



## CMF / CRF Details

CMF ID: 8841

### 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:



[\[View score details\]](#)

### Crash Modification Factor (CMF)

**Value:** 0.756

**Adjusted Standard Error:**

**Unadjusted Standard Error:** 0.112

### Crash Reduction Factor (CRF)

**Value:** 24.4 (This value indicates a **decrease** 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:** District 1

|                                  |     |
|----------------------------------|-----|
| <b>State:</b>                    | 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 District 1 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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