

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: P162436

Luminaire Tested: **ECM-E02-LED-E1-SL3-HSS-7030**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P162436
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-7030
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, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3011.2 lumens
Efficiency: N/A
Efficacy: 57.8 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

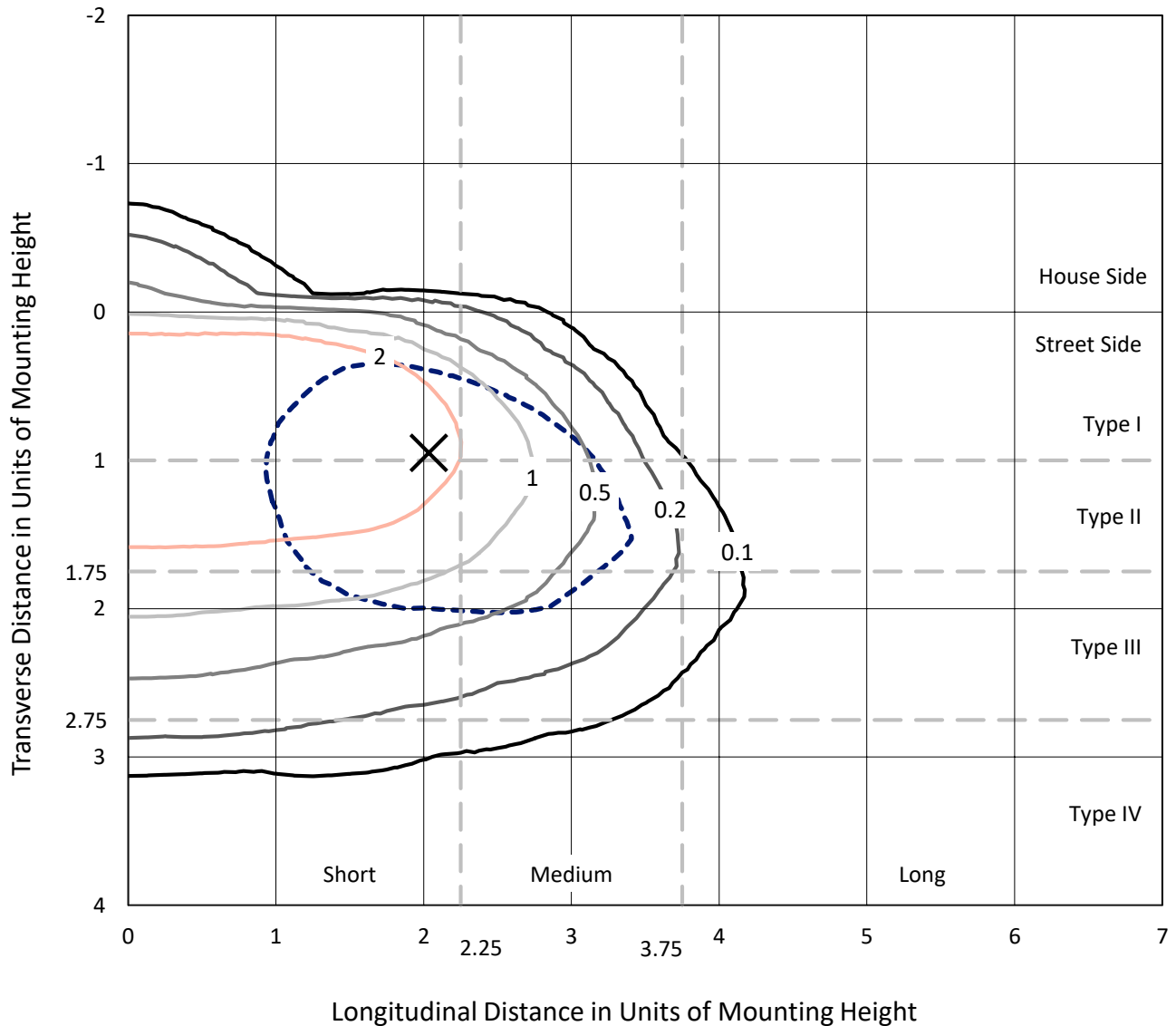
Input Watts (W): 52.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

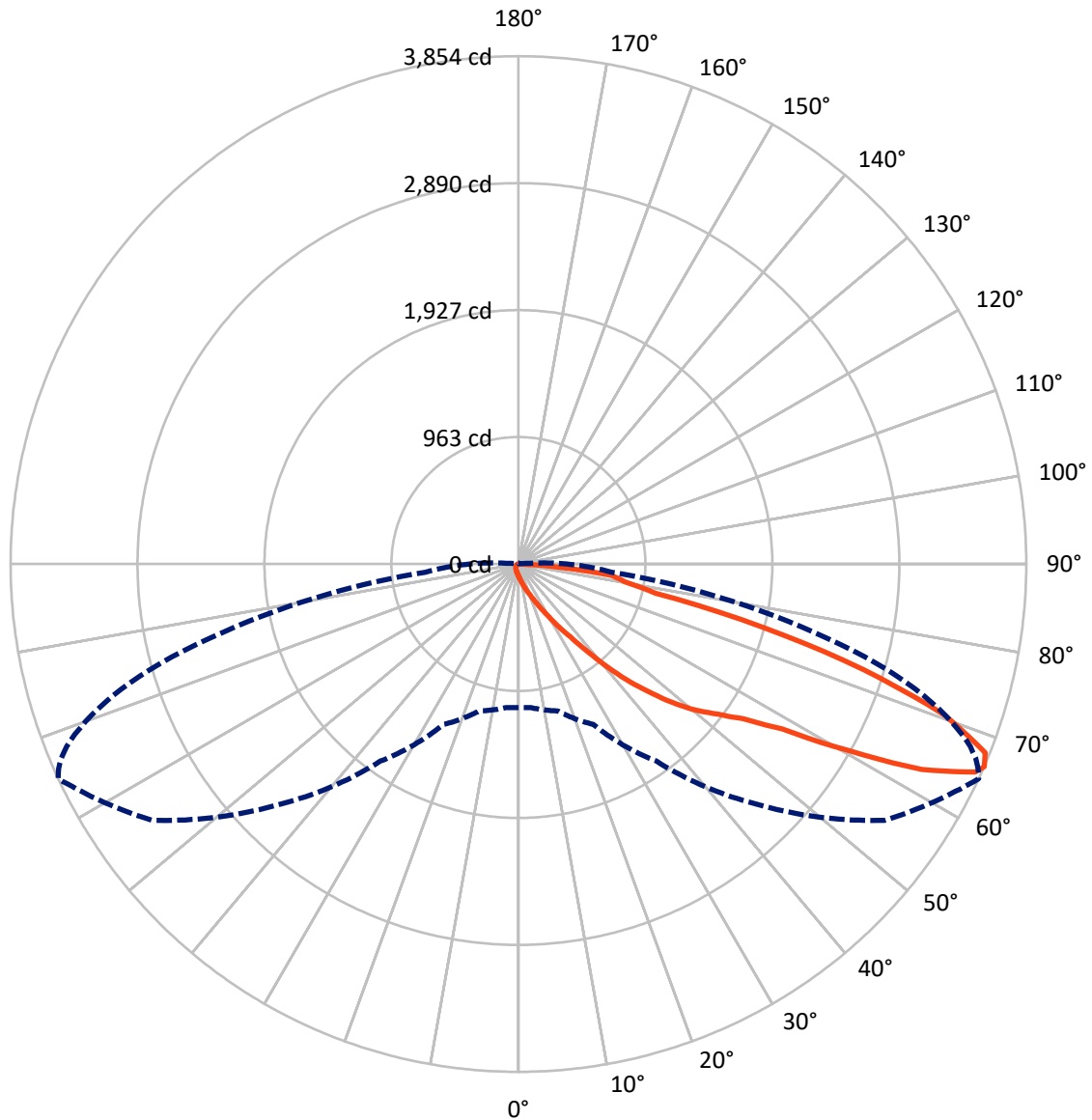
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5 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	65.3	0.0	65.3
	% Fixture	2.2	0.0	2.2
Street Side	Lumens	2946.0	0.0	2946.0
	% Fixture	97.8	0.0	97.8
Total	Lumens	3011.2	0.0	3011.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	10.2	0.3
10°-20°	43.1	1.4
20°-30°	93.0	3.1
30°-40°	198.7	6.6
40°-50°	439.5	14.6
50°-60°	744.7	24.7
60°-70°	993.8	33.0
70°-80°	437.8	14.5
80°-90°	50.4	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°	3011.2	100.0
0°-180°	3011.2	100.0



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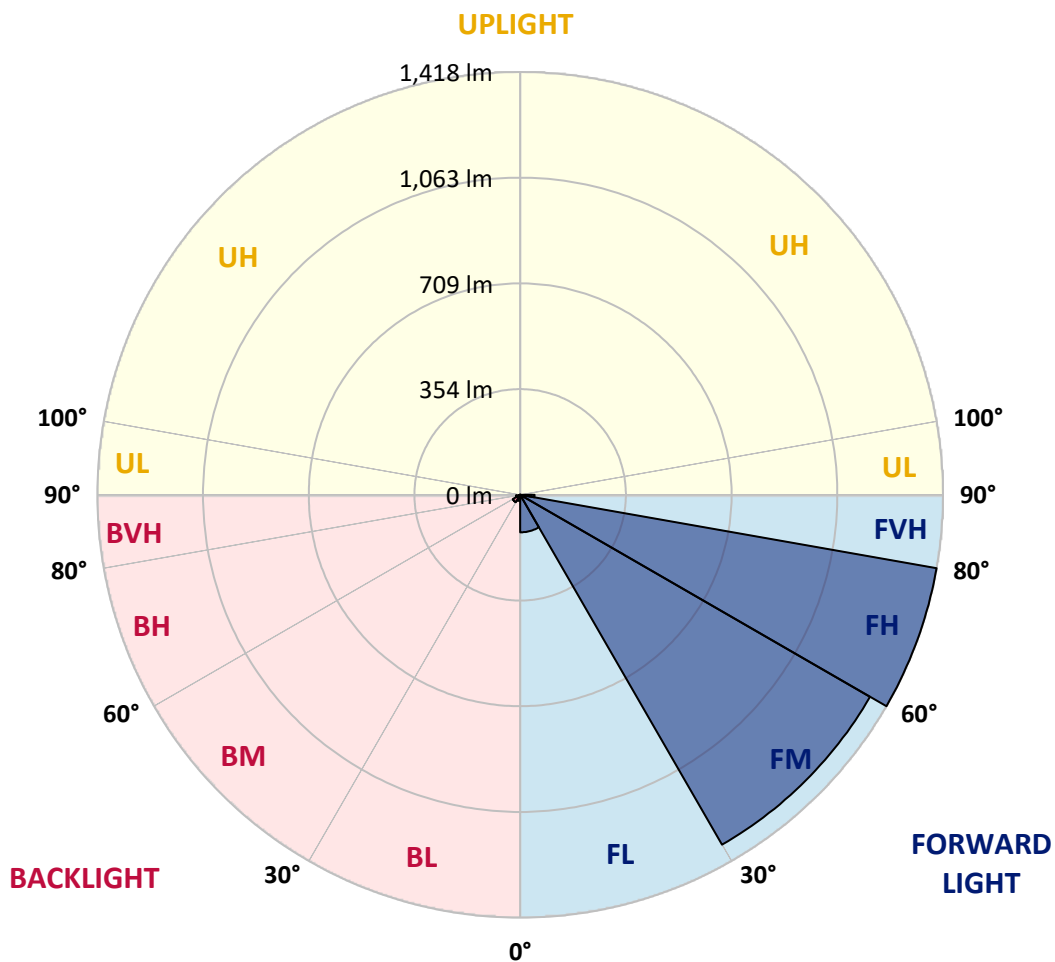
CATALOG NUMBER: ECM-E02-LED-E1-SL3-HSS-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	125.8	4.2			
FM	(30°-60°)	1354.2	45.0			
FH	(60°-80°)	1417.5	47.1			G1/1800
FVH	(80°-90°)	48.4	1.6			G1/100
BL	(0°-30°)	20.6	0.7	B0/110		
BM	(30°-60°)	28.7	1.0	B0/220		
BH	(60°-80°)	14.0	0.5	B0/110		G0/110
BVH	(80°-90°)	2.0	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°	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9
2.5°	114.7	114.0	111.7	111.7	108.3	105.9	103.0	100.2	100.2	99.6	99.0
5°	151.7	148.2	147.6	141.3	136.0	128.5	121.6	112.3	111.1	110.0	109.4
7.5°	192.8	192.2	187.0	179.4	169.0	155.1	141.3	126.2	123.9	122.8	120.4
10°	246.1	243.1	236.2	223.5	207.8	189.3	166.7	143.0	140.1	137.8	136.6
12.5°	297.0	291.8	287.7	271.5	251.8	224.6	197.4	163.2	160.9	158.1	153.4
15°	344.5	339.8	332.9	319.0	297.0	262.8	231.0	189.3	183.5	179.4	176.0
17.5°	381.5	378.6	370.5	354.9	331.1	301.0	262.8	215.9	211.3	206.1	199.7
20°	416.8	412.8	400.0	378.6	353.2	330.0	300.4	250.7	244.3	238.0	231.0
22.5°	450.4	446.3	425.5	390.2	363.0	353.2	342.7	290.0	280.2	275.0	268.0
25°	497.3	488.6	456.2	400.0	363.6	371.1	389.0	341.0	331.7	324.2	313.2
27.5°	560.4	548.8	497.9	414.5	365.9	390.8	442.3	402.9	393.1	384.4	372.2
30°	631.6	624.1	563.3	449.2	382.7	419.7	501.9	481.6	470.1	459.7	445.2
32.5°	703.4	693.0	632.8	515.3	427.8	475.9	576.6	573.2	558.1	548.3	532.6
35°	766.5	761.2	716.7	623.5	530.8	574.3	676.2	680.2	666.9	656.5	639.1
37.5°	809.4	809.4	800.6	739.9	694.7	727.1	822.6	823.2	809.9	786.2	777.5
40°	831.3	837.7	869.0	880.5	878.2	919.9	1014.9	1004.4	993.4	981.2	952.3
42.5°	876.5	882.3	948.8	1028.7	1080.9	1135.8	1201.2	1197.8	1184.5	1162.5	1135.8
45°	952.9	960.4	1039.8	1166.5	1273.6	1351.8	1393.5	1377.3	1363.9	1343.1	1329.2
47.5°	1050.2	1064.6	1154.4	1311.3	1440.4	1569.4	1612.9	1570.0	1558.4	1542.2	1519.6
50°	1153.8	1167.7	1263.2	1442.7	1588.6	1742.6	1814.9	1742.6	1725.7	1720.6	1695.1
52.5°	1243.5	1255.1	1347.1	1544.0	1702.0	1882.7	1988.0	1892.5	1880.3	1862.9	1844.4
55°	1296.8	1306.0	1392.3	1592.6	1779.0	2008.8	2155.3	2071.4	2053.4	2046.5	2019.8
57.5°	1314.7	1324.0	1401.6	1599.0	1820.7	2124.0	2358.5	2361.4	2340.0	2315.1	2307.0
60°	1314.7	1325.1	1390.5	1583.3	1861.2	2246.8	2629.5	2870.8	2824.6	2819.9	2790.4
62.5°	1260.3	1270.2	1336.2	1535.3	1915.7	2412.3	3006.9	3433.0	3419.6	3389.6	3340.9
65°	1142.2	1148.0	1212.8	1412.6	1894.8	2564.6	3334.0	3807.0	3785.5	3726.5	3664.0
66°	1089.0	1093.6	1154.4	1342.5	1826.5	2585.5	3391.9	3853.9	3818.5	3768.7	3698.2
67.5°	1011.9	1020.0	1062.9	1212.3	1662.7	2513.1	3355.4	3820.8	3790.2	3729.9	3659.4
70°	675.6	669.8	820.9	930.3	1266.7	2047.6	3010.4	3430.7	3431.3	3402.9	3374.5
72.5°	320.7	324.2	368.2	572.5	829.0	1368.0	2396.1	2738.3	2777.6	2726.7	2691.4
75°	230.4	235.6	262.3	350.2	494.4	820.9	1553.2	1915.1	1916.2	1825.9	1745.4
77.5°	67.2	70.0	98.4	215.9	370.5	554.0	892.1	1064.6	1039.8	974.9	914.1
80°	27.8	27.8	28.9	68.9	148.8	376.3	624.1	819.8	816.8	791.9	756.1
82.5°	10.4	11.0	13.9	28.4	35.3	92.6	416.2	711.5	709.7	674.4	649.0
85°	1.2	1.2	3.5	12.2	13.3	17.4	83.4	313.8	312.1	313.8	275.0
87.5°	0.0	0.0	0.6	1.2	1.8	2.3	3.5	12.2	13.3	12.7	11.6
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):

	69°	70°	71°	72°	73°	74°	75°	76°	77°	78°	79°
0°	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9
2.5°	99.0	97.9	97.9	97.2	97.2	97.2	96.7	96.1	96.1	95.5	94.9
5°	108.3	107.1	106.5	105.3	104.8	104.2	103.0	102.5	101.3	100.7	100.2
7.5°	119.3	117.0	116.4	114.7	112.9	111.7	110.6	108.8	107.7	105.3	104.8
10°	133.2	130.2	127.9	125.6	123.9	121.0	119.3	117.0	114.7	112.9	111.1
12.5°	151.1	147.0	143.6	141.3	137.2	133.7	130.2	128.5	123.9	121.6	118.7
15°	170.8	166.2	162.1	157.5	154.6	148.8	144.1	139.0	136.6	132.6	127.9
17.5°	196.2	188.7	182.4	177.7	172.0	166.2	160.9	155.8	148.8	144.1	138.3
20°	223.5	217.1	208.4	200.3	193.4	186.4	178.9	172.0	165.6	158.1	151.1
22.5°	258.2	248.9	238.5	230.4	221.2	213.6	203.2	193.9	183.5	173.7	165.6
25°	302.2	290.0	280.2	268.6	257.6	246.1	233.3	221.7	208.4	199.2	185.2
27.5°	356.6	345.1	331.7	316.7	305.7	288.3	271.5	257.0	241.4	226.9	211.3
30°	426.1	409.3	395.4	380.9	358.9	342.1	322.5	302.7	281.4	266.9	243.1
32.5°	509.5	491.5	470.7	449.8	429.6	405.8	381.5	357.2	333.4	306.8	282.5
35°	611.3	589.9	566.2	543.6	512.3	486.9	456.2	422.6	396.0	365.3	334.6
37.5°	746.2	710.9	690.1	666.3	624.1	589.4	555.2	521.6	474.7	442.3	398.9
40°	915.3	894.4	860.3	822.1	783.8	738.1	691.8	647.2	592.8	547.6	497.3
42.5°	1113.9	1083.2	1048.4	993.4	954.6	900.8	848.1	789.1	722.5	664.6	605.6
45°	1300.2	1263.8	1237.2	1182.2	1141.6	1077.9	1014.2	951.7	874.7	800.1	731.8
47.5°	1501.7	1471.6	1427.6	1383.1	1342.0	1270.2	1201.2	1125.4	1044.4	955.8	867.2
50°	1678.9	1655.1	1625.0	1571.2	1525.5	1465.3	1384.2	1301.4	1198.9	1110.9	1010.2
52.5°	1829.4	1810.9	1768.6	1730.4	1689.3	1632.5	1560.2	1480.8	1370.3	1273.6	1159.0
55°	2007.1	1993.8	1956.8	1933.0	1896.5	1842.1	1774.4	1700.8	1583.9	1478.5	1348.9
57.5°	2298.3	2287.9	2255.5	2245.6	2209.8	2162.3	2078.9	2000.2	1863.5	1732.7	1584.5
60°	2780.5	2759.7	2712.2	2687.9	2612.1	2548.4	2440.2	2331.9	2166.9	2000.2	1821.8
62.5°	3297.0	3238.5	3148.1	3070.6	2962.9	2852.3	2707.6	2542.0	2348.6	2150.7	1945.7
65°	3575.4	3475.8	3361.8	3238.5	3098.9	2936.3	2753.9	2555.4	2347.5	2138.5	1922.0
66°	3607.2	3494.9	3373.9	3236.7	3081.6	2908.5	2723.2	2514.8	2298.9	2095.1	1878.6
67.5°	3567.3	3449.8	3321.9	3169.6	3001.7	2822.3	2627.7	2411.2	2203.4	1996.7	1786.0
70°	3287.7	3170.7	3056.7	2896.4	2717.5	2536.8	2352.7	2110.8	1913.9	1724.0	1536.4
72.5°	2625.4	2546.1	2433.2	2296.0	2121.7	1909.9	1756.4	1539.9	1369.1	1185.0	1039.8
75°	1640.7	1528.9	1389.4	1214.6	1081.4	909.5	819.8	655.4	558.1	473.0	390.8
77.5°	838.9	754.9	657.1	558.7	464.3	370.5	286.5	202.6	136.6	94.9	70.6
80°	693.0	618.9	537.8	448.1	364.7	283.1	203.8	139.0	88.6	57.9	45.2
82.5°	572.5	510.0	437.7	354.3	281.9	222.3	154.6	100.7	62.5	40.6	31.8
85°	243.7	221.2	170.8	135.5	101.9	75.3	52.7	35.3	24.9	20.3	18.5
87.5°	10.4	11.6	11.0	8.7	6.4	6.4	5.8	4.6	4.6	4.6	4.6
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°	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9
2.5°	94.9	94.4	93.8	93.8	93.2	92.6	89.1	86.3	82.8	80.5	78.2
5°	99.0	98.4	97.2	96.7	95.5	94.9	87.4	81.0	75.8	71.8	68.9
7.5°	103.0	102.5	100.7	99.0	98.4	97.2	85.1	77.0	70.0	65.4	62.5
10°	108.3	106.5	104.8	102.5	100.7	99.0	82.8	72.3	64.8	60.8	57.9
12.5°	115.8	112.9	110.0	107.1	104.8	101.9	81.7	68.3	60.8	56.1	53.3
15°	124.5	120.4	117.0	113.4	109.4	106.5	79.3	64.8	57.3	52.7	49.2
17.5°	132.6	127.9	122.8	117.5	113.4	109.4	77.0	61.4	53.8	49.2	45.7
20°	144.1	137.2	130.9	124.5	118.7	113.4	73.5	57.9	51.0	45.7	42.3
22.5°	156.9	148.8	140.7	132.0	124.5	117.5	70.6	55.0	48.0	42.9	38.8
25°	173.1	163.2	152.2	141.3	132.6	123.3	67.7	52.1	45.2	39.9	35.9
27.5°	195.7	181.8	169.6	155.8	142.4	132.0	65.4	49.8	42.3	37.0	33.0
30°	226.3	206.1	187.0	172.0	156.3	141.3	63.1	46.9	39.9	34.2	29.5
32.5°	260.5	236.8	214.8	192.2	172.5	155.1	60.8	44.6	37.0	31.2	27.2
35°	302.7	272.7	243.1	217.1	193.4	170.2	58.5	42.3	34.7	28.4	24.3
37.5°	363.6	325.9	287.2	253.5	222.9	192.2	56.7	39.9	31.8	25.5	21.4
40°	446.9	398.3	350.8	305.1	265.1	226.9	54.4	37.6	29.5	23.1	19.1
42.5°	537.2	478.2	415.6	364.1	309.1	261.1	52.1	35.3	27.2	20.8	16.8
45°	649.6	576.0	500.2	430.1	363.0	301.0	49.8	33.0	24.3	18.5	14.5
47.5°	772.3	678.5	592.8	504.8	425.0	350.8	46.9	31.2	22.0	16.2	12.7
50°	898.5	799.5	691.2	591.1	496.1	400.6	44.0	28.4	19.7	14.5	10.4
52.5°	1034.5	917.6	807.0	682.5	572.0	466.1	41.1	26.1	18.0	12.7	8.7
55°	1207.6	1076.8	947.1	807.6	674.4	541.9	38.2	23.1	15.6	11.0	6.9
57.5°	1425.3	1270.2	1110.9	953.5	791.9	641.4	35.9	20.3	13.3	9.3	5.8
60°	1630.8	1449.6	1256.8	1075.6	893.3	717.8	32.4	18.0	11.6	7.6	5.8
62.5°	1737.3	1530.7	1322.8	1123.1	928.6	745.1	28.9	15.0	9.9	6.4	5.2
65°	1711.3	1500.6	1299.1	1097.6	907.1	727.7	25.5	13.3	8.7	5.8	5.2
66°	1673.6	1465.3	1262.6	1071.0	889.2	709.2	23.7	12.7	8.1	5.8	4.6
67.5°	1591.4	1390.0	1196.6	1018.3	840.0	673.9	21.4	11.6	7.6	5.2	4.6
70°	1359.3	1176.3	1021.8	863.2	717.8	567.9	17.4	9.9	6.4	4.6	4.6
72.5°	899.7	775.2	672.1	578.3	483.4	375.1	14.5	8.1	5.2	4.6	4.1
75°	339.2	306.8	263.4	236.8	206.7	181.2	11.6	5.2	4.1	4.1	4.1
77.5°	60.2	55.6	49.2	45.2	41.7	38.2	9.3	3.5	3.5	4.1	4.1
80°	40.6	37.6	34.2	31.2	28.9	26.1	6.4	2.9	3.5	3.5	4.1
82.5°	28.9	27.2	25.5	23.1	21.4	19.1	4.1	2.9	3.5	3.5	3.5
85°	17.4	16.2	15.0	13.9	12.2	11.6	2.9	2.9	2.9	3.5	3.5
87.5°	4.6	4.1	4.6	4.6	3.5	4.1	2.3	2.3	2.3	2.9	2.9
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-7030

CANDELA DISTRIBUTION (continued):

	145°	155°	165°	175°	180°
0°	90.9	90.9	90.9	90.9	90.9
2.5°	77.0	77.0	75.8	77.6	77.6
5°	66.6	66.6	66.0	66.6	66.6
7.5°	60.8	60.2	60.2	60.2	60.8
10°	55.6	55.0	55.0	55.0	55.0
12.5°	51.0	50.4	49.8	50.4	50.4
15°	46.9	45.7	45.7	45.7	45.7
17.5°	43.4	42.3	41.7	41.7	41.7
20°	39.9	38.2	38.2	38.2	38.2
22.5°	36.5	34.7	34.7	34.7	34.7
25°	33.0	31.2	31.2	31.2	31.2
27.5°	30.1	28.4	28.4	28.4	28.4
30°	26.6	25.5	25.5	26.1	25.5
32.5°	24.3	22.6	22.6	23.1	23.1
35°	21.4	20.3	20.3	20.3	20.3
37.5°	18.5	17.4	17.4	17.4	17.4
40°	16.2	15.0	14.5	15.0	15.0
42.5°	13.9	12.7	12.2	12.2	12.2
45°	12.2	10.4	9.9	10.4	10.4
47.5°	9.9	8.7	8.7	9.3	9.3
50°	7.6	7.6	8.1	9.3	9.3
52.5°	6.9	6.9	8.1	9.3	9.3
55°	6.4	6.9	8.1	8.7	9.3
57.5°	5.8	6.9	8.1	8.7	8.7
60°	5.8	6.4	7.6	8.7	8.7
62.5°	5.2	5.8	6.9	8.1	8.1
65°	5.2	5.8	6.9	8.1	8.1
66°	5.2	5.8	6.9	8.1	8.1
67.5°	5.2	5.8	6.9	8.1	8.1
70°	5.2	5.8	6.9	7.6	7.6
72.5°	4.6	5.2	6.4	7.6	7.6
75°	4.6	5.2	6.4	7.6	7.6
77.5°	4.6	5.2	6.4	7.6	7.6
80°	4.6	5.2	6.4	6.9	7.6
82.5°	4.1	5.2	5.8	6.9	6.9
85°	4.1	4.6	5.8	6.4	6.9
87.5°	3.5	4.1	4.6	5.8	5.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)