

Exhibit No. 01

Frequency (A)	(B)	Power (C)	(D)	Emission (E)	Modulating Signal (F)	Necessary Bandwidth (G)
80 kHz	2kW	2kW	MEAN	A0	N/A	N/A
111 kHz	2kW	2kW	MEAN	A0	N/A	N/A
130 kHz	2kW	2kW	MEAN	A0	N/A	N/A
160 kHz	2kW	2kW	MEAN	A0	N/A	N/A
+200 kHz	2kW	2kW	MEAN	A0	N/A	N/A
+250 kHz	2kW	2kW	MEAN	A0	N/A	N/A
+326 kHz	2kW	2kW	MEAN	A0	N/A	N/A
+400 kHz	2kW	2kW	MEAN	A0	N/A	N/A
520 kHz	2kW	2kW	MEAN	A0	N/A	N/A
640 kHz	2kW	2kW	MEAN	A0	N/A	N/A
810 kHz	2kW	2kW	MEAN	A0	N/A	N/A
1.0 MHz	2kW	2kW	MEAN	A0	N/A	N/A
1.3 MHz	2kW	2kW	MEAN	A0	N/A	N/A
1.995 MHz	2kW	2kW	MEAN	A0	N/A	N/A
2.6 MHz	2kW	2kW	MEAN	A0	N/A	N/A
3.2 MHz	2kW	2kW	MEAN	A0	N/A	N/A

Exhibit No. 01 (continued)

Frequency (A)	(B)	Power (C)	(D)	Emission (E)	Modulating Signal (F)	Necessary Bandwidth (G)
4.06 MHz	2kW	2kW	MEAN	A0	N/A	N/A
5.1 MHz	2kW	2kW	MEAN	A0	N/A	N/A
+6.525 MHz	2kW	2kW	MEAN	A0	N/A	N/A
8.1 MHz	2kW	2kW	MEAN	A0	N/A	N/A
10.1 MHz	2kW	2kW	MEAN	A0	N/A	N/A
13.560 MHz	2kW	2kW	MEAN	A0	N/A	N/A
16.000 MHz	2kW	2kW	MEAN	A0	N/A	N/A
20.02 MHz	2kW	2kW	MEAN	A0	N/A	N/A
27.120 MHz	2kW	2kW	MEAN	A0	N/A	N/A
33.3 MHz	2kW	2kW	MEAN	A0	N/A	N/A
40.680 MHz	2kW	2kW	MEAN	A0	N/A	N/A
52 MHz	2kW	2kW	MEAN	A0	N/A	N/A
65 MHz	2kW	2kW	MEAN	A0	N/A	N/A
81 MHz	2kW	2kW	MEAN	A0	N/A	N/A
+108 MHz	2kW	2kW	MEAN	A0	N/A	N/A

Exhibit No. 01 (continued)

Frequency (A)	(B)	Power (C)	(D)	Emission (E)	Modulating Signal (F)	Necessary Bandwidth (G)
† 130 MHz	2kW	2kW	MEAN	A0	N/A	N/A
160 MHz	2kW	2kW	MEAN	A0	N/A	N/A
209 MHz	0.5kW	15.8kW	MEAN	A0	N/A	N/A
260 MHz	0.5kW	15.8kW	MEAN	A0	N/A	N/A
327 MHz	0.5kW	15.8kW	MEAN	A0	N/A	N/A
415 MHz	0.5kW	15.8kW	MEAN	A0	N/A	N/A
523 MHz	0.5kW	15.8kW	MEAN	A0	N/A	N/A
661 MHz	0.5kW	15.8kW	MEAN	A0	N/A	N/A
830 MHz	0.5kW	15.8kW	MEAN	A0	N/A	N/A
915 MHz	0.5kW	15.8kW	MEAN	A0	N/A	N/A
1.29 GHz	.2kW	6.32kW	MEAN	A0	N/A	N/A
1.86 GHz	.2kW	6.32kW	MEAN	A0	N/A	N/A
2.1 GHz	.2kW	6.32kW	MEAN	A0	N/A	N/A
2.45 GHz	.2kW	6.32kW	MEAN	A0	N/A	N/A
3.29 GHz	.2kW	6.32kW	MEAN	A0	N/A	N/A
4.30 GHz	.2kW	6.32kW	MEAN	A0	N/A	N/A

Exhibit No. 01 (continued)

Frequency (A)	(B)	Power (C)	(D)	Emission (E)	Modulating Signal (F)	Necessary Bandwidth (G)
5.800 GHz	.2kW	6.32kW	MEAN	A0	N/A	N/A
6.6 GHz	.2kW	6.32kW	MEAN	A0	N/A	N/A
8.5 GHz	.2kW	6.32kW	MEAN	A0	N/A	N/A
10.495 GHz	.2kW	6.32kW	MEAN	A0	N/A	N/A
13.22 GHz	.2kW	6.32kW	MEAN	A0	N/A	N/A
18 GHz	.2kW	6.32kW	MEAN	A0	N/A	N/A

Exhibit 02

Antenna Type: Modified Beverage Antenna
Frequency Range: 10 kHz - 1.6 MHz
Width of Beam in Degrees at the Half-Power Point: 187.1
Orientation: Horizontally Polarized
Power Gain: 1

Antenna Type: 3 Meter Whip (Transformer coupled)
Frequency Range: 1.6 - 10 MHz
Width of Beam in Degrees at the Half-Power Point: 187.1
Orientation: Vertically Polarized
Power Gain: 1

Antenna Type: 2 Meter Whip (Transformer coupled or Base loaded)
Frequency Range: 10 -25 MHz
Width of Beam in Degrees at the Half-Power Point: 187.1
Orientation: Vertically Polarized
Power Gain: 1

Antenna Type: High Power Biconical Dipole
Frequency Range: 25 -200 MHz
Width of Beam in Degrees at the Half-Power Point: 187.1
Orientation: Used both Vertically and Horizontally Polarized
Power Gain: 1

Antenna Type: Ridged Waveguide Horn or Log Periodic Array
Frequency Range: 200 MHz - 1 GHz
Width of Beam in Degrees at the Half-Power Point: 40.77
Orientation: Used both Vertically and Horizontally Polarized
Power Gain: 31.6

Antenna Type: Ridged Waveguide Horn
Frequency Range: 1 GHz - 8 GHz
Width of Beam in Degrees at the Half-Power Point: 40.77
Orientation: Used both Vertically and Horizontally Polarized
Power Gain: 31.6

Antenna Type: Rectangular Waveguide Horn
Frequency Range: 8 GHz - 18 GHz
Width of Beam in Degrees at the Half-Power Point: 40.77
Orientation: Used both Vertically and Horizontally Polarized
Power Gain: 31.6

NOTE: The higher frequency antenna (200 MHz. and above) which tend to have narrower beams of radiation may need to be mounted at elevations and angles that will maximize their radiation through windows or other openings. This may be needed for adequate tests of cluster or dash-mounted electronics.

Exhibit 03

The proposed program of experimentation is designed to ensure electromagnetic compatibility (EMC) in electronic control systems used for automotive applications. Testing techniques will be conducted on complete systems (whole-vehicles) since components systems, which may not be susceptible to electromagnetic interference (EMI) when tested by themselves, may be susceptible when installed as part of a larger or whole-vehicle system. Open-field testing will provide both a reference and perturbation-free environment in which actual operating conditions of the equipment under test (EUT) can be simulated.

The method of testing will consist of irradiating the EUT at a selected frequency and monitoring the system for susceptibility. The time of irradiation will be limited to several minutes in duration, but of sufficient time to insure the credibility of the testing.

The test site will consist of the existing open area test site located at Southwest Research Institute (SWRI). A description of this site is on file with the FCC under the September 1982 report "Description of Measurement Facility" prepared for the FCC Laboratory Division, P.O. Box 40 Laurel, Maryland 20810. A copy of this report is included.

Exhibit 04

Experimentation is done on a contractual basis and is subject to the needs and fluctuation of the EMI/EMC testing market. The experimental license is needed on a continuing basis to be able to respond in a timely fashion to project requirements. The length of the proposed EMI/EMC testing will be greater than two years.