

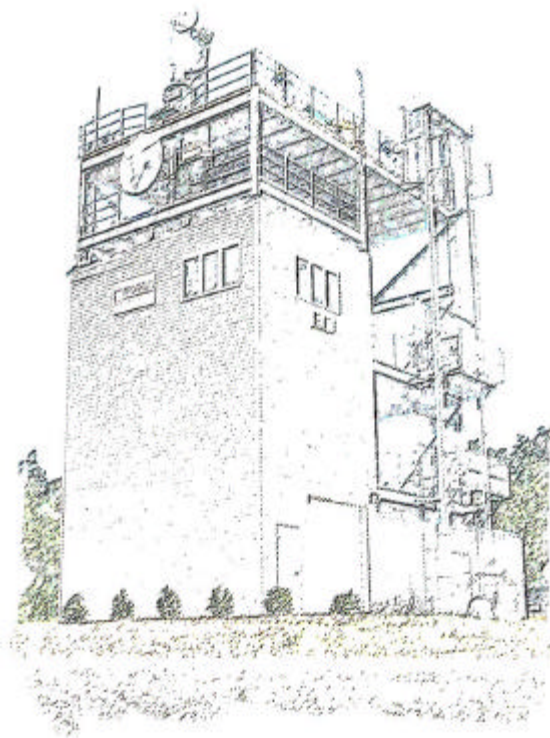
GENERAL DYNAMICS

SATCOM Technologies

Antenna Test Report

Test No. 1578

Project: 2.4M C-Band CP Series 1251 Antenna System



General Dynamics SATCOM Technologies

East Maiden Antenna Test Facility
4488 Lawing Chapel Church Road
Maiden, North Carolina 28650
828-428-1485 / 828-428-1488 fax

Test report prepared by Dwight B. Lutz

General Dynamics SATCOM Technologies

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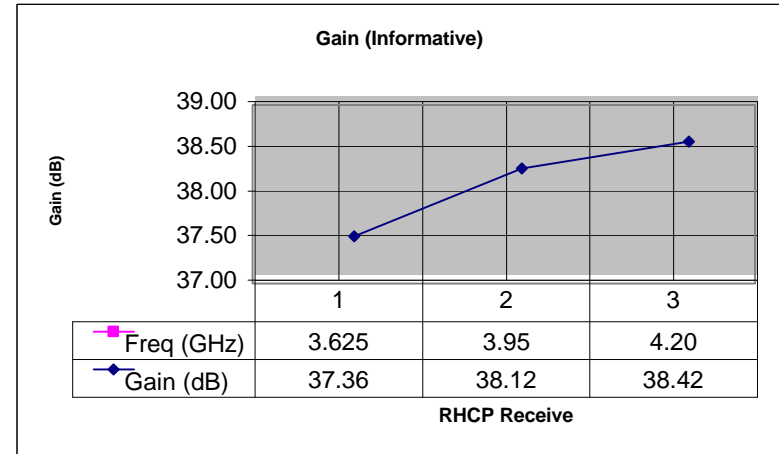
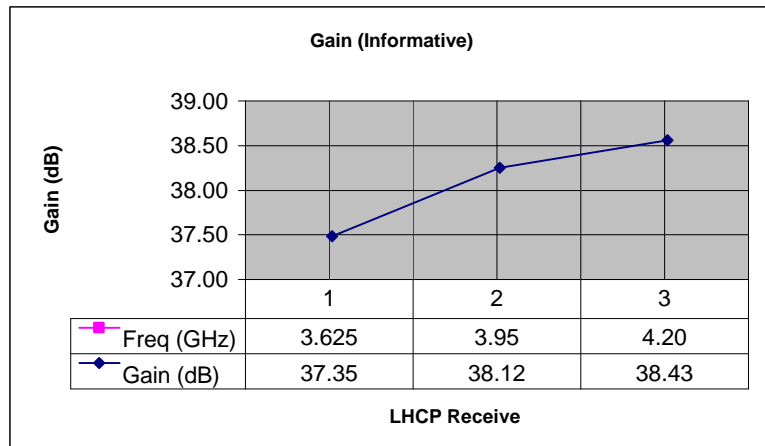
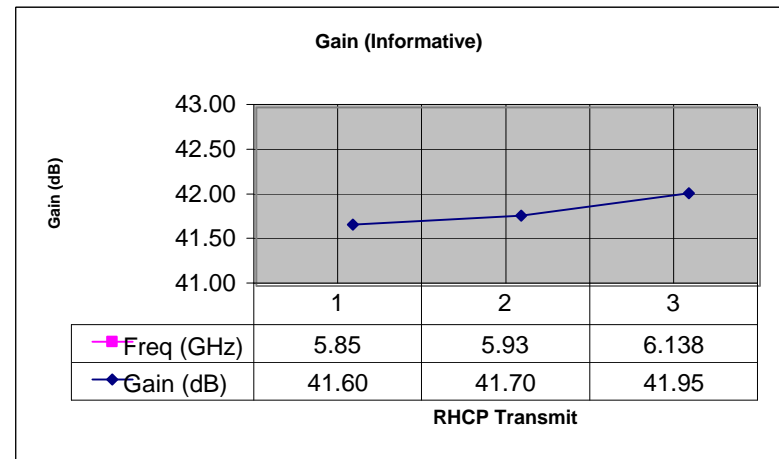
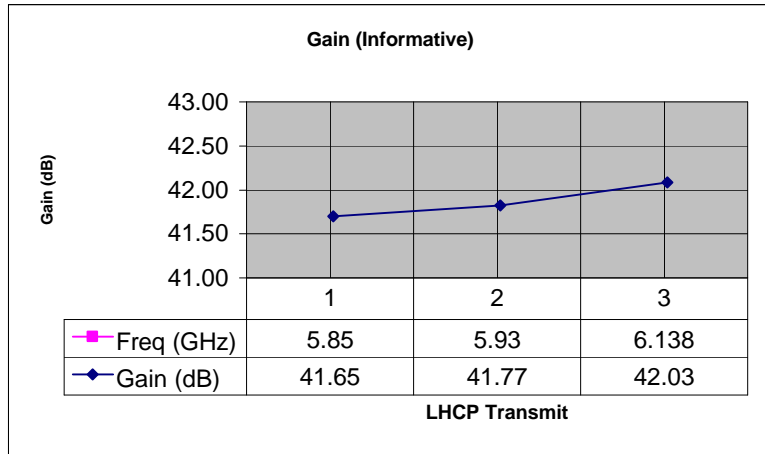
<u>Section</u>	<u>Title</u>
I	Gain Analysis
II	Radiation Patterns LHCP Tx
III	Radiation Patterns RHCP Tx
IV	Radiation Patterns LHCP Rx
V	Radiation Patterns RHCP Rx



Section I



Gain Analysis





Section II



File: See Legend

2.4 Meter 2-Pc. C-Band-Circular Polarization
Series 1251

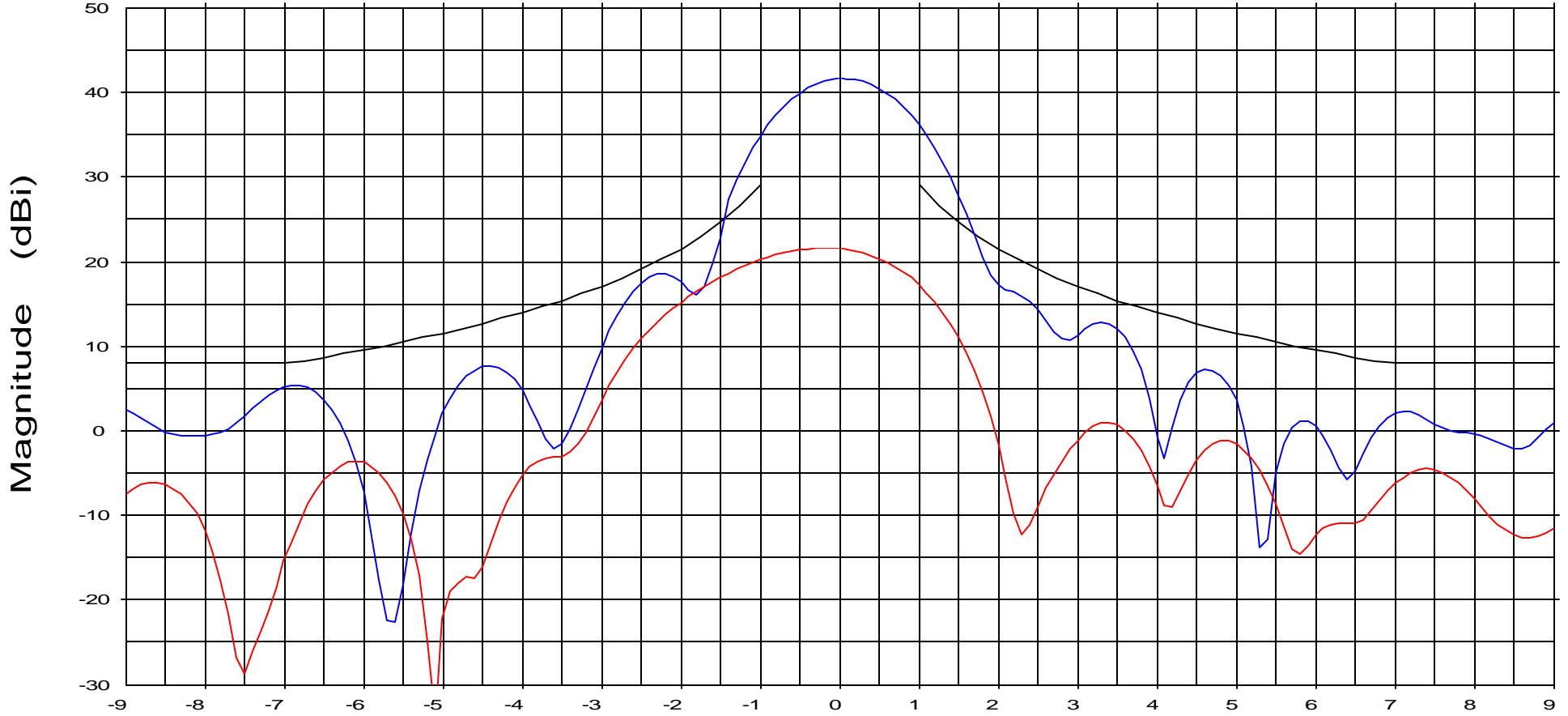
Frequency : 5.850 GHz

Operator: Ken Poovey

Channel: test

Tx pol: LHCP

Rx pol: LHCP



Sidelobe Envelope: $29 - 25 \log(\theta) \sim 1.0$ to 7 Deg
 $+8$ dBi ~ 7 to 9.2 Deg | $32 - 25 \log(\theta) \sim 9.2$ to 48 Deg
 -10 dBi ~ 48 to 180 Deg

Overlays

1578 - 065007.DAT-ant_under_test
 1578 - 065008.DAT-ant_under_test

Cal. file

065007.DAT
 065008.DAT

units

dBi
 dBi

Beam Peak

Deg dB
 0.05 41.65

File: See Legend

2.4 Meter 2-Pc. C-Band-Circular Polarization
Series 1251

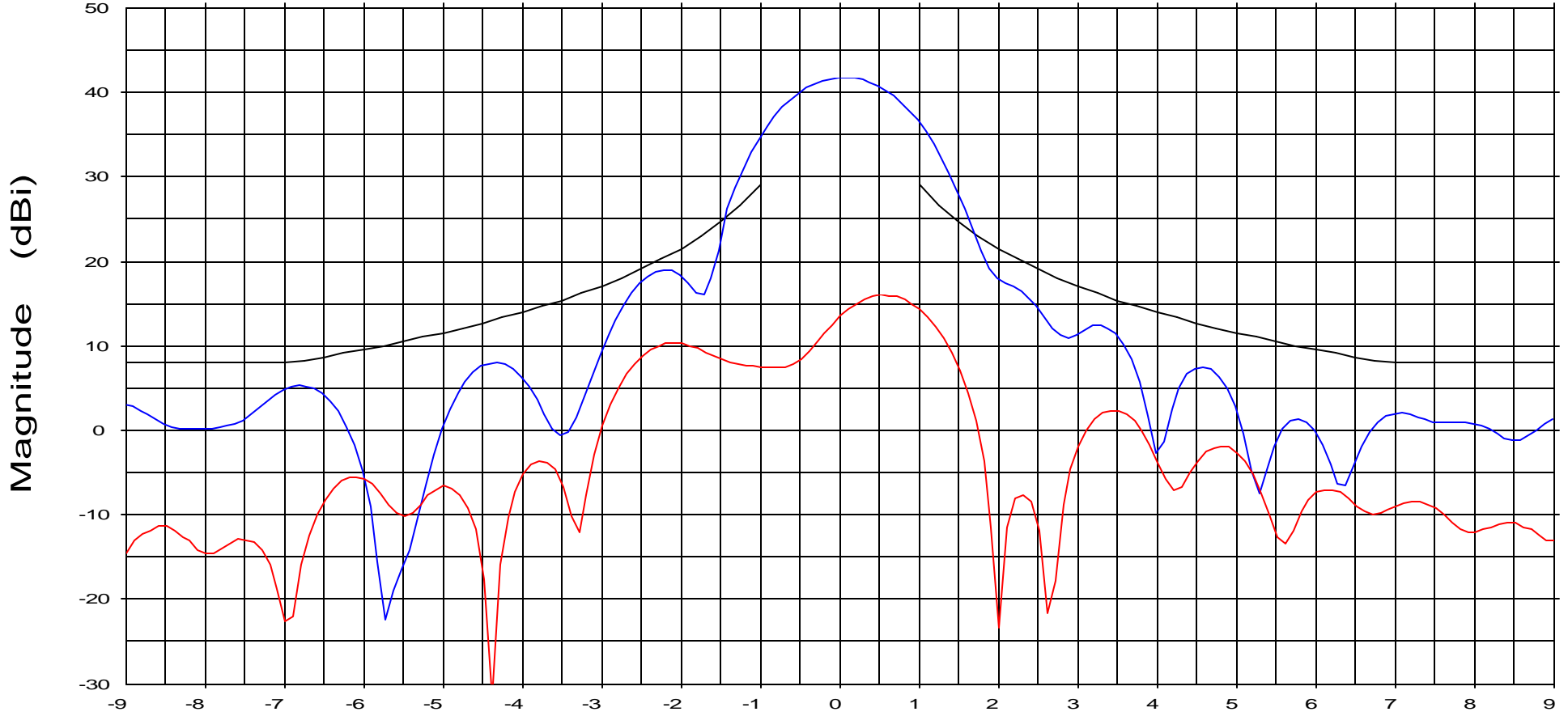
Frequency : 5.925 GHz

Operator: Ken Poovey

Channel: test

Tx pol: LHCP

Rx pol: LHCP



Sidelobe Envelope: $29 - 25 \log(\theta) \sim 1.0$ to 7 Deg
 $+8$ dBi ~ 7 to 9.2 Deg | $32 - 25 \log(\theta) \sim 9.2$ to 48 Deg
 -10 dBi ~ 48 to 180 Deg

Overlays

1578 - 065007.DAT-ant_under_test
 1578 - 065008.DAT-ant_under_test

Cal. file

065007.DAT
 065008.DAT

units

dBi
 dBi

Beam Peak

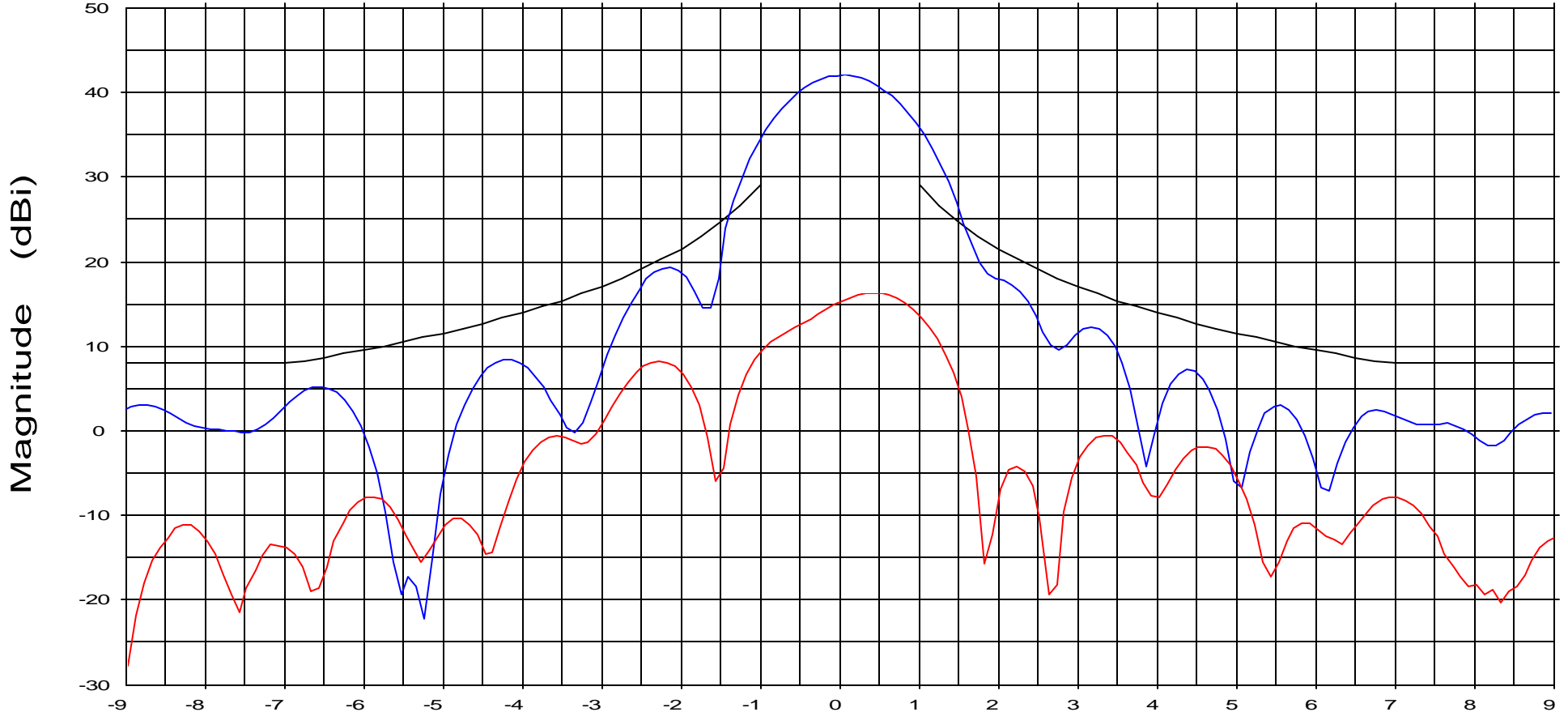
Deg dB
 0.06 41.77

Operator: Ken Poovey

Channel: test

Tx pol: LHCP

Rx pol: LHCP



Sidelobe Envelope: $29 - 25 \log(\theta) \sim 1.0$ to 7 Deg
 $+8$ dBi ~ 7 to 9.2 Deg | $32 - 25 \log(\theta) \sim 9.2$ to 48 Deg
 -10 dBi ~ 48 to 180 Deg

Azimuth (Deg)

Overlays

1578 - 065007.DAT-ant_under_test
 1578 - 065008.DAT-ant_under_test

Cal. file

065007.DAT
 065008.DAT

units

dBi
 dBi

Beam Peak

Deg dB
 0.04 42.03

File: See Legend

2.4 Meter 2-Pc. C-Band-Circular Polarization
Series 1251

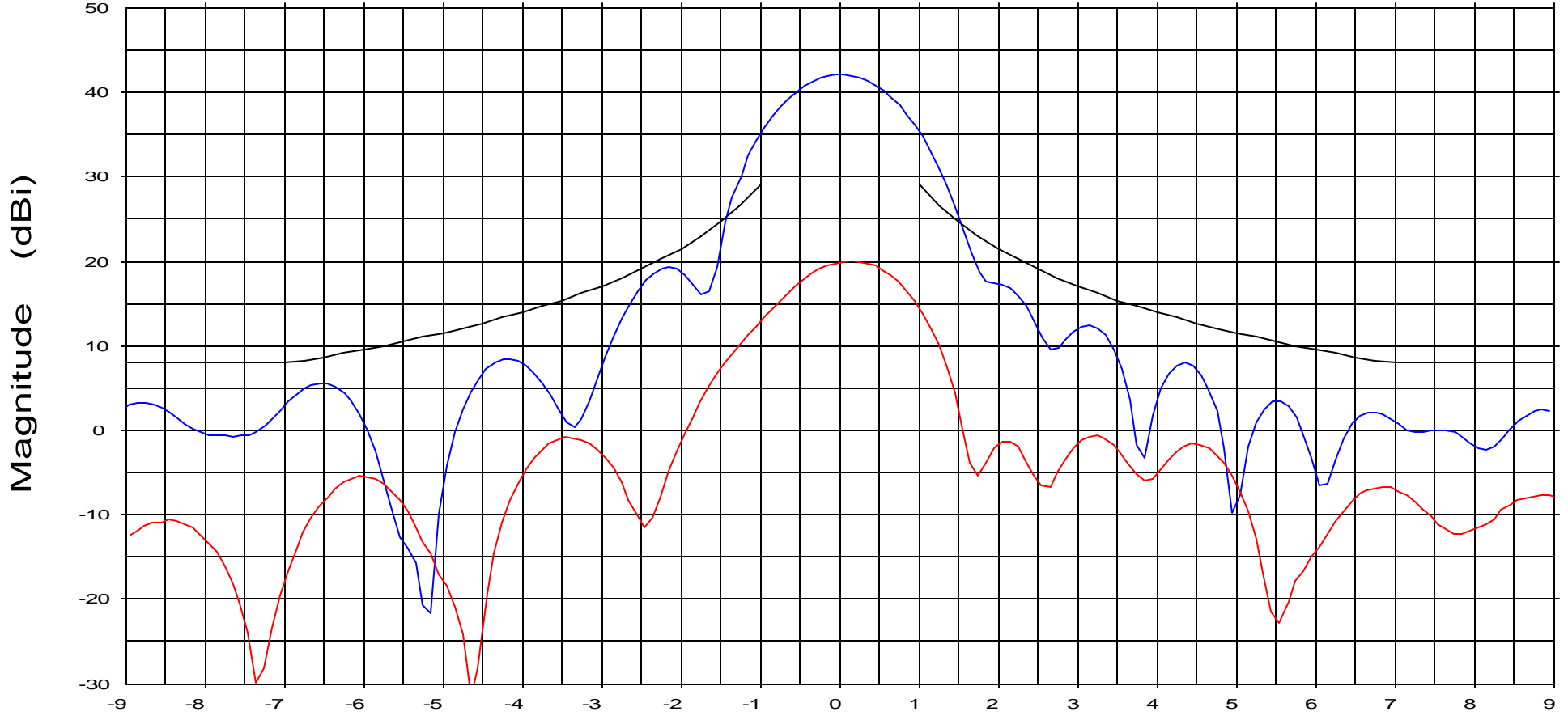
Frequency : 6.175 GHz

Operator: Ken Poovey

Channel: test

Tx pol: LHCP

Rx pol: LHCP



Sidelobe Envelope: $29 - 25 \log(\theta) \sim 1.0$ to 7 Deg
 $+8$ dBi ~ 7 to 9.2 Deg | $32 - 25 \log(\theta) \sim 9.2$ to 48 Deg
 -10 dBi ~ 48 to 180 Deg

Overlays

1578 - 065007.DAT-ant_under_test
 1578 - 065008.DAT-ant_under_test

Cal. file

065007.DAT
 065008.DAT

units

dBi
 dBi

Beam Peak

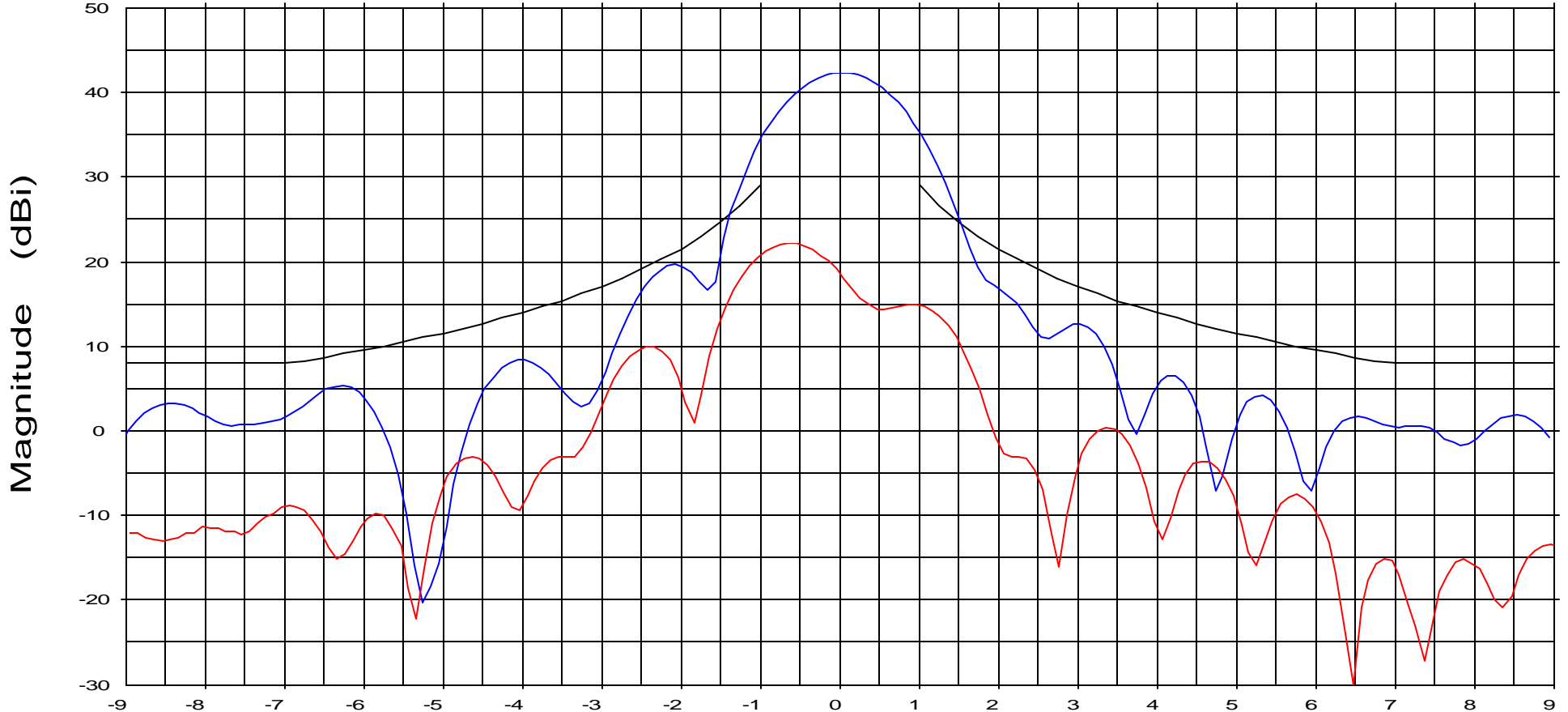
Deg dB
 0.02 42.09

Operator: Ken Poovey

Channel: test

Tx pol: LHCP

Rx pol: LHCP



Sidelobe Envelope: $29 - 25\text{Log}(\text{Theta}) \sim 1.0$ to 7 Deg
 $+8$ dBi ~ 7 to 9.2 Deg | $32 - 25\text{Log}(\text{Theta}) \sim 9.2$ to 48 Deg
 -10 dBi ~ 48 to 180 Deg

Overlays

1578 - 065007.DAT-ant_under_test
 1578 - 065008.DAT-ant_under_test

Cal. file
 065007.DAT
 065008.DAT

units
 dBi
 dBi

Beam Peak
 Deg dB
 0.04 42.39

File: See Legend

2.4 Meter 2-Pc. C-Band-Circular Polarization
Series 1251

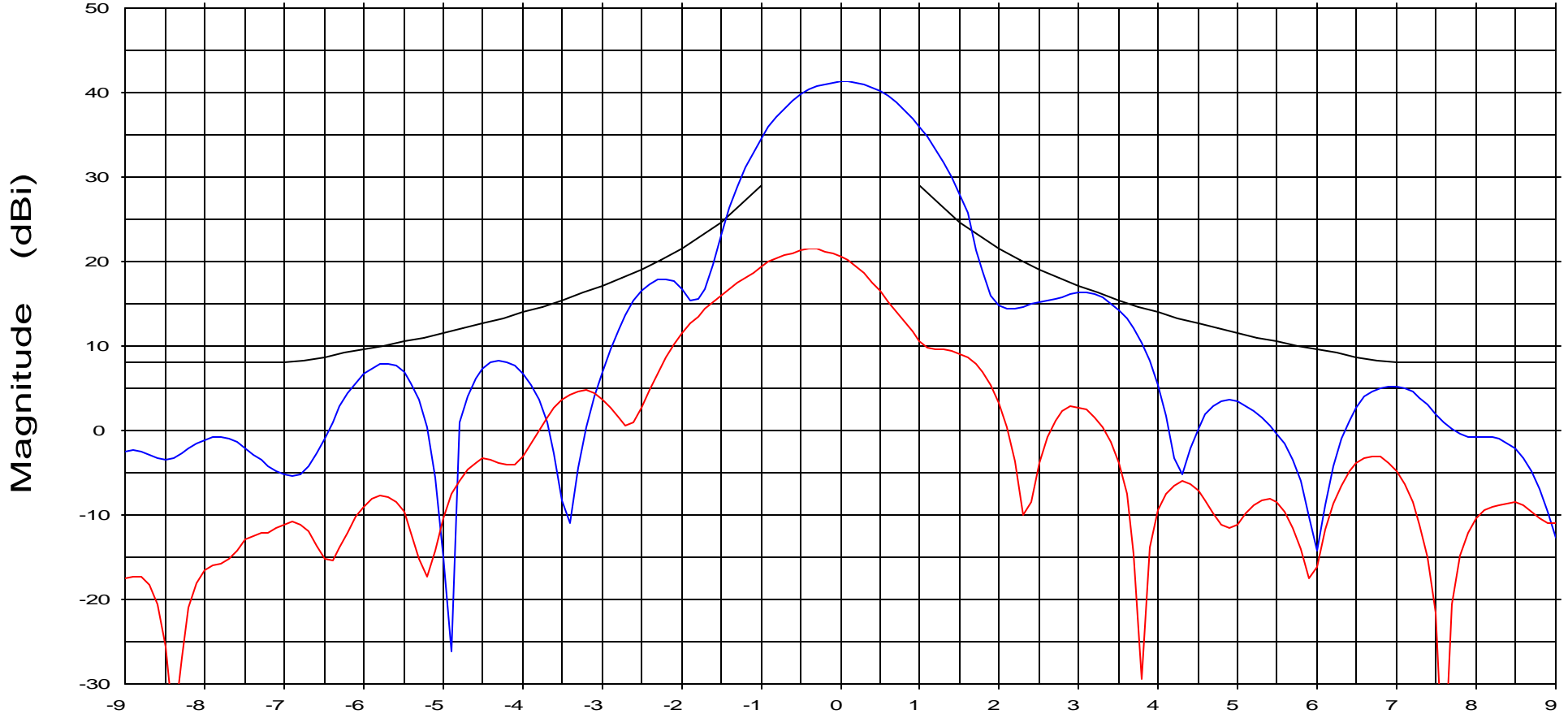
Frequency : 5.850 GHz

Operator: Ken Poovey

Channel: test

Tx pol: LHCP

Rx pol: LHCP



Sidelobe Envelope: $29 - 25 \log(\theta) \sim 1.0$ to 7 Deg
 $+8$ dBi ~ 7 to 9.2 Deg | $32 - 25 \log(\theta) \sim 9.2$ to 48 Deg
 -10 dBi ~ 48 to 180 Deg

Overlays
 1578 - 065005.DAT-ant_under_test
 1578 - 065009.DAT-ant_under_test

Cal. file
 065005.DAT
 065009.DAT

units
 dBi
 dBi

Beam Peak
 Deg dB
 0.04 41.24

File: See Legend

2.4 Meter 2-Pc. C-Band-Circular Polarization
Series 1251

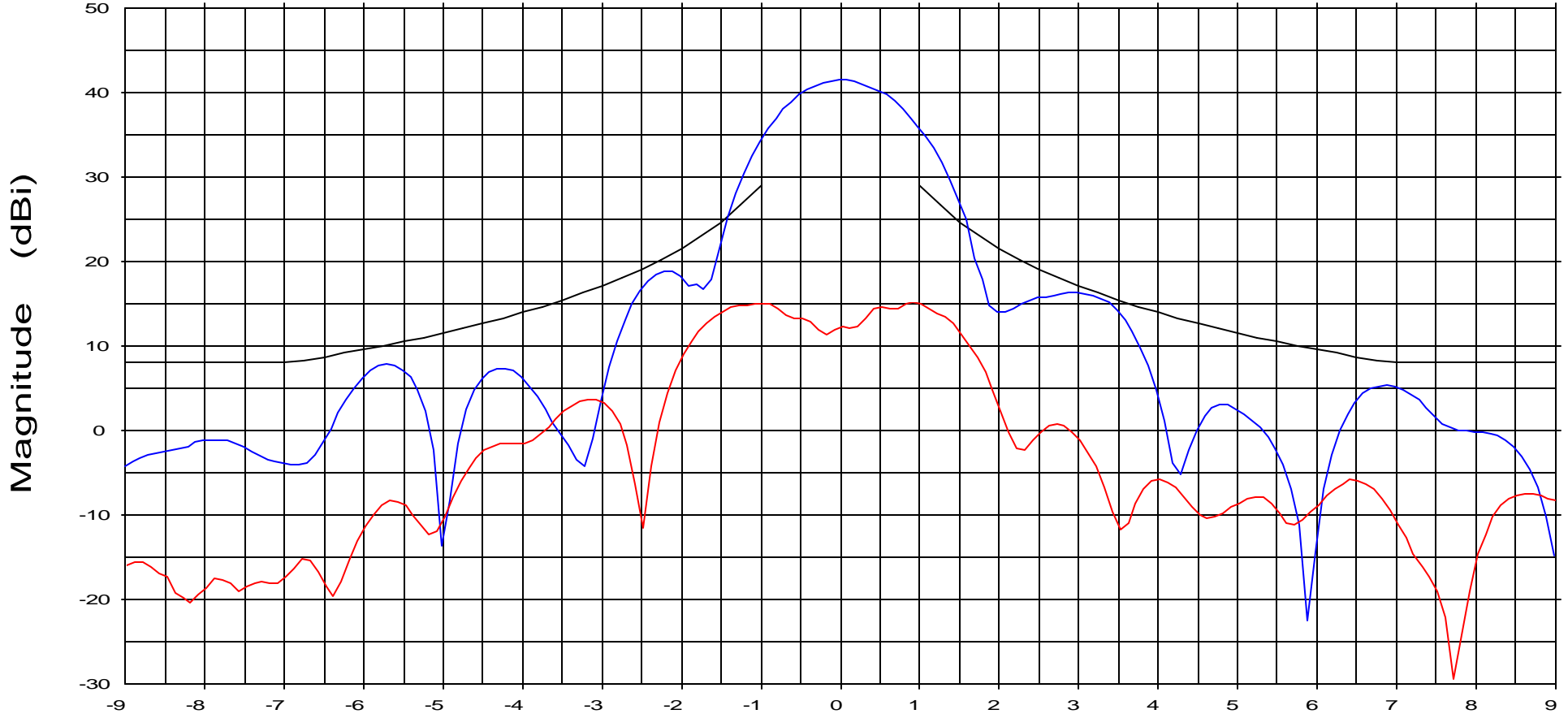
Frequency : 5.925 GHz

Operator: Ken Poovey

Channel: test

Tx pol: LHCP

Rx pol: LHCP



Sidelobe Envelope: $29 - 25 \log(\Theta) \sim 1.0$ to 7 Deg
 $+8$ dBi ~ 7 to 9.2 Deg | $32 - 25 \log(\Theta) \sim 9.2$ to 48 Deg
 -10 dBi ~ 48 to 180 Deg

Overlays
 1578 - 065005.DAT-ant_under_test
 1578 - 065009.DAT-ant_under_test

Cal. file
 065005.DAT
 065009.DAT

units
 dBi
 dBi

Elevation (Deg)

Beam Peak
 Deg dB
 0.03 41.42

File: See Legend

2.4 Meter 2-Pc. C-Band-Circular Polarization
Series 1251

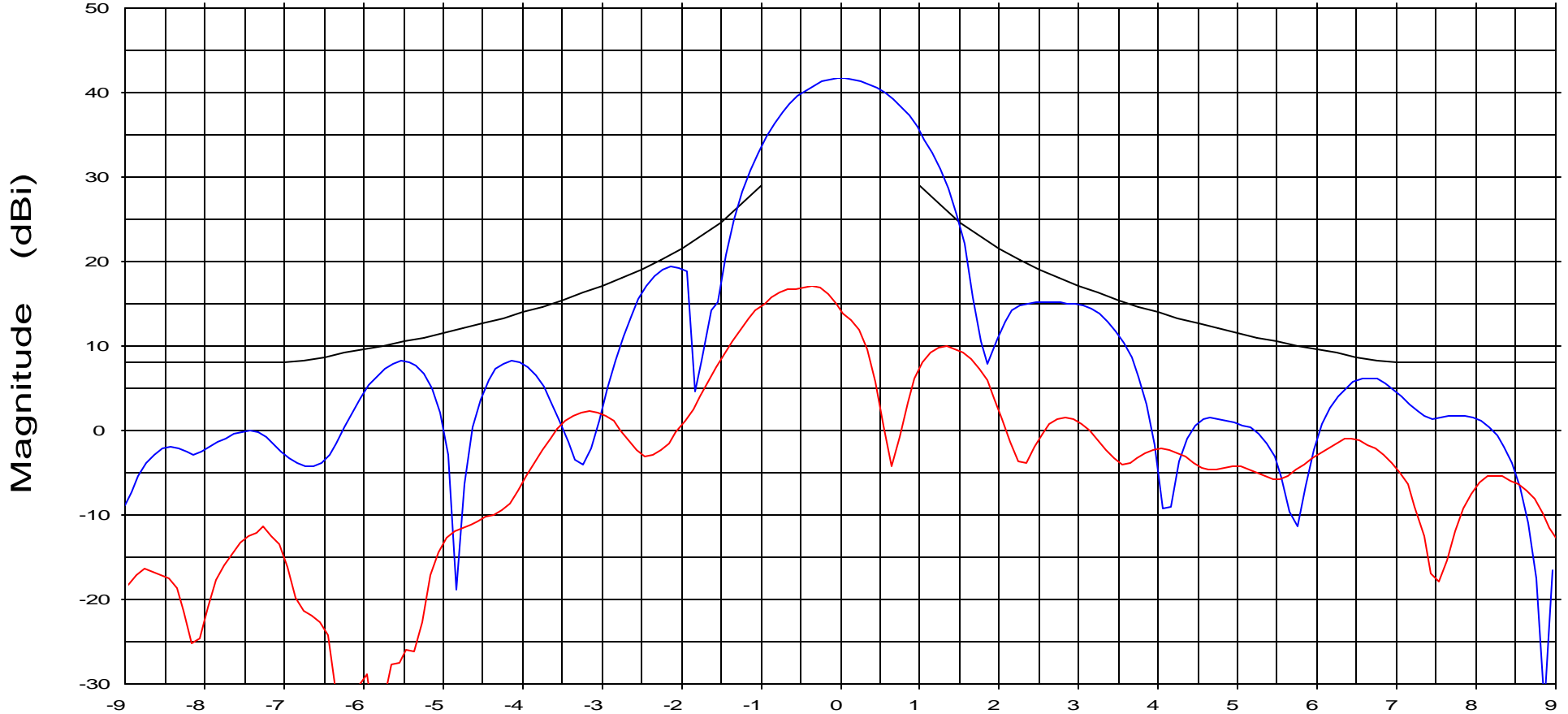
Frequency : 6.138 GHz

Operator: Ken Poovey

Channel: test

Tx pol: LHCP

Rx pol: LHCP



Sidelobe Envelope: $29 - 25 \log(\theta) \sim 1.0$ to 7 Deg
 $+8$ dBi ~ 7 to 9.2 Deg | $32 - 25 \log(\theta) \sim 9.2$ to 48 Deg
 -10 dBi ~ 48 to 180 Deg

Overlays
 1578 - 065005.DAT-ant_under_test
 1578 - 065009.DAT-ant_under_test

Cal. file
 065005.DAT
 065009.DAT

units
 dBi
 dBi

Elevation (Deg)

Beam Peak
 Deg dB
 0.04 41.68

File: See Legend

2.4 Meter 2-Pc. C-Band-Circular Polarization
Series 1251

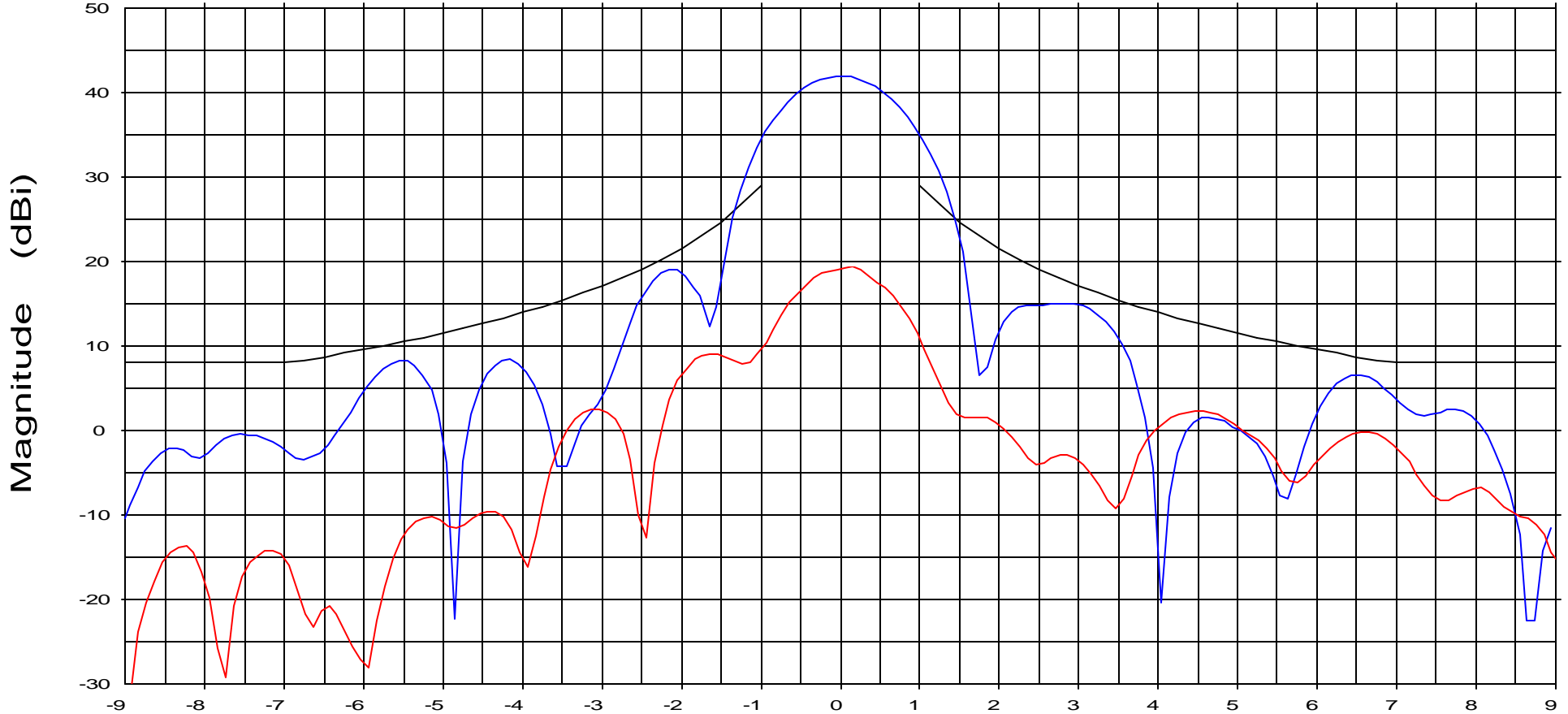
Frequency : 6.175 GHz

Operator: Ken Poovey

Channel: test

Tx pol: LHCP

Rx pol: LHCP



Sidelobe Envelope: $29 - 25 \log(\theta) \sim 1.0$ to 7 Deg
 $+8$ dBi ~ 7 to 9.2 Deg | $32 - 25 \log(\theta) \sim 9.2$ to 48 Deg
 -10 dBi ~ 48 to 180 Deg

Overlays
 1578 - 065005.DAT-ant_under_test
 1578 - 065009.DAT-ant_under_test

Cal. file
 065005.DAT
 065009.DAT

units
 dBi
 dBi

Elevation (Deg)

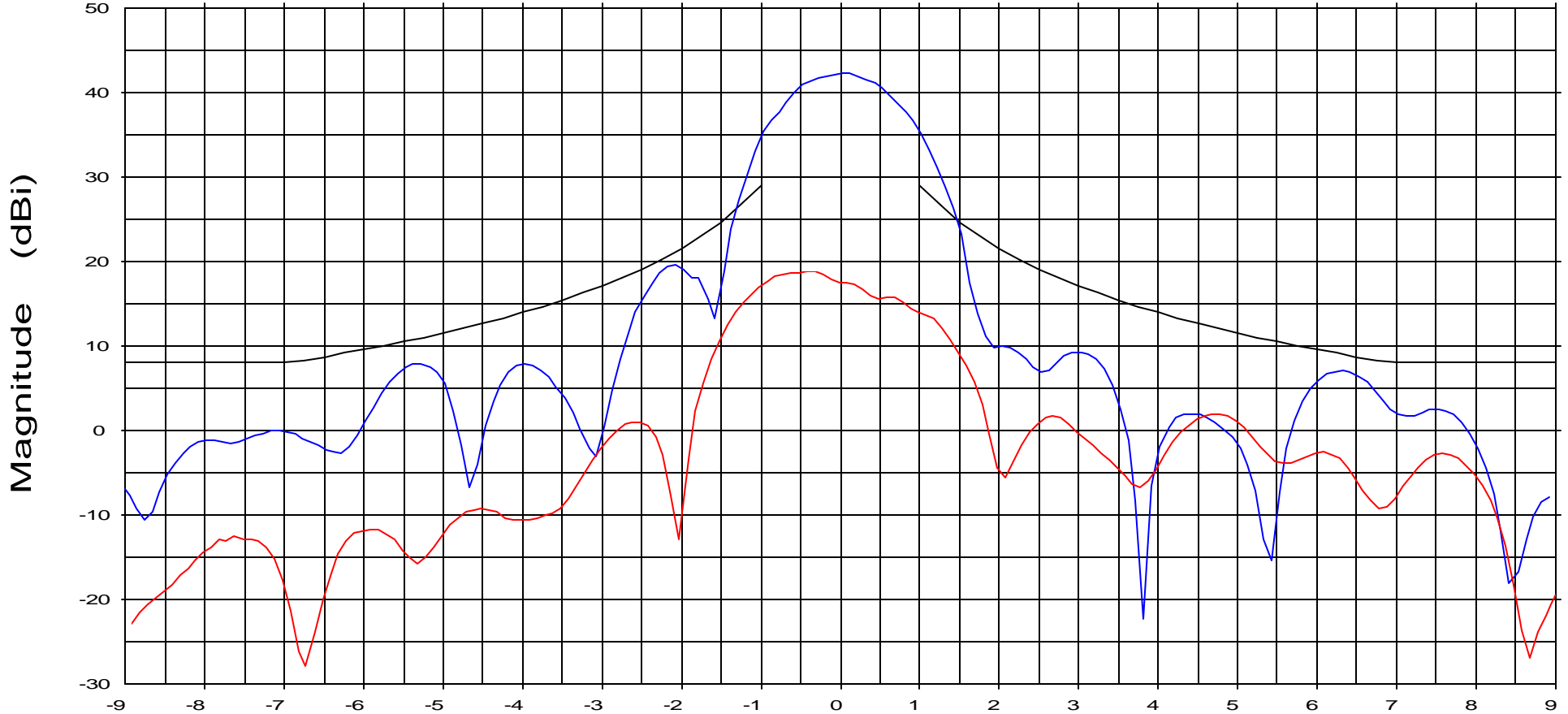
Beam Peak
 Deg dB
 0.01 41.82

Operator: Ken Poovey

Channel: test

Tx pol: LHCP

Rx pol: LHCP



Sidelobe Envelope: $29 - 25 \log(\theta) \sim 1.0$ to 7 Deg
 $+8$ dBi ~ 7 to 9.2 Deg | $32 - 25 \log(\theta) \sim 9.2$ to 48 Deg
 -10 dBi ~ 48 to 180 Deg

Overlays
 1578 - 065005.DAT-ant_under_test
 1578 - 065009.DAT-ant_under_test

Cal. file
 065005.DAT
 065009.DAT

units
 dBi
 dBi

Beam Peak
 Deg dB
 0.01 42.26

File: See Legend

2.4 Meter 2-Pc. C-Band-Circular Polarization
Series 1251

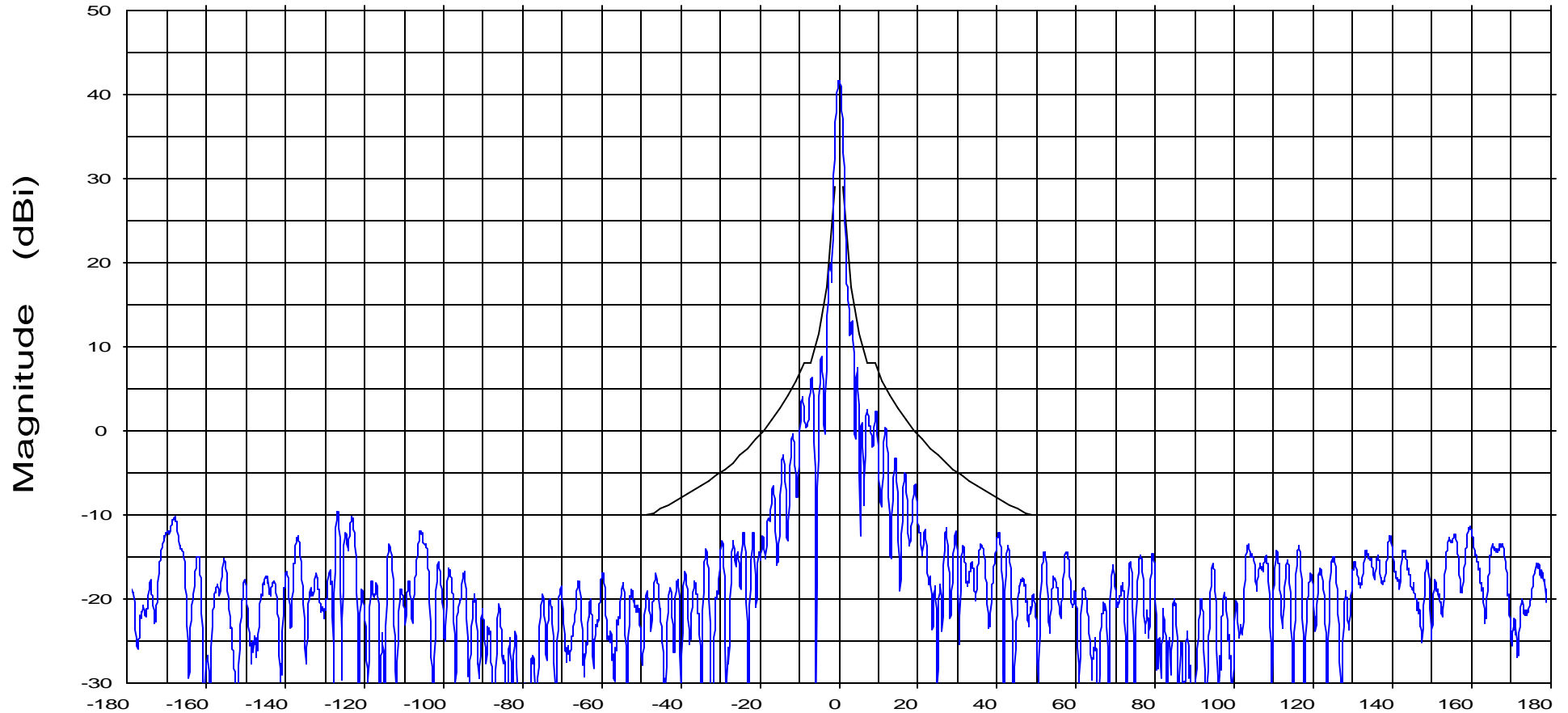
Frequency : 5.850 GHz

Operator: Ken Poovey

Channel: test

Tx pol: LHCP

Rx pol: LHCP



Sidelobe Envelope: $29 - 25 \log(\theta) \sim 1.0$ to 7 Deg
 $+8$ dBi ~ 7 to 9.2 Deg | $32 - 25 \log(\theta) \sim 9.2$ to 48 Deg
 -10 dBi ~ 48 to 180 Deg

Overlays
1578 - 065004.DAT-ant_under_test

Cal. file
065004.DAT

units
dBi

Azimuth (Deg)

Beam Peak
Deg dB
0.02 41.66

File: See Legend

2.4 Meter 2-Pc. C-Band-Circular Polarization
Series 1251

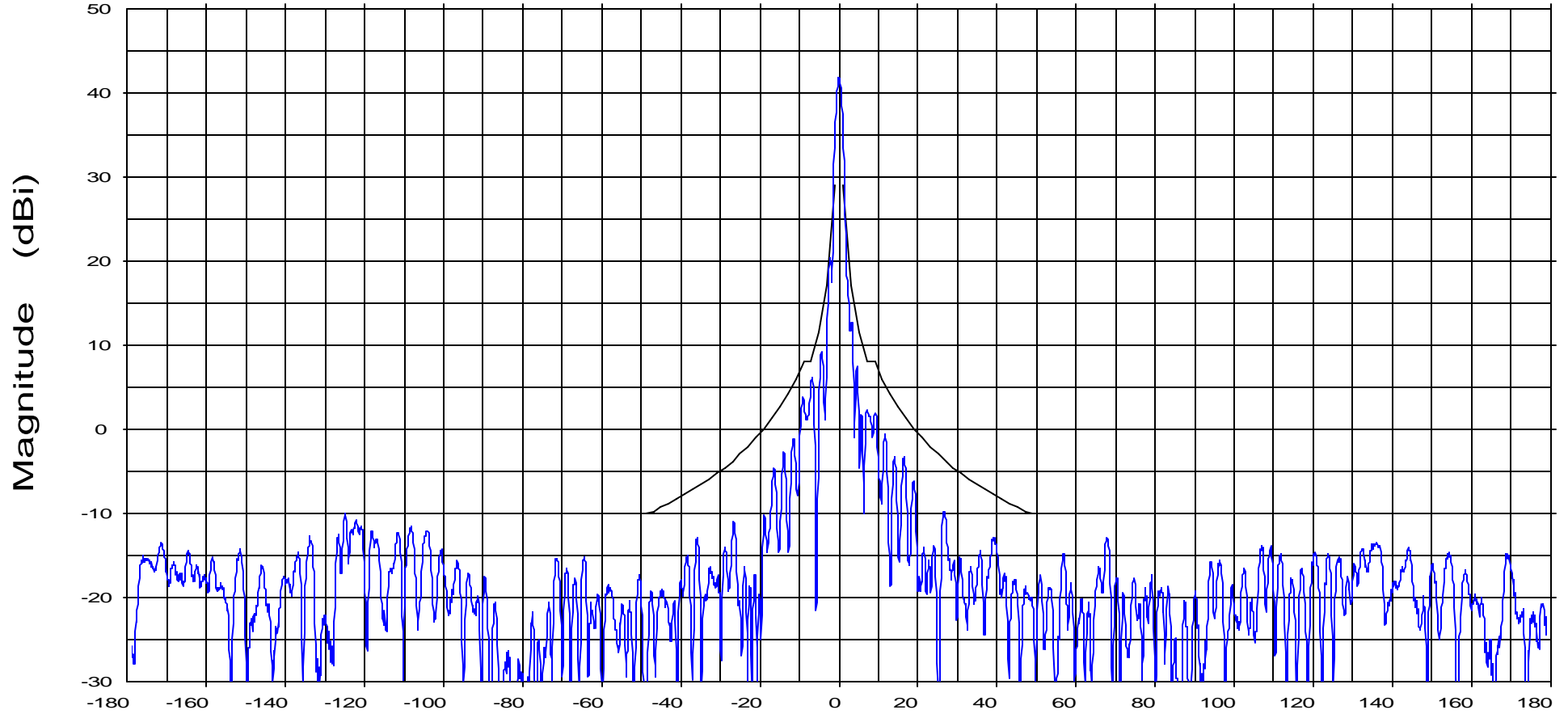
Frequency : 5.925 GHz

Operator: Ken Poovey

Channel: test

Tx pol: LHCP

Rx pol: LHCP



Sidelobe Envelope: $29 - 25 \log(\theta) \sim 1.0$ to 7 Deg
 $+8$ dBi ~ 7 to 9.2 Deg | $32 - 25 \log(\theta) \sim 9.2$ to 48 Deg
 -10 dBi ~ 48 to 180 Deg

Azimuth (Deg)

Overlays
1578 - 065004.DAT-ant_under_test

Cal. file
065004.DAT

units
dBi

Beam Peak
Deg dB
0.03 41.75

File: See Legend

2.4 Meter 2-Pc. C-Band-Circular Polarization
Series 1251

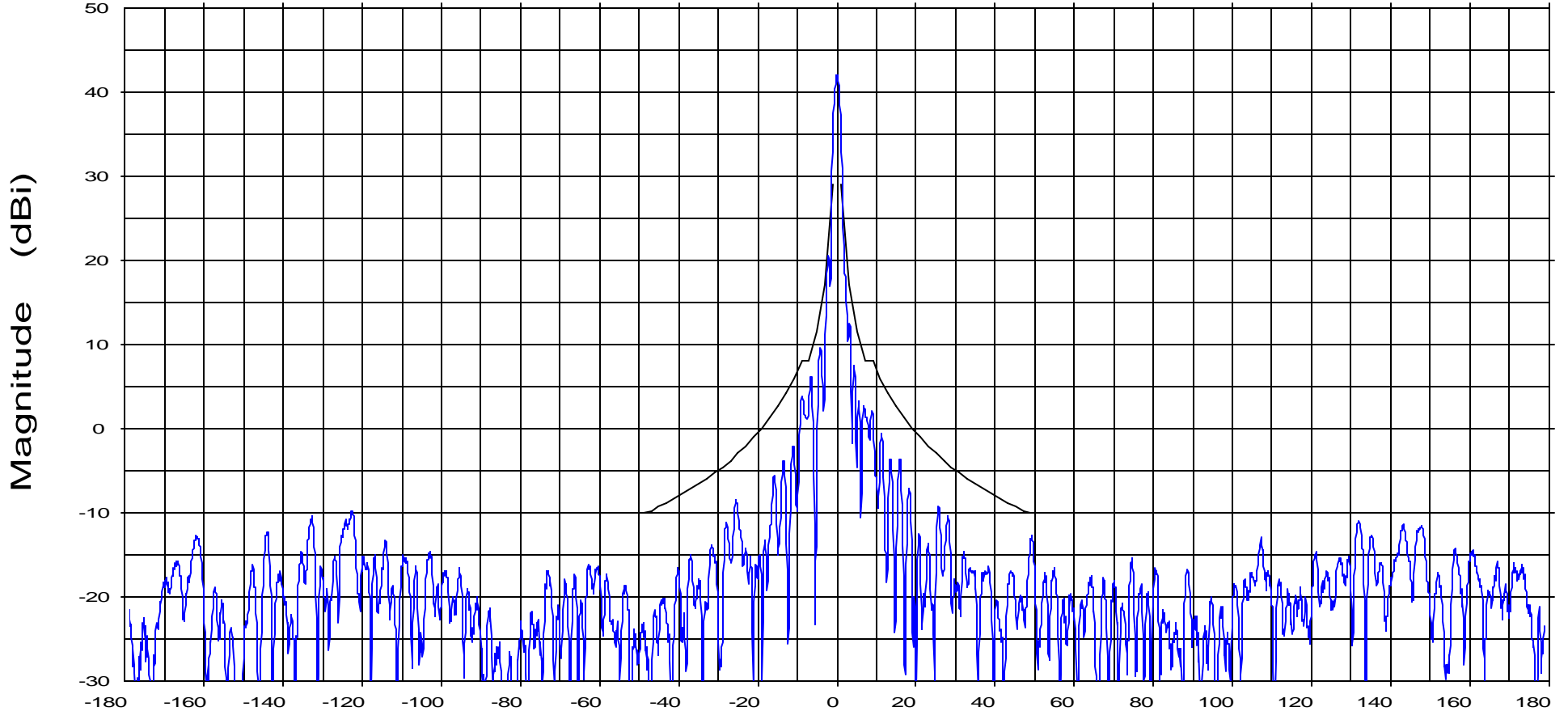
Frequency : 6.138 GHz

Operator: Ken Poovey

Channel: test

Tx pol: LHCP

Rx pol: LHCP



Sidelobe Envelope: $29 - 25 \log(\theta) \sim 1.0$ to 7 Deg
 $+8$ dBi ~ 7 to 9.2 Deg | $32 - 25 \log(\theta) \sim 9.2$ to 48 Deg
 -10 dBi ~ 48 to 180 Deg

Azimuth (Deg)

Overlays
 1578 - 065004.DAT-ant_under_test

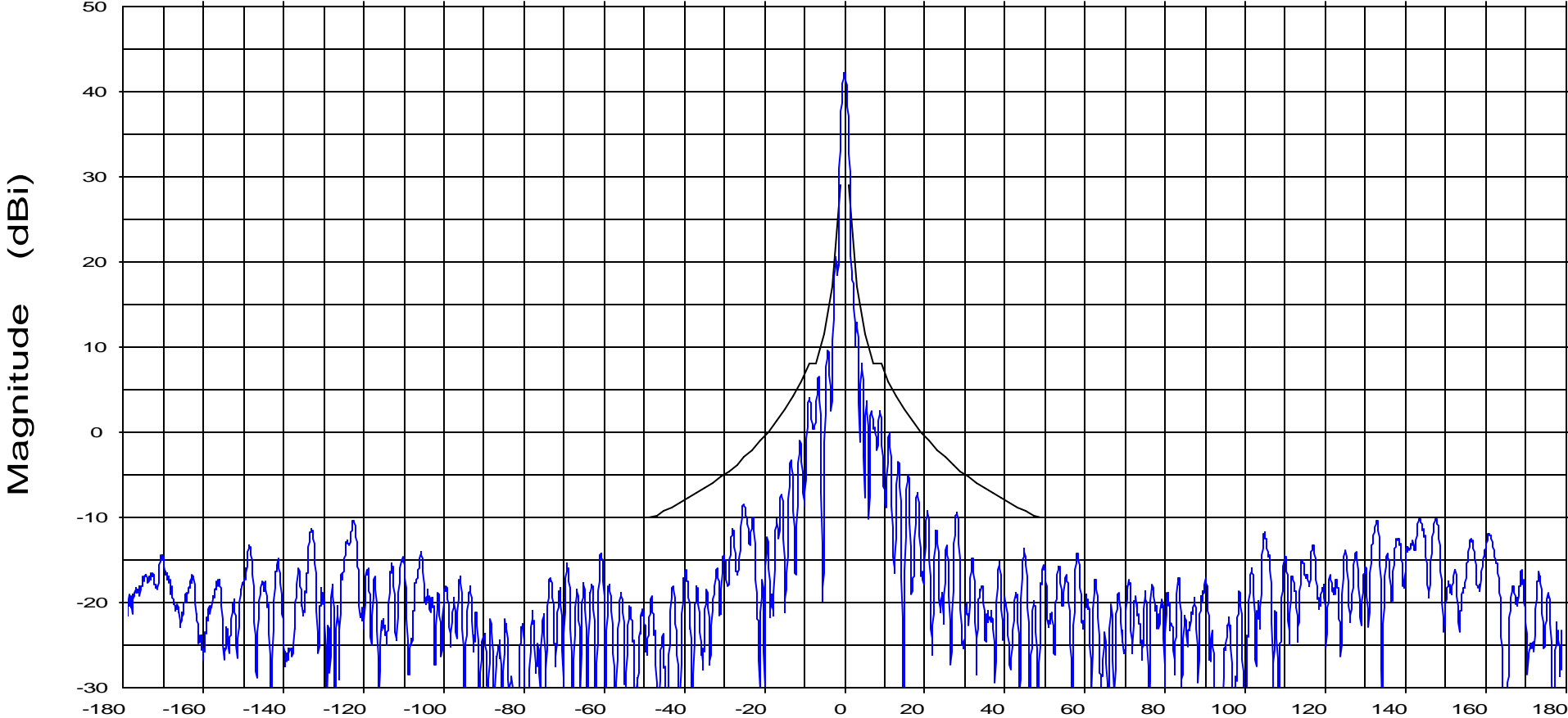
Cal. file
 065004.DAT

units
 dBi

Beam Peak
 Deg dB
 0.01 42.06

Operator: Ken Poovey

Channel: test Tx pol: LHCP Rx pol: LHCP



Sidelobe Envelope: $29 - 25 \log(\theta) \sim 1.0$ to 7 Deg
 $+8$ dBi ~ 7 to 9.2 Deg | $32 - 25 \log(\theta) \sim 9.2$ to 48 Deg
 -10 dBi ~ 48 to 180 Deg

Azimuth (Deg)

Overlays
1578 - 065004.DAT-ant_under_test

Cal. file
065004.DAT

units
dBi

Beam Peak
 Deg dB
 -0.02 42.13

File: See Legend

2.4 Meter 2-Pc. C-Band-Circular Polarization
Series 1251

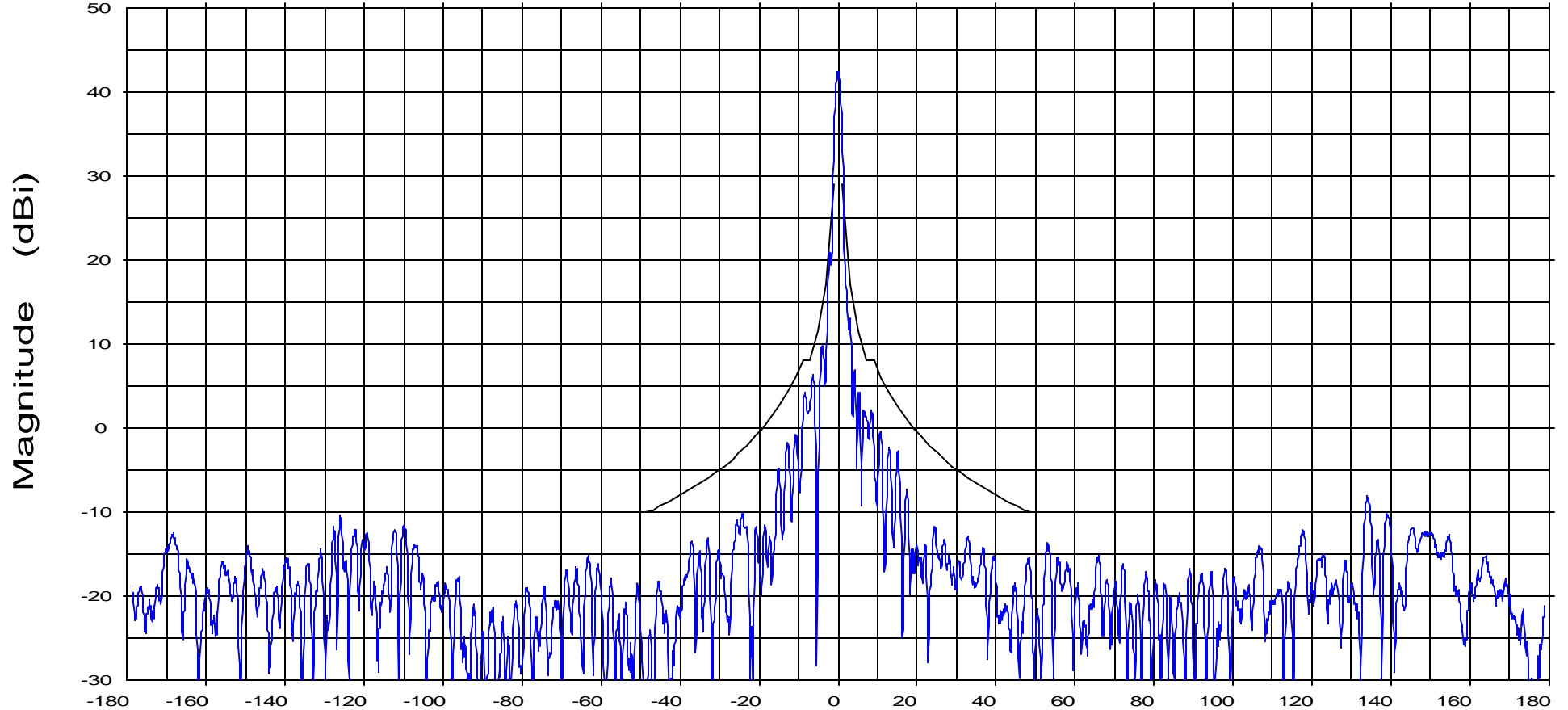
Frequency : 6.425 GHz

Operator: Ken Poovey

Channel: test

Tx pol: LHCP

Rx pol: LHCP



Sidelobe Envelope: $29 - 25 \log(\theta) \sim 1.0$ to 7 Deg
 $+8$ dBi ~ 7 to 9.2 Deg | $32 - 25 \log(\theta) \sim 9.2$ to 48 Deg
 -10 dBi ~ 48 to 180 Deg

Overlays
1578 - 065004.DAT-ant_under_test

Cal. file
065004.DAT

units
dBi

Azimuth (Deg)

Beam Peak
Deg dB
0.00 42.42

Section III



File: See Legend

2.4 Meter 2-Pc. C-Band-Circular Polarization
Series 1251

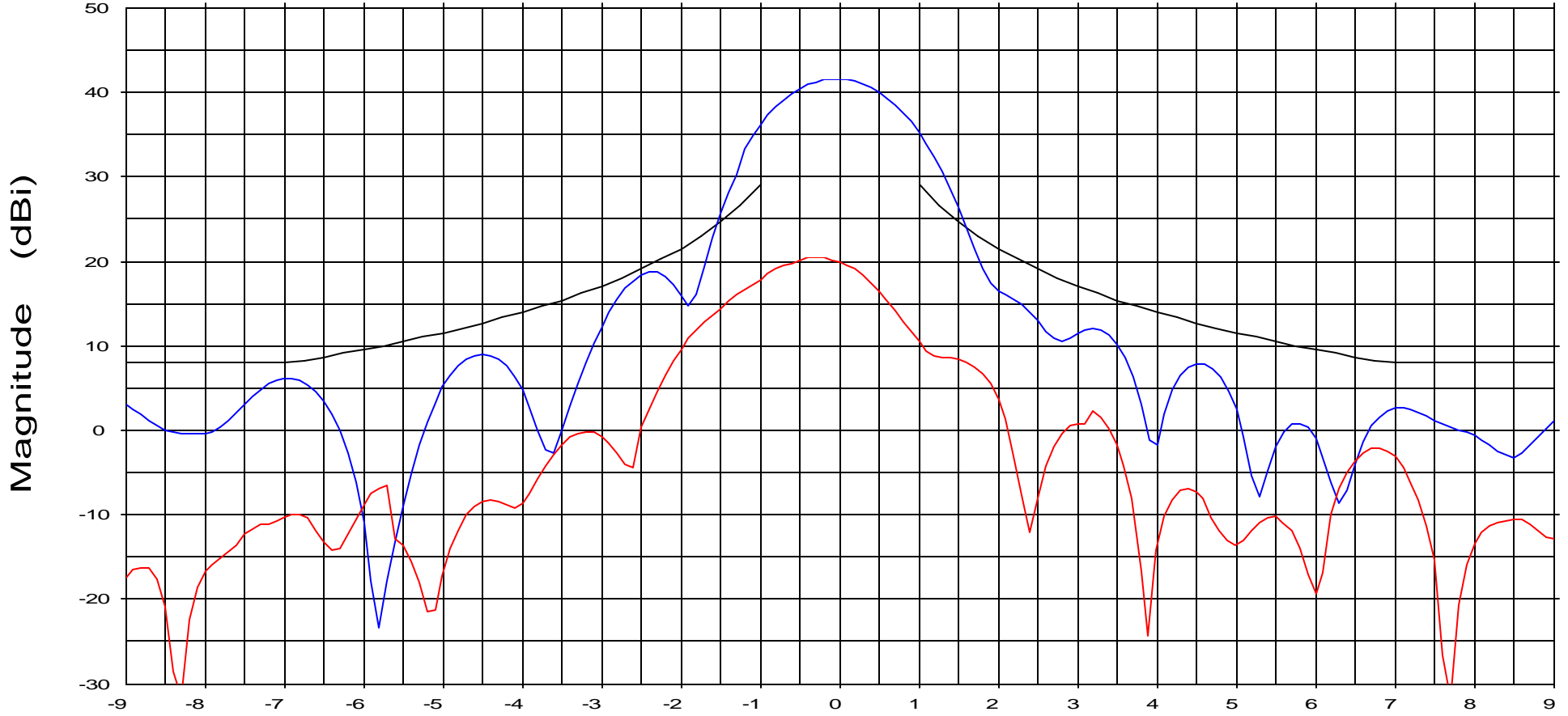
Frequency : 5.850 GHz

Operator: Ken Poovey

Channel: test

Tx pol: RHCP

Rx pol: RHCP



Sidelobe Envelope: $29 - 25 \log(\theta) \sim 1.0$ to 7 Deg
 $+8$ dBi ~ 7 to 9.2 Deg | $32 - 25 \log(\theta) \sim 9.2$ to 48 Deg
 -10 dBi ~ 48 to 180 Deg

Overlays

1578 - 065000.DAT-ant_under_test
 1578 - 065003.DAT-ant_under_test

Cal. file

065000.DAT
 065003.DAT

units

dBi
 dBi

Beam Peak

Deg dB
 -0.04 41.60

File: See Legend

2.4 Meter 2-Pc. C-Band-Circular Polarization
Series 1251

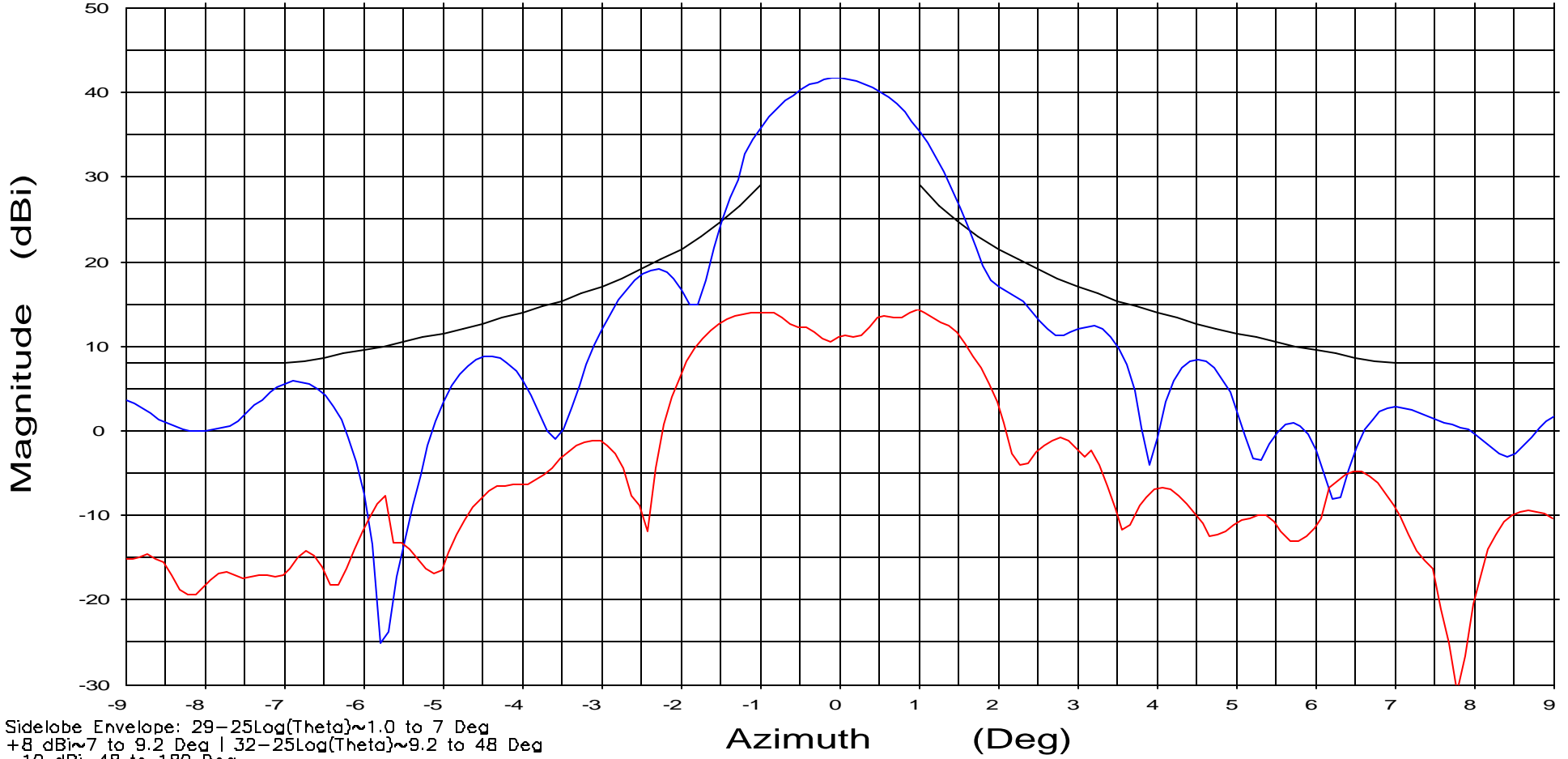
Frequency : 5.925 GHz

Operator: Ken Poovey

Channel: test

Tx pol: RHCP

Rx pol: RHCP



Overlays
 1578 - 065000.DAT-ant_under_test
 1578 - 065003.DAT-ant_under_test

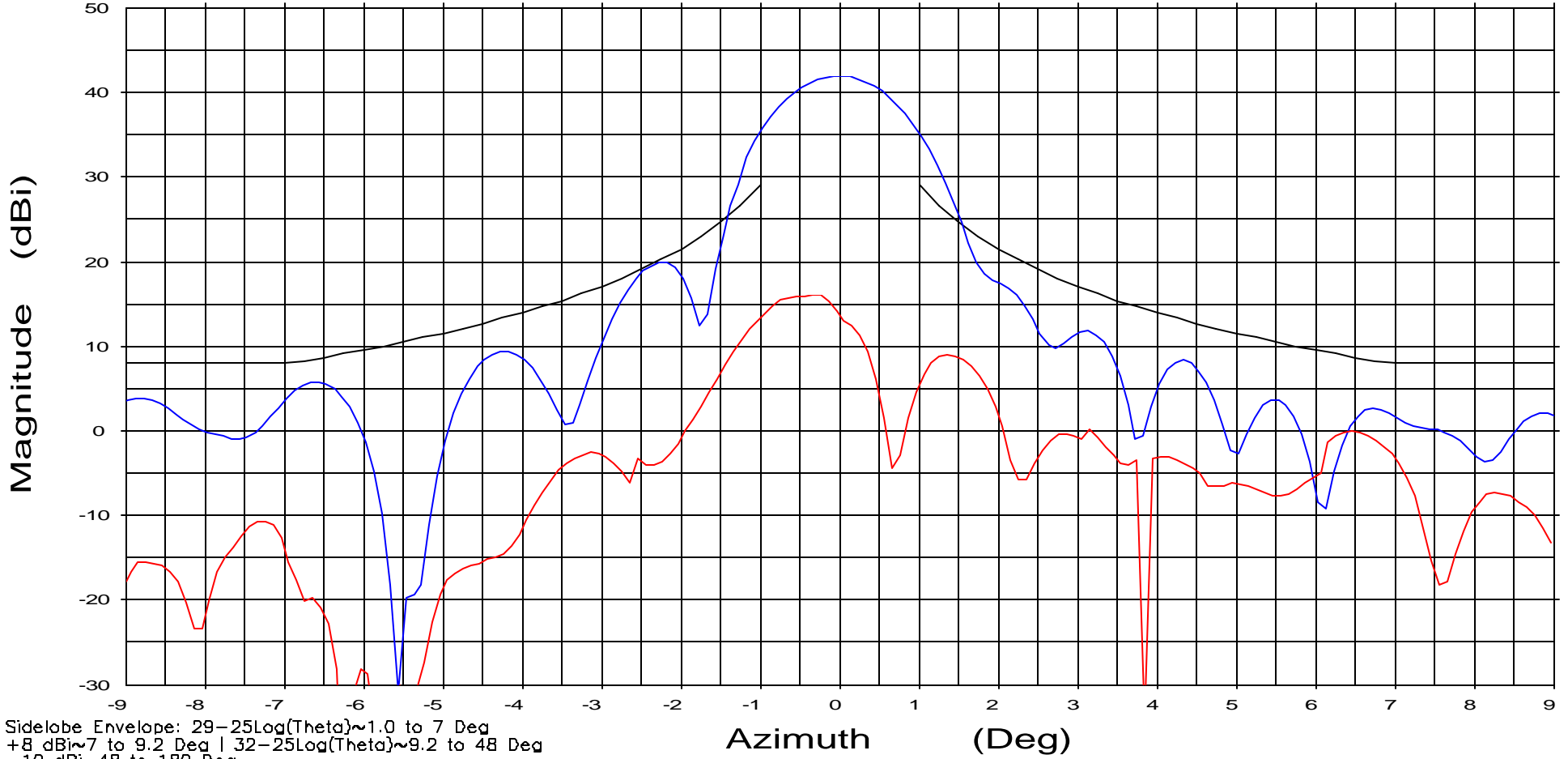
Cal. file
 065000.DAT
 065003.DAT

units
 dBi
 dBi

Beam Peak
 Deg dB
 -0.00 41.70

Operator: Ken Poovey

Channel: test Tx pol: RHCP Rx pol: RHCP



Overlays
 1578 - 065000.DAT-ant_under_test
 1578 - 065003.DAT-ant_under_test

Cal. file
 065000.DAT
 065003.DAT

units
 dBi
 dBi

Beam Peak
 Deg dB
 -0.01 41.95

File: See Legend

2.4 Meter 2-Pc. C-Band-Circular Polarization
Series 1251

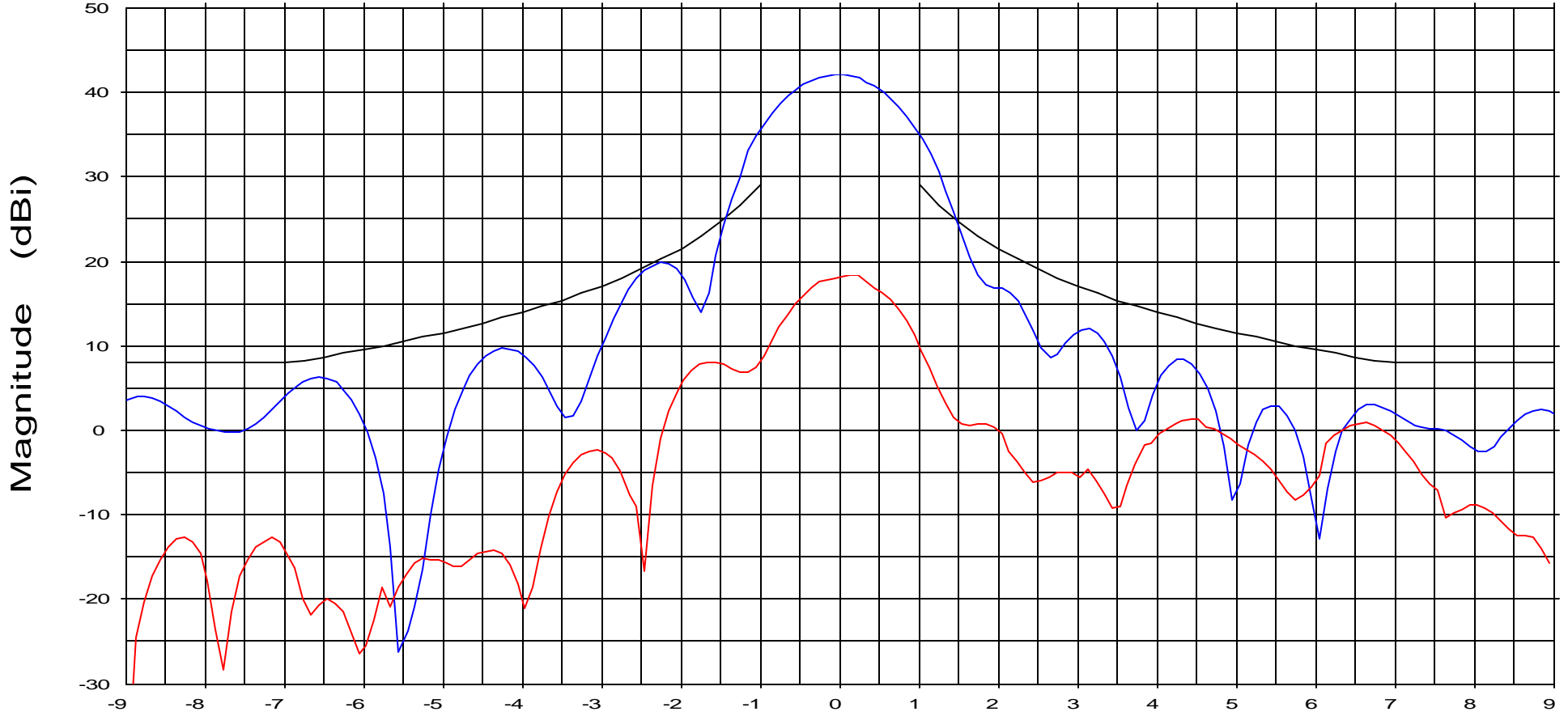
Frequency : 6.175 GHz

Operator: Ken Poovey

Channel: test

Tx pol: RHCP

Rx pol: RHCP



Sidelobe Envelope: $29 - 25 \log(\theta) \sim 1.0$ to 7 Deg
 $+8$ dBi ~ 7 to 9.2 Deg | $32 - 25 \log(\theta) \sim 9.2$ to 48 Deg
 -10 dBi ~ 48 to 180 Deg

Overlays

1578 - 065000.DAT-ant_under_test
 1578 - 065003.DAT-ant_under_test

Cal. file

065000.DAT
 065003.DAT

units

dBi
 dBi

Beam Peak

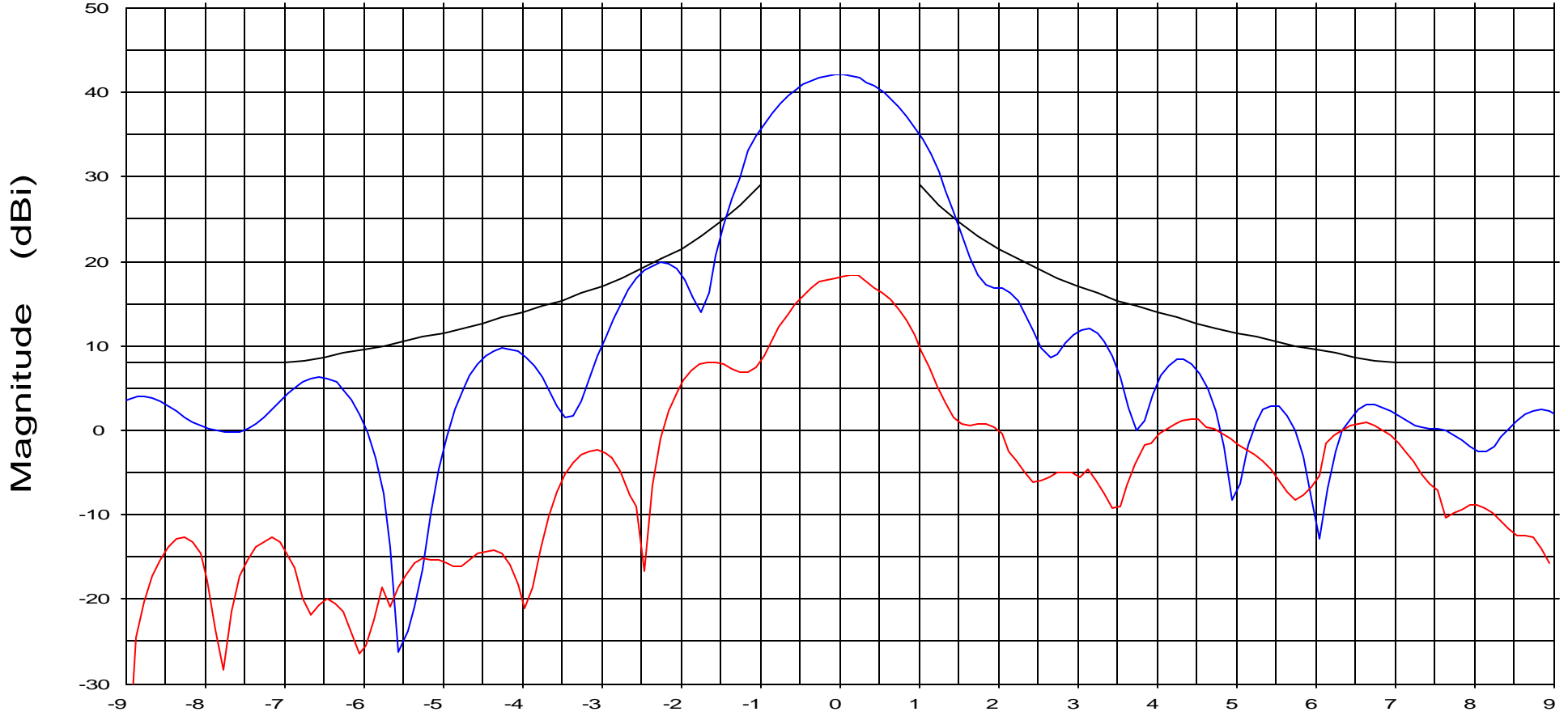
Deg dB
 -0.02 42.08

Operator: Ken Poovey

Channel: test

Tx pol: RHCP

Rx pol: RHCP



Sidelobe Envelope: $29 - 25 \log(\theta) \sim 1.0$ to 7 Deg
 $+8$ dBi ~ 7 to 9.2 Deg | $32 - 25 \log(\theta) \sim 9.2$ to 48 Deg
 -10 dBi ~ 48 to 180 Deg

Overlays

1578 - 065000.DAT-ant_under_test
 1578 - 065003.DAT-ant_under_test

Cal. file

065000.DAT
 065003.DAT

units

dBi
 dBi

Beam Peak

Deg dB
 -0.02 42.08

File: See Legend

2.4 Meter 2-Pc. C-Band-Circular Polarization
Series 1251

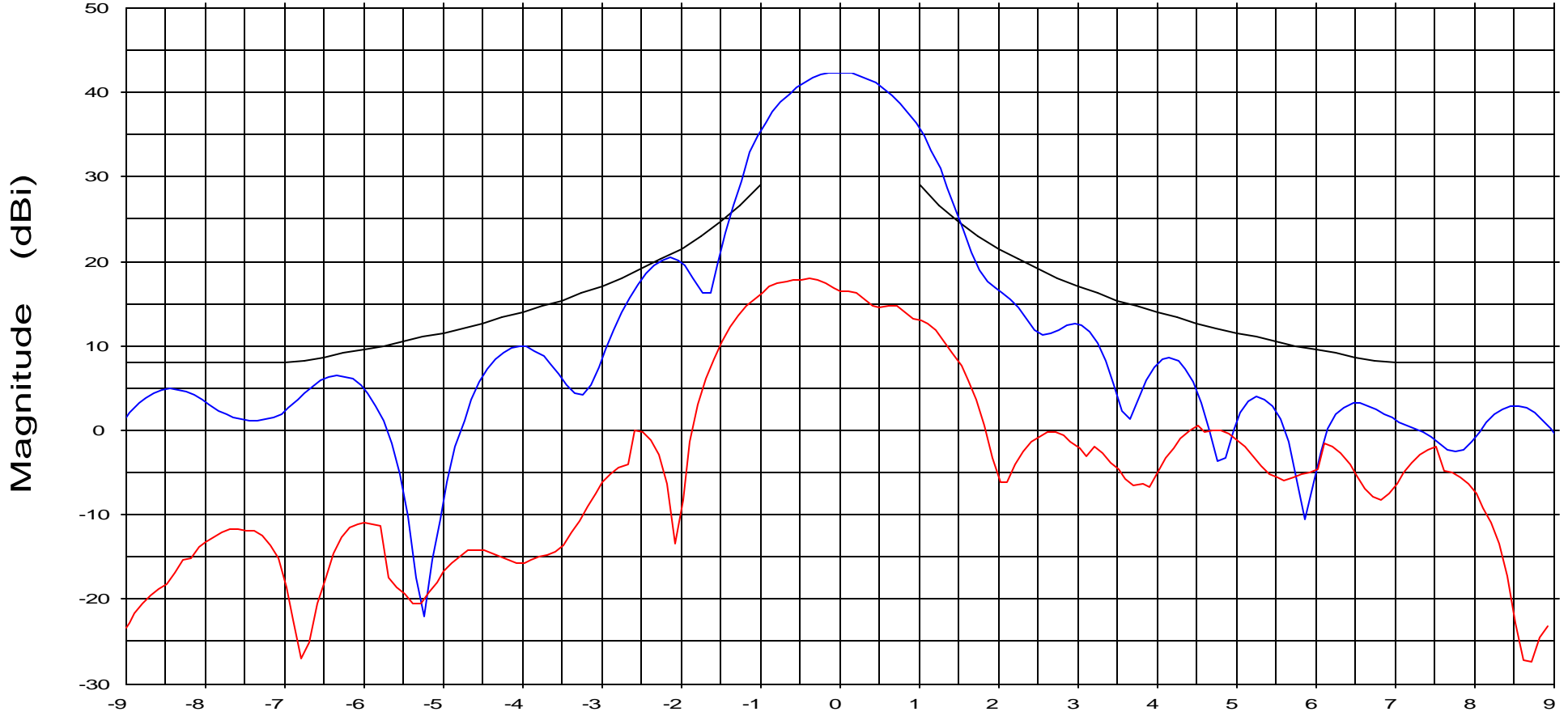
Frequency : 6.425 GHz

Operator: Ken Poovey

Channel: test

Tx pol: RHCP

Rx pol: RHCP



Sidelobe Envelope: $29 - 25 \log(\theta) \sim 1.0$ to 7 Deg
 $+8$ dBi ~ 7 to 9.2 Deg | $32 - 25 \log(\theta) \sim 9.2$ to 48 Deg
 -10 dBi ~ 48 to 180 Deg

Overlays

1578 - 065000.DAT-ant_under_test
 1578 - 065003.DAT-ant_under_test

Cal. file

065000.DAT
 065003.DAT

units

dBi
 dBi

Beam Peak

Deg dB
 0.00 42.40

File: See Legend

2.4 Meter 2-Pc. C-Band-Circular Polarization
Series 1251

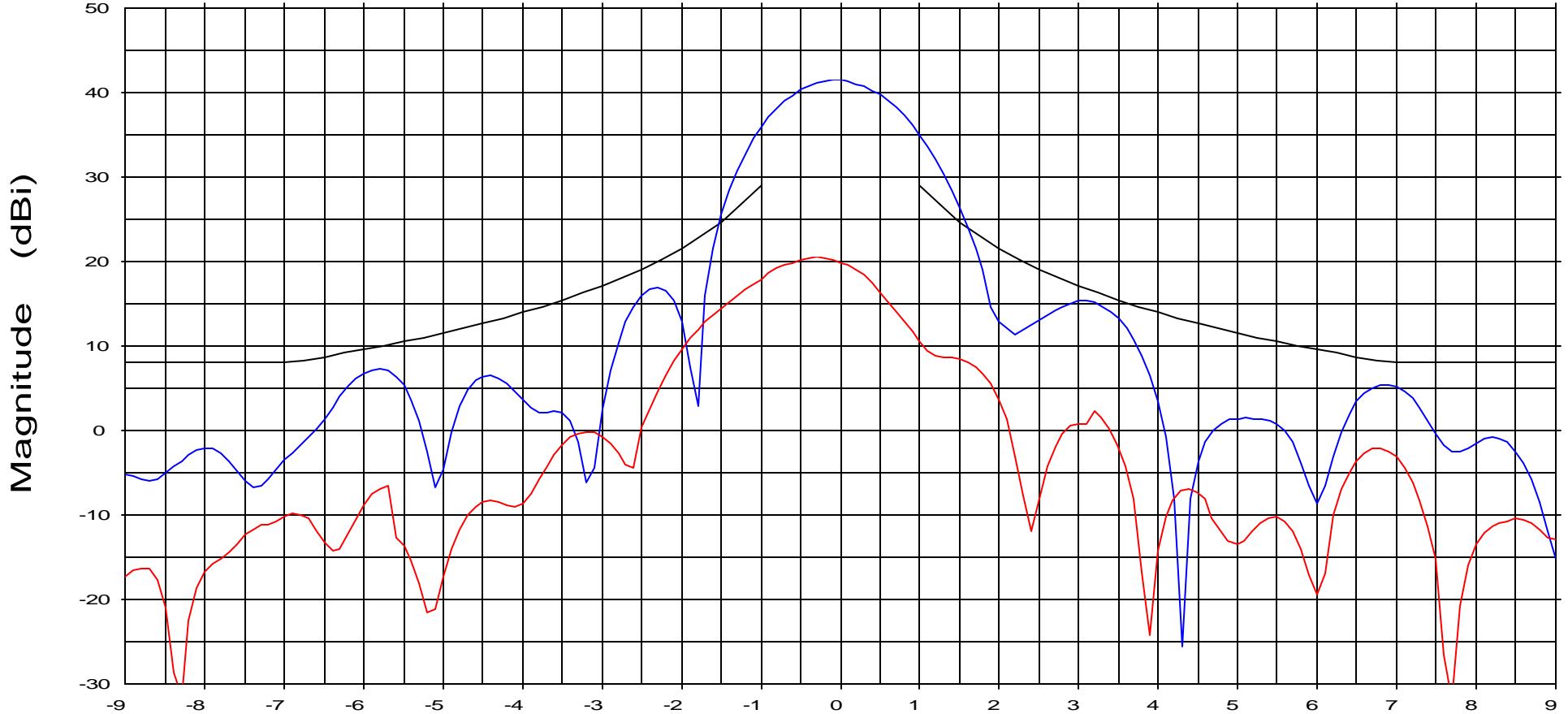
Frequency : 5.850 GHz

Operator: Ken Poovey

Channel: test

Tx pol: RHCP

Rx pol: RHCP



Sidelobe Envelope: $29 - 25 \log(\theta) \sim 1.0$ to 7 Deg
 $+8$ dBi ~ 7 to 9.2 Deg | $32 - 25 \log(\theta) \sim 9.2$ to 48 Deg
 -10 dBi ~ 48 to 180 Deg

Overlays
 1578 - 065001.DAT-ant_under_test
 1578 - 065003.DAT-ant_under_test

Cal. file
 065001.DAT
 065003.DAT

units
 dBi
 dBi

Elevation (Deg)

Beam Peak
 Deg dB
 -0.04 41.40

File: See Legend

2.4 Meter 2-Pc. C-Band-Circular Polarization
Series 1251

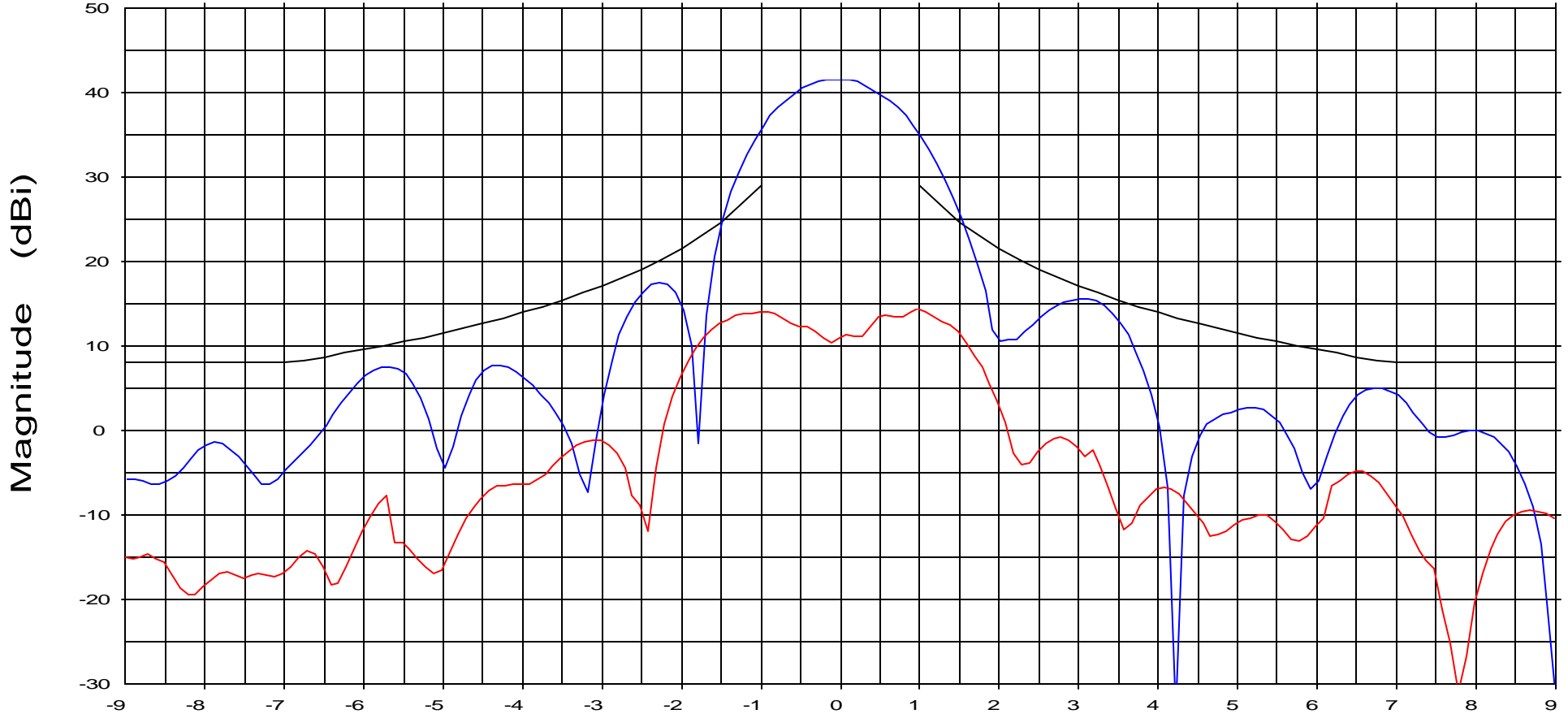
Frequency : 5.925 GHz

Operator: Ken Poovey

Channel: test

Tx pol: RHCP

Rx pol: RHCP



Sidelobe Envelope: $29 - 25 \log(\theta) \sim 1.0$ to 7 Deg
 $+8$ dBi ~ 7 to 9.2 Deg | $32 - 25 \log(\theta) \sim 9.2$ to 48 Deg
 -10 dBi ~ 48 to 180 Deg

Overlays
 1578 - 065001.DAT-ant_under_test
 1578 - 065003.DAT-ant_under_test

Cal. file
 065001.DAT
 065003.DAT

units
 dBi
 dBi

Elevation (Deg)

Beam Peak
 Deg dB
 -0.03 41.52

File: See Legend

2.4 Meter 2-Pc. C-Band-Circular Polarization
Series 1251

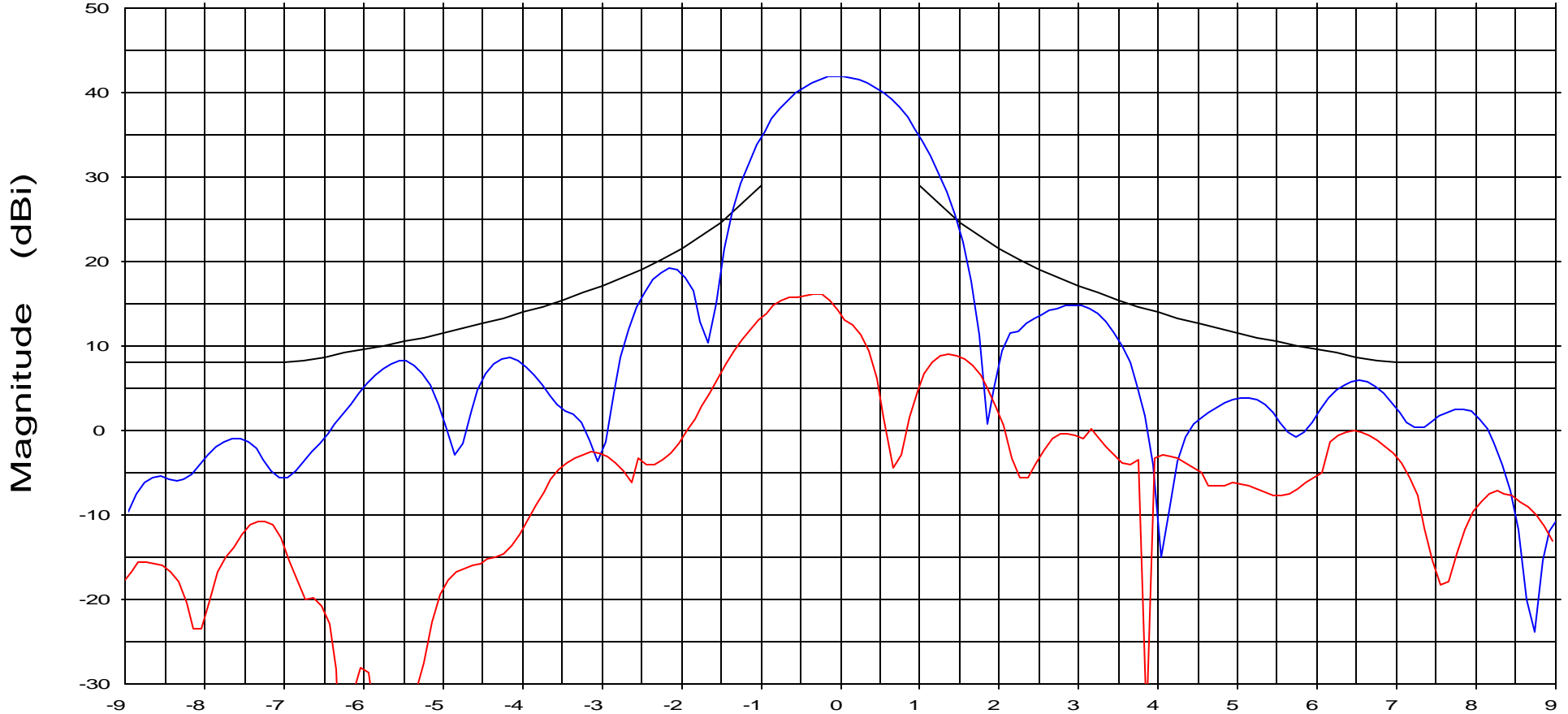
Frequency : 6.138 GHz

Operator: Ken Poovey

Channel: test

Tx pol: RHCP

Rx pol: RHCP



Sidelobe Envelope: $29 - 25 \log(\theta) \sim 1.0$ to 7 Deg
 $+8$ dBi ~ 7 to 9.2 Deg | $32 - 25 \log(\theta) \sim 9.2$ to 48 Deg
 -10 dBi ~ 48 to 180 Deg

Overlays
 1578 - 065001.DAT-ant_under_test
 1578 - 065003.DAT-ant_under_test

Cal. file
 065001.DAT
 065003.DAT

units
 dBi
 dBi

Elevation (Deg)

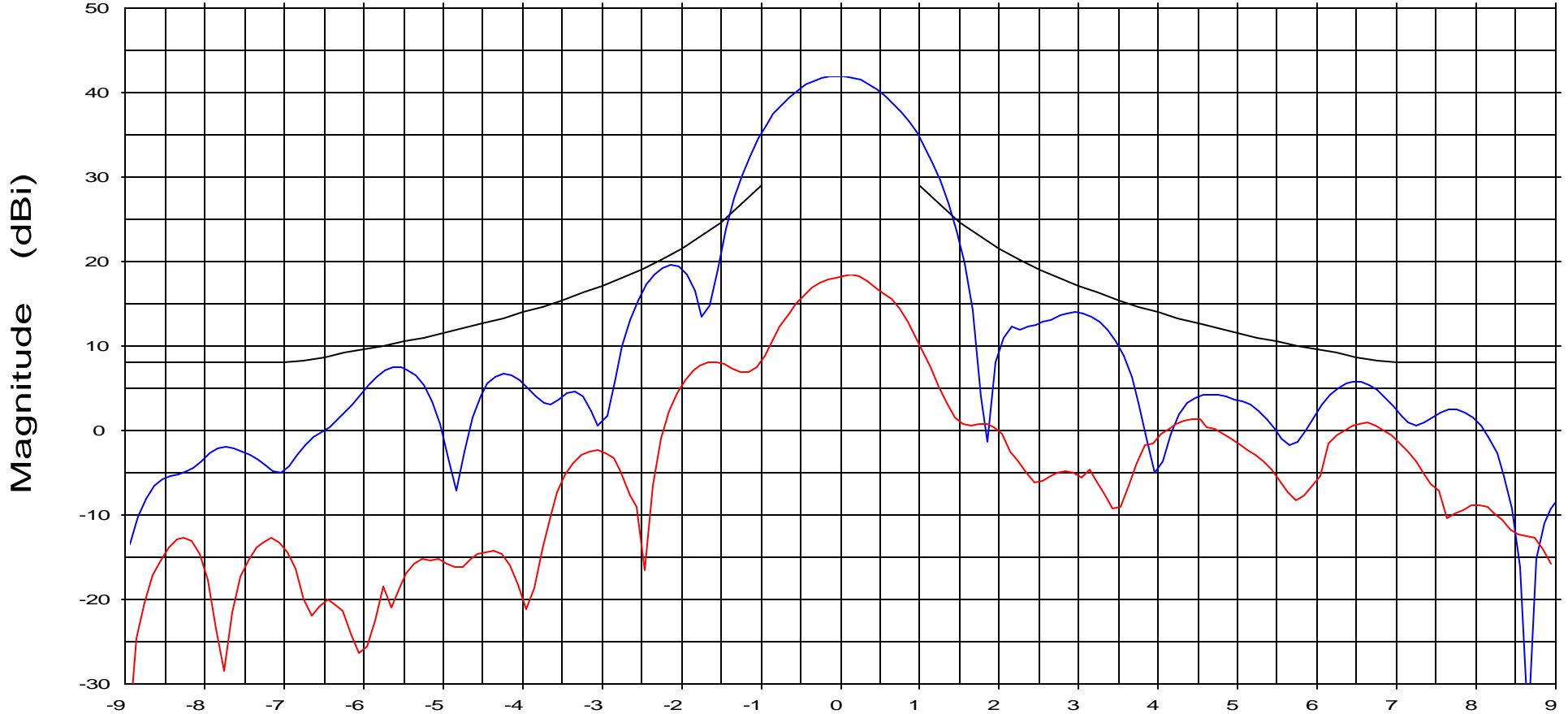
Beam Peak
 Deg dB
 -0.01 41.81

Operator: Ken Poovey

Channel: test

Tx pol: RHCP

Rx pol: RHCP



Sidelobe Envelope: $29 - 25 \log(\theta) \sim 1.0$ to 7 Deg
 $+8$ dBi ~ 7 to 9.2 Deg | $32 - 25 \log(\theta) \sim 9.2$ to 48 Deg
 -10 dBi ~ 48 to 180 Deg

Overlays
 1578 - 065001.DAT-ant_under_test
 1578 - 065003.DAT-ant_under_test

Cal. file
 065001.DAT
 065003.DAT

units
 dBi
 dBi

Elevation (Deg)

Beam Peak
 Deg dB
 -0.03 41.90

File: See Legend

2.4 Meter 2-Pc. C-Band-Circular Polarization
Series 1251

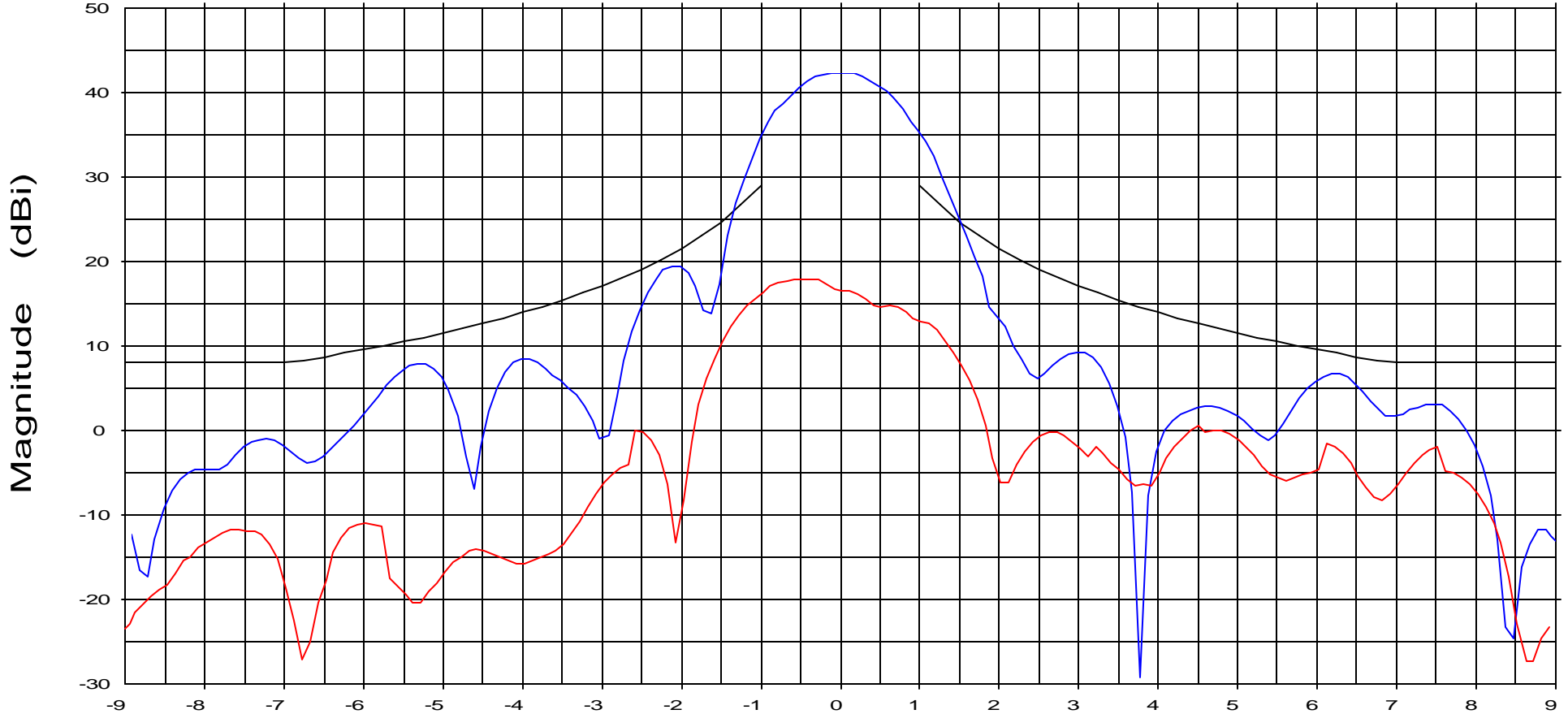
Frequency : 6.425 GHz

Operator: Ken Poovey

Channel: test

Tx pol: RHCP

Rx pol: RHCP



Sidelobe Envelope: $29 - 25 \log(\theta) \sim 1.0$ to 7 Deg
 $+8$ dBi ~ 7 to 9.2 Deg | $32 - 25 \log(\theta) \sim 9.2$ to 48 Deg
 -10 dBi ~ 48 to 180 Deg

Elevation (Deg)

Overlays
 1578 - 065001.DAT-ant_under_test
 1578 - 065003.DAT-ant_under_test

Cal. file
 065001.DAT
 065003.DAT

units
 dBi
 dBi

Beam Peak
 Deg dB
 0.01 42.32

File: See Legend

2.4 Meter 2-Pc. C-Band-Circular Polarization
Series 1251

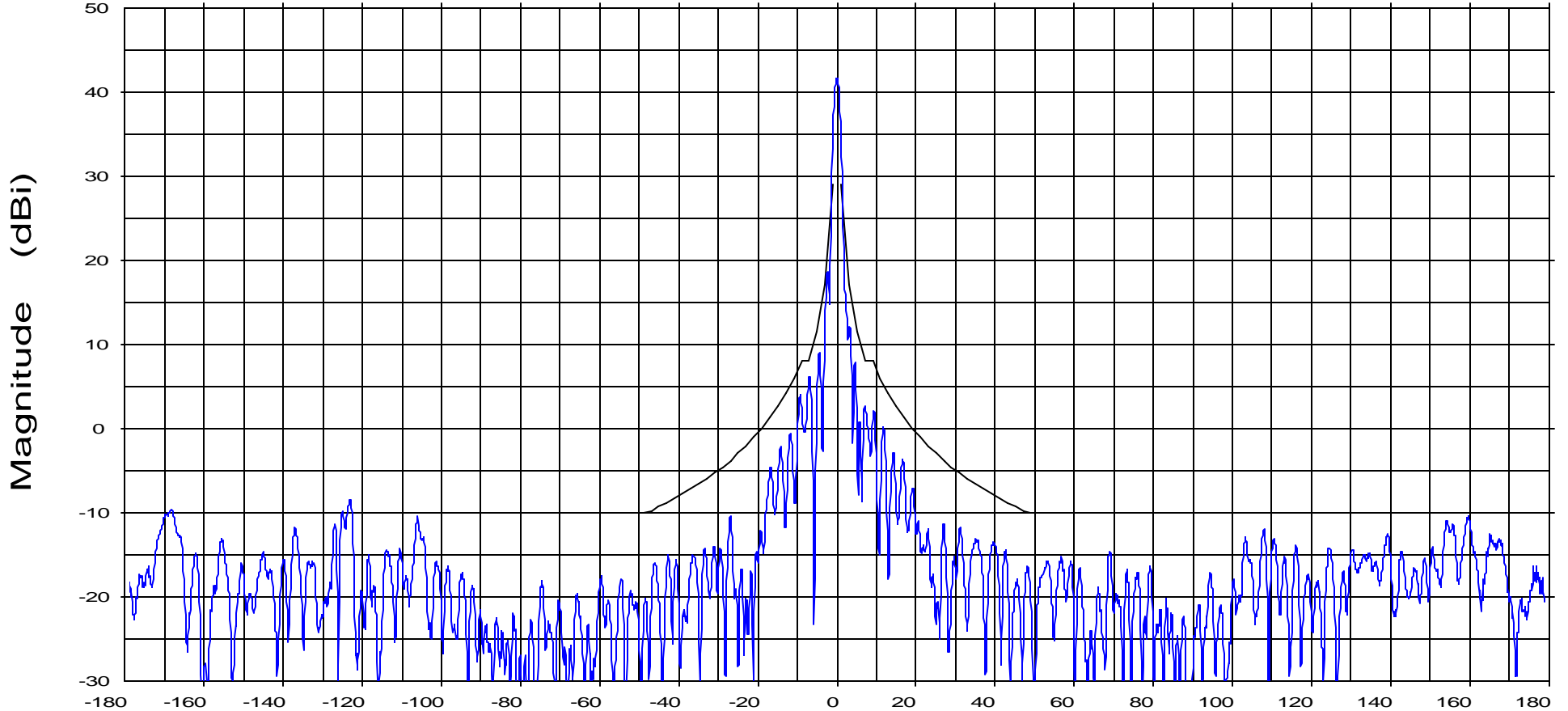
Frequency : 5.850 GHz

Operator: Ken Poovey

Channel: test

Tx pol: RHCP

Rx pol: RHCP



Sidelobe Envelope: $29 - 25 \log(\theta) \sim 1.0$ to 7 Deg
 $+8$ dBi ~ 7 to 9.2 Deg | $32 - 25 \log(\theta) \sim 9.2$ to 48 Deg
 -10 dBi ~ 48 to 180 Deg

Overlays
1578 - 065000.DAT-ant_under_test

Cal. file
065000.DAT

units
dBi

Azimuth (Deg)

Beam Peak
Deg dB
-0.04 41.60

File: See Legend

2.4 Meter 2-Pc. C-Band-Circular Polarization
Series 1251

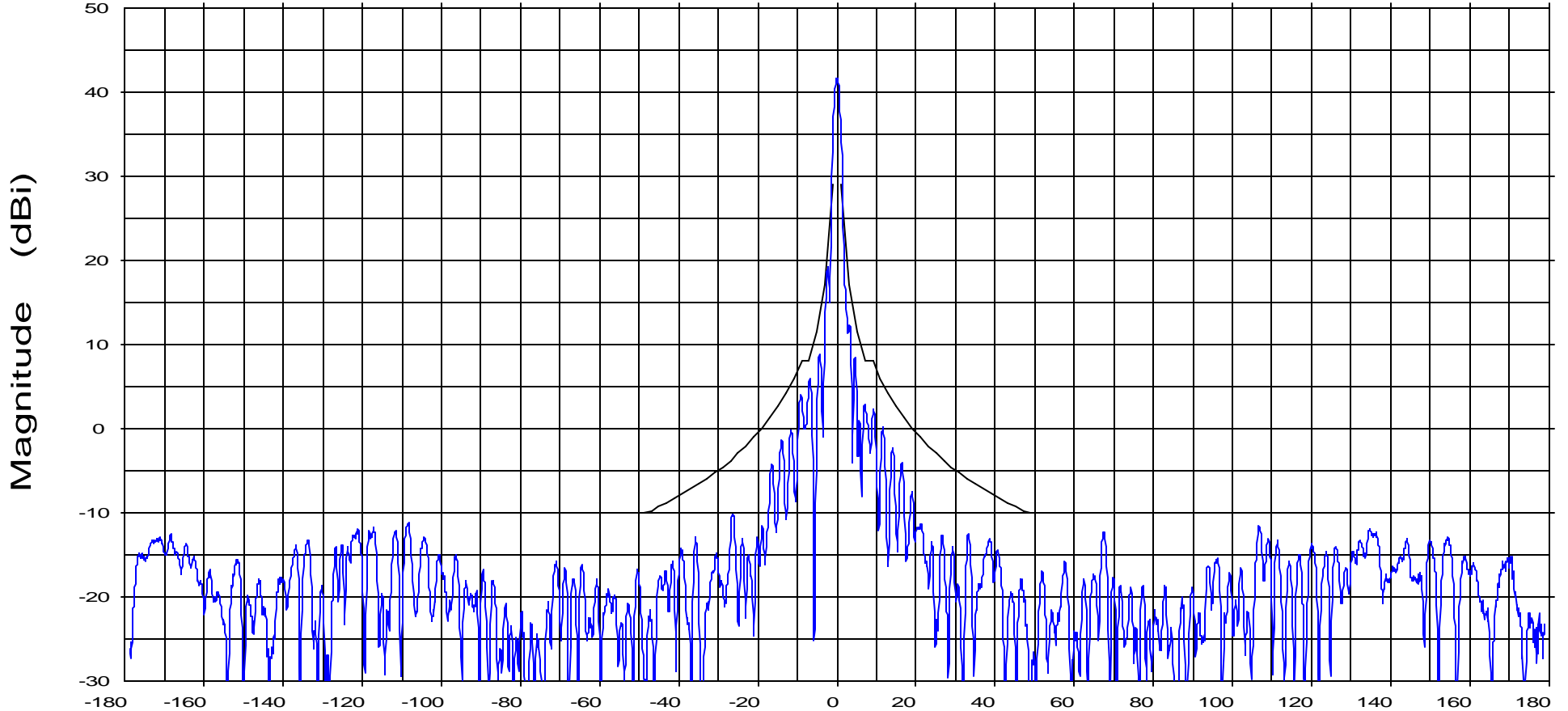
Frequency : 5.925 GHz

Operator: Ken Poovey

Channel: test

Tx pol: RHCP

Rx pol: RHCP



Sidelobe Envelope: $29 - 25 \log(\theta) \sim 1.0$ to 7 Deg
 $+8$ dBi ~ 7 to 9.2 Deg | $32 - 25 \log(\theta) \sim 9.2$ to 48 Deg
 -10 dBi ~ 48 to 180 Deg

Overlays
 1578 - 065000.DAT-ant_under_test

Cal. file
 065000.DAT

units
 dBi

Azimuth (Deg)

Beam Peak
 Deg dB
 -0.00 41.70

File: See Legend

2.4 Meter 2-Pc. C-Band-Circular Polarization
Series 1251

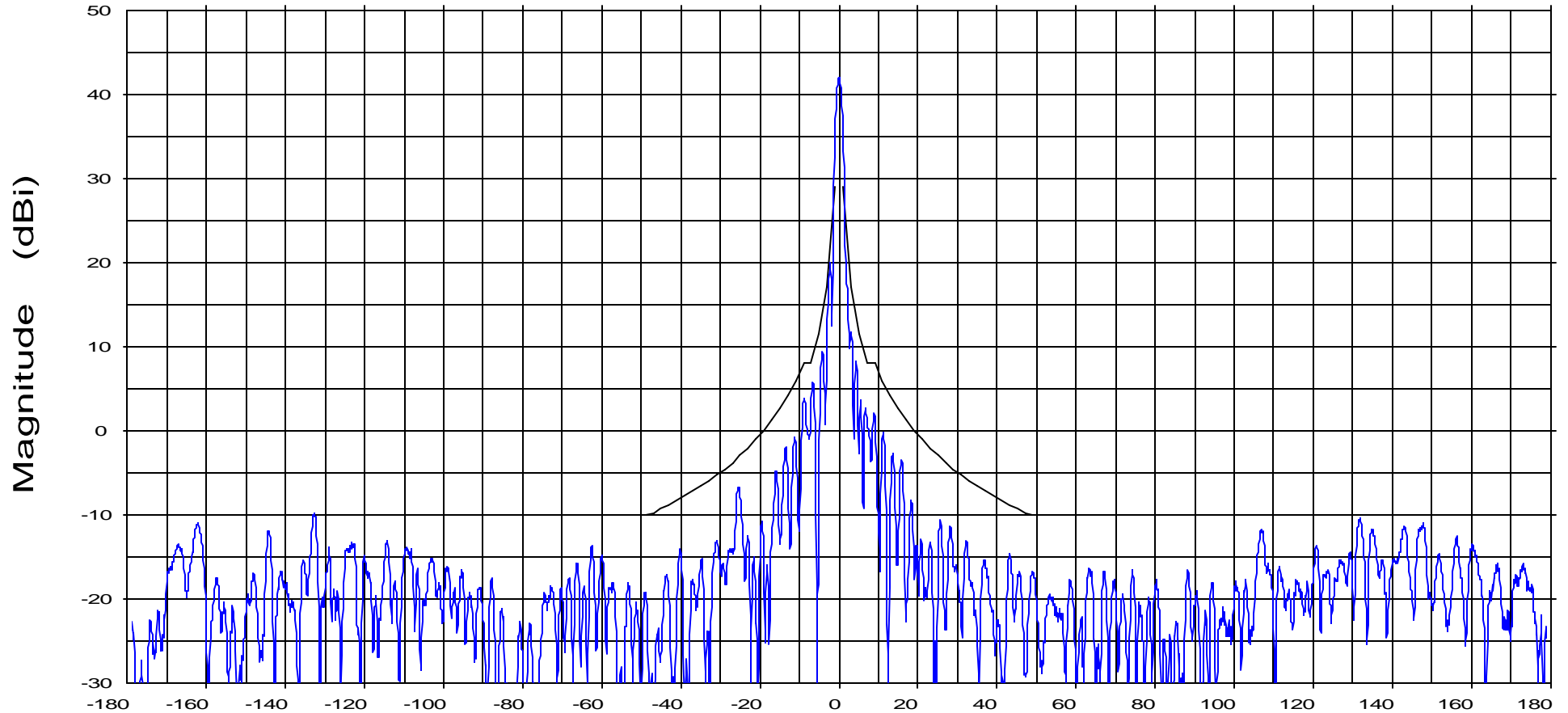
Frequency : 6.138 GHz

Operator: Ken Poovey

Channel: test

Tx pol: RHCP

Rx pol: RHCP



Sidelobe Envelope: $29 - 25 \log(\theta) \sim 1.0$ to 7 Deg
 $+8$ dBi ~ 7 to 9.2 Deg | $32 - 25 \log(\theta) \sim 9.2$ to 48 Deg
 -10 dBi ~ 48 to 180 Deg

Azimuth (Deg)

Overlays
1578 - 065000.DAT-ant_under_test

Cal. file
065000.DAT

units
dBi

Beam Peak
Deg dB
-0.01 41.95

File: See Legend

2.4 Meter 2-Pc. C-Band-Circular Polarization
Series 1251

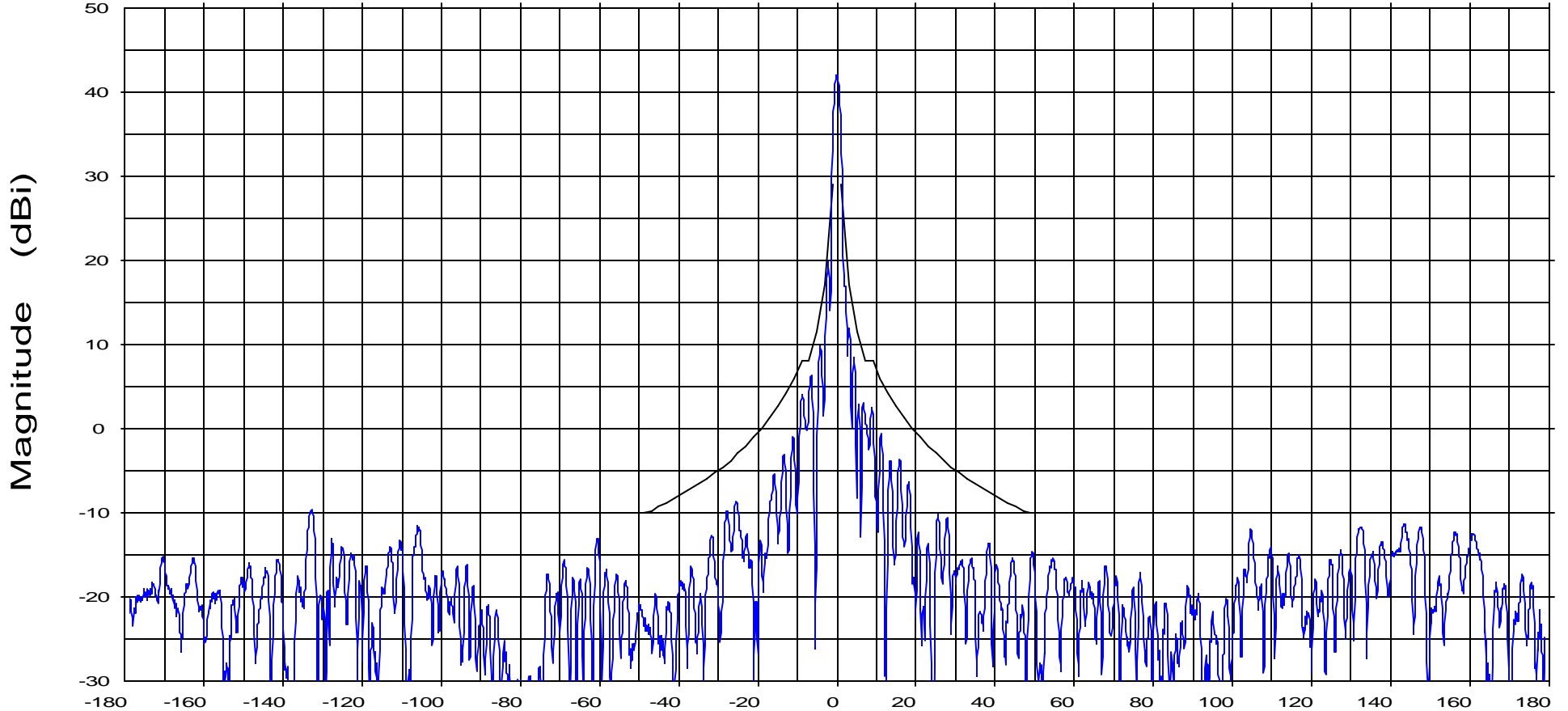
Frequency : 6.175 GHz

Operator: Ken Poovey

Channel: test

Tx pol: RHCP

Rx pol: RHCP



Sidelobe Envelope: $29 - 25 \log(\theta) \sim 1.0$ to 7 Deg
 $+8$ dBi ~ 7 to 9.2 Deg | $32 - 25 \log(\theta) \sim 9.2$ to 48 Deg
 -10 dBi ~ 48 to 180 Deg

Azimuth (Deg)

Overlays
1578 - 065000.DAT-ant_under_test

Cal. file
065000.DAT

units
dBi

Beam Peak
Deg dB
-0.02 42.08

File: See Legend

2.4 Meter 2-Pc. C-Band-Circular Polarization
Series 1251

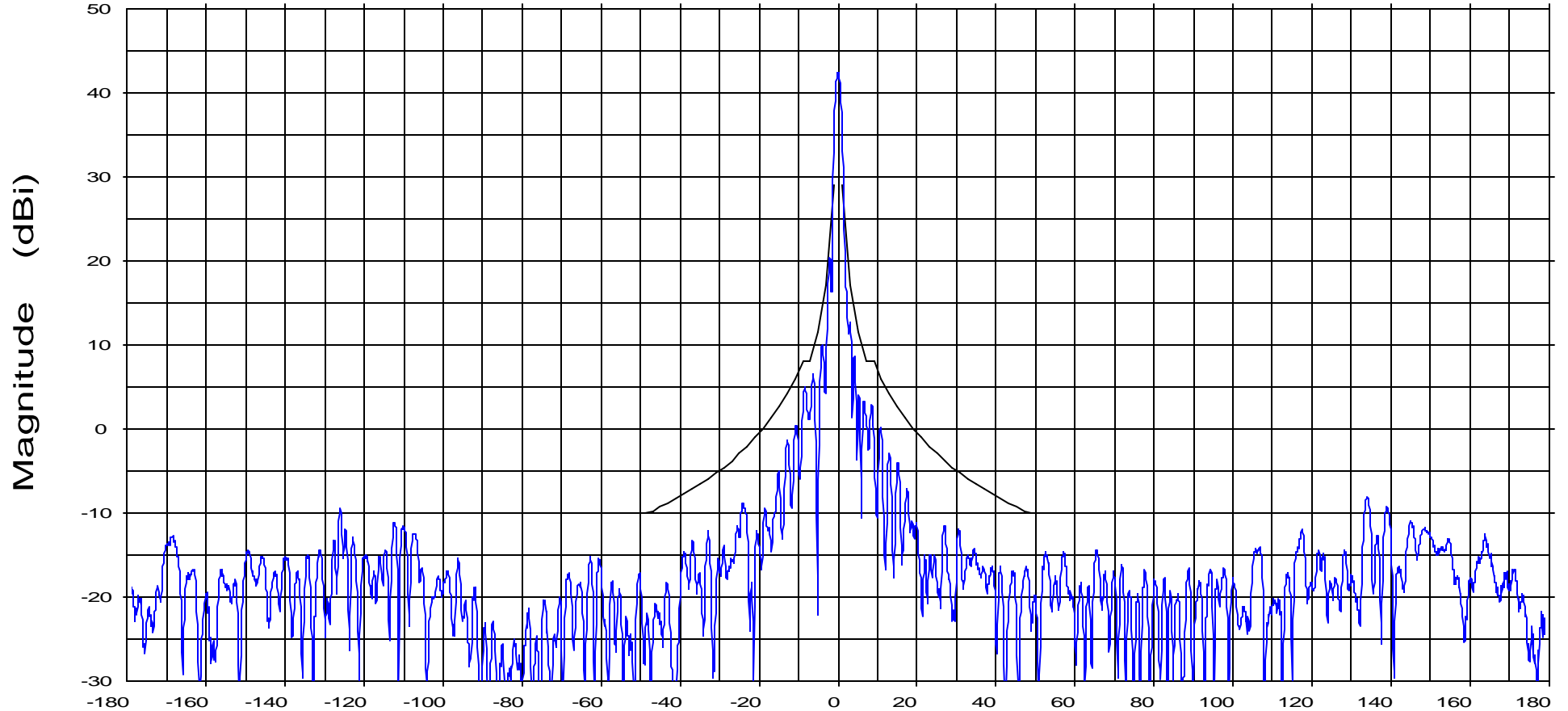
Frequency : 6.425 GHz

Operator: Ken Poovey

Channel: test

Tx pol: RHCP

Rx pol: RHCP



Sidelobe Envelope: $29 - 25 \log(\theta) \sim 1.0$ to 7 Deg
 $+8$ dBi ~ 7 to 9.2 Deg | $32 - 25 \log(\theta) \sim 9.2$ to 48 Deg
 -10 dBi ~ 48 to 180 Deg

Overlays
1578 - 065000.DAT-ant_under_test

Cal. file
065000.DAT

units
dBi

Azimuth (Deg)

Beam Peak
Deg dB
0.00 42.40

Section IV

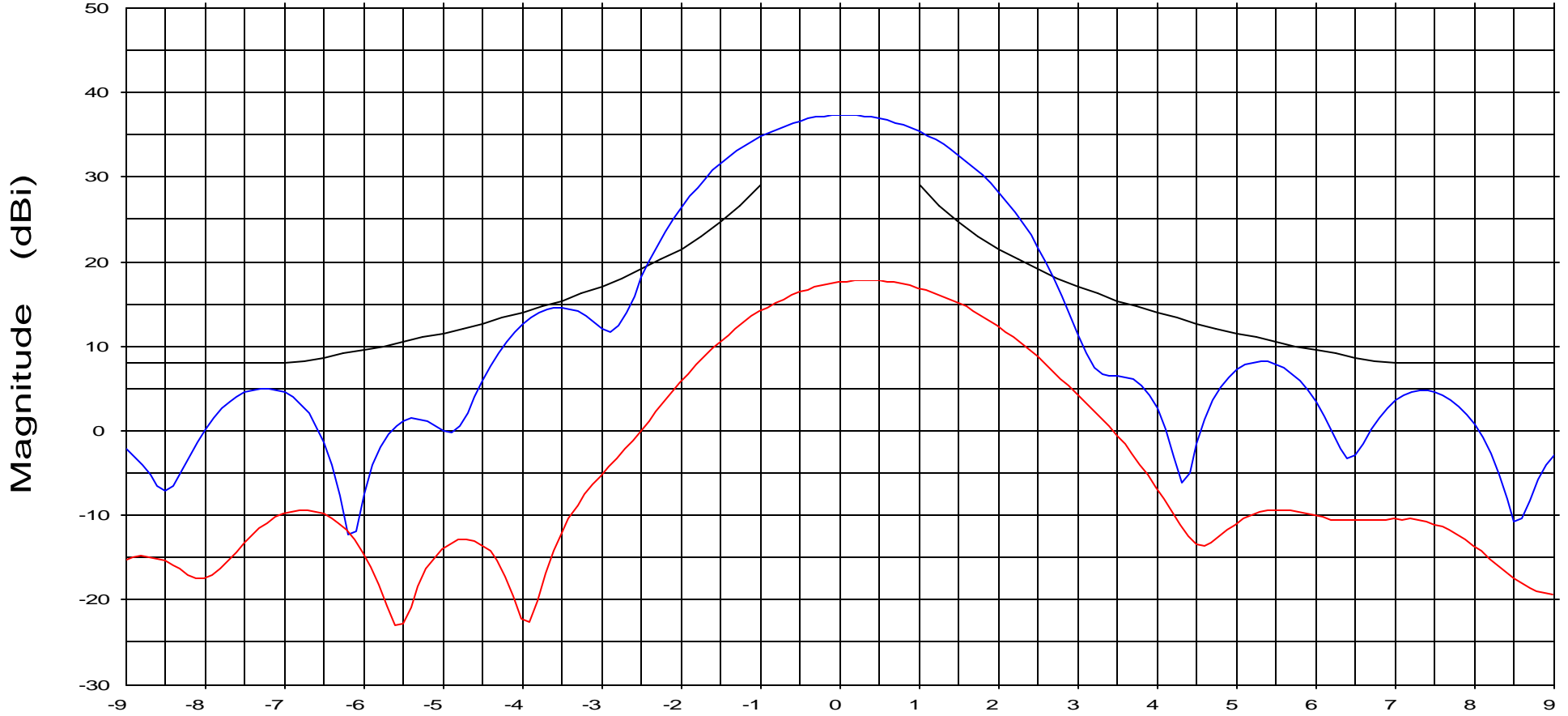


Operator: Ken Poovey

Channel: test

Tx pol: LHCP

Rx pol: LHCP



Sidelobe Envelope: $29 - 25\text{Log}(\text{Theta}) \sim 1.0$ to 7 Deg
 $+8$ dBi ~ 7 to 9.2 Deg | $32 - 25\text{Log}(\text{Theta}) \sim 9.2$ to 48 Deg
 -10 dBi ~ 48 to 180 Deg

Overlays

1578 - 065014.DAT-ant_under_test
 1578 - 065018.DAT-ant_under_test

Cal. file
 065014.DAT
 065018.DAT

units
 dBi
 dBi

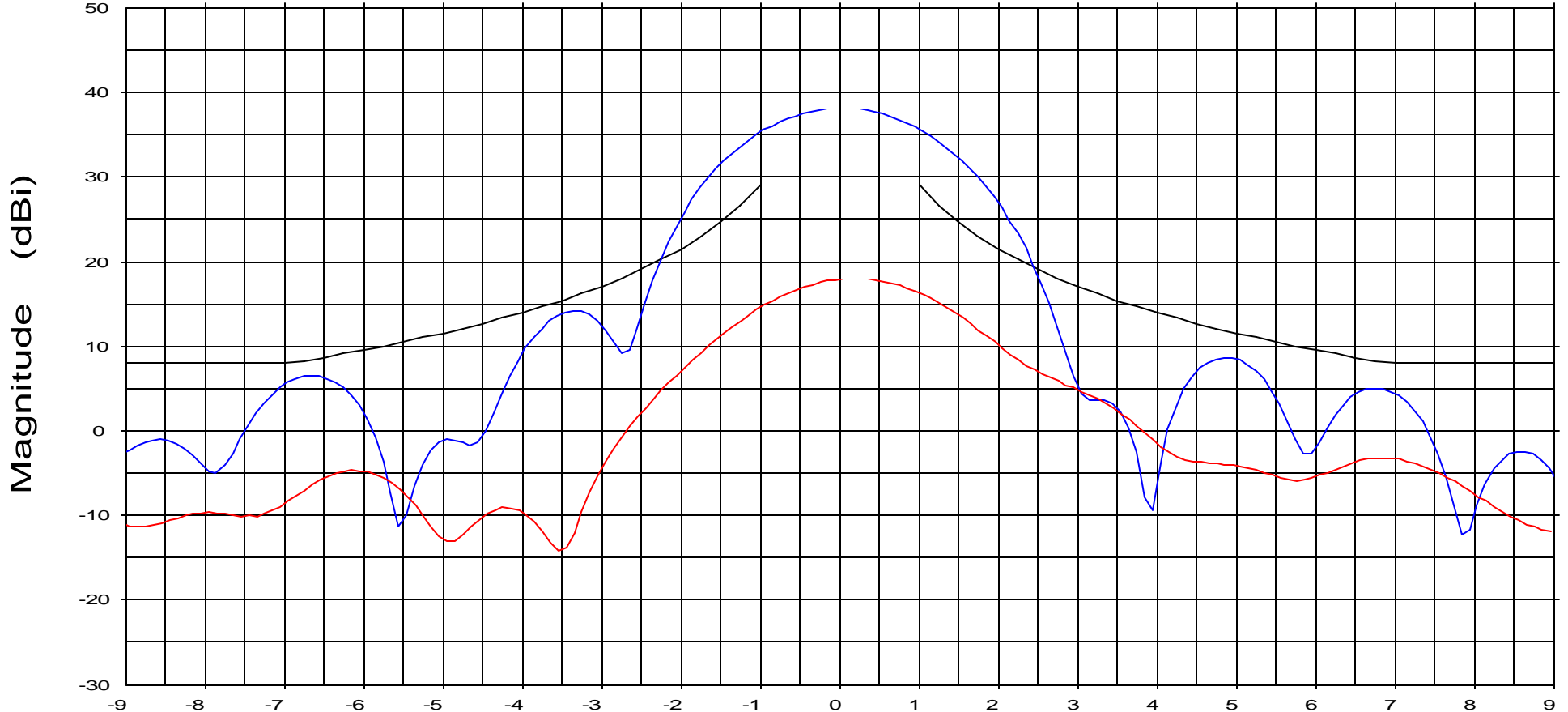
Beam Peak
 Deg dB
 0.07 37.35

Operator: Ken Poovey

Channel: test

Tx pol: LHCP

Rx pol: LHCP



Sidelobe Envelope: $29 - 25\text{Log}(\text{Theta}) \sim 1.0$ to 7 Deg
 $+8$ dBi ~ 7 to 9.2 Deg | $32 - 25\text{Log}(\text{Theta}) \sim 9.2$ to 48 Deg
 -10 dBi ~ 48 to 180 Deg

Overlays

1578 - 065014.DAT-ant_under_test
 1578 - 065017.DAT-ant_under_test

Cal. file
 065014.DAT
 065017.DAT

units
 dBi
 dBi

Azimuth (Deg)

Beam Peak
 Deg dB
 0.04 38.12

File: See Legend

2.4 Meter 2-Pc. C-Band-Circular Polarization
Series 1251

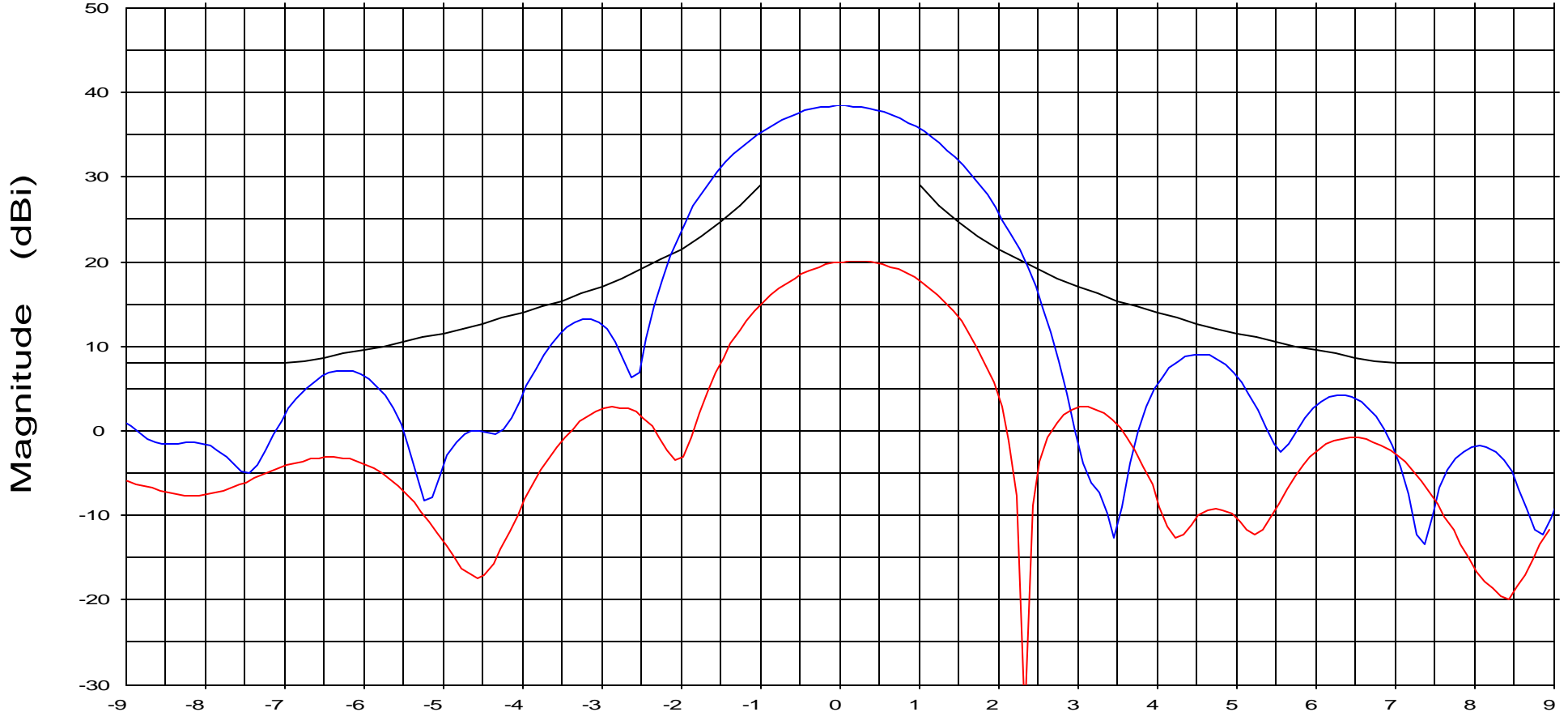
Frequency : 4.200 GHz

Operator: Ken Poovey

Channel: test

Tx pol: LHCP

Rx pol: LHCP



Sidelobe Envelope: $29 - 25 \log(\theta) \sim 1.0$ to 7 Deg
 $+8$ dBi ~ 7 to 9.2 Deg | $32 - 25 \log(\theta) \sim 9.2$ to 48 Deg
 -10 dBi ~ 48 to 180 Deg

Overlays

1578 - 065014.DAT-ant_under_test
 1578 - 065017.DAT-ant_under_test

Cal. file

065014.DAT
 065017.DAT

units

dBi
 dBi

Beam Peak

Deg dB
 0.04 38.43

File: See Legend

2.4 Meter 2-Pc. C-Band-Circular Polarization
Series 1251

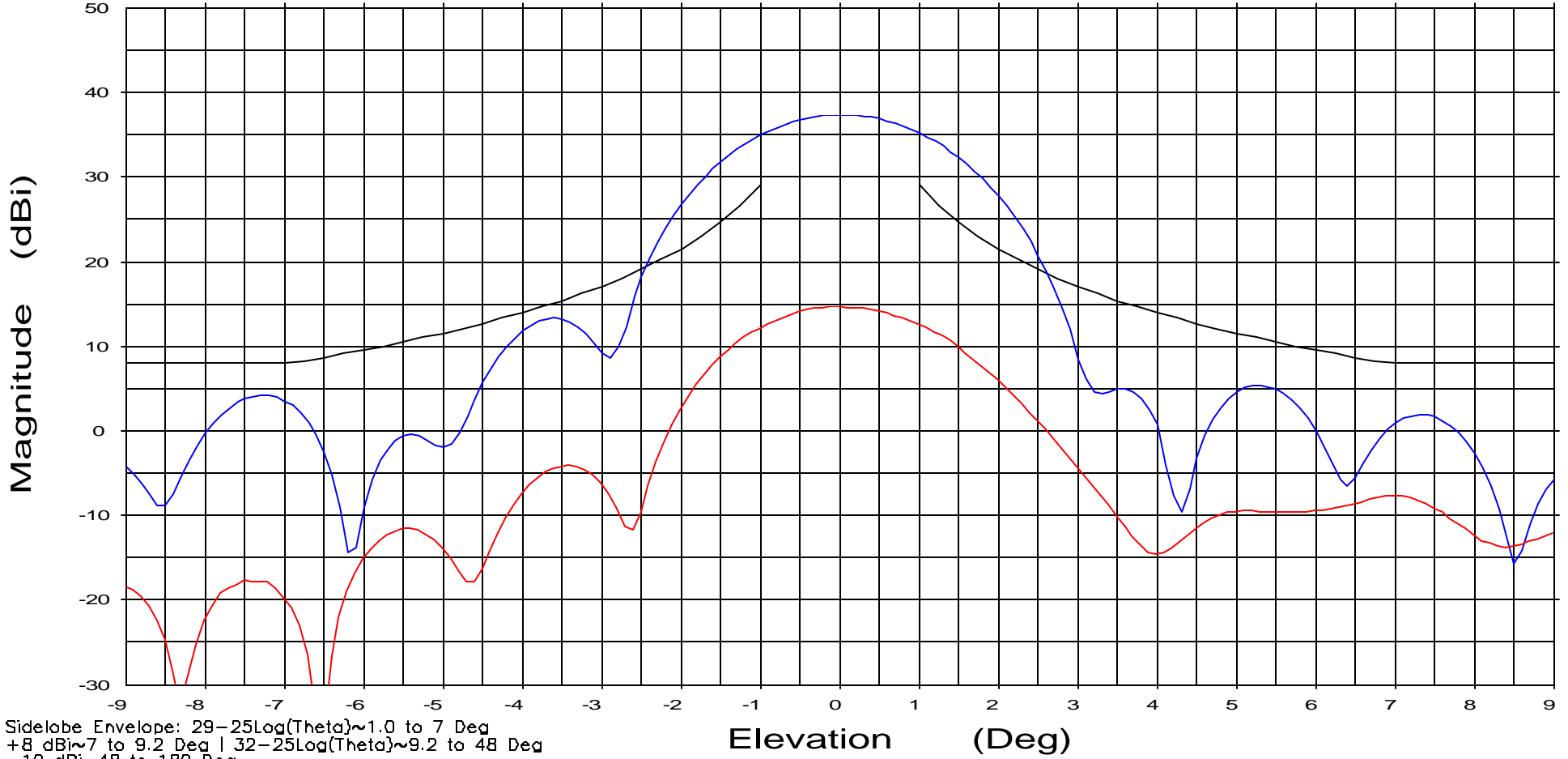
Frequency : 3.625 GHz

Operator: Ken Poovey

Channel: test

Tx pol: LHCP

Rx pol: LHCP



Overlays
 1578 - 065016.DAT-ant_under_test
 1578 - 065020.DAT-ant_under_test

Cal. file
 065016.DAT
 065020.DAT

units
 dBi
 dBi

Beam Peak
 Deg dB
 0.03 37.37

File: See Legend

2.4 Meter 2-Pc. C-Band-Circular Polarization
Series 1251

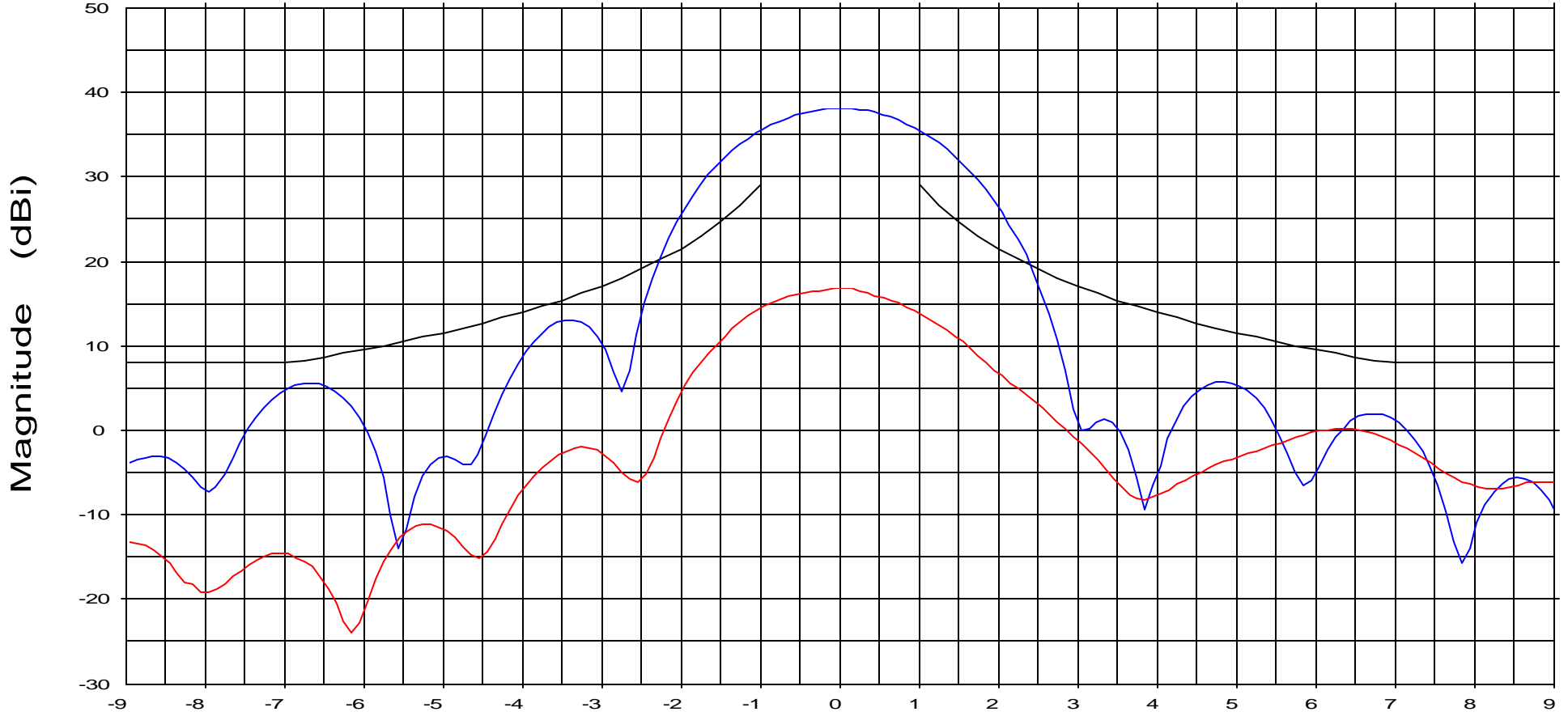
Frequency : 3.950 GHz

Operator: Ken Poovey

Channel: test

Tx pol: LHCP

Rx pol: LHCP



Sidelobe Envelope: $29 - 25\text{Log}(\text{Theta}) \sim 1.0$ to 7 Deg
 $+8$ dBi ~ 7 to 9.2 Deg | $32 - 25\text{Log}(\text{Theta}) \sim 9.2$ to 48 Deg
 -10 dBi ~ 48 to 180 Deg

Overlays

1578 - 065016.DAT-ant_under_test
 1578 - 065021.DAT-ant_under_test

Cal. file
 065016.DAT
 065021.DAT

units
 dBi
 dBi

Elevation (Deg)

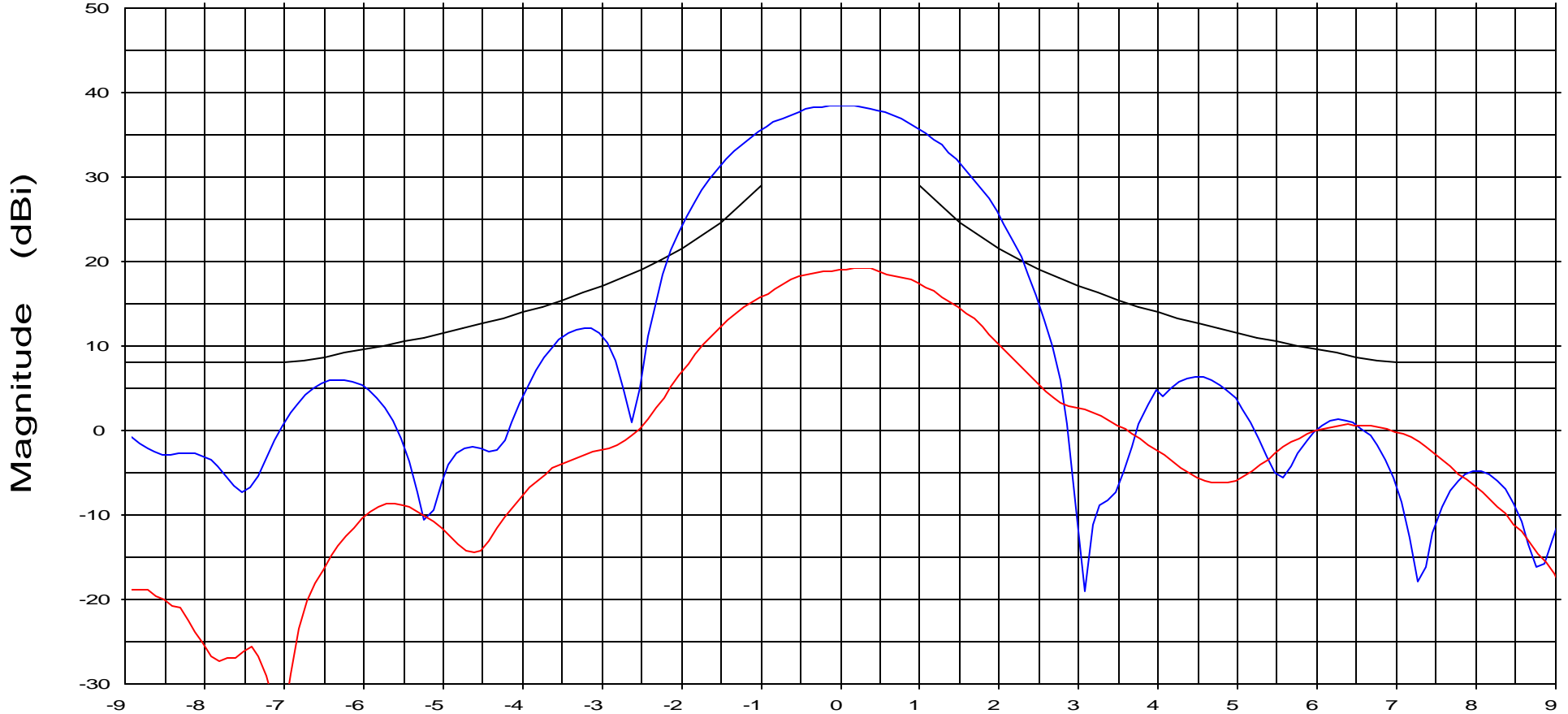
Beam Peak
 Deg dB
 0.01 38.13

Operator: Ken Poovey

Channel: test

Tx pol: LHCP

Rx pol: LHCP



Sidelobe Envelope: $29 - 25 \log(\theta) \sim 1.0$ to 7 Deg
 $+8$ dBi ~ 7 to 9.2 Deg | $32 - 25 \log(\theta) \sim 9.2$ to 48 Deg
 -10 dBi ~ 48 to 180 Deg

Elevation (Deg)

Overlays
 1578 - 065016.DAT-ant_under_test
 1578 - 065021.DAT-ant_under_test

Cal. file
 065016.DAT
 065021.DAT

units
 dBi
 dBi

Beam Peak
 Deg dB
 0.00 38.44

File: See Legend

2.4 Meter 2-Pc. C-Band-Circular Polarization
Series 1251

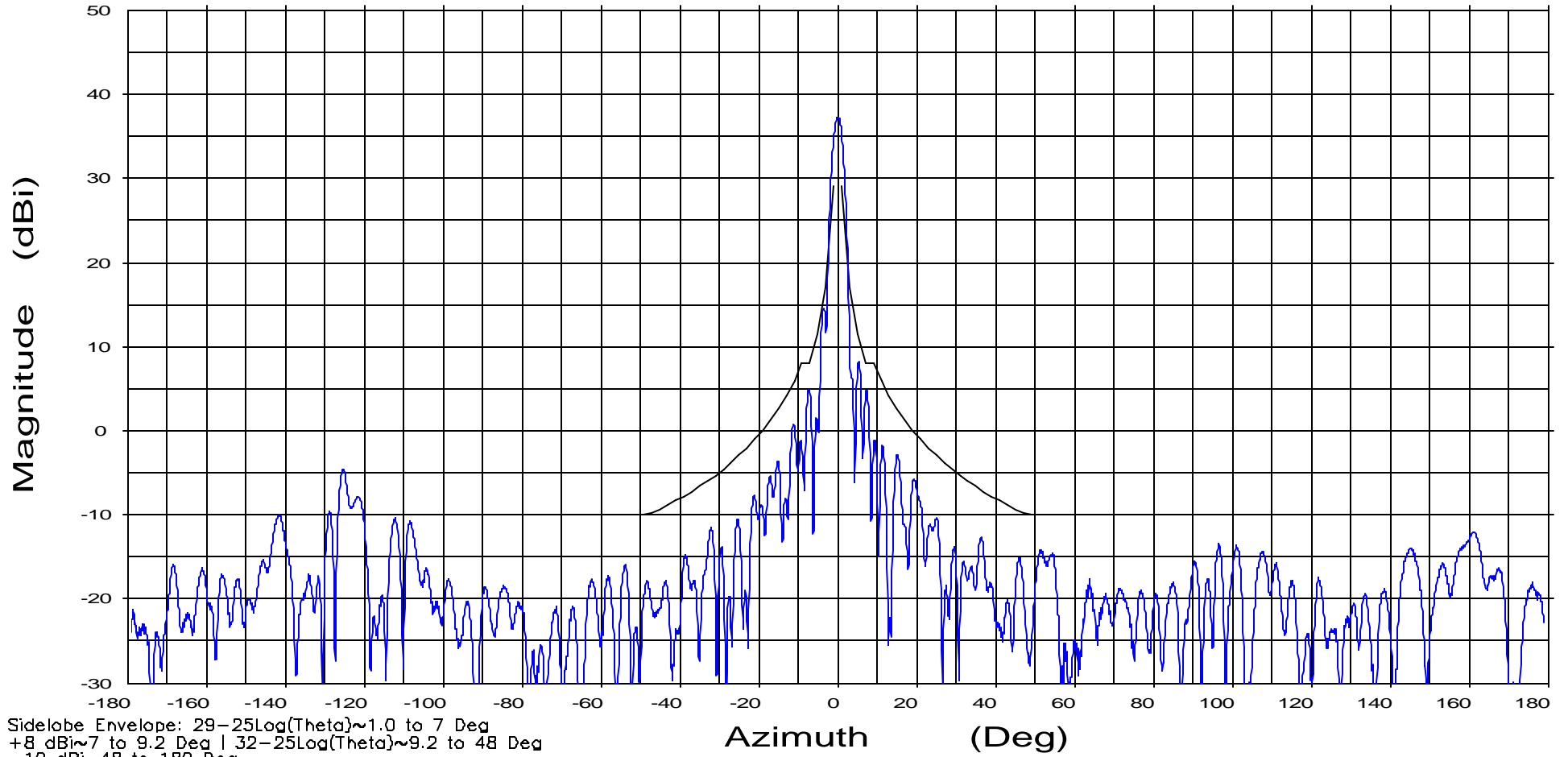
Frequency : 3.625 GHz

Operator: Ken Poovey

Channel: test

Tx pol: LHCP

Rx pol: LHCP



Sidelobe Envelope: $29 - 25 \log(\theta) \sim 1.0$ to 7 Deg
 $+8$ dBi ~ 7 to 9.2 Deg | $32 - 25 \log(\theta) \sim 9.2$ to 48 Deg
 -10 dBi ~ 48 to 180 Deg

Overlays
1578 - 065014.DAT-ant_under_test

Cal. file
065014.DAT

units
dBi

Beam Peak
Deg dB
0.07 37.35

File: See Legend

2.4 Meter 2-Pc. C-Band-Circular Polarization
Series 1251

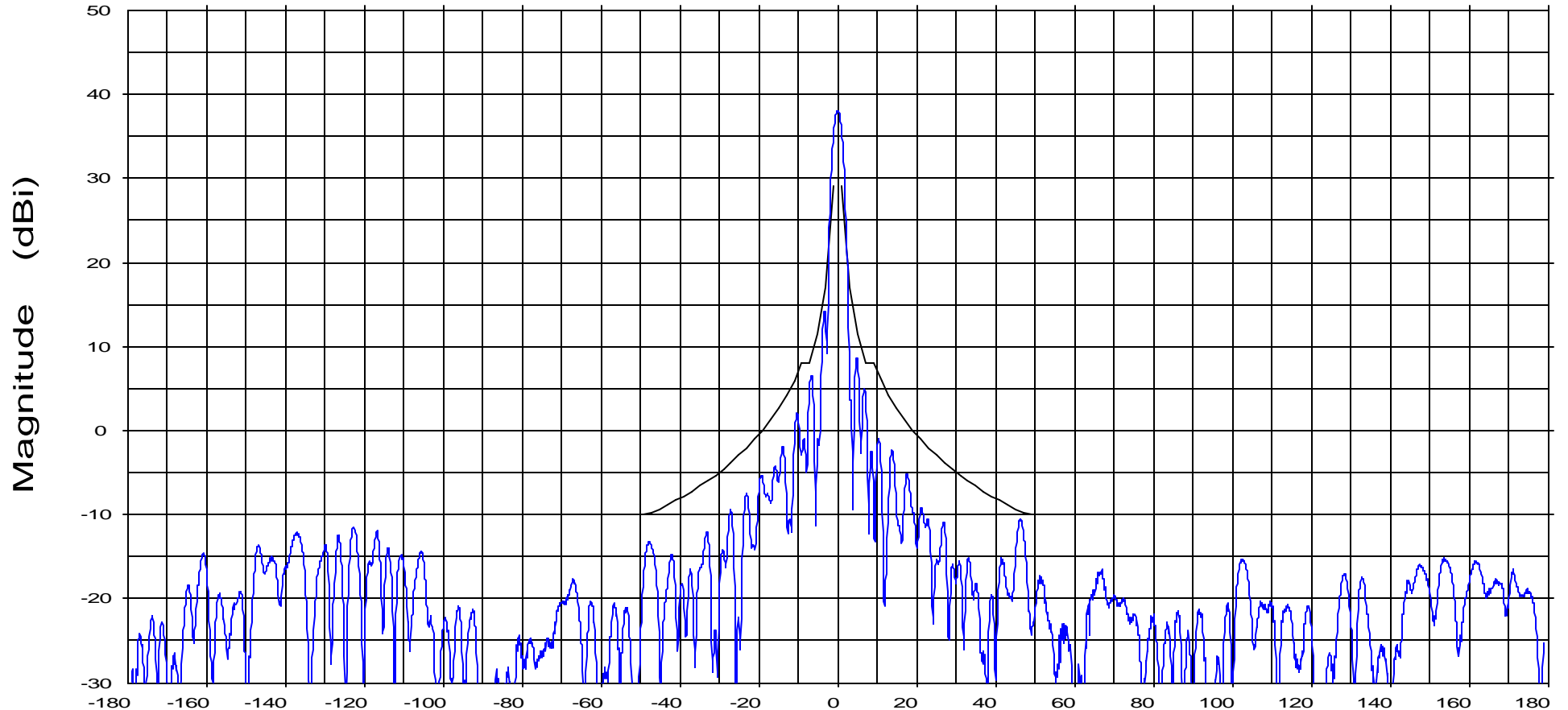
Frequency : 3.950 GHz

Operator: Ken Poovey

Channel: test

Tx pol: LHCP

Rx pol: LHCP



Sidelobe Envelope: $29 - 25\text{Log}(\text{Theta}) \sim 1.0$ to 7 Deg
 $+8$ dBi ~ 7 to 9.2 Deg | $32 - 25\text{Log}(\text{Theta}) \sim 9.2$ to 48 Deg
 -10 dBi ~ 48 to 180 Deg

Azimuth (Deg)

Overlays
1578 - 065014.DAT-ant_under_test

Cal. file
065014.DAT

units
dBi

Beam Peak
Deg dB
0.04 38.12

File: See Legend

2.4 Meter 2-Pc. C-Band-Circular Polarization
Series 1251

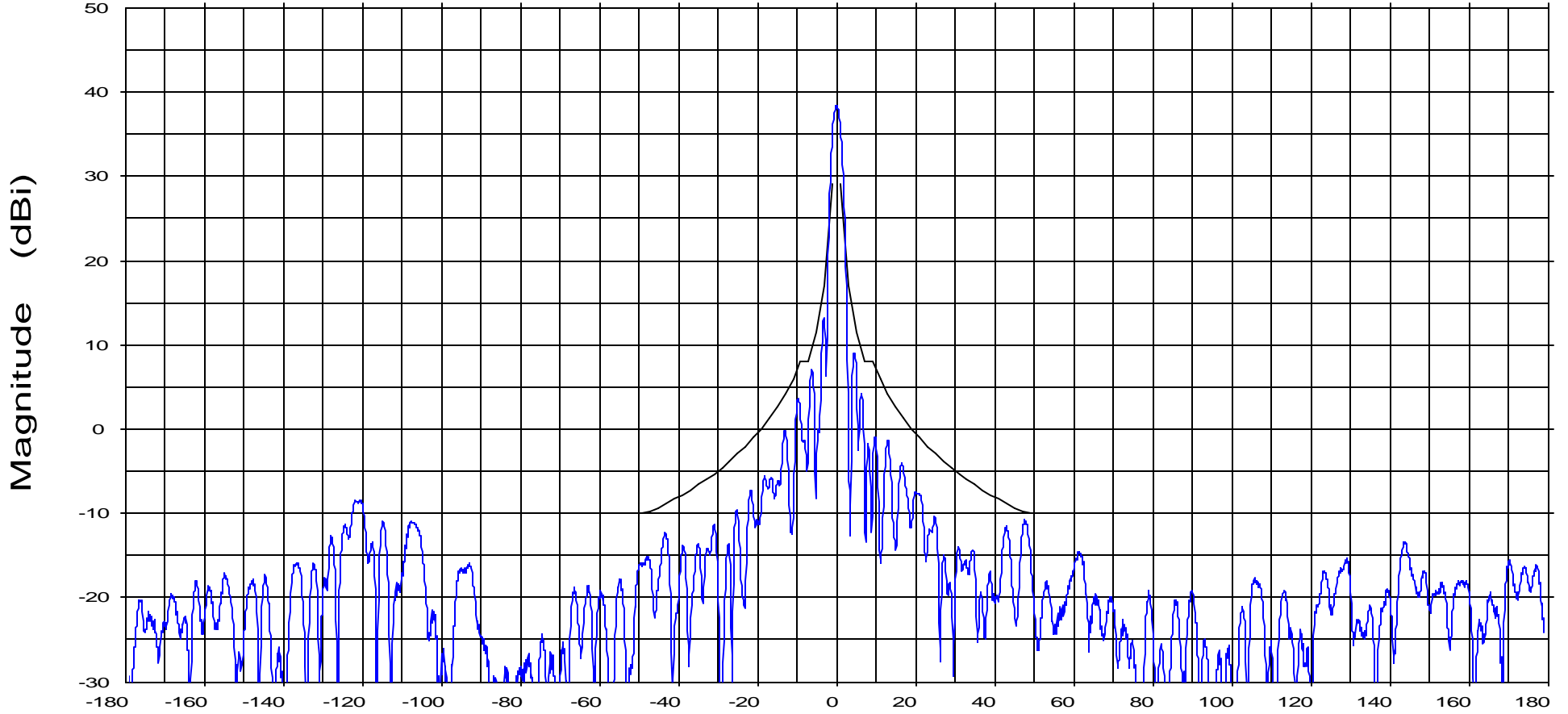
Frequency : 4.200 GHz

Operator: Ken Poovey

Channel: test

Tx pol: LHCP

Rx pol: LHCP



Sidelobe Envelope: $29 - 25 \log(\theta) \sim 1.0$ to 7 Deg
 $+8$ dBi ~ 7 to 9.2 Deg | $32 - 25 \log(\theta) \sim 9.2$ to 48 Deg
 -10 dBi ~ 48 to 180 Deg

Overlays
 1578 - 065014.DAT-ant_under_test

Cal. file
 065014.DAT

units
 dBi

Beam Peak
 Deg dB
 0.04 38.43

Section V



File: See Legend

2.4 Meter 2-Pc. C-Band-Circular Polarization
Series 1251

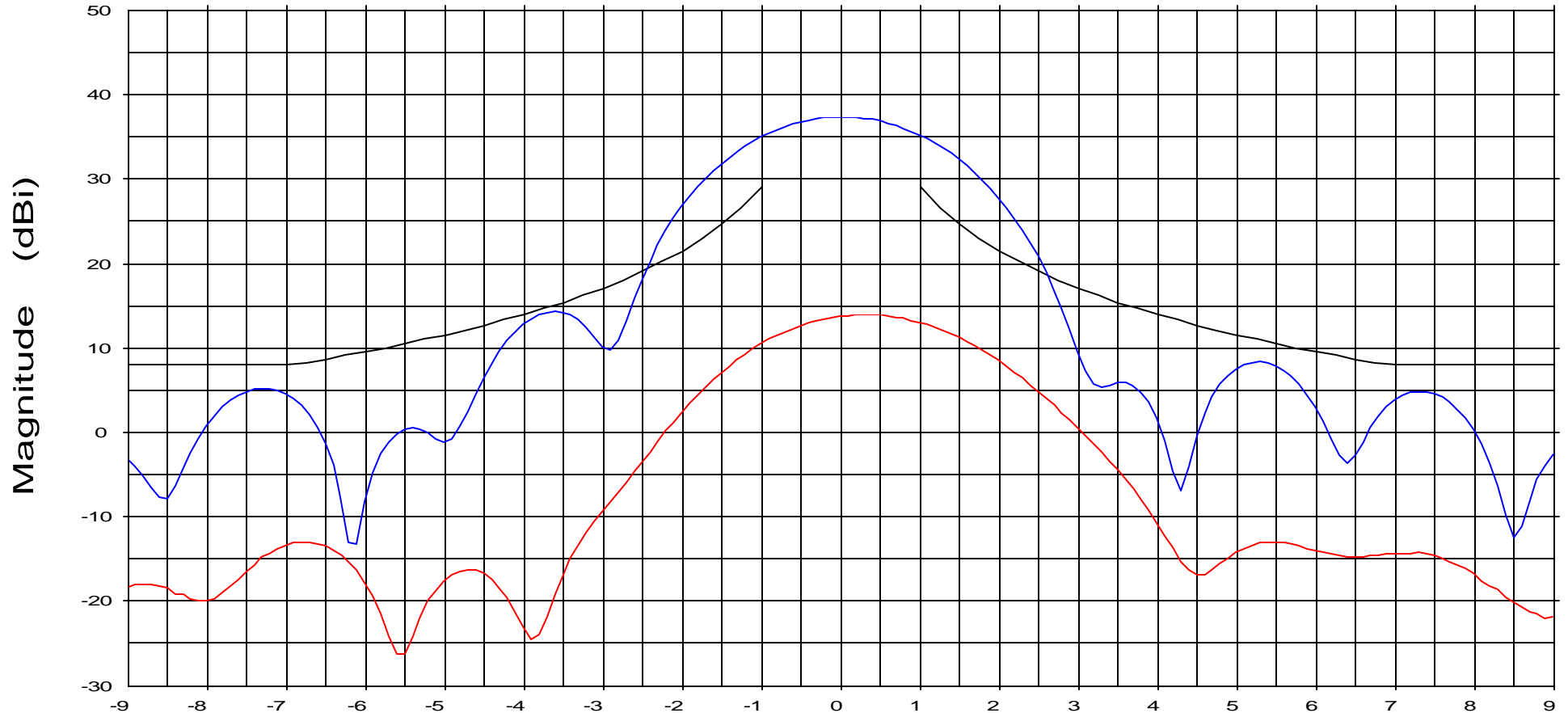
Frequency : 3.625 GHz

Operator: Ken Poovey

Channel: test

Tx pol: RHCP

Rx pol: RHCP



Sidelobe Envelope: $29 - 25 \log(\theta) \sim 1.0$ to 7 Deg
 $+8$ dBi ~ 7 to 9.2 Deg | $32 - 25 \log(\theta) \sim 9.2$ to 48 Deg
 -10 dBi ~ 48 to 180 Deg

Overlays
1578 - 065010.DAT-ant_under_test
1578 - 065022.DAT-ant_under_test

Cal. file
065010.DAT
065022.DAT

units
dBi
dBi

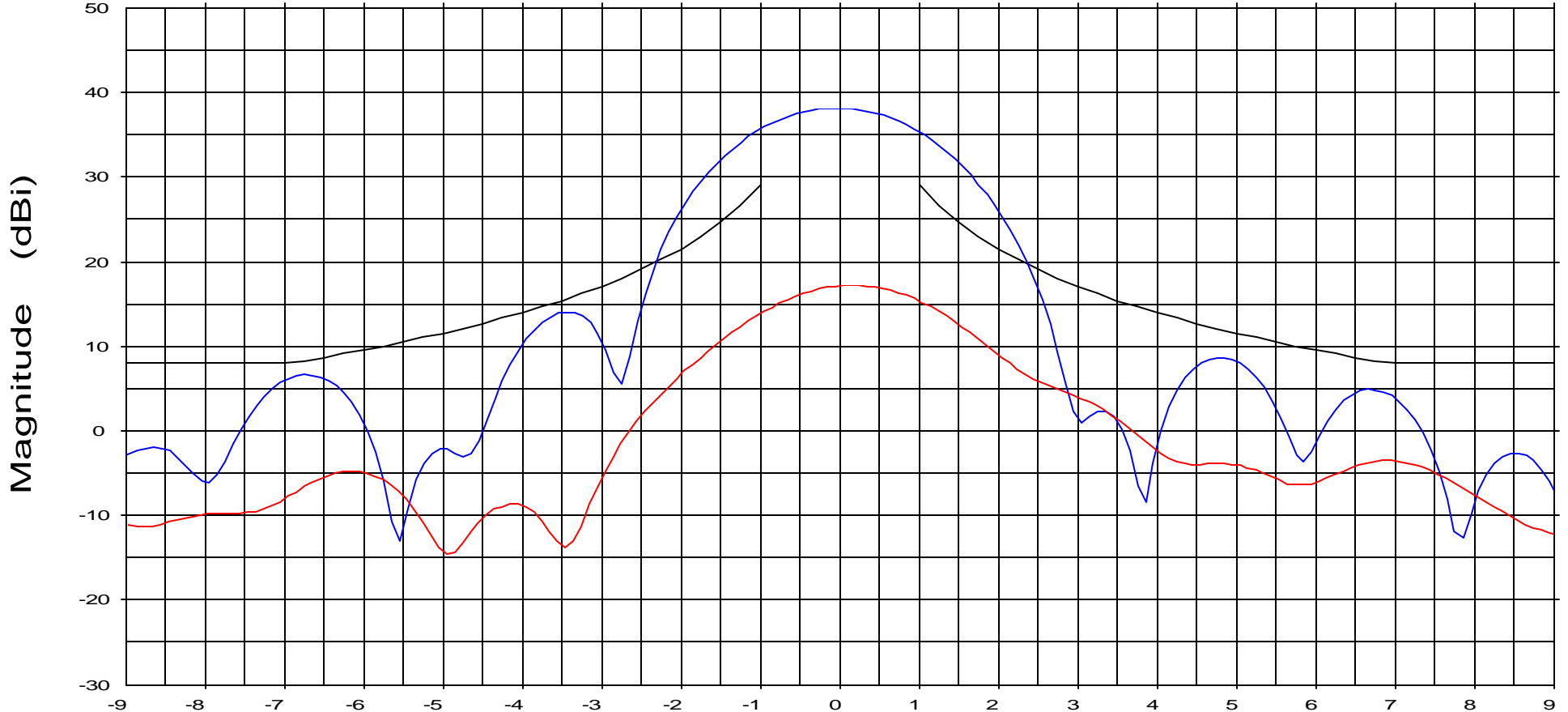
Beam Peak
Deg dB
0.02 37.36

Operator: Ken Poovey

Channel: test

Tx pol: RHCP

Rx pol: RHCP



Sidelobe Envelope: $29 - 25 \log(\theta) \sim 1.0$ to 7 Deg
 $+8$ dBi ~ 7 to 9.2 Deg | $32 - 25 \log(\theta) \sim 9.2$ to 48 Deg
 -10 dBi ~ 48 to 180 Deg

Azimuth (Deg)

Overlays

1578 - 065010.DAT-ant_under_test
 1578 - 065012.DAT-ant_under_test

Cal. file
 065010.DAT
 065012.DAT

units
 dBi
 dBi

Beam Peak
 Deg dB
 -0.02 38.12

File: See Legend

2.4 Meter 2-Pc. C-Band-Circular Polarization
Series 1251

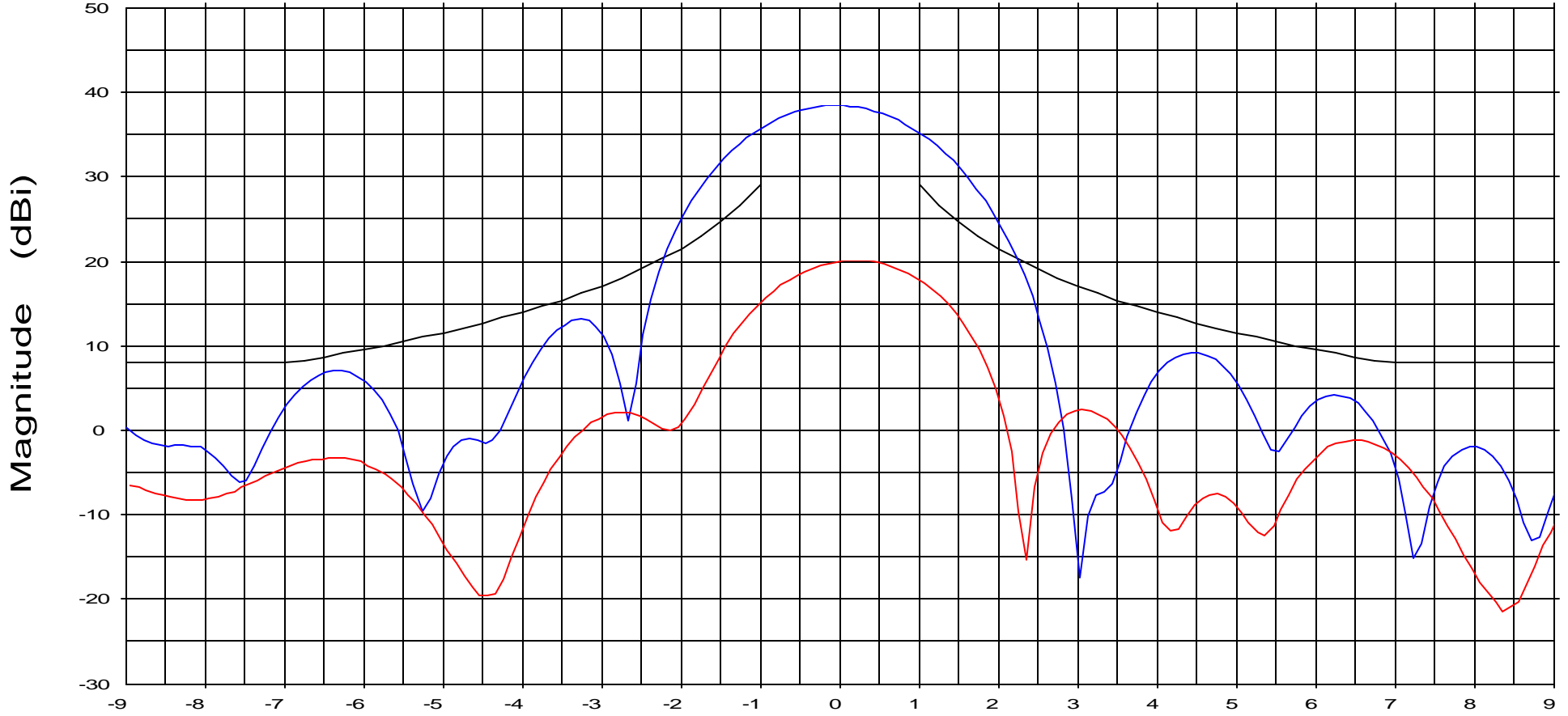
Frequency : 4.200 GHz

Operator: Ken Poovey

Channel: test

Tx pol: RHCP

Rx pol: RHCP



Sidelobe Envelope: $29 - 25 \log(\theta) \sim 1.0$ to 7 Deg
 $+8$ dBi ~ 7 to 9.2 Deg | $32 - 25 \log(\theta) \sim 9.2$ to 48 Deg
 -10 dBi ~ 48 to 180 Deg

Overlays

1578 - 065010.DAT-ant_under_test
 1578 - 065012.DAT-ant_under_test

Cal. file
 065010.DAT
 065012.DAT

units
 dBi
 dBi

Azimuth (Deg)

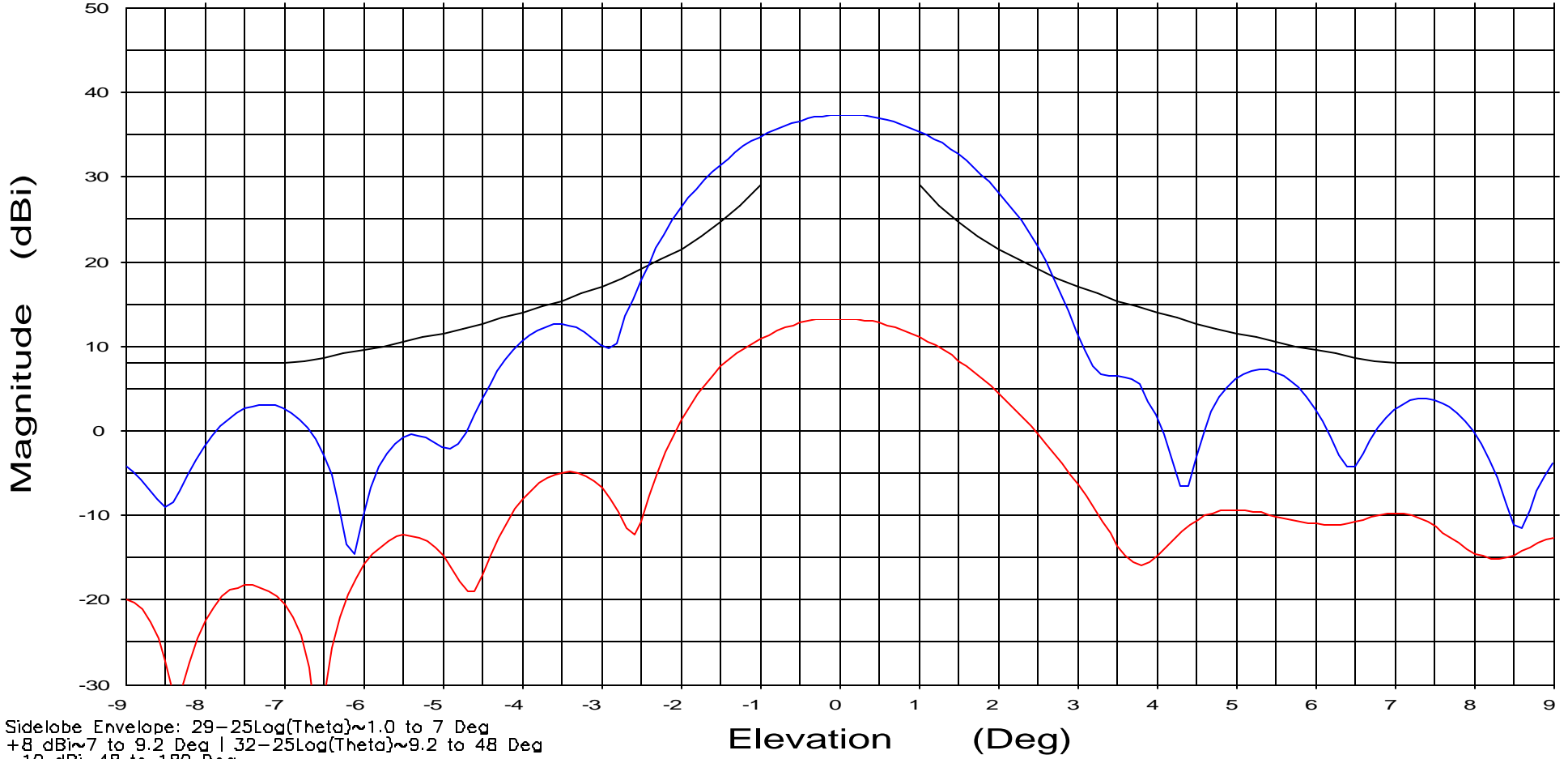
Beam Peak
 Deg dB
 -0.03 38.42

Operator: Ken Poovey

Channel: test

Tx pol: RHCP

Rx pol: RHCP



Overlays
 1578 - 065011.DAT-ant_under_test
 1578 - 065015.DAT-ant_under_test

Cal. file
 065011.DAT
 065015.DAT

units
 dBi
 dBi

Beam Peak
 Deg dB
 0.07 37.35

File: See Legend

2.4 Meter 2-Pc. C-Band-Circular Polarization
Series 1251

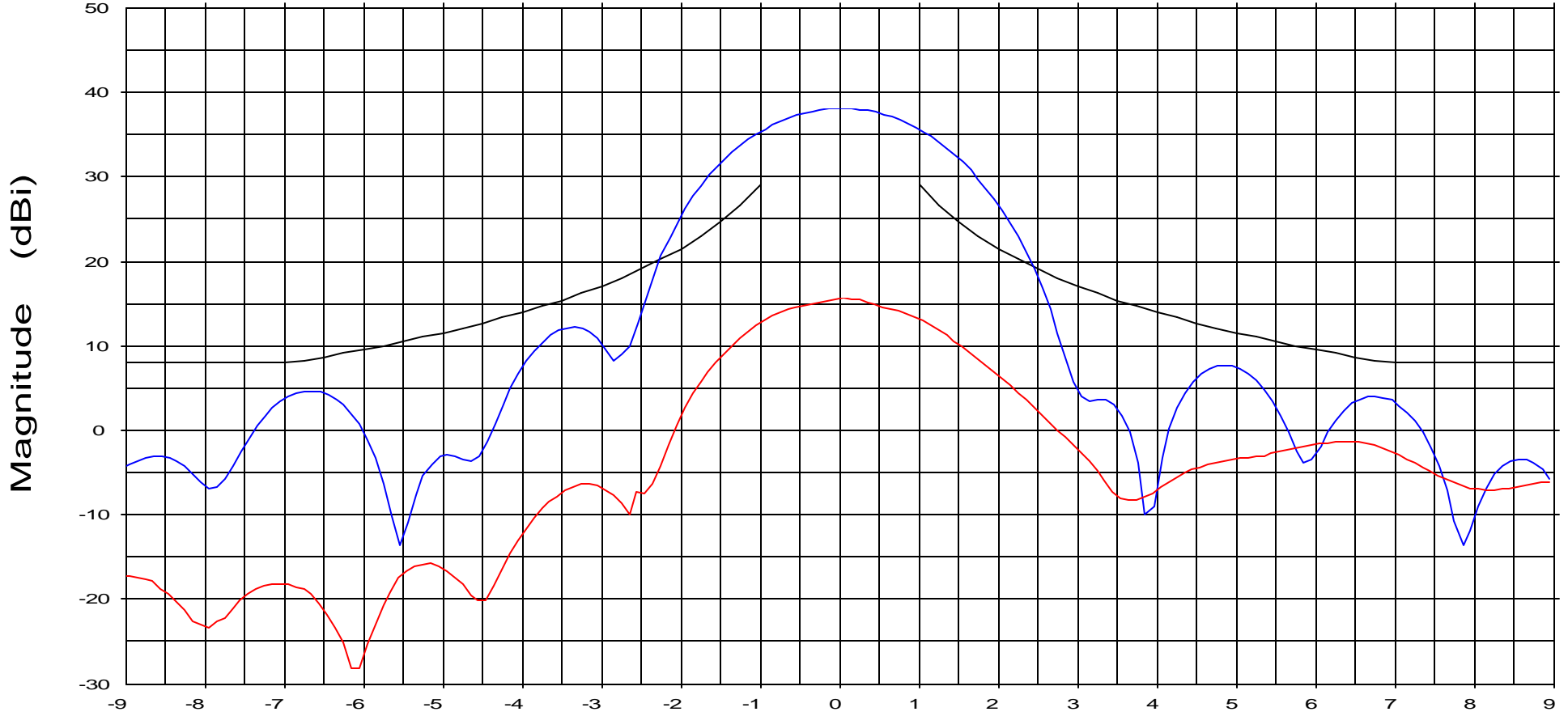
Frequency : 3.950 GHz

Operator: Ken Poovey

Channel: test

Tx pol: RHCP

Rx pol: RHCP



Sidelobe Envelope: $29 - 25 \log(\theta) \sim 1.0$ to 7 Deg
 $+8$ dBi ~ 7 to 9.2 Deg | $32 - 25 \log(\theta) \sim 9.2$ to 48 Deg
 -10 dBi ~ 48 to 180 Deg

Overlays

1578 - 065011.DAT-ant_under_test
 1578 - 065013.DAT-ant_under_test

Cal. file

065011.DAT
 065013.DAT

units

dBi
 dBi

Beam Peak

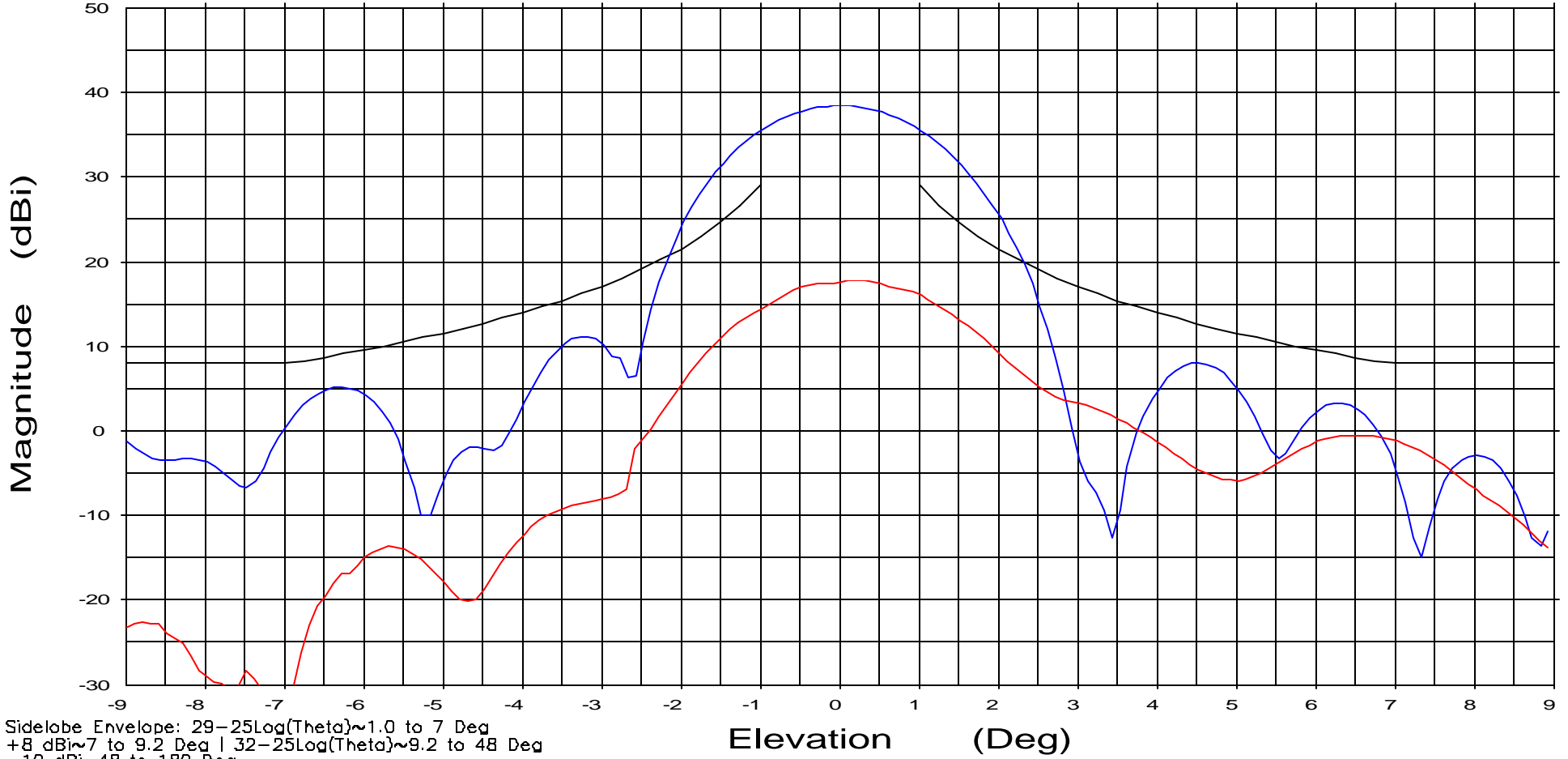
Deg	dB
0.02	38.11

Operator: Ken Poovey

Channel: test

Tx pol: RHCP

Rx pol: RHCP



Overlays
 1578 - 065011.DAT-ant_under_test
 1578 - 065013.DAT-ant_under_test

Cal. file
 065011.DAT
 065013.DAT

units
 dBi
 dBi

Beam Peak
 Deg dB
 0.02 38.43

File: See Legend

2.4 Meter 2-Pc. C-Band-Circular Polarization
Series 1251

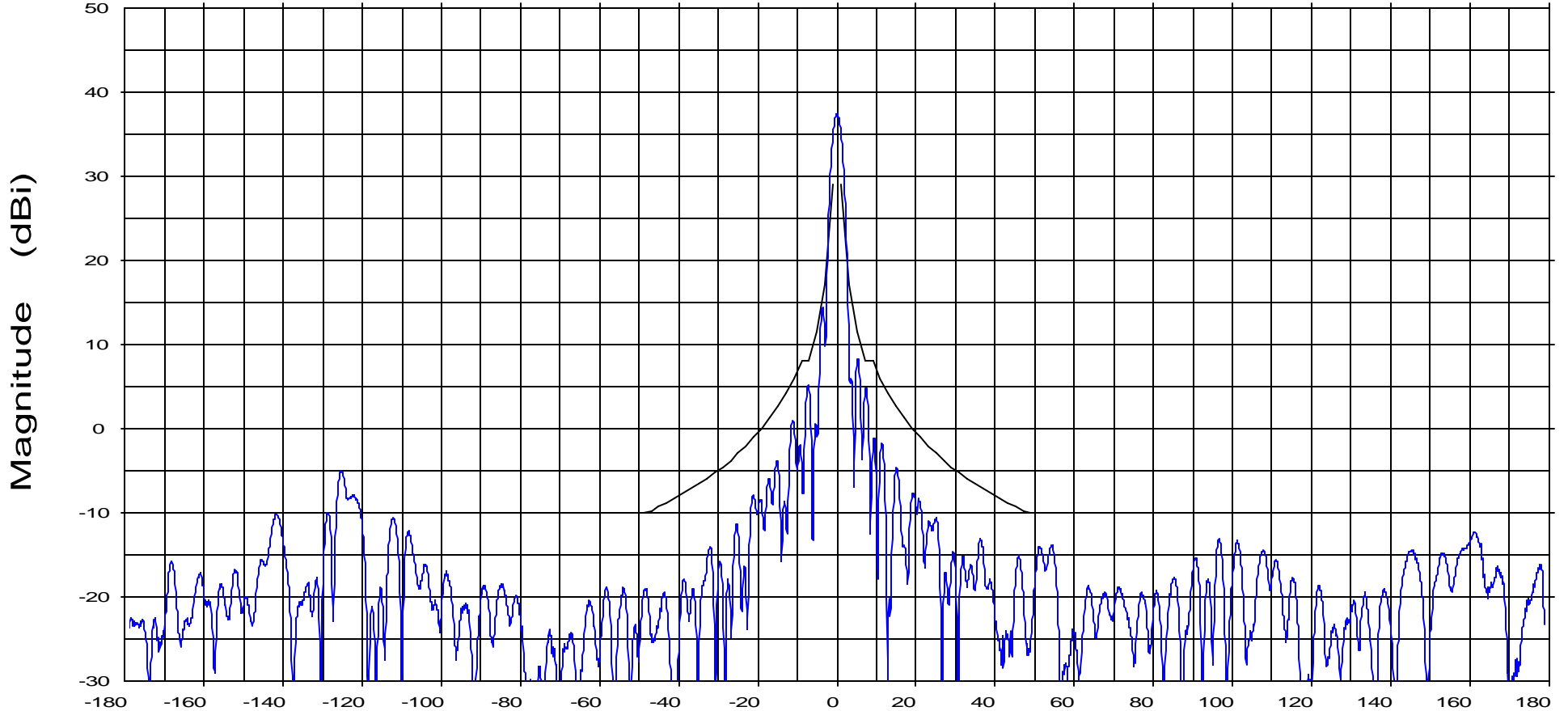
Frequency : 3.625 GHz

Operator: Ken Poovey

Channel: test

Tx pol: RHCP

Rx pol: RHCP



Sidelobe Envelope: $29 - 25 \log(\theta) \sim 1.0$ to 7 Deg
 $+8$ dBi ~ 7 to 9.2 Deg | $32 - 25 \log(\theta) \sim 9.2$ to 48 Deg
 -10 dBi ~ 48 to 180 Deg

Overlays
 1578 - 065010.DAT-ant_under_test

Cal. file
 065010.DAT

units
 dBi

Azimuth (Deg)

Beam Peak
 Deg dB
 0.02 37.36

File: See Legend

2.4 Meter 2-Pc. C-Band-Circular Polarization
Series 1251

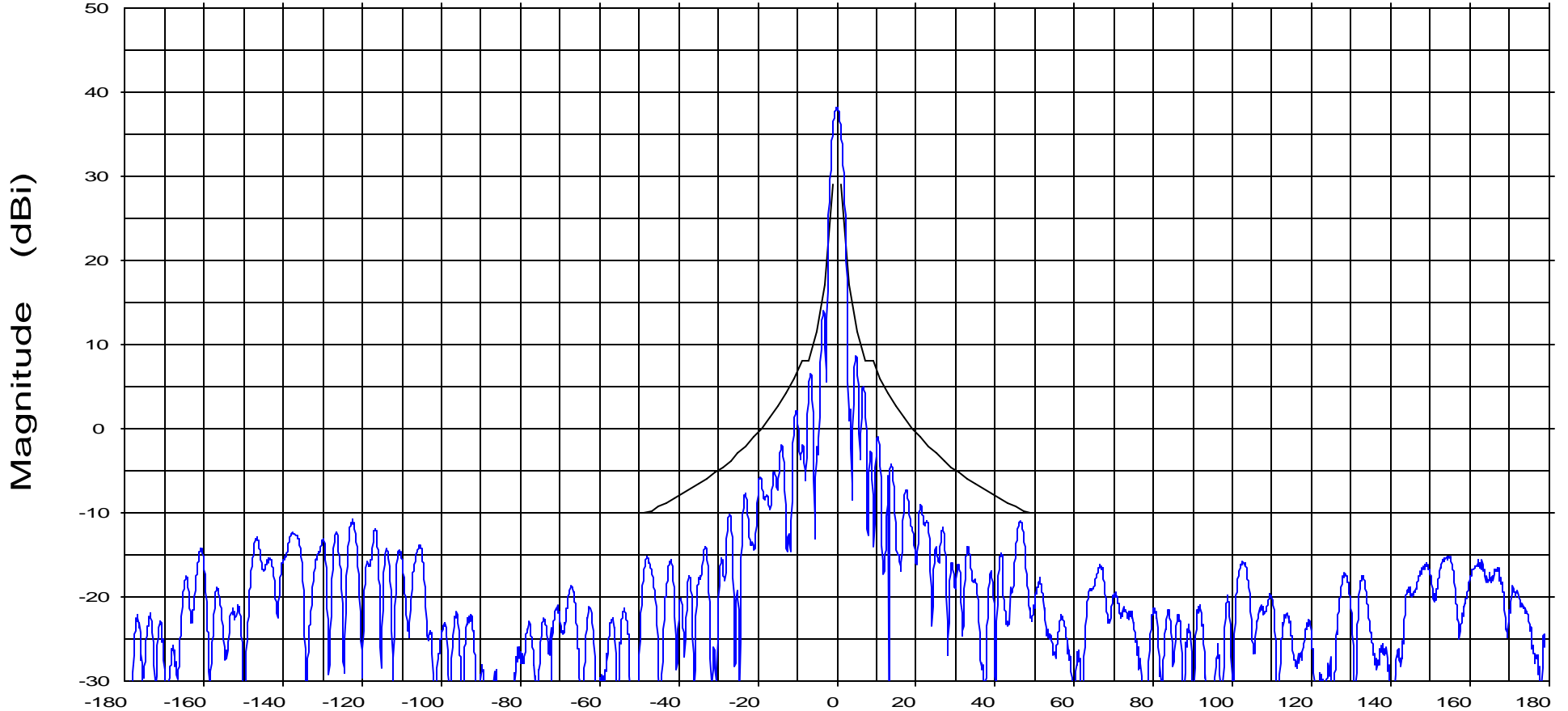
Frequency : 3.950 GHz

Operator: Ken Poovey

Channel: test

Tx pol: RHCP

Rx pol: RHCP



Sidelobe Envelope: $29 - 25 \log(\theta) \sim 1.0$ to 7 Deg
 $+8$ dBi ~ 7 to 9.2 Deg | $32 - 25 \log(\theta) \sim 9.2$ to 48 Deg
 -10 dBi ~ 48 to 180 Deg

Azimuth (Deg)

Overlays
1578 - 065010.DAT-ant_under_test

Cal. file
065010.DAT

units
dBi

Beam Peak
Deg dB
-0.02 **38.12**

General Dynamics SATCOM Technologies
East Maiden Test Facility
4488 Lawing Chapel Church Road
Maiden, North Carolina 28650

File: See Legend

2.4 Meter 2-Pc. C-Band-Circular Polarization
Series 1251

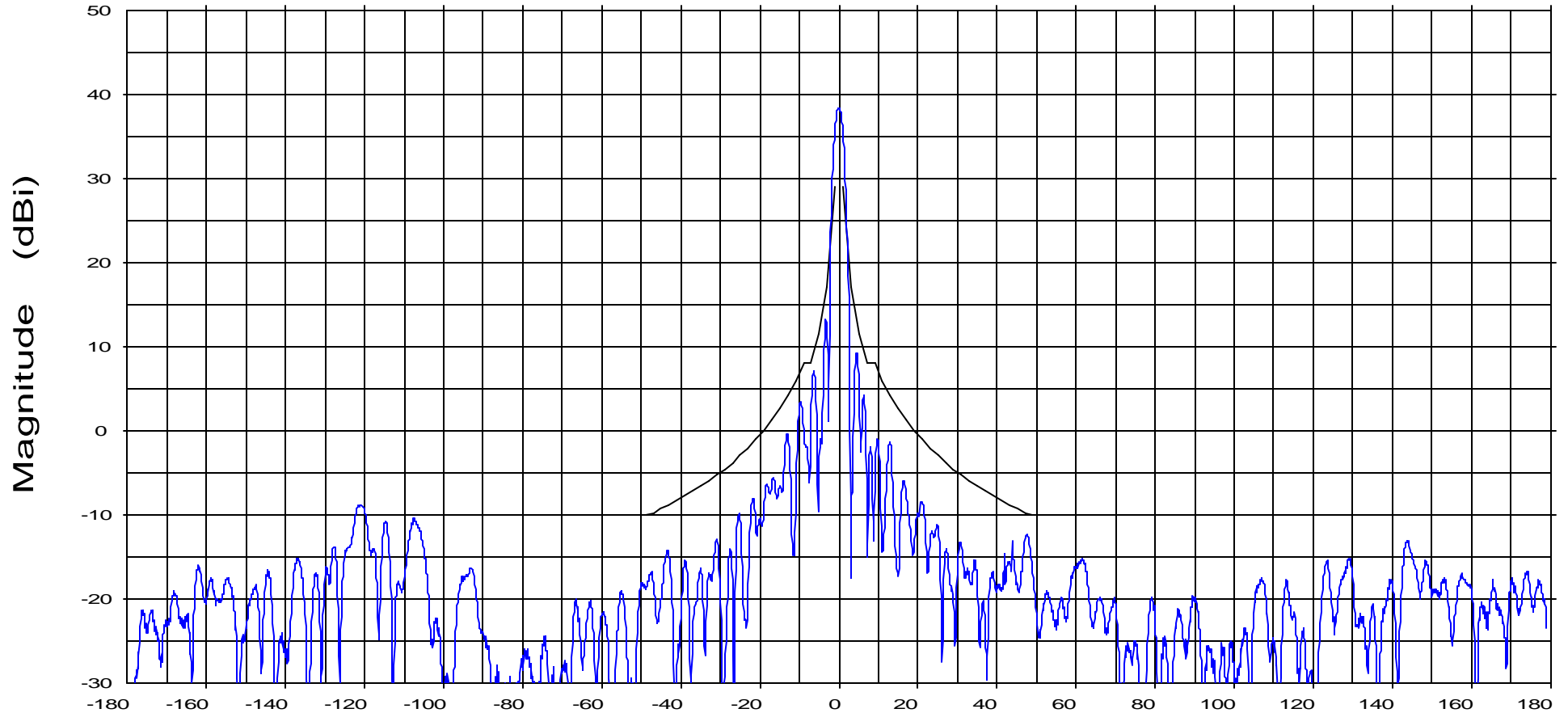
Frequency : 4.200 GHz

Operator: Ken Poovey

Channel: test

Tx pol: RHCP

Rx pol: RHCP



Sidelobe Envelope: $29 - 25 \log(\theta) \sim 1.0$ to 7 Deg
 $+8$ dBi ~ 7 to 9.2 Deg | $32 - 25 \log(\theta) \sim 9.2$ to 48 Deg
 -10 dBi ~ 48 to 180 Deg

Azimuth (Deg)

Overlays
1578 - 065010.DAT-ant_under_test

Cal. file
065010.DAT

units
dBi

Beam Peak
Deg dB
-0.03 38.42

End of Report

General Dynamics SATCOM Technologies
East Maiden Test Facility
4488 Lawing Chapel Church Road
Maiden, North Carolina 28650