

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: McGRAW-EDISON

Report Number: P226765

Luminaire Tested: **ISW-AF-350-LED-E1-SL2-ULG**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P226765  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35945)-DOWNLIGHT AND  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: ISW-AF-350-LED-E1-SL2-ULG  
Description: IMPACT ELITE LED WEDGE LUMINAIRE WITH UPLIGHT  
LIGHT SQUARE WITH ACCULED OPTICS-TYPE II W/SPILL CONTROL, WITH UPLIGHT  
GLOW  
Light Source: (16) 4000K CCT, 70 CRI LEDs and (1) UPLIGHT LED  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4245.6 lumens  
Efficiency: N/A  
Efficacy: 115.4 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 0.5' x H: 0.54')  
IES Classification: Type II - Short - Non-Cutoff  
BUG Rating: B1 - U5 - G1

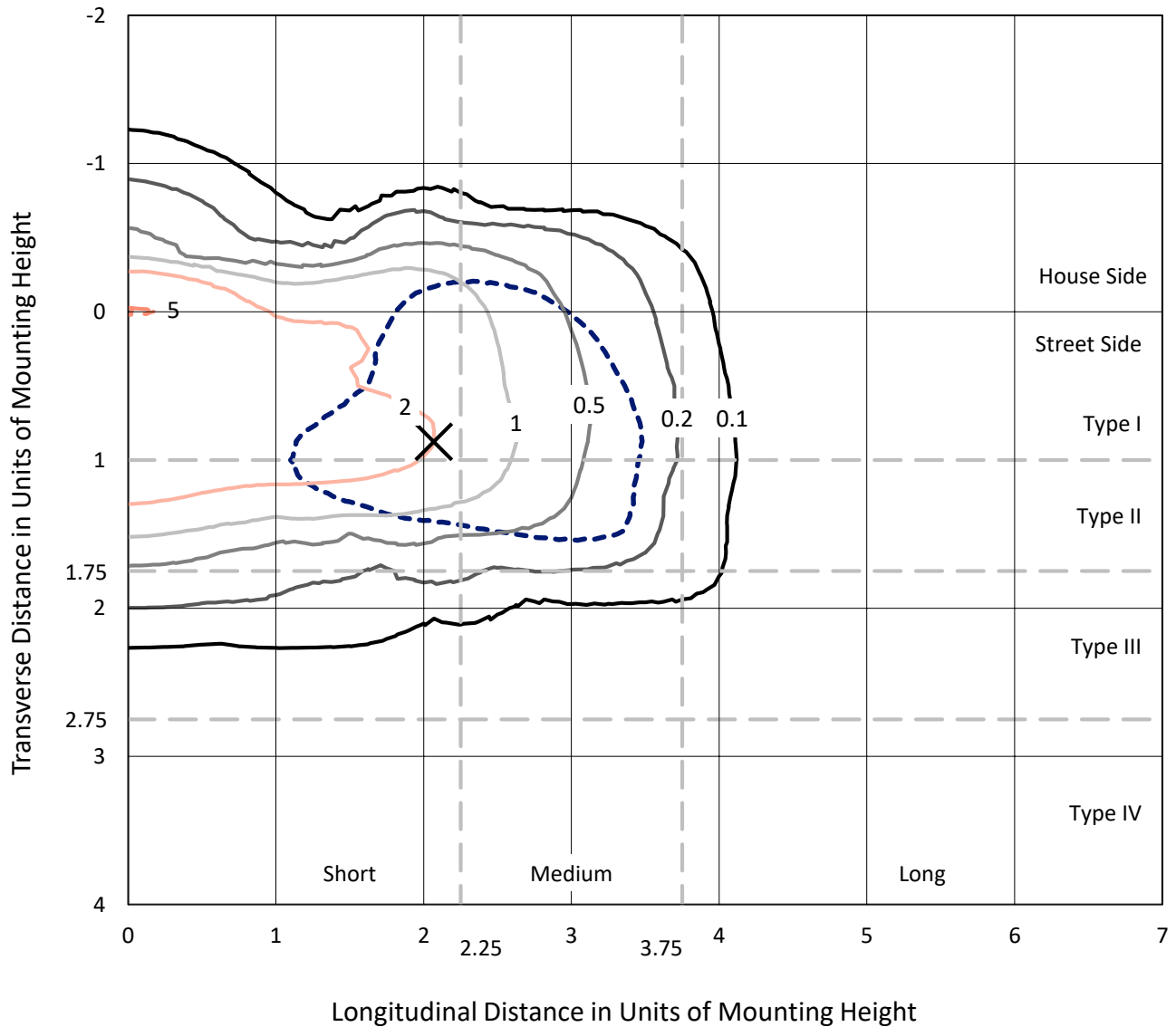
Input Watts (W): 36.79  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



REPORT NUMBER: P226765  
 CATALOG NUMBER: ISW-AF-350-LED-E1-SL2-ULG

### Iso-Footcandle Lines of Horizontal Illumination

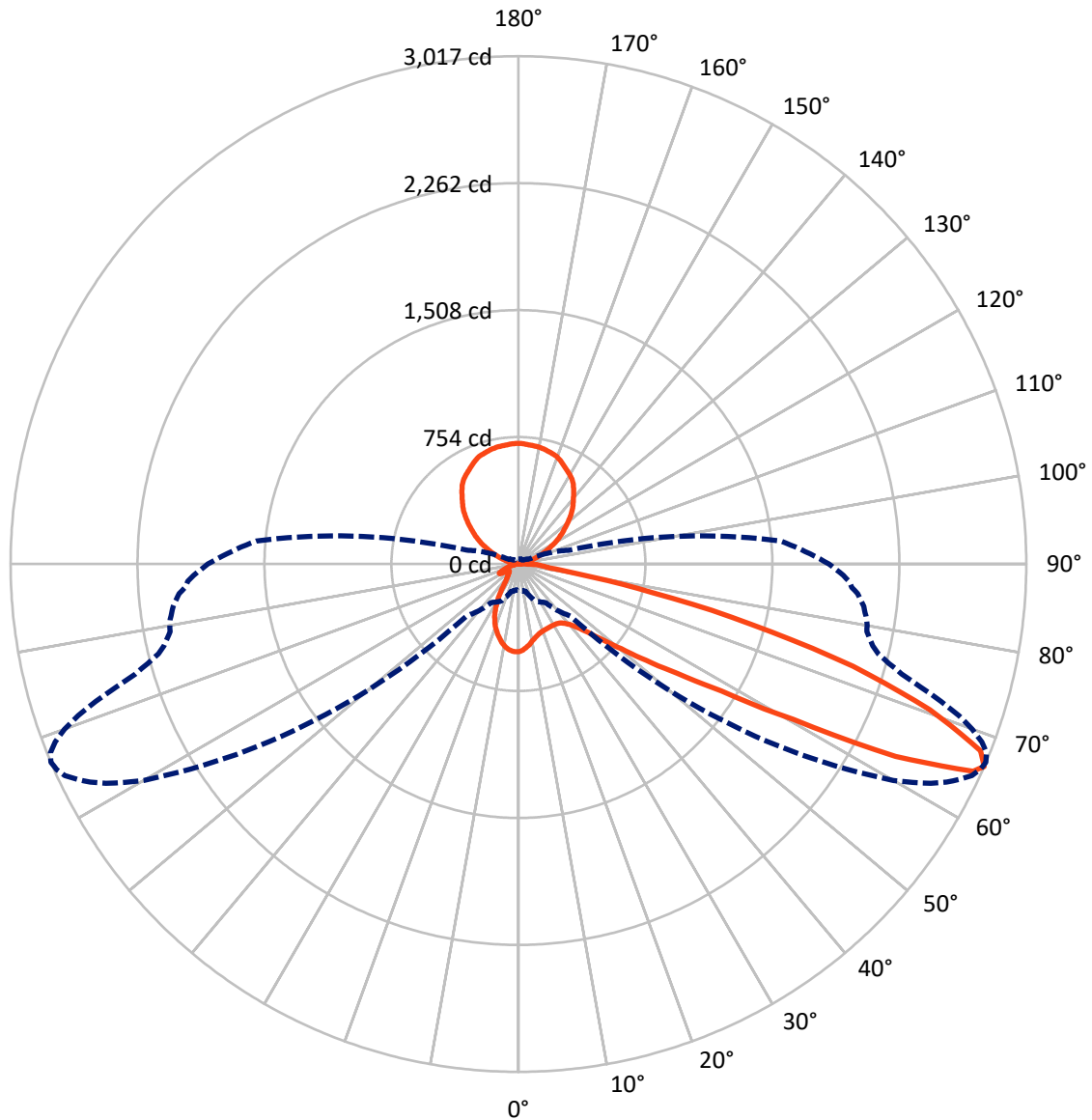
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.2 fc  
 Type II - Short - Non-Cutoff

REPORT NUMBER: P226765  
CATALOG NUMBER: ISW-AF-350-LED-E1-SL2-ULG

### Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral    - - - Horizontal Cone Through 66-Deg Vertical

REPORT NUMBER: P226765

CATALOG NUMBER: ISW-AF-350-LED-E1-SL2-ULG

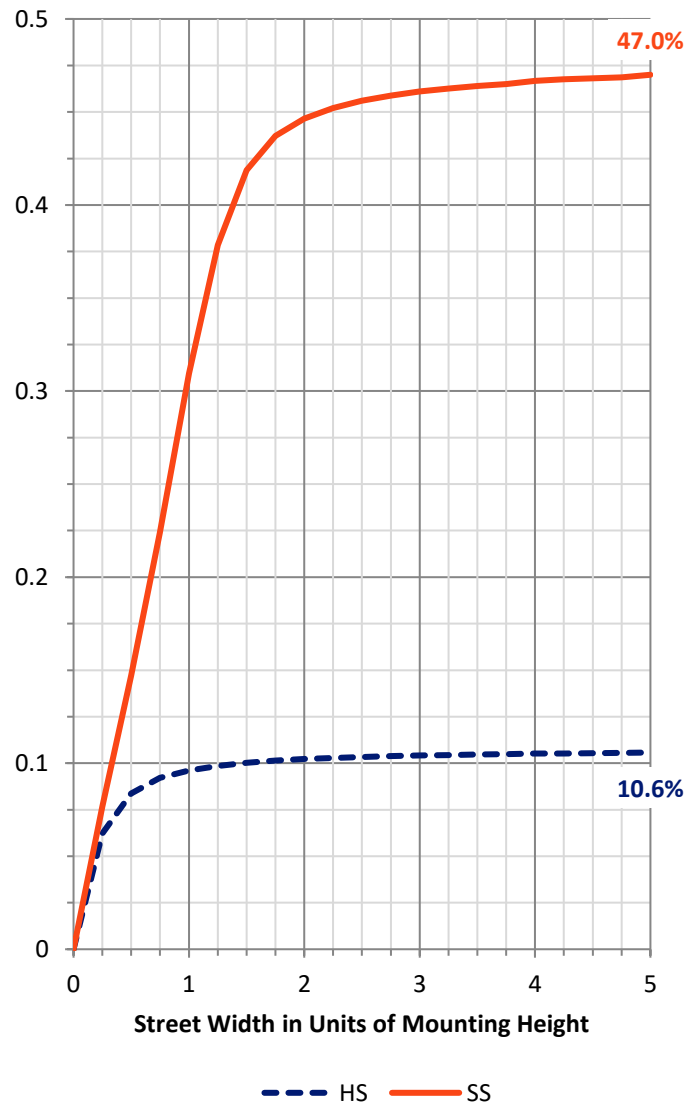
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	456.5	887.7	1344.2
	% Fixture	10.8	20.9	31.7
<b>Street Side</b>	Lumens	2013.3	888.2	2901.4
	% Fixture	47.4	20.9	68.3
<b>Total</b>	Lumens	2469.8	1775.9	4245.6
	% Fixture	58.2	41.8	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	45.1	1.1
10°-20°	107.3	2.5
20°-30°	147.1	3.5
30°-40°	210.2	5.0
40°-50°	340.8	8.0
50°-60°	540.0	12.7
60°-70°	684.3	16.1
70°-80°	340.1	8.0
80°-90°	54.9	1.3
90°-100°	10.4	0.2
100°-110°	58.7	1.4
110°-120°	169.9	4.0
120°-130°	279.4	6.6
130°-140°	344.6	8.1
140°-150°	352.5	8.3
150°-160°	297.0	7.0
160°-170°	195.5	4.6
170°-180°	67.8	1.6
0°-90°	2469.8	58.2
0°-180°	4245.6	100.0



REPORT NUMBER: P226765

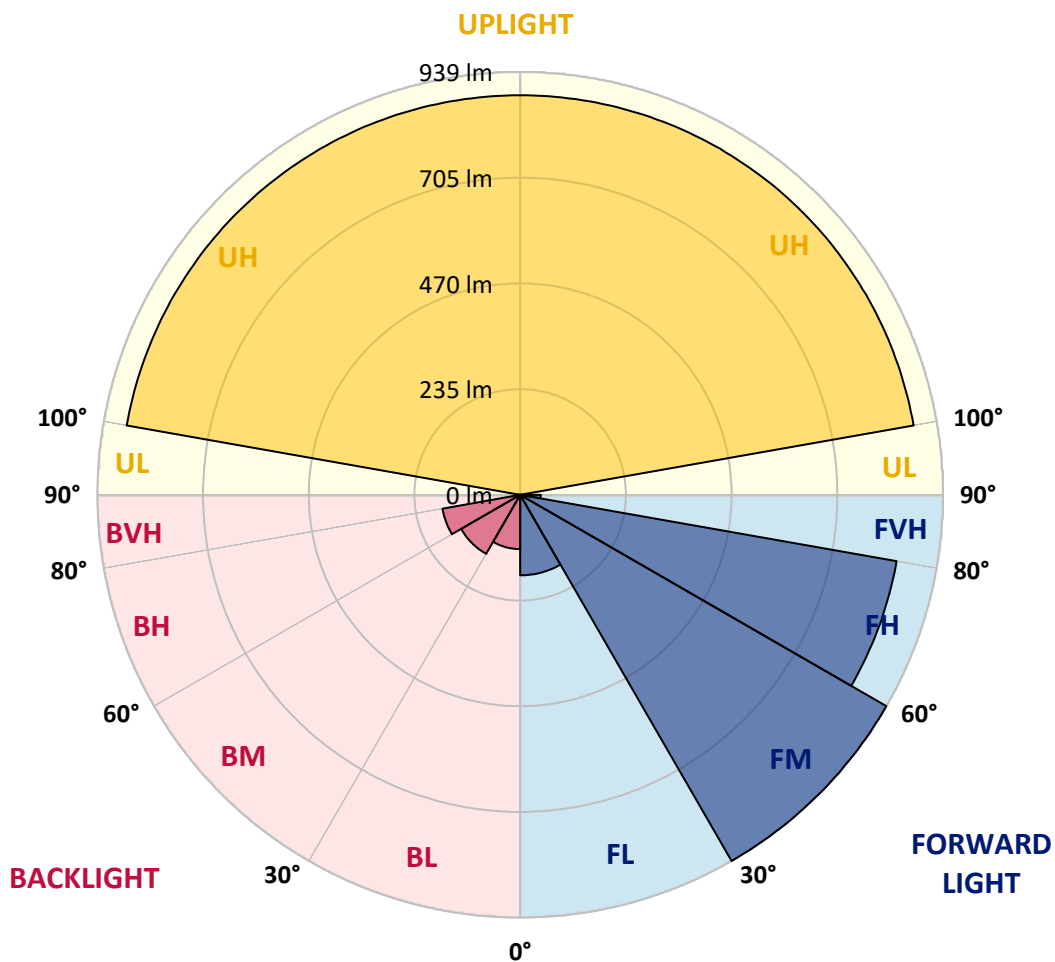
CATALOG NUMBER: ISW-AF-350-LED-E1-SL2-ULG

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	178.9	4.2			
FM (30°-60°)	939.5	22.1			
FH (60°-80°)	849.2	20.0			G1/1800
FVH (80°-90°)	45.7	1.1			G1/100
BL (0°-30°)	120.6	2.8	B1/500		
BM (30°-60°)	151.5	3.6	B0/220		
BH (60°-80°)	175.2	4.1	B1/500		G1/500
BVH (80°-90°)	9.2	0.2			G0/10
UL (90°-100°)	10.4	0.2		U2/50	
UH (100°-180°)	887.7	20.9		U4/1000	

**BUG Rating: B1-U5-G1**

Type II Short





REPORT NUMBER: P226765

CATALOG NUMBER: ISW-AF-350-LED-E1-SL2-ULG

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	60°	61°	62°	63°
0°	519.9	519.9	519.9	519.9	519.9	519.9	519.9	519.9	519.9	519.9	519.9
2.5°	483.1	484.2	490.5	493.9	498.7	500.1	505.7	508.0	509.8	509.4	509.4
5°	439.7	443.0	446.0	452.7	459.7	468.2	479.0	487.1	488.7	490.5	491.6
7.5°	406.6	408.9	414.1	418.9	427.8	439.7	454.9	465.2	467.5	468.2	470.9
10°	383.3	384.7	389.2	395.6	405.9	417.5	433.4	444.2	447.4	449.0	451.2
12.5°	365.1	367.3	371.4	378.1	389.2	401.1	417.8	428.5	430.8	432.6	436.0
15°	353.6	355.1	358.7	366.2	376.2	388.1	404.5	417.5	418.9	420.7	423.7
17.5°	351.4	352.5	354.8	360.3	368.1	379.6	396.3	407.0	409.6	412.2	415.2
20°	360.3	361.0	361.7	362.5	366.9	374.4	390.7	402.2	404.5	406.6	410.4
22.5°	379.6	380.6	378.8	376.2	372.9	374.4	388.1	400.0	401.5	403.7	406.6
25°	413.0	411.8	406.3	402.2	390.4	380.6	388.8	398.8	400.7	402.9	406.3
27.5°	452.3	450.8	447.4	436.4	416.6	397.0	393.3	400.7	401.8	403.7	406.6
30°	494.6	495.0	492.0	479.8	454.5	421.5	403.3	405.2	405.9	407.4	409.3
32.5°	532.9	538.4	538.0	537.3	501.2	454.5	422.6	415.2	414.1	415.2	415.9
35°	576.9	578.1	588.5	593.6	564.4	502.8	450.8	434.4	430.0	430.4	429.6
37.5°	624.4	625.9	643.7	652.6	630.0	557.7	488.3	463.1	459.0	454.9	451.9
40°	693.5	699.4	708.7	718.7	707.6	631.5	537.7	503.5	493.1	492.3	486.4
42.5°	796.6	794.7	790.3	798.5	785.1	714.2	597.4	560.7	552.8	542.5	534.3
45°	897.9	902.0	882.7	886.4	887.2	810.0	683.8	632.3	628.2	615.9	607.0
47.5°	966.2	961.8	935.8	954.7	1001.1	921.7	784.0	729.9	721.3	715.0	709.4
50°	969.9	966.2	949.5	982.9	1082.0	1120.1	923.5	860.4	848.2	837.1	833.7
52.5°	879.3	874.2	879.7	947.7	1111.2	1286.4	1120.5	1022.5	1012.6	1003.3	990.3
55°	718.0	723.9	750.2	847.8	1066.3	1404.4	1508.2	1273.1	1230.0	1229.6	1197.7
57.5°	536.1	530.2	549.8	641.5	952.9	1446.4	1864.4	1806.2	1710.2	1645.2	1566.9
60°	361.7	363.2	381.5	428.5	663.1	1400.7	2103.1	2306.0	2272.3	2258.5	2237.4
62.5°	250.8	253.1	269.8	313.9	387.7	1126.9	2172.8	2586.1	2646.6	2696.7	2684.4
65°	175.5	175.8	192.5	260.9	290.5	578.8	2018.8	2623.3	2713.4	2799.5	2876.6
66°	154.8	155.1	168.8	242.6	278.7	436.7	1885.3	2571.7	2674.5	2774.7	2854.4
67.5°	132.5	134.7	145.5	206.3	267.2	336.9	1557.2	2417.7	2525.3	2635.5	2740.9
70°	90.9	91.7	101.3	167.4	250.1	295.7	887.5	1887.4	2036.3	2229.9	2342.0
72.5°	65.0	64.1	65.3	103.5	256.8	293.9	466.4	1242.3	1450.4	1620.4	1741.7
75°	57.9	56.1	51.2	64.1	187.4	320.9	312.4	731.3	889.8	1044.4	1168.8
77.5°	51.6	48.6	46.0	49.3	92.8	302.4	280.5	418.9	499.8	615.2	711.0
80°	39.3	37.4	39.0	42.7	55.6	278.2	278.7	278.7	300.5	338.4	376.2
82.5°	26.0	23.7	27.1	35.3	41.9	209.6	288.0	246.0	241.9	240.4	243.1
85°	16.4	14.1	18.9	26.4	32.3	109.5	295.3	259.7	240.8	222.6	204.5
87.5°	5.9	6.6	9.6	15.2	21.2	47.5	259.0	228.9	215.9	193.3	172.2
90°	6.6	6.2	9.0	12.7	13.0	16.1	46.9	71.6	46.2	27.5	24.0
92.5°	4.1	4.1	5.1	6.1	6.1	6.1	7.2	7.2	7.2	7.2	7.2
95°	5.1	5.1	6.1	7.2	7.2	7.2	7.2	7.7	7.8	7.9	8.0
97.5°	7.2	7.2	8.2	8.2	9.2	9.2	12.3	11.3	11.0	10.8	10.6
100°	8.2	8.2	9.2	10.2	12.3	21.5	29.7	28.1	27.8	27.5	27.2
102.5°	11.3	11.3	13.3	18.4	27.6	40.9	51.1	49.6	49.3	49.0	48.7
105°	21.5	22.5	27.6	36.8	49.1	64.4	73.7	72.6	72.4	72.2	72.0
107.5°	41.9	43.0	50.1	59.3	74.7	90.0	97.2	96.7	96.6	96.5	96.4



REPORT NUMBER: P226765

CATALOG NUMBER: ISW-AF-350-LED-E1-SL2-ULG

**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	60°	61°	62°	63°
110°	67.5	69.6	75.7	89.0	104.3	116.6	122.8	123.3	123.4	123.5	123.6
112.5°	101.3	101.3	108.4	123.8	137.1	146.3	151.4	152.4	152.6	152.8	153.0
115°	143.2	142.2	150.4	162.6	171.9	178.0	183.1	184.6	184.9	185.3	185.6
117.5°	188.2	188.2	193.3	201.5	206.6	209.7	215.8	217.9	218.3	218.7	219.1
120°	230.2	228.1	231.2	238.3	242.4	248.6	251.6	253.7	254.1	254.5	254.9
122.5°	269.0	266.0	267.0	273.1	277.2	283.4	285.4	287.4	287.9	288.3	288.7
125°	304.8	300.7	302.8	305.9	312.0	317.1	320.2	321.2	321.4	321.6	321.8
127.5°	337.6	336.6	336.6	340.6	346.8	347.8	352.9	353.4	353.5	353.6	353.7
130°	371.3	369.3	370.3	374.4	378.5	380.5	385.7	387.7	388.1	388.5	388.9
132.5°	405.1	403.0	402.0	410.2	413.3	414.3	420.4	423.0	423.5	424.0	424.5
135°	438.8	435.8	435.8	441.9	445.0	447.0	453.2	455.7	456.2	456.7	457.3
137.5°	470.6	467.5	469.5	470.6	474.6	478.7	483.9	484.9	485.1	485.3	485.5
140°	499.2	496.1	498.2	500.2	502.3	508.4	511.5	512.5	512.7	512.9	513.1
142.5°	529.9	526.8	528.9	529.9	533.0	537.0	539.1	542.2	542.8	543.4	544.0
145°	562.6	558.5	556.5	559.6	562.6	563.6	568.8	571.8	572.4	573.1	573.7
147.5°	588.2	585.1	584.1	587.2	587.2	588.2	593.3	595.9	596.4	596.9	597.4
150°	608.7	605.6	606.6	606.6	606.6	606.6	610.7	612.2	612.5	612.8	613.2
152.5°	625.0	622.0	622.0	623.0	624.0	624.0	625.0	626.6	626.9	627.2	627.5
155°	643.4	639.3	639.3	641.4	644.5	642.4	640.4	642.9	643.4	643.9	644.5
157.5°	660.8	657.8	657.8	658.8	660.8	659.8	658.8	660.8	661.2	661.6	662.1
160°	678.2	675.1	674.1	671.1	670.0	670.0	673.1	676.2	676.8	677.4	678.0
162.5°	688.4	684.4	684.4	680.3	676.2	678.2	682.3	684.4	684.8	685.2	685.6
165°	696.6	693.6	691.5	691.5	688.4	688.4	687.4	690.0	690.5	691.0	691.5
167.5°	705.8	702.8	699.7	701.7	703.8	700.7	693.6	696.6	697.2	697.9	698.5
170°	714.0	711.0	707.9	707.9	708.9	706.9	701.7	703.3	703.6	703.9	704.2
172.5°	715.0	713.0	711.0	708.9	705.8	705.8	704.8	706.3	706.7	707.0	707.3
175°	716.1	714.0	713.0	711.0	706.9	705.8	705.8	708.4	708.9	709.4	709.9
177.5°	723.2	721.2	716.1	715.0	713.0	711.0	709.9	712.5	713.0	713.5	714.0
180°	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1





REPORT NUMBER: P226765

CATALOG NUMBER: ISW-AF-350-LED-E1-SL2-ULG

**CANDELA DISTRIBUTION (continued):**

	64°	65°	66°	67°	68°	69°	70°	71°	72°	73°	74°
0°	519.9	519.9	519.9	519.9	519.9	519.9	519.9	519.9	519.9	519.9	519.9
2.5°	509.8	511.7	512.4	511.7	512.0	514.2	513.5	514.6	514.6	515.4	515.4
5°	493.1	494.6	497.6	497.2	500.1	501.2	502.4	503.9	505.7	506.9	509.0
7.5°	473.4	476.4	479.0	480.5	482.3	486.1	487.1	490.5	493.5	496.4	498.7
10°	454.5	458.6	461.6	462.7	466.8	468.6	472.7	475.3	479.0	482.7	486.1
12.5°	438.5	442.3	443.8	447.4	451.2	454.9	456.7	461.6	465.2	470.1	474.5
15°	426.7	430.4	433.4	436.0	439.7	443.3	446.3	451.2	455.6	460.4	464.5
17.5°	419.3	421.5	425.2	427.4	431.9	436.4	439.7	445.3	450.1	454.2	459.7
20°	413.7	416.3	419.6	423.0	427.1	432.6	435.6	441.5	446.7	451.5	456.7
22.5°	410.7	413.4	416.6	420.0	424.4	428.9	433.7	438.9	444.5	449.7	454.9
25°	409.6	411.8	414.8	418.2	423.0	427.8	431.9	437.8	442.6	448.3	454.5
27.5°	410.0	411.5	414.8	417.8	422.6	427.1	431.2	437.1	442.6	447.8	454.2
30°	411.5	412.6	415.9	418.5	422.6	427.1	430.8	437.1	441.9	447.4	454.2
32.5°	416.6	418.2	419.6	421.5	425.2	428.5	433.0	438.5	443.0	448.6	454.2
35°	428.9	427.8	428.9	429.6	432.3	435.6	438.9	443.8	447.8	452.7	458.6
37.5°	448.3	446.0	446.7	446.3	446.3	448.6	451.9	455.3	458.6	463.4	469.3
40°	483.9	478.2	476.8	472.7	471.6	473.4	475.7	476.1	480.2	486.4	489.1
42.5°	529.9	522.4	523.5	516.9	515.0	512.8	515.8	513.9	516.5	520.6	526.1
45°	602.5	595.6	588.1	577.4	579.6	571.4	569.2	569.9	569.6	571.0	577.7
47.5°	689.4	680.2	675.2	671.3	663.4	658.6	652.3	643.0	645.3	648.2	654.2
50°	816.3	813.3	804.0	790.6	788.8	781.7	779.9	771.7	768.7	768.4	768.0
52.5°	985.8	966.6	962.8	950.2	940.6	934.0	931.7	920.1	908.7	915.3	914.6
55°	1192.6	1176.6	1156.1	1145.0	1137.2	1121.3	1117.2	1102.7	1096.1	1092.3	1083.1
57.5°	1539.8	1483.8	1441.8	1421.1	1391.7	1362.1	1351.7	1322.1	1299.0	1282.7	1283.8
60°	2145.3	2045.5	1928.0	1875.3	1753.1	1735.3	1651.5	1631.1	1580.7	1547.2	1528.0
62.5°	2675.9	2648.8	2592.5	2515.6	2393.2	2252.2	2188.8	2062.6	1964.0	1920.9	1861.2
65°	2929.3	2967.6	2983.1	2968.7	2919.7	2833.7	2758.0	2634.7	2469.3	2375.8	2259.6
66°	2916.3	2973.1	3001.7	3016.6	2998.8	2947.9	2868.6	2767.2	2639.2	2496.7	2366.5
67.5°	2821.4	2876.6	2916.3	2961.6	2961.6	2945.7	2913.4	2845.8	2755.3	2631.0	2514.2
70°	2433.3	2508.3	2578.3	2592.1	2630.7	2618.8	2644.4	2601.4	2579.9	2527.9	2465.2
72.5°	1895.6	1958.3	2018.5	2078.5	2068.5	2055.5	2053.0	2061.9	2018.1	2033.6	2017.4
75°	1260.8	1368.8	1430.4	1424.5	1428.6	1431.8	1404.4	1343.1	1390.7	1330.6	1350.6
77.5°	766.2	816.3	833.0	814.5	790.3	759.1	709.0	679.8	637.8	641.2	613.4
80°	401.8	408.2	394.8	357.3	336.9	318.3	261.3	235.6	211.9	203.0	182.9
82.5°	230.4	215.2	198.9	186.3	162.1	145.8	123.6	109.5	94.2	80.9	76.1
85°	186.6	166.2	151.0	136.9	120.6	106.1	87.6	73.1	62.0	53.8	52.0
87.5°	154.0	139.8	124.3	111.0	95.0	80.1	62.0	48.3	38.3	30.8	28.5
90°	22.7	27.7	22.6	16.7	20.4	15.1	12.6	12.9	12.2	12.2	12.6
92.5°	7.2	7.2	7.1	7.0	6.9	6.8	6.6	6.5	6.4	6.3	6.2
95°	8.1	8.2	8.1	8.0	7.9	7.8	7.7	7.6	7.5	7.4	7.3
97.5°	10.4	10.2	10.1	10.0	9.9	9.8	9.7	9.6	9.5	9.4	9.3
100°	26.9	26.6	26.3	26.0	25.7	25.4	25.1	24.8	24.4	24.1	23.8
102.5°	48.4	48.1	47.6	47.1	46.5	46.0	45.5	45.0	44.5	44.0	43.5
105°	71.8	71.6	71.1	70.6	70.1	69.6	69.0	68.5	68.0	67.5	67.0
107.5°	96.3	96.2	95.7	95.3	94.9	94.5	94.1	93.7	93.3	92.9	92.5



REPORT NUMBER: P226765

CATALOG NUMBER: ISW-AF-350-LED-E1-SL2-ULG

**CANDELA DISTRIBUTION (continued):**

	64°	65°	66°	67°	68°	69°	70°	71°	72°	73°	74°
110°	123.7	123.8	123.6	123.4	123.2	123.0	122.8	122.5	122.3	122.1	121.9
112.5°	153.2	153.4	153.3	153.2	153.1	153.0	152.9	152.8	152.7	152.6	152.5
115°	185.9	186.2	185.9	185.6	185.3	184.9	184.6	184.3	184.0	183.7	183.4
117.5°	219.5	219.9	219.4	218.9	218.4	217.9	217.4	216.9	216.4	215.8	215.3
120°	255.3	255.7	255.2	254.7	254.2	253.7	253.2	252.7	252.2	251.6	251.1
122.5°	289.1	289.5	289.0	288.5	288.0	287.4	286.9	286.4	285.9	285.4	284.9
125°	322.0	322.2	321.7	321.2	320.7	320.2	319.7	319.2	318.6	318.1	317.6
127.5°	353.8	353.9	353.9	353.9	353.9	353.9	353.9	353.9	353.9	353.9	353.9
130°	389.3	389.7	389.7	389.7	389.7	389.7	389.7	389.7	389.7	389.7	389.7
132.5°	425.0	425.5	425.3	425.1	424.9	424.7	424.5	424.3	424.1	423.9	423.7
135°	457.8	458.3	458.2	458.1	458.0	457.9	457.8	457.7	457.6	457.5	457.4
137.5°	485.7	485.9	486.0	486.1	486.2	486.3	486.4	486.5	486.6	486.7	486.8
140°	513.3	513.5	513.7	513.9	514.1	514.3	514.5	514.7	515.0	515.2	515.4
142.5°	544.6	545.2	545.2	545.2	545.2	545.2	545.2	545.2	545.2	545.2	545.2
145°	574.3	574.9	574.8	574.7	574.6	574.5	574.4	574.3	574.2	574.1	574.0
147.5°	597.9	598.4	598.5	598.6	598.7	598.8	598.9	599.0	599.1	599.2	599.3
150°	613.5	613.8	614.1	614.4	614.7	615.0	615.3	615.6	615.9	616.2	616.5
152.5°	627.8	628.1	628.5	628.9	629.3	629.7	630.1	630.5	631.0	631.4	631.8
155°	645.0	645.5	646.0	646.5	647.0	647.5	648.0	648.6	649.1	649.6	650.1
157.5°	662.5	662.9	663.1	663.3	663.5	663.7	663.9	664.1	664.3	664.5	664.7
160°	678.6	679.2	678.9	678.6	678.3	678.0	677.7	677.4	677.1	676.8	676.5
162.5°	686.0	686.4	686.3	686.2	686.1	686.0	685.9	685.8	685.7	685.6	685.5
165°	692.0	692.5	692.8	693.2	693.5	693.8	694.1	694.4	694.7	695.0	695.3
167.5°	699.1	699.7	700.1	700.5	700.9	701.3	701.7	702.2	702.6	703.0	703.4
170°	704.5	704.8	705.3	705.8	706.3	706.9	707.4	707.9	708.4	708.9	709.4
172.5°	707.6	707.9	708.1	708.3	708.5	708.7	708.9	709.1	709.3	709.5	709.7
175°	710.4	711.0	711.1	711.2	711.3	711.4	711.5	711.6	711.7	711.8	711.9
177.5°	714.5	715.0	715.2	715.5	715.7	715.9	716.1	716.3	716.5	716.7	716.9
180°	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1



REPORT NUMBER: P226765

CATALOG NUMBER: ISW-AF-350-LED-E1-SL2-ULG

**CANDELA DISTRIBUTION (continued):**

	75°	76°	77°	78°	79°	80°	81°	82°	83°	84°	85°
0°	519.9	519.9	519.9	519.9	519.9	519.9	519.9	519.9	519.9	519.9	519.9
2.5°	516.5	516.5	517.2	518.0	518.3	518.3	518.3	519.0	519.5	518.3	519.5
5°	510.1	512.0	513.5	514.6	515.0	516.1	517.2	518.0	519.0	519.0	519.9
7.5°	501.7	505.0	506.9	508.7	510.6	512.4	514.6	516.1	516.9	518.3	519.5
10°	490.9	495.0	498.7	501.7	504.2	508.0	511.0	513.1	516.5	516.9	519.5
12.5°	479.4	485.3	488.3	493.9	497.6	503.1	506.1	509.4	513.1	515.0	518.0
15°	471.2	476.4	482.0	487.1	493.1	499.8	503.5	508.0	513.1	517.2	521.0
17.5°	464.9	472.0	478.2	485.0	492.3	499.4	505.0	509.8	516.5	518.7	522.4
20°	463.1	470.9	477.2	484.2	492.0	501.2	508.0	513.1	519.9	523.5	526.9
22.5°	462.3	469.7	477.2	485.7	494.2	503.9	511.0	517.6	524.3	527.6	530.2
25°	461.6	469.3	477.5	487.1	496.4	506.5	514.6	521.0	527.2	530.6	532.9
27.5°	461.6	469.7	478.6	488.3	498.3	509.4	517.2	523.1	528.8	531.7	532.4
30°	461.2	469.7	478.2	489.1	499.8	511.3	519.9	525.4	530.2	532.0	531.3
32.5°	462.0	470.9	480.2	490.9	502.1	513.1	522.0	528.4	530.9	530.6	530.2
35°	465.6	473.8	484.6	495.3	506.9	517.2	525.8	530.2	532.4	531.7	529.9
37.5°	475.7	483.9	494.6	506.5	515.4	527.2	535.0	538.4	538.8	536.5	532.0
40°	496.4	504.6	514.2	527.2	538.0	546.2	553.6	557.3	555.1	551.0	546.2
42.5°	529.5	539.9	551.4	561.8	574.4	585.5	587.4	589.6	585.8	578.1	572.1
45°	582.6	588.8	603.6	611.5	627.8	633.4	637.4	638.5	630.4	624.1	613.7
47.5°	659.0	671.3	681.6	689.1	700.9	708.3	716.5	712.8	706.4	695.7	682.0
50°	779.2	787.0	800.4	813.7	826.3	831.5	831.5	827.8	823.7	802.9	786.2
52.5°	926.9	927.6	946.8	962.8	973.6	965.8	975.1	965.8	963.2	948.8	935.0
55°	1097.9	1090.9	1114.2	1128.3	1137.9	1147.2	1145.4	1144.3	1134.7	1118.3	1101.6
57.5°	1260.4	1280.8	1292.0	1312.8	1317.6	1323.9	1321.2	1317.6	1312.0	1302.7	1295.3
60°	1494.9	1508.6	1518.7	1522.8	1536.5	1538.3	1547.6	1532.4	1536.1	1525.3	1502.0
62.5°	1814.0	1799.2	1806.9	1806.9	1802.8	1788.4	1796.2	1802.1	1792.1	1783.2	1779.5
65°	2171.3	2123.4	2077.4	2069.6	2048.6	2043.7	2037.7	2022.9	2016.6	2001.0	1988.4
66°	2278.2	2203.9	2160.6	2133.9	2108.2	2102.7	2094.5	2078.9	2066.4	2044.5	2023.3
67.5°	2398.0	2302.3	2237.0	2199.1	2167.6	2146.9	2130.5	2108.2	2088.3	2055.5	2021.8
70°	2390.2	2311.3	2232.6	2175.0	2127.5	2084.9	2059.6	2011.7	1970.9	1924.2	1885.6
72.5°	2008.5	1994.3	1948.7	1916.4	1858.2	1835.6	1768.8	1738.3	1681.9	1621.5	1602.9
75°	1396.2	1341.0	1317.6	1304.6	1279.0	1208.5	1162.5	1172.5	1106.4	1047.4	1013.6
77.5°	610.4	621.4	556.9	527.9	505.7	467.5	431.9	407.4	393.3	384.0	342.1
80°	168.8	147.3	145.5	135.0	132.9	118.4	120.2	109.9	102.8	101.3	98.0
82.5°	73.9	72.3	70.2	69.0	67.9	66.4	64.5	64.1	62.0	60.1	60.5
85°	49.0	48.6	47.5	46.3	44.5	41.9	40.1	38.6	39.0	37.1	36.7
87.5°	28.5	27.8	27.4	26.0	25.6	23.4	23.7	21.9	21.5	21.2	20.0
90°	13.3	13.5	14.3	13.8	12.1	15.2	13.9	13.0	13.1	11.9	11.7
92.5°	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
95°	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2
97.5°	9.2	9.1	9.0	8.9	8.8	8.7	8.6	8.5	8.4	8.3	8.2
100°	23.5	23.1	22.7	22.3	21.9	21.5	21.1	20.7	20.3	19.8	19.4
102.5°	43.0	42.7	42.4	42.0	41.7	41.4	41.1	40.8	40.5	40.2	39.9
105°	66.5	66.1	65.7	65.3	64.9	64.4	64.0	63.6	63.2	62.8	62.4
107.5°	92.1	91.8	91.5	91.1	90.8	90.5	90.2	89.9	89.6	89.3	89.0



REPORT NUMBER: P226765  
 CATALOG NUMBER: ISW-AF-350-LED-E1-SL2-ULG

REPORT N  
 CATALOG

**CANDELA DISTRIBUTION (continued):**

**CANDELA**

	75°	76°	77°	78°	79°	80°	81°	82°	83°	84°	85°	
110°	121.7	121.4	121.1	120.8	120.5	120.2	119.9	119.6	119.3	119.0	118.7	0°
112.5°	152.4	152.2	152.0	151.8	151.6	151.4	151.2	151.0	150.8	150.6	150.4	2.5°
115°	183.1	182.9	182.7	182.5	182.3	182.1	181.9	181.7	181.5	181.3	181.1	5°
117.5°	214.8	214.6	214.4	214.2	214.0	213.8	213.6	213.4	213.2	213.0	212.8	7.5°
120°	250.6	250.4	250.2	250.0	249.8	249.6	249.4	249.2	249.0	248.8	248.6	10°
122.5°	284.4	284.2	284.0	283.8	283.6	283.4	283.2	282.9	282.7	282.5	282.3	12.5°
125°	317.1	317.1	317.1	317.1	317.1	317.1	317.1	317.1	317.1	317.1	317.1	15°
127.5°	353.9	353.8	353.7	353.6	353.5	353.4	353.3	353.2	353.1	353.0	352.9	17.5°
130°	389.7	389.5	389.3	389.1	388.9	388.7	388.5	388.3	388.1	387.9	387.7	20°
132.5°	423.5	423.5	423.5	423.5	423.5	423.5	423.5	423.5	423.5	423.5	423.5	22.5°
135°	457.3	457.6	457.9	458.2	458.5	458.8	459.1	459.4	459.7	460.0	460.3	25°
137.5°	486.9	487.4	487.9	488.5	489.0	489.5	490.0	490.5	491.0	491.5	492.0	27.5°
140°	515.6	516.1	516.6	517.1	517.6	518.1	518.6	519.1	519.7	520.2	520.7	30°
142.5°	545.2	545.3	545.4	545.5	545.6	545.7	545.8	545.9	546.1	546.2	546.3	32.5°
145°	573.9	573.6	573.3	573.0	572.6	572.3	572.0	571.7	571.4	571.1	570.8	35°
147.5°	599.4	599.1	598.8	598.5	598.2	597.9	597.6	597.3	597.0	596.7	596.4	37.5°
150°	616.8	617.1	617.5	617.8	618.1	618.4	618.7	619.0	619.3	619.6	619.9	40°
152.5°	632.2	632.7	633.2	633.7	634.2	634.7	635.3	635.8	636.3	636.8	637.3	42.5°
155°	650.6	650.8	651.0	651.2	651.4	651.6	651.8	652.0	652.2	652.4	652.6	45°
157.5°	664.9	664.9	664.9	664.9	664.9	664.9	664.9	664.9	664.9	664.9	664.9	47.5°
160°	676.2	676.1	676.0	675.9	675.8	675.7	675.6	675.5	675.4	675.2	675.1	50°
162.5°	685.4	685.2	685.0	684.8	684.6	684.4	684.1	683.9	683.7	683.5	683.3	52.5°
165°	695.6	695.4	695.2	695.0	694.8	694.6	694.4	694.2	694.0	693.8	693.6	55°
167.5°	703.8	703.8	703.8	703.8	703.8	703.8	703.8	703.8	703.8	703.8	703.8	57.5°
170°	709.9	710.1	710.3	710.5	710.7	711.0	711.2	711.4	711.6	711.8	712.0	60°
172.5°	709.9	710.1	710.3	710.5	710.7	711.0	711.2	711.4	711.6	711.8	712.0	62.5°
175°	712.0	711.8	711.6	711.4	711.2	711.0	710.7	710.5	710.3	710.1	709.9	65°
177.5°	717.1	716.8	716.5	716.2	715.9	715.6	715.2	714.9	714.6	714.3	714.0	66°
180°	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1	67.5°
												70°
												72.5°
												75°
												77.5°
												80°
												82.5°
												85°
												87.5°
												90°
												92.5°
												95°
												97.5°
												100°
												102.5°
												105°
												107.5°

NUMBER: P226765  
 NUMBER: ISW-AF-350-LED-E1-SL2-ULG

REPORT NUMBER: P  
 CATALOG NUMBER:

**DISTRIBUTION (continued):**

**CANDELA DISTRIBUTION**

86°	87°	88°	89°	90°	95°	105°	115°	125°	135°	145°	110°	86°
519.9	519.9	519.9	519.9	519.9	519.9	519.9	519.9	519.9	519.9	519.9	110°	118.9
520.6	521.3	521.7	521.3	522.0	521.7	522.0	521.7	519.9	519.5	519.0	112.5°	150.4
521.3	522.8	523.1	523.5	522.8	523.5	522.0	516.1	509.4	502.1	496.1	115°	181.3
522.0	524.0	525.0	525.0	525.4	524.7	519.0	506.1	490.5	475.0	463.1	117.5°	213.0
521.7	524.3	525.4	525.8	525.8	524.3	511.0	490.1	466.4	442.6	418.5	120°	248.6
520.6	522.8	524.7	524.7	525.0	519.9	499.1	469.3	435.6	400.0	367.8	122.5°	282.5
522.8	525.0	525.0	525.0	524.7	515.8	486.4	443.3	398.1	349.8	302.1	125°	317.1
526.1	527.2	526.5	526.5	525.0	511.7	472.3	417.8	358.4	294.6	227.8	127.5°	353.3
529.1	529.9	529.5	527.6	525.8	507.2	457.9	390.7	311.0	227.8	161.4	130°	387.9
532.0	532.9	530.9	527.9	525.4	501.2	440.4	356.2	257.2	155.8	106.9	132.5°	423.7
532.4	533.2	529.9	525.8	522.0	492.3	419.3	319.5	198.1	101.0	83.5	135°	460.5
532.0	531.3	525.8	520.6	516.5	481.6	395.9	273.8	132.1	76.1	72.7	137.5°	492.2
529.5	526.1	521.7	515.8	509.8	469.7	372.6	223.0	83.5	66.1	66.1	140°	521.1
525.8	522.4	516.9	509.0	502.4	458.3	345.9	171.0	66.8	60.9	61.6	142.5°	546.7
524.3	520.6	512.4	504.2	495.7	447.8	317.6	115.0	60.1	57.5	57.9	145°	571.2
527.2	521.0	512.8	503.5	493.5	438.9	288.3	80.1	56.8	53.8	54.5	147.5°	596.8
537.3	531.3	521.7	509.8	499.1	433.7	257.2	66.4	53.4	50.8	50.8	150°	620.7
561.4	553.6	540.6	526.5	513.5	437.1	229.3	60.5	50.8	48.3	48.3	152.5°	638.3
600.4	591.1	575.8	559.9	542.9	453.4	197.7	58.2	49.0	45.3	44.5	155°	653.3
667.2	654.9	634.8	615.9	595.6	481.6	165.8	56.8	46.7	43.4	41.9	157.5°	665.9
772.1	753.9	730.2	705.3	680.5	533.2	140.7	55.2	45.3	41.9	40.4	160°	676.4
907.2	895.0	865.3	832.6	802.9	636.0	126.1	54.2	44.2	40.1	39.0	162.5°	684.6
1079.3	1059.4	1035.9	1006.6	971.4	769.2	124.7	53.8	43.1	38.6	37.8	165°	694.4
1261.2	1253.4	1213.6	1195.5	1157.3	946.5	151.8	54.5	42.2	37.4	36.3	167.5°	705.0
1468.5	1471.5	1434.5	1414.4	1382.8	1171.4	241.5	56.8	42.2	36.3	35.3	170°	713.0
1739.8	1744.6	1700.9	1677.1	1650.4	1423.3	379.6	60.5	43.4	35.3	34.2	172.5°	713.0
1962.0	1936.0	1907.9	1866.4	1832.6	1563.9	365.5	67.2	44.9	34.2	33.0	175°	711.0
1985.0	1966.5	1930.9	1886.0	1844.8	1564.7	319.1	69.4	45.3	33.8	32.6	177.5°	714.8
1982.1	1949.0	1908.6	1870.8	1830.4	1524.6	246.7	72.3	46.3	33.0	31.9	180°	716.1
1844.8	1798.4	1759.1	1706.8	1664.4	1364.3	151.8	72.0	44.9	30.8	30.1		
1521.2	1497.5	1450.7	1408.8	1364.7	1104.2	103.9	64.1	39.7	27.8	28.2		
984.0	956.9	909.4	885.7	860.8	706.4	80.9	52.3	33.8	24.9	26.0		
328.4	317.6	300.1	309.9	295.3	275.3	59.3	39.7	27.1	21.5	23.0		
98.3	96.1	99.4	93.5	99.0	83.9	39.0	27.8	20.8	18.5	20.4		
58.2	57.5	57.5	57.5	56.1	52.3	25.6	19.3	16.0	15.5	17.1		
35.6	34.9	35.3	34.9	35.6	31.9	17.4	13.4	11.9	11.5	13.7		
20.4	20.4	20.8	20.0	20.4	19.6	12.3	8.5	7.8	7.5	10.0		
12.0	12.0	10.8	10.5	10.8	12.4	12.6	11.8	9.4	9.0	11.6		
6.1	6.1	6.1	6.1	6.1	6.1	6.1	7.2	7.2	6.1	6.1		
7.2	7.2	7.2	7.2	7.2	7.2	7.2	8.2	7.2	7.2	7.2		
8.2	8.2	8.2	8.2	8.2	8.2	9.2	10.2	12.3	9.2	9.2		
19.4	19.4	19.4	19.4	19.4	19.4	23.5	26.6	29.7	21.5	12.3		
39.7	39.5	39.3	39.1	38.9	39.9	43.0	48.1	51.1	40.9	27.6		
62.4	62.4	62.4	62.4	62.4	62.4	66.5	71.6	73.7	64.4	49.1		
88.8	88.6	88.4	88.2	88.0	89.0	92.1	96.2	97.2	90.0	74.7		

'226765  
 ISW-AF-350-LED-E1-SL2-ULG

REPORT NUMBER: P226765  
 CATALOG NUMBER: ISW-AF-31

**TION (continued):**

**CANDELA DISTRIBUTION (con**

87°	88°	89°	90°	95°	105°	115°	125°	135°	145°		155°	165°
119.1	119.3	119.5	119.7	118.7	121.7	123.8	122.8	116.6	104.3	0°	519.9	519.9
150.4	150.4	150.4	150.4	150.4	152.4	153.4	151.4	146.3	137.1	2.5°	516.1	513.5
181.5	181.7	181.9	182.1	181.1	183.1	186.2	183.1	178.0	171.9	5°	486.8	479.8
213.2	213.4	213.6	213.8	212.8	214.8	219.9	215.8	209.7	206.6	7.5°	444.5	436.4
248.6	248.6	248.6	248.6	248.6	250.6	255.7	251.6	248.6	242.4	10°	396.3	384.0
282.7	282.9	283.2	283.4	282.3	284.4	289.5	285.4	283.4	277.2	12.5°	334.7	310.6
317.1	317.1	317.1	317.1	317.1	317.1	322.2	320.2	317.1	312.0	15°	263.4	231.2
353.7	354.1	354.6	355.0	352.9	353.9	353.9	352.9	347.8	346.8	17.5°	181.5	155.5
388.1	388.3	388.5	388.7	387.7	389.7	389.7	385.7	380.5	378.5	20°	127.3	117.6
423.9	424.1	424.3	424.5	423.5	423.5	425.5	420.4	414.3	413.3	22.5°	98.3	98.7
460.7	460.9	461.1	461.4	460.3	457.3	458.3	453.2	447.0	445.0	25°	81.6	85.3
492.4	492.7	492.9	493.1	492.0	486.9	485.9	483.9	478.7	474.6	27.5°	72.0	75.7
521.5	521.9	522.3	522.7	520.7	515.6	513.5	511.5	508.4	502.3	30°	66.1	69.4
547.1	547.5	547.9	548.3	546.3	545.2	545.2	539.1	537.0	533.0	32.5°	62.0	63.4
571.6	572.0	572.4	572.9	570.8	573.9	574.9	568.8	563.6	562.6	35°	57.2	57.9
597.2	597.6	598.0	598.4	596.4	599.4	598.4	593.3	588.2	587.2	37.5°	53.1	53.1
621.5	622.4	623.2	624.0	619.9	616.8	613.8	610.7	606.6	606.6	40°	49.3	49.0
639.3	640.4	641.4	642.4	637.3	632.2	628.1	625.0	624.0	624.0	42.5°	46.0	45.6
653.9	654.5	655.1	655.7	652.6	650.6	645.5	640.4	642.4	644.5	45°	42.7	43.1
667.0	668.0	669.0	670.0	664.9	664.9	662.9	658.8	659.8	660.8	47.5°	40.8	41.2
677.6	678.8	680.1	681.3	675.1	676.2	679.2	673.1	670.0	670.0	50°	39.0	39.3
685.8	687.0	688.2	689.5	683.3	685.4	686.4	682.3	678.2	676.2	52.5°	37.4	37.4
695.2	696.0	696.8	697.7	693.6	695.6	692.5	687.4	688.4	688.4	55°	36.0	35.6
706.2	707.5	708.7	709.9	703.8	703.8	699.7	693.6	700.7	703.8	57.5°	34.9	34.2
714.0	715.0	716.1	717.1	712.0	709.9	704.8	701.7	706.9	708.9	60°	33.8	33.0
714.0	715.0	716.1	717.1	712.0	709.9	707.9	704.8	705.8	705.8	62.5°	33.0	31.9
712.0	713.0	714.0	715.0	709.9	712.0	711.0	705.8	705.8	706.9	65°	32.3	31.5
715.7	716.5	717.3	718.1	714.0	717.1	715.0	709.9	711.0	713.0	66°	31.9	31.2
716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1	67.5°	31.5	30.8
										70°	30.1	29.4
										72.5°	27.8	27.4
										75°	25.6	24.9
										77.5°	22.6	22.3
										80°	19.3	18.9
										82.5°	16.4	15.5
										85°	13.0	12.3
										87.5°	8.9	8.2
										90°	10.4	9.7
										92.5°	6.1	5.1
										95°	7.2	6.1
										97.5°	8.2	8.2
										100°	10.2	9.2
										102.5°	18.4	13.3
										105°	36.8	27.6
										107.5°	59.3	50.1



REPORT NUMBER: P226765

CATALOG NUMBER: ISW-AF-350-LED-E1-

50-LED-E1-SL2-ULG

**tinued):**

175°	180°
519.9	519.9
511.3	514.6
477.5	476.4
429.6	430.0
371.7	372.6
296.9	292.4
212.6	214.4
148.0	147.7
118.8	119.5
101.7	101.7
90.5	90.5
79.8	80.1
72.3	73.1
65.7	66.1
59.0	59.3
53.4	53.4
49.7	50.1
47.2	47.2
44.5	44.5
42.2	43.1
40.1	40.4
37.8	38.3
35.6	35.6
33.8	33.8
32.3	31.9
31.2	30.4
30.1	29.7
29.7	29.4
29.4	28.9
28.5	28.2
27.4	27.1
25.3	24.4
23.0	22.3
21.2	20.0
17.8	17.1
13.0	12.3
7.8	7.8
7.0	7.0
4.1	4.1
5.1	5.1
7.2	7.2
8.2	8.2
11.3	11.3
22.5	21.5
43.0	41.9

**CANDELA DISTRIBUTION (continued):**

	155°	165°	175°
110°	89.0	75.7	69.6
112.5°	123.8	108.4	101.3
115°	162.6	150.4	142.2
117.5°	201.5	193.3	188.2
120°	238.3	231.2	228.1
122.5°	273.1	267.0	266.0
125°	305.9	302.8	300.7
127.5°	340.6	336.6	336.6
130°	374.4	370.3	369.3
132.5°	410.2	402.0	403.0
135°	441.9	435.8	435.8
137.5°	470.6	469.5	467.5
140°	500.2	498.2	496.1
142.5°	529.9	528.9	526.8
145°	559.6	556.5	558.5
147.5°	587.2	584.1	585.1
150°	606.6	606.6	605.6
152.5°	623.0	622.0	622.0
155°	641.4	639.3	639.3
157.5°	658.8	657.8	657.8
160°	671.1	674.1	675.1
162.5°	680.3	684.4	684.4
165°	691.5	691.5	693.6
167.5°	701.7	699.7	702.8
170°	707.9	707.9	711.0
172.5°	708.9	711.0	713.0
175°	711.0	713.0	714.0
177.5°	715.0	716.1	721.2
180°	716.1	716.1	716.1

-SL2-ULG

180°  
-----  
67.5  
101.3  
143.2  
188.2  
230.2  
269.0  
304.8  
337.6  
371.3  
405.1  
438.8  
470.6  
499.2  
529.9  
562.6  
588.2  
608.7  
625.0  
643.4  
660.8  
678.2  
688.4  
696.6  
705.8  
714.0  
715.0  
716.1  
723.2  
716.1

(END OF REPORT)