

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: P162450

Luminaire Tested: **ECM-F03-LED-E1-SL3-HSS-8030**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P162450
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-F03-LED-E1-SL3-HSS-8030
Description: EPIC CLASSICAL MEDIUM DECORATIVE LED LUMINAIRE
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD
Light Source: (21) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3445.6 lumens
Efficiency: N/A
Efficacy: 44.0 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 - G1

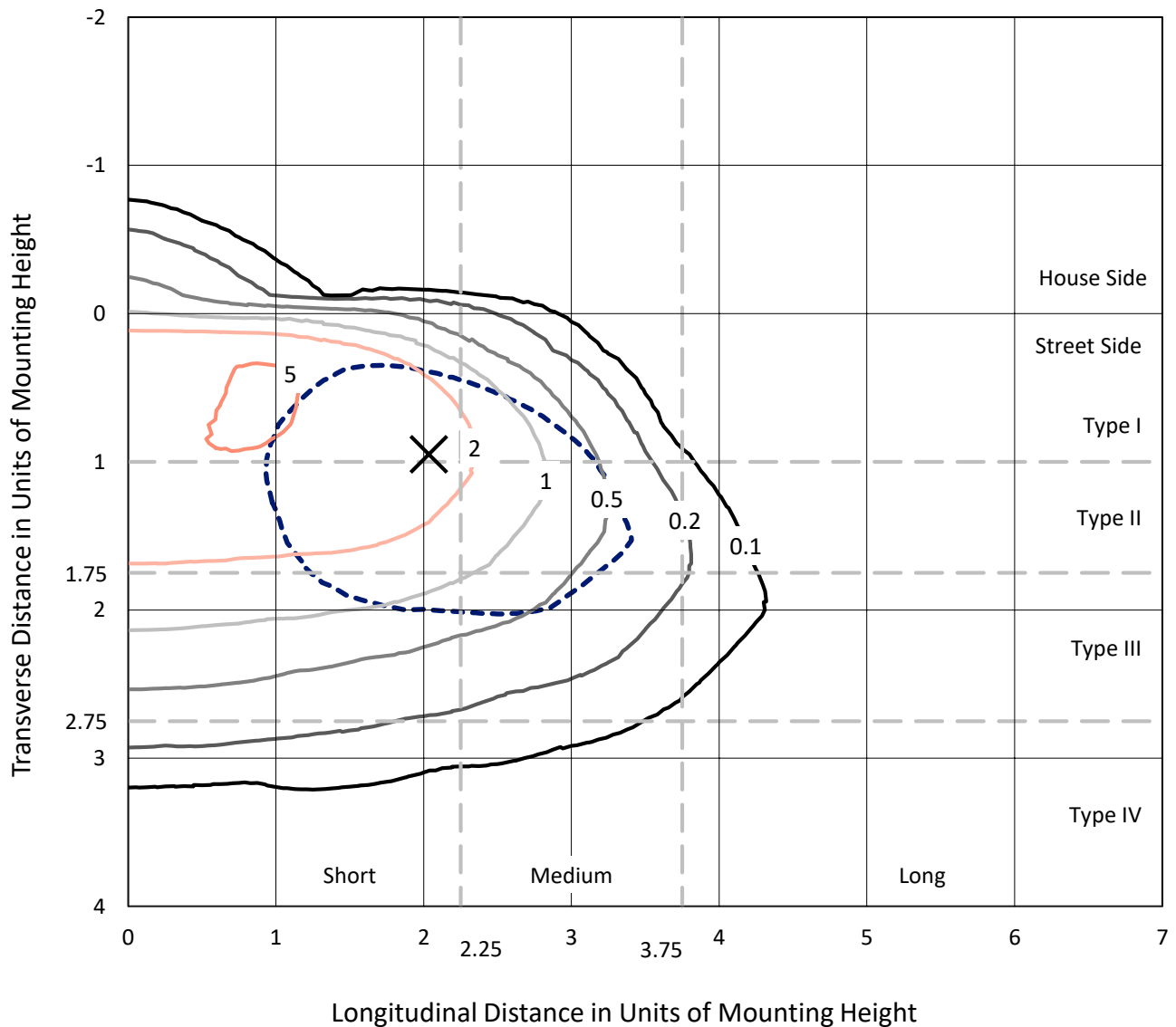
Input Watts (W): 78.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P162450
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Iso-Footcandle Lines of Horizontal Illumination

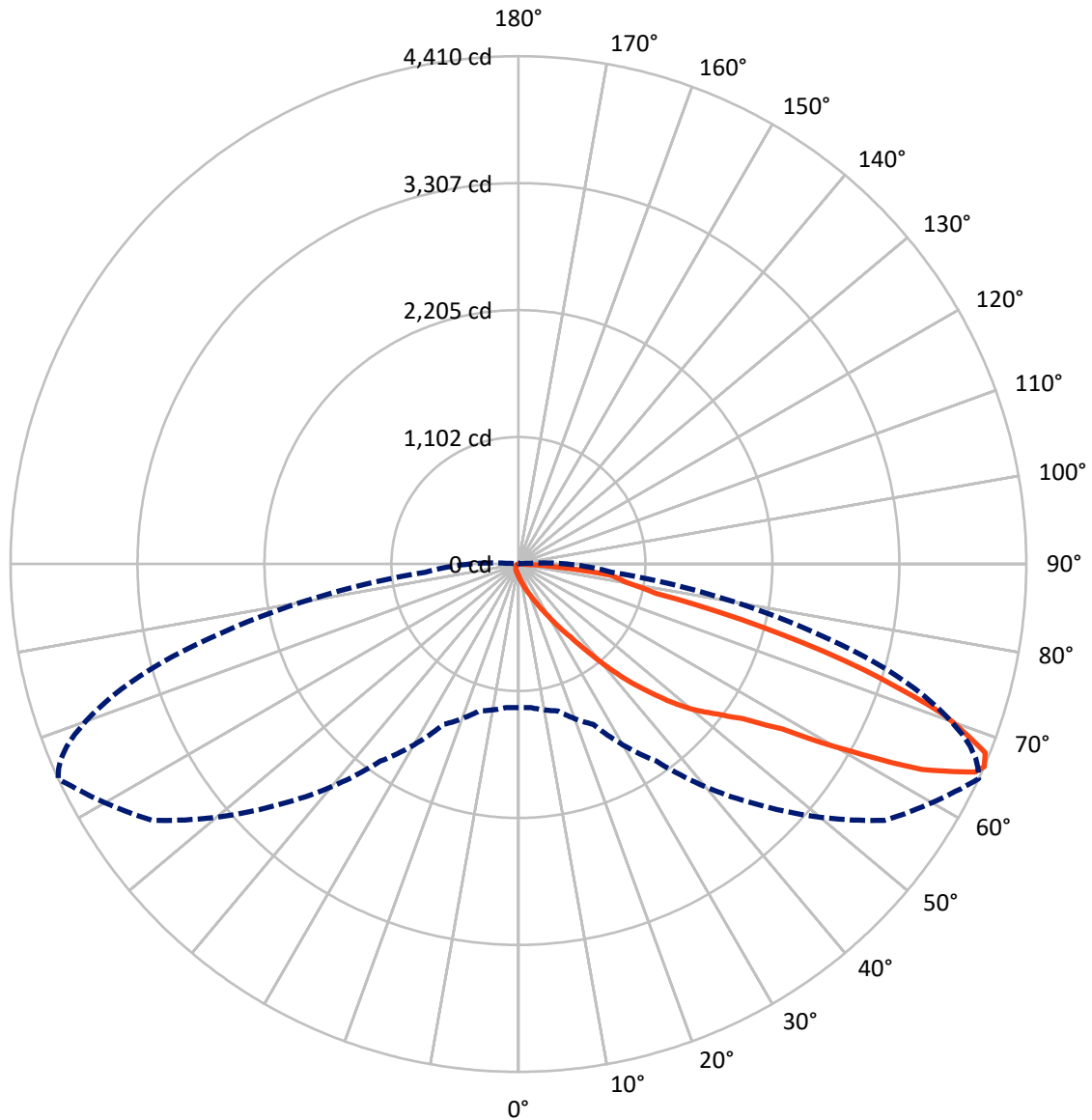
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.7 fc
 Type III - Short - Non-Cutoff

REPORT NUMBER: P162450
CATALOG NUMBER: ECM-F03-LED-E1-SL3-HSS-8030

Luminous Intensity Polar Plot



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

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CATALOG NUMBER: ECM-F03-LED-E1-SL3-HSS-8030

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	74.7	0.0	74.7
	% Fixture	2.2	0.0	2.2
Street Side	Lumens	3370.9	0.0	3370.9
	% Fixture	97.8	0.0	97.8
Total	Lumens	3445.6	0.0	3445.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	11.6	0.3
10°-20°	49.4	1.4
20°-30°	106.5	3.1
30°-40°	227.4	6.6
40°-50°	502.8	14.6
50°-60°	852.2	24.7
60°-70°	1137.1	33.0
70°-80°	500.9	14.5
80°-90°	57.7	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°	3445.6	100.0
0°-180°	3445.6	100.0



REPORT NUMBER: P162450

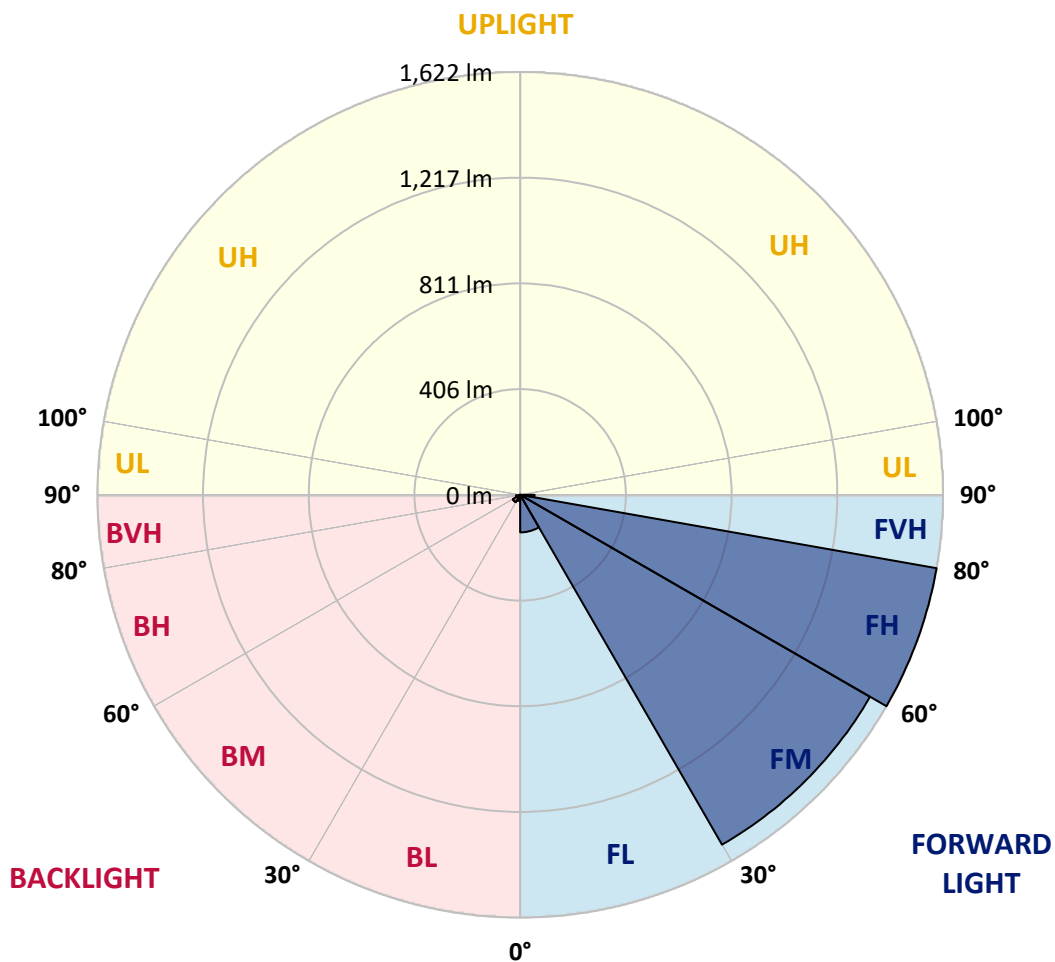
CATALOG NUMBER: ECM-F03-LED-E1-SL3-HSS-8030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	143.9	4.2			
FM	(30°-60°)	1549.6	45.0			
FH	(60°-80°)	1622.0	47.1			G1/1800
FVH	(80°-90°)	55.4	1.6			G1/100
BL	(0°-30°)	23.6	0.7	B0/110		
BM	(30°-60°)	32.8	1.0	B0/220		
BH	(60°-80°)	16.0	0.5	B0/110		G0/110
BVH	(80°-90°)	2.3	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-G1

Type III Short





REPORT NUMBER: P162450

CATALOG NUMBER: ECM-F03-LED-E1-SL3-HSS-8030

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	67°	68°
0°	104.0	104.0	104.0	104.0	104.0	104.0	104.0	104.0	104.0	104.0	104.0
2.5°	131.2	130.5	127.9	127.9	123.9	121.2	117.9	114.6	114.6	113.9	113.3
5°	173.6	169.6	168.9	161.6	155.7	147.1	139.1	128.5	127.2	125.8	125.2
7.5°	220.6	220.0	214.0	205.3	193.4	177.5	161.6	144.4	141.8	140.5	137.8
10°	281.6	278.2	270.3	255.7	237.8	216.6	190.8	163.6	160.3	157.7	156.3
12.5°	339.8	333.9	329.2	310.7	288.2	257.0	225.9	186.8	184.1	180.9	175.6
15°	394.1	388.8	380.9	365.0	339.8	300.7	264.3	216.6	210.0	205.3	201.4
17.5°	436.6	433.2	424.0	406.1	378.9	344.5	300.7	247.1	241.8	235.8	228.5
20°	476.9	472.3	457.8	433.2	404.1	377.6	343.8	286.8	279.5	272.3	264.3
22.5°	515.4	510.7	486.9	446.5	415.3	404.1	392.1	331.9	320.6	314.6	306.7
25°	569.0	559.1	522.0	457.8	416.0	424.6	445.1	390.2	379.6	370.9	358.4
27.5°	641.2	628.0	569.7	474.3	418.7	447.2	506.1	461.0	449.8	439.8	425.9
30°	722.7	714.1	644.6	514.1	437.9	480.3	574.3	551.1	537.9	526.0	509.4
32.5°	804.9	793.0	724.0	589.6	489.5	544.5	659.8	655.8	638.6	627.3	609.4
35°	877.1	871.1	820.1	713.5	607.4	657.2	773.7	778.3	763.1	751.2	731.3
37.5°	926.1	926.1	916.1	846.6	794.9	832.0	941.3	942.0	926.7	899.6	889.7
40°	951.3	958.5	994.3	1007.5	1004.9	1052.6	1161.2	1149.3	1136.7	1122.8	1089.7
42.5°	1003.0	1009.6	1085.7	1177.1	1236.8	1299.7	1374.5	1370.5	1355.4	1330.1	1299.7
45°	1090.4	1099.0	1189.7	1334.8	1457.4	1546.8	1594.5	1575.9	1560.7	1536.9	1520.9
47.5°	1201.7	1218.2	1320.9	1500.4	1648.1	1795.8	1845.5	1796.5	1783.2	1764.7	1738.8
50°	1320.2	1336.1	1445.4	1650.8	1817.7	1993.9	2076.7	1993.9	1974.7	1968.8	1939.6
52.5°	1422.9	1436.1	1541.5	1766.7	1947.5	2154.2	2274.8	2165.5	2151.6	2131.7	2110.5
55°	1483.8	1494.4	1593.2	1822.3	2035.7	2298.6	2466.2	2370.2	2349.6	2341.7	2311.2
57.5°	1504.4	1515.0	1603.7	1829.6	2083.3	2430.4	2698.7	2702.1	2677.6	2649.1	2639.8
60°	1504.4	1516.3	1591.1	1811.7	2129.7	2570.9	3008.8	3285.0	3232.0	3226.7	3192.9
62.5°	1442.1	1453.4	1528.9	1756.7	2192.0	2760.3	3440.6	3928.2	3912.9	3878.5	3822.8
65°	1306.9	1313.6	1387.8	1616.4	2168.1	2934.6	3814.9	4356.1	4331.6	4264.0	4192.5
66°	1246.0	1251.3	1320.9	1536.2	2089.9	2958.4	3881.2	4409.8	4369.4	4312.4	4231.6
67.5°	1157.9	1167.2	1216.2	1387.1	1902.5	2875.6	3839.4	4372.0	4336.9	4268.0	4187.2
70°	773.0	766.4	939.3	1064.5	1449.4	2343.0	3444.7	3925.5	3926.2	3893.8	3861.3
72.5°	367.0	370.9	421.3	655.1	948.6	1565.3	2741.8	3133.3	3178.3	3120.1	3079.6
75°	263.6	269.6	300.1	400.8	565.7	939.3	1777.3	2191.3	2192.6	2089.3	1997.2
77.5°	76.8	80.1	112.6	247.1	424.0	634.0	1020.8	1218.2	1189.7	1115.5	1046.0
80°	31.8	31.8	33.1	78.8	170.2	430.6	714.1	938.0	934.7	906.2	865.1
82.5°	11.9	12.6	15.9	32.5	40.4	106.0	476.3	814.1	812.1	771.7	742.6
85°	1.3	1.3	4.0	13.9	15.3	19.9	95.4	359.0	357.1	359.0	314.6
87.5°	0.0	0.0	0.7	1.3	2.0	2.6	4.0	13.9	15.3	14.6	13.2
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: P162450
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CANDELA DISTRIBUTION (continued):

	69°	70°	71°	72°	73°	74°	75°	76°	77°	78°	79°
0°	104.0	104.0	104.0	104.0	104.0	104.0	104.0	104.0	104.0	104.0	104.0
2.5°	113.3	112.0	112.0	111.3	111.3	111.3	110.6	109.9	109.9	109.3	108.6
5°	123.9	122.6	121.9	120.5	119.9	119.2	117.9	117.3	115.9	115.2	114.6
7.5°	136.5	133.8	133.1	131.2	129.2	127.9	126.5	124.5	123.2	120.5	119.9
10°	152.4	149.0	146.4	143.7	141.8	138.4	136.5	133.8	131.2	129.2	127.2
12.5°	172.9	168.3	164.3	161.6	157.0	153.0	149.0	147.1	141.8	139.1	135.8
15°	195.4	190.1	185.5	180.2	176.9	170.2	164.9	159.0	156.3	151.7	146.4
17.5°	224.6	215.9	208.7	203.4	196.8	190.1	184.1	178.2	170.2	164.9	158.3
20°	255.7	248.4	238.5	229.2	221.3	213.3	204.7	196.8	189.4	180.9	172.9
22.5°	295.4	284.8	272.9	263.6	253.1	244.4	232.5	221.9	210.0	198.7	189.4
25°	345.8	331.9	320.6	307.4	294.8	281.6	267.0	253.7	238.5	227.9	211.9
27.5°	408.1	394.8	379.6	362.4	349.8	329.9	310.7	294.1	276.3	259.7	241.8
30°	487.6	468.3	452.5	435.9	410.7	391.5	369.0	346.4	322.0	305.4	278.2
32.5°	583.0	562.4	538.6	514.7	491.5	464.4	436.6	408.7	381.5	351.1	323.3
35°	699.5	675.0	647.8	622.0	586.2	557.1	522.0	483.6	453.1	418.0	382.9
37.5°	853.8	813.4	789.6	762.4	714.1	674.4	635.3	596.8	543.2	506.1	456.4
40°	1047.3	1023.4	984.3	940.7	896.9	844.6	791.6	740.6	678.3	626.6	569.0
42.5°	1274.5	1239.4	1199.6	1136.7	1092.3	1030.8	970.5	902.9	826.7	760.5	692.9
45°	1487.8	1446.1	1415.6	1352.7	1306.3	1233.4	1160.6	1089.0	1000.9	915.5	837.3
47.5°	1718.4	1683.9	1633.6	1582.6	1535.5	1453.4	1374.5	1287.8	1195.0	1093.7	992.3
50°	1921.0	1893.9	1859.4	1797.9	1745.5	1676.6	1583.9	1489.1	1371.9	1271.2	1156.0
52.5°	2093.3	2072.1	2023.7	1980.0	1933.0	1868.0	1785.2	1694.5	1567.9	1457.4	1326.2
55°	2296.6	2281.4	2239.0	2211.9	2170.1	2107.8	2030.4	1946.2	1812.4	1691.8	1543.5
57.5°	2629.8	2617.9	2580.8	2569.6	2528.5	2474.2	2378.8	2288.7	2132.4	1982.6	1813.0
60°	3181.6	3157.8	3103.5	3075.7	2988.9	2916.0	2792.2	2668.3	2479.5	2288.7	2084.6
62.5°	3772.5	3705.7	3602.3	3513.5	3390.3	3263.8	3098.2	2908.7	2687.4	2460.9	2226.4
65°	4091.2	3977.2	3846.7	3705.7	3546.0	3359.9	3151.2	2924.0	2686.1	2447.0	2199.2
66°	4127.6	3999.1	3860.6	3703.6	3526.1	3328.0	3116.1	2877.6	2630.5	2397.3	2149.6
67.5°	4081.9	3947.4	3801.0	3626.8	3434.7	3229.4	3006.8	2759.0	2521.2	2284.7	2043.6
70°	3762.0	3628.1	3497.6	3314.2	3109.5	2902.7	2692.1	2415.2	2190.0	1972.7	1758.1
72.5°	3004.1	2913.3	2784.2	2627.2	2427.8	2185.4	2009.8	1762.0	1566.6	1356.0	1189.7
75°	1877.4	1749.5	1589.8	1389.8	1237.4	1040.6	938.0	749.9	638.6	541.2	447.2
77.5°	959.9	863.8	751.8	639.3	531.3	424.0	327.9	231.9	156.3	108.6	80.8
80°	793.0	708.2	615.4	512.7	417.3	323.9	233.2	159.0	101.4	66.3	51.7
82.5°	655.1	583.6	500.8	405.4	322.6	254.4	176.9	115.2	71.6	46.4	36.4
85°	278.9	253.1	195.4	155.0	116.6	86.1	60.3	40.4	28.5	23.2	21.2
87.5°	11.9	13.2	12.6	10.0	7.3	7.3	6.6	5.3	5.3	5.3	5.3
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: P162450
 CATALOG NUMBER: ECM-F03-LED-E1-SL3-HSS-8030

CANDELA DISTRIBUTION (continued):

	80°	81°	82°	83°	84°	85°	95°	105°	115°	125°	135°
0°	104.0	104.0	104.0	104.0	104.0	104.0	104.0	104.0	104.0	104.0	104.0
2.5°	108.6	108.0	107.3	107.3	106.7	106.0	102.0	98.7	94.8	92.1	89.5
5°	113.3	112.6	111.3	110.6	109.3	108.6	100.1	92.7	86.7	82.1	78.8
7.5°	117.9	117.3	115.2	113.3	112.6	111.3	97.4	88.1	80.1	74.8	71.6
10°	123.9	121.9	119.9	117.3	115.2	113.3	94.8	82.8	74.2	69.5	66.3
12.5°	132.5	129.2	125.8	122.6	119.9	116.6	93.4	78.2	69.5	64.2	61.0
15°	142.4	137.8	133.8	129.8	125.2	121.9	90.8	74.2	65.6	60.3	56.3
17.5°	151.7	146.4	140.5	134.5	129.8	125.2	88.1	70.2	61.6	56.3	52.3
20°	164.9	157.0	149.7	142.4	135.8	129.8	84.1	66.3	58.3	52.3	48.4
22.5°	179.5	170.2	160.9	151.1	142.4	134.5	80.8	62.9	55.0	49.1	44.4
25°	198.1	186.8	174.2	161.6	151.7	141.1	77.5	59.6	51.7	45.7	41.0
27.5°	223.9	208.0	194.1	178.2	163.0	151.1	74.8	57.0	48.4	42.4	37.8
30°	259.0	235.8	214.0	196.8	178.9	161.6	72.2	53.6	45.7	39.1	33.8
32.5°	298.1	271.0	245.7	220.0	197.4	177.5	69.5	51.0	42.4	35.7	31.1
35°	346.4	312.0	278.2	248.4	221.3	194.7	66.9	48.4	39.7	32.5	27.8
37.5°	416.0	373.0	328.6	290.1	255.0	220.0	64.9	45.7	36.4	29.1	24.5
40°	511.4	455.7	401.5	349.1	303.4	259.7	62.3	43.1	33.8	26.5	21.9
42.5°	614.7	547.1	475.6	416.6	353.7	298.8	59.6	40.4	31.1	23.8	19.2
45°	743.3	659.1	572.4	492.2	415.3	344.5	57.0	37.8	27.8	21.2	16.6
47.5°	883.7	776.4	678.3	577.7	486.3	401.5	53.6	35.7	25.2	18.5	14.6
50°	1028.1	914.8	790.9	676.3	567.7	458.4	50.4	32.5	22.5	16.6	11.9
52.5°	1183.8	1050.0	923.5	781.0	654.5	533.3	47.0	29.8	20.6	14.6	10.0
55°	1381.8	1232.1	1083.7	924.1	771.7	620.0	43.8	26.5	17.9	12.6	7.9
57.5°	1630.9	1453.4	1271.2	1091.0	906.2	733.9	41.0	23.2	15.3	10.6	6.6
60°	1866.1	1658.7	1438.1	1230.8	1022.1	821.4	37.1	20.6	13.2	8.6	6.6
62.5°	1987.9	1751.5	1513.7	1285.1	1062.5	852.5	33.1	17.2	11.3	7.3	6.0
65°	1958.1	1717.0	1486.5	1255.9	1038.0	832.7	29.1	15.3	10.0	6.6	6.0
66°	1915.0	1676.6	1444.8	1225.5	1017.5	811.5	27.2	14.6	9.3	6.6	5.3
67.5°	1821.0	1590.5	1369.2	1165.2	961.2	771.1	24.5	13.2	8.6	6.0	5.3
70°	1555.4	1346.0	1169.2	987.7	821.4	649.8	19.9	11.3	7.3	5.3	5.3
72.5°	1029.4	887.0	769.1	661.8	553.1	429.3	16.6	9.3	6.0	5.3	4.7
75°	388.2	351.1	301.4	271.0	236.5	207.3	13.2	6.0	4.7	4.7	4.7
77.5°	68.9	63.6	56.3	51.7	47.7	43.8	10.6	4.0	4.0	4.7	4.7
80°	46.4	43.1	39.1	35.7	33.1	29.8	7.3	3.3	4.0	4.0	4.7
82.5°	33.1	31.1	29.1	26.5	24.5	21.9	4.7	3.3	4.0	4.0	4.0
85°	19.9	18.5	17.2	15.9	13.9	13.2	3.3	3.3	3.3	4.0	4.0
87.5°	5.3	4.7	5.3	5.3	4.0	4.7	2.6	2.6	2.6	3.3	3.3
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: P162450

CATALOG NUMBER: ECM-F03-LED-E1-SL3-HSS-8030

CANDELA DISTRIBUTION (continued):

	145°	155°	165°	175°	180°
0°	104.0	104.0	104.0	104.0	104.0
2.5°	88.1	88.1	86.7	88.8	88.8
5°	76.2	76.2	75.5	76.2	76.2
7.5°	69.5	68.9	68.9	68.9	69.5
10°	63.6	62.9	62.9	62.9	62.9
12.5°	58.3	57.6	57.0	57.6	57.6
15°	53.6	52.3	52.3	52.3	52.3
17.5°	49.7	48.4	47.7	47.7	47.7
20°	45.7	43.8	43.8	43.8	43.8
22.5°	41.7	39.7	39.7	39.7	39.7
25°	37.8	35.7	35.7	35.7	35.7
27.5°	34.4	32.5	32.5	32.5	32.5
30°	30.4	29.1	29.1	29.8	29.1
32.5°	27.8	25.8	25.8	26.5	26.5
35°	24.5	23.2	23.2	23.2	23.2
37.5°	21.2	19.9	19.9	19.9	19.9
40°	18.5	17.2	16.6	17.2	17.2
42.5°	15.9	14.6	13.9	13.9	13.9
45°	13.9	11.9	11.3	11.9	11.9
47.5°	11.3	10.0	10.0	10.6	10.6
50°	8.6	8.6	9.3	10.6	10.6
52.5°	7.9	7.9	9.3	10.6	10.6
55°	7.3	7.9	9.3	10.0	10.6
57.5°	6.6	7.9	9.3	10.0	10.0
60°	6.6	7.3	8.6	10.0	10.0
62.5°	6.0	6.6	7.9	9.3	9.3
65°	6.0	6.6	7.9	9.3	9.3
66°	6.0	6.6	7.9	9.3	9.3
67.5°	6.0	6.6	7.9	9.3	9.3
70°	6.0	6.6	7.9	8.6	8.6
72.5°	5.3	6.0	7.3	8.6	8.6
75°	5.3	6.0	7.3	8.6	8.6
77.5°	5.3	6.0	7.3	8.6	8.6
80°	5.3	6.0	7.3	7.9	8.6
82.5°	4.7	6.0	6.6	7.9	7.9
85°	4.7	5.3	6.6	7.3	7.9
87.5°	4.0	4.7	5.3	6.6	6.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)