CS-4225F (9-24)

pennsylvania
DEPARTMENT OF TRANSPORTATION
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HIGH MAST LIGHTING TEST

COUNTY: _____ TOWNSHIP _____

S.R.: _____ SECT.: _____ PROJECT NO.: _____

TEST PERFORMED BY: _____

TEST WITNESSED BY: _____

INSPECTOR IN CHARGE: _____

When installing fixtures: Level the Ring and Bottom Edge of Fixture.

Luminaire Test

Pole Number _____ Pole Station Location_____

Pole Height _____ Luminaire Manufacturer_____

No. of Luminaires _____ Luminaire Cat. No._____

Socket Position _____

MOUNTING HEIGHT																	
18.3m (60')		21.3m (70')		24.4m (80')		27.4m (90')		30.5m (100')		33.5m (110')		36.6m (120')		DESIGN VALUE LUX (FC)	FIELD VALUE LUX (FC)	TEST	ANGLE
D	LUX (FC)	D	LUX (FC)	D	LUX (FC)	D	LUX (FC)	D	LUX (FC)	D	LUX (FC)	D	LUX (FC)				
31.7 (104)	4.84 (.45)	36.9 (121)	3.55 (.33)	42.4 (139)	2.69 (.25)	47.5 (156)	2.15 (.20)	52.7 (173)	1.72 (.16)	57.9 (190)	1.40 (.13)	63.4 (208)	1.18 (.11)			1	60°
35.1 (115)	3.55 (.33)	40.8 (134)	2.69 (.25)	46.9 (154)	2.05 (.19)	52.7 (173)	1.61 (.15)	58.5 (192)	1.29 (.12)	64.3 (211)	1.08 (.10)	70.4 (231)	.97 (.09)			2	62.5°
39.3 (129)	2.58 (.24)	45.7 (150)	1.94 (.18)	52.4 (172)	1.51 (.14)	58.8 (193)	1.18 (.11)	65.2 (214)	.97 (.09)	71.9 (236)	.75 (.07)	78.3 (257)	.65 (.06)			3	65°
50.3 (165)	1.08 (.10)	58.5 (192)	.86 (.08)	67.1 (220)	.65 (.06)	75.3 (247)	.54 (.05)	83.8 (275)	.43 (.04)	92.0 (302)	.32 (.03)	101 (330)	.32 (.03)			4	70°
57.9 (190)	.54 (.05)	67.7 (222)	.43 (.04)	77.4 (254)	.32 (.03)	86.9 (285)	.26 (.024)	96.6 (317)	.22 (.020)	106 (349)	.17 (.016)	116 (381)	.15 (.014)			5	72.5°
68.0 (223)	.22 (.02)	79.6 (261)	.16 (.015)	91.1 (299)	.14 (.013)	102 (336)	.11 (.010)	114 (373)	.09 (.008)	125 (411)	.08 (.007)	137 (448)	.06 (.006)			6	75°

D = Distance from the Pole to the Reading Location.

LUX (FC) = Design Value for 1 Luminaire.

NOTE 1. The pole selected for the test should be the only source of significant illumination. Take readings in any direction from the pole at an elevation approximately the same as the pole foundation at distances 'D' from the pole for the specified mounting height.

2. To obtain the 'Design Value'; multiply the LUX value (FC value) by the number of luminaires being tested.

Example: Pole Height = 33.5m (110'), number of luminaires = 7

For TEST number 2, the 'Design Value' is 1.08 X 7 = 7.56 LUX (.10 x 7 = .70 FC)

ILLUMINATION TEST:

Procedure:

1. Select three (3) areas on any roadway, including ramps, within each interchange having the least illumination as determined by visual observation.

2. Take six (6) readings of horizontal FC through the areas selected at 15 M (50 FT) intervals. Record the station and reading below.

Roadway _____	Roadway _____	Roadway _____
STA. _____ +000 (+00) VALUE _____	STA. _____ +000 (+00) VALUE _____	STA. _____+000 (+00) VALUE ____
STA. _____ +015 (+50) VALUE _____	STA. _____ +015 (+50) VALUE _____	STA. _____+015 (+50) VALUE ____
STA. _____ +030 (+00) VALUE _____	STA. _____ +030 (+00) VALUE _____	STA. _____+030 (+00) VALUE ____
STA. _____ +045 (+50) VALUE _____	STA. _____ +045 (+50) VALUE _____	STA. _____+045 (+50) VALUE ____
STA. _____ +060 (+00) VALUE _____	STA. _____ +060 (+00) VALUE _____	STA. _____+060 (+00) VALUE ____
STA. _____ +075 (+50) VALUE _____	STA. _____ +075 (+50) VALUE _____	STA. _____+075 (+50) VALUE ____

Minimum FC value from above eighteen readings

Evaluation of minimum reading

3.12 LUX (.29 FC) .....Marginal

3.34 LUX (.31 FC) .....Acceptable

3.44 LUX (.32 FC) .....Fair

3.66 LUX (.34 FC) .....Good

3.88 LUX (.36 FC) .....Very Good

REMARKS: