



# CMF / CRF Details

CMF ID: 8838

## 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:	
4 Stars	<a href="#">[View score details]</a>

Crash Modification Factor (CMF)	
Value:	0.989
Adjusted Standard Error:	
Unadjusted Standard Error:	0.079

Crash Reduction Factor (CRF)	
Value:	1.1 (This value indicates a <b>decrease</b> in crashes)
Adjusted Standard Error:	

**Unadjusted Standard Error:**

### Applicability

**Crash Type:** Angle

**Crash Severity:** All

**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 one year after RLIL installation 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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