

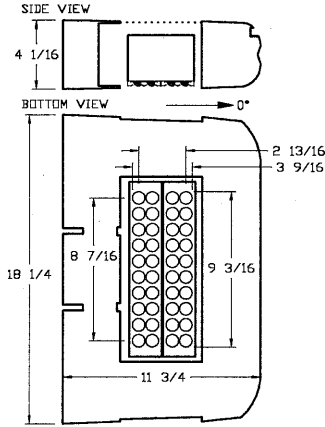
**itl boulder**  
THE LIGHT CENTER OF THE INDUSTRY SINCE 1955

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.



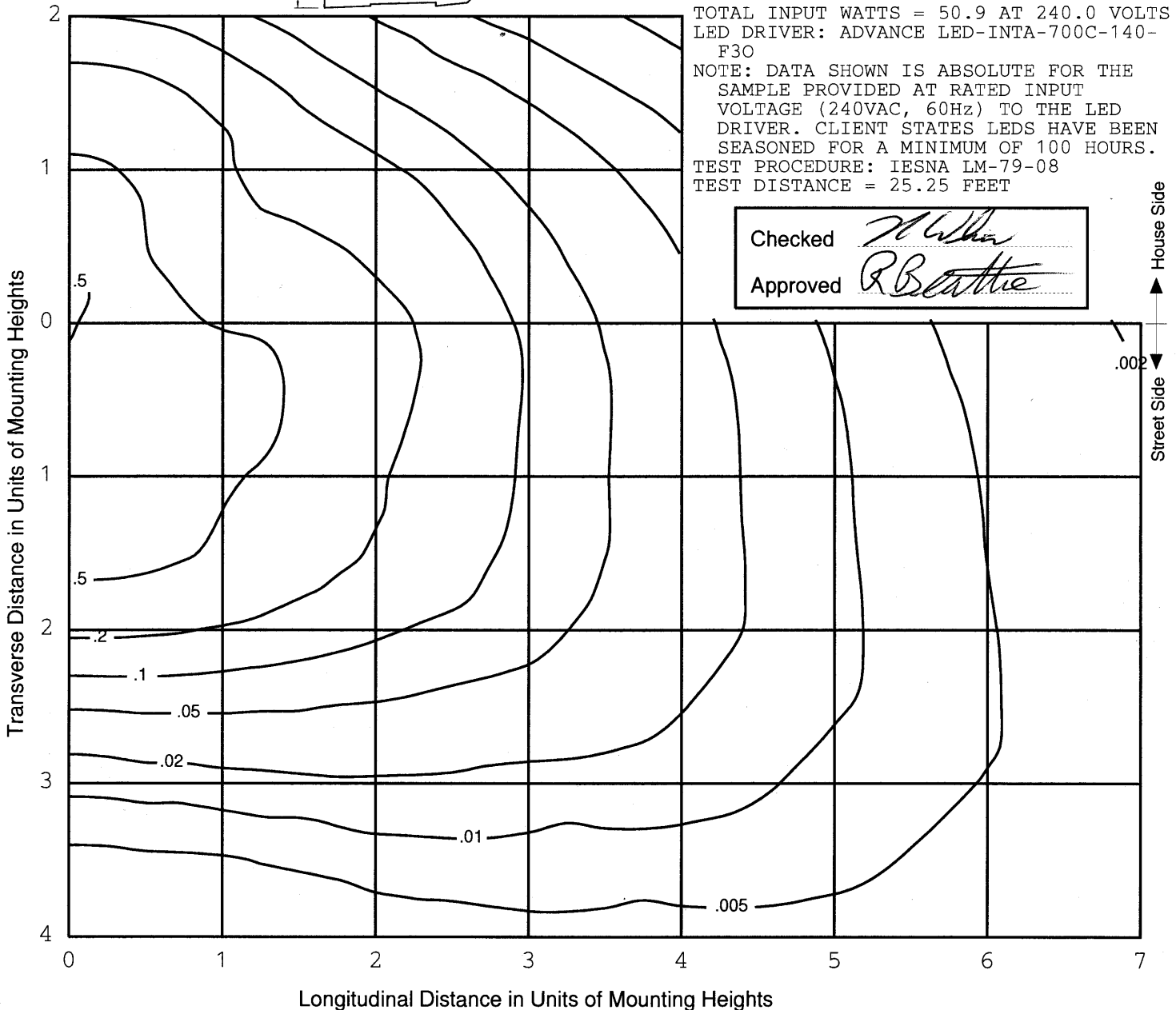
REPORT NUMBER: ITL63874  
DATE: 12/16/09  
PREPARED FOR: BETA LIGHTING, INC.  
CATALOG NUMBER: BXSE0304C-U (350mA)  
LUMINAIRE: EXTRUDED GRAY PAINTED METAL HOUSING, FABRICATED GRAY PAINTED METAL BALLAST MOUNTING PLATE, CAST GRAY PAINTED METAL END CAPS, FORMED PERFORATED METAL TOP, TWO EXTRUDED FINNED METAL HEAT SINKS, EACH HEAT SINK CONTAINS ONE CIRCUIT BOARD WITH 20 LEDs, CAST GRAY PAINTED METAL TRIM PLATE, ONE CLEAR PLASTIC NON-INTEGRAL LENS BELOW EACH LED.

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

TOTAL INPUT WATTS = 50.9 AT 240.0 VOLTS  
LED DRIVER: ADVANCE LED-INTA-700C-140-F30

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

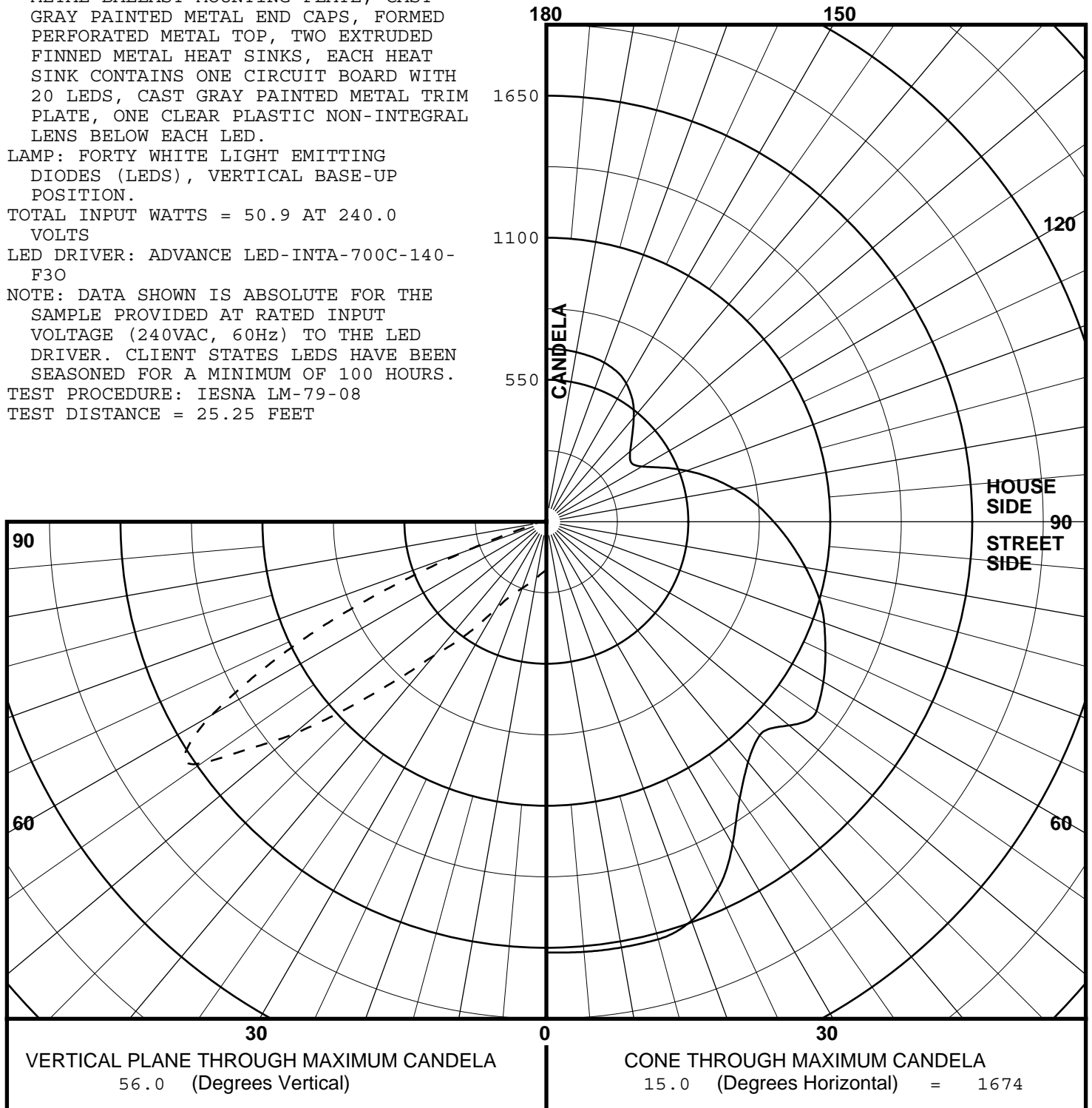


Checked *[Signature]*  
Approved *[Signature]*



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 LAMP: FORTY WHITE LIGHT EMITTING DIODES (LEDS), VERTICAL BASE-UP POSITION.  
 TOTAL INPUT WATTS = 50.9 AT 240.0 VOLTS  
 LED DRIVER: ADVANCE LED-INTA-700C-140-F30  
 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

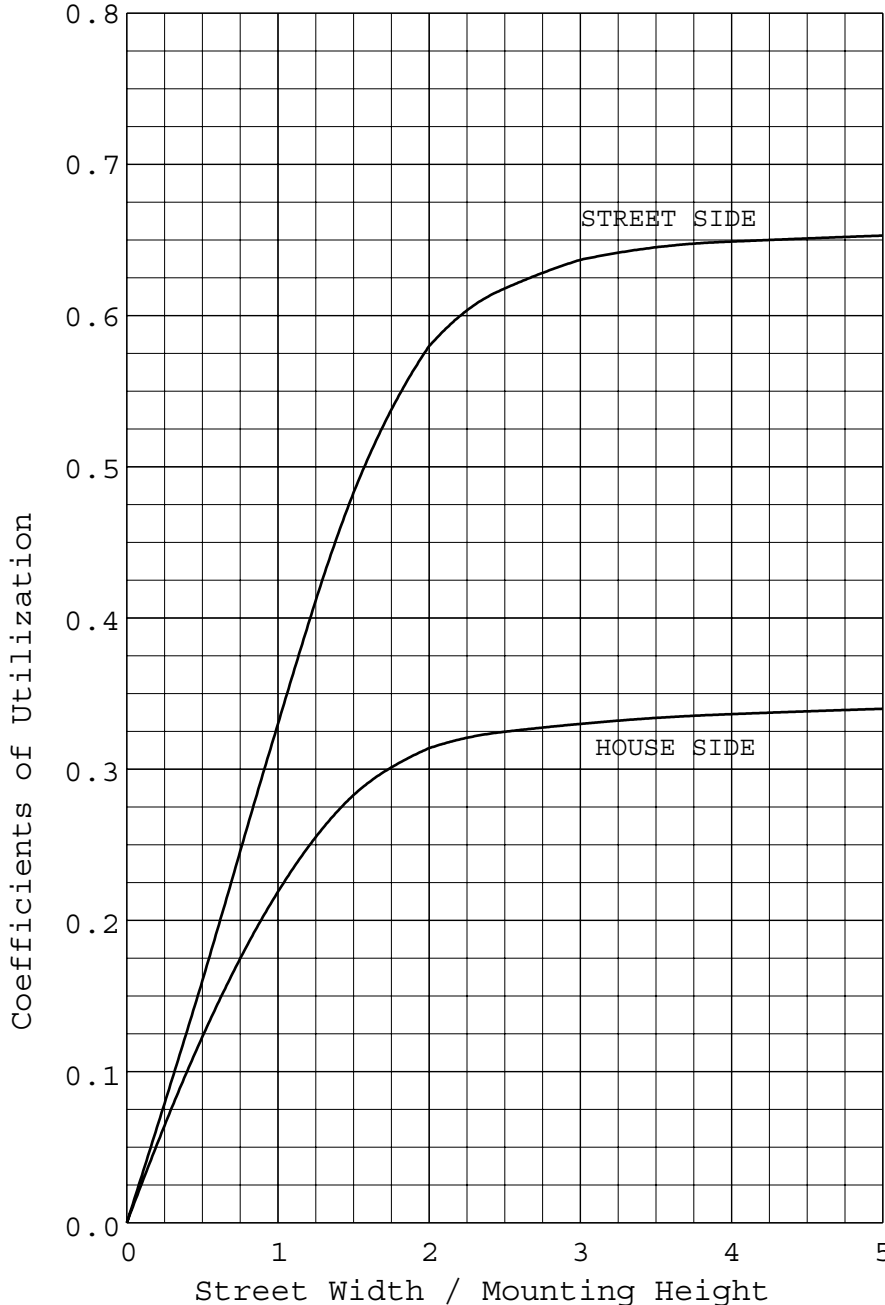
MAXIMUM PLANE AND MAXIMUM CONE PLOTS OF CANDELA





REPORT NUMBER: ITL63874  
 DATE: 12/16/09  
 PREPARED FOR: BETA LIGHTING, INC.

COEFFICIENTS OF UTILIZATION AND FLUX DISTRIBUTION



	LUMENS	PERCENT OF FIXTURE
DOWNWARD STREET SIDE	2180.	65.9
DOWNWARD HOUSE SIDE	1131.	34.1
DOWNWARD TOTAL	3311.	100.0
UPWARD STREET SIDE	0.	0.0
UPWARD HOUSE SIDE	0.	0.0
UPWARD TOTAL	0.	0.0
TOTAL FLUX	3311.	100.0
EFFICACY = 65.0 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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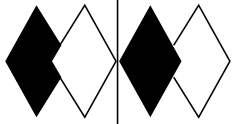
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REPORT NUMBER: ITL63874  
DATE: 12/16/09  
PREPARED FOR: BETA LIGHTING, INC.

FLUX DISTRIBUTION BY SOLID ANGLE  
(PER IESNA TM-15-07, LUMINAIRE CLASSIFICATION  
SYSTEM FOR OUTDOOR LUMINAIRES)

	LUMENS	PERCENT OF FIXTURE
FORWARD LIGHT	2180.	65.9
FL ( 0- 30)		4.1
FM ( 30- 60)		31.9
FH ( 60- 80)		27.8
FVH( 80- 90)		2.0
BACK LIGHT	1131.	34.1
BL ( 0- 30)		3.6
BM ( 30- 60)		17.6
BH ( 60- 80)		12.6
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	3311.	100.0



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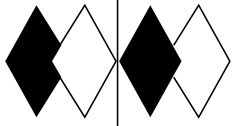
DATE: 12/16/09

## CANDELA TABULATION

	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.	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	3.	3.	2.	2.	2.	4.	16.	50.	34.	6.	4.
85.0	76.	71.	25.	14.	19.	51.	130.	285.	187.	100.	58.
V 82.5	94.	85.	38.	30.	51.	142.	390.	517.	364.	263.	207.
E 80.0	84.	79.	50.	48.	120.	274.	647.	782.	563.	438.	367.
R 77.5	62.	63.	59.	82.	218.	434.	949.	1060.	800.	658.	566.
T 75.0	64.	65.	79.	157.	361.	670.	1253.	1309.	1048.	922.	810.
I 72.5	106.	111.	154.	301.	573.	977.	1490.	1460.	1250.	1158.	1044.
C 70.0	227.	241.	334.	535.	861.	1249.	1572.	1446.	1349.	1299.	1201.
A 67.5	478.	493.	618.	857.	1151.	1421.	1469.	1303.	1320.	1329.	1253.
L 65.0	800.	818.	954.	1172.	1377.	1460.	1289.	1181.	1173.	1200.	1147.
62.5	1118.	1130.	1240.	1418.	1521.	1361.	1238.	1184.	1075.	1024.	980.
A 60.0	1391.	1407.	1495.	1598.	1526.	1213.	1264.	1202.	1085.	984.	932.
N 57.5	1609.	1620.	1657.	1635.	1375.	1170.	1277.	1198.	1093.	968.	907.
G 56.0 <<	1668.	1672.	1674.	1570.	1306.	1169.	1278.	1193.	1089.	950.	881.
L 55.0	1671.	1672.	1631.	1480.	1267.	1157.	1275.	1181.	1079.	923.	848.
E 52.5	1501.	1492.	1439.	1344.	1206.	1120.	1254.	1153.	1049.	865.	770.
50.0	1299.	1298.	1279.	1218.	1113.	1051.	1191.	1105.	992.	789.	682.
47.5	1098.	1101.	1101.	1064.	997.	941.	1048.	1004.	899.	701.	590.
45.0	922.	925.	934.	918.	877.	815.	859.	842.	784.	619.	520.
42.5	780.	782.	795.	792.	760.	691.	679.	677.	672.	559.	479.
40.0	663.	666.	676.	684.	655.	586.	536.	537.	582.	519.	457.
37.5	584.	586.	599.	608.	586.	533.	492.	482.	521.	488.	440.
35.0	509.	510.	525.	535.	524.	493.	473.	456.	474.	461.	424.
30.0	377.	378.	390.	410.	426.	438.	447.	432.	416.	409.	396.
25.0	300.	301.	312.	336.	366.	398.	416.	410.	389.	368.	362.
20.0	267.	267.	274.	292.	318.	346.	363.	367.	353.	332.	325.
15.0	243.	243.	246.	254.	270.	287.	300.	306.	300.	289.	282.
10.0	220.	219.	221.	223.	228.	234.	241.	246.	244.	237.	234.
5.0	200.	200.	200.	201.	202.	203.	204.	203.	201.	198.	196.
0.0	186.	186.	186.	186.	186.	186.	186.	186.	186.	186.	186.

||  
PLANE OF MAXIMUM CANDELA

CONE OF MAXIMUM CANDELA



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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	4.	4.	3.	3.	4.	3.	2.	1.	1.	1.
85.0	29.	8.	6.	6.	7.	7.	5.	4.	4.	4.
V 82.5	147.	65.	24.	11.	13.	15.	12.	11.	9.	9.
E 80.0	294.	169.	84.	46.	52.	67.	74.	73.	68.	68.
R 77.5	468.	295.	151.	77.	97.	152.	156.	178.	188.	188.
T 75.0	676.	455.	242.	120.	101.	150.	208.	245.	245.	245.
I 72.5	893.	635.	378.	197.	133.	152.	191.	225.	237.	239.
C 70.0	1060.	816.	557.	322.	218.	192.	205.	226.	235.	237.
A 67.5	1126.	906.	706.	474.	350.	296.	273.	268.	267.	268.
L 65.0	1051.	855.	686.	541.	466.	429.	407.	382.	367.	367.
62.5	919.	761.	582.	496.	512.	511.	521.	515.	505.	503.
A 60.0	877.	726.	531.	436.	526.	570.	589.	595.	595.	594.
N 57.5	844.	688.	507.	403.	492.	590.	631.	644.	648.	647.
G 56.0 <<	813.	659.	496.	401.	470.	580.	643.	663.	669.	669.
L 55.0	776.	627.	483.	400.	457.	565.	644.	675.	684.	683.
E 52.5	690.	560.	459.	406.	448.	541.	629.	679.	698.	698.
50.0	597.	494.	441.	416.	452.	530.	611.	661.	685.	687.
47.5	511.	447.	430.	421.	456.	523.	592.	638.	662.	664.
45.0	454.	413.	418.	416.	445.	507.	569.	608.	625.	627.
42.5	423.	392.	408.	405.	427.	479.	532.	571.	585.	586.
40.0	409.	379.	396.	393.	407.	451.	492.	523.	538.	540.
37.5	400.	371.	382.	381.	387.	423.	457.	480.	489.	492.
35.0	393.	368.	367.	369.	367.	394.	424.	445.	454.	457.
30.0	379.	368.	354.	341.	337.	339.	354.	369.	376.	378.
25.0	356.	347.	344.	324.	312.	297.	291.	294.	296.	298.
20.0	320.	316.	312.	297.	278.	267.	251.	241.	236.	236.
15.0	278.	270.	267.	255.	238.	223.	213.	205.	200.	200.
10.0	231.	226.	222.	216.	208.	197.	188.	182.	179.	179.
5.0	195.	193.	190.	188.	185.	182.	180.	178.	177.	178.
0.0	186.	186.	186.	186.	186.	186.	186.	186.	186.	186.

CONE OF MAXIMUM CANDELA