

itl boulder

THE LIGHT CENTER OF THE INDUSTRY SINCE 1955

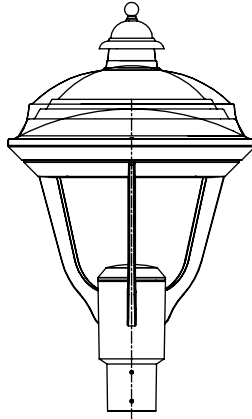
INDEPENDENT TESTING LABORATORIES, INC.

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: ITL64432

DATE: 03/24/10

PREPARED FOR: LSI INDUSTRIES, INC.

CATALOG NUMBER: XENM/XINM/XLXM PT 5 LED

63 CW F UE

LUMINAIRE: CAST BLACK PAINTED METAL

POST TOP FITTER, CAST BLACK PAINTED

METAL POST TOP CAP, THREE FABRICATED

BLACK PAINTED METAL SUPPORT ARMS, FLAT

METAL CIRCUIT BOARD MOUNTING PLATE,

ONE CIRCUIT BOARD WITH 63 LEDS,

FABRICATED PREMIUM SPECULAR METAL

REFLECTOR WITH 12 "V" SHAPED INSERTS

BELOW ALL LEDS, FLAT PREMIUM SPECULAR

METAL REFLECTOR SURROUND, CAST BLACK

PAINTED METAL UPPER HOUSING WITH

FORMED BLACK PAINTED METAL TOP, CLEAR

FLAT GLASS LENS.

LAMPS: SIXTY-THREE 1.15-WATT WHITE

LIGHT EMITTING DIODES (LEDs) EACH WITH

CLEAR SEMI-HEMISPHERICAL INTEGRAL

LENS, VERTICAL BASE-UP POSITION.

TOTAL INPUT WATTS = 76.9 AT 120.0 VOLTS

LED DRIVER: LED ELECTRONIC 350mA DRIVER

NOTE: DATA SHOWN IS ABSOLUTE FOR THE

SAMPLE PROVIDED AT RATED INPUT VOLTAGE

(120VAC, 60Hz) TO THE LED DRIVER. LAMP

AND LED DRIVER INFORMATION PROVIDED BY

CLIENT. THE LUMINAIRE HOUSING PROVIDED

TO ITL TO TEST AND GENERATE THIS

REPORT WAS MODEL NUMBER "XENM PT 5 LED

63 CW F UE" THE OTHER HOUSINGS

DEPICTED IN THE DRAWING AND LISTED AS

ADDITIONAL CATALOG NUMBERS SHOULD

PRODUCE COMPARABLE RESULTS. DRAWING

PROVIDED BY CLIENT.

TEST PROCEDURE: IESNA LM-79-08

TEST DISTANCE = 25.25 FEET

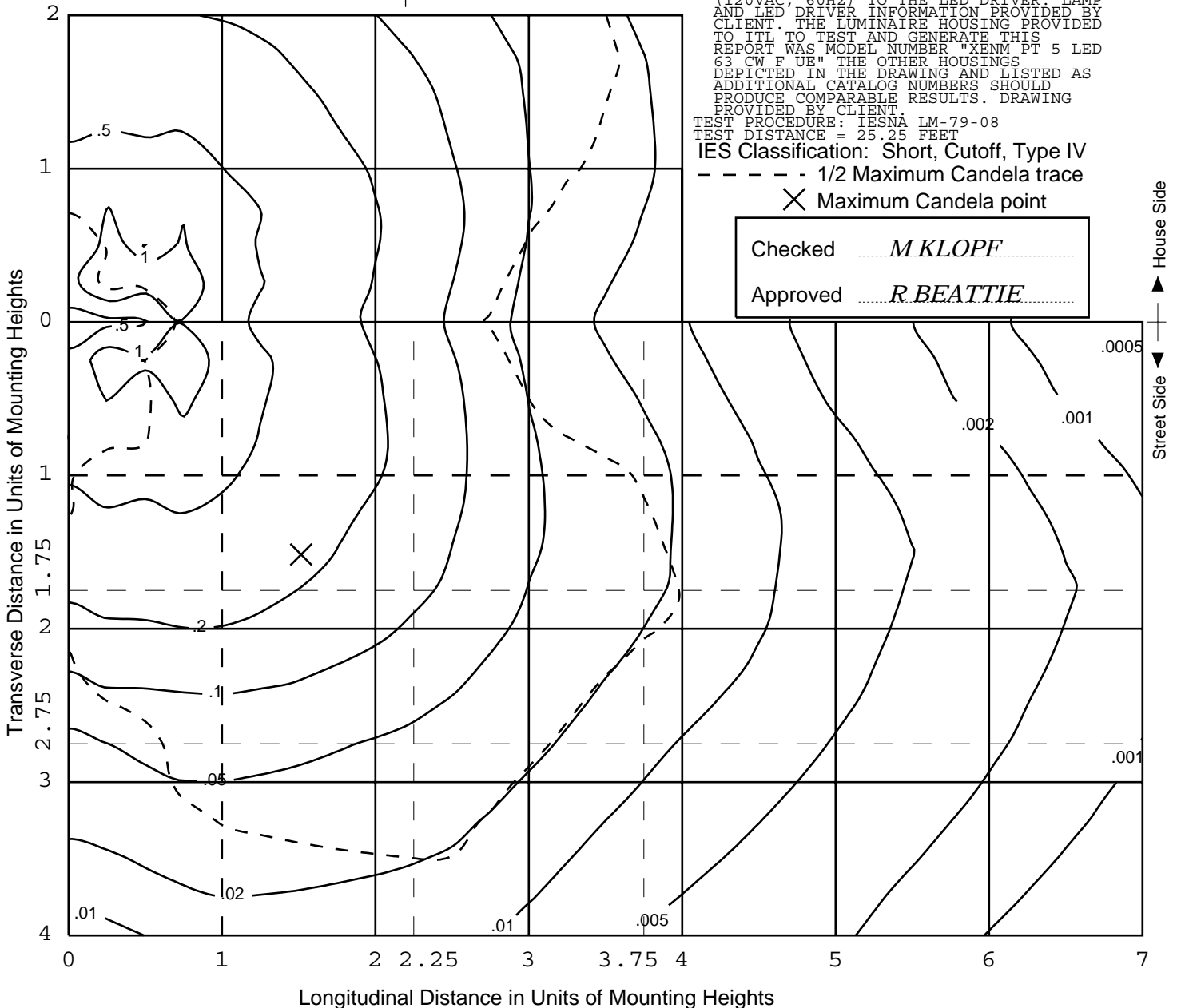
IES Classification: Short, Cutoff, Type IV

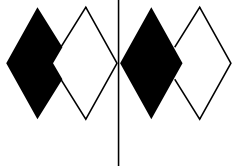
----- 1/2 Maximum Candela trace

✕ Maximum Candela point

Checked *M KLOPF*

Approved *R BEATTIE*





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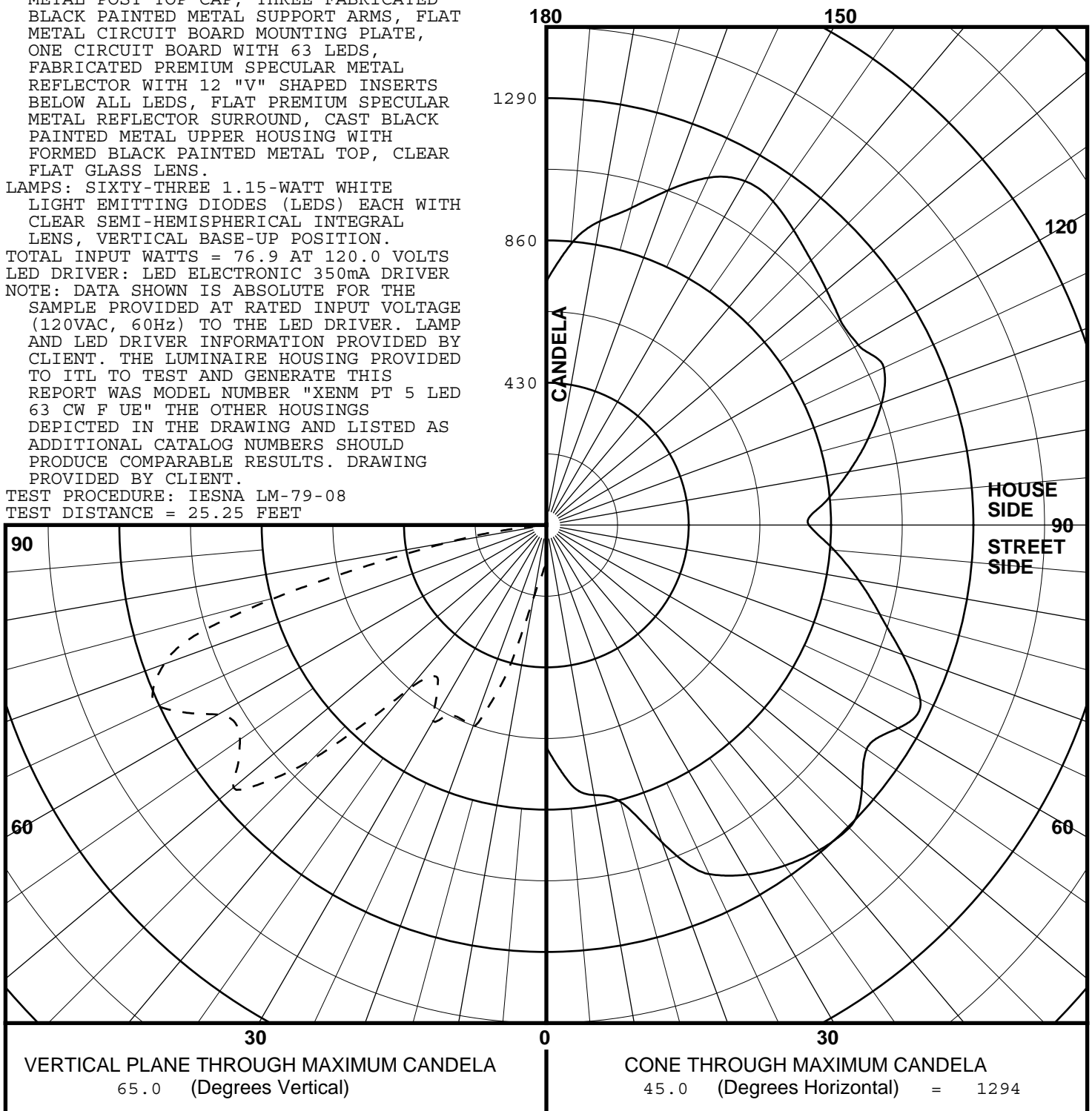
LED DRIVER: LED ELECTRONIC 350mA DRIVER

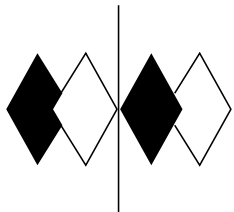
NOTE: DATA SHOWN IS ABSOLUTE FOR THE
SAMPLE PROVIDED AT RATED INPUT VOLTAGE
(120VAC, 60Hz) TO THE LED DRIVER. LAMP
AND LED DRIVER INFORMATION PROVIDED BY
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TEST PROCEDURE: IESNA LM-79-08

TEST DISTANCE = 25.25 FEET

MAXIMUM PLANE AND MAXIMUM CONE PLOTS OF CANDELA





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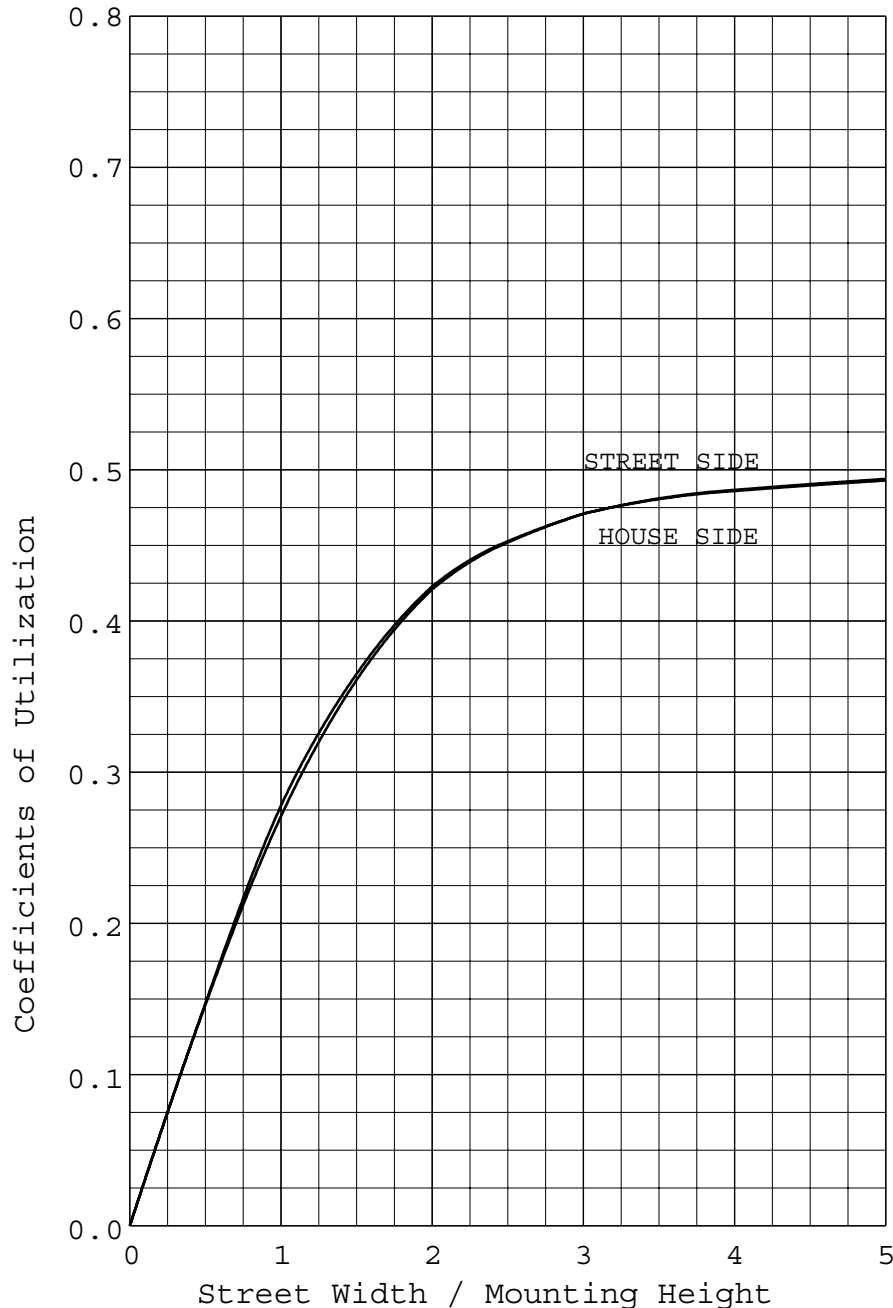
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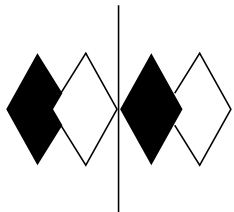
PREPARED FOR: LSI INDUSTRIES, INC.

COEFFICIENTS OF UTILIZATION AND FLUX DISTRIBUTION



	LUMENS	PERCENT OF FIXTURE
DOWNWARD STREET SIDE	2062.	50.0
DOWNWARD HOUSE SIDE	2057.	49.9
DOWNWARD TOTAL	4119.	99.9
UPWARD STREET SIDE	1.	0.0
UPWARD HOUSE SIDE	1.	0.0
UPWARD TOTAL	3.	0.1
TOTAL FLUX	4122.	100.0
EFFICACY = 53.6 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.



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FLUX DISTRIBUTION BY SOLID ANGLE

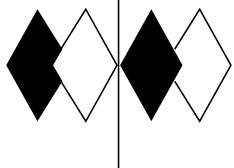
(PER IESNA TM-15-07, LUMINAIRE CLASSIFICATION
SYSTEM FOR OUTDOOR LUMINAIRES)

	LUMENS	PERCENT OF FIXTURE
FORWARD LIGHT	2062.	50.0
FL (0- 30)		4.2
FM (30- 60)		24.1
FH (60- 80)		20.6
FVH(80- 90)		1.1
BACK LIGHT	2057.	49.9
BL (0- 30)		4.7
BM (30- 60)		24.7
BH (60- 80)		19.5
BVH(80- 90)		1.0
UPLIGHT	3.	0.1
UL (90-100)		0.0
UH (100-180)		0.0
TRAPPED LIGHT	0.	0.0
TOTAL FLUX	4122.	100.0

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

BUG RATING: B2 U1 G1	FIRST DETERMINING SECONDARY SOLID ANGLE*	LUMENS
BACKLIGHT RATING: B2	BH	803.6
UPLIGHT RATING : U1	UH	1.6
GLARE RATING : G1	FVH	47.1

* 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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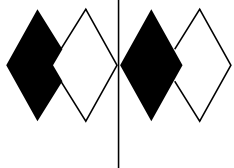
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CANDELA TABULATION

	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	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.
	125.0	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.
	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.	1.	2.	2.	2.	2.	1.
	92.5	0.	0.	0.	0.	1.	2.	2.	3.	3.	2.	1.
	90.0	0.	0.	0.	0.	1.	2.	3.	3.	3.	2.	1.
	87.5	4.	11.	8.	5.	5.	6.	6.	6.	6.	5.	3.
	85.0	22.	68.	115.	79.	49.	30.	23.	37.	57.	33.	9.
V	82.5	67.	76.	199.	167.	168.	154.	105.	152.	188.	62.	25.
E	80.0	96.	102.	303.	371.	263.	304.	352.	396.	397.	172.	126.
R	77.5	136.	155.	371.	466.	606.	520.	524.	632.	503.	288.	243.
T	75.0	272.	299.	554.	659.	778.	844.	832.	803.	667.	394.	323.
I	72.5	386.	459.	703.	781.	871.	1117.	1163.	960.	714.	472.	394.
C	70.0	397.	501.	696.	841.	1088.	1229.	1272.	1115.	924.	734.	633.
A	67.5	557.	686.	742.	1059.	1193.	1285.	1225.	1214.	999.	838.	750.
L	65.0<<	671.	779.	866.	1164.	1256.	1294.	1181.	1246.	1043.	873.	793.
	62.5	685.	790.	899.	1253.	1262.	1228.	1198.	1215.	1039.	901.	792.
A	60.0	731.	863.	940.	1247.	1235.	1146.	1208.	1132.	1033.	910.	778.
N	57.5	733.	842.	901.	1038.	1232.	1114.	1183.	1066.	1067.	917.	789.
G	55.0	718.	791.	818.	866.	1226.	1130.	1109.	1000.	1057.	912.	783.
L	52.5	657.	718.	812.	795.	1215.	1172.	1015.	945.	984.	849.	745.
E	50.0	615.	678.	832.	791.	1074.	1234.	984.	988.	954.	777.	698.
	47.5	611.	698.	838.	790.	933.	1147.	1014.	1030.	954.	761.	695.
	45.0	606.	680.	906.	801.	791.	1004.	1069.	1135.	986.	779.	715.
	42.5	619.	679.	888.	766.	607.	813.	1074.	1196.	1078.	789.	732.
	40.0	554.	612.	693.	577.	534.	650.	955.	1204.	1186.	841.	769.
	37.5	409.	437.	491.	470.	539.	579.	865.	1098.	1129.	889.	787.
	35.0	328.	344.	411.	453.	553.	571.	738.	939.	994.	773.	678.
	32.5	321.	333.	398.	534.	582.	618.	673.	730.	740.	582.	487.
	30.0	314.	327.	407.	612.	605.	684.	625.	663.	548.	380.	337.
	25.0	309.	312.	442.	571.	653.	639.	676.	647.	446.	297.	263.
	20.0	328.	325.	373.	473.	552.	650.	596.	471.	315.	220.	204.
	15.0	262.	267.	311.	346.	397.	466.	410.	298.	223.	180.	170.
	10.0	219.	222.	235.	263.	240.	224.	219.	184.	162.	144.	142.
	5.0	152.	152.	154.	151.	151.	151.	142.	140.	135.	130.	130.
	0.0	123.	123.	123.	123.	123.	123.	123.	123.	123.	123.	123.
							PLANE OF MAXIMUM CANDELA					
							CONE OF MAXIMUM CANDELA					



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CANDELA TABULATION

	HOUSE SIDE										
	95.0	105.0	115.0	120.0	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	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.
	125.0	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.
	115.0	1.	0.	0.	0.	0.	0.	0.	0.	1.	1.
	105.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	95.0	0.	1.	1.	0.	0.	0.	1.	1.	1.	1.
	92.5	1.	1.	1.	0.	0.	0.	1.	1.	2.	2.
	90.0	1.	1.	1.	0.	0.	1.	1.	2.	2.	2.
	87.5	3.	4.	4.	3.	3.	5.	4.	5.	10.	17.
	85.0	24.	39.	29.	21.	21.	28.	32.	67.	114.	73.
V	82.5	48.	133.	122.	105.	99.	128.	139.	132.	235.	101.
E	80.0	170.	306.	373.	312.	287.	260.	233.	357.	353.	114.
R	77.5	293.	446.	567.	541.	453.	423.	521.	471.	392.	179.
T	75.0	390.	587.	685.	729.	730.	707.	663.	655.	569.	298.
I	72.5	456.	682.	827.	965.	1033.	1004.	779.	745.	682.	444.
C	70.0	709.	930.	996.	1052.	1109.	1112.	1020.	825.	753.	518.
A	67.5	814.	968.	1068.	1092.	1099.	1140.	1156.	1023.	840.	702.
L	65.0<<	850.	1006.	1125.	1088.	1083.	1131.	1194.	1158.	992.	852.
	62.5	842.	1002.	1196.	1100.	1091.	1043.	1160.	1211.	1030.	916.
A	60.0	828.	1022.	1184.	1151.	1087.	1039.	1136.	1190.	1035.	975.
N	57.5	847.	1015.	1057.	1188.	1070.	1024.	1138.	1073.	956.	920.
G	55.0	853.	1012.	919.	1071.	1082.	1046.	1184.	916.	853.	865.
L	52.5	804.	943.	825.	902.	1094.	1074.	1174.	859.	901.	797.
E	50.0	755.	877.	906.	854.	1016.	1162.	1082.	843.	919.	779.
	47.5	749.	882.	960.	905.	947.	1251.	992.	859.	916.	765.
	45.0	770.	895.	1037.	1018.	945.	1111.	954.	881.	947.	733.
	42.5	785.	990.	1135.	1075.	987.	854.	889.	928.	933.	751.
	40.0	832.	1046.	1192.	1079.	951.	649.	743.	895.	902.	766.
	37.5	866.	1022.	1096.	1040.	873.	585.	594.	737.	812.	782.
	35.0	757.	859.	971.	936.	775.	652.	578.	535.	609.	637.
	32.5	534.	680.	803.	812.	768.	684.	619.	506.	434.	414.
	30.0	373.	516.	698.	791.	765.	739.	714.	655.	397.	317.
	25.0	300.	437.	614.	715.	804.	790.	741.	646.	482.	365.
	20.0	223.	299.	446.	548.	641.	737.	674.	575.	483.	417.
	15.0	178.	226.	307.	362.	389.	485.	488.	434.	433.	397.
	10.0	145.	163.	181.	201.	216.	237.	256.	267.	272.	251.
	5.0	131.	138.	145.	146.	146.	150.	156.	162.	167.	178.
	0.0	123.	123.	123.	123.	123.	123.	123.	123.	123.	123.

CONE OF MAXIMUM CANDELA