

Operational Description:

The DUT is named **RSDS**, which stands for Rear Side Detection Support.

The Device Under Test (DUT) is a 76.5 GHz vehicular radar. The device employs a dynamic chirp modulated transmit array. Multiple receive antennas are used to determine target angular resolution through digital beam forming. When installed on a vehicle, the device will operate when the vehicle is running. The nominal operating voltage is 12.0 VDC.

System Requirements

The RSDS system uses vehicle data and returns from the radar transmitter to identify targets vehicles in the host vehicle rear blind zone as well as vehicles in adjacent lanes that are quickly approaching the host vehicle. The RSDS system will also detect crossing traffic that may intercept the host vehicle while it performs a backing maneuver. The Radar measures the following parameters:

Parameter	Operational Range
Range	0.5 meters to 70 meters
Range Rate	-50 meters/sec to +10 meters/sec
Angle	150 deg field-of-view coverage
Data Update Rate	20 Hz