

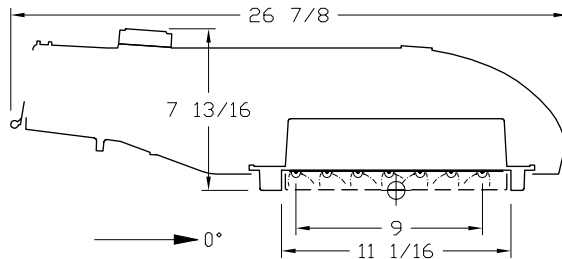


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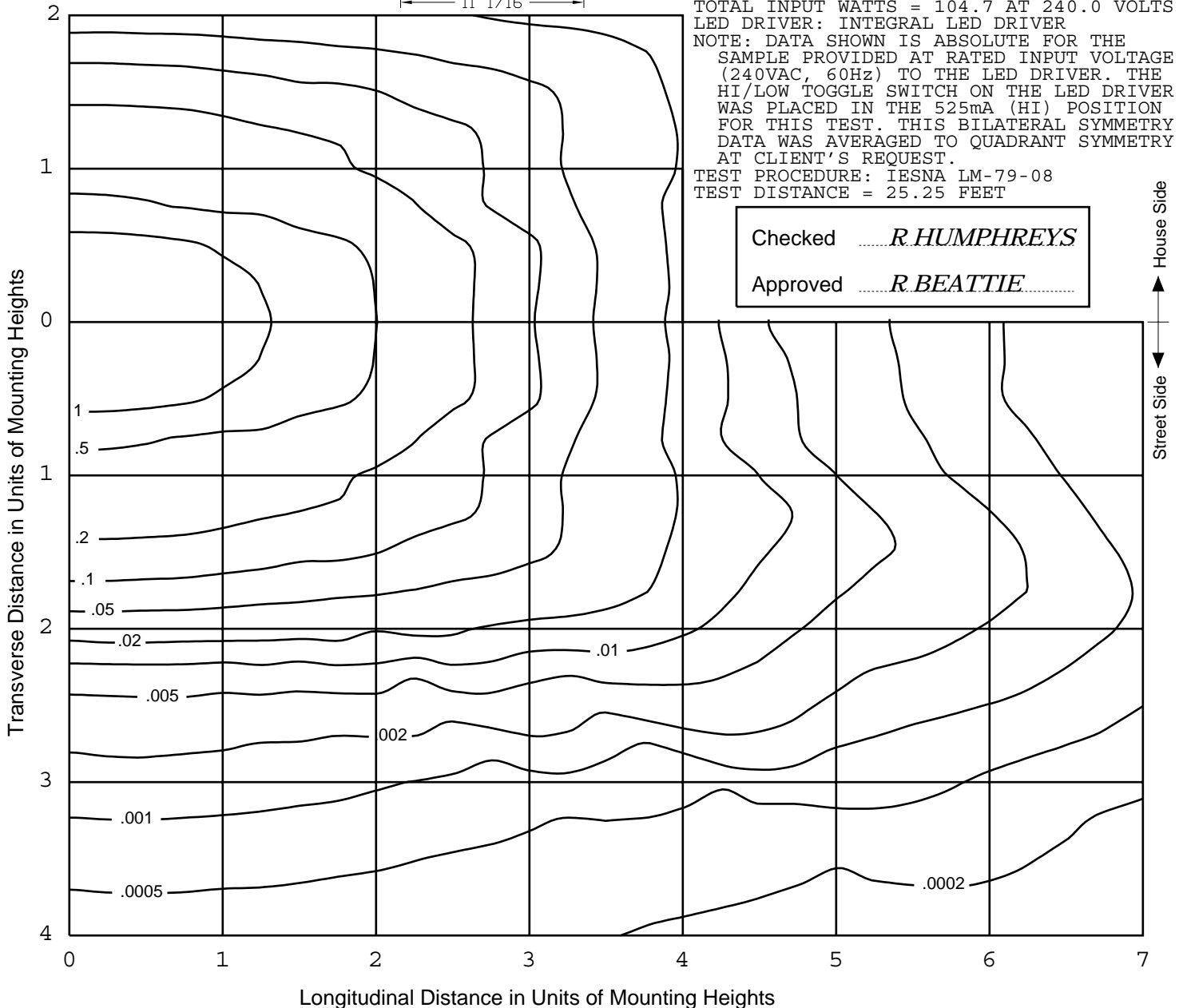
INDEPENDENT TESTING LABORATORIES, INC.  
 3386 LONGHORN ROAD, BOULDER, CO 80302 USA

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 25 foot mounting height.



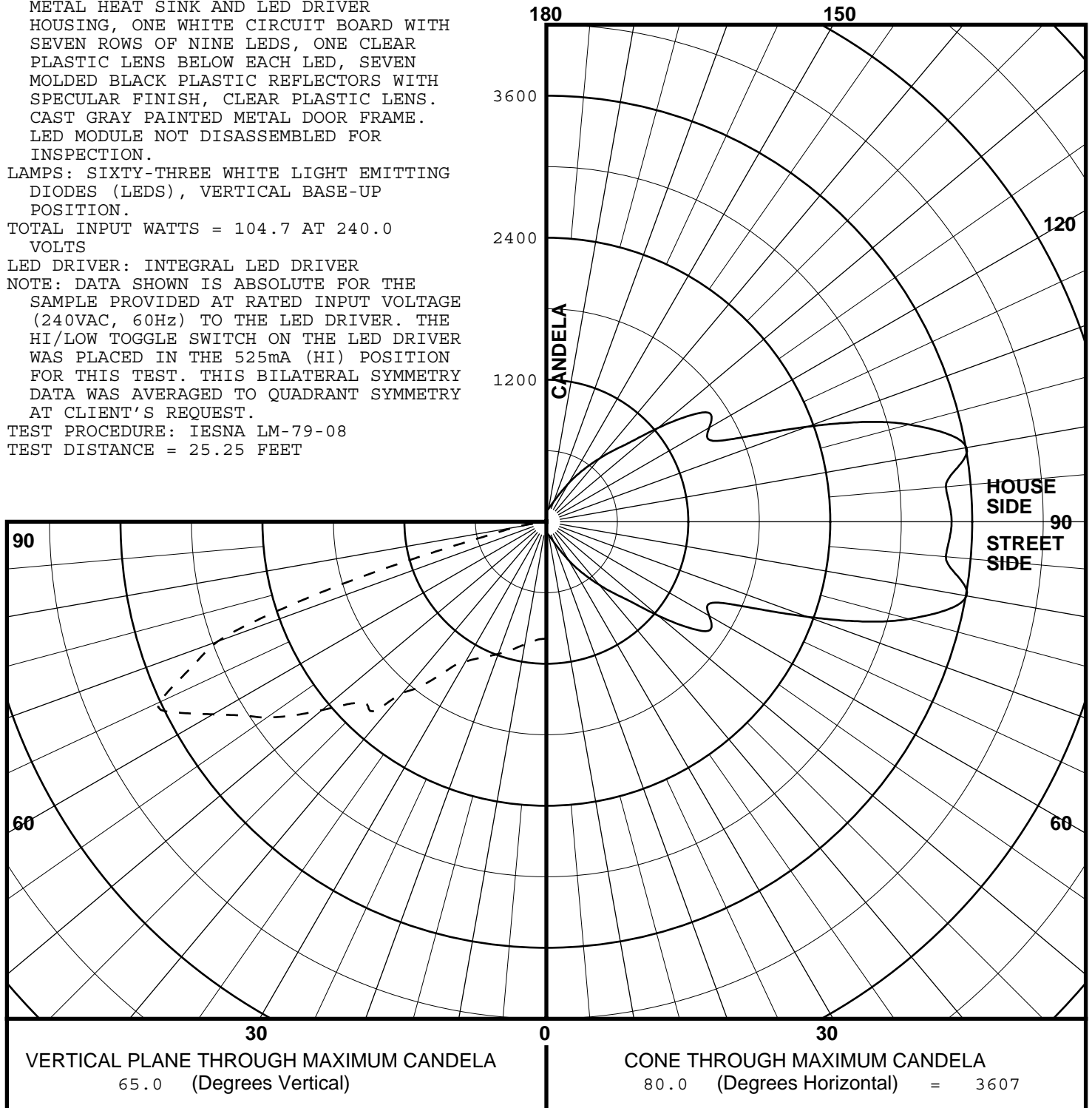
REPORT NUMBER: ITL65049  
 DATE: 06/05/10  
 PREPARED FOR: ECOFIT LIGHTING  
 CATALOG NUMBER: DURASTREET 63 SERIES,  
 525mA, TYPE 5  
 LUMINAIRE: CAST METAL HOUSING. ONE LED  
 MODULE CONSISTING OF: CAST FINNED  
 METAL HEAT SINK AND LED DRIVER  
 HOUSING, ONE WHITE CIRCUIT BOARD WITH  
 SEVEN ROWS OF NINE LEDS, ONE CLEAR  
 PLASTIC LENS BELOW EACH LED, SEVEN  
 MOLDED BLACK PLASTIC REFLECTORS WITH  
 SPECULAR FINISH, CLEAR PLASTIC LENS.  
 CAST GRAY PAINTED METAL DOOR FRAME.  
 LED MODULE NOT DISASSEMBLED FOR  
 INSPECTION.  
 LAMPS: SIXTY-THREE WHITE LIGHT EMITTING  
 DIODES (LEDS), VERTICAL BASE-UP  
 POSITION.  
 TOTAL INPUT WATTS = 104.7 AT 240.0 VOLTS  
 LED DRIVER: INTEGRAL LED DRIVER  
 NOTE: DATA SHOWN IS ABSOLUTE FOR THE  
 SAMPLE PROVIDED AT RATED INPUT VOLTAGE  
 (240VAC, 60Hz) TO THE LED DRIVER. THE  
 HI/LOW TOGGLE SWITCH ON THE LED DRIVER  
 WAS PLACED IN THE 525mA (HI) POSITION  
 FOR THIS TEST. THIS BILATERAL SYMMETRY  
 DATA WAS AVERAGED TO QUADRANT SYMMETRY  
 AT CLIENT'S REQUEST.  
 TEST PROCEDURE: IESNA LM-79-08  
 TEST DISTANCE = 25.25 FEET





REPORT NUMBER: ITL65049  
 DATE: 06/05/10  
 PREPARED FOR: ECOFIT LIGHTING  
 CATALOG NUMBER: DURASTREET 63 SERIES,  
 525mA, TYPE 5  
 LUMINAIRE: CAST METAL HOUSING. ONE LED  
 MODULE CONSISTING OF: CAST FINNED  
 METAL HEAT SINK AND LED DRIVER  
 HOUSING, ONE WHITE CIRCUIT BOARD WITH  
 SEVEN ROWS OF NINE LEDS, ONE CLEAR  
 PLASTIC LENS BELOW EACH LED, SEVEN  
 MOLDED BLACK PLASTIC REFLECTORS WITH  
 SPECULAR FINISH, CLEAR PLASTIC LENS.  
 CAST GRAY PAINTED METAL DOOR FRAME.  
 LED MODULE NOT DISASSEMBLED FOR  
 INSPECTION.  
 LAMPS: SIXTY-THREE WHITE LIGHT EMITTING  
 DIODES (LEDS), VERTICAL BASE-UP  
 POSITION.  
 TOTAL INPUT WATTS = 104.7 AT 240.0  
 VOLTS  
 LED DRIVER: INTEGRAL LED DRIVER  
 NOTE: DATA SHOWN IS ABSOLUTE FOR THE  
 SAMPLE PROVIDED AT RATED INPUT VOLTAGE  
 (240VAC, 60Hz) TO THE LED DRIVER. THE  
 HI/LOW TOGGLE SWITCH ON THE LED DRIVER  
 WAS PLACED IN THE 525mA (HI) POSITION  
 FOR THIS TEST. THIS BILATERAL SYMMETRY  
 DATA WAS AVERAGED TO QUADRANT SYMMETRY  
 AT CLIENT'S REQUEST.  
 TEST PROCEDURE: IESNA LM-79-08  
 TEST DISTANCE = 25.25 FEET

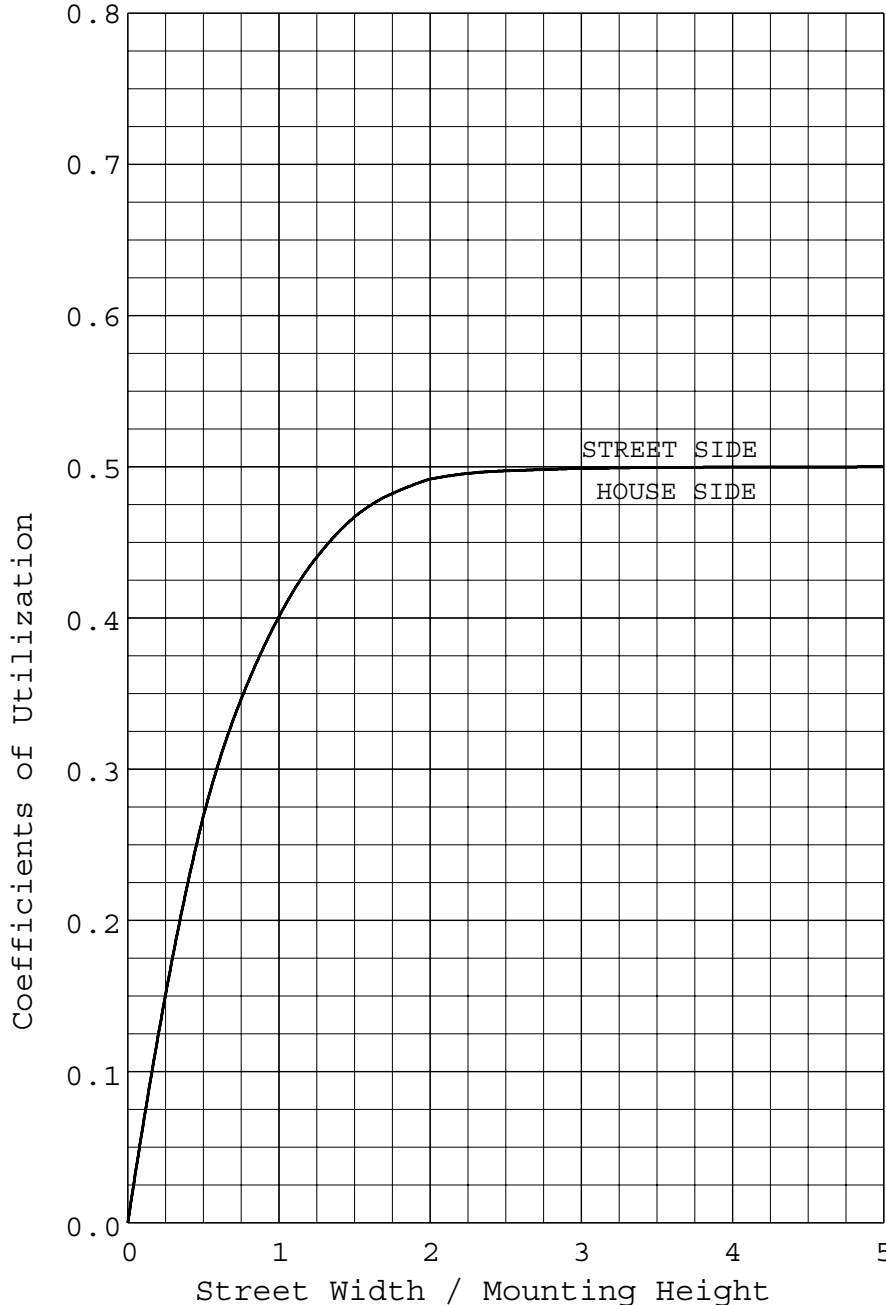
MAXIMUM PLANE AND MAXIMUM CONE PLOTS OF CANDELA





REPORT NUMBER: ITL65049  
 DATE: 06/05/10  
 PREPARED FOR: ECOFIT LIGHTING

COEFFICIENTS OF UTILIZATION AND FLUX DISTRIBUTION



	LUMENS	PERCENT OF FIXTURE
DOWNWARD STREET SIDE	2890.	50.0
DOWNWARD HOUSE SIDE	2890.	50.0
DOWNWARD TOTAL	5781.	100.0
UPWARD STREET SIDE	0.	0.0
UPWARD HOUSE SIDE	0.	0.0
UPWARD TOTAL	0.	0.0
TOTAL FLUX	5781.	100.0
EFFICACY = 55.2 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: ITL65049  
 DATE: 06/05/10  
 PREPARED FOR: ECOFIT LIGHTING

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	2890.	50.0	
FL ( 0- 30)	468.8	8.1	
FM ( 30- 60)	1534.5	26.5	
FH ( 60- 80)	871.7	15.1	G1
FVH( 80- 90)	15.6	0.3	U1 G1
BACK LIGHT	2890.	50.0	
BL ( 0- 30)	468.8	8.1	B1
BM ( 30- 60)	1534.5	26.5	B2
BH ( 60- 80)	871.7	15.1	B2 G2
BVH( 80- 90)	15.6	0.3	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	5781.	100.0	

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

BUG RATING: B2 U1 G2



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REPORT NUMBER: ITL65049  
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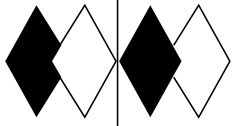
DATE: 06/05/10

CANDELA TABULATION

	STREET SIDE											LATERAL ANGLE										
	0.0	5.0	15.0	25.0	35.0	45.0	55.0	65.0	75.0	80.0	85.0	0.0	5.0	15.0	25.0	35.0	45.0	55.0	65.0	75.0	80.0	85.0
	90.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	90.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	87.5	1.	1.	1.	2.	3.	4.	6.	8.	13.	13.	87.5	1.	1.	1.	2.	3.	4.	6.	8.	13.	13.
	85.0	3.	3.	3.	4.	5.	7.	11.	20.	42.	40.	85.0	3.	3.	3.	4.	5.	7.	11.	20.	42.	40.
	82.5	4.	4.	5.	6.	9.	12.	20.	44.	177.	131.	82.5	4.	4.	5.	6.	9.	12.	20.	44.	177.	131.
	80.0	6.	7.	8.	10.	14.	20.	35.	185.	563.	269.	80.0	6.	7.	8.	10.	14.	20.	35.	185.	563.	269.
	77.5	10.	11.	13.	16.	22.	32.	76.	727.	916.	435.	77.5	10.	11.	13.	16.	22.	32.	76.	727.	916.	435.
	75.0	17.	18.	20.	25.	33.	50.	272.	1350.	1015.	941.	75.0	17.	18.	20.	25.	33.	50.	272.	1350.	1015.	941.
	72.5	25.	26.	29.	35.	49.	136.	776.	1881.	1369.	2040.	72.5	25.	26.	29.	35.	49.	136.	776.	1881.	1369.	2040.
	70.0	34.	36.	41.	50.	102.	408.	1157.	1909.	1740.	2959.	70.0	34.	36.	41.	50.	102.	408.	1157.	1909.	1740.	2959.
	67.5	49.	51.	65.	104.	267.	733.	1468.	1677.	2393.	3270.	67.5	49.	51.	65.	104.	267.	733.	1468.	1677.	2393.	3270.
	65.0<<	99.	102.	140.	254.	524.	899.	1609.	1620.	3174.	3607.	65.0<<	99.	102.	140.	254.	524.	899.	1609.	1620.	3174.	3607.
	62.5	222.	232.	318.	485.	703.	1058.	1511.	1577.	3290.	3495.	62.5	222.	232.	318.	485.	703.	1058.	1511.	1577.	3290.	3495.
	60.0	429.	435.	504.	631.	839.	1120.	1363.	1573.	3209.	3255.	60.0	429.	435.	504.	631.	839.	1120.	1363.	1573.	3209.	3255.
	57.5	565.	566.	607.	735.	971.	1072.	1231.	1691.	3065.	3046.	57.5	565.	566.	607.	735.	971.	1072.	1231.	1691.	3065.	3046.
V	55.0	628.	635.	688.	817.	968.	998.	1138.	2018.	2902.	2884.	55.0	628.	635.	688.	817.	968.	998.	1138.	2018.	2902.	2884.
E	52.5	698.	704.	744.	827.	954.	1009.	1107.	2183.	2655.	2686.	52.5	698.	704.	744.	827.	954.	1009.	1107.	2183.	2655.	2686.
R	50.0	705.	709.	740.	811.	913.	969.	1147.	2145.	2409.	2476.	50.0	705.	709.	740.	811.	913.	969.	1147.	2145.	2409.	2476.
T	47.5	703.	706.	732.	774.	869.	950.	1365.	2079.	2206.	2283.	47.5	703.	706.	732.	774.	869.	950.	1365.	2079.	2206.	2283.
I	45.0	685.	687.	710.	752.	837.	947.	1557.	2102.	2117.	2170.	45.0	685.	687.	710.	752.	837.	947.	1557.	2102.	2117.	2170.
C	42.5	685.	684.	701.	738.	814.	990.	1625.	1844.	2035.	2173.	42.5	685.	684.	701.	738.	814.	990.	1625.	1844.	2035.	2173.
A	40.0	678.	681.	699.	735.	811.	1191.	1565.	1709.	1802.	1886.	40.0	678.	681.	699.	735.	811.	1191.	1565.	1709.	1802.	1886.
L	37.5	682.	683.	702.	740.	900.	1339.	1486.	1561.	1685.	1759.	37.5	682.	683.	702.	740.	900.	1339.	1486.	1561.	1685.	1759.
	35.0	689.	691.	711.	811.	1132.	1331.	1398.	1432.	1549.	1591.	35.0	689.	691.	711.	811.	1132.	1331.	1398.	1432.	1549.	1591.
A	32.5	750.	759.	831.	1036.	1212.	1298.	1321.	1346.	1407.	1437.	32.5	750.	759.	831.	1036.	1212.	1298.	1321.	1346.	1407.	1437.
N	30.0	969.	978.	1048.	1136.	1202.	1248.	1269.	1294.	1344.	1363.	30.0	969.	978.	1048.	1136.	1202.	1248.	1269.	1294.	1344.	1363.
G	27.5	1069.	1071.	1093.	1138.	1170.	1191.	1218.	1252.	1294.	1307.	27.5	1069.	1071.	1093.	1138.	1170.	1191.	1218.	1252.	1294.	1307.
L	25.0	1082.	1082.	1094.	1115.	1128.	1155.	1175.	1220.	1253.	1262.	25.0	1082.	1082.	1094.	1115.	1128.	1155.	1175.	1220.	1253.	1262.
E	22.5	1064.	1062.	1067.	1077.	1096.	1118.	1147.	1187.	1218.	1225.	22.5	1064.	1062.	1067.	1077.	1096.	1118.	1147.	1187.	1218.	1225.
	20.0	1036.	1036.	1040.	1054.	1066.	1087.	1120.	1157.	1182.	1189.	20.0	1036.	1036.	1040.	1054.	1066.	1087.	1120.	1157.	1182.	1189.
	17.5	1022.	1022.	1023.	1029.	1042.	1064.	1098.	1126.	1148.	1153.	17.5	1022.	1022.	1023.	1029.	1042.	1064.	1098.	1126.	1148.	1153.
	15.0	1004.	1005.	1008.	1018.	1031.	1051.	1074.	1097.	1113.	1119.	15.0	1004.	1005.	1008.	1018.	1031.	1051.	1074.	1097.	1113.	1119.
	12.5	1001.	1001.	1004.	1012.	1024.	1039.	1056.	1068.	1079.	1083.	12.5	1001.	1001.	1004.	1012.	1024.	1039.	1056.	1068.	1079.	1083.
	10.0	999.	1000.	1003.	1007.	1014.	1025.	1034.	1045.	1050.	1053.	10.0	999.	1000.	1003.	1007.	1014.	1025.	1034.	1045.	1050.	1053.
	7.5	995.	996.	998.	1000.	1006.	1011.	1016.	1021.	1026.	1027.	7.5	995.	996.	998.	1000.	1006.	1011.	1016.	1021.	1026.	1027.
	5.0	991.	992.	992.	993.	994.	999.	1000.	1003.	1005.	1005.	5.0	991.	992.	992.	993.	994.	999.	1000.	1003.	1005.	1005.
	2.5	987.	988.	989.	989.	989.	989.	990.	992.	992.	992.	2.5	987.	988.	989.	989.	989.	989.	990.	992.	992.	992.
	0.0	987.	987.	987.	987.	987.	987.	987.	987.	987.	987.	0.0	987.	987.	987.	987.	987.	987.	987.	987.	987.	987.

PLANE OF MAXIMUM CANDELA

CONE OF MAXIMUM CANDELA



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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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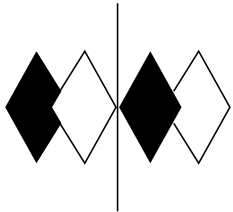
REPORT NUMBER: ITL65049  
PREPARED FOR: ECOFIT LIGHTING

DATE: 06/05/10

## CANDELA TABULATION

	HOUSE SIDE		LATERAL ANGLE									
	90.0	95.0	100.0	105.0	115.0	125.0	135.0	145.0	155.0	165.0	175.0	
	90.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	87.5	11.	11.	13.	13.	8.	6.	4.	3.	2.	1.	1.
	85.0	38.	36.	40.	42.	20.	11.	7.	5.	4.	3.	3.
	82.5	102.	91.	131.	177.	44.	20.	12.	9.	6.	5.	4.
	80.0	163.	171.	269.	563.	185.	35.	20.	14.	10.	8.	7.
	77.5	319.	421.	435.	916.	727.	76.	32.	22.	16.	13.	11.
	75.0	926.	988.	941.	1015.	1350.	272.	50.	33.	25.	20.	18.
	72.5	1781.	1936.	2040.	1369.	1881.	776.	136.	49.	35.	29.	26.
	70.0	2577.	2684.	2959.	1740.	1909.	1157.	408.	102.	50.	41.	36.
	67.5	3048.	3052.	3270.	2393.	1677.	1468.	733.	267.	104.	65.	51.
	65.0<<	3426.	3390.	3607.	3174.	1620.	1609.	899.	524.	254.	140.	102.
	62.5	3578.	3499.	3495.	3290.	1577.	1511.	1058.	703.	485.	318.	232.
	60.0	3368.	3294.	3255.	3209.	1573.	1363.	1120.	839.	631.	504.	435.
	57.5	3145.	3110.	3046.	3065.	1691.	1231.	1072.	971.	735.	607.	566.
V	55.0	2988.	2952.	2884.	2902.	2018.	1138.	998.	968.	817.	688.	635.
E	52.5	2819.	2794.	2686.	2655.	2183.	1107.	1009.	954.	827.	744.	704.
R	50.0	2598.	2573.	2476.	2409.	2145.	1147.	969.	913.	811.	740.	709.
T	47.5	2392.	2367.	2283.	2206.	2079.	1365.	950.	869.	774.	732.	706.
I	45.0	2231.	2219.	2170.	2117.	2102.	1557.	947.	837.	752.	710.	687.
C	42.5	2281.	2253.	2173.	2035.	1844.	1625.	990.	814.	738.	701.	684.
A	40.0	1956.	1939.	1886.	1802.	1709.	1565.	1191.	811.	735.	699.	681.
L	37.5	1802.	1795.	1759.	1685.	1561.	1486.	1339.	900.	740.	702.	683.
	35.0	1618.	1613.	1591.	1549.	1432.	1398.	1331.	1132.	811.	711.	691.
A	32.5	1454.	1448.	1437.	1407.	1346.	1321.	1298.	1212.	1036.	831.	759.
N	30.0	1375.	1370.	1363.	1344.	1294.	1269.	1248.	1202.	1136.	1048.	978.
G	27.5	1315.	1312.	1307.	1294.	1252.	1218.	1191.	1170.	1138.	1093.	1071.
L	25.0	1268.	1267.	1262.	1253.	1220.	1175.	1155.	1128.	1115.	1094.	1082.
E	22.5	1232.	1229.	1225.	1218.	1187.	1147.	1118.	1096.	1077.	1067.	1062.
	20.0	1195.	1193.	1189.	1182.	1157.	1120.	1087.	1066.	1054.	1040.	1036.
	17.5	1158.	1157.	1153.	1148.	1126.	1098.	1064.	1042.	1029.	1023.	1022.
	15.0	1123.	1123.	1119.	1113.	1097.	1074.	1051.	1031.	1018.	1008.	1005.
	12.5	1086.	1086.	1083.	1079.	1068.	1056.	1039.	1024.	1012.	1004.	1001.
	10.0	1054.	1055.	1053.	1050.	1045.	1034.	1025.	1014.	1007.	1003.	1000.
	7.5	1027.	1027.	1027.	1026.	1021.	1016.	1011.	1006.	1000.	998.	996.
	5.0	1006.	1006.	1005.	1005.	1003.	1000.	999.	994.	993.	992.	992.
	2.5	993.	993.	992.	992.	992.	990.	989.	989.	989.	989.	988.
	0.0	987.	987.	987.	987.	987.	987.	987.	987.	987.	987.	987.

CONE OF MAXIMUM CANDELA



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REPORT NUMBER: ITL65049  
 PREPARED FOR: ECOFIT LIGHTING

DATE: 06/05/10

CANDELA TABULATION

HOUSE SIDE	LATERAL ANGLE
180.0	
90.0	0.
87.5	1.
85.0	3.
82.5	4.
80.0	6.
77.5	10.
75.0	17.
72.5	25.
70.0	34.
67.5	49.
65.0<<	99.
62.5	222.
60.0	429.
57.5	565.
V 55.0	628.
E 52.5	698.
R 50.0	705.
T 47.5	703.
I 45.0	685.
C 42.5	685.
A 40.0	678.
L 37.5	682.
35.0	689.
A 32.5	750.
N 30.0	969.
G 27.5	1069.
L 25.0	1082.
E 22.5	1064.
20.0	1036.
17.5	1022.
15.0	1004.
12.5	1001.
10.0	999.
7.5	995.
5.0	991.
2.5	987.
0.0	987.

CONE OF MAXIMUM CANDELA