

# **Worldwide Regulatory Approvals Experts**

(A2LA Certificate Number 1627-01)

### **Technical Report**

Company: Escort, Inc. FRN: 0007508732 Model: Passport 8500

FCC ID: QKL8500

**Equipment Code: CRD** 

Report prepared for:

Escort, Inc. 5440 West Chester Road West Chester, OH 45069 Phone: (513)-870-8535 FAX: (513)-870-8523 Report prepared by: Evan D. Gould Curtis-Straus LLC 527 Great Road

Phone: (978)-486-8880 FAX: (978)-486-8828

**EMC Manager** 

#### Introduction

This report is an application for Certification of a Radar Detector operating pursuant to 47 CFR 15.109, as amended by ET Docket No. 01-278; FCC 02-211, published in the Federal Register Vol. 67, No. 145 on Monday July 29, 2002.

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### **Statement of Conformity**

47 CFR 15.109(h) states that "Radar detectors shall comply with the emissions limits...of [section 15.109(a)] over the frequency range of 11.7 - 12.2 GHz." The applicable limit being  $500\mu V/m$  measured at a distance of 3m. The Escort Passport 8500 has been tested and found to comply with this requirement.

# Test Methodology

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Radiated emission testing was performed according to the procedures in ANSI C63.4 (2001). The testing was performed at an antenna to EUT distance of 1 meter. Performance was investigated in the range 11.7-12.2GHz. The Passport 8500 was powered by a R.O.C. SPN4025A 12VDC 400mA power supply. Since the device is a hand-held unit, the emissions were maximized around the three orthogonal axes and the maximum reading was recorded. The integrated antenna cannot be maximized separately.

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### **Test Equipment**

SPECTRUM ANALYZERS								
X	Analyzer Model N		Company	Serial No.	<b>Calibration Due</b>			
X	ORANGE 9kHz-26.5GHz	E4407B	HP	US39440975	07-JUN-2003			

OPEN AREA TEST SITES (OATS)								
X	Site	Site FCC Code		VCCI Code	<b>Calibration Due</b>			
X	<b>"T"</b> Texas	93448	IC 2762-T	R-905/ C-480	04-FEB-2004			

A	ANTENNAS							
X	Antenna Model No		Company Serial No.		<b>Calibration Due</b>			
X	BLACK Horn: 1-18GHz	3115	EMCO	9703-5148	12-JUN-2003			

PREAMPLIFIERS / ATTENUATORS								
X	Preamplifier Model No.		Company	Serial No.	<b>Calibration Due</b>			
X	ORANGE-BLACK 1-20GHz	SMC-12A	MITEQ	690639	06-SEP-2002			

Unless otherwise noted the calibration interval is one year. All equipment is calibrated using standards traceable to NIST or other nationally recognized calibration standard. All Open Area Test Sites are located at 527 Great Road, Littleton, MA 01460.

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### Setup Photo



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#### **Measurement Results**

All measurements taken were peak detector readings of the noise floor. There were no emissions detected from the EUTs.

Radiated Emissions Table Curtis-Straus LLC										
Date: 08-Aug-02				Company:	Company: Escort			Table 1		
Engineer: Evan Gould				EUT Desc:	EUT Desc: various radar detector models			Work Order: C0610		
Frequency Range: 11.7-12.2GHz Measurement Distance: 1 m										
Notes: Emissions maximized Horizontally and Vertically.  All measurements are noise floor readings.										
Antenna			Preamp	Antenna	Cable	Adjusted	47 CFR 15.209(a)			
Polarization	Frequency	Reading	Factor	Factor	Factor	Reading	Limit	Margin	Result	
(H / V)	(MHz)	(dBµV)	(dB)	(dB/m)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	(Pass/Fail)	
8500 S7B	12040.0	32.1	20.2	38.9	4.7	55.5	63.5	-8.0	Pass	
8500 S7V	11821.0	32.2	20.2	38.9	4.7	55.6	63.5	-7.9	Pass	
Test Sites:	Test Sites: "T" Pre-Amp: Or-Blk				3m Microflex	Analyzer:	Orange	Antennas:	Black Horn	

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### **Sample Emission Plot**

