

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-LD5-33SL-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-LD5-33SL-LW-UNV-L940-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
WIDE FROSTED LENS
Light Source: -
Ballast/Driver: -

Summary

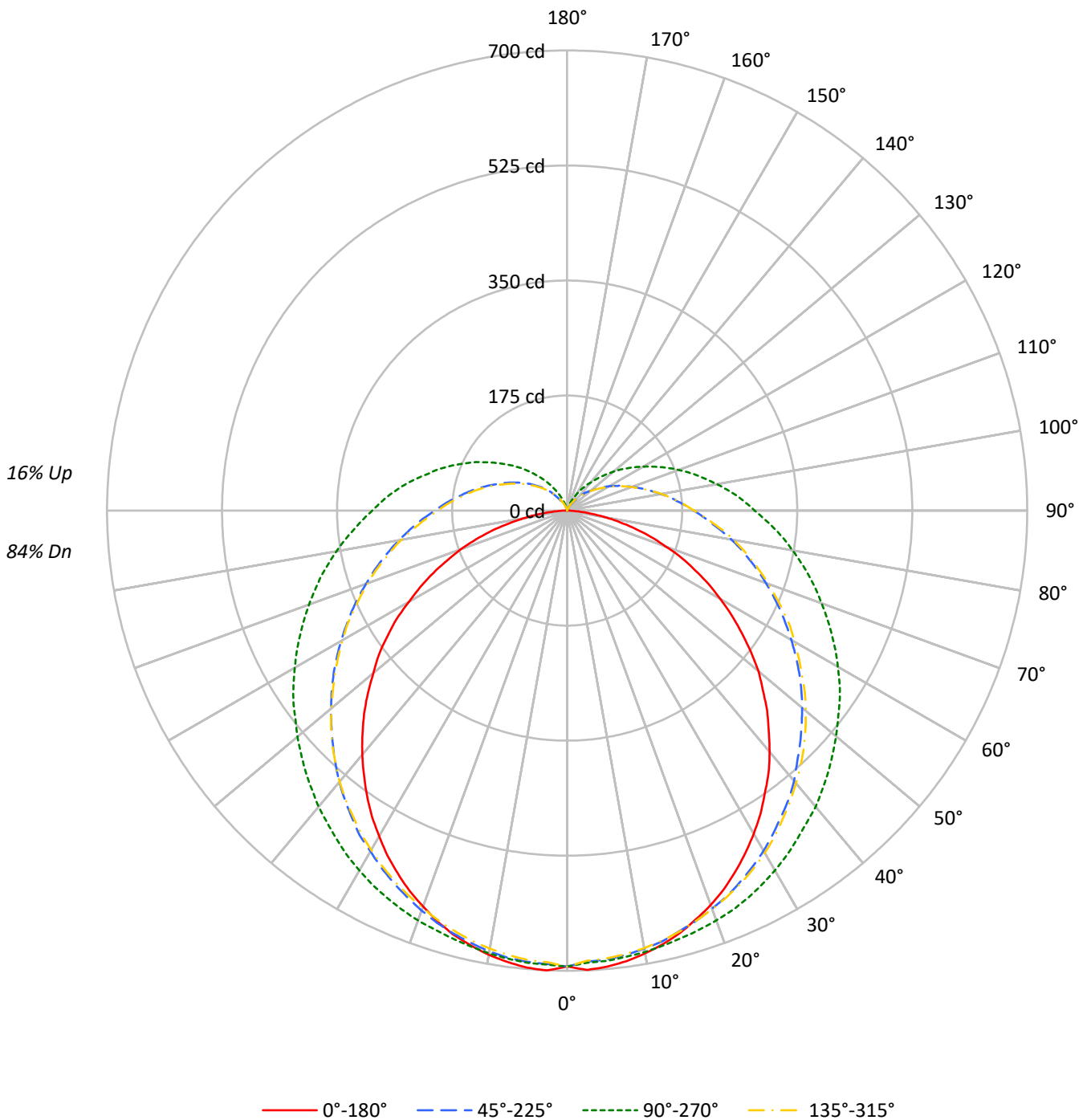
Lumens per Lamp: N/A
Luminaire Lumens: 3013.0 lumens
Efficiency: N/A
Efficacy: 107.6 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.36 / 1.44
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Semi-Direct

Input Watts (W): 28
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			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	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°	5604	5604	5604	5604
5°	5634	5401	5646	5424
10°	5582	5247	5600	5264
15°	5517	5116	5541	5122
20°	5430	5020	5449	5020
25°	5323	4935	5356	4929
30°	5203	4848	5244	4848
35°	5063	4766	5120	4771
40°	4926	4719	4986	4719
45°	4766	4668	4839	4675
50°	4602	4638	4664	4651
55°	4371	4643	4509	4663
60°	4127	4657	4262	4686
65°	3855	4704	4025	4750
70°	3471	4791	3740	4858
75°	3028	4947	3313	5042
80°	2344	5179	2660	5299
85°	1401	5552	1749	5705



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.7	2.2
10°-20°	188.8	6.3
20°-30°	289.5	9.6
30°-40°	357.1	11.9
40°-50°	387.5	12.9
50°-60°	381.9	12.7
60°-70°	345.3	11.5
70°-80°	287.7	9.5
80°-90°	222.8	7.4
90°-100°	169.0	5.6
100°-110°	125.0	4.1
110°-120°	87.0	2.9
120°-130°	55.5	1.8
130°-140°	31.1	1.0
140°-150°	14.2	0.5
150°-160°	4.4	0.1
160°-170°	0.6	0.0
170°-180°	0.0	0.0
0°-30°	544.0	18.1
0°-40°	901.1	29.9
0°-60°	1670.5	55.4
0°-90°	2526.2	83.8
90°-120°	381.0	12.6
90°-150°	481.8	16.0
90°-180°	487.0	16.2
0°-180°	3013.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	694	694	694	694	694	
5°	696	688	698	691	696	66
15°	665	673	668	674	665	187
25°	606	650	609	650	606	279
35°	524	610	530	611	524	328
45°	430	562	437	563	430	331
55°	324	506	334	508	324	290
65°	215	444	225	448	215	213
75°	108	380	118	388	108	115
85°	20	317	26	326	20	25
90°	1	285	2	296	1	1
95°	1	259	1	271	1	1
105°	1	206	1	218	1	1
115°	1	157	1	170	1	1
125°	1	113	1	125	1	1
135°	1	73	1	86	1	1
145°	1	42	1	52	1	0
155°	1	18	1	24	1	0
165°	1	3	1	4	1	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-33SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	693.5	693.5	693.5	693.5	693.5	693.5	693.5	693.5	693.5	693.5	693.5
2.5°	699.4	699.4	698.6	697.2	697.9	700.1	698.6	695.0	692.8	686.9	688.4
5°	696.4	696.4	695.7	694.2	695.0	697.9	696.4	693.5	690.6	685.5	687.7
7.5°	691.3	691.3	690.6	689.1	690.6	693.5	692.0	689.1	686.9	681.8	684.0
10°	684.0	684.7	684.0	681.8	684.7	687.7	686.9	683.3	681.1	676.7	678.9
12.5°	675.2	675.9	675.2	674.5	675.9	680.3	678.9	675.9	674.5	670.8	673.0
15°	665.0	665.7	664.2	664.2	665.7	670.1	670.1	667.2	665.7	662.0	666.4
17.5°	651.8	652.5	651.8	651.8	653.3	657.7	658.4	656.9	655.5	654.0	658.4
20°	638.6	637.9	637.9	637.2	640.1	646.7	646.0	646.0	644.5	644.5	649.6
22.5°	623.3	623.3	622.5	622.5	626.2	632.1	632.1	633.5	632.1	635.0	639.4
25°	605.7	606.5	605.7	607.2	610.1	616.7	617.4	619.6	620.3	623.3	628.4
27.5°	587.4	588.2	587.4	588.9	594.0	599.1	602.8	605.7	606.5	610.8	617.4
30°	567.7	567.7	568.4	569.9	575.7	583.8	586.7	590.4	590.4	597.7	604.3
32.5°	547.2	547.2	547.2	550.1	556.7	566.2	569.9	574.3	575.7	583.0	590.4
35°	524.5	525.2	525.2	527.4	536.2	545.7	550.9	556.0	558.9	567.7	575.0
37.5°	503.3	504.8	502.6	505.5	517.9	526.0	531.8	537.0	542.1	553.8	559.6
40°	479.2	480.6	479.9	485.7	496.0	506.2	512.8	517.9	525.2	537.0	543.5
42.5°	453.6	455.0	456.5	463.1	474.0	484.3	492.3	498.9	507.7	517.9	528.9
45°	430.1	430.1	432.3	440.4	452.1	463.1	472.6	479.9	490.1	501.1	512.1
47.5°	403.8	404.5	407.5	417.0	429.4	442.6	451.4	460.9	471.8	483.6	496.0
50°	379.7	379.7	384.1	394.3	406.0	420.6	430.1	441.1	452.8	466.7	479.2
52.5°	351.9	353.3	359.9	369.4	384.8	398.0	408.9	420.6	434.5	449.2	463.1
55°	324.1	327.0	332.1	345.3	361.4	373.8	387.0	401.6	414.8	430.9	447.0
57.5°	297.0	299.2	307.2	320.4	337.2	352.6	366.5	380.4	396.5	412.6	429.4
60°	269.2	272.1	281.6	294.8	313.1	329.2	345.3	359.9	376.7	393.6	411.1
62.5°	242.9	245.1	256.0	271.4	289.7	307.2	323.3	340.9	359.2	375.3	392.8
65°	215.1	218.7	231.2	245.1	266.3	283.8	302.1	321.1	340.2	357.7	374.6
67.5°	189.5	191.7	204.8	220.9	242.1	261.9	280.9	301.4	321.1	339.4	356.3
70°	159.5	166.8	180.0	196.8	219.5	239.9	260.4	281.6	302.9	321.9	338.0
72.5°	134.6	140.5	155.1	173.4	195.3	219.5	240.7	263.4	284.6	304.3	321.1
75°	108.3	114.1	130.9	151.4	174.1	199.7	221.7	245.1	267.0	286.8	304.3
77.5°	82.7	90.0	108.3	129.5	154.4	180.7	203.4	226.8	249.5	270.7	288.2
80°	59.3	67.3	87.1	111.2	135.3	161.7	186.5	210.0	232.6	253.8	272.1
82.5°	38.0	46.8	68.0	92.2	117.8	144.1	169.7	193.1	215.8	237.0	256.0
85°	20.5	30.0	51.9	76.1	101.7	128.0	153.6	178.5	200.4	220.2	240.7
87.5°	5.9	17.6	38.8	62.9	89.2	113.4	138.3	163.1	185.1	206.3	224.6
90°	0.7	10.2	29.3	51.9	77.5	101.0	125.8	149.2	171.2	192.4	210.7
92.5°	0.7	6.6	22.7	43.2	66.6	90.7	115.6	138.3	158.7	180.0	198.2
95°	0.7	5.1	18.3	36.6	58.5	81.2	104.6	126.6	147.8	167.5	185.8
97.5°	0.7	3.7	14.6	31.5	51.2	72.4	95.1	117.0	137.5	156.6	173.4
100°	0.7	2.9	11.7	27.1	44.6	65.1	85.6	106.8	126.6	144.8	162.4
102.5°	0.7	2.2	10.2	22.7	39.5	57.8	77.5	97.3	116.3	133.9	151.4
105°	0.7	2.2	8.8	19.8	35.1	51.9	70.2	89.2	106.8	123.6	139.7
107.5°	0.7	1.5	7.3	16.8	30.7	46.8	63.6	81.9	98.0	114.1	129.5
110°	0.7	1.5	5.9	15.4	27.1	41.7	57.8	74.6	90.0	105.3	120.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	0.7	1.5	5.1	13.2	23.4	37.3	51.9	67.3	81.9	97.3	110.5
115°	0.7	1.5	4.4	11.7	21.9	32.2	46.8	60.7	75.3	89.2	101.7
117.5°	0.7	1.5	3.7	9.5	19.0	29.3	41.0	54.9	68.0	81.2	92.9
120°	0.7	1.5	2.9	8.8	16.8	26.3	36.6	49.0	61.4	73.9	86.3
122.5°	0.7	0.7	2.9	7.3	14.6	23.4	33.7	43.2	54.9	66.6	77.5
125°	0.7	0.7	2.9	6.6	12.4	21.2	30.0	38.8	49.0	59.3	68.8
127.5°	0.7	0.7	2.2	5.1	11.0	18.3	26.3	35.8	43.2	52.7	62.2
130°	0.7	0.7	2.2	4.4	9.5	15.4	23.4	31.5	40.2	46.8	54.9
132.5°	0.7	0.7	2.2	3.7	7.3	12.4	19.8	27.1	35.1	42.4	49.0
135°	0.7	0.7	1.5	2.9	5.9	10.2	16.1	22.7	30.7	38.0	44.6
137.5°	0.7	0.7	1.5	2.9	4.4	8.8	12.4	18.3	25.6	32.2	38.8
140°	0.7	0.7	1.5	2.2	3.7	6.6	10.2	14.6	20.5	26.3	33.7
142.5°	0.7	0.7	0.7	2.2	2.9	5.1	8.0	11.7	16.1	21.2	27.1
145°	0.7	0.7	0.7	2.2	2.9	3.7	6.6	9.5	12.4	16.1	21.2
147.5°	0.7	0.7	0.7	1.5	2.2	2.9	5.1	7.3	9.5	12.4	15.4
150°	0.7	0.7	0.7	1.5	2.2	2.9	3.7	5.1	7.3	10.2	12.4
152.5°	0.7	0.7	0.7	1.5	1.5	2.2	2.9	3.7	5.1	7.3	8.8
155°	0.7	0.7	0.7	0.7	1.5	2.2	2.9	2.9	3.7	5.1	6.6
157.5°	0.7	0.7	0.7	0.7	1.5	1.5	2.2	2.2	2.9	2.9	4.4
160°	0.7	0.7	0.7	0.7	0.7	1.5	1.5	2.2	2.2	2.2	2.2
162.5°	0.7	0.7	0.7	0.7	0.7	0.7	1.5	1.5	1.5	2.2	2.2
165°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.5	1.5	1.5
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°	693.5	693.5	693.5	693.5	693.5	693.5	693.5	693.5	693.5	693.5	693.5
2.5°	688.4	689.1	691.3	691.3	689.8	689.8	689.1	688.4	689.1	690.6	690.6
5°	686.9	687.7	689.8	690.6	689.1	688.4	688.4	687.7	688.4	689.8	689.8
7.5°	684.0	684.7	686.9	687.7	686.2	686.2	685.5	684.7	686.2	686.9	686.9
10°	679.6	680.3	683.3	684.0	683.3	682.5	682.5	681.8	682.5	684.0	684.0
12.5°	673.8	675.2	678.9	678.9	678.9	678.1	678.1	677.4	678.1	679.6	678.9
15°	667.2	670.1	673.0	674.5	674.5	674.5	673.8	673.0	674.5	675.2	674.5
17.5°	659.9	663.5	667.9	669.4	669.4	670.1	669.4	668.6	670.1	670.1	669.4
20°	652.5	656.2	660.6	662.0	663.5	664.2	664.2	663.5	664.2	665.0	664.2
22.5°	643.0	647.4	652.5	654.7	656.2	657.7	657.7	657.7	658.4	659.1	657.7
25°	632.8	637.9	643.8	646.0	648.9	649.6	650.3	650.3	651.1	651.8	649.6
27.5°	621.8	627.7	633.5	637.2	639.4	640.8	640.8	641.6	642.3	643.0	640.8
30°	608.6	617.4	622.5	625.5	628.4	630.6	631.3	632.1	632.8	633.5	631.3
32.5°	596.9	604.3	610.8	614.5	618.2	621.1	621.8	621.8	623.3	623.3	621.1
35°	583.0	591.8	598.4	602.1	606.5	608.6	610.1	610.1	611.6	611.6	609.4
37.5°	569.1	577.9	585.2	589.6	594.7	597.7	598.4	598.4	599.9	599.9	596.9
40°	554.5	564.0	572.1	577.2	581.6	585.2	586.0	588.2	588.2	587.4	584.5
42.5°	539.9	548.7	557.4	563.3	569.1	572.8	574.3	575.0	575.0	574.3	572.1
45°	523.8	534.0	542.1	549.4	555.2	558.9	561.1	561.8	561.8	560.4	558.2
47.5°	508.4	518.7	526.7	534.8	540.6	545.0	547.2	547.9	547.2	546.5	544.3
50°	492.3	504.0	512.1	520.1	526.0	529.6	533.3	534.0	533.3	532.6	528.2
52.5°	475.5	487.9	496.7	504.8	511.3	515.7	518.7	519.4	519.4	517.9	515.0
55°	458.7	469.7	480.6	489.4	496.7	501.1	504.8	506.2	504.8	503.3	499.6
57.5°	443.3	453.6	464.5	474.0	481.4	487.2	490.1	491.6	490.1	487.9	484.3
60°	425.0	436.0	448.4	457.2	465.3	471.1	472.6	475.5	474.0	471.8	468.2
62.5°	407.5	420.6	431.6	442.6	449.2	455.8	458.7	460.1	458.7	456.5	452.8
65°	389.2	403.8	414.8	425.8	433.1	439.7	443.3	444.0	442.6	440.4	436.7
67.5°	372.4	386.3	398.0	409.7	416.2	422.8	426.5	428.0	426.5	423.6	419.9
70°	355.5	369.4	383.3	392.1	400.2	407.5	409.7	411.9	410.4	407.5	403.1
72.5°	338.7	353.3	367.2	376.0	384.8	391.4	394.3	396.5	395.0	392.1	387.0
75°	321.1	336.5	350.4	359.9	368.7	375.3	378.2	380.4	378.9	376.0	370.2
77.5°	305.1	320.4	333.6	343.8	352.6	358.5	363.6	364.3	362.8	359.9	354.1
80°	288.2	303.6	317.5	327.7	336.5	342.4	346.0	348.2	346.8	343.8	338.0
82.5°	273.6	287.5	301.4	311.6	320.4	327.7	330.7	332.9	332.1	327.7	323.3
85°	257.5	273.6	284.6	295.5	304.3	311.6	313.8	316.8	316.0	312.4	306.5
87.5°	241.4	257.5	270.7	281.6	289.7	295.5	299.2	300.7	299.9	296.3	289.7
90°	228.2	242.9	256.0	267.7	274.3	280.9	284.6	285.3	285.3	280.9	275.8
92.5°	215.8	229.7	242.9	253.8	261.9	267.7	270.7	272.1	271.4	267.7	261.9
95°	201.9	217.3	229.7	240.7	248.7	254.6	257.5	259.0	258.2	254.6	248.7
97.5°	190.2	204.1	216.5	226.8	234.8	240.7	243.6	245.1	245.1	241.4	235.6
100°	178.5	192.4	204.1	214.3	221.7	227.5	230.4	231.2	230.4	227.5	221.7
102.5°	166.8	180.0	191.7	201.2	209.2	214.3	217.3	218.0	218.0	214.3	208.5
105°	155.1	168.3	179.2	189.5	196.1	201.2	203.4	205.6	204.8	201.9	196.1
107.5°	144.1	157.3	167.5	177.0	183.6	188.7	190.9	193.1	192.4	189.5	183.6
110°	133.9	146.3	155.8	165.3	171.2	176.3	180.0	180.7	179.2	176.3	171.2



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-33SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	124.4	135.3	144.8	153.6	160.2	163.9	166.8	168.3	166.8	163.9	160.2
115°	114.1	125.1	134.6	142.7	148.5	152.9	155.1	156.6	155.1	152.2	148.5
117.5°	104.6	114.9	124.4	132.4	137.5	141.2	143.4	144.8	143.4	141.2	137.5
120°	96.6	105.3	114.1	121.4	127.3	130.2	132.4	133.9	133.1	130.2	126.6
122.5°	87.1	96.6	104.6	111.9	117.0	120.0	121.4	122.9	122.2	120.0	116.3
125°	79.0	87.1	95.1	101.7	106.8	109.7	111.2	112.7	111.9	109.7	105.3
127.5°	70.2	79.0	85.6	92.2	95.8	100.2	101.0	102.4	101.7	99.5	95.8
130°	63.6	70.2	76.8	82.7	87.1	90.0	91.4	92.2	90.7	89.2	85.6
132.5°	55.6	62.9	68.8	73.9	76.8	79.7	81.2	81.9	81.9	79.7	76.8
135°	49.7	54.9	60.0	65.1	68.0	71.0	72.4	73.2	72.4	71.0	68.0
137.5°	44.6	49.0	52.7	57.1	60.7	62.2	63.6	63.6	62.9	62.2	60.0
140°	38.8	43.9	47.6	50.5	53.4	54.1	55.6	55.6	54.9	54.1	52.7
142.5°	32.9	37.3	41.0	44.6	46.8	48.3	49.0	49.7	49.0	48.3	46.1
145°	26.3	31.5	35.1	37.3	40.2	41.0	41.7	42.4	41.7	41.0	38.8
147.5°	20.5	24.9	28.5	31.5	33.7	34.4	35.1	35.8	35.1	33.7	32.9
150°	14.6	18.3	22.7	25.6	27.1	28.5	28.5	28.5	29.3	27.8	26.3
152.5°	11.7	13.2	16.1	19.0	21.2	21.9	22.7	22.7	21.9	21.9	20.5
155°	8.0	9.5	11.7	13.9	16.1	16.8	17.6	17.6	16.8	16.8	16.1
157.5°	5.1	6.6	8.0	9.5	11.7	12.4	13.2	13.2	13.2	12.4	11.7
160°	2.9	3.7	4.4	5.9	7.3	8.0	8.8	8.8	8.8	8.8	8.0
162.5°	2.2	2.2	2.2	2.9	3.7	4.4	5.1	5.1	5.1	5.1	4.4
165°	1.5	1.5	1.5	1.5	1.5	2.2	2.9	2.9	2.9	2.9	2.9
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-LD5-33SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	693.5	693.5	693.5	693.5	693.5	693.5	693.5	693.5	693.5	693.5	693.5
2.5°	689.8	689.8	690.6	689.1	684.7	685.5	685.5	688.4	689.8	690.6	694.2
5°	688.4	688.4	689.8	687.7	684.0	684.0	684.0	686.9	687.7	689.1	692.0
7.5°	686.2	686.2	686.9	684.7	680.3	680.3	679.6	682.5	684.0	684.7	687.7
10°	682.5	682.5	683.3	681.1	675.9	675.9	675.2	677.4	678.1	679.6	681.8
12.5°	677.4	677.4	677.4	675.2	670.1	669.4	668.6	670.8	670.8	671.6	673.8
15°	673.0	671.6	671.6	669.4	664.2	662.8	661.3	662.0	663.5	662.8	664.2
17.5°	667.9	666.4	665.0	662.8	656.2	654.0	652.5	653.3	652.5	651.8	653.3
20°	662.0	659.9	659.1	655.5	648.9	645.2	642.3	640.8	641.6	639.4	640.1
22.5°	655.5	652.5	651.1	646.7	640.1	635.7	632.1	629.1	628.4	625.5	626.2
25°	647.4	643.8	641.6	637.9	630.6	625.5	621.1	616.7	614.5	610.8	610.1
27.5°	637.9	634.2	631.3	627.7	620.3	613.8	608.6	602.8	599.9	595.5	593.3
30°	628.4	624.0	619.6	616.7	608.6	601.3	593.3	588.2	583.8	578.7	575.0
32.5°	616.7	612.3	607.9	603.5	596.2	587.4	580.8	572.8	567.7	561.8	557.4
35°	605.0	599.1	594.7	588.9	582.3	572.1	564.0	556.0	549.4	542.8	537.7
37.5°	591.8	587.4	580.8	575.7	567.7	557.4	548.7	538.4	532.6	523.8	517.2
40°	579.4	574.3	567.7	561.1	553.0	541.3	531.8	520.1	513.5	503.3	496.7
42.5°	566.9	559.6	553.0	545.7	537.0	526.0	514.3	502.6	493.8	484.3	474.8
45°	553.0	545.0	537.0	528.9	520.1	509.2	496.7	484.3	473.3	464.5	452.8
47.5°	538.4	530.4	520.9	512.1	502.6	491.6	478.4	465.3	453.6	443.3	430.9
50°	523.8	515.7	505.5	496.0	485.0	474.0	460.1	444.8	432.3	419.2	408.2
52.5°	508.4	500.4	490.9	478.4	466.7	455.8	441.1	425.0	411.1	400.2	386.3
55°	493.1	485.0	474.0	461.6	449.9	436.0	422.1	406.0	390.6	377.5	363.6
57.5°	477.0	469.7	457.2	447.0	432.3	417.7	403.1	387.7	370.9	355.5	339.4
60°	460.9	452.8	441.1	428.7	414.1	399.4	384.1	367.2	349.7	332.9	318.2
62.5°	446.2	436.0	425.0	411.9	396.5	382.6	365.0	346.8	329.2	311.6	294.1
65°	429.4	418.4	408.2	395.0	378.9	362.8	345.3	327.0	308.0	289.0	271.4
67.5°	412.6	401.6	390.6	377.5	360.7	343.8	325.5	307.2	286.0	267.7	247.3
70°	395.8	387.0	373.1	359.2	343.8	325.5	307.2	287.5	265.6	245.8	224.6
72.5°	378.9	370.2	356.3	341.6	327.0	308.0	288.2	268.5	248.0	225.3	202.6
75°	362.8	351.9	339.4	325.5	310.2	290.4	270.7	250.2	226.0	204.8	181.4
77.5°	347.5	337.2	324.8	309.4	292.6	273.6	253.1	231.9	207.8	185.1	159.5
80°	330.7	320.4	308.0	292.6	275.8	257.5	235.6	213.6	190.2	165.3	139.0
82.5°	314.6	305.1	291.2	277.3	259.0	240.7	218.7	196.8	171.9	147.8	122.2
85°	297.7	288.2	275.1	260.4	242.9	223.1	202.6	180.7	155.8	130.9	105.3
87.5°	283.1	272.1	259.0	244.3	226.8	207.8	188.0	164.6	140.5	116.3	90.0
90°	267.7	257.5	244.3	229.7	212.1	193.1	172.6	150.7	127.3	102.4	77.5
92.5°	254.6	243.6	231.2	216.5	199.0	180.7	160.2	138.3	115.6	91.4	67.3
95°	241.4	230.4	218.7	204.1	186.5	168.3	147.8	126.6	104.6	81.2	58.5
97.5°	226.8	217.3	205.6	191.7	174.1	156.6	136.8	116.3	95.1	72.4	51.2
100°	215.1	204.1	193.1	178.5	162.4	145.6	125.8	106.1	85.6	64.4	44.6
102.5°	201.9	191.7	180.7	166.8	150.7	133.9	115.6	96.6	77.5	57.8	38.8
105°	189.5	180.0	168.3	155.1	139.7	123.6	106.1	88.5	70.2	51.2	34.4
107.5°	177.0	167.5	156.6	144.1	129.5	113.4	97.3	79.7	62.9	46.1	30.7
110°	164.6	155.8	145.6	133.1	119.2	104.6	89.2	73.2	56.3	41.0	27.1



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-33SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	153.6	144.8	134.6	122.9	109.7	95.8	81.2	65.8	50.5	36.6	23.4
115°	142.7	134.6	124.4	114.1	101.0	87.8	73.9	59.3	45.4	32.9	20.5
117.5°	131.7	123.6	114.1	103.9	92.2	79.7	66.6	52.7	41.0	29.3	18.3
120°	120.7	113.4	104.6	95.1	84.9	72.4	59.3	47.6	36.6	25.6	16.1
122.5°	110.5	103.9	95.8	87.1	76.1	64.4	53.4	43.2	32.9	22.7	13.2
125°	101.0	94.4	87.1	78.3	68.0	57.8	48.3	38.8	28.5	19.8	11.0
127.5°	91.4	84.9	77.5	69.5	61.4	51.9	43.2	34.4	25.6	17.6	9.5
130°	81.9	76.1	69.5	62.9	54.9	46.1	38.8	30.0	21.9	13.9	8.0
132.5°	72.4	68.0	62.2	55.6	48.3	41.7	33.7	26.3	19.0	12.4	7.3
135°	64.4	60.0	54.9	49.0	43.2	36.6	29.3	22.7	16.1	10.2	5.9
137.5°	57.1	53.4	48.3	43.2	38.0	31.5	25.6	19.0	13.2	8.8	4.4
140°	50.5	46.8	42.4	37.3	32.9	27.1	21.2	15.4	11.7	7.3	3.7
142.5°	43.9	40.2	36.6	32.2	27.8	22.7	17.6	13.2	9.5	5.9	3.7
145°	37.3	34.4	30.7	27.1	22.7	18.3	14.6	11.0	7.3	4.4	2.9
147.5°	30.7	28.5	24.9	21.9	18.3	14.6	11.7	8.8	5.9	3.7	2.2
150°	24.9	22.7	19.8	16.8	14.6	11.7	9.5	6.6	4.4	3.7	2.2
152.5°	19.0	17.6	15.4	13.9	11.7	8.8	6.6	5.1	3.7	2.9	1.5
155°	15.4	13.9	12.4	10.2	8.8	6.6	5.1	3.7	2.9	2.2	1.5
157.5°	11.0	10.2	8.8	7.3	5.9	4.4	3.7	3.7	2.2	1.5	0.7
160°	7.3	6.6	5.9	4.4	3.7	3.7	2.9	2.2	1.5	1.5	0.7
162.5°	4.4	3.7	3.7	3.7	2.9	2.9	2.2	1.5	1.5	0.7	0.7
165°	2.9	2.9	2.9	2.2	2.2	2.2	1.5	0.7	0.7	0.7	0.7
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-33SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	693.5	693.5	693.5	693.5	693.5	693.5	693.5	693.5	693.5	693.5	693.5
2.5°	694.2	692.0	695.0	700.1	700.8	700.1	698.6	700.8	703.7	703.0	697.9
5°	692.8	689.8	692.8	697.9	697.9	697.2	696.4	698.6	701.6	700.8	696.4
7.5°	688.4	685.5	688.4	692.8	693.5	692.0	692.0	694.2	697.2	696.4	692.8
10°	682.5	679.6	681.1	686.2	687.7	686.2	686.2	688.4	692.0	691.3	686.9
12.5°	673.8	671.6	673.0	677.4	678.9	678.1	677.4	680.3	684.0	684.0	679.6
15°	664.2	661.3	662.8	667.9	668.6	667.2	667.9	670.1	674.5	674.5	670.8
17.5°	653.3	649.6	651.8	655.5	656.2	656.2	656.2	659.1	664.2	663.5	660.6
20°	640.8	635.7	637.2	640.8	642.3	642.3	642.3	647.4	651.1	651.1	648.1
22.5°	626.2	622.5	622.5	626.2	628.4	627.7	627.7	632.1	637.2	636.4	636.4
25°	609.4	606.5	605.0	609.4	610.1	610.8	612.3	616.7	622.5	622.5	623.3
27.5°	591.8	588.9	588.2	591.8	592.6	593.3	594.7	599.9	605.7	606.5	607.9
30°	575.0	570.6	569.1	572.1	573.5	574.3	574.3	582.3	587.4	589.6	592.6
32.5°	555.2	550.9	547.2	552.3	553.0	554.5	555.2	563.3	569.1	572.8	577.2
35°	535.5	528.2	526.7	530.4	531.8	532.6	534.0	542.8	550.9	553.8	559.6
37.5°	513.5	508.4	504.0	507.7	509.2	509.9	514.3	522.3	530.4	534.8	540.6
40°	493.1	486.5	482.8	485.0	486.5	487.2	492.3	501.1	510.6	515.7	523.1
42.5°	470.4	461.6	458.7	460.9	461.6	463.8	468.2	479.9	489.4	496.7	502.6
45°	447.7	441.1	434.5	436.7	437.5	438.9	445.5	457.9	468.2	477.0	483.6
47.5°	424.3	416.2	409.7	411.1	414.1	414.8	422.1	436.7	446.2	455.8	464.5
50°	400.9	389.9	384.8	384.8	386.3	389.9	399.4	414.1	424.3	435.3	444.8
52.5°	376.7	366.5	360.7	361.4	362.8	367.2	376.0	390.6	402.3	414.1	425.8
55°	352.6	341.6	335.8	334.3	335.8	341.6	351.9	367.2	378.9	392.8	405.3
57.5°	328.5	315.3	310.2	308.0	309.4	316.8	327.0	343.1	357.7	370.9	385.5
60°	302.1	291.9	283.1	278.0	281.6	291.2	302.1	319.0	334.3	348.9	365.0
62.5°	279.5	266.3	256.8	251.7	255.3	263.4	278.7	294.8	311.6	328.5	344.6
65°	253.8	240.7	229.7	224.6	228.2	237.8	253.1	270.7	289.0	305.8	324.8
67.5°	229.0	215.1	201.9	196.8	201.2	211.4	228.2	248.0	267.7	285.3	305.8
70°	204.8	189.5	175.6	171.9	174.8	188.7	204.8	224.6	245.1	265.6	286.8
72.5°	182.9	163.9	149.2	144.8	148.5	163.9	182.2	202.6	224.6	246.5	269.2
75°	157.3	139.7	123.6	118.5	122.9	136.8	159.5	181.4	204.8	228.2	249.5
77.5°	136.8	116.3	99.5	91.4	98.8	116.3	138.3	161.7	185.8	210.0	234.1
80°	115.6	94.4	76.1	67.3	75.3	94.4	116.3	141.9	169.0	193.1	215.1
82.5°	96.6	73.9	54.9	45.4	54.1	75.3	99.5	125.1	151.4	175.6	201.2
85°	79.0	55.6	35.8	25.6	38.0	57.1	82.7	109.0	136.1	160.9	185.8
87.5°	64.4	41.7	21.9	11.0	23.4	44.6	68.8	95.1	122.2	147.0	170.4
90°	52.7	30.0	11.7	1.5	13.9	33.7	57.1	82.7	108.3	133.9	157.3
92.5°	43.2	22.7	6.6	0.7	8.8	27.1	49.0	73.2	98.0	122.9	145.6
95°	35.8	17.6	4.4	0.7	6.6	21.2	41.7	65.1	88.5	112.7	135.3
97.5°	30.7	14.6	3.7	0.7	5.1	18.3	35.8	57.8	80.5	103.1	125.1
100°	26.3	11.7	2.9	0.7	4.4	15.4	31.5	51.2	72.4	94.4	115.6
102.5°	22.7	9.5	2.2	0.7	3.7	13.2	27.8	46.1	65.1	86.3	106.8
105°	19.8	8.0	2.2	0.7	2.9	11.7	24.9	41.0	60.0	79.0	98.8
107.5°	16.8	6.6	1.5	0.7	2.2	9.5	21.9	37.3	54.1	72.4	90.7
110°	14.6	5.9	1.5	0.7	2.2	8.8	19.0	33.7	49.0	65.8	83.4



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-33SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	12.4	4.4	1.5	0.7	1.5	7.3	16.8	30.0	44.6	60.0	76.8
115°	11.0	3.7	0.7	0.7	1.5	6.6	15.4	27.1	40.2	54.9	70.2
117.5°	8.8	2.9	0.7	0.7	0.7	5.1	13.2	24.1	36.6	50.5	64.4
120°	7.3	2.9	0.7	0.7	0.7	4.4	11.7	21.2	32.9	45.4	58.5
122.5°	6.6	2.2	0.7	0.7	0.7	3.7	10.2	19.0	29.3	41.0	53.4
125°	5.9	2.2	0.7	0.7	0.7	2.9	8.8	16.8	26.3	36.6	48.3
127.5°	4.4	2.2	0.7	0.7	0.7	2.2	8.0	14.6	23.4	32.9	43.2
130°	3.7	1.5	0.7	0.7	0.7	2.2	6.6	13.2	20.5	29.3	38.8
132.5°	2.9	1.5	0.7	0.7	0.7	1.5	5.1	10.2	17.6	25.6	34.4
135°	2.9	1.5	0.7	0.7	0.7	1.5	3.7	8.8	14.6	21.9	29.3
137.5°	2.9	0.7	0.7	0.7	0.7	1.5	2.9	6.6	11.7	17.6	24.1
140°	2.2	0.7	0.7	0.7	0.7	0.7	2.2	5.1	9.5	14.6	20.5
142.5°	2.2	0.7	0.7	0.7	0.7	0.7	2.2	3.7	7.3	11.7	16.1
145°	1.5	0.7	0.7	0.7	0.7	0.7	1.5	2.9	5.9	8.8	13.2
147.5°	1.5	0.7	0.7	0.7	0.7	0.7	1.5	2.2	4.4	7.3	10.2
150°	1.5	0.7	0.7	0.7	0.7	0.7	1.5	2.2	2.9	5.1	8.0
152.5°	0.7	0.7	0.7	0.7	0.7	0.7	1.5	1.5	2.2	3.7	5.1
155°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.5	2.2	2.9	3.7
157.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.5	1.5	2.2	2.9
160°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.5	1.5	2.2
162.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.5	1.5
165°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-33SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	693.5	693.5	693.5	693.5	693.5	693.5	693.5	693.5	693.5	693.5	693.5
2.5°	695.7	690.6	692.0	691.3	692.8	695.0	695.0	694.2	694.2	692.8	691.3
5°	694.2	689.1	691.3	690.6	692.0	694.2	694.2	693.5	693.5	691.3	690.6
7.5°	689.8	686.2	687.7	687.7	689.1	691.3	691.3	690.6	690.6	688.4	687.7
10°	685.5	681.1	683.3	683.3	684.7	687.7	687.7	686.9	686.9	684.7	684.0
12.5°	678.1	673.8	677.4	678.1	679.6	682.5	681.8	681.8	681.8	679.6	678.9
15°	669.4	666.4	670.1	670.8	673.0	676.7	676.7	676.7	676.7	674.5	673.8
17.5°	659.9	657.7	661.3	662.8	665.7	669.4	669.4	670.1	670.8	669.4	668.6
20°	648.9	647.4	651.1	654.0	658.4	662.0	663.5	664.2	665.7	664.2	663.5
22.5°	636.4	636.4	641.6	644.5	649.6	653.3	655.5	657.7	659.1	657.7	656.9
25°	622.5	624.7	629.9	635.0	640.8	644.5	646.7	649.6	651.1	650.3	649.6
27.5°	609.4	612.3	618.9	624.0	629.1	635.0	637.2	640.8	642.3	642.3	641.6
30°	594.0	598.4	605.7	611.6	618.2	624.0	626.9	630.6	632.8	631.3	632.1
32.5°	579.4	586.7	592.6	599.1	606.5	612.3	616.0	620.3	622.5	621.8	622.5
35°	563.3	570.6	578.7	585.2	594.0	599.9	605.0	608.6	611.6	610.8	610.8
37.5°	545.7	555.2	563.3	572.1	580.1	586.7	591.8	596.2	599.1	599.1	599.1
40°	528.9	539.1	547.2	557.4	567.7	573.5	579.4	583.8	586.7	587.4	588.2
42.5°	510.6	521.6	531.1	542.1	552.3	559.6	566.2	571.3	574.3	575.7	575.0
45°	493.8	504.0	515.0	527.4	537.0	544.3	552.3	558.2	561.1	561.8	562.6
47.5°	474.8	486.5	498.9	511.3	520.9	530.4	537.7	543.5	546.5	548.7	548.7
50°	456.5	468.9	482.8	496.0	506.2	515.7	523.1	529.6	533.3	534.8	535.5
52.5°	439.7	451.4	466.0	479.2	489.4	498.9	508.4	515.7	519.4	520.9	520.9
55°	419.2	433.8	449.9	462.3	473.3	484.3	493.8	501.1	504.8	507.0	508.4
57.5°	400.2	415.5	432.3	445.5	458.7	468.9	477.7	487.2	490.1	493.1	493.8
60°	381.9	397.2	413.3	428.0	441.1	452.1	462.3	470.4	475.5	477.0	478.4
62.5°	362.8	378.9	395.8	410.4	424.3	437.5	447.0	454.3	460.1	462.3	463.8
65°	344.6	361.4	378.2	393.6	408.2	421.4	430.9	438.2	444.0	447.7	448.4
67.5°	324.8	343.1	360.7	376.7	391.4	405.3	414.8	422.1	428.0	432.3	433.1
70°	306.5	325.5	343.1	360.7	375.3	389.2	399.4	406.7	413.3	416.2	417.7
72.5°	289.0	308.7	327.0	344.6	359.2	373.1	384.1	391.4	398.0	401.6	402.3
75°	272.1	291.9	311.6	328.5	343.8	357.7	368.7	376.7	382.6	386.3	387.7
77.5°	255.3	275.8	295.5	312.4	328.5	342.4	351.9	361.4	367.2	371.6	371.6
80°	238.5	259.7	280.2	297.0	313.1	325.5	336.5	346.0	351.9	356.3	356.3
82.5°	223.9	244.3	264.1	280.9	297.0	310.9	321.9	330.7	337.2	340.2	340.9
85°	207.0	229.7	248.0	266.3	281.6	294.8	305.8	315.3	321.1	324.1	325.5
87.5°	193.1	215.1	234.8	250.9	266.3	279.5	291.9	299.9	305.8	309.4	310.9
90°	180.0	201.2	220.9	237.0	253.1	265.6	277.3	285.3	291.9	294.8	296.3
92.5°	168.3	189.5	208.5	224.6	239.9	253.8	264.8	272.9	278.7	281.6	283.8
95°	157.3	177.8	196.1	213.6	228.2	240.7	252.4	260.4	267.0	269.2	271.4
97.5°	146.3	166.1	184.3	201.2	216.5	228.2	239.2	247.3	252.4	256.0	258.2
100°	136.8	155.8	173.4	189.5	204.1	215.1	226.8	234.1	239.2	242.1	245.1
102.5°	126.6	145.6	162.4	177.8	193.1	203.4	214.3	221.7	226.0	231.2	231.2
105°	117.8	135.3	152.2	166.8	180.0	192.4	201.9	209.2	214.3	218.0	218.0
107.5°	108.3	125.8	141.9	157.3	169.7	181.4	190.2	196.8	202.6	204.8	207.0
110°	101.0	116.3	132.4	147.0	158.7	169.7	178.5	185.8	190.9	193.1	194.6



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-33SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	92.2	108.3	122.9	136.8	148.5	158.7	167.5	173.4	178.5	181.4	182.2
115°	84.9	100.2	113.4	126.6	139.0	147.8	155.8	161.7	166.8	169.0	170.4
117.5°	78.3	92.2	105.3	116.3	128.0	137.5	145.6	150.7	155.1	158.0	159.5
120°	71.7	84.9	96.6	107.5	118.5	127.3	134.6	139.7	144.8	147.0	147.0
122.5°	65.1	77.5	88.5	98.8	109.0	117.0	125.1	129.5	133.9	136.1	136.1
125°	59.3	71.0	81.2	90.7	100.2	107.5	114.1	119.2	123.6	125.1	125.1
127.5°	53.4	64.4	73.9	82.7	90.7	98.0	104.6	109.7	113.4	114.9	114.9
130°	48.3	57.8	66.6	75.3	83.4	89.2	95.8	100.2	102.4	104.6	105.3
132.5°	43.2	51.9	60.0	67.3	75.3	81.2	86.3	90.7	92.9	95.1	95.8
135°	38.0	46.1	53.4	60.7	67.3	73.2	77.5	81.2	84.1	85.6	86.3
137.5°	32.2	41.0	47.6	53.4	60.7	65.1	70.2	72.4	75.3	76.8	76.8
140°	27.1	33.7	41.0	46.8	52.7	57.1	61.4	65.1	67.3	68.0	68.0
142.5°	21.9	27.8	33.7	41.0	46.1	49.7	54.1	57.1	58.5	59.3	60.0
145°	17.6	21.9	27.1	33.7	39.5	43.9	46.1	49.0	50.5	51.2	51.9
147.5°	13.2	17.6	21.9	26.3	32.2	36.6	38.8	41.7	43.2	43.9	43.9
150°	10.2	13.2	16.1	20.5	24.9	30.0	32.9	35.1	35.8	36.6	36.6
152.5°	7.3	10.2	12.4	15.4	18.3	22.7	27.1	28.5	29.3	30.0	30.0
155°	5.1	7.3	8.8	11.0	13.2	16.8	20.5	22.7	23.4	24.1	24.1
157.5°	3.7	5.1	5.9	8.0	9.5	11.0	13.9	17.6	18.3	18.3	18.3
160°	2.2	2.9	3.7	5.1	5.9	7.3	8.8	11.0	13.2	13.2	13.2
162.5°	1.5	2.2	2.2	2.9	2.9	4.4	5.1	5.9	8.0	8.8	8.8
165°	0.7	1.5	1.5	1.5	1.5	1.5	2.2	2.2	3.7	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-LD5-33SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	693.5	693.5	693.5	693.5	693.5	693.5	693.5	693.5	693.5	693.5	693.5
2.5°	692.0	693.5	692.8	692.8	692.8	694.2	692.8	686.2	687.7	689.1	690.6
5°	691.3	692.0	692.0	691.3	691.3	692.8	691.3	684.7	686.2	687.7	688.4
7.5°	688.4	689.1	689.1	689.1	688.4	689.8	687.7	681.8	681.8	683.3	684.0
10°	684.7	686.2	685.5	684.7	684.7	684.7	683.3	676.7	676.7	677.4	678.1
12.5°	680.3	680.3	680.3	679.6	678.9	678.9	677.4	670.8	670.1	671.6	670.8
15°	674.5	675.9	674.5	673.8	672.3	672.3	670.1	663.5	662.0	662.8	662.0
17.5°	669.4	670.1	668.6	667.2	665.7	665.0	662.8	655.5	653.3	654.0	652.5
20°	664.2	664.2	662.8	661.3	659.1	656.9	654.0	646.7	643.0	643.0	640.1
22.5°	657.7	657.7	656.2	654.0	651.8	648.9	646.0	638.6	632.8	631.3	629.1
25°	650.3	649.6	648.9	646.7	642.3	639.4	636.4	628.4	621.8	618.9	615.2
27.5°	641.6	641.6	639.4	637.2	632.8	629.1	625.5	618.2	609.4	605.7	600.6
30°	632.1	632.1	629.9	626.9	622.5	618.2	613.8	605.0	596.2	591.1	585.2
32.5°	622.5	621.8	619.6	616.7	612.3	605.7	602.1	593.3	583.0	577.2	569.1
35°	610.8	610.1	607.9	604.3	598.4	593.3	587.4	579.4	567.7	560.4	551.6
37.5°	599.1	598.4	596.9	591.8	586.0	580.1	572.8	564.8	553.8	544.3	535.5
40°	587.4	586.7	583.8	580.1	572.8	565.5	558.2	550.1	538.4	527.4	517.9
42.5°	575.0	574.3	570.6	566.2	558.2	550.9	542.1	533.3	521.6	508.4	498.9
45°	562.6	561.1	557.4	552.3	543.5	535.5	526.7	516.5	504.8	492.3	479.9
47.5°	549.4	547.2	543.5	536.2	528.9	520.1	509.9	498.9	487.2	473.3	460.1
50°	534.8	533.3	528.9	522.3	513.5	504.8	493.1	482.1	468.2	455.0	438.9
52.5°	520.9	517.9	514.3	507.0	498.2	488.7	476.2	463.1	449.2	436.7	419.9
55°	506.2	504.8	499.6	493.8	482.8	471.8	460.1	446.2	430.9	416.2	400.2
57.5°	492.3	489.4	485.0	477.0	467.5	456.5	444.0	429.4	412.6	397.2	379.7
60°	478.4	474.0	468.9	461.6	451.4	439.7	426.5	411.1	394.3	377.5	359.2
62.5°	463.1	459.4	453.6	446.2	436.0	423.6	409.7	393.6	377.5	359.9	340.2
65°	447.7	444.0	438.2	430.9	420.6	406.7	392.1	376.0	357.7	340.9	319.7
67.5°	432.3	428.7	422.1	414.1	403.8	390.6	375.3	358.5	340.2	321.9	299.9
70°	417.0	412.6	406.7	398.0	387.7	373.8	358.5	340.9	322.6	302.9	280.9
72.5°	401.6	398.0	390.6	382.6	371.6	357.7	342.4	324.8	305.8	285.3	263.4
75°	386.3	381.9	376.7	367.2	355.5	342.4	326.3	308.7	288.2	268.5	245.8
77.5°	370.9	367.2	360.7	351.1	340.2	326.3	310.2	292.6	272.1	251.7	227.5
80°	355.5	351.1	346.0	337.2	324.8	310.9	294.1	276.5	256.0	234.8	210.7
82.5°	340.2	335.8	329.9	321.1	309.4	295.5	279.5	260.4	239.9	218.0	195.3
85°	324.8	321.1	314.6	305.8	293.3	279.5	263.4	246.5	224.6	202.6	180.0
87.5°	309.4	305.8	299.2	290.4	278.7	264.8	248.7	231.2	210.0	189.5	164.6
90°	294.8	291.9	285.3	276.5	264.8	250.9	236.3	217.3	196.8	176.3	152.9
92.5°	281.6	278.7	272.9	264.1	253.8	238.5	223.9	205.6	185.1	163.9	141.2
95°	269.9	266.3	260.4	252.4	239.9	226.8	212.1	193.9	174.1	152.9	130.9
97.5°	256.8	253.1	247.3	238.5	228.2	214.3	199.7	182.2	162.4	142.7	120.7
100°	243.6	239.9	233.4	226.0	215.8	201.9	188.0	170.4	152.2	133.1	111.9
102.5°	230.4	226.8	220.9	213.6	203.4	190.9	177.0	160.2	141.9	122.9	103.1
105°	218.0	214.3	208.5	201.2	191.7	179.2	164.6	150.0	132.4	114.1	95.1
107.5°	205.6	201.9	196.8	189.5	180.0	168.3	154.4	139.0	122.9	105.3	87.1
110°	193.1	190.2	184.3	177.8	168.3	156.6	144.1	129.5	113.4	97.3	79.7



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-33SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	181.4	178.5	172.6	165.3	157.3	146.3	133.9	120.0	104.6	89.2	72.4
115°	169.7	166.1	160.9	154.4	146.3	136.1	124.4	111.9	96.6	81.9	66.6
117.5°	158.0	155.1	150.0	143.4	136.1	125.8	114.9	103.1	88.5	74.6	60.7
120°	146.3	144.1	139.0	133.1	125.8	116.3	106.1	94.4	81.2	68.0	54.9
122.5°	135.3	133.1	128.0	122.9	115.6	106.8	97.3	86.3	74.6	62.2	50.5
125°	125.1	122.2	117.8	112.7	106.1	98.0	88.5	78.3	67.3	56.3	45.4
127.5°	114.1	111.9	109.0	103.1	96.6	89.2	80.5	71.7	61.4	51.2	41.0
130°	105.3	102.4	98.8	94.4	88.5	81.2	73.2	64.4	55.6	46.1	35.8
132.5°	95.1	92.2	89.2	84.9	79.7	73.2	65.8	57.8	49.7	41.0	32.2
135°	85.6	83.4	80.5	76.1	71.0	65.8	58.5	51.2	43.9	35.8	28.5
137.5°	76.8	74.6	71.7	68.8	63.6	58.5	51.9	45.4	38.8	31.5	24.9
140°	68.0	66.6	63.6	60.7	56.3	51.2	45.4	39.5	33.7	27.1	21.2
142.5°	59.3	57.8	55.6	52.7	49.0	44.6	39.5	34.4	28.5	23.4	18.3
145°	51.2	50.5	48.3	45.4	42.4	38.0	33.7	29.3	24.1	19.8	14.6
147.5°	43.2	42.4	41.0	38.8	35.8	32.2	28.5	24.1	20.5	16.1	11.7
150°	35.8	35.1	34.4	31.5	30.0	26.3	23.4	19.8	16.8	12.4	9.5
152.5°	29.3	29.3	27.8	25.6	24.1	21.2	19.0	16.1	13.2	10.2	7.3
155°	23.4	22.7	21.9	20.5	19.0	16.8	14.6	12.4	10.2	7.3	5.1
157.5°	18.3	17.6	16.8	15.4	13.9	13.2	11.0	8.8	6.6	5.1	3.7
160°	13.2	12.4	11.7	11.0	10.2	8.8	7.3	5.9	4.4	2.9	2.2
162.5°	8.8	8.0	8.0	7.3	6.6	5.1	4.4	3.7	2.9	2.2	1.5
165°	4.4	4.4	3.7	3.7	2.9	2.2	2.2	2.2	1.5	1.5	0.7
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-33SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	693.5	693.5	693.5	693.5	693.5	693.5	693.5
2.5°	689.8	689.8	692.8	692.0	689.8	694.2	699.4
5°	687.7	687.7	689.8	689.8	687.7	692.0	696.4
7.5°	684.0	683.3	685.5	685.5	682.5	686.2	691.3
10°	677.4	676.7	678.9	678.9	675.9	679.6	684.0
12.5°	670.1	668.6	670.8	670.1	667.2	670.8	675.2
15°	660.6	659.9	661.3	659.9	656.9	660.6	665.0
17.5°	651.1	648.9	649.6	649.6	644.5	648.1	651.8
20°	638.6	635.7	636.4	635.7	632.1	634.2	638.6
22.5°	626.2	621.8	621.8	621.1	616.7	619.6	623.3
25°	610.8	605.7	605.7	605.0	599.9	602.1	605.7
27.5°	595.5	590.4	588.2	587.4	582.3	582.3	587.4
30°	579.4	572.1	570.6	568.4	563.3	563.3	567.7
32.5°	564.0	553.8	550.9	547.9	542.8	542.1	547.2
35°	543.5	535.5	530.4	527.4	521.6	520.1	524.5
37.5°	526.7	516.5	509.2	505.5	499.6	497.5	503.3
40°	508.4	497.5	487.9	485.7	477.0	474.0	479.2
42.5°	487.9	476.2	466.7	462.3	455.8	452.8	453.6
45°	467.5	455.0	444.8	438.9	432.3	427.2	430.1
47.5°	446.2	435.3	422.8	414.1	406.0	402.3	403.8
50°	425.0	411.9	400.2	390.6	381.1	376.7	379.7
52.5°	403.8	389.9	376.7	366.5	355.5	351.1	351.9
55°	383.3	368.7	353.3	342.4	332.1	325.5	324.1
57.5°	362.8	346.8	330.7	318.2	305.1	299.2	297.0
60°	340.9	324.1	307.2	292.6	278.7	272.1	269.2
62.5°	320.4	302.1	283.1	267.7	253.8	245.1	242.9
65°	300.7	279.5	260.4	242.9	227.5	218.0	215.1
67.5°	279.5	257.5	237.0	218.0	203.4	190.9	189.5
70°	259.7	236.3	213.6	193.9	177.8	165.3	159.5
72.5°	239.9	215.8	192.4	171.2	150.7	139.0	134.6
75°	220.9	196.1	171.2	149.2	126.6	112.7	108.3
77.5°	203.4	177.8	151.4	127.3	106.1	88.5	82.7
80°	186.5	160.2	132.4	107.5	84.9	65.8	59.3
82.5°	169.0	144.1	115.6	89.2	65.8	46.1	38.0
85°	153.6	128.8	100.2	73.9	50.5	29.3	20.5
87.5°	141.2	114.1	88.5	62.2	38.0	16.8	5.9
90°	128.8	102.4	76.8	51.2	28.5	9.5	0.7
92.5°	117.8	92.9	67.3	43.9	21.9	6.6	0.7
95°	107.5	83.4	59.3	36.6	17.6	4.4	0.7
97.5°	98.0	75.3	52.7	31.5	14.6	3.7	0.7
100°	90.0	68.0	46.8	27.8	12.4	2.9	0.7
102.5°	81.9	61.4	41.7	24.1	11.0	2.2	0.7
105°	75.3	55.6	37.3	21.9	9.5	2.2	0.7
107.5°	68.8	50.5	33.7	19.0	8.0	1.5	0.7
110°	62.2	46.1	30.0	16.8	7.3	1.5	0.7



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-33SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	57.1	41.7	27.1	15.4	5.9	1.5	0.7
115°	51.9	37.3	24.1	13.2	5.1	0.7	0.7
117.5°	46.8	33.7	21.2	11.7	4.4	0.7	0.7
120°	42.4	30.0	19.0	10.2	3.7	0.7	0.7
122.5°	38.0	27.1	16.8	8.8	2.9	0.7	0.7
125°	34.4	24.1	14.6	7.3	2.2	0.7	0.7
127.5°	30.7	21.2	13.2	6.6	2.2	0.7	0.7
130°	27.1	19.0	11.0	5.1	1.5	0.7	0.7
132.5°	24.1	16.1	9.5	4.4	1.5	0.7	0.7
135°	21.2	13.9	8.0	2.9	1.5	0.7	0.7
137.5°	18.3	11.7	6.6	2.2	0.7	0.7	0.7
140°	15.4	10.2	5.1	2.2	0.7	0.7	0.7
142.5°	13.2	8.0	3.7	1.5	0.7	0.7	0.7
145°	10.2	6.6	2.9	1.5	0.7	0.7	0.7
147.5°	8.0	5.1	2.2	1.5	0.7	0.7	0.7
150°	5.9	3.7	2.2	0.7	0.7	0.7	0.7
152.5°	4.4	2.9	1.5	0.7	0.7	0.7	0.7
155°	2.9	2.2	1.5	0.7	0.7	0.7	0.7
157.5°	2.2	1.5	0.7	0.7	0.7	0.7	0.7
160°	1.5	0.7	0.7	0.7	0.7	0.7	0.7
162.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7
165°	0.7	0.7	0.7	0.7	0.7	0.7	0.7
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)