

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: P162323

Luminaire Tested: **EMM-F02-LED-E1-SL2-HSS-7050**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P162323
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33726)
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: EMM-F02-LED-E1-SL2-HSS-7050
Description: EPIC MODERN MEDIUM DECORATIVE LED LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 2 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD
Light Source: (14) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2953.4 lumens
Efficiency: N/A
Efficacy: 53.7 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 1' x H: 0.1')
IES Classification: Type II - Short - Non-Cutoff
BUG Rating: B0 - U0 - G1

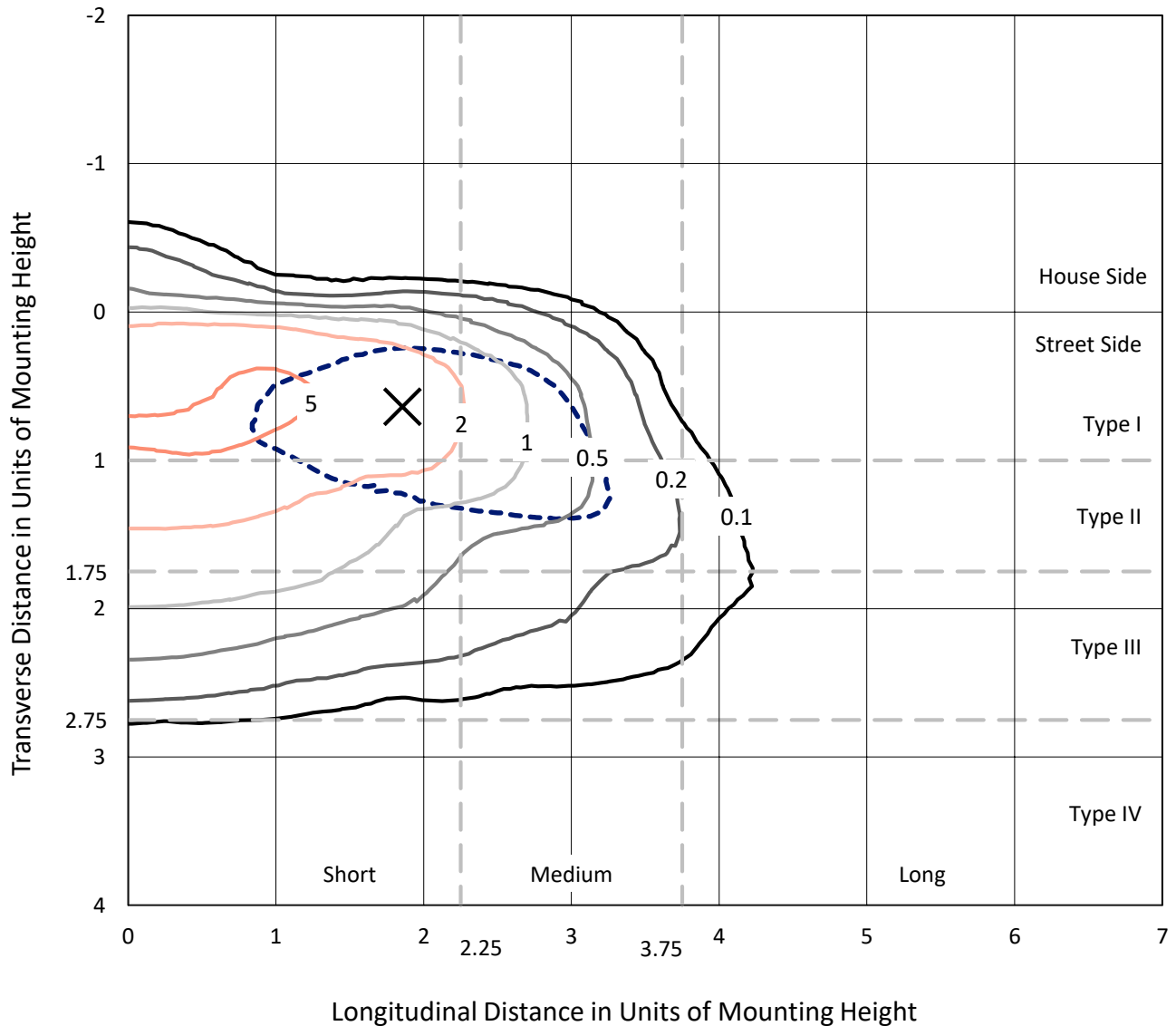
Input Watts (W): 55
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

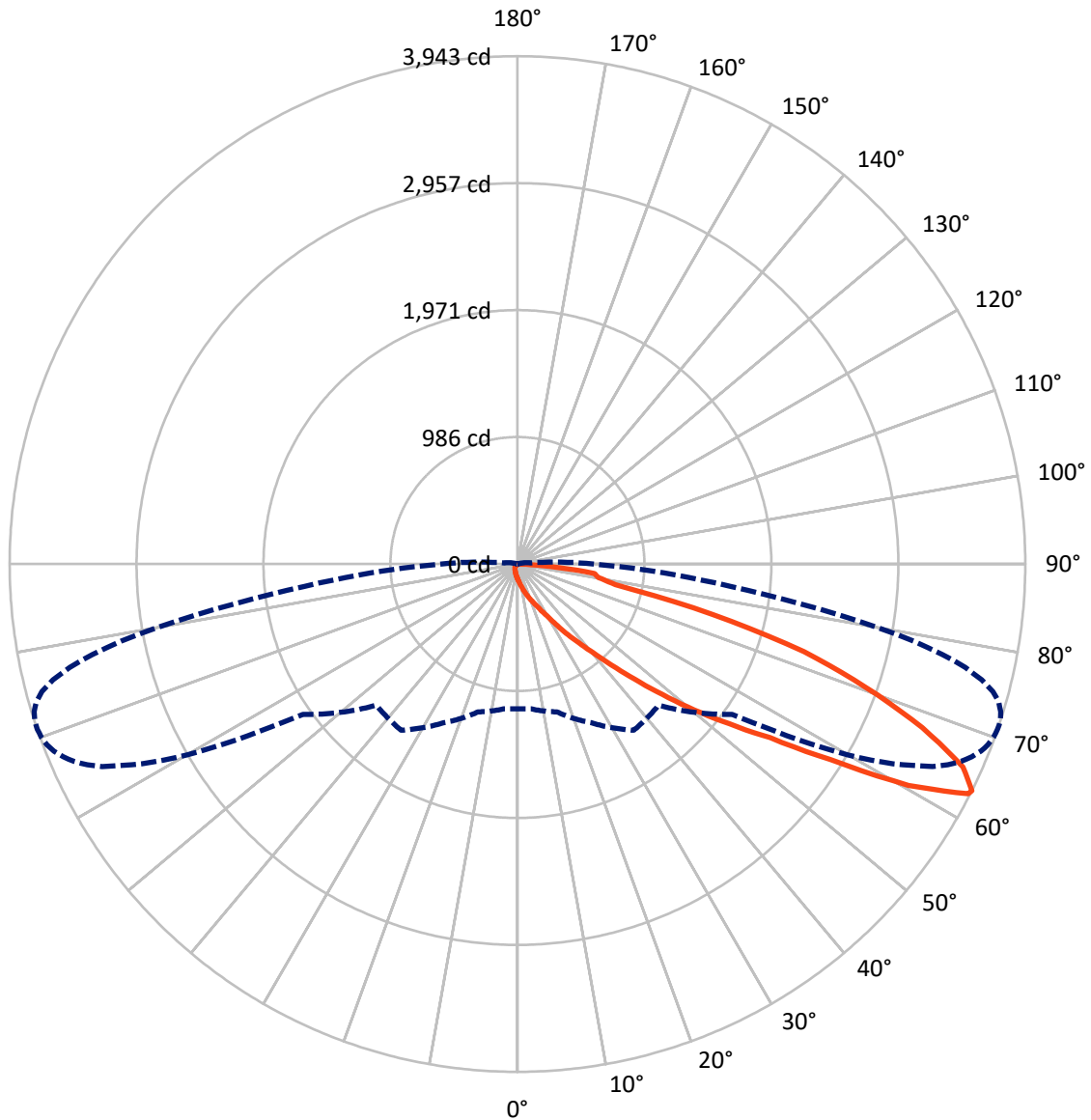
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6.2 fc
 Type II - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 71-Deg Lateral - - - Horizontal Cone Through 63-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	62.7	0.0	62.7
	% Fixture	2.1	0.0	2.1
Street Side	Lumens	2890.7	0.0	2890.7
	% Fixture	97.9	0.0	97.9
Total	Lumens	2953.4	0.0	2953.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	12.5	0.4
10°-20°	48.6	1.6
20°-30°	98.6	3.3
30°-40°	241.0	8.2
40°-50°	538.9	18.2
50°-60°	757.8	25.7
60°-70°	891.1	30.2
70°-80°	321.8	10.9
80°-90°	43.0	1.5
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°	2953.4	100.0
0°-180°	2953.4	100.0



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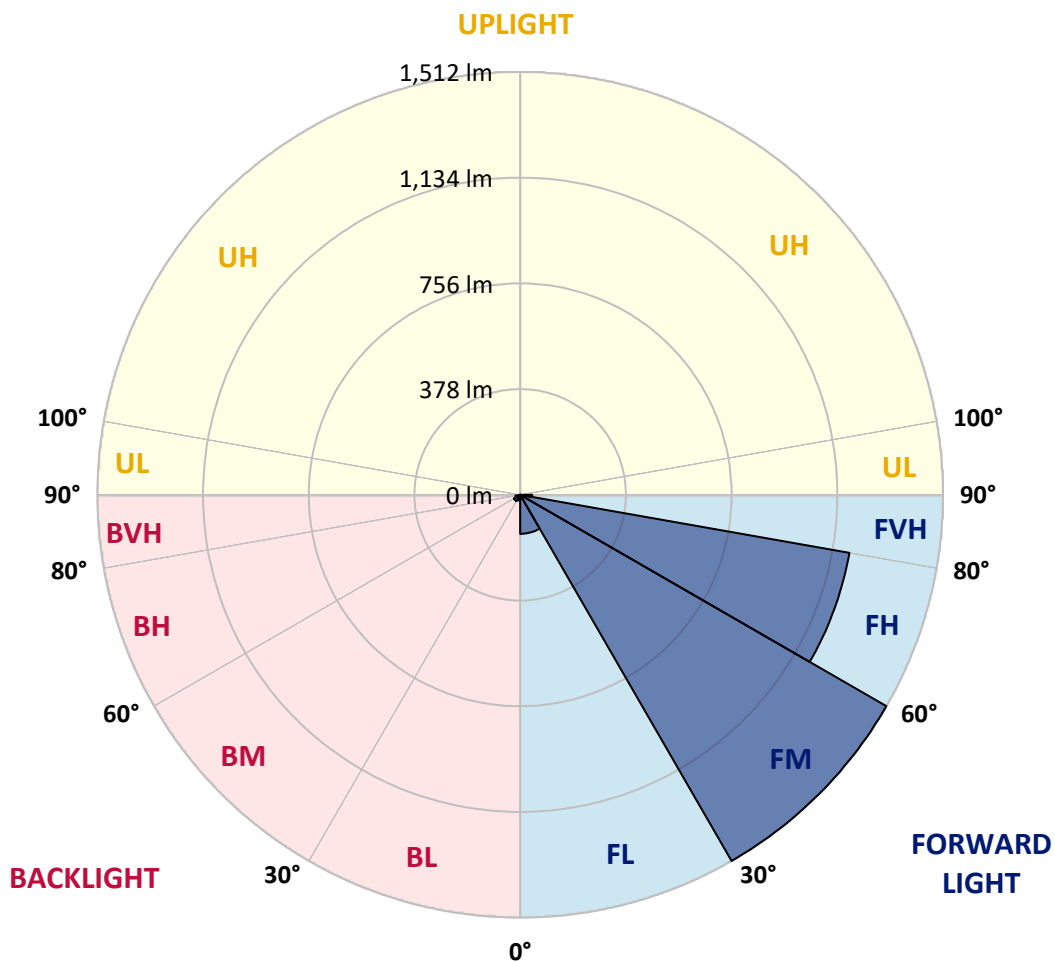
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	139.6	4.7			
FM	(30°-60°)	1512.5	51.2			
FH	(60°-80°)	1195.7	40.5			G1/1800
FVH	(80°-90°)	42.9	1.5			G1/100
BL	(0°-30°)	20.2	0.7	B0/110		
BM	(30°-60°)	25.3	0.9	B0/220		
BH	(60°-80°)	17.2	0.6	B0/110		G0/110
BVH	(80°-90°)	0.1	0.0			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 II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	57°	58°	59°
0°	113.3	113.3	113.3	113.3	113.3	113.3	113.3	113.3	113.3	113.3	113.3
2.5°	148.2	149.8	148.7	146.0	142.8	138.5	134.7	134.7	134.2	132.6	133.2
5°	194.4	194.9	192.7	186.3	180.4	171.3	161.1	160.0	158.9	157.3	156.8
7.5°	239.4	241.6	239.4	232.5	220.7	206.7	190.6	189.0	185.8	185.8	183.6
10°	285.6	285.6	283.5	275.4	264.7	244.8	224.4	221.8	218.0	216.9	213.7
12.5°	318.4	318.4	317.3	313.0	304.4	286.7	262.0	259.3	254.5	252.9	249.2
15°	331.3	331.3	331.8	335.6	336.1	328.0	302.3	300.1	295.3	291.0	289.4
17.5°	339.3	338.8	338.8	344.1	353.9	359.2	342.6	340.4	335.0	332.9	327.5
20°	357.1	356.0	352.7	352.7	361.9	380.7	380.7	380.1	374.2	372.6	369.9
22.5°	383.3	382.3	372.6	364.6	368.9	392.5	414.5	413.4	411.3	409.1	407.5
25°	426.3	422.5	405.9	382.3	378.5	403.8	440.3	443.0	444.5	444.5	445.6
27.5°	491.2	486.4	456.9	412.9	396.3	422.0	468.7	474.1	478.9	480.0	484.8
30°	581.5	572.9	530.5	466.1	427.9	448.8	510.6	516.5	523.5	525.6	533.1
32.5°	729.7	724.8	684.0	587.4	505.8	501.5	569.1	576.6	585.8	589.5	598.7
35°	955.2	956.2	923.0	836.0	723.2	664.2	673.8	680.3	683.5	694.8	699.6
37.5°	1108.2	1110.9	1118.4	1084.0	1003.5	943.4	867.6	874.6	858.0	859.6	860.1
40°	1191.9	1200.5	1244.6	1277.8	1271.4	1236.5	1175.9	1179.6	1148.5	1141.5	1107.6
42.5°	1247.8	1259.0	1329.4	1432.5	1485.1	1516.8	1502.8	1501.2	1477.0	1467.9	1439.5
45°	1282.7	1292.9	1381.5	1533.4	1654.7	1747.1	1785.2	1789.5	1769.1	1760.0	1736.4
47.5°	1281.1	1292.9	1387.9	1571.0	1749.8	1897.4	2004.8	2010.2	2022.5	2014.5	2016.1
50°	1210.2	1221.5	1317.0	1507.1	1721.9	1966.2	2162.7	2179.9	2199.7	2213.1	2219.6
52.5°	1124.3	1132.4	1217.2	1397.6	1602.7	1937.7	2256.1	2285.6	2315.2	2340.4	2358.1
55°	1092.6	1101.8	1168.3	1318.1	1507.1	1818.5	2299.6	2343.1	2385.0	2426.3	2460.1
57.5°	1109.3	1117.9	1165.6	1280.6	1450.2	1692.9	2312.0	2379.6	2448.3	2515.4	2582.0
60°	1170.5	1179.6	1220.4	1315.5	1435.2	1620.4	2263.6	2375.8	2490.2	2607.2	2717.3
62.5°	1146.3	1150.0	1210.2	1376.6	1542.5	1558.7	2088.0	2244.8	2419.3	2599.7	2777.4
63°	1123.2	1127.5	1188.7	1360.0	1575.3	1549.5	2033.8	2199.2	2383.3	2577.7	2771.0
65°	1018.5	1019.0	1065.8	1201.1	1538.8	1565.6	1792.2	1950.1	2161.6	2394.6	2638.9
67.5°	760.3	756.5	801.6	904.7	1208.0	1566.2	1538.2	1626.8	1773.9	1980.7	2199.7
70°	269.5	263.6	336.6	479.4	752.8	1281.1	1321.9	1327.8	1368.6	1480.2	1617.7
72.5°	87.5	89.1	107.4	175.6	346.8	862.3	1196.7	1178.5	1167.8	1167.3	1185.5
75°	34.9	35.5	43.0	77.9	155.7	415.6	1048.1	1058.2	1062.0	1067.4	1073.3
77.5°	16.7	18.2	24.2	43.5	77.3	205.6	750.1	836.5	885.9	924.0	947.1
80°	5.9	7.0	13.4	26.8	36.0	94.5	395.2	476.8	549.2	642.7	723.2
82.5°	0.0	0.0	2.7	18.8	19.9	38.1	162.1	190.1	217.5	281.9	361.9
85°	0.0	0.0	0.0	5.4	5.9	6.4	54.8	66.0	74.1	86.5	99.8
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.6	1.6	3.2	8.1	12.4
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):

	60°	61°	62°	64°	65°	66°	67°	68°	69°	70°	71°
0°	113.3	113.3	113.3	113.3	113.3	113.3	113.3	113.3	113.3	113.3	113.3
2.5°	132.1	131.5	131.5	130.4	129.9	128.9	128.3	126.7	126.2	126.2	126.2
5°	156.3	154.1	153.0	150.3	148.7	148.2	145.5	144.5	142.8	143.4	140.7
7.5°	183.1	179.4	177.7	173.9	172.9	169.1	168.1	165.3	163.8	160.5	159.5
10°	212.6	207.8	205.1	199.2	197.6	194.9	191.7	188.4	185.8	182.6	180.9
12.5°	246.4	242.2	240.0	231.9	228.2	224.4	220.1	215.8	211.5	208.8	205.1
15°	286.2	279.2	277.1	269.5	263.1	258.2	252.4	247.0	243.7	238.4	234.6
17.5°	325.4	318.4	316.7	305.5	298.5	295.3	288.9	281.9	276.0	270.6	264.7
20°	364.6	359.7	355.4	344.7	337.2	331.8	323.2	316.2	311.4	303.9	296.4
22.5°	403.8	398.9	395.7	384.4	377.5	369.9	362.4	354.9	347.9	338.8	330.2
25°	444.0	440.8	439.2	429.0	422.5	415.6	408.1	399.5	390.9	380.7	371.5
27.5°	485.9	487.0	483.7	481.6	474.6	469.8	458.0	452.1	445.6	433.3	422.0
30°	539.1	542.3	541.2	542.8	538.5	535.3	526.1	518.6	511.1	499.3	486.4
32.5°	606.2	610.5	612.6	618.5	616.4	615.3	612.6	601.9	596.5	576.1	570.8
35°	709.8	707.6	716.8	721.6	719.4	718.4	715.2	709.3	702.8	688.3	674.9
37.5°	844.5	846.7	850.0	840.2	833.8	833.3	823.6	817.7	808.6	792.5	776.4
40°	1091.5	1078.1	1063.1	1022.3	1004.6	994.4	965.9	957.9	942.3	920.3	903.6
42.5°	1412.6	1399.2	1354.1	1285.9	1249.4	1198.9	1175.9	1147.4	1125.4	1089.4	1070.1
45°	1731.5	1692.9	1687.5	1608.0	1563.0	1496.4	1455.1	1407.2	1357.3	1310.1	1275.7
47.5°	2000.5	1991.9	1965.6	1917.3	1875.4	1819.6	1766.4	1692.9	1641.4	1574.2	1512.5
50°	2215.8	2215.3	2205.6	2177.7	2142.8	2097.7	2051.0	1988.7	1930.2	1848.0	1782.0
52.5°	2376.9	2385.5	2388.7	2380.1	2366.7	2327.0	2303.4	2251.2	2201.9	2132.1	2060.7
55°	2495.0	2526.7	2542.8	2561.0	2557.3	2543.4	2542.2	2508.5	2485.9	2430.6	2380.1
57.5°	2641.1	2693.1	2743.1	2831.7	2834.9	2866.1	2882.1	2898.2	2902.5	2880.5	2863.9
60°	2826.9	2933.1	3027.6	3212.8	3261.2	3337.4	3386.8	3440.5	3486.2	3489.9	3488.8
62.5°	2957.8	3121.6	3274.1	3549.0	3642.9	3731.0	3797.0	3849.1	3880.8	3913.0	3928.1
63°	2961.6	3140.9	3303.1	3586.6	3685.3	3769.1	3831.9	3880.2	3913.5	3932.9	3942.5
65°	2870.9	3088.3	3281.6	3564.0	3656.9	3741.2	3773.9	3805.6	3821.7	3829.2	3800.8
67.5°	2433.3	2645.9	2871.4	3187.1	3266.5	3367.5	3394.3	3410.4	3418.0	3416.4	3392.2
70°	1819.6	1997.9	2248.6	2609.4	2714.6	2813.4	2874.6	2901.0	2909.5	2906.8	2870.9
72.5°	1270.3	1375.0	1581.7	1983.3	2126.7	2253.4	2329.1	2368.3	2376.4	2360.2	2327.0
75°	1066.9	1072.2	1118.9	1338.5	1472.7	1608.0	1693.4	1718.1	1702.0	1653.2	1568.3
77.5°	952.5	964.3	964.3	997.1	1023.3	1060.9	1069.0	1008.9	939.1	848.9	775.8
80°	798.9	840.2	869.3	893.4	896.1	888.6	868.7	834.9	781.2	712.5	636.3
82.5°	485.4	567.0	600.2	724.8	786.0	827.4	824.1	779.1	738.3	666.8	601.9
85°	122.4	132.1	143.4	186.3	208.8	255.0	284.1	297.4	302.3	277.6	251.3
87.5°	11.8	8.1	13.4	10.2	14.5	10.7	14.5	13.4	16.7	17.7	19.3
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):

	72°	73°	74°	75°	76°	77°	78°	79°	80°	81°	82°
0°	113.3	113.3	113.3	113.3	113.3	113.3	113.3	113.3	113.3	113.3	113.3
2.5°	125.1	124.6	124.0	123.5	122.9	122.4	121.4	121.4	120.3	119.7	119.2
5°	139.0	138.0	137.5	136.4	134.7	133.7	132.1	129.9	128.3	127.8	126.7
7.5°	156.8	154.1	153.0	151.4	149.3	146.0	143.9	142.3	139.6	138.0	134.7
10°	176.6	173.9	170.7	167.5	164.3	160.5	157.8	155.7	151.4	149.3	145.5
12.5°	201.9	197.0	193.3	189.0	184.7	180.4	177.2	170.7	167.0	162.1	158.9
15°	227.6	223.3	219.1	213.7	207.3	200.2	197.0	191.2	186.3	178.8	174.5
17.5°	258.8	250.7	244.3	237.9	231.9	225.5	219.1	209.9	203.0	196.5	187.9
20°	289.4	279.7	272.8	264.2	255.6	245.4	237.9	231.4	221.8	213.2	204.0
22.5°	322.2	312.5	301.2	292.6	280.8	272.8	262.5	251.8	242.2	230.9	219.6
25°	361.9	351.6	338.8	327.5	314.1	302.8	290.5	278.1	266.3	253.4	238.9
27.5°	410.7	400.0	386.0	372.6	354.9	340.9	329.1	312.5	297.4	281.3	264.7
30°	472.5	460.7	443.5	424.2	406.4	390.9	374.2	352.2	335.6	316.2	294.8
32.5°	553.0	539.1	516.0	497.7	475.7	455.3	432.2	410.2	386.5	361.4	336.6
35°	654.5	641.6	614.8	587.9	563.8	539.6	510.6	485.4	452.1	421.4	389.8
37.5°	759.7	736.6	711.9	683.0	652.9	623.9	588.4	553.5	515.4	482.2	442.4
40°	880.0	852.1	831.7	800.5	758.1	716.8	684.0	640.6	592.7	548.2	501.5
42.5°	1044.8	1013.7	977.2	929.9	899.3	851.0	808.6	757.1	694.2	644.3	587.9
45°	1235.4	1193.0	1157.6	1111.9	1074.9	1014.7	965.4	896.7	833.8	768.3	699.6
47.5°	1452.9	1400.3	1348.7	1303.6	1244.6	1185.5	1122.7	1049.6	969.1	897.2	815.6
50°	1702.6	1627.9	1556.5	1498.5	1417.4	1349.3	1281.1	1198.9	1109.8	1027.1	934.2
52.5°	1980.1	1893.7	1799.2	1710.1	1616.1	1528.6	1446.4	1351.9	1252.6	1151.7	1048.1
55°	2315.2	2250.2	2139.0	2025.8	1900.1	1783.1	1677.3	1560.3	1439.5	1306.8	1197.8
57.5°	2839.7	2808.1	2715.2	2601.9	2438.1	2295.8	2116.5	1973.1	1798.1	1615.5	1474.9
60°	3550.6	3511.4	3459.3	3367.5	3237.6	3044.3	2846.7	2623.9	2357.6	2104.7	1864.7
62.5°	3929.6	3915.7	3873.3	3809.9	3688.6	3536.1	3336.9	3092.1	2791.4	2484.3	2178.2
63°	3940.9	3923.2	3886.7	3822.3	3715.4	3567.8	3372.3	3134.5	2840.2	2527.2	2214.8
65°	3788.5	3781.5	3744.4	3674.1	3601.0	3488.3	3336.9	3132.3	2885.4	2589.5	2278.6
67.5°	3360.0	3339.1	3282.1	3260.7	3209.6	3131.2	3015.8	2875.1	2698.5	2466.0	2197.6
70°	2841.9	2810.7	2739.3	2701.2	2638.9	2589.5	2519.2	2418.8	2309.8	2147.6	1947.4
72.5°	2292.6	2228.2	2162.7	2063.4	1976.3	1888.3	1810.5	1739.6	1619.8	1554.4	1402.4
75°	1488.9	1371.8	1259.6	1109.3	974.0	854.2	737.7	678.7	555.7	505.8	434.4
77.5°	706.6	641.1	553.0	484.8	397.8	324.8	265.2	199.2	156.3	122.4	93.4
80°	570.2	514.9	461.8	400.0	334.5	266.8	204.5	153.0	108.5	75.2	53.1
82.5°	508.5	448.3	382.8	340.4	295.9	242.2	198.7	162.1	119.7	87.5	59.6
85°	197.6	166.4	128.3	104.7	81.6	67.1	60.7	41.9	32.8	25.8	19.9
87.5°	17.2	13.9	11.3	7.5	8.1	4.3	4.9	3.2	2.7	2.7	2.1
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: EMM-F02-LED-E1-SL2-HSS-7050

CANDELA DISTRIBUTION (continued):

	83°	84°	85°	86°	87°	88°	89°	90°	95°	105°	115°
0°	113.3	113.3	113.3	113.3	113.3	113.3	113.3	113.3	113.3	113.3	113.3
2.5°	118.6	118.1	117.6	116.5	116.5	115.4	114.9	114.4	111.7	105.8	100.9
5°	124.6	123.5	122.4	120.8	119.7	118.1	117.1	115.4	109.6	98.3	88.6
7.5°	133.2	131.0	129.4	126.2	124.6	122.4	120.8	118.1	108.5	91.3	77.9
10°	143.4	139.6	136.9	133.2	129.9	127.2	124.6	120.8	107.4	83.7	68.2
12.5°	155.7	151.4	146.0	141.7	137.5	133.7	129.9	125.1	105.8	77.3	60.7
15°	168.1	161.6	157.8	152.0	146.0	140.7	135.3	131.0	106.3	70.3	54.2
17.5°	182.0	175.6	167.5	161.1	154.6	147.7	141.2	132.6	103.6	64.9	49.4
20°	195.4	186.3	178.8	170.7	161.6	153.0	145.0	137.5	101.5	59.6	45.1
22.5°	209.9	199.2	189.5	179.4	168.1	158.4	148.7	139.0	97.7	54.8	41.3
25°	227.6	215.3	201.3	189.0	177.2	165.3	153.0	141.2	94.0	50.5	38.7
27.5°	249.2	233.0	219.1	203.5	186.9	171.8	158.4	145.5	90.2	47.3	36.0
30°	276.5	257.7	237.9	218.0	200.2	183.1	164.3	148.2	86.5	44.0	33.3
32.5°	313.0	289.4	265.2	242.2	218.5	196.5	176.6	155.7	84.3	41.3	30.6
35°	361.4	330.8	301.2	272.2	243.7	216.9	191.2	167.5	84.3	38.1	27.4
37.5°	407.0	371.5	334.0	298.0	264.2	233.0	202.4	173.9	80.0	35.5	24.7
40°	456.3	413.9	369.9	327.5	286.7	248.1	213.2	180.4	76.2	32.2	22.0
42.5°	532.1	478.4	420.9	371.5	322.7	274.9	231.4	192.7	71.4	29.0	19.3
45°	631.4	563.2	495.6	435.5	373.2	314.6	263.1	215.3	70.3	26.3	16.7
47.5°	737.7	657.2	577.7	501.0	427.9	359.7	298.0	240.5	70.3	23.6	14.5
50°	843.5	742.5	657.7	568.6	486.4	405.9	332.3	266.8	70.9	21.5	11.8
52.5°	939.1	831.2	736.1	633.0	542.3	448.8	368.9	292.6	69.8	18.8	9.7
55°	1071.7	944.9	834.9	721.1	614.8	509.5	418.8	331.3	70.3	16.7	8.1
57.5°	1316.0	1167.3	1034.6	885.4	762.9	627.1	517.1	410.7	76.8	13.9	5.9
60°	1666.6	1473.3	1287.0	1105.0	949.2	787.7	644.9	519.7	90.2	11.3	4.3
62.5°	1902.2	1649.4	1427.1	1226.3	1045.3	876.2	720.5	578.3	99.3	9.1	2.7
63°	1926.4	1665.0	1441.6	1234.4	1049.6	880.5	723.7	582.6	99.8	8.6	2.7
65°	1972.0	1691.8	1449.7	1235.9	1045.3	874.6	721.6	582.0	100.9	7.0	2.1
67.5°	1920.0	1650.4	1402.9	1189.8	1007.8	839.7	694.8	560.5	100.4	4.9	1.6
70°	1717.0	1493.7	1276.3	1077.6	912.2	760.3	632.5	511.1	92.3	3.2	1.1
72.5°	1260.7	1108.7	940.1	796.8	687.3	570.8	487.0	383.9	71.4	2.1	0.6
75°	373.7	340.4	286.2	252.4	222.8	184.2	163.8	127.8	36.5	1.1	0.0
77.5°	74.7	67.7	60.7	55.3	52.1	44.6	42.4	34.9	15.0	0.6	0.0
80°	39.2	32.2	27.4	24.2	21.0	17.2	14.5	11.8	2.7	0.0	0.0
82.5°	37.6	25.2	18.2	15.0	12.9	10.2	8.1	5.9	1.6	0.0	0.0
85°	13.9	10.7	8.1	6.4	5.4	4.9	3.8	3.2	0.0	0.0	0.0
87.5°	2.1	1.6	1.6	1.1	1.1	0.6	0.6	0.6	0.0	0.0	0.0
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):

	125°	135°	145°	155°	165°	175°	180°
0°	113.3	113.3	113.3	113.3	113.3	113.3	113.3
2.5°	96.1	91.8	89.7	87.0	87.0	86.5	87.5
5°	80.0	74.1	69.8	66.6	67.1	65.5	66.0
7.5°	67.7	61.7	58.0	55.9	55.3	54.8	54.8
10°	58.5	53.1	49.9	48.3	47.8	47.8	47.8
12.5°	52.1	46.7	44.0	43.0	43.0	42.4	42.4
15°	46.7	42.4	39.8	38.7	38.7	38.1	38.7
17.5°	42.4	38.1	36.0	34.9	34.9	34.3	34.3
20°	38.7	34.9	32.8	31.1	31.1	30.6	31.1
22.5°	35.5	31.7	29.0	27.9	27.4	26.8	27.4
25°	32.2	28.5	25.8	24.2	23.6	23.6	23.1
27.5°	29.5	25.8	22.5	21.0	20.4	20.4	19.9
30°	26.8	22.5	19.3	17.7	17.2	17.2	17.2
32.5°	24.2	19.3	16.7	15.0	14.5	14.5	14.5
35°	21.5	16.7	13.9	12.4	11.8	11.8	11.8
37.5°	18.2	13.9	10.7	9.7	9.1	8.6	8.6
40°	15.6	10.7	8.1	7.0	5.9	5.9	5.9
42.5°	12.9	8.6	5.9	4.3	3.8	3.2	3.8
45°	10.7	6.4	3.8	2.1	1.6	1.6	1.6
47.5°	8.6	4.3	1.6	0.6	0.6	0.6	0.6
50°	6.4	2.7	0.6	0.0	0.0	0.6	0.6
52.5°	4.9	1.6	0.0	0.0	0.0	0.0	0.0
55°	2.7	0.6	0.0	0.0	0.0	0.0	0.0
57.5°	1.6	0.0	0.0	0.0	0.0	0.0	0.0
60°	1.1	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	0.6	0.0	0.0	0.0	0.0	0.0	0.0
63°	0.6	0.0	0.0	0.0	0.0	0.0	0.0
65°	0.6	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)