

Renesas Experiment License Proposal

1. Introduction

Renesas is evaluating the automotive radar space in the 76-81GHz frequency band and would like to expand its testing into the US.

Renesas is planning to conduct 76-81 GHz band radar field testing using frequency-modulated continuous-wave radar units installed on temporary fixtures and moving vehicles to evaluate the performance of the prototype units and develop corresponding software for data processing.

The testing locations are described in section 2 of this document. The Radar units will utilize a 4 GHz bandwidth within the 76-81GHz frequency band.

2. Transmitter Information

Radar unit information such as the maximum output power and bandwidth are denoted below:

Type	Frequency (GHz)	Power			Bandwidth (GHz)	Emissions Designator
		EIRP (dBm)	EIRP (W)	ERP (W)		
Mobile	76-81	37	5.02	3.06	4	4G00F3N

Renesas will test and demonstrate up to 10 units at varying locations nationwide as described below:

Address	Latitude (North)	Longitude (West)	Radius (kilometers)	Antenna Type
34705 W. 12 Mile Road, Farmington Hills, MI 48331	42° 29' 46"	83° 23' 37"	100	Directional, Patch Array
1001 Murphy Ranch Road, Milpitas, CA 95035	37° 24' 48"	121° 55' 24"	100	Directional, Patch Array

3. Contact Information

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4. Applicant Information

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