



Form 442 file number: 0746-EX-CN-2026

New 76-81 GHz band radar experiment proposal

Vehicle-level field testing of next generation automotive radars with model name 'Alpine'

Introduction

General Motors is planning to perform field testing of next generation radar hardware (model name 'Alpine') operating within the 76-81 GHz frequency range. The radars are using frequency modulated continuous wave (FMCW) technology and are developed and provided by GM Munich GmbH (formerly Cruise Munich GmbH).

The purpose of the experiment is to collect radar data from different scenarios such as urban and highway as well as recording at different times of the day and in different weather conditions. The setup would support building a better understanding on the most optimal performance for the need of the vehicle fleet.

Note that previous experiments have been covered by experimental license 0572-EX-CN-2025, which has been requested by Cruise LLC. This license expires on 10/01/2026 and since not Cruise LLC (former subsidiary of General Motors) but General Motors is owner and operator of the proposed experiment, a new license request is placed.

Technical information

The technical information such as output power and the requested frequency range is denoted in table 1 below.

Table 1: Technical information

Model	Type	Frequency [GHz]	Peak Power			Bandwidth [GHz]	Emissions designator
			EIRP [dBm]	EIRP [W]	ERP [W]		
Alpine	Mobile	76-81	50	100	60.95	5	5G00F8N

Scope of the experiment

A maximum of 150 units is intended to be operated simultaneously under the requested experimental license in the areas listed in Table 2.

Table 2: Test areas

#	Address	Latitude	Longitude	Radius
1	1201 Bryant St, San Francisco, CA 94103	37° 46' 9.084" N	122° 24' 38.844" W	350 km
2	3300 General Motors Road, Milford, MI 48380	42° 34' 34.608" N	83° 39' 53.712" W	350 km
3	4520 Copper Sage Las Vegas, NV 89115	36° 12' 56.88" N	115° 4' 1.559" W	350 km
4	6969 Ardmore St, Houston, TX 77054	29° 41' 49.65" N	95° 22' 41.444" W	350 km
5	16650 Midway Ranch Rd, Fountain, CO 80817	38° 35' 11.351" N	104° 40' 21.1" W	350 km
6	2589 Consulate Dr, Orlando, FL 32819	28° 25' 49.944" N	81° 24' 27.198" W	450 km
7	3449 N Anchor Street, Portland, OR 97217	45° 33' 36.372' N	122° 42' 12.764" W	350 km

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Stop buzzer contact information

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