

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: P226620

Luminaire Tested: **ISW-AF-800-LED-E1-T4W-ULG**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P226620
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35944)-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-800-LED-E1-T4W-ULG
Description: IMPACT ELITE LED WEDGE LUMINAIRE WITH UPLIGHT
LIGHT SQUARE WITH ACCULED OPTICS-TYPE IV WIDE, 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: 7022.8 lumens
Efficiency: N/A
Efficacy: 116.7 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 0.5' x H: 0.54')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B1 - U5 - G2

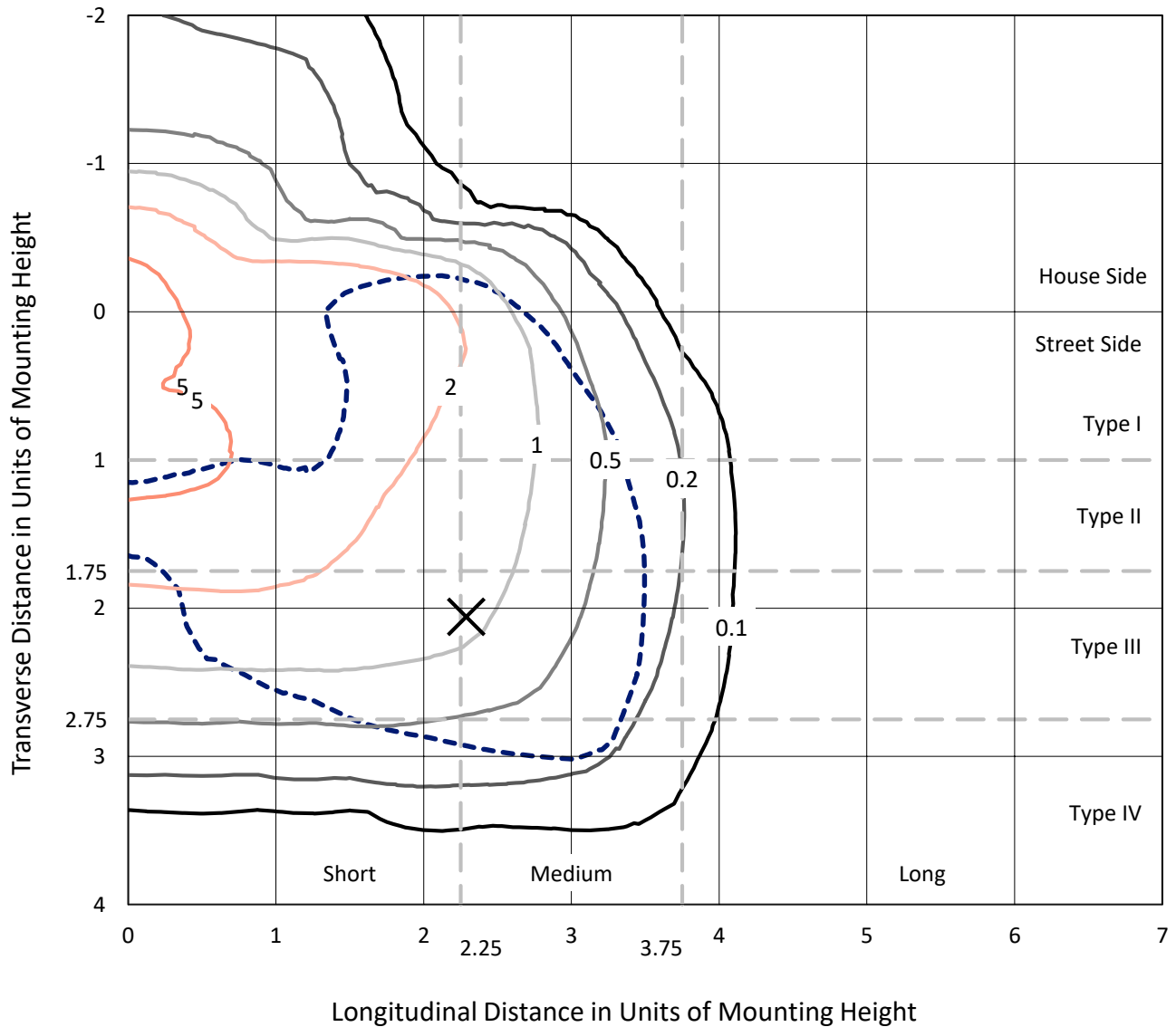
Input Watts (W): 60.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

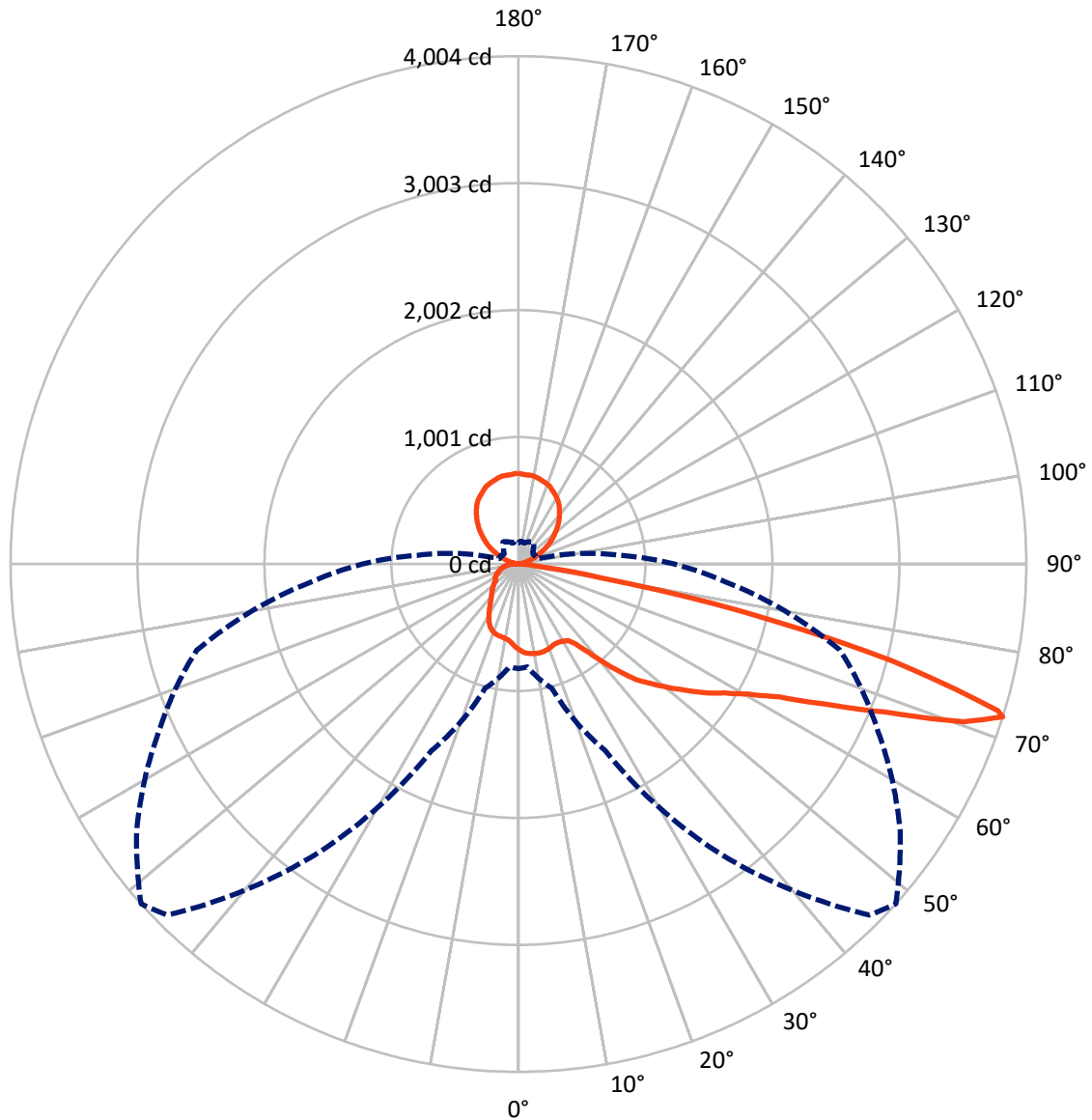
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7.6 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 48-Deg Lateral - - - Horizontal Cone Through 72-Deg Vertical

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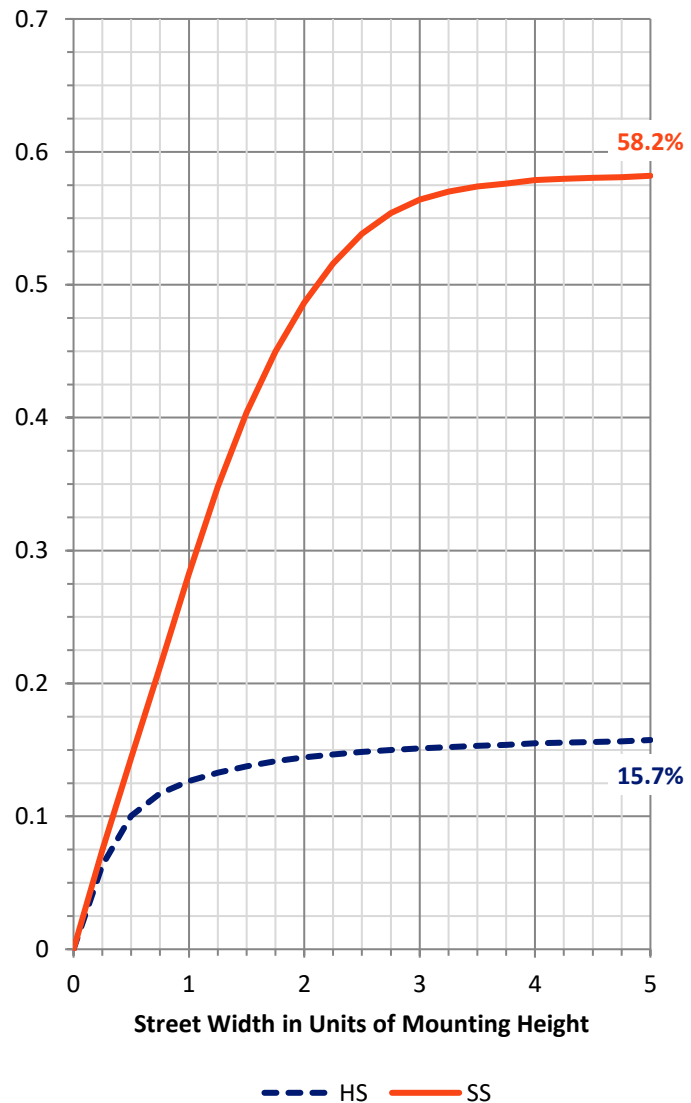
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1140.1	889.8	2029.9
	% Fixture	16.2	12.7	28.9
Street Side	Lumens	4104.6	888.3	4992.9
	% Fixture	58.4	12.6	71.1
Total	Lumens	5244.7	1778.1	7022.8
	% Fixture	74.7	25.3	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.8	0.9
10°-20°	186.4	2.7
20°-30°	287.5	4.1
30°-40°	430.9	6.1
40°-50°	717.5	10.2
50°-60°	1121.3	16.0
60°-70°	1481.1	21.1
70°-80°	856.8	12.2
80°-90°	99.3	1.4
90°-100°	12.7	0.2
100°-110°	58.7	0.8
110°-120°	169.9	2.4
120°-130°	279.4	4.0
130°-140°	344.6	4.9
140°-150°	352.5	5.0
150°-160°	297.0	4.2
160°-170°	195.5	2.8
170°-180°	67.8	1.0
0°-90°	5244.7	74.7
0°-180°	7022.8	100.0



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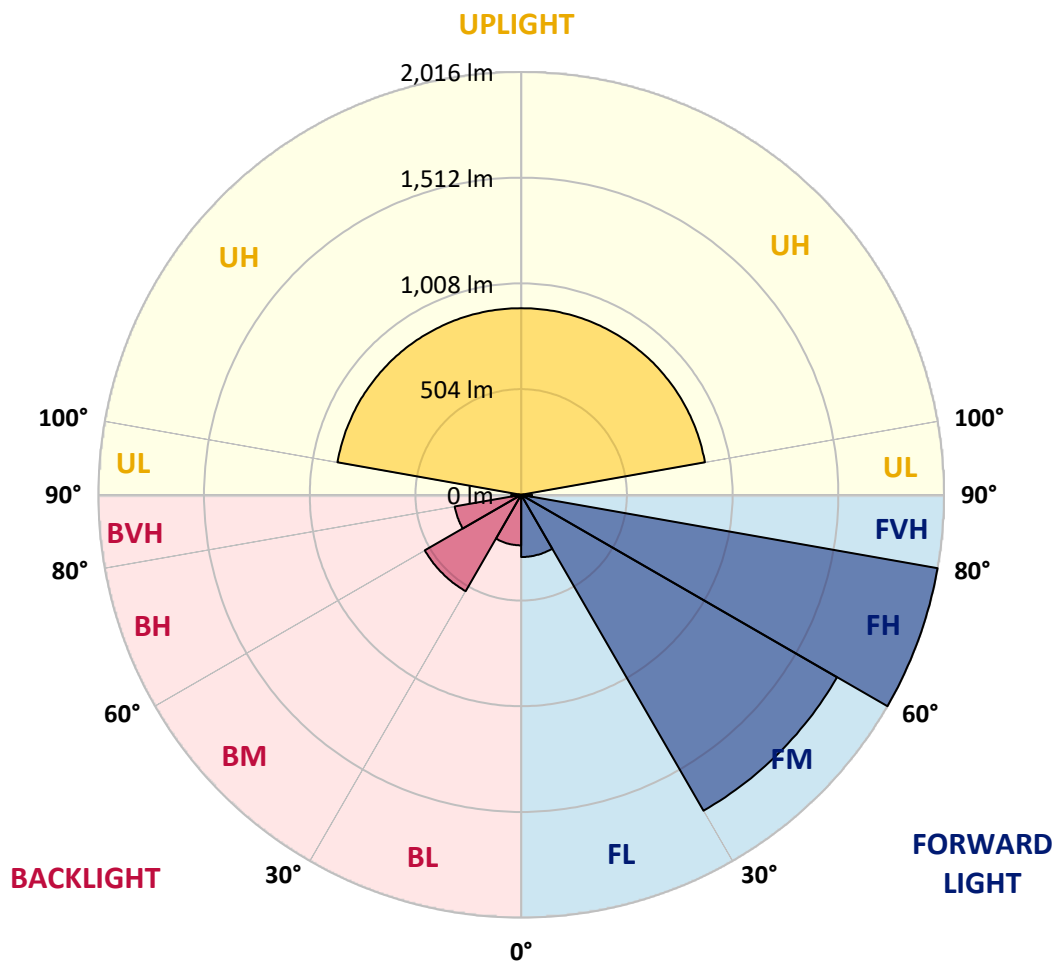
CATALOG NUMBER: ISW-AF-800-LED-E1-T4W-ULG

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	296.7	4.2			
FM	(30°-60°)	1739.5	24.8			
FH	(60°-80°)	2016.4	28.7			G2/5000
FVH	(80°-90°)	52.1	0.7			G1/100
BL	(0°-30°)	241.1	3.4	B1/500		
BM	(30°-60°)	530.3	7.6	B1/1000		
BH	(60°-80°)	321.5	4.6	B1/500		G1/500
BVH	(80°-90°)	47.2	0.7			G1/100
UL	(90°-100°)	12.7	0.2		U2/50	
UH	(100°-180°)	889.8	12.7		U4/1000	

BUG Rating: B1-U5-G2

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	48°	55°	65°	75°	85°
0°	674.9	674.9	674.9	674.9	674.9	674.9	674.9	674.9	674.9	674.9	674.9
2.5°	710.7	710.0	710.0	703.9	701.6	697.9	694.8	690.2	685.7	680.3	673.4
5°	745.0	747.3	744.2	735.1	723.6	711.5	707.0	696.3	681.8	668.9	656.7
7.5°	777.7	778.5	770.1	754.8	737.3	718.3	712.3	697.9	681.8	664.3	646.8
10°	801.3	802.1	789.9	768.5	745.0	723.6	716.9	702.4	682.6	663.6	641.5
12.5°	815.0	815.8	797.5	775.4	747.3	726.0	719.9	704.6	684.1	659.8	635.5
15°	812.7	815.0	799.7	775.4	745.7	726.7	719.1	706.1	680.3	655.9	630.0
17.5°	797.5	800.6	788.4	761.7	738.2	722.9	714.5	701.6	676.5	650.6	622.5
20°	767.8	771.6	766.3	740.4	724.5	712.3	707.0	694.8	671.2	644.6	615.6
22.5°	734.4	738.2	736.6	715.3	707.7	701.6	696.3	687.1	666.7	640.0	612.5
25°	710.0	713.0	710.7	692.4	694.8	694.8	691.7	684.9	665.8	641.5	612.5
27.5°	750.3	750.3	730.5	693.3	689.5	696.3	694.8	691.0	675.8	649.1	618.7
30°	897.9	886.5	850.8	757.2	709.2	706.1	705.4	703.2	689.5	665.8	637.7
32.5°	1063.1	1051.7	1009.0	891.8	792.2	726.7	719.9	720.7	716.9	694.8	666.7
35°	1209.9	1208.4	1175.0	1047.8	920.8	799.0	771.6	753.4	751.9	742.7	720.7
37.5°	1328.6	1328.6	1331.7	1187.1	1060.1	913.9	867.5	809.7	809.7	804.3	790.6
40°	1464.1	1470.2	1477.0	1313.5	1209.2	1050.9	998.4	910.8	884.2	892.6	895.7
42.5°	1642.1	1649.8	1645.2	1469.5	1345.4	1214.5	1149.8	1044.0	978.7	992.3	1024.3
45°	1762.4	1765.4	1798.1	1632.3	1516.6	1353.1	1298.2	1152.9	1088.2	1116.3	1172.6
47.5°	1898.6	1906.3	1911.6	1817.2	1717.5	1509.8	1409.3	1258.6	1216.8	1259.5	1348.5
50°	2031.8	2021.9	2036.4	2032.6	1907.8	1649.0	1529.5	1357.6	1360.6	1418.4	1564.6
52.5°	2147.5	2113.9	2147.5	2189.3	2152.8	1792.1	1652.8	1474.0	1518.2	1588.9	1819.5
55°	2236.5	2155.9	2212.1	2330.9	2322.5	1918.4	1793.6	1629.3	1703.0	1799.7	2129.2
57.5°	2054.6	2064.5	2219.8	2425.9	2422.1	2046.2	1916.9	1823.3	1913.8	2021.9	2496.0
60°	1884.9	1929.1	2168.8	2441.2	2491.4	2185.5	2082.7	2044.0	2127.6	2259.3	2847.6
62.5°	1795.2	1837.0	2085.8	2413.0	2601.8	2391.8	2305.7	2276.1	2390.2	2537.8	3161.1
65°	1823.3	1849.2	2080.5	2455.7	2728.8	2703.8	2666.4	2617.0	2674.1	2812.5	3302.6
67.5°	1744.1	1786.8	2036.4	2531.0	2960.9	3084.2	3115.4	3062.1	3014.2	2995.2	3096.4
70°	1298.2	1339.3	1601.1	2219.8	3151.2	3744.7	3725.7	3547.7	3225.0	2955.6	2419.2
72°	824.9	813.5	1013.6	1626.2	2801.1	3914.4	4004.2	3674.7	3129.1	2624.6	1643.0
72.5°	599.7	653.7	840.9	1445.8	2661.1	3821.6	3952.5	3633.6	3003.6	2479.2	1445.1
75°	146.1	154.5	201.6	518.2	1558.5	2875.7	3040.1	2807.2	2192.4	1471.7	640.8
77.5°	98.9	102.7	133.2	182.6	458.1	1639.9	1804.3	1550.1	980.9	500.7	285.4
80°	73.9	76.1	96.7	129.4	190.3	559.3	659.8	524.3	244.3	277.7	203.2
82.5°	51.8	53.3	73.0	95.1	126.3	130.9	174.3	192.5	158.3	181.9	118.7
85°	35.8	35.8	53.3	65.5	79.9	64.7	69.3	96.7	107.3	108.0	72.3
87.5°	19.0	21.3	31.2	41.8	41.8	29.7	32.7	49.5	60.1	64.7	43.4
90°	12.0	12.0	20.0	24.1	18.1	14.7	14.0	17.1	23.6	29.8	20.9
92.5°	4.1	4.1	5.1	6.1	6.1	6.1	6.4	7.2	7.2	6.1	6.1
95°	5.1	5.1	6.1	7.2	7.2	7.2	7.2	7.2	8.2	7.2	7.2
97.5°	7.2	7.2	8.2	8.2	9.2	9.2	10.1	12.3	10.2	9.2	8.2
100°	8.2	8.2	9.2	10.2	12.3	21.5	23.9	29.7	26.6	23.5	19.4
102.5°	11.3	11.3	13.3	18.4	27.6	40.9	44.0	51.1	48.1	43.0	39.9
105°	21.5	22.5	27.6	36.8	49.1	64.4	67.2	73.7	71.6	66.5	62.4
107.5°	41.9	43.0	50.1	59.3	74.7	90.0	92.2	97.2	96.2	92.1	89.0



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CATALOG NUMBER: ISW-AF-800-LED-E1-T4W-ULG

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	48°	55°	65°	75°	85°
110°	67.5	69.6	75.7	89.0	104.3	116.6	118.5	122.8	123.8	121.7	118.7
112.5°	101.3	101.3	108.4	123.8	137.1	146.3	147.8	151.4	153.4	152.4	150.4
115°	143.2	142.2	150.4	162.6	171.9	178.0	179.5	183.1	186.2	183.1	181.1
117.5°	188.2	188.2	193.3	201.5	206.6	209.7	211.5	215.8	219.9	214.8	212.8
120°	230.2	228.1	231.2	238.3	242.4	248.6	249.5	251.6	255.7	250.6	248.6
122.5°	269.0	266.0	267.0	273.1	277.2	283.4	284.0	285.4	289.5	284.4	282.3
125°	304.8	300.7	302.8	305.9	312.0	317.1	318.0	320.2	322.2	317.1	317.1
127.5°	337.6	336.6	336.6	340.6	346.8	347.8	349.3	352.9	353.9	353.9	352.9
130°	371.3	369.3	370.3	374.4	378.5	380.5	382.1	385.7	389.7	389.7	387.7
132.5°	405.1	403.0	402.0	410.2	413.3	414.3	416.1	420.4	425.5	423.5	423.5
135°	438.8	435.8	435.8	441.9	445.0	447.0	448.9	453.2	458.3	457.3	460.3
137.5°	470.6	467.5	469.5	470.6	474.6	478.7	480.3	483.9	485.9	486.9	492.0
140°	499.2	496.1	498.2	500.2	502.3	508.4	509.3	511.5	513.5	515.6	520.7
142.5°	529.9	526.8	528.9	529.9	533.0	537.0	537.7	539.1	545.2	545.2	546.3
145°	562.6	558.5	556.5	559.6	562.6	563.6	565.2	568.8	574.9	573.9	570.8
147.5°	588.2	585.1	584.1	587.2	587.2	588.2	589.7	593.3	598.4	599.4	596.4
150°	608.7	605.6	606.6	606.6	606.6	606.6	607.8	610.7	613.8	616.8	619.9
152.5°	625.0	622.0	622.0	623.0	624.0	624.0	624.3	625.0	628.1	632.2	637.3
155°	643.4	639.3	639.3	641.4	644.5	642.4	641.8	640.4	645.5	650.6	652.6
157.5°	660.8	657.8	657.8	658.8	660.8	659.8	659.5	658.8	662.9	664.9	664.9
160°	678.2	675.1	674.1	671.1	670.0	670.0	671.0	673.1	679.2	676.2	675.1
162.5°	688.4	684.4	684.4	680.3	676.2	678.2	679.4	682.3	686.4	685.4	683.3
165°	696.6	693.6	691.5	691.5	688.4	688.4	688.1	687.4	692.5	695.6	693.6
167.5°	705.8	702.8	699.7	701.7	703.8	700.7	698.6	693.6	699.7	703.8	703.8
170°	714.0	711.0	707.9	707.9	708.9	706.9	705.3	701.7	704.8	709.9	712.0
172.5°	715.0	713.0	711.0	708.9	705.8	705.8	705.5	704.8	707.9	709.9	712.0
175°	716.1	714.0	713.0	711.0	706.9	705.8	705.8	705.8	711.0	712.0	709.9
177.5°	723.2	721.2	716.1	715.0	713.0	711.0	710.6	709.9	715.0	717.1	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



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	674.9	674.9	674.9	674.9	674.9	674.9	674.9	674.9	674.9	674.9	674.9
2.5°	672.0	667.4	661.2	658.3	656.7	653.7	650.6	649.1	649.1	646.1	646.8
5°	650.6	643.7	635.5	629.3	628.6	628.6	630.0	630.0	630.9	628.6	631.6
7.5°	640.0	632.4	620.2	613.4	608.0	607.2	610.3	616.4	619.4	617.1	620.2
10°	632.4	624.0	610.3	601.9	598.1	596.6	598.8	605.0	614.9	614.9	617.9
12.5°	624.7	614.1	600.4	594.3	591.3	592.1	595.1	599.7	610.3	614.1	615.6
15°	617.1	605.0	593.5	585.2	585.2	587.5	591.3	596.6	606.5	613.4	614.9
17.5°	609.6	597.4	587.5	580.6	580.6	583.7	587.5	594.3	601.2	611.1	611.1
20°	602.7	592.8	579.9	573.8	573.1	575.3	579.9	586.7	592.1	601.9	602.7
22.5°	598.8	586.7	574.5	565.4	561.6	560.1	564.7	571.5	576.8	586.7	588.2
25°	597.4	583.7	568.5	551.7	541.9	538.8	541.0	549.4	554.0	561.6	563.9
27.5°	602.7	589.7	566.2	535.7	515.2	506.8	509.1	514.4	516.0	524.3	528.1
30°	620.9	605.7	570.7	518.9	481.7	466.5	466.5	467.3	469.5	476.4	477.1
32.5°	650.6	636.2	584.4	501.5	447.4	426.2	420.8	417.1	417.1	416.2	417.1
35°	705.4	693.3	608.0	481.7	410.2	386.6	373.7	366.8	360.0	356.9	356.1
37.5°	784.6	773.9	641.5	458.9	377.5	353.8	337.9	324.2	316.6	315.8	319.6
40°	902.5	891.8	678.8	433.0	346.3	328.8	312.0	297.6	289.2	289.9	293.7
42.5°	1047.8	1015.2	719.1	398.0	321.1	312.0	293.7	281.5	273.2	268.6	267.9
45°	1217.5	1162.8	757.2	365.3	293.7	297.6	280.1	266.4	255.6	243.5	242.0
47.5°	1429.1	1310.4	790.6	332.6	264.0	282.3	265.6	252.7	236.7	222.2	219.9
50°	1649.8	1480.1	819.6	297.6	237.4	265.6	251.1	233.6	211.5	198.7	198.7
52.5°	1904.7	1684.0	856.8	258.7	216.9	247.3	232.8	210.0	191.8	190.3	190.3
55°	2188.6	1897.9	882.7	228.3	200.9	227.5	220.7	213.8	207.8	209.3	210.0
57.5°	2485.4	2120.8	859.9	206.9	187.9	223.0	242.7	233.6	214.6	213.8	213.1
60°	2741.0	2294.4	733.6	193.3	178.1	230.6	260.2	233.6	214.6	224.4	225.3
62.5°	2908.5	2376.5	488.6	175.7	163.6	217.7	254.2	226.8	215.3	243.5	245.8
65°	2885.6	2284.5	280.8	163.6	154.5	200.1	245.8	218.4	200.9	216.9	212.3
67.5°	2545.4	1914.6	203.2	158.3	147.6	187.9	230.6	206.2	187.2	206.9	198.7
70°	1829.3	1303.5	175.0	153.7	143.1	173.5	219.9	198.7	179.6	193.3	180.3
72°	1227.4	792.9	160.6	149.9	138.5	164.4	212.3	192.5	172.8	180.3	165.9
72.5°	1044.8	625.5	156.7	148.4	137.0	162.1	210.0	191.0	171.2	178.8	165.1
75°	390.4	245.0	139.2	137.0	126.3	150.7	200.9	184.1	163.6	161.3	155.3
77.5°	200.9	155.3	118.7	121.0	113.3	137.7	191.0	173.5	150.7	142.3	139.2
80°	146.1	112.6	95.9	102.7	96.7	124.1	177.3	157.5	137.0	127.9	124.1
82.5°	92.1	70.0	73.0	81.4	82.1	109.6	161.3	141.6	121.7	114.2	108.0
85°	44.1	41.8	51.8	60.1	66.2	92.9	147.6	125.5	106.5	91.3	92.1
87.5°	23.6	31.9	31.2	40.3	50.9	76.1	130.9	102.7	85.2	68.5	69.3
90°	12.5	15.5	18.3	25.2	27.7	39.9	92.7	66.8	64.2	29.5	26.4
92.5°	6.1	6.1	6.1	7.2	7.2	6.1	6.1	6.1	5.1	4.1	4.1
95°	7.2	7.2	7.2	8.2	7.2	7.2	7.2	7.2	6.1	5.1	5.1
97.5°	8.2	8.2	9.2	10.2	12.3	9.2	9.2	8.2	8.2	7.2	7.2
100°	19.4	19.4	23.5	26.6	29.7	21.5	12.3	10.2	9.2	8.2	8.2
102.5°	38.9	39.9	43.0	48.1	51.1	40.9	27.6	18.4	13.3	11.3	11.3
105°	62.4	62.4	66.5	71.6	73.7	64.4	49.1	36.8	27.6	22.5	21.5
107.5°	88.0	89.0	92.1	96.2	97.2	90.0	74.7	59.3	50.1	43.0	41.9



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	119.7	118.7	121.7	123.8	122.8	116.6	104.3	89.0	75.7	69.6	67.5
112.5°	150.4	150.4	152.4	153.4	151.4	146.3	137.1	123.8	108.4	101.3	101.3
115°	182.1	181.1	183.1	186.2	183.1	178.0	171.9	162.6	150.4	142.2	143.2
117.5°	213.8	212.8	214.8	219.9	215.8	209.7	206.6	201.5	193.3	188.2	188.2
120°	248.6	248.6	250.6	255.7	251.6	248.6	242.4	238.3	231.2	228.1	230.2
122.5°	283.4	282.3	284.4	289.5	285.4	283.4	277.2	273.1	267.0	266.0	269.0
125°	317.1	317.1	317.1	322.2	320.2	317.1	312.0	305.9	302.8	300.7	304.8
127.5°	355.0	352.9	353.9	353.9	352.9	347.8	346.8	340.6	336.6	336.6	337.6
130°	388.7	387.7	389.7	389.7	385.7	380.5	378.5	374.4	370.3	369.3	371.3
132.5°	424.5	423.5	423.5	425.5	420.4	414.3	413.3	410.2	402.0	403.0	405.1
135°	461.4	460.3	457.3	458.3	453.2	447.0	445.0	441.9	435.8	435.8	438.8
137.5°	493.1	492.0	486.9	485.9	483.9	478.7	474.6	470.6	469.5	467.5	470.6
140°	522.7	520.7	515.6	513.5	511.5	508.4	502.3	500.2	498.2	496.1	499.2
142.5°	548.3	546.3	545.2	545.2	539.1	537.0	533.0	529.9	528.9	526.8	529.9
145°	572.9	570.8	573.9	574.9	568.8	563.6	562.6	559.6	556.5	558.5	562.6
147.5°	598.4	596.4	599.4	598.4	593.3	588.2	587.2	587.2	584.1	585.1	588.2
150°	624.0	619.9	616.8	613.8	610.7	606.6	606.6	606.6	606.6	605.6	608.7
152.5°	642.4	637.3	632.2	628.1	625.0	624.0	624.0	623.0	622.0	622.0	625.0
155°	655.7	652.6	650.6	645.5	640.4	642.4	644.5	641.4	639.3	639.3	643.4
157.5°	670.0	664.9	664.9	662.9	658.8	659.8	660.8	658.8	657.8	657.8	660.8
160°	681.3	675.1	676.2	679.2	673.1	670.0	670.0	671.1	674.1	675.1	678.2
162.5°	689.5	683.3	685.4	686.4	682.3	678.2	676.2	680.3	684.4	684.4	688.4
165°	697.7	693.6	695.6	692.5	687.4	688.4	688.4	691.5	691.5	693.6	696.6
167.5°	709.9	703.8	703.8	699.7	693.6	700.7	703.8	701.7	699.7	702.8	705.8
170°	717.1	712.0	709.9	704.8	701.7	706.9	708.9	707.9	707.9	711.0	714.0
172.5°	717.1	712.0	709.9	707.9	704.8	705.8	705.8	708.9	711.0	713.0	715.0
175°	715.0	709.9	712.0	711.0	705.8	705.8	706.9	711.0	713.0	714.0	716.1
177.5°	718.1	714.0	717.1	715.0	709.9	711.0	713.0	715.0	716.1	721.2	723.2
180°	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1

(END OF REPORT)