

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-LD5-18SL-LC-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 (P33518)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 4SNLED-LD5-18SL-LC-UNV-L950-CD1-U  
Description: 4FT LINEAR SNLED LED FIXTURE  
CLEAR LENSED  
Light Source: -  
Ballast/Driver: -

**Summary**

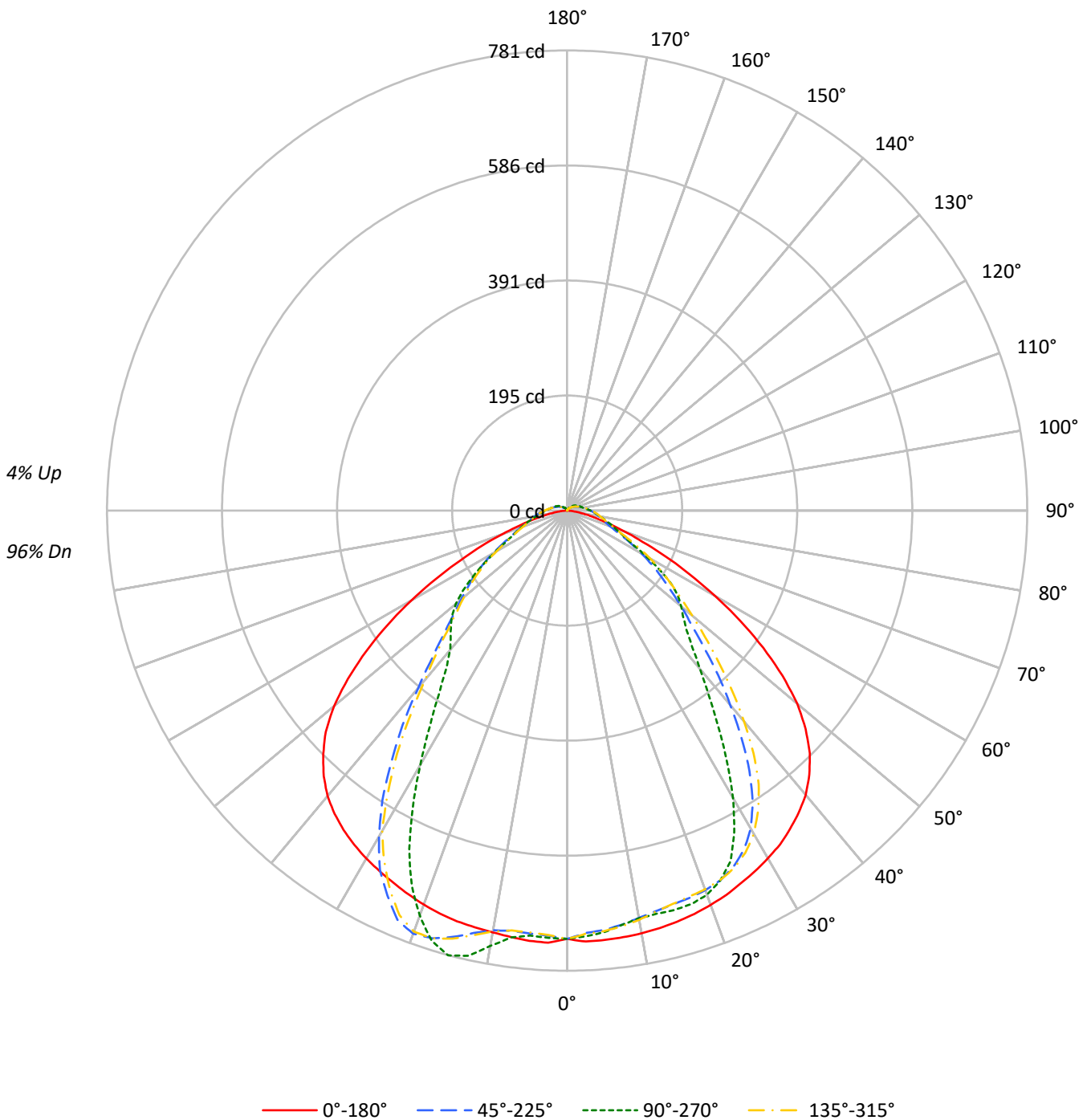
Lumens per Lamp: N/A  
Luminaire Lumens: 1733.0 lumens  
Efficiency: N/A  
Efficacy: 133.3 lumens/watt  
Spacing Criteria (0/90/45): 1.4 / 1.12 / 1.19  
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')  
CIE Type: Direct

Input Watts (W): 13  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P#  
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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20					20					20					20					20	
RC	80					70					50					30					10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR																						
0	118	118	118	118	115	115	115	115	109	109	109	103	103	103	98	98	98	96				
1	109	104	100	97	106	102	98	95	97	94	91	92	90	88	88	86	84	82				
2	100	93	86	81	97	90	85	80	86	82	77	82	79	75	79	76	73	71				
3	92	83	75	69	89	81	74	68	77	71	67	74	69	65	71	67	63	61				
4	85	74	66	60	83	73	65	59	70	63	58	67	61	57	64	60	56	54				
5	79	67	59	52	76	66	58	52	63	56	51	61	55	50	59	53	49	47				
6	73	61	52	46	71	60	52	46	57	51	45	55	49	45	54	48	44	42				
7	68	55	47	42	66	54	47	41	53	46	41	51	45	40	49	44	40	38				
8	64	51	43	37	62	50	42	37	48	42	37	47	41	36	45	40	36	34				
9	60	47	39	34	58	46	39	34	45	38	33	43	37	33	42	37	33	31				
10	56	43	36	31	54	43	36	31	42	35	30	40	34	30	39	34	30	28				

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
0°	5874	5874	5874	5874
5°	5918	5641	5930	5685
10°	5945	5407	5932	5774
15°	5991	5335	5988	5940
20°	6057	5250	6051	5534
25°	6132	4981	6128	4812
30°	6246	4317	6250	3825
35°	6369	3490	6387	2954
40°	6477	2810	6504	2476
45°	6454	2381	6487	2318
50°	6175	2191	6263	2143
55°	5480	1970	5616	1791
60°	4445	1508	4681	1383
65°	3305	1154	3559	1094
70°	2248	996	2533	953
75°	1471	899	1711	849
80°	949	837	1115	770
85°	485	836	642	764



TEST NUMBER: P#

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	69.1	4.0
10°-20°	205.5	11.9
20°-30°	312.3	18.0
30°-40°	335.1	19.3
40°-50°	290.8	16.8
50°-60°	215.5	12.4
60°-70°	123.5	7.1
70°-80°	68.4	3.9
80°-90°	41.6	2.4
90°-100°	27.1	1.6
100°-110°	18.1	1.0
110°-120°	12.2	0.7
120°-130°	7.5	0.4
130°-140°	4.0	0.2
140°-150°	1.8	0.1
150°-160°	0.5	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	586.9	33.9
0°-40°	921.9	53.2
0°-60°	1428.2	82.4
0°-90°	1661.7	95.9
90°-120°	57.5	3.3
90°-150°	70.8	4.1
90°-180°	71.0	4.1
0°-180°	1733.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	727	727	727	727	727	
5°	732	718	733	724	732	70
15°	722	702	722	781	722	204
25°	698	656	697	634	698	323
35°	660	447	662	378	660	413
45°	582	286	585	279	582	446
55°	406	215	416	195	406	360
65°	184	109	199	103	184	186
75°	53	69	61	65	53	60
85°	7	48	9	44	7	9
90°	0	40	1	37	0	0
95°	0	33	0	31	0	0
105°	0	24	0	23	0	0
115°	0	20	0	18	0	0
125°	0	15	0	12	0	0
135°	0	9	0	8	0	0
145°	0	6	1	4	0	0
155°	1	3	1	2	1	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-18SL-LC-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	726.9	726.9	726.9	726.9	726.9	726.9	726.9	726.9	726.9	726.9	726.9
2.5°	732.2	730.3	729.6	728.1	729.2	733.7	730.7	725.8	726.2	717.6	722.1
5°	731.5	729.2	728.1	726.6	727.3	731.5	728.5	723.6	723.2	714.6	718.7
7.5°	730.3	728.1	726.2	725.1	725.4	728.8	725.1	719.4	718.3	708.9	712.7
10°	728.5	726.9	724.3	722.4	722.1	725.8	719.8	714.2	711.6	701.8	705.5
12.5°	725.8	723.6	720.9	717.6	717.2	719.4	714.6	706.7	704.0	696.2	700.3
15°	722.1	719.4	716.4	712.7	710.8	712.3	706.3	699.2	698.8	692.0	697.7
17.5°	717.9	714.2	710.8	705.5	702.9	704.0	699.2	692.8	693.5	689.4	695.8
20°	712.3	708.2	702.9	697.7	693.9	695.8	692.4	687.5	688.6	685.6	691.3
22.5°	705.9	700.3	693.9	687.9	684.9	687.5	684.9	680.8	681.1	679.3	682.6
25°	697.7	691.3	683.8	676.3	674.8	676.6	675.1	671.8	670.3	667.2	668.7
27.5°	690.2	683.0	673.6	665.7	663.1	666.9	663.5	657.9	653.7	649.6	646.6
30°	681.5	672.9	662.4	653.4	651.1	652.6	647.7	639.1	628.2	622.9	614.7
32.5°	672.1	660.9	647.7	637.6	636.1	635.0	625.9	613.6	596.7	586.1	573.4
35°	659.7	647.3	631.6	619.2	616.9	610.5	595.9	579.4	557.6	539.6	517.8
37.5°	645.8	631.2	614.7	598.2	591.8	579.0	558.4	541.1	508.0	486.3	460.0
40°	630.1	612.4	592.1	572.2	561.7	541.1	517.4	491.9	460.0	430.7	408.5
42.5°	608.3	589.5	565.5	543.3	525.3	497.9	470.1	434.1	404.8	380.0	357.5
45°	582.4	559.9	532.1	505.4	482.5	449.8	417.2	381.1	356.7	327.8	312.4
47.5°	549.0	524.6	494.9	465.2	435.2	399.1	365.0	330.4	306.0	285.4	274.1
50°	509.5	487.0	454.3	419.0	386.0	348.5	314.3	288.4	264.7	252.0	243.3
52.5°	460.7	439.7	406.3	368.0	336.1	299.3	268.1	247.1	230.2	220.8	217.8
55°	406.3	387.9	354.8	319.2	286.5	252.7	229.0	210.7	199.8	194.1	194.5
57.5°	348.1	333.8	302.6	270.7	239.9	214.4	193.0	178.4	170.1	169.7	170.8
60°	289.9	279.4	252.3	224.9	197.9	177.2	161.5	151.3	146.1	146.4	146.1
62.5°	234.3	224.5	205.0	182.5	161.1	147.2	132.9	128.8	124.3	123.9	123.9
65°	184.4	176.9	161.1	144.9	128.8	119.8	112.6	107.8	104.4	103.6	104.0
67.5°	138.6	135.6	124.7	113.8	103.6	98.0	92.0	90.9	88.2	88.2	89.0
70°	103.3	101.0	95.0	88.6	84.5	80.7	77.7	77.7	77.4	77.0	78.9
72.5°	74.7	75.1	73.2	68.3	68.0	67.2	66.5	67.6	68.0	69.1	71.3
75°	52.6	53.7	53.7	52.9	54.4	56.3	57.5	59.3	61.6	63.1	65.7
77.5°	37.2	37.2	39.1	41.3	44.3	47.7	50.7	53.3	56.3	58.2	60.5
80°	24.0	25.2	28.2	32.3	36.4	40.9	45.1	48.4	51.4	54.4	55.9
82.5°	14.3	16.1	19.9	25.2	30.4	36.0	40.2	44.3	47.7	50.7	51.8
85°	7.1	9.8	14.3	19.9	25.5	31.5	36.8	40.6	44.3	46.9	48.4
87.5°	2.3	5.3	10.1	15.4	21.4	27.4	33.0	37.2	40.6	42.8	44.3
90°	0.0	2.6	7.1	12.8	18.4	24.4	29.7	34.2	37.5	39.4	40.6
92.5°	0.0	1.5	5.6	10.5	15.8	21.8	27.0	31.2	34.2	36.0	36.8
95°	0.4	1.1	4.1	8.6	13.9	19.5	24.4	28.2	31.2	33.0	33.4
97.5°	0.4	0.8	3.4	7.1	12.0	17.3	22.2	25.9	28.2	30.0	30.4
100°	0.4	0.8	2.6	6.4	10.5	15.4	19.9	23.3	25.9	27.4	27.8
102.5°	0.4	0.4	2.3	5.3	9.4	13.5	17.6	21.0	23.3	24.8	25.5
105°	0.4	0.4	1.9	4.5	8.3	12.0	15.8	19.2	21.0	22.5	23.3
107.5°	0.4	0.4	1.5	3.8	7.1	10.5	14.3	16.9	19.2	20.7	21.4
110°	0.4	0.4	1.1	3.4	6.0	9.4	12.4	15.0	17.3	18.8	19.5



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-18SL-LC-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	0.4	0.4	1.1	3.0	5.3	8.3	10.9	13.5	15.4	16.9	18.0
115°	0.4	0.4	1.1	2.6	4.9	7.1	9.8	12.0	13.9	15.4	16.5
117.5°	0.4	0.4	1.1	2.3	4.1	6.4	8.6	10.9	12.4	13.9	15.0
120°	0.4	0.4	0.8	1.9	3.8	5.6	7.5	9.4	11.3	12.8	13.9
122.5°	0.4	0.4	0.8	1.9	3.0	4.9	6.8	8.3	10.1	11.3	12.4
125°	0.4	0.4	0.8	1.5	2.6	4.5	6.0	7.5	8.6	10.1	11.3
127.5°	0.4	0.4	0.8	1.5	2.3	3.8	5.3	6.8	7.9	9.0	9.8
130°	0.4	0.4	0.8	1.1	1.9	3.0	4.5	5.6	7.1	7.9	8.6
132.5°	0.4	0.4	0.4	1.1	1.5	2.3	3.4	4.9	6.0	7.1	7.5
135°	0.4	0.4	0.4	0.8	1.5	1.9	2.6	3.8	4.9	6.0	6.8
137.5°	0.4	0.4	0.4	0.8	1.1	1.9	2.3	3.0	4.1	4.9	6.0
140°	0.4	0.4	0.4	0.8	1.1	1.5	1.9	2.6	3.4	4.1	4.9
142.5°	0.4	0.4	0.4	0.8	0.8	1.1	1.5	2.3	2.6	3.4	4.1
145°	0.4	0.4	0.4	0.8	0.8	1.1	1.5	1.9	2.3	2.6	3.4
147.5°	0.4	0.4	0.4	0.8	0.8	0.8	1.1	1.5	1.9	2.3	2.6
150°	0.8	0.8	0.8	0.8	0.8	0.8	1.1	1.1	1.5	1.9	2.3
152.5°	0.8	0.8	0.8	0.8	0.8	0.8	1.1	1.1	1.1	1.5	1.9
155°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.1	1.1	1.5	1.5
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P#

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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	726.9	726.9	726.9	726.9	726.9	726.9	726.9	726.9	726.9	726.9	726.9
2.5°	720.6	721.3	725.8	725.4	724.7	723.9	723.9	723.2	723.9	725.8	725.1
5°	716.8	717.9	721.3	720.9	720.2	719.8	719.4	718.3	719.1	721.7	720.9
7.5°	710.1	711.2	714.2	712.7	711.6	712.3	710.4	709.3	710.8	713.4	713.1
10°	702.9	703.7	707.4	706.7	704.8	705.2	703.3	702.5	704.4	705.9	706.3
12.5°	698.0	700.7	704.0	703.7	703.3	703.7	701.8	701.0	702.2	703.7	703.3
15°	696.9	700.3	704.0	704.0	704.4	704.8	702.9	701.8	702.9	704.0	703.7
17.5°	695.8	699.9	703.3	702.9	703.3	704.0	701.0	700.3	701.8	703.3	702.5
20°	692.0	695.8	698.0	697.3	697.3	697.7	693.9	693.9	696.2	697.3	697.7
22.5°	681.5	686.0	686.0	684.1	684.1	682.6	681.5	679.3	681.9	683.8	685.3
25°	665.7	667.6	665.4	661.2	659.0	657.1	651.9	656.4	656.4	662.0	663.9
27.5°	643.6	639.5	633.1	624.4	622.6	616.6	613.2	614.3	616.2	624.1	630.1
30°	607.2	594.8	583.9	580.1	571.9	565.9	559.9	562.9	566.2	570.7	583.1
32.5°	559.1	547.1	529.4	523.1	514.4	506.9	499.8	504.3	510.3	513.3	526.8
35°	503.9	489.6	473.5	462.6	453.6	449.5	440.5	446.8	453.2	455.5	467.1
37.5°	445.3	430.7	416.4	407.0	398.4	395.8	389.8	394.3	399.1	402.5	412.3
40°	389.8	376.2	365.4	359.0	353.0	350.7	348.5	350.3	354.1	356.7	364.2
42.5°	342.1	331.2	323.7	319.9	315.8	312.8	313.2	313.9	315.8	321.4	324.8
45°	300.4	294.0	289.1	288.4	285.7	285.4	285.0	286.5	287.6	291.0	293.6
47.5°	267.0	264.3	263.2	264.7	265.8	264.3	265.1	267.0	269.2	269.2	268.9
50°	240.7	241.4	242.9	246.3	248.6	249.3	250.1	252.3	252.7	253.5	252.3
52.5°	219.3	220.0	224.2	229.4	232.1	233.2	234.7	236.9	236.9	237.7	236.2
55°	197.5	198.6	202.8	208.0	210.3	211.8	213.3	214.8	215.9	217.4	216.3
57.5°	173.5	176.9	179.5	181.0	182.5	183.6	184.7	185.1	187.4	187.7	189.6
60°	147.9	148.7	151.3	150.9	149.8	152.8	151.3	154.0	156.6	160.0	160.3
62.5°	123.5	123.9	125.8	125.0	126.5	126.2	127.3	127.3	129.2	130.7	132.5
65°	104.4	104.8	106.3	106.3	105.9	107.0	108.1	108.9	108.9	110.0	111.5
67.5°	90.1	91.2	92.7	93.5	94.2	94.2	95.4	95.8	96.5	96.9	97.6
70°	80.4	81.9	83.4	84.1	84.5	85.2	85.6	85.6	86.4	86.7	87.5
72.5°	73.2	74.7	75.8	75.8	76.6	77.0	77.0	77.4	77.7	78.5	79.2
75°	67.2	68.3	69.1	68.7	68.7	68.7	69.1	69.1	69.8	70.6	71.3
77.5°	61.6	62.7	62.7	62.0	62.0	62.0	62.0	62.3	62.7	63.5	64.2
80°	57.5	57.5	57.1	57.1	56.3	55.9	55.9	56.3	56.3	57.1	58.2
82.5°	52.9	52.9	52.6	52.2	51.8	51.4	51.4	51.8	52.2	52.6	53.3
85°	48.8	48.8	48.1	48.1	47.7	47.7	47.7	47.7	48.1	48.4	49.2
87.5°	44.7	44.3	43.9	43.6	43.6	43.6	43.6	43.6	43.9	44.7	45.1
90°	40.6	40.2	39.8	39.8	39.4	39.4	39.8	39.8	40.2	40.6	40.9
92.5°	36.8	36.4	36.0	36.0	35.7	35.7	36.0	35.7	36.4	36.4	36.8
95°	33.4	33.0	32.7	32.7	32.7	32.7	32.7	32.7	33.0	33.0	33.4
97.5°	30.4	30.0	29.7	29.7	30.0	29.7	30.0	30.0	30.0	30.4	30.8
100°	27.8	27.4	27.4	27.8	27.4	27.4	27.8	27.8	27.8	27.8	28.2
102.5°	25.5	25.5	25.5	25.5	25.5	25.5	25.9	25.9	25.9	25.9	26.3
105°	23.3	23.7	23.7	23.7	24.0	24.0	24.0	24.4	24.4	24.4	24.4
107.5°	21.8	22.2	22.2	22.5	22.5	22.9	22.9	22.9	22.9	23.3	23.3
110°	20.3	20.7	21.0	21.4	21.4	21.8	21.8	21.8	21.8	21.8	21.8





TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-18SL-LC-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	18.8	19.2	19.5	20.3	20.7	20.7	20.7	20.7	21.0	21.0	20.7
115°	17.3	18.0	18.4	19.2	19.5	19.5	19.9	19.9	19.9	19.9	19.5
117.5°	15.8	16.9	17.3	18.0	18.4	18.4	18.8	18.8	18.8	18.8	18.4
120°	14.6	15.4	16.1	16.5	16.9	17.3	17.3	17.6	17.6	17.6	17.3
122.5°	13.5	14.3	15.0	15.4	15.8	16.1	16.1	16.1	16.1	16.1	16.1
125°	12.0	12.8	13.5	13.9	14.3	14.6	14.6	15.0	15.0	15.0	14.6
127.5°	10.9	11.6	12.0	12.8	13.1	13.1	13.5	13.5	13.5	13.5	13.1
130°	9.4	10.1	10.9	11.3	11.6	11.6	12.0	12.0	12.0	12.0	12.0
132.5°	8.3	9.0	9.4	10.1	10.1	10.5	10.5	10.9	10.9	10.9	10.5
135°	7.5	7.9	8.3	9.0	9.0	9.4	9.4	9.4	9.4	9.4	9.4
137.5°	6.8	7.1	7.5	7.9	7.9	8.3	8.3	8.3	8.3	8.6	8.3
140°	5.6	6.4	6.8	6.8	7.1	7.1	7.1	7.5	7.5	7.5	7.1
142.5°	4.9	5.3	5.6	6.0	6.4	6.4	6.4	6.4	6.8	6.4	6.4
145°	3.8	4.5	4.9	5.3	5.6	5.6	5.6	5.6	5.6	5.6	5.6
147.5°	3.0	3.4	4.1	4.5	4.5	4.9	4.9	4.9	4.9	4.9	4.9
150°	2.6	2.6	3.4	3.8	4.1	4.1	4.1	4.1	4.1	4.1	4.1
152.5°	1.9	2.3	2.6	3.0	3.4	3.4	3.4	3.4	3.4	3.4	3.4
155°	1.9	1.9	2.3	2.3	2.6	2.6	2.6	2.6	3.0	2.6	2.6
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-18SL-LC-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	726.9	726.9	726.9	726.9	726.9	726.9	726.9	726.9	726.9	726.9	726.9
2.5°	723.9	723.6	725.1	723.6	716.1	719.1	717.9	722.1	722.4	723.6	727.3
5°	720.2	720.2	722.1	720.6	713.4	716.4	716.1	720.2	720.9	721.7	725.8
7.5°	712.7	713.1	715.7	714.6	707.0	711.6	711.2	716.1	717.6	719.1	722.8
10°	705.5	705.2	708.2	707.0	699.9	705.2	704.8	709.7	711.9	714.6	719.1
12.5°	701.8	700.7	701.8	700.7	692.8	696.9	697.3	702.9	705.5	708.9	714.2
15°	701.8	699.9	699.9	697.7	688.6	691.3	691.7	695.4	698.8	702.2	708.6
17.5°	701.0	699.2	698.8	696.9	687.1	687.1	686.8	689.4	691.3	694.7	701.4
20°	696.9	696.2	695.8	694.7	685.6	684.1	683.4	683.4	684.5	685.6	692.4
22.5°	686.0	686.8	687.5	688.3	681.1	678.5	678.9	678.1	677.0	677.0	682.6
25°	665.7	669.5	672.5	675.9	671.8	669.9	672.1	671.0	669.1	667.6	672.5
27.5°	633.5	641.3	647.7	656.0	656.4	654.9	660.9	660.1	659.7	657.5	661.2
30°	588.8	601.2	609.8	621.8	632.0	633.5	643.6	645.1	646.6	645.5	649.2
32.5°	534.7	551.6	566.2	585.0	594.8	603.4	617.7	623.7	629.7	631.6	635.7
35°	475.7	494.9	512.2	532.8	548.2	567.0	584.3	593.3	606.8	612.0	618.1
37.5°	419.8	437.8	454.7	475.4	500.2	519.7	541.1	561.4	579.8	587.3	596.3
40°	370.2	384.9	401.0	419.0	441.6	467.1	490.4	518.6	540.3	555.4	568.5
42.5°	332.7	339.8	353.7	369.9	387.9	413.8	437.4	469.0	495.3	516.7	538.5
45°	299.3	302.6	312.8	321.4	339.8	362.7	387.9	418.7	446.1	473.5	499.8
47.5°	270.7	274.9	279.7	285.0	298.1	317.3	339.1	366.9	394.3	426.2	456.2
50°	251.6	252.7	253.5	255.7	263.6	276.7	294.4	318.0	344.3	378.5	410.4
52.5°	234.7	234.7	232.4	231.3	234.3	242.6	252.7	269.6	296.6	328.2	362.0
55°	216.7	213.3	212.5	208.8	209.5	213.3	218.2	231.3	253.5	280.5	313.2
57.5°	191.5	190.0	190.0	188.5	185.5	187.4	188.5	197.9	213.7	236.9	265.5
60°	162.6	161.8	163.7	164.1	161.5	162.6	162.2	167.8	179.1	197.9	221.5
62.5°	133.7	137.1	137.4	138.9	137.4	137.1	138.9	143.8	149.4	163.7	182.1
65°	112.3	114.1	114.5	116.4	115.7	115.7	117.2	120.9	124.3	134.1	148.3
67.5°	98.4	97.6	98.0	99.1	98.0	97.6	98.8	101.0	103.6	109.6	119.8
70°	87.5	86.7	86.7	86.7	85.2	84.1	84.5	85.2	86.4	89.7	96.1
72.5°	79.2	79.2	78.1	77.0	75.8	75.1	74.3	73.6	73.2	74.3	77.7
75°	71.7	72.1	71.7	70.6	69.1	67.6	66.1	64.6	62.7	62.0	62.3
77.5°	65.0	65.3	65.7	65.3	63.8	62.0	59.7	57.5	54.8	52.2	50.7
80°	59.0	59.7	60.1	59.7	58.6	57.1	54.4	51.8	48.1	44.7	40.9
82.5°	53.7	54.8	55.2	55.2	54.4	52.9	49.9	46.9	42.8	38.3	33.4
85°	49.6	50.3	51.1	51.1	50.7	49.2	46.2	42.8	38.7	33.4	28.2
87.5°	45.4	45.8	46.6	47.3	46.6	45.1	42.4	38.7	34.5	29.3	23.3
90°	41.3	41.7	42.4	43.2	42.8	41.3	39.1	35.7	31.2	25.5	19.5
92.5°	37.2	37.9	38.3	38.7	39.1	37.9	36.0	32.7	28.2	22.5	16.9
95°	34.2	34.2	34.9	35.3	35.7	34.5	33.0	29.7	25.5	20.3	14.6
97.5°	31.2	31.2	31.9	31.9	32.3	31.5	30.0	27.0	22.9	18.0	12.4
100°	28.2	28.5	28.9	29.3	29.3	28.9	27.4	24.4	20.7	16.1	10.9
102.5°	26.3	26.3	26.7	26.7	27.0	26.3	24.8	22.2	18.4	14.3	9.4
105°	24.4	24.4	24.8	24.8	24.4	23.7	22.2	19.9	16.5	12.4	8.3
107.5°	22.9	22.9	22.9	22.9	22.5	21.8	20.3	17.6	14.6	11.3	7.5
110°	21.8	21.4	21.4	21.0	20.7	19.5	18.0	15.8	13.1	9.8	6.4



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-18SL-LC-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	20.7	20.3	19.9	19.5	18.8	17.6	16.1	14.3	11.6	8.6	5.6
115°	19.5	19.2	18.8	18.0	17.3	16.1	14.6	12.8	10.1	7.5	4.9
117.5°	18.4	18.0	17.3	16.5	15.8	14.6	13.1	11.3	9.0	6.8	4.5
120°	16.9	16.5	16.1	15.4	14.6	13.1	11.6	10.1	7.9	6.0	3.8
122.5°	15.8	15.4	14.6	14.3	13.1	12.0	10.5	9.0	7.1	5.3	3.4
125°	14.3	13.9	13.5	12.8	12.0	10.5	9.4	7.9	6.4	4.5	2.6
127.5°	13.1	12.8	12.0	11.3	10.5	9.4	8.3	7.1	5.6	3.8	2.6
130°	11.6	11.3	10.9	10.1	9.4	8.3	7.5	6.0	4.9	3.4	2.3
132.5°	10.1	10.1	9.8	9.0	8.3	7.5	6.4	5.3	4.1	3.0	1.9
135°	9.4	9.0	8.6	7.9	7.5	6.4	5.6	4.5	3.4	2.6	1.5
137.5°	8.3	7.9	7.5	7.1	6.4	5.6	4.9	3.8	3.0	2.3	1.5
140°	7.1	6.8	6.8	6.0	5.6	4.9	4.1	3.4	2.6	1.9	1.1
142.5°	6.4	6.0	5.6	5.3	4.9	4.1	3.4	2.6	2.3	1.5	1.1
145°	5.6	5.3	4.9	4.5	4.1	3.4	3.0	2.3	1.9	1.5	1.1
147.5°	4.5	4.5	4.1	3.8	3.4	3.0	2.6	2.3	1.5	1.1	0.8
150°	3.8	3.8	3.4	3.0	3.0	2.6	2.3	1.9	1.5	1.1	0.8
152.5°	3.4	3.0	3.0	2.6	2.6	2.3	1.9	1.5	1.1	1.1	0.8
155°	2.6	2.6	2.6	2.3	2.3	1.9	1.5	1.5	1.1	0.8	0.8
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-18SL-LC-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	726.9	726.9	726.9	726.9	726.9	726.9	726.9	726.9	726.9	726.9	726.9
2.5°	728.1	723.6	727.3	734.1	733.3	732.6	731.8	733.3	738.2	735.6	731.5
5°	726.9	722.4	726.6	733.0	732.6	731.5	730.7	732.2	737.1	734.5	730.0
7.5°	724.7	720.6	723.6	730.0	730.0	729.2	728.5	730.0	734.5	732.2	727.7
10°	720.9	717.9	720.9	726.9	727.3	725.8	725.1	726.9	731.5	730.3	726.6
12.5°	717.9	714.9	718.3	724.3	724.7	723.2	722.1	724.3	730.3	731.1	730.0
15°	713.8	711.2	715.3	721.7	721.7	720.6	720.6	723.6	731.8	735.2	737.1
17.5°	707.8	705.9	710.8	717.2	717.6	716.8	717.2	723.2	734.1	742.3	747.6
20°	700.3	699.5	704.8	711.6	712.7	713.1	714.9	723.9	739.0	750.2	755.5
22.5°	691.3	691.7	697.7	704.8	706.3	707.4	711.2	723.9	742.7	754.7	757.0
25°	681.1	682.3	688.6	697.3	699.2	701.4	707.8	724.3	743.8	751.7	748.0
27.5°	670.3	672.5	680.8	689.8	692.0	695.8	704.0	722.1	738.6	739.0	725.1
30°	659.0	661.6	671.4	681.9	685.6	689.4	699.5	716.8	725.8	713.8	689.4
32.5°	646.2	650.0	659.7	672.5	677.0	681.9	692.0	706.7	703.3	677.4	642.5
35°	630.1	635.3	646.6	661.6	665.7	672.1	679.3	682.6	667.6	630.8	591.4
37.5°	610.2	618.1	631.2	648.5	653.0	657.1	659.0	649.6	619.6	579.8	538.8
40°	587.3	599.3	613.6	632.7	637.2	637.2	630.4	610.5	572.6	520.4	475.0
42.5°	559.5	574.1	592.1	611.3	615.8	610.5	594.4	559.5	516.3	458.1	410.0
45°	525.7	545.2	565.5	585.4	587.6	576.0	547.1	502.8	449.5	395.4	349.6
47.5°	485.5	511.0	533.2	555.7	552.7	533.2	494.5	444.2	387.9	336.8	300.0
50°	440.5	470.5	495.3	516.7	510.3	483.3	437.8	385.3	329.3	285.7	255.3
52.5°	392.4	426.9	451.7	469.0	460.4	428.1	378.1	327.8	282.0	242.2	221.9
55°	342.4	377.4	402.9	416.4	405.2	370.2	321.0	275.2	232.1	206.1	194.1
57.5°	294.0	326.7	350.7	361.6	347.3	312.4	267.0	228.3	197.1	175.4	169.3
60°	247.4	274.1	297.0	305.3	289.9	257.6	218.5	187.7	164.8	149.8	146.8
62.5°	204.3	226.0	244.1	250.5	235.4	210.3	176.5	153.6	137.4	129.9	126.2
65°	168.6	181.4	199.8	198.6	189.6	166.3	141.6	125.4	114.9	110.0	107.8
67.5°	132.5	144.2	155.8	157.3	146.1	129.9	113.8	102.1	96.5	93.9	92.7
70°	102.5	111.1	118.3	116.4	110.4	100.3	90.1	83.7	81.5	80.4	80.4
72.5°	79.6	84.1	87.5	85.2	81.5	76.2	71.3	68.7	69.1	69.8	70.6
75°	61.6	62.7	63.5	61.2	60.5	57.1	56.7	57.1	59.3	61.6	62.7
77.5°	47.3	45.8	44.7	42.4	42.8	42.4	44.3	47.3	50.7	54.1	57.1
80°	36.4	33.0	30.4	28.2	29.3	31.2	34.9	39.4	43.9	47.7	51.4
82.5°	28.2	23.3	19.5	17.3	19.5	22.5	27.4	33.0	38.3	42.4	46.6
85°	21.8	16.1	11.6	9.4	11.6	16.1	21.4	27.8	33.4	37.9	42.1
87.5°	16.9	11.6	6.4	3.8	6.4	11.3	17.3	23.3	28.9	34.2	38.3
90°	13.5	7.9	3.0	0.8	3.4	7.9	13.5	19.5	25.2	30.8	34.9
92.5°	10.9	5.6	1.5	0.0	1.9	6.0	11.3	16.9	22.5	27.8	31.9
95°	9.0	4.5	1.1	0.0	1.5	4.5	9.0	14.6	19.9	25.2	28.5
97.5°	7.5	3.4	0.8	0.0	0.8	3.8	7.5	12.4	17.6	22.5	25.9
100°	6.4	3.0	0.8	0.0	0.8	3.0	6.4	10.9	15.4	19.9	23.3
102.5°	5.3	2.3	0.4	0.4	0.4	2.3	5.6	9.4	13.5	17.6	21.0
105°	4.9	1.9	0.4	0.4	0.4	1.9	4.9	8.3	12.0	15.8	18.8
107.5°	4.1	1.5	0.4	0.4	0.4	1.5	4.1	7.1	10.9	14.3	16.9
110°	3.4	1.5	0.4	0.4	0.4	1.5	3.4	6.4	9.4	12.4	15.0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-18SL-LC-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	3.0	1.1	0.4	0.4	0.4	1.1	3.0	5.6	8.3	11.3	13.5
115°	2.6	1.1	0.4	0.4	0.4	1.1	2.6	4.9	7.1	9.8	12.0
117.5°	2.3	1.1	0.4	0.4	0.4	0.8	2.3	4.1	6.4	8.6	10.9
120°	1.9	0.8	0.4	0.4	0.4	0.8	1.9	3.8	5.6	7.5	9.4
122.5°	1.9	0.8	0.4	0.4	0.4	0.8	1.5	3.0	4.9	6.4	8.3
125°	1.5	0.8	0.4	0.4	0.4	0.4	1.5	2.6	4.1	5.6	7.1
127.5°	1.5	0.8	0.4	0.4	0.4	0.4	1.1	2.3	3.4	4.9	6.4
130°	1.1	0.8	0.4	0.4	0.4	0.4	0.8	1.9	3.0	4.1	5.3
132.5°	1.1	0.8	0.4	0.4	0.4	0.4	0.8	1.5	2.3	3.4	4.5
135°	1.1	0.4	0.4	0.4	0.4	0.4	0.4	1.1	1.9	2.6	3.4
137.5°	0.8	0.4	0.4	0.4	0.4	0.4	0.4	0.8	1.5	1.9	3.0
140°	0.8	0.4	0.4	0.4	0.4	0.4	0.4	0.8	1.1	1.5	2.3
142.5°	0.8	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.8	1.1	1.9
145°	0.8	0.4	0.4	0.8	0.8	0.4	0.4	0.8	0.8	1.1	1.5
147.5°	0.8	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.8	0.8	1.1
150°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.1
152.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
155°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-18SL-LC-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	726.9	726.9	726.9	726.9	726.9	726.9	726.9	726.9	726.9	726.9	726.9
2.5°	730.7	722.1	726.6	725.1	726.6	730.3	730.0	728.8	729.6	727.7	725.8
5°	729.2	720.6	725.1	723.2	725.1	728.8	728.1	726.9	728.1	725.8	723.9
7.5°	727.3	719.4	724.7	724.3	727.7	732.6	733.0	733.0	735.6	732.2	730.7
10°	727.3	723.2	730.3	733.0	741.6	748.0	748.7	750.2	754.7	754.0	750.2
12.5°	735.2	734.5	745.0	751.4	759.2	768.3	773.1	774.6	777.6	775.4	773.9
15°	745.3	749.1	760.7	767.9	776.5	783.3	784.4	785.2	787.4	784.0	781.4
17.5°	758.9	761.1	770.5	773.5	779.1	780.3	778.8	775.0	775.0	767.5	765.2
20°	765.2	764.1	767.9	763.0	760.7	754.0	747.6	740.5	740.1	732.2	731.5
22.5°	759.6	752.1	744.2	732.2	726.9	717.2	708.6	704.4	701.8	691.7	689.0
25°	739.7	721.3	709.7	695.4	682.6	671.4	663.1	654.5	646.2	638.0	634.2
27.5°	705.2	687.9	669.1	649.2	631.6	614.3	600.4	591.8	583.9	573.0	567.4
30°	662.7	638.7	618.1	598.9	570.0	549.0	537.3	520.1	514.0	509.2	498.7
32.5°	612.8	583.9	555.7	529.8	500.2	480.6	465.2	452.5	448.7	435.9	432.9
35°	557.6	519.7	487.8	462.2	440.8	417.2	404.4	395.8	388.3	379.6	378.1
37.5°	492.6	458.5	422.4	399.9	383.0	362.7	353.0	347.0	343.6	337.2	336.1
40°	427.3	393.1	368.4	345.8	335.3	324.4	317.3	314.7	313.2	310.9	308.7
42.5°	368.0	337.9	320.3	305.3	300.8	295.5	293.6	295.1	293.6	292.9	292.5
45°	317.7	294.8	282.4	277.9	276.7	275.2	276.7	279.4	279.7	279.0	279.0
47.5°	271.9	261.0	255.7	256.5	258.3	259.5	262.1	265.5	266.2	264.3	265.1
50°	241.8	235.4	234.3	237.3	241.4	242.9	245.9	248.6	248.2	247.4	246.7
52.5°	213.7	211.8	214.8	217.8	222.3	223.0	224.2	225.3	224.9	223.4	222.7
55°	190.0	191.5	194.1	195.3	198.6	198.3	198.6	198.6	197.1	196.4	195.3
57.5°	168.6	169.0	170.5	170.8	172.7	172.0	171.6	170.8	168.6	168.2	167.1
60°	146.8	146.1	149.4	146.8	148.3	146.8	146.4	144.6	142.3	141.9	141.2
62.5°	126.2	124.7	126.9	125.8	126.5	125.0	124.3	122.0	120.2	119.8	119.4
65°	107.8	107.0	109.3	108.9	109.6	107.8	107.0	105.5	104.0	103.6	103.3
67.5°	92.4	94.2	95.4	95.4	96.1	95.8	93.9	93.5	93.1	91.6	91.6
70°	81.1	82.2	84.5	84.9	84.5	85.2	83.7	83.4	83.0	82.2	81.9
72.5°	72.1	73.6	75.8	76.2	75.8	75.8	75.1	74.7	74.7	73.6	73.6
75°	65.0	66.8	68.7	68.7	68.7	68.0	67.2	67.2	66.5	66.1	65.3
77.5°	59.0	61.2	62.7	62.3	62.0	61.2	61.2	60.1	59.0	59.0	58.2
80°	54.4	55.9	57.1	56.7	56.3	55.2	54.8	53.7	52.9	51.8	51.8
82.5°	49.6	51.4	52.2	51.8	51.1	49.9	49.6	48.8	48.1	47.7	46.9
85°	45.4	47.3	47.7	46.9	46.2	45.4	45.1	44.7	44.3	43.6	43.6
87.5°	41.3	43.2	43.2	42.8	42.1	41.7	41.3	40.9	40.6	40.2	39.8
90°	37.9	39.4	39.4	39.1	38.7	38.3	37.9	37.5	37.2	36.8	36.8
92.5°	34.5	36.0	36.0	35.7	35.3	34.9	34.9	34.5	34.2	33.8	33.4
95°	31.5	33.0	33.0	33.0	32.7	32.3	32.3	31.9	31.5	31.5	31.2
97.5°	28.5	30.0	30.0	30.0	29.7	29.3	29.3	28.9	28.9	28.9	28.5
100°	25.9	27.0	27.4	27.4	27.0	27.0	27.0	26.7	26.7	26.7	26.3
102.5°	23.3	24.4	25.2	25.2	25.2	24.8	24.8	24.8	24.8	24.8	24.4
105°	21.0	22.2	22.9	23.3	23.3	23.3	23.3	23.3	23.3	23.3	23.3
107.5°	19.2	20.3	21.0	21.4	21.8	21.8	22.2	22.2	22.2	22.2	22.2
110°	17.3	18.4	19.5	19.9	20.3	20.7	20.7	21.0	20.7	20.7	20.7



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-18SL-LC-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	15.4	16.9	17.6	18.4	18.8	19.2	19.5	19.5	19.5	19.5	19.5
115°	13.9	15.4	16.1	16.9	17.6	18.0	18.0	18.4	18.4	18.4	18.0
117.5°	12.4	13.9	14.6	15.4	15.8	16.5	16.9	16.9	16.9	16.9	16.5
120°	11.3	12.4	13.1	13.9	14.6	15.0	15.4	15.4	15.4	15.4	15.4
122.5°	9.8	10.9	12.0	12.8	13.1	13.5	13.9	13.9	13.9	13.9	13.9
125°	8.6	9.8	10.5	11.3	11.6	12.4	12.4	12.4	12.4	12.4	12.4
127.5°	7.5	8.6	9.4	10.1	10.5	10.9	11.3	11.3	11.3	11.3	11.3
130°	6.4	7.5	8.3	9.0	9.4	9.8	9.8	10.1	10.1	10.1	10.1
132.5°	5.6	6.4	7.1	7.9	8.3	8.6	8.6	9.0	9.0	9.0	9.0
135°	4.5	5.6	6.0	6.8	7.1	7.5	7.5	7.9	7.9	7.9	7.9
137.5°	3.8	4.5	5.3	6.0	6.4	6.4	6.8	6.8	7.1	7.1	7.1
140°	3.0	3.4	4.5	4.9	5.3	5.6	6.0	6.0	6.0	6.0	6.0
142.5°	2.3	3.0	3.4	4.1	4.5	4.9	5.3	5.3	5.3	5.3	5.3
145°	1.9	2.3	2.6	3.4	3.8	4.1	4.5	4.5	4.5	4.5	4.5
147.5°	1.5	1.9	2.3	2.6	3.0	3.4	3.8	3.8	3.8	3.8	3.8
150°	1.1	1.5	1.9	1.9	2.3	2.6	3.0	3.4	3.4	3.4	3.4
152.5°	1.1	1.1	1.5	1.5	1.9	2.3	2.6	2.6	2.6	2.6	2.6
155°	0.8	1.1	1.1	1.1	1.5	1.5	1.9	2.3	2.3	2.3	2.3
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-18SL-LC-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	726.9	726.9	726.9	726.9	726.9	726.9	726.9	726.9	726.9	726.9	726.9
2.5°	726.9	728.5	727.7	726.6	726.2	728.1	726.2	717.6	720.9	721.3	723.9
5°	725.8	726.9	726.2	725.4	724.3	726.6	724.3	715.3	718.7	719.1	721.7
7.5°	733.3	733.7	733.7	731.8	728.8	730.0	726.9	716.8	718.7	718.7	720.6
10°	752.1	752.9	754.0	749.1	745.3	742.3	738.2	725.8	725.4	722.4	722.4
12.5°	776.5	774.6	772.8	770.5	767.5	763.7	757.7	743.1	738.2	733.3	728.5
15°	783.6	782.9	782.5	781.4	779.5	778.4	773.9	759.2	752.1	746.1	737.5
17.5°	764.9	766.4	771.3	771.6	773.9	778.4	777.6	767.5	761.1	758.5	748.0
20°	731.1	731.5	737.5	740.1	749.9	757.4	763.0	761.9	760.4	763.4	755.5
22.5°	690.5	693.2	699.5	703.7	713.1	721.7	730.7	735.6	743.5	755.9	754.4
25°	635.3	638.7	647.7	654.5	667.6	680.8	692.8	701.4	710.8	734.5	742.3
27.5°	569.2	574.5	586.1	592.9	611.3	624.8	642.1	659.0	672.1	699.2	715.3
30°	499.8	504.3	516.7	526.1	541.8	560.2	582.0	606.0	627.8	655.2	675.5
32.5°	434.8	439.7	449.8	458.1	475.7	491.1	515.2	544.8	565.1	603.0	630.1
35°	378.1	382.6	389.8	396.9	411.5	427.3	448.0	476.9	502.8	542.2	576.4
37.5°	338.3	339.1	343.2	347.3	358.2	370.2	386.4	411.9	435.9	478.4	515.9
40°	309.8	309.8	312.0	313.2	318.0	325.2	335.3	355.2	375.1	407.4	453.2
42.5°	292.1	291.4	291.4	291.8	291.4	294.8	300.8	310.2	327.8	354.5	390.1
45°	279.0	277.5	276.4	273.7	272.2	272.2	272.6	276.0	286.1	303.4	332.3
47.5°	264.3	264.0	262.1	259.1	256.5	254.6	251.6	250.5	253.5	263.2	282.7
50°	247.4	245.6	243.7	241.4	238.4	236.6	230.9	231.3	228.7	233.2	243.3
52.5°	222.7	221.2	220.4	218.5	217.4	216.7	212.2	207.6	206.5	207.3	211.0
55°	195.3	196.0	193.0	194.5	194.1	190.7	188.9	185.5	184.4	184.0	185.9
57.5°	166.7	167.5	165.6	167.1	167.1	165.2	164.1	164.1	161.5	159.2	161.8
60°	140.8	139.3	140.4	142.3	142.3	141.2	140.4	140.4	138.6	137.8	139.7
62.5°	119.8	118.3	119.4	121.3	121.7	120.9	120.2	120.2	117.9	117.9	119.4
65°	103.6	104.0	103.6	105.1	105.1	105.5	104.8	104.0	101.4	102.5	102.1
67.5°	92.0	91.6	91.6	93.1	92.7	93.5	92.7	91.6	89.7	88.2	87.9
70°	82.2	81.9	81.9	82.6	83.0	83.0	82.6	81.9	79.2	77.7	76.6
72.5°	73.6	73.2	73.6	74.0	74.3	74.7	74.3	73.6	71.3	69.5	67.6
75°	65.7	65.3	66.5	66.5	66.8	66.8	67.2	66.8	65.0	62.7	60.5
77.5°	57.8	58.2	59.3	59.7	60.5	60.8	61.2	61.2	59.3	57.5	54.4
80°	51.4	52.2	52.9	53.3	54.1	55.2	55.6	55.9	54.4	52.6	49.2
82.5°	46.9	47.3	48.1	48.4	49.6	49.9	50.3	51.1	50.3	48.4	44.7
85°	43.2	43.6	44.3	44.3	45.1	45.8	46.2	46.6	46.2	44.3	40.6
87.5°	39.8	40.2	40.6	40.9	41.3	41.7	42.1	42.4	42.1	40.2	36.8
90°	36.8	36.8	37.2	37.2	37.5	37.9	38.7	38.7	38.3	36.8	33.4
92.5°	33.4	33.8	33.8	34.2	34.5	34.9	35.3	35.3	34.9	33.4	30.4
95°	31.2	31.2	31.5	31.5	31.9	31.9	32.3	32.3	31.9	30.4	27.4
97.5°	28.5	28.5	28.5	28.5	28.9	28.9	29.3	29.3	28.9	27.4	24.8
100°	26.3	26.3	26.3	26.3	26.3	26.7	26.7	26.7	26.3	24.8	22.2
102.5°	24.4	24.4	24.4	24.4	24.4	24.4	24.4	24.4	23.7	22.5	19.9
105°	23.3	23.3	23.3	22.9	22.9	22.9	22.5	22.5	21.4	20.3	18.0
107.5°	21.8	21.8	21.8	21.4	21.4	21.0	20.7	20.7	19.5	18.4	16.1
110°	20.7	20.7	20.7	20.3	19.9	19.5	19.2	18.8	17.6	16.1	14.3





TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-18SL-LC-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	19.5	19.5	19.2	19.2	18.8	18.4	17.6	17.3	16.1	14.6	12.8
115°	18.0	18.0	18.0	17.6	17.3	16.9	16.5	15.8	14.6	13.1	11.3
117.5°	16.5	16.5	16.5	16.1	15.8	15.4	15.0	14.3	13.1	11.6	10.1
120°	15.0	15.0	15.0	14.6	14.3	13.9	13.5	12.8	11.6	10.5	8.6
122.5°	13.9	13.9	13.5	13.1	12.8	12.4	12.0	11.3	10.5	9.0	7.5
125°	12.4	12.4	12.0	12.0	11.6	11.3	10.9	10.1	9.0	7.9	6.8
127.5°	11.3	10.9	10.9	10.9	10.5	10.1	9.4	9.0	7.9	6.8	5.6
130°	9.8	9.8	9.8	9.4	9.4	9.0	8.3	7.5	6.8	6.0	4.9
132.5°	8.6	8.6	8.6	8.6	8.3	7.9	7.1	6.8	6.0	4.9	4.1
135°	7.9	7.9	7.5	7.5	7.1	6.8	6.4	5.6	4.9	4.1	3.4
137.5°	6.8	6.8	6.8	6.4	6.4	6.0	5.3	4.9	4.5	3.8	3.0
140°	6.0	6.0	5.6	5.6	5.3	5.3	4.9	4.1	3.8	3.0	2.6
142.5°	5.3	5.3	4.9	4.9	4.5	4.5	4.1	3.8	3.0	2.6	1.9
145°	4.5	4.5	4.1	4.1	4.1	3.8	3.4	3.0	2.6	2.3	1.9
147.5°	3.8	3.8	3.8	3.4	3.4	3.0	3.0	2.6	2.3	1.9	1.5
150°	3.4	3.4	3.0	3.0	3.0	2.6	2.3	2.3	1.9	1.5	1.1
152.5°	2.6	2.6	2.6	2.6	2.3	2.3	1.9	1.9	1.5	1.1	1.1
155°	2.3	2.3	2.3	1.9	1.9	1.9	1.5	1.5	1.1	1.1	0.8
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-18SL-LC-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	726.9	726.9	726.9	726.9	726.9	726.9	726.9
2.5°	722.8	722.4	725.8	725.4	720.9	727.7	732.2
5°	720.9	720.6	723.6	724.3	719.4	726.6	731.5
7.5°	719.4	719.1	722.4	723.6	718.7	725.1	730.3
10°	719.8	717.9	720.9	721.7	717.2	723.9	728.5
12.5°	722.4	717.9	719.1	719.1	714.9	720.9	725.8
15°	728.8	719.4	717.9	716.8	711.6	717.2	722.1
17.5°	736.0	723.2	717.9	714.2	707.8	712.7	717.9
20°	743.1	727.3	718.7	712.7	704.0	708.6	712.3
22.5°	746.5	731.1	719.4	710.4	699.5	701.8	705.9
25°	742.0	729.6	717.9	707.0	693.9	694.3	697.7
27.5°	725.4	722.1	714.6	703.7	689.4	687.5	690.2
30°	697.3	706.7	707.0	699.2	684.1	680.4	681.5
32.5°	657.9	678.9	691.3	689.8	676.6	671.4	672.1
35°	612.4	638.7	665.7	674.8	665.4	661.2	659.7
37.5°	558.0	593.3	629.3	651.5	650.0	647.3	645.8
40°	497.9	540.3	583.1	618.4	629.3	629.3	630.1
42.5°	433.7	483.3	530.2	574.9	600.4	606.0	608.3
45°	371.7	421.7	472.7	524.2	558.4	576.0	582.4
47.5°	315.4	365.7	414.2	470.5	515.9	538.8	549.0
50°	267.3	304.9	356.0	411.9	461.5	489.6	509.5
52.5°	227.5	256.8	301.5	353.7	403.7	442.3	460.7
55°	194.1	214.0	252.0	297.0	344.7	384.9	406.3
57.5°	166.0	181.7	207.6	245.2	285.4	325.2	348.1
60°	141.2	152.1	169.7	199.4	233.6	267.7	289.9
62.5°	119.8	126.9	138.6	160.3	187.0	213.7	234.3
65°	103.3	106.3	112.6	126.2	146.4	166.7	184.4
67.5°	87.1	89.0	93.9	102.1	112.3	126.9	138.6
70°	75.1	75.1	75.5	80.4	85.6	95.0	103.3
72.5°	65.3	64.2	62.0	63.1	64.2	69.5	74.7
75°	57.5	54.8	51.1	49.6	48.8	49.6	52.6
77.5°	50.7	46.9	42.4	38.7	35.7	34.5	37.2
80°	45.1	40.6	35.3	30.4	25.5	22.9	24.0
82.5°	40.6	34.9	29.3	23.7	18.0	14.3	14.3
85°	35.7	30.4	24.4	18.4	12.8	7.9	7.1
87.5°	32.3	26.7	20.3	14.6	9.0	4.1	2.3
90°	28.9	23.3	17.3	11.6	6.4	1.9	0.0
92.5°	25.9	20.7	15.0	9.4	4.5	1.1	0.0
95°	23.3	18.4	12.8	7.9	3.8	0.8	0.4
97.5°	20.7	16.1	11.3	6.4	2.6	0.8	0.4
100°	18.8	14.3	9.8	5.3	2.3	0.4	0.4
102.5°	16.5	12.8	8.3	4.5	1.9	0.4	0.4
105°	14.6	11.3	7.1	3.8	1.5	0.4	0.4
107.5°	13.1	9.8	6.4	3.4	1.5	0.4	0.4
110°	11.6	8.6	5.6	3.0	1.1	0.4	0.4



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-18SL-LC-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	10.5	7.5	4.9	2.6	0.8	0.4	0.4
115°	9.0	6.8	4.1	2.3	0.8	0.4	0.4
117.5°	7.9	5.6	3.8	1.9	0.8	0.4	0.4
120°	6.8	4.9	3.0	1.5	0.4	0.4	0.4
122.5°	6.0	4.1	2.6	1.5	0.4	0.4	0.4
125°	5.3	3.8	2.3	1.1	0.4	0.4	0.4
127.5°	4.5	3.0	1.9	0.8	0.4	0.4	0.4
130°	3.8	2.6	1.5	0.8	0.4	0.4	0.4
132.5°	3.0	2.3	1.5	0.8	0.4	0.4	0.4
135°	2.6	1.9	1.1	0.8	0.4	0.4	0.4
137.5°	2.3	1.5	0.8	0.8	0.8	0.4	0.4
140°	1.9	1.1	0.8	0.8	0.8	0.8	0.4
142.5°	1.5	1.1	0.8	0.8	0.8	0.8	0.4
145°	1.1	0.8	0.8	0.8	0.8	0.8	0.4
147.5°	1.1	0.8	0.8	0.8	0.8	0.8	0.4
150°	0.8	0.8	0.8	0.8	0.8	0.8	0.8
152.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8
155°	0.8	0.8	0.8	0.8	0.8	0.8	0.8
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)