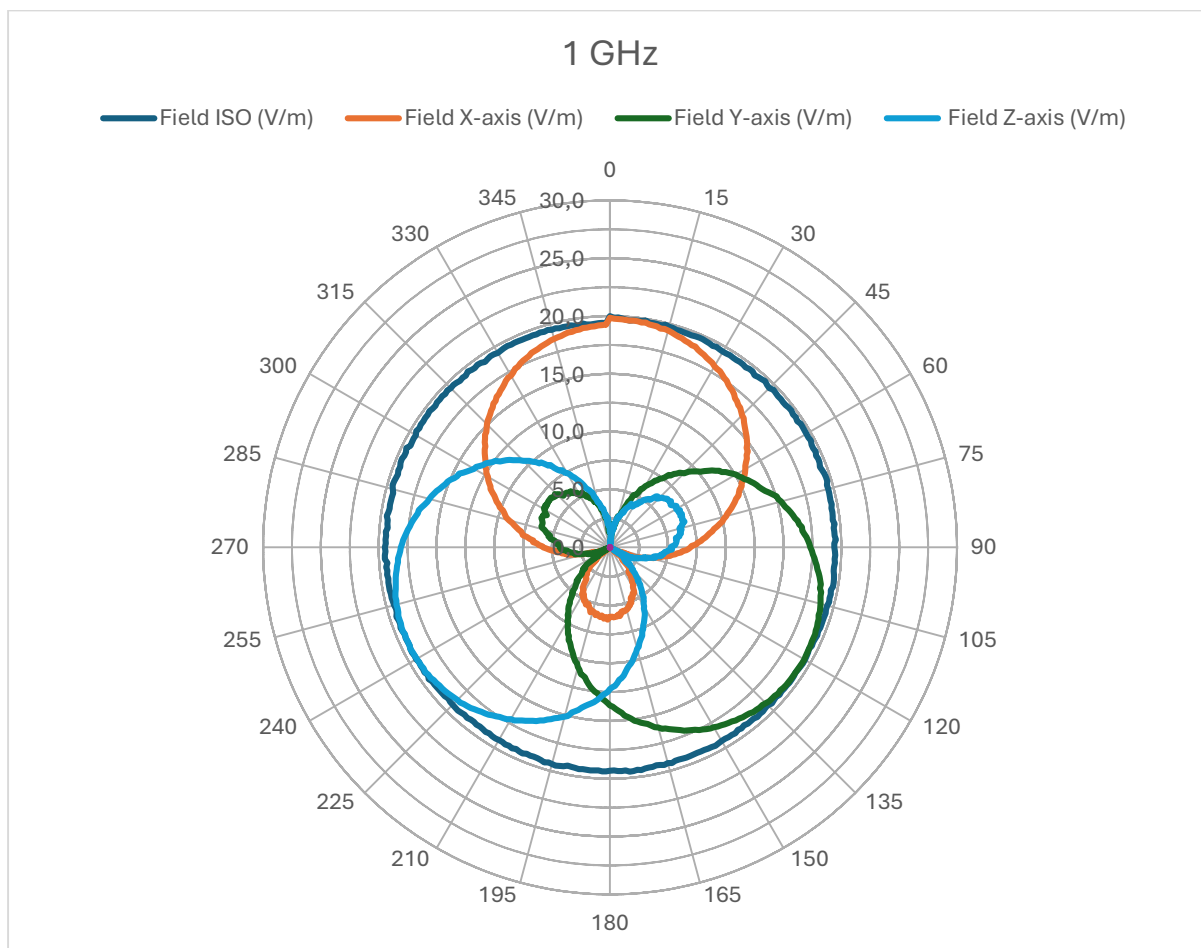


Test report

Anisotropic performance

RadiSense models RSS2026S and RSS2040S

Issued by	Raditeq B.V. Vijzelmolenlaan 3 3447GX, Woerden The Netherlands		
Product description	Electrical Field probe		
Brand	Raditeq BV		
Model	RS2040S		
Serial number	2301009		
Measurement date	02-03-2024, report version 2		
Measurement procedure	The anisotropy calibration is carried out in accordance to IEEE-std 1309 (2013). In the frequency range of 1 GHz to 40 GHz, measurements are performed in an anechoic chamber. To measure the anisotropy of the RSS2026/RS2040 probe, the probe is rotated over its orthogonal axis with a probe rotator. As a result, the X-axis is in line with the applied E-field at 0 degrees, the Y-axis is in line with the applied E-field at 120 degrees and the Z-axis is in line with the applied E-field at 240 degrees. For all tests, a step resolution of one (1) degree is used. During the tests, a nominal fieldstrength of 20 V/m is applied. The reported fieldstrength values are corrected (scaled) for an indication of 20 V/m at an angle of zero (0) degrees (X-axis on top). The anisotropy [A] is defined as: $A = 20\log \left(\frac{S_{max}}{\sqrt{S_{max} * S_{min}}} \right)$ While the RSS2040S and RSS2026 (up to 26 GHz) use the same antenna elements, the measured data applies to both models.		
Environmental conditions	Temperature	23°C ± 3°C	
	Relative humidity	50% ± 25%	
Uncertainty	The measurement uncertainty of the anisotropic measurements is ± 0.59 dB. This reported expanded uncertainty of measurement results is stated as the standard uncertainty of the measurement multiplied by a coverage factor (k = 2), which, for a normal distribution corresponds to a coverage probability of approximately 95 %. The standard uncertainty of measurement has been determined in accordance with EAL publication EA-4/02 (2022).		

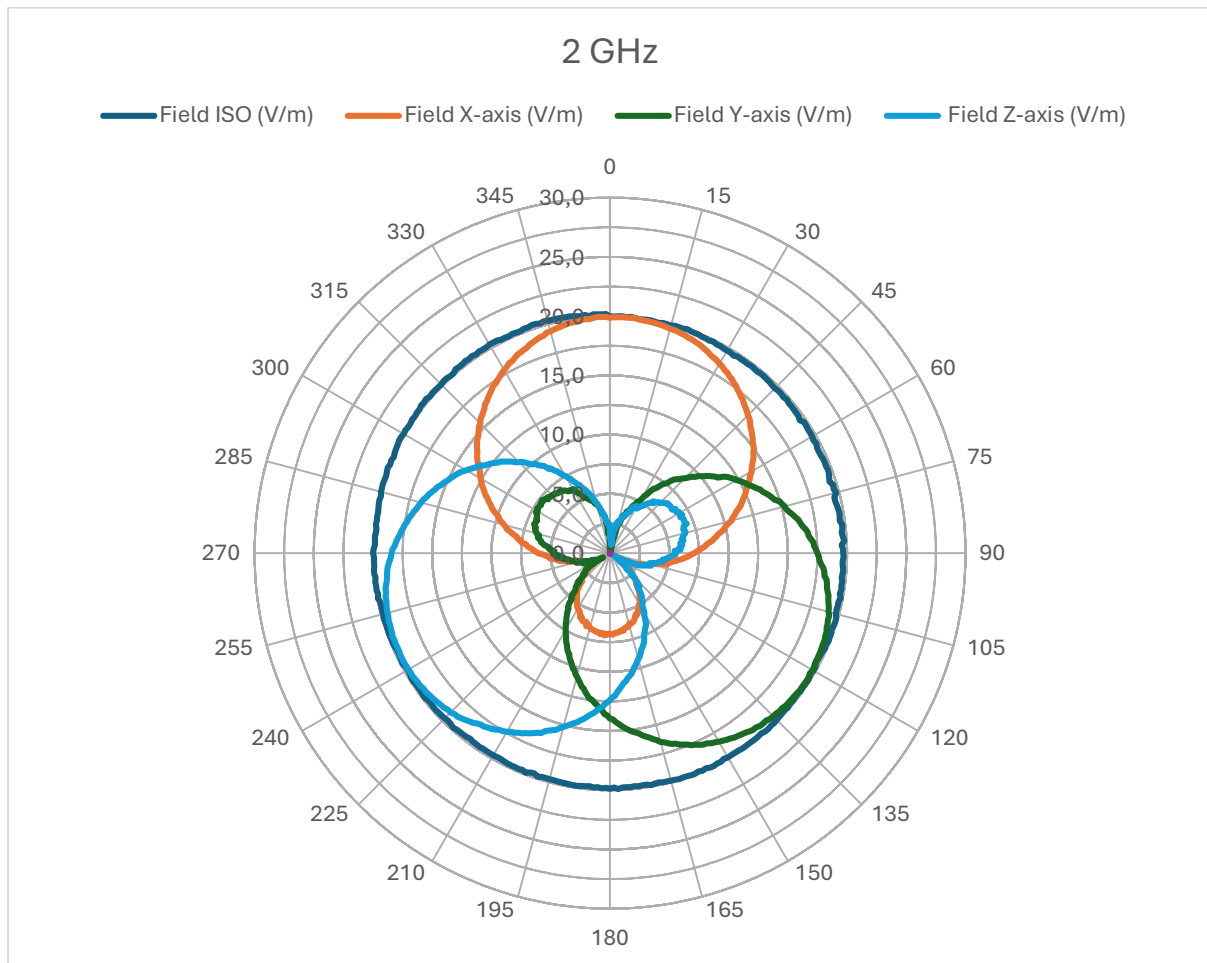


$$A = 20 \log \left(\frac{S_{max}}{\sqrt{S_{max} * S_{min}}} \right)$$

Minimum 19.13 V/m

Maximum 19.91 V/m

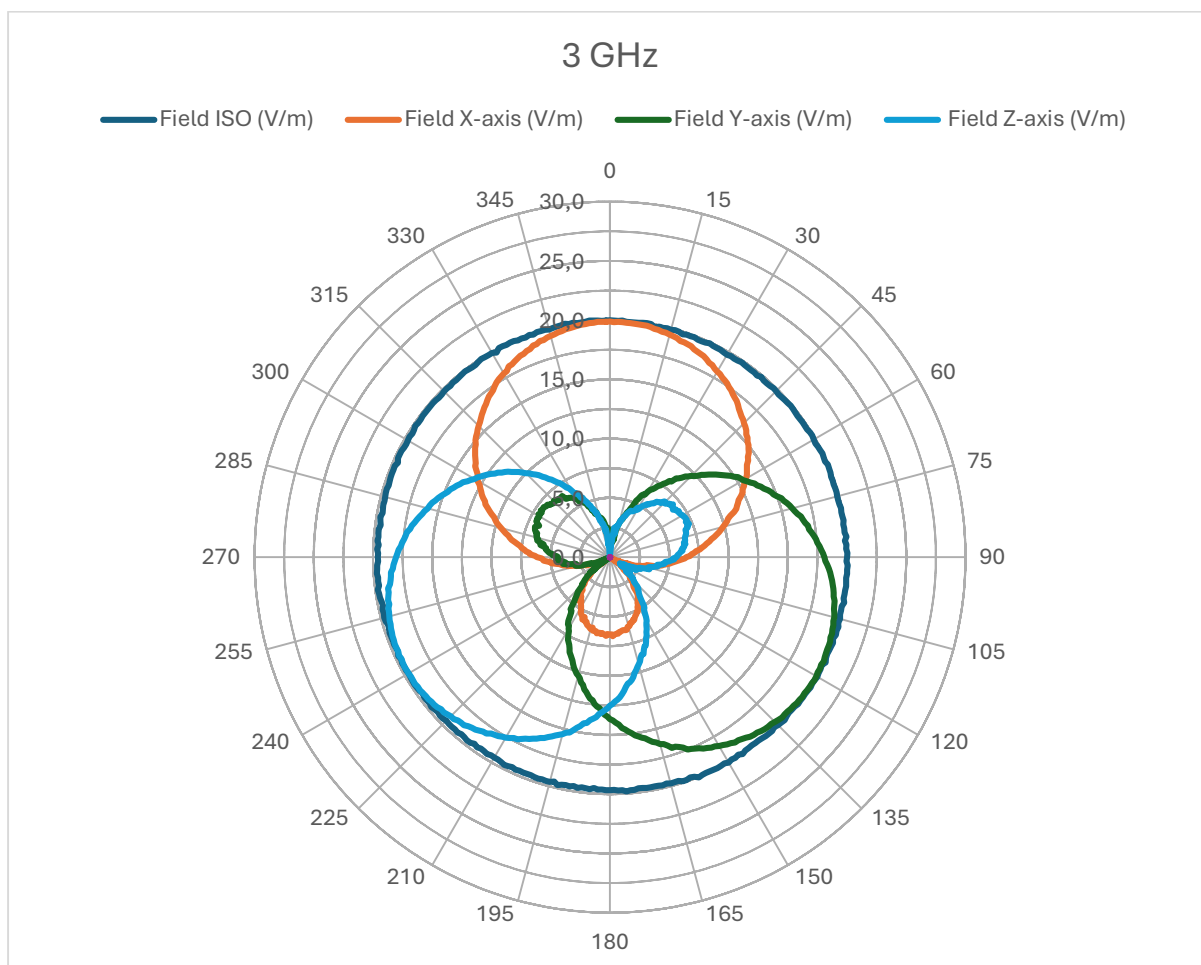
Anisotropy ± 0.17 dB



$$A = 20 \log \left(\frac{S_{max}}{\sqrt{S_{max} * S_{min}}} \right)$$

Minimum	19.48	V/m
Maximum	20.36	V/m

Anisotropy	±	0.19	dB
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$$A = 20 \log \left(\frac{S_{max}}{\sqrt{S_{max} * S_{min}}} \right)$$

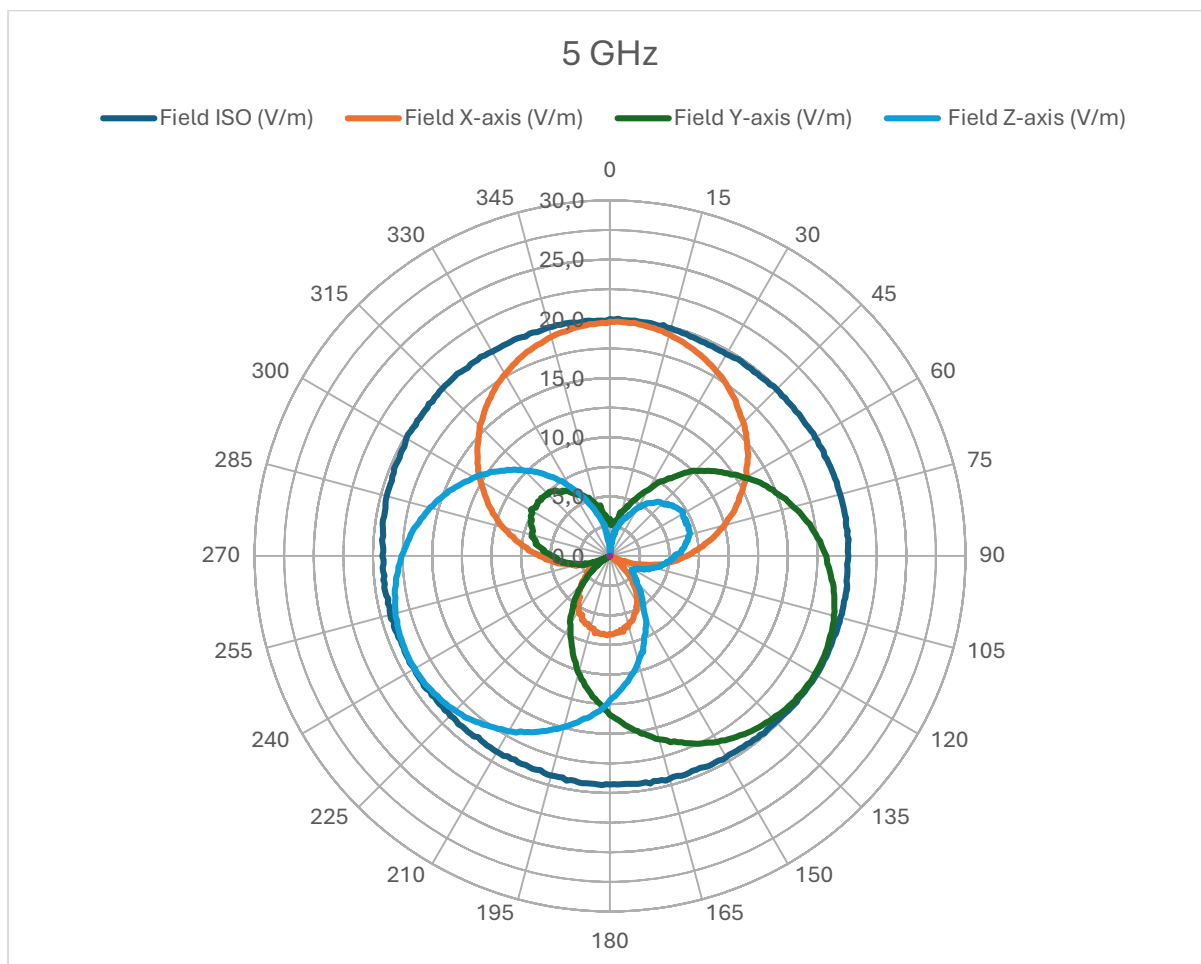
Minimum	19.47	V/m
Maximum	20.24	V/m

Anisotropy	±	0.17	dB
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$$A = 20 \log \left(\frac{S_{max}}{\sqrt{S_{max} * S_{min}}} \right)$$

Minimum	19.61	V/m
Maximum	20.42	V/m
Anisotropy	± 0.18	dB

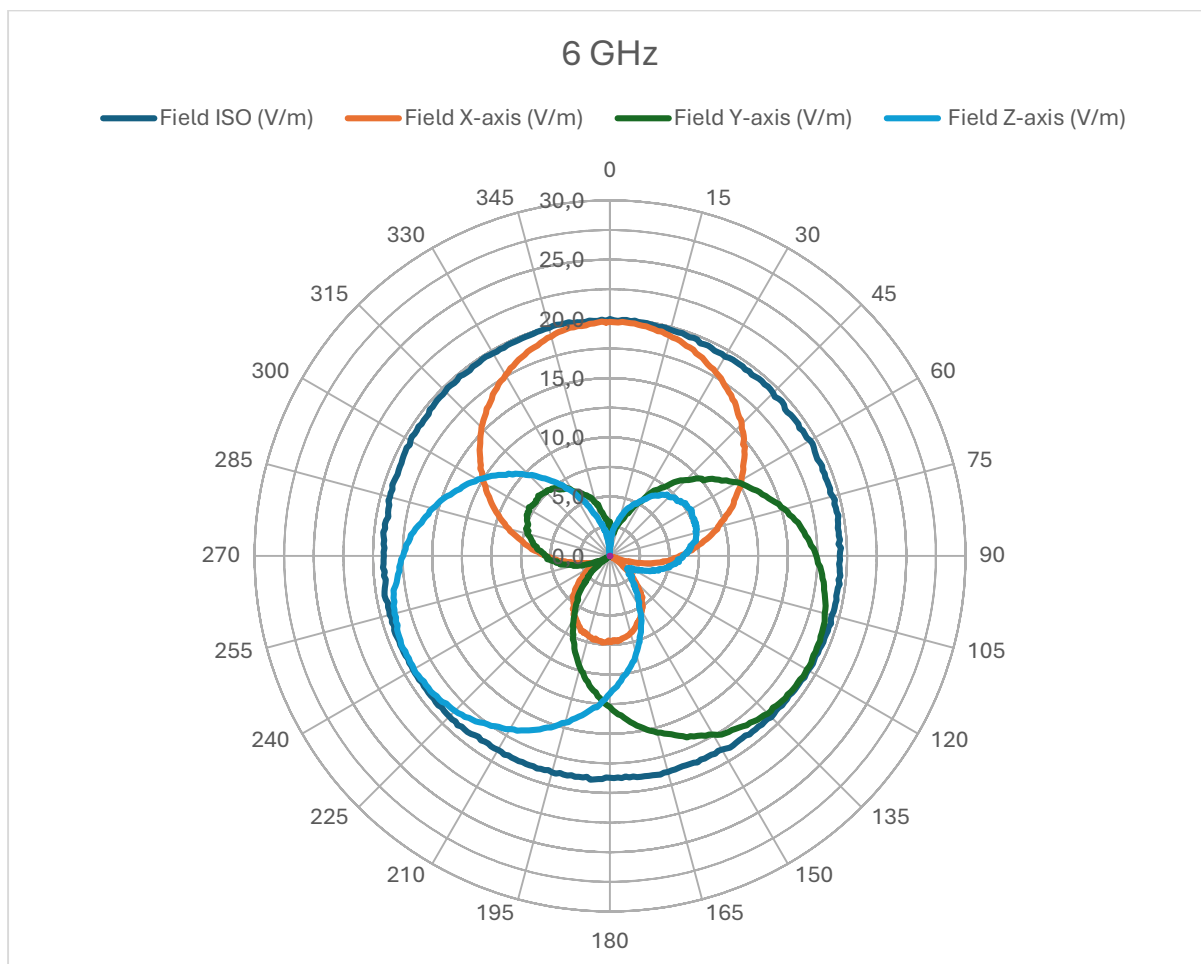


$$A = 20 \log \left(\frac{S_{max}}{\sqrt{S_{max} * S_{min}}} \right)$$

Minimum 18.91 V/m

Maximum 20.20 V/m

Anisotropy ± 0.29 dB

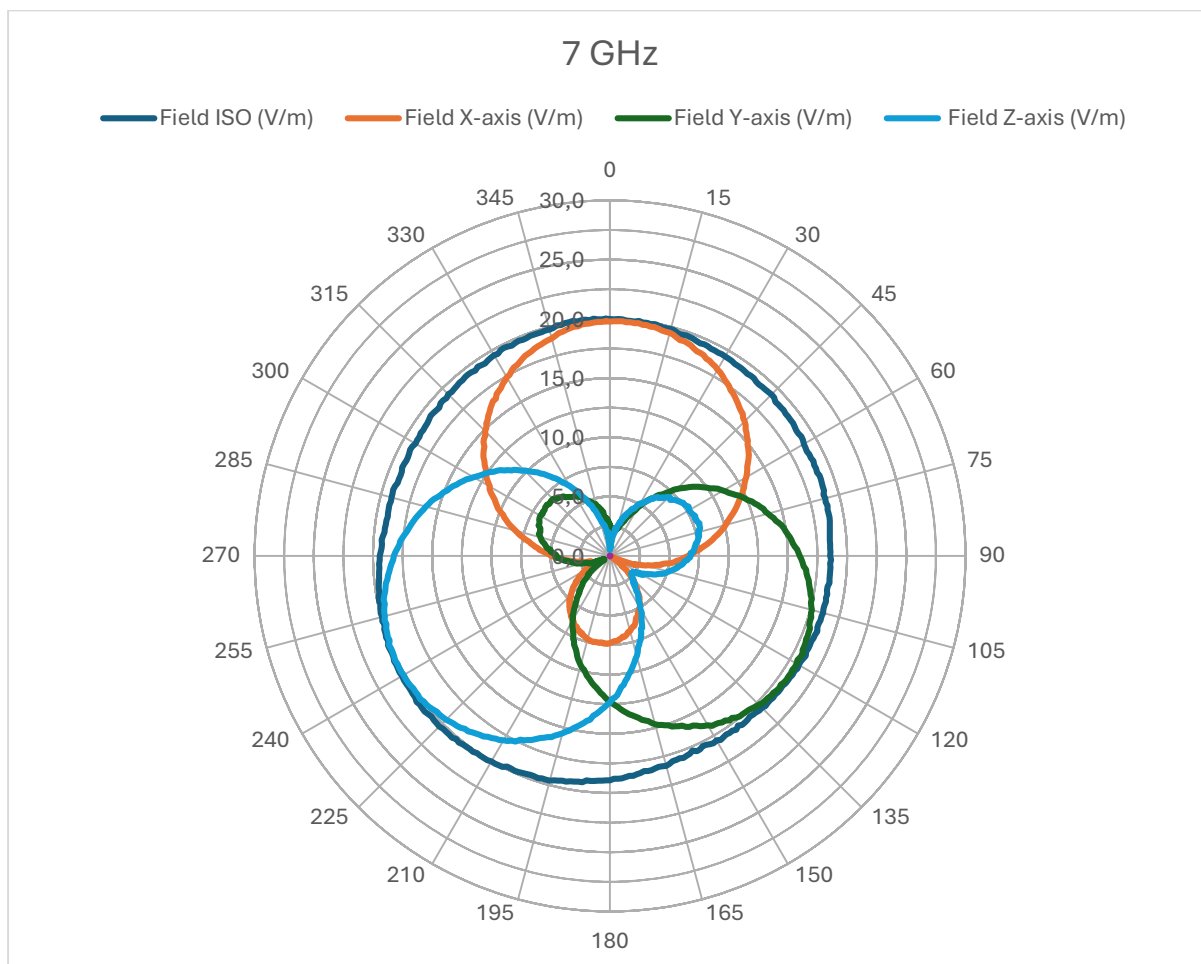


$$A = 20 \log \left(\frac{S_{max}}{\sqrt{S_{max} * S_{min}}} \right)$$

Minimum 18.67 V/m

Maximum 20.04 V/m

Anisotropy ± 0.31 dB

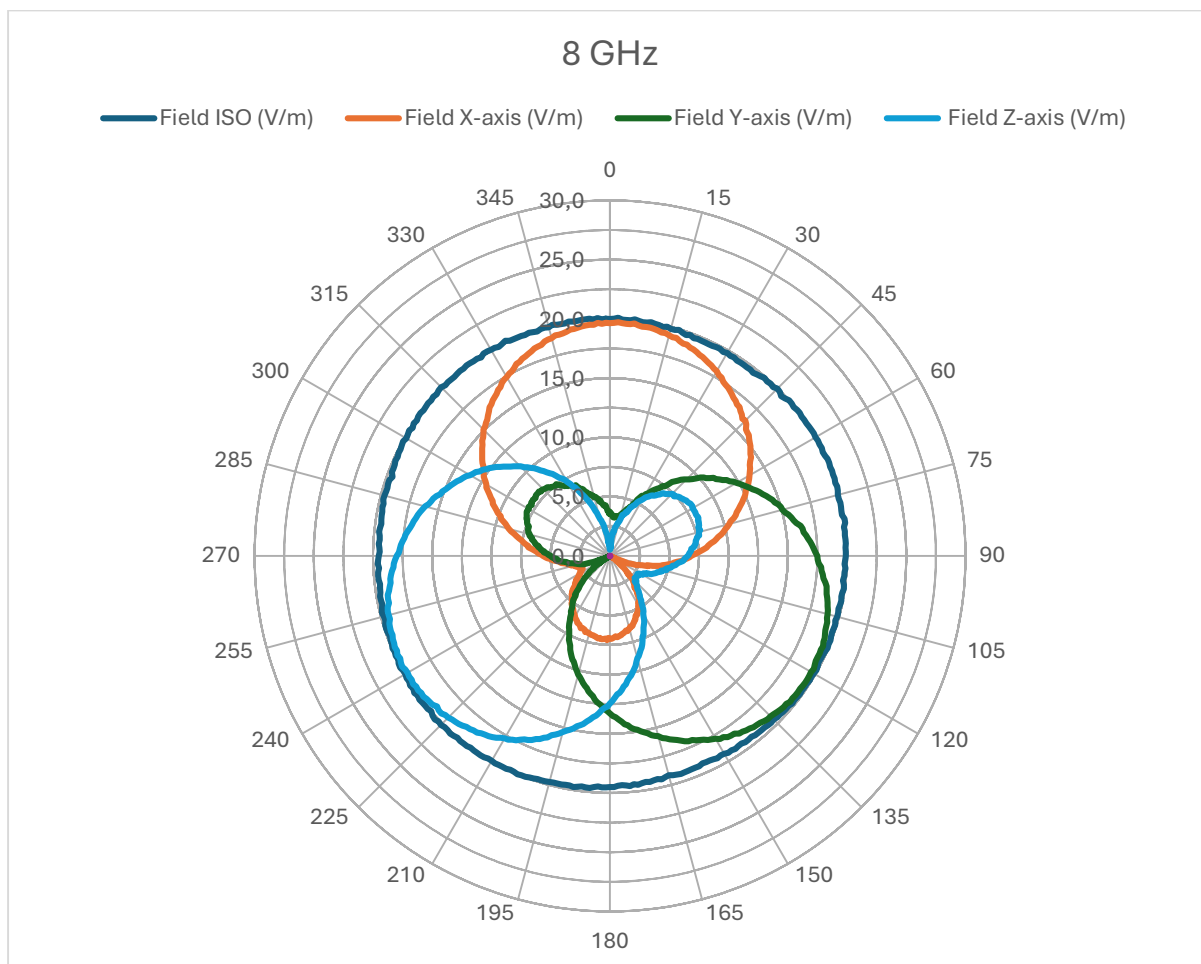


$$A = 20 \log \left(\frac{S_{max}}{\sqrt{S_{max} * S_{min}}} \right)$$

Minimum 17.84 V/m

Maximum 20.45 V/m

Anisotropy ± 0.59 dB

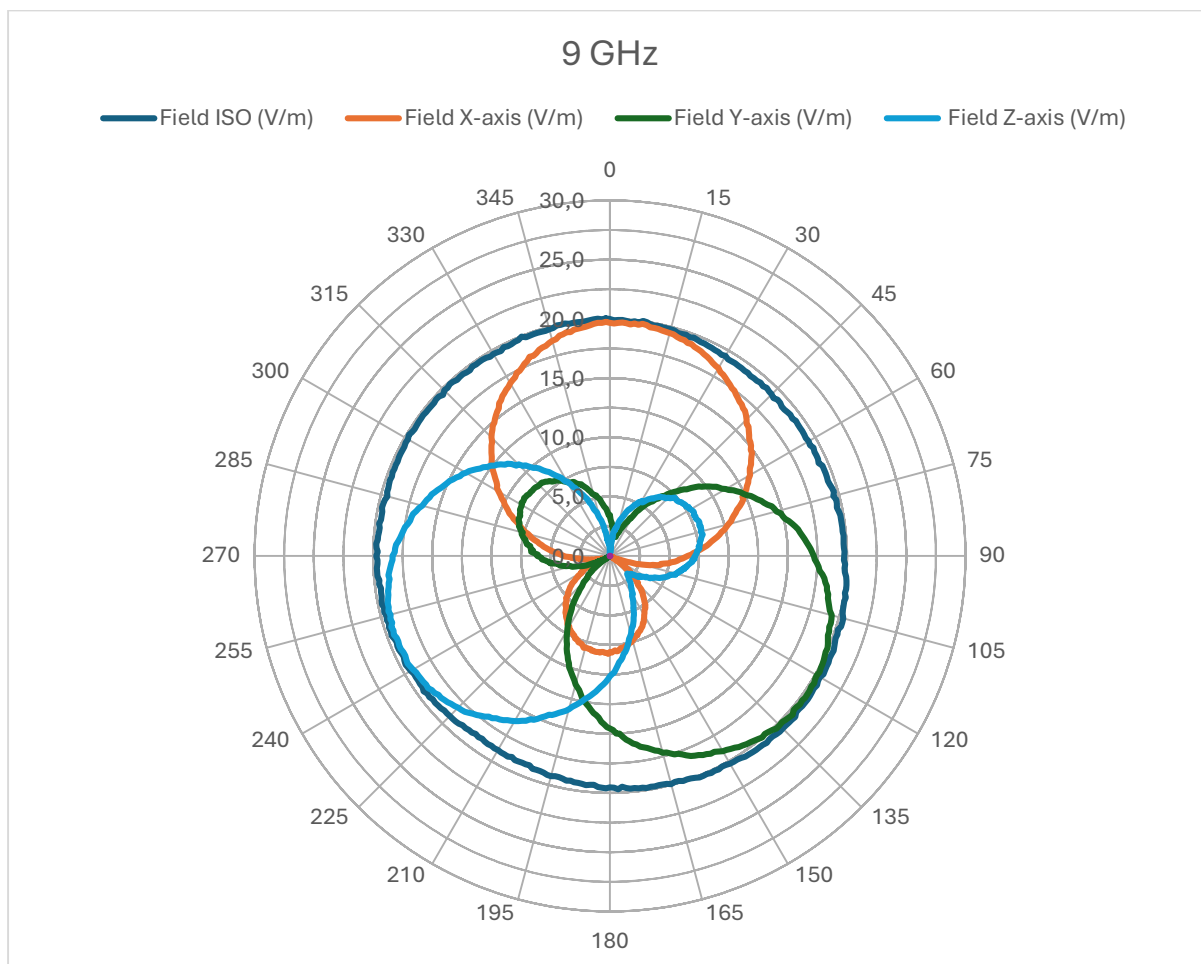


$$A = 20 \log \left(\frac{S_{max}}{\sqrt{S_{max} * S_{min}}} \right)$$

Minimum 19.17 V/m

Maximum 20.23 V/m

Anisotropy ± 0.23 dB

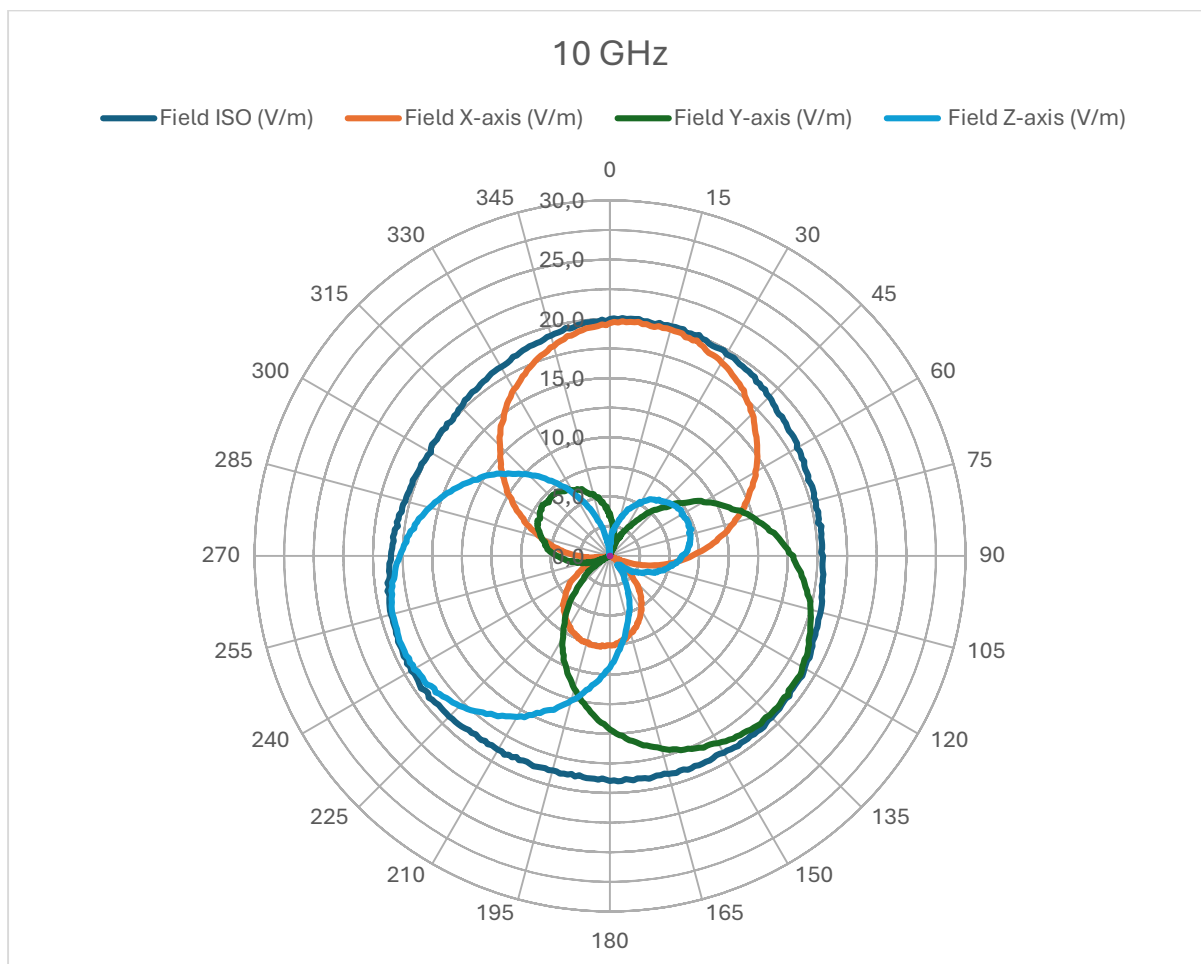


$$A = 20 \log \left(\frac{S_{max}}{\sqrt{S_{max} * S_{min}}} \right)$$

Minimum 18.82 V/m

Maximum 20.71 V/m

Anisotropy ± 0.42 dB

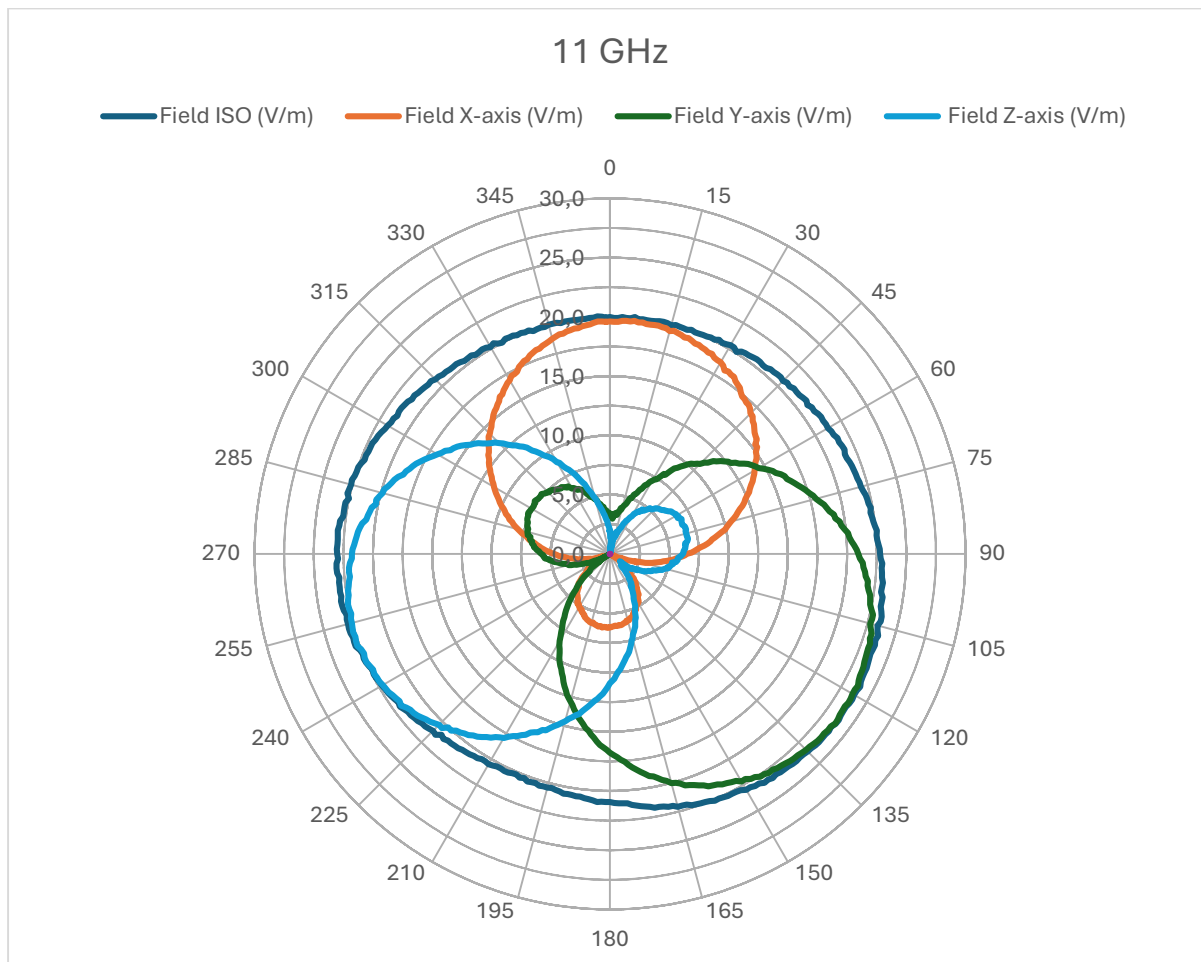


$$A = 20 \log \left(\frac{S_{max}}{\sqrt{S_{max} * S_{min}}} \right)$$

Minimum 17.44 V/m

Maximum 20.16 V/m

Anisotropy ± 0.63 dB

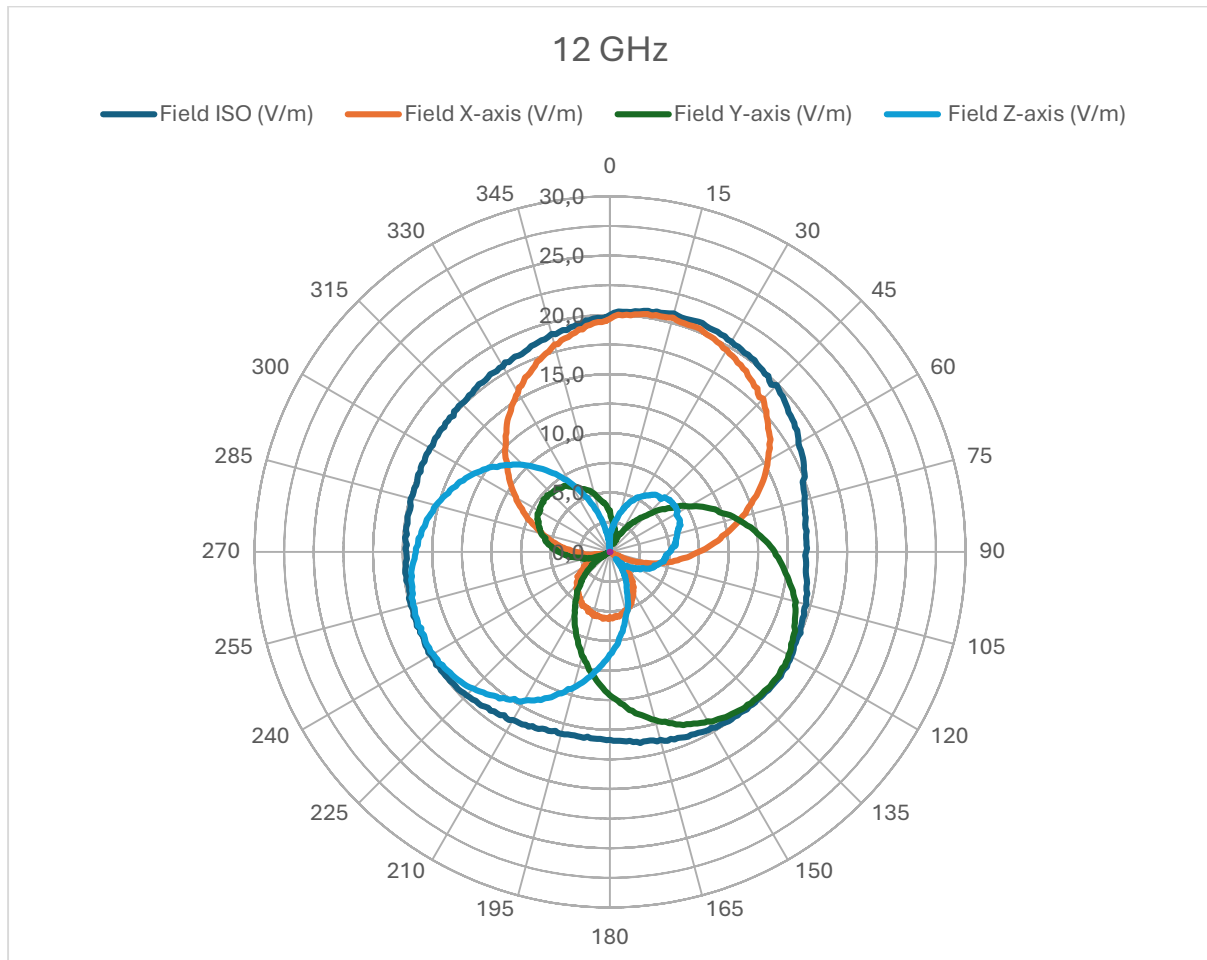


$$A = 20 \log \left(\frac{S_{max}}{\sqrt{S_{max} * S_{min}}} \right)$$

Minimum 19.88 V/m

Maximum 23.91 V/m

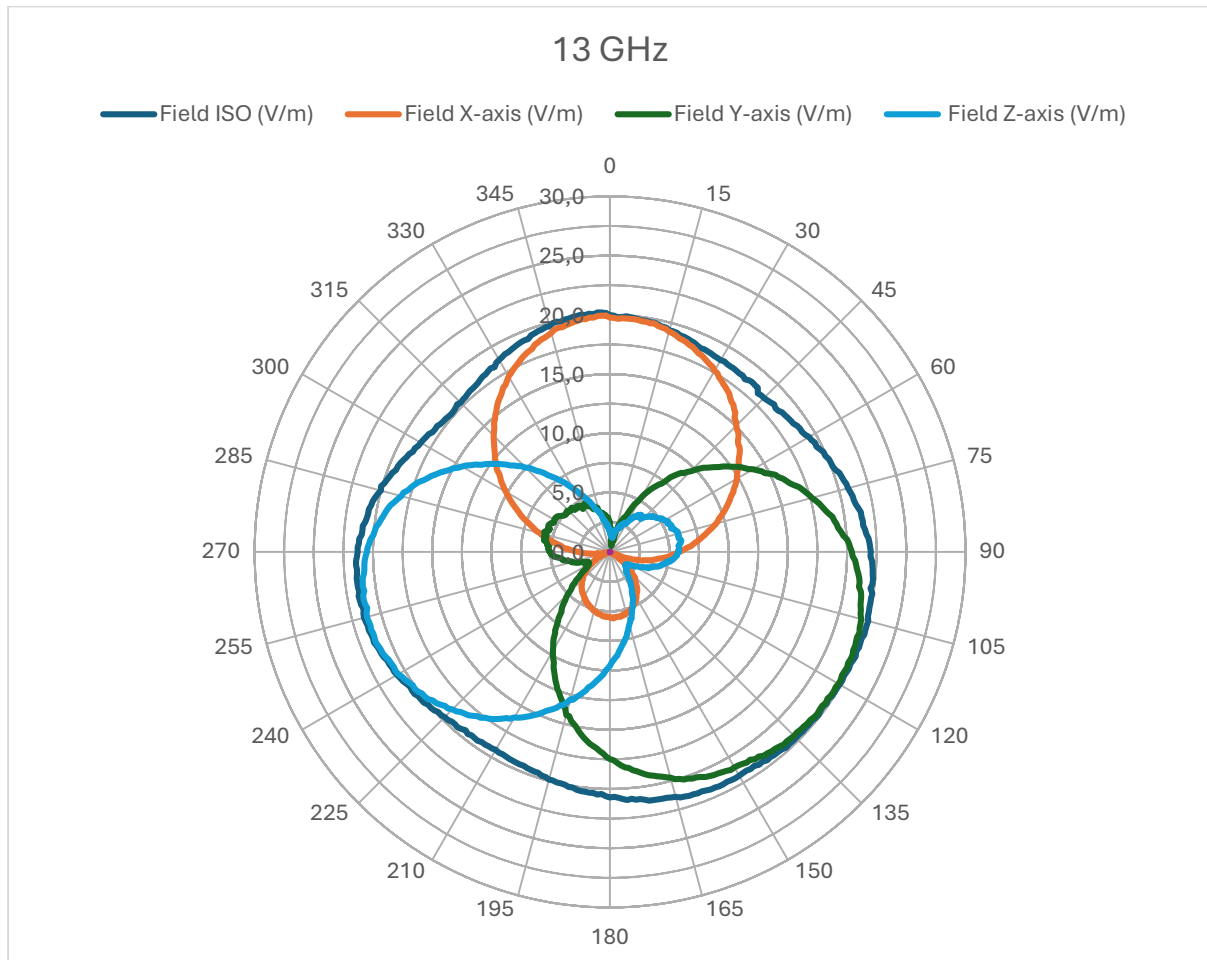
Anisotropy ± 0.80 dB



$$A = 20 \log \left(\frac{S_{max}}{\sqrt{S_{max} * S_{min}}} \right)$$

Minimum	15.71	V/m
Maximum	20.85	V/m

Anisotropy	±	1.23	dB
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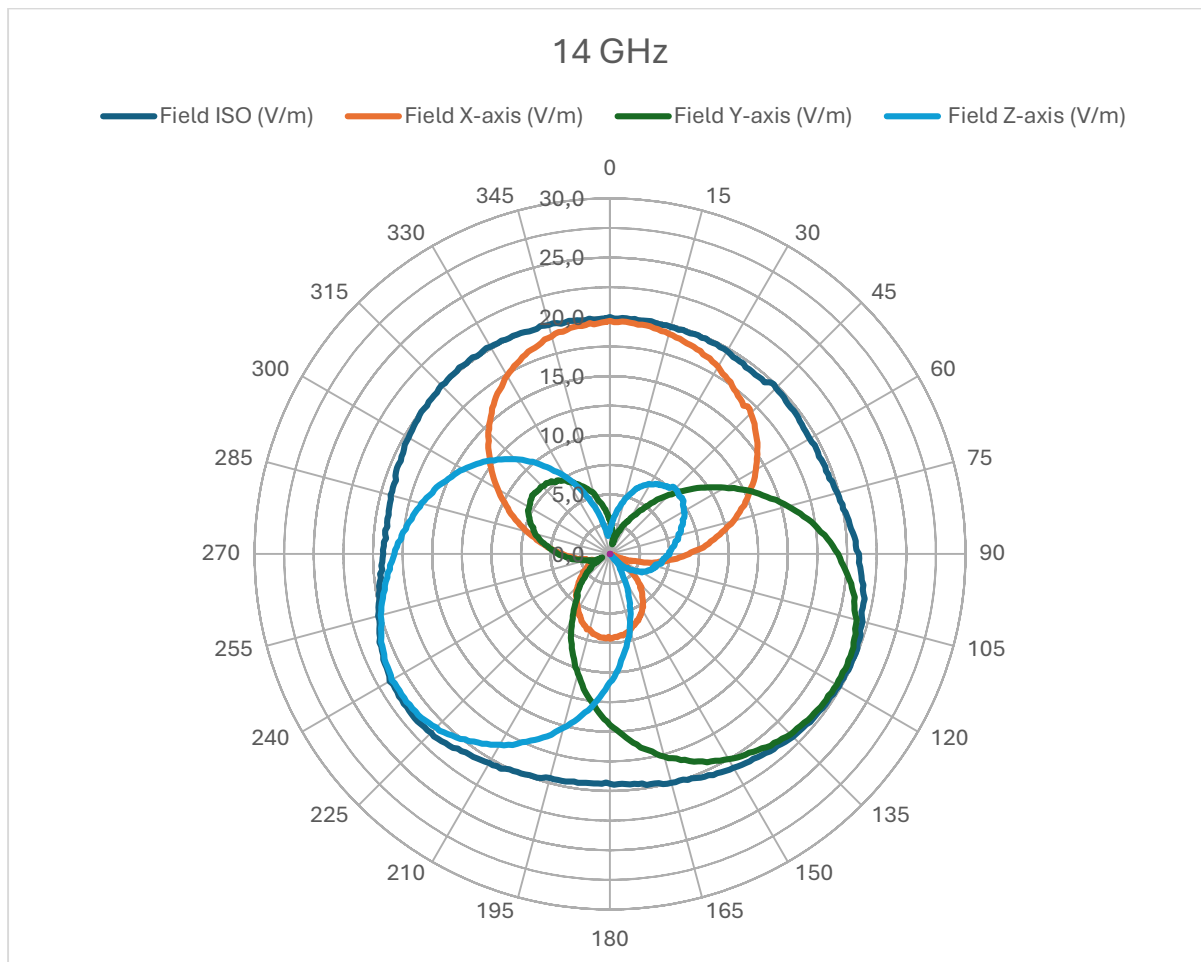


$$A = 20 \log \left(\frac{S_{max}}{\sqrt{S_{max} * S_{min}}} \right)$$

Minimum 17.74 V/m

Maximum 22.58 V/m

Anisotropy ± 1.05 dB

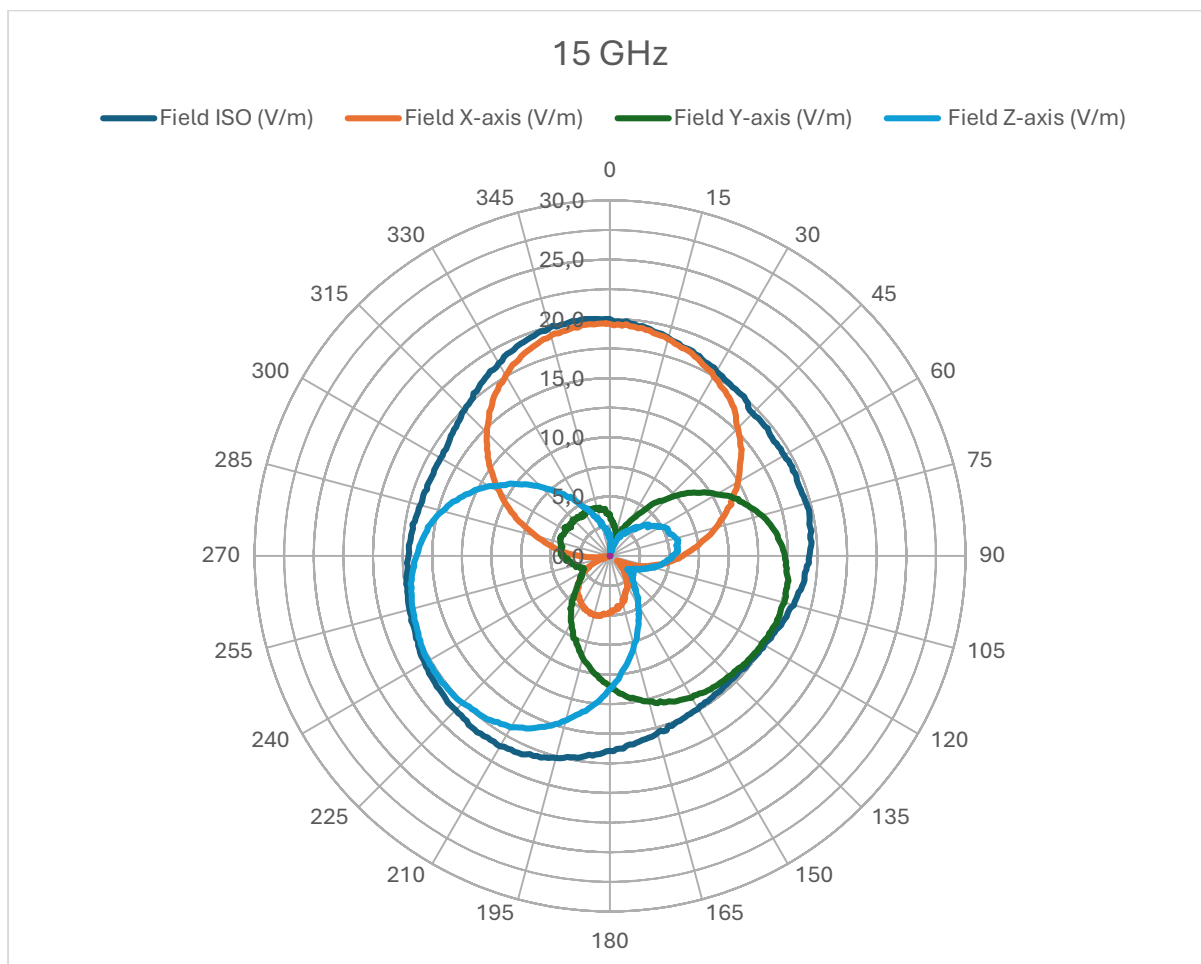


$$A = 20 \log \left(\frac{S_{max}}{\sqrt{S_{max} * S_{min}}} \right)$$

Minimum 18.93 V/m

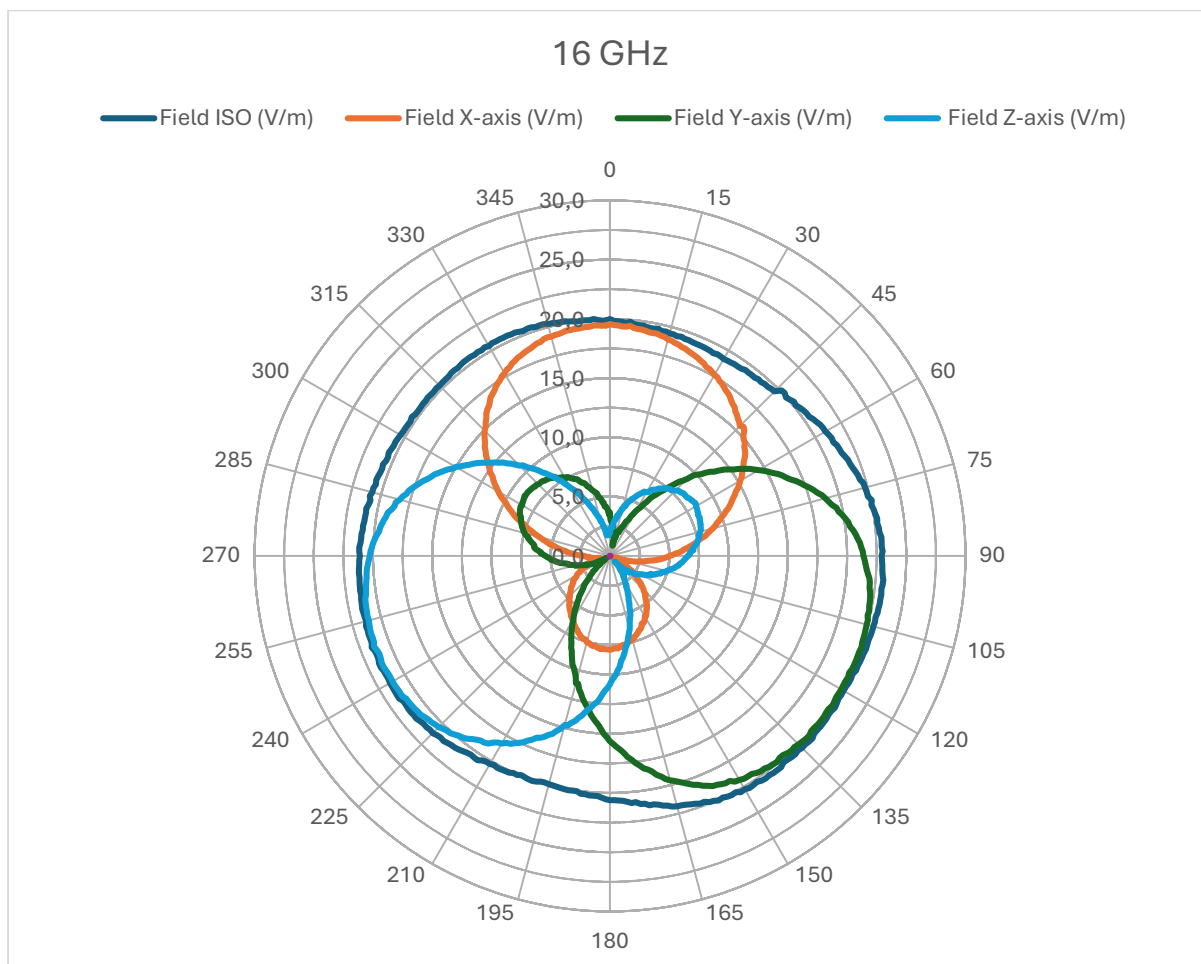
Maximum 22.39 V/m

Anisotropy ± 0.73 dB



$$A = 20 \log \left(\frac{S_{max}}{\sqrt{S_{max} * S_{min}}} \right)$$

Minimum	14.60	V/m
Maximum	20.12	V/m
Anisotropy	± 1.39	dB

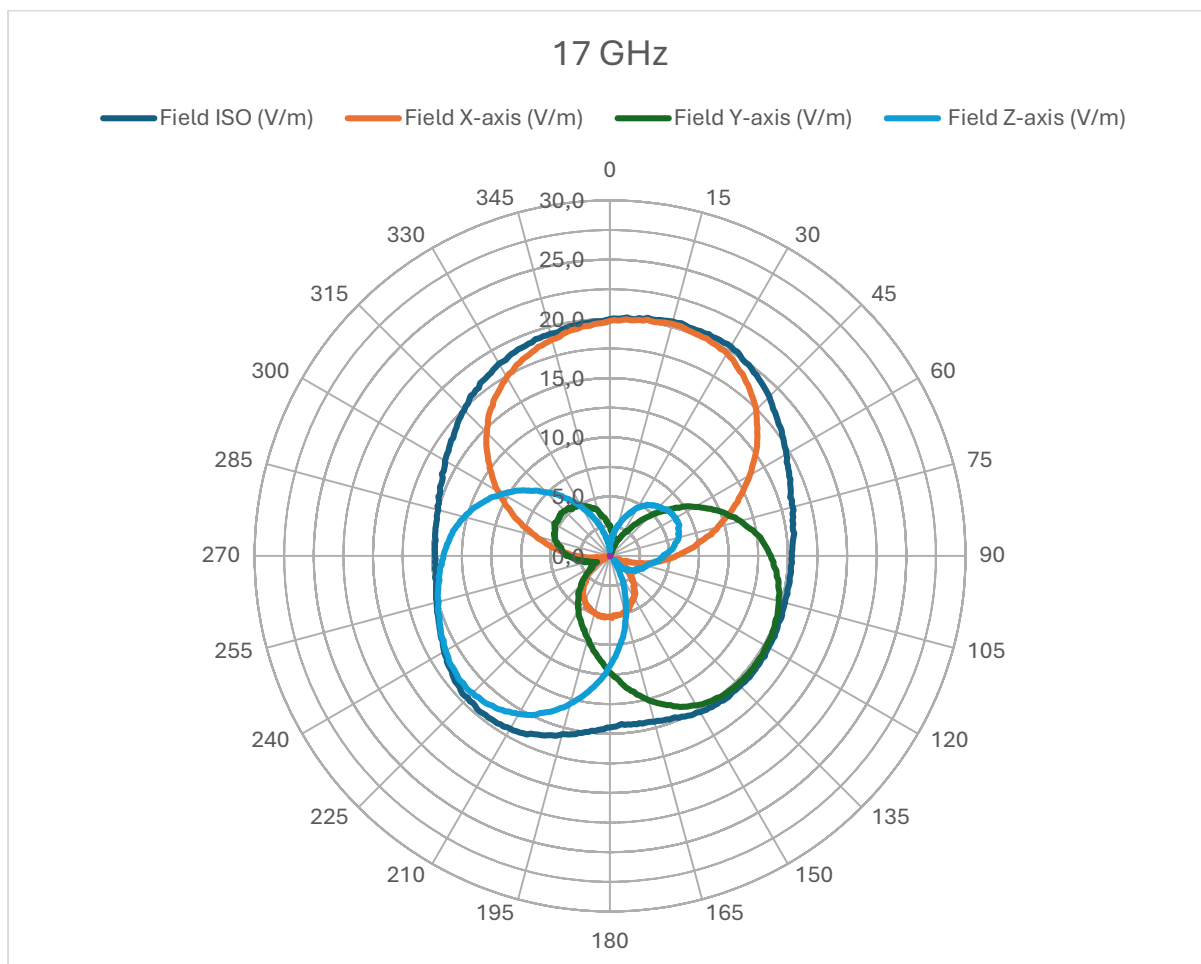


$$A = 20 \log \left(\frac{S_{max}}{\sqrt{S_{max} * S_{min}}} \right)$$

Minimum 19.18 V/m

Maximum 23.14 V/m

Anisotropy ± 0.81 dB

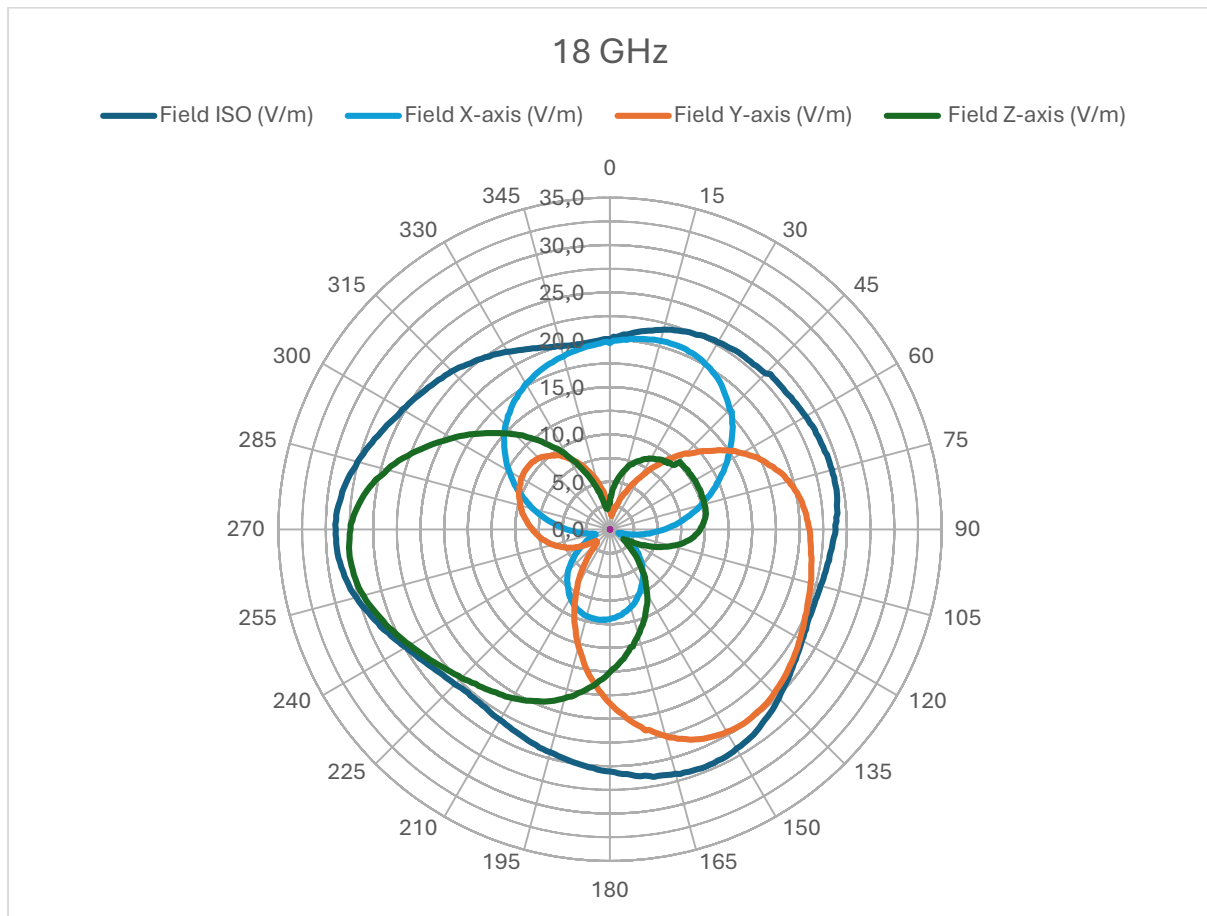


$$A = 20 \log \left(\frac{S_{max}}{\sqrt{S_{max} * S_{min}}} \right)$$

Minimum 14.23 V/m

Maximum 20.53 V/m

Anisotropy ± 1.59 dB

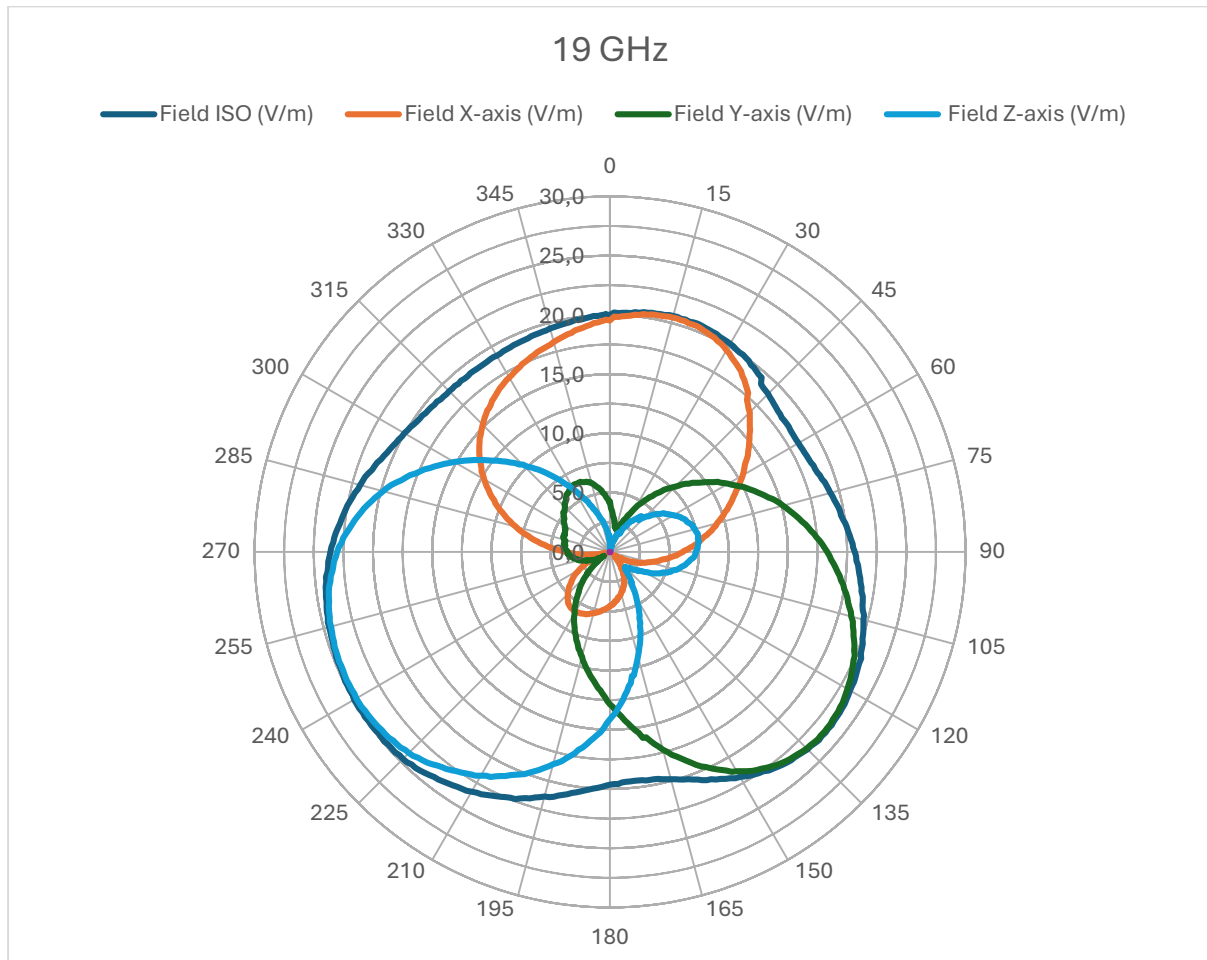


$$A = 20 \log \left(\frac{S_{max}}{\sqrt{S_{max} * S_{min}}} \right)$$

Minimum 19.81 V/m

Maximum 29.02 V/m

Anisotropy ± 1.66 dB

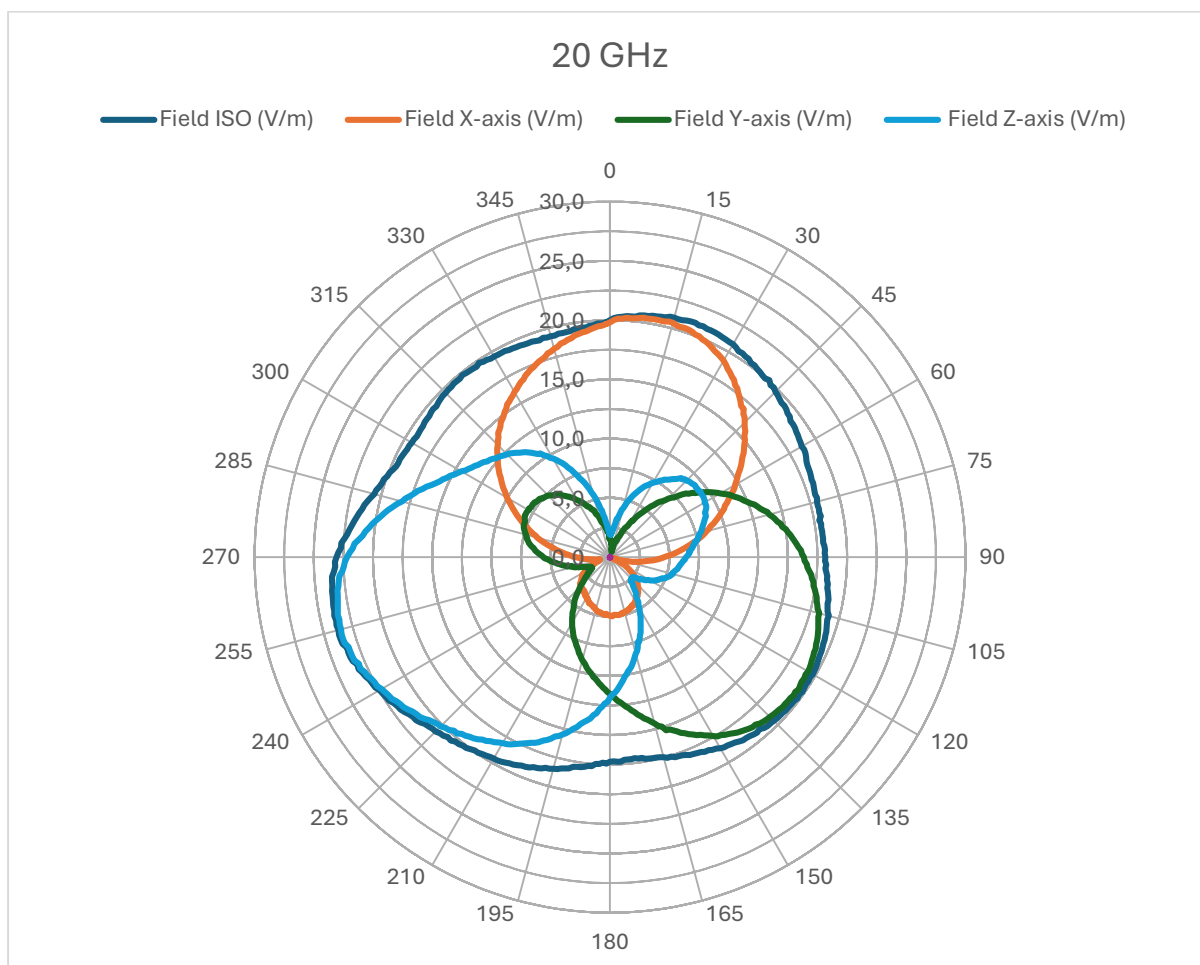


$$A = 20 \log \left(\frac{S_{max}}{\sqrt{S_{max} * S_{min}}} \right)$$

Minimum 18.33 V/m

Maximum 24.95 V/m

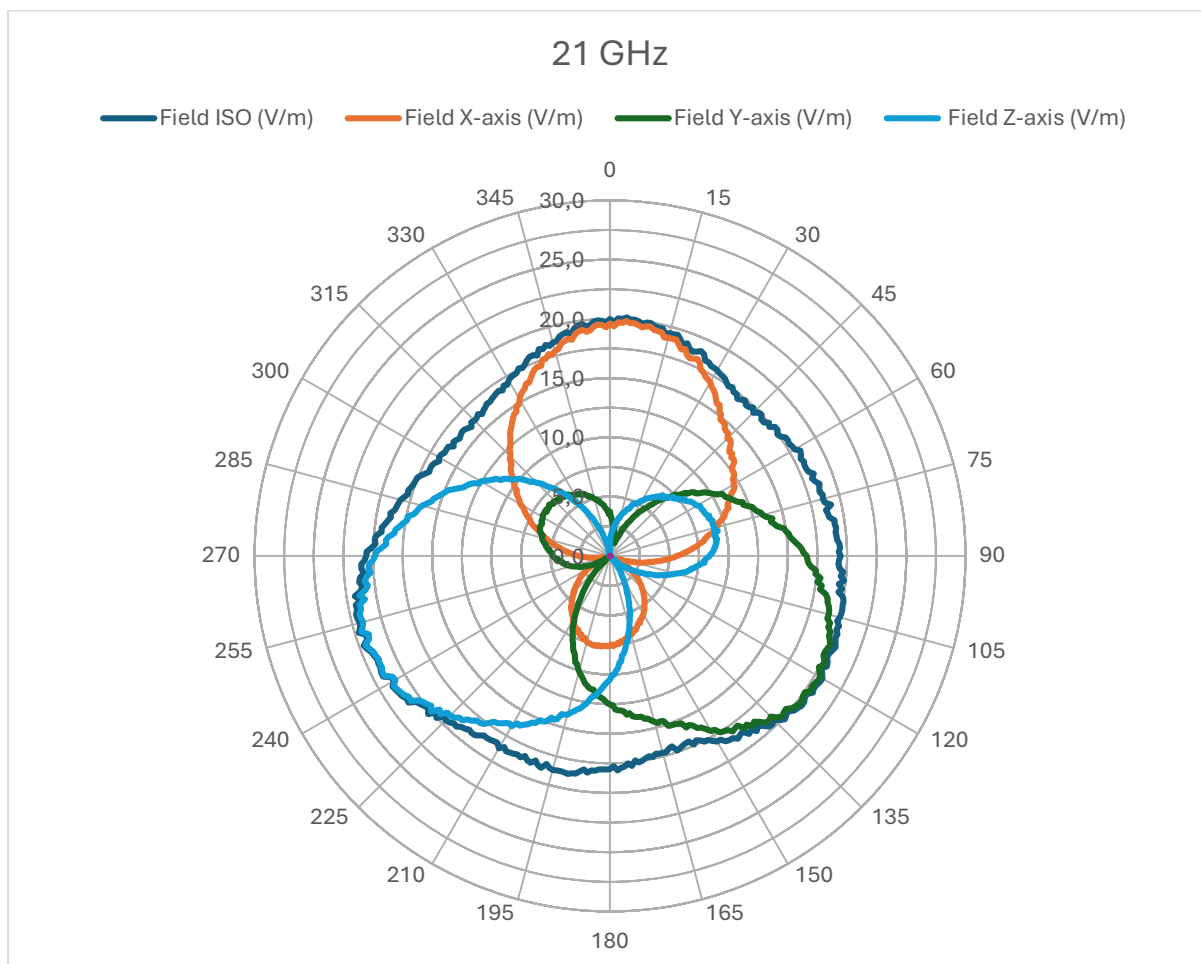
Anisotropy ± 1.34 dB



$$A = 20 \log \left(\frac{S_{max}}{\sqrt{S_{max} * S_{min}}} \right)$$

Minimum	17.08	V/m
Maximum	23.80	V/m

Anisotropy	±	1.44	dB
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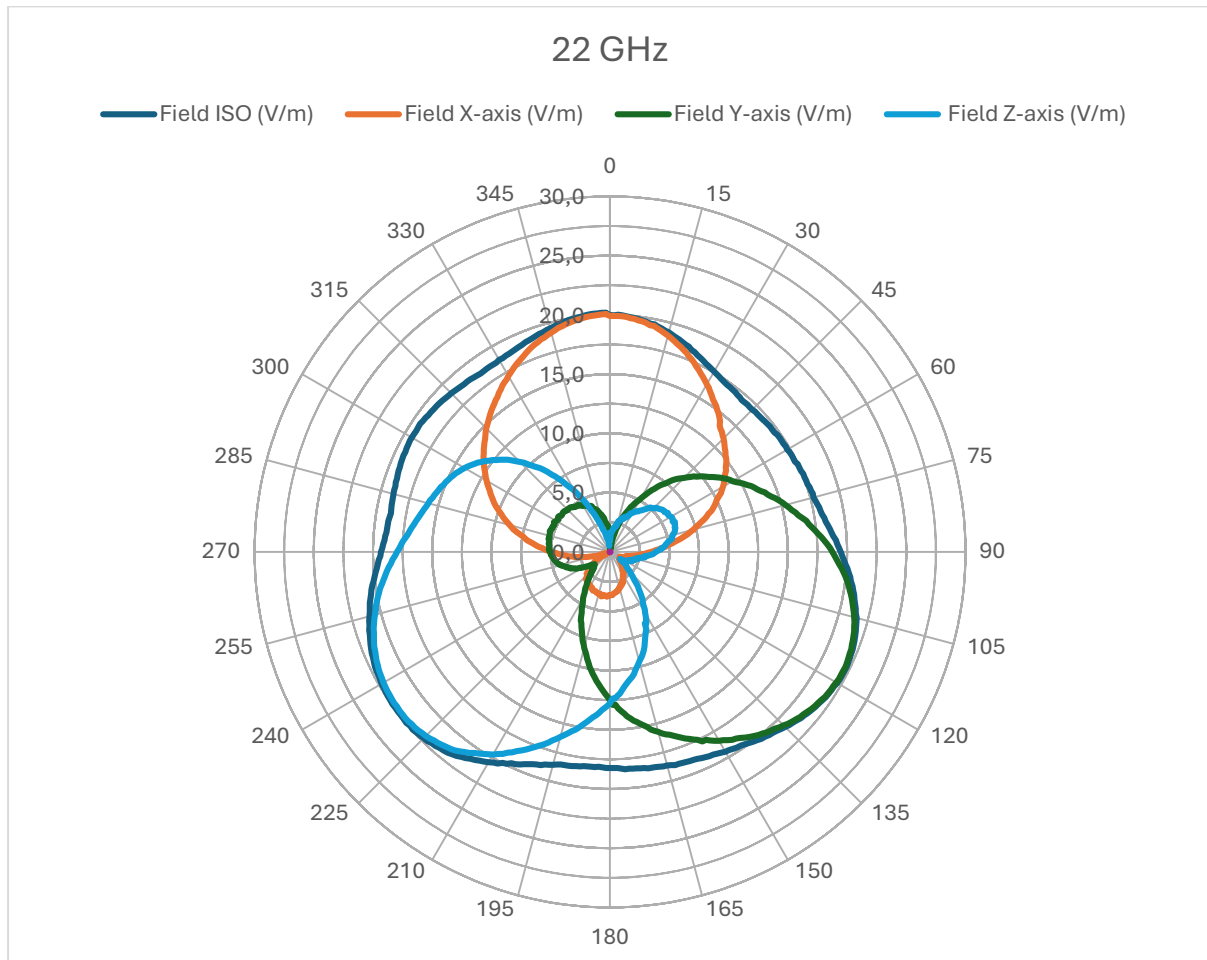


$$A = 20 \log \left(\frac{S_{max}}{\sqrt{S_{max} * S_{min}}} \right)$$

Minimum 15.97 V/m

Maximum 22.15 V/m

Anisotropy ± 1.42 dB

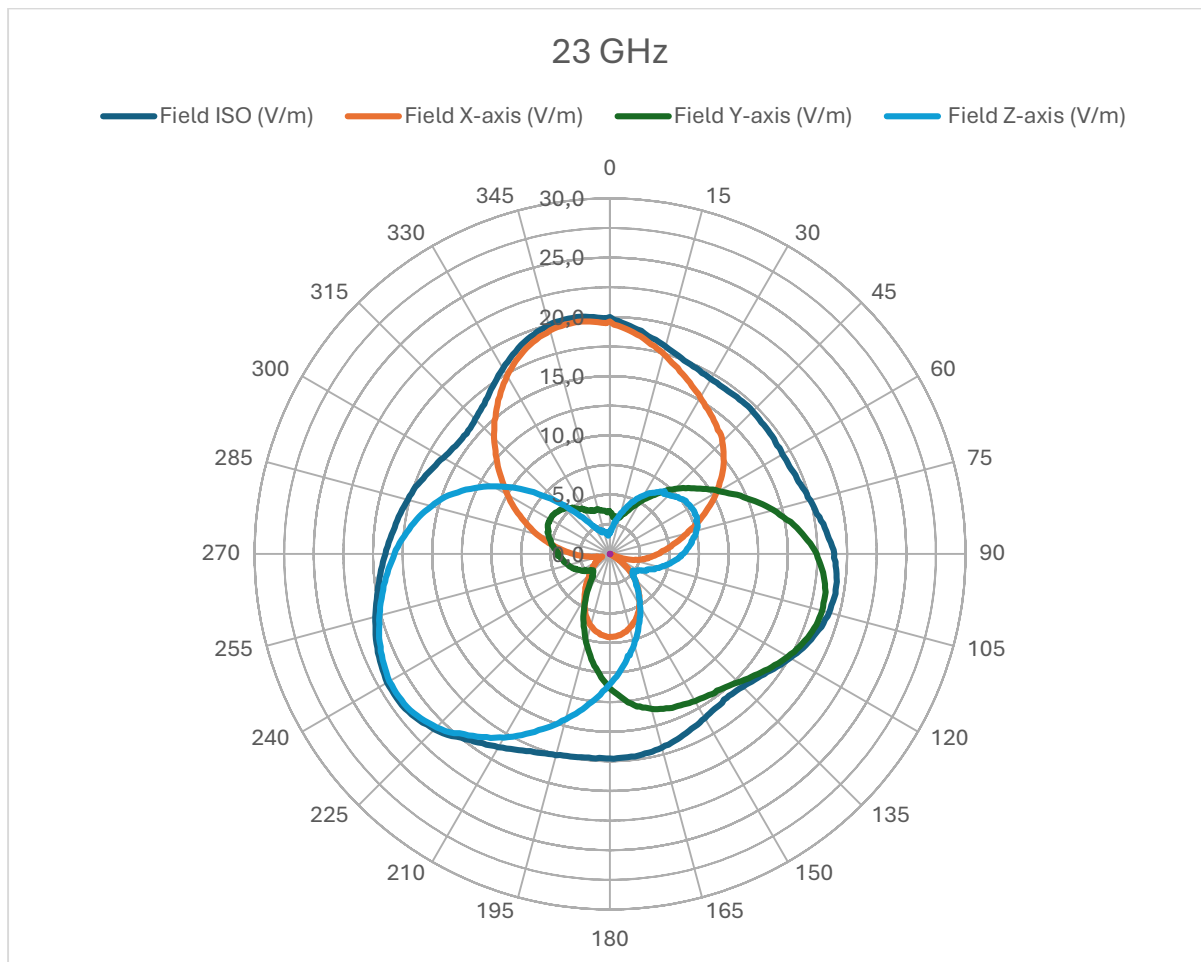


$$A = 20 \log \left(\frac{S_{max}}{\sqrt{S_{max} * S_{min}}} \right)$$

Minimum 16.95 V/m

Maximum 22.43 V/m

Anisotropy ± 1.22 dB

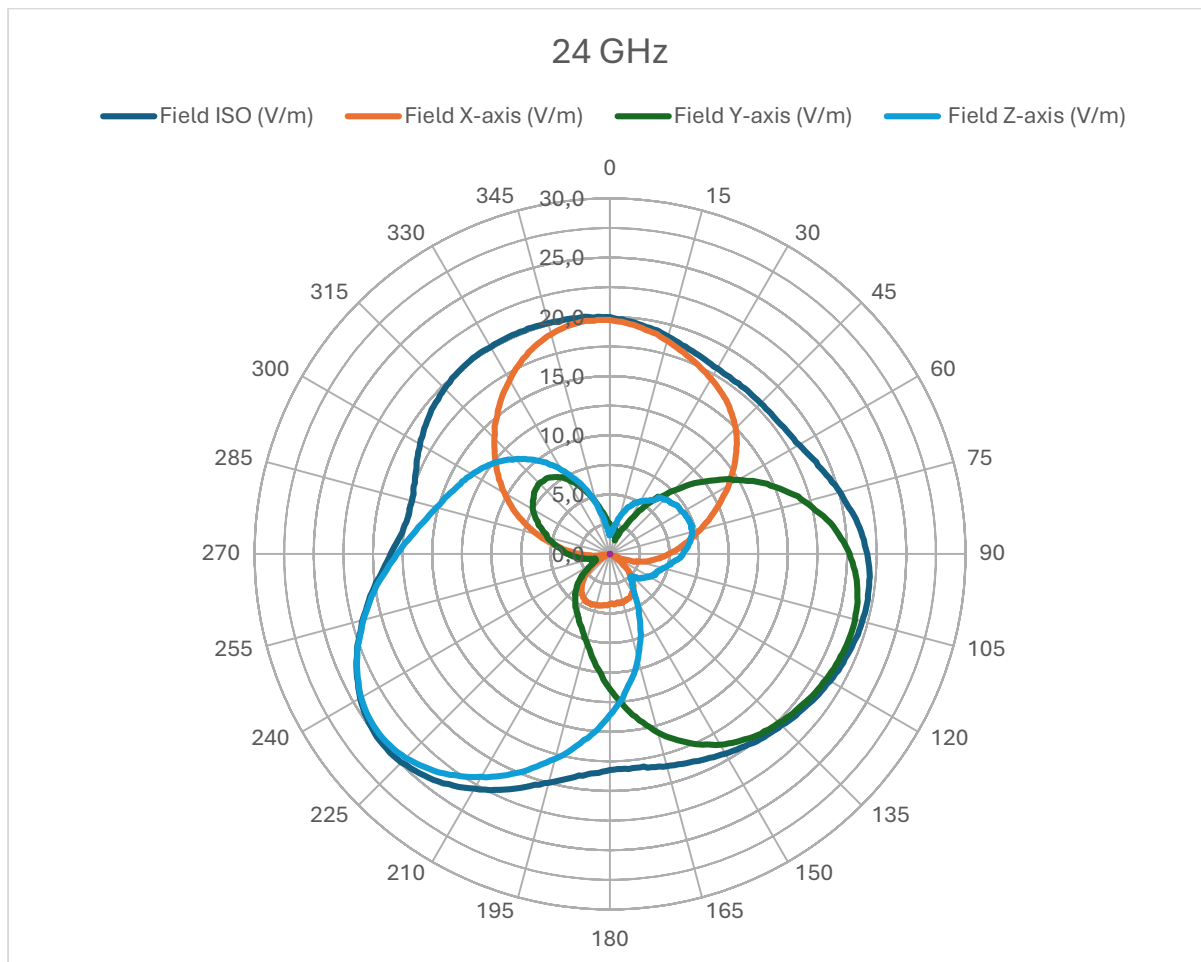


$$A = 20 \log \left(\frac{S_{max}}{\sqrt{S_{max} * S_{min}}} \right)$$

Minimum 15.61 V/m

Maximum 21.72 V/m

Anisotropy ± 1.43 dB

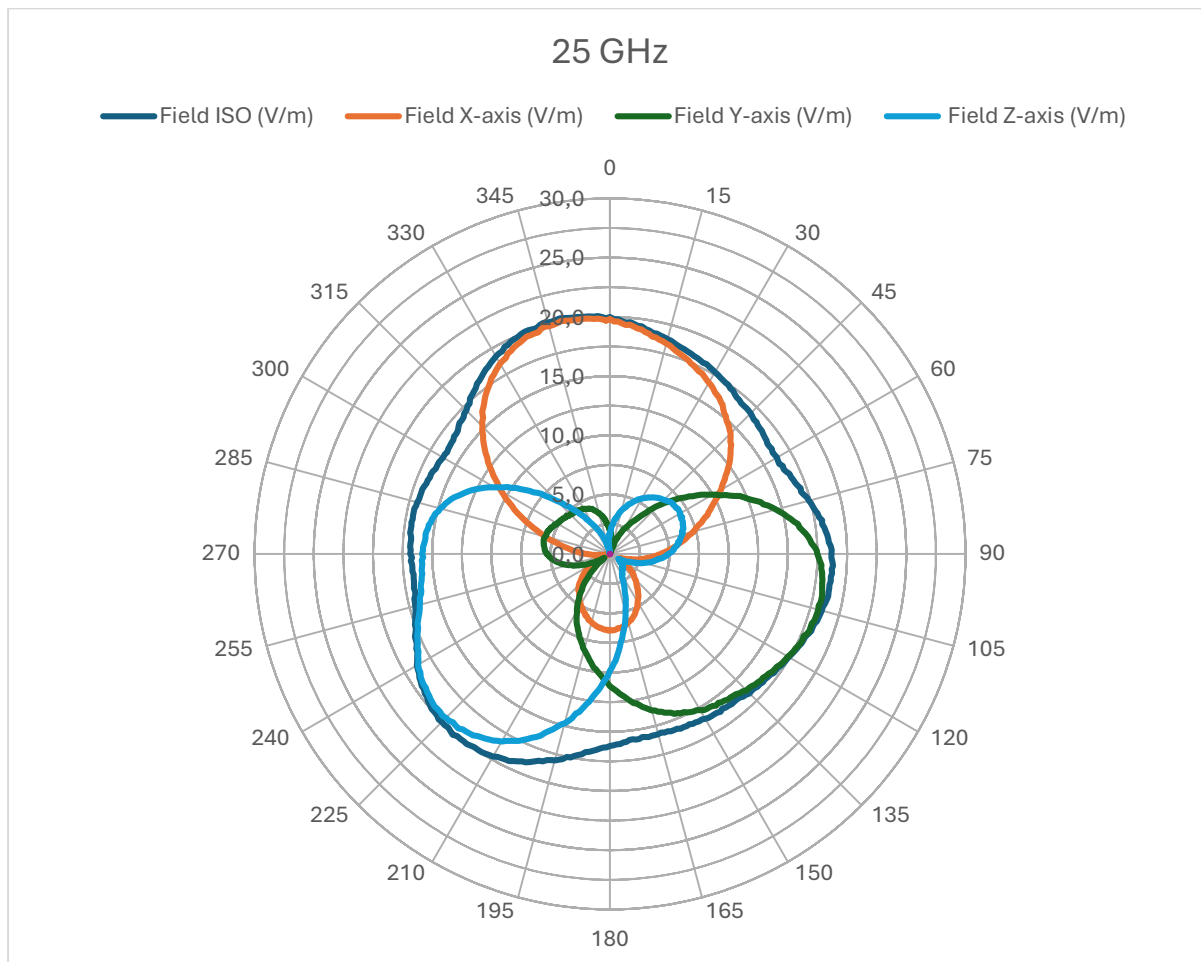


$$A = 20 \log \left(\frac{S_{max}}{\sqrt{S_{max} * S_{min}}} \right)$$

Minimum 17.30 V/m

Maximum 25.02 V/m

Anisotropy ± 1.60 dB

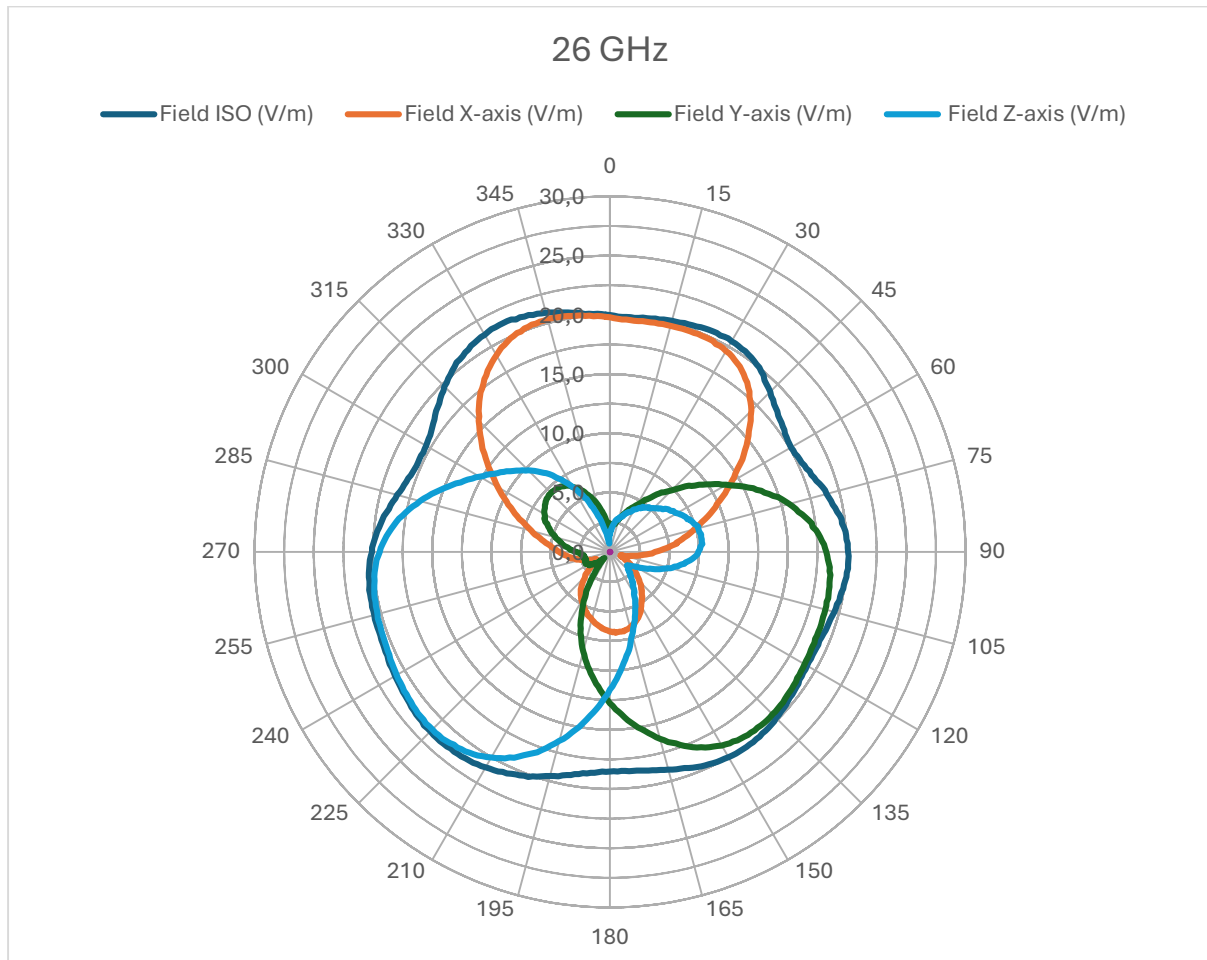


$$A = 20 \log \left(\frac{S_{max}}{\sqrt{S_{max} * S_{min}}} \right)$$

Minimum 15.68 V/m

Maximum 20.33 V/m

Anisotropy ± 1.13 dB

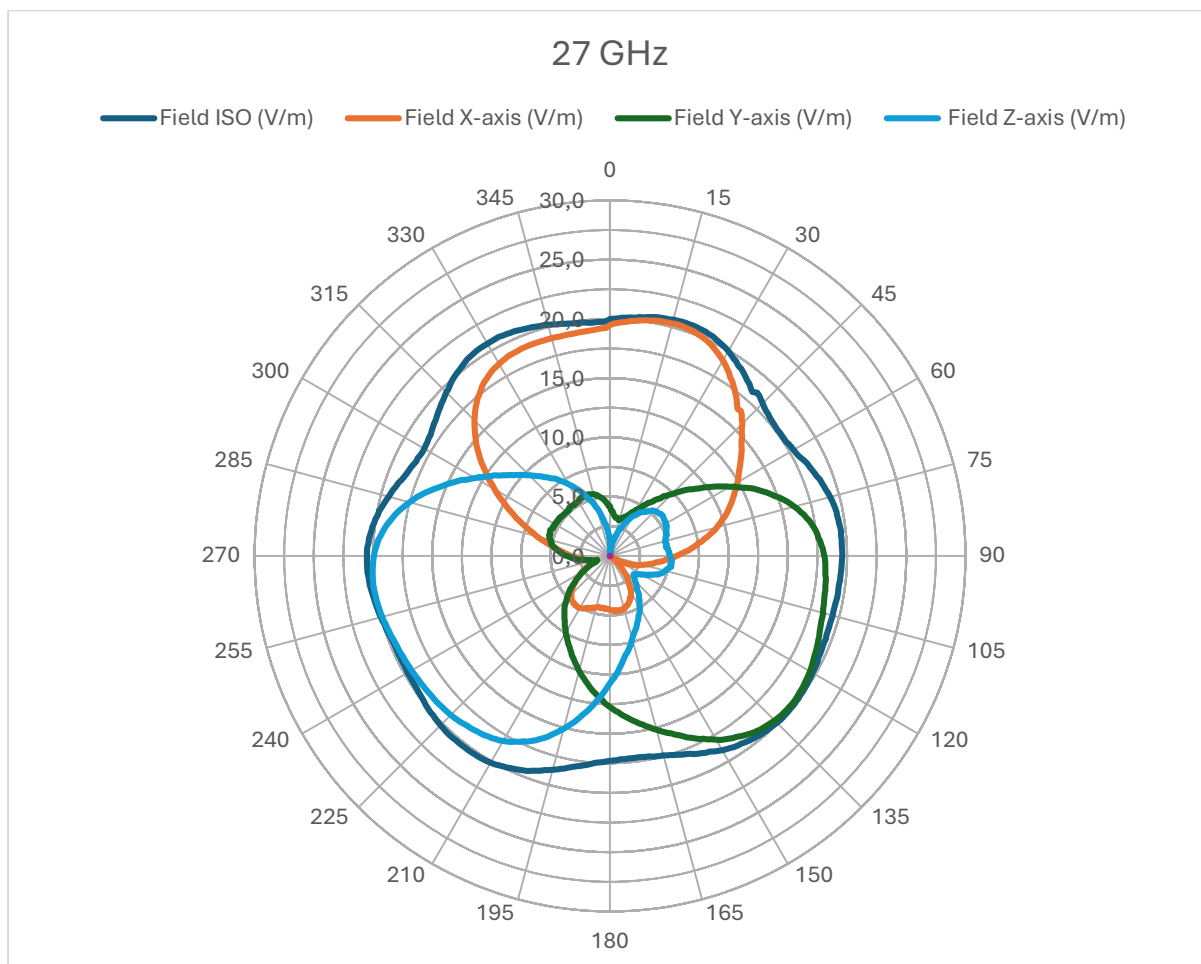


$$A = 20 \log \left(\frac{S_{max}}{\sqrt{S_{max} * S_{min}}} \right)$$

Minimum 17.64 V/m

Maximum 21.48 V/m

Anisotropy ± 0.86 dB

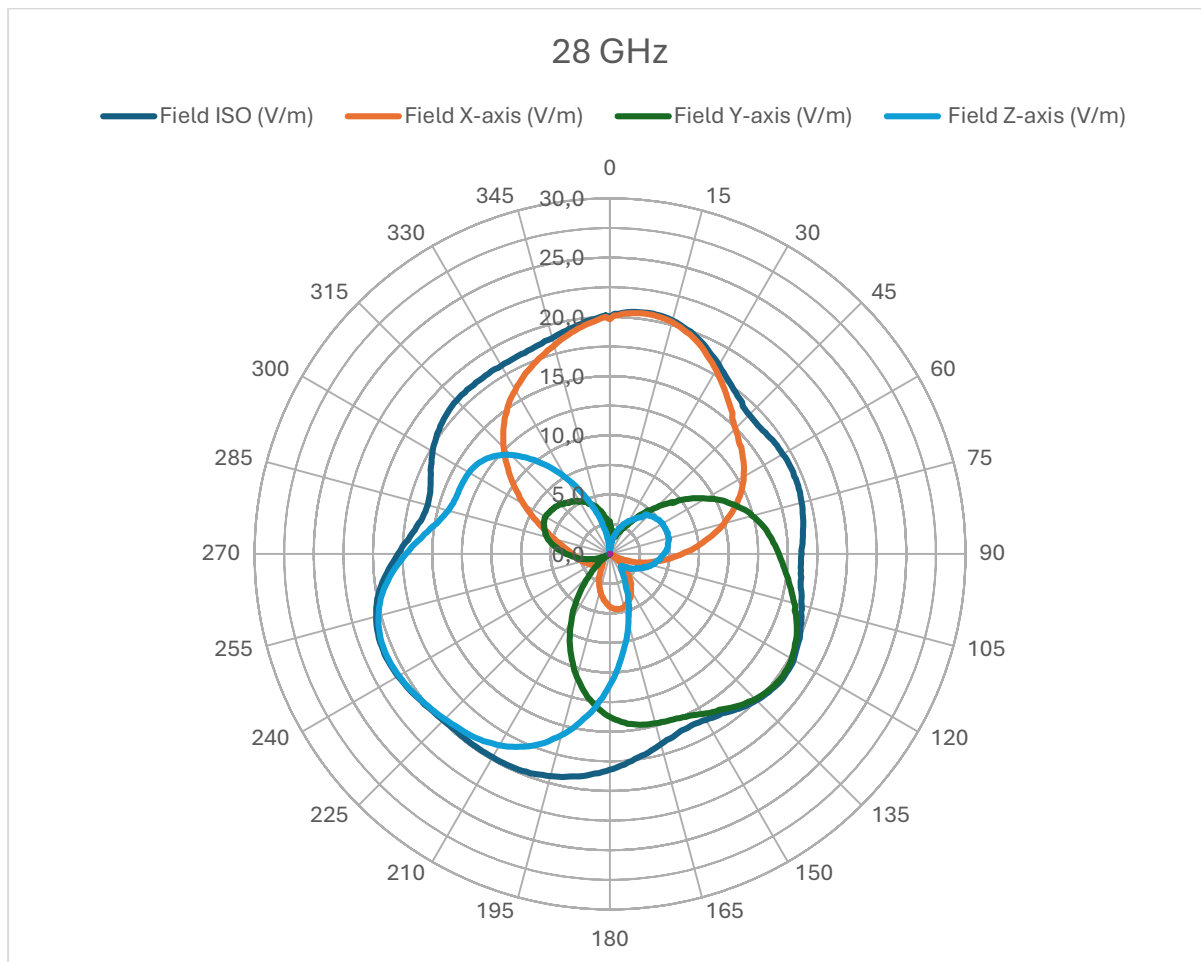


$$A = 20 \log \left(\frac{S_{max}}{\sqrt{S_{max} * S_{min}}} \right)$$

Minimum 17.15 V/m

Maximum 20.73 V/m

Anisotropy ± 0.82 dB

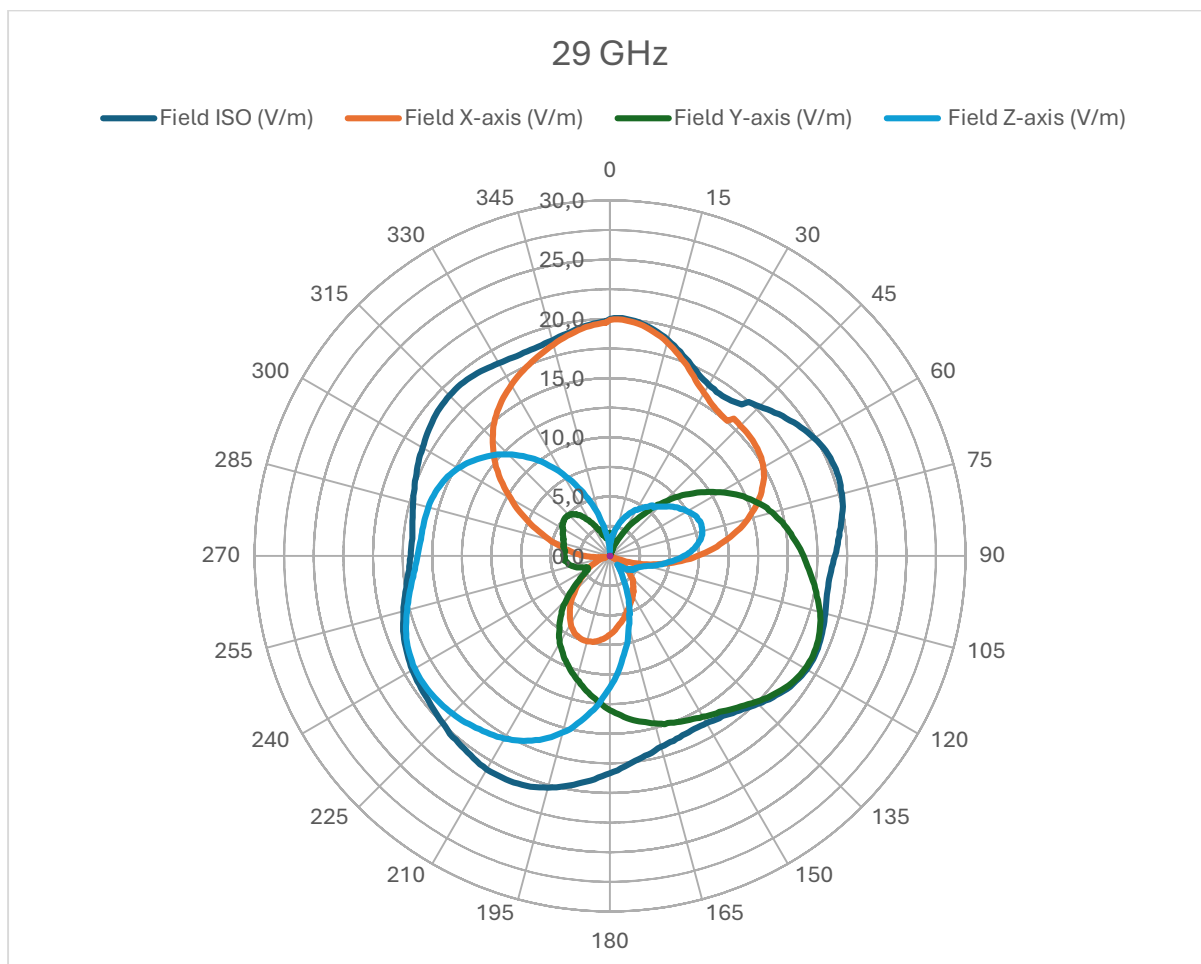


$$A = 20 \log \left(\frac{S_{max}}{\sqrt{S_{max} * S_{min}}} \right)$$

Minimum 15.94 V/m

Maximum 20.83 V/m

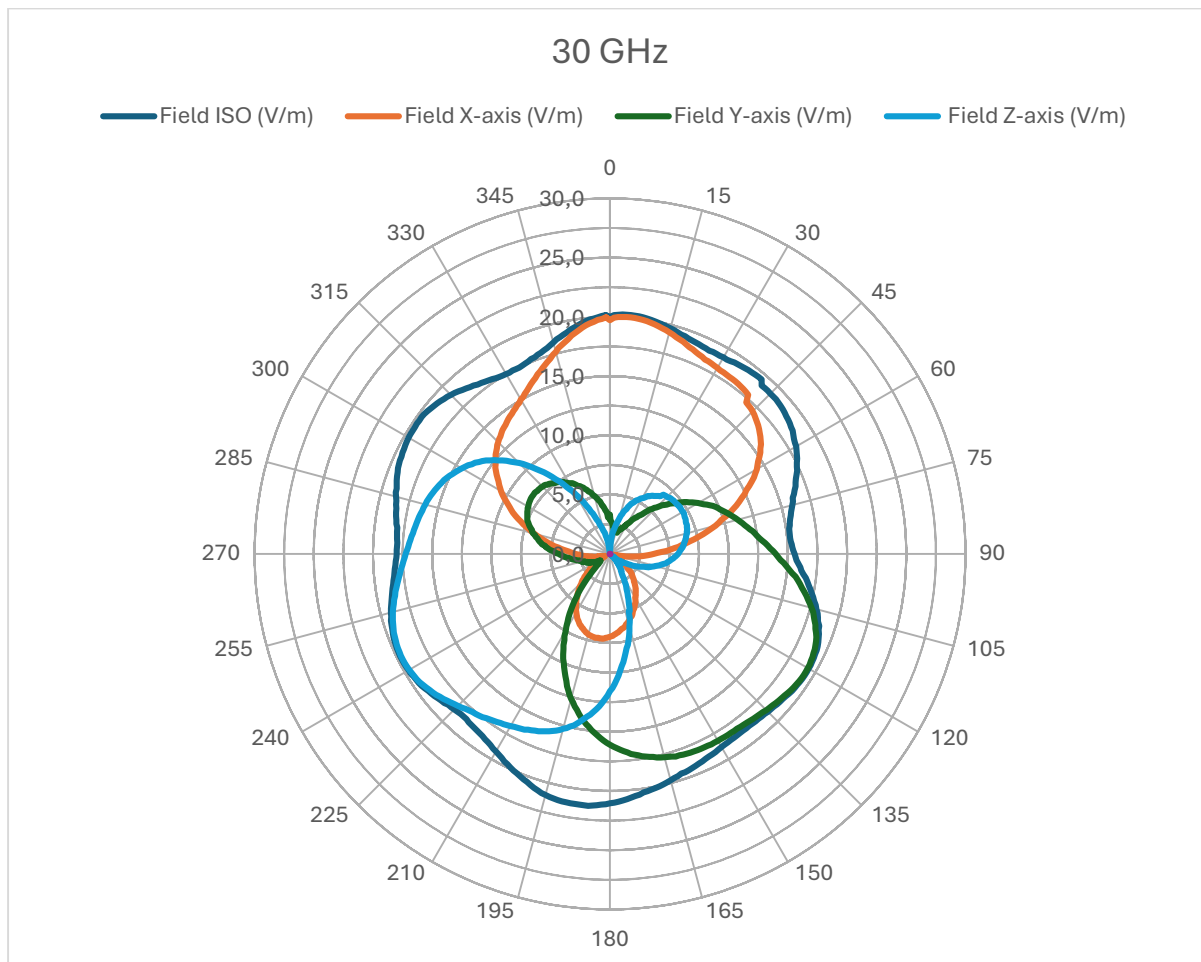
Anisotropy ± 1.16 dB



$$A = 20 \log \left(\frac{S_{max}}{\sqrt{S_{max} * S_{min}}} \right)$$

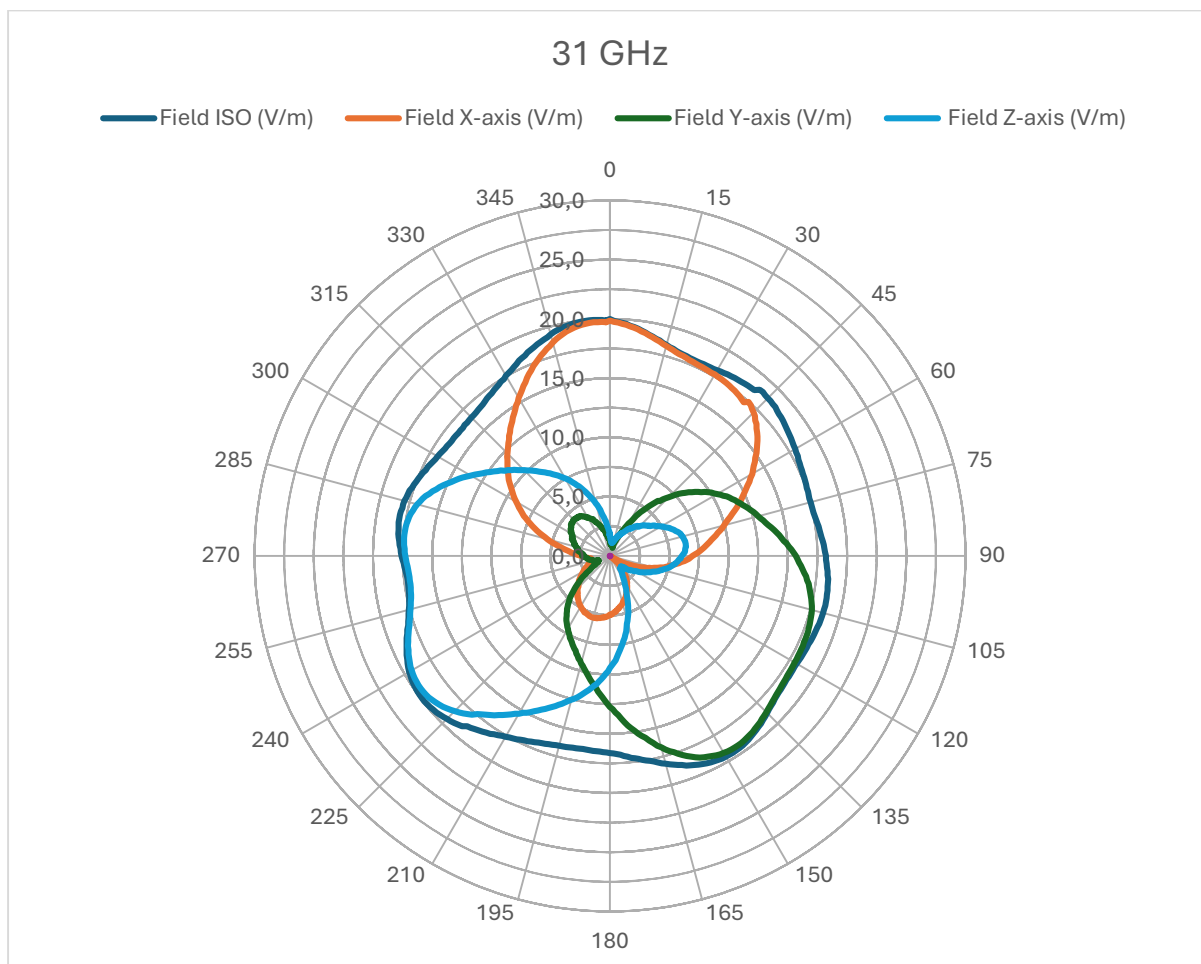
Minimum	16.23	V/m
Maximum	20.82	V/m

Anisotropy	±	1.08	dB
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$$A = 20 \log \left(\frac{S_{max}}{\sqrt{S_{max} * S_{min}}} \right)$$

Minimum	15.26	V/m
Maximum	21.32	V/m
Anisotropy	± 1.45	dB

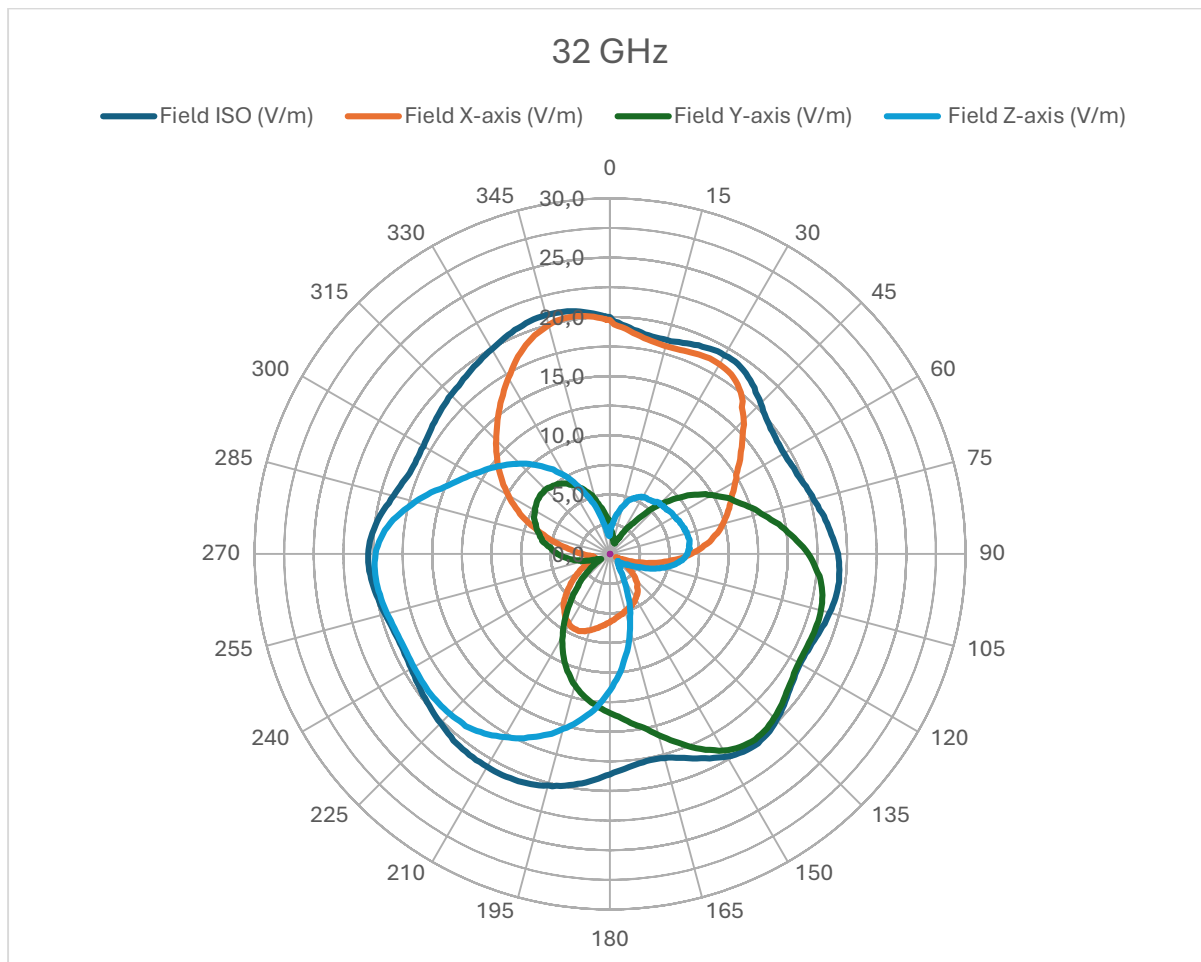


$$A = 20 \log \left(\frac{S_{max}}{\sqrt{S_{max} * S_{min}}} \right)$$

Minimum 16.46 V/m

Maximum 19.97 V/m

Anisotropy ± 0.84 dB

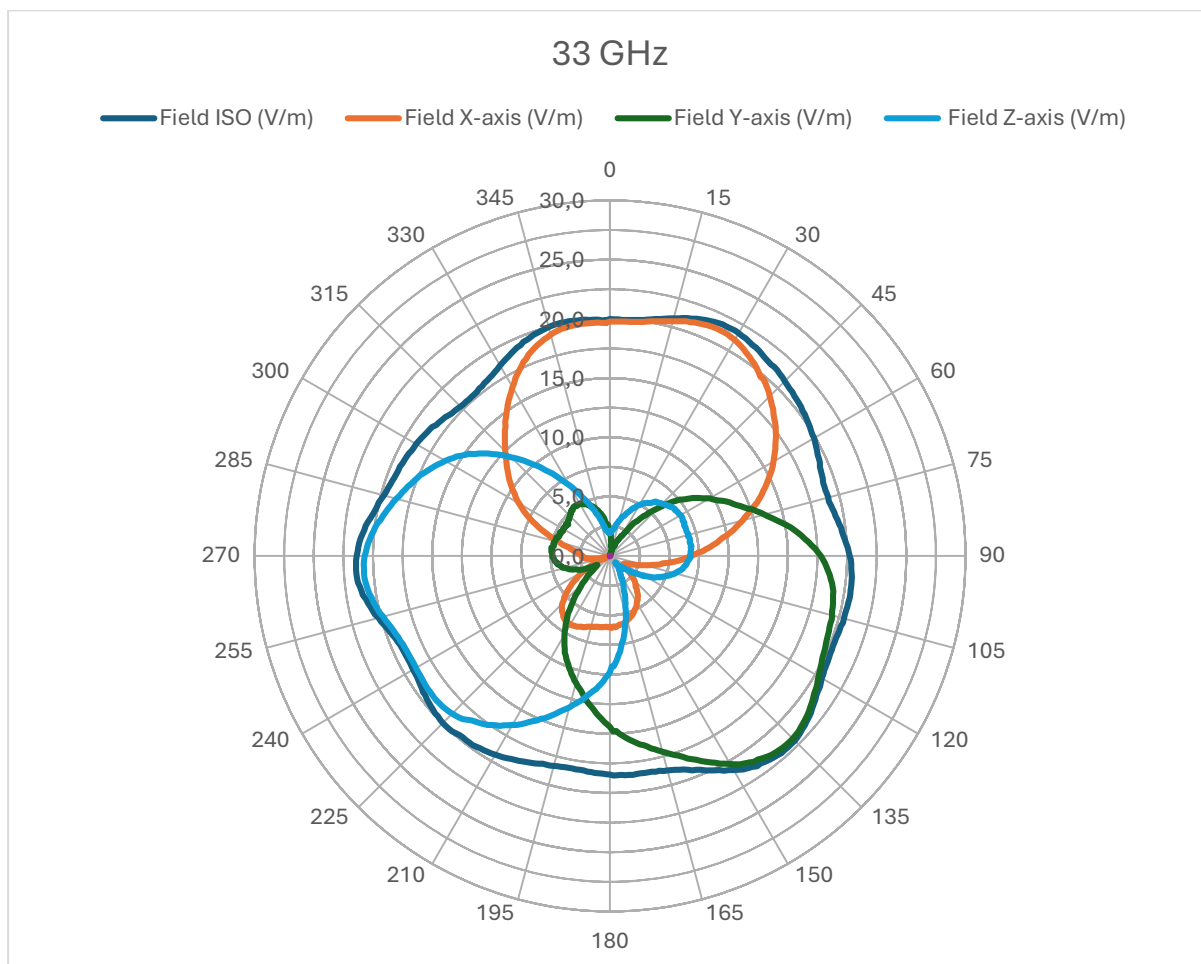


$$A = 20 \log \left(\frac{S_{max}}{\sqrt{S_{max} * S_{min}}} \right)$$

Minimum 16.96 V/m

Maximum 20.87 V/m

Anisotropy ± 0.90 dB

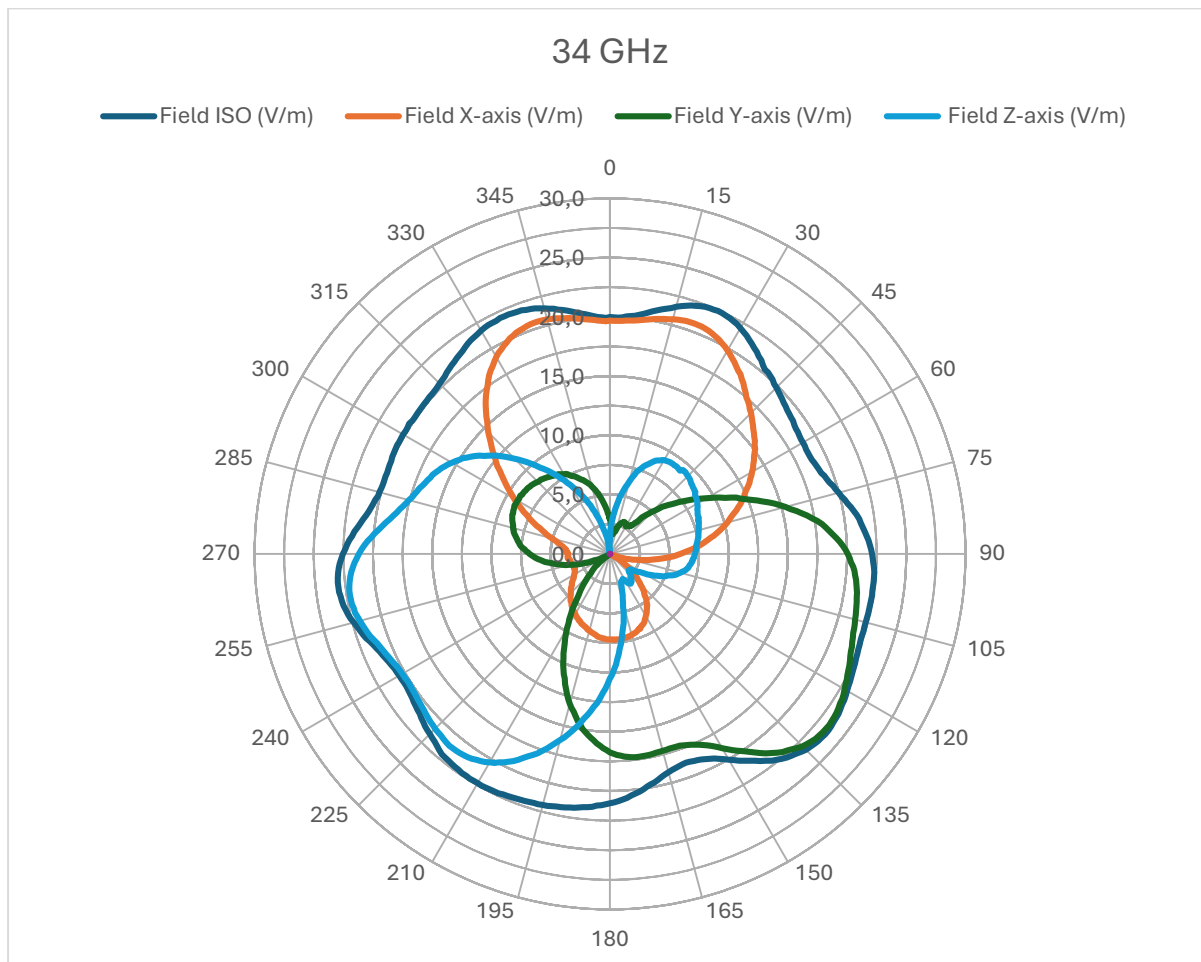


$$A = 20 \log \left(\frac{S_{max}}{\sqrt{S_{max} * S_{min}}} \right)$$

Minimum 17.78 V/m

Maximum 22.06 V/m

Anisotropy ± 0.94 dB

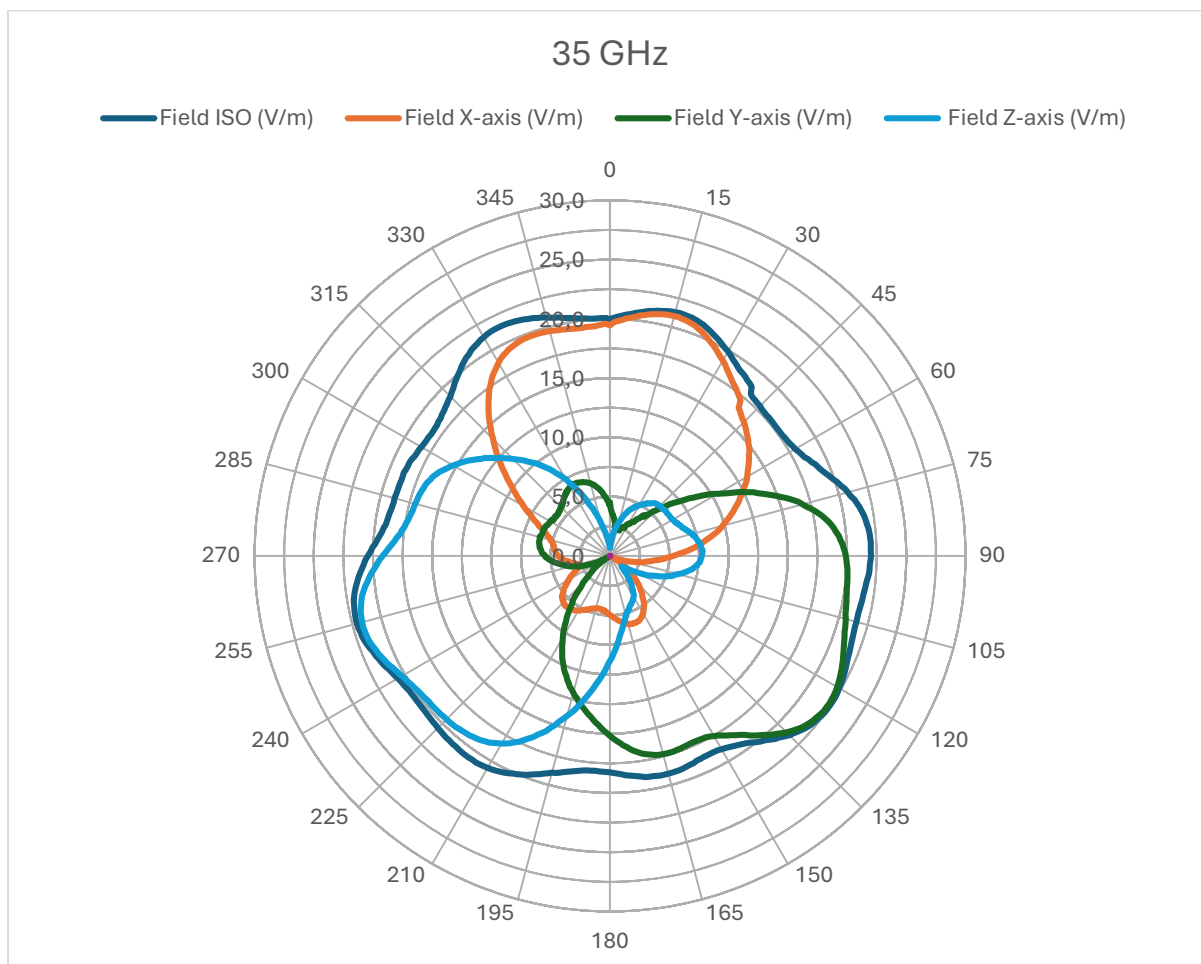


$$A = 20 \log \left(\frac{S_{max}}{\sqrt{S_{max} * S_{min}}} \right)$$

Minimum 18.75 V/m

Maximum 23.69 V/m

Anisotropy ± 1.01 dB

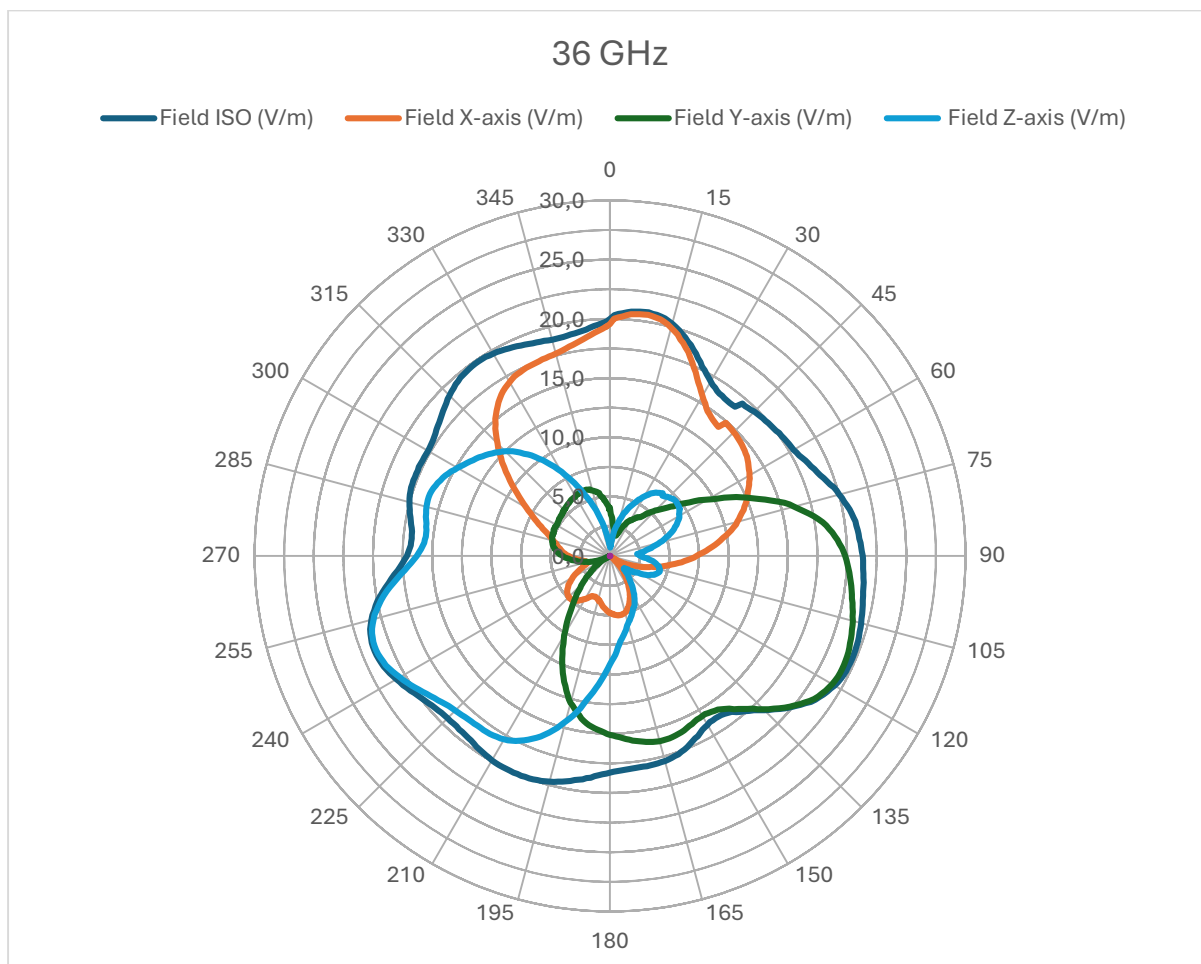


$$A = 20 \log \left(\frac{S_{max}}{\sqrt{S_{max} * S_{min}}} \right)$$

Minimum 17.74 V/m

Maximum 22.45 V/m

Anisotropy ± 1.02 dB

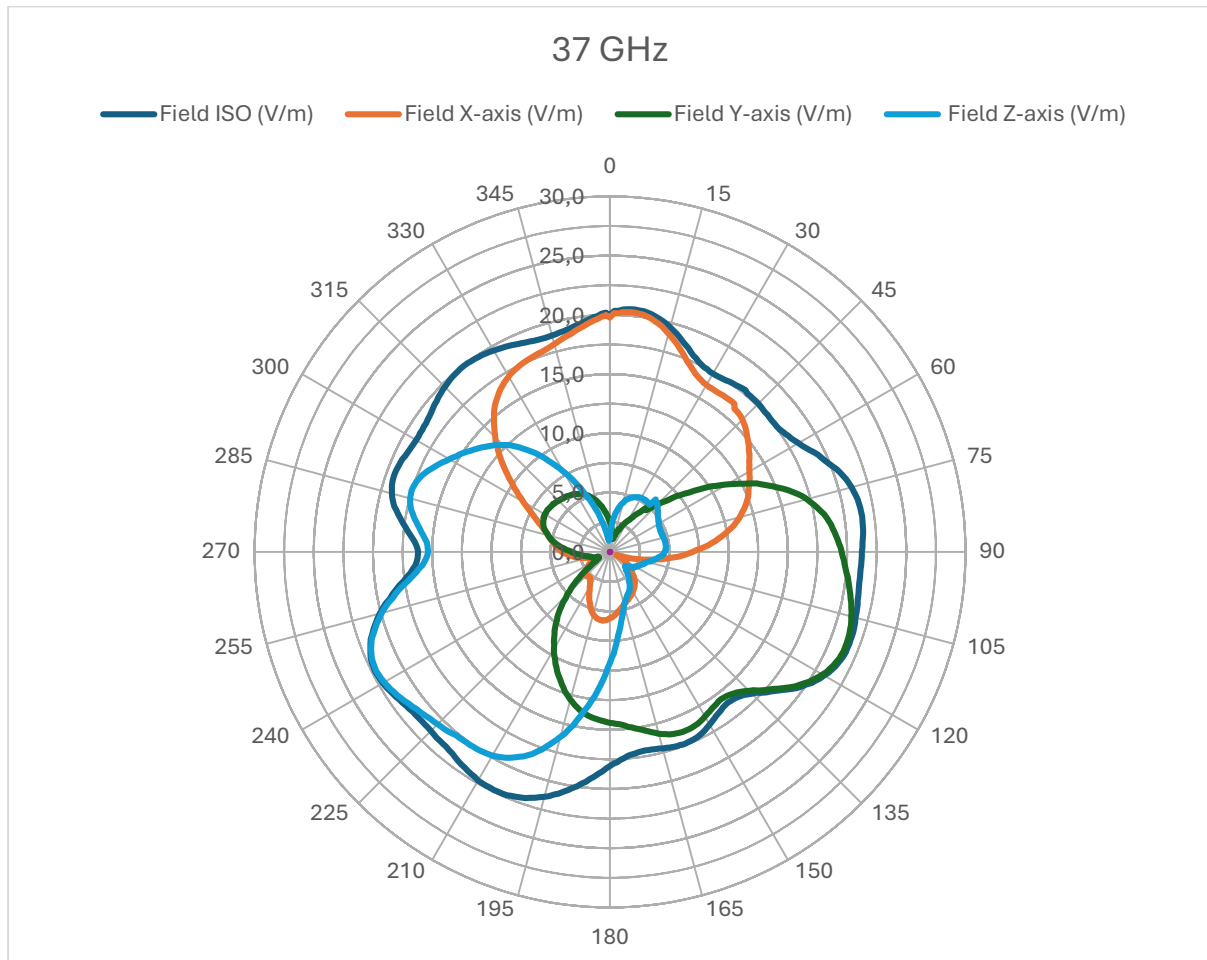


$$A = 20 \log \left(\frac{S_{max}}{\sqrt{S_{max} * S_{min}}} \right)$$

Minimum 16.34 V/m

Maximum 22.21 V/m

Anisotropy ± 1.33 dB

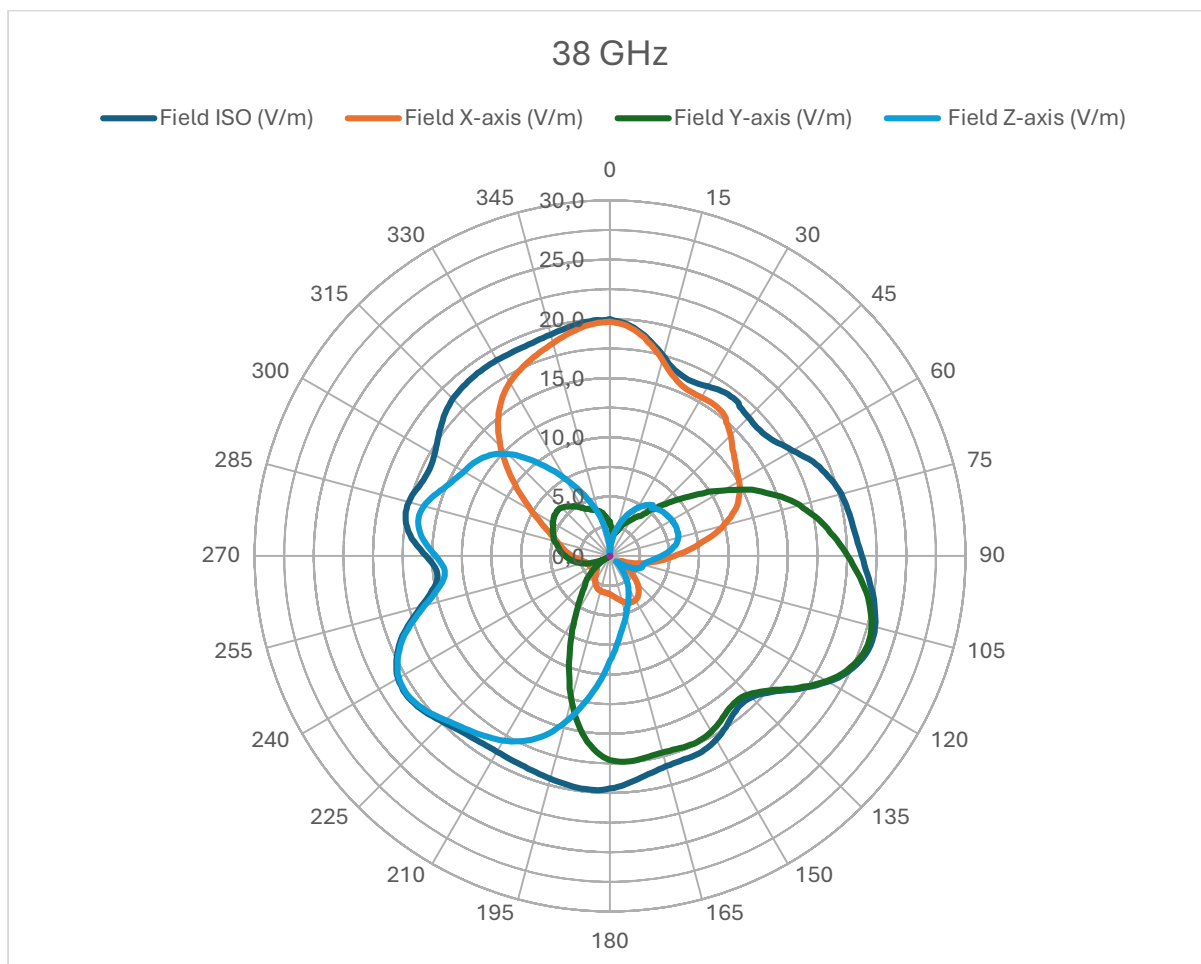


$$A = 20 \log \left(\frac{S_{max}}{\sqrt{S_{max} * S_{min}}} \right)$$

Minimum 16.15 V/m

Maximum 22.35 V/m

Anisotropy ± 1.41 dB

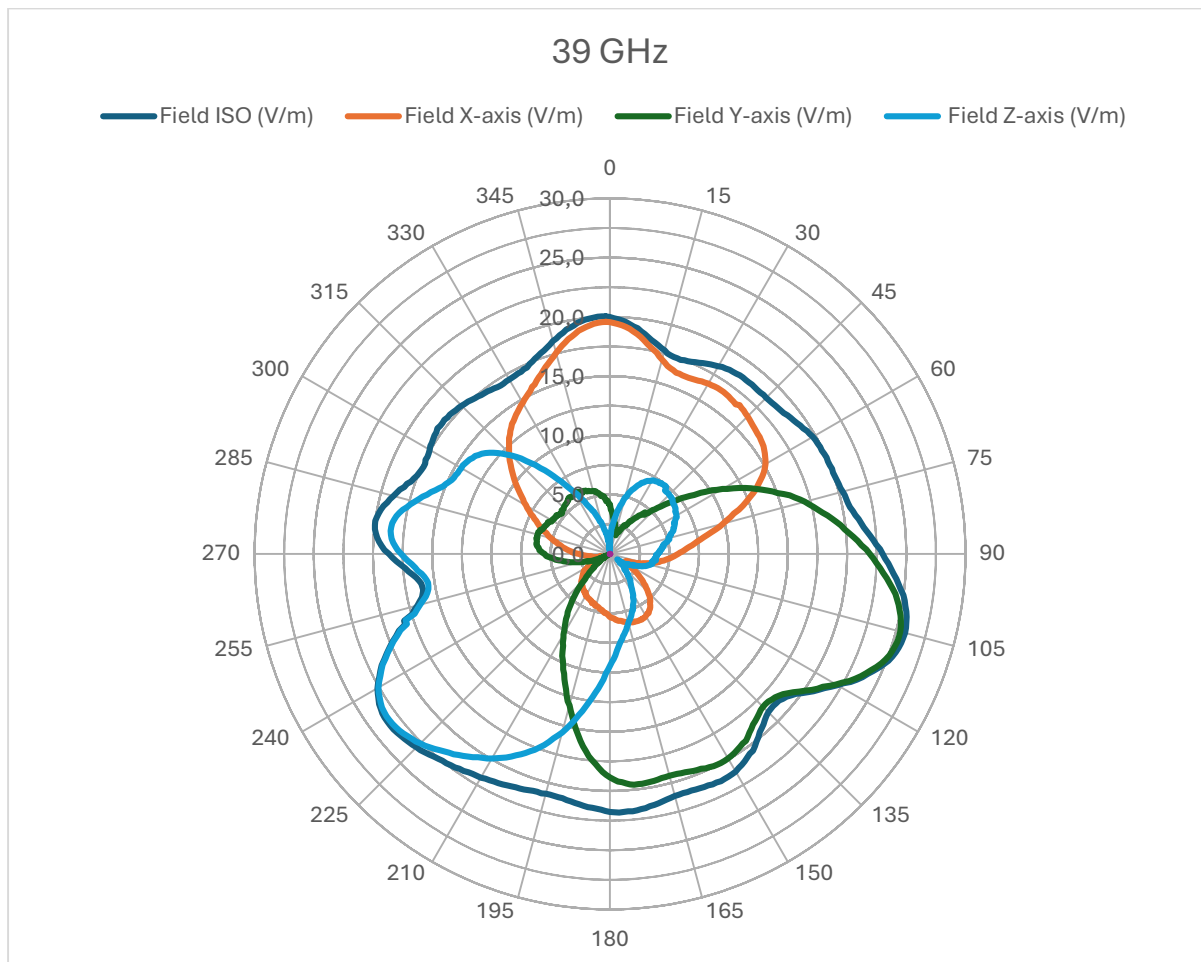


$$A = 20 \log \left(\frac{S_{max}}{\sqrt{S_{max} * S_{min}}} \right)$$

Minimum 14.65 V/m

Maximum 23.26 V/m

Anisotropy ± 2.01 dB

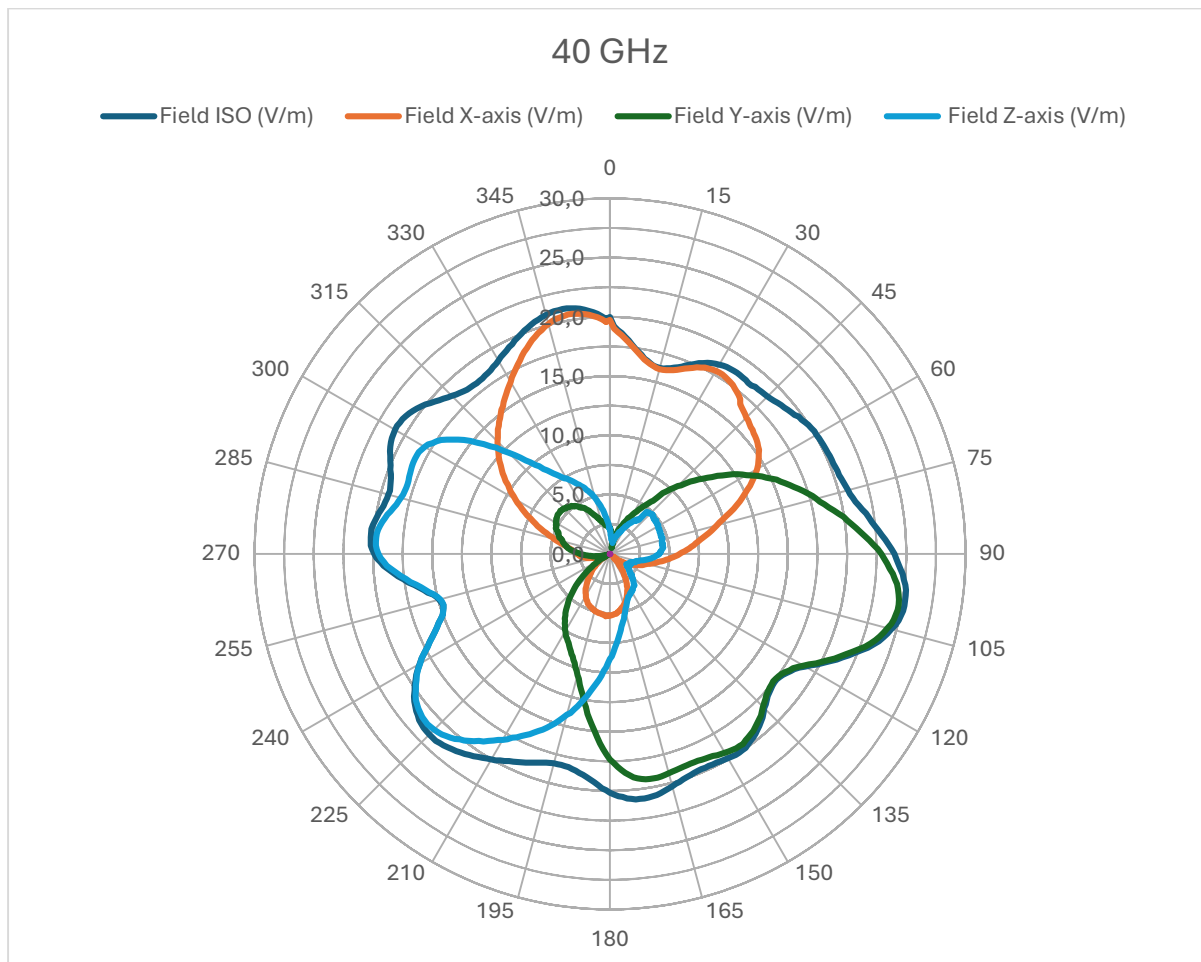


$$A = 20 \log \left(\frac{S_{max}}{\sqrt{S_{max} * S_{min}}} \right)$$

Minimum 16.06 V/m

Maximum 25.77 V/m

Anisotropy ± 2.05 dB



$$A = 20 \log \left(\frac{S_{max}}{\sqrt{S_{max} * S_{min}}} \right)$$

Minimum 14.71 V/m

Maximum 25.24 V/m

Anisotropy ± 2.34 dB