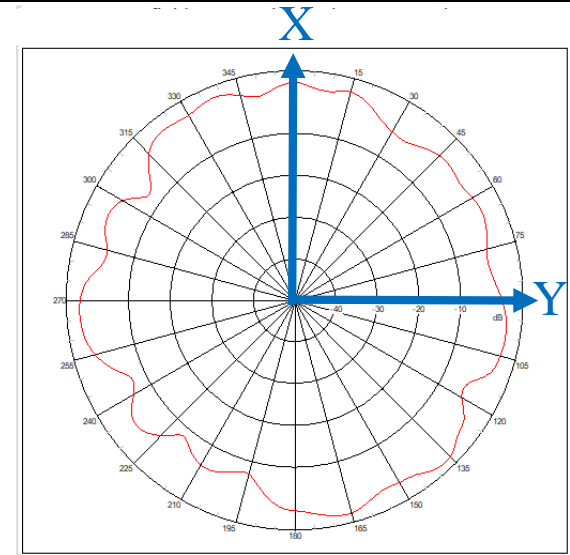
XZ-plane



YZ-plane



XY-plane



Far-field amplitude limits:

Max: 5dB

min: -50dB