

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: P162315

Luminaire Tested: **EMM-E02-LED-E1-SL2-HSS-8030**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P162315
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-E02-LED-E1-SL2-HSS-8030
Description: EPIC MODERN MEDIUM DECORATIVE LED LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 2 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: 2942.7 lumens
Efficiency: N/A
Efficacy: 56.5 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

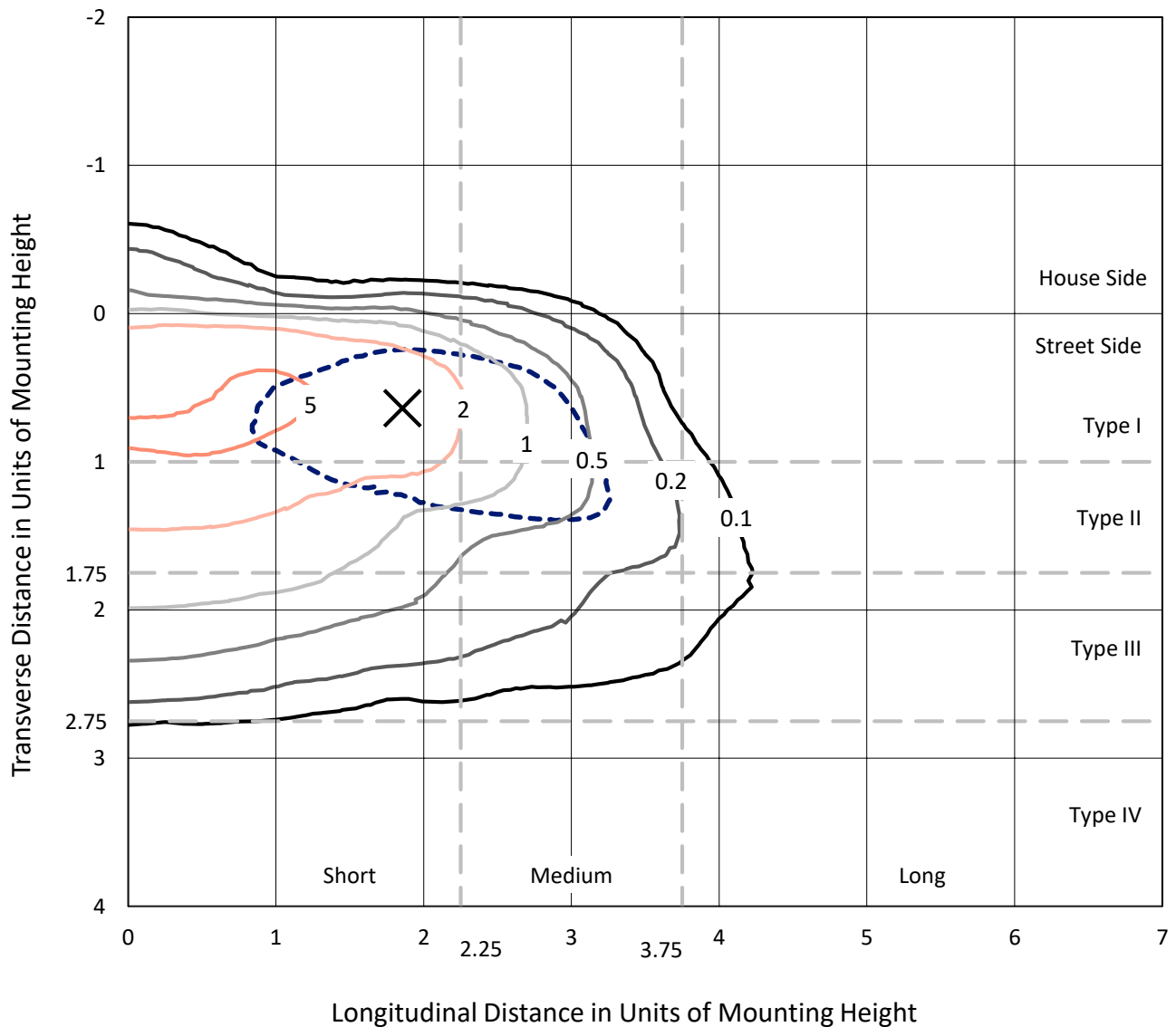
Input Watts (W): 52.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

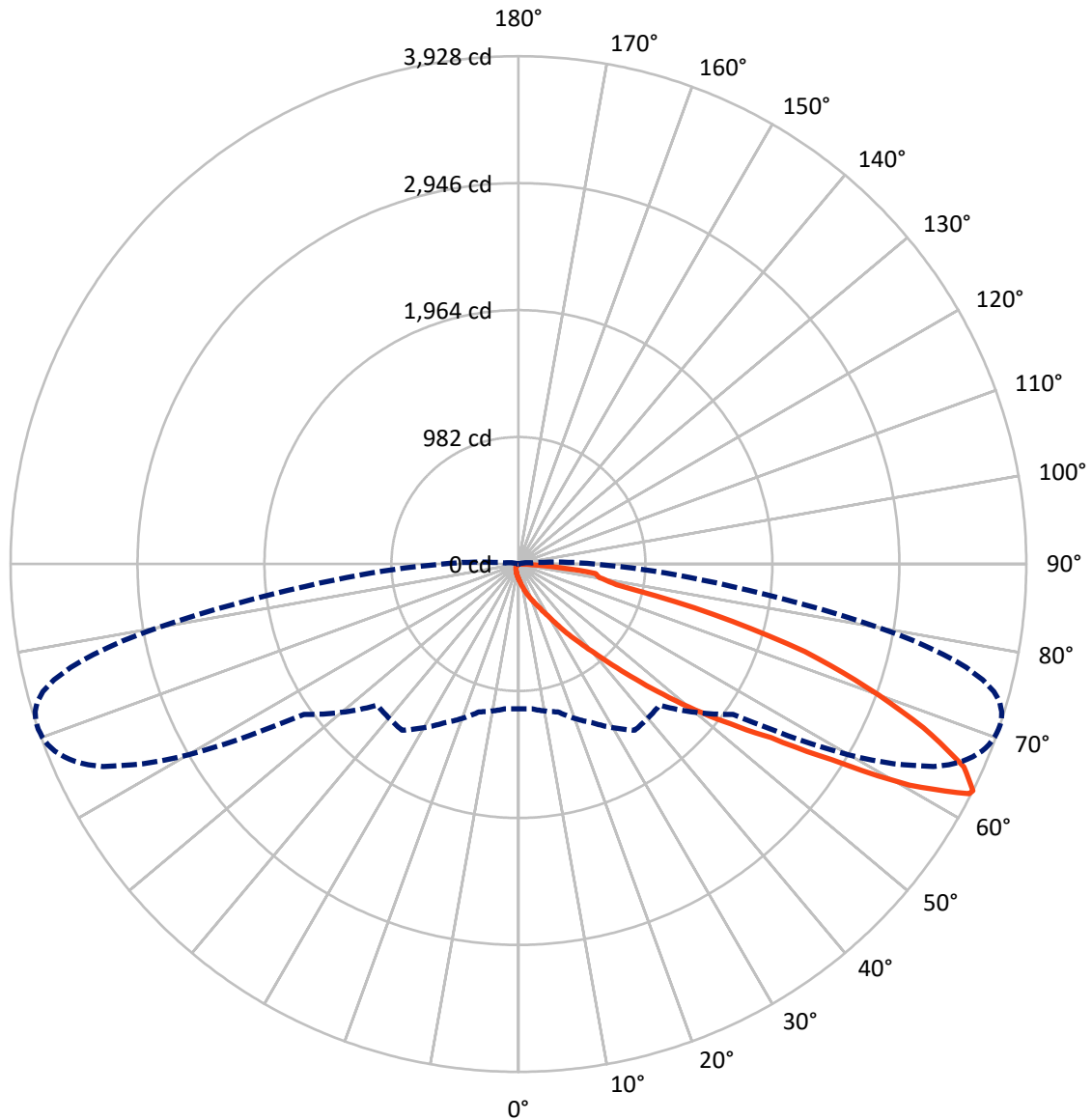
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 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	62.5	0.0	62.5
	% Fixture	2.1	0.0	2.1
Street Side	Lumens	2880.2	0.0	2880.2
	% Fixture	97.9	0.0	97.9
Total	Lumens	2942.7	0.0	2942.7
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	12.5	0.4
10°-20°	48.4	1.6
20°-30°	98.3	3.3
30°-40°	240.1	8.2
40°-50°	537.0	18.2
50°-60°	755.1	25.7
60°-70°	887.9	30.2
70°-80°	320.6	10.9
80°-90°	42.9	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°	2942.7	100.0
0°-180°	2942.7	100.0



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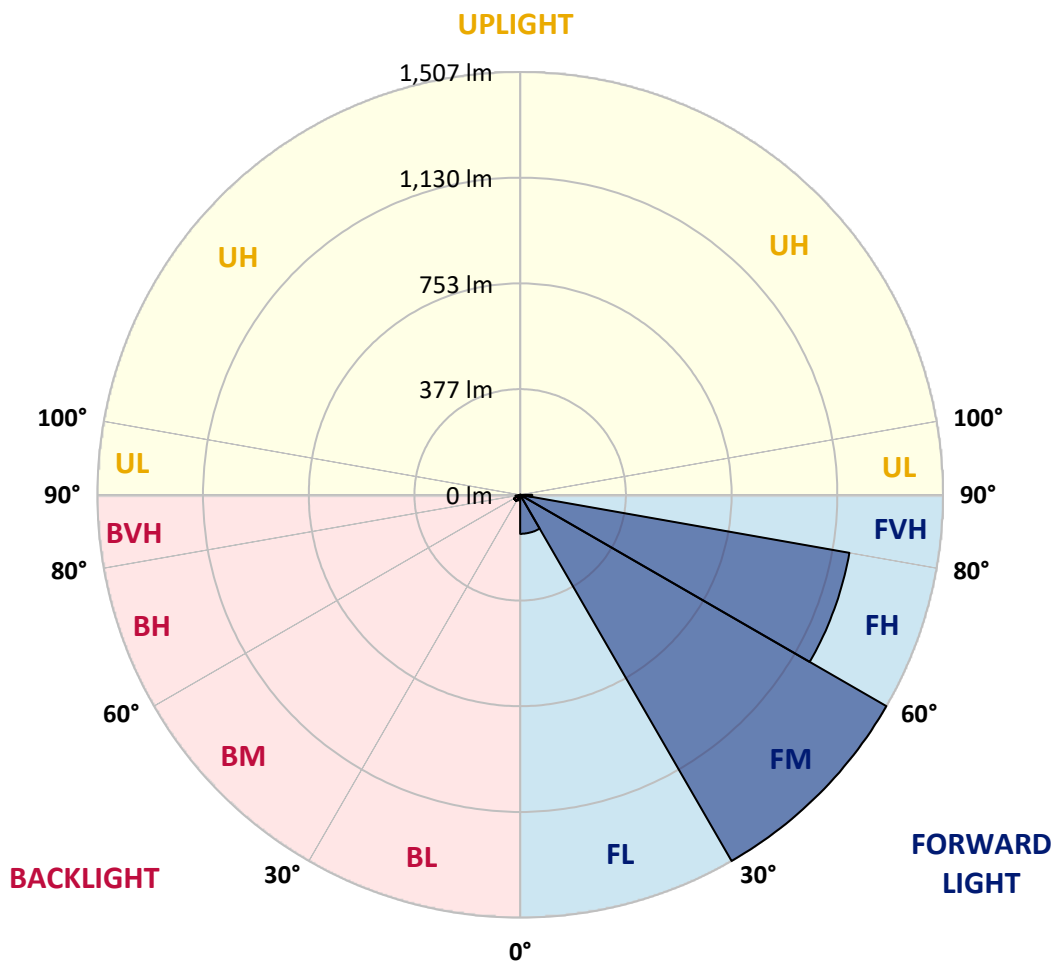
CATALOG NUMBER: EMM-E02-LED-E1-SL2-HSS-8030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	139.1	4.7			
FM (30°-60°)	1507.0	51.2			
FH (60°-80°)	1191.4	40.5			G1/1800
FVH (80°-90°)	42.8	1.5			G1/100
BL (0°-30°)	20.1	0.7	B0/110		
BM (30°-60°)	25.2	0.9	B0/220		
BH (60°-80°)	17.1	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°	112.9	112.9	112.9	112.9	112.9	112.9	112.9	112.9	112.9	112.9	112.9
2.5°	147.6	149.3	148.2	145.5	142.3	138.0	134.3	134.3	133.7	132.1	132.7
5°	193.7	194.2	192.0	185.6	179.8	170.7	160.5	159.4	158.3	156.8	156.2
7.5°	238.6	240.7	238.6	231.6	219.9	205.9	189.9	188.3	185.1	185.1	183.0
10°	284.6	284.6	282.5	274.4	263.7	243.9	223.6	221.0	217.2	216.1	212.9
12.5°	317.2	317.2	316.2	311.9	303.3	285.7	261.1	258.4	253.6	252.0	248.2
15°	330.1	330.1	330.6	334.3	334.9	326.8	301.2	299.1	294.2	289.9	288.4
17.5°	338.1	337.5	337.5	342.9	352.6	357.9	341.3	339.2	333.8	331.7	326.3
20°	355.8	354.7	351.4	351.4	360.6	379.3	379.3	378.7	372.9	371.2	368.6
22.5°	381.9	380.9	371.2	363.3	367.5	391.0	413.0	411.9	409.8	407.6	406.0
25°	424.8	421.0	404.4	380.9	377.2	402.3	438.7	441.4	442.9	442.9	444.0
27.5°	489.5	484.7	455.2	411.4	394.8	420.5	467.0	472.4	477.2	478.3	483.0
30°	579.4	570.8	528.6	464.4	426.4	447.2	508.8	514.6	521.6	523.7	531.2
32.5°	727.0	722.2	681.6	585.2	503.9	499.6	567.0	574.5	583.6	587.4	596.5
35°	951.7	952.8	919.6	832.9	720.6	661.7	671.4	677.8	681.0	692.2	697.0
37.5°	1104.2	1106.8	1114.3	1080.1	999.8	939.9	864.5	871.4	854.9	856.5	857.0
40°	1187.6	1196.2	1240.0	1273.2	1266.8	1232.0	1171.6	1175.3	1144.3	1137.3	1103.6
42.5°	1243.3	1254.5	1324.6	1427.2	1479.7	1511.3	1497.4	1495.7	1471.6	1462.6	1434.2
45°	1278.0	1288.2	1376.4	1527.8	1648.7	1740.8	1778.7	1783.0	1762.7	1753.6	1730.1
47.5°	1276.4	1288.2	1382.9	1565.3	1743.4	1890.5	1997.5	2002.8	2015.2	2007.2	2008.8
50°	1205.8	1217.0	1312.2	1501.6	1715.6	1959.0	2154.8	2171.9	2191.7	2205.1	2211.5
52.5°	1120.2	1128.2	1212.8	1392.5	1596.8	1930.7	2247.9	2277.3	2306.7	2331.9	2349.5
55°	1088.6	1097.8	1164.1	1313.3	1501.6	1811.9	2291.2	2334.5	2376.3	2417.5	2451.2
57.5°	1105.2	1113.8	1161.4	1275.9	1444.9	1686.7	2303.5	2370.9	2439.4	2506.3	2572.6
60°	1166.2	1175.3	1216.0	1310.7	1429.9	1614.5	2255.4	2367.2	2481.1	2597.7	2707.4
62.5°	1142.1	1145.9	1205.8	1371.6	1536.9	1553.0	2080.4	2236.6	2410.5	2590.3	2767.3
63°	1119.1	1123.4	1184.4	1355.1	1569.5	1543.9	2026.4	2191.2	2374.7	2568.3	2760.9
65°	1014.8	1015.3	1061.9	1196.7	1533.2	1559.9	1785.7	1943.0	2153.8	2385.9	2629.3
67.5°	757.5	753.7	798.7	901.4	1203.6	1560.5	1532.6	1620.9	1767.5	1973.5	2191.7
70°	268.6	262.6	335.4	477.7	750.0	1276.4	1317.1	1322.9	1363.6	1474.8	1611.8
72.5°	87.2	88.8	107.0	174.9	345.6	859.1	1192.4	1174.2	1163.5	1163.0	1181.2
75°	34.8	35.3	42.8	77.6	155.1	414.1	1044.2	1054.4	1058.1	1063.5	1069.4
77.5°	16.6	18.2	24.1	43.3	77.0	204.9	747.3	833.5	882.7	920.7	943.6
80°	5.9	7.0	13.4	26.7	35.8	94.1	393.7	475.1	547.2	640.4	720.6
82.5°	0.0	0.0	2.7	18.7	19.8	38.0	161.5	189.4	216.7	280.8	360.6
85°	0.0	0.0	0.0	5.3	5.9	6.4	54.6	65.8	73.8	86.1	99.5
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.6	1.6	3.2	8.0	12.3
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):

	60°	61°	62°	64°	65°	66°	67°	68°	69°	70°	71°
0°	112.9	112.9	112.9	112.9	112.9	112.9	112.9	112.9	112.9	112.9	112.9
2.5°	131.6	131.0	131.0	130.0	129.5	128.4	127.8	126.3	125.7	125.7	125.7
5°	155.7	153.6	152.5	149.8	148.2	147.6	145.0	143.9	142.3	142.9	140.2
7.5°	182.4	178.7	177.1	173.3	172.2	168.5	167.4	164.7	163.2	160.0	158.9
10°	211.8	207.0	204.4	198.5	196.9	194.2	191.0	187.8	185.1	181.9	180.3
12.5°	245.5	241.3	239.1	231.1	227.4	223.6	219.3	215.0	210.8	208.1	204.4
15°	285.2	278.2	276.0	268.6	262.1	257.3	251.5	246.1	242.8	237.5	233.8
17.5°	324.2	317.2	315.6	304.4	297.4	294.2	287.8	280.8	275.0	269.6	263.7
20°	363.3	358.4	354.1	343.4	336.0	330.6	322.1	315.1	310.3	302.8	295.3
22.5°	402.3	397.5	394.3	383.0	376.1	368.6	361.1	353.6	346.7	337.5	329.0
25°	442.4	439.2	437.6	427.5	421.0	414.1	406.6	398.0	389.5	379.3	370.2
27.5°	484.1	485.2	482.0	479.8	472.9	468.1	456.3	450.4	444.0	431.7	420.5
30°	537.1	540.3	539.3	540.8	536.6	533.3	524.2	516.7	509.3	497.5	484.7
32.5°	604.0	608.2	610.4	616.3	614.1	613.1	610.4	599.7	594.3	574.0	568.7
35°	707.2	705.1	714.2	719.0	716.8	715.8	712.6	706.7	700.2	685.8	672.4
37.5°	841.5	843.6	846.9	837.2	830.8	830.3	820.6	814.7	805.6	789.6	773.5
40°	1087.6	1074.2	1059.2	1018.5	1000.9	990.7	962.4	954.4	938.9	916.9	900.3
42.5°	1407.4	1394.1	1349.1	1281.2	1244.8	1194.5	1171.6	1143.2	1121.3	1085.4	1066.2
45°	1725.2	1686.7	1681.3	1602.2	1557.3	1490.9	1449.8	1402.1	1352.4	1305.3	1271.1
47.5°	1993.2	1984.7	1958.5	1910.3	1868.6	1812.9	1760.0	1686.7	1635.4	1568.5	1507.0
50°	2207.8	2207.2	2197.6	2169.8	2135.0	2090.1	2043.5	1981.5	1923.2	1841.3	1775.5
52.5°	2368.2	2376.8	2380.0	2371.4	2358.1	2318.5	2295.0	2243.0	2193.9	2124.3	2053.1
55°	2485.9	2517.5	2533.5	2551.7	2548.0	2534.1	2533.0	2499.3	2476.8	2421.7	2371.4
57.5°	2631.5	2683.3	2733.1	2821.3	2824.6	2855.6	2871.7	2887.7	2892.0	2870.0	2853.5
60°	2816.6	2922.5	3016.6	3201.1	3249.3	3325.3	3374.5	3428.0	3473.5	3477.2	3476.1
62.5°	2947.0	3110.2	3262.1	3536.0	3629.7	3717.4	3783.2	3835.1	3866.7	3898.7	3913.8
63°	2950.8	3129.5	3291.1	3573.5	3671.9	3755.4	3818.0	3866.1	3899.3	3918.5	3928.2
65°	2860.4	3077.1	3269.6	3551.0	3643.6	3727.6	3760.2	3791.8	3807.8	3815.3	3786.9
67.5°	2424.4	2636.2	2861.0	3175.5	3254.7	3355.3	3382.0	3398.0	3405.5	3403.9	3379.8
70°	1812.9	1990.6	2240.4	2599.9	2704.7	2803.2	2864.2	2890.4	2898.9	2896.2	2860.4
72.5°	1265.7	1370.0	1576.0	1976.1	2119.0	2245.2	2320.6	2359.7	2367.7	2351.6	2318.5
75°	1063.0	1068.3	1114.9	1333.6	1467.4	1602.2	1687.3	1711.8	1695.8	1647.1	1562.6
77.5°	949.0	960.8	960.8	993.4	1019.6	1057.1	1065.1	1005.2	935.6	845.8	773.0
80°	796.0	837.2	866.1	890.2	892.8	885.3	865.5	831.8	778.4	709.9	633.9
82.5°	483.6	564.9	598.1	722.2	783.2	824.4	821.1	776.2	735.6	664.4	599.7
85°	122.0	131.6	142.9	185.6	208.1	254.1	283.0	296.4	301.2	276.5	250.4
87.5°	11.8	8.0	13.4	10.2	14.5	10.7	14.5	13.4	16.6	17.7	19.2
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°	112.9	112.9	112.9	112.9	112.9	112.9	112.9	112.9	112.9	112.9	112.9
2.5°	124.6	124.1	123.6	123.1	122.5	122.0	120.9	120.9	119.8	119.3	118.8
5°	138.5	137.5	137.0	135.9	134.3	133.2	131.6	129.5	127.8	127.3	126.3
7.5°	156.2	153.6	152.5	150.8	148.7	145.5	143.4	141.8	139.1	137.5	134.3
10°	176.0	173.3	170.1	166.9	163.7	160.0	157.3	155.1	150.8	148.7	145.0
12.5°	201.2	196.3	192.6	188.3	184.0	179.8	176.6	170.1	166.4	161.5	158.3
15°	226.8	222.5	218.3	212.9	206.5	199.5	196.3	190.5	185.6	178.1	173.9
17.5°	257.9	249.8	243.4	237.0	231.1	224.7	218.3	209.1	202.2	195.8	187.3
20°	288.4	278.7	271.8	263.2	254.7	244.5	237.0	230.6	221.0	212.4	203.3
22.5°	321.0	311.3	300.1	291.6	279.8	271.8	261.6	250.9	241.3	230.0	218.8
25°	360.6	350.4	337.5	326.3	313.0	301.7	289.4	277.1	265.4	252.5	238.1
27.5°	409.2	398.5	384.6	371.2	353.6	339.7	327.9	311.3	296.4	280.3	263.7
30°	470.8	459.0	441.9	422.6	404.9	389.5	372.9	350.9	334.3	315.1	293.7
32.5°	551.0	537.1	514.1	495.9	474.0	453.6	430.7	408.7	385.1	360.0	335.4
35°	652.1	639.3	612.5	585.8	561.7	537.6	508.8	483.6	450.4	419.9	388.4
37.5°	756.9	733.9	709.3	680.5	650.5	621.6	586.3	551.5	513.5	480.4	440.8
40°	876.8	849.0	828.6	797.6	755.4	714.2	681.6	638.2	590.6	546.2	499.6
42.5°	1041.0	1010.0	973.6	926.5	896.0	847.9	805.6	754.3	691.7	641.9	585.8
45°	1230.9	1188.7	1153.3	1107.9	1071.0	1011.0	961.9	893.4	830.8	765.5	697.0
47.5°	1447.6	1395.2	1343.8	1298.8	1240.0	1181.2	1118.6	1045.8	965.6	893.9	812.6
50°	1696.4	1622.0	1550.9	1493.1	1412.3	1344.4	1276.4	1194.5	1105.7	1023.4	930.8
52.5°	1972.9	1886.8	1792.6	1703.8	1610.2	1523.0	1441.1	1347.0	1248.0	1147.5	1044.2
55°	2306.7	2242.0	2131.2	2018.4	1893.2	1776.6	1671.2	1554.6	1434.2	1302.1	1193.5
57.5°	2829.4	2797.8	2705.3	2592.4	2429.2	2287.4	2108.8	1965.9	1791.6	1609.7	1469.5
60°	3537.7	3498.6	3446.7	3355.3	3225.8	3033.2	2836.3	2614.3	2349.0	2097.0	1857.9
62.5°	3915.3	3901.4	3859.2	3796.0	3675.1	3523.2	3324.8	3080.8	2781.2	2475.3	2170.3
63°	3926.6	3908.9	3872.6	3808.4	3701.9	3554.8	3360.0	3123.0	2829.9	2518.0	2206.7
65°	3774.7	3767.7	3730.8	3660.7	3587.9	3475.6	3324.8	3120.9	2874.9	2580.1	2270.3
67.5°	3347.8	3326.9	3270.2	3248.8	3197.9	3119.8	3004.8	2864.7	2688.7	2457.0	2189.6
70°	2831.5	2800.5	2729.4	2691.4	2629.3	2580.1	2510.0	2410.0	2301.4	2139.8	1940.3
72.5°	2284.2	2220.1	2154.8	2055.8	1969.1	1881.4	1803.9	1733.3	1613.9	1548.7	1397.3
75°	1483.5	1366.8	1255.0	1105.2	970.4	851.1	735.0	676.2	553.7	503.9	432.8
77.5°	704.0	638.7	551.0	483.0	396.4	323.6	264.3	198.5	155.7	122.0	93.1
80°	568.1	513.0	460.1	398.5	333.3	265.9	203.8	152.5	108.1	74.9	52.9
82.5°	506.6	446.7	381.4	339.2	294.8	241.3	197.9	161.5	119.3	87.2	59.4
85°	196.9	165.8	127.8	104.3	81.3	66.8	60.4	41.7	32.6	25.7	19.8
87.5°	17.1	13.9	11.3	7.5	8.0	4.3	4.8	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-E02-LED-E1-SL2-HSS-8030

CANDELA DISTRIBUTION (continued):

	83°	84°	85°	86°	87°	88°	89°	90°	95°	105°	115°
0°	112.9	112.9	112.9	112.9	112.9	112.9	112.9	112.9	112.9	112.9	112.9
2.5°	118.2	117.7	117.1	116.1	116.1	115.0	114.5	113.9	111.3	105.4	100.5
5°	124.1	123.1	122.0	120.4	119.3	117.7	116.6	115.0	109.2	97.9	88.3
7.5°	132.7	130.5	128.9	125.7	124.1	122.0	120.4	117.7	108.1	90.9	77.6
10°	142.9	139.1	136.4	132.7	129.5	126.8	124.1	120.4	107.0	83.4	67.9
12.5°	155.1	150.8	145.5	141.2	137.0	133.2	129.5	124.6	105.4	77.0	60.4
15°	167.4	161.0	157.3	151.4	145.5	140.2	134.8	130.5	105.9	70.1	54.0
17.5°	181.3	174.9	166.9	160.5	154.1	147.1	140.7	132.1	103.2	64.7	49.2
20°	194.7	185.6	178.1	170.1	161.0	152.5	144.4	137.0	101.1	59.4	45.0
22.5°	209.1	198.5	188.8	178.7	167.4	157.8	148.2	138.5	97.3	54.6	41.2
25°	226.8	214.5	200.6	188.3	176.6	164.7	152.5	140.7	93.6	50.3	38.5
27.5°	248.2	232.2	218.3	202.7	186.2	171.2	157.8	145.0	89.9	47.1	35.8
30°	275.5	256.8	237.0	217.2	199.5	182.4	163.7	147.6	86.1	43.9	33.1
32.5°	311.9	288.4	264.3	241.3	217.7	195.8	176.0	155.1	84.0	41.2	30.5
35°	360.0	329.6	300.1	271.2	242.8	216.1	190.5	166.9	84.0	38.0	27.3
37.5°	405.5	370.2	332.8	296.9	263.2	232.2	201.7	173.3	79.7	35.3	24.6
40°	454.7	412.4	368.6	326.3	285.7	247.2	212.4	179.8	76.0	32.1	21.9
42.5°	530.1	476.6	419.4	370.2	321.5	273.9	230.6	192.0	71.2	28.9	19.2
45°	629.1	561.1	493.8	433.9	371.8	313.5	262.1	214.5	70.1	26.2	16.6
47.5°	735.0	654.8	575.6	499.1	426.4	358.4	296.9	239.6	70.1	23.5	14.5
50°	840.4	739.8	655.3	566.5	484.7	404.4	331.1	265.9	70.6	21.4	11.8
52.5°	935.6	828.1	733.4	630.7	540.3	447.2	367.5	291.6	69.5	18.7	9.6
55°	1067.8	941.5	831.8	718.5	612.5	507.7	417.3	330.1	70.1	16.6	8.0
57.5°	1311.2	1163.0	1030.9	882.1	760.2	624.8	515.2	409.2	76.5	13.9	5.9
60°	1660.5	1467.9	1282.3	1101.0	945.8	784.8	642.5	517.8	89.9	11.3	4.3
62.5°	1895.3	1643.4	1421.9	1221.8	1041.5	873.0	717.9	576.2	99.0	9.1	2.7
63°	1919.4	1658.9	1436.4	1229.9	1045.8	877.3	721.1	580.4	99.5	8.6	2.7
65°	1964.9	1685.6	1444.4	1231.4	1041.5	871.4	719.0	579.9	100.5	7.0	2.1
67.5°	1913.0	1644.4	1397.8	1185.5	1004.1	836.7	692.2	558.5	100.0	4.8	1.6
70°	1710.8	1488.2	1271.6	1073.7	908.9	757.5	630.2	509.3	92.0	3.2	1.1
72.5°	1256.1	1104.7	936.7	793.9	684.8	568.7	485.2	382.5	71.2	2.1	0.6
75°	372.3	339.2	285.2	251.5	222.0	183.5	163.2	127.3	36.4	1.1	0.0
77.5°	74.4	67.4	60.4	55.1	51.9	44.4	42.3	34.8	15.0	0.6	0.0
80°	39.0	32.1	27.3	24.1	20.9	17.1	14.5	11.8	2.7	0.0	0.0
82.5°	37.5	25.2	18.2	15.0	12.8	10.2	8.0	5.9	1.6	0.0	0.0
85°	13.9	10.7	8.0	6.4	5.3	4.8	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°	112.9	112.9	112.9	112.9	112.9	112.9	112.9
2.5°	95.8	91.5	89.4	86.6	86.6	86.1	87.2
5°	79.7	73.8	69.5	66.3	66.8	65.3	65.8
7.5°	67.4	61.5	57.8	55.6	55.1	54.6	54.6
10°	58.3	52.9	49.7	48.2	47.6	47.6	47.6
12.5°	51.9	46.5	43.9	42.8	42.8	42.3	42.3
15°	46.5	42.3	39.6	38.5	38.5	38.0	38.5
17.5°	42.3	38.0	35.8	34.8	34.8	34.2	34.2
20°	38.5	34.8	32.6	31.0	31.0	30.5	31.0
22.5°	35.3	31.6	28.9	27.8	27.3	26.7	27.3
25°	32.1	28.4	25.7	24.1	23.5	23.5	23.0
27.5°	29.4	25.7	22.5	20.9	20.3	20.3	19.8
30°	26.7	22.5	19.2	17.7	17.1	17.1	17.1
32.5°	24.1	19.2	16.6	15.0	14.5	14.5	14.5
35°	21.4	16.6	13.9	12.3	11.8	11.8	11.8
37.5°	18.2	13.9	10.7	9.6	9.1	8.6	8.6
40°	15.5	10.7	8.0	7.0	5.9	5.9	5.9
42.5°	12.8	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°	4.8	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)