RF Energy Exposure Assessment Record

Product or Equipment Name: ISU Model No. 9505 w/AD510 antennas Date: 11/26/02

05/12/03 Rev. A

Product/Equipment Sponsor: John Rice Phone: (703) 465-1032

Sector/Group/Division: Iridium LLC M/D:

Location of Product/Equipment: Hayden – USC#2

1. RF Emitting Product or Equipment Description

Manufacturer: Motorola – 9505; SSD – AD510

Model: 9505 w/AD510 antennas Serial Number: AD510-1 S/N 17; AD510-10 S/N 11

Antenna Bar Code: N/A

Describe the product or equipment, the environment(s) where it is used, and information about operators and others who might be exposed to its emitted RF energy.

The AD510-10 active antenna with 30 m of RG213U cable and AD510-30 Regulator.

The AD510-1 passive antenna with 30 m of RG213U and 3 m of Gore 65474 cable

Frequencies of Operation (MHz): 1616 – 1626.5 MHz

Maximum Output Power Level (Watts): 0.6 W (avg); 7 W (peak)

Modulation Characteristics: DEQPSK

If pulsed; Pulse duration: 8.2 ms Pulse repetition frequency (PRF): 11.1 pps

Duty cycle: Approx. 9%

Antenna description: AD510-10 active RHCP Dipole antenna; AD510-1 Passive RHCP Dipole Antenna

Antenna gain: 8 dBi (both antennae)

Failure Modes

Are there credible failure modes in the product or equipment (hardware, software) or operations (controls, procedures, human error) that could cause the average output power to increase above the normal operating level?

Yes _____ No X

If Yes, describe the failure mode, probability of occurrence of the failure, and the expected level of output power.

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Note: Rev. A changes corrected MPE limits only. No other changes were made.

2. Maximum Permissible Levels

Levels based on 47 CFR 1.1310, Table 1 requirements, unless otherwise specified.

Frequency (MHz) 1621.0208	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Plane Wave Equiv. Power Density (S) (mW/cm^2)	Induced Current (mA) Both Feet/ One Foot	Contact Current (mA)	SAR (W/kg)
Controlled Environment:	N/A	N/A	5.0	N/A	N/A	N/A
Uncontrolled Environment:	N/A	N/A	1.0	N/A	N/A	N/A

Testing Required: S.A.R. ____ M.P.E. _X__ (Check all that apply.)
If S.A.R. is required indicate: E.M.C. to perform test ____ Outside Lab to perform test ____

3. Measurement Results

Applicable Document: Radio Frequency (RF) Energy Exposure Test Procedure, Rev G.

Frequency (MHz) 1621.0208	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Plane Wave Equiv. Power Density (S) (mW/cm^2)	Induced Current (mA) Both Feet/ One Foot	Contact Current (mA)	SAR (W/kg)
AD510-1 Measured levels:	N/A	N/A	0.20	N/A	N/A	N/A
AD510-10 Measured levels:	N/A	N/A	0.05	N/A	N/A	N/A

Note: Above measurements are the worst-case (highest) levels obtained for each antenna. See attached drawings for detailed measurements for each antenna type. All measurements were taken at a distance of 20 cm.

Is the Maximum Permissible Exposure Level for an uncontrolled environment exceeded?

Yes _____ No **X** If Yes, complete section 5.

Is the Maximum Permissible Exposure Level for a controlled environment exceeded?

Yes _____ No **X** If Yes, complete section 5.

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4. RF Energy Measurement Equipment

Manufacturer	Description	Model	Asset No.	Date of Last Cal.	Cal. Due Date
Narda	Electromagnetic Survey Meter	8718B	G58802	10/23/02	10/31/03
Narda	Probe, Isotropic, E-field	8741	G52451	09/17/02	09/30/03
Narda	Probe, Isotropic, E-Field	8721	G43368	04/04/02	04/30/03

Measurements performed by: Steve Gooding Date: 5/12/03

Measurements reviewed by: Gil Estrella Date: 5/12/03

5. Required Hazard Controls

Fully describe all hazard controls to be implemented. Provide drawings and other attachments, as necessary, to describe Restricted Access Areas.

No constraints required for the present configuration and intended state of use.

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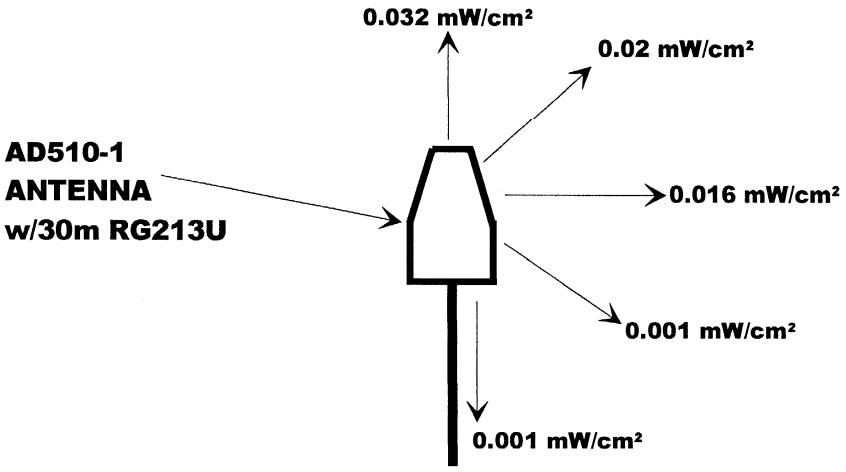
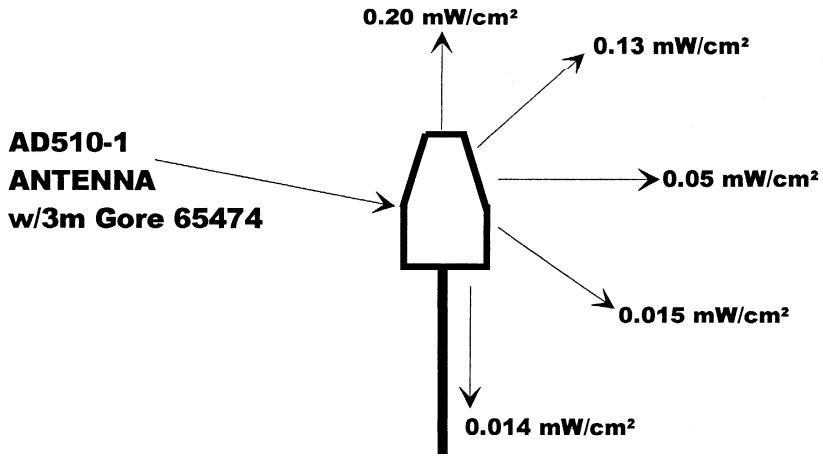
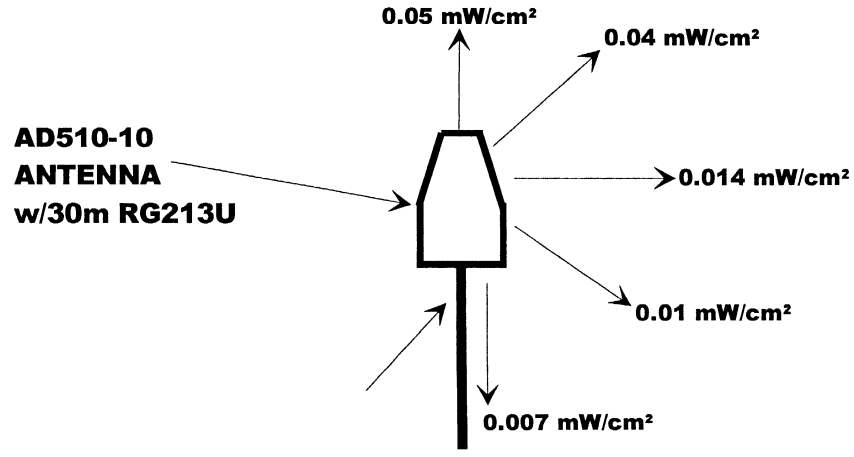


NOTE: All measurements taken at a distance of 20cm.



NOTE: All measurements taken at a distance of 20cm.



NOTE: All measurements taken at a distance of 20cm.