

NVA-A03

1.3 - 4.4 GHz Vivaldi Antenna

Key Features

- Vivaldi antenna
- 1.3 - 4.4 GHz frequency range
- Up to 9.15 dBi gain
- 50 Ohm impedance



Product Description

The Novelda 1.3 - 4.4 GHz Vivaldi Antenna is specifically designed to work with the NVA6100 radar chip.

The highly directional antenna is optimal for radar and ranging applications.

Applications

- Energy automation
- Through-wall imaging.
- Tank gauging.
- Materials evaluation.
- Cable inspection.
- Object tracking.

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1. Technical data

Parameter	Value
Frequency range	1.3 - 4.4 GHz
Gain	9.15 dBi
Impedance	50Ω, unbalanced
VSWR	<2.1:1
Size	150 x 113 x 1.5 mm
Connector	SMA

Table 1.1. Technical data

2. Gain/Returnloss

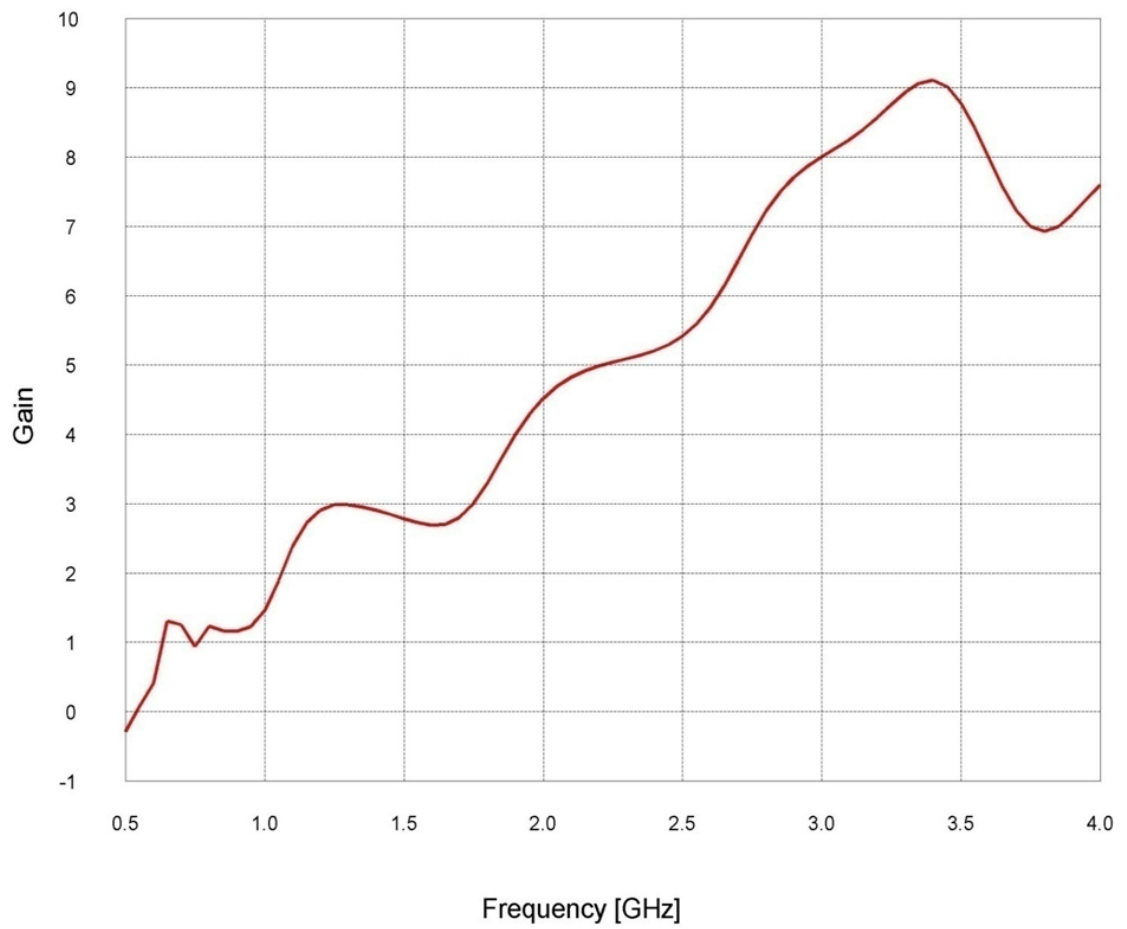


Figure 2.1. Gain in dBi vs frequency

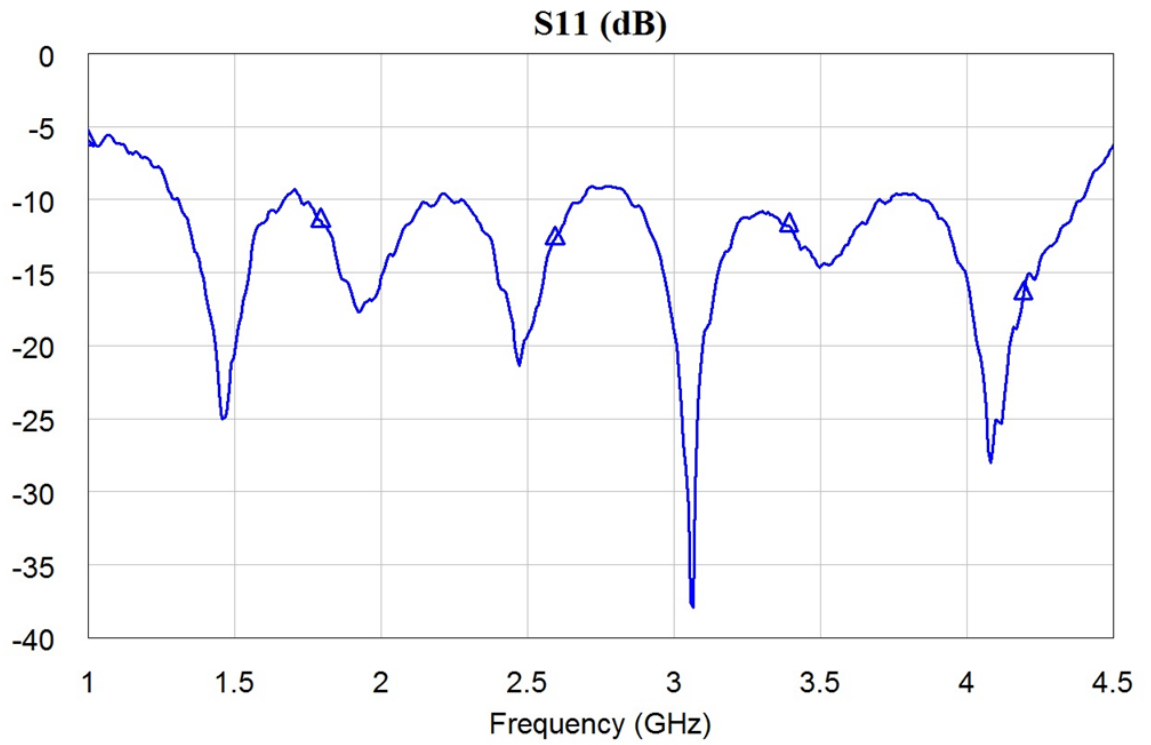


Figure 2.2. S11 vs frequency

3. Radiation Patterns

3.1. Vertical radiation patterns

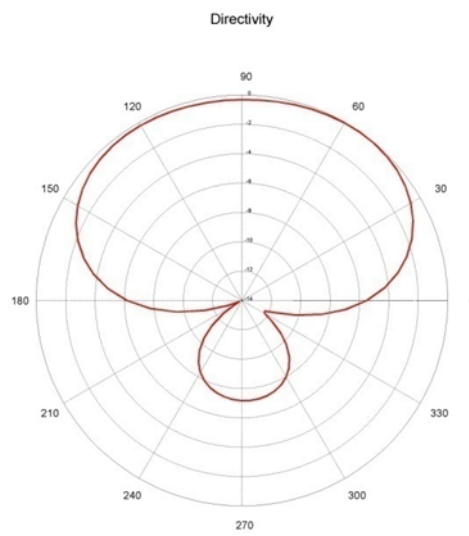


Figure 3.1. Vertical radiation pattern of antenna at 1.4 GHz

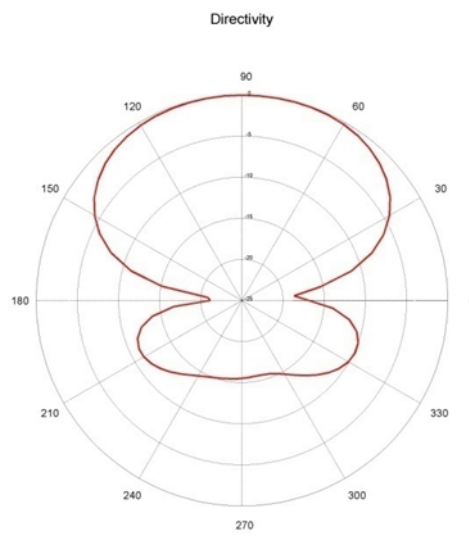


Figure 3.2. Vertical radiation pattern of antenna at 2 GHz

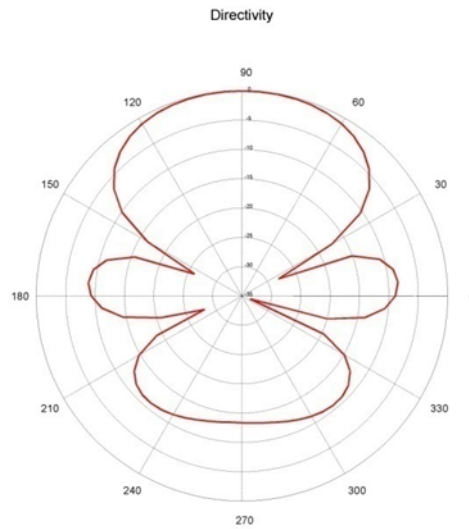


Figure 3.3. Vertical radiation pattern of antenna at 3 GHz

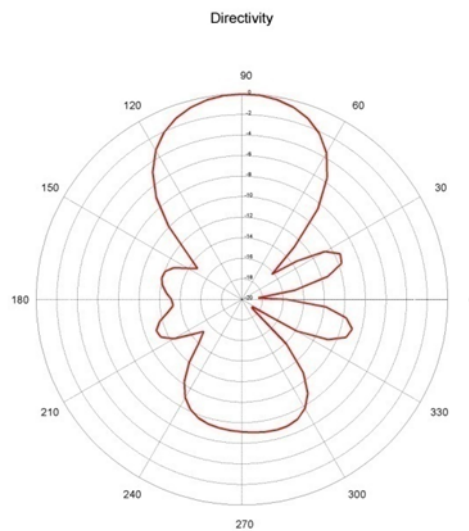


Figure 3.4. Vertical radiation pattern of antenna at 3.5 GHz

3.2. Horizontal radiation patterns

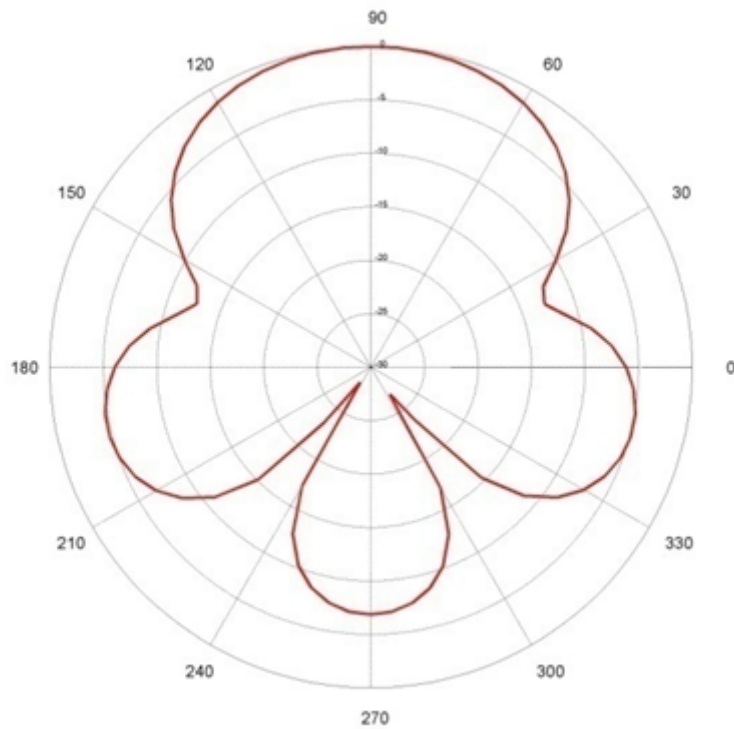


Figure 3.5. Horizontal radiation pattern of antenna at 1.4 GHz

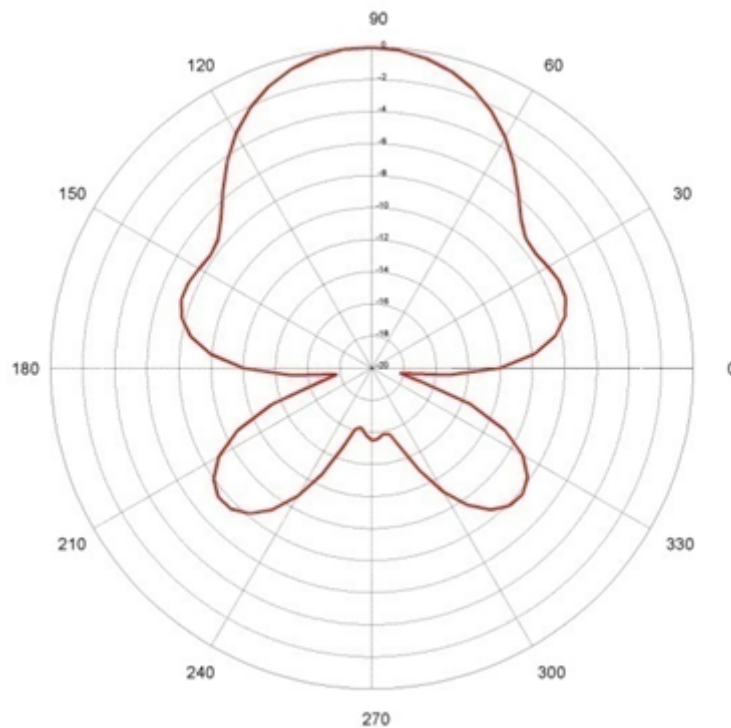


Figure 3.6. Horizontal radiation pattern of antenna at 2 GHz

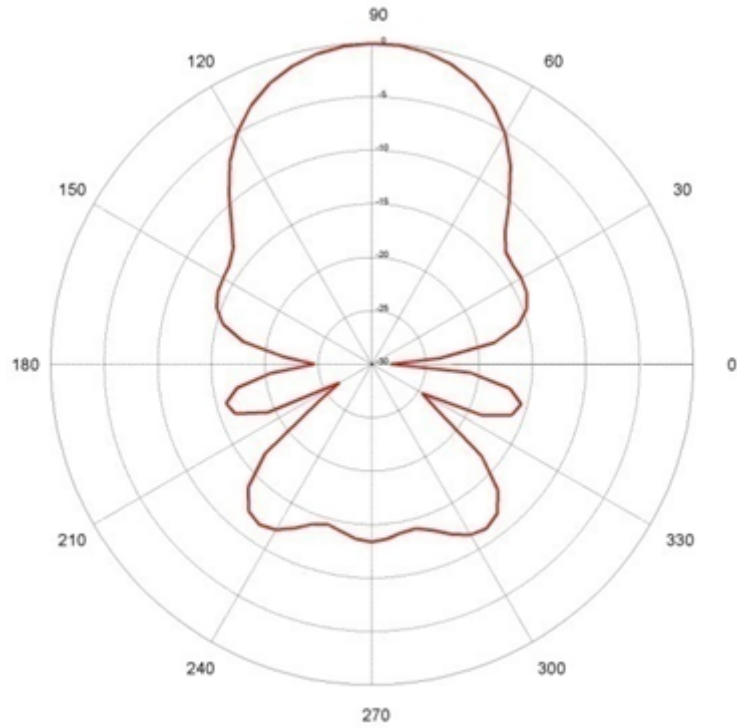


Figure 3.7. Horizontal radiation pattern of antenna at 3 GHz

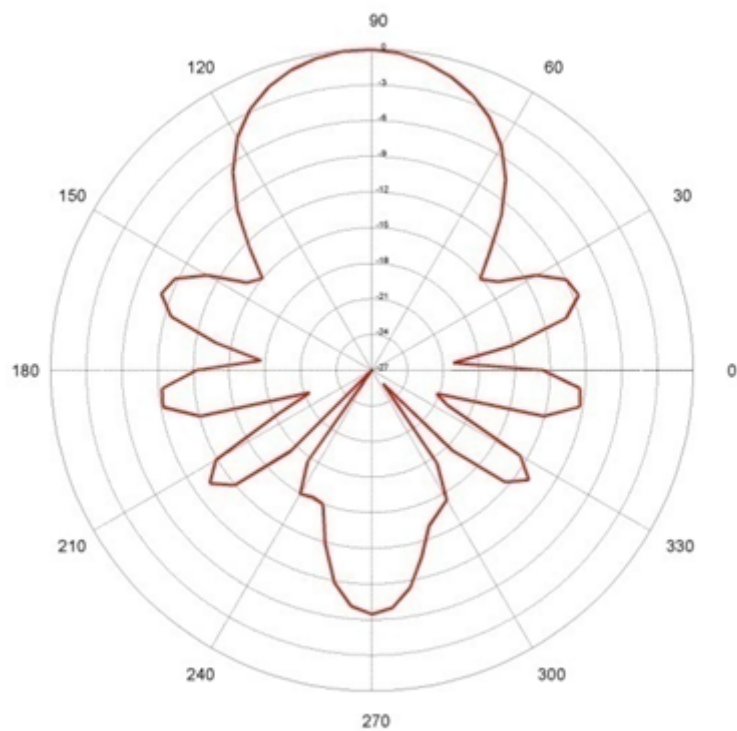


Figure 3.8. Horizontal radiation pattern of antenna at 3.5 GHz

4. Contact Information

4.1. Novelda Corporate Headquarters

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4.3. Ordering Information

Visit www.novelda.no or contact sales@novelda.no for information on sales and distribution.

4.4. Technical Support

For the latest update on datasheets, FAQ, application notes and errata, as well as new product releases, please visit www.novelda.no, or contact support@novelda.no.

5. Disclaimer

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Document History

Rev.	Release date	Change description
A	02.11.2012	Initial release