

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: METALUX

Report Number: P#

Luminaire Tested: **4SNLED-LD5-50SL-LW-UNV-L950-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P#
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33520)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4SNLED-LD5-50SL-LW-UNV-L950-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
WIDE FROSTED LENS
Light Source: -
Ballast/Driver: -

Summary

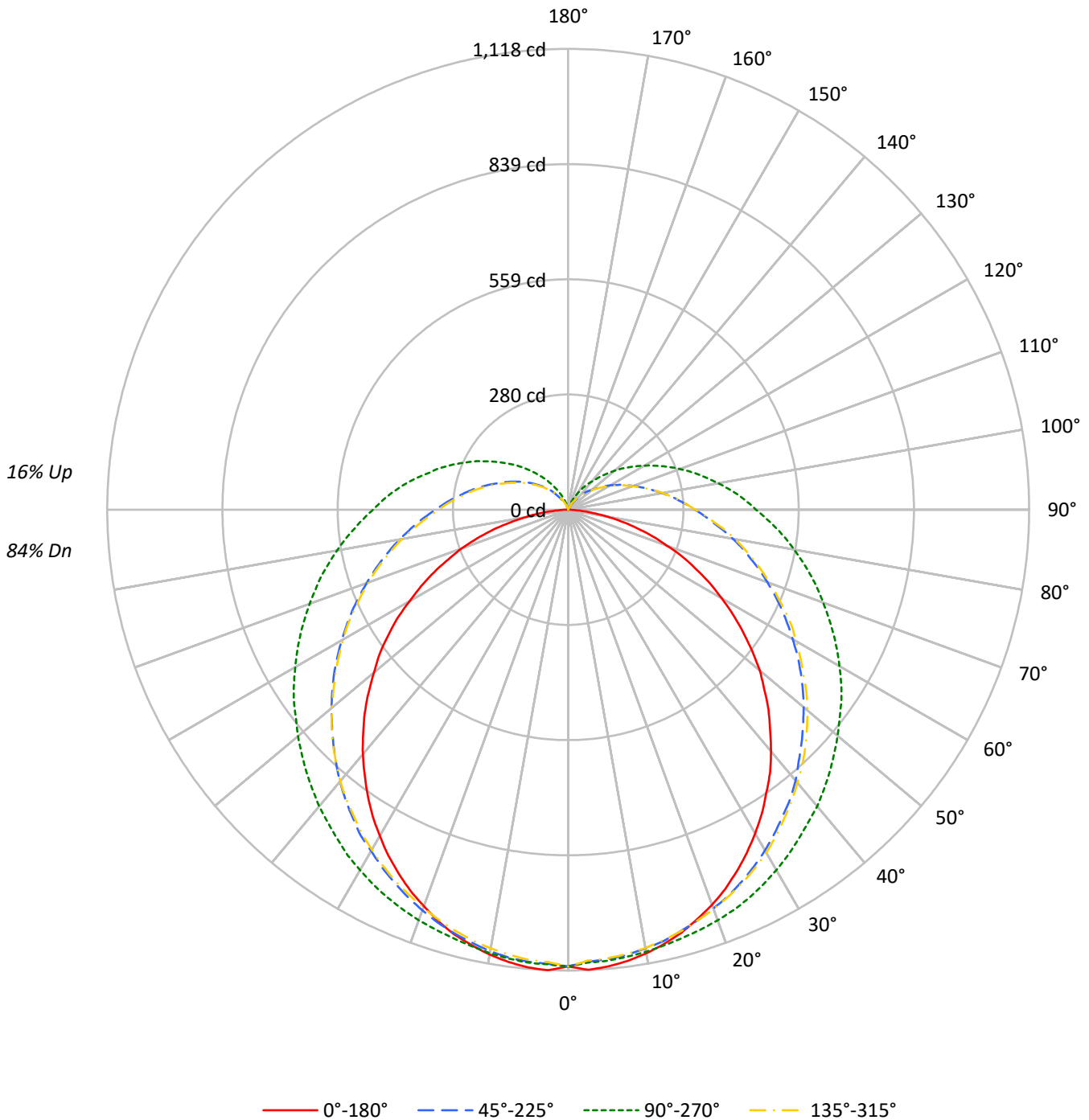
Lumens per Lamp: N/A
Luminaire Lumens: 4813.0 lumens
Efficiency: N/A
Efficacy: 104.6 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.36 / 1.44
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Semi-Direct

Input Watts (W): 46
Input Voltage (V): NR
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



TEST NUMBER: P#
CATALOG NUMBER: 4SNLED-LD5-50SL-LW-UNV-L950-CD1-U

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20																		
RC	80									70									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0																
RCR																																														
0	115	115	115	115	111	111	111	111	102	102	102	94	94	94	87	87	87	84																												
1	102	96	91	86	98	92	87	83	85	81	77	78	75	72	72	70	67	64																												
2	92	82	74	68	87	79	72	66	73	67	62	67	62	58	62	58	54	51																												
3	83	71	62	55	79	69	60	54	63	56	51	58	52	48	54	49	45	42																												
4	76	63	53	46	72	60	52	45	56	48	42	51	45	40	47	42	38	35																												
5	69	56	46	39	66	54	45	38	50	42	36	46	39	34	42	37	33	30																												
6	64	50	41	34	61	48	39	33	45	37	31	41	35	30	38	33	28	26																												
7	59	45	36	30	56	43	35	29	40	33	28	38	31	26	35	29	25	23																												
8	55	41	32	26	52	40	31	26	37	30	24	34	28	23	32	26	22	20																												
9	51	37	29	23	49	36	28	23	34	27	22	32	25	21	30	24	20	18																												
10	48	34	26	21	46	33	26	21	31	24	20	29	23	19	27	22	18	16																												

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	8952	8952	8952	8952
5°	9000	8628	9018	8664
10°	8916	8382	8945	8409
15°	8813	8172	8852	8182
20°	8675	8019	8704	8019
25°	8504	7883	8555	7874
30°	8312	7743	8376	7743
35°	8089	7613	8179	7623
40°	7868	7537	7965	7537
45°	7614	7458	7731	7467
50°	7351	7410	7450	7430
55°	6982	7417	7202	7449
60°	6593	7440	6809	7485
65°	6157	7514	6430	7588
70°	5542	7652	5975	7762
75°	4835	7903	5293	8054
80°	3744	8273	4250	8464
85°	2234	8868	2794	9113



TEST NUMBER: P#

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.9	2.2
10°-20°	301.6	6.3
20°-30°	462.4	9.6
30°-40°	570.5	11.9
40°-50°	618.9	12.9
50°-60°	610.0	12.7
60°-70°	551.6	11.5
70°-80°	459.5	9.5
80°-90°	355.9	7.4
90°-100°	269.9	5.6
100°-110°	199.7	4.1
110°-120°	138.9	2.9
120°-130°	88.6	1.8
130°-140°	49.7	1.0
140°-150°	22.7	0.5
150°-160°	7.0	0.1
160°-170°	0.9	0.0
170°-180°	0.0	0.0
0°-30°	869.0	18.1
0°-40°	1439.5	29.9
0°-60°	2668.4	55.4
0°-90°	4035.4	83.8
90°-120°	608.6	12.6
90°-150°	769.7	16.0
90°-180°	778.0	16.2
0°-180°	4813.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1108	1108	1108	1108	1108	
5°	1112	1098	1115	1103	1112	106
15°	1062	1075	1067	1076	1062	299
25°	968	1039	973	1038	968	446
35°	838	975	847	976	838	525
45°	687	898	698	899	687	529
55°	518	809	534	812	518	463
65°	344	709	359	716	344	341
75°	173	608	189	619	173	183
85°	33	506	41	520	33	40
90°	1	456	2	473	1	2
95°	1	414	1	434	1	1
105°	1	328	1	348	1	1
115°	1	250	1	272	1	1
125°	1	180	1	200	1	1
135°	1	117	1	138	1	1
145°	1	68	1	83	1	1
155°	1	28	1	39	1	1
165°	1	5	1	7	1	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-50SL-LW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1107.8	1107.8	1107.8	1107.8	1107.8	1107.8	1107.8	1107.8	1107.8	1107.8	1107.8
2.5°	1117.2	1117.2	1116.0	1113.7	1114.8	1118.3	1116.0	1110.1	1106.6	1097.3	1099.6
5°	1112.5	1112.5	1111.3	1109.0	1110.1	1114.8	1112.5	1107.8	1103.1	1095.0	1098.5
7.5°	1104.3	1104.3	1103.1	1100.8	1103.1	1107.8	1105.5	1100.8	1097.3	1089.1	1092.6
10°	1092.6	1093.8	1092.6	1089.1	1093.8	1098.5	1097.3	1091.5	1087.9	1080.9	1084.4
12.5°	1078.6	1079.8	1078.6	1077.4	1079.8	1086.8	1084.4	1079.8	1077.4	1071.6	1075.1
15°	1062.2	1063.4	1061.1	1061.1	1063.4	1070.4	1070.4	1065.7	1063.4	1057.6	1064.6
17.5°	1041.2	1042.4	1041.2	1041.2	1043.5	1050.6	1051.7	1049.4	1047.0	1044.7	1051.7
20°	1020.2	1019.0	1019.0	1017.8	1022.5	1033.0	1031.9	1031.9	1029.5	1029.5	1037.7
22.5°	995.6	995.6	994.5	994.5	1000.3	1009.7	1009.7	1012.0	1009.7	1014.3	1021.3
25°	967.6	968.8	967.6	969.9	974.6	985.1	986.3	989.8	991.0	995.6	1003.8
27.5°	938.4	939.5	938.4	940.7	948.9	957.1	962.9	967.6	968.8	975.8	986.3
30°	906.8	906.8	908.0	910.3	919.7	932.5	937.2	943.0	943.0	954.7	965.2
32.5°	874.1	874.1	874.1	878.8	889.3	904.5	910.3	917.3	919.7	931.4	943.0
35°	837.9	839.0	839.0	842.5	856.6	871.8	879.9	888.1	892.8	906.8	918.5
37.5°	804.0	806.3	802.8	807.5	827.4	840.2	849.6	857.7	865.9	884.6	894.0
40°	765.4	767.8	766.6	775.9	792.3	808.7	819.2	827.4	839.0	857.7	868.3
42.5°	724.5	726.9	729.2	739.7	757.2	773.6	786.5	797.0	811.0	827.4	844.9
45°	687.1	687.1	690.6	703.5	722.2	739.7	754.9	766.6	782.9	800.5	818.0
47.5°	645.1	646.2	650.9	666.1	686.0	707.0	721.0	736.2	753.7	772.4	792.3
50°	606.5	606.5	613.5	629.9	648.6	671.9	687.1	704.7	723.3	745.6	765.4
52.5°	562.1	564.4	574.9	590.1	614.7	635.7	653.2	671.9	694.1	717.5	739.7
55°	517.7	522.4	530.5	551.6	577.3	597.1	618.2	641.5	662.6	688.3	714.0
57.5°	474.4	477.9	490.8	511.8	538.7	563.3	585.5	607.7	633.4	659.1	686.0
60°	430.0	434.7	449.9	470.9	500.2	525.9	551.6	574.9	601.8	628.7	656.7
62.5°	388.0	391.5	409.0	433.5	462.8	490.8	516.5	544.6	573.8	599.5	627.5
65°	343.6	349.4	369.3	391.5	425.4	453.4	482.6	513.0	543.4	571.4	598.3
67.5°	302.7	306.2	327.2	352.9	386.8	418.4	448.7	481.5	513.0	542.2	569.1
70°	254.7	266.4	287.5	314.3	350.6	383.3	416.0	449.9	483.8	514.2	539.9
72.5°	215.0	224.4	247.7	277.0	312.0	350.6	384.5	420.7	454.6	486.1	513.0
75°	172.9	182.3	209.2	241.9	278.1	319.0	354.1	391.5	426.5	458.1	486.1
77.5°	132.0	143.7	172.9	206.8	246.6	288.6	324.9	362.3	398.5	432.4	460.4
80°	94.7	107.5	139.1	177.6	216.2	258.3	298.0	335.4	371.6	405.5	434.7
82.5°	60.8	74.8	108.7	147.2	188.1	230.2	271.1	308.5	344.7	378.6	409.0
85°	32.7	47.9	83.0	121.5	162.4	204.5	245.4	285.1	320.2	351.7	384.5
87.5°	9.3	28.0	61.9	100.5	142.6	181.1	220.9	260.6	295.7	329.5	358.8
90°	1.2	16.4	46.7	83.0	123.9	161.3	201.0	238.4	273.4	307.3	336.6
92.5°	1.2	10.5	36.2	68.9	106.3	144.9	184.6	220.9	253.6	287.5	316.7
95°	1.2	8.2	29.2	58.4	93.5	129.7	167.1	202.2	236.1	267.6	296.8
97.5°	1.2	5.8	23.4	50.2	81.8	115.7	151.9	187.0	219.7	250.1	277.0
100°	1.2	4.7	18.7	43.2	71.3	104.0	136.7	170.6	202.2	231.4	259.4
102.5°	1.2	3.5	16.4	36.2	63.1	92.3	123.9	155.4	185.8	213.8	241.9
105°	1.2	3.5	14.0	31.6	56.1	83.0	112.2	142.6	170.6	197.5	223.2
107.5°	1.2	2.3	11.7	26.9	49.1	74.8	101.7	130.9	156.6	182.3	206.8
110°	1.2	2.3	9.3	24.5	43.2	66.6	92.3	119.2	143.7	168.3	191.6



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-50SL-LW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1.2	2.3	8.2	21.0	37.4	59.6	83.0	107.5	130.9	155.4	176.5
115°	1.2	2.3	7.0	18.7	35.1	51.4	74.8	97.0	120.4	142.6	162.4
117.5°	1.2	2.3	5.8	15.2	30.4	46.7	65.4	87.6	108.7	129.7	148.4
120°	1.2	2.3	4.7	14.0	26.9	42.1	58.4	78.3	98.2	118.0	137.9
122.5°	1.2	1.2	4.7	11.7	23.4	37.4	53.8	68.9	87.6	106.3	123.9
125°	1.2	1.2	4.7	10.5	19.9	33.9	47.9	61.9	78.3	94.7	109.8
127.5°	1.2	1.2	3.5	8.2	17.5	29.2	42.1	57.3	68.9	84.1	99.3
130°	1.2	1.2	3.5	7.0	15.2	24.5	37.4	50.2	64.3	74.8	87.6
132.5°	1.2	1.2	3.5	5.8	11.7	19.9	31.6	43.2	56.1	67.8	78.3
135°	1.2	1.2	2.3	4.7	9.3	16.4	25.7	36.2	49.1	60.8	71.3
137.5°	1.2	1.2	2.3	4.7	7.0	14.0	19.9	29.2	40.9	51.4	61.9
140°	1.2	1.2	2.3	3.5	5.8	10.5	16.4	23.4	32.7	42.1	53.8
142.5°	1.2	1.2	1.2	3.5	4.7	8.2	12.9	18.7	25.7	33.9	43.2
145°	1.2	1.2	1.2	3.5	4.7	5.8	10.5	15.2	19.9	25.7	33.9
147.5°	1.2	1.2	1.2	2.3	3.5	4.7	8.2	11.7	15.2	19.9	24.5
150°	1.2	1.2	1.2	2.3	3.5	4.7	5.8	8.2	11.7	16.4	19.9
152.5°	1.2	1.2	1.2	2.3	2.3	3.5	4.7	5.8	8.2	11.7	14.0
155°	1.2	1.2	1.2	1.2	2.3	3.5	4.7	4.7	5.8	8.2	10.5
157.5°	1.2	1.2	1.2	1.2	2.3	2.3	3.5	3.5	4.7	4.7	7.0
160°	1.2	1.2	1.2	1.2	1.2	2.3	2.3	3.5	3.5	3.5	3.5
162.5°	1.2	1.2	1.2	1.2	1.2	1.2	2.3	2.3	2.3	3.5	3.5
165°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	2.3	2.3	2.3
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



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-50SL-LW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1107.8	1107.8	1107.8	1107.8	1107.8	1107.8	1107.8	1107.8	1107.8	1107.8	1107.8
2.5°	1099.6	1100.8	1104.3	1104.3	1102.0	1102.0	1100.8	1099.6	1100.8	1103.1	1103.1
5°	1097.3	1098.5	1102.0	1103.1	1100.8	1099.6	1099.6	1098.5	1099.6	1102.0	1102.0
7.5°	1092.6	1093.8	1097.3	1098.5	1096.1	1096.1	1095.0	1093.8	1096.1	1097.3	1097.3
10°	1085.6	1086.8	1091.5	1092.6	1091.5	1090.3	1090.3	1089.1	1090.3	1092.6	1092.6
12.5°	1076.3	1078.6	1084.4	1084.4	1084.4	1083.3	1083.3	1082.1	1083.3	1085.6	1084.4
15°	1065.7	1070.4	1075.1	1077.4	1077.4	1077.4	1076.3	1075.1	1077.4	1078.6	1077.4
17.5°	1054.1	1059.9	1066.9	1069.2	1069.2	1070.4	1069.2	1068.1	1070.4	1070.4	1069.2
20°	1042.4	1048.2	1055.2	1057.6	1059.9	1061.1	1061.1	1059.9	1061.1	1062.2	1061.1
22.5°	1027.2	1034.2	1042.4	1045.9	1048.2	1050.6	1050.6	1050.6	1051.7	1052.9	1050.6
25°	1010.8	1019.0	1028.3	1031.9	1036.5	1037.7	1038.9	1038.9	1040.0	1041.2	1037.7
27.5°	993.3	1002.6	1012.0	1017.8	1021.3	1023.7	1023.7	1024.8	1026.0	1027.2	1023.7
30°	972.3	986.3	994.5	999.1	1003.8	1007.3	1008.5	1009.7	1010.8	1012.0	1008.5
32.5°	953.6	965.2	975.8	981.6	987.4	992.1	993.3	993.3	995.6	995.6	992.1
35°	931.4	945.4	955.9	961.7	968.8	972.3	974.6	974.6	976.9	976.9	973.4
37.5°	909.2	923.2	934.9	941.9	950.1	954.7	955.9	955.9	958.2	958.2	953.6
40°	885.8	901.0	913.8	922.0	929.0	934.9	936.0	939.5	939.5	938.4	933.7
42.5°	862.4	876.4	890.5	899.8	909.2	915.0	917.3	918.5	918.5	917.3	913.8
45°	836.7	853.1	865.9	877.6	887.0	892.8	896.3	897.5	897.5	895.1	891.6
47.5°	812.2	828.5	841.4	854.2	863.6	870.6	874.1	875.3	874.1	872.9	869.4
50°	786.5	805.1	818.0	830.9	840.2	846.1	851.9	853.1	851.9	850.7	843.7
52.5°	759.6	779.4	793.5	806.3	816.8	823.8	828.5	829.7	829.7	827.4	822.7
55°	732.7	750.2	767.8	781.8	793.5	800.5	806.3	808.7	806.3	804.0	798.1
57.5°	708.2	724.5	742.0	757.2	768.9	778.3	782.9	785.3	782.9	779.4	773.6
60°	678.9	696.5	716.3	730.4	743.2	752.6	754.9	759.6	757.2	753.7	747.9
62.5°	650.9	671.9	689.5	707.0	717.5	728.0	732.7	735.0	732.7	729.2	723.3
65°	621.7	645.1	662.6	680.1	691.8	702.3	708.2	709.3	707.0	703.5	697.6
67.5°	594.8	617.0	635.7	654.4	664.9	675.4	681.3	683.6	681.3	676.6	670.8
70°	567.9	590.1	612.3	626.4	639.2	650.9	654.4	657.9	655.6	650.9	643.9
72.5°	541.1	564.4	586.6	600.6	614.7	625.2	629.9	633.4	631.0	626.4	618.2
75°	513.0	537.5	559.7	574.9	589.0	599.5	604.2	607.7	605.3	600.6	591.3
77.5°	487.3	511.8	532.9	549.2	563.3	572.6	580.8	582.0	579.6	574.9	565.6
80°	460.4	485.0	507.2	523.5	537.5	546.9	552.7	556.2	553.9	549.2	539.9
82.5°	437.0	459.3	481.5	497.8	511.8	523.5	528.2	531.7	530.5	523.5	516.5
85°	411.3	437.0	454.6	472.1	486.1	497.8	501.3	506.0	504.8	499.0	489.6
87.5°	385.6	411.3	432.4	449.9	462.8	472.1	477.9	480.3	479.1	473.3	462.8
90°	364.6	388.0	409.0	427.7	438.2	448.7	454.6	455.7	455.7	448.7	440.6
92.5°	344.7	366.9	388.0	405.5	418.4	427.7	432.4	434.7	433.5	427.7	418.4
95°	322.5	347.1	366.9	384.5	397.3	406.7	411.3	413.7	412.5	406.7	397.3
97.5°	303.8	326.0	345.9	362.3	375.1	384.5	389.1	391.5	391.5	385.6	376.3
100°	285.1	307.3	326.0	342.4	354.1	363.4	368.1	369.3	368.1	363.4	354.1
102.5°	266.4	287.5	306.2	321.4	334.2	342.4	347.1	348.2	348.2	342.4	333.0
105°	247.7	268.8	286.3	302.7	313.2	321.4	324.9	328.4	327.2	322.5	313.2
107.5°	230.2	251.2	267.6	282.8	293.3	301.5	305.0	308.5	307.3	302.7	293.3
110°	213.8	233.7	248.9	264.1	273.4	281.6	287.5	288.6	286.3	281.6	273.4



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-50SL-LW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	198.7	216.2	231.4	245.4	255.9	261.8	266.4	268.8	266.4	261.8	255.9
115°	182.3	199.8	215.0	227.9	237.2	244.2	247.7	250.1	247.7	243.1	237.2
117.5°	167.1	183.5	198.7	211.5	219.7	225.5	229.0	231.4	229.0	225.5	219.7
120°	154.3	168.3	182.3	194.0	203.3	208.0	211.5	213.8	212.7	208.0	202.2
122.5°	139.1	154.3	167.1	178.8	187.0	191.6	194.0	196.3	195.2	191.6	185.8
125°	126.2	139.1	151.9	162.4	170.6	175.3	177.6	180.0	178.8	175.3	168.3
127.5°	112.2	126.2	136.7	147.2	153.1	160.1	161.3	163.6	162.4	158.9	153.1
130°	101.7	112.2	122.7	132.0	139.1	143.7	146.1	147.2	144.9	142.6	136.7
132.5°	88.8	100.5	109.8	118.0	122.7	127.4	129.7	130.9	130.9	127.4	122.7
135°	79.5	87.6	95.8	104.0	108.7	113.4	115.7	116.9	115.7	113.4	108.7
137.5°	71.3	78.3	84.1	91.1	97.0	99.3	101.7	101.7	100.5	99.3	95.8
140°	61.9	70.1	76.0	80.6	85.3	86.5	88.8	88.8	87.6	86.5	84.1
142.5°	52.6	59.6	65.4	71.3	74.8	77.1	78.3	79.5	78.3	77.1	73.6
145°	42.1	50.2	56.1	59.6	64.3	65.4	66.6	67.8	66.6	65.4	61.9
147.5°	32.7	39.7	45.6	50.2	53.8	54.9	56.1	57.3	56.1	53.8	52.6
150°	23.4	29.2	36.2	40.9	43.2	45.6	45.6	45.6	46.7	44.4	42.1
152.5°	18.7	21.0	25.7	30.4	33.9	35.1	36.2	36.2	35.1	35.1	32.7
155°	12.9	15.2	18.7	22.2	25.7	26.9	28.0	28.0	26.9	26.9	25.7
157.5°	8.2	10.5	12.9	15.2	18.7	19.9	21.0	21.0	21.0	19.9	18.7
160°	4.7	5.8	7.0	9.3	11.7	12.9	14.0	14.0	14.0	14.0	12.9
162.5°	3.5	3.5	3.5	4.7	5.8	7.0	8.2	8.2	8.2	8.2	7.0
165°	2.3	2.3	2.3	2.3	2.3	3.5	4.7	4.7	4.7	4.7	4.7
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



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-50SL-LW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1107.8	1107.8	1107.8	1107.8	1107.8	1107.8	1107.8	1107.8	1107.8	1107.8	1107.8
2.5°	1102.0	1102.0	1103.1	1100.8	1093.8	1095.0	1095.0	1099.6	1102.0	1103.1	1109.0
5°	1099.6	1099.6	1102.0	1098.5	1092.6	1092.6	1092.6	1097.3	1098.5	1100.8	1105.5
7.5°	1096.1	1096.1	1097.3	1093.8	1086.8	1086.8	1085.6	1090.3	1092.6	1093.8	1098.5
10°	1090.3	1090.3	1091.5	1087.9	1079.8	1079.8	1078.6	1082.1	1083.3	1085.6	1089.1
12.5°	1082.1	1082.1	1082.1	1078.6	1070.4	1069.2	1068.1	1071.6	1071.6	1072.8	1076.3
15°	1075.1	1072.8	1072.8	1069.2	1061.1	1058.7	1056.4	1057.6	1059.9	1058.7	1061.1
17.5°	1066.9	1064.6	1062.2	1058.7	1048.2	1044.7	1042.4	1043.5	1042.4	1041.2	1043.5
20°	1057.6	1054.1	1052.9	1047.0	1036.5	1030.7	1026.0	1023.7	1024.8	1021.3	1022.5
22.5°	1047.0	1042.4	1040.0	1033.0	1022.5	1015.5	1009.7	1005.0	1003.8	999.1	1000.3
25°	1034.2	1028.3	1024.8	1019.0	1007.3	999.1	992.1	985.1	981.6	975.8	974.6
27.5°	1019.0	1013.2	1008.5	1002.6	991.0	980.4	972.3	962.9	958.2	951.2	947.7
30°	1003.8	996.8	989.8	985.1	972.3	960.6	947.7	939.5	932.5	924.3	918.5
32.5°	985.1	978.1	971.1	964.1	952.4	938.4	927.9	915.0	906.8	897.5	890.5
35°	966.4	957.1	950.1	940.7	930.2	913.8	901.0	888.1	877.6	867.1	858.9
37.5°	945.4	938.4	927.9	919.7	906.8	890.5	876.4	860.1	850.7	836.7	826.2
40°	925.5	917.3	906.8	896.3	883.4	864.7	849.6	830.9	820.3	804.0	793.5
42.5°	905.6	894.0	883.4	871.8	857.7	840.2	821.5	802.8	788.8	773.6	758.4
45°	883.4	870.6	857.7	844.9	830.9	813.3	793.5	773.6	756.1	742.0	723.3
47.5°	860.1	847.2	832.0	818.0	802.8	785.3	764.2	743.2	724.5	708.2	688.3
50°	836.7	823.8	807.5	792.3	774.8	757.2	735.0	710.5	690.6	669.6	652.1
52.5°	812.2	799.3	784.1	764.2	745.6	728.0	704.7	678.9	656.7	639.2	617.0
55°	787.6	774.8	757.2	737.4	718.7	696.5	674.3	648.6	624.0	603.0	580.8
57.5°	761.9	750.2	730.4	714.0	690.6	667.3	643.9	619.3	592.5	567.9	542.2
60°	736.2	723.3	704.7	684.8	661.4	638.0	613.5	586.6	558.6	531.7	508.3
62.5°	712.8	696.5	678.9	657.9	633.4	611.2	583.1	553.9	525.9	497.8	469.8
65°	686.0	668.4	652.1	631.0	605.3	579.6	551.6	522.4	492.0	461.6	433.5
67.5°	659.1	641.5	624.0	603.0	576.1	549.2	520.0	490.8	456.9	427.7	395.0
70°	632.2	618.2	596.0	573.8	549.2	520.0	490.8	459.3	424.2	392.6	358.8
72.5°	605.3	591.3	569.1	545.7	522.4	492.0	460.4	428.9	396.1	359.9	323.7
75°	579.6	562.1	542.2	520.0	495.5	463.9	432.4	399.7	361.1	327.2	289.8
77.5°	555.1	538.7	518.8	494.3	467.4	437.0	404.3	370.4	331.9	295.7	254.7
80°	528.2	511.8	492.0	467.4	440.6	411.3	376.3	341.2	303.8	264.1	222.0
82.5°	502.5	487.3	465.1	442.9	413.7	384.5	349.4	314.3	274.6	236.1	195.2
85°	475.6	460.4	439.4	416.0	388.0	356.4	323.7	288.6	248.9	209.2	168.3
87.5°	452.2	434.7	413.7	390.3	362.3	331.9	300.3	262.9	224.4	185.8	143.7
90°	427.7	411.3	390.3	366.9	338.9	308.5	275.8	240.7	203.3	163.6	123.9
92.5°	406.7	389.1	369.3	345.9	317.9	288.6	255.9	220.9	184.6	146.1	107.5
95°	385.6	368.1	349.4	326.0	298.0	268.8	236.1	202.2	167.1	129.7	93.5
97.5°	362.3	347.1	328.4	306.2	278.1	250.1	218.5	185.8	151.9	115.7	81.8
100°	343.6	326.0	308.5	285.1	259.4	232.5	201.0	169.4	136.7	102.8	71.3
102.5°	322.5	306.2	288.6	266.4	240.7	213.8	184.6	154.3	123.9	92.3	61.9
105°	302.7	287.5	268.8	247.7	223.2	197.5	169.4	141.4	112.2	81.8	54.9
107.5°	282.8	267.6	250.1	230.2	206.8	181.1	155.4	127.4	100.5	73.6	49.1
110°	262.9	248.9	232.5	212.7	190.5	167.1	142.6	116.9	90.0	65.4	43.2



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-50SL-LW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	245.4	231.4	215.0	196.3	175.3	153.1	129.7	105.2	80.6	58.4	37.4
115°	227.9	215.0	198.7	182.3	161.3	140.2	118.0	94.7	72.5	52.6	32.7
117.5°	210.3	197.5	182.3	165.9	147.2	127.4	106.3	84.1	65.4	46.7	29.2
120°	192.8	181.1	167.1	151.9	135.6	115.7	94.7	76.0	58.4	40.9	25.7
122.5°	176.5	165.9	153.1	139.1	121.5	102.8	85.3	68.9	52.6	36.2	21.0
125°	161.3	150.7	139.1	125.0	108.7	92.3	77.1	61.9	45.6	31.6	17.5
127.5°	146.1	135.6	123.9	111.0	98.2	83.0	68.9	54.9	40.9	28.0	15.2
130°	130.9	121.5	111.0	100.5	87.6	73.6	61.9	47.9	35.1	22.2	12.9
132.5°	115.7	108.7	99.3	88.8	77.1	66.6	53.8	42.1	30.4	19.9	11.7
135°	102.8	95.8	87.6	78.3	68.9	58.4	46.7	36.2	25.7	16.4	9.3
137.5°	91.1	85.3	77.1	68.9	60.8	50.2	40.9	30.4	21.0	14.0	7.0
140°	80.6	74.8	67.8	59.6	52.6	43.2	33.9	24.5	18.7	11.7	5.8
142.5°	70.1	64.3	58.4	51.4	44.4	36.2	28.0	21.0	15.2	9.3	5.8
145°	59.6	54.9	49.1	43.2	36.2	29.2	23.4	17.5	11.7	7.0	4.7
147.5°	49.1	45.6	39.7	35.1	29.2	23.4	18.7	14.0	9.3	5.8	3.5
150°	39.7	36.2	31.6	26.9	23.4	18.7	15.2	10.5	7.0	5.8	3.5
152.5°	30.4	28.0	24.5	22.2	18.7	14.0	10.5	8.2	5.8	4.7	2.3
155°	24.5	22.2	19.9	16.4	14.0	10.5	8.2	5.8	4.7	3.5	2.3
157.5°	17.5	16.4	14.0	11.7	9.3	7.0	5.8	5.8	3.5	2.3	1.2
160°	11.7	10.5	9.3	7.0	5.8	5.8	4.7	3.5	2.3	2.3	1.2
162.5°	7.0	5.8	5.8	5.8	4.7	4.7	3.5	2.3	2.3	1.2	1.2
165°	4.7	4.7	4.7	3.5	3.5	3.5	2.3	1.2	1.2	1.2	1.2
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



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-50SL-LW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1107.8	1107.8	1107.8	1107.8	1107.8	1107.8	1107.8	1107.8	1107.8	1107.8	1107.8
2.5°	1109.0	1105.5	1110.1	1118.3	1119.5	1118.3	1116.0	1119.5	1124.2	1123.0	1114.8
5°	1106.6	1102.0	1106.6	1114.8	1114.8	1113.7	1112.5	1116.0	1120.7	1119.5	1112.5
7.5°	1099.6	1095.0	1099.6	1106.6	1107.8	1105.5	1105.5	1109.0	1113.7	1112.5	1106.6
10°	1090.3	1085.6	1087.9	1096.1	1098.5	1096.1	1096.1	1099.6	1105.5	1104.3	1097.3
12.5°	1076.3	1072.8	1075.1	1082.1	1084.4	1083.3	1082.1	1086.8	1092.6	1092.6	1085.6
15°	1061.1	1056.4	1058.7	1066.9	1068.1	1065.7	1066.9	1070.4	1077.4	1077.4	1071.6
17.5°	1043.5	1037.7	1041.2	1047.0	1048.2	1048.2	1048.2	1052.9	1061.1	1059.9	1055.2
20°	1023.7	1015.5	1017.8	1023.7	1026.0	1026.0	1026.0	1034.2	1040.0	1040.0	1035.4
22.5°	1000.3	994.5	994.5	1000.3	1003.8	1002.6	1002.6	1009.7	1017.8	1016.7	1016.7
25°	973.4	968.8	966.4	973.4	974.6	975.8	978.1	985.1	994.5	994.5	995.6
27.5°	945.4	940.7	939.5	945.4	946.5	947.7	950.1	958.2	967.6	968.8	971.1
30°	918.5	911.5	909.2	913.8	916.2	917.3	917.3	930.2	938.4	941.9	946.5
32.5°	887.0	879.9	874.1	882.3	883.4	885.8	887.0	899.8	909.2	915.0	922.0
35°	855.4	843.7	841.4	847.2	849.6	850.7	853.1	867.1	879.9	884.6	894.0
37.5°	820.3	812.2	805.1	811.0	813.3	814.5	821.5	834.4	847.2	854.2	863.6
40°	787.6	777.1	771.3	774.8	777.1	778.3	786.5	800.5	815.7	823.8	835.5
42.5°	751.4	737.4	732.7	736.2	737.4	740.9	747.9	766.6	781.8	793.5	802.8
45°	715.2	704.7	694.1	697.6	698.8	701.1	711.7	731.5	747.9	761.9	772.4
47.5°	677.8	664.9	654.4	656.7	661.4	662.6	674.3	697.6	712.8	728.0	742.0
50°	640.4	622.9	614.7	614.7	617.0	622.9	638.0	661.4	677.8	695.3	710.5
52.5°	601.8	585.5	576.1	577.3	579.6	586.6	600.6	624.0	642.7	661.4	680.1
55°	563.3	545.7	536.4	534.0	536.4	545.7	562.1	586.6	605.3	627.5	647.4
57.5°	524.7	503.7	495.5	492.0	494.3	506.0	522.4	548.1	571.4	592.5	615.8
60°	482.6	466.3	452.2	444.1	449.9	465.1	482.6	509.5	534.0	557.4	583.1
62.5°	446.4	425.4	410.2	402.0	407.8	420.7	445.2	470.9	497.8	524.7	550.4
65°	405.5	384.5	366.9	358.8	364.6	379.8	404.3	432.4	461.6	488.5	518.8
67.5°	365.8	343.6	322.5	314.3	321.4	337.7	364.6	396.1	427.7	455.7	488.5
70°	327.2	302.7	280.5	274.6	279.3	301.5	327.2	358.8	391.5	424.2	458.1
72.5°	292.1	261.8	238.4	231.4	237.2	261.8	291.0	323.7	358.8	393.8	430.0
75°	251.2	223.2	197.5	189.3	196.3	218.5	254.7	289.8	327.2	364.6	398.5
77.5°	218.5	185.8	158.9	146.1	157.8	185.8	220.9	258.3	296.8	335.4	373.9
80°	184.6	150.7	121.5	107.5	120.4	150.7	185.8	226.7	269.9	308.5	343.6
82.5°	154.3	118.0	87.6	72.5	86.5	120.4	158.9	199.8	241.9	280.5	321.4
85°	126.2	88.8	57.3	40.9	60.8	91.1	132.0	174.1	217.4	257.1	296.8
87.5°	102.8	66.6	35.1	17.5	37.4	71.3	109.8	151.9	195.2	234.9	272.3
90°	84.1	47.9	18.7	2.3	22.2	53.8	91.1	132.0	172.9	213.8	251.2
92.5°	68.9	36.2	10.5	1.2	14.0	43.2	78.3	116.9	156.6	196.3	232.5
95°	57.3	28.0	7.0	1.2	10.5	33.9	66.6	104.0	141.4	180.0	216.2
97.5°	49.1	23.4	5.8	1.2	8.2	29.2	57.3	92.3	128.5	164.8	199.8
100°	42.1	18.7	4.7	1.2	7.0	24.5	50.2	81.8	115.7	150.7	184.6
102.5°	36.2	15.2	3.5	1.2	5.8	21.0	44.4	73.6	104.0	137.9	170.6
105°	31.6	12.9	3.5	1.2	4.7	18.7	39.7	65.4	95.8	126.2	157.8
107.5°	26.9	10.5	2.3	1.2	3.5	15.2	35.1	59.6	86.5	115.7	144.9
110°	23.4	9.3	2.3	1.2	3.5	14.0	30.4	53.8	78.3	105.2	133.2



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-50SL-LW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	19.9	7.0	2.3	1.2	2.3	11.7	26.9	47.9	71.3	95.8	122.7
115°	17.5	5.8	1.2	1.2	2.3	10.5	24.5	43.2	64.3	87.6	112.2
117.5°	14.0	4.7	1.2	1.2	1.2	8.2	21.0	38.6	58.4	80.6	102.8
120°	11.7	4.7	1.2	1.2	1.2	7.0	18.7	33.9	52.6	72.5	93.5
122.5°	10.5	3.5	1.2	1.2	1.2	5.8	16.4	30.4	46.7	65.4	85.3
125°	9.3	3.5	1.2	1.2	1.2	4.7	14.0	26.9	42.1	58.4	77.1
127.5°	7.0	3.5	1.2	1.2	1.2	3.5	12.9	23.4	37.4	52.6	68.9
130°	5.8	2.3	1.2	1.2	1.2	3.5	10.5	21.0	32.7	46.7	61.9
132.5°	4.7	2.3	1.2	1.2	1.2	2.3	8.2	16.4	28.0	40.9	54.9
135°	4.7	2.3	1.2	1.2	1.2	2.3	5.8	14.0	23.4	35.1	46.7
137.5°	4.7	1.2	1.2	1.2	1.2	2.3	4.7	10.5	18.7	28.0	38.6
140°	3.5	1.2	1.2	1.2	1.2	1.2	3.5	8.2	15.2	23.4	32.7
142.5°	3.5	1.2	1.2	1.2	1.2	1.2	3.5	5.8	11.7	18.7	25.7
145°	2.3	1.2	1.2	1.2	1.2	1.2	2.3	4.7	9.3	14.0	21.0
147.5°	2.3	1.2	1.2	1.2	1.2	1.2	2.3	3.5	7.0	11.7	16.4
150°	2.3	1.2	1.2	1.2	1.2	1.2	2.3	3.5	4.7	8.2	12.9
152.5°	1.2	1.2	1.2	1.2	1.2	1.2	2.3	2.3	3.5	5.8	8.2
155°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	2.3	3.5	4.7	5.8
157.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	2.3	2.3	3.5	4.7
160°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	2.3	2.3	3.5
162.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	2.3	2.3
165°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
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



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-50SL-LW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1107.8	1107.8	1107.8	1107.8	1107.8	1107.8	1107.8	1107.8	1107.8	1107.8	1107.8
2.5°	1111.3	1103.1	1105.5	1104.3	1106.6	1110.1	1110.1	1109.0	1109.0	1106.6	1104.3
5°	1109.0	1100.8	1104.3	1103.1	1105.5	1109.0	1109.0	1107.8	1107.8	1104.3	1103.1
7.5°	1102.0	1096.1	1098.5	1098.5	1100.8	1104.3	1104.3	1103.1	1103.1	1099.6	1098.5
10°	1095.0	1087.9	1091.5	1091.5	1093.8	1098.5	1098.5	1097.3	1097.3	1093.8	1092.6
12.5°	1083.3	1076.3	1082.1	1083.3	1085.6	1090.3	1089.1	1089.1	1089.1	1085.6	1084.4
15°	1069.2	1064.6	1070.4	1071.6	1075.1	1080.9	1080.9	1080.9	1080.9	1077.4	1076.3
17.5°	1054.1	1050.6	1056.4	1058.7	1063.4	1069.2	1069.2	1070.4	1071.6	1069.2	1068.1
20°	1036.5	1034.2	1040.0	1044.7	1051.7	1057.6	1059.9	1061.1	1063.4	1061.1	1059.9
22.5°	1016.7	1016.7	1024.8	1029.5	1037.7	1043.5	1047.0	1050.6	1052.9	1050.6	1049.4
25°	994.5	998.0	1006.1	1014.3	1023.7	1029.5	1033.0	1037.7	1040.0	1038.9	1037.7
27.5°	973.4	978.1	988.6	996.8	1005.0	1014.3	1017.8	1023.7	1026.0	1026.0	1024.8
30°	948.9	955.9	967.6	976.9	987.4	996.8	1001.5	1007.3	1010.8	1008.5	1009.7
32.5°	925.5	937.2	946.5	957.1	968.8	978.1	983.9	991.0	994.5	993.3	994.5
35°	899.8	911.5	924.3	934.9	948.9	958.2	966.4	972.3	976.9	975.8	975.8
37.5°	871.8	887.0	899.8	913.8	926.7	937.2	945.4	952.4	957.1	957.1	957.1
40°	844.9	861.2	874.1	890.5	906.8	916.2	925.5	932.5	937.2	938.4	939.5
42.5°	815.7	833.2	848.4	865.9	882.3	894.0	904.5	912.7	917.3	919.7	918.5
45°	788.8	805.1	822.7	842.5	857.7	869.4	882.3	891.6	896.3	897.5	898.6
47.5°	758.4	777.1	797.0	816.8	832.0	847.2	858.9	868.3	872.9	876.4	876.4
50°	729.2	749.1	771.3	792.3	808.7	823.8	835.5	846.1	851.9	854.2	855.4
52.5°	702.3	721.0	744.4	765.4	781.8	797.0	812.2	823.8	829.7	832.0	832.0
55°	669.6	693.0	718.7	738.5	756.1	773.6	788.8	800.5	806.3	809.8	812.2
57.5°	639.2	663.8	690.6	711.7	732.7	749.1	763.1	778.3	782.9	787.6	788.8
60°	610.0	634.5	660.2	683.6	704.7	722.2	738.5	751.4	759.6	761.9	764.2
62.5°	579.6	605.3	632.2	655.6	677.8	698.8	714.0	725.7	735.0	738.5	740.9
65°	550.4	577.3	604.2	628.7	652.1	673.1	688.3	700.0	709.3	715.2	716.3
67.5°	518.8	548.1	576.1	601.8	625.2	647.4	662.6	674.3	683.6	690.6	691.8
70°	489.6	520.0	548.1	576.1	599.5	621.7	638.0	649.7	660.2	664.9	667.3
72.5°	461.6	493.1	522.4	550.4	573.8	596.0	613.5	625.2	635.7	641.5	642.7
75°	434.7	466.3	497.8	524.7	549.2	571.4	589.0	601.8	611.2	617.0	619.3
77.5°	407.8	440.6	472.1	499.0	524.7	546.9	562.1	577.3	586.6	593.6	593.6
80°	381.0	414.8	447.6	474.4	500.2	520.0	537.5	552.7	562.1	569.1	569.1
82.5°	357.6	390.3	421.9	448.7	474.4	496.6	514.2	528.2	538.7	543.4	544.6
85°	330.7	366.9	396.1	425.4	449.9	470.9	488.5	503.7	513.0	517.7	520.0
87.5°	308.5	343.6	375.1	400.8	425.4	446.4	466.3	479.1	488.5	494.3	496.6
90°	287.5	321.4	352.9	378.6	404.3	424.2	442.9	455.7	466.3	470.9	473.3
92.5°	268.8	302.7	333.0	358.8	383.3	405.5	423.0	435.9	445.2	449.9	453.4
95°	251.2	284.0	313.2	341.2	364.6	384.5	403.2	416.0	426.5	430.0	433.5
97.5°	233.7	265.3	294.5	321.4	345.9	364.6	382.1	395.0	403.2	409.0	412.5
100°	218.5	248.9	277.0	302.7	326.0	343.6	362.3	373.9	382.1	386.8	391.5
102.5°	202.2	232.5	259.4	284.0	308.5	324.9	342.4	354.1	361.1	369.3	369.3
105°	188.1	216.2	243.1	266.4	287.5	307.3	322.5	334.2	342.4	348.2	348.2
107.5°	172.9	201.0	226.7	251.2	271.1	289.8	303.8	314.3	323.7	327.2	330.7
110°	161.3	185.8	211.5	234.9	253.6	271.1	285.1	296.8	305.0	308.5	310.8



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-50SL-LW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	147.2	172.9	196.3	218.5	237.2	253.6	267.6	277.0	285.1	289.8	291.0
115°	135.6	160.1	181.1	202.2	222.0	236.1	248.9	258.3	266.4	269.9	272.3
117.5°	125.0	147.2	168.3	185.8	204.5	219.7	232.5	240.7	247.7	252.4	254.7
120°	114.5	135.6	154.3	171.8	189.3	203.3	215.0	223.2	231.4	234.9	234.9
122.5°	104.0	123.9	141.4	157.8	174.1	187.0	199.8	206.8	213.8	217.4	217.4
125°	94.7	113.4	129.7	144.9	160.1	171.8	182.3	190.5	197.5	199.8	199.8
127.5°	85.3	102.8	118.0	132.0	144.9	156.6	167.1	175.3	181.1	183.5	183.5
130°	77.1	92.3	106.3	120.4	133.2	142.6	153.1	160.1	163.6	167.1	168.3
132.5°	68.9	83.0	95.8	107.5	120.4	129.7	137.9	144.9	148.4	151.9	153.1
135°	60.8	73.6	85.3	97.0	107.5	116.9	123.9	129.7	134.4	136.7	137.9
137.5°	51.4	65.4	76.0	85.3	97.0	104.0	112.2	115.7	120.4	122.7	122.7
140°	43.2	53.8	65.4	74.8	84.1	91.1	98.2	104.0	107.5	108.7	108.7
142.5°	35.1	44.4	53.8	65.4	73.6	79.5	86.5	91.1	93.5	94.7	95.8
145°	28.0	35.1	43.2	53.8	63.1	70.1	73.6	78.3	80.6	81.8	83.0
147.5°	21.0	28.0	35.1	42.1	51.4	58.4	61.9	66.6	68.9	70.1	70.1
150°	16.4	21.0	25.7	32.7	39.7	47.9	52.6	56.1	57.3	58.4	58.4
152.5°	11.7	16.4	19.9	24.5	29.2	36.2	43.2	45.6	46.7	47.9	47.9
155°	8.2	11.7	14.0	17.5	21.0	26.9	32.7	36.2	37.4	38.6	38.6
157.5°	5.8	8.2	9.3	12.9	15.2	17.5	22.2	28.0	29.2	29.2	29.2
160°	3.5	4.7	5.8	8.2	9.3	11.7	14.0	17.5	21.0	21.0	21.0
162.5°	2.3	3.5	3.5	4.7	4.7	7.0	8.2	9.3	12.9	14.0	14.0
165°	1.2	2.3	2.3	2.3	2.3	2.3	3.5	3.5	5.8	7.0	7.0
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



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-50SL-LW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1107.8	1107.8	1107.8	1107.8	1107.8	1107.8	1107.8	1107.8	1107.8	1107.8	1107.8
2.5°	1105.5	1107.8	1106.6	1106.6	1106.6	1109.0	1106.6	1096.1	1098.5	1100.8	1103.1
5°	1104.3	1105.5	1105.5	1104.3	1104.3	1106.6	1104.3	1093.8	1096.1	1098.5	1099.6
7.5°	1099.6	1100.8	1100.8	1100.8	1099.6	1102.0	1098.5	1089.1	1089.1	1091.5	1092.6
10°	1093.8	1096.1	1095.0	1093.8	1093.8	1093.8	1091.5	1080.9	1080.9	1082.1	1083.3
12.5°	1086.8	1086.8	1086.8	1085.6	1084.4	1084.4	1082.1	1071.6	1070.4	1072.8	1071.6
15°	1077.4	1079.8	1077.4	1076.3	1073.9	1073.9	1070.4	1059.9	1057.6	1058.7	1057.6
17.5°	1069.2	1070.4	1068.1	1065.7	1063.4	1062.2	1058.7	1047.0	1043.5	1044.7	1042.4
20°	1061.1	1061.1	1058.7	1056.4	1052.9	1049.4	1044.7	1033.0	1027.2	1027.2	1022.5
22.5°	1050.6	1050.6	1048.2	1044.7	1041.2	1036.5	1031.9	1020.2	1010.8	1008.5	1005.0
25°	1038.9	1037.7	1036.5	1033.0	1026.0	1021.3	1016.7	1003.8	993.3	988.6	982.8
27.5°	1024.8	1024.8	1021.3	1017.8	1010.8	1005.0	999.1	987.4	973.4	967.6	959.4
30°	1009.7	1009.7	1006.1	1001.5	994.5	987.4	980.4	966.4	952.4	944.2	934.9
32.5°	994.5	993.3	989.8	985.1	978.1	967.6	961.7	947.7	931.4	922.0	909.2
35°	975.8	974.6	971.1	965.2	955.9	947.7	938.4	925.5	906.8	895.1	881.1
37.5°	957.1	955.9	953.6	945.4	936.0	926.7	915.0	902.1	884.6	869.4	855.4
40°	938.4	937.2	932.5	926.7	915.0	903.3	891.6	878.8	860.1	842.5	827.4
42.5°	918.5	917.3	911.5	904.5	891.6	879.9	865.9	851.9	833.2	812.2	797.0
45°	898.6	896.3	890.5	882.3	868.3	855.4	841.4	825.0	806.3	786.5	766.6
47.5°	877.6	874.1	868.3	856.6	844.9	830.9	814.5	797.0	778.3	756.1	735.0
50°	854.2	851.9	844.9	834.4	820.3	806.3	787.6	770.1	747.9	726.9	701.1
52.5°	832.0	827.4	821.5	809.8	795.8	780.6	760.7	739.7	717.5	697.6	670.8
55°	808.7	806.3	798.1	788.8	771.3	753.7	735.0	712.8	688.3	664.9	639.2
57.5°	786.5	781.8	774.8	761.9	746.7	729.2	709.3	686.0	659.1	634.5	606.5
60°	764.2	757.2	749.1	737.4	721.0	702.3	681.3	656.7	629.9	603.0	573.8
62.5°	739.7	733.9	724.5	712.8	696.5	676.6	654.4	628.7	603.0	574.9	543.4
65°	715.2	709.3	700.0	688.3	671.9	649.7	626.4	600.6	571.4	544.6	510.7
67.5°	690.6	684.8	674.3	661.4	645.1	624.0	599.5	572.6	543.4	514.2	479.1
70°	666.1	659.1	649.7	635.7	619.3	597.1	572.6	544.6	515.3	483.8	448.7
72.5°	641.5	635.7	624.0	611.2	593.6	571.4	546.9	518.8	488.5	455.7	420.7
75°	617.0	610.0	601.8	586.6	567.9	546.9	521.2	493.1	460.4	428.9	392.6
77.5°	592.5	586.6	576.1	560.9	543.4	521.2	495.5	467.4	434.7	402.0	363.4
80°	567.9	560.9	552.7	538.7	518.8	496.6	469.8	441.7	409.0	375.1	336.6
82.5°	543.4	536.4	527.0	513.0	494.3	472.1	446.4	416.0	383.3	348.2	312.0
85°	518.8	513.0	502.5	488.5	468.6	446.4	420.7	393.8	358.8	323.7	287.5
87.5°	494.3	488.5	477.9	463.9	445.2	423.0	397.3	369.3	335.4	302.7	262.9
90°	470.9	466.3	455.7	441.7	423.0	400.8	377.5	347.1	314.3	281.6	244.2
92.5°	449.9	445.2	435.9	421.9	405.5	381.0	357.6	328.4	295.7	261.8	225.5
95°	431.2	425.4	416.0	403.2	383.3	362.3	338.9	309.7	278.1	244.2	209.2
97.5°	410.2	404.3	395.0	381.0	364.6	342.4	319.0	291.0	259.4	227.9	192.8
100°	389.1	383.3	372.8	361.1	344.7	322.5	300.3	272.3	243.1	212.7	178.8
102.5°	368.1	362.3	352.9	341.2	324.9	305.0	282.8	255.9	226.7	196.3	164.8
105°	348.2	342.4	333.0	321.4	306.2	286.3	262.9	239.6	211.5	182.3	151.9
107.5°	328.4	322.5	314.3	302.7	287.5	268.8	246.6	222.0	196.3	168.3	139.1
110°	308.5	303.8	294.5	284.0	268.8	250.1	230.2	206.8	181.1	155.4	127.4



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-50SL-LW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	289.8	285.1	275.8	264.1	251.2	233.7	213.8	191.6	167.1	142.6	115.7
115°	271.1	265.3	257.1	246.6	233.7	217.4	198.7	178.8	154.3	130.9	106.3
117.5°	252.4	247.7	239.6	229.0	217.4	201.0	183.5	164.8	141.4	119.2	97.0
120°	233.7	230.2	222.0	212.7	201.0	185.8	169.4	150.7	129.7	108.7	87.6
122.5°	216.2	212.7	204.5	196.3	184.6	170.6	155.4	137.9	119.2	99.3	80.6
125°	199.8	195.2	188.1	180.0	169.4	156.6	141.4	125.0	107.5	90.0	72.5
127.5°	182.3	178.8	174.1	164.8	154.3	142.6	128.5	114.5	98.2	81.8	65.4
130°	168.3	163.6	157.8	150.7	141.4	129.7	116.9	102.8	88.8	73.6	57.3
132.5°	151.9	147.2	142.6	135.6	127.4	116.9	105.2	92.3	79.5	65.4	51.4
135°	136.7	133.2	128.5	121.5	113.4	105.2	93.5	81.8	70.1	57.3	45.6
137.5°	122.7	119.2	114.5	109.8	101.7	93.5	83.0	72.5	61.9	50.2	39.7
140°	108.7	106.3	101.7	97.0	90.0	81.8	72.5	63.1	53.8	43.2	33.9
142.5°	94.7	92.3	88.8	84.1	78.3	71.3	63.1	54.9	45.6	37.4	29.2
145°	81.8	80.6	77.1	72.5	67.8	60.8	53.8	46.7	38.6	31.6	23.4
147.5°	68.9	67.8	65.4	61.9	57.3	51.4	45.6	38.6	32.7	25.7	18.7
150°	57.3	56.1	54.9	50.2	47.9	42.1	37.4	31.6	26.9	19.9	15.2
152.5°	46.7	46.7	44.4	40.9	38.6	33.9	30.4	25.7	21.0	16.4	11.7
155°	37.4	36.2	35.1	32.7	30.4	26.9	23.4	19.9	16.4	11.7	8.2
157.5°	29.2	28.0	26.9	24.5	22.2	21.0	17.5	14.0	10.5	8.2	5.8
160°	21.0	19.9	18.7	17.5	16.4	14.0	11.7	9.3	7.0	4.7	3.5
162.5°	14.0	12.9	12.9	11.7	10.5	8.2	7.0	5.8	4.7	3.5	2.3
165°	7.0	7.0	5.8	5.8	4.7	3.5	3.5	3.5	2.3	2.3	1.2
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



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-50SL-LW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1107.8	1107.8	1107.8	1107.8	1107.8	1107.8	1107.8
2.5°	1102.0	1102.0	1106.6	1105.5	1102.0	1109.0	1117.2
5°	1098.5	1098.5	1102.0	1102.0	1098.5	1105.5	1112.5
7.5°	1092.6	1091.5	1095.0	1095.0	1090.3	1096.1	1104.3
10°	1082.1	1080.9	1084.4	1084.4	1079.8	1085.6	1092.6
12.5°	1070.4	1068.1	1071.6	1070.4	1065.7	1071.6	1078.6
15°	1055.2	1054.1	1056.4	1054.1	1049.4	1055.2	1062.2
17.5°	1040.0	1036.5	1037.7	1037.7	1029.5	1035.4	1041.2
20°	1020.2	1015.5	1016.7	1015.5	1009.7	1013.2	1020.2
22.5°	1000.3	993.3	993.3	992.1	985.1	989.8	995.6
25°	975.8	967.6	967.6	966.4	958.2	961.7	967.6
27.5°	951.2	943.0	939.5	938.4	930.2	930.2	938.4
30°	925.5	913.8	911.5	908.0	899.8	899.8	906.8
32.5°	901.0	884.6	879.9	875.3	867.1	865.9	874.1
35°	868.3	855.4	847.2	842.5	833.2	830.9	837.9
37.5°	841.4	825.0	813.3	807.5	798.1	794.6	804.0
40°	812.2	794.6	779.4	775.9	761.9	757.2	765.4
42.5°	779.4	760.7	745.6	738.5	728.0	723.3	724.5
45°	746.7	726.9	710.5	701.1	690.6	682.4	687.1
47.5°	712.8	695.3	675.4	661.4	648.6	642.7	645.1
50°	678.9	657.9	639.2	624.0	608.8	601.8	606.5
52.5°	645.1	622.9	601.8	585.5	567.9	560.9	562.1
55°	612.3	589.0	564.4	546.9	530.5	520.0	517.7
57.5°	579.6	553.9	528.2	508.3	487.3	477.9	474.4
60°	544.6	517.7	490.8	467.4	445.2	434.7	430.0
62.5°	511.8	482.6	452.2	427.7	405.5	391.5	388.0
65°	480.3	446.4	416.0	388.0	363.4	348.2	343.6
67.5°	446.4	411.3	378.6	348.2	324.9	305.0	302.7
70°	414.8	377.5	341.2	309.7	284.0	264.1	254.7
72.5°	383.3	344.7	307.3	273.4	240.7	222.0	215.0
75°	352.9	313.2	273.4	238.4	202.2	180.0	172.9
77.5°	324.9	284.0	241.9	203.3	169.4	141.4	132.0
80°	298.0	255.9	211.5	171.8	135.6	105.2	94.7
82.5°	269.9	230.2	184.6	142.6	105.2	73.6	60.8
85°	245.4	205.7	160.1	118.0	80.6	46.7	32.7
87.5°	225.5	182.3	141.4	99.3	60.8	26.9	9.3
90°	205.7	163.6	122.7	81.8	45.6	15.2	1.2
92.5°	188.1	148.4	107.5	70.1	35.1	10.5	1.2
95°	171.8	133.2	94.7	58.4	28.0	7.0	1.2
97.5°	156.6	120.4	84.1	50.2	23.4	5.8	1.2
100°	143.7	108.7	74.8	44.4	19.9	4.7	1.2
102.5°	130.9	98.2	66.6	38.6	17.5	3.5	1.2
105°	120.4	88.8	59.6	35.1	15.2	3.5	1.2
107.5°	109.8	80.6	53.8	30.4	12.9	2.3	1.2
110°	99.3	73.6	47.9	26.9	11.7	2.3	1.2



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-50SL-LW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	91.1	66.6	43.2	24.5	9.3	2.3	1.2
115°	83.0	59.6	38.6	21.0	8.2	1.2	1.2
117.5°	74.8	53.8	33.9	18.7	7.0	1.2	1.2
120°	67.8	47.9	30.4	16.4	5.8	1.2	1.2
122.5°	60.8	43.2	26.9	14.0	4.7	1.2	1.2
125°	54.9	38.6	23.4	11.7	3.5	1.2	1.2
127.5°	49.1	33.9	21.0	10.5	3.5	1.2	1.2
130°	43.2	30.4	17.5	8.2	2.3	1.2	1.2
132.5°	38.6	25.7	15.2	7.0	2.3	1.2	1.2
135°	33.9	22.2	12.9	4.7	2.3	1.2	1.2
137.5°	29.2	18.7	10.5	3.5	1.2	1.2	1.2
140°	24.5	16.4	8.2	3.5	1.2	1.2	1.2
142.5°	21.0	12.9	5.8	2.3	1.2	1.2	1.2
145°	16.4	10.5	4.7	2.3	1.2	1.2	1.2
147.5°	12.9	8.2	3.5	2.3	1.2	1.2	1.2
150°	9.3	5.8	3.5	1.2	1.2	1.2	1.2
152.5°	7.0	4.7	2.3	1.2	1.2	1.2	1.2
155°	4.7	3.5	2.3	1.2	1.2	1.2	1.2
157.5°	3.5	2.3	1.2	1.2	1.2	1.2	1.2
160°	2.3	1.2	1.2	1.2	1.2	1.2	1.2
162.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2
165°	1.2	1.2	1.2	1.2	1.2	1.2	1.2
167.5°	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
172.5°	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
177.5°	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

(END OF REPORT)