

REPORT NUMBER: ITL85366

ISSUE DATE: 08/13/15

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PREPARED FOR: LED ROADWAY LIGHTING LTD.

CATALOG NUMBER: NXT 72M 0 X 2ES 6 XX 3 XX X XX X

LUMINAIRE: CAST METAL HOUSING WITH SEMI-DIFFUSE INTERIOR FINISH, 2 WHITE CIRCUIT BOARDS EACH WITH 36 LEDS, 2 CLEAR PLASTIC LENSES WITH 1 OPTIC PER LED, CLEAR FLAT GLASS LENS IN CAST SEMI-DIFFUSE METAL DOOR FRAME.

LAMPS: SEVENTY-TWO WHITE LIGHT EMITTING DIODES (LEDs), VERTICAL BASE-UP POSITION.

INPUT ELECTRICAL: 120.0 VOLTS, 134.9 WATTS, 1.15 AMPS

LED DRIVER: LED ROADWAY LIGHTING J150UN, DRIVER HAS MULTIPLE LEADS, ONLY LINE INPUT AND LED OUTPUT LEADS CONNECTED FOR THIS TEST, OUTPUT CURRENT ROTARY SWITCH SET TO 600mA. LRL65633-LF SURGE PROTECTOR.

NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED AT RATED INPUT VOLTAGE (120VAC, 60Hz) TO THE DRIVER AND SURGE PROTECTOR. SURGE PROTECTOR INFORMATION PROVIDED BY CLIENT.

TEST PROCEDURE: IESNA LM-79-08

TEST DISTANCE = 35.0 FEET

TOTAL LUMEN OUTPUT: 15269

COLOR TEMPERATURE AS MEASURED IN INTEGRATING SPHERE TEST # ITL85374: 3775K

COLOR RENDERING INDEX AS MEASURED IN INTEGRATING SPHERE TEST # ITL85374: 73

LED DC DRIVE CURRENT (mA): 600 (PROVIDED BY CLIENT)

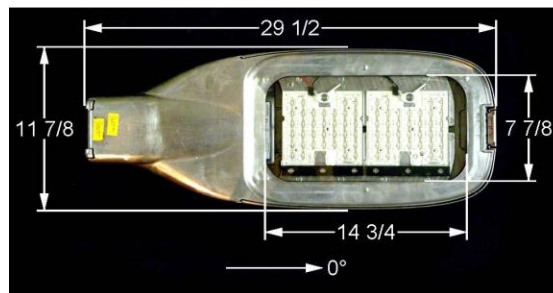
POWER FACTOR: 97.8 %

BUG RATING: B3 U0 G3

LUMINAIRE EFFICACY: 113.2 lm/W

IES CLASSIFICATION: Medium, Type II

**CUTOFF DESIGNATION IS NOT INTENDED TO BE USED WITH ABSOLUTE PHOTOMETRIC TESTS.



FLUX DISTRIBUTION

LUMENS	DOWNWARD	UPWARD	TOTALS
HOUSE SIDE	4930	0	4930
STREET SIDE	10339	0	10339
TOTALS	15269	0	15269

TESTING WAS PERFORMED IN ACCORDANCE WITH IESNA LM-79-08
TEST ANGULAR INCREMENTS AND REPORT FORMATTING WAS BASED ON IESNA LM-31-95

THIS REPORT IS BASED ON PUBLISHED INDUSTRY PROCEDURES. FIELD PERFORMANCE MAY DIFFER FROM LABORATORY PERFORMANCE.



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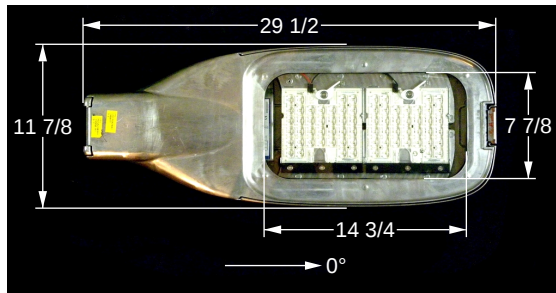
NVLAP
NVLAP LAB CODE: 200925-0

INDEPENDENT TESTING LABORATORIES, INC.

4066 CAMELOT CIRCLE, LONGMONT, CO 80504 USA

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINATION

Values based on 30 foot mounting height.



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PREPARED FOR: LED ROADWAY LIGHTING LTD.

CATALOG NUMBER: NXT 72M 0 X 2ES 6 XX 3
XX X XX X

LUMINAIRE: CAST METAL HOUSING WITH SEMI-DIFFUSE INTERIOR FINISH, 2 WHITE CIRCUIT BOARDS EACH WITH 36 LEDs, 2 CLEAR PLASTIC LENSES WITH 1 OPTIC PER LED, CLEAR FLAT GLASS LENS IN CAST SEMI-DIFFUSE METAL DOOR FRAME.

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WATTS, 1.15 AMPS

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TEST PROCEDURE: IESNA LM-79-08

TEST DISTANCE = 35.0 FEET

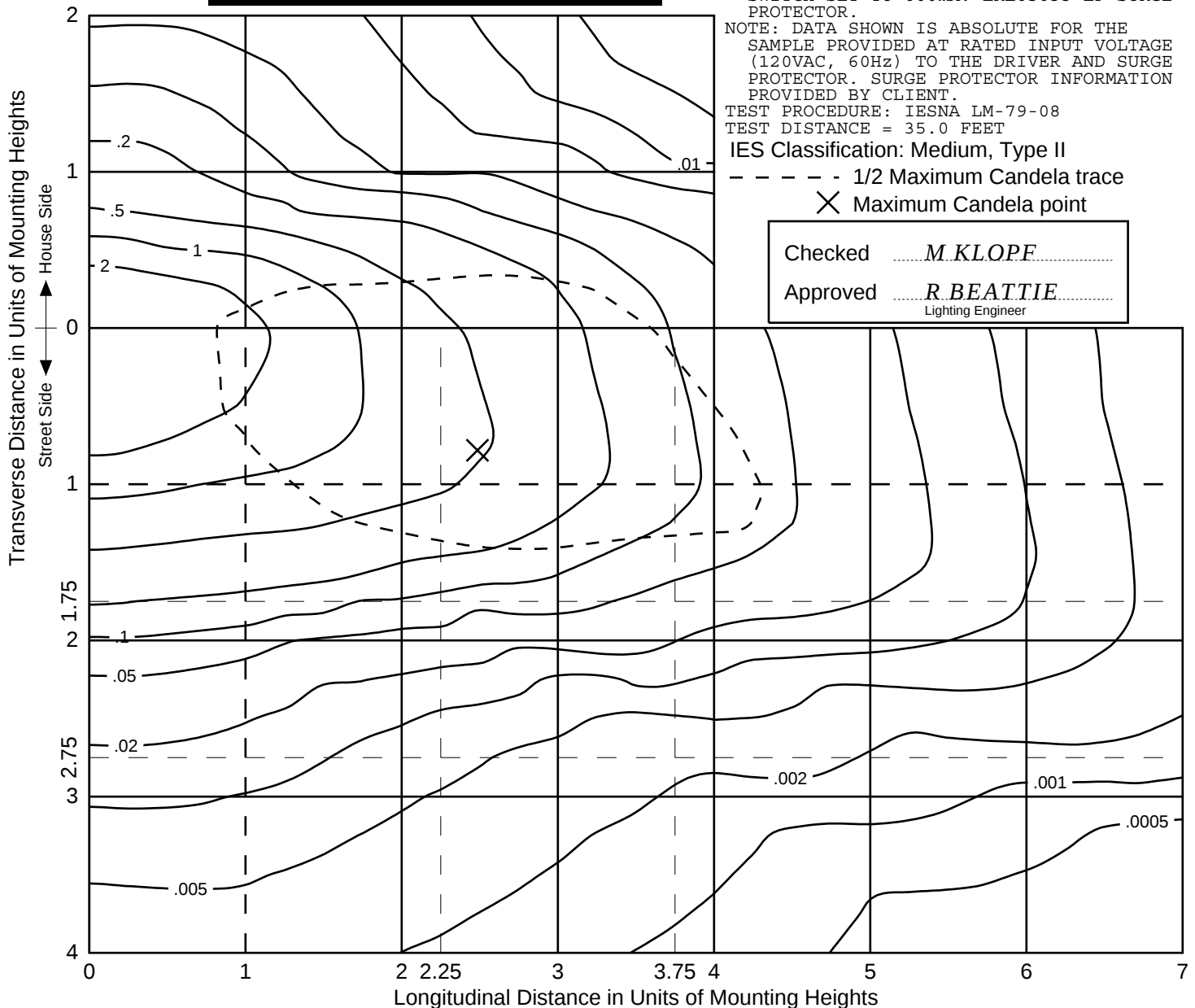
IES Classification: Medium, Type II

--- 1/2 Maximum Candela trace

X Maximum Candela point

CheckedM.KLOPF.....

ApprovedR.BEATTIE.....
Lighting Engineer



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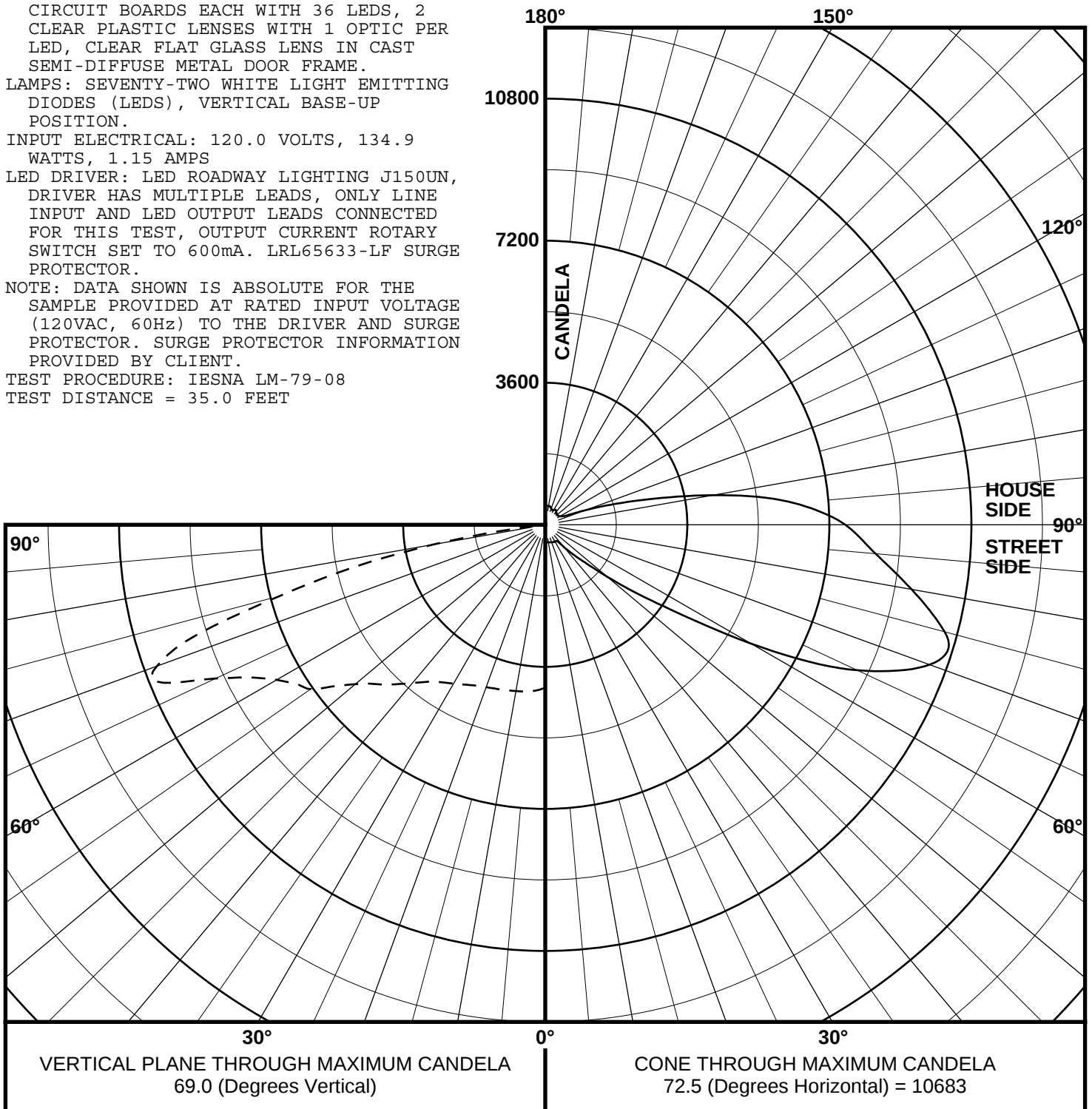
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TEST PROCEDURE: IESNA LM-79-08

TEST DISTANCE = 35.0 FEET

MAXIMUM PLANE AND MAXIMUM CONE PLOTS OF CANDELA

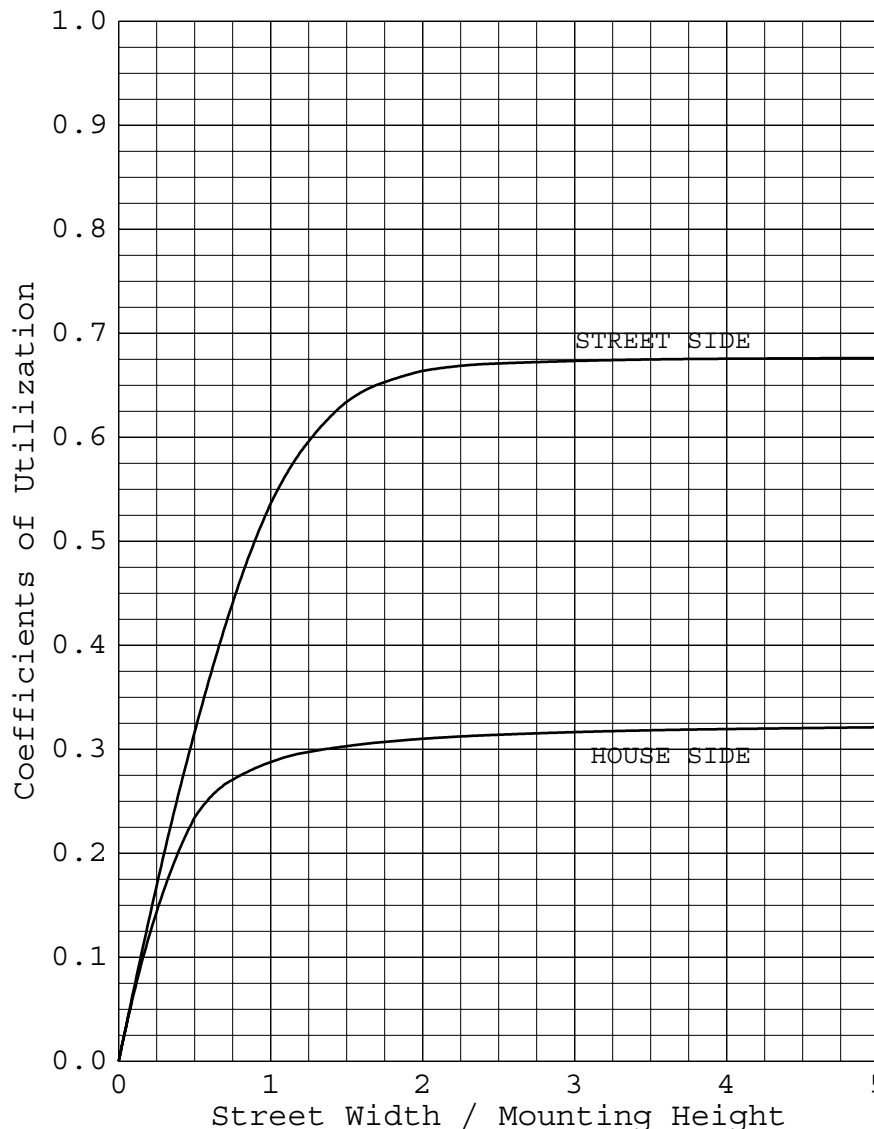




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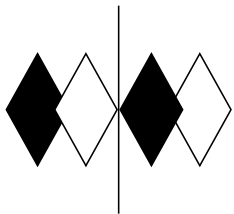
COEFFICIENTS OF UTILIZATION AND FLUX DISTRIBUTION



	LUMENS	PERCENT OF FIXTURE
DOWNWARD STREET SIDE	10339	67.7
DOWNWARD HOUSE SIDE	4930	32.3
DOWNWARD TOTAL	15269	100.0
UPWARD STREET SIDE	0	0.0
UPWARD HOUSE SIDE	0	0.0
UPWARD TOTAL	0	0.0
TOTAL FLUX	15269	100.0

EFFICACY = 113.2 lm/W

ALL CANDELA AND LUMENS IN THIS REPORT ARE BASED ON ABSOLUTE PHOTOMETRY.
THE COEFFICIENT OF UTILIZATION VALUES ARE BASED ON THE TOTAL ABSOLUTE
LUMEN OUTPUT OF THIS LUMINAIRE SAMPLE.



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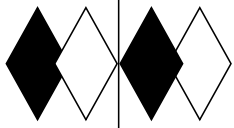
FLUX DISTRIBUTION BY SOLID ANGLE

(PER IESNA TM-15-11, LUMINAIRE CLASSIFICATION
SYSTEM FOR OUTDOOR LUMINAIRES)

	LUMENS	PERCENT OF FIXTURE	BUG ZONE RATINGS
FORWARD LIGHT	10339.	67.7	
FL (0- 30)	1837.2	12.0	
FM (30- 60)	5226.9	34.2	
FH (60- 80)	3189.7	20.9	G2
FVH(80- 90)	84.9	0.6	G1
BACK LIGHT	4930.	32.3	
BL (0- 30)	1306.7	8.6	B3
BM (30- 60)	2407.2	15.8	B2
BH (60- 80)	1174.0	7.7	B3 G3
BVH(80- 90)	42.4	0.3	G1
UPLIGHT	0.	0.0	
UL (90-100)	0.0	0.0	U0
UH (100-180)	0.0	0.0	U0
TRAPPED LIGHT	0.	0.0	
TOTAL FLUX	15269.	100.0	

BACKLIGHT, UPLIGHT, AND GLARE (BUG) RATINGS
(PER ADDENDUM A FOR IESNA TM-15-11)

BUG RATING: B3 U0 G3



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CANDELA TABULATION

	STREET SIDE										
	0.0	5.0	15.0	25.0	35.0	45.0	55.0	65.0	72.5	75.0	85.0
180.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
175.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
165.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
155.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
145.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
135.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
125.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
115.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
105.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
95.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
92.5	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
90.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
87.5	4.	4.	4.	3.	3.	2.	3.	6.	9.	10.	8.
85.0	26.	27.	32.	31.	22.	20.	19.	22.	28.	32.	25.
V 82.5	68.	71.	92.	79.	58.	70.	66.	135.	838.	888.	500.
E 80.0	126.	130.	166.	121.	110.	134.	133.	451.	2864.	3161.	2116.
R 77.5	171.	176.	215.	168.	176.	187.	247.	1397.	4971.	5359.	4179.
T 75.0	205.	214.	248.	242.	242.	277.	489.	3619.	6967.	7361.	5663.
I 72.5	274.	282.	310.	320.	319.	445.	1287.	6059.	9244.	9385.	7174.
C 70.0	372.	387.	407.	430.	428.	882.	2795.	8149.	10478.	10334.	8166.
A 69.0<<	437.	445.	462.	484.	501.	1208.	3476.	8723.	10683.	10479.	8405.
L 67.5	522.	534.	548.	587.	704.	1868.	4417.	9057.	10467.	10287.	8536.
65.0	681.	705.	753.	924.	1467.	3121.	5530.	8540.	9221.	9139.	8069.
A 62.5	1026.	1073.	1197.	1568.	2367.	3940.	5834.	7914.	8385.	8286.	7544.
N 60.0	1606.	1593.	1727.	2136.	2845.	4164.	5734.	7476.	7862.	7771.	7278.
G 57.5	2009.	1993.	2104.	2441.	3050.	4190.	5658.	7215.	7497.	7417.	7089.
L 55.0	2288.	2265.	2364.	2659.	3233.	4211.	5578.	7074.	7261.	7155.	6889.
E 52.5	2506.	2477.	2564.	2855.	3420.	4240.	5450.	6555.	6722.	6687.	6660.
50.0	2654.	2645.	2753.	3060.	3604.	4317.	5356.	6158.	6283.	6290.	6382.
47.5	2821.	2821.	2947.	3246.	3776.	4416.	5256.	5823.	5963.	6003.	6140.
45.0	2995.	3007.	3145.	3433.	3922.	4474.	5089.	5521.	5727.	5770.	5915.
42.5	3187.	3204.	3365.	3716.	4095.	4558.	4983.	5264.	5473.	5538.	5694.
40.0	3509.	3539.	3721.	3990.	4281.	4641.	4849.	5035.	5239.	5299.	5446.
37.5	3950.	3971.	4086.	4241.	4454.	4674.	4697.	4842.	5022.	5097.	5219.
35.0	4280.	4266.	4356.	4458.	4581.	4624.	4554.	4682.	4859.	4922.	5004.
30.0	4646.	4660.	4666.	4650.	4536.	4355.	4343.	4504.	4649.	4678.	4684.
25.0	4584.	4609.	4522.	4396.	4265.	4209.	4276.	4412.	4483.	4490.	4430.
20.0	4253.	4281.	4255.	4215.	4199.	4241.	4325.	4387.	4381.	4363.	4272.
15.0	4231.	4265.	4260.	4265.	4303.	4350.	4398.	4366.	4323.	4300.	4202.
10.0	4366.	4409.	4402.	4405.	4420.	4404.	4381.	4321.	4280.	4261.	4180.
5.0	4338.	4382.	4359.	4340.	4328.	4311.	4289.	4255.	4232.	4219.	4169.
0.0	4135.	4135.	4135.	4135.	4135.	4135.	4135.	4135.	4135.	4135.	4135.

||
PLANE OF MAXIMUM CANDELA

CONE OF MAXIMUM CANDELA



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CANDELA TABULATION

	HOUSE SIDE	LATERAL ANGLE									
		90.0	95.0	105.0	115.0	125.0	135.0	145.0	155.0	165.0	175.0 180.0
	180.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	175.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	165.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	155.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	145.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	135.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	125.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	115.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	105.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	95.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	92.5	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	90.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	87.5	10.	8.	4.	4.	3.	2.	1.	1.	1.	0.
	85.0	25.	23.	18.	14.	11.	15.	21.	39.	28.	7.
V	82.5	516.	403.	56.	52.	48.	73.	90.	114.	137.	125.
E	80.0	1879.	1395.	153.	115.	105.	145.	186.	216.	262.	272.
R	77.5	3602.	2783.	338.	184.	172.	217.	281.	328.	406.	431.
T	75.0	5006.	3998.	685.	271.	250.	278.	350.	380.	507.	566.
I	72.5	6514.	5395.	1330.	374.	318.	332.	395.	394.	548.	596.
C	70.0	7406.	6161.	2046.	482.	376.	381.	439.	403.	493.	520.
A	69.0<<	7603.	6330.	2311.	520.	398.	400.	459.	407.	476.	482.
L	67.5	7693.	6423.	2659.	571.	433.	427.	487.	425.	462.	435.
	65.0	7423.	6365.	3138.	656.	485.	478.	526.	475.	467.	420.
A	62.5	7132.	6312.	3610.	792.	529.	536.	551.	542.	501.	459.
N	60.0	7016.	6349.	3998.	1031.	578.	591.	557.	589.	564.	510.
G	57.5	6962.	6460.	4358.	1412.	637.	642.	580.	615.	616.	563.
L	55.0	6818.	6429.	4641.	1862.	717.	686.	620.	631.	652.	613.
E	52.5	6591.	6211.	4681.	2318.	850.	723.	660.	668.	691.	645.
	50.0	6349.	6025.	4698.	2713.	1057.	768.	703.	703.	721.	678.
	47.5	6135.	5865.	4711.	3014.	1333.	821.	753.	745.	732.	702.
	45.0	5899.	5690.	4670.	3217.	1633.	937.	809.	788.	771.	745.
	42.5	5664.	5484.	4601.	3332.	1909.	1130.	875.	831.	814.	798.
	40.0	5420.	5258.	4498.	3401.	2139.	1340.	994.	884.	853.	835.
	37.5	5186.	5033.	4376.	3437.	2338.	1541.	1163.	990.	914.	883.
	35.0	4964.	4821.	4259.	3450.	2512.	1739.	1340.	1141.	1047.	999.
	30.0	4616.	4472.	4041.	3462.	2812.	2198.	1759.	1510.	1354.	1290.
	25.0	4341.	4216.	3881.	3495.	3068.	2646.	2282.	2017.	1832.	1745.
	20.0	4178.	4073.	3823.	3564.	3294.	3036.	2787.	2580.	2428.	2363.
	15.0	4122.	4037.	3857.	3662.	3494.	3338.	3200.	3081.	2991.	2946.
	10.0	4117.	4058.	3944.	3808.	3698.	3596.	3523.	3462.	3423.	3398.
	5.0	4133.	4102.	4053.	3978.	3924.	3862.	3823.	3788.	3768.	3765.
	0.0	4135.	4135.	4135.	4135.	4135.	4135.	4135.	4135.	4135.	4135.

CONE OF MAXIMUM CANDELA



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5-DEGREE
ZONAL LUMEN SUMMARY

0- 5	98
5- 10	290
10- 15	466
15- 20	621
20- 25	763
25- 30	906
30- 35	1038
35- 40	1148
40- 45	1240
45- 50	1328
50- 55	1414
55- 60	1467
60- 65	1449
65- 70	1365
70- 75	1024
75- 80	526
80- 85	123
85- 90	4
90- 95	0
95-100	0
100-105	0
105-110	0
110-115	0
115-120	0
120-125	0
125-130	0
130-135	0
135-140	0
140-145	0
145-150	0
150-155	0
155-160	0
160-165	0
165-170	0
170-175	0
175-180	0

10-DEGREE
ZONAL LUMEN SUMMARY

0- 10	388
0- 20	1475
0- 30	3144
0- 40	5329
0- 50	7897
0- 60	10778
0- 70	13592
0- 80	15142
0- 90	15269
0-100	15269
0-110	15269
0-120	15269
0-130	15269
0-140	15269
0-150	15269
0-160	15269
0-170	15269
0-180	15269



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