



# CMF / CRF Details

CMF ID: 8855

## Install Red-light indicator lights

**Description:** Red-light indicator lights are mounted on the signal head or on the mast arm. The indicator activates simultaneously with the red interval, allowing an enforcement officer downstream to identify if a vehicle has violated the red interval.

**Prior Condition:** 4-legged signalized intersection without RLIL

**Category:** Advanced technology and ITS

**Study:** [Safety Evaluation of Red-Light Indicator Lights in Florida, Himes et al., 2017](#)

Star Quality Rating:	
5 Stars	<a href="#">[View score details]</a>

Crash Modification Factor (CMF)	
Value:	0.916
Adjusted Standard Error:	
Unadjusted Standard Error:	0.035

Crash Reduction Factor (CRF)	
Value:	8.4 (This value indicates a <b>decrease</b> in crashes)
Adjusted Standard Error:	

**Unadjusted Standard Error:**

### Applicability

**Crash Type:**

All

**Crash Severity:**

K (fatal),A (serious injury),B (minor injury),C (possible injury)

**Roadway Types:**

Not specified

**Number of Lanes:**

**Road Division Type:**

**Speed Limit:**

**Area Type:**

Not specified

**Traffic Volume:**

**Time of Day:**

All

### *If countermeasure is intersection-based*

**Intersection Type:**

Roadway/roadway (not interchange related)

**Intersection Geometry:**

4-leg

**Traffic Control:**

Signalized

**Major Road Traffic Volume:**

5900 to 80500 Annual Average Daily Traffic (AADT)

**Minor Road Traffic Volume:**

845 to 62666 Annual Average Daily Traffic (AADT)

### Development Details

**Date Range of Data Used:**

2003 to 2012

**Municipality:**

**State:**

FL

<b>Country:</b>	USA
<b>Type of Methodology Used:</b>	2
<b>Sample Size Used:</b>	

<b>Other Details</b>	
<b>Included in Highway Safety Manual?</b>	No
<b>Date Added to Clearinghouse:</b>	Nov-17-2017
<b>Comments:</b>	Disaggregated CMF for total entering volume $\geq 40,000$ veh/day The number of crashes in the after period were not reported in this study, however, they have been recorded as 300 to give 10 points as a benefit of doubt for one or more of the following: (1) number of miles/sites in the reference/treatment group, (2) number of crashes in the references/treatment group, (3) reporting AADTs for the aggregate dataset but not for the disaggregate dataset used for CMF development.

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This site is funded by the U.S. Department of Transportation Federal Highway Administration and maintained by the University of North Carolina Highway Safety Research Center

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