

REPORT NUMBER: ITL85359

ISSUE DATE: 08/11/15

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PREPARED FOR: LED ROADWAY LIGHTING LTD.

CATALOG NUMBER: NXT 36S 0 X 2ES 3 XX 3 XX X XX X

LUMINAIRE: CAST METAL HOUSING WITH GRAY PAINTED INTERIOR FINISH, 1 WHITE CIRCUIT BOARD WITH 36 LEDS, 1 CLEAR PLASTIC LENS WITH 1 OPTIC PER LED, CLEAR FLAT GLASS LENS IN CAST GRAY PAINTED METAL DOOR FRAME.

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

INPUT ELECTRICAL: 120.0 VOLTS, 42.3 WATTS, 0.363 AMPS

LED DRIVER: LED ROADWAY LIGHTING J100UN, 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 = 20.0 FEET

TOTAL LUMEN OUTPUT: 4978

COLOR TEMPERATURE AS MEASURED IN INTEGRATING SPHERE TEST # ITL85367: 3758K

COLOR RENDERING INDEX AS MEASURED IN INTEGRATING SPHERE TEST # ITL85367: 73

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

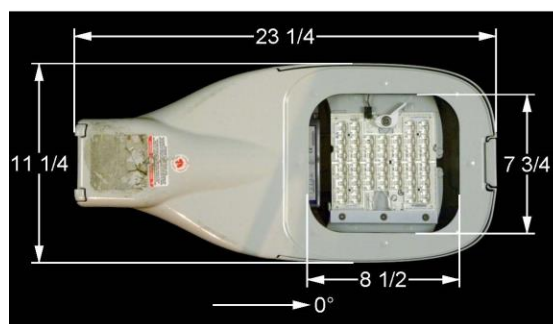
POWER FACTOR: 97.1 %

BUG RATING: B1 U0 G1

LUMINAIRE EFFICACY: 117.7 lm/W

IES CLASSIFICATION: Medium, Type II

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

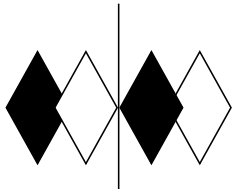


FLUX DISTRIBUTION

LUMENS	DOWNWARD	UPWARD	TOTALS
HOUSE SIDE	1592	0	1592
STREET SIDE	3386	0	3386
TOTALS	4978	0	4978

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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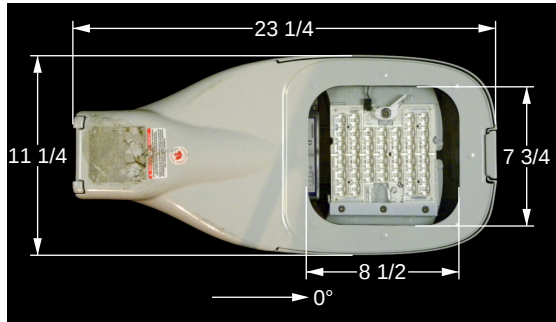
NVLAP
NVLAP LAB CODE: 200925-0

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

LUMINAIRE: CAST METAL HOUSING WITH GRAY PAINTED INTERIOR FINISH, 1 WHITE CIRCUIT BOARD WITH 36 LEDs, 1 CLEAR PLASTIC LENS WITH 1 OPTIC PER LED, CLEAR FLAT GLASS LENS IN CAST GRAY PAINTED METAL DOOR FRAME.

LAMPS: THIRTY-SIX WHITE LIGHT EMITTING DIODES (LEDs), VERTICAL BASE-UP POSITION. INPUT ELECTRICAL: 120.0 VOLTS, 42.3

WATTS, 0.363 AMPS

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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 = 20.0 FEET

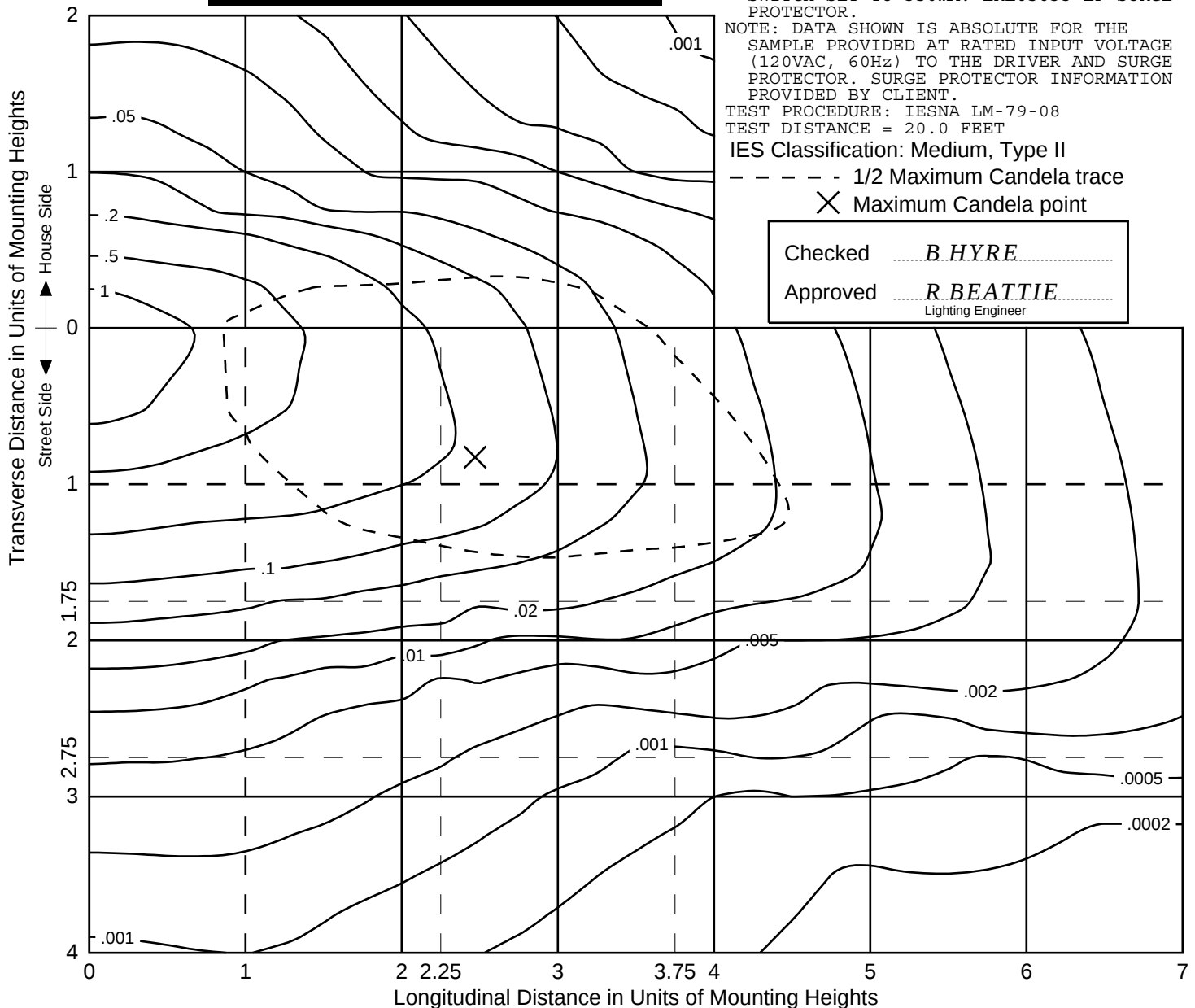
IES Classification: Medium, Type II

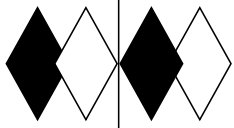
--- 1/2 Maximum Candela trace

X Maximum Candela point

Checked *B. HYRE*

Approved *R. BEATTIE*
Lighting Engineer





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PREPARED FOR: LED ROADWAY LIGHTING LTD.

CATALOG NUMBER: NXT 36S 0 X 2ES 3 XX 3

XX X XX X

LUMINAIRE: CAST METAL HOUSING WITH GRAY
PAINTED INTERIOR FINISH, 1 WHITE
CIRCUIT BOARD WITH 36 LEDS, 1 CLEAR
PLASTIC LENS WITH 1 OPTIC PER LED,
CLEAR FLAT GLASS LENS IN CAST GRAY
PAINTED METAL DOOR FRAME.

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

INPUT ELECTRICAL: 120.0 VOLTS, 42.3
WATTS, 0.363 AMPS

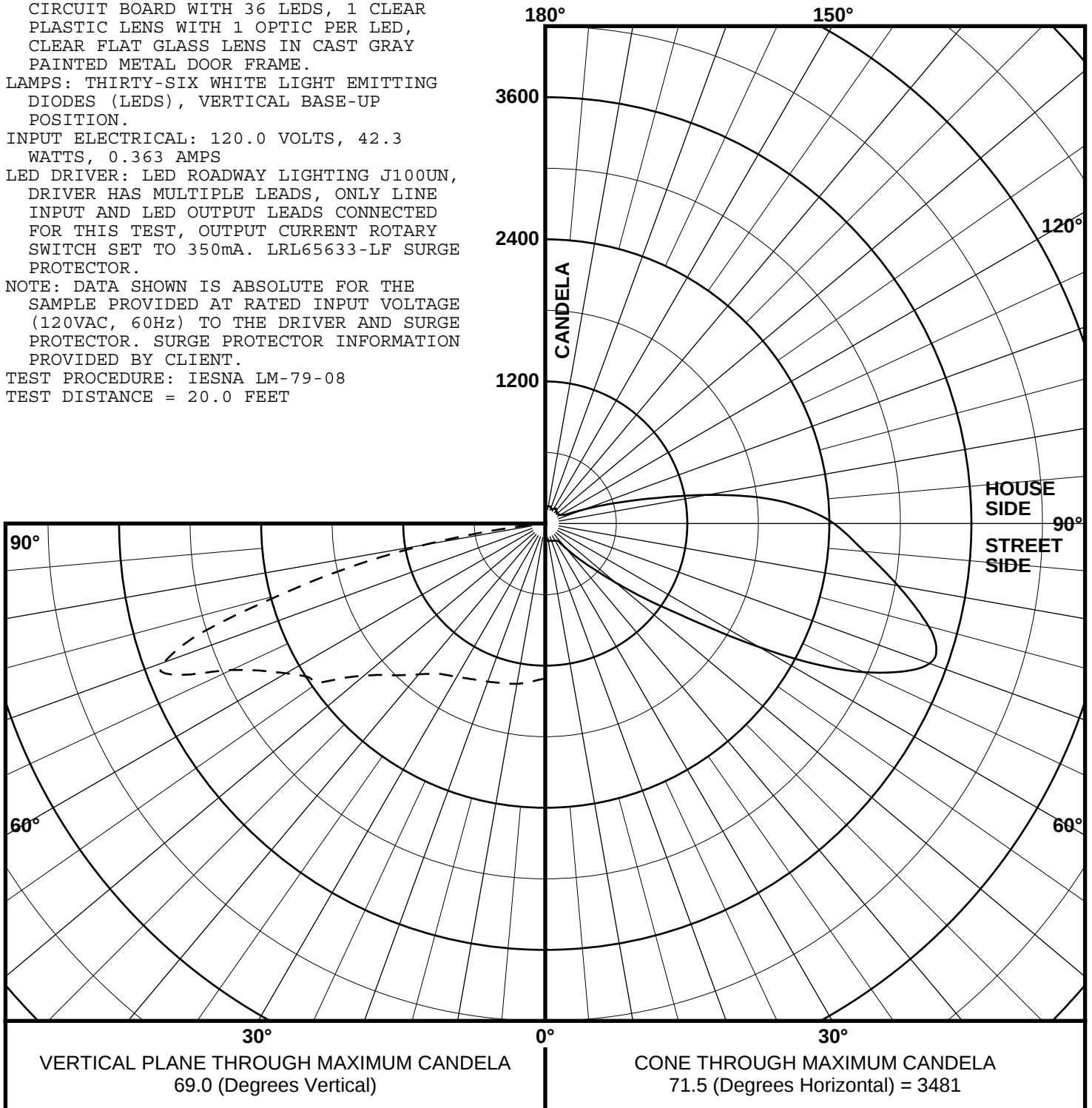
LED DRIVER: LED ROADWAY LIGHTING J100UN,
DRIVER HAS MULTIPLE LEADS, ONLY LINE
INPUT AND LED OUTPUT LEADS CONNECTED
FOR THIS TEST, OUTPUT CURRENT ROTARY
SWITCH SET TO 350mA. LRL65633-LF SURGE
PROTECTOR.

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 = 20.0 FEET

MAXIMUM PLANE AND MAXIMUM CONE PLOTS OF CANDELA

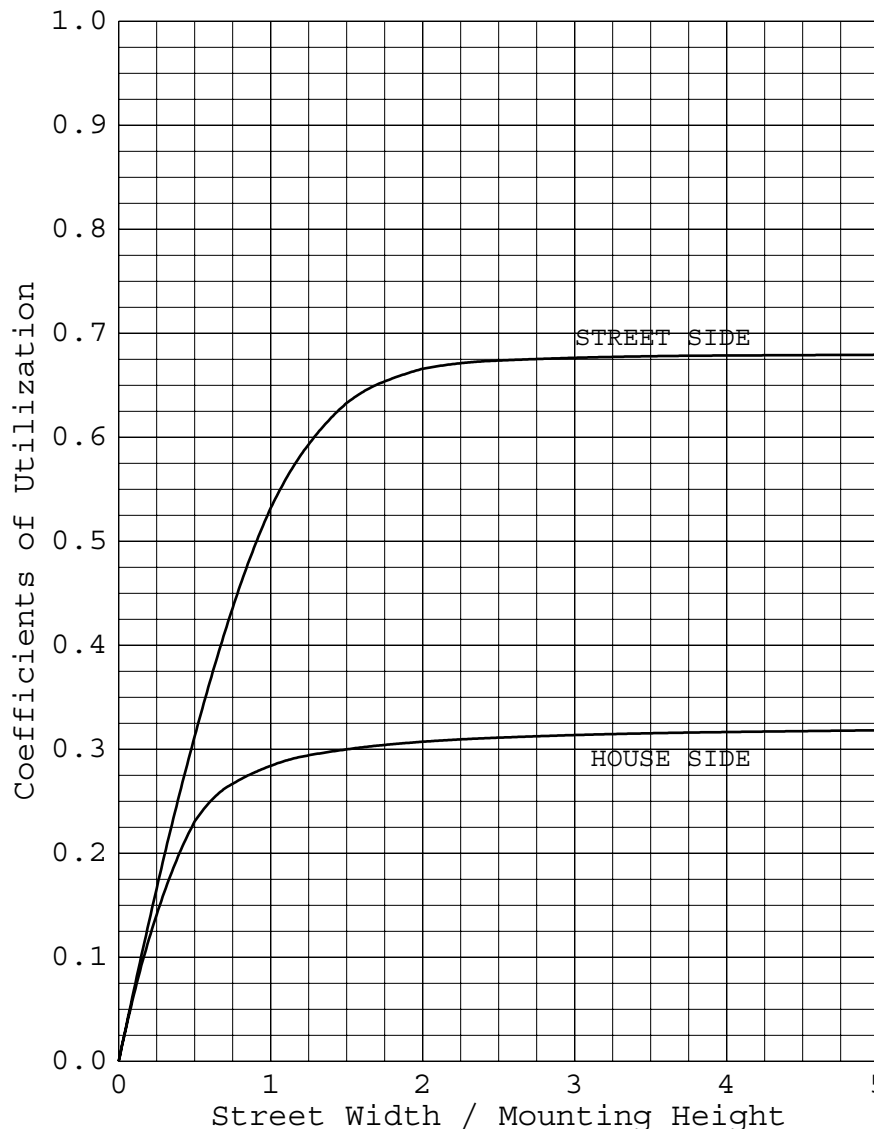




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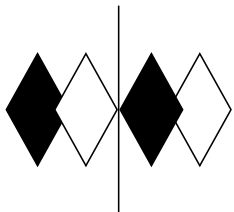
COEFFICIENTS OF UTILIZATION AND FLUX DISTRIBUTION



	LUMENS	PERCENT OF FIXTURE
DOWNWARD STREET SIDE	3386	68.0
DOWNWARD HOUSE SIDE	1592	32.0
DOWNWARD TOTAL	4978	100.0
UPWARD STREET SIDE	0	0.0
UPWARD HOUSE SIDE	0	0.0
UPWARD TOTAL	0	0.0
TOTAL FLUX	4978	100.0

EFFICACY = 117.7 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	3386.	68.0	
FL (0- 30)	593.3	11.9	
FM (30- 60)	1691.0	34.0	
FH (60- 80)	1066.4	21.4	G1
FVH(80- 90)	35.2	0.7	G1
BACK LIGHT	1592.	32.0	
BL (0- 30)	418.8	8.4	B1
BM (30- 60)	777.8	15.6	B1
BH (60- 80)	380.7	7.6	B1 G1
BVH(80- 90)	14.8	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	4978.	100.0	

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

BUG RATING: B1 U0 G1



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CANDELA TABULATION

	STREET SIDE										
	0.0	5.0	15.0	25.0	35.0	45.0	55.0	65.0	71.5	75.0	85.0
	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	1.	1.	2.	2.	2.	2.	3.	3.	3.	4.
	85.0	7.	7.	10.	9.	8.	8.	8.	12.	69.	67.
V	82.5	19.	19.	27.	23.	18.	22.	21.	53.	400.	429.
E	80.0	35.	36.	49.	35.	35.	40.	42.	168.	1022.	1142.
R	77.5	49.	51.	66.	52.	57.	58.	80.	583.	1670.	1860.
T	75.0	61.	63.	77.	77.	79.	92.	164.	1376.	2300.	2476.
I	72.5	85.	87.	98.	104.	105.	157.	499.	2169.	3014.	3099.
C	70.0	120.	120.	133.	142.	145.	340.	1039.	2807.	3426.	3330.
A	69.0<<	142.	142.	151.	161.	177.	470.	1255.	2969.	3481.	3353.
L	67.5	168.	171.	180.	198.	275.	712.	1563.	2975.	3341.	3277.
	65.0	234.	236.	267.	344.	552.	1130.	1892.	2751.	2927.	2887.
A	62.5	376.	378.	429.	559.	821.	1342.	1935.	2541.	2694.	2642.
N	60.0	546.	547.	592.	721.	943.	1381.	1880.	2421.	2529.	2482.
G	57.5	664.	663.	702.	804.	1005.	1389.	1850.	2326.	2400.	2355.
L	55.0	745.	744.	776.	868.	1064.	1386.	1823.	2282.	2338.	2283.
E	52.5	810.	807.	838.	933.	1123.	1390.	1768.	2082.	2139.	2121.
	50.0	866.	863.	901.	996.	1179.	1415.	1732.	1957.	1998.	2000.
	47.5	921.	920.	961.	1055.	1233.	1440.	1688.	1854.	1893.	1910.
	45.0	975.	975.	1023.	1124.	1280.	1458.	1638.	1753.	1812.	1835.
	42.5	1040.	1041.	1102.	1214.	1342.	1481.	1609.	1674.	1734.	1766.
	40.0	1152.	1153.	1220.	1311.	1404.	1502.	1567.	1611.	1662.	1694.
	37.5	1291.	1290.	1340.	1395.	1454.	1510.	1512.	1552.	1599.	1634.
	35.0	1410.	1406.	1433.	1460.	1488.	1494.	1458.	1503.	1550.	1579.
	30.0	1523.	1520.	1524.	1513.	1470.	1399.	1397.	1452.	1493.	1509.
	25.0	1499.	1490.	1469.	1424.	1368.	1360.	1381.	1427.	1451.	1452.
	20.0	1376.	1373.	1366.	1363.	1364.	1379.	1398.	1424.	1421.	1407.
	15.0	1390.	1391.	1394.	1397.	1402.	1412.	1423.	1417.	1395.	1382.
	10.0	1431.	1430.	1431.	1432.	1433.	1430.	1416.	1394.	1374.	1360.
	5.0	1421.	1420.	1414.	1408.	1400.	1391.	1374.	1355.	1341.	1334.
	0.0	1307.	1307.	1307.	1307.	1307.	1307.	1307.	1307.	1307.	1307.

||
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	3.	3.	3.	2.	2.	1.	0.	0.	0.	0.	0.
	85.0	33.	28.	9.	7.	7.	8.	9.	8.	4.	0.	0.
V	82.5	240.	185.	23.	20.	18.	23.	30.	34.	37.	16.	5.
E	80.0	642.	494.	51.	38.	36.	45.	60.	66.	76.	79.	80.
R	77.5	1182.	918.	113.	63.	59.	68.	91.	103.	127.	140.	137.
T	75.0	1626.	1284.	222.	93.	87.	90.	114.	125.	161.	179.	176.
I	72.5	2098.	1729.	428.	127.	110.	110.	126.	125.	177.	200.	206.
C	70.0	2382.	1991.	654.	160.	129.	129.	147.	127.	154.	159.	159.
A	69.0<<	2438.	2039.	733.	172.	136.	136.	154.	131.	150.	146.	146.
L	67.5	2471.	2067.	845.	187.	148.	146.	164.	140.	148.	135.	134.
	65.0	2386.	2042.	1011.	216.	166.	162.	178.	159.	153.	136.	134.
A	62.5	2297.	2034.	1159.	256.	180.	180.	187.	182.	167.	150.	147.
N	60.0	2267.	2052.	1294.	331.	196.	197.	191.	199.	188.	169.	164.
G	57.5	2243.	2077.	1405.	450.	216.	214.	198.	208.	206.	187.	182.
L	55.0	2197.	2061.	1499.	591.	242.	231.	211.	212.	219.	204.	198.
E	52.5	2110.	1984.	1484.	732.	283.	244.	225.	224.	232.	216.	210.
	50.0	2034.	1925.	1495.	863.	351.	259.	238.	237.	242.	228.	224.
	47.5	1957.	1872.	1499.	959.	442.	278.	255.	250.	247.	237.	235.
	45.0	1880.	1814.	1485.	1021.	535.	313.	272.	263.	258.	250.	250.
	42.5	1806.	1744.	1464.	1059.	621.	374.	294.	278.	271.	267.	267.
	40.0	1725.	1670.	1431.	1083.	696.	440.	334.	295.	285.	279.	278.
	37.5	1649.	1600.	1394.	1097.	757.	503.	386.	331.	305.	294.	294.
	35.0	1578.	1532.	1357.	1103.	810.	566.	440.	380.	349.	332.	332.
	30.0	1464.	1420.	1286.	1108.	904.	710.	575.	492.	445.	423.	423.
	25.0	1378.	1337.	1236.	1121.	987.	852.	737.	646.	596.	569.	570.
	20.0	1325.	1291.	1216.	1142.	1063.	974.	899.	831.	786.	766.	763.
	15.0	1305.	1279.	1223.	1173.	1125.	1077.	1031.	993.	963.	949.	951.
	10.0	1301.	1283.	1246.	1212.	1184.	1158.	1134.	1118.	1104.	1099.	1102.
	5.0	1304.	1295.	1276.	1259.	1244.	1230.	1220.	1212.	1208.	1207.	1208.
	0.0	1307.	1307.	1307.	1307.	1307.	1307.	1307.	1307.	1307.	1307.	1307.

CONE OF MAXIMUM CANDELA



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5-DEGREE
ZONAL LUMEN SUMMARY

0- 5	31
5- 10	93
10- 15	150
15- 20	200
20- 25	246
25- 30	292
30- 35	335
35- 40	371
40- 45	400
45- 50	428
50- 55	457
55- 60	477
60- 65	475
65- 70	450
70- 75	342
75- 80	180
80- 85	48
85- 90	2
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	124
0- 20	474
0- 30	1012
0- 40	1718
0- 50	2547
0- 60	3481
0- 70	4406
0- 80	4928
0- 90	4978
0-100	4978
0-110	4978
0-120	4978
0-130	4978
0-140	4978
0-150	4978
0-160	4978
0-170	4978
0-180	4978



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