

**Description: LTE 698-3700MHz Swivel Dipole**

**Series: OMNI Antenna**

**PART NUMBER: W5084x**

**Features:**

- 698-3700MHz
- Omni radiation pattern in horizontal plane
- Gain 2/4 dBi
- Power rating 5W
- IP65
- Connector options:
  - W5084 TNC male
  - W5084K SMA male

**Applications:**

- LTE radios
- 2G/3G/4G radios
- Gateways, Routers, Set top boxes, Security, Metering
- IoT, M2M
- Optimized for straight and 90deg bent positions



All dimensions are in mm / inches

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## ELECTRICAL SPECIFICATIONS

|                                        |                                 |                    |
|----------------------------------------|---------------------------------|--------------------|
| Frequency                              | 698-960/1400-2690/3400-3700MHz  |                    |
| Nominal Impedance                      | 50                              | $\Omega$           |
| *VSWR(698-960MHz/1400-2690MHz)         | 3                               | Max                |
| *VSWR(3400-3700MHz)                    | 3.6                             | Max                |
| **VSWR(698-960/1400-2690/3400-3700MHz) | 3                               | Max                |
| Average Efficiency(698-960MHz)         | 58                              | %                  |
| Average Efficiency(1400-2690MHz)       | 78                              | %                  |
| Average Efficiency(3400-3700MHz)       | 60                              | %                  |
| Peak Gain (698-960MHz)                 | 2                               | dBi +/- 1 dB       |
| Peak Gain (1400-2690MHz)               | 4                               | dBi +/- 1 dB       |
| Peak Gain (3400-3700MHz)               | 5                               | dBi +/- 1 dB       |
| Polarization:                          | Vertical                        |                    |
| Power withstanding                     | 5                               | W                  |
| Connector type                         | TNC male (SMA male is optional) |                    |
| Connector Options                      | W5084                           | TNC male connector |
|                                        | W5084K                          | SMA male connector |

\*VSWR spec only for W5084 TNC male connector version

\*\*VSWR spec only for W5084K SMA male connector version

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### MECHANICAL SPECIFICATIONS

|                              |                                   |
|------------------------------|-----------------------------------|
| Plastic radome               | ABS/PC                            |
| Color                        | Black                             |
| Flammability                 | UL94-V0                           |
| Ingress Protection           | IP65                              |
| Weight                       | 65.9 g                            |
| Overall Length(W5084/W5084K) | 228.84/223.24mm [9.01/8.79INCHES] |
| Position                     | 0°, 45° & 90°                     |

### ENVIRONMENTAL SPECIFICATIONS

|                       |             |
|-----------------------|-------------|
| Operating temperature | -40/+85 ° C |
| Storage Temperature   | -40/+85 ° C |
| Salt mist             | 96 hours    |

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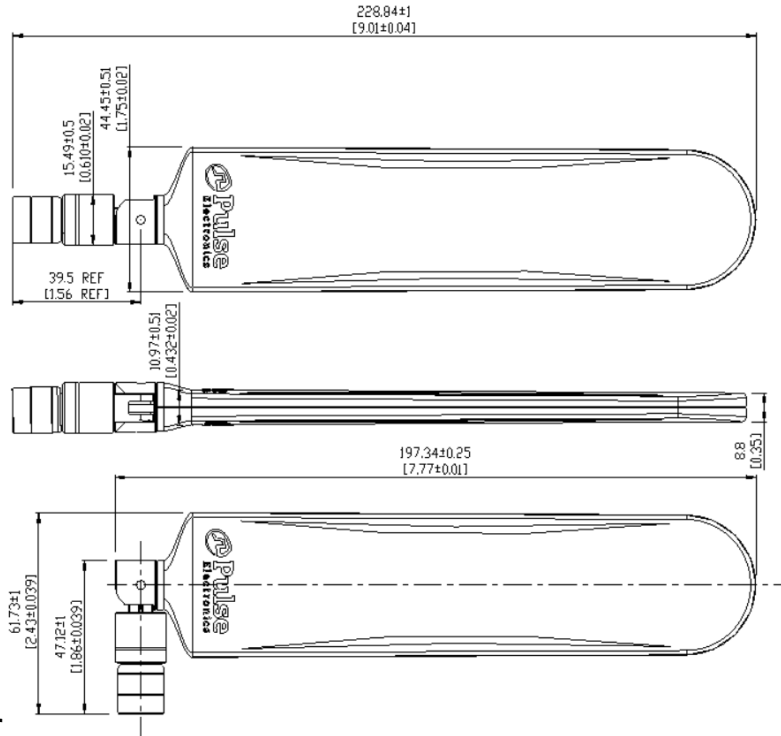
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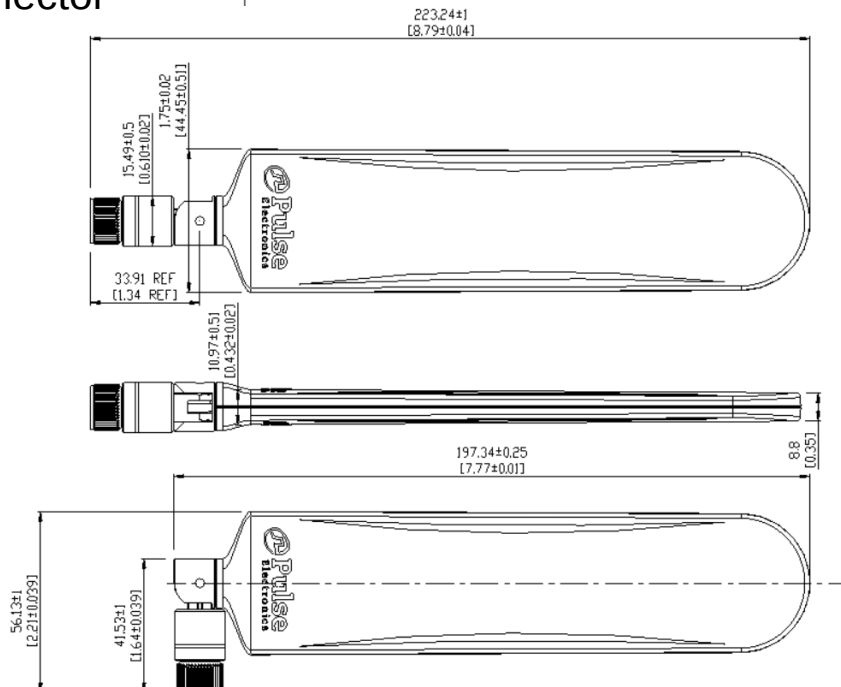
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## MECHANICAL DRAWING

W5084 TNC male connector



W5084K SMA male connector



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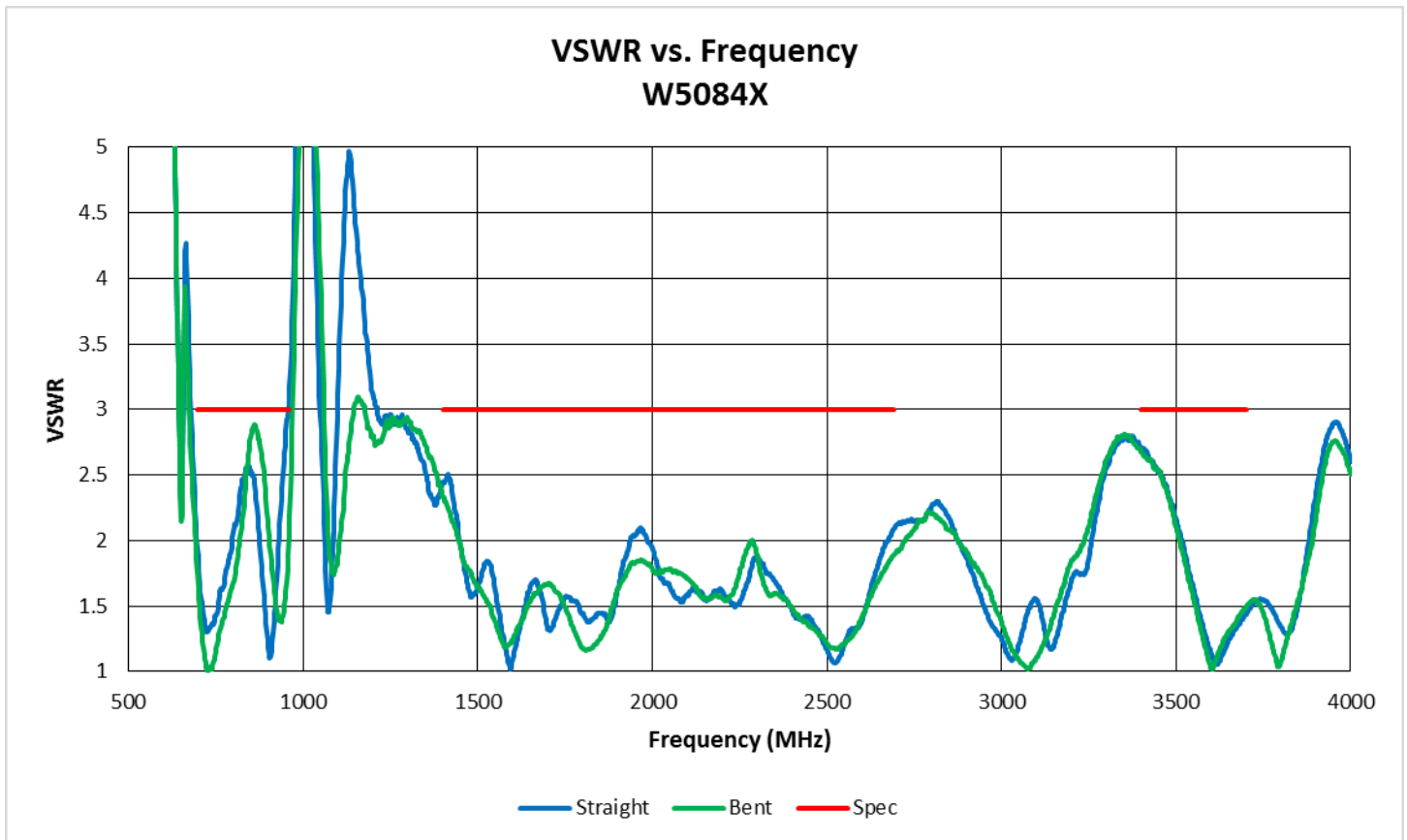
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## CHARTS

### VSWR



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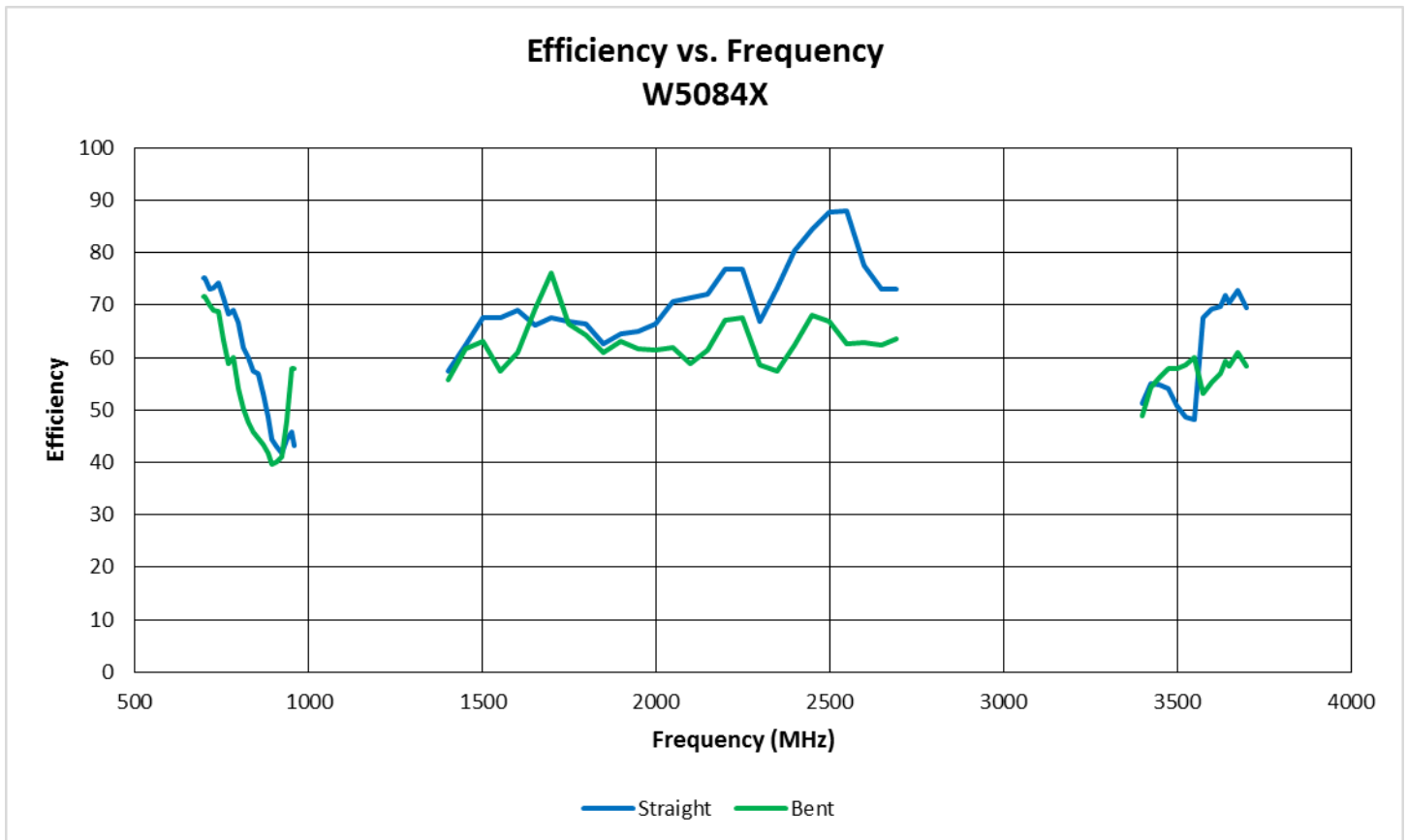
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## CHARTS

### Efficiency



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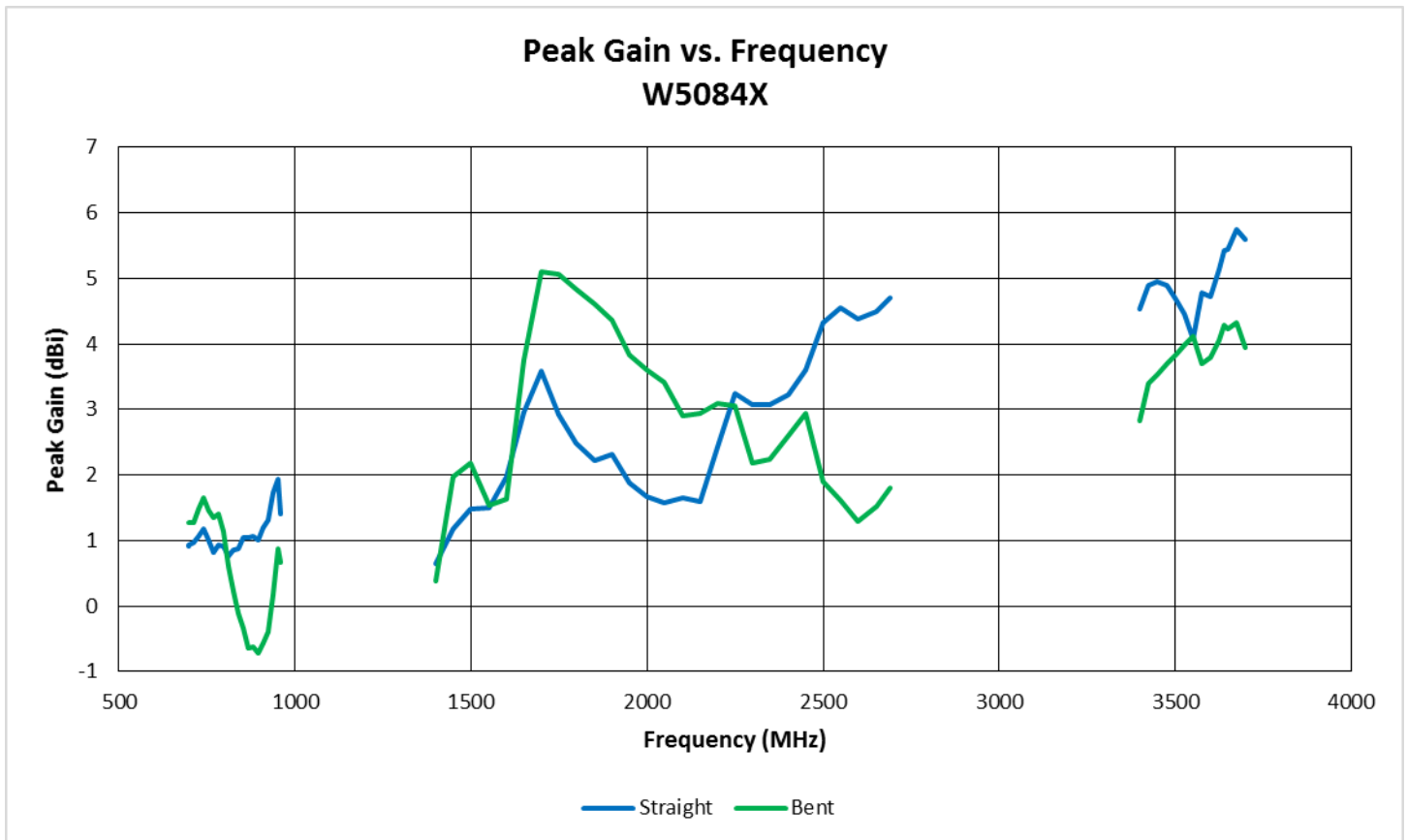
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## CHARTS

### Peak Gain



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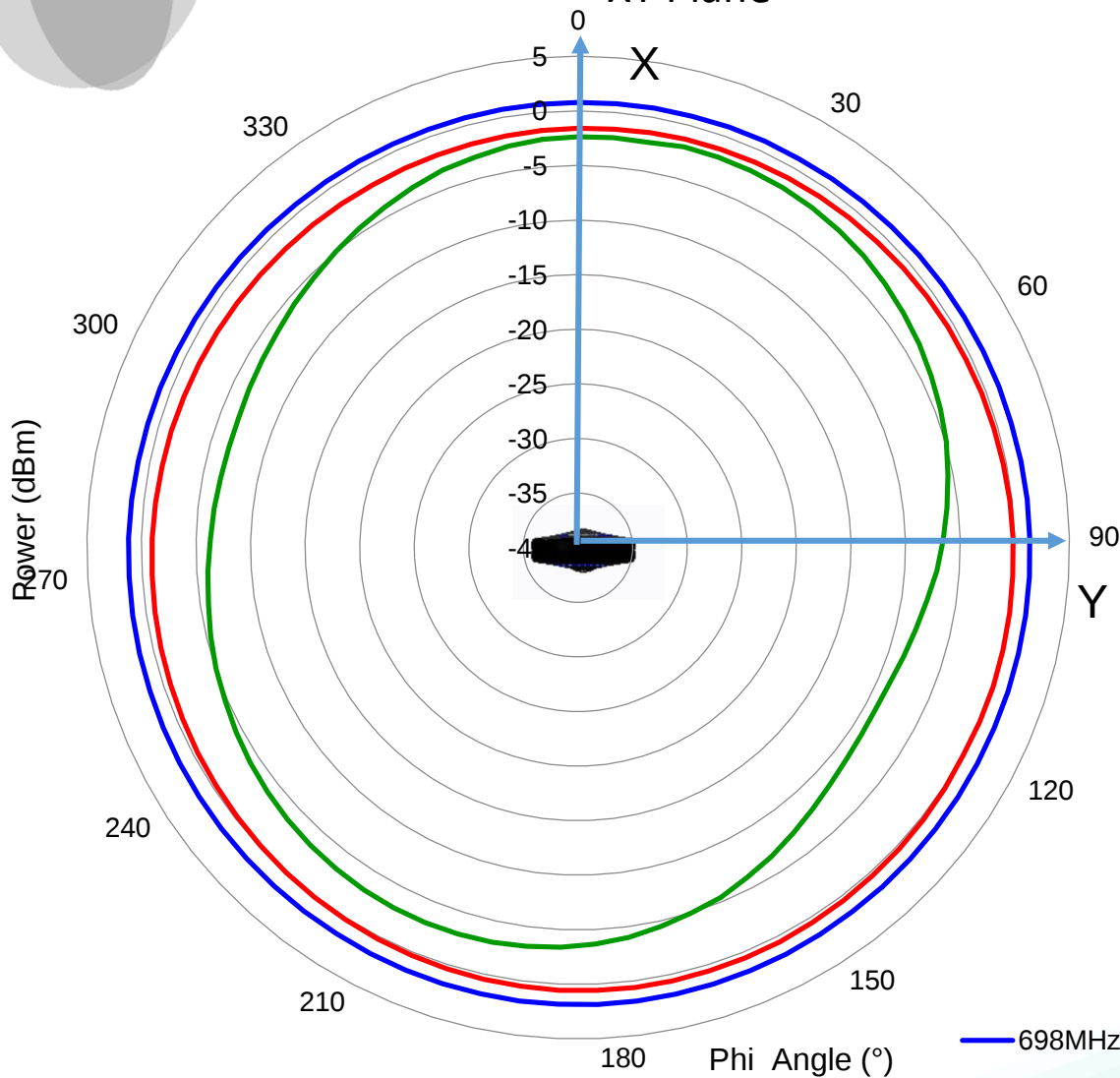
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## CHARTS

### Gain Plots

#### XY Plane



698MHz

Avg (dBi) = 1.29  
Peak (dBi) = 1.86  
Avg -3 (deg) = 360

824MHz

Avg (dBi) = -0.56  
Peak (dBi) = 0.6  
Avg -3 (deg) = 235

960MHz

Avg (dBi) = -4.79  
Peak (dBi) = -2  
Avg -3 (deg) = 205

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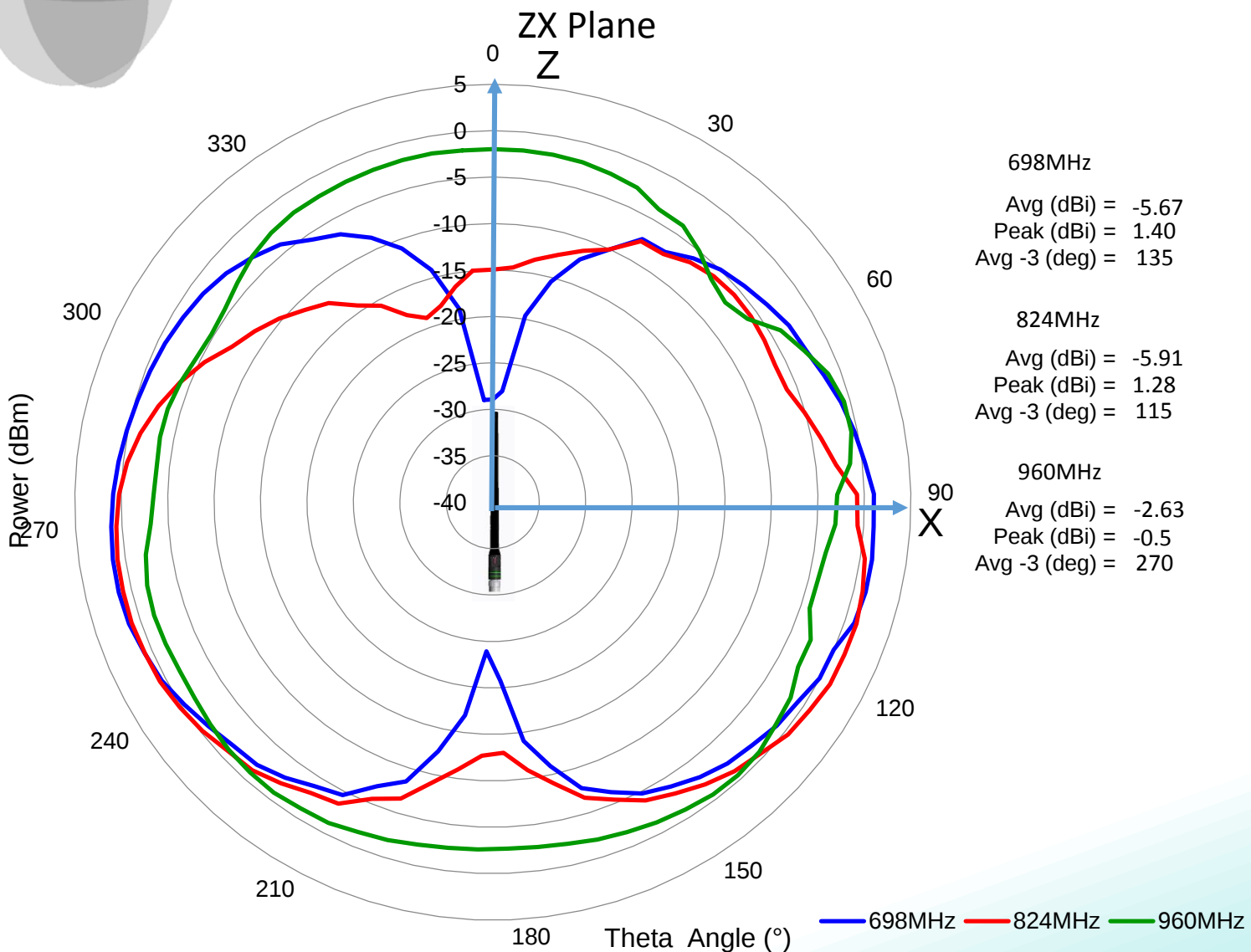
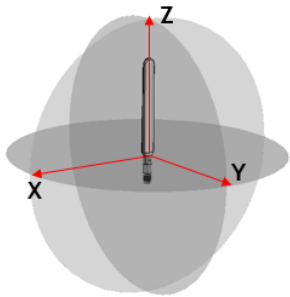
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## CHARTS

### Gain Plots



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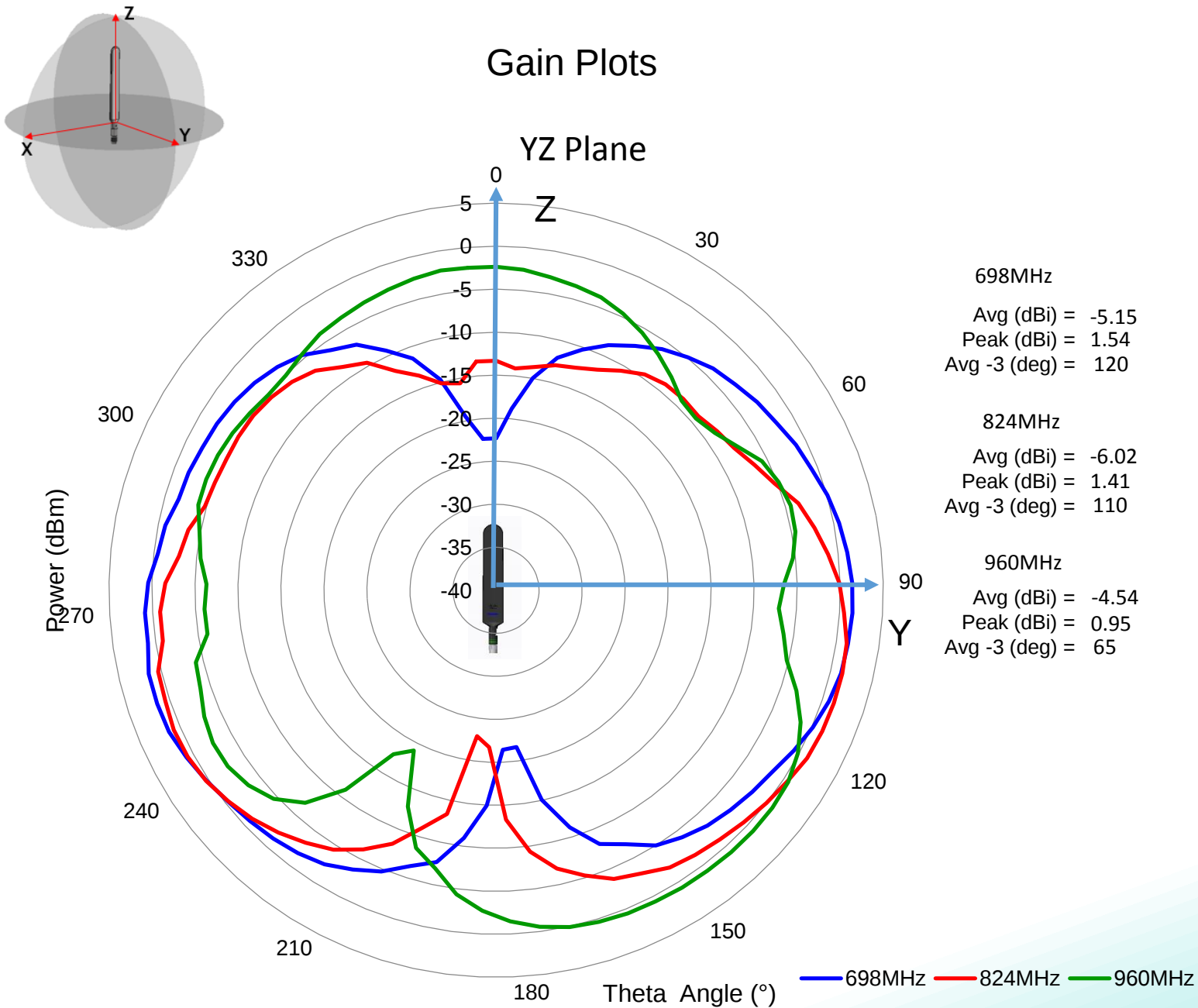
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## CHARTS

### Gain Plots

#### YZ Plane



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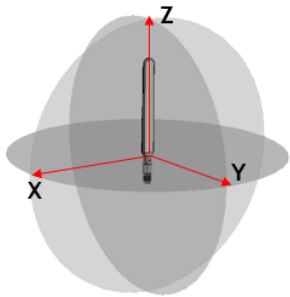
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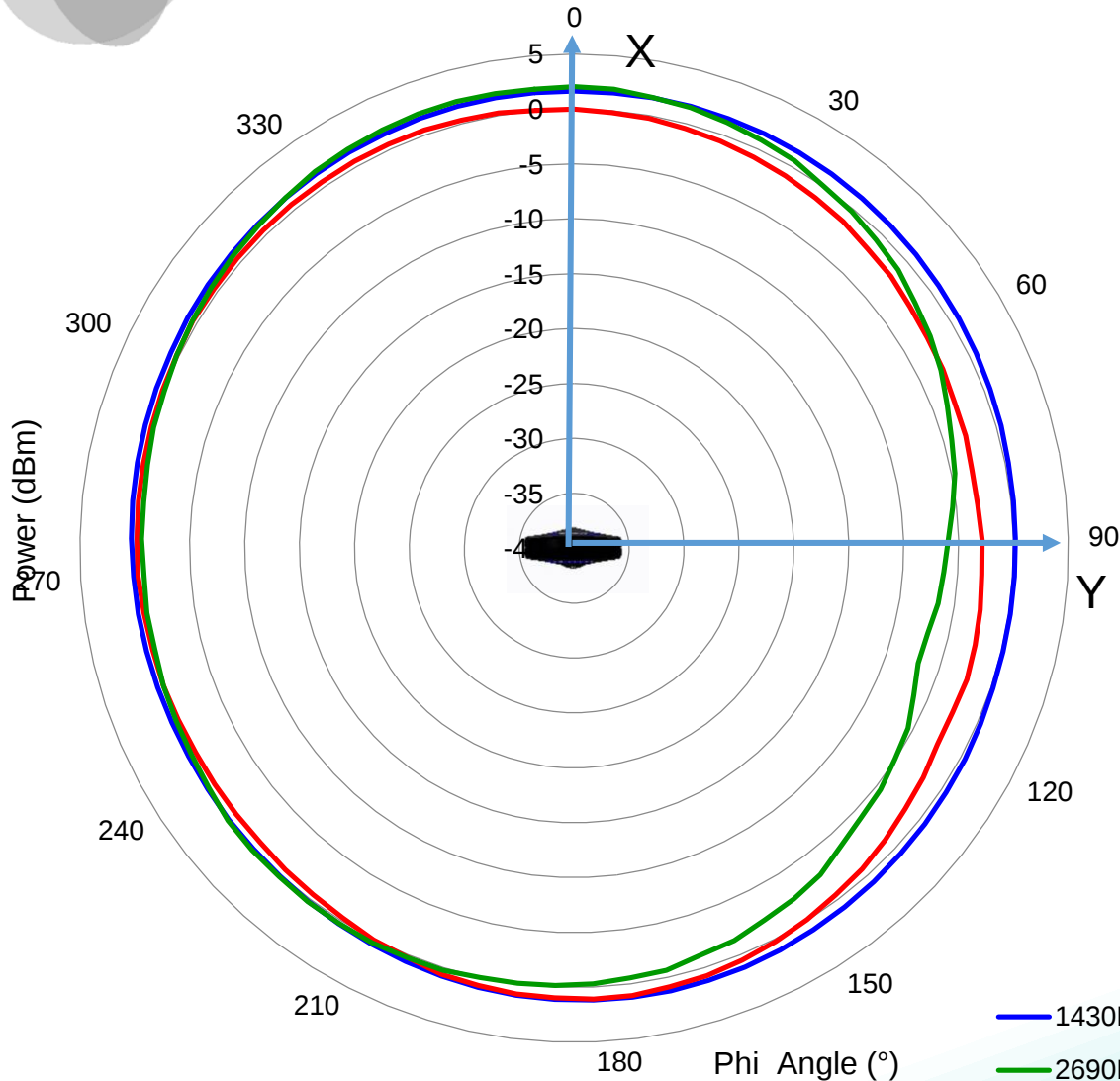
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## CHARTS

### Gain Plots



#### XY Plane



1430MHz

Avg (dBi) = 0.82  
Peak (dBi) = 1.65  
Avg -3 (deg) = 360

2170MHz

Avg (dBi) = -0.64  
Peak (dBi) = 1.1  
Avg -3 (deg) = 280

2690MHz

Avg (dBi) = -0.99  
Peak (dBi) = 2.08  
Avg -3 (deg) = 240

— 1430MHz — 2170MHz  
— 2690MHz

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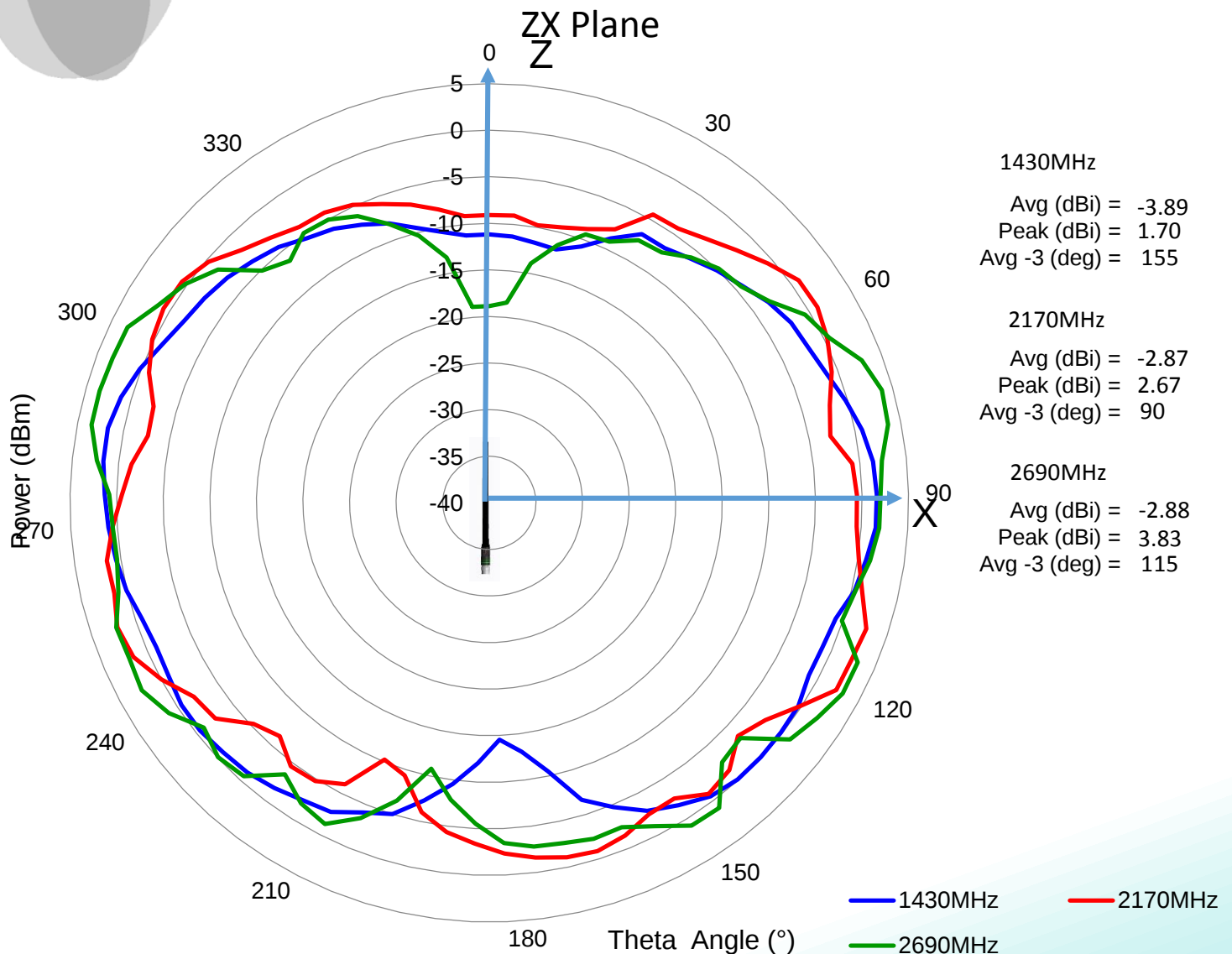
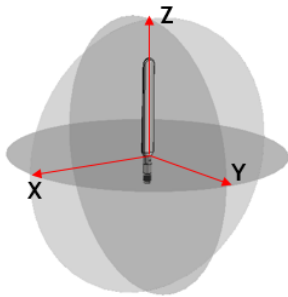
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## CHARTS

### Gain Plots



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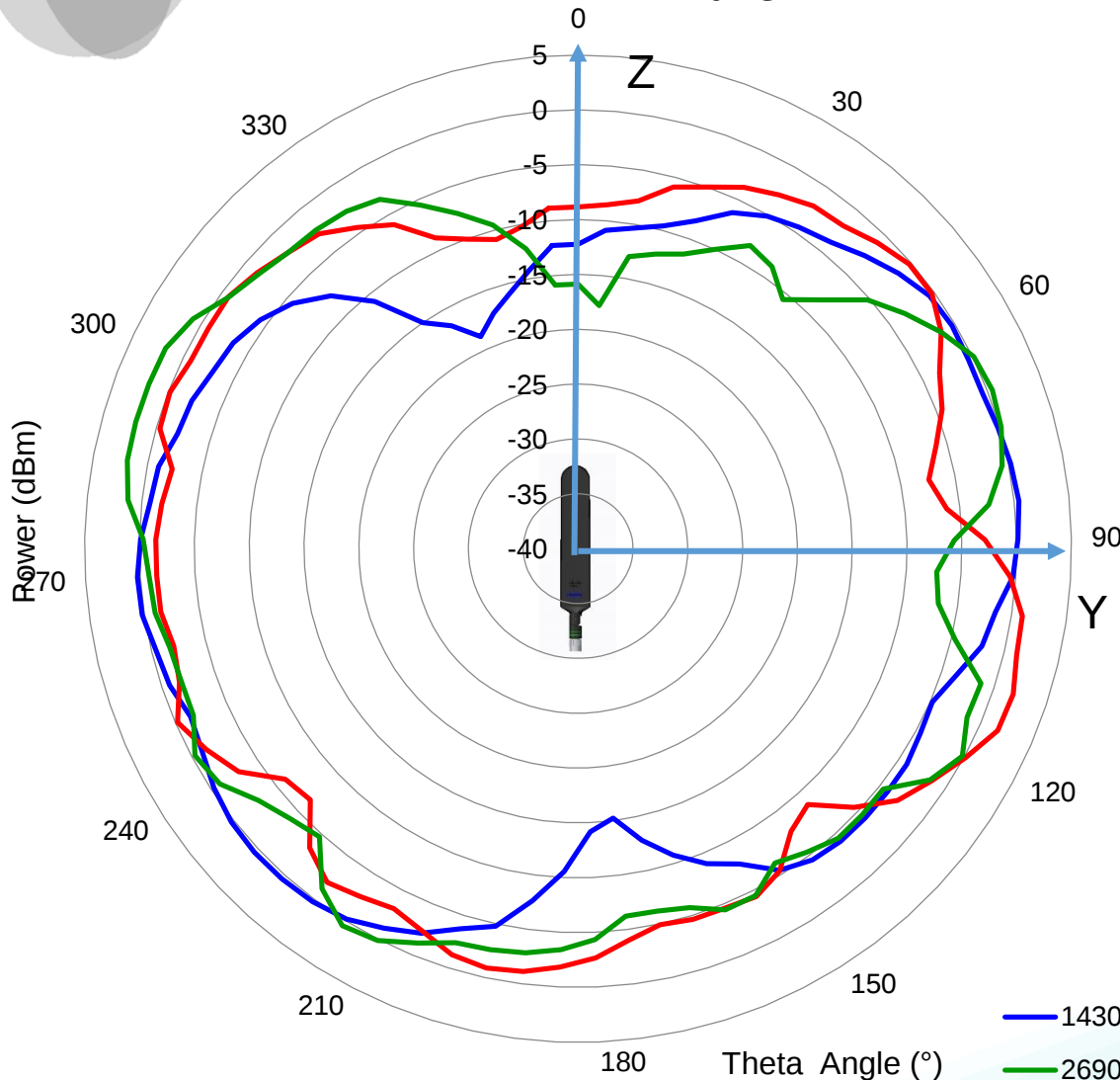
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## CHARTS

### Gain Plots

#### YZ Plane



1430MHz

Avg (dBi) = -5.31

Peak (dBi) = 0.45

Avg -3 (deg) = 150

2170MHz

Avg (dBi) = -3.61

Peak (dBi) = 1.85

Avg -3 (deg) = 80

2690MHz

Avg (dBi) = -4.28

Peak (dBi) = 1.96

Avg -3 (deg) = 90

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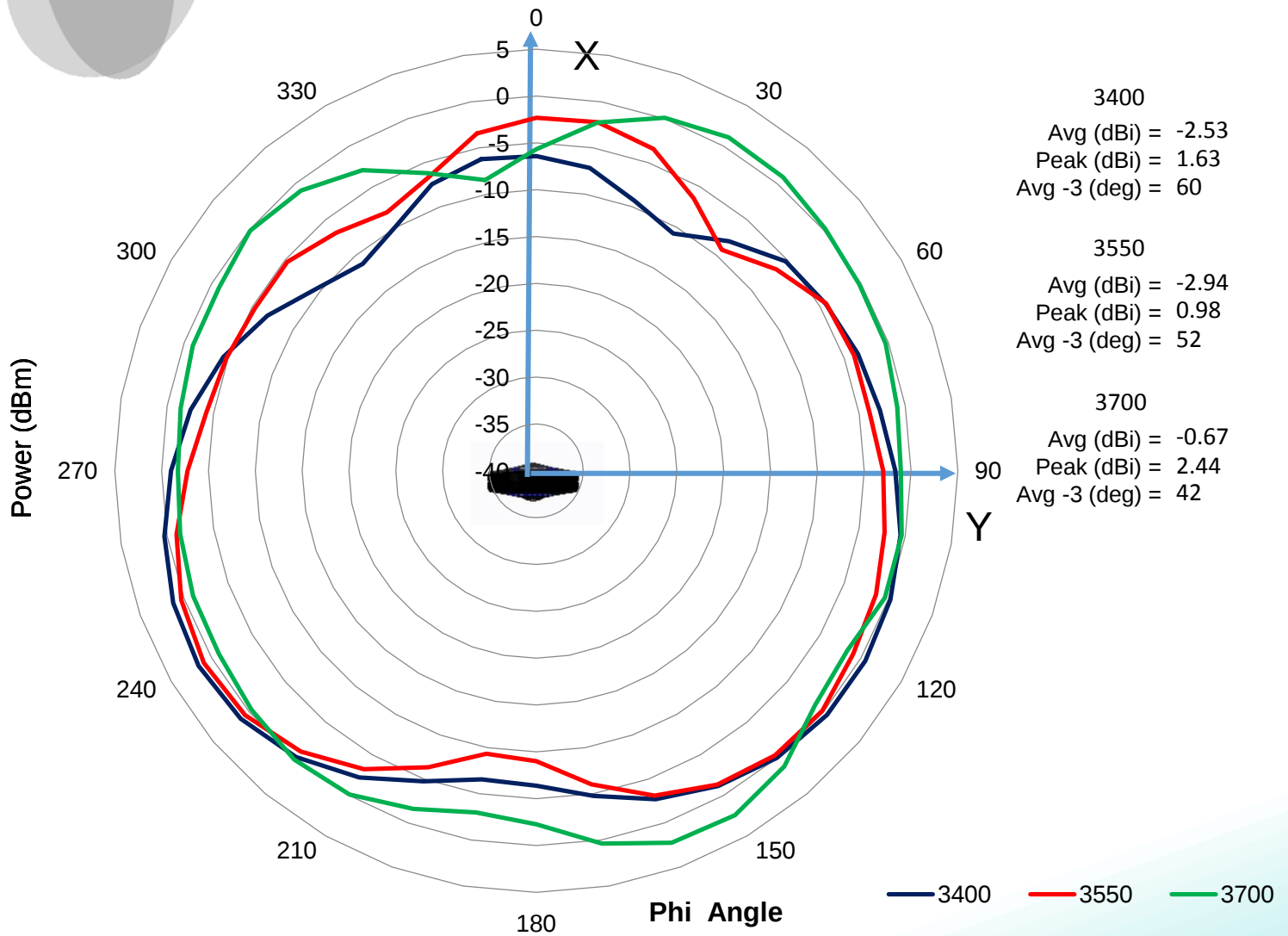
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## CHARTS

### Gain Plots

#### XY plane



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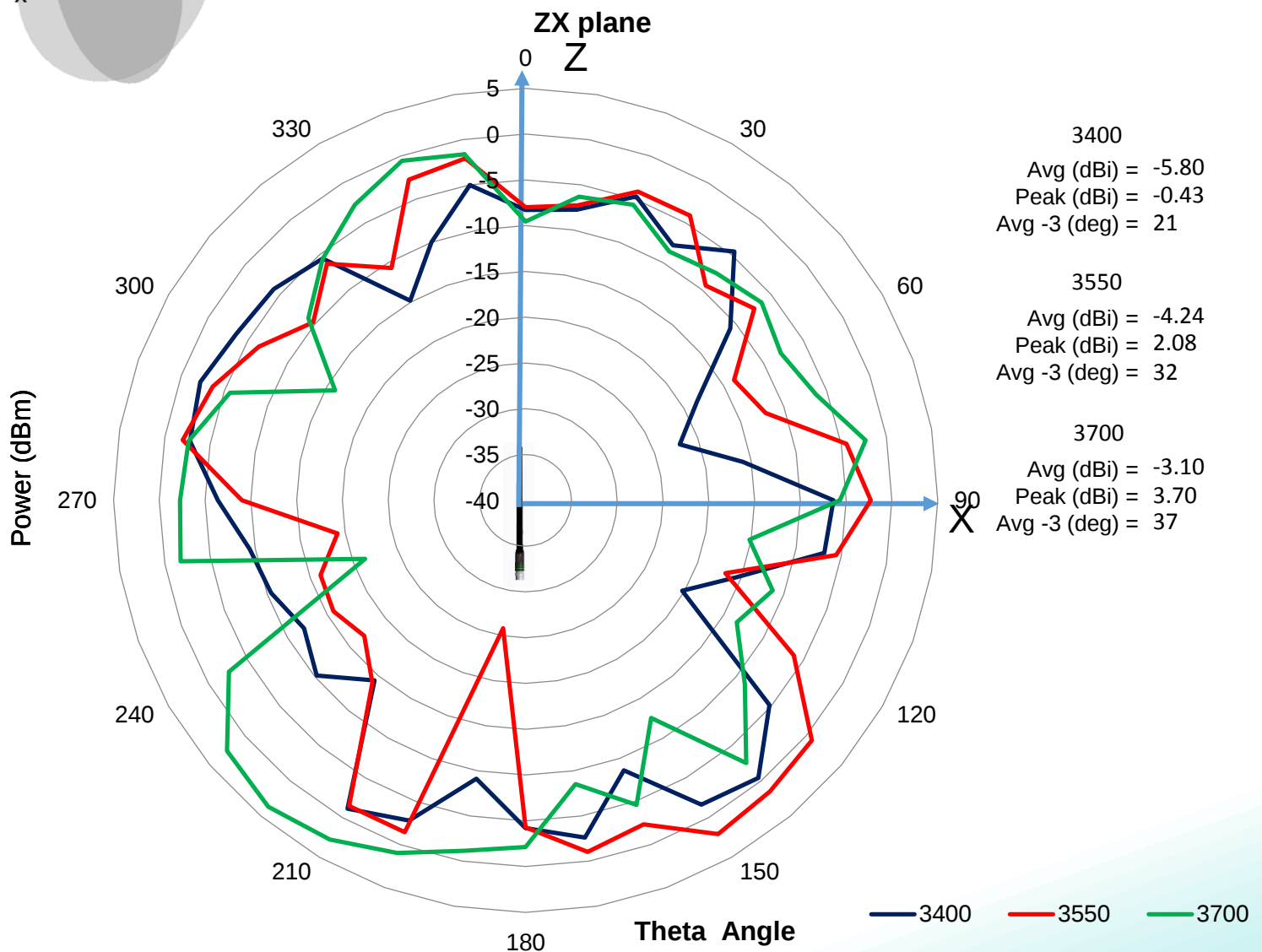
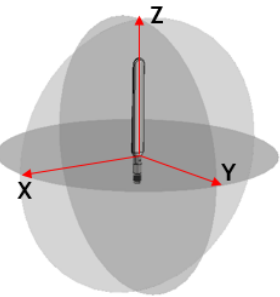
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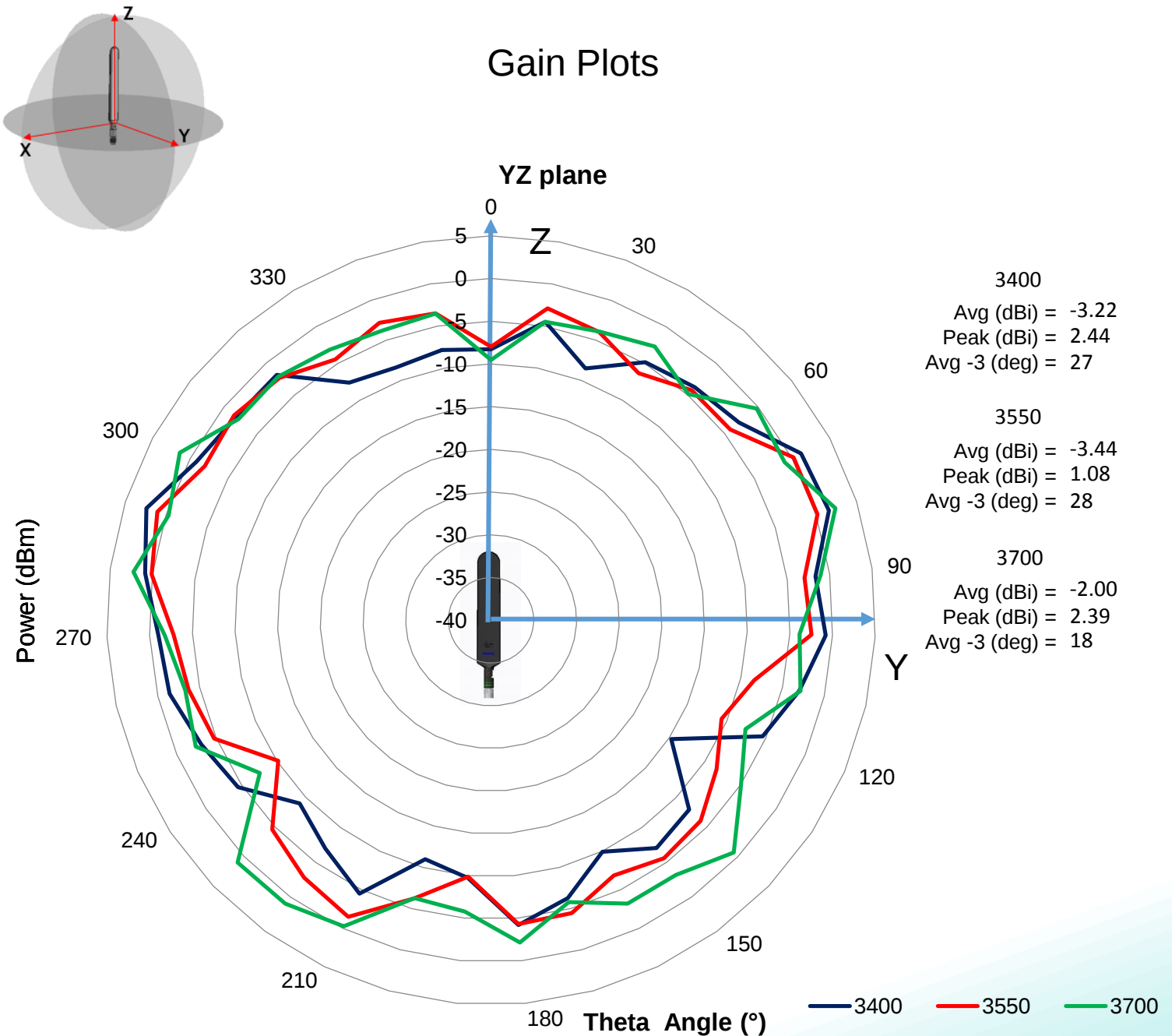
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## PACKAGING

1PCS/PE bag

100PCS/Carton box

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