

TEST REPORT SUPPLEMENT

1m Segmented Ku-Band Antenna for FCC 25.209 Compliance

SPECIFICATION NO. : SCD-AQY-001_ver7

SUBMITTED TO:



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QUALITY ASSURANCE

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REVISION SHEET

<u>Rev.</u>	<u>Date</u>	<u>Page</u>	<u>Description</u>
X1	02/16/2015		Original Document
A	02/20/2015		Release
B	02/26/2015	5,7,9-25	Re-plot data as absolute gain

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0.0 CUSTOMER COMMENTS

Number	Comment	Micro-Ant Response
01	Request data be reported as absolute gain.	Data plots have been updated and plotted as absolute gain.

Table 1 - Customer Comments

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1.0 SCOPE

1.1 PURPOSE

This report supplies the test data of the 1m Segmented Ku-Band Antenna measured at the MI Technologies Compact Range test facility for FCC 25.209 Compliance.

2.0 APPLICABLE DOCUMENTS

2.1 CUSTOMER DOCUMENTS

None

2.2 GOVERNMENT SPECIFICATIONS

None

2.3 MICRO-ANT LLC DOCUMENTS

Test Report – 1m Segmented Ku-Band Antenna – 84-0038-01

2.4 OTHER DOCUMENTS

Code of Federal Regulations Title 47-Chapter 1-Subchapter B
Part 25-Subpart C-§25.209

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3.0 TEST SUMMARY

3.1 TEST SEQUENCE/DATES

Testing was carried out February 9, 2015 to February 12, 2015 at The MI Technologies Compact Range test facility in Suwanee, GA.

3.2 TEST ANOMALIES

No anomalies were noted during testing.

3.3 TEST SUMMARY

After collection of all the data the absolute gain relative results were plotted along with the FCC 25.209 sidelobe masks. The results can be reviewed in Section 4.0 Test Data.

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4.0 TEST DATA

Frequency Sweeps

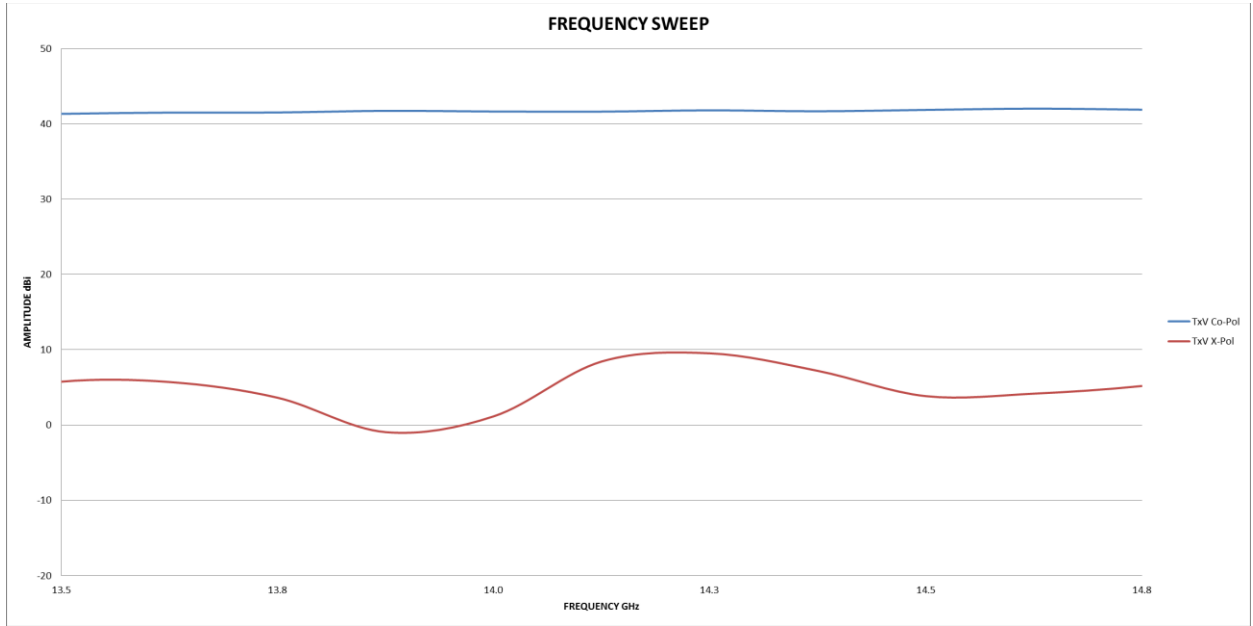


Figure 1 - TxV On-Axis Frequency Sweep

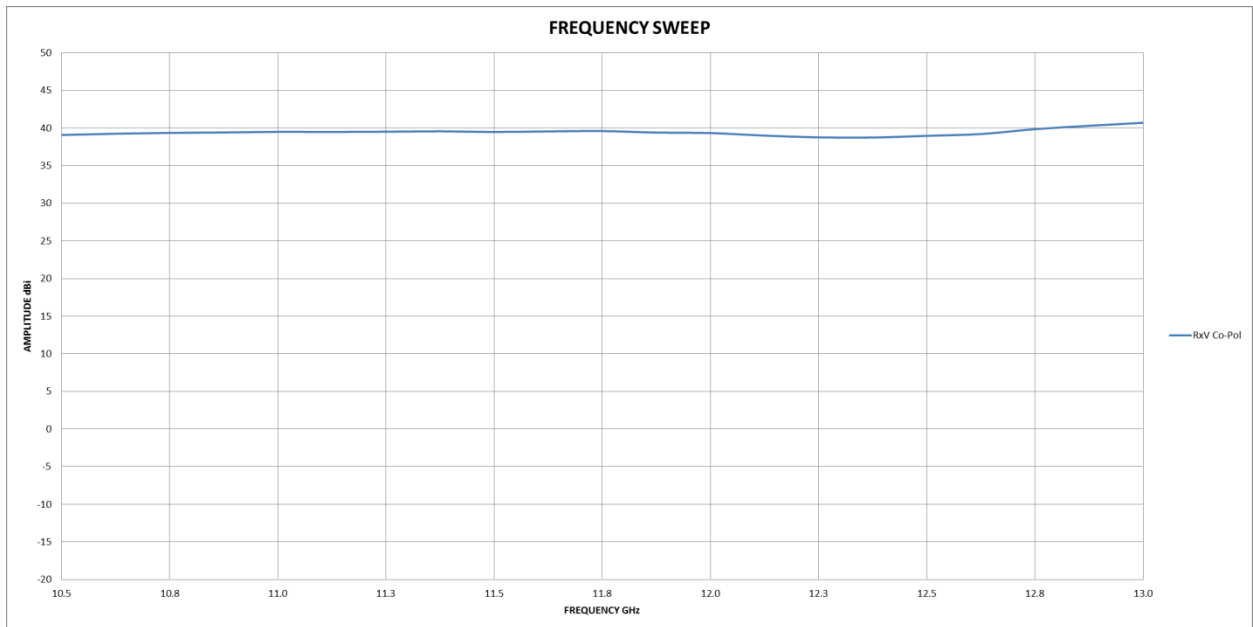


Figure 2 - RxV On-Axis Frequency Sweep

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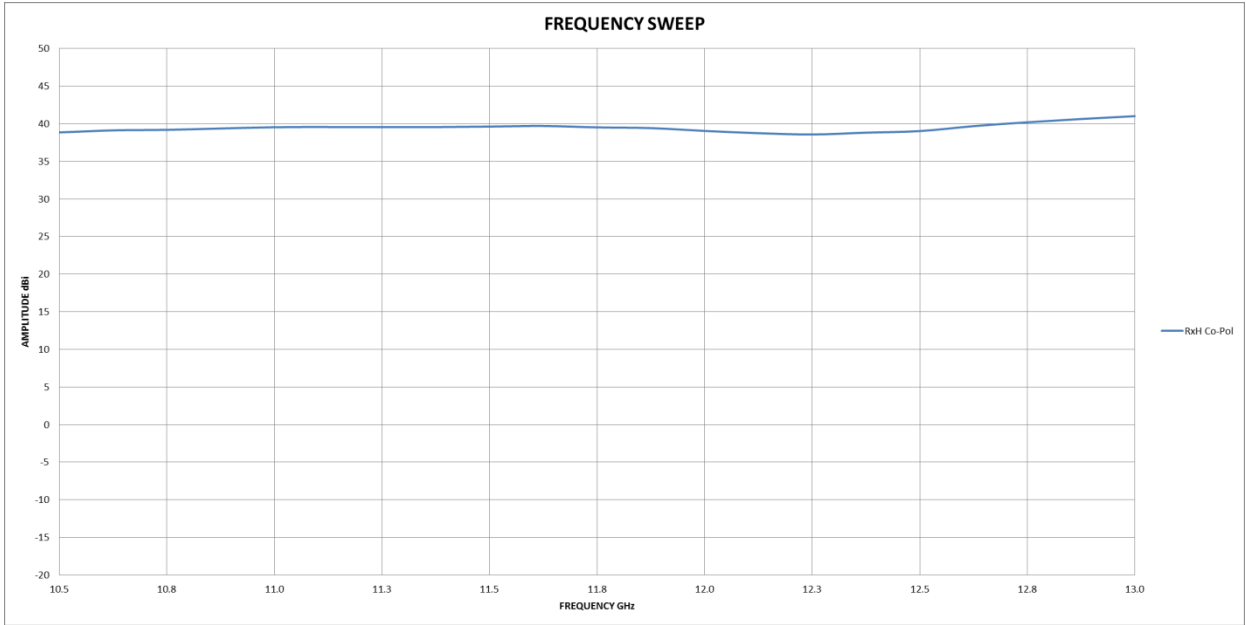


Figure 3 - RxH On-Axis Frequency Sweep

Radiation Patterns – TxV Azimuth

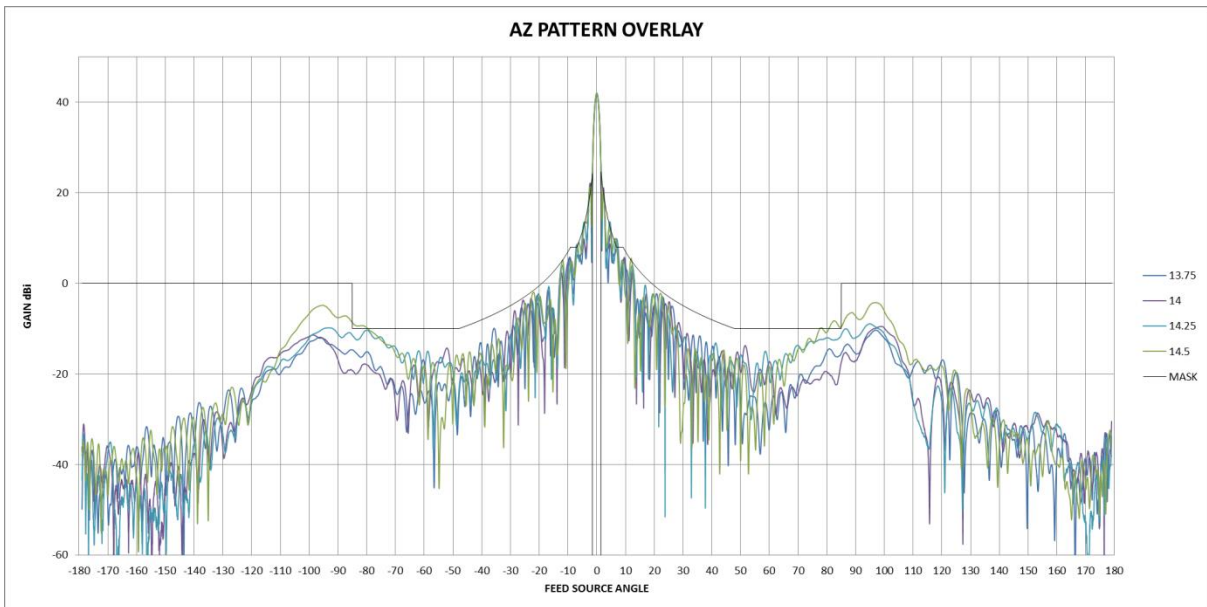


Figure 4 – TxV Azimuth Co-Polarized +/- 180

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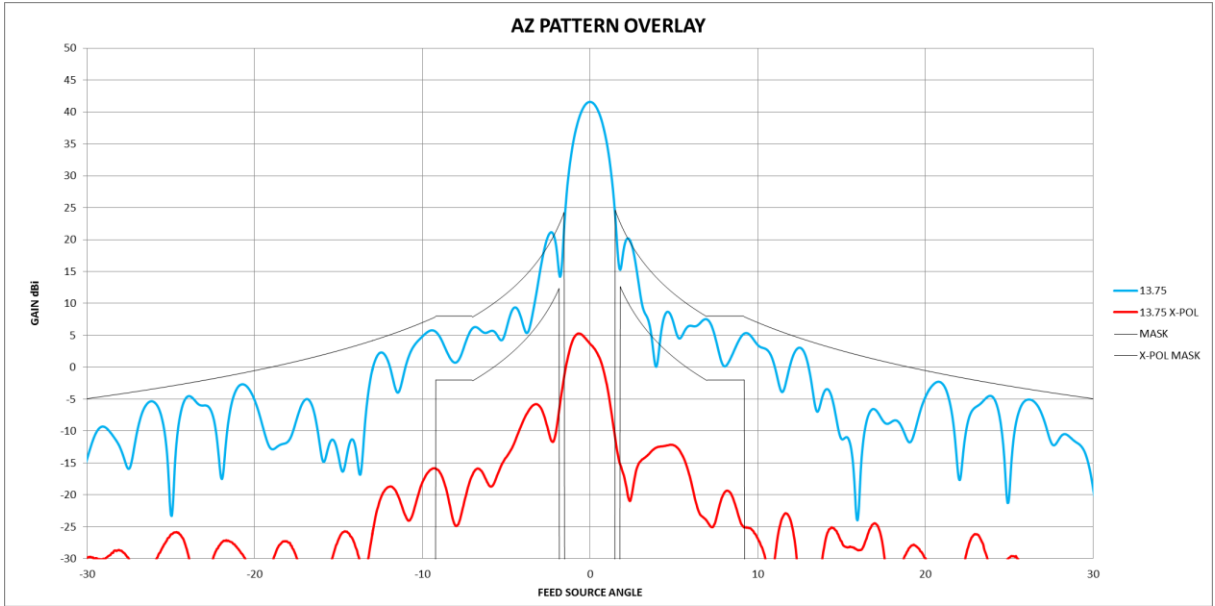


Figure 5 - TxV 13.75 GHz Azimuth

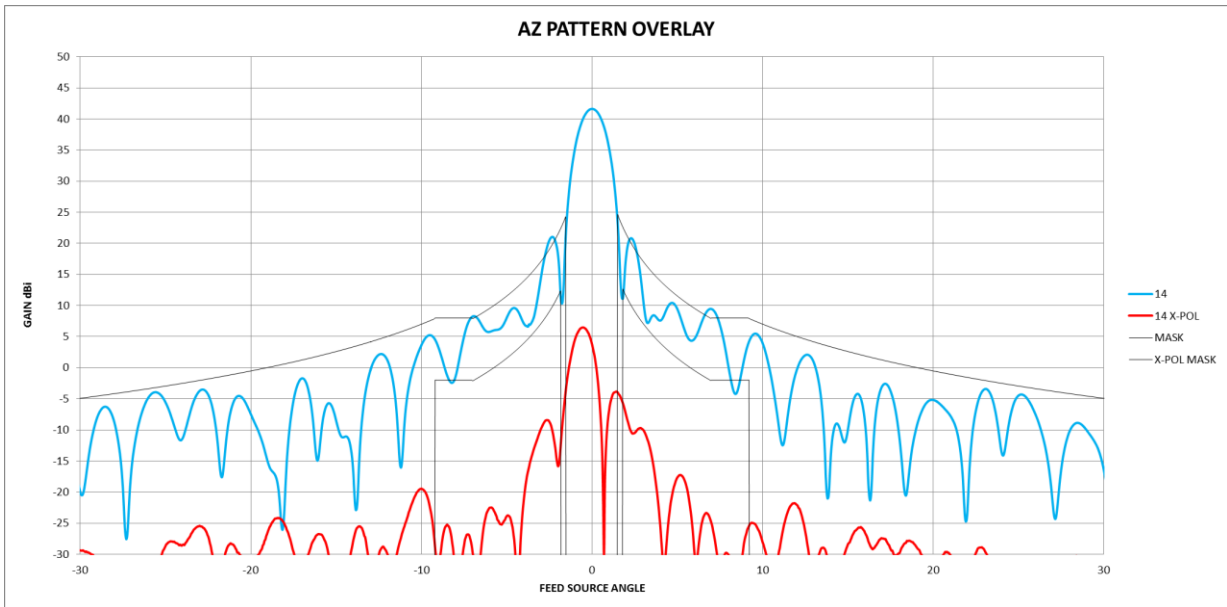


Figure 6 - TxV 14.00 GHz Azimuth

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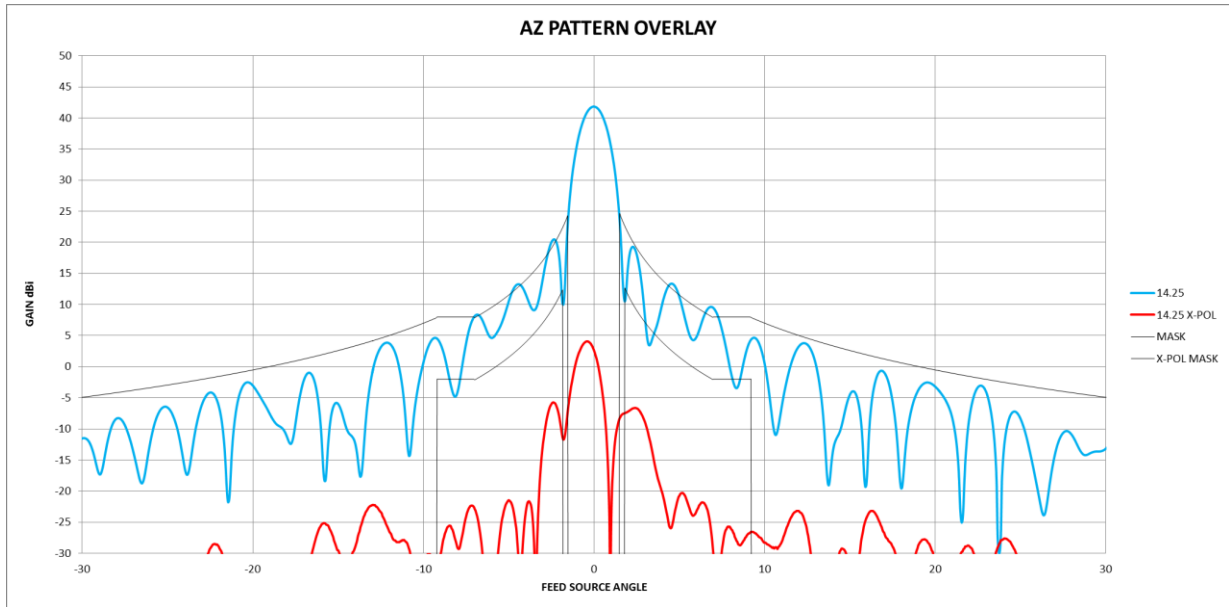


Figure 7 - TxV 14.25 GHz Azimuth

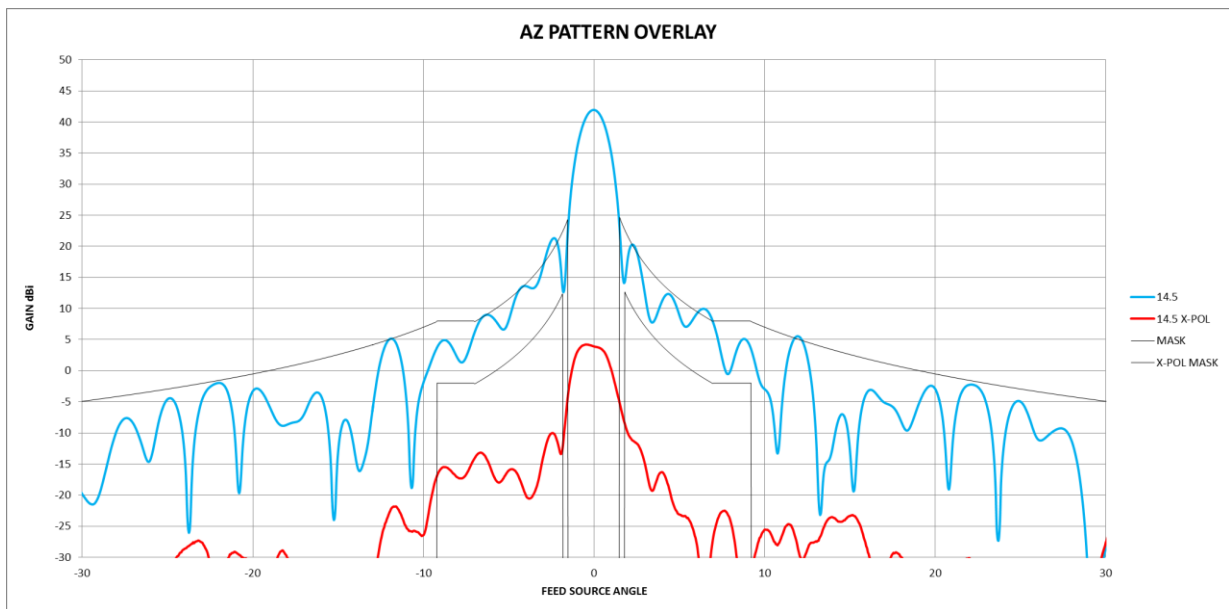


Figure 8 - TxV 14.50 GHz Azimuth

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Radiation Patterns – TxV Elevation

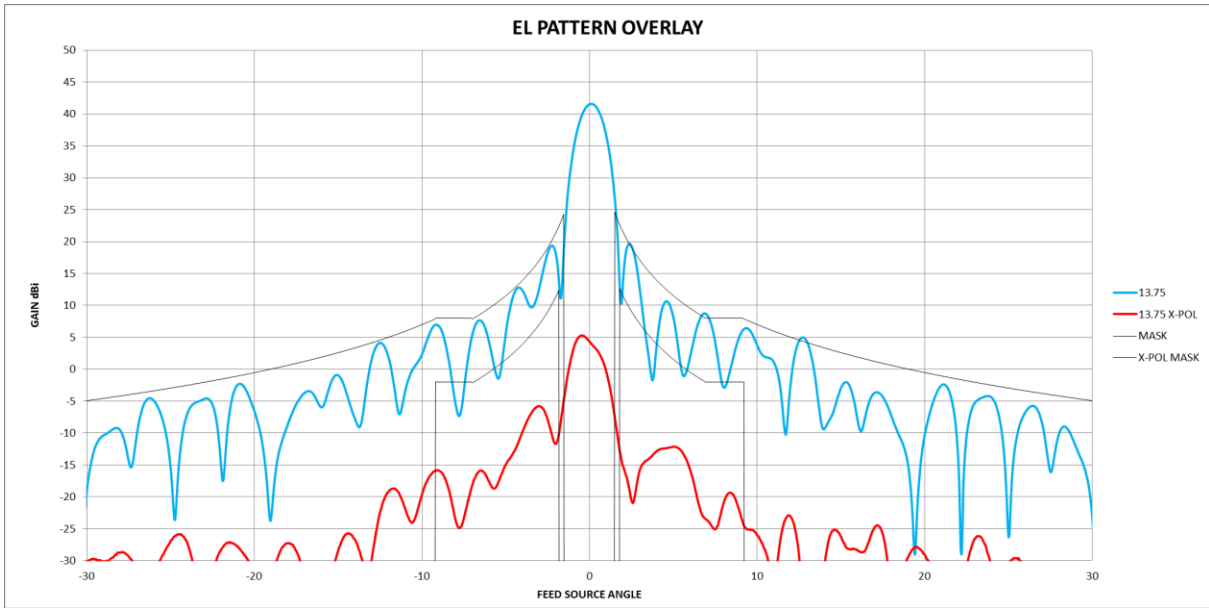


Figure 9 - TxV 13.75 GHz Elevation

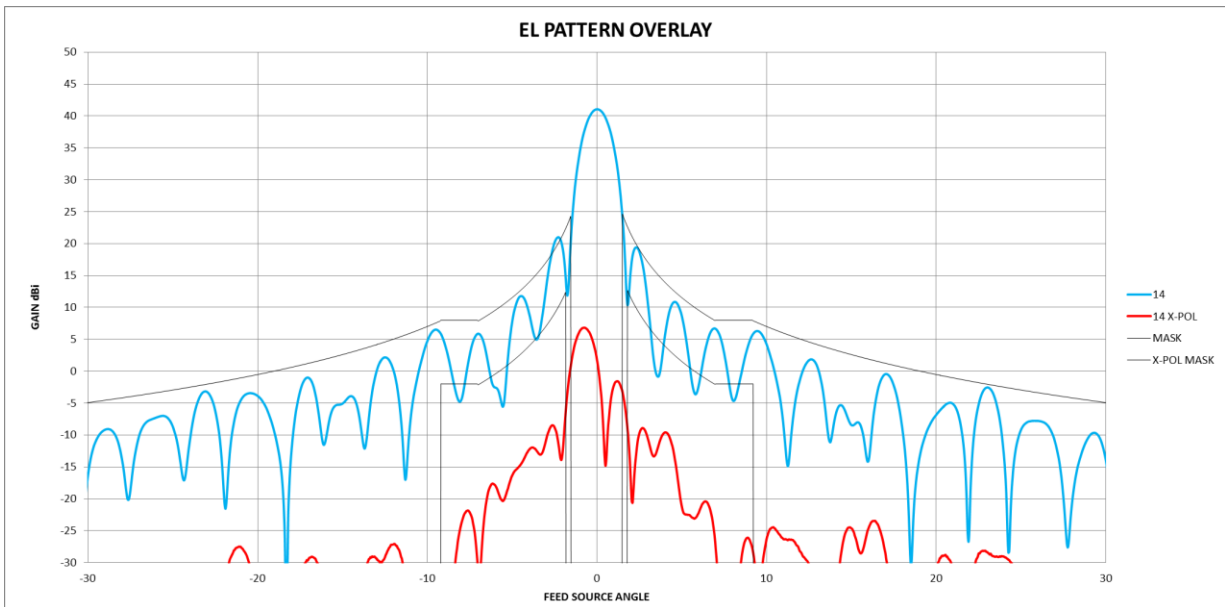


Figure 10 - TxV 14.00 GHz Elevation

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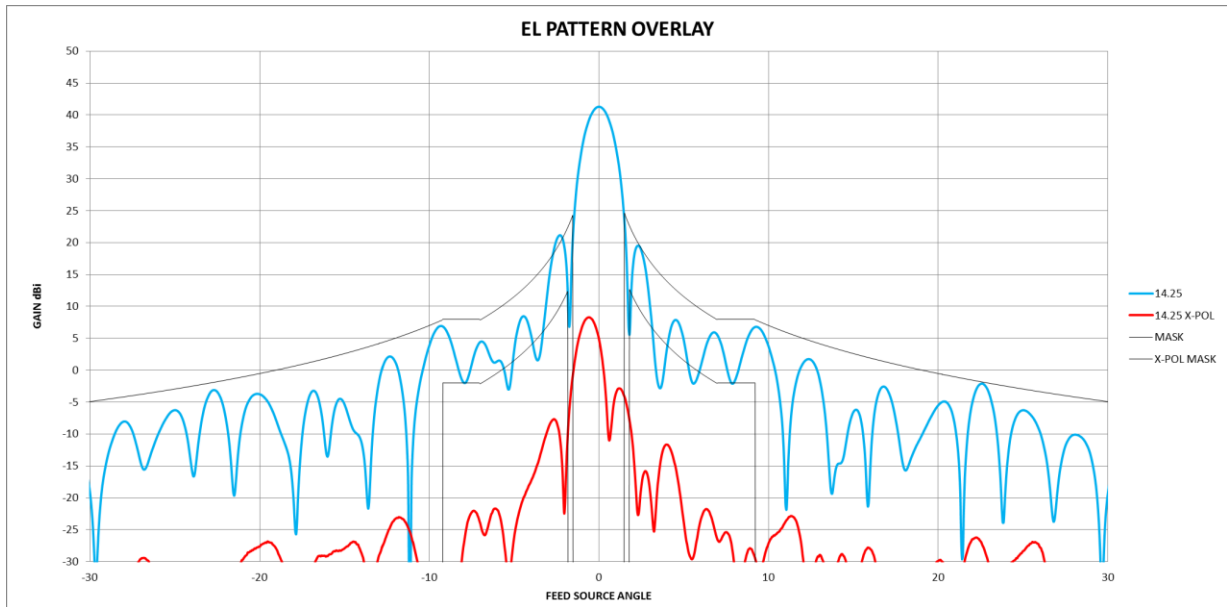


Figure 11 - TxV 14.25 GHz Elevation

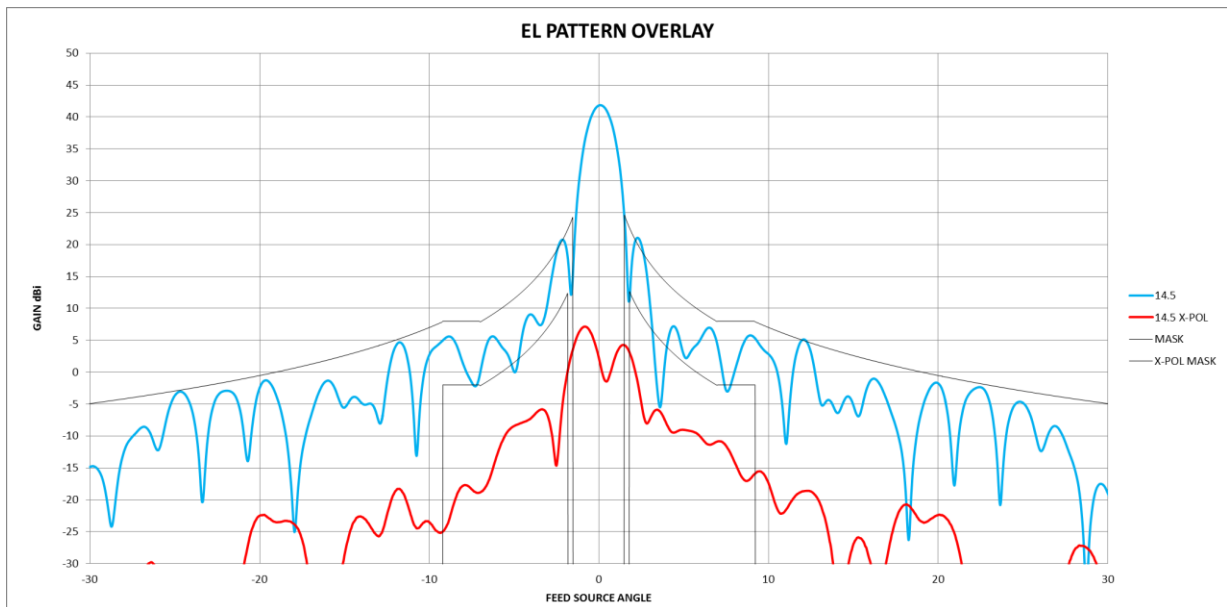


Figure 12 - TxV 14.50 GHz Elevation

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Radiation Patterns – RxV Azimuth

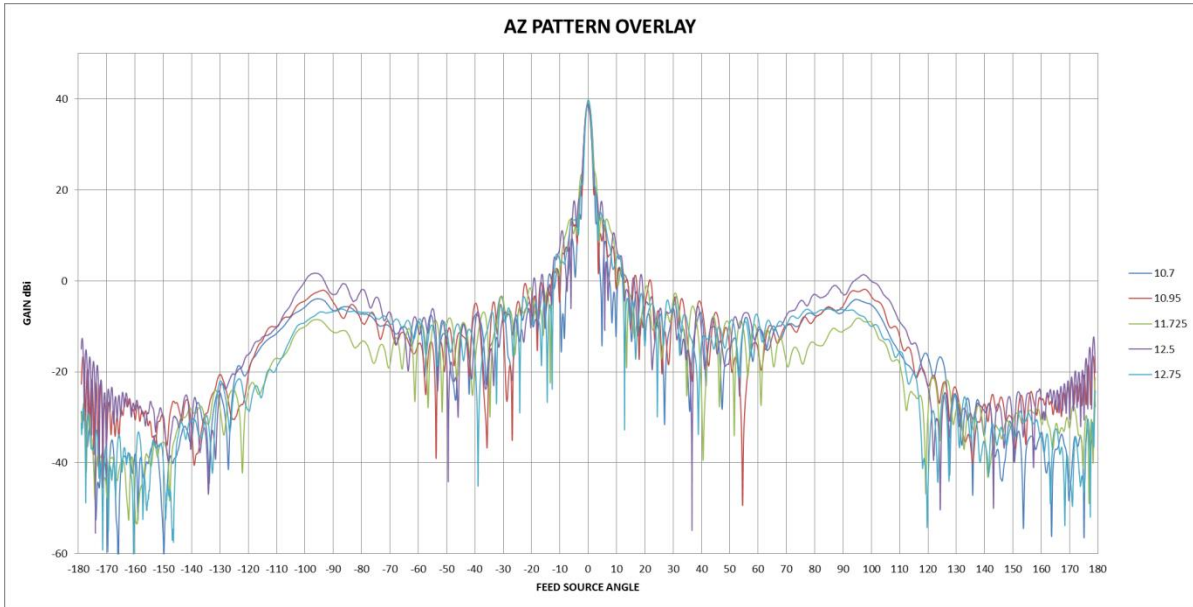


Figure 13 - RxV Azimuth Co-Polarized +/-180

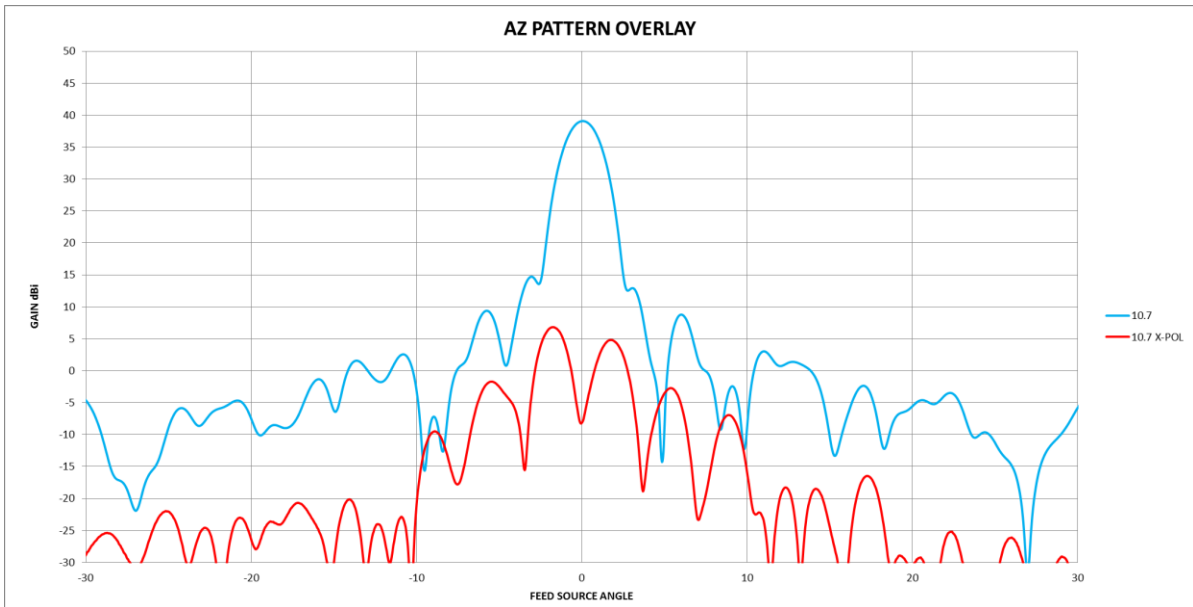


Figure 14 - RxV 10.70 GHz Azimuth

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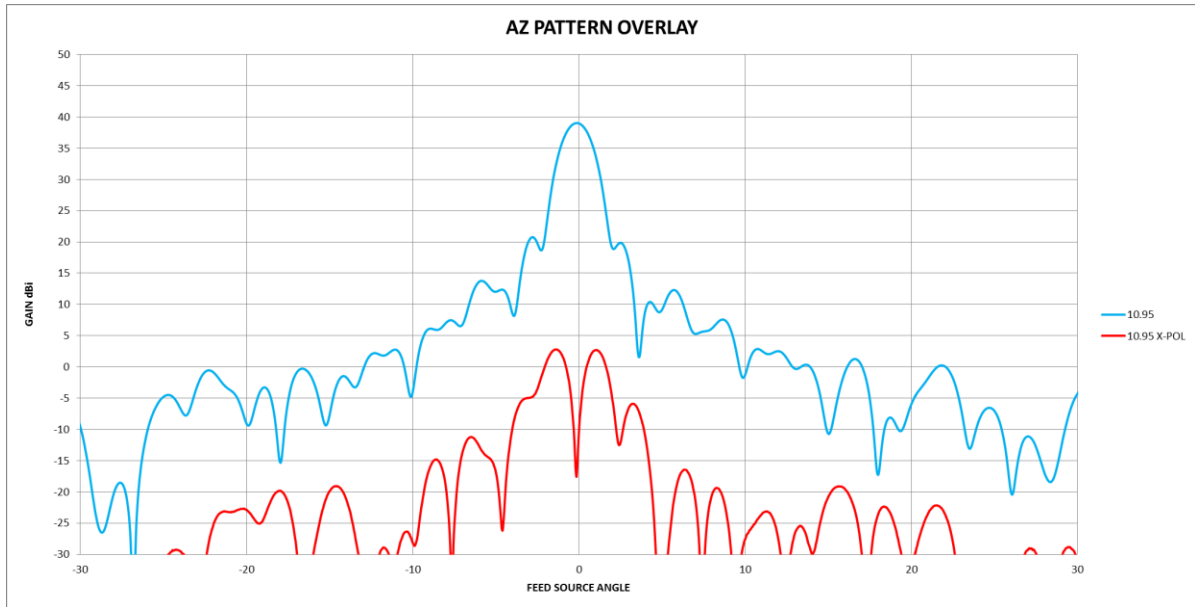


Figure 15 - RxV 10.95 GHz Azimuth

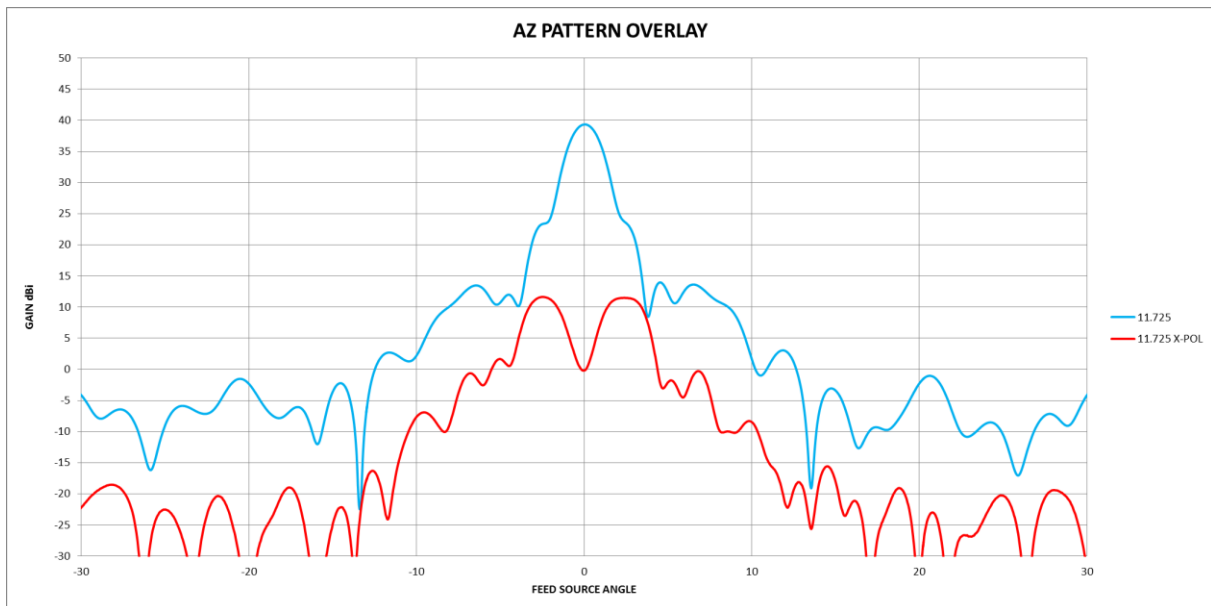


Figure 16 - RxV 11.725 GHz Azimuth

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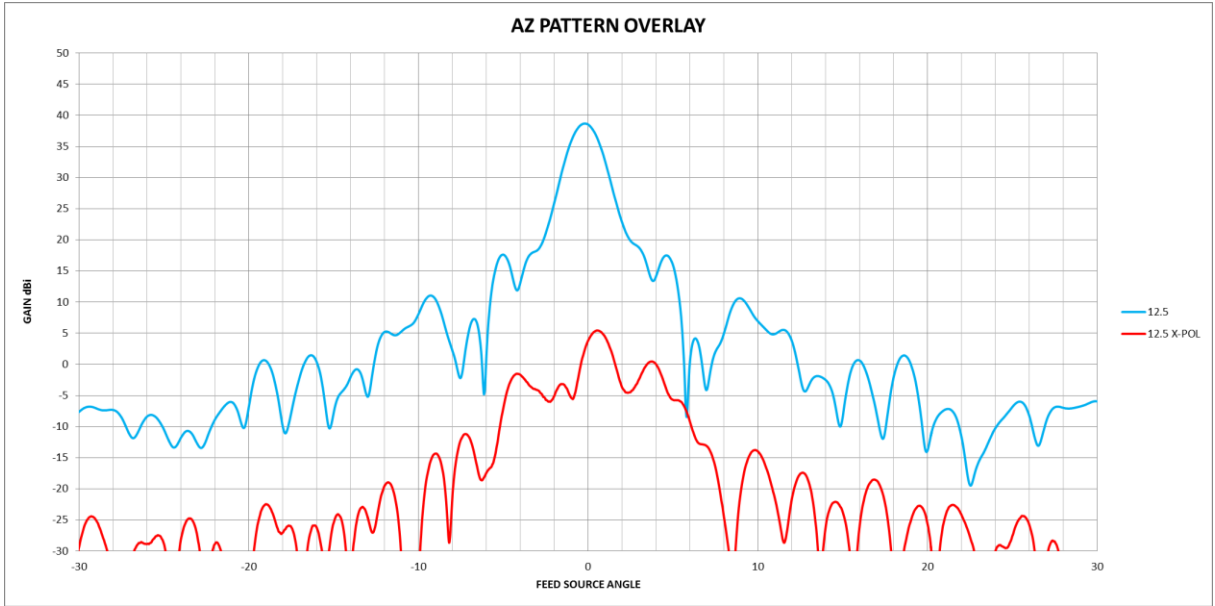


Figure 17 - RxV 12.50 GHz Azimuth

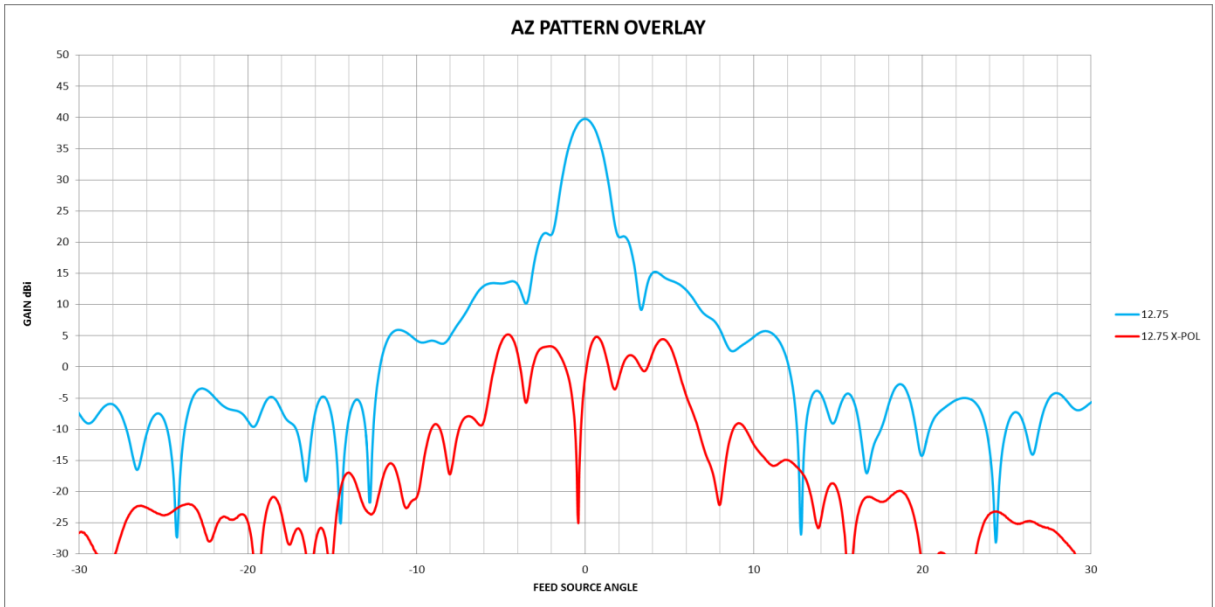


Figure 18 - RxV 12.75 GHz Azimuth

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Radiation Patterns – RxV Elevation

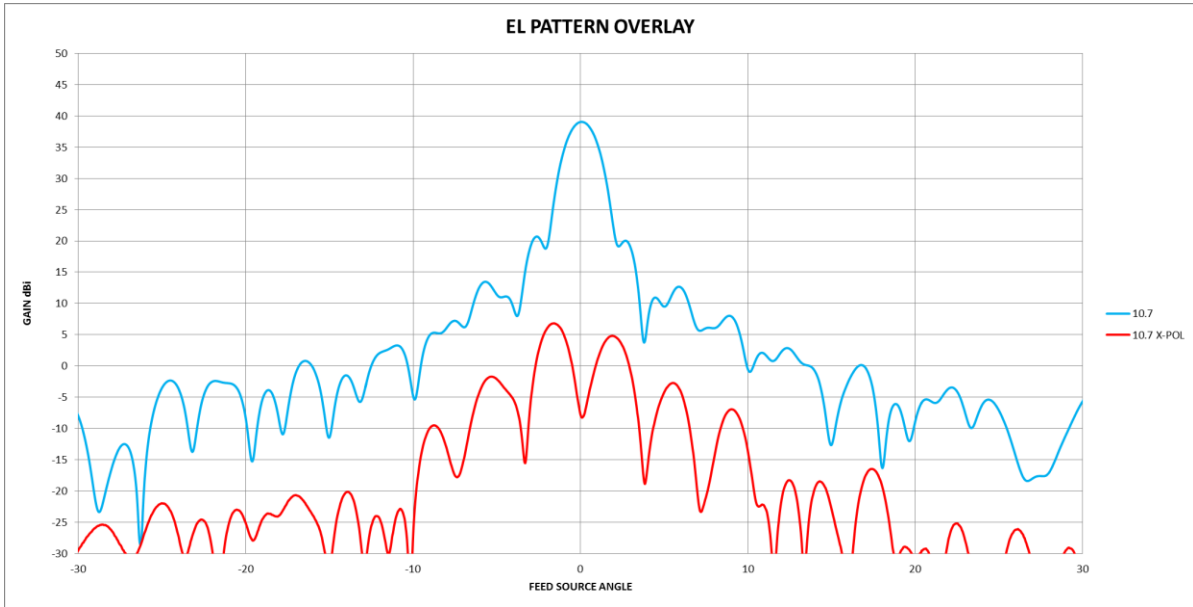


Figure 19 - RxV 10.70 GHz Elevation

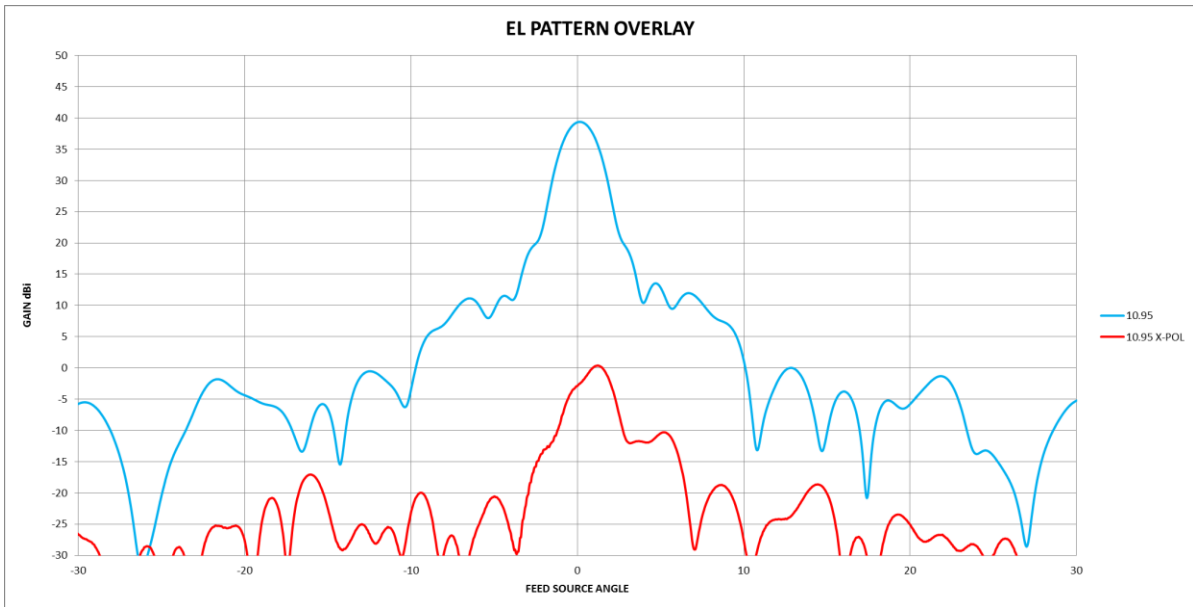


Figure 20 - RxV 10.95 GHz Elevation

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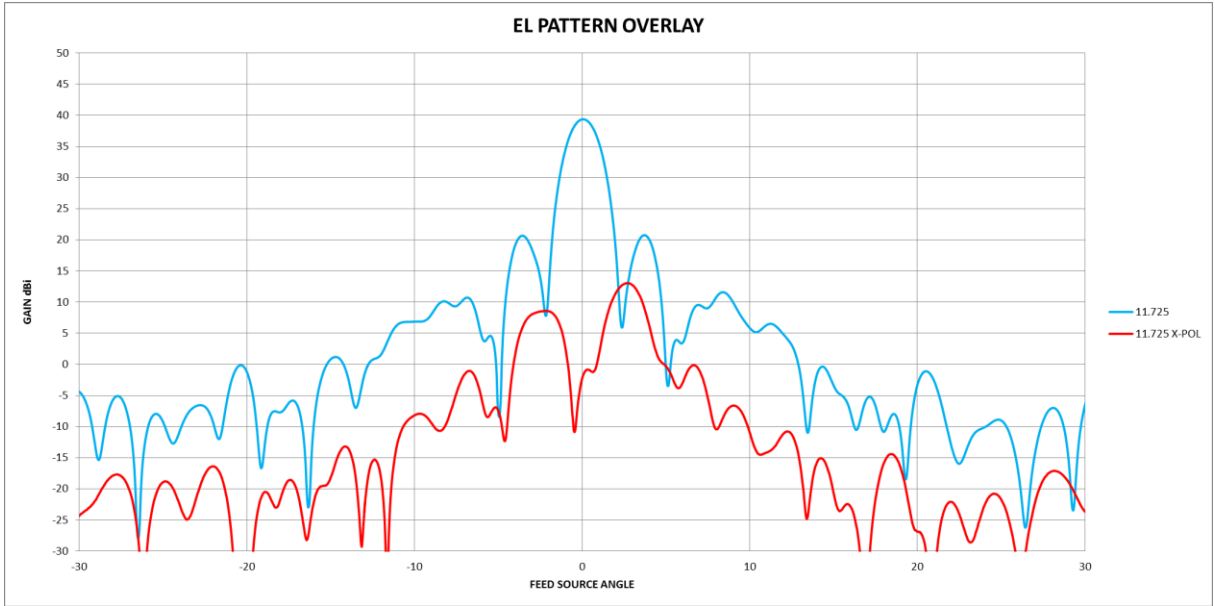


Figure 21 - RxV 11.725 GHz Elevation

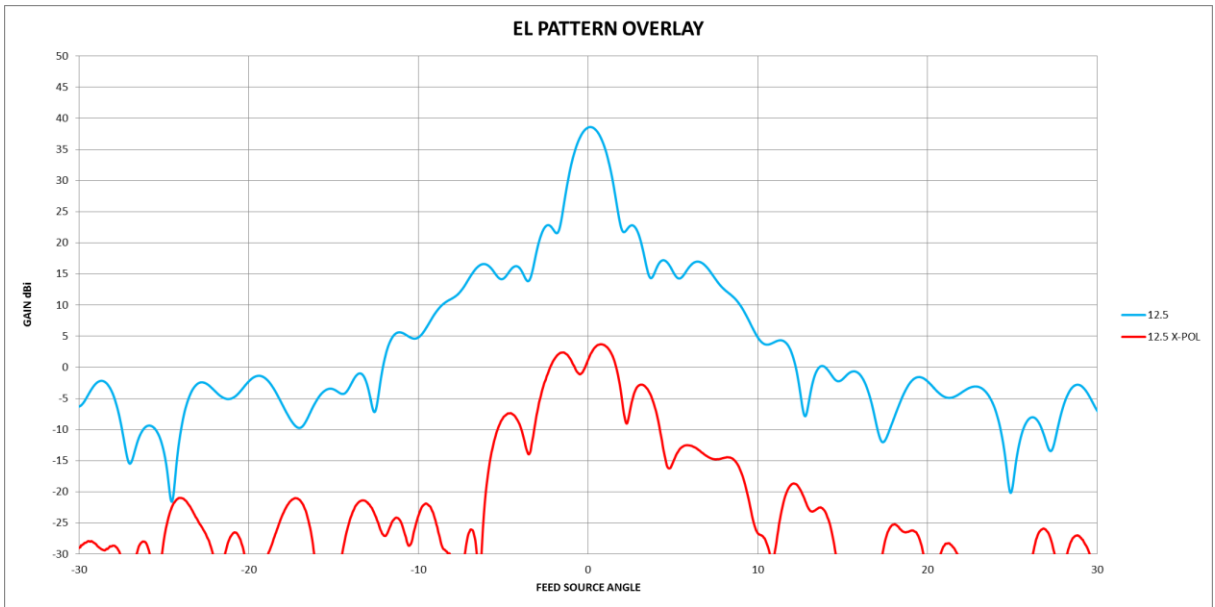


Figure 22 - RxV 12.50 GHz Elevation

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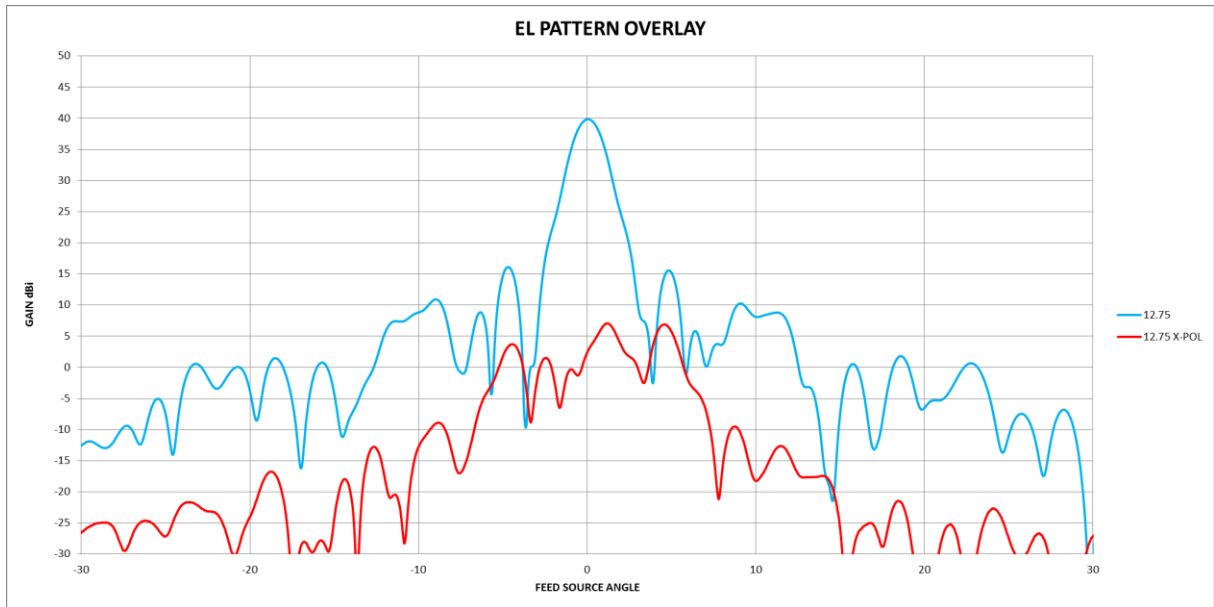


Figure 23 - RxV 12.75 GHz Elevation

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Radiation Patterns – RxH Azimuth

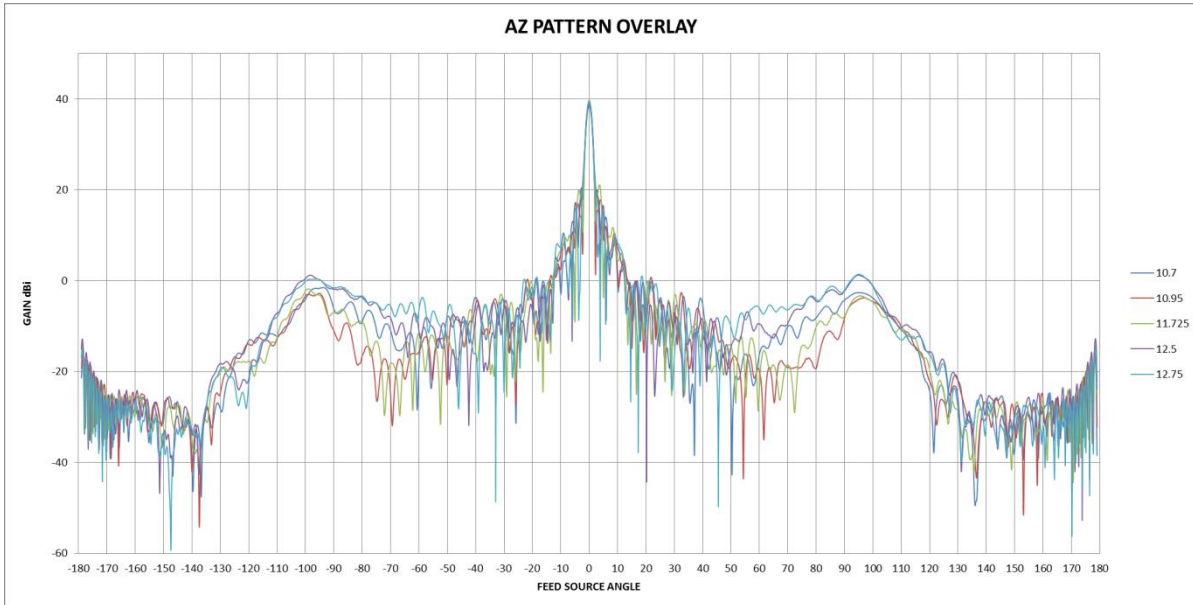


Figure 24 - RxH Azimuth Co-Polarized +/-180

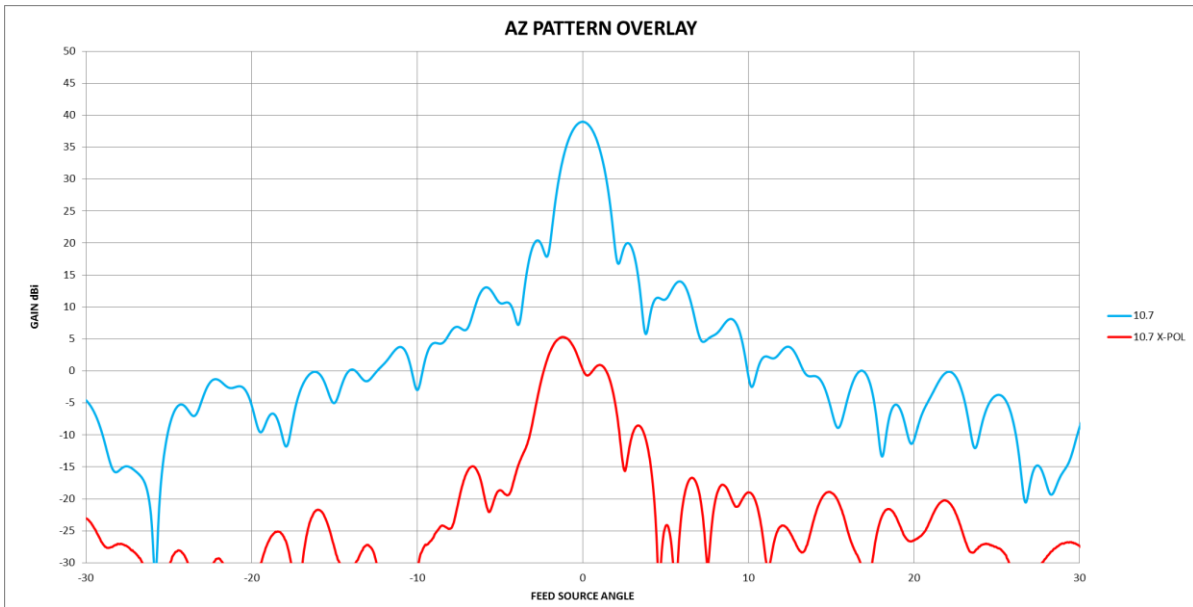


Figure 25 - RxH 10.70 GHz Azimuth

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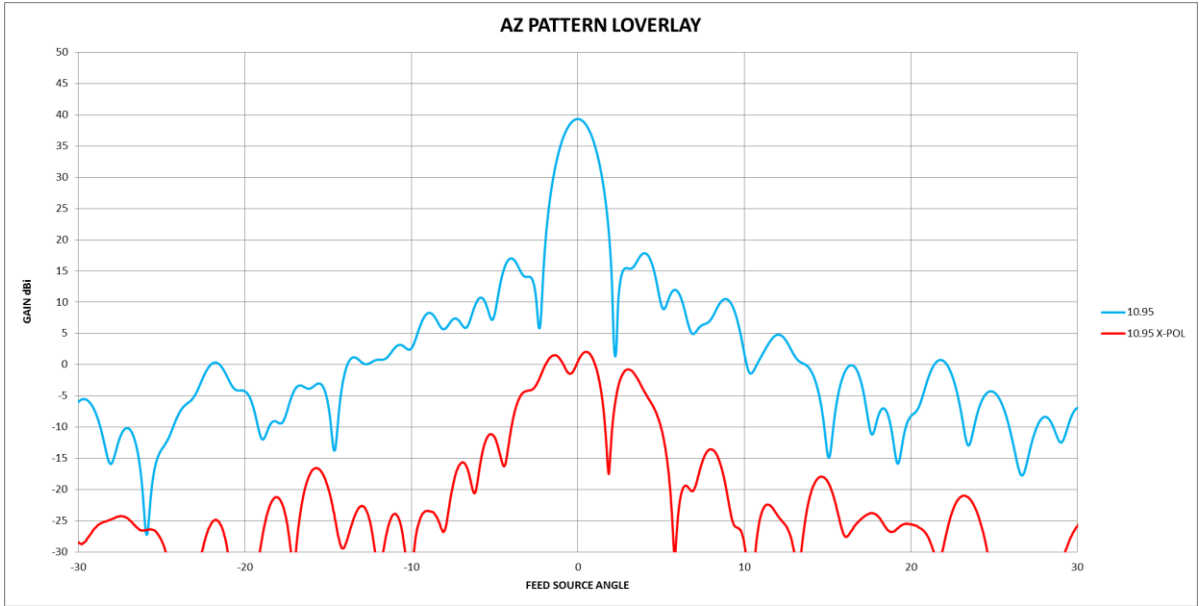


Figure 26 – RxH 10.95 GHz Azimuth

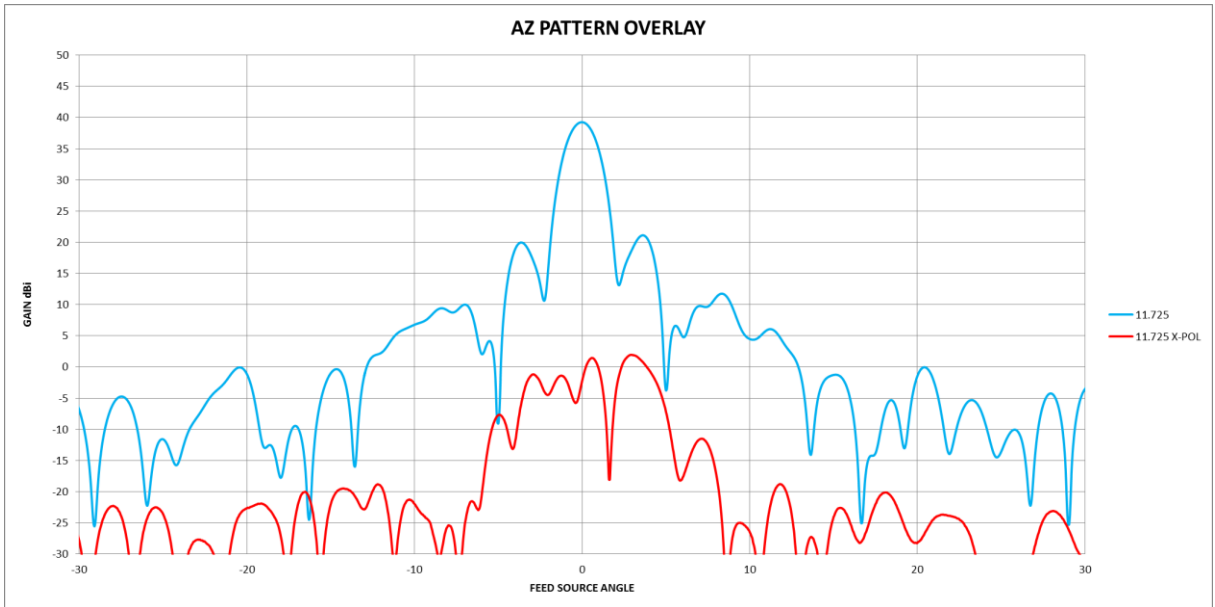


Figure 27 – RxH 11.725 GHz Azimuth

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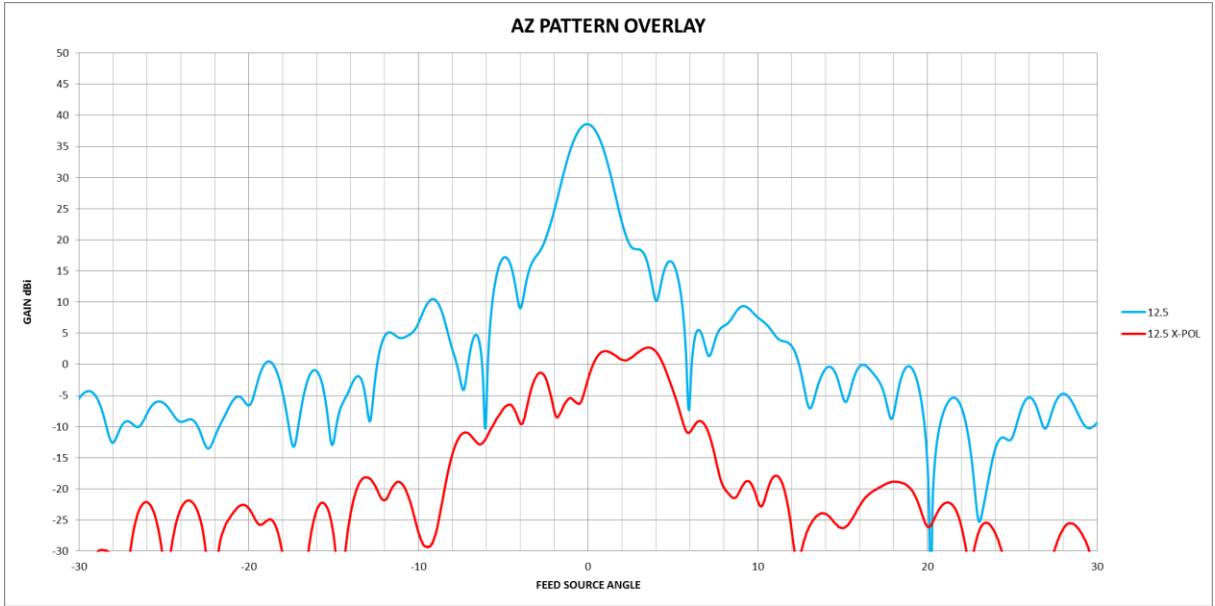


Figure 28 – RxH 12.50 GHz Azimuth

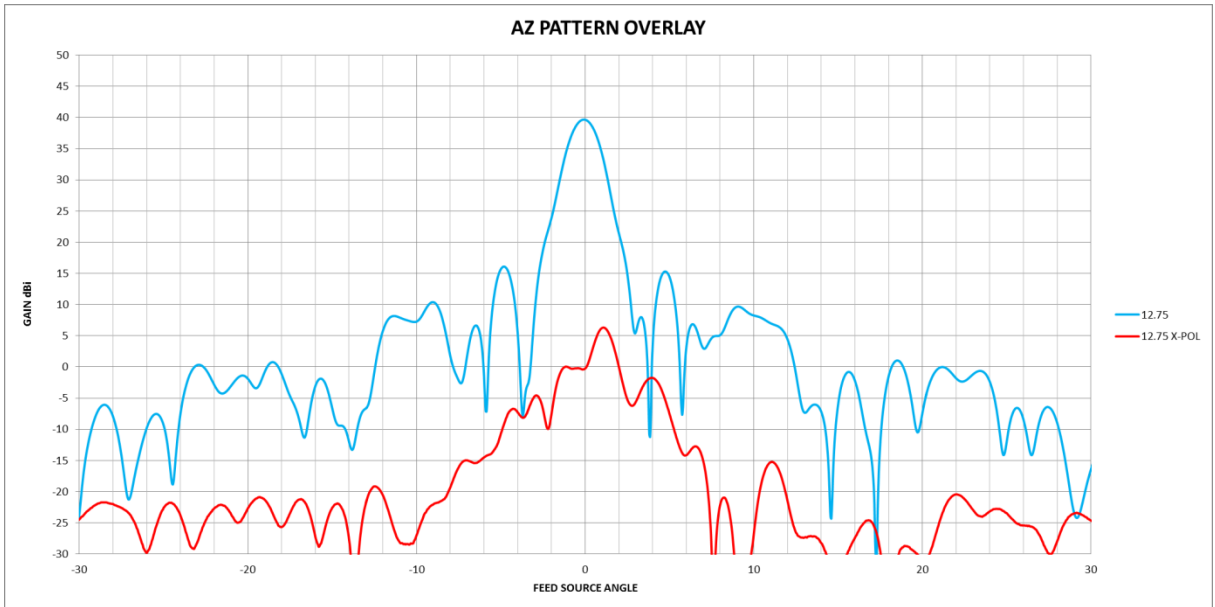


Figure 29 - RxH 12.75 GHz Azimuth

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Radiation Patterns – RxH Elevation

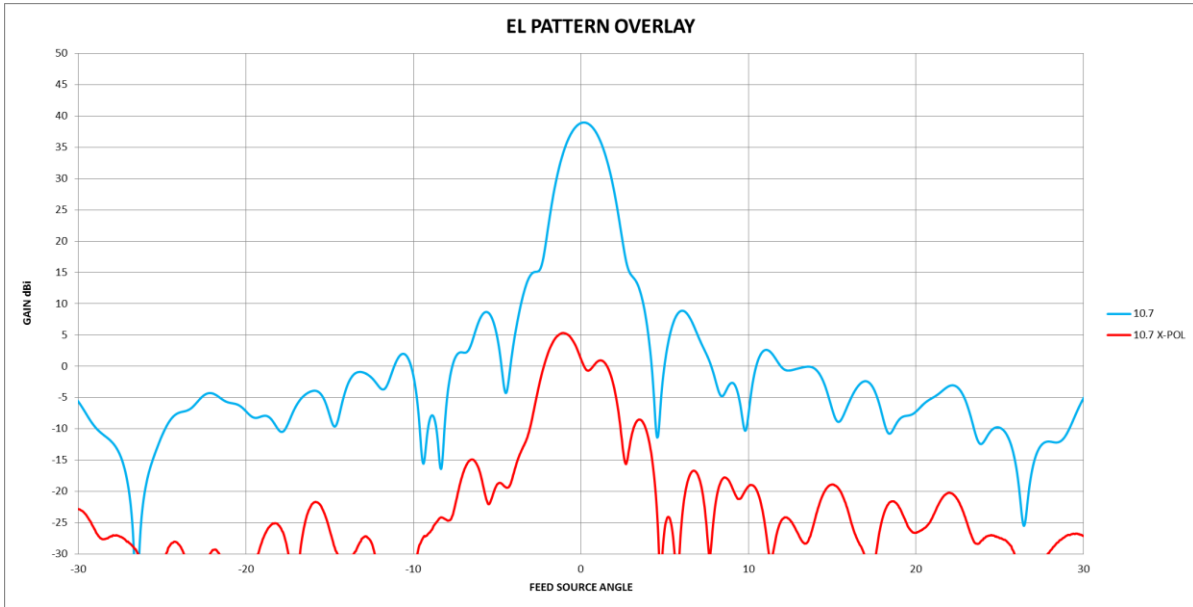


Figure 30 - RxH 10.70 GHz Elevation

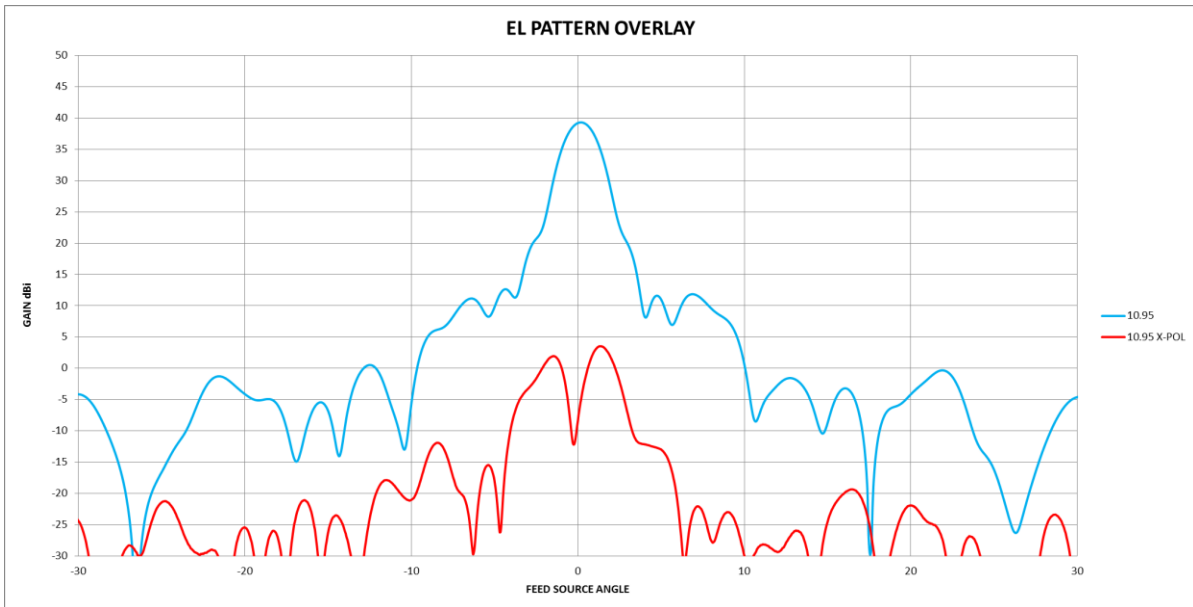


Figure 31 - RxH 10.95 GHz Elevation

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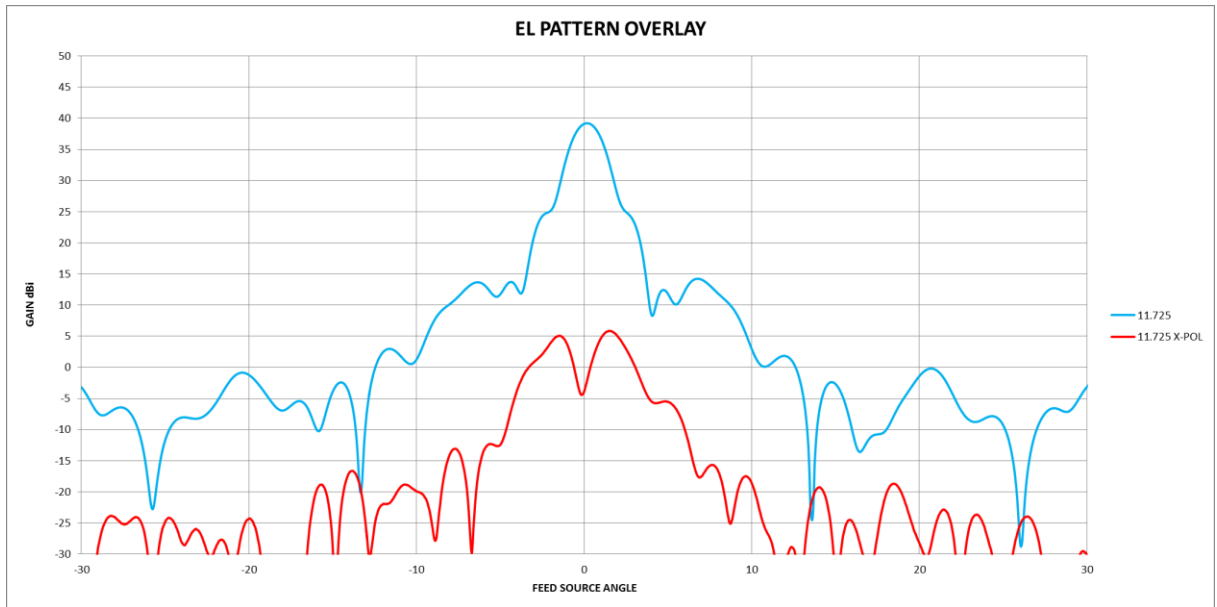


Figure 32 - RxH 11.725 GHz Elevation

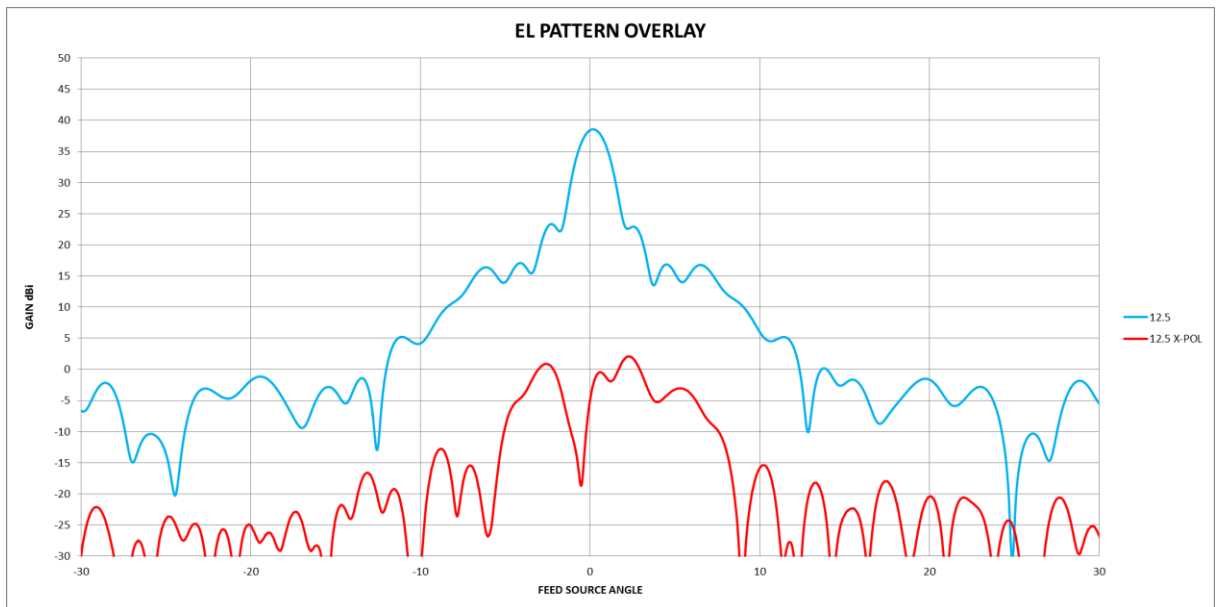


Figure 33 - RxH 12.50 GHz Elevation

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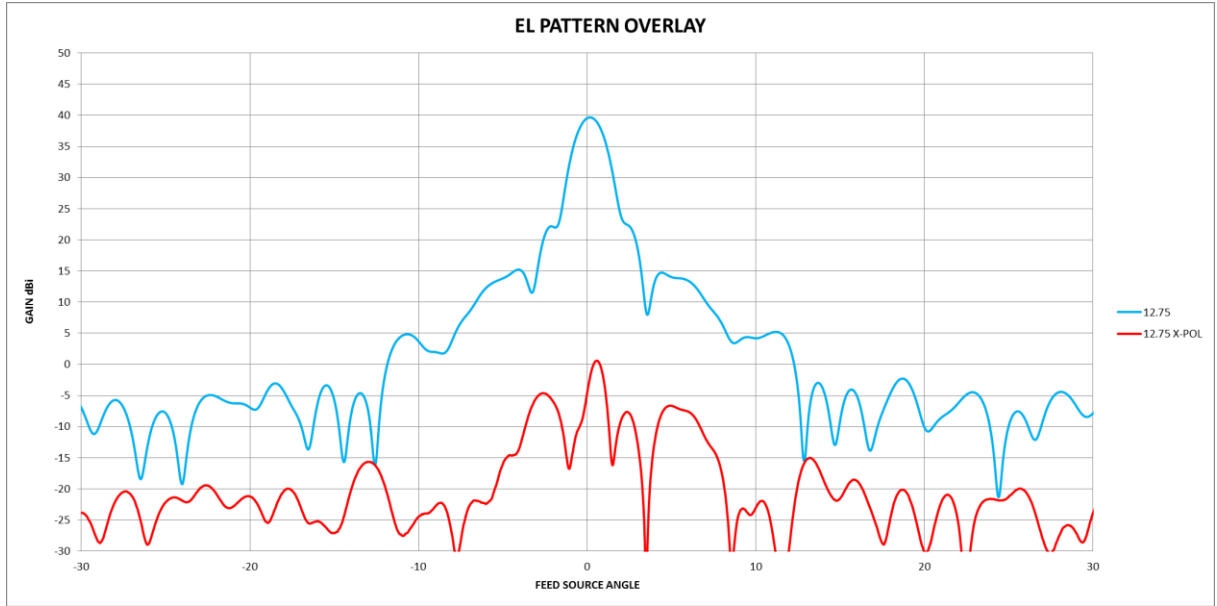


Figure 34 - RxH 12.75 GHz Elevation

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