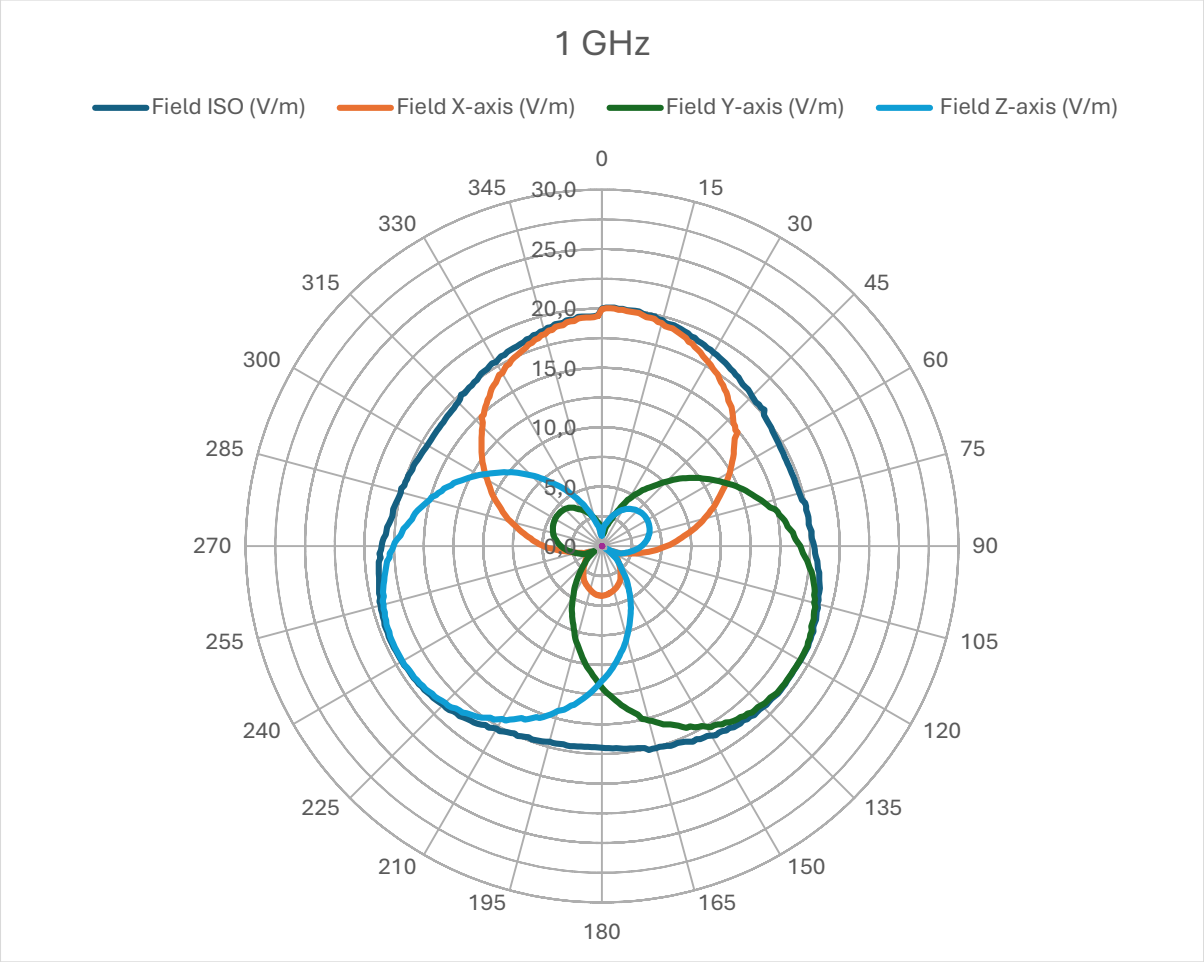
Test report

Anisotropic performance

RadiSense models RSS1006A

Issued by	Raditeq B.V. Vijzelmolenlaan 3 3447GX, Woerden The Netherlands
Product description	Electrical Field probe
Brand	Raditeq BV
Model	RSS1006A
Serial number	10I00037SNO67
Measurement date	23-08-2024
Measurement procedure	The anisotropy calibration is carried out in accordance to IEEE-std 1309 (2013). In the frequency range of 1 GHz to 6 GHz, measurements are performed in an anechoic chamber. To measure the anisotropy of the RSS1006A probe, the probe is rotated over its orhogonal 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: $A = 20\log\left(\frac{S_{max}}{\sqrt{S_{max} * S_{min}}}\right)$
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).

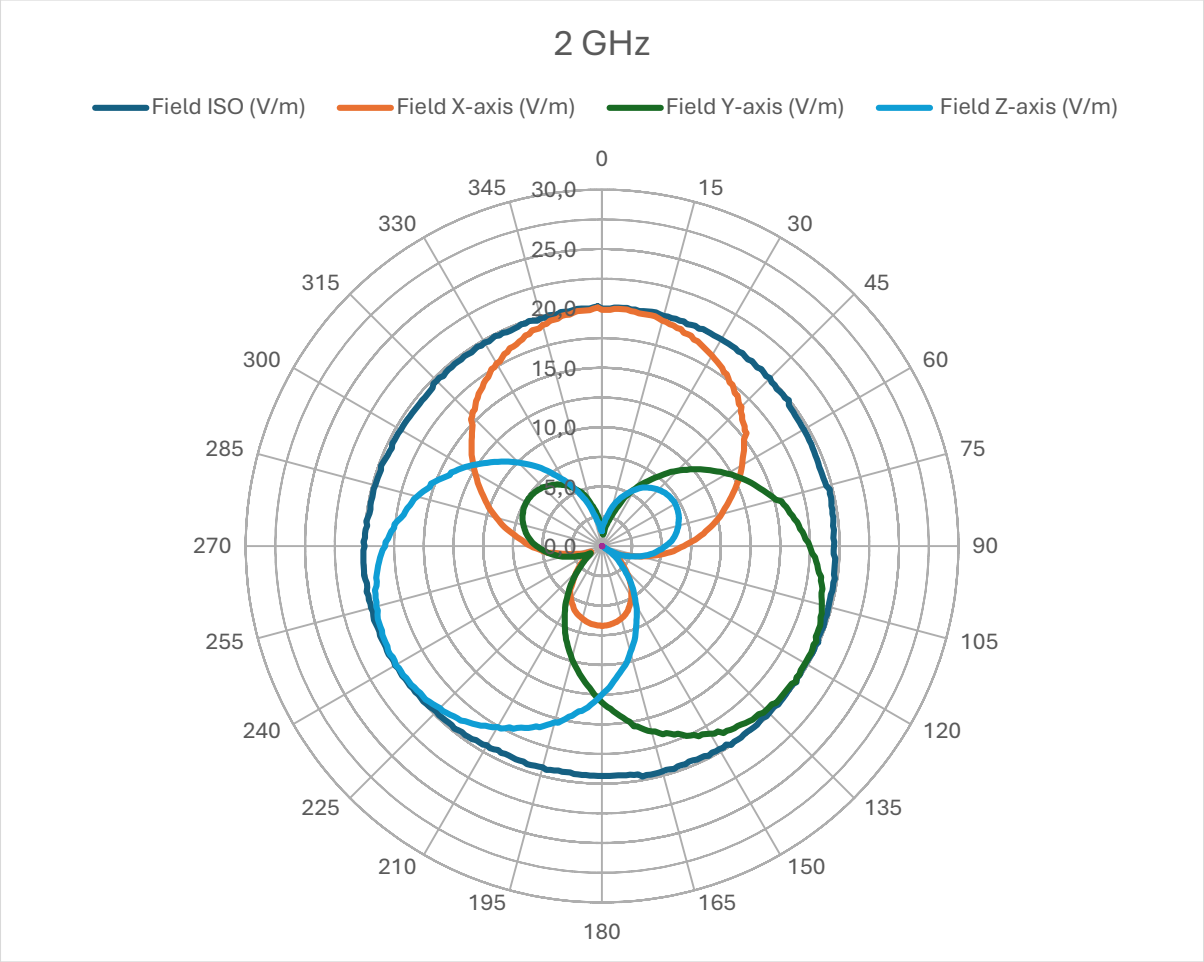
Factory Calibration



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

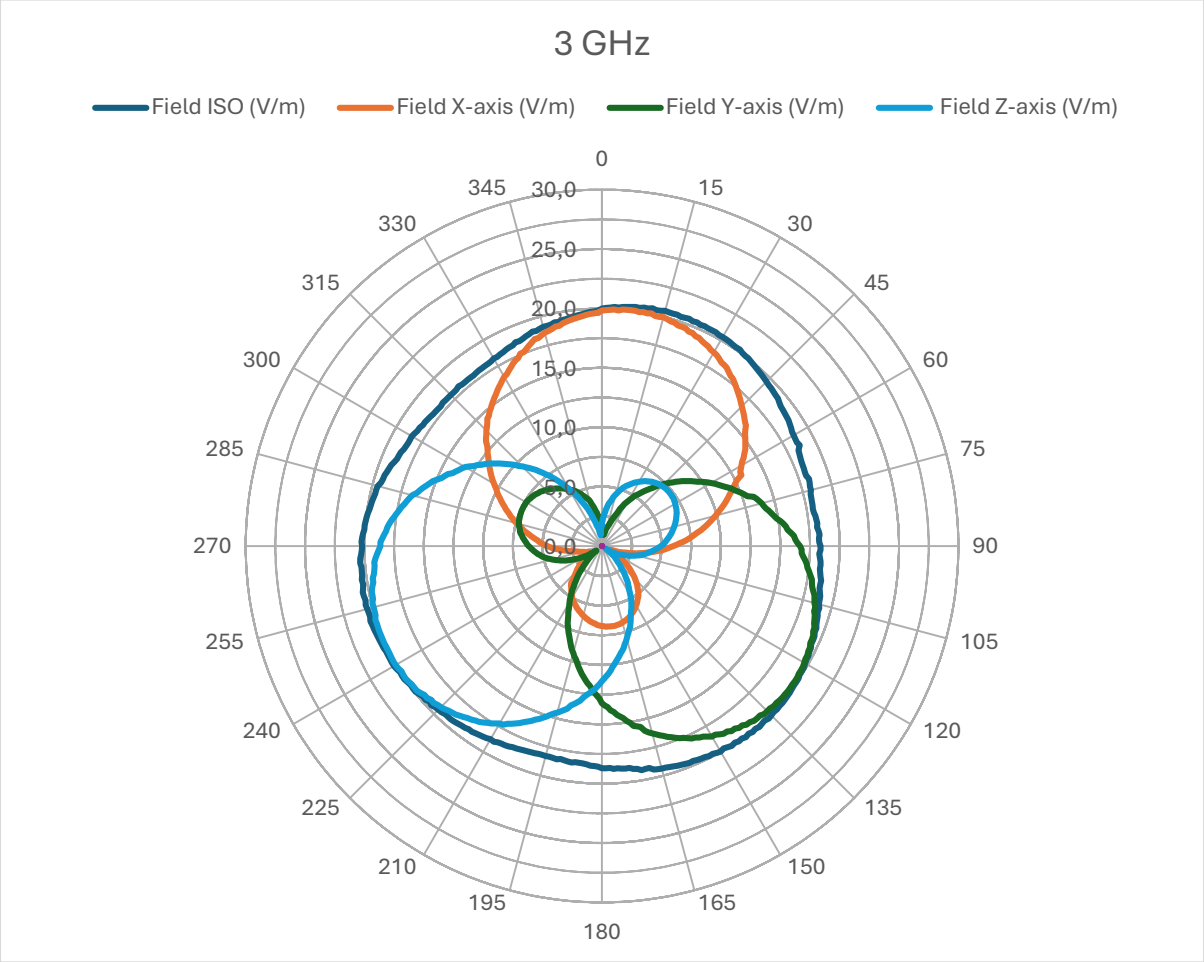
Minimum		16,94	V/m
Maximum		20,12	V/m
Anisotropy	±	0,75	dB

Factory Calibration



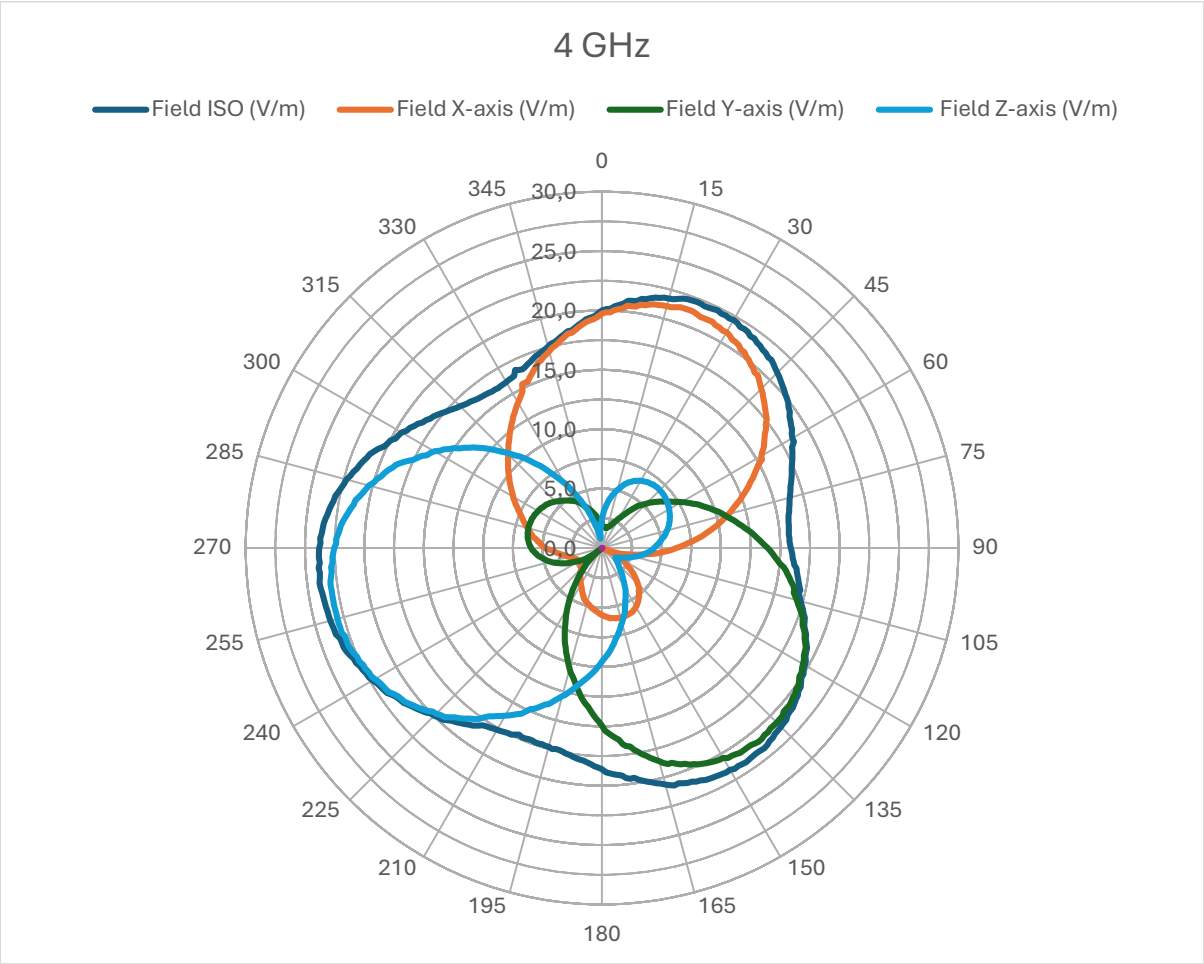
$$A = 20\log\left(\frac{S_{max}}{\sqrt{S_{max} * S_{min}}}\right)$$

Minimum		19,24	V/m
Maximum		20,21	V/m
Anisotropy	±	0,21	dB



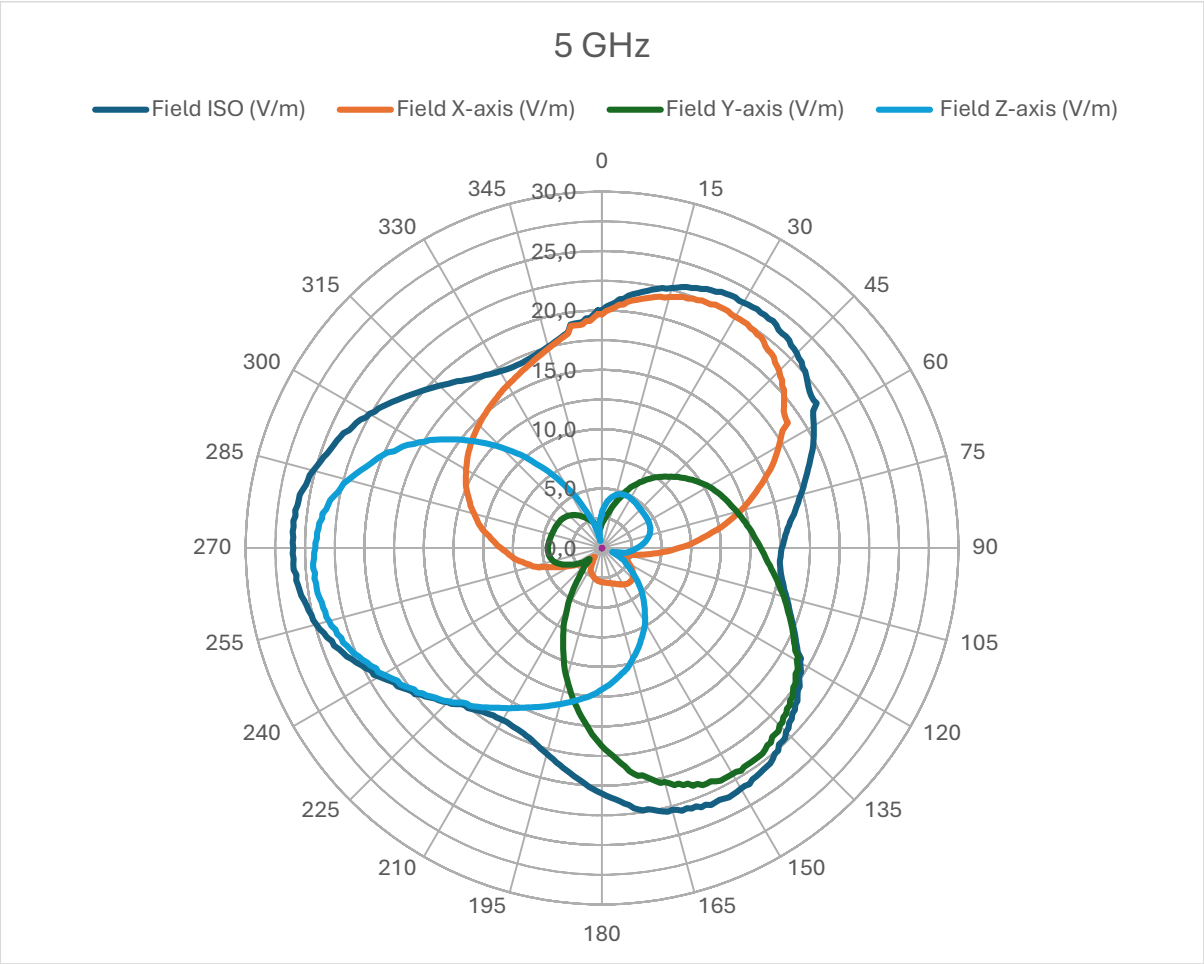
$$A = 20\log\left(\frac{S_{max}}{\sqrt{S_{max} * S_{min}}}\right)$$

Minimum		17,96	V/m
Maximum		20,52	V/m
Anisotropie	±	0,58	dB



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

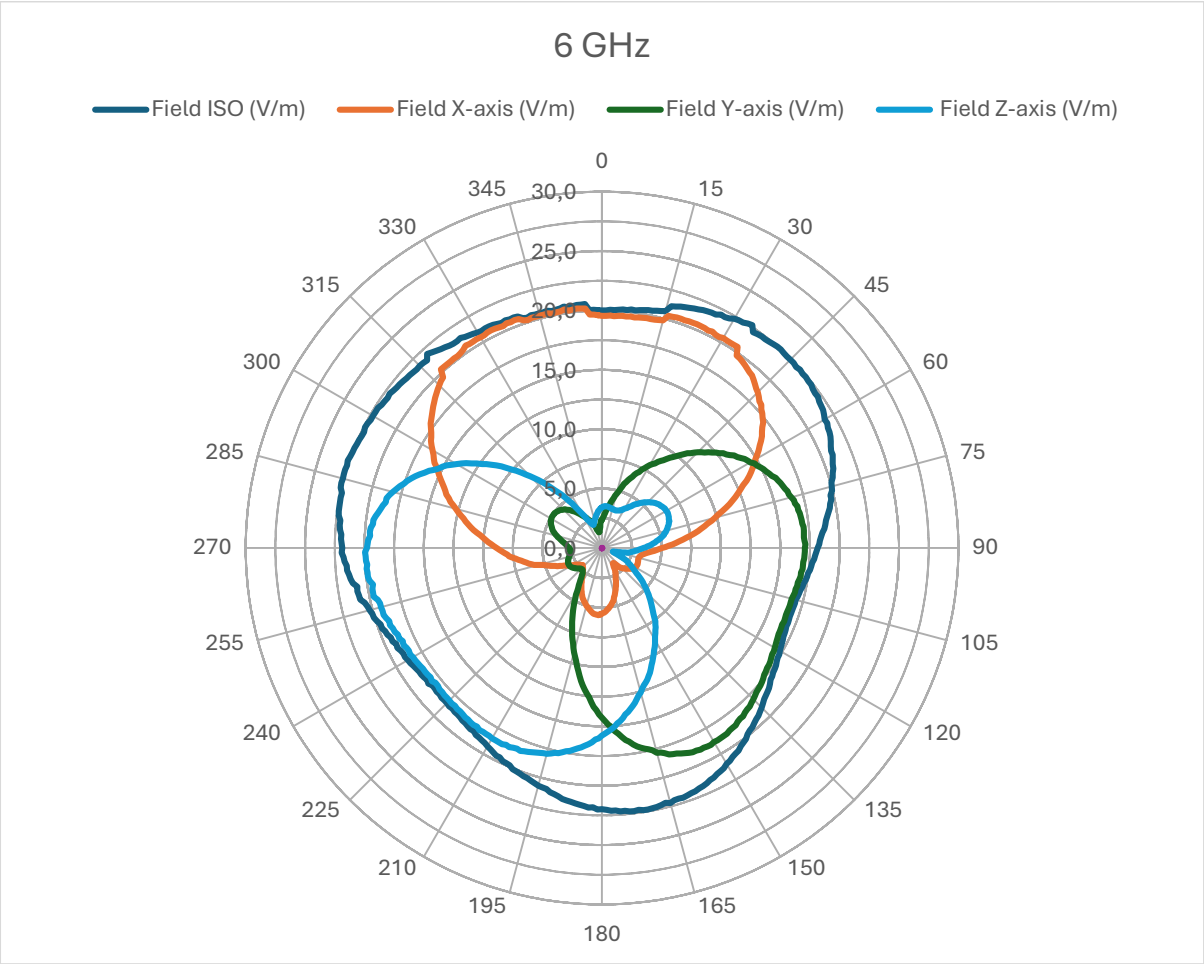
Minimum		15,78	V/m
Maximum		23,96	V/m
Anisotropy	±	1,81	dB



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

Minimum		15,01	V/m
Maximum		26,08	V/m
Anisotropy	±	2,40	dB

Factory Calibration



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

Minimum		16,82	V/m
Maximum		22,64	V/m
Anisotropy	±	1,29	dB