

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-LD5-34SL-LN-UNV-L930-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 (P33519)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4SNLED-LD5-34SL-LN-UNV-L930-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
NARROW LENS
Light Source: -
Ballast/Driver: -

Summary

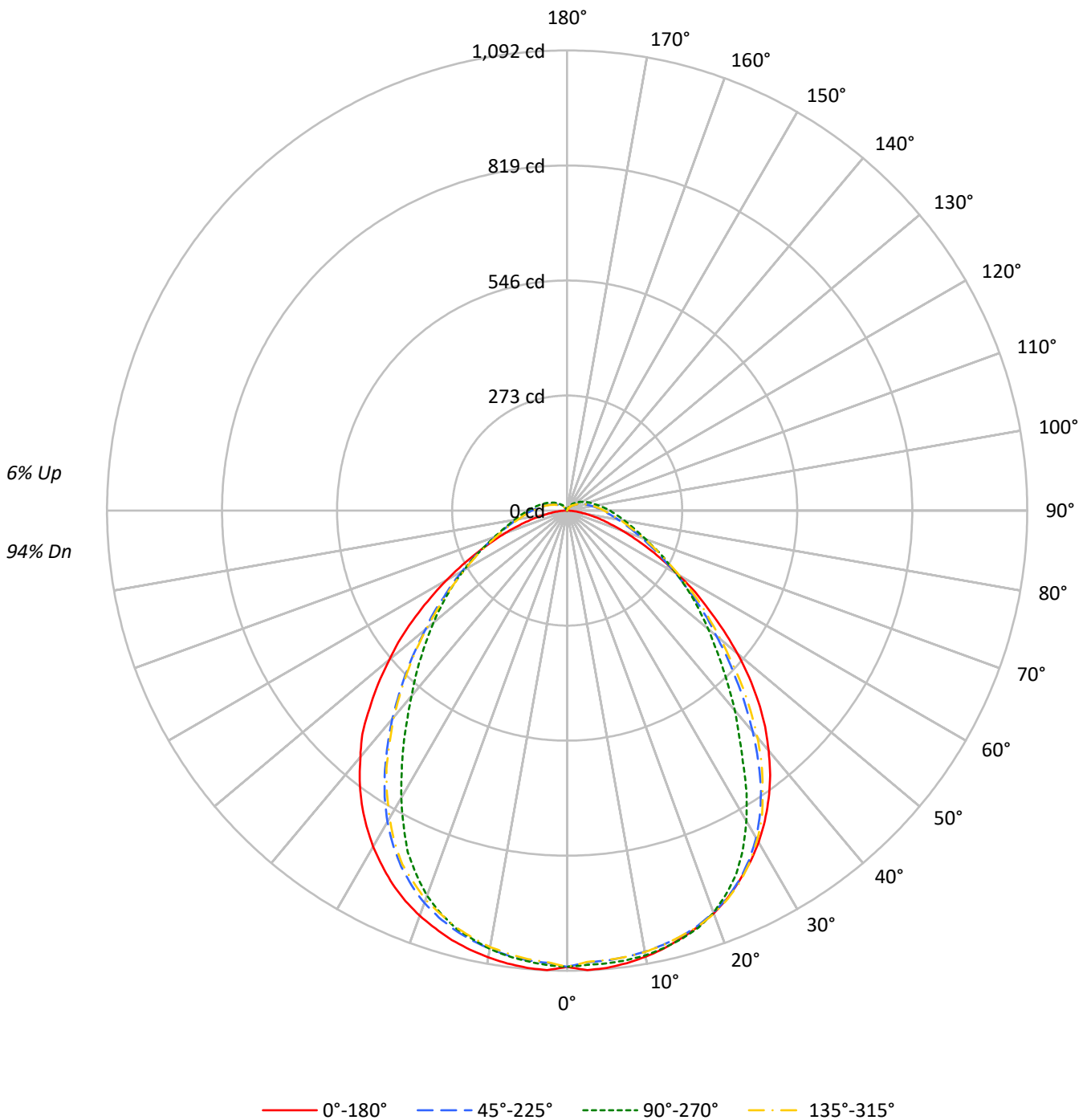
Lumens per Lamp: N/A
Luminaire Lumens: 2740.0 lumens
Efficiency: N/A
Efficacy: 109.6 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.14 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 25
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



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					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	0	
RCR																						
0	118	118	118	118	114	114	114	114	108	108	108	102	102	102	96	96	96	94				
1	107	103	98	95	104	100	96	92	94	91	88	89	87	85	85	83	81	79				
2	98	90	84	78	95	88	82	77	83	78	74	79	75	72	75	72	69	67				
3	90	80	72	66	87	78	71	65	74	68	63	71	66	61	67	63	60	57				
4	83	72	63	57	80	70	62	56	67	60	55	64	58	53	61	56	52	50				
5	77	64	56	50	74	63	55	49	60	53	48	58	52	47	55	50	46	44				
6	71	58	50	44	69	57	49	43	55	48	42	52	46	42	50	45	41	39				
7	66	53	45	39	64	52	44	39	50	43	38	48	42	37	46	41	37	35				
8	62	49	41	35	60	48	40	35	46	39	34	44	38	34	43	37	33	31				
9	58	45	37	32	56	44	37	31	42	36	31	41	35	30	40	34	30	28				
10	54	42	34	29	53	41	34	29	39	33	28	38	32	28	37	31	27	26				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	8749	8749	8749	8749
5°	8811	8470	8811	8434
10°	8772	8246	8787	8131
15°	8716	7999	8755	7791
20°	8649	7682	8699	7358
25°	8510	7213	8605	6788
30°	8330	6522	8439	6038
35°	8049	5676	8204	5285
40°	7646	4964	7848	4606
45°	7115	4315	7345	4067
50°	6389	3791	6670	3600
55°	5526	3349	5927	3179
60°	4647	2940	5067	2771
65°	3810	2600	4193	2410
70°	3033	2307	3394	2133
75°	2382	2130	2682	1960
80°	1720	2056	2024	1879
85°	1059	2066	1421	1900



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.6	3.7
10°-20°	294.3	10.7
20°-30°	436.2	15.9
30°-40°	484.6	17.7
40°-50°	439.3	16.0
50°-60°	340.4	12.4
60°-70°	231.2	8.4
70°-80°	147.1	5.4
80°-90°	94.0	3.4
90°-100°	63.4	2.3
100°-110°	43.4	1.6
110°-120°	29.0	1.1
120°-130°	18.0	0.7
130°-140°	10.0	0.4
140°-150°	4.7	0.2
150°-160°	1.7	0.1
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	833.2	30.4
0°-40°	1317.8	48.1
0°-60°	2097.5	76.6
0°-90°	2569.8	93.8
90°-120°	135.8	5.0
90°-150°	168.4	6.1
90°-180°	170.0	6.2
0°-180°	2740.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1083	1083	1083	1083	1083	
5°	1089	1078	1089	1074	1089	103
15°	1050	1052	1055	1025	1050	297
25°	968	950	979	894	968	446
35°	834	727	850	676	834	520
45°	642	519	663	490	642	493
55°	410	365	440	347	410	369
65°	213	245	234	228	213	213
75°	85	164	96	151	85	92
85°	16	118	21	108	16	19
90°	0	102	1	93	0	1
95°	1	87	0	81	1	0
105°	1	64	0	60	1	1
115°	1	48	0	45	1	1
125°	1	36	1	32	1	1
135°	1	25	1	20	1	0
145°	1	16	1	11	1	0
155°	1	9	1	4	1	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1082.7	1082.7	1082.7	1082.7	1082.7	1082.7	1082.7	1082.7	1082.7	1082.7	1082.7
2.5°	1091.6	1090.4	1089.2	1087.5	1089.2	1094.0	1091.0	1084.5	1083.3	1072.6	1077.3
5°	1089.2	1087.5	1086.3	1084.5	1086.9	1092.8	1089.8	1083.9	1082.1	1072.0	1077.3
7.5°	1083.3	1082.1	1080.3	1080.3	1082.7	1088.6	1086.3	1079.7	1078.5	1068.4	1074.4
10°	1074.9	1074.4	1073.2	1073.2	1075.5	1082.7	1079.7	1073.8	1072.6	1063.0	1069.6
12.5°	1064.2	1064.8	1063.0	1063.0	1066.6	1073.8	1071.4	1064.8	1063.6	1055.3	1061.8
15°	1050.5	1051.1	1049.9	1050.5	1054.1	1062.4	1059.5	1053.5	1052.3	1045.8	1051.1
17.5°	1035.0	1035.6	1035.6	1035.0	1039.2	1047.6	1045.2	1039.8	1038.0	1032.7	1039.2
20°	1017.2	1017.2	1017.2	1017.2	1021.9	1030.3	1027.3	1023.1	1019.6	1015.4	1020.8
22.5°	995.1	994.5	995.1	996.9	1001.7	1008.2	1006.5	1001.7	996.3	994.0	998.1
25°	968.3	970.1	970.7	972.5	978.5	983.8	982.0	977.3	968.9	967.2	968.3
27.5°	940.4	941.5	943.3	942.7	951.1	956.4	952.9	948.7	936.8	935.0	933.8
30°	908.8	910.6	911.8	911.2	917.7	923.7	920.1	914.7	898.7	897.5	887.9
32.5°	873.1	874.8	876.0	876.0	885.6	887.9	881.4	873.7	856.4	852.2	843.9
35°	833.8	835.5	836.1	836.1	845.7	845.1	836.7	826.0	807.0	801.6	787.3
37.5°	791.5	792.7	793.3	796.8	801.0	797.4	786.7	773.0	758.7	743.8	728.3
40°	743.8	745.6	746.8	749.2	753.4	749.2	733.7	717.0	701.5	684.9	669.4
42.5°	695.0	700.4	699.2	698.6	700.9	689.6	677.7	658.7	643.2	625.9	610.4
45°	642.0	641.4	644.4	645.6	645.0	635.4	618.8	601.5	586.0	568.1	555.0
47.5°	586.0	585.4	587.8	589.0	585.4	575.3	562.2	542.5	529.4	513.9	503.8
50°	527.1	527.1	530.6	527.1	525.3	515.1	504.4	484.8	474.6	460.9	455.0
52.5°	468.1	473.5	469.9	468.7	466.9	456.8	448.4	432.4	424.0	418.1	410.9
55°	409.7	415.7	413.3	411.5	410.9	402.6	394.8	382.9	377.6	373.4	369.2
57.5°	360.3	359.7	358.5	356.7	357.3	350.8	343.0	336.5	334.1	332.3	333.5
60°	303.1	307.9	306.1	306.7	307.3	306.1	299.6	295.4	296.0	296.6	298.4
62.5°	256.1	260.3	263.2	260.8	262.0	263.8	260.3	259.1	261.4	263.8	266.2
65°	212.6	216.8	219.8	219.2	222.7	226.3	225.7	226.9	232.3	235.2	238.2
67.5°	173.3	177.5	181.6	182.2	187.6	193.0	195.3	199.5	205.5	209.6	213.2
70°	139.4	142.9	147.7	150.7	157.8	165.0	169.1	177.5	181.0	187.0	189.4
72.5°	109.0	112.0	118.5	125.7	131.6	140.5	148.9	156.0	161.4	167.9	170.9
75°	85.2	86.4	93.5	101.8	110.2	120.3	129.2	137.0	144.1	150.7	155.4
77.5°	62.5	64.3	70.9	82.2	91.7	102.4	112.6	120.9	128.6	135.2	141.7
80°	43.5	47.0	54.2	65.5	76.2	88.1	97.7	107.2	115.5	122.1	128.6
82.5°	28.0	31.0	41.1	52.4	63.7	75.6	85.8	95.3	104.2	111.4	117.3
85°	15.5	19.7	29.8	41.7	53.0	64.9	75.6	85.2	94.1	100.6	106.6
87.5°	6.0	11.9	21.4	32.8	44.1	55.4	66.7	75.6	84.6	91.7	97.1
90°	0.0	7.1	16.1	27.4	38.7	50.0	60.7	70.3	78.6	85.2	91.1
92.5°	0.6	4.8	12.5	22.0	32.8	43.5	53.6	63.1	71.5	78.0	83.4
95°	0.6	3.6	10.1	19.1	28.6	38.7	48.2	57.2	64.9	71.5	76.8
97.5°	0.6	2.4	8.3	16.7	25.0	35.1	44.1	52.4	59.6	66.1	70.3
100°	0.6	2.4	7.1	14.3	22.6	31.6	39.9	48.2	54.8	60.1	64.9
102.5°	0.6	1.8	6.0	12.5	20.2	28.0	36.3	44.1	50.0	55.4	60.1
105°	0.6	1.8	5.4	10.7	17.9	25.6	32.8	39.9	46.5	51.2	55.4
107.5°	0.6	1.2	4.8	8.9	15.5	23.2	30.4	36.3	42.3	47.0	51.2
110°	0.6	1.2	4.2	8.3	13.7	20.8	27.4	33.4	38.7	43.5	47.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	0.6	1.2	3.6	7.7	12.5	18.5	25.0	30.4	35.7	39.9	43.5
115°	0.6	1.2	3.6	7.1	11.3	16.1	22.0	28.0	32.2	36.9	39.9
117.5°	0.6	1.2	3.0	6.0	10.7	14.9	20.2	25.0	29.8	33.9	36.9
120°	0.6	1.2	3.0	5.4	9.5	13.7	17.9	22.6	27.4	30.4	33.4
122.5°	0.6	1.2	2.4	5.4	8.3	12.5	16.1	20.2	24.4	28.0	31.0
125°	0.6	1.2	2.4	4.8	7.7	11.3	14.9	17.9	22.0	25.0	28.0
127.5°	0.6	1.2	2.4	4.2	7.1	10.1	13.7	16.7	19.7	22.6	25.0
130°	0.6	1.2	1.8	3.6	6.6	8.9	11.9	15.5	17.9	20.2	22.6
132.5°	0.6	1.2	1.8	3.6	5.4	7.7	10.7	13.7	16.1	18.5	20.2
135°	0.6	1.2	1.8	3.0	4.8	7.1	8.9	11.9	14.3	16.7	18.5
137.5°	0.6	1.2	1.8	3.0	4.2	6.0	7.7	10.1	12.5	14.3	16.7
140°	0.6	1.2	1.8	2.4	3.6	5.4	7.1	8.3	10.7	12.5	14.3
142.5°	0.6	1.2	1.8	2.4	3.6	4.8	6.0	7.1	8.9	10.7	12.5
145°	0.6	1.2	1.8	2.4	3.0	4.2	5.4	6.6	7.1	8.9	10.1
147.5°	0.6	1.2	1.8	2.4	2.4	3.6	4.8	5.4	6.6	7.1	8.3
150°	0.6	1.2	1.8	1.8	2.4	3.0	4.2	4.8	5.4	6.6	7.1
152.5°	0.6	1.2	1.8	1.8	2.4	3.0	3.6	4.2	4.8	5.4	6.0
155°	0.6	1.2	1.8	1.8	1.8	2.4	3.0	3.6	4.2	4.8	5.4
157.5°	1.2	1.2	1.2	1.8	1.8	2.4	2.4	3.0	3.6	3.6	4.2
160°	1.2	1.2	1.2	1.8	1.8	1.8	2.4	2.4	3.0	3.0	3.6
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1082.7	1082.7	1082.7	1082.7	1082.7	1082.7	1082.7	1082.7	1082.7	1082.7	1082.7
2.5°	1076.1	1077.9	1083.3	1083.3	1082.1	1080.9	1080.9	1079.1	1080.3	1082.7	1081.5
5°	1076.1	1077.9	1083.3	1083.3	1082.1	1080.9	1080.3	1078.5	1080.3	1082.7	1081.5
7.5°	1072.6	1074.9	1080.3	1080.3	1079.1	1078.5	1077.3	1076.1	1077.9	1080.3	1079.1
10°	1067.8	1070.2	1075.5	1075.5	1074.4	1074.4	1072.6	1071.4	1073.8	1075.5	1074.9
12.5°	1060.7	1063.6	1068.4	1067.8	1066.6	1067.2	1065.4	1063.0	1065.4	1067.2	1067.8
15°	1050.5	1054.1	1058.9	1057.7	1055.9	1057.1	1054.1	1052.3	1054.1	1057.7	1057.1
17.5°	1037.4	1039.8	1043.4	1043.4	1041.6	1040.4	1039.2	1037.4	1038.6	1041.0	1041.6
20°	1019.0	1021.9	1023.7	1021.9	1021.3	1019.6	1017.2	1015.4	1017.8	1021.3	1021.9
22.5°	994.5	995.1	999.3	995.1	992.2	991.6	989.2	985.6	989.2	992.2	992.8
25°	964.2	967.2	965.4	958.2	958.2	953.5	952.3	950.5	951.1	956.4	958.8
27.5°	925.5	926.7	921.9	915.9	910.6	907.6	903.4	904.0	904.0	911.2	913.6
30°	883.2	876.6	872.5	862.9	858.8	851.6	850.4	850.4	849.2	852.8	863.5
32.5°	832.6	823.6	817.1	808.1	801.0	793.9	790.3	792.1	791.5	800.4	804.0
35°	777.2	771.8	758.1	746.8	742.6	731.9	731.9	726.6	730.1	740.3	744.4
37.5°	718.8	710.5	699.2	686.7	683.7	675.3	672.4	669.4	677.1	678.9	683.1
40°	659.3	651.5	640.8	628.9	628.9	618.8	618.8	618.8	619.4	622.9	630.7
42.5°	602.7	594.3	584.8	576.5	575.3	567.5	567.5	567.0	568.1	571.1	578.3
45°	547.9	541.3	531.2	527.1	527.6	519.3	521.1	519.3	521.7	524.7	527.1
47.5°	497.3	493.1	488.9	483.0	481.2	480.6	477.6	475.2	479.4	479.4	483.0
50°	450.2	447.8	445.5	441.9	442.5	440.1	436.5	436.5	439.5	440.1	442.5
52.5°	409.1	406.2	403.2	403.8	404.4	403.2	401.4	399.6	401.4	402.6	405.6
55°	368.0	365.7	368.6	367.4	368.6	367.4	366.3	365.1	368.0	366.3	369.2
57.5°	331.1	333.5	334.7	332.3	334.1	332.9	333.5	331.7	334.1	335.3	334.7
60°	297.2	300.7	299.0	299.6	301.9	300.7	298.4	300.2	302.5	303.1	302.5
62.5°	266.2	270.4	272.2	271.0	271.6	270.4	272.2	269.8	272.8	273.9	272.2
65°	238.2	243.0	244.2	244.2	244.2	243.0	244.8	245.4	246.6	246.6	245.4
67.5°	214.4	218.6	219.8	220.9	219.8	218.6	218.6	219.2	221.5	222.7	221.5
70°	193.0	197.1	197.7	197.7	198.3	199.5	197.1	198.3	200.1	200.7	200.1
72.5°	174.5	178.7	179.9	179.3	179.9	180.4	180.4	179.3	181.0	182.2	182.2
75°	159.6	162.0	163.2	163.2	163.8	164.4	164.4	163.8	165.0	165.6	166.2
77.5°	145.9	147.7	149.5	149.5	150.1	149.5	150.7	150.7	151.3	151.9	152.5
80°	132.2	134.6	135.8	136.4	137.6	138.2	138.2	138.2	138.8	139.4	139.4
82.5°	121.5	123.3	125.1	126.8	126.8	127.4	127.4	127.4	128.0	128.0	128.6
85°	110.8	113.2	114.9	116.1	116.7	117.3	117.3	117.9	117.9	117.9	118.5
87.5°	101.2	104.2	105.4	106.6	107.2	108.4	108.4	108.4	109.0	109.0	109.0
90°	94.7	97.7	98.9	100.1	100.6	101.2	101.2	101.8	101.8	102.4	102.4
92.5°	86.9	89.9	92.3	92.3	92.9	94.1	93.5	93.5	94.1	94.7	94.7
95°	81.0	83.4	85.2	85.8	86.4	86.4	86.4	86.9	86.4	86.9	86.9
97.5°	73.8	76.2	78.0	79.2	79.8	79.8	79.8	80.4	79.8	80.4	80.4
100°	67.9	70.3	72.1	72.7	73.8	73.8	73.8	73.8	73.8	73.8	74.4
102.5°	63.1	65.5	66.7	67.3	67.9	68.5	68.5	68.5	68.5	69.1	69.1
105°	58.4	60.7	61.9	62.5	63.1	63.7	63.7	63.7	64.3	64.3	63.7
107.5°	54.2	56.0	57.2	58.4	59.0	59.0	59.6	59.6	59.6	59.6	59.6
110°	50.0	51.8	53.6	54.8	54.8	55.4	55.4	56.0	56.0	55.4	56.0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-34SL-LN-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	45.9	48.2	49.4	50.6	51.2	51.8	51.8	51.8	51.8	51.8	51.8
115°	42.3	44.7	45.9	47.0	47.6	48.2	48.2	48.2	48.2	48.2	48.2
117.5°	39.3	41.7	42.9	43.5	44.1	44.7	45.3	45.3	45.3	45.3	44.7
120°	36.3	38.1	39.3	40.5	41.1	41.7	41.7	41.7	41.7	41.7	41.7
122.5°	33.4	35.1	36.3	37.5	38.1	38.7	38.7	38.7	38.7	38.7	38.7
125°	30.4	32.2	33.4	34.5	35.1	35.7	35.7	35.7	35.7	35.7	35.7
127.5°	27.4	29.2	31.0	31.6	32.2	32.8	32.8	32.8	33.4	32.8	32.8
130°	24.4	26.2	28.0	28.6	29.2	29.8	30.4	30.4	30.4	30.4	29.8
132.5°	22.0	23.8	25.0	25.6	26.8	26.8	27.4	27.4	27.4	27.4	26.8
135°	20.2	21.4	22.6	23.2	24.4	24.4	24.4	25.0	25.0	24.4	23.8
137.5°	17.9	19.1	20.2	20.8	21.4	22.0	22.0	22.6	22.0	22.0	22.0
140°	16.7	17.3	18.5	19.1	19.7	19.7	19.7	20.2	20.2	19.7	19.7
142.5°	14.3	15.5	16.7	17.3	17.9	17.9	17.9	17.9	17.9	17.9	17.9
145°	11.9	13.7	14.3	15.5	15.5	16.1	16.1	16.1	16.1	16.1	15.5
147.5°	10.1	11.3	13.1	13.7	13.7	14.3	14.3	14.3	14.3	14.3	13.7
150°	7.7	8.9	10.7	11.9	11.9	12.5	12.5	12.5	12.5	11.9	11.9
152.5°	6.6	7.7	8.3	9.5	10.1	10.1	10.1	10.7	10.1	10.1	10.1
155°	6.0	6.6	7.1	7.7	8.3	8.9	8.9	8.9	8.9	8.3	8.3
157.5°	4.8	5.4	6.0	6.6	7.1	7.7	7.7	7.7	7.7	7.7	7.1
160°	3.6	4.2	4.8	4.8	5.4	6.0	6.6	6.0	6.0	6.0	6.0
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



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-34SL-LN-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1082.7	1082.7	1082.7	1082.7	1082.7	1082.7	1082.7	1082.7	1082.7	1082.7	1082.7
2.5°	1080.3	1079.7	1081.5	1078.5	1069.6	1072.0	1070.8	1076.1	1077.3	1078.5	1083.9
5°	1080.3	1079.7	1080.9	1078.5	1069.0	1070.8	1069.6	1074.9	1076.1	1076.7	1082.1
7.5°	1077.9	1077.3	1079.1	1076.1	1066.0	1068.4	1066.6	1072.0	1072.6	1073.2	1077.9
10°	1073.2	1072.6	1073.8	1071.4	1061.2	1063.6	1061.2	1066.6	1066.6	1067.8	1071.4
12.5°	1066.0	1064.8	1067.2	1064.2	1052.9	1055.9	1054.7	1058.3	1058.9	1059.5	1063.0
15°	1055.9	1054.7	1056.5	1054.7	1044.6	1045.2	1043.4	1048.7	1049.3	1048.1	1051.7
17.5°	1041.0	1039.8	1043.4	1042.2	1032.1	1034.4	1033.9	1035.0	1036.8	1033.9	1038.6
20°	1022.5	1023.7	1024.9	1025.5	1017.8	1017.8	1017.2	1019.6	1021.3	1019.0	1022.5
22.5°	995.1	998.1	1001.7	1002.9	997.5	996.9	1000.5	999.3	1001.1	999.9	1002.3
25°	960.6	966.6	970.1	973.7	970.7	971.9	977.3	978.5	978.5	977.9	980.3
27.5°	917.7	925.5	932.0	939.8	936.8	939.2	948.1	949.3	951.7	949.3	954.1
30°	866.5	873.7	886.2	897.5	898.7	902.2	914.7	915.9	922.5	920.1	921.9
32.5°	815.3	818.9	833.2	844.5	851.6	860.6	874.3	876.6	885.6	887.4	887.4
35°	751.0	761.1	774.2	790.3	799.2	808.7	827.2	830.8	843.9	848.0	852.8
37.5°	696.8	706.3	714.6	731.3	747.4	758.1	773.0	781.9	795.6	803.4	809.3
40°	639.0	646.8	655.7	672.4	686.1	702.1	717.0	727.7	745.0	754.0	761.7
42.5°	584.2	590.2	599.7	611.6	625.9	643.8	658.1	670.6	689.0	701.5	710.5
45°	535.4	539.0	547.3	556.2	568.7	587.2	600.9	617.0	631.9	645.0	655.7
47.5°	489.5	494.3	498.5	504.4	515.7	527.1	543.1	558.6	573.5	587.8	598.5
50°	447.2	447.2	453.8	458.0	465.7	475.8	488.3	499.1	517.5	527.6	541.3
52.5°	406.2	408.5	412.1	414.5	420.5	427.0	437.1	446.1	461.5	471.1	484.2
55°	369.8	372.2	374.0	375.2	378.8	386.5	390.1	397.2	407.9	415.7	427.0
57.5°	335.3	336.5	338.3	338.9	339.5	344.2	347.2	349.0	359.7	367.4	377.0
60°	303.7	303.7	305.5	304.9	304.3	306.7	306.1	307.9	314.4	319.2	323.4
62.5°	273.9	273.9	274.5	273.4	272.8	272.8	270.4	272.2	273.9	274.5	277.5
65°	246.6	249.5	247.1	247.7	244.2	243.0	241.8	238.2	237.6	235.2	236.4
67.5°	222.1	224.5	222.1	222.1	219.2	216.8	213.8	207.8	206.1	201.3	200.1
70°	202.5	200.7	201.9	200.1	196.5	193.5	189.4	184.6	178.7	172.7	168.5
72.5°	183.4	183.4	182.2	180.4	178.7	172.7	167.9	162.6	155.4	147.7	141.7
75°	165.0	165.6	165.6	163.8	160.8	155.4	150.1	142.3	134.6	125.7	117.9
77.5°	151.9	151.9	151.9	148.9	145.9	141.1	134.6	126.3	117.9	107.2	98.3
80°	139.4	138.8	138.8	135.2	132.2	126.8	120.3	112.0	103.0	91.7	81.6
82.5°	129.2	128.6	127.4	124.5	120.3	114.9	108.4	99.5	89.9	79.8	67.3
85°	118.5	117.9	116.7	113.7	109.6	104.8	97.7	88.7	79.2	67.9	56.0
87.5°	109.0	108.4	106.6	104.8	100.1	94.7	87.5	79.2	69.1	58.4	46.5
90°	102.4	101.2	100.1	97.7	93.5	87.5	80.4	71.5	61.3	50.6	38.7
92.5°	94.7	94.1	92.3	89.9	86.4	80.4	73.3	64.9	54.8	44.7	33.4
95°	86.9	86.4	85.2	82.8	79.2	73.8	67.3	59.0	49.4	39.3	29.2
97.5°	79.8	79.8	78.0	76.2	72.1	67.9	61.3	53.6	44.7	35.7	26.2
100°	73.8	73.8	72.1	69.7	66.7	62.5	56.0	48.8	40.5	32.2	22.6
102.5°	68.5	67.9	66.7	64.3	61.3	57.2	51.2	44.7	36.9	28.6	20.2
105°	63.7	63.1	61.9	59.6	57.2	52.4	47.6	41.1	33.4	25.6	17.9
107.5°	59.0	58.4	57.8	55.4	52.4	48.2	43.5	36.9	30.4	23.2	16.1
110°	54.8	54.2	53.0	50.6	47.6	44.1	39.3	33.9	27.4	20.8	14.3



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-34SL-LN-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	51.2	50.6	49.4	47.0	44.7	40.5	36.3	30.4	25.0	19.1	12.5
115°	47.6	47.0	45.9	43.5	40.5	36.9	32.8	28.0	22.0	16.7	11.3
117.5°	44.1	43.5	42.3	40.5	37.5	33.9	29.8	25.0	19.7	15.5	10.1
120°	41.1	39.9	38.7	36.9	33.9	31.0	26.8	22.6	17.9	13.7	8.9
122.5°	38.1	36.9	35.7	33.9	31.0	28.0	23.8	20.2	16.7	12.5	8.3
125°	34.5	33.9	32.8	31.0	28.0	25.0	22.0	18.5	14.9	11.3	7.1
127.5°	31.6	31.0	29.8	27.4	25.0	22.6	19.7	16.7	13.1	9.5	6.6
130°	29.2	28.0	26.8	25.0	23.2	20.8	17.9	14.9	11.9	8.3	6.0
132.5°	26.2	25.0	23.8	22.6	20.8	18.5	16.1	13.1	10.7	7.7	5.4
135°	23.8	22.6	21.4	20.2	18.5	16.7	14.3	11.9	9.5	7.1	4.8
137.5°	20.8	20.2	19.7	18.5	16.7	14.9	13.1	10.1	8.3	6.6	4.2
140°	19.1	18.5	17.9	16.1	14.9	13.1	11.3	8.9	7.1	5.4	3.6
142.5°	17.3	16.7	15.5	14.3	13.1	11.9	9.5	8.3	6.6	4.8	3.6
145°	14.9	14.3	13.7	12.5	11.3	9.5	8.3	7.1	6.0	4.2	3.0
147.5°	13.7	13.1	11.9	10.7	9.5	8.3	7.7	6.6	4.8	3.6	2.4
150°	11.3	10.7	10.1	8.9	8.3	7.7	6.6	5.4	4.2	3.0	2.4
152.5°	9.5	8.9	8.3	8.3	7.1	6.6	5.4	4.8	3.6	3.0	1.8
155°	8.3	8.3	7.7	7.1	6.0	5.4	4.8	3.6	3.0	2.4	1.8
157.5°	7.1	6.6	6.0	6.0	5.4	4.8	3.6	3.0	2.4	2.4	1.8
160°	6.0	5.4	5.4	4.8	4.2	3.6	3.0	3.0	2.4	1.8	1.8
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



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-34SL-LN-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1082.7	1082.7	1082.7	1082.7	1082.7	1082.7	1082.7	1082.7	1082.7	1082.7	1082.7
2.5°	1084.5	1077.9	1083.9	1091.6	1091.6	1090.4	1089.2	1091.6	1097.6	1095.2	1088.0
5°	1082.7	1076.1	1081.5	1089.2	1089.2	1087.5	1086.3	1088.0	1094.6	1091.6	1085.1
7.5°	1079.1	1073.2	1076.7	1083.9	1083.9	1082.1	1080.9	1083.3	1088.6	1085.7	1078.5
10°	1072.6	1066.0	1070.2	1076.7	1076.1	1074.9	1073.2	1076.1	1080.9	1076.7	1068.4
12.5°	1064.2	1057.7	1061.2	1067.2	1066.6	1064.2	1063.0	1064.8	1069.0	1066.6	1057.7
15°	1052.9	1046.4	1049.3	1055.3	1053.5	1051.7	1049.3	1049.9	1055.3	1051.1	1041.6
17.5°	1039.2	1032.1	1034.4	1039.8	1038.0	1036.2	1033.3	1033.9	1039.8	1033.9	1023.7
20°	1022.5	1014.8	1016.6	1023.1	1020.2	1017.2	1014.2	1014.2	1020.2	1013.6	1002.3
22.5°	1004.7	996.9	998.1	1002.9	1000.5	995.1	992.2	994.0	996.9	988.6	976.7
25°	982.6	972.5	974.3	979.1	977.3	970.1	967.2	968.3	967.2	960.6	948.1
27.5°	957.0	946.3	947.5	950.5	948.1	941.5	938.0	938.6	936.2	927.8	913.6
30°	924.9	919.5	918.9	920.7	917.1	910.6	906.4	905.2	904.6	892.7	875.4
32.5°	892.1	887.4	884.4	886.8	882.6	876.0	868.9	868.9	862.9	851.6	836.7
35°	858.8	851.0	848.0	849.8	845.1	836.7	830.8	827.8	818.9	804.6	788.5
37.5°	815.9	810.5	807.0	808.7	803.4	797.4	786.1	783.1	773.6	754.0	733.7
40°	769.4	765.3	761.7	763.5	757.5	748.6	738.5	733.7	723.0	700.9	684.9
42.5°	719.4	717.6	713.5	720.0	708.1	699.2	689.0	681.3	670.6	646.8	628.3
45°	666.4	670.6	661.0	662.8	655.1	647.4	636.6	625.3	614.6	592.0	571.1
47.5°	610.4	613.4	606.9	608.0	599.7	592.6	583.0	568.7	556.8	537.2	518.7
50°	552.7	551.5	551.5	550.3	543.7	534.8	525.3	512.2	500.3	482.4	466.9
52.5°	491.3	493.7	494.9	497.9	489.5	484.2	469.3	458.0	449.0	430.6	417.5
55°	432.4	440.7	438.3	439.5	430.0	425.8	413.9	405.0	391.9	381.1	372.8
57.5°	378.8	380.5	381.7	383.5	379.4	371.0	361.5	354.3	344.2	335.3	329.3
60°	327.0	327.0	327.5	330.5	326.4	319.2	312.1	306.7	299.6	294.2	290.6
62.5°	278.1	282.3	282.9	280.5	275.1	271.6	266.8	263.8	259.1	257.3	256.1
65°	232.9	232.9	232.9	234.0	231.1	228.7	225.7	225.1	226.9	224.5	225.7
67.5°	194.7	193.0	191.8	192.4	191.2	190.0	189.4	191.2	194.7	194.7	197.7
70°	162.0	158.4	156.0	156.0	156.0	156.6	158.4	162.0	167.9	170.3	174.5
72.5°	135.2	127.4	123.9	123.9	124.5	126.8	132.2	138.8	144.1	148.9	154.2
75°	109.6	101.8	96.5	95.9	97.1	100.6	108.4	114.3	123.3	129.8	136.4
77.5°	88.7	79.2	72.7	72.1	73.8	79.2	88.7	96.5	106.6	113.7	120.9
80°	70.9	60.1	54.8	51.2	54.2	60.7	71.5	81.0	90.5	100.1	109.0
82.5°	56.6	46.5	38.1	34.5	38.1	47.0	57.2	68.5	78.0	88.1	97.1
85°	44.7	33.9	24.4	20.8	25.0	34.5	45.9	57.2	67.9	78.0	86.9
87.5°	35.1	24.4	14.9	10.1	15.5	25.6	36.3	47.6	59.0	69.1	78.0
90°	27.4	17.3	8.3	1.2	8.9	18.5	29.2	39.9	51.2	61.3	70.3
92.5°	23.2	13.1	4.8	0.0	5.4	13.7	23.8	34.5	44.7	54.8	63.7
95°	19.7	10.7	3.6	0.0	3.6	10.7	19.7	29.2	39.3	49.4	58.4
97.5°	16.7	8.3	2.4	0.0	2.4	8.3	16.1	25.6	34.5	44.1	52.4
100°	14.3	7.1	1.8	0.0	1.8	6.6	13.7	22.0	31.0	39.9	47.6
102.5°	12.5	6.0	1.2	0.0	1.2	5.4	11.3	19.1	26.8	35.1	42.9
105°	10.7	4.8	1.2	0.0	0.6	4.2	9.5	16.7	23.8	31.6	38.7
107.5°	9.5	4.2	1.2	0.0	0.6	3.6	8.3	14.3	21.4	28.0	34.5
110°	8.3	3.6	1.2	0.0	0.6	2.4	7.1	12.5	18.5	25.0	31.6



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-34SL-LN-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	7.1	3.0	0.6	0.0	0.0	1.8	6.0	10.7	16.1	22.6	28.0
115°	6.6	3.0	0.6	0.0	0.0	1.2	4.8	9.5	14.3	20.2	25.0
117.5°	6.0	2.4	0.6	0.0	0.6	1.2	4.2	8.3	12.5	17.3	22.6
120°	5.4	2.4	0.6	0.0	0.6	0.6	3.0	7.1	10.7	15.5	19.7
122.5°	4.8	2.4	0.6	0.0	0.6	0.6	2.4	6.0	9.5	13.7	17.3
125°	4.2	1.8	1.2	0.6	0.6	0.6	1.8	4.8	8.3	11.3	15.5
127.5°	4.2	1.8	1.2	0.6	0.6	0.6	1.2	4.2	6.6	10.1	13.7
130°	3.6	1.8	1.2	0.6	0.6	0.6	0.6	3.0	6.0	8.3	11.3
132.5°	3.0	1.8	1.2	0.6	0.6	0.6	0.6	1.8	4.2	7.1	9.5
135°	3.0	1.8	1.2	0.6	0.6	0.6	0.6	1.2	3.0	5.4	7.7
137.5°	2.4	1.2	1.2	0.6	0.6	0.6	0.6	0.6	2.4	4.2	6.0
140°	2.4	1.2	1.2	0.6	0.6	0.6	0.6	0.6	1.8	3.0	4.8
142.5°	1.8	1.2	1.2	0.6	0.6	0.6	0.6	0.6	1.2	2.4	3.6
145°	1.8	1.2	1.2	0.6	0.6	0.6	0.6	0.6	0.6	1.2	2.4
147.5°	1.8	1.8	1.2	0.6	0.6	0.6	0.6	0.6	0.6	1.2	1.8
150°	1.8	1.2	1.2	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.2
152.5°	1.8	1.2	1.2	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.2
155°	1.8	1.2	1.2	0.6	0.6	0.6	0.6	0.6	0.6	1.2	1.2
157.5°	1.8	1.2	1.2	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.2
160°	1.8	1.2	1.2	0.6	1.2	0.6	1.2	1.2	1.2	1.2	1.2
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



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-34SL-LN-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1082.7	1082.7	1082.7	1082.7	1082.7	1082.7	1082.7	1082.7	1082.7	1082.7	1082.7
2.5°	1085.7	1074.4	1080.3	1078.5	1080.9	1085.7	1085.1	1083.9	1083.9	1082.1	1079.7
5°	1082.1	1071.4	1076.7	1073.8	1076.7	1080.9	1080.3	1078.5	1079.7	1076.7	1073.8
7.5°	1074.9	1065.4	1070.2	1067.8	1070.2	1074.4	1072.6	1072.0	1073.2	1068.4	1066.6
10°	1066.6	1055.9	1061.2	1058.3	1061.2	1064.2	1063.0	1060.7	1063.0	1058.3	1056.5
12.5°	1053.5	1044.6	1048.1	1047.0	1048.7	1051.7	1049.3	1047.6	1048.7	1044.6	1041.0
15°	1039.2	1030.3	1033.3	1031.5	1032.7	1036.2	1032.1	1031.5	1030.3	1026.1	1024.9
17.5°	1020.8	1012.4	1015.4	1012.4	1014.2	1013.0	1012.4	1009.4	1009.4	1004.7	1001.1
20°	998.1	991.0	989.2	986.8	989.2	986.8	983.2	980.9	980.3	975.5	972.5
22.5°	971.9	963.6	964.8	958.2	958.8	955.2	949.3	946.9	944.5	939.2	935.0
25°	940.4	932.0	926.1	921.9	916.5	915.9	908.2	902.2	901.6	895.1	894.5
27.5°	904.6	895.1	890.3	880.2	873.7	868.3	861.7	855.8	852.8	845.7	840.9
30°	863.5	852.8	840.9	833.8	823.6	819.5	808.1	801.0	798.6	790.9	787.3
32.5°	817.1	805.8	796.2	782.5	771.2	765.3	754.0	746.8	743.8	735.5	730.7
35°	766.5	754.0	742.6	729.5	720.6	710.5	696.8	689.6	683.1	680.1	676.5
37.5°	713.5	699.8	686.7	673.6	665.8	653.9	642.0	637.2	629.5	626.5	622.9
40°	658.7	645.0	632.5	620.0	611.0	600.3	589.6	587.8	579.5	576.5	574.1
42.5°	604.5	590.2	575.9	567.0	560.4	549.7	542.5	540.7	533.6	531.8	531.8
45°	555.6	537.8	525.9	518.1	512.8	503.8	497.9	496.7	490.7	489.5	489.5
47.5°	503.2	486.6	477.6	472.9	468.1	461.5	458.0	458.0	452.0	450.8	450.2
50°	454.4	438.9	432.4	427.6	427.0	422.2	419.3	418.1	418.1	413.9	414.5
52.5°	407.9	400.2	394.8	391.9	388.3	385.3	382.9	382.9	381.1	378.2	379.4
55°	365.1	356.1	356.7	354.3	352.6	350.8	351.4	347.8	347.2	344.8	346.6
57.5°	322.2	322.2	321.0	319.2	316.2	317.4	317.4	317.4	314.4	312.7	314.4
60°	285.9	287.6	284.7	286.5	285.3	285.9	284.7	284.7	282.9	282.3	282.9
62.5°	253.7	256.7	255.5	257.9	256.7	257.3	258.5	256.1	254.9	253.7	254.9
65°	225.1	228.7	228.1	229.9	230.5	231.1	231.7	230.5	229.3	228.1	227.5
67.5°	200.1	203.7	206.1	206.7	207.2	209.0	208.4	207.2	206.1	204.3	203.7
70°	177.5	182.2	185.2	186.4	188.8	187.6	187.6	187.0	185.8	184.0	183.4
72.5°	158.4	163.8	166.8	167.9	170.3	170.3	169.7	169.1	167.9	166.2	165.6
75°	141.7	146.5	150.7	153.1	154.8	154.8	154.2	153.6	152.5	151.3	150.7
77.5°	128.6	132.8	136.4	139.4	140.5	141.1	140.5	139.4	139.4	138.8	138.2
80°	115.5	120.3	123.9	126.8	128.6	128.6	128.0	128.6	127.4	126.8	126.3
82.5°	104.2	109.6	113.7	116.7	117.9	118.5	117.9	118.5	117.3	117.3	117.3
85°	94.1	99.5	104.2	106.6	108.4	109.0	109.0	109.0	108.4	108.4	108.4
87.5°	85.8	91.1	95.9	98.3	100.1	100.6	100.6	101.2	100.1	100.1	100.1
90°	78.0	83.4	88.1	90.5	92.3	93.5	93.5	94.1	93.5	92.9	92.9
92.5°	70.9	76.8	81.6	84.0	85.8	87.5	87.5	88.1	86.9	86.9	86.9
95°	64.9	70.9	75.0	78.0	79.8	81.0	81.6	81.6	81.0	81.0	81.0
97.5°	59.6	64.9	69.1	72.1	73.8	74.4	75.0	75.6	75.0	75.0	75.0
100°	54.2	59.6	63.7	66.1	68.5	69.1	69.7	70.3	70.3	69.7	69.7
102.5°	49.4	54.8	58.4	61.3	63.1	64.3	64.9	64.9	64.9	64.9	64.9
105°	44.7	50.0	53.6	56.6	58.4	59.6	60.1	60.7	60.7	60.1	60.1
107.5°	40.5	45.3	49.4	51.8	54.2	55.4	56.0	56.0	56.6	56.0	56.0
110°	36.3	41.7	45.3	47.6	50.0	51.2	51.8	52.4	52.4	52.4	52.4



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-34SL-LN-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	33.4	37.5	41.1	43.5	45.9	47.0	47.6	48.2	48.8	48.2	48.2
115°	29.8	33.9	37.5	39.9	41.7	42.9	44.1	44.7	44.7	45.3	44.7
117.5°	26.8	30.4	33.9	36.3	38.1	39.9	40.5	41.1	41.7	41.1	41.1
120°	23.8	27.4	30.4	32.8	34.5	36.3	36.9	37.5	38.1	37.5	37.5
122.5°	21.4	24.4	27.4	29.8	31.6	32.8	33.9	33.9	34.5	34.5	34.5
125°	19.1	22.0	24.4	26.8	28.6	29.8	30.4	31.0	31.0	31.6	31.6
127.5°	16.7	19.1	22.0	23.8	25.6	26.8	27.4	28.0	28.0	28.6	28.6
130°	14.3	16.7	19.1	20.8	22.6	23.8	24.4	25.0	25.6	25.6	25.6
132.5°	12.5	14.9	16.7	18.5	19.7	20.8	22.0	22.6	22.6	22.6	22.6
135°	10.1	12.5	14.3	16.1	17.3	18.5	19.1	20.2	20.2	20.2	20.2
137.5°	8.3	10.7	12.5	13.7	14.9	16.1	16.7	17.3	17.9	17.9	17.9
140°	6.6	8.3	10.1	11.9	13.1	13.7	14.9	14.9	15.5	15.5	15.5
142.5°	4.8	6.6	7.7	9.5	10.7	11.9	12.5	13.1	13.1	13.1	13.1
145°	3.6	4.8	6.0	7.1	8.9	9.5	10.1	10.7	11.3	11.3	11.3
147.5°	2.4	3.6	4.2	5.4	6.6	7.7	8.3	8.9	9.5	9.5	9.5
150°	1.8	2.4	3.6	4.2	4.8	6.0	7.1	7.1	7.7	7.7	7.1
152.5°	1.2	1.8	2.4	3.0	3.6	4.2	5.4	5.4	6.0	6.0	6.0
155°	1.2	1.2	1.2	1.8	2.4	3.0	3.6	4.2	4.2	4.2	4.2
157.5°	1.2	1.2	1.2	1.2	1.2	1.8	2.4	3.0	3.0	3.0	3.0
160°	1.2	1.2	0.6	0.6	1.2	1.2	1.2	1.2	1.8	1.8	1.8
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



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-34SL-LN-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1082.7	1082.7	1082.7	1082.7	1082.7	1082.7	1082.7	1082.7	1082.7	1082.7	1082.7
2.5°	1081.5	1082.7	1082.7	1081.5	1080.9	1083.3	1080.3	1069.0	1072.6	1073.8	1077.3
5°	1076.1	1077.3	1077.3	1077.3	1076.1	1078.5	1075.5	1064.2	1068.4	1070.2	1072.6
7.5°	1068.4	1069.0	1070.2	1069.6	1068.4	1072.0	1069.0	1057.7	1060.7	1063.6	1066.6
10°	1058.3	1058.3	1058.9	1060.1	1058.9	1061.8	1058.9	1048.7	1051.7	1053.5	1057.1
12.5°	1044.6	1045.8	1046.4	1045.8	1045.2	1047.6	1046.4	1036.8	1038.0	1041.6	1045.2
15°	1026.1	1026.1	1029.1	1027.9	1027.9	1030.3	1031.5	1020.8	1022.5	1027.9	1031.5
17.5°	1003.5	1004.1	1006.5	1007.7	1007.1	1011.2	1011.8	1003.5	1002.9	1009.4	1013.0
20°	974.3	975.5	978.5	980.9	980.9	985.6	987.4	982.0	982.6	989.8	991.0
22.5°	938.6	938.6	943.9	947.5	950.5	953.5	958.8	954.1	954.1	963.6	968.9
25°	894.5	898.7	900.5	907.6	911.8	920.1	924.9	925.5	926.1	935.0	938.6
27.5°	845.7	846.9	852.2	860.6	865.3	873.1	882.0	883.8	886.8	898.7	904.0
30°	790.3	793.9	796.2	808.1	814.7	824.8	836.1	840.3	842.7	858.8	865.3
32.5°	733.7	734.9	745.0	751.6	759.3	770.0	783.1	790.9	795.6	812.3	821.8
35°	677.1	679.5	687.8	696.2	703.9	714.6	728.3	739.1	747.4	762.3	774.8
37.5°	625.3	631.3	633.1	641.4	647.4	658.1	667.6	683.1	691.4	706.9	723.0
40°	578.9	580.6	581.8	590.2	594.3	604.5	618.2	628.3	639.6	650.9	670.0
42.5°	533.0	534.2	536.0	540.7	545.5	552.7	562.8	572.9	584.8	601.5	614.0
45°	490.7	491.9	493.1	496.1	500.3	506.8	513.4	520.5	532.4	546.7	559.8
47.5°	451.4	453.8	453.8	454.4	457.4	462.7	467.5	476.4	483.0	490.7	505.6
50°	413.9	415.7	416.3	416.3	418.1	421.6	422.8	428.8	434.7	441.9	452.6
52.5°	378.8	378.8	378.2	380.5	380.5	382.9	383.5	387.1	391.3	399.0	403.8
55°	345.4	345.4	347.2	346.0	346.0	347.2	346.6	347.2	350.8	355.5	359.7
57.5°	313.3	312.7	314.4	313.3	312.7	313.8	315.0	312.7	313.3	318.0	318.0
60°	281.1	281.7	283.5	282.3	282.3	282.3	281.1	279.9	278.7	281.7	282.9
62.5°	255.5	253.7	255.5	253.7	254.9	254.3	253.1	250.7	251.3	250.1	248.9
65°	228.7	228.7	229.3	227.5	228.7	228.7	226.9	226.3	222.7	221.5	218.6
67.5°	205.5	205.5	206.1	204.9	204.9	205.5	203.7	201.9	198.3	196.5	192.4
70°	185.2	185.2	185.2	184.6	184.6	184.6	183.4	181.0	177.5	174.5	169.1
72.5°	166.8	167.3	166.8	166.8	168.5	166.8	165.0	162.6	159.6	153.6	148.9
75°	151.9	152.5	151.9	151.9	151.9	151.3	150.7	147.1	143.5	138.8	131.6
77.5°	138.8	138.8	139.4	138.8	138.8	138.2	136.4	133.4	129.2	125.1	116.7
80°	126.3	126.8	127.4	128.0	126.8	126.3	124.5	122.1	116.7	112.0	103.6
82.5°	117.3	116.7	117.3	117.9	116.7	116.1	114.3	111.4	107.2	100.6	92.3
85°	108.4	107.8	107.8	108.4	107.8	106.6	104.8	101.8	97.7	91.1	82.8
87.5°	99.5	100.1	100.6	100.1	99.5	98.3	96.5	93.5	88.7	83.4	74.4
90°	92.9	92.9	92.9	92.9	92.3	91.1	89.3	85.8	81.6	75.0	67.3
92.5°	86.9	86.9	86.9	86.9	86.4	84.6	82.8	79.8	75.0	68.5	61.3
95°	81.0	81.6	81.0	81.0	79.8	79.2	76.2	73.3	69.1	62.5	54.8
97.5°	74.4	75.0	74.4	74.4	73.8	72.7	70.9	67.3	63.1	57.2	50.0
100°	69.7	69.7	69.1	69.1	68.5	67.3	64.9	61.9	57.8	51.8	44.7
102.5°	64.3	64.9	64.3	64.3	63.1	61.9	60.1	57.2	53.0	47.0	40.5
105°	60.1	60.1	59.6	59.6	58.4	57.2	55.4	51.8	48.2	42.9	36.3
107.5°	56.0	56.0	55.4	55.4	54.2	53.0	50.6	47.6	44.1	38.7	32.8
110°	51.8	51.8	51.8	51.2	50.0	48.2	46.5	43.5	39.9	35.1	29.2



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-34SL-LN-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	48.8	48.2	47.6	47.0	45.9	44.7	42.3	39.3	35.7	31.6	26.2
115°	44.7	44.7	44.1	43.5	42.3	40.5	38.7	36.3	32.8	28.0	23.2
117.5°	41.1	41.1	40.5	39.9	38.7	36.9	35.1	32.8	29.2	25.0	20.8
120°	37.5	37.5	36.9	36.3	35.1	33.4	32.2	29.2	26.2	22.0	18.5
122.5°	34.5	33.9	33.9	32.8	32.2	30.4	28.6	26.2	23.2	19.7	16.1
125°	31.0	31.0	30.4	29.8	29.2	27.4	25.6	23.2	20.2	17.3	14.3
127.5°	28.0	28.0	27.4	26.8	26.2	24.4	22.6	20.8	17.9	14.9	11.9
130°	25.0	25.0	24.4	23.8	23.2	21.4	20.2	17.9	15.5	13.1	10.1
132.5°	22.6	22.6	22.0	21.4	20.2	19.1	17.9	15.5	13.7	11.3	8.9
135°	20.2	19.7	19.7	19.1	17.9	16.7	15.5	13.7	11.3	9.5	7.1
137.5°	17.9	17.3	16.7	16.1	15.5	14.3	13.1	11.9	10.1	7.7	6.0
140°	15.5	14.9	14.9	14.3	13.1	12.5	11.3	9.5	8.3	6.6	4.8
142.5°	13.1	13.1	12.5	11.9	11.3	10.7	9.5	8.3	6.6	5.4	3.6
145°	11.3	10.7	10.7	10.1	9.5	8.3	7.7	6.6	5.4	4.2	3.0
147.5°	8.9	8.9	8.9	8.3	7.7	7.1	6.6	5.4	4.2	3.0	1.8
150°	7.1	7.1	7.1	6.6	6.0	5.4	4.8	4.2	3.0	1.8	1.2
152.5°	6.0	6.0	5.4	5.4	4.8	4.2	3.6	3.0	1.8	1.2	1.2
155°	4.2	4.2	4.2	3.6	3.6	3.0	2.4	1.8	1.2	1.2	1.2
157.5°	3.0	3.0	3.0	2.4	2.4	1.8	1.8	1.2	1.2	1.2	1.2
160°	1.8	1.8	1.8	1.8	1.2	1.2	1.2	1.2	1.2	1.2	1.2
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



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-34SL-LN-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1082.7	1082.7	1082.7	1082.7	1082.7	1082.7	1082.7
2.5°	1075.5	1074.9	1079.7	1079.7	1074.4	1082.7	1091.6
5°	1072.0	1071.4	1076.1	1076.1	1071.4	1079.7	1089.2
7.5°	1064.8	1065.4	1070.2	1071.4	1065.4	1073.2	1083.3
10°	1057.1	1056.5	1061.8	1063.0	1058.3	1065.4	1074.9
12.5°	1044.6	1044.6	1049.9	1051.7	1047.0	1055.3	1064.2
15°	1031.5	1031.5	1035.0	1038.0	1033.9	1041.6	1050.5
17.5°	1014.8	1014.2	1017.8	1021.3	1017.2	1025.5	1035.0
20°	993.4	993.4	997.5	1001.7	998.7	1006.5	1017.2
22.5°	970.7	968.3	975.5	978.5	976.7	984.4	995.1
25°	942.1	941.5	948.7	952.9	950.5	958.8	968.3
27.5°	911.2	910.6	917.7	923.1	921.9	929.6	940.4
30°	873.7	876.6	883.2	892.1	889.1	897.5	908.8
32.5°	834.3	837.3	845.1	854.6	855.2	861.7	873.1
35°	787.3	795.0	800.4	812.9	815.3	821.8	833.8
37.5°	737.9	746.8	758.1	767.6	772.4	777.8	791.5
40°	682.5	695.6	708.1	719.4	725.4	730.7	743.8
42.5°	632.5	642.6	654.5	665.8	676.5	681.3	695.0
45°	575.9	587.8	598.5	612.2	622.9	628.3	642.0
47.5°	520.5	532.4	546.7	556.2	567.5	572.9	586.0
50°	467.5	478.2	490.1	501.4	511.0	515.7	527.1
52.5°	415.1	426.4	437.7	444.9	455.0	458.6	468.1
55°	368.6	376.4	386.5	390.7	400.8	403.2	409.7
57.5°	324.0	329.3	332.9	340.1	347.2	352.6	360.3
60°	283.5	285.9	288.2	292.4	298.4	300.2	303.1
62.5°	247.1	246.6	251.3	252.5	253.1	259.1	256.1
65°	215.0	215.6	211.4	209.6	212.0	213.8	212.6
67.5°	188.2	184.6	181.0	176.9	173.3	175.1	173.3
70°	162.0	159.0	153.1	147.1	144.7	141.1	139.4
72.5°	141.1	134.0	128.0	120.3	116.1	112.0	109.0
75°	125.1	114.9	106.6	98.3	92.3	86.4	85.2
77.5°	108.4	98.9	89.3	80.4	71.5	64.9	62.5
80°	95.3	86.4	75.0	64.3	54.8	46.5	43.5
82.5°	83.4	73.8	62.5	51.2	40.5	31.6	28.0
85°	73.3	63.1	51.8	40.5	29.8	20.2	15.5
87.5°	65.5	54.2	42.9	32.2	20.8	11.3	6.0
90°	58.4	47.6	36.9	25.6	14.9	6.0	0.0
92.5°	51.8	41.7	31.0	20.8	11.3	3.6	0.6
95°	45.9	36.9	26.2	16.7	8.3	2.4	0.6
97.5°	41.1	32.2	22.6	13.7	6.6	1.8	0.6
100°	36.9	28.0	19.7	11.3	5.4	1.2	0.6
102.5°	32.8	25.0	16.7	9.5	4.2	0.6	0.6
105°	29.2	22.0	14.3	8.3	3.6	0.6	0.6
107.5°	26.2	19.7	12.5	7.1	2.4	0.6	0.6
110°	23.2	16.7	10.7	6.0	1.8	0.6	0.6



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-34SL-LN-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	20.8	14.9	9.5	4.8	1.2	0.6	0.6
115°	18.5	13.1	8.3	4.2	1.2	0.6	0.6
117.5°	16.1	11.3	7.1	3.0	0.6	0.6	0.6
120°	14.3	10.1	6.0	2.4	0.6	0.6	0.6
122.5°	12.5	8.3	4.8	1.8	0.6	0.6	0.6
125°	10.7	7.1	4.2	1.2	0.6	0.6	0.6
127.5°	8.9	6.0	3.0	1.2	0.6	0.6	0.6
130°	7.7	4.8	2.4	0.6	0.6	0.6	0.6
132.5°	6.6	3.6	1.8	0.6	0.6	0.6	0.6
135°	5.4	3.0	1.2	0.6	0.6	0.6	0.6
137.5°	4.2	2.4	1.2	0.6	0.6	0.6	0.6
140°	3.0	1.8	0.6	0.6	0.6	0.6	0.6
142.5°	2.4	1.2	0.6	0.6	0.6	0.6	0.6
145°	1.8	1.2	0.6	0.6	0.6	0.6	0.6
147.5°	1.2	1.2	1.2	1.2	0.6	0.6	0.6
150°	1.2	1.2	0.6	0.6	1.2	0.6	0.6
152.5°	1.2	0.6	0.6	0.6	1.2	0.6	0.6
155°	1.2	1.2	1.2	1.2	1.2	1.2	0.6
157.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2
160°	1.2	1.2	1.2	1.2	1.2	1.2	1.2
162.5°	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
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)