

GENERAL DYNAMICS

C4 Systems

Antenna Test Report

Test No. 1487

Project: 95cm Series 1951

Ku-Band Rx/Tx Antenna System



East Maiden Antenna Test Facility
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Maiden, North Carolina 28650
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Prodelin Corporation®

1500 Prodelin Drive
Newton, NC 28658

Antenna Patterns

95cm Series 1951
Ku-Band Rx/Tx
Antenna System
TN1487

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Section I



Gain Analysis

95cm

Series 1951

Ku-Band Rx/Tx Antenna System

Test No. 1487

Frequency In GHz	Polarization (plane)	RX Gain In dBi
14.000	Vertical	40.86
14.250	Vertical	41.00
14.500	Vertical	41.11

Frequency In GHz	Polarization (plane)	Rx Gain In dBi
14.000	Horizontal	40.88
14.250	Horizontal	40.99
14.500	Horizontal	41.06

Frequency In GHz	Polarization (plane)	Tx Gain In dBi
10.950	Vertical	39.21
11.700	Vertical	39.49
12.200	Vertical	39.61

Frequency In GHz	Polarization (plane)	Tx Gain In dBi
10.950	Horizontal	39.25
11.700	Horizontal	39.52
12.200	Horizontal	39.70



Section II

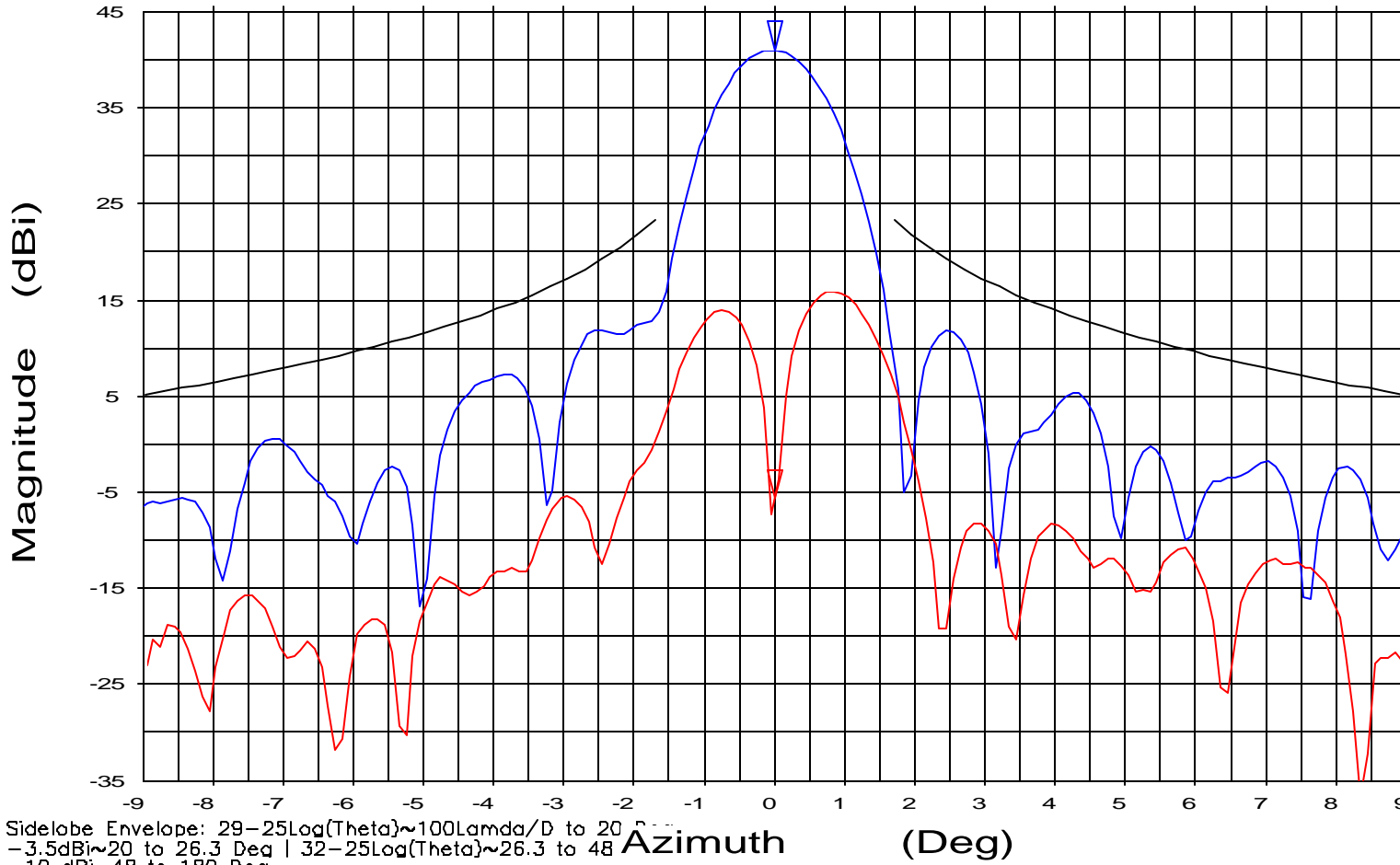


95CM Ku-Band Receive / Transmit
Horizontal Ellipse Antenna System
Series 1951

Frequency : 14.000 GHz

Operator: D. Lutz
Ser. no.: 030899

Tx pol: Vert. Rx pol: Vert.



X-Pol Analysis	
Position	Gain (dB)
0.000	47.18

Sidelobe Envelope: $29 - 25 \log(\theta) \sim 100 \lambda / D$ to $20 \lambda / D$
-3.5 dBi ~ 20 to 26.3 Deg | $32 - 25 \log(\theta) \sim 26.3$ to $48 \lambda / D$
-10 dBi ~ 48 to 180 Deg

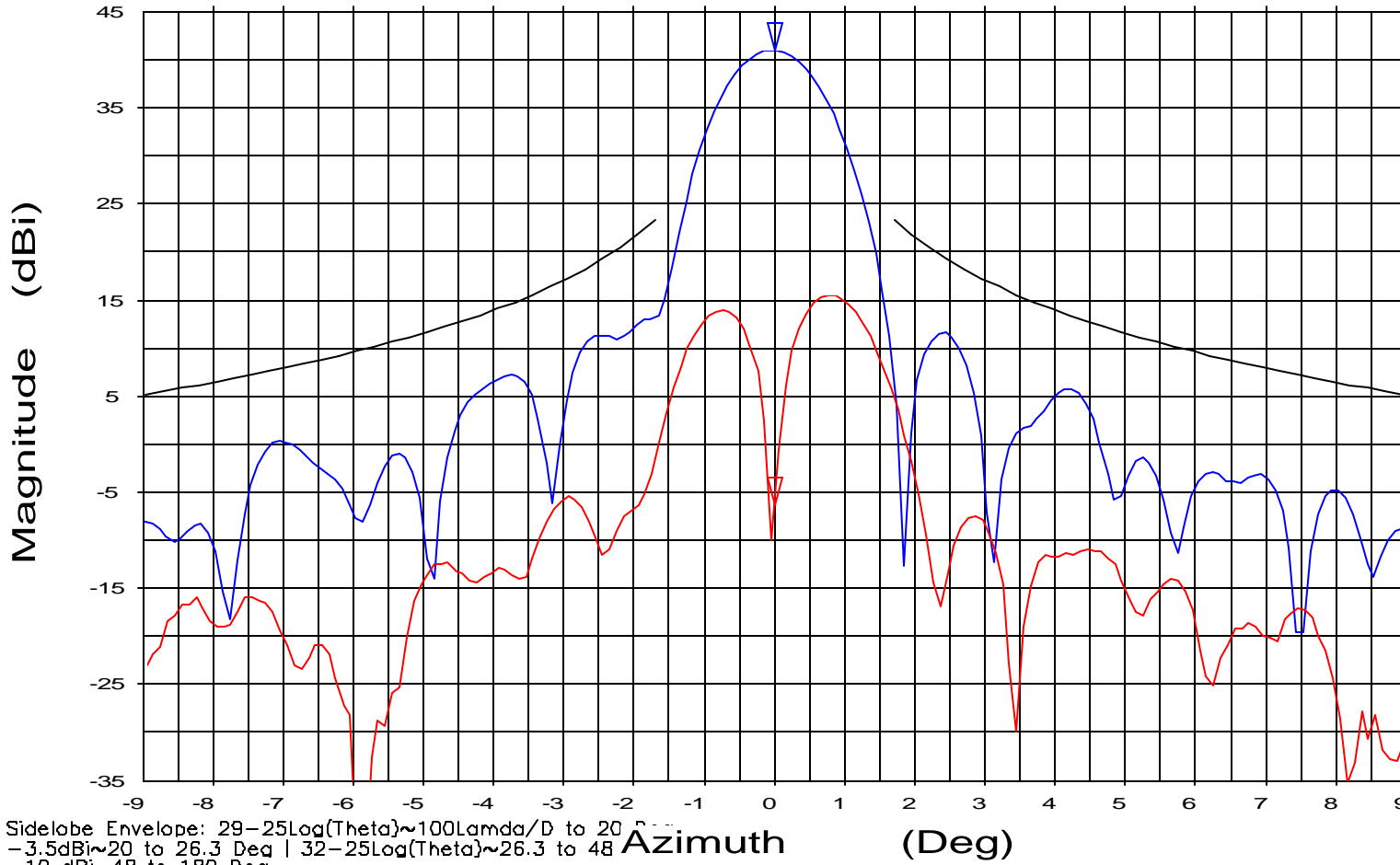
Overlays
148725.DAT-ant_under_test — blue line
148728.DAT-ant_under_test — red line

95CM Ku-Band Receive / Transmit
Horizontal Ellipse Antenna System
Series 1951

Frequency : 14.250 GHz

Operator: D. Lutz
Ser. no.: 030899

Tx pol: Vert. Rx pol: Vert.



X-Pol Analysis	
Position	Gain (dB)
0.000	49.28

Sidelobe Envelope: $29 - 25 \log(\theta) \sim 100 \lambda / D$ to 20°
 $-3.5 \text{ dBi} \sim 20$ to 26.3 Deg | $32 - 25 \log(\theta) \sim 26.3$ to 48°
 $-10 \text{ dBi} \sim 48$ to 180 Deg

Overlays
148725.DAT-ant_under_test — blue line
148728.DAT-ant_under_test — red line

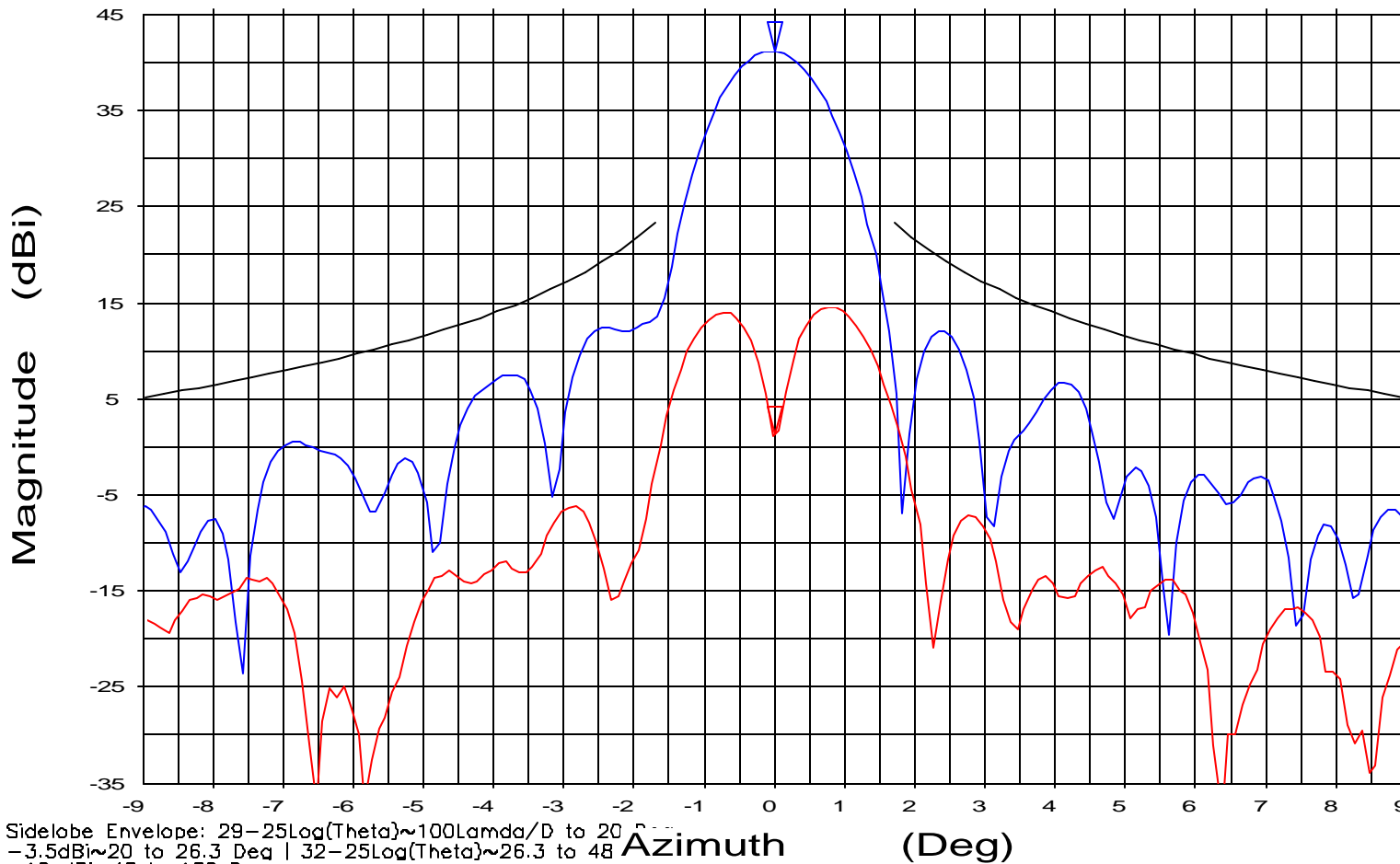
95CM Ku-Band Receive / Transmit
Horizontal Ellipse Antenna System
Series 1951

Frequency : 14.500 GHz

Operator: D. Lutz
Ser. no.: 030899

Tx pol: Vert.

Rx pol: Vert.



X-Pol Analysis	
Position	Gain (dB)
0.000	39.88

Sidelobe Envelope: $29 - 25 \log(\theta) \sim 100 \lambda / D$ to 20°
 $-3.5 \text{ dBi} \sim 20$ to 26.3 Deg | $32 - 25 \log(\theta) \sim 26.3$ to 48°
 $-10 \text{ dBi} \sim 48$ to 180 Deg

Overlays
148725.DAT-ant_under_test — blue line
148728.DAT-ant_under_test — red line

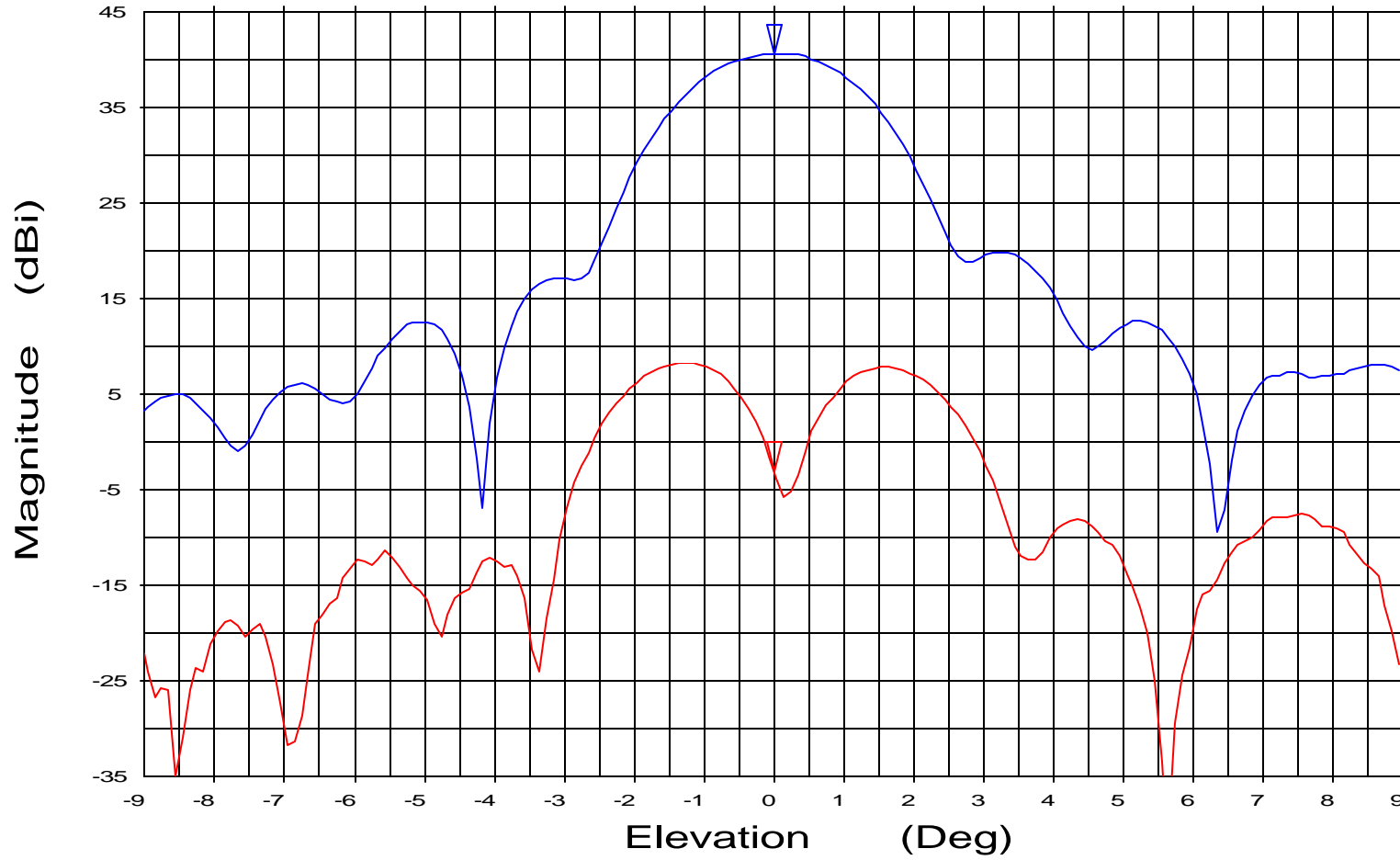
95CM Ku-Band Receive / Transmit
Horizontal Ellipse Antenna System
Series 1951

Frequency : 14.000 GHz

Operator: D. Lutz
Ser. no.: 030899

Tx pol: Vert.

Rx pol: Vert.



X-Pol Analysis	
Position	Gain (dB)
0.000	43.55

Overlays
148726.DAT-ant_under_test — blue line
148729.DAT-ant_under_test — red line

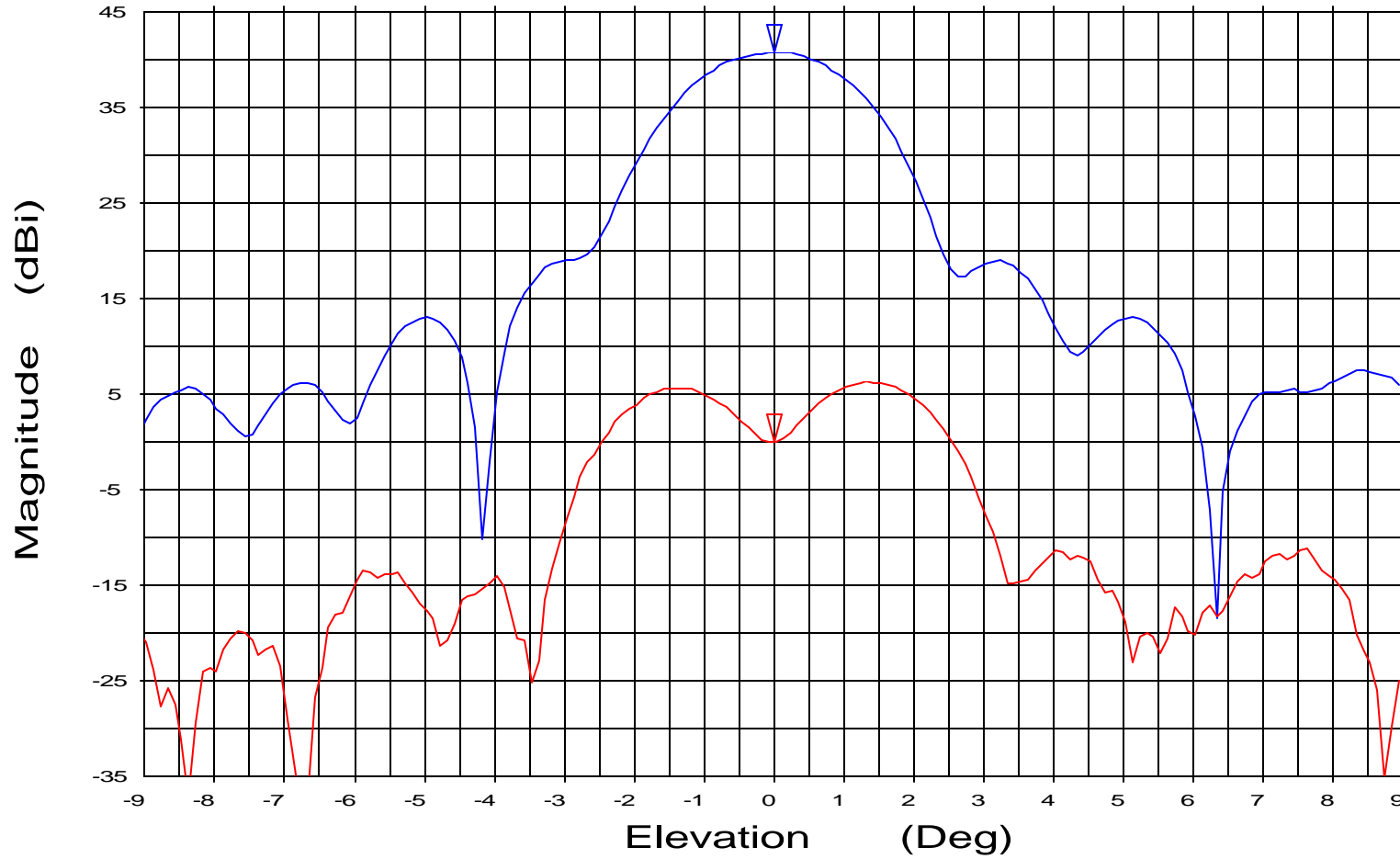
95CM Ku-Band Receive / Transmit
Horizontal Ellipse Antenna System
Series 1951

Frequency : 14.250 GHz

Operator: D. Lutz
Ser. no.: 030899

Tx pol: Vert.

Rx pol: Vert.



X-Pol Analysis	
Position	Gain (dB)
0.000	-40.00

Overlays
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148729.DAT-ant_under_test — red line

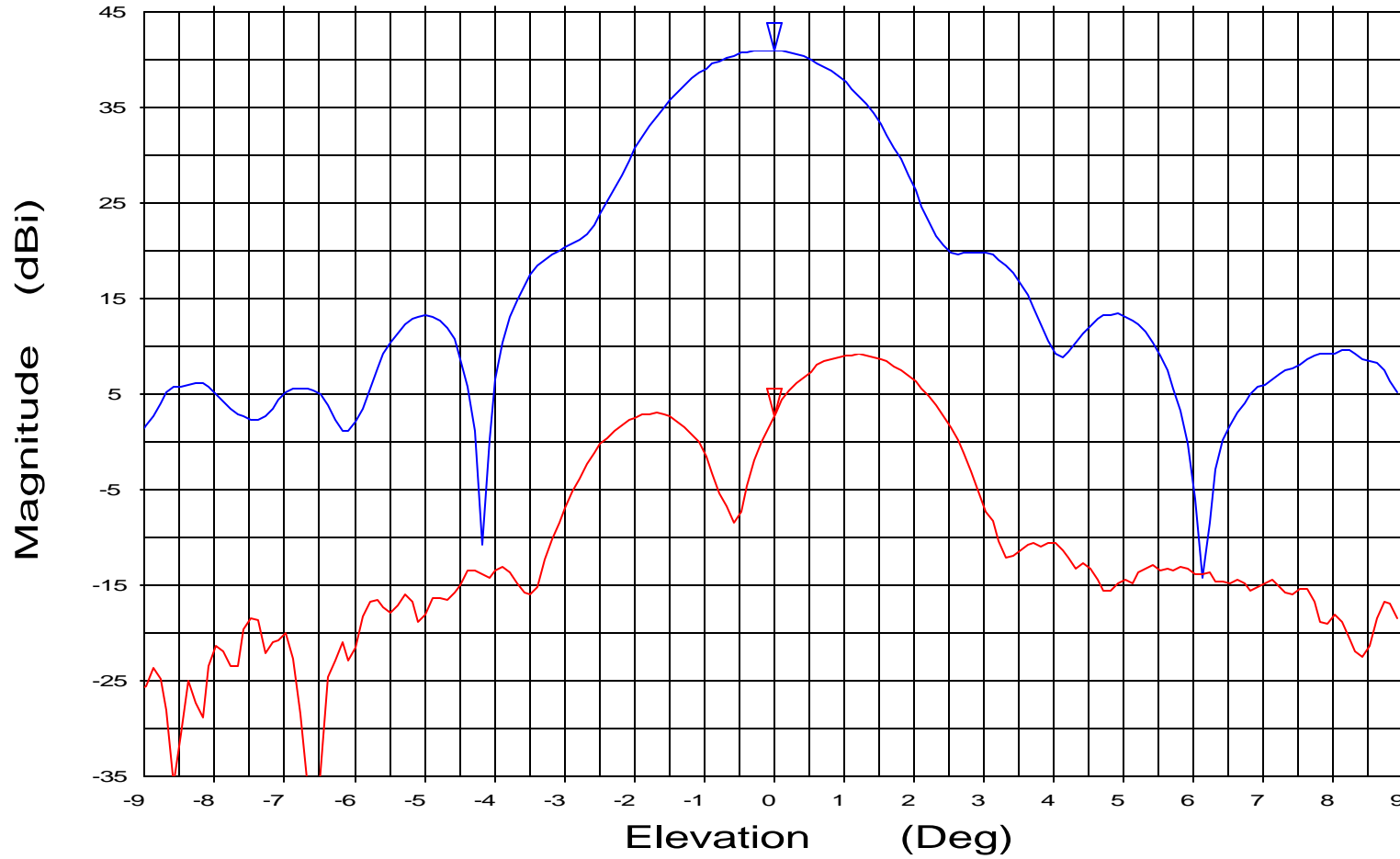
95CM Ku-Band Receive / Transmit
Horizontal Ellipse Antenna System
Series 1951

Frequency : 14.500 GHz

Operator: D. Lutz
Ser. no.: 030899

Tx pol: Vert.

Rx pol: Vert.



X-Pol Analysis	
Position	Gain (dB)
0.000	38.67

Overlays
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148729.DAT-ant_under_test — red line

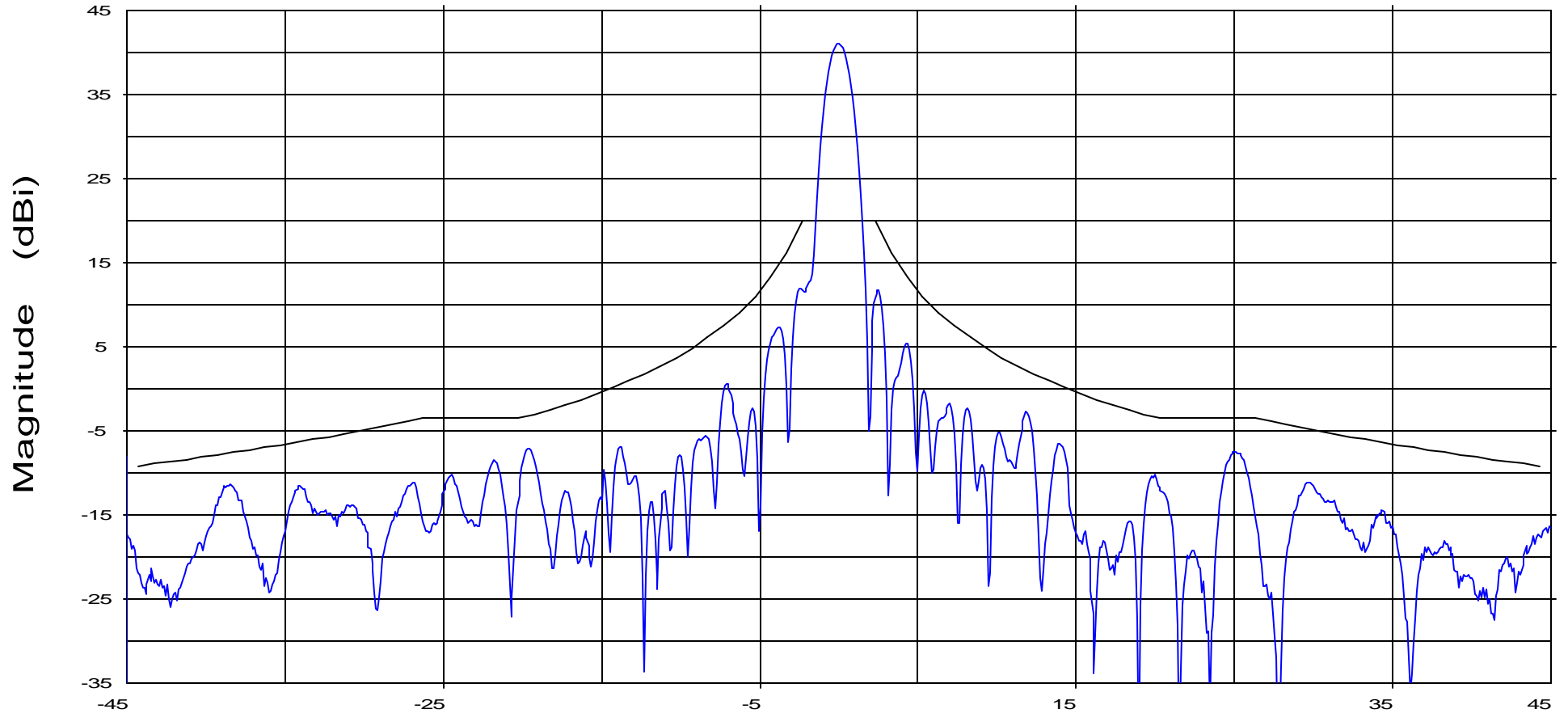
95CM Ku-Band Receive / Transmit
Horizontal Ellipse Antenna System
Series 1951

Frequency : 14.000 GHz

Operator: D. Lutz
Ser. no.: 030899

Tx pol: Vert.

Rx pol: Vert.



Sidelobe Envelope: $29 - 25 \log(\theta) \sim 100 \lambda / D$ to 20 Deg
-3.5 dBi ~ 20 to 26.3 Deg | $32 - 25 \log(\theta) \sim 26.3$ to 48 Deg
-10 dBi ~ 48 to 180 Deg

Overlays
148725.DAT-ant_under_test

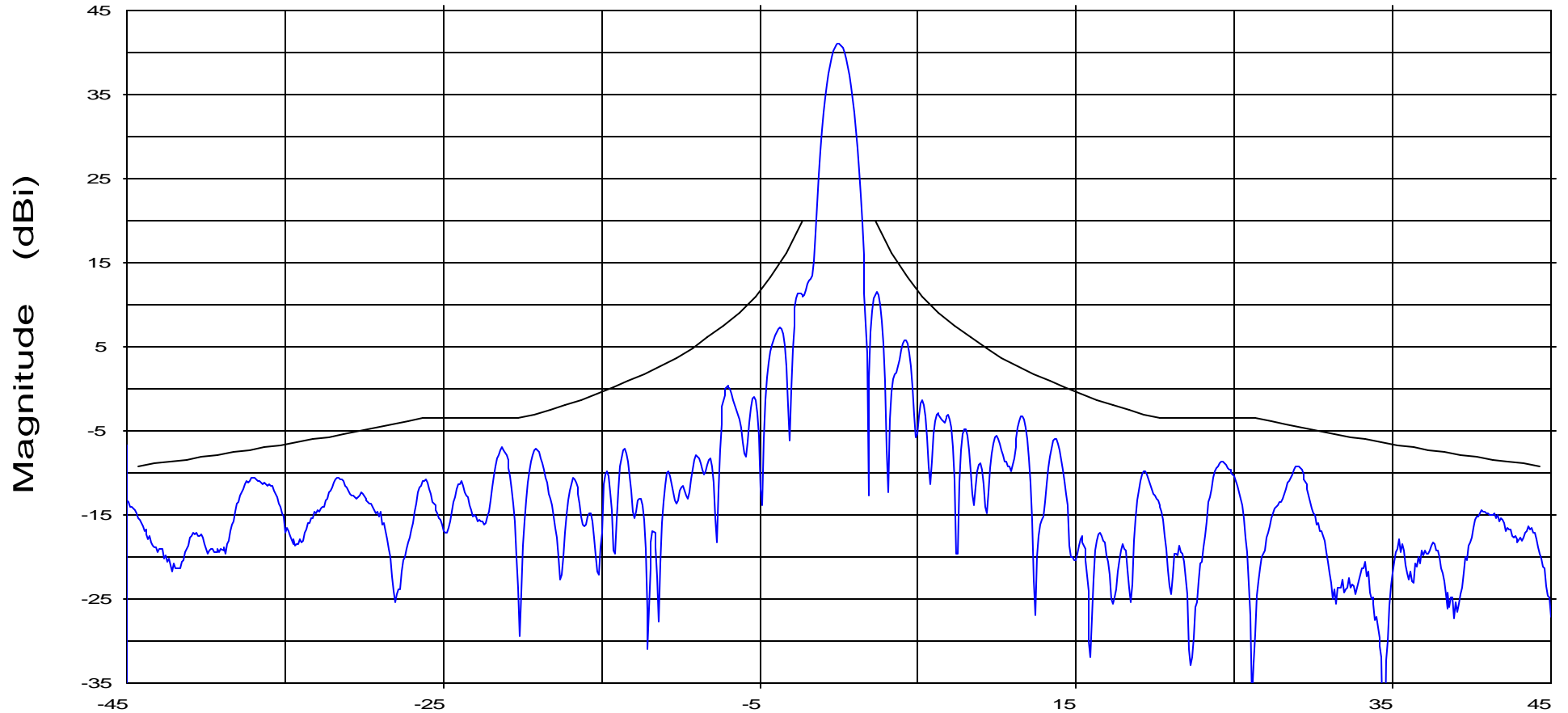
95CM Ku-Band Receive / Transmit
Horizontal Ellipse Antenna System
Series 1951

Frequency : 14.250 GHz

Operator: D. Lutz
Ser. no.: 030899

Tx pol: Vert.

Rx pol: Vert.



Sidelobe Envelope: $29 - 25 \log(\theta) \sim 100 \lambda / D$ to 20 Deg
-3.5 dBi ~ 20 to 26.3 Deg | $32 - 25 \log(\theta) \sim 26.3$ to 48 Deg
-10 dBi ~ 48 to 180 Deg

Overlays

148725.DAT-ant_under_test

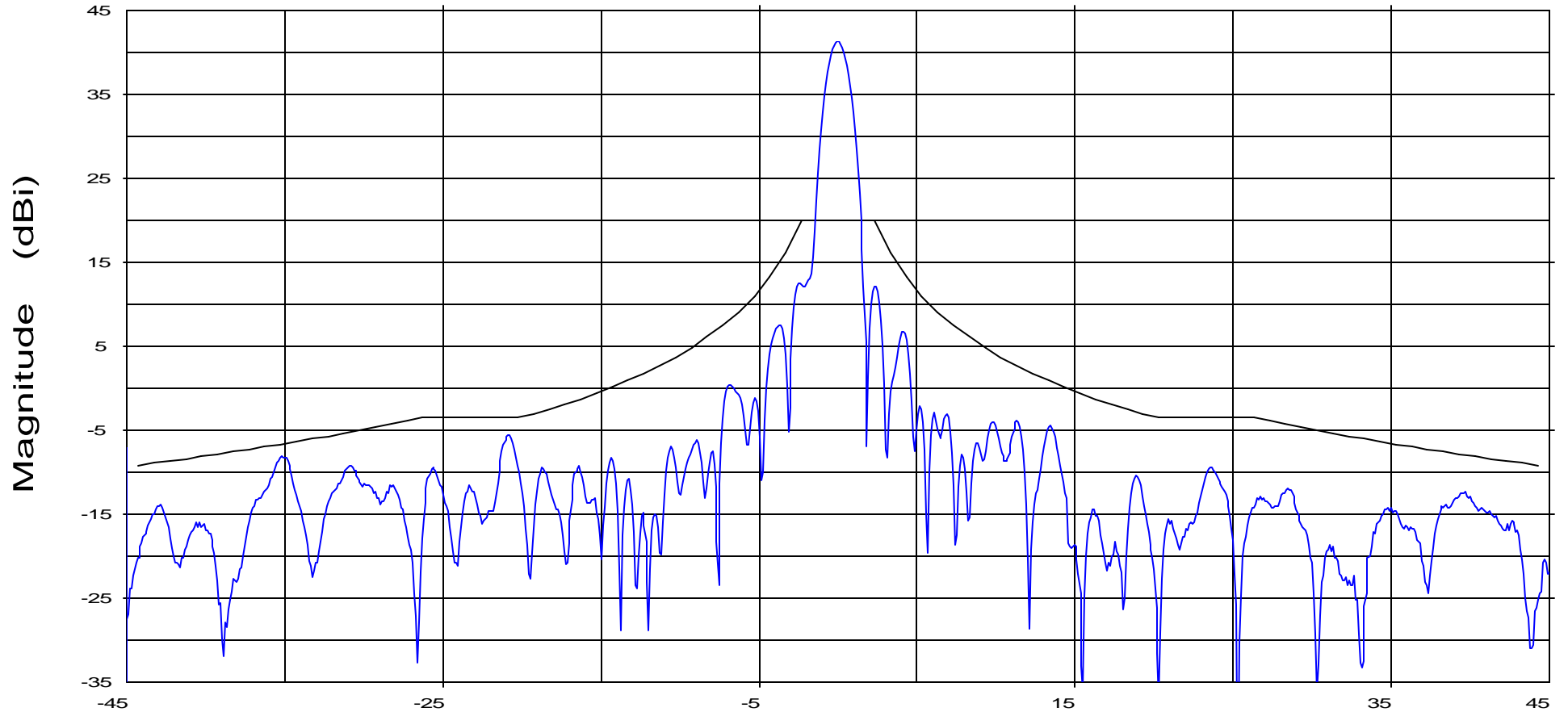
95CM Ku-Band Receive / Transmit
Horizontal Ellipse Antenna System
Series 1951

Frequency : 14.500 GHz

Operator: D. Lutz
Ser. no.: 030899

Tx pol: Vert.

Rx pol: Vert.



Sidelobe Envelope: $29 - 25 \log(\theta) \sim 100 \lambda / D$ to 20 Deg
-3.5 dBi ~ 20 to 26.3 Deg | $32 - 25 \log(\theta) \sim 26.3$ to 48 Deg
-10 dBi ~ 48 to 180 Deg

Overlays
148725.DAT-ant_under_test

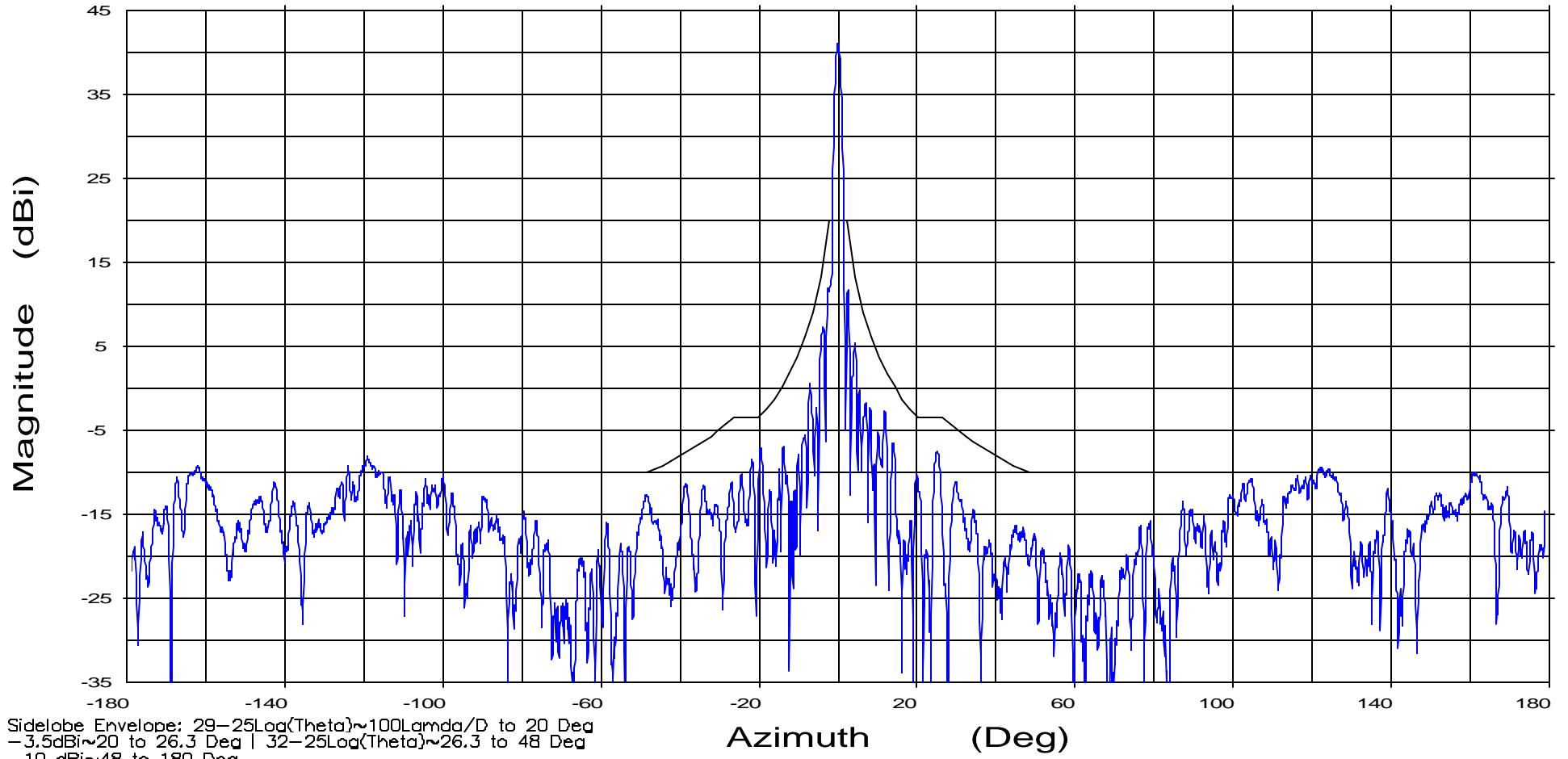
95CM Ku-Band Receive / Transmit
Horizontal Ellipse Antenna System
Series 1951

Frequency : 14.000 GHz

Operator: D. Lutz
Ser. no.: 030899

Tx pol: Vert.

Rx pol: Vert.



Sidelobe Envelope: $29 - 25 \log(\theta) \sim 100 \lambda / D$ to 20 Deg
 $-3.5 \text{ dBi} \sim 20$ to 26.3 Deg | $32 - 25 \log(\theta) \sim 26.3$ to 48 Deg
 $-10 \text{ dBi} \sim 48$ to 180 Deg

Overlays
148725.DAT-ant_under_test

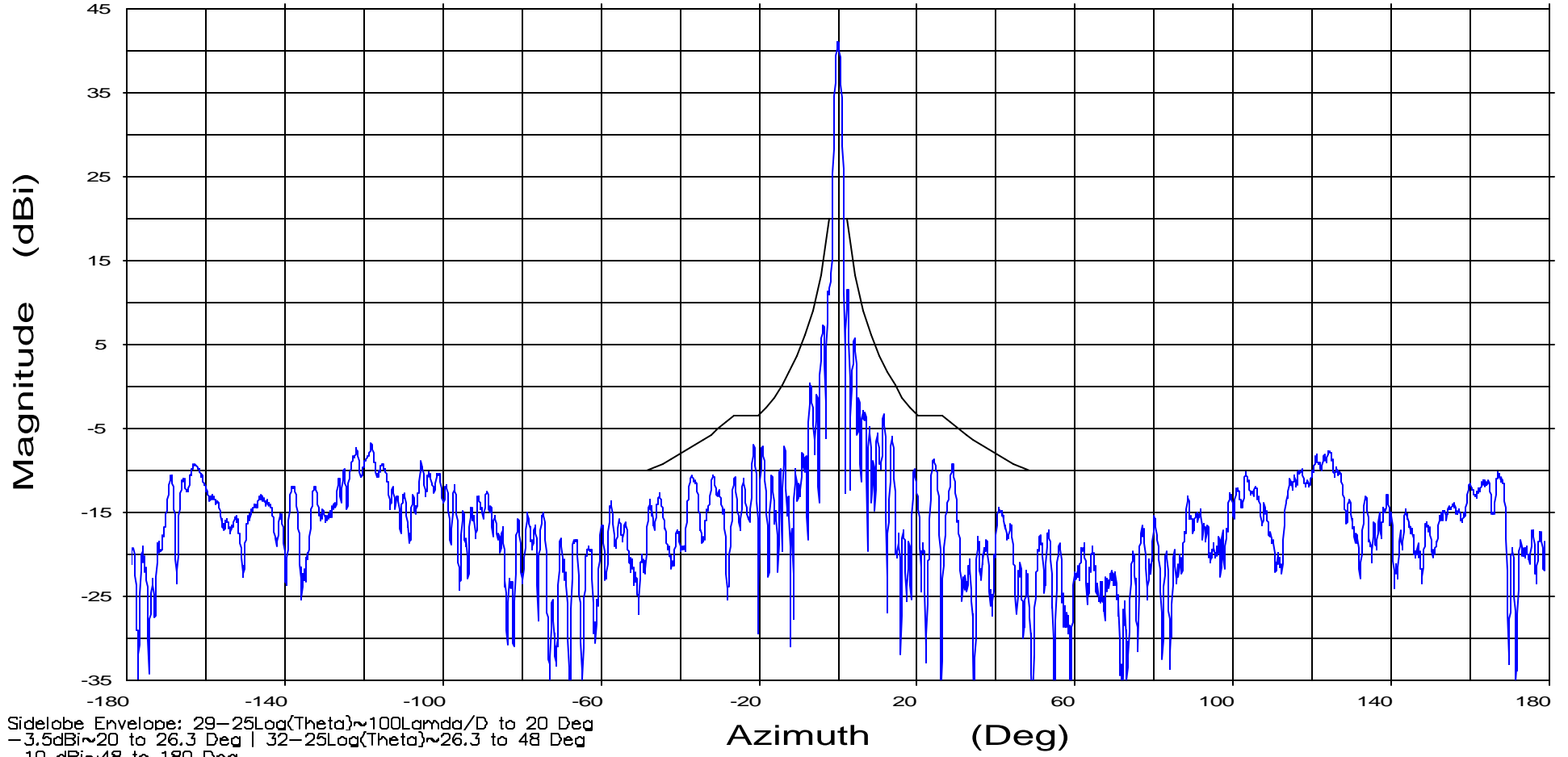
95CM Ku-Band Receive / Transmit
Horizontal Ellipse Antenna System
Series 1951

Frequency : 14.250 GHz

Operator: D. Lutz
Ser. no.: 030899

Tx pol: Vert.

Rx pol: Vert.



Sidelobe Envelope: $29 - 25 \log(\theta) \sim 100 \lambda / D$ to 20 Deg
-3.5 dBi ~ 20 to 26.3 Deg | $32 - 25 \log(\theta) \sim 26.3$ to 48 Deg
-10 dBi ~ 48 to 180 Deg

Overlays

148725.DAT-ant_under_test —

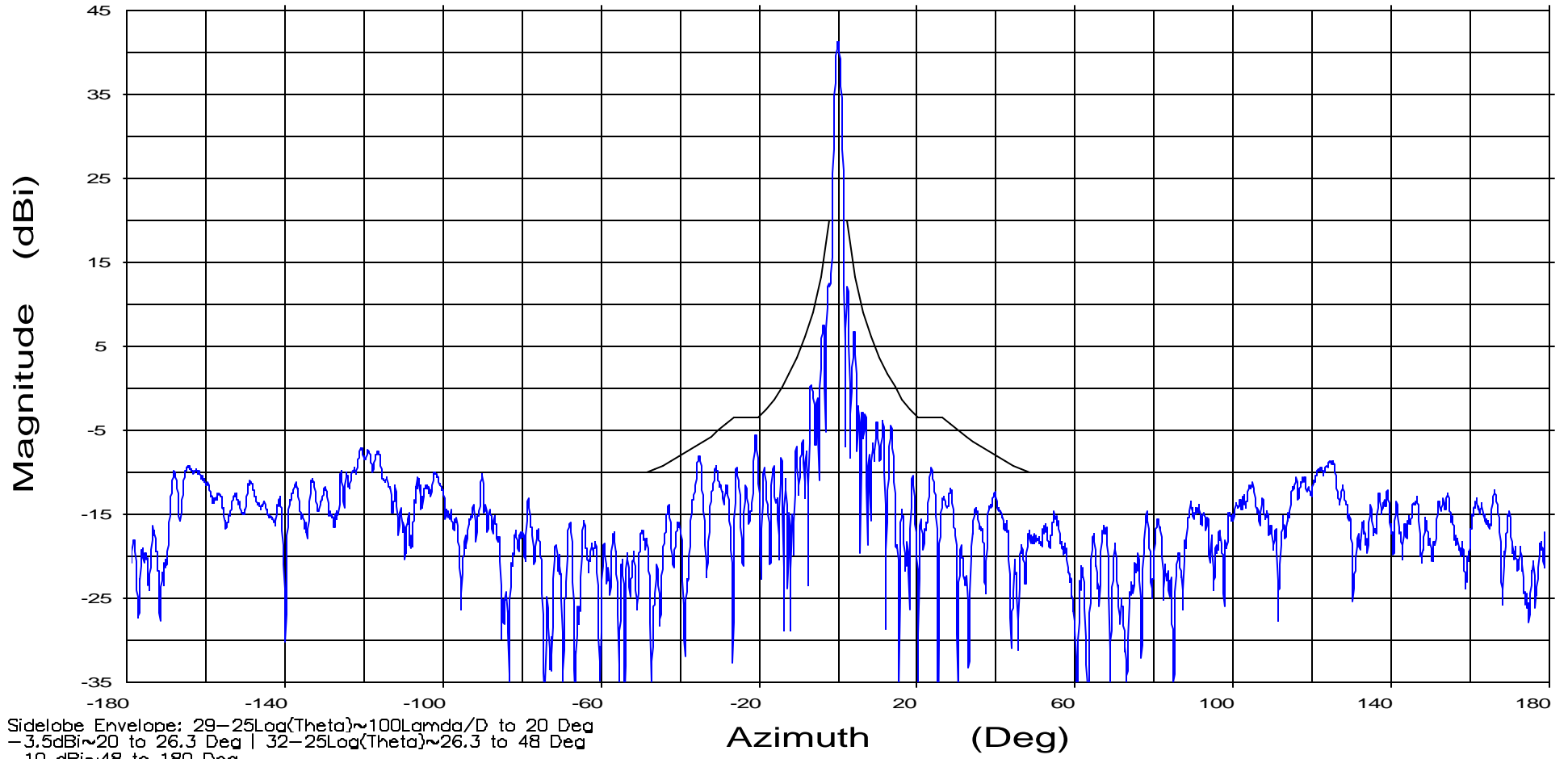
95CM Ku-Band Receive / Transmit
Horizontal Ellipse Antenna System
Series 1951

Frequency : 14.500 GHz

Operator: D. Lutz
Ser. no.: 030899

Tx pol: Vert.

Rx pol: Vert.



Sidelobe Envelope: $29 - 25 \log(\theta) \sim 100 \lambda / D$ to 20 Deg
-3.5 dBi ~ 20 to 26.3 Deg | $32 - 25 \log(\theta) \sim 26.3$ to 48 Deg
-10 dBi ~ 48 to 180 Deg

Overlays
148725.DAT-ant_under_test

Section III



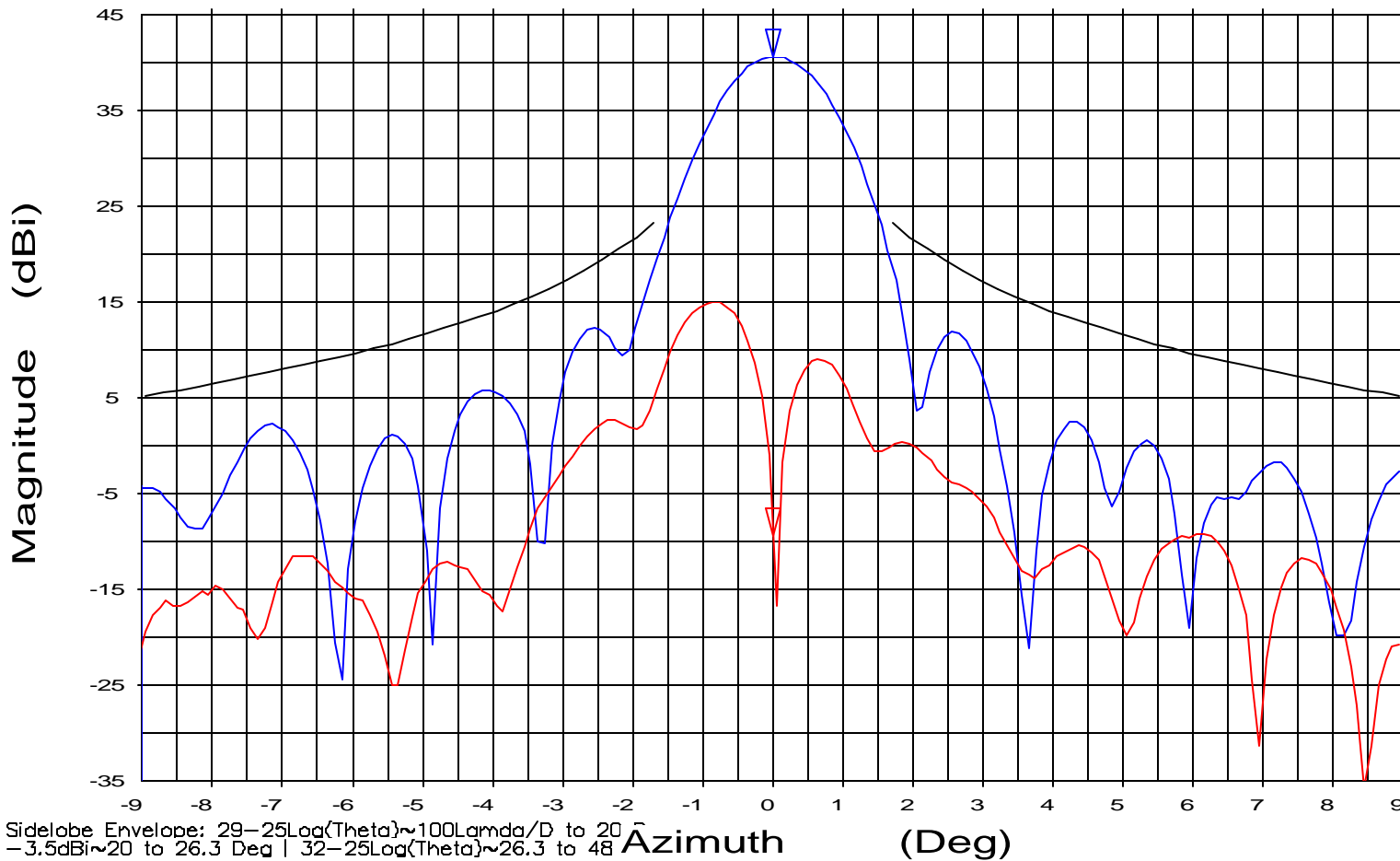
95CM Ku-Band Receive / Transmit
Horizontal Ellipse Antenna System
Series 1951

Frequency : 14.000 GHz

Operator: Ken Poovey
Ser. no.: 030899

Tx pol: Horiz.

Rx pol: Horiz.



X-Pol Analysis	
Position	Gain (dB)
0.000	49.05

Sidelobe Envelope: $29 - 25 \log(\theta) \sim 100 \lambda / D$ to 20°
-3.5 dBi ~ 20 to 26.3 Deg | $32 - 25 \log(\theta) \sim 26.3$ to 48°
-10 dBi ~ 48 to 180 Deg

Overlays
148734.DAT-ant_under_test — blue line
148736.DAT-ant_under_test — red line

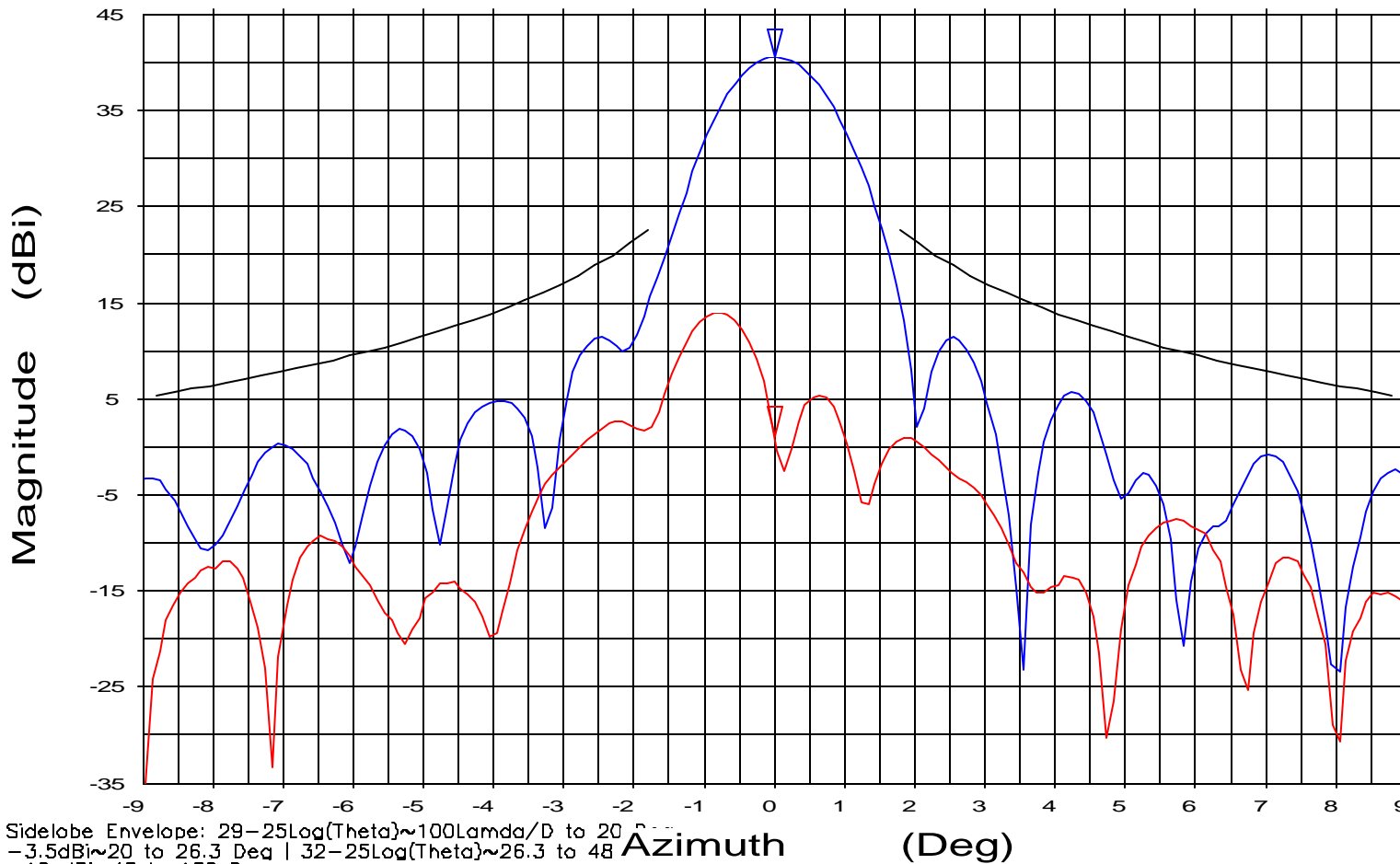
95CM Ku-Band Receive / Transmit
Horizontal Ellipse Antenna System
Series 1951

Frequency : 14.250 GHz

Operator: Ken Poovey
Ser. no.: 030899

Tx pol: Horiz.

Rx pol: Horiz.



X-Pol Analysis	
Position	Gain (dB)
0.000	39.57

Sidelobe Envelope: $29 - 25 \log(\theta) \sim 100 \lambda / D$ to 20°
 $-3.5 \text{ dBi} \sim 20$ to 26.3 Deg | $32 - 25 \log(\theta) \sim 26.3$ to 48°
 $-10 \text{ dBi} \sim 48$ to 180 Deg

Overlays
148734.DAT-ant_under_test — blue line
148736.DAT-ant_under_test — red line

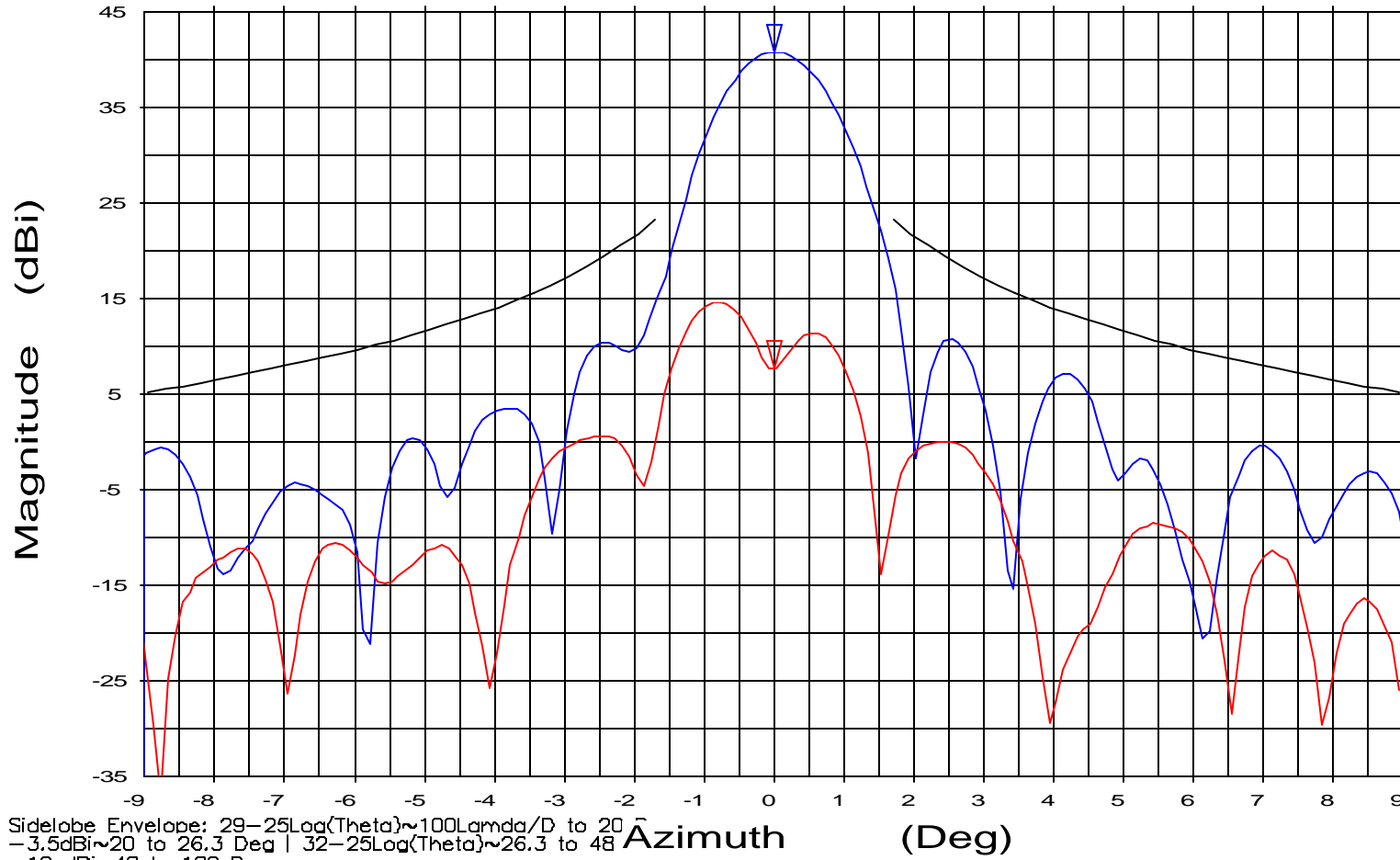
95CM Ku-Band Receive / Transmit
Horizontal Ellipse Antenna System
Series 1951

Frequency : 14.500 GHz

Operator: Ken Poovey
Ser. no.: 030899

Tx pol: Horiz.

Rx pol: Horiz.



X-Pol Analysis	
Position	Gain (dB)
0.000	32.85

Sidelobe Envelope: $29 - 25 \log(\theta) \sim 100 \lambda / D$ to 20°
-3.5 dBi ~ 20 to 26.3 Deg | $32 - 25 \log(\theta) \sim 26.3$ to 48°
-10 dBi ~ 48 to 180 Deg

Overlays
148734.DAT-ant_under_test — blue line
148736.DAT-ant_under_test — red line

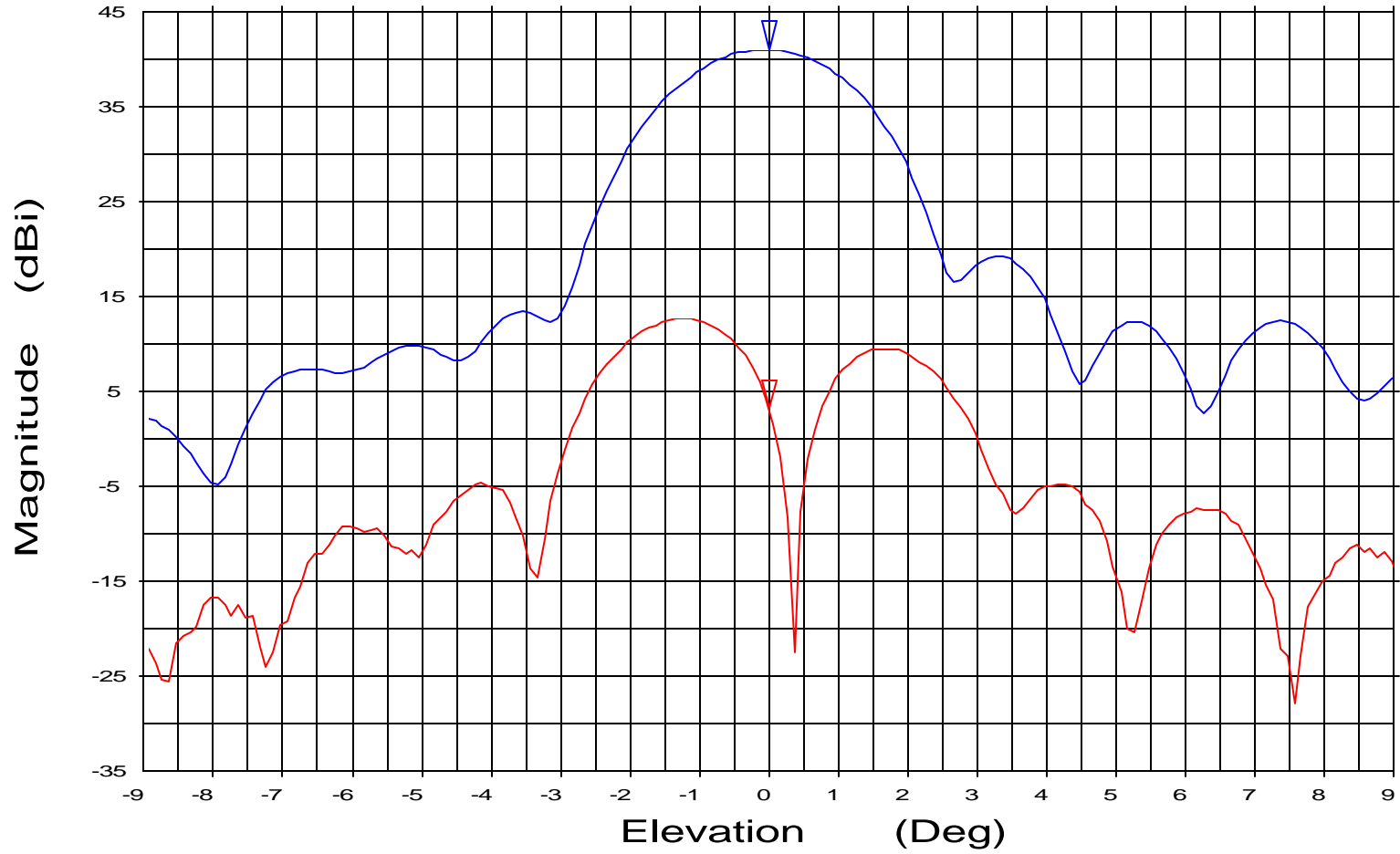
95CM Ku-Band Receive / Transmit
Horizontal Ellipse Antenna System
Series 1951

Frequency : 14.000 GHz

Operator: Ken Poovey
Ser. no.: 030899

Tx pol: Horiz.

Rx pol: Horiz.



X-Pol Analysis	
Position	Gain (dB)
0.000	36.95

Overlays
148738.DAT-ant_under_test — blue line
148740.DAT-ant_under_test — red line

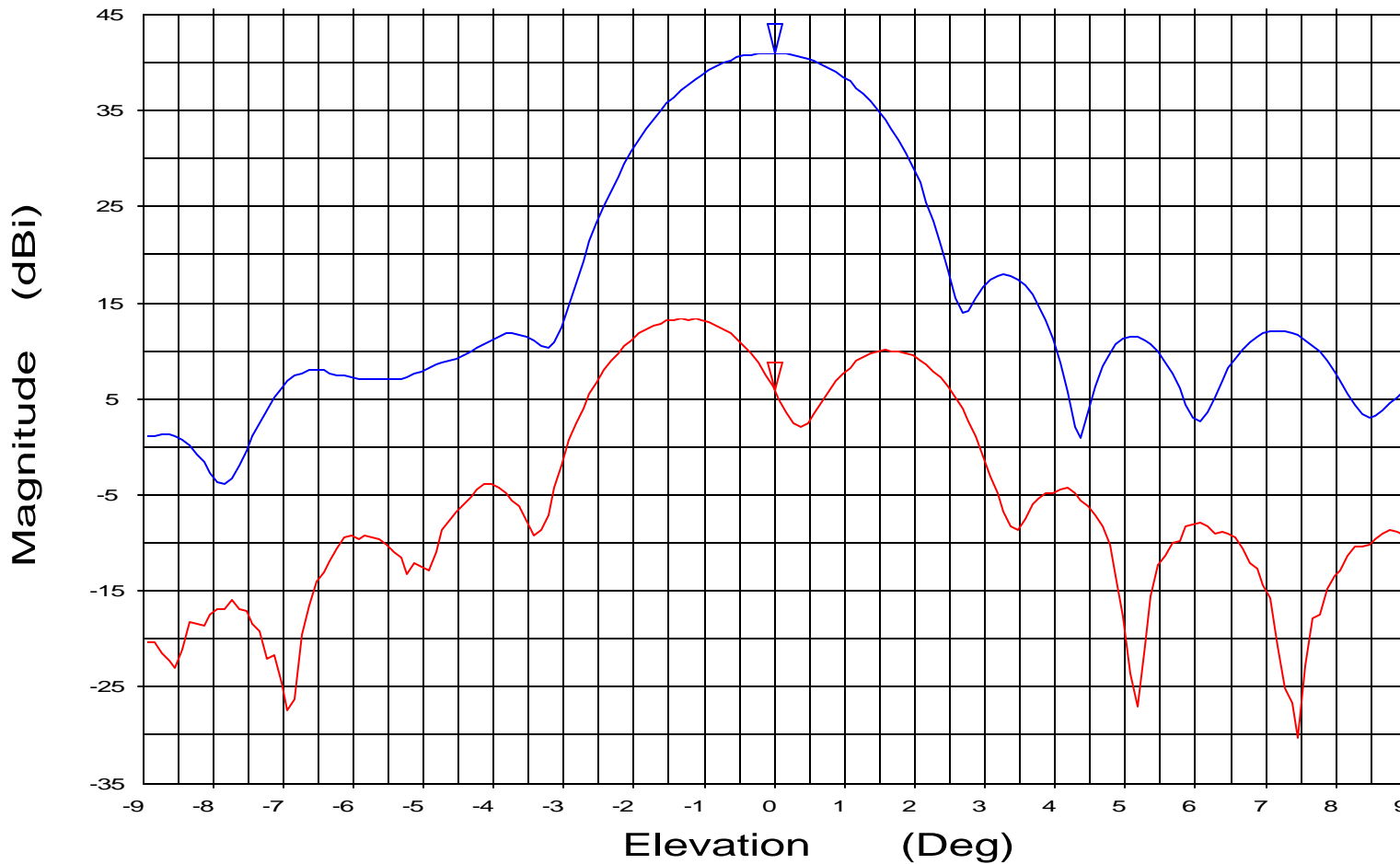
95CM Ku-Band Receive / Transmit
Horizontal Ellipse Antenna System
Series 1951

Frequency : 14.250 GHz

Operator: Ken Poovey
Ser. no.: 030899

Tx pol: Horiz.

Rx pol: Horiz.



X-Pol Analysis	
Position	Gain (dB)
0.000	36.05

Overlays
148738.DAT-ant_under_test — blue line
148740.DAT-ant_under_test — red line

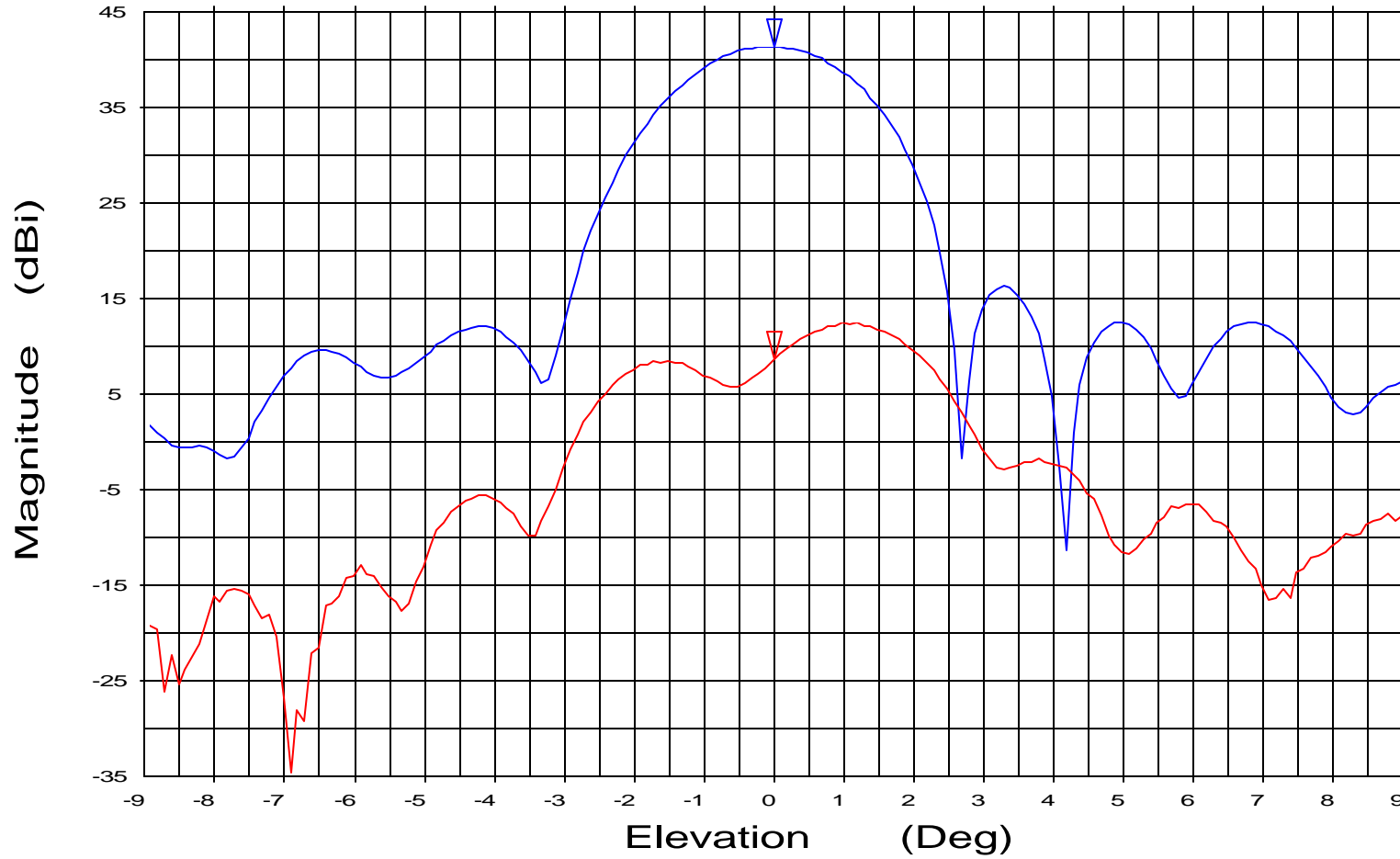
95CM Ku-Band Receive / Transmit
Horizontal Ellipse Antenna System
Series 1951

Frequency : 14.500 GHz

Operator: Ken Poovey
Ser. no.: 030899

Tx pol: Horiz.

Rx pol: Horiz.



X-Pol Analysis	
Position	Gain (dB)
0.000	32.70

Overlays
148738.DAT-ant_under_test — blue line
148741.DAT-ant_under_test — red line

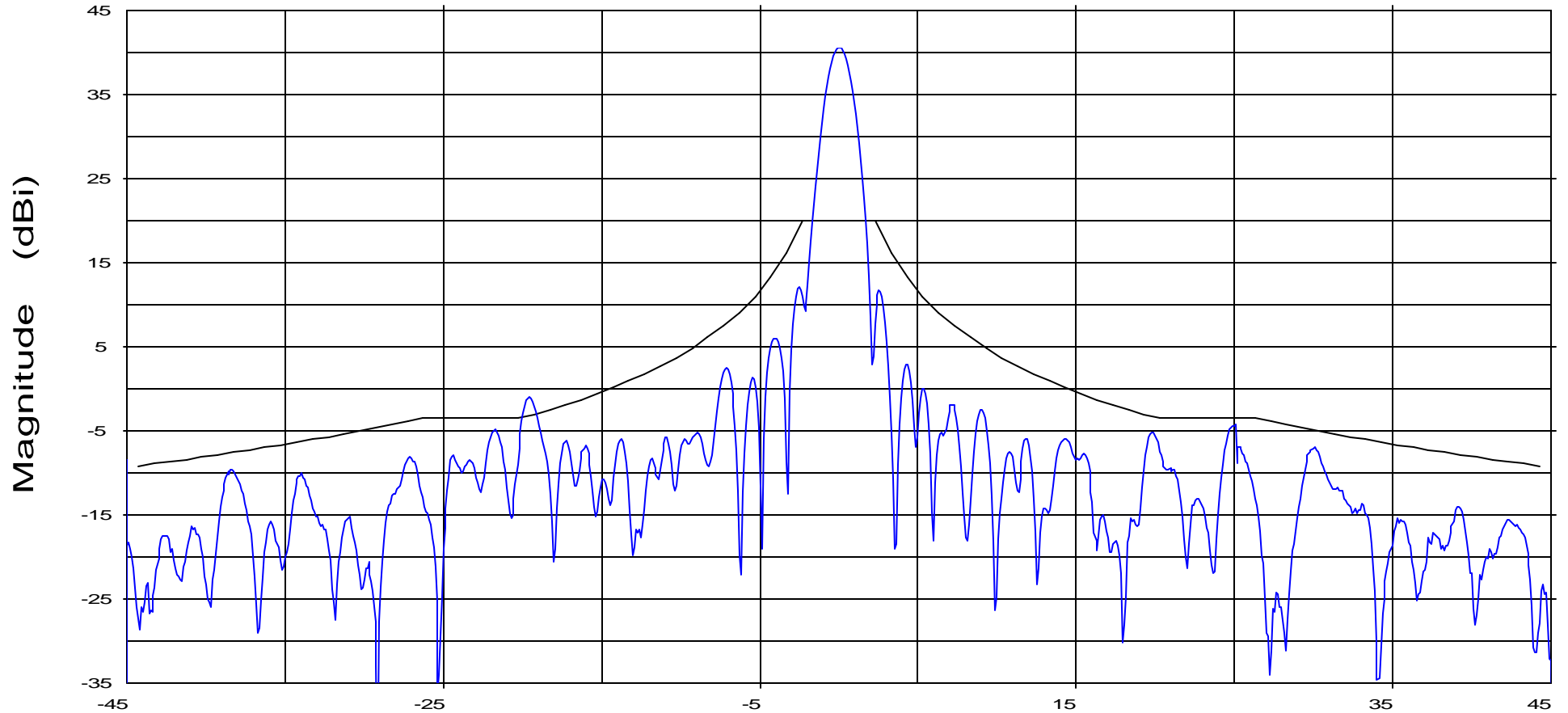
95CM Ku-Band Receive / Transmit
Horizontal Ellipse Antenna System
Series 1951

Frequency : 14.000 GHz

Operator: Ken Poovey
Ser. no.: 030899

Tx pol: Horiz.

Rx pol: Horiz.



Sidelobe Envelope: $29 - 25 \log(\theta) \sim 100 \lambda / D$ to 20 Deg
-3.5 dBi ~ 20 to 26.3 Deg | $32 - 25 \log(\theta) \sim 26.3$ to 48 Deg
-10 dBi ~ 48 to 180 Deg

Overlays
148733.DAT-ant_under_test

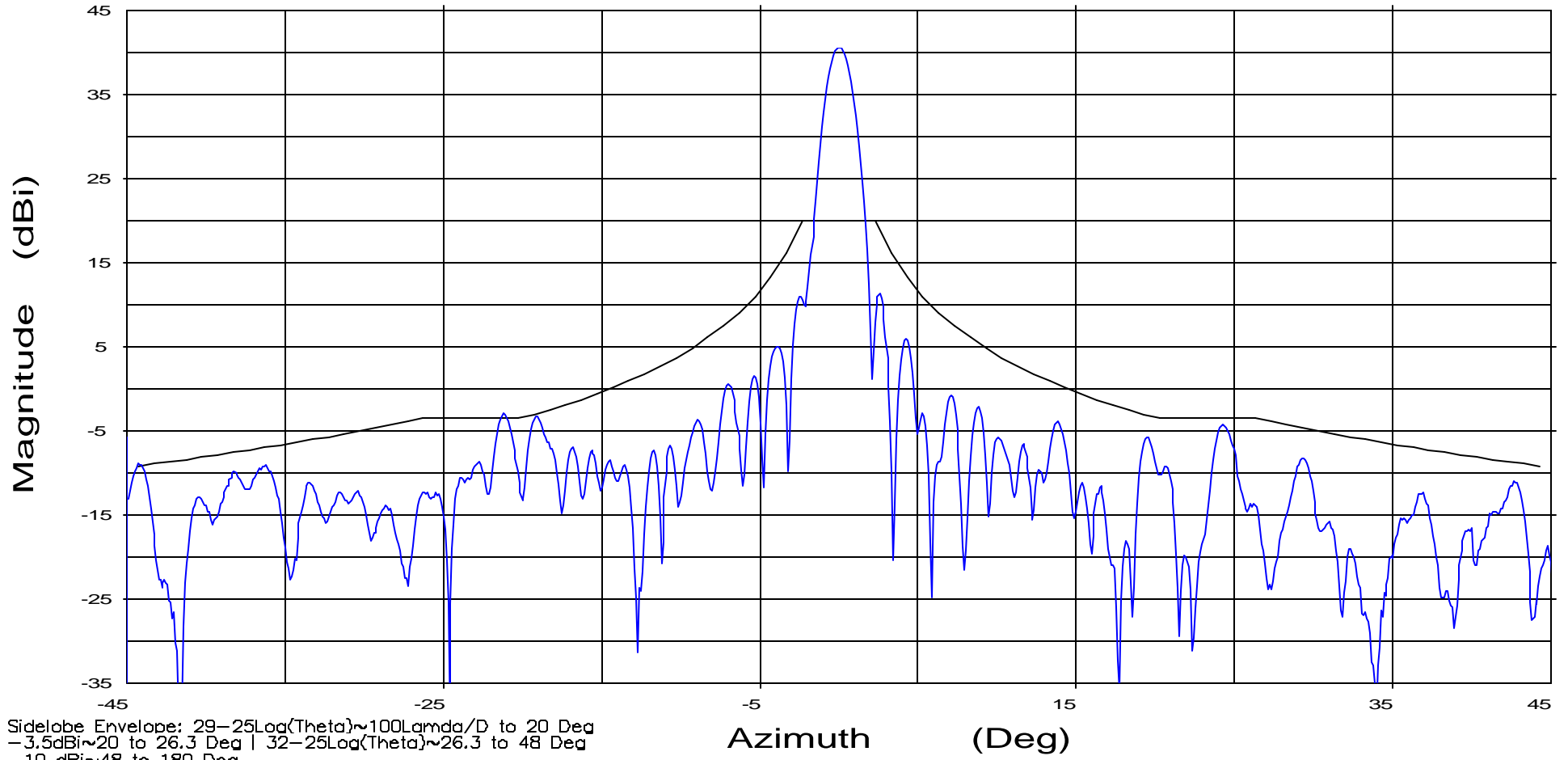
95CM Ku-Band Receive / Transmit
Horizontal Ellipse Antenna System
Series 1951

Frequency : 14.250 GHz

Operator: Ken Poovey
Ser. no.: 030899

Tx pol: Horiz.

Rx pol: Horiz.



Sidelobe Envelope: $29 - 25 \log(\theta) \sim 100 \lambda / D$ to 20 Deg
-3.5 dBi ~ 20 to 26.3 Deg | $32 - 25 \log(\theta) \sim 26.3$ to 48 Deg
-10 dBi ~ 48 to 180 Deg

Overlays
148733.DAT-ant_under_test

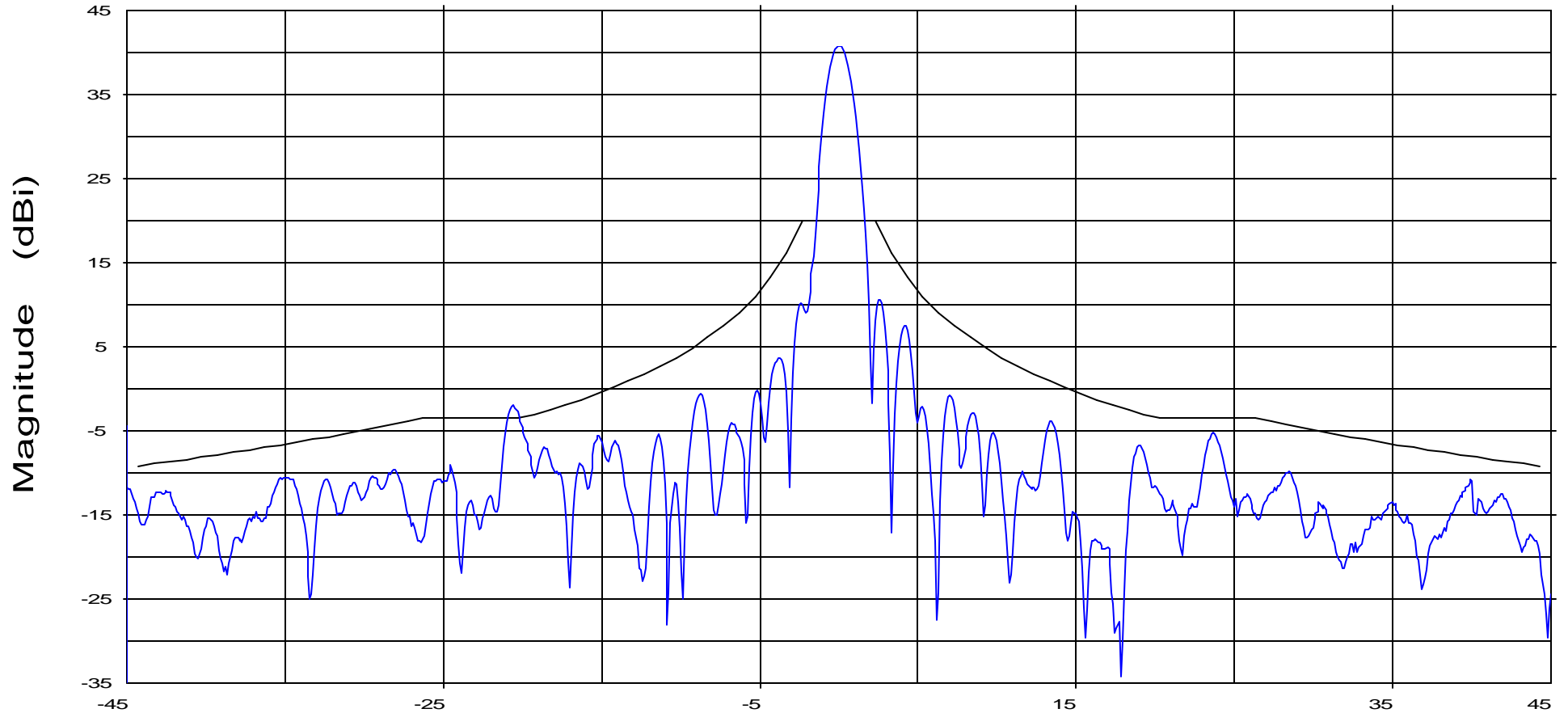
95CM Ku-Band Receive / Transmit
Horizontal Ellipse Antenna System
Series 1951

Frequency : 14.500 GHz

Operator: Ken Poovey
Ser. no.: 030899

Tx pol: Horiz.

Rx pol: Horiz.



Sidelobe Envelope: $29 - 25 \log(\theta) \sim 100 \lambda / D$ to 20 Deg
-3.5 dBi ~ 20 to 26.3 Deg | $32 - 25 \log(\theta) \sim 26.3$ to 48 Deg
-10 dBi ~ 48 to 180 Deg

Overlays
148733.DAT-ant_under_test

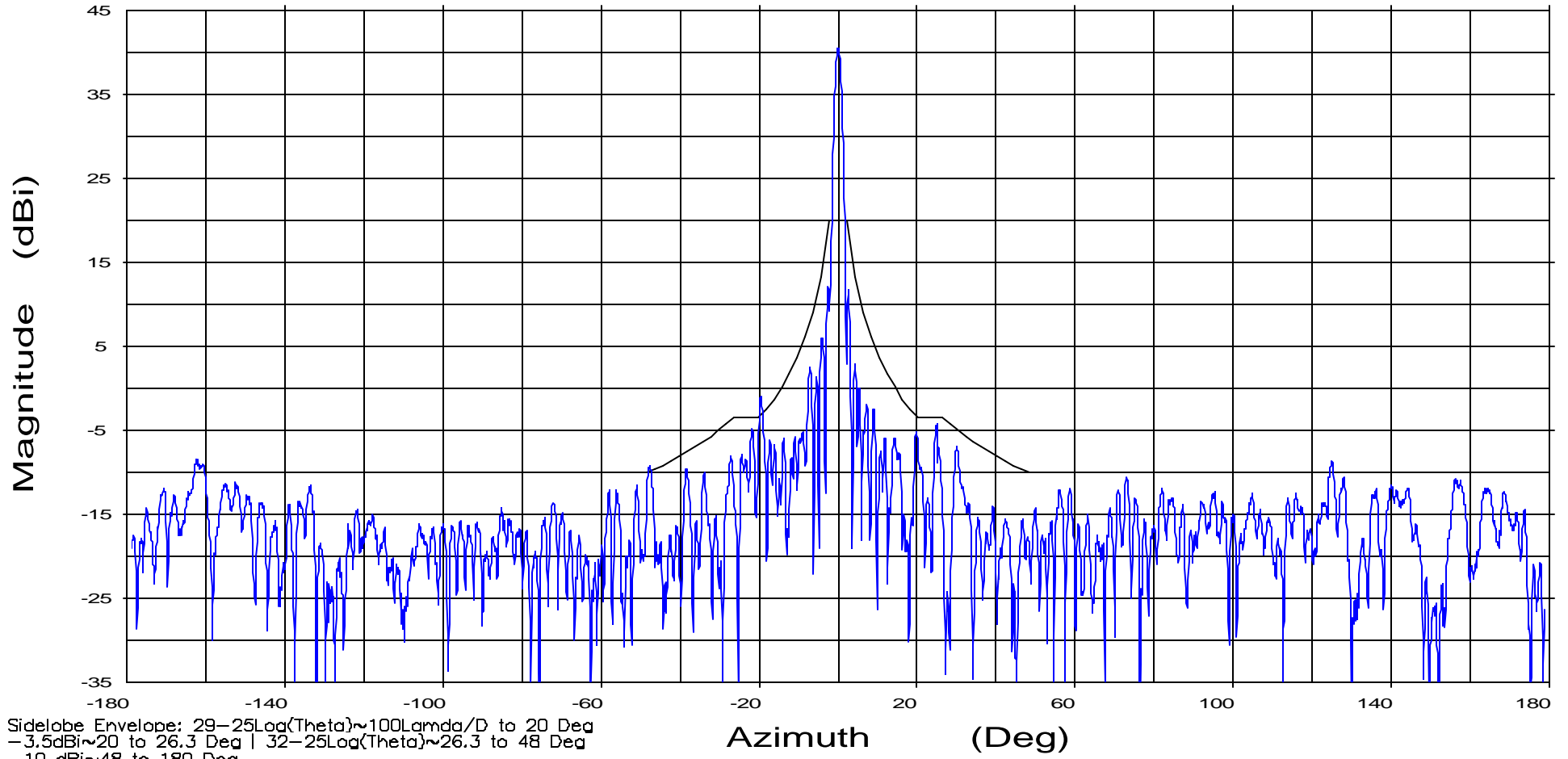
95CM Ku-Band Receive / Transmit
Horizontal Ellipse Antenna System
Series 1951

Frequency : 14.000 GHz

Operator: Ken Poovey
Ser. no.: 030899

Tx pol: Horiz.

Rx pol: Horiz.



Sidelobe Envelope: $29 - 25 \log(\theta) \sim 100 \lambda/D$ to 20 Deg
-3.5 dBi ~ 20 to 26.3 Deg | $32 - 25 \log(\theta) \sim 26.3$ to 48 Deg
-10 dBi ~ 48 to 180 Deg

Overlays
148743.DAT-ant_under_test

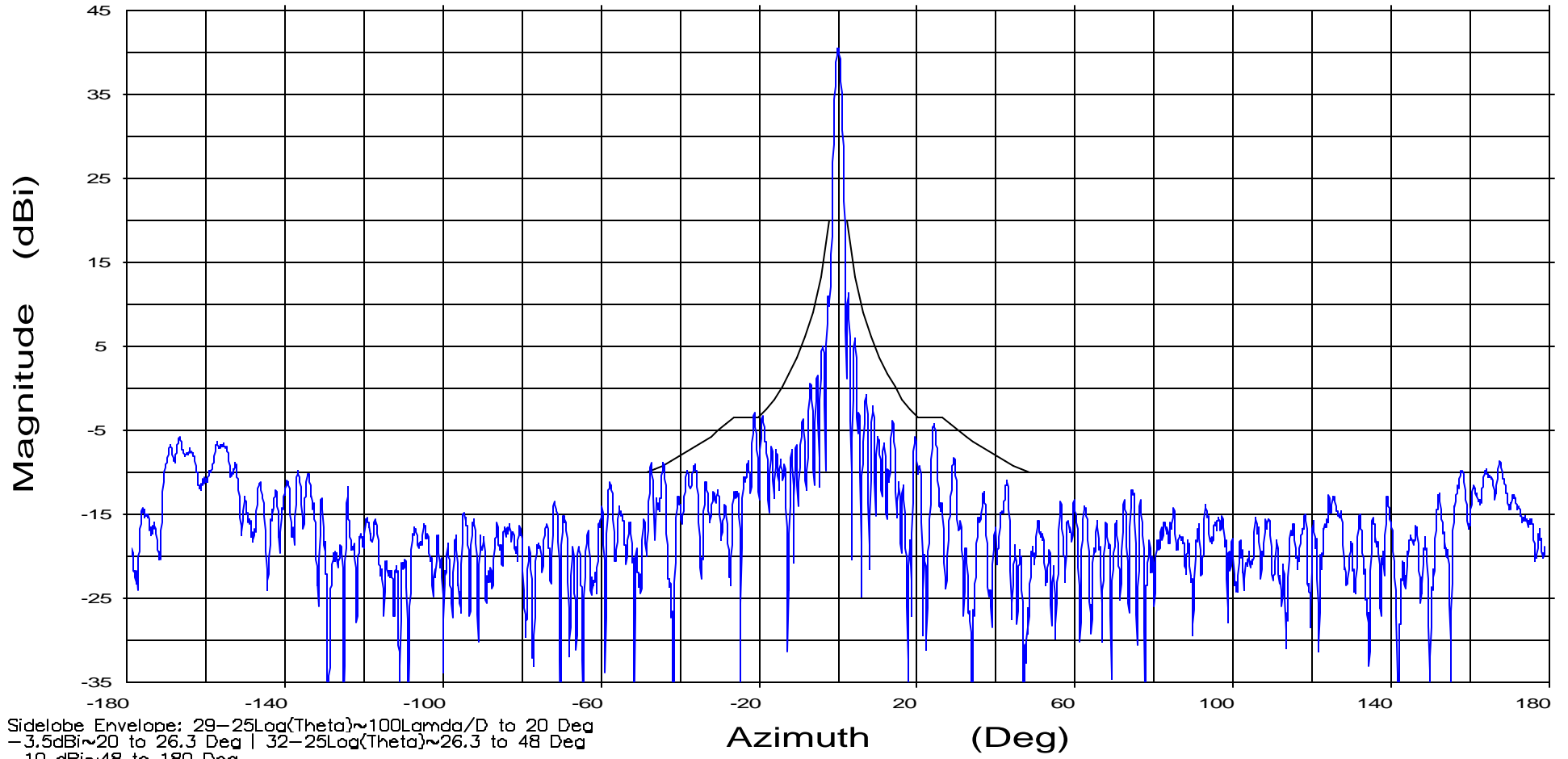
95CM Ku-Band Receive / Transmit
Horizontal Ellipse Antenna System
Series 1951

Frequency : 14.250 GHz

Operator: Ken Poovey
Ser. no.: 030899

Tx pol: Horiz.

Rx pol: Horiz.



Sidelobe Envelope: $29 - 25 \log(\theta) \sim 100 \lambda / D$ to 20 Deg
-3.5 dBi ~ 20 to 26.3 Deg | $32 - 25 \log(\theta) \sim 26.3$ to 48 Deg
-10 dBi ~ 48 to 180 Deg

Overlays
148733.DAT-ant_under_test

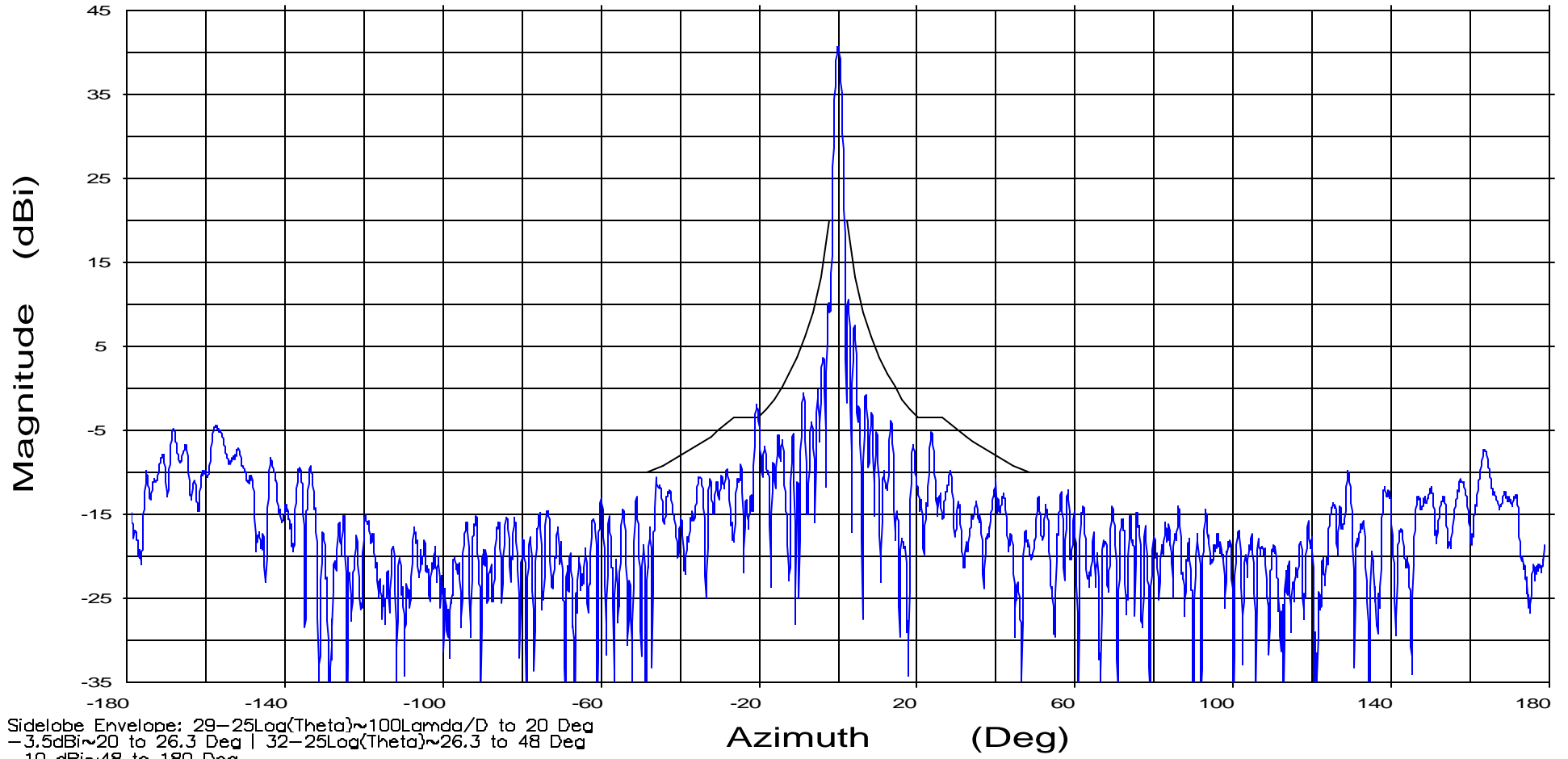
95CM Ku-Band Receive / Transmit
Horizontal Ellipse Antenna System
Series 1951

Frequency : 14.500 GHz

Operator: Ken Poovey
Ser. no.: 030899

Tx pol: Horiz.

Rx pol: Horiz.



Sidelobe Envelope: $29 - 25 \log(\theta) \sim 100 \lambda/D$ to 20 Deg
 $-3.5 \text{ dBi} \sim 20$ to 26.3 Deg | $32 - 25 \log(\theta) \sim 26.3$ to 48 Deg
 $-10 \text{ dBi} \sim 48$ to 180 Deg

Overlays
148733.DAT-ant_under_test —

Section IV



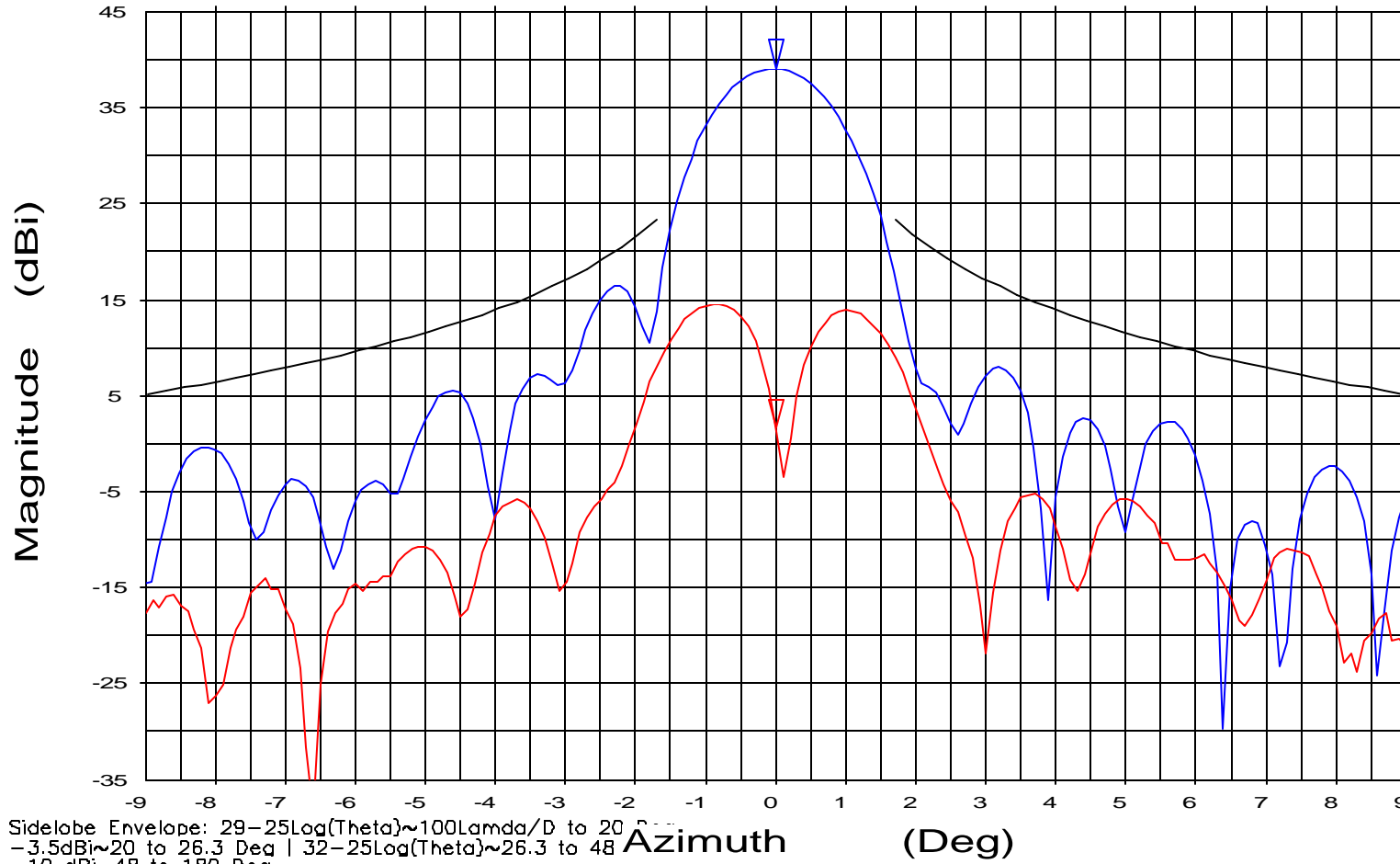
95CM Ku-Band Receive / Transmit
Horizontal Ellipse Antenna System
Series 1951

Frequency : 10.950 GHz

Operator: D. Lutz
Ser. no.: 030899

Tx pol: Vert.

Rx pol: Vert.



X-Pol Analysis	
Position	Gain (dB)
0.000	37.85

Sidelobe Envelope: $29 - 25 \log(\theta) \sim 100 \lambda / D$ to 20°
 $-3.5 \text{ dBi} \sim 20$ to 26.3 Deg | $32 - 25 \log(\theta) \sim 26.3$ to 48°
 $-10 \text{ dBi} \sim 48$ to 180 Deg

Overlays
148725.DAT-ant_under_test — blue line
148727.DAT-ant_under_test — red line

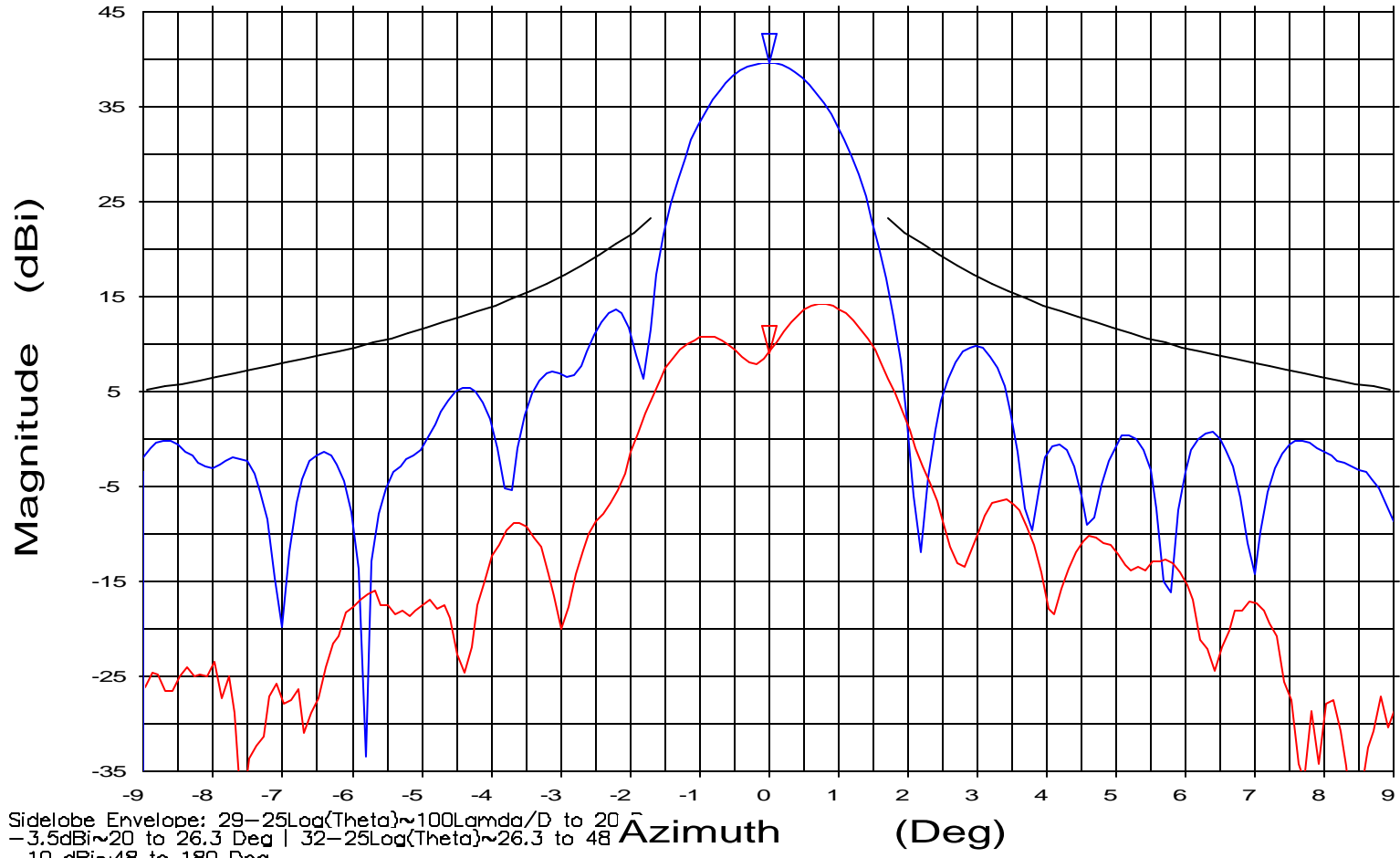
95CM Ku-Band Receive / Transmit
Horizontal Ellipse Antenna System
Series 1951

Frequency : 11.700 GHz

Operator: D. Lutz
Ser. no.: 030899

Tx pol: Vert.

Rx pol: Vert.



X-Pol Analysis	
Position	Gain (dB)
0.000	30.58

Sidelobe Envelope: $29 - 25 \log(\theta) \sim 100 \lambda / D$ to 20°
-3.5 dBi ~ 20 to 26.3 Deg | $32 - 25 \log(\theta) \sim 26.3$ to 48°
-10 dBi ~ 48 to 180 Deg

Overlays
148725.DAT-ant_under_test — blue line
148727.DAT-ant_under_test — red line

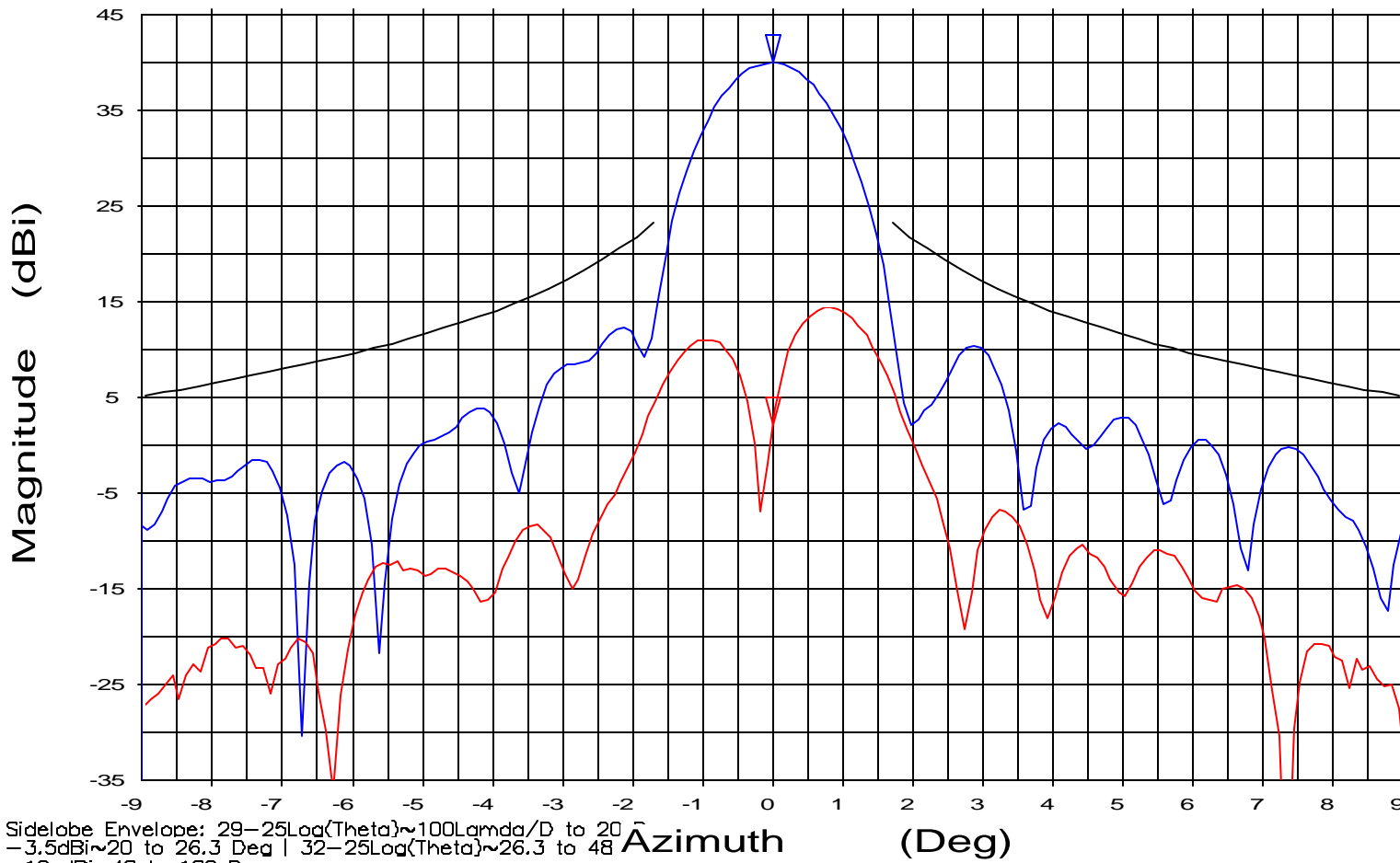
95CM Ku-Band Receive / Transmit
Horizontal Ellipse Antenna System
Series 1951

Frequency : 12.200 GHz

Operator: D. Lutz
Ser. no.: 030899

Tx pol: Vert.

Rx pol: Vert.



X-Pol Analysis	
Position	Gain (dB)
0.000	37.62

Sidelobe Envelope: $29 - 25 \log(\theta) \sim 100 \lambda / D$ to 20°
-3.5 dBi ~ 20 to 26.3 Deg | $32 - 25 \log(\theta) \sim 26.3$ to 48°
-10 dBi ~ 48 to 180 Deg

Overlays
148725.DAT-ant_under_test — blue line
148727.DAT-ant_under_test — red line

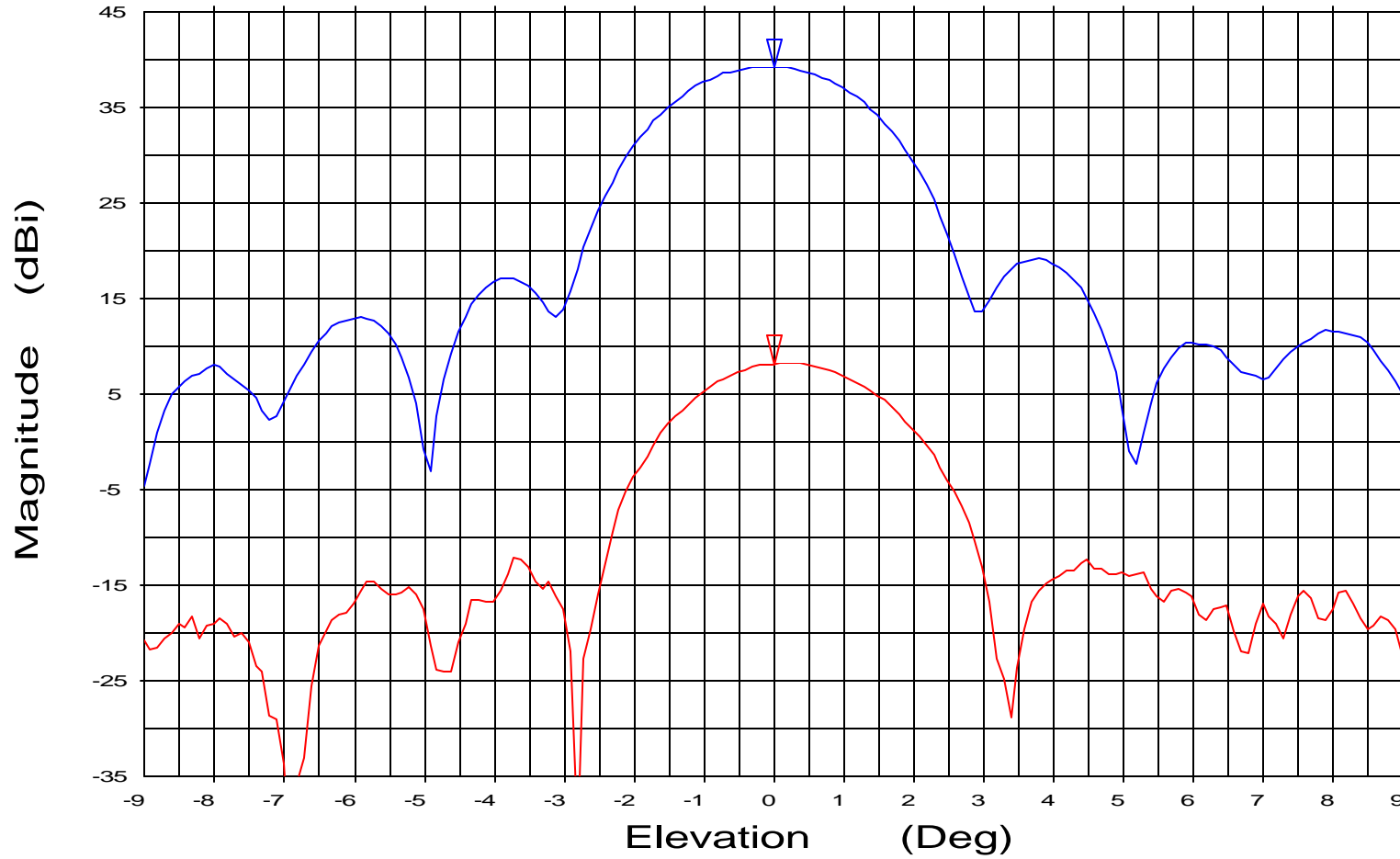
95CM Ku-Band Receive / Transmit
Horizontal Ellipse Antenna System
Series 1951

Frequency : 10.95 GHz

Operator: D. Lutz
Ser. no.: 030899

Tx pol: Vert.

Rx pol: Vert.



X-Pol Analysis	
Position	Gain (dB)
0.000	31.06

Overlays
148726.DAT-ant_under_test — blue line
148729.DAT-ant_under_test — red line

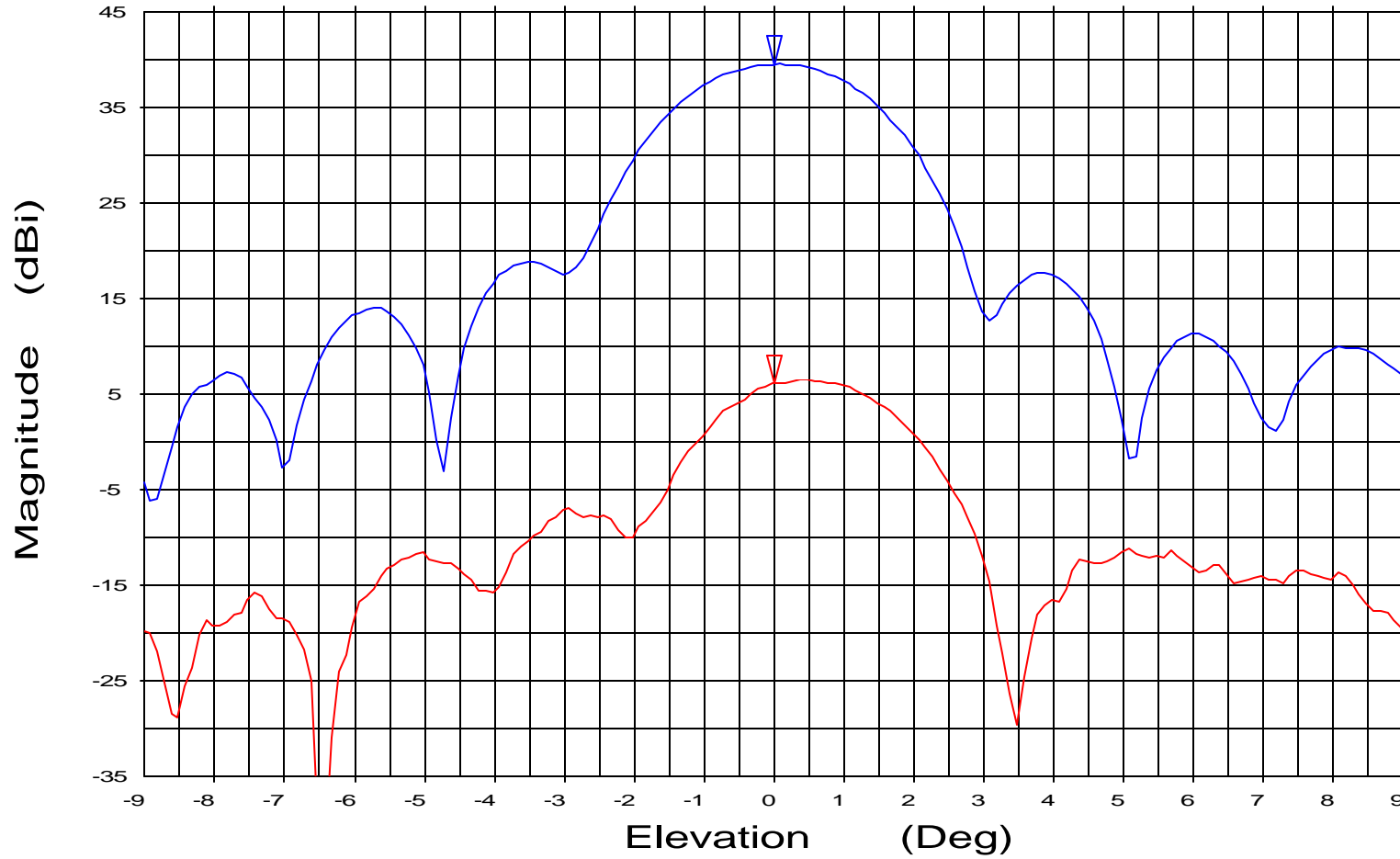
95CM Ku-Band Receive / Transmit
Horizontal Ellipse Antenna System
Series 1951

Frequency : 11.700 GHz

Operator: D. Lutz
Ser. no.: 030899

Tx pol: Vert.

Rx pol: Vert.



X-Pol Analysis	
Position	Gain (dB)
0.000	33.54

Overlays
148726.DAT-ant_under_test
148729.DAT-ant_under_test

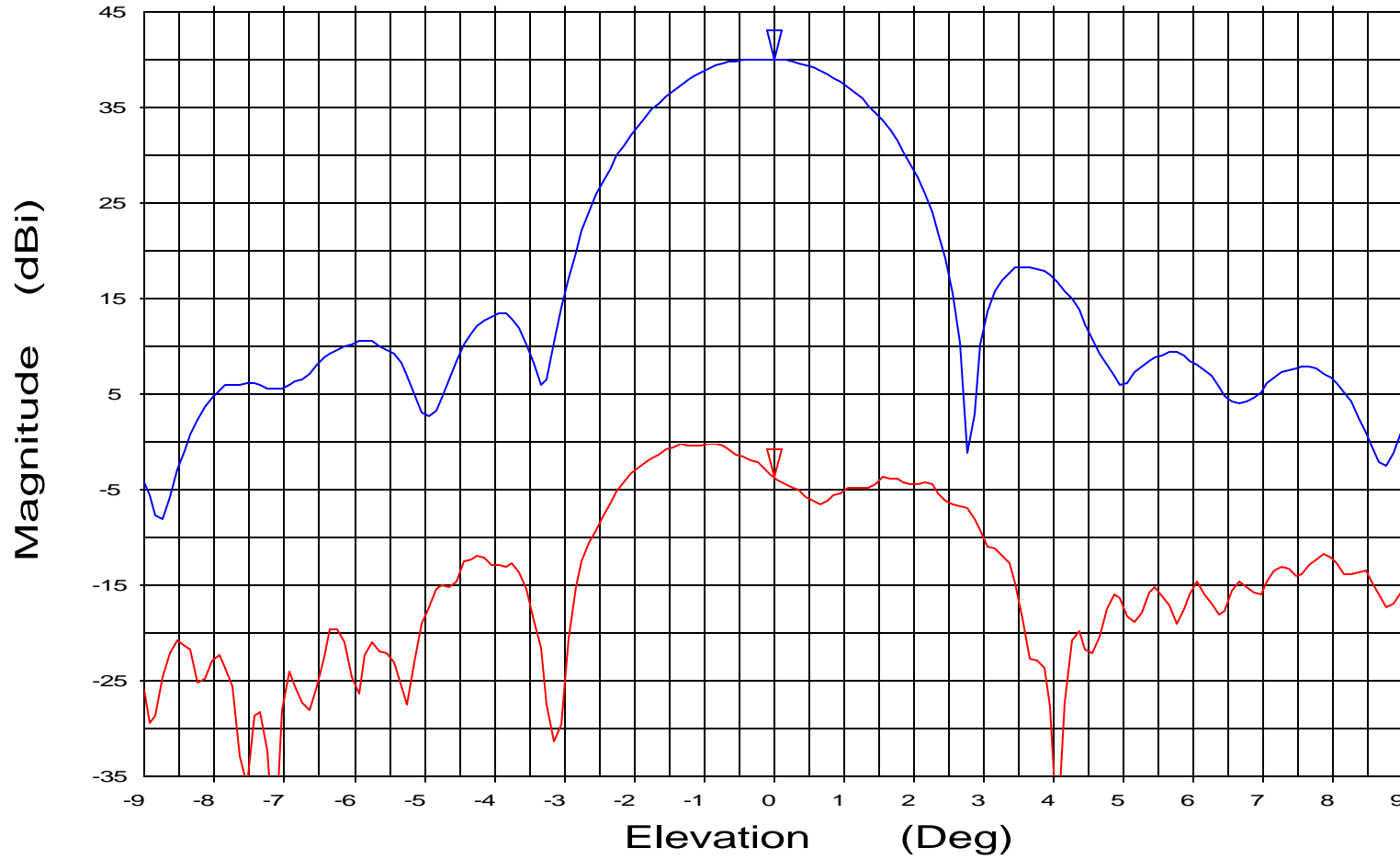
95CM Ku-Band Receive / Transmit
Horizontal Ellipse Antenna System
Series 1951

Frequency : 12.200 GHz

Operator: D. Lutz
Ser. no.: 030899

Tx pol: Vert.

Rx pol: Vert.



X-Pol Analysis	
Position	Gain (dB)
0.000	35.42

Overlays
148726.DAT-ant_under_test — blue line
148729.DAT-ant_under_test — red line

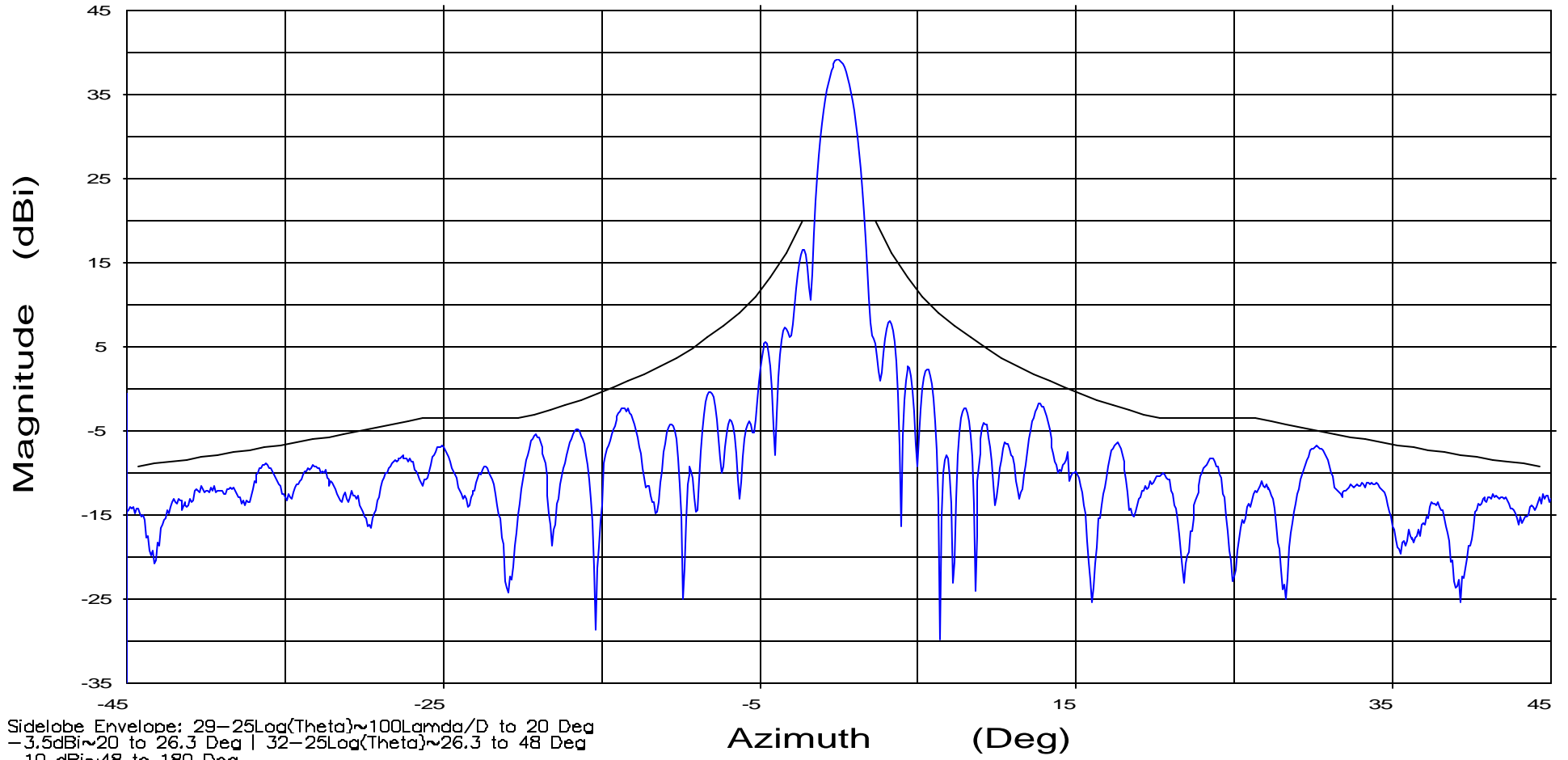
95CM Ku-Band Receive / Transmit
Horizontal Ellipse Antenna System
Series 1951

Frequency : 10.950 GHz

Operator: D. Lutz
Ser. no.: 030899

Tx pol: Vert.

Rx pol: Vert.



Sidelobe Envelope: $29 - 25 \log(\theta) \sim 100 \lambda / D$ to 20 Deg
-3.5 dBi ~ 20 to 26.3 Deg | $32 - 25 \log(\theta) \sim 26.3$ to 48 Deg
-10 dBi ~ 48 to 180 Deg

Overlays
148725.DAT-ant_under_test

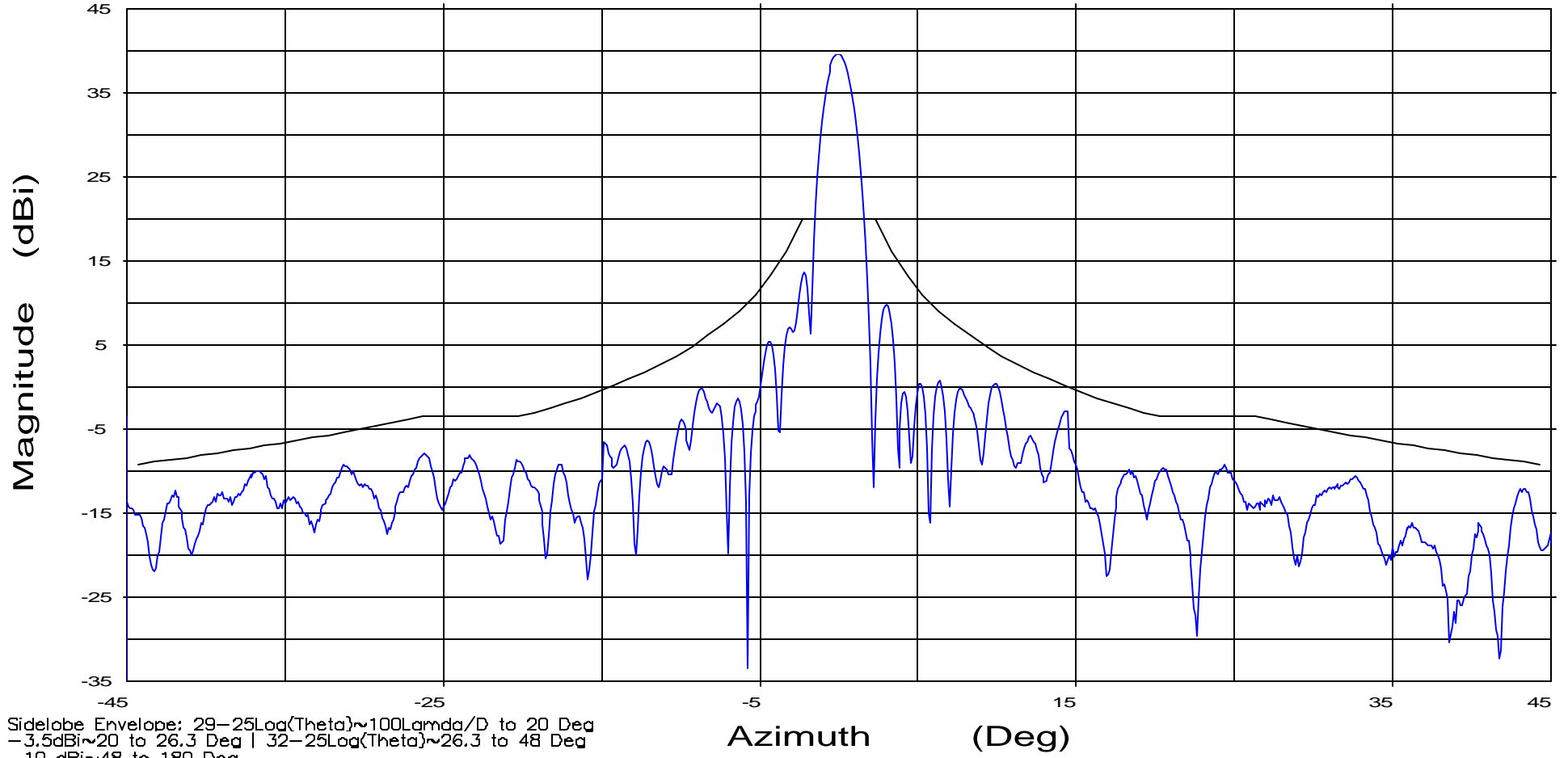
95CM Ku-Band Receive / Transmit
Horizontal Ellipse Antenna System
Series 1951

Frequency : 11.700 GHz

Operator: D. Lutz
Ser. no.: 030899

Tx pol: Vert.

Rx pol: Vert.



Sidelobe Envelope: $29 - 25 \log(\theta) \sim 100 \lambda / D$ to 20 Deg
-3.5 dBi ~ 20 to 26.3 Deg | $32 - 25 \log(\theta) \sim 26.3$ to 48 Deg
-10 dBi ~ 48 to 180 Deg

Overlays

148725.DAT-ant_under_test

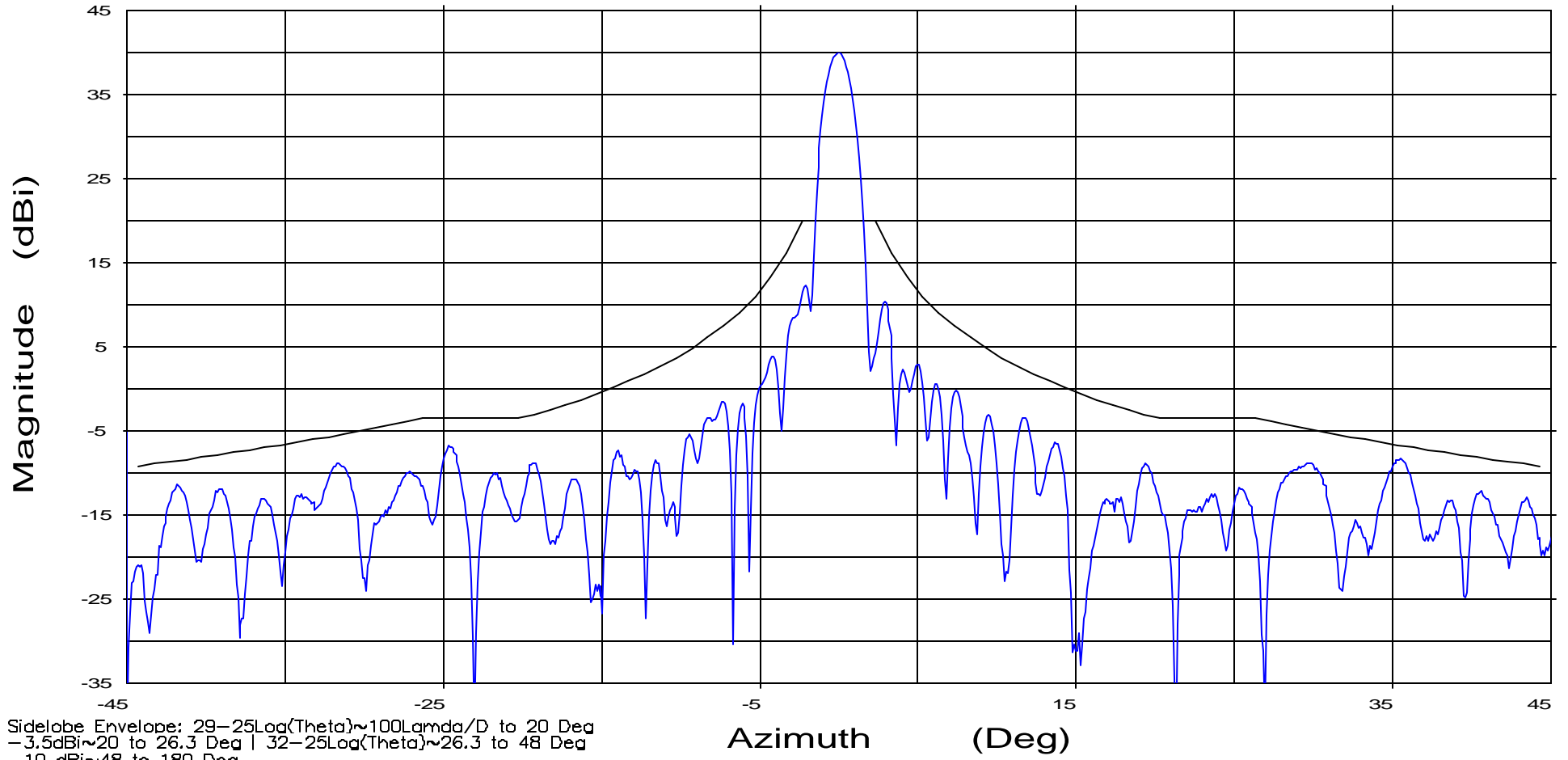
95CM Ku-Band Receive / Transmit
Horizontal Ellipse Antenna System
Series 1951

Frequency : 12.200 GHz

Operator: D. Lutz
Ser. no.: 030899

Tx pol: Vert.

Rx pol: Vert.



Sidelobe Envelope: $29 - 25 \log(\theta) \sim 100 \lambda / D$ to 20 Deg
-3.5 dBi ~ 20 to 26.3 Deg | $32 - 25 \log(\theta) \sim 26.3$ to 48 Deg
-10 dBi ~ 48 to 180 Deg

Overlays
148725.DAT-ant_under_test

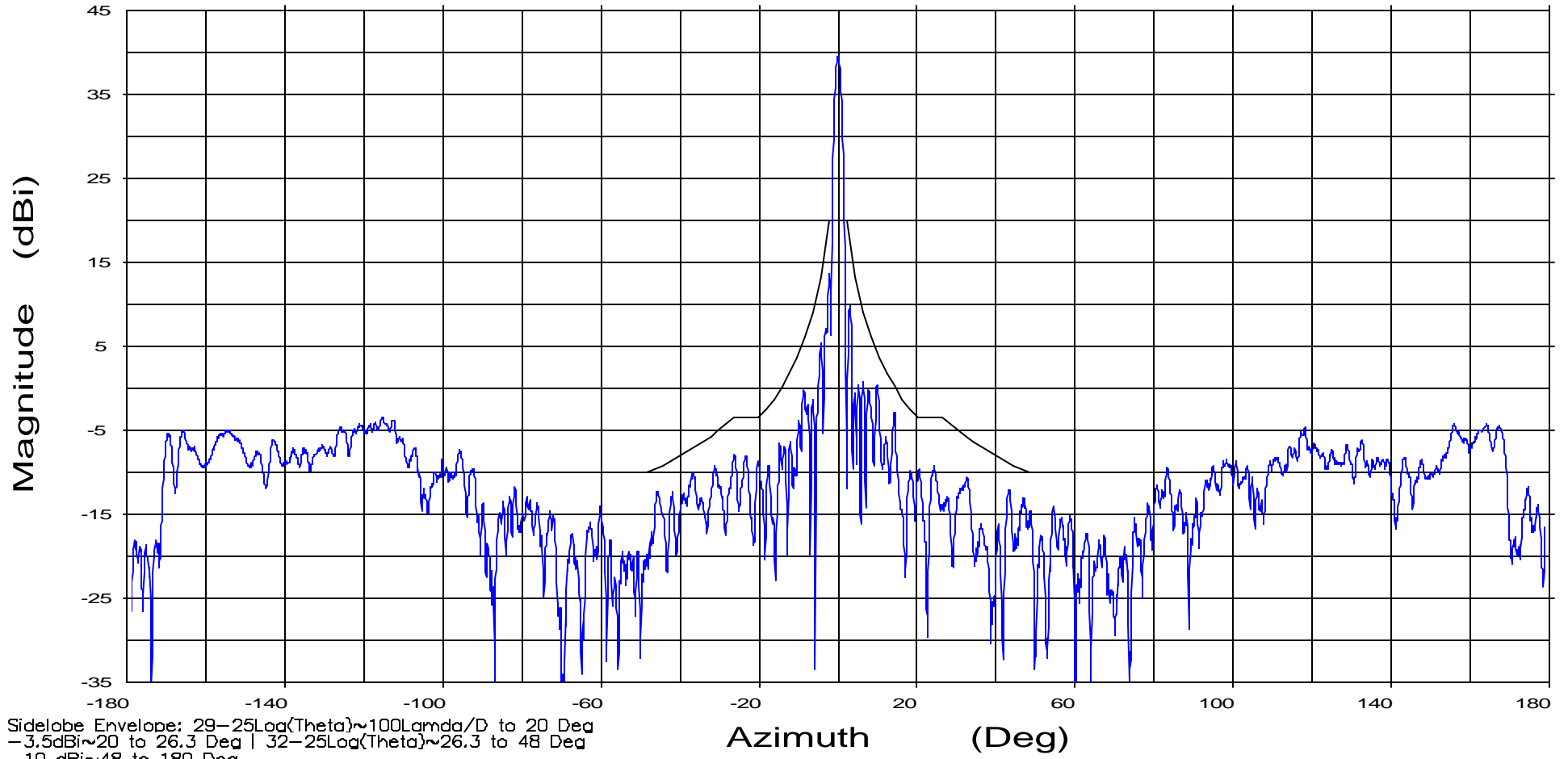
95CM Ku-Band Receive / Transmit
Horizontal Ellipse Antenna System
Series 1951

Frequency : 10.950 GHz

Operator: D. Lutz
Ser. no.: 030899

Tx pol: Vert.

Rx pol: Vert.



Sidelobe Envelope: $29 - 25 \log(\theta) \sim 100 \lambda / D$ to 20 Deg
-3.5 dBi ~ 20 to 26.3 Deg | $32 - 25 \log(\theta) \sim 26.3$ to 48 Deg
-10 dBi ~ 48 to 180 Deg

Overlays
148725.DAT-ant_under_test —

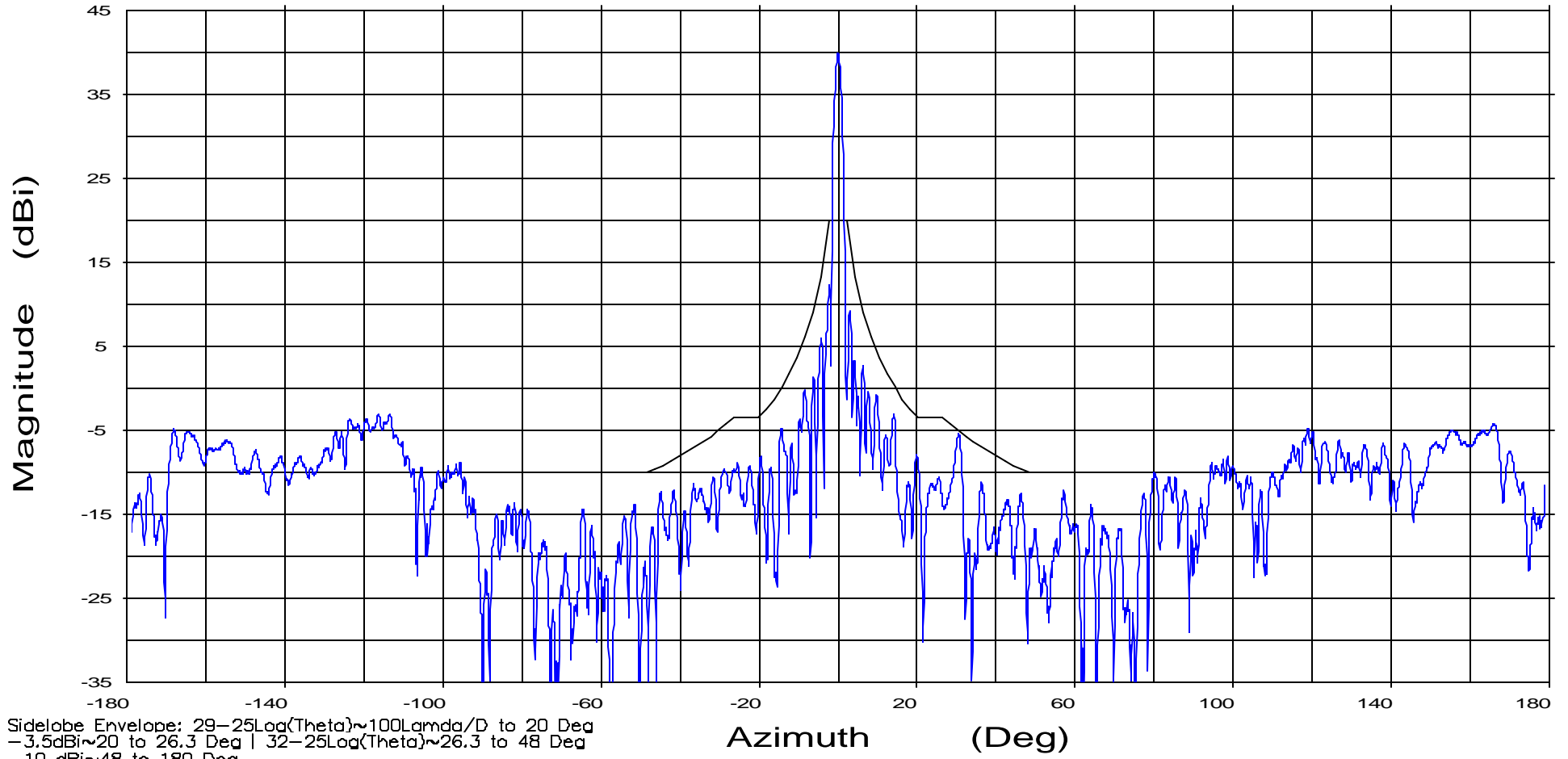
95CM Ku-Band Receive / Transmit
Horizontal Ellipse Antenna System
Series 1951

Frequency : 11.700 GHz

Operator: D. Lutz
Ser. no.: 030899

Tx pol: Vert.

Rx pol: Vert.



Sidelobe Envelope: $29 - 25 \log(\theta) \sim 100 \lambda / D$ to 20 Deg
 $-3.5 \text{ dBi} \sim 20$ to 26.3 Deg | $32 - 25 \log(\theta) \sim 26.3$ to 48 Deg
 $-10 \text{ dBi} \sim 48$ to 180 Deg

Overlays
148725.DAT-ant_under_test

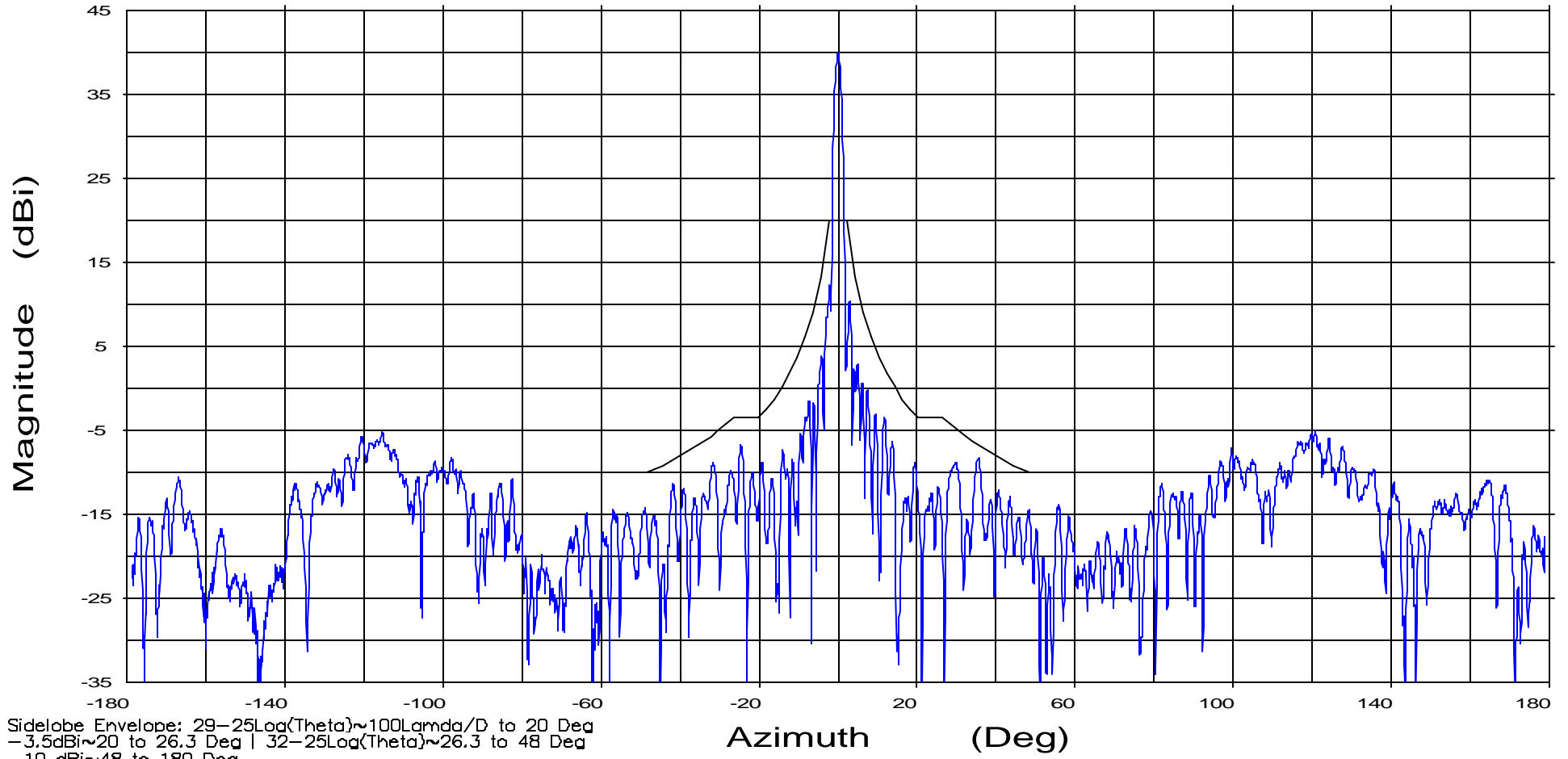
95CM Ku-Band Receive / Transmit
Horizontal Ellipse Antenna System
Series 1951

Frequency : 12.200 GHz

Operator: D. Lutz
Ser. no.: 030899

Tx pol: Vert.

Rx pol: Vert.



Sidelobe Envelope: $29 - 25 \log(\theta) \sim 100 \lambda / D$ to 20 Deg
 $-3.5 \text{ dBi} \sim 20$ to 26.3 Deg | $32 - 25 \log(\theta) \sim 26.3$ to 48 Deg
 $-10 \text{ dBi} \sim 48$ to 180 Deg

Overlays
148725.DAT-ant_under_test

Section V



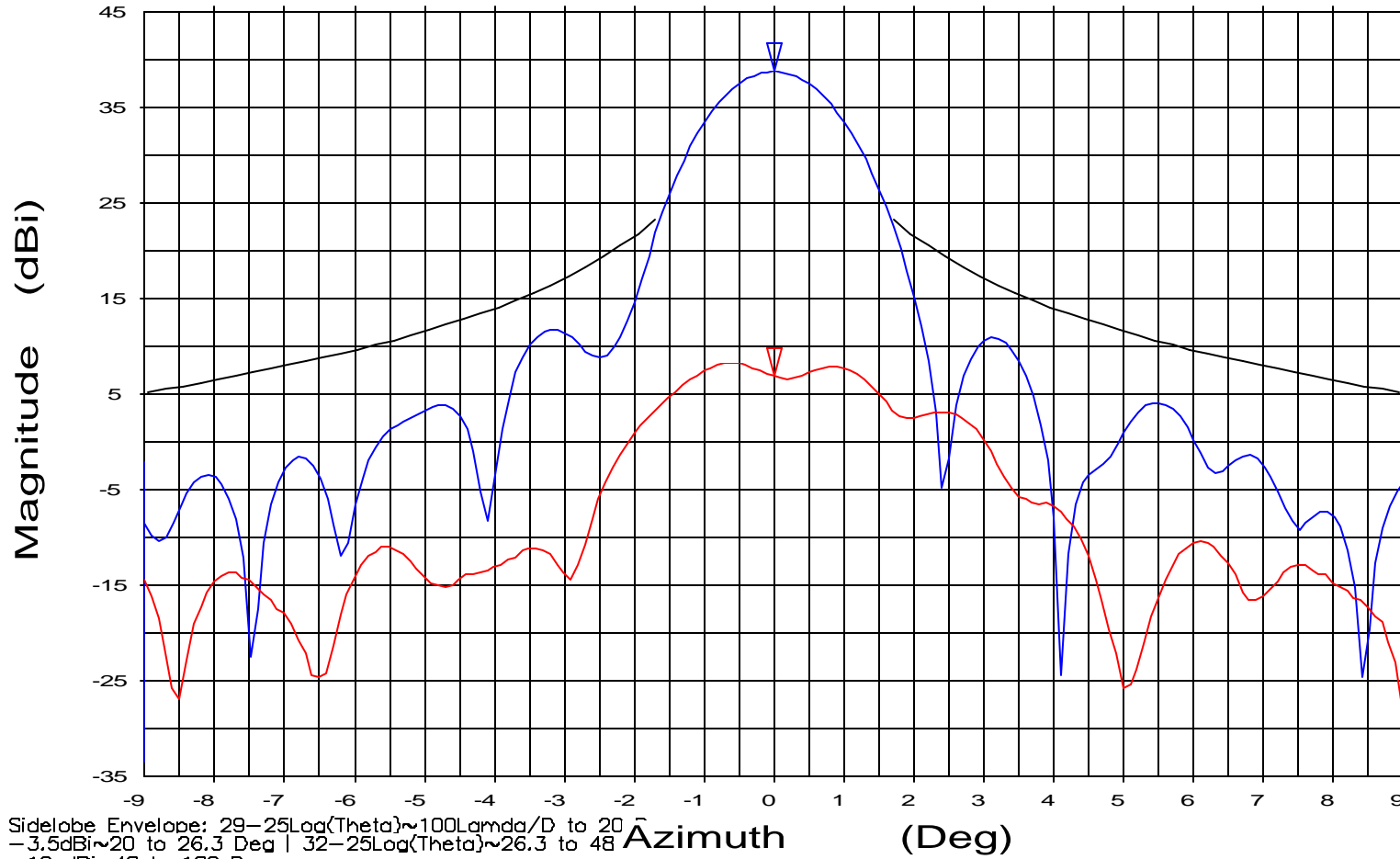
95CM Ku-Band Receive / Transmit
Horizontal Ellipse Antenna System
Series 1951

Frequency : 10.950 GHz

Operator: Ken Poovey
Ser. no.: 030899

Tx pol: Horiz.

Rx pol: Horiz.



X-Pol Analysis	
Position	Gain (dB)
0.000	31.94

Sidelobe Envelope: $29 - 25 \log(\theta) \sim 100 \lambda / D$ to 20°
-3.5 dBi ~ 20 to 26.3 Deg | $32 - 25 \log(\theta) \sim 26.3$ to 48°
-10 dBi ~ 48 to 180 Deg

Overlays
148733.DAT-ant_under_test — blue line
148737.DAT-ant_under_test — red line

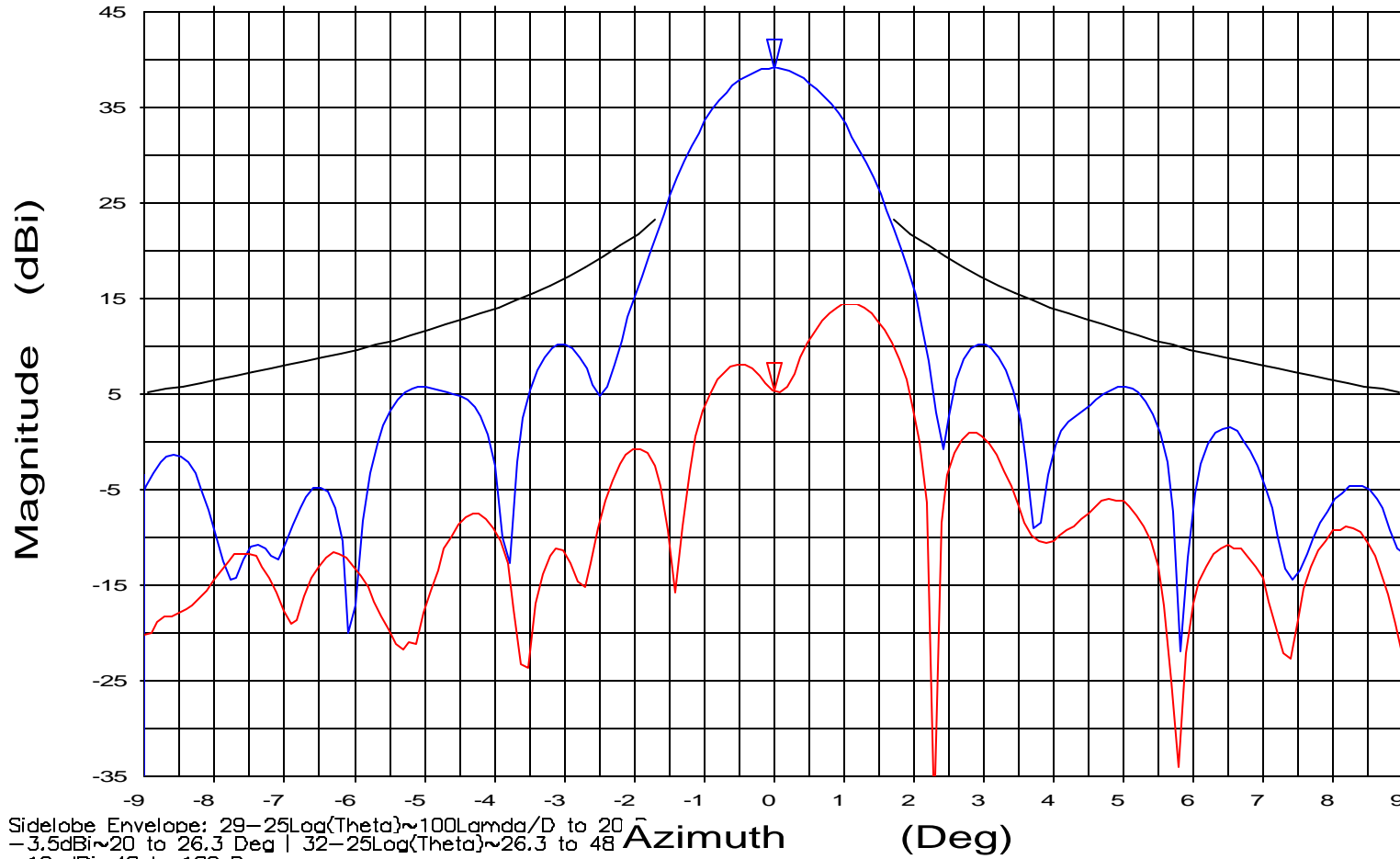
95CM Ku-Band Receive / Transmit
Horizontal Ellipse Antenna System
Series 1951

Frequency : 11.700 GHz

Operator: Ken Poovey
Ser. no.: 030899

Tx pol: Horiz.

Rx pol: Horiz.



X-Pol Analysis	
Position	Gain (dB)
0.000	34.03

Sidelobe Envelope: $29 - 25 \log(\theta) \sim 100 \lambda / D$ to 20°
-3.5 dBi ~ 20 to 26.3 Deg | $32 - 25 \log(\theta) \sim 26.3$ to 48°
-10 dBi ~ 48 to 180 Deg

Overlays
148733.DAT-ant_under_test — blue line
148737.DAT-ant_under_test — red line

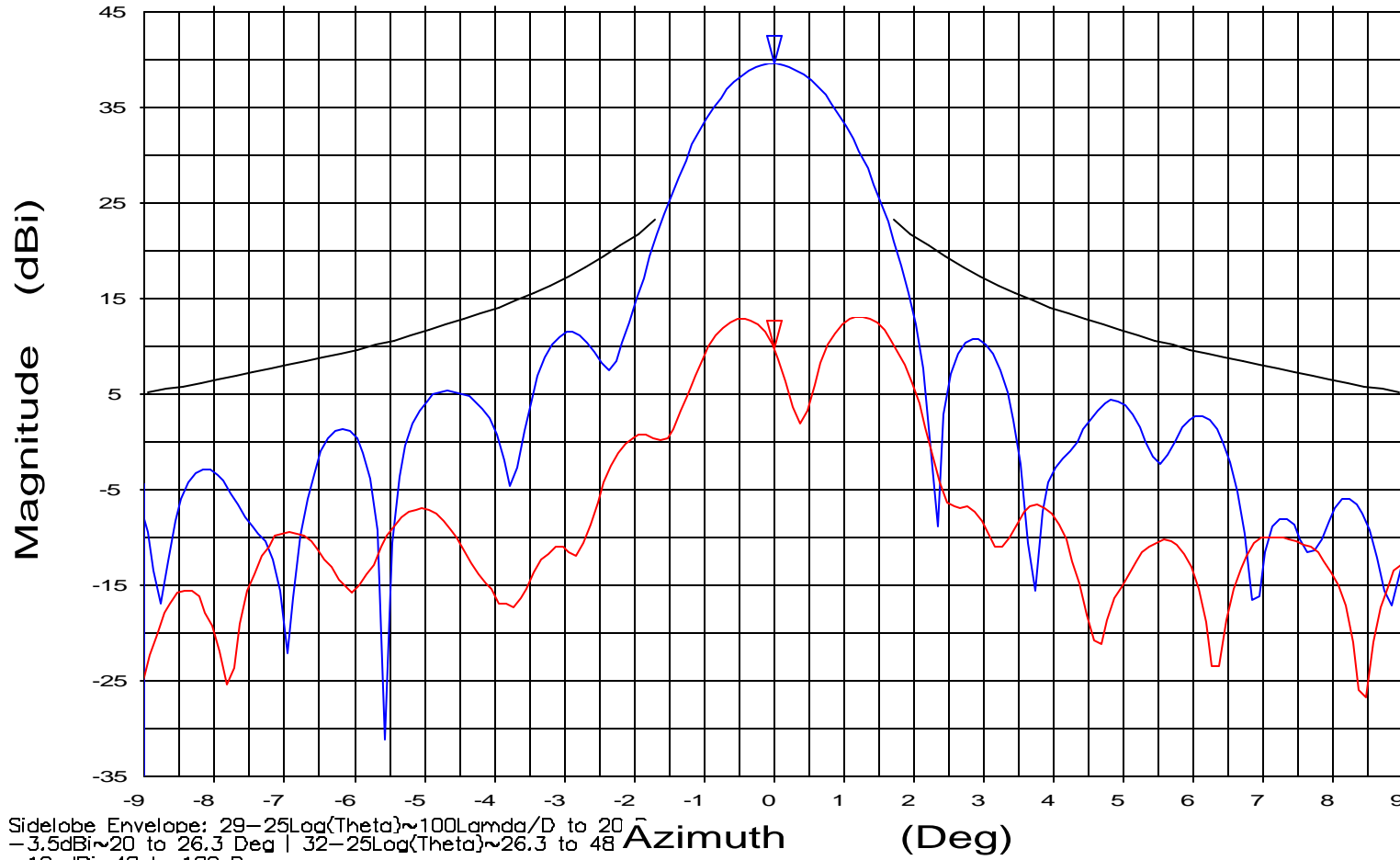
95CM Ku-Band Receive / Transmit
Horizontal Ellipse Antenna System
Series 1951

Frequency : 12.200 GHz

Operator: Ken Poovey
Ser. no.: 030899

Tx pol: Horiz.

Rx pol: Horiz.



X-Pol Analysis	
Position	Gain (dB)
0.000	30.45

Sidelobe Envelope: $29 - 25 \log(\theta) \sim 100 \lambda / D$ to 20°
-3.5 dBi ~ 20 to 26.3 Deg | $32 - 25 \log(\theta) \sim 26.3$ to 48°
-10 dBi ~ 48 to 180 Deg

Overlays
148733.DAT-ant_under_test — blue line
148737.DAT-ant_under_test — red line

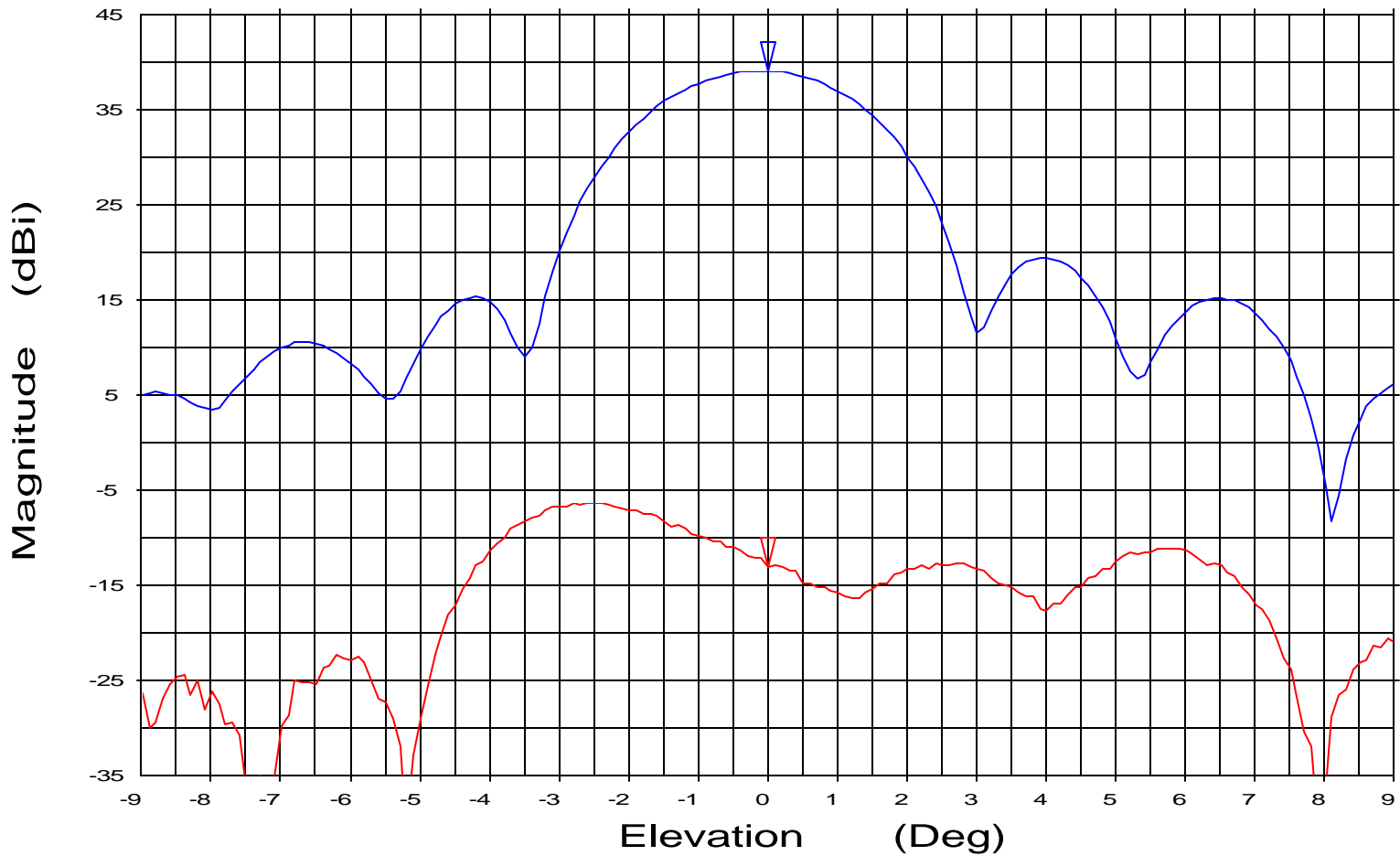
95CM Ku-Band Receive / Transmit
Horizontal Ellipse Antenna System
Series 1951

Frequency : 10.950 GHz

Operator: Ken Poovey
Ser. no.: 030899

Tx pol: Horiz.

Rx pol: Horiz.



X-Pol Analysis	
Position	Gain (dB)
0.000	52.20

Overlays
148738.DAT-ant_under_test — blue line
148741.DAT-ant_under_test — red line

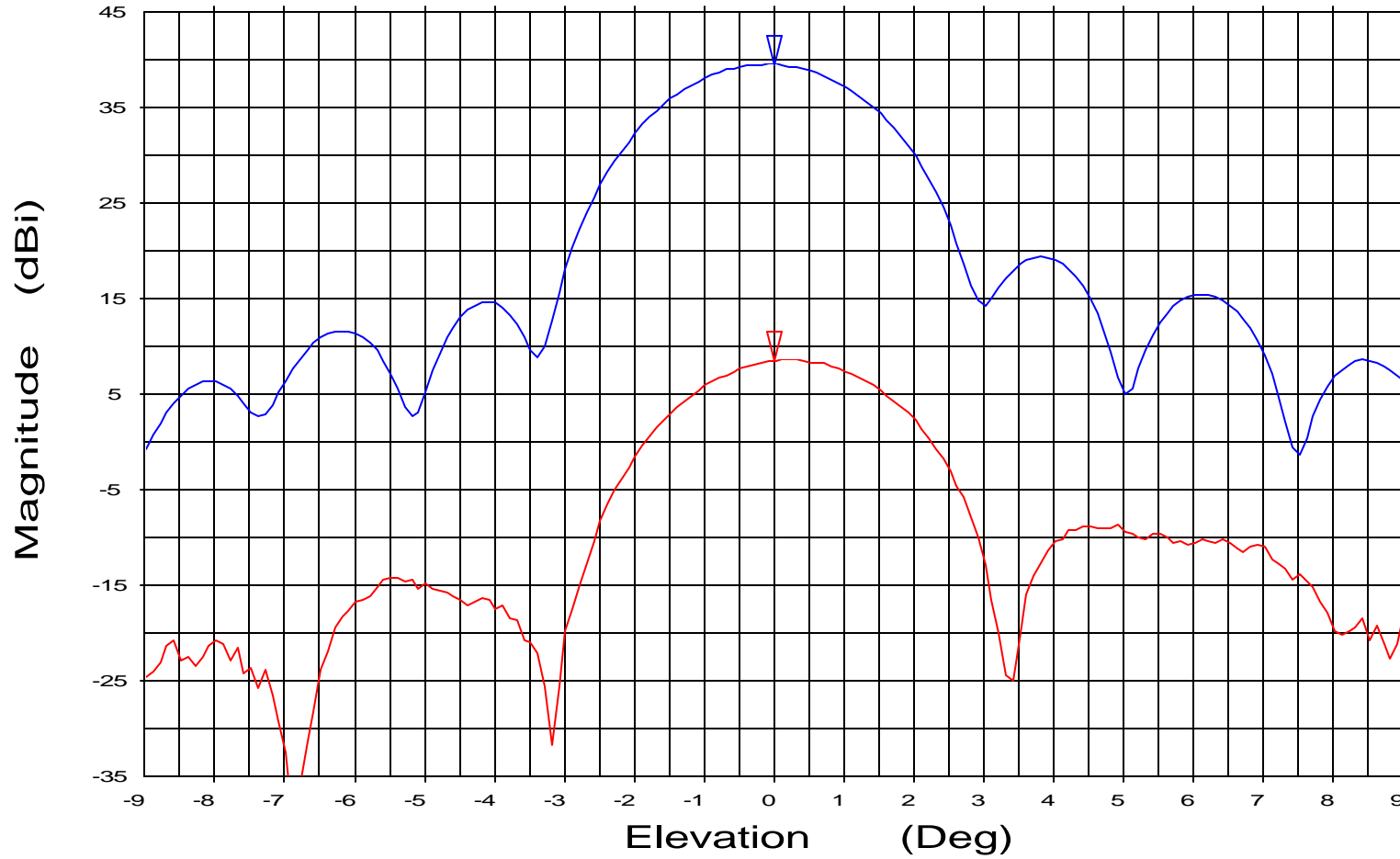
95CM Ku-Band Receive / Transmit
Horizontal Ellipse Antenna System
Series 1951

Frequency : 11.700 GHz

Operator: Ken Poovey
Ser. no.: 030899

Tx pol: Horiz.

Rx pol: Horiz.



X-Pol Analysis	
Position	Gain (dB)
0.000	31.06

Overlays
148738.DAT-ant_under_test — blue line
148741.DAT-ant_under_test — red line

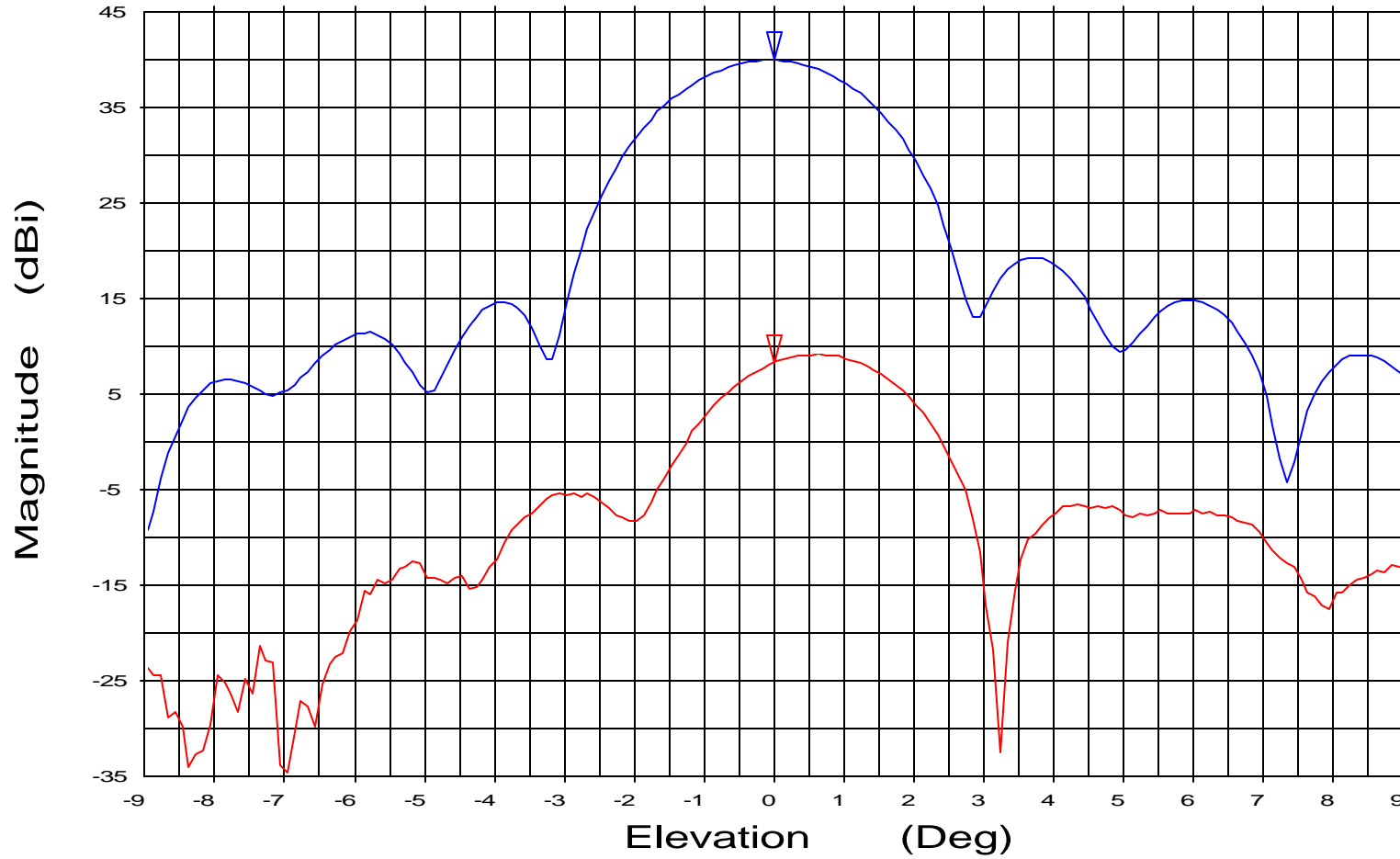
95CM Ku-Band Receive / Transmit
Horizontal Ellipse Antenna System
Series 1951

Frequency : 12.200 GHz

Operator: Ken Poovey
Ser. no.: 030899

Tx pol: Horiz.

Rx pol: Horiz.



X-Pol Analysis	
Position	Gain (dB)
0.000	31.66

Overlays
148738.DAT-ant_under_test — blue line
148741.DAT-ant_under_test — red line

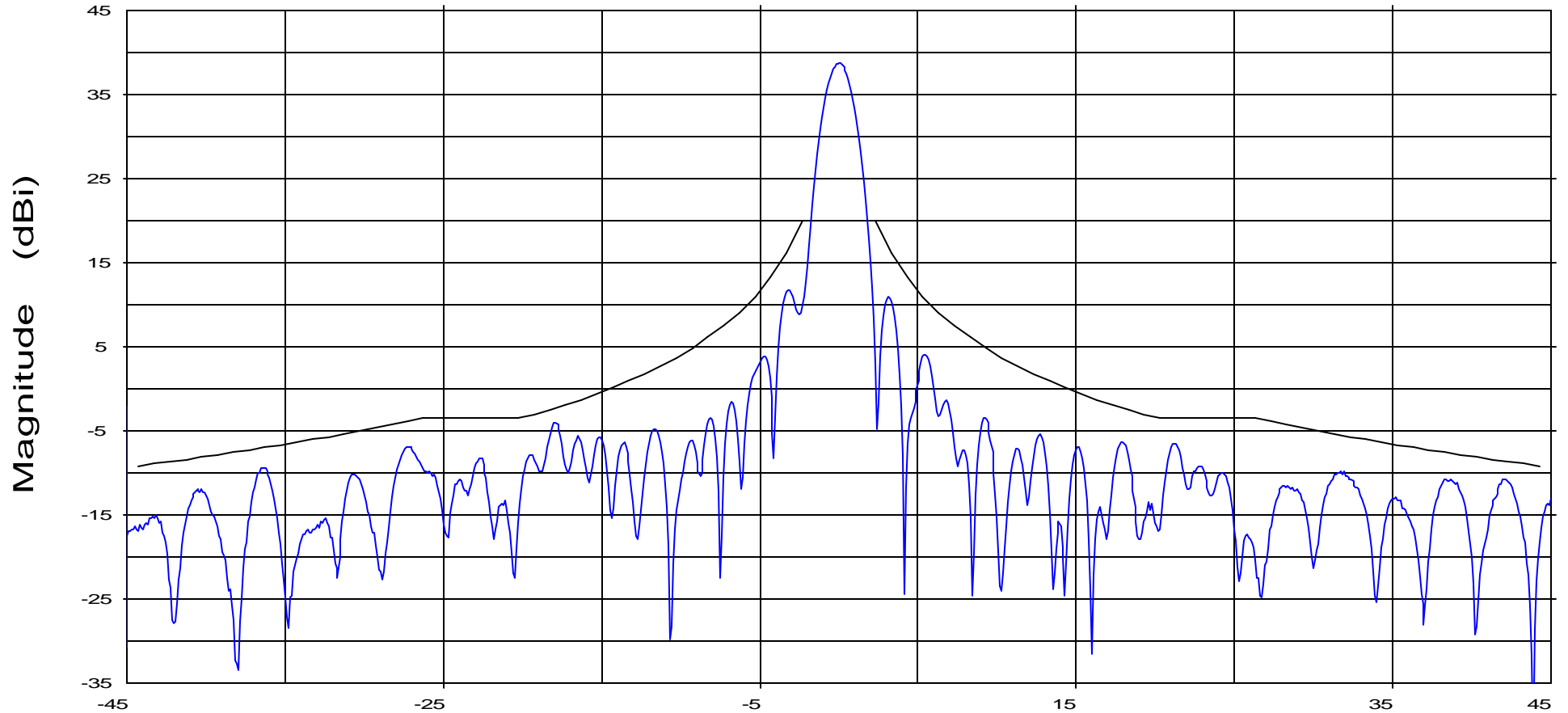
95CM Ku-Band Receive / Transmit
Horizontal Ellipse Antenna System
Series 1951

Frequency : 10.950 GHz

Operator: Ken Poovey
Ser. no.: 030899

Tx pol: Horiz.

Rx pol: Horiz.



Sidelobe Envelope: $29 - 25 \log(\theta) \sim 100 \lambda / D$ to 20 Deg
-3.5 dBi ~ 20 to 26.3 Deg | $32 - 25 \log(\theta) \sim 26.3$ to 48 Deg
-10 dBi ~ 48 to 180 Deg

Overlays
148733.DAT-ant_under_test

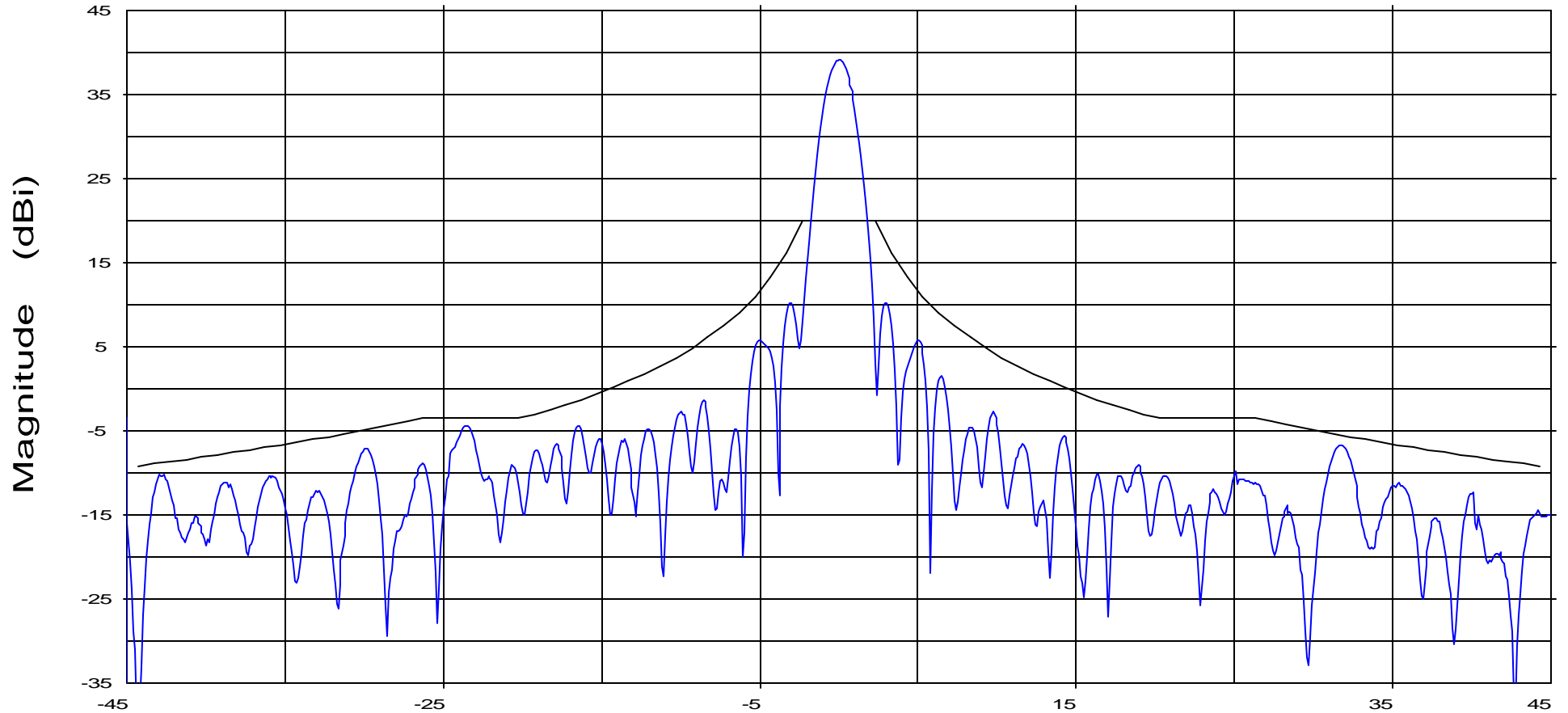
95CM Ku-Band Receive / Transmit
Horizontal Ellipse Antenna System
Series 1951

Frequency : 11.700 GHz

Operator: Ken Poovey
Ser. no.: 030899

Tx pol: Horiz.

Rx pol: Horiz.



Sidelobe Envelope: $29 - 25 \log(\theta) \sim 100 \lambda / D$ to 20 Deg
-3.5 dBi ~ 20 to 26.3 Deg | $32 - 25 \log(\theta) \sim 26.3$ to 48 Deg
-10 dBi ~ 48 to 180 Deg

Overlays
148733.DAT-ant_under_test

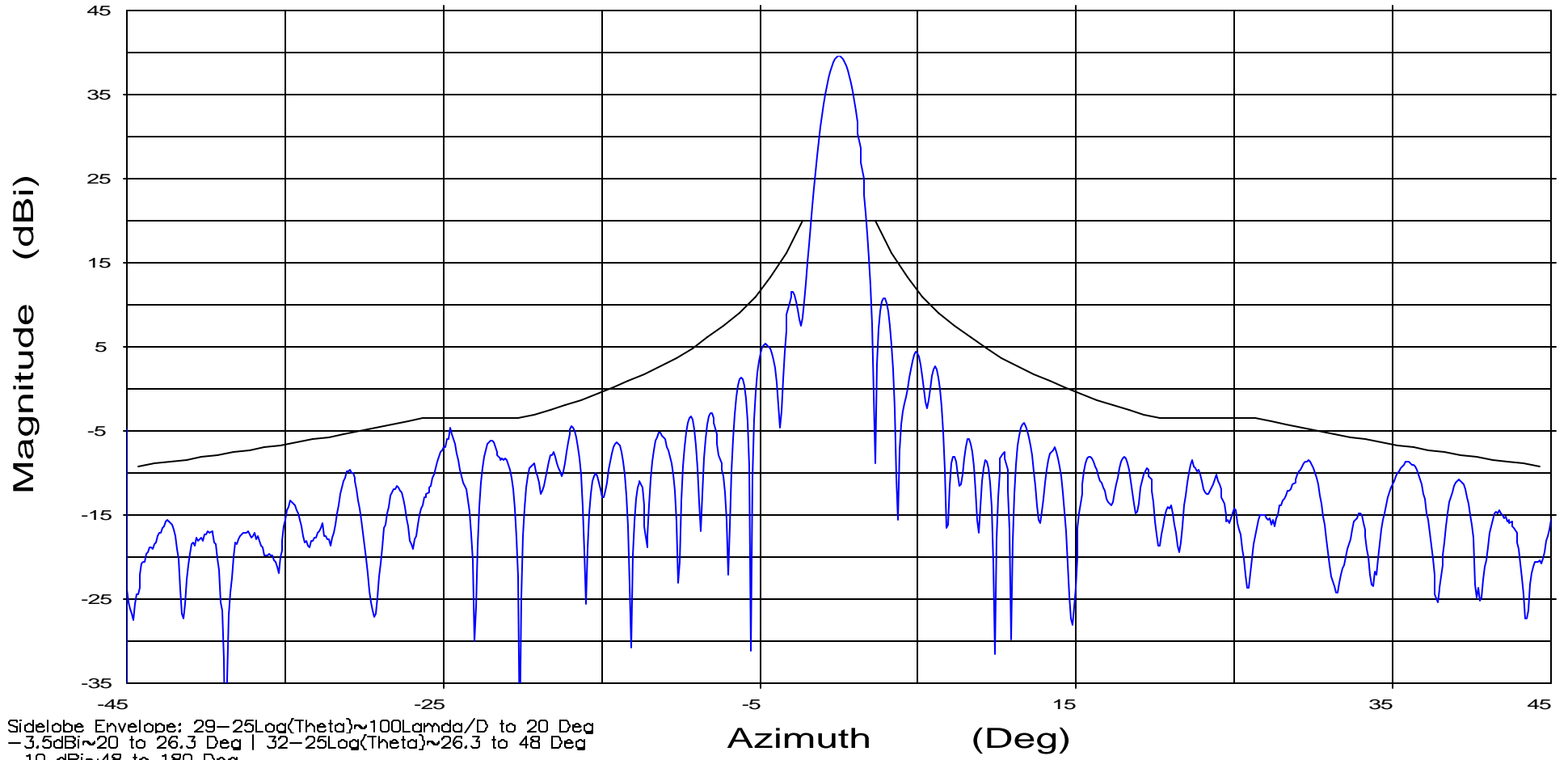
95CM Ku-Band Receive / Transmit
Horizontal Ellipse Antenna System
Series 1951

Frequency : 12.200 GHz

Operator: Ken Poovey
Ser. no.: 030899

Tx pol: Horiz.

Rx pol: Horiz.



Sidelobe Envelope: $29 - 25 \log(\theta) \sim 100 \lambda / D$ to 20 Deg
-3.5 dBi ~ 20 to 26.3 Deg | $32 - 25 \log(\theta) \sim 26.3$ to 48 Deg
-10 dBi ~ 48 to 180 Deg

Overlays
148733.DAT-ant_under_test

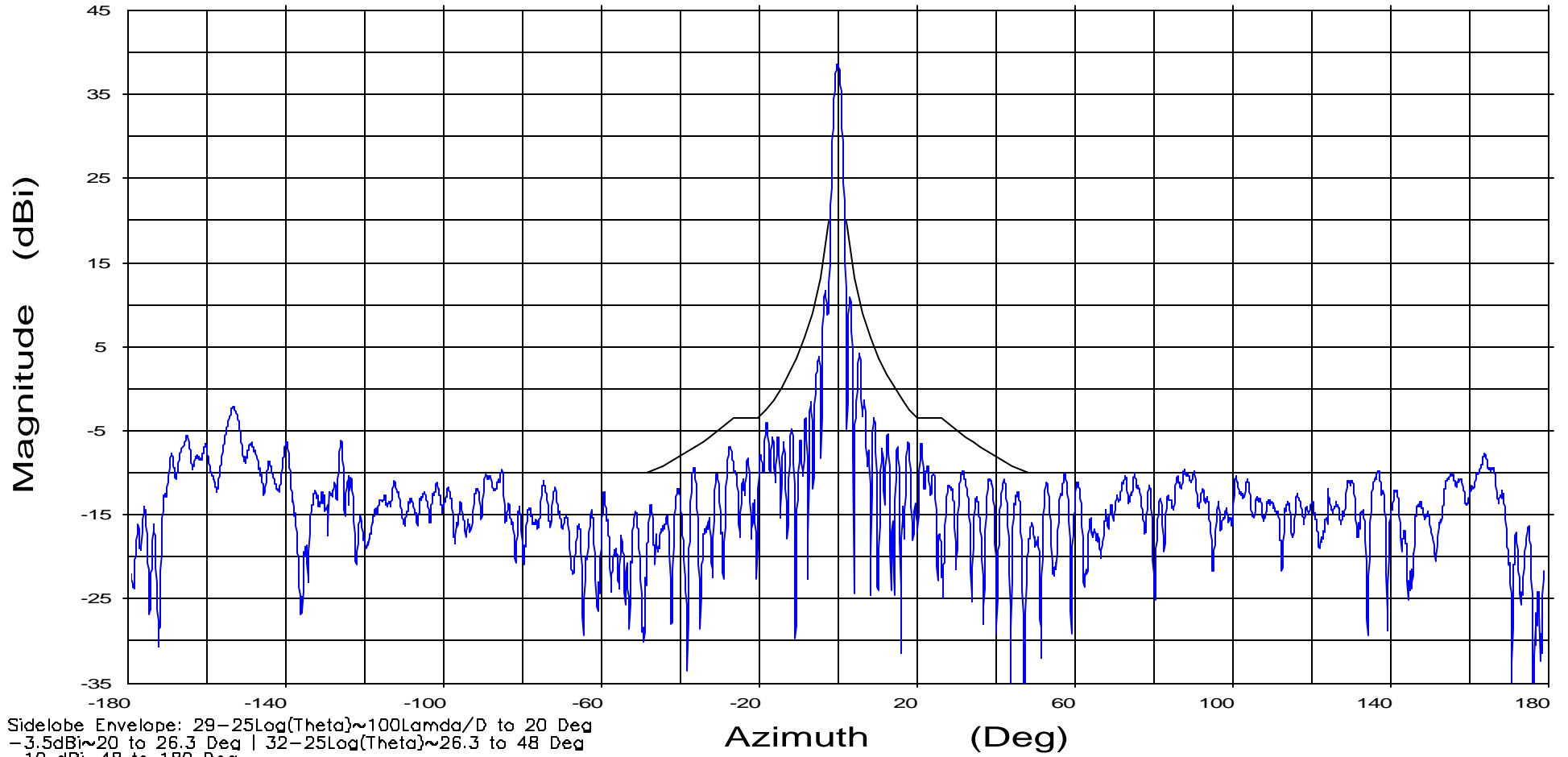
95CM Ku-Band Receive / Transmit
Horizontal Ellipse Antenna System
Series 1951

Frequency : 10.950 GHz

Operator: Ken Poovey
Ser. no.: 030899

Tx pol: Horiz.

Rx pol: Horiz.



Sidelobe Envelope: $29 - 25 \log(\theta) \sim 100 \lambda / D$ to 20 Deg
 $-3.5 \text{ dBi} \sim 20$ to 26.3 Deg | $32 - 25 \log(\theta) \sim 26.3$ to 48 Deg
 $-10 \text{ dBi} \sim 48$ to 180 Deg

Overlays

148733.DAT-ant_under_test —

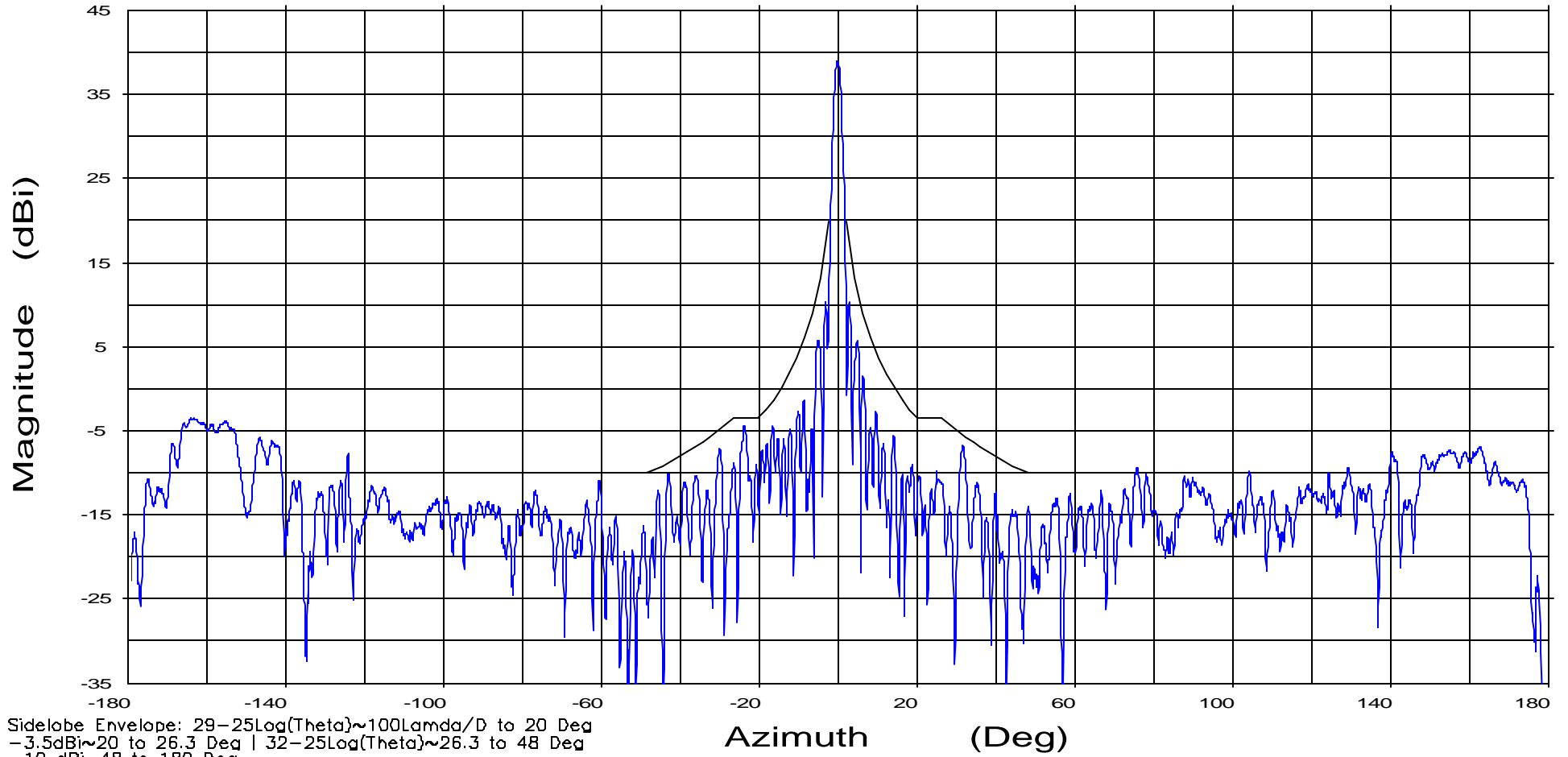
95CM Ku-Band Receive / Transmit
Horizontal Ellipse Antenna System
Series 1951

Frequency : 11.700 GHz

Operator: Ken Poovey
Ser. no.: 030899

Tx pol: Horiz.

Rx pol: Horiz.



Sidelobe Envelope: $29 - 25 \log(\theta) \sim 100 \lambda / D$ to 20 Deg
 $-3.5 \text{ dBi} \sim 20$ to 26.3 Deg | $32 - 25 \log(\theta) \sim 26.3$ to 48 Deg
 $-10 \text{ dBi} \sim 48$ to 180 Deg

Overlays

148733.DAT-ant_under_test —

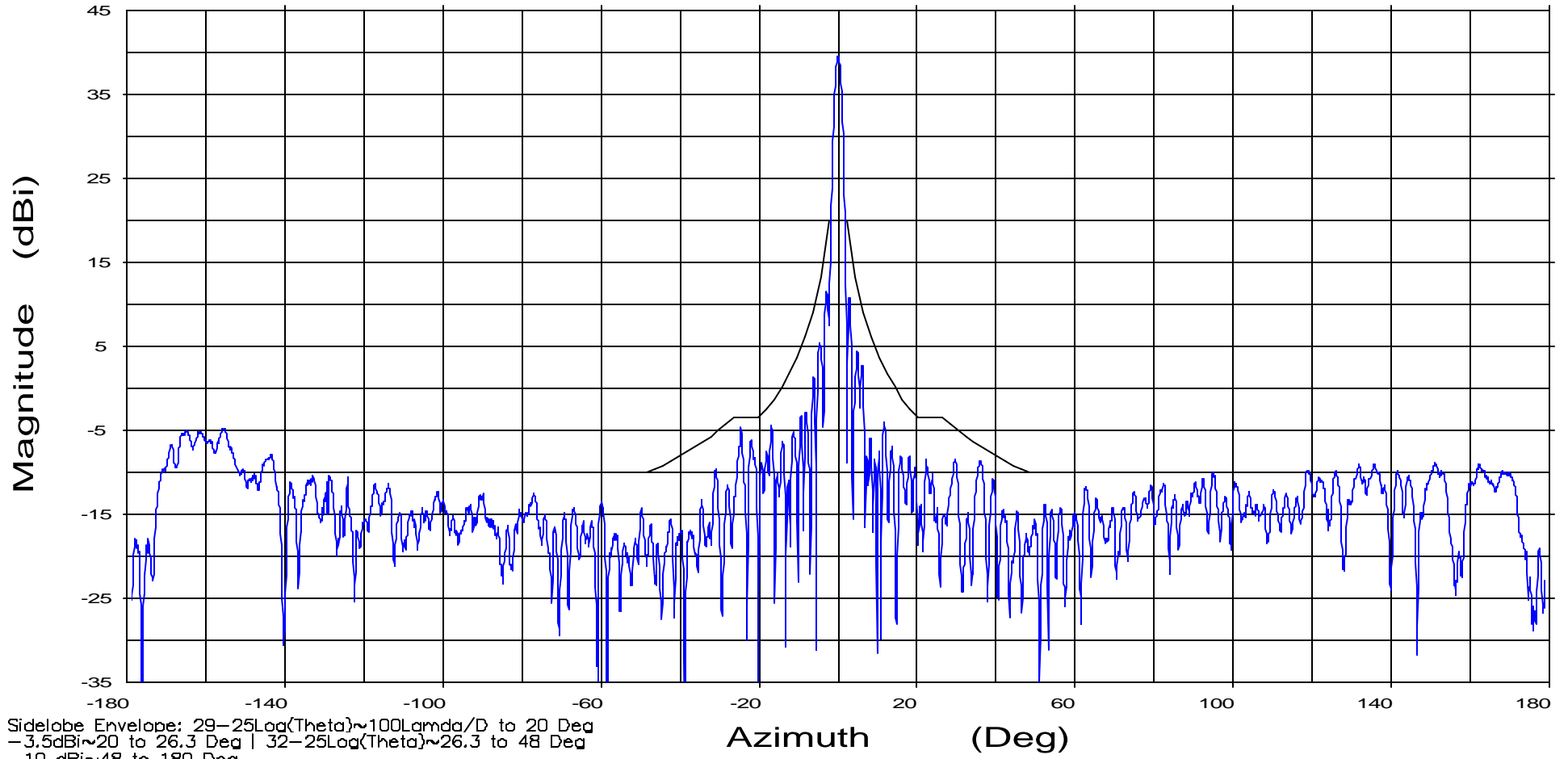
95CM Ku-Band Receive / Transmit
Horizontal Ellipse Antenna System
Series 1951

Frequency : 12.200 GHz

Operator: Ken Poovey
Ser. no.: 030899

Tx pol: Horiz.

Rx pol: Horiz.



Overlays
148733.DAT-ant_under_test