

Satellite Ground Testing

Boeing Proprietary

The Boeing Company

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by:

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Why an Experimental License is Necessary

An experimental license is required to support ground testing of production satellite systems at the Boeing facility, located in El Segundo, CA.

Test Description

The purpose of this experiment is to test/verify proper operation of production satellite equipment. The experiment will involve use of a production satellite transmitter, which will be ground tested inside of the Boeing satellite test facility, located in El Segundo, CA. The test set-up will use a Left-Hand Circularly Polarized Cup Dipole antenna, and will be conducted from inside the Boeing test facility building. The antenna is dual circularly polarized, and has a maximum gain of approximately 11 dBi. An environmental assessment is included as a separate exhibit. The specific test parameters are listed in Table (1).

Test Parameters	
Frequency Band	1525 – 1559 MHz
Emissions	1K00N0N (CW) 34M0XXN (White Noise) 2M50G1D 1M25G1D
Antenna Type	Left-hand Circularly Polarized Cup Dipole
Maximum Antenna Gain	11 dBi
Transmitter Peak Power	700 Watts
ERP	5374 Watts

Table 1

Frequencies, Power and Emission

Frequency	Emissions	RF Power (ERP)	Station Class	Tolerance
1525 – 1559 MHz	1K00N0N (CW) 34M0XXN (White Noise) 2M50G1D 1M25G1D	5374 Watts	FX	0.001

Schedule for Development Work

The experiment will be conducted over a two year period.

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Location

Boeing Facility, El Segundo, CA
Inside Satellite Test Facility Building
Coordinates: 33-55-45 N 118-23-17 W NAD83

Stop Buzzer Contact Information

The "Stop Buzzer" point of contact:

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