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December 17, 2014

Marlene H. Dortch  
Secretary  
Federal Communications Commission  
445 12th Street, SW  
Washington, DC 20554

Re: O3b Limited  
FCC File No. SES-LIC-20141001-00781  
(Call Sign E140101)

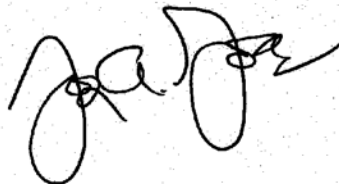
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Dear Ms. Dortch:

Pursuant to Section 1.65 of the Commission's rules, 47 C.F.R. § 1.65, O3b Limited ("O3b"), by its counsel, hereby provides an antenna pattern exhibit for the 1.8m antennas covered by the above-referenced application. Please use the attached exhibit instead of what was incorrectly labeled as a 1.8m antenna pattern exhibit in the original filing.

Please contact the undersigned if you have any questions.

Respectfully submitted,



Joseph A. Godles  
*Counsel to O3b Limited*

# **GENERAL DYNAMICS**

## SATCOM Technologies

1.8m Ka-Band CP Rx/Tx Antenna  
O3b Antenna System  
[2241 RevB Test Report / FCC Format](#)



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



# **GENERAL DYNAMICS**

SATCOM Technologies

# **GENERAL DYNAMICS**

## SATCOM Technologies

**Test No.** 2241 RevB

**Antenna:** 1.8M Ka-Band CP Rx/Tx O3b Antenna System

### **Report Notes:**

This report is to show antenna compliance to FCC 47 CFR Ch. 1, 10-01-10 Edition, Section 25.209 and 25.138.

In the plane of the geostationary satellite orbit the following RPE is shown on patterns.

29-25log theta dBi for  $1.5^\circ < \theta = 7^\circ$

+8 dBi for  $7^\circ < \theta = 9.2^\circ$

32-25log theta dBi for  $9.2^\circ < \theta = 48^\circ$

-10 dBi for  $48^\circ < \theta = 85^\circ$

0 dBi for  $85^\circ < \theta = 180^\circ$

In all other directions or in the plane of the horizon, the following RPE is shown on patterns.

32-25log theta dBi for  $3^\circ < \theta = 48^\circ$

-10 dBi for  $48^\circ < \theta = 85^\circ$

0 dBi for  $85^\circ < \theta = 180^\circ$

The Cross-Polarization in the plane of the geostationary satellite orbit and/or in all other directions the following RPE is shown on patterns.

19-25log theta dBi for  $1.8^\circ < \theta = 7^\circ$

-2 dBi for  $7^\circ < \theta = 9.2^\circ$

### **Test Location:**

General Dynamics SATCOM Technologies

Antenna Test Facility

4488 Lawing Chapel Church Rd

Maiden, NC 28650

### **Test Operator(s):**

Dwight B. Lutz

Jonathan Hartness

828-428-1485 office

[dwight.lutz@gdsatcom.com](mailto:dwight.lutz@gdsatcom.com)

# 1.8M Ka-Band CP Rx/Tx Antenna System

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O3b

## Contents

<b>Gain Analysis</b> .....	<b>Section 1</b>
<b>Feed Data</b> .....	<b>Section 2</b>
Compliance to Return Loss, Port to Port Isolation & Axial Ratio	
<b>LHCP Radiation Patterns</b> .....	<b>Section 3</b>
Transmit Frequencies	
<b>RHCP Radiation Patterns</b> .....	<b>Section 4</b>
Transmit Frequencies	
<b>LHCP Radiation Patterns</b> .....	<b>Section 5</b>
Receive Frequencies	
<b>RHCP Radiation Patterns</b> .....	<b>Section 6</b>
Receive Frequencies	
<b>Test Photos</b> .....	<b>Section 7</b>

Gain

## Gain Analysis

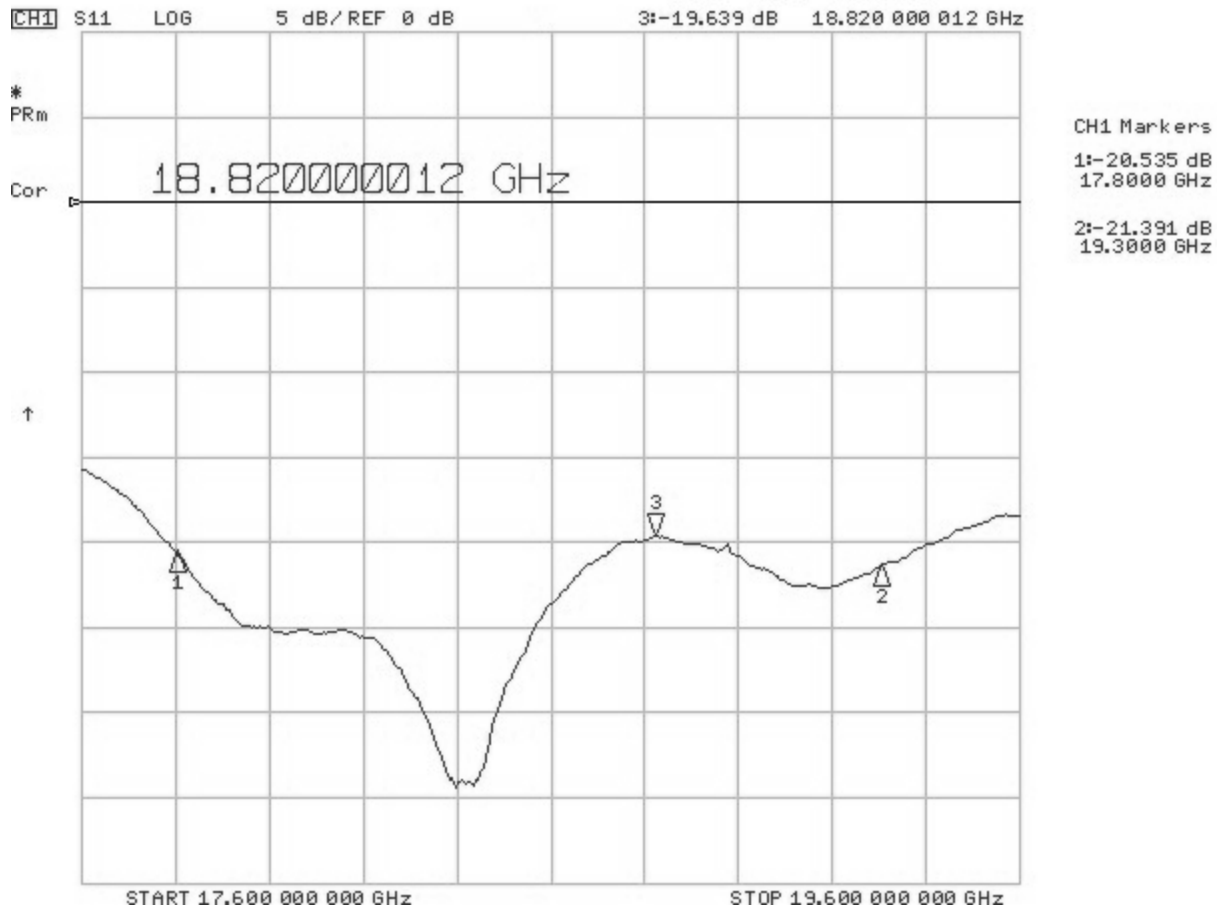
Frequency (GHz)	Gain (dB) LHCP	Gain (dB) RHCP
27.60	52.7	52.6
28.35	52.9	52.8
29.10	53.0	53.0
17.80	49.1	49.0
18.55	49.4	49.4
19.30	49.7	49.7

**Feed Data**

Compliance to Return Loss, Port to Port Isolation & Axial Ratio



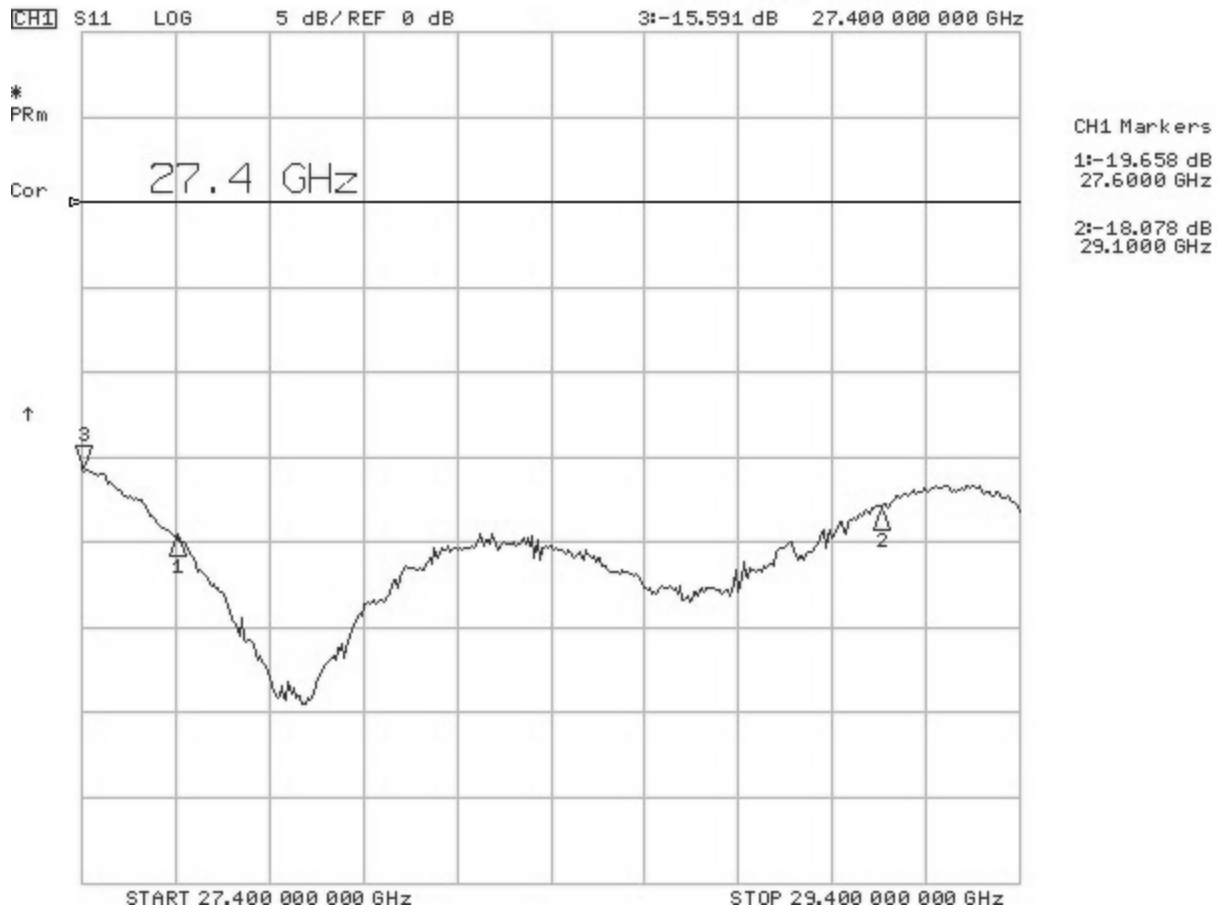
# Rx LH Return Loss



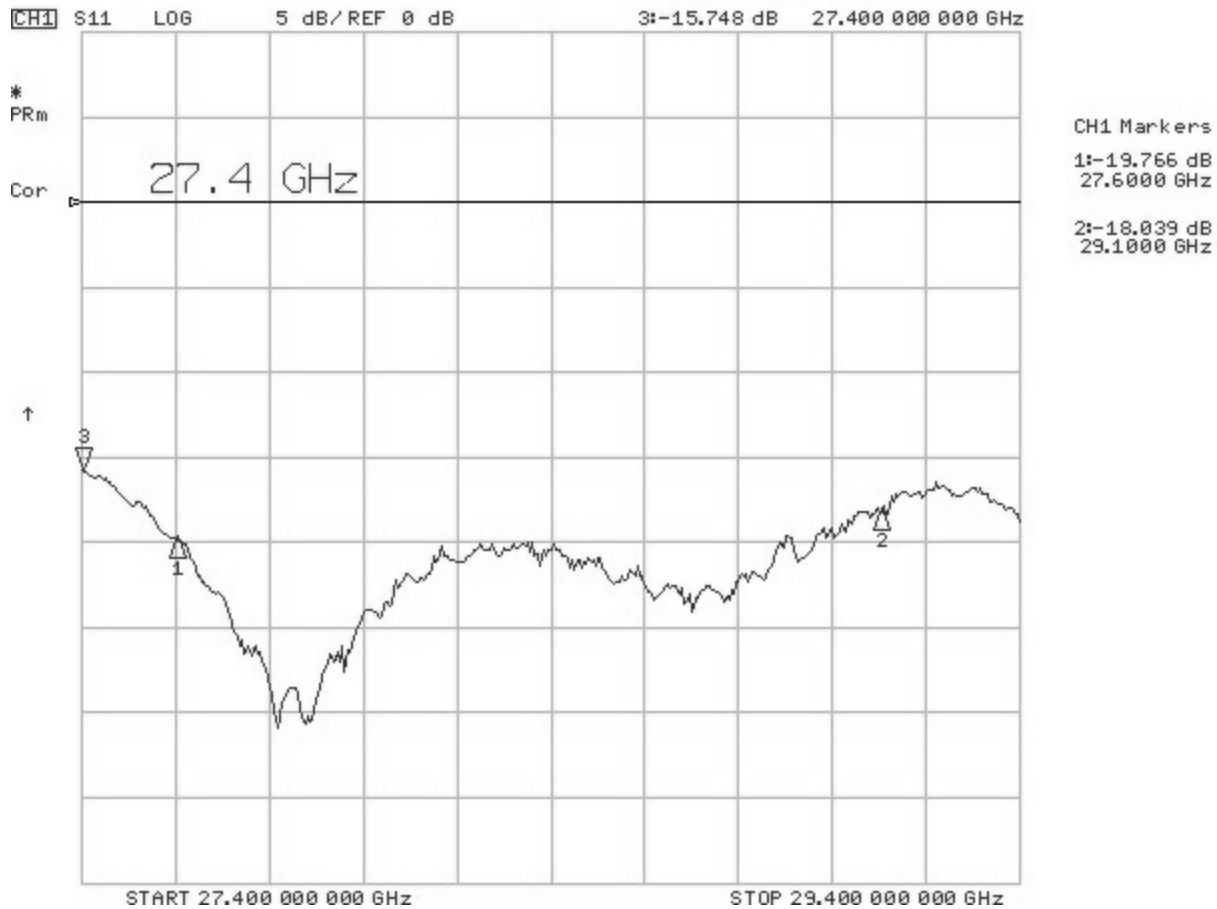
# Rx RH Return Loss



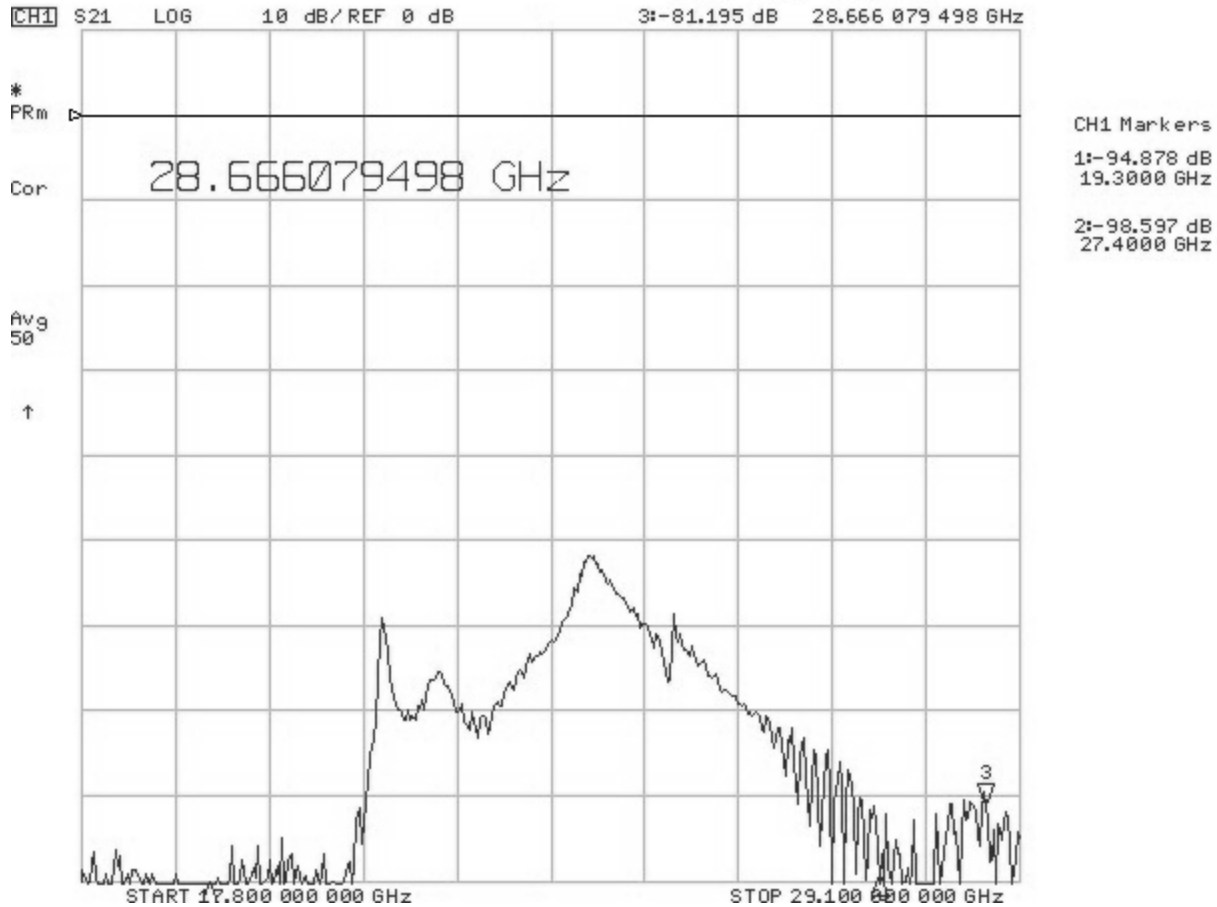
# Tx LH Return Loss



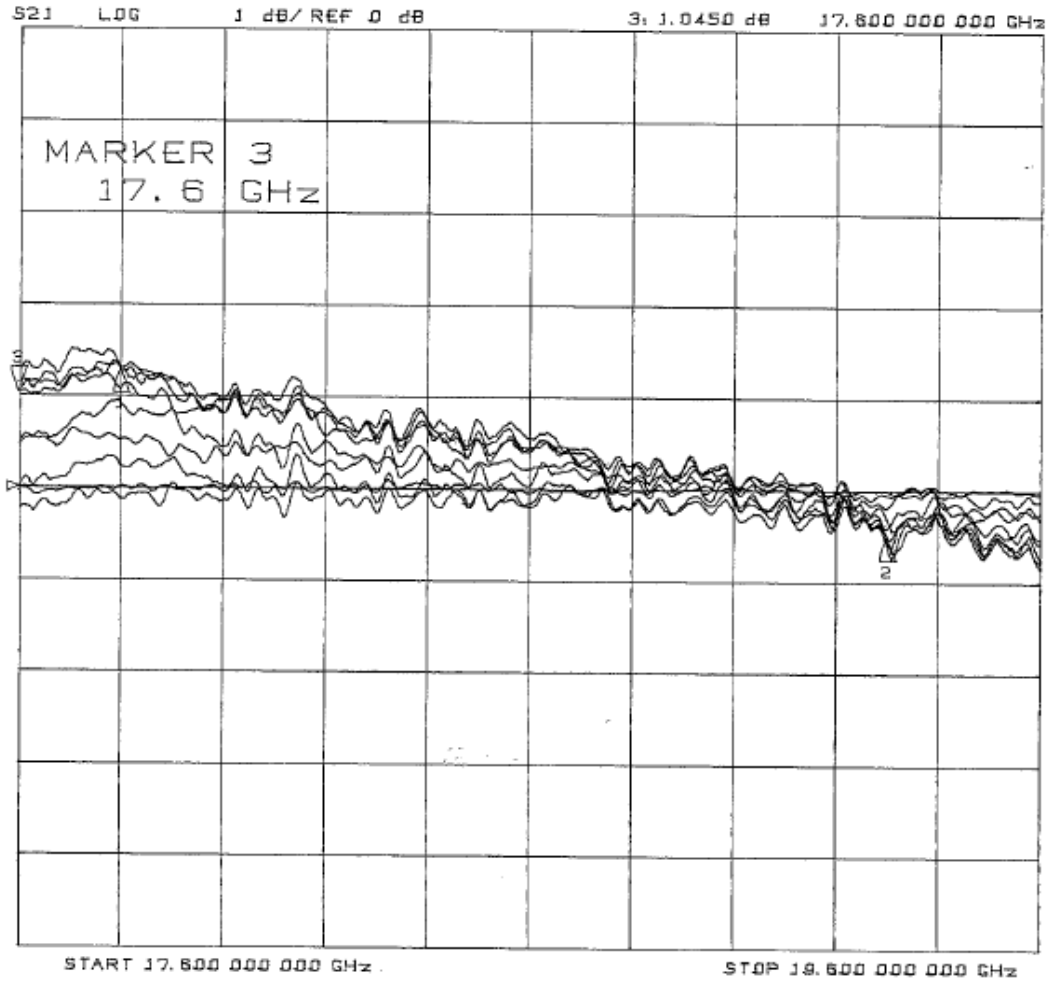
# Tx RH Return Loss



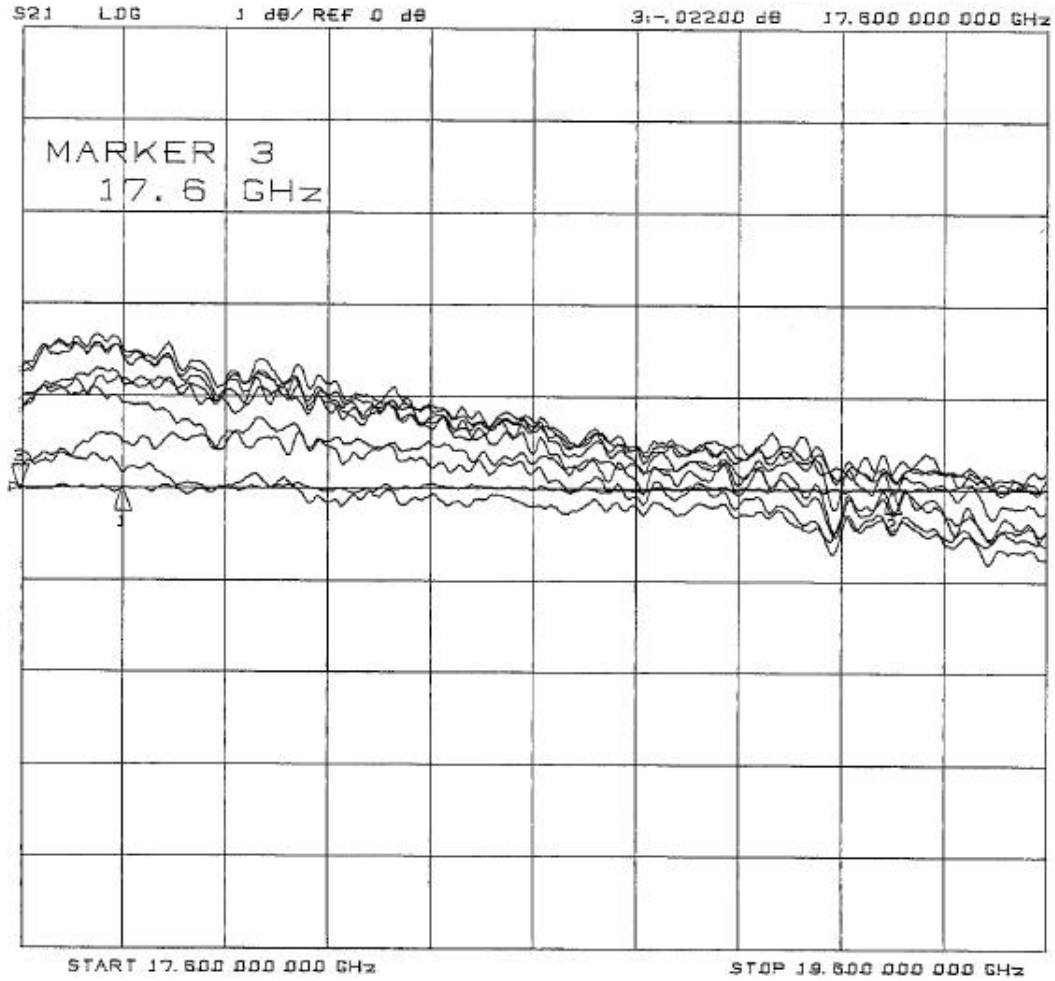
# Port to Port Isolation



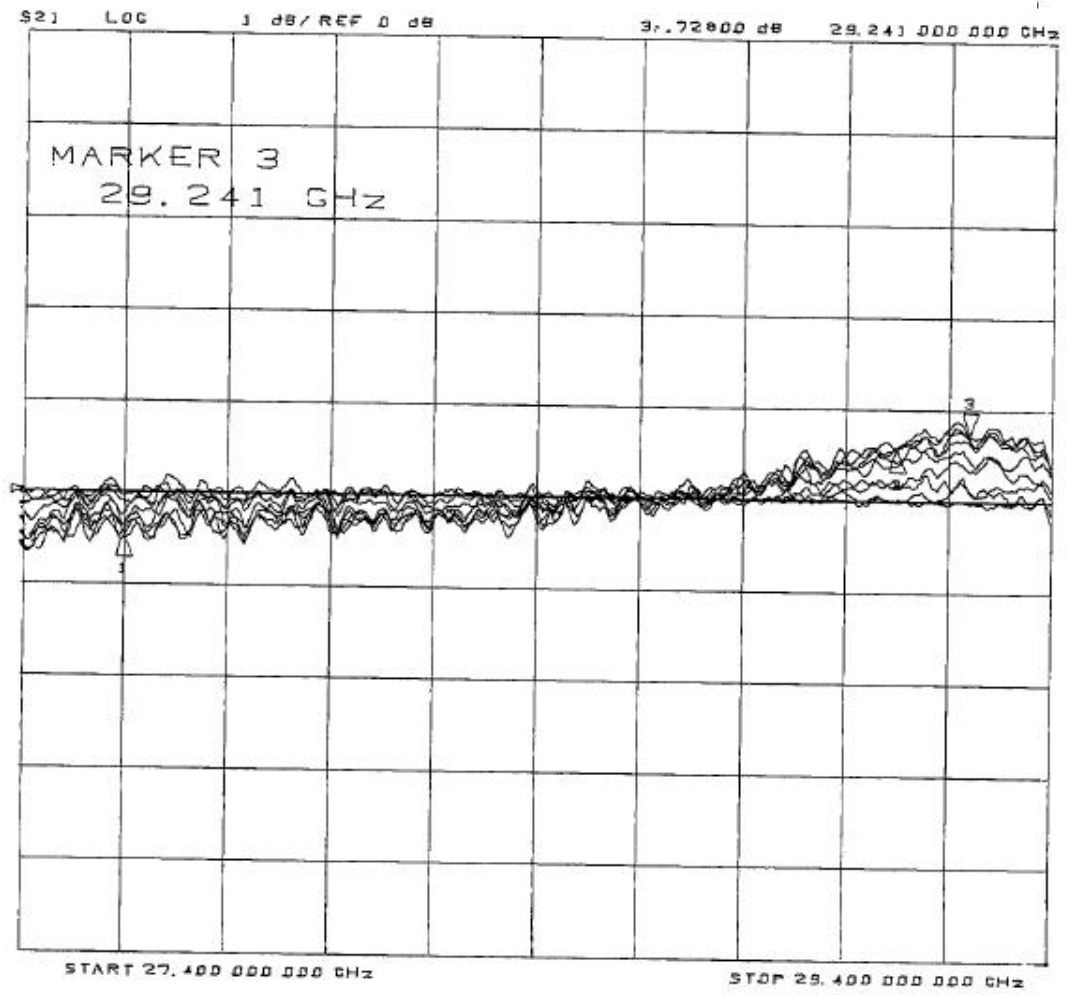
# Axial Ratio Rx LH



# Axial Ratio Rx RH

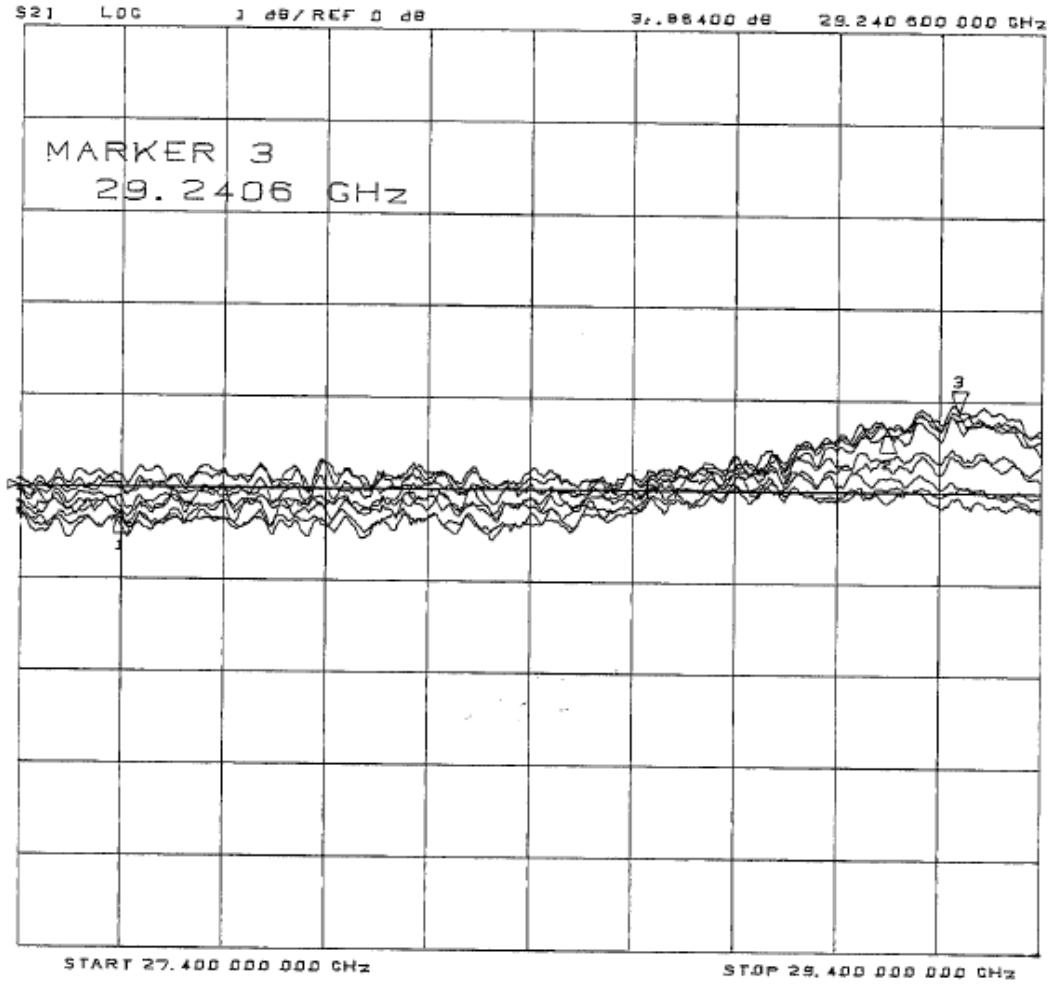


# Axial Ratio Tx LH





# Axial Ratio Tx RH

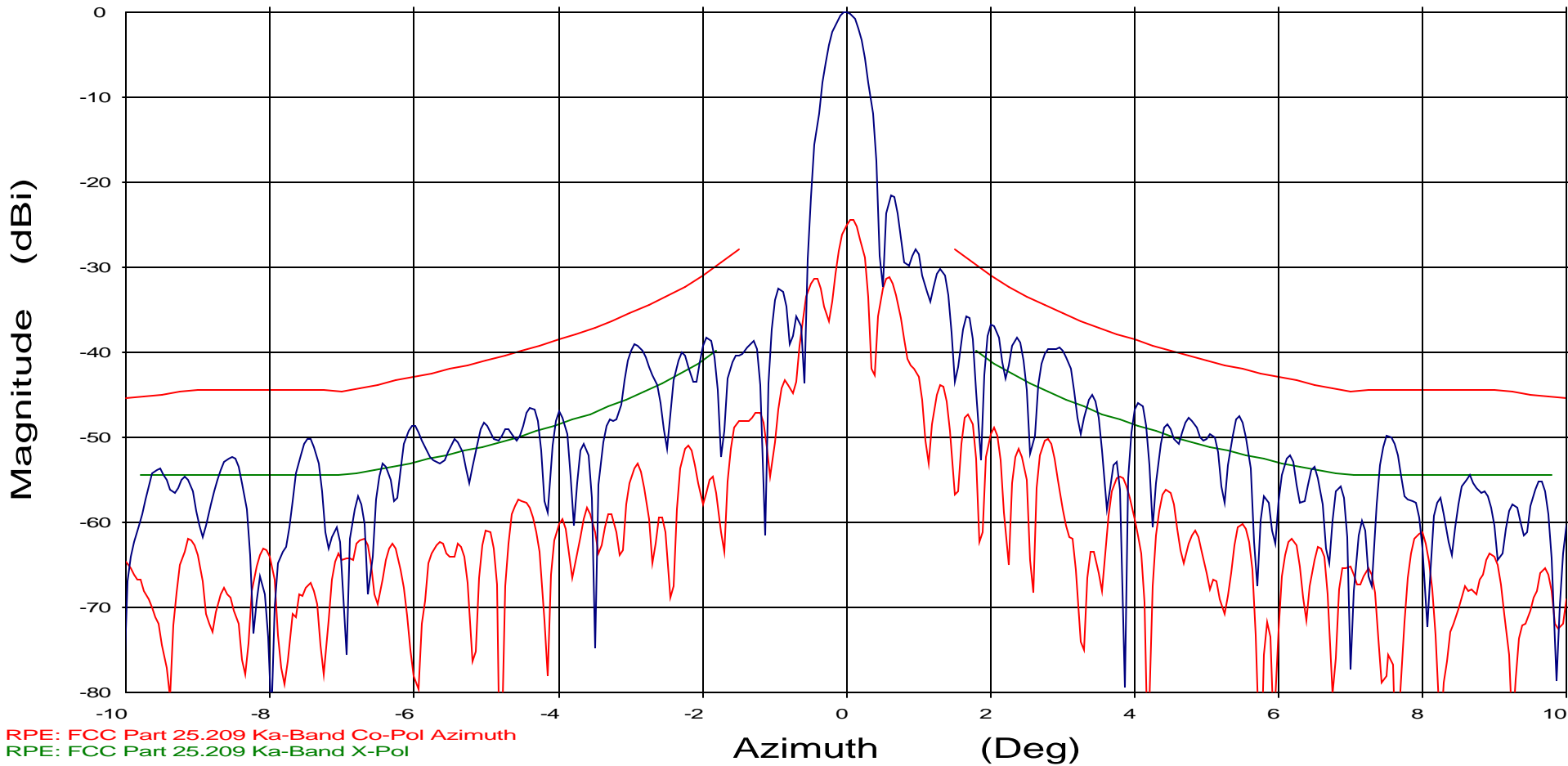


LHCP Radiation Patterns  
**Transmit Frequencies**

Operator: J Hartness  
Ser. no.: 013012-1  
Channel: AUT

Tx pol: LHCP

Rx pol: LHCP



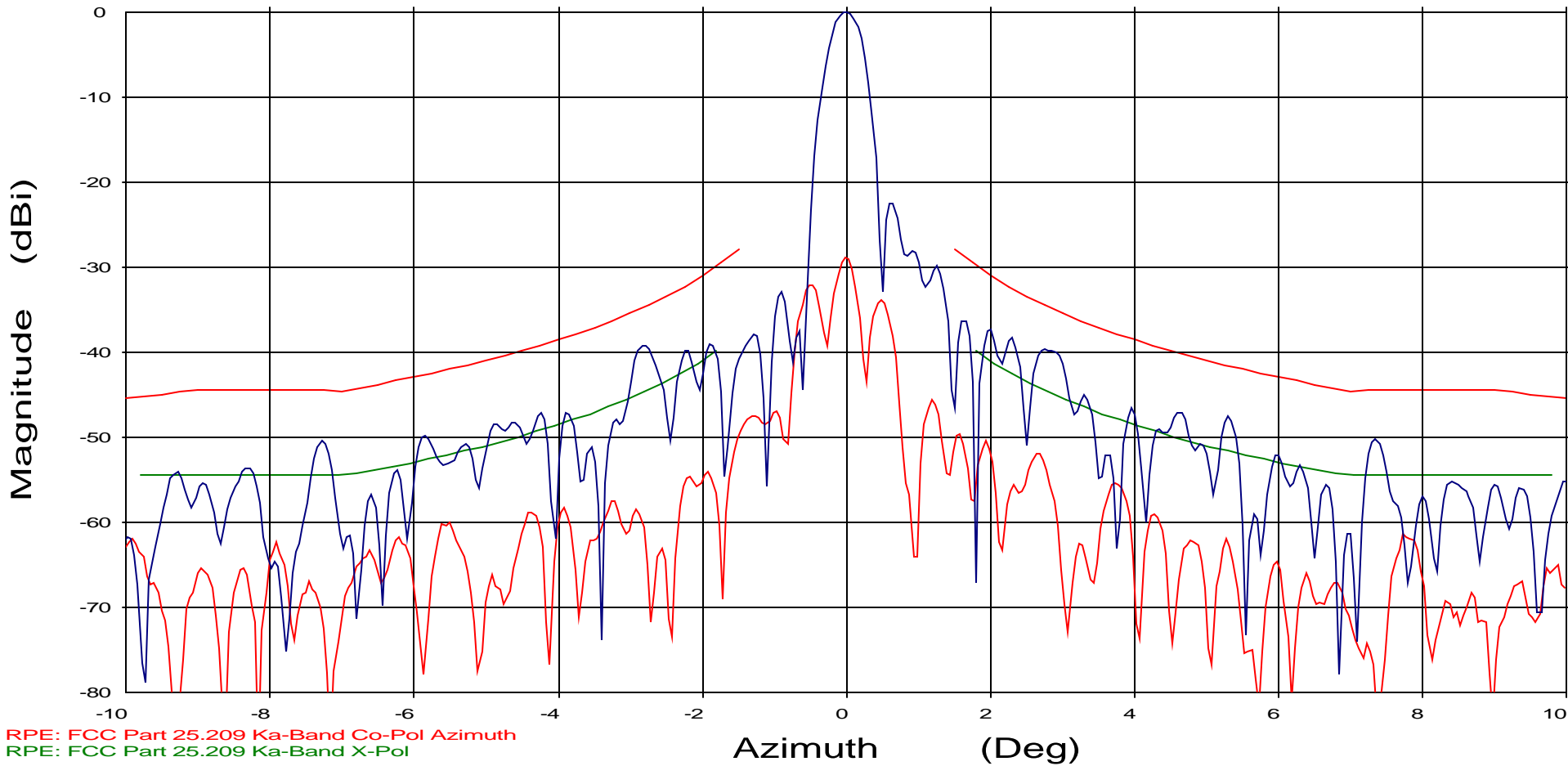
RPE: FCC Part 25.209 Ka-Band Co-Pol Azimuth  
RPE: FCC Part 25.209 Ka-Band X-Pol

Overlays	Cal. file	table	channel	units
2241 05.dat-ant_under_test	2241 05.dat	Reference	AUT	dBi
2241 08.dat-ant_under_test	2241 08.dat	Reference	AUT	dBi

Operator: J Hartness  
Ser. no.: 013012-1  
Channel: AUT

Tx pol: LHCP

Rx pol: LHCP



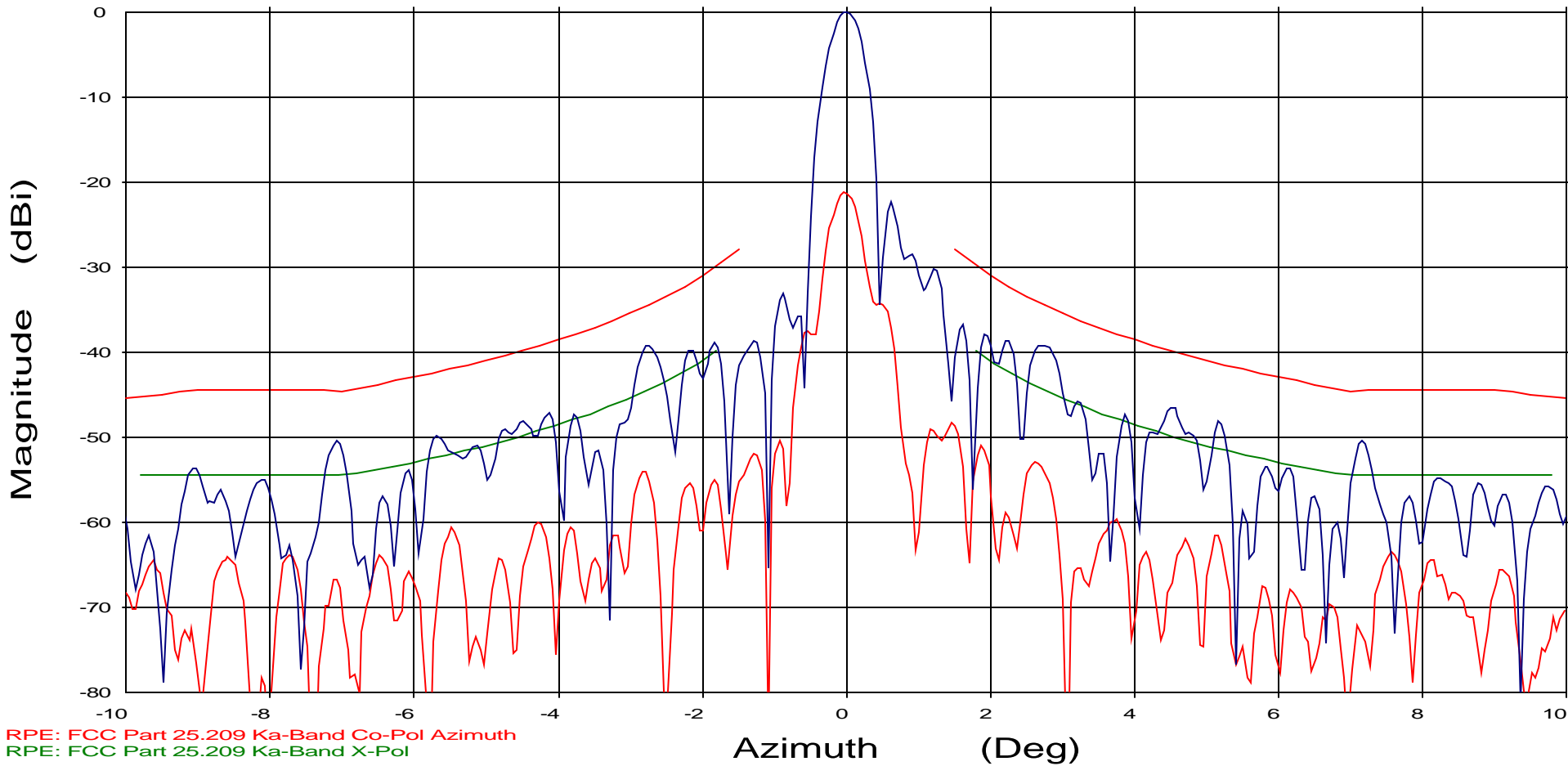
RPE: FCC Part 25.209 Ka-Band Co-Pol Azimuth  
RPE: FCC Part 25.209 Ka-Band X-Pol

Overlays	Cal. file	table	channel	units
2241 05.dat-ant_under_test	2241 05.dat	Reference	AUT	dBi
2241 08.dat-ant_under_test	2241 08.dat	Reference	AUT	dBi

Operator: J Hartness  
Ser. no.: 013012-1  
Channel: AUT

Tx pol: LHCP

Rx pol: LHCP



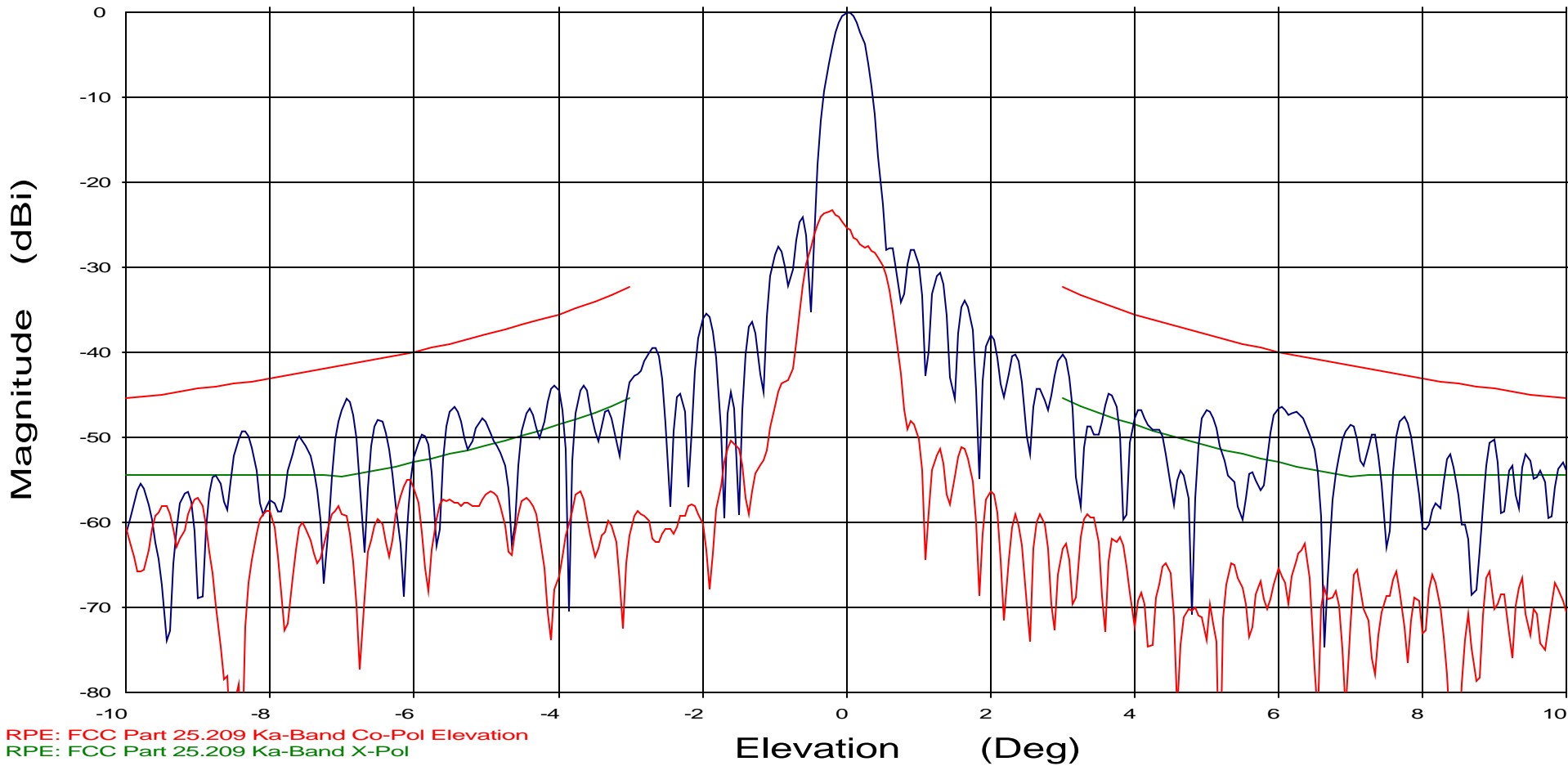
RPE: FCC Part 25.209 Ka-Band Co-Pol Azimuth  
RPE: FCC Part 25.209 Ka-Band X-Pol

Overlays	Cal. file	table	channel	units
2241 05.dat-ant_under_test	2241 05.dat	Reference	AUT	dBi
2241 08.dat-ant_under_test	2241 08.dat	Reference	AUT	dBi

Operator: J Hartness  
Ser. no.: 013012-1  
Channel: AUT

Tx pol: LHCP

Rx pol: LHCP



RPE: FCC Part 25.209 Ka-Band Co-Pol Elevation  
RPE: FCC Part 25.209 Ka-Band X-Pol

Overlays	Cal. file	table	channel	units
2241 07.dat-ant_under_test	2241 07.dat	Reference	AUT	dBi
2241 10.dat-ant_under_test	2241 10.dat	Reference	AUT	dBi

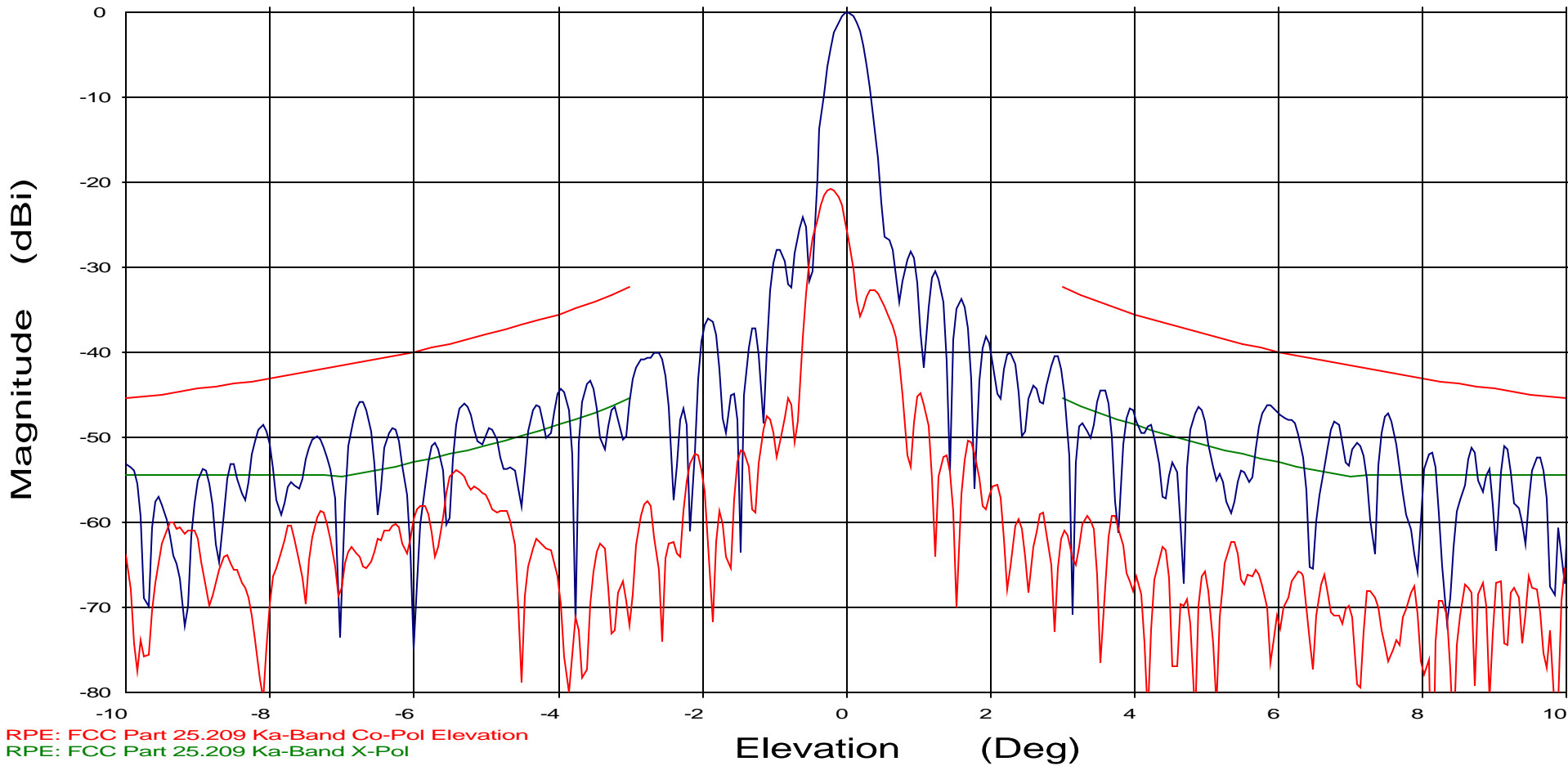
1.8M Ka-Band CP Rx/Tx  
O3b Antenna System

Frequency : 28.350 GHz

Operator: J Hartness  
Ser. no.: 013012-1  
Channel: AUT

Tx pol: LHCP

Rx pol: LHCP

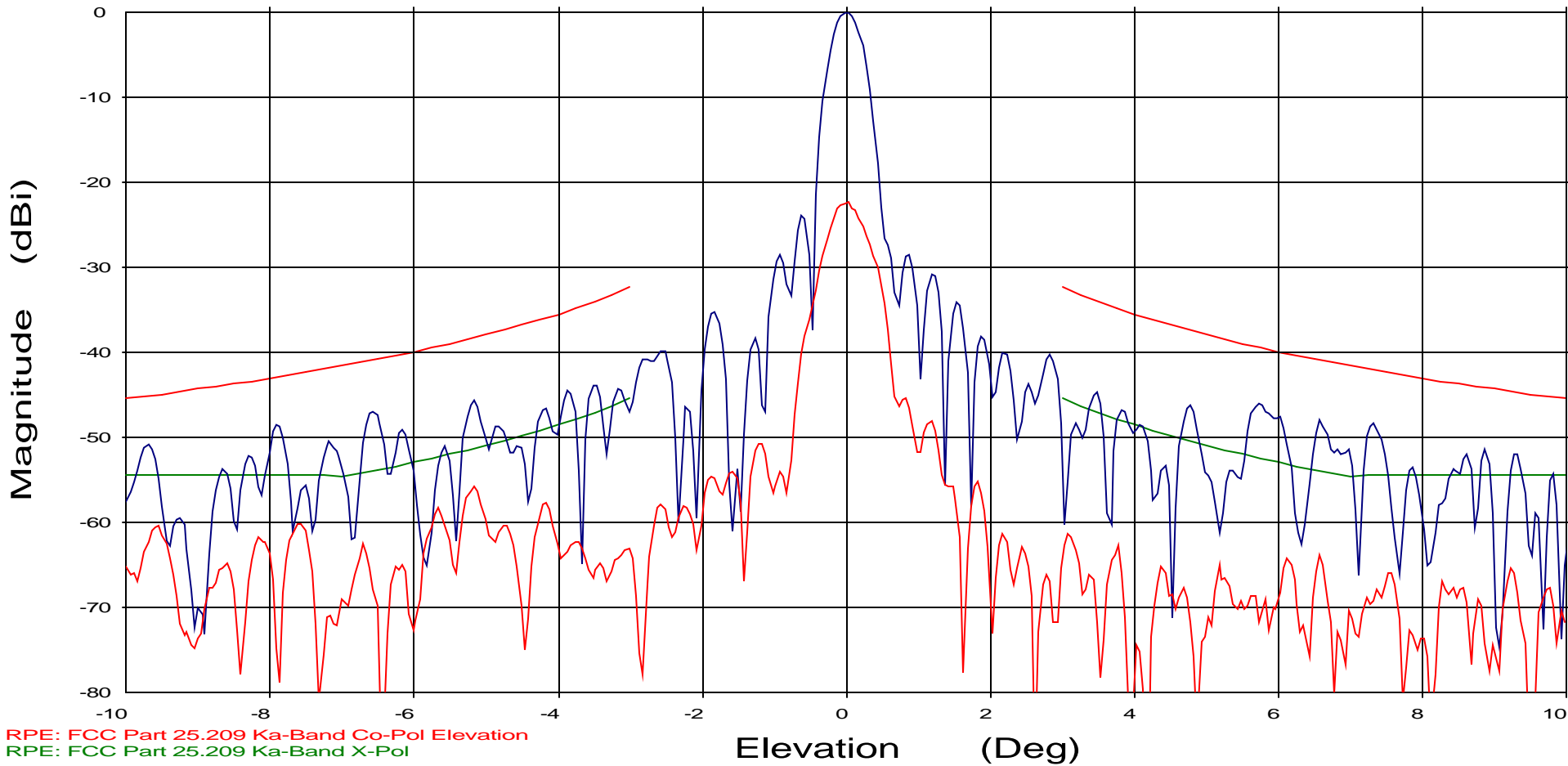


Overlays	Cal. file	table	channel	units
2241 07.dat-ant_under_test	2241 07.dat	Reference	AUT	dBi
2241 10.dat-ant_under_test	2241 10.dat	Reference	AUT	dBi

Operator: J Hartness  
Ser. no.: 013012-1  
Channel: AUT

Tx pol: LHCP

Rx pol: LHCP



Overlays	Cal. file	table	channel	units
2241 07.dat-ant_under_test	2241 07.dat	Reference	AUT	dBi
2241 10.dat-ant_under_test	2241 10.dat	Reference	AUT	dBi



File: 2241 07.dat

1.8M Ka-Band CP Rx/Tx  
O3b Antenna System

Frequency : 27.600 GHz

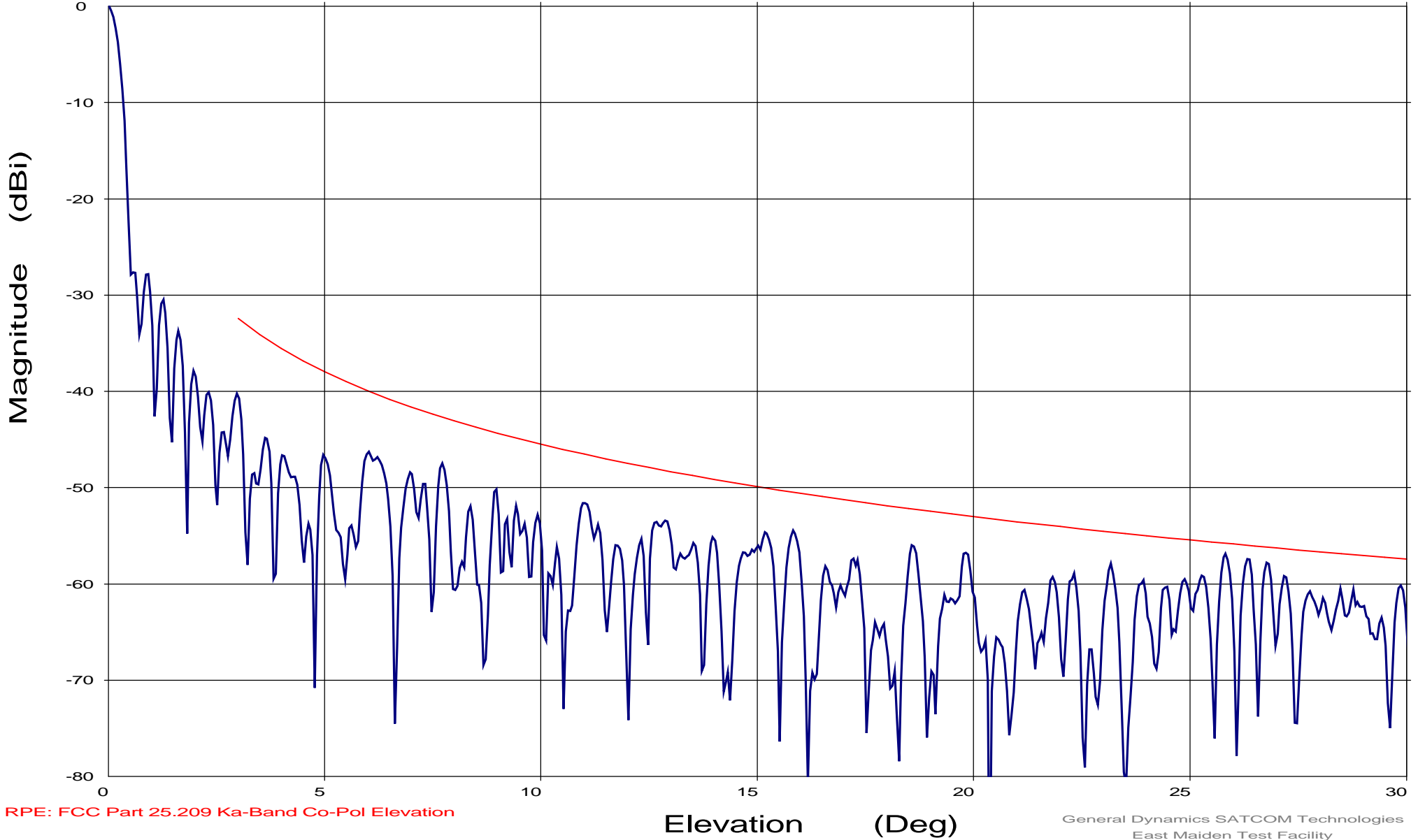
Operator: J Hartness

Ser. no.: 013012-1

Channel: AUT

Tx pol: LHCP

Rx pol: LHCP



RPE: FCC Part 25.209 Ka-Band Co-Pol Elevation

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

File: 2241 07.dat

1.8M Ka-Band CP Rx/Tx  
O3b Antenna System

Frequency : 28.350 GHz

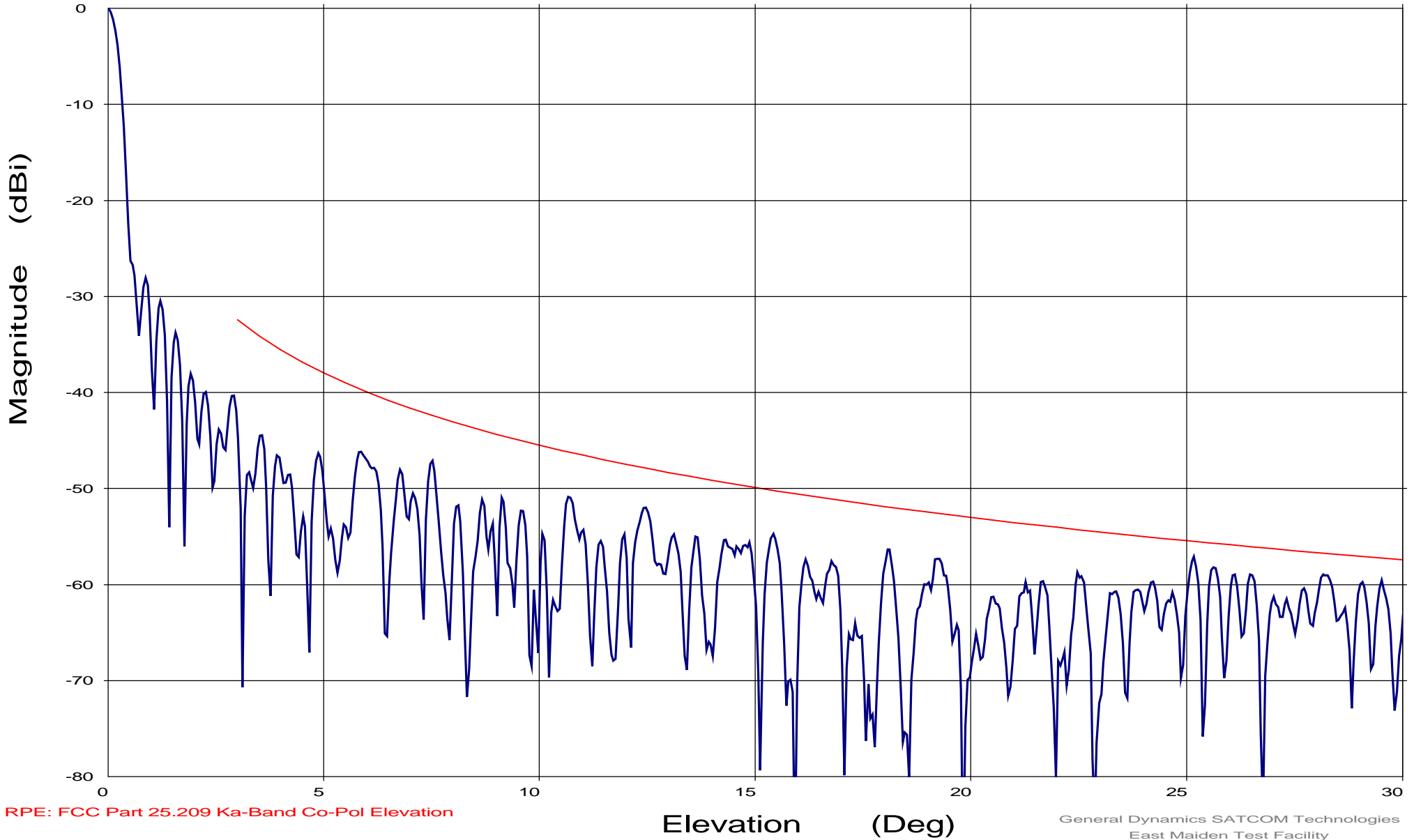
Operator: J Hartness

Ser. no.: 013012-1

Channel: AUT

Tx pol: LHCP

Rx pol: LHCP



RPE: FCC Part 25.209 Ka-Band Co-Pol Elevation

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

File: 2241 07.dat

1.8M Ka-Band CP Rx/Tx  
O3b Antenna System

Frequency : 29.100 GHz

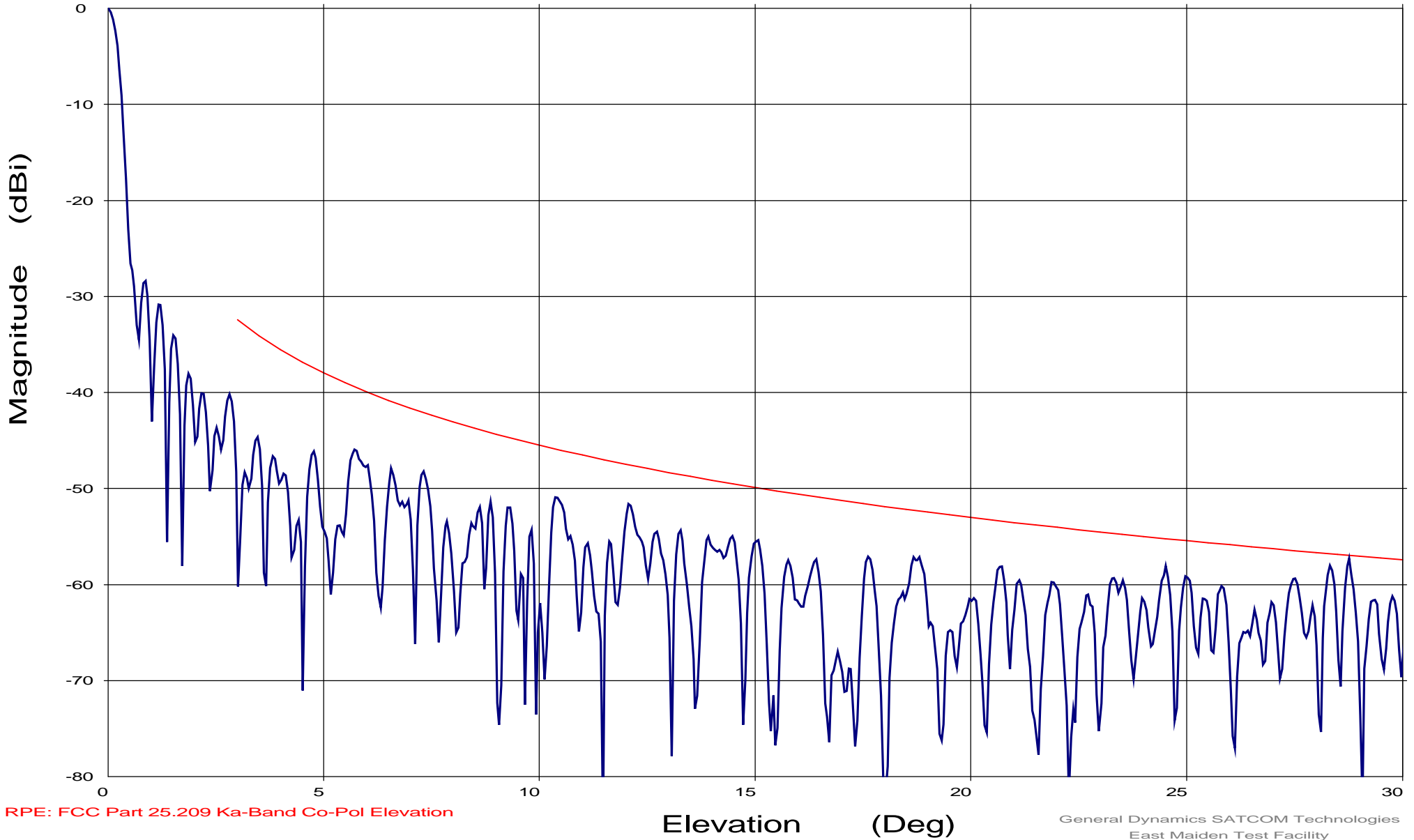
Operator: J Hartness

Ser. no.: 013012-1

Channel: AUT

Tx pol: LHCP

Rx pol: LHCP



RPE: FCC Part 25.209 Ka-Band Co-Pol Elevation

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

File: 2241 05.dat

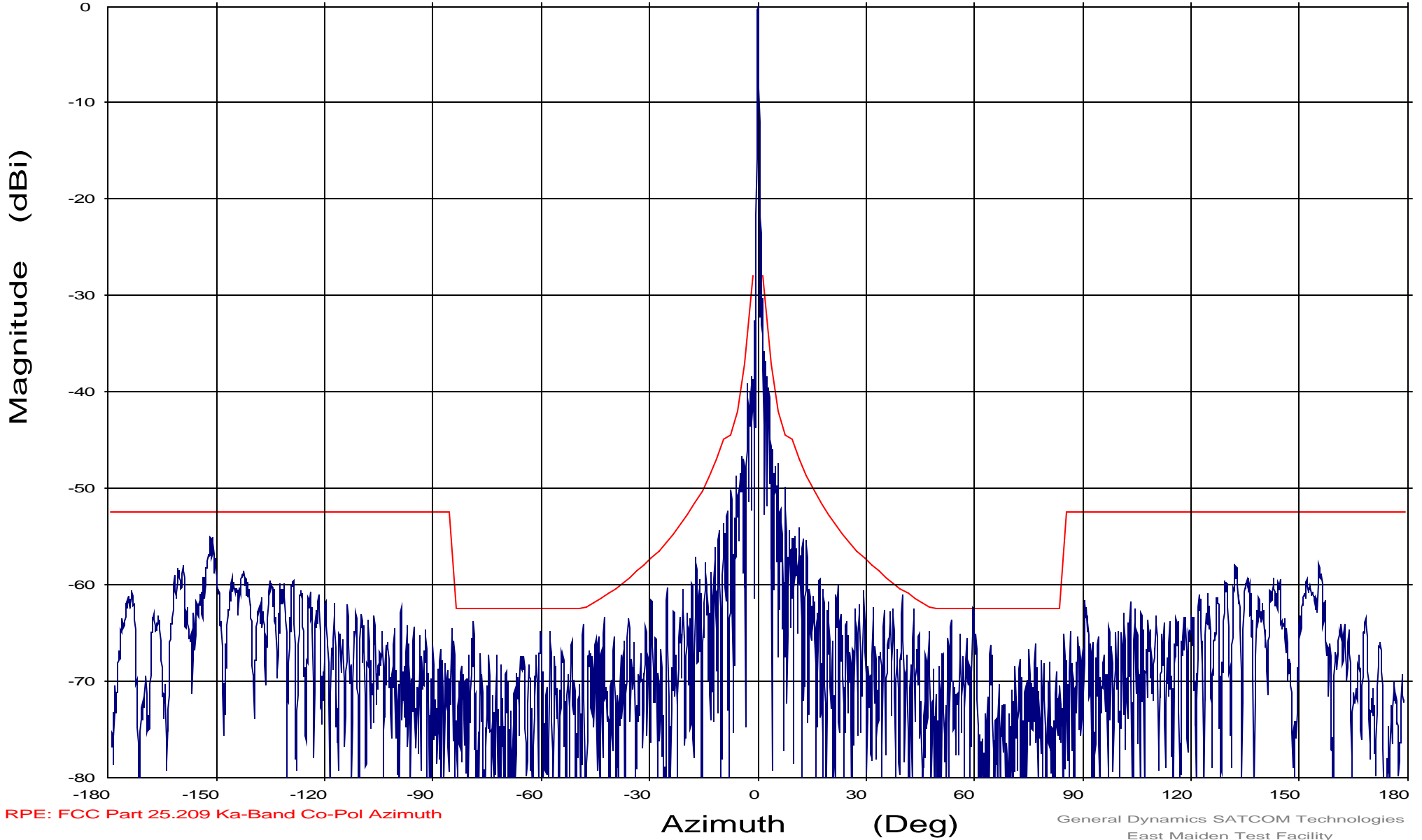
1.8M Ka-Band CP Rx/Tx  
O3b Antenna System

Frequency : 27.600 GHz

Operator: J Hartness  
Ser. no.: 013012-1  
Channel: AUT

Tx pol: LHCP

Rx pol: LHCP



RPE: FCC Part 25.209 Ka-Band Co-Pol Azimuth

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

File: 2241 05.dat

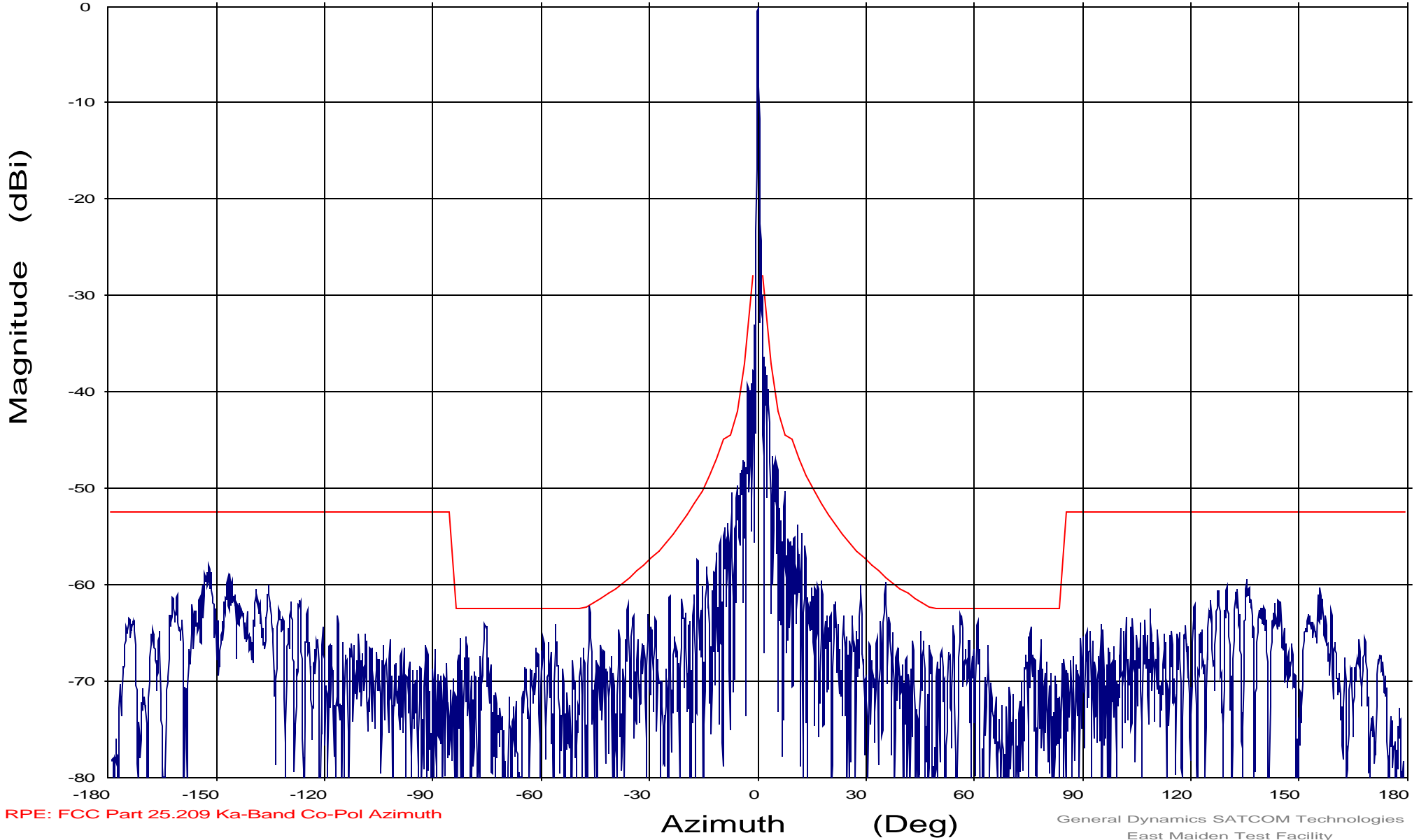
1.8M Ka-Band CP Rx/Tx  
O3b Antenna System

Frequency : 28.350 GHz

Operator: J Hartness  
Ser. no.: 013012-1  
Channel: AUT

Tx pol: LHCP

Rx pol: LHCP



RPE: FCC Part 25.209 Ka-Band Co-Pol Azimuth

Azimuth (Deg)

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

File: 2241 05.dat

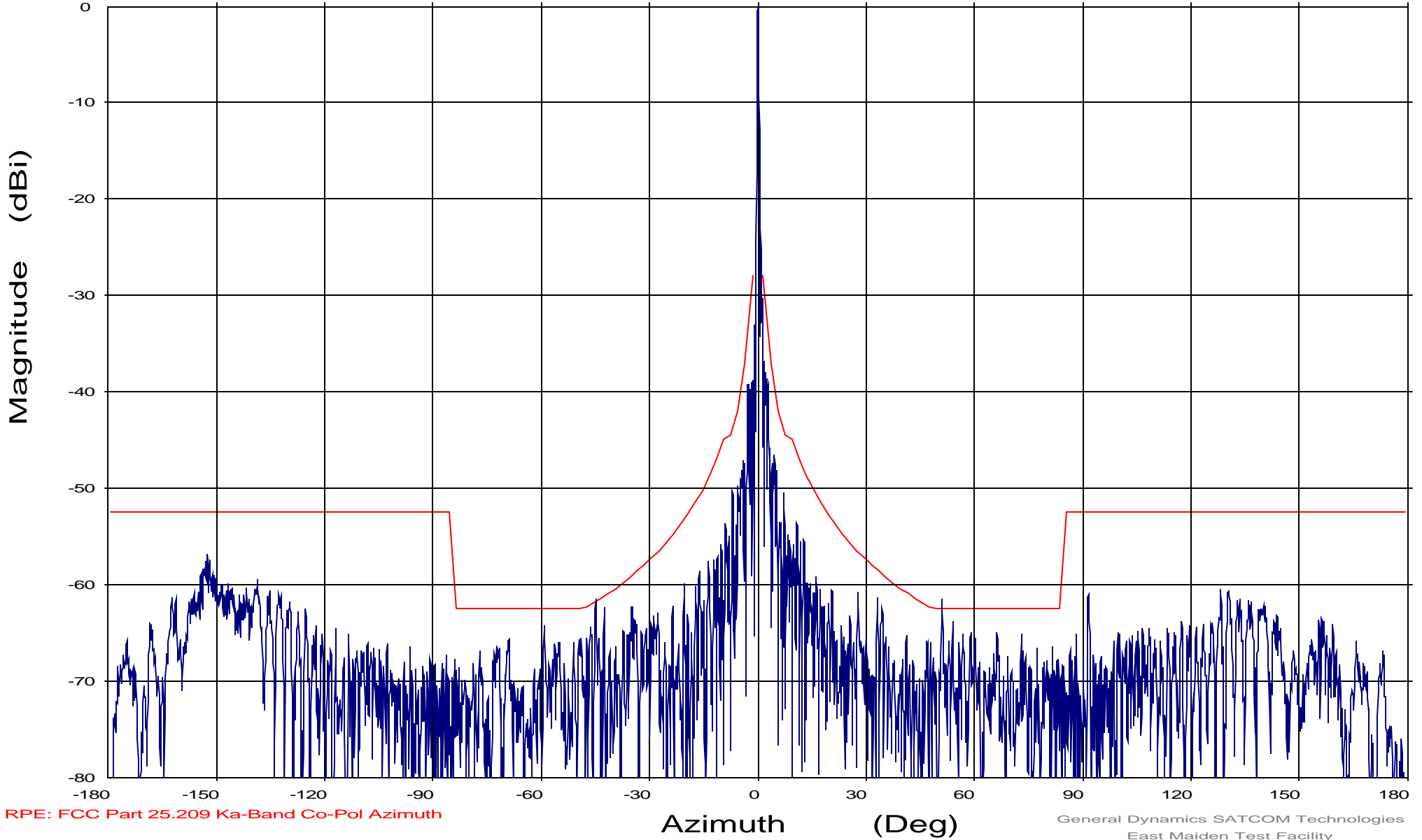
1.8M Ka-Band CP Rx/Tx  
O3b Antenna System

Frequency : 29.100 GHz

Operator: J Hartness  
Ser. no.: 013012-1  
Channel: AUT

Tx pol: LHCP

Rx pol: LHCP



RPE: FCC Part 25.209 Ka-Band Co-Pol Azimuth

Azimuth (Deg)

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

RHCP Radiation Patterns  
**Transmit Frequencies**

1.8M Ka-Band CP Rx/Tx  
O3b Antenna System

Frequency : 27.600 GHz

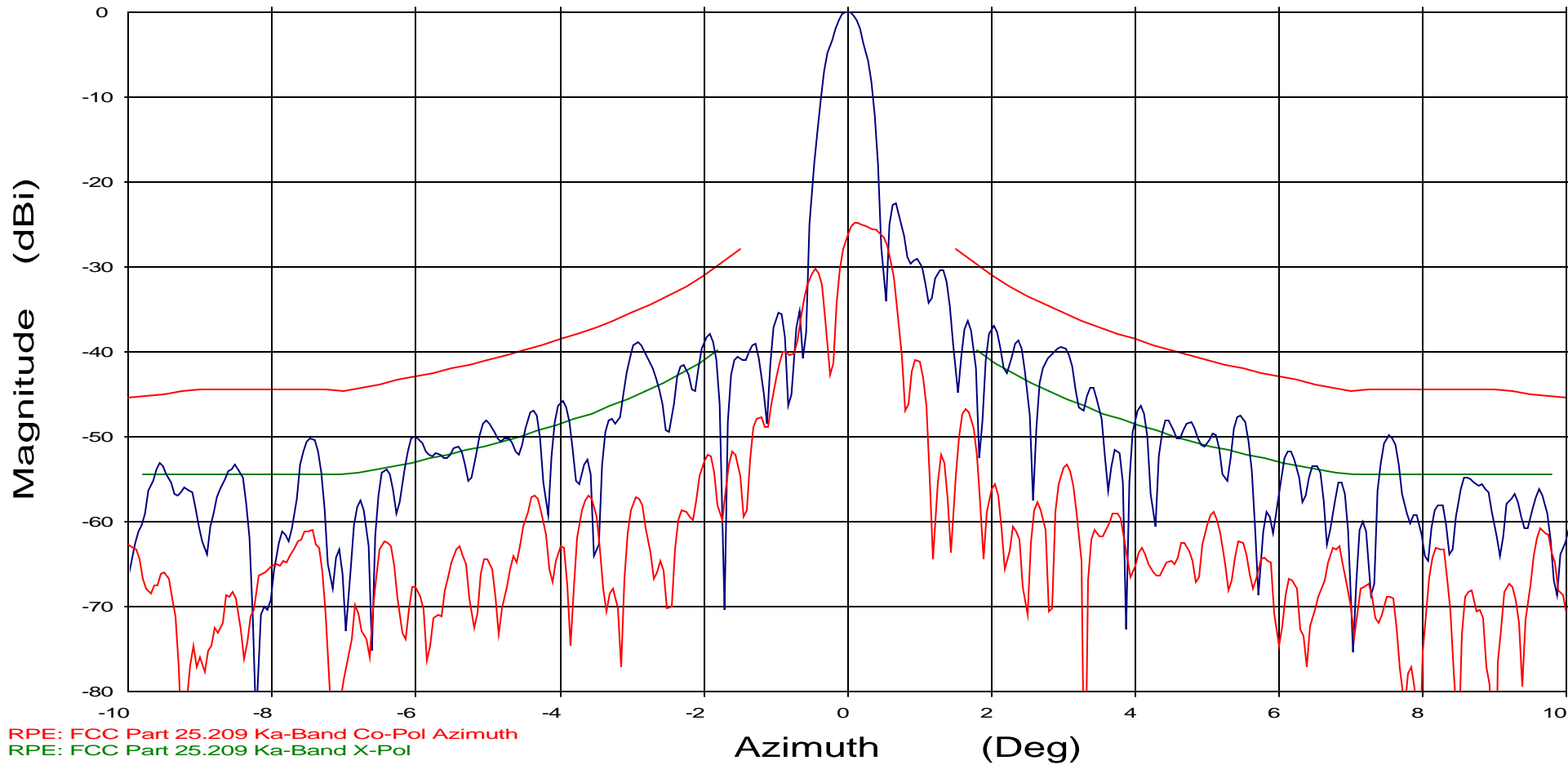
Operator: Dwight B. Lutz

Ser. no.: 013012-1

Channel: AUT

Tx pol: RHCP

Rx pol: RHCP



RPE: FCC Part 25.209 Ka-Band Co-Pol Azimuth

RPE: FCC Part 25.209 Ka-Band X-Pol

Overlays

2241 13.dat-ant\_under\_test

2241 16.dat-ant\_under\_test

Cal. file

2241 13.dat

2241 16.dat

table

Reference

Reference

channel

AUT

AUT

units

dBi

dBi



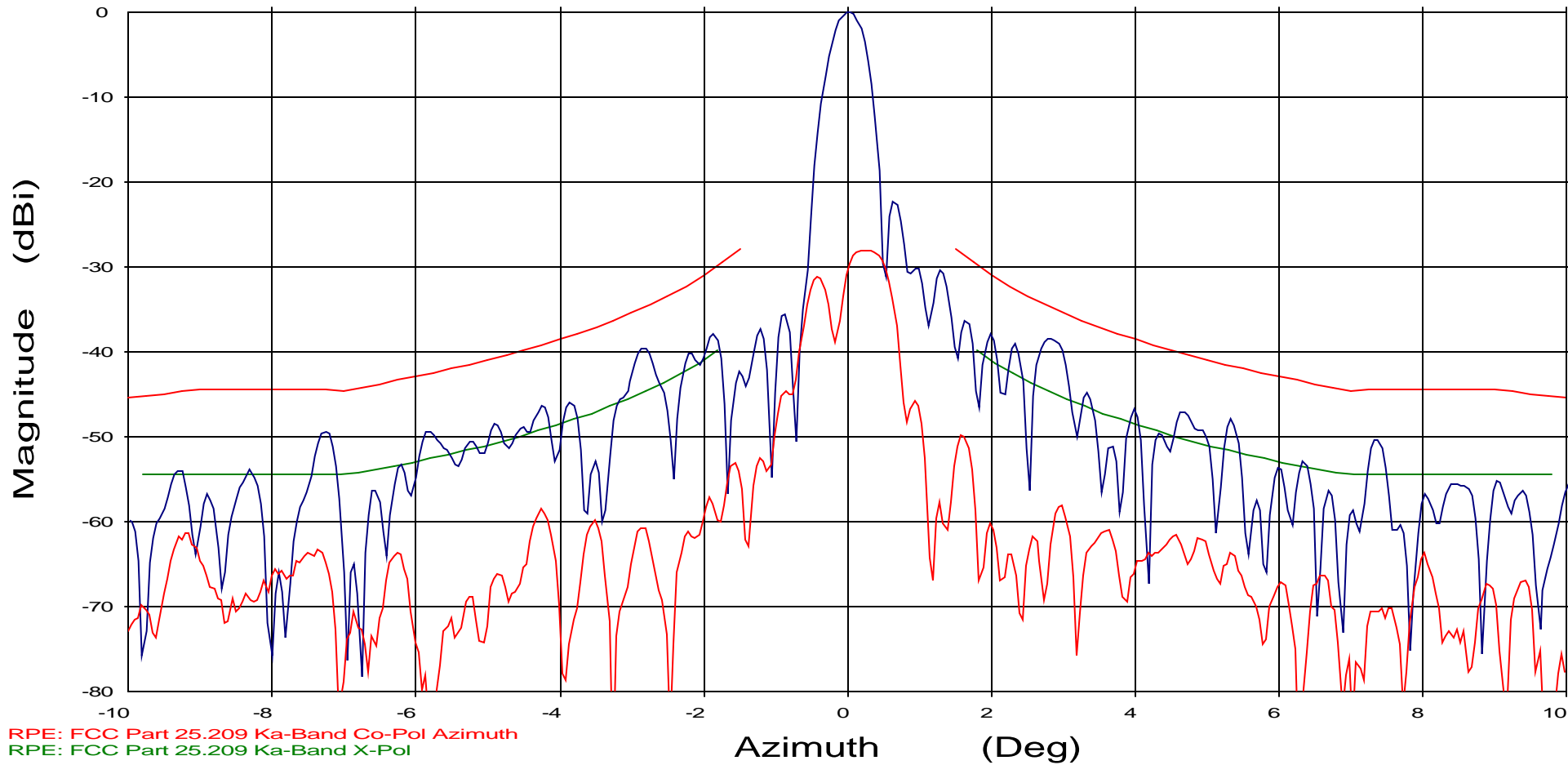
Operator: Dwight B. Lutz

Ser. no.: 013012-1

Channel: AUT

Tx pol: RHCP

Rx pol: RHCP



Overlays

2241 13.dat-ant\_under\_test  
2241 16.dat-ant\_under\_test

Cal. file

2241 13.dat  
2241 16.dat

table

Reference  
Reference

channel

AUT  
AUT

units

dBi  
dBi

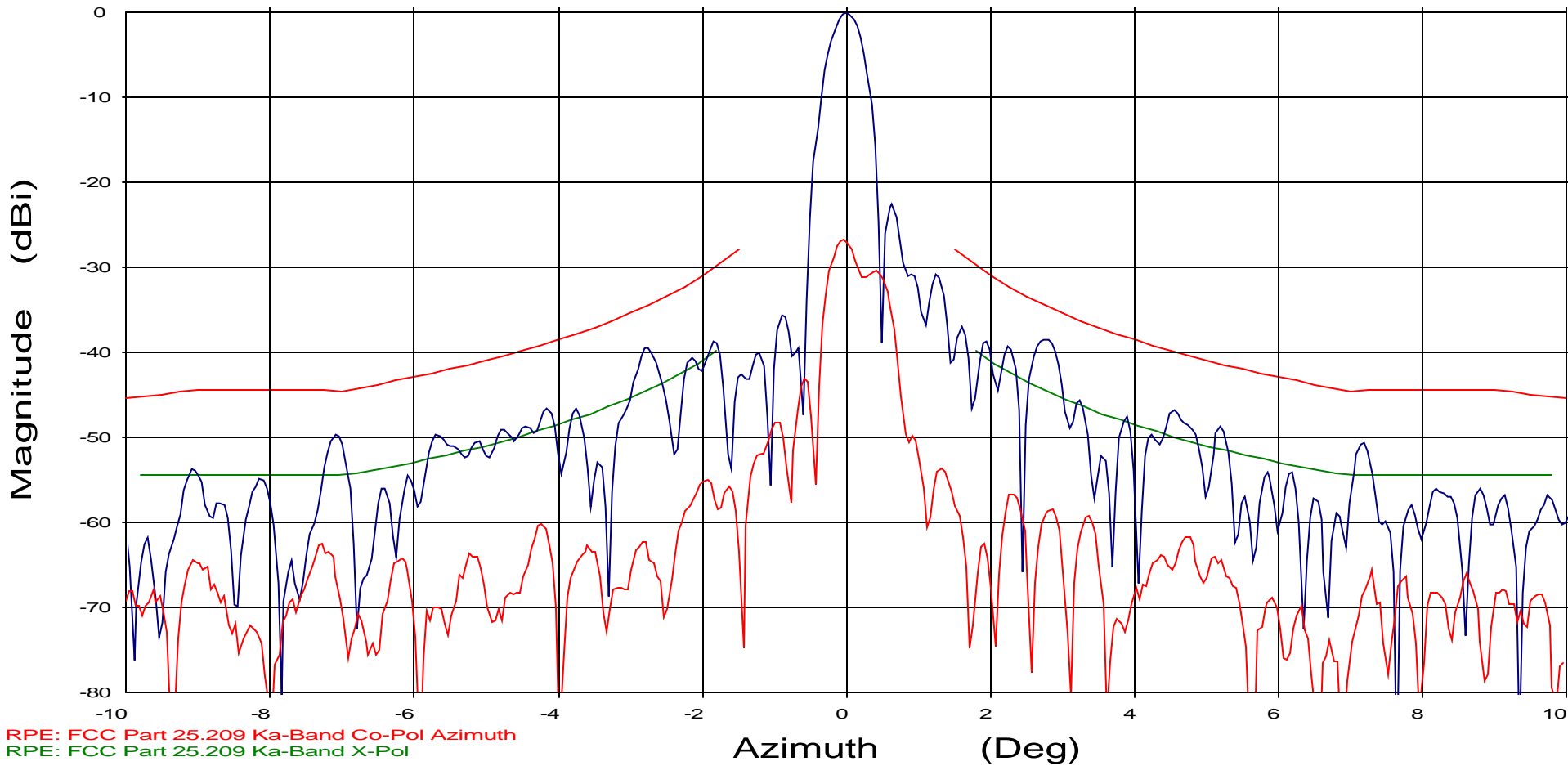
1.8M Ka-Band CP Rx/Tx  
O3b Antenna System

Frequency : 29.100 GHz

Operator: Dwight B. Lutz  
Ser. no.: 013012-1  
Channel: AUT

Tx pol: RHCP

Rx pol: RHCP



RPE: FCC Part 25.209 Ka-Band Co-Pol Azimuth  
RPE: FCC Part 25.209 Ka-Band X-Pol

Overlays	Cal. file	table	channel	units
2241 13.dat-ant_under_test	2241 13.dat	Reference	AUT	dBi
2241 16.dat-ant_under_test	2241 16.dat	Reference	AUT	dBi

1.8M Ka-Band CP Rx/Tx  
O3b Antenna System

Frequency : 27.600 GHz

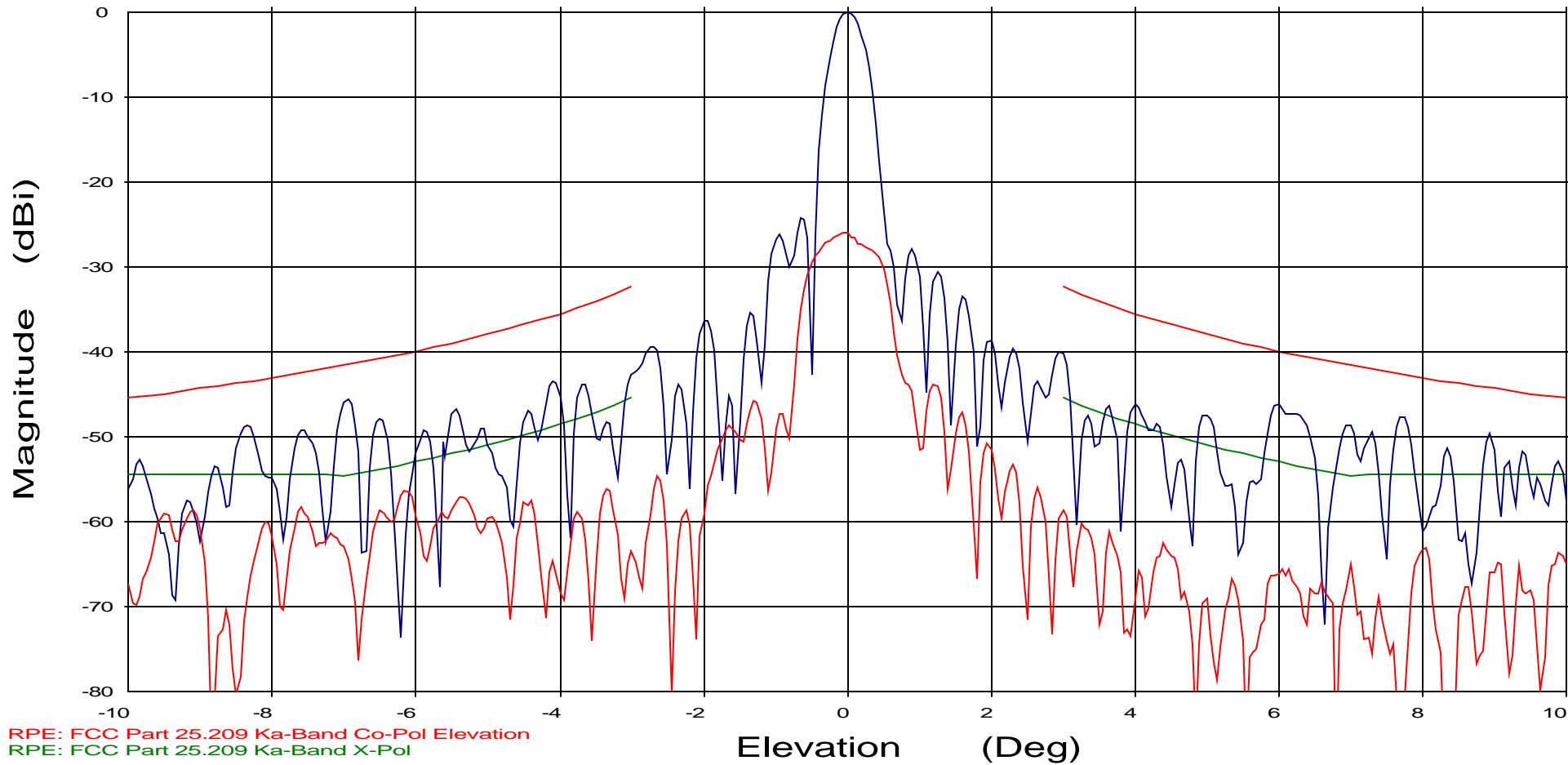
Operator: Dwight B. Lutz

Ser. no.: 013012-1

Channel: AUT

Tx pol: RHCP

Rx pol: RHCP



Overlays

2241 15.dat-ant\_under\_test  
2241 18.dat-ant\_under\_test

Cal. file

2241 15.dat  
2241 18.dat

table

Reference  
Reference

channel

AUT  
AUT

units

dBi  
dBi

1.8M Ka-Band CP Rx/Tx  
O3b Antenna System

Frequency : 28.350 GHz

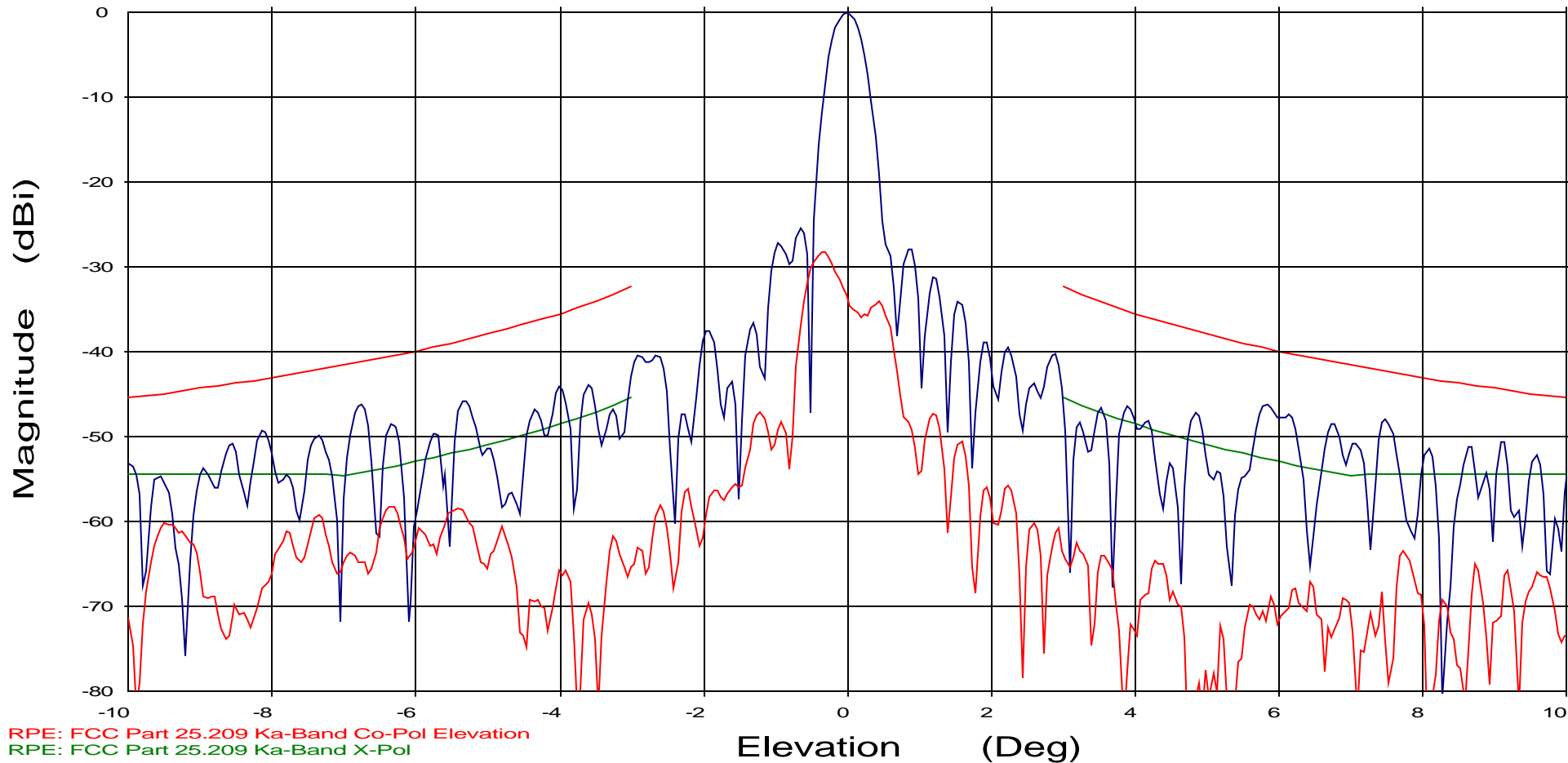
Operator: Dwight B. Lutz

Ser. no.: 013012-1

Channel: AUT

Tx pol: RHCP

Rx pol: RHCP



RPE: FCC Part 25.209 Ka-Band Co-Pol Elevation

RPE: FCC Part 25.209 Ka-Band X-Pol

Overlays

2241 15.dat-ant\_under\_test

2241 18.dat-ant\_under\_test

Cal. file

2241 15.dat

2241 18.dat

table

Reference

Reference

channel

AUT

AUT

units

dBi

dBi

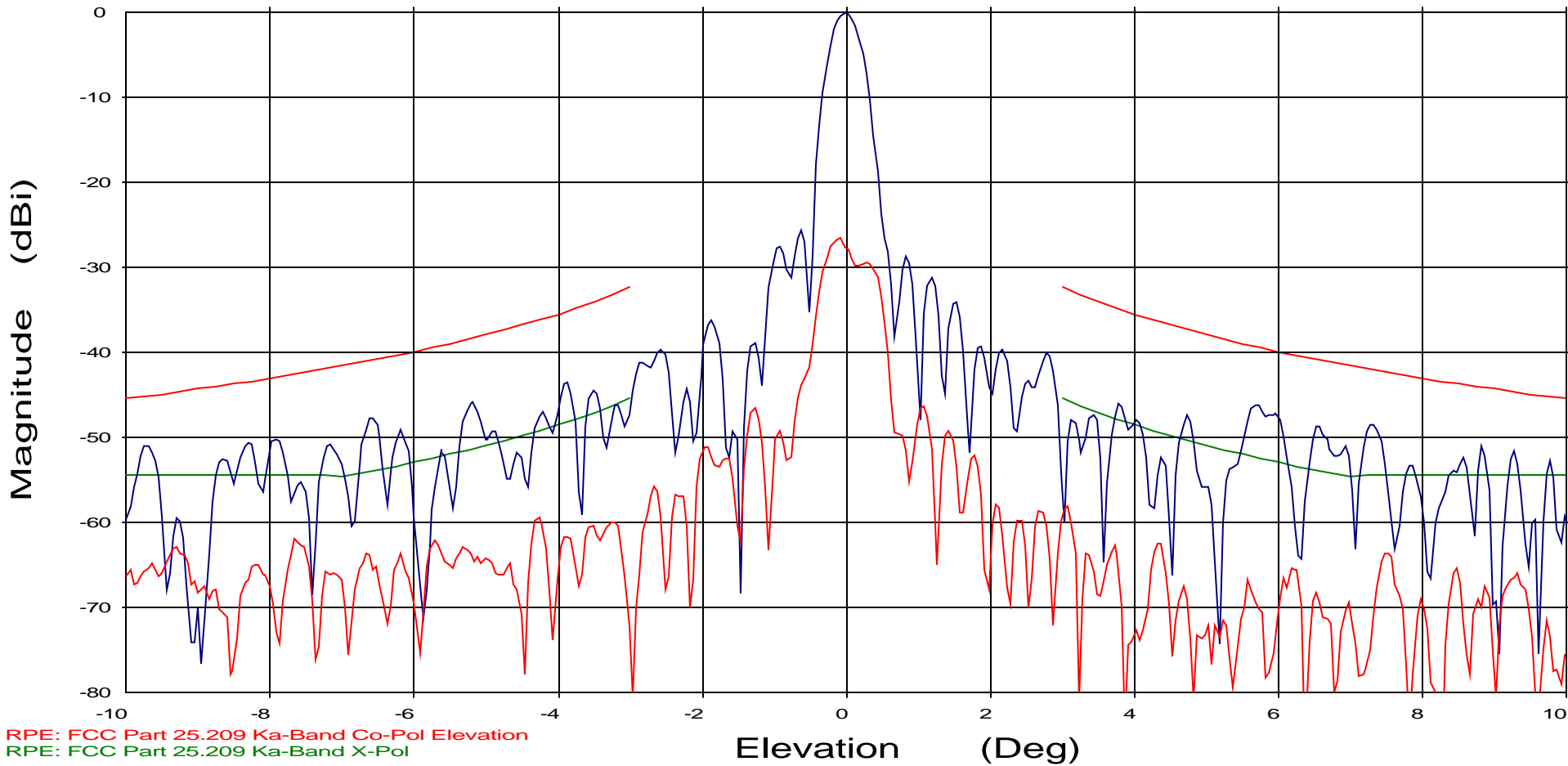
1.8M Ka-Band CP Rx/Tx  
O3b Antenna System

Frequency : 29.100 GHz

Operator: Dwight B. Lutz  
Ser. no.: 013012-1  
Channel: AUT

Tx pol: RHCP

Rx pol: RHCP



Overlays

2241 15.dat-ant\_under\_test — blue line  
2241 18.dat-ant\_under\_test — red line

Cal. file

2241 15.dat  
2241 18.dat

table

Reference  
Reference

channel

AUT  
AUT

units

dBi  
dBi

File: 2241 15.dat

1.8M Ka-Band CP Rx/Tx  
O3b Antenna System

Frequency : 27.600 GHz

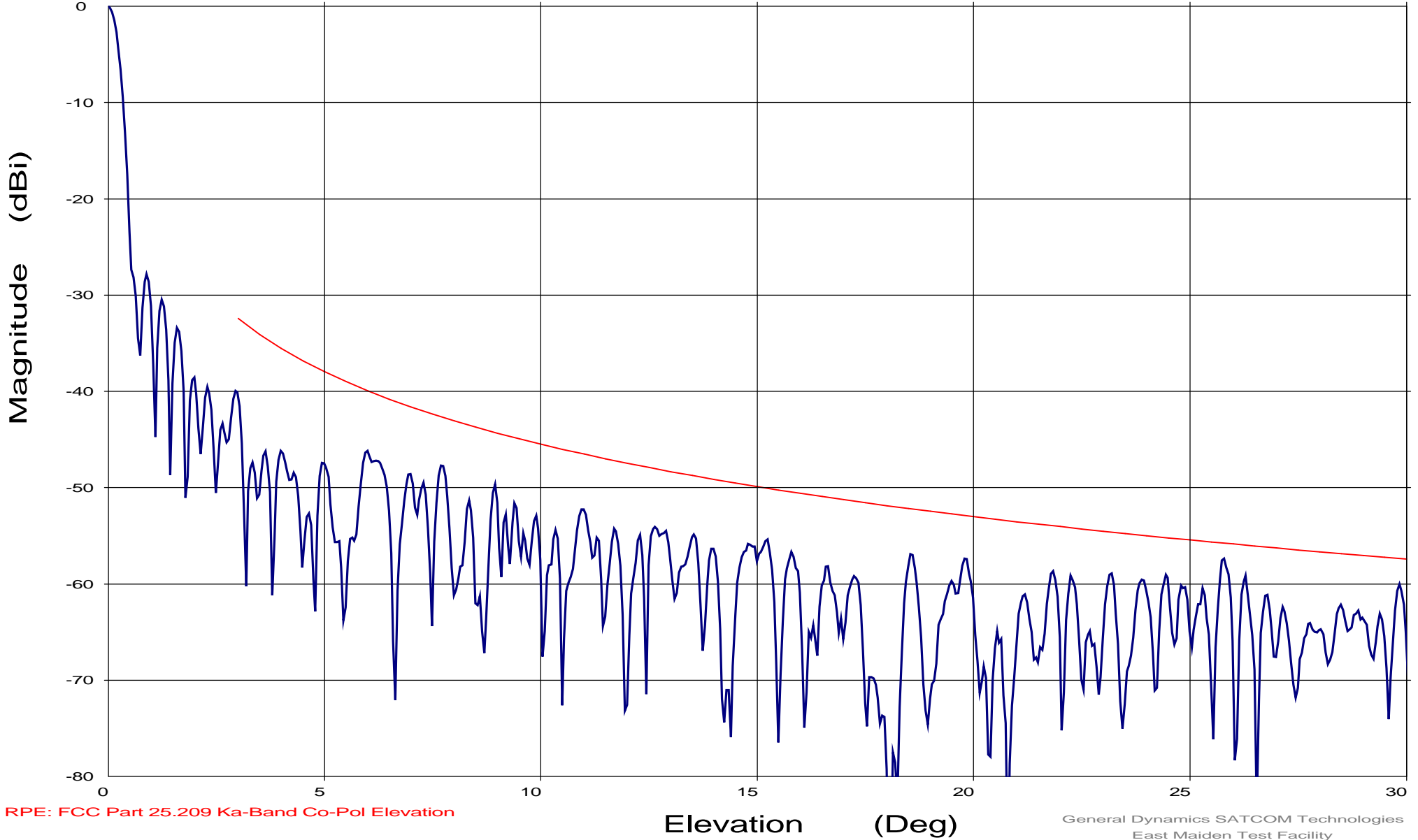
Operator: Dwight B. Lutz

Ser. no.: 013012-1

Channel: AUT

Tx pol: RHCP

Rx pol: RHCP



RPE: FCC Part 25.209 Ka-Band Co-Pol Elevation

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

File: 2241 15.dat

1.8M Ka-Band CP Rx/Tx  
O3b Antenna System

Frequency : 28.350 GHz

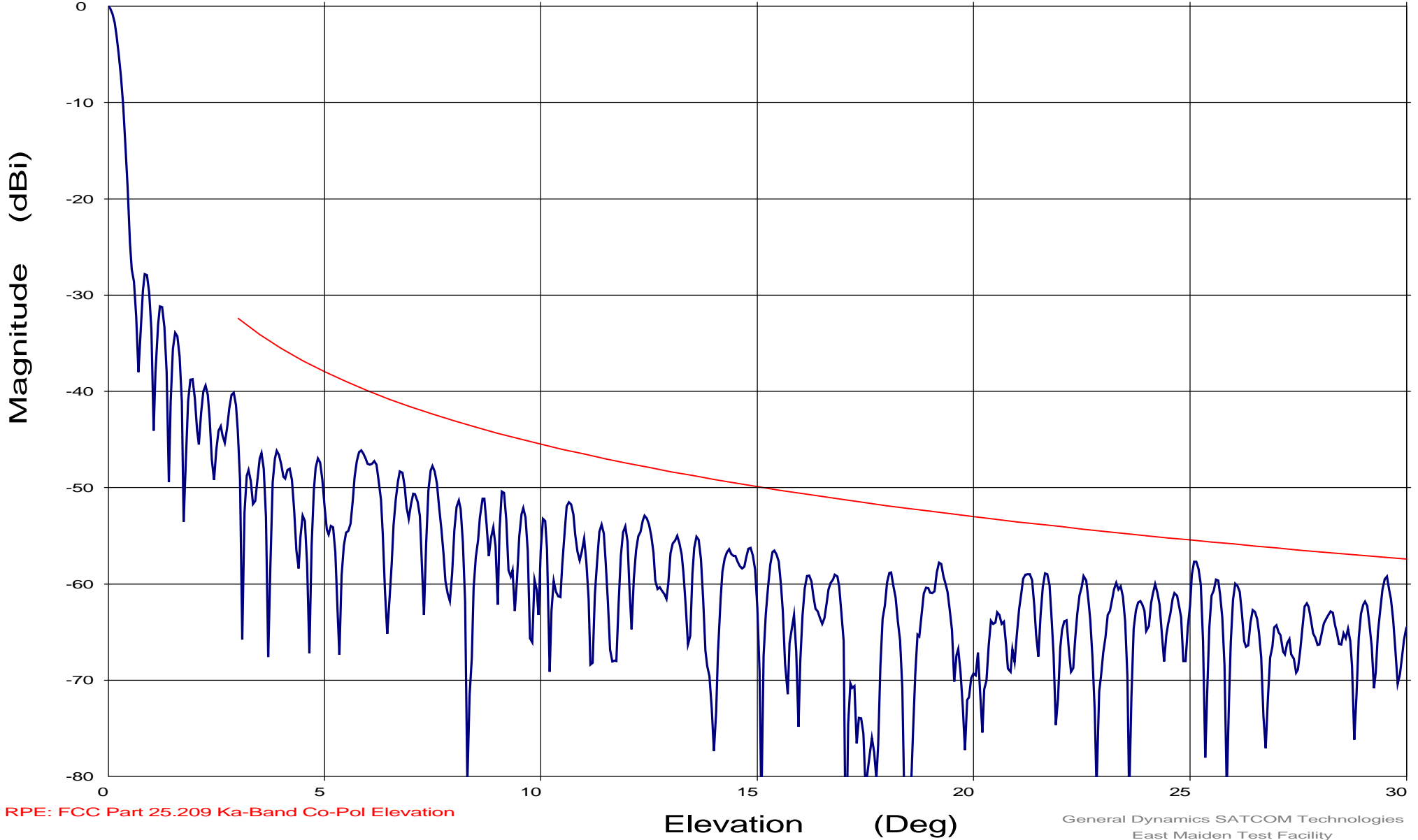
Operator: Dwight B. Lutz

Ser. no.: 013012-1

Channel: AUT

Tx pol: RHCP

Rx pol: RHCP



RPE: FCC Part 25.209 Ka-Band Co-Pol Elevation

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

File: 2241 15.dat

1.8M Ka-Band CP Rx/Tx  
O3b Antenna System

Frequency : 29.100 GHz

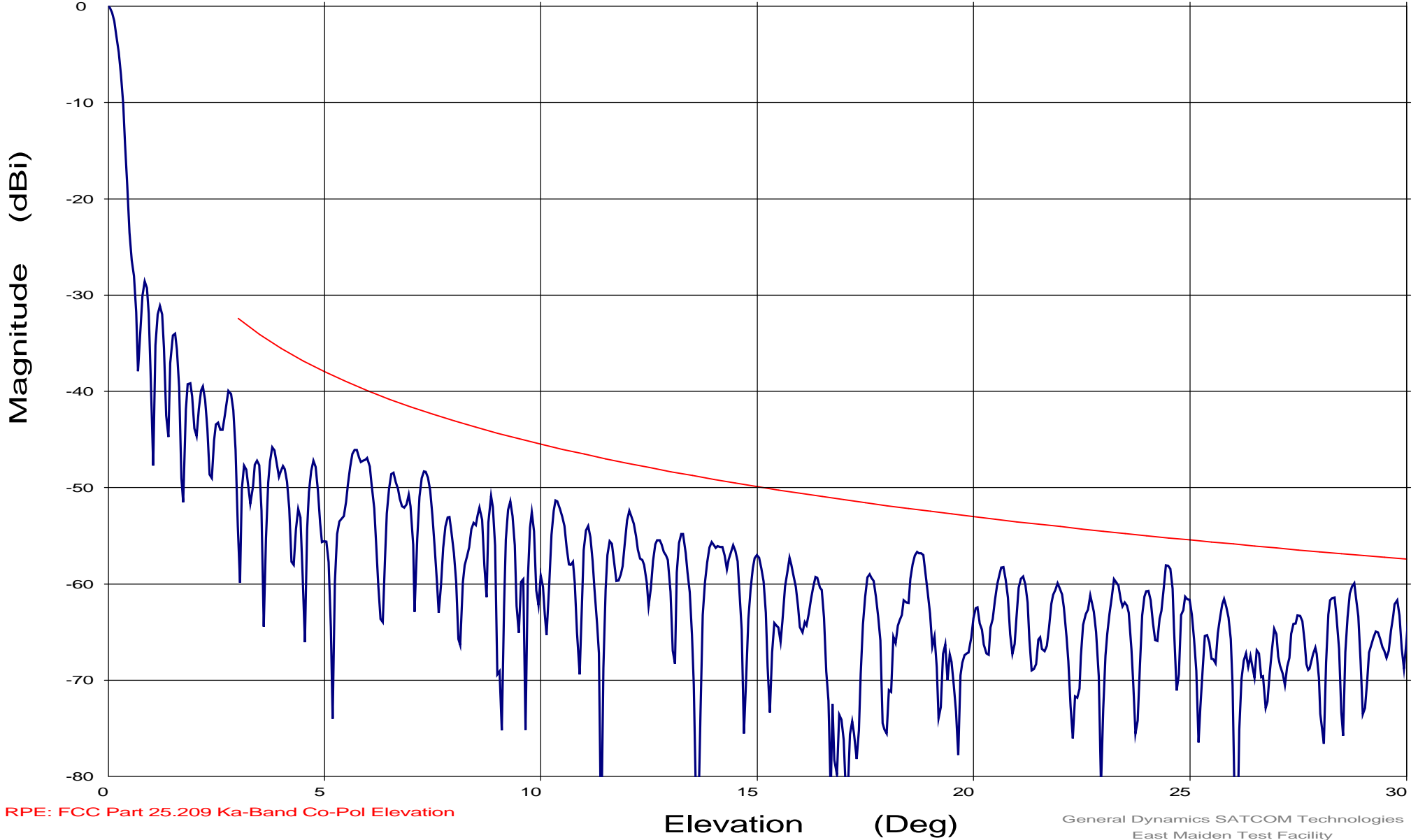
Operator: Dwight B. Lutz

Ser. no.: 013012-1

Channel: AUT

Tx pol: RHCP

Rx pol: RHCP



RPE: FCC Part 25.209 Ka-Band Co-Pol Elevation

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



File: 2241 13.dat

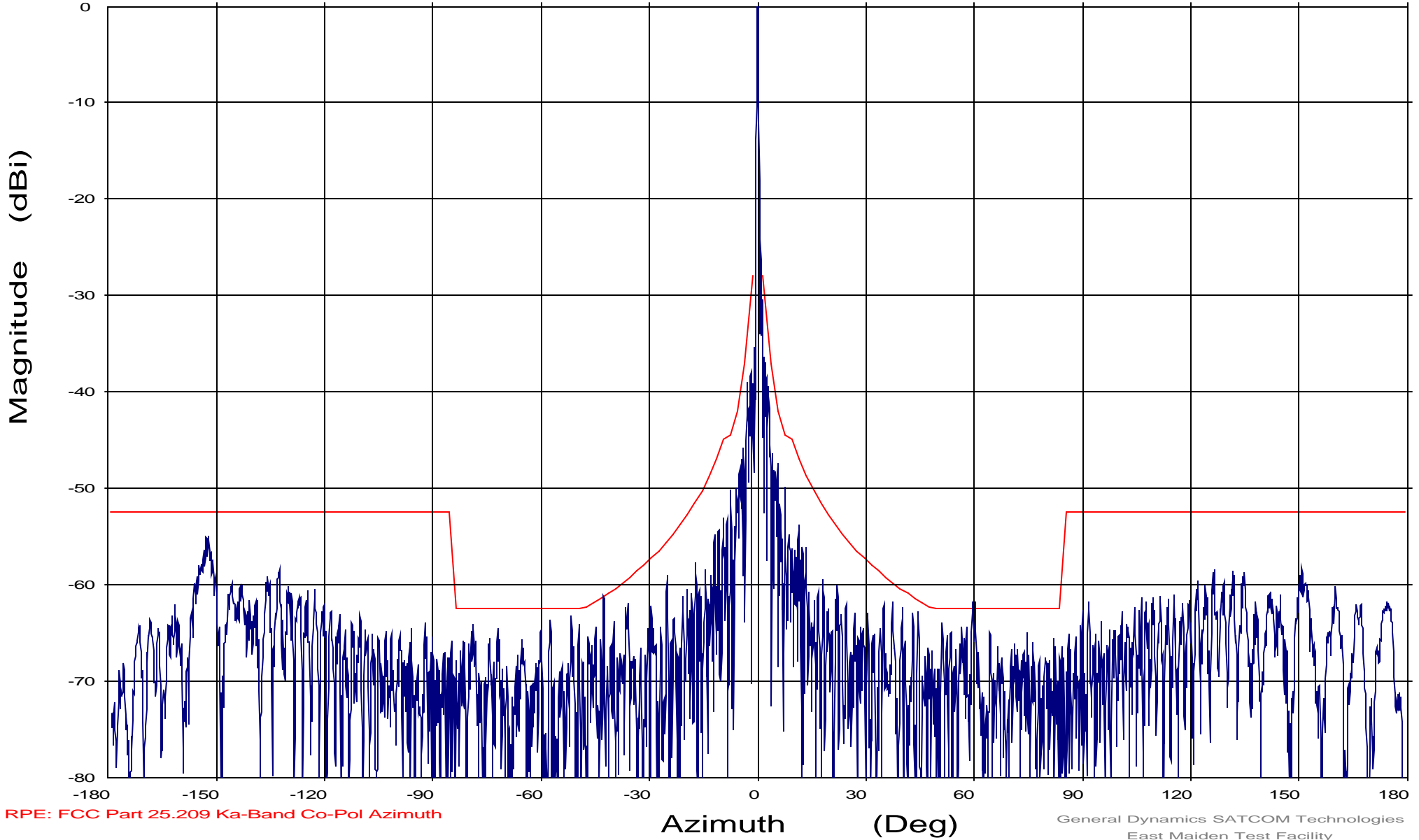
1.8M Ka-Band CP Rx/Tx  
O3b Antenna System

Frequency : 27.600 GHz

Operator: Dwight B. Lutz  
Ser. no.: 013012-1  
Channel: AUT

Tx pol: RHCP

Rx pol: RHCP



RPE: FCC Part 25.209 Ka-Band Co-Pol Azimuth

Azimuth (Deg)

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

File: 2241 13.dat

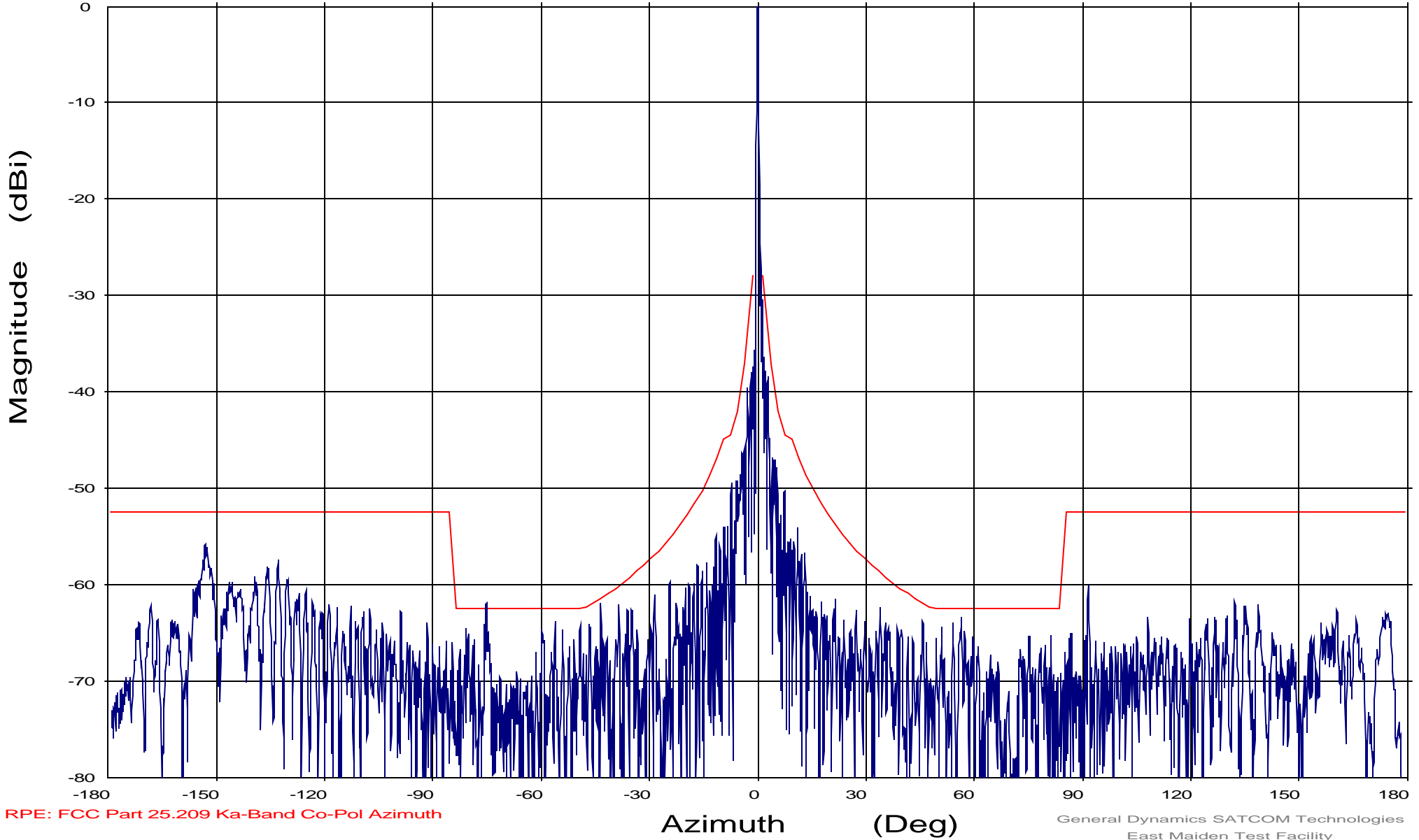
1.8M Ka-Band CP Rx/Tx  
O3b Antenna System

Frequency : 28.350 GHz

Operator: Dwight B. Lutz  
Ser. no.: 013012-1  
Channel: AUT

Tx pol: RHCP

Rx pol: RHCP



RPE: FCC Part 25.209 Ka-Band Co-Pol Azimuth

Azimuth (Deg)

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

File: 2241 13.dat

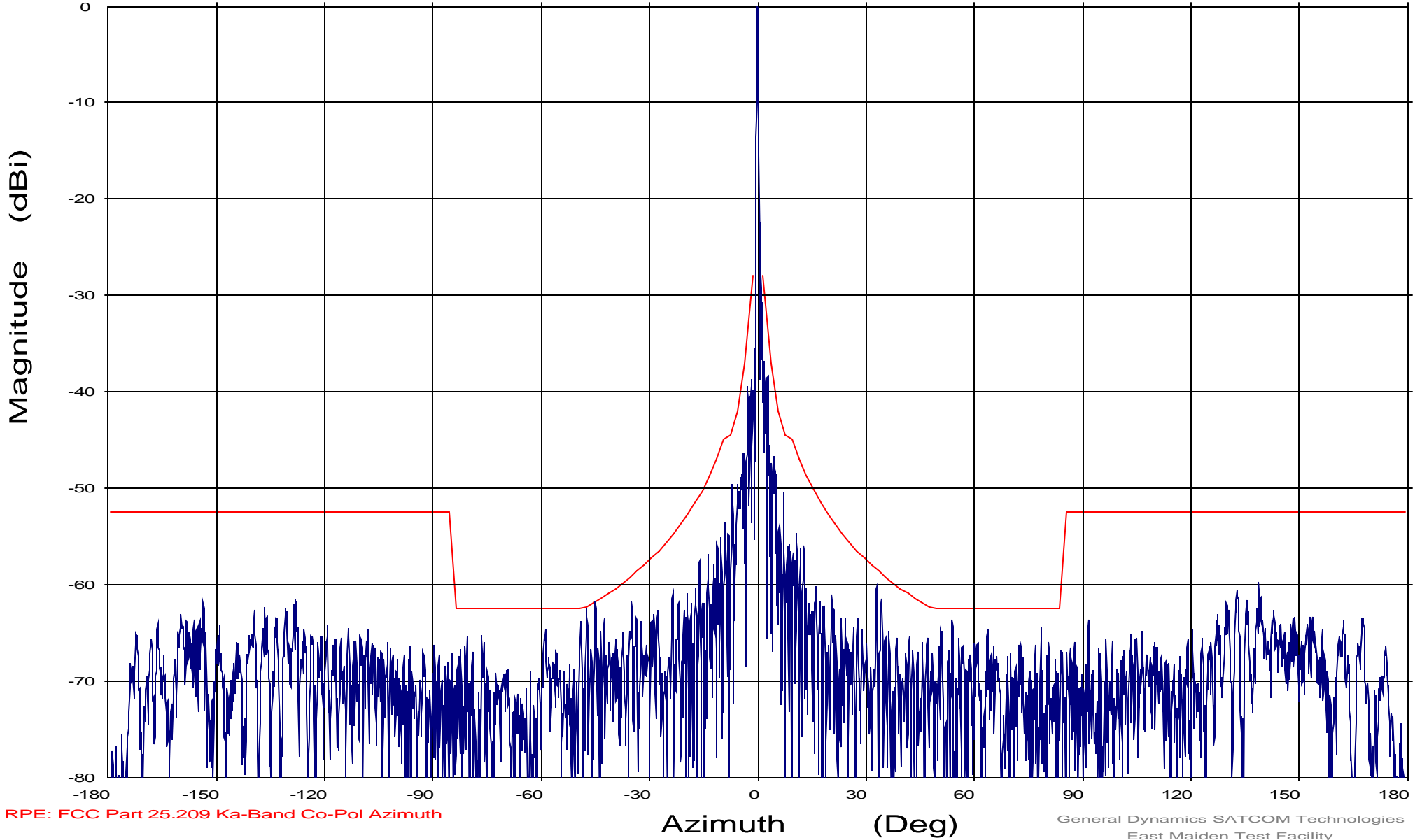
1.8M Ka-Band CP Rx/Tx  
O3b Antenna System

Frequency : 29.100 GHz

Operator: Dwight B. Lutz  
Ser. no.: 013012-1  
Channel: AUT

Tx pol: RHCP

Rx pol: RHCP



RPE: FCC Part 25.209 Ka-Band Co-Pol Azimuth

Azimuth (Deg)

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

LHCP Radiation Patterns  
**Receive Frequencies**

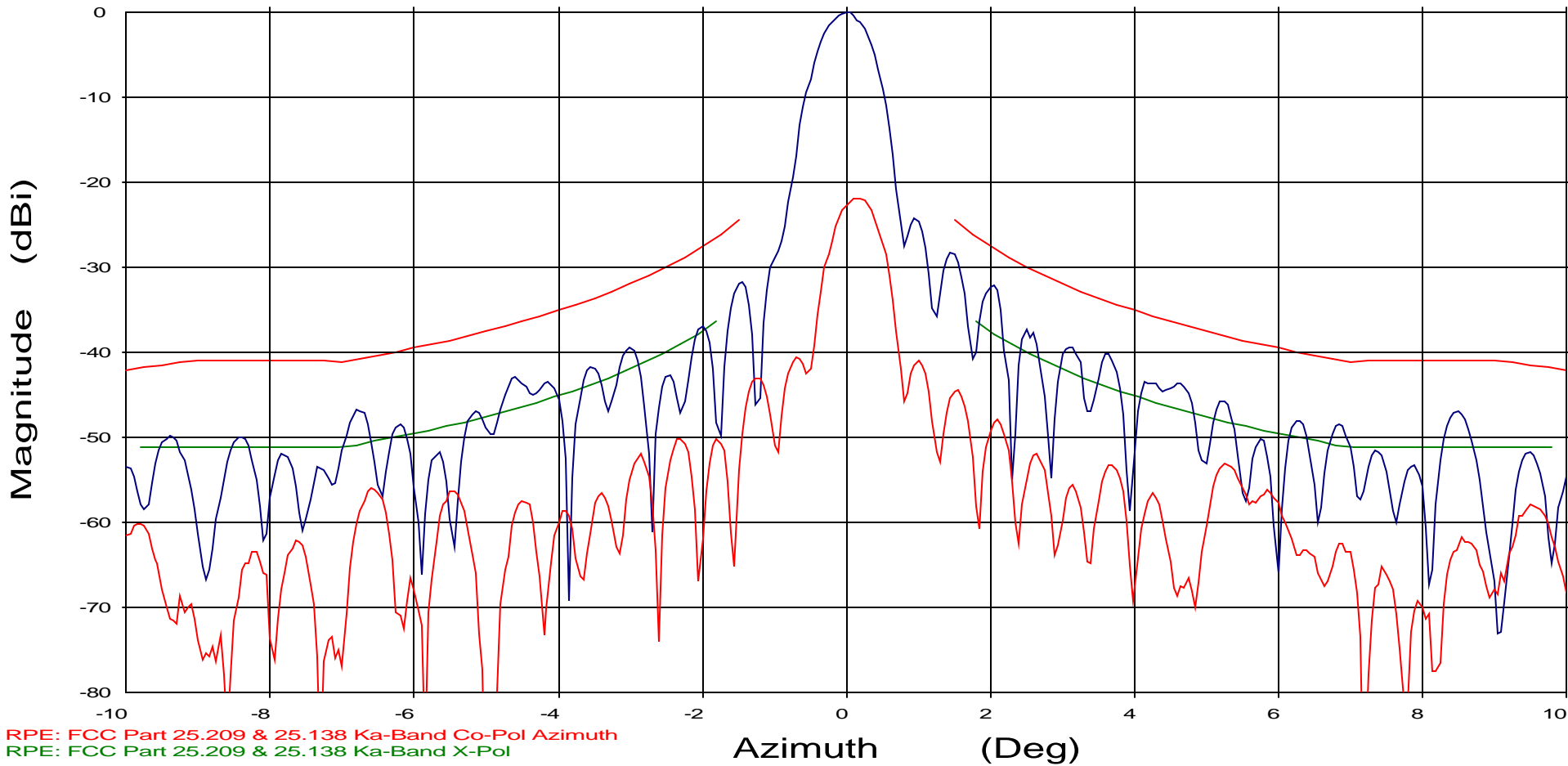
1.8M Ka-Band CP Rx/Tx  
O3b Antenna System

Frequency : 17.800 GHz

Operator: Dwight B. Lutz  
Ser. no.: 013012-1  
Channel: AUT

Tx pol: LHCP

Rx pol: LHCP



Overlays	Cal. file	table	channel	units
2241 21.dat-ant_under_test	2241 21.dat	Reference	AUT	dBi
2241 25.dat-ant_under_test	2241 25.dat	Reference	AUT	dBi

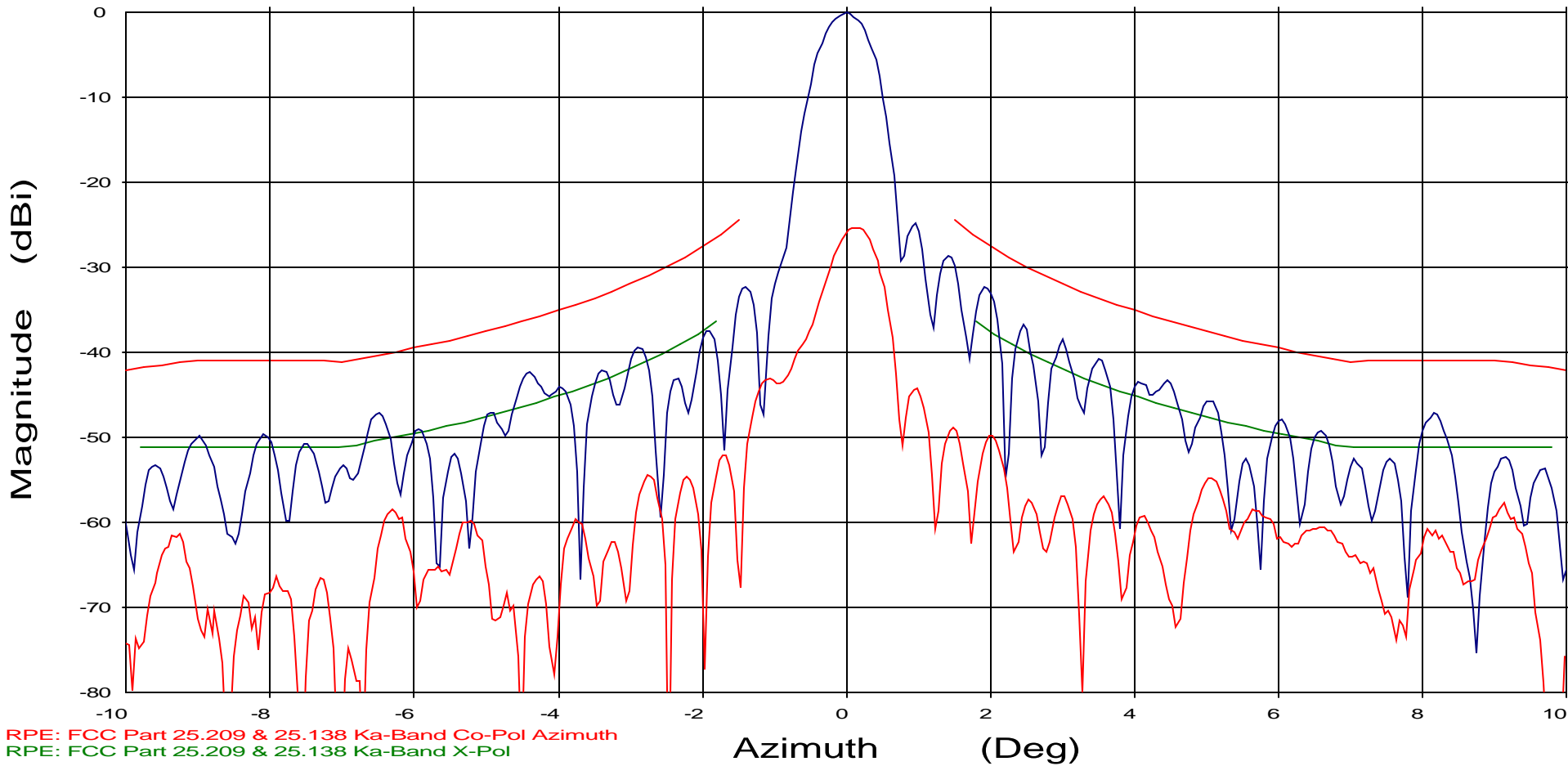
1.8M Ka-Band CP Rx/Tx  
O3b Antenna System

Frequency : 18.550 GHz

Operator: Dwight B. Lutz  
Ser. no.: 013012-1  
Channel: AUT

Tx pol: LHCP

Rx pol: LHCP



RPE: FCC Part 25.209 & 25.138 Ka-Band Co-Pol Azimuth  
RPE: FCC Part 25.209 & 25.138 Ka-Band X-Pol

Overlays	Cal. file	table	channel	units
2241 21.dat-ant_under_test	2241 21.dat	Reference	AUT	dBi
2241 25.dat-ant_under_test	2241 25.dat	Reference	AUT	dBi

1.8M Ka-Band CP Rx/Tx  
O3b Antenna System

Frequency : 19.300 GHz

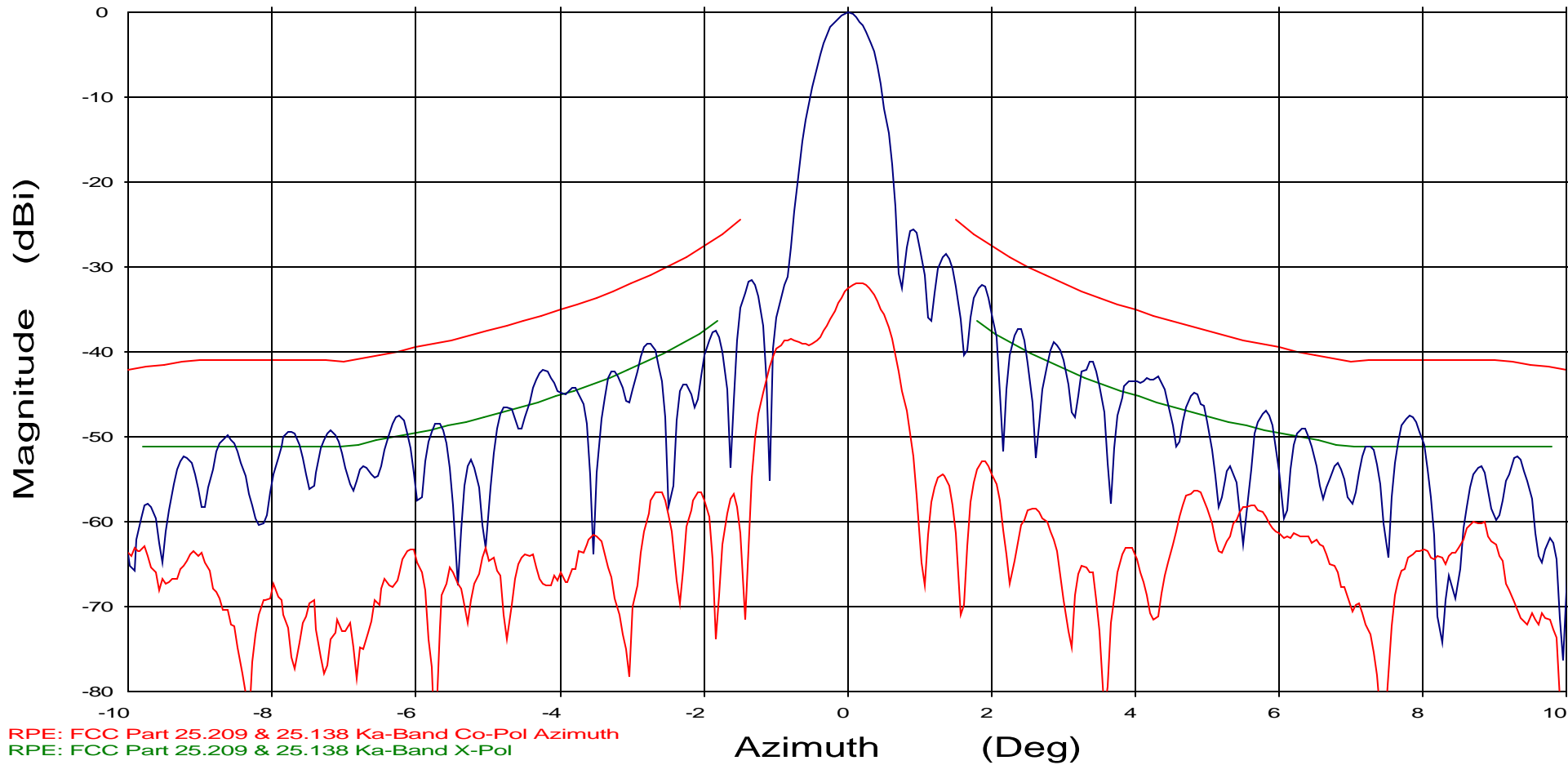
Operator: Dwight B. Lutz

Ser. no.: 013012-1

Channel: AUT

Tx pol: LHCP

Rx pol: LHCP



Overlays

2241 21.dat-ant\_under\_test  
2241 25.dat-ant\_under\_test

Cal. file

2241 21.dat  
2241 25.dat

table

Reference  
Reference

channel

AUT  
AUT

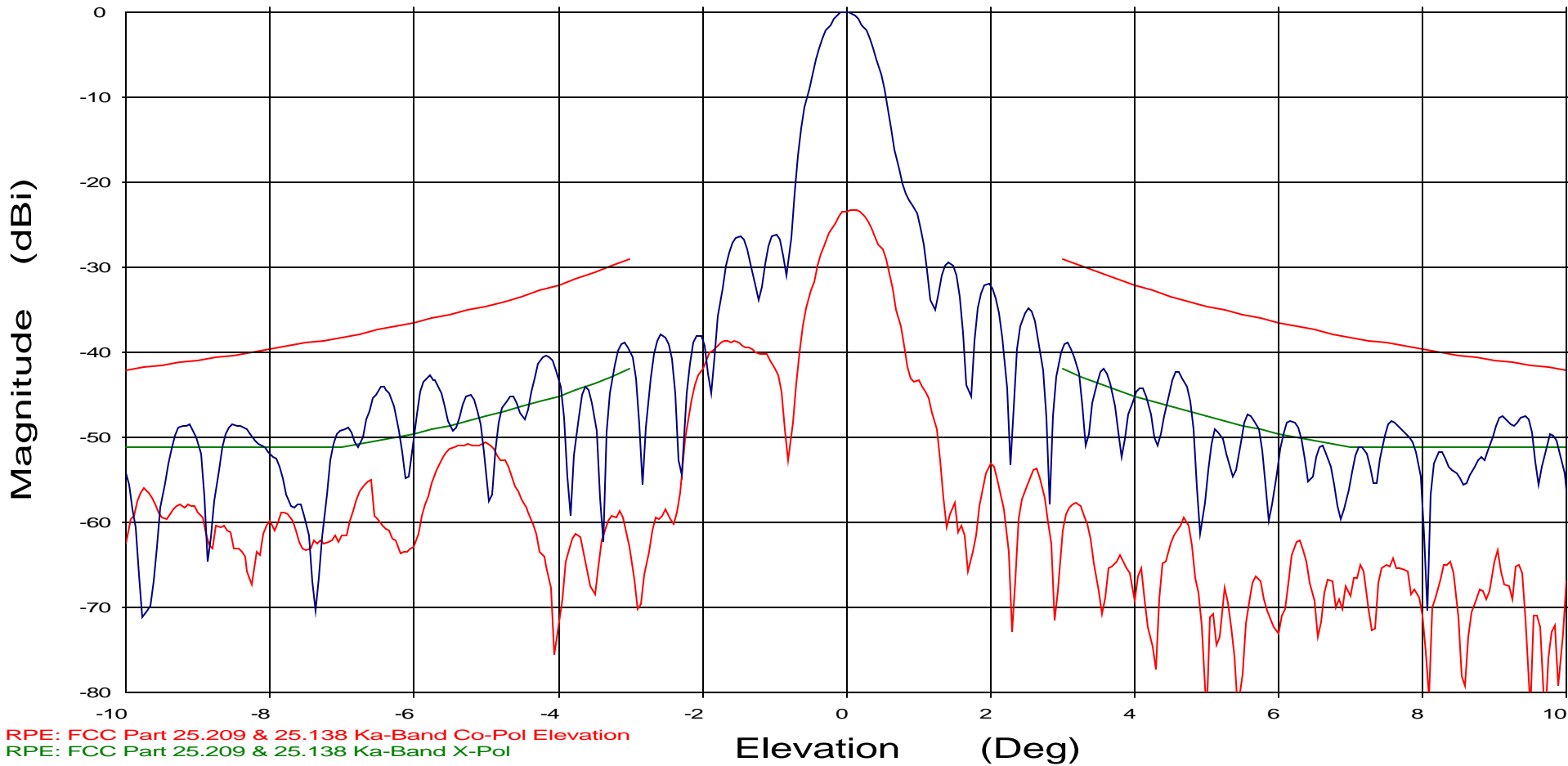
units

dBi  
dBi

Operator: Dwight B. Lutz  
Ser. no.: 013012-1  
Channel: AUT

Tx pol: LHCP

Rx pol: LHCP



RPE: FCC Part 25.209 & 25.138 Ka-Band Co-Pol Elevation  
RPE: FCC Part 25.209 & 25.138 Ka-Band X-Pol

Overlays	Cal. file	table	channel	units
2241 23.dat-ant_under_test	2241 23.dat	Reference	AUT	dBi
2241 28.dat-ant_under_test	2241 28.dat	Reference	AUT	dBi



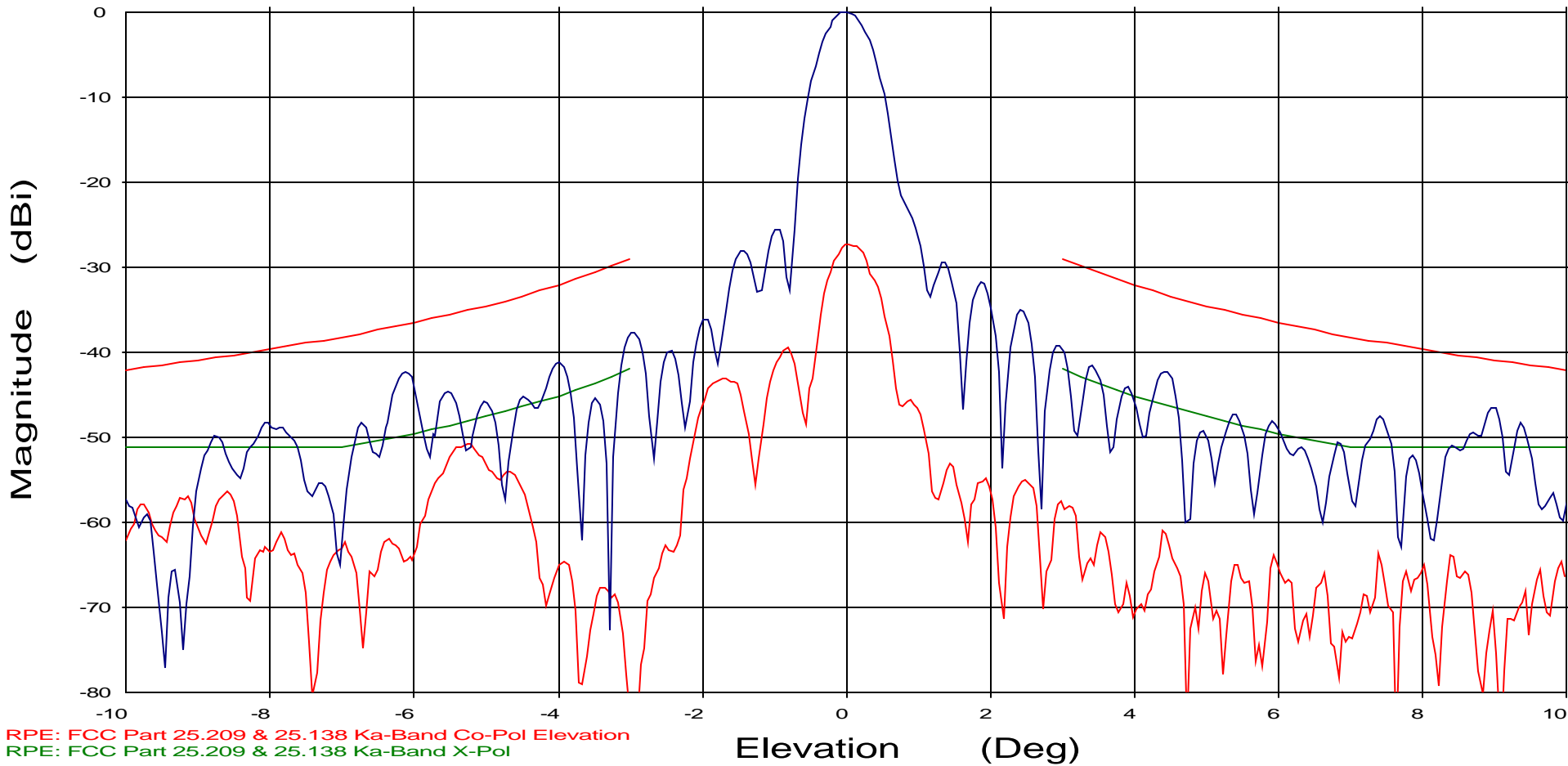
1.8M Ka-Band CP Rx/Tx  
O3b Antenna System

Frequency : 18.550 GHz

Operator: Dwight B. Lutz  
Ser. no.: 013012-1  
Channel: AUT

Tx pol: LHCP

Rx pol: LHCP



RPE: FCC Part 25.209 & 25.138 Ka-Band Co-Pol Elevation  
RPE: FCC Part 25.209 & 25.138 Ka-Band X-Pol

Overlays	Cal. file	table	channel	units
2241 23.dat-ant_under_test	2241 23.dat	Reference	AUT	dBi
2241 28.dat-ant_under_test	2241 28.dat	Reference	AUT	dBi

1.8M Ka-Band CP Rx/Tx  
O3b Antenna System

Frequency : 19.300 GHz

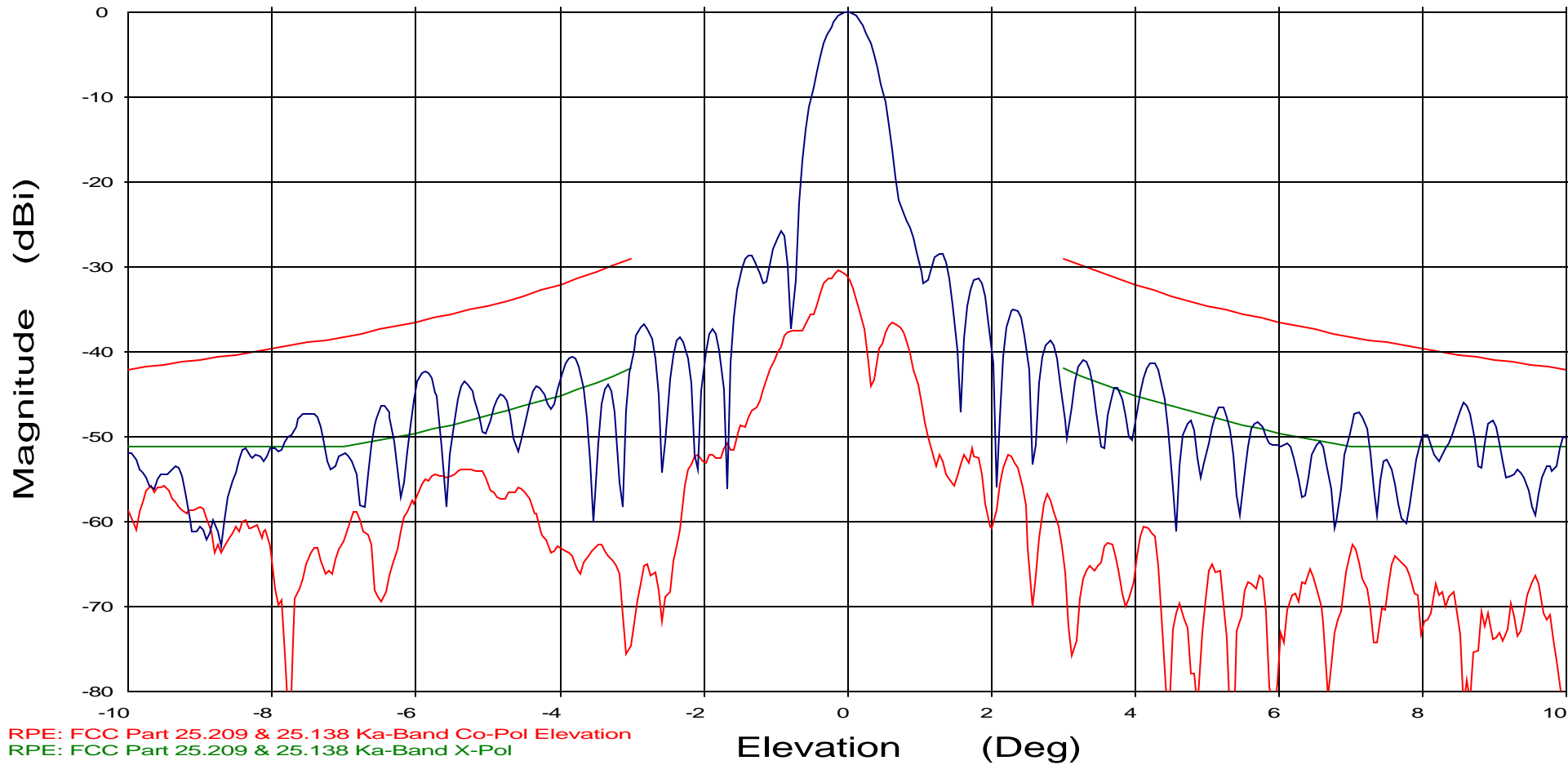
Operator: Dwight B. Lutz

Ser. no.: 013012-1

Channel: AUT

Tx pol: LHCP

Rx pol: LHCP



Overlays

2241 23.dat-ant\_under\_test  
2241 28.dat-ant\_under\_test

Cal. file

2241 23.dat  
2241 28.dat

table

Reference  
Reference

channel

AUT  
AUT

units

dBi  
dBi

File: 2241 23.dat

1.8M Ka-Band CP Rx/Tx  
O3b Antenna System

Frequency : 17.800 GHz

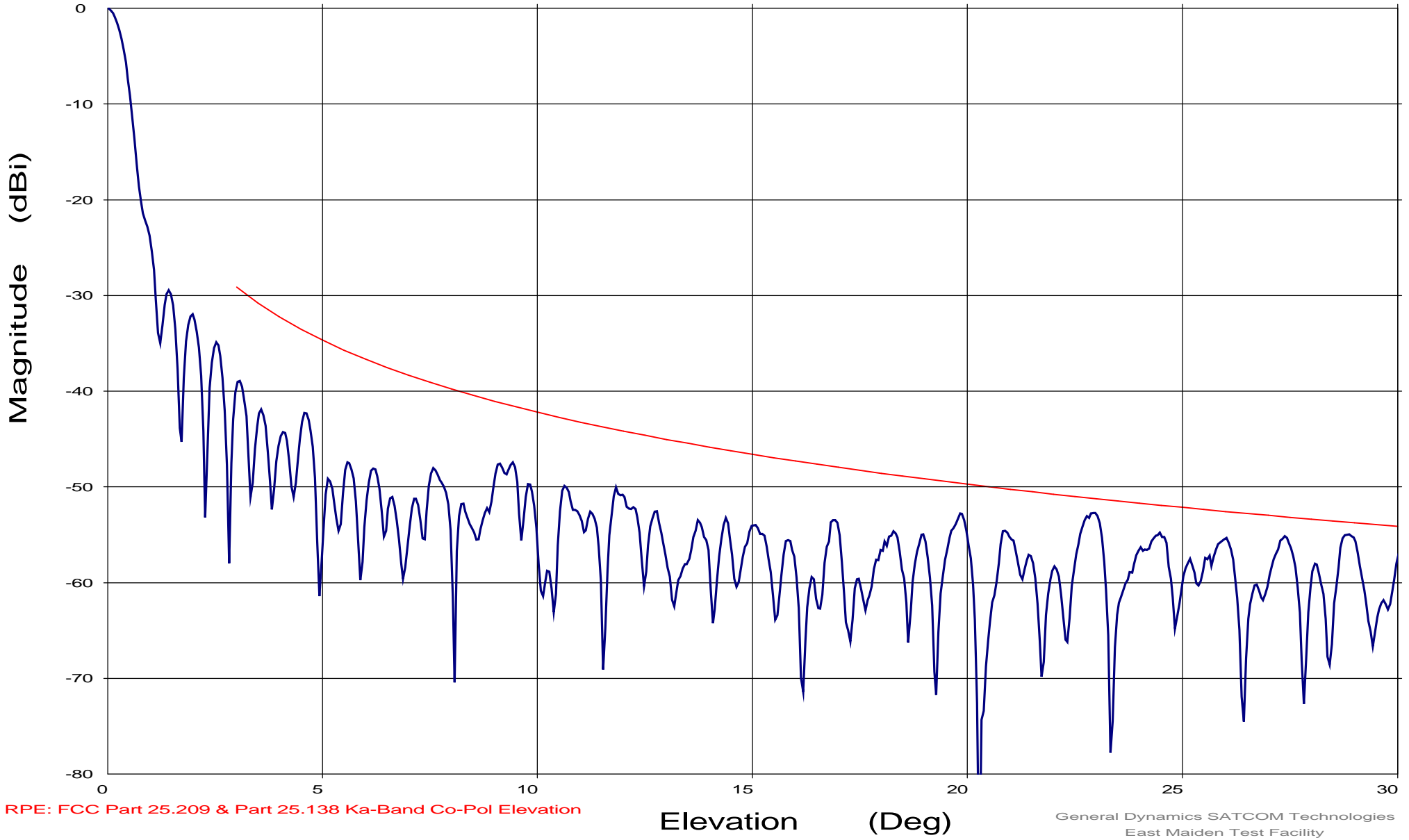
Operator: Dwight B. Lutz

Ser. no.: 013012-1

Channel: AUT

Tx pol: LHCP

Rx pol: LHCP



RPE: FCC Part 25.209 & Part 25.138 Ka-Band Co-Pol Elevation

Elevation (Deg)

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

File: 2241 23.dat

1.8M Ka-Band CP Rx/Tx  
O3b Antenna System

Frequency : 18.550 GHz

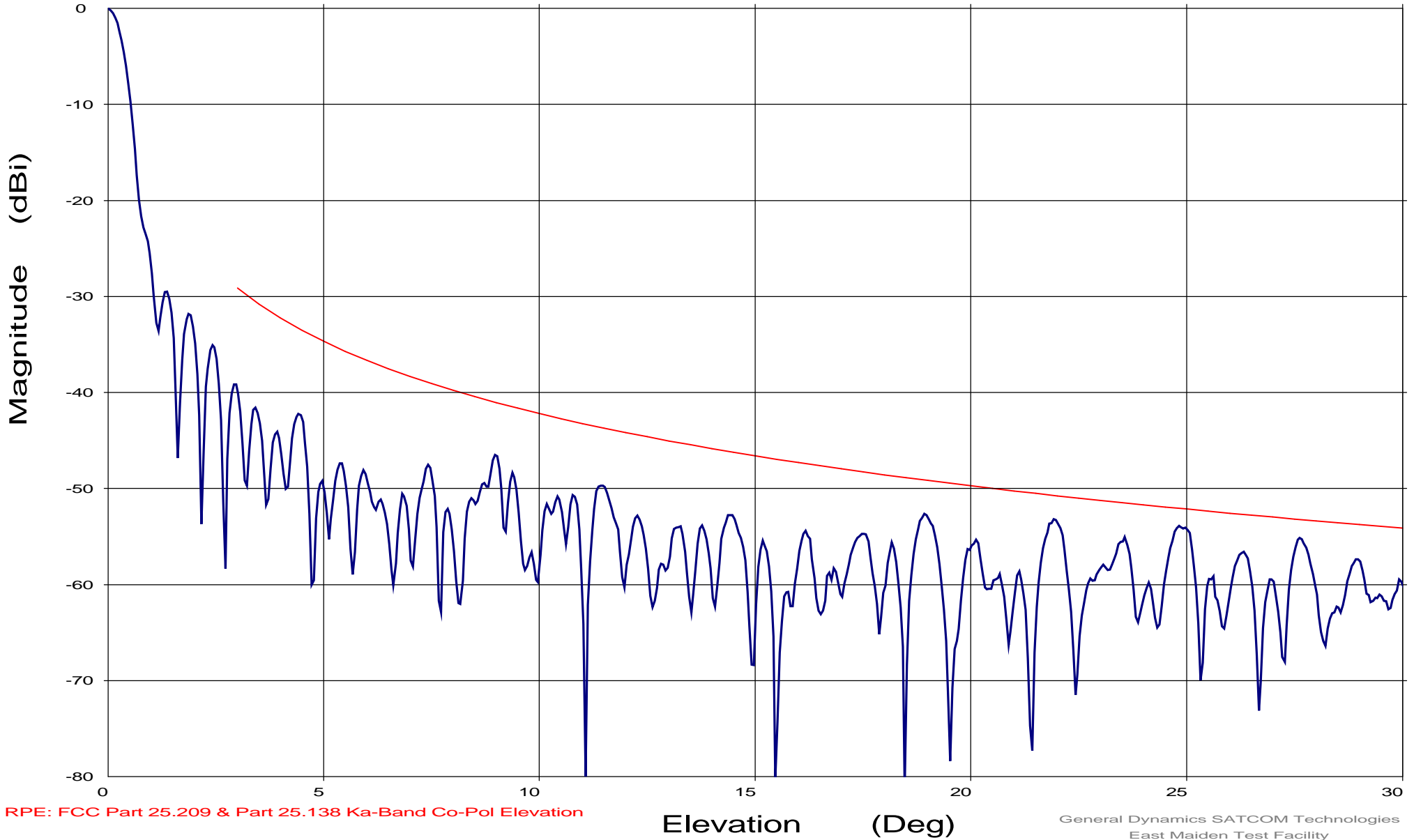
Operator: Dwight B. Lutz

Ser. no.: 013012-1

Channel: AUT

Tx pol: LHCP

Rx pol: LHCP



RPE: FCC Part 25.209 & Part 25.138 Ka-Band Co-Pol Elevation

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

File: 2241 23.dat

1.8M Ka-Band CP Rx/Tx  
O3b Antenna System

Frequency : 19.300 GHz

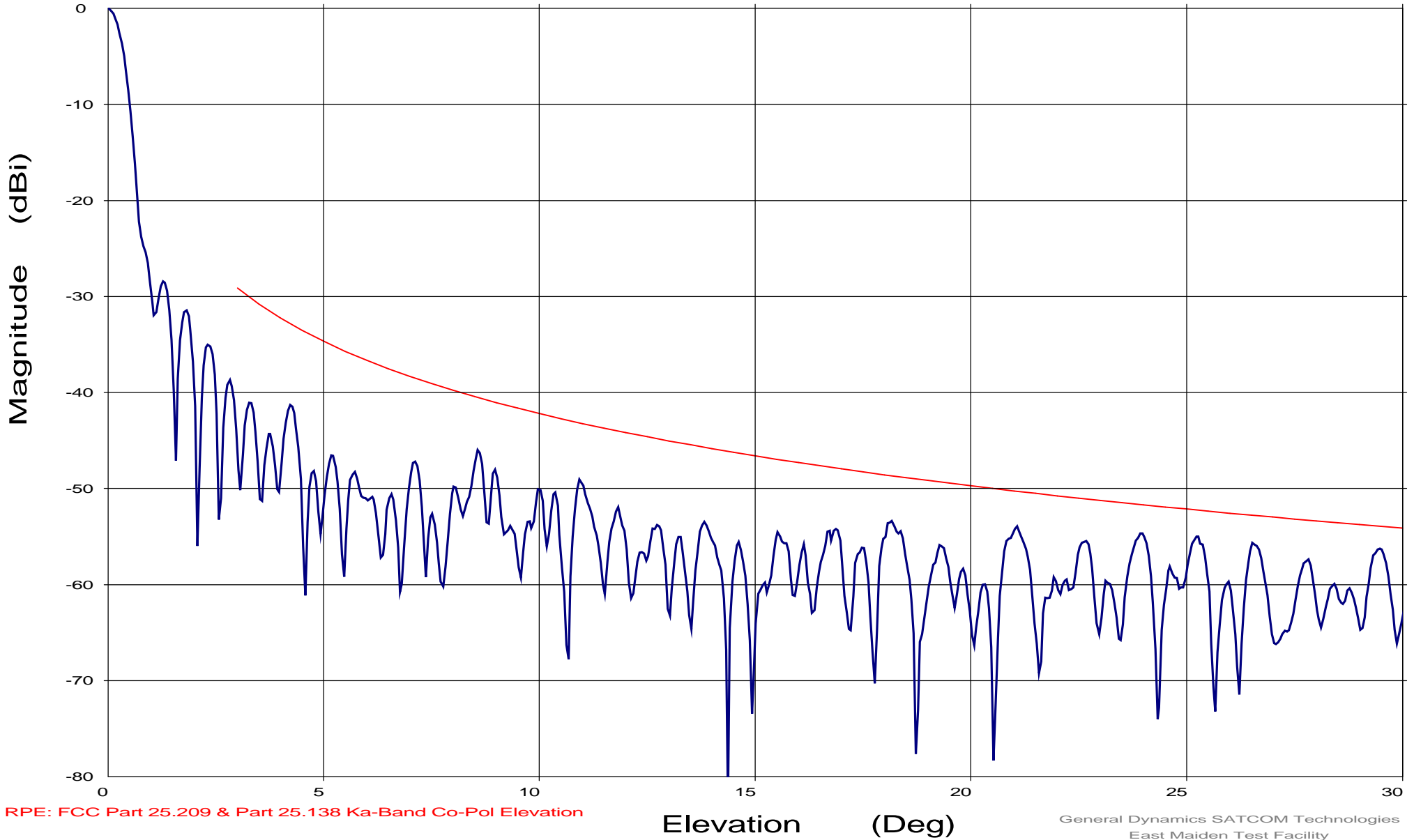
Operator: Dwight B. Lutz

Ser. no.: 013012-1

Channel: AUT

Tx pol: LHCP

Rx pol: LHCP



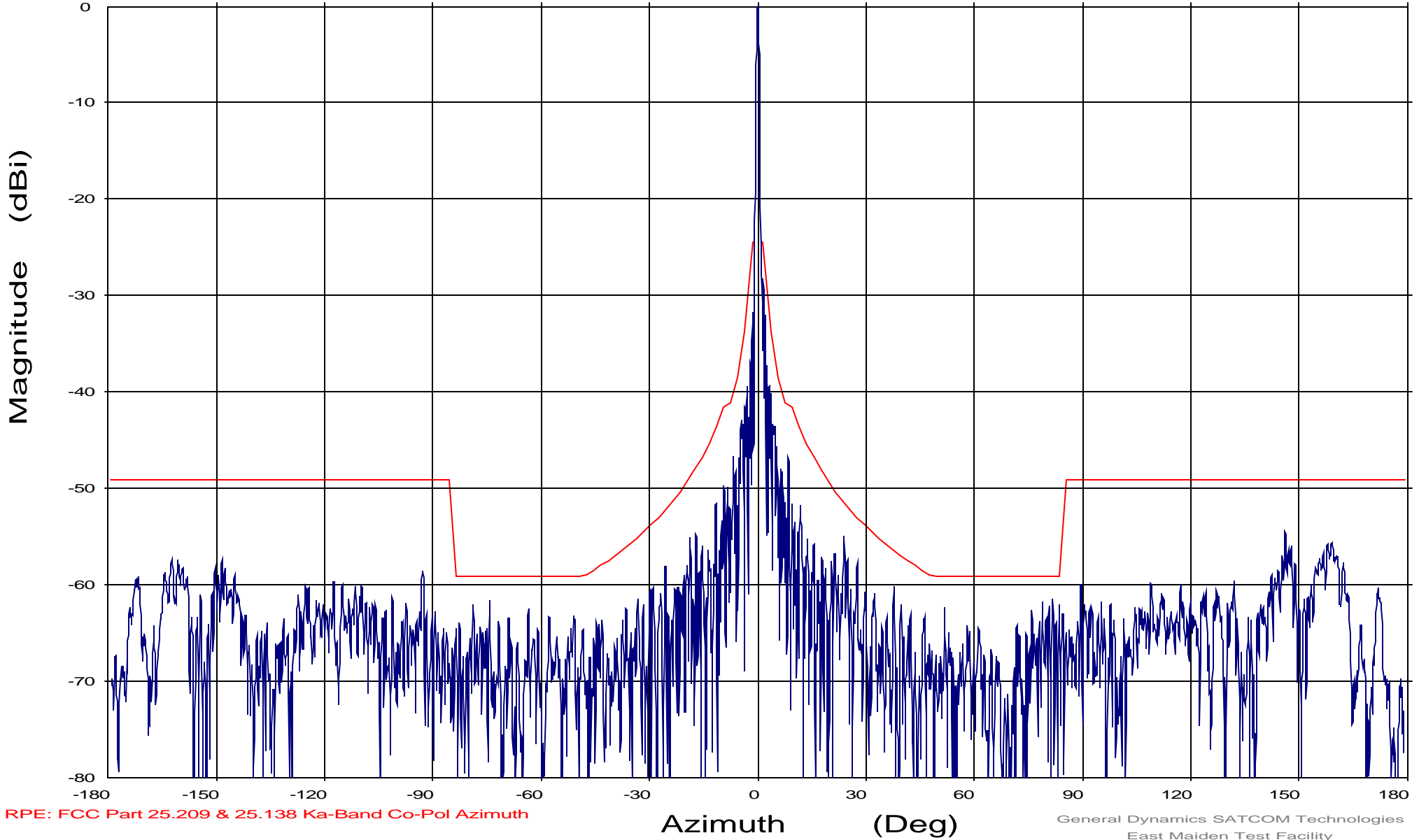
RPE: FCC Part 25.209 & Part 25.138 Ka-Band Co-Pol Elevation

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

Operator: Dwight B. Lutz  
Ser. no.: 013012-1  
Channel: AUT

Tx pol: LHCP

Rx pol: LHCP



RPE: FCC Part 25.209 & 25.138 Ka-Band Co-Pol Azimuth

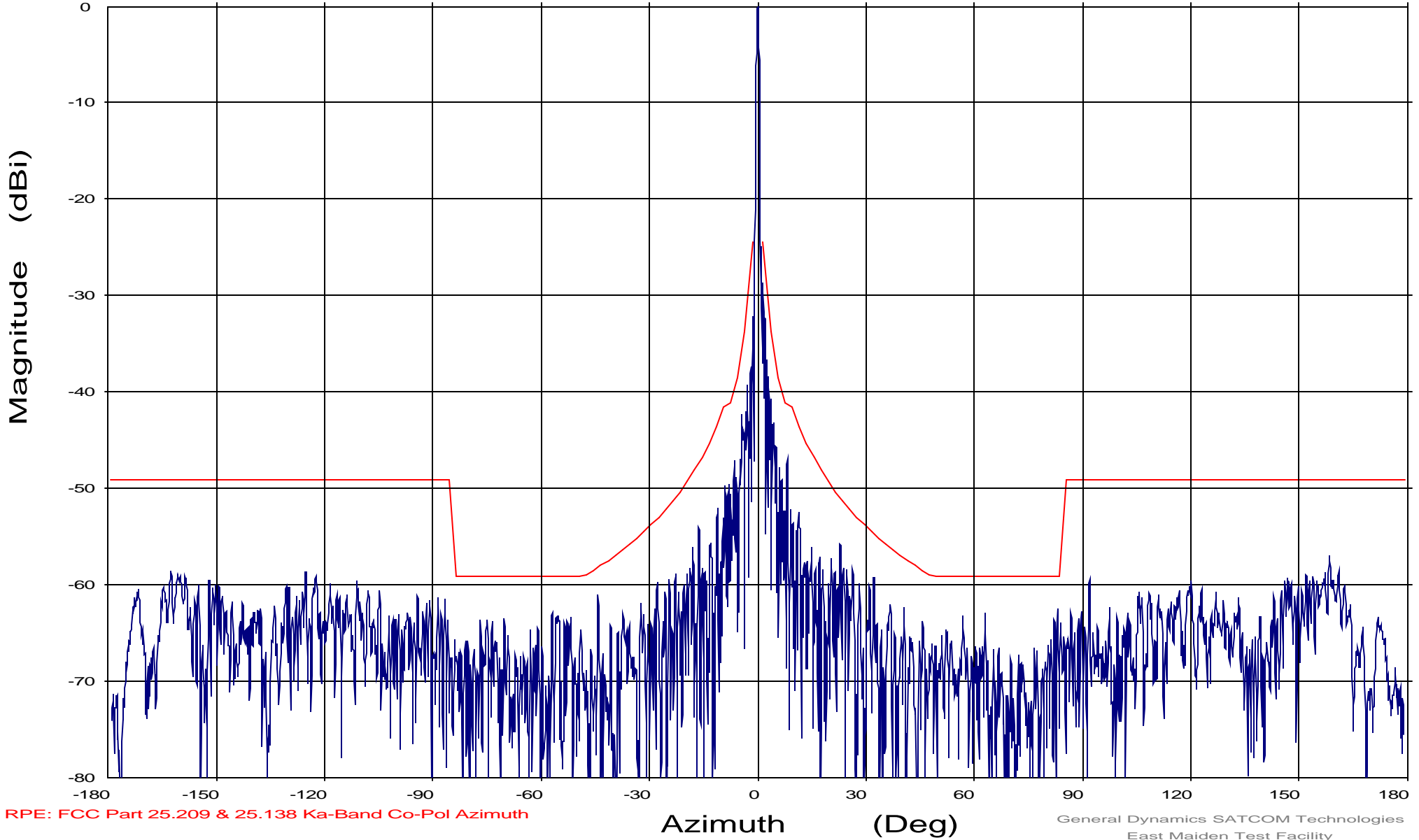
Azimuth (Deg)

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

Operator: Dwight B. Lutz  
Ser. no.: 013012-1  
Channel: AUT

Tx pol: LHCP

Rx pol: LHCP



RPE: FCC Part 25.209 & 25.138 Ka-Band Co-Pol Azimuth

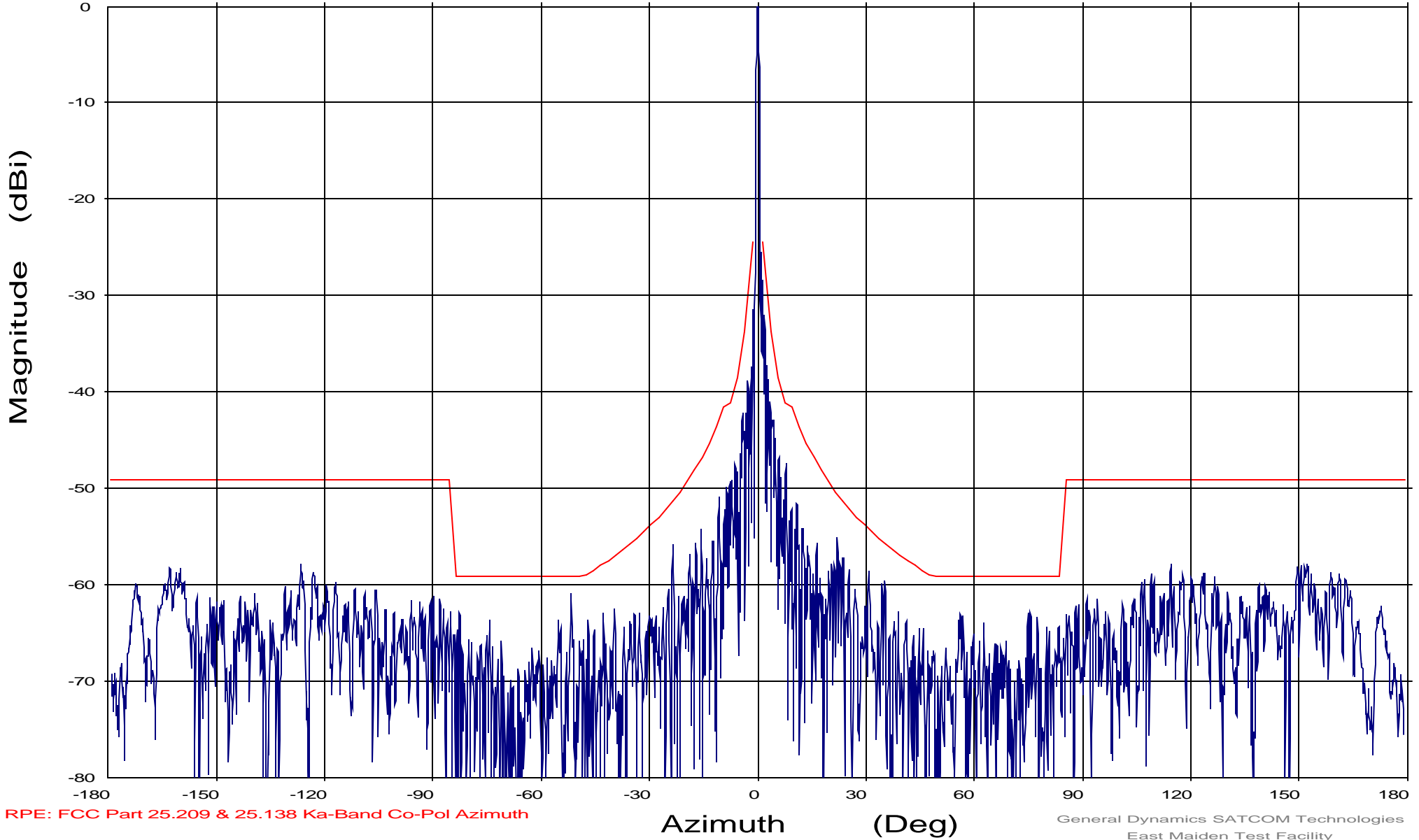
Azimuth (Deg)

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

Operator: Dwight B. Lutz  
Ser. no.: 013012-1  
Channel: AUT

Tx pol: LHCP

Rx pol: LHCP



RPE: FCC Part 25.209 & 25.138 Ka-Band Co-Pol Azimuth



RHCP Radiation Patterns  
**Receive Frequencies**

1.8M Ka-Band CP Rx/Tx  
O3b Antenna System

Frequency : 17.800 GHz

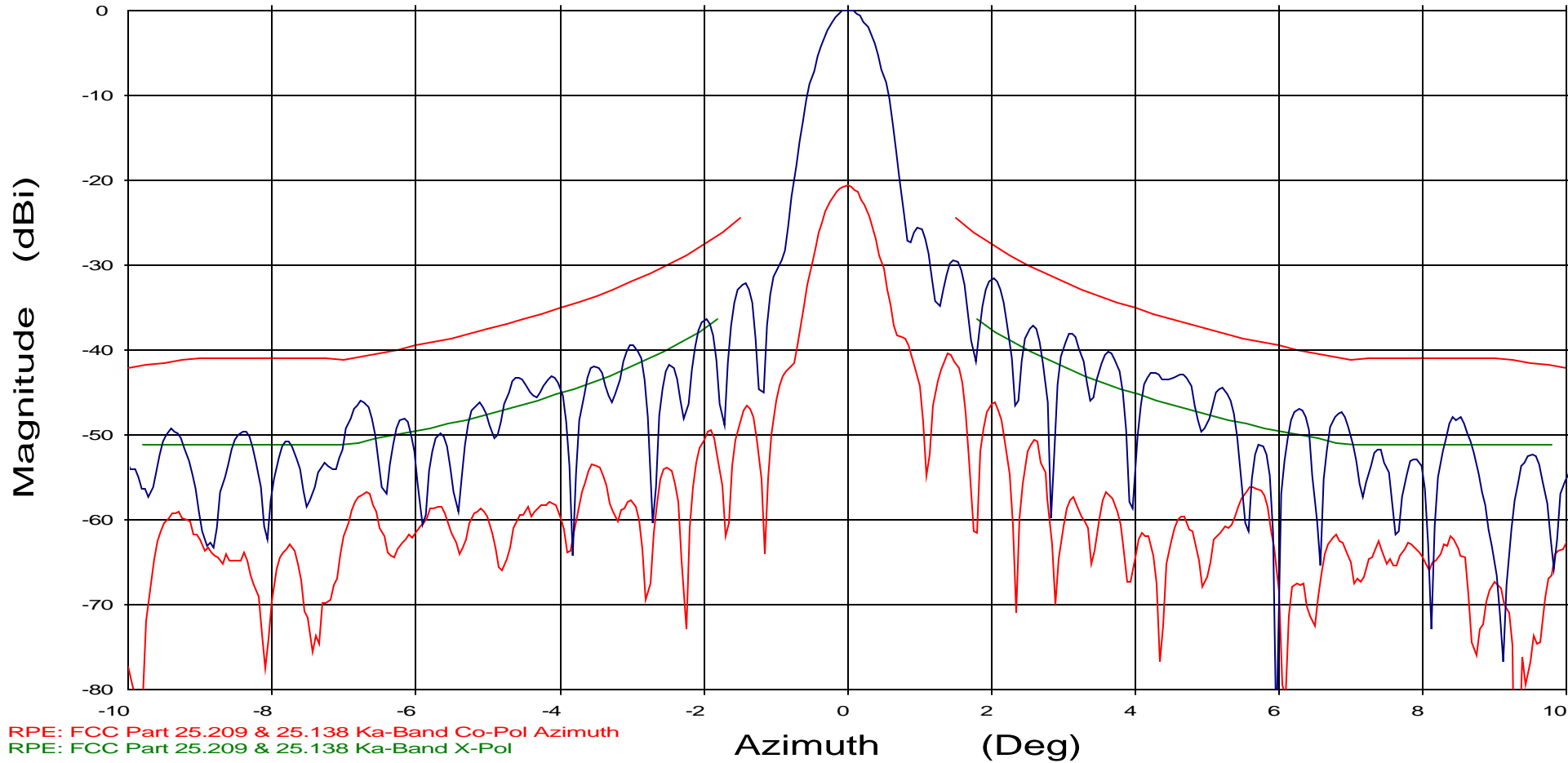
Operator: Dwight B. Lutz

Ser. no.: 013012-1

Channel: AUT

Tx pol: RHCP

Rx pol: RHCP



Overlays

2241 31.dat-ant\_under\_test  
2241 34.dat-ant\_under\_test

Cal. file

2241 31.dat  
2241 34.dat

table

Reference  
Reference

channel

AUT  
AUT

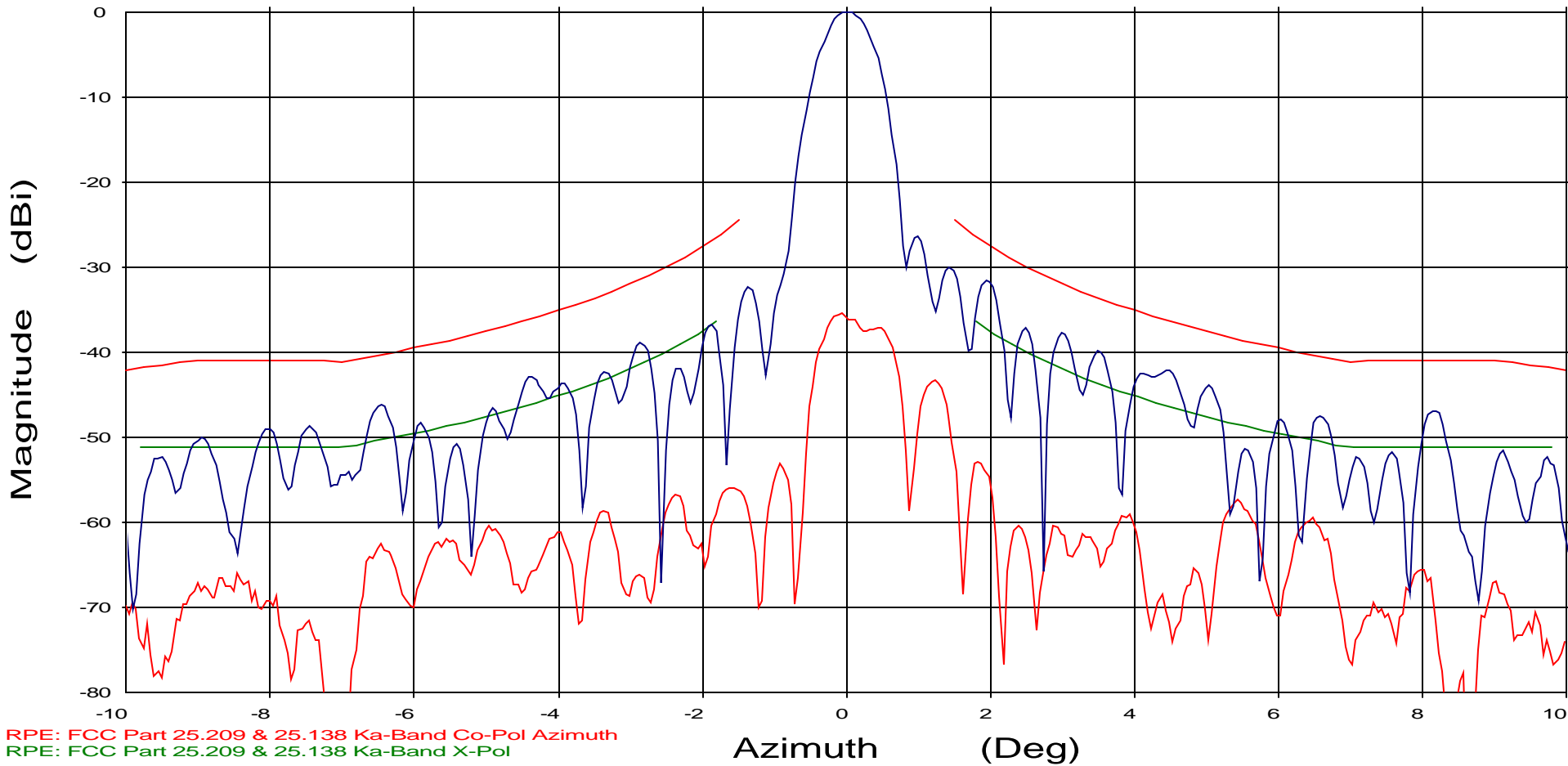
units

dBi  
dBi

Operator: Dwight B. Lutz  
Ser. no.: 013012-1  
Channel: AUT

Tx pol: RHCP

Rx pol: RHCP



Overlays

2241 31.dat-ant\_under\_test — blue line  
2241 34.dat-ant\_under\_test — red line

Cal. file

2241 31.dat  
2241 34.dat

table

Reference  
Reference

channel

AUT  
AUT

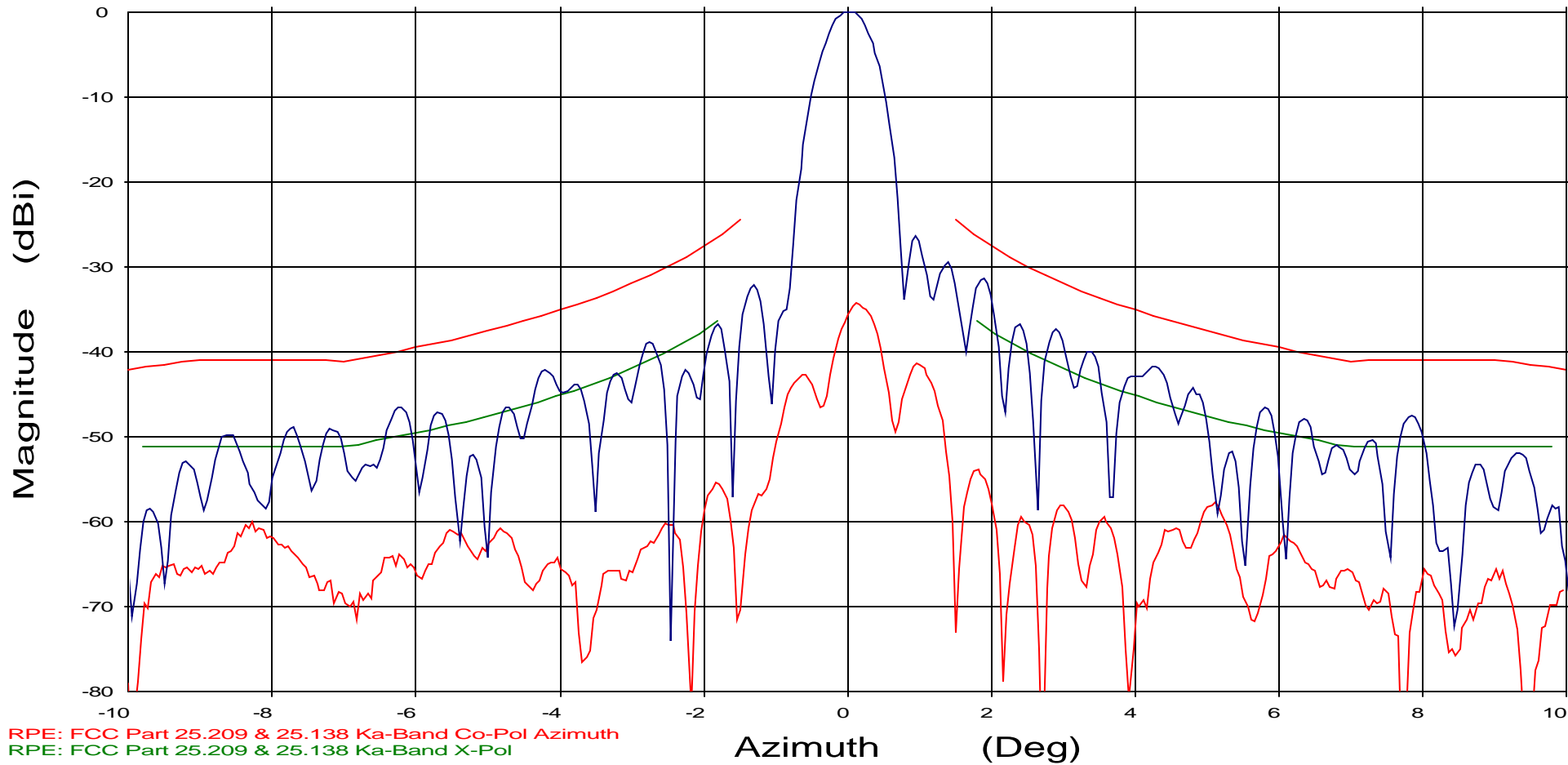
units

dBi  
dBi

Operator: Dwight B. Lutz  
Ser. no.: 013012-1  
Channel: AUT

Tx pol: RHCP

Rx pol: RHCP



Overlays	Cal. file	table	channel	units
2241 31.dat-ant_under_test	2241 31.dat	Reference	AUT	dBi
2241 34.dat-ant_under_test	2241 34.dat	Reference	AUT	dBi

1.8M Ka-Band CP Rx/Tx  
O3b Antenna System

Frequency : 17.800 GHz

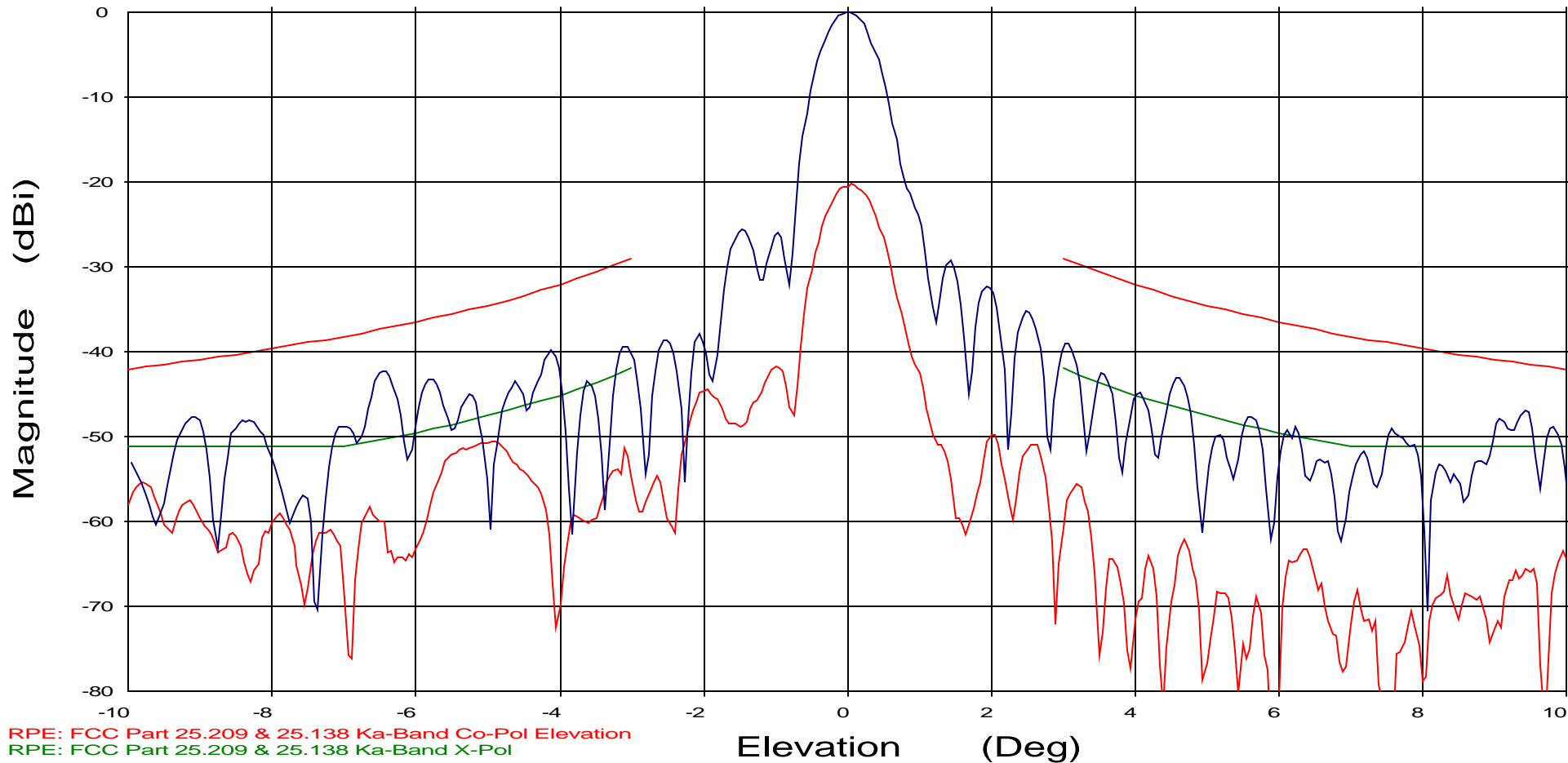
Operator: Dwight B. Lutz

Ser. no.: 013012-1

Channel: AUT

Tx pol: RHCP

Rx pol: RHCP



Overlays

2241 32.dat-ant\_under\_test  
2241 35.dat-ant\_under\_test

Cal. file

2241 32.dat  
2241 35.dat

table

Reference  
Reference

channel

AUT  
AUT

units

dBi  
dBi

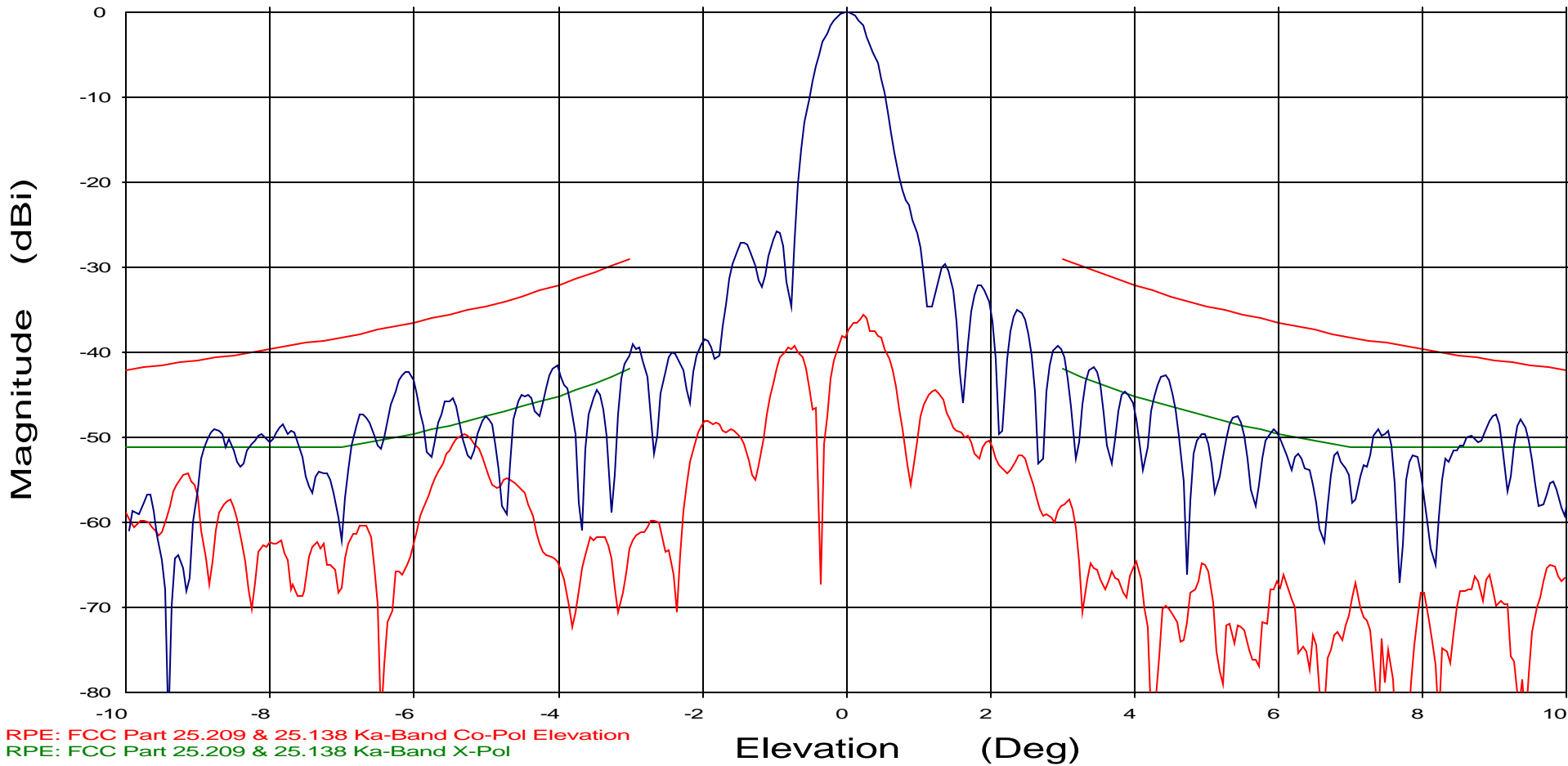
1.8M Ka-Band CP Rx/Tx  
O3b Antenna System

Frequency : 18.550 GHz

Operator: Dwight B. Lutz  
Ser. no.: 013012-1  
Channel: AUT

Tx pol: RHCP

Rx pol: RHCP



Overlays	Cal. file	table	channel	units
2241 32.dat-ant_under_test	2241 32.dat	Reference	AUT	dBi
2241 35.dat-ant_under_test	2241 35.dat	Reference	AUT	dBi

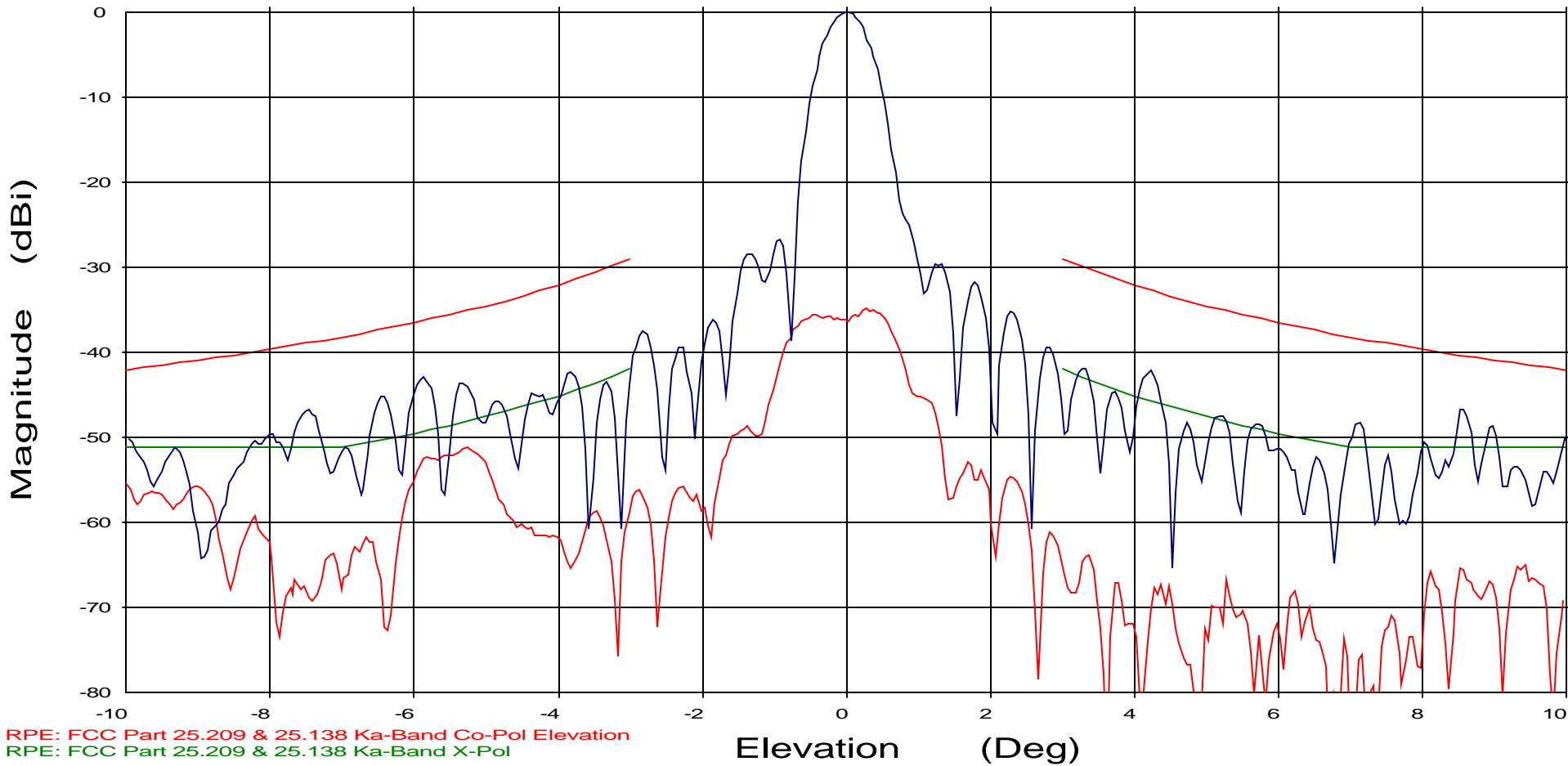
1.8M Ka-Band CP Rx/Tx  
O3b Antenna System

Frequency : 19.300 GHz

Operator: Dwight B. Lutz  
Ser. no.: 013012-1  
Channel: AUT

Tx pol: RHCP

Rx pol: RHCP



RPE: FCC Part 25.209 & 25.138 Ka-Band Co-Pol Elevation  
RPE: FCC Part 25.209 & 25.138 Ka-Band X-Pol

Overlays	Cal. file	table	channel	units
2241 32.dat-ant_under_test	2241 32.dat	Reference	AUT	dBi
2241 35.dat-ant_under_test	2241 35.dat	Reference	AUT	dBi

File: 2241 32.dat

1.8M Ka-Band CP Rx/Tx  
O3b Antenna System

Frequency : 17.800 GHz

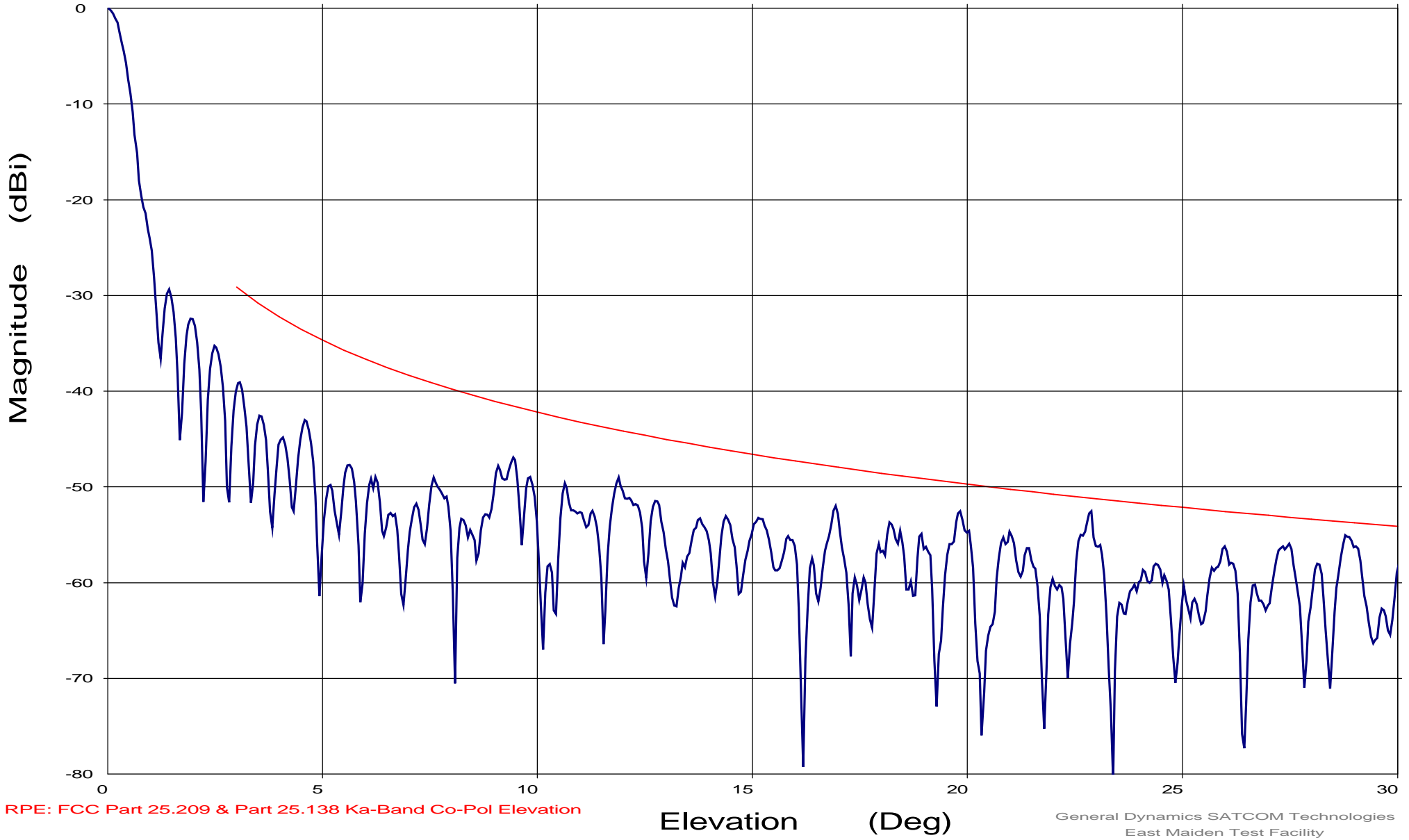
Operator: Dwight B. Lutz

Ser. no.: 013012-1

Channel: AUT

Tx pol: RHCP

Rx pol: RHCP



RPE: FCC Part 25.209 & Part 25.138 Ka-Band Co-Pol Elevation

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



File: 2241 32.dat

1.8M Ka-Band CP Rx/Tx  
O3b Antenna System

Frequency : 18.550 GHz

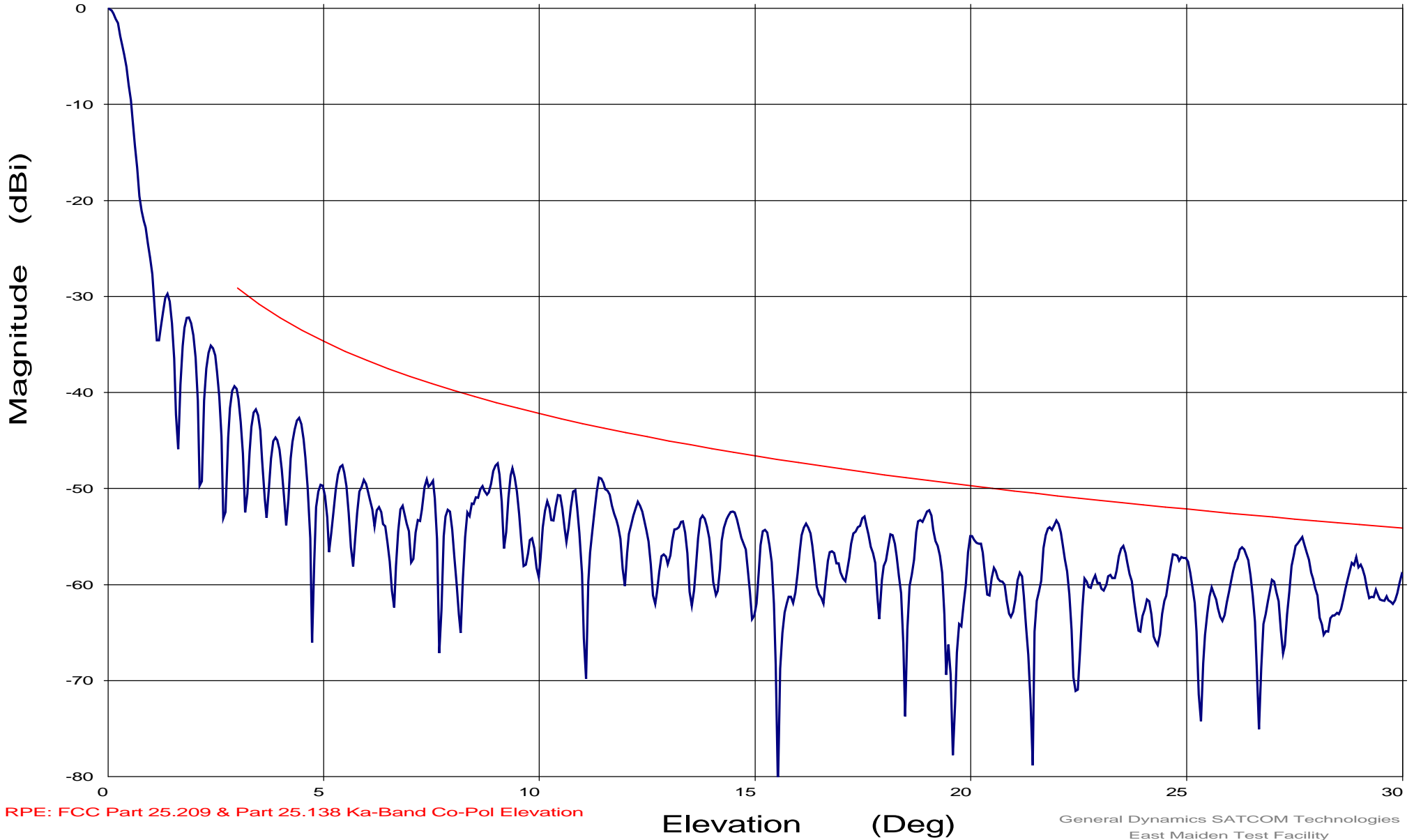
Operator: Dwight B. Lutz

Ser. no.: 013012-1

Channel: AUT

Tx pol: RHCP

Rx pol: RHCP



RPE: FCC Part 25.209 & Part 25.138 Ka-Band Co-Pol Elevation

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

File: 2241 32.dat

1.8M Ka-Band CP Rx/Tx  
O3b Antenna System

Frequency : 19.300 GHz

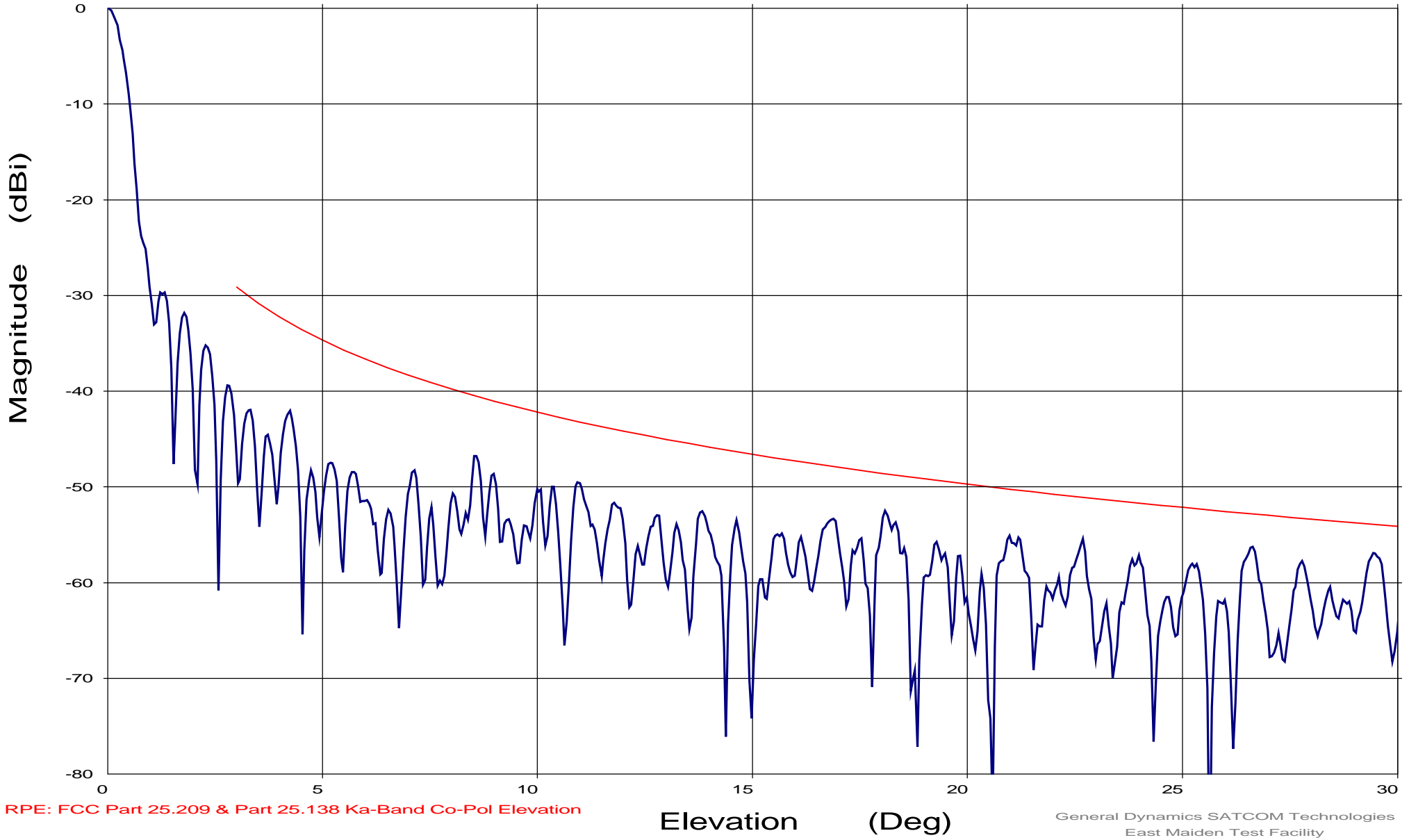
Operator: Dwight B. Lutz

Ser. no.: 013012-1

Channel: AUT

Tx pol: RHCP

Rx pol: RHCP



RPE: FCC Part 25.209 & Part 25.138 Ka-Band Co-Pol Elevation

Elevation (Deg)

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

File: 2241 31.dat

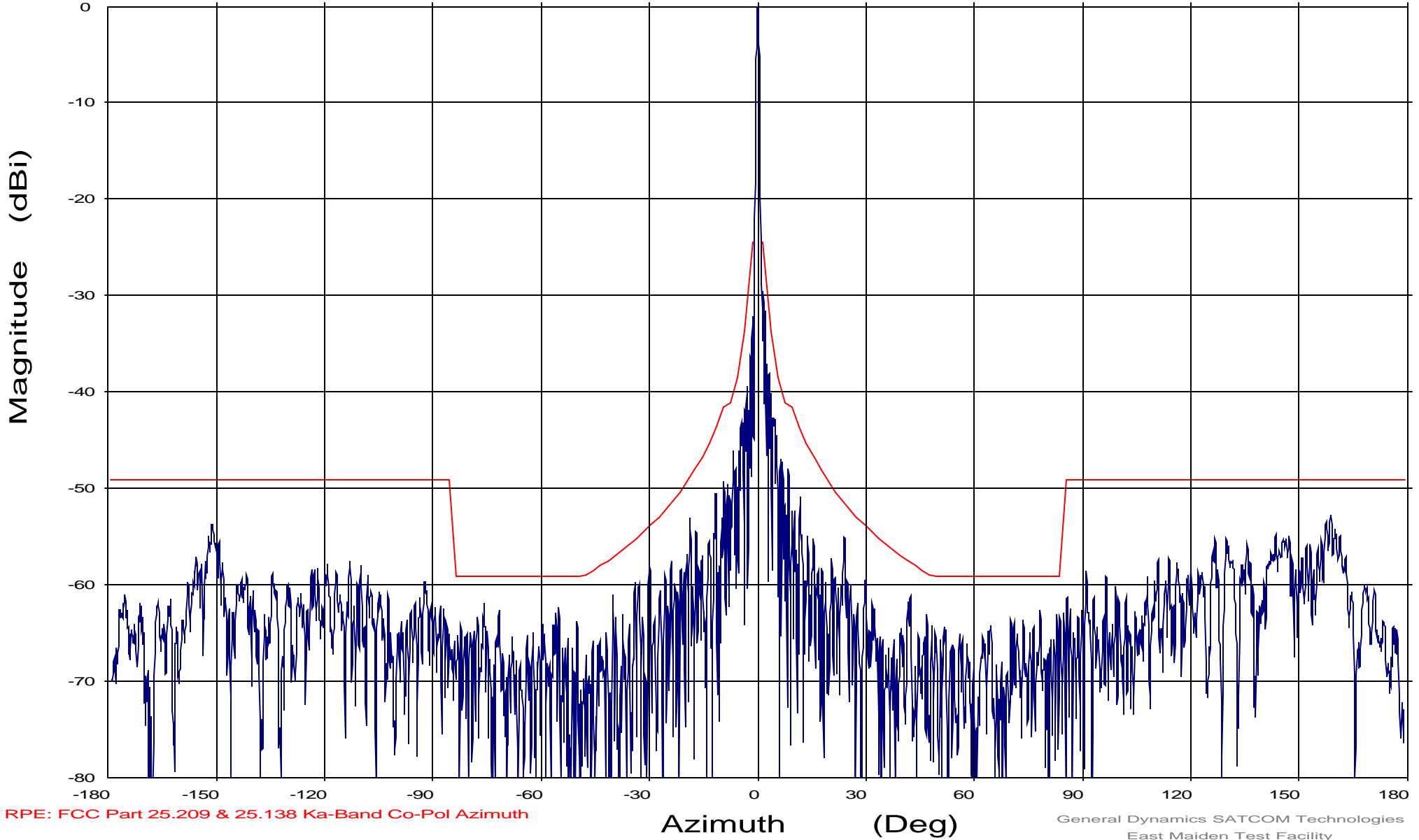
1.8M Ka-Band CP Rx/Tx  
O3b Antenna System

Frequency : 17.800 GHz

Operator: Dwight B. Lutz  
Ser. no.: 013012-1  
Channel: AUT

Tx pol: RHCP

Rx pol: RHCP



RPE: FCC Part 25.209 & 25.138 Ka-Band Co-Pol Azimuth

Azimuth (Deg)

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

File: 2241 31.dat

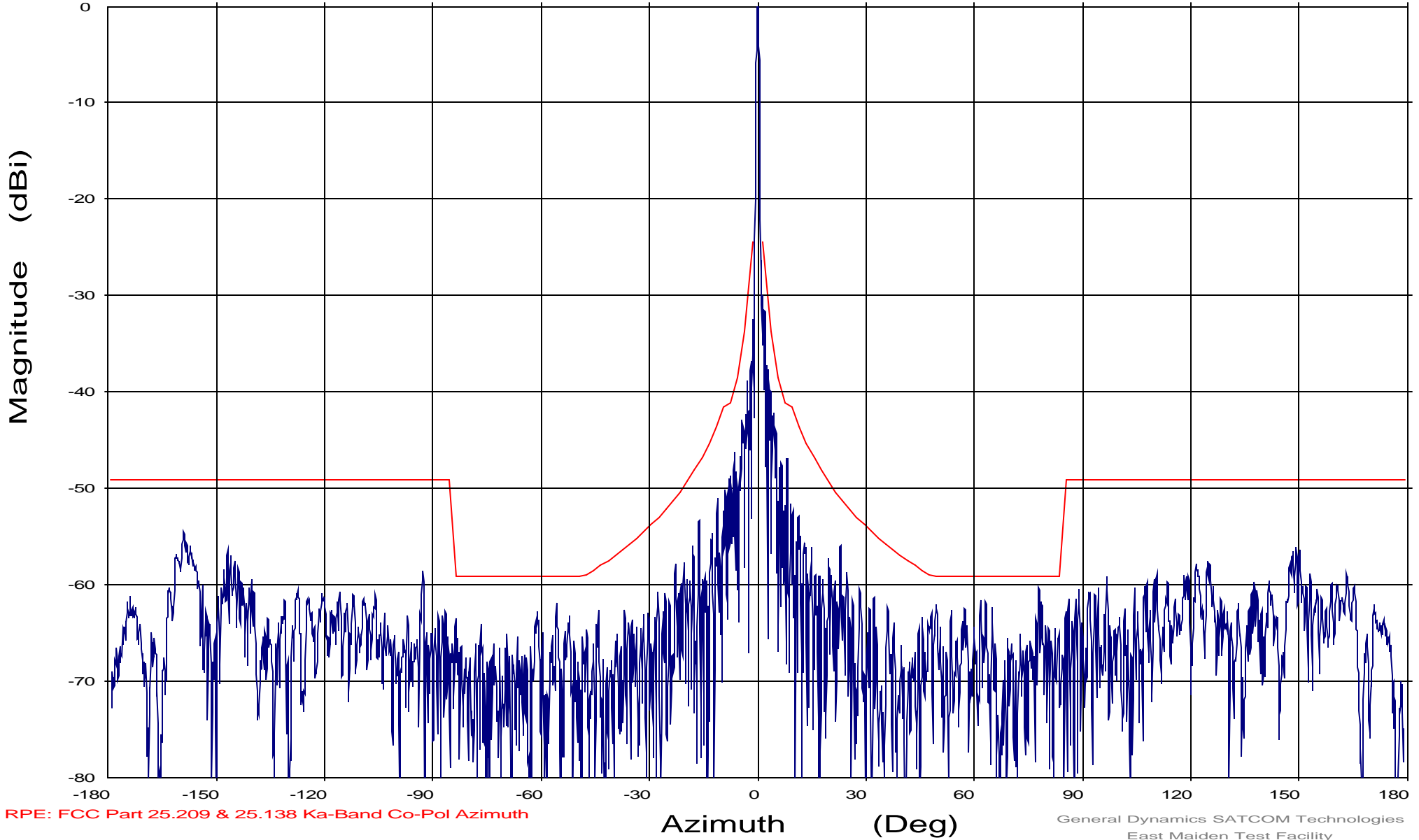
1.8M Ka-Band CP Rx/Tx  
O3b Antenna System

Frequency : 18.550 GHz

Operator: Dwight B. Lutz  
Ser. no.: 013012-1  
Channel: AUT

Tx pol: RHCP

Rx pol: RHCP



RPE: FCC Part 25.209 & 25.138 Ka-Band Co-Pol Azimuth

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

File: 2241 31.dat

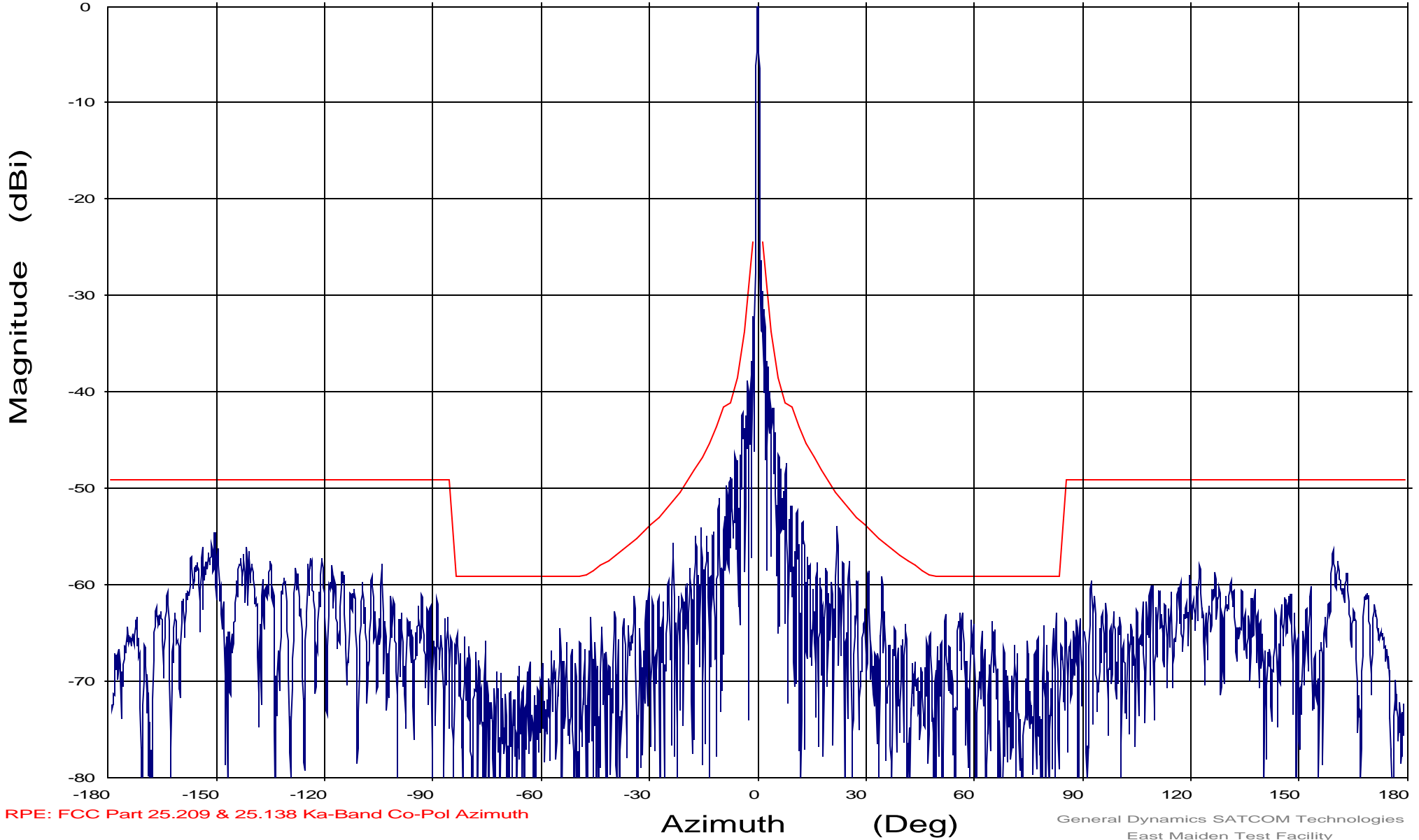
1.8M Ka-Band CP Rx/Tx  
O3b Antenna System

Frequency : 19.300 GHz

Operator: Dwight B. Lutz  
Ser. no.: 013012-1  
Channel: AUT

Tx pol: RHCP

Rx pol: RHCP



RPE: FCC Part 25.209 & 25.138 Ka-Band Co-Pol Azimuth

Azimuth (Deg)

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

Test Photos







