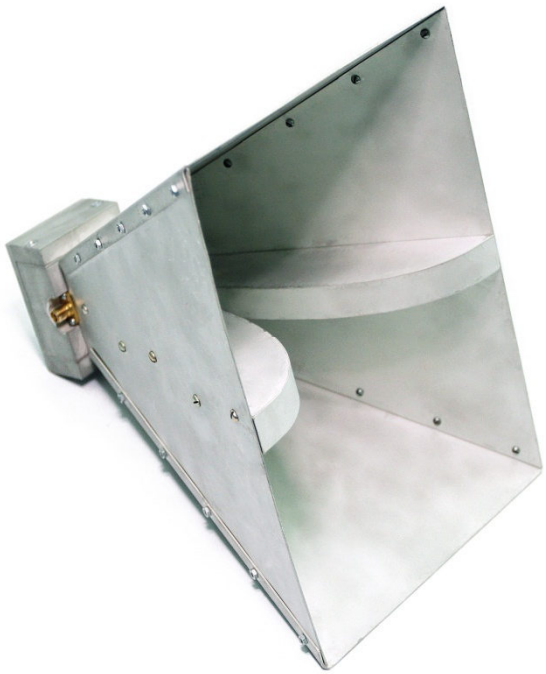
Technical Data

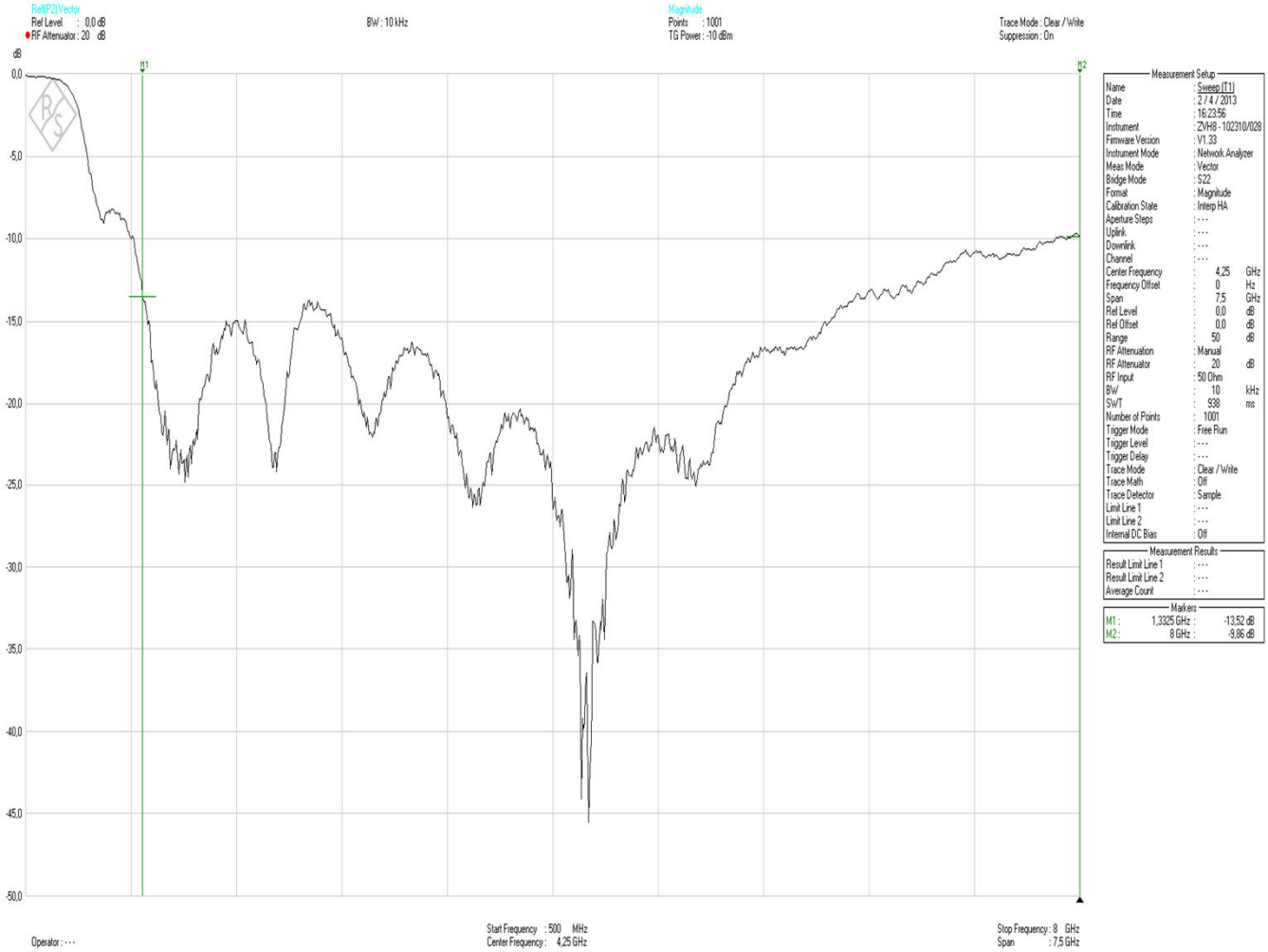
Antenna Type:	horn antenna
Frequency Range:	1 - 8 GHz
Gain:	up to 20.6 dBi (at a frequency of 6 GHz)
Impedance:	50 Ω, unbalanced
VSWR:	< 2.0:1
Size:	210 × 205 × 145 mm
Connector:	SMA (FEMALE)
Weight:	0.7 kg



«KBOR» No.3, 1-st Shchipkovskiy Lane, Moscow, tel. +7 (499) 235-56-94
uwb-market@uwbs.ru, www.uwbs.ru

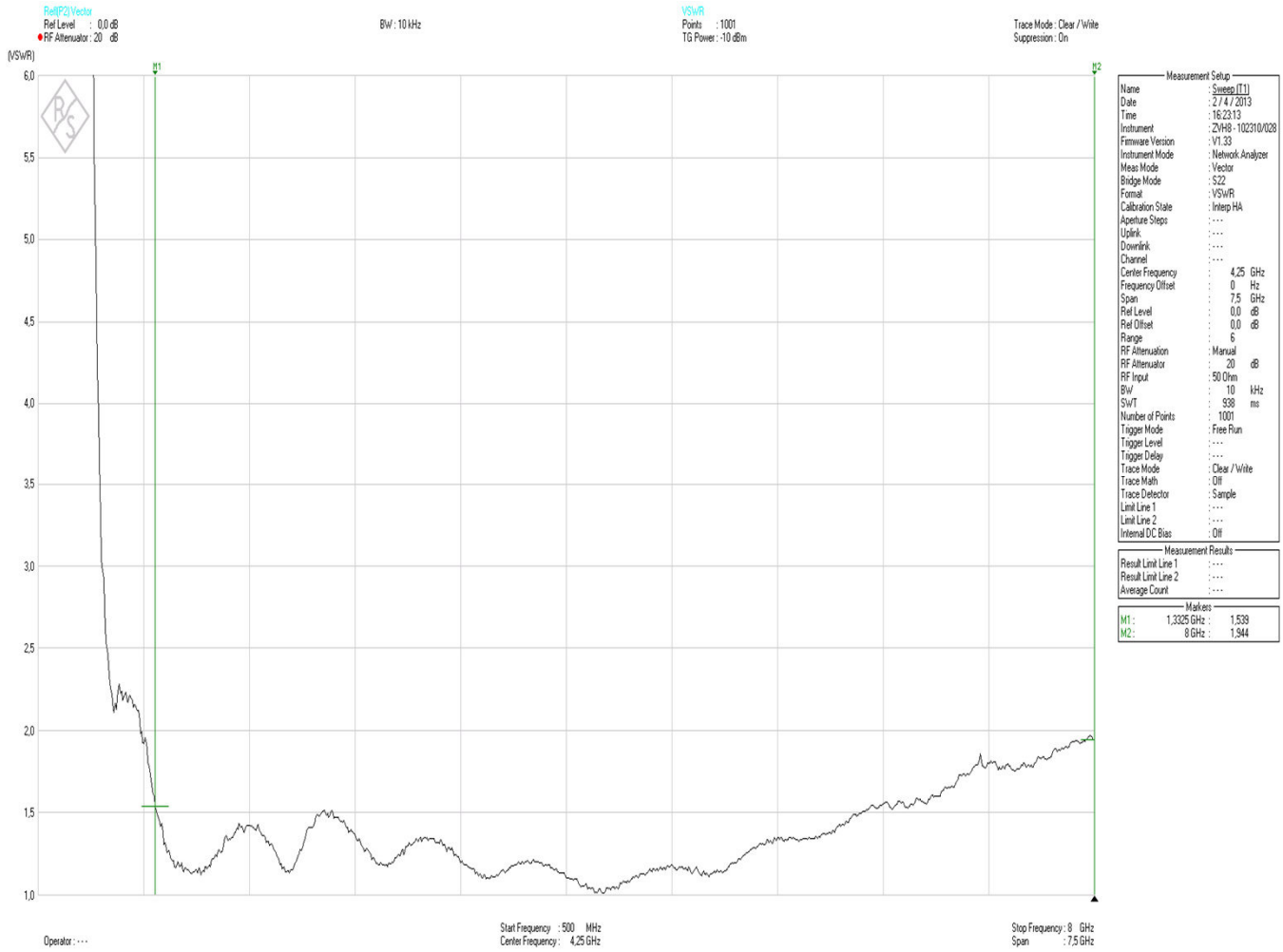
Reflection coefficient

The following picture shows Reflection coefficient S11 in dB.



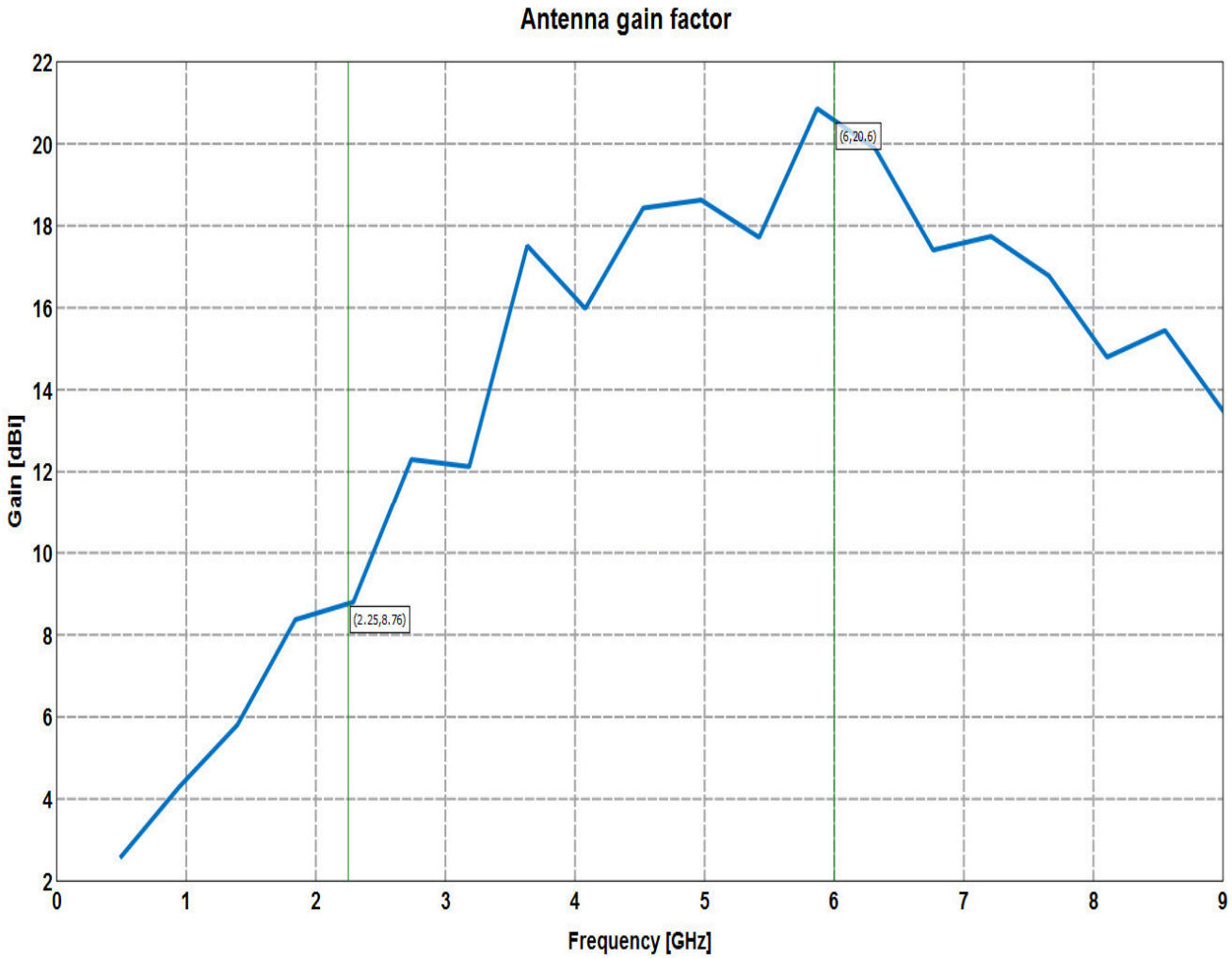
VSWR

The following picture shows VSWR.



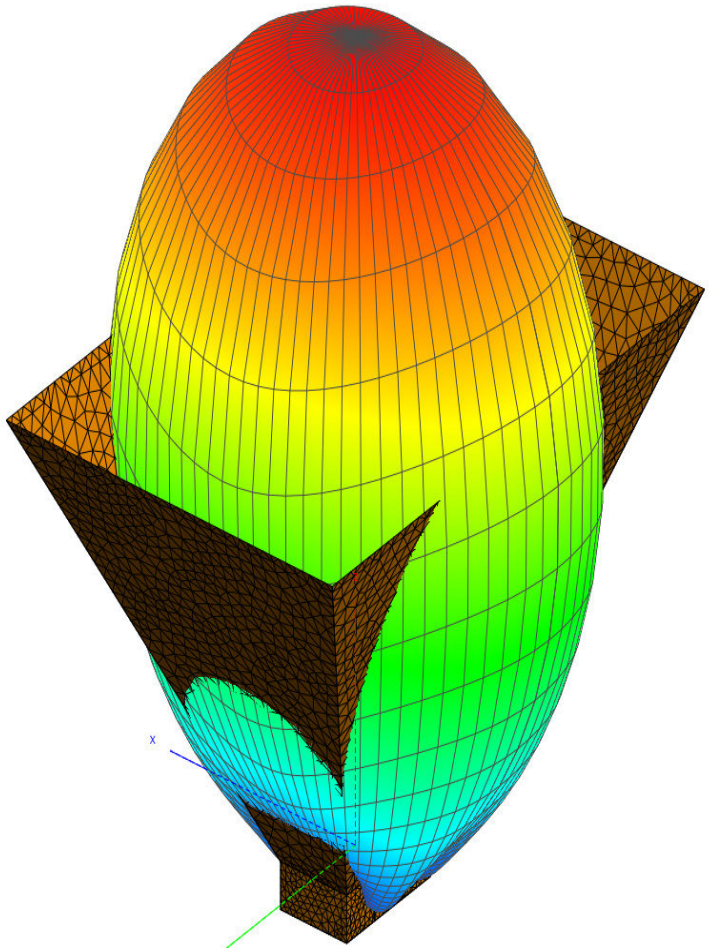
Gain

The following picture shows Gain factor (according to the model).



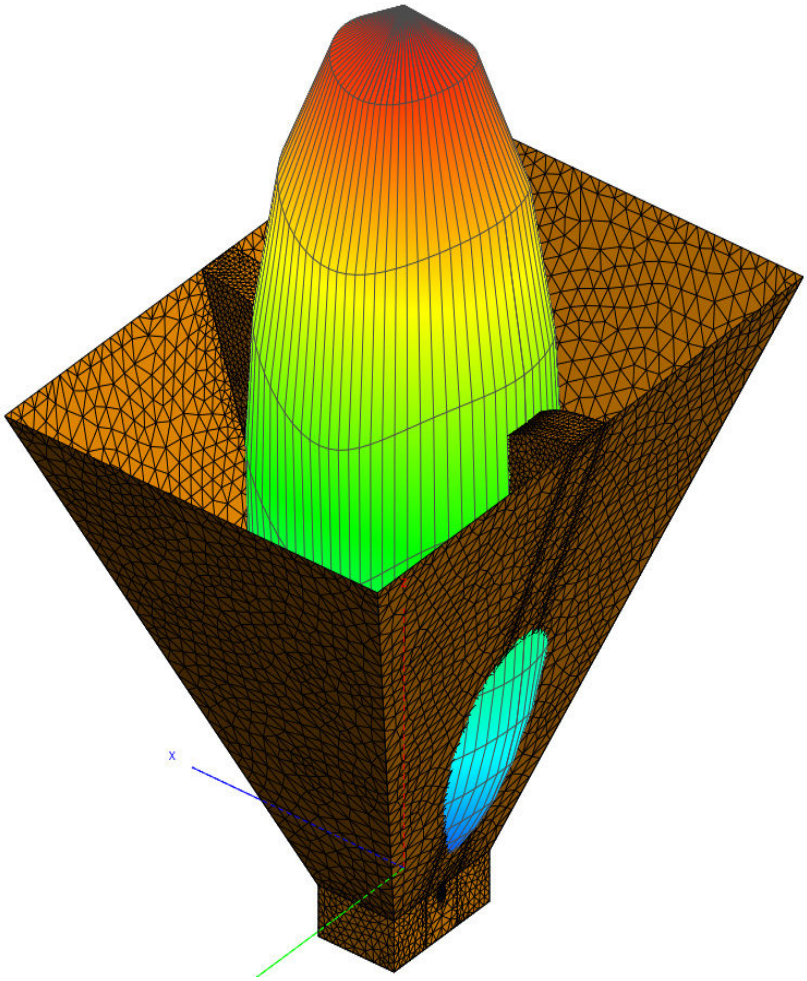
Radiation pattern

The following picture shows Radiation pattern in 3D at a frequency of 1 GHz (according to the model).



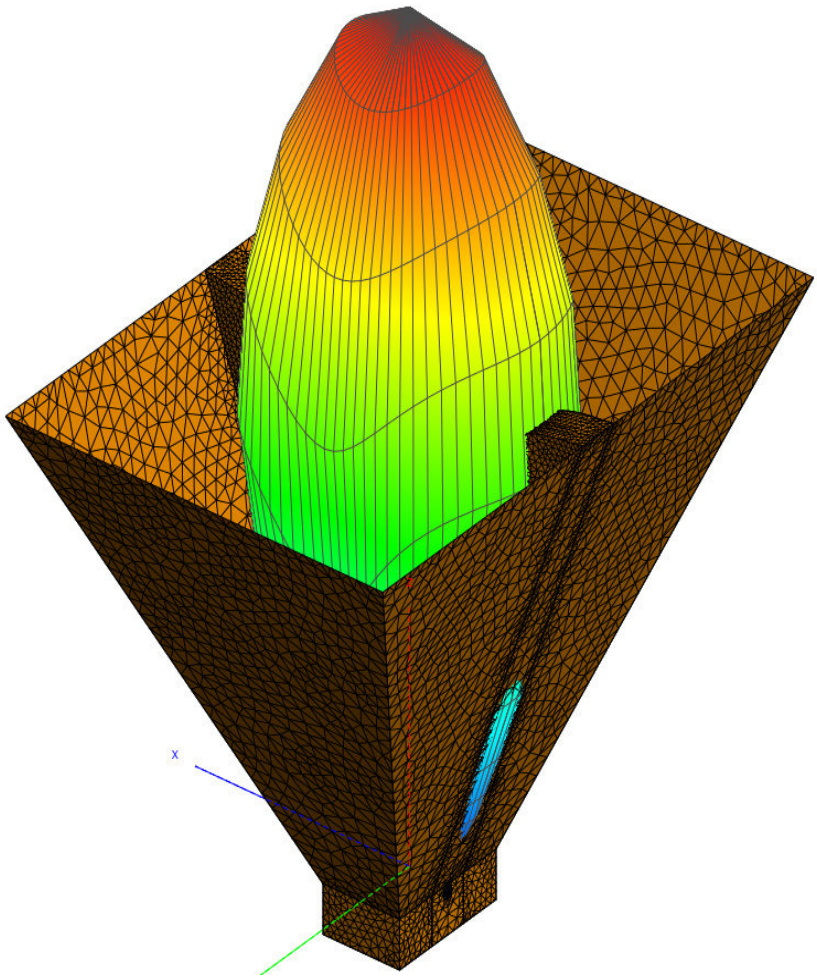
Radiation pattern

The following picture shows Radiation pattern in 3D at a frequency of 4 GHz (according to the model).



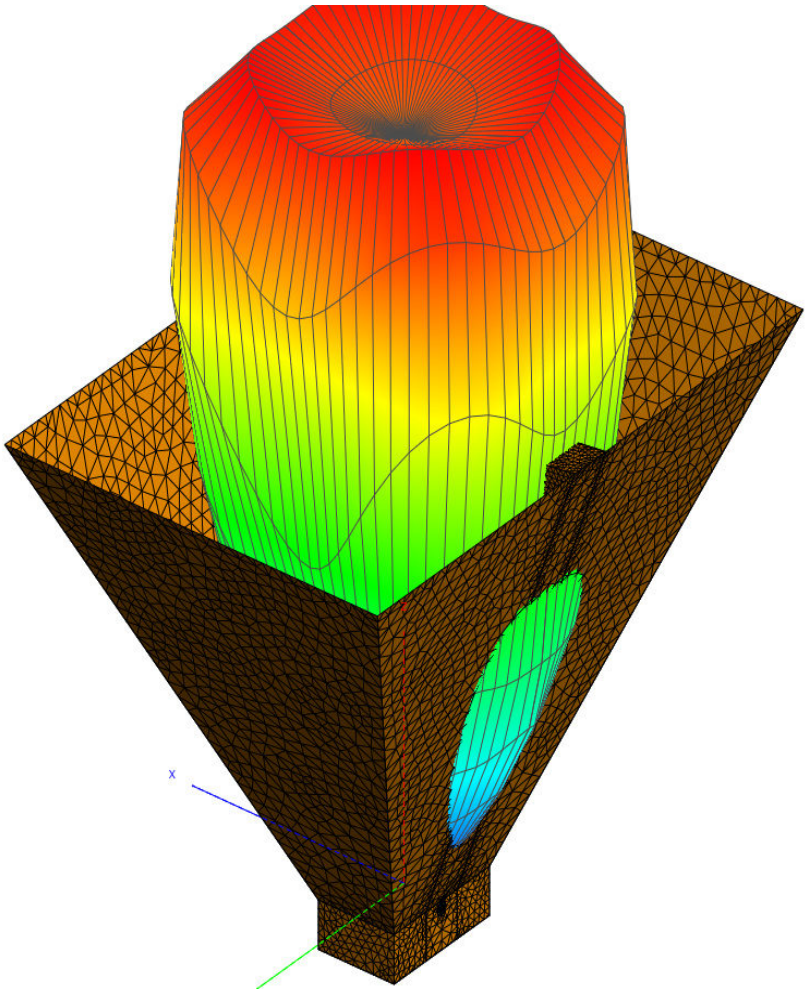
Radiation pattern

The following picture shows Radiation pattern in 3D at a frequency of 6 GHz (according to the model).



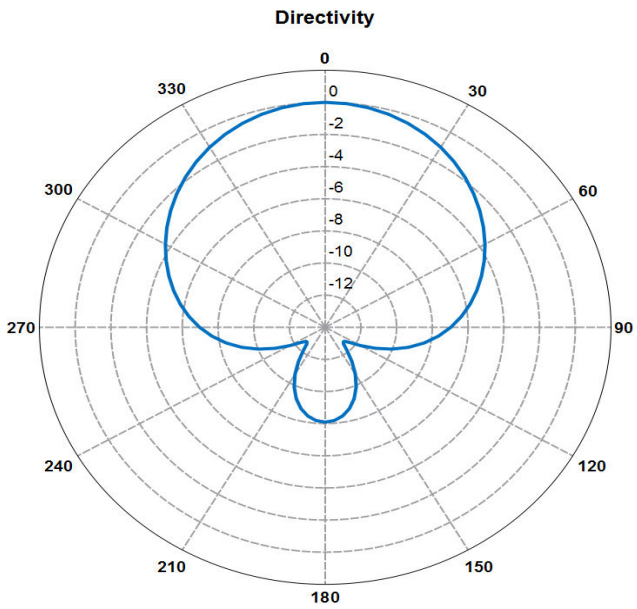
Radiation pattern

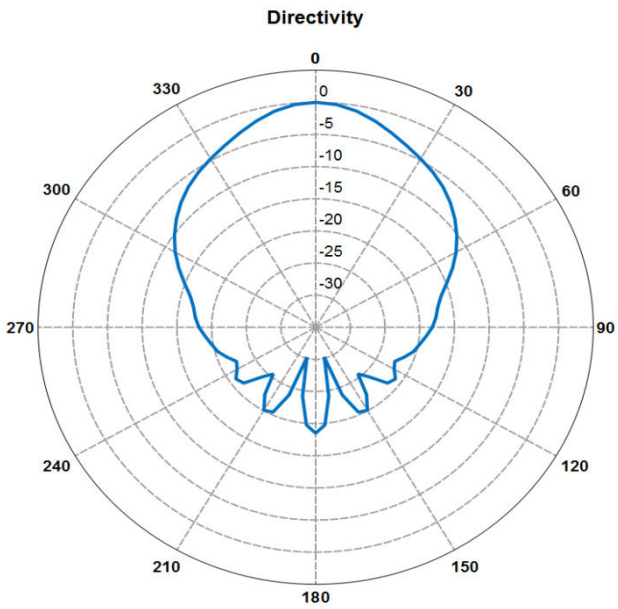
The following picture shows Radiation pattern in 3D at a frequency of 8 GHz (according to the model).

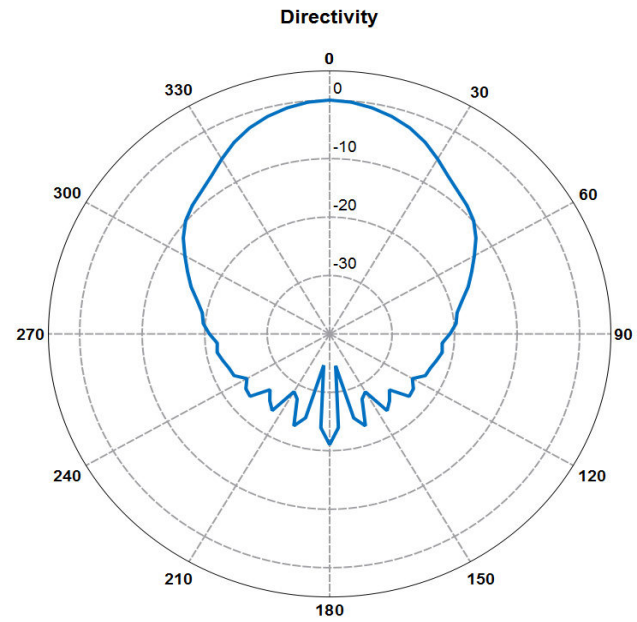


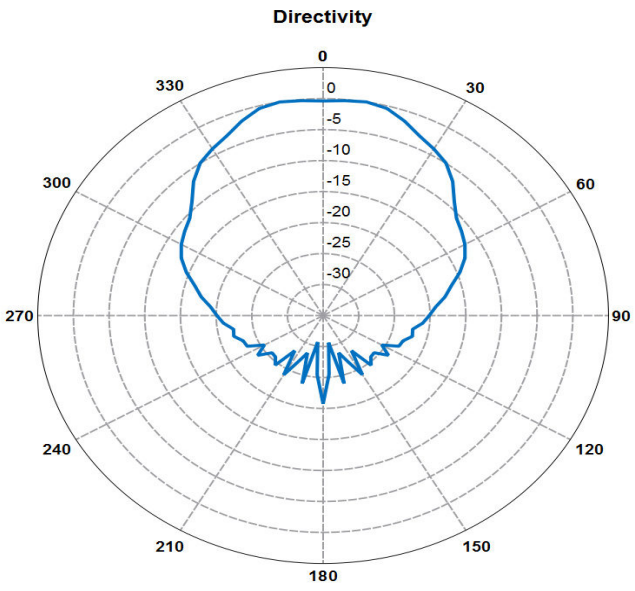
Radiation pattern

The following picture shows normalized radiation pattern in the horizontal plane in dB with the shift of 5˚ at the frequencies of 1, 4, 6, 8 GHz accordingly (according to the model).



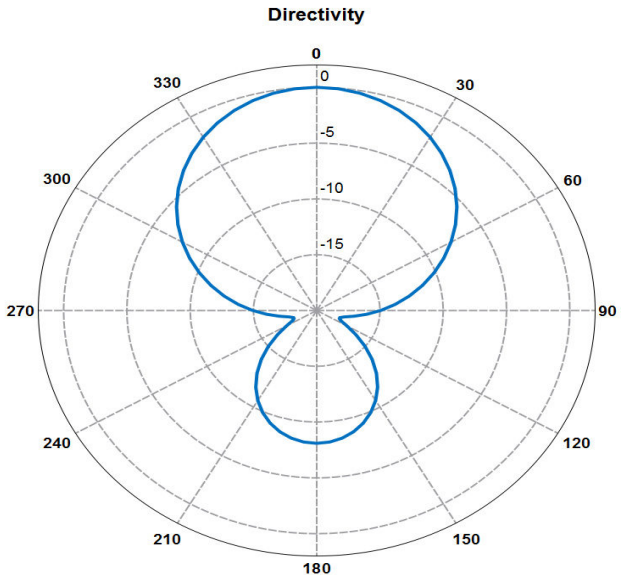


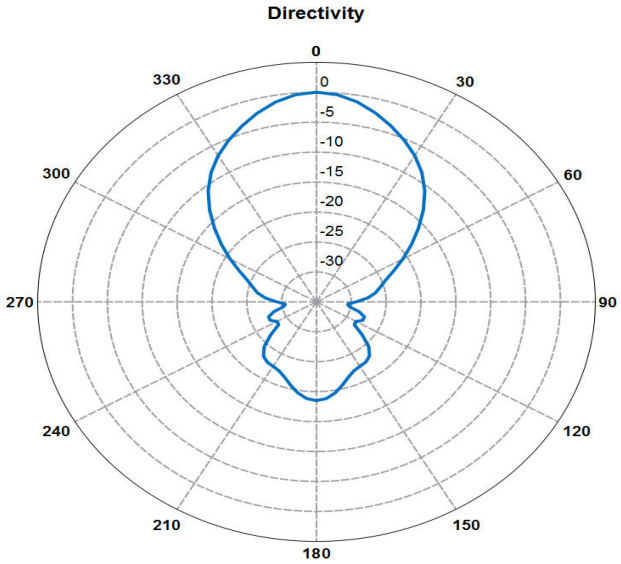


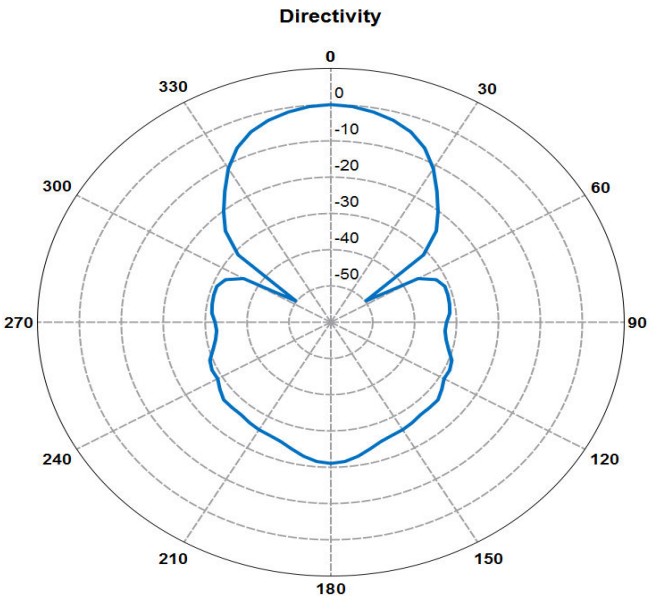


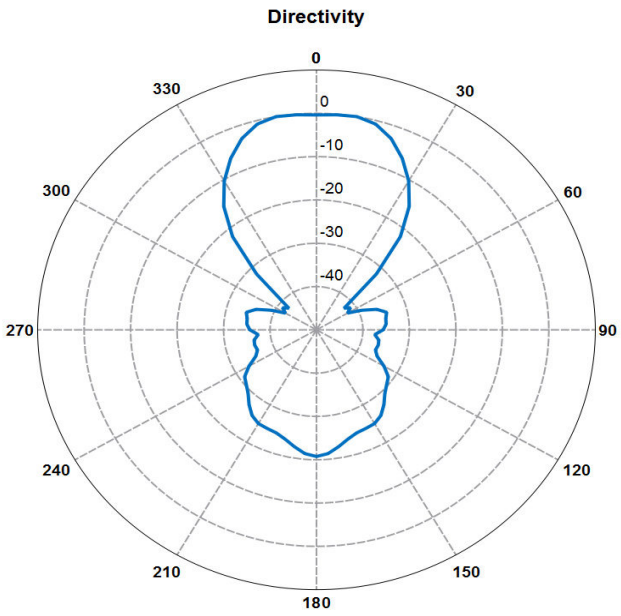
Radiation pattern

The following picture shows normalized radiation pattern in the vertical plane in dB at the frequencies of 1, 4, 6, 8 GHz accordingly (according to the model).









Application note

The highly directional ultra-wideband horn antenna Antrad-6R can be used for radar, radio communication and radio monitoring systems operating in different frequency bands from 1 to 8 GHz.
Also Antrad-6R can be used in the laboratory as the **measuring antenna**.

History

Author:	Gregory Seregin, Dmitry Bahtin, «KBOR», Moscow
Date:	March 30, 2012
Revision:	2.0
Changes:	galvanic coating was applied to the antenna, added the updated measurements of the reflection coefficient and VSWR