

COMTELCO

Technical Specification

Y22248
Y222410

2400/2500 MHz YAGI

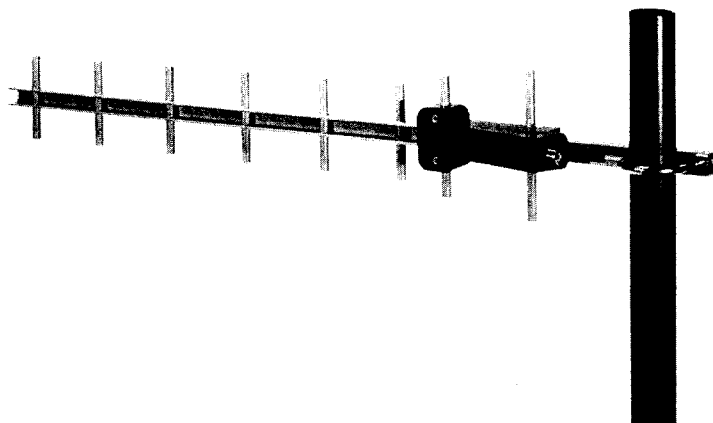
YAGI ANTENNA

High Performance: These 8 and 10 element yagi antennas provide 10.6dBd and 11.8dBd gain with wide band performance.

Rugged and Weatherproof: The construction of these standard duty yagis feature 1/2" aluminum U channel and 3/16" solid elements. All exposed areas are coated with UV polyester. The balun is sealed in an ABS housing.

Lightweight: This yagi antenna is easily installed by one person.

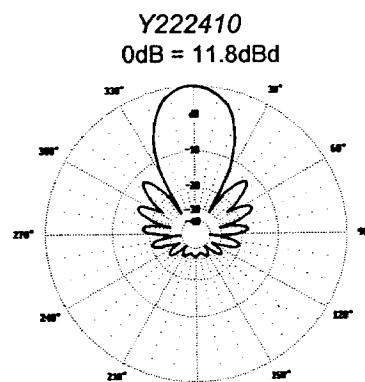
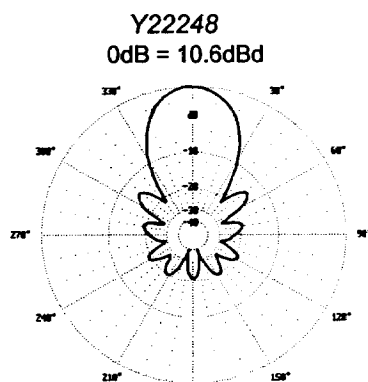
Termination: 12" Teflon pigtail with N Female.



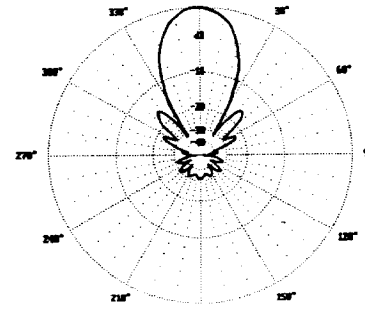
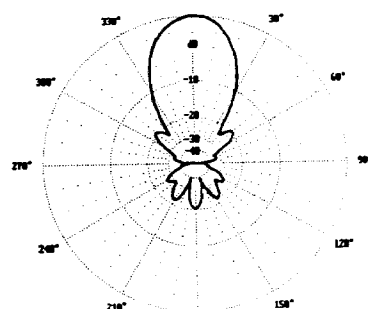
SPECIFICATIONS

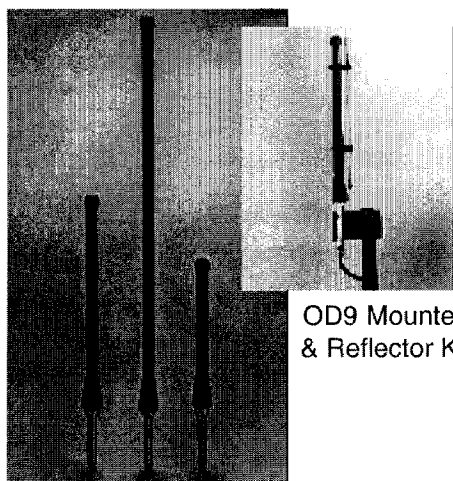
MATERIAL:	1/2" aluminum U channel boom 3/16" solid elements	
FINISH:	UV inhibited polyester coat	
WEIGHT:	<2 lbs.	
LENGTH:	Y22248	Y222410
	18"	21"
MOUNTING:	1 5/8" mast maximum	
WIND SURVIVAL:	100 MPH +	
FREQUENCY:	2400-2500MHz @ <2.0:1 VSWR	
POWER RATING:	150 watts	

Horizontal
Radiation
Patterns



Vertical
Radiation
Patterns





OD9 Mounted & Reflector Kit

OD9, OD12, OD6 Shown

OD Series Omni Antenna

For WLAN, Video, PCS, and Data Systems

- 3 dBi, 6 dBi, 9 dBi & 12 dBi antennas provide uniform omni coverage
- Unique design allows economical build out
- Mounting kit includes all hardware needed
- Reflector option provides directional beamshaping & increased performance

The OD Series Antennas are optimized for use in a wide variety of wireless systems. Typical uses include WLAN access points or bridge, PCS Microcell, WLL and surveillance transmitters.

These antennas consist of a collinear array with elements stacked vertically. Unique phasing cancels out-of-phase current distribution, improving system performance. This design maintains an omni pattern in the horizontal plane. The OD Series are free space antennas; no ground plane is required.

An option for the OD series is a reflector kit that beam shapes the omni pattern into a directional cardioid shape. This can result in improved directional gain, and isolation for reduced interference.

The low profile black radome (1" diameter) makes the antennas durable and rugged. They can withstand the harshest environments of snow, wind, rain and ice. The feed assembly is made of precision machined aluminum components and is irridited for weather protection. The antennas comes with all the hardware needed to install it to a mast. The OD antennas normally terminate with a female N connector. Optional models include pigtail cable

with connector. For ISM, Part 15 compliant connectors are available (reverse polarized), please consult factory.

Model Numbers

Model	Freq.(MHz)	Gain	Applications
OD6-1800	1700-1900	6 dBi	PCN, Surveillance
OD9-1800	1700-1900	9 dBi	PCN, Surveillance
OD6-1900	1850-1990	6 dBi	PCS, CDMA/TDMA
OD9-1900	1850-1990	9 dBi	PCS, CDMA/TDMA
OD3-2400	2400-2485	3 dBi	WLAN, ISM, Video
OD6-2400	2400-2485	6 dBi	WLAN, ISM, Video
OD9-2400	2400-2485	9 dBi	WLAN, ISM, Video
OD12-2400	2400-2485	12 dBi	WLAN, ISM, Video

Frequencies subject to bandwidth constraints; confirm desired frequencies at time of order. For pigtail cable options and special frequencies, please consult factory for latest model numbers and configurations.

Reflector Options

Reflector Options	Model
Add-on kit for 6 dBi models	ODR6-Kit
Add-on kit for 9 dBi models	ODR9-Kit
Add-on kit for 12 dBi models	ODR12-Kit

Specifications

Frequency & Gain:	See above	Material:	Polycarbonate radome, aluminum feed
Bandwidth @2:1 SWR:	140 MHz, 85 MHz for OD12	Length/Weight:	
Nominal Impedance:	50 ohms	3 dBi Models	16 inches, 1.5 lbs
Max. Power (continuous):	100 watts	6 dBi Models	19 inches, 1.5 lbs
Vertical Beamwidth (-3 dB point):		9 dBi Models	27 inches, 2.0 lbs
3 dBi Model	55 degrees	12 dBi Model	41 inches, 2.5 lbs
6 dBi Models	25 degrees	Antenna Diameter:	1", main mast
9 dBi Models	14 degrees	OD Series Interface:	N female connector
12 dBi Model	7 degrees	Mounting Kit:	Mast mount kit included
Wind Loading (flat plate equiv.):	30-40 sq. inches	Mounting Dimensions:	Use mast up to 2" OD
Rated Wind Velocity:	100+ mph	Options:	Reflector Option Kit
Lightning Protection:	External suggested		Pigtail Cable Option
			Part 15 Reverse Connectors

MOBILE MARK®
COMMUNICATIONS ANTENNAS

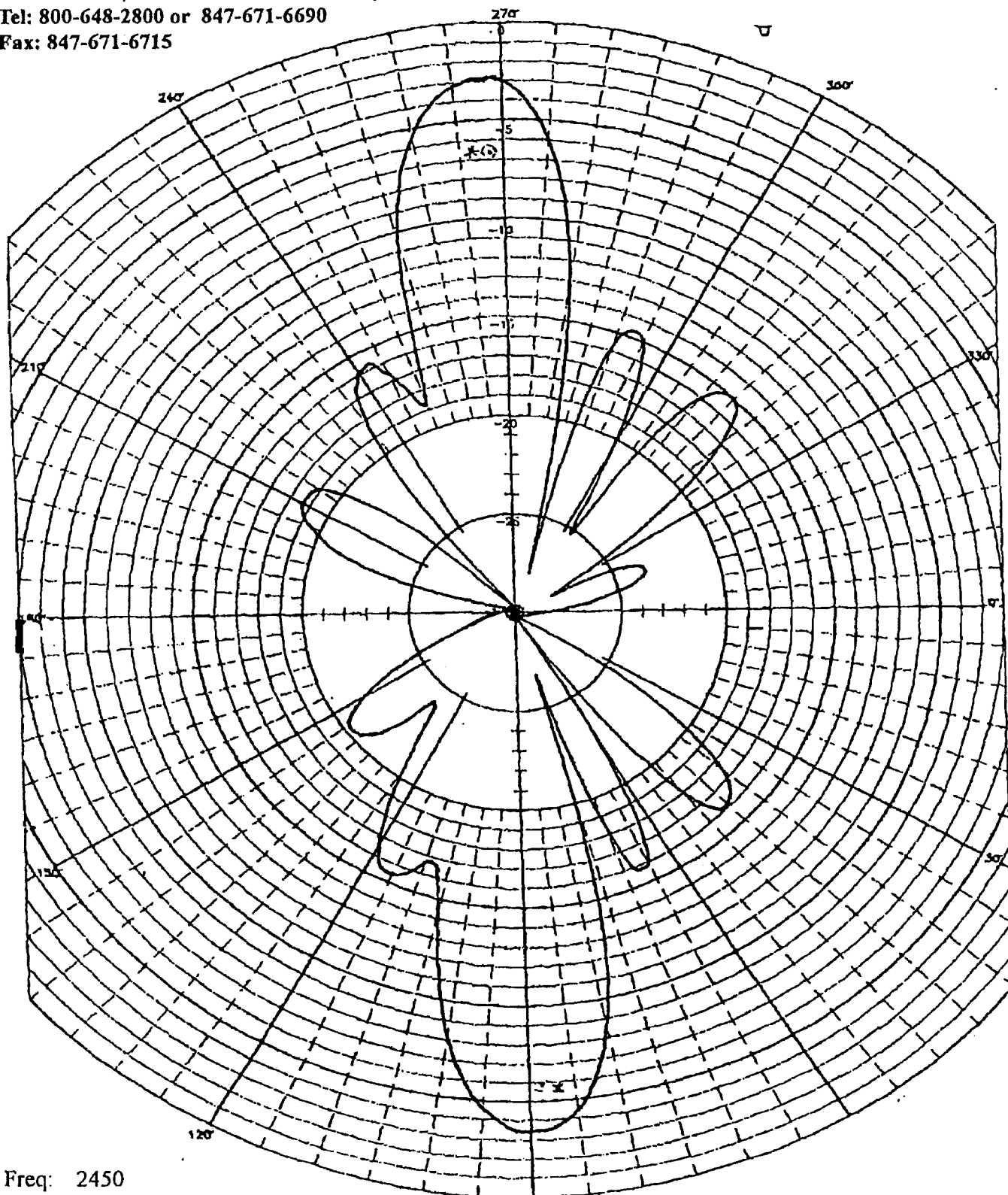
Engineer:JP Date:8-13-98

3900-B River Road

Schiller Park, IL 60176

Tel: 800-648-2800 or 847-671-6690

Fax: 847-671-6715



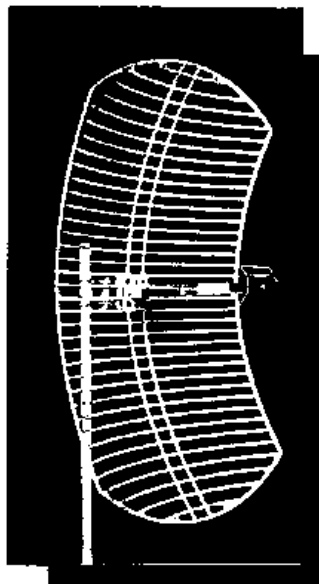
Freq: 2450
Pol: Vertical
Antenna: OD9

Az [] El [X]
File No: JP081304

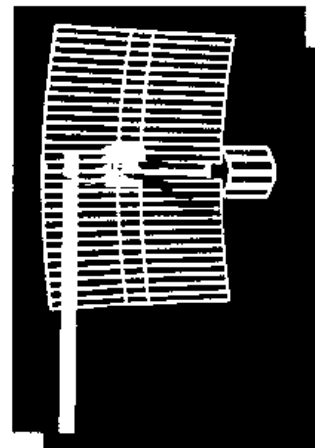
Wireless Antennas

For World-Wide Applications
WLAN/ISM
2.4 - 2.5 GHz*

MODEL
26T-2400*



MODEL
18T-2400*



*U.S. Patent 5,191,350

FEATURES

- Die-cast 18/26 manufacturing processes
- Magnesium Alloy is superior to anodized aluminum and weighs 33% less
- Low wind loading
- Manufactured with nonferrous materials; magnesium alloy, stainless steel and aluminum
- Compact packaging
- No mechanical adaptors required to mount the feed
- Five Year Limited Warranty

BENEFITS

- Consistent high performance from every antenna
- Lightest weight and most durable grid antennas
- Operational in most all weather environments
- No rust!
- Saves on shipping costs
- One feed fits both antennas
- Guaranteed reliability

CONIFER II*

WIRELESS TELECOMMUNICATION TECHNOLOGY

1400 N Roosevelt, Burlington, IA 52601

Phone 800-843-5419 (U.S.), 319-752-3607 (Int'l)

Fax 319-753-5508, email <conifer@conifercorp.com>



*Contact factory for other frequency options.

PERFORMANCE SPECIFICATIONS*

	MODEL 18T-2400	MODEL 26T-2400
Input Frequency	2400 - 2500 MHz	2400 - 2500 MHz
Gain	18 dBi	24 dBi
-3 dB Beam Width	14°	7.5°
Front to Back Ratio	>23 dB	>31 dB
Polarity	Dual	Dual
Cross Polarity Rejection	>23 dB	>26 dB
VSWR (Average)	1.3:1 @ 2400-2500 MHz	1.3:1 @ 2400-2500 MHz
Impedance @ Output	50 OHMS	50 OHMS
Connector "N" Type**	Male	Male
Coaxial Pigtail - RG8**	24 inches	24 inches
Input Power	50 Watts	50 Watts
Windloading		
@ 100 MPH	39.4 lbs.	97.0 lbs.
@ 140 MPH	77.9 lbs.	199.5 lbs.
Elevation Adjustment	60° in 10° Increments	60° in 10° Increments
Size	16 x 20 x 15 inches (40.64 x 50.80 x 38.10 cm)	23.5 x 39.25 x 15 inches (60.95 x 91.44 x 38.10 cm)
Weight	2.7 lbs. (1.22 Kg)	5.4 lbs. (2.43 Kg)
Reflector Material	Cast Magnesium Alloy	Cast Magnesium Alloy
Mounting Hardware	Stainless Steel	Stainless Steel
Mounting	1" - 2" O.D. Mast (2.54 - 5.08 cm)	1" - 2" O.D. Mast (2.54 - 5.08 cm)

*Specifications subject to change without notice.

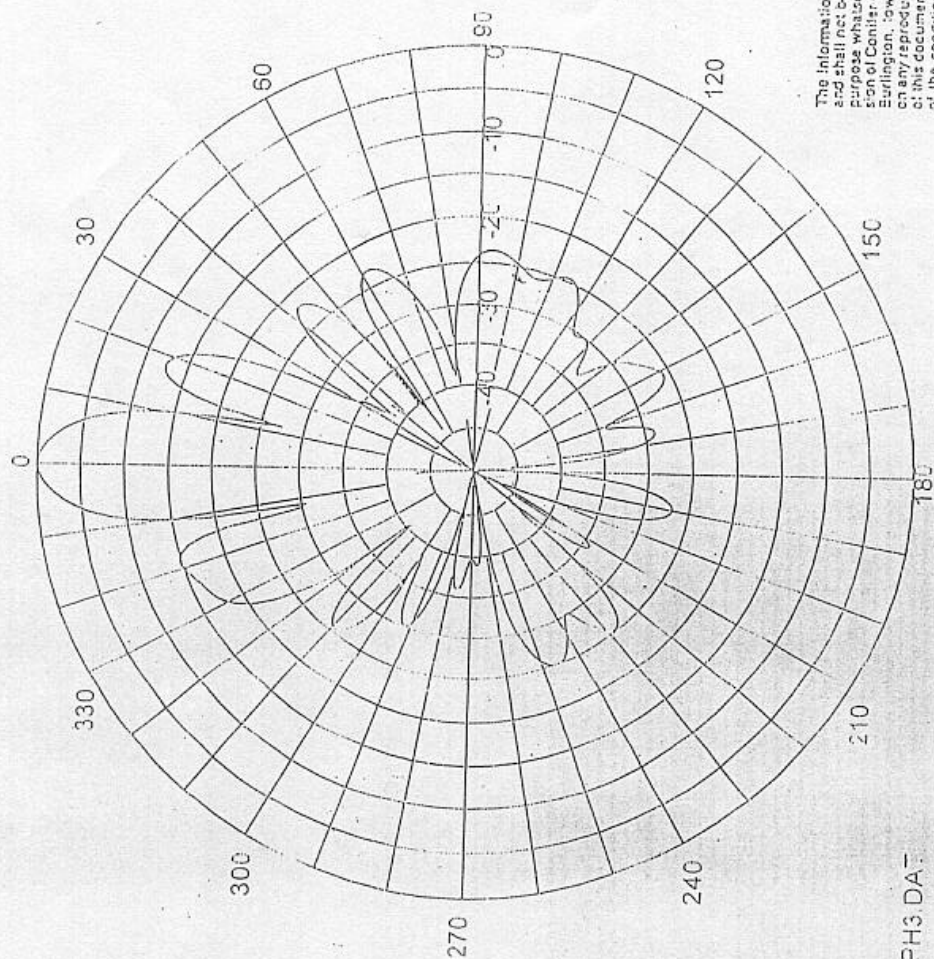
**Contact factory for other options.

MANUFACTURED IN BURLINGTON, IOWA

© CONIFER 1/95, 2/98

Conifer Corporation Polar Plotter

in = 22.98 dB
 quency = 2.5 GHz
 BW = 17.4 Deg.
 BW = 10 Deg.



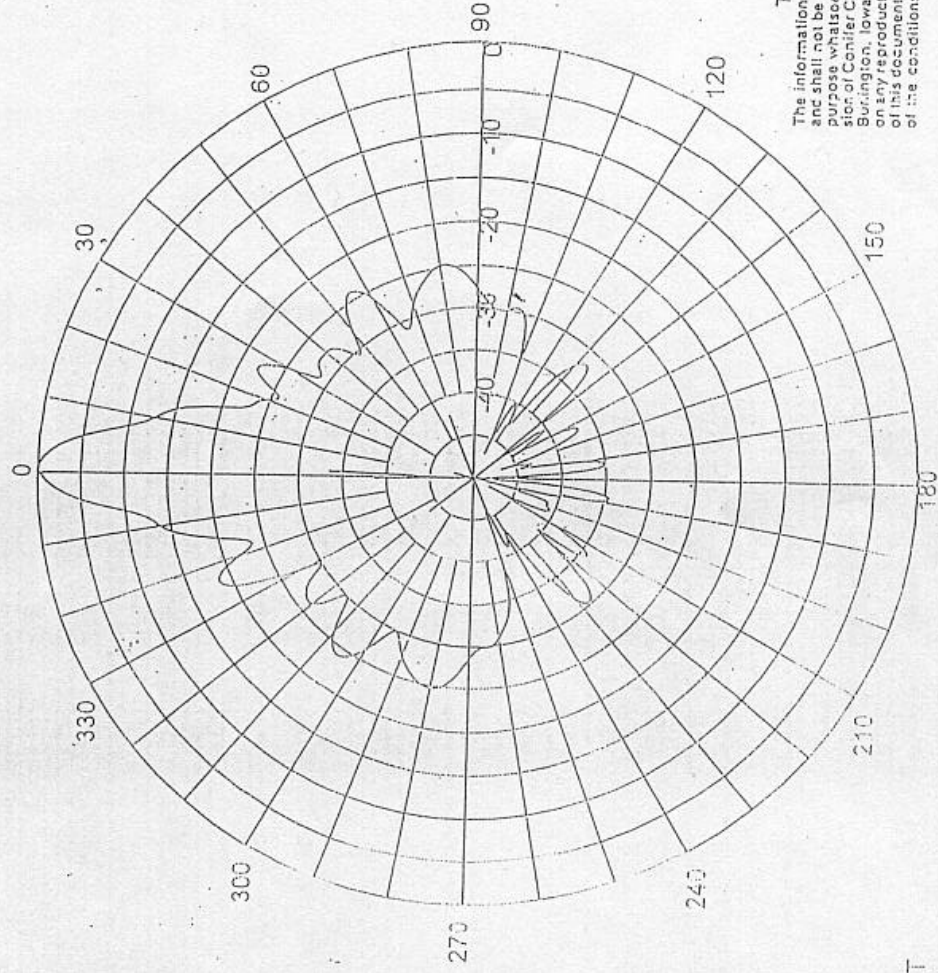
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Conifer Corporation Polar Plotter

= 23.43 dBi
 uency = 2.4 GHz
 : BW = 14.2 Deg.
 BW = 7.1 Deg.



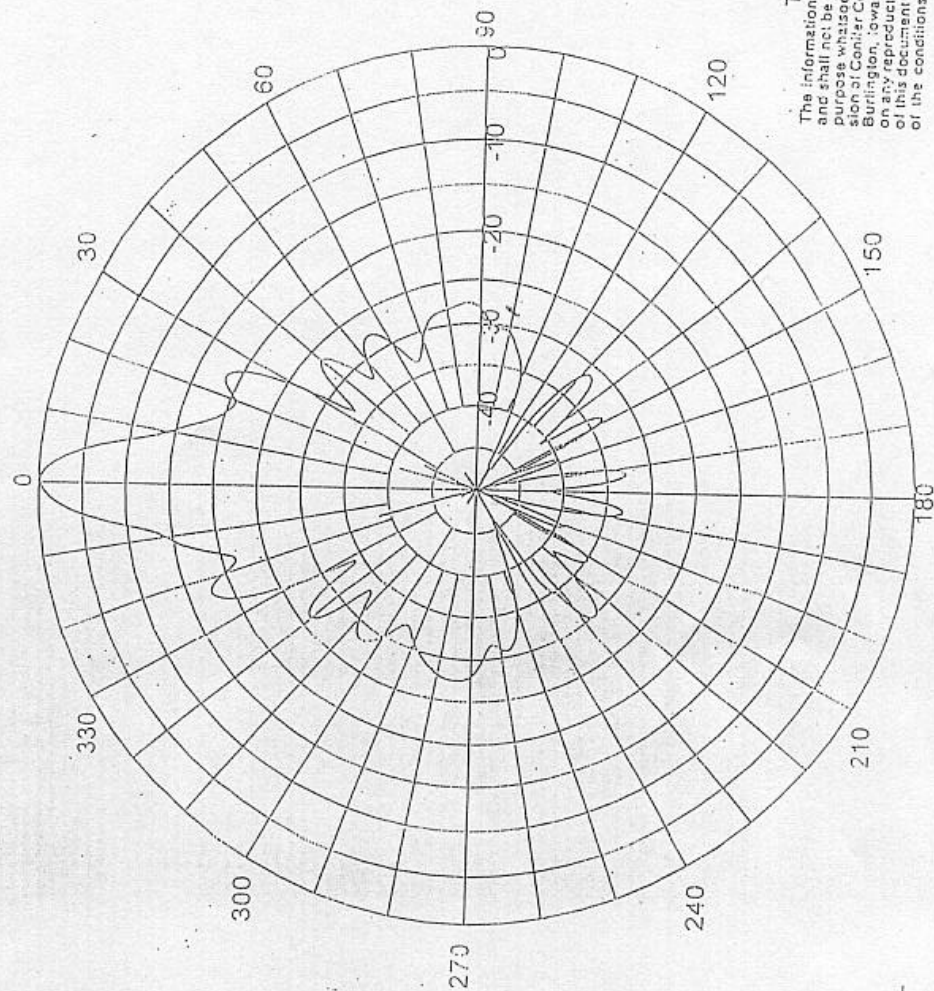
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 Ver. 26-2400 w/occf

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Conifer Corporation Polar Plotter

gain = 22.77 dBi
 frequency = 2.5 GHz
 xdB BW = 14.2 Deg.
 dB BW = 7.2 Deg.



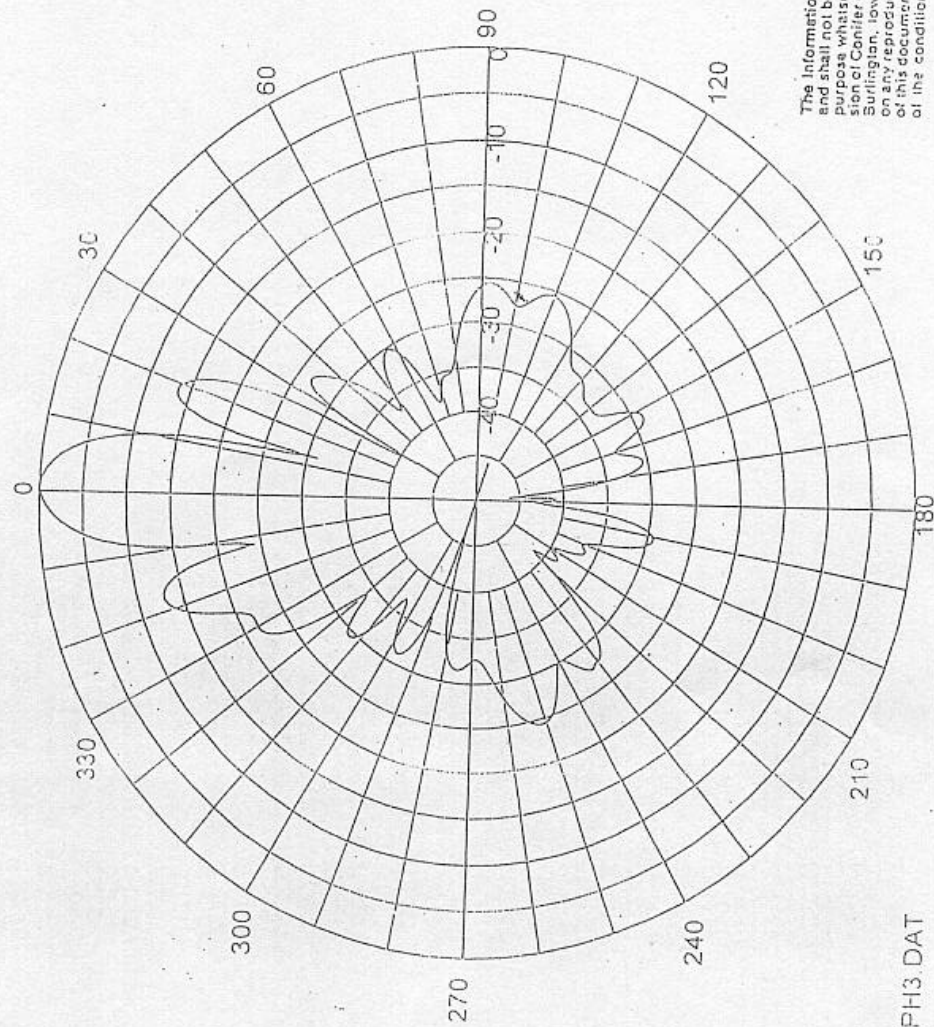
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Conifer Corporation Polar Plotter

In = 24.02 dBi
 quency = 2.4 GHz
 13.8W = 17.6 Deg.
 3.8W = 10 Deg.



Name = JARANGEI26HPFPH3.DAT
 Items: Horiz. 26T-2400 w/pcb fd

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