

Product Name:

The DUT is named **RACAM**, which stands for Radar + Camera.

Users Manual / Operational Description:

The Device Under Test (DUT) is a 76.5 GHz vehicular radar and camera. 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.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 20 cm between the radiator and your body.

Antenna Operation

Item		Specification
Frequency Band (GHz)		76.5 +/- 0.5
VSWR		=< 2.3
Polarization (deg)		Vertical (90 deg) polarization
Maximum RF Output Power		10 mW (10 dBm) (TX power delivered to antenna)
Average Gain (dBi)		Long range transmit = 22 Long range receive = 20 Mid range transmit = 16 Mid range receive = 16
Beamwidth	Azimuth (deg)	Long range transmit = 19 Long range receive = 35 Mid range transmit = 80 Mid range receive = 80
	Elevation (deg)	Long range transmit = 4.5 Long range receive = 4.5 Mid range transmit = 6 Mid range receive = 4
Operating Temperature (degC)		from -40C to +85C