

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: P141060

Luminaire Tested: **ECM-E01-LED-E1-SL3**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P141060
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33691)
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ECM-E01-LED-E1-SL3
Description: EPIC CLASSICAL MEDIUM DECORATIVE LED LUMINAIRE
(1) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL
Light Source: (21) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2893.9 lumens
Efficiency: N/A
Efficacy: 117.2 lumens/watt
Luminous Opening: Rectangular (W 0.17' x L: 1' x H: 0')
IES Classification: Type III - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G1

Input Watts (W): 24.7
Input Voltage (V): NR
Input Current (A_{in}): 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

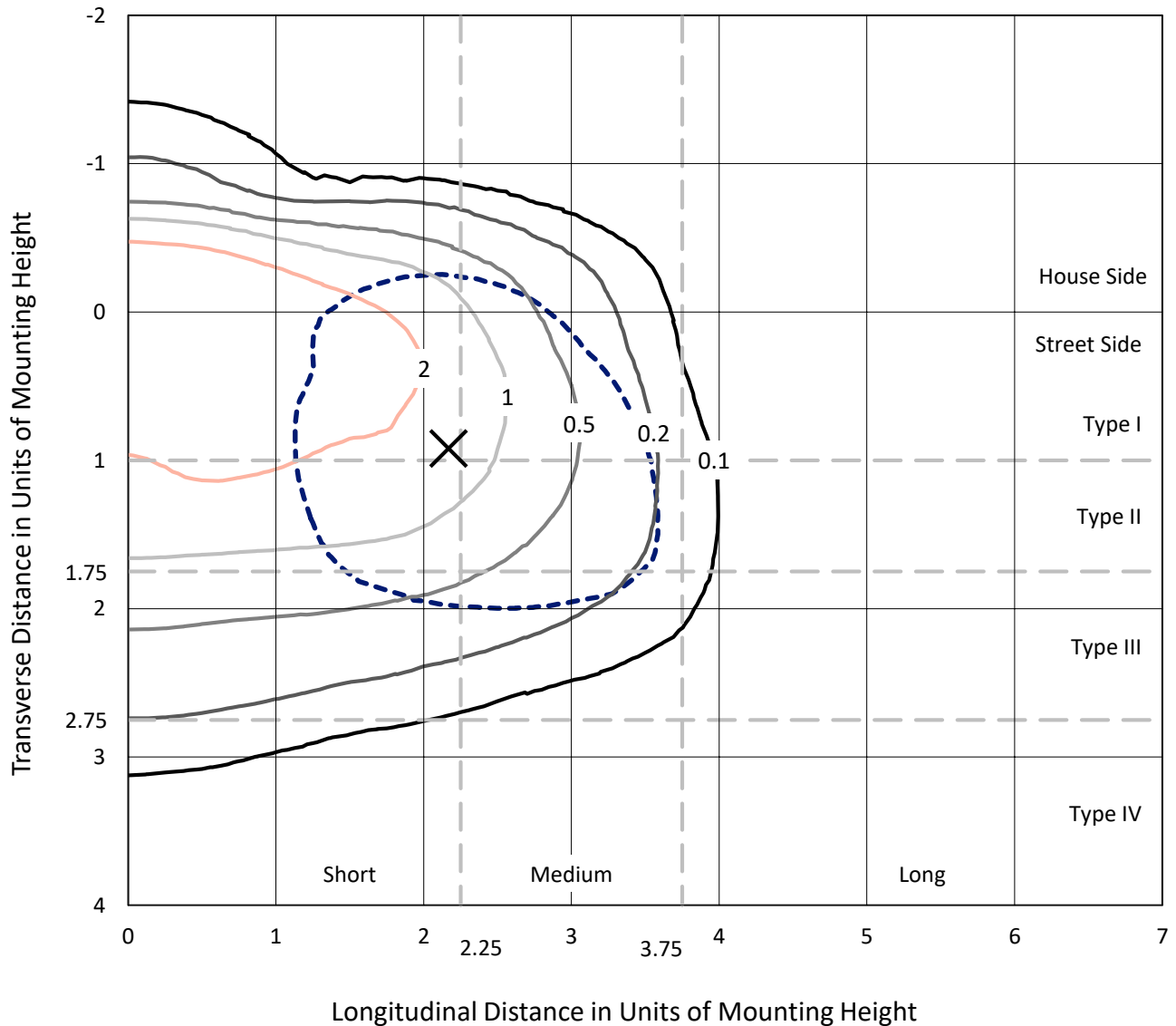


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Iso-Footcandle Lines of Horizontal Illumination

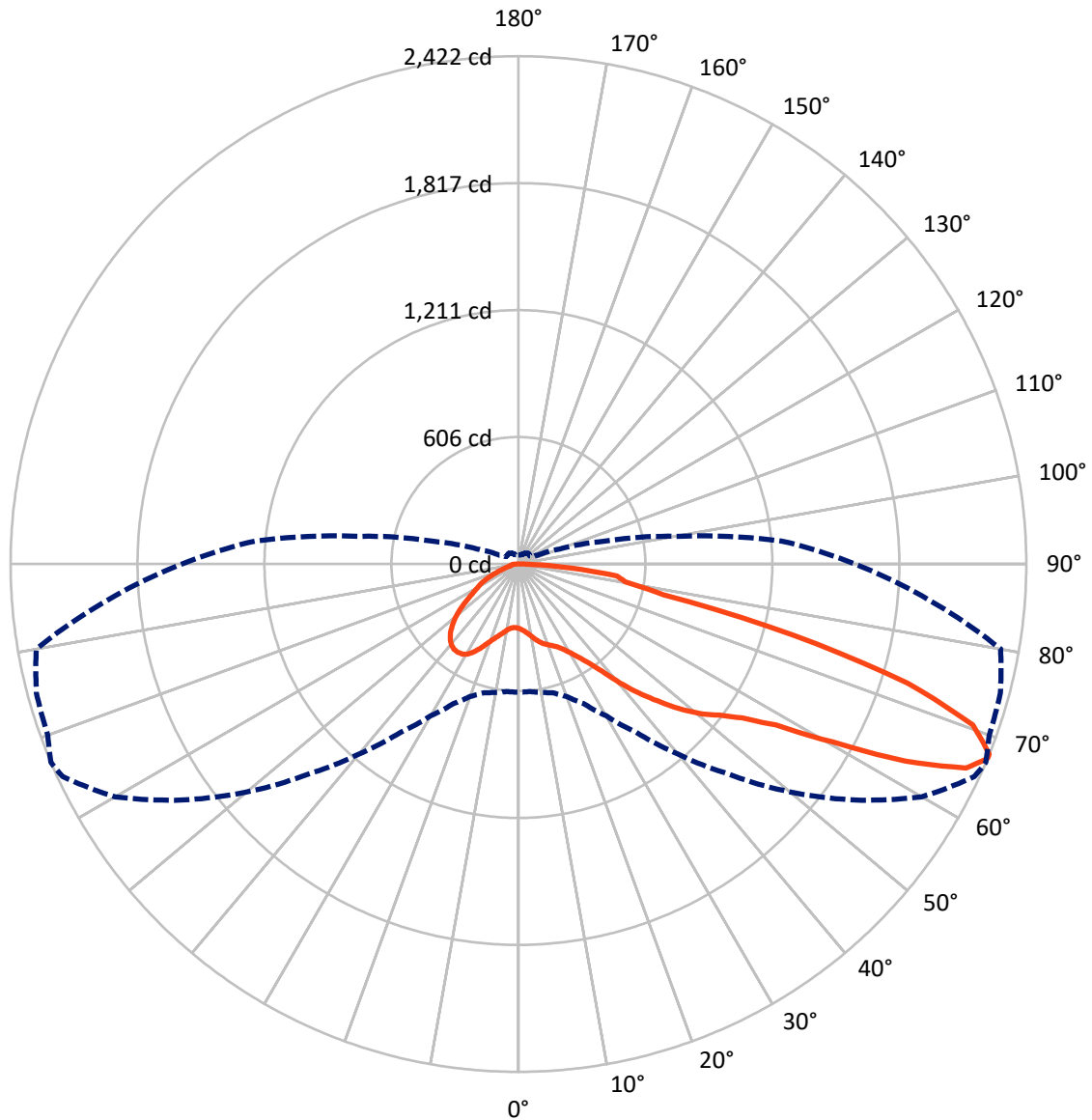
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 4 fc
 Type III - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral - - - Horizontal Cone Through 67-Deg Vertical

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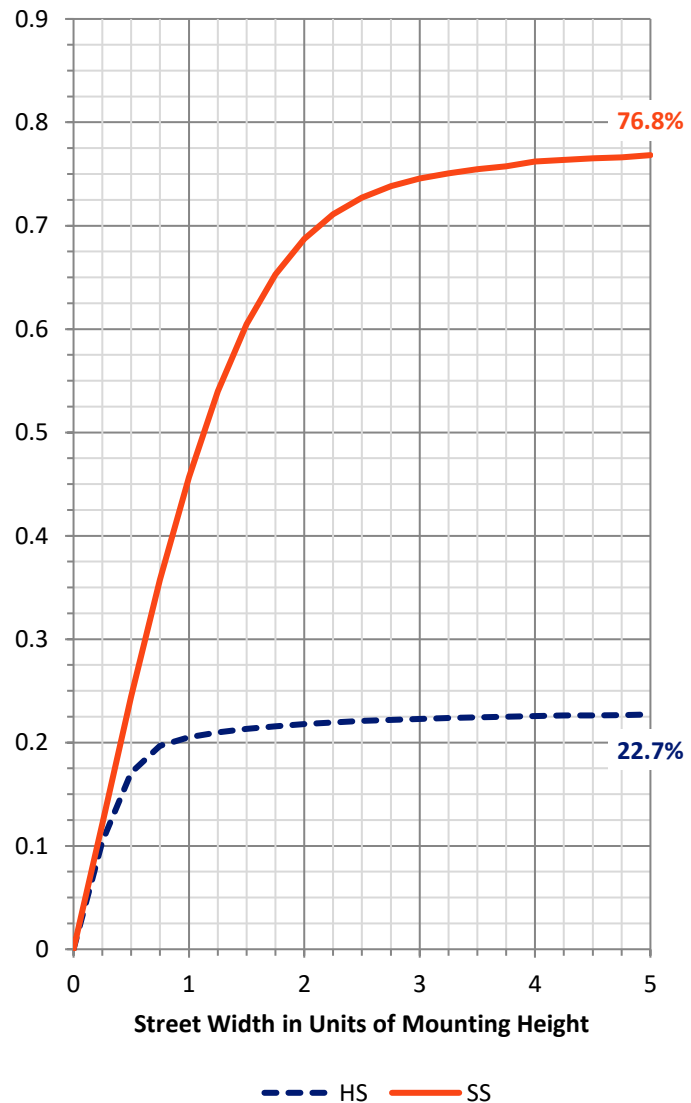
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	665.7	0.0	665.7
	% Fixture	23.0	0.0	23.0
Street Side	Lumens	2228.1	0.0	2228.1
	% Fixture	77.0	0.0	77.0
Total	Lumens	2893.9	0.0	2893.9
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	30.8	1.1
10°-20°	106.4	3.7
20°-30°	189.4	6.5
30°-40°	272.3	9.4
40°-50°	415.0	14.3
50°-60°	606.2	20.9
60°-70°	816.9	28.2
70°-80°	401.1	13.9
80°-90°	55.8	1.9
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°	2893.9	100.0
0°-180°	2893.9	100.0



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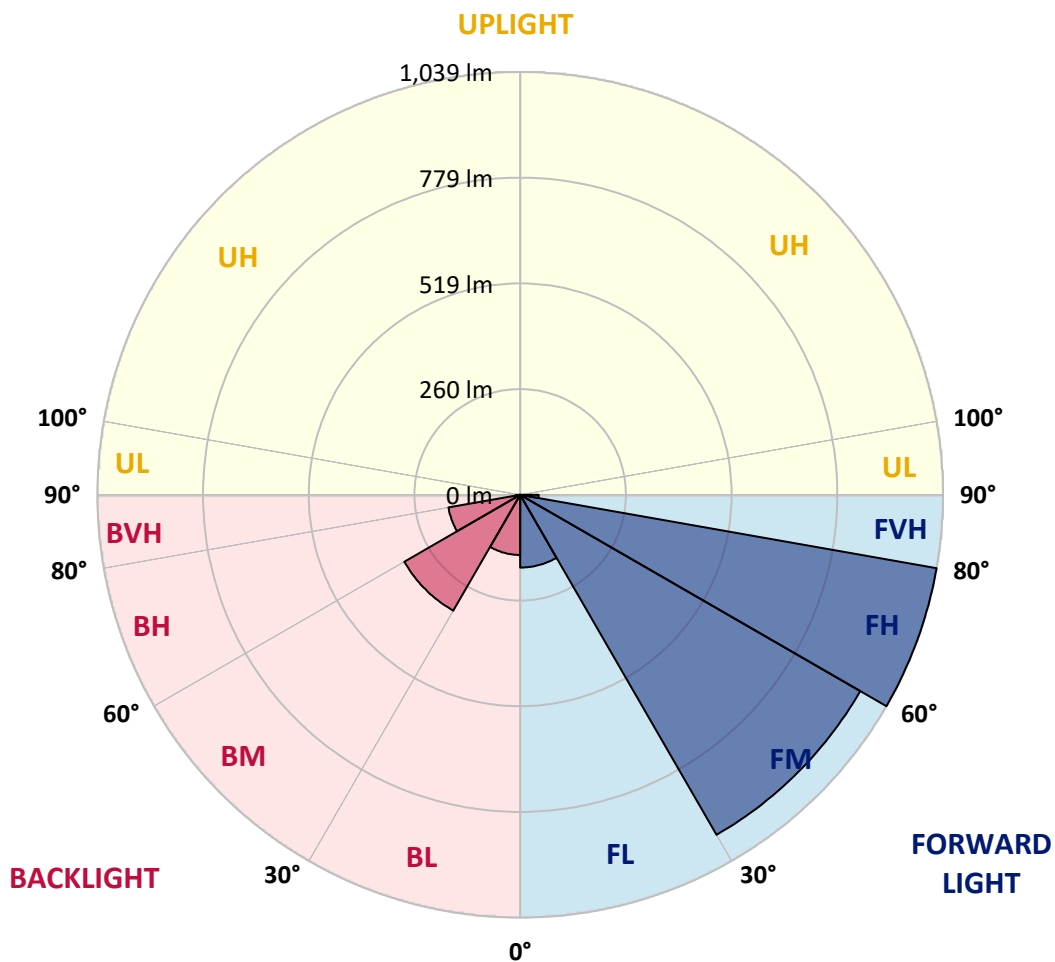
CATALOG NUMBER: ECM-E01-LED-E1-SL3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	178.8	6.2			
FM	(30°-60°)	964.8	33.3			
FH	(60°-80°)	1038.9	35.9			G1/1800
FVH	(80°-90°)	45.7	1.6			G1/100
BL	(0°-30°)	147.8	5.1	B1/500		
BM	(30°-60°)	328.8	11.4	B1/1000		
BH	(60°-80°)	179.0	6.2	B1/500		G1/500
BVH	(80°-90°)	10.1	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	307.0	307.0	307.0	307.0	307.0	307.0	307.0	307.0	307.0	307.0	307.0
2.5°	323.0	321.3	322.7	322.3	321.3	320.0	320.7	319.7	319.0	318.0	317.0
5°	344.0	343.0	342.3	341.3	340.7	339.7	339.0	337.3	335.0	333.3	332.0
7.5°	364.7	364.3	363.3	362.0	359.3	358.7	356.3	354.7	352.7	349.3	346.7
10°	389.0	388.7	387.0	385.0	382.0	379.0	376.3	372.3	368.3	365.3	363.0
12.5°	418.3	416.7	413.3	410.7	407.3	402.7	398.3	393.7	388.0	383.3	380.7
15°	447.7	445.7	443.0	439.3	434.3	428.0	421.7	414.7	406.0	400.0	396.3
17.5°	471.7	470.3	467.3	462.3	457.3	449.7	441.3	431.7	421.0	412.0	406.3
20°	489.0	487.7	483.0	477.0	470.3	461.7	452.7	442.0	429.3	418.3	412.0
22.5°	496.3	494.3	489.0	481.0	472.0	461.3	451.7	442.7	431.0	422.7	416.0
25°	498.7	496.3	489.3	479.3	467.7	454.0	443.0	436.0	429.0	426.0	423.7
27.5°	497.3	495.3	487.7	475.3	459.7	443.7	432.0	427.0	427.3	433.0	435.7
30°	492.7	490.3	483.3	469.7	453.0	435.7	425.3	423.7	431.3	445.7	456.3
32.5°	485.0	483.3	477.7	466.0	451.0	436.0	428.7	432.3	445.7	468.0	486.3
35°	483.0	482.7	480.0	473.7	462.7	453.0	450.0	460.3	482.3	513.0	536.3
37.5°	482.7	484.3	485.7	485.7	483.3	482.7	491.7	506.0	538.7	577.0	615.0
40°	489.3	492.3	499.0	507.7	516.0	528.0	546.3	573.3	607.3	654.0	701.3
42.5°	510.0	516.7	528.0	543.0	564.7	587.0	616.7	650.3	694.0	741.0	788.0
45°	550.3	560.0	568.3	592.0	620.7	647.0	685.7	730.0	778.0	837.0	887.7
47.5°	603.7	610.7	628.0	653.0	688.0	725.7	763.0	801.7	859.3	921.0	982.3
50°	657.0	662.3	680.7	710.0	756.0	797.3	840.0	878.3	928.0	993.3	1053.3
52.5°	696.7	704.0	720.0	748.7	800.3	847.3	896.0	938.3	994.3	1053.0	1115.7
55°	724.0	728.7	743.3	771.3	820.0	873.7	928.7	980.7	1047.3	1113.7	1176.0
57.5°	728.3	733.0	746.3	771.0	818.3	874.7	937.7	1001.3	1082.0	1169.7	1251.3
60°	723.3	727.0	738.7	759.0	803.7	865.3	940.3	1020.3	1119.7	1232.7	1349.3
62.5°	701.0	704.7	715.3	732.0	771.7	838.3	932.3	1048.3	1173.3	1315.3	1486.3
65°	659.0	661.3	671.3	684.7	724.7	792.3	896.0	1042.7	1215.7	1409.0	1630.3
67°	611.3	610.3	621.7	635.0	671.7	734.0	835.3	979.7	1182.0	1416.3	1690.7
67.5°	596.7	599.3	610.3	619.7	655.3	715.7	812.7	955.3	1153.3	1399.7	1689.7
70°	492.7	497.7	503.7	509.7	541.0	585.3	656.7	794.7	954.7	1188.0	1534.0
72.5°	338.0	328.0	332.3	330.3	340.0	368.0	417.7	539.0	666.0	866.7	1138.7
75°	171.3	182.3	181.0	189.3	203.0	220.7	243.7	289.0	388.7	506.7	704.7
77.5°	96.0	93.3	102.7	104.7	112.7	131.3	172.0	231.7	277.3	325.7	398.3
80°	43.7	48.3	51.3	46.7	48.3	52.3	68.0	106.7	179.3	273.0	314.0
82.5°	24.3	26.0	30.3	30.7	32.0	33.0	35.7	41.3	55.7	112.7	221.7
85°	15.3	16.0	20.3	22.3	23.3	23.3	23.3	24.7	28.3	33.3	57.3
87.5°	5.7	6.0	9.3	12.3	12.7	12.0	11.3	13.0	12.0	12.3	18.7
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°	67°	70°	75°	80°	85°	90°	95°	100°
0°	307.0	307.0	307.0	307.0	307.0	307.0	307.0	307.0	307.0	307.0	307.0
2.5°	316.3	315.0	313.7	313.3	312.3	311.7	310.0	308.7	307.3	306.3	305.3
5°	329.0	326.3	324.0	323.0	321.7	320.0	316.7	314.3	312.3	310.3	308.3
7.5°	343.3	340.0	336.7	335.3	333.3	330.3	326.7	324.0	320.7	317.7	315.0
10°	359.3	355.7	353.0	351.7	350.0	345.7	343.3	338.7	335.0	331.0	327.7
12.5°	376.7	375.0	371.3	370.0	368.3	365.3	362.0	358.0	353.3	349.0	345.0
15°	392.3	389.7	387.3	387.0	386.0	384.3	380.0	375.7	371.7	366.0	362.7
17.5°	402.0	401.0	400.7	400.3	399.7	398.7	396.7	392.0	388.3	383.7	379.0
20°	408.0	409.0	410.7	412.0	412.7	413.3	412.3	407.7	404.0	400.0	396.0
22.5°	414.3	417.0	421.3	423.3	425.7	429.0	428.3	425.3	423.3	418.7	415.7
25°	423.3	428.7	436.0	438.7	443.0	447.3	448.3	446.7	444.7	441.3	441.3
27.5°	438.7	446.3	456.0	461.7	466.0	472.0	474.0	473.0	473.3	471.3	476.0
30°	462.7	473.3	486.3	492.3	497.7	504.7	506.0	508.0	506.7	510.3	516.0
32.5°	499.0	512.3	525.7	531.3	536.0	543.3	547.7	546.3	551.0	553.3	561.3
35°	555.0	568.3	578.7	579.7	585.0	589.0	593.0	591.7	604.3	609.3	613.7
37.5°	632.3	643.7	650.0	647.7	641.3	649.0	654.3	662.3	670.3	679.3	663.3
40°	732.7	750.7	748.0	744.7	732.7	734.3	736.7	741.0	754.3	751.3	705.7
42.5°	828.0	846.3	843.3	839.7	823.7	815.3	821.7	829.3	836.7	808.3	740.3
45°	924.3	941.0	926.7	931.7	917.3	913.7	926.0	930.3	922.0	870.0	769.7
47.5°	1024.3	1042.3	1035.3	1030.3	1020.0	1019.0	1026.0	1032.7	999.7	914.7	791.7
50°	1101.0	1127.7	1124.0	1121.0	1109.7	1108.3	1125.0	1129.7	1070.3	962.0	813.7
52.5°	1160.0	1194.7	1201.3	1197.3	1194.7	1195.3	1243.3	1236.3	1154.3	1019.3	839.3
55°	1229.7	1265.7	1290.0	1295.0	1301.7	1311.3	1406.3	1396.0	1270.3	1102.0	866.3
57.5°	1322.0	1388.7	1425.3	1448.0	1466.3	1529.0	1649.7	1610.0	1431.0	1208.7	898.3
60°	1458.0	1590.3	1666.3	1724.0	1760.3	1869.7	2016.0	1870.0	1617.7	1336.7	940.3
62.5°	1676.3	1892.3	2037.7	2070.3	2085.7	2189.7	2294.3	2069.0	1752.3	1421.3	947.0
65°	1888.0	2158.0	2327.7	2346.7	2335.3	2363.3	2392.7	2075.0	1721.0	1381.3	869.0
67°	1962.7	2220.7	2399.0	2422.0	2388.7	2379.7	2335.0	1965.7	1604.0	1258.7	760.3
67.5°	1958.7	2213.3	2398.3	2421.7	2388.7	2374.3	2308.7	1921.7	1558.0	1228.7	739.3
70°	1805.3	2050.0	2256.0	2299.7	2281.3	2243.3	2068.7	1627.7	1291.0	1008.0	570.0
72.5°	1465.7	1730.0	1893.3	1941.7	1954.7	1857.0	1540.7	1139.3	930.7	720.3	413.3
75°	984.0	1246.7	1380.3	1356.0	1277.0	1110.7	813.3	601.0	510.0	419.0	255.7
77.5°	558.0	760.7	750.3	708.3	641.7	475.0	230.7	125.0	119.3	139.3	108.3
80°	372.7	469.0	501.0	517.3	513.7	351.3	95.3	48.3	41.7	41.7	41.0
82.5°	311.0	405.3	459.0	473.3	441.0	267.0	57.0	31.7	25.3	28.3	31.7
85°	131.0	204.3	270.3	260.0	206.7	104.0	29.0	16.7	16.7	22.0	27.7
87.5°	31.7	47.0	66.3	64.3	51.7	24.0	14.7	10.3	10.3	17.0	24.0
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):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	307.0	307.0	307.0	307.0	307.0	307.0	307.0	307.0	307.0	307.0	307.0
2.5°	305.0	303.7	303.7	302.3	301.7	301.0	300.7	301.0	300.0	299.0	299.3
5°	306.7	304.7	303.7	301.3	300.0	298.7	297.7	297.3	295.7	294.7	294.7
7.5°	312.3	309.7	307.7	305.0	302.3	300.3	298.7	297.7	295.3	293.7	293.3
10°	324.0	320.3	317.3	313.3	309.7	307.0	304.0	302.3	299.7	298.0	297.3
12.5°	341.3	336.0	331.3	325.3	321.0	317.0	315.3	312.7	311.7	310.7	311.0
15°	357.7	351.3	347.0	342.3	337.3	335.0	331.7	331.3	331.7	330.0	330.0
17.5°	374.3	369.3	364.3	362.7	358.0	356.3	354.0	352.7	349.7	346.7	343.0
20°	391.7	389.0	387.0	385.0	384.0	380.0	374.0	367.0	357.3	348.7	341.3
22.5°	414.0	412.3	412.7	411.0	405.7	395.7	382.0	367.3	351.7	337.7	326.7
25°	442.3	444.0	442.0	433.7	418.3	398.0	377.0	356.3	335.7	319.0	304.0
27.5°	478.3	477.0	467.7	446.3	420.0	391.0	364.0	339.3	314.7	295.3	276.7
30°	517.7	508.0	483.7	450.3	413.3	378.3	345.0	316.3	287.7	265.0	244.0
32.5°	557.3	529.7	490.3	445.7	401.7	360.3	323.0	289.3	256.3	231.0	206.7
35°	587.3	543.0	489.3	435.7	384.0	336.7	293.3	251.7	213.3	183.0	158.3
37.5°	615.0	550.3	482.7	420.3	359.7	305.3	251.3	206.3	167.7	137.3	116.0
40°	632.0	549.7	469.7	395.0	326.0	259.3	200.7	154.3	120.3	98.0	86.3
42.5°	642.0	542.7	447.3	361.3	279.7	207.7	148.0	106.3	85.7	76.0	70.7
45°	647.0	527.7	419.7	316.3	223.7	148.3	102.0	76.7	68.3	65.7	64.3
47.5°	644.0	506.7	380.0	265.7	166.7	101.7	73.0	64.7	62.0	60.7	60.3
50°	637.0	479.3	338.3	210.7	118.3	73.0	61.3	59.0	58.0	57.7	57.0
52.5°	627.0	447.0	290.7	163.3	84.0	60.7	57.3	56.3	55.7	54.7	54.3
55°	610.3	407.0	242.0	120.3	67.3	57.3	55.7	55.3	54.0	53.0	52.3
57.5°	590.3	364.3	196.0	94.3	62.0	56.0	55.0	54.7	53.3	52.0	50.7
60°	580.3	334.3	161.3	81.7	61.0	56.7	56.0	55.3	53.7	51.7	50.0
62.5°	555.7	302.0	139.0	77.7	62.3	59.0	58.7	57.3	55.0	53.0	50.3
65°	492.0	256.3	118.3	73.7	64.3	62.7	63.3	61.7	59.0	55.7	51.3
67°	415.7	208.3	100.0	70.7	66.7	67.7	68.7	67.7	63.3	58.3	52.7
67.5°	395.0	194.0	95.0	69.7	67.3	68.7	70.3	69.3	64.7	59.0	53.3
70°	297.0	139.0	75.3	66.0	69.7	73.3	76.7	76.3	71.7	64.7	55.7
72.5°	205.3	95.0	61.0	61.7	67.7	74.3	78.7	80.7	76.0	67.7	57.0
75°	123.7	60.7	51.3	55.7	61.7	68.3	75.3	76.0	70.7	62.3	53.3
77.5°	60.7	43.7	42.3	44.0	49.7	55.3	58.3	54.7	51.3	45.7	42.3
80°	36.7	34.3	33.7	37.3	40.7	39.7	37.3	34.3	32.7	31.3	30.0
82.5°	30.7	31.0	31.7	32.3	31.7	28.0	24.0	22.0	20.7	20.7	21.0
85°	31.3	32.0	29.3	27.0	24.0	20.0	16.3	14.0	14.3	14.7	14.7
87.5°	24.3	23.3	20.7	17.0	13.7	10.0	8.0	6.7	7.3	7.0	7.7
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-E01-LED-E1-SL3

CANDELA DISTRIBUTION (continued):

	160°	165°	170°	175°	180°
0°	307.0	307.0	307.0	307.0	307.0
2.5°	299.3	299.0	299.3	299.3	299.7
5°	294.0	293.3	293.3	293.7	293.7
7.5°	292.7	292.0	292.0	292.3	292.0
10°	297.3	297.0	297.7	297.3	297.3
12.5°	311.3	311.3	312.7	313.3	312.7
15°	330.3	329.7	330.7	331.0	331.3
17.5°	341.0	338.0	337.0	337.7	336.3
20°	335.0	330.0	328.0	327.7	325.3
22.5°	318.0	310.7	307.7	306.3	303.7
25°	294.0	285.3	281.3	278.0	276.3
27.5°	265.3	254.7	249.0	246.3	245.3
30°	229.3	219.0	210.7	206.3	205.0
32.5°	189.3	174.3	165.7	160.3	156.7
35°	141.3	127.0	120.7	116.7	112.0
37.5°	102.7	94.0	88.7	86.0	85.0
40°	79.3	75.0	72.3	72.0	71.7
42.5°	68.7	66.7	66.3	65.7	65.0
45°	63.3	62.7	63.0	62.0	61.3
47.5°	59.7	59.3	59.3	58.7	58.3
50°	56.7	56.7	56.3	56.0	56.0
52.5°	54.0	54.3	54.3	53.7	53.7
55°	51.7	51.7	52.0	51.7	51.7
57.5°	50.0	49.7	50.0	50.0	50.0
60°	49.0	48.3	48.0	48.3	48.3
62.5°	48.0	47.0	46.7	46.7	47.0
65°	48.0	46.3	45.7	45.7	45.3
67°	48.3	45.7	44.3	43.7	43.3
67.5°	48.3	45.3	43.7	43.3	43.0
70°	48.3	44.0	41.7	40.0	40.0
72.5°	48.0	42.7	39.0	37.3	36.7
75°	45.7	40.3	37.0	35.0	34.3
77.5°	38.3	35.0	33.3	31.7	31.3
80°	29.0	27.3	26.0	22.3	20.7
82.5°	20.7	19.7	17.3	16.0	15.0
85°	14.7	13.7	12.7	11.3	11.3
87.5°	8.0	7.7	7.3	6.7	6.0
90°	0.0	0.0	0.0	0.0	0.0

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