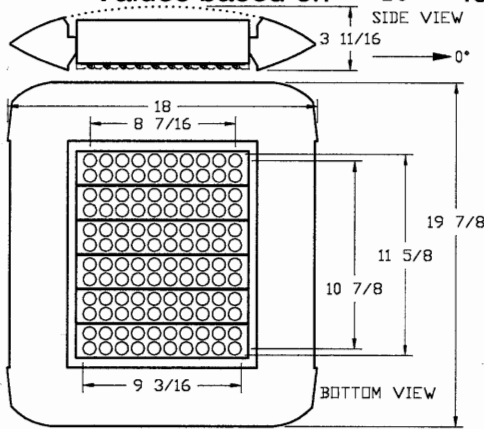


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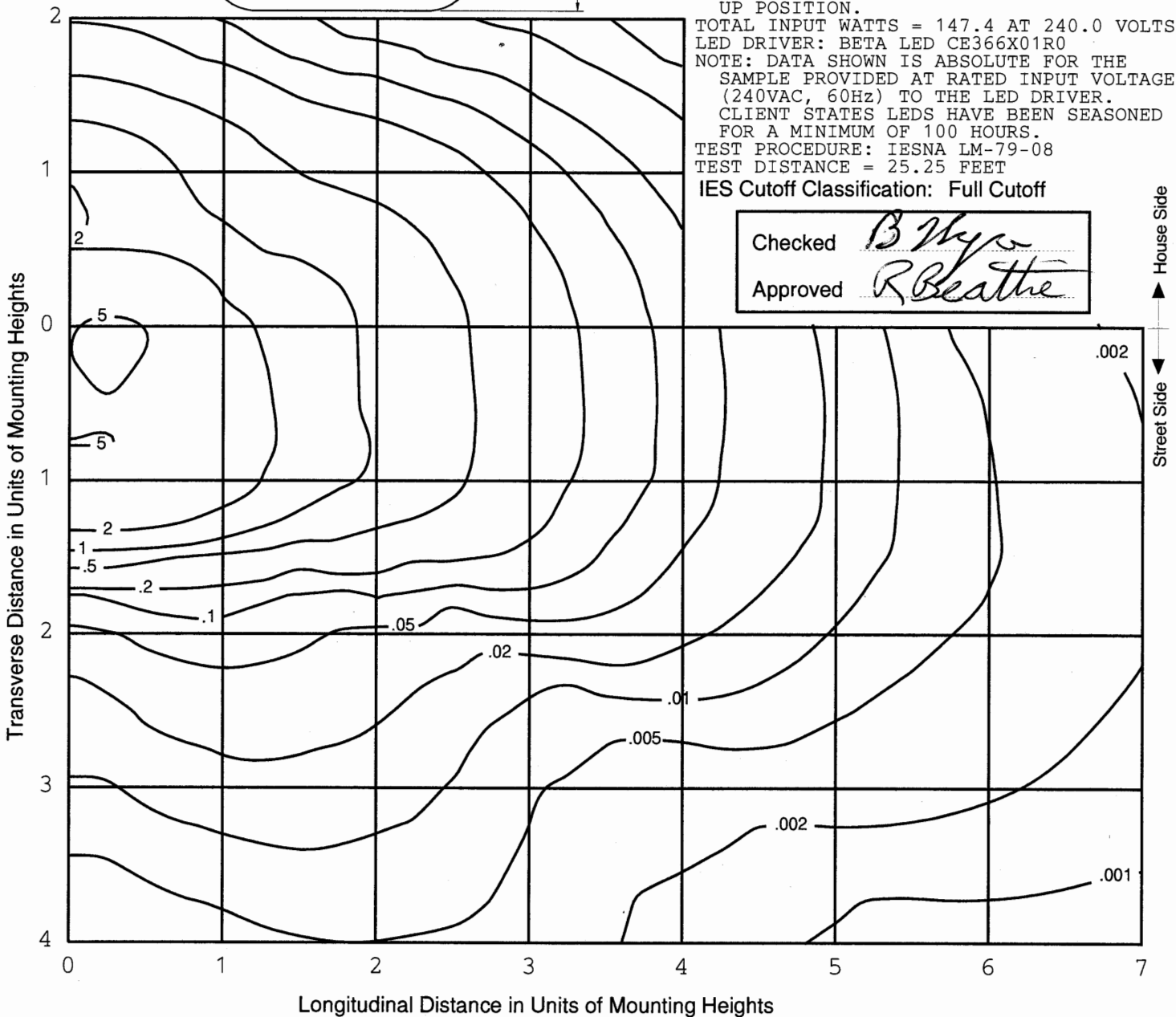
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ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINATION
Values based on 20 foot mounting height.

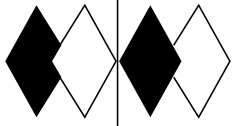


REPORT NUMBER: ITL64116
DATE: 01/28/10
PREPARED FOR: BETALED, A DIVISION OF RUUD LIGHTING
CATALOG NUMBER: ARE-EDG-2S-**-12-C-UL-BK or BXAL1212C-UT (350mA)
LUMINAIRE: EXTRUDED BLACK PAINTED METAL HOUSING, FABRICATED BLACK PAINTED METAL BALLAST MOUNTING PLATE, CAST BLACK PAINTED METAL END CAPS, FORMED PERFORATED METAL TOP, SIX EXTRUDED FINNED METAL HEAT SINKS, EACH HEAT SINK CONTAINS ONE CIRCUIT BOARD WITH 20 LEDS AND CAST BLACK PAINTED METAL TRIM PLATE, ONE CLEAR PLASTIC NON-INTEGRAL LENS BELOW EACH LED.
LAMPS: ONE HUNDRED TWENTY WHITE LIGHT EMITTING DIODES (LEDS), VERTICAL BASE-UP POSITION.
TOTAL INPUT WATTS = 147.4 AT 240.0 VOLTS
LED DRIVER: BETA LED CE366X01R0
NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED AT RATED INPUT VOLTAGE (240VAC, 60Hz) TO THE LED DRIVER. CLIENT STATES LEDES HAVE BEEN SEASONED FOR A MINIMUM OF 100 HOURS.
TEST PROCEDURE: IESNA LM-79-08
TEST DISTANCE = 25.25 FEET
IES Cutoff Classification: Full Cutoff

Checked *B Myers*
Approved *R Beathe*

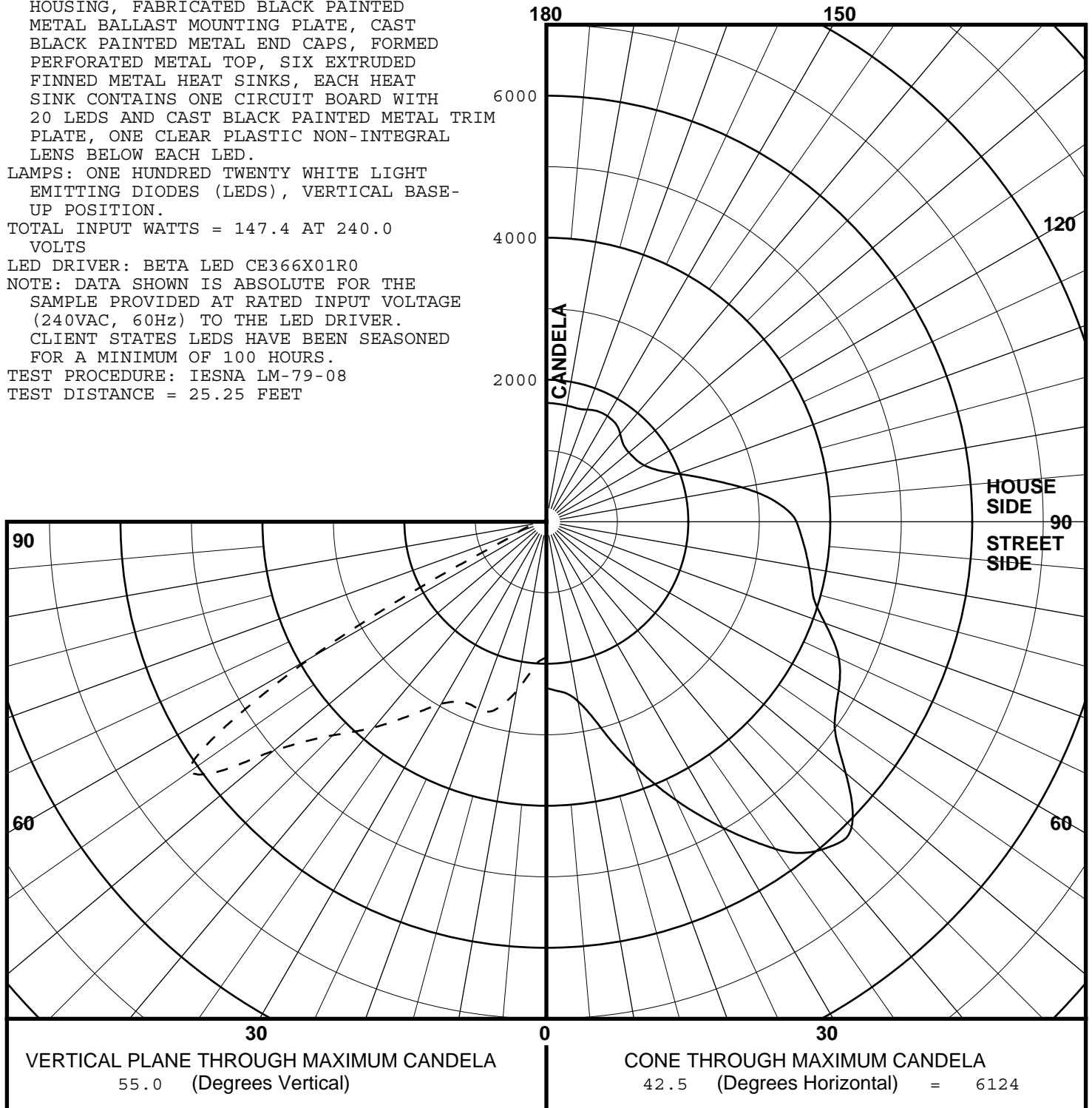


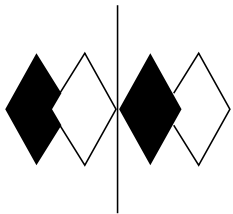
THIS REPORT IS BASED ON PUBLISHED INDUSTRY PROCEDURES. FIELD PERFORMANCE MAY DIFFER FROM LABORATORY PERFORMANCE.



REPORT NUMBER: ITL64116
 DATE: 01/28/10
 PREPARED FOR: BETALED, A DIVISION OF
 RUUD LIGHTING
 CATALOG NUMBER: ARE-EDG-2S-**-12-C-UL-
 BK or BXAL*F12C-UT (350mA)
 LUMINAIRE: EXTRUDED BLACK PAINTED METAL
 HOUSING, FABRICATED BLACK PAINTED
 METAL BALLAST MOUNTING PLATE, CAST
 BLACK PAINTED METAL END CAPS, FORMED
 PERFORATED METAL TOP, SIX EXTRUDED
 FINNED METAL HEAT SINKS, EACH HEAT
 SINK CONTAINS ONE CIRCUIT BOARD WITH
 20 LEDS AND CAST BLACK PAINTED METAL TRIM
 PLATE, ONE CLEAR PLASTIC NON-INTEGRAL
 LENS BELOW EACH LED.
 LAMPS: ONE HUNDRED TWENTY WHITE LIGHT
 EMITTING DIODES (LEDS), VERTICAL BASE-
 UP POSITION.
 TOTAL INPUT WATTS = 147.4 AT 240.0
 VOLTS
 LED DRIVER: BETA LED CE366X01R0
 NOTE: DATA SHOWN IS ABSOLUTE FOR THE
 SAMPLE PROVIDED AT RATED INPUT VOLTAGE
 (240VAC, 60Hz) TO THE LED DRIVER.
 CLIENT STATES LEDS HAVE BEEN SEASONED
 FOR A MINIMUM OF 100 HOURS.
 TEST PROCEDURE: IESNA LM-79-08
 TEST DISTANCE = 25.25 FEET

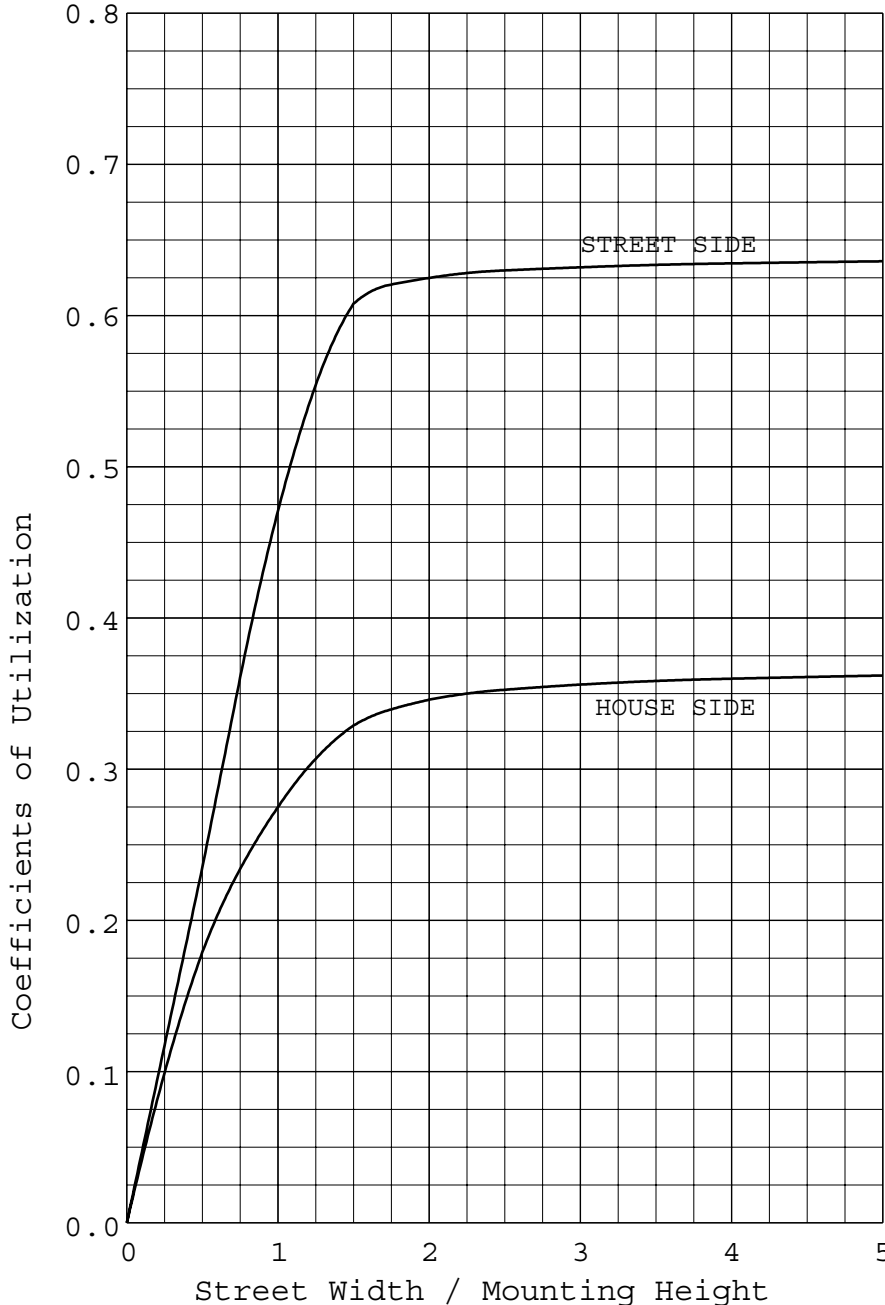
MAXIMUM PLANE AND MAXIMUM CONE PLOTS OF CANDELA





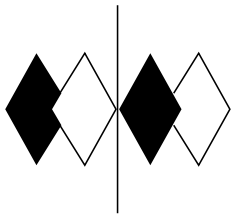
REPORT NUMBER: ITL64116
 DATE: 01/28/10
 PREPARED FOR: BETALED, A DIVISION OF RUUD LIGHTING

COEFFICIENTS OF UTILIZATION AND FLUX DISTRIBUTION



	LUMENS	PERCENT OF FIXTURE
DOWNWARD STREET SIDE	7125.	63.7
DOWNWARD HOUSE SIDE	4058.	36.3
DOWNWARD TOTAL	11183.	100.0
UPWARD STREET SIDE	0.	0.0
UPWARD HOUSE SIDE	0.	0.0
UPWARD TOTAL	0.	0.0
TOTAL FLUX	11183.	100.0
EFFICACY = 75.9 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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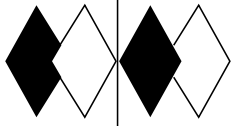
FLUX DISTRIBUTION BY SOLID ANGLE
 (PER IESNA TM-15-07, LUMINAIRE CLASSIFICATION
 SYSTEM FOR OUTDOOR LUMINAIRES)

	LUMENS	PERCENT OF FIXTURE
FORWARD LIGHT	7125.	63.7
FL (0- 30)		9.6
FM (30- 60)		38.5
FH (60- 80)		15.2
FVH(80- 90)		0.4
BACK LIGHT	4058.	36.3
BL (0- 30)		6.6
BM (30- 60)		18.8
BH (60- 80)		10.7
BVH(80- 90)		0.1
UPLIGHT	0.	0.0
UL (90-100)		0.0
UH (100-180)		0.0
TRAPPED LIGHT	0.	0.0
TOTAL FLUX	11183.	100.0

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

BUG RATING:	FIRST DETERMINING SECONDARY SOLID ANGLE*	LUMENS
B3 U1 G3	BH	1199.3
BACKLIGHT RATING: B3	FVH	45.3
UPLIGHT RATING : U1	BH	1199.3
GLARE RATING : G3		

* 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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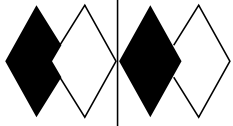
PREPARED FOR: BETALED, A DIVISION OF RUUD LIGHTING

CANDELA TABULATION

	STREET SIDE						LATERAL ANGLE					
	0.0	5.0	15.0	25.0	35.0	42.5	45.0	55.0	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.	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	12.	14.	14.	19.	15.	12.	13.	41.	50.	31.	
	85.0	14.	14.	17.	44.	58.	28.	31.	82.	148.	135.	
V	82.5	13.	15.	27.	79.	126.	63.	63.	67.	233.	314.	
E	80.0	36.	38.	58.	131.	177.	112.	102.	142.	408.	640.	
R	77.5	53.	57.	102.	181.	228.	180.	153.	191.	941.	1533.	
T	75.0	78.	82.	144.	237.	276.	263.	232.	288.	2208.	3032.	
I	72.5	105.	112.	194.	272.	326.	340.	333.	555.	3867.	4358.	
C	70.0	128.	134.	204.	316.	386.	415.	426.	1388.	5293.	5001.	
A	67.5	111.	118.	226.	380.	464.	523.	573.	2833.	5820.	4866.	
L	65.0	133.	147.	281.	453.	568.	833.	1145.	4097.	5502.	4378.	
	62.5	195.	211.	357.	563.	799.	2022.	2644.	4937.	5101.	4062.	
A	60.0	321.	336.	504.	821.	1929.	3830.	4278.	5386.	4915.	3947.	
N	57.5	853.	880.	1219.	2169.	4101.	5348.	5582.	5365.	4799.	3921.	
G	55.0 <<	2341.	2403.	3024.	4329.	5625.	6124.	6082.	4958.	4546.	3885.	
L	52.5	3874.	3938.	4543.	5420.	6020.	5756.	5541.	4336.	4055.	3686.	
E	50.0	4659.	4701.	5033.	5480.	5581.	5023.	4811.	3801.	3472.	3316.	
	47.5	4769.	4797.	5026.	5306.	5141.	4567.	4372.	3431.	3008.	2940.	
	45.0	4850.	4876.	5027.	5106.	4783.	4253.	4080.	3224.	2719.	2620.	
	42.5	4805.	4822.	4861.	4795.	4464.	4010.	3862.	3097.	2573.	2469.	
	40.0	4514.	4520.	4508.	4426.	4152.	3782.	3655.	3012.	2542.	2452.	
	37.5	4076.	4094.	4097.	4045.	3825.	3547.	3450.	2954.	2549.	2461.	
	35.0	3631.	3638.	3668.	3645.	3507.	3322.	3258.	2912.	2579.	2481.	
	32.5	3155.	3165.	3214.	3243.	3208.	3120.	3084.	2888.	2640.	2530.	
	30.0	2697.	2708.	2785.	2886.	2960.	2961.	2954.	2888.	2731.	2596.	
	25.0	2065.	2079.	2211.	2434.	2663.	2801.	2834.	3013.	2889.	2729.	
	20.0	1912.	1928.	2061.	2292.	2568.	2804.	2866.	3017.	2873.	2759.	
	15.0	2036.	2047.	2157.	2356.	2596.	2732.	2753.	2769.	2702.	2599.	
	10.0	2243.	2248.	2287.	2342.	2397.	2423.	2425.	2415.	2371.	2319.	
	5.0	2073.	2075.	2076.	2073.	2068.	2065.	2064.	2052.	2043.	2039.	
	0.0	1906.	1906.	1906.	1906.	1906.	1906.	1906.	1906.	1906.	1906.	

||
 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	10.	7.	5.	6.	3.	2.	1.	1.	4.	10.	11.
85.0	46.	31.	15.	10.	6.	5.	4.	5.	8.	17.	20.
V 82.5	157.	107.	49.	28.	19.	10.	9.	10.	14.	29.	32.
E 80.0	399.	296.	136.	80.	87.	85.	104.	94.	85.	94.	99.
R 77.5	1249.	1058.	542.	180.	153.	255.	367.	428.	446.	468.	476.
T 75.0	2520.	2244.	1421.	551.	206.	270.	397.	486.	514.	532.	539.
I 72.5	3572.	3285.	2362.	1252.	396.	286.	392.	476.	507.	531.	540.
C 70.0	4221.	3977.	3149.	1982.	830.	334.	398.	479.	514.	546.	556.
A 67.5	4364.	4163.	3453.	2347.	1296.	513.	435.	507.	554.	595.	607.
L 65.0	4052.	3917.	3378.	2350.	1528.	929.	606.	586.	637.	687.	699.
62.5	3765.	3681.	3205.	2206.	1656.	1337.	980.	820.	812.	870.	884.
A 60.0	3674.	3584.	2934.	2035.	1695.	1563.	1397.	1161.	1101.	1138.	1152.
N 57.5	3643.	3465.	2603.	1849.	1627.	1601.	1635.	1513.	1408.	1425.	1437.
G 55.0 <<	3524.	3243.	2335.	1724.	1535.	1536.	1694.	1717.	1654.	1668.	1674.
L 52.5	3271.	2968.	2181.	1689.	1479.	1457.	1645.	1800.	1808.	1848.	1859.
E 50.0	2988.	2735.	2129.	1710.	1471.	1405.	1539.	1788.	1906.	1991.	2004.
47.5	2759.	2601.	2160.	1758.	1497.	1395.	1446.	1708.	1954.	2119.	2142.
45.0	2655.	2588.	2224.	1793.	1522.	1405.	1413.	1566.	1901.	2151.	2181.
42.5	2651.	2624.	2291.	1824.	1538.	1416.	1396.	1488.	1713.	1998.	2041.
40.0	2667.	2663.	2365.	1858.	1545.	1420.	1379.	1437.	1608.	1791.	1825.
37.5	2678.	2696.	2449.	1895.	1549.	1411.	1357.	1388.	1518.	1674.	1704.
35.0	2694.	2733.	2540.	1949.	1551.	1395.	1329.	1334.	1422.	1544.	1571.
32.5	2719.	2764.	2622.	2019.	1552.	1376.	1266.	1272.	1321.	1409.	1428.
30.0	2737.	2784.	2679.	2107.	1556.	1354.	1256.	1209.	1218.	1269.	1284.
25.0	2745.	2773.	2692.	2277.	1651.	1320.	1201.	1123.	1075.	1062.	1062.
20.0	2689.	2684.	2577.	2311.	1855.	1435.	1238.	1151.	1097.	1069.	1067.
15.0	2524.	2498.	2386.	2210.	1972.	1708.	1504.	1395.	1344.	1320.	1320.
10.0	2276.	2253.	2176.	2066.	1955.	1847.	1744.	1661.	1609.	1583.	1583.
5.0	2023.	2012.	1981.	1942.	1895.	1849.	1808.	1775.	1753.	1741.	1744.
0.0	1906.	1906.	1906.	1906.	1906.	1906.	1906.	1906.	1906.	1906.	1906.

CONE OF MAXIMUM CANDELA