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External / In-building
5G/4G Stick Monopole Antenna

W1696/W1697/W1696-M/W1696-MW - 617 to 3800 MHz (Several 5G FR1 bands)

Pulse
a YAGEO company



Applications:

- Small form factor monopole
- 4G LTE/LTE-A, 5G NR/
- LTE CAT 1M
- NB IoT
- CBRS US B48
- Gateways, Set Top boxes
- Telemetry, High speed data
- IoT and M2M solutions

Electrical Specifications @ 25°C - Operating Temperature -30°C to +85°C[1]					
Frequency Bands: 617-960/1710-2690/3400-3800 MHz					
Antenna[2] Type	**Nominal Impedance**	**Return Loss**	**Radiation Pattern**	**Polarization**	**Power Withstanding**
Monopole	50Ω	per below	Omni	Linear	5W

Frequency	617-960 MHz	1710-2690 MHz	3400-3800 MHz
Return Loss	<-5 dB	<-5 dB	<-4 dB
Peak Gain	>-0.5 dBi	>1 dBi	>0 dBi
Efficiency	40%	45%	30%

Mechanical Specifications						
Orderable PN: W1696, W1696-M, W1697 ,W1696-MW						
Part Number	**Size (Length * Dia)**	**Color**	**Wind-loading**	**Weight**	**Connector Type**	**Ingress Protection**
W1696	49.6 * 10	Black	100 km/h	7.5grms	SMA Male	IP42
W1697	49.6 * 10	Black	100 km/h	7.5grms	RP - SMA Male	IP42
W1696-M	50 * 12	Black	100 km/h	7.8grms	SMA Male	IP65
W1696-MW	50 * 12	Black	100 km/h	7.8grms	SMA Male	IP68 (24H 1MWater)

Notes:

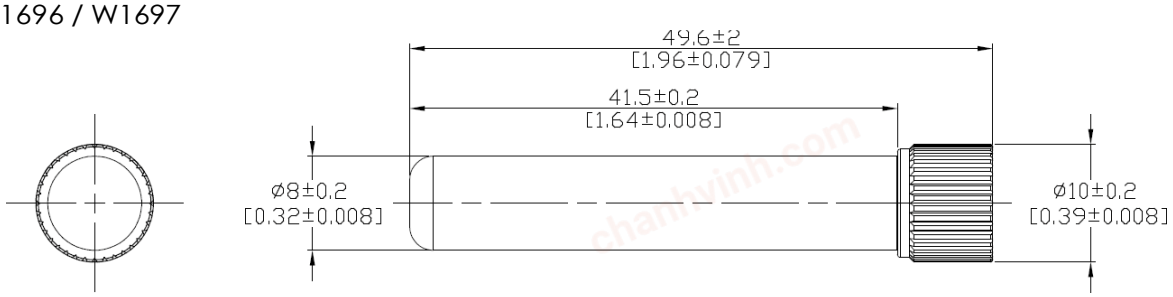
1. **Storage Temperature: -30°C to 85°C**
2. **Measured on 120 x 40mm ground plane**

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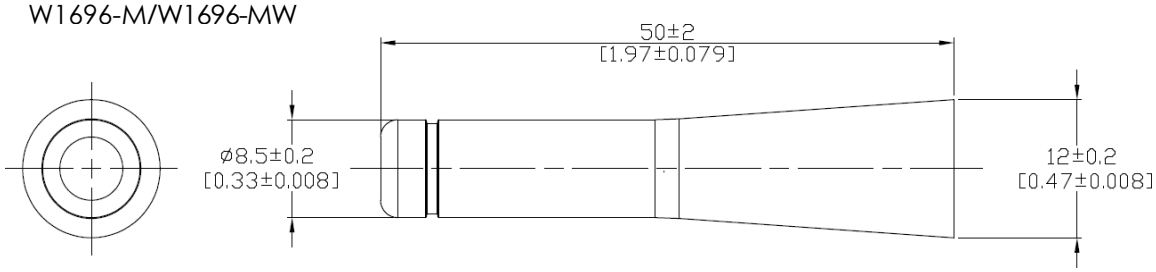
Mechanical

W1696/W1697/1696-M/W1696-MW

W1696 / W1697



W1696-M/W1696-MW



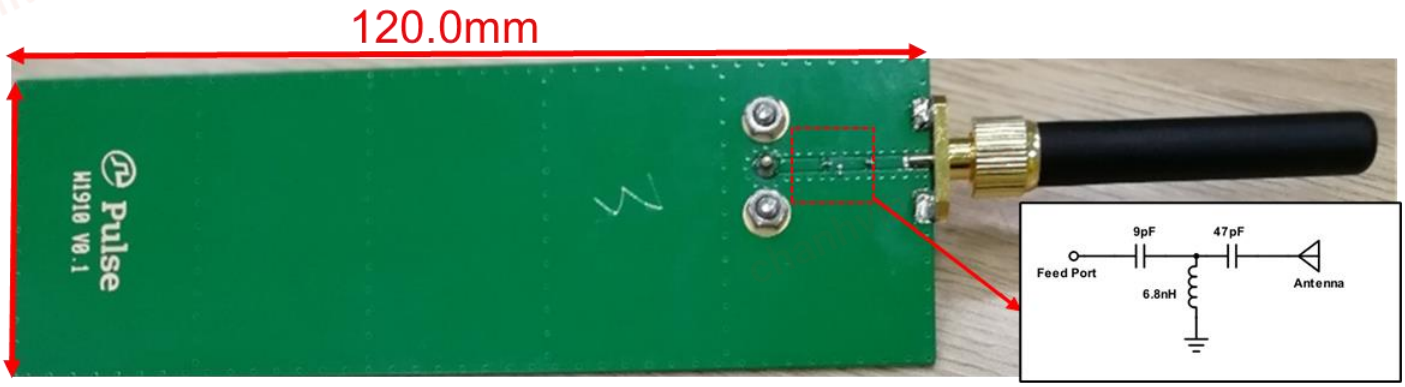
Dimensions: Inches / mm

Unless otherwise specified, all tolerances are ± .010 / 0,25

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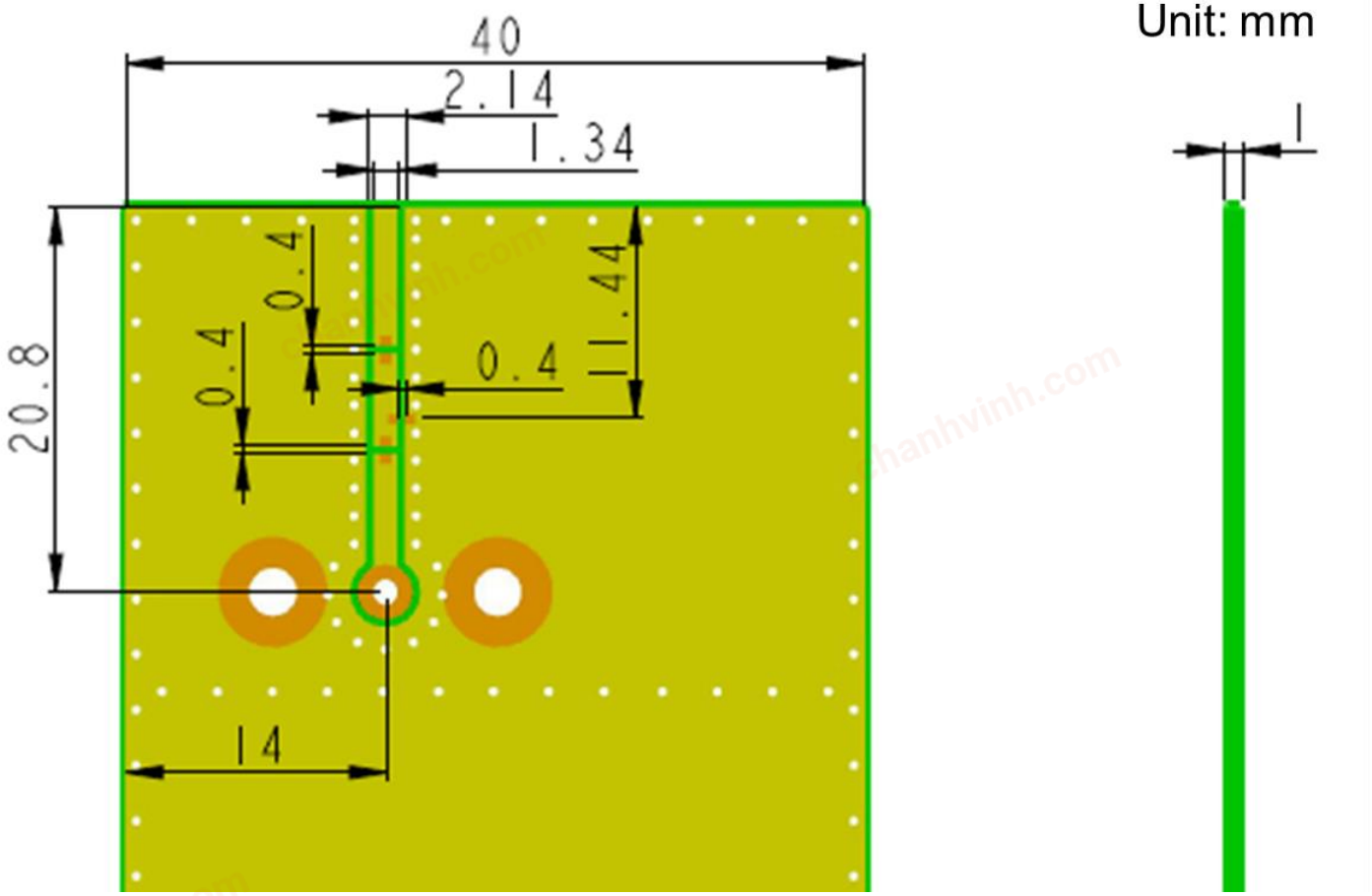
Test setup

W1696/W1697/1696-M/W1696-MW



#Test on 40.0*120.0mm ground plane with matching circuit.

Unit: mm



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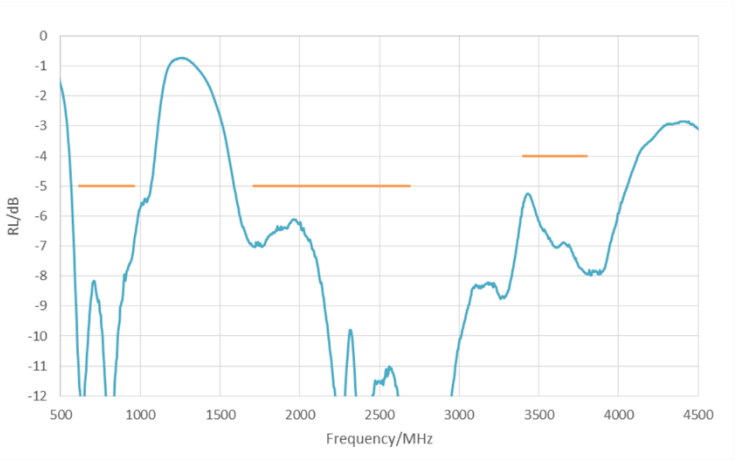
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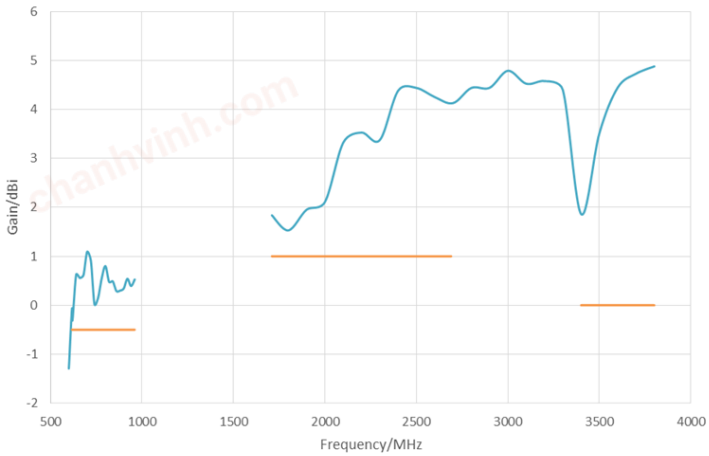
Charts

W1696/W1697/1696-M/W1696-MW

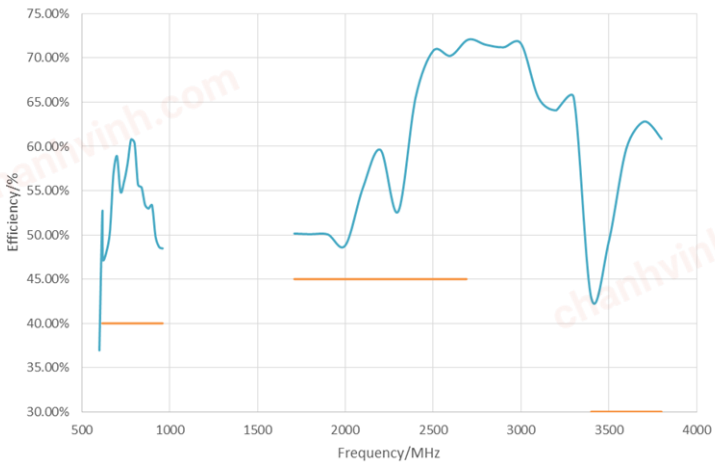
Return Loss vs Frequency



Peak Gain vs Frequency



Radiation Efficiency vs Frequency



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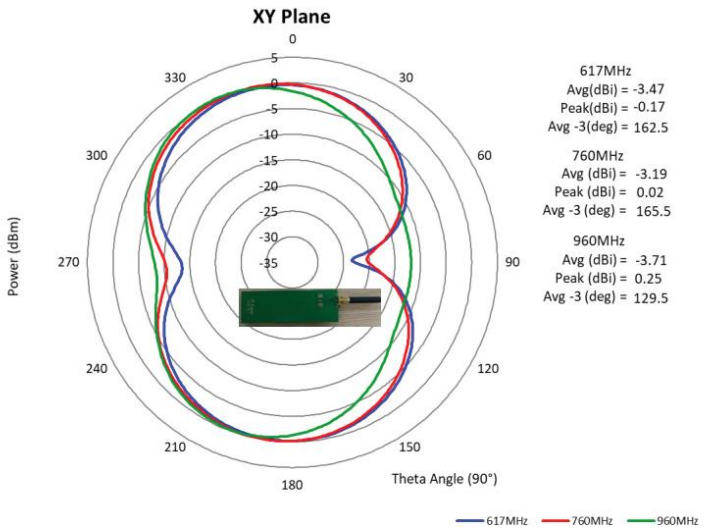
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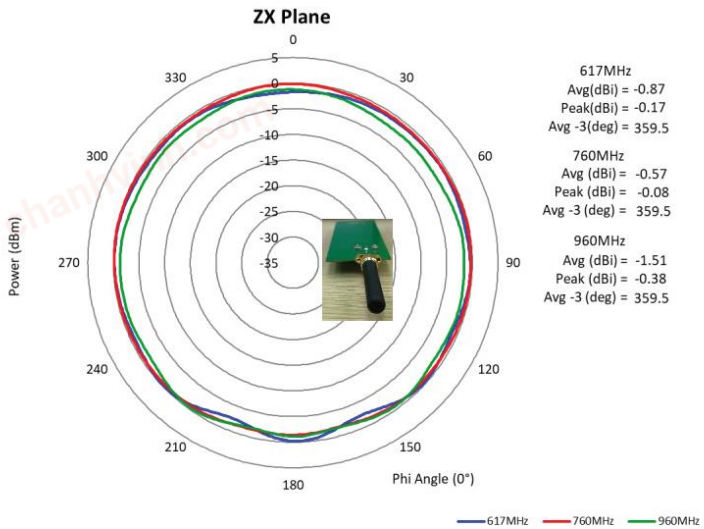
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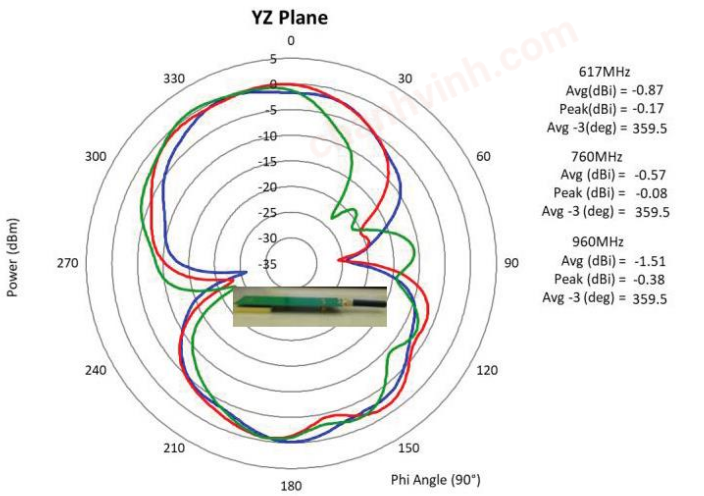
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Free Space Radiation Pattern

617MHz - 960MHz



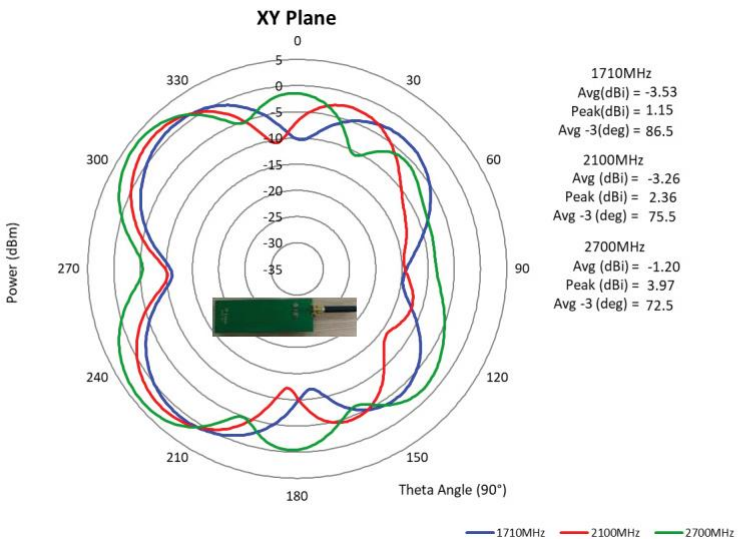


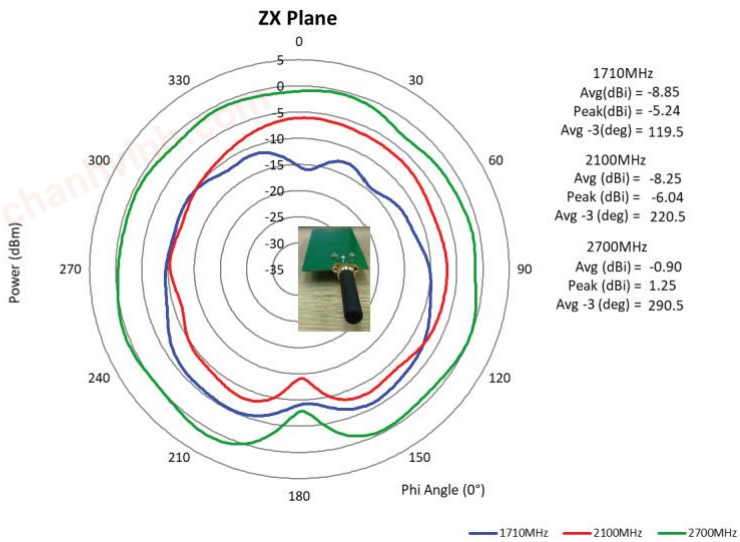


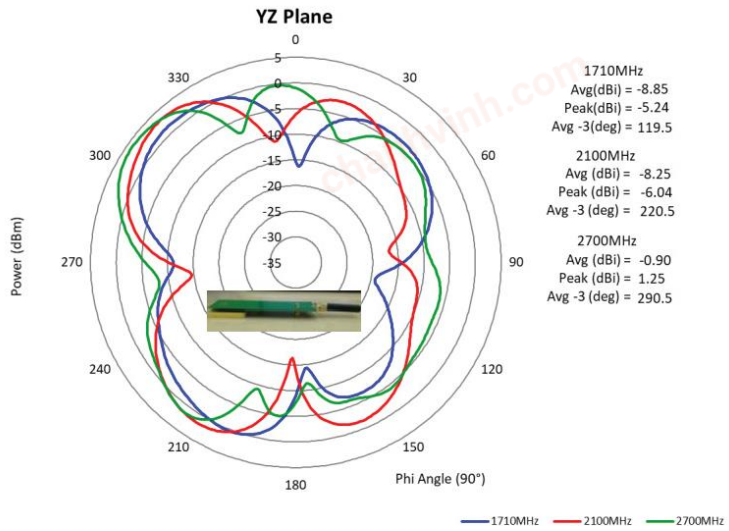
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Free Space Radiation Pattern

1710MHz 2690MHz







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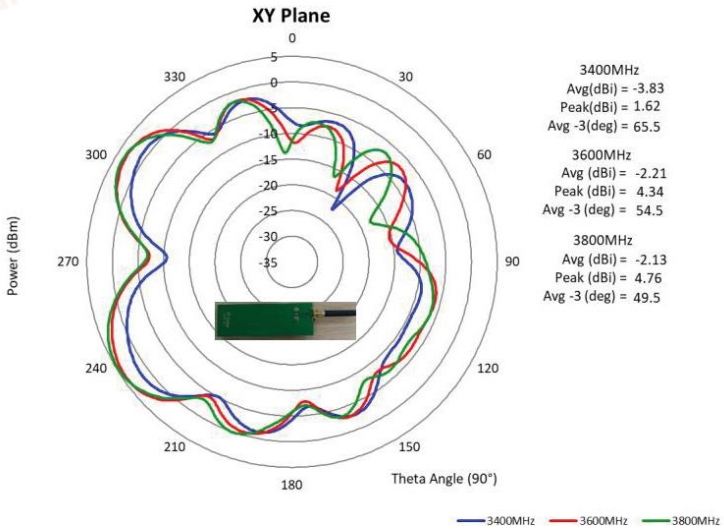
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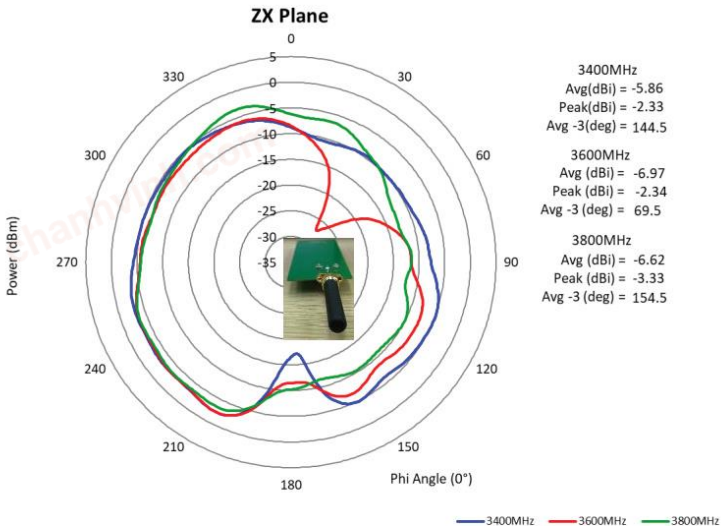
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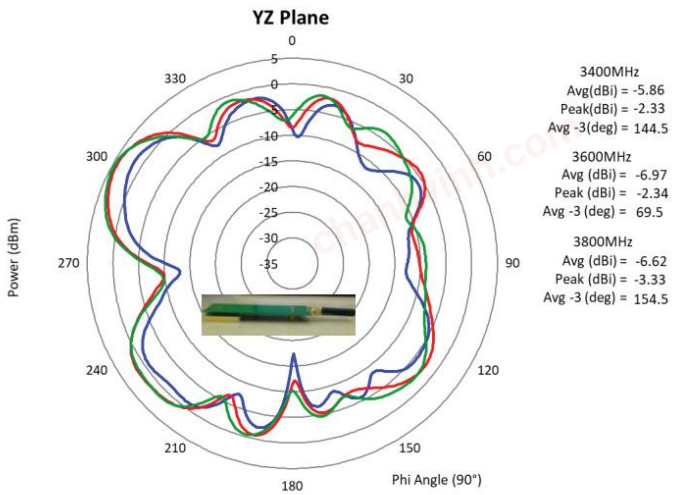
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Free Space Radiation Pattern

3400Mhz-3800Mhz







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Packing Info

W1696/W1697/1696-M/W1696-MW

1pcs antenna per PE bag 24pcs PE bags per tray
14pcs trays per package box(2 pcs empty tray) 288pcs antenna per package
Package box: 460mm*235mm*140mm

For More Information:
Americas - antennas.us@pulseelectronics.com | Europe – antennas.eu@pulseelectronics.com | Asia – antennas.as@pulseelectronics.com | Questions? +1-800-ANTENNA
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