

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: P162435

Luminaire Tested: **ECM-E02-LED-E1-SL3-HSS-8030**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P162435  
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-E02-LED-E1-SL3-HSS-8030  
Description: EPIC CLASSICAL MEDIUM DECORATIVE LED LUMINAIRE  
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD  
Light Source: (42) 3000K CCT, 80 CRI LEDs  
Ballast/Driver: -

**Summary**

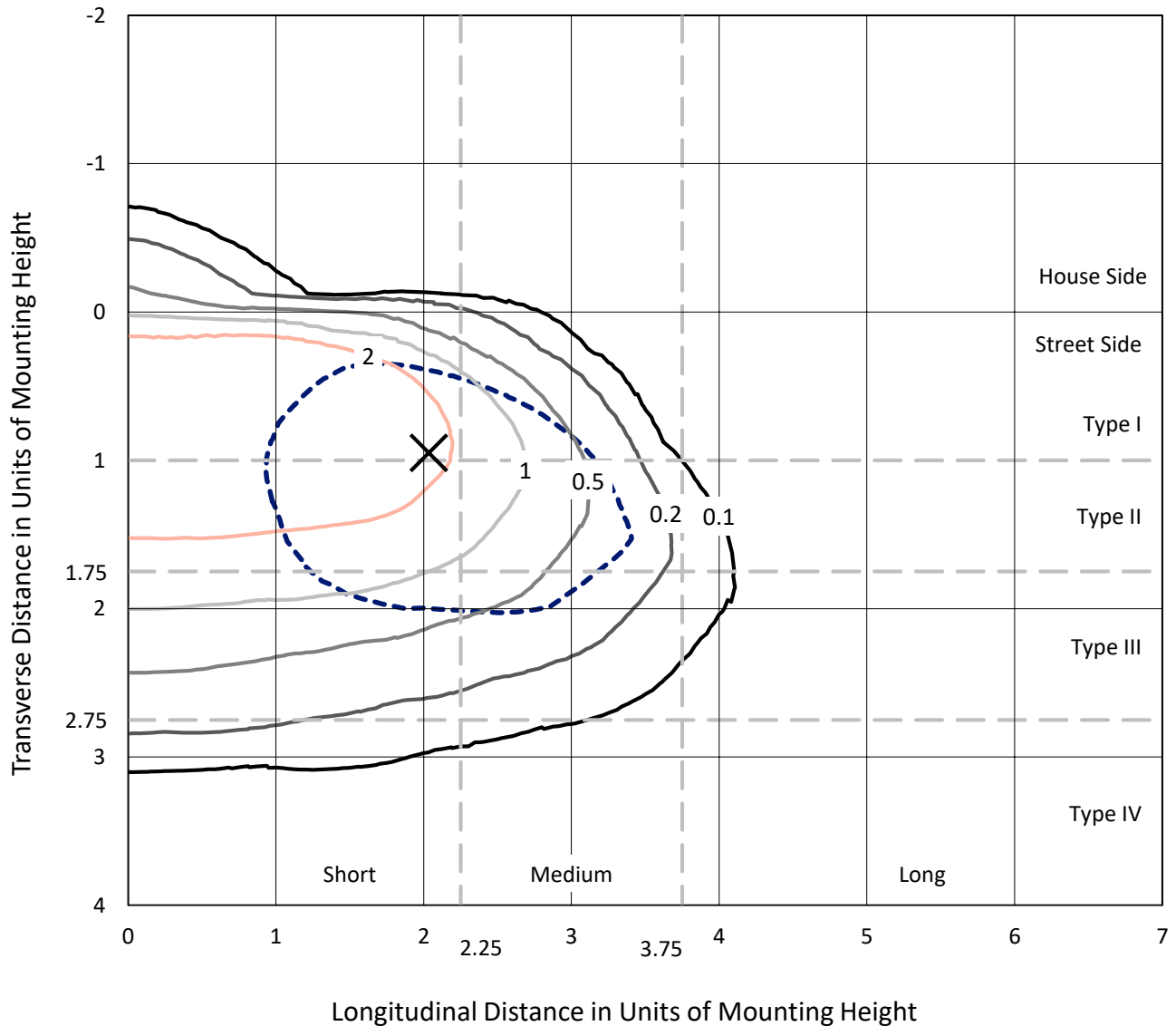
Lumens per Lamp: N/A  
Luminaire Lumens: 2782.6 lumens  
Efficiency: N/A  
Efficacy: 53.4 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 1' x H: 0.1')  
IES Classification: Type III - Short - Non-Cutoff  
BUG Rating: B0 - U0 - G1  
  
Input Watts (W): 52.1  
Input Voltage (V): NR  
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

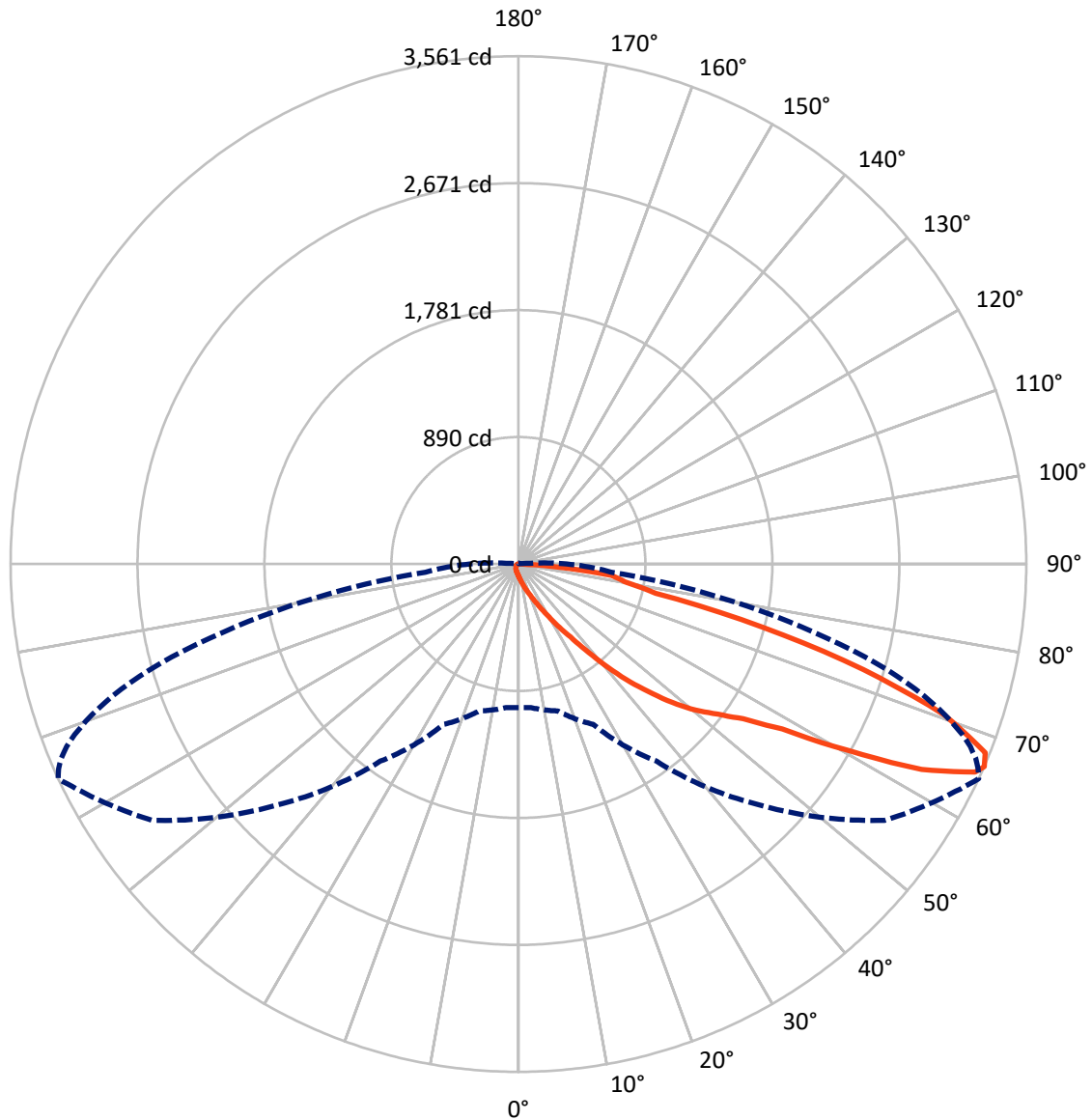
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 4.6 fc  
 Type III - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



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

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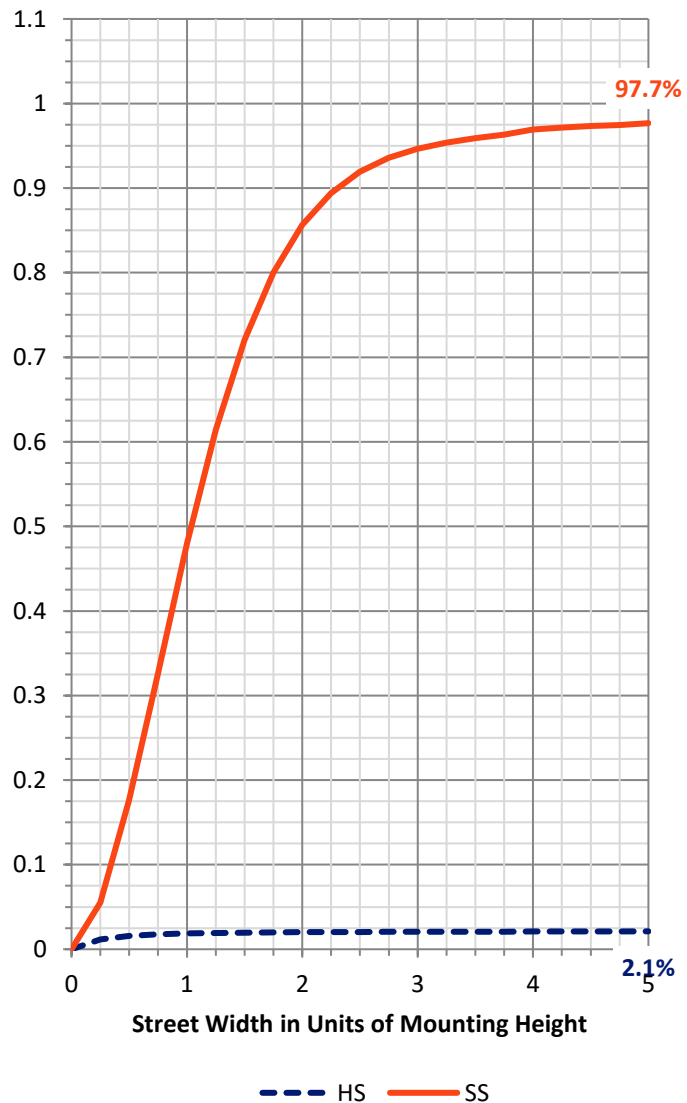
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	60.3	0.0	60.3
	% Fixture	2.2	0.0	2.2
<b>Street Side</b>	Lumens	2722.2	0.0	2722.2
	% Fixture	97.8	0.0	97.8
<b>Total</b>	Lumens	2782.6	0.0	2782.6
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	9.4	0.3
10°-20°	39.9	1.4
20°-30°	86.0	3.1
30°-40°	183.6	6.6
40°-50°	406.1	14.6
50°-60°	688.2	24.7
60°-70°	918.3	33.0
70°-80°	404.5	14.5
80°-90°	46.6	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°	2782.6	100.0
0°-180°	2782.6	100.0



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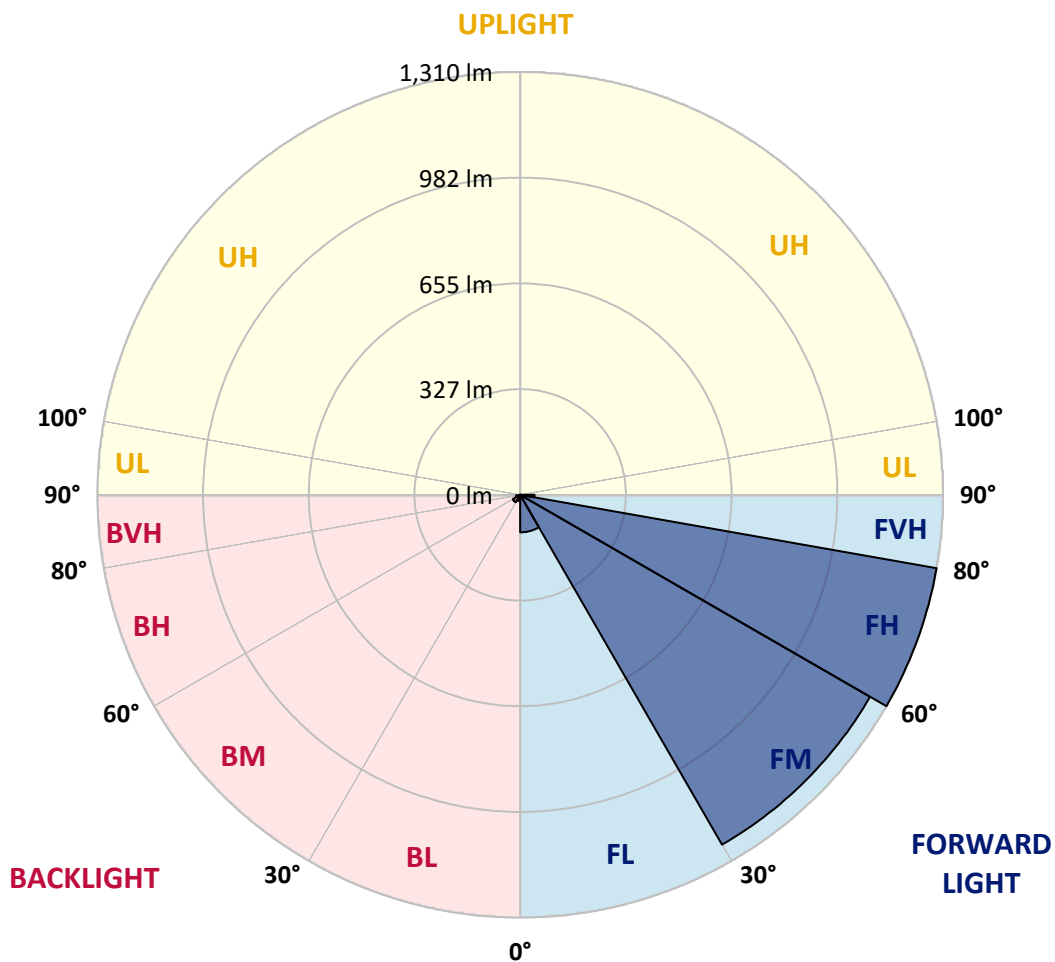
CATALOG NUMBER: ECM-E02-LED-E1-SL3-HSS-8030

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	116.2	4.2			
FM	(30°-60°)	1251.4	45.0			
FH	(60°-80°)	1309.9	47.1			G1/1800
FVH	(80°-90°)	44.7	1.6			G1/100
BL	(0°-30°)	19.0	0.7	B0/110		
BM	(30°-60°)	26.5	1.0	B0/220		
BH	(60°-80°)	12.9	0.5	B0/110		G0/110
BVH	(80°-90°)	1.9	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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	67°	68°
0°	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0
2.5°	105.9	105.4	103.2	103.2	100.0	97.9	95.2	92.6	92.6	92.0	91.5
5°	140.2	137.0	136.4	130.5	125.7	118.8	112.4	103.8	102.7	101.6	101.1
7.5°	178.1	177.6	172.8	165.8	156.2	143.4	130.5	116.6	114.5	113.4	111.3
10°	227.4	224.7	218.3	206.5	192.0	174.9	154.1	132.1	129.5	127.3	126.3
12.5°	274.4	269.6	265.9	250.9	232.7	207.6	182.4	150.8	148.7	146.1	141.8
15°	318.3	314.0	307.6	294.8	274.4	242.8	213.5	174.9	169.6	165.8	162.6
17.5°	352.6	349.9	342.4	327.9	306.0	278.2	242.8	199.5	195.2	190.5	184.6
20°	385.1	381.4	369.7	349.9	326.3	304.9	277.6	231.6	225.7	219.9	213.5
22.5°	416.2	412.4	393.2	360.6	335.4	326.3	316.7	268.0	258.9	254.1	247.7
25°	459.5	451.5	421.5	369.7	336.0	342.9	359.5	315.1	306.5	299.6	289.4
27.5°	517.8	507.1	460.1	383.0	338.1	361.1	408.7	372.3	363.3	355.2	344.0
30°	583.6	576.7	520.5	415.1	353.6	387.8	463.8	445.1	434.4	424.8	411.4
32.5°	650.0	640.4	584.7	476.1	395.3	439.7	532.8	529.6	515.7	506.6	492.2
35°	708.3	703.4	662.3	576.2	490.5	530.7	624.8	628.5	616.3	606.7	590.6
37.5°	747.9	747.9	739.8	683.7	641.9	671.9	760.2	760.7	748.4	726.5	718.5
40°	768.2	774.1	803.0	813.7	811.5	850.1	937.8	928.2	918.0	906.7	880.0
42.5°	809.9	815.3	876.8	950.6	998.8	1049.6	1110.0	1106.8	1094.5	1074.2	1049.6
45°	880.6	887.5	960.8	1077.9	1176.9	1249.1	1287.6	1272.7	1260.4	1241.1	1228.2
47.5°	970.4	983.8	1066.7	1211.7	1331.0	1450.3	1490.4	1450.8	1440.1	1425.1	1404.2
50°	1066.2	1079.0	1167.3	1333.1	1467.9	1610.2	1677.1	1610.2	1594.7	1589.9	1566.3
52.5°	1149.1	1159.8	1244.8	1426.7	1572.7	1739.7	1837.0	1748.7	1737.6	1721.5	1704.4
55°	1198.3	1206.9	1286.6	1471.6	1643.9	1856.3	1991.6	1914.1	1897.5	1891.0	1866.5
57.5°	1214.9	1223.4	1295.1	1477.5	1682.4	1962.7	2179.4	2182.1	2162.3	2139.3	2131.8
60°	1214.9	1224.5	1284.9	1463.1	1719.9	2076.2	2429.8	2652.8	2610.1	2605.8	2578.5
62.5°	1164.6	1173.7	1234.7	1418.7	1770.2	2229.1	2778.5	3172.3	3160.0	3132.2	3087.2
65°	1055.4	1060.8	1120.7	1305.3	1750.9	2369.9	3080.8	3517.9	3498.1	3443.5	3385.8
66°	1006.3	1010.5	1066.7	1240.6	1687.8	2389.1	3134.3	3561.2	3528.6	3482.5	3417.3
67.5°	935.1	942.6	982.2	1120.2	1536.4	2322.2	3100.6	3530.7	3502.3	3446.7	3381.5
70°	624.3	618.9	758.6	859.7	1170.5	1892.1	2781.8	3170.1	3170.7	3144.5	3118.3
72.5°	296.4	299.6	340.2	529.1	766.1	1264.1	2214.2	2530.3	2566.7	2519.7	2487.0
75°	212.9	217.7	242.3	323.6	456.8	758.6	1435.3	1769.6	1770.7	1687.3	1612.9
77.5°	62.1	64.7	90.9	199.5	342.4	512.0	824.4	983.8	960.8	900.9	844.7
80°	25.7	25.7	26.7	63.6	137.5	347.7	576.7	757.5	754.8	731.8	698.7
82.5°	9.6	10.2	12.8	26.2	32.6	85.6	384.6	657.5	655.8	623.2	599.7
85°	1.1	1.1	3.2	11.3	12.3	16.0	77.0	289.9	288.4	289.9	254.1
87.5°	0.0	0.0	0.6	1.1	1.6	2.1	3.2	11.3	12.3	11.8	10.7
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):**

	69°	70°	71°	72°	73°	74°	75°	76°	77°	78°	79°
0°	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0
2.5°	91.5	90.4	90.4	89.9	89.9	89.9	89.4	88.8	88.8	88.3	87.7
5°	100.0	99.0	98.4	97.3	96.8	96.3	95.2	94.7	93.6	93.1	92.6
7.5°	110.2	108.1	107.5	105.9	104.3	103.2	102.2	100.5	99.5	97.3	96.8
10°	123.1	120.4	118.2	116.1	114.5	111.8	110.2	108.1	105.9	104.3	102.7
12.5°	139.6	135.9	132.7	130.5	126.8	123.6	120.4	118.8	114.5	112.4	109.7
15°	157.8	153.6	149.8	145.5	142.9	137.5	133.2	128.4	126.3	122.5	118.2
17.5°	181.3	174.4	168.5	164.2	158.9	153.6	148.7	143.9	137.5	133.2	127.8
20°	206.5	200.6	192.6	185.1	178.7	172.2	165.3	158.9	153.0	146.1	139.6
22.5°	238.6	230.0	220.4	212.9	204.4	197.4	187.8	179.2	169.6	160.5	153.0
25°	279.2	268.0	258.9	248.2	238.1	227.4	215.6	204.9	192.6	184.0	171.2
27.5°	329.6	318.9	306.5	292.6	282.5	266.4	250.9	237.5	223.1	209.7	195.2
30°	393.7	378.2	365.4	352.0	331.7	316.2	298.0	279.8	260.0	246.6	224.7
32.5°	470.8	454.2	434.9	415.6	397.0	375.0	352.6	330.1	308.1	283.5	261.1
35°	564.9	545.1	523.2	502.3	473.4	449.9	421.5	390.5	365.9	337.5	309.2
37.5°	689.5	656.9	637.7	615.7	576.7	544.6	513.0	482.0	438.7	408.7	368.6
40°	845.8	826.5	794.9	759.6	724.3	682.1	639.3	598.1	547.8	506.1	459.5
42.5°	1029.3	1000.9	968.8	918.0	882.1	832.4	783.7	729.2	667.6	614.1	559.6
45°	1201.5	1167.8	1143.2	1092.4	1054.9	996.1	937.2	879.4	808.3	739.3	676.2
47.5°	1387.7	1359.8	1319.2	1278.0	1240.0	1173.7	1110.0	1040.0	965.1	883.2	801.3
50°	1551.4	1529.4	1501.6	1451.9	1409.6	1354.0	1279.1	1202.6	1107.9	1026.6	933.5
52.5°	1690.5	1673.4	1634.3	1599.0	1561.0	1508.5	1441.7	1368.4	1266.2	1176.9	1071.0
55°	1854.7	1842.4	1808.2	1786.2	1752.5	1702.2	1639.6	1571.7	1463.6	1366.3	1246.5
57.5°	2123.8	2114.1	2084.2	2075.1	2042.0	1998.1	1921.0	1848.3	1722.0	1601.1	1464.2
60°	2569.4	2550.1	2506.3	2483.8	2413.7	2354.8	2254.9	2154.8	2002.3	1848.3	1683.5
62.5°	3046.6	2992.6	2909.1	2837.4	2737.9	2635.7	2502.0	2349.0	2170.3	1987.4	1798.0
65°	3303.9	3211.9	3106.5	2992.6	2863.6	2713.3	2544.8	2361.3	2169.2	1976.1	1776.0
66°	3333.3	3229.5	3117.7	2990.9	2847.6	2687.6	2516.4	2323.8	2124.3	1936.0	1735.9
67.5°	3296.4	3187.8	3069.6	2928.9	2773.7	2607.9	2428.2	2228.1	2036.0	1845.1	1650.3
70°	3038.0	2929.9	2824.6	2676.4	2511.1	2344.2	2174.1	1950.5	1768.6	1593.1	1419.8
72.5°	2426.0	2352.7	2248.4	2121.6	1960.6	1764.8	1623.1	1423.0	1265.1	1095.1	960.8
75°	1516.1	1412.8	1283.9	1122.3	999.3	840.4	757.5	605.6	515.7	437.1	361.1
77.5°	775.2	697.6	607.2	516.2	429.0	342.4	264.8	187.3	126.3	87.7	65.3
80°	640.4	571.9	497.0	414.1	337.0	261.6	188.3	128.4	81.9	53.5	41.7
82.5°	529.1	471.3	404.4	327.4	260.5	205.4	142.9	93.1	57.8	37.5	29.4
85°	225.2	204.4	157.8	125.2	94.1	69.5	48.7	32.6	23.0	18.7	17.1
87.5°	9.6	10.7	10.2	8.0	5.9	5.9	5.3	4.3	4.3	4.3	4.3
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):**

	80°	81°	82°	83°	84°	85°	95°	105°	115°	125°	135°
0°	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0
2.5°	87.7	87.2	86.6	86.6	86.1	85.6	82.4	79.7	76.5	74.4	72.2
5°	91.5	90.9	89.9	89.4	88.3	87.7	80.8	74.9	70.1	66.3	63.6
7.5°	95.2	94.7	93.1	91.5	90.9	89.9	78.7	71.2	64.7	60.4	57.8
10°	100.0	98.4	96.8	94.7	93.1	91.5	76.5	66.8	59.9	56.2	53.5
12.5°	107.0	104.3	101.6	99.0	96.8	94.1	75.5	63.1	56.2	51.9	49.2
15°	115.0	111.3	108.1	104.8	101.1	98.4	73.3	59.9	52.9	48.7	45.5
17.5°	122.5	118.2	113.4	108.6	104.8	101.1	71.2	56.7	49.7	45.5	42.3
20°	133.2	126.8	120.9	115.0	109.7	104.8	67.9	53.5	47.1	42.3	39.0
22.5°	145.0	137.5	130.0	122.0	115.0	108.6	65.3	50.8	44.4	39.6	35.8
25°	160.0	150.8	140.7	130.5	122.5	113.9	62.6	48.2	41.7	36.9	33.1
27.5°	180.8	168.0	156.8	143.9	131.6	122.0	60.4	46.0	39.0	34.2	30.5
30°	209.1	190.5	172.8	158.9	144.4	130.5	58.3	43.3	36.9	31.6	27.3
32.5°	240.7	218.8	198.5	177.6	159.4	143.4	56.2	41.2	34.2	28.9	25.2
35°	279.8	252.0	224.7	200.6	178.7	157.3	54.0	39.0	32.1	26.2	22.5
37.5°	336.0	301.2	265.4	234.3	205.9	177.6	52.4	36.9	29.4	23.5	19.8
40°	413.0	368.0	324.2	281.9	245.0	209.7	50.3	34.8	27.3	21.4	17.7
42.5°	496.4	441.9	384.1	336.5	285.7	241.3	48.2	32.6	25.2	19.2	15.5
45°	600.2	532.3	462.2	397.5	335.4	278.2	46.0	30.5	22.5	17.1	13.4
47.5°	713.6	627.0	547.8	466.5	392.7	324.2	43.3	28.9	20.3	15.0	11.8
50°	830.3	738.8	638.7	546.2	458.5	370.2	40.7	26.2	18.2	13.4	9.6
52.5°	956.0	847.9	745.8	630.7	528.6	430.7	38.0	24.1	16.6	11.8	8.0
55°	1115.9	995.0	875.2	746.3	623.2	500.7	35.3	21.4	14.5	10.2	6.4
57.5°	1317.1	1173.7	1026.6	881.1	731.8	592.7	33.1	18.7	12.3	8.6	5.3
60°	1507.0	1339.5	1161.4	993.9	825.4	663.3	29.9	16.6	10.7	7.0	5.3
62.5°	1605.4	1414.4	1222.4	1037.8	858.1	688.5	26.7	13.9	9.1	5.9	4.8
65°	1581.3	1386.6	1200.4	1014.3	838.3	672.4	23.5	12.3	8.0	5.3	4.8
66°	1546.5	1354.0	1166.7	989.7	821.7	655.3	21.9	11.8	7.5	5.3	4.3
67.5°	1470.6	1284.4	1105.7	941.0	776.2	622.7	19.8	10.7	7.0	4.8	4.3
70°	1256.1	1087.0	944.2	797.6	663.3	524.8	16.0	9.1	5.9	4.3	4.3
72.5°	831.3	716.3	621.1	534.4	446.7	346.7	13.4	7.5	4.8	4.3	3.8
75°	313.5	283.5	243.4	218.8	191.0	167.4	10.7	4.8	3.8	3.8	3.8
77.5°	55.6	51.4	45.5	41.7	38.5	35.3	8.6	3.2	3.2	3.8	3.8
80°	37.5	34.8	31.6	28.9	26.7	24.1	5.9	2.7	3.2	3.2	3.8
82.5°	26.7	25.2	23.5	21.4	19.8	17.7	3.8	2.7	3.2	3.2	3.2
85°	16.0	15.0	13.9	12.8	11.3	10.7	2.7	2.7	2.7	3.2	3.2
87.5°	4.3	3.8	4.3	4.3	3.2	3.8	2.1	2.1	2.1	2.7	2.7
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-E02-LED-E1-SL3-HSS-8030

**CANDELA DISTRIBUTION (continued):**

	145°	155°	165°	175°	180°
0°	84.0	84.0	84.0	84.0	84.0
2.5°	71.2	71.2	70.1	71.7	71.7
5°	61.5	61.5	61.0	61.5	61.5
7.5°	56.2	55.6	55.6	55.6	56.2
10°	51.4	50.8	50.8	50.8	50.8
12.5°	47.1	46.5	46.0	46.5	46.5
15°	43.3	42.3	42.3	42.3	42.3
17.5°	40.1	39.0	38.5	38.5	38.5
20°	36.9	35.3	35.3	35.3	35.3
22.5°	33.7	32.1	32.1	32.1	32.1
25°	30.5	28.9	28.9	28.9	28.9
27.5°	27.8	26.2	26.2	26.2	26.2
30°	24.6	23.5	23.5	24.1	23.5
32.5°	22.5	20.9	20.9	21.4	21.4
35°	19.8	18.7	18.7	18.7	18.7
37.5°	17.1	16.0	16.0	16.0	16.0
40°	15.0	13.9	13.4	13.9	13.9
42.5°	12.8	11.8	11.3	11.3	11.3
45°	11.3	9.6	9.1	9.6	9.6
47.5°	9.1	8.0	8.0	8.6	8.6
50°	7.0	7.0	7.5	8.6	8.6
52.5°	6.4	6.4	7.5	8.6	8.6
55°	5.9	6.4	7.5	8.0	8.6
57.5°	5.3	6.4	7.5	8.0	8.0
60°	5.3	5.9	7.0	8.0	8.0
62.5°	4.8	5.3	6.4	7.5	7.5
65°	4.8	5.3	6.4	7.5	7.5
66°	4.8	5.3	6.4	7.5	7.5
67.5°	4.8	5.3	6.4	7.5	7.5
70°	4.8	5.3	6.4	7.0	7.0
72.5°	4.3	4.8	5.9	7.0	7.0
75°	4.3	4.8	5.9	7.0	7.0
77.5°	4.3	4.8	5.9	7.0	7.0
80°	4.3	4.8	5.9	6.4	7.0
82.5°	3.8	4.8	5.3	6.4	6.4
85°	3.8	4.3	5.3	5.9	6.4
87.5°	3.2	3.8	4.3	5.3	5.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)