

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-L950-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P#  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33520)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 4SNLED-LD5-33SL-LW-UNV-L950-CD1-U  
Description: 4FT LINEAR SNLED LED FIXTURE  
WIDE FROSTED LENS  
Light Source: -  
Ballast/Driver: -

**Summary**

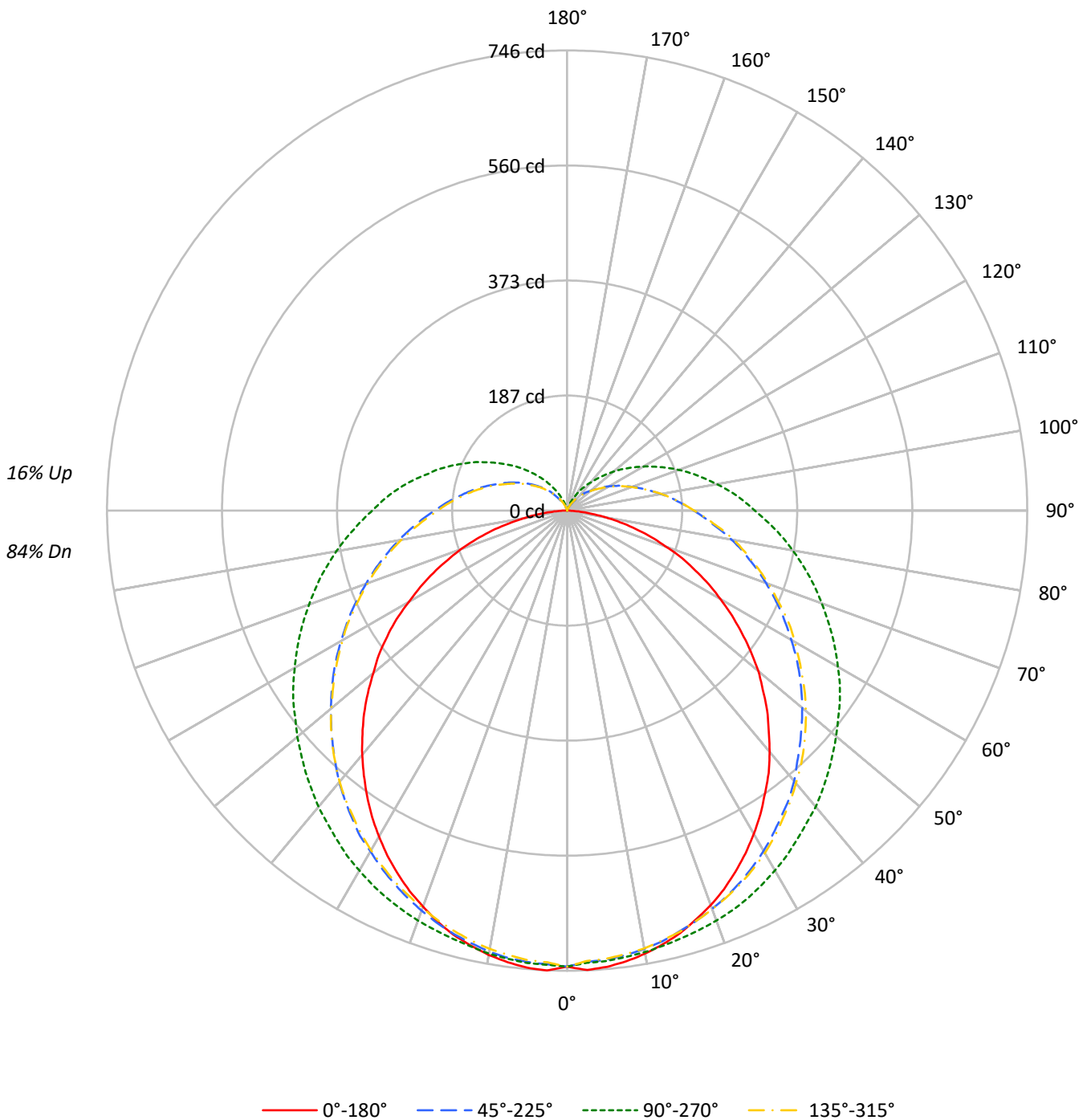
Lumens per Lamp: N/A  
Luminaire Lumens: 3212.0 lumens  
Efficiency: N/A  
Efficacy: 114.7 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.36 / 1.44  
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')  
CIE Type: Semi-Direct

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°	5974	5974	5974	5974
5°	6006	5758	6019	5782
10°	5951	5594	5970	5612
15°	5881	5454	5907	5460
20°	5789	5351	5809	5351
25°	5675	5261	5709	5255
30°	5547	5167	5590	5167
35°	5398	5081	5458	5087
40°	5251	5030	5314	5030
45°	5082	4976	5160	4983
50°	4905	4945	4972	4959
55°	4660	4950	4807	4971
60°	4400	4965	4543	4995
65°	4109	5015	4290	5065
70°	3699	5107	3988	5179
75°	3227	5273	3532	5375
80°	2498	5521	2834	5649
85°	1489	5918	1865	6081



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	70.0	2.2
10°-20°	201.3	6.3
20°-30°	308.6	9.6
30°-40°	380.7	11.9
40°-50°	413.1	12.9
50°-60°	407.1	12.7
60°-70°	368.1	11.5
70°-80°	306.6	9.5
80°-90°	237.5	7.4
90°-100°	180.1	5.6
100°-110°	133.3	4.1
110°-120°	92.7	2.9
120°-130°	59.2	1.8
130°-140°	33.2	1.0
140°-150°	15.2	0.5
150°-160°	4.7	0.1
160°-170°	0.6	0.0
170°-180°	0.0	0.0
0°-30°	579.9	18.1
0°-40°	960.6	29.9
0°-60°	1780.8	55.4
0°-90°	2693.0	83.8
90°-120°	406.2	12.6
90°-150°	513.7	16.0
90°-180°	519.0	16.2
0°-180°	3212.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	739	739	739	739	739	
5°	742	733	744	736	742	70
15°	709	718	712	718	709	200
25°	646	693	650	692	646	297
35°	559	650	565	651	559	350
45°	459	599	466	600	459	353
55°	346	540	356	542	346	309
65°	229	473	239	478	229	227
75°	115	406	126	413	115	122
85°	22	338	27	347	22	26
90°	1	304	2	316	1	1
95°	1	276	1	289	1	1
105°	1	219	1	232	1	1
115°	1	167	1	182	1	1
125°	1	120	1	133	1	1
135°	1	78	1	92	1	1
145°	1	45	1	55	1	1
155°	1	19	1	26	1	0
165°	1	3	1	5	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-L950-CD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	739.3	739.3	739.3	739.3	739.3	739.3	739.3	739.3	739.3	739.3	739.3
2.5°	745.5	745.5	744.8	743.2	744.0	746.3	744.8	740.9	738.5	732.3	733.8
5°	742.4	742.4	741.6	740.1	740.9	744.0	742.4	739.3	736.2	730.7	733.1
7.5°	737.0	737.0	736.2	734.6	736.2	739.3	737.7	734.6	732.3	726.8	729.2
10°	729.2	729.9	729.2	726.8	729.9	733.1	732.3	728.4	726.1	721.4	723.7
12.5°	719.8	720.6	719.8	719.0	720.6	725.3	723.7	720.6	719.0	715.1	717.5
15°	708.9	709.7	708.1	708.1	709.7	714.4	714.4	711.2	709.7	705.8	710.5
17.5°	694.9	695.6	694.9	694.9	696.4	701.1	701.9	700.3	698.8	697.2	701.9
20°	680.8	680.0	680.0	679.3	682.4	689.4	688.6	688.6	687.1	687.1	692.5
22.5°	664.4	664.4	663.7	663.7	667.6	673.8	673.8	675.4	673.8	676.9	681.6
25°	645.7	646.5	645.7	647.3	650.4	657.4	658.2	660.5	661.3	664.4	669.9
27.5°	626.2	627.0	626.2	627.8	633.2	638.7	642.6	645.7	646.5	651.2	658.2
30°	605.2	605.2	606.0	607.5	613.8	622.3	625.4	629.3	629.3	637.1	644.2
32.5°	583.3	583.3	583.3	586.5	593.5	603.6	607.5	612.2	613.8	621.5	629.3
35°	559.2	559.9	559.9	562.3	571.6	581.8	587.2	592.7	595.8	605.2	613.0
37.5°	536.5	538.1	535.8	538.9	552.1	560.7	567.0	572.4	577.9	590.4	596.6
40°	510.8	512.4	511.6	517.8	528.7	539.7	546.7	552.1	559.9	572.4	579.4
42.5°	483.5	485.1	486.6	493.7	505.3	516.3	524.8	531.9	541.2	552.1	563.8
45°	458.6	458.6	460.9	469.5	482.0	493.7	503.8	511.6	522.5	534.2	545.9
47.5°	430.5	431.3	434.4	444.5	457.8	471.8	481.2	491.3	503.0	515.5	528.7
50°	404.7	404.7	409.4	420.3	432.8	448.4	458.6	470.3	482.7	497.6	510.8
52.5°	375.1	376.7	383.7	393.8	410.2	424.2	435.9	448.4	463.2	478.8	493.7
55°	345.5	348.6	354.1	368.1	385.3	398.5	412.5	428.1	442.2	459.3	476.5
57.5°	316.6	319.0	327.5	341.6	359.5	375.9	390.7	405.5	422.7	439.8	457.8
60°	287.0	290.1	300.2	314.3	333.8	350.9	368.1	383.7	401.6	419.6	438.3
62.5°	258.9	261.3	273.0	289.3	308.8	327.5	344.7	363.4	382.9	400.1	418.8
65°	229.3	233.2	246.4	261.3	283.9	302.6	322.1	342.4	362.6	381.4	399.3
67.5°	202.0	204.3	218.4	235.5	258.1	279.2	299.5	321.3	342.4	361.9	379.8
70°	170.0	177.8	191.8	209.8	234.0	255.8	277.6	300.2	322.9	343.1	360.3
72.5°	143.5	149.7	165.3	184.8	208.2	234.0	256.6	280.7	303.4	324.4	342.4
75°	115.4	121.7	139.6	161.4	185.6	212.9	236.3	261.3	284.6	305.7	324.4
77.5°	88.1	95.9	115.4	138.0	164.6	192.6	216.8	241.8	265.9	288.5	307.3
80°	63.2	71.7	92.8	118.5	144.3	172.3	198.9	223.8	248.0	270.6	290.1
82.5°	40.6	49.9	72.5	98.3	125.6	153.6	180.9	205.9	230.1	252.7	273.0
85°	21.8	32.0	55.4	81.1	108.4	136.5	163.8	190.3	213.7	234.7	256.6
87.5°	6.2	18.7	41.3	67.1	95.1	120.9	147.4	173.9	197.3	219.9	239.4
90°	0.8	10.9	31.2	55.4	82.7	107.6	134.1	159.1	182.5	205.1	224.6
92.5°	0.8	7.0	24.2	46.0	71.0	96.7	123.2	147.4	169.2	191.8	211.3
95°	0.8	5.5	19.5	39.0	62.4	86.6	111.5	134.9	157.5	178.6	198.1
97.5°	0.8	3.9	15.6	33.5	54.6	77.2	101.4	124.8	146.6	166.9	184.8
100°	0.8	3.1	12.5	28.9	47.6	69.4	91.2	113.9	134.9	154.4	173.1
102.5°	0.8	2.3	10.9	24.2	42.1	61.6	82.7	103.7	124.0	142.7	161.4
105°	0.8	2.3	9.4	21.1	37.4	55.4	74.9	95.1	113.9	131.8	149.0
107.5°	0.8	1.6	7.8	17.9	32.8	49.9	67.8	87.3	104.5	121.7	138.0
110°	0.8	1.6	6.2	16.4	28.9	44.5	61.6	79.5	95.9	112.3	127.9



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-33SL-LW-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	0.8	1.6	5.5	14.0	25.0	39.8	55.4	71.7	87.3	103.7	117.8
115°	0.8	1.6	4.7	12.5	23.4	34.3	49.9	64.7	80.3	95.1	108.4
117.5°	0.8	1.6	3.9	10.1	20.3	31.2	43.7	58.5	72.5	86.6	99.0
120°	0.8	1.6	3.1	9.4	17.9	28.1	39.0	52.3	65.5	78.8	92.0
122.5°	0.8	0.8	3.1	7.8	15.6	25.0	35.9	46.0	58.5	71.0	82.7
125°	0.8	0.8	3.1	7.0	13.3	22.6	32.0	41.3	52.3	63.2	73.3
127.5°	0.8	0.8	2.3	5.5	11.7	19.5	28.1	38.2	46.0	56.1	66.3
130°	0.8	0.8	2.3	4.7	10.1	16.4	25.0	33.5	42.9	49.9	58.5
132.5°	0.8	0.8	2.3	3.9	7.8	13.3	21.1	28.9	37.4	45.2	52.3
135°	0.8	0.8	1.6	3.1	6.2	10.9	17.2	24.2	32.8	40.6	47.6
137.5°	0.8	0.8	1.6	3.1	4.7	9.4	13.3	19.5	27.3	34.3	41.3
140°	0.8	0.8	1.6	2.3	3.9	7.0	10.9	15.6	21.8	28.1	35.9
142.5°	0.8	0.8	0.8	2.3	3.1	5.5	8.6	12.5	17.2	22.6	28.9
145°	0.8	0.8	0.8	2.3	3.1	3.9	7.0	10.1	13.3	17.2	22.6
147.5°	0.8	0.8	0.8	1.6	2.3	3.1	5.5	7.8	10.1	13.3	16.4
150°	0.8	0.8	0.8	1.6	2.3	3.1	3.9	5.5	7.8	10.9	13.3
152.5°	0.8	0.8	0.8	1.6	1.6	2.3	3.1	3.9	5.5	7.8	9.4
155°	0.8	0.8	0.8	0.8	1.6	2.3	3.1	3.1	3.9	5.5	7.0
157.5°	0.8	0.8	0.8	0.8	1.6	1.6	2.3	2.3	3.1	3.1	4.7
160°	0.8	0.8	0.8	0.8	0.8	1.6	1.6	2.3	2.3	2.3	2.3
162.5°	0.8	0.8	0.8	0.8	0.8	0.8	1.6	1.6	1.6	2.3	2.3
165°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.6	1.6	1.6
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



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	739.3	739.3	739.3	739.3	739.3	739.3	739.3	739.3	739.3	739.3	739.3
2.5°	733.8	734.6	737.0	737.0	735.4	735.4	734.6	733.8	734.6	736.2	736.2
5°	732.3	733.1	735.4	736.2	734.6	733.8	733.8	733.1	733.8	735.4	735.4
7.5°	729.2	729.9	732.3	733.1	731.5	731.5	730.7	729.9	731.5	732.3	732.3
10°	724.5	725.3	728.4	729.2	728.4	727.6	727.6	726.8	727.6	729.2	729.2
12.5°	718.3	719.8	723.7	723.7	723.7	722.9	722.9	722.2	722.9	724.5	723.7
15°	711.2	714.4	717.5	719.0	719.0	719.0	718.3	717.5	719.0	719.8	719.0
17.5°	703.4	707.3	712.0	713.6	713.6	714.4	713.6	712.8	714.4	714.4	713.6
20°	695.6	699.5	704.2	705.8	707.3	708.1	708.1	707.3	708.1	708.9	708.1
22.5°	685.5	690.2	695.6	698.0	699.5	701.1	701.1	701.1	701.9	702.7	701.1
25°	674.6	680.0	686.3	688.6	691.7	692.5	693.3	693.3	694.1	694.9	692.5
27.5°	662.9	669.1	675.4	679.3	681.6	683.2	683.2	683.9	684.7	685.5	683.2
30°	648.8	658.2	663.7	666.8	669.9	672.2	673.0	673.8	674.6	675.4	673.0
32.5°	636.4	644.2	651.2	655.1	659.0	662.1	662.9	662.9	664.4	664.4	662.1
35°	621.5	630.9	637.9	641.8	646.5	648.8	650.4	650.4	652.0	652.0	649.6
37.5°	606.7	616.1	623.9	628.6	634.0	637.1	637.9	637.9	639.5	639.5	636.4
40°	591.1	601.3	609.9	615.3	620.0	623.9	624.7	627.0	627.0	626.2	623.1
42.5°	575.5	584.9	594.3	600.5	606.7	610.6	612.2	613.0	613.0	612.2	609.9
45°	558.4	569.3	577.9	585.7	591.9	595.8	598.2	598.9	598.9	597.4	595.0
47.5°	542.0	552.9	561.5	570.1	576.3	581.0	583.3	584.1	583.3	582.6	580.2
50°	524.8	537.3	545.9	554.5	560.7	564.6	568.5	569.3	568.5	567.7	563.1
52.5°	506.9	520.2	529.5	538.1	545.1	549.8	552.9	553.7	553.7	552.1	549.0
55°	489.0	500.7	512.4	521.7	529.5	534.2	538.1	539.7	538.1	536.5	532.6
57.5°	472.6	483.5	495.2	505.3	513.1	519.4	522.5	524.1	522.5	520.2	516.3
60°	453.1	464.8	478.1	487.4	496.0	502.2	503.8	506.9	505.3	503.0	499.1
62.5°	434.4	448.4	460.1	471.8	478.8	485.9	489.0	490.5	489.0	486.6	482.7
65°	414.9	430.5	442.2	453.9	461.7	468.7	472.6	473.4	471.8	469.5	465.6
67.5°	396.9	411.8	424.2	436.7	443.7	450.8	454.7	456.2	454.7	451.5	447.6
70°	379.0	393.8	408.6	418.0	426.6	434.4	436.7	439.1	437.5	434.4	429.7
72.5°	361.1	376.7	391.5	400.8	410.2	417.2	420.3	422.7	421.1	418.0	412.5
75°	342.4	358.7	373.6	383.7	393.0	400.1	403.2	405.5	404.0	400.8	394.6
77.5°	325.2	341.6	355.6	366.5	375.9	382.1	387.6	388.4	386.8	383.7	377.5
80°	307.3	323.6	338.5	349.4	358.7	365.0	368.9	371.2	369.7	366.5	360.3
82.5°	291.7	306.5	321.3	332.2	341.6	349.4	352.5	354.8	354.1	349.4	344.7
85°	274.5	291.7	303.4	315.1	324.4	332.2	334.6	337.7	336.9	333.0	326.8
87.5°	257.4	274.5	288.5	300.2	308.8	315.1	319.0	320.5	319.7	315.8	308.8
90°	243.3	258.9	273.0	285.4	292.4	299.5	303.4	304.1	304.1	299.5	294.0
92.5°	230.1	244.9	258.9	270.6	279.2	285.4	288.5	290.1	289.3	285.4	279.2
95°	215.2	231.6	244.9	256.6	265.2	271.4	274.5	276.1	275.3	271.4	265.2
97.5°	202.8	217.6	230.8	241.8	250.3	256.6	259.7	261.3	261.3	257.4	251.1
100°	190.3	205.1	217.6	228.5	236.3	242.5	245.7	246.4	245.7	242.5	236.3
102.5°	177.8	191.8	204.3	214.5	223.0	228.5	231.6	232.4	232.4	228.5	222.3
105°	165.3	179.4	191.1	202.0	209.0	214.5	216.8	219.1	218.4	215.2	209.0
107.5°	153.6	167.7	178.6	188.7	195.7	201.2	203.5	205.9	205.1	202.0	195.7
110°	142.7	156.0	166.1	176.2	182.5	187.9	191.8	192.6	191.1	187.9	182.5





TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-33SL-LW-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	132.6	144.3	154.4	163.8	170.8	174.7	177.8	179.4	177.8	174.7	170.8
115°	121.7	133.4	143.5	152.1	158.3	163.0	165.3	166.9	165.3	162.2	158.3
117.5°	111.5	122.4	132.6	141.2	146.6	150.5	152.9	154.4	152.9	150.5	146.6
120°	102.9	112.3	121.7	129.5	135.7	138.8	141.2	142.7	141.9	138.8	134.9
122.5°	92.8	102.9	111.5	119.3	124.8	127.9	129.5	131.0	130.2	127.9	124.0
125°	84.2	92.8	101.4	108.4	113.9	117.0	118.5	120.1	119.3	117.0	112.3
127.5°	74.9	84.2	91.2	98.3	102.2	106.8	107.6	109.2	108.4	106.1	102.2
130°	67.8	74.9	81.9	88.1	92.8	95.9	97.5	98.3	96.7	95.1	91.2
132.5°	59.3	67.1	73.3	78.8	81.9	85.0	86.6	87.3	87.3	85.0	81.9
135°	53.0	58.5	63.9	69.4	72.5	75.6	77.2	78.0	77.2	75.6	72.5
137.5°	47.6	52.3	56.1	60.8	64.7	66.3	67.8	67.8	67.1	66.3	63.9
140°	41.3	46.8	50.7	53.8	56.9	57.7	59.3	59.3	58.5	57.7	56.1
142.5°	35.1	39.8	43.7	47.6	49.9	51.5	52.3	53.0	52.3	51.5	49.1
145°	28.1	33.5	37.4	39.8	42.9	43.7	44.5	45.2	44.5	43.7	41.3
147.5°	21.8	26.5	30.4	33.5	35.9	36.7	37.4	38.2	37.4	35.9	35.1
150°	15.6	19.5	24.2	27.3	28.9	30.4	30.4	30.4	31.2	29.6	28.1
152.5°	12.5	14.0	17.2	20.3	22.6	23.4	24.2	24.2	23.4	23.4	21.8
155°	8.6	10.1	12.5	14.8	17.2	17.9	18.7	18.7	17.9	17.9	17.2
157.5°	5.5	7.0	8.6	10.1	12.5	13.3	14.0	14.0	14.0	13.3	12.5
160°	3.1	3.9	4.7	6.2	7.8	8.6	9.4	9.4	9.4	9.4	8.6
162.5°	2.3	2.3	2.3	3.1	3.9	4.7	5.5	5.5	5.5	5.5	4.7
165°	1.6	1.6	1.6	1.6	1.6	2.3	3.1	3.1	3.1	3.1	3.1
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-LD5-33SL-LW-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	739.3	739.3	739.3	739.3	739.3	739.3	739.3	739.3	739.3	739.3	739.3
2.5°	735.4	735.4	736.2	734.6	729.9	730.7	730.7	733.8	735.4	736.2	740.1
5°	733.8	733.8	735.4	733.1	729.2	729.2	729.2	732.3	733.1	734.6	737.7
7.5°	731.5	731.5	732.3	729.9	725.3	725.3	724.5	727.6	729.2	729.9	733.1
10°	727.6	727.6	728.4	726.1	720.6	720.6	719.8	722.2	722.9	724.5	726.8
12.5°	722.2	722.2	722.2	719.8	714.4	713.6	712.8	715.1	715.1	715.9	718.3
15°	717.5	715.9	715.9	713.6	708.1	706.6	705.0	705.8	707.3	706.6	708.1
17.5°	712.0	710.5	708.9	706.6	699.5	697.2	695.6	696.4	695.6	694.9	696.4
20°	705.8	703.4	702.7	698.8	691.7	687.8	684.7	683.2	683.9	681.6	682.4
22.5°	698.8	695.6	694.1	689.4	682.4	677.7	673.8	670.7	669.9	666.8	667.6
25°	690.2	686.3	683.9	680.0	672.2	666.8	662.1	657.4	655.1	651.2	650.4
27.5°	680.0	676.1	673.0	669.1	661.3	654.3	648.8	642.6	639.5	634.8	632.5
30°	669.9	665.2	660.5	657.4	648.8	641.0	632.5	627.0	622.3	616.9	613.0
32.5°	657.4	652.7	648.1	643.4	635.6	626.2	619.2	610.6	605.2	598.9	594.3
35°	644.9	638.7	634.0	627.8	620.8	609.9	601.3	592.7	585.7	578.7	573.2
37.5°	630.9	626.2	619.2	613.8	605.2	594.3	584.9	574.0	567.7	558.4	551.4
40°	617.6	612.2	605.2	598.2	589.6	577.1	567.0	554.5	547.5	536.5	529.5
42.5°	604.4	596.6	589.6	581.8	572.4	560.7	548.2	535.8	526.4	516.3	506.1
45°	589.6	581.0	572.4	563.8	554.5	542.8	529.5	516.3	504.6	495.2	482.7
47.5°	574.0	565.4	555.3	545.9	535.8	524.1	510.0	496.0	483.5	472.6	459.3
50°	558.4	549.8	538.9	528.7	517.0	505.3	490.5	474.2	460.9	446.9	435.2
52.5°	542.0	533.4	523.3	510.0	497.6	485.9	470.3	453.1	438.3	426.6	411.8
55°	525.6	517.0	505.3	492.1	479.6	464.8	450.0	432.8	416.4	402.4	387.6
57.5°	508.5	500.7	487.4	476.5	460.9	445.3	429.7	413.3	395.4	379.0	361.9
60°	491.3	482.7	470.3	457.0	441.4	425.8	409.4	391.5	372.8	354.8	339.2
62.5°	475.7	464.8	453.1	439.1	422.7	407.9	389.2	369.7	350.9	332.2	313.5
65°	457.8	446.1	435.2	421.1	404.0	386.8	368.1	348.6	328.3	308.0	289.3
67.5°	439.8	428.1	416.4	402.4	384.5	366.5	347.0	327.5	304.9	285.4	263.6
70°	421.9	412.5	397.7	382.9	366.5	347.0	327.5	306.5	283.1	262.0	239.4
72.5°	404.0	394.6	379.8	364.2	348.6	328.3	307.3	286.2	264.4	240.2	216.0
75°	386.8	375.1	361.9	347.0	330.7	309.6	288.5	266.7	241.0	218.4	193.4
77.5°	370.4	359.5	346.3	329.9	311.9	291.7	269.8	247.2	221.5	197.3	170.0
80°	352.5	341.6	328.3	311.9	294.0	274.5	251.1	227.7	202.8	176.2	148.2
82.5°	335.3	325.2	310.4	295.6	276.1	256.6	233.2	209.8	183.3	157.5	130.2
85°	317.4	307.3	293.2	277.6	258.9	237.9	216.0	192.6	166.1	139.6	112.3
87.5°	301.8	290.1	276.1	260.5	241.8	221.5	200.4	175.5	149.7	124.0	95.9
90°	285.4	274.5	260.5	244.9	226.2	205.9	184.0	160.7	135.7	109.2	82.7
92.5°	271.4	259.7	246.4	230.8	212.1	192.6	170.8	147.4	123.2	97.5	71.7
95°	257.4	245.7	233.2	217.6	198.9	179.4	157.5	134.9	111.5	86.6	62.4
97.5°	241.8	231.6	219.1	204.3	185.6	166.9	145.8	124.0	101.4	77.2	54.6
100°	229.3	217.6	205.9	190.3	173.1	155.2	134.1	113.1	91.2	68.6	47.6
102.5°	215.2	204.3	192.6	177.8	160.7	142.7	123.2	102.9	82.7	61.6	41.3
105°	202.0	191.8	179.4	165.3	149.0	131.8	113.1	94.4	74.9	54.6	36.7
107.5°	188.7	178.6	166.9	153.6	138.0	120.9	103.7	85.0	67.1	49.1	32.8
110°	175.5	166.1	155.2	141.9	127.1	111.5	95.1	78.0	60.0	43.7	28.9



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-33SL-LW-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	163.8	154.4	143.5	131.0	117.0	102.2	86.6	70.2	53.8	39.0	25.0
115°	152.1	143.5	132.6	121.7	107.6	93.6	78.8	63.2	48.4	35.1	21.8
117.5°	140.4	131.8	121.7	110.7	98.3	85.0	71.0	56.1	43.7	31.2	19.5
120°	128.7	120.9	111.5	101.4	90.5	77.2	63.2	50.7	39.0	27.3	17.2
122.5°	117.8	110.7	102.2	92.8	81.1	68.6	56.9	46.0	35.1	24.2	14.0
125°	107.6	100.6	92.8	83.4	72.5	61.6	51.5	41.3	30.4	21.1	11.7
127.5°	97.5	90.5	82.7	74.1	65.5	55.4	46.0	36.7	27.3	18.7	10.1
130°	87.3	81.1	74.1	67.1	58.5	49.1	41.3	32.0	23.4	14.8	8.6
132.5°	77.2	72.5	66.3	59.3	51.5	44.5	35.9	28.1	20.3	13.3	7.8
135°	68.6	63.9	58.5	52.3	46.0	39.0	31.2	24.2	17.2	10.9	6.2
137.5°	60.8	56.9	51.5	46.0	40.6	33.5	27.3	20.3	14.0	9.4	4.7
140°	53.8	49.9	45.2	39.8	35.1	28.9	22.6	16.4	12.5	7.8	3.9
142.5°	46.8	42.9	39.0	34.3	29.6	24.2	18.7	14.0	10.1	6.2	3.9
145°	39.8	36.7	32.8	28.9	24.2	19.5	15.6	11.7	7.8	4.7	3.1
147.5°	32.8	30.4	26.5	23.4	19.5	15.6	12.5	9.4	6.2	3.9	2.3
150°	26.5	24.2	21.1	17.9	15.6	12.5	10.1	7.0	4.7	3.9	2.3
152.5°	20.3	18.7	16.4	14.8	12.5	9.4	7.0	5.5	3.9	3.1	1.6
155°	16.4	14.8	13.3	10.9	9.4	7.0	5.5	3.9	3.1	2.3	1.6
157.5°	11.7	10.9	9.4	7.8	6.2	4.7	3.9	3.9	2.3	1.6	0.8
160°	7.8	7.0	6.2	4.7	3.9	3.9	3.1	2.3	1.6	1.6	0.8
162.5°	4.7	3.9	3.9	3.9	3.1	3.1	2.3	1.6	1.6	0.8	0.8
165°	3.1	3.1	3.1	2.3	2.3	2.3	1.6	0.8	0.8	0.8	0.8
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-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	739.3	739.3	739.3	739.3	739.3	739.3	739.3	739.3	739.3	739.3	739.3
2.5°	740.1	737.7	740.9	746.3	747.1	746.3	744.8	747.1	750.2	749.4	744.0
5°	738.5	735.4	738.5	744.0	744.0	743.2	742.4	744.8	747.9	747.1	742.4
7.5°	733.8	730.7	733.8	738.5	739.3	737.7	737.7	740.1	743.2	742.4	738.5
10°	727.6	724.5	726.1	731.5	733.1	731.5	731.5	733.8	737.7	737.0	732.3
12.5°	718.3	715.9	717.5	722.2	723.7	722.9	722.2	725.3	729.2	729.2	724.5
15°	708.1	705.0	706.6	712.0	712.8	711.2	712.0	714.4	719.0	719.0	715.1
17.5°	696.4	692.5	694.9	698.8	699.5	699.5	699.5	702.7	708.1	707.3	704.2
20°	683.2	677.7	679.3	683.2	684.7	684.7	684.7	690.2	694.1	694.1	691.0
22.5°	667.6	663.7	663.7	667.6	669.9	669.1	669.1	673.8	679.3	678.5	678.5
25°	649.6	646.5	644.9	649.6	650.4	651.2	652.7	657.4	663.7	663.7	664.4
27.5°	630.9	627.8	627.0	630.9	631.7	632.5	634.0	639.5	645.7	646.5	648.1
30°	613.0	608.3	606.7	609.9	611.4	612.2	612.2	620.8	626.2	628.6	631.7
32.5°	591.9	587.2	583.3	588.8	589.6	591.1	591.9	600.5	606.7	610.6	615.3
35°	570.9	563.1	561.5	565.4	567.0	567.7	569.3	578.7	587.2	590.4	596.6
37.5°	547.5	542.0	537.3	541.2	542.8	543.6	548.2	556.8	565.4	570.1	576.3
40°	525.6	518.6	514.7	517.0	518.6	519.4	524.8	534.2	544.3	549.8	557.6
42.5°	501.5	492.1	489.0	491.3	492.1	494.4	499.1	511.6	521.7	529.5	535.8
45°	477.3	470.3	463.2	465.6	466.4	467.9	474.9	488.2	499.1	508.5	515.5
47.5°	452.3	443.7	436.7	438.3	441.4	442.2	450.0	465.6	475.7	485.9	495.2
50°	427.4	415.7	410.2	410.2	411.8	415.7	425.8	441.4	452.3	464.0	474.2
52.5°	401.6	390.7	384.5	385.3	386.8	391.5	400.8	416.4	428.9	441.4	453.9
55°	375.9	364.2	358.0	356.4	358.0	364.2	375.1	391.5	404.0	418.8	432.0
57.5°	350.2	336.1	330.7	328.3	329.9	337.7	348.6	365.8	381.4	395.4	411.0
60°	322.1	311.2	301.8	296.3	300.2	310.4	322.1	340.0	356.4	372.0	389.2
62.5°	297.9	283.9	273.7	268.3	272.2	280.7	297.1	314.3	332.2	350.2	367.3
65°	270.6	256.6	244.9	239.4	243.3	253.5	269.8	288.5	308.0	326.0	346.3
67.5°	244.1	229.3	215.2	209.8	214.5	225.4	243.3	264.4	285.4	304.1	326.0
70°	218.4	202.0	187.2	183.3	186.4	201.2	218.4	239.4	261.3	283.1	305.7
72.5°	195.0	174.7	159.1	154.4	158.3	174.7	194.2	216.0	239.4	262.8	287.0
75°	167.7	149.0	131.8	126.3	131.0	145.8	170.0	193.4	218.4	243.3	265.9
77.5°	145.8	124.0	106.1	97.5	105.3	124.0	147.4	172.3	198.1	223.8	249.6
80°	123.2	100.6	81.1	71.7	80.3	100.6	124.0	151.3	180.1	205.9	229.3
82.5°	102.9	78.8	58.5	48.4	57.7	80.3	106.1	133.4	161.4	187.2	214.5
85°	84.2	59.3	38.2	27.3	40.6	60.8	88.1	116.2	145.1	171.6	198.1
87.5°	68.6	44.5	23.4	11.7	25.0	47.6	73.3	101.4	130.2	156.8	181.7
90°	56.1	32.0	12.5	1.6	14.8	35.9	60.8	88.1	115.4	142.7	167.7
92.5°	46.0	24.2	7.0	0.8	9.4	28.9	52.3	78.0	104.5	131.0	155.2
95°	38.2	18.7	4.7	0.8	7.0	22.6	44.5	69.4	94.4	120.1	144.3
97.5°	32.8	15.6	3.9	0.8	5.5	19.5	38.2	61.6	85.8	110.0	133.4
100°	28.1	12.5	3.1	0.8	4.7	16.4	33.5	54.6	77.2	100.6	123.2
102.5°	24.2	10.1	2.3	0.8	3.9	14.0	29.6	49.1	69.4	92.0	113.9
105°	21.1	8.6	2.3	0.8	3.1	12.5	26.5	43.7	63.9	84.2	105.3
107.5°	17.9	7.0	1.6	0.8	2.3	10.1	23.4	39.8	57.7	77.2	96.7
110°	15.6	6.2	1.6	0.8	2.3	9.4	20.3	35.9	52.3	70.2	88.9



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-33SL-LW-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	13.3	4.7	1.6	0.8	1.6	7.8	17.9	32.0	47.6	63.9	81.9
115°	11.7	3.9	0.8	0.8	1.6	7.0	16.4	28.9	42.9	58.5	74.9
117.5°	9.4	3.1	0.8	0.8	0.8	5.5	14.0	25.7	39.0	53.8	68.6
120°	7.8	3.1	0.8	0.8	0.8	4.7	12.5	22.6	35.1	48.4	62.4
122.5°	7.0	2.3	0.8	0.8	0.8	3.9	10.9	20.3	31.2	43.7	56.9
125°	6.2	2.3	0.8	0.8	0.8	3.1	9.4	17.9	28.1	39.0	51.5
127.5°	4.7	2.3	0.8	0.8	0.8	2.3	8.6	15.6	25.0	35.1	46.0
130°	3.9	1.6	0.8	0.8	0.8	2.3	7.0	14.0	21.8	31.2	41.3
132.5°	3.1	1.6	0.8	0.8	0.8	1.6	5.5	10.9	18.7	27.3	36.7
135°	3.1	1.6	0.8	0.8	0.8	1.6	3.9	9.4	15.6	23.4	31.2
137.5°	3.1	0.8	0.8	0.8	0.8	1.6	3.1	7.0	12.5	18.7	25.7
140°	2.3	0.8	0.8	0.8	0.8	0.8	2.3	5.5	10.1	15.6	21.8
142.5°	2.3	0.8	0.8	0.8	0.8	0.8	2.3	3.9	7.8	12.5	17.2
145°	1.6	0.8	0.8	0.8	0.8	0.8	1.6	3.1	6.2	9.4	14.0
147.5°	1.6	0.8	0.8	0.8	0.8	0.8	1.6	2.3	4.7	7.8	10.9
150°	1.6	0.8	0.8	0.8	0.8	0.8	1.6	2.3	3.1	5.5	8.6
152.5°	0.8	0.8	0.8	0.8	0.8	0.8	1.6	1.6	2.3	3.9	5.5
155°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.6	2.3	3.1	3.9
157.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.6	1.6	2.3	3.1
160°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.6	1.6	2.3
162.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.6	1.6
165°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
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-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	739.3	739.3	739.3	739.3	739.3	739.3	739.3	739.3	739.3	739.3	739.3
2.5°	741.6	736.2	737.7	737.0	738.5	740.9	740.9	740.1	740.1	738.5	737.0
5°	740.1	734.6	737.0	736.2	737.7	740.1	740.1	739.3	739.3	737.0	736.2
7.5°	735.4	731.5	733.1	733.1	734.6	737.0	737.0	736.2	736.2	733.8	733.1
10°	730.7	726.1	728.4	728.4	729.9	733.1	733.1	732.3	732.3	729.9	729.2
12.5°	722.9	718.3	722.2	722.9	724.5	727.6	726.8	726.8	726.8	724.5	723.7
15°	713.6	710.5	714.4	715.1	717.5	721.4	721.4	721.4	721.4	719.0	718.3
17.5°	703.4	701.1	705.0	706.6	709.7	713.6	713.6	714.4	715.1	713.6	712.8
20°	691.7	690.2	694.1	697.2	701.9	705.8	707.3	708.1	709.7	708.1	707.3
22.5°	678.5	678.5	683.9	687.1	692.5	696.4	698.8	701.1	702.7	701.1	700.3
25°	663.7	666.0	671.5	676.9	683.2	687.1	689.4	692.5	694.1	693.3	692.5
27.5°	649.6	652.7	659.8	665.2	670.7	676.9	679.3	683.2	684.7	684.7	683.9
30°	633.2	637.9	645.7	652.0	659.0	665.2	668.3	672.2	674.6	673.0	673.8
32.5°	617.6	625.4	631.7	638.7	646.5	652.7	656.6	661.3	663.7	662.9	663.7
35°	600.5	608.3	616.9	623.9	633.2	639.5	644.9	648.8	652.0	651.2	651.2
37.5°	581.8	591.9	600.5	609.9	618.4	625.4	630.9	635.6	638.7	638.7	638.7
40°	563.8	574.8	583.3	594.3	605.2	611.4	617.6	622.3	625.4	626.2	627.0
42.5°	544.3	556.0	566.2	577.9	588.8	596.6	603.6	609.1	612.2	613.8	613.0
45°	526.4	537.3	549.0	562.3	572.4	580.2	588.8	595.0	598.2	598.9	599.7
47.5°	506.1	518.6	531.9	545.1	555.3	565.4	573.2	579.4	582.6	584.9	584.9
50°	486.6	499.9	514.7	528.7	539.7	549.8	557.6	564.6	568.5	570.1	570.9
52.5°	468.7	481.2	496.8	510.8	521.7	531.9	542.0	549.8	553.7	555.3	555.3
55°	446.9	462.5	479.6	492.9	504.6	516.3	526.4	534.2	538.1	540.4	542.0
57.5°	426.6	443.0	460.9	474.9	489.0	499.9	509.2	519.4	522.5	525.6	526.4
60°	407.1	423.5	440.6	456.2	470.3	482.0	492.9	501.5	506.9	508.5	510.0
62.5°	386.8	404.0	421.9	437.5	452.3	466.4	476.5	484.3	490.5	492.9	494.4
65°	367.3	385.3	403.2	419.6	435.2	449.2	459.3	467.1	473.4	477.3	478.1
67.5°	346.3	365.8	384.5	401.6	417.2	432.0	442.2	450.0	456.2	460.9	461.7
70°	326.8	347.0	365.8	384.5	400.1	414.9	425.8	433.6	440.6	443.7	445.3
72.5°	308.0	329.1	348.6	367.3	382.9	397.7	409.4	417.2	424.2	428.1	428.9
75°	290.1	311.2	332.2	350.2	366.5	381.4	393.0	401.6	407.9	411.8	413.3
77.5°	272.2	294.0	315.1	333.0	350.2	365.0	375.1	385.3	391.5	396.2	396.2
80°	254.2	276.9	298.7	316.6	333.8	347.0	358.7	368.9	375.1	379.8	379.8
82.5°	238.6	260.5	281.5	299.5	316.6	331.4	343.1	352.5	359.5	362.6	363.4
85°	220.7	244.9	264.4	283.9	300.2	314.3	326.0	336.1	342.4	345.5	347.0
87.5°	205.9	229.3	250.3	267.5	283.9	297.9	311.2	319.7	326.0	329.9	331.4
90°	191.8	214.5	235.5	252.7	269.8	283.1	295.6	304.1	311.2	314.3	315.8
92.5°	179.4	202.0	222.3	239.4	255.8	270.6	282.3	290.9	297.1	300.2	302.6
95°	167.7	189.5	209.0	227.7	243.3	256.6	269.1	277.6	284.6	287.0	289.3
97.5°	156.0	177.0	196.5	214.5	230.8	243.3	255.0	263.6	269.1	273.0	275.3
100°	145.8	166.1	184.8	202.0	217.6	229.3	241.8	249.6	255.0	258.1	261.3
102.5°	134.9	155.2	173.1	189.5	205.9	216.8	228.5	236.3	241.0	246.4	246.4
105°	125.6	144.3	162.2	177.8	191.8	205.1	215.2	223.0	228.5	232.4	232.4
107.5°	115.4	134.1	151.3	167.7	180.9	193.4	202.8	209.8	216.0	218.4	220.7
110°	107.6	124.0	141.2	156.8	169.2	180.9	190.3	198.1	203.5	205.9	207.4



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-33SL-LW-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	98.3	115.4	131.0	145.8	158.3	169.2	178.6	184.8	190.3	193.4	194.2
115°	90.5	106.8	120.9	134.9	148.2	157.5	166.1	172.3	177.8	180.1	181.7
117.5°	83.4	98.3	112.3	124.0	136.5	146.6	155.2	160.7	165.3	168.4	170.0
120°	76.4	90.5	102.9	114.6	126.3	135.7	143.5	149.0	154.4	156.8	156.8
122.5°	69.4	82.7	94.4	105.3	116.2	124.8	133.4	138.0	142.7	145.1	145.1
125°	63.2	75.6	86.6	96.7	106.8	114.6	121.7	127.1	131.8	133.4	133.4
127.5°	56.9	68.6	78.8	88.1	96.7	104.5	111.5	117.0	120.9	122.4	122.4
130°	51.5	61.6	71.0	80.3	88.9	95.1	102.2	106.8	109.2	111.5	112.3
132.5°	46.0	55.4	63.9	71.7	80.3	86.6	92.0	96.7	99.0	101.4	102.2
135°	40.6	49.1	56.9	64.7	71.7	78.0	82.7	86.6	89.7	91.2	92.0
137.5°	34.3	43.7	50.7	56.9	64.7	69.4	74.9	77.2	80.3	81.9	81.9
140°	28.9	35.9	43.7	49.9	56.1	60.8	65.5	69.4	71.7	72.5	72.5
142.5°	23.4	29.6	35.9	43.7	49.1	53.0	57.7	60.8	62.4	63.2	63.9
145°	18.7	23.4	28.9	35.9	42.1	46.8	49.1	52.3	53.8	54.6	55.4
147.5°	14.0	18.7	23.4	28.1	34.3	39.0	41.3	44.5	46.0	46.8	46.8
150°	10.9	14.0	17.2	21.8	26.5	32.0	35.1	37.4	38.2	39.0	39.0
152.5°	7.8	10.9	13.3	16.4	19.5	24.2	28.9	30.4	31.2	32.0	32.0
155°	5.5	7.8	9.4	11.7	14.0	17.9	21.8	24.2	25.0	25.7	25.7
157.5°	3.9	5.5	6.2	8.6	10.1	11.7	14.8	18.7	19.5	19.5	19.5
160°	2.3	3.1	3.9	5.5	6.2	7.8	9.4	11.7	14.0	14.0	14.0
162.5°	1.6	2.3	2.3	3.1	3.1	4.7	5.5	6.2	8.6	9.4	9.4
165°	0.8	1.6	1.6	1.6	1.6	1.6	2.3	2.3	3.9	4.7	4.7
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-33SL-LW-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	739.3	739.3	739.3	739.3	739.3	739.3	739.3	739.3	739.3	739.3	739.3
2.5°	737.7	739.3	738.5	738.5	738.5	740.1	738.5	731.5	733.1	734.6	736.2
5°	737.0	737.7	737.7	737.0	737.0	738.5	737.0	729.9	731.5	733.1	733.8
7.5°	733.8	734.6	734.6	734.6	733.8	735.4	733.1	726.8	726.8	728.4	729.2
10°	729.9	731.5	730.7	729.9	729.9	729.9	728.4	721.4	721.4	722.2	722.9
12.5°	725.3	725.3	725.3	724.5	723.7	723.7	722.2	715.1	714.4	715.9	715.1
15°	719.0	720.6	719.0	718.3	716.7	716.7	714.4	707.3	705.8	706.6	705.8
17.5°	713.6	714.4	712.8	711.2	709.7	708.9	706.6	698.8	696.4	697.2	695.6
20°	708.1	708.1	706.6	705.0	702.7	700.3	697.2	689.4	685.5	685.5	682.4
22.5°	701.1	701.1	699.5	697.2	694.9	691.7	688.6	680.8	674.6	673.0	670.7
25°	693.3	692.5	691.7	689.4	684.7	681.6	678.5	669.9	662.9	659.8	655.9
27.5°	683.9	683.9	681.6	679.3	674.6	670.7	666.8	659.0	649.6	645.7	640.3
30°	673.8	673.8	671.5	668.3	663.7	659.0	654.3	644.9	635.6	630.1	623.9
32.5°	663.7	662.9	660.5	657.4	652.7	645.7	641.8	632.5	621.5	615.3	606.7
35°	651.2	650.4	648.1	644.2	637.9	632.5	626.2	617.6	605.2	597.4	588.0
37.5°	638.7	637.9	636.4	630.9	624.7	618.4	610.6	602.1	590.4	580.2	570.9
40°	626.2	625.4	622.3	618.4	610.6	602.8	595.0	586.5	574.0	562.3	552.1
42.5°	613.0	612.2	608.3	603.6	595.0	587.2	577.9	568.5	556.0	542.0	531.9
45°	599.7	598.2	594.3	588.8	579.4	570.9	561.5	550.6	538.1	524.8	511.6
47.5°	585.7	583.3	579.4	571.6	563.8	554.5	543.6	531.9	519.4	504.6	490.5
50°	570.1	568.5	563.8	556.8	547.5	538.1	525.6	513.9	499.1	485.1	467.9
52.5°	555.3	552.1	548.2	540.4	531.1	520.9	507.7	493.7	478.8	465.6	447.6
55°	539.7	538.1	532.6	526.4	514.7	503.0	490.5	475.7	459.3	443.7	426.6
57.5°	524.8	521.7	517.0	508.5	498.3	486.6	473.4	457.8	439.8	423.5	404.7
60°	510.0	505.3	499.9	492.1	481.2	468.7	454.7	438.3	420.3	402.4	382.9
62.5°	493.7	489.8	483.5	475.7	464.8	451.5	436.7	419.6	402.4	383.7	362.6
65°	477.3	473.4	467.1	459.3	448.4	433.6	418.0	400.8	381.4	363.4	340.8
67.5°	460.9	457.0	450.0	441.4	430.5	416.4	400.1	382.1	362.6	343.1	319.7
70°	444.5	439.8	433.6	424.2	413.3	398.5	382.1	363.4	343.9	322.9	299.5
72.5°	428.1	424.2	416.4	407.9	396.2	381.4	365.0	346.3	326.0	304.1	280.7
75°	411.8	407.1	401.6	391.5	379.0	365.0	347.8	329.1	307.3	286.2	262.0
77.5°	395.4	391.5	384.5	374.3	362.6	347.8	330.7	311.9	290.1	268.3	242.5
80°	379.0	374.3	368.9	359.5	346.3	331.4	313.5	294.8	273.0	250.3	224.6
82.5°	362.6	358.0	351.7	342.4	329.9	315.1	297.9	277.6	255.8	232.4	208.2
85°	346.3	342.4	335.3	326.0	312.7	297.9	280.7	262.8	239.4	216.0	191.8
87.5°	329.9	326.0	319.0	309.6	297.1	282.3	265.2	246.4	223.8	202.0	175.5
90°	314.3	311.2	304.1	294.8	282.3	267.5	251.9	231.6	209.8	187.9	163.0
92.5°	300.2	297.1	290.9	281.5	270.6	254.2	238.6	219.1	197.3	174.7	150.5
95°	287.8	283.9	277.6	269.1	255.8	241.8	226.2	206.7	185.6	163.0	139.6
97.5°	273.7	269.8	263.6	254.2	243.3	228.5	212.9	194.2	173.1	152.1	128.7
100°	259.7	255.8	248.8	241.0	230.1	215.2	200.4	181.7	162.2	141.9	119.3
102.5°	245.7	241.8	235.5	227.7	216.8	203.5	188.7	170.8	151.3	131.0	110.0
105°	232.4	228.5	222.3	214.5	204.3	191.1	175.5	159.9	141.2	121.7	101.4
107.5°	219.1	215.2	209.8	202.0	191.8	179.4	164.6	148.2	131.0	112.3	92.8
110°	205.9	202.8	196.5	189.5	179.4	166.9	153.6	138.0	120.9	103.7	85.0





TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-33SL-LW-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	193.4	190.3	184.0	176.2	167.7	156.0	142.7	127.9	111.5	95.1	77.2
115°	180.9	177.0	171.6	164.6	156.0	145.1	132.6	119.3	102.9	87.3	71.0
117.5°	168.4	165.3	159.9	152.9	145.1	134.1	122.4	110.0	94.4	79.5	64.7
120°	156.0	153.6	148.2	141.9	134.1	124.0	113.1	100.6	86.6	72.5	58.5
122.5°	144.3	141.9	136.5	131.0	123.2	113.9	103.7	92.0	79.5	66.3	53.8
125°	133.4	130.2	125.6	120.1	113.1	104.5	94.4	83.4	71.7	60.0	48.4
127.5°	121.7	119.3	116.2	110.0	102.9	95.1	85.8	76.4	65.5	54.6	43.7
130°	112.3	109.2	105.3	100.6	94.4	86.6	78.0	68.6	59.3	49.1	38.2
132.5°	101.4	98.3	95.1	90.5	85.0	78.0	70.2	61.6	53.0	43.7	34.3
135°	91.2	88.9	85.8	81.1	75.6	70.2	62.4	54.6	46.8	38.2	30.4
137.5°	81.9	79.5	76.4	73.3	67.8	62.4	55.4	48.4	41.3	33.5	26.5
140°	72.5	71.0	67.8	64.7	60.0	54.6	48.4	42.1	35.9	28.9	22.6
142.5°	63.2	61.6	59.3	56.1	52.3	47.6	42.1	36.7	30.4	25.0	19.5
145°	54.6	53.8	51.5	48.4	45.2	40.6	35.9	31.2	25.7	21.1	15.6
147.5°	46.0	45.2	43.7	41.3	38.2	34.3	30.4	25.7	21.8	17.2	12.5
150°	38.2	37.4	36.7	33.5	32.0	28.1	25.0	21.1	17.9	13.3	10.1
152.5°	31.2	31.2	29.6	27.3	25.7	22.6	20.3	17.2	14.0	10.9	7.8
155°	25.0	24.2	23.4	21.8	20.3	17.9	15.6	13.3	10.9	7.8	5.5
157.5°	19.5	18.7	17.9	16.4	14.8	14.0	11.7	9.4	7.0	5.5	3.9
160°	14.0	13.3	12.5	11.7	10.9	9.4	7.8	6.2	4.7	3.1	2.3
162.5°	9.4	8.6	8.6	7.8	7.0	5.5	4.7	3.9	3.1	2.3	1.6
165°	4.7	4.7	3.9	3.9	3.1	2.3	2.3	2.3	1.6	1.6	0.8
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-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	739.3	739.3	739.3	739.3	739.3	739.3	739.3
2.5°	735.4	735.4	738.5	737.7	735.4	740.1	745.5
5°	733.1	733.1	735.4	735.4	733.1	737.7	742.4
7.5°	729.2	728.4	730.7	730.7	727.6	731.5	737.0
10°	722.2	721.4	723.7	723.7	720.6	724.5	729.2
12.5°	714.4	712.8	715.1	714.4	711.2	715.1	719.8
15°	704.2	703.4	705.0	703.4	700.3	704.2	708.9
17.5°	694.1	691.7	692.5	692.5	687.1	691.0	694.9
20°	680.8	677.7	678.5	677.7	673.8	676.1	680.8
22.5°	667.6	662.9	662.9	662.1	657.4	660.5	664.4
25°	651.2	645.7	645.7	644.9	639.5	641.8	645.7
27.5°	634.8	629.3	627.0	626.2	620.8	620.8	626.2
30°	617.6	609.9	608.3	606.0	600.5	600.5	605.2
32.5°	601.3	590.4	587.2	584.1	578.7	577.9	583.3
35°	579.4	570.9	565.4	562.3	556.0	554.5	559.2
37.5°	561.5	550.6	542.8	538.9	532.6	530.3	536.5
40°	542.0	530.3	520.2	517.8	508.5	505.3	510.8
42.5°	520.2	507.7	497.6	492.9	485.9	482.7	483.5
45°	498.3	485.1	474.2	467.9	460.9	455.4	458.6
47.5°	475.7	464.0	450.8	441.4	432.8	428.9	430.5
50°	453.1	439.1	426.6	416.4	406.3	401.6	404.7
52.5°	430.5	415.7	401.6	390.7	379.0	374.3	375.1
55°	408.6	393.0	376.7	365.0	354.1	347.0	345.5
57.5°	386.8	369.7	352.5	339.2	325.2	319.0	316.6
60°	363.4	345.5	327.5	311.9	297.1	290.1	287.0
62.5°	341.6	322.1	301.8	285.4	270.6	261.3	258.9
65°	320.5	297.9	277.6	258.9	242.5	232.4	229.3
67.5°	297.9	274.5	252.7	232.4	216.8	203.5	202.0
70°	276.9	251.9	227.7	206.7	189.5	176.2	170.0
72.5°	255.8	230.1	205.1	182.5	160.7	148.2	143.5
75°	235.5	209.0	182.5	159.1	134.9	120.1	115.4
77.5°	216.8	189.5	161.4	135.7	113.1	94.4	88.1
80°	198.9	170.8	141.2	114.6	90.5	70.2	63.2
82.5°	180.1	153.6	123.2	95.1	70.2	49.1	40.6
85°	163.8	137.3	106.8	78.8	53.8	31.2	21.8
87.5°	150.5	121.7	94.4	66.3	40.6	17.9	6.2
90°	137.3	109.2	81.9	54.6	30.4	10.1	0.8
92.5°	125.6	99.0	71.7	46.8	23.4	7.0	0.8
95°	114.6	88.9	63.2	39.0	18.7	4.7	0.8
97.5°	104.5	80.3	56.1	33.5	15.6	3.9	0.8
100°	95.9	72.5	49.9	29.6	13.3	3.1	0.8
102.5°	87.3	65.5	44.5	25.7	11.7	2.3	0.8
105°	80.3	59.3	39.8	23.4	10.1	2.3	0.8
107.5°	73.3	53.8	35.9	20.3	8.6	1.6	0.8
110°	66.3	49.1	32.0	17.9	7.8	1.6	0.8



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-33SL-LW-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	60.8	44.5	28.9	16.4	6.2	1.6	0.8
115°	55.4	39.8	25.7	14.0	5.5	0.8	0.8
117.5°	49.9	35.9	22.6	12.5	4.7	0.8	0.8
120°	45.2	32.0	20.3	10.9	3.9	0.8	0.8
122.5°	40.6	28.9	17.9	9.4	3.1	0.8	0.8
125°	36.7	25.7	15.6	7.8	2.3	0.8	0.8
127.5°	32.8	22.6	14.0	7.0	2.3	0.8	0.8
130°	28.9	20.3	11.7	5.5	1.6	0.8	0.8
132.5°	25.7	17.2	10.1	4.7	1.6	0.8	0.8
135°	22.6	14.8	8.6	3.1	1.6	0.8	0.8
137.5°	19.5	12.5	7.0	2.3	0.8	0.8	0.8
140°	16.4	10.9	5.5	2.3	0.8	0.8	0.8
142.5°	14.0	8.6	3.9	1.6	0.8	0.8	0.8
145°	10.9	7.0	3.1	1.6	0.8	0.8	0.8
147.5°	8.6	5.5	2.3	1.6	0.8	0.8	0.8
150°	6.2	3.9	2.3	0.8	0.8	0.8	0.8
152.5°	4.7	3.1	1.6	0.8	0.8	0.8	0.8
155°	3.1	2.3	1.6	0.8	0.8	0.8	0.8
157.5°	2.3	1.6	0.8	0.8	0.8	0.8	0.8
160°	1.6	0.8	0.8	0.8	0.8	0.8	0.8
162.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8
165°	0.8	0.8	0.8	0.8	0.8	0.8	0.8
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)