

# Certificate of Accuracy

09-01-2020

Counting Display: S.N. DE018271

Antenna #1: S.N. KC189295

Antenna #2: S.N. KC189255

## CERTIFICATE OF ACCURACY

I hereby certify this STALKER® Speed Measuring Device.

Computing Unit: S.N. DE018271

Antenna #1: S.N. KC189295

Frequency 34.72 GHz

Power Density 0.5 mw/cm<sup>2</sup>

Antenna #2: S.N. KC189255

Frequency 34.73 GHz

Power Density 0.8 mw/cm<sup>2</sup>

Under my supervision, this Speed Measuring Device has been checked for accuracy and correct operation.

This STALKER® Speed Measuring Device is certified accurate within  $\pm 1$  mph ( $\pm 2$  km/h) in stationary mode, and/or  $\pm 2$  mph ( $\pm 3$  km/h) in moving mode.

The transmitter frequency of this speed measuring radar device has been tested and found to be within the prescribed limits as established by the Federal Communications Commission.

The measured Power Density of this speed measuring device has been tested and found to be below the ANSI Standard of 5.0 mw/cm<sup>2</sup> for this device.

All test instruments are traceable to NIST.

Technician (signature)



Date: 02/13/2020

Technician: Nam Nguyen

Technician overseen by: Roland Rickerd

Applied Concepts, Inc. | Richardson, Texas 75081

006-0147-00 Rev P  
88196

# Tuning Fork Certification

40 m.p.h.      34.7 Ghz

Serial # FB385122

## TUNING FORK CERTIFICATE

This Tuning Fork has been tested and found to oscillate at  $4,166 \pm 5$  Hertz at  $70^{\circ}\text{F}$  ( $21^{\circ}\text{C}$ ) resulting in a calibration signal of 40mph (64 km/h) when used with a Ka-Band Radar operating at 34.7 GHz. The instrument used to calibrate the tuning fork is traceable to NIST.

Operation from  $-22$  to  $+140^{\circ}\text{F}$  ( $-30^{\circ}\text{C}$  to  $60^{\circ}\text{C}$ ) will result in a speed error of less than 0.5 mph,  $-0.0040$  mph/ $^{\circ}\text{F}$  (0.8 km/h,  $-0.0065$  km/h/ $^{\circ}\text{C}$ ).

Date FEB 12 2020 Technician (signature) Todd L. Gardner

Todd L. Gardner

Technician (name) \_\_\_\_\_

Serial # 385122

Applied Concepts, Inc.

Richardson, Texas 75081

006-0411-00 Rev F



# Tuning Fork Certification

25 m.p.h.      34.7 GHz

Serial # FA277239

## TUNING FORK CERTIFICATE

This Tuning Fork has been tested and found to oscillate at  $2,614 \pm 5$  Hertz at  $70^{\circ}$  F ( $21^{\circ}$ C) resulting in a calibration signal of 25 mph (40 km/h) when used with a Ka-Band Radar operating at 34.7 GHz. The instrument used to calibrate the tuning fork is traceable to NIST.

Operation from  $-22$  to  $+140^{\circ}$ F ( $-30^{\circ}$ C to  $60^{\circ}$ C) will result in a speed error of less than 0.5 mph,  $-0.0025$  mph/ $^{\circ}$ F ( $0.8$  km/h,  $-0.0041$  km/h/ $^{\circ}$ C).

Date FEB 13 2020 Technician (signature) Todd L. Gardner

Todd L. Gardner

Technician (name) \_\_\_\_\_

Serial # 277239

Applied Concepts, Inc.



Plano, Texas 75074

006-0410-00 Rev D