

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: P162606

Luminaire Tested: **ECM-E03-LED-E1-SL4-HSS-7030**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P162606
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33728)
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-SL4-HSS-7030
Description: EPIC CLASSICAL MEDIUM DECORATIVE LED LUMINAIRE
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 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: 5301 lumens
Efficiency: N/A
Efficacy: 70.5 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 1' x H: 0.1')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B0 - U0 - G2

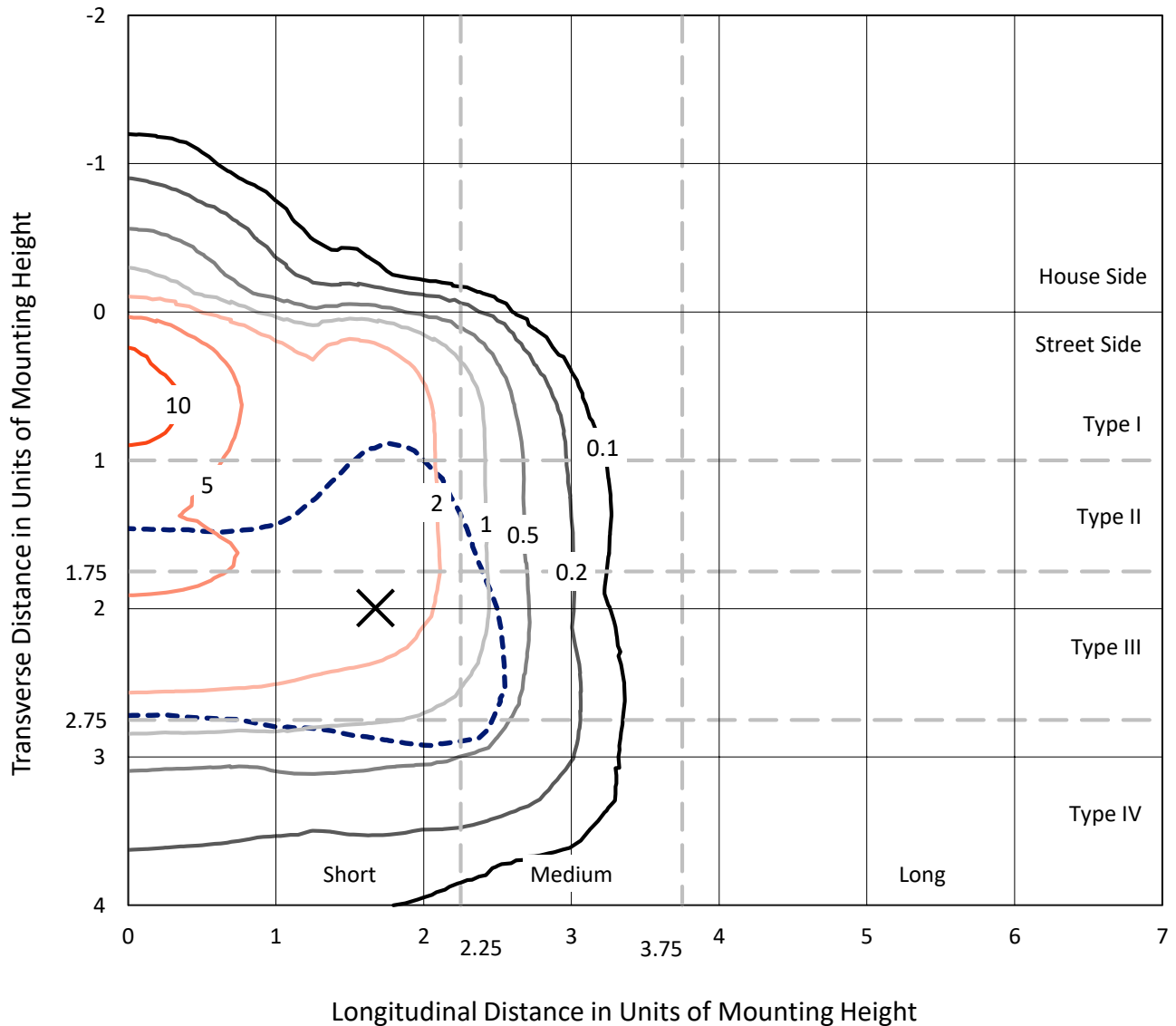
Input Watts (W): 75.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

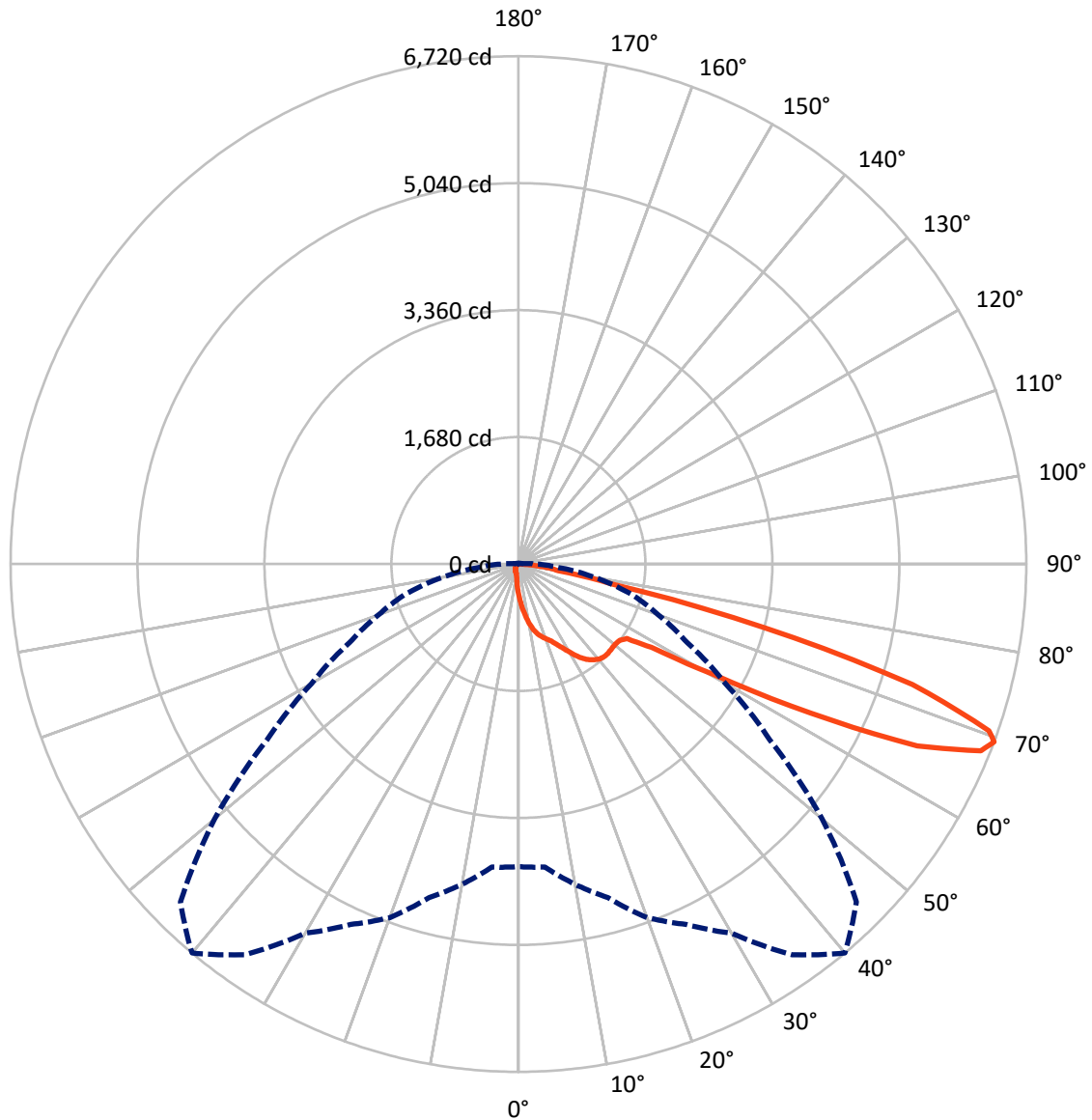
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 11.9 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	157.9	0.0	157.9
	% Fixture	3.0	0.0	3.0
Street Side	Lumens	5143.1	0.0	5143.1
	% Fixture	97.0	0.0	97.0
Total	Lumens	5301.0	0.0	5301.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.1	0.8
10°-20°	141.9	2.7
20°-30°	271.5	5.1
30°-40°	451.6	8.5
40°-50°	611.0	11.5
50°-60°	955.6	18.0
60°-70°	1964.6	37.1
70°-80°	790.5	14.9
80°-90°	73.1	1.4
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°	5301.0	100.0
0°-180°	5301.0	100.0



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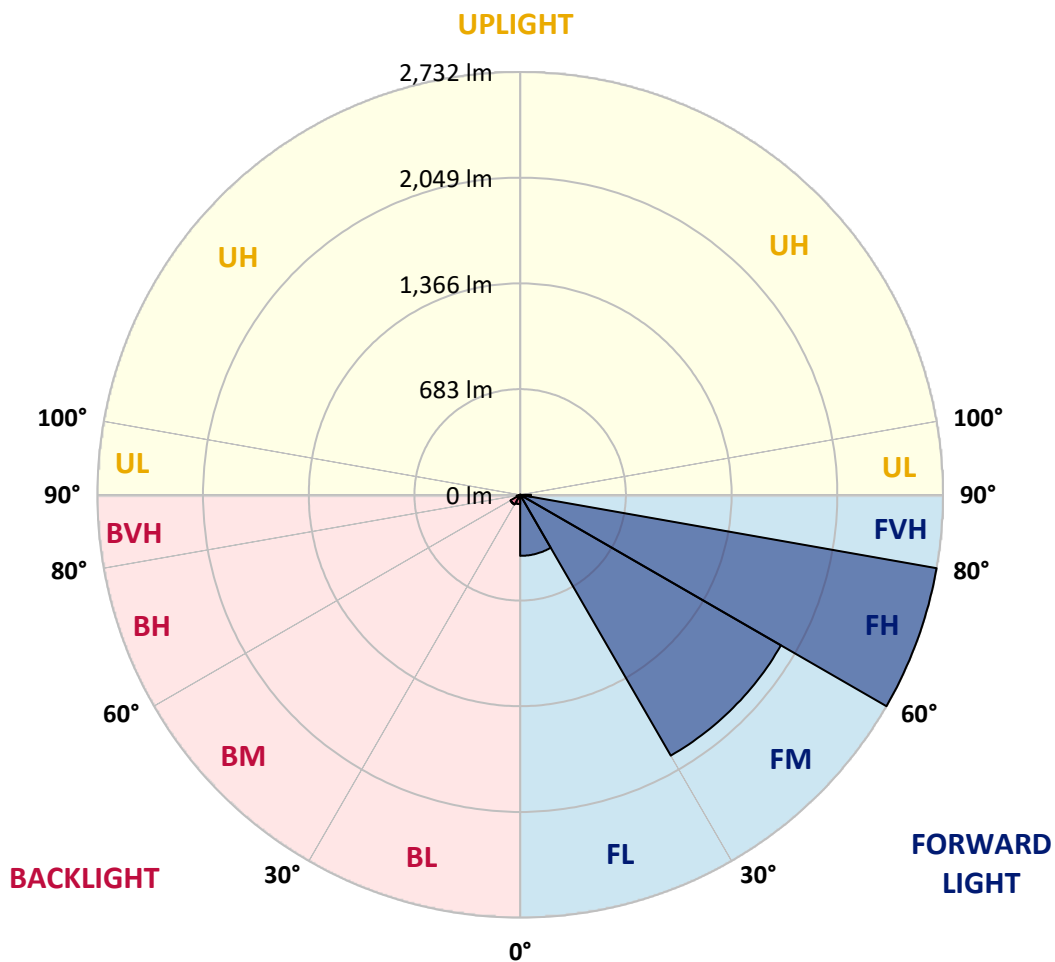
CATALOG NUMBER: ECM-E03-LED-E1-SL4-HSS-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	394.5	7.4			
FM	(30°-60°)	1946.1	36.7			
FH	(60°-80°)	2732.1	51.5			G2/5000
FVH	(80°-90°)	70.4	1.3			G1/100
BL	(0°-30°)	60.0	1.1	B0/110		
BM	(30°-60°)	72.1	1.4	B0/220		
BH	(60°-80°)	23.0	0.4	B0/110		G0/110
BVH	(80°-90°)	2.7	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 IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	400.3	400.3	400.3	400.3	400.3	400.3	400.3	400.3	400.3	400.3	400.3
2.5°	534.0	528.0	521.1	521.1	512.3	512.3	507.1	493.2	491.5	483.7	475.9
5°	681.6	676.4	667.8	660.0	653.0	640.9	632.2	615.7	597.4	580.1	564.5
7.5°	825.9	823.2	807.6	805.0	793.7	773.7	756.3	732.1	700.8	676.4	647.8
10°	959.6	953.4	950.0	935.3	918.7	897.0	870.1	840.6	804.1	765.9	725.1
12.5°	1065.5	1062.0	1046.4	1040.3	1023.0	1001.2	967.3	929.2	892.7	843.2	795.4
15°	1144.5	1138.4	1128.0	1118.5	1097.7	1078.5	1047.2	1005.6	961.3	907.4	850.1
17.5°	1210.6	1199.2	1196.6	1181.9	1160.1	1137.6	1102.9	1064.6	1012.5	958.7	896.2
20°	1299.1	1283.4	1278.2	1256.5	1231.4	1200.1	1160.1	1112.4	1057.7	998.7	934.4
22.5°	1403.3	1392.0	1380.7	1361.6	1329.5	1285.2	1227.0	1174.9	1105.4	1040.3	970.8
25°	1551.0	1541.4	1523.1	1497.1	1457.2	1404.2	1333.9	1257.4	1175.8	1092.5	1010.8
27.5°	1694.2	1685.5	1672.5	1652.5	1607.4	1549.2	1462.4	1365.1	1261.8	1161.1	1070.7
30°	1828.8	1820.9	1808.0	1788.0	1748.1	1690.7	1592.6	1488.4	1359.9	1242.6	1134.1
32.5°	1973.8	1971.2	1956.5	1927.8	1893.1	1815.7	1709.0	1596.9	1466.7	1331.2	1204.4
35°	2138.0	2118.0	2104.1	2075.4	2016.4	1933.8	1808.8	1686.4	1549.2	1410.2	1268.7
37.5°	2276.9	2257.8	2240.4	2203.9	2131.9	2026.8	1885.2	1750.6	1609.1	1467.6	1323.4
40°	2378.5	2369.0	2348.1	2300.4	2219.5	2094.5	1941.7	1794.9	1652.5	1510.1	1367.7
42.5°	2454.0	2439.3	2415.8	2366.3	2270.8	2128.4	1964.3	1813.2	1672.5	1536.2	1396.3
45°	2481.8	2469.7	2448.0	2394.1	2290.8	2138.0	1963.4	1808.0	1673.3	1544.0	1415.4
47.5°	2465.3	2453.2	2434.1	2383.7	2282.1	2126.6	1947.8	1793.2	1664.7	1546.6	1432.9
50°	2410.6	2403.7	2388.9	2346.4	2255.2	2104.9	1933.8	1785.4	1662.9	1559.6	1457.2
52.5°	2405.4	2401.1	2382.8	2340.3	2247.4	2098.0	1932.1	1789.7	1677.7	1576.1	1474.5
55°	2939.4	2877.8	2739.7	2622.5	2429.7	2200.4	2019.9	1860.0	1740.2	1641.2	1570.0
57.5°	4177.8	4085.7	3904.2	3681.1	3238.2	2803.2	2454.9	2203.1	2078.9	2033.8	2060.7
60°	4757.8	4741.3	4712.7	4606.8	4380.1	4005.9	3589.0	3138.3	2957.7	2942.1	2996.8
62.5°	5033.1	5022.7	5031.4	5018.3	4948.0	4838.6	4718.7	4524.3	4345.4	4229.9	3984.9
65°	5159.9	5166.8	5216.3	5255.4	5264.1	5292.8	5380.5	5622.8	5799.9	5502.0	4822.1
67.5°	4837.7	4878.6	4992.3	5134.7	5301.5	5462.9	5723.5	6234.1	6598.0	6248.0	5282.4
69°	4004.9	4025.0	4302.8	4571.1	4978.4	5263.3	5640.9	6310.5	6719.5	6324.4	5245.8
70°	3153.1	3171.3	3469.2	3833.9	4522.5	4889.0	5383.1	6181.1	6605.7	6222.7	5058.3
72.5°	1422.4	1396.3	1501.5	1696.8	2445.3	3027.1	3891.2	5007.9	5450.0	4985.3	3784.4
75°	993.5	982.1	993.5	994.3	1110.6	1432.9	1808.0	2714.6	3357.1	2896.9	1808.0
77.5°	769.4	761.6	753.8	745.1	759.0	850.1	886.6	963.0	1250.5	1182.7	689.5
80°	608.7	601.8	620.9	614.8	614.8	625.2	618.2	589.7	535.8	496.7	444.6
82.5°	283.0	284.8	284.8	309.2	372.6	435.0	455.0	426.4	378.6	322.1	259.7
85°	26.9	30.4	51.2	79.0	157.2	177.2	178.0	147.6	147.6	116.4	93.8
87.5°	0.0	0.9	0.9	0.9	7.9	21.7	18.3	5.2	2.6	2.6	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



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	400.3	400.3	400.3	400.3	400.3	400.3	400.3	400.3	400.3	400.3	400.3
2.5°	462.0	459.4	448.9	438.5	429.0	418.6	409.0	399.4	389.0	381.2	371.6
5°	540.2	521.1	499.3	478.5	457.7	435.9	413.4	393.4	372.6	353.5	335.2
7.5°	619.2	581.8	552.3	514.9	481.1	447.2	415.9	383.8	354.3	326.5	300.5
10°	686.0	640.9	594.9	547.1	498.4	453.3	409.9	371.6	332.6	298.8	266.6
12.5°	740.7	683.4	626.9	567.0	512.3	455.0	401.2	355.2	309.2	270.9	237.9
15°	790.2	724.2	656.5	587.0	517.6	452.4	392.5	335.2	288.3	244.9	207.5
17.5°	830.1	754.6	678.2	600.1	525.4	448.9	381.2	321.3	266.6	221.4	185.0
20°	864.9	785.8	703.4	615.7	530.6	448.1	371.6	304.0	247.5	199.7	164.1
22.5°	897.0	818.0	729.4	635.7	538.4	447.2	363.0	290.9	231.0	183.2	147.6
25°	933.5	850.1	757.3	656.5	552.3	450.6	357.8	280.5	216.2	167.6	134.6
27.5°	974.4	886.6	790.2	682.5	570.5	457.7	356.0	269.2	203.2	152.8	124.2
30°	1031.6	930.1	823.2	708.6	587.0	465.4	354.3	262.2	190.2	141.6	113.7
32.5°	1082.0	972.6	859.7	735.5	605.3	473.3	353.5	252.7	178.0	130.2	105.9
35°	1134.9	1011.6	891.0	761.6	620.9	482.0	352.6	245.8	166.7	119.0	98.1
37.5°	1181.0	1044.7	915.3	784.1	638.2	489.7	353.5	239.7	156.3	109.4	91.2
40°	1220.1	1078.5	942.2	805.0	656.5	501.9	354.3	233.6	145.9	100.7	85.1
42.5°	1254.8	1110.6	970.8	828.4	677.3	515.9	359.5	228.3	137.2	92.9	79.0
45°	1281.7	1140.1	1002.1	861.5	711.2	538.4	369.1	224.9	128.5	85.9	73.8
47.5°	1309.5	1183.6	1055.1	913.5	760.7	574.0	385.5	224.0	121.6	80.7	69.5
50°	1347.7	1227.0	1102.0	966.5	805.8	610.5	405.5	224.9	112.9	75.5	65.1
52.5°	1375.5	1271.3	1162.8	1058.6	913.5	721.6	482.8	240.6	108.5	71.2	59.9
55°	1539.6	1521.4	1524.0	1541.4	1429.4	1227.9	807.6	347.3	127.7	80.7	59.1
57.5°	2170.9	2235.2	2272.5	2271.7	2086.7	1730.7	1084.6	446.4	142.4	93.8	70.3
60°	3001.1	2952.5	2883.9	2714.6	2468.8	1975.6	1213.1	480.2	123.3	74.7	64.3
62.5°	3734.9	3450.1	3197.4	2923.0	2600.8	2060.7	1239.1	477.6	107.7	56.4	45.1
65°	4192.6	3680.2	3272.1	2928.2	2548.7	1989.5	1172.3	438.5	91.2	46.0	37.4
67.5°	4302.0	3556.0	2978.5	2540.0	2129.3	1548.3	860.6	330.0	71.2	38.2	33.0
69°	4063.1	3160.9	2468.0	1970.4	1549.2	1027.2	532.3	208.4	54.7	34.7	30.4
70°	3737.5	2749.3	2010.3	1581.3	1147.2	721.6	372.6	146.8	44.3	32.1	27.8
72.5°	2404.6	1444.1	988.2	687.8	473.3	287.4	145.9	66.0	33.9	26.9	22.6
75°	932.6	534.0	387.3	294.4	230.2	159.7	88.6	42.6	28.7	22.6	17.4
77.5°	459.4	351.7	287.4	197.1	114.6	71.2	47.8	33.0	23.5	16.5	11.3
80°	363.0	241.4	144.1	89.4	67.8	51.2	36.4	26.9	17.4	10.4	7.9
82.5°	185.9	101.6	74.7	60.8	50.3	39.9	29.5	19.1	11.3	6.9	6.1
85°	58.2	42.6	38.2	37.4	34.7	28.7	20.8	12.1	6.9	4.4	4.4
87.5°	4.4	6.1	7.9	6.1	6.9	6.1	7.9	5.2	3.5	3.5	2.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	400.3	400.3	400.3	400.3	400.3	400.3	400.3	400.3	400.3	400.3	400.3
2.5°	364.7	354.3	344.8	338.7	327.3	323.1	318.7	316.9	309.2	310.9	304.0
5°	318.7	300.5	286.6	272.6	259.7	250.1	242.3	232.7	224.9	221.4	214.5
7.5°	277.0	253.5	235.4	220.6	205.0	192.8	182.4	175.5	168.4	161.5	158.0
10°	240.6	215.4	194.5	179.7	165.0	154.5	146.8	141.6	137.2	134.6	133.7
12.5°	206.7	182.4	163.2	150.2	138.9	133.7	130.2	127.7	126.8	126.0	126.0
15°	180.7	156.3	141.6	132.0	126.8	124.2	123.3	121.6	119.8	119.0	119.0
17.5°	156.3	138.1	127.7	122.5	119.8	118.1	116.4	114.6	112.9	112.0	112.0
20°	139.8	125.0	119.8	116.4	113.7	112.0	109.4	107.7	106.8	105.9	105.0
22.5°	126.8	117.3	113.7	111.2	107.7	105.0	103.3	101.6	99.8	99.0	98.1
25°	117.3	111.2	108.5	105.0	101.6	99.0	96.4	93.8	92.1	91.2	89.4
27.5°	110.2	105.9	102.5	98.1	94.6	92.1	89.4	86.9	85.1	83.4	82.5
30°	104.2	99.8	95.5	92.1	87.7	85.1	81.7	79.0	78.2	76.4	74.7
32.5°	98.1	93.8	89.4	85.1	80.7	77.3	75.5	72.1	70.3	69.5	67.8
35°	91.2	86.9	81.7	78.2	73.8	70.3	67.8	65.1	63.4	61.7	60.8
37.5°	85.1	79.9	74.7	70.3	66.9	63.4	60.8	58.2	56.4	54.7	53.8
40°	78.2	73.0	67.8	63.4	59.9	57.4	54.7	52.1	50.3	49.5	49.5
42.5°	72.1	66.0	60.8	57.4	54.7	51.2	48.6	46.0	45.1	44.3	45.1
45°	66.0	59.9	55.5	52.1	49.5	46.0	43.4	41.6	40.8	41.6	42.6
47.5°	60.8	54.7	50.3	47.8	45.1	42.6	39.9	38.2	38.2	39.9	41.6
50°	55.5	49.5	46.0	44.3	41.6	39.1	35.6	34.7	35.6	37.4	39.1
52.5°	50.3	43.4	40.8	39.9	37.4	34.7	32.1	31.2	32.1	33.9	33.0
55°	45.1	38.2	37.4	36.4	33.9	30.4	27.8	27.8	27.8	26.9	25.2
57.5°	43.4	33.9	33.0	32.1	29.5	26.0	24.3	22.6	21.7	19.1	18.3
60°	45.1	30.4	30.4	28.7	26.0	22.6	20.0	17.4	15.6	13.9	13.9
62.5°	36.4	27.8	26.9	25.2	21.7	18.3	15.6	13.1	12.1	11.3	11.3
65°	29.5	25.2	23.5	20.8	18.3	14.8	12.1	10.4	9.6	9.6	10.4
67.5°	26.9	22.6	20.0	17.4	14.8	11.3	9.6	8.7	8.7	9.6	9.6
69°	25.2	20.8	18.3	15.6	13.1	10.4	8.7	8.7	8.7	8.7	9.6
70°	23.5	20.0	17.4	14.8	11.3	8.7	7.9	7.9	8.7	8.7	9.6
72.5°	18.3	15.6	14.8	12.1	8.7	7.9	6.9	7.9	7.9	8.7	8.7
75°	13.9	11.3	11.3	9.6	6.9	6.1	6.1	6.9	6.9	7.9	7.9
77.5°	9.6	7.9	7.9	6.9	6.1	5.2	5.2	6.1	6.9	6.9	7.9
80°	6.9	6.1	5.2	6.1	5.2	4.4	5.2	6.1	6.1	6.9	6.9
82.5°	5.2	5.2	5.2	5.2	4.4	4.4	5.2	5.2	6.1	6.9	6.9
85°	4.4	4.4	4.4	4.4	4.4	4.4	4.4	5.2	5.2	6.1	6.1
87.5°	2.6	2.6	2.6	3.5	3.5	4.4	4.4	4.4	4.4	5.2	5.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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 CATALOG NUMBER: ECM-E03-LED-E1-SL4-HSS-7030

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	400.3	400.3	400.3	400.3
2.5°	302.2	301.3	297.8	298.8
5°	211.9	206.7	210.2	209.2
7.5°	155.5	154.5	153.7	155.5
10°	132.9	132.9	132.0	132.9
12.5°	125.0	125.0	125.0	125.0
15°	119.0	119.0	118.1	118.1
17.5°	112.0	112.0	112.0	111.2
20°	105.0	104.2	104.2	104.2
22.5°	97.3	96.4	96.4	96.4
25°	89.4	88.6	88.6	88.6
27.5°	81.7	80.7	79.9	79.9
30°	73.8	73.0	72.1	72.1
32.5°	66.0	65.1	64.3	64.3
35°	59.1	59.1	58.2	57.4
37.5°	53.0	53.0	53.0	53.0
40°	48.6	49.5	49.5	49.5
42.5°	46.0	46.9	47.8	48.6
45°	44.3	46.0	46.9	46.9
47.5°	43.4	44.3	45.1	45.1
50°	39.9	39.1	39.1	39.1
52.5°	32.1	30.4	29.5	28.7
55°	23.5	22.6	20.8	20.8
57.5°	16.5	16.5	15.6	15.6
60°	13.1	13.1	12.1	13.1
62.5°	11.3	11.3	11.3	11.3
65°	10.4	10.4	10.4	10.4
67.5°	10.4	10.4	10.4	10.4
69°	9.6	9.6	9.6	9.6
70°	9.6	9.6	9.6	9.6
72.5°	8.7	8.7	8.7	8.7
75°	7.9	8.7	8.7	8.7
77.5°	7.9	7.9	7.9	7.9
80°	6.9	6.9	7.9	7.9
82.5°	6.9	6.9	6.9	6.9
85°	6.1	6.1	6.9	6.9
87.5°	5.2	5.2	6.1	6.1
90°	0.0	0.0	0.0	0.0

(END OF REPORT)