

itl boulder
THE LIGHT CENTER OF THE INDUSTRY SINCE 1955

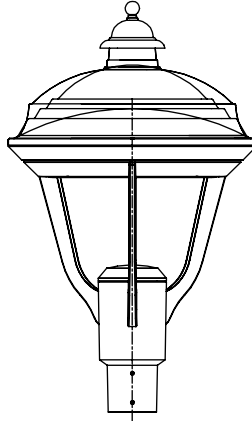
NVLAP
NVLAP LAB CODE: 200925-0

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

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

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINATION

Values based on 20 foot mounting height.



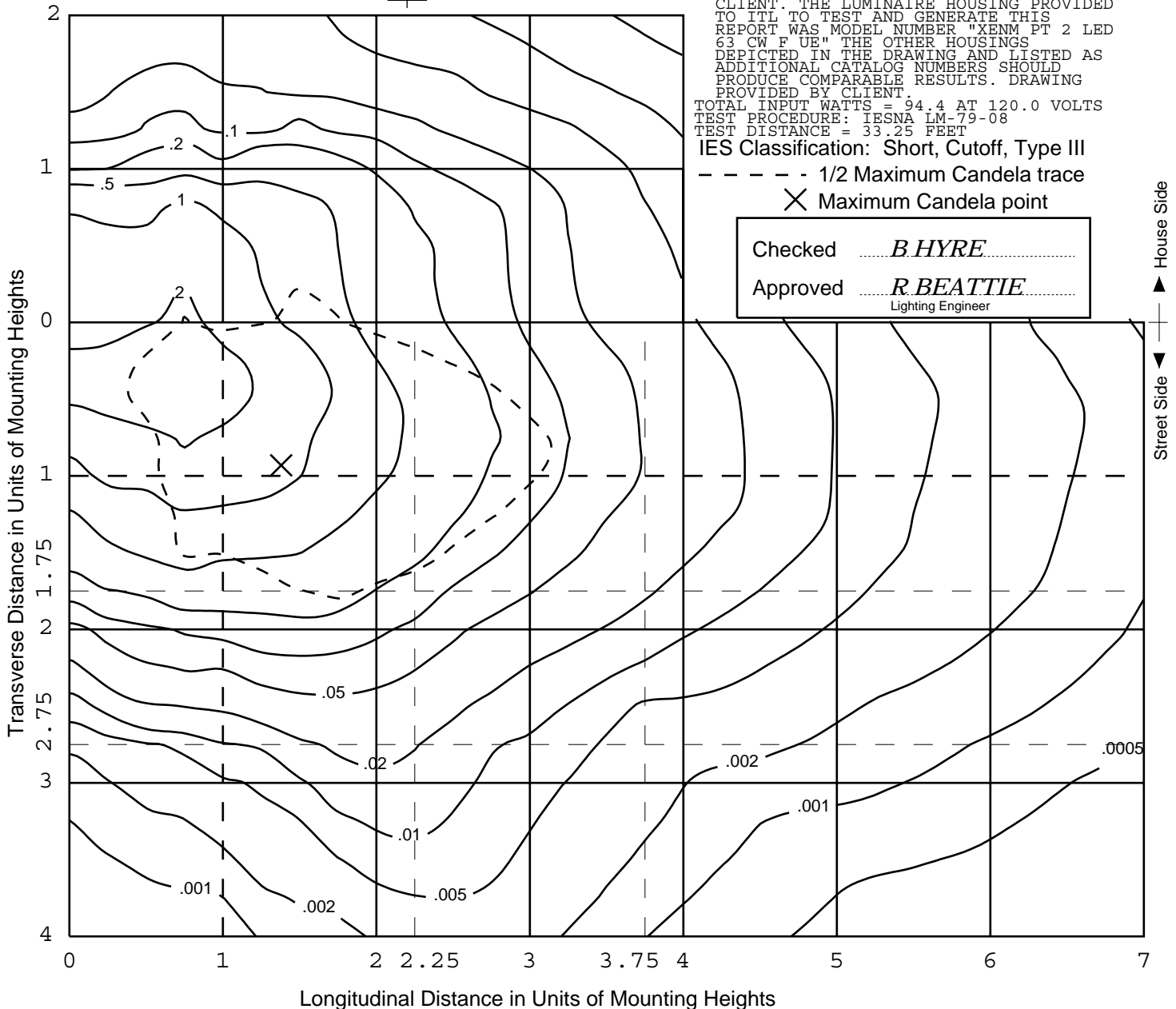
REPORT NUMBER: ITL68991
ISSUE DATE: 06/14/11 PAGE: 1 OF 7
PREPARED FOR: LSI INDUSTRIES, INC.
CATALOG NUMBER: XENM3/XINM3/XLXM3 PT 2
LED 63 450 CW UE
LUMINAIRE: CAST BROWN PAINTED METAL
POST TOP FITTER, CAST BROWN PAINTED
METAL POST TOP CAP, THREE FABRICATED
BROWN PAINTED METAL SUPPORT ARMS, FLAT
METAL CIRCUIT BOARD MOUNTING PLATE,
ONE CIRCUIT BOARD WITH 63 LEDS,
FABRICATED PREMIUM SPECULAR METAL
REFLECTOR WITH 4 "V" SHAPED INSERTS
BELOW 36 LEDS, CAST BLACK PAINTED
METAL UPPER HOUSING WITH FORMED BLACK
PAINTED METAL TOP, CLEAR FLAT GLASS LENS.
LAMPS: SIXTY-THREE 1.5-WATT WHITE LIGHT
EMITTING DIODES (LEDs) EACH WITH CLEAR
SEMI-HEMISPHERICAL INTEGRAL LENS,
VERTICAL BASE-UP POSITION.
LED DRIVER: LED ELECTRONIC 450mA 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 2 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.

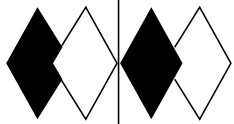
TOTAL INPUT WATTS = 94.4 AT 120.0 VOLTS
TEST PROCEDURE: IESNA LM-79-08
TEST DISTANCE = 33.25 FEET

IES Classification: Short, Cutoff, Type III

--- 1/2 Maximum Candela trace

X Maximum Candela point





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PREPARED FOR: LSI INDUSTRIES, INC.

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LED 63 450 CW UE

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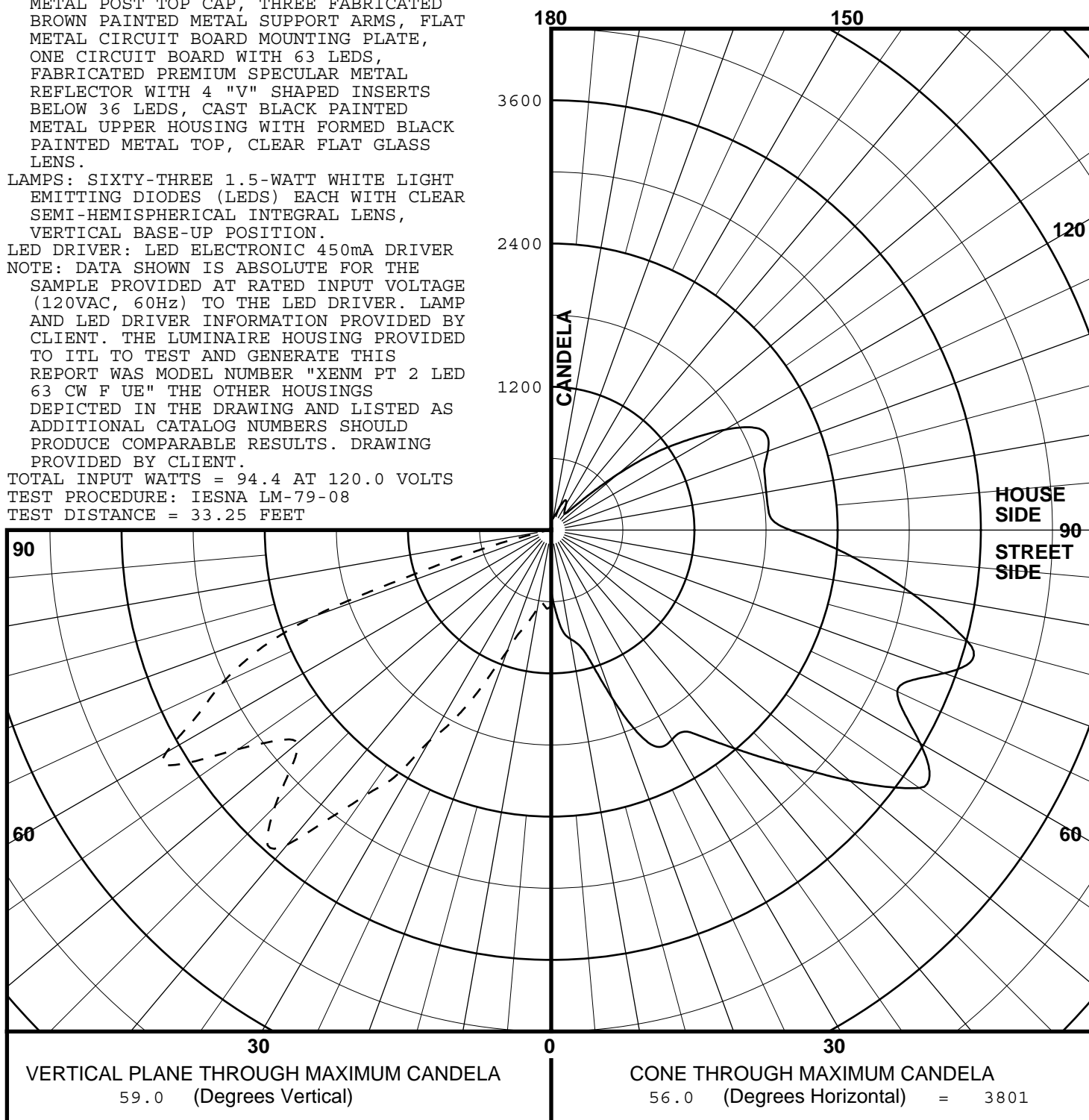
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DEPICTED IN THE DRAWING AND LISTED AS
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PROVIDED BY CLIENT.

TOTAL INPUT WATTS = 94.4 AT 120.0 VOLTS

TEST PROCEDURE: IESNA LM-79-08

TEST DISTANCE = 33.25 FEET

MAXIMUM PLANE AND MAXIMUM CONE PLOTS OF CANDELA

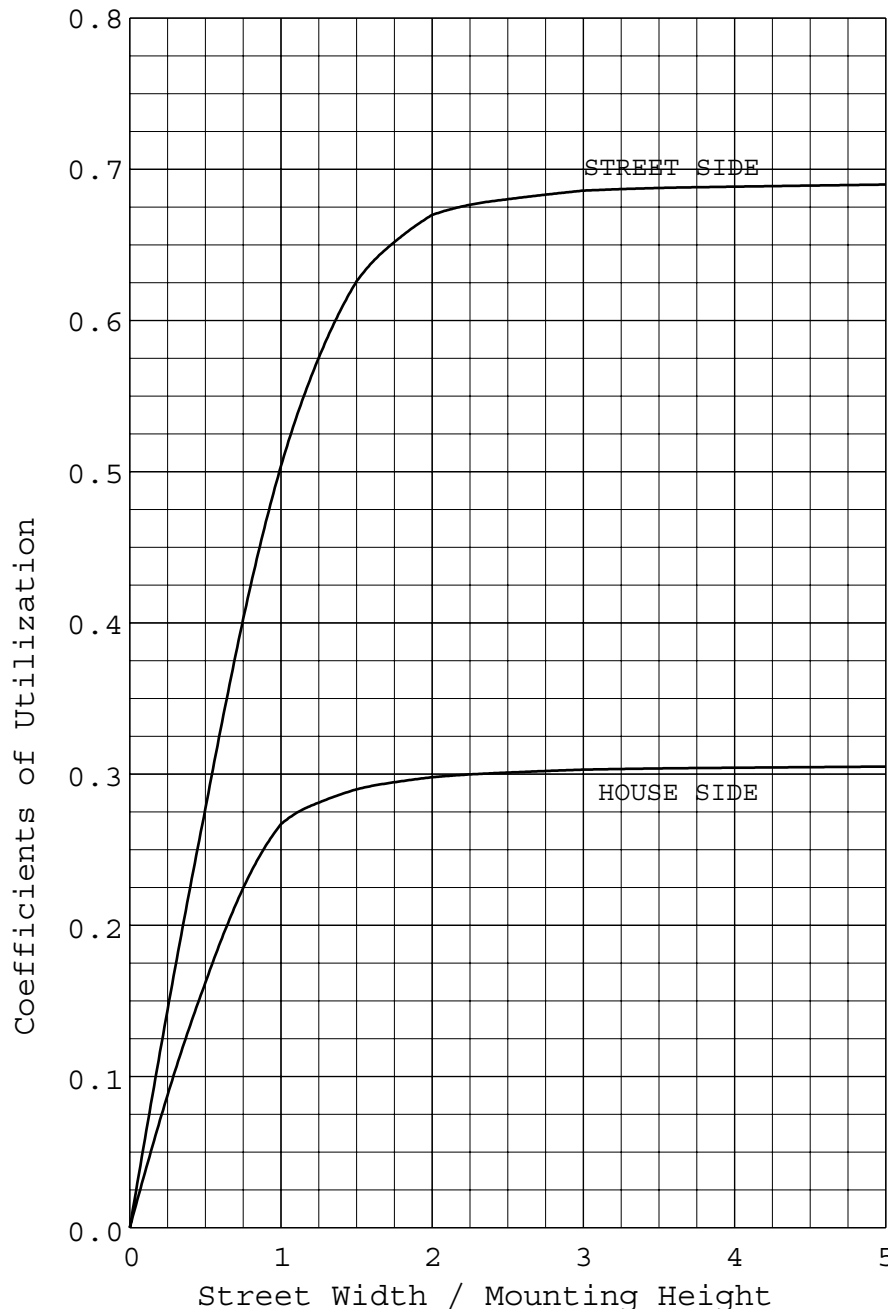




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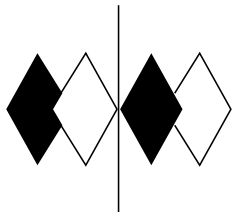
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COEFFICIENTS OF UTILIZATION AND FLUX DISTRIBUTION



	LUMENS	PERCENT OF FIXTURE
DOWNWARD STREET SIDE	4223	69.0
DOWNWARD HOUSE SIDE	1891	30.9
DOWNWARD TOTAL	6114	99.8
UPWARD STREET SIDE	2	0.0
UPWARD HOUSE SIDE	7	0.1
UPWARD TOTAL	10	0.2
TOTAL FLUX	6123	100.0
EFFICACY = 64.9 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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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	4223.	69.0	
FL (0- 30)	476.6	7.8	
FM (30- 60)	2533.8	41.4	
FH (60- 80)	1196.3	19.5	G1
FVH(80- 90)	15.9	0.3	U1 G1
BACK LIGHT	1891.	30.9	
BL (0- 30)	283.0	4.6	B1
BM (30- 60)	1154.6	18.9	B2
BH (60- 80)	444.3	7.3	B1 G1
BVH(80- 90)	9.2	0.1	U0 G0
UPLIGHT	10.	0.2	
UL (90-100)	2.5	0.0	U1
UH (100-180)	7.0	0.1	U1
TRAPPED LIGHT	0.	0.0	
TOTAL FLUX	6123.	100.0	

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

BUG RATING: B2 U1 G1



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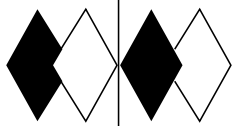
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CANDELA TABULATION

	STREET SIDE										
	0.0	5.0	15.0	25.0	35.0	45.0	55.0	56.0	65.0	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.	1.	2.
	125.0	0.	0.	0.	0.	0.	0.	1.	1.	2.	3.
	115.0	0.	0.	0.	0.	0.	0.	1.	2.	3.	4.
	105.0	0.	0.	0.	0.	0.	1.	1.	2.	3.	4.
	95.0	0.	0.	0.	0.	1.	2.	3.	3.	3.	3.
	92.5	0.	0.	0.	0.	2.	3.	4.	3.	3.	3.
	90.0	0.	0.	0.	0.	3.	4.	4.	4.	3.	3.
	87.5	0.	0.	0.	0.	5.	7.	8.	6.	5.	6.
	85.0	0.	0.	3.	5.	10.	10.	11.	11.	14.	14.
V	82.5	3.	3.	6.	11.	18.	22.	24.	27.	54.	119.
E	80.0	3.	6.	14.	22.	43.	56.	67.	76.	169.	384.
R	77.5	10.	10.	19.	54.	226.	169.	143.	161.	446.	814.
T	75.0	13.	18.	27.	100.	381.	303.	492.	532.	957.	1329.
I	72.5	16.	22.	40.	103.	454.	772.	931.	1081.	1691.	2091.
C	70.0	22.	30.	67.	226.	740.	1326.	2005.	2126.	2411.	2482.
A	67.5	67.	111.	285.	433.	1150.	2231.	2629.	2688.	3219.	2901.
L	65.0	115.	174.	395.	670.	1415.	2592.	2993.	3049.	3329.	3033.
	62.5	188.	291.	505.	1247.	1925.	2740.	3312.	3328.	3156.	3106.
A	60.0	430.	626.	900.	1850.	2020.	2775.	3673.	3723.	3162.	3590.
N	59.0<<	509.	783.	1041.	1982.	2079.	2770.	3766.	3801.	3199.	3613.
G	57.5	605.	876.	1224.	1826.	2162.	2766.	3735.	3637.	3256.	3504.
L	55.0	672.	962.	1172.	1696.	2333.	2918.	3259.	3197.	3379.	3334.
E	52.5	729.	1027.	1173.	1565.	2439.	3125.	2898.	2896.	3441.	3141.
	50.0	780.	1099.	1173.	1428.	2525.	2936.	2747.	2780.	3492.	2926.
	47.5	841.	1175.	1248.	1344.	2350.	2724.	2861.	2958.	3514.	2896.
	45.0	933.	1304.	1361.	1318.	2000.	2540.	3176.	3274.	3568.	2925.
	42.5	968.	1344.	1352.	1197.	1681.	2387.	3458.	3524.	3530.	3028.
	40.0	930.	1255.	1264.	1129.	1481.	2318.	3410.	3439.	3457.	3092.
	37.5	914.	1228.	1255.	1150.	1481.	2290.	3027.	3036.	3251.	3154.
	35.0	949.	1248.	1294.	1264.	1643.	2208.	2689.	2711.	2828.	2920.
	30.0	1137.	1449.	1508.	1487.	1412.	1817.	2014.	2040.	2202.	1939.
	25.0	1175.	1355.	1358.	1304.	1302.	1271.	1560.	1557.	1573.	1269.
	20.0	1035.	1102.	1199.	1183.	1189.	1111.	1081.	1080.	1009.	925.
	15.0	978.	973.	1032.	976.	954.	892.	839.	828.	810.	739.
	10.0	818.	798.	834.	771.	716.	691.	667.	666.	659.	659.
	5.0	672.	667.	673.	672.	642.	651.	626.	637.	632.	608.
	0.0	639.	639.	639.	639.	639.	639.	639.	639.	639.	639.

PLANE OF MAXIMUM CANDELA

CONE OF MAXIMUM CANDELA



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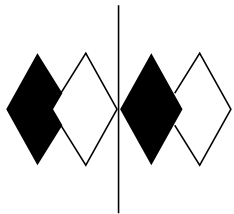
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CANDELA TABULATION

	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.	1.	1.
	145.0	0.	0.	0.	0.	0.	0.	1.	1.	1.	1.
	135.0	2.	2.	2.	1.	1.	2.	2.	2.	2.	2.
	125.0	4.	4.	3.	3.	3.	3.	3.	2.	2.	2.
	115.0	4.	4.	4.	4.	4.	3.	3.	2.	2.	2.
	105.0	4.	4.	5.	5.	5.	4.	3.	2.	1.	1.
	95.0	3.	3.	4.	5.	4.	4.	2.	2.	1.	1.
	92.5	3.	3.	4.	4.	4.	4.	2.	2.	1.	1.
	90.0	2.	3.	3.	4.	3.	3.	2.	2.	1.	1.
	87.5	6.	5.	7.	6.	3.	3.	3.	2.	3.	1.
	85.0	11.	8.	10.	8.	5.	3.	3.	3.	6.	1.
V	82.5	78.	81.	35.	35.	18.	14.	13.	10.	8.	3.
E	80.0	277.	245.	81.	65.	41.	38.	59.	35.	22.	5.
R	77.5	459.	396.	263.	145.	56.	68.	113.	78.	53.	16.
T	75.0	729.	640.	482.	220.	139.	94.	145.	102.	48.	32.
I	72.5	958.	863.	965.	283.	188.	129.	140.	148.	167.	43.
C	70.0	1312.	1218.	1283.	545.	212.	146.	175.	132.	385.	59.
A	67.5	1481.	1360.	1425.	818.	279.	185.	205.	145.	202.	80.
L	65.0	1635.	1493.	1597.	1438.	492.	217.	204.	148.	150.	97.
	62.5	1766.	1614.	1732.	1850.	834.	252.	185.	146.	107.	96.
A	60.0	1946.	1769.	1820.	1949.	1099.	290.	189.	229.	115.	92.
N	59.0<<	2005.	1828.	1849.	1963.	1231.	301.	194.	275.	132.	91.
G	57.5	2057.	1882.	1860.	1954.	1438.	330.	209.	282.	150.	89.
L	55.0	2044.	1922.	1842.	1860.	1586.	439.	269.	236.	146.	92.
E	52.5	1947.	1821.	1708.	1670.	1532.	931.	368.	237.	123.	99.
	50.0	1756.	1632.	1556.	1635.	1548.	1344.	624.	244.	134.	116.
	47.5	1645.	1543.	1505.	1643.	1613.	1435.	844.	312.	166.	145.
	45.0	1657.	1581.	1564.	1654.	1619.	1372.	839.	524.	283.	231.
	42.5	1809.	1704.	1648.	1618.	1565.	1196.	842.	683.	545.	498.
	40.0	1879.	1763.	1667.	1578.	1455.	1054.	880.	744.	670.	681.
	37.5	1960.	1836.	1643.	1466.	1148.	944.	873.	798.	710.	752.
	35.0	1931.	1761.	1439.	1161.	922.	850.	833.	793.	721.	766.
	30.0	1231.	1102.	944.	880.	758.	747.	709.	696.	699.	712.
	25.0	952.	874.	807.	758.	721.	681.	673.	635.	616.	631.
	20.0	855.	868.	767.	678.	651.	589.	578.	588.	591.	570.
	15.0	726.	734.	685.	635.	580.	580.	557.	545.	540.	575.
	10.0	650.	650.	605.	610.	575.	552.	538.	533.	540.	597.
	5.0	600.	615.	586.	573.	554.	532.	530.	583.	599.	623.
	0.0	639.	639.	639.	639.	639.	639.	639.	639.	639.	639.

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