

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: P180826

Luminaire Tested: **ICS-E02-LED-E1-SL4-HSS-8030**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P180826
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33728)
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-HSS-8030
Description: ICON SITE SMALL LED LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 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: 3091.4 lumens
Efficiency: N/A
Efficacy: 59.3 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 1' x H: 0.1')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B0 - U0 - G1

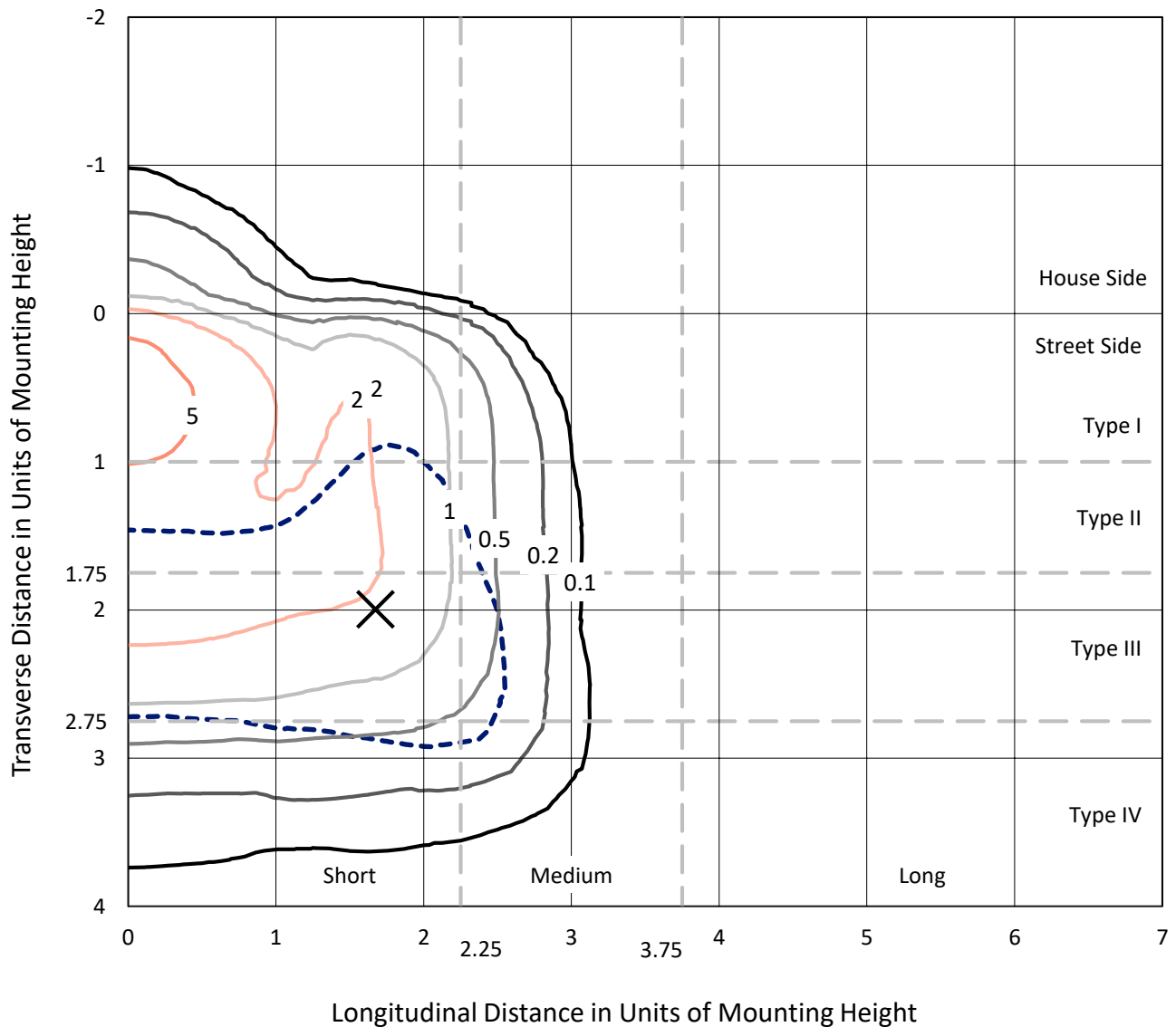
Input Watts (W): 52.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P180826
 CATALOG NUMBER: ICS-E02-LED-E1-SL4-HSS-8030

Iso-Footcandle Lines of Horizontal Illumination

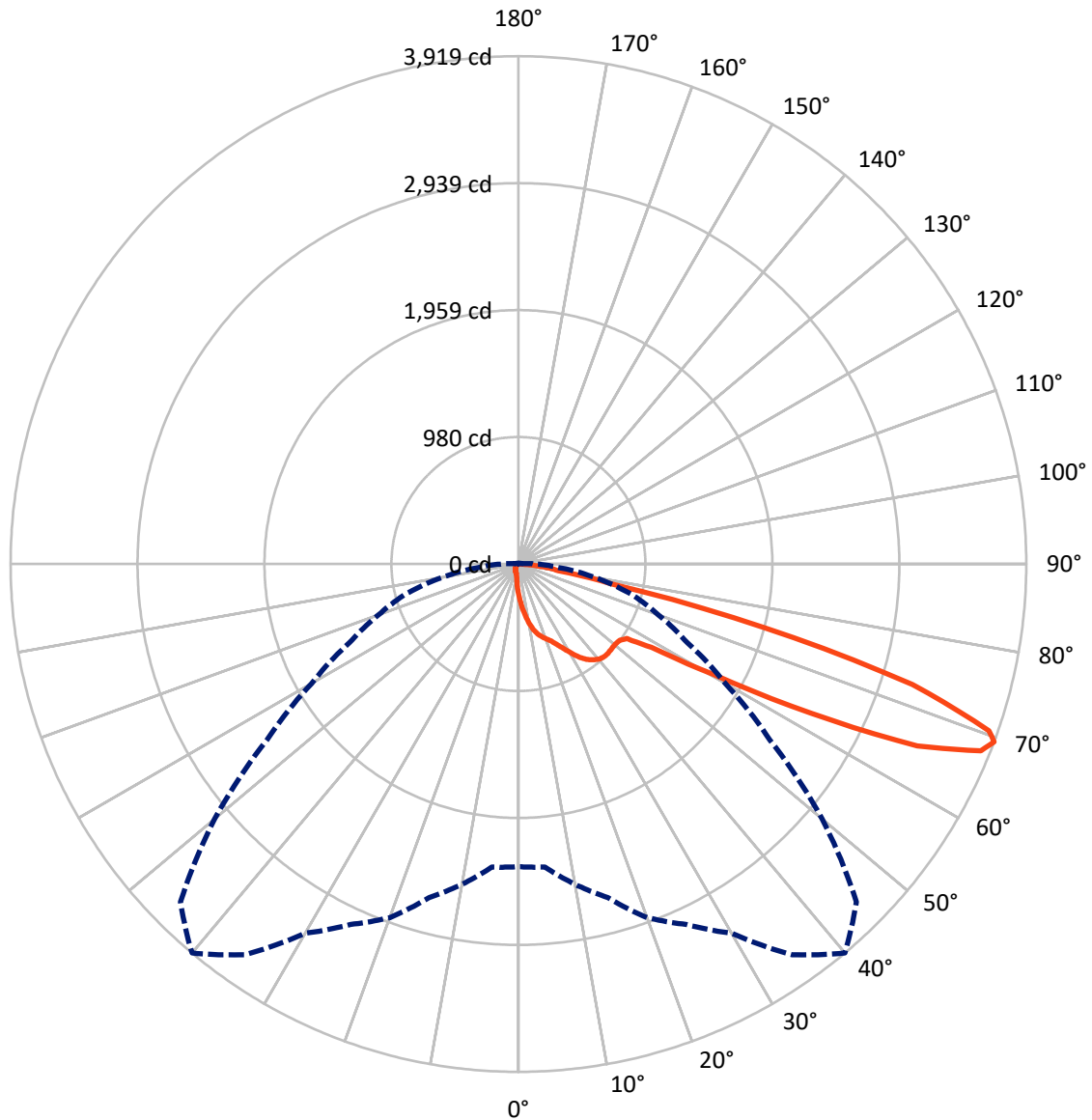
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6.9 fc
 Type IV - Short - Semi-Cutoff

REPORT NUMBER: P180826
CATALOG NUMBER: ICS-E02-LED-E1-SL4-HSS-8030

Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

REPORT NUMBER: P180826

CATALOG NUMBER: ICS-E02-LED-E1-SL4-HSS-8030

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	92.1	0.0	92.1
	% Fixture	3.0	0.0	3.0
Street Side	Lumens	2999.4	0.0	2999.4
	% Fixture	97.0	0.0	97.0
Total	Lumens	3091.4	0.0	3091.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	24.0	0.8
10°-20°	82.7	2.7
20°-30°	158.3	5.1
30°-40°	263.3	8.5
40°-50°	356.3	11.5
50°-60°	557.3	18.0
60°-70°	1145.7	37.1
70°-80°	461.0	14.9
80°-90°	42.6	1.4
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°	3091.4	100.0
0°-180°	3091.4	100.0



REPORT NUMBER: P180826

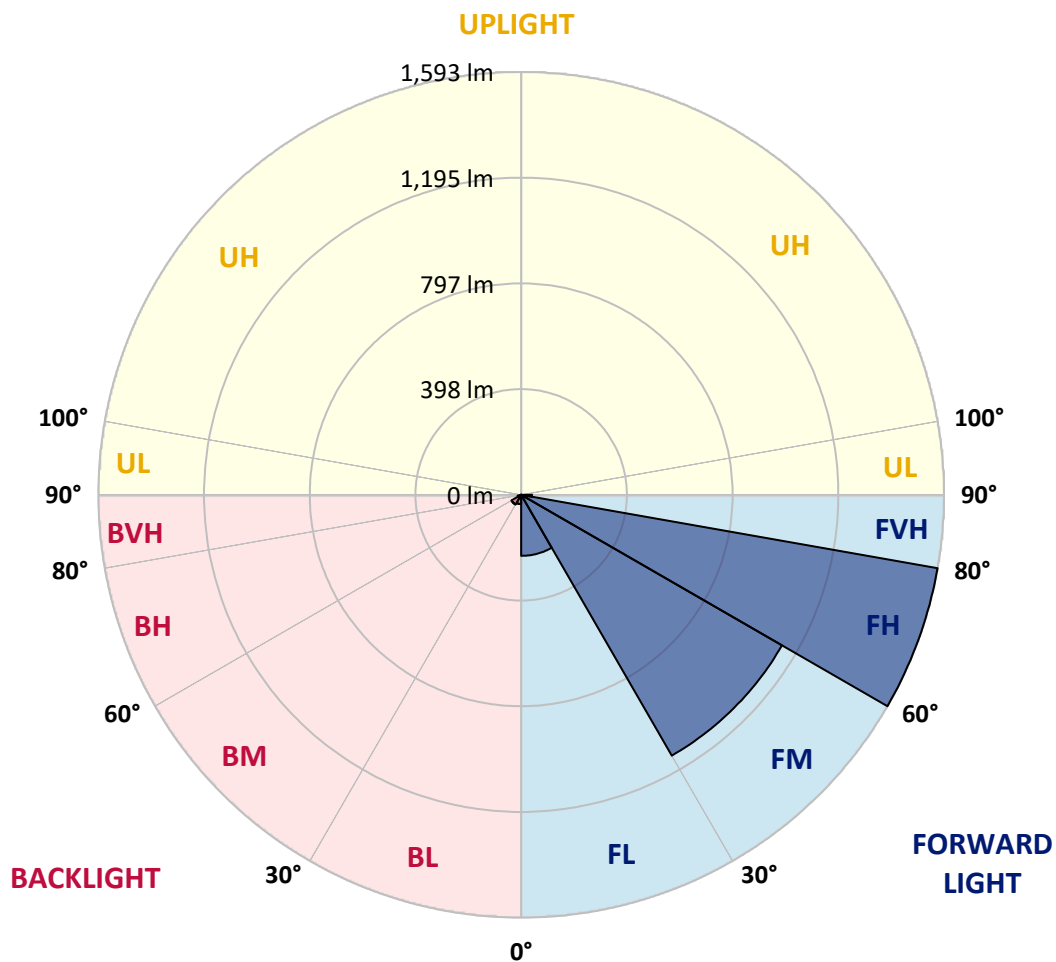
CATALOG NUMBER: ICS-E02-LED-E1-SL4-HSS-8030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	230.1	7.4			
FM (30°-60°)	1134.9	36.7			
FH (60°-80°)	1593.3	51.5			G1/1800
FVH (80°-90°)	41.1	1.3			G1/100
BL (0°-30°)	35.0	1.1	B0/110		
BM (30°-60°)	42.0	1.4	B0/220		
BH (60°-80°)	13.4	0.4	B0/110		G0/110
BVH (80°-90°)	1.6	0.1			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 IV Short



REPORT NUMBER: P180826

CATALOG NUMBER: ICS-E02-LED-E1-SL4-HSS-8030

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	233.5	233.5	233.5	233.5	233.5	233.5	233.5	233.5	233.5	233.5	233.5
2.5°	311.4	307.9	303.9	303.9	298.8	298.8	295.8	287.6	286.6	282.1	277.5
5°	397.5	394.5	389.4	384.9	380.8	373.7	368.7	359.1	348.4	338.3	329.2
7.5°	481.6	480.1	471.0	469.5	462.9	451.2	441.1	426.9	408.7	394.5	377.8
10°	559.6	556.1	554.0	545.4	535.8	523.1	507.4	490.2	468.9	446.7	422.9
12.5°	621.4	619.4	610.2	606.7	596.6	583.9	564.2	541.9	520.6	491.7	463.9
15°	667.5	663.9	657.8	652.3	640.1	629.0	610.7	586.4	560.6	529.2	495.8
17.5°	706.0	699.4	697.8	689.2	676.6	663.4	643.2	620.9	590.5	559.1	522.6
20°	757.6	748.5	745.5	732.8	718.1	699.9	676.6	648.7	616.8	582.4	544.9
22.5°	818.4	811.8	805.2	794.1	775.3	749.5	715.6	685.2	644.7	606.7	566.2
25°	904.5	898.9	888.3	873.1	849.8	818.9	777.9	733.3	685.7	637.1	589.5
27.5°	988.0	983.0	975.4	963.7	937.4	903.5	852.8	796.1	735.8	677.1	624.4
30°	1066.5	1062.0	1054.4	1042.7	1019.4	986.0	928.8	868.0	793.1	724.7	661.4
32.5°	1151.1	1149.6	1141.0	1124.3	1104.0	1058.9	996.6	931.3	855.3	776.3	702.4
35°	1246.8	1235.2	1227.1	1210.3	1175.9	1127.8	1054.9	983.5	903.5	822.4	739.9
37.5°	1327.8	1316.7	1306.6	1285.3	1243.3	1182.0	1099.4	1020.9	938.4	855.9	771.8
40°	1387.1	1381.5	1369.4	1341.5	1294.4	1221.5	1132.4	1046.8	963.7	880.7	797.6
42.5°	1431.1	1422.5	1408.9	1380.0	1324.3	1241.2	1145.5	1057.4	975.4	895.9	814.3
45°	1447.4	1440.3	1427.6	1396.2	1335.9	1246.8	1145.0	1054.4	975.9	900.4	825.5
47.5°	1437.7	1430.6	1419.5	1390.1	1330.9	1240.2	1135.9	1045.8	970.8	901.9	835.6
50°	1405.8	1401.8	1393.2	1368.4	1315.2	1227.6	1127.8	1041.2	969.8	909.5	849.8
52.5°	1402.8	1400.3	1389.6	1364.8	1310.6	1223.5	1126.8	1043.7	978.4	919.2	859.9
55°	1714.2	1678.3	1597.8	1529.4	1417.0	1283.3	1177.9	1084.8	1014.9	957.1	915.6
57.5°	2436.4	2382.7	2276.9	2146.7	1888.4	1634.7	1431.7	1284.8	1212.4	1186.0	1201.7
60°	2774.7	2765.1	2748.4	2686.6	2554.4	2336.1	2093.0	1830.2	1724.9	1715.8	1747.7
62.5°	2935.2	2929.1	2934.2	2926.6	2885.6	2821.8	2751.9	2638.5	2534.1	2466.8	2324.0
65°	3009.2	3013.2	3042.1	3064.9	3069.9	3086.6	3137.8	3279.1	3382.4	3208.7	2812.2
67.5°	2821.3	2845.1	2911.4	2994.5	3091.7	3185.9	3337.8	3635.6	3847.8	3643.7	3080.6
69°	2335.6	2347.3	2509.3	2665.8	2903.3	3069.4	3289.7	3680.2	3918.7	3688.3	3059.3
70°	1838.8	1849.5	2023.2	2235.9	2637.4	2851.2	3139.3	3604.7	3852.4	3629.0	2949.9
72.5°	829.5	814.3	875.6	989.5	1426.1	1765.4	2269.3	2920.5	3178.3	2907.4	2207.0
75°	579.3	572.8	579.3	579.9	647.7	835.6	1054.4	1583.1	1957.8	1689.4	1054.4
77.5°	448.7	444.1	439.6	434.5	442.6	495.8	517.1	561.6	729.2	689.7	402.1
80°	355.0	351.0	362.1	358.5	358.5	364.6	360.6	343.9	312.5	289.7	259.3
82.5°	165.1	166.1	166.1	180.3	217.3	253.7	265.4	248.7	220.8	187.9	151.4
85°	15.7	17.7	29.9	46.1	91.7	103.3	103.8	86.1	86.1	67.9	54.7
87.5°	0.0	0.5	0.5	0.5	4.6	12.7	10.6	3.0	1.5	1.5	2.5
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: P180826

CATALOG NUMBER: ICS-E02-LED-E1-SL4-HSS-8030

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	233.5	233.5	233.5	233.5	233.5	233.5	233.5	233.5	233.5	233.5	233.5
2.5°	269.4	267.9	261.8	255.7	250.2	244.1	238.5	233.0	226.9	222.3	216.7
5°	315.0	303.9	291.2	279.0	266.9	254.2	241.1	229.4	217.3	206.1	195.5
7.5°	361.1	339.3	322.1	300.3	280.6	260.8	242.6	223.8	206.6	190.4	175.2
10°	400.1	373.7	346.9	319.0	290.7	264.4	239.0	216.7	194.0	174.2	155.5
12.5°	432.0	398.6	365.6	330.7	298.8	265.4	234.0	207.1	180.3	158.0	138.8
15°	460.8	422.4	382.9	342.3	301.8	263.8	228.9	195.5	168.1	142.8	121.0
17.5°	484.1	440.1	395.5	349.9	306.4	261.8	222.3	187.4	155.5	129.1	107.9
20°	504.4	458.3	410.2	359.1	309.4	261.3	216.7	177.2	144.3	116.5	95.7
22.5°	523.1	477.0	425.4	370.7	314.0	260.8	211.7	169.7	134.7	106.9	86.1
25°	544.4	495.8	441.6	382.9	322.1	262.8	208.6	163.6	126.1	97.7	78.5
27.5°	568.2	517.1	460.8	398.0	332.7	266.9	207.6	157.0	118.5	89.1	72.4
30°	601.6	542.4	480.1	413.2	342.3	271.4	206.6	152.9	110.9	82.5	66.3
32.5°	631.0	567.2	501.4	428.9	353.0	276.0	206.1	147.4	103.8	76.0	61.8
35°	661.9	590.0	519.6	444.1	362.1	281.1	205.6	143.3	97.2	69.4	57.2
37.5°	688.7	609.2	533.8	457.3	372.2	285.6	206.1	139.8	91.2	63.8	53.2
40°	711.5	629.0	549.5	469.5	382.9	292.7	206.6	136.2	85.1	58.7	49.6
42.5°	731.8	647.7	566.2	483.1	395.0	300.8	209.7	133.2	80.0	54.2	46.1
45°	747.5	664.9	584.4	502.4	414.8	314.0	215.2	131.2	75.0	50.1	43.0
47.5°	763.7	690.3	615.3	532.8	443.6	334.7	224.9	130.7	70.9	47.1	40.5
50°	786.0	715.6	642.6	563.6	470.0	356.0	236.5	131.2	65.8	44.1	38.0
52.5°	802.2	741.4	678.1	617.3	532.8	420.8	281.6	140.3	63.3	41.5	34.9
55°	897.9	887.3	888.8	898.9	833.6	716.1	471.0	202.6	74.4	47.1	34.4
57.5°	1266.1	1303.5	1325.3	1324.8	1216.9	1009.3	632.5	260.3	83.1	54.7	41.0
60°	1750.2	1721.8	1681.8	1583.1	1439.8	1152.1	707.5	280.1	71.9	43.6	37.5
62.5°	2178.1	2012.0	1864.6	1704.6	1516.7	1201.7	722.7	278.5	62.8	32.9	26.3
65°	2445.0	2146.2	1908.2	1707.7	1486.3	1160.2	683.7	255.7	53.2	26.8	21.8
67.5°	2508.8	2073.8	1737.0	1481.3	1241.7	903.0	501.9	192.4	41.5	22.3	19.2
69°	2369.5	1843.4	1439.3	1149.1	903.5	599.1	310.4	121.5	31.9	20.3	17.7
70°	2179.6	1603.3	1172.4	922.2	669.0	420.8	217.3	85.6	25.8	18.7	16.2
72.5°	1402.3	842.2	576.3	401.1	276.0	167.6	85.1	38.5	19.8	15.7	13.2
75°	543.9	311.4	225.9	171.7	134.2	93.2	51.7	24.8	16.7	13.2	10.1
77.5°	267.9	205.1	167.6	115.0	66.8	41.5	27.9	19.2	13.7	9.6	6.6
80°	211.7	140.8	84.1	52.2	39.5	29.9	21.3	15.7	10.1	6.1	4.6
82.5°	108.4	59.3	43.6	35.4	29.4	23.3	17.2	11.1	6.6	4.1	3.5
85°	33.9	24.8	22.3	21.8	20.3	16.7	12.2	7.1	4.1	2.5	2.5
87.5°	2.5	3.5	4.6	3.5	4.1	3.5	4.6	3.0	2.0	2.0	1.5
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: P180826

CATALOG NUMBER: ICS-E02-LED-E1-SL4-HSS-8030

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	233.5	233.5	233.5	233.5	233.5	233.5	233.5	233.5	233.5	233.5	233.5
2.5°	212.7	206.6	201.0	197.5	190.9	188.4	185.9	184.8	180.3	181.3	177.2
5°	185.9	175.2	167.1	159.0	151.4	145.8	141.3	135.7	131.2	129.1	125.1
7.5°	161.5	147.9	137.2	128.6	119.5	112.4	106.3	102.3	98.2	94.2	92.2
10°	140.3	125.6	113.4	104.8	96.2	90.1	85.6	82.5	80.0	78.5	78.0
12.5°	120.5	106.3	95.2	87.6	81.0	78.0	76.0	74.4	73.9	73.4	73.4
15°	105.3	91.2	82.5	77.0	73.9	72.4	71.9	70.9	69.9	69.4	69.4
17.5°	91.2	80.5	74.4	71.4	69.9	68.9	67.9	66.8	65.8	65.3	65.3
20°	81.5	72.9	69.9	67.9	66.3	65.3	63.8	62.8	62.3	61.8	61.3
22.5°	73.9	68.4	66.3	64.8	62.8	61.3	60.3	59.3	58.2	57.7	57.2
25°	68.4	64.8	63.3	61.3	59.3	57.7	56.2	54.7	53.7	53.2	52.2
27.5°	64.3	61.8	59.8	57.2	55.2	53.7	52.2	50.6	49.6	48.6	48.1
30°	60.8	58.2	55.7	53.7	51.1	49.6	47.6	46.1	45.6	44.6	43.6
32.5°	57.2	54.7	52.2	49.6	47.1	45.1	44.1	42.0	41.0	40.5	39.5
35°	53.2	50.6	47.6	45.6	43.0	41.0	39.5	38.0	37.0	36.0	35.4
37.5°	49.6	46.6	43.6	41.0	39.0	37.0	35.4	33.9	32.9	31.9	31.4
40°	45.6	42.5	39.5	37.0	34.9	33.4	31.9	30.4	29.4	28.9	28.9
42.5°	42.0	38.5	35.4	33.4	31.9	29.9	28.4	26.8	26.3	25.8	26.3
45°	38.5	34.9	32.4	30.4	28.9	26.8	25.3	24.3	23.8	24.3	24.8
47.5°	35.4	31.9	29.4	27.9	26.3	24.8	23.3	22.3	22.3	23.3	24.3
50°	32.4	28.9	26.8	25.8	24.3	22.8	20.8	20.3	20.8	21.8	22.8
52.5°	29.4	25.3	23.8	23.3	21.8	20.3	18.7	18.2	18.7	19.8	19.2
55°	26.3	22.3	21.8	21.3	19.8	17.7	16.2	16.2	16.2	15.7	14.7
57.5°	25.3	19.8	19.2	18.7	17.2	15.2	14.2	13.2	12.7	11.1	10.6
60°	26.3	17.7	17.7	16.7	15.2	13.2	11.6	10.1	9.1	8.1	8.1
62.5°	21.3	16.2	15.7	14.7	12.7	10.6	9.1	7.6	7.1	6.6	6.6
65°	17.2	14.7	13.7	12.2	10.6	8.6	7.1	6.1	5.6	5.6	6.1
67.5°	15.7	13.2	11.6	10.1	8.6	6.6	5.6	5.1	5.1	5.6	5.6
69°	14.7	12.2	10.6	9.1	7.6	6.1	5.1	5.1	5.1	5.1	5.6
70°	13.7	11.6	10.1	8.6	6.6	5.1	4.6	4.6	5.1	5.1	5.6
72.5°	10.6	9.1	8.6	7.1	5.1	4.6	4.1	4.6	4.6	5.1	5.1
75°	8.1	6.6	6.6	5.6	4.1	3.5	3.5	4.1	4.1	4.6	4.6
77.5°	5.6	4.6	4.6	4.1	3.5	3.0	3.0	3.5	4.1	4.1	4.6
80°	4.1	3.5	3.0	3.5	3.0	2.5	3.0	3.5	3.5	4.1	4.1
82.5°	3.0	3.0	3.0	3.0	2.5	2.5	3.0	3.0	3.5	4.1	4.1
85°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	3.0	3.0	3.5	3.5
87.5°	1.5	1.5	1.5	2.0	2.0	2.5	2.5	2.5	2.5	3.0	3.0
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: P180826

CATALOG NUMBER: ICS-E02-LED-E1-SL4-HSS-8030

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	233.5	233.5	233.5	233.5
2.5°	176.2	175.7	173.7	174.2
5°	123.6	120.5	122.6	122.0
7.5°	90.6	90.1	89.6	90.6
10°	77.5	77.5	77.0	77.5
12.5°	72.9	72.9	72.9	72.9
15°	69.4	69.4	68.9	68.9
17.5°	65.3	65.3	65.3	64.8
20°	61.3	60.8	60.8	60.8
22.5°	56.7	56.2	56.2	56.2
25°	52.2	51.7	51.7	51.7
27.5°	47.6	47.1	46.6	46.6
30°	43.0	42.5	42.0	42.0
32.5°	38.5	38.0	37.5	37.5
35°	34.4	34.4	33.9	33.4
37.5°	30.9	30.9	30.9	30.9
40°	28.4	28.9	28.9	28.9
42.5°	26.8	27.3	27.9	28.4
45°	25.8	26.8	27.3	27.3
47.5°	25.3	25.8	26.3	26.3
50°	23.3	22.8	22.8	22.8
52.5°	18.7	17.7	17.2	16.7
55°	13.7	13.2	12.2	12.2
57.5°	9.6	9.6	9.1	9.1
60°	7.6	7.6	7.1	7.6
62.5°	6.6	6.6	6.6	6.6
65°	6.1	6.1	6.1	6.1
67.5°	6.1	6.1	6.1	6.1
69°	5.6	5.6	5.6	5.6
70°	5.6	5.6	5.6	5.6
72.5°	5.1	5.1	5.1	5.1
75°	4.6	5.1	5.1	5.1
77.5°	4.6	4.6	4.6	4.6
80°	4.1	4.1	4.6	4.6
82.5°	4.1	4.1	4.1	4.1
85°	3.5	3.5	4.1	4.1
87.5°	3.0	3.0	3.5	3.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)