

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: P226774

Luminaire Tested: **ISW-AF-1200-LED-E1-SL2-7030-ULG**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P226774
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-1200-LED-E1-SL2-7030-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) 3000K CCT, 70 CRI LEDs and (1) UPLIGHT LED
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7630.2 lumens
Efficiency: N/A
Efficacy: 92.3 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 - G2

Input Watts (W): 82.7
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

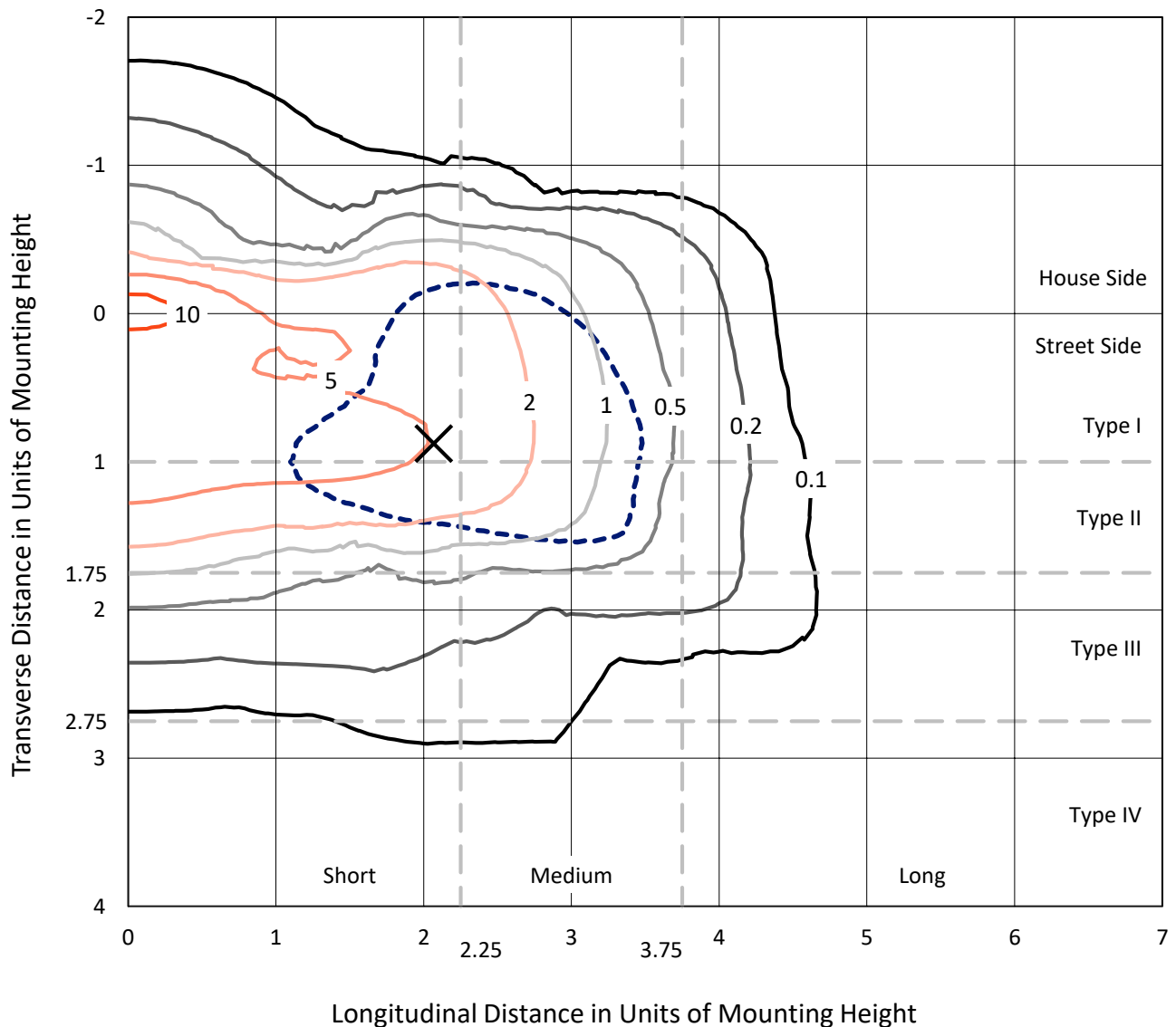


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Iso-Footcandle Lines of Horizontal Illumination

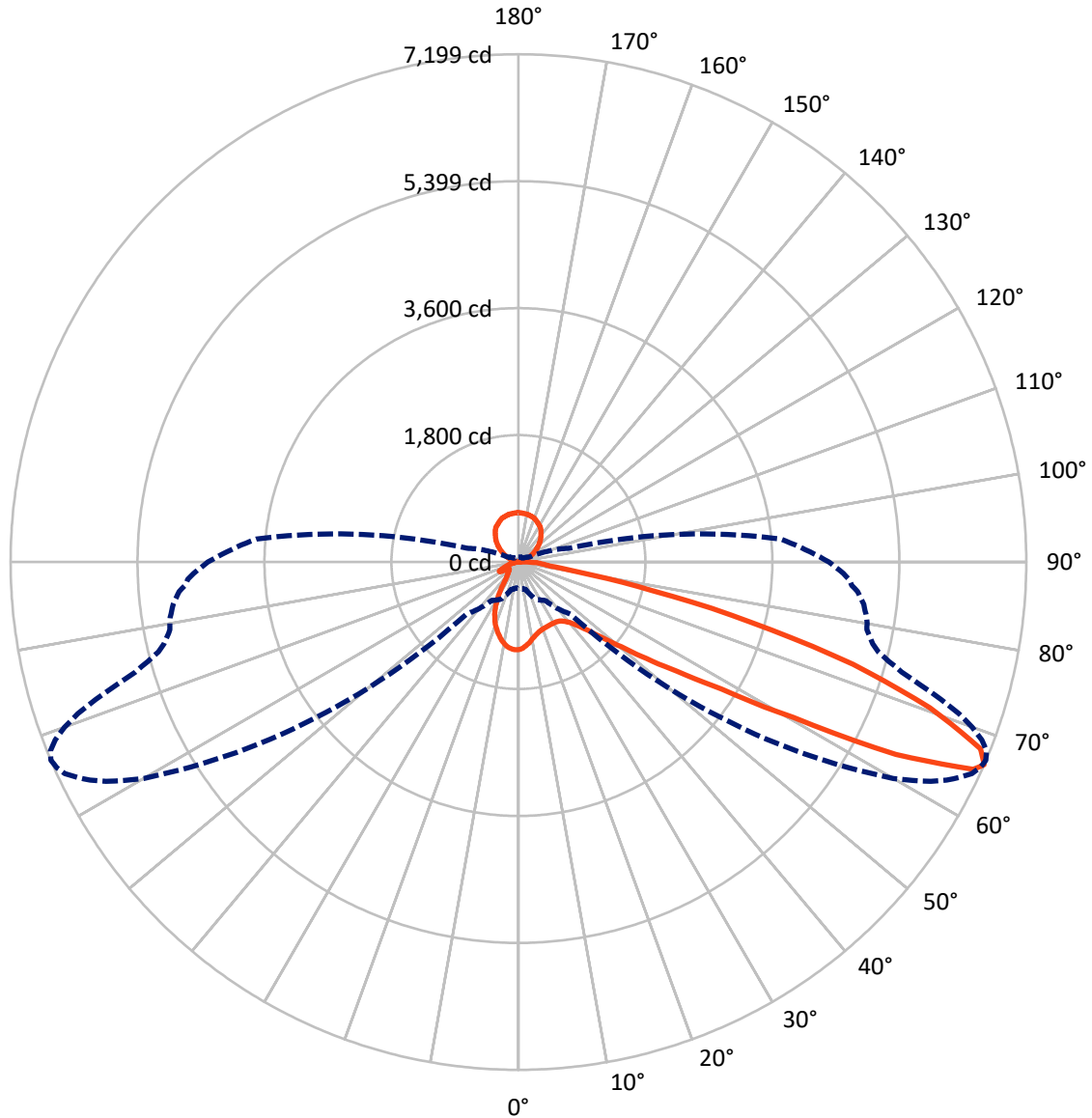
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 12.4 fc
 Type II - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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

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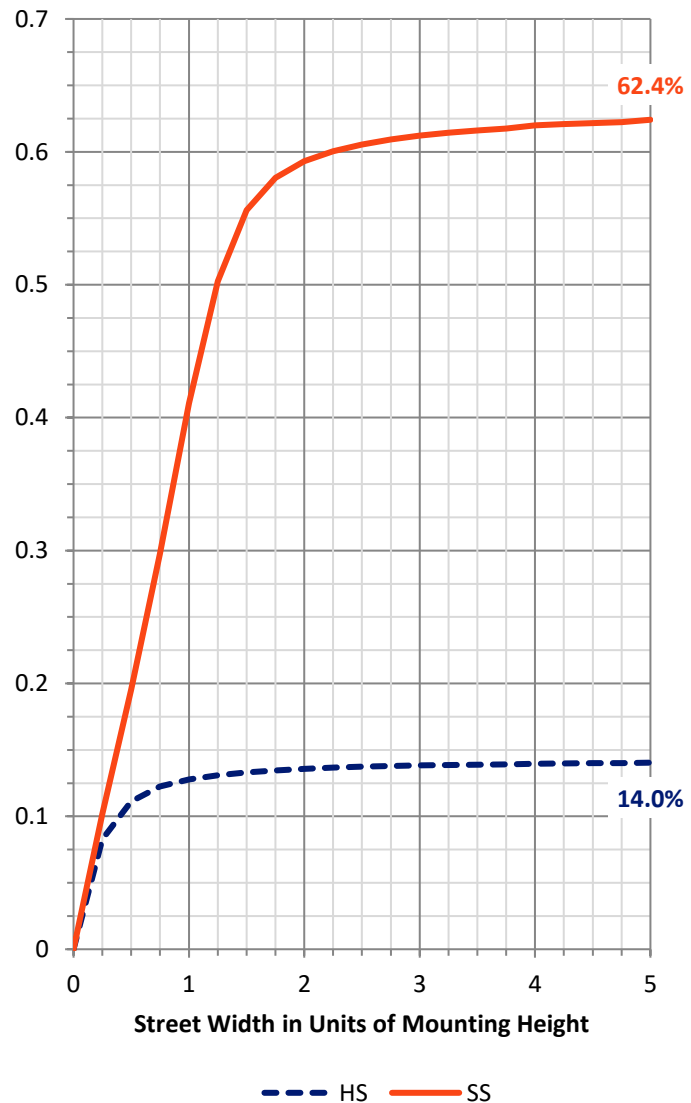
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1088.8	868.0	1956.8
	% Fixture	14.3	11.4	25.6
Street Side	Lumens	4804.1	869.3	5673.4
	% Fixture	63.0	11.4	74.4
Total	Lumens	5892.9	1737.3	7630.2
	% Fixture	77.2	22.8	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	107.6	1.4
10°-20°	256.1	3.4
20°-30°	351.1	4.6
30°-40°	501.6	6.6
40°-50°	813.3	10.7
50°-60°	1288.7	16.9
60°-70°	1633.1	21.4
70°-80°	811.8	10.6
80°-90°	129.6	1.7
90°-100°	11.4	0.1
100°-110°	57.4	0.8
110°-120°	166.1	2.2
120°-130°	273.2	3.6
130°-140°	336.8	4.4
140°-150°	344.6	4.5
150°-160°	290.3	3.8
160°-170°	191.2	2.5
170°-180°	66.3	0.9
0°-90°	5892.9	77.2
0°-180°	7630.2	100.0



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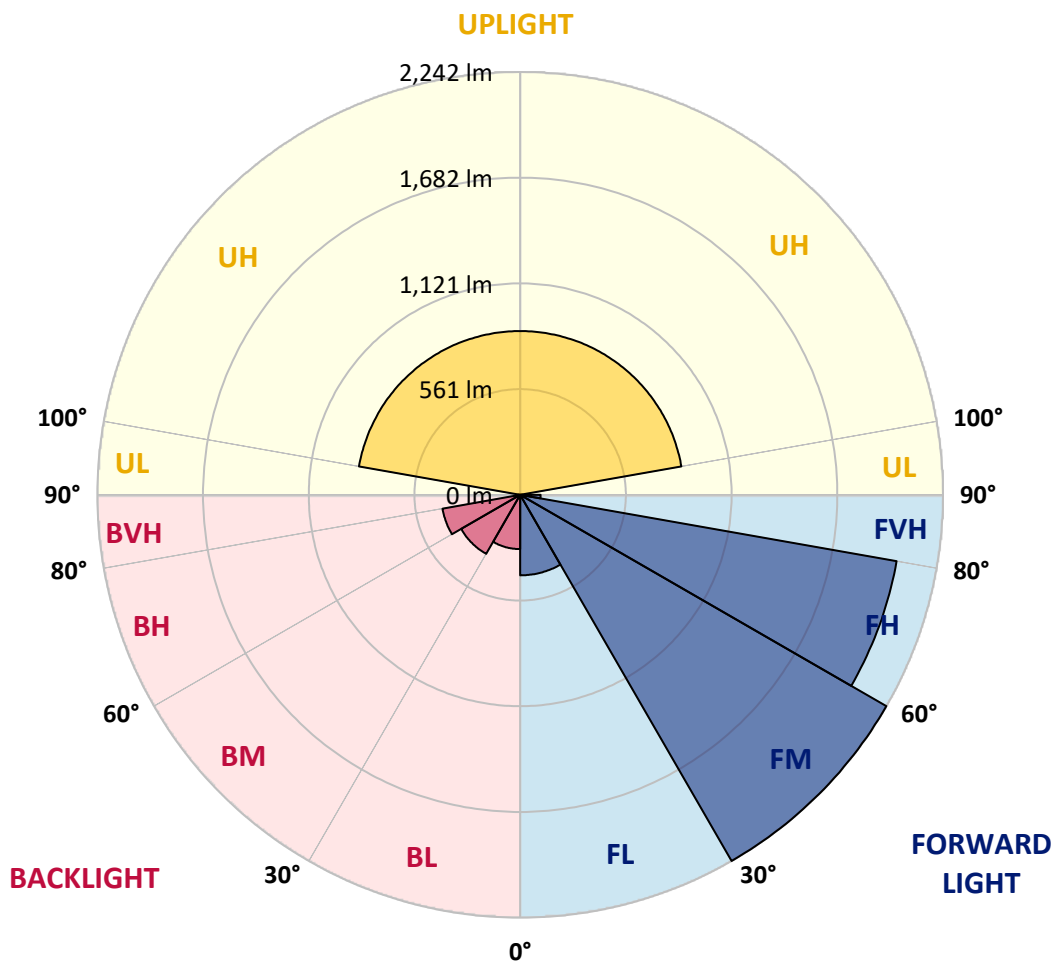
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	427.0	5.6			
FM (30°-60°)	2242.1	29.4			
FH (60°-80°)	2026.6	26.6			G2/5000
FVH (80°-90°)	108.4	1.4			G2/225
BL (0°-30°)	287.8	3.8	B1/500		
BM (30°-60°)	361.5	4.7	B1/1000		
BH (60°-80°)	418.2	5.5	B1/500		G1/500
BVH (80°-90°)	21.3	0.3			G1/100
UL (90°-100°)	11.4	0.1		U2/50	
UH (100°-180°)	868.0	11.4		U4/1000	

BUG Rating: B1-U5-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	60°	61°	62°	63°
0°	1240.6	1240.6	1240.6	1240.6	1240.6	1240.6	1240.6	1240.6	1240.6	1240.6	1240.6
2.5°	1153.0	1155.6	1170.7	1178.6	1190.1	1193.7	1207.0	1212.3	1216.7	1215.8	1215.8
5°	1049.3	1057.3	1064.4	1080.3	1097.2	1117.5	1143.2	1162.7	1166.2	1170.7	1173.3
7.5°	970.5	975.9	988.2	999.8	1021.0	1049.3	1085.7	1110.5	1115.8	1117.5	1123.7
10°	914.7	918.3	928.9	944.0	968.8	996.2	1034.3	1060.0	1067.9	1071.5	1076.8
12.5°	871.4	876.7	886.4	902.4	928.9	957.3	997.1	1022.8	1028.1	1032.5	1040.5
15°	843.9	847.4	856.3	874.0	897.9	926.3	965.2	996.2	999.8	1004.2	1011.3
17.5°	838.6	841.3	846.6	859.8	878.4	905.9	945.7	971.4	977.6	983.8	990.9
20°	859.8	861.6	863.4	865.2	875.8	893.5	932.5	959.9	965.2	970.5	979.4
22.5°	905.9	908.6	904.1	897.9	890.0	893.5	926.3	954.6	958.1	963.5	970.5
25°	985.6	982.9	969.7	959.9	931.6	908.6	928.0	951.9	956.4	961.7	969.7
27.5°	1079.5	1075.9	1067.9	1041.4	994.4	947.5	938.7	956.4	959.0	963.5	970.5
30°	1180.4	1181.3	1174.2	1145.0	1084.8	1006.0	962.6	967.0	968.8	972.3	976.7
32.5°	1271.6	1284.9	1284.0	1282.2	1196.3	1084.8	1008.6	990.9	988.2	990.9	992.7
35°	1377.0	1379.7	1404.4	1416.8	1346.9	1199.9	1075.9	1037.0	1026.3	1027.2	1025.4
37.5°	1490.3	1493.9	1536.4	1557.6	1503.6	1330.9	1165.4	1105.1	1095.4	1085.7	1078.6
40°	1655.0	1669.2	1691.4	1715.3	1688.7	1507.2	1283.1	1201.7	1176.9	1175.1	1160.9
42.5°	1901.2	1896.8	1886.2	1905.7	1873.8	1704.6	1425.7	1338.0	1319.4	1294.6	1275.2
45°	2143.0	2152.7	2106.7	2115.5	2117.3	1933.1	1632.0	1508.9	1499.2	1470.0	1448.7
47.5°	2305.9	2295.3	2233.3	2278.5	2389.2	2199.6	1871.1	1741.8	1721.5	1706.4	1693.1
50°	2314.8	2305.9	2266.1	2345.8	2582.2	2673.4	2204.1	2053.5	2024.3	1997.7	1989.8
52.5°	2098.7	2086.3	2099.6	2261.6	2652.2	3070.1	2674.3	2440.5	2416.6	2394.5	2363.5
55°	1713.5	1727.7	1790.5	2023.4	2545.0	3351.7	3599.7	3038.2	2935.5	2934.6	2858.5
57.5°	1279.6	1265.4	1312.4	1531.1	2274.0	3451.8	4449.8	4310.7	4081.4	3926.4	3739.6
60°	863.4	866.9	910.3	1022.8	1582.4	3342.9	5019.2	5503.5	5423.0	5390.2	5339.7
62.5°	598.6	603.9	643.8	749.2	925.4	2689.3	5185.6	6172.1	6316.5	6436.0	6406.8
65°	418.9	419.7	459.6	622.5	693.4	1381.4	4818.2	6260.7	6475.9	6681.3	6865.5
66°	369.3	370.2	402.9	579.1	665.0	1042.3	4499.4	6137.6	6382.9	6622.0	6812.4
67.5°	316.1	321.4	347.1	492.4	637.6	804.1	3716.6	5770.1	6026.9	6289.9	6541.4
70°	217.0	218.7	241.7	399.4	596.8	705.8	2118.2	4504.7	4859.8	5322.0	5589.4
72.5°	155.0	153.2	155.9	247.1	612.8	701.3	1113.1	2964.7	3461.5	3867.1	4156.7
75°	138.1	133.7	122.2	153.2	447.2	766.0	745.6	1745.4	2123.5	2492.8	2789.4
77.5°	123.1	116.0	109.8	117.8	221.4	721.7	669.5	999.8	1192.8	1468.2	1696.7
80°	93.9	89.4	93.0	101.8	132.8	664.1	665.0	665.0	717.3	807.6	897.9
82.5°	62.0	56.7	64.6	84.1	100.1	500.3	687.2	587.1	577.4	573.8	580.0
85°	39.0	33.7	45.2	62.9	77.0	261.2	704.9	619.9	574.7	531.3	487.9
87.5°	14.2	15.9	23.0	36.3	50.5	113.3	618.1	546.4	515.4	461.4	410.9
90°	8.5	7.7	11.4	18.6	19.5	28.3	101.8	159.4	98.5	53.6	44.9
92.5°	4.0	4.0	5.0	6.0	6.0	6.0	7.0	7.0	7.0	7.0	7.0
95°	5.0	5.0	6.0	7.0	7.0	7.0	7.0	7.5	7.6	7.7	7.8
97.5°	7.0	7.0	8.0	8.0	9.0	9.0	12.0	11.0	10.8	10.6	10.4
100°	8.0	8.0	9.0	10.0	12.0	21.0	29.0	27.5	27.2	26.9	26.6
102.5°	11.0	11.0	13.0	18.0	27.0	40.0	50.0	48.5	48.2	47.9	47.6
105°	21.0	22.0	27.0	36.0	48.0	63.0	72.0	71.0	70.8	70.6	70.4
107.5°	41.0	42.0	49.0	58.0	73.0	88.0	95.0	94.5	94.4	94.3	94.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	60°	61°	62°	63°
110°	66.0	68.0	74.0	87.0	102.0	114.0	120.0	120.5	120.6	120.7	120.8
112.5°	99.0	99.0	106.0	121.0	134.0	143.0	148.0	149.0	149.2	149.4	149.6
115°	140.0	139.0	147.0	159.0	168.0	174.0	179.0	180.5	180.8	181.1	181.4
117.5°	184.0	184.0	189.0	197.0	202.0	205.0	211.0	213.0	213.4	213.8	214.2
120°	225.0	223.0	226.0	233.0	237.0	243.0	246.0	248.0	248.4	248.8	249.2
122.5°	263.0	260.0	261.0	267.0	271.0	277.0	279.0	281.0	281.4	281.8	282.2
125°	298.0	294.0	296.0	299.0	305.0	310.0	313.0	314.0	314.2	314.4	314.6
127.5°	330.0	329.0	329.0	333.0	339.0	340.0	345.0	345.5	345.6	345.7	345.8
130°	363.0	361.0	362.0	366.0	370.0	372.0	377.0	379.0	379.4	379.8	380.2
132.5°	396.0	394.0	393.0	401.0	404.0	405.0	411.0	413.5	414.0	414.5	415.0
135°	429.0	426.0	426.0	432.0	435.0	437.0	443.0	445.5	446.0	446.5	447.0
137.5°	460.0	457.0	459.0	460.0	464.0	468.0	473.0	474.0	474.2	474.4	474.6
140°	488.0	485.0	487.0	489.0	491.0	497.0	500.0	501.0	501.2	501.4	501.6
142.5°	518.0	515.0	517.0	518.0	521.0	525.0	527.0	530.0	530.6	531.2	531.8
145°	550.0	546.0	544.0	547.0	550.0	551.0	556.0	559.0	559.6	560.2	560.8
147.5°	575.0	572.0	571.0	574.0	574.0	575.0	580.0	582.5	583.0	583.5	584.0
150°	595.0	592.0	593.0	593.0	593.0	593.0	597.0	598.5	598.8	599.1	599.4
152.5°	611.0	608.0	608.0	609.0	610.0	610.0	611.0	612.5	612.8	613.1	613.4
155°	629.0	625.0	625.0	627.0	630.0	628.0	626.0	628.5	629.0	629.5	630.0
157.5°	646.0	643.0	643.0	644.0	646.0	645.0	644.0	646.0	646.4	646.8	647.2
160°	663.0	660.0	659.0	656.0	655.0	655.0	658.0	661.0	661.6	662.2	662.8
162.5°	673.0	669.0	669.0	665.0	661.0	663.0	667.0	669.0	669.4	669.8	670.2
165°	681.0	678.0	676.0	676.0	673.0	673.0	672.0	674.5	675.0	675.5	676.0
167.5°	690.0	687.0	684.0	686.0	688.0	685.0	678.0	681.0	681.6	682.2	682.8
170°	698.0	695.0	692.0	692.0	693.0	691.0	686.0	687.5	687.8	688.1	688.4
172.5°	699.0	697.0	695.0	693.0	690.0	690.0	689.0	690.5	690.8	691.1	691.4
175°	700.0	698.0	697.0	695.0	691.0	690.0	690.0	692.5	693.0	693.5	694.0
177.5°	707.0	705.0	700.0	699.0	697.0	695.0	694.0	696.5	697.0	697.5	698.0
180°	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0



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CANDELA DISTRIBUTION (continued):

	64°	65°	66°	67°	68°	69°	70°	71°	72°	73°	74°
0°	1240.6	1240.6	1240.6	1240.6	1240.6	1240.6	1240.6	1240.6	1240.6	1240.6	1240.6
2.5°	1216.7	1221.1	1222.9	1221.1	1222.0	1227.3	1225.6	1228.2	1228.2	1230.0	1230.0
5°	1176.9	1180.4	1187.5	1186.6	1193.7	1196.3	1199.0	1202.5	1207.0	1209.6	1214.9
7.5°	1129.9	1137.0	1143.2	1146.8	1151.2	1160.0	1162.7	1170.7	1177.8	1184.8	1190.1
10°	1084.8	1094.5	1101.6	1104.3	1114.0	1118.4	1128.2	1134.4	1143.2	1152.1	1160.0
12.5°	1046.7	1055.5	1059.1	1067.9	1076.8	1085.7	1090.1	1101.6	1110.5	1122.0	1132.6
15°	1018.4	1027.2	1034.3	1040.5	1049.3	1058.2	1065.3	1076.8	1087.4	1098.9	1108.7
17.5°	1000.6	1006.0	1014.8	1020.1	1030.8	1041.4	1049.3	1062.6	1074.1	1083.9	1097.2
20°	987.4	993.6	1001.5	1009.5	1019.2	1032.5	1039.6	1053.8	1066.2	1077.7	1090.1
22.5°	980.3	986.5	994.4	1002.4	1013.0	1023.7	1035.2	1047.6	1060.9	1073.3	1085.7
25°	977.6	982.9	990.0	998.0	1009.5	1021.0	1030.8	1044.9	1056.4	1069.7	1084.8
27.5°	978.5	982.0	990.0	997.1	1008.6	1019.2	1029.0	1043.2	1056.4	1068.8	1083.9
30°	982.0	984.7	992.7	998.9	1008.6	1019.2	1028.1	1043.2	1054.7	1067.9	1083.9
32.5°	994.4	998.0	1001.5	1006.0	1014.8	1022.8	1033.4	1046.7	1057.3	1070.6	1083.9
35°	1023.7	1021.0	1023.7	1025.4	1031.6	1039.6	1047.6	1059.1	1068.8	1080.3	1094.5
37.5°	1069.7	1064.4	1066.2	1065.3	1065.3	1070.6	1078.6	1086.5	1094.5	1106.0	1120.2
40°	1154.7	1141.4	1137.9	1128.2	1125.5	1129.9	1135.2	1136.1	1145.9	1160.9	1167.1
42.5°	1264.5	1246.8	1249.5	1233.5	1229.1	1223.8	1230.9	1226.5	1232.7	1242.4	1255.7
45°	1438.1	1421.3	1403.6	1377.9	1383.2	1363.7	1358.4	1360.2	1359.3	1362.8	1378.8
47.5°	1645.3	1623.2	1611.7	1601.9	1583.3	1571.8	1556.8	1534.6	1539.9	1547.0	1561.2
50°	1948.2	1941.1	1918.9	1887.1	1882.6	1865.8	1861.4	1841.9	1834.8	1833.9	1833.0
52.5°	2352.8	2306.8	2297.9	2267.8	2244.8	2228.9	2223.6	2196.1	2168.7	2184.6	2182.8
55°	2846.1	2808.0	2759.3	2732.7	2714.1	2676.1	2666.3	2631.8	2615.8	2607.0	2584.9
57.5°	3674.9	3541.2	3441.2	3391.6	3321.6	3250.8	3226.0	3155.1	3100.2	3061.3	3063.9
60°	5120.1	4881.9	4601.2	4475.5	4184.1	4141.6	3941.5	3892.8	3772.3	3692.6	3646.6
62.5°	6386.4	6321.8	6187.2	6003.9	5711.6	5375.1	5223.7	4922.6	4687.1	4584.4	4441.8
65°	6991.2	7082.4	7119.6	7085.1	6968.2	6762.8	6582.1	6288.1	5893.2	5670.0	5392.9
66°	6960.2	7095.7	7163.9	7199.3	7156.8	7035.5	6846.0	6604.3	6298.8	5958.7	5647.9
67.5°	6733.5	6865.5	6960.2	7068.3	7068.3	7030.2	6953.2	6792.0	6575.9	6279.3	6000.3
70°	5807.3	5986.2	6153.5	6186.3	6278.4	6250.0	6311.1	6208.4	6157.1	6033.1	5883.4
72.5°	4524.2	4673.8	4817.3	4960.7	4936.8	4905.8	4899.6	4920.9	4816.4	4853.6	4814.6
75°	3009.0	3266.7	3413.7	3399.5	3409.3	3417.2	3351.7	3205.6	3319.0	3175.5	3223.3
77.5°	1828.6	1948.2	1988.0	1943.7	1886.2	1811.8	1692.2	1622.3	1522.2	1530.2	1463.8
80°	959.0	974.1	942.2	852.8	804.1	759.8	623.4	562.3	505.6	484.4	436.6
82.5°	549.9	513.6	474.6	444.5	387.0	348.0	294.9	261.2	224.9	193.0	181.5
85°	445.4	396.7	360.4	326.8	287.8	253.3	209.0	174.4	147.9	128.4	124.0
87.5°	367.5	333.8	296.7	264.8	226.7	191.3	147.9	115.1	91.2	73.5	68.2
90°	41.6	53.3	40.9	26.7	35.6	23.2	17.0	17.9	16.1	16.1	17.0
92.5°	7.0	7.0	6.9	6.8	6.7	6.6	6.5	6.4	6.3	6.2	6.1
95°	7.9	8.0	7.9	7.8	7.7	7.6	7.5	7.4	7.3	7.2	7.1
97.5°	10.2	10.0	9.9	9.8	9.7	9.6	9.5	9.4	9.3	9.2	9.1
100°	26.3	26.0	25.7	25.4	25.1	24.8	24.5	24.2	23.9	23.6	23.3
102.5°	47.3	47.0	46.5	46.0	45.5	45.0	44.5	44.0	43.5	43.0	42.5
105°	70.2	70.0	69.5	69.0	68.5	68.0	67.5	67.0	66.5	66.0	65.5
107.5°	94.1	94.0	93.6	93.2	92.8	92.4	92.0	91.6	91.2	90.8	90.4



REPORT NUMBER: P226774

CATALOG NUMBER: ISW-AF-1200-LED-E1-SL2-7030-ULG

CANDELA DISTRIBUTION (continued):

	64°	65°	66°	67°	68°	69°	70°	71°	72°	73°	74°
110°	120.9	121.0	120.8	120.6	120.4	120.2	120.0	119.8	119.6	119.4	119.2
112.5°	149.8	150.0	149.9	149.8	149.7	149.6	149.5	149.4	149.3	149.2	149.1
115°	181.7	182.0	181.7	181.4	181.1	180.8	180.5	180.2	179.9	179.6	179.3
117.5°	214.6	215.0	214.5	214.0	213.5	213.0	212.5	212.0	211.5	211.0	210.5
120°	249.6	250.0	249.5	249.0	248.5	248.0	247.5	247.0	246.5	246.0	245.5
122.5°	282.6	283.0	282.5	282.0	281.5	281.0	280.5	280.0	279.5	279.0	278.5
125°	314.8	315.0	314.5	314.0	313.5	313.0	312.5	312.0	311.5	311.0	310.5
127.5°	345.9	346.0	346.0	346.0	346.0	346.0	346.0	346.0	346.0	346.0	346.0
130°	380.6	381.0	381.0	381.0	381.0	381.0	381.0	381.0	381.0	381.0	381.0
132.5°	415.5	416.0	415.8	415.6	415.4	415.2	415.0	414.8	414.6	414.4	414.2
135°	447.5	448.0	447.9	447.8	447.7	447.6	447.5	447.4	447.3	447.2	447.1
137.5°	474.8	475.0	475.1	475.2	475.3	475.4	475.5	475.6	475.7	475.8	475.9
140°	501.8	502.0	502.2	502.4	502.6	502.8	503.0	503.2	503.4	503.6	503.8
142.5°	532.4	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0
145°	561.4	562.0	561.9	561.8	561.7	561.6	561.5	561.4	561.3	561.2	561.1
147.5°	584.5	585.0	585.1	585.2	585.3	585.4	585.5	585.6	585.7	585.8	585.9
150°	599.7	600.0	600.3	600.6	600.9	601.2	601.5	601.8	602.1	602.4	602.7
152.5°	613.7	614.0	614.4	614.8	615.2	615.6	616.0	616.4	616.8	617.2	617.6
155°	630.5	631.0	631.5	632.0	632.5	633.0	633.5	634.0	634.5	635.0	635.5
157.5°	647.6	648.0	648.2	648.4	648.6	648.8	649.0	649.2	649.4	649.6	649.8
160°	663.4	664.0	663.7	663.4	663.1	662.8	662.5	662.2	661.9	661.6	661.3
162.5°	670.6	671.0	670.9	670.8	670.7	670.6	670.5	670.4	670.3	670.2	670.1
165°	676.5	677.0	677.3	677.6	677.9	678.2	678.5	678.8	679.1	679.4	679.7
167.5°	683.4	684.0	684.4	684.8	685.2	685.6	686.0	686.4	686.8	687.2	687.6
170°	688.7	689.0	689.5	690.0	690.5	691.0	691.5	692.0	692.5	693.0	693.5
172.5°	691.7	692.0	692.2	692.4	692.6	692.8	693.0	693.2	693.4	693.6	693.8
175°	694.5	695.0	695.1	695.2	695.3	695.4	695.5	695.6	695.7	695.8	695.9
177.5°	698.5	699.0	699.2	699.4	699.6	699.8	700.0	700.2	700.4	700.6	700.8
180°	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0



REPORT NUMBER: P226774

CATALOG NUMBER: ISW-AF-1200-LED-E1-SL2-7030-ULG

CANDELA DISTRIBUTION (continued):

	75°	76°	77°	78°	79°	80°	81°	82°	83°	84°	85°
0°	1240.6	1240.6	1240.6	1240.6	1240.6	1240.6	1240.6	1240.6	1240.6	1240.6	1240.6
2.5°	1232.7	1232.7	1234.4	1236.2	1237.1	1237.1	1237.1	1238.9	1239.7	1237.1	1239.7
5°	1217.6	1222.0	1225.6	1228.2	1229.1	1231.8	1234.4	1236.2	1238.9	1238.9	1240.6
7.5°	1197.2	1205.2	1209.6	1214.1	1218.5	1222.9	1228.2	1231.8	1233.5	1237.1	1239.7
10°	1171.6	1181.3	1190.1	1197.2	1203.4	1212.3	1219.4	1224.7	1232.7	1233.5	1239.7
12.5°	1144.1	1158.3	1165.4	1178.6	1187.5	1200.8	1207.9	1215.8	1224.7	1229.1	1236.2
15°	1124.6	1137.0	1150.3	1162.7	1176.9	1192.8	1201.7	1212.3	1224.7	1234.4	1243.3
17.5°	1109.6	1126.4	1141.4	1157.4	1175.1	1191.9	1205.2	1216.7	1232.7	1238.0	1246.8
20°	1105.1	1123.7	1138.8	1155.6	1174.2	1196.3	1212.3	1224.7	1240.6	1249.5	1257.4
22.5°	1103.4	1121.1	1138.8	1159.2	1179.5	1202.5	1219.4	1235.3	1251.2	1259.2	1265.4
25°	1101.6	1120.2	1139.7	1162.7	1184.8	1208.7	1228.2	1243.3	1258.3	1266.3	1271.6
27.5°	1101.6	1121.1	1142.3	1165.4	1189.3	1215.8	1234.4	1248.6	1261.9	1269.0	1270.7
30°	1100.7	1121.1	1141.4	1167.1	1192.8	1220.3	1240.6	1253.9	1265.4	1269.8	1268.1
32.5°	1102.5	1123.7	1145.9	1171.6	1198.1	1224.7	1245.9	1261.0	1267.2	1266.3	1265.4
35°	1111.3	1130.8	1156.5	1182.2	1209.6	1234.4	1254.8	1265.4	1270.7	1269.0	1264.5
37.5°	1135.2	1154.7	1180.4	1208.7	1230.0	1258.3	1276.9	1284.9	1285.8	1280.5	1269.8
40°	1184.8	1204.3	1227.3	1258.3	1284.0	1303.5	1321.2	1330.1	1324.7	1315.0	1303.5
42.5°	1263.6	1288.4	1315.9	1340.7	1370.8	1397.4	1401.8	1407.1	1398.2	1379.7	1365.5
45°	1390.3	1405.3	1440.8	1459.3	1498.3	1511.6	1521.3	1524.0	1504.5	1489.5	1464.7
47.5°	1572.7	1601.9	1626.7	1644.4	1672.8	1690.5	1710.0	1701.1	1686.0	1660.4	1627.6
50°	1859.6	1878.2	1910.1	1942.0	1972.1	1984.5	1984.5	1975.6	1965.9	1916.3	1876.4
52.5°	2212.0	2213.8	2259.9	2297.9	2323.6	2305.0	2327.2	2305.0	2298.8	2264.3	2231.5
55°	2620.3	2603.4	2659.2	2692.9	2715.9	2738.0	2733.6	2731.0	2707.9	2669.0	2629.1
57.5°	3008.1	3056.8	3083.4	3133.0	3144.5	3159.6	3153.4	3144.5	3131.2	3109.1	3091.4
60°	3567.8	3600.6	3624.5	3634.2	3667.0	3671.4	3693.5	3657.2	3666.1	3640.4	3584.6
62.5°	4329.3	4293.9	4312.5	4312.5	4302.8	4268.2	4286.8	4301.0	4277.1	4255.8	4247.0
65°	5182.1	5067.9	4958.1	4939.5	4889.0	4877.5	4863.3	4827.9	4812.8	4775.6	4745.5
66°	5437.1	5260.0	5156.4	5092.7	5031.6	5018.3	4998.8	4961.6	4931.5	4879.3	4828.8
67.5°	5723.2	5494.7	5338.8	5248.5	5173.2	5123.7	5084.7	5031.6	4983.7	4905.8	4825.2
70°	5704.6	5515.9	5328.2	5191.0	5077.6	4975.8	4915.6	4801.3	4703.9	4592.3	4500.2
72.5°	4793.4	4759.7	4650.8	4573.7	4434.7	4380.7	4221.3	4148.7	4014.1	3869.8	3825.5
75°	3332.2	3200.3	3144.5	3113.5	3052.4	2884.2	2774.4	2798.3	2640.6	2499.8	2419.3
77.5°	1456.7	1483.3	1329.2	1260.1	1207.0	1115.8	1030.8	972.3	938.7	916.5	816.5
80°	402.9	351.6	347.1	322.3	317.0	282.5	286.9	262.1	245.3	241.7	233.8
82.5°	176.2	172.7	167.4	164.7	162.1	158.5	154.1	153.2	147.9	143.5	144.3
85°	116.9	116.0	113.3	110.7	106.3	100.1	95.6	92.1	93.0	88.6	87.7
87.5°	68.2	66.4	65.5	62.0	61.1	55.8	56.7	52.2	51.4	50.5	47.8
90°	18.7	19.4	21.9	20.8	17.1	24.8	22.0	20.0	20.7	17.8	17.6
92.5°	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
95°	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
97.5°	9.0	8.9	8.8	8.7	8.6	8.5	8.4	8.3	8.2	8.1	8.0
100°	23.0	22.6	22.2	21.8	21.4	21.0	20.6	20.2	19.8	19.4	19.0
102.5°	42.0	41.7	41.4	41.1	40.8	40.5	40.2	39.9	39.6	39.3	39.0
105°	65.0	64.6	64.2	63.8	63.4	63.0	62.6	62.2	61.8	61.4	61.0
107.5°	90.0	89.7	89.4	89.1	88.8	88.5	88.2	87.9	87.6	87.3	87.0



REPORT NUMBER: P226774
 CATALOG NUMBER: ISW-AF-1200-LED-E1-SL2-7030-ULG

REPORT N
 CATALOG

CANDELA DISTRIBUTION (continued):

CANDELA

	75°	76°	77°	78°	79°	80°	81°	82°	83°	84°	85°	
110°	119.0	118.7	118.4	118.1	117.8	117.5	117.2	116.9	116.6	116.3	116.0	0°
112.5°	149.0	148.8	148.6	148.4	148.2	148.0	147.8	147.6	147.4	147.2	147.0	2.5°
115°	179.0	178.8	178.6	178.4	178.2	178.0	177.8	177.6	177.4	177.2	177.0	5°
117.5°	210.0	209.8	209.6	209.4	209.2	209.0	208.8	208.6	208.4	208.2	208.0	7.5°
120°	245.0	244.8	244.6	244.4	244.2	244.0	243.8	243.6	243.4	243.2	243.0	10°
122.5°	278.0	277.8	277.6	277.4	277.2	277.0	276.8	276.6	276.4	276.2	276.0	12.5°
125°	310.0	310.0	310.0	310.0	310.0	310.0	310.0	310.0	310.0	310.0	310.0	15°
127.5°	346.0	345.9	345.8	345.7	345.6	345.5	345.4	345.3	345.2	345.1	345.0	17.5°
130°	381.0	380.8	380.6	380.4	380.2	380.0	379.8	379.6	379.4	379.2	379.0	20°
132.5°	414.0	414.0	414.0	414.0	414.0	414.0	414.0	414.0	414.0	414.0	414.0	22.5°
135°	447.0	447.3	447.6	447.9	448.2	448.5	448.8	449.1	449.4	449.7	450.0	25°
137.5°	476.0	476.5	477.0	477.5	478.0	478.5	479.0	479.5	480.0	480.5	481.0	27.5°
140°	504.0	504.5	505.0	505.5	506.0	506.5	507.0	507.5	508.0	508.5	509.0	30°
142.5°	533.0	533.1	533.2	533.3	533.4	533.5	533.6	533.7	533.8	533.9	534.0	32.5°
145°	561.0	560.7	560.4	560.1	559.8	559.5	559.2	558.9	558.6	558.3	558.0	35°
147.5°	586.0	585.7	585.4	585.1	584.8	584.5	584.2	583.9	583.6	583.3	583.0	37.5°
150°	603.0	603.3	603.6	603.9	604.2	604.5	604.8	605.1	605.4	605.7	606.0	40°
152.5°	618.0	618.5	619.0	619.5	620.0	620.5	621.0	621.5	622.0	622.5	623.0	42.5°
155°	636.0	636.2	636.4	636.6	636.8	637.0	637.2	637.4	637.6	637.8	638.0	45°
157.5°	650.0	650.0	650.0	650.0	650.0	650.0	650.0	650.0	650.0	650.0	650.0	47.5°
160°	661.0	660.9	660.8	660.7	660.6	660.5	660.4	660.3	660.2	660.1	660.0	50°
162.5°	670.0	669.8	669.6	669.4	669.2	669.0	668.8	668.6	668.4	668.2	668.0	52.5°
165°	680.0	679.8	679.6	679.4	679.2	679.0	678.8	678.6	678.4	678.2	678.0	55°
167.5°	688.0	688.0	688.0	688.0	688.0	688.0	688.0	688.0	688.0	688.0	688.0	57.5°
170°	694.0	694.2	694.4	694.6	694.8	695.0	695.2	695.4	695.6	695.8	696.0	60°
172.5°	694.0	694.2	694.4	694.6	694.8	695.0	695.2	695.4	695.6	695.8	696.0	62.5°
175°	696.0	695.8	695.6	695.4	695.2	695.0	694.8	694.6	694.4	694.2	694.0	65°
177.5°	701.0	700.7	700.4	700.1	699.8	699.5	699.2	698.9	698.6	698.3	698.0	66°
180°	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	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: P226774
 NUMBER: ISW-AF-1200-LED-E1-SL2-7030-ULG

REPORT NUMBER: P
 CATALOG NUMBER:

DISTRIBUTION (continued):

CANDELA DISTRIBUTION

86°	87°	88°	89°	90°	95°	105°	115°	125°	135°	145°	86°	
1240.6	1240.6	1240.6	1240.6	1240.6	1240.6	1240.6	1240.6	1240.6	1240.6	1240.6	110°	116.2
1242.4	1244.2	1245.1	1244.2	1245.9	1245.1	1245.9	1245.1	1240.6	1239.7	1238.9	112.5°	147.0
1244.2	1247.7	1248.6	1249.5	1247.7	1249.5	1245.9	1231.8	1215.8	1198.1	1183.9	115°	177.2
1245.9	1250.4	1253.0	1253.0	1253.9	1252.1	1238.9	1207.9	1170.7	1133.5	1105.1	117.5°	208.2
1245.1	1251.2	1253.9	1254.8	1254.8	1251.2	1219.4	1169.8	1113.1	1056.4	998.9	120°	243.0
1242.4	1247.7	1252.1	1252.1	1253.0	1240.6	1191.0	1120.2	1039.6	954.6	877.6	122.5°	276.2
1247.7	1253.0	1253.0	1253.0	1252.1	1230.9	1160.9	1058.2	950.2	835.1	720.8	125°	310.0
1255.7	1258.3	1256.6	1256.6	1253.0	1221.1	1127.3	997.1	855.4	703.1	543.7	127.5°	345.4
1262.8	1264.5	1263.6	1259.2	1254.8	1210.5	1092.7	932.5	742.1	543.7	385.2	130°	379.2
1269.8	1271.6	1267.2	1260.1	1253.9	1196.3	1051.1	850.1	613.7	371.9	255.0	132.5°	414.2
1270.7	1272.5	1264.5	1254.8	1245.9	1175.1	1000.6	762.4	472.9	240.9	199.2	135°	450.2
1269.8	1268.1	1254.8	1242.4	1232.7	1149.4	944.9	653.5	315.2	181.5	173.6	137.5°	481.2
1263.6	1255.7	1245.1	1230.9	1216.7	1121.1	889.1	532.2	199.2	157.6	157.6	140°	509.4
1254.8	1246.8	1233.5	1214.9	1199.0	1093.6	825.3	408.2	159.4	145.2	147.0	142.5°	534.4
1251.2	1242.4	1222.9	1203.4	1183.1	1068.8	758.0	274.5	143.5	137.3	138.1	145°	558.4
1258.3	1243.3	1223.8	1201.7	1177.8	1047.6	688.1	191.3	135.5	128.4	130.2	147.5°	583.4
1282.2	1268.1	1245.1	1216.7	1191.0	1035.2	613.7	158.5	127.5	121.3	121.3	150°	606.8
1339.8	1321.2	1290.2	1256.6	1225.6	1043.2	547.3	144.3	121.3	115.1	115.1	152.5°	624.0
1432.8	1410.6	1374.3	1336.3	1295.5	1082.1	472.0	139.0	116.9	108.0	106.3	155°	638.6
1592.2	1563.0	1515.1	1470.0	1421.3	1149.4	395.8	135.5	111.6	103.6	100.1	157.5°	651.0
1842.8	1799.4	1742.7	1683.4	1624.1	1272.5	335.6	131.9	108.0	100.1	96.5	160°	661.2
2165.1	2135.9	2065.0	1987.1	1916.3	1517.8	301.1	129.3	105.4	95.6	93.0	162.5°	669.2
2576.0	2528.2	2472.4	2402.4	2318.3	1835.7	297.5	128.4	102.7	92.1	90.3	165°	678.8
3009.9	2991.3	2896.6	2853.2	2762.0	2259.0	362.2	130.2	101.0	89.4	86.8	167.5°	689.2
3504.9	3512.0	3423.4	3375.6	3300.4	2795.6	576.5	135.5	101.0	86.8	84.1	170°	697.0
4152.2	4163.7	4059.3	4002.6	3938.8	3396.9	905.9	144.3	103.6	84.1	81.5	172.5°	697.0
4682.7	4620.7	4553.4	4454.2	4373.6	3732.5	872.2	160.3	107.1	81.5	78.8	175°	695.0
4737.6	4693.3	4608.3	4501.1	4402.8	3734.3	761.6	165.6	108.0	80.6	77.9	177.5°	698.8
4730.5	4651.7	4555.1	4464.8	4368.3	3638.6	588.9	172.7	110.7	78.8	76.2	180°	700.0
4402.8	4292.1	4198.3	4073.4	3972.5	3256.1	362.2	171.8	107.1	73.5	71.7		
3630.7	3574.0	3462.4	3362.3	3257.0	2635.3	247.9	153.2	94.8	66.4	67.3		
2348.4	2283.8	2170.4	2113.8	2054.4	1686.0	193.0	124.9	80.6	59.3	62.0		
783.7	758.0	716.4	739.4	704.9	657.1	141.7	94.8	64.6	51.4	54.9		
234.7	229.4	237.3	223.2	236.4	200.1	93.0	66.4	49.6	44.3	48.7		
139.0	137.3	137.3	137.3	133.7	124.9	61.1	46.0	38.1	37.2	40.7		
85.0	83.2	84.1	83.2	85.0	76.2	41.6	31.9	28.3	27.5	32.8		
48.7	48.7	49.6	47.8	48.7	46.9	29.2	20.4	18.6	17.7	23.9		
18.5	18.5	15.9	15.0	15.9	19.4	17.0	15.2	12.3	11.4	16.0		
6.0	6.0	6.0	6.0	6.0	6.0	6.0	7.0	7.0	6.0	6.0		
7.0	7.0	7.0	7.0	7.0	7.0	7.0	8.0	7.0	7.0	7.0		
8.0	8.0	8.0	8.0	8.0	8.0	9.0	10.0	12.0	9.0	9.0		
19.0	19.0	19.0	19.0	19.0	19.0	23.0	26.0	29.0	21.0	12.0		
38.8	38.6	38.4	38.2	38.0	39.0	42.0	47.0	50.0	40.0	27.0		
61.0	61.0	61.0	61.0	61.0	61.0	65.0	70.0	72.0	63.0	48.0		
86.8	86.6	86.4	86.2	86.0	87.0	90.0	94.0	95.0	88.0	73.0		

'226774
 ISW-AF-1200-LED-E1-SL2-7030-ULG

REPORT NUMBER: P226774
 CATALOG NUMBER: ISW-AF-1:

TION (continued):

CANDELA DISTRIBUTION (con

87°	88°	89°	90°	95°	105°	115°	125°	135°	145°		155°	165°
116.4	116.6	116.8	117.0	116.0	119.0	121.0	120.0	114.0	102.0	0°	1240.6	1240.6
147.0	147.0	147.0	147.0	147.0	149.0	150.0	148.0	143.0	134.0	2.5°	1231.8	1225.6
177.4	177.6	177.8	178.0	177.0	179.0	182.0	179.0	174.0	168.0	5°	1161.8	1145.0
208.4	208.6	208.8	209.0	208.0	210.0	215.0	211.0	205.0	202.0	7.5°	1060.9	1041.4
243.0	243.0	243.0	243.0	243.0	245.0	250.0	246.0	243.0	237.0	10°	945.7	916.5
276.4	276.6	276.8	277.0	276.0	278.0	283.0	279.0	277.0	271.0	12.5°	798.7	741.2
310.0	310.0	310.0	310.0	310.0	310.0	315.0	313.0	310.0	305.0	15°	628.7	551.7
345.8	346.2	346.6	347.0	345.0	346.0	346.0	345.0	340.0	339.0	17.5°	433.0	371.0
379.4	379.6	379.8	380.0	379.0	381.0	381.0	377.0	372.0	370.0	20°	303.7	280.7
414.4	414.6	414.8	415.0	414.0	414.0	416.0	411.0	405.0	404.0	22.5°	234.7	235.6
450.4	450.6	450.8	451.0	450.0	447.0	448.0	443.0	437.0	435.0	25°	194.8	203.7
481.4	481.6	481.8	482.0	481.0	476.0	475.0	473.0	468.0	464.0	27.5°	171.8	180.6
509.8	510.2	510.6	511.0	509.0	504.0	502.0	500.0	497.0	491.0	30°	157.6	165.6
534.8	535.2	535.6	536.0	534.0	533.0	533.0	527.0	525.0	521.0	32.5°	147.9	151.4
558.8	559.2	559.6	560.0	558.0	561.0	562.0	556.0	551.0	550.0	35°	136.4	138.1
583.8	584.2	584.6	585.0	583.0	586.0	585.0	580.0	575.0	574.0	37.5°	126.6	126.6
607.6	608.4	609.2	610.0	606.0	603.0	600.0	597.0	593.0	593.0	40°	117.8	116.9
625.0	626.0	627.0	628.0	623.0	618.0	614.0	611.0	610.0	610.0	42.5°	109.8	108.9
639.2	639.8	640.4	641.0	638.0	636.0	631.0	626.0	628.0	630.0	45°	101.8	102.7
652.0	653.0	654.0	655.0	650.0	650.0	648.0	644.0	645.0	646.0	47.5°	97.4	98.3
662.4	663.6	664.8	666.0	660.0	661.0	664.0	658.0	655.0	655.0	50°	93.0	93.9
670.4	671.6	672.8	674.0	668.0	670.0	671.0	667.0	663.0	661.0	52.5°	89.4	89.4
679.6	680.4	681.2	682.0	678.0	680.0	677.0	672.0	673.0	673.0	55°	85.9	85.0
690.4	691.6	692.8	694.0	688.0	688.0	684.0	678.0	685.0	688.0	57.5°	83.2	81.5
698.0	699.0	700.0	701.0	696.0	694.0	689.0	686.0	691.0	693.0	60°	80.6	78.8
698.0	699.0	700.0	701.0	696.0	694.0	692.0	689.0	690.0	690.0	62.5°	78.8	76.2
696.0	697.0	698.0	699.0	694.0	696.0	695.0	690.0	690.0	691.0	65°	77.0	75.3
699.6	700.4	701.2	702.0	698.0	701.0	699.0	694.0	695.0	697.0	66°	76.2	74.4
700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	67.5°	75.3	73.5
										70°	71.7	70.0
										72.5°	66.4	65.5
										75°	61.1	59.3
										77.5°	54.0	53.1
										80°	46.0	45.2
										82.5°	39.0	37.2
										85°	31.0	29.2
										87.5°	21.3	19.5
										90°	13.3	13.2
										92.5°	6.0	5.0
										95°	7.0	6.0
										97.5°	8.0	8.0
										100°	10.0	9.0
										102.5°	18.0	13.0
										105°	36.0	27.0
										107.5°	58.0	49.0



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tinued):

175°	180°
1240.6	1240.6
1220.3	1228.2
1139.7	1137.0
1025.4	1026.3
887.3	889.1
708.4	697.8
507.4	511.8
353.3	352.4
283.4	285.1
242.6	242.6
216.1	216.1
190.4	191.3
172.7	174.4
156.7	157.6
140.8	141.7
127.5	127.5
118.7	119.5
112.5	112.5
106.3	106.3
101.0	102.7
95.6	96.5
90.3	91.2
85.0	85.0
80.6	80.6
77.0	76.2
74.4	72.6
71.7	70.8
70.8	70.0
70.0	69.1
68.2	67.3
65.5	64.6
60.2	58.4
54.9	53.1
50.5	47.8
42.5	40.7
31.0	29.2
18.6	18.6
9.4	9.4
4.0	4.0
5.0	5.0
7.0	7.0
8.0	8.0
11.0	11.0
22.0	21.0
42.0	41.0

CANDELA DISTRIBUTION (continued):

	155°	165°	175°
110°	87.0	74.0	68.0
112.5°	121.0	106.0	99.0
115°	159.0	147.0	139.0
117.5°	197.0	189.0	184.0
120°	233.0	226.0	223.0
122.5°	267.0	261.0	260.0
125°	299.0	296.0	294.0
127.5°	333.0	329.0	329.0
130°	366.0	362.0	361.0
132.5°	401.0	393.0	394.0
135°	432.0	426.0	426.0
137.5°	460.0	459.0	457.0
140°	489.0	487.0	485.0
142.5°	518.0	517.0	515.0
145°	547.0	544.0	546.0
147.5°	574.0	571.0	572.0
150°	593.0	593.0	592.0
152.5°	609.0	608.0	608.0
155°	627.0	625.0	625.0
157.5°	644.0	643.0	643.0
160°	656.0	659.0	660.0
162.5°	665.0	669.0	669.0
165°	676.0	676.0	678.0
167.5°	686.0	684.0	687.0
170°	692.0	692.0	695.0
172.5°	693.0	695.0	697.0
175°	695.0	697.0	698.0
177.5°	699.0	700.0	705.0
180°	700.0	700.0	700.0



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180°
66.0
99.0
140.0
184.0
225.0
263.0
298.0
330.0
363.0
396.0
429.0
460.0
488.0
518.0
550.0
575.0
595.0
611.0
629.0
646.0
663.0
673.0
681.0
690.0
698.0
699.0
700.0
707.0
700.0

(END OF REPORT)