



# CMF / CRF Details

**CMF ID: 7964**

**Install lighting**

**Description:**

**Prior Condition: Roadways without street lighting**

**Category: Highway lighting**

**Study: [Validation and Application of Highway Safety Manual \(Part D\) in Florida, Abdel-Aty et al., 2014](#)**

**Star Quality Rating:**

**4 Stars**

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

## Crash Modification Factor (CMF)

**Value:** 0.77

**Adjusted Standard Error:**

**Unadjusted Standard Error:** 0.09

## Crash Reduction Factor (CRF)

**Value:** 23 (This value indicates a **decrease** in crashes)

**Adjusted Standard Error:**

**Unadjusted Standard Error:** 9

## Applicability

**Crash Type:**

All

**Crash Severity:**

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

**Roadway Types:**

Minor Arterial

**Number of Lanes:**

4,6

**Road Division Type:**

All

**Speed Limit:**

**Area Type:**

Urban

**Traffic Volume:**

**Time of Day:**

Night

*If countermeasure is intersection-based*

**Intersection Type:**

**Intersection Geometry:**

**Traffic Control:**

**Major Road Traffic Volume:**

**Minor Road Traffic Volume:**

## Development Details

**Date Range of Data Used:**

2006 to 2010

**Municipality:**

**State:**

FL

**Country:**

USA

**Type of Methodology Used:**

2

<b>Sample Size Used:</b>	
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<b>Other Details</b>	
<b>Included in Highway Safety Manual?</b>	No
<b>Date Added to Clearinghouse:</b>	Mar-08-2016
<b>Comments:</b>	CMFs of adding lighting on urban 4-lane and 6-lane principal and minor arterials. This CMF ignores possible injury crashes. 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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