

## 2 Degree Antenna Statement

Re: 2.4 Meter Earth Station  
Fixed Satellite Service  
C-Band 5925 – 6425 MHz

Per §25.115(h)(4) the earth station applicant certifies that it will limit its pointing error to 0.5.

This antenna is a Prodelin 2.4 meter antenna and it does not strictly comply with 25.209 of the FCC Rules and Regulations. However, pursuant to Section 25.218 of the FCC Rules and Regulations an applicant may request routine processing of an application if it meets the applicable off-axis EIRP envelope.

The attached antenna patterns and corresponding table's present the data outlined in Section 25.218 and therefore the applicant request routine processing of this application.

The applicant agrees to accept any adjacent satellite interference in the 4 GHz receive band as a result of the performance of the antenna in the 1° to 1.5° region. The applicant understands that no adjacent satellite interference protection will be available in the 1° to 1.5° regions. The applicant understands that adjacent satellite interference protection applies only to the extent of the criteria set forth in §25.209.

### **Routine Licensing for Antennas with Low Power Densities**

Pursuant to §25.134 (a)(2)<sup>1</sup> of the Rules and Regulations ("Regulations") of the Federal Communications Commission ("Commission"), the operator of an antenna smaller than 4.5m in the 4/6 GHz frequency bands must demonstrate that unacceptable interference will not be caused to any and all affected adjacent satellites. The proposed antenna in this application is smaller than 4.5m. Hence, a demonstration that interference will not be caused to adjacent satellites is now presented.

### **Power Calculations**

Calculating the Maximum Total Input Power at the Antenna Flange as well as the Maximum EIRP Density per Carrier (E40, E48, and E49 of the application). The figures, as revised, are set forth below:

#### Power Calculations

Main Bean Gain	42.0 dBi	[field E41]
Total Input Power at Antenna Flange	5 watts	[field E38]
Max EIRP Density at Antenna Output	49.0 dBW	[field E40]

$5 \text{ watts} \log_{10} = 7$   
 $42 + 7 = 49.0 \text{ dBW}$

Maximum EIRP Density Per Carrier	31.9 dBW/4 KHz	[field E49]
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$31.9 - 42.0 = (-10.1) \text{ dBW/4KHz}$

Pursuant to §25.134(a) of the Regulations, the Maximum digital uplink transmitter power density at the antenna flange permitted is -2.7 dBW/4KHz. According to the calculations above, the proposed system is designed to operate with a maximum EIRP density at the antenna flange of -10.1 dBW/4KHz.

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<sup>1</sup> 47 C.F.R. 25.134 (a)(2).

Consequently, the system will operate with a power density below the maximum allowed by a margin of 7.4 dB.

The 2.4m antenna proposed with this system does not strictly comply with §25.209<sup>2</sup> of the Regulations (patterns attached as an exhibit to the application). However, pursuant to §25.220 (b-c)<sup>3</sup> of the Regulations<sup>4</sup>, an applicant may request the Commission to consider a non-compliant antenna if it can be shown that the operational power density will be below the requirement of §25.134. Specifically, the earth station operator must provide the power and power density levels that result by reducing the values stated in §25.134 by the number of decibels that the non-compliant antenna fails to meet the standards of §25.209.

In this case, the antenna exceeds the patterns of §25.209 in the 1° to 1.9° region measured at the low, mid, and high frequency bands. The Max EIRP Density at the Antenna Flange is -10.1 dBW/4KHz. This figure is below the maximum allowed power of -2.7 dBW/4KHz by a margin of 7.4 dB.

#### **Affidavits from Adjacent Satellite Operators**

In view of the new Section 25.220, affidavits from adjacent satellite operators are not necessarily required so long as the power density operates below the limits and such margin is enough to compensate for any power amount over the 2-degree compliance envelope of §25.209. Since the herein proposed system exhibits power density characteristics 7.4 dB below the limits set forth in §25.134, the provisions of 25.220 will apply.

Based on this information and the antenna patterns attached as an exhibit with this application, sufficient information has been provided to enable the Commission to grant this application for license.

#### **Summary**

The antenna pattern contained with this application exceeds the CFR 25.209 sidelobe specification for the sidelobe envelope in the  $\pm 1$  to 2.0 region. Outside the main beam, the antenna meets the requirements of 25.209.

The power density restrictions specified by the FCC for small diameter antennas utilizing digital traffic at C-Band is -2.7 dBW/4 kHz. This antenna will operate at a maximum transmit power density of -10.1 dBW/4 kHz.

If the use of this antenna should cause interference to other systems, the applicant will terminate such transmissions immediately upon notice from the FCC or offended parties.

There are currently no satellites located within 1.5° of the applicant's desired satellites.

Based on this information and the antenna patterns attached as an exhibit with this application, sufficient information has been provided to enable the Commission grant this application for license.

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<sup>2</sup> 47 C.F.R. 25.209.

<sup>3</sup> 47 C.F.R. 25.220 (b-c).

<sup>4</sup> *Amendment to Part 25 of the Commission's Rules and Regulations to Reduce Alien Carrier Interference Between Fixed Satellites at Reduced Orbital Spacings and to Revise Application Procedures for Satellite Communications Services*, Appendix B, Rule Changes, Fifth Report and Order, Docket No. 00-248, 20 F.C.C.R. 5666 (Released March 15, 2005).

25.115 C-Band Compliance Table		EIRP at 6.175 GHz	Worst Case - 4.2568040 9956018			Worst Case -2.3 dB		Worst Case -8.03 dB
Off-Axis Angle (deg.)	FCC Mask 25.218(d)(1) (dBW/4kHz z)	Geo Plane EIRP (dBW/4kHz z)	Difference Between EIRP Density and FCC Mask	FCC Mask 25.218(d)(2) (dBW/4kHz z)	Horizon Plane EIRP (dBW/4kHz z)	Difference Between EIRP Density and FCC Mask	Elevation Plane EIRP (dBW/4kHz z)	Difference Between EIRP Density and FCC Mask
-180	-12.7	-30.0	-17.3	-12.7	-31.0	-18.3		
-175	-12.7	-26.0	-13.3	-12.7	-25.0	-12.3		
-170	-12.7	-23.0	-10.3	-12.7	-24.0	-11.3		
-165	-12.7	-20.0	-7.3	-12.7	-21.0	-8.3		
-160	-12.7	-18.0	-5.3	-12.7	-19.0	-6.3		
-155	-12.7	-20.0	-7.3	-12.7	-17.0	-4.3		
-150	-12.7	-22.0	-9.3	-12.7	-15.0	-2.3		
-145	-12.7	-18.0	-5.3	-12.7	-16.5	-3.8		
-140	-12.7	-20.0	-7.3	-12.7	-18.0	-5.3		
-135	-12.7	-21.0	-8.3	-12.7	-19.0	-6.3		
-130	-12.7	-22.0	-9.3	-12.7	-18.0	-5.3		
-125	-12.7	-21.0	-8.3	-12.7	-19.0	-6.3		
-120	-12.7	-25.0	-12.3	-12.7	-21.0	-8.3		
-115	-12.7	-28.0	-15.3	-12.7	-30.0	-17.3		
-110	-12.7	-30.0	-17.3	-12.7	-31.0	-18.3		
-105	-12.7	-30.0	-17.3	-12.7	-31.0	-18.3		
-100	-12.7	-33.0	-20.3	-12.7	-30.0	-17.3		
-95	-12.7	-32.0	-19.3	-12.7	-33.0	-20.3		
-90	-12.7	-30.0	-17.3	-12.7	-30.0	-17.3		
-85	-12.7	-30.0	-17.3	-12.7	-30.0	-17.3		
-80	-12.7	-30.0	-17.3	-12.7	-31.0	-18.3		
-75	-12.7	-31.0	-18.3	-12.7	-28.0	-15.3		
-70	-12.7	-30.0	-17.3	-12.7	-32.0	-19.3		
-65	-12.7	-32.0	-19.3	-12.7	-33.0	-20.3		
-60	-12.7	-30.0	-17.3	-12.7	-34.0	-21.3		
-55	-12.7	-30.0	-17.3	-12.7	-30.0	-17.3		
-50	-12.7	-33.0	-20.3	-12.7	-30.0	-17.3		
-48	-12.7			-12.7				
-45	-12.0	-19.0	-7.0	-12.0	-20.0	-8.0		
-40	-10.8	-20.0	-9.2	-10.8	-22.0	-11.2		
-35	-9.3	-24.0	-14.7	-9.3	-25.0	-15.7		
-30	-7.6	-26.0	-18.4	-7.6	-29.0	-21.4		
-25	-5.6	-31.0	-25.4	-5.6	-30.0	-24.4		
-20	-3.2	-23.0	-19.8	-3.2	-24.0	-20.8		
-15	-0.1	-18.0	-17.9	-0.1	-20.0	-19.9		
-10	4.3	-15.0	-19.3	4.3	-15.0	-19.3		
-9.9	4.4	-17.0	-21.4	4.4	-15.0	-19.4		
-9.8	4.5	-18.0	-22.5	4.5	-17.0	-21.5		
-9.7	4.6	-21.0	-25.6	4.6	-20.0	-24.6		
-9.6	4.7	-25.0	-29.7	4.7	-22.0	-26.7		
-9.5	4.9	-27.0	-31.9	4.9	-25.0	-29.9		

-9.4	5.0	-24.0	-29.0	5.0	-24.0	-29.0		
-9.3	5.1	-21.0	-26.1	5.1	-22.0	-27.1		
-9.2	5.3	-19.0	-24.3	5.2	-20.0	-25.2		
-9.1	5.3	-18.0	-23.3	5.3	-16.0	-21.3		
-9	5.3	-14.0	-19.3	5.4	-13.0	-18.4	-9.3	-14.7
-8.9	5.3	-13.0	-18.3	5.6	-12.5	-18.1	-9.9	-15.4
-8.8	5.3	-12.0	-17.3	5.7	-11.0	-16.7	-10.4	-16.1
-8.7	5.3	-11.5	-16.8	5.8	-10.0	-15.8	-11.2	-17.0
-8.6	5.3	-11.2	-16.5	5.9	-9.5	-15.4	-12.0	-17.9
-8.5	5.3	-18.0	-23.3	6.1	-9.0	-15.1	-13.3	-19.4
-8.4	5.3	-16.0	-21.3	6.2	-8.5	-14.7	-13.7	-19.8
-8.3	5.3	-14.0	-19.3	6.3	-8.0	-14.3	-14.0	-20.3
-8.2	5.3	-12.0	-17.3	6.5	-8.5	-15.0	-13.0	-19.4
-8.1	5.3	-10.0	-15.3	6.6	-9.0	-15.6	-12.6	-19.2
-8	5.3	-8.0	-13.3	6.7	-10.0	-16.7	-11.2	-17.9
-7.9	5.3	-7.0	-12.3	6.9	-6.0	-12.9	-10.5	-17.3
-7.8	5.3	-10.0	-15.3	7.0	-18.0	-25.0	-9.9	-16.9
-7.7	5.3	-12.0	-17.3	7.1	-17.0	-24.1	-9.5	-16.6
-7.6	5.3	-16.0	-21.3	7.3	-15.0	-22.3	-9.3	-16.6
-7.5	5.3	-18.0	-23.3	7.4	-14.0	-21.4	-8.6	-16.1
-7.4	5.3	-19.0	-24.3	7.6	-13.0	-20.6	-7.7	-15.3
-7.3	5.3	-20.0	-25.3	7.7	-12.5	-20.2	-6.8	-14.5
-7.2	5.3	-21.5	-26.8	7.9	-12.0	-19.9	-5.8	-13.7
-7.1	5.3	-23.0	-28.3	8.0	-10.0	-18.0	-4.4	-12.4
-7.0	5.2	-24.0	-29.2	8.2	-8.0	-16.2	-3.7	-11.8
-6.9	5.3	-21.0	-26.3	8.3	-8.5	-16.8	-2.8	-11.1
-6.8	5.5	-18.0	-23.5	8.5	-9.0	-17.5	-2.5	-10.9
-6.7	5.6	-17.0	-22.6	8.6	-10.0	-18.6	-2.3	-10.9
-6.6	5.8	-13.0	-18.8	8.8	-9.0	-17.8	-2.6	-11.4
-6.5	6.0	-10.0	-16.0	9.0	-8.0	-17.0	-3.2	-12.2
-6.4	6.1	-10.5	-16.6	9.1	-10.0	-19.1	-4.7	-13.9
-6.3	6.3	-11.0	-17.3	9.3	-13.0	-22.3	-6.5	-15.8
-6.2	6.5	-11.5	-18.0	9.5	-15.0	-24.5	-10.0	-19.5
-6.1	6.7	-11.0	-17.7	9.7	-17.5	-27.2	-17.3	-27.0
-6.0	6.8	-12.0	-18.8	9.8	-16.0	-25.8	-25.6	-35.4
-5.9	7.0	-14.0	-21.0	10.0	-14.0	-24.0	-13.1	-23.1
-5.8	7.2	-12.0	-19.2	10.2	-12.5	-22.7	-8.9	-19.2
-5.7	7.4	-8.9	-16.3	10.4	-12.0	-22.4	-6.5	-16.9
-5.6	7.6	-8.0	-15.6	10.6	-10.0	-20.6	-5.3	-15.9
-5.5	7.8	-15.0	-22.8	10.8	-8.0	-18.8	-4.9	-15.7
-5.4	8.0	-16.0	-24.0	11.0	-7.5	-18.5	-4.8	-15.8
-5.3	8.2	-16.5	-24.7	11.2	-7.0	-18.2	-5.2	-16.4
-5.2	8.4	-17.0	-25.4	11.4	-7.8	-19.2	-5.4	-16.8
-5.1	8.6	-18.0	-26.6	11.6	-8.2	-19.8	-6.4	-18.0
-5.0	8.8	-20.0	-28.8	11.8	-8.0	-19.8	-7.1	-18.9
-4.9	9.0	-15.0	-24.0	12.0	-10.0	-22.0	-7.0	-19.1
-4.8	9.3	-10.0	-19.3	12.3	-11.0	-23.3	-5.4	-17.7
-4.7	9.5	-8.0	-17.5	12.5	-13.0	-25.5	-3.9	-16.4
-4.6	9.7	-5.0	-14.7	12.7	-11.0	-23.7	-2.1	-14.8
-4.5	10.0	-1.0	-11.0	13.0	-5.0	-18.0	-0.9	-13.9
-4.4	10.2	-2.0	-12.2	13.2	-4.0	-17.2	-0.1	-13.3
-4.3	10.5	-2.5	-13.0	13.5	-3.5	-17.0	0.3	-13.1

-4.2	10.7	-3.0	-13.7	13.7	-2.0	-15.7	0.2	-13.5
-4.1	11.0	-3.5	-14.5	14.0	-2.5	-16.5	-0.1	-14.1
-4.0	11.2	-4.0	-15.2	14.2	-3.0	-17.2	-1.1	-15.3
-3.9	11.5	-8.0	-19.5	14.5	-5.0	-19.5	-2.8	-17.4
-3.8	11.8	-10.0	-21.8	14.8	-7.0	-21.8	-5.1	-19.9
-3.7	12.1	-20.0	-32.1	15.1	-9.0	-24.1	-7.5	-22.6
-3.6	12.4	-12.0	-24.4	15.4	-8.0	-23.4	-13.2	-28.6
-3.5	12.7	-6.0	-18.7	15.7	-5.0	-20.7	-27.9	-43.6
-3.4	13.0	-1.0	-14.0	16.0	-4.0	-20.0	-14.3	-30.4
-3.3	13.3	-1.0	-14.3	16.3	-3.0	-19.3	-8.8	-25.2
-3.2	13.7	-2.0	-15.7	16.7	-2.0	-18.7	-5.6	-22.3
-3.1	14.0	-1.0	-15.0	17.0	-2.5	-19.5	-3.5	-20.5
-3.0	14.4	-2.0	-16.4	17.4	-3.0	-20.4	-1.8	-19.2
-2.9	14.7	-5.0	-19.7		-10.0			
-2.8	15.1	-15.0	-30.1		-17.0			
-2.7	15.5	-21.0	-36.5		-6.0			
-2.6	15.9	-10.0	-25.9		-10.0			
-2.5	16.4	-3.0	-19.4		2.0			
-2.4	16.8	4.0	-12.8		5.0			
-2.3	17.3	13.0	-4.3		6.0			
-2.2	17.7	6.0	-11.7		7.0			
-2.1	18.2	5.0	-13.2		6.0			
-2.0	18.8	6.0	-12.8		7.0			
-1.9	19.3	5.5	-13.8		8.0			
-1.8	19.9	5.0	-14.9		7.0			
-1.7	20.5	4.0	-16.5		7.0			
-1.6	21.2	9.0	-12.2		8.0			
-1.5	21.9	13.0	-8.9		13.0			
-1.4		15.0			15.0			
-1.3		18.0			18.0			
-1.2		20.0			20.0			
-1.1		22.0			22.0			
-1.0		24.0			24.0			
-0.9		25.0			25.0			
-0.8		26.5			26.5			
-0.7		27.5			27.5			
-0.6		28.7			28.7			
-0.5		29.5			29.5			
-0.4		30.5			30.5			
-0.3		30.6			30.6			
-0.2		31.0			31.0			
-0.1		31.5			31.5			
0.0		32.0			32.0			
0.1		31.5			31.5			
0.2		31.0			31.0			
0.3		30.6			30.6			
0.4		30.5			30.5			
0.5		29.5			29.5			
0.6		28.7			28.7			
0.7		27.5			27.5			
0.8		26.5			26.5			
0.9		25.0			25.0			

1.0		24.0			24.0			
1.1		22.0			22.0			
1.2		20.0			20.0			
1.3		17.0			18.0			
1.4		15.0			15.0			
1.5	21.9	12.0	-9.9		14.0			
1.6	21.2	10.0	-11.2		10.0			
1.7	20.5	5.0	-15.5		8.0			
1.8	19.9	8.5	-11.4		8.5			
1.9	19.3	8.0	-11.3		9.0			
2.0	18.8	7.0	-11.8		10.0			
2.1	18.2	7.0	-11.2		11.0			
2.2	17.7	5.0	-12.7		11.5			
2.3	17.3	4.0	-13.3		3.0			
2.4	16.8	2.5	-14.3		4.0			
2.5	16.4	1.0	-15.4		0.0			
2.6	15.9	-4.0	-19.9		-4.5			
2.7	15.5	-13.0	-28.5		-10.0			
2.8	15.1	-4.0	-19.1		0.0			
2.9	14.7	-2.0	-16.7		-1.5			
3.0	14.4	0.0	-14.4	17.4	-3.0	-20.4	0.8	-16.6
3.1	14.0	0.0	-14.0	17.0	-4.0	-21.0	-2.3	-19.3
3.2	13.7	-2.2	-15.9	16.7	-5.0	-21.7	-5.2	-21.9
3.3	13.3	0.0	-13.3	16.3	-6.0	-22.3	-10.2	-26.5
3.4	13.0	-3.0	-16.0	16.0	-8.0	-24.0	-15.7	-31.8
3.5	12.7	-5.0	-17.7	15.7	-10.0	-25.7	-13.0	-28.7
3.6	12.4	-10.0	-22.4	15.4	-15.0	-30.4	-7.2	-22.6
3.7	12.1	-16.0	-28.1	15.1	-20.0	-35.1	-4.1	-19.2
3.8	11.8	-10.0	-21.8	14.8	-2.0	-16.8	-2.0	-16.8
3.9	11.5	-0.3	-11.8	14.5	-4.0	-18.5	-0.7	-15.2
4.0	11.2	-8.0	-19.2	14.2	-8.0	-22.2	0.0	-14.2
4.1	11.0	-6.5	-17.5	14.0	-7.5	-21.5	0.5	-13.4
4.2	10.7	-5.5	-16.2	13.7	-7.0	-20.7	0.7	-13.0
4.3	10.5	-4.0	-14.5	13.5	-6.5	-20.0	0.5	-13.0
4.4	10.2	1.0	-9.2	13.2	-6.0	-19.2	-0.3	-13.5
4.5	10.0	-10.0	-20.0	13.0	-5.0	-18.0	-1.8	-14.7
4.6	9.7	-12.0	-21.7	12.7	-7.0	-19.7	-3.5	-16.2
4.7	9.5	-15.0	-24.5	12.5	-10.0	-22.5	-6.4	-18.9
4.8	9.3	-14.0	-23.3	12.3	-8.0	-20.3	-8.5	-20.7
4.9	9.0	-13.0	-22.0	12.0	-6.5	-18.5	-9.0	-21.0
5.0	8.8	-11.0	-19.8	11.8	-6.0	-17.8	-7.8	-19.6
5.1	8.6	-8.0	-16.6	11.6	-5.0	-16.6	-6.1	-17.7
5.2	8.4	-5.0	-13.4	11.4	-4.5	-15.9	-5.3	-16.6
5.3	8.2	-5.0	-13.2	11.2	-4.0	-15.2	-4.8	-16.0
5.4	8.0	-6.0	-14.0	11.0	-3.5	-14.5	-5.3	-16.3
5.5	7.8	-7.0	-14.8	10.8	-3.0	-13.8	-5.8	-16.6
5.6	7.6	-7.5	-15.1	10.6	-6.5	-17.1	-7.9	-18.5
5.7	7.4	-8.0	-15.4	10.4	-9.0	-19.4	-11.3	-21.7
5.8	7.2	-8.3	-15.5	10.2	-10.0	-20.2	-18.7	-29.0
5.9	7.0	-9.0	-16.0	10.0	-11.0	-21.0	-22.8	-32.9
6.0	6.8	-10.0	-16.8	9.8	-15.0	-24.8	-13.3	-23.1
6.1	6.7	-10.0	-16.7	9.7	-14.0	-23.7	-9.6	-19.3

6.2	6.5	-11.0	-17.5	9.5	-13.0	-22.5	-7.5	-17.0
6.3	6.3	-12.0	-18.3	9.3	-12.0	-21.3	-5.9	-15.2
6.4	6.1	-11.0	-17.1	9.1	-11.0	-20.1	-4.8	-13.9
6.5	6.0	-10.0	-16.0	9.0	-10.0	-19.0	-4.3	-13.3
6.6	5.8	-11.5	-17.3	8.8	-12.0	-20.8	-4.2	-13.0
6.7	5.6	-13.0	-18.6	8.6	-14.0	-22.6	-4.4	-13.0
6.8	5.5	-14.0	-19.5	8.5	-16.0	-24.5	-4.9	-13.4
6.9	5.3	-18.0	-23.3	8.3	-17.0	-25.3	-5.3	-13.7
7.0	5.2	-26.0	-31.2	8.2	-18.0	-26.2	-5.5	-13.6
7.1	5.3	-23.0	-28.3	8.0	-16.0	-24.0	-5.4	-13.5
7.2	5.3	-19.0	-24.3	7.9	-15.0	-22.9	-5.1	-13.0
7.3	5.3	-17.0	-22.3	7.7	-14.0	-21.7	-4.6	-12.3
7.4	5.3	-16.0	-21.3	7.6	-13.0	-20.6	-3.9	-11.5
7.5	5.3	-15.0	-20.3	7.4	-12.0	-19.4	-3.6	-11.1
7.6	5.3	-14.0	-19.3	7.3	-11.0	-18.3	-3.5	-10.8
7.7	5.3	-13.0	-18.3	7.1	-10.0	-17.1	-3.9	-11.0
7.8	5.3	-11.0	-16.3	7.0	-11.0	-18.0	-4.4	-11.3
7.9	5.3	-10.0	-15.3	6.9	-12.0	-18.9	-4.9	-11.8
8.0	5.3	-8.0	-13.3	6.7	-13.0	-19.7	-5.4	-12.1
8.1	5.3	-15.0	-20.3	6.6	-14.0	-20.6	-6.7	-13.3
8.2	5.3	-17.0	-22.3	6.5	-14.5	-21.0	-8.5	-15.0
8.3	5.3	-18.0	-23.3	6.3	-15.0	-21.3	-11.2	-17.5
8.4	5.3	-23.0	-28.3	6.2	-16.5	-22.7	-14.6	-20.8
8.5	5.3	-25.0	-30.3	6.1	-18.0	-24.1	-20.8	-26.9
8.6	5.3	-22.0	-27.3	5.9	-17.0	-22.9	-24.1	-30.1
8.7	5.3	-19.0	-24.3	5.8	-16.0	-21.8	-18.6	-24.4
8.8	5.3	-17.0	-22.3	5.7	-15.0	-20.7	-15.9	-21.6
8.9	5.3	-15.0	-20.3	5.6	-14.5	-20.1	-14.5	-20.0
9.0	5.3	-13.0	-18.3	5.4	-14.0	-19.4	-14.3	-19.7
9.1	5.3	-14.2	-19.5	5.3	-14.2	-19.5	-14.7	-20.0
9.2	5.3	-15.4	-20.7	5.2	-14.4	-19.6	-15.1	-20.3
9.3	5.1	-16.6	-21.7	5.1	-14.6	-19.7	-15.0	-20.1
9.4	5.0	-14.2	-19.2	5.0	-14.8	-19.8	-14.2	-19.2
9.5	4.9	-12.8	-17.7	4.9	-16.0	-20.9	-12.2	-17.1
9.6	4.7	-12.8	-17.5	4.7	-17.0	-21.7	-11.3	-16.1
9.7	4.6	-11.4	-16.0	4.6	-18.0	-22.6	-9.9	-14.5
9.8	4.5	-10.0	-14.5	4.5	-16.5	-21.0	-9.0	-13.5
9.9	4.4	-8.6	-13.0	4.4	-15.0	-19.4	-8.4	-12.8
10.0	4.3	-13.0	-17.3	4.3	-14.0	-18.3	-8.1	-12.4
15.0	-0.1	-17.0	-16.9	-0.1	-18.0	-17.9	-14.5	-14.4
20.0	-3.2	-24.0	-20.8	-3.2	-25.0	-21.8	-15.4	-12.2
25.0	-5.6	-19.0	-13.4	-5.6	-29.0	-23.4	-28.5	-22.8
30.0	-7.6	-22.0	-14.4	-7.6	-28.0	-20.4	-15.7	-8.0
35.0	-9.3	-19.0	-9.7	-9.3	-26.0	-16.7	-28.5	-19.1
40.0	-10.8	-20.0	-9.2	-10.8	-23.0	-12.2	-26.8	-16.0
45.0	-12.0	-18.0	-6.0	-12.0	-19.0	-7.0		
48	-12.7			-12.7				
50.0	-12.7	-32.0	-19.3	-12.7	-28.0	-15.3		
55.0	-12.7	-31.0	-18.3	-12.7	-30.0	-17.3		
60.0	-12.7	-32.0	-19.3	-12.7	-31.0	-18.3		
65.0	-12.7	-30.0	-17.3	-12.7	-32.0	-19.3		
70.0	-12.7	-33.0	-20.3	-12.7	-32.0	-19.3		

75.0	-12.7	-30.0	-17.3	-12.7	-33.0	-20.3		
80.0	-12.7	-32.0	-19.3	-12.7	-31.0	-18.3		
85.0	-12.7	-33.0	-20.3	-12.7	-30.0	-17.3		
90.0	-12.7	-30.0	-17.3	-12.7	-33.0	-20.3		
95.0	-12.7	-29.0	-16.3	-12.7	-32.0	-19.3		
100.0	-12.7	-30.0	-17.3	-12.7	-31.0	-18.3		
105.0	-12.7	-31.0	-18.3	-12.7	-30.0	-17.3		
110.0	-12.7	-32.0	-19.3	-12.7	-28.0	-15.3		
115.0	-12.7	-32.0	-19.3	-12.7	-28.0	-15.3		
120.0	-12.7	-29.0	-16.3	-12.7	-25.0	-12.3		
125.0	-12.7	-24.0	-11.3	-12.7	-30.0	-17.3		
130.0	-12.7	-22.0	-9.3	-12.7	-19.0	-6.3		
135.0	-12.7	-20.0	-7.3	-12.7	-18.5	-5.8		
140.0	-12.7	-19.0	-6.3	-12.7	-18.6	-5.9		
145.0	-12.7	-18.5	-5.8	-12.7	-21.6	-8.9		
150.0	-12.7	-18.0	-5.3	-12.7	-21.3	-8.6		
155.0	-12.7	-18.0	-5.3	-12.7	-24.4	-11.7		
160.0	-12.7	-18.0	-5.3	-12.7	-24.8	-12.1		
165.0	-12.7	-18.5	-5.8	-12.7	-23.8	-11.1		
170.0	-12.7	-19.0	-6.3	-12.7	-22.0	-9.3		
175.0	-12.7	-24.0	-11.3	-12.7	-23.5	-10.8		
180.0	-12.7	-30.0	-17.3	-12.7	-30.0	-17.3		



Frequency : 5.845 GHz

Prodelin 2.4M 4-Pc  
Receive / Transmit  
Offset Antenna System  
C-Band Linear

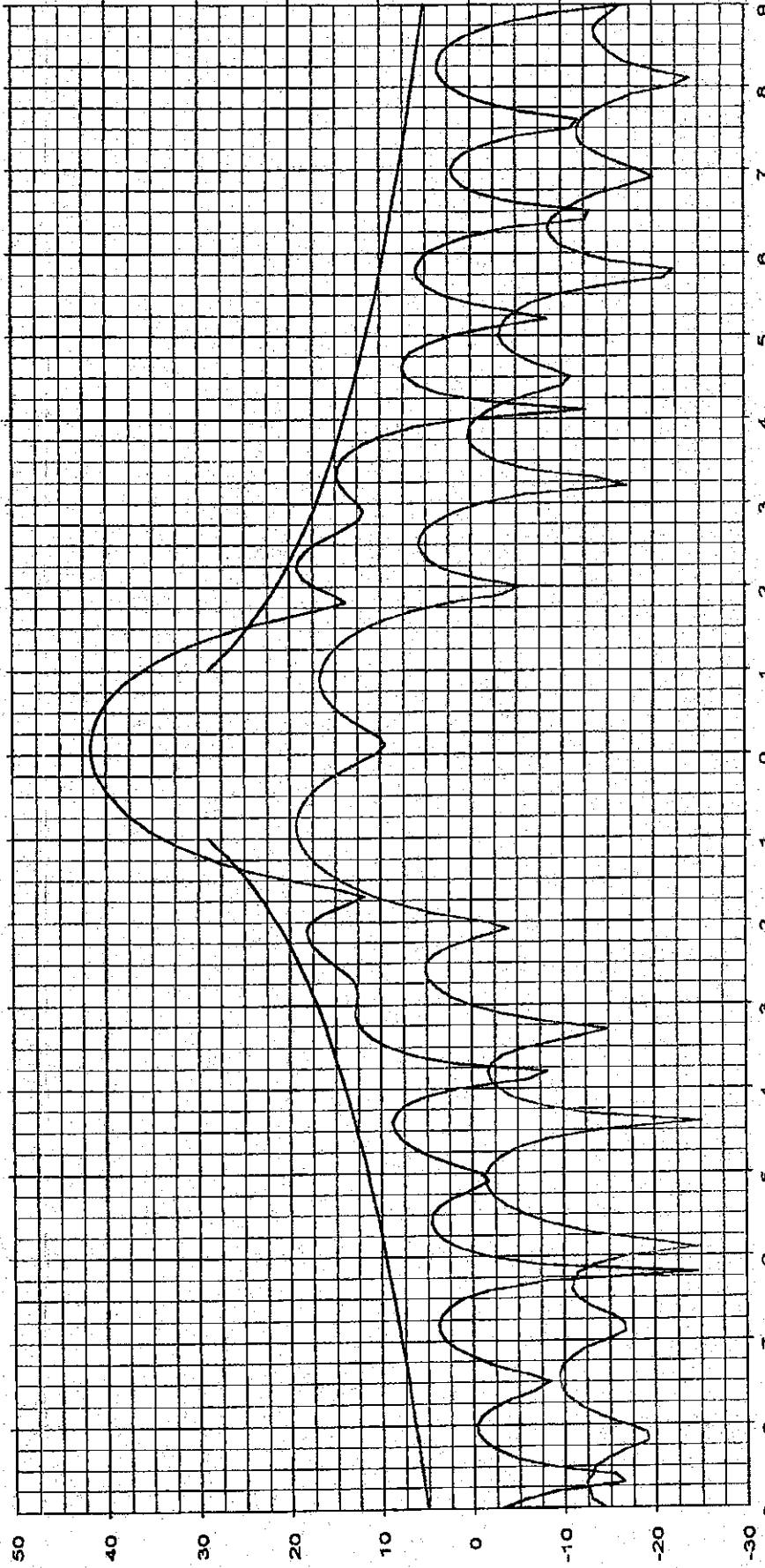
Operator: Ken Poovey

Ser. no.:

Channel: test

Tx pol: Vert.

Rx pol: Vert.



Sidlobe Envelope: 29-25Log(Theta)~100Lamdc/D to 20 Deg  
 -3.5dBi~20 to 26.3 Deg | 32-25Log(Theta)~26.3 to 48 Deg  
 -10 dBi~48 to 180 Deg

Overlays  
 064532.DAT-ant\_under\_test  
 064536.DAT-ant\_under\_test

Cal. file	units
064532.DAT	dBi
064536.DAT	dBi

Azimuth (Deg)

Beam Peak	
Deg	dB
0.10	41.64
-0.80	19.28

Frequency : 4.200 GHz

Prodelin 2.4M 4-Pc  
Receive / Transmit  
Offset Antenna System  
C-Band Linear

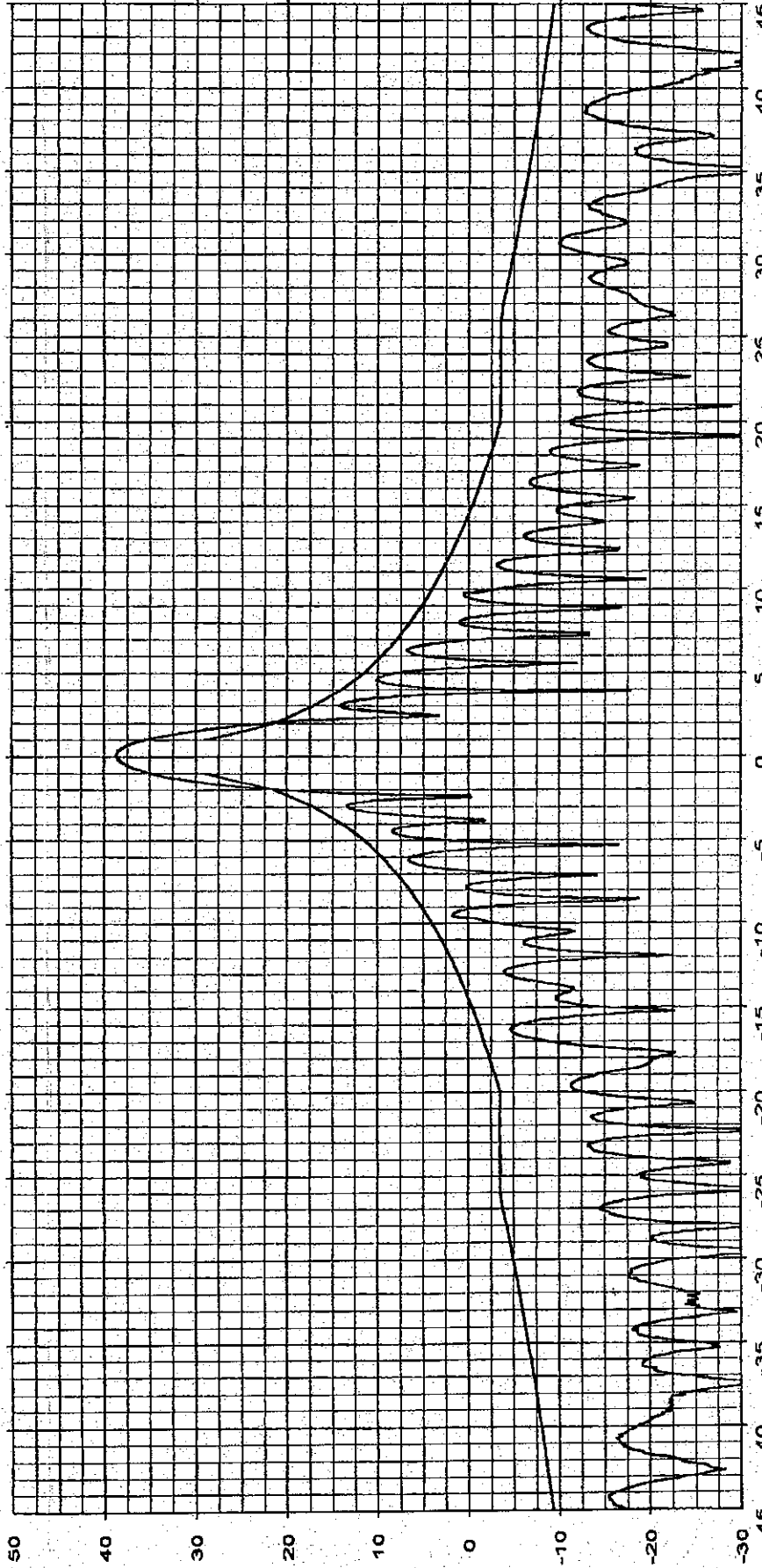
Operator: Ken Poovey

Ser. no.:

Channel: test

Tx pol: Horiz.

Rx pol: Horiz.



Sidelobe Envelope: 29-25Log(Theta)~100Lomda/D to 20 Deg  
 -3.5dBi~20 to 26.3 Deg | 32-25Log(Theta)~26.3 to 48 Deg  
 ~10 dBi~48 to 180 Deg

Azimuth (Deg)

Beam Peak	
Deg	0.06
dB	38.63

Cal. file	units
064549.DAT_ant_under_test	dBi

Overlays

064549.DAT\_ant\_under\_test

Frequency : 3.950 GHz

File: See Legend  
Prodelin 2.4M 4-Pc  
Receive / Transmit  
Offset Antenna System  
C-Band Linear

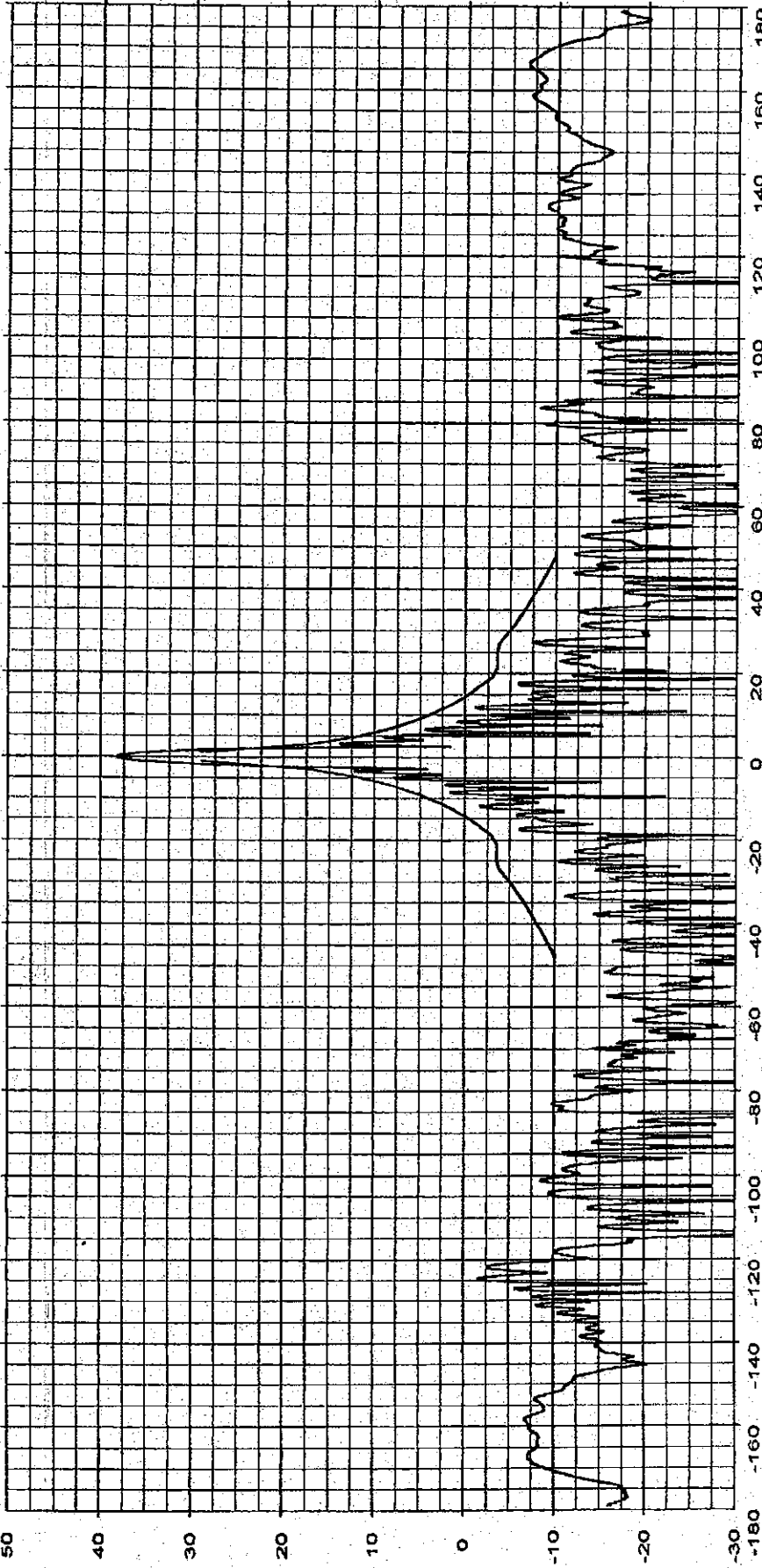
Operator: Ken Poovey

Ser. no.:

Channel: test

Tx pol: Vert.

Rx pol: Vert.



Sideloobe Envelope: 29-25Log(Theta)~100Lmdd/D to 20 Deg  
 -3.5dBi~-20 to 26.3 Deg | 32-25Log(Theta)~26.3 to 48 Deg  
 -10 dBi~48 to 180 Deg

Azimuth (Deg)

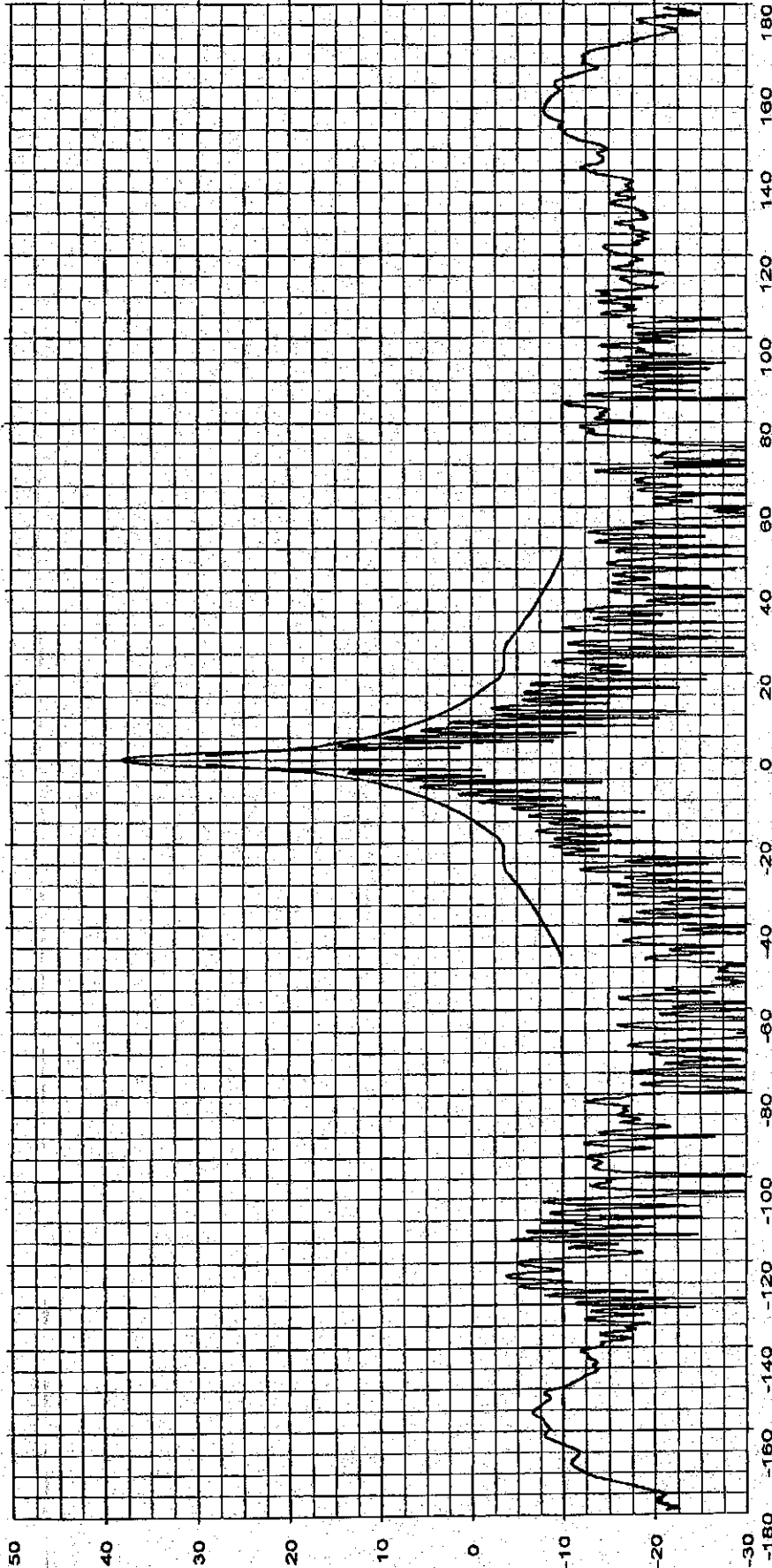
Overlays  
 064544.DAT-ant\_under\_test  
 Cal. file units  
 064544.DAT dBi  
 Beam Peak  
 Deg units  
 -0.13 38.10 dB

45/45

File: See Legend  
Operator: Ken Poovey  
Ser. no.:  
Channel: test

Frequency : 3.950 GHz

Tx pol: Horiz. Rx pol: Horiz.



Side-lobe Envelope: 29-25Log(Theta)~100Lmda/D to 20 Deg  
 -3.5dB~-20 to 26.3 Deg | 32-25Log(Theta)~26.3 to 48 Deg  
 -10 dB~-48 to 180 Deg

Azimuth (Deg)

Beam Peak  
 Deg 0.03 38.02

Overlays  
 064549.DAT-ant\_under\_test  
 Cal. file units  
 064549.DAT dBi

FAX NO. 828 466 0860

PRODELIN CORP.

JUL-08-1999 THU 02:02 PM

Prodelin Corporation  
 Riverbend at Range  
 Cl. nont NC

Frequency : 3.700 GHz

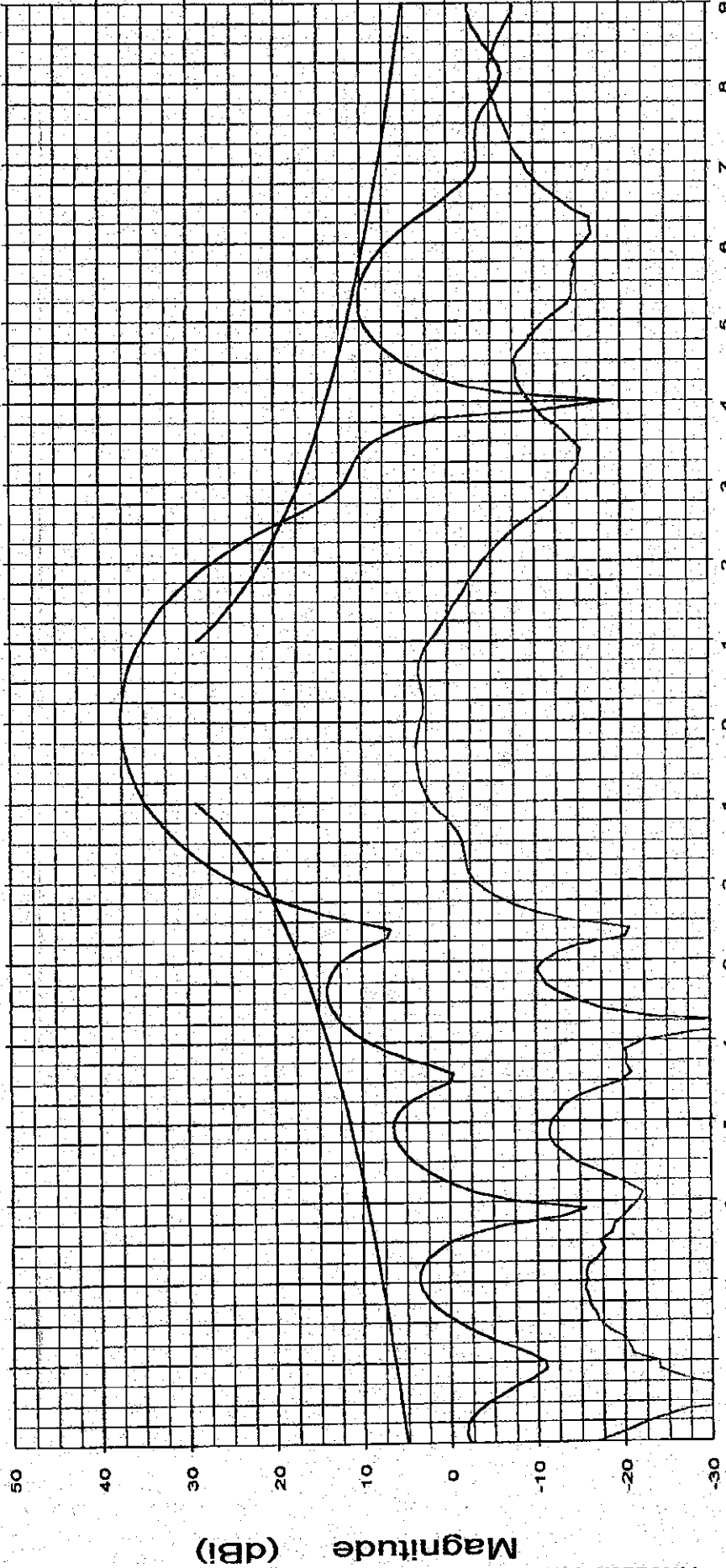
Prodelin 2.4M 4-Pc  
Receive / Transmit  
Offset Antenna System  
C-Band Linear

File: See Legend

Operator: Ken Poovey

ser. no.:

Channel: test Tx pol: Horiz. Rx pol: Horiz.



SideLobe Envelope: 29~-25Log(Theta)~100Lambda/D to 20 Deg  
 -3.5dBi~-20 to 26.3 Deg | 32~-25Log(Theta)~26.3 to 48 Deg  
 -10 dBi~48 to 180 Deg

Elevation (Deg)

Beam Peak	
Deg	dB
0.00	37.52
-0.30	3.64

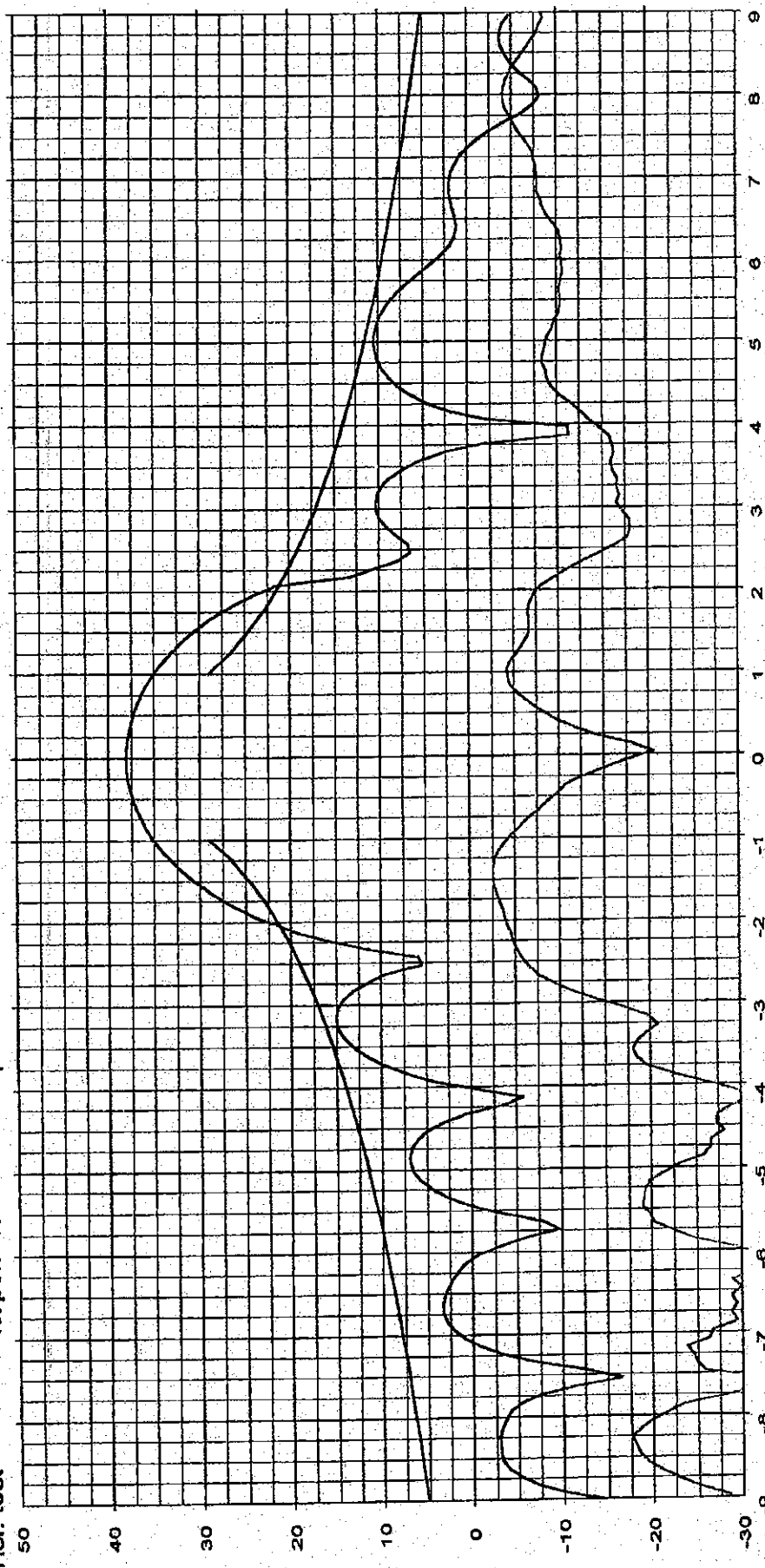
Overlays	Cal. file	units
064551.DAT-ant_under_test	064551.DAT	dBi
064553.DAT-ant_under_test	064553.DAT	dBi

Frequency : 3.950 GHz

Prodelin 2.4M 4-Pc  
Receive / Transmit  
Offset Antenna System  
C-Band Linear

Operator: Ken Poovey

Tx pol: Horiz. Rx pol: Horiz.



Sideloobe Envelope: 29-25Log(Theta)~100Lqmdc/D to 20 Deg  
-3.5dBi~-20 to 26.3 Deg | 32-25Log(Theta)~26.3 to 48 Deg  
-10 dBi~48 to 180 Deg

Elevation (Deg)

Beam Peak	
Deg	dB
-0.04	38.02
-1.37	-2.59

Overlays	Cal. file	units
064550.DAT-ant_under_test	064550.DAT	dBi
064553.DAT-ant_under_test	064553.DAT	dBi

Frequency : 4.200 GHz

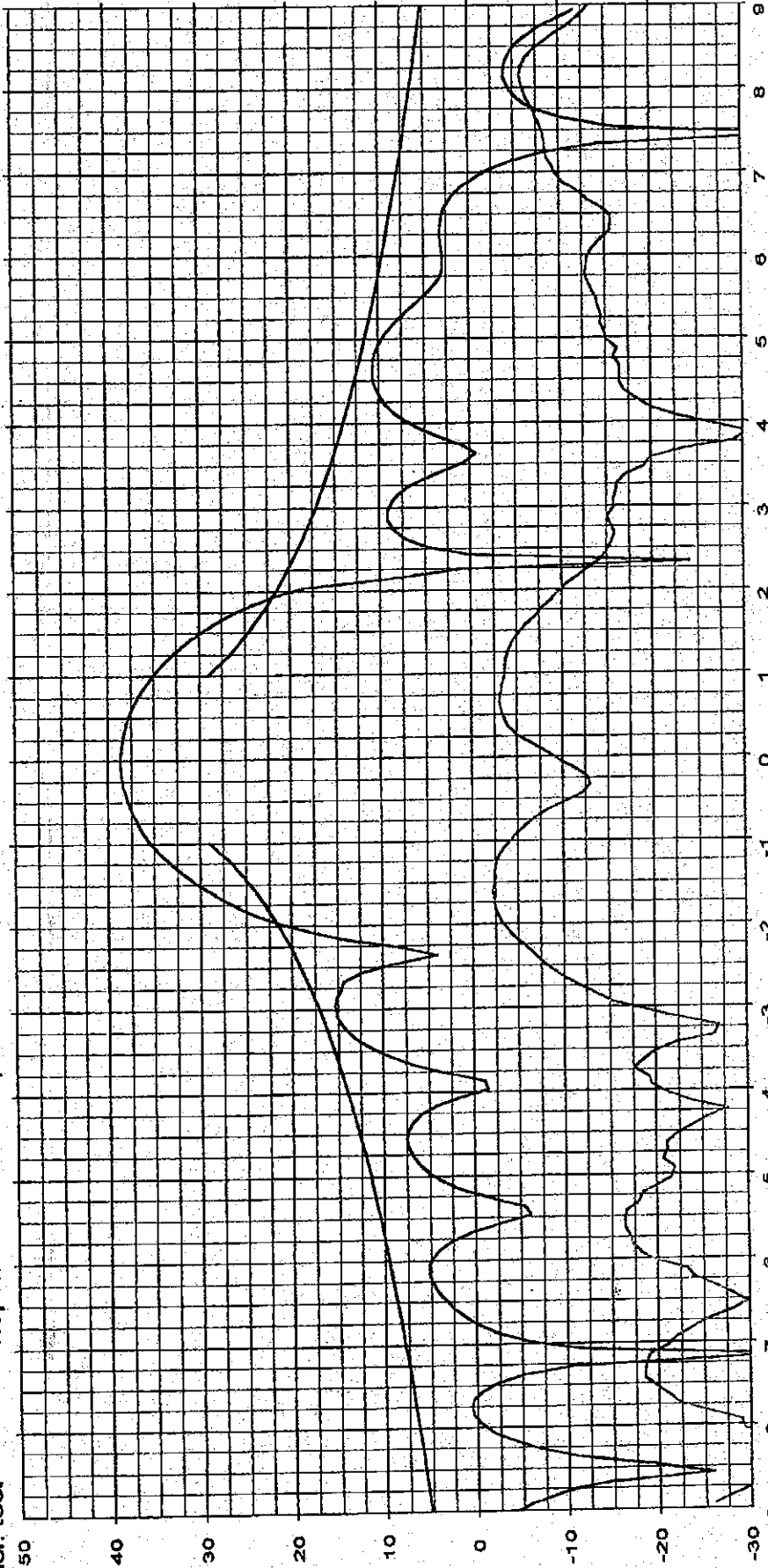
Prodelin 2.4M 4-Pc  
Receive / Transmit  
Offset Antenna System  
C-Band Linear

Operator: Ken Poovey

ser. no.:

channel: test

Tx pol: Horiz. Rx pol: Horiz.



Sidelobe Envelope: 29-25Log(Theta)~100Lamda/D to 20 Deg  
-3.5dBi~20 to 26.3 Deg | 32-25Log(Theta)~26.3 to 48 Deg  
-10 dBi~48 to 180 Deg

Elevation (Deg)

Beam Peak	Deg	dB
	0.03	38.60
	-1.63	-2.31

Cal. file	units
064550.DAT	dBi
064553.DAT	dBi

Overlays  
064550.DAT-ant\_under\_test  
064553.DAT-ant\_under\_test

37/45

FAX NO. 828 466 0860

PRODELIN CORP.

JUL-08-1999 THU 01:42 PM

Prodelin Corporation  
Riverbend - 1st Range  
C - 1st Range  
mont NC

Frequency : 3.700 GHz

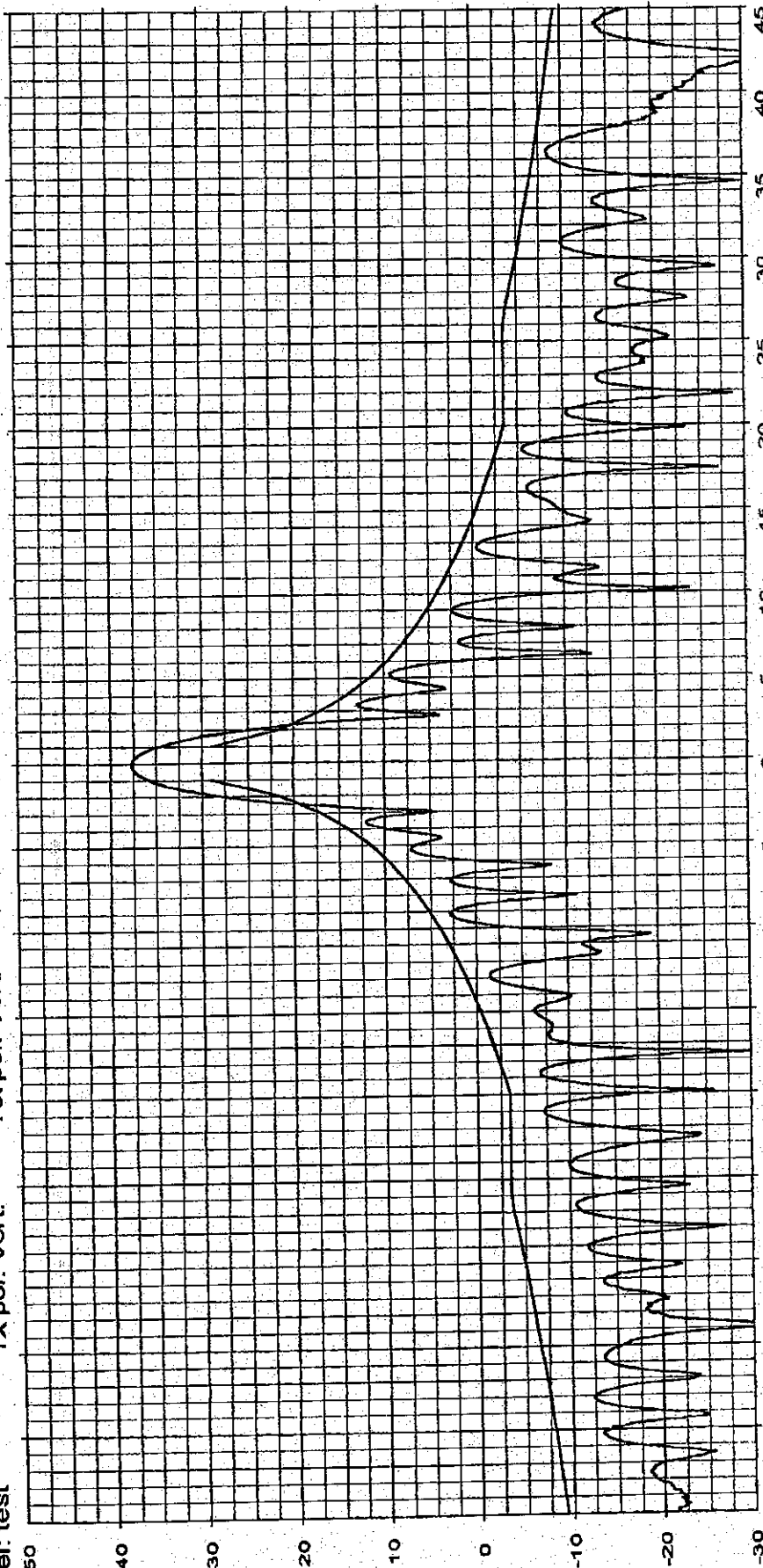
Prodelin 2.4M 4-Pc  
Receive / Transmit  
Offset Antenna System  
C-Band Linear

Operator: Ken Poovey

ser. no.:

channel: test

Tx pol: Vert. Rx pol: Vert.



Azimuth (Deg)

Beam Peak	Deg	dB
	-0.10	37.66

Overlays	Cal. file	units	dBi
064544.DAT-ant_under_test	064544.DAT		

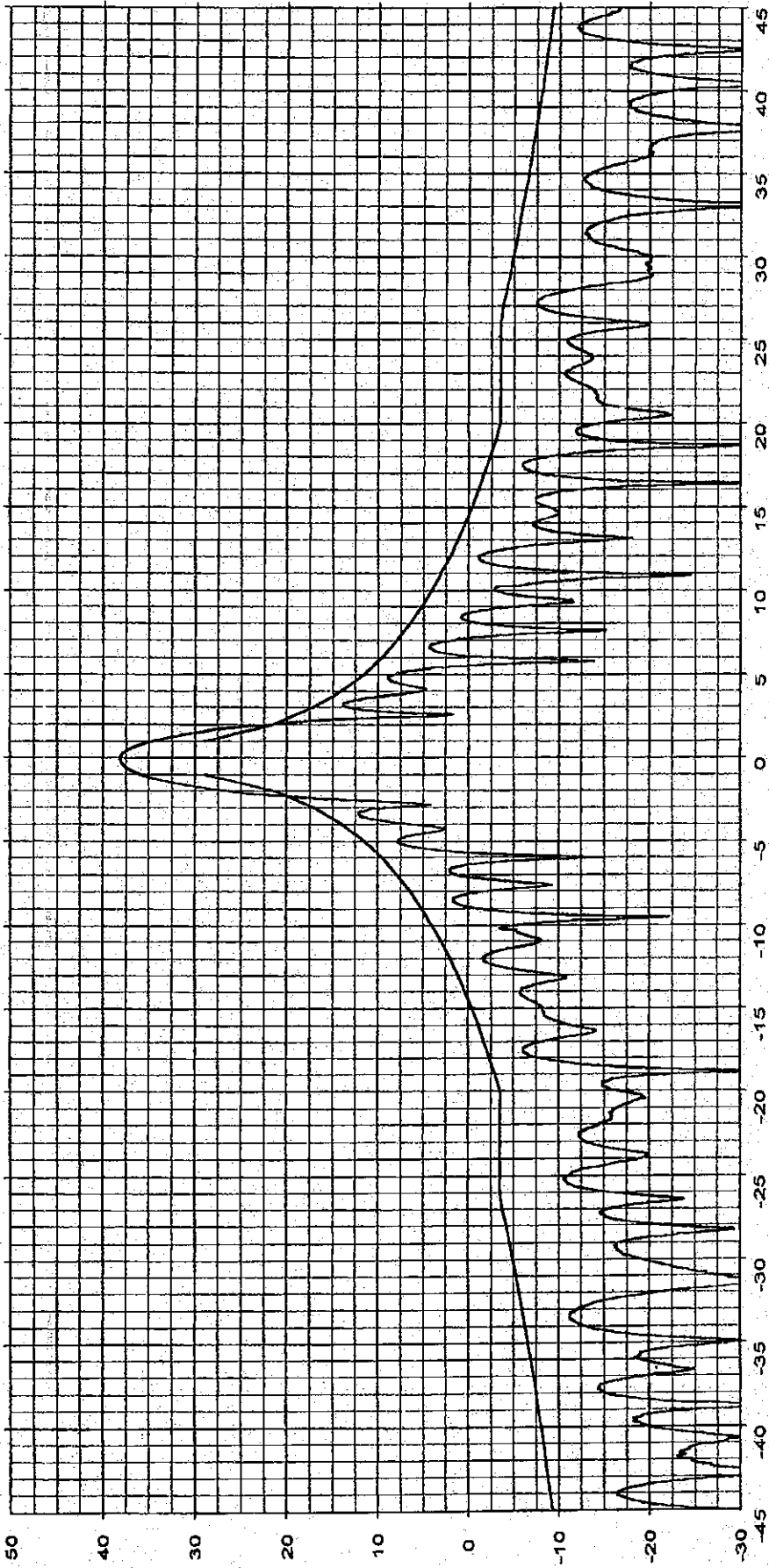
Sidelobe Envelope: 29-25Log(Theta)~i00Lamda/D to 20 Deg  
 -3.5dB~-20 to 26.3 Deg | 32-25Log(Theta)~26.3 to 48 Deg  
 -10 dB~-48 to 180 Deg



File: See Legend  
Operator: Ken Poovey  
Ser. no.:  
Channel: test

Frequency : 3.950 GHz

Tx pol: Vert. Rx pol: Vert.



Side lobe Envelope: 29-25Log(Theta)~100Lambda/D to 20 Deg  
 -3.5dBi~20 to 26.3 Deg | 32-25Log(Theta)~26.3 to 48 Deg  
 -10 dBi~48 to 180 Deg

Azimuth (Deg)

Beam Peak  
 Deg: -0.13 38.10

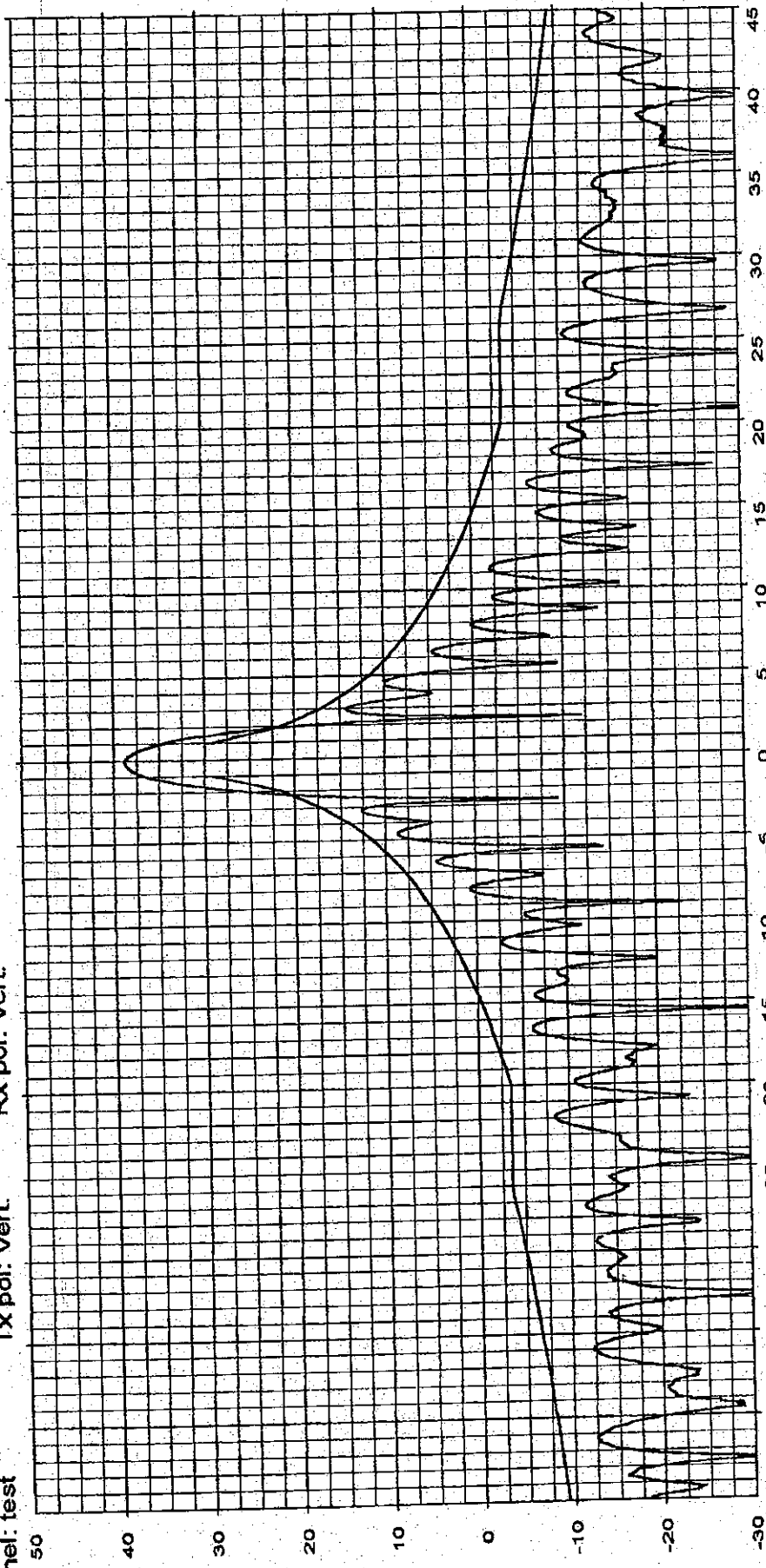
Overlays  
 064544.DAT-ant\_under\_test Cal. file units dBi 064544.DAT

Frequency : 4.200 GHz

Prodelin 2.4M 4-Pc  
Receive / Transmit  
Offset Antenna System  
C-Band Linear

Operator: Ken Poovey  
Ser. no.:  
Channel: test

Tx pol: Vert. Rx pol: Vert.



Azimuth (Deg)

Beam Peak  
Deg -0.16 dB 38.70

Beam Envelope: 29-25Log(Theta)~100Lambda/D to 20 Deg  
-3.5dB~-20 to 26.3 Deg | 32-25Log(Theta)~26.3 to 48 Deg  
-10 dB~-48 to 180 Deg

Overlays  
064544.DAT-ant\_under\_test  
Cal. file units  
064544.DAT dBi

File: See Legend

FAX NO. 828 466 0860

PRODELIN CORP.

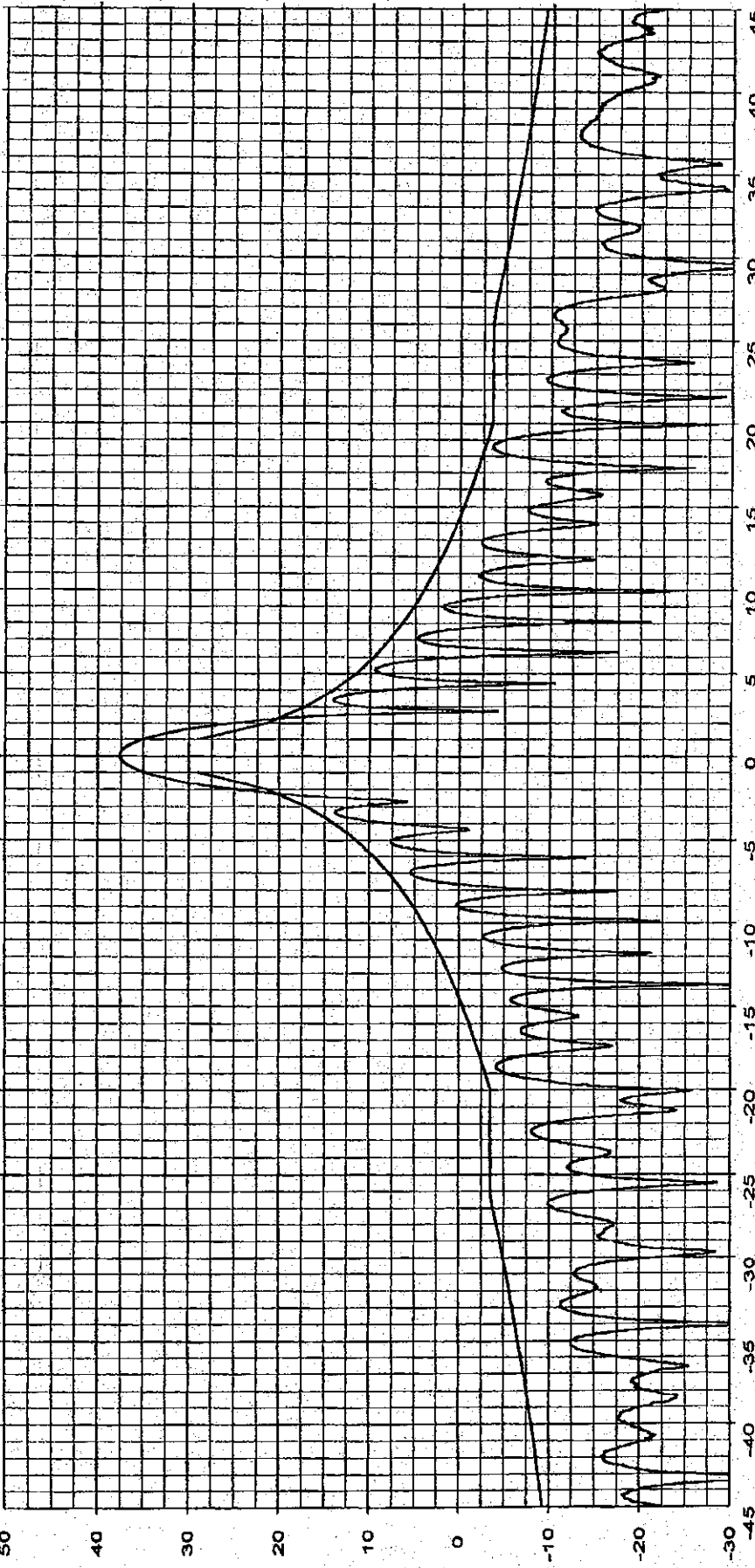
JUL-08-1999 THU 01:48 PM

Prodelin Corporation  
Riverbend  
Cl...mont NC

File: See Legend  
Operator: Ken Poovey  
Ser. no.:  
Channel: test

Frequency : 3.700 GHz

Tx pol: Horiz. Rx pol: Horiz.



Side lobe Envelope: 29-25Log(Theta)~100Lamda/D to 20 Deg  
-3.5dB~-20 to 26.3 Deg | 32-25Log(Theta)~26.3 to 48 Deg  
-10 dB~-48 to 180 Deg

Azimuth (Deg)

Beam Peak  
Deg 0.00 dB 37.55

Overlays  
064549.DAT-ant\_under\_test Cal. file units dBi  
064549.DAT 064549.DAT

File: See Legend

Prodelin 2.4M 4-Pc  
Receive / Transmit  
Offset Antenna System  
C-Band Linear

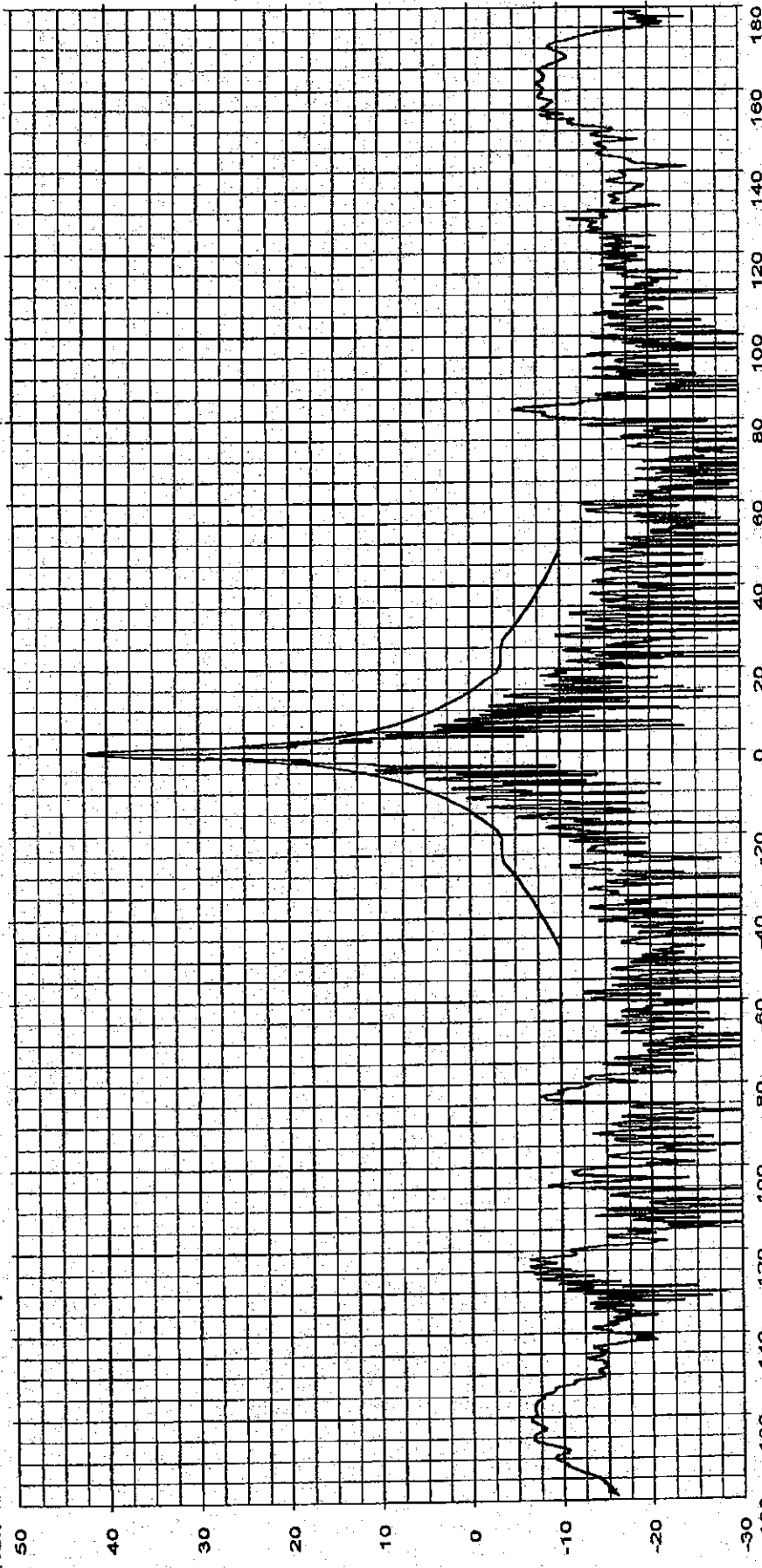
Operator: Ken Poovey

ser. no.:

Channel: test

Tx pol: Horiz.

Rx pol: Horiz.



Sidelobe Envelope: 29-25Log(Theta)~100Lomda/D to 20 Deg  
 -3.5dB~-20 to 26.3 Deg | 32-25Log(Theta)~26.3 to 48 Deg  
 -10 dBi~48 to 180 Deg

Azimuth (Deg)

Beam Peak  
 Deg -0.07  
 dB 42.06

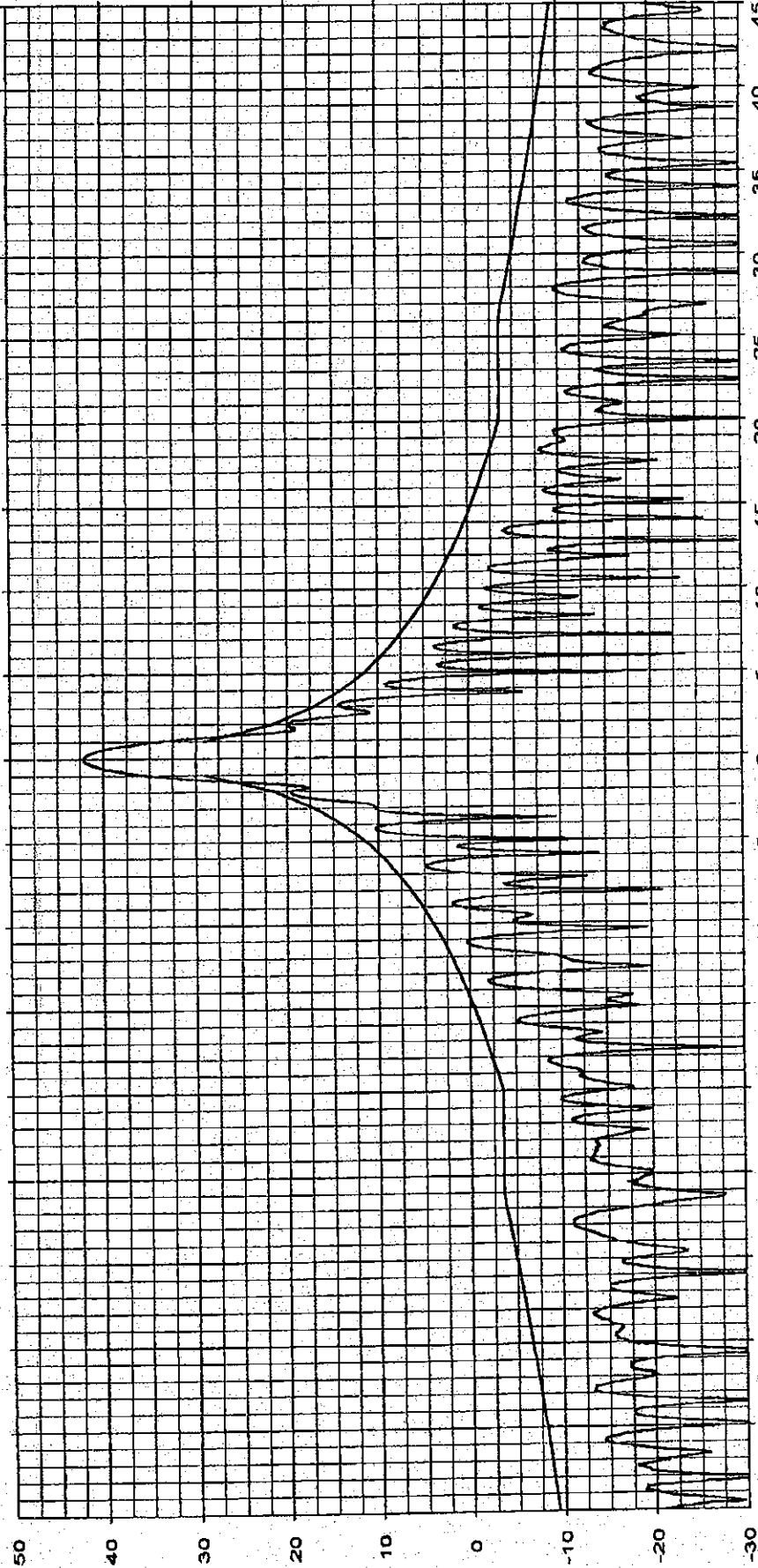
Overlays  
 064539.DAT-ant\_under\_test  
 Cal. file units  
 064539.DAT dBi

Frequency : 6.138 GHz

Prodelin 2.4M 4-Pc  
Receive / Transmit  
Offset Antenna System  
C-Band Linear

Operator: Ken Poovey  
Ser. no.:  
Channel: test

Tx pol: Horiz. Rx pol: Horiz.



Azimuth (Deg)

Beam Peak  
Deg -0.07  
dB 42.06

Sidelobe Envelope: 29-25Log(Theta)~100Lamda/D to 20 Deg  
-3.5cBt~20 to 26.3 Deg | 32-25Log(Theta)~26.3 to 48 Deg  
-10 dBi~48 to 180 Deg

Overlays  
064539.DAT-ant\_under\_test Cal. file 064539.DAT units dBi

File: See Legend

Prodelin 2.4M 4-Pc  
Receive / Transmit  
Offset Antenna System  
C-Band Linear

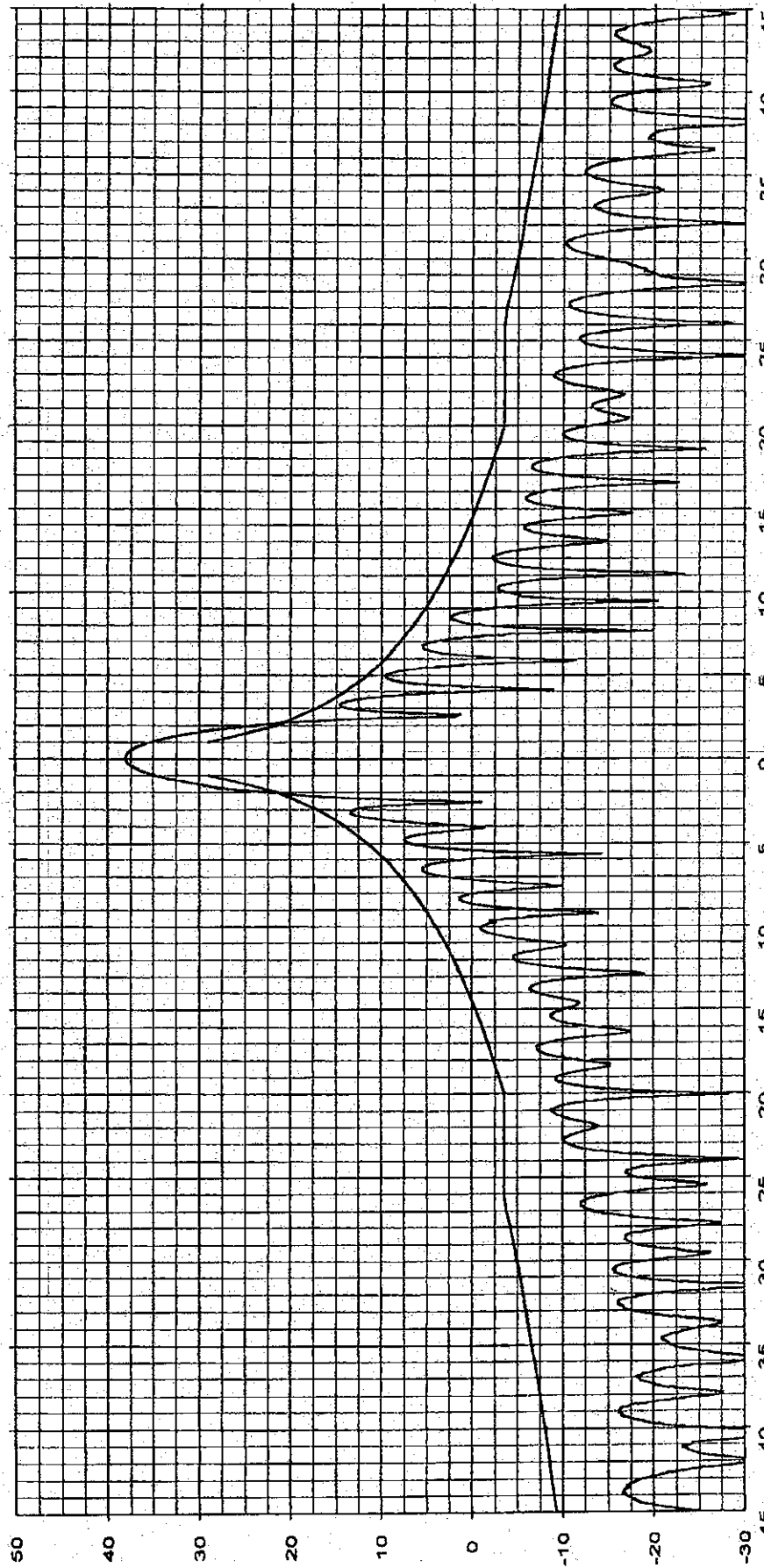
Operator: Ken Poovey

Ser. no.:

Channel: test

Tx pol: Horiz.

Rx pol: Horiz.



Sidelobe Envelope: 29-25Log(Theta)~100,smoo/D to 20 Deg  
 -3.5dBi~20 to 26.3 Deg | 32-25Log(Theta)~26.3 to 48 Deg  
 -10 dBi~48 to 180 Deg

Overlays  
 064549.DAT-ant\_under\_test—— Cal. file units dBi  
 064549.DAT 0.03 38.02

Azimuth (Deg)

Beam Peak

Deg

0.03 38.02

Frequency : 6.425 GHz

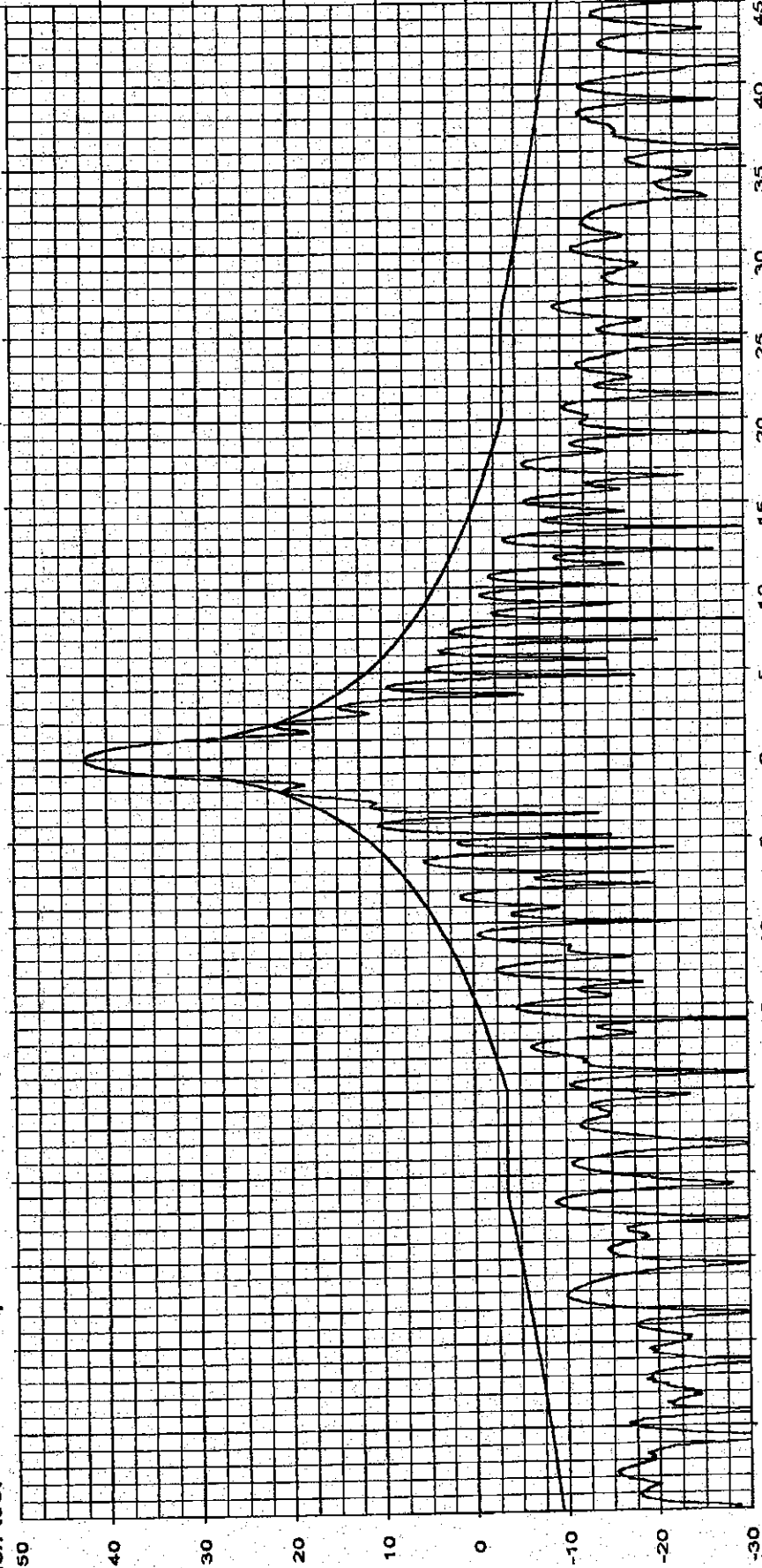
Prodelin 2.4M 4-Pc  
Receive / Transmit  
Offset Antenna System  
C-Band Linear

Operator: Ken Poovey

Ser. no.:

Channel: test

Tx pol: Horiz Rx pol: Horiz



Azimuth (Deg)

Sidelobe Envelope: 29-25Log(Theta)~100Lamdo/D to 20 Deg  
-3.5dBi~20 to 26.3 Deg | 32-25Log(Theta)~26.3 to 48 Deg  
-10 dBi~48 to 180 Deg

Beam Peak  
Deg 42.36  
dB -0.04

Overlays  
064539.DAT-ant\_under\_test  
Cal. file 064539.DAT units dBi

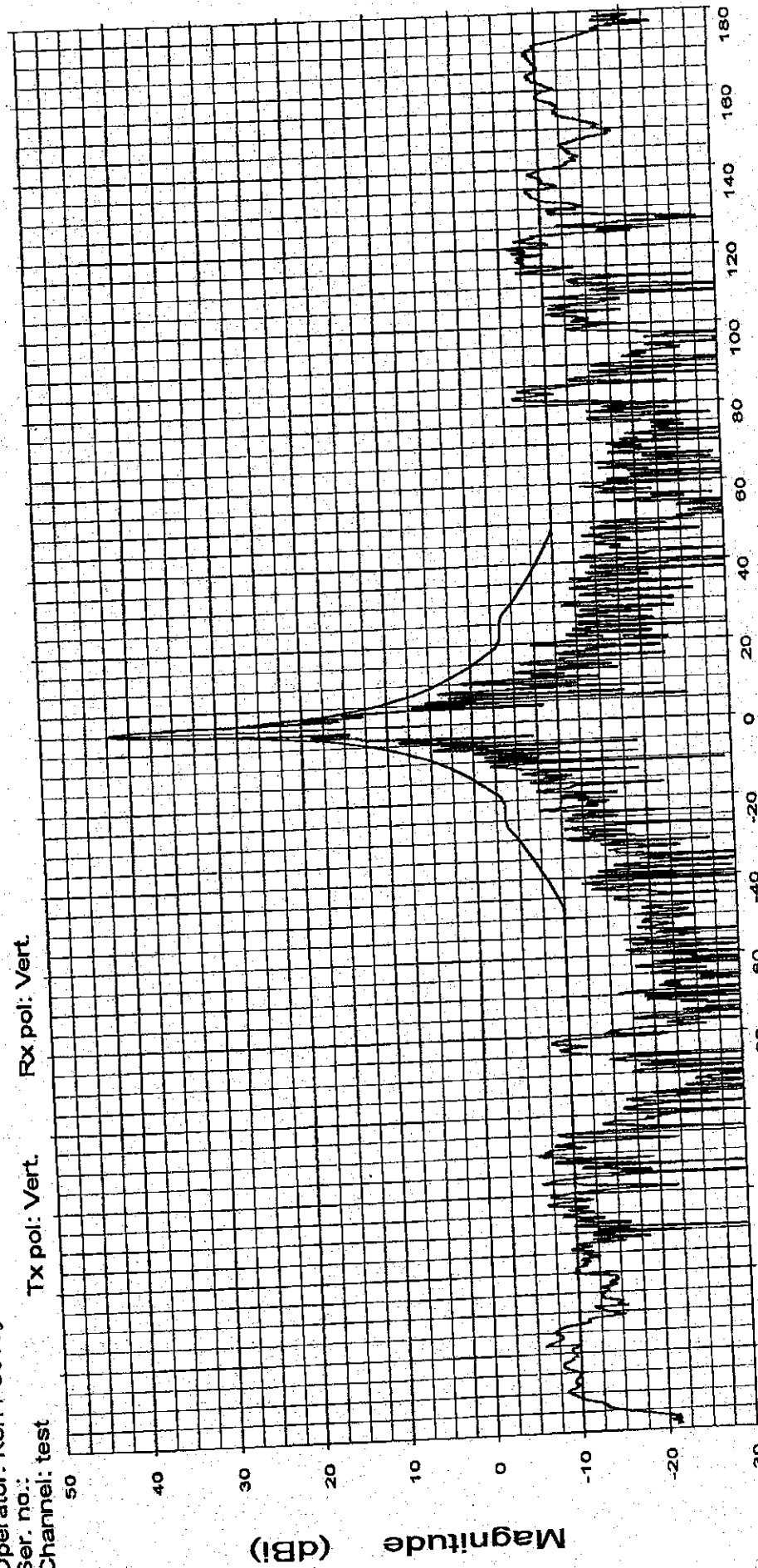
Frequency : 6.138 GHz

Prodelin 2.4M 4-Pc  
Receive / Transmit  
Offset Antenna System  
C-Band Linear

Operator: Ken Poovey

Tx pol: Vert. Rx pol: Vert.

Ser. no.:  
Channel: test



Azimuth (Deg)

Beam Peak  
Deg 0.07 dB 42.14

Cal. file units  
064532.DAT dBi

Overlays  
064532.DAT-ant\_under\_test

Sidelobe Envelope: 29-25Log(Theta)~100Lambda/D to 20 Deg  
-3.5dBi~20 to 26.3 Deg | 32-25Log(Theta)~26.3 to 48 Deg  
-10 dBi~48 to 160 Deg

Prodelin Corporation  
Riverbend  
C. mont NC

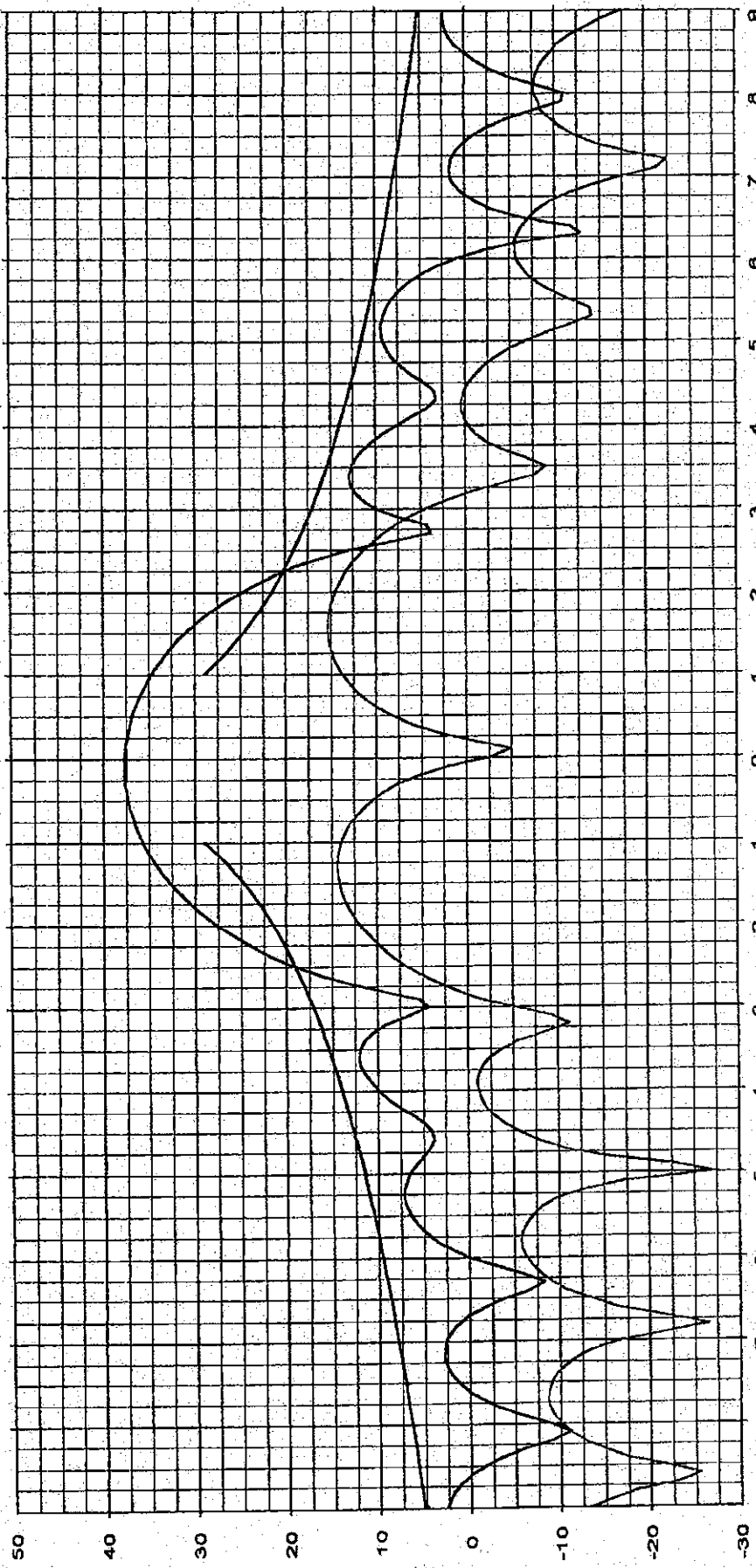


# Receive Patterns

Frequency : 3.700 GHz

Operator: Ken Poovey  
Ser. no.:  
Channel: test

Tx pol: Vert. Rx pol: Vert.



Azimuth (Deg)

Beam Peak	units
Deg	dB
-0.10	37.66
1.60	15.33

Sidelobe Envelope: 29-25Log(Theta)~100Lomda/D to 20 Deg  
 -3.5dBi~20 to 26.3 Deg | 32-25Log(Theta)~26.5 to 48 Deg  
 -10 dBi~48 to 180 Deg

Overlays	Cal. file	units
064544.DAT-ant_under_test	064544.DAT	dBi
064547.DAT-ant_under_test	064547.DAT	dBi

Frequency : 3.950 GHz

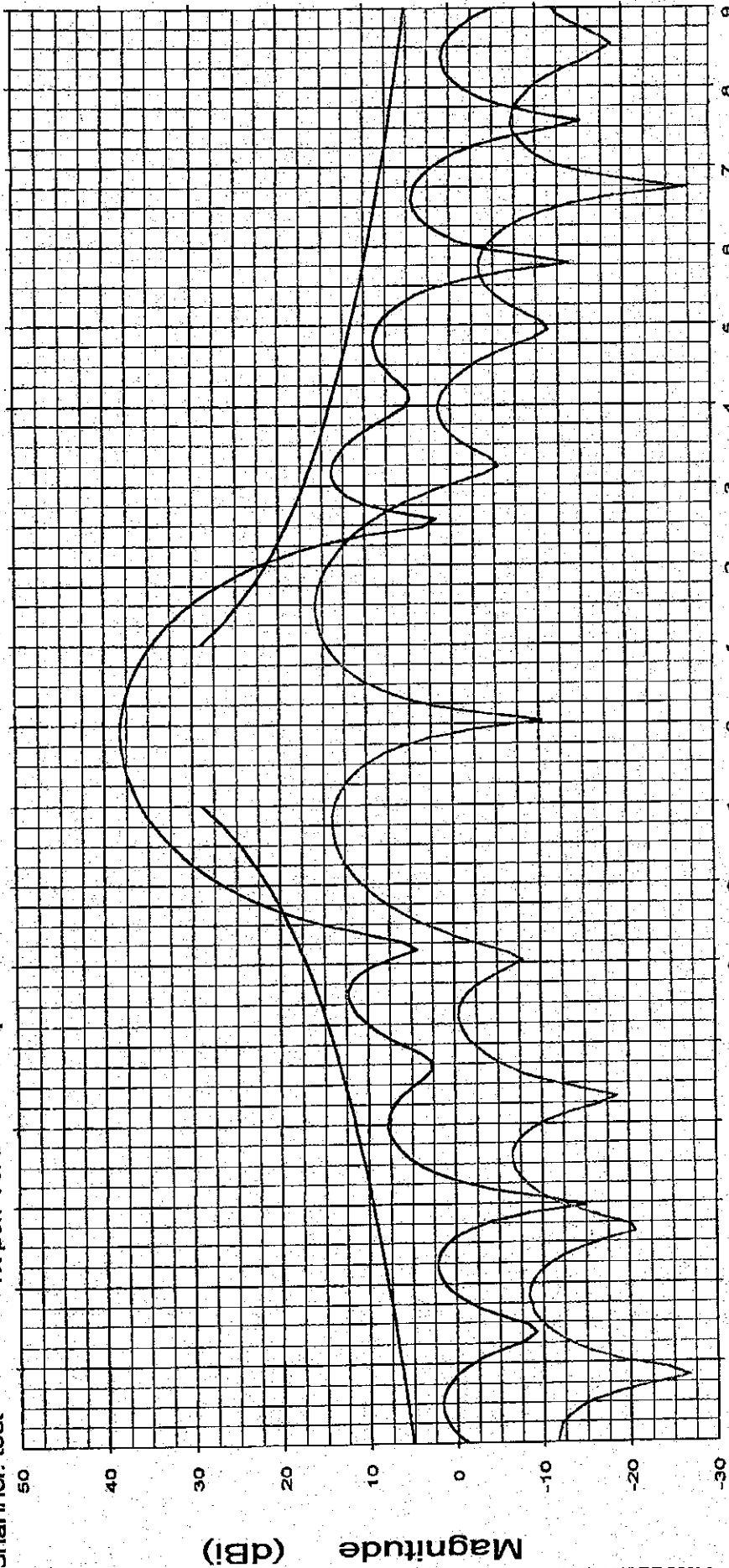
Prodelin 2.4M 4-Pc  
Receive / Transmit  
Offset Antenna System  
C-Band Linear

Operator: Ken Poovey

Ser. no.:

Channel: test

Tx pol: Vert Rx pol: Vert



Sidelobe Envelope: 29~-25Log(Theta)~100Lamde/D to 20 Deg  
-3.5dBi~20 to 26.3 Deg | 32~-25Log(Theta)~26.3 to 48 Deg  
-10 dBi~48 to 180 Deg.

Overlays	Cal. file	units
064544.DAT-ant_under_test	064544.DAT	dBi
064547.DAT-ant_under_test	064547.DAT	dBi

Azimuth (Deg)

Beam Peak	Deg	dB
-0.13	38.10	
1.43	15.74	

Prodelin 2.4M 4-Pc  
Receive / Transmit  
Offset Antenna System  
C-Band Linear

Frequency : 4.200 GHz

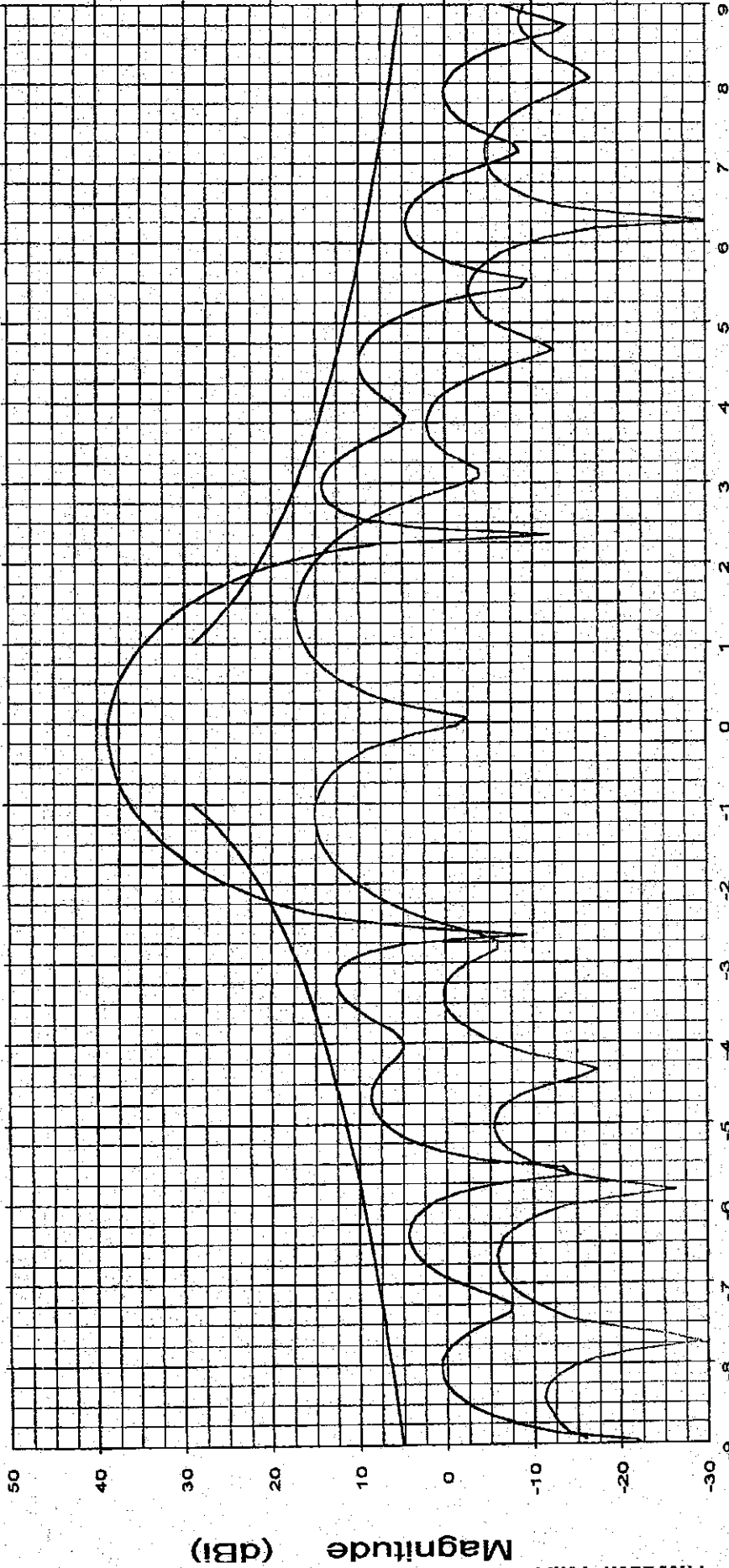
Operator: Ken Poovey

Ser. no.:

Channel: test

Tx pol: Vert.

Rx pol: Vert.



Side-lobe Envelope: 29-25Log(Theta)~100Lamda/D to 20 Deg  
 -3.5dBi~20 to 26.3 Deg | 32-25Log(Theta)~26.3 to 48 Deg  
 -10 dBi~48 to 180 Deg

Overlays  
 064544.DAT-ant\_under\_test  
 064547.DAT-ant\_under\_test

Azimuth (Deg)

Beam Peak  
 Deg    dB  
 -0.16   38.70  
 1.36   17.22

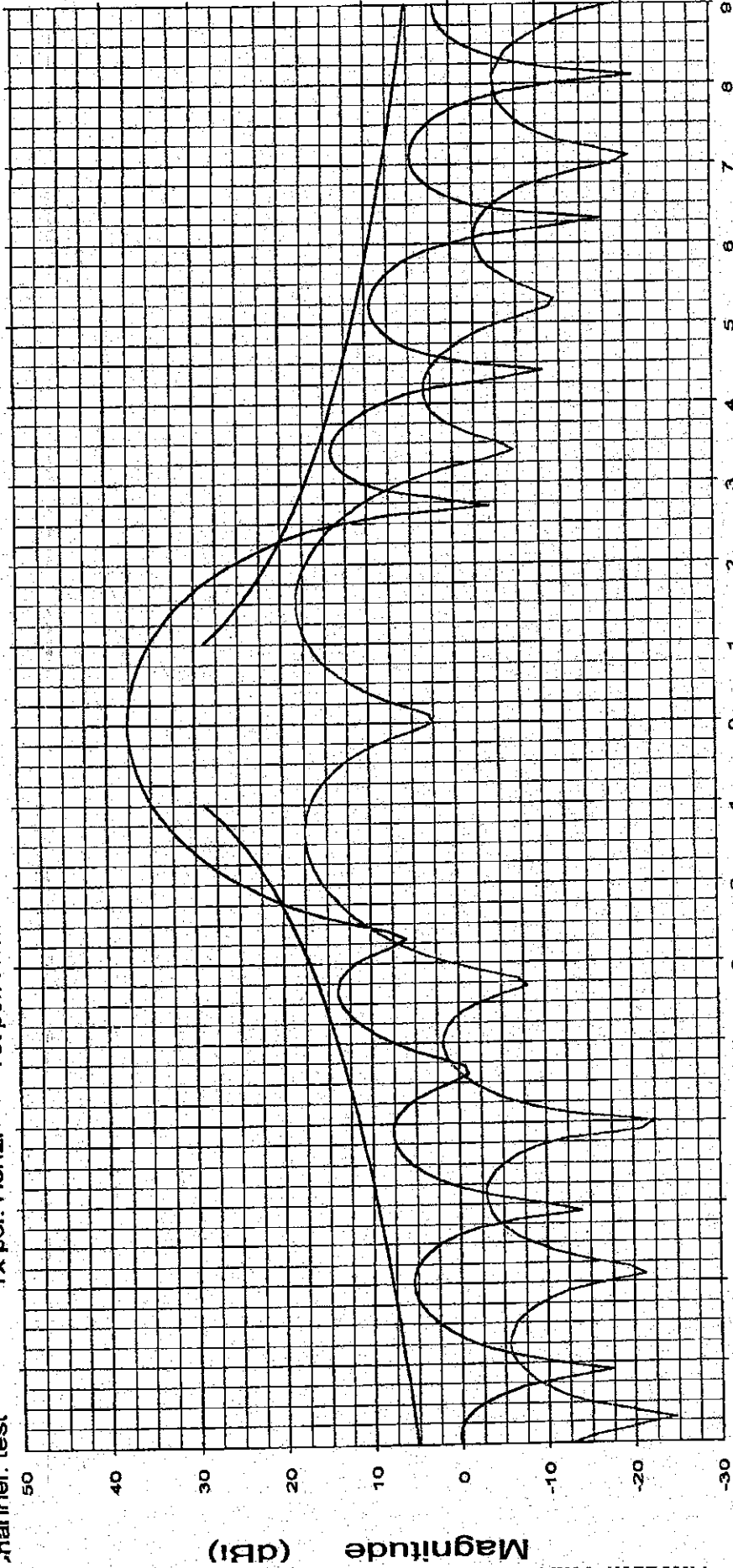
Cal. file    units  
 064544.DAT    dBi  
 064547.DAT    dBi

Frequency : 3.700 GHz

Prodelin 2.4M 4-Pc  
Receive / Transmit  
Offset Antenna System  
C-Band Linear

Operator: Ken Poovey  
Ser. no.:  
Channel: test

Tx pol: Horiz. Rx pol: Horiz.



Azimuth (Deg)

Beam Peak	
Deg	dB
0.00	37.55
1.50	18.20

Sidelobe Envelope: 29-25Log(Theta)~100Lgmco/D to 20 Deg  
 -3.5dBi~20 to 26.3 Deg | 32-25Log(Theta)~26.3 to 48 Deg  
 -10 dBi~48 to 180 Deg

Overlays	Cal. file	units
064549.DAT-ant_under_test	064549.DAT	dB
064552.DAT-ant_under_test	064552.DAT	dB

File: See Legend

FAX NO. 828 466 0860

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JUL-08-1999 THU 01:23 PM

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C. mont NC

30/45

File: See Legend  
Prodelin 2.4M 4-Pc  
Receive / Transmit  
Offset Antenna System  
C-Band Linear

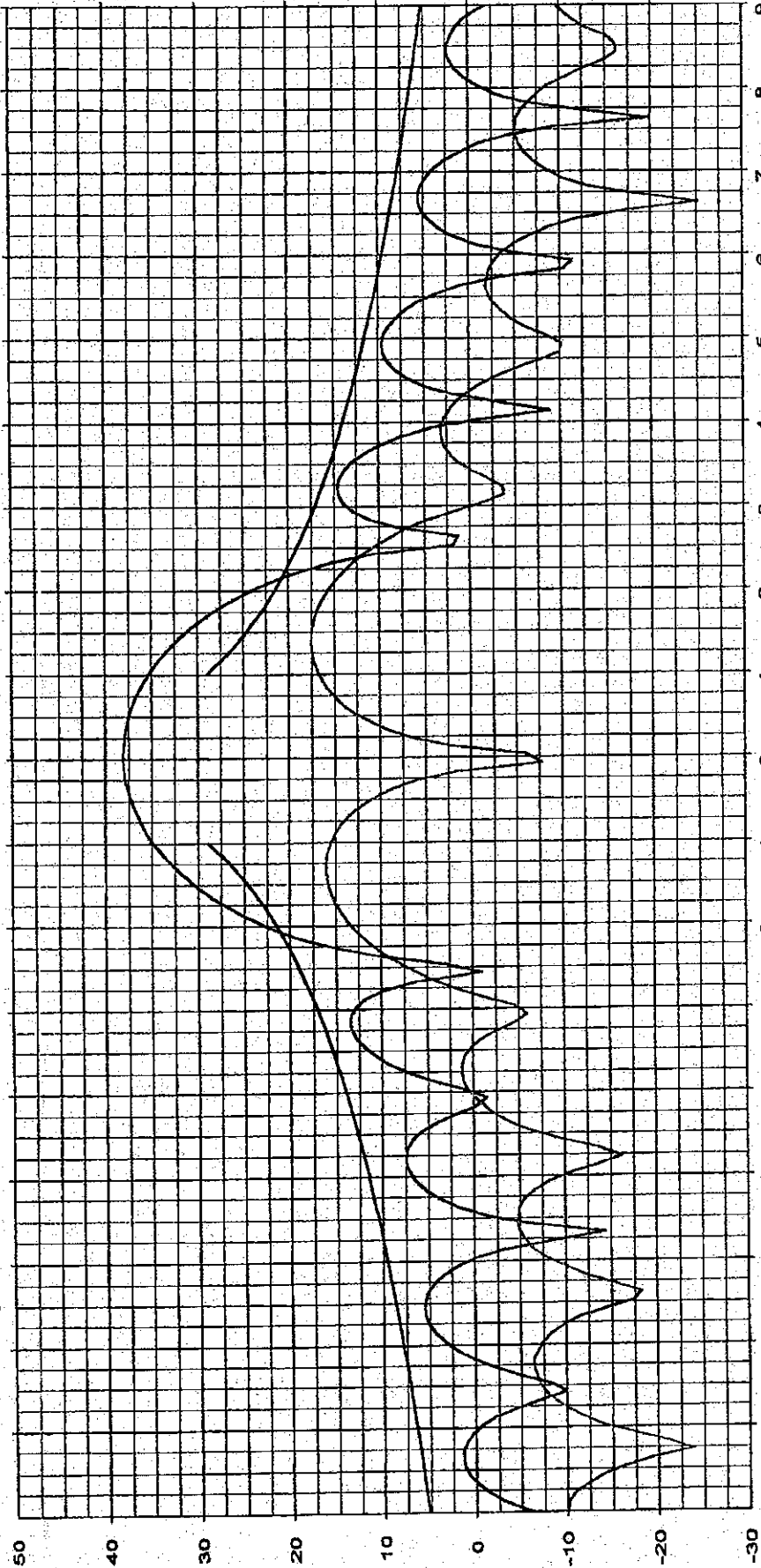
Frequency : 3.950 GHz

Operator: Ken Poovey

Ser. no.:

Channel: test

Tx pol: Horiz. Rx pol: Horiz.



Side-lobe Envelope: 29-25Log(Theta)~100Lmda/D to 20 Deg  
 -3.5dBi~20 to 26.3 Deg | 32-25Log(Theta)~26.3 to 48 Deg  
 -10 dBi~48 to 180. Deg

Azimuth (Deg)

Beam Peak	Deg	dB
0.03	38.02	
1.33	17.52	

Overlays	Cal. file	units
064549.DAT-ant_under_test	064549.DAT	dBi
064552.DAT-ant_under_test	064552.DAT	dBi

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PRODELIN CORP.

JUL-08-1999 THU 01:25 PM

Prodelin Corporation  
Riverbend - st Range  
C mont NC

Frequency : 4.200 GHz

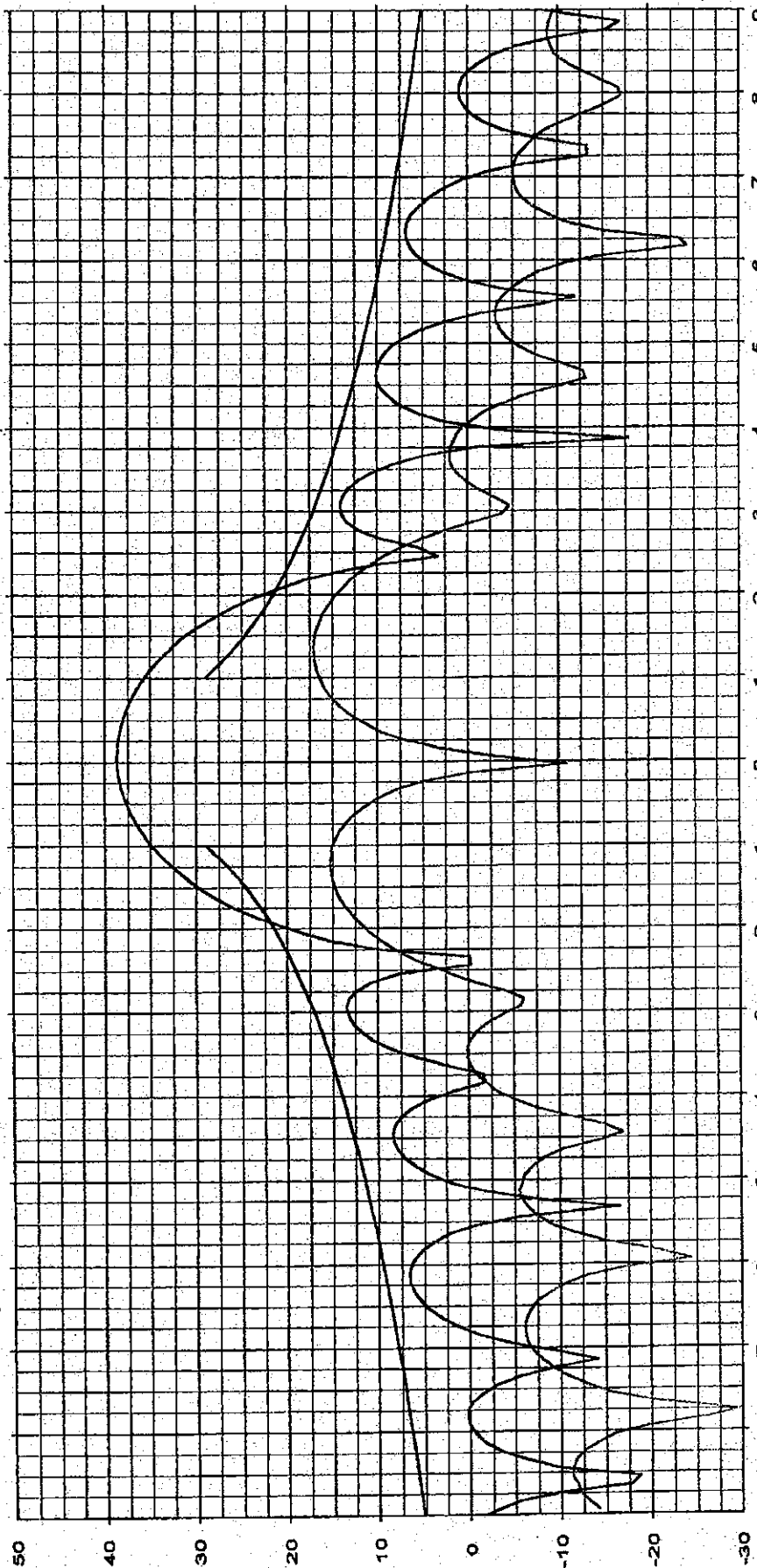
Prodelin 2.4M 4-Pc  
Receive / Transmit  
Offset Antenna System  
C-Band Linear

Operator: Ken Poovey

Ser. no.:

Channel: test

Tx pol: Horiz. Rx pol: Horiz.



Sidlobe Envelope: 29-25Log(Theta)~100Lomdc/D to 20 Deg  
 -3.5dBi~20 to 26.3 Deg | 32-25Log(Theta)~26.3 to 48 Deg  
 -10 dBi~48 to 180 Deg

Azimuth (Deg)

Beam Peak	
Deg	dB
0.06	38.63
1.36	17.05

Overlays	Cal. file	units
064549.DAT-ant_under_test	064549.DAT	dBi
064552.DAT-ant_under_test	064552.DAT	dBi

32/45

File: See Legend

Prodelin 2.4M 4-Pc  
Receive / Transmit  
Offset Antenna System  
C-Band Linear

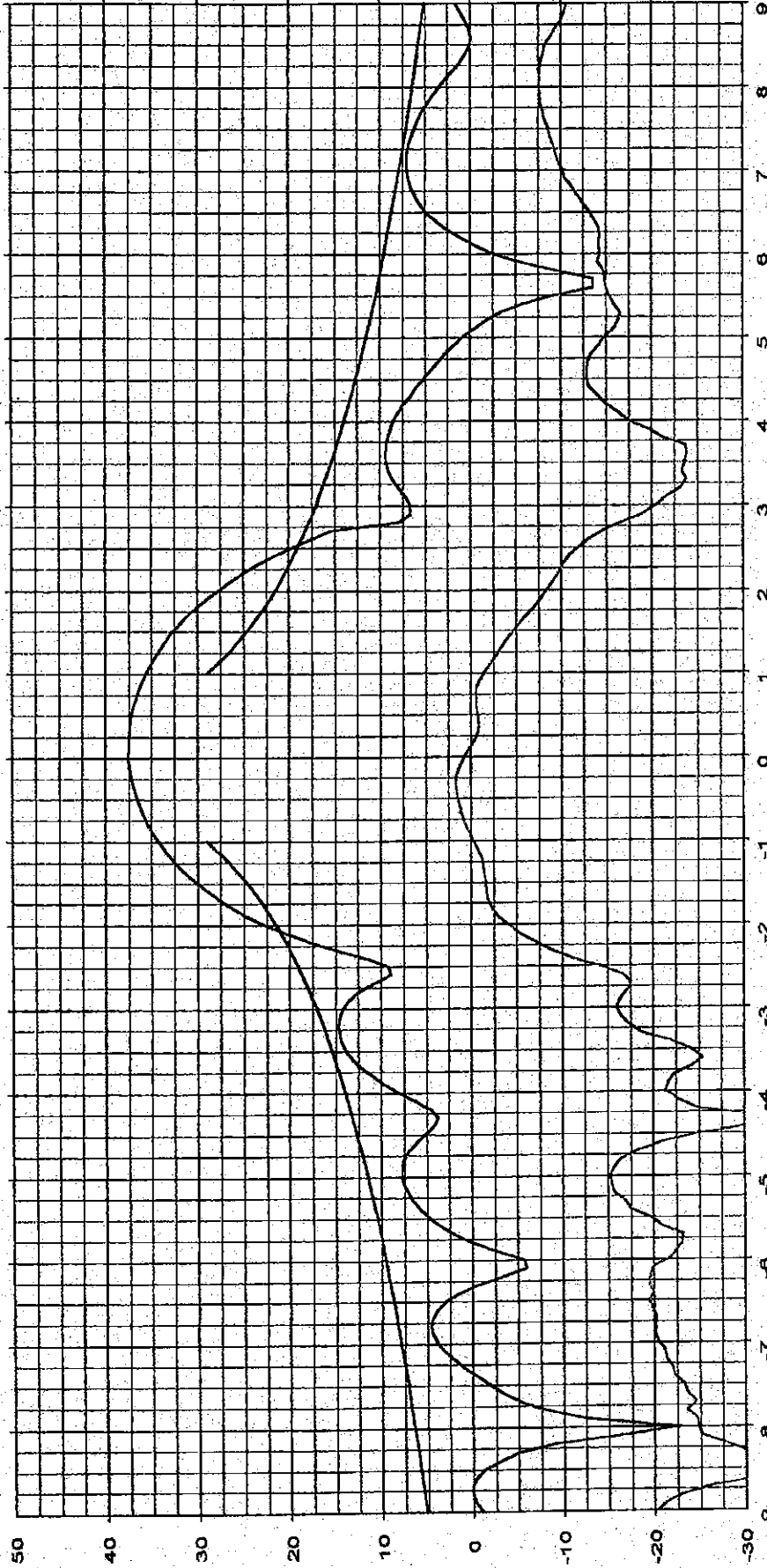
Operator: Ken Poovey

ser. no.:

Channel: test

Tx pol: Vert

Rx pol: Vert



Sidelobe Envelope: 29-25Log(Theta)~100Lamda/D to 20 Deg  
 -3.5dBi~20 to 26.3 Deg | 32-25Log(Theta)~26.3 to 48 Deg  
 -10 dBi~48 to 180 Deg

Overlays  
 064546.DAT-ant\_under\_test ——— units  
 064548.DAT-ant\_under\_test ——— dBi

Elevation (Deg)

Beam Peak  
 Deg 0.10 37.50  
 -0.40 1.62

Frequency : 3.700 GHz

FAX NO. 828 466 0860

PRODELLIN CORP.

JUL-08-1999 THU 01:28 PM

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Frequency : 3.950 GHz

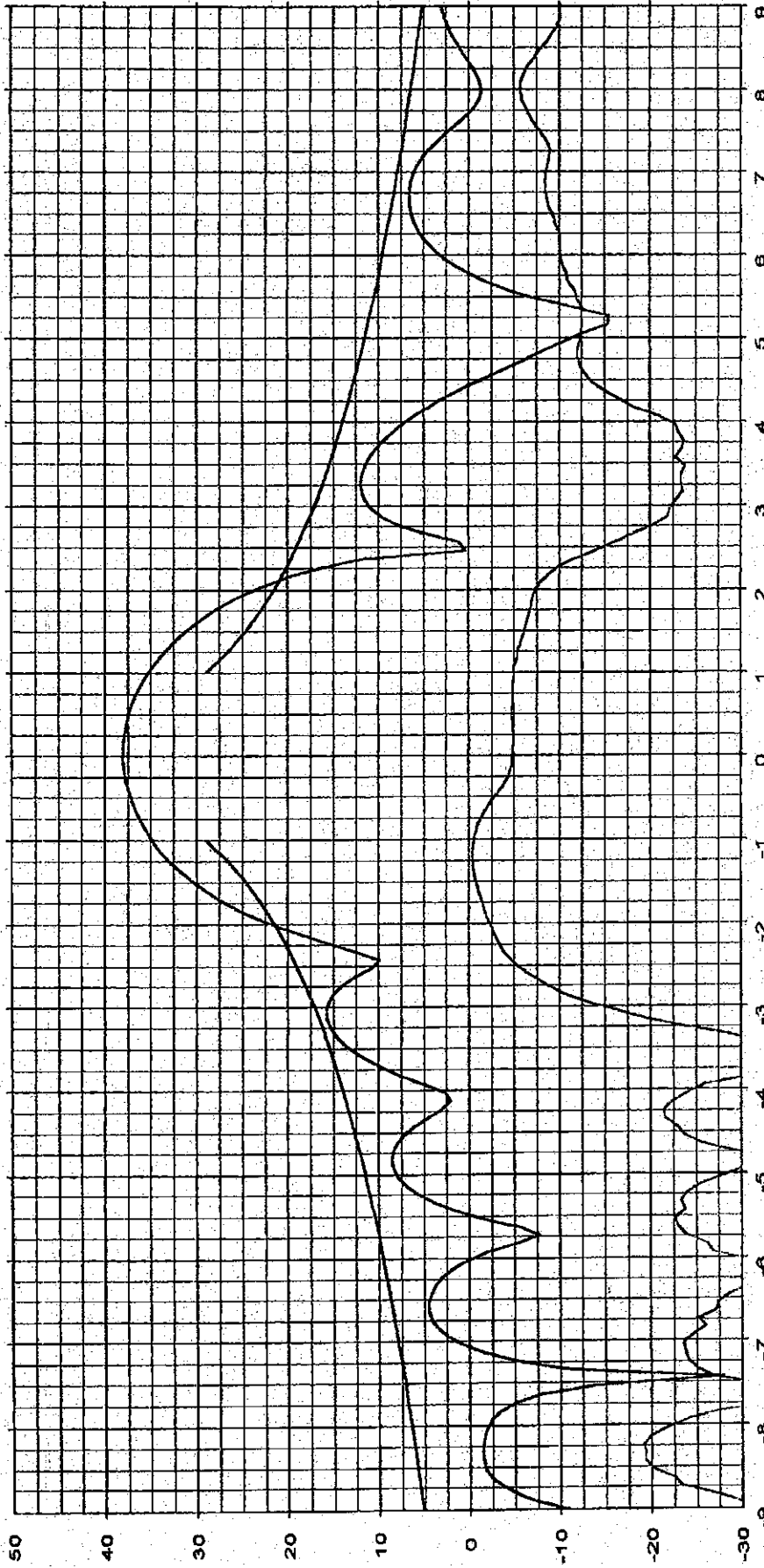
Prodelin 2.4M 4-Pc  
Receive / Transmit  
Offset Antenna System  
C-Band Linear

Operator: Ken Poovey

Ser. no.:

Channel: test

Tx pol: Vert. Rx pol: Vert.



Sidelobe Envelope: 29~-25Log(Theta)~100Lmmda/D to 20 Deg  
 -3.5dBi~20 to 26.3 Deg | 32~-25Log(Theta)~26.3 to 48 Deg  
 -10 dBi~48 to 180 Deg

Elevation (Deg)

Beam Peak	
Deg	dB
0.07	37.99
-1.23	-0.41

Cal. file	units
064545.DAT	dBi
064548.DAT	dBi

Overlays  
 064545.DAT-ant\_under\_test  
 064548.DAT-ant\_under\_test

Frequency : 4.200 GHz

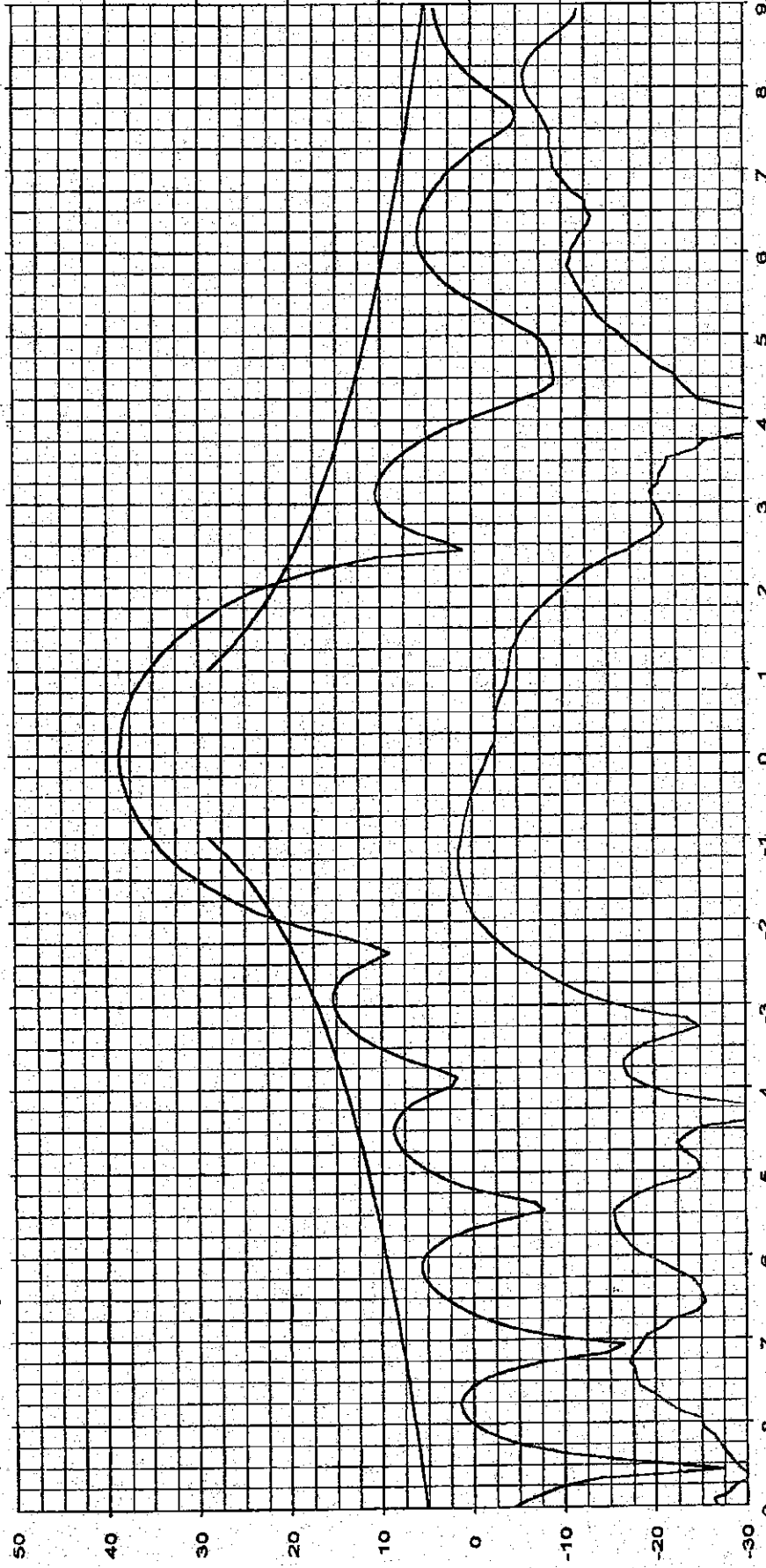
Prodelin 2.4M 4-Pc  
Receive / Transmit  
Offset Antenna System  
C-Band Linear

Operator: Ken Poovey

Ser. no.:

Channel: test

Tx pol: Vert Rx pol: Vert



Sidelobe Envelope: 29-25Log(Theta)~100Lm/dg/D to 20 Deg  
 -3.5dBi~20 to 26.3 Deg | 32-25Log(Theta)~26.3 to 48 Deg  
 -10 dBi~48 to 180 Deg

Elevation (Deg)

Beam Peak	
Deg	dB
0.03	38.60
-1.26	1.49

Overlays	Cal. file	units
064545.DAT_ant_under_test	064545.DAT	dBi
064548.DAT_ant_under_test	064548.DAT	dBi

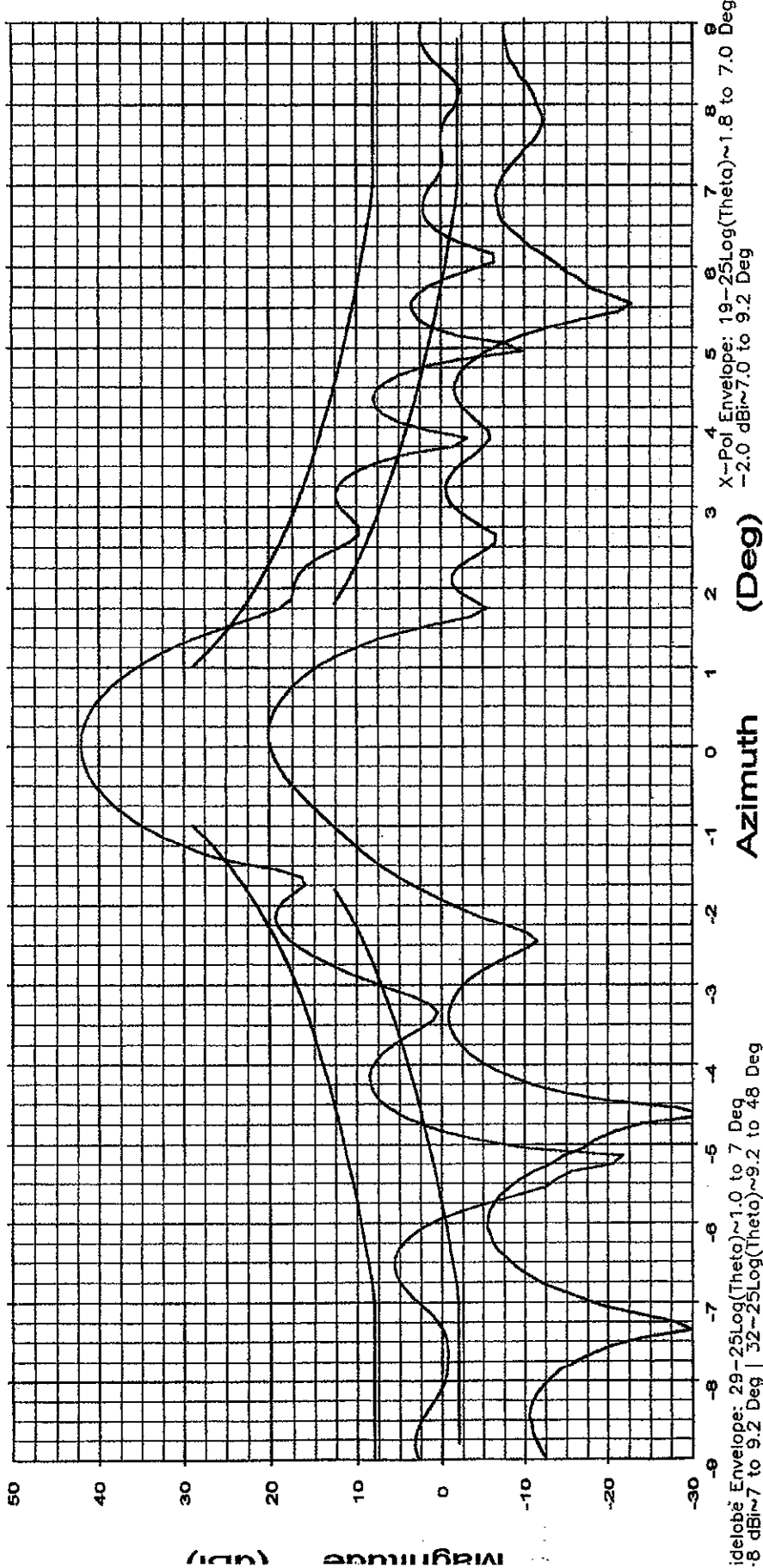
File: See Legend

Prodelin 2.4 Meter 2-Pc. RX/TX Antenna System  
Series 1251 / C-Band Circular Polarization

Frequency : 6.175 GHz

Operator: Ken Poovey  
Ser. no.: Osartn1  
Channel: test

Tx pol: LHCP      Rx pol: LHCP



Solid Envelope: 29-25Log(Theta)~1.0 to 7 Deg  
 Dashed Envelope: 19-25Log(Theta)~1.8 to 7.0 Deg  
 X-Pol Envelope: 19-25Log(Theta)~1.8 to 7.0 Deg  
 -2.0 dBi~-7.0 to 9.2 Deg

Azimuth (Deg)

Beam Peak	Deg	dB
0.06	42.10	
0.15	20.07	

Overlays	Cal. file	units
165007.DAT-ant_under_test	065007.DAT	dBI
165008.DAT-ant_under_test	065008.DAT	dBI

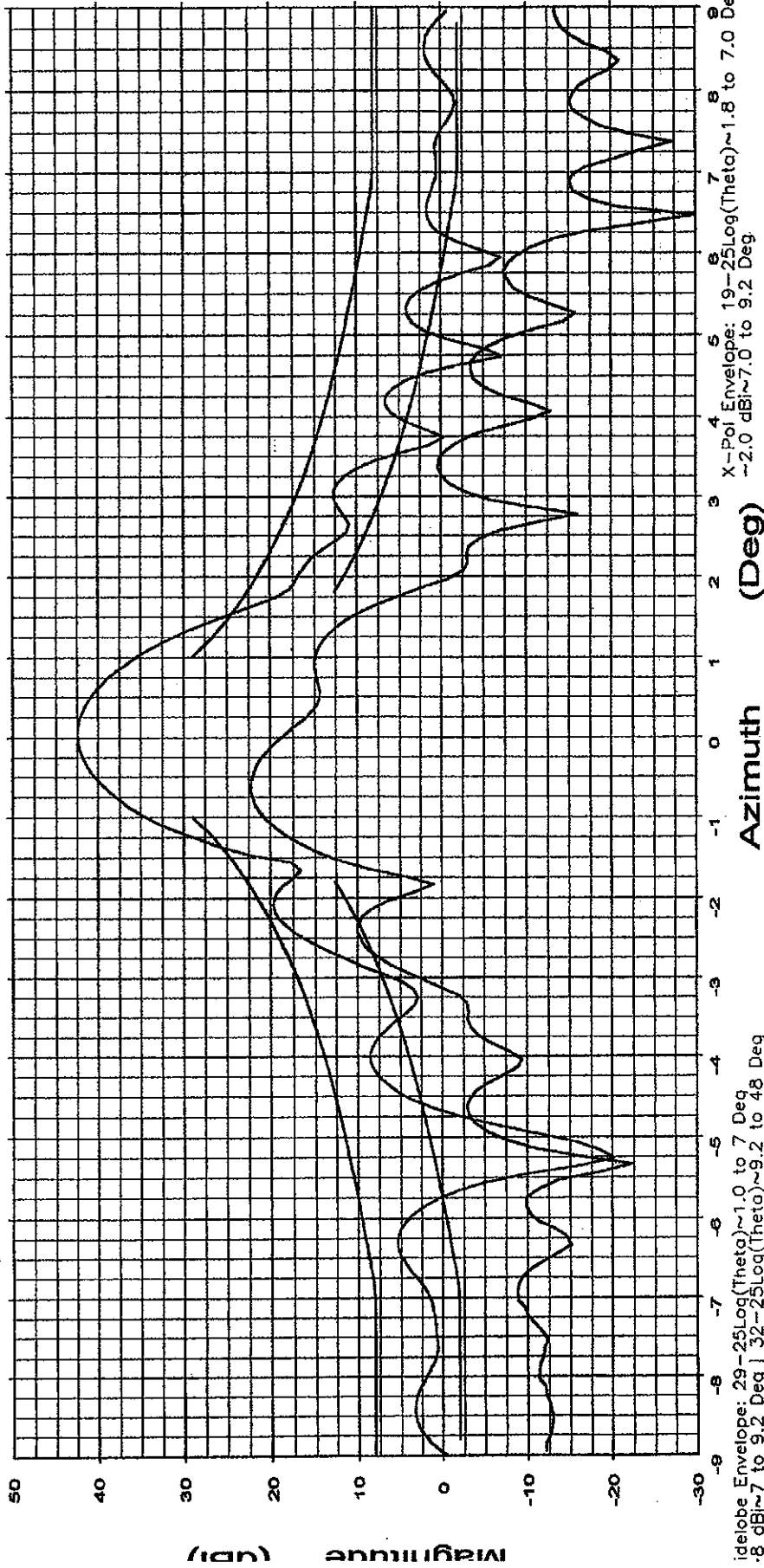
File: See Legend

Prodelin 2.4 Meter 2-Pc. RX/TX Antenna System  
Series 1251 / C-Band Circular Polarization

Frequency : 6.425 GHz

Operator: Ken Poovey  
Order no.: Osarh1  
Channel: test

Tx pol: LHCP Rx pol: LHCP



1-dB Envelope: 29--25Log(Theta)~1.0 to 7 Deg  
-8 dBi~7 to 9.2 Deg | 32--25Log(Theta)~9.2 to 48 Deg  
-10 dBi~48 to 180 Deg

X-Pol Envelope: 19--25Log(Theta)~1.8 to 7.0 Deg  
-2.0 dBi~7.0 to 9.2 Deg

Overlays

File Name	Cal. file	units	Beam Peak Deg	dB
165007.DAT-ant_under_test	065007.DAT	dBi	0.04	42.39
165008.DAT-ant_under_test	065008.DAT	dBi	-0.64	22.16

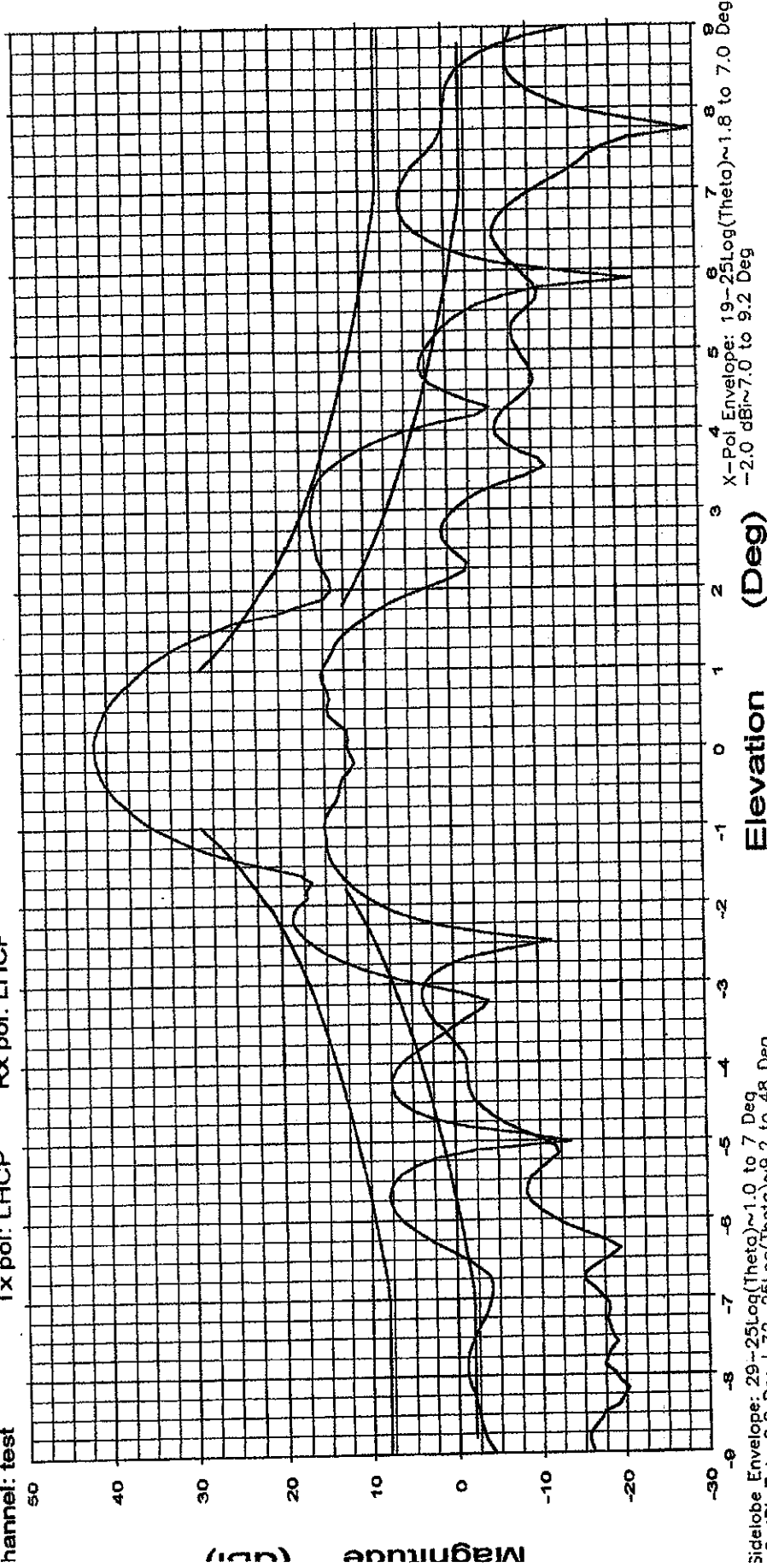
Frequency : 5.925 GHz

Prodellin 2.4 Meter 2- Pc. RX/TX Antenna System  
Series 1251 / C-Band Circular Polarization

le: See Legend

operator: Ken Poovey  
sr. no.: Osartrn1  
channel: test

Tx pol: LHCP Rx pol: LHCP



Overlays

File Name	Units
065005.DAT-ant_under_test	dBI
065009.DAT-ant_under_test	dBI

Beam Peak	Deg	dB
0.08	41.44	
0.92	15.24	

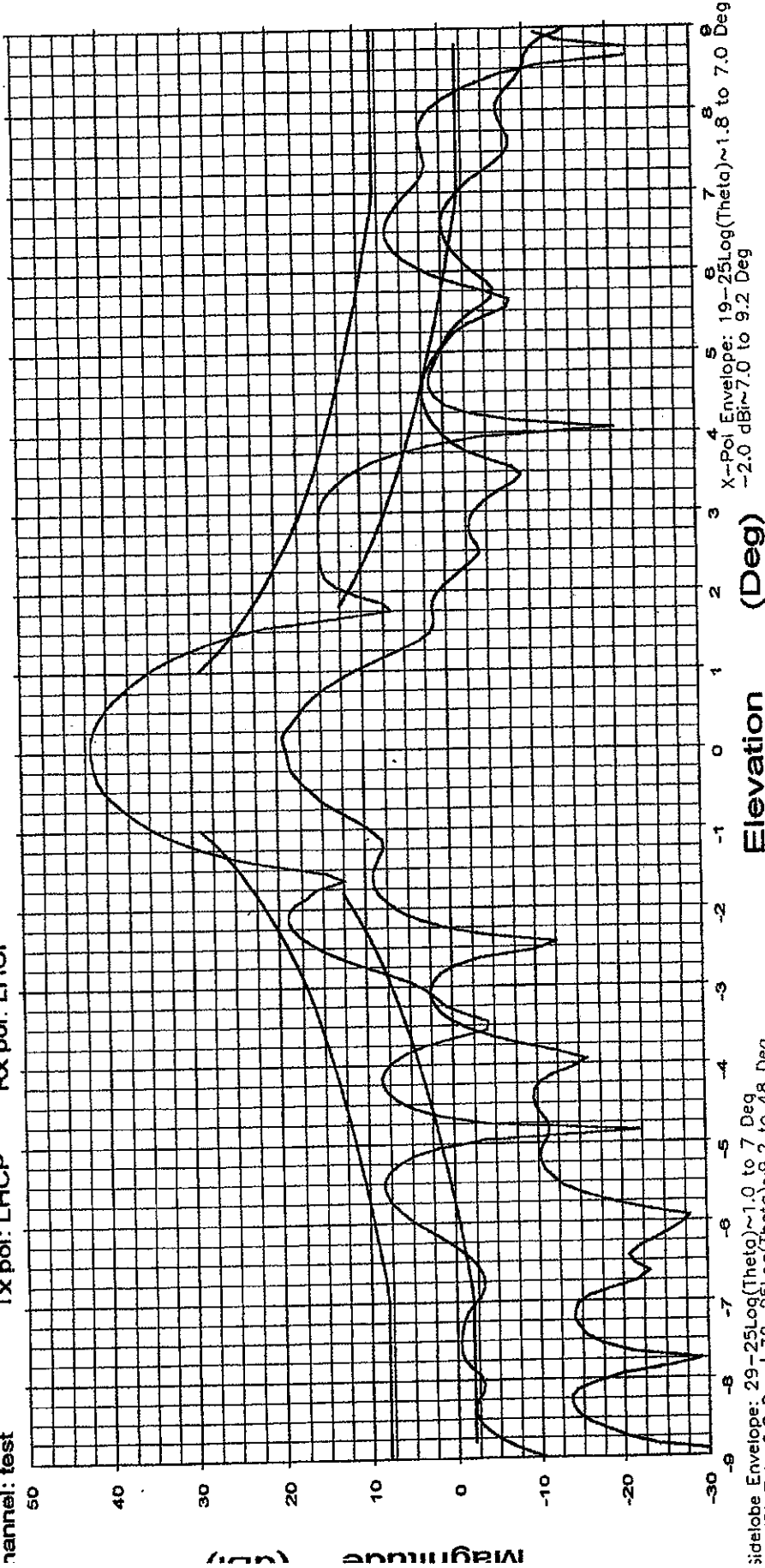
Frequency : 6.175 GHz

Prodellin 2.4 Meter 2- Pc. RX/TX Antenna System  
Series 1251 / C-Band Circular Polarization

See Legend

Operator: Ken Poovey  
Pr. no.: Osartn1  
Channel: test

Tx pol: LHCP Rx pol: LHCP



Overlays

365005.DAT-ant_under_test	365009.DAT-ant_under_test
065005.DAT	065009.DAT
065005.DAT	065009.DAT
065005.DAT	065009.DAT

Beam Peak	units
41.84	dB
0.04	Deg
19.40	dB
0.16	Deg

Frequency : 6.425 GHz

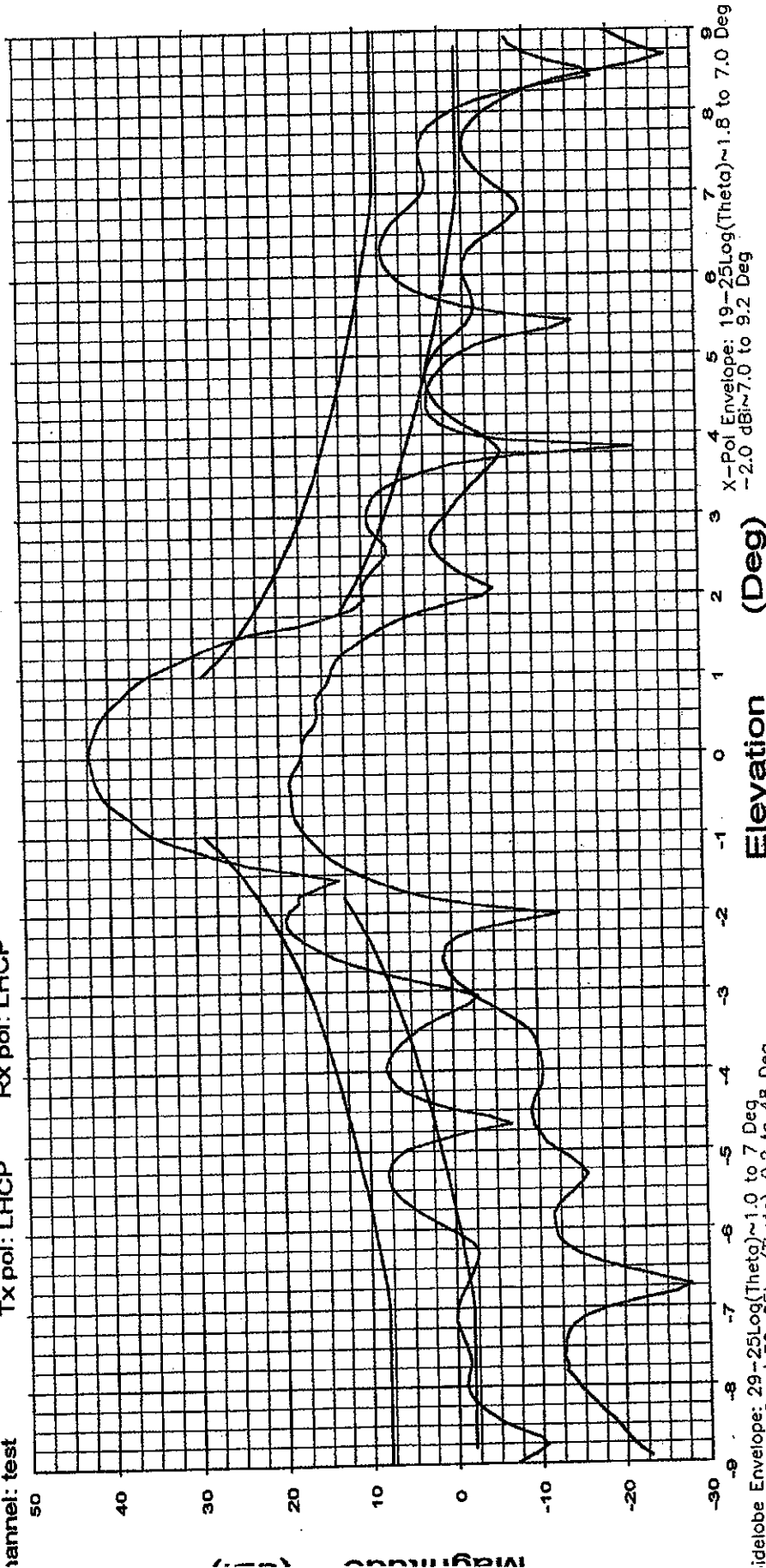
Prodelin 2.4 Meter 2- Pc. RX/TX Antenna System  
Series 1251 / C-Band Circular Polarization

Operator: Ken Poovey

Pr. no.: Osarfn1

Channel: test

Tx pol: LHCP Rx pol: LHCP



1-dB Envelope: 29-25Log(Theta)~1.0 to 7 Deg  
 -8 dB~7 to 9.2 Deg | 32-25Log(Theta)~9.2 to 48 Deg  
 -10 dB~48 to 180 Deg

X-Pol Envelope: 19-25Log(Theta)~1.8 to 7.0 Deg  
 -2.0 dB~7.0 to 9.2 Deg

Overlays  
 X65005.DAT-ant\_under\_test  
 X65009.DAT-ant\_under\_test

Cal. file	units	Beam Peak
065005.DAT	dB	42.28
065009.DAT	dB	18.84