

# itl boulder

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 25 foot mounting height.

REPORT NUMBER: ITL63596

DATE: 11/10/09

PREPARED FOR: ECOFIT LIGHTING

CATALOG NUMBER: DURASTREET 42 SERIES

350 - TYPE 3

LUMINAIRE: CAST METAL HOUSING. ONE LED MODULE CONSISTING OF: CAST FINNED METAL HEAT SINK AND LED DRIVER HOUSING, ONE WHITE CIRCUIT BOARD WITH SEVEN ROWS OF SIX LEDS, ONE CLEAR PLASTIC LENS BELOW EACH LED, SEVEN MOLDED BLACK PLASTIC REFLECTORS WITH SPECULAR FINISH AND BLACK SECTION AT EACH END, CLEAR PLASTIC LENS. CAST GRAY PAINTED METAL DOOR FRAME. LED MODULE NOT DISASSEMBLED FOR INSPECTION.

LAMP: FORTY-TWO WHITE LIGHT EMITTING DIODES (LEDS), VERTICAL BASE-UP POSITION.

TOTAL INPUT WATTS = 52.3 AT 240.0 VOLTS

LED DRIVER: INTEGRAL LED DRIVER

NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED AT RATED INPUT VOLTAGE (240VAC, 60Hz) TO THE LED DRIVER. THE HI/LOW TOGGLE SWITCH ON THE LED DRIVER WAS PLACED IN THE 350mA (LOW) POSITION FOR THIS TEST.

TEST PROCEDURE: IESNA LM-79-08

TEST DISTANCE = 25.25 FEET

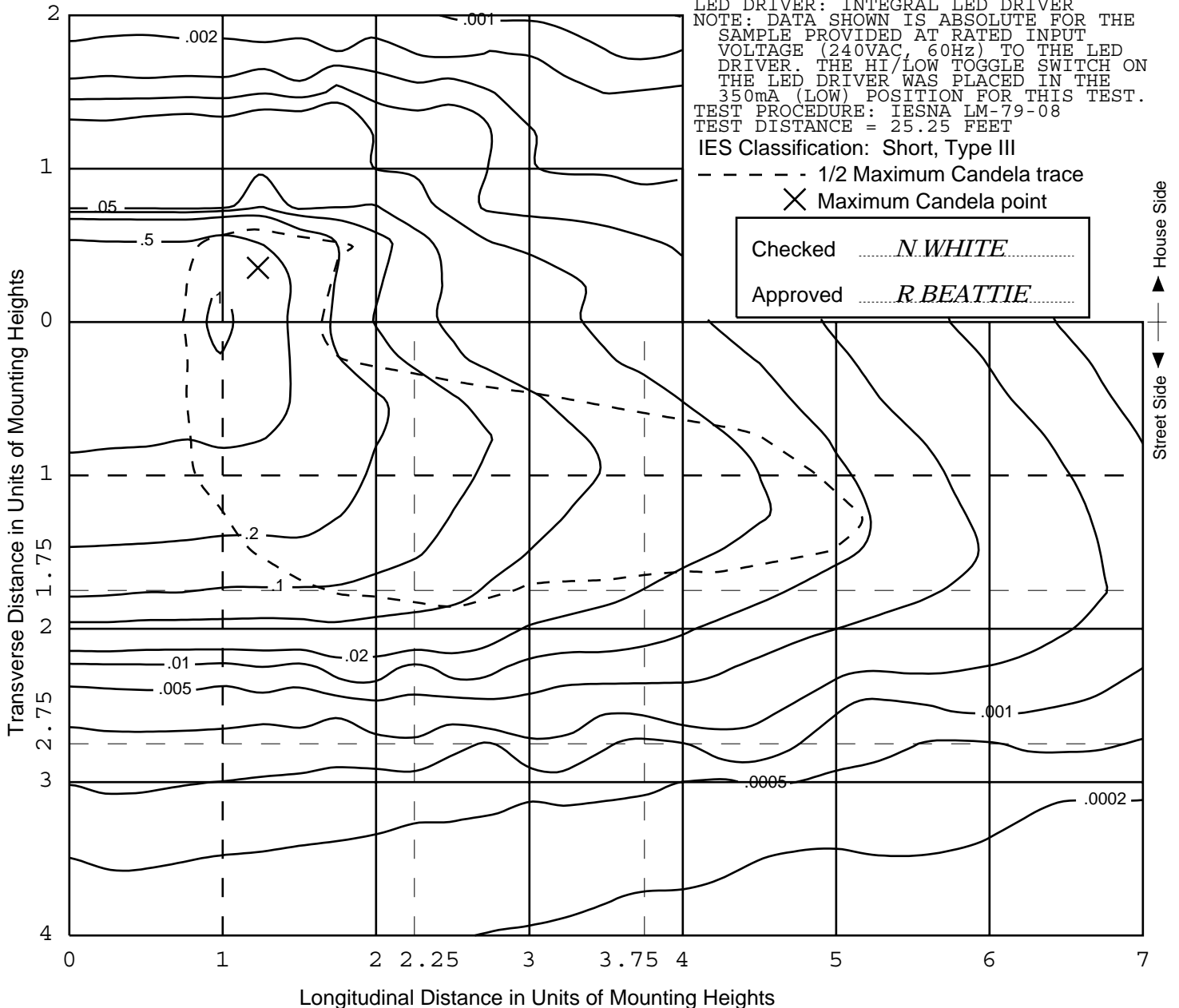
IES Classification: Short, Type III

----- 1/2 Maximum Candela trace

X Maximum Candela point

Checked *N. WHITE*

Approved *R. BEATTIE*





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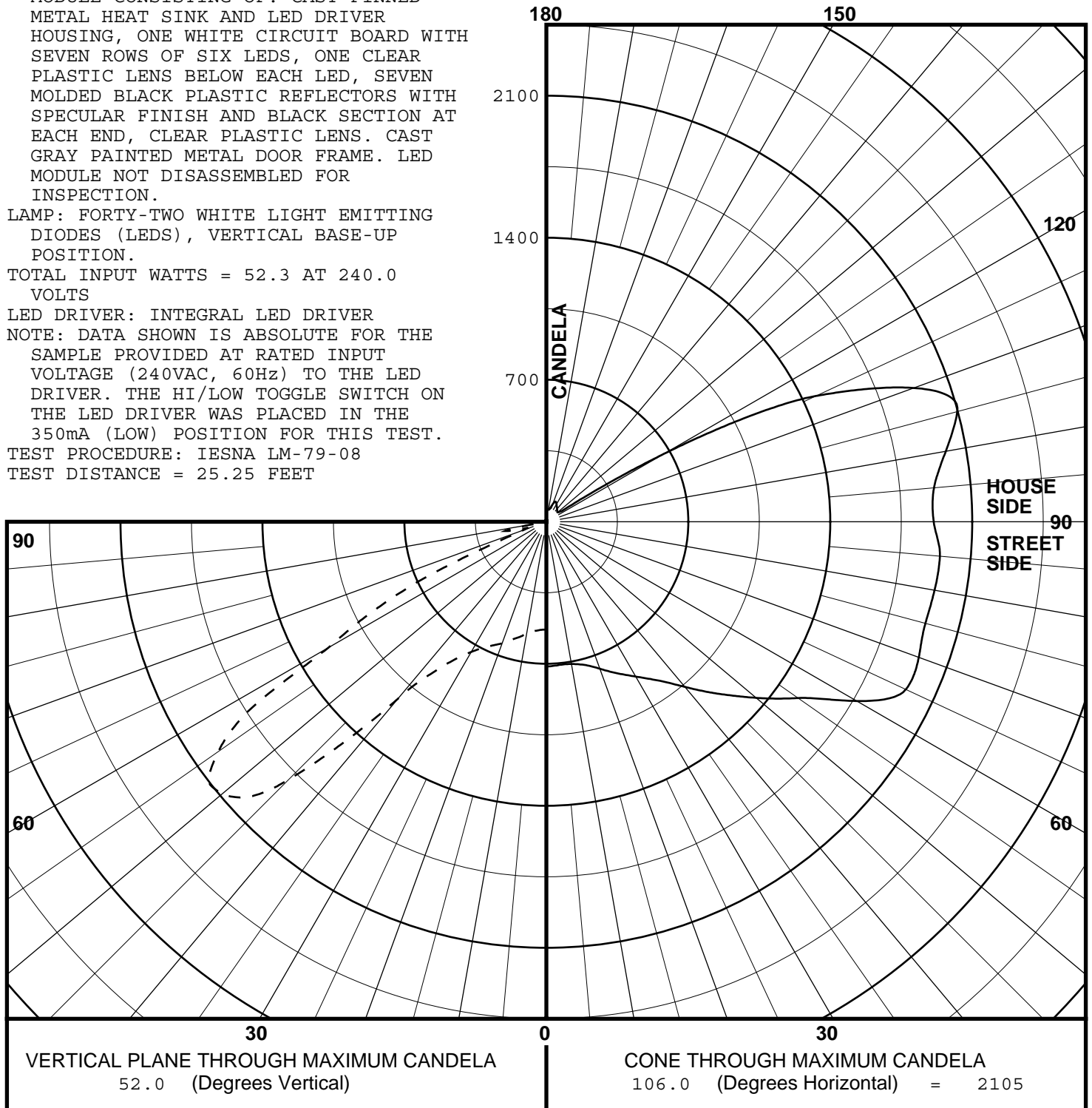
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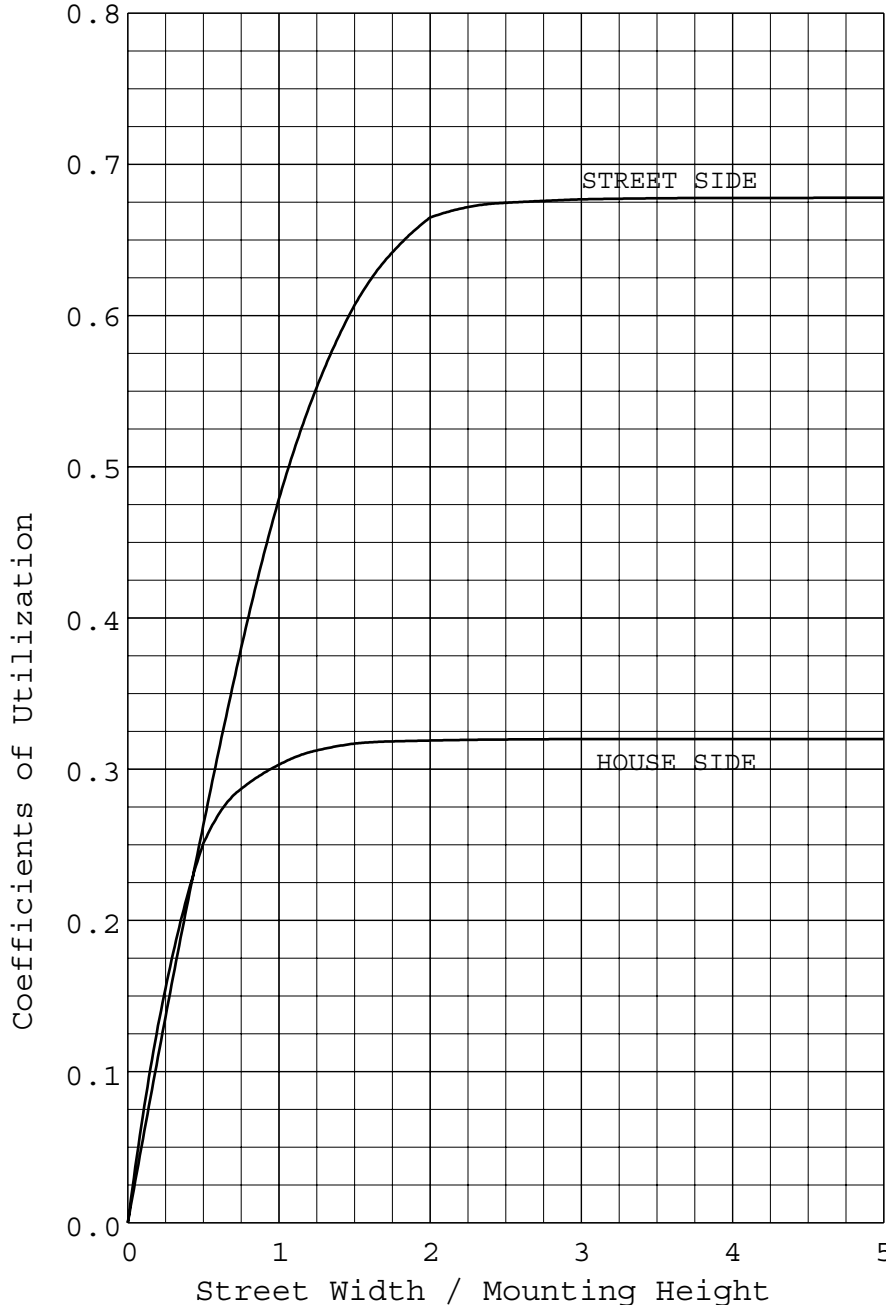
MAXIMUM PLANE AND MAXIMUM CONE PLOTS OF CANDELA





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COEFFICIENTS OF UTILIZATION AND FLUX DISTRIBUTION



	LUMENS	PERCENT OF FIXTURE
DOWNWARD STREET SIDE	2235.	67.9
DOWNWARD HOUSE SIDE	1057.	32.1
DOWNWARD TOTAL	3292.	100.0
UPWARD STREET SIDE	0.	0.0
UPWARD HOUSE SIDE	0.	0.0
UPWARD TOTAL	0.	0.0
TOTAL FLUX	3292.	100.0
EFFICACY = 62.9 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
FORWARD LIGHT	2235.	67.9
FL ( 0- 30)		7.8
FM ( 30- 60)		37.9
FH ( 60- 80)		21.6
FVH( 80- 90)		0.6
BACK LIGHT	1057.	32.1
BL ( 0- 30)		7.4
BM ( 30- 60)		19.8
BH ( 60- 80)		4.6
BVH( 80- 90)		0.2
UPLIGHT	0.	0.0
UL ( 90-100)		0.0
UH (100-180)		0.0
TRAPPED LIGHT	0.	0.0
TOTAL FLUX	3292.	100.0



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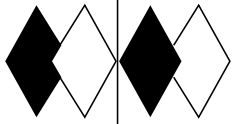
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CANDELA TABULATION

	LATERAL ANGLE										
	0.0	5.0	15.0	25.0	35.0	45.0	55.0	65.0	75.0	85.0	90.0
90.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
87.5	0.	0.	1.	1.	2.	3.	4.	7.	15.	11.	8.
85.0	2.	2.	2.	3.	4.	6.	10.	17.	52.	38.	27.
82.5	3.	4.	4.	5.	7.	10.	17.	34.	273.	129.	74.
80.0	5.	6.	6.	8.	11.	16.	28.	110.	975.	391.	256.
77.5	8.	10.	10.	13.	17.	25.	62.	727.	1595.	673.	478.
75.0	13.	15.	15.	18.	24.	42.	341.	1239.	1635.	669.	515.
72.5	18.	20.	21.	25.	35.	189.	1152.	1512.	1718.	657.	535.
70.0	24.	26.	28.	36.	90.	740.	1576.	1654.	1762.	619.	521.
67.5	35.	37.	48.	99.	358.	1186.	1684.	1667.	1782.	629.	529.
65.0	94.	99.	152.	359.	760.	1365.	1739.	1639.	1755.	715.	614.
62.5	357.	368.	480.	662.	901.	1315.	1992.	1728.	1598.	773.	698.
60.0	599.	603.	641.	780.	940.	1267.	1900.	2072.	1542.	897.	816.
57.5	678.	682.	707.	813.	929.	1230.	1670.	2021.	1753.	1347.	1250.
V 55.0	697.	695.	710.	804.	946.	1213.	1595.	1996.	1851.	1637.	1561.
E 52.5	705.	705.	725.	819.	945.	1129.	1511.	1958.	1927.	1926.	1883.
R 52.0<<	714.	709.	731.	824.	954.	1199.	1515.	1956.	1935.	1948.	1910.
T 50.0	719.	721.	737.	822.	937.	1054.	1384.	1864.	1960.	2045.	2024.
I 47.5	736.	733.	744.	829.	843.	993.	1255.	1680.	1905.	2031.	2031.
C 45.0	737.	737.	737.	759.	824.	963.	1129.	1367.	1719.	1918.	1930.
A 42.5	690.	688.	676.	733.	830.	927.	1022.	1088.	1475.	1712.	1734.
L 40.0	668.	669.	679.	738.	815.	873.	931.	934.	1167.	1378.	1402.
37.5	676.	678.	690.	738.	796.	816.	823.	854.	981.	1093.	1108.
A 35.0	689.	691.	696.	723.	755.	781.	741.	791.	883.	939.	940.
N 32.5	688.	687.	684.	697.	724.	713.	691.	747.	815.	848.	848.
G 30.0	664.	664.	662.	675.	686.	653.	664.	713.	765.	780.	779.
L 27.5	651.	649.	649.	643.	628.	619.	649.	682.	723.	732.	730.
E 25.0	613.	612.	606.	592.	588.	607.	636.	666.	690.	694.	692.
22.5	561.	563.	559.	559.	574.	600.	623.	650.	667.	669.	667.
20.0	538.	542.	546.	554.	571.	591.	610.	634.	644.	643.	642.
17.5	539.	542.	545.	551.	563.	581.	603.	616.	620.	618.	618.
15.0	539.	540.	544.	549.	556.	572.	593.	598.	599.	597.	597.
12.5	539.	539.	543.	547.	557.	565.	574.	580.	579.	579.	580.
10.0	544.	544.	547.	549.	553.	553.	558.	560.	559.	558.	559.
7.5	541.	541.	542.	544.	546.	546.	546.	546.	546.	544.	544.
5.0	535.	536.	536.	536.	537.	537.	539.	539.	539.	540.	539.
2.5	531.	532.	531.	531.	531.	531.	532.	533.	533.	534.	533.
0.0	531.	531.	531.	531.	531.	531.	531.	531.	531.	531.	531.

CONE OF MAXIMUM CANDELA



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	HOUSE SIDE	LATERAL ANGLE										
		95.0	105.0	106.0	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.	0.
	87.5	7.	4.	4.	2.	2.	1.	0.	0.	0.	0.	0.
	85.0	23.	13.	12.	7.	5.	3.	2.	1.	1.	1.	1.
	82.5	66.	27.	28.	13.	8.	5.	4.	3.	2.	2.	2.
	80.0	259.	57.	51.	22.	11.	8.	5.	4.	3.	3.	2.
	77.5	479.	221.	210.	30.	16.	10.	7.	5.	5.	4.	4.
	75.0	506.	120.	163.	53.	20.	12.	8.	7.	6.	5.	4.
	72.5	553.	110.	105.	146.	27.	15.	10.	8.	7.	6.	5.
	70.0	547.	173.	120.	330.	47.	18.	12.	9.	8.	8.	6.
	67.5	557.	546.	286.	180.	131.	26.	14.	11.	9.	8.	8.
	65.0	640.	924.	697.	148.	369.	42.	18.	12.	11.	9.	9.
	62.5	746.	1028.	987.	131.	334.	110.	24.	15.	12.	10.	10.
	60.0	860.	1196.	1242.	129.	204.	188.	49.	20.	15.	13.	12.
	57.5	1299.	1742.	1756.	239.	163.	164.	93.	39.	21.	17.	16.
V	55.0	1594.	1969.	1975.	821.	122.	98.	140.	71.	46.	34.	32.
E	52.5	1891.	2084.	2099.	1453.	94.	78.	94.	106.	65.	56.	55.
R	52.0<<	1919.	2098.	2105.	1468.	92.	76.	90.	109.	68.	57.	56.
T	50.0	2025.	2088.	2085.	1677.	101.	64.	75.	79.	94.	85.	83.
I	47.5	2023.	1966.	2009.	1622.	253.	55.	65.	60.	64.	68.	69.
C	45.0	1915.	1770.	1798.	1442.	578.	55.	54.	53.	52.	52.	51.
A	42.5	1718.	1496.	1469.	1202.	789.	92.	48.	47.	47.	46.	46.
L	40.0	1384.	1172.	1138.	1008.	796.	269.	53.	42.	41.	40.	40.
	37.5	1100.	974.	954.	899.	769.	551.	109.	47.	39.	38.	37.
A	35.0	935.	867.	854.	822.	740.	638.	327.	85.	49.	41.	40.
N	32.5	844.	798.	788.	737.	718.	641.	536.	270.	118.	78.	76.
G	30.0	775.	747.	741.	683.	677.	638.	573.	495.	362.	269.	261.
L	27.5	727.	709.	705.	658.	664.	615.	585.	539.	512.	493.	489.
E	25.0	692.	681.	678.	644.	618.	606.	586.	557.	540.	529.	530.
	22.5	664.	659.	657.	635.	593.	604.	569.	556.	553.	546.	547.
	20.0	640.	639.	638.	620.	588.	568.	578.	552.	538.	536.	537.
	17.5	617.	615.	615.	604.	586.	559.	546.	550.	552.	547.	546.
	15.0	596.	595.	596.	590.	578.	560.	538.	523.	522.	529.	528.
	12.5	579.	578.	579.	578.	569.	555.	543.	534.	526.	523.	520.
	10.0	559.	558.	558.	557.	555.	550.	544.	540.	535.	535.	534.
	7.5	544.	544.	544.	544.	547.	547.	544.	542.	540.	539.	539.
	5.0	539.	539.	539.	538.	539.	539.	538.	539.	539.	539.	540.
	2.5	533.	533.	533.	533.	533.	533.	532.	532.	532.	532.	533.
	0.0	531.	531.	531.	531.	531.	531.	531.	531.	531.	531.	531.

PLANE OF MAXIMUM CANDELA

CONE OF MAXIMUM CANDELA