



Tango 24

DUAL BAND WIFI 2.4/5.8 GHZ WITH LTE BANDS THROUGH HOLE MOUNT ANTENNA

Key Features

- 2.4GHz / 5.8GHz Dual Band WiFi Antenna
- Some LTE Bands Covered
- Compact Puck Design



General Description

The Tango 24 is a compact, puck shaped antenna, tuned to 2.4GHz - 5.8 GHz WiFi//Bluetooth/ Zigbee frequencies. The coverage also allows for the antenna to be used with some of the LTE bands.

The Tango 24 screw base, through hole design allows secure mounting onto the case of the product.

Typical applications include vending machines, point of sales terminals and kiosks.

Supplied as standard with an SMA Male connector with reverse polarity for WiFi and a standard SMA Male for LTE. Alternative connectors and cable lengths may be specified for volume orders.

Additional Considerations

- Bluetooth / Zigbee / ISM 2450MHz
- Screw threaded base for secure mounting
- Omni directional radiation

T Through	WLAN 2400	ISM 2450	BLE Bluetooth
ZB Zigbee	WLAN 5800	4G LTE	5G LTE
IP 67			



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Electrical Specifications

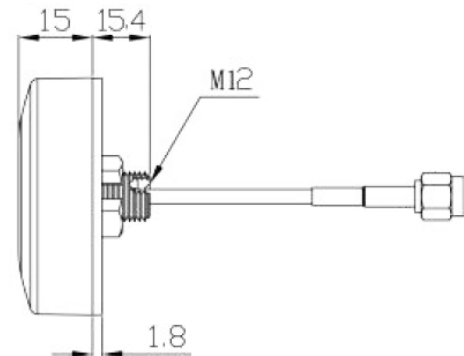
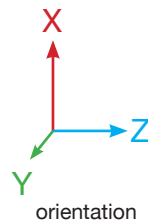
Impedance:	50 Ohm
Power capacity:	50W
Polarization:	Vertical

Environmental Specifications

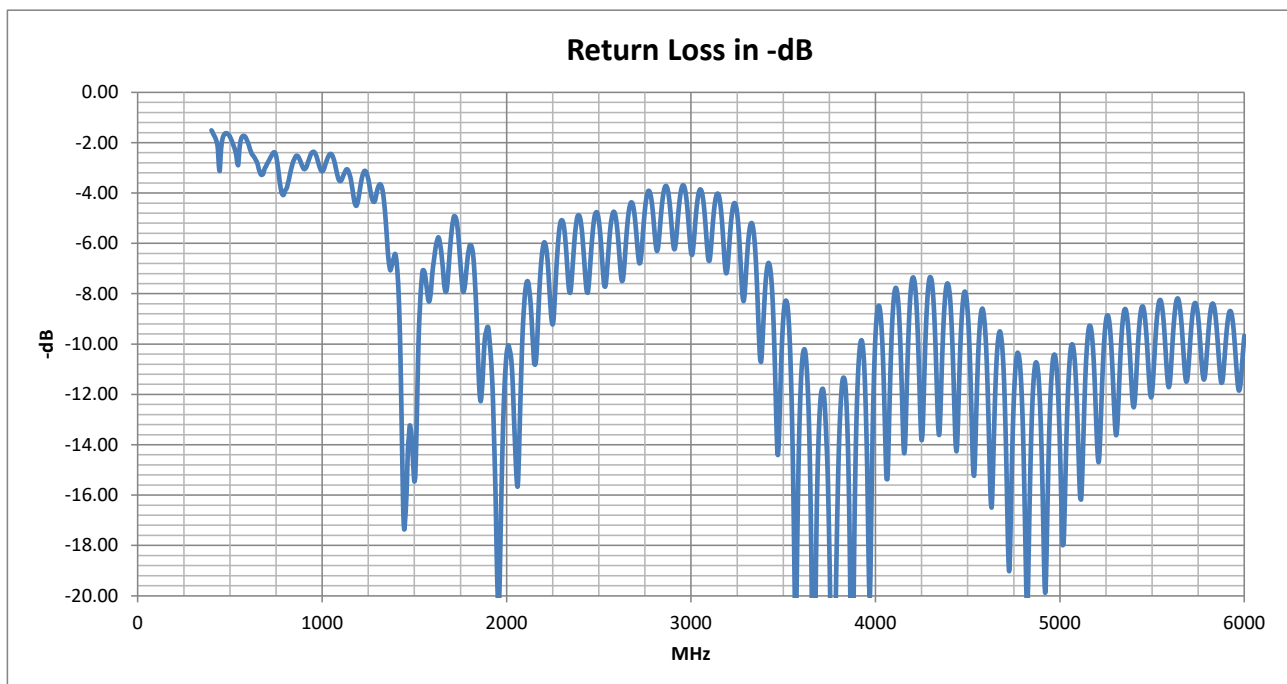
Operating Temperature:	-30 - +75°C
Storage Temperature:	-30 - +75°C

Mechanical Specifications

Dimensions:	46 Ø x H15mm
Connector:	SMA Male Reverse Polarity
Cable:	RG174
Mounting Method:	M12 Screw
Maximum Material Thickness:	3.5mm

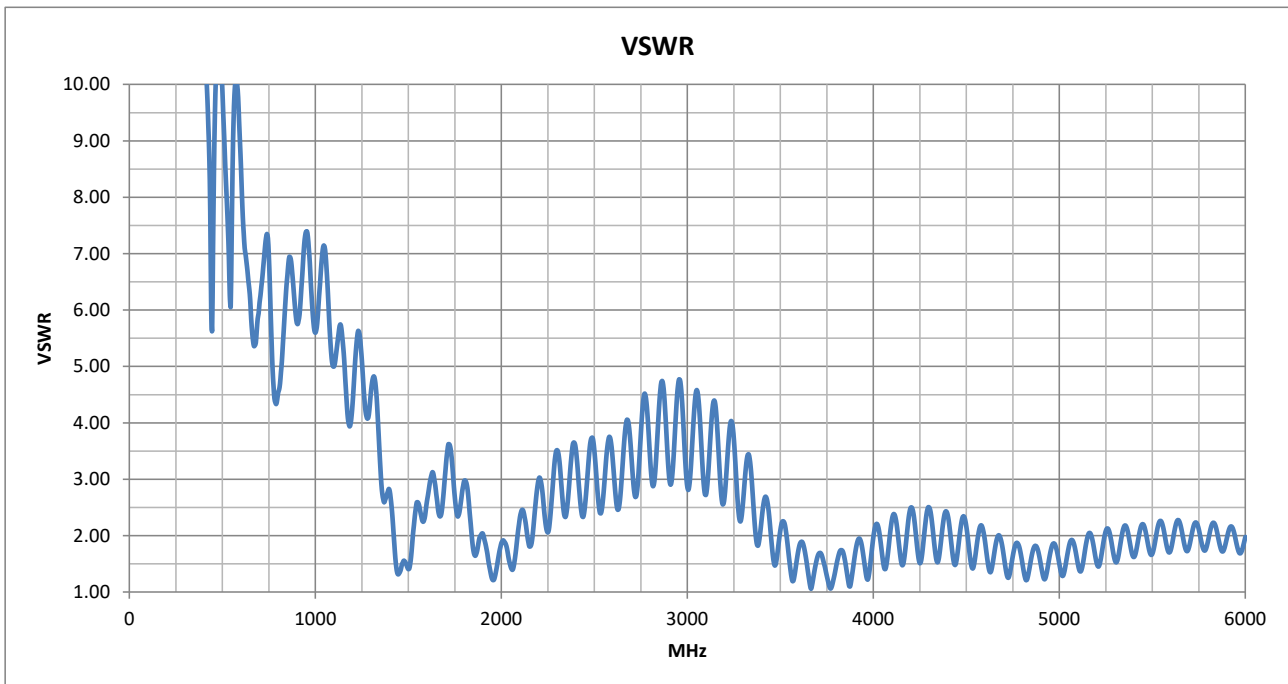


Return Loss tested with 1m cable

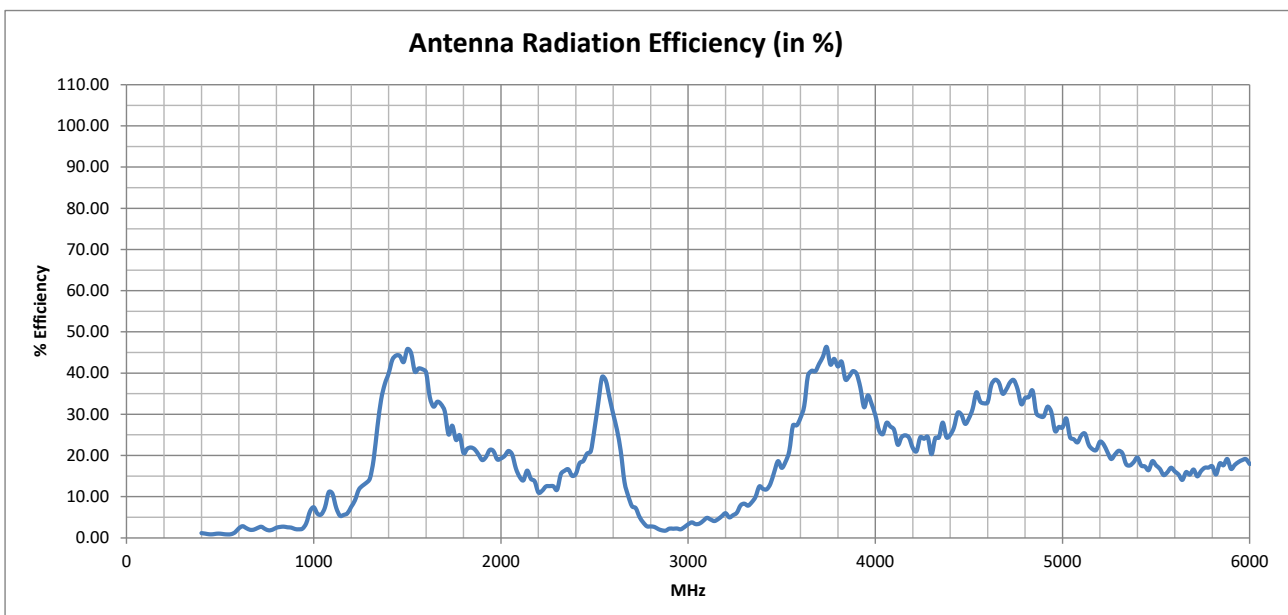




VSWR tested with 1m cable



Radiation Efficiency tested with 1m cable





LTE/5G Band Coverage

LTE, CAT-M/5G Bands	NB-IoT Band	Regional Coverage	Uplink	Downlink	Avg Efficiency % over band	Max VSWR over Band
2/n2	B2	North America/Latin America/Caribbean	1850-1910 MHz	1930-1990 MHz	20.43 / 20.07 ●	2.04 / 1.73
3/n3	B3	Europe/Africa/Asia/Oceania	1710-1785 MHz	1805-1880 MHz	25.38 / 21.17 ●	3.62 / 2.98
11	B11	Country Specific	1427.9-1447.9 MHz	1475.9-1495.9 MHz	43.89 / 44.21 ●	1.83 / 1.56
21		Country Specific	1447.9-1462.9 MHz	1495.9-1510.9 MHz	43.69 / 44.45 ●	1.49 / 1.50
n24		-----	1626.5 - 1660.5 MHz	1525 - 1559 MHz	33.00 / 42.12 ●	3.13 / 2.59
25/n25	B25	Country Specific	1850-1915 MHz	1525-1559 MHz	20.43 / 42.12 ●	2.04 / 2.59
38/n38		Europe +	2570-2620 MHz		31.10 ●	3.75
43		Country Specific	3600-3800 MHz		40.10 ●	1.89
46		Country Specific	5150-5925 MHz		18.00 ●	2.28
48/n48		Country Specific	3550-3700 MHz		33.26 ●	1.89
n50		-----	1432 /1517 MHz		44.17 ●	1.61
n51		-----	1427 - 1432 MHz		43.76 ●	1.83
n53		-----	2483.5 - 2495 MHz		23.76 ●	3.74
65/n65		Country Specific	1920-2010 MHz	2110-2200 MHz	20.04 / 14.03 ○	1.92 / 2.99
66/n66	B66	Country Specific	1710-1780 MHz	2110-2200 MHz	26.34 / 14.03 ○	3.62 / 2.99
n74			1427 - 1470 MHz	1475 - 1518 MHz	43.58 / 44.38 ●	1.83 / 1.83
n75		-----	1432 -1517 MHz		44.17 ●	1.61
n76		-----	1427 - 1432 MHz		43.76 ●	1.83
n79		-----	4400 - 5000 MHz		32.19 ●	2.36
n80		-----	1710 - 1785 MHz		25.38 ●	3.62
n86		-----	1710 - 1780 MHz		26.34 ●	3.62
n90		-----	2496 - 2690 MHz		25.01 ●	4.05
n95		-----	2010 - 2025 MHz		20.09 ●	1.92
n99		-----	1626.5 - 1660.5 MHz		33.00 ●	3.13

Table data for bands as detailed in 3GPP TS 36.101 & 38.101

● Usable Band ○ Adequate in good signal area

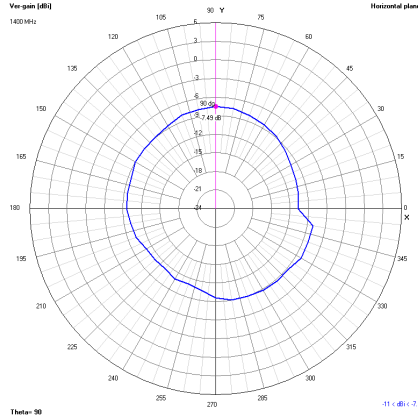


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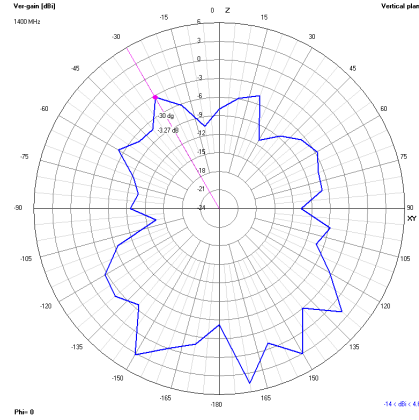
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Radiation Plots tested with 1 m cable

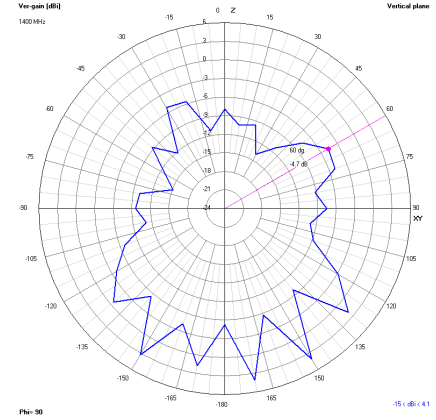
1400 MHz XY



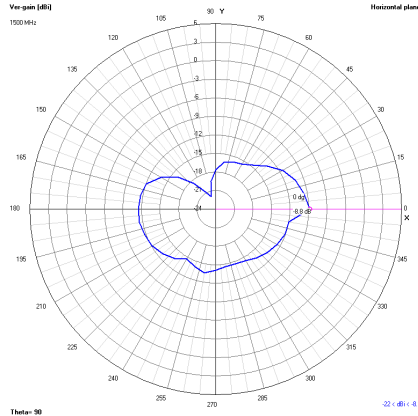
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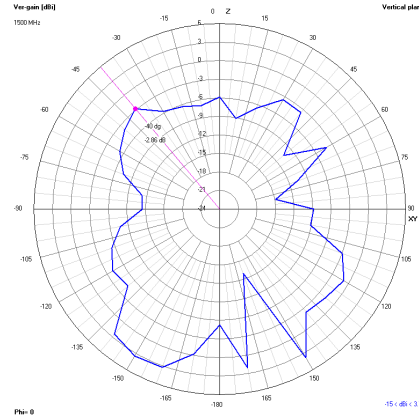
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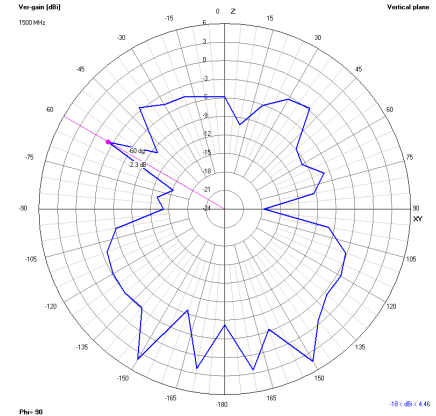
1500 MHz XY



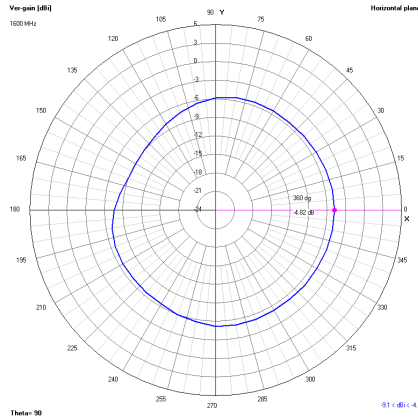
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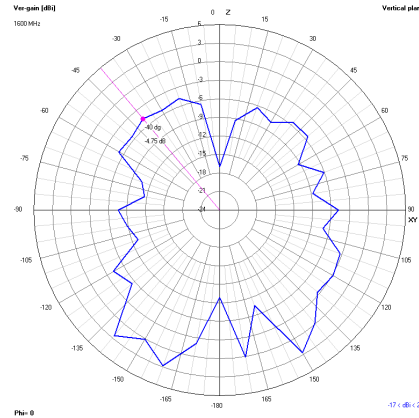
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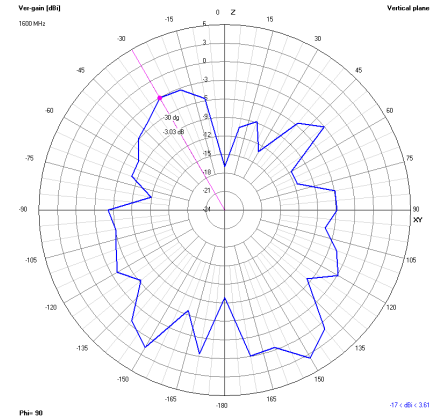
1600 MHz XY



XZ



YZ



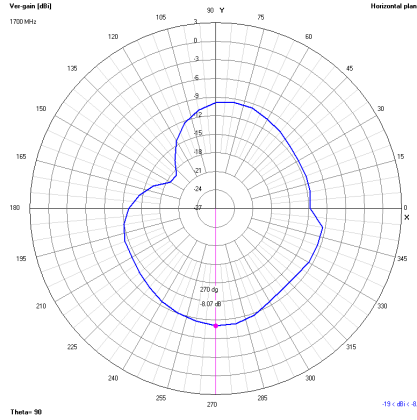


Tango 24

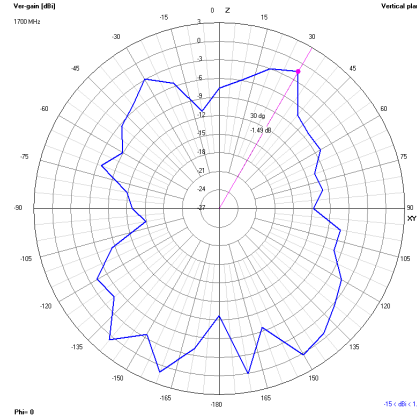
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Radiation Plots tested with 1 m cable

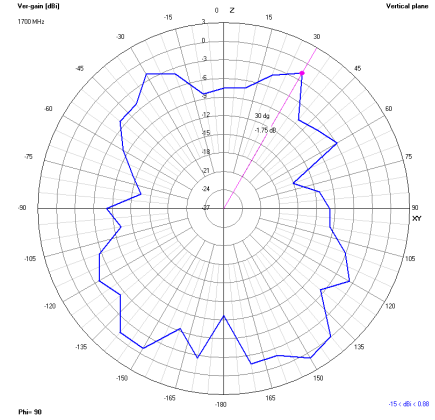
1700 MHz XY



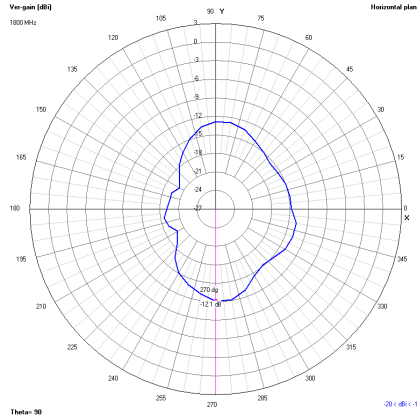
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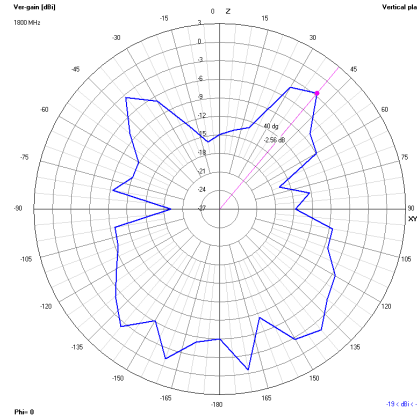
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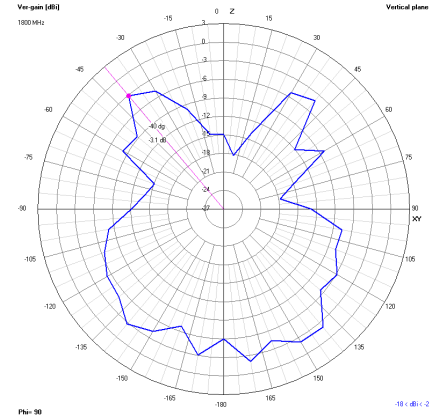
1800 MHz XY



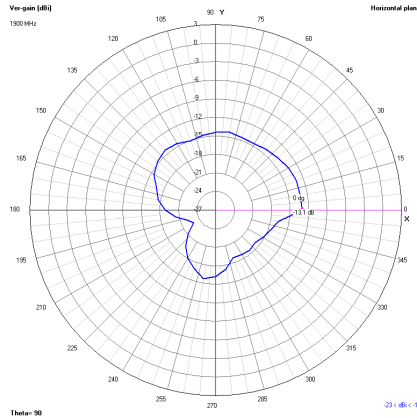
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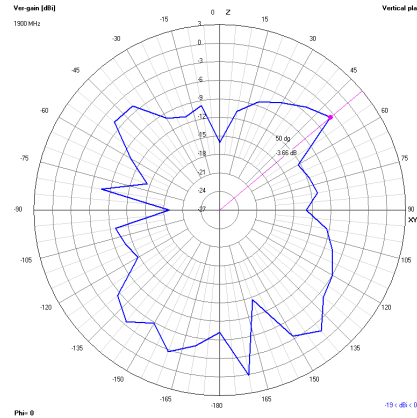
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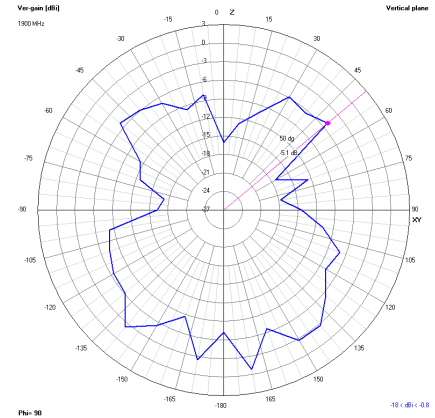
1900 MHz XY



XZ



YZ



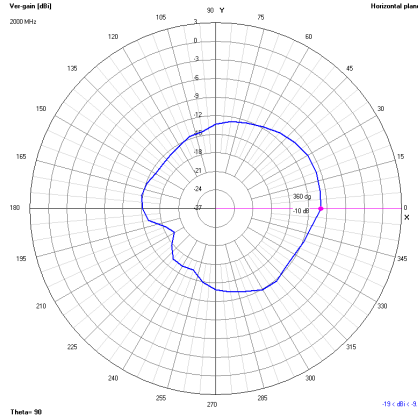


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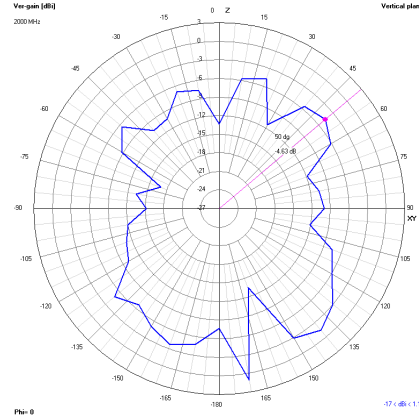
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Radiation Plots tested with 1 m cable

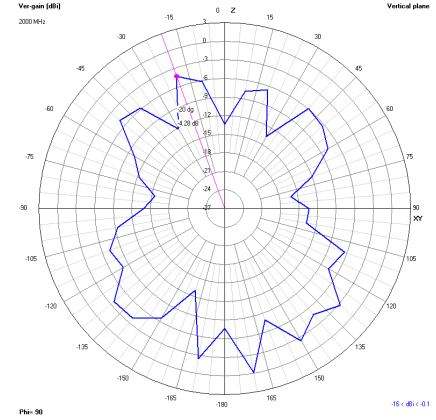
2000 MHz XY



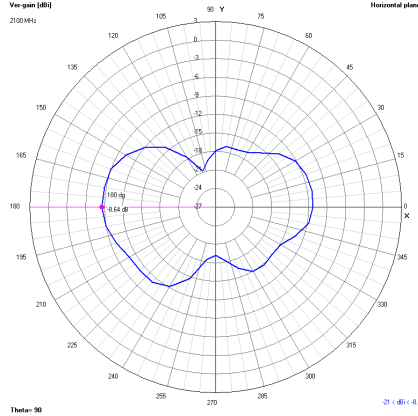
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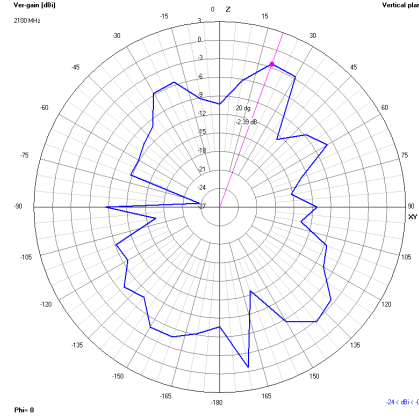
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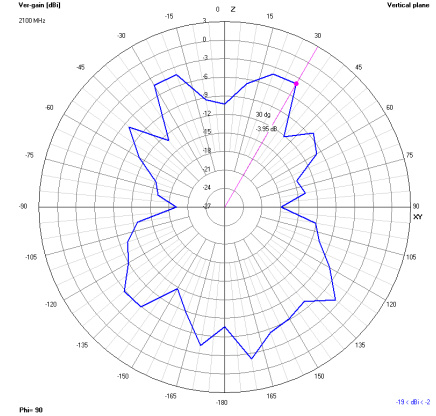
2100 MHz XY



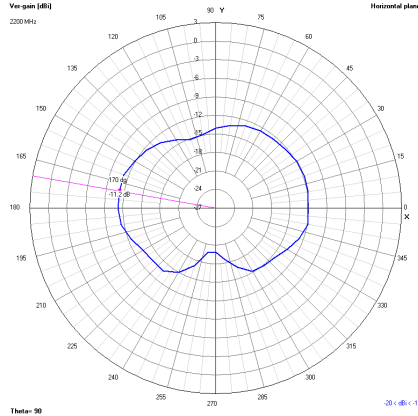
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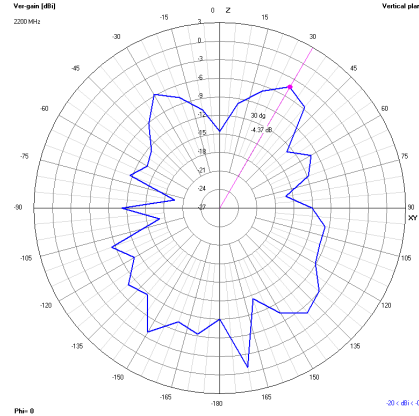
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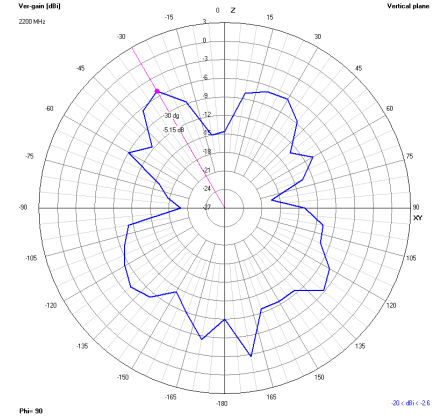
2200 MHz XY



XZ



YZ



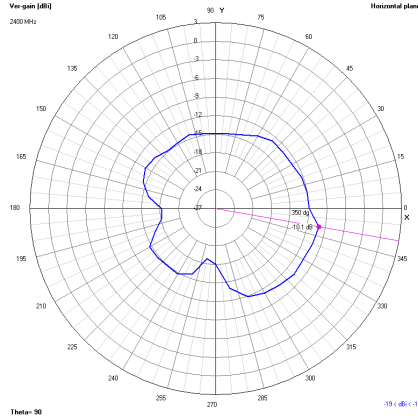


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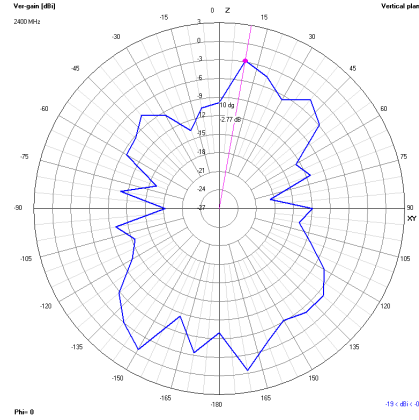
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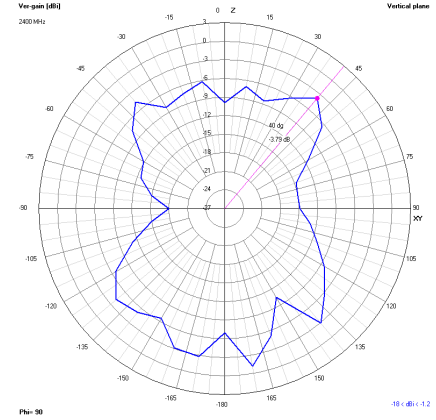
2400 MHz XY



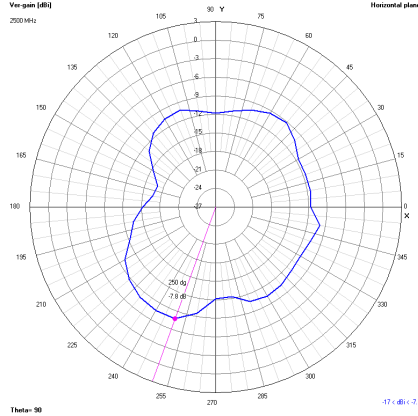
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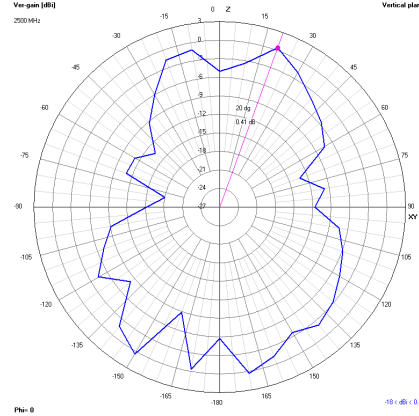
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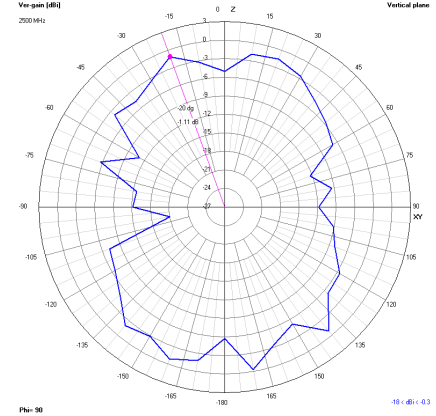
2500 MHz XY



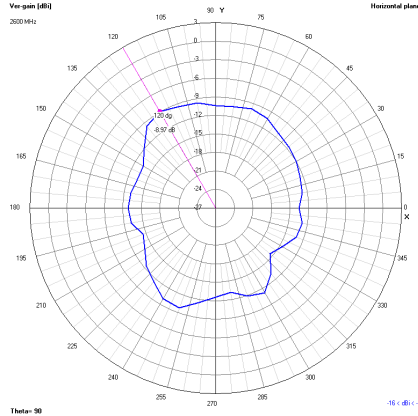
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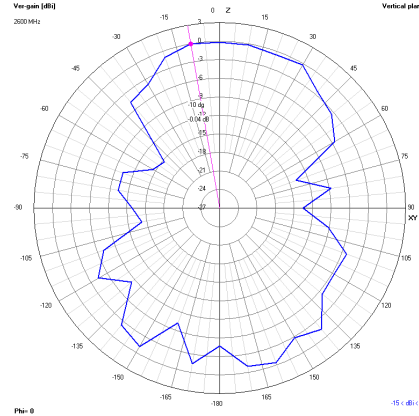
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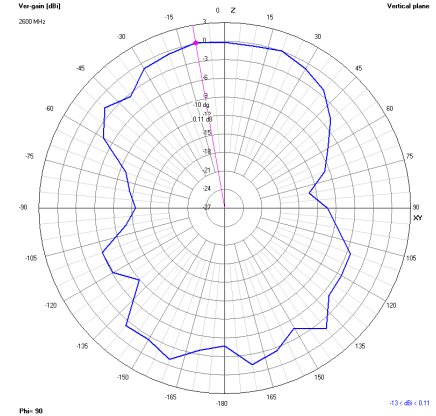
2600 MHz XY



XZ



YZ



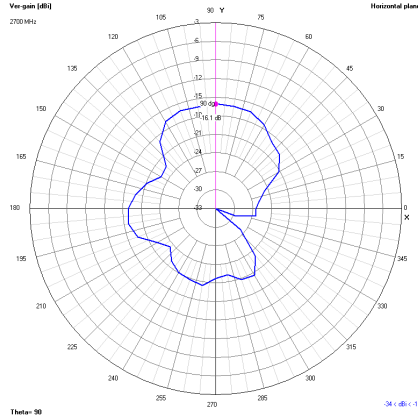


Tango 24

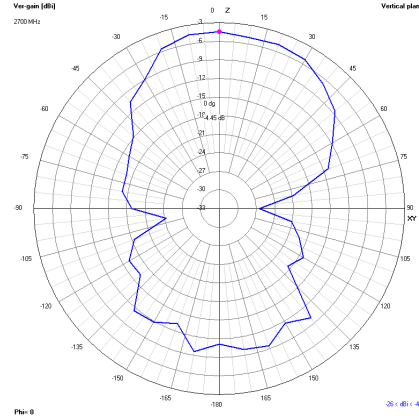
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Radiation Plots tested with 1 m cable

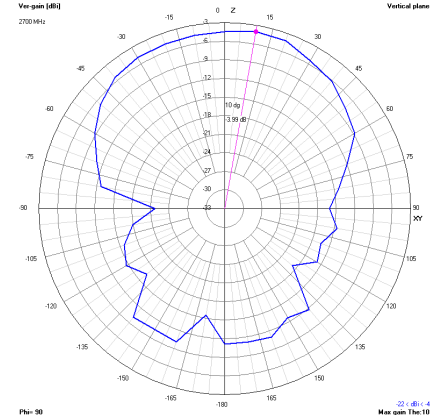
2700 MHz XY



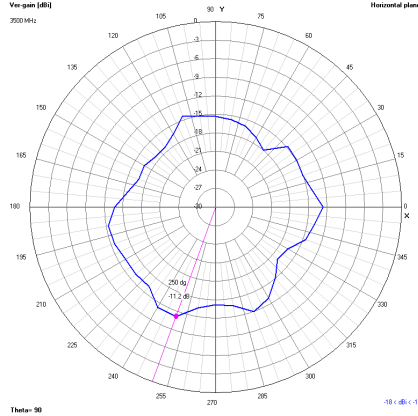
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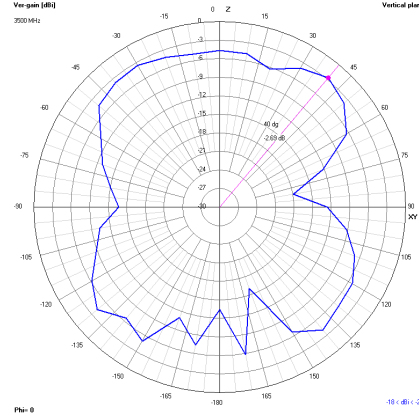
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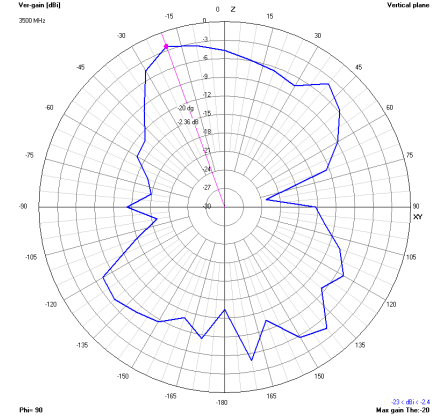
3500 MHz XY



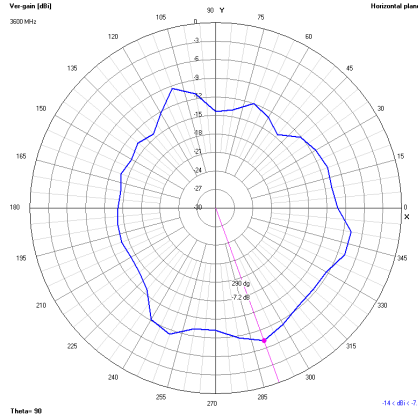
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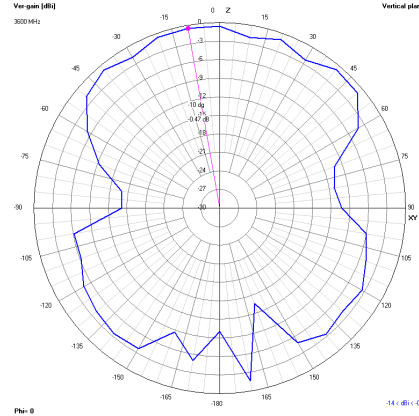
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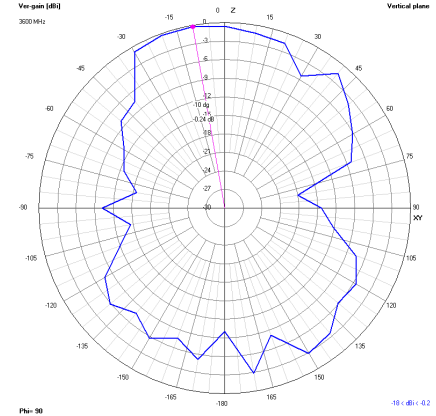
3600 MHz XY



XZ



YZ



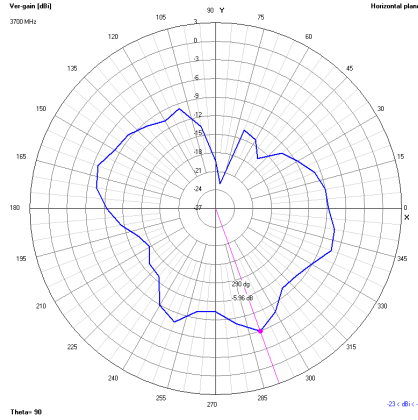


Tango 24

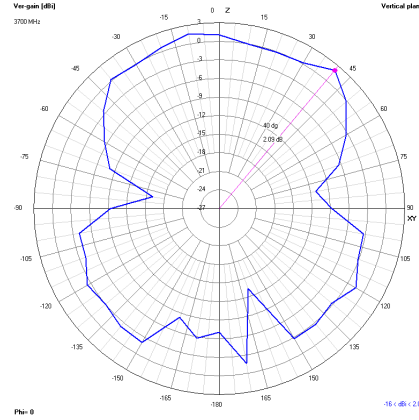
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Radiation Plots tested with 1 m cable

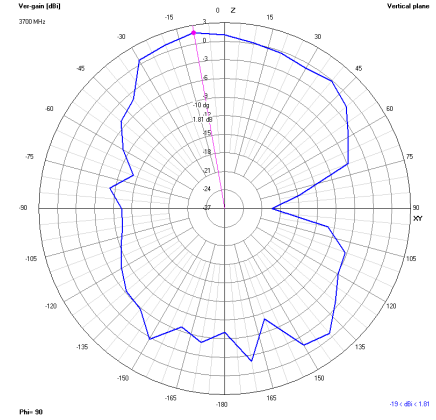
3700 MHz XY



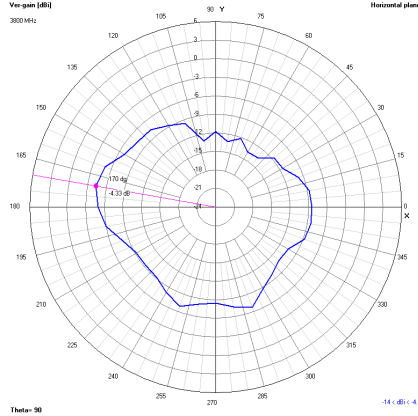
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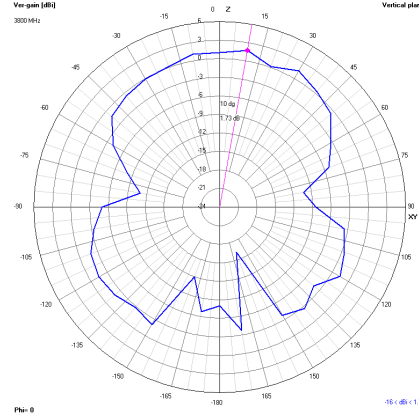
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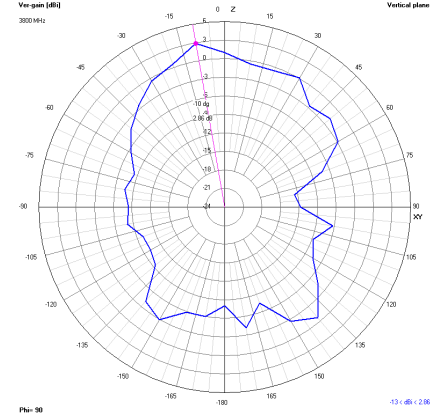
3800 MHz XY



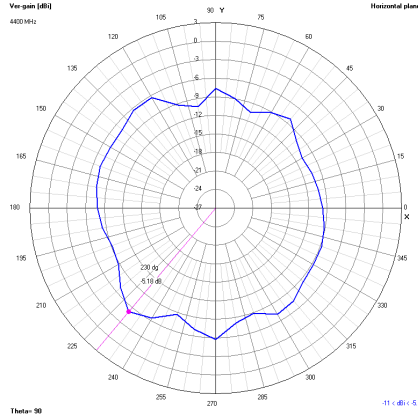
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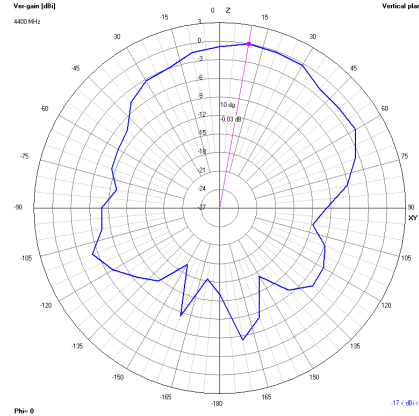
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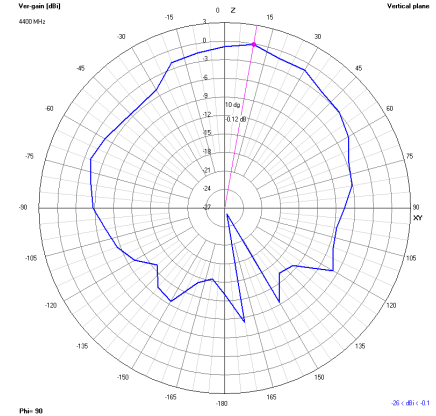
4400 MHz XY



XZ



YZ



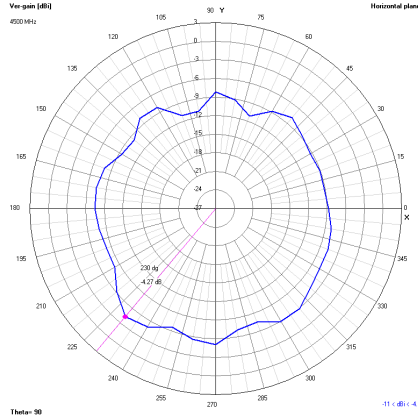


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DUAL BAND WIFI 2.4/5.8 GHZ WITH LTE BANDS THROUGH HOLE MOUNT ANTENNA

Radiation Plots tested with 1 m cable

4500 MHz XY



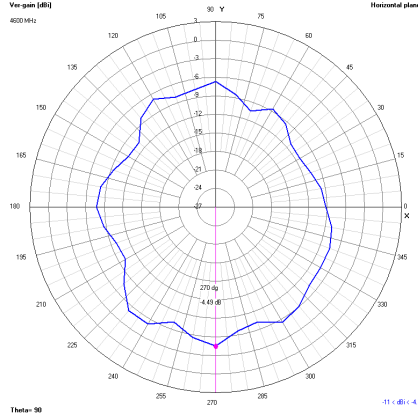
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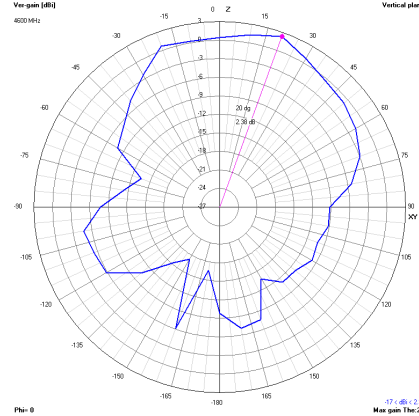
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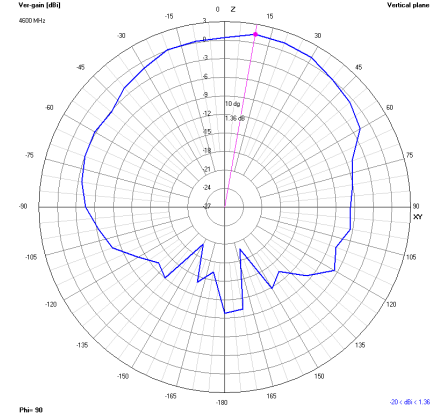
4600 MHz XY



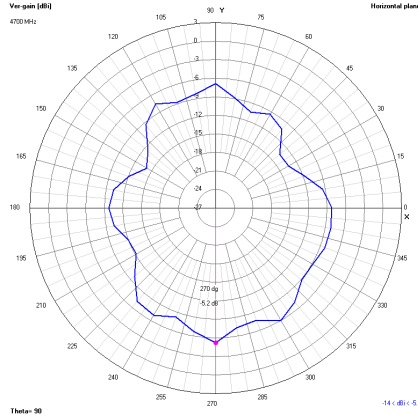
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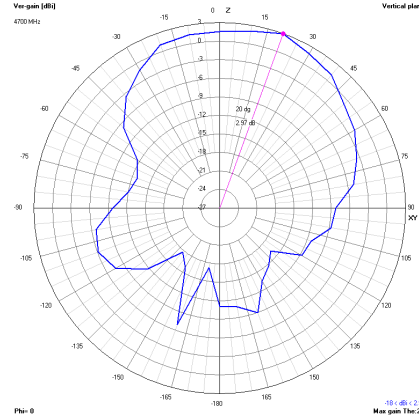
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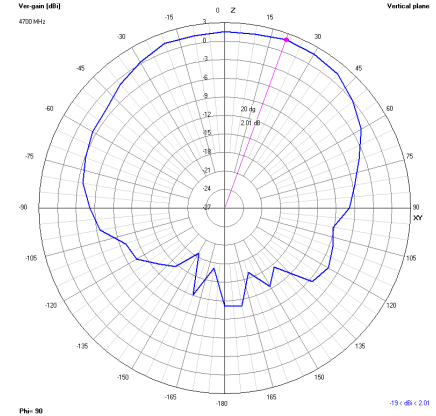
4700 MHz XY



XZ



YZ



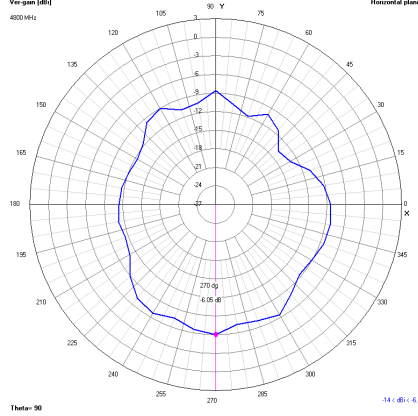


Tango 24

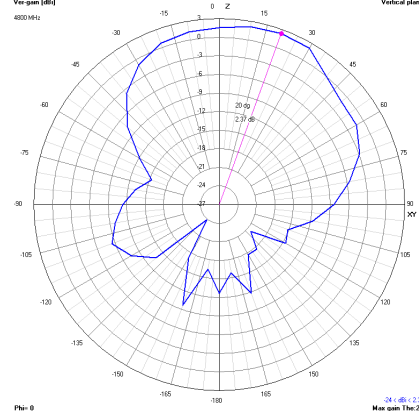
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Radiation Plots tested with 1 m cable

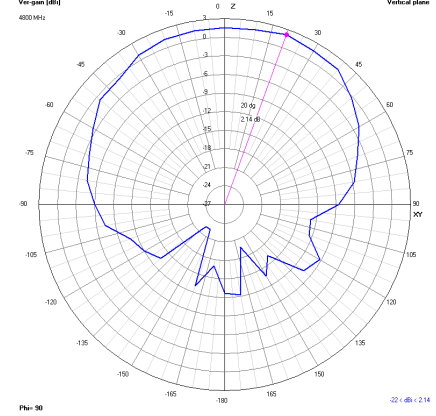
4800 MHz XY



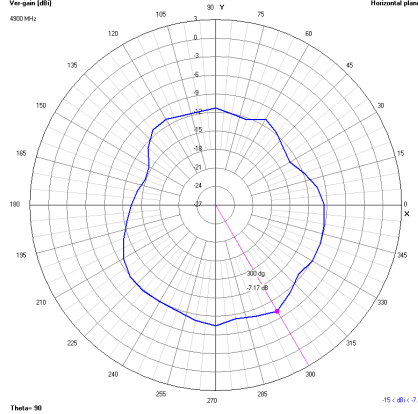
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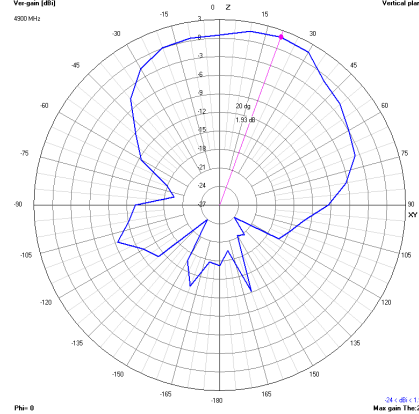
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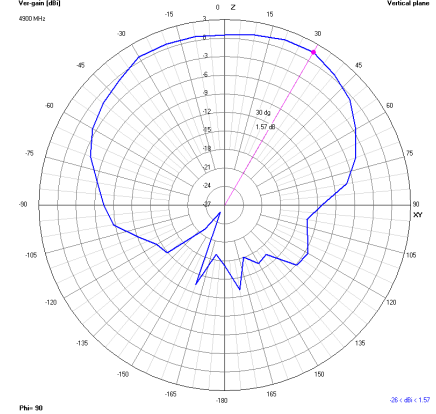
4900 MHz XY



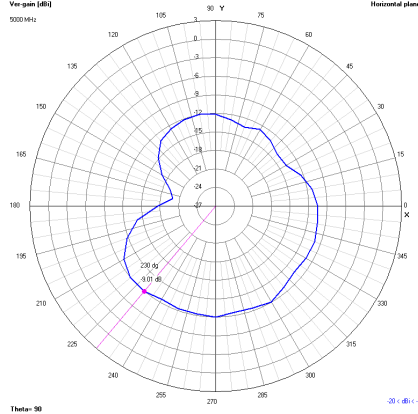
XZ



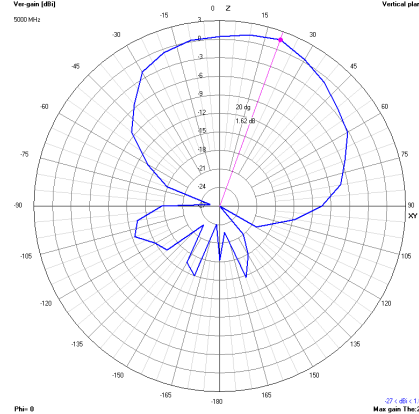
YZ



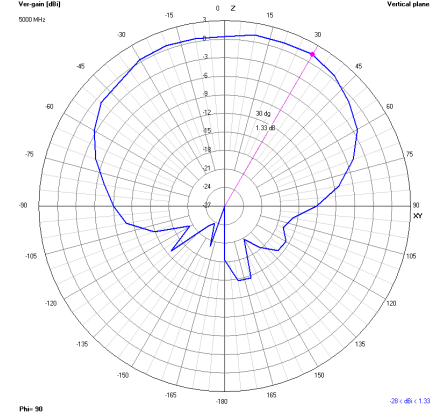
5000 MHz XY



XZ



YZ



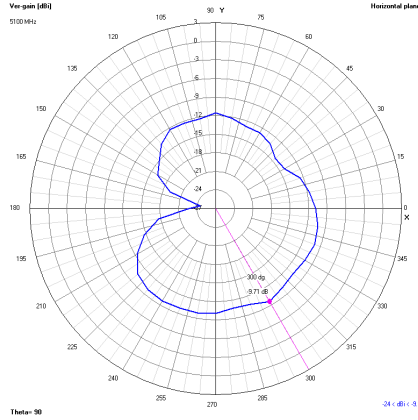


Tango 24

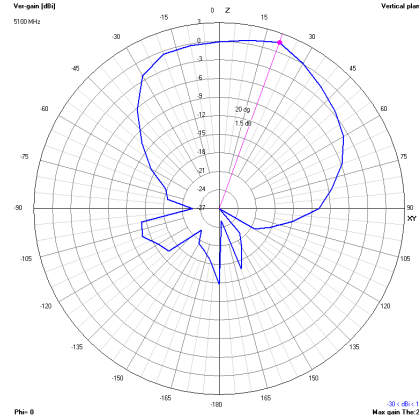
DUAL BAND WIFI 2.4/5.8 GHz WITH LTE BANDS THROUGH HOLE MOUNT ANTENNA

Radiation Plots tested with 1 m cable

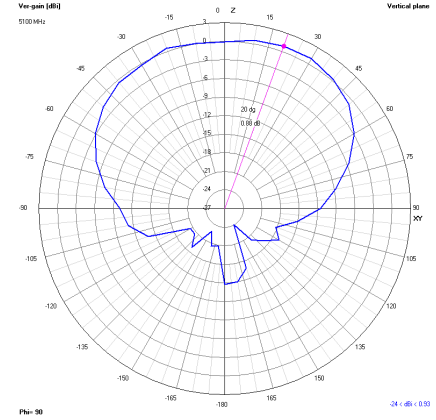
5100 MHz XY



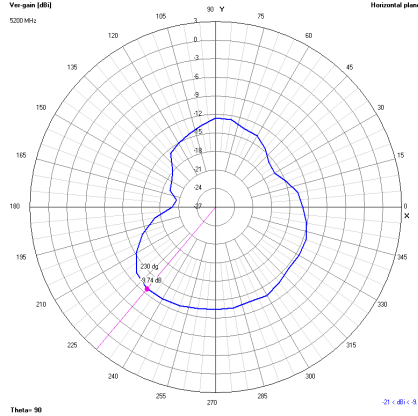
XZ



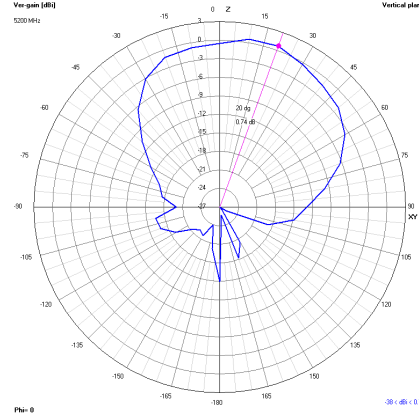
YZ



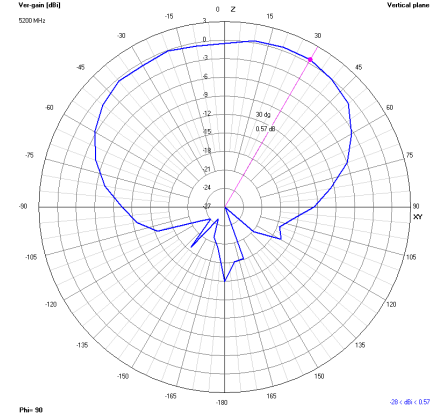
5200 MHz XY



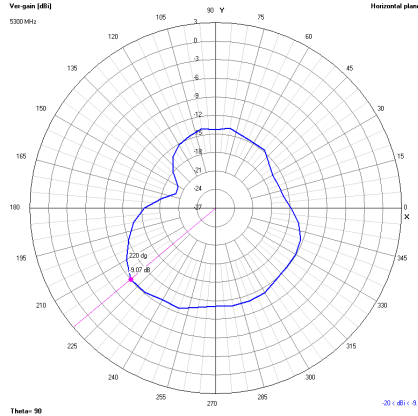
XZ



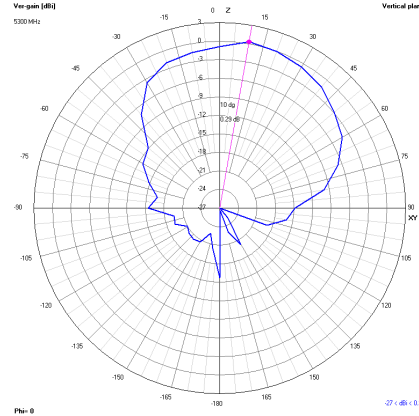
YZ



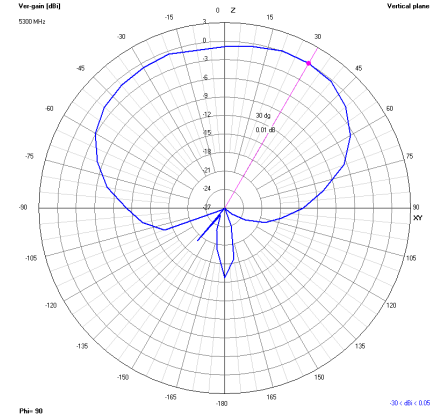
5300 MHz XY



XZ



YZ



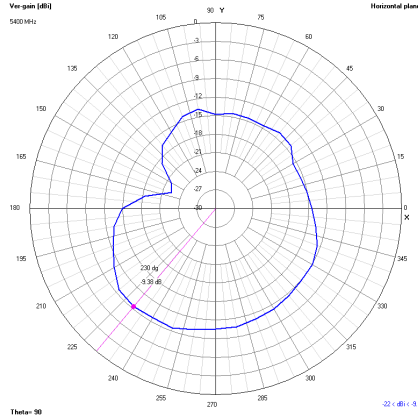


Tango 24

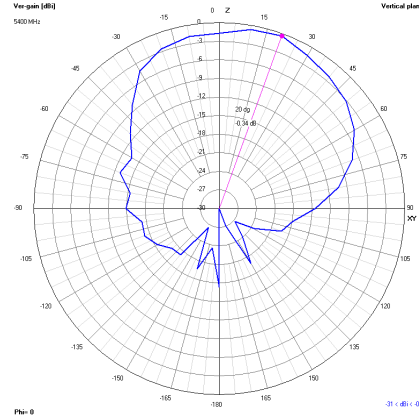
DUAL BAND WIFI 2.4/5.8 GHZ WITH LTE BANDS THROUGH HOLE MOUNT ANTENNA

Radiation Plots tested with 1 m cable

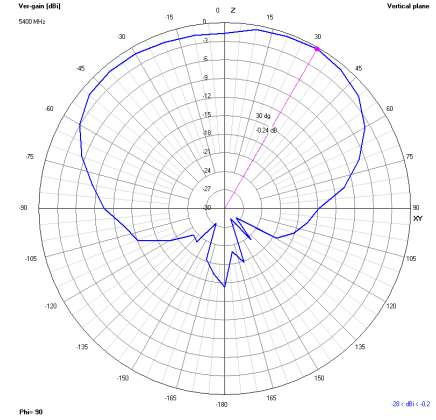
5400 MHz XY



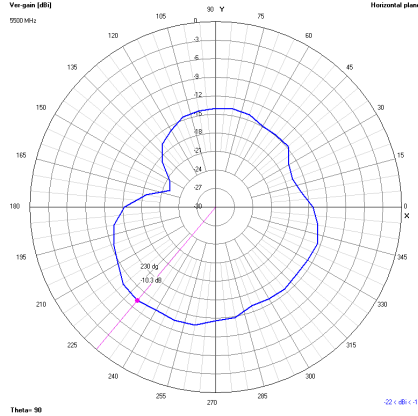
XZ



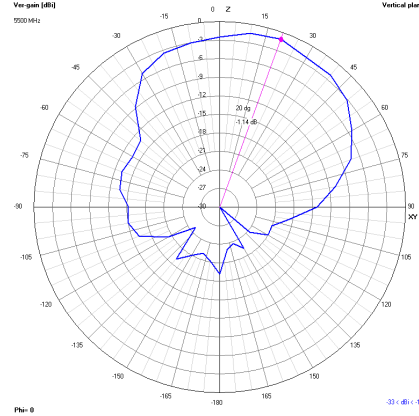
YZ



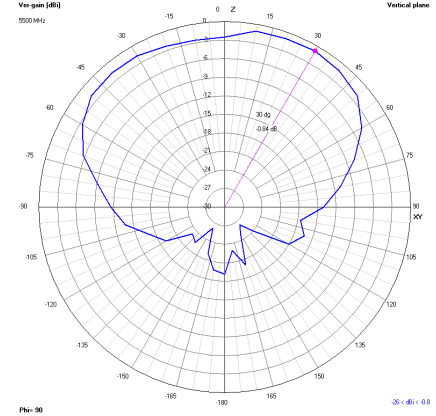
5500 MHz XY



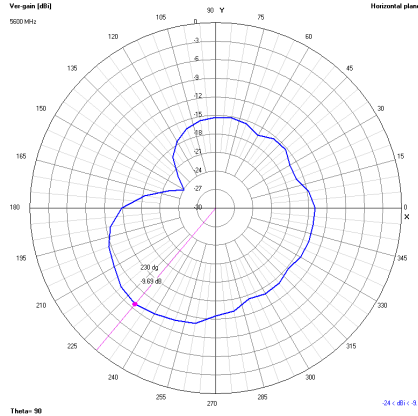
XZ



YZ



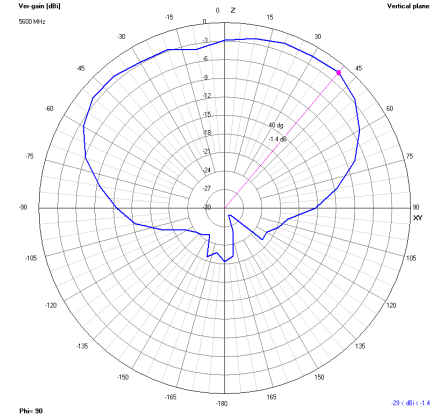
5600 MHz XY



XZ



YZ



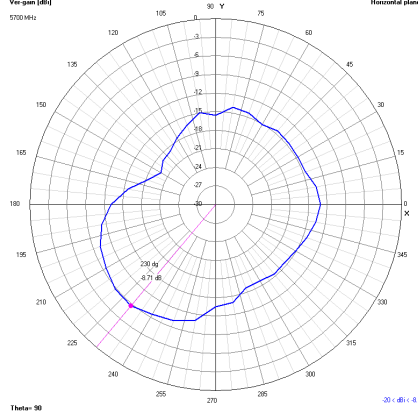


Tango 24

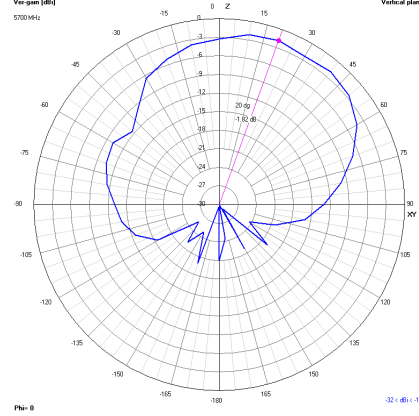
DUAL BAND WIFI 2.4/5.8 GHZ WITH LTE BANDS THROUGH HOLE MOUNT ANTENNA

Radiation Plots tested with 1 m cable

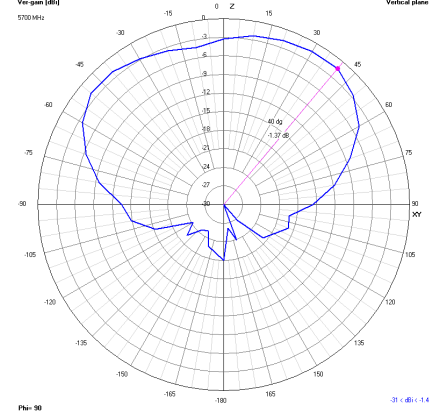
5700 MHz XY



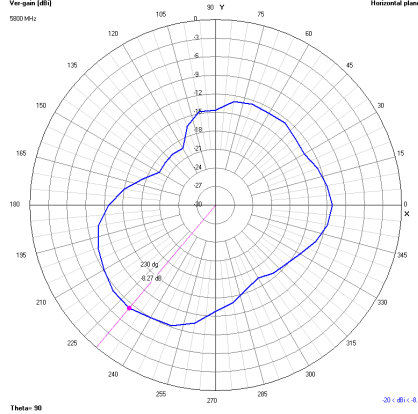
XZ



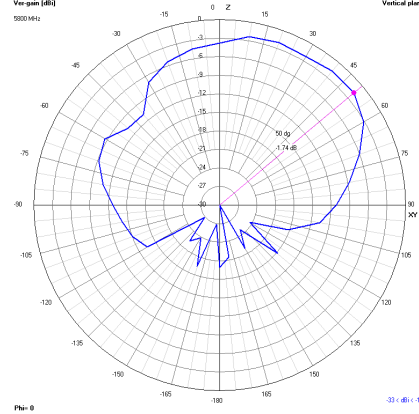
YZ



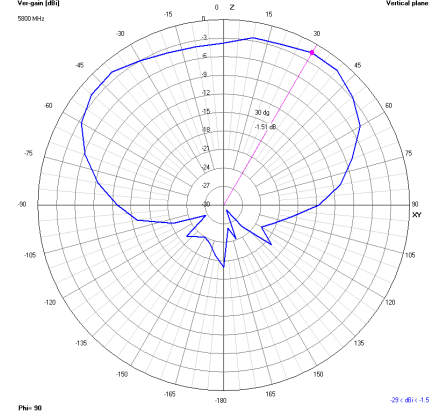
5800 MHz XY



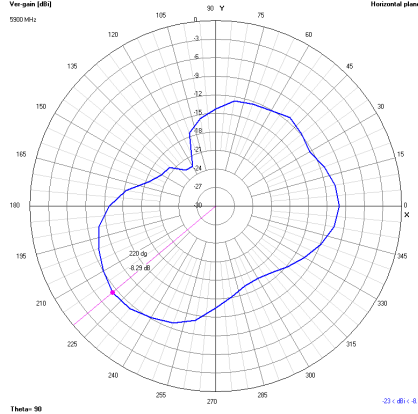
XZ



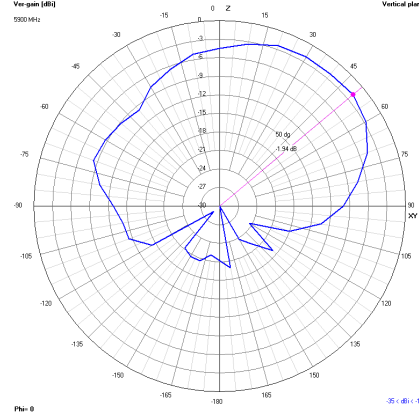
YZ



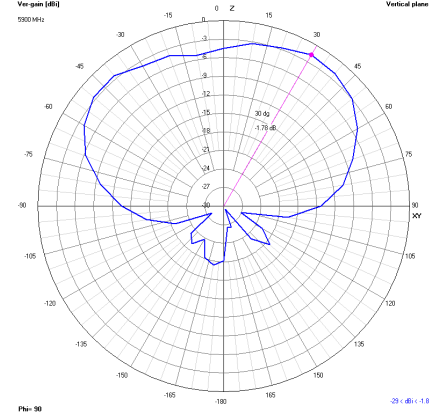
5900 MHz XY



XZ



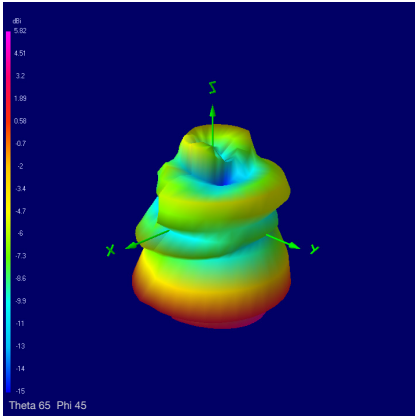
YZ



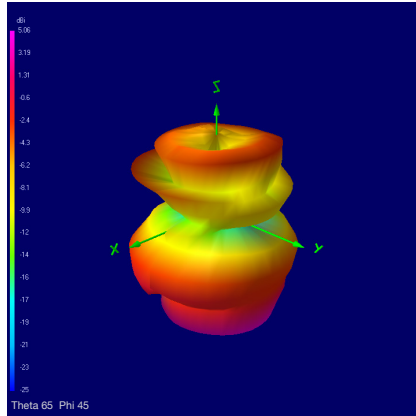


3D Radiation Plots tested with 1 m cable

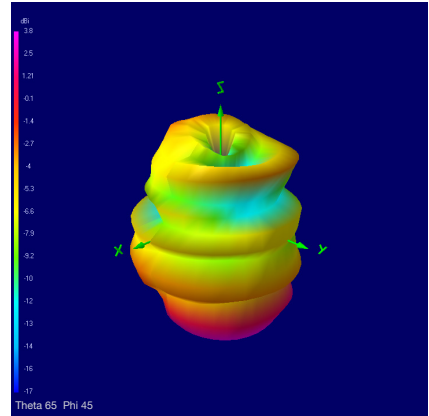
1400 MHz



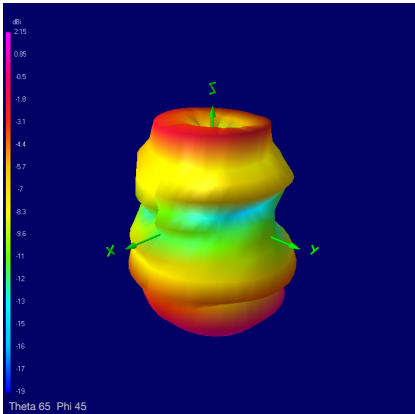
1500 MHz



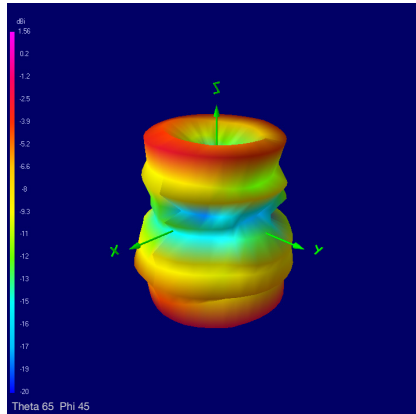
1600 MHz



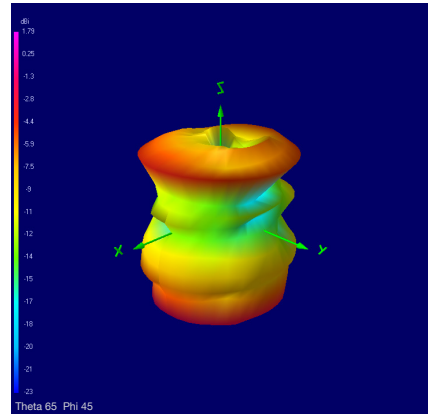
1700 MHz



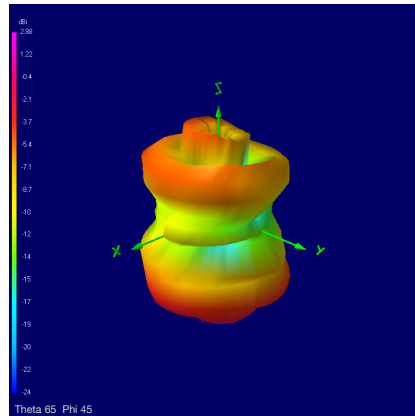
1800 MHz



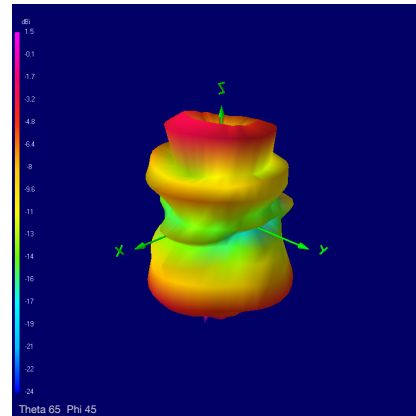
1900 MHz



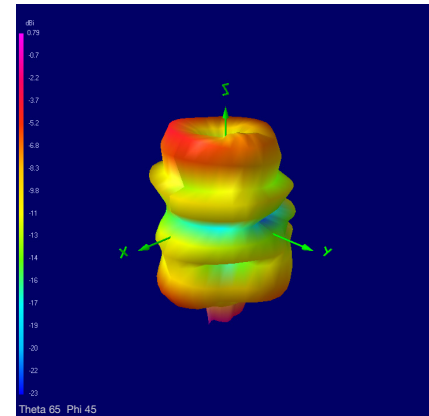
2000 MHz



2100 MHz



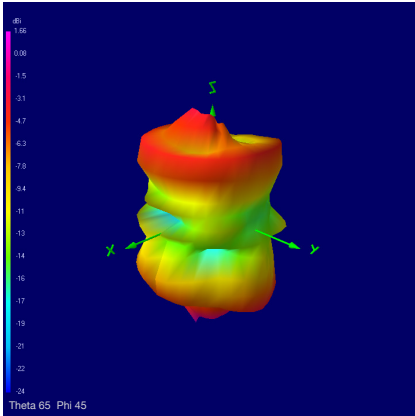
2200 MHz



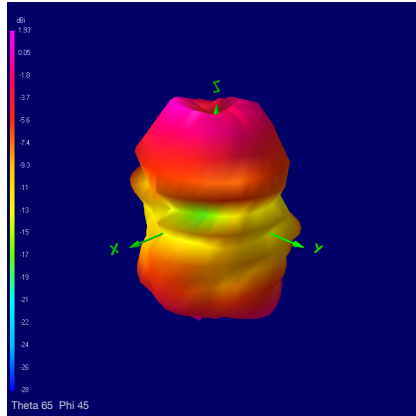


3D Radiation Plots tested with 1 m cable

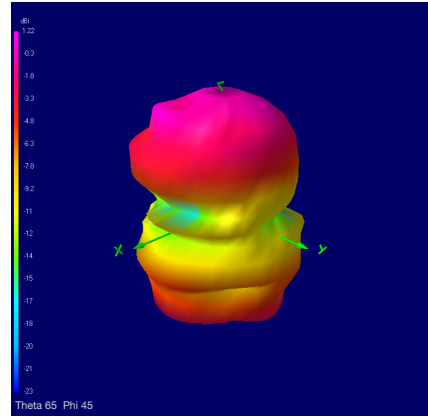
2400 MHz



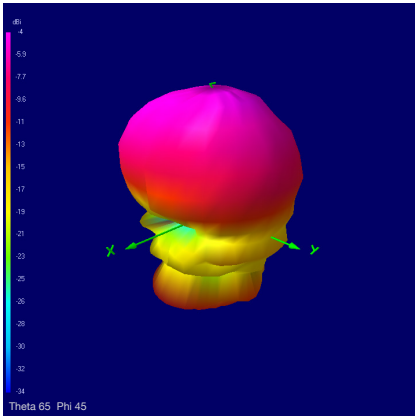
2500 MHz



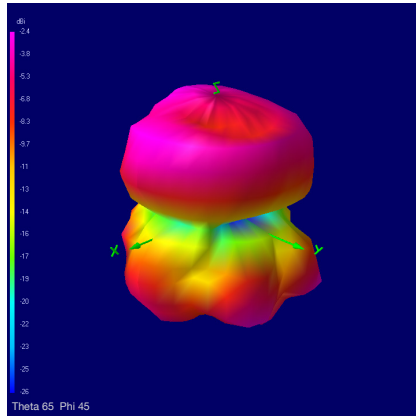
2600 MHz



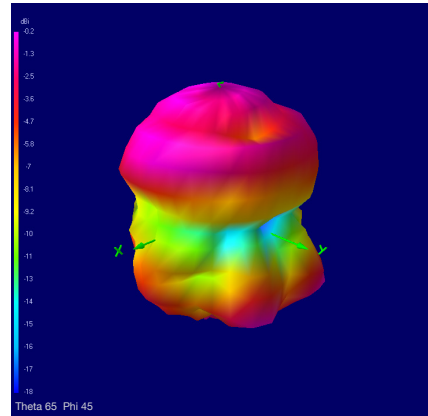
2700 MHz



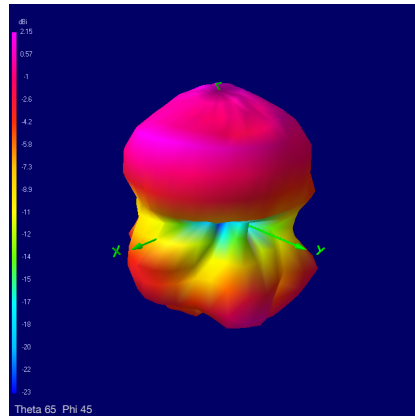
3500 MHz



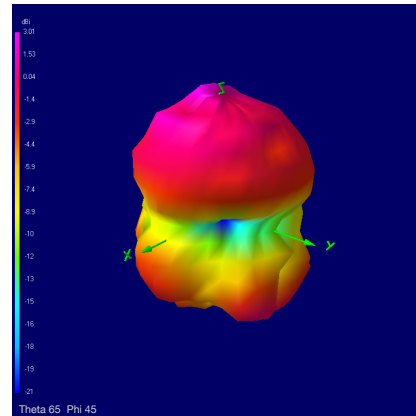
3600 MHz



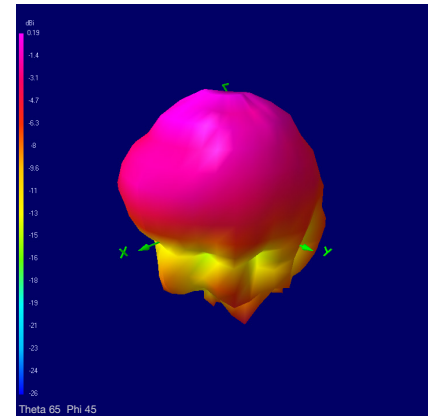
3700 MHz



3800 MHz



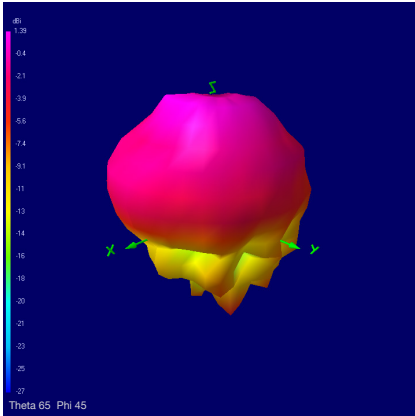
4400 MHz



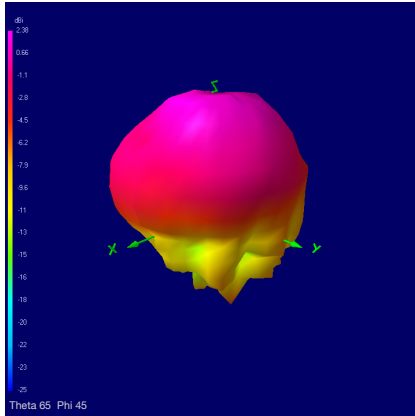


3D Radiation Plots tested with 1 m cable

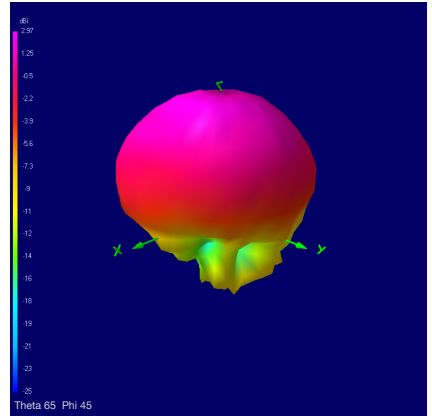
4500 MHz



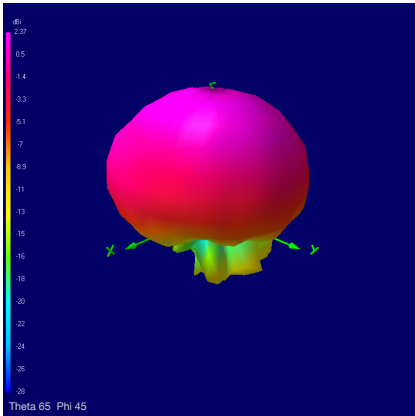
4600 MHz



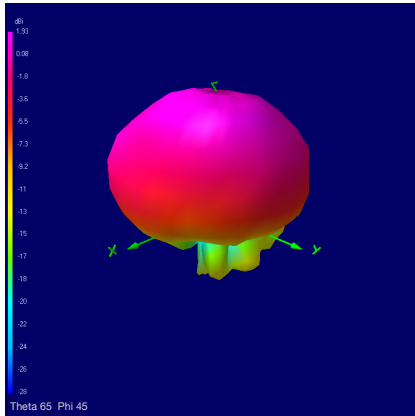
4700 MHz



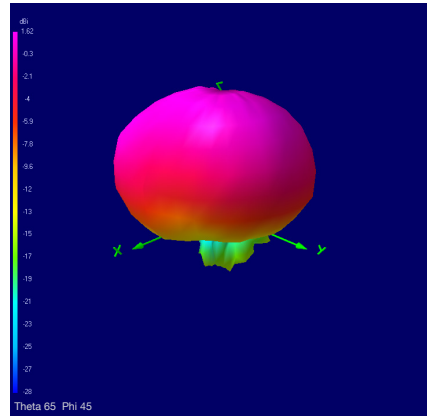
4800 MHz



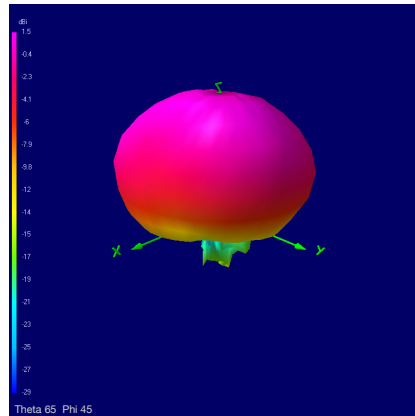
4900 MHz



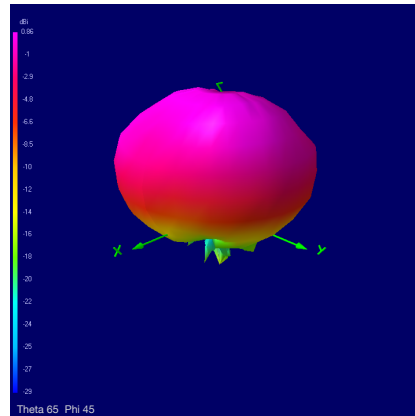
5000 MHz



5100 MHz



5200 MHz



5300 MHz

