

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: INVUE

Report Number: P162446

Luminaire Tested: **ECM-E03-LED-E1-SL3-HSS-7030**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P162446
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33727)
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ECM-E03-LED-E1-SL3-HSS-7030
Description: EPIC CLASSICAL MEDIUM DECORATIVE LED LUMINAIRE
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD
Light Source: (63) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4516.9 lumens
Efficiency: N/A
Efficacy: 60.1 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 1' x H: 0.1')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B0 - U0 - G2

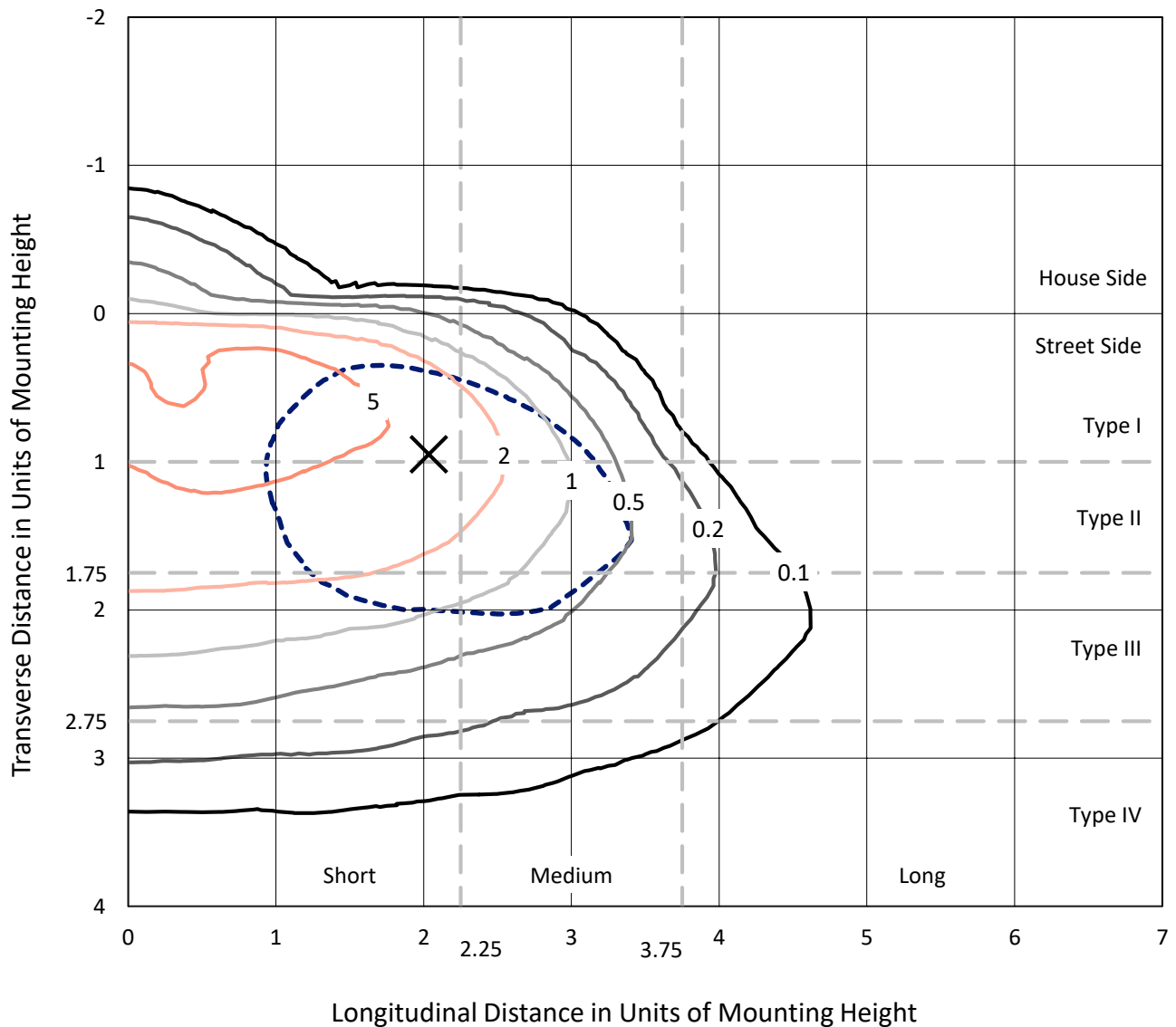
Input Watts (W): 75.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P162446
 CATALOG NUMBER: ECM-E03-LED-E1-SL3-HSS-7030

Iso-Footcandle Lines of Horizontal Illumination

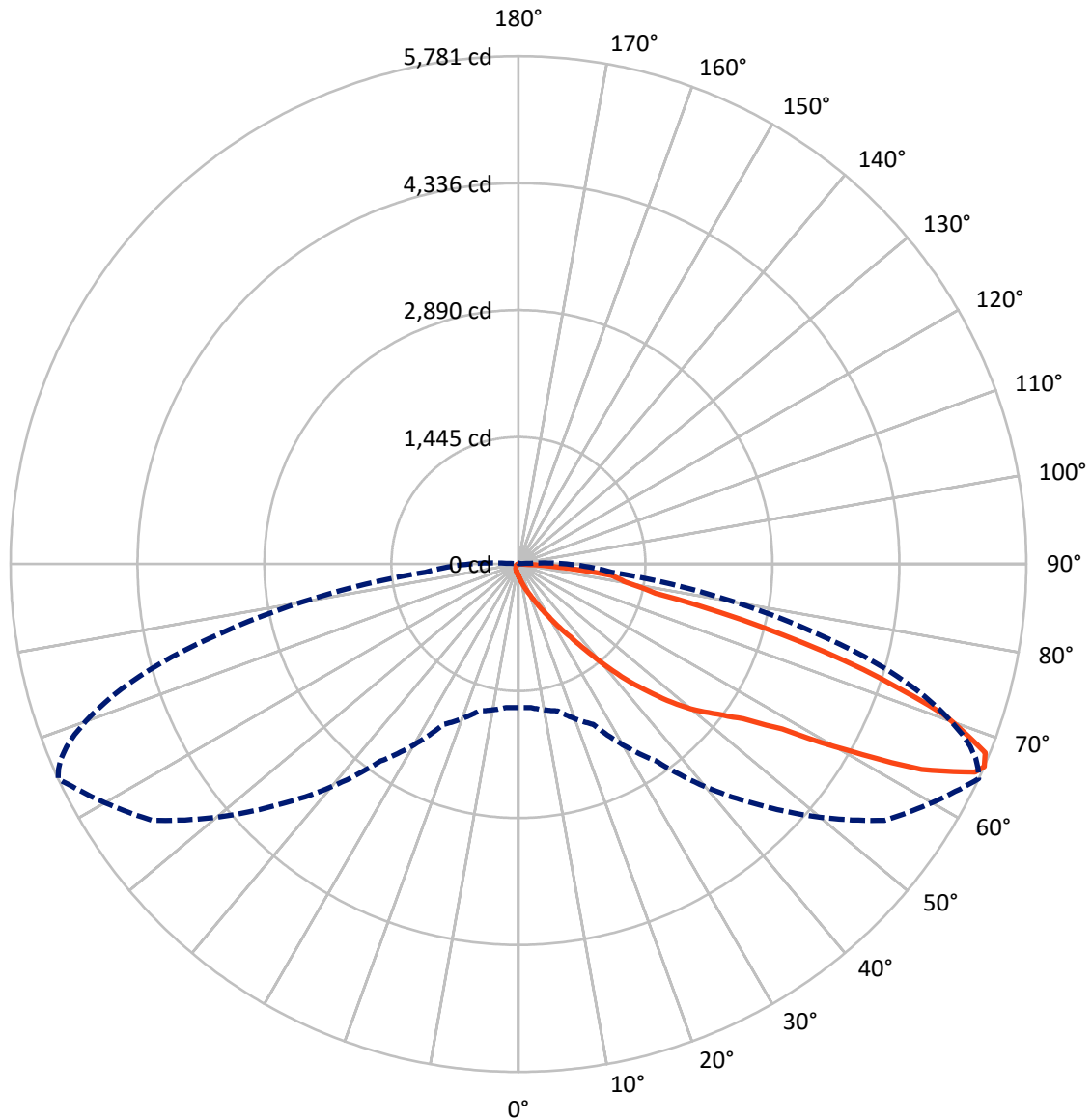
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7.5 fc
 Type III - Short - Non-Cutoff

REPORT NUMBER: P162446
CATALOG NUMBER: ECM-E03-LED-E1-SL3-HSS-7030

Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral - - - Horizontal Cone Through 66-Deg Vertical

REPORT NUMBER: P162446

CATALOG NUMBER: ECM-E03-LED-E1-SL3-HSS-7030

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	97.9	0.0	97.9
	% Fixture	2.2	0.0	2.2
Street Side	Lumens	4418.9	0.0	4418.9
	% Fixture	97.8	0.0	97.8
Total	Lumens	4516.9	0.0	4516.9
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	15.3	0.3
10°-20°	64.7	1.4
20°-30°	139.6	3.1
30°-40°	298.1	6.6
40°-50°	659.2	14.6
50°-60°	1117.1	24.7
60°-70°	1490.7	33.0
70°-80°	656.6	14.5
80°-90°	75.6	1.7
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	4516.9	100.0
0°-180°	4516.9	100.0



REPORT NUMBER: P162446

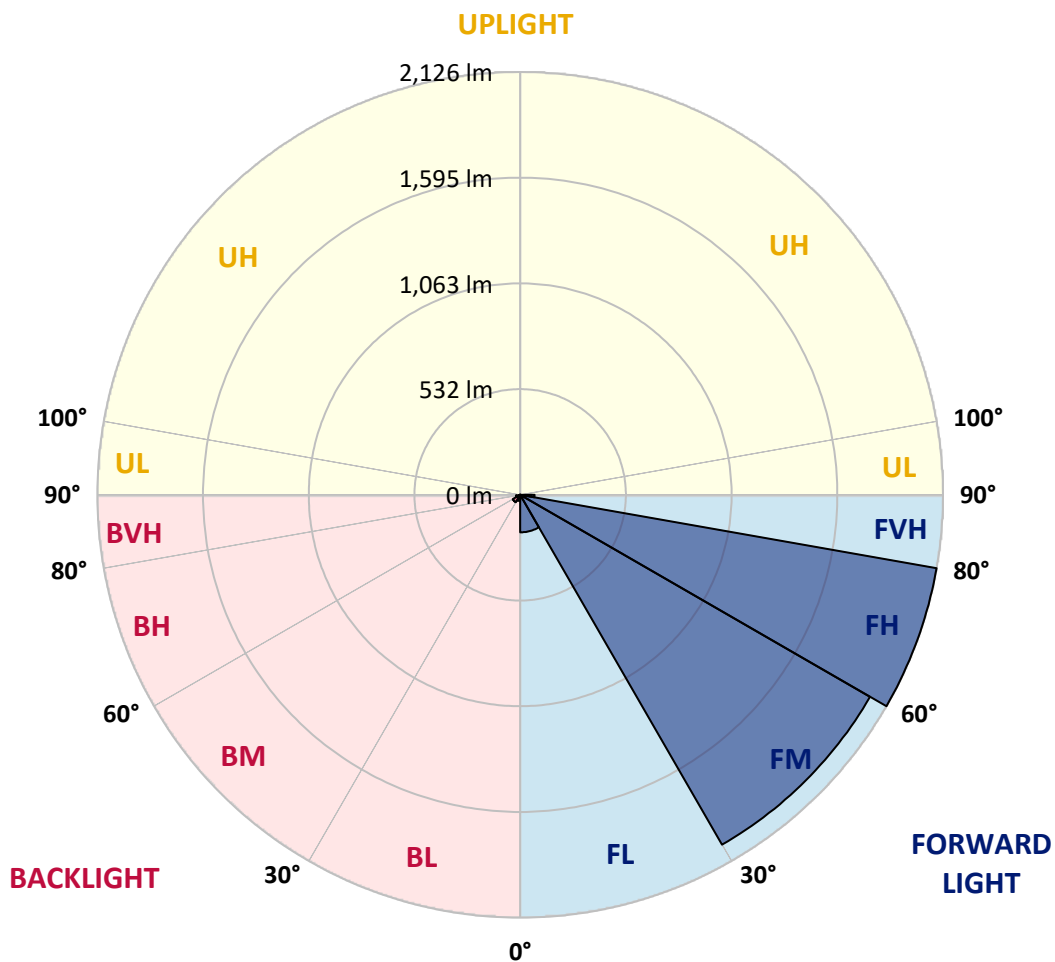
CATALOG NUMBER: ECM-E03-LED-E1-SL3-HSS-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	188.7	4.2			
FM	(30°-60°)	2031.4	45.0			
FH	(60°-80°)	2126.3	47.1			G2/5000
FVH	(80°-90°)	72.6	1.6			G1/100
BL	(0°-30°)	30.9	0.7	B0/110		
BM	(30°-60°)	43.0	1.0	B0/220		
BH	(60°-80°)	21.0	0.5	B0/110		G0/110
BVH	(80°-90°)	3.0	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G2

Type III Short





REPORT NUMBER: P162446
 CATALOG NUMBER: ECM-E03-LED-E1-SL3-HSS-7030

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	67°	68°
0°	136.4	136.4	136.4	136.4	136.4	136.4	136.4	136.4	136.4	136.4	136.4
2.5°	172.0	171.1	167.6	167.6	162.4	158.9	154.5	150.2	150.2	149.3	148.5
5°	227.5	222.3	221.4	211.9	204.0	192.8	182.4	168.4	166.7	165.0	164.1
7.5°	289.2	288.3	280.5	269.2	253.5	232.7	211.9	189.3	185.9	184.1	180.7
10°	369.1	364.7	354.3	335.2	311.7	284.0	250.1	214.5	210.2	206.7	205.0
12.5°	445.4	437.7	431.6	407.3	377.8	336.9	296.1	244.9	241.4	237.1	230.2
15°	516.7	509.7	499.3	478.5	445.4	394.2	346.5	284.0	275.3	269.2	264.0
17.5°	572.3	567.9	555.8	532.3	496.7	451.6	394.2	323.9	316.9	309.2	299.6
20°	625.2	619.2	600.1	567.9	529.7	494.9	450.6	376.0	366.4	356.9	346.5
22.5°	675.6	669.5	638.2	585.3	544.4	529.7	514.0	435.0	420.3	412.5	402.1
25°	745.9	732.9	684.3	600.1	545.4	556.6	583.5	511.5	497.6	486.3	469.8
27.5°	840.6	823.2	746.8	621.7	548.8	586.2	663.5	604.4	589.7	576.6	558.3
30°	947.4	936.1	844.9	673.9	574.0	629.6	752.9	722.5	705.1	689.5	667.8
32.5°	1055.1	1039.5	949.2	772.9	641.7	713.8	864.9	859.7	837.1	822.4	798.9
35°	1149.7	1141.9	1075.0	935.3	796.3	861.5	1014.3	1020.3	1000.4	984.8	958.7
37.5°	1214.0	1214.0	1201.0	1109.8	1042.0	1090.7	1233.9	1234.8	1214.8	1179.2	1166.3
40°	1247.0	1256.5	1303.4	1320.8	1317.3	1379.9	1522.3	1506.7	1490.1	1471.9	1428.5
42.5°	1314.8	1323.4	1423.3	1543.1	1621.3	1703.8	1801.9	1796.7	1776.7	1743.7	1703.8
45°	1429.4	1440.6	1559.6	1749.8	1910.5	2027.6	2090.2	2065.9	2045.9	2014.7	1993.8
47.5°	1575.3	1596.9	1731.5	1966.9	2160.5	2354.2	2419.3	2355.1	2337.6	2313.3	2279.4
50°	1730.7	1751.5	1894.8	2164.0	2382.8	2613.8	2722.3	2613.8	2588.6	2580.9	2542.6
52.5°	1865.2	1882.6	2020.7	2316.0	2553.0	2824.0	2982.0	2838.7	2820.5	2794.4	2766.6
55°	1945.2	1959.0	2088.5	2388.9	2668.5	3013.2	3233.0	3107.0	3080.1	3069.7	3029.8
57.5°	1972.1	1986.0	2102.3	2398.5	2731.0	3186.0	3537.8	3542.2	3510.0	3472.6	3460.5
60°	1972.1	1987.7	2085.8	2375.0	2791.8	3370.2	3944.2	4306.3	4236.8	4229.9	4185.6
62.5°	1890.5	1905.2	2004.3	2302.9	2873.5	3618.5	4510.3	5149.5	5129.5	5084.3	5011.4
65°	1713.3	1722.0	1819.2	2118.9	2842.2	3846.9	5001.0	5710.4	5678.3	5589.7	5496.0
66°	1633.4	1640.4	1731.5	2013.8	2739.7	3878.2	5087.8	5780.8	5727.8	5653.1	5547.2
67.5°	1517.9	1530.0	1594.3	1818.4	2494.0	3769.6	5033.1	5731.3	5685.2	5594.9	5489.1
70°	1013.4	1004.7	1231.4	1395.5	1900.0	3071.4	4515.6	5146.0	5146.9	5104.3	5061.8
72.5°	481.1	486.3	552.3	858.8	1243.5	2051.9	3594.2	4107.4	4166.4	4090.1	4037.1
75°	345.6	353.5	393.4	525.4	741.5	1231.4	2329.9	2872.6	2874.3	2738.9	2618.1
77.5°	100.7	105.0	147.6	323.9	555.8	831.1	1338.1	1596.9	1559.6	1462.4	1371.2
80°	41.6	41.6	43.4	103.3	223.1	564.5	936.1	1229.6	1225.3	1187.9	1134.1
82.5°	15.6	16.5	20.8	42.6	53.0	138.9	624.4	1067.2	1064.6	1011.6	973.4
85°	1.7	1.7	5.2	18.3	20.0	26.0	125.0	470.6	468.1	470.6	412.5
87.5°	0.0	0.0	0.9	1.7	2.6	3.5	5.2	18.3	20.0	19.1	17.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P162446
 CATALOG NUMBER: ECM-E03-LED-E1-SL3-HSS-7030

CANDELA DISTRIBUTION (continued):

	69°	70°	71°	72°	73°	74°	75°	76°	77°	78°	79°
0°	136.4	136.4	136.4	136.4	136.4	136.4	136.4	136.4	136.4	136.4	136.4
2.5°	148.5	146.8	146.8	145.9	145.9	145.9	145.0	144.1	144.1	143.3	142.4
5°	162.4	160.7	159.7	158.0	157.2	156.3	154.5	153.7	152.0	151.1	150.2
7.5°	178.9	175.5	174.5	172.0	169.3	167.6	165.9	163.2	161.5	158.0	157.2
10°	199.7	195.4	191.9	188.4	185.9	181.5	178.9	175.5	172.0	169.3	166.7
12.5°	226.6	220.6	215.4	211.9	205.8	200.6	195.4	192.8	185.9	182.4	178.0
15°	256.2	249.3	243.1	236.2	231.9	223.1	216.2	208.4	205.0	198.8	191.9
17.5°	294.4	283.0	273.5	266.6	257.9	249.3	241.4	233.6	223.1	216.2	207.5
20°	335.2	325.6	312.6	300.5	290.1	279.6	268.3	257.9	248.3	237.1	226.6
22.5°	387.3	373.4	357.8	345.6	331.7	320.4	304.8	290.9	275.3	260.5	248.3
25°	453.3	435.0	420.3	403.0	386.4	369.1	350.0	332.6	312.6	298.8	277.8
27.5°	534.9	517.6	497.6	475.0	458.5	432.5	407.3	385.5	362.1	340.4	316.9
30°	639.2	614.0	593.1	571.4	538.4	513.2	483.7	454.1	422.1	400.3	364.7
32.5°	764.2	737.3	706.0	674.7	644.4	608.7	572.3	535.8	500.2	460.2	423.8
35°	917.0	884.9	849.2	815.4	768.5	730.3	684.3	634.0	594.0	547.9	501.9
37.5°	1119.3	1066.3	1035.1	999.5	936.1	884.0	832.8	782.4	712.0	663.5	598.3
40°	1372.9	1341.6	1290.4	1233.1	1175.8	1107.2	1037.7	970.8	889.2	821.5	745.9
42.5°	1670.8	1624.8	1572.6	1490.1	1432.0	1351.2	1272.2	1183.6	1083.7	996.9	908.3
45°	1950.4	1895.7	1855.7	1773.3	1712.4	1616.9	1521.4	1427.6	1312.1	1200.1	1097.7
47.5°	2252.6	2207.4	2141.4	2074.6	2012.9	1905.2	1801.9	1688.1	1566.6	1433.7	1300.8
50°	2518.3	2482.7	2437.5	2356.8	2288.2	2197.9	2076.3	1952.1	1798.4	1666.4	1515.3
52.5°	2744.1	2716.3	2652.9	2595.6	2533.9	2448.8	2340.3	2221.3	2055.4	1910.5	1738.5
55°	3010.7	2990.7	2935.1	2899.5	2844.8	2763.2	2661.6	2551.3	2375.9	2217.8	2023.3
57.5°	3447.4	3431.8	3383.2	3368.4	3314.6	3243.4	3118.4	3000.3	2795.3	2599.0	2376.7
60°	4170.8	4139.6	4068.3	4031.9	3918.1	3822.6	3660.3	3497.9	3250.3	3000.3	2732.7
62.5°	4945.4	4857.7	4722.2	4605.8	4444.4	4278.5	4061.4	3813.1	3523.0	3226.0	2918.6
65°	5363.1	5213.8	5042.7	4857.7	4648.4	4404.4	4130.9	3833.1	3521.2	3207.8	2883.0
66°	5410.9	5242.4	5060.9	4855.1	4622.4	4362.7	4084.9	3772.2	3448.4	3142.7	2817.9
67.5°	5351.0	5174.7	4982.8	4754.4	4502.5	4233.4	3941.6	3616.8	3305.0	2995.1	2678.9
70°	4931.5	4756.1	4585.0	4344.5	4076.2	3805.2	3529.1	3166.1	2870.8	2586.1	2304.7
72.5°	3938.1	3819.1	3649.7	3444.0	3182.6	2864.8	2634.7	2309.9	2053.7	1777.6	1559.6
75°	2461.0	2293.4	2084.1	1821.9	1622.1	1364.2	1229.6	983.0	837.1	709.5	586.2
77.5°	1258.3	1132.4	985.6	838.0	696.4	555.8	429.8	304.0	205.0	142.4	105.9
80°	1039.5	928.3	806.8	672.1	547.1	424.6	305.7	208.4	132.9	86.9	67.8
82.5°	858.8	765.0	656.5	531.5	422.9	333.5	231.9	151.1	93.8	60.8	47.8
85°	365.6	331.7	256.2	203.2	152.8	112.9	79.0	53.0	37.4	30.4	27.8
87.5°	15.6	17.4	16.5	13.1	9.6	9.6	8.7	6.9	6.9	6.9	6.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P162446
 CATALOG NUMBER: ECM-E03-LED-E1-SL3-HSS-7030

CANDELA DISTRIBUTION (continued):

	80°	81°	82°	83°	84°	85°	95°	105°	115°	125°	135°
0°	136.4	136.4	136.4	136.4	136.4	136.4	136.4	136.4	136.4	136.4	136.4
2.5°	142.4	141.6	140.7	140.7	139.8	138.9	133.7	129.4	124.2	120.7	117.3
5°	148.5	147.6	145.9	145.0	143.3	142.4	131.2	121.6	113.7	107.7	103.3
7.5°	154.5	153.7	151.1	148.5	147.6	145.9	127.7	115.5	105.0	98.1	93.8
10°	162.4	159.7	157.2	153.7	151.1	148.5	124.2	108.5	97.3	91.2	86.9
12.5°	173.7	169.3	165.0	160.7	157.2	152.8	122.5	102.5	91.2	84.2	79.9
15°	186.7	180.7	175.5	170.2	164.1	159.7	119.0	97.3	85.9	79.0	73.8
17.5°	198.8	191.9	184.1	176.3	170.2	164.1	115.5	92.1	80.7	73.8	68.6
20°	216.2	205.8	196.3	186.7	178.0	170.2	110.2	86.9	76.4	68.6	63.4
22.5°	235.4	223.1	211.0	198.0	186.7	176.3	105.9	82.5	72.1	64.3	58.2
25°	259.7	244.9	228.3	211.9	198.8	185.0	101.6	78.2	67.8	59.9	53.8
27.5°	293.6	272.6	254.5	233.6	213.6	198.0	98.1	74.7	63.4	55.5	49.5
30°	339.5	309.2	280.5	257.9	234.5	211.9	94.6	70.3	59.9	51.2	44.3
32.5°	390.7	355.2	322.1	288.3	258.8	232.7	91.2	66.9	55.5	46.9	40.8
35°	454.1	409.0	364.7	325.6	290.1	255.3	87.7	63.4	52.1	42.6	36.4
37.5°	545.4	488.9	430.7	380.3	334.3	288.3	85.1	59.9	47.8	38.2	32.1
40°	670.4	597.4	526.3	457.7	397.7	340.4	81.7	56.4	44.3	34.7	28.7
42.5°	805.8	717.3	623.5	546.2	463.7	391.6	78.2	53.0	40.8	31.2	25.2
45°	974.4	864.0	750.3	645.2	544.4	451.6	74.7	49.5	36.4	27.8	21.7
47.5°	1158.4	1017.7	889.2	757.3	637.4	526.3	70.3	46.9	33.0	24.3	19.1
50°	1347.7	1199.2	1036.8	886.6	744.2	600.9	66.0	42.6	29.5	21.7	15.6
52.5°	1551.8	1376.4	1210.6	1023.8	858.0	699.1	61.7	39.1	26.9	19.1	13.1
55°	1811.4	1615.2	1420.6	1211.4	1011.6	812.8	57.4	34.7	23.5	16.5	10.4
57.5°	2138.0	1905.2	1666.4	1430.2	1187.9	962.1	53.8	30.4	20.0	13.9	8.7
60°	2446.2	2174.4	1885.2	1613.4	1339.9	1076.7	48.6	26.9	17.4	11.3	8.7
62.5°	2606.0	2296.0	1984.3	1684.7	1392.9	1117.6	43.4	22.6	14.8	9.6	7.9
65°	2566.9	2250.9	1948.6	1646.4	1360.7	1091.5	38.2	20.0	13.1	8.7	7.9
66°	2510.4	2197.9	1893.9	1606.5	1333.9	1063.8	35.6	19.1	12.1	8.7	6.9
67.5°	2387.1	2085.0	1794.9	1527.5	1260.1	1010.8	32.1	17.4	11.3	7.9	6.9
70°	2039.0	1764.5	1532.7	1294.8	1076.7	851.9	26.0	14.8	9.6	6.9	6.9
72.5°	1349.5	1162.8	1008.2	867.5	725.1	562.7	21.7	12.1	7.9	6.9	6.1
75°	508.8	460.2	395.1	355.2	310.0	271.8	17.4	7.9	6.1	6.1	6.1
77.5°	90.3	83.4	73.8	67.8	62.6	57.4	13.9	5.2	5.2	6.1	6.1
80°	60.8	56.4	51.2	46.9	43.4	39.1	9.6	4.4	5.2	5.2	6.1
82.5°	43.4	40.8	38.2	34.7	32.1	28.7	6.1	4.4	5.2	5.2	5.2
85°	26.0	24.3	22.6	20.8	18.3	17.4	4.4	4.4	4.4	5.2	5.2
87.5°	6.9	6.1	6.9	6.9	5.2	6.1	3.5	3.5	3.5	4.4	4.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P162446

CATALOG NUMBER: ECM-E03-LED-E1-SL3-HSS-7030

CANDELA DISTRIBUTION (continued):

	145°	155°	165°	175°	180°
0°	136.4	136.4	136.4	136.4	136.4
2.5°	115.5	115.5	113.7	116.4	116.4
5°	99.8	99.8	99.0	99.8	99.8
7.5°	91.2	90.3	90.3	90.3	91.2
10°	83.4	82.5	82.5	82.5	82.5
12.5°	76.4	75.5	74.7	75.5	75.5
15°	70.3	68.6	68.6	68.6	68.6
17.5°	65.1	63.4	62.6	62.6	62.6
20°	59.9	57.4	57.4	57.4	57.4
22.5°	54.7	52.1	52.1	52.1	52.1
25°	49.5	46.9	46.9	46.9	46.9
27.5°	45.1	42.6	42.6	42.6	42.6
30°	39.9	38.2	38.2	39.1	38.2
32.5°	36.4	33.9	33.9	34.7	34.7
35°	32.1	30.4	30.4	30.4	30.4
37.5°	27.8	26.0	26.0	26.0	26.0
40°	24.3	22.6	21.7	22.6	22.6
42.5°	20.8	19.1	18.3	18.3	18.3
45°	18.3	15.6	14.8	15.6	15.6
47.5°	14.8	13.1	13.1	13.9	13.9
50°	11.3	11.3	12.1	13.9	13.9
52.5°	10.4	10.4	12.1	13.9	13.9
55°	9.6	10.4	12.1	13.1	13.9
57.5°	8.7	10.4	12.1	13.1	13.1
60°	8.7	9.6	11.3	13.1	13.1
62.5°	7.9	8.7	10.4	12.1	12.1
65°	7.9	8.7	10.4	12.1	12.1
66°	7.9	8.7	10.4	12.1	12.1
67.5°	7.9	8.7	10.4	12.1	12.1
70°	7.9	8.7	10.4	11.3	11.3
72.5°	6.9	7.9	9.6	11.3	11.3
75°	6.9	7.9	9.6	11.3	11.3
77.5°	6.9	7.9	9.6	11.3	11.3
80°	6.9	7.9	9.6	10.4	11.3
82.5°	6.1	7.9	8.7	10.4	10.4
85°	6.1	6.9	8.7	9.6	10.4
87.5°	5.2	6.1	6.9	8.7	8.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)