Project 13461-10

Prepared for: Traxxas LLP 1100 Klein Road Plano, TX 75074

By

Professional Testing (EMI), Inc. 1601 N. A.W. Grimes Blvd., Suite B Round Rock, Texas 78665

April 6, 2012

MPE / RF Exposure Report Drag Timing System Stage End FCC ID: XVE-SA11201

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Applicant:Traxxas LLPApplicant's Address:1100 Klein Road<br/>Plano, Texas 75074FCC ID:XVE-SA11201Project Number:13461-10Test Dates:March 9, 2012

I, Jesse Banda, for Professional Testing (EMI), Inc., being familiar with the FCC rules and test procedures have reviewed the test setup, measured data and this report. I believe them to be true and accurate.

Jesse Borda

Jesse Banda EMC Engineer

This report has been reviewed and accepted by Traxxas LLP. The undersigned is responsible for ensuring that this device will continue to comply with the FCC rules.

Traxxas LLP, Representative

# 1.0 MPE Prediction

Prediction of MPE limit at a given distance was made by using equation from page 18 of OET Bulletin 65, Edition 97-01.

### **1.1 Evaluation Procedure**

 $S=PG/4\pi R^2$ 

or

## $S = EIRP/4\pi R^2$

Where: S = power density

P= power input to antenna

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

 $\mathbf{R}$  = distance to the center of radiation of the antenna

EIRP = Equivalent (or effective) isotropcially radiated power

# 1.2 Antenna Gain

The Antenna gain is 7.64 dBi

### 1.3 Evaluation Criteria

MPE limit for uncontrolled exposure at prediction frequency (mW/cm<sup>2</sup>): 1.0

Frequency (MHz)	EIRP	Waiver Limit (60/f(GHz))	Minimum Exposure Distance	RF Field Density	MPE Limit	Result
	(mW)	(mW)	(cm)	(mW/cm <sup>2</sup> )	(mW/cm²)	(P/F)
2406	41.591	24.94	20	8.27E-03	1.00	PASS
2426	40.551	24.73	20	8.07E-03	1.00	PASS
2453	34.514	24.46	20	6.87E-03	1.00	PASS

**MPE Prediction Calculation** 

# Calculations

2406 MHz:	S=EIRP/ $4\pi R^2$ = 41.591mW/(4* $\pi$ *20cm*20cm) = 0.00827mW/cm <sup>2</sup>
2426 MHz:	S=EIRP/ $4\pi R^2 = 40.551 mW/(4*\pi * 20 cm * 20 cm) = 0.00807 mW/cm^2$
2453 MHz:	S=EIRP/ $4\pi R^2$ = 34.514mW/(4* $\pi$ *20cm*20cm) = 0.00687mW/cm <sup>2</sup>