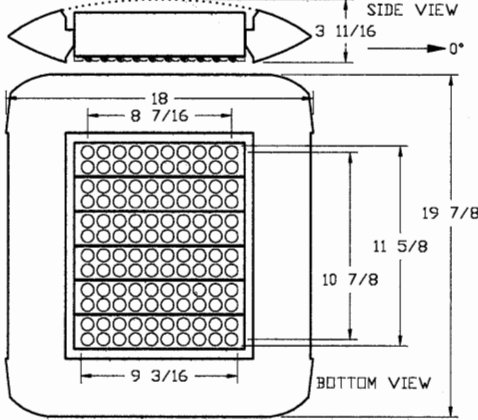


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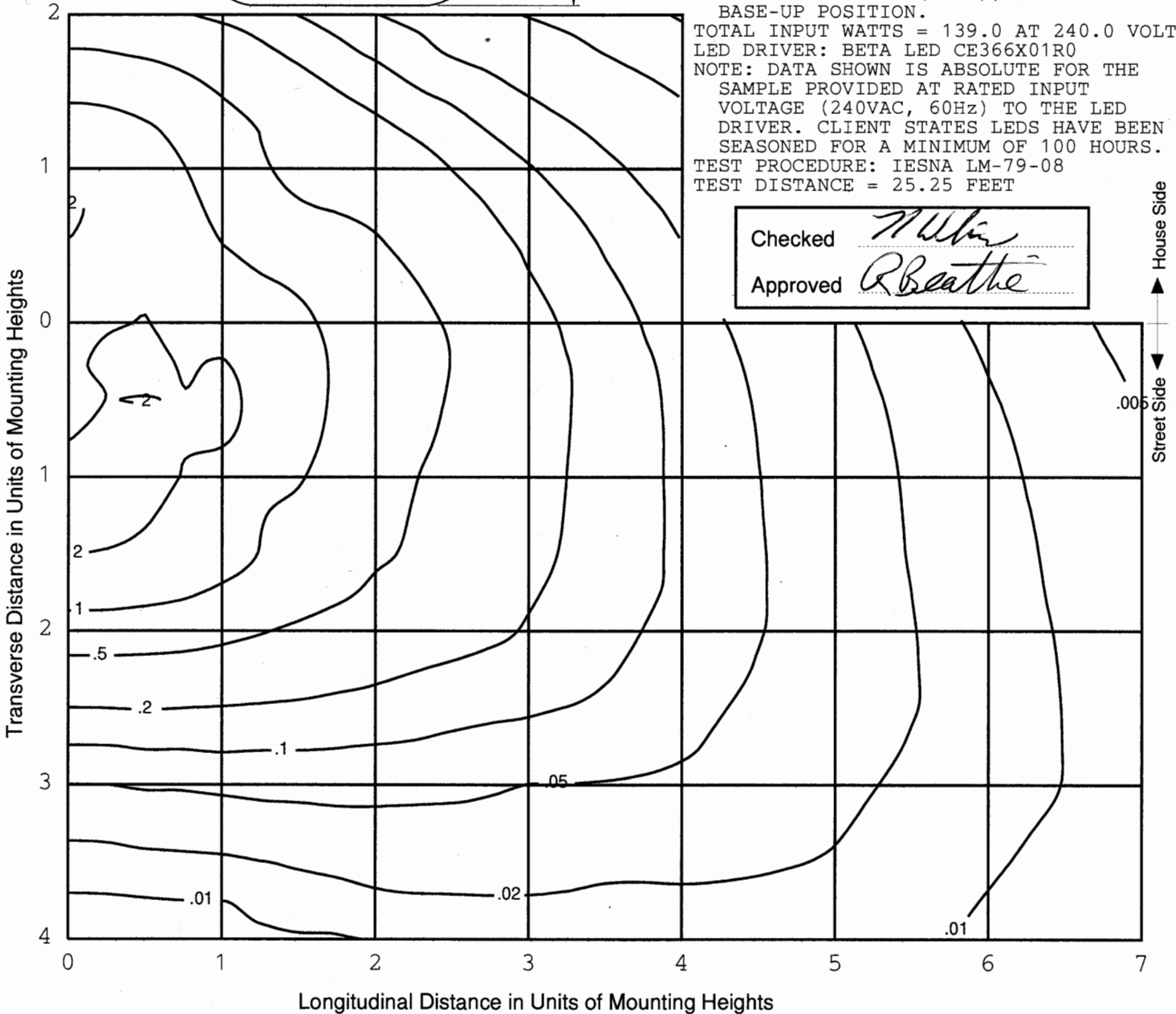
INDEPENDENT TESTING LABORATORIES, INC.
3386 LONGHORN ROAD, BOULDER, CO 80302 USA

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

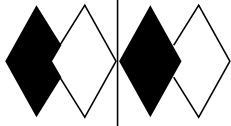
ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINATION
Values based on 20 foot mounting height.



REPORT NUMBER: ITL63574
DATE: 11/09/09
PREPARED FOR: BETA LIGHTING, INC.
CATALOG NUMBER: BXAL1312C-UW (350mA)
LUMINAIRE: EXTRUDED WHITE PAINTED METAL HOUSING, FABRICATED WHITE PAINTED METAL BALLAST MOUNTING PLATE, CAST WHITE PAINTED METAL END CAPS, FORMED PERFORATED METAL TOP, SIX EXTRUDED FINNED METAL HEAT SINKS, EACH HEAT SINK CONTAINS ONE CIRCUIT BOARD WITH 20 LEDES, CAST WHITE PAINTED METAL TRIM PLATE, ONE CLEAR PLASTIC NON-INTEGRAL LENS BELOW EACH LED.
LAMP: ONE HUNDRED TWENTY WHITE LIGHT EMITTING DIODES (LEDS), VERTICAL BASE-UP POSITION.
TOTAL INPUT WATTS = 139.0 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



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



REPORT NUMBER: ITL63574

DATE: 11/09/09

PREPARED FOR: BetaLED a Division of Ruud Lighting

CATALOG NUMBER: BXAL1312C-U(350mA)/ARE-EDG-3M-DA-12-C-UL

LUMINAIRE: EXTRUDED WHITE PAINTED

METAL HOUSING, FABRICATED WHITE
 PAINTED METAL BALLAST MOUNTING PLATE,
 CAST WHITE PAINTED METAL END CAPS,
 FORMED PERFORATED METAL TOP, SIX
 EXTRUDED FINNED METAL HEAT SINKS,
 EACH HEAT SINK CONTAINS ONE CIRCUIT
 BOARD WITH 20 LEDS, CAST WHITE
 PAINTED METAL TRIM PLATE, ONE CLEAR
 PLASTIC NON-INTEGRAL LENS BELOW EACH
 LED.

LAMP: ONE HUNDRED TWENTY WHITE LIGHT
 EMITTING DIODES (LEDS), VERTICAL
 BASE-UP POSITION.

TOTAL INPUT WATTS = 139.0 AT 240.0
 VOLTS

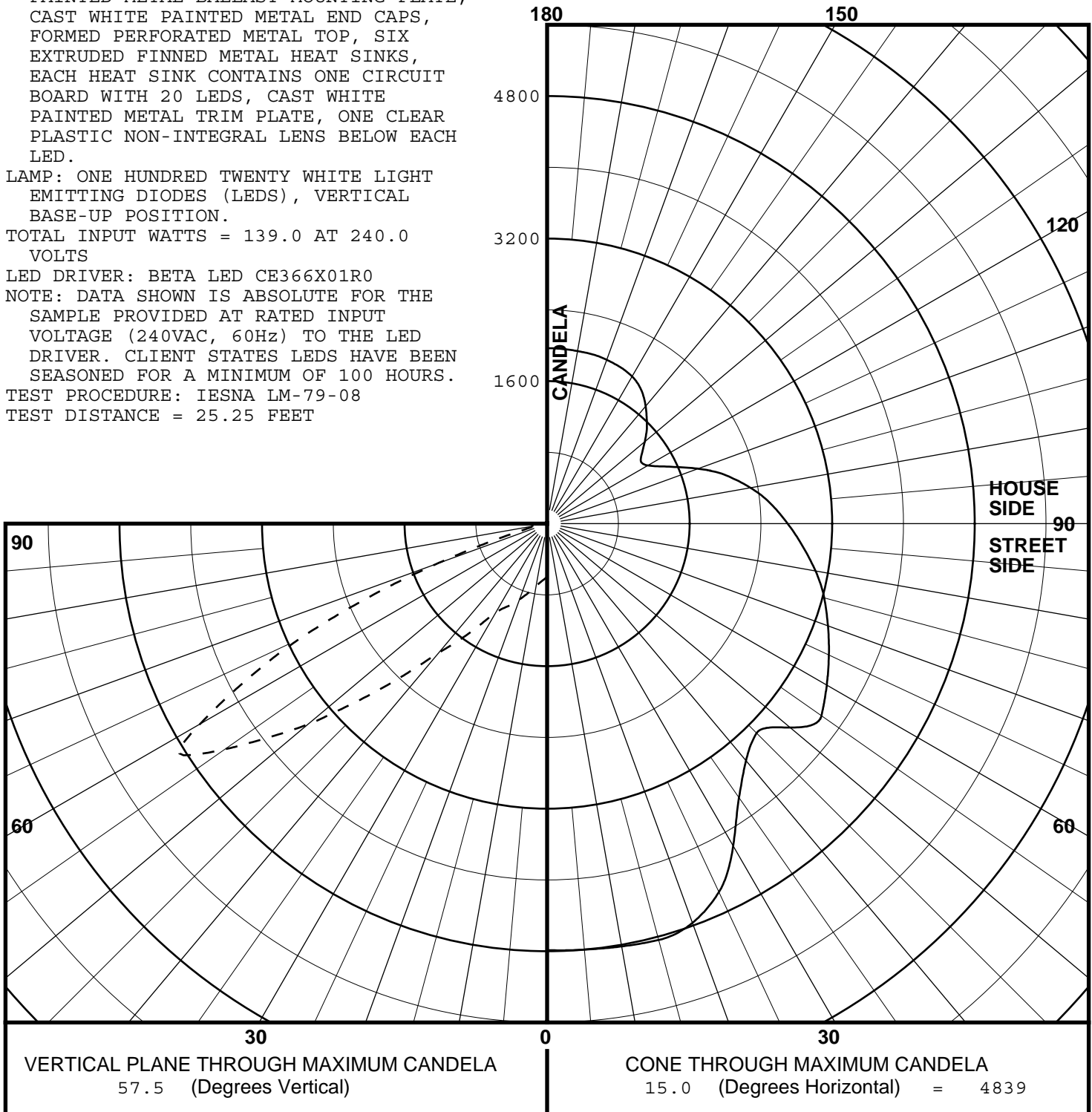
LED DRIVER: BETA LED CE366X01R0

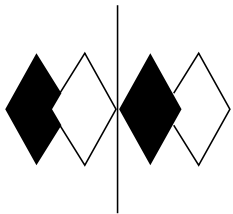
NOTE: DATA SHOWN IS ABSOLUTE FOR THE
 SAMPLE PROVIDED AT RATED INPUT
 VOLTAGE (240VAC, 60Hz) TO THE LED
 DRIVER. CLIENT STATES LEDS HAVE BEEN
 SEASONED FOR A MINIMUM OF 100 HOURS.

TEST PROCEDURE: IESNA LM-79-08

TEST DISTANCE = 25.25 FEET

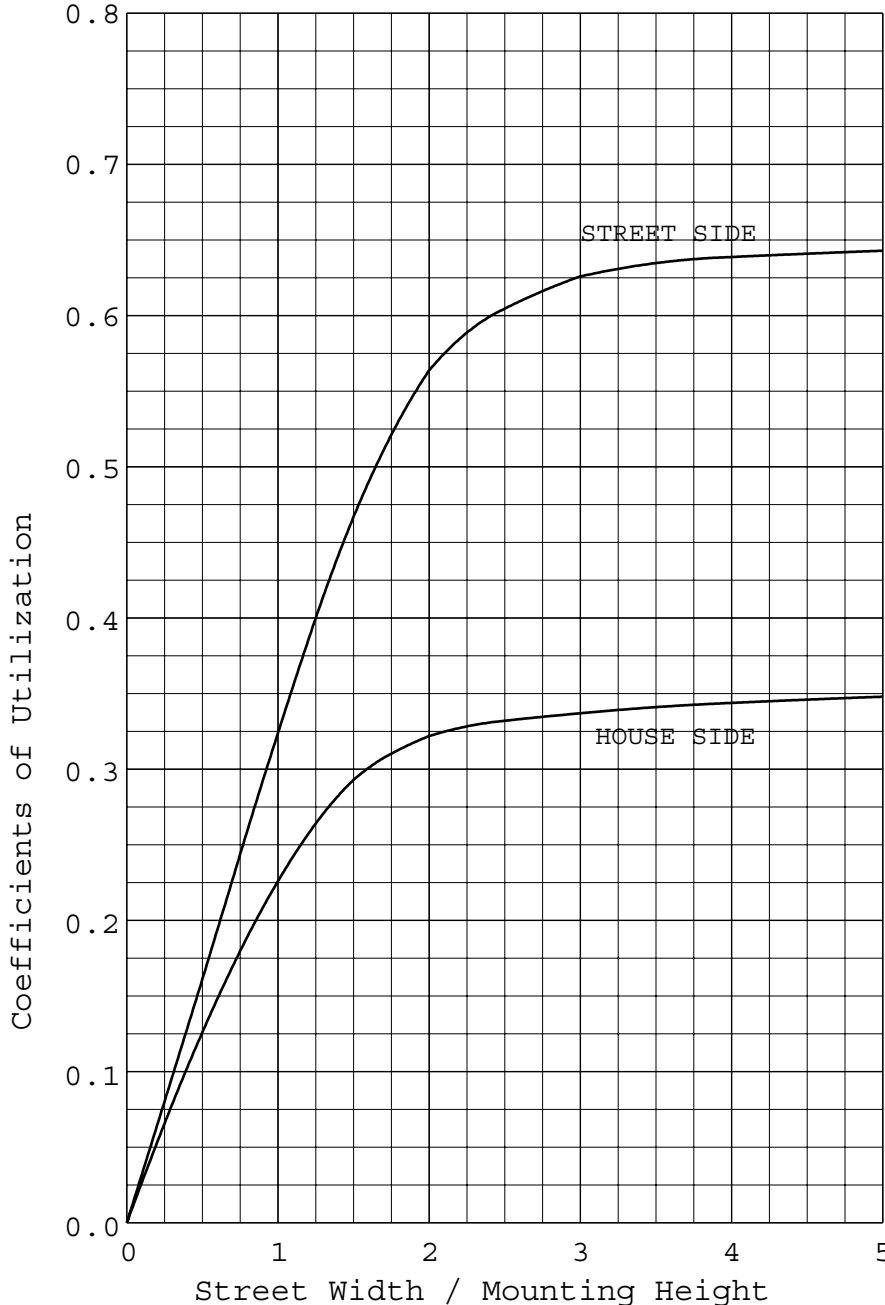
MAXIMUM PLANE AND MAXIMUM CONE PLOTS OF CANDELA





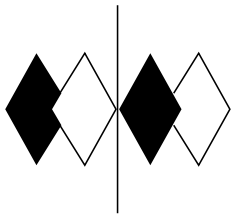
REPORT NUMBER: ITL63574
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COEFFICIENTS OF UTILIZATION AND FLUX DISTRIBUTION



	LUMENS	PERCENT OF FIXTURE
DOWNWARD STREET SIDE	6447.	65.0
DOWNWARD HOUSE SIDE	3467.	35.0
DOWNWARD TOTAL	9914.	100.0
UPWARD STREET SIDE	0.	0.0
UPWARD HOUSE SIDE	0.	0.0
UPWARD TOTAL	0.	0.0
TOTAL FLUX	9914.	100.0
EFFICACY = 71.3 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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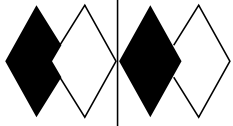
DATE: 11/09/09

PREPARED FOR: BetaLED a Division of Ruud Lighting

FLUX DISTRIBUTION BY SOLID ANGLE

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

	LUMENS	PERCENT OF FIXTURE
FORWARD LIGHT	6447.	65.0
FL (0- 30)		4.3
FM (30- 60)		30.6
FH (60- 80)		28.2
FVH(80- 90)		2.0
BACK LIGHT	3467.	35.0
BL (0- 30)		3.8
BM (30- 60)		18.6
BH (60- 80)		12.2
BVH(80- 90)		0.4
UPLIGHT	0.	0.0
UL (90-100)		0.0
UH (100-180)		0.0
TRAPPED LIGHT	0.	0.0
TOTAL FLUX	9914.	100.0



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CANDELA TABULATION

	HOUSE SIDE		LATERAL ANGLE							
	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.	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	14.	14.	13.	16.	20.	19.	16.	14.	13.	11.
85.0	54.	25.	23.	25.	31.	31.	27.	23.	21.	19.
V 82.5	299.	134.	60.	46.	48.	53.	44.	36.	31.	30.
E 80.0	670.	374.	177.	127.	154.	208.	231.	220.	201.	195.
R 77.5	1194.	746.	374.	206.	295.	466.	617.	699.	726.	732.
T 75.0	1865.	1217.	629.	313.	303.	456.	629.	752.	804.	814.
I 72.5	2516.	1771.	1009.	517.	378.	449.	572.	675.	712.	717.
C 70.0	3029.	2317.	1554.	871.	594.	535.	591.	662.	693.	697.
A 67.5	3252.	2614.	2050.	1344.	986.	806.	741.	735.	745.	746.
L 65.0	3148.	2572.	2101.	1663.	1382.	1246.	1122.	1022.	964.	954.
62.5	2854.	2357.	1826.	1612.	1574.	1542.	1537.	1472.	1416.	1406.
A 60.0	2644.	2197.	1605.	1417.	1651.	1737.	1786.	1796.	1774.	1772.
N 57.5<<	2524.	2085.	1512.	1285.	1585.	1838.	1939.	1967.	1968.	1970.
G 55.0	2334.	1930.	1456.	1262.	1480.	1812.	2010.	2080.	2095.	2097.
L 52.5	2087.	1740.	1413.	1287.	1447.	1737.	1996.	2120.	2161.	2162.
E 50.0	1834.	1569.	1387.	1324.	1454.	1700.	1944.	2088.	2151.	2155.
47.5	1601.	1425.	1359.	1352.	1472.	1676.	1889.	2030.	2145.	2111.
45.0	1407.	1299.	1319.	1351.	1456.	1643.	1830.	1944.	2006.	2013.
42.5	1252.	1209.	1292.	1331.	1414.	1572.	1740.	1849.	1887.	1892.
40.0	1195.	1165.	1265.	1297.	1352.	1489.	1618.	1714.	1764.	1767.
37.5	1172.	1139.	1226.	1255.	1290.	1402.	1510.	1584.	1621.	1625.
35.0	1165.	1129.	1177.	1209.	1225.	1318.	1412.	1479.	1510.	1512.
32.5	1165.	1128.	1128.	1157.	1168.	1231.	1310.	1371.	1398.	1401.
30.0	1159.	1116.	1098.	1099.	1111.	1147.	1206.	1255.	1283.	1285.
25.0	1082.	1040.	1032.	1002.	1004.	987.	996.	1014.	1031.	1031.
20.0	969.	951.	936.	899.	869.	855.	828.	816.	815.	813.
15.0	841.	824.	814.	779.	730.	697.	677.	660.	651.	649.
10.0	713.	698.	689.	673.	647.	616.	592.	576.	568.	566.
5.0	621.	614.	607.	600.	593.	586.	582.	577.	574.	574.
0.0	599.	599.	599.	599.	599.	599.	599.	599.	599.	599.

CONE OF MAXIMUM CANDELA