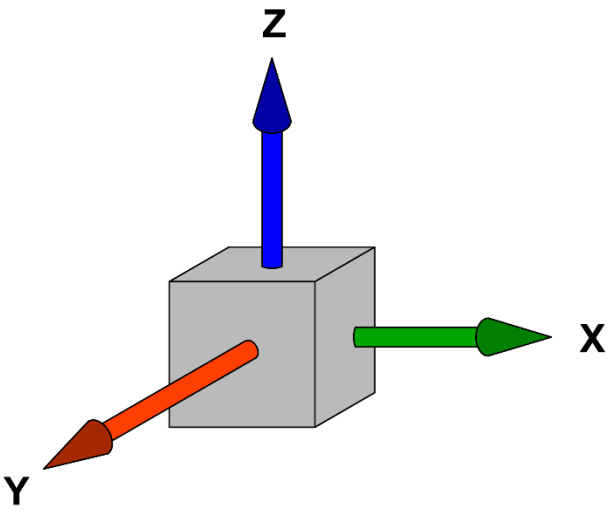
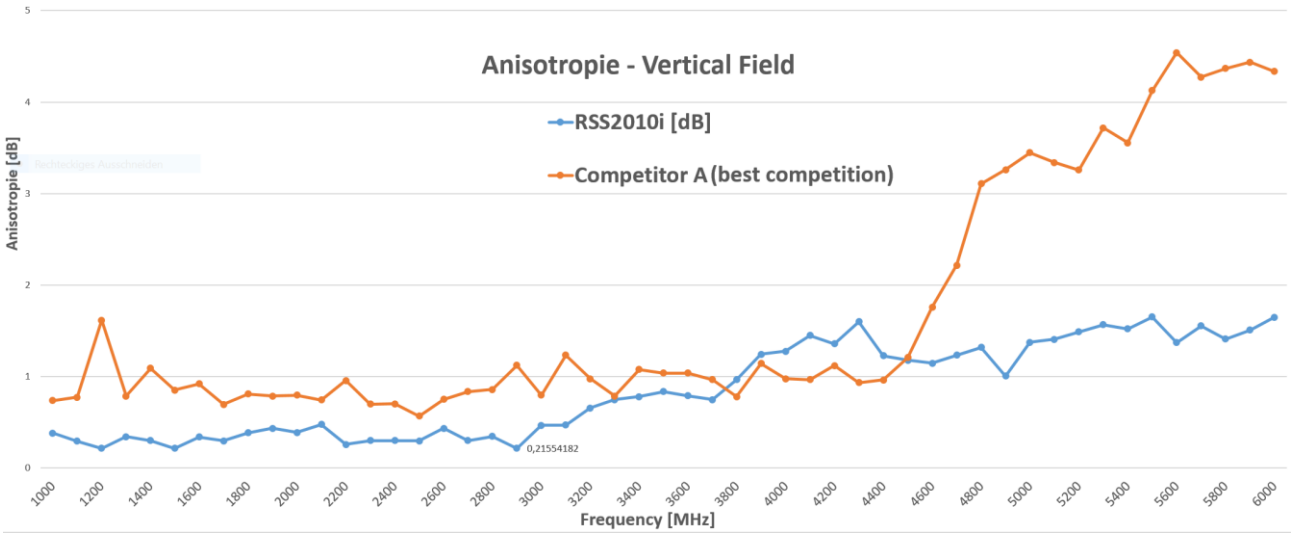
THE Field Probe for correct Measurements above 3 GHz



With traditional "half dipole field probes", precise measurements of electromagnetic fields in all directions are hardly possible above 3 GHz. The main reasons are the antenna structure and the too large housing dimensions of the previously known field probes.

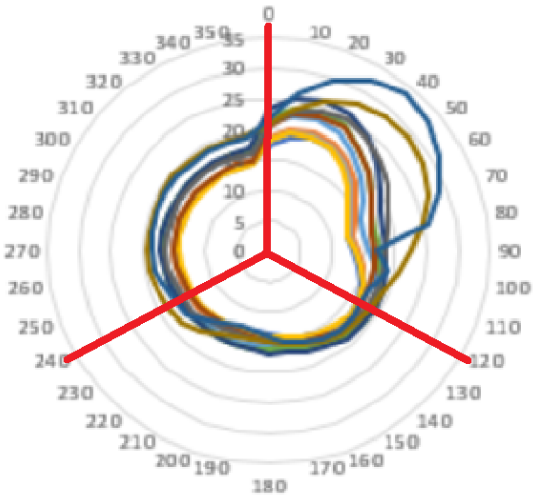
This causes measurement errors of 8 dB and more and will result in so called over testing or under testing of DUTs. Over testing of DUTs causes unnecessary high development costs, where under testing may jeopardize the certification!

This graph illustrates the extreme deviations of several field probes at measuring frequencies above 3 GHz.



For this measurement setup, a continuous field was calibrated and then measured, how large the difference between conventional field probes and the isotropically measuring **RadiSense 10** field probes will be.

A further, very significant error in the measurement results will be caused by measuring deviations of the field distribution angle (isotropical error) of usual 3-antenna field probe designs!



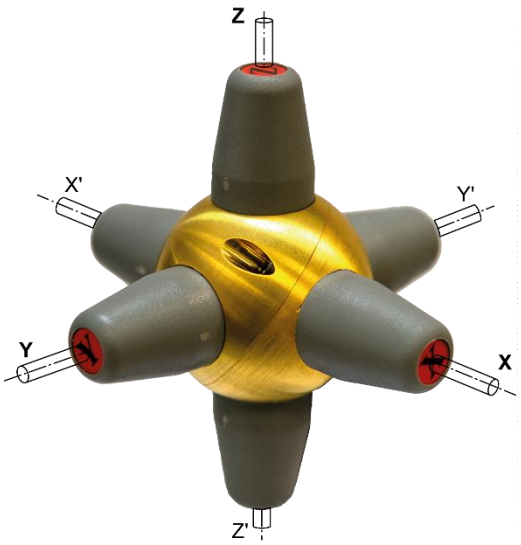
The deviation of 8 dB and more in the measurement results is caused by reflections from the test object or the anechoic chamber!

The different colours of the amplitude responses represent the measured frequencies. The higher the frequency, the higher deviations caused by reflections.

These design-related measurement errors cannot be corrected and therefore, are not taken into consideration – even at accredited calibration laboratories! According to current calibration standards these measurements only are performed ideally aligned to the X, Y and Z axis. Subsequently, the field probes appear to be much better than the results really are in reality!

THE Field Probe for correct Measurements above 3 GHz

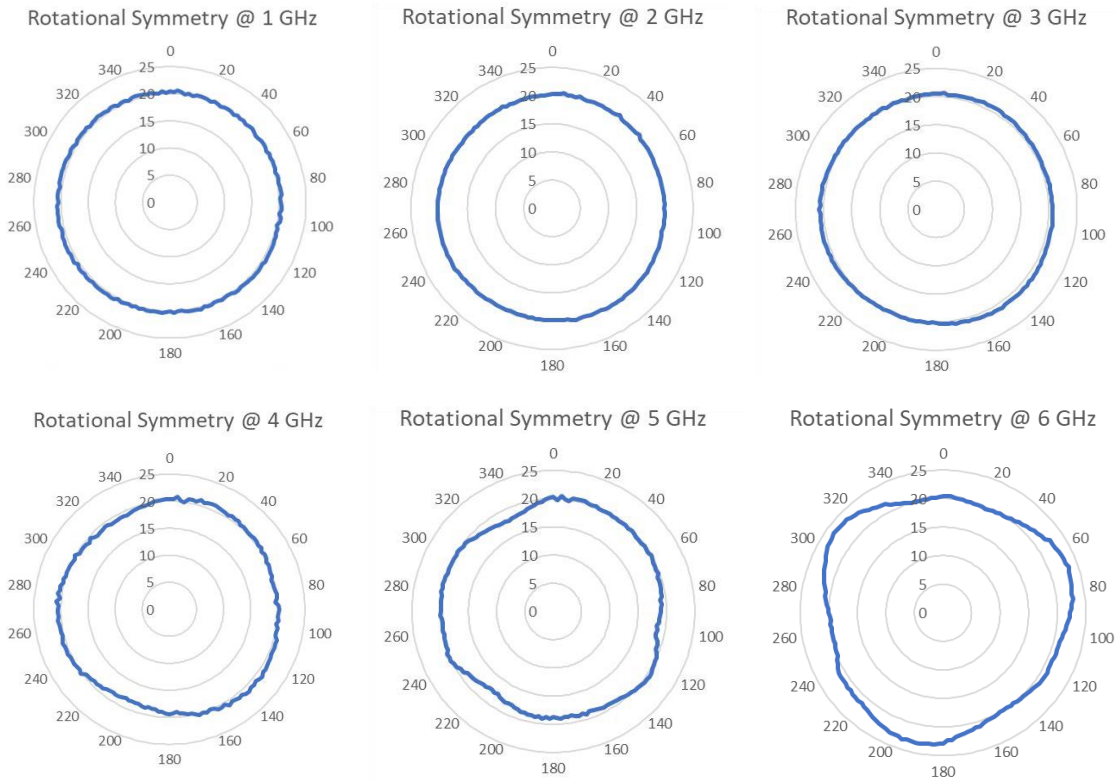
The 6-antenna design and the patented measuring algorithm developed by DARE!! set a new reference for the measurement of electric fields!

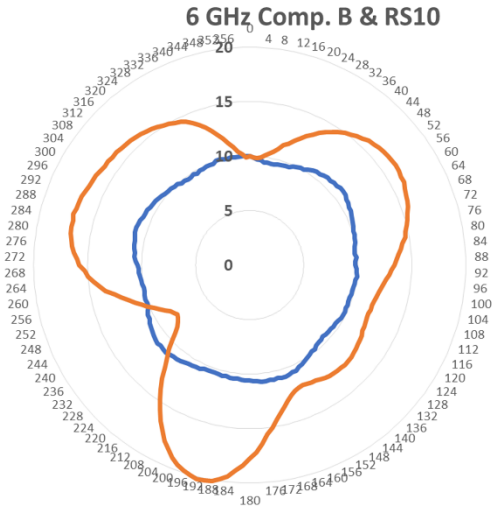


Using the **RadiSense 10** reduces the measurement error for the measured field strength from 8 dB downto only ±2.5 dB max.!

An isotropic error of the field probe cannot be corrected later – even this often is wrongly assumed by users. To improve the isotropic performance, several design details of the field probe have to be optimized up front.

The following test results of a **RadiSense 10** show impressively, that the field angle over the critical frequency range from 1 - 6 GHz, has no significant impact at all. (The graphs show the field strength in V/m depending on the probe position)





The graph on the left shows a direct comparison of a **RadiSense 10** field probe with another conventional field probe. Both field probes were tested under the same conditions (10 V / m) with fine-pitched rotation. The impressive differences in the results of the measured values speak for themselves!

You are welcome to test and prove the new **RadiSense 10** field probe. Please contact us: we are pleased to offer a personal visit for a demonstration or you may get a demo probe for your own hands-on experience.

Currently there is also an attractive Trade-In program with additional discounts if you replace your old field probe with a new **RadiSense 10** field probe!