

## **LIST OF EXHIBITS**

EXHIBIT A	User Manual
EXHIBIT B:	Schematic Diagram(s) Block Diagram(s)
EXHIBIT C:	Modifications to EUT to Meet EMI Requirements
EXHIBIT D:	Photographs of EUT and FCC ID Label
EXHIBIT E:	Emissions Test Report

## **EXHIBIT A:**

**User Manual: separate electronic exhibit**

**EXHIBIT B:**

**Schematic Diagram(s)**

**Block Diagram(s)**

**-separate electronic exhibits**

## **EXHIBIT C:**

### **Modifications to EUT to Meet EMI Requirements**

**[x] None                    [ ] Description attached**

## **EXHIBIT D:**

### **Photographs of EUT and FCC ID Label**

**- separate electronic submissions**

## **EXHIBIT E:**

### **Emissions Test Report**

## EMISSIONS TEST REPORT FOR A LOW POWER TRANSMITTER

### I. GENERAL INFORMATION

Requirement: Federal Communications Commission (FCC)  
Certification under FCC Rule Part 15  
(Technical Requirements: 15.205, 15.209)

Applicant: Keri Systems Inc.  
130 Old Oakland Road, Suite 100  
San Jose, CA 95112

Product ID: FCC ID: N42KERI1000

### II. DESCRIPTION OF EQUIPMENT UNDER TEST (EUT)

The Keri Systems P500 is a tag reader employing a low level, 125 kHz RF magnetic field to activate a microchip embedded in a small plastic tag.. The activated chip transmits a unique pre-coded identification (ID) number back to the receiver. The receiver decodes and converts the ID number to a predetermined output format (RS-232, WIEGAND, ETC.). The formatted code is sent to a host terminal through an external cable.

The EUT is DC powered only and exempt from the AC line conducted requirements of 15.207.

### III. TEST LOCATION

All emissions tests were performed at:

Compliance Consulting Services  
1366 Bordeaux Avenue  
Sunnyvale, CA 94086

CCS is a NVLAP accredited test facility with 3 open air test sites (OATS). Three meter and 10 meter site attenuation data and test site descriptions are on file with the FCC.

Radiated emissions testing was performed on a large open grassy area located between two of the sites. The open area extends for more than 200 meters.

### IV. TEST PROCEDURES AND RESULTS

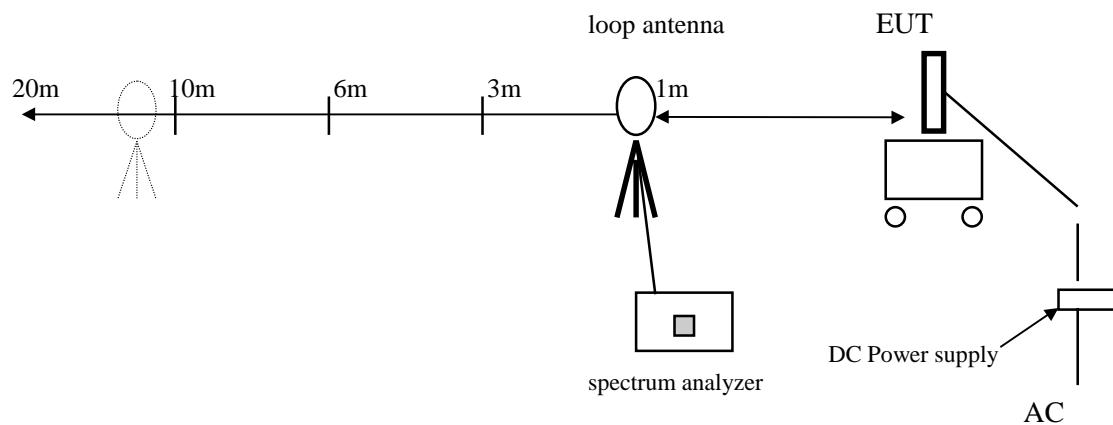
#### Radiated Emissions (15.209 intentional radiator):

Radiated emissions measurements were performed at several intermediate distances less than 300 m. Data points so obtained were plotted on semilog graph paper, and a best-fit straight line was extended to the 300 m mark of the graph, and the extrapolated emissions level was compared to the limit for each frequency. Data was taken up to 30 MHz.

For each test location:

1. The EUT was placed on a plastic cart approximately 90 cm above ground level. An RF tag was placed in the field of the EUT to verify proper EUT operation. The tag was left in place for the duration of the test. Refer to Figure 1 for test set-up.
2. The EUT was rotated, raised, and lowered in order to maximize received emissions. Maximum received emissions were achieved when the EUT loop antenna was in the same plane and at the same height as the receiving active loop antenna.
3. The reading for each frequency of emission was recorded and plotted on semilog graph paper.

**Figure 1. Radiated Emissions Test Set-up**



## Test Results

PASS. See attached spread sheet and extrapolated data graph.

## Conducted Emissions:

NOT APPLICABLE - DC OPERATION ONLY

## Radiated Emissions (15.109 unintentional radiator):

The KERI 1000 was placed on a turntable at 3m distance from the measuring antenna on an open field test site. Radiated emissions were performed according to ANSI C63.4.

Test results indicated EUT meets the emission requirements for a class A digital device. A class A verification report has been prepared and forwarded to Keri Systems under separate cover.

## Equipment Used to Perform Tests

Description	Manufacturer	Model	S/N
Analyzer	HP	8568	3207A01294
Pre-amplifier (15.109)	HP	8447D	2944A06550

Active Loop Antenna

EMCO

6502

9202-2722

**V. CERTIFICATION OF DATA**

All radiated and conducted measurements, for both intentional and unintentional radiator portion of the EUT, were performed, or were witnessed and supervised, by the undersigned. To the best of his knowledge and belief, test equipment calibrations, test procedures, and test data were accurate and as reported here.

T.N. COKENIAS  
Agent for Keri Systems Inc.

7 September 1998

**TABLE 1: Radiated Emissions****Test Date: 24 August 1998**

**Company:** Keri Systems Inc.  
**Model:** P500 (2" x 4" coil)

**FCC ID:** **N42KERI1000**

<b>F(kHz)</b>	<b>Dist. (ft)</b>	<b>Reading, dBuV</b>	<b>AF, dB</b>	<b>Amp, dB</b>	<b>Total,dBuV/m</b>
125	3	93.2	51	-25	119.2
	6	80.1	51	-25	106.1
	10	64.5	51	-25	90.5
	15	54.7	51	-25	80.7
	20	47.0	51	-25	73.0

