

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-LD5-30SL-LN-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 (P33519)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4SNLED-LD5-30SL-LN-UNV-L950-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
NARROW LENS
Light Source: -
Ballast/Driver: -

Summary

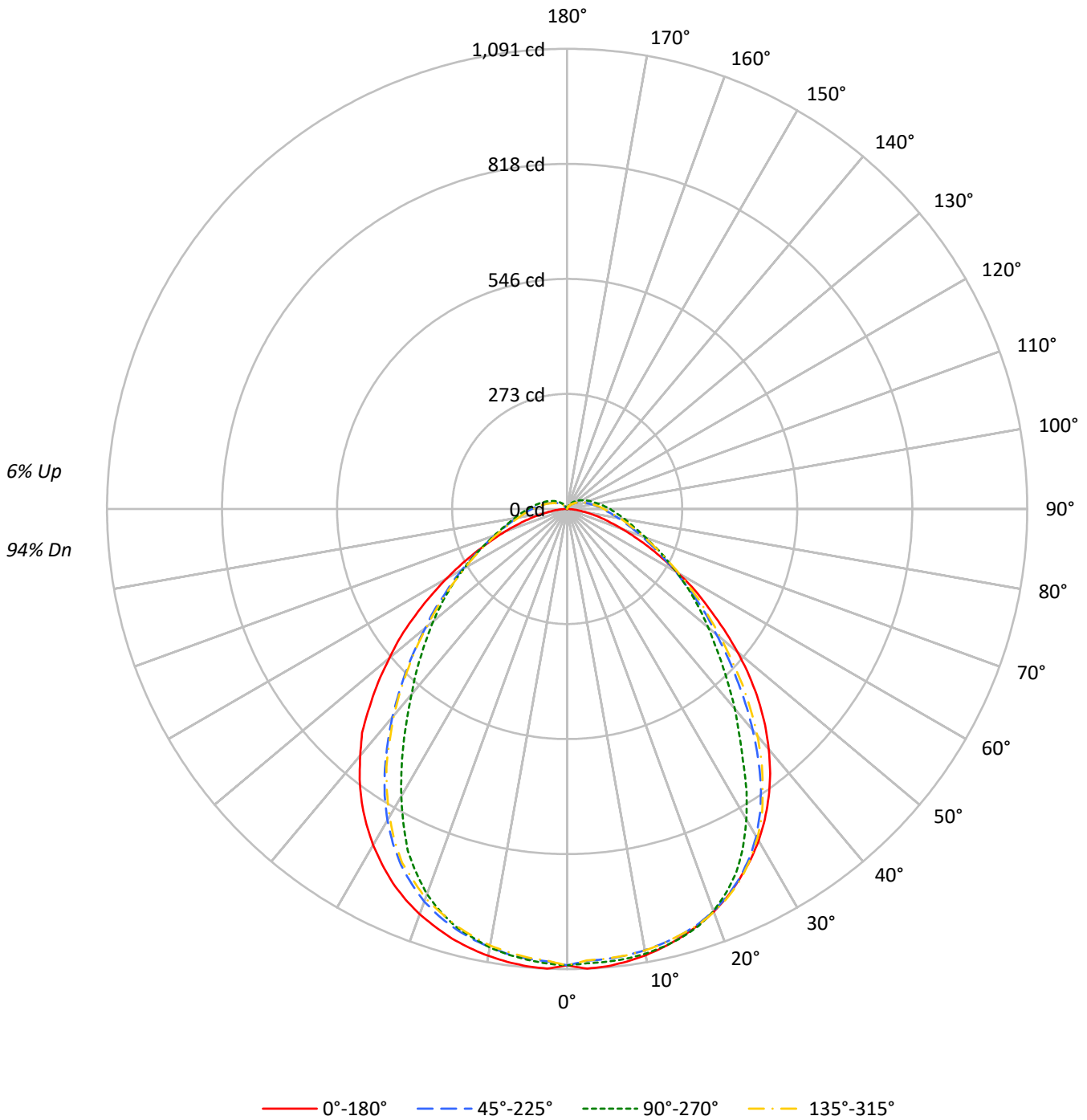
Lumens per Lamp: N/A
Luminaire Lumens: 2738.0 lumens
Efficiency: N/A
Efficacy: 130.4 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.14 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 21
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-LD5-30SL-LN-UNV-L950-CD1-U

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°	8743	8743	8743	8743
5°	8805	8464	8805	8427
10°	8766	8240	8780	8125
15°	8710	7993	8749	7785
20°	8642	7677	8693	7353
25°	8504	7207	8599	6782
30°	8323	6517	8433	6033
35°	8043	5671	8198	5281
40°	7641	4960	7842	4602
45°	7109	4312	7341	4065
50°	6384	3789	6665	3598
55°	5522	3346	5923	3177
60°	4644	2937	5064	2769
65°	3808	2598	4192	2408
70°	3031	2305	3392	2132
75°	2380	2129	2679	1958
80°	1716	2054	2024	1877
85°	1059	2064	1421	1898



TEST NUMBER: P#

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.6	3.7
10°-20°	294.1	10.7
20°-30°	435.9	15.9
30°-40°	484.3	17.7
40°-50°	439.0	16.0
50°-60°	340.2	12.4
60°-70°	231.0	8.4
70°-80°	147.0	5.4
80°-90°	94.0	3.4
90°-100°	63.3	2.3
100°-110°	43.4	1.6
110°-120°	28.9	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°	832.6	30.4
0°-40°	1316.8	48.1
0°-60°	2096.0	76.6
0°-90°	2567.9	93.8
90°-120°	135.7	5.0
90°-150°	168.3	6.1
90°-180°	170.0	6.2
0°-180°	2738.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1082	1082	1082	1082	1082	
5°	1088	1078	1088	1073	1088	103
15°	1050	1052	1054	1024	1050	296
25°	968	950	978	894	968	446
35°	833	726	849	676	833	520
45°	642	519	662	489	642	493
55°	409	365	439	346	409	369
65°	212	245	234	227	212	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



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-30SL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1081.9	1081.9	1081.9	1081.9	1081.9	1081.9	1081.9	1081.9	1081.9	1081.9	1081.9
2.5°	1090.8	1089.6	1088.4	1086.7	1088.4	1093.2	1090.2	1083.7	1082.5	1071.8	1076.5
5°	1088.4	1086.7	1085.5	1083.7	1086.1	1092.0	1089.0	1083.1	1081.3	1071.2	1076.5
7.5°	1082.5	1081.3	1079.5	1079.5	1081.9	1087.8	1085.5	1078.9	1077.7	1067.6	1073.6
10°	1074.2	1073.6	1072.4	1072.4	1074.8	1081.9	1078.9	1073.0	1071.8	1062.3	1068.8
12.5°	1063.5	1064.0	1062.3	1062.3	1065.8	1073.0	1070.6	1064.0	1062.9	1054.5	1061.1
15°	1049.8	1050.4	1049.2	1049.8	1053.3	1061.7	1058.7	1052.7	1051.5	1045.0	1050.4
17.5°	1034.3	1034.9	1034.9	1034.3	1038.5	1046.8	1044.4	1039.1	1037.3	1031.9	1038.5
20°	1016.4	1016.4	1016.4	1016.4	1021.2	1029.5	1026.6	1022.4	1018.8	1014.7	1020.0
22.5°	994.4	993.8	994.4	996.2	1001.0	1007.5	1005.7	1001.0	995.6	993.2	997.4
25°	967.6	969.4	970.0	971.8	977.8	983.1	981.3	976.6	968.2	966.4	967.6
27.5°	939.7	940.9	942.6	942.0	950.4	955.7	952.2	948.0	936.1	934.3	933.1
30°	908.1	909.9	911.1	910.5	917.1	923.0	919.4	914.1	898.0	896.8	887.3
32.5°	872.4	874.2	875.4	875.4	884.9	887.3	880.8	873.0	855.8	851.6	843.3
35°	833.1	834.9	835.5	835.5	845.0	844.5	836.1	825.4	806.4	801.0	786.7
37.5°	790.9	792.1	792.7	796.2	800.4	796.8	786.1	772.4	758.2	743.3	727.8
40°	743.3	745.1	746.3	748.6	752.8	748.6	733.2	716.5	701.0	684.4	668.9
42.5°	694.5	699.8	698.7	698.1	700.4	689.1	677.2	658.2	642.7	625.5	610.0
45°	641.5	640.9	643.9	645.1	644.5	635.0	618.3	601.1	585.6	567.7	554.6
47.5°	585.6	585.0	587.4	588.6	585.0	574.9	561.8	542.1	529.0	513.6	503.5
50°	526.7	526.7	530.2	526.7	524.9	514.8	504.1	484.4	474.3	460.6	454.7
52.5°	467.8	473.1	469.5	468.3	466.6	456.4	448.1	432.0	423.7	417.8	410.6
55°	409.4	415.4	413.0	411.2	410.6	402.3	394.6	382.7	377.3	373.1	369.0
57.5°	360.0	359.4	358.3	356.5	357.1	350.5	342.8	336.2	333.9	332.1	333.3
60°	302.9	307.7	305.9	306.5	307.1	305.9	299.3	295.2	295.8	296.4	298.1
62.5°	255.9	260.1	263.0	260.7	261.8	263.6	260.1	258.9	261.3	263.6	266.0
65°	212.5	216.6	219.6	219.0	222.6	226.1	225.5	226.7	232.1	235.1	238.0
67.5°	173.2	177.3	181.5	182.1	187.5	192.8	195.2	199.4	205.3	209.5	213.0
70°	139.3	142.8	147.6	150.6	157.7	164.8	169.0	177.3	180.9	186.9	189.2
72.5°	108.9	111.9	118.4	125.6	131.5	140.4	148.8	155.9	161.3	167.8	170.8
75°	85.1	86.3	93.4	101.8	110.1	120.2	129.1	136.9	144.0	150.6	155.3
77.5°	62.5	64.3	70.8	82.1	91.6	102.4	112.5	120.8	128.5	135.1	141.6
80°	43.4	47.0	54.2	65.5	76.2	88.1	97.6	107.1	115.5	122.0	128.5
82.5°	28.0	30.9	41.1	52.4	63.7	75.6	85.7	95.2	104.1	111.3	117.2
85°	15.5	19.6	29.8	41.7	53.0	64.9	75.6	85.1	94.0	100.6	106.5
87.5°	6.0	11.9	21.4	32.7	44.0	55.3	66.7	75.6	84.5	91.6	97.0
90°	0.0	7.1	16.1	27.4	38.7	50.0	60.7	70.2	78.6	85.1	91.1
92.5°	0.6	4.8	12.5	22.0	32.7	43.4	53.6	63.1	71.4	78.0	83.3
95°	0.6	3.6	10.1	19.0	28.6	38.7	48.2	57.1	64.9	71.4	76.8
97.5°	0.6	2.4	8.3	16.7	25.0	35.1	44.0	52.4	59.5	66.1	70.2
100°	0.6	2.4	7.1	14.3	22.6	31.5	39.9	48.2	54.7	60.1	64.9
102.5°	0.6	1.8	6.0	12.5	20.2	28.0	36.3	44.0	50.0	55.3	60.1
105°	0.6	1.8	5.4	10.7	17.9	25.6	32.7	39.9	46.4	51.2	55.3
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	33.3	38.7	43.4	47.0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-30SL-LN-UNV-L950-CD1-U

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	18.4	25.0	30.4	35.7	39.9	43.4
115°	0.6	1.2	3.6	7.1	11.3	16.1	22.0	28.0	32.1	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	33.3
122.5°	0.6	1.2	2.4	5.4	8.3	12.5	16.1	20.2	24.4	28.0	30.9
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	19.6	22.6	25.0
130°	0.6	1.2	1.8	3.6	6.5	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	18.4	20.2
135°	0.6	1.2	1.8	3.0	4.8	7.1	8.9	11.9	14.3	16.7	18.4
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	6.5	7.1	8.9	10.1
147.5°	0.6	1.2	1.8	2.4	2.4	3.6	4.8	5.4	6.5	7.1	8.3
150°	0.6	1.2	1.8	1.8	2.4	3.0	4.2	4.8	5.4	6.5	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°	1081.9	1081.9	1081.9	1081.9	1081.9	1081.9	1081.9	1081.9	1081.9	1081.9	1081.9
2.5°	1075.4	1077.1	1082.5	1082.5	1081.3	1080.1	1080.1	1078.3	1079.5	1081.9	1080.7
5°	1075.4	1077.1	1082.5	1082.5	1081.3	1080.1	1079.5	1077.7	1079.5	1081.9	1080.7
7.5°	1071.8	1074.2	1079.5	1079.5	1078.3	1077.7	1076.5	1075.4	1077.1	1079.5	1078.3
10°	1067.0	1069.4	1074.8	1074.8	1073.6	1073.6	1071.8	1070.6	1073.0	1074.8	1074.2
12.5°	1059.9	1062.9	1067.6	1067.0	1065.8	1066.4	1064.6	1062.3	1064.6	1066.4	1067.0
15°	1049.8	1053.3	1058.1	1056.9	1055.1	1056.3	1053.3	1051.5	1053.3	1056.9	1056.3
17.5°	1036.7	1039.1	1042.6	1042.6	1040.8	1039.6	1038.5	1036.7	1037.9	1040.2	1040.8
20°	1018.2	1021.2	1023.0	1021.2	1020.6	1018.8	1016.4	1014.7	1017.0	1020.6	1021.2
22.5°	993.8	994.4	998.6	994.4	991.4	990.8	988.5	984.9	988.5	991.4	992.0
25°	963.5	966.4	964.7	957.5	957.5	952.8	951.6	949.8	950.4	955.7	958.1
27.5°	924.8	926.0	921.2	915.3	909.9	906.9	902.8	903.4	903.4	910.5	912.9
30°	882.5	876.0	871.8	862.3	858.1	851.0	849.8	849.8	848.6	852.2	862.9
32.5°	832.0	823.0	816.5	807.6	800.4	793.3	789.7	791.5	790.9	799.8	803.4
35°	776.6	771.3	757.6	746.3	742.1	731.4	731.4	726.0	729.6	739.7	743.9
37.5°	718.3	710.0	698.7	686.2	683.2	674.8	671.9	668.9	676.6	678.4	682.6
40°	658.8	651.0	640.3	628.4	628.4	618.3	618.3	618.3	618.9	622.5	630.2
42.5°	602.2	593.9	584.4	576.1	574.9	567.1	567.1	566.5	567.7	570.7	577.8
45°	547.5	540.9	530.8	526.7	527.3	518.9	520.7	518.9	521.3	524.3	526.7
47.5°	496.9	492.7	488.6	482.6	480.8	480.2	477.3	474.9	479.1	479.1	482.6
50°	449.9	447.5	445.1	441.6	442.2	439.8	436.2	436.2	439.2	439.8	442.2
52.5°	408.8	405.9	402.9	403.5	404.1	402.9	401.1	399.3	401.1	402.3	405.3
55°	367.8	365.4	368.4	367.2	368.4	367.2	366.0	364.8	367.8	366.0	369.0
57.5°	330.9	333.3	334.4	332.1	333.9	332.7	333.3	331.5	333.9	335.0	334.4
60°	297.0	300.5	298.7	299.3	301.7	300.5	298.1	299.9	302.3	302.9	302.3
62.5°	266.0	270.2	272.0	270.8	271.4	270.2	272.0	269.6	272.6	273.7	272.0
65°	238.0	242.8	244.0	244.0	244.0	242.8	244.6	245.2	246.4	246.4	245.2
67.5°	214.2	218.4	219.6	220.8	219.6	218.4	218.4	219.0	221.4	222.6	221.4
70°	192.8	197.0	197.6	197.6	198.2	199.4	197.0	198.2	200.0	200.5	200.0
72.5°	174.4	178.5	179.7	179.1	179.7	180.3	180.3	179.1	180.9	182.1	182.1
75°	159.5	161.9	163.1	163.1	163.7	164.2	164.2	163.7	164.8	165.4	166.0
77.5°	145.8	147.6	149.4	149.4	150.0	149.4	150.6	150.6	151.2	151.8	152.3
80°	132.1	134.5	135.7	136.3	137.5	138.1	138.1	138.1	138.7	139.3	139.3
82.5°	121.4	123.2	125.0	126.8	126.8	127.4	127.4	127.4	127.9	127.9	128.5
85°	110.7	113.1	114.9	116.0	116.6	117.2	117.2	117.8	117.8	117.8	118.4
87.5°	101.2	104.1	105.3	106.5	107.1	108.3	108.3	108.3	108.9	108.9	108.9
90°	94.6	97.6	98.8	100.0	100.6	101.2	101.2	101.8	101.8	102.4	102.4
92.5°	86.9	89.9	92.2	92.2	92.8	94.0	93.4	93.4	94.0	94.6	94.6
95°	80.9	83.3	85.1	85.7	86.3	86.3	86.3	86.9	86.3	86.9	86.9
97.5°	73.8	76.2	78.0	79.1	79.7	79.7	79.7	80.3	79.7	80.3	80.3
100°	67.8	70.2	72.0	72.6	73.8	73.8	73.8	73.8	73.8	73.8	74.4
102.5°	63.1	65.5	66.7	67.2	67.8	68.4	68.4	68.4	68.4	69.0	69.0
105°	58.3	60.7	61.9	62.5	63.1	63.7	63.7	63.7	64.3	64.3	63.7
107.5°	54.2	55.9	57.1	58.3	58.9	58.9	59.5	59.5	59.5	59.5	59.5
110°	50.0	51.8	53.6	54.7	54.7	55.3	55.3	55.9	55.9	55.3	55.9



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-30SL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	45.8	48.2	49.4	50.6	51.2	51.8	51.8	51.8	51.8	51.8	51.8
115°	42.3	44.6	45.8	47.0	47.6	48.2	48.2	48.2	48.2	48.2	48.2
117.5°	39.3	41.7	42.8	43.4	44.0	44.6	45.2	45.2	45.2	45.2	44.6
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°	33.3	35.1	36.3	37.5	38.1	38.7	38.7	38.7	38.7	38.7	38.7
125°	30.4	32.1	33.3	34.5	35.1	35.7	35.7	35.7	35.7	35.7	35.7
127.5°	27.4	29.2	30.9	31.5	32.1	32.7	32.7	32.7	33.3	32.7	32.7
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	19.0	20.2	20.8	21.4	22.0	22.0	22.6	22.0	22.0	22.0
140°	16.7	17.3	18.4	19.0	19.6	19.6	19.6	20.2	20.2	19.6	19.6
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°	6.5	7.7	8.3	9.5	10.1	10.1	10.1	10.7	10.1	10.1	10.1
155°	6.0	6.5	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	6.5	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	6.5	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-LD5-30SL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1081.9	1081.9	1081.9	1081.9	1081.9	1081.9	1081.9	1081.9	1081.9	1081.9	1081.9
2.5°	1079.5	1078.9	1080.7	1077.7	1068.8	1071.2	1070.0	1075.4	1076.5	1077.7	1083.1
5°	1079.5	1078.9	1080.1	1077.7	1068.2	1070.0	1068.8	1074.2	1075.4	1075.9	1081.3
7.5°	1077.1	1076.5	1078.3	1075.4	1065.2	1067.6	1065.8	1071.2	1071.8	1072.4	1077.1
10°	1072.4	1071.8	1073.0	1070.6	1060.5	1062.9	1060.5	1065.8	1065.8	1067.0	1070.6
12.5°	1065.2	1064.0	1066.4	1063.5	1052.1	1055.1	1053.9	1057.5	1058.1	1058.7	1062.3
15°	1055.1	1053.9	1055.7	1053.9	1043.8	1044.4	1042.6	1048.0	1048.6	1047.4	1051.0
17.5°	1040.2	1039.1	1042.6	1041.4	1031.3	1033.7	1033.1	1034.3	1036.1	1033.1	1037.9
20°	1021.8	1023.0	1024.2	1024.8	1017.0	1017.0	1016.4	1018.8	1020.6	1018.2	1021.8
22.5°	994.4	997.4	1001.0	1002.2	996.8	996.2	999.8	998.6	1000.4	999.2	1001.6
25°	959.9	965.9	969.4	973.0	970.0	971.2	976.6	977.8	977.8	977.2	979.5
27.5°	917.1	924.8	931.3	939.1	936.1	938.5	947.4	948.6	951.0	948.6	953.4
30°	865.9	873.0	885.5	896.8	898.0	901.6	914.1	915.3	921.8	919.4	921.2
32.5°	814.7	818.3	832.5	843.9	851.0	859.9	873.6	876.0	884.9	886.7	886.7
35°	750.4	760.5	773.6	789.7	798.6	808.2	826.6	830.2	843.3	847.4	852.2
37.5°	696.3	705.8	714.1	730.8	746.9	757.6	772.4	781.4	795.1	802.8	808.7
40°	638.5	646.3	655.2	671.9	685.6	701.6	716.5	727.2	744.5	753.4	761.1
42.5°	583.8	589.7	599.3	611.2	625.5	643.3	657.6	670.1	688.5	701.0	710.0
45°	535.0	538.6	546.9	555.8	568.3	586.8	600.5	616.5	631.4	644.5	655.2
47.5°	489.2	493.9	498.1	504.1	515.4	526.7	542.7	558.2	573.1	587.4	598.1
50°	446.9	446.9	453.5	457.6	465.4	475.5	488.0	498.7	517.1	527.3	540.9
52.5°	405.9	408.2	411.8	414.2	420.1	426.7	436.8	445.7	461.2	470.7	483.8
55°	369.6	371.9	373.7	374.9	378.5	386.2	389.8	396.9	407.6	415.4	426.7
57.5°	335.0	336.2	338.0	338.6	339.2	344.0	346.9	348.7	359.4	367.2	376.7
60°	303.5	303.5	305.3	304.7	304.1	306.5	305.9	307.7	314.2	319.0	323.1
62.5°	273.7	273.7	274.3	273.2	272.6	272.6	270.2	272.0	273.7	274.3	277.3
65°	246.4	249.3	247.0	247.6	244.0	242.8	241.6	238.0	237.4	235.1	236.3
67.5°	222.0	224.4	222.0	222.0	219.0	216.6	213.6	207.7	205.9	201.1	200.0
70°	202.3	200.5	201.7	200.0	196.4	193.4	189.2	184.5	178.5	172.6	168.4
72.5°	183.3	183.3	182.1	180.3	178.5	172.6	167.8	162.5	155.3	147.6	141.6
75°	164.8	165.4	165.4	163.7	160.7	155.3	150.0	142.2	134.5	125.6	117.8
77.5°	151.8	151.8	151.8	148.8	145.8	141.0	134.5	126.2	117.8	107.1	98.2
80°	139.3	138.7	138.7	135.1	132.1	126.8	120.2	111.9	103.0	91.6	81.5
82.5°	129.1	128.5	127.4	124.4	120.2	114.9	108.3	99.4	89.9	79.7	67.2
85°	118.4	117.8	116.6	113.7	109.5	104.7	97.6	88.7	79.1	67.8	55.9
87.5°	108.9	108.3	106.5	104.7	100.0	94.6	87.5	79.1	69.0	58.3	46.4
90°	102.4	101.2	100.0	97.6	93.4	87.5	80.3	71.4	61.3	50.6	38.7
92.5°	94.6	94.0	92.2	89.9	86.3	80.3	73.2	64.9	54.7	44.6	33.3
95°	86.9	86.3	85.1	82.7	79.1	73.8	67.2	58.9	49.4	39.3	29.2
97.5°	79.7	79.7	78.0	76.2	72.0	67.8	61.3	53.6	44.6	35.7	26.2
100°	73.8	73.8	72.0	69.6	66.7	62.5	55.9	48.8	40.5	32.1	22.6
102.5°	68.4	67.8	66.7	64.3	61.3	57.1	51.2	44.6	36.9	28.6	20.2
105°	63.7	63.1	61.9	59.5	57.1	52.4	47.6	41.1	33.3	25.6	17.9
107.5°	58.9	58.3	57.7	55.3	52.4	48.2	43.4	36.9	30.4	23.2	16.1
110°	54.7	54.2	53.0	50.6	47.6	44.0	39.3	33.9	27.4	20.8	14.3



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-30SL-LN-UNV-L950-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	44.6	40.5	36.3	30.4	25.0	19.0	12.5
115°	47.6	47.0	45.8	43.4	40.5	36.9	32.7	28.0	22.0	16.7	11.3
117.5°	44.0	43.4	42.3	40.5	37.5	33.9	29.8	25.0	19.6	15.5	10.1
120°	41.1	39.9	38.7	36.9	33.9	30.9	26.8	22.6	17.9	13.7	8.9
122.5°	38.1	36.9	35.7	33.9	30.9	28.0	23.8	20.2	16.7	12.5	8.3
125°	34.5	33.9	32.7	30.9	28.0	25.0	22.0	18.4	14.9	11.3	7.1
127.5°	31.5	30.9	29.8	27.4	25.0	22.6	19.6	16.7	13.1	9.5	6.5
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	18.4	16.1	13.1	10.7	7.7	5.4
135°	23.8	22.6	21.4	20.2	18.4	16.7	14.3	11.9	9.5	7.1	4.8
137.5°	20.8	20.2	19.6	18.4	16.7	14.9	13.1	10.1	8.3	6.5	4.2
140°	19.0	18.4	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	6.5	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	6.5	4.8	3.6	2.4
150°	11.3	10.7	10.1	8.9	8.3	7.7	6.5	5.4	4.2	3.0	2.4
152.5°	9.5	8.9	8.3	8.3	7.1	6.5	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	6.5	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-LD5-30SL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1081.9	1081.9	1081.9	1081.9	1081.9	1081.9	1081.9	1081.9	1081.9	1081.9	1081.9
2.5°	1083.7	1077.1	1083.1	1090.8	1090.8	1089.6	1088.4	1090.8	1096.8	1094.4	1087.3
5°	1081.9	1075.4	1080.7	1088.4	1088.4	1086.7	1085.5	1087.3	1093.8	1090.8	1084.3
7.5°	1078.3	1072.4	1075.9	1083.1	1083.1	1081.3	1080.1	1082.5	1087.8	1084.9	1077.7
10°	1071.8	1065.2	1069.4	1075.9	1075.4	1074.2	1072.4	1075.4	1080.1	1075.9	1067.6
12.5°	1063.5	1056.9	1060.5	1066.4	1065.8	1063.5	1062.3	1064.0	1068.2	1065.8	1056.9
15°	1052.1	1045.6	1048.6	1054.5	1052.7	1051.0	1048.6	1049.2	1054.5	1050.4	1040.8
17.5°	1038.5	1031.3	1033.7	1039.1	1037.3	1035.5	1032.5	1033.1	1039.1	1033.1	1023.0
20°	1021.8	1014.1	1015.8	1022.4	1019.4	1016.4	1013.5	1013.5	1019.4	1012.9	1001.6
22.5°	1003.9	996.2	997.4	1002.2	999.8	994.4	991.4	993.2	996.2	987.9	976.0
25°	981.9	971.8	973.6	978.4	976.6	969.4	966.4	967.6	966.4	959.9	947.4
27.5°	956.3	945.6	946.8	949.8	947.4	940.9	937.3	937.9	935.5	927.2	912.9
30°	924.2	918.8	918.2	920.0	916.5	909.9	905.7	904.6	904.0	892.1	874.8
32.5°	891.5	886.7	883.7	886.1	881.9	875.4	868.3	868.3	862.3	851.0	836.1
35°	858.1	850.4	847.4	849.2	844.5	836.1	830.2	827.2	818.3	804.0	787.9
37.5°	815.3	809.9	806.4	808.2	802.8	796.8	785.5	782.6	773.0	753.4	733.2
40°	768.9	764.7	761.1	762.9	757.0	748.0	737.9	733.2	722.5	700.4	684.4
42.5°	718.9	717.1	712.9	719.5	707.6	698.7	688.5	680.8	670.1	646.3	627.8
45°	665.9	670.1	660.6	662.4	654.6	646.9	636.2	624.9	614.1	591.5	570.7
47.5°	610.0	613.0	606.4	607.6	599.3	592.1	582.6	568.3	556.4	536.8	518.3
50°	552.3	551.1	551.1	549.9	543.3	534.4	524.9	511.8	499.9	482.0	466.6
52.5°	491.0	493.3	494.5	497.5	489.2	483.8	468.9	457.6	448.7	430.3	417.2
55°	432.0	440.4	438.0	439.2	429.7	425.5	413.6	404.7	391.6	380.9	372.5
57.5°	378.5	380.3	381.5	383.2	379.1	370.7	361.2	354.1	344.0	335.0	329.1
60°	326.7	326.7	327.3	330.3	326.1	319.0	311.8	306.5	299.3	294.0	290.4
62.5°	277.9	282.1	282.7	280.3	274.9	271.4	266.6	263.6	258.9	257.1	255.9
65°	232.7	232.7	232.7	233.9	230.9	228.5	225.5	224.9	226.7	224.4	225.5
67.5°	194.6	192.8	191.6	192.2	191.0	189.8	189.2	191.0	194.6	194.6	197.6
70°	161.9	158.3	155.9	155.9	155.9	156.5	158.3	161.9	167.8	170.2	174.4
72.5°	135.1	127.4	123.8	123.8	124.4	126.8	132.1	138.7	144.0	148.8	154.1
75°	109.5	101.8	96.4	95.8	97.0	100.6	108.3	114.3	123.2	129.7	136.3
77.5°	88.7	79.1	72.6	72.0	73.8	79.1	88.7	96.4	106.5	113.7	120.8
80°	70.8	60.1	54.7	51.2	54.2	60.7	71.4	80.9	90.5	100.0	108.9
82.5°	56.5	46.4	38.1	34.5	38.1	47.0	57.1	68.4	78.0	88.1	97.0
85°	44.6	33.9	24.4	20.8	25.0	34.5	45.8	57.1	67.8	78.0	86.9
87.5°	35.1	24.4	14.9	10.1	15.5	25.6	36.3	47.6	58.9	69.0	78.0
90°	27.4	17.3	8.3	1.2	8.9	18.4	29.2	39.9	51.2	61.3	70.2
92.5°	23.2	13.1	4.8	0.0	5.4	13.7	23.8	34.5	44.6	54.7	63.7
95°	19.6	10.7	3.6	0.0	3.6	10.7	19.6	29.2	39.3	49.4	58.3
97.5°	16.7	8.3	2.4	0.0	2.4	8.3	16.1	25.6	34.5	44.0	52.4
100°	14.3	7.1	1.8	0.0	1.8	6.5	13.7	22.0	30.9	39.9	47.6
102.5°	12.5	6.0	1.2	0.0	1.2	5.4	11.3	19.0	26.8	35.1	42.8
105°	10.7	4.8	1.2	0.0	0.6	4.2	9.5	16.7	23.8	31.5	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	18.4	25.0	31.5



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-30SL-LN-UNV-L950-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°	6.5	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	19.6
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	6.5	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-LD5-30SL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1081.9	1081.9	1081.9	1081.9	1081.9	1081.9	1081.9	1081.9	1081.9	1081.9	1081.9
2.5°	1084.9	1073.6	1079.5	1077.7	1080.1	1084.9	1084.3	1083.1	1083.1	1081.3	1078.9
5°	1081.3	1070.6	1075.9	1073.0	1075.9	1080.1	1079.5	1077.7	1078.9	1075.9	1073.0
7.5°	1074.2	1064.6	1069.4	1067.0	1069.4	1073.6	1071.8	1071.2	1072.4	1067.6	1065.8
10°	1065.8	1055.1	1060.5	1057.5	1060.5	1063.5	1062.3	1059.9	1062.3	1057.5	1055.7
12.5°	1052.7	1043.8	1047.4	1046.2	1048.0	1051.0	1048.6	1046.8	1048.0	1043.8	1040.2
15°	1038.5	1029.5	1032.5	1030.7	1031.9	1035.5	1031.3	1030.7	1029.5	1025.4	1024.2
17.5°	1020.0	1011.7	1014.7	1011.7	1013.5	1012.3	1011.7	1008.7	1008.7	1003.9	1000.4
20°	997.4	990.3	988.5	986.1	988.5	986.1	982.5	980.1	979.5	974.8	971.8
22.5°	971.2	962.9	964.1	957.5	958.1	954.5	948.6	946.2	943.8	938.5	934.3
25°	939.7	931.3	925.4	921.2	915.9	915.3	907.5	901.6	901.0	894.4	893.8
27.5°	904.0	894.4	889.7	879.6	873.0	867.7	861.1	855.2	852.2	845.0	840.3
30°	862.9	852.2	840.3	833.1	823.0	818.9	807.6	800.4	798.0	790.3	786.7
32.5°	816.5	805.2	795.7	782.0	770.7	764.7	753.4	746.3	743.3	735.0	730.2
35°	765.9	753.4	742.1	729.0	720.1	710.0	696.3	689.1	682.6	679.6	676.0
37.5°	712.9	699.2	686.2	673.1	665.3	653.4	641.5	636.8	629.0	626.0	622.5
40°	658.2	644.5	632.0	619.5	610.6	599.9	589.2	587.4	579.0	576.1	573.7
42.5°	604.0	589.7	575.5	566.5	560.0	549.3	542.1	540.4	533.2	531.4	531.4
45°	555.2	537.4	525.5	517.7	512.4	503.5	497.5	496.3	490.4	489.2	489.2
47.5°	502.9	486.2	477.3	472.5	467.8	461.2	457.6	457.6	451.7	450.5	449.9
50°	454.1	438.6	432.0	427.3	426.7	421.9	419.0	417.8	417.8	413.6	414.2
52.5°	407.6	399.9	394.6	391.6	388.0	385.0	382.7	382.7	380.9	377.9	379.1
55°	364.8	355.9	356.5	354.1	352.3	350.5	351.1	347.5	346.9	344.6	346.4
57.5°	322.0	322.0	320.8	319.0	316.0	317.2	317.2	317.2	314.2	312.4	314.2
60°	285.6	287.4	284.5	286.2	285.1	285.6	284.5	284.5	282.7	282.1	282.7
62.5°	253.5	256.5	255.3	257.7	256.5	257.1	258.3	255.9	254.7	253.5	254.7
65°	224.9	228.5	227.9	229.7	230.3	230.9	231.5	230.3	229.1	227.9	227.3
67.5°	200.0	203.5	205.9	206.5	207.1	208.9	208.3	207.1	205.9	204.1	203.5
70°	177.3	182.1	185.1	186.3	188.6	187.5	187.5	186.9	185.7	183.9	183.3
72.5°	158.3	163.7	166.6	167.8	170.2	170.2	169.6	169.0	167.8	166.0	165.4
75°	141.6	146.4	150.6	152.9	154.7	154.7	154.1	153.5	152.3	151.2	150.6
77.5°	128.5	132.7	136.3	139.3	140.4	141.0	140.4	139.3	139.3	138.7	138.1
80°	115.5	120.2	123.8	126.8	128.5	128.5	127.9	128.5	127.4	126.8	126.2
82.5°	104.1	109.5	113.7	116.6	117.8	118.4	117.8	118.4	117.2	117.2	117.2
85°	94.0	99.4	104.1	106.5	108.3	108.9	108.9	108.9	108.3	108.3	108.3
87.5°	85.7	91.1	95.8	98.2	100.0	100.6	100.6	101.2	100.0	100.0	100.0
90°	78.0	83.3	88.1	90.5	92.2	93.4	93.4	94.0	93.4	92.8	92.8
92.5°	70.8	76.8	81.5	83.9	85.7	87.5	87.5	88.1	86.9	86.9	86.9
95°	64.9	70.8	75.0	78.0	79.7	80.9	81.5	81.5	80.9	80.9	80.9
97.5°	59.5	64.9	69.0	72.0	73.8	74.4	75.0	75.6	75.0	75.0	75.0
100°	54.2	59.5	63.7	66.1	68.4	69.0	69.6	70.2	70.2	69.6	69.6
102.5°	49.4	54.7	58.3	61.3	63.1	64.3	64.9	64.9	64.9	64.9	64.9
105°	44.6	50.0	53.6	56.5	58.3	59.5	60.1	60.7	60.7	60.1	60.1
107.5°	40.5	45.2	49.4	51.8	54.2	55.3	55.9	55.9	56.5	55.9	55.9
110°	36.3	41.7	45.2	47.6	50.0	51.2	51.8	52.4	52.4	52.4	52.4



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-30SL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	33.3	37.5	41.1	43.4	45.8	47.0	47.6	48.2	48.8	48.2	48.2
115°	29.8	33.9	37.5	39.9	41.7	42.8	44.0	44.6	44.6	45.2	44.6
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	32.7	34.5	36.3	36.9	37.5	38.1	37.5	37.5
122.5°	21.4	24.4	27.4	29.8	31.5	32.7	33.9	33.9	34.5	34.5	34.5
125°	19.0	22.0	24.4	26.8	28.6	29.8	30.4	30.9	30.9	31.5	31.5
127.5°	16.7	19.0	22.0	23.8	25.6	26.8	27.4	28.0	28.0	28.6	28.6
130°	14.3	16.7	19.0	20.8	22.6	23.8	24.4	25.0	25.6	25.6	25.6
132.5°	12.5	14.9	16.7	18.4	19.6	20.8	22.0	22.6	22.6	22.6	22.6
135°	10.1	12.5	14.3	16.1	17.3	18.4	19.0	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°	6.5	8.3	10.1	11.9	13.1	13.7	14.9	14.9	15.5	15.5	15.5
142.5°	4.8	6.5	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	6.5	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-LD5-30SL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1081.9	1081.9	1081.9	1081.9	1081.9	1081.9	1081.9	1081.9	1081.9	1081.9	1081.9
2.5°	1080.7	1081.9	1081.9	1080.7	1080.1	1082.5	1079.5	1068.2	1071.8	1073.0	1076.5
5°	1075.4	1076.5	1076.5	1076.5	1075.4	1077.7	1074.8	1063.5	1067.6	1069.4	1071.8
7.5°	1067.6	1068.2	1069.4	1068.8	1067.6	1071.2	1068.2	1056.9	1059.9	1062.9	1065.8
10°	1057.5	1057.5	1058.1	1059.3	1058.1	1061.1	1058.1	1048.0	1051.0	1052.7	1056.3
12.5°	1043.8	1045.0	1045.6	1045.0	1044.4	1046.8	1045.6	1036.1	1037.3	1040.8	1044.4
15°	1025.4	1025.4	1028.3	1027.1	1027.1	1029.5	1030.7	1020.0	1021.8	1027.1	1030.7
17.5°	1002.7	1003.3	1005.7	1006.9	1006.3	1010.5	1011.1	1002.7	1002.2	1008.7	1012.3
20°	973.6	974.8	977.8	980.1	980.1	984.9	986.7	981.3	981.9	989.1	990.3
22.5°	937.9	937.9	943.2	946.8	949.8	952.8	958.1	953.4	953.4	962.9	968.2
25°	893.8	898.0	899.8	906.9	911.1	919.4	924.2	924.8	925.4	934.3	937.9
27.5°	845.0	846.2	851.6	859.9	864.7	872.4	881.3	883.1	886.1	898.0	903.4
30°	789.7	793.3	795.7	807.6	814.1	824.2	835.5	839.7	842.1	858.1	864.7
32.5°	733.2	734.4	744.5	751.0	758.8	769.5	782.6	790.3	795.1	811.7	821.2
35°	676.6	679.0	687.3	695.7	703.4	714.1	727.8	738.5	746.9	761.7	774.2
37.5°	624.9	630.8	632.6	640.9	646.9	657.6	667.1	682.6	690.9	706.4	722.5
40°	578.4	580.2	581.4	589.7	593.9	604.0	617.7	627.8	639.1	650.4	669.5
42.5°	532.6	533.8	535.6	540.4	545.1	552.3	562.4	572.5	584.4	601.1	613.6
45°	490.4	491.6	492.7	495.7	499.9	506.4	513.0	520.1	532.0	546.3	559.4
47.5°	451.1	453.5	453.5	454.1	457.0	462.4	467.2	476.1	482.6	490.4	505.2
50°	413.6	415.4	416.0	416.0	417.8	421.3	422.5	428.5	434.4	441.6	452.3
52.5°	378.5	378.5	377.9	380.3	380.3	382.7	383.2	386.8	391.0	398.7	403.5
55°	345.2	345.2	346.9	345.8	345.8	346.9	346.4	346.9	350.5	355.3	359.4
57.5°	313.0	312.4	314.2	313.0	312.4	313.6	314.8	312.4	313.0	317.8	317.8
60°	280.9	281.5	283.3	282.1	282.1	282.1	280.9	279.7	278.5	281.5	282.7
62.5°	255.3	253.5	255.3	253.5	254.7	254.1	252.9	250.5	251.1	249.9	248.8
65°	228.5	228.5	229.1	227.3	228.5	228.5	226.7	226.1	222.6	221.4	218.4
67.5°	205.3	205.3	205.9	204.7	204.7	205.3	203.5	201.7	198.2	196.4	192.2
70°	185.1	185.1	185.1	184.5	184.5	184.5	183.3	180.9	177.3	174.4	169.0
72.5°	166.6	167.2	166.6	166.6	168.4	166.6	164.8	162.5	159.5	153.5	148.8
75°	151.8	152.3	151.8	151.8	151.8	151.2	150.6	147.0	143.4	138.7	131.5
77.5°	138.7	138.7	139.3	138.7	138.7	138.1	136.3	133.3	129.1	125.0	116.6
80°	126.2	126.8	127.4	127.9	126.8	126.2	124.4	122.0	116.6	111.9	103.5
82.5°	117.2	116.6	117.2	117.8	116.6	116.0	114.3	111.3	107.1	100.6	92.2
85°	108.3	107.7	107.7	108.3	107.7	106.5	104.7	101.8	97.6	91.1	82.7
87.5°	99.4	100.0	100.6	100.0	99.4	98.2	96.4	93.4	88.7	83.3	74.4
90°	92.8	92.8	92.8	92.8	92.2	91.1	89.3	85.7	81.5	75.0	67.2
92.5°	86.9	86.9	86.9	86.9	86.3	84.5	82.7	79.7	75.0	68.4	61.3
95°	80.9	81.5	80.9	80.9	79.7	79.1	76.2	73.2	69.0	62.5	54.7
97.5°	74.4	75.0	74.4	74.4	73.8	72.6	70.8	67.2	63.1	57.1	50.0
100°	69.6	69.6	69.0	69.0	68.4	67.2	64.9	61.9	57.7	51.8	44.6
102.5°	64.3	64.9	64.3	64.3	63.1	61.9	60.1	57.1	53.0	47.0	40.5
105°	60.1	60.1	59.5	59.5	58.3	57.1	55.3	51.8	48.2	42.8	36.3
107.5°	55.9	55.9	55.3	55.3	54.2	53.0	50.6	47.6	44.0	38.7	32.7
110°	51.8	51.8	51.8	51.2	50.0	48.2	46.4	43.4	39.9	35.1	29.2



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-30SL-LN-UNV-L950-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	45.8	44.6	42.3	39.3	35.7	31.5	26.2
115°	44.6	44.6	44.0	43.4	42.3	40.5	38.7	36.3	32.7	28.0	23.2
117.5°	41.1	41.1	40.5	39.9	38.7	36.9	35.1	32.7	29.2	25.0	20.8
120°	37.5	37.5	36.9	36.3	35.1	33.3	32.1	29.2	26.2	22.0	18.4
122.5°	34.5	33.9	33.9	32.7	32.1	30.4	28.6	26.2	23.2	19.6	16.1
125°	30.9	30.9	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	19.0	17.9	15.5	13.7	11.3	8.9
135°	20.2	19.6	19.6	19.0	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	6.5	4.8
142.5°	13.1	13.1	12.5	11.9	11.3	10.7	9.5	8.3	6.5	5.4	3.6
145°	11.3	10.7	10.7	10.1	9.5	8.3	7.7	6.5	5.4	4.2	3.0
147.5°	8.9	8.9	8.9	8.3	7.7	7.1	6.5	5.4	4.2	3.0	1.8
150°	7.1	7.1	7.1	6.5	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-LD5-30SL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1081.9	1081.9	1081.9	1081.9	1081.9	1081.9	1081.9
2.5°	1074.8	1074.2	1078.9	1078.9	1073.6	1081.9	1090.8
5°	1071.2	1070.6	1075.4	1075.4	1070.6	1078.9	1088.4
7.5°	1064.0	1064.6	1069.4	1070.6	1064.6	1072.4	1082.5
10°	1056.3	1055.7	1061.1	1062.3	1057.5	1064.6	1074.2
12.5°	1043.8	1043.8	1049.2	1051.0	1046.2	1054.5	1063.5
15°	1030.7	1030.7	1034.3	1037.3	1033.1	1040.8	1049.8
17.5°	1014.1	1013.5	1017.0	1020.6	1016.4	1024.8	1034.3
20°	992.6	992.6	996.8	1001.0	998.0	1005.7	1016.4
22.5°	970.0	967.6	974.8	977.8	976.0	983.7	994.4
25°	941.5	940.9	948.0	952.2	949.8	958.1	967.6
27.5°	910.5	909.9	917.1	922.4	921.2	929.0	939.7
30°	873.0	876.0	882.5	891.5	888.5	896.8	908.1
32.5°	833.7	836.7	844.5	854.0	854.6	861.1	872.4
35°	786.7	794.5	799.8	812.3	814.7	821.2	833.1
37.5°	737.3	746.3	757.6	767.1	771.8	777.2	790.9
40°	682.0	695.1	707.6	718.9	724.8	730.2	743.3
42.5°	632.0	642.1	654.0	665.3	676.0	680.8	694.5
45°	575.5	587.4	598.1	611.8	622.5	627.8	641.5
47.5°	520.1	532.0	546.3	555.8	567.1	572.5	585.6
50°	467.2	477.9	489.8	501.1	510.6	515.4	526.7
52.5°	414.8	426.1	437.4	444.5	454.7	458.2	467.8
55°	368.4	376.1	386.2	390.4	400.5	402.9	409.4
57.5°	323.7	329.1	332.7	339.8	346.9	352.3	360.0
60°	283.3	285.6	288.0	292.2	298.1	299.9	302.9
62.5°	247.0	246.4	251.1	252.3	252.9	258.9	255.9
65°	214.8	215.4	211.3	209.5	211.9	213.6	212.5
67.5°	188.1	184.5	180.9	176.7	173.2	175.0	173.2
70°	161.9	158.9	152.9	147.0	144.6	141.0	139.3
72.5°	141.0	133.9	127.9	120.2	116.0	111.9	108.9
75°	125.0	114.9	106.5	98.2	92.2	86.3	85.1
77.5°	108.3	98.8	89.3	80.3	71.4	64.9	62.5
80°	95.2	86.3	75.0	64.3	54.7	46.4	43.4
82.5°	83.3	73.8	62.5	51.2	40.5	31.5	28.0
85°	73.2	63.1	51.8	40.5	29.8	20.2	15.5
87.5°	65.5	54.2	42.8	32.1	20.8	11.3	6.0
90°	58.3	47.6	36.9	25.6	14.9	6.0	0.0
92.5°	51.8	41.7	30.9	20.8	11.3	3.6	0.6
95°	45.8	36.9	26.2	16.7	8.3	2.4	0.6
97.5°	41.1	32.1	22.6	13.7	6.5	1.8	0.6
100°	36.9	28.0	19.6	11.3	5.4	1.2	0.6
102.5°	32.7	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	19.6	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-LD5-30SL-LN-UNV-L950-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°	18.4	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°	6.5	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)