

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

### **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 Beam Gain	42.0 dBi	[field E41]
Total Input Power at Antenna Flange	18.8 watts	[field E38]
Max EIRP Density at Antenna Output	54.75 dBW	[field E40]

$$18.8\text{watts}\log_{10} = 12.75$$
$$42.0 + 12.75 = 54.75 \text{ dBW}$$

Maximum EIRP Density Per Carrier	32.8 dBW/4 KHz	[field E49]
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$$26.0 - 42.0 = (-16.0) \text{ dBW/4KHz}$$

Pursuant to §25.134(a) of the Regulation, 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 -16.0 dBW/4KHz. Consequently, the system will operate with a power density below the maximum allowed by a margin of 13.3 dB.

The 2.4 meter 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.

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

<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).

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 Antenna Flange is -16.0 dBW/4KHz. This figure is below the maximum allowed of -2.7 dBW/4KHz by a margin of 13.3 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 13.3 dB below the limits set forth in §25.134, the provisions of 25.220 will apply.

**Summary**

The antenna pattern contained with this application exceeds the CFR 25.209 sidelobe specification for the sidelobe envelope in the ± 1 to 1.9 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 -16.0 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 provided in Attachment B, sufficient information has been provided to enable the Commission grant this application for license.

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.

25.115 C-Band Compliance Table								
		EIRP at 6.175 GHz	Worst Case -9.8 dB			Worst Case -8.3 dB		Worst Case -14.03 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 (dWB/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	-38.0	-25.3	-12.7	-31.0	-18.3		
-175	-12.7	-33.5	-20.8	-12.7	-29.0	-16.3		
-170	-12.7	-24.5	-11.8	-12.7	-25.5	-12.8		
-165	-12.7	-26.0	-13.3	-12.7	-23.0	-10.3		
-160	-12.7	-25.0	-12.3	-12.7	-23.5	-10.8		
-155	-12.7	-23.0	-10.3	-12.7	-25.0	-12.3		
-150	-12.7	-28.0	-15.3	-12.7	-29.5	-16.8		
-145	-12.7	-28.0	-15.3	-12.7	-28.5	-15.8		
-140	-12.7	-26.0	-13.3	-12.7	-29.0	-16.3		
-135	-12.7	-26.0	-13.3	-12.7	-21.0	-8.3		
-130	-12.7	-27.8	-15.1	-12.7	-26.0	-13.3		
-125	-12.7	-23.7	-11.0	-12.7	-22.0	-9.3		
-120	-12.7	-23.3	-10.6	-12.7	-27.0	-14.3		
-115	-12.7	-32.0	-19.3	-12.7	-33.0	-20.3		
-110	-12.7	-31.0	-18.3	-12.7	-28.5	-15.8		
-105	-12.7	-24.0	-11.3	-12.7	-24.0	-11.3		
-100	-12.7	-31.0	-18.3	-12.7	-32.0	-19.3		
-95	-12.7	-34.0	-21.3	-12.7	-33.0	-20.3		
-90	-12.7	-33.0	-20.3	-12.7	-31.0	-18.3		
-85	-12.7	-26.0	-13.3	-12.7	-26.0	-13.3		
-80	-12.7	-28.0	-15.3	-12.7	-28.5	-15.8		
-75	-12.7	-28.5	-15.8	-12.7	-31.0	-18.3		
-70	-12.7	-33.0	-20.3	-12.7	-34.0	-21.3		
-65	-12.7	-36.0	-23.3	-12.7	-32.0	-19.3		
-60	-12.7	-33.0	-20.3	-12.7	-29.0	-16.3		
-55	-12.7	-33.0	-20.3	-12.7	-32.0	-19.3		
-50	-12.7	-36.0	-23.3	-12.7	-33.5	-20.8		
-48	-12.7			-12.7				
-45	-12.0	-38.0	-26.0	-12.0	-36.0	-24.0		
-40	-10.8	-29.0	-18.2	-10.8	-34.0	-23.2		
-35	-9.3	-38.0	-28.7	-9.3	-34.0	-24.7		
-30	-7.6	-28.5	-20.9	-7.6	-33.5	-25.9		
-25	-5.6	-29.0	-23.4	-5.6	-31.0	-25.4		
-20	-3.2	-28.5	-25.3	-3.2	-29.5	-26.3		
-15	-0.1	-26.0	-25.9	-0.1	-28.5	-28.4		
-10	4.3	-18.5	-22.8	4.3	-26.0	-30.3		
-9.9	4.4	-21.0	-25.4	4.4	-23.5	-27.9		
-9.8	4.5	-26.0	-30.5	4.5	-21.0	-25.5		
-9.7	4.6	-31.0	-35.6	4.6	-18.5	-23.1		
-9.6	4.7	-33.0	-37.7	4.7	-17.0	-21.7		

-9.5	4.9	-36.0	-40.9	4.9	-15.0	-19.9		
-9.4	5.0	-33.0	-38.0	5.0	-15.2	-20.2		
-9.3	5.1	-31.0	-36.1	5.1	-15.4	-20.5		
-9.2	5.3	-27.0	-32.3	5.2	-15.6	-20.8		
-9.1	5.3	-26.0	-31.3	5.3	-15.8	-21.1		
-9	5.3	-19.0	-24.3	5.4	-16.0	-21.4	-15.3	-20.7
-8.9	5.3	-21.0	-26.3	5.6	-15.0	-20.6	-15.9	-21.4
-8.8	5.3	-26.0	-31.3	5.7	-14.0	-19.7	-16.4	-22.1
-8.7	5.3	-32.0	-37.3	5.8	-14.5	-20.3	-17.2	-23.0
-8.6	5.3	-29.0	-34.3	5.9	-15.0	-20.9	-18.0	-23.9
-8.5	5.3	-26.0	-31.3	6.1	-16.5	-22.6	-19.3	-25.4
-8.4	5.3	-21.0	-26.3	6.2	-21.0	-27.2	-19.7	-25.8
-8.3	5.3	-18.5	-23.8	6.3	-26.0	-32.3	-20.0	-26.3
-8.2	5.3	-17.5	-22.8	6.5	-37.0	-43.5	-19.0	-25.4
-8.1	5.3	-17.0	-22.3	6.6	-32.0	-38.6	-18.6	-25.2
-8	5.3	-16.0	-21.3	6.7	-26.0	-32.7	-17.2	-23.9
-7.9	5.3	-17.0	-22.3	6.9	-24.0	-30.9	-16.5	-23.3
-7.8	5.3	-18.0	-23.3	7.0	-22.0	-29.0	-15.9	-22.9
-7.7	5.3	-21.0	-26.3	7.1	-20.0	-27.1	-15.5	-22.6
-7.6	5.3	-22.0	-27.3	7.3	-21.0	-28.3	-15.3	-22.6
-7.5	5.3	-24.0	-29.3	7.4	-22.0	-29.4	-14.6	-22.1
-7.4	5.3	-22.0	-27.3	7.6	-28.0	-35.6	-13.7	-21.3
-7.3	5.3	-21.0	-26.3	7.7	-28.5	-36.2	-12.8	-20.5
-7.2	5.3	-16.0	-21.3	7.9	-23.0	-30.9	-11.8	-19.7
-7.1	5.3	-15.0	-20.3	8.0	-19.0	-27.0	-10.4	-18.4
-7.0	5.2	-21.0	-26.2	8.2	-16.0	-24.2	-9.7	-17.8
-6.9	5.3	-18.5	-23.8	8.3	-15.0	-23.3	-8.8	-17.1
-6.8	5.5	-13.5	-19.0	8.5	-14.0	-22.5	-8.5	-16.9
-6.7	5.6	-12.5	-18.1	8.6	-13.0	-21.6	-8.3	-16.9
-6.6	5.8	-11.3	-17.1	8.8	-12.0	-20.8	-8.6	-17.4
-6.5	6.0	-11.1	-17.1	9.0	-11.0	-20.0	-9.2	-18.2
-6.4	6.1	-11.3	-17.4	9.1	-13.5	-22.6	-10.7	-19.9
-6.3	6.3	-12.5	-18.8	9.3	-16.0	-25.3	-12.5	-21.8
-6.2	6.5	-13.5	-20.0	9.5	-18.5	-28.0	-16.0	-25.5
-6.1	6.7	-18.5	-25.2	9.7	-21.0	-30.7	-23.3	-33.0
-6.0	6.8	-21.0	-27.8	9.8	-23.5	-33.3	-31.6	-41.4
-5.9	7.0	-25.0	-32.0	10.0	-21.0	-31.0	-19.1	-29.1
-5.8	7.2	-26.0	-33.2	10.2	-21.0	-31.2	-14.9	-25.2
-5.7	7.4	-21.0	-28.4	10.4	-19.0	-29.4	-12.5	-22.9
-5.6	7.6	-16.0	-23.6	10.6	-17.0	-27.6	-11.3	-21.9
-5.5	7.8	-13.5	-21.3	10.8	-15.0	-25.8	-10.9	-21.7
-5.4	8.0	-13.3	-21.3	11.0	-15.0	-26.0	-10.8	-21.8
-5.3	8.2	-13.0	-21.2	11.2	-16.0	-27.2	-11.2	-22.4
-5.2	8.4	-13.3	-21.7	11.4	-20.0	-31.4	-11.4	-22.8
-5.1	8.6	-14.5	-23.1	11.6	-23.0	-34.6	-12.4	-24.0
-5.0	8.8	-16.0	-24.8	11.8	-27.0	-38.8	-13.1	-24.9
-4.9	9.0	-15.5	-24.5	12.0	-21.0	-33.0	-13.0	-25.1
-4.8	9.3	-15.0	-24.3	12.3	-16.0	-28.3	-11.4	-23.7
-4.7	9.5	-14.5	-24.0	12.5	-13.0	-25.5	-9.9	-22.4
-4.6	9.7	-13.0	-22.7	12.7	-11.0	-23.7	-8.1	-20.8
-4.5	10.0	-10.0	-20.0	13.0	-8.0	-21.0	-6.9	-19.9
-4.4	10.2	-8.5	-18.7	13.2	-7.0	-20.2	-6.1	-19.3

-4.3	10.5	-8.0	-18.5	13.5	-6.0	-19.5	-5.7	-19.1
-4.2	10.7	-8.0	-18.7	13.7	-7.0	-20.7	-5.8	-19.5
-4.1	11.0	-8.5	-19.5	14.0	-8.0	-22.0	-6.1	-20.1
-4.0	11.2	-9.0	-20.2	14.2	-8.5	-22.7	-7.1	-21.3
-3.9	11.5	-13.0	-24.5	14.5	-11.0	-25.5	-8.8	-23.4
-3.8	11.8	-19.0	-30.8	14.8	-15.9	-30.7	-11.1	-25.9
-3.7	12.1	-23.0	-35.1	15.1	-23.0	-38.1	-13.5	-28.6
-3.6	12.4	-16.0	-28.4	15.4	-19.0	-34.4	-19.2	-34.6
-3.5	12.7	-13.5	-26.2	15.7	-13.2	-28.9	-33.9	-49.6
-3.4	13.0	-11.0	-24.0	16.0	-8.0	-24.0	-20.3	-36.4
-3.3	13.3	-6.0	-19.3	16.3	-9.0	-25.3	-14.8	-31.2
-3.2	13.7	-4.0	-17.7	16.7	-8.0	-24.7	-11.6	-28.3
-3.1	14.0	-3.5	-17.5	17.0	-7.0	-24.0	-9.5	-26.5
-3.0	14.4	-3.0	-17.4	17.4	-5.5	-22.9	-7.8	-25.2
-2.9	14.7	-2.9	-17.6		-5.0			
-2.8	15.1	-2.8	-17.9		-4.5			
-2.7	15.5	-2.5	-18.0		-3.5			
-2.6	15.9	-2.0	-17.9		-2.0			
-2.5	16.4	-1.0	-17.4		-1.0			
-2.4	16.8	0.0	-16.8		-0.5			
-2.3	17.3	1.0	-16.3		0.0			
-2.2	17.7	1.5	-16.2		1.0			
-2.1	18.2	2.0	-16.2		2.0			
-2.0	18.8	2.5	-16.3		3.0			
-1.9	19.3	2.9	-16.4		2.0			
-1.8	19.9	3.2	-16.7		1.6			
-1.7	20.5	3.6	-16.9		2.0			
-1.6	21.2	3.8	-17.4		4.0			
-1.5	21.9	4.0	-17.9		6.5			
-1.4		13.0			9.7			
-1.3		14.6			12.0			
-1.2		16.2			14.5			
-1.1		17.5			16.4			
-1.0		18.8			17.9			
-0.9		20.1			19.4			
-0.8		21.1			20.6			
-0.7		22.1			21.7			
-0.6		23.0			22.7			
-0.5		23.8			23.5			
-0.4		24.3			24.1			
-0.3		24.8			24.6			
-0.2		25.2			25.0			
-0.1		25.3			25.2			
0.0		26.0			26.0			
0.1		25.5			25.2			
0.2		25.4			25.1			
0.3		25.1			24.8			
0.4		24.7			24.5			
0.5		24.3			23.9			
0.6		23.5			23.3			
0.7		22.7			22.2			
0.8		21.8			21.3			

0.9		20.6			19.8			
1.0		19.3			18.3			
1.1		18.0			16.8			
1.2		16.4			14.7			
1.3		14.4			12.4			
1.4		12.7			9.3			
1.5	21.9	6.0	-15.9		6.5			
1.6	21.2	3.0	-18.2		4.0			
1.7	20.5	1.5	-19.0		2.0			
1.8	19.9	0.0	-19.9		1.0			
1.9	19.3	3.0	-16.3		3.0			
2.0	18.8	3.5	-15.3		4.0			
2.1	18.2	4.0	-14.2		3.0			
2.2	17.7	3.5	-14.2		2.0			
2.3	17.3	3.0	-14.3		1.0			
2.4	16.8	1.5	-15.3		-1.0			
2.5	16.4	0.0	-16.4		-4.0			
2.6	15.9	-2.0	-17.9		0.0			
2.7	15.5	-3.5	-19.0		-1.0			
2.8	15.1	-2.8	-17.9		-2.0			
2.9	14.7	-2.5	-17.2		-3.0			
3.0	14.4	-1.5	-15.9	17.4	-2.0	-19.4	-5.2	-22.6
3.1	14.0	-1.3	-15.3	17.0	-3.0	-20.0	-8.3	-25.3
3.2	13.7	-1.0	-14.7	16.7	-4.0	-20.7	-11.2	-27.9
3.3	13.3	-2.0	-15.3	16.3	-5.0	-21.3	-16.2	-32.5
3.4	13.0	-2.8	-15.8	16.0	-5.5	-21.5	-21.7	-37.8
3.5	12.7	-3.5	-16.2	15.7	-6.0	-21.7	-19.0	-34.7
3.6	12.4	-7.0	-19.4	15.4	-11.0	-26.4	-13.2	-28.6
3.7	12.1	-8.5	-20.6	15.1	-21.0	-36.1	-10.1	-25.2
3.8	11.8	-16.0	-27.8	14.8	-17.0	-31.8	-8.0	-22.8
3.9	11.5	-24.0	-35.5	14.5	-14.0	-28.5	-6.7	-21.2
4.0	11.2	-21.0	-32.2	14.2	-11.0	-25.2	-6.0	-20.2
4.1	11.0	-16.0	-27.0	14.0	-8.5	-22.5	-5.5	-19.4
4.2	10.7	-14.0	-24.7	13.7	-6.0	-19.7	-5.3	-19.0
4.3	10.5	-13.0	-23.5	13.5	-6.0	-19.5	-5.5	-19.0
4.4	10.2	-11.0	-21.2	13.2	-8.0	-21.2	-6.3	-19.5
4.5	10.0	-9.0	-19.0	13.0	-8.5	-21.5	-7.8	-20.7
4.6	9.7	-11.0	-20.7	12.7	-11.0	-23.7	-9.5	-22.2
4.7	9.5	-13.0	-22.5	12.5	-13.5	-26.0	-12.4	-24.9
4.8	9.3	-16.0	-25.3	12.3	-12.0	-24.3	-14.5	-26.7
4.9	9.0	-14.5	-23.5	12.0	-11.0	-23.0	-15.0	-27.0
5.0	8.8	-18.5	-27.3	11.8	-21.0	-32.8	-13.8	-25.6
5.1	8.6	-16.0	-24.6	11.6	-18.5	-30.1	-12.1	-23.7
5.2	8.4	-13.5	-21.9	11.4	-16.0	-27.4	-11.3	-22.6
5.3	8.2	-12.0	-20.2	11.2	-13.5	-24.7	-10.8	-22.0
5.4	8.0	-11.5	-19.5	11.0	-12.7	-23.7	-11.3	-22.3
5.5	7.8	-11.0	-18.8	10.8	-13.5	-24.3	-11.8	-22.6
5.6	7.6	-11.5	-19.1	10.6	-15.0	-25.6	-13.9	-24.5
5.7	7.4	-12.0	-19.4	10.4	-16.0	-26.4	-17.3	-27.7
5.8	7.2	-13.5	-20.7	10.2	-19.0	-29.2	-24.7	-35.0
5.9	7.0	-18.5	-25.5	10.0	-22.0	-32.0	-28.8	-38.9
6.0	6.8	-23.5	-30.3	9.8	-25.0	-34.8	-19.3	-29.1

6.1	6.7	-23.5	-30.2	9.7	-18.5	-28.2	-15.6	-25.3
6.2	6.5	-21.0	-27.5	9.5	-16.0	-25.5	-13.5	-23.0
6.3	6.3	-17.5	-23.8	9.3	-15.0	-24.3	-11.9	-21.2
6.4	6.1	-15.0	-21.1	9.1	-13.5	-22.6	-10.8	-19.9
6.5	6.0	-14.0	-20.0	9.0	-13.0	-22.0	-10.3	-19.3
6.6	5.8	-13.5	-19.3	8.8	-14.0	-22.8	-10.2	-19.0
6.7	5.6	-14.0	-19.6	8.6	-15.0	-23.6	-10.4	-19.0
6.8	5.5	-16.0	-21.5	8.5	-16.0	-24.5	-10.9	-19.4
6.9	5.3	-18.0	-23.3	8.3	-18.5	-26.8	-11.3	-19.7
7.0	5.2	-18.5	-23.7	8.2	-23.5	-31.7	-11.5	-19.6
7.1	5.3	-14.0	-19.3	8.0	-28.0	-36.0	-11.4	-19.5
7.2	5.3	-15.0	-20.3	7.9	-28.0	-35.9	-11.1	-19.0
7.3	5.3	-17.0	-22.3	7.7	-28.0	-35.7	-10.6	-18.3
7.4	5.3	-22.0	-27.3	7.6	-23.0	-30.6	-9.9	-17.5
7.5	5.3	-27.0	-32.3	7.4	-16.0	-23.4	-9.6	-17.1
7.6	5.3	-28.5	-33.8	7.3	-15.0	-22.3	-9.5	-16.8
7.7	5.3	-23.5	-28.8	7.1	-14.0	-21.1	-9.9	-17.0
7.8	5.3	-16.0	-21.3	7.0	-15.5	-22.5	-10.4	-17.3
7.9	5.3	-15.0	-20.3	6.9	-16.5	-23.4	-10.9	-17.8
8.0	5.3	-13.5	-18.8	6.7	-18.0	-24.7	-11.4	-18.1
8.1	5.3	-13.3	-18.6	6.6	-21.0	-27.6	-12.7	-19.3
8.2	5.3	-13.0	-18.3	6.5	-25.0	-31.5	-14.5	-21.0
8.3	5.3	-13.3	-18.6	6.3	-21.0	-27.3	-17.2	-23.5
8.4	5.3	-13.5	-18.8	6.2	-12.0	-18.2	-20.6	-26.8
8.5	5.3	-14.0	-19.3	6.1	-18.5	-24.6	-26.8	-32.9
8.6	5.3	-16.0	-21.3	5.9	-17.0	-22.9	-30.1	-36.1
8.7	5.3	-21.0	-26.3	5.8	-18.0	-23.8	-24.6	-30.4
8.8	5.3	-23.0	-28.3	5.7	-18.5	-24.2	-21.9	-27.6
8.9	5.3	-26.0	-31.3	5.6	-19.0	-24.6	-20.5	-26.0
9.0	5.3	-32.0	-37.3	5.4	-19.5	-24.9	-20.3	-25.7
9.1	5.3	-23.0	-28.3	5.3	-19.0	-24.3	-20.7	-26.0
9.2	5.3	-24.0	-29.3	5.2	-19.5	-24.7	-21.1	-26.3
9.3	5.1	-25.0	-30.1	5.1	-20.0	-25.1	-21.0	-26.1
9.4	5.0	-28.5	-33.5	5.0	-20.5	-25.5	-20.2	-25.2
9.5	4.9	-25.0	-29.9	4.9	-21.0	-25.9	-18.2	-23.1
9.6	4.7	-25.0	-29.7	4.7	-22.0	-26.7	-17.3	-22.1
9.7	4.6	-23.0	-27.6	4.6	-23.0	-27.6	-15.9	-20.5
9.8	4.5	-21.0	-25.5	4.5	-24.0	-28.5	-15.0	-19.5
9.9	4.4	-17.0	-21.4	4.4	-25.0	-29.4	-14.4	-18.8
10.0	4.3	-15.0	-19.3	4.3	-26.0	-30.3	-14.1	-18.4
15.0	-0.1	-22.0	-21.9	-0.1	-26.0	-25.9	-20.5	-20.4
20.0	-3.2	-23.5	-20.3	-3.2	-28.0	-24.8	-21.4	-18.2
25.0	-5.6	-28.5	-22.9	-5.6	-29.0	-23.4	-34.5	-28.8
30.0	-7.6	-27.0	-19.4	-7.6	-27.0	-19.4	-21.7	-14.0
35.0	-9.3	-31.0	-21.7	-9.3	-31.0	-21.7	-34.5	-25.1
40.0	-10.8	-36.0	-25.2	-10.8	-36.0	-25.2	-32.8	-22.0
45.0	-12.0	-31.0	-19.0	-12.0	-29.0	-17.0		
48	-12.7			-12.7				
50.0	-12.7	-31.0	-18.3	-12.7	-33.0	-20.3		
55.0	-12.7	-33.0	-20.3	-12.7	-35.0	-22.3		
60.0	-12.7	-31.0	-18.3	-12.7	-28.0	-15.3		
65.0	-12.7	-32.0	-19.3	-12.7	-34.0	-21.3		

70.0	-12.7	-33.0	-20.3	-12.7	-34.0	-21.3		
75.0	-12.7	-31.0	-18.3	-12.7	-33.5	-20.8		
80.0	-12.7	-31.0	-18.3	-12.7	-26.0	-13.3		
85.0	-12.7	-23.5	-10.8	-12.7	-21.0	-8.3		
90.0	-12.7	-31.0	-18.3	-12.7	-29.5	-16.8		
95.0	-12.7	-37.0	-24.3	-12.7	-29.0	-16.3		
100.0	-12.7	-28.5	-15.8	-12.7	-29.5	-16.8		
105.0	-12.7	-26.0	-13.3	-12.7	-29.5	-16.8		
110.0	-12.7	-26.0	-13.3	-12.7	-33.0	-20.3		
115.0	-12.7	-23.0	-10.3	-12.7	-31.0	-18.3		
120.0	-12.7	-22.5	-9.8	-12.7	-30.0	-17.3		
125.0	-12.7	-28.0	-15.3	-12.7	-29.0	-16.3		
130.0	-12.7	-27.0	-14.3	-12.7	-29.0	-16.3		
135.0	-12.7	-24.0	-11.3	-12.7	-32.0	-19.3		
140.0	-12.7	-26.0	-13.3	-12.7	-33.0	-20.3		
145.0	-12.7	-28.5	-15.8	-12.7	-31.0	-18.3		
150.0	-12.7	-32.5	-19.8	-12.7	-30.0	-17.3		
155.0	-12.7	-28.0	-15.3	-12.7	-23.0	-10.3		
160.0	-12.7	-26.0	-13.3	-12.7	-23.5	-10.8		
165.0	-12.7	-26.0	-13.3	-12.7	-23.5	-10.8		
170.0	-12.7	-25.0	-12.3	-12.7	-24.5	-11.8		
175.0	-12.7	-33.0	-20.3	-12.7	-33.0	-20.3		
180.0	-12.7	-36.0	-23.3	-12.7	-33.5	-20.8		

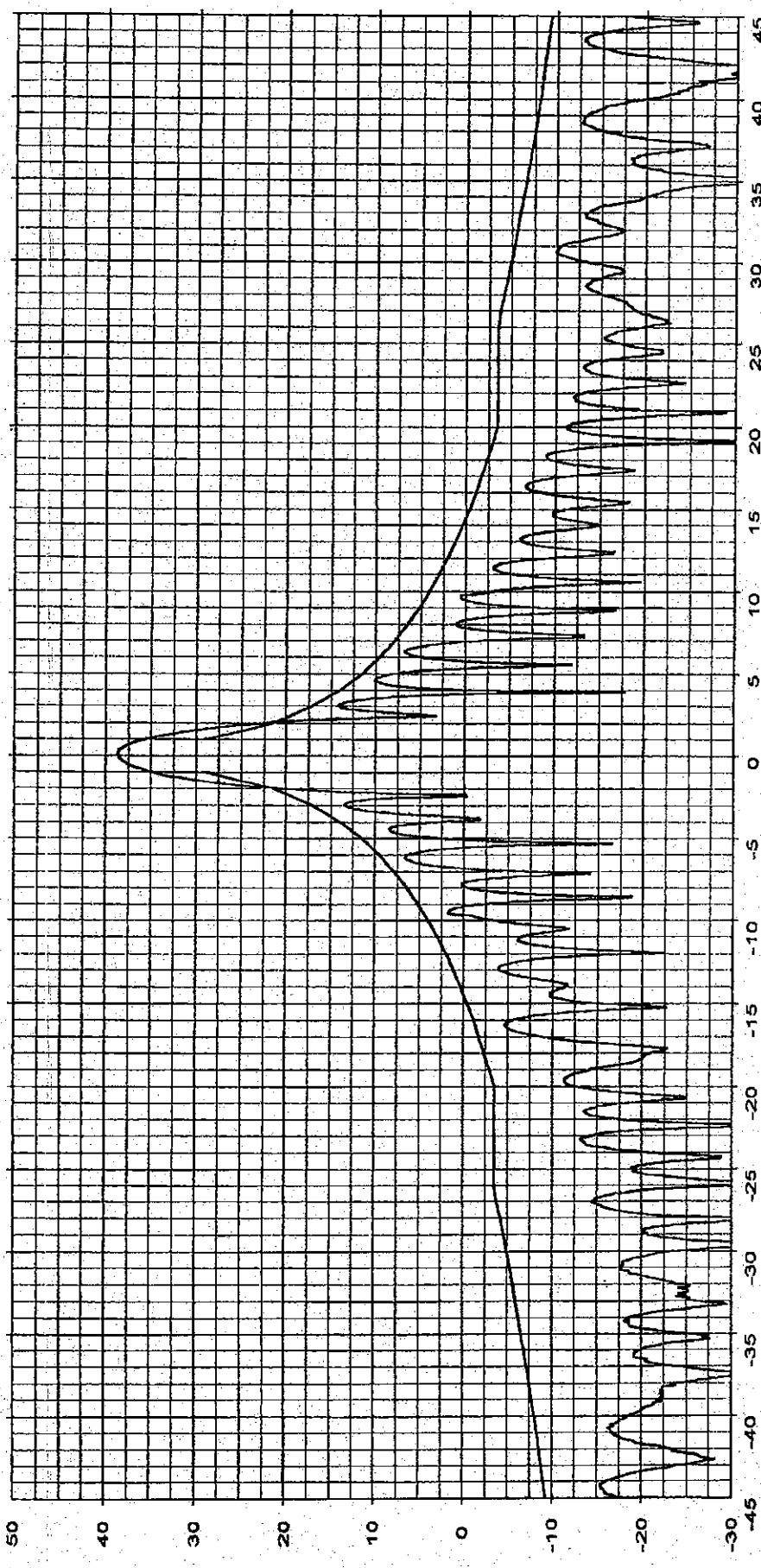


File: See Legend  
Operator: Ken Poovey  
Ser. no.:  
Channel: test

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

TX pol: Horiz.    RX pol: Horiz.

Frequency : 4.200 GHz



FAX NO. 828 466 0860

PRODELIN CORP.

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

Azimuth (Deg)

Beam Peak  
Deg 0.06    dB 38.63

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

JUL-08-1999 THU 01:59 PM

Prodelin Corporation  
Riverbend    it Range  
Cl.    nont NC

File: See Legend

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

Frequency : 3.950 GHz

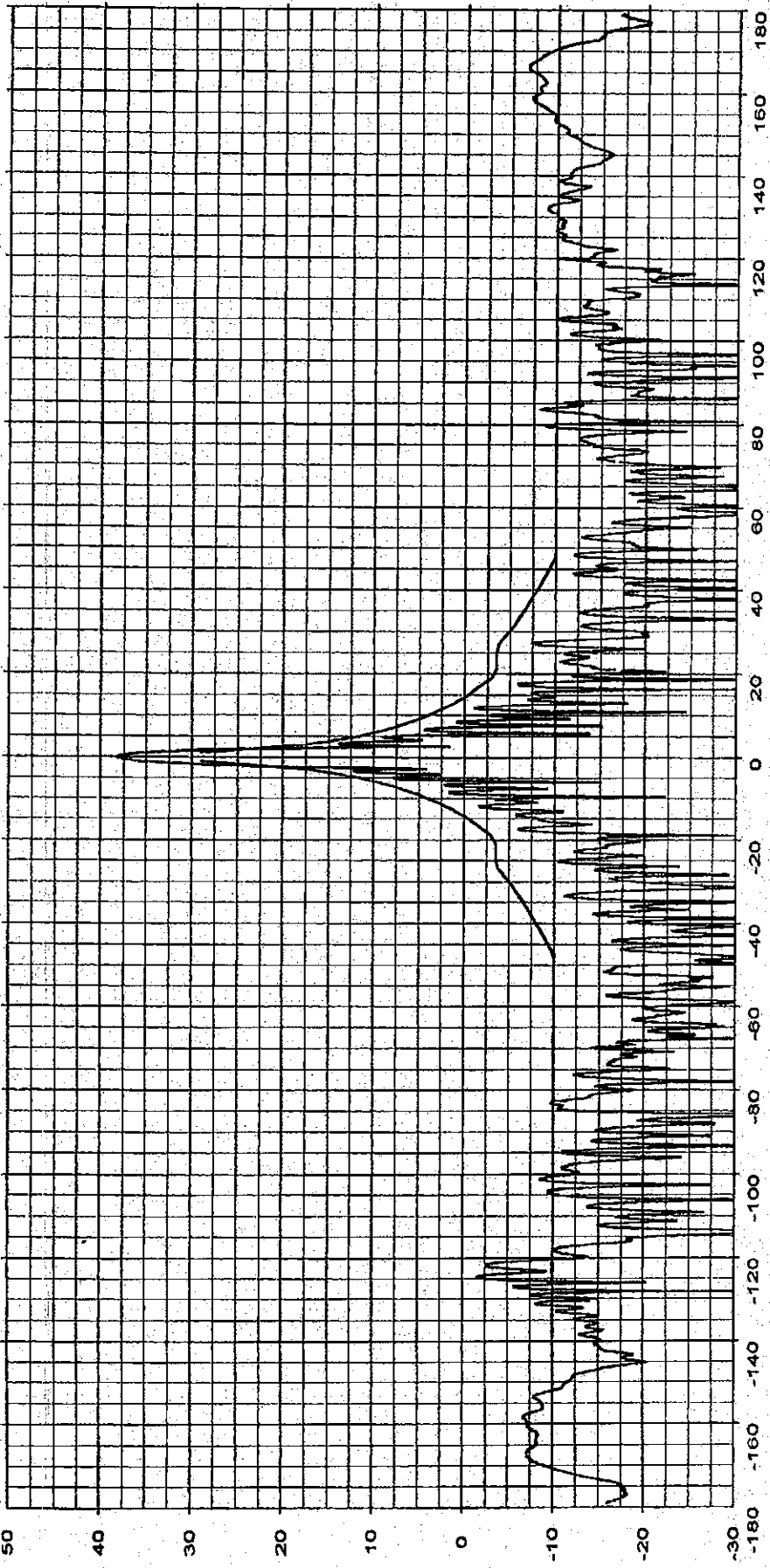
Operator: Ken Poovey

Ser. no.:

Channel: test

Tx pol: Vert.

Rx pol: Vert.



Sidelobe 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

Azimuth (Deg)

Beam Peak  
 Deg -0.13  
 dB 38.10

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

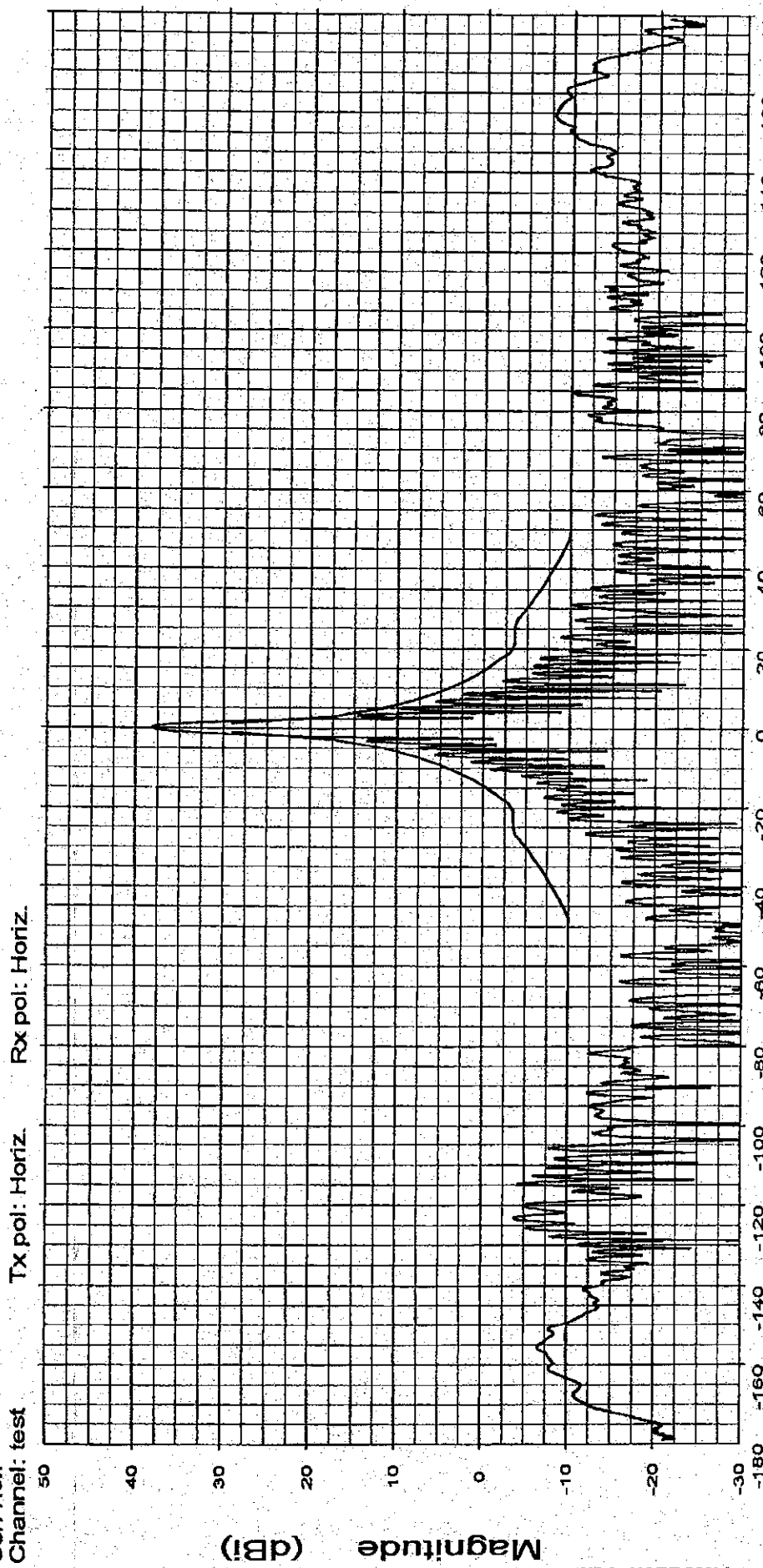
FAX NO. 828 466 0860

PRODELIN CORP.

JUL-08-1999 THU 02:00 PM

Prodelin Corporation  
 Riverbend  
 Clmont NC

File: See Legend  
 Operator: Ken Poovey  
 Ser. no.:  
 Channel: test  
 Tx pol: Horiz  
 Rx pol: Horiz  
 Frequency : 3.950 GHz  
 Prodelin 2.4M 4-Pc  
 Receive / Transmit  
 Offset Antenna System  
 C-Band Linear



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

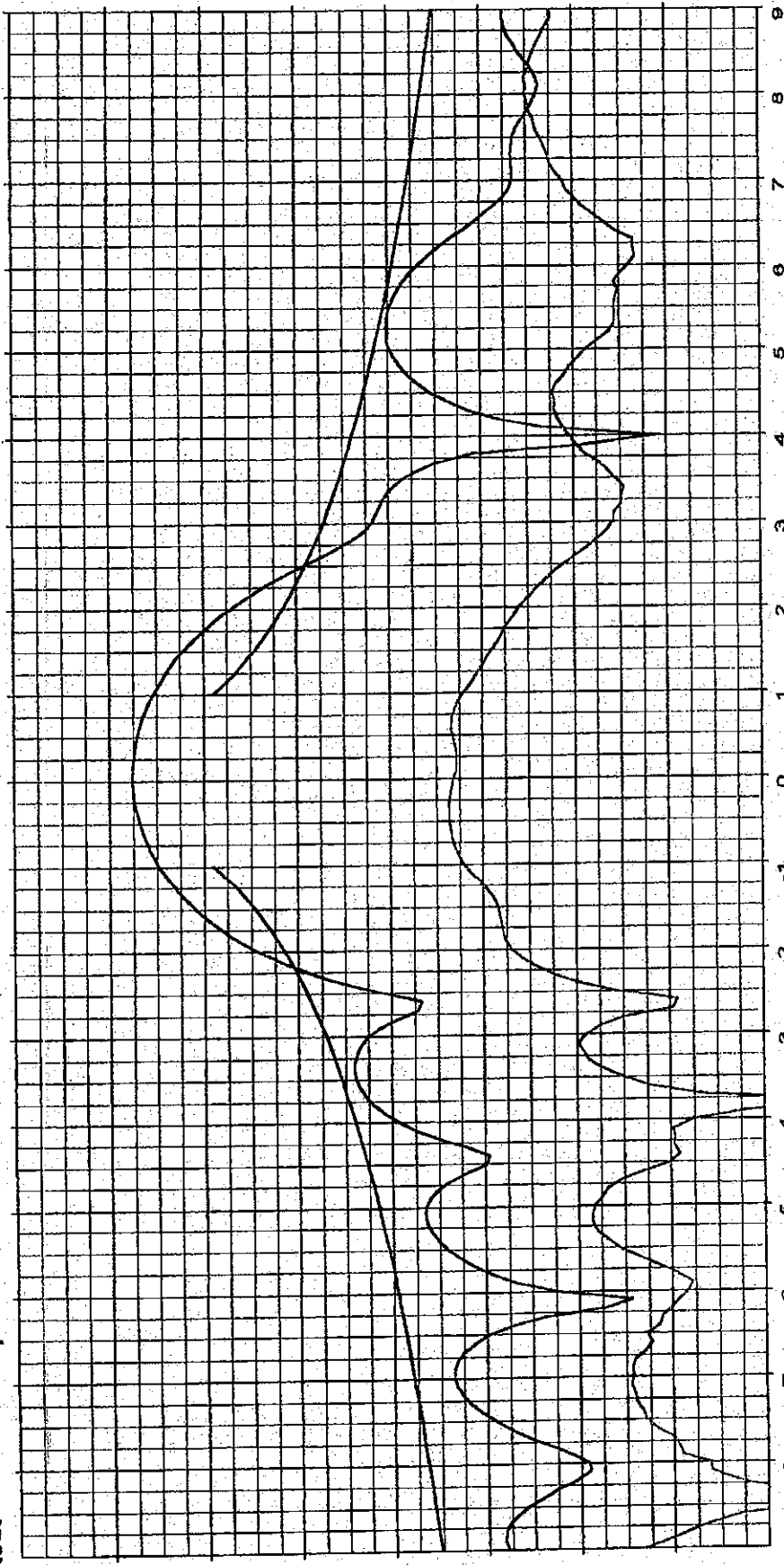
Overlays  
 064549.DAT-ant\_under\_test  
 Cal. file units  
 064549.DAT dBi  
 Beam Peak  
 Deg 0.03  
 dB 38.02

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.



Elevation (Deg)

Sidlobe 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

Beam Peak	Deg	dB
0.00	37.52	
-0.30	3.64	

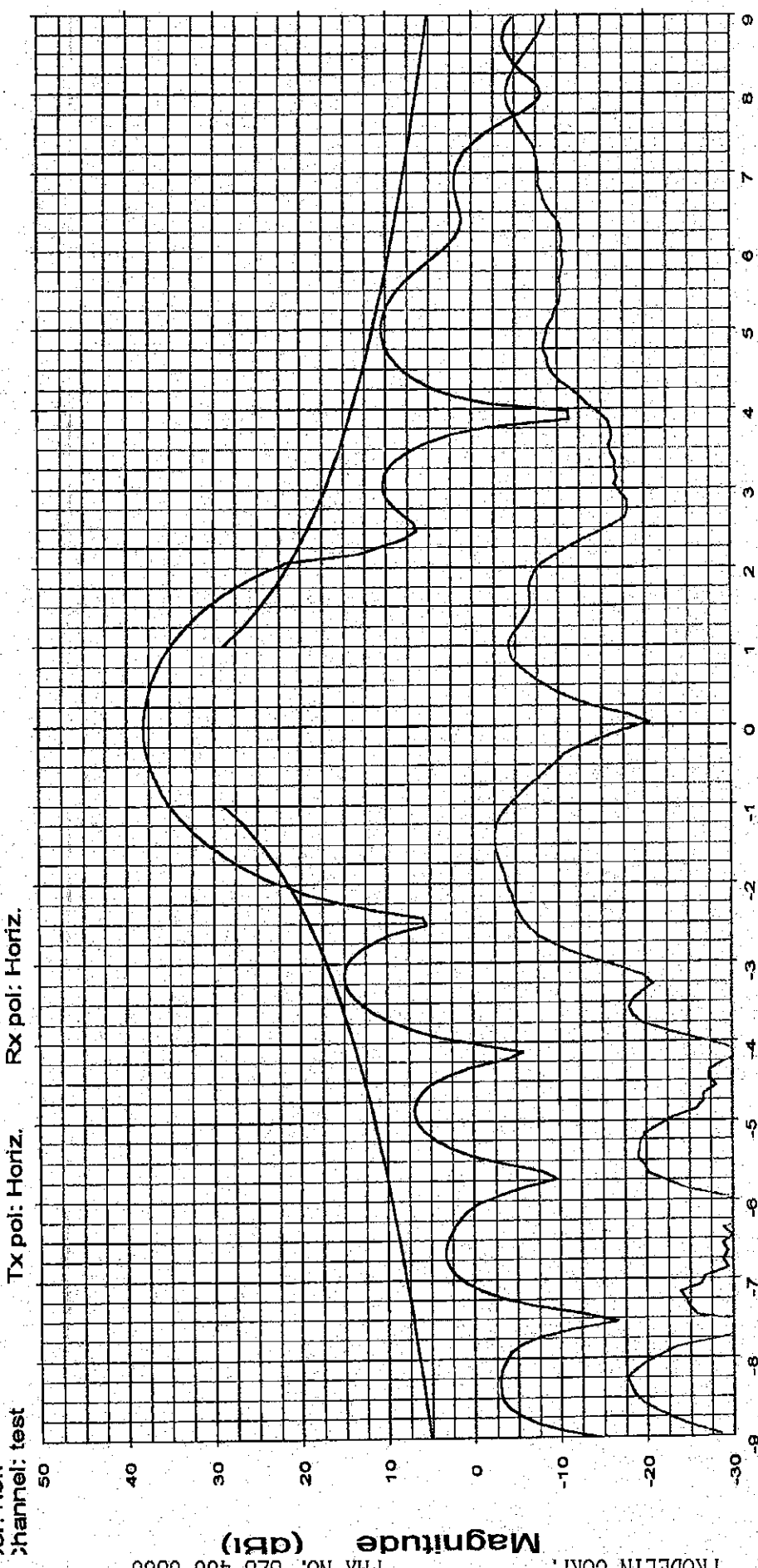
Cal. file	units
064551.DAT	dBi
064553.DAT	dBi

Overlays  
064551.DAT-ant\_under\_test  
064553.DAT-ant\_under\_test

Frequency : 3.950 GHz

Operator: Ken Poovey  
Channel: test  
Tx pol: Horiz. Rx pol: Horiz.

File: See Legend  
Operator: Ken Poovey  
Channel: test



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

Sidelobe 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

Frequency : 4.200 GHz

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

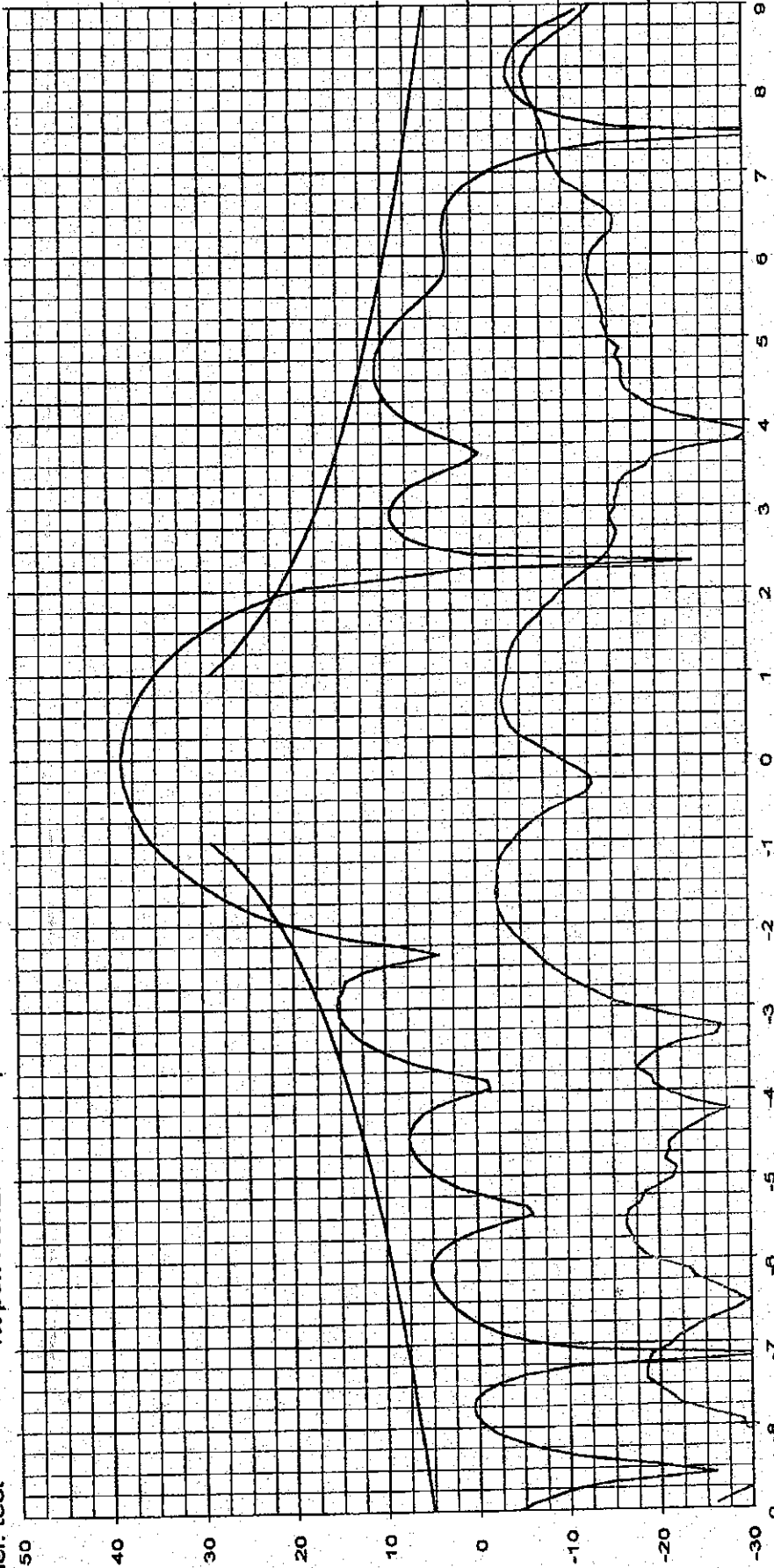
File: See Legend

Operator: Ken Poovey

ser. no.:

channel: test

Tx pol: Horiz. Rx pol: Horiz.



Sidelobe Envelope: 29-25Log(Theta)~100Lamda/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

Elevation (Deg)

Beam Peak	units
Deg	dB
0.03	38.60
-1.63	-2.31

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

File: See Legend

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

Frequency : 3.700 GHz

Operator: Ken Poovey

Ser. no.:

Channel: test

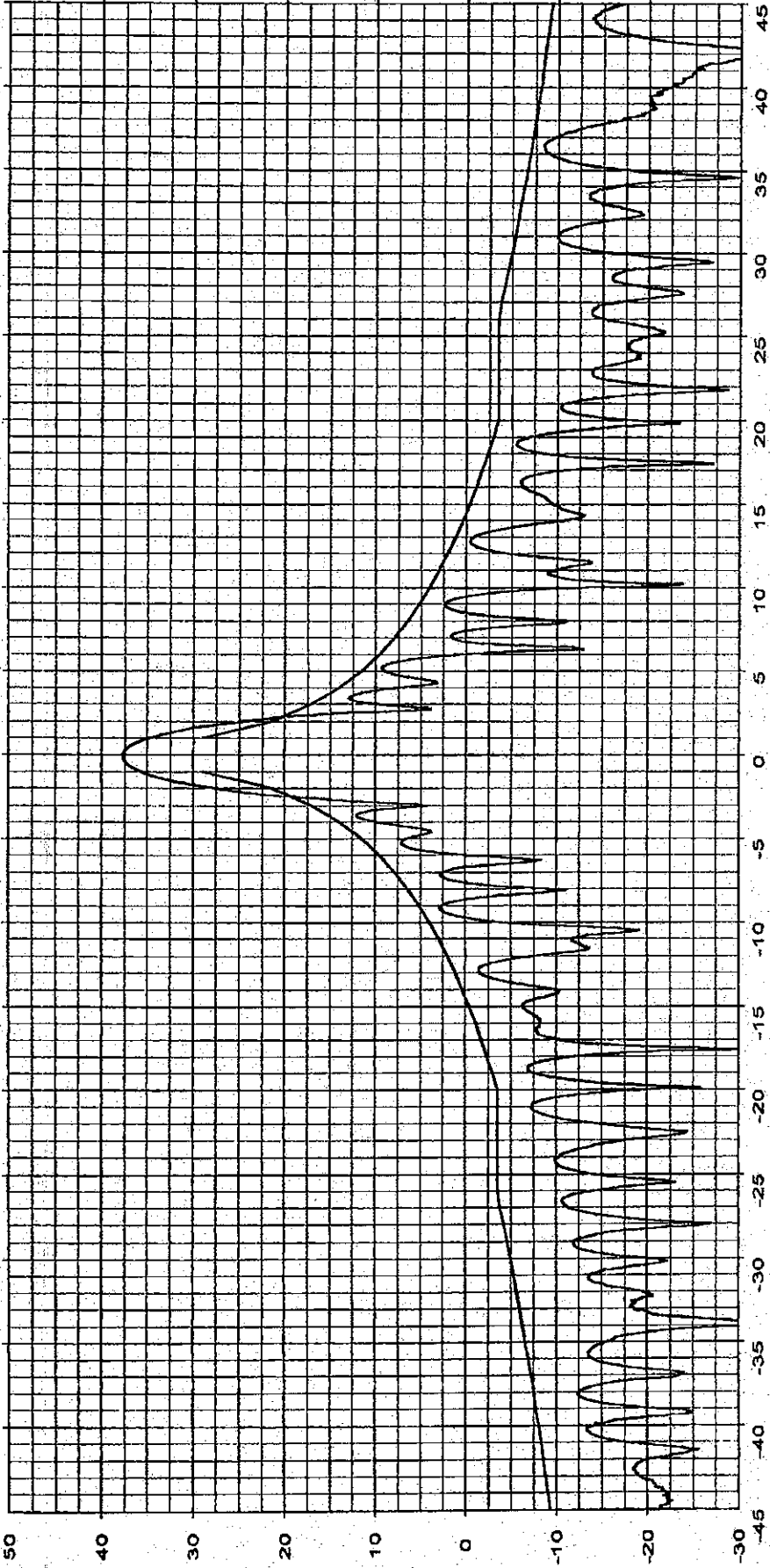
Tx pol: Vert.

Rx pol: Vert.

FAX NO. 828 466 0860

PRODELIN CORP.

JUL-08-1999 THU 01:44 PM



Sidelobe Envelope: 29-25Log(Theta)~100Lmdc/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 -0.10  
dB 37.66

Overlays  
364544.DAT-ant\_under\_test  
Cal. file 064544.DAT  
units dBi

Prodelin Corporation  
Riverbend  
Clmont NC

Frequency : 3.950 GHz

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

File: See Legend

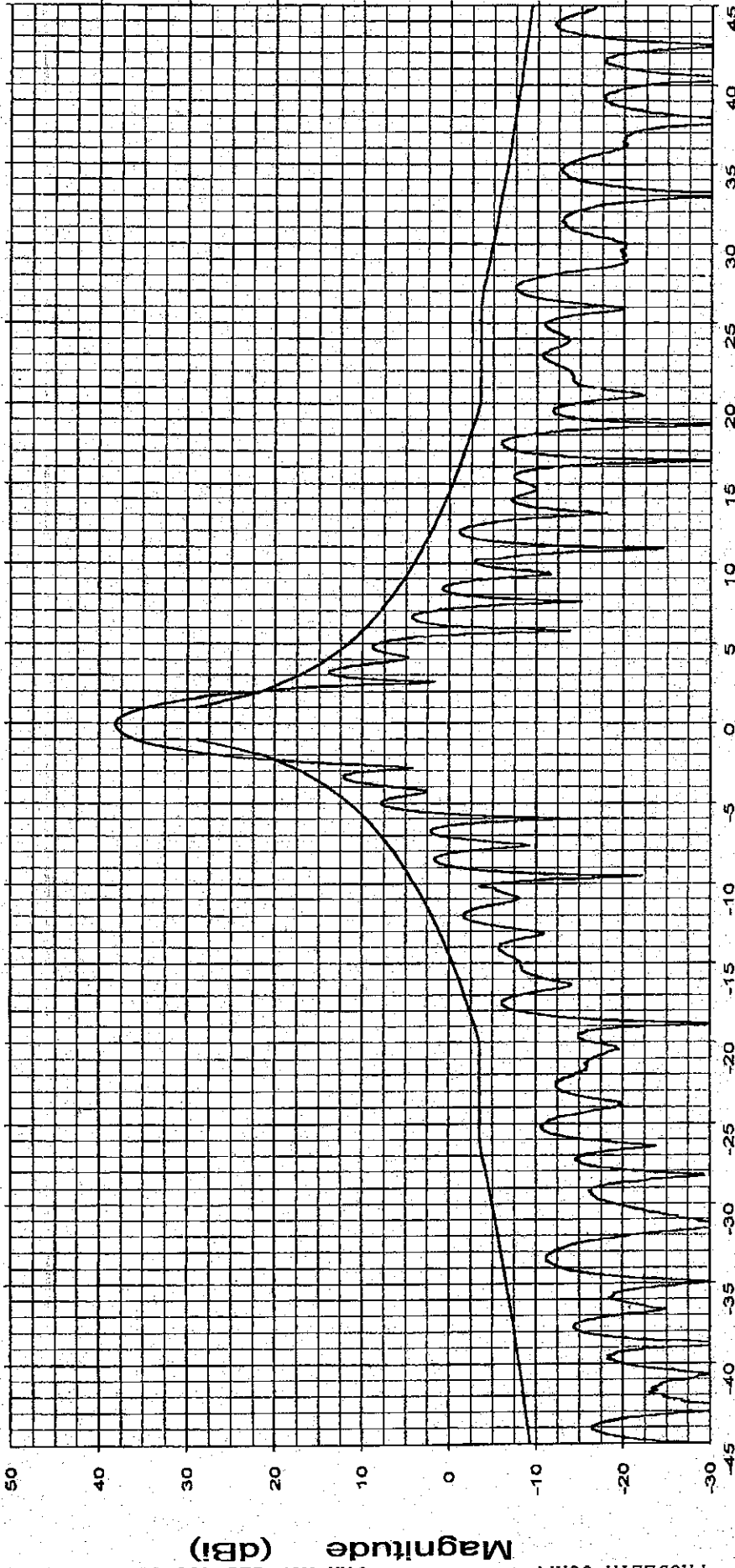
Operator: Ken Poovey

Ser. no.:

Channel: test

Tx pol: Vert.

Rx pol: Vert.



Sidelobe Envelope: 29~25Log(Theta)~100.Lambda/D to 20 Deg  
 -3.5cSi~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  
 dB: 38.10

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

FAX NO. 828 466 0860

PRODELIN CORP.

JUL-08-1999 THU 01:46 PM

Prodelin Corporation  
 Riverbend  
 Clmont NC

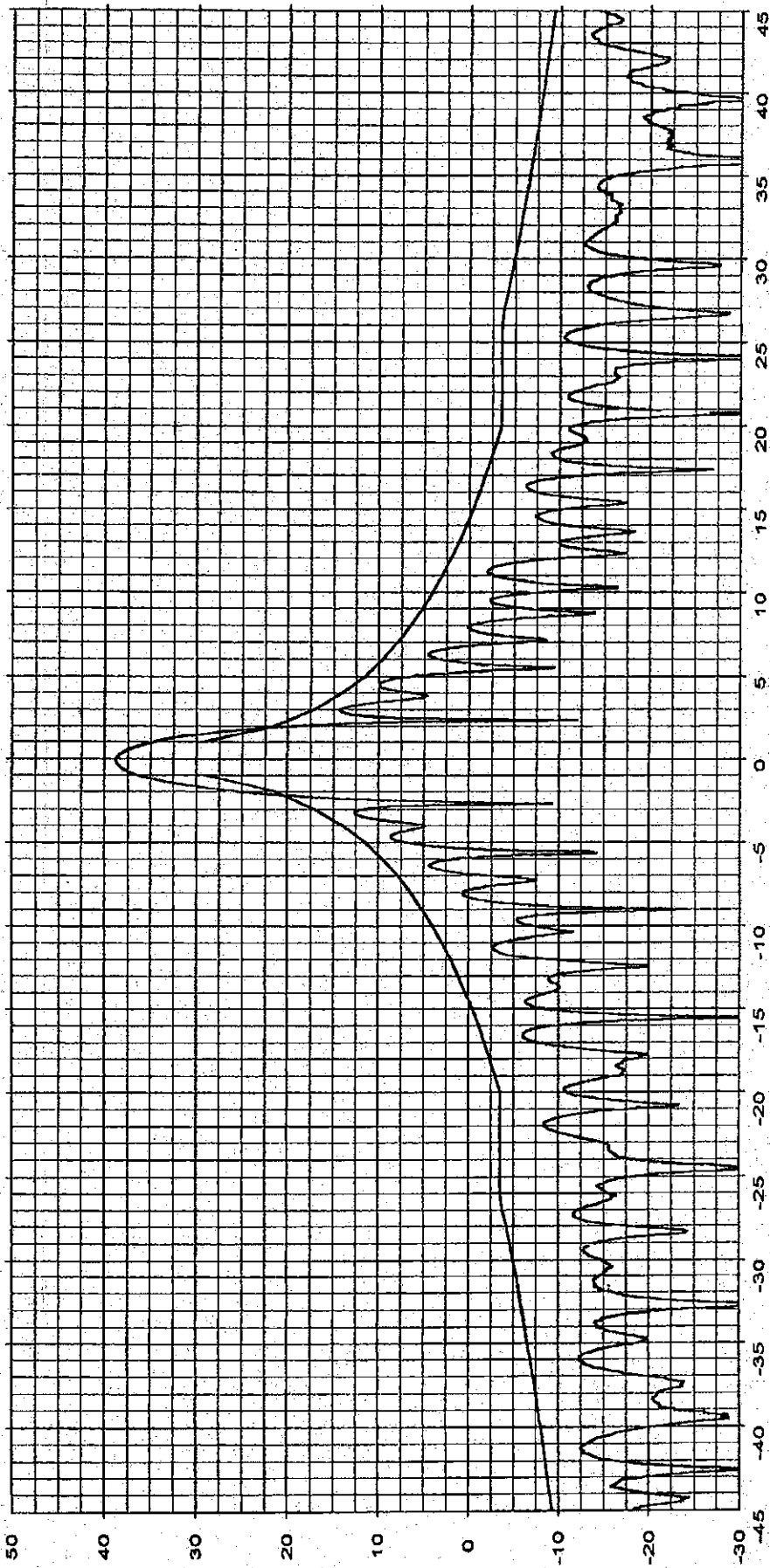


Frequency : 4.200 GHz

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

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

Tx pol: Vert. Rx pol: Vert.



Azimuth (Deg)

Beam Peak	Deg	dB
	-0.16	38.70

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

Envelope: 29-25Log(Theta)~100Lomdo/D to 20 Deg  
 -3.5dB~20 to 28.3 Deg | 32-25Log(Theta)~26.3 to 48 Deg  
 -10 dB~48 to 180 Deg

File: See Legend

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

Operator: Ken Poovey  
Ser. no.:

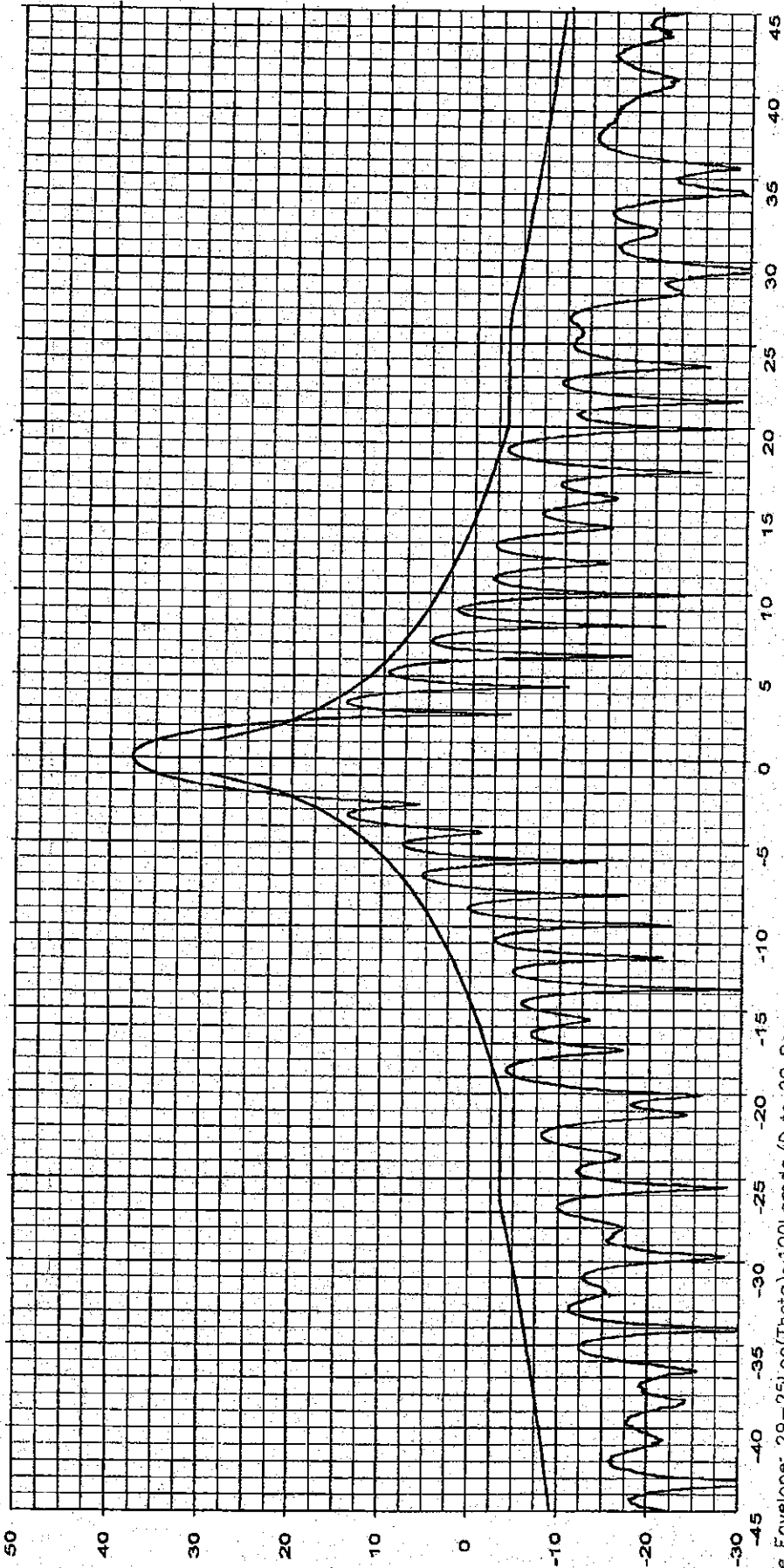
Channel: test Tx pol: Horiz. Rx pol: Horiz.

Frequency : 3.700 GHz

FAX NO. 828 466 0860

PRODELIN CORP.

JUL-08-1999 THU 01:49 PM



Sidelobe 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 064549.DAT units dBi

Prodelin Corporation  
Riverbend ... t Range  
Clk ... nont NC

Frequency : 6.138 GHz

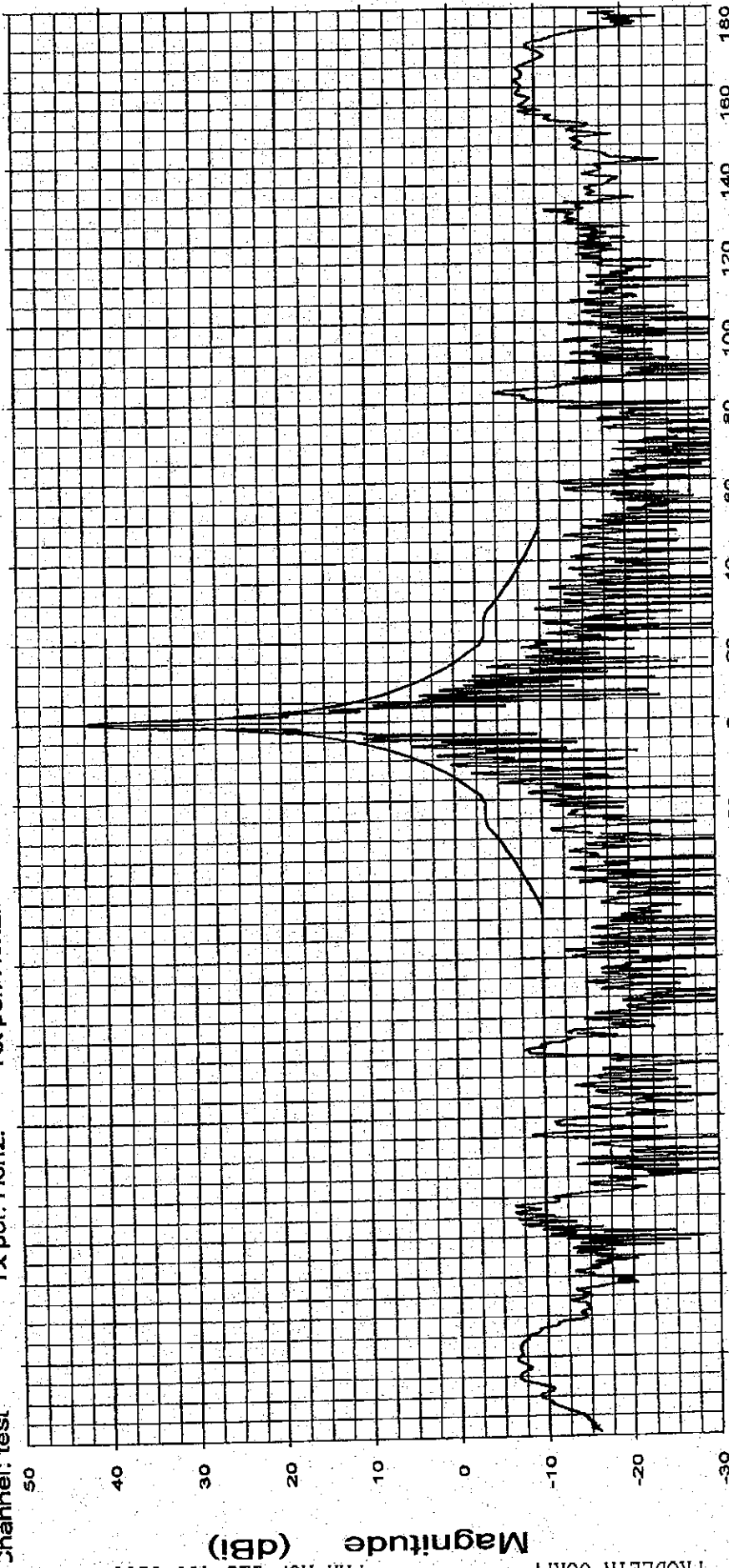
Prodelin 2.4M 4-Pc  
Receive / Transmit  
Offset Antenna System  
C-Band Linear

Operator: Ken Poovey

Ser. no.:

Channel: test

Tx pol: Horiz. Rx pol: Horiz.



Azimuth (Deg)

Beam Peak  
Deg 42.06  
-0.07

Cal. file  
064539.DAT

Overlays  
064539.DAT-ant\_under\_test

File: See Legend

FAX NO. 828 466 0860

PRODELIN CORP.

JUL-08-1999 THU 01:02 PM

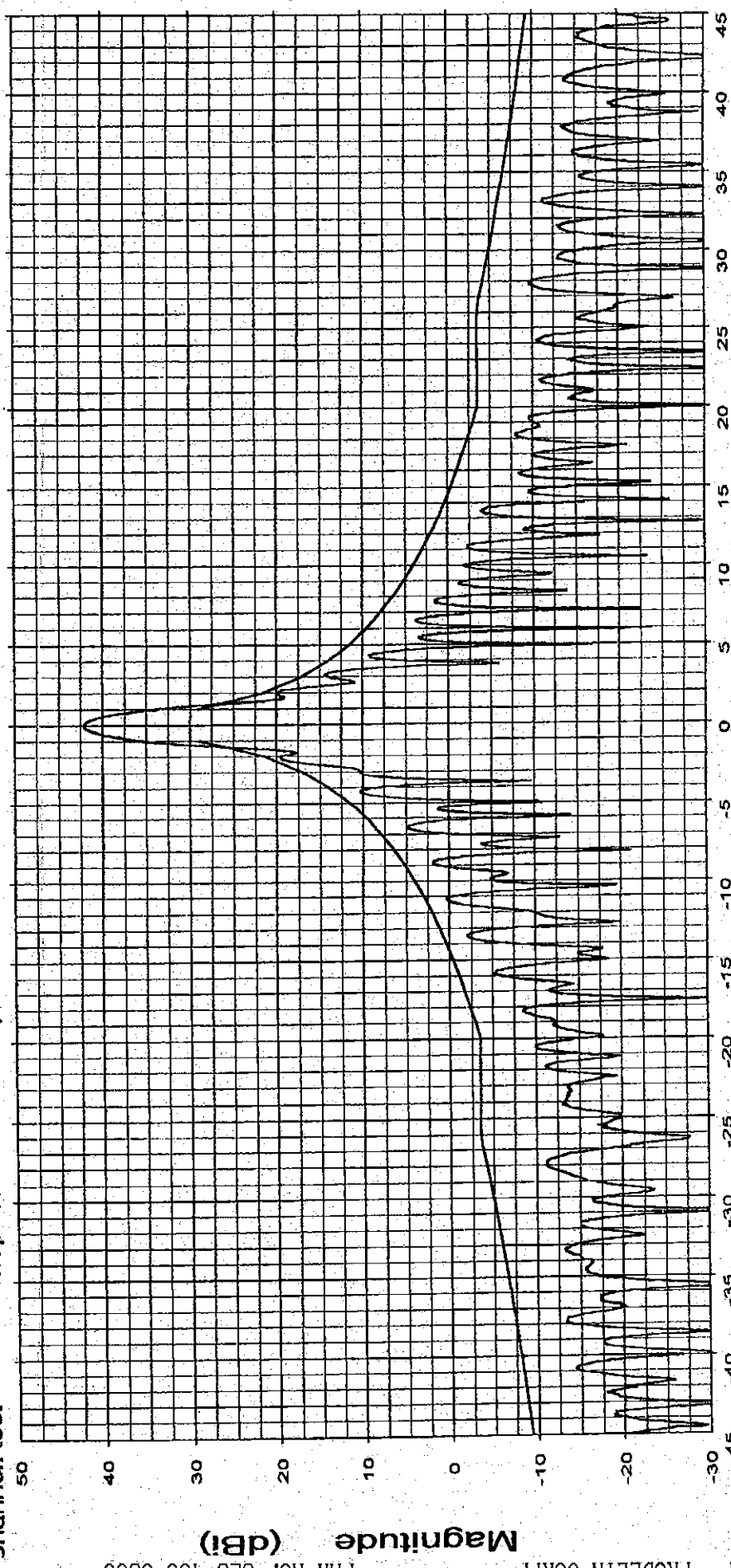
Prodelin Corporation  
Riverbend  
Cl...mont NC

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

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

Tx pol: Horiz. Rx pol: Horiz.

Frequency : 6.138 GHz



Azimuth (Deg)

Beam Peak  
 Deg -0.07  
 dB 42.06

Sidelobe 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 dBi~48 to 180 Deg

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

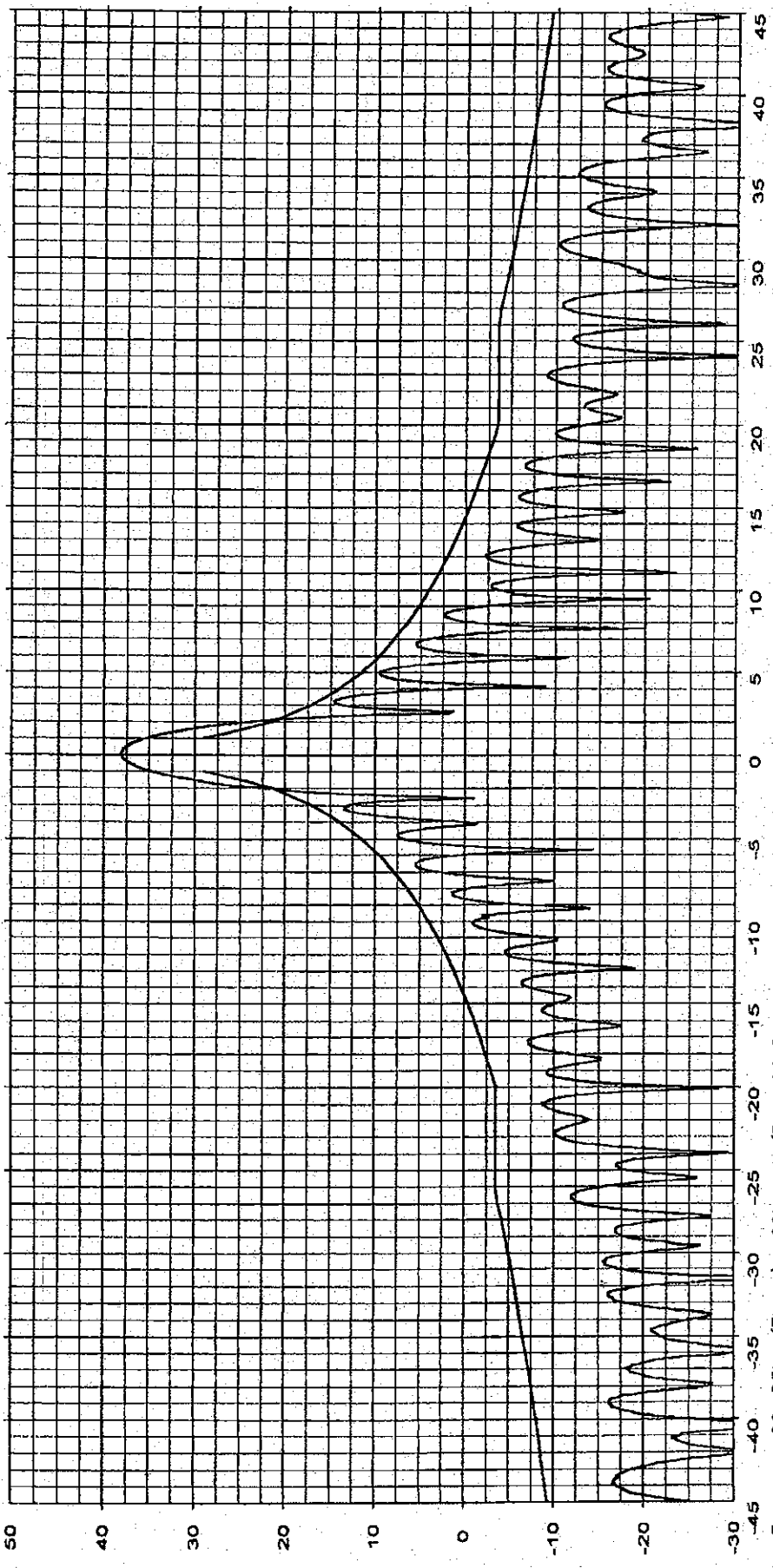
File: See Legend  
42/45

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.



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  
064549.DAT-ant\_under\_test

Cal. file units  
064549.DAT dBi

Azimuth (Deg)

Beam Peak  
Deg 0.03 dB 38.02

FAX NO. 828 466 0860

PRODELIN CORP.

JUL-08-1999 THU 01:51 PM

Prodelin Corporation  
Riverbend, NC  
Clmont, NC

Frequency : 5.845 GHz

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

File: See Legend

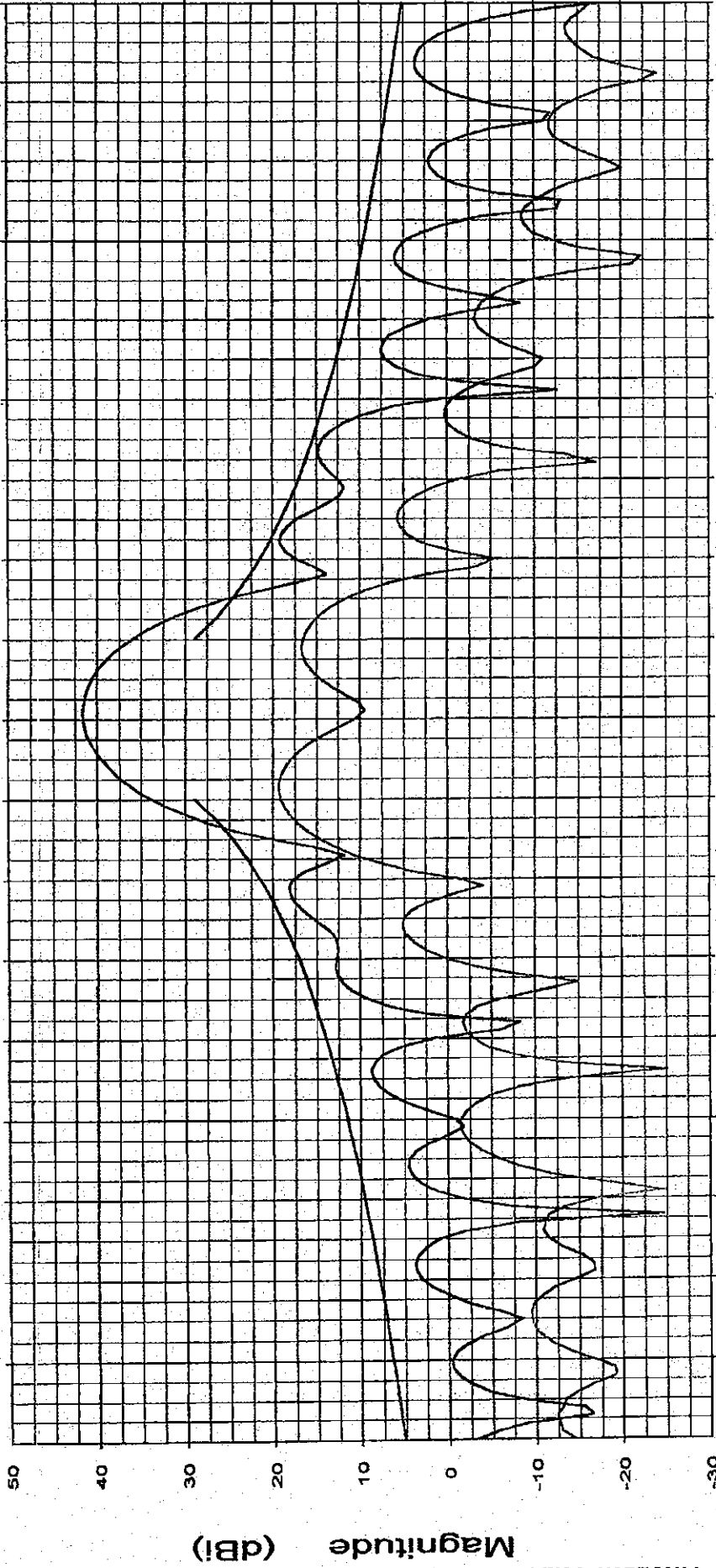
Operator: Ken Poovey

Ser. no.:

Channel: test

Tx pol: Vert

Rx pol: Vert



Azimuth (Deg)

Beam Peak	
Deg	dB
0.10	41.64
-0.80	19.28

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

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

Overlays

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

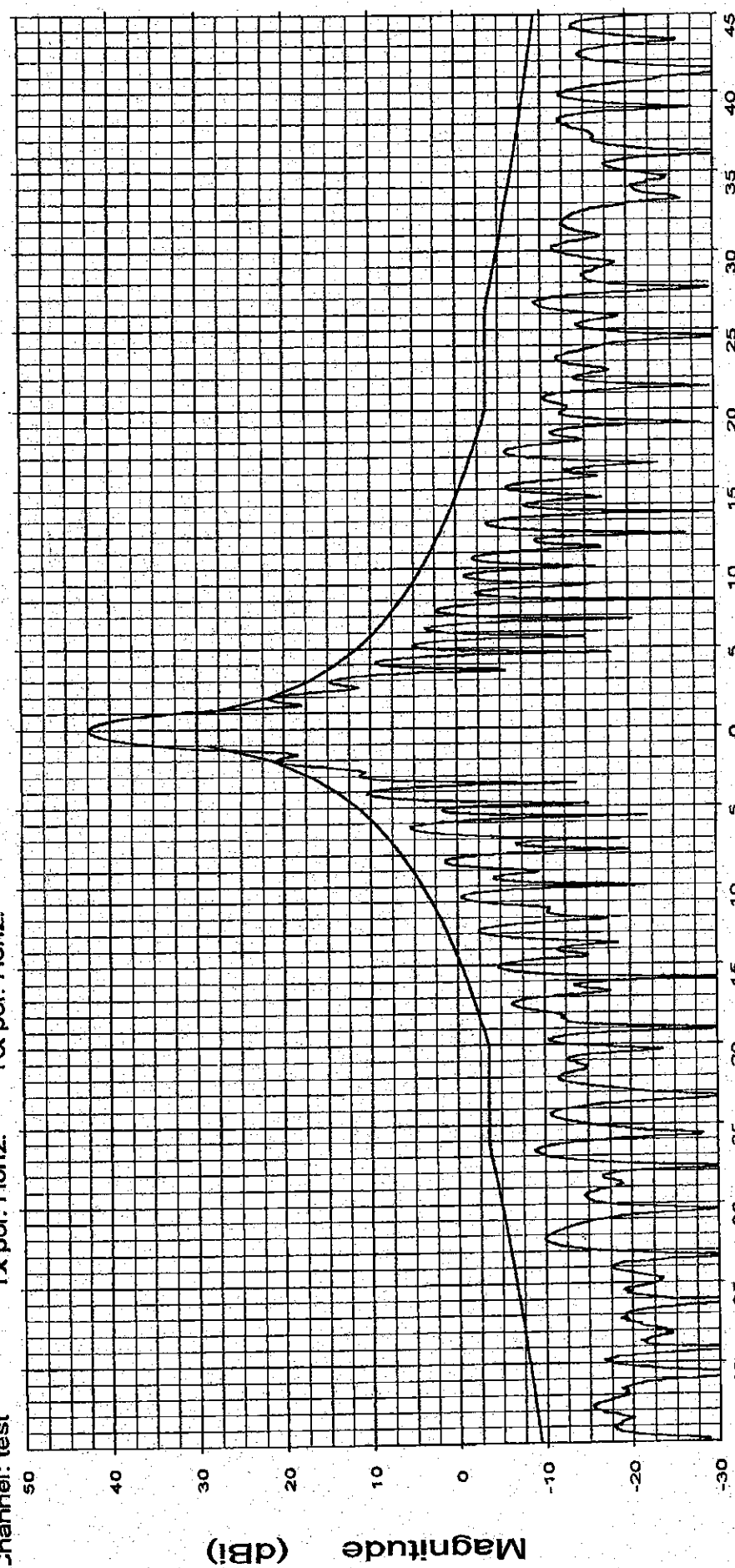
Frequency : 6.425 GHz

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)

Beam Peak  
Deg -0.04 dB 42.36

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

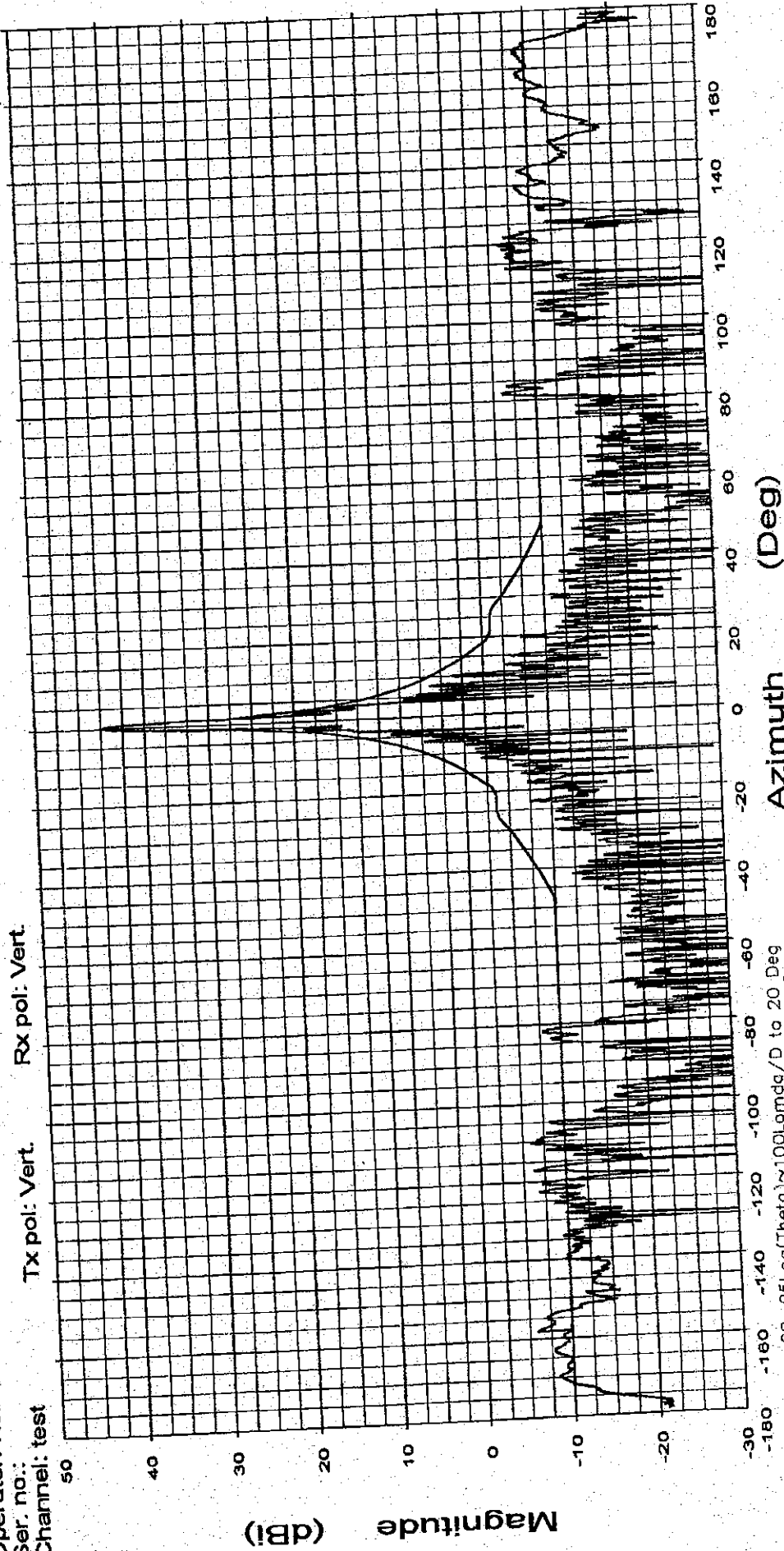
Frequency : 6.138 GHz

File: See Legend  
Operator: Ken Poovey

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

Ser. no.:  
Channel: test

Tx pol: Vert. Rx pol: Vert.



Side-lobe 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 0.07 dB 42.14

Cal. file units dBi  
 064532.DAT

Overlays  
 064532.DAT-ant\_under\_test



# Receive Patterns

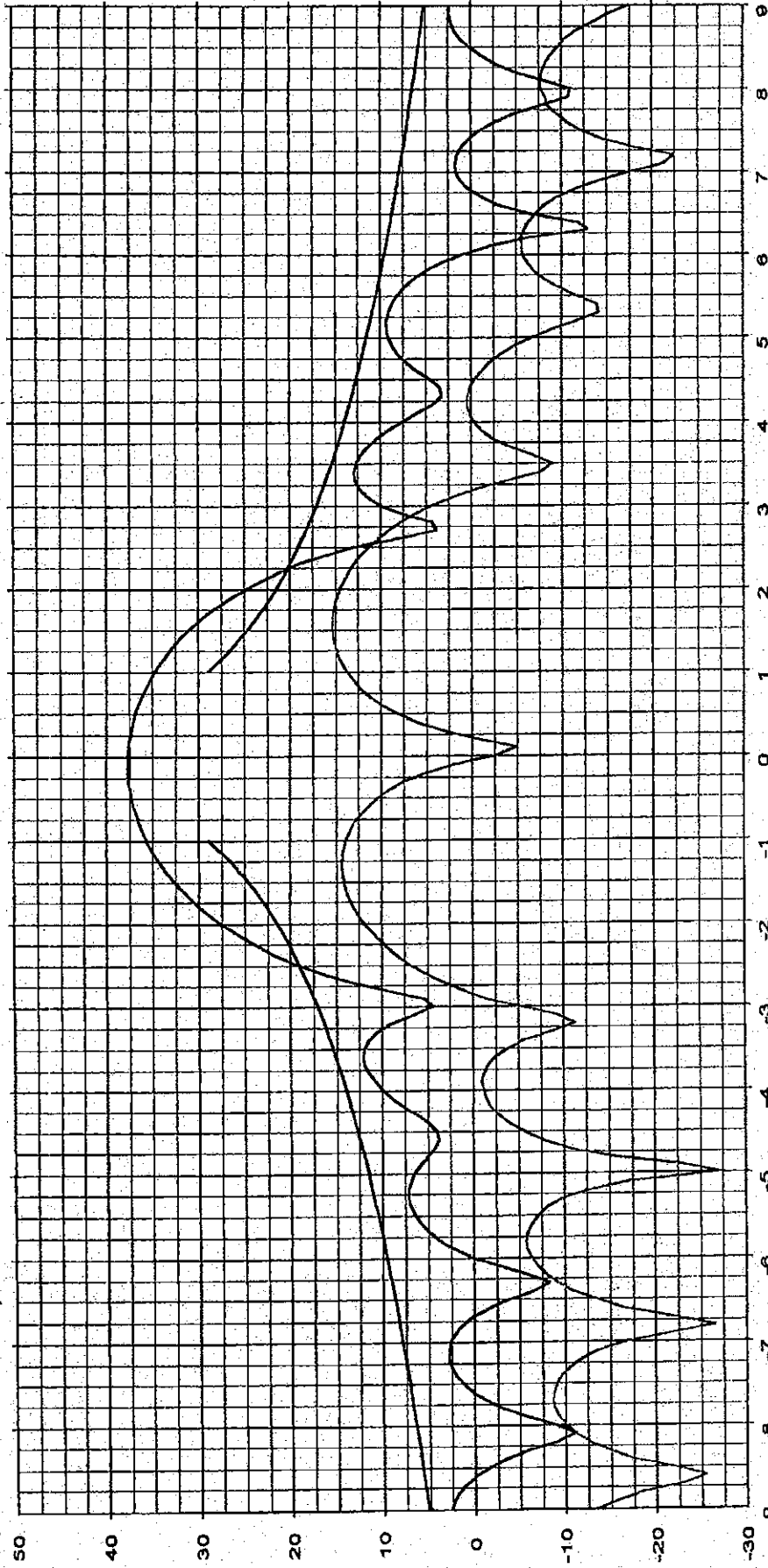
Operator: Ken Poovey

Ser. no.:

Channel: test

Tx pol: Vert.

Rx pol: Vert.



Sidelobe Envelope: 29-25Log(Theta)~100LmDa/D to 20 Deg  
 ~3.5cBi~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
-0.10	37.66	
1.60	15.33	

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

File: See Legend

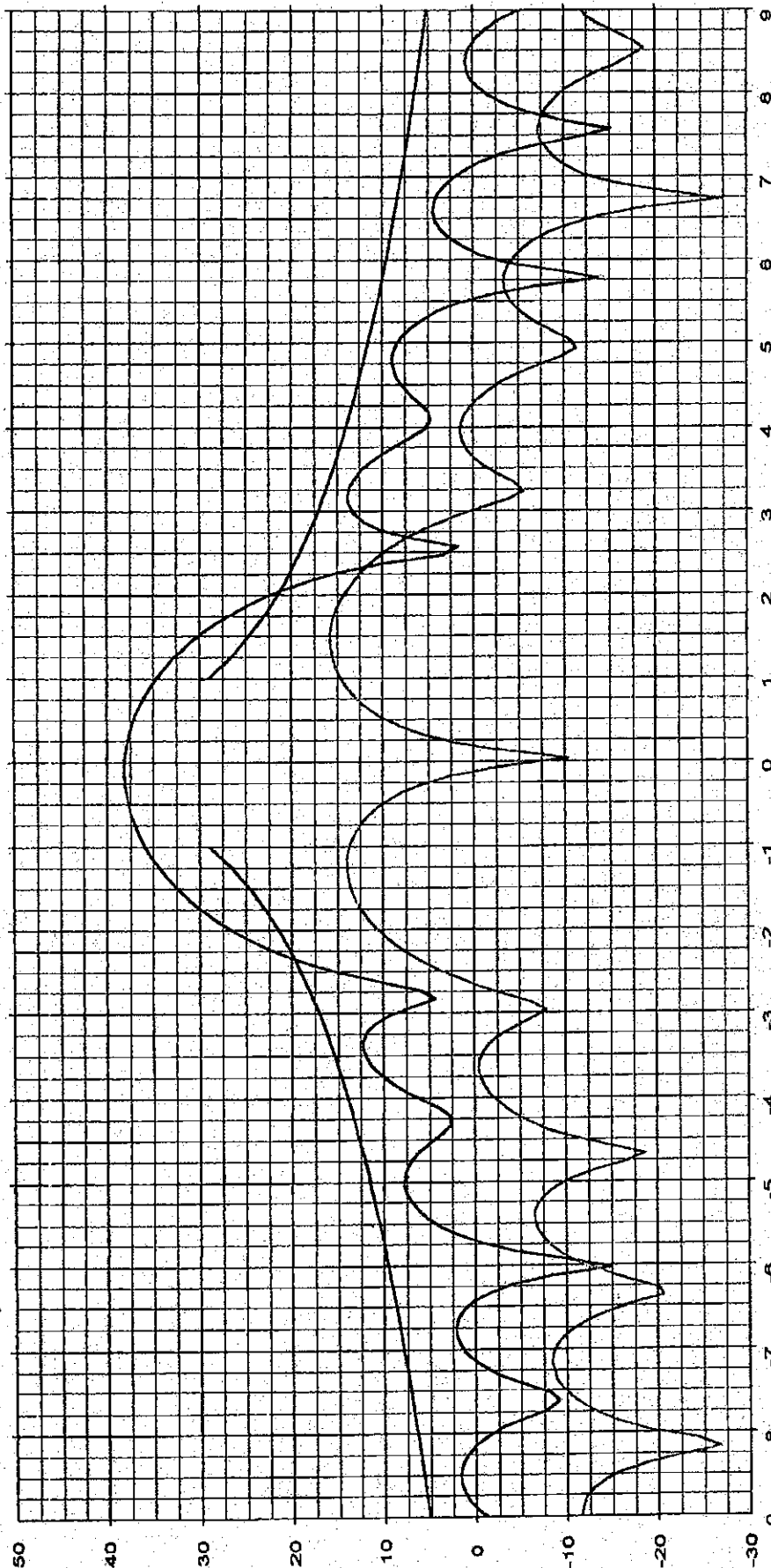
Operator: Ken Poovey

Ser. no.:

Channel: test

Tx pol: Vert.

Rx pol: Vert.



Sidelobe 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
-0.13	38.10
1.43	15.74

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

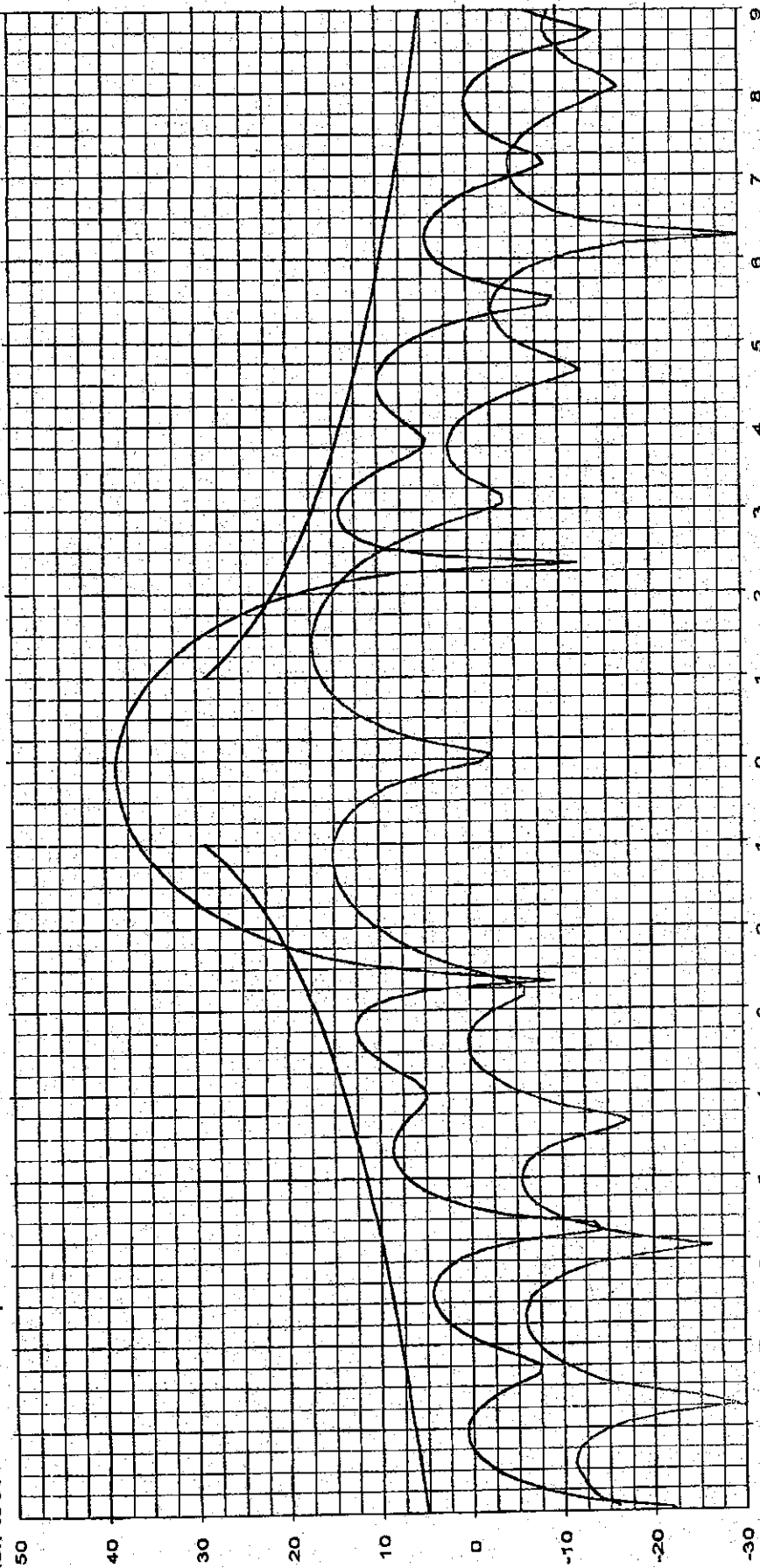
Prodelin 2.4M 4-Pc  
Receive / Transmit  
Offset Antenna System  
C-Band Linear

Frequency : 4.200 GHz

Operator: Ken Poovey

Ser. no.:  
Channel: test

Tx pol: Vert Rx pol: Vert



Sidelobe 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

Azimuth (Deg)

Beam Peak	
Deg	dB
-0.16	38.70
1.36	17.22

Cal. file	units
064544.DAT	dB
064547.DAT	dB

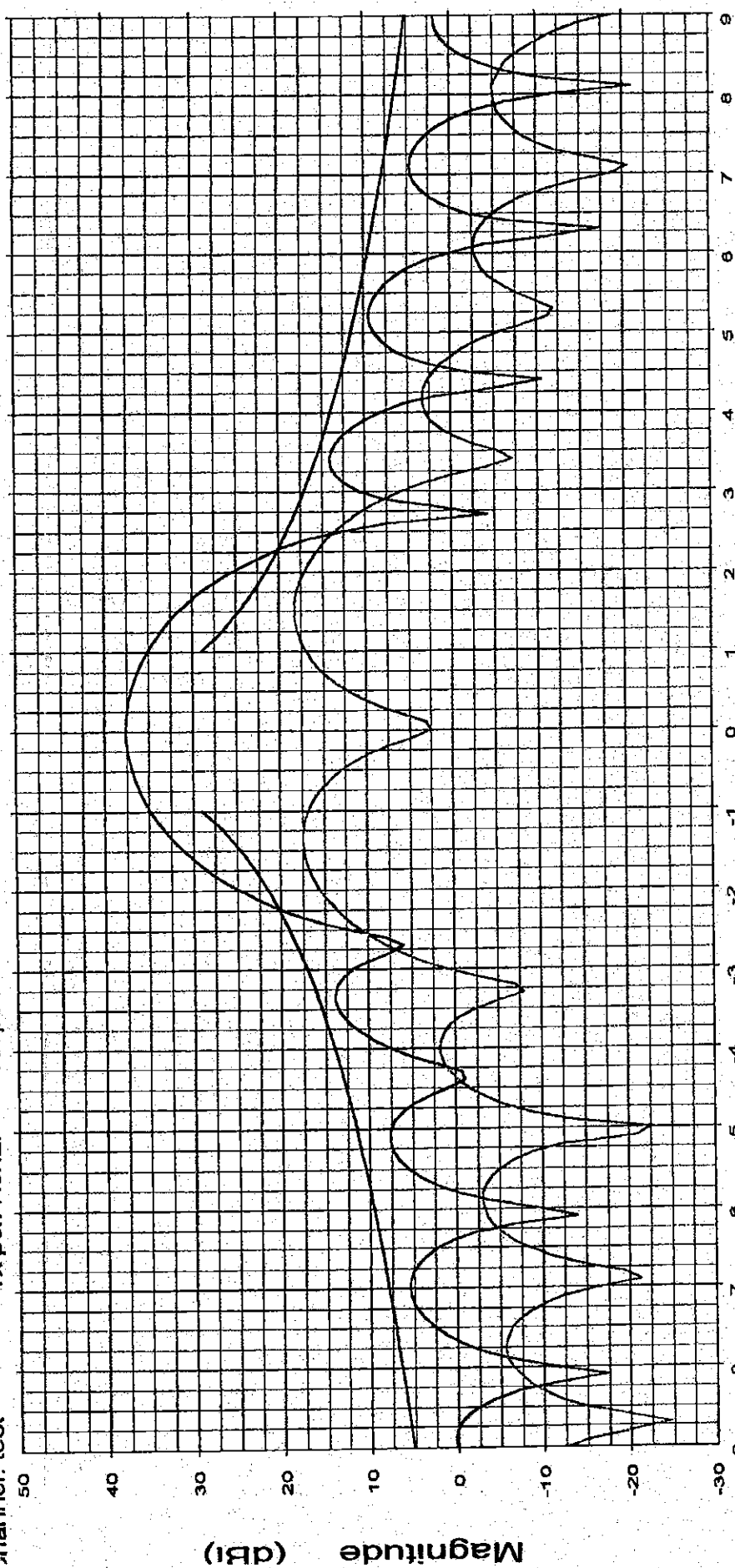
Overlays  
 064544.DAT-ant\_under\_test  
 064547.DAT-ant\_under\_test

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.



Sidelobe Envelope: 29-25Log(Theta)~100LambD/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  
 064552.DAT-ant\_under\_test

Cal. file units  
 064549.DAT dBi  
 064552.DAT dBi

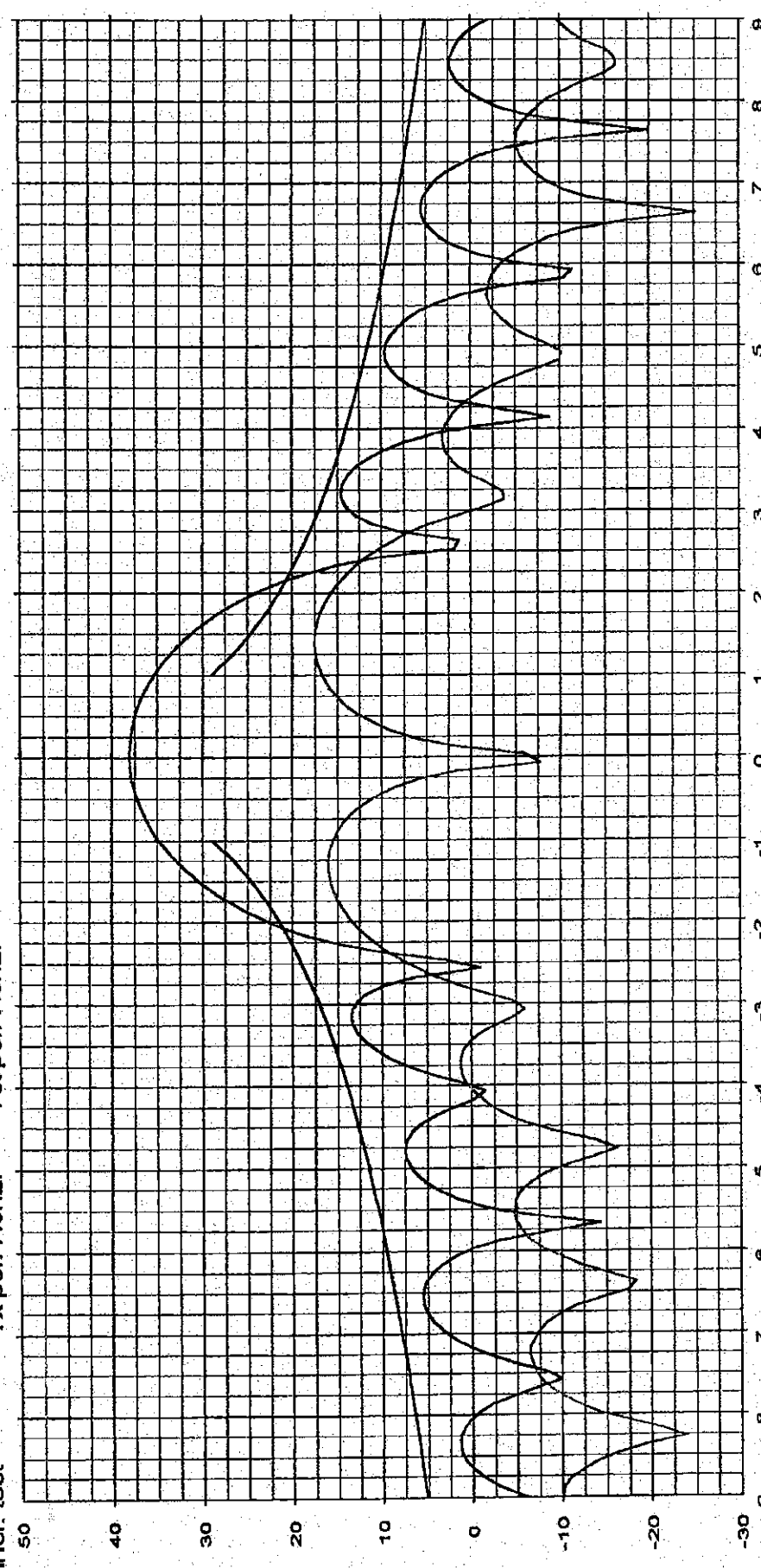
Beam Peak  
 Deg dB  
 0.00 37.55  
 1.50 18.20

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: Horiz. Rx pol: Horiz.



Azimuth (Deg)

Beam Peak	Deg	dB
0.03	38.02	
1.33	17.52	

Sidelobe Envelope: 29-25Log(Theta)~100Lmod/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  
 064552.DAT-ant\_under\_test

Cal. file units  
 064549.DAT dBi  
 064552.DAT dBi

Frequency : 4.200 GHz

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

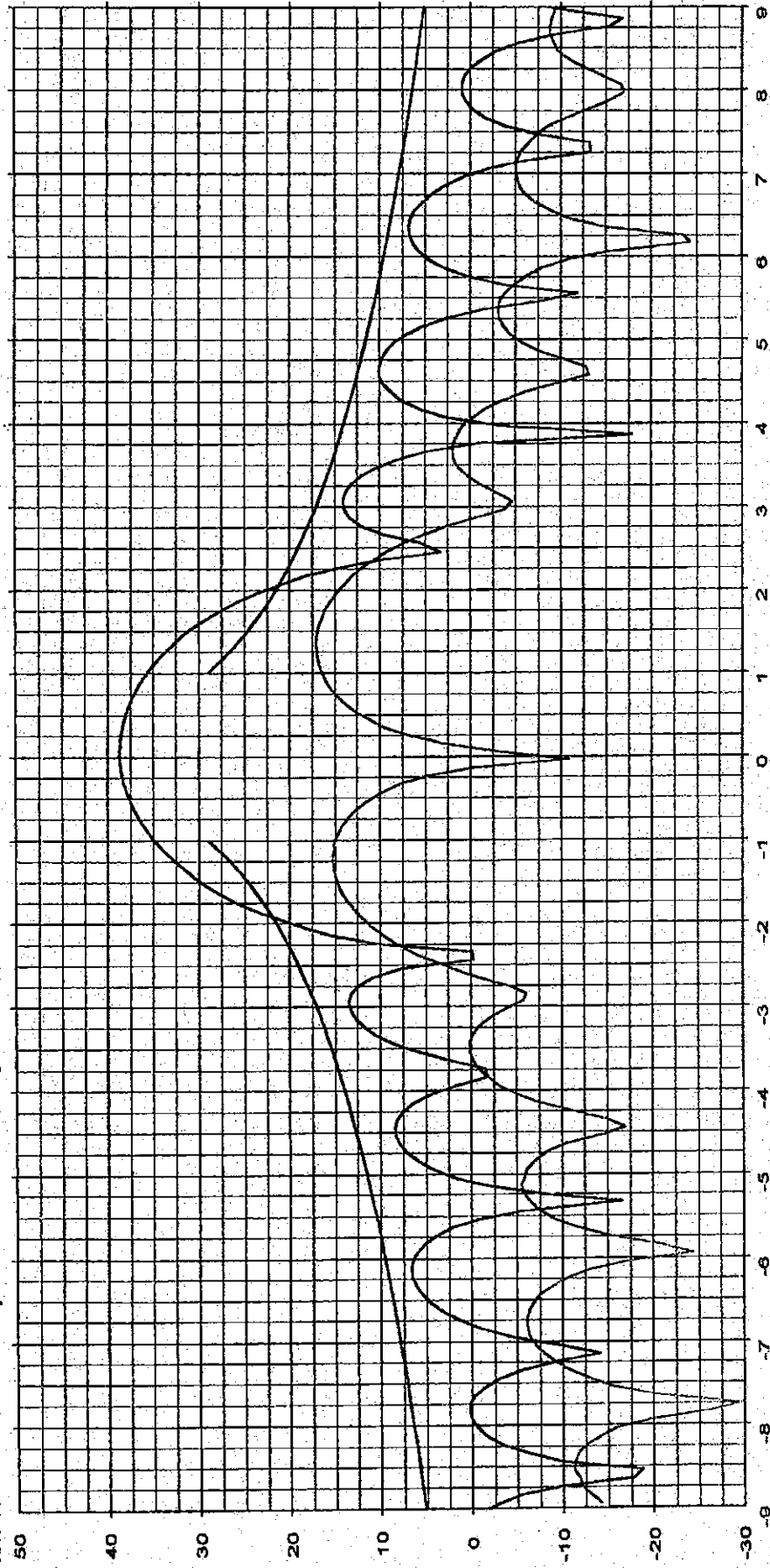
Operator: Ken Poovey

Ser. no.:

Channel: test

Tx pol: Horiz.

Rx pol: Horiz.



Azimuth (Deg)

Beam Peak	
Deg	dB
0.06	38.63
1.36	17.05

Sidelobe Envelope: 29-25Log(Theta)~100Lmde/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	dBi
064552.DAT_ant_under_test	064552.DAT	dBi

File: See Legend

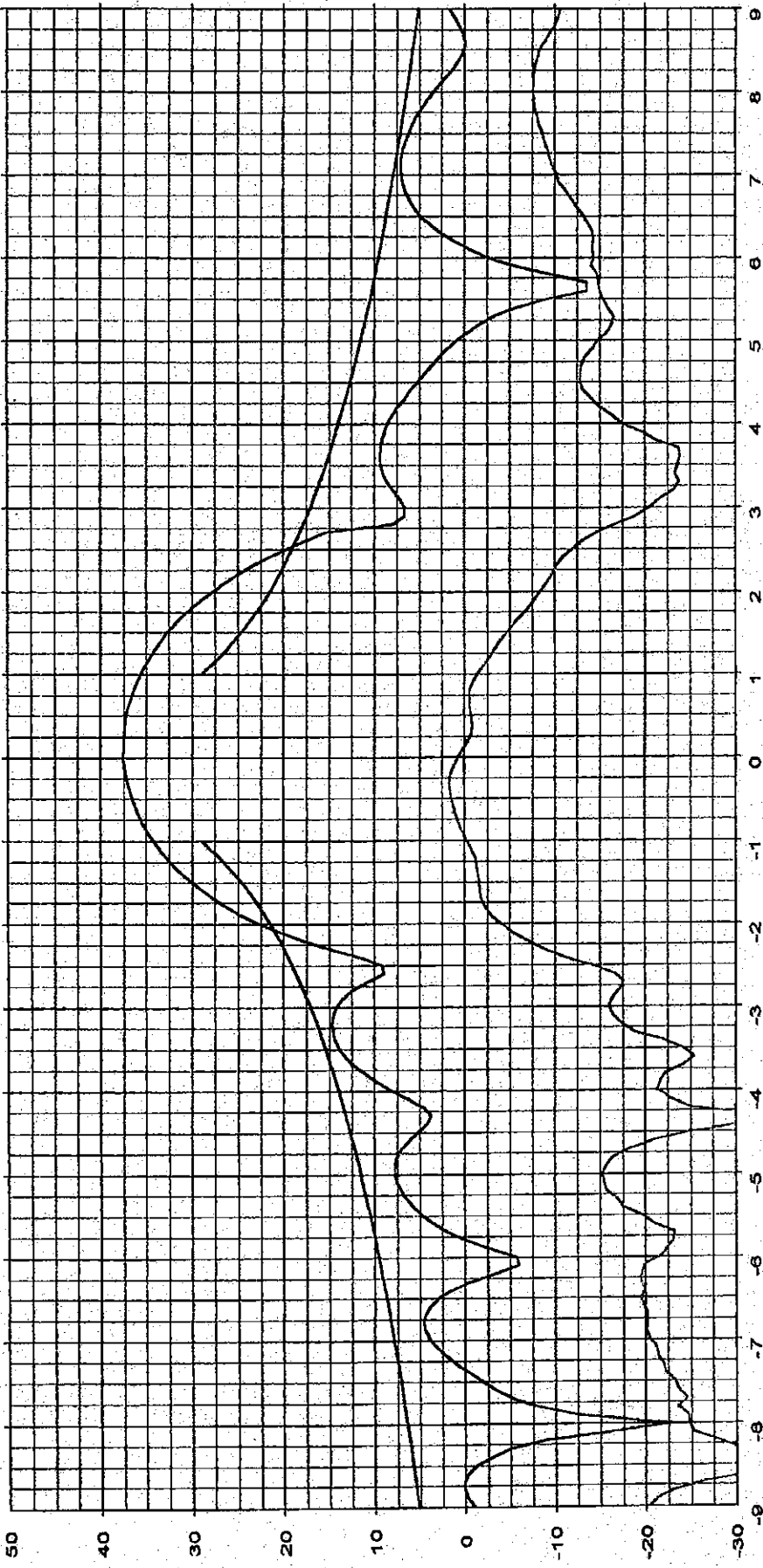
Prodelin 2.4M 4-Pc  
Receive / Transmit  
Offset Antenna System  
C-Band Linear

Frequency : 3.700 GHz

Operator: Ken Poovey

Ser. no.:  
Channel: test

Tx pol: Vert Rx pol: Vert



Sidelobe Envelope: 29~25Log(Theta)~100, lambda/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

Elevation (Deg)		Beam Peak	
Deg	dB	Deg	dB
0.10	37.50	-0.40	1.62

Overlays	Cal. file	units
064546.DAT-ant_under_test	064546.DAT	dBi
064548.DAT-ant_under_test	064548.DAT	dBi

FAX NO. 828 466 0860

PRODELIN CORP.

JUL-08-1999 THU 01:28 PM

Prodelin Corporation  
Riverbend  
C. mont NC



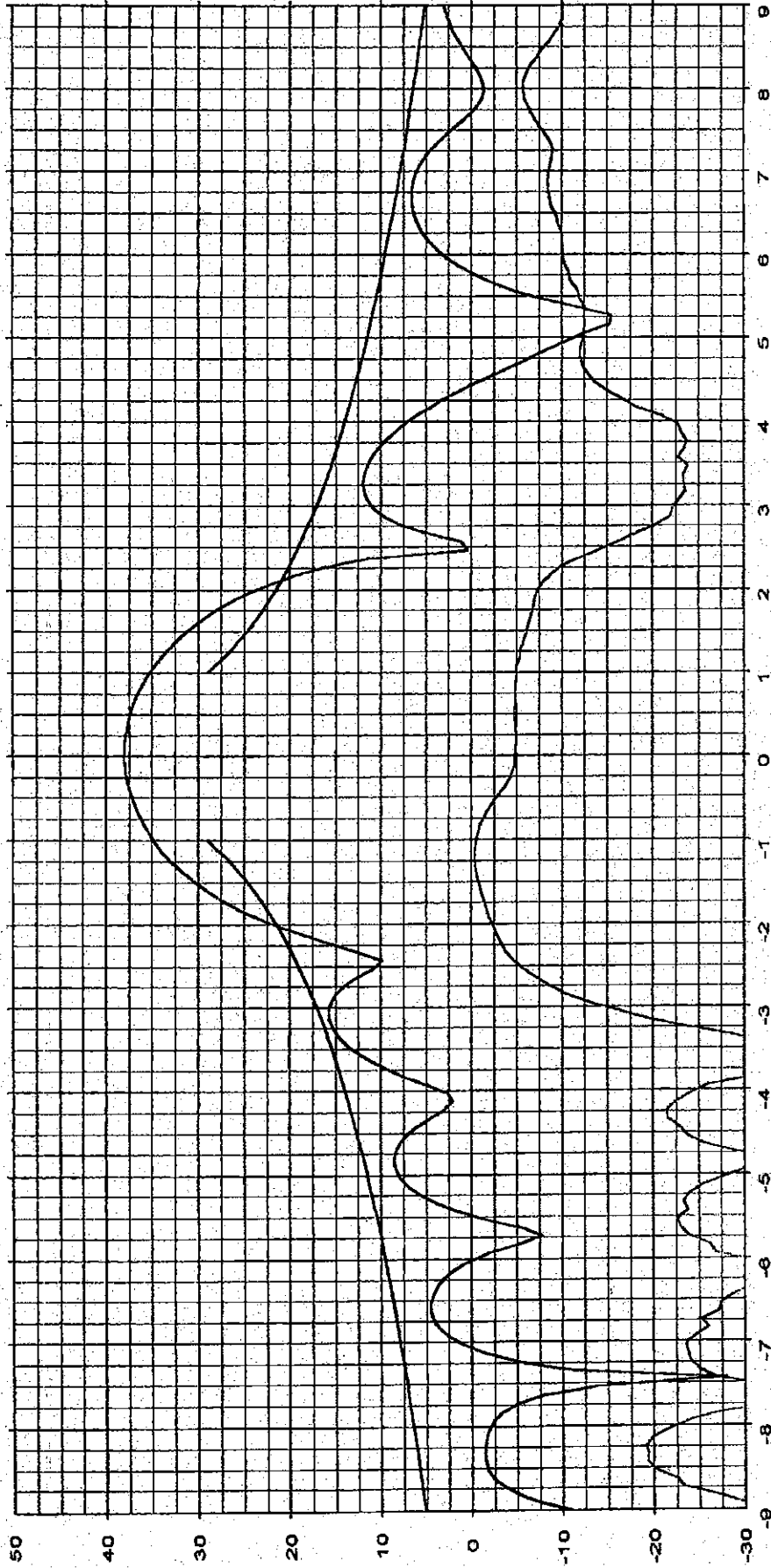
Operator: Ken Poovey

Ser. No.:

Channel: test

Tx pol: Vert.

Rx pol: Vert.



Sidlobe Envelope: 29-25Log(Theta)~100Lmdo/D to 20 Deg  
 -3.5dBi~20 to 26.5 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	

Overlays	Cal. file	units
064545.DAT-ant_under_test	064545.DAT	dBi
064548.DAT-ant_under_test	064548.DAT	dBi

Frequency : 4.200 GHz

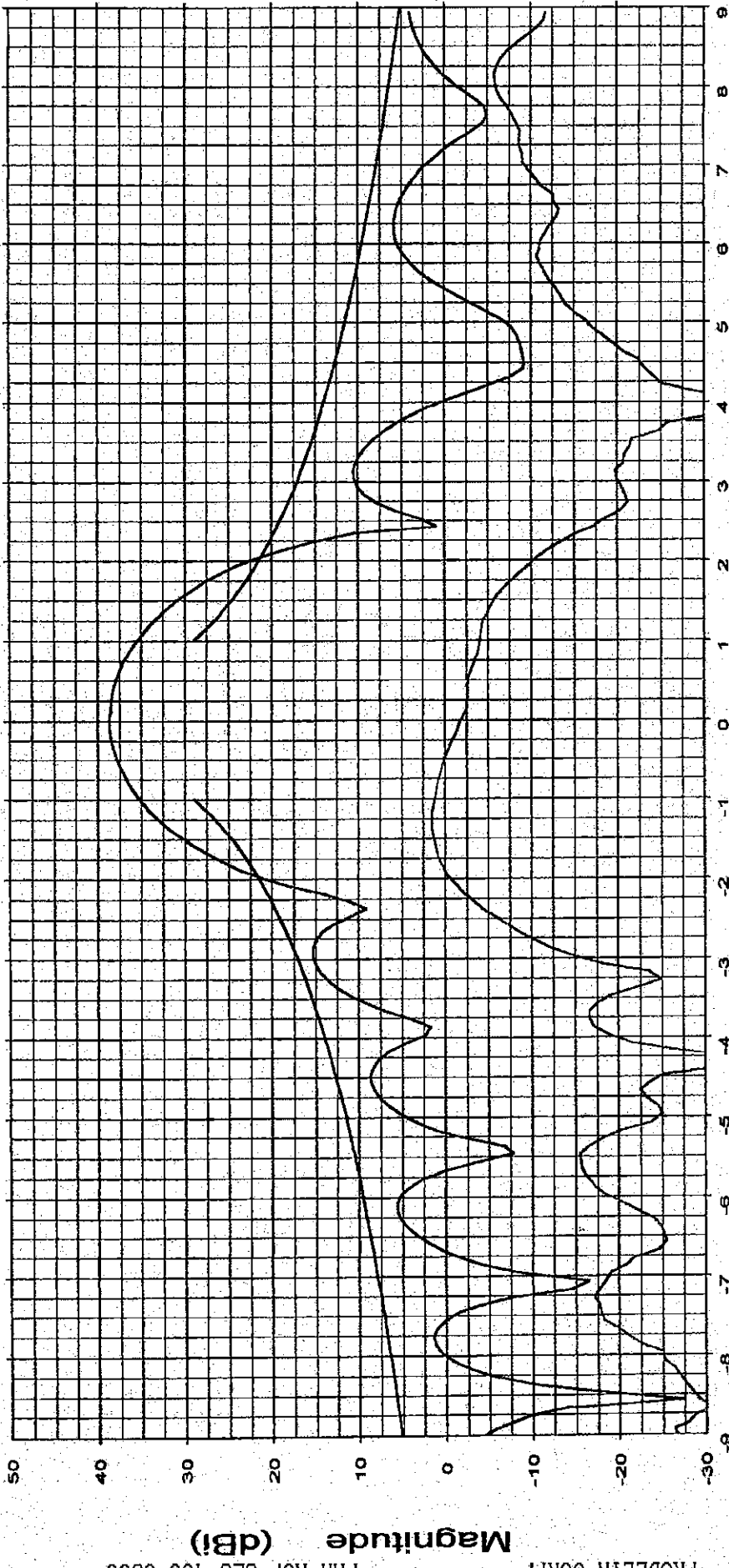
Prodelin 2.4M 4-Pc  
Receive / Transmit  
Offset Antenna System  
C-Band Linear

File: See Legend

Operator: Ken Poovey

Ser. no.:  
Channel: test

Tx pol: 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

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

Elevation (Deg)

Beam Peak	Deg	dB
0.03	38.60	
-1.26	1.49	

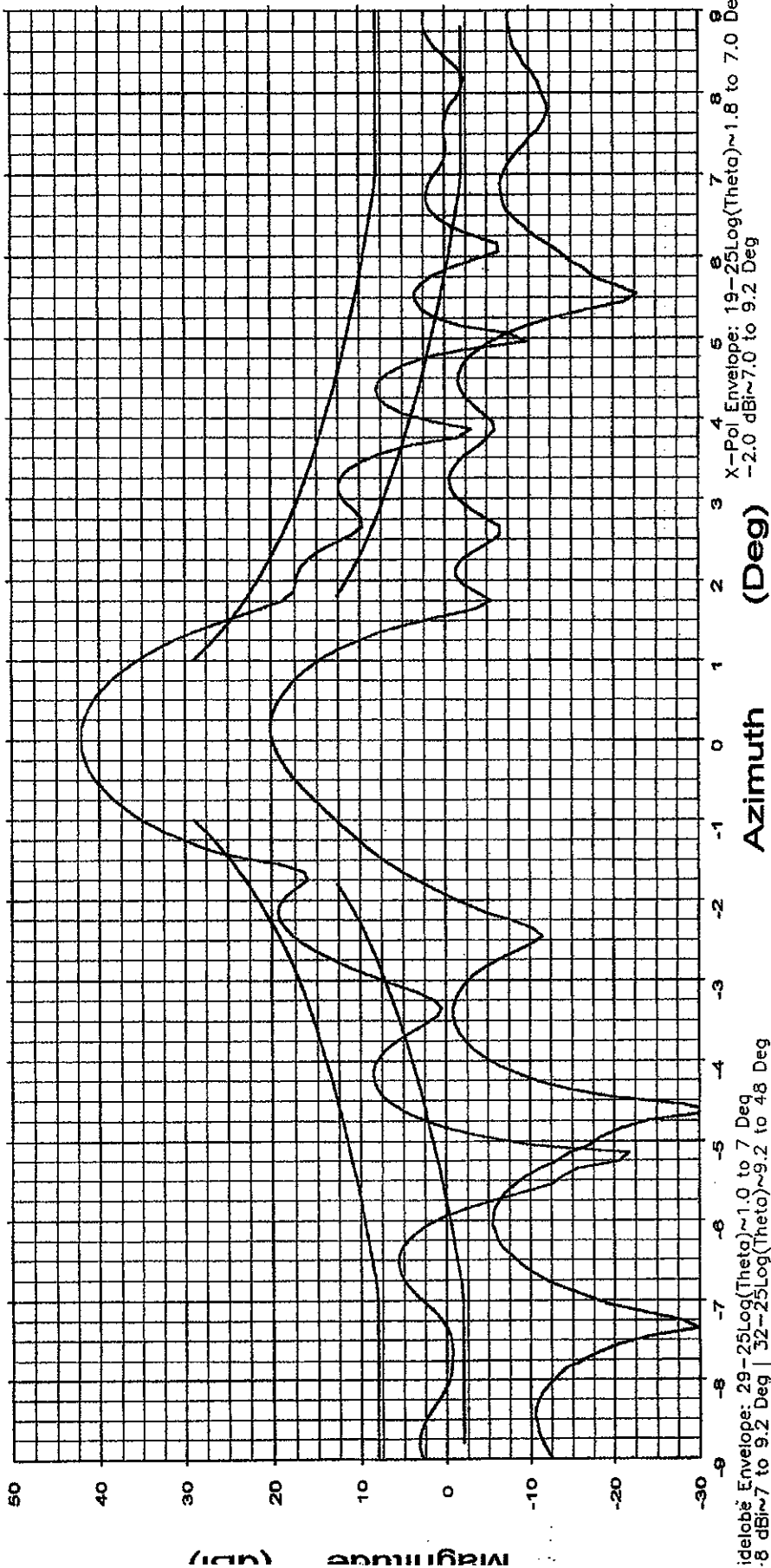
File: See Legend

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.: Osarh1  
Channel: test

Tx pol: LHCP Rx pol: LHCP



Overlays

File	Cal. file	units	Beam Peak
065007.DAT-ant_under_test	065007.DAT	dBi	Deg
065008.DAT-ant_under_test	065008.DAT	dBi	Deg
			0.06
			0.15
			42.10
			20.07

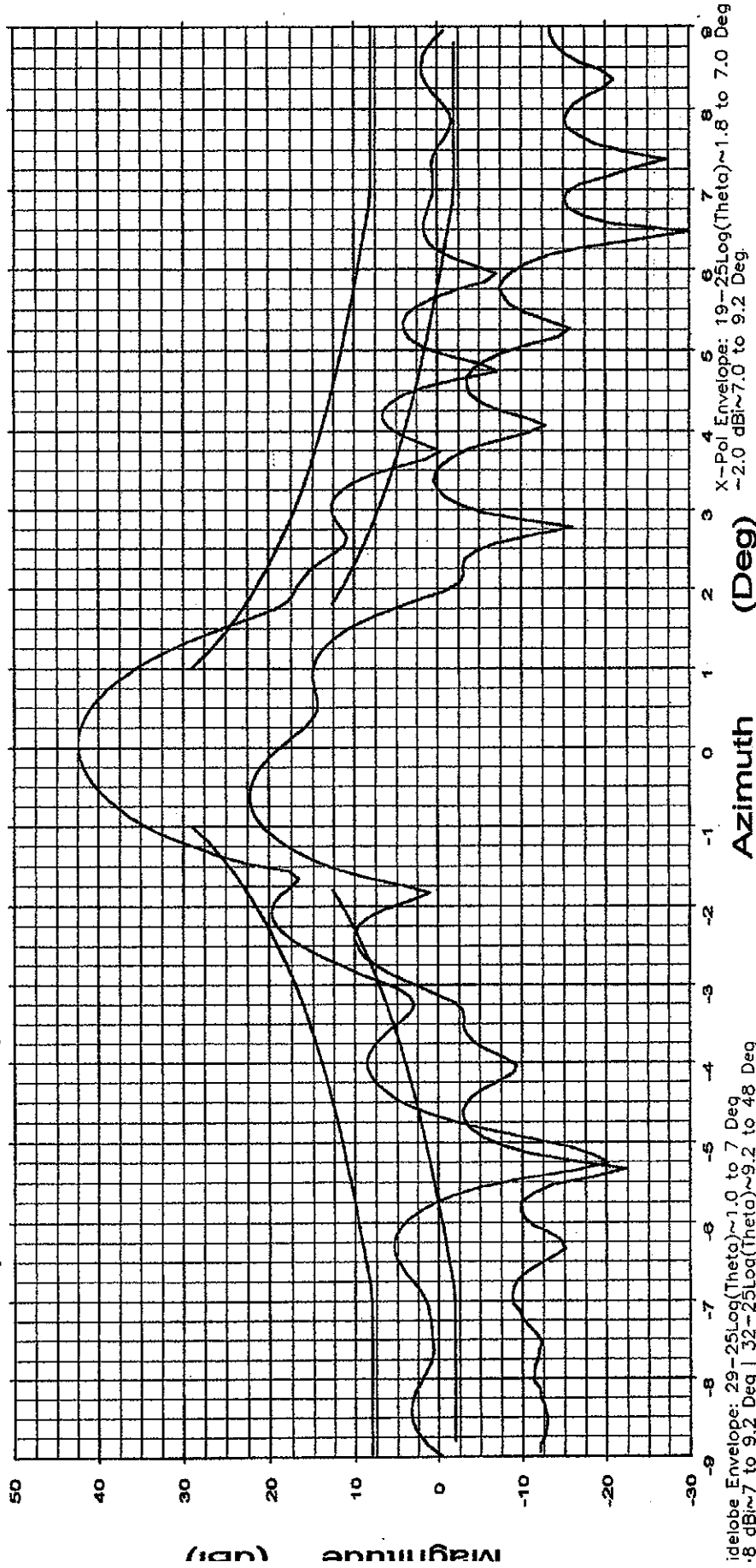
File: See Legend

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

Frequency : 6.425 GHz

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

Tx pol: LHCP Rx pol: LHCP



Mainlobe 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

Azimuth (Deg)

Overlays	Cal. file	units	Beam Peak
			Deg
065007.DAT-ant_under_test	065007.DAT	dB	0.04
065008.DAT-ant_under_test	065008.DAT	dB	-0.64
			42.39
			22.16

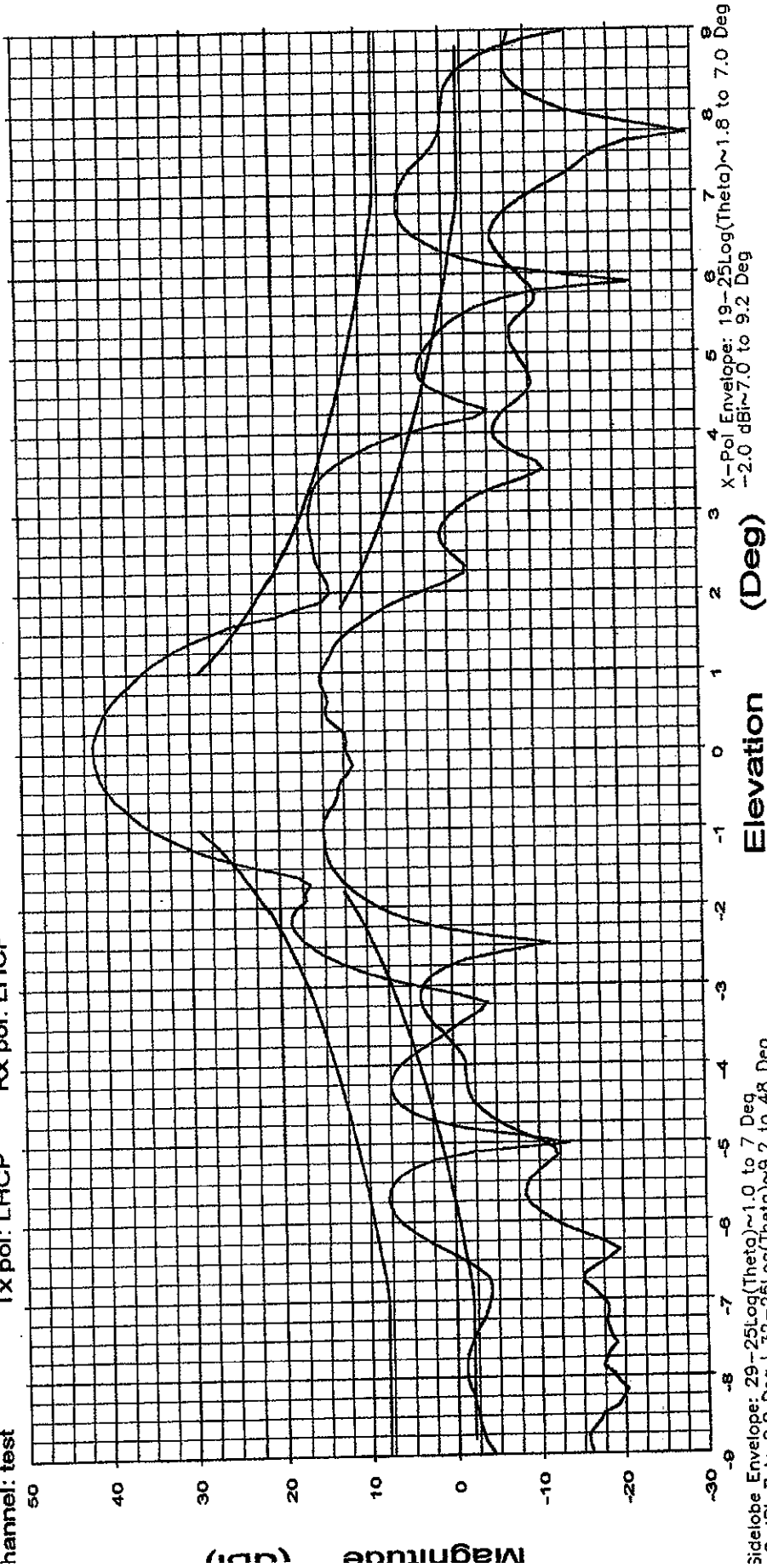
Frequency : 5.925 GHz

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

See Legend

Operator: Ken Poovey  
Pr. no.: Osartm1  
Channel: test

Tx pol: LHCP Rx pol: LHCP



Elevation

Beam Peak	Deg	dB
	0.08	41.44
	0.92	15.24

Cal. file	units
065005.DAT	dBi
065009.DAT	dBi

Overlays  
065005.DAT-ant\_under\_test  
065009.DAT-ant\_under\_test

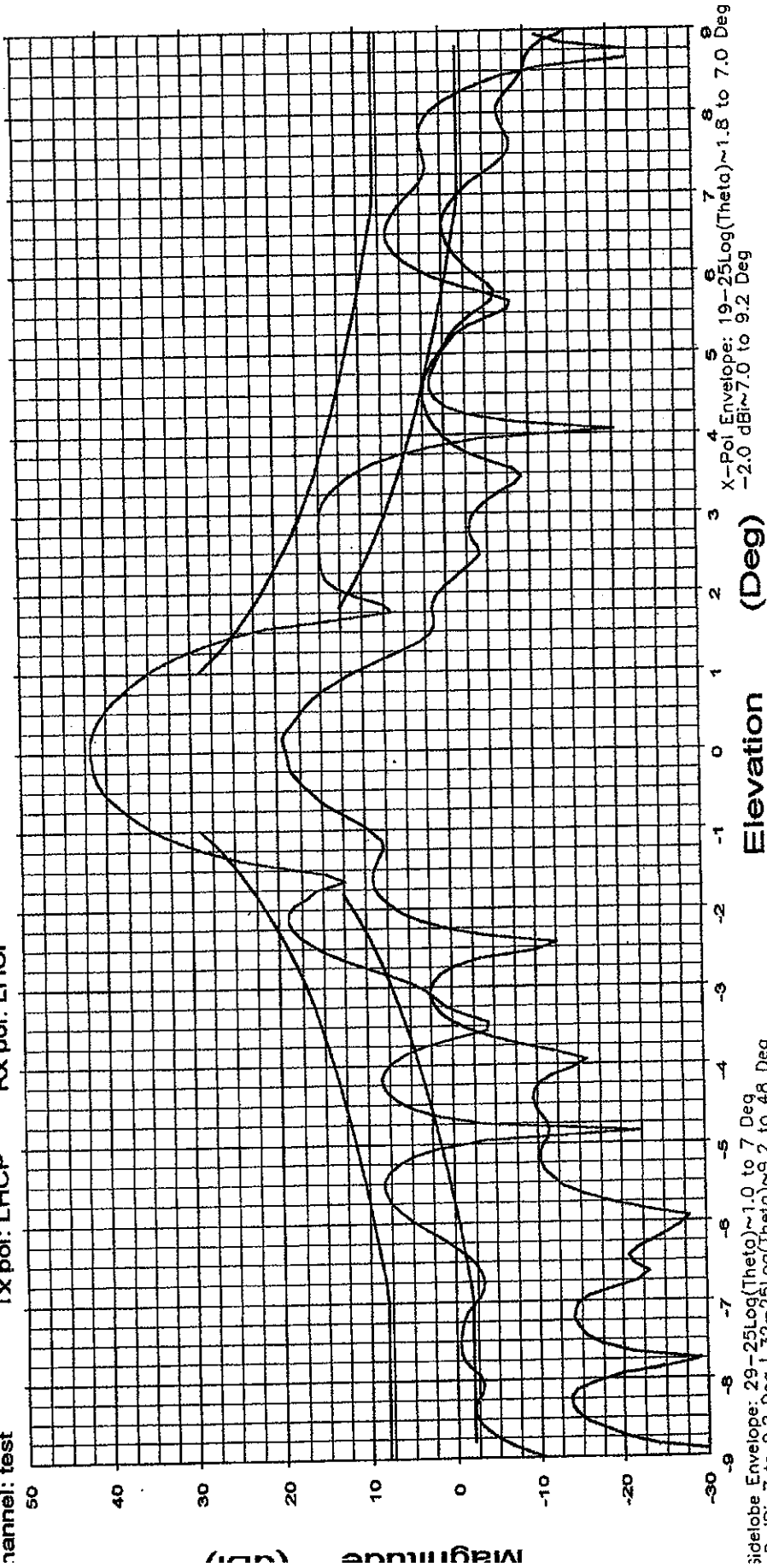
Frequency : 6.175 GHz

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



Sideloobe 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	Cal. file	units
065005.DAT-ant_under_test	065005.DAT	dBi
065009.DAT-ant_under_test	065009.DAT	dBi

Beam Peak	Deg	dB
0.04	41.84	
0.16	19.40	

Frequency : 6.425 GHz

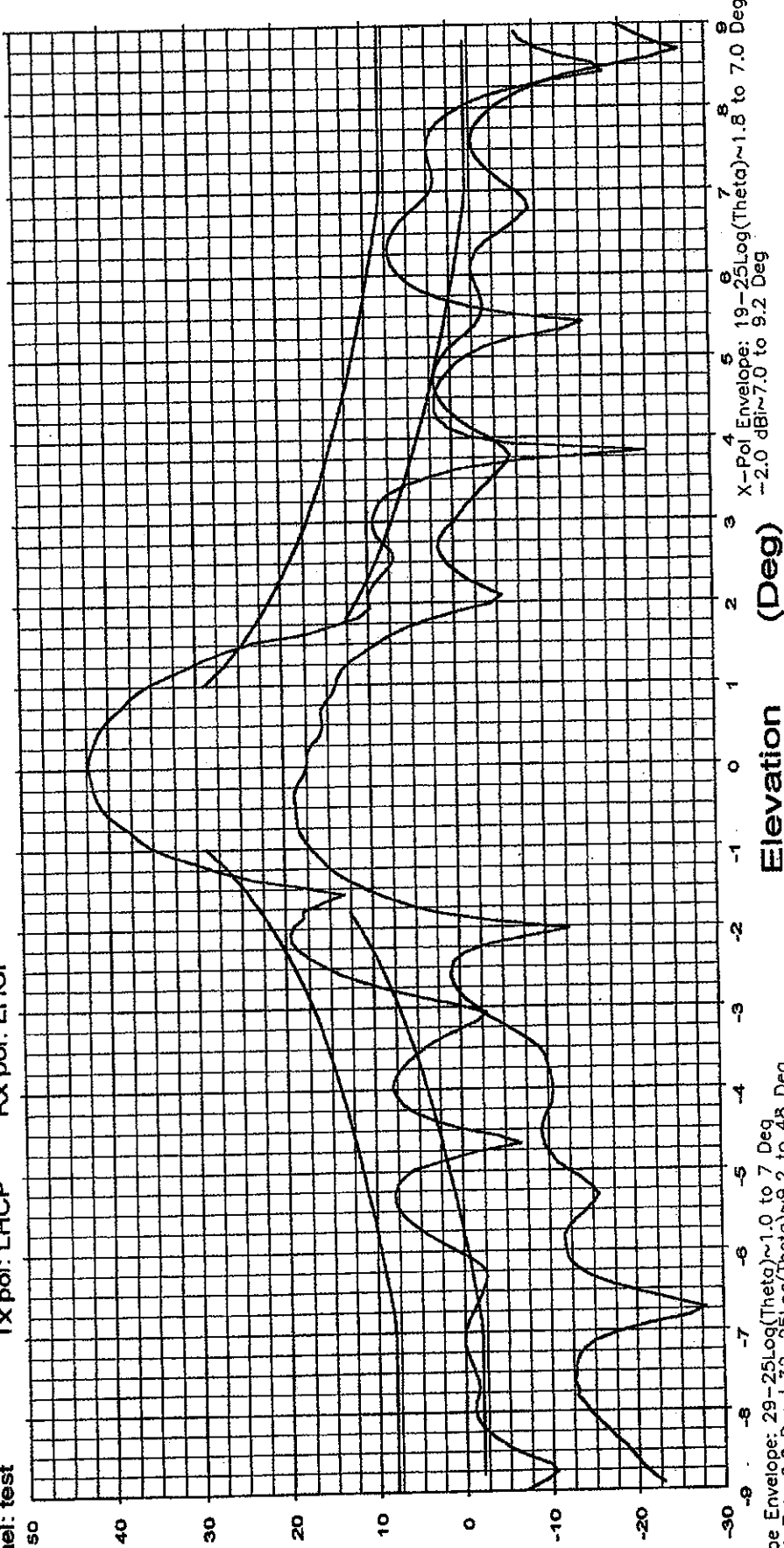
Prodellin 2.4 Meter 2-Pc. RX/TX Antenna System  
Series 1251 / C-Band Circular Polarization

Operator: Ken Poovey

File no.: Osartrn1

Channel: test

Tx pol: LHCP Rx pol: LHCP



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

Elevation

Beam Peak	Deg	dB
0.02	42.28	
-0.32	18.84	

Side lobe 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

Cal. file	units
065005.DAT	dBi
065009.DAT	dBi

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