



Report No.: 1910-071EA-259

Revision: N/C

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## Radar Sensor Calibration Verification Certificate of Calibration

**Model: RRS24F-ST3**

**Part Number / Serial Number:**

**590-112/62334**

**Ex. 590-XXX / 6XXXX**

**Description:**

**Radar Characteristics Validation**

**In compliance with:**

**RRS24F-ST3 Radar Sensor Calibration Verification Procedure Documentation (5030-0150)**

**Date of Issue: October 9, 2023**

**Owner of EUT:**

**Verra Mobility  
1150 N. Alma School Rd  
Mesa, AZ 85201**

**Attention of:**

**Engineering Department  
Phone: (480) 443-7000**

<b>Test Facility</b>	
Test Laboratory	Keystone Compliance, LLC
Address	131 North Columbus Innerbelt
City, State, Zip Code	New Castle, PA 16101
Phone	(724) 657-9940
Email	emcteam@keystonecompliance.com
Web Site	www.keystonecompliance.com

<b>Test Personnel</b>	
Name	Camren Morgan
Title	EMC Test Engineer
Signature	

Radar Sensor Calibration Verification  
 Certificate of Calibration

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The frequency measurements performed and recorded within this report demonstrate that the JENOPTIK RR24F-ST3 radar has an accuracy of less than or equal to 0.62 mph in the range of 6.21 mph to 62.14 mph and an accuracy of 0.62 mph to 1.86 mph in the range of 62.14 mph to 186.41 mph. This is equal to or better than +/- 1 mph accuracy up to 100 mph, as specified by the manufacturer.

FSK Frequency Set 1					
Nominal Frequency (GHz)	Measured Frequency (GHz)	Amplitude (dBm)	Frequency Deviation (MHz)	Limit (MHz)	Results
$f_0 = 24.08$	24.0773	11.9928307	-2.70	+/- 48.2	PASS
$f_1 = 24.08725$	24.084449	12.1564484	-2.80	+/- 48.2	PASS
$f_2 = 24.089$	24.086401	13.3740744	-2.60	+/- 48.2	PASS
$f_3 = 24.09$	24.087376	13.619438	-2.62	+/- 48.2	PASS

FSK Frequency Set 2					
Nominal Frequency (GHz)	Measured Frequency (GHz)	Amplitude (dBm)	Frequency Deviation (MHz)	Limit (MHz)	Results
$f_0 = 24.12$	24.118249	12.9132451	-1.75	+/- 48.2	PASS
$f_1 = 24.12725$	24.125401	13.2478555	-1.85	+/- 48.2	PASS
$f_2 = 24.129$	24.127351	14.0484895	-1.65	+/- 48.2	PASS
$f_3 = 24.13$	24.128326	14.3068444	-1.67	+/- 48.2	PASS

FSK Frequency Set 3					
Nominal Frequency (GHz)	Measured Frequency (GHz)	Amplitude (dBm)	Frequency Deviation (MHz)	Limit (MHz)	Results
$f_0 = 24.16$	24.157575	12.3736366	-2.42	+/- 48.2	PASS
$f_1 = 24.16725$	24.16505	12.9652467	-2.20	+/- 48.2	PASS
$f_2 = 24.169$	24.166676	14.1588766	-2.32	+/- 48.2	PASS
$f_3 = 24.17$	24.167651	14.43523	-2.35	+/- 48.2	PASS