Part No. WGAT-D-1-18-13

1-18GHz Gain: 13dBi Double Ridge Horn Antenna/N(F)



Features:

- Small Size
- Lightweight
- High Gain

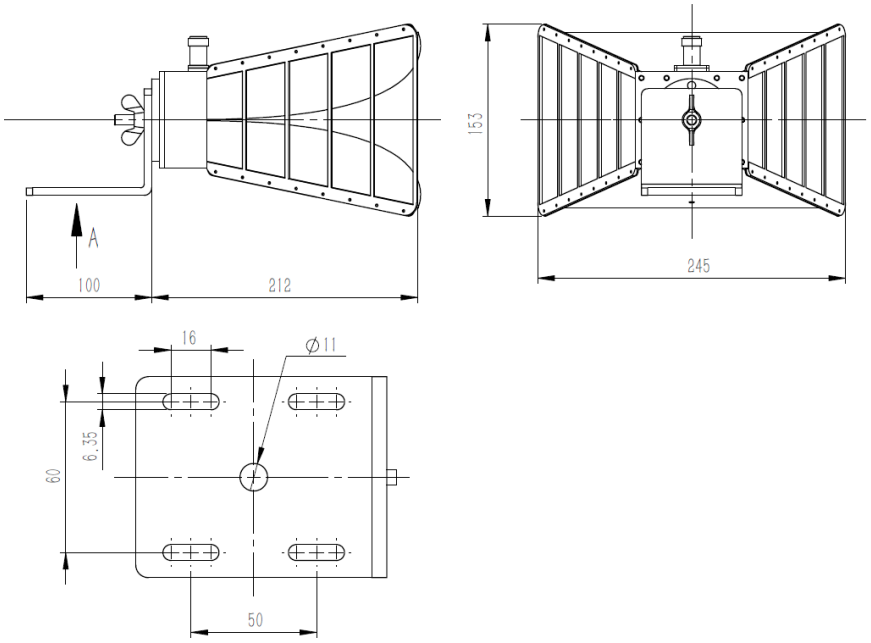
RoHS Compliant

Electrical Specification	
Frequency	1-18GHz
Gain	7-16dBi
VSWR	2.5:1 Max.
Coaxial Connection	N Female

Material Specification	
Material	Aluminum
Inside Finish	White Paint
Outside Finish	Blue Paint

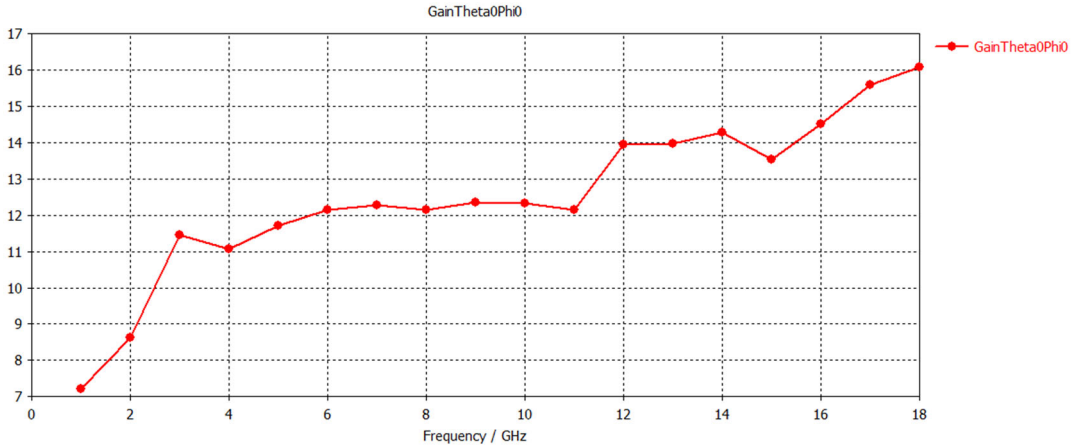
Outline

Unit:mm

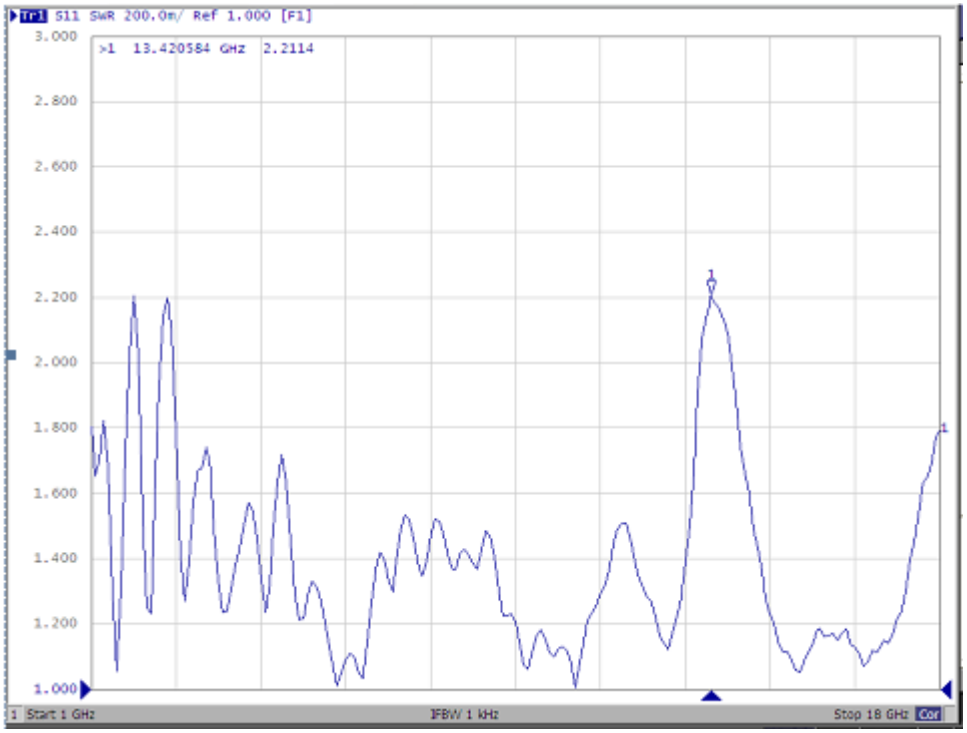


Test Data

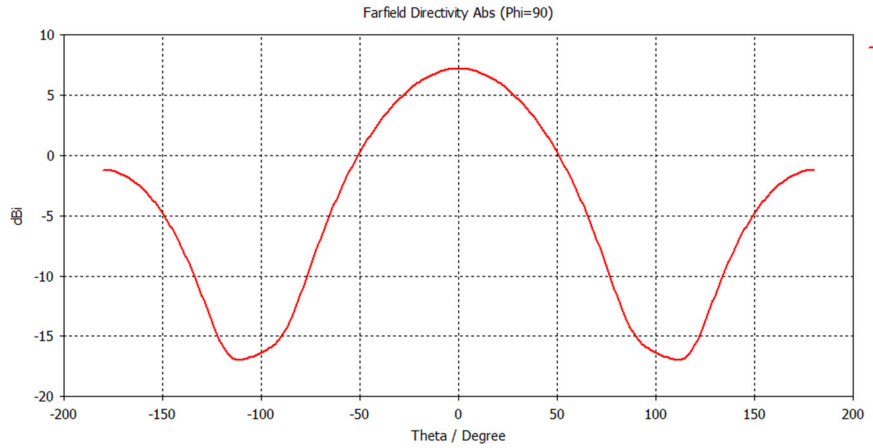
Gain



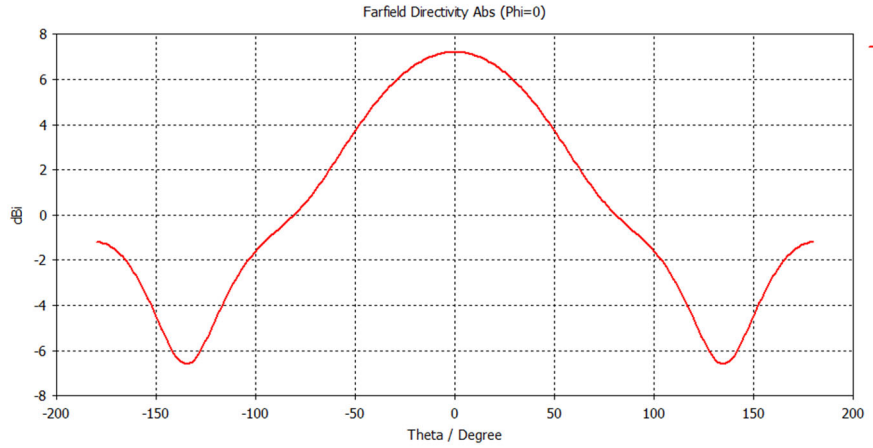
VSWR



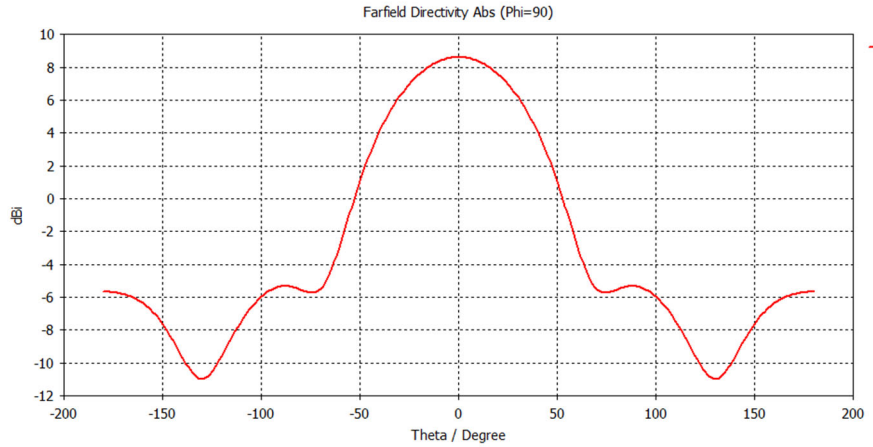
Radiation Pattern



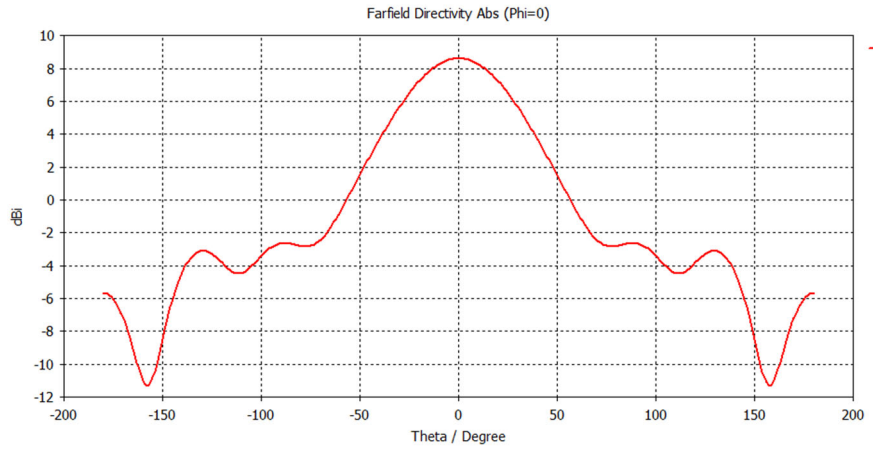
Frequency = 1 GHz
Main lobe magnitude = 7.21 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 66.0 deg.
Side lobe level = -8.4 dB



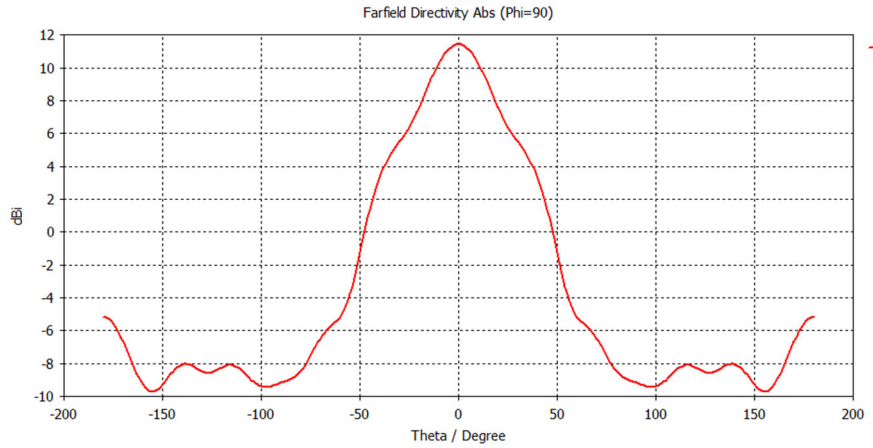
Frequency = 1 GHz
Main lobe magnitude = 7.21 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 92.5 deg.
Side lobe level = -8.4 dB



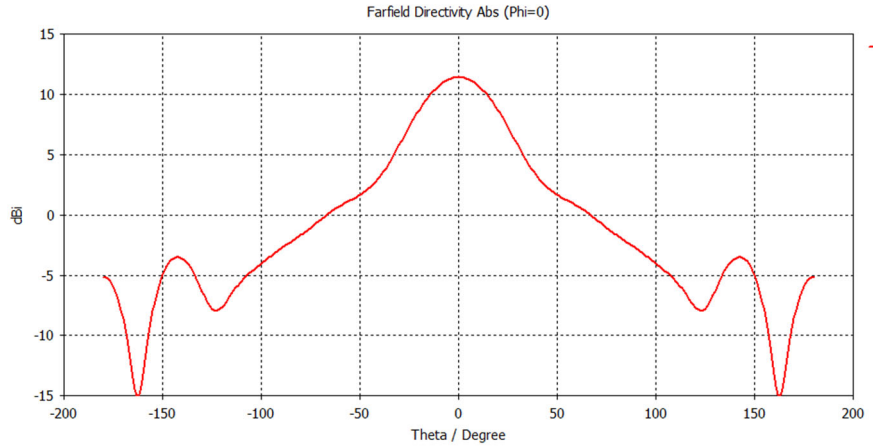
Frequency = 2 GHz
Main lobe magnitude = 8.62 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 66.5 deg.
Side lobe level = -13.9 dB



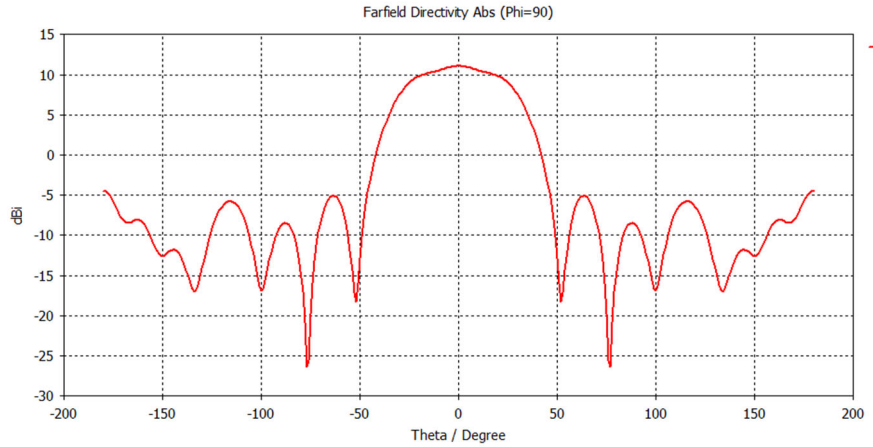
Frequency = 2 GHz
Main lobe magnitude = 8.62 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 60.5 deg.
Side lobe level = -11.3 dB



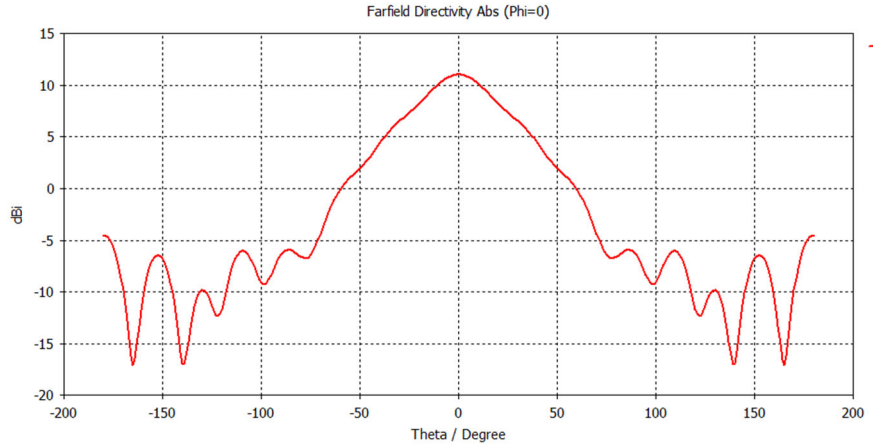
Frequency = 3 GHz
Main lobe magnitude = 11.4 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 33.9 deg.
Side lobe level = -16.6 dB



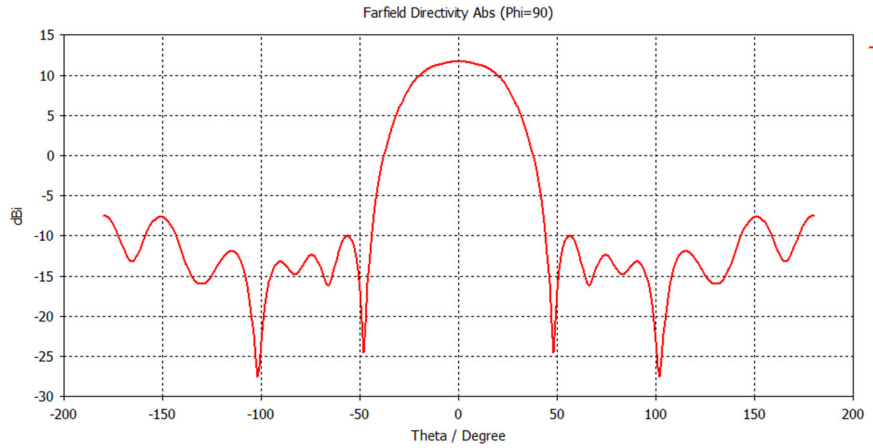
Frequency = 3 GHz
Main lobe magnitude = 11.4 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 42.0 deg.
Side lobe level = -14.9 dB



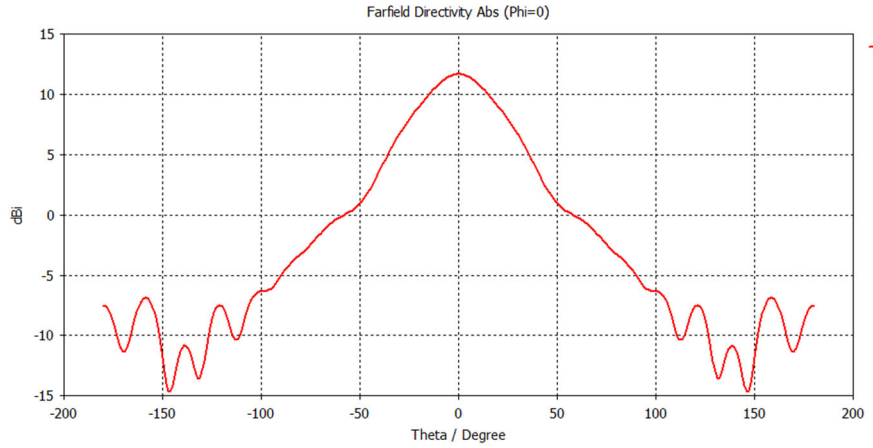
Frequency = 4 GHz
Main lobe magnitude = 11.1 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 56.9 deg.
Side lobe level = -15.6 dB



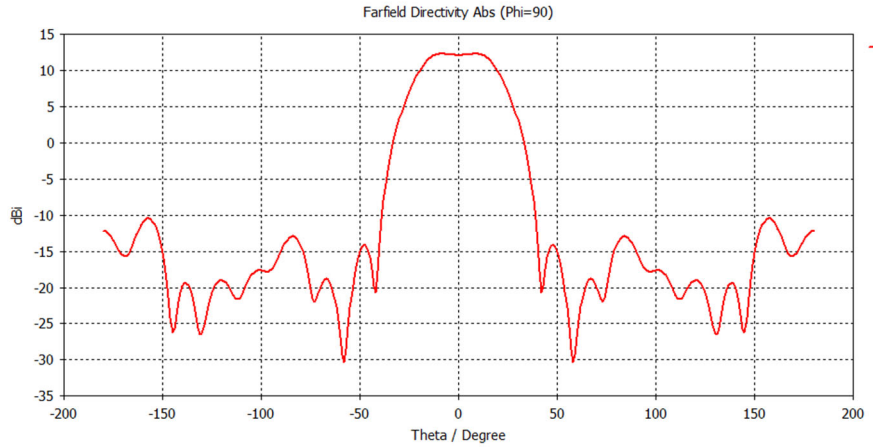
Frequency = 4 GHz
Main lobe magnitude = 11.1 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 41.8 deg.
Side lobe level = -15.6 dB



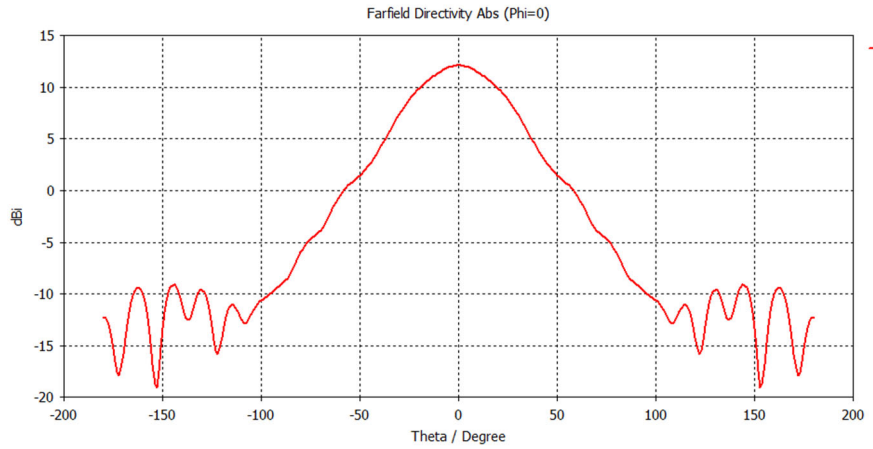
Frequency = 5 GHz
Main lobe magnitude = 11.7 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 48.3 deg.
Side lobe level = -19.2 dB



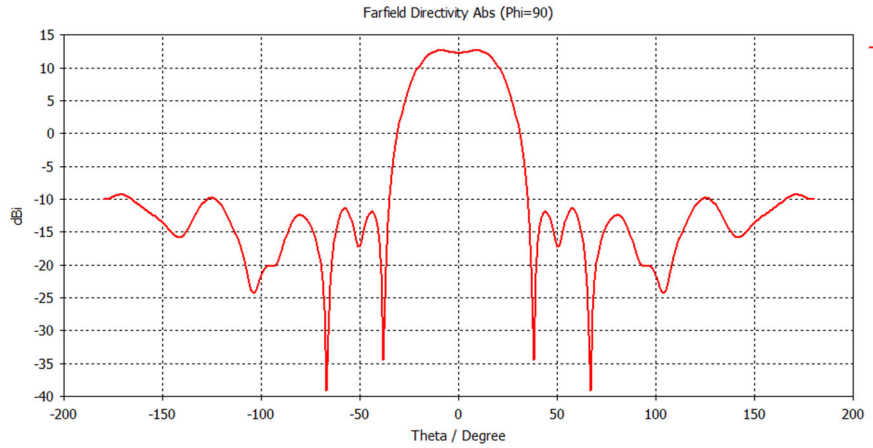
Frequency = 5 GHz
Main lobe magnitude = 11.7 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 42.9 deg.
Side lobe level = -18.6 dB



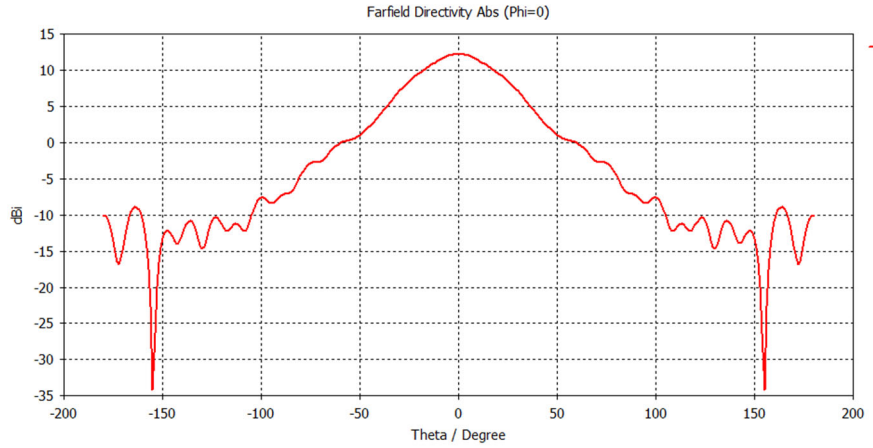
Frequency = 6 GHz
Main lobe magnitude = 12.3 dBi
Main lobe direction = -9.0 deg.
Angular width (3 dB) = 42.2 deg.
Side lobe level = -22.8 dB



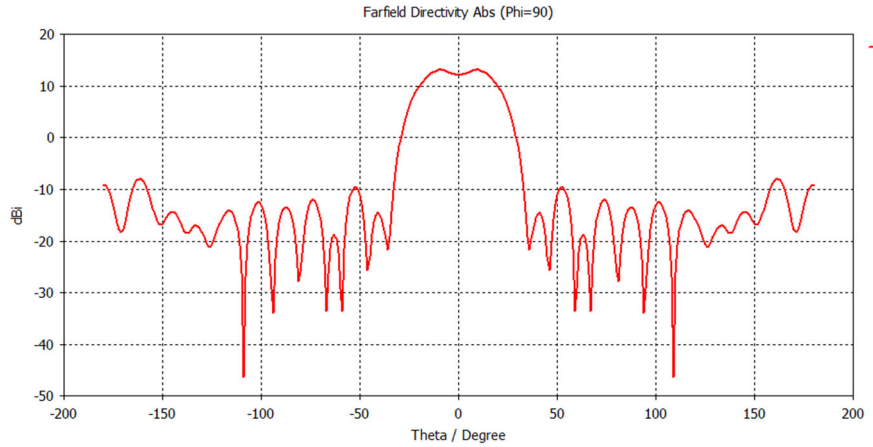
Frequency = 6 GHz
Main lobe magnitude = 12.1 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 47.2 deg.
Side lobe level = -21.3 dB



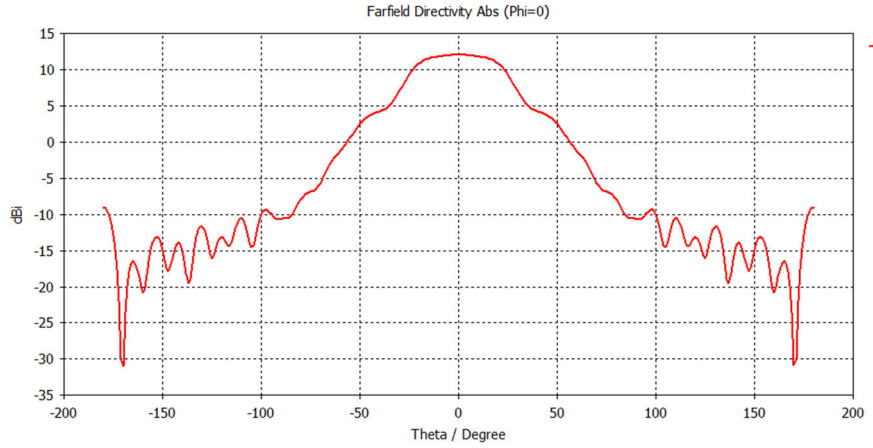
Frequency = 7 GHz
Main lobe magnitude = 12.7 dBi
Main lobe direction = -9.0 deg.
Angular width (3 dB) = 42.3 deg.
Side lobe level = -21.9 dB



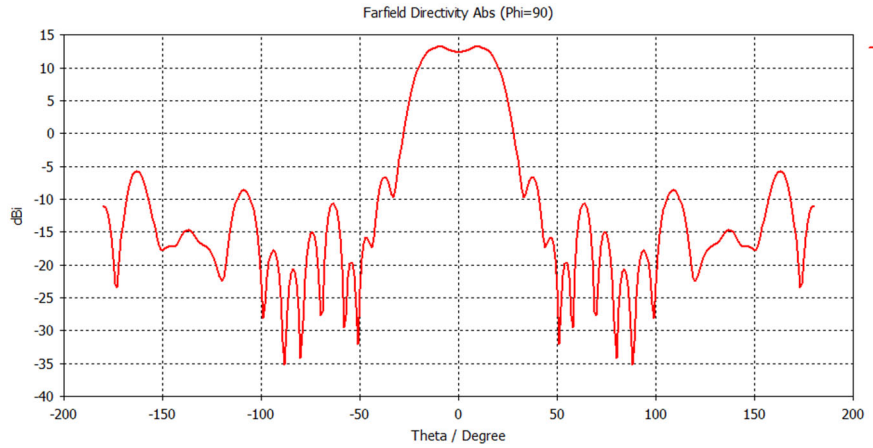
Frequency = 7 GHz
Main lobe magnitude = 12.3 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 43.5 deg.
Side lobe level = -19.8 dB



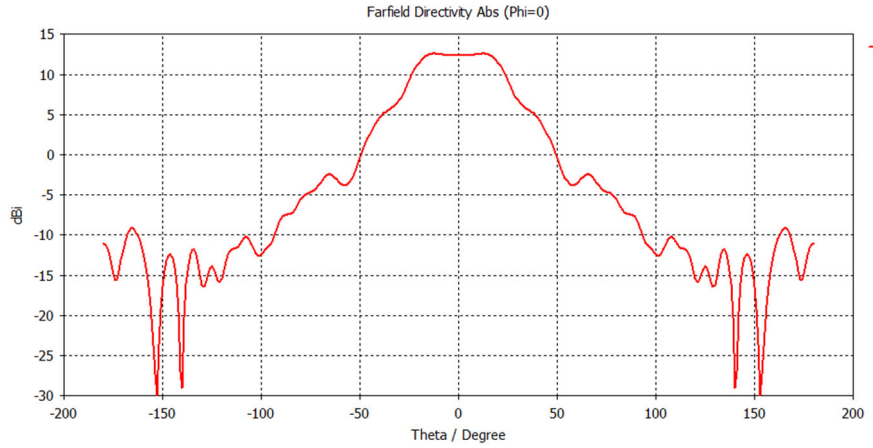
Frequency = 8 GHz
Main lobe magnitude = 13.2 dBi
Main lobe direction = -9.0 deg.
Angular width (3 dB) = 39.0 deg.
Side lobe level = -21.1 dB



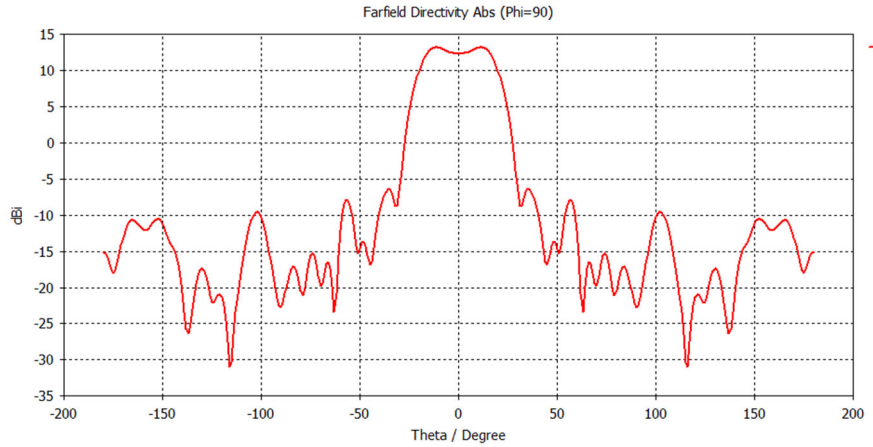
Frequency = 8 GHz
Main lobe magnitude = 12.1 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 50.9 deg.
Side lobe level = -21.2 dB



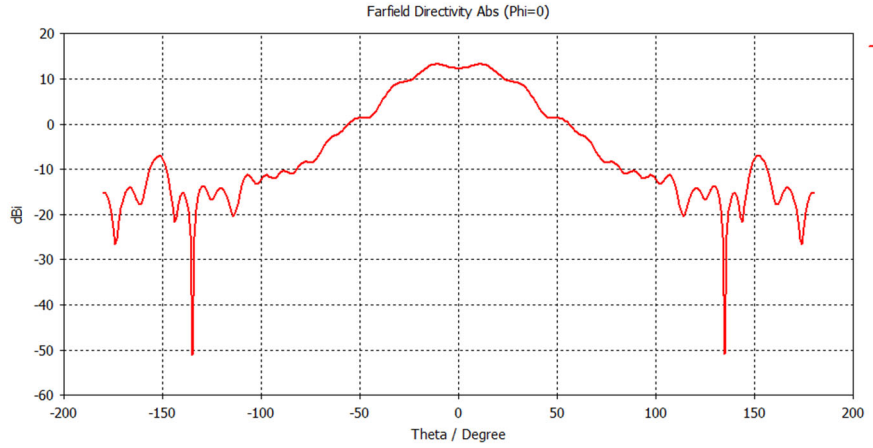
Frequency = 9 GHz
Main lobe magnitude = 13.2 dBi
Main lobe direction = -10.0 deg.
Angular width (3 dB) = 40.0 deg.
Side lobe level = -18.9 dB



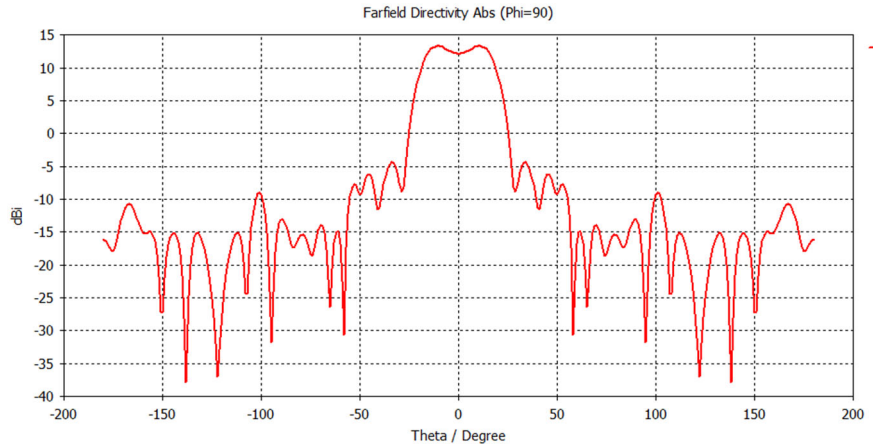
Frequency = 9 GHz
Main lobe magnitude = 12.6 dBi
Main lobe direction = -12.0 deg.
Angular width (3 dB) = 48.9 deg.
Side lobe level = -15.0 dB



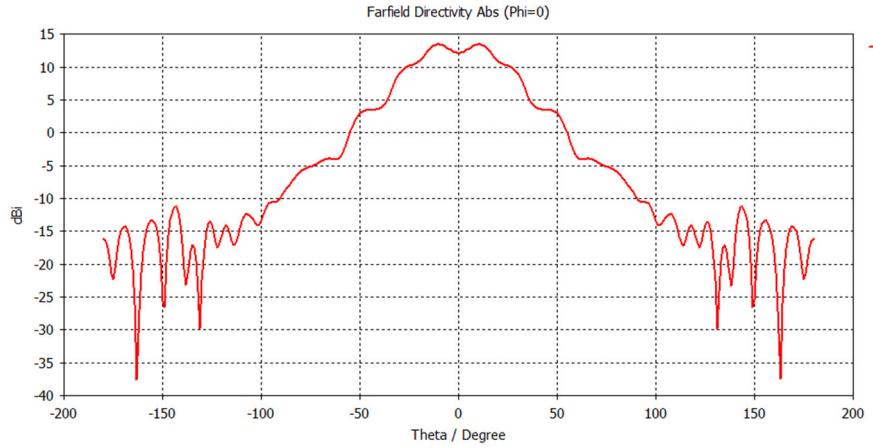
Frequency = 10 GHz
Main lobe magnitude = 13.2 dBi
Main lobe direction = 11.0 deg.
Angular width (3 dB) = 39.4 deg.
Side lobe level = -19.5 dB



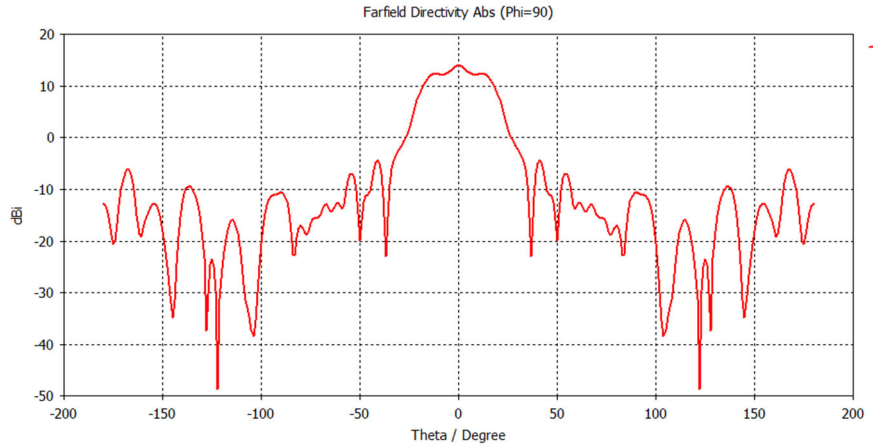
Frequency = 10 GHz
Main lobe magnitude = 13.2 dBi
Main lobe direction = 11.0 deg.
Angular width (3 dB) = 45.1 deg.
Side lobe level = -11.9 dB



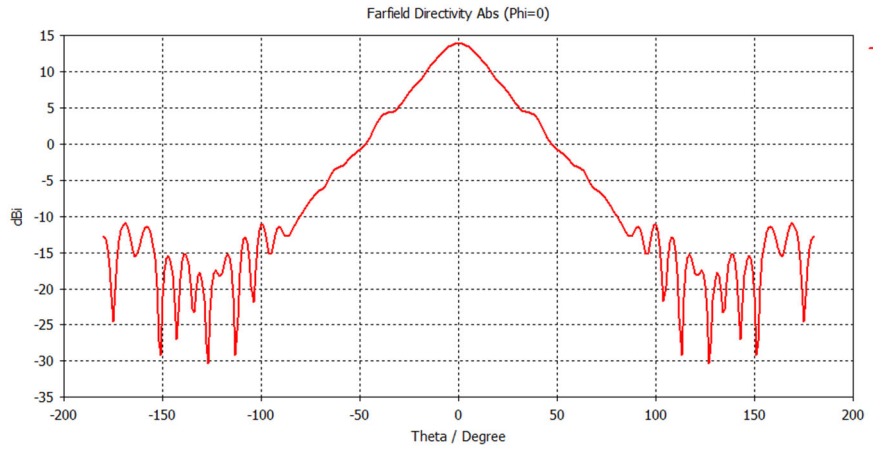
Frequency = 11 GHz
Main lobe magnitude = 13.3 dBi
Main lobe direction = 11.0 deg.
Angular width (3 dB) = 36.9 deg.
Side lobe level = -17.7 dB



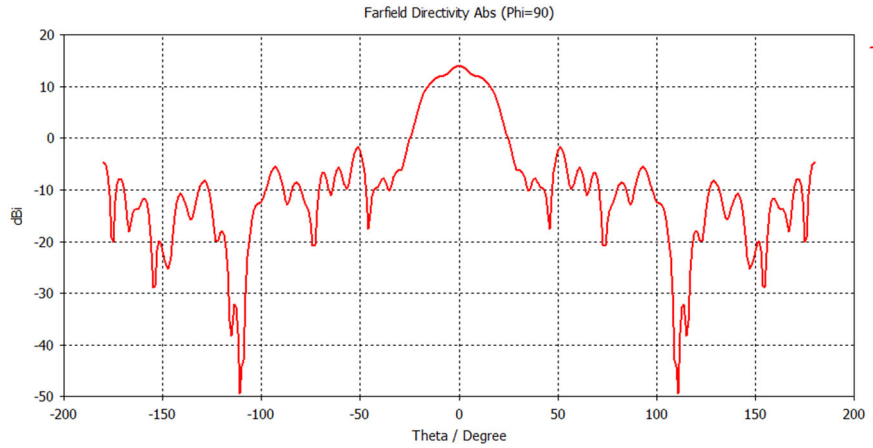
Frequency = 11 GHz
Main lobe magnitude = 13.5 dBi
Main lobe direction = 10.0 deg.
Angular width (3 dB) = 44.4 deg.
Side lobe level = -17.4 dB



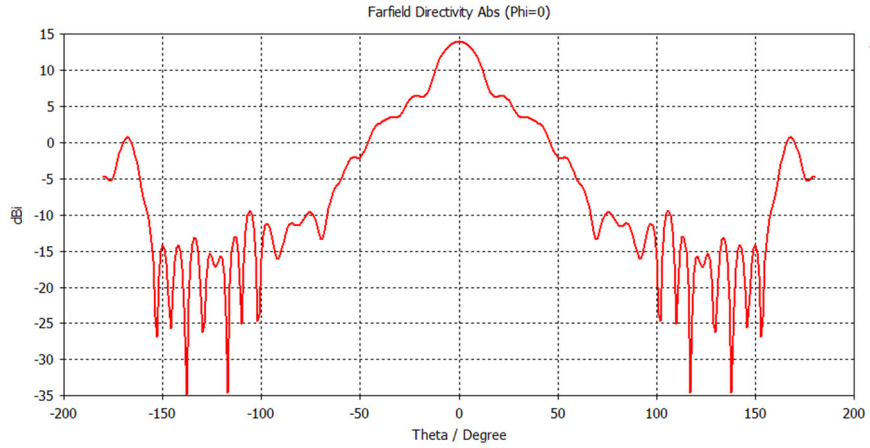
Frequency = 12 GHz
Main lobe magnitude = 13.9 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 33.4 deg.
Side lobe level = -18.3 dB



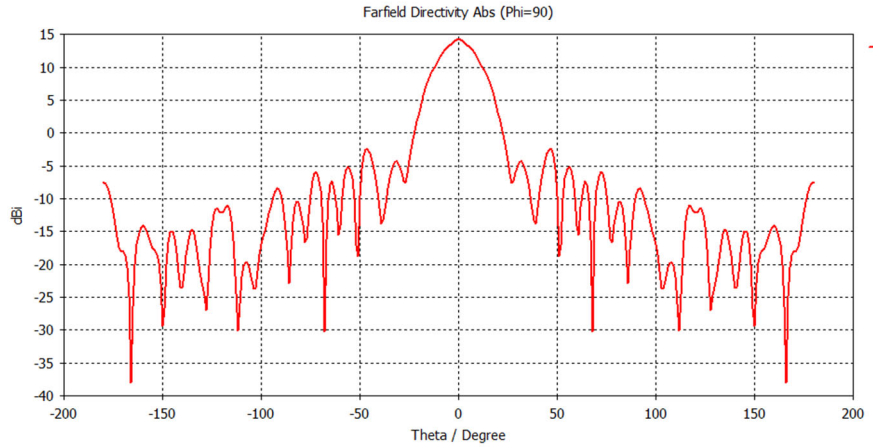
Frequency = 12 GHz
Main lobe magnitude = 13.9 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 27.7 deg.
Side lobe level = -24.9 dB



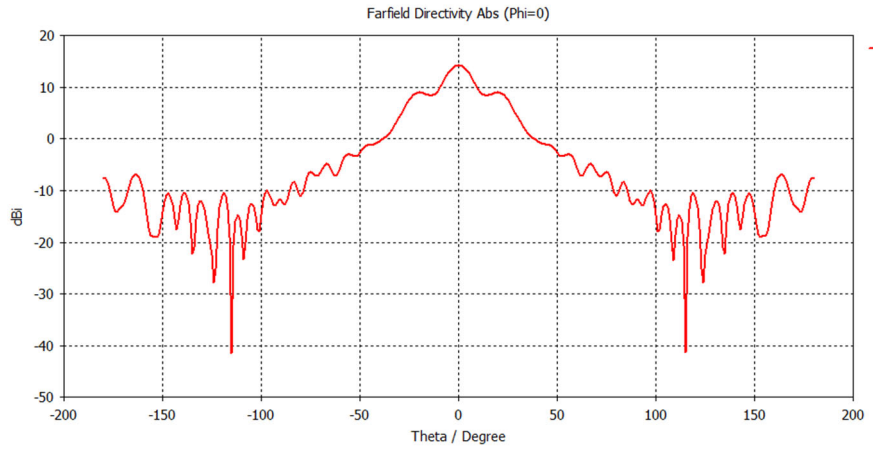
Frequency = 13 GHz
Main lobe magnitude = 14 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 27.8 deg.
Side lobe level = -15.7 dB



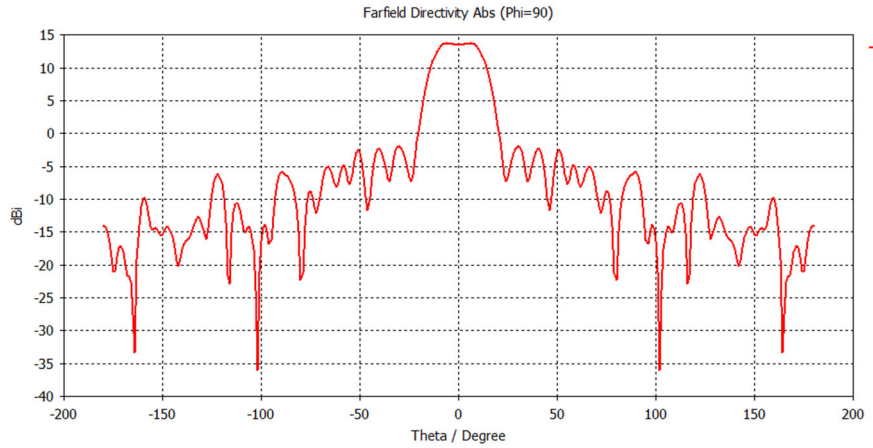
Frequency = 13 GHz
Main lobe magnitude = 14 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 21.3 deg.
Side lobe level = -7.5 dB



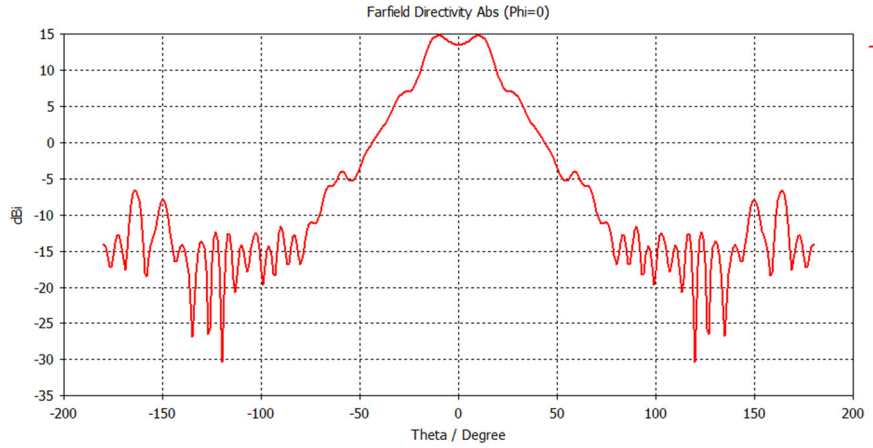
Frequency = 14 GHz
Main lobe magnitude = 14.3 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 20.0 deg.
Side lobe level = -16.7 dB



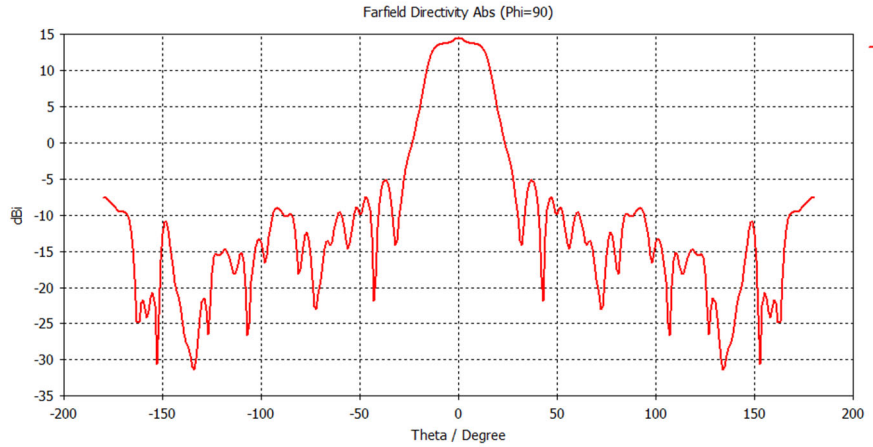
Frequency = 14 GHz
Main lobe magnitude = 14.3 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 15.1 deg.
Side lobe level = -5.3 dB



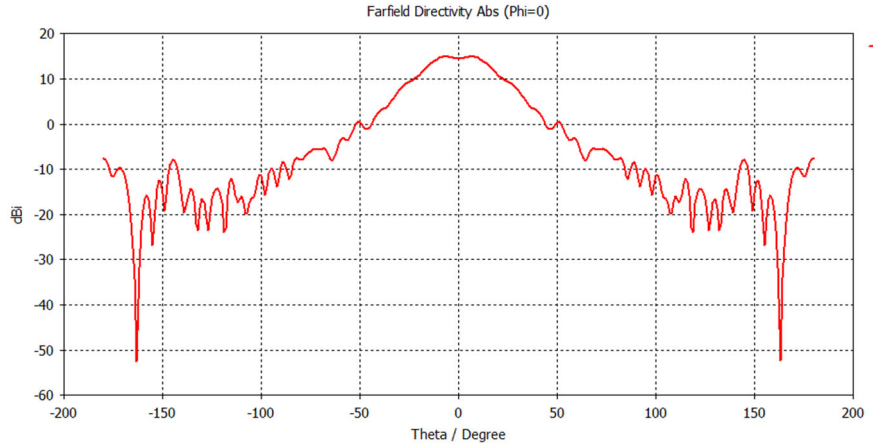
Frequency = 15 GHz
Main lobe magnitude = 13.7 dBi
Main lobe direction = -6.0 deg.
Angular width (3 dB) = 26.7 deg.
Side lobe level = -15.7 dB



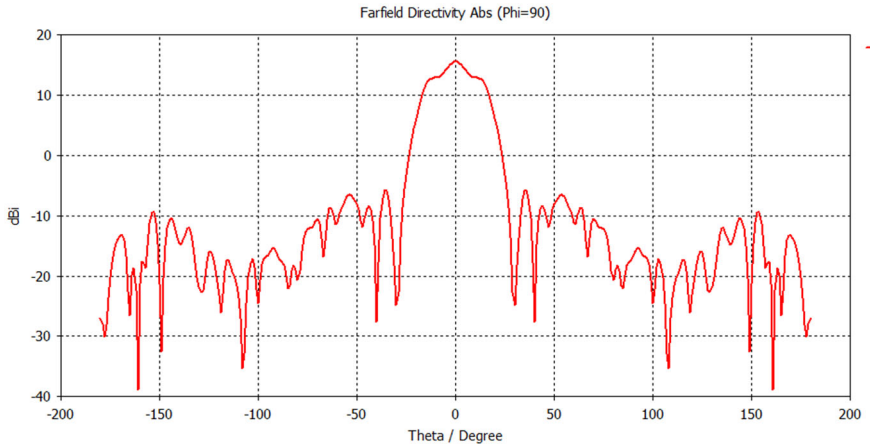
Frequency = 15 GHz
Main lobe magnitude = 14.9 dBi
Main lobe direction = 10.0 deg.
Angular width (3 dB) = 34.3 deg.
Side lobe level = -18.9 dB



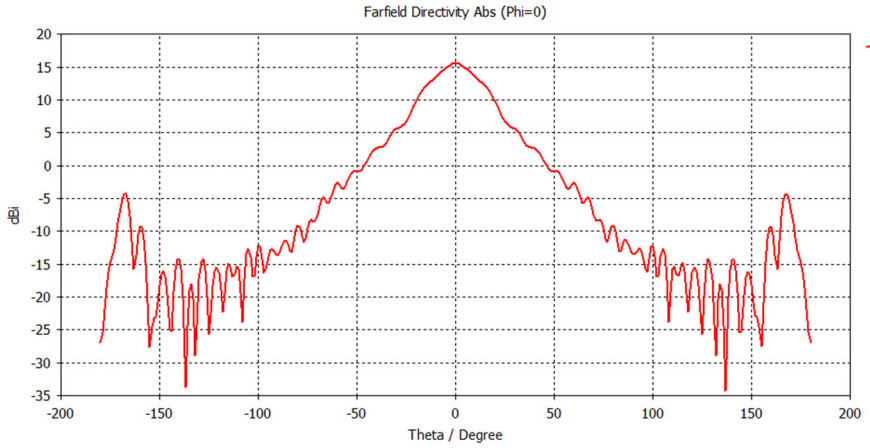
Frequency = 16 GHz
Main lobe magnitude = 14.5 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 29.3 deg.
Side lobe level = -19.6 dB



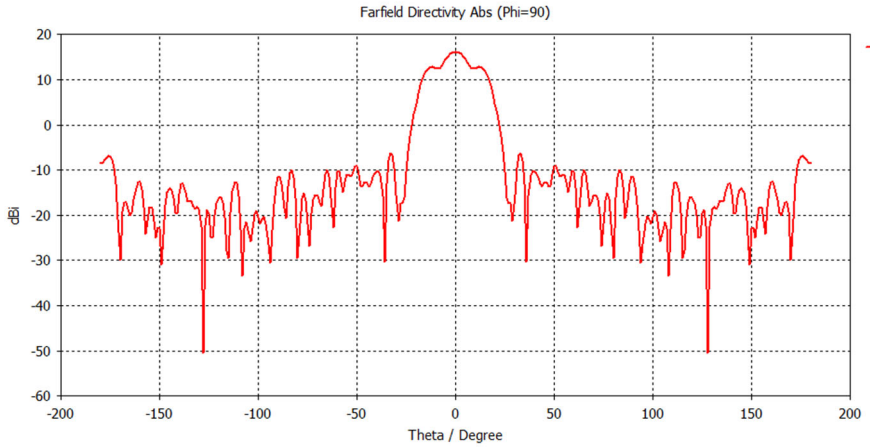
Frequency = 16 GHz
Main lobe magnitude = 14.9 dBi
Main lobe direction = 7.0 deg.
Angular width (3 dB) = 35.4 deg.
Side lobe level = -14.4 dB



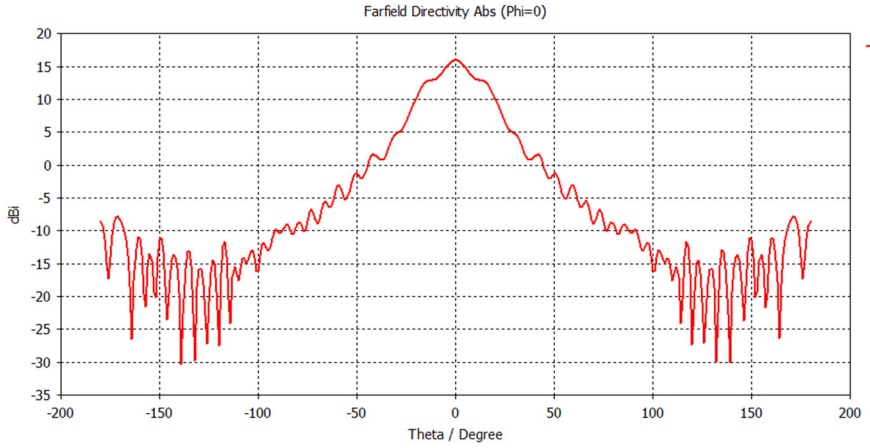
Frequency = 17 GHz
Main lobe magnitude = 15.6 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 26.6 deg.
Side lobe level = -21.4 dB



Frequency = 17 GHz
Main lobe magnitude = 15.6 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 26.5 deg.
Side lobe level = -16.4 dB



Frequency = 18 GHz
Main lobe magnitude = 16.1 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 13.9 deg.
Side lobe level = -3.3 dB



Frequency = 18 GHz
Main lobe magnitude = 16.1 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 21.0 deg.
Side lobe level = -14.4 dB