



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

REPORT NUMBER: ITL68004
DATE: 03/22/11
REVISED: 09/13/11
PREPARED FOR: MAXLITE

ADDRESS: 12 YORK AVE
WEST CALDWELL, NJ 07006

CATALOG NUMBER: MLLWP70LED50DS

LUMINAIRE: CAST BROWN PAINTED METAL HOUSING, FLAT SEMI-DIFFUSE METAL CIRCUIT BOARD MOUNTING PLATE, FOUR CIRCUIT BOARDS EACH WITH 8 LEDS, CLEAR FLAT GLASS LENS, CAST BROWN PAINTED METAL LENS FRAME.

LAMPS: THIRTY-TWO WHITE LIGHT EMITTING DIODES (LEDs) EACH WITH CLEAR HEMISPHERICAL INTEGRAL LENS, VERTICAL BASE-UP POSITION.

DRIVER: INVENTRONICS EUC-060S230ST

NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED AT RATED INPUT VOLTAGE (120VAC, 60HZ) TO THE LED DRIVER.

INSTRUMENTS: Associated Power Technologies APT6040 AC Power Source
Yokogawa WT210 Digital Power Meter
Ocean Optics QE65000 Spectroradiometer
ITL 2.0 Meter Diameter Integrating Sphere, 4π Geometry

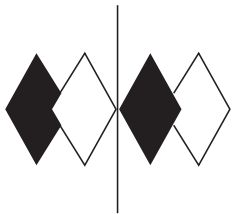
OBJECT OF TEST: Measure the Correlated Color Temperature (CCT), Color Rendering Index (CRIa), Chromaticity Coordinates (x,y), ANSI C78.377 Duv, and electrical data including Power Factor (PF) to the luminaire.

PROCEDURE: The luminaire was provided by the customer and had an unknown number of burn hours. The luminaire was mounted inside the integrating sphere in a horizontal position (LEDs facing down). The luminaire was allowed to stabilize at 120.0 input. After stabilization occurred, Correlated Color Temperature (CCT), Color Rendering Index (CRIa), Chromaticity Coordinates (x,y), ANSI C78.377 Duv, and electrical data including Power Factor (PF) were measured with the luminaire operating in the integrating sphere. In order to measure mean performance, multiple data sets were recorded and averaged. Readings were taken with the luminaire operating at 120.0 input in a 25 +/-1 degree Celsius free air ambient and in accordance with IESNA LM-79-08. All data are traceable to the National Institute of Standards and Technology.

RESULTS: (continued next page)

THIS ITL REPORT WITH THE USE OF THE NVLAP LOGO SHALL NOT BE USED BY THE CLIENT TO CLAIM PRODUCT CERTIFICATION, APPROVAL, OR ENDORSEMENT BY NVLAP, NIST, OR ANY AGENCY OF THE FEDERAL GOVERNMENT.

Checked N Gully
Approved R Bergin
 Lighting Engineer



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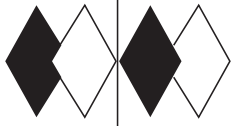
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RESULTS:

SPECTRORADIOMETRIC	
Observer	CIE 1931 2 degree
Chromaticity Ordinate x	0.3425
Chromaticity Ordinate y	0.3631
Correlated Color Temp CCT (K)	5130
Color Rendering Index (CRIa)	68
ANSI C78.377-2008 Duv	0.007
ELECTRICAL	
Input Voltage (Volts AC)	120.0
Input Current (mA AC)	579
Input Power (Watts)	68.8
Input Power Factor (%)	99.0



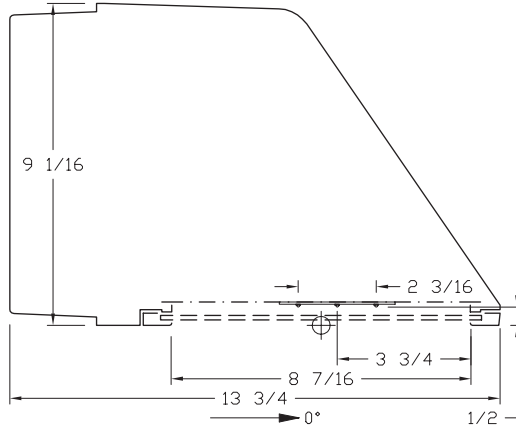
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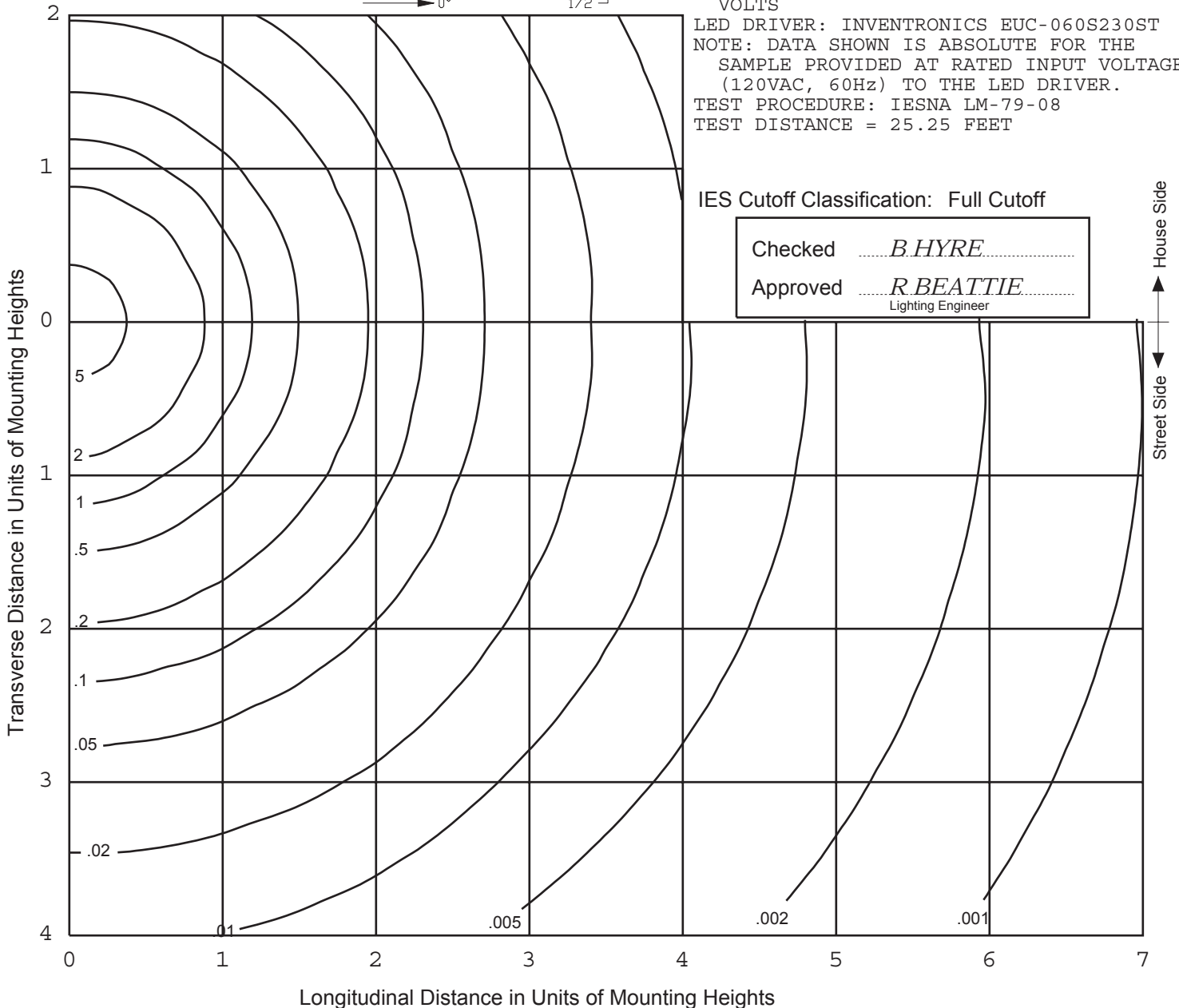
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ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINATION
Values based on 16 foot mounting height.



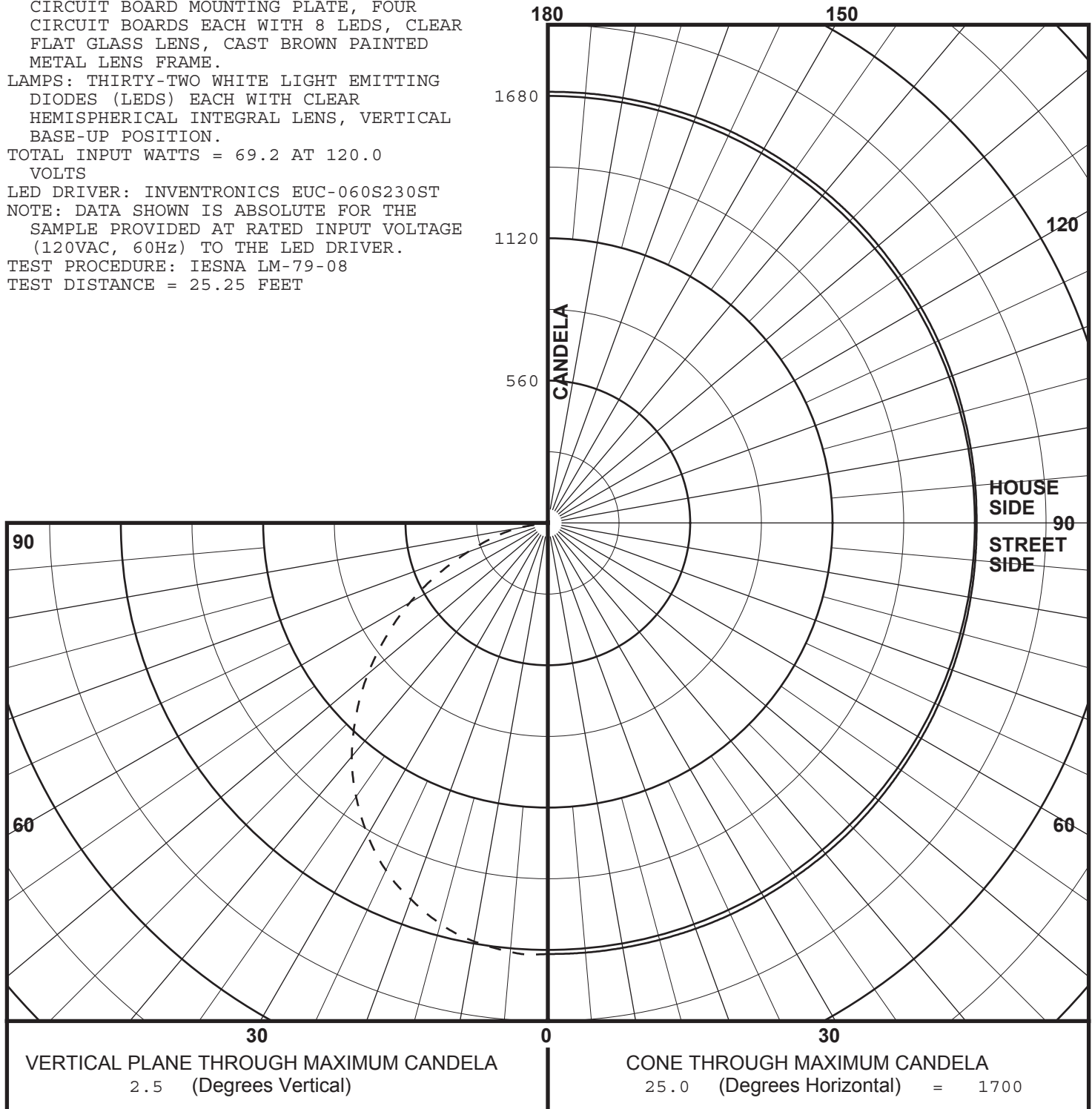
REPORT NUMBER: ITL68003
ISSUE DATE: 03/22/11 PAGE: 1 OF 6
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LUMINAIRE: CAST BROWN PAINTED METAL HOUSING, FLAT SEMI-DIFFUSE METAL CIRCUIT BOARD MOUNTING PLATE, FOUR CIRCUIT BOARDS EACH WITH 8 LEDS, CLEAR FLAT GLASS LENS, CAST BROWN PAINTED METAL LENS FRAME.
LAMPS: THIRTY-TWO WHITE LIGHT EMITTING DIODES (LEDs) EACH WITH CLEAR HEMISPHERICAL INTEGRAL LENS, VERTICAL BASE-UP POSITION.
TOTAL INPUT WATTS = 69.2 AT 120.0 VOLTS
LED DRIVER: INVENTRONICS EUC-060S230ST
NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED AT RATED INPUT VOLTAGE (120VAC, 60Hz) TO THE LED DRIVER.
TEST PROCEDURE: IESNA LM-79-08
TEST DISTANCE = 25.25 FEET





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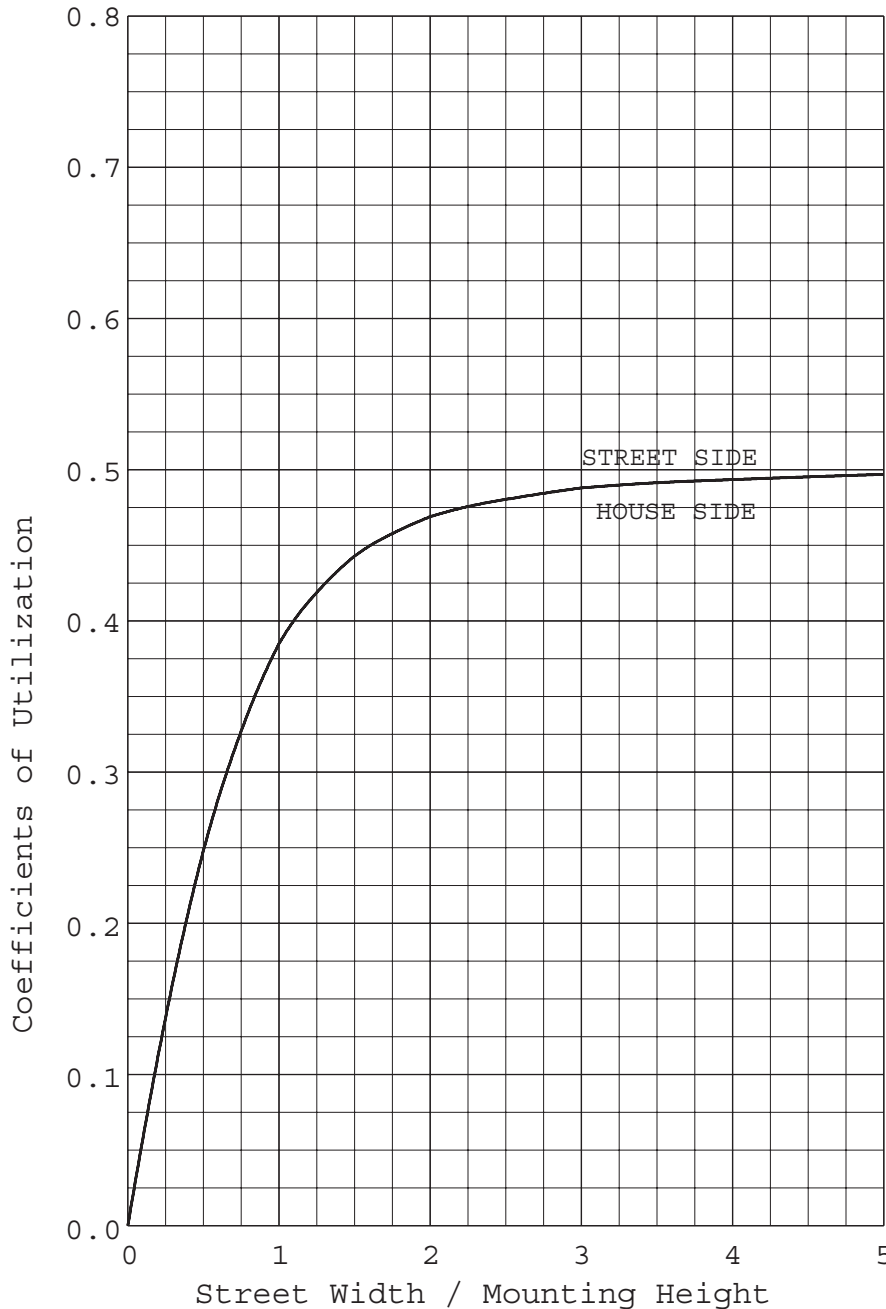
MAXIMUM PLANE AND MAXIMUM CONE PLOTS OF CANDELA



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COEFFICIENTS OF UTILIZATION AND FLUX DISTRIBUTION



	LUMENS	PERCENT OF FIXTURE
DOWNWARD STREET SIDE	2199	50.0
DOWNWARD HOUSE SIDE	2199	50.0
DOWNWARD TOTAL	4399	100.0
UPWARD STREET SIDE	0	0.0
UPWARD HOUSE SIDE	0	0.0
UPWARD TOTAL	0	0.0
TOTAL FLUX	4399	100.0
EFFICACY = 63.6 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.

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



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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	2199.	50.0	
FL (0- 30)	658.0	15.0	
FM (30- 60)	1170.1	26.6	
FH (60- 80)	348.4	7.9	G0
FVH(80- 90)	22.8	0.5	U1 G1
BACK LIGHT	2199.	50.0	
BL (0- 30)	658.0	15.0	B2
BM (30- 60)	1170.1	26.6	B2
BH (60- 80)	348.4	7.9	B1 G0
BVH(80- 90)	22.8	0.5	U1 G1
UPLIGHT	0.	0.0	
UL (90-100)	0.0	0.0	U0
UH (100-180)	0.0	0.0	U0
TRAPPED LIGHT	0.	0.0	
TOTAL FLUX	4399.	100.0	

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

BUG RATING: B2 U1 G1



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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.
	87.5	1.	1.	1.	1.	1.	2.	6.	10.	9.	7.
	85.0	14.	14.	13.	18.	24.	29.	37.	42.	43.	37.
	82.5	60.	62.	61.	63.	70.	79.	82.	84.	84.	78.
	80.0	119.	120.	121.	123.	121.	124.	126.	126.	125.	118.
	77.5	168.	170.	170.	173.	169.	171.	171.	171.	169.	163.
	75.0	214.	218.	218.	222.	225.	216.	214.	212.	208.	201.
	72.5	266.	269.	272.	275.	279.	278.	264.	257.	250.	245.
	70.0	329.	330.	332.	334.	338.	339.	332.	314.	300.	296.
	67.5	397.	399.	401.	403.	406.	404.	404.	391.	377.	367.
	65.0	476.	477.	477.	476.	476.	474.	474.	466.	463.	452.
	62.5	557.	558.	556.	552.	549.	547.	546.	540.	542.	539.
	60.0	634.	636.	632.	626.	623.	620.	620.	615.	618.	617.
	57.5	711.	713.	707.	701.	697.	694.	694.	692.	696.	699.
V	55.0	787.	787.	782.	774.	771.	770.	769.	767.	774.	778.
E	52.5	860.	859.	855.	850.	847.	845.	844.	844.	851.	857.
R	50.0	933.	935.	931.	924.	921.	918.	917.	919.	927.	932.
T	47.5	1007.	1008.	1005.	997.	994.	990.	989.	993.	1001.	1006.
I	45.0	1078.	1080.	1076.	1066.	1064.	1061.	1060.	1064.	1074.	1080.
C	42.5	1146.	1148.	1143.	1134.	1132.	1129.	1130.	1134.	1141.	1143.
A	40.0	1210.	1210.	1206.	1200.	1196.	1193.	1195.	1199.	1206.	1206.
L	37.5	1270.	1271.	1267.	1260.	1258.	1255.	1258.	1262.	1267.	1268.
	35.0	1325.	1326.	1323.	1315.	1316.	1313.	1317.	1320.	1325.	1326.
A	32.5	1374.	1376.	1373.	1368.	1368.	1368.	1370.	1376.	1376.	1380.
N	30.0	1421.	1424.	1421.	1418.	1417.	1418.	1419.	1424.	1426.	1429.
G	27.5	1467.	1470.	1467.	1466.	1464.	1465.	1466.	1469.	1472.	1472.
L	25.0	1508.	1510.	1509.	1508.	1508.	1508.	1508.	1509.	1512.	1512.
E	22.5	1543.	1545.	1545.	1545.	1545.	1545.	1545.	1549.	1548.	1546.
	20.0	1573.	1574.	1576.	1576.	1577.	1577.	1580.	1583.	1580.	1576.
	17.5	1602.	1602.	1605.	1606.	1606.	1607.	1609.	1611.	1609.	1604.
	15.0	1629.	1629.	1631.	1633.	1633.	1632.	1636.	1636.	1632.	1627.
	12.5	1652.	1651.	1653.	1656.	1655.	1654.	1657.	1657.	1652.	1648.
	10.0	1668.	1668.	1669.	1672.	1671.	1671.	1674.	1673.	1668.	1666.
	7.5	1681.	1681.	1682.	1684.	1684.	1684.	1685.	1684.	1680.	1679.
	5.0	1692.	1692.	1693.	1694.	1693.	1693.	1691.	1691.	1688.	1685.
	2.5<<	1696.	1697.	1698.	1700.	1699.	1699.	1696.	1695.	1691.	1687.
	0.0	1696.	1696.	1696.	1696.	1696.	1696.	1696.	1696.	1696.	1696.

PLANE OF MAXIMUM CANDELA

CONE OF MAXIMUM CANDELA



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