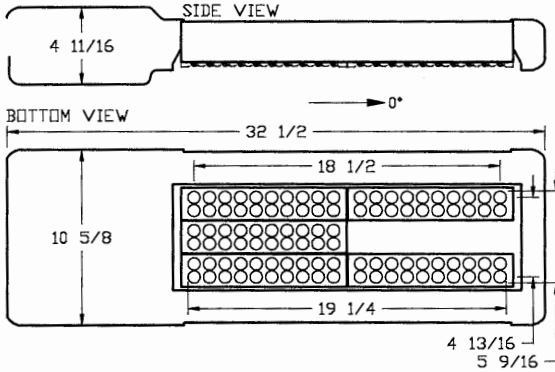


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THE LIGHT CENTER OF THE INDUSTRY SINCE 1955

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

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



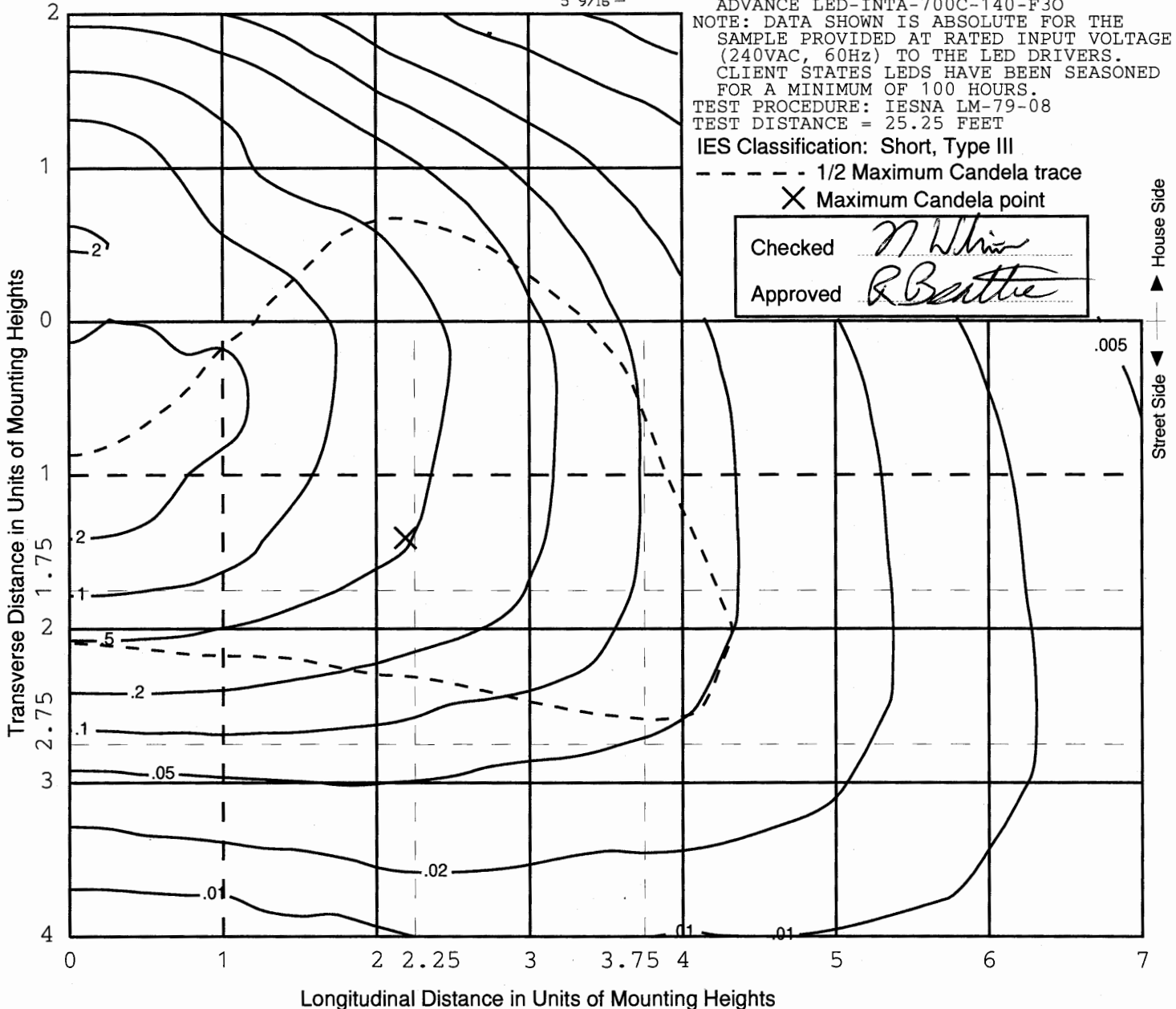
REPORT NUMBER: ITL64940  
DATE: 05/20/10  
PREPARED FOR: BETALED, A DIVISION OF RUUD LIGHTING  
CATALOG NUMBER: STR-LWY-3M-\*\*-10-C-UL-43K or BXSL0310C-U7 (525mA)  
LUMINAIRE: CAST GRAY PAINTED METAL HOUSING WITH CAST GRAY PAINTED METAL ACCESS DOOR, EXTRUDED FINNED METAL HEAT SINK, CAST GRAY PAINTED METAL FORWARD HOUSING PIECE, FIVE CIRCUIT BOARDS EACH WITH 20 LEDS AND CAST GRAY PAINTED METAL TRIM PLATE, ONE CLEAR PLASTIC NON-INTEGRAL LENS BELOW EACH LED.  
LAMPS: ONE HUNDRED WHITE LIGHT EMITTING DIODES (LEDS), VERTICAL BASE-UP POSITION.  
TOTAL INPUT WATTS = 173.1 AT 240.0 VOLTS  
LED DRIVER: BETA LED CE366X01R0, ADVANCE LED-INTA-700C-140-F30  
NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED AT RATED INPUT VOLTAGE (240VAC, 60Hz) TO THE LED DRIVERS. CLIENT STATES LEDS HAVE BEEN SEASONED FOR A MINIMUM OF 100 HOURS.  
TEST PROCEDURE: IESNA LM-79-08  
TEST DISTANCE = 25.25 FEET

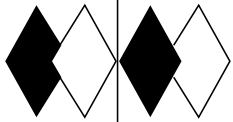
IES Classification: Short, Type III

--- 1/2 Maximum Candela trace

X Maximum Candela point

Checked *N. White*  
Approved *R. Bantle*





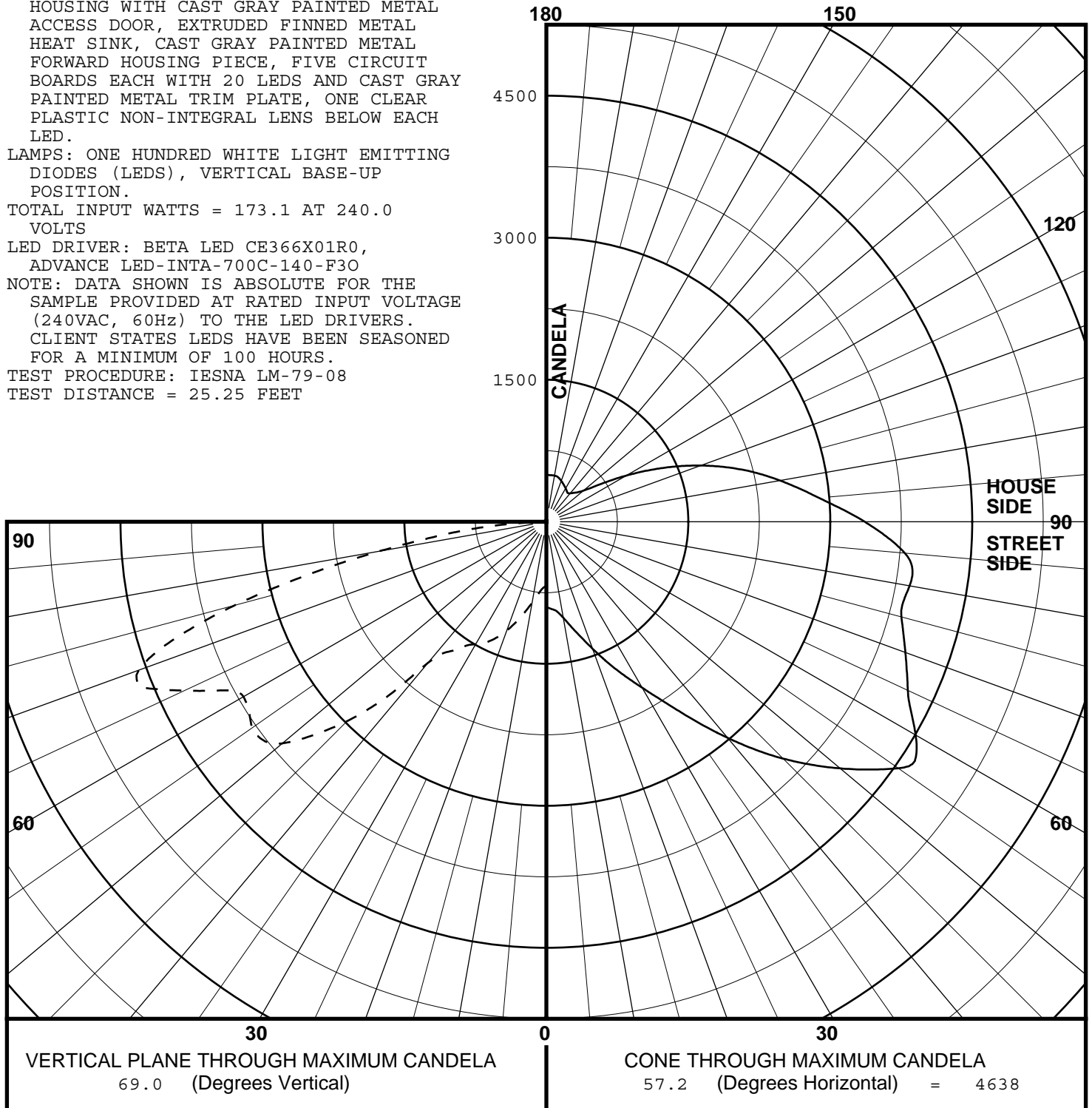
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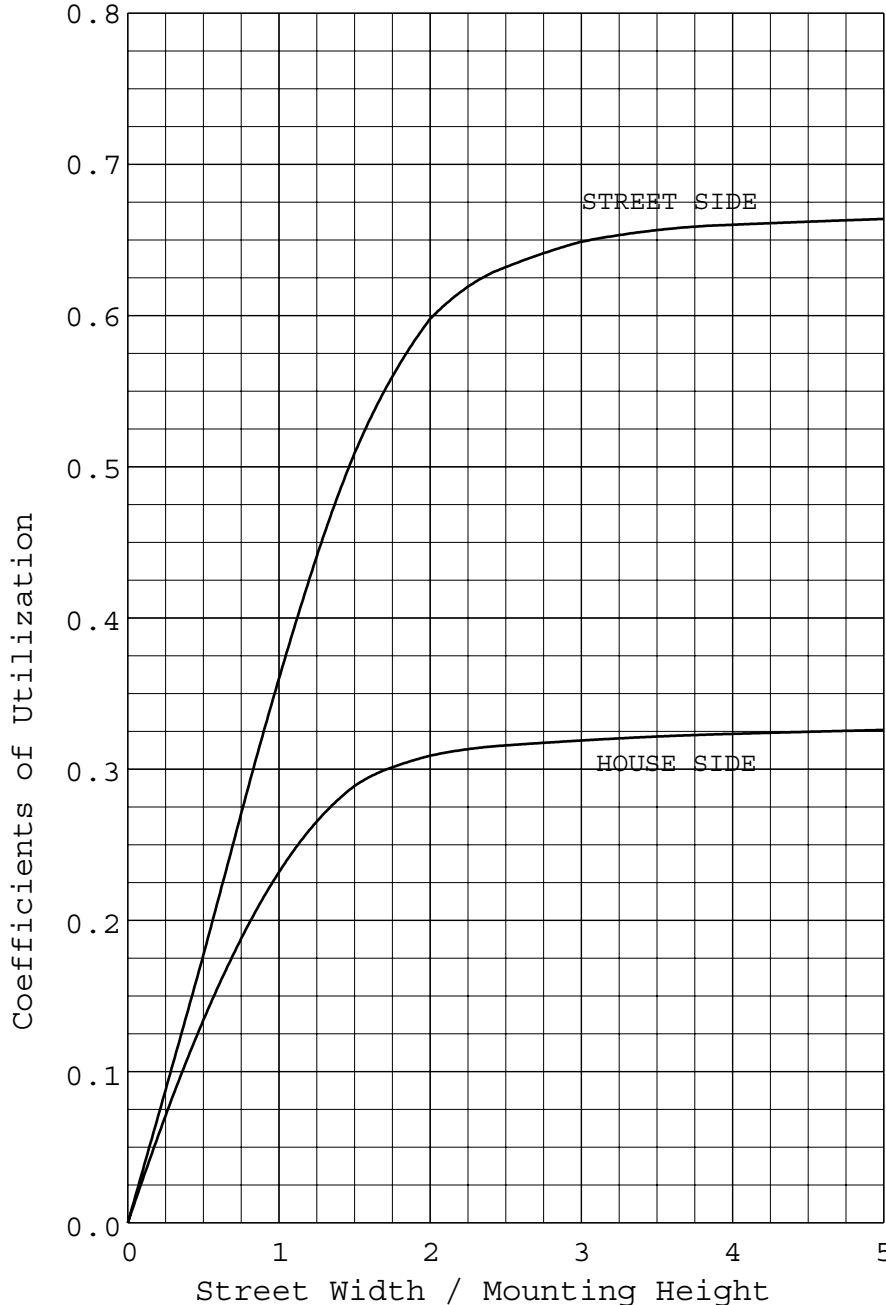
MAXIMUM PLANE AND MAXIMUM CONE PLOTS OF CANDELA





REPORT NUMBER: ITL64940  
 DATE: 05/20/10  
 PREPARED FOR: BETALED, A DIVISION OF RUUD LIGHTING

COEFFICIENTS OF UTILIZATION AND FLUX DISTRIBUTION



	LUMENS	PERCENT OF FIXTURE
DOWNWARD STREET SIDE	6486.	67.2
DOWNWARD HOUSE SIDE	3169.	32.8
DOWNWARD TOTAL	9654.	100.0
UPWARD STREET SIDE	0.	0.0
UPWARD HOUSE SIDE	0.	0.0
UPWARD TOTAL	0.	0.0
TOTAL FLUX	9654.	100.0
EFFICACY = 55.8 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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REPORT NUMBER: ITL64940  
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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	6486.	67.2	
FL ( 0- 30)	490.3	5.1	
FM ( 30- 60)	3214.7	33.3	
FH ( 60- 80)	2588.9	26.8	G2
FVH( 80- 90)	191.6	2.0	U3 G1
BACK LIGHT	3169.	32.8	
BL ( 0- 30)	389.5	4.0	B1
BM ( 30- 60)	1755.9	18.2	B2
BH ( 60- 80)	980.5	10.2	B2 G2
BVH( 80- 90)	43.1	0.4	U1 G1
UPLIGHT	0.	0.0	
UL ( 90-100)	0.1	0.0	U1
UH (100-180)	0.0	0.0	U0
TRAPPED LIGHT	0.	0.0	
TOTAL FLUX	9654.	100.0	

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

BUG RATING: B2 U3 G2



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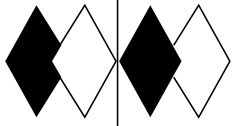
PREPARED FOR: BETALED, A DIVISION OF RUUD LIGHTING

## CANDELA TABULATION

	STREET SIDE				LATERAL ANGLE							
	0.0	5.0	15.0	25.0	35.0	45.0	55.0	57.2	65.0	75.0	85.0	
	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	2.	2.	1.	1.	1.	1.	1.	0.	0.	0.	0.
	87.5	363.	286.	91.	43.	30.	54.	185.	229.	251.	129.	25.
	85.0	425.	352.	122.	71.	108.	240.	582.	688.	699.	408.	215.
V	82.5	385.	336.	147.	105.	210.	449.	995.	1161.	1215.	857.	616.
E	80.0	288.	273.	170.	155.	379.	716.	1544.	1791.	1809.	1339.	1020.
R	77.5	198.	202.	190.	261.	651.	1101.	2296.	2577.	2513.	1931.	1541.
T	75.0	208.	211.	263.	487.	1033.	1674.	3148.	3408.	3255.	2630.	2211.
I	72.5	355.	371.	511.	887.	1528.	2474.	3918.	4125.	3871.	3310.	2966.
C	70.0	735.	761.	1005.	1477.	2192.	3313.	4450.	4583.	4183.	3787.	3578.
A	69.0<<	900.	934.	1202.	1707.	2440.	3538.	4541.	4638.	4214.	3884.	3803.
L	67.5	1366.	1409.	1713.	2281.	2993.	3932.	4576.	4590.	4161.	3992.	3950.
	65.0	2144.	2192.	2524.	3101.	3691.	4190.	4253.	4222.	3927.	3923.	3993.
A	62.5	2899.	2930.	3224.	3784.	4186.	4018.	3853.	3856.	3666.	3621.	3675.
N	60.0	3567.	3591.	3857.	4308.	4283.	3627.	3649.	3696.	3526.	3283.	3204.
G	57.5	4145.	4163.	4339.	4463.	3953.	3332.	3671.	3727.	3492.	3121.	2876.
L	55.0	4376.	4370.	4413.	4173.	3581.	3270.	3744.	3795.	3529.	3111.	2755.
E	52.5	4102.	4093.	4031.	3773.	3408.	3264.	3740.	3782.	3509.	3095.	2669.
	50.0	3643.	3644.	3642.	3518.	3316.	3181.	3606.	3642.	3389.	3003.	2520.
	47.5	3266.	3272.	3319.	3271.	3136.	2977.	3294.	3334.	3140.	2801.	2302.
	45.0	2904.	2917.	2987.	3029.	2953.	2780.	2955.	2978.	2823.	2527.	2041.
	42.5	2570.	2582.	2667.	2734.	2635.	2408.	2515.	2537.	2466.	2206.	1684.
	40.0	2052.	2068.	2169.	2262.	2212.	2011.	1943.	1942.	1934.	1816.	1485.
	37.5	1814.	1829.	1948.	2063.	2044.	1888.	1766.	1736.	1680.	1630.	1420.
	35.0	1685.	1701.	1807.	1916.	1898.	1776.	1676.	1647.	1568.	1507.	1353.
	30.0	1476.	1483.	1549.	1616.	1616.	1589.	1520.	1494.	1404.	1324.	1235.
	25.0	1328.	1328.	1342.	1374.	1407.	1428.	1399.	1383.	1312.	1208.	1109.
	20.0	1174.	1174.	1174.	1188.	1215.	1240.	1230.	1223.	1185.	1117.	1032.
	15.0	1031.	1027.	1010.	1008.	1023.	1038.	1041.	1041.	1026.	987.	932.
	10.0	840.	841.	845.	850.	854.	860.	866.	868.	863.	840.	807.
	5.0	732.	732.	734.	736.	739.	739.	737.	736.	731.	723.	710.
	0.0	673.	673.	673.	673.	673.	673.	673.	673.	673.	673.	673.

||  
PLANE OF MAXIMUM CANDELA

CONE OF MAXIMUM CANDELA



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REPORT NUMBER: ITL64940

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PREPARED FOR: BETALED, A DIVISION OF RUUD LIGHTING

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	26.	18.	13.	12.	13.	17.	13.	9.	4.	0.	0.
85.0	180.	131.	63.	29.	26.	25.	22.	17.	12.	9.	8.
V 82.5	493.	375.	191.	76.	54.	66.	77.	87.	64.	54.	51.
E 80.0	848.	680.	385.	160.	89.	147.	236.	304.	314.	320.	319.
R 77.5	1296.	1056.	633.	266.	126.	163.	253.	345.	416.	420.	418.
T 75.0	1888.	1562.	979.	433.	185.	194.	266.	356.	423.	433.	437.
I 72.5	2592.	2181.	1456.	722.	306.	246.	304.	373.	439.	457.	459.
C 70.0	3202.	2743.	2002.	1182.	565.	368.	353.	421.	479.	469.	467.
A 69.0<<	3364.	2892.	2132.	1339.	686.	435.	383.	432.	485.	494.	493.
L 67.5	3639.	3174.	2359.	1614.	970.	652.	488.	476.	503.	506.	504.
65.0	3776.	3394.	2566.	1779.	1276.	1007.	790.	622.	560.	539.	534.
A 62.5	3531.	3273.	2567.	1761.	1343.	1257.	1150.	974.	800.	718.	704.
N 60.0	3096.	2923.	2426.	1684.	1277.	1373.	1418.	1352.	1225.	1112.	1098.
G 57.5	2774.	2643.	2227.	1591.	1200.	1347.	1551.	1605.	1566.	1512.	1504.
L 55.0	2615.	2484.	2090.	1540.	1204.	1309.	1548.	1712.	1750.	1736.	1735.
E 52.5	2491.	2331.	1976.	1525.	1258.	1324.	1519.	1705.	1801.	1827.	1832.
50.0	2304.	2126.	1829.	1516.	1317.	1360.	1508.	1669.	1771.	1809.	1817.
47.5	2084.	1927.	1695.	1464.	1353.	1387.	1501.	1633.	1715.	1743.	1752.
45.0	1774.	1550.	1330.	1355.	1370.	1403.	1494.	1600.	1658.	1675.	1679.
42.5	1425.	1266.	1226.	1335.	1372.	1400.	1479.	1568.	1612.	1623.	1625.
40.0	1317.	1223.	1202.	1300.	1348.	1374.	1451.	1529.	1568.	1582.	1586.
37.5	1277.	1184.	1152.	1241.	1304.	1332.	1406.	1478.	1515.	1530.	1530.
35.0	1238.	1156.	1128.	1182.	1243.	1277.	1343.	1413.	1453.	1465.	1467.
30.0	1169.	1113.	1070.	1091.	1116.	1154.	1195.	1246.	1282.	1293.	1295.
25.0	1062.	1027.	984.	998.	1027.	1040.	1050.	1063.	1079.	1085.	1084.
20.0	991.	961.	924.	911.	914.	921.	922.	911.	897.	888.	887.
15.0	902.	876.	841.	821.	805.	786.	771.	763.	757.	746.	746.
10.0	788.	772.	741.	719.	702.	682.	663.	650.	640.	632.	632.
5.0	702.	694.	678.	663.	650.	637.	626.	620.	614.	606.	606.
0.0	673.	673.	673.	673.	673.	673.	673.	673.	673.	673.	673.

CONE OF MAXIMUM CANDELA