

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-L940-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-L940-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
WIDE FROSTED LENS
Light Source: -
Ballast/Driver: -

Summary

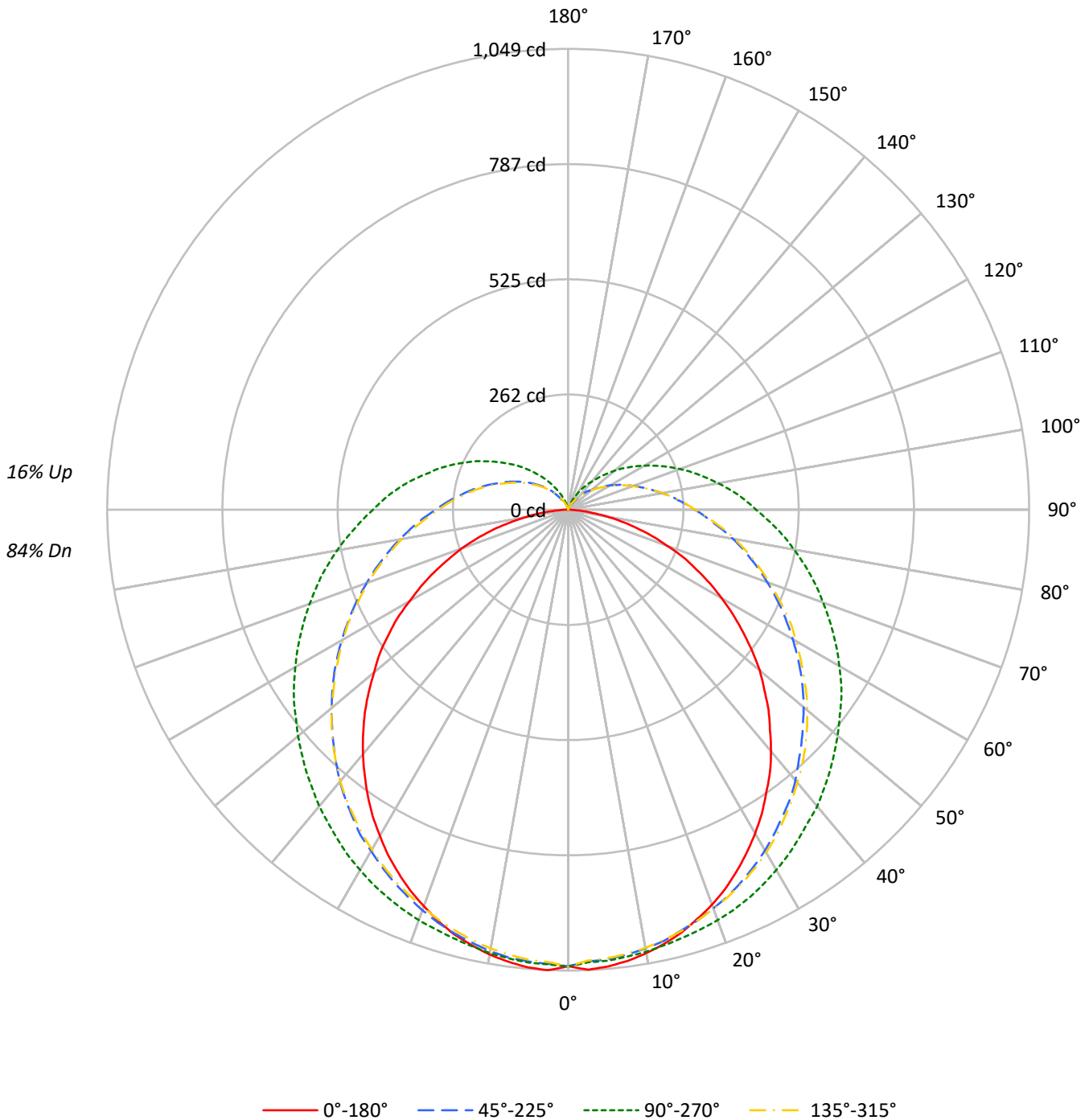
Lumens per Lamp: N/A
Luminaire Lumens: 4515.0 lumens
Efficiency: N/A
Efficacy: 98.2 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.36 / 1.44
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Semi-Direct

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



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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	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°	8398	8398	8398	8398
5°	8442	8093	8460	8127
10°	8365	7863	8392	7889
15°	8268	7666	8304	7674
20°	8137	7523	8165	7523
25°	7977	7395	8026	7386
30°	7797	7263	7857	7263
35°	7588	7142	7673	7150
40°	7381	7071	7471	7071
45°	7143	6996	7252	7005
50°	6895	6951	6989	6970
55°	6549	6958	6757	6988
60°	6185	6978	6387	7021
65°	5776	7049	6030	7119
70°	5200	7179	5605	7280
75°	4535	7413	4966	7556
80°	3510	7761	3989	7941
85°	2097	8319	2623	8549



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.4	2.2
10°-20°	282.9	6.3
20°-30°	433.8	9.6
30°-40°	535.2	11.9
40°-50°	580.6	12.9
50°-60°	572.3	12.7
60°-70°	517.4	11.5
70°-80°	431.0	9.5
80°-90°	333.9	7.4
90°-100°	253.2	5.6
100°-110°	187.4	4.2
110°-120°	130.3	2.9
120°-130°	83.2	1.8
130°-140°	46.7	1.0
140°-150°	21.3	0.5
150°-160°	6.6	0.1
160°-170°	0.8	0.0
170°-180°	0.0	0.0
0°-30°	815.2	18.1
0°-40°	1350.3	29.9
0°-60°	2503.2	55.4
0°-90°	3785.5	83.8
90°-120°	570.9	12.6
90°-150°	722.0	16.0
90°-180°	729.0	16.1
0°-180°	4515.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1039	1039	1039	1039	1039	
5°	1044	1030	1046	1035	1044	99
15°	996	1008	1001	1010	996	281
25°	908	974	913	973	908	418
35°	786	914	795	915	786	492
45°	645	842	654	843	645	497
55°	486	759	501	762	486	435
65°	322	665	336	672	322	319
75°	162	570	178	581	162	172
85°	31	475	38	488	31	37
90°	1	428	2	444	1	2
95°	1	388	1	407	1	1
105°	1	308	1	327	1	1
115°	1	235	1	255	1	1
125°	1	169	1	188	1	1
135°	1	110	1	129	1	1
145°	1	64	1	78	1	1
155°	1	26	1	36	1	1
165°	1	4	1	7	1	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-50SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1039.2	1039.2	1039.2	1039.2	1039.2	1039.2	1039.2	1039.2	1039.2	1039.2	1039.2
2.5°	1048.0	1048.0	1046.9	1044.7	1045.8	1049.1	1046.9	1041.4	1038.1	1029.4	1031.5
5°	1043.6	1043.6	1042.5	1040.3	1041.4	1045.8	1043.6	1039.2	1034.8	1027.2	1030.5
7.5°	1035.9	1035.9	1034.8	1032.6	1034.8	1039.2	1037.0	1032.6	1029.4	1021.7	1025.0
10°	1025.0	1026.1	1025.0	1021.7	1026.1	1030.5	1029.4	1023.9	1020.6	1014.0	1017.3
12.5°	1011.8	1012.9	1011.8	1010.7	1012.9	1019.5	1017.3	1012.9	1010.7	1005.2	1008.5
15°	996.5	997.6	995.4	995.4	997.6	1004.1	1004.1	999.8	997.6	992.1	998.7
17.5°	976.7	977.8	976.7	976.7	978.9	985.5	986.6	984.4	982.2	980.0	986.6
20°	957.0	955.9	955.9	954.8	959.2	969.1	968.0	968.0	965.8	965.8	973.4
22.5°	934.0	934.0	932.9	932.9	938.4	947.1	947.1	949.3	947.1	951.5	958.1
25°	907.7	908.8	907.7	909.9	914.3	924.1	925.2	928.5	929.6	934.0	941.7
27.5°	880.3	881.4	880.3	882.5	890.1	897.8	903.3	907.7	908.8	915.3	925.2
30°	850.7	850.7	851.8	854.0	862.7	874.8	879.2	884.7	884.7	895.6	905.5
32.5°	820.0	820.0	820.0	824.4	834.2	848.5	854.0	860.5	862.7	873.7	884.7
35°	786.0	787.1	787.1	790.4	803.5	817.8	825.5	833.1	837.5	850.7	861.6
37.5°	754.2	756.4	753.1	757.5	776.1	788.2	797.0	804.6	812.3	829.8	838.6
40°	718.0	720.2	719.1	727.9	743.2	758.6	768.5	776.1	787.1	804.6	814.5
42.5°	679.7	681.9	684.0	693.9	710.4	725.7	737.8	747.6	760.8	776.1	792.6
45°	644.6	644.6	647.9	659.9	677.5	693.9	708.2	719.1	734.5	750.9	767.4
47.5°	605.1	606.2	610.6	624.8	643.5	663.2	676.4	690.6	707.1	724.6	743.2
50°	568.9	568.9	575.5	590.9	608.4	630.3	644.6	661.0	678.6	699.4	718.0
52.5°	527.3	529.5	539.3	553.6	576.6	596.3	612.8	630.3	651.2	673.1	693.9
55°	485.6	490.0	497.7	517.4	541.5	560.2	579.9	601.8	621.6	645.7	669.8
57.5°	445.1	448.4	460.4	480.1	505.4	528.4	549.2	570.0	594.2	618.3	643.5
60°	403.4	407.8	422.0	441.8	469.2	493.3	517.4	539.3	564.6	589.8	616.1
62.5°	363.9	367.2	383.7	406.7	434.1	460.4	484.5	510.8	538.2	562.4	588.7
65°	322.3	327.8	346.4	367.2	399.0	425.3	452.7	481.2	509.7	536.1	561.3
67.5°	283.9	287.2	306.9	331.1	362.9	392.4	421.0	451.6	481.2	508.6	533.9
70°	239.0	249.9	269.7	294.9	328.9	359.6	390.3	422.0	453.8	482.3	506.5
72.5°	201.7	210.5	232.4	259.8	292.7	328.9	360.7	394.6	426.4	456.0	481.2
75°	162.2	171.0	196.2	226.9	260.9	299.3	332.2	367.2	400.1	429.7	456.0
77.5°	123.9	134.8	162.2	194.0	231.3	270.8	304.8	339.8	373.8	405.6	431.9
80°	88.8	100.9	130.5	166.6	202.8	242.3	279.5	314.6	348.6	380.4	407.8
82.5°	57.0	70.2	101.9	138.1	176.5	216.0	254.3	289.4	323.4	355.2	383.7
85°	30.7	44.9	77.8	114.0	152.4	191.8	230.2	267.5	300.4	330.0	360.7
87.5°	8.8	26.3	58.1	94.3	133.7	169.9	207.2	244.5	277.3	309.1	336.5
90°	1.1	15.3	43.8	77.8	116.2	151.3	188.6	223.6	256.5	288.3	315.7
92.5°	1.1	9.9	34.0	64.7	99.8	135.9	173.2	207.2	237.9	269.7	297.1
95°	1.1	7.7	27.4	54.8	87.7	121.7	156.8	189.6	221.4	251.0	278.4
97.5°	1.1	5.5	21.9	47.1	76.7	108.5	142.5	175.4	206.1	234.6	259.8
100°	1.1	4.4	17.5	40.6	66.9	97.6	128.3	160.0	189.6	217.1	243.4
102.5°	1.1	3.3	15.3	34.0	59.2	86.6	116.2	145.8	174.3	200.6	226.9
105°	1.1	3.3	13.2	29.6	52.6	77.8	105.2	133.7	160.0	185.3	209.4
107.5°	1.1	2.2	11.0	25.2	46.0	70.2	95.4	122.8	146.9	171.0	194.0
110°	1.1	2.2	8.8	23.0	40.6	62.5	86.6	111.8	134.8	157.9	179.8



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CATALOG NUMBER: 4SNLED-LD5-50SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1.1	2.2	7.7	19.7	35.1	55.9	77.8	100.9	122.8	145.8	165.5
115°	1.1	2.2	6.6	17.5	32.9	48.2	70.2	91.0	112.9	133.7	152.4
117.5°	1.1	2.2	5.5	14.3	28.5	43.8	61.4	82.2	101.9	121.7	139.2
120°	1.1	2.2	4.4	13.2	25.2	39.5	54.8	73.4	92.1	110.7	129.4
122.5°	1.1	1.1	4.4	11.0	21.9	35.1	50.4	64.7	82.2	99.8	116.2
125°	1.1	1.1	4.4	9.9	18.6	31.8	44.9	58.1	73.4	88.8	103.0
127.5°	1.1	1.1	3.3	7.7	16.4	27.4	39.5	53.7	64.7	78.9	93.2
130°	1.1	1.1	3.3	6.6	14.3	23.0	35.1	47.1	60.3	70.2	82.2
132.5°	1.1	1.1	3.3	5.5	11.0	18.6	29.6	40.6	52.6	63.6	73.4
135°	1.1	1.1	2.2	4.4	8.8	15.3	24.1	34.0	46.0	57.0	66.9
137.5°	1.1	1.1	2.2	4.4	6.6	13.2	18.6	27.4	38.4	48.2	58.1
140°	1.1	1.1	2.2	3.3	5.5	9.9	15.3	21.9	30.7	39.5	50.4
142.5°	1.1	1.1	1.1	3.3	4.4	7.7	12.1	17.5	24.1	31.8	40.6
145°	1.1	1.1	1.1	3.3	4.4	5.5	9.9	14.3	18.6	24.1	31.8
147.5°	1.1	1.1	1.1	2.2	3.3	4.4	7.7	11.0	14.3	18.6	23.0
150°	1.1	1.1	1.1	2.2	3.3	4.4	5.5	7.7	11.0	15.3	18.6
152.5°	1.1	1.1	1.1	2.2	2.2	3.3	4.4	5.5	7.7	11.0	13.2
155°	1.1	1.1	1.1	1.1	2.2	3.3	4.4	4.4	5.5	7.7	9.9
157.5°	1.1	1.1	1.1	1.1	2.2	2.2	3.3	3.3	4.4	4.4	6.6
160°	1.1	1.1	1.1	1.1	1.1	2.2	2.2	3.3	3.3	3.3	3.3
162.5°	1.1	1.1	1.1	1.1	1.1	1.1	2.2	2.2	2.2	3.3	3.3
165°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	2.2	2.2	2.2
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



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1039.2	1039.2	1039.2	1039.2	1039.2	1039.2	1039.2	1039.2	1039.2	1039.2	1039.2
2.5°	1031.5	1032.6	1035.9	1035.9	1033.7	1033.7	1032.6	1031.5	1032.6	1034.8	1034.8
5°	1029.4	1030.5	1033.7	1034.8	1032.6	1031.5	1031.5	1030.5	1031.5	1033.7	1033.7
7.5°	1025.0	1026.1	1029.4	1030.5	1028.3	1028.3	1027.2	1026.1	1028.3	1029.4	1029.4
10°	1018.4	1019.5	1023.9	1025.0	1023.9	1022.8	1022.8	1021.7	1022.8	1025.0	1025.0
12.5°	1009.6	1011.8	1017.3	1017.3	1017.3	1016.2	1016.2	1015.1	1016.2	1018.4	1017.3
15°	999.8	1004.1	1008.5	1010.7	1010.7	1010.7	1009.6	1008.5	1010.7	1011.8	1010.7
17.5°	988.8	994.3	1000.9	1003.0	1003.0	1004.1	1003.0	1001.9	1004.1	1004.1	1003.0
20°	977.8	983.3	989.9	992.1	994.3	995.4	995.4	994.3	995.4	996.5	995.4
22.5°	963.6	970.2	977.8	981.1	983.3	985.5	985.5	985.5	986.6	987.7	985.5
25°	948.2	955.9	964.7	968.0	972.4	973.4	974.5	974.5	975.6	976.7	973.4
27.5°	931.8	940.6	949.3	954.8	958.1	960.3	960.3	961.4	962.5	963.6	960.3
30°	912.1	925.2	932.9	937.3	941.7	944.9	946.0	947.1	948.2	949.3	946.0
32.5°	894.5	905.5	915.3	920.8	926.3	930.7	931.8	931.8	934.0	934.0	930.7
35°	873.7	886.8	896.7	902.2	908.8	912.1	914.3	914.3	916.4	916.4	913.2
37.5°	852.9	866.0	877.0	883.6	891.2	895.6	896.7	896.7	898.9	898.9	894.5
40°	830.9	845.2	857.2	864.9	871.5	877.0	878.1	881.4	881.4	880.3	875.9
42.5°	809.0	822.2	835.3	844.1	852.9	858.3	860.5	861.6	861.6	860.5	857.2
45°	784.9	800.2	812.3	823.3	832.0	837.5	840.8	841.9	841.9	839.7	836.4
47.5°	761.9	777.2	789.3	801.3	810.1	816.7	820.0	821.1	820.0	818.9	815.6
50°	737.8	755.3	767.4	779.4	788.2	793.7	799.1	800.2	799.1	798.1	791.5
52.5°	712.5	731.2	744.3	756.4	766.3	772.8	777.2	778.3	778.3	776.1	771.7
55°	687.3	703.8	720.2	733.4	744.3	750.9	756.4	758.6	756.4	754.2	748.7
57.5°	664.3	679.7	696.1	710.4	721.3	730.1	734.5	736.7	734.5	731.2	725.7
60°	636.9	653.3	672.0	685.1	697.2	706.0	708.2	712.5	710.4	707.1	701.6
62.5°	610.6	630.3	646.8	663.2	673.1	682.9	687.3	689.5	687.3	684.0	678.6
65°	583.2	605.1	621.6	638.0	649.0	658.8	664.3	665.4	663.2	659.9	654.4
67.5°	558.0	578.8	596.3	613.9	623.8	633.6	639.1	641.3	639.1	634.7	629.2
70°	532.8	553.6	574.4	587.6	599.6	610.6	613.9	617.2	615.0	610.6	604.0
72.5°	507.6	529.5	550.3	563.5	576.6	586.5	590.9	594.2	592.0	587.6	579.9
75°	481.2	504.3	525.1	539.3	552.5	562.4	566.7	570.0	567.8	563.5	554.7
77.5°	457.1	480.1	499.9	515.2	528.4	537.1	544.8	545.9	543.7	539.3	530.6
80°	431.9	454.9	475.8	491.1	504.3	513.0	518.5	521.8	519.6	515.2	506.5
82.5°	410.0	430.8	451.6	467.0	480.1	491.1	495.5	498.8	497.7	491.1	484.5
85°	385.9	410.0	426.4	442.9	456.0	467.0	470.3	474.7	473.6	468.1	459.3
87.5°	361.8	385.9	405.6	422.0	434.1	442.9	448.4	450.5	449.5	444.0	434.1
90°	342.0	363.9	383.7	401.2	411.1	421.0	426.4	427.5	427.5	421.0	413.3
92.5°	323.4	344.2	363.9	380.4	392.4	401.2	405.6	407.8	406.7	401.2	392.4
95°	302.6	325.6	344.2	360.7	372.7	381.5	385.9	388.1	387.0	381.5	372.7
97.5°	285.0	305.8	324.5	339.8	351.9	360.7	365.0	367.2	367.2	361.8	353.0
100°	267.5	288.3	305.8	321.2	332.2	340.9	345.3	346.4	345.3	340.9	332.2
102.5°	249.9	269.7	287.2	301.5	313.5	321.2	325.6	326.7	326.7	321.2	312.4
105°	232.4	252.1	268.6	283.9	293.8	301.5	304.8	308.0	306.9	302.6	293.8
107.5°	216.0	235.7	251.0	265.3	275.2	282.8	286.1	289.4	288.3	283.9	275.2
110°	200.6	219.2	233.5	247.7	256.5	264.2	269.7	270.8	268.6	264.2	256.5



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-50SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	186.4	202.8	217.1	230.2	240.1	245.6	249.9	252.1	249.9	245.6	240.1
115°	171.0	187.5	201.7	213.8	222.5	229.1	232.4	234.6	232.4	228.0	222.5
117.5°	156.8	172.1	186.4	198.4	206.1	211.6	214.9	217.1	214.9	211.6	206.1
120°	144.7	157.9	171.0	182.0	190.7	195.1	198.4	200.6	199.5	195.1	189.6
122.5°	130.5	144.7	156.8	167.7	175.4	179.8	182.0	184.2	183.1	179.8	174.3
125°	118.4	130.5	142.5	152.4	160.0	164.4	166.6	168.8	167.7	164.4	157.9
127.5°	105.2	118.4	128.3	138.1	143.6	150.2	151.3	153.5	152.4	149.1	143.6
130°	95.4	105.2	115.1	123.9	130.5	134.8	137.0	138.1	135.9	133.7	128.3
132.5°	83.3	94.3	103.0	110.7	115.1	119.5	121.7	122.8	122.8	119.5	115.1
135°	74.5	82.2	89.9	97.6	101.9	106.3	108.5	109.6	108.5	106.3	101.9
137.5°	66.9	73.4	78.9	85.5	91.0	93.2	95.4	95.4	94.3	93.2	89.9
140°	58.1	65.8	71.3	75.6	80.0	81.1	83.3	83.3	82.2	81.1	78.9
142.5°	49.3	55.9	61.4	66.9	70.2	72.4	73.4	74.5	73.4	72.4	69.1
145°	39.5	47.1	52.6	55.9	60.3	61.4	62.5	63.6	62.5	61.4	58.1
147.5°	30.7	37.3	42.8	47.1	50.4	51.5	52.6	53.7	52.6	50.4	49.3
150°	21.9	27.4	34.0	38.4	40.6	42.8	42.8	42.8	43.8	41.7	39.5
152.5°	17.5	19.7	24.1	28.5	31.8	32.9	34.0	34.0	32.9	32.9	30.7
155°	12.1	14.3	17.5	20.8	24.1	25.2	26.3	26.3	25.2	25.2	24.1
157.5°	7.7	9.9	12.1	14.3	17.5	18.6	19.7	19.7	19.7	18.6	17.5
160°	4.4	5.5	6.6	8.8	11.0	12.1	13.2	13.2	13.2	13.2	12.1
162.5°	3.3	3.3	3.3	4.4	5.5	6.6	7.7	7.7	7.7	7.7	6.6
165°	2.2	2.2	2.2	2.2	2.2	3.3	4.4	4.4	4.4	4.4	4.4
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-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1039.2	1039.2	1039.2	1039.2	1039.2	1039.2	1039.2	1039.2	1039.2	1039.2	1039.2
2.5°	1033.7	1033.7	1034.8	1032.6	1026.1	1027.2	1027.2	1031.5	1033.7	1034.8	1040.3
5°	1031.5	1031.5	1033.7	1030.5	1025.0	1025.0	1025.0	1029.4	1030.5	1032.6	1037.0
7.5°	1028.3	1028.3	1029.4	1026.1	1019.5	1019.5	1018.4	1022.8	1025.0	1026.1	1030.5
10°	1022.8	1022.8	1023.9	1020.6	1012.9	1012.9	1011.8	1015.1	1016.2	1018.4	1021.7
12.5°	1015.1	1015.1	1015.1	1011.8	1004.1	1003.0	1001.9	1005.2	1005.2	1006.3	1009.6
15°	1008.5	1006.3	1006.3	1003.0	995.4	993.2	991.0	992.1	994.3	993.2	995.4
17.5°	1000.9	998.7	996.5	993.2	983.3	980.0	977.8	978.9	977.8	976.7	978.9
20°	992.1	988.8	987.7	982.2	972.4	966.9	962.5	960.3	961.4	958.1	959.2
22.5°	982.2	977.8	975.6	969.1	959.2	952.6	947.1	942.8	941.7	937.3	938.4
25°	970.2	964.7	961.4	955.9	944.9	937.3	930.7	924.1	920.8	915.3	914.3
27.5°	955.9	950.4	946.0	940.6	929.6	919.7	912.1	903.3	898.9	892.3	889.0
30°	941.7	935.1	928.5	924.1	912.1	901.1	889.0	881.4	874.8	867.1	861.6
32.5°	924.1	917.5	911.0	904.4	893.4	880.3	870.4	858.3	850.7	841.9	835.3
35°	906.6	897.8	891.2	882.5	872.6	857.2	845.2	833.1	823.3	813.4	805.7
37.5°	886.8	880.3	870.4	862.7	850.7	835.3	822.2	806.8	798.1	784.9	775.0
40°	868.2	860.5	850.7	840.8	828.7	811.2	797.0	779.4	769.5	754.2	744.3
42.5°	849.6	838.6	828.7	817.8	804.6	788.2	770.6	753.1	740.0	725.7	711.4
45°	828.7	816.7	804.6	792.6	779.4	763.0	744.3	725.7	709.3	696.1	678.6
47.5°	806.8	794.8	780.5	767.4	753.1	736.7	716.9	697.2	679.7	664.3	645.7
50°	784.9	772.8	757.5	743.2	726.8	710.4	689.5	666.5	647.9	628.1	611.7
52.5°	761.9	749.8	735.6	716.9	699.4	682.9	661.0	636.9	616.1	599.6	578.8
55°	738.9	726.8	710.4	691.7	674.2	653.3	632.5	608.4	585.4	565.7	544.8
57.5°	714.7	703.8	685.1	669.8	647.9	625.9	604.0	581.0	555.8	532.8	508.6
60°	690.6	678.6	661.0	642.4	620.5	598.5	575.5	550.3	524.0	498.8	476.9
62.5°	668.7	653.3	636.9	617.2	594.2	573.3	547.0	519.6	493.3	467.0	440.7
65°	643.5	627.0	611.7	592.0	567.8	543.7	517.4	490.0	461.5	433.0	406.7
67.5°	618.3	601.8	585.4	565.7	540.4	515.2	487.8	460.4	428.6	401.2	370.5
70°	593.1	579.9	559.1	538.2	515.2	487.8	460.4	430.8	397.9	368.3	336.5
72.5°	567.8	554.7	533.9	511.9	490.0	461.5	431.9	402.3	371.6	337.6	303.7
75°	543.7	527.3	508.6	487.8	464.8	435.2	405.6	374.9	338.7	306.9	271.9
77.5°	520.7	505.4	486.7	463.7	438.5	410.0	379.3	347.5	311.3	277.3	239.0
80°	495.5	480.1	461.5	438.5	413.3	385.9	353.0	320.1	285.0	247.7	208.3
82.5°	471.4	457.1	436.3	415.5	388.1	360.7	327.8	294.9	257.6	221.4	183.1
85°	446.2	431.9	412.2	390.3	363.9	334.3	303.7	270.8	233.5	196.2	157.9
87.5°	424.2	407.8	388.1	366.1	339.8	311.3	281.7	246.7	210.5	174.3	134.8
90°	401.2	385.9	366.1	344.2	317.9	289.4	258.7	225.8	190.7	153.5	116.2
92.5°	381.5	365.0	346.4	324.5	298.2	270.8	240.1	207.2	173.2	137.0	100.9
95°	361.8	345.3	327.8	305.8	279.5	252.1	221.4	189.6	156.8	121.7	87.7
97.5°	339.8	325.6	308.0	287.2	260.9	234.6	205.0	174.3	142.5	108.5	76.7
100°	322.3	305.8	289.4	267.5	243.4	218.1	188.6	159.0	128.3	96.5	66.9
102.5°	302.6	287.2	270.8	249.9	225.8	200.6	173.2	144.7	116.2	86.6	58.1
105°	283.9	269.7	252.1	232.4	209.4	185.3	159.0	132.6	105.2	76.7	51.5
107.5°	265.3	251.0	234.6	216.0	194.0	169.9	145.8	119.5	94.3	69.1	46.0
110°	246.7	233.5	218.1	199.5	178.7	156.8	133.7	109.6	84.4	61.4	40.6



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-50SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	230.2	217.1	201.7	184.2	164.4	143.6	121.7	98.7	75.6	54.8	35.1
115°	213.8	201.7	186.4	171.0	151.3	131.5	110.7	88.8	68.0	49.3	30.7
117.5°	197.3	185.3	171.0	155.7	138.1	119.5	99.8	78.9	61.4	43.8	27.4
120°	180.9	169.9	156.8	142.5	127.2	108.5	88.8	71.3	54.8	38.4	24.1
122.5°	165.5	155.7	143.6	130.5	114.0	96.5	80.0	64.7	49.3	34.0	19.7
125°	151.3	141.4	130.5	117.3	101.9	86.6	72.4	58.1	42.8	29.6	16.4
127.5°	137.0	127.2	116.2	104.1	92.1	77.8	64.7	51.5	38.4	26.3	14.3
130°	122.8	114.0	104.1	94.3	82.2	69.1	58.1	44.9	32.9	20.8	12.1
132.5°	108.5	101.9	93.2	83.3	72.4	62.5	50.4	39.5	28.5	18.6	11.0
135°	96.5	89.9	82.2	73.4	64.7	54.8	43.8	34.0	24.1	15.3	8.8
137.5°	85.5	80.0	72.4	64.7	57.0	47.1	38.4	28.5	19.7	13.2	6.6
140°	75.6	70.2	63.6	55.9	49.3	40.6	31.8	23.0	17.5	11.0	5.5
142.5°	65.8	60.3	54.8	48.2	41.7	34.0	26.3	19.7	14.3	8.8	5.5
145°	55.9	51.5	46.0	40.6	34.0	27.4	21.9	16.4	11.0	6.6	4.4
147.5°	46.0	42.8	37.3	32.9	27.4	21.9	17.5	13.2	8.8	5.5	3.3
150°	37.3	34.0	29.6	25.2	21.9	17.5	14.3	9.9	6.6	5.5	3.3
152.5°	28.5	26.3	23.0	20.8	17.5	13.2	9.9	7.7	5.5	4.4	2.2
155°	23.0	20.8	18.6	15.3	13.2	9.9	7.7	5.5	4.4	3.3	2.2
157.5°	16.4	15.3	13.2	11.0	8.8	6.6	5.5	5.5	3.3	2.2	1.1
160°	11.0	9.9	8.8	6.6	5.5	5.5	4.4	3.3	2.2	2.2	1.1
162.5°	6.6	5.5	5.5	5.5	4.4	4.4	3.3	2.2	2.2	1.1	1.1
165°	4.4	4.4	4.4	3.3	3.3	3.3	2.2	1.1	1.1	1.1	1.1
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-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1039.2	1039.2	1039.2	1039.2	1039.2	1039.2	1039.2	1039.2	1039.2	1039.2	1039.2
2.5°	1040.3	1037.0	1041.4	1049.1	1050.2	1049.1	1046.9	1050.2	1054.6	1053.5	1045.8
5°	1038.1	1033.7	1038.1	1045.8	1045.8	1044.7	1043.6	1046.9	1051.3	1050.2	1043.6
7.5°	1031.5	1027.2	1031.5	1038.1	1039.2	1037.0	1037.0	1040.3	1044.7	1043.6	1038.1
10°	1022.8	1018.4	1020.6	1028.3	1030.5	1028.3	1028.3	1031.5	1037.0	1035.9	1029.4
12.5°	1009.6	1006.3	1008.5	1015.1	1017.3	1016.2	1015.1	1019.5	1025.0	1025.0	1018.4
15°	995.4	991.0	993.2	1000.9	1001.9	999.8	1000.9	1004.1	1010.7	1010.7	1005.2
17.5°	978.9	973.4	976.7	982.2	983.3	983.3	983.3	987.7	995.4	994.3	989.9
20°	960.3	952.6	954.8	960.3	962.5	962.5	962.5	970.2	975.6	975.6	971.3
22.5°	938.4	932.9	932.9	938.4	941.7	940.6	940.6	947.1	954.8	953.7	953.7
25°	913.2	908.8	906.6	913.2	914.3	915.3	917.5	924.1	932.9	932.9	934.0
27.5°	886.8	882.5	881.4	886.8	887.9	889.0	891.2	898.9	907.7	908.8	911.0
30°	861.6	855.1	852.9	857.2	859.4	860.5	860.5	872.6	880.3	883.6	887.9
32.5°	832.0	825.5	820.0	827.6	828.7	830.9	832.0	844.1	852.9	858.3	864.9
35°	802.4	791.5	789.3	794.8	797.0	798.1	800.2	813.4	825.5	829.8	838.6
37.5°	769.5	761.9	755.3	760.8	763.0	764.1	770.6	782.7	794.8	801.3	810.1
40°	738.9	729.0	723.5	726.8	729.0	730.1	737.8	750.9	765.2	772.8	783.8
42.5°	704.9	691.7	687.3	690.6	691.7	695.0	701.6	719.1	733.4	744.3	753.1
45°	670.9	661.0	651.2	654.4	655.5	657.7	667.6	686.2	701.6	714.7	724.6
47.5°	635.8	623.8	613.9	616.1	620.5	621.6	632.5	654.4	668.7	682.9	696.1
50°	600.7	584.3	576.6	576.6	578.8	584.3	598.5	620.5	635.8	652.3	666.5
52.5°	564.6	549.2	540.4	541.5	543.7	550.3	563.5	585.4	602.9	620.5	638.0
55°	528.4	511.9	503.2	501.0	503.2	511.9	527.3	550.3	567.8	588.7	607.3
57.5°	492.2	472.5	464.8	461.5	463.7	474.7	490.0	514.1	536.1	555.8	577.7
60°	452.7	437.4	424.2	416.6	422.0	436.3	452.7	478.0	501.0	522.9	547.0
62.5°	418.8	399.0	384.8	377.1	382.6	394.6	417.7	441.8	467.0	492.2	516.3
65°	380.4	360.7	344.2	336.5	342.0	356.3	379.3	405.6	433.0	458.2	486.7
67.5°	343.1	322.3	302.6	294.9	301.5	316.8	342.0	371.6	401.2	427.5	458.2
70°	306.9	283.9	263.1	257.6	262.0	282.8	306.9	336.5	367.2	397.9	429.7
72.5°	274.1	245.6	223.6	217.1	222.5	245.6	273.0	303.7	336.5	369.4	403.4
75°	235.7	209.4	185.3	177.6	184.2	205.0	239.0	271.9	306.9	342.0	373.8
77.5°	205.0	174.3	149.1	137.0	148.0	174.3	207.2	242.3	278.4	314.6	350.8
80°	173.2	141.4	114.0	100.9	112.9	141.4	174.3	212.7	253.2	289.4	322.3
82.5°	144.7	110.7	82.2	68.0	81.1	112.9	149.1	187.5	226.9	263.1	301.5
85°	118.4	83.3	53.7	38.4	57.0	85.5	123.9	163.3	203.9	241.2	278.4
87.5°	96.5	62.5	32.9	16.4	35.1	66.9	103.0	142.5	183.1	220.3	255.4
90°	78.9	44.9	17.5	2.2	20.8	50.4	85.5	123.9	162.2	200.6	235.7
92.5°	64.7	34.0	9.9	1.1	13.2	40.6	73.4	109.6	146.9	184.2	218.1
95°	53.7	26.3	6.6	1.1	9.9	31.8	62.5	97.6	132.6	168.8	202.8
97.5°	46.0	21.9	5.5	1.1	7.7	27.4	53.7	86.6	120.6	154.6	187.5
100°	39.5	17.5	4.4	1.1	6.6	23.0	47.1	76.7	108.5	141.4	173.2
102.5°	34.0	14.3	3.3	1.1	5.5	19.7	41.7	69.1	97.6	129.4	160.0
105°	29.6	12.1	3.3	1.1	4.4	17.5	37.3	61.4	89.9	118.4	148.0
107.5°	25.2	9.9	2.2	1.1	3.3	14.3	32.9	55.9	81.1	108.5	135.9
110°	21.9	8.8	2.2	1.1	3.3	13.2	28.5	50.4	73.4	98.7	125.0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-50SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	18.6	6.6	2.2	1.1	2.2	11.0	25.2	44.9	66.9	89.9	115.1
115°	16.4	5.5	1.1	1.1	2.2	9.9	23.0	40.6	60.3	82.2	105.2
117.5°	13.2	4.4	1.1	1.1	1.1	7.7	19.7	36.2	54.8	75.6	96.5
120°	11.0	4.4	1.1	1.1	1.1	6.6	17.5	31.8	49.3	68.0	87.7
122.5°	9.9	3.3	1.1	1.1	1.1	5.5	15.3	28.5	43.8	61.4	80.0
125°	8.8	3.3	1.1	1.1	1.1	4.4	13.2	25.2	39.5	54.8	72.4
127.5°	6.6	3.3	1.1	1.1	1.1	3.3	12.1	21.9	35.1	49.3	64.7
130°	5.5	2.2	1.1	1.1	1.1	3.3	9.9	19.7	30.7	43.8	58.1
132.5°	4.4	2.2	1.1	1.1	1.1	2.2	7.7	15.3	26.3	38.4	51.5
135°	4.4	2.2	1.1	1.1	1.1	2.2	5.5	13.2	21.9	32.9	43.8
137.5°	4.4	1.1	1.1	1.1	1.1	2.2	4.4	9.9	17.5	26.3	36.2
140°	3.3	1.1	1.1	1.1	1.1	1.1	3.3	7.7	14.3	21.9	30.7
142.5°	3.3	1.1	1.1	1.1	1.1	1.1	3.3	5.5	11.0	17.5	24.1
145°	2.2	1.1	1.1	1.1	1.1	1.1	2.2	4.4	8.8	13.2	19.7
147.5°	2.2	1.1	1.1	1.1	1.1	1.1	2.2	3.3	6.6	11.0	15.3
150°	2.2	1.1	1.1	1.1	1.1	1.1	2.2	3.3	4.4	7.7	12.1
152.5°	1.1	1.1	1.1	1.1	1.1	1.1	2.2	2.2	3.3	5.5	7.7
155°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	2.2	3.3	4.4	5.5
157.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	2.2	2.2	3.3	4.4
160°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	2.2	2.2	3.3
162.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	2.2	2.2
165°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
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-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1039.2	1039.2	1039.2	1039.2	1039.2	1039.2	1039.2	1039.2	1039.2	1039.2	1039.2
2.5°	1042.5	1034.8	1037.0	1035.9	1038.1	1041.4	1041.4	1040.3	1040.3	1038.1	1035.9
5°	1040.3	1032.6	1035.9	1034.8	1037.0	1040.3	1040.3	1039.2	1039.2	1035.9	1034.8
7.5°	1033.7	1028.3	1030.5	1030.5	1032.6	1035.9	1035.9	1034.8	1034.8	1031.5	1030.5
10°	1027.2	1020.6	1023.9	1023.9	1026.1	1030.5	1030.5	1029.4	1029.4	1026.1	1025.0
12.5°	1016.2	1009.6	1015.1	1016.2	1018.4	1022.8	1021.7	1021.7	1021.7	1018.4	1017.3
15°	1003.0	998.7	1004.1	1005.2	1008.5	1014.0	1014.0	1014.0	1014.0	1010.7	1009.6
17.5°	988.8	985.5	991.0	993.2	997.6	1003.0	1003.0	1004.1	1005.2	1003.0	1001.9
20°	972.4	970.2	975.6	980.0	986.6	992.1	994.3	995.4	997.6	995.4	994.3
22.5°	953.7	953.7	961.4	965.8	973.4	978.9	982.2	985.5	987.7	985.5	984.4
25°	932.9	936.2	943.8	951.5	960.3	965.8	969.1	973.4	975.6	974.5	973.4
27.5°	913.2	917.5	927.4	935.1	942.8	951.5	954.8	960.3	962.5	962.5	961.4
30°	890.1	896.7	907.7	916.4	926.3	935.1	939.5	944.9	948.2	946.0	947.1
32.5°	868.2	879.2	887.9	897.8	908.8	917.5	923.0	929.6	932.9	931.8	932.9
35°	844.1	855.1	867.1	877.0	890.1	898.9	906.6	912.1	916.4	915.3	915.3
37.5°	817.8	832.0	844.1	857.2	869.3	879.2	886.8	893.4	897.8	897.8	897.8
40°	792.6	807.9	820.0	835.3	850.7	859.4	868.2	874.8	879.2	880.3	881.4
42.5°	765.2	781.6	795.9	812.3	827.6	838.6	848.5	856.2	860.5	862.7	861.6
45°	740.0	755.3	771.7	790.4	804.6	815.6	827.6	836.4	840.8	841.9	843.0
47.5°	711.4	729.0	747.6	766.3	780.5	794.8	805.7	814.5	818.9	822.2	822.2
50°	684.0	702.7	723.5	743.2	758.6	772.8	783.8	793.7	799.1	801.3	802.4
52.5°	658.8	676.4	698.3	718.0	733.4	747.6	761.9	772.8	778.3	780.5	780.5
55°	628.1	650.1	674.2	692.8	709.3	725.7	740.0	750.9	756.4	759.7	761.9
57.5°	599.6	622.7	647.9	667.6	687.3	702.7	715.8	730.1	734.5	738.9	740.0
60°	572.2	595.2	619.4	641.3	661.0	677.5	692.8	704.9	712.5	714.7	716.9
62.5°	543.7	567.8	593.1	615.0	635.8	655.5	669.8	680.8	689.5	692.8	695.0
65°	516.3	541.5	566.7	589.8	611.7	631.4	645.7	656.6	665.4	670.9	672.0
67.5°	486.7	514.1	540.4	564.6	586.5	607.3	621.6	632.5	641.3	647.9	649.0
70°	459.3	487.8	514.1	540.4	562.4	583.2	598.5	609.5	619.4	623.8	625.9
72.5°	433.0	462.6	490.0	516.3	538.2	559.1	575.5	586.5	596.3	601.8	602.9
75°	407.8	437.4	467.0	492.2	515.2	536.1	552.5	564.6	573.3	578.8	581.0
77.5°	382.6	413.3	442.9	468.1	492.2	513.0	527.3	541.5	550.3	556.9	556.9
80°	357.4	389.2	419.9	445.1	469.2	487.8	504.3	518.5	527.3	533.9	533.9
82.5°	335.4	366.1	395.7	421.0	445.1	465.9	482.3	495.5	505.4	509.7	510.8
85°	310.2	344.2	371.6	399.0	422.0	441.8	458.2	472.5	481.2	485.6	487.8
87.5°	289.4	322.3	351.9	376.0	399.0	418.8	437.4	449.5	458.2	463.7	465.9
90°	269.7	301.5	331.1	355.2	379.3	397.9	415.5	427.5	437.4	441.8	444.0
92.5°	252.1	283.9	312.4	336.5	359.6	380.4	396.8	408.9	417.7	422.0	425.3
95°	235.7	266.4	293.8	320.1	342.0	360.7	378.2	390.3	400.1	403.4	406.7
97.5°	219.2	248.8	276.2	301.5	324.5	342.0	358.5	370.5	378.2	383.7	387.0
100°	205.0	233.5	259.8	283.9	305.8	322.3	339.8	350.8	358.5	362.9	367.2
102.5°	189.6	218.1	243.4	266.4	289.4	304.8	321.2	332.2	338.7	346.4	346.4
105°	176.5	202.8	228.0	249.9	269.7	288.3	302.6	313.5	321.2	326.7	326.7
107.5°	162.2	188.6	212.7	235.7	254.3	271.9	285.0	294.9	303.7	306.9	310.2
110°	151.3	174.3	198.4	220.3	237.9	254.3	267.5	278.4	286.1	289.4	291.6



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-50SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	138.1	162.2	184.2	205.0	222.5	237.9	251.0	259.8	267.5	271.9	273.0
115°	127.2	150.2	169.9	189.6	208.3	221.4	233.5	242.3	249.9	253.2	255.4
117.5°	117.3	138.1	157.9	174.3	191.8	206.1	218.1	225.8	232.4	236.8	239.0
120°	107.4	127.2	144.7	161.1	177.6	190.7	201.7	209.4	217.1	220.3	220.3
122.5°	97.6	116.2	132.6	148.0	163.3	175.4	187.5	194.0	200.6	203.9	203.9
125°	88.8	106.3	121.7	135.9	150.2	161.1	171.0	178.7	185.3	187.5	187.5
127.5°	80.0	96.5	110.7	123.9	135.9	146.9	156.8	164.4	169.9	172.1	172.1
130°	72.4	86.6	99.8	112.9	125.0	133.7	143.6	150.2	153.5	156.8	157.9
132.5°	64.7	77.8	89.9	100.9	112.9	121.7	129.4	135.9	139.2	142.5	143.6
135°	57.0	69.1	80.0	91.0	100.9	109.6	116.2	121.7	126.1	128.3	129.4
137.5°	48.2	61.4	71.3	80.0	91.0	97.6	105.2	108.5	112.9	115.1	115.1
140°	40.6	50.4	61.4	70.2	78.9	85.5	92.1	97.6	100.9	101.9	101.9
142.5°	32.9	41.7	50.4	61.4	69.1	74.5	81.1	85.5	87.7	88.8	89.9
145°	26.3	32.9	40.6	50.4	59.2	65.8	69.1	73.4	75.6	76.7	77.8
147.5°	19.7	26.3	32.9	39.5	48.2	54.8	58.1	62.5	64.7	65.8	65.8
150°	15.3	19.7	24.1	30.7	37.3	44.9	49.3	52.6	53.7	54.8	54.8
152.5°	11.0	15.3	18.6	23.0	27.4	34.0	40.6	42.8	43.8	44.9	44.9
155°	7.7	11.0	13.2	16.4	19.7	25.2	30.7	34.0	35.1	36.2	36.2
157.5°	5.5	7.7	8.8	12.1	14.3	16.4	20.8	26.3	27.4	27.4	27.4
160°	3.3	4.4	5.5	7.7	8.8	11.0	13.2	16.4	19.7	19.7	19.7
162.5°	2.2	3.3	3.3	4.4	4.4	6.6	7.7	8.8	12.1	13.2	13.2
165°	1.1	2.2	2.2	2.2	2.2	2.2	3.3	3.3	5.5	6.6	6.6
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-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1039.2	1039.2	1039.2	1039.2	1039.2	1039.2	1039.2	1039.2	1039.2	1039.2	1039.2
2.5°	1037.0	1039.2	1038.1	1038.1	1038.1	1040.3	1038.1	1028.3	1030.5	1032.6	1034.8
5°	1035.9	1037.0	1037.0	1035.9	1035.9	1038.1	1035.9	1026.1	1028.3	1030.5	1031.5
7.5°	1031.5	1032.6	1032.6	1032.6	1031.5	1033.7	1030.5	1021.7	1021.7	1023.9	1025.0
10°	1026.1	1028.3	1027.2	1026.1	1026.1	1026.1	1023.9	1014.0	1014.0	1015.1	1016.2
12.5°	1019.5	1019.5	1019.5	1018.4	1017.3	1017.3	1015.1	1005.2	1004.1	1006.3	1005.2
15°	1010.7	1012.9	1010.7	1009.6	1007.4	1007.4	1004.1	994.3	992.1	993.2	992.1
17.5°	1003.0	1004.1	1001.9	999.8	997.6	996.5	993.2	982.2	978.9	980.0	977.8
20°	995.4	995.4	993.2	991.0	987.7	984.4	980.0	969.1	963.6	963.6	959.2
22.5°	985.5	985.5	983.3	980.0	976.7	972.4	968.0	957.0	948.2	946.0	942.8
25°	974.5	973.4	972.4	969.1	962.5	958.1	953.7	941.7	931.8	927.4	921.9
27.5°	961.4	961.4	958.1	954.8	948.2	942.8	937.3	926.3	913.2	907.7	900.0
30°	947.1	947.1	943.8	939.5	932.9	926.3	919.7	906.6	893.4	885.7	877.0
32.5°	932.9	931.8	928.5	924.1	917.5	907.7	902.2	889.0	873.7	864.9	852.9
35°	915.3	914.3	911.0	905.5	896.7	889.0	880.3	868.2	850.7	839.7	826.6
37.5°	897.8	896.7	894.5	886.8	878.1	869.3	858.3	846.3	829.8	815.6	802.4
40°	880.3	879.2	874.8	869.3	858.3	847.4	836.4	824.4	806.8	790.4	776.1
42.5°	861.6	860.5	855.1	848.5	836.4	825.5	812.3	799.1	781.6	761.9	747.6
45°	843.0	840.8	835.3	827.6	814.5	802.4	789.3	773.9	756.4	737.8	719.1
47.5°	823.3	820.0	814.5	803.5	792.6	779.4	764.1	747.6	730.1	709.3	689.5
50°	801.3	799.1	792.6	782.7	769.5	756.4	738.9	722.4	701.6	681.9	657.7
52.5°	780.5	776.1	770.6	759.7	746.5	732.3	713.6	693.9	673.1	654.4	629.2
55°	758.6	756.4	748.7	740.0	723.5	707.1	689.5	668.7	645.7	623.8	599.6
57.5°	737.8	733.4	726.8	714.7	700.5	684.0	665.4	643.5	618.3	595.2	568.9
60°	716.9	710.4	702.7	691.7	676.4	658.8	639.1	616.1	590.9	565.7	538.2
62.5°	693.9	688.4	679.7	668.7	653.3	634.7	613.9	589.8	565.7	539.3	509.7
65°	670.9	665.4	656.6	645.7	630.3	609.5	587.6	563.5	536.1	510.8	479.0
67.5°	647.9	642.4	632.5	620.5	605.1	585.4	562.4	537.1	509.7	482.3	449.5
70°	624.8	618.3	609.5	596.3	581.0	560.2	537.1	510.8	483.4	453.8	421.0
72.5°	601.8	596.3	585.4	573.3	556.9	536.1	513.0	486.7	458.2	427.5	394.6
75°	578.8	572.2	564.6	550.3	532.8	513.0	488.9	462.6	431.9	402.3	368.3
77.5°	555.8	550.3	540.4	526.2	509.7	488.9	464.8	438.5	407.8	377.1	340.9
80°	532.8	526.2	518.5	505.4	486.7	465.9	440.7	414.4	383.7	351.9	315.7
82.5°	509.7	503.2	494.4	481.2	463.7	442.9	418.8	390.3	359.6	326.7	292.7
85°	486.7	481.2	471.4	458.2	439.6	418.8	394.6	369.4	336.5	303.7	269.7
87.5°	463.7	458.2	448.4	435.2	417.7	396.8	372.7	346.4	314.6	283.9	246.7
90°	441.8	437.4	427.5	414.4	396.8	376.0	354.1	325.6	294.9	264.2	229.1
92.5°	422.0	417.7	408.9	395.7	380.4	357.4	335.4	308.0	277.3	245.6	211.6
95°	404.5	399.0	390.3	378.2	359.6	339.8	317.9	290.5	260.9	229.1	196.2
97.5°	384.8	379.3	370.5	357.4	342.0	321.2	299.3	273.0	243.4	213.8	180.9
100°	365.0	359.6	349.7	338.7	323.4	302.6	281.7	255.4	228.0	199.5	167.7
102.5°	345.3	339.8	331.1	320.1	304.8	286.1	265.3	240.1	212.7	184.2	154.6
105°	326.7	321.2	312.4	301.5	287.2	268.6	246.7	224.7	198.4	171.0	142.5
107.5°	308.0	302.6	294.9	283.9	269.7	252.1	231.3	208.3	184.2	157.9	130.5
110°	289.4	285.0	276.2	266.4	252.1	234.6	216.0	194.0	169.9	145.8	119.5



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-50SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	271.9	267.5	258.7	247.7	235.7	219.2	200.6	179.8	156.8	133.7	108.5
115°	254.3	248.8	241.2	231.3	219.2	203.9	186.4	167.7	144.7	122.8	99.8
117.5°	236.8	232.4	224.7	214.9	203.9	188.6	172.1	154.6	132.6	111.8	91.0
120°	219.2	216.0	208.3	199.5	188.6	174.3	159.0	141.4	121.7	101.9	82.2
122.5°	202.8	199.5	191.8	184.2	173.2	160.0	145.8	129.4	111.8	93.2	75.6
125°	187.5	183.1	176.5	168.8	159.0	146.9	132.6	117.3	100.9	84.4	68.0
127.5°	171.0	167.7	163.3	154.6	144.7	133.7	120.6	107.4	92.1	76.7	61.4
130°	157.9	153.5	148.0	141.4	132.6	121.7	109.6	96.5	83.3	69.1	53.7
132.5°	142.5	138.1	133.7	127.2	119.5	109.6	98.7	86.6	74.5	61.4	48.2
135°	128.3	125.0	120.6	114.0	106.3	98.7	87.7	76.7	65.8	53.7	42.8
137.5°	115.1	111.8	107.4	103.0	95.4	87.7	77.8	68.0	58.1	47.1	37.3
140°	101.9	99.8	95.4	91.0	84.4	76.7	68.0	59.2	50.4	40.6	31.8
142.5°	88.8	86.6	83.3	78.9	73.4	66.9	59.2	51.5	42.8	35.1	27.4
145°	76.7	75.6	72.4	68.0	63.6	57.0	50.4	43.8	36.2	29.6	21.9
147.5°	64.7	63.6	61.4	58.1	53.7	48.2	42.8	36.2	30.7	24.1	17.5
150°	53.7	52.6	51.5	47.1	44.9	39.5	35.1	29.6	25.2	18.6	14.3
152.5°	43.8	43.8	41.7	38.4	36.2	31.8	28.5	24.1	19.7	15.3	11.0
155°	35.1	34.0	32.9	30.7	28.5	25.2	21.9	18.6	15.3	11.0	7.7
157.5°	27.4	26.3	25.2	23.0	20.8	19.7	16.4	13.2	9.9	7.7	5.5
160°	19.7	18.6	17.5	16.4	15.3	13.2	11.0	8.8	6.6	4.4	3.3
162.5°	13.2	12.1	12.1	11.0	9.9	7.7	6.6	5.5	4.4	3.3	2.2
165°	6.6	6.6	5.5	5.5	4.4	3.3	3.3	3.3	2.2	2.2	1.1
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-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1039.2	1039.2	1039.2	1039.2	1039.2	1039.2	1039.2
2.5°	1033.7	1033.7	1038.1	1037.0	1033.7	1040.3	1048.0
5°	1030.5	1030.5	1033.7	1033.7	1030.5	1037.0	1043.6
7.5°	1025.0	1023.9	1027.2	1027.2	1022.8	1028.3	1035.9
10°	1015.1	1014.0	1017.3	1017.3	1012.9	1018.4	1025.0
12.5°	1004.1	1001.9	1005.2	1004.1	999.8	1005.2	1011.8
15°	989.9	988.8	991.0	988.8	984.4	989.9	996.5
17.5°	975.6	972.4	973.4	973.4	965.8	971.3	976.7
20°	957.0	952.6	953.7	952.6	947.1	950.4	957.0
22.5°	938.4	931.8	931.8	930.7	924.1	928.5	934.0
25°	915.3	907.7	907.7	906.6	898.9	902.2	907.7
27.5°	892.3	884.7	881.4	880.3	872.6	872.6	880.3
30°	868.2	857.2	855.1	851.8	844.1	844.1	850.7
32.5°	845.2	829.8	825.5	821.1	813.4	812.3	820.0
35°	814.5	802.4	794.8	790.4	781.6	779.4	786.0
37.5°	789.3	773.9	763.0	757.5	748.7	745.4	754.2
40°	761.9	745.4	731.2	727.9	714.7	710.4	718.0
42.5°	731.2	713.6	699.4	692.8	682.9	678.6	679.7
45°	700.5	681.9	666.5	657.7	647.9	640.2	644.6
47.5°	668.7	652.3	633.6	620.5	608.4	602.9	605.1
50°	636.9	617.2	599.6	585.4	571.1	564.6	568.9
52.5°	605.1	584.3	564.6	549.2	532.8	526.2	527.3
55°	574.4	552.5	529.5	513.0	497.7	487.8	485.6
57.5°	543.7	519.6	495.5	476.9	457.1	448.4	445.1
60°	510.8	485.6	460.4	438.5	417.7	407.8	403.4
62.5°	480.1	452.7	424.2	401.2	380.4	367.2	363.9
65°	450.5	418.8	390.3	363.9	340.9	326.7	322.3
67.5°	418.8	385.9	355.2	326.7	304.8	286.1	283.9
70°	389.2	354.1	320.1	290.5	266.4	247.7	239.0
72.5°	359.6	323.4	288.3	256.5	225.8	208.3	201.7
75°	331.1	293.8	256.5	223.6	189.6	168.8	162.2
77.5°	304.8	266.4	226.9	190.7	159.0	132.6	123.9
80°	279.5	240.1	198.4	161.1	127.2	98.7	88.8
82.5°	253.2	216.0	173.2	133.7	98.7	69.1	57.0
85°	230.2	192.9	150.2	110.7	75.6	43.8	30.7
87.5°	211.6	171.0	132.6	93.2	57.0	25.2	8.8
90°	192.9	153.5	115.1	76.7	42.8	14.3	1.1
92.5°	176.5	139.2	100.9	65.8	32.9	9.9	1.1
95°	161.1	125.0	88.8	54.8	26.3	6.6	1.1
97.5°	146.9	112.9	78.9	47.1	21.9	5.5	1.1
100°	134.8	101.9	70.2	41.7	18.6	4.4	1.1
102.5°	122.8	92.1	62.5	36.2	16.4	3.3	1.1
105°	112.9	83.3	55.9	32.9	14.3	3.3	1.1
107.5°	103.0	75.6	50.4	28.5	12.1	2.2	1.1
110°	93.2	69.1	44.9	25.2	11.0	2.2	1.1



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-50SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	85.5	62.5	40.6	23.0	8.8	2.2	1.1
115°	77.8	55.9	36.2	19.7	7.7	1.1	1.1
117.5°	70.2	50.4	31.8	17.5	6.6	1.1	1.1
120°	63.6	44.9	28.5	15.3	5.5	1.1	1.1
122.5°	57.0	40.6	25.2	13.2	4.4	1.1	1.1
125°	51.5	36.2	21.9	11.0	3.3	1.1	1.1
127.5°	46.0	31.8	19.7	9.9	3.3	1.1	1.1
130°	40.6	28.5	16.4	7.7	2.2	1.1	1.1
132.5°	36.2	24.1	14.3	6.6	2.2	1.1	1.1
135°	31.8	20.8	12.1	4.4	2.2	1.1	1.1
137.5°	27.4	17.5	9.9	3.3	1.1	1.1	1.1
140°	23.0	15.3	7.7	3.3	1.1	1.1	1.1
142.5°	19.7	12.1	5.5	2.2	1.1	1.1	1.1
145°	15.3	9.9	4.4	2.2	1.1	1.1	1.1
147.5°	12.1	7.7	3.3	2.2	1.1	1.1	1.1
150°	8.8	5.5	3.3	1.1	1.1	1.1	1.1
152.5°	6.6	4.4	2.2	1.1	1.1	1.1	1.1
155°	4.4	3.3	2.2	1.1	1.1	1.1	1.1
157.5°	3.3	2.2	1.1	1.1	1.1	1.1	1.1
160°	2.2	1.1	1.1	1.1	1.1	1.1	1.1
162.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1
165°	1.1	1.1	1.1	1.1	1.1	1.1	1.1
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)