Standard Gain Horn Antenna

12.4-18.0 GHz | 15 dBi | P/N: AMT-SGH62-15-NF

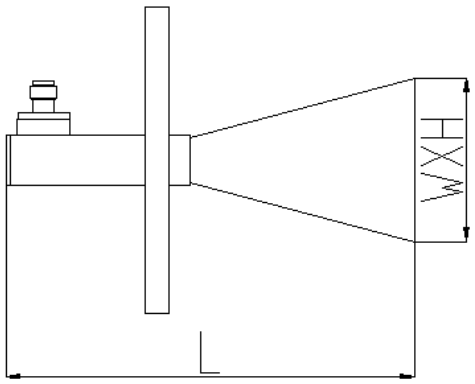
1. Product Overview

The AMT-SGH62-15-NF is a linearly polarized standard gain horn antenna operating from 12.4 GHz to 18.0 GHz. It provides nominal 15 dBi gain and low VSWR for antenna calibration, gain comparison, RF measurement, EMC/EMI testing, and laboratory applications.

2. Technical Specifications

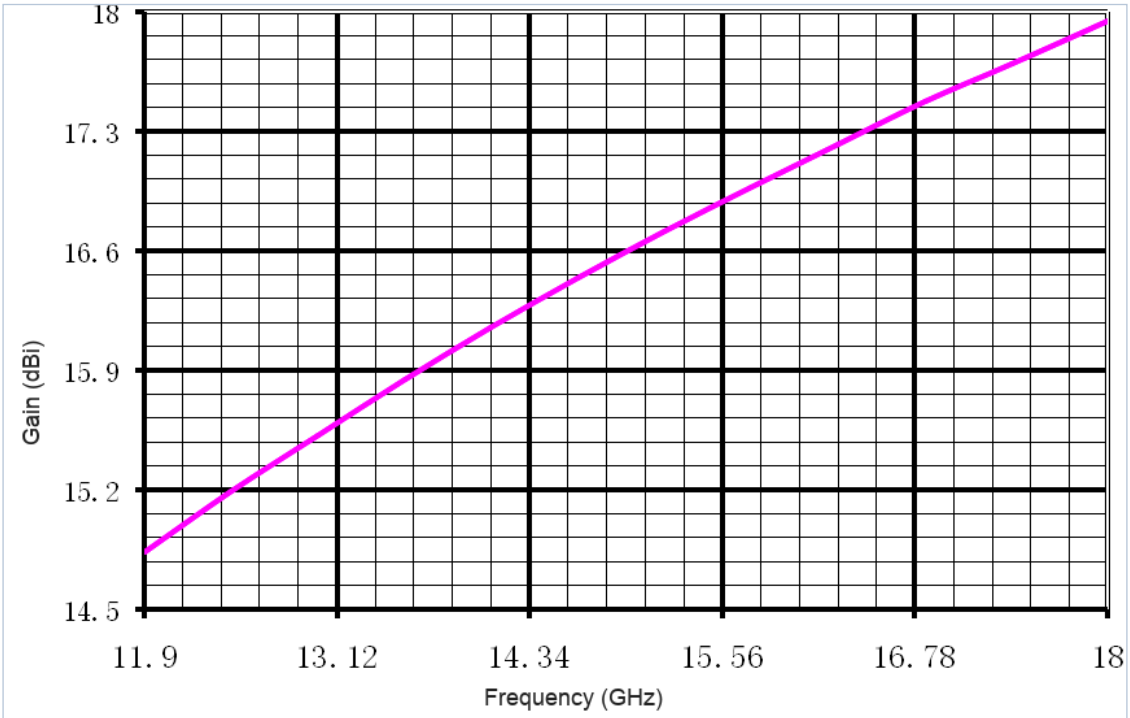
Parameter	Specification
Frequency Range	12.4-18.0 GHz
Nominal Gain	15 dBi typ.
VSWR	≤ 1.5
Polarization	Linear
RF Connector	N-Female; SMA-Female optional
Dimensions	Approx. 57 × 40 × 100 mm
Material	Aluminum
Surface Finish	Sea-gray paint

3. Outline Drawing



Test Result

Gain

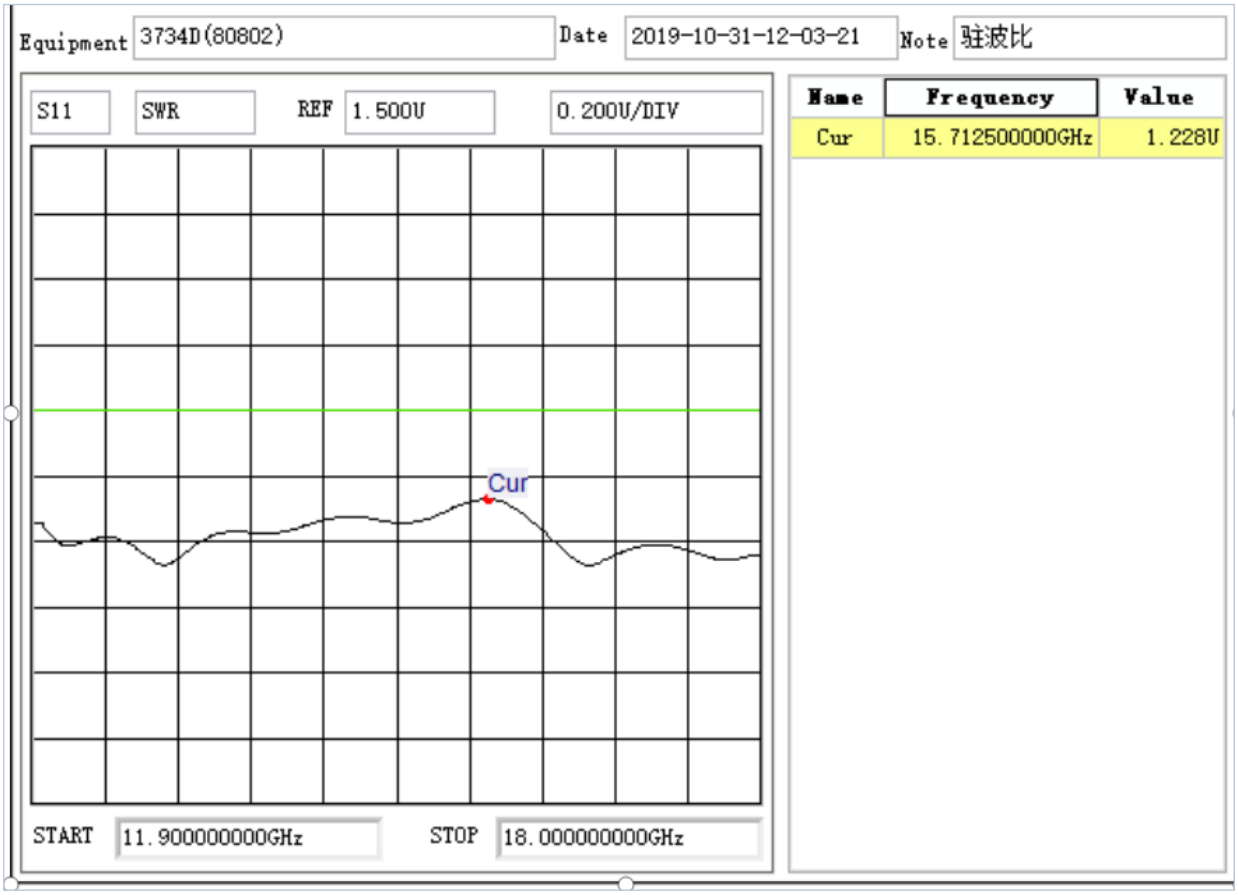


Measured Gain Data

Frequency (GHz)	Gain (dBi)	Frequency (GHz)	Gain (dBi)
11.90	14.83	15.19	16.72
12.45	15.19	15.74	16.97
13.00	15.52	16.29	17.22
13.55	15.84	16.84	17.48
14.10	16.15	17.39	17.69
14.65	16.44	18.00	17.95

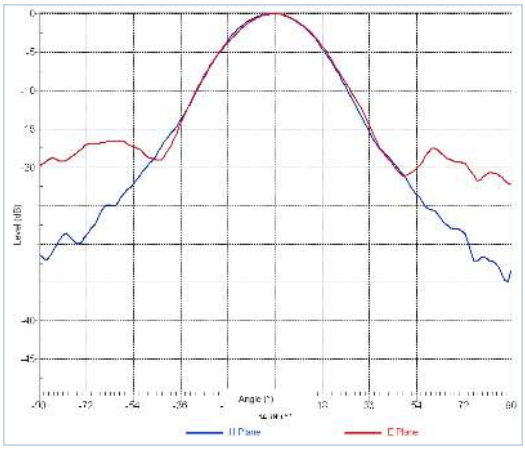
VSWR

Measured VSWR, 12.4-18.0 GHz



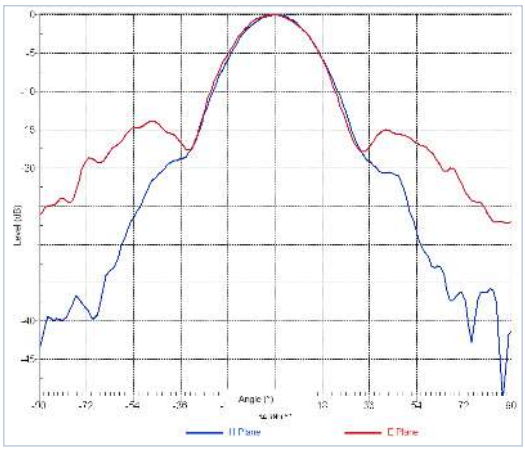
Pattern

11.90 GHz



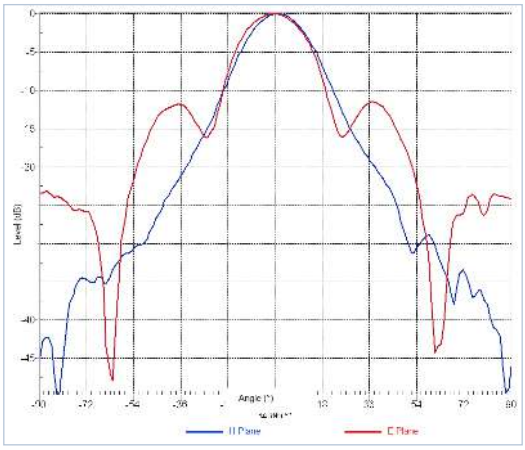
3 dB Beamwidth: H Plane 31.75°; E Plane 30.91°

14.95 GHz



3 dB Beamwidth: H Plane 26.73°; E Plane 27.57°

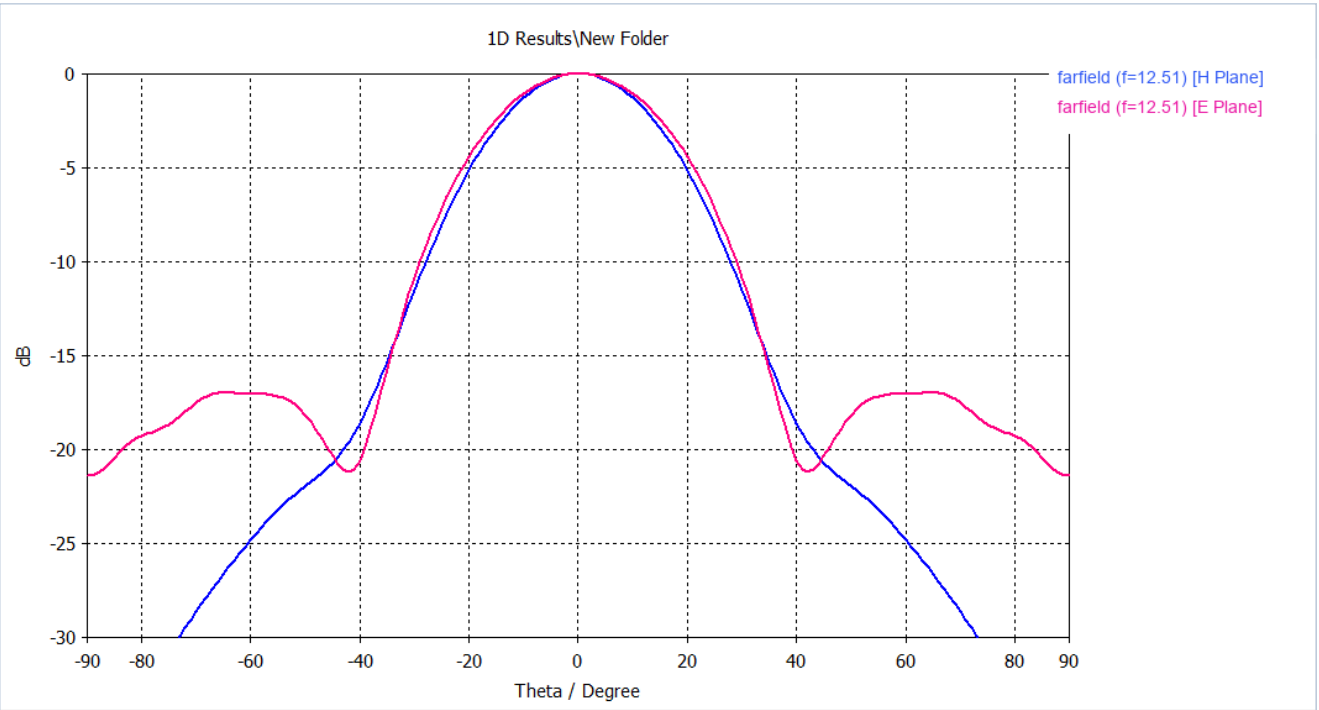
18.00 GHz



3 dB Beamwidth: H Plane 21.90°; E Plane 23.69°

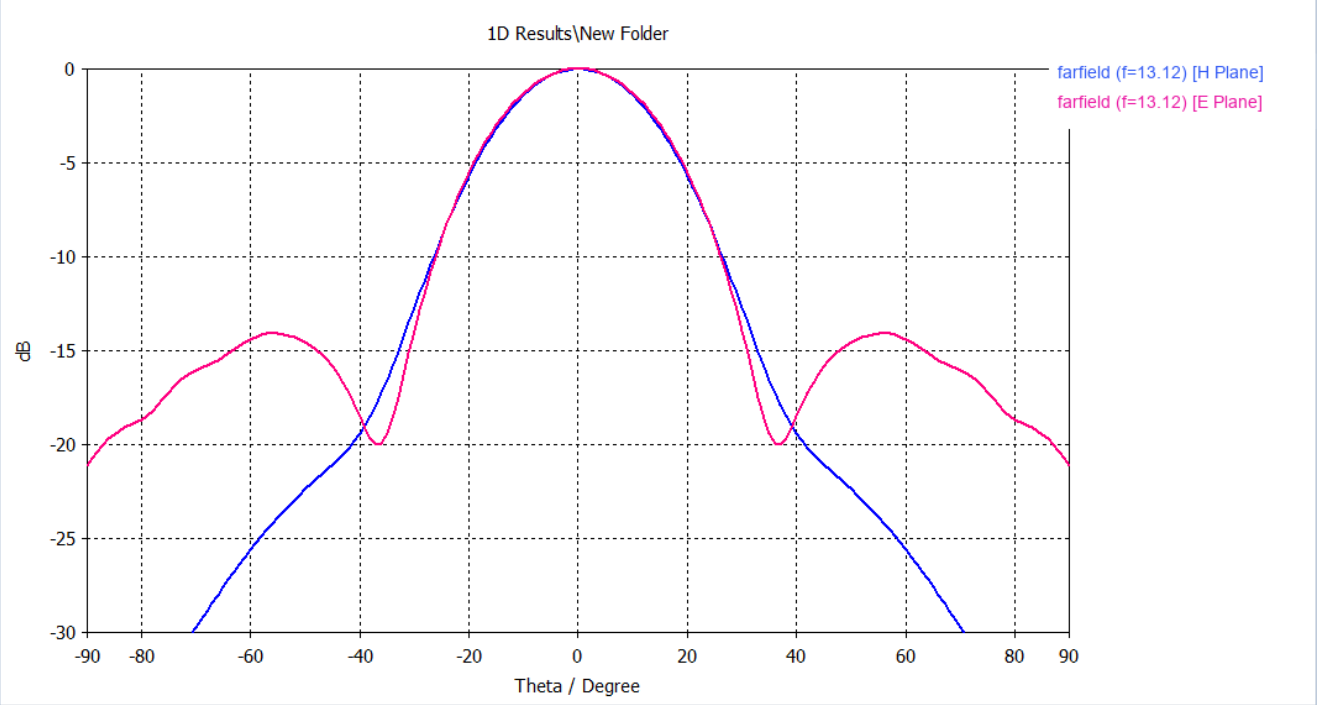
Typical Radiation Patterns at Other Frequencies

12.51 GHz



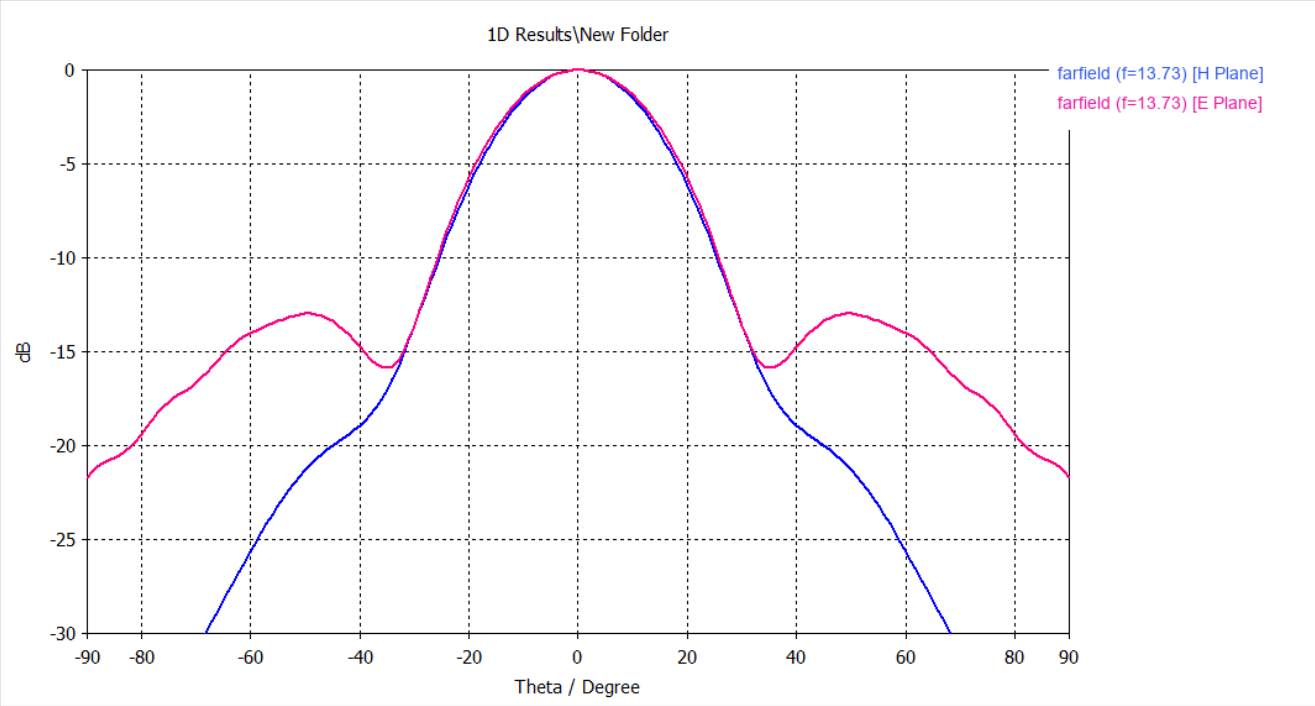
3 dB Beamwidth: H Plane 30.60°; E Plane 33.20°

13.12 GHz



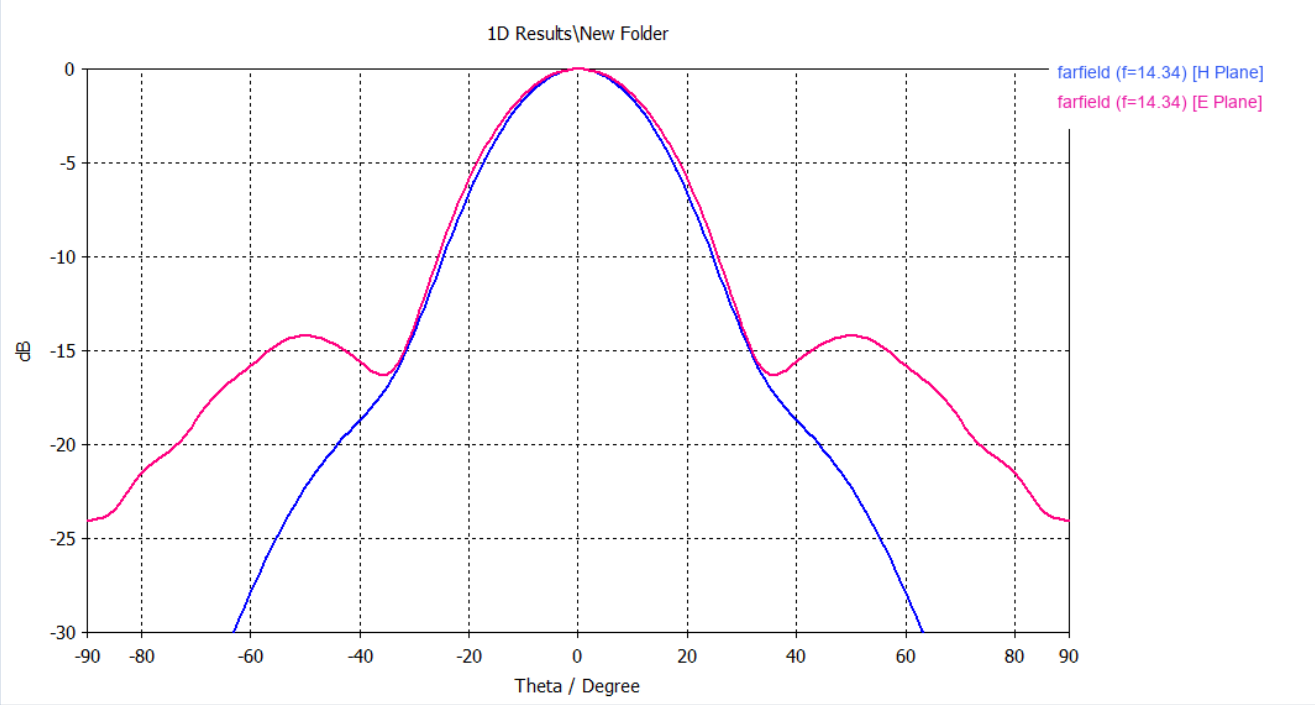
3 dB Beamwidth: H Plane 29.10°; E Plane 30.00°

13.73 GHz



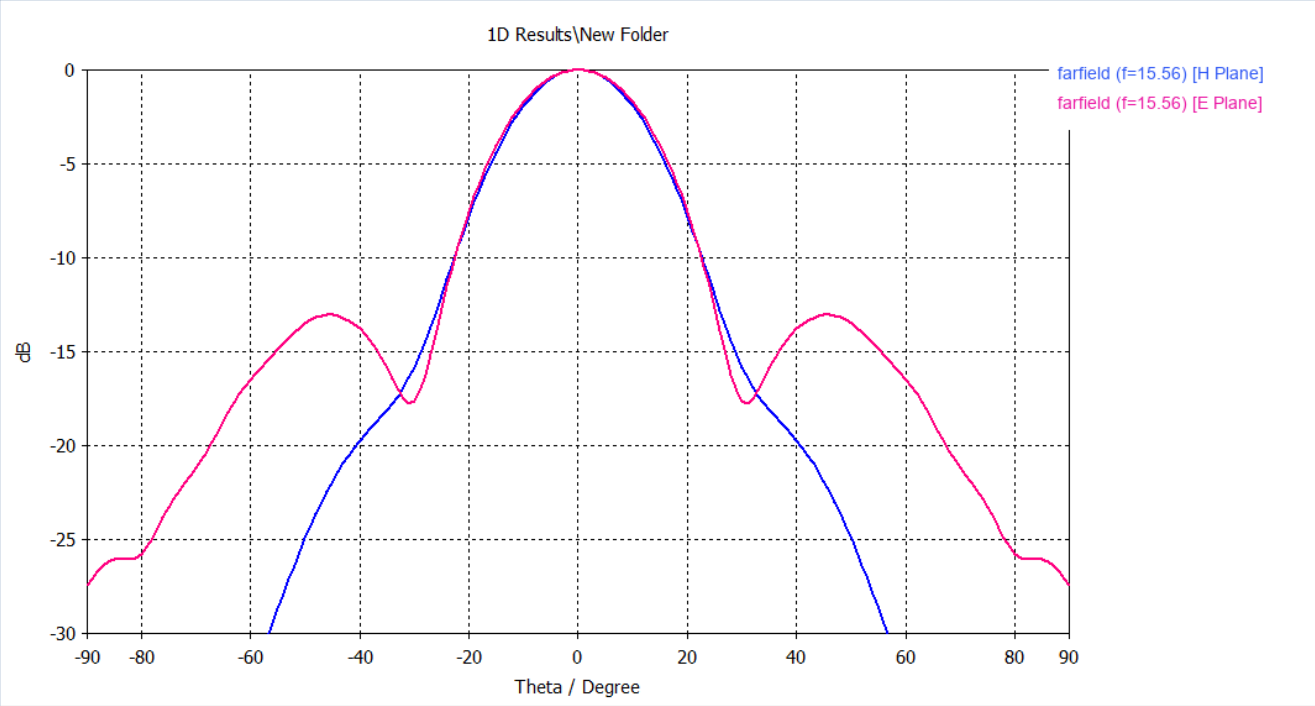
3 dB Beamwidth: H Plane 28.00°; E Plane 29.40°

14.34 GHz



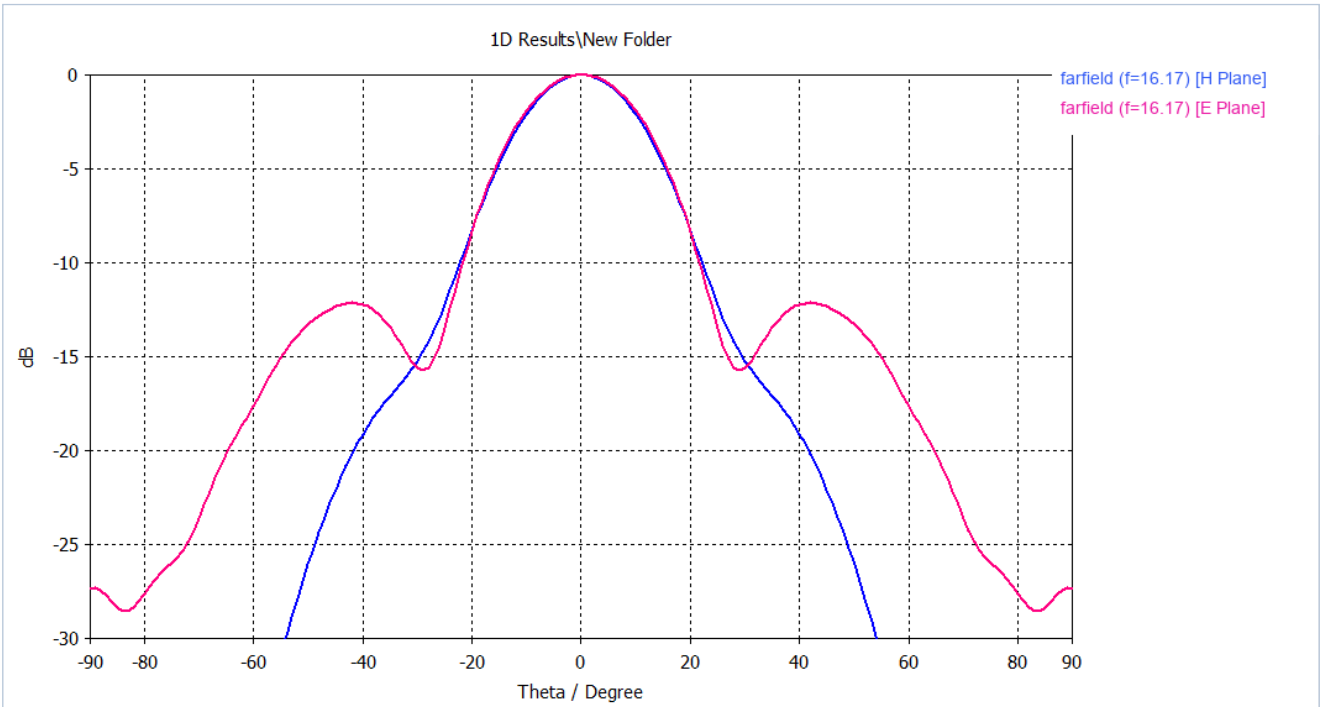
3 dB Beamwidth: H Plane 26.90°; E Plane 29.00°

15.56 GHz



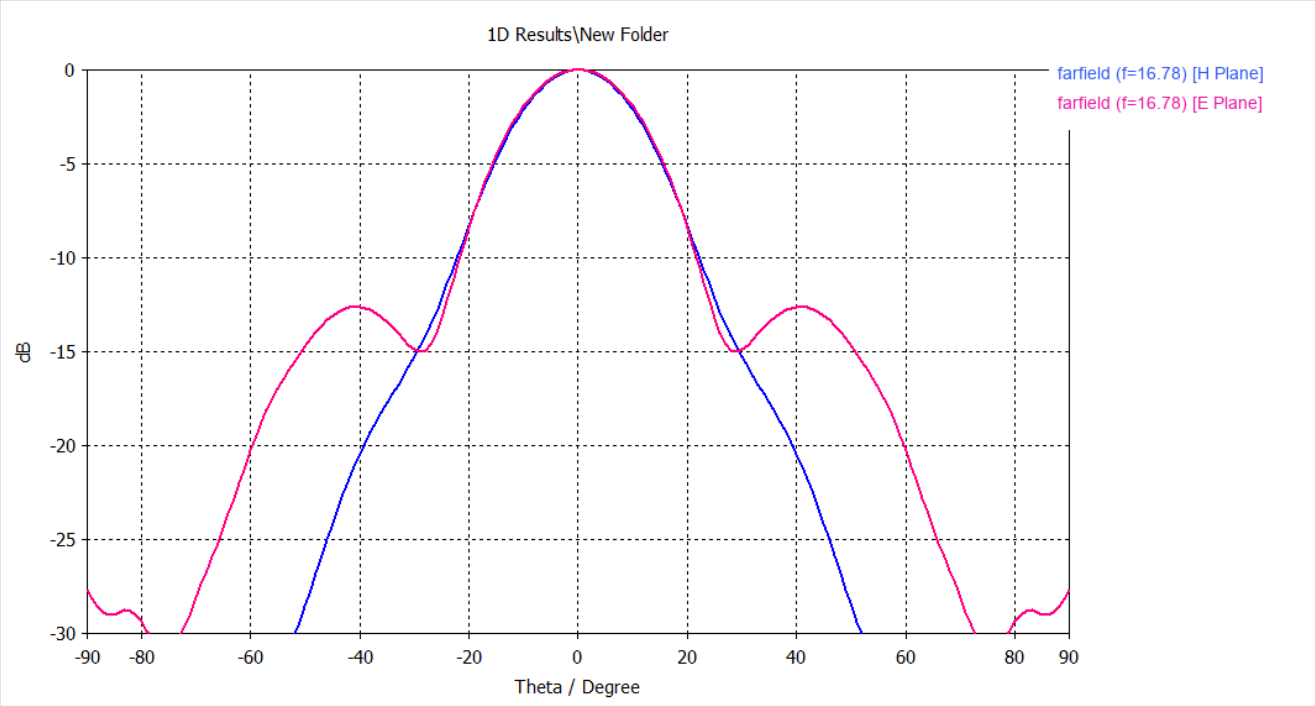
3 dB Beamwidth: H Plane 24.80°; E Plane 26.10°

Radiation Pattern at 16.17 GHz



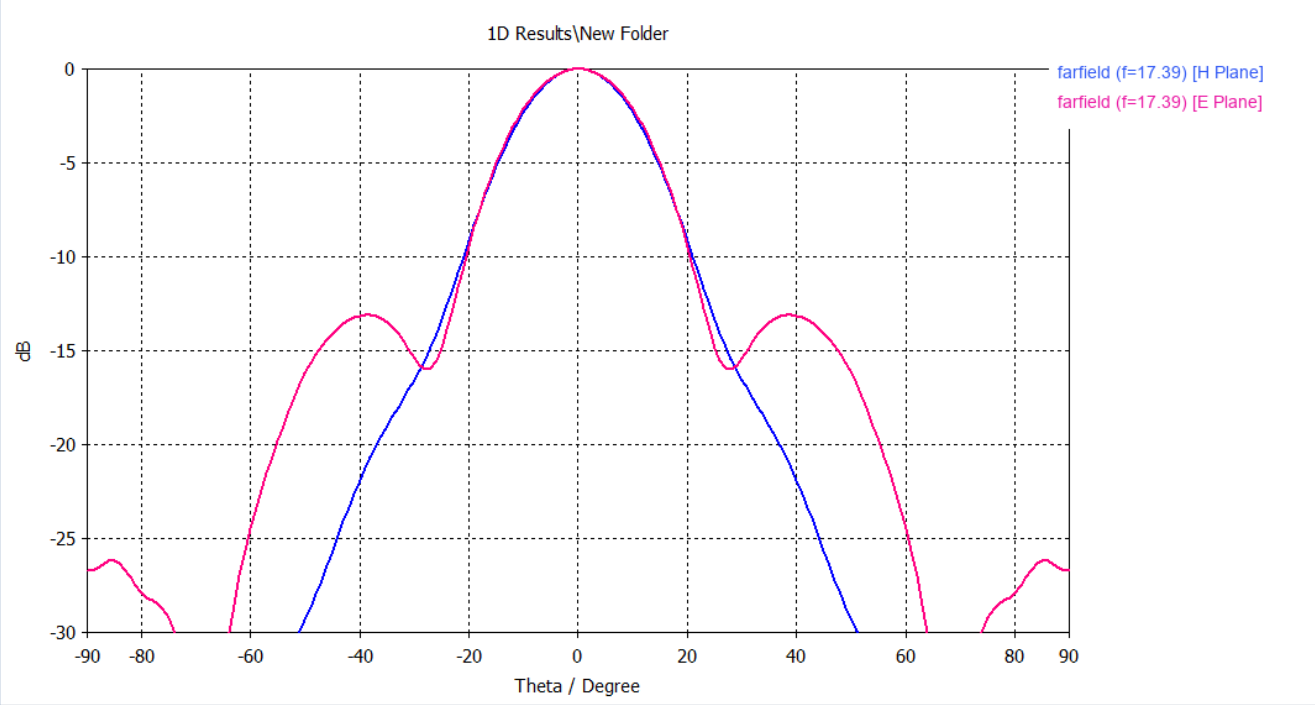
3 dB Beamwidth: H Plane 23.90°; E Plane 24.80°

16.78 GHz



3 dB Beamwidth: H Plane 23.70°; E Plane 24.60°

17.39 GHz



3 dB Beamwidth: H Plane 22.70°; E Plane 23.50°