

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: P228335

Luminaire Tested: **ISS-AF-1000-LED-E1-SL4-ULG**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P228335  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29763)-DOWNLIGHT AND  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: ISS-AF-1000-LED-E1-SL4-ULG  
Description: IMPACT ELITE LED QUATER SPHERE LUMINAIRE WITH UPLIGHT  
LIGHT SQUARE WITH ACCULED OPTICS-TYPE IV W/SPILL CONTROL, WITH UPLIGHT  
GLOW  
Light Source: (16) 4000K CCT, 70 CRI LEDs and (1) UPLIGHT LED  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

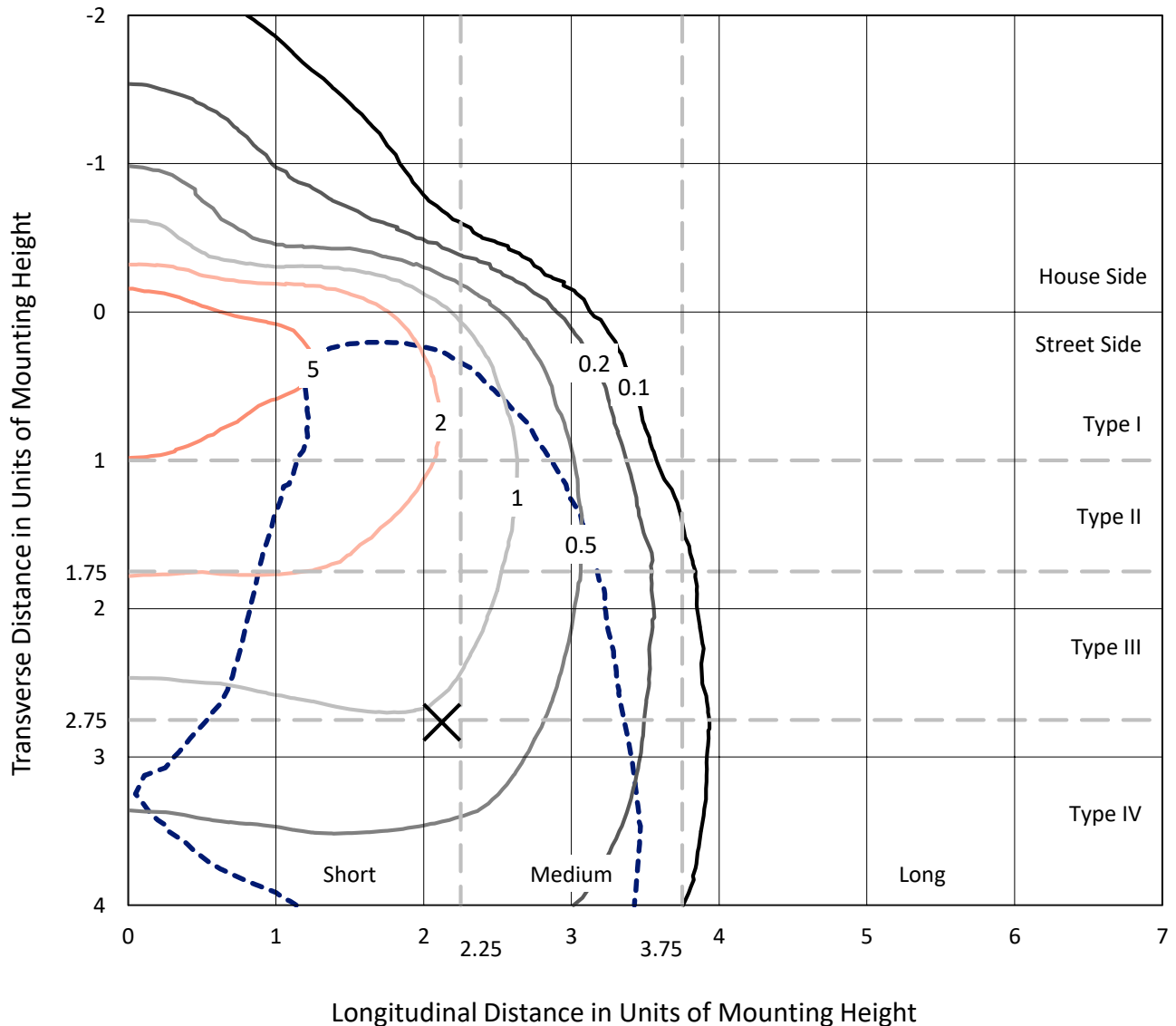
Lumens per Lamp: N/A  
Luminaire Lumens: 6689.3 lumens  
Efficiency: N/A  
Efficacy: 93.8 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 0.5' x H: 0.54')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B1 - U5 - G2  
  
Input Watts (W): 71.3  
Input Voltage (V): 120  
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: P228335  
 CATALOG NUMBER: ISS-AF-1000-LED-E1-SL4-ULG

### Iso-Footcandle Lines of Horizontal Illumination

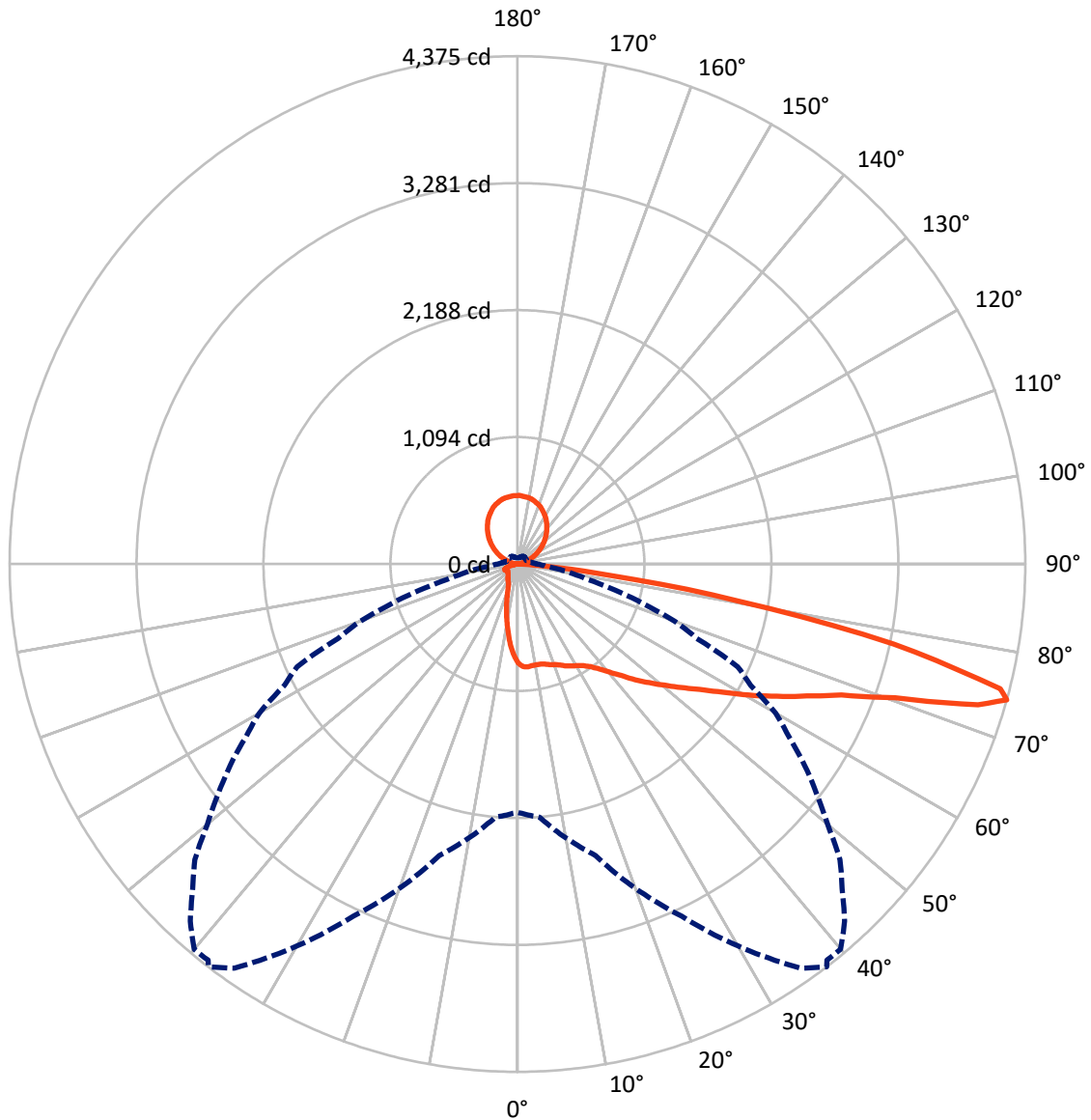
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 9 fc  
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P228335  
CATALOG NUMBER: ISS-AF-1000-LED-E1-SL4-ULG

### Luminous Intensity Polar Plot



— Vertical Plane Through 37.5-Deg Lateral    - - - Horizontal Cone Through 74-Deg Vertical

REPORT NUMBER: P228335

CATALOG NUMBER: ISS-AF-1000-LED-E1-SL4-ULG

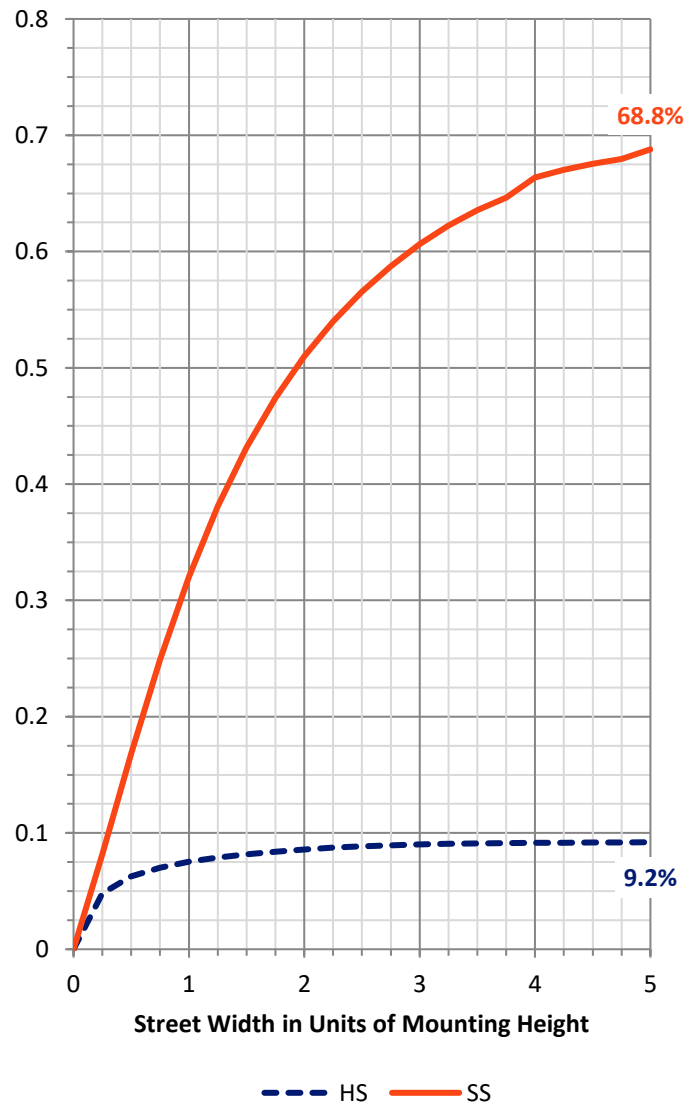
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	620.2	729.4	1349.6
	% Fixture	9.3	10.9	20.2
<b>Street Side</b>	Lumens	4610.2	729.4	5339.6
	% Fixture	68.9	10.9	79.8
<b>Total</b>	Lumens	5230.4	1458.9	6689.3
	% Fixture	78.2	21.8	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	74.3	1.1
10°-20°	189.3	2.8
20°-30°	293.3	4.4
30°-40°	435.1	6.5
40°-50°	669.3	10.0
50°-60°	989.4	14.8
60°-70°	1318.8	19.7
70°-80°	1138.4	17.0
80°-90°	122.4	1.8
90°-100°	4.8	0.1
100°-110°	70.6	1.1
110°-120°	156.6	2.3
120°-130°	229.0	3.4
130°-140°	271.7	4.1
140°-150°	275.5	4.1
150°-160°	236.4	3.5
160°-170°	158.7	2.4
170°-180°	55.6	0.8
0°-90°	5230.4	78.2
0°-180°	6689.3	100.0

**Coefficient of Utilization**



REPORT NUMBER: P228335

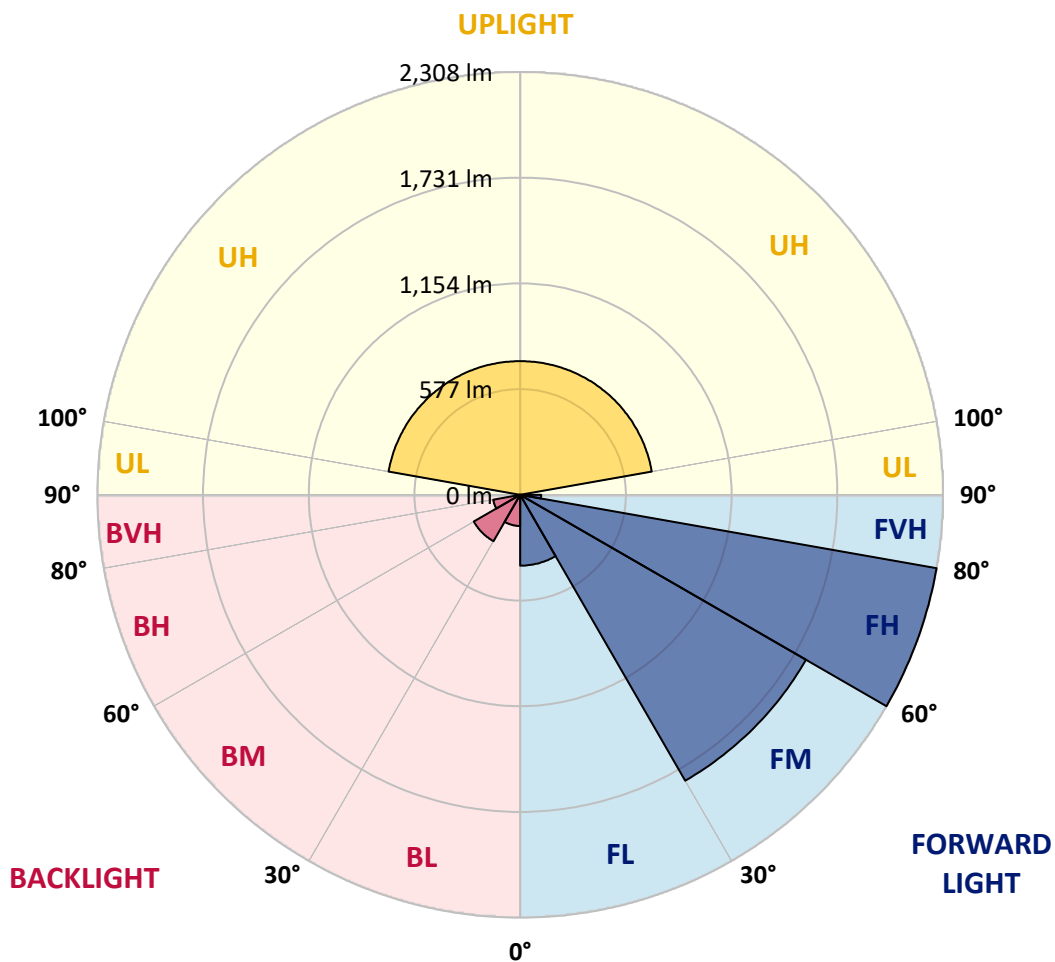
CATALOG NUMBER: ISS-AF-1000-LED-E1-SL4-ULG

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	386.7	5.8			
FM	(30°-60°)	1801.5	26.9			
FH	(60°-80°)	2307.6	34.5			G2/5000
FVH	(80°-90°)	114.4	1.7			G2/225
BL	(0°-30°)	170.3	2.5	B1/500		
BM	(30°-60°)	292.3	4.4	B1/1000		
BH	(60°-80°)	149.5	2.2	B1/500		G1/500
BVH	(80°-90°)	8.1	0.1			G0/10
UL	(90°-100°)	4.8	0.1		U1/10	
UH	(100°-180°)	729.4	10.9		U4/1000	

**BUG Rating: B1-U5-G2**

Type IV Short





REPORT NUMBER: P228335

CATALOG NUMBER: ISS-AF-1000-LED-E1-SL4-ULG

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	37.5°	38°	40°	42.5°	45°	47.5°
0°	853.6	853.6	853.6	853.6	853.6	853.6	853.6	853.6	853.6	853.6	853.6
2.5°	902.3	900.4	896.5	894.6	890.6	884.8	890.6	882.8	878.9	882.8	875.0
5°	918.0	916.1	912.1	904.3	900.4	890.6	896.5	886.7	884.8	888.6	878.9
7.5°	919.9	916.1	910.1	900.4	896.5	884.8	888.6	877.0	873.1	877.0	871.0
10°	914.0	912.1	906.2	890.6	886.7	882.8	880.9	873.1	871.0	869.1	867.2
12.5°	904.3	904.3	900.4	894.6	892.5	884.8	886.7	878.9	880.9	877.0	873.1
15°	900.4	898.5	902.3	906.2	906.2	894.6	902.3	896.5	892.5	894.6	888.6
17.5°	896.5	898.5	912.1	919.9	923.8	912.1	923.8	912.1	904.3	914.0	904.3
20°	894.6	900.4	923.8	941.4	943.4	923.8	943.4	923.8	923.8	935.6	918.0
22.5°	904.3	914.0	947.3	966.8	970.7	945.3	968.7	943.4	943.4	953.1	935.6
25°	935.6	945.3	982.4	1003.9	1000.0	972.6	994.1	968.7	966.8	978.6	955.0
27.5°	976.5	990.2	1025.4	1044.9	1031.2	994.1	1025.4	988.3	988.3	1005.9	974.6
30°	1035.1	1044.9	1076.1	1078.1	1060.5	1015.6	1050.8	1009.8	1003.9	1035.1	996.0
32.5°	1099.6	1107.4	1130.9	1117.2	1091.8	1044.9	1086.0	1037.1	1035.1	1068.4	1023.5
35°	1168.0	1175.8	1183.6	1160.1	1136.7	1086.0	1130.9	1082.0	1080.0	1117.2	1074.2
37.5°	1238.3	1238.3	1238.3	1211.0	1195.3	1146.5	1187.4	1148.5	1144.5	1183.6	1142.5
40°	1295.0	1298.8	1293.0	1267.5	1259.8	1224.6	1259.8	1224.6	1230.5	1265.6	1232.5
42.5°	1341.8	1345.7	1347.6	1326.2	1333.9	1314.5	1341.8	1316.4	1318.4	1357.5	1337.9
45°	1388.7	1386.7	1402.4	1396.4	1420.0	1421.9	1437.5	1427.7	1431.6	1461.0	1455.0
47.5°	1437.5	1427.7	1445.3	1470.7	1513.7	1527.4	1537.1	1541.0	1556.6	1570.3	1583.9
50°	1484.4	1474.6	1486.3	1542.9	1611.4	1640.6	1642.6	1662.1	1679.7	1699.2	1726.5
52.5°	1533.2	1525.4	1537.1	1617.2	1726.5	1767.6	1761.7	1794.9	1820.3	1841.8	1886.7
55°	1583.9	1576.2	1587.9	1707.0	1849.6	1906.3	1900.3	1947.3	1996.1	2003.9	2054.7
57.5°	1632.8	1623.0	1656.3	1812.5	1996.1	2082.0	2054.7	2126.9	2173.8	2169.9	2240.3
60°	1685.5	1677.7	1730.4	1941.4	2179.7	2291.0	2250.0	2345.7	2378.9	2365.3	2431.7
62.5°	1736.4	1734.4	1822.3	2091.8	2402.3	2509.7	2472.7	2556.7	2580.1	2562.5	2595.6
65°	1783.2	1794.9	1921.8	2242.2	2617.2	2740.2	2689.4	2773.4	2800.7	2787.1	2843.7
67.5°	1861.4	1875.0	2044.9	2433.6	2882.8	3009.7	2966.8	3054.6	3095.7	3091.8	3154.3
70°	1976.5	2001.9	2226.6	2705.1	3287.0	3449.2	3425.8	3533.2	3632.8	3624.9	3687.4
72.5°	2177.8	2218.8	2525.4	3127.0	3951.1	4148.4	4121.1	4181.6	4164.0	4021.4	3906.2
74°	2138.7	2189.4	2599.6	3347.6	4250.0	4375.0	4330.0	4332.0	4171.8	3955.0	3769.5
75°	1996.1	2048.8	2492.2	3320.3	4228.5	4296.8	4232.4	4152.4	3958.9	3738.3	3509.7
77.5°	1369.1	1437.5	1832.0	2681.7	3404.3	3310.6	3294.9	3142.6	2886.7	2638.7	2345.7
80°	701.1	750.0	947.3	1402.4	2019.5	1925.8	1957.0	1833.9	1621.1	1441.4	1142.5
82.5°	168.0	179.7	279.3	543.0	875.0	800.8	812.5	718.7	595.7	486.3	377.0
85°	87.9	99.6	136.8	150.4	230.5	238.2	232.4	224.6	183.6	154.3	134.7
87.5°	0.0	0.0	0.0	3.9	1.9	0.0	1.9	0.0	0.0	1.9	3.9
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°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
97.5°	2.0	2.0	2.0	3.1	4.1	5.3	5.6	6.6	8.0	9.2	10.2
100°	8.2	8.2	10.2	14.3	22.5	24.6	25.0	26.6	28.6	30.7	31.2
102.5°	28.6	28.6	32.7	38.9	46.0	47.3	47.6	48.6	49.9	51.1	51.4
105°	55.2	55.2	57.3	62.4	67.5	68.5	68.7	69.6	70.6	71.6	71.8
107.5°	79.8	78.8	81.8	85.9	90.0	90.8	90.9	91.6	92.3	93.1	93.6



REPORT NUMBER: P228335

CATALOG NUMBER: ISS-AF-1000-LED-E1-SL4-ULG

**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	37.5°	38°	40°	42.5°	45°	47.5°
110°	103.3	104.3	105.4	108.4	112.5	113.0	113.1	113.5	114.1	114.6	115.1
112.5°	126.8	126.8	128.9	132.0	135.0	135.5	135.6	136.1	136.6	137.1	137.6
115°	149.4	150.4	152.4	154.5	157.5	158.0	158.1	158.6	159.1	159.6	160.1
117.5°	172.9	173.9	175.9	178.0	181.1	181.6	181.7	182.1	182.6	183.1	183.3
120°	197.4	199.5	200.5	202.5	205.6	205.8	205.9	206.1	206.4	206.6	207.1
122.5°	224.0	225.0	226.1	228.1	231.2	231.4	231.5	231.7	232.0	232.2	232.4
125°	249.6	251.6	252.7	253.7	256.8	257.0	257.1	257.3	257.6	257.8	258.0
127.5°	273.1	275.2	276.2	278.2	280.3	280.8	280.9	281.3	281.8	282.3	282.8
130°	296.7	298.7	299.7	300.7	304.8	305.0	305.1	305.4	305.7	305.9	306.4
132.5°	320.2	321.2	324.3	325.3	328.4	328.6	328.7	328.9	329.2	329.4	330.2
135°	343.7	344.7	346.8	348.8	352.9	352.9	352.9	352.9	352.9	352.9	353.7
137.5°	367.2	368.3	371.3	372.4	375.4	375.4	375.4	375.4	375.4	375.4	375.9
140°	390.8	391.8	393.8	394.9	396.9	397.1	397.2	397.4	397.7	397.9	398.1
142.5°	413.3	415.3	417.4	416.3	419.4	419.4	419.4	419.4	419.4	419.4	419.9
145°	434.8	435.8	437.8	437.8	440.9	441.1	441.2	441.4	441.7	441.9	442.4
147.5°	454.2	454.2	457.3	458.3	462.4	462.6	462.7	462.9	463.2	463.4	463.6
150°	471.6	472.6	474.6	475.7	479.8	480.0	480.1	480.3	480.6	480.8	481.0
152.5°	490.0	491.0	494.1	493.1	496.1	496.3	496.4	496.6	496.9	497.2	497.4
155°	510.5	511.5	513.5	512.5	514.5	514.5	514.5	514.5	514.5	514.5	514.7
157.5°	524.8	526.8	528.9	527.8	530.9	530.9	530.9	530.9	530.9	530.9	530.9
160°	537.0	539.1	541.1	541.1	544.2	544.2	544.2	544.2	544.2	544.2	544.2
162.5°	547.3	548.3	551.4	550.3	553.4	553.4	553.4	553.4	553.4	553.4	553.6
165°	558.5	559.6	561.6	560.6	564.7	564.7	564.7	564.7	564.7	564.7	564.9
167.5°	567.7	568.8	571.8	570.8	573.9	573.7	573.6	573.4	573.1	572.9	572.9
170°	574.9	575.9	579.0	578.0	580.0	579.8	579.7	579.5	579.2	579.0	578.8
172.5°	578.0	579.0	582.1	580.0	582.1	581.9	581.8	581.5	581.2	581.0	581.2
175°	580.0	582.1	583.1	582.1	585.1	585.1	585.1	585.1	585.1	585.1	585.3
177.5°	585.1	586.2	588.2	587.2	591.3	591.1	591.0	590.8	590.4	590.2	590.2
180°	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2





REPORT NUMBER: P228335

CATALOG NUMBER: ISS-AF-1000-LED-E1-SL4-ULG

**CANDELA DISTRIBUTION (continued):**

	50°	52.5°	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°
0°	853.6	853.6	853.6	853.6	853.6	853.6	853.6	853.6	853.6	853.6	853.6
2.5°	880.9	877.0	880.9	869.1	875.0	865.2	869.1	859.4	863.3	855.5	857.4
5°	884.8	875.0	880.9	871.0	873.1	865.2	863.3	859.4	857.4	851.6	847.6
7.5°	875.0	867.2	865.2	861.3	855.5	857.4	849.6	847.6	841.8	841.8	830.0
10°	865.2	867.2	855.5	859.4	849.6	851.6	837.9	841.8	832.1	839.8	822.2
12.5°	873.1	875.0	865.2	871.0	853.6	857.4	845.7	851.6	837.9	847.6	826.1
15°	890.6	888.6	884.8	884.8	867.2	875.0	861.3	865.2	851.6	863.3	839.8
17.5°	906.2	904.3	898.5	896.5	884.8	886.7	873.1	880.9	865.2	875.0	851.6
20°	923.8	914.0	912.1	910.1	896.5	896.5	886.7	890.6	875.0	886.7	859.4
22.5°	937.5	929.7	927.7	919.9	910.1	914.0	900.4	902.3	886.7	898.5	875.0
25°	959.0	949.2	949.2	937.5	931.6	929.7	921.9	927.7	912.1	919.9	898.5
27.5°	988.3	966.8	974.6	962.9	959.0	957.1	953.1	957.1	945.3	951.1	929.7
30°	1015.6	988.3	1000.0	984.4	992.2	984.4	990.2	984.4	984.4	984.4	974.6
32.5°	1052.7	1019.6	1043.0	1019.6	1035.1	1023.5	1043.0	1031.2	1039.0	1037.1	1033.2
35°	1105.5	1066.4	1099.6	1068.4	1095.7	1080.0	1107.4	1101.5	1117.2	1109.4	1117.2
37.5°	1175.8	1134.8	1173.8	1144.5	1177.7	1154.3	1193.4	1189.5	1222.6	1211.0	1222.6
40°	1263.7	1234.4	1263.7	1242.2	1277.4	1267.5	1308.6	1310.5	1347.6	1341.8	1355.4
42.5°	1361.3	1339.9	1369.1	1357.5	1392.5	1400.4	1447.3	1458.9	1494.1	1503.9	1505.9
45°	1466.8	1462.9	1486.3	1498.0	1533.2	1556.6	1597.6	1626.9	1666.0	1687.5	1683.6
47.5°	1589.9	1605.4	1621.1	1650.4	1681.6	1730.4	1771.4	1808.6	1853.5	1867.2	1873.0
50°	1728.5	1755.9	1769.5	1810.5	1841.8	1902.4	1959.0	2005.8	2054.7	2048.8	2052.8
52.5°	1875.0	1910.2	1929.7	1978.5	2019.5	2089.8	2138.7	2183.6	2244.1	2228.5	2222.7
55°	2037.1	2089.8	2105.4	2160.2	2195.3	2267.6	2310.5	2388.7	2414.1	2398.4	2365.3
57.5°	2209.0	2271.5	2289.1	2363.2	2380.8	2459.0	2496.1	2548.8	2570.3	2544.9	2501.9
60°	2404.2	2460.9	2474.6	2541.0	2564.4	2636.7	2664.1	2710.9	2726.6	2664.1	2603.5
62.5°	2599.6	2658.1	2666.0	2724.6	2748.1	2810.6	2841.8	2869.2	2861.3	2769.5	2693.3
65°	2822.2	2878.9	2898.4	2957.0	2970.6	3017.6	3043.0	3011.7	2994.1	2855.5	2769.5
67.5°	3175.8	3236.3	3244.1	3257.8	3255.8	3232.4	3220.7	3113.2	3035.1	2779.3	2656.2
70°	3640.6	3595.7	3507.8	3406.2	3332.1	3199.2	3121.0	2900.4	2736.3	2449.3	2242.2
72.5°	3724.6	3578.1	3361.3	3187.5	3007.8	2798.8	2630.8	2296.8	2066.4	1765.6	1546.9
74°	3486.3	3248.1	3019.5	2775.4	2568.3	2263.7	2093.8	1671.9	1443.4	1138.6	873.1
75°	3199.2	2919.9	2662.1	2351.6	2158.2	1792.9	1632.8	1177.7	949.2	675.8	455.1
77.5°	2041.0	1707.0	1461.0	1101.5	951.1	656.2	480.5	298.8	220.8	193.3	168.0
80°	916.1	652.3	517.6	357.4	298.8	228.5	193.3	156.2	142.6	125.0	119.2
82.5°	293.0	234.4	222.7	199.2	199.2	160.2	136.8	107.4	97.7	84.0	76.2
85°	126.9	119.2	123.1	113.2	115.2	87.9	70.3	52.8	52.8	37.1	33.2
87.5°	3.9	0.0	1.9	0.0	3.9	0.0	1.9	0.0	1.9	0.0	1.9
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°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
97.5°	11.3	12.3	13.3	11.8	10.2	8.7	7.2	6.6	6.1	5.6	5.1
100°	31.7	32.2	32.7	32.2	31.7	31.2	30.7	29.9	29.2	28.4	27.6
102.5°	51.7	52.0	52.2	52.0	51.7	51.4	51.1	50.6	50.1	49.6	49.1
105°	72.1	72.4	72.6	72.6	72.6	72.6	72.6	72.1	71.6	71.1	70.6
107.5°	94.1	94.6	95.1	94.9	94.6	94.3	94.1	93.9	93.6	93.3	93.1



REPORT NUMBER: P228335

CATALOG NUMBER: ISS-AF-1000-LED-E1-SL4-ULG

**CANDELA DISTRIBUTION (continued):**

	50°	52.5°	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°
110°	115.6	116.1	116.6	116.6	116.6	116.6	116.6	116.4	116.1	115.8	115.6
112.5°	138.1	138.6	139.1	139.1	139.1	139.1	139.1	138.9	138.6	138.3	138.1
115°	160.6	161.1	161.6	161.6	161.6	161.6	161.6	161.6	161.6	161.6	161.6
117.5°	183.6	183.9	184.1	184.3	184.6	184.9	185.2	184.9	184.6	184.3	184.1
120°	207.7	208.2	208.7	208.7	208.7	208.7	208.7	208.7	208.7	208.7	208.7
122.5°	232.7	233.0	233.2	233.2	233.2	233.2	233.2	233.4	233.7	234.1	234.3
125°	258.3	258.6	258.8	259.0	259.3	259.6	259.8	259.8	259.8	259.8	259.8
127.5°	283.4	283.9	284.4	284.2	283.9	283.6	283.4	283.6	283.9	284.2	284.4
130°	306.9	307.4	307.9	307.9	307.9	307.9	307.9	308.1	308.4	308.7	308.9
132.5°	330.9	331.6	332.5	332.5	332.5	332.5	332.5	332.7	333.0	333.3	333.5
135°	354.5	355.2	356.0	356.0	356.0	356.0	356.0	356.2	356.5	356.8	357.0
137.5°	376.4	377.0	377.5	377.5	377.5	377.5	377.5	377.7	378.0	378.3	378.5
140°	398.4	398.7	399.0	399.0	399.0	399.0	399.0	399.5	400.0	400.5	401.0
142.5°	420.4	420.9	421.5	421.5	421.5	421.5	421.5	421.7	422.0	422.3	422.5
145°	442.9	443.4	444.0	443.8	443.4	443.1	442.9	443.1	443.4	443.8	444.0
147.5°	463.9	464.2	464.4	463.9	463.4	462.9	462.4	462.6	462.9	463.2	463.4
150°	481.3	481.6	481.8	481.3	480.8	480.3	479.8	479.8	479.8	479.8	479.8
152.5°	497.7	498.0	498.2	498.0	497.7	497.4	497.2	497.2	497.2	497.2	497.2
155°	515.1	515.4	515.6	515.4	515.1	514.7	514.5	514.7	515.1	515.4	515.6
157.5°	530.9	530.9	530.9	530.4	529.9	529.4	528.9	529.1	529.4	529.7	529.9
160°	544.2	544.2	544.2	543.7	543.2	542.7	542.2	542.2	542.2	542.2	542.2
162.5°	553.9	554.2	554.4	553.9	553.4	552.9	552.4	551.9	551.4	550.9	550.3
165°	565.2	565.5	565.7	564.9	564.2	563.4	562.6	562.1	561.6	561.1	560.6
167.5°	572.9	572.9	572.9	572.3	571.8	571.3	570.8	571.0	571.3	571.6	571.8
170°	578.5	578.2	578.0	577.8	577.5	577.1	576.9	577.5	578.0	578.5	579.0
172.5°	581.5	581.9	582.1	581.5	581.0	580.5	580.0	580.2	580.5	580.8	581.0
175°	585.6	585.9	586.2	585.3	584.6	583.9	583.1	582.6	582.1	581.5	581.0
177.5°	590.2	590.2	590.2	589.4	588.7	588.0	587.2	587.2	587.2	587.2	587.2
180°	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2



REPORT NUMBER: P228335

CATALOG NUMBER: ISS-AF-1000-LED-E1-SL4-ULG

**CANDELA DISTRIBUTION (continued):**

	77.5°	80°	85°	90°	95°	100°	102.5°	105°	107.5°	110°	112.5°
0°	853.6	853.6	853.6	853.6	853.6	853.6	853.6	853.6	853.6	853.6	853.6
2.5°	849.6	853.6	851.6	843.7	841.8	836.0	822.2	824.2	816.4	822.2	812.5
5°	841.8	839.8	832.1	822.2	812.5	800.8	791.0	787.1	779.3	775.4	769.6
7.5°	830.0	822.2	808.5	793.0	779.3	763.6	755.9	742.2	738.3	724.6	722.6
10°	826.1	812.5	796.9	777.3	753.9	730.5	728.5	705.1	703.1	681.6	675.8
12.5°	834.0	816.4	796.9	773.5	746.0	712.9	712.9	677.7	675.8	646.5	636.7
15°	849.6	828.1	802.7	775.4	740.2	699.2	697.2	656.2	652.3	617.1	605.5
17.5°	863.3	834.0	810.6	773.5	732.4	685.6	675.8	634.7	627.0	585.9	570.3
20°	873.1	839.8	812.5	769.6	718.7	664.1	650.4	607.4	589.8	548.8	527.3
22.5°	884.8	853.6	816.4	767.6	711.0	646.5	617.1	578.2	552.7	509.7	480.5
25°	902.3	875.0	830.0	773.5	705.1	628.9	589.8	548.8	513.6	470.7	427.7
27.5°	929.7	902.3	849.6	781.2	703.1	611.3	568.4	517.6	474.6	427.7	378.9
30°	968.7	939.5	882.8	802.7	705.1	597.6	544.9	490.2	439.5	384.7	334.0
32.5°	1019.6	996.0	925.8	826.1	712.9	585.9	523.4	460.9	398.4	345.7	300.7
35°	1089.9	1074.2	986.3	871.0	732.4	580.1	502.0	433.6	363.2	310.6	261.7
37.5°	1193.4	1171.9	1074.2	935.6	763.6	576.1	486.3	400.4	334.0	277.3	236.3
40°	1324.2	1295.0	1177.7	1013.6	812.5	578.2	472.6	375.0	308.6	248.1	214.8
42.5°	1480.4	1437.5	1304.7	1109.4	861.3	582.1	464.8	351.6	289.1	224.6	199.2
45°	1656.3	1607.4	1455.0	1228.5	931.6	591.8	459.0	332.0	271.5	207.0	189.5
47.5°	1828.1	1779.3	1609.4	1347.6	1003.9	609.4	462.9	320.3	259.7	197.2	177.7
50°	1996.1	1945.3	1746.1	1455.0	1066.4	632.8	478.5	322.2	257.8	193.3	171.9
52.5°	2144.5	2082.0	1863.3	1539.0	1111.3	648.4	492.1	328.2	259.7	191.4	169.9
55°	2292.9	2212.8	1957.0	1605.4	1138.6	650.4	492.1	330.1	261.7	191.4	168.0
57.5°	2404.2	2312.5	2029.3	1644.5	1148.5	640.6	480.5	320.3	250.0	189.5	164.1
60°	2474.6	2376.9	2080.1	1669.9	1134.8	599.7	418.0	283.2	220.8	175.7	152.3
62.5°	2533.2	2433.6	2095.7	1626.9	1019.6	476.6	326.2	230.5	183.6	156.2	140.7
65°	2546.8	2427.8	1986.4	1437.5	796.9	330.1	236.3	181.7	150.4	138.7	126.9
67.5°	2339.8	2197.3	1669.9	1125.0	543.0	226.6	175.7	148.4	128.9	123.1	119.2
70°	1902.4	1746.1	1222.6	736.3	302.7	158.3	134.7	123.1	111.3	111.3	105.5
72.5°	1226.5	1064.5	627.0	314.5	154.3	121.1	109.4	105.5	95.7	97.7	91.8
74°	627.0	488.3	255.8	166.0	126.9	107.4	97.7	95.7	85.9	87.9	82.0
75°	318.3	252.0	179.7	138.7	117.2	101.6	89.8	89.8	78.2	80.1	74.3
77.5°	148.4	142.6	123.1	109.4	99.6	85.9	74.3	72.2	60.6	64.4	56.7
80°	103.5	103.5	95.7	91.8	82.0	70.3	56.7	56.7	44.9	46.9	41.0
82.5°	58.6	54.7	54.7	62.5	64.4	52.8	41.0	39.1	33.2	33.2	27.3
85°	25.4	29.3	35.2	43.0	46.9	41.0	29.3	27.3	17.6	17.6	9.7
87.5°	0.0	1.9	1.9	3.9	7.8	7.8	0.0	3.9	0.0	1.9	0.0
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°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
97.5°	4.9	4.6	4.1	4.1	4.1	4.6	4.9	5.1	5.6	6.1	6.6
100°	27.4	27.1	26.6	25.6	26.6	27.1	27.4	27.6	28.4	29.2	29.9
102.5°	49.3	49.6	50.1	49.1	50.1	49.6	49.3	49.1	49.6	50.1	50.6
105°	71.1	71.6	72.6	70.6	72.6	71.6	71.1	70.6	71.1	71.6	72.1
107.5°	93.3	93.6	94.1	93.1	94.1	93.6	93.3	93.1	93.3	93.6	93.9



REPORT NUMBER: P228335  
 CATALOG NUMBER: ISS-AF-1000-LED-E1-SL4-ULG

REPORT N  
 CATALOG

**CANDELA DISTRIBUTION (continued):**

**CANDELA**

	77.5°	80°	85°	90°	95°	100°	102.5°	105°	107.5°	110°	112.5°	
110°	115.8	116.1	116.6	115.6	116.6	116.1	115.8	115.6	115.8	116.1	116.4	0°
112.5°	138.6	139.1	140.1	138.1	140.1	139.1	138.6	138.1	138.3	138.6	138.9	2.5°
115°	162.1	162.6	163.7	162.6	163.7	162.6	162.1	161.6	161.6	161.6	161.6	5°
117.5°	184.6	185.2	186.2	184.1	186.2	185.2	184.6	184.1	184.3	184.6	184.9	7.5°
120°	209.2	209.7	210.7	208.7	210.7	209.7	209.2	208.7	208.7	208.7	208.7	10°
122.5°	235.3	236.3	238.3	237.3	238.3	236.3	235.3	234.3	234.1	233.7	233.4	12.5°
125°	260.6	261.4	262.9	261.9	262.9	261.4	260.6	259.8	259.8	259.8	259.8	15°
127.5°	285.2	285.9	287.4	284.4	287.4	285.9	285.2	284.4	284.2	283.9	283.6	17.5°
130°	309.7	310.5	312.0	310.0	312.0	310.5	309.7	308.9	308.7	308.4	308.1	20°
132.5°	334.3	335.0	336.6	334.5	336.6	335.0	334.3	333.5	333.3	333.0	332.7	22.5°
135°	357.5	358.0	359.1	358.0	359.1	358.0	357.5	357.0	356.8	356.5	356.2	25°
137.5°	379.5	380.5	382.6	380.5	382.6	380.5	379.5	378.5	378.3	378.0	377.7	27.5°
140°	402.0	403.0	405.1	403.0	405.1	403.0	402.0	401.0	400.5	400.0	399.5	30°
142.5°	423.3	424.0	425.5	424.5	425.5	424.0	423.3	422.5	422.3	422.0	421.7	32.5°
145°	444.8	445.5	447.0	445.0	447.0	445.5	444.8	444.0	443.8	443.4	443.1	35°
147.5°	464.2	464.9	466.5	463.4	466.5	464.9	464.2	463.4	463.2	462.9	462.6	37.5°
150°	480.8	481.8	483.9	480.8	483.9	481.8	480.8	479.8	479.8	479.8	479.8	40°
152.5°	498.0	498.7	500.2	497.2	500.2	498.7	498.0	497.2	497.2	497.2	497.2	42.5°
155°	516.4	517.1	518.6	516.6	518.6	517.1	516.4	515.6	515.4	515.1	514.7	45°
157.5°	531.1	532.4	535.0	531.9	535.0	532.4	531.1	529.9	529.7	529.4	529.1	47.5°
160°	543.0	543.7	545.2	543.2	545.2	543.7	543.0	542.2	542.2	542.2	542.2	50°
162.5°	550.9	551.4	552.4	549.3	552.4	551.4	550.9	550.3	550.9	551.4	551.9	52.5°
165°	561.1	561.6	562.6	560.6	562.6	561.6	561.1	560.6	561.1	561.6	562.1	55°
167.5°	572.9	573.9	575.9	573.9	575.9	573.9	572.9	571.8	571.6	571.3	571.0	57.5°
170°	580.2	581.5	584.1	582.1	584.1	581.5	580.2	579.0	578.5	578.0	577.5	60°
172.5°	581.9	582.6	584.1	581.0	584.1	582.6	581.9	581.0	580.8	580.5	580.2	62.5°
175°	581.9	582.6	584.1	581.0	584.1	582.6	581.9	581.0	581.5	582.1	582.6	65°
177.5°	588.0	588.7	590.2	587.2	590.2	588.7	588.0	587.2	587.2	587.2	587.2	67.5°
180°	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	70°
												72.5°
												74°
												75°
												77.5°
												80°
												82.5°
												85°
												87.5°
												90°
												92.5°
												95°
												97.5°
												100°
												102.5°
												105°
												107.5°



NUMBER: P228335  
 NUMBER: ISS-AF-1000-LED-E1-SL4-ULG

REPORT NUMBER: P  
 CATALOG NUMBER:

**DISTRIBUTION (continued):**

**CANDELA DISTRIBUTION**

115°	117.5°	120°	122.5°	125°	127.5°	130°	135°	145°	155°	165°	110°	115°
853.6	853.6	853.6	853.6	853.6	853.6	853.6	853.6	853.6	853.6	853.6	110°	116.6
816.4	806.6	812.5	802.7	806.6	796.9	800.8	794.9	789.1	781.2	779.3	112.5°	139.1
763.6	755.9	753.9	744.1	746.0	738.3	730.5	720.7	709.0	693.4	687.5	115°	161.6
705.1	703.1	689.5	683.6	675.8	668.0	654.3	638.6	615.2	593.7	580.1	117.5°	185.2
654.3	648.4	628.9	619.1	607.4	597.6	578.2	556.6	523.4	490.2	472.6	120°	208.7
611.3	603.5	578.2	566.4	548.8	537.2	513.6	486.3	439.5	392.6	371.1	122.5°	233.2
576.1	564.5	535.1	517.6	494.2	482.4	457.1	418.0	361.3	312.5	283.2	125°	259.8
535.1	519.6	488.3	466.8	443.3	421.9	396.5	355.5	291.0	246.1	216.8	127.5°	283.4
490.2	470.7	437.5	408.2	382.8	363.2	337.9	296.9	232.4	197.2	181.7	130°	307.9
443.3	412.1	382.8	357.4	328.2	308.6	283.2	246.1	197.2	177.7	171.9	132.5°	332.5
394.6	359.4	330.1	304.6	277.3	259.7	238.2	209.0	179.7	173.8	173.8	135°	356.0
345.7	310.6	283.2	257.8	234.4	222.7	203.2	183.6	169.9	171.9	173.8	137.5°	377.5
300.7	265.7	240.2	220.8	199.2	191.4	175.7	164.1	162.1	168.0	169.9	140°	399.0
261.7	230.5	207.0	191.4	173.8	169.9	156.2	150.4	156.2	164.1	162.1	142.5°	421.5
228.5	203.2	179.7	169.9	154.3	152.3	142.6	138.7	146.5	156.2	156.2	145°	442.9
203.2	179.7	162.1	154.3	142.6	140.7	132.8	128.9	134.7	148.4	152.3	147.5°	462.4
181.7	168.0	150.4	142.6	134.7	130.8	126.9	123.1	125.0	142.6	144.5	150°	479.8
168.0	158.3	142.6	138.7	128.9	126.9	121.1	117.2	119.2	132.8	138.7	152.5°	497.2
158.3	150.4	136.8	134.7	125.0	123.1	117.2	113.2	115.2	126.9	132.8	155°	514.5
150.4	142.6	130.8	126.9	121.1	119.2	115.2	111.3	111.3	123.1	128.9	157.5°	528.9
146.5	138.7	126.9	123.1	117.2	115.2	111.3	107.4	109.4	119.2	123.1	160°	542.2
144.5	134.7	125.0	119.2	115.2	111.3	107.4	103.5	105.5	115.2	119.2	162.5°	552.4
144.5	132.8	125.0	119.2	113.2	107.4	105.5	99.6	103.5	111.3	117.2	165°	562.6
144.5	132.8	125.0	119.2	115.2	109.4	105.5	101.6	103.5	111.3	117.2	167.5°	570.8
140.7	130.8	126.9	121.1	119.2	113.2	111.3	107.4	107.4	117.2	126.9	170°	576.9
134.7	128.9	126.9	123.1	123.1	119.2	119.2	115.2	115.2	126.9	136.8	172.5°	580.0
126.9	123.1	125.0	123.1	123.1	123.1	121.1	121.1	121.1	130.8	142.6	175°	583.1
119.2	117.2	119.2	119.2	121.1	119.2	121.1	119.2	119.2	128.9	140.7	177.5°	587.2
107.4	107.4	109.4	107.4	109.4	109.4	111.3	111.3	111.3	117.2	128.9	180°	589.2
93.7	91.8	93.7	91.8	95.7	91.8	95.7	97.7	95.7	97.7	103.5		
84.0	82.0	84.0	82.0	85.9	82.0	84.0	84.0	82.0	66.4	56.7		
76.2	74.3	76.2	74.3	78.2	74.3	78.2	76.2	72.2	48.8	46.9		
60.6	54.7	60.6	54.7	58.6	52.8	56.7	48.8	37.1	35.2	35.2		
44.9	39.1	43.0	37.1	35.2	27.3	29.3	27.3	25.4	27.3	27.3		
27.3	19.5	23.4	17.6	21.5	15.7	19.5	17.6	15.7	15.7	15.7		
13.7	9.7	13.7	7.8	11.8	7.8	9.7	9.7	5.8	5.8	5.8		
1.9	0.0	3.9	0.0	3.9	0.0	1.9	1.9	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	0.0		
1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
7.2	8.7	10.2	11.8	13.3	12.3	11.3	9.2	4.1	3.1	2.0		
30.7	31.2	31.7	32.2	32.7	32.2	31.7	30.7	22.5	14.3	10.2		
51.1	51.4	51.7	52.0	52.2	52.0	51.7	51.1	46.0	38.9	32.7		
72.6	72.6	72.6	72.6	72.6	72.4	72.1	71.6	67.5	62.4	57.3		
94.1	94.3	94.6	94.9	95.1	94.6	94.1	93.1	90.0	85.9	81.8		

'228335  
 ISS-AF-1000-LED-E1-SL4-ULG

REPORT NUMBER: P228335  
 CATALOG NUMBER: ISS-AF-10

**TION (continued):**

**CANDELA DISTRIBUTION (con**

117.5°	120°	122.5°	125°	127.5°	130°	135°	145°	155°	165°		175°	180°
116.6	116.6	116.6	116.6	116.1	115.6	114.6	112.5	108.4	105.4	0°	853.6	853.6
139.1	139.1	139.1	139.1	138.6	138.1	137.1	135.0	132.0	128.9	2.5°	773.5	775.4
161.6	161.6	161.6	161.6	161.1	160.6	159.6	157.5	154.5	152.4	5°	677.7	683.6
184.9	184.6	184.3	184.1	183.9	183.6	183.1	181.1	178.0	175.9	7.5°	572.2	576.1
208.7	208.7	208.7	208.7	208.2	207.7	206.6	205.6	202.5	200.5	10°	460.9	464.8
233.2	233.2	233.2	233.2	233.0	232.7	232.2	231.2	228.1	226.1	12.5°	355.5	359.4
259.6	259.3	259.0	258.8	258.6	258.3	257.8	256.8	253.7	252.7	15°	267.6	263.7
283.6	283.9	284.2	284.4	283.9	283.4	282.3	280.3	278.2	276.2	17.5°	205.1	201.2
307.9	307.9	307.9	307.9	307.4	306.9	305.9	304.8	300.7	299.7	20°	173.8	173.8
332.5	332.5	332.5	332.5	331.6	330.9	329.4	328.4	325.3	324.3	22.5°	169.9	168.0
356.0	356.0	356.0	356.0	355.2	354.5	352.9	352.9	348.8	346.8	25°	171.9	169.9
377.5	377.5	377.5	377.5	377.0	376.4	375.4	375.4	372.4	371.3	27.5°	171.9	169.9
399.0	399.0	399.0	399.0	398.7	398.4	397.9	396.9	394.9	393.8	30°	168.0	166.0
421.5	421.5	421.5	421.5	420.9	420.4	419.4	419.4	416.3	417.4	32.5°	162.1	160.2
443.1	443.4	443.8	444.0	443.4	442.9	441.9	440.9	437.8	437.8	35°	156.2	156.2
462.9	463.4	463.9	464.4	464.2	463.9	463.4	462.4	458.3	457.3	37.5°	152.3	154.3
480.3	480.8	481.3	481.8	481.6	481.3	480.8	479.8	475.7	474.6	40°	146.5	148.4
497.4	497.7	498.0	498.2	498.0	497.7	497.2	496.1	493.1	494.1	42.5°	140.7	142.6
514.7	515.1	515.4	515.6	515.4	515.1	514.5	514.5	512.5	513.5	45°	134.7	136.8
529.4	529.9	530.4	530.9	530.9	530.9	530.9	530.9	527.8	528.9	47.5°	128.9	128.9
542.7	543.2	543.7	544.2	544.2	544.2	544.2	544.2	541.1	541.1	50°	121.1	121.1
552.9	553.4	553.9	554.4	554.2	553.9	553.4	553.4	550.3	551.4	52.5°	119.2	119.2
563.4	564.2	564.9	565.7	565.5	565.2	564.7	564.7	560.6	561.6	55°	119.2	119.2
571.3	571.8	572.3	572.9	572.9	572.9	572.9	573.9	570.8	571.8	57.5°	123.1	123.1
577.1	577.5	577.8	578.0	578.2	578.5	579.0	580.0	578.0	579.0	60°	134.7	136.8
580.5	581.0	581.5	582.1	581.9	581.5	581.0	582.1	580.0	582.1	62.5°	158.3	160.2
583.9	584.6	585.3	586.2	585.9	585.6	585.1	585.1	582.1	583.1	65°	181.7	185.6
588.0	588.7	589.4	590.2	590.2	590.2	590.2	591.3	587.2	588.2	67.5°	183.6	189.5
589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	70°	177.7	183.6
										72.5°	123.1	123.1
										74°	54.7	52.8
										75°	46.9	44.9
										77.5°	35.2	35.2
										80°	25.4	23.4
										82.5°	13.7	13.7
										85°	3.9	3.9
										87.5°	0.0	0.0
										90°	0.0	0.0
										92.5°	0.0	0.0
										95°	1.0	1.0
										97.5°	2.0	2.0
										100°	8.2	8.2
										102.5°	28.6	28.6
										105°	55.2	55.2
										107.5°	78.8	79.8



REPORT NUMBER: P228335

CATALOG NUMBER: ISS-AF-1000-LED-E1

**CANDELA DISTRIBUTION (continued):**

	175°	180°
110°	104.3	103.3
112.5°	126.8	126.8
115°	150.4	149.4
117.5°	173.9	172.9
120°	199.5	197.4
122.5°	225.0	224.0
125°	251.6	249.6
127.5°	275.2	273.1
130°	298.7	296.7
132.5°	321.2	320.2
135°	344.7	343.7
137.5°	368.3	367.2
140°	391.8	390.8
142.5°	415.3	413.3
145°	435.8	434.8
147.5°	454.2	454.2
150°	472.6	471.6
152.5°	491.0	490.0
155°	511.5	510.5
157.5°	526.8	524.8
160°	539.1	537.0
162.5°	548.3	547.3
165°	559.6	558.5
167.5°	568.8	567.7
170°	575.9	574.9
172.5°	579.0	578.0
175°	582.1	580.0
177.5°	586.2	585.1
180°	589.2	589.2

(END OF REPORT)

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report

