

REPORT NUMBER: ITL85363

ISSUE DATE: 08/14/15

PAGE: 1 OF 9

PREPARED FOR: LED ROADWAY LIGHTING LTD.

CATALOG NUMBER: NXT 72M 0 X 2ES 3 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, 81.1 WATTS, 0.682 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 350mA. 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: 9929

COLOR TEMPERATURE AS MEASURED IN INTEGRATING SPHERE TEST # ITL85371: 3753K

COLOR RENDERING INDEX AS MEASURED IN INTEGRATING SPHERE TEST # ITL85371: 73

LED DC DRIVE CURRENT (mA): 350 (PROVIDED BY CLIENT)

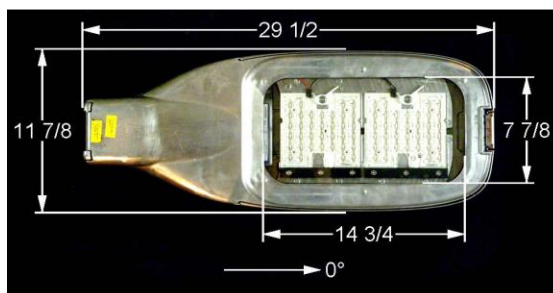
POWER FACTOR: 99.1 %

BUG RATING: B2 U0 G2

LUMINAIRE EFFICACY: 122.4 lm/W

IES CLASSIFICATION: Medium, Type II

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

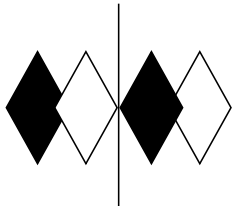


FLUX DISTRIBUTION

LUMENS	DOWNWARD	UPWARD	TOTALS
HOUSE SIDE	3217	0	3217
STREET SIDE	6713	0	6713
TOTALS	9929	0	9929

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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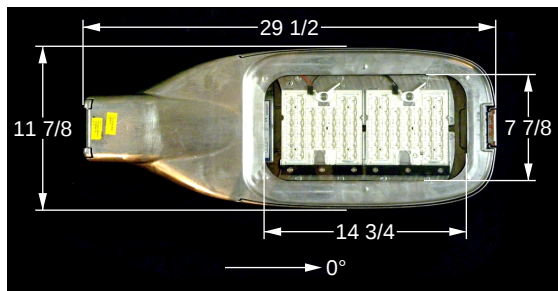
NVLAP
NVLAP LAB CODE: 200925-0

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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XX X XX X

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WATTS, 0.682 AMPS

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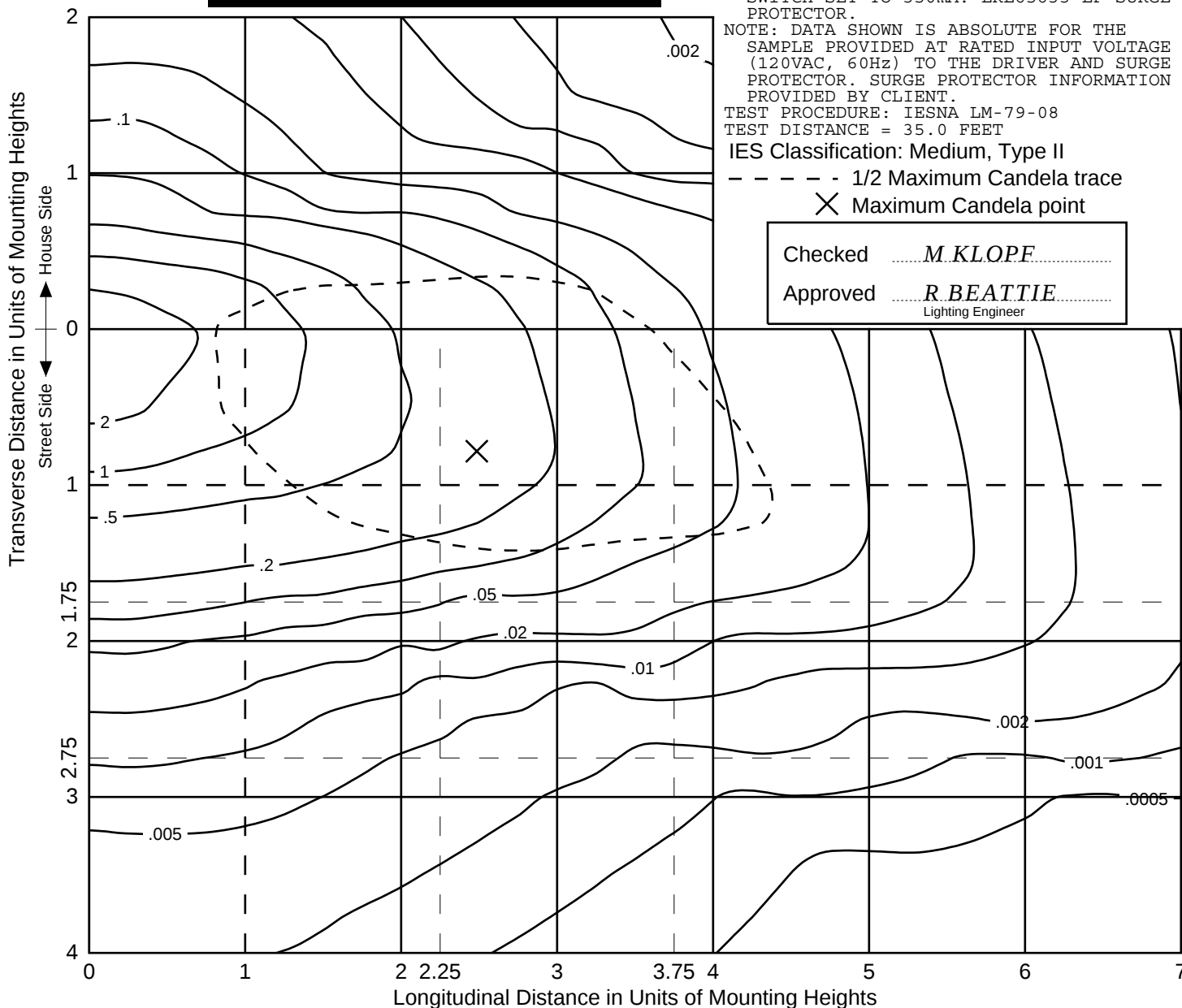
TEST PROCEDURE: IESNA LM-79-08

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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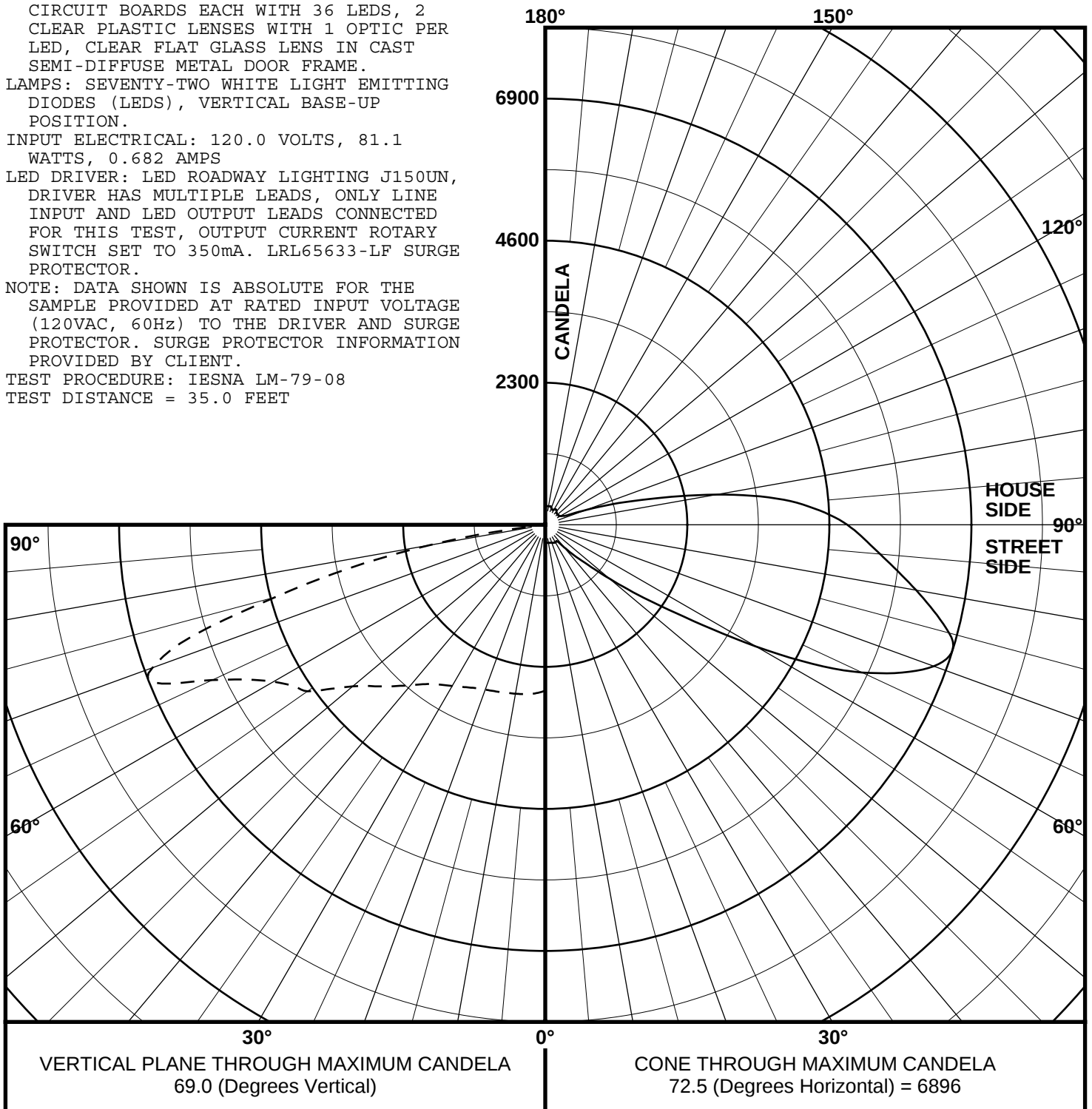
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TEST PROCEDURE: IESNA LM-79-08

TEST DISTANCE = 35.0 FEET

MAXIMUM PLANE AND MAXIMUM CONE PLOTS OF CANDELA

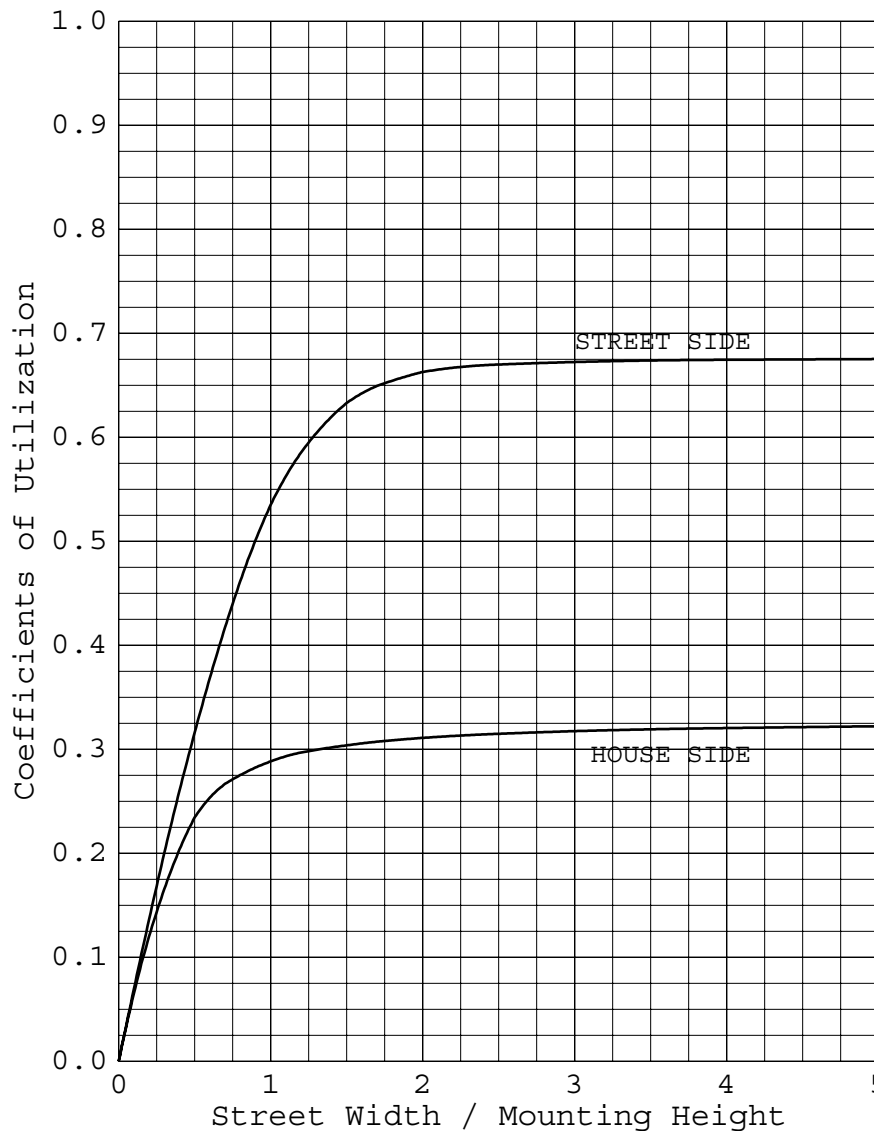




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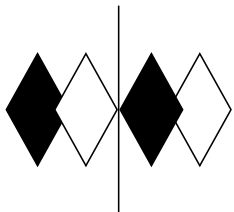
COEFFICIENTS OF UTILIZATION AND FLUX DISTRIBUTION



	LUMENS	PERCENT OF FIXTURE
DOWNWARD STREET SIDE	6713	67.6
DOWNWARD HOUSE SIDE	3217	32.4
DOWNWARD TOTAL	9929	100.0
UPWARD STREET SIDE	0	0.0
UPWARD HOUSE SIDE	0	0.0
UPWARD TOTAL	0	0.0
TOTAL FLUX	9929	100.0

EFFICACY = 122.4 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	6713.	67.6	
FL (0- 30)	1194.5	12.0	
FM (30- 60)	3388.0	34.1	
FH (60- 80)	2072.5	20.9	G2
FVH(80- 90)	57.5	0.6	G1
BACK LIGHT	3217.	32.4	
BL (0- 30)	852.5	8.6	B2
BM (30- 60)	1570.3	15.8	B2
BH (60- 80)	765.1	7.7	B2 G2
BVH(80- 90)	28.7	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	9929.	100.0	

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

BUG RATING: B2 U0 G2



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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	3.	3.	3.	2.	2.	1.	2.	4.	6.	7.	8.
85.0	15.	16.	20.	19.	13.	13.	12.	14.	17.	18.	17.
V 82.5	41.	44.	59.	53.	38.	45.	42.	92.	580.	596.	383.
E 80.0	77.	82.	105.	79.	72.	86.	88.	318.	1910.	2088.	1492.
R 77.5	107.	113.	138.	110.	115.	121.	159.	941.	3255.	3562.	2797.
T 75.0	131.	139.	160.	159.	157.	178.	313.	2364.	4521.	4840.	3724.
I 72.5	172.	182.	200.	211.	207.	290.	844.	3960.	5988.	6109.	4679.
C 70.0	241.	250.	264.	285.	279.	576.	1873.	5315.	6770.	6696.	5299.
A 69.0<<	283.	293.	301.	322.	325.	791.	2310.	5659.	6896.	6771.	5441.
L 67.5	340.	352.	357.	387.	453.	1224.	2908.	5832.	6721.	6594.	5497.
65.0	445.	465.	494.	594.	935.	2041.	3607.	5508.	5950.	5908.	5195.
A 62.5	667.	702.	783.	1007.	1511.	2565.	3784.	5114.	5429.	5375.	4881.
N 60.0	1007.	1035.	1127.	1379.	1828.	2694.	3722.	4832.	5082.	5045.	4708.
G 57.5	1283.	1298.	1371.	1579.	1973.	2710.	3679.	4662.	4849.	4813.	4589.
L 55.0	1464.	1475.	1538.	1719.	2094.	2724.	3628.	4562.	4699.	4643.	4461.
E 52.5	1618.	1612.	1664.	1848.	2216.	2746.	3538.	4242.	4361.	4353.	4305.
50.0	1722.	1721.	1784.	1980.	2338.	2797.	3470.	3981.	4072.	4087.	4124.
47.5	1829.	1834.	1908.	2109.	2455.	2863.	3406.	3770.	3865.	3889.	3968.
45.0	1928.	1948.	2036.	2233.	2549.	2905.	3300.	3573.	3702.	3745.	3822.
42.5	2053.	2076.	2184.	2407.	2662.	2960.	3231.	3410.	3541.	3594.	3680.
40.0	2274.	2296.	2414.	2589.	2781.	3013.	3148.	3264.	3390.	3441.	3519.
37.5	2535.	2570.	2655.	2750.	2896.	3032.	3057.	3135.	3254.	3301.	3373.
35.0	2752.	2782.	2829.	2893.	2977.	2998.	2967.	3039.	3150.	3189.	3243.
30.0	3000.	3031.	3031.	3016.	2947.	2833.	2832.	2925.	3013.	3031.	3035.
25.0	2964.	2997.	2939.	2866.	2785.	2746.	2785.	2869.	2907.	2911.	2875.
20.0	2764.	2798.	2778.	2757.	2735.	2763.	2816.	2850.	2843.	2832.	2773.
15.0	2741.	2779.	2776.	2784.	2796.	2829.	2855.	2834.	2805.	2791.	2729.
10.0	2820.	2863.	2860.	2864.	2864.	2856.	2841.	2805.	2777.	2767.	2715.
5.0	2804.	2843.	2829.	2820.	2808.	2796.	2784.	2763.	2748.	2740.	2707.
0.0	2687.	2687.	2687.	2687.	2687.	2687.	2687.	2687.	2687.	2687.	2687.

||
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.	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	8.	7.	5.	3.	2.	1.	1.	1.	1.	0.	0.
	85.0	17.	15.	11.	10.	9.	11.	17.	26.	20.	6.	2.
V	82.5	359.	266.	35.	35.	34.	49.	64.	76.	92.	92.	84.
E	80.0	1243.	952.	97.	75.	73.	96.	126.	140.	169.	186.	182.
R	77.5	2349.	1819.	217.	122.	116.	142.	187.	213.	270.	300.	289.
T	75.0	3239.	2599.	439.	179.	168.	182.	231.	247.	333.	372.	367.
I	72.5	4192.	3493.	866.	247.	212.	218.	260.	256.	355.	391.	392.
C	70.0	4766.	3996.	1336.	314.	248.	251.	291.	263.	320.	331.	332.
A	69.0<<	4890.	4088.	1510.	339.	262.	263.	303.	267.	310.	304.	306.
L	67.5	4945.	4138.	1742.	373.	285.	280.	321.	279.	301.	281.	280.
	65.0	4777.	4108.	2081.	433.	319.	314.	346.	314.	305.	276.	270.
A	62.5	4610.	4090.	2367.	523.	347.	351.	362.	357.	330.	303.	296.
N	60.0	4537.	4111.	2624.	680.	378.	388.	366.	386.	372.	337.	325.
G	57.5	4504.	4182.	2849.	932.	417.	421.	381.	404.	405.	372.	361.
L	55.0	4408.	4172.	3035.	1224.	471.	451.	407.	415.	429.	402.	390.
E	52.5	4257.	4022.	3049.	1519.	565.	476.	434.	439.	455.	424.	413.
	50.0	4104.	3900.	3051.	1771.	705.	506.	462.	462.	472.	445.	439.
	47.5	3960.	3797.	3059.	1962.	888.	545.	496.	489.	481.	461.	460.
	45.0	3808.	3684.	3027.	2095.	1083.	626.	532.	518.	506.	489.	490.
	42.5	3658.	3549.	2983.	2164.	1261.	755.	577.	548.	535.	525.	526.
	40.0	3501.	3404.	2915.	2208.	1407.	893.	657.	582.	562.	549.	549.
	37.5	3349.	3259.	2832.	2232.	1533.	1025.	767.	656.	604.	581.	582.
	35.0	3208.	3123.	2760.	2241.	1639.	1156.	883.	757.	695.	660.	664.
	30.0	2984.	2900.	2617.	2247.	1830.	1456.	1154.	991.	895.	850.	854.
	25.0	2814.	2732.	2519.	2271.	1997.	1736.	1499.	1329.	1208.	1155.	1162.
	20.0	2714.	2645.	2486.	2317.	2145.	1986.	1822.	1695.	1608.	1554.	1568.
	15.0	2677.	2624.	2507.	2384.	2273.	2179.	2086.	2012.	1959.	1926.	1932.
	10.0	2676.	2637.	2563.	2482.	2403.	2345.	2294.	2251.	2224.	2211.	2231.
	5.0	2685.	2665.	2632.	2591.	2553.	2519.	2491.	2466.	2452.	2444.	2472.
	0.0	2687.	2687.	2687.	2687.	2687.	2687.	2687.	2687.	2687.	2687.	2687.

CONE OF MAXIMUM CANDELA



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5-DEGREE
ZONAL LUMEN SUMMARY

0- 5	64
5- 10	188
10- 15	303
15- 20	405
20- 25	498
25- 30	590
30- 35	675
35- 40	746
40- 45	805
45- 50	862
50- 55	918
55- 60	952
60- 65	940
65- 70	884
70- 75	667
75- 80	347
80- 85	83
85- 90	3
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	252
0- 20	960
0- 30	2047
0- 40	3468
0- 50	5135
0- 60	7005
0- 70	8830
0- 80	9843
0- 90	9929
0-100	9929
0-110	9929
0-120	9929
0-130	9929
0-140	9929
0-150	9929
0-160	9929
0-170	9929
0-180	9929



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