

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: STREETWORKS

Report Number: P140979

Luminaire Tested: **CEM-E01-LED-E-U-SL2-7030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P140979  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33690)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: CEM-E01-LED-E-U-SL2-7030  
Description: EPIC CLASSICAL MEDIUM DECORATIVE LED LUMINAIRE  
(1) LIGHTBARS WITH AccuLED OPTICS - TYPE 2 W/ SPILL LIGHT CONTROL  
Light Source: (21) 3000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2628.5 lumens  
Efficiency: N/A  
Efficacy: 106.4 lumens/watt  
Luminous Opening: Rectangular (W 0.17' x L: 1' x H: 0')  
IES Classification: Type II - Short - Non-Cutoff  
BUG Rating: B1 - U0 - G1  
  
Input Watts (W): 24.7  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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: 28.75 FT

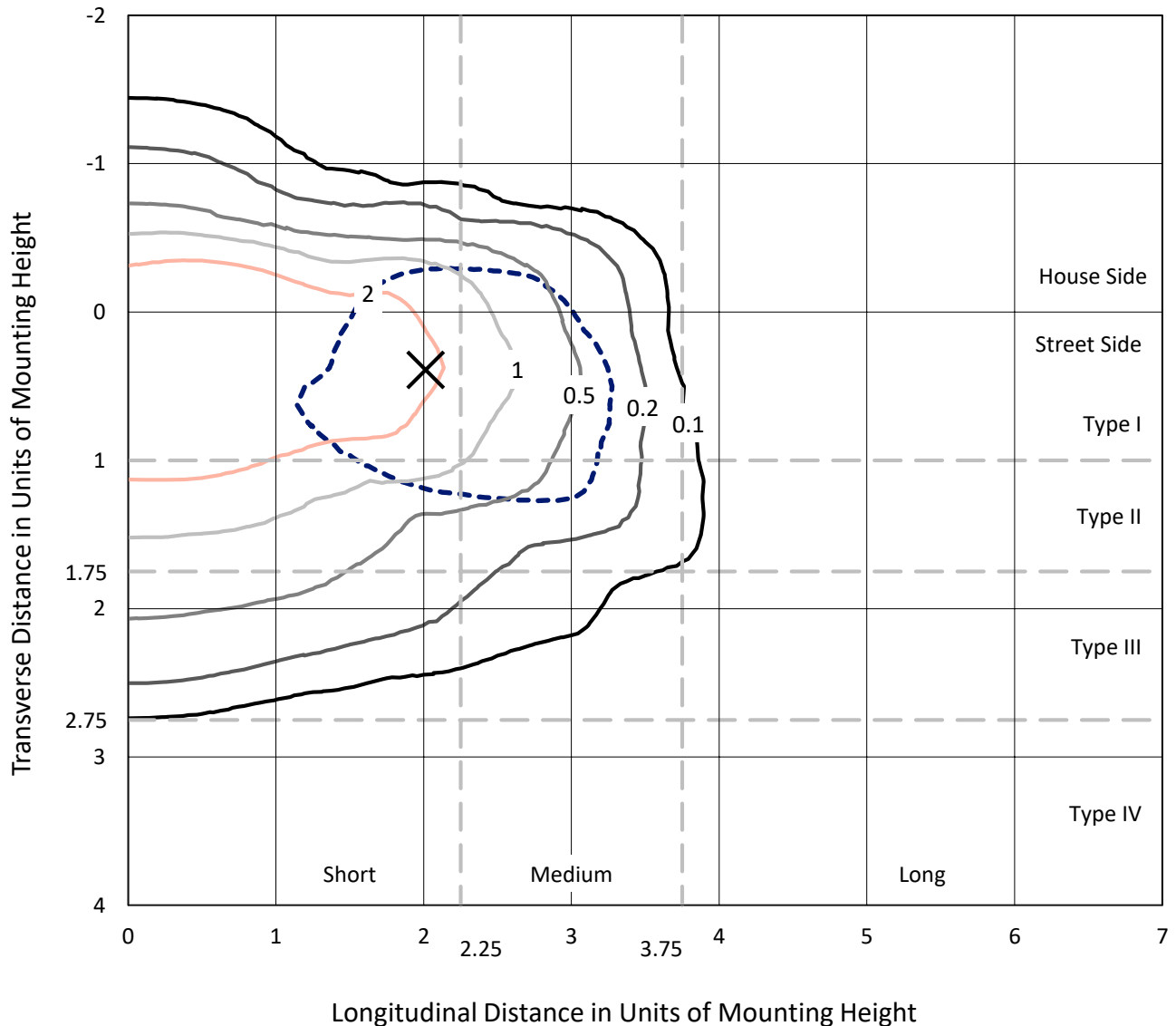


REPORT NUMBER: P140979

CATALOG NUMBER: CEM-E01-LED-E-U-SL2-7030

### Iso-Footcandle Lines of Horizontal Illumination

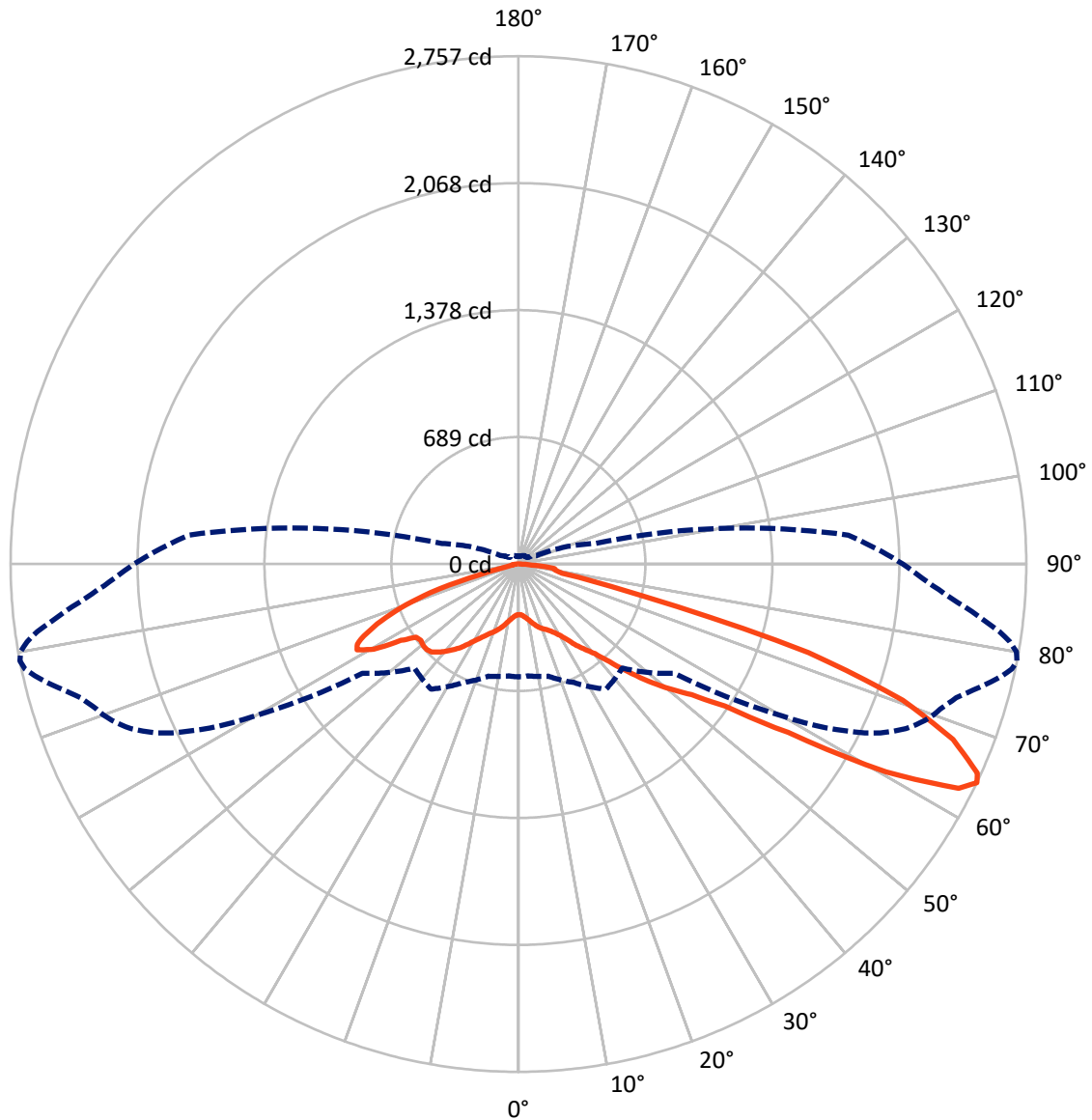
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 3.7 fc  
 Type II - Short - Non-Cutoff

REPORT NUMBER: P140979  
CATALOG NUMBER: CEM-E01-LED-E-U-SL2-7030

### Luminous Intensity Polar Plot



— Vertical Plane Through 79-Deg Lateral      - - - Horizontal Cone Through 64-Deg Vertical

REPORT NUMBER: P140979

CATALOG NUMBER: CEM-E01-LED-E-U-SL2-7030

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	626.5	0.0	626.5
	% Fixture	23.8	0.0	23.8
<b>Street Side</b>	Lumens	2002.0	0.0	2002.0
	% Fixture	76.2	0.0	76.2
<b>Total</b>	Lumens	2628.5	0.0	2628.5
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	27.2	1.0
10°-20°	88.3	3.4
20°-30°	151.6	5.8
30°-40°	253.4	9.6
40°-50°	434.0	16.5
50°-60°	585.5	22.3
60°-70°	740.6	28.2
70°-80°	295.5	11.2
80°-90°	52.4	2.0
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°	2628.5	100.0
0°-180°	2628.5	100.0



REPORT NUMBER: P140979

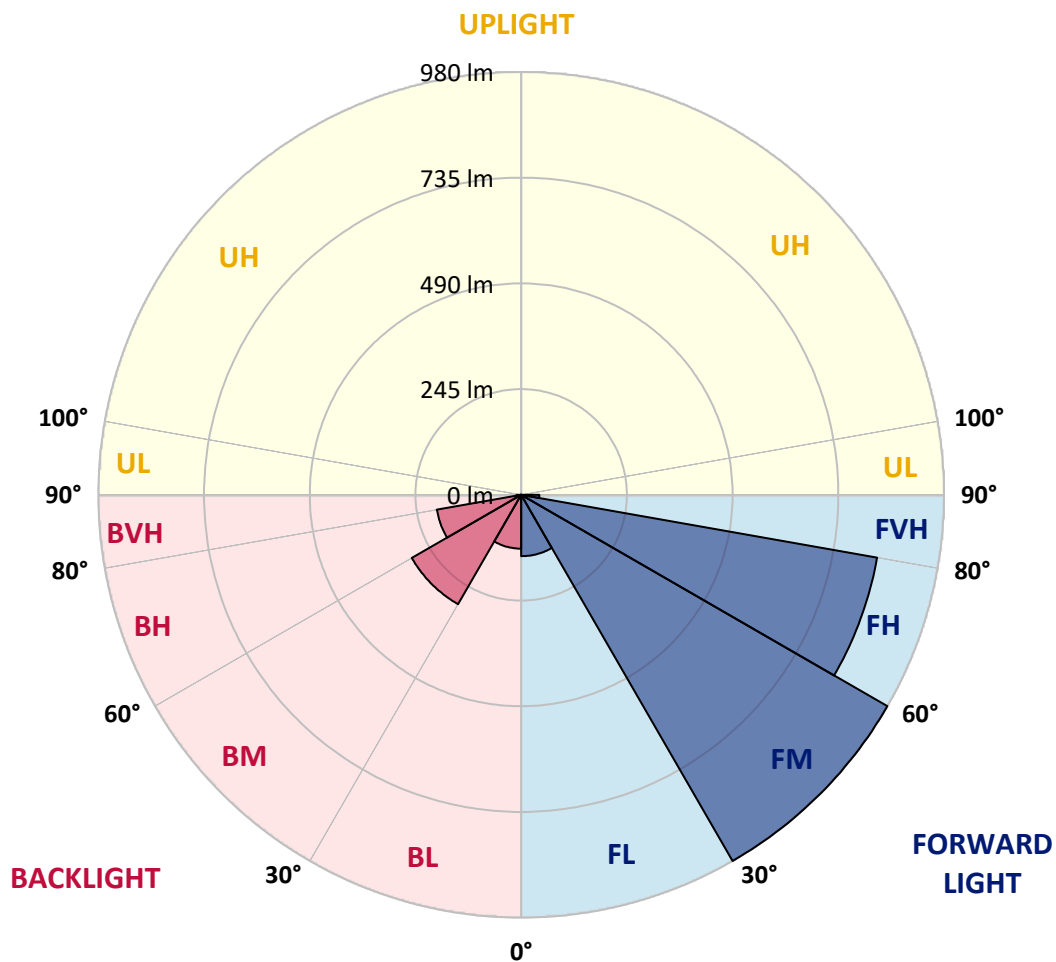
CATALOG NUMBER: CEM-E01-LED-E-U-SL2-7030

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	142.3	5.4			
FM (30°-60°)	980.1	37.3			
FH (60°-80°)	837.7	31.9			G1/1800
FVH (80°-90°)	42.0	1.6			G1/100
BL (0°-30°)	124.9	4.7	B1/500		
BM (30°-60°)	292.8	11.1	B1/1000		
BH (60°-80°)	198.5	7.6	B1/500		G1/500
BVH (80°-90°)	10.4	0.4			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G1**

Type II Short





REPORT NUMBER: P140979

CATALOG NUMBER: CEM-E01-LED-E-U-SL2-7030

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	60°	61°	62°	64°
0°	274.9	274.9	274.9	274.9	274.9	274.9	274.9	274.9	274.9	274.9	274.9
2.5°	273.7	274.0	273.7	274.6	275.2	276.1	276.1	276.1	276.1	276.1	276.1
5°	273.4	273.7	273.4	274.9	276.4	278.3	280.1	280.7	280.7	281.0	281.3
7.5°	276.1	276.4	276.1	278.0	280.1	283.1	286.5	288.3	288.6	288.9	289.5
10°	284.7	284.1	282.8	284.7	286.8	291.4	295.3	298.4	299.3	299.6	300.8
12.5°	295.9	295.6	293.5	292.6	293.8	299.0	306.3	310.5	311.5	311.8	313.0
15°	304.5	303.5	301.7	300.5	302.6	308.1	317.8	323.3	325.2	325.5	327.6
17.5°	309.9	309.3	306.3	305.4	308.7	317.2	329.4	336.1	337.3	338.2	340.7
20°	319.1	317.2	312.7	308.7	311.5	324.5	338.9	345.9	347.7	348.6	350.7
22.5°	331.2	329.7	324.2	314.2	314.2	328.8	347.4	355.3	356.8	358.6	361.1
25°	352.2	351.0	340.4	323.3	319.1	333.1	355.3	365.9	367.5	369.6	373.3
27.5°	373.9	372.3	360.5	337.6	327.6	341.0	366.9	379.6	381.8	384.2	388.5
30°	401.6	398.8	387.0	360.5	344.3	353.8	385.1	401.3	403.7	406.7	412.5
32.5°	463.7	464.9	443.3	415.3	387.0	383.0	413.4	433.2	436.9	440.8	448.8
35°	564.8	559.9	552.0	523.3	492.0	460.9	468.5	489.9	493.8	495.0	498.4
37.5°	629.3	632.0	638.4	638.4	615.0	601.9	580.3	569.9	570.8	572.1	569.3
40°	665.2	671.0	692.9	722.5	743.8	755.6	752.0	703.6	697.8	690.2	665.8
42.5°	691.1	696.9	734.3	791.0	843.9	885.9	909.1	871.0	866.8	848.5	819.3
45°	706.9	711.5	756.6	836.9	917.0	988.5	1051.9	1038.5	1037.3	1021.7	983.4
47.5°	703.9	707.8	754.7	851.5	956.6	1053.7	1151.7	1176.1	1177.3	1173.4	1149.9
50°	658.8	668.3	714.8	819.3	934.7	1079.0	1216.3	1279.9	1281.7	1285.4	1276.3
52.5°	618.6	625.9	667.7	761.1	871.9	1054.0	1254.9	1356.0	1371.5	1380.4	1397.4
55°	602.2	606.5	638.4	717.9	820.2	987.3	1268.0	1411.1	1438.8	1455.6	1494.5
57.5°	599.2	602.5	627.2	687.8	785.8	918.5	1263.8	1485.1	1528.9	1560.6	1636.1
60°	619.6	622.6	640.0	690.8	762.0	868.3	1224.8	1582.5	1644.0	1729.3	1851.1
62.5°	634.8	636.3	657.6	728.9	788.2	819.3	1125.6	1650.7	1760.0	1868.4	2049.6
64°	612.6	609.5	630.5	709.1	828.7	798.3	1033.6	1647.4	1775.6	1895.8	2091.9
65°	580.0	582.1	601.0	670.4	821.7	797.4	973.3	1610.8	1743.9	1871.5	2072.1
67.5°	450.6	458.8	464.0	527.6	673.1	823.2	815.0	1378.2	1511.9	1633.7	1870.8
70°	242.3	241.4	253.0	303.2	468.2	698.7	699.3	971.5	1119.5	1270.8	1506.7
72.5°	89.2	93.8	102.9	138.5	243.3	504.2	640.9	673.7	739.8	860.1	1113.1
75°	51.1	51.8	53.6	65.2	117.2	278.3	595.5	596.1	601.0	620.8	758.4
77.5°	39.9	38.7	39.6	42.3	63.9	146.4	477.7	566.3	565.7	562.6	582.7
80°	29.8	31.1	32.9	32.9	39.6	78.5	271.6	503.9	520.9	533.7	541.0
82.5°	24.1	25.0	29.5	29.5	28.9	44.4	128.2	373.3	426.8	461.5	515.4
85°	15.5	16.4	25.0	24.7	23.4	26.2	67.0	125.1	134.9	164.4	233.8
87.5°	4.3	5.2	11.6	10.0	12.2	9.7	25.0	38.1	46.9	53.0	66.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P140979

CATALOG NUMBER: CEM-E01-LED-E-U-SL2-7030

**CANDELA DISTRIBUTION (continued):**

	65°	66°	67°	68°	69°	70°	71°	72°	73°	74°	75°
0°	274.9	274.9	274.9	274.9	274.9	274.9	274.9	274.9	274.9	274.9	274.9
2.5°	276.1	276.1	276.1	276.4	276.4	276.4	276.4	276.4	276.7	276.1	276.1
5°	281.6	281.3	281.6	281.6	282.5	282.2	282.5	282.5	282.2	282.8	282.8
7.5°	290.4	289.8	290.4	290.7	291.1	292.3	292.3	292.9	293.2	293.5	292.9
10°	301.1	302.0	302.3	302.3	303.8	304.5	304.5	305.4	306.3	306.9	306.6
12.5°	314.2	314.8	315.1	316.9	317.2	318.2	319.7	320.6	320.6	322.1	323.0
15°	328.8	329.4	331.2	331.9	333.1	334.6	335.5	336.4	336.4	339.2	340.1
17.5°	341.3	342.5	343.7	344.6	346.8	348.3	349.8	350.7	352.2	353.5	355.6
20°	351.9	353.5	355.0	356.8	358.3	359.9	361.7	362.9	364.7	366.6	368.7
22.5°	362.3	364.1	365.9	367.5	369.6	371.1	372.6	374.8	376.0	377.8	380.3
25°	373.6	376.6	378.4	380.6	382.7	384.8	386.7	388.5	390.3	392.7	395.2
27.5°	391.5	393.0	395.5	396.7	400.4	402.8	405.2	405.5	408.0	412.5	413.1
30°	415.0	417.7	419.2	423.5	424.1	425.0	429.0	431.7	434.8	438.4	439.9
32.5°	450.3	452.7	454.8	456.1	459.4	464.9	465.5	467.9	473.1	474.0	479.5
35°	502.0	502.6	506.0	507.8	512.1	515.1	516.7	518.8	521.5	527.9	529.4
37.5°	564.1	569.3	565.1	560.8	568.4	567.5	569.3	566.9	574.2	574.5	577.2
40°	660.7	658.5	649.4	639.6	635.1	632.3	626.9	625.6	629.6	627.8	628.7
42.5°	802.8	782.7	767.2	755.6	741.3	725.8	717.0	703.6	703.6	699.6	703.3
45°	970.0	947.4	918.5	891.1	873.5	853.1	832.1	818.1	803.7	793.1	802.5
47.5°	1134.7	1119.5	1087.2	1061.9	1026.6	996.2	963.0	934.1	917.0	904.5	906.3
50°	1277.8	1263.8	1247.0	1212.9	1186.1	1155.1	1120.1	1082.0	1045.2	1030.3	1017.5
52.5°	1398.3	1393.5	1379.2	1363.3	1341.4	1308.2	1286.0	1249.8	1206.2	1174.9	1161.5
55°	1504.9	1513.4	1521.0	1517.7	1509.8	1505.5	1478.1	1453.4	1423.9	1414.8	1387.1
57.5°	1672.6	1697.3	1726.5	1742.7	1758.5	1794.7	1803.6	1794.1	1797.8	1795.3	1780.7
60°	1910.1	1969.8	2020.9	2061.7	2105.3	2147.6	2197.5	2230.4	2244.1	2297.1	2296.2
62.5°	2113.8	2193.3	2258.7	2307.7	2358.6	2396.9	2429.2	2462.1	2502.3	2540.6	2589.0
64°	2169.2	2231.6	2284.9	2328.7	2365.3	2396.6	2421.3	2451.4	2484.6	2534.2	2587.8
65°	2140.6	2210.9	2249.6	2289.2	2322.0	2346.4	2371.7	2399.1	2441.1	2480.4	2537.6
67.5°	1946.0	1999.3	2055.3	2092.2	2123.8	2138.2	2161.9	2184.7	2208.2	2247.8	2319.3
70°	1641.0	1700.7	1781.3	1816.0	1848.9	1854.1	1876.3	1893.4	1908.9	1961.6	1996.9
72.5°	1231.2	1346.9	1426.0	1486.9	1493.6	1519.5	1528.6	1535.6	1553.3	1563.0	1573.7
75°	848.5	952.6	1019.9	1043.0	1071.4	1057.7	1041.8	986.1	986.4	939.2	885.6
77.5°	597.0	613.2	613.8	614.1	576.6	554.7	529.7	497.8	485.3	460.3	426.2
80°	541.3	539.5	528.2	514.5	494.1	464.9	434.8	413.7	397.3	378.7	354.4
82.5°	522.4	526.7	518.5	506.9	495.0	466.1	431.4	398.5	371.4	341.9	312.1
85°	254.5	261.8	285.6	301.1	304.8	286.8	262.1	232.3	203.7	171.4	156.5
87.5°	76.4	81.9	83.7	88.9	95.3	86.8	76.4	68.5	55.1	47.8	37.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0





REPORT NUMBER: P140979

CATALOG NUMBER: CEM-E01-LED-E-U-SL2-7030

**CANDELA DISTRIBUTION (continued):**

	76°	77°	78°	79°	80°	81°	82°	83°	84°	85°	86°
0°	274.9	274.9	274.9	274.9	274.9	274.9	274.9	274.9	274.9	274.9	274.9
2.5°	276.1	276.4	276.4	276.1	276.4	276.4	276.7	276.4	276.4	276.4	276.1
5°	282.2	283.4	283.1	283.1	283.7	283.7	283.4	284.1	283.7	283.7	283.4
7.5°	293.8	293.8	294.7	295.0	294.4	294.4	295.0	295.3	295.9	296.2	296.2
10°	307.2	308.7	308.7	309.0	309.3	310.2	310.5	310.5	311.1	311.1	311.8
12.5°	323.6	324.2	324.8	326.4	326.7	326.7	328.2	327.9	327.9	329.4	329.7
15°	341.3	342.2	343.7	344.3	344.9	346.5	347.4	348.3	348.0	350.1	350.7
17.5°	356.8	357.7	359.6	361.1	362.0	362.9	363.5	364.7	366.6	368.1	368.4
20°	369.3	370.5	372.6	374.5	376.0	376.9	379.3	380.6	381.2	382.4	383.9
22.5°	381.5	383.6	385.7	386.3	389.7	390.6	392.4	394.3	395.5	398.2	399.1
25°	396.7	398.5	401.3	403.1	405.2	407.0	408.9	410.4	413.1	415.6	416.8
27.5°	416.8	418.3	420.4	423.8	425.6	426.8	430.2	433.2	434.5	436.9	439.0
30°	443.3	444.8	447.8	451.2	452.7	456.7	459.1	461.2	463.7	467.0	470.1
32.5°	481.9	483.8	486.5	490.8	490.8	493.5	498.7	503.3	505.1	509.0	511.2
35°	532.8	533.1	536.1	542.5	544.4	543.7	548.6	552.9	554.1	560.2	564.1
37.5°	582.1	583.0	586.7	589.1	592.5	594.9	598.2	604.6	604.6	613.5	617.1
40°	633.3	637.8	638.4	639.0	644.5	654.3	657.6	664.0	669.8	678.3	682.3
42.5°	707.5	712.4	718.2	724.9	733.1	738.6	745.0	754.1	756.6	767.2	770.0
45°	809.2	815.0	830.5	832.1	846.7	854.0	864.6	876.8	879.9	886.9	883.2
47.5°	910.6	917.3	934.4	952.0	965.4	978.2	981.2	986.4	991.0	986.7	987.9
50°	1023.0	1032.7	1048.8	1064.4	1074.4	1089.0	1089.0	1090.2	1086.0	1079.0	1067.7
52.5°	1154.5	1156.0	1166.3	1178.5	1187.7	1190.7	1190.7	1183.7	1173.4	1162.1	1140.2
55°	1374.0	1357.2	1360.3	1360.3	1353.6	1348.1	1343.8	1326.8	1306.4	1286.0	1265.9
57.5°	1769.5	1785.3	1738.1	1725.3	1725.9	1684.2	1667.2	1637.9	1616.0	1579.5	1548.7
60°	2333.6	2322.6	2307.1	2292.5	2293.7	2238.6	2200.0	2156.4	2118.4	2038.0	2003.9
62.5°	2632.3	2671.2	2693.5	2682.2	2656.3	2621.9	2558.6	2492.5	2425.6	2357.4	2296.2
64°	2643.2	2694.7	2738.5	2756.8	2744.6	2701.1	2636.5	2554.3	2474.6	2394.2	2320.2
65°	2590.3	2655.4	2712.0	2737.6	2738.2	2699.9	2635.3	2552.5	2467.3	2374.1	2297.1
67.5°	2370.4	2445.3	2501.1	2544.0	2580.8	2561.3	2516.6	2428.6	2347.9	2242.3	2157.9
70°	2040.7	2087.0	2149.7	2212.4	2242.0	2246.5	2229.8	2185.3	2091.0	2005.1	1896.4
72.5°	1572.8	1644.6	1607.8	1646.5	1671.1	1647.1	1650.1	1574.3	1543.9	1468.4	1391.9
75°	833.0	835.4	819.6	704.5	690.2	637.5	696.0	591.5	555.9	523.0	480.7
77.5°	386.3	336.4	289.8	242.0	197.9	173.2	135.2	119.0	107.2	94.4	97.1
80°	323.0	284.7	243.9	202.2	169.9	137.3	110.2	85.6	68.5	57.5	52.4
82.5°	285.9	252.1	223.8	198.2	175.1	143.1	117.5	90.7	69.7	52.7	40.8
85°	129.1	101.1	91.9	72.5	61.5	52.4	41.7	34.4	28.3	24.1	18.9
87.5°	30.1	20.7	17.7	16.7	14.6	13.7	11.6	12.2	10.0	7.9	8.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P140979

CATALOG NUMBER: CEM-E01-LED-E-U-SL2-7030

**CANDELA DISTRIBUTION (continued):**

	87°	88°	89°	90°	95°	105°	115°	125°	135°	145°	155°
0°	274.9	274.9	274.9	274.9	274.9	274.9	274.9	274.9	274.9	274.9	274.9
2.5°	276.1	276.1	276.4	276.4	276.7	277.4	278.3	277.4	277.4	277.4	277.7
5°	284.1	284.4	284.1	284.1	284.7	285.6	285.9	284.1	283.1	282.2	281.0
7.5°	295.6	296.8	296.5	296.5	297.1	297.1	296.5	293.8	291.1	286.8	283.1
10°	311.8	312.4	312.4	312.4	313.3	313.9	311.1	305.1	297.8	290.1	283.4
12.5°	330.9	330.6	331.5	332.5	331.9	331.9	326.7	317.2	305.4	292.9	281.3
15°	351.0	351.3	351.3	352.9	353.2	351.9	343.7	329.1	310.8	292.0	273.4
17.5°	369.9	370.5	370.8	372.0	373.6	370.2	358.3	338.5	311.8	283.4	258.5
20°	385.7	386.7	387.6	388.5	390.0	387.6	371.7	343.1	306.9	269.7	241.1
22.5°	400.0	401.6	402.2	403.7	406.1	403.1	383.9	343.1	295.9	254.8	221.6
25°	417.4	419.2	422.3	422.9	427.1	423.8	393.7	340.7	283.4	235.9	200.6
27.5°	440.2	442.1	444.8	446.3	451.5	446.9	401.0	334.3	267.9	215.6	180.2
30°	470.4	472.2	475.6	477.1	486.5	471.3	405.8	324.5	250.0	191.8	156.8
32.5°	512.4	517.3	517.0	520.9	529.4	498.4	408.0	310.8	227.4	167.8	134.9
35°	567.5	570.8	573.9	579.4	583.3	527.3	406.4	292.9	199.4	142.8	115.7
37.5°	620.5	626.3	628.4	632.0	631.1	546.8	400.4	264.9	169.0	120.6	102.6
40°	686.5	689.9	696.6	699.9	683.8	565.4	386.0	227.4	138.5	105.9	94.1
42.5°	774.5	778.8	775.4	774.5	743.5	575.7	358.6	190.0	116.0	95.3	87.1
45°	881.4	883.2	873.2	866.5	812.3	574.8	318.8	154.7	100.5	87.4	81.0
47.5°	977.9	974.2	961.1	951.1	871.9	553.5	268.8	127.6	92.2	81.0	76.1
50°	1057.7	1041.5	1027.5	1014.7	919.7	520.9	221.0	107.5	84.3	75.8	71.2
52.5°	1129.8	1107.9	1091.5	1069.8	963.3	478.0	183.0	93.8	76.4	70.6	66.1
55°	1236.7	1211.1	1190.1	1168.8	1040.3	444.5	158.3	83.4	68.5	65.2	60.9
57.5°	1543.3	1474.8	1456.2	1437.0	1246.7	437.2	144.0	75.2	62.4	60.0	57.2
60°	1962.5	1918.0	1888.2	1841.3	1589.5	460.6	133.3	69.1	58.1	56.6	54.2
62.5°	2235.9	2182.3	2133.0	2085.2	1790.8	460.0	120.3	65.2	55.7	55.4	51.8
64°	2253.2	2193.3	2138.2	2086.7	1797.2	429.9	108.4	62.4	55.7	55.7	50.2
65°	2224.6	2164.3	2107.4	2053.8	1760.6	406.7	100.5	61.2	56.6	56.3	49.3
67.5°	2078.8	2018.2	1954.3	1896.7	1606.0	318.8	79.5	59.1	61.5	59.4	48.4
70°	1820.9	1752.1	1704.0	1662.6	1378.6	222.6	63.0	60.3	67.3	63.0	50.8
72.5°	1319.8	1263.8	1263.2	1216.3	1043.7	141.3	50.8	60.0	67.0	62.4	52.7
75°	512.7	439.6	437.2	453.6	443.9	76.4	43.8	53.0	54.8	52.1	46.6
77.5°	87.7	86.2	85.2	89.8	98.9	42.3	40.2	45.1	40.8	36.8	38.7
80°	48.7	46.6	46.0	46.0	43.2	34.7	35.6	35.9	29.5	27.4	32.0
82.5°	33.8	31.4	30.1	29.2	28.3	31.1	31.7	28.3	21.3	21.0	29.8
85°	16.4	15.5	15.2	15.2	17.4	29.2	26.2	21.9	14.3	14.3	32.3
87.5°	7.0	7.0	6.1	6.1	9.4	18.6	11.9	9.1	5.8	6.7	13.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P140979

CATALOG NUMBER: CEM-E01-LED-E-U-SL2-7030

**CANDELA DISTRIBUTION (continued):**

	165°	175°	180°
0°	274.9	274.9	274.9
2.5°	277.4	278.0	277.7
5°	279.5	279.5	278.9
7.5°	279.2	278.0	277.4
10°	277.4	274.0	273.7
12.5°	272.5	267.0	265.5
15°	258.5	251.2	249.3
17.5°	240.8	232.3	229.9
20°	220.7	211.0	207.6
22.5°	201.2	190.0	186.6
25°	179.9	168.7	166.8
27.5°	156.5	145.8	143.1
30°	134.9	125.7	123.6
32.5°	115.4	109.0	109.0
35°	102.6	97.1	97.1
37.5°	92.6	90.1	89.8
40°	85.9	83.7	83.4
42.5°	80.7	78.2	77.9
45°	75.2	72.8	72.8
47.5°	70.0	67.3	67.6
50°	64.8	62.7	62.7
52.5°	60.6	58.5	58.1
55°	56.6	54.5	54.2
57.5°	53.0	50.5	50.2
60°	49.3	46.9	46.3
62.5°	46.3	43.5	42.9
64°	44.4	41.7	41.1
65°	43.5	40.5	40.2
67.5°	42.6	38.7	38.4
70°	46.0	38.1	36.5
72.5°	46.3	37.1	35.3
75°	43.8	35.3	33.8
77.5°	38.7	32.3	30.4
80°	37.1	25.3	22.2
82.5°	34.1	20.7	17.4
85°	28.0	13.4	12.5
87.5°	16.1	8.8	6.4
90°	0.0	0.0	0.0

(END OF REPORT)