

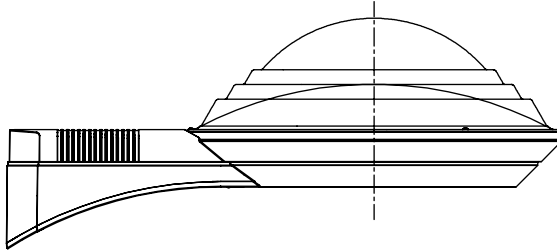
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THE LIGHT CENTER OF THE INDUSTRY SINCE 1955

INDEPENDENT TESTING LABORATORIES, INC.  
3386 LONGHORN ROAD, BOULDER, CO 80302 USA

PHONE: (303)442-1255 • FAX: (303)449-5274 • E-MAIL: [itl@itlboulder.com](mailto:itl@itlboulder.com) • WEBSITE: [www.itlboulder.com](http://www.itlboulder.com)

## ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINATION

Values based on 20 foot mounting height.



REPORT NUMBER: ITL64429  
ISSUE DATE: 08/15/11 PAGE: 1 OF 6  
DATE SAMPLE TESTED: 03/19/10  
PREPARED FOR: LSI INDUSTRIES, INC.  
CATALOG NUMBER: XENM3/XINM3 SA FT LED  
63 350 CW UE  
LUMINAIRE: CAST BLACK PAINTED METAL  
HOUSING, FORMED BLACK PAINTED METAL  
TOP, FLAT METAL CIRCUIT BOARD MOUNTING  
PLATE, ONE CIRCUIT BOARD WITH 63 LEDS,  
FABRICATED PREMIUM SPECULAR METAL  
REFLECTOR WITH 2 "V" SHAPED INSERTS  
BELOW 18 LEDS, FLAT PREMIUM SPECULAR  
METAL REFLECTOR SURROUND, CLEAR FLAT  
GLASS LENS.  
LAMPS: SIXTY-THREE 1.15-WATT WHITE  
LIGHT EMITTING DIODES (LEDs) EACH WITH  
CLEAR SEMI-HEMISPHERICAL INTEGRAL  
LENS, VERTICAL BASE-UP POSITION.  
TOTAL INPUT WATTS = 77.3 AT 120.0 VOLTS  
LED DRIVER: LED ELECTRONIC 350mA DRIVER  
NOTE: DATA SHOWN IS ABSOLUTE FOR THE  
SAMPLE PROVIDED AT RATED INPUT VOLTAGE  
(120VAC, 60Hz) TO THE LED DRIVER. LAMP  
AND LED DRIVER INFORMATION PROVIDED BY  
CLIENT. THE LUMINAIRE HOUSING PROVIDED  
TO ITL TO TEST AND GENERATE THIS  
REPORT WAS MODEL NUMBER "XENM3 SA FT  
LED 63 350 CW UE" THE OTHER HOUSINGS  
DEPICTED IN THE DRAWING AND LISTED AS  
ADDITIONAL CATALOG NUMBERS SHOULD  
PRODUCE COMPARABLE RESULTS. DRAWING  
PROVIDED BY CLIENT.  
TEST PROCEDURE: IESNA LM-79-08  
TEST DISTANCE = 25.25 FEET

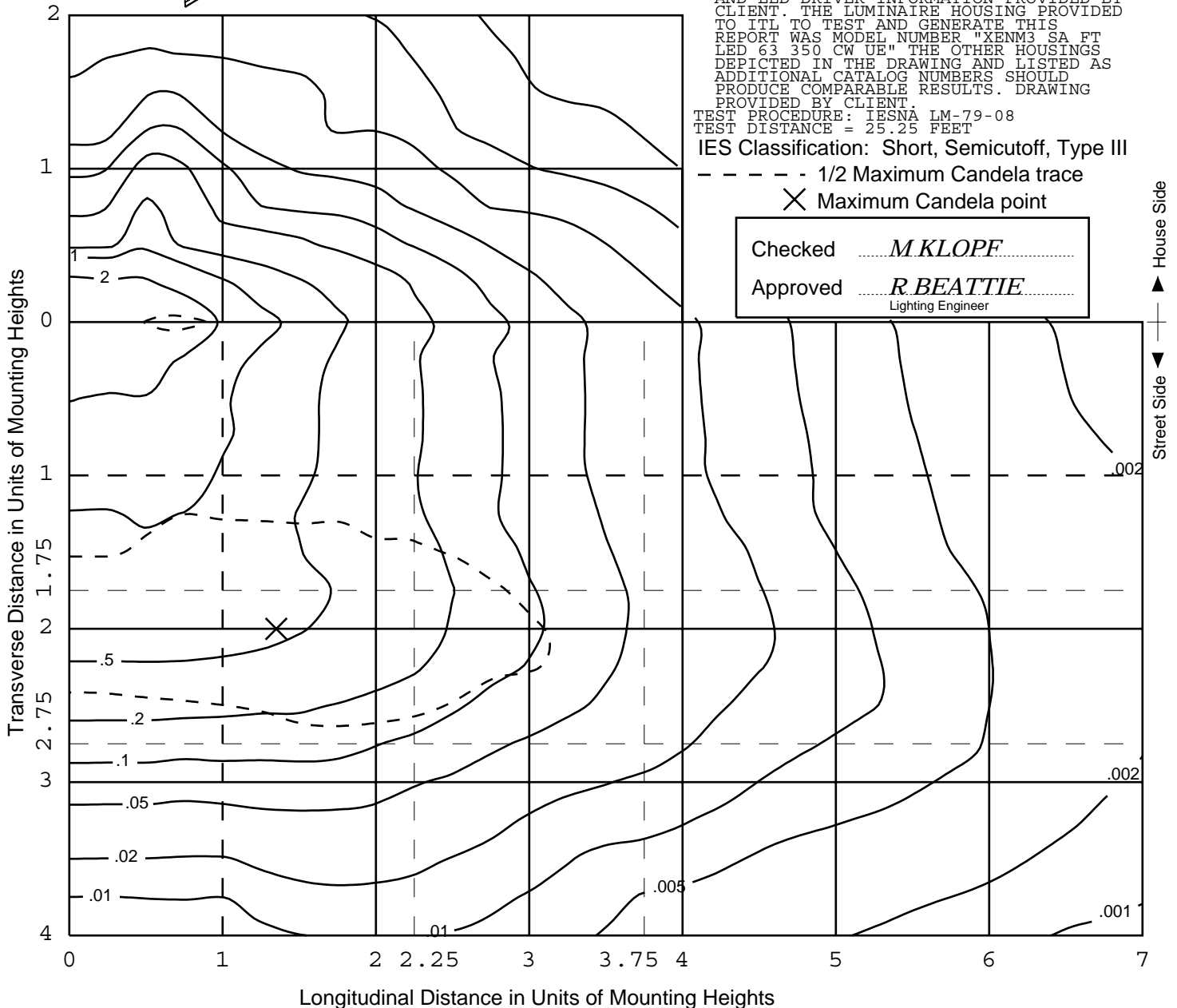
IES Classification: Short, Semicutoff, Type III

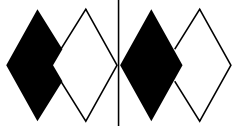
--- 1/2 Maximum Candela trace

X Maximum Candela point

Checked *M.KLOPF*

Approved *R.BEATTIE*  
Lighting Engineer





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REPORT NUMBER: ITL64429

ISSUE DATE: 08/15/11 PAGE: 2 OF 6

DATE SAMPLE TESTED: 03/19/10

PREPARED FOR: LSI INDUSTRIES, INC.

CATALOG NUMBER: XENM3/XINM3 SA FT LED

63 350 CW UE

LUMINAIRE: CAST BLACK PAINTED METAL HOUSING, FORMED BLACK PAINTED METAL TOP, FLAT METAL CIRCUIT BOARD MOUNTING PLATE, ONE CIRCUIT BOARD WITH 63 LEDS, FABRICATED PREMIUM SPECULAR METAL REFLECTOR WITH 2 "V" SHAPED INSERTS BELOW 18 LEDS, FLAT PREMIUM SPECULAR METAL REFLECTOR SURROUND, CLEAR FLAT GLASS LENS.

LAMPS: SIXTY-THREE 1.15-WATT WHITE LIGHT EMITTING DIODES (LEDs) EACH WITH CLEAR SEMI-HEMISPHERICAL INTEGRAL LENS, VERTICAL BASE-UP POSITION.

TOTAL INPUT WATTS = 77.3 AT 120.0 VOLTS

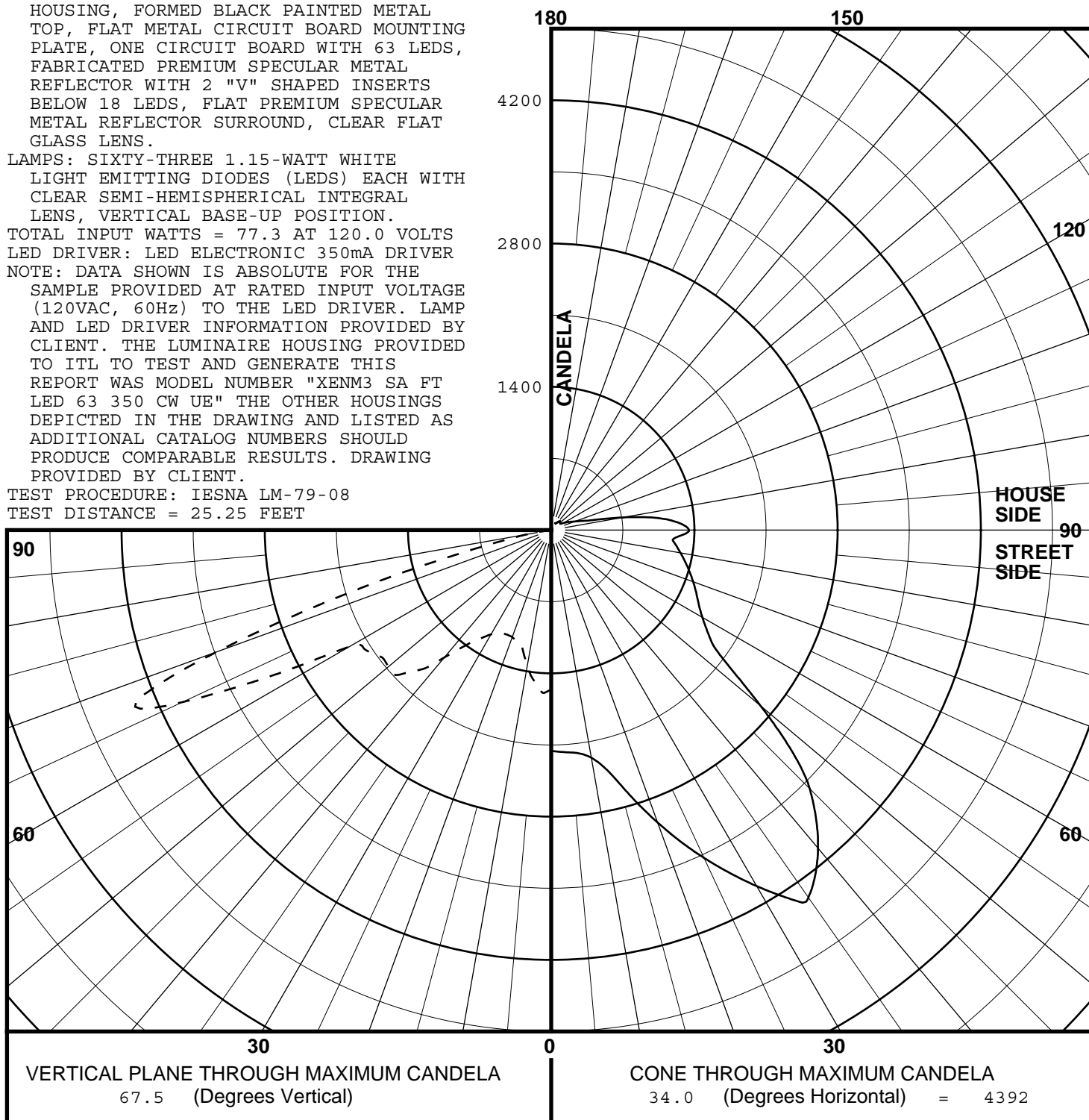
LED DRIVER: LED ELECTRONIC 350mA DRIVER

NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED AT RATED INPUT VOLTAGE (120VAC, 60Hz) TO THE LED DRIVER. LAMP AND LED DRIVER INFORMATION PROVIDED BY CLIENT. THE LUMINAIRE HOUSING PROVIDED TO ITL TO TEST AND GENERATE THIS REPORT WAS MODEL NUMBER "XENM3 SA FT LED 63 350 CW UE" THE OTHER HOUSINGS DEPICTED IN THE DRAWING AND LISTED AS ADDITIONAL CATALOG NUMBERS SHOULD PRODUCE COMPARABLE RESULTS. DRAWING PROVIDED BY CLIENT.

TEST PROCEDURE: IESNA LM-79-08

TEST DISTANCE = 25.25 FEET

## MAXIMUM PLANE AND MAXIMUM CONE PLOTS OF CANDELA





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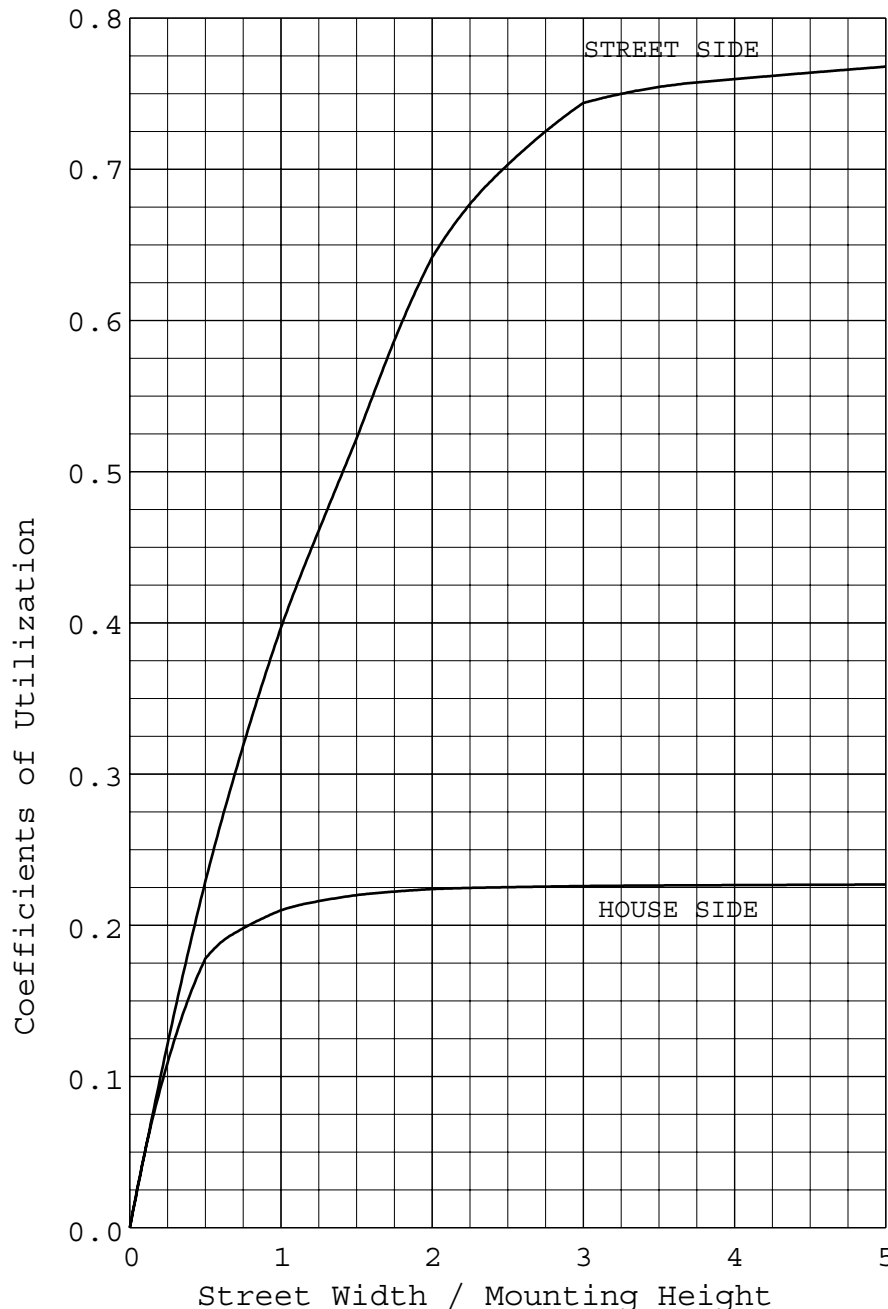
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PAGE: 3 OF 6  
DATE SAMPLE TESTED: 03/19/10

#### COEFFICIENTS OF UTILIZATION AND FLUX DISTRIBUTION



	LUMENS	PERCENT OF FIXTURE
DOWNWARD STREET SIDE	4397	77.0
DOWNWARD HOUSE SIDE	1316	23.0
DOWNWARD TOTAL	5713	100.0
UPWARD STREET SIDE	0	0.0
UPWARD HOUSE SIDE	0	0.0
UPWARD TOTAL	0	0.0
TOTAL FLUX	5713	100.0
EFFICACY = 73.9 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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REPORT NUMBER: ITL64429

PAGE: 4 OF 6

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DATE SAMPLE TESTED: 03/19/10

PREPARED FOR: LSI INDUSTRIES, INC.

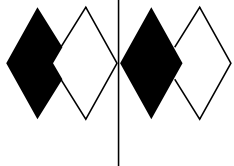
### FLUX DISTRIBUTION BY SOLID ANGLE

(PER IESNA TM-15-07, LUMINAIRE CLASSIFICATION  
SYSTEM FOR OUTDOOR LUMINAIRES)

	LUMENS	PERCENT OF FIXTURE	BUG ZONE RATINGS
FORWARD LIGHT	4397.	77.0	
FL ( 0- 30)	572.6	10.0	
FM ( 30- 60)	1965.6	34.4	
FH ( 60- 80)	1815.4	31.8	G2
FVH( 80- 90)	44.0	0.8	U1 G1
BACK LIGHT	1316.	23.0	
BL ( 0- 30)	444.2	7.8	B1
BM ( 30- 60)	667.0	11.7	B1
BH ( 60- 80)	197.7	3.5	B1 G1
BVH( 80- 90)	6.9	0.1	U0 G0
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	5713.	100.0	

BACKLIGHT, UPLIGHT, AND GLARE (BUG) RATINGS  
(PER ADDENDUM A FOR IESNA TM-15-07)

BUG RATING: B1 U1 G2



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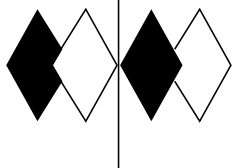
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PAGE: 5 OF 6  
DATE SAMPLE TESTED: 03/19/10

### CANDELA TABULATION

	STREET SIDE										
	0.0	5.0	15.0	25.0	34.0	35.0	45.0	55.0	65.0	75.0	85.0
	90.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	87.5	1.	1.	2.	2.	2.	2.	5.	5.	3.	6.
	85.0	4.	5.	9.	13.	13.	19.	39.	50.	92.	47.
	82.5	12.	14.	22.	35.	68.	69.	58.	112.	295.	166.
	80.0	35.	36.	51.	140.	241.	238.	171.	436.	921.	438.
	77.5	87.	90.	113.	367.	518.	512.	613.	1322.	1370.	646.
	75.0	236.	240.	299.	736.	1139.	1140.	1661.	2427.	1365.	820.
	72.5	632.	643.	764.	1324.	2206.	2228.	3210.	2740.	1319.	1066.
	70.0	1310.	1335.	1562.	2207.	3483.	3544.	4118.	2555.	1471.	1253.
	67.5<<	2157.	2182.	2557.	3535.	4392.	4384.	3574.	1918.	1577.	1378.
	65.0	3143.	3164.	3754.	4279.	3980.	3927.	2685.	2038.	1633.	1436.
	62.5	3418.	3401.	3672.	3994.	3093.	3024.	1971.	2023.	1744.	1500.
	60.0	3043.	3012.	2995.	3244.	2281.	2218.	2122.	1975.	1690.	1478.
	57.5	2375.	2346.	2207.	2433.	2164.	2170.	1982.	1927.	1646.	1476.
V	55.0	1748.	1717.	1603.	2258.	2120.	2103.	1921.	1812.	1575.	1449.
E	52.5	1609.	1620.	1698.	2104.	2065.	2060.	1971.	1723.	1477.	1393.
R	50.0	1580.	1576.	1565.	1931.	2077.	2080.	1991.	1699.	1409.	1350.
T	47.5	1511.	1507.	1510.	1775.	2088.	2098.	2019.	1666.	1378.	1348.
I	45.0	1464.	1464.	1477.	1703.	1964.	1980.	1964.	1629.	1372.	1378.
C	42.5	1465.	1464.	1465.	1584.	1835.	1847.	1822.	1584.	1391.	1423.
A	40.0	1415.	1414.	1410.	1469.	1624.	1633.	1677.	1525.	1440.	1497.
L	37.5	1365.	1363.	1351.	1362.	1453.	1456.	1524.	1486.	1495.	1606.
	35.0	1306.	1304.	1292.	1282.	1329.	1327.	1420.	1442.	1580.	1723.
A	32.5	1247.	1243.	1227.	1237.	1245.	1248.	1265.	1380.	1621.	1830.
N	30.0	1183.	1180.	1175.	1177.	1176.	1176.	1194.	1298.	1583.	1885.
G	27.5	1150.	1146.	1139.	1122.	1141.	1144.	1157.	1230.	1476.	1826.
L	25.0	1097.	1096.	1094.	1093.	1115.	1117.	1147.	1206.	1393.	1710.
E	22.5	1077.	1078.	1082.	1089.	1110.	1112.	1149.	1192.	1348.	1636.
	20.0	1078.	1081.	1088.	1098.	1114.	1116.	1156.	1202.	1382.	1622.
	17.5	1095.	1099.	1103.	1115.	1133.	1134.	1165.	1266.	1438.	1610.
	15.0	1124.	1128.	1129.	1136.	1155.	1156.	1226.	1342.	1483.	1602.
	12.5	1151.	1154.	1162.	1187.	1238.	1240.	1315.	1420.	1504.	1590.
	10.0	1256.	1259.	1273.	1302.	1348.	1350.	1413.	1466.	1519.	1578.
	7.5	1395.	1396.	1406.	1427.	1451.	1451.	1477.	1508.	1552.	1589.
	5.0	1493.	1494.	1496.	1506.	1520.	1521.	1541.	1564.	1586.	1587.
	2.5	1591.	1594.	1591.	1592.	1594.	1593.	1594.	1588.	1580.	1571.
	0.0	1557.	1557.	1557.	1557.	1557.	1557.	1557.	1557.	1557.	1557.
					PLANE OF MAXIMUM CANDELA						
					CONE OF MAXIMUM CANDELA						



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PAGE: 6 OF 6  
DATE SAMPLE TESTED: 03/19/10

#### 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
	90.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	87.5	5.	2.	2.	1.	1.	1.	0.	0.	0.	0.
	85.0	36.	12.	8.	14.	8.	8.	3.	2.	0.	0.
	82.5	138.	48.	32.	33.	15.	17.	14.	10.	5.	2.
	80.0	277.	134.	53.	53.	29.	26.	18.	15.	13.	8.
	77.5	480.	269.	96.	88.	40.	36.	29.	18.	16.	13.
	75.0	721.	446.	172.	90.	68.	58.	43.	24.	19.	16.
	72.5	932.	644.	180.	91.	94.	85.	63.	34.	25.	21.
	70.0	1162.	853.	228.	111.	112.	110.	74.	45.	35.	28.
	67.5<<	1347.	1152.	352.	187.	107.	124.	83.	59.	49.	36.
	65.0	1418.	1342.	503.	234.	98.	120.	96.	74.	58.	46.
	62.5	1608.	1476.	605.	257.	127.	96.	100.	78.	70.	56.
	60.0	1846.	1625.	695.	254.	165.	103.	99.	102.	78.	59.
	57.5	1975.	1695.	781.	277.	180.	152.	124.	176.	82.	58.
V	55.0	1953.	1688.	884.	298.	176.	220.	244.	219.	77.	53.
E	52.5	1934.	1660.	984.	285.	196.	287.	351.	253.	65.	46.
R	50.0	1935.	1626.	1073.	324.	248.	338.	367.	321.	74.	51.
T	47.5	1981.	1640.	1187.	429.	301.	384.	373.	333.	121.	84.
I	45.0	2086.	1704.	1307.	530.	322.	479.	436.	211.	119.	106.
C	42.5	2122.	1736.	1408.	662.	371.	606.	612.	216.	117.	113.
A	40.0	2158.	1788.	1479.	837.	499.	648.	595.	289.	122.	115.
L	37.5	2320.	1927.	1509.	1019.	623.	658.	431.	228.	121.	116.
	35.0	2400.	1984.	1532.	1173.	709.	631.	375.	174.	128.	119.
A	32.5	2420.	2012.	1558.	1305.	857.	550.	345.	163.	149.	130.
N	30.0	2345.	2019.	1573.	1379.	961.	555.	337.	200.	166.	151.
G	27.5	2295.	2001.	1542.	1346.	1025.	657.	409.	278.	215.	189.
L	25.0	2106.	1894.	1468.	1278.	1075.	810.	537.	384.	313.	274.
E	22.5	1939.	1793.	1430.	1247.	1135.	947.	713.	544.	440.	395.
	20.0	1851.	1751.	1449.	1269.	1172.	1037.	885.	747.	640.	588.
	17.5	1784.	1720.	1468.	1283.	1175.	1107.	1017.	928.	856.	818.
	15.0	1719.	1664.	1449.	1286.	1191.	1141.	1103.	1060.	1017.	991.
	12.5	1616.	1571.	1429.	1306.	1230.	1178.	1147.	1132.	1115.	1106.
	10.0	1565.	1537.	1451.	1352.	1281.	1234.	1197.	1177.	1165.	1160.
	7.5	1555.	1537.	1483.	1412.	1346.	1301.	1267.	1249.	1234.	1228.
	5.0	1553.	1542.	1513.	1475.	1433.	1394.	1365.	1347.	1331.	1328.
	2.5	1554.	1550.	1537.	1524.	1511.	1498.	1489.	1482.	1475.	1474.
	0.0	1557.	1557.	1557.	1557.	1557.	1557.	1557.	1557.	1557.	1557.

CONE OF MAXIMUM CANDELA