

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: P162447

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

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P162447
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
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) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4945.4 lumens
Efficiency: N/A
Efficacy: 65.8 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

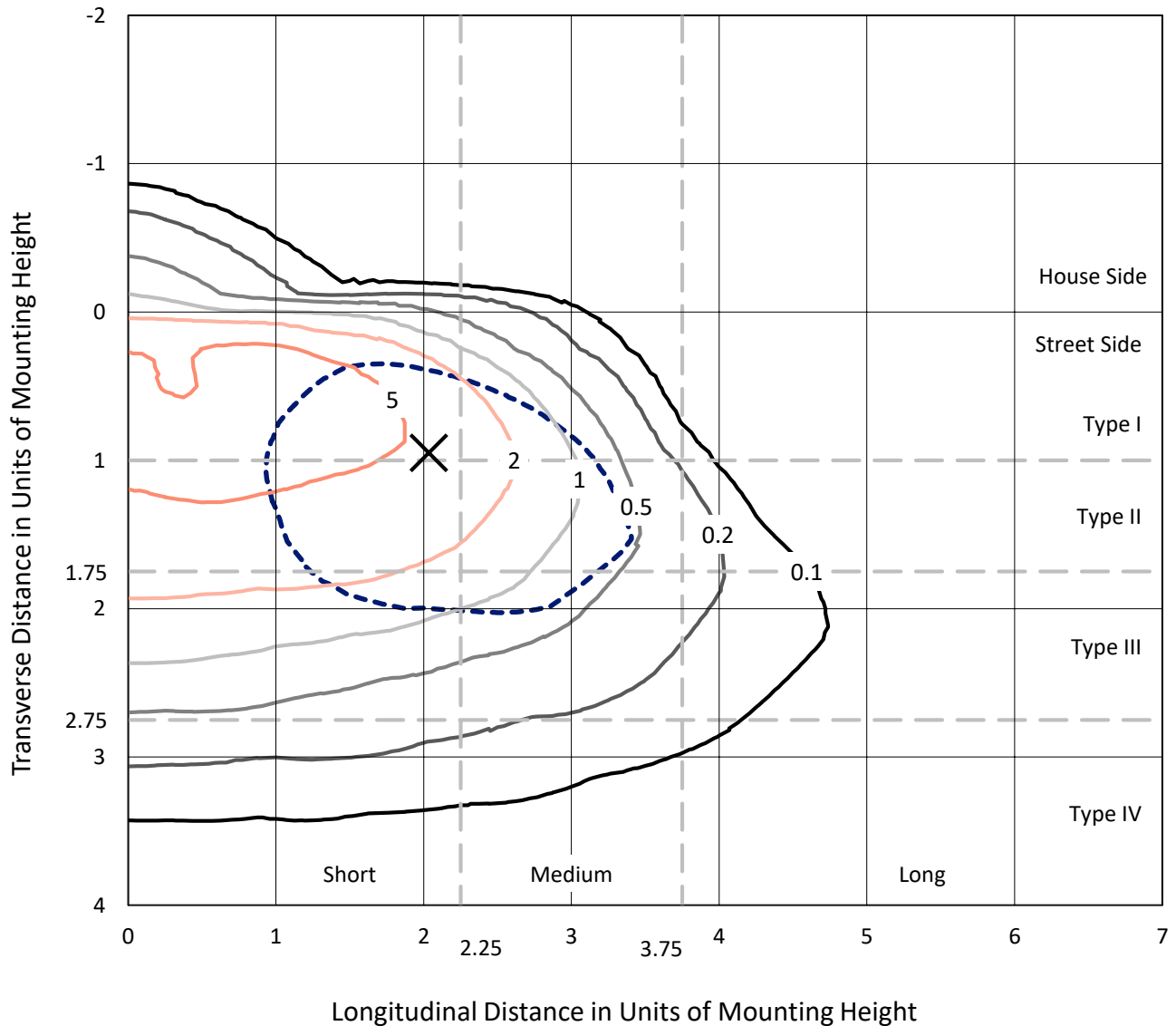


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

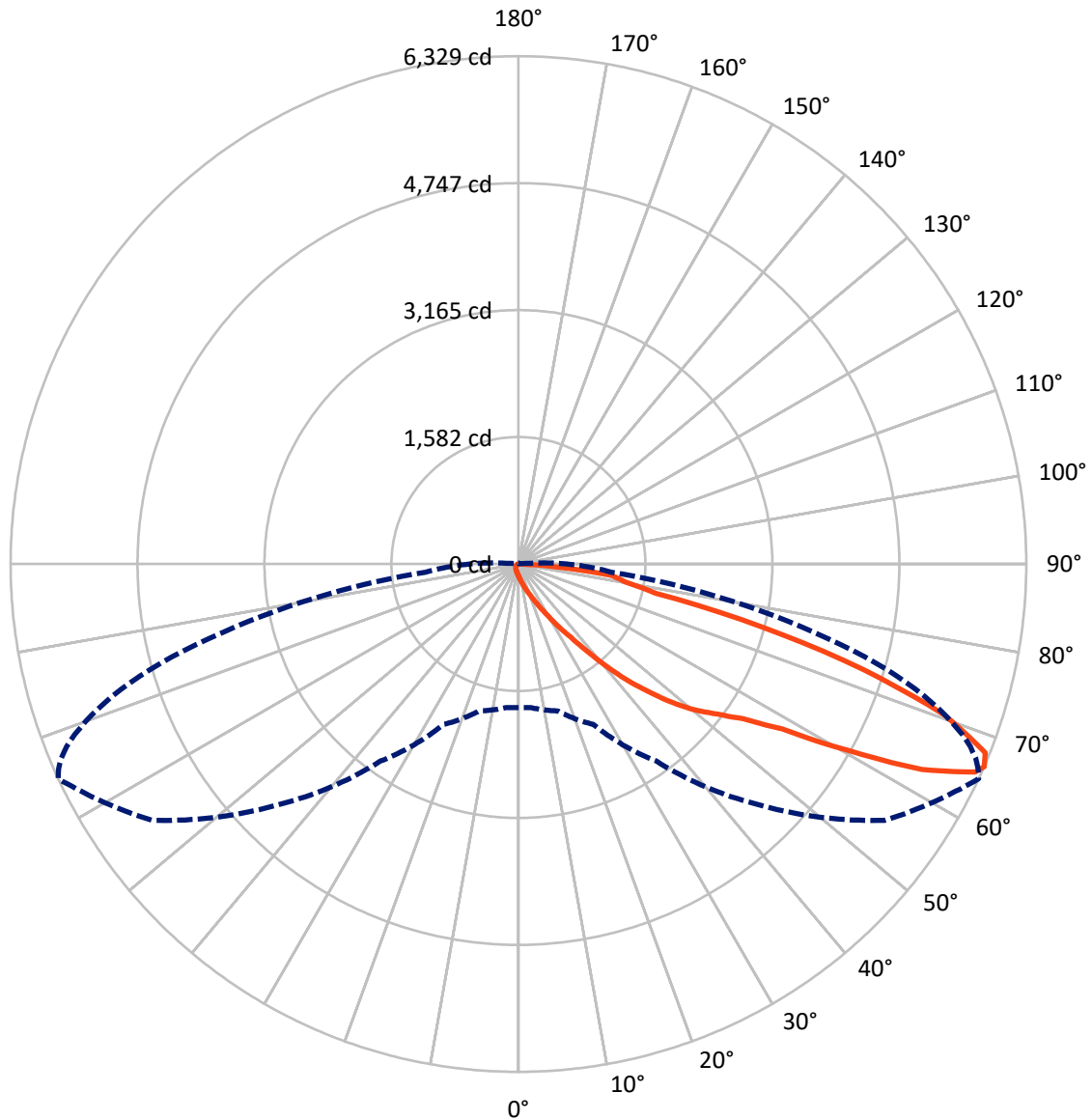


Based on 10 foot mounting height. Maximum calculated value = 8.2 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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

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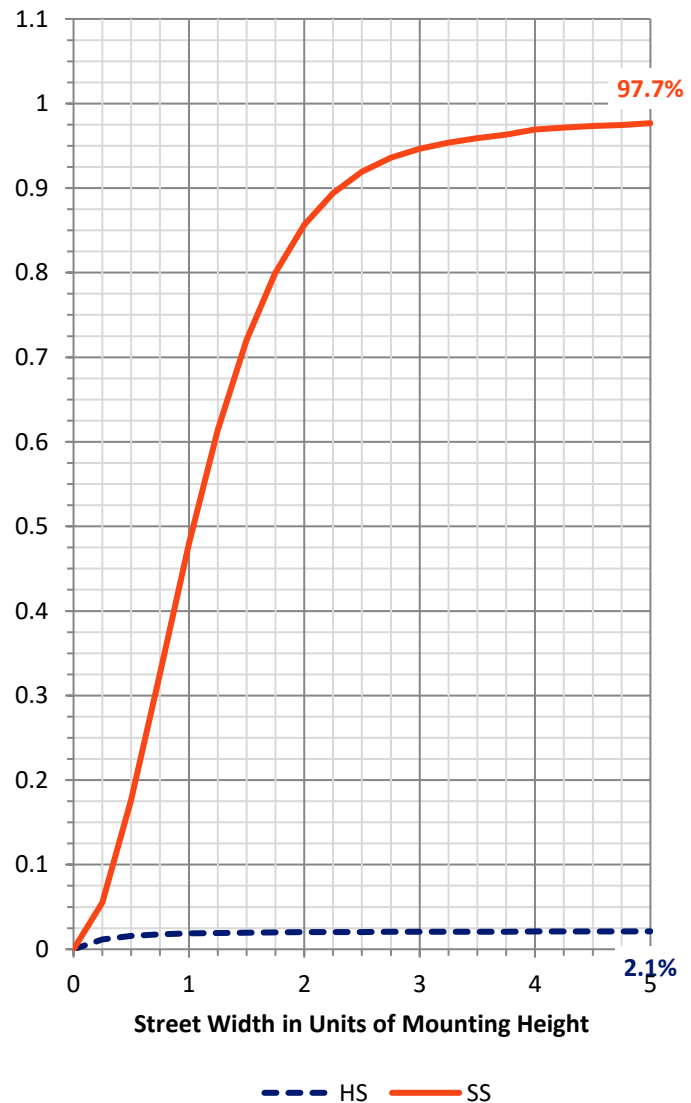
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	107.2	0.0	107.2
	% Fixture	2.2	0.0	2.2
Street Side	Lumens	4838.2	0.0	4838.2
	% Fixture	97.8	0.0	97.8
Total	Lumens	4945.4	0.0	4945.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	16.7	0.3
10°-20°	70.9	1.4
20°-30°	152.8	3.1
30°-40°	326.3	6.6
40°-50°	721.7	14.6
50°-60°	1223.1	24.7
60°-70°	1632.1	33.0
70°-80°	718.9	14.5
80°-90°	82.8	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°	4945.4	100.0
0°-180°	4945.4	100.0

Coefficient of Utilization



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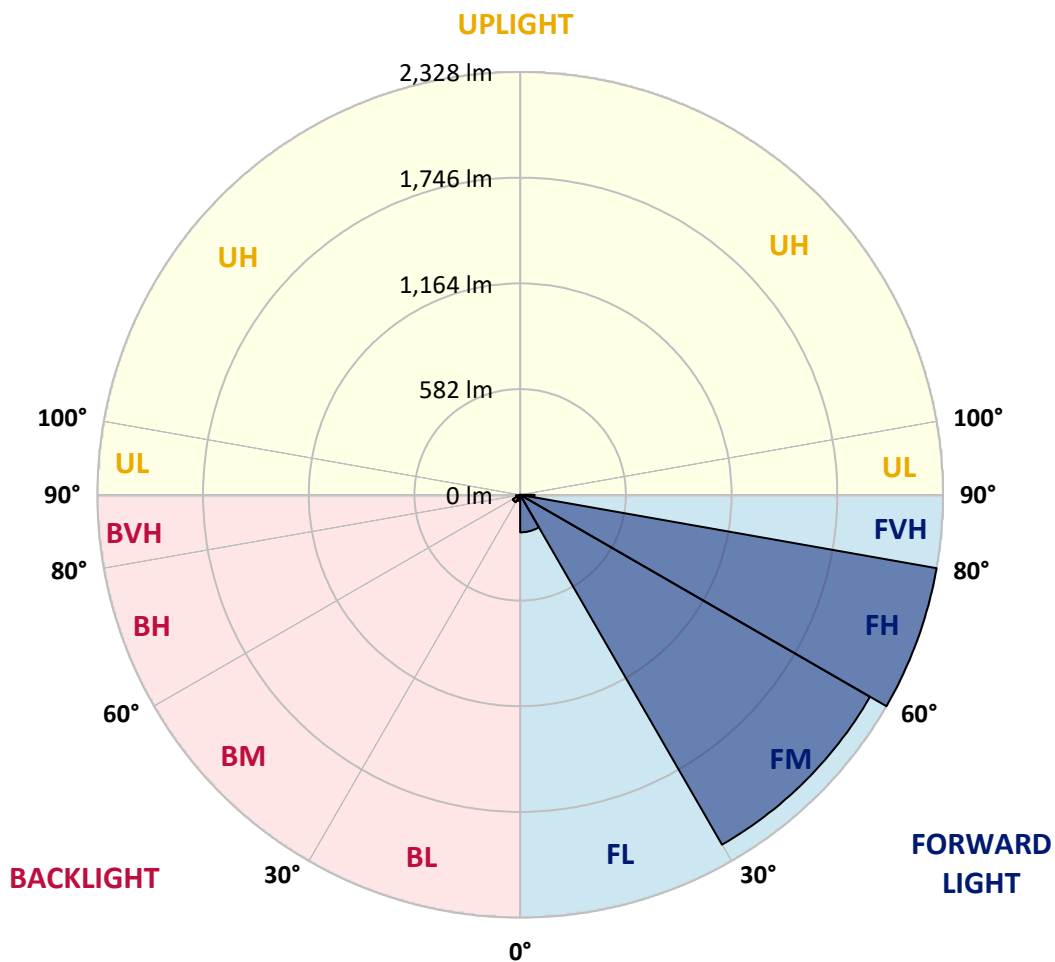
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	206.6	4.2			
FM	(30°-60°)	2224.1	45.0			
FH	(60°-80°)	2328.0	47.1			G2/5000
FVH	(80°-90°)	79.5	1.6			G1/100
BL	(0°-30°)	33.8	0.7	B0/110		
BM	(30°-60°)	47.1	1.0	B0/220		
BH	(60°-80°)	23.0	0.5	B0/110		G0/110
BVH	(80°-90°)	3.3	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-G2

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	67°	68°
0°	149.3	149.3	149.3	149.3	149.3	149.3	149.3	149.3	149.3	149.3	149.3
2.5°	188.3	187.3	183.5	183.5	177.8	174.0	169.2	164.5	164.5	163.5	162.6
5°	249.1	243.4	242.4	232.0	223.4	211.1	199.7	184.4	182.5	180.6	179.7
7.5°	316.6	315.7	307.1	294.7	277.6	254.8	232.0	207.3	203.5	201.6	197.8
10°	404.1	399.3	387.9	367.0	341.3	310.9	273.8	234.8	230.1	226.3	224.4
12.5°	487.7	479.2	472.5	445.9	413.6	368.9	324.2	268.1	264.3	259.6	252.0
15°	565.7	558.1	546.7	523.9	487.7	431.6	379.4	310.9	301.4	294.7	289.0
17.5°	626.6	621.8	608.5	582.8	543.8	494.4	431.6	354.6	347.0	338.5	328.0
20°	684.5	677.9	657.0	621.8	580.0	541.9	493.4	411.7	401.2	390.8	379.4
22.5°	739.7	733.0	698.8	640.8	596.1	580.0	562.8	476.3	460.2	451.6	440.2
25°	816.7	802.4	749.2	657.0	597.1	609.4	638.9	560.0	544.8	532.4	514.4
27.5°	920.3	901.3	817.7	680.7	600.9	641.8	726.4	661.7	645.6	631.3	611.3
30°	1037.3	1024.9	925.1	737.8	628.5	689.3	824.3	791.0	772.0	754.9	731.1
32.5°	1155.2	1138.1	1039.2	846.2	702.6	781.5	947.0	941.3	916.5	900.4	874.7
35°	1258.8	1250.2	1177.0	1024.0	871.8	943.2	1110.5	1117.1	1095.3	1078.2	1049.6
37.5°	1329.2	1329.2	1314.9	1215.1	1140.9	1194.2	1351.0	1352.0	1330.1	1291.1	1276.9
40°	1365.3	1375.7	1427.1	1446.1	1442.3	1510.8	1666.7	1649.6	1631.5	1611.5	1564.0
42.5°	1439.5	1449.0	1558.3	1689.5	1775.1	1865.4	1972.8	1967.1	1945.3	1909.1	1865.4
45°	1565.0	1577.3	1707.6	1915.8	2091.7	2220.0	2288.5	2261.9	2240.0	2205.8	2182.9
47.5°	1724.7	1748.4	1895.8	2153.5	2365.5	2577.5	2648.8	2578.5	2559.4	2532.8	2495.7
50°	1894.9	1917.7	2074.6	2369.3	2608.9	2861.8	2980.6	2861.8	2834.2	2825.7	2783.8
52.5°	2042.2	2061.2	2212.4	2535.7	2795.2	3091.9	3264.9	3108.0	3088.1	3059.5	3029.1
55°	2129.7	2144.9	2286.6	2615.5	2921.7	3299.1	3539.7	3401.8	3372.3	3360.9	3317.2
57.5°	2159.2	2174.4	2301.8	2626.0	2990.1	3488.3	3873.4	3878.2	3843.0	3802.1	3788.8
60°	2159.2	2176.3	2283.7	2600.3	3056.7	3689.9	4318.4	4714.8	4638.8	4631.2	4582.7
62.5°	2069.8	2086.0	2194.4	2521.4	3146.1	3961.8	4938.2	5638.0	5616.1	5566.7	5486.8
65°	1875.8	1885.4	1991.8	2319.9	3111.8	4211.9	5475.4	6252.2	6217.0	6120.0	6017.4
66°	1788.4	1796.0	1895.8	2204.8	2999.6	4246.1	5570.5	6329.2	6271.2	6189.4	6073.5
67.5°	1661.9	1675.2	1745.6	1990.9	2730.6	4127.2	5510.6	6275.0	6224.6	6125.7	6009.8
70°	1109.5	1100.0	1348.2	1527.9	2080.3	3362.8	4944.0	5634.2	5635.2	5588.6	5542.0
72.5°	526.7	532.4	604.7	940.3	1361.5	2246.6	3935.2	4497.1	4561.7	4478.1	4420.1
75°	378.4	387.0	430.7	575.2	811.9	1348.2	2550.9	3145.1	3147.0	2998.7	2866.5
77.5°	110.3	115.0	161.6	354.6	608.5	909.9	1465.1	1748.4	1707.6	1601.1	1501.3
80°	45.6	45.6	47.5	113.1	244.3	618.0	1024.9	1346.3	1341.5	1300.6	1241.7
82.5°	17.1	18.1	22.8	46.6	58.0	152.1	683.6	1168.5	1165.6	1107.6	1065.8
85°	1.9	1.9	5.7	20.0	21.9	28.5	136.9	515.3	512.5	515.3	451.6
87.5°	0.0	0.0	1.0	1.9	2.9	3.8	5.7	20.0	21.9	20.9	19.0
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):

	69°	70°	71°	72°	73°	74°	75°	76°	77°	78°	79°
0°	149.3	149.3	149.3	149.3	149.3	149.3	149.3	149.3	149.3	149.3	149.3
2.5°	162.6	160.7	160.7	159.7	159.7	159.7	158.8	157.8	157.8	156.9	155.9
5°	177.8	175.9	174.9	173.0	172.1	171.1	169.2	168.3	166.4	165.4	164.5
7.5°	195.9	192.1	191.1	188.3	185.4	183.5	181.6	178.7	176.8	173.0	172.1
10°	218.7	213.9	210.1	206.3	203.5	198.7	195.9	192.1	188.3	185.4	182.5
12.5°	248.1	241.5	235.8	232.0	225.3	219.6	213.9	211.1	203.5	199.7	194.9
15°	280.5	272.9	266.2	258.6	253.9	244.3	236.7	228.2	224.4	217.7	210.1
17.5°	322.3	309.9	299.5	291.9	282.4	272.9	264.3	255.8	244.3	236.7	227.2
20°	367.0	356.5	342.3	329.0	317.6	306.1	293.8	282.4	271.9	259.6	248.1
22.5°	424.0	408.8	391.7	378.4	363.2	350.8	333.7	318.5	301.4	285.2	271.9
25°	496.3	476.3	460.2	441.2	423.1	404.1	383.2	364.1	342.3	327.1	304.2
27.5°	585.7	566.7	544.8	520.1	502.0	473.5	445.9	422.1	396.5	372.7	347.0
30°	699.8	672.2	649.4	625.6	589.5	561.9	529.6	497.2	462.1	438.3	399.3
32.5°	836.7	807.2	773.0	738.7	705.5	666.5	626.6	586.6	547.6	503.9	464.0
35°	1004.0	968.8	929.8	892.8	841.4	799.6	749.2	694.1	650.3	599.9	549.5
37.5°	1225.5	1167.5	1133.3	1094.3	1024.9	967.9	911.8	856.6	779.6	726.4	655.1
40°	1503.2	1468.9	1412.8	1350.1	1287.3	1212.2	1136.2	1062.9	973.6	899.4	816.7
42.5°	1829.3	1778.9	1721.8	1631.5	1567.8	1479.4	1392.9	1295.9	1186.5	1091.5	994.5
45°	2135.4	2075.5	2031.8	1941.5	1874.9	1770.3	1665.7	1563.0	1436.6	1314.0	1201.8
47.5°	2466.3	2416.8	2344.6	2271.4	2203.9	2086.0	1972.8	1848.3	1715.2	1569.7	1424.2
50°	2757.2	2718.2	2668.8	2580.4	2505.3	2406.4	2273.3	2137.3	1969.0	1824.5	1659.1
52.5°	3004.4	2974.0	2904.6	2841.8	2774.3	2681.1	2562.3	2432.0	2250.4	2091.7	1903.4
55°	3296.3	3274.4	3213.6	3174.6	3114.7	3025.3	2914.1	2793.3	2601.3	2428.2	2215.3
57.5°	3774.5	3757.4	3704.2	3688.0	3629.1	3551.1	3414.2	3284.9	3060.5	2845.6	2602.2
60°	4566.5	4532.3	4454.3	4414.4	4289.8	4185.2	4007.5	3829.7	3558.7	3284.9	2992.0
62.5°	5414.6	5318.6	5170.2	5042.8	4866.0	4684.4	4446.7	4174.8	3857.2	3532.1	3195.5
65°	5871.9	5708.4	5521.1	5318.6	5089.4	4822.3	4522.8	4196.7	3855.3	3512.1	3156.5
66°	5924.2	5739.7	5541.0	5315.7	5060.9	4776.6	4472.4	4130.1	3775.5	3440.8	3085.2
67.5°	5858.6	5665.6	5455.5	5205.4	4929.7	4635.0	4315.5	3959.9	3618.6	3279.2	2933.1
70°	5399.4	5207.3	5020.0	4756.7	4462.9	4166.2	3863.9	3466.5	3143.2	2831.4	2523.3
72.5°	4311.7	4181.4	3996.0	3770.7	3484.5	3136.6	2884.6	2529.0	2248.5	1946.2	1707.6
75°	2694.5	2511.0	2281.8	1994.7	1776.0	1493.6	1346.3	1076.3	916.5	776.8	641.8
77.5°	1377.7	1239.8	1079.1	917.5	762.5	608.5	470.6	332.8	224.4	155.9	116.0
80°	1138.1	1016.4	883.3	735.9	599.0	464.9	334.7	228.2	145.5	95.1	74.2
82.5°	940.3	837.6	718.8	581.9	463.0	365.1	253.9	165.4	102.7	66.6	52.3
85°	400.3	363.2	280.5	222.5	167.3	123.6	86.5	58.0	40.9	33.3	30.4
87.5°	17.1	19.0	18.1	14.3	10.5	10.5	9.5	7.6	7.6	7.6	7.6
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):

	80°	81°	82°	83°	84°	85°	95°	105°	115°	125°	135°
0°	149.3	149.3	149.3	149.3	149.3	149.3	149.3	149.3	149.3	149.3	149.3
2.5°	155.9	155.0	154.0	154.0	153.1	152.1	146.4	141.7	136.0	132.2	128.4
5°	162.6	161.6	159.7	158.8	156.9	155.9	143.6	133.1	124.5	117.9	113.1
7.5°	169.2	168.3	165.4	162.6	161.6	159.7	139.8	126.5	115.0	107.4	102.7
10°	177.8	174.9	172.1	168.3	165.4	162.6	136.0	118.8	106.5	99.8	95.1
12.5°	190.2	185.4	180.6	175.9	172.1	167.3	134.1	112.2	99.8	92.2	87.5
15°	204.4	197.8	192.1	186.3	179.7	174.9	130.3	106.5	94.1	86.5	80.8
17.5°	217.7	210.1	201.6	193.0	186.3	179.7	126.5	100.8	88.4	80.8	75.1
20°	236.7	225.3	214.9	204.4	194.9	186.3	120.7	95.1	83.7	75.1	69.4
22.5°	257.7	244.3	231.0	216.8	204.4	193.0	116.0	90.3	78.9	70.4	63.7
25°	284.3	268.1	250.0	232.0	217.7	202.5	111.2	85.6	74.2	65.6	58.9
27.5°	321.4	298.5	278.6	255.8	233.9	216.8	107.4	81.8	69.4	60.8	54.2
30°	371.7	338.5	307.1	282.4	256.7	232.0	103.6	77.0	65.6	56.1	48.5
32.5°	427.8	388.9	352.7	315.7	283.3	254.8	99.8	73.2	60.8	51.3	44.7
35°	497.2	447.8	399.3	356.5	317.6	279.5	96.0	69.4	57.0	46.6	39.9
37.5°	597.1	535.3	471.6	416.4	366.0	315.7	93.2	65.6	52.3	41.8	35.2
40°	734.0	654.1	576.2	501.1	435.4	372.7	89.4	61.8	48.5	38.0	31.4
42.5°	882.3	785.3	682.6	598.0	507.7	428.8	85.6	58.0	44.7	34.2	27.6
45°	1066.8	946.0	821.5	706.4	596.1	494.4	81.8	54.2	39.9	30.4	23.8
47.5°	1268.3	1114.3	973.6	829.1	697.9	576.2	77.0	51.3	36.1	26.6	20.9
50°	1475.6	1313.0	1135.2	970.7	814.8	657.9	72.3	46.6	32.3	23.8	17.1
52.5°	1699.0	1507.0	1325.4	1120.9	939.4	765.4	67.5	42.8	29.5	20.9	14.3
55°	1983.3	1768.4	1555.4	1326.3	1107.6	889.9	62.8	38.0	25.7	18.1	11.4
57.5°	2340.8	2086.0	1824.5	1565.9	1300.6	1053.4	58.9	33.3	21.9	15.2	9.5
60°	2678.3	2380.7	2064.1	1766.5	1467.0	1178.9	53.2	29.5	19.0	12.4	9.5
62.5°	2853.2	2513.8	2172.5	1844.5	1525.0	1223.6	47.5	24.7	16.2	10.5	8.6
65°	2810.4	2464.4	2133.5	1802.6	1489.8	1195.1	41.8	21.9	14.3	9.5	8.6
66°	2748.6	2406.4	2073.6	1758.9	1460.4	1164.7	39.0	20.9	13.3	9.5	7.6
67.5°	2613.6	2282.8	1965.2	1672.4	1379.6	1106.7	35.2	19.0	12.4	8.6	7.6
70°	2232.4	1931.9	1678.1	1417.6	1178.9	932.7	28.5	16.2	10.5	7.6	7.6
72.5°	1477.5	1273.1	1103.8	949.8	793.9	616.1	23.8	13.3	8.6	7.6	6.7
75°	557.1	503.9	432.6	388.9	339.4	297.6	19.0	8.6	6.7	6.7	6.7
77.5°	98.9	91.3	80.8	74.2	68.5	62.8	15.2	5.7	5.7	6.7	6.7
80°	66.6	61.8	56.1	51.3	47.5	42.8	10.5	4.8	5.7	5.7	6.7
82.5°	47.5	44.7	41.8	38.0	35.2	31.4	6.7	4.8	5.7	5.7	5.7
85°	28.5	26.6	24.7	22.8	20.0	19.0	4.8	4.8	4.8	5.7	5.7
87.5°	7.6	6.7	7.6	7.6	5.7	6.7	3.8	3.8	3.8	4.8	4.8
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-SL3-HSS

CANDELA DISTRIBUTION (continued):

	145°	155°	165°	175°	180°
0°	149.3	149.3	149.3	149.3	149.3
2.5°	126.5	126.5	124.5	127.4	127.4
5°	109.3	109.3	108.4	109.3	109.3
7.5°	99.8	98.9	98.9	98.9	99.8
10°	91.3	90.3	90.3	90.3	90.3
12.5°	83.7	82.7	81.8	82.7	82.7
15°	77.0	75.1	75.1	75.1	75.1
17.5°	71.3	69.4	68.5	68.5	68.5
20°	65.6	62.8	62.8	62.8	62.8
22.5°	59.9	57.0	57.0	57.0	57.0
25°	54.2	51.3	51.3	51.3	51.3
27.5°	49.4	46.6	46.6	46.6	46.6
30°	43.7	41.8	41.8	42.8	41.8
32.5°	39.9	37.1	37.1	38.0	38.0
35°	35.2	33.3	33.3	33.3	33.3
37.5°	30.4	28.5	28.5	28.5	28.5
40°	26.6	24.7	23.8	24.7	24.7
42.5°	22.8	20.9	20.0	20.0	20.0
45°	20.0	17.1	16.2	17.1	17.1
47.5°	16.2	14.3	14.3	15.2	15.2
50°	12.4	12.4	13.3	15.2	15.2
52.5°	11.4	11.4	13.3	15.2	15.2
55°	10.5	11.4	13.3	14.3	15.2
57.5°	9.5	11.4	13.3	14.3	14.3
60°	9.5	10.5	12.4	14.3	14.3
62.5°	8.6	9.5	11.4	13.3	13.3
65°	8.6	9.5	11.4	13.3	13.3
66°	8.6	9.5	11.4	13.3	13.3
67.5°	8.6	9.5	11.4	13.3	13.3
70°	8.6	9.5	11.4	12.4	12.4
72.5°	7.6	8.6	10.5	12.4	12.4
75°	7.6	8.6	10.5	12.4	12.4
77.5°	7.6	8.6	10.5	12.4	12.4
80°	7.6	8.6	10.5	11.4	12.4
82.5°	6.7	8.6	9.5	11.4	11.4
85°	6.7	7.6	9.5	10.5	11.4
87.5°	5.7	6.7	7.6	9.5	9.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)