

"We make the world a safer place."

We verify **radar technology** and help save lives.

Why every millimeter counts. How radars help make autonomous cars safer.

Current situation

43% of all accidents take place in urban areas

European objectives for traffic fatalities:

2001 54,900
2020 <16,000

46% of road traffic deaths are car accidents

Accidents are caused by:

- Human error
- Vehicle failure
- Unclear situations
- Poor road conditions

50 Typical cycle time in ms of an up-to-date long-range radar sensor

3.9 Approximate wavelength in mm of radar signals at 76.5 GHz

1972 First experiments with radar modules mounted on vehicles are carried out

8 to 12 radar sensors will be integrated into autonomous cars in the future

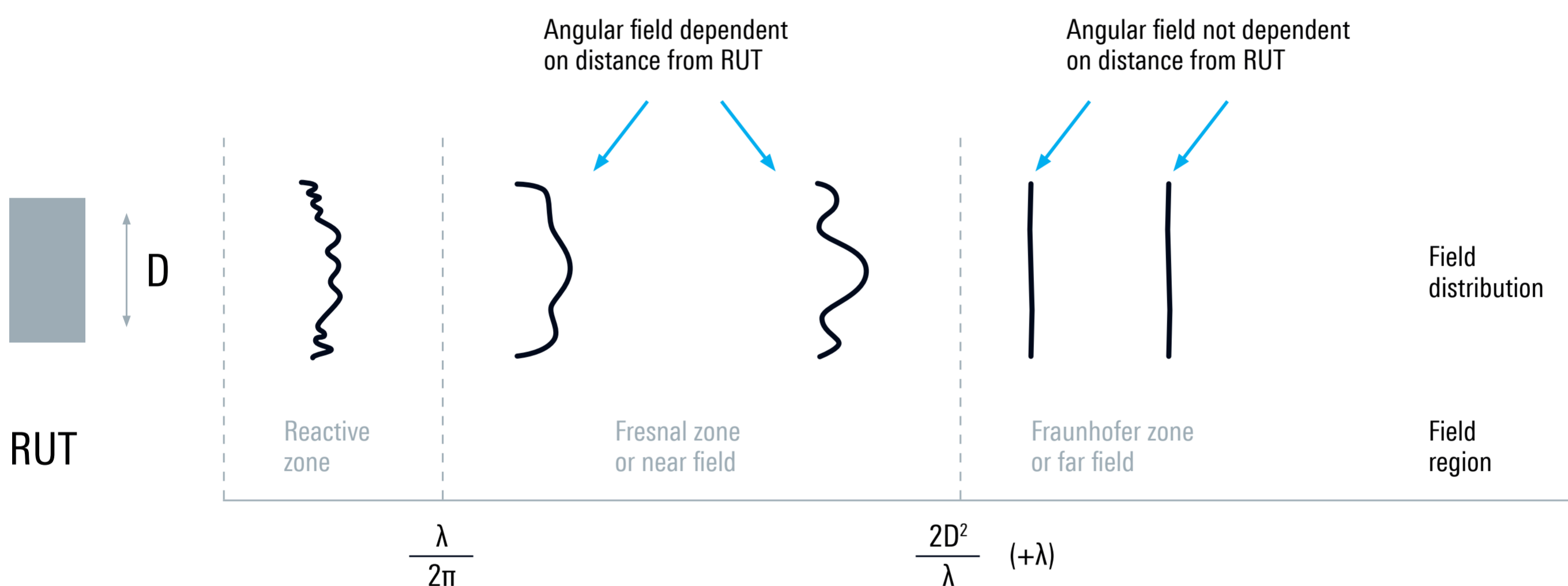
By 2023 global automotive radar market is projected to reach approx.
10 billion USD

76 to 77 GHz most common radar band for automotive applications

55 Maximum EIRP output power in dBm of automotive radar in the E-band

Technical insights (near-field/far-field considerations)

For an automotive radar with a 5 cm antenna aperture, far field starts at a distance of approximately 1.3 m.



Did you know?

Every year, **1.24 million road deaths** worldwide could be prevented.

Our vision: We make the world a safer place.

0.0 fatalities
injuries
accidents
on european roads by 2050

Our contribution – varify/test radomes for today and tomorrow

Our expertise

Started pioneering work in

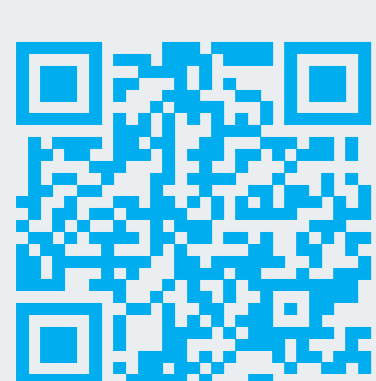
1933

300 launches a year

70 locations worldwide

More than **80** years of experience

10,500 employees worldwide



We make the world a safer place.

For more information, visit our website:

www.rohde-schwarz.com/radar