

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: P180928

Luminaire Tested: **ICS-E02-LED-E1-SL4**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P180928
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33680)
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ICS-E02-LED-E1-SL4
Description: ICON SITE SMALL LED LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL
Light Source: (42) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5317.7 lumens
Efficiency: N/A
Efficacy: 102.1 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 1' x H: 0.1')
IES Classification: Type IV - Short - Full Cutoff
BUG Rating: B1 - U0 - G2

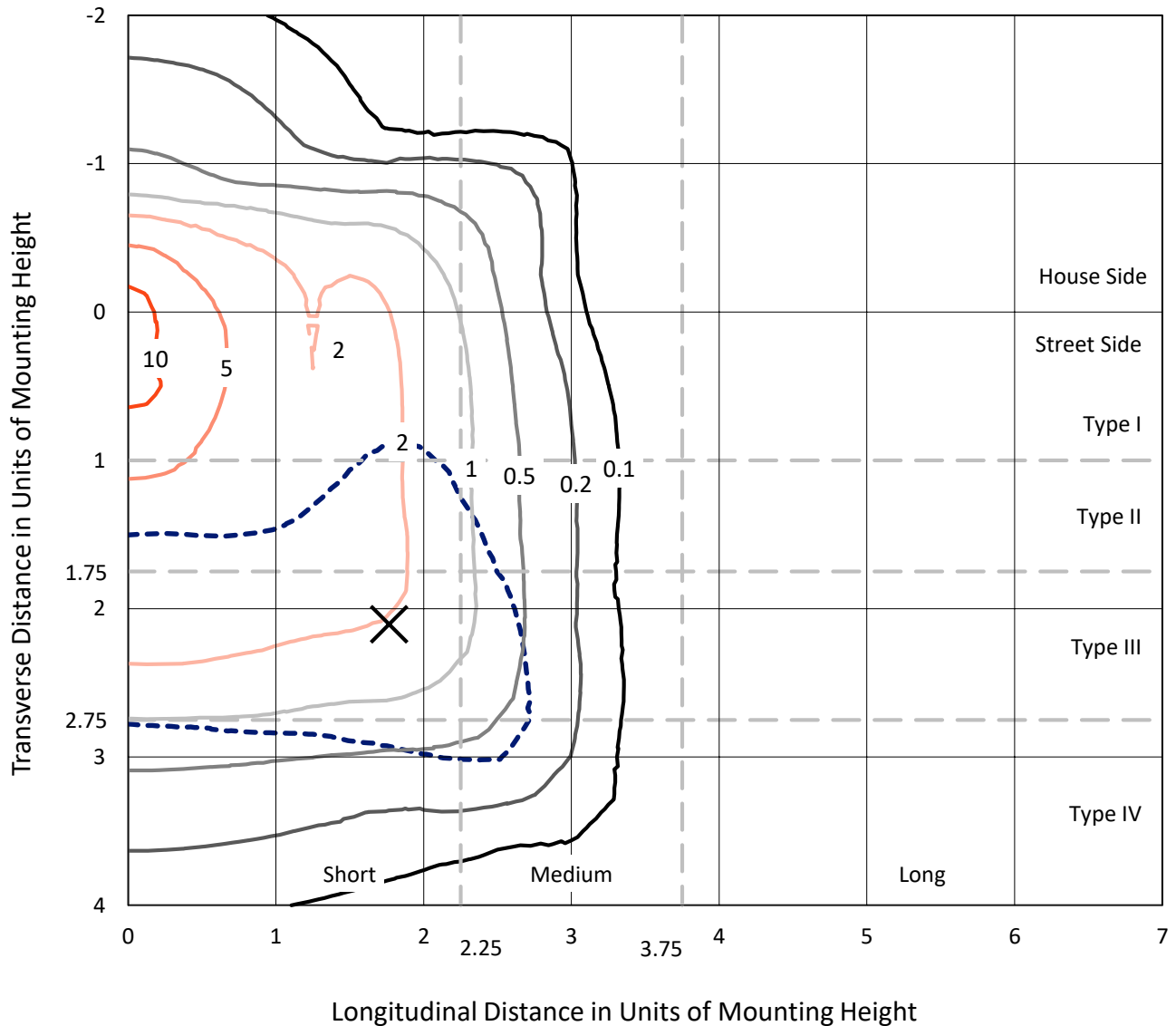
Input Watts (W): 52.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P180928
 CATALOG NUMBER: ICS-E02-LED-E1-SL4

Iso-Footcandle Lines of Horizontal Illumination

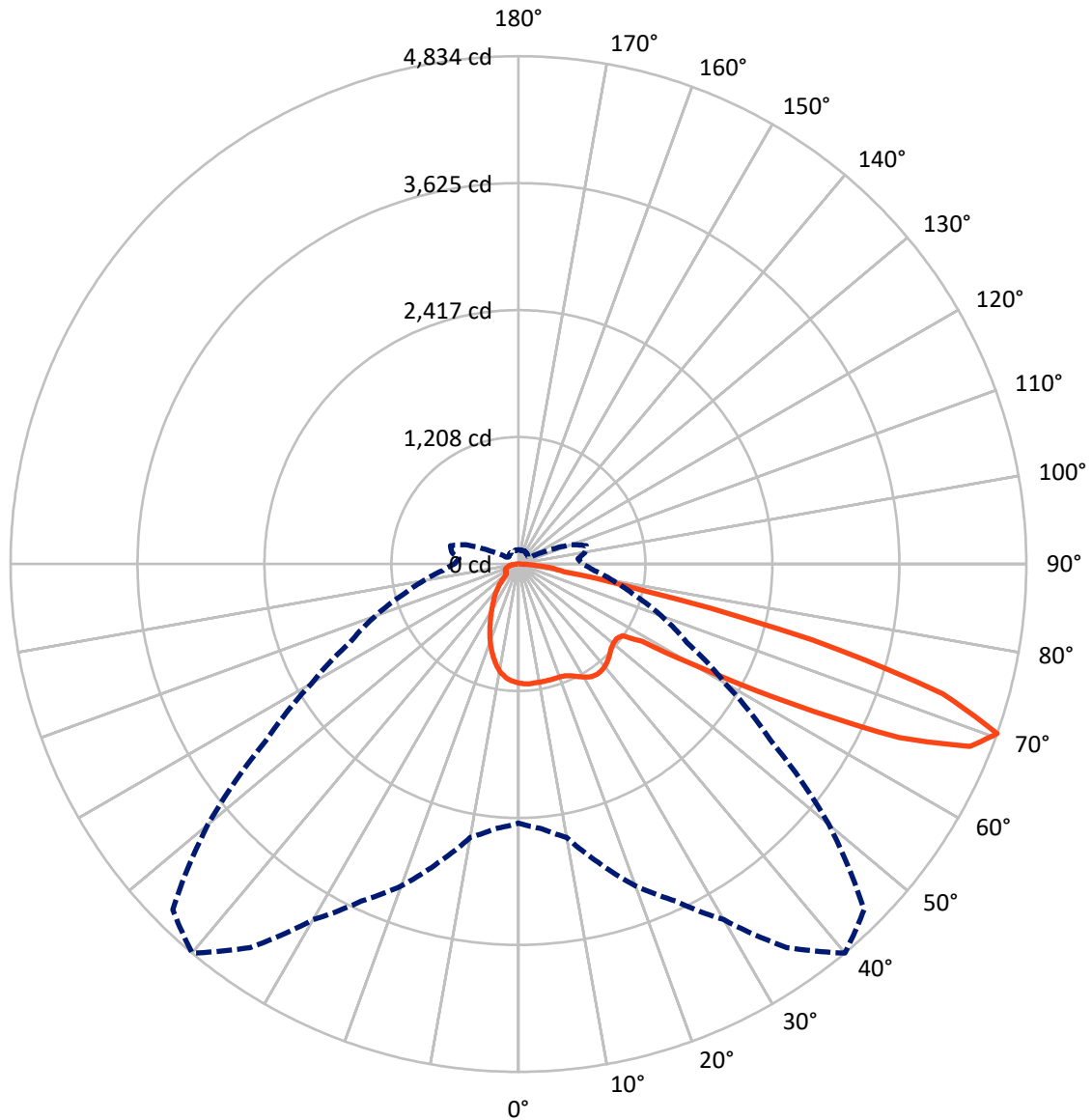
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 11.4 fc
 Type IV - Short - Full Cutoff

REPORT NUMBER: P180928
CATALOG NUMBER: ICS-E02-LED-E1-SL4

Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P180928

CATALOG NUMBER: ICS-E02-LED-E1-SL4

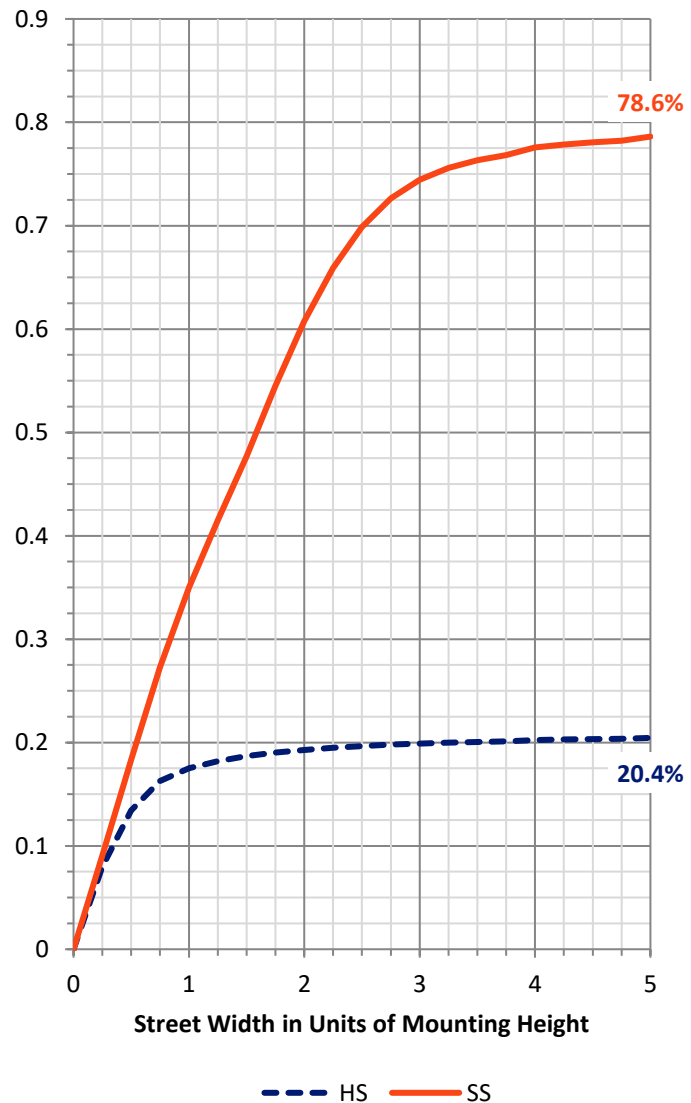
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1103.9	0.0	1103.9
	% Fixture	20.8	0.0	20.8
Street Side	Lumens	4213.8	0.0	4213.8
	% Fixture	79.2	0.0	79.2
Total	Lumens	5317.7	0.0	5317.7
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.0	2.0
10°-20°	290.2	5.5
20°-30°	429.6	8.1
30°-40°	542.9	10.2
40°-50°	614.0	11.5
50°-60°	873.7	16.4
60°-70°	1627.1	30.6
70°-80°	745.7	14.0
80°-90°	88.5	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°	5317.7	100.0
0°-180°	5317.7	100.0



REPORT NUMBER: P180928

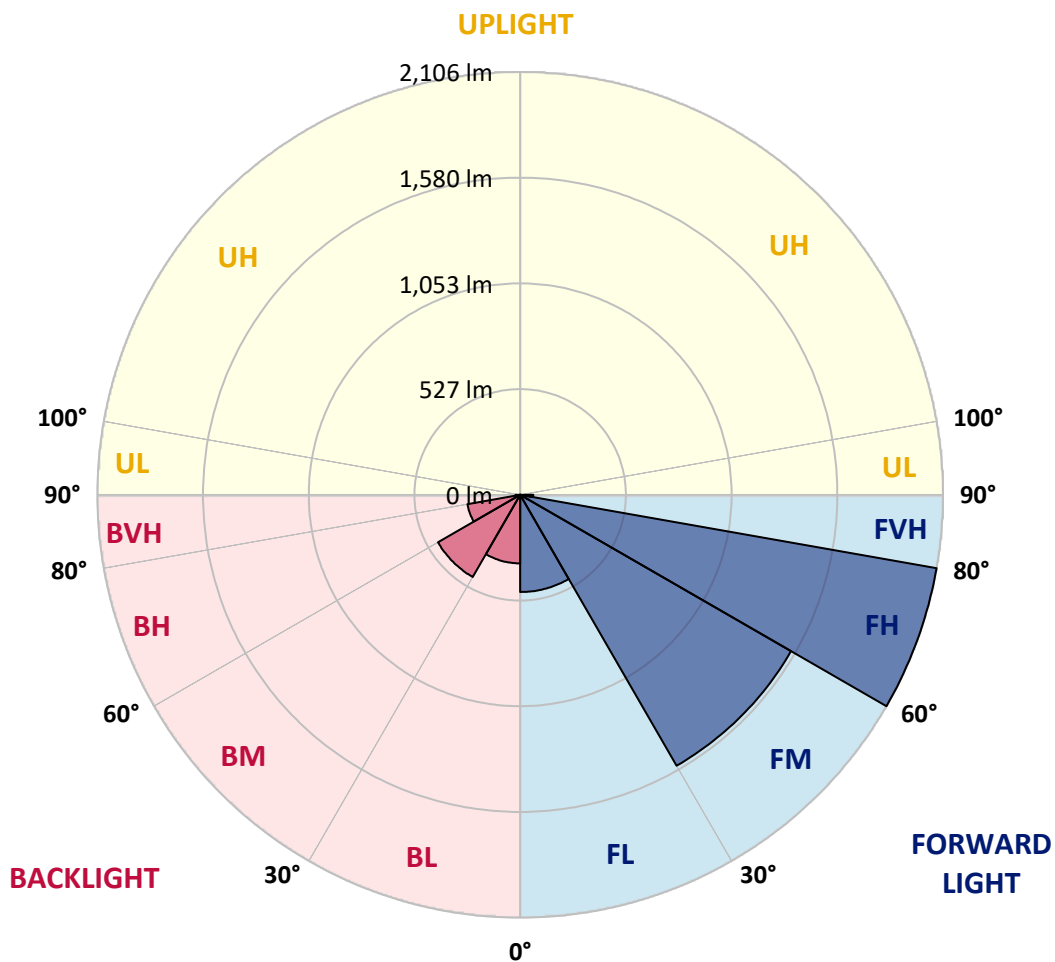
CATALOG NUMBER: ICS-E02-LED-E1-SL4

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	484.2	9.1			
FM (30°-60°)	1557.9	29.3			
FH (60°-80°)	2106.0	39.6			G2/5000
FVH (80°-90°)	65.7	1.2			G1/100
BL (0°-30°)	341.5	6.4	B1/500		
BM (30°-60°)	472.6	8.9	B1/1000		
BH (60°-80°)	266.9	5.0	B1/500		G1/500
BVH (80°-90°)	22.9	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-G2

Type IV Short





REPORT NUMBER: P180928

CATALOG NUMBER: ICS-E02-LED-E1-SL4

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1134.7	1134.7	1134.7	1134.7	1134.7	1134.7	1134.7	1134.7	1134.7	1134.7	1134.7
2.5°	1152.1	1155.1	1151.5	1150.9	1150.9	1150.3	1146.7	1146.1	1141.3	1141.9	1143.1
5°	1160.5	1161.7	1159.3	1158.7	1157.5	1155.1	1152.1	1148.5	1144.9	1141.3	1138.3
7.5°	1168.9	1167.7	1165.9	1165.9	1164.1	1160.5	1154.5	1149.7	1141.9	1137.7	1132.3
10°	1180.9	1179.1	1176.7	1175.5	1172.5	1167.1	1158.7	1152.1	1142.5	1134.1	1125.1
12.5°	1192.3	1191.7	1188.1	1186.3	1181.5	1176.1	1165.9	1155.7	1143.1	1129.9	1117.9
15°	1212.7	1210.3	1206.7	1203.1	1195.3	1188.1	1172.5	1160.5	1142.5	1125.1	1106.5
17.5°	1248.1	1243.9	1240.3	1232.5	1222.9	1210.3	1187.5	1167.1	1142.5	1117.3	1096.3
20°	1312.9	1303.9	1299.1	1288.9	1272.1	1249.3	1213.9	1180.9	1144.3	1111.9	1083.7
22.5°	1386.1	1380.1	1373.5	1366.9	1340.5	1307.5	1259.5	1210.3	1155.1	1109.5	1073.5
25°	1468.3	1460.5	1456.9	1445.5	1420.9	1383.1	1317.7	1249.3	1179.7	1119.1	1073.5
27.5°	1541.5	1539.1	1538.5	1525.3	1501.9	1457.5	1380.1	1297.9	1213.3	1138.9	1082.5
30°	1608.1	1605.7	1604.5	1597.3	1570.3	1517.5	1433.5	1341.1	1249.9	1166.5	1099.3
32.5°	1678.9	1671.1	1667.5	1653.7	1623.1	1561.3	1465.3	1369.3	1278.7	1193.5	1117.9
35°	1736.5	1729.9	1722.7	1702.9	1659.7	1586.5	1479.1	1378.9	1290.1	1208.5	1127.5
37.5°	1778.5	1771.9	1761.7	1736.5	1683.1	1594.9	1478.5	1375.9	1285.9	1206.1	1129.3
40°	1797.1	1790.5	1779.7	1747.9	1687.3	1590.1	1467.1	1362.1	1273.3	1193.5	1122.1
42.5°	1789.9	1785.1	1771.3	1740.7	1674.1	1568.5	1444.3	1336.3	1249.3	1173.1	1105.9
45°	1762.3	1758.7	1745.5	1713.1	1644.1	1533.7	1410.7	1303.9	1220.5	1147.9	1084.3
47.5°	1720.9	1719.7	1706.5	1674.7	1606.3	1498.9	1375.9	1272.1	1191.7	1123.3	1066.3
50°	1675.3	1669.3	1662.7	1633.3	1570.9	1468.9	1350.7	1252.3	1175.5	1114.3	1058.5
52.5°	1646.5	1644.7	1638.7	1612.3	1552.3	1451.5	1339.3	1245.1	1174.3	1112.5	1054.3
55°	1902.1	1906.3	1851.1	1736.5	1635.7	1499.5	1373.5	1281.7	1203.7	1141.3	1098.7
57.5°	2813.6	2795.0	2700.1	2472.7	2215.9	1876.9	1632.7	1484.5	1387.9	1398.7	1420.3
60°	3278.0	3274.4	3257.0	3168.8	2997.8	2739.7	2453.5	2125.3	2020.9	2032.3	2040.7
62.5°	3485.6	3491.0	3504.2	3471.2	3426.2	3351.2	3208.4	3076.4	2936.6	2884.4	2744.5
65°	3581.6	3591.2	3621.2	3639.8	3657.2	3670.4	3726.8	3881.6	3983.6	3792.8	3348.8
67.5°	3383.0	3429.2	3528.2	3624.8	3711.2	3834.2	4025.0	4384.4	4634.7	4400.0	3756.2
70°	2466.1	2529.1	2642.5	2941.4	3260.6	3539.6	3909.2	4456.4	4833.9	4652.7	3857.0
72.5°	1546.3	1563.7	1614.1	1723.9	1960.9	2319.1	2965.4	3786.2	4221.8	4077.2	3260.0
75°	981.1	987.1	985.3	1010.5	1050.7	1128.7	1384.3	2236.3	2892.2	2666.5	1816.9
77.5°	584.4	593.4	597.0	604.8	624.0	651.6	672.6	760.8	1212.7	1177.3	659.4
80°	489.6	496.8	490.8	489.0	477.0	468.6	478.8	468.6	435.0	418.8	385.8
82.5°	259.2	258.6	256.8	274.2	309.6	337.2	358.2	353.4	319.8	272.4	231.0
85°	142.2	147.0	147.0	153.0	147.6	148.2	153.0	161.4	149.4	124.8	102.0
87.5°	12.0	18.6	15.0	18.6	25.2	18.0	17.4	17.4	15.0	10.8	9.6
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: P180928

CATALOG NUMBER: ICS-E02-LED-E1-SL4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1134.7	1134.7	1134.7	1134.7	1134.7	1134.7	1134.7	1134.7	1134.7	1134.7	1134.7
2.5°	1140.1	1138.9	1136.5	1134.7	1134.7	1131.7	1129.9	1128.7	1128.1	1125.7	1125.7
5°	1136.5	1132.3	1128.1	1125.1	1123.3	1120.3	1115.5	1113.1	1110.1	1107.7	1106.5
7.5°	1128.7	1120.9	1114.3	1109.5	1103.5	1098.7	1092.7	1087.3	1081.9	1079.5	1078.3
10°	1116.7	1106.5	1096.3	1087.3	1078.9	1070.5	1062.7	1054.9	1048.3	1043.5	1038.7
12.5°	1105.3	1089.7	1076.5	1063.3	1050.1	1039.9	1029.1	1017.7	1008.1	999.1	996.7
15°	1089.7	1071.7	1054.9	1038.7	1022.5	1005.7	992.5	979.9	964.3	954.1	946.3
17.5°	1075.3	1053.7	1033.3	1014.1	994.3	976.9	957.1	940.3	924.7	909.0	897.6
20°	1059.7	1036.3	1014.7	993.1	971.5	949.3	926.5	904.8	885.6	867.0	848.4
22.5°	1045.9	1021.9	1000.9	977.5	953.5	928.3	901.8	874.8	852.6	828.6	807.0
25°	1037.5	1011.1	989.5	966.7	940.3	912.6	882.6	850.8	823.8	796.2	770.4
27.5°	1037.5	1003.3	981.1	958.3	931.3	901.8	868.8	834.0	803.4	772.8	741.0
30°	1046.5	1004.5	974.5	950.5	922.9	891.0	854.4	817.8	784.2	748.2	717.6
32.5°	1054.9	1006.9	969.7	939.1	907.2	876.0	838.8	799.8	762.6	728.4	696.0
35°	1060.3	1006.9	960.7	921.7	885.6	855.0	818.4	779.4	741.6	708.0	678.0
37.5°	1060.9	1002.1	946.3	901.8	864.0	832.2	797.4	760.8	724.8	693.6	668.4
40°	1054.9	992.5	931.9	880.8	841.2	808.8	777.0	744.0	711.6	685.8	664.2
42.5°	1044.1	982.3	918.0	864.0	822.6	789.0	759.6	731.4	703.2	681.0	663.0
45°	1027.9	968.5	905.4	853.8	813.0	777.6	748.8	725.4	701.4	682.8	664.8
47.5°	1013.5	963.7	909.6	860.4	817.8	781.2	751.8	732.0	713.4	700.8	676.2
50°	1010.5	961.3	911.4	865.8	822.6	785.4	759.6	749.4	744.0	736.2	698.4
52.5°	1002.1	960.7	924.7	899.4	871.8	854.4	827.4	837.0	831.0	803.4	735.0
55°	1090.3	1102.3	1135.9	1183.9	1228.3	1238.5	1235.5	1224.1	1163.5	1000.9	823.2
57.5°	1498.9	1566.7	1630.3	1658.5	1654.9	1623.1	1600.3	1554.1	1466.5	1268.5	997.3
60°	2066.5	2077.3	2043.7	1993.9	1909.9	1839.7	1764.7	1678.3	1551.1	1357.3	1104.1
62.5°	2589.1	2443.9	2294.5	2154.1	2026.3	1914.7	1810.3	1689.7	1524.1	1321.9	1090.3
65°	2958.2	2650.9	2415.1	2213.5	2032.9	1876.9	1746.7	1590.1	1403.5	1221.1	1010.5
67.5°	3148.4	2677.3	2315.5	2034.7	1778.5	1562.5	1389.1	1236.7	1098.1	1018.3	884.4
70°	2936.0	2272.3	1768.3	1450.9	1144.3	917.4	724.8	608.4	568.2	643.8	669.6
72.5°	2187.7	1479.1	1051.9	813.6	623.4	496.8	381.0	299.4	243.6	255.6	331.8
75°	1034.5	638.4	451.2	343.2	273.0	226.2	184.8	169.2	141.6	117.6	110.4
77.5°	402.6	293.4	242.4	177.6	126.0	101.4	86.4	83.4	85.2	82.8	81.6
80°	306.6	207.6	130.2	95.4	82.2	72.6	64.2	61.8	63.0	66.0	69.0
82.5°	171.0	106.8	79.2	69.0	61.8	52.8	48.0	44.4	45.0	48.6	55.2
85°	66.0	51.6	47.4	45.6	42.6	34.2	29.4	30.0	34.2	40.8	40.8
87.5°	7.2	7.2	9.6	7.2	7.2	7.2	6.6	7.8	8.4	10.8	12.6
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: P180928

CATALOG NUMBER: ICS-E02-LED-E1-SL4

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1134.7	1134.7	1134.7	1134.7	1134.7	1134.7	1134.7	1134.7	1134.7	1134.7	1134.7
2.5°	1124.5	1124.5	1124.5	1123.3	1123.9	1121.5	1121.5	1119.7	1122.7	1120.9	1120.3
5°	1107.1	1106.5	1104.1	1104.1	1104.1	1104.1	1105.9	1101.1	1104.7	1104.7	1102.9
7.5°	1077.7	1077.7	1071.1	1074.7	1073.5	1075.3	1077.7	1075.3	1078.9	1081.3	1079.5
10°	1036.9	1036.9	1031.5	1035.7	1033.9	1038.1	1042.3	1039.9	1042.3	1045.9	1047.1
12.5°	991.9	989.5	984.7	986.5	986.5	988.9	990.7	993.7	996.7	1001.5	1003.9
15°	939.7	936.1	930.1	930.1	926.5	927.7	931.3	932.5	938.5	945.1	952.9
17.5°	886.2	877.2	870.6	862.8	856.8	861.6	865.8	868.8	873.6	883.8	889.2
20°	835.8	817.8	805.2	795.0	788.4	791.4	796.8	800.4	804.6	807.0	808.8
22.5°	786.0	765.6	748.2	735.6	724.8	727.8	725.4	723.6	726.6	718.8	718.2
25°	742.8	718.8	695.4	680.4	667.2	663.0	650.4	647.4	639.0	632.4	627.6
27.5°	711.6	680.4	654.6	637.2	616.2	600.6	584.4	568.2	559.2	548.4	543.0
30°	687.0	654.0	623.4	594.0	566.4	542.4	520.8	499.8	485.4	469.8	459.6
32.5°	664.2	633.6	596.4	556.2	519.0	492.0	463.8	439.8	417.0	396.6	381.6
35°	648.6	614.4	567.0	517.8	475.8	444.0	414.0	379.8	352.2	325.8	309.6
37.5°	640.2	598.2	540.0	485.4	438.6	402.6	365.4	325.8	292.2	267.6	243.0
40°	633.6	582.0	516.0	456.6	407.4	364.2	321.0	274.2	237.0	211.2	192.0
42.5°	626.4	564.0	495.0	433.8	379.2	328.8	276.6	226.8	191.4	173.4	165.0
45°	618.6	548.4	475.2	412.2	351.6	290.4	230.4	184.2	163.2	157.2	157.2
47.5°	616.8	538.2	460.8	391.2	320.4	246.0	187.8	159.0	153.0	154.2	156.6
50°	624.0	535.2	448.2	366.6	279.0	199.2	159.0	149.4	150.6	154.2	157.8
52.5°	641.4	537.6	435.0	332.4	229.8	164.4	147.0	146.4	150.0	155.4	159.0
55°	670.8	537.6	409.8	281.4	183.6	147.6	142.8	145.2	150.0	154.8	157.8
57.5°	733.8	532.2	365.4	225.0	153.6	141.6	141.6	144.6	148.8	153.6	156.0
60°	808.8	525.0	303.0	174.0	138.6	136.8	141.0	144.6	148.2	152.4	154.8
62.5°	813.6	506.4	240.0	144.0	130.8	133.8	140.4	145.2	146.4	149.4	152.4
65°	747.6	441.6	190.8	129.0	127.2	132.0	138.6	142.2	142.8	144.0	147.0
67.5°	654.6	360.0	154.2	121.8	123.6	129.0	132.6	135.6	137.4	140.4	141.0
70°	537.6	289.2	132.0	114.6	116.4	122.4	125.4	128.4	132.0	135.6	133.8
72.5°	381.0	225.0	115.8	106.8	109.2	114.6	118.2	120.6	123.6	127.2	124.8
75°	162.0	157.2	100.2	96.6	100.2	103.8	107.4	111.0	114.0	115.8	115.8
77.5°	82.8	92.4	86.4	86.4	88.8	92.4	95.4	99.0	100.8	102.6	105.0
80°	70.2	71.4	72.6	75.0	77.4	81.0	84.0	87.0	87.6	88.2	89.4
82.5°	58.2	60.6	61.8	65.4	67.2	68.4	70.2	70.2	71.4	71.4	69.6
85°	42.0	45.0	46.8	47.4	46.8	47.4	48.0	49.2	52.2	52.2	49.8
87.5°	12.0	11.4	14.4	15.0	16.2	18.6	21.0	25.2	26.4	27.6	27.6
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: P180928

CATALOG NUMBER: ICS-E02-LED-E1-SL4

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1134.7	1134.7	1134.7	1134.7
2.5°	1119.7	1120.9	1118.5	1119.1
5°	1102.9	1105.3	1102.3	1105.9
7.5°	1081.3	1084.9	1084.3	1083.7
10°	1050.1	1054.9	1054.9	1056.7
12.5°	1010.5	1013.5	1015.9	1017.1
15°	957.1	962.5	965.5	965.5
17.5°	892.8	896.4	898.2	895.8
20°	811.2	810.0	810.6	804.6
22.5°	717.0	718.8	713.4	714.6
25°	624.6	621.6	624.0	620.4
27.5°	535.2	535.8	529.2	532.2
30°	450.0	447.0	438.6	442.8
32.5°	367.8	360.0	351.0	345.6
35°	290.4	278.4	274.2	272.4
37.5°	228.0	214.8	210.6	205.8
40°	181.2	176.4	174.6	175.8
42.5°	162.6	162.6	163.8	164.4
45°	157.8	159.6	161.4	162.0
47.5°	158.4	160.2	162.6	163.2
50°	159.6	161.4	163.2	163.8
52.5°	160.2	160.2	161.4	162.0
55°	159.0	158.4	159.0	159.6
57.5°	156.6	155.4	156.0	157.8
60°	155.4	153.6	154.8	156.0
62.5°	152.4	151.8	153.0	153.6
65°	145.8	146.4	148.2	148.2
67.5°	139.8	140.4	141.0	141.6
70°	132.6	133.2	134.4	135.0
72.5°	124.2	126.6	128.4	130.8
75°	117.6	120.0	123.6	126.0
77.5°	106.2	108.0	112.2	115.2
80°	90.0	89.4	90.0	91.8
82.5°	69.0	69.0	68.4	67.8
85°	48.6	48.0	46.2	46.2
87.5°	26.4	25.8	25.2	24.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)