

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: P227187

Luminaire Tested: **ISW-AF-450-LED-E1-SLL-7060**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P227187
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35948)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: ISW-AF-450-LED-E1-SLL-7060
Description: IMPACT ELITE LED WEDGE LUMINAIRE
LIGHT SQUARE WITH ACCULED OPTICS-90° SPILL LIGHT ELIMINATOR LEFT
Light Source: (16) 5700K CCT, 70 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2705.1 lumens
Efficiency: N/A
Efficacy: 106.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B1 - U1 - G1

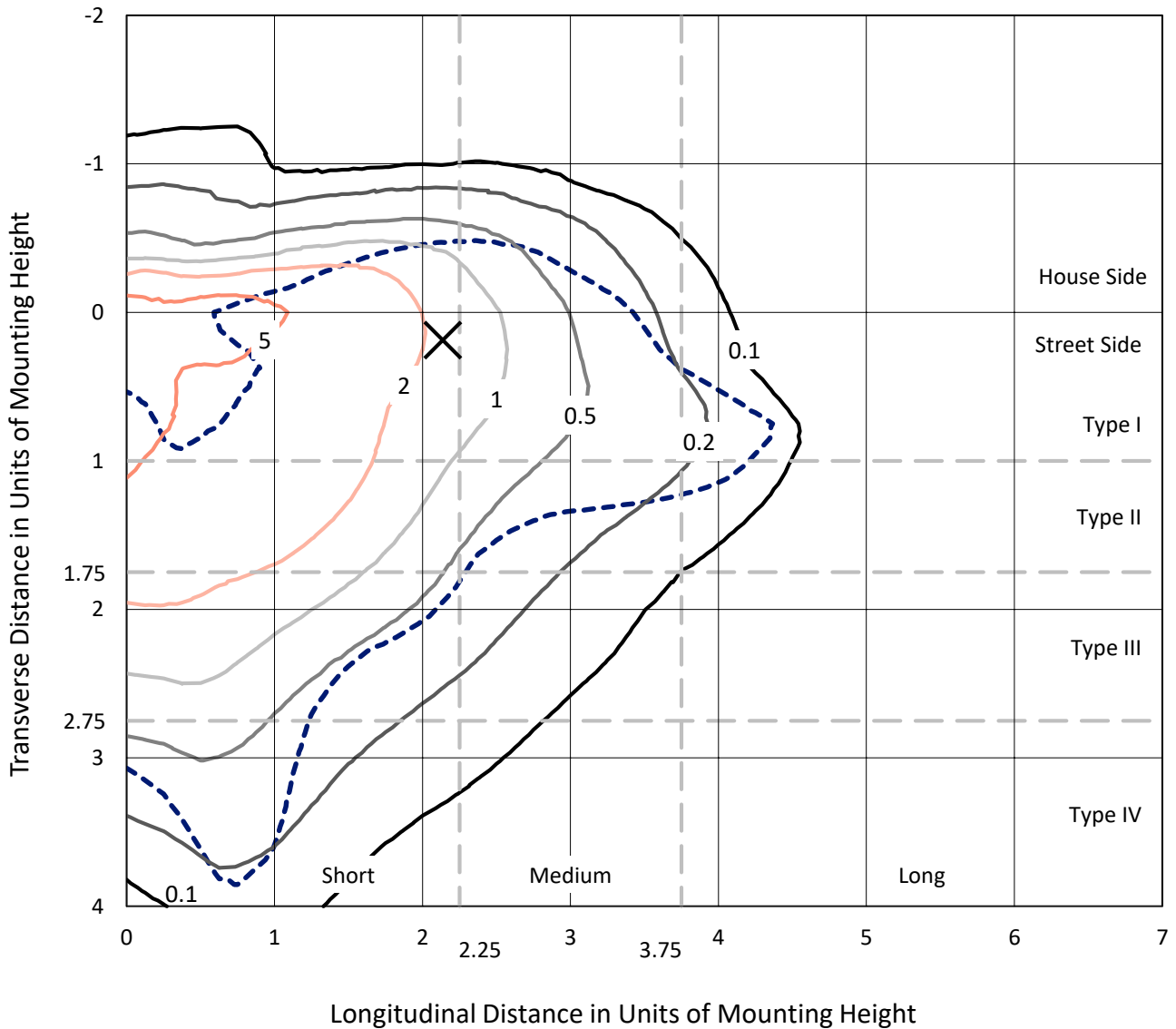
Input Watts (W): 25.31
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

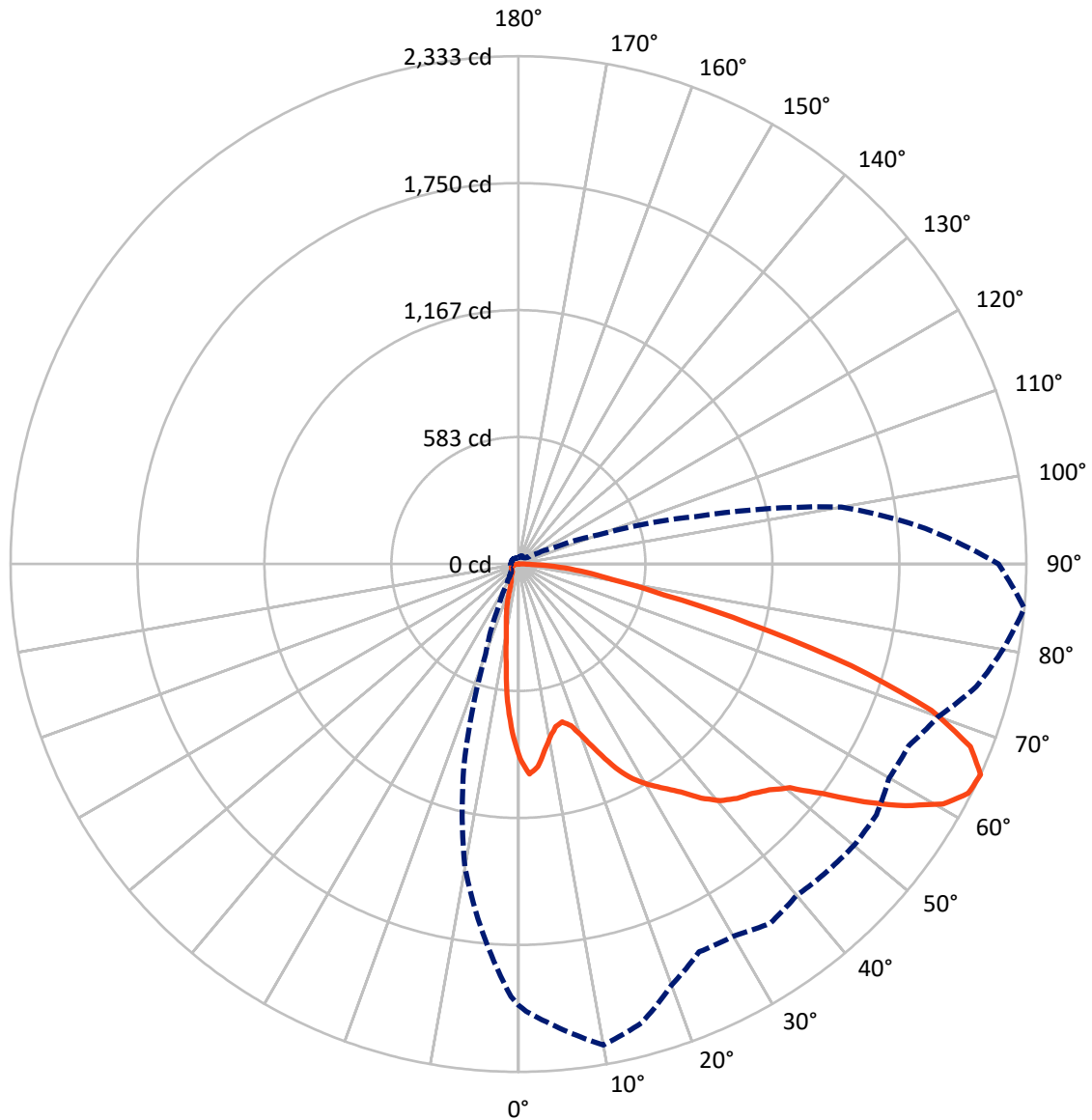
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 9.8 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 85-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	464.0	0.0	464.0
	% Fixture	17.2	0.0	17.2
Street Side	Lumens	2241.0	0.1	2241.1
	% Fixture	82.8	0.0	82.8
Total	Lumens	2705.0	0.1	2705.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.2	2.4
10°-20°	127.4	4.7
20°-30°	181.7	6.7
30°-40°	263.5	9.7
40°-50°	377.0	13.9
50°-60°	578.8	21.4
60°-70°	670.0	24.8
70°-80°	341.8	12.6
80°-90°	98.6	3.6
90°-100°	0.1	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°	2705.0	100.0
0°-180°	2705.1	100.0



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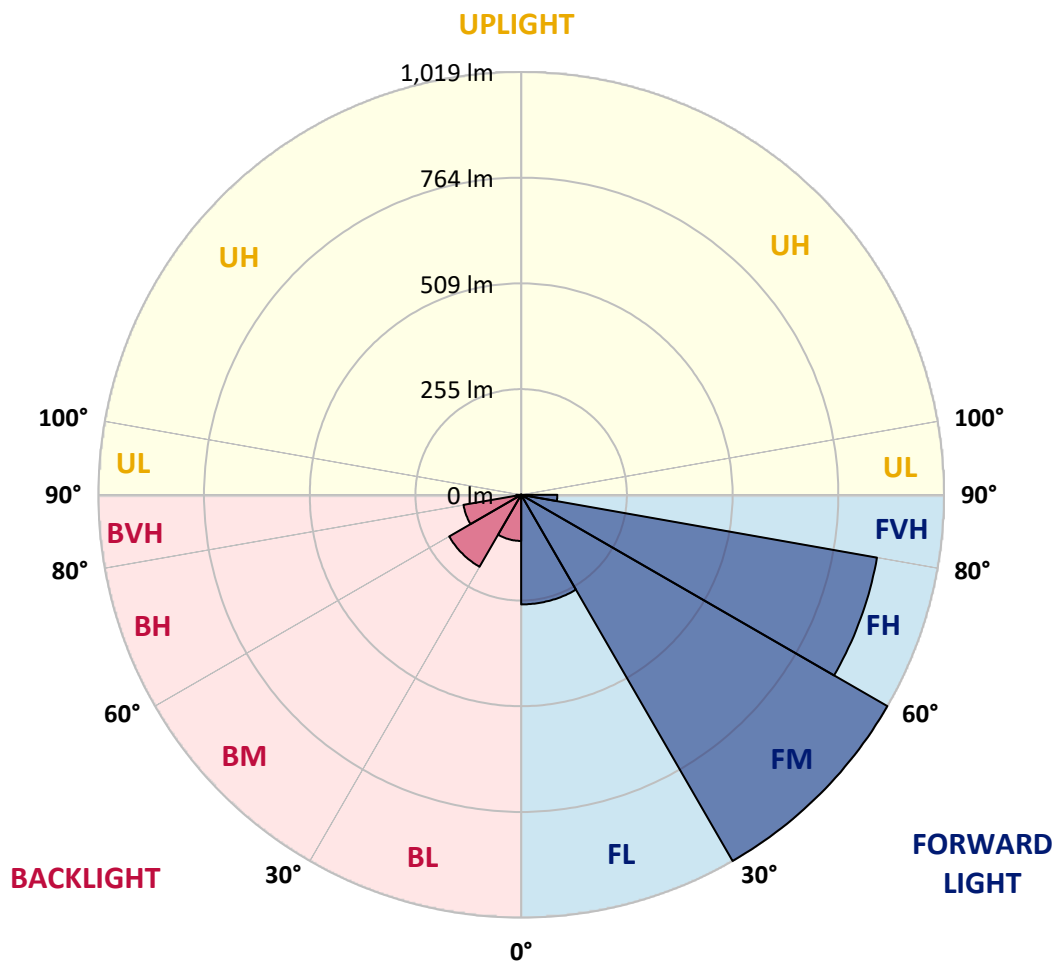
CATALOG NUMBER: ISW-AF-450-LED-E1-SLL-7060

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	264.2	9.8			
FM	(30°-60°)	1019.0	37.7			
FH	(60°-80°)	870.6	32.2			G1/1800
FVH	(80°-90°)	87.2	3.2			G1/100
BL	(0°-30°)	111.1	4.1	B1/500		
BM	(30°-60°)	200.4	7.4	B0/220		
BH	(60°-80°)	141.1	5.2	B1/500		G1/500
BVH	(80°-90°)	11.5	0.4			G1/100
UL	(90°-100°)	0.1	0.0		U1/10	
UH	(100°-180°)	0.0	0.0		U1/10	

BUG Rating: B1-U1-G1

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	10°	15°	20°	25°	30°	35°	40°	45°
0°	893.7	893.7	893.7	893.7	893.7	893.7	893.7	893.7	893.7	893.7	893.7
2.5°	925.1	926.0	938.7	951.0	966.5	964.2	977.0	986.5	995.2	996.6	1002.9
5°	868.6	877.7	906.4	931.0	962.0	986.1	1012.0	1032.5	1047.5	1061.7	1063.5
7.5°	789.4	796.2	829.5	868.2	912.8	944.7	983.8	1018.0	1042.1	1064.8	1069.9
10°	721.6	728.0	764.8	814.9	854.1	895.5	936.0	963.8	995.2	1014.8	1024.3
12.5°	688.8	696.5	731.6	777.1	817.2	857.2	887.8	911.9	929.6	933.3	936.0
15°	701.6	705.6	744.3	784.9	816.7	836.8	845.0	859.5	858.2	865.4	866.8
17.5°	753.0	751.2	792.1	820.4	835.9	833.6	820.8	813.1	799.4	795.3	807.2
20°	841.3	847.7	874.1	891.4	875.5	838.6	803.5	779.4	760.3	753.9	752.5
22.5°	944.7	952.9	981.5	972.4	931.9	864.5	800.8	762.1	738.4	731.6	728.9
25°	1053.0	1058.5	1073.0	1042.1	985.2	897.8	819.9	765.7	734.3	724.3	722.9
27.5°	1140.4	1145.9	1139.1	1103.5	1021.1	935.1	846.3	782.1	741.2	731.1	726.6
30°	1211.9	1214.6	1191.9	1147.7	1065.8	976.5	880.9	810.8	763.0	740.2	737.1
32.5°	1292.0	1290.2	1246.0	1185.0	1103.5	1013.9	920.5	843.1	784.0	756.2	751.2
35°	1379.9	1363.9	1286.1	1221.9	1129.5	1042.5	956.5	877.3	817.6	780.8	774.4
37.5°	1458.2	1441.8	1337.5	1251.0	1155.4	1064.8	984.7	921.4	869.1	835.4	832.7
40°	1519.2	1499.2	1376.7	1270.6	1168.2	1081.2	1018.0	977.0	942.4	915.1	915.1
42.5°	1568.4	1546.5	1414.9	1293.4	1179.6	1106.3	1073.5	1059.4	1052.1	1037.1	1042.5
45°	1615.7	1593.4	1446.4	1308.0	1205.1	1155.0	1159.5	1171.8	1193.7	1185.0	1192.8
47.5°	1660.8	1638.9	1481.9	1331.2	1254.2	1242.4	1266.1	1315.2	1358.0	1391.7	1415.4
50°	1736.3	1710.4	1545.6	1399.5	1331.6	1337.5	1405.8	1502.3	1572.0	1603.0	1601.1
52.5°	1879.8	1842.9	1682.6	1526.9	1442.3	1475.0	1555.6	1677.2	1768.2	1792.3	1801.9
55°	2055.0	2025.9	1880.7	1695.8	1634.4	1645.8	1745.9	1883.4	1953.5	1978.5	1986.7
57.5°	2157.9	2150.2	2059.1	1876.6	1816.9	1812.4	1943.0	2055.5	2116.0	2139.7	2132.4
59°	2182.0	2184.3	2132.4	2004.5	1922.5	1912.5	2045.5	2149.7	2200.3	2207.5	2203.9
60°	2179.8	2192.5	2186.1	2074.6	1989.5	1976.7	2088.7	2188.0	2230.3	2241.7	2228.9
62.5°	2132.9	2154.7	2215.3	2203.4	2141.1	2076.0	2128.8	2200.7	2228.0	2217.1	2207.5
65°	2026.3	2055.0	2139.3	2244.0	2183.9	2058.2	1965.8	1974.0	2015.4	1988.1	2001.3
67.5°	1842.4	1875.2	1919.8	2157.5	2070.1	1859.3	1700.4	1622.5	1603.0	1629.4	1671.2
70°	1498.7	1520.1	1633.0	1969.0	1817.8	1528.3	1328.9	1225.1	1190.5	1251.5	1294.3
72.5°	1057.1	1089.0	1237.8	1629.4	1495.5	1224.2	1005.7	910.1	875.5	878.2	915.5
75°	643.3	686.5	865.0	1288.4	1178.7	937.8	766.2	697.5	687.0	681.1	674.7
77.5°	424.3	440.7	568.6	889.1	794.9	667.0	575.0	603.2	634.6	641.5	649.7
80°	287.7	292.7	368.8	623.7	523.5	492.6	464.8	531.3	590.9	601.8	595.9
82.5°	177.1	192.1	257.2	420.7	417.5	402.9	367.4	419.3	458.9	465.7	478.0
85°	61.5	64.2	158.0	371.5	424.3	428.9	302.7	239.0	268.6	263.6	189.4
87.5°	26.4	29.6	49.2	248.6	287.3	237.6	138.4	122.9	94.7	53.3	51.4
90°	1.8	1.8	1.4	2.3	6.8	4.6	4.1	1.4	0.0	0.0	0.0
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	0°	1°	5°	10°	15°	20°	25°	30°	35°	40°	45°
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°
0°	893.7	893.7	893.7	893.7	893.7	893.7	893.7	893.7	893.7	893.7	893.7
2.5°	1001.6	995.6	999.3	994.3	986.1	980.6	974.2	966.1	956.5	943.7	931.0
5°	1059.4	1054.8	1043.4	1027.1	1004.3	985.2	962.4	935.6	913.2	884.6	857.7
7.5°	1064.4	1057.1	1036.2	1005.7	970.6	935.1	908.2	864.5	836.3	790.8	760.3
10°	1018.9	1019.3	998.4	969.7	933.3	891.4	852.7	804.9	763.5	717.0	666.0
12.5°	951.9	958.3	959.2	933.7	898.2	854.1	810.8	765.3	713.8	664.2	617.3
15°	875.9	894.1	895.5	889.1	870.5	833.1	793.5	752.5	700.2	646.0	593.2
17.5°	808.1	825.4	841.3	855.9	856.8	839.0	814.9	779.9	727.5	663.8	601.8
20°	756.6	775.3	802.6	829.5	859.1	868.2	870.0	847.7	791.7	713.8	630.1
22.5°	735.2	757.1	784.9	835.4	887.8	920.1	938.3	938.3	879.6	788.5	676.5
25°	730.7	748.4	790.8	853.6	923.7	980.2	1014.8	1038.0	995.6	884.6	733.9
27.5°	733.9	758.0	810.4	874.5	947.8	1020.2	1077.1	1117.7	1078.0	950.1	787.1
30°	746.6	782.6	836.8	903.2	978.8	1055.3	1124.0	1175.5	1146.3	1009.8	837.7
32.5°	768.9	812.6	874.1	934.2	1009.3	1092.2	1160.0	1227.8	1206.4	1051.2	864.5
35°	802.2	853.6	909.6	970.2	1042.1	1124.9	1197.3	1286.1	1278.4	1103.1	891.4
37.5°	855.9	908.7	960.1	1012.0	1080.3	1160.9	1251.0	1364.4	1358.0	1180.0	934.6
40°	950.6	981.5	1019.8	1053.0	1117.2	1194.1	1290.7	1429.1	1451.8	1246.0	972.9
42.5°	1068.0	1086.2	1097.2	1106.3	1139.1	1211.4	1319.3	1472.3	1509.6	1295.2	1002.5
45°	1217.8	1212.3	1190.5	1169.6	1165.9	1221.5	1332.5	1504.2	1555.2	1343.0	1032.5
47.5°	1394.9	1383.1	1323.4	1254.7	1216.4	1239.7	1355.8	1551.1	1611.2	1405.8	1069.9
50°	1599.3	1571.5	1474.1	1358.0	1287.5	1291.1	1414.5	1616.2	1684.9	1487.8	1139.5
52.5°	1788.7	1739.1	1623.0	1469.6	1368.5	1380.8	1520.1	1750.9	1836.1	1623.4	1256.5
55°	1955.8	1892.0	1766.9	1598.9	1507.4	1528.8	1689.0	1929.4	2010.0	1785.1	1374.9
57.5°	2097.8	2030.0	1906.6	1758.7	1644.8	1662.6	1839.7	2095.1	2149.3	1930.3	1488.2
59°	2162.5	2095.5	1981.7	1845.2	1738.6	1776.0	1946.2	2177.5	2200.7	1986.3	1531.5
60°	2193.9	2127.0	2026.8	1893.4	1796.0	1845.2	2002.7	2239.9	2219.8	1994.5	1547.9
62.5°	2191.6	2144.7	2078.7	1987.7	1969.9	2051.8	2186.1	2320.0	2233.0	1970.8	1558.3
65°	2011.8	2007.7	1966.7	1977.2	2051.4	2177.9	2260.3	2333.2	2205.7	1876.6	1507.8
67.5°	1678.1	1694.9	1700.4	1764.6	1938.0	2152.9	2225.3	2239.4	2086.9	1674.9	1350.7
70°	1295.7	1258.3	1319.8	1433.1	1683.1	1959.9	2062.8	2013.6	1843.8	1402.6	1103.1
72.5°	917.3	928.3	1016.6	1163.6	1418.1	1704.9	1866.1	1598.0	1387.2	1049.8	782.1
75°	690.2	741.6	784.4	913.2	1151.8	1460.5	1593.4	1098.5	903.7	723.9	511.7
77.5°	661.5	657.4	624.6	651.9	830.4	1023.0	1136.8	685.6	565.9	473.5	309.1
80°	611.4	576.4	516.7	490.3	523.1	656.9	721.6	440.7	376.5	331.0	174.4
82.5°	474.4	450.7	387.9	386.1	436.1	466.6	496.2	312.3	283.2	268.1	107.0
85°	300.9	309.1	316.9	386.5	483.9	489.4	386.1	190.3	149.3	210.3	68.3
87.5°	89.2	145.2	176.2	299.1	436.1	437.5	290.5	62.4	56.0	65.6	39.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P227187

CATALOG NUMBER: ISW-AF-450-LED-E1-SLL-7060

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P227187

CATALOG NUMBER: ISW-AF-450-LED-E1-SLL-7060

CANDELA DISTRIBUTION (continued):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	893.7	893.7	893.7	893.7	893.7	893.7	893.7	893.7	893.7	893.7	893.7
2.5°	917.8	916.0	903.2	881.8	883.7	873.6	860.9	840.4	836.3	824.9	823.1
5°	834.9	813.5	785.8	752.1	739.3	722.0	704.3	691.5	675.6	661.0	680.6
7.5°	724.3	692.9	660.6	625.1	604.6	576.4	561.3	532.2	510.8	506.7	489.9
10°	631.9	592.3	555.4	523.5	485.3	458.9	439.8	423.8	409.3	391.5	380.6
12.5°	570.4	525.8	486.7	447.1	428.9	407.0	395.2	380.1	359.2	344.2	329.6
15°	542.7	494.4	451.6	417.0	390.6	370.1	349.2	331.0	308.2	291.4	274.5
17.5°	539.0	476.2	422.0	383.3	354.6	332.3	304.6	280.4	252.7	234.0	219.9
20°	543.1	462.5	394.7	344.2	315.0	275.9	249.9	220.3	193.0	168.4	146.1
22.5°	559.5	455.3	367.8	312.3	269.1	224.4	196.7	158.9	135.7	112.0	103.3
25°	581.8	450.7	344.6	277.3	222.6	178.5	140.7	109.3	98.8	92.9	89.7
27.5°	605.5	442.5	318.7	244.9	185.3	131.6	105.2	92.0	87.9	84.7	82.4
30°	623.2	426.6	286.8	210.3	147.5	112.4	93.8	85.1	82.4	78.8	76.5
32.5°	631.0	402.0	258.1	177.6	124.3	96.5	81.9	76.9	74.2	71.0	69.7
35°	629.6	374.2	243.6	164.8	113.8	85.6	71.9	68.7	65.1	61.9	58.7
37.5°	631.0	348.7	232.2	161.6	109.3	77.4	65.6	63.3	60.5	57.4	54.6
40°	636.4	334.6	226.7	154.8	105.6	74.2	60.5	58.3	57.8	54.2	51.9
42.5°	638.7	336.0	224.0	145.2	96.5	73.3	60.5	55.5	55.5	52.8	50.1
45°	636.0	346.0	225.8	139.8	89.7	68.7	63.7	55.5	54.2	51.9	49.2
47.5°	644.2	353.3	225.8	138.9	85.1	64.2	60.5	61.0	55.1	52.4	48.3
50°	677.9	360.1	221.3	137.5	83.8	59.6	57.4	60.1	61.9	53.3	48.7
52.5°	737.5	368.8	216.2	135.2	81.9	56.0	53.3	56.5	63.3	56.0	48.7
55°	798.5	384.2	213.1	131.6	79.2	53.7	48.3	54.2	57.8	55.5	48.3
57.5°	863.6	401.1	209.9	122.9	72.8	51.4	46.4	47.3	51.9	53.7	46.9
59°	883.2	409.3	207.1	116.5	67.4	49.6	45.1	43.7	46.4	51.4	46.0
60°	897.3	409.7	204.0	111.1	64.2	48.7	44.2	42.3	43.2	52.8	46.4
62.5°	898.7	409.3	193.9	99.7	57.8	46.9	42.8	40.5	39.6	44.2	47.3
65°	842.2	390.2	175.7	93.8	58.3	45.1	40.5	38.7	36.9	37.8	41.0
67.5°	736.6	341.0	156.6	95.1	61.5	43.7	38.7	36.9	35.5	34.6	36.0
70°	557.2	283.2	151.1	98.3	64.2	42.8	36.0	34.1	33.2	32.8	32.8
72.5°	386.1	233.1	145.2	100.6	66.5	42.3	33.2	31.4	31.0	30.5	30.5
75°	248.6	169.4	120.2	85.6	60.5	38.7	30.0	28.2	27.8	27.3	27.8
77.5°	147.0	118.4	88.3	60.1	44.2	31.0	25.9	24.6	24.6	24.6	25.0
80°	81.5	70.1	58.7	38.7	31.4	23.2	21.4	20.0	20.0	20.5	21.4
82.5°	48.7	38.7	33.2	24.6	21.4	16.4	15.9	15.0	15.5	15.9	16.8
85°	31.9	24.6	20.0	16.4	14.6	10.5	9.1	9.6	10.0	10.9	11.4
87.5°	17.8	13.7	10.9	9.6	8.6	4.6	3.6	3.6	4.6	5.5	6.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P227187
 CATALOG NUMBER: ISW-AF-450-LED-E1-SLL-7060

REPORT N
 CATALOG

CANDELA DISTRIBUTION (continued):

CANDELA

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0°
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5°
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5°
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5°
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10°
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.5°
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15°
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.5°
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20°
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.5°
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25°
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.5°
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30°
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.5°
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35°
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	37.5°
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40°
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.5°
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45°
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.5°
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50°
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.5°
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55°
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	57.5°
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	59°
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60°
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	62.5°
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	65°
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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°

'227187
 ISW-AF-450-LED-E1-SLL-7060

REPORT NUMBER: P227187
 CATALOG NUMBER: ISW-AF-4!

TION (continued):

CANDELA DISTRIBUTION (con

165°	170°	175°	180°	185°	190°	195°	200°	205°	210°		215°	220°
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0°	893.7	893.7
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5°	774.4	773.9
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5°	635.5	631.4
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5°	492.6	507.6
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10°	355.1	365.6
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.5°	247.2	252.7
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15°	170.3	181.2
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.5°	132.5	133.8
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20°	109.3	110.2
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.5°	97.0	98.8
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25°	81.5	83.3
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.5°	71.9	73.8
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30°	66.0	66.9
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.5°	60.1	60.1
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35°	55.1	55.5
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	37.5°	51.4	52.4
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40°	48.3	48.7
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.5°	43.7	44.6
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45°	39.6	40.1
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.5°	36.9	36.9
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50°	35.1	35.5
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.5°	34.1	34.6
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55°	33.7	34.6
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	57.5°	33.7	34.1
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	59°	33.2	33.7
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60°	33.2	34.1
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	62.5°	31.9	32.8
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	65°	31.0	31.9
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	67.5°	29.6	31.0
										70°	28.2	29.6
										72.5°	26.4	28.2
										75°	24.6	25.9
										77.5°	22.3	23.7
										80°	19.6	20.0
										82.5°	16.4	16.4
										85°	12.3	10.9
										87.5°	6.8	7.3
										90°	0.0	0.0
										92.5°	0.0	0.0
										95°	0.0	0.0
										97.5°	0.0	0.0
										100°	0.0	0.0
										102.5°	0.0	0.0
										105°	0.0	0.0
										107.5°	0.0	0.0



REPORT NUMBER: P227187

CATALOG NUMBER: ISW-AF-450-LED-E1-SLL-7060

SLL-7060

CANDELA DISTRIBUTION (continued):

230°	235°	240°	245°	250°	255°	260°	265°		270°	275°	280°	285°
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0°	893.7	893.7	893.7	893.7
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5°	767.6	784.4	786.7	789.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5°	631.0	647.8	638.3	642.4
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5°	460.7	449.8	463.9	472.6
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10°	336.4	349.2	354.6	364.7
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.5°	279.1	287.3	297.3	313.2
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15°	226.3	232.2	244.9	260.4
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.5°	164.8	173.5	181.6	194.4
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20°	110.6	114.3	124.3	130.2
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.5°	88.8	90.1	92.0	97.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25°	79.7	80.6	81.9	83.8
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.5°	72.4	72.8	74.2	75.1
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30°	66.0	65.6	66.0	67.4
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.5°	59.2	59.2	60.1	60.1
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35°	51.0	50.5	51.4	52.8
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	37.5°	46.9	47.3	48.3	49.2
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40°	44.6	45.1	46.0	46.9
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.5°	42.3	43.2	44.2	45.5
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45°	41.0	41.9	43.2	44.6
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.5°	40.5	41.4	42.8	44.6
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50°	39.6	41.0	42.3	44.2
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.5°	39.6	40.5	41.9	44.2
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55°	38.2	39.6	41.0	43.2
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	57.5°	37.3	38.2	40.1	42.8
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	59°	36.9	37.8	39.6	42.3
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60°	36.0	37.3	39.2	41.9
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	62.5°	35.1	36.4	38.2	41.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	65°	33.7	35.5	37.3	39.2
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	67.5°	32.8	33.7	35.5	37.3
								70°	31.0	31.9	33.2	34.6
								72.5°	28.7	29.1	30.0	31.4
								75°	25.5	25.9	26.4	27.8
								77.5°	22.3	22.3	22.8	24.6
								80°	18.7	18.7	19.1	20.0
								82.5°	14.1	14.1	15.0	16.4
								85°	10.0	9.6	10.9	11.8
								87.5°	5.9	5.5	5.9	5.9
								90°	0.5	1.4	0.9	0.9
								92.5°	0.0	0.0	0.0	0.0
								95°	0.0	0.0	0.0	0.0
								97.5°	0.0	0.0	0.0	0.0
								100°	0.0	0.0	0.0	0.0
								102.5°	0.0	0.0	0.0	0.0
								105°	0.0	0.0	0.0	0.0
								107.5°	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

295°	300°	305°	310°	315°	320°		325°	330°	335°	340°	345°	350°
0.0	0.0	0.0	0.0	0.0	0.0	0°	893.7	893.7	893.7	893.7	893.7	893.7
0.0	0.0	0.0	0.0	0.0	0.0	2.5°	841.3	853.2	871.8	875.5	890.5	901.0
0.0	0.0	0.0	0.0	0.0	0.0	5°	712.9	741.2	751.2	770.7	804.9	822.2
0.0	0.0	0.0	0.0	0.0	0.0	7.5°	588.2	609.6	633.7	665.1	690.2	719.8
0.0	0.0	0.0	0.0	0.0	0.0	10°	483.9	514.4	545.9	571.3	606.4	641.9
0.0	0.0	0.0	0.0	0.0	0.0	12.5°	429.8	446.6	477.6	513.5	557.2	596.8
0.0	0.0	0.0	0.0	0.0	0.0	15°	401.5	421.6	454.8	493.0	539.5	588.6
0.0	0.0	0.0	0.0	0.0	0.0	17.5°	366.5	398.3	436.1	490.8	550.9	619.1
0.0	0.0	0.0	0.0	0.0	0.0	20°	331.9	370.6	420.2	492.1	575.4	664.2
0.0	0.0	0.0	0.0	0.0	0.0	22.5°	301.4	347.4	410.2	500.3	606.9	725.2
0.0	0.0	0.0	0.0	0.0	0.0	25°	265.4	326.9	402.4	517.2	655.1	807.2
0.0	0.0	0.0	0.0	0.0	0.0	27.5°	236.7	307.3	391.1	531.7	699.3	885.9
0.0	0.0	0.0	0.0	0.0	0.0	30°	204.9	284.5	375.1	536.7	753.0	950.6
0.0	0.0	0.0	0.0	0.0	0.0	32.5°	179.4	263.1	356.9	532.2	777.1	995.6
0.0	0.0	0.0	0.0	0.0	0.0	35°	167.1	247.7	341.4	516.3	797.2	1044.4
0.0	0.0	0.0	0.0	0.0	0.0	37.5°	158.9	230.8	326.4	489.9	819.9	1092.6
0.0	0.0	0.0	0.0	0.0	0.0	40°	148.4	217.6	314.1	470.7	837.7	1132.7
0.0	0.0	0.0	0.0	0.0	0.0	42.5°	138.9	205.8	304.6	453.9	842.2	1168.6
0.0	0.0	0.0	0.0	0.0	0.0	45°	130.7	198.5	297.3	454.8	845.4	1218.7
0.0	0.0	0.0	0.0	0.0	0.0	47.5°	124.3	191.7	294.6	470.3	879.1	1288.4
0.0	0.0	0.0	0.0	0.0	0.0	50°	118.4	185.7	290.0	500.3	933.3	1382.6
0.0	0.0	0.0	0.0	0.0	0.0	52.5°	111.5	177.6	284.1	531.3	992.5	1508.7
0.0	0.0	0.0	0.0	0.0	0.0	55°	102.4	166.6	277.7	557.2	1073.0	1662.1
0.0	0.0	0.0	0.0	0.0	0.0	57.5°	88.3	153.9	273.6	570.4	1122.7	1750.5
0.0	0.0	0.0	0.0	0.0	0.0	59°	81.0	141.6	271.3	564.1	1135.9	1765.5
0.0	0.0	0.0	0.0	0.0	0.0	60°	76.9	134.3	267.7	556.3	1139.5	1755.9
0.0	0.0	0.0	0.0	0.0	0.0	62.5°	71.5	117.0	252.7	517.6	1088.5	1640.3
0.0	0.0	0.0	0.0	0.0	0.0	65°	72.8	110.6	218.5	440.7	971.5	1414.5
0.0	0.0	0.0	0.0	0.0	0.0	67.5°	74.7	107.9	188.9	356.0	774.4	1170.5
						70°	73.3	106.5	171.6	283.2	580.0	876.4
						72.5°	71.5	100.6	148.9	227.6	367.8	613.7
						75°	63.3	84.7	117.0	156.2	232.2	447.1
						77.5°	49.6	65.1	82.9	97.0	117.9	315.5
						80°	36.4	47.3	54.2	58.3	65.6	215.3
						82.5°	25.9	31.9	34.6	36.9	43.7	161.2
						85°	19.6	22.3	24.1	24.1	29.6	113.8
						87.5°	10.9	11.4	11.4	12.3	14.6	31.0
						90°	3.2	3.2	2.7	3.2	2.3	1.8
						92.5°	0.0	0.0	0.0	0.0	0.0	0.0
						95°	0.0	0.0	0.0	0.0	0.0	0.0
						97.5°	0.0	0.0	0.0	0.0	0.0	0.0
						100°	0.0	0.0	0.0	0.0	0.0	0.0
						102.5°	0.0	0.0	0.0	0.0	0.0	0.0
						105°	0.0	0.0	0.0	0.0	0.0	0.0
						107.5°	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P227187

CATALOG NUMBER: ISW-AF-450-LED-E1-SLL-7060

CANDELA DISTRIBUTION (continued):

355°	359°	360°		325°	330°	335°	340°	345°	350°	355°
893.7	893.7	893.7	110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
912.8	919.6	925.1	112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
848.6	865.4	868.6	115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
752.5	779.9	789.4	117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
682.0	711.6	721.6	120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
643.3	677.9	688.8	122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
644.2	685.6	701.6	125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
686.1	733.4	753.0	127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
758.0	826.7	841.3	130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
855.4	922.8	944.7	132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
946.9	1036.2	1053.0	135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1037.1	1125.4	1140.4	137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1106.7	1199.1	1211.9	140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1173.7	1277.9	1292.0	142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1248.3	1363.5	1379.9	145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1315.7	1447.7	1458.2	147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1390.4	1516.5	1519.2	150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1451.4	1567.4	1568.4	152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1510.5	1615.3	1615.7	155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1572.5	1667.6	1660.8	157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1670.3	1729.5	1736.3	160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1819.2	1872.0	1879.8	162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1992.2	2065.5	2055.0	165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2065.5	2149.3	2157.9	167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2053.2	2167.5	2182.0	170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2033.6	2162.0	2179.8	172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1922.5	2105.1	2132.9	175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1735.9	1987.2	2026.3	177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1496.0	1811.0	1842.4	180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1167.3	1471.8	1498.7								
775.8	1010.7	1057.1								
493.0	651.9	643.3								
363.8	423.8	424.3								
264.0	290.9	287.7								
204.4	177.6	177.1								
71.5	62.8	61.5								
31.0	25.9	26.4								
1.4	1.4	1.8								
0.0	0.0	0.0								
0.0	0.0	0.0								
0.0	0.0	0.0								
0.0	0.0	0.0								
0.0	0.0	0.0								
0.0	0.0	0.0								
0.0	0.0	0.0								
0.0	0.0	0.0								

