

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: P162448

Luminaire Tested: **ECM-E03-LED-E1-SL3-HSS-7050**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P162448
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-7050
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) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5074.4 lumens
Efficiency: N/A
Efficacy: 67.5 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

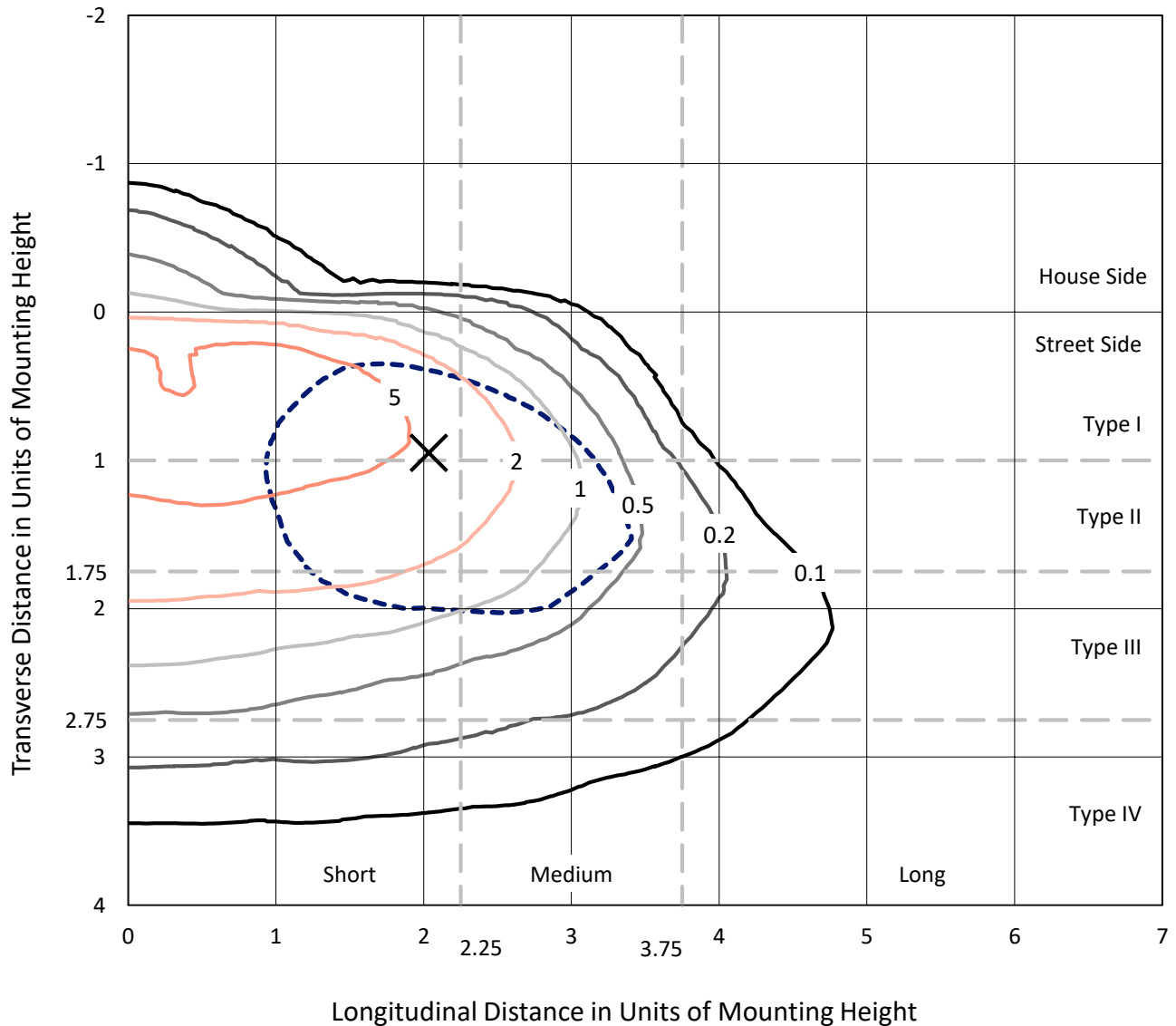
Input Watts (W): 75.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P162448
 CATALOG NUMBER: ECM-E03-LED-E1-SL3-HSS-7050

Iso-Footcandle Lines of Horizontal Illumination

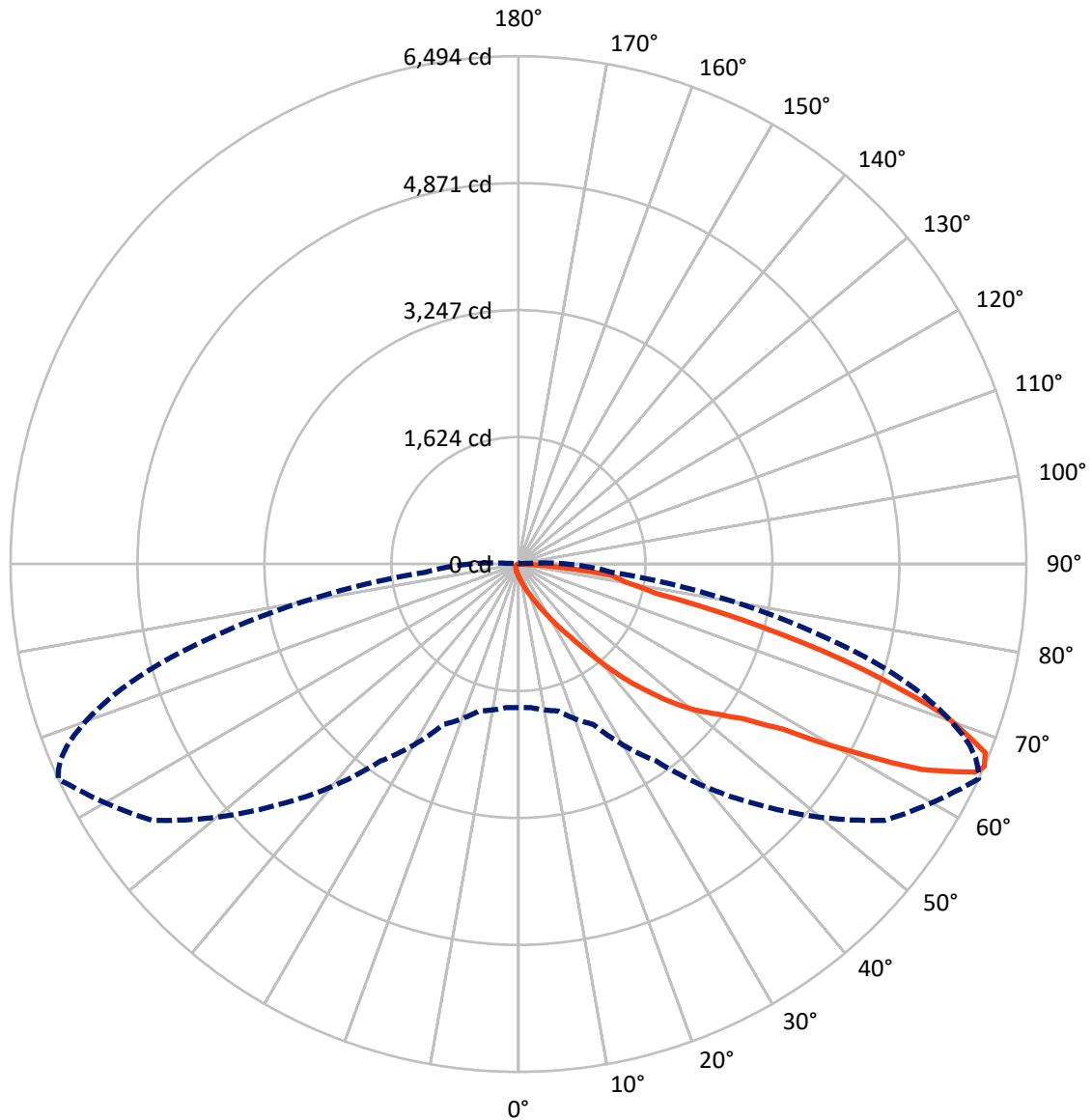
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 8.4 fc
 Type III - Short - Non-Cutoff

REPORT NUMBER: P162448
CATALOG NUMBER: ECM-E03-LED-E1-SL3-HSS-7050

Luminous Intensity Polar Plot



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

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 CATALOG NUMBER: ECM-E03-LED-E1-SL3-HSS-7050

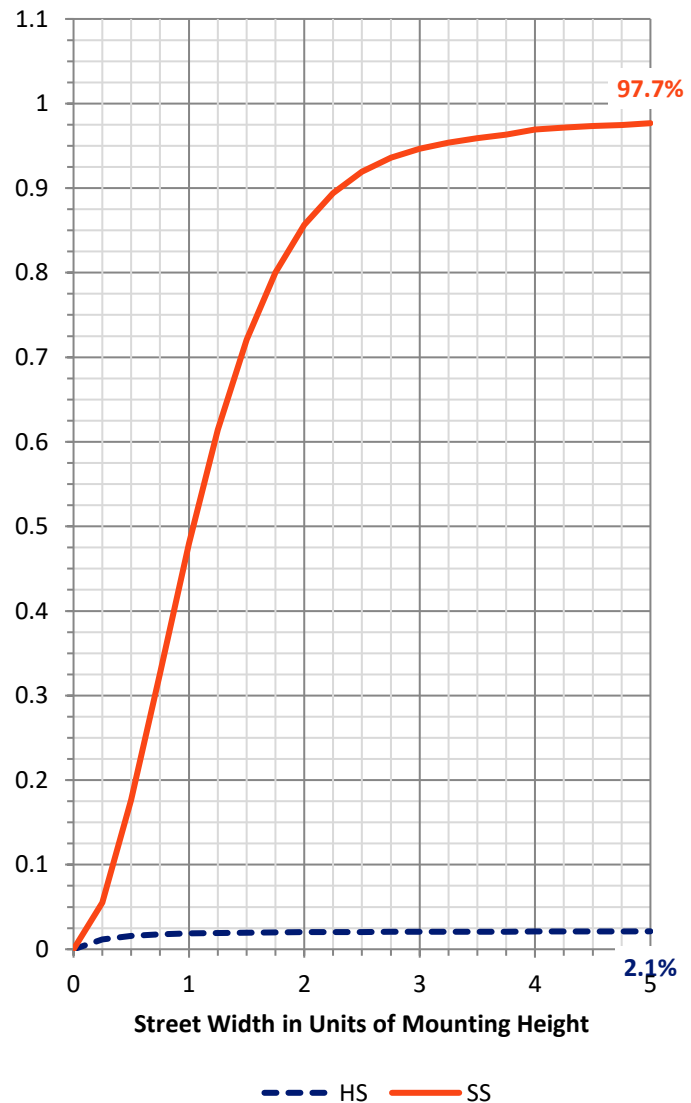
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	110.0	0.0	110.0
	% Fixture	2.2	0.0	2.2
Street Side	Lumens	4964.5	0.0	4964.5
	% Fixture	97.8	0.0	97.8
Total	Lumens	5074.4	0.0	5074.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	17.1	0.3
10°-20°	72.7	1.4
20°-30°	156.8	3.1
30°-40°	334.9	6.6
40°-50°	740.6	14.6
50°-60°	1255.0	24.7
60°-70°	1674.7	33.0
70°-80°	737.7	14.5
80°-90°	85.0	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°	5074.4	100.0
0°-180°	5074.4	100.0



REPORT NUMBER: P162448

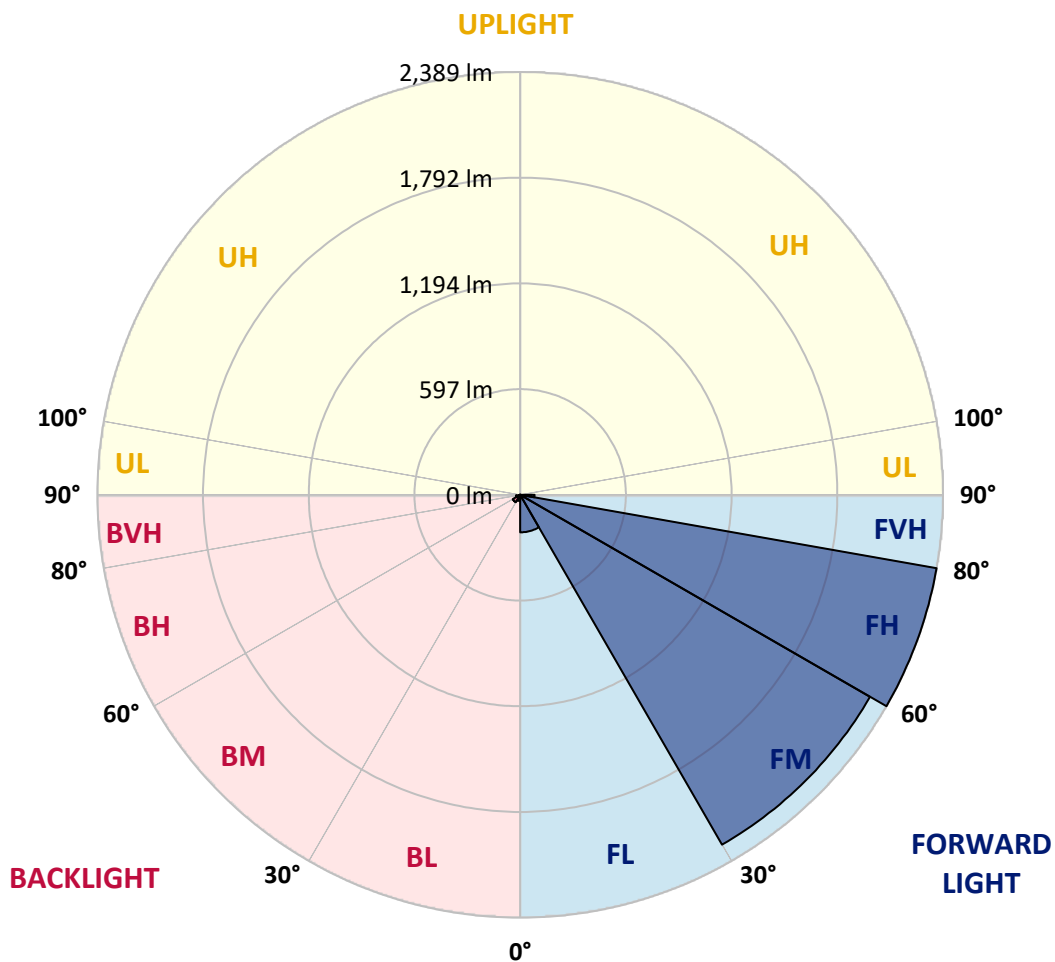
CATALOG NUMBER: ECM-E03-LED-E1-SL3-HSS-7050

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	212.0	4.2			
FM	(30°-60°)	2282.1	45.0			
FH	(60°-80°)	2388.8	47.1			G2/5000
FVH	(80°-90°)	81.6	1.6			G1/100
BL	(0°-30°)	34.7	0.7	B0/110		
BM	(30°-60°)	48.3	1.0	B0/220		
BH	(60°-80°)	23.6	0.5	B0/110		G0/110
BVH	(80°-90°)	3.4	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: P162448
 CATALOG NUMBER: ECM-E03-LED-E1-SL3-HSS-7050

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	67°	68°
0°	153.2	153.2	153.2	153.2	153.2	153.2	153.2	153.2	153.2	153.2	153.2
2.5°	193.2	192.2	188.3	188.3	182.4	178.5	173.6	168.8	168.8	167.8	166.8
5°	255.6	249.8	248.7	238.1	229.2	216.6	204.9	189.2	187.3	185.3	184.4
7.5°	324.9	323.9	315.1	302.4	284.8	261.5	238.1	212.7	208.8	206.9	203.0
10°	414.6	409.7	398.0	376.6	350.2	319.0	280.9	240.9	236.1	232.2	230.3
12.5°	500.4	491.7	484.8	457.5	424.4	378.5	332.7	275.1	271.2	266.4	258.6
15°	580.5	572.7	561.0	537.6	500.4	442.9	389.3	319.0	309.3	302.4	296.5
17.5°	643.0	638.0	624.4	598.0	558.0	507.3	442.9	363.9	356.1	347.3	336.6
20°	702.4	695.6	674.2	638.0	595.1	556.0	506.3	422.4	411.7	401.0	389.3
22.5°	759.0	752.1	717.0	657.5	611.7	595.1	577.5	488.7	472.2	463.4	451.7
25°	838.0	823.3	768.8	674.2	612.7	625.3	655.6	574.6	559.0	546.3	527.8
27.5°	944.3	924.8	839.0	698.5	616.6	658.6	745.4	679.0	662.5	647.8	627.3
30°	1064.4	1051.7	949.3	757.1	644.9	707.3	845.8	811.6	792.2	774.6	750.2
32.5°	1185.4	1167.8	1066.3	868.3	720.9	801.9	971.7	965.9	940.4	923.9	897.5
35°	1291.7	1282.8	1207.7	1050.7	894.6	967.8	1139.5	1146.3	1123.9	1106.3	1077.0
37.5°	1363.9	1363.9	1349.2	1246.8	1170.7	1225.4	1386.3	1387.3	1364.8	1324.8	1310.2
40°	1400.9	1411.6	1464.4	1483.9	1480.0	1550.2	1710.2	1692.7	1674.1	1653.6	1604.8
42.5°	1477.1	1486.8	1599.0	1733.6	1821.4	1914.1	2024.3	2018.5	1996.1	1958.9	1914.1
45°	1605.9	1618.5	1752.2	1965.8	2146.3	2278.0	2348.2	2320.9	2298.5	2263.4	2239.9
47.5°	1769.7	1794.0	1945.3	2209.7	2427.3	2644.8	2717.9	2645.8	2626.2	2598.9	2560.9
50°	1944.4	1967.8	2128.8	2431.2	2677.0	2936.5	3058.4	2936.5	2908.2	2899.5	2856.5
52.5°	2095.5	2115.0	2270.2	2601.9	2868.2	3172.6	3350.1	3189.1	3168.7	3139.4	3108.2
55°	2185.3	2200.9	2346.3	2683.8	2998.0	3385.2	3632.1	3490.6	3460.3	3448.6	3403.8
57.5°	2215.6	2231.2	2361.9	2694.6	3068.2	3579.4	3974.5	3979.4	3943.3	3901.4	3887.7
60°	2215.6	2233.1	2343.3	2668.2	3136.5	3786.2	4431.1	4837.9	4759.9	4752.1	4702.3
62.5°	2123.8	2140.5	2251.7	2587.2	3228.2	4065.2	5067.1	5785.2	5762.7	5712.0	5630.0
65°	1924.8	1934.6	2043.8	2380.5	3193.0	4321.9	5618.3	6415.4	6379.3	6279.8	6174.5
66°	1835.1	1842.9	1945.3	2262.4	3077.9	4356.9	5715.9	6494.4	6434.9	6351.0	6232.1
67.5°	1705.3	1718.9	1791.2	2042.9	2801.9	4234.9	5654.5	6438.8	6387.1	6285.6	6166.7
70°	1138.5	1128.7	1383.4	1567.8	2134.6	3450.6	5073.1	5781.3	5782.3	5734.5	5686.7
72.5°	540.4	546.3	620.5	964.8	1397.0	2305.2	4037.9	4614.5	4680.8	4595.0	4535.5
75°	388.3	397.1	441.9	590.2	833.1	1383.4	2617.5	3227.2	3229.2	3077.0	2941.3
77.5°	113.2	118.0	165.8	363.9	624.4	933.7	1503.3	1794.0	1752.2	1642.9	1540.5
80°	46.8	46.8	48.7	116.1	250.7	634.1	1051.7	1381.4	1376.5	1334.6	1274.1
82.5°	17.5	18.6	23.4	47.8	59.5	156.1	701.4	1199.0	1196.0	1136.5	1093.6
85°	1.9	1.9	5.8	20.5	22.5	29.2	140.5	528.8	525.9	528.8	463.4
87.5°	0.0	0.0	1.0	1.9	3.0	3.9	5.8	20.5	22.5	21.4	19.5
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: P162448

CATALOG NUMBER: ECM-E03-LED-E1-SL3-HSS-7050

CANDELA DISTRIBUTION (continued):

	69°	70°	71°	72°	73°	74°	75°	76°	77°	78°	79°
0°	153.2	153.2	153.2	153.2	153.2	153.2	153.2	153.2	153.2	153.2	153.2
2.5°	166.8	164.9	164.9	163.9	163.9	163.9	162.9	161.9	161.9	161.0	160.0
5°	182.4	180.5	179.5	177.5	176.6	175.6	173.6	172.7	170.7	169.7	168.8
7.5°	201.0	197.1	196.1	193.2	190.2	188.3	186.3	183.4	181.4	177.5	176.6
10°	224.4	219.5	215.6	211.7	208.8	203.9	201.0	197.1	193.2	190.2	187.3
12.5°	254.6	247.8	242.0	238.1	231.2	225.3	219.5	216.6	208.8	204.9	200.0
15°	287.8	280.0	273.1	265.4	260.5	250.7	242.9	234.2	230.3	223.4	215.6
17.5°	330.7	318.0	307.3	299.5	289.8	280.0	271.2	262.5	250.7	242.9	233.1
20°	376.6	365.8	351.2	337.6	325.9	314.1	301.5	289.8	279.0	266.4	254.6
22.5°	435.1	419.5	401.9	388.3	372.7	360.0	342.4	326.8	309.3	292.6	279.0
25°	509.3	488.7	472.2	452.7	434.1	414.6	393.2	373.6	351.2	335.6	312.1
27.5°	601.0	581.5	559.0	533.7	515.1	485.9	457.5	433.1	406.9	382.4	356.1
30°	718.1	689.7	666.4	641.9	604.9	576.6	543.4	510.2	474.2	449.7	409.7
32.5°	858.5	828.3	793.2	758.0	723.9	683.9	643.0	601.9	561.9	517.1	476.1
35°	1030.2	994.1	954.1	916.1	863.4	820.5	768.8	712.2	667.3	615.6	563.8
37.5°	1257.5	1198.0	1162.9	1122.9	1051.7	993.2	935.6	879.0	800.0	745.4	672.2
40°	1542.4	1507.2	1449.7	1385.3	1320.9	1243.8	1165.9	1090.6	999.0	922.9	838.0
42.5°	1877.1	1825.3	1766.7	1674.1	1608.7	1518.0	1429.3	1329.7	1217.5	1120.0	1020.5
45°	2191.1	2129.7	2084.8	1992.2	1923.8	1816.5	1709.2	1603.8	1474.1	1348.3	1233.2
47.5°	2530.7	2479.9	2405.8	2330.7	2261.4	2140.5	2024.3	1896.6	1760.0	1610.7	1461.4
50°	2829.2	2789.2	2738.5	2647.8	2570.7	2469.2	2332.6	2193.1	2020.4	1872.1	1702.4
52.5°	3082.8	3051.6	2980.4	2916.0	2846.7	2751.1	2629.2	2495.5	2309.1	2146.3	1953.1
55°	3382.4	3359.9	3297.5	3257.5	3196.0	3104.3	2990.2	2866.2	2669.2	2491.6	2273.1
57.5°	3873.0	3855.5	3800.9	3784.3	3723.8	3643.8	3503.3	3370.7	3140.4	2919.9	2670.1
60°	4685.7	4650.6	4570.6	4529.6	4401.8	4294.5	4112.1	3929.7	3651.6	3370.7	3070.1
62.5°	5556.0	5457.4	5305.2	5174.4	4993.0	4806.7	4562.8	4283.8	3957.9	3624.3	3278.9
65°	6025.2	5857.4	5665.2	5457.4	5222.3	4948.2	4640.9	4306.3	3955.9	3603.8	3238.9
66°	6078.9	5889.5	5685.7	5454.5	5193.0	4901.3	4589.2	4237.9	3874.1	3530.6	3165.7
67.5°	6011.5	5813.5	5597.9	5341.3	5058.4	4756.0	4428.2	4063.3	3713.1	3364.8	3009.7
70°	5540.4	5343.2	5151.0	4880.9	4579.4	4275.0	3964.8	3557.0	3225.3	2905.3	2589.2
72.5°	4424.3	4290.6	4100.3	3869.1	3575.5	3218.5	2959.9	2595.0	2307.2	1997.0	1752.2
75°	2764.8	2576.6	2341.4	2046.8	1822.4	1532.6	1381.4	1104.4	940.4	797.1	658.6
77.5°	1413.7	1272.2	1107.3	941.5	782.4	624.4	482.9	341.5	230.3	160.0	119.0
80°	1167.8	1042.9	906.4	755.1	614.6	477.0	343.4	234.2	149.3	97.6	76.1
82.5°	964.8	859.5	737.6	597.1	475.1	374.6	260.5	169.7	105.4	68.3	53.7
85°	410.8	372.7	287.8	228.3	171.7	126.8	88.8	59.5	42.0	34.2	31.2
87.5°	17.5	19.5	18.6	14.7	10.8	10.8	9.7	7.8	7.8	7.8	7.8
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: P162448

CATALOG NUMBER: ECM-E03-LED-E1-SL3-HSS-7050

CANDELA DISTRIBUTION (continued):

	80°	81°	82°	83°	84°	85°	95°	105°	115°	125°	135°
0°	153.2	153.2	153.2	153.2	153.2	153.2	153.2	153.2	153.2	153.2	153.2
2.5°	160.0	159.0	158.0	158.0	157.1	156.1	150.2	145.4	139.6	135.7	131.8
5°	166.8	165.8	163.9	162.9	161.0	160.0	147.3	136.6	127.8	121.0	116.1
7.5°	173.6	172.7	169.7	166.8	165.8	163.9	143.4	129.8	118.0	110.2	105.4
10°	182.4	179.5	176.6	172.7	169.7	166.8	139.6	121.9	109.3	102.4	97.6
12.5°	195.2	190.2	185.3	180.5	176.6	171.7	137.6	115.1	102.4	94.6	89.8
15°	209.7	203.0	197.1	191.2	184.4	179.5	133.7	109.3	96.6	88.8	82.9
17.5°	223.4	215.6	206.9	198.0	191.2	184.4	129.8	103.4	90.7	82.9	77.1
20°	242.9	231.2	220.5	209.7	200.0	191.2	123.9	97.6	85.9	77.1	71.2
22.5°	264.4	250.7	237.0	222.5	209.7	198.0	119.0	92.7	81.0	72.2	65.4
25°	291.7	275.1	256.5	238.1	223.4	207.8	114.1	87.8	76.1	67.3	60.4
27.5°	329.8	306.3	285.9	262.5	240.0	222.5	110.2	83.9	71.2	62.4	55.6
30°	381.4	347.3	315.1	289.8	263.4	238.1	106.3	79.0	67.3	57.6	49.8
32.5°	439.0	399.1	361.9	323.9	290.7	261.5	102.4	75.1	62.4	52.6	45.9
35°	510.2	459.5	409.7	365.8	325.9	286.8	98.5	71.2	58.5	47.8	40.9
37.5°	612.7	549.3	483.9	427.3	375.6	323.9	95.6	67.3	53.7	42.9	36.1
40°	753.2	671.2	591.2	514.2	446.8	382.4	91.7	63.4	49.8	39.0	32.2
42.5°	905.3	805.8	700.4	613.6	521.0	440.0	87.8	59.5	45.9	35.1	28.3
45°	1094.6	970.7	842.9	724.8	611.7	507.3	83.9	55.6	40.9	31.2	24.4
47.5°	1301.4	1143.4	999.0	850.7	716.1	591.2	79.0	52.6	37.0	27.3	21.4
50°	1514.1	1347.3	1164.8	996.0	836.1	675.1	74.2	47.8	33.1	24.4	17.5
52.5°	1743.4	1546.3	1360.0	1150.2	963.9	785.4	69.3	43.9	30.3	21.4	14.7
55°	2035.1	1814.6	1596.0	1360.9	1136.5	913.1	64.4	39.0	26.4	18.6	11.7
57.5°	2401.9	2140.5	1872.1	1606.8	1334.6	1080.9	60.4	34.2	22.5	15.6	9.7
60°	2748.2	2442.8	2118.0	1812.6	1505.3	1209.7	54.6	30.3	19.5	12.7	9.7
62.5°	2927.7	2579.4	2229.2	1892.7	1564.8	1255.5	48.7	25.3	16.6	10.8	8.8
65°	2883.8	2528.7	2189.2	1849.7	1528.7	1226.3	42.9	22.5	14.7	9.7	8.8
66°	2820.4	2469.2	2127.7	1804.8	1498.5	1195.1	40.0	21.4	13.6	9.7	7.8
67.5°	2681.8	2342.4	2016.5	1716.1	1415.6	1135.6	36.1	19.5	12.7	8.8	7.8
70°	2290.7	1982.3	1721.9	1454.6	1209.7	957.0	29.2	16.6	10.8	7.8	7.8
72.5°	1516.1	1306.3	1132.6	974.6	814.6	632.2	24.4	13.6	8.8	7.8	6.9
75°	571.6	517.1	443.9	399.1	348.3	305.4	19.5	8.8	6.9	6.9	6.9
77.5°	101.5	93.7	82.9	76.1	70.3	64.4	15.6	5.8	5.8	6.9	6.9
80°	68.3	63.4	57.6	52.6	48.7	43.9	10.8	4.9	5.8	5.8	6.9
82.5°	48.7	45.9	42.9	39.0	36.1	32.2	6.9	4.9	5.8	5.8	5.8
85°	29.2	27.3	25.3	23.4	20.5	19.5	4.9	4.9	4.9	5.8	5.8
87.5°	7.8	6.9	7.8	7.8	5.8	6.9	3.9	3.9	3.9	4.9	4.9
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: P162448

CATALOG NUMBER: ECM-E03-LED-E1-SL3-HSS-7050

CANDELA DISTRIBUTION (continued):

	145°	155°	165°	175°	180°
0°	153.2	153.2	153.2	153.2	153.2
2.5°	129.8	129.8	127.8	130.7	130.7
5°	112.2	112.2	111.2	112.2	112.2
7.5°	102.4	101.5	101.5	101.5	102.4
10°	93.7	92.7	92.7	92.7	92.7
12.5°	85.9	84.9	83.9	84.9	84.9
15°	79.0	77.1	77.1	77.1	77.1
17.5°	73.2	71.2	70.3	70.3	70.3
20°	67.3	64.4	64.4	64.4	64.4
22.5°	61.5	58.5	58.5	58.5	58.5
25°	55.6	52.6	52.6	52.6	52.6
27.5°	50.7	47.8	47.8	47.8	47.8
30°	44.8	42.9	42.9	43.9	42.9
32.5°	40.9	38.1	38.1	39.0	39.0
35°	36.1	34.2	34.2	34.2	34.2
37.5°	31.2	29.2	29.2	29.2	29.2
40°	27.3	25.3	24.4	25.3	25.3
42.5°	23.4	21.4	20.5	20.5	20.5
45°	20.5	17.5	16.6	17.5	17.5
47.5°	16.6	14.7	14.7	15.6	15.6
50°	12.7	12.7	13.6	15.6	15.6
52.5°	11.7	11.7	13.6	15.6	15.6
55°	10.8	11.7	13.6	14.7	15.6
57.5°	9.7	11.7	13.6	14.7	14.7
60°	9.7	10.8	12.7	14.7	14.7
62.5°	8.8	9.7	11.7	13.6	13.6
65°	8.8	9.7	11.7	13.6	13.6
66°	8.8	9.7	11.7	13.6	13.6
67.5°	8.8	9.7	11.7	13.6	13.6
70°	8.8	9.7	11.7	12.7	12.7
72.5°	7.8	8.8	10.8	12.7	12.7
75°	7.8	8.8	10.8	12.7	12.7
77.5°	7.8	8.8	10.8	12.7	12.7
80°	7.8	8.8	10.8	11.7	12.7
82.5°	6.9	8.8	9.7	11.7	11.7
85°	6.9	7.8	9.7	10.8	11.7
87.5°	5.8	6.9	7.8	9.7	9.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)