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Do More Emergency Lights Make You Safer?

Perception of different colors

SCENE SAFETY PRIMARY CONCERN



TESTING PROCEDURE

- Conducted along I-80 in rural Grundy County
- 11:00 pm – 3:00 am
- 100 test subjects (53 male/47 female)
- Age range 18-68
- Static and monochromatic display
- Front passenger seat at 60 mph

Testing results

RAW DATA



Color	Elapsed time in seconds	Distance in feet	Difference in feet
White	62.4	5068.80	
Amber	72.81	4152.72	916.08
Red	77.84	3710.08	1358.72
Blue	84.36	3136.32	1932.48

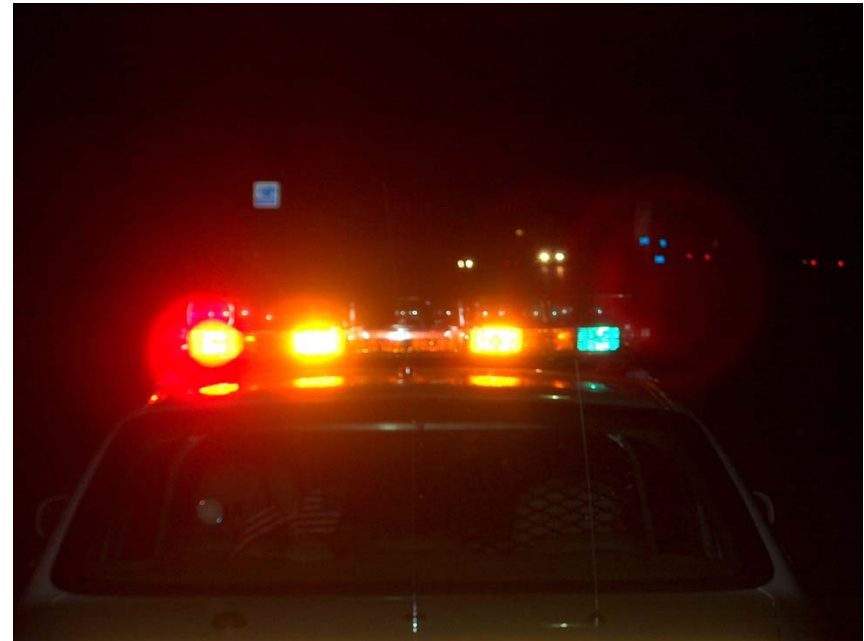
Comments offered during the test

Color	Positive	Negative	Ambivalent
White	11	64	9
Amber	67	0	3
Red	6	0	0
Blue	5	1	2

Reactions to different levels of emergency lighting

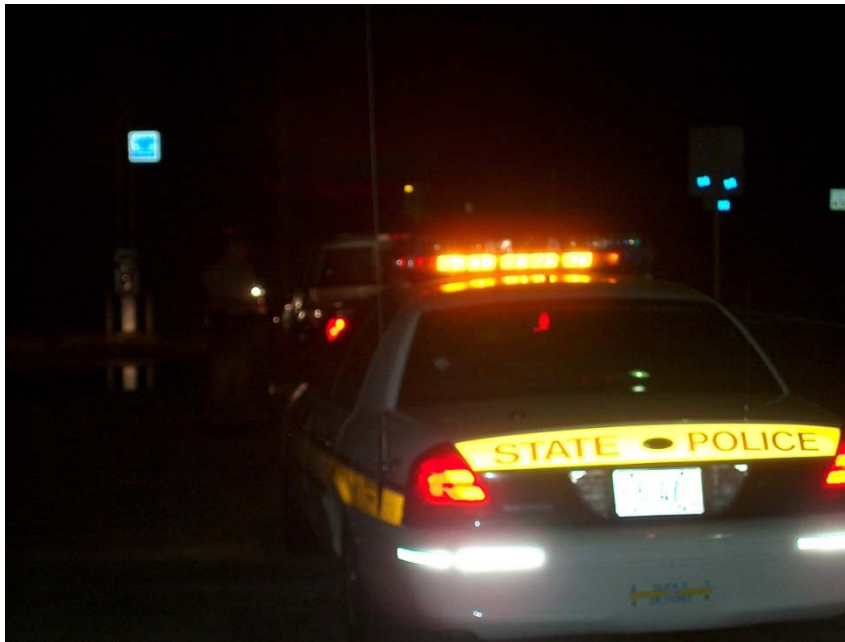
**HIGHER LEVEL SEEN AT
5202 FEET**

**LOWER LEVEL SEEN AT
4312 FEET**



Comments offered during the test

HIGHER VS. LOWER LEVEL



- 26 subjects tested
- 18 negative comments for higher level, 1 positive and 7 ambivalent
- 16 positive comments for lower level, 4 negative and 6 ambivalent
- 20 found the higher level to be more distracting

References

- **Motorists' Perception of Distance and Reactions to the Color of Emergency Lighting in Northeastern Illinois – Governor State University Library**
- https://books.google.com/books/about/Motorists_Perception_of_Distance_and_Rea.html?id=DZ-hNwAACAAJmaintained
- **Do More Emergency Lights Make You Safer? Law and Order March 2004**
- http://www.hendonpub.com/resources/article_archive/results/details?id=4625
- **Reactions to Emergency Light Colors Police Fleet Manager January/February 2002**
- http://www.hendonpub.com/resources/article_archive/results/details?id=1933