

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: P180466

Luminaire Tested: **ICM-E02-LED-E1-SL2-8030**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P180466
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33678)
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ICM-E02-LED-E1-SL2-8030
Description: ICON SITE MEDIUM LED LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 2 W/ SPILL LIGHT CONTROL
Light Source: (42) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4797.2 lumens
Efficiency: N/A
Efficacy: 92.1 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: B1 - U0 - G1

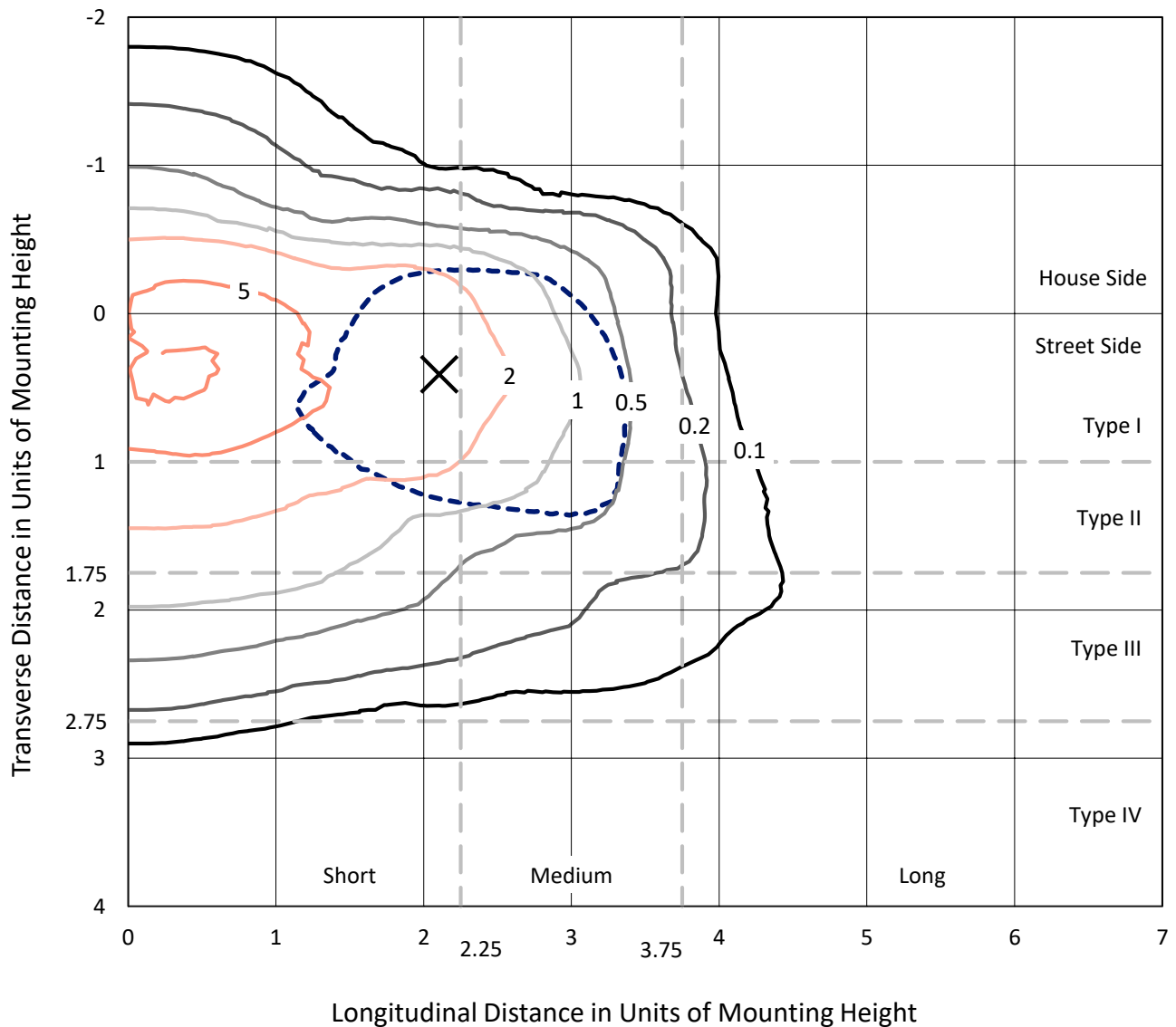
Input Watts (W): 52.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P180466
 CATALOG NUMBER: ICM-E02-LED-E1-SL2-8030

Iso-Footcandle Lines of Horizontal Illumination

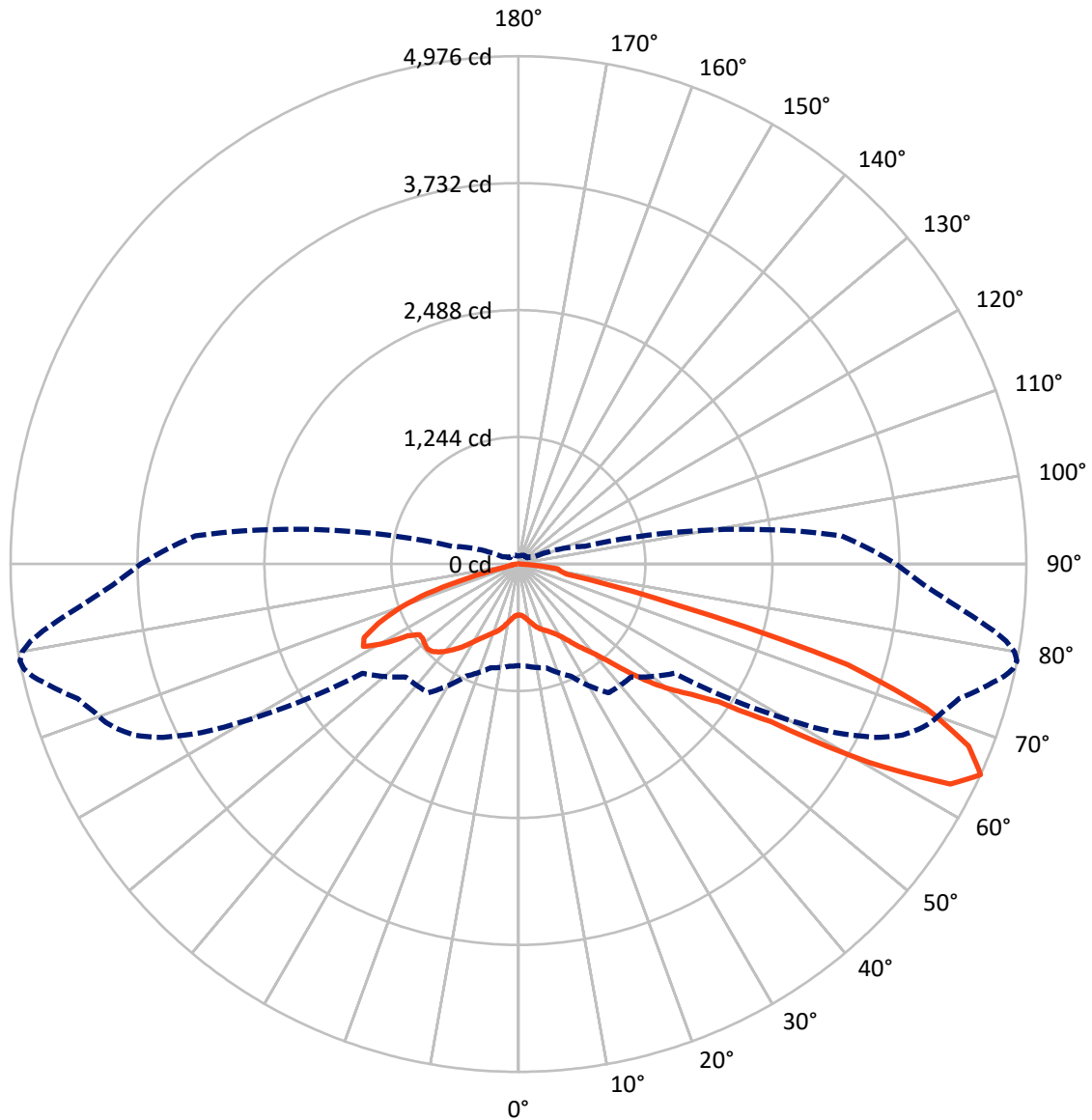
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6.6 fc
 Type II - Short - Non-Cutoff

REPORT NUMBER: P180466
CATALOG NUMBER: ICM-E02-LED-E1-SL2-8030

Luminous Intensity Polar Plot



— Vertical Plane Through 79-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P180466

CATALOG NUMBER: ICM-E02-LED-E1-SL2-8030

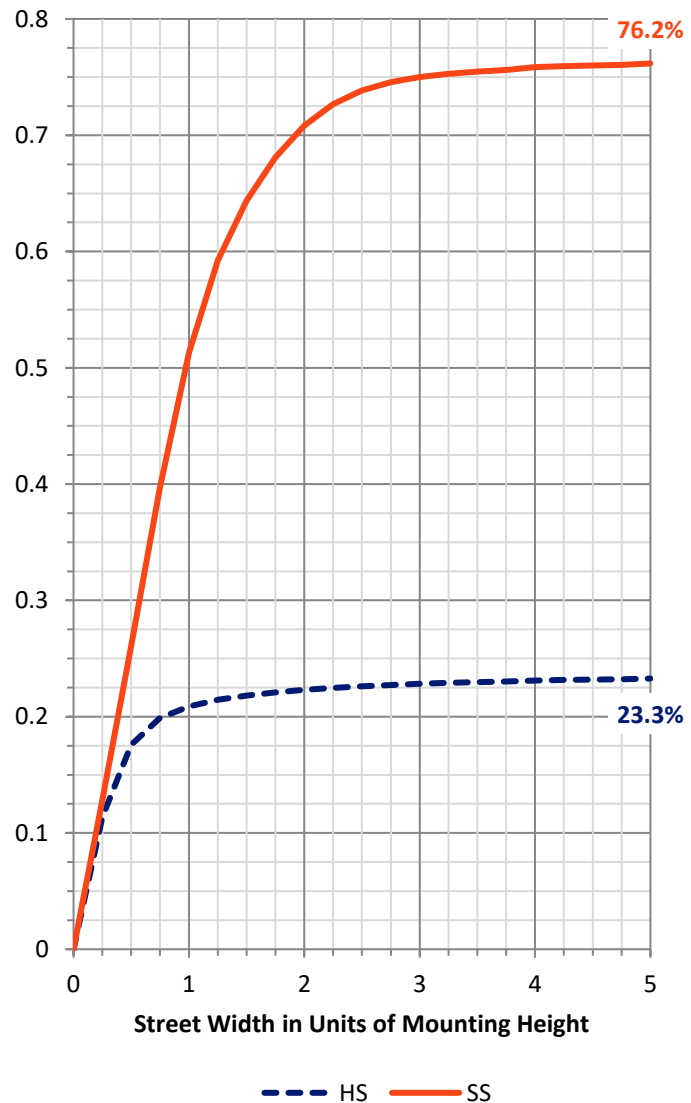
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1134.0	0.0	1134.0
	% Fixture	23.6	0.0	23.6
Street Side	Lumens	3663.1	0.0	3663.1
	% Fixture	76.4	0.0	76.4
Total	Lumens	4797.2	0.0	4797.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.6	1.0
10°-20°	162.3	3.4
20°-30°	280.3	5.8
30°-40°	464.0	9.7
40°-50°	787.0	16.4
50°-60°	1045.7	21.8
60°-70°	1350.7	28.2
70°-80°	566.5	11.8
80°-90°	91.0	1.9
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°	4797.2	100.0
0°-180°	4797.2	100.0



REPORT NUMBER: P180466

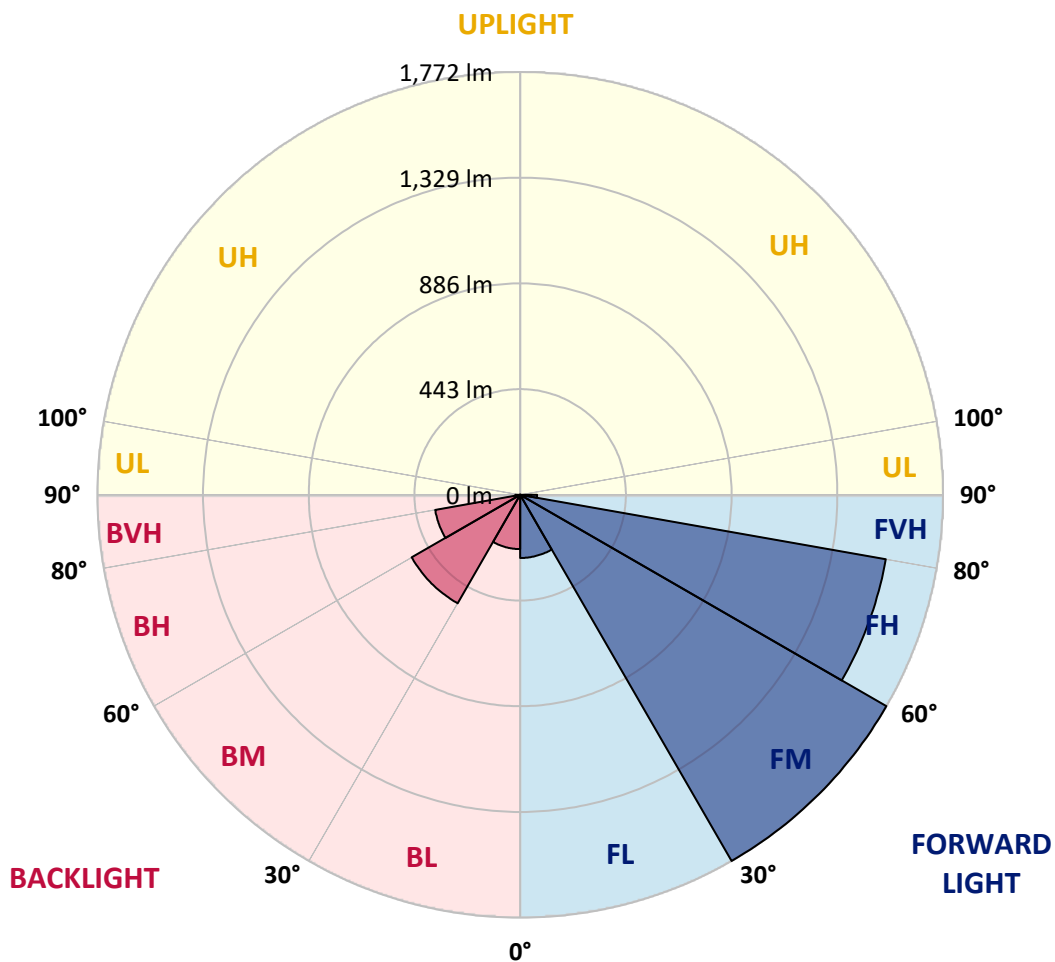
CATALOG NUMBER: ICM-E02-LED-E1-SL2-8030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	264.7	5.5			
FM (30°-60°)	1771.7	36.9			
FH (60°-80°)	1555.6	32.4			G1/1800
FVH (80°-90°)	71.2	1.5			G1/100
BL (0°-30°)	227.6	4.7	B1/500		
BM (30°-60°)	524.9	10.9	B1/1000		
BH (60°-80°)	361.7	7.5	B1/500		G1/500
BVH (80°-90°)	19.8	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: P180466

CATALOG NUMBER: ICM-E02-LED-E1-SL2-8030

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	60°	61°	62°	64°
0°	499.4	499.4	499.4	499.4	499.4	499.4	499.4	499.4	499.4	499.4	499.4
2.5°	497.8	499.4	498.3	499.4	500.4	500.9	502.0	501.4	501.4	502.0	500.9
5°	497.8	497.8	499.4	502.0	503.0	506.1	509.8	509.3	509.8	509.3	510.3
7.5°	508.2	507.7	509.3	512.4	513.5	518.1	524.5	525.5	526.5	526.5	528.1
10°	526.5	526.0	527.6	529.1	530.7	534.4	543.3	547.0	547.4	548.0	550.1
12.5°	549.6	549.0	547.0	547.0	546.4	553.2	565.3	572.1	573.1	575.3	576.8
15°	565.8	564.2	561.1	559.0	561.6	572.7	590.4	598.2	599.3	600.8	605.0
17.5°	581.5	579.9	573.1	567.9	571.5	589.4	613.4	621.8	623.9	625.5	630.1
20°	603.4	602.4	592.5	579.9	578.9	602.0	631.3	642.2	643.8	645.9	650.6
22.5°	637.0	632.3	620.7	597.2	585.7	609.2	643.8	659.0	661.0	663.2	669.4
25°	678.9	676.7	656.8	620.7	596.7	616.6	657.4	676.3	679.4	682.0	690.3
27.5°	722.3	719.2	697.7	650.6	616.1	631.3	678.9	700.3	704.5	708.7	716.6
30°	761.0	760.0	742.2	690.9	647.4	659.0	713.4	739.5	744.3	749.5	756.8
32.5°	852.1	852.7	834.3	782.0	723.4	709.2	763.2	802.4	804.5	810.8	823.8
35°	1026.4	1028.5	1021.7	980.4	914.4	856.3	861.5	900.3	902.3	907.6	920.2
37.5°	1143.2	1147.4	1168.3	1181.3	1147.8	1121.1	1054.7	1039.4	1041.0	1038.0	1035.3
40°	1207.5	1213.8	1268.8	1336.8	1373.4	1374.0	1345.1	1278.1	1252.5	1245.2	1213.8
42.5°	1244.1	1254.6	1332.6	1448.8	1554.0	1626.2	1644.0	1569.7	1550.9	1517.4	1457.1
45°	1268.2	1280.8	1372.9	1532.0	1687.0	1810.0	1902.6	1869.6	1857.0	1836.7	1781.1
47.5°	1264.0	1274.0	1369.8	1560.3	1756.6	1931.4	2095.7	2129.8	2114.5	2109.3	2071.6
50°	1187.6	1196.5	1293.9	1490.1	1718.3	1977.4	2218.2	2314.5	2314.5	2324.5	2312.9
52.5°	1106.0	1113.3	1201.8	1378.1	1594.8	1932.4	2286.2	2445.9	2466.8	2484.1	2511.3
55°	1075.1	1084.0	1151.0	1301.7	1489.6	1803.6	2309.3	2544.3	2583.0	2612.3	2674.1
57.5°	1089.8	1098.6	1146.2	1260.4	1427.8	1672.3	2310.3	2676.7	2751.6	2811.7	2936.9
60°	1153.0	1161.4	1201.2	1298.6	1411.6	1596.4	2265.9	2887.6	3007.0	3120.0	3328.4
62.5°	1123.7	1134.2	1192.3	1361.9	1532.6	1538.8	2105.1	3050.9	3243.0	3410.0	3741.3
65°	995.5	1006.5	1052.0	1210.6	1539.8	1563.9	1867.0	3054.1	3292.8	3518.3	3875.8
67.5°	755.8	760.0	796.1	923.3	1231.5	1591.7	1622.1	2692.4	2919.6	3171.4	3540.3
70°	386.2	393.6	404.1	509.8	792.9	1315.4	1393.9	1984.2	2273.7	2533.8	2977.1
72.5°	134.0	136.7	147.1	194.7	386.2	863.1	1220.1	1359.8	1534.6	1778.1	2291.5
75°	80.6	80.6	84.3	98.4	176.4	449.6	1085.6	1110.7	1134.2	1215.9	1551.9
77.5°	63.8	64.9	64.9	67.5	97.9	230.8	824.4	1032.7	1035.8	1043.6	1100.2
80°	45.6	47.6	51.8	54.0	63.3	126.7	462.7	906.5	968.3	998.1	1039.4
82.5°	34.0	36.1	44.0	46.6	49.2	70.7	207.8	625.5	738.1	797.7	943.2
85°	15.2	17.8	29.9	32.9	34.5	37.7	97.4	178.0	204.7	229.8	303.1
87.5°	2.6	2.6	4.7	6.8	10.0	9.4	21.5	30.3	30.9	36.1	40.3
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: P180466

CATALOG NUMBER: ICM-E02-LED-E1-SL2-8030

CANDELA DISTRIBUTION (continued):

	65°	66°	67°	68°	69°	70°	71°	72°	73°	74°	75°
0°	499.4	499.4	499.4	499.4	499.4	499.4	499.4	499.4	499.4	499.4	499.4
2.5°	500.9	500.9	500.9	500.4	500.9	500.9	500.9	500.9	501.4	501.4	501.4
5°	511.9	510.9	511.4	511.4	511.4	510.9	511.9	511.4	511.9	513.5	512.9
7.5°	528.1	529.1	529.7	530.2	530.2	530.2	530.7	531.8	531.8	533.4	532.8
10°	552.2	551.6	552.2	553.8	555.4	555.8	557.4	556.9	558.0	560.0	562.1
12.5°	577.9	578.9	580.5	582.1	584.7	585.2	586.7	587.3	590.4	590.4	592.5
15°	606.6	607.2	610.3	610.8	614.0	615.0	617.6	618.7	622.3	622.9	624.9
17.5°	632.8	633.9	635.4	637.0	640.7	642.2	644.3	646.4	649.6	650.6	654.2
20°	653.8	655.8	656.4	659.5	662.6	664.7	666.8	668.9	672.1	673.6	677.3
22.5°	672.6	674.7	676.3	678.9	680.9	684.1	685.1	688.8	691.9	694.6	697.7
25°	693.0	696.1	697.7	702.4	704.0	707.2	709.8	713.4	717.6	720.7	724.9
27.5°	721.8	726.5	728.6	733.9	737.5	739.1	743.3	748.5	752.1	755.8	760.0
30°	761.6	770.4	772.0	775.7	782.5	783.5	788.7	792.9	798.7	802.4	806.1
32.5°	823.4	834.3	835.4	839.5	845.3	847.4	851.5	856.3	865.2	866.8	872.6
35°	918.1	922.8	927.0	928.6	933.2	935.8	939.0	944.2	953.1	952.1	958.3
37.5°	1031.6	1033.2	1033.8	1028.5	1029.6	1024.8	1030.6	1031.6	1034.8	1037.4	1043.6
40°	1193.9	1177.7	1175.5	1163.0	1150.4	1143.6	1141.0	1130.5	1133.2	1134.2	1139.4
42.5°	1431.0	1399.6	1373.4	1355.6	1324.8	1309.6	1289.1	1272.9	1260.4	1265.1	1267.2
45°	1731.5	1686.4	1644.6	1590.1	1549.8	1521.0	1484.9	1452.5	1437.8	1431.0	1439.4
47.5°	2031.4	1991.5	1942.3	1886.3	1822.5	1774.9	1714.7	1661.8	1625.2	1611.5	1618.9
50°	2290.4	2253.8	2216.7	2183.6	2109.3	2057.5	1975.4	1906.8	1849.2	1819.9	1812.0
52.5°	2505.6	2486.2	2466.3	2438.5	2378.9	2327.1	2261.7	2194.2	2117.7	2058.1	2037.6
55°	2697.7	2709.1	2699.2	2699.7	2676.2	2643.2	2587.7	2537.5	2484.1	2416.6	2388.3
57.5°	2977.7	3045.7	3059.4	3093.3	3110.1	3127.9	3143.6	3113.8	3100.1	3049.9	3050.4
60°	3418.9	3518.3	3604.7	3683.2	3747.7	3810.4	3876.4	3905.7	3938.2	3953.3	4005.1
62.5°	3888.4	3983.1	4111.9	4217.1	4276.2	4357.9	4429.6	4476.2	4533.2	4594.0	4673.0
65°	4004.6	4118.7	4199.8	4270.0	4328.6	4372.0	4411.3	4466.7	4514.4	4610.7	4703.8
67.5°	3706.8	3797.9	3872.2	3941.2	3986.8	4023.5	4058.5	4095.2	4176.8	4264.2	4357.9
70°	3181.8	3291.7	3414.7	3504.2	3526.7	3558.2	3591.6	3639.3	3680.1	3771.7	3842.9
72.5°	2556.3	2714.4	2818.5	2942.6	2969.3	3016.9	3035.7	3072.9	3080.3	3130.0	3148.9
75°	1781.7	1962.8	2067.5	2158.5	2176.3	2150.2	2160.7	2029.2	1995.7	1968.6	1946.5
77.5°	1176.1	1224.8	1241.5	1226.9	1156.8	1101.8	1043.2	985.6	991.8	945.3	863.6
80°	1045.8	1056.8	1041.6	1026.9	986.6	929.0	876.2	822.2	795.5	767.4	725.4
82.5°	1017.5	1059.9	1064.7	1046.8	1014.9	952.1	888.2	808.1	740.1	677.3	613.4
85°	340.2	414.0	447.0	477.9	487.3	498.3	460.6	409.3	347.5	306.2	239.7
87.5°	43.4	54.0	62.3	53.4	62.3	73.3	52.8	59.2	59.6	37.1	27.7
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: P180466

CATALOG NUMBER: ICM-E02-LED-E1-SL2-8030

CANDELA DISTRIBUTION (continued):

	76°	77°	78°	79°	80°	81°	82°	83°	84°	85°	86°
0°	499.4	499.4	499.4	499.4	499.4	499.4	499.4	499.4	499.4	499.4	499.4
2.5°	502.0	501.4	501.4	501.4	500.9	501.4	501.4	501.4	501.4	501.4	500.9
5°	513.5	513.5	515.1	515.5	514.5	514.0	514.5	515.1	515.1	514.5	515.1
7.5°	534.9	535.4	536.5	538.0	537.0	537.6	538.0	537.6	539.1	539.6	539.1
10°	562.1	563.2	565.8	566.3	565.8	567.9	568.4	567.4	568.4	568.4	570.5
12.5°	593.6	594.6	597.8	598.8	599.8	600.4	602.0	602.4	604.0	605.0	606.6
15°	627.5	628.7	630.7	634.3	635.4	636.5	637.5	640.7	641.2	643.3	644.8
17.5°	656.4	658.0	661.0	663.7	665.2	667.9	668.9	672.6	673.6	676.7	679.4
20°	679.4	682.0	684.7	687.7	690.3	693.5	694.6	698.2	700.3	701.9	705.0
22.5°	700.3	703.4	707.2	710.8	712.8	717.0	718.6	720.2	724.9	727.0	730.1
25°	727.5	730.7	734.9	739.5	741.7	746.9	748.5	751.1	756.3	758.4	763.2
27.5°	764.7	768.8	772.0	776.7	779.4	783.0	786.7	789.9	794.5	797.7	802.9
30°	811.3	814.4	819.6	823.4	827.5	832.7	836.9	840.1	842.7	847.4	853.1
32.5°	879.8	880.4	882.0	890.8	895.0	899.3	904.9	907.6	911.8	916.5	922.8
35°	965.1	969.9	973.5	977.8	982.4	987.2	989.2	997.1	1000.8	1007.1	1013.3
37.5°	1050.0	1050.5	1058.9	1061.5	1065.7	1070.3	1077.7	1085.6	1095.0	1101.2	1111.2
40°	1141.0	1145.2	1155.7	1160.9	1166.1	1177.7	1183.4	1196.0	1211.7	1220.6	1237.3
42.5°	1272.9	1279.2	1298.1	1306.4	1319.0	1337.9	1349.9	1367.2	1373.4	1394.9	1402.7
45°	1445.7	1465.0	1492.2	1510.1	1532.6	1552.9	1563.5	1571.3	1580.7	1597.4	1595.4
47.5°	1632.5	1657.6	1688.0	1724.7	1739.3	1763.4	1776.9	1792.1	1783.7	1779.5	1775.4
50°	1824.1	1853.4	1893.7	1926.7	1949.1	1963.8	1975.4	1973.2	1955.5	1946.1	1919.8
52.5°	2037.1	2054.3	2092.6	2120.9	2134.4	2137.6	2135.0	2119.3	2102.5	2072.7	2041.8
55°	2363.7	2355.8	2371.1	2384.1	2379.9	2394.6	2356.9	2342.2	2300.9	2262.2	2220.9
57.5°	3027.4	3037.9	2953.0	2914.9	2908.0	2921.7	2855.2	2846.8	2746.8	2734.2	2664.7
60°	3997.8	4049.0	3982.6	3945.4	3845.0	3812.0	3737.7	3706.8	3611.0	3533.5	3435.6
62.5°	4727.5	4774.0	4801.7	4748.9	4690.3	4603.9	4491.4	4366.8	4265.2	4146.4	4042.8
65°	4793.3	4887.6	4951.5	4976.0	4934.7	4839.9	4701.2	4544.2	4388.8	4239.7	4108.8
67.5°	4485.1	4569.3	4668.3	4756.8	4762.0	4700.2	4581.9	4422.3	4242.7	4058.5	3905.1
70°	3955.4	4061.1	4147.5	4240.7	4305.5	4270.0	4210.8	4064.3	3878.0	3734.5	3558.2
72.5°	3216.9	3261.3	3282.3	3373.9	3374.9	3310.1	3268.2	3187.0	3036.9	2935.3	2800.8
75°	1878.5	1780.7	1676.5	1586.0	1512.1	1481.2	1344.1	1321.1	1228.9	1171.9	1088.2
77.5°	774.6	687.3	574.7	481.0	388.4	346.5	285.8	259.1	224.6	209.4	199.4
80°	664.2	581.5	496.7	415.6	343.4	271.2	211.0	163.8	128.7	109.4	101.6
82.5°	542.2	492.6	433.4	389.4	332.9	279.0	235.5	182.7	136.7	100.5	76.9
85°	195.7	160.7	129.3	118.8	94.7	78.0	65.4	56.0	46.0	36.7	32.5
87.5°	22.0	20.9	12.0	11.5	13.1	9.4	11.0	10.0	8.4	7.3	7.8
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: P180466

CATALOG NUMBER: ICM-E02-LED-E1-SL2-8030

CANDELA DISTRIBUTION (continued):

	87°	88°	89°	90°	95°	105°	115°	125°	135°	145°	155°
0°	499.4	499.4	499.4	499.4	499.4	499.4	499.4	499.4	499.4	499.4	499.4
2.5°	500.9	500.9	501.4	501.4	502.0	502.5	503.5	503.0	503.0	503.5	503.5
5°	515.1	516.6	516.1	516.1	516.1	516.6	517.1	515.1	512.9	510.9	509.8
7.5°	539.6	540.7	541.8	540.7	541.8	541.2	540.2	534.4	527.6	519.3	513.5
10°	571.5	571.5	572.7	572.1	574.1	572.7	569.5	556.4	541.8	523.9	510.9
12.5°	606.1	609.8	608.2	608.7	612.9	608.7	601.4	582.1	555.8	527.1	504.0
15°	646.9	648.5	649.6	648.0	650.6	646.9	633.9	603.0	564.7	524.5	490.4
17.5°	680.5	680.9	681.5	682.5	686.1	682.0	659.5	617.6	566.9	512.4	467.4
20°	706.6	709.2	711.4	711.4	716.6	710.2	680.5	624.9	560.0	492.6	438.0
22.5°	733.9	735.9	738.5	739.1	745.9	739.5	697.7	623.4	542.2	464.3	404.1
25°	767.4	769.4	771.5	774.1	783.5	774.6	715.0	617.1	517.7	430.8	367.4
27.5°	806.1	810.8	812.3	816.6	827.5	813.9	729.6	607.6	490.4	392.0	328.7
30°	857.9	863.6	865.7	871.4	886.6	856.8	738.1	591.4	455.9	352.7	287.4
32.5°	927.4	935.4	941.6	947.9	965.1	899.7	739.1	567.9	415.6	308.8	247.5
35°	1018.5	1030.6	1035.3	1039.4	1055.7	946.3	734.3	532.8	366.4	263.8	216.2
37.5°	1120.7	1132.7	1135.8	1137.9	1141.0	986.1	722.8	479.4	310.9	224.6	191.1
40°	1246.2	1256.7	1260.8	1257.8	1241.0	1016.9	697.2	417.1	257.0	197.9	175.3
42.5°	1399.6	1415.3	1416.8	1402.7	1347.3	1034.2	645.9	343.9	214.6	178.5	163.3
45°	1589.6	1588.6	1579.6	1569.7	1462.9	1027.4	574.1	280.0	187.9	163.3	152.3
47.5°	1760.2	1742.4	1728.8	1699.5	1565.0	987.6	481.5	231.9	171.7	151.8	142.9
50°	1900.0	1867.5	1838.7	1806.8	1640.8	917.0	389.4	196.8	156.5	141.9	134.0
52.5°	2010.4	1971.2	1937.7	1906.2	1714.2	838.5	319.3	171.2	141.9	131.9	124.1
55°	2183.2	2143.9	2090.5	2055.9	1826.2	766.2	273.8	150.7	127.7	121.4	113.6
57.5°	2620.2	2585.6	2521.8	2432.3	2114.1	739.1	248.1	135.1	116.2	112.6	106.2
60°	3383.3	3327.3	3244.1	3153.0	2699.2	757.4	227.7	124.1	108.4	105.2	100.5
62.5°	3959.1	3860.7	3766.4	3682.2	3167.2	756.8	201.0	115.6	102.6	101.0	96.3
65°	3982.6	3882.6	3787.9	3699.5	3177.6	673.6	169.6	108.4	101.6	101.0	93.2
67.5°	3771.2	3662.8	3571.2	3459.7	2941.6	526.5	136.1	103.6	105.8	104.7	92.1
70°	3425.7	3284.4	3209.0	3099.1	2588.8	368.5	112.0	105.2	114.6	111.4	93.7
72.5°	2688.8	2582.0	2467.4	2390.9	2026.6	232.9	94.2	106.2	118.3	113.0	97.9
75°	1000.8	1029.6	982.4	965.7	1029.6	136.7	83.7	98.9	105.8	97.9	89.0
77.5°	202.0	193.1	183.2	181.1	234.0	84.3	76.9	85.9	81.1	71.7	72.2
80°	96.8	94.2	91.1	90.5	86.9	70.1	71.2	73.3	61.2	55.4	59.2
82.5°	64.4	60.7	59.6	57.6	58.6	62.8	67.5	62.8	47.1	44.0	53.4
85°	29.9	28.7	28.3	28.3	31.4	56.6	56.0	46.0	32.5	31.4	53.4
87.5°	7.3	7.3	7.8	7.3	8.4	16.7	14.7	14.1	12.0	13.6	25.1
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: P180466

CATALOG NUMBER: ICM-E02-LED-E1-SL2-8030

CANDELA DISTRIBUTION (continued):

	165°	175°	180°
0°	499.4	499.4	499.4
2.5°	503.0	503.5	503.0
5°	507.7	507.7	507.7
7.5°	507.7	506.1	505.6
10°	500.4	495.6	495.6
12.5°	487.8	480.0	478.9
15°	464.3	453.8	452.2
17.5°	434.4	420.3	417.7
20°	400.9	383.2	380.0
22.5°	364.3	343.9	342.3
25°	328.2	307.3	303.1
27.5°	287.9	267.4	265.4
30°	247.5	229.8	228.7
32.5°	213.6	202.5	200.5
35°	189.5	183.2	180.6
37.5°	173.8	169.0	168.6
40°	161.8	157.6	157.0
42.5°	151.8	148.1	147.6
45°	141.9	138.7	137.7
47.5°	131.9	128.7	128.3
50°	123.0	118.8	118.3
52.5°	114.6	110.4	109.4
55°	106.8	102.6	102.6
57.5°	100.0	95.8	95.3
60°	93.7	89.5	89.0
62.5°	89.0	83.7	83.3
65°	85.3	80.1	79.1
67.5°	83.3	76.9	75.3
70°	86.9	75.3	72.7
72.5°	87.4	73.8	70.1
75°	84.3	69.6	67.0
77.5°	73.8	62.3	59.6
80°	63.8	48.2	44.5
82.5°	60.7	39.3	34.0
85°	47.1	25.7	24.1
87.5°	26.7	14.1	11.5
90°	0.0	0.0	0.0

(END OF REPORT)