

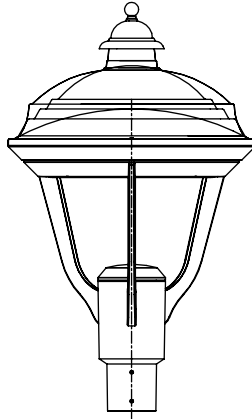
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THE LIGHT CENTER OF THE INDUSTRY SINCE 1955

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

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## ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINATION

Values based on 20 foot mounting height.



REPORT NUMBER: ITL64433  
DATE: 03/25/10  
PREPARED FOR: LSI INDUSTRIES, INC.  
CATALOG NUMBER: XENM/XINM/XLXM PT FT  
LED 63 CW F UE  
LUMINAIRE: CAST BLACK PAINTED METAL  
POST TOP FITTER, CAST BLACK PAINTED  
METAL POST TOP CAP, THREE FABRICATED  
BLACK PAINTED METAL SUPPORT ARMS, 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, CAST BLACK  
PAINTED METAL UPPER HOUSING WITH  
FORMED BLACK PAINTED METAL TOP, 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 = 76.9 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 "XENM PT FT  
LED 63 CW F 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

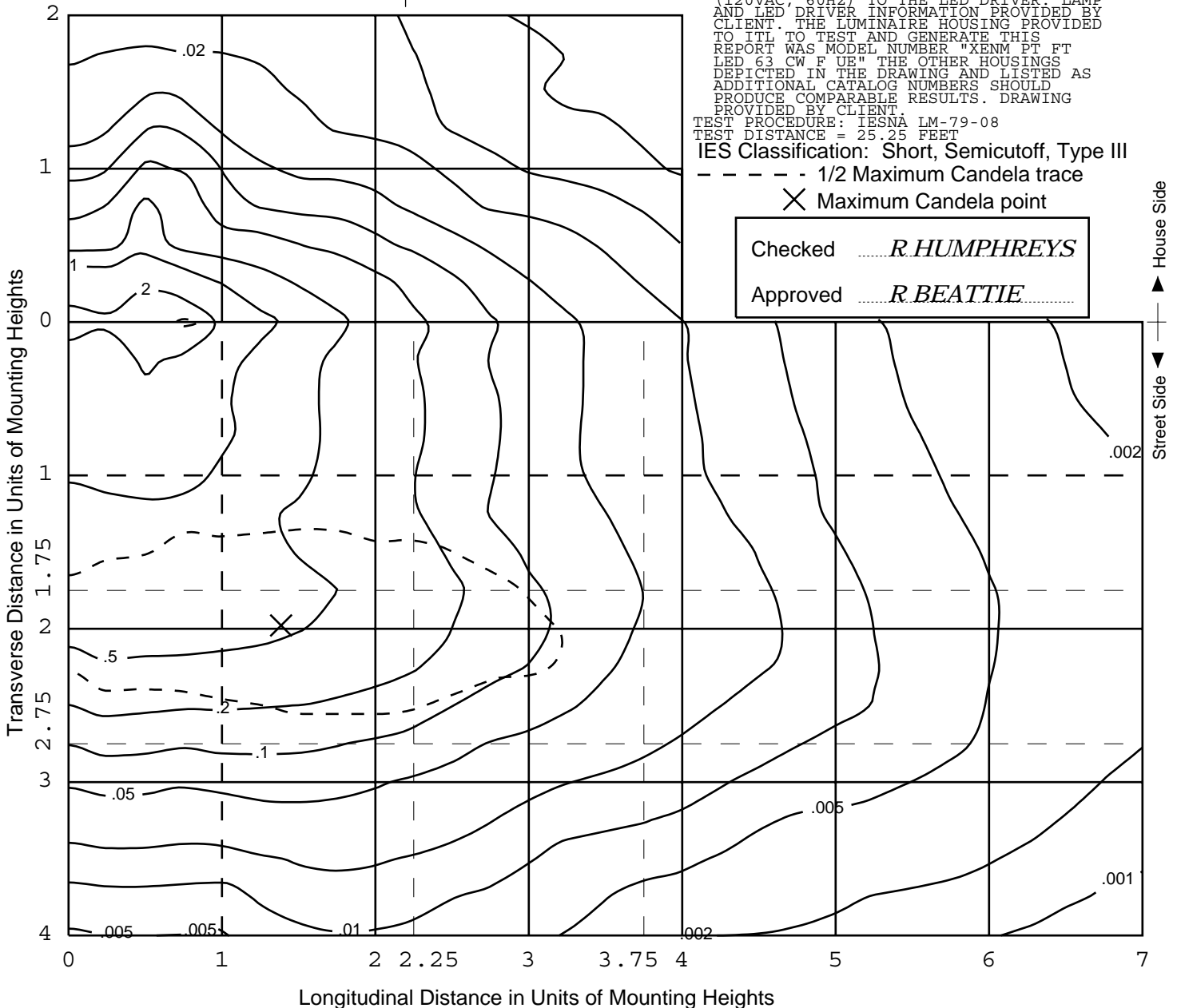
IES Classification: Short, Semicutoff, Type III

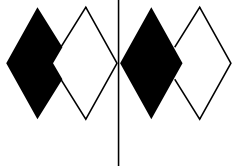
--- 1/2 Maximum Candela trace

X Maximum Candela point

Checked *R. HUMPHREYS*

Approved *R. BEATTIE*





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DATE: 03/25/10

PREPARED FOR: LSI INDUSTRIES, INC.

CATALOG NUMBER: XENM/XINM/XLXM PT FT

LED 63 CW F UE

LUMINAIRE: CAST BLACK PAINTED METAL  
POST TOP FITTER, CAST BLACK PAINTED  
METAL POST TOP CAP, THREE FABRICATED  
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TOTAL INPUT WATTS = 76.9 AT 120.0 VOLTS

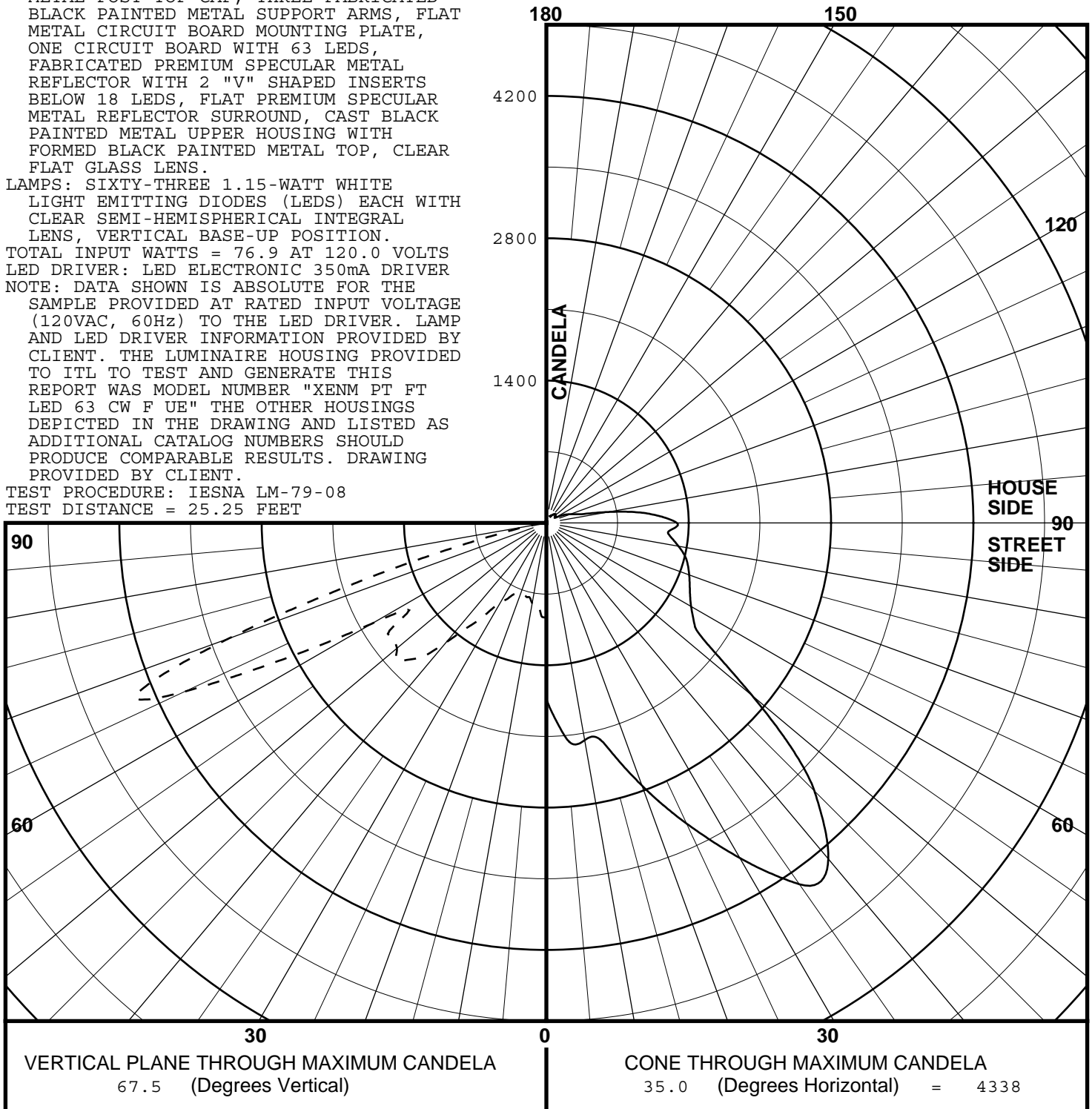
LED DRIVER: LED ELECTRONIC 350mA DRIVER

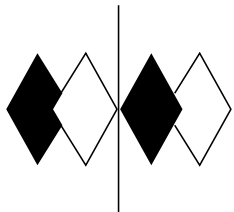
NOTE: DATA SHOWN IS ABSOLUTE FOR THE  
SAMPLE PROVIDED AT RATED INPUT VOLTAGE  
(120VAC, 60Hz) TO THE LED DRIVER. LAMP  
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LED 63 CW F UE" THE OTHER HOUSINGS  
DEPICTED IN THE DRAWING AND LISTED AS  
ADDITIONAL CATALOG NUMBERS SHOULD  
PRODUCE COMPARABLE 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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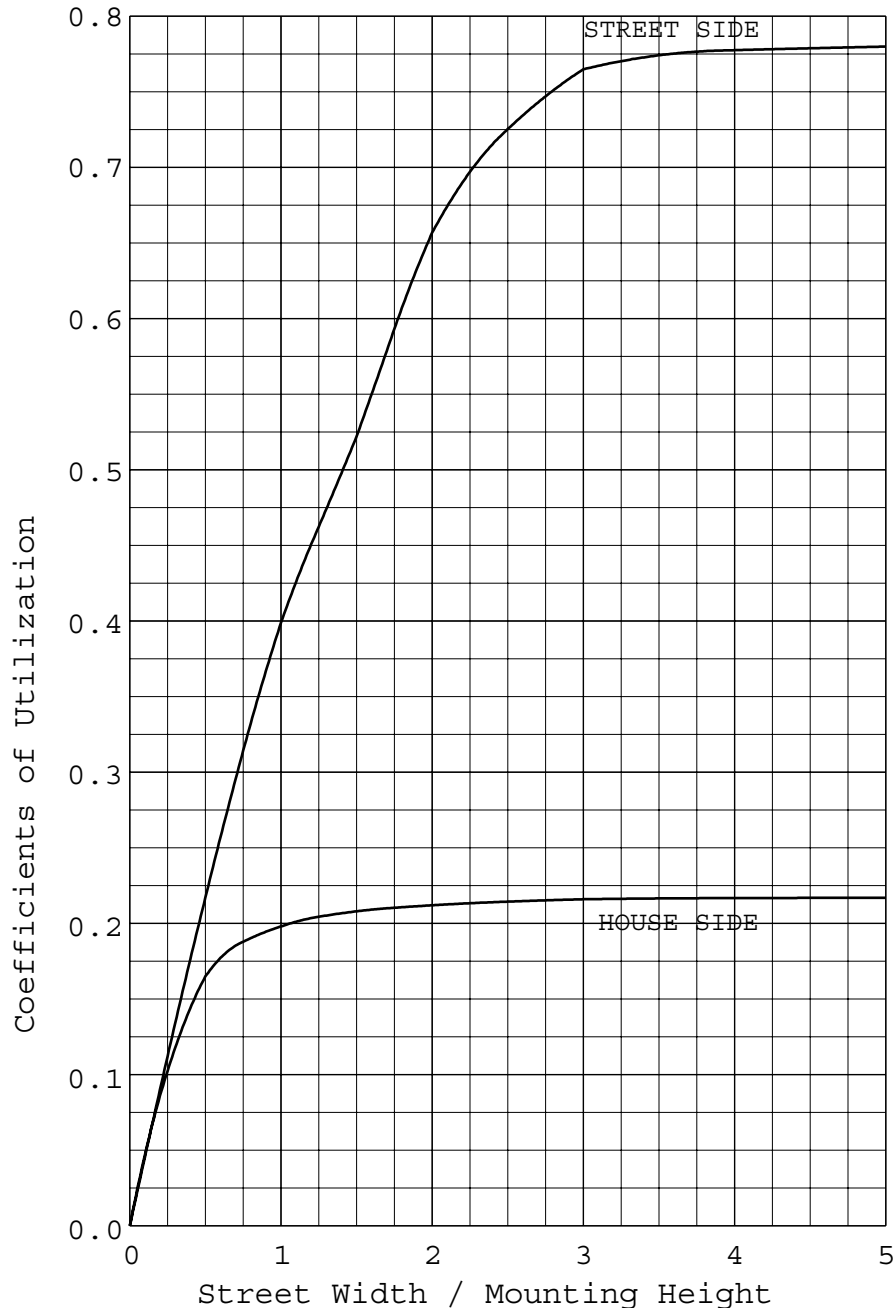
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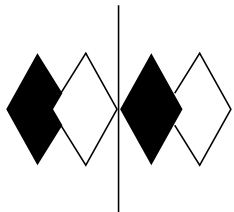
PREPARED FOR: LSI INDUSTRIES, INC.

#### COEFFICIENTS OF UTILIZATION AND FLUX DISTRIBUTION



	LUMENS	PERCENT OF FIXTURE
DOWNWARD STREET SIDE	4008.	78.1
DOWNWARD HOUSE SIDE	1119.	21.8
DOWNWARD TOTAL	5127.	100.0
UPWARD STREET SIDE	1.	0.0
UPWARD HOUSE SIDE	1.	0.0
UPWARD TOTAL	2.	0.0
TOTAL FLUX	5129.	100.0
EFFICACY = 66.7 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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REPORT NUMBER: ITL64433

DATE: 03/25/10

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
FORWARD LIGHT	4008.	78.1
FL ( 0- 30)		7.7
FM ( 30- 60)		35.8
FH ( 60- 80)		33.8
FVH( 80- 90)		0.8
BACK LIGHT	1119.	21.8
BL ( 0- 30)		6.0
BM ( 30- 60)		11.9
BH ( 60- 80)		3.7
BVH( 80- 90)		0.2
UPLIGHT	2.	0.0
UL ( 90-100)		0.0
UH (100-180)		0.0
TRAPPED LIGHT	0.	0.0
TOTAL FLUX	5129.	100.0

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

BUG RATING: B1 U1 G1	FIRST DETERMINING SECONDARY SOLID ANGLE*	LUMENS
BACKLIGHT RATING: B1	BH	188.4
UPLIGHT RATING : U1	UH	1.3
GLARE RATING : G1	FVH	41.3

\* NOTE: OTHER DETERMINING SOLID ANGLES MAY FALL INTO THIS SAME CATEGORY. ONLY THE FIRST DETERMINING ANGLES FROM THE TABLES A1-A3 IN THE ADDENDUM ARE SHOWN.



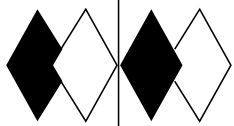
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DATE: 03/25/10

STREET SIDE	LATERAL ANGLE										
	0.0	5.0	15.0	25.0	35.0	45.0	55.0	65.0	75.0	85.0	90.0

	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.	1.	1.	2.	2.
	125.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	1.
	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.	1.	1.	1.	1.	1.	1.
	92.5	0.	0.	0.	0.	1.	2.	1.	1.	1.	1.	1.
	90.0	0.	0.	0.	0.	2.	2.	1.	1.	1.	1.	1.
	87.5	1.	0.	1.	2.	3.	3.	3.	3.	3.	4.	3.
	85.0	5.	4.	8.	10.	13.	17.	32.	50.	68.	50.	40.
V	82.5	11.	12.	19.	28.	48.	53.	92.	249.	518.	180.	153.
E	80.0	28.	31.	43.	111.	183.	145.	343.	892.	488.	314.	267.
R	77.5	66.	74.	89.	331.	407.	509.	1158.	1537.	648.	476.	432.
T	75.0	167.	189.	213.	622.	973.	1474.	2525.	1519.	831.	670.	655.
I	72.5	480.	549.	622.	1224.	1978.	3144.	3024.	1165.	989.	973.	898.
C	70.0	1023.	1219.	1341.	2074.	3332.	4220.	2567.	1428.	1266.	980.	1061.
A	67.5	1737.	2110.	2268.	3263.	4338.	3728.	1786.	1557.	1429.	1203.	1284.
L	65.0	2595.	3187.	3403.	3976.	3928.	2582.	1762.	1632.	1454.	1233.	1361.
	62.5	2819.	3460.	3460.	3717.	2875.	1796.	1984.	1769.	1484.	1335.	1595.
A	60.0	2492.	3036.	2849.	2930.	1979.	1838.	2005.	1729.	1497.	1482.	1899.
N	57.5	1879.	2247.	2010.	2096.	1601.	1933.	1971.	1659.	1467.	1500.	1936.
G	55.0	1348.	1578.	1415.	1656.	1903.	1889.	1866.	1615.	1436.	1512.	1905.
L	52.5	1081.	1272.	1309.	1795.	1887.	1959.	1756.	1523.	1409.	1554.	1873.
E	50.0	1248.	1485.	1457.	1659.	1919.	1966.	1710.	1432.	1363.	1571.	1882.
	47.5	1219.	1444.	1395.	1577.	1995.	1970.	1674.	1379.	1350.	1670.	1982.
	45.0	1207.	1422.	1390.	1533.	1900.	1956.	1619.	1367.	1367.	1776.	2029.
	42.5	1236.	1439.	1422.	1428.	1774.	1816.	1570.	1382.	1408.	1821.	2025.
	40.0	1187.	1376.	1360.	1327.	1532.	1656.	1514.	1418.	1467.	1891.	2056.
	37.5	1140.	1315.	1309.	1210.	1317.	1454.	1433.	1446.	1550.	2090.	2245.
	35.0	1091.	1235.	1253.	1109.	1171.	1269.	1362.	1447.	1635.	2156.	2283.
	32.5	1039.	1116.	1147.	1035.	1013.	1063.	1237.	1481.	1646.	2169.	2188.
	30.0	949.	1018.	1058.	946.	898.	954.	1083.	1378.	1641.	2035.	2055.
	25.0	813.	875.	901.	819.	780.	837.	905.	1085.	1269.	1571.	1580.
	20.0	731.	785.	828.	804.	733.	723.	781.	892.	1002.	1246.	1259.
	15.0	704.	734.	786.	779.	754.	741.	742.	785.	842.	975.	977.
	10.0	719.	730.	753.	799.	802.	823.	823.	819.	836.	863.	853.
	5.0	839.	843.	847.	844.	838.	871.	910.	939.	937.	919.	897.
	0.0	933.	933.	933.	933.	933.	933.	933.	933.	933.	933.	933.

CONE OF MAXIMUM CANDELA



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REPORT NUMBER: ITL64433  
PREPARED FOR: LSI INDUSTRIES, INC.

DATE: 03/25/10

### CANDELA TABULATION

	HOUSE SIDE	LATERAL ANGLE										
		95.0	105.0	115.0	120.0	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	2.	2.	2.	2.	1.	1.	1.	0.	0.	0.	0.
	125.0	1.	2.	2.	1.	2.	1.	1.	1.	0.	0.	0.
	115.0	0.	1.	1.	1.	1.	0.	0.	0.	0.	0.	0.
	105.0	0.	1.	0.	1.	0.	0.	0.	0.	0.	0.	0.
	95.0	0.	1.	0.	1.	0.	0.	0.	2.	1.	1.	2.
	92.5	1.	1.	0.	0.	0.	1.	0.	2.	2.	2.	2.
	90.0	1.	1.	0.	0.	0.	1.	0.	2.	2.	2.	2.
	87.5	3.	2.	2.	2.	2.	3.	2.	3.	3.	3.	3.
	85.0	11.	10.	15.	9.	8.	9.	8.	8.	7.	6.	6.
V	82.5	50.	32.	39.	25.	18.	15.	16.	15.	13.	12.	12.
E	80.0	119.	52.	75.	53.	33.	25.	29.	20.	18.	17.	17.
R	77.5	243.	86.	99.	102.	51.	45.	37.	25.	21.	20.	19.
T	75.0	396.	160.	87.	119.	78.	67.	60.	28.	25.	24.	23.
I	72.5	591.	162.	85.	116.	114.	104.	69.	38.	30.	26.	25.
C	70.0	764.	216.	105.	99.	103.	132.	83.	48.	38.	31.	30.
A	67.5<<	1020.	327.	184.	105.	102.	125.	91.	61.	52.	39.	38.
L	65.0	1172.	457.	226.	165.	103.	98.	99.	80.	62.	50.	49.
	62.5	1292.	556.	250.	182.	124.	91.	109.	81.	72.	61.	59.
A	60.0	1451.	628.	242.	176.	146.	97.	102.	98.	80.	64.	61.
N	57.5	1493.	690.	254.	212.	165.	138.	124.	154.	93.	62.	58.
G	55.0	1510.	790.	287.	228.	172.	197.	236.	187.	91.	68.	52.
L	52.5	1525.	900.	295.	208.	193.	244.	315.	254.	90.	55.	44.
E	50.0	1523.	993.	333.	235.	251.	297.	331.	387.	116.	54.	45.
	47.5	1560.	1086.	421.	282.	300.	336.	328.	256.	116.	87.	73.
	45.0	1596.	1175.	510.	346.	289.	386.	418.	192.	113.	113.	93.
	42.5	1609.	1251.	632.	415.	304.	506.	624.	272.	115.	120.	97.
	40.0	1659.	1306.	792.	520.	399.	549.	576.	319.	119.	119.	102.
	37.5	1799.	1320.	944.	660.	549.	590.	431.	235.	125.	115.	108.
	35.0	1837.	1340.	1046.	825.	653.	568.	368.	170.	118.	113.	111.
	32.5	1793.	1307.	1137.	977.	783.	515.	321.	156.	133.	127.	117.
	30.0	1765.	1297.	1126.	998.	848.	515.	307.	180.	143.	130.	126.
	25.0	1436.	1097.	918.	898.	817.	687.	473.	344.	271.	239.	230.
	20.0	1203.	992.	849.	803.	749.	709.	634.	600.	553.	520.	511.
	15.0	982.	856.	772.	750.	705.	694.	698.	698.	651.	684.	674.
	10.0	850.	793.	765.	757.	727.	720.	686.	677.	604.	685.	686.
	5.0	900.	928.	898.	877.	841.	764.	753.	764.	814.	796.	801.
	0.0	933.	933.	933.	933.	933.	933.	933.	933.	933.	933.	933.

CONE OF MAXIMUM CANDELA