

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-LN-UNV-L950-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P#
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33519)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4SNLED-LD5-18SL-LN-UNV-L950-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
NARROW LENS
Light Source: -
Ballast/Driver: -

Summary

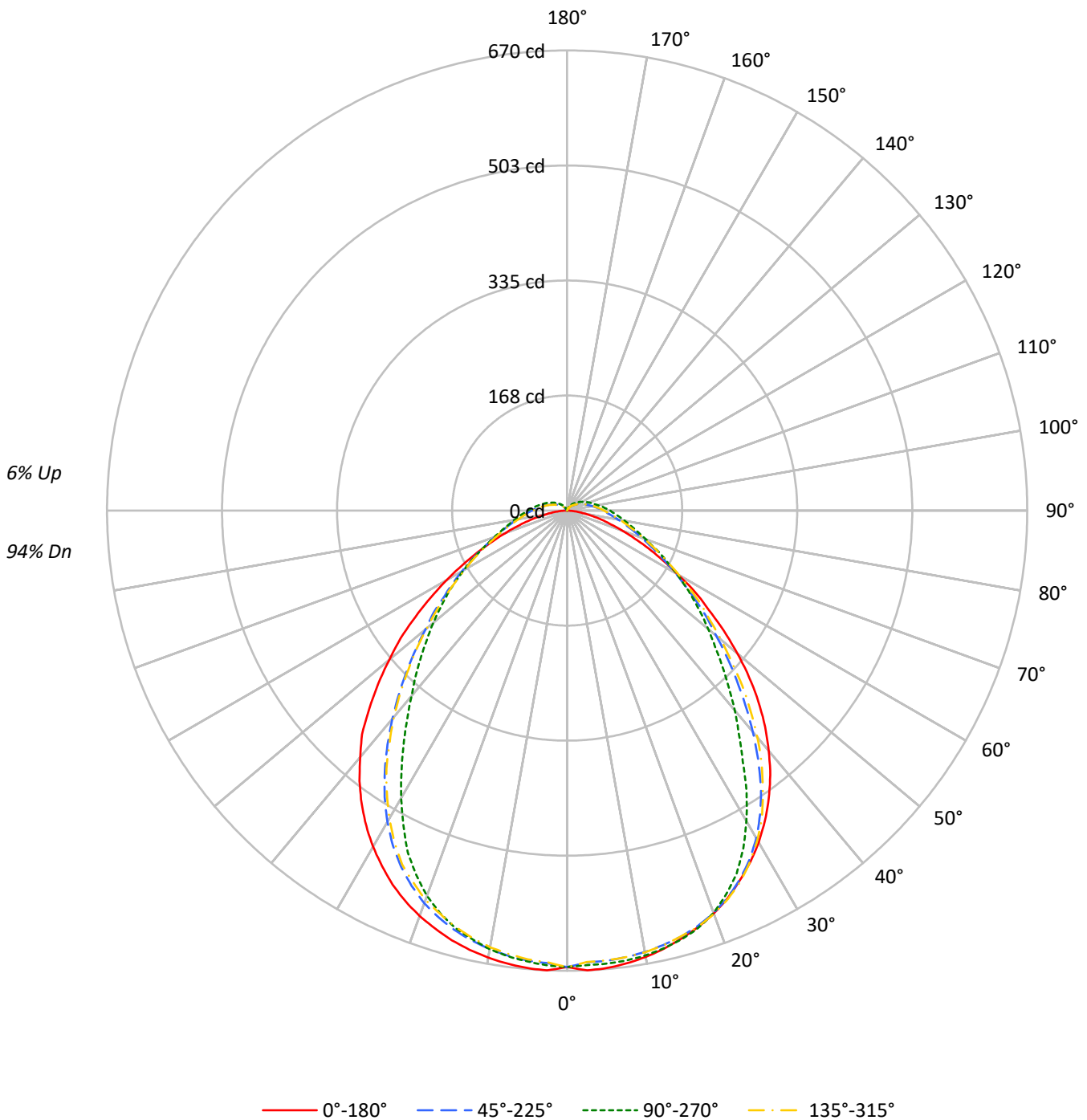
Lumens per Lamp: N/A
Luminaire Lumens: 1682.0 lumens
Efficiency: N/A
Efficacy: 129.4 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.14 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 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#
CATALOG NUMBER: 4SNLED-LD5-18SL-LN-UNV-L950-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P#

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

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	0
RCR																		
0	118	118	118	118	114	114	114	114	108	108	108	102	102	102	96	96	96	94
1	107	103	98	95	104	100	96	92	94	91	88	89	87	85	85	83	81	79
2	98	90	84	78	95	88	82	77	83	78	74	79	75	72	75	72	69	67
3	90	80	72	66	87	78	71	65	74	68	63	71	66	61	67	63	60	57
4	83	72	63	57	80	70	62	56	67	60	55	64	58	53	61	56	52	50
5	77	64	56	50	74	63	55	49	60	53	48	58	52	47	55	50	46	44
6	71	58	50	44	69	57	49	43	55	48	42	52	46	42	50	45	41	39
7	66	53	45	39	64	52	44	39	50	43	38	48	42	37	46	41	37	35
8	62	49	41	35	60	48	40	35	46	39	34	44	38	34	43	37	33	31
9	58	45	37	32	56	44	37	31	42	36	31	41	35	30	40	34	30	28
10	54	42	34	29	53	41	34	29	39	33	28	38	32	28	37	31	27	26

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	5371	5371	5371	5371
5°	5409	5200	5409	5177
10°	5385	5062	5394	4991
15°	5350	4911	5375	4783
20°	5309	4716	5341	4517
25°	5224	4428	5282	4167
30°	5114	4004	5181	3706
35°	4941	3484	5036	3244
40°	4694	3047	4818	2827
45°	4367	2649	4509	2497
50°	3921	2328	4094	2210
55°	3392	2055	3639	1952
60°	2853	1805	3111	1701
65°	2339	1595	2575	1480
70°	1860	1416	2085	1310
75°	1462	1307	1647	1203
80°	1055	1261	1241	1153
85°	649	1269	874	1165



TEST NUMBER: P#

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.0	3.7
10°-20°	180.7	10.7
20°-30°	267.8	15.9
30°-40°	297.5	17.7
40°-50°	269.7	16.0
50°-60°	209.0	12.4
60°-70°	141.9	8.4
70°-80°	90.3	5.4
80°-90°	57.7	3.4
90°-100°	38.9	2.3
100°-110°	26.7	1.6
110°-120°	17.8	1.1
120°-130°	11.1	0.7
130°-140°	6.1	0.4
140°-150°	2.9	0.2
150°-160°	1.1	0.1
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	511.5	30.4
0°-40°	809.0	48.1
0°-60°	1287.6	76.6
0°-90°	1577.5	93.8
90°-120°	83.4	5.0
90°-150°	103.4	6.1
90°-180°	105.0	6.2
0°-180°	1682.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	665	665	665	665	665	
5°	669	662	669	659	669	64
15°	645	646	648	629	645	182
25°	594	584	601	549	594	274
35°	512	446	522	415	512	319
45°	394	319	407	300	394	303
55°	252	224	270	213	252	226
65°	130	151	144	140	130	131
75°	52	100	59	92	52	56
85°	10	72	13	66	10	11
90°	0	62	1	57	0	1
95°	0	53	0	50	0	0
105°	0	39	0	37	0	0
115°	0	30	0	27	0	0
125°	0	22	0	19	0	0
135°	0	15	0	12	0	0
145°	0	10	0	7	0	0
155°	0	6	0	3	0	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-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	664.6	664.6	664.6	664.6	664.6	664.6	664.6	664.6	664.6	664.6	664.6
2.5°	670.1	669.4	668.6	667.6	668.6	671.6	669.7	665.7	665.0	658.4	661.3
5°	668.6	667.6	666.8	665.7	667.2	670.8	669.0	665.4	664.3	658.0	661.3
7.5°	665.0	664.3	663.2	663.2	664.6	668.3	666.8	662.8	662.1	655.9	659.5
10°	659.9	659.5	658.8	658.8	660.2	664.6	662.8	659.1	658.4	652.6	656.6
12.5°	653.3	653.7	652.6	652.6	654.8	659.1	657.7	653.7	652.9	647.8	651.8
15°	644.9	645.3	644.5	644.9	647.1	652.2	650.4	646.7	646.0	642.0	645.3
17.5°	635.4	635.7	635.7	635.4	637.9	643.1	641.6	638.3	637.2	633.9	637.9
20°	624.4	624.4	624.4	624.4	627.3	632.5	630.6	628.1	625.9	623.3	626.6
22.5°	610.9	610.5	610.9	612.0	614.9	618.9	617.8	614.9	611.6	610.2	612.7
25°	594.4	595.5	595.9	597.0	600.7	603.9	602.8	599.9	594.8	593.7	594.4
27.5°	577.3	578.0	579.1	578.7	583.8	587.1	584.9	582.4	575.1	574.0	573.2
30°	557.9	559.0	559.7	559.3	563.4	567.0	564.8	561.5	551.7	550.9	545.1
32.5°	535.9	537.0	537.8	537.8	543.6	545.1	541.1	536.3	525.7	523.1	518.0
35°	511.8	512.9	513.3	513.3	519.1	518.8	513.6	507.1	495.4	492.1	483.3
37.5°	485.9	486.6	487.0	489.1	491.7	489.5	482.9	474.5	465.8	456.6	447.1
40°	456.6	457.7	458.4	459.9	462.5	459.9	450.4	440.2	430.7	420.4	410.9
42.5°	426.6	429.9	429.2	428.8	430.3	423.3	416.0	404.3	394.8	384.2	374.7
45°	394.1	393.7	395.6	396.3	395.9	390.1	379.8	369.2	359.7	348.8	340.7
47.5°	359.7	359.4	360.8	361.6	359.4	353.2	345.1	333.0	325.0	315.5	309.3
50°	323.5	323.5	325.7	323.5	322.4	316.2	309.6	297.6	291.4	283.0	279.3
52.5°	287.3	290.6	288.4	287.7	286.6	280.4	275.3	265.4	260.3	256.6	252.3
55°	251.5	255.2	253.7	252.6	252.3	247.1	242.4	235.1	231.8	229.2	226.7
57.5°	221.2	220.8	220.1	219.0	219.3	215.3	210.6	206.6	205.1	204.0	204.7
60°	186.1	189.0	187.9	188.3	188.6	187.9	183.9	181.3	181.7	182.1	183.2
62.5°	157.2	159.8	161.6	160.1	160.9	162.0	159.8	159.0	160.5	162.0	163.4
65°	130.5	133.1	134.9	134.5	136.7	138.9	138.6	139.3	142.6	144.4	146.2
67.5°	106.4	108.9	111.5	111.9	115.2	118.4	119.9	122.5	126.1	128.7	130.9
70°	85.5	87.7	90.7	92.5	96.9	101.3	103.8	108.9	111.1	114.8	116.3
72.5°	66.9	68.7	72.8	77.1	80.8	86.3	91.4	95.8	99.1	103.1	104.9
75°	52.3	53.0	57.4	62.5	67.6	73.8	79.3	84.1	88.5	92.5	95.4
77.5°	38.4	39.5	43.5	50.5	56.3	62.9	69.1	74.2	79.0	83.0	87.0
80°	26.7	28.9	33.3	40.2	46.8	54.1	60.0	65.8	70.9	74.9	79.0
82.5°	17.2	19.0	25.2	32.2	39.1	46.4	52.6	58.5	64.0	68.4	72.0
85°	9.5	12.1	18.3	25.6	32.5	39.8	46.4	52.3	57.8	61.8	65.4
87.5°	3.7	7.3	13.2	20.1	27.1	34.0	40.9	46.4	51.9	56.3	59.6
90°	0.0	4.4	9.9	16.8	23.8	30.7	37.3	43.1	48.3	52.3	55.9
92.5°	0.4	2.9	7.7	13.5	20.1	26.7	32.9	38.8	43.9	47.9	51.2
95°	0.4	2.2	6.2	11.7	17.5	23.8	29.6	35.1	39.8	43.9	47.2
97.5°	0.4	1.5	5.1	10.2	15.4	21.6	27.1	32.2	36.6	40.6	43.1
100°	0.4	1.5	4.4	8.8	13.9	19.4	24.5	29.6	33.6	36.9	39.8
102.5°	0.4	1.1	3.7	7.7	12.4	17.2	22.3	27.1	30.7	34.0	36.9
105°	0.4	1.1	3.3	6.6	11.0	15.7	20.1	24.5	28.5	31.4	34.0
107.5°	0.4	0.7	2.9	5.5	9.5	14.3	18.6	22.3	26.0	28.9	31.4
110°	0.4	0.7	2.6	5.1	8.4	12.8	16.8	20.5	23.8	26.7	28.9



TEST NUMBER: P#

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

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	0.4	0.7	2.2	4.8	7.7	11.3	15.4	18.6	21.9	24.5	26.7
115°	0.4	0.7	2.2	4.4	6.9	9.9	13.5	17.2	19.7	22.7	24.5
117.5°	0.4	0.7	1.8	3.7	6.6	9.1	12.4	15.4	18.3	20.8	22.7
120°	0.4	0.7	1.8	3.3	5.8	8.4	11.0	13.9	16.8	18.6	20.5
122.5°	0.4	0.7	1.5	3.3	5.1	7.7	9.9	12.4	15.0	17.2	19.0
125°	0.4	0.7	1.5	2.9	4.8	6.9	9.1	11.0	13.5	15.4	17.2
127.5°	0.4	0.7	1.5	2.6	4.4	6.2	8.4	10.2	12.1	13.9	15.4
130°	0.4	0.7	1.1	2.2	4.0	5.5	7.3	9.5	11.0	12.4	13.9
132.5°	0.4	0.7	1.1	2.2	3.3	4.8	6.6	8.4	9.9	11.3	12.4
135°	0.4	0.7	1.1	1.8	2.9	4.4	5.5	7.3	8.8	10.2	11.3
137.5°	0.4	0.7	1.1	1.8	2.6	3.7	4.8	6.2	7.7	8.8	10.2
140°	0.4	0.7	1.1	1.5	2.2	3.3	4.4	5.1	6.6	7.7	8.8
142.5°	0.4	0.7	1.1	1.5	2.2	2.9	3.7	4.4	5.5	6.6	7.7
145°	0.4	0.7	1.1	1.5	1.8	2.6	3.3	4.0	4.4	5.5	6.2
147.5°	0.4	0.7	1.1	1.5	1.5	2.2	2.9	3.3	4.0	4.4	5.1
150°	0.4	0.7	1.1	1.1	1.5	1.8	2.6	2.9	3.3	4.0	4.4
152.5°	0.4	0.7	1.1	1.1	1.5	1.8	2.2	2.6	2.9	3.3	3.7
155°	0.4	0.7	1.1	1.1	1.1	1.5	1.8	2.2	2.6	2.9	3.3
157.5°	0.7	0.7	0.7	1.1	1.1	1.5	1.5	1.8	2.2	2.2	2.6
160°	0.7	0.7	0.7	1.1	1.1	1.1	1.5	1.5	1.8	1.8	2.2
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P#

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

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	664.6	664.6	664.6	664.6	664.6	664.6	664.6	664.6	664.6	664.6	664.6
2.5°	660.6	661.7	665.0	665.0	664.3	663.5	663.5	662.4	663.2	664.6	663.9
5°	660.6	661.7	665.0	665.0	664.3	663.5	663.2	662.1	663.2	664.6	663.9
7.5°	658.4	659.9	663.2	663.2	662.4	662.1	661.3	660.6	661.7	663.2	662.4
10°	655.5	657.0	660.2	660.2	659.5	659.5	658.4	657.7	659.1	660.2	659.9
12.5°	651.1	652.9	655.9	655.5	654.8	655.1	654.0	652.6	654.0	655.1	655.5
15°	644.9	647.1	650.0	649.3	648.2	648.9	647.1	646.0	647.1	649.3	648.9
17.5°	636.8	638.3	640.5	640.5	639.4	638.7	637.9	636.8	637.6	639.0	639.4
20°	625.5	627.3	628.4	627.3	627.0	625.9	624.4	623.3	624.8	627.0	627.3
22.5°	610.5	610.9	613.4	610.9	609.1	608.7	607.2	605.0	607.2	609.1	609.4
25°	591.9	593.7	592.6	588.2	588.2	585.3	584.6	583.5	583.8	587.1	588.6
27.5°	568.1	568.8	565.9	562.3	559.0	557.1	554.6	555.0	555.0	559.3	560.8
30°	542.2	538.1	535.6	529.7	527.2	522.8	522.1	522.1	521.3	523.5	530.1
32.5°	511.1	505.6	501.6	496.1	491.7	487.3	485.1	486.2	485.9	491.3	493.5
35°	477.1	473.8	465.4	458.4	455.9	449.3	449.3	446.0	448.2	454.4	457.0
37.5°	441.3	436.1	429.2	421.5	419.7	414.6	412.7	410.9	415.7	416.8	419.3
40°	404.7	399.9	393.4	386.1	386.1	379.8	379.8	379.8	380.2	382.4	387.2
42.5°	370.0	364.9	359.0	353.9	353.2	348.4	348.4	348.0	348.8	350.6	355.0
45°	336.3	332.3	326.1	323.5	323.9	318.8	319.9	318.8	320.3	322.1	323.5
47.5°	305.3	302.7	300.1	296.5	295.4	295.0	293.2	291.7	294.3	294.3	296.5
50°	276.4	274.9	273.5	271.3	271.6	270.2	268.0	268.0	269.8	270.2	271.6
52.5°	251.2	249.3	247.5	247.9	248.2	247.5	246.4	245.3	246.4	247.1	249.0
55°	225.9	224.5	226.3	225.6	226.3	225.6	224.8	224.1	225.9	224.8	226.7
57.5°	203.3	204.7	205.5	204.0	205.1	204.4	204.7	203.6	205.1	205.8	205.5
60°	182.4	184.6	183.5	183.9	185.4	184.6	183.2	184.3	185.7	186.1	185.7
62.5°	163.4	166.0	167.1	166.3	166.7	166.0	167.1	165.6	167.4	168.2	167.1
65°	146.2	149.2	149.9	149.9	149.9	149.2	150.3	150.6	151.4	151.4	150.6
67.5°	131.6	134.2	134.9	135.6	134.9	134.2	134.2	134.5	136.0	136.7	136.0
70°	118.4	121.0	121.4	121.4	121.7	122.5	121.0	121.7	122.8	123.2	122.8
72.5°	107.1	109.7	110.4	110.0	110.4	110.8	110.8	110.0	111.1	111.9	111.9
75°	98.0	99.4	100.2	100.2	100.5	100.9	100.9	100.5	101.3	101.6	102.0
77.5°	89.6	90.7	91.8	91.8	92.1	91.8	92.5	92.5	92.9	93.2	93.6
80°	81.2	82.6	83.4	83.7	84.4	84.8	84.8	84.8	85.2	85.5	85.5
82.5°	74.6	75.7	76.8	77.9	77.9	78.2	78.2	78.2	78.6	78.6	79.0
85°	68.0	69.5	70.6	71.3	71.7	72.0	72.0	72.4	72.4	72.4	72.8
87.5°	62.1	64.0	64.7	65.4	65.8	66.5	66.5	66.5	66.9	66.9	66.9
90°	58.1	60.0	60.7	61.4	61.8	62.1	62.1	62.5	62.5	62.9	62.9
92.5°	53.4	55.2	56.7	56.7	57.0	57.8	57.4	57.4	57.8	58.1	58.1
95°	49.7	51.2	52.3	52.6	53.0	53.0	53.0	53.4	53.0	53.4	53.4
97.5°	45.3	46.8	47.9	48.6	49.0	49.0	49.0	49.4	49.0	49.4	49.4
100°	41.7	43.1	44.2	44.6	45.3	45.3	45.3	45.3	45.3	45.3	45.7
102.5°	38.8	40.2	40.9	41.3	41.7	42.0	42.0	42.0	42.0	42.4	42.4
105°	35.8	37.3	38.0	38.4	38.8	39.1	39.1	39.1	39.5	39.5	39.1
107.5°	33.3	34.4	35.1	35.8	36.2	36.2	36.6	36.6	36.6	36.6	36.6
110°	30.7	31.8	32.9	33.6	33.6	34.0	34.0	34.4	34.4	34.0	34.4



TEST NUMBER: P#

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

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	28.1	29.6	30.3	31.1	31.4	31.8	31.8	31.8	31.8	31.8	31.8
115°	26.0	27.4	28.1	28.9	29.2	29.6	29.6	29.6	29.6	29.6	29.6
117.5°	24.1	25.6	26.3	26.7	27.1	27.4	27.8	27.8	27.8	27.8	27.4
120°	22.3	23.4	24.1	24.9	25.2	25.6	25.6	25.6	25.6	25.6	25.6
122.5°	20.5	21.6	22.3	23.0	23.4	23.8	23.8	23.8	23.8	23.8	23.8
125°	18.6	19.7	20.5	21.2	21.6	21.9	21.9	21.9	21.9	21.9	21.9
127.5°	16.8	17.9	19.0	19.4	19.7	20.1	20.1	20.1	20.5	20.1	20.1
130°	15.0	16.1	17.2	17.5	17.9	18.3	18.6	18.6	18.6	18.6	18.3
132.5°	13.5	14.6	15.4	15.7	16.5	16.5	16.8	16.8	16.8	16.8	16.5
135°	12.4	13.2	13.9	14.3	15.0	15.0	15.0	15.4	15.4	15.0	14.6
137.5°	11.0	11.7	12.4	12.8	13.2	13.5	13.5	13.9	13.5	13.5	13.5
140°	10.2	10.6	11.3	11.7	12.1	12.1	12.1	12.4	12.4	12.1	12.1
142.5°	8.8	9.5	10.2	10.6	11.0	11.0	11.0	11.0	11.0	11.0	11.0
145°	7.3	8.4	8.8	9.5	9.5	9.9	9.9	9.9	9.9	9.9	9.5
147.5°	6.2	6.9	8.0	8.4	8.4	8.8	8.8	8.8	8.8	8.8	8.4
150°	4.8	5.5	6.6	7.3	7.3	7.7	7.7	7.7	7.7	7.3	7.3
152.5°	4.0	4.8	5.1	5.8	6.2	6.2	6.2	6.6	6.2	6.2	6.2
155°	3.7	4.0	4.4	4.8	5.1	5.5	5.5	5.5	5.5	5.1	5.1
157.5°	2.9	3.3	3.7	4.0	4.4	4.8	4.8	4.8	4.8	4.8	4.4
160°	2.2	2.6	2.9	2.9	3.3	3.7	4.0	3.7	3.7	3.7	3.7
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-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	664.6	664.6	664.6	664.6	664.6	664.6	664.6	664.6	664.6	664.6	664.6
2.5°	663.2	662.8	663.9	662.1	656.6	658.0	657.3	660.6	661.3	662.1	665.4
5°	663.2	662.8	663.5	662.1	656.2	657.3	656.6	659.9	660.6	661.0	664.3
7.5°	661.7	661.3	662.4	660.6	654.4	655.9	654.8	658.0	658.4	658.8	661.7
10°	658.8	658.4	659.1	657.7	651.5	652.9	651.5	654.8	654.8	655.5	657.7
12.5°	654.4	653.7	655.1	653.3	646.3	648.2	647.4	649.6	650.0	650.4	652.6
15°	648.2	647.4	648.5	647.4	641.2	641.6	640.5	643.8	644.2	643.4	645.6
17.5°	639.0	638.3	640.5	639.8	633.6	635.0	634.7	635.4	636.5	634.7	637.6
20°	627.7	628.4	629.2	629.5	624.8	624.8	624.4	625.9	627.0	625.5	627.7
22.5°	610.9	612.7	614.9	615.6	612.4	612.0	614.2	613.4	614.5	613.8	615.3
25°	589.7	593.3	595.5	597.7	595.9	596.6	599.9	600.7	600.7	600.3	601.7
27.5°	563.4	568.1	572.1	576.9	575.1	576.5	582.0	582.7	584.2	582.7	585.7
30°	531.9	536.3	544.0	550.9	551.7	553.9	561.5	562.3	566.3	564.8	565.9
32.5°	500.5	502.7	511.4	518.4	522.8	528.3	536.7	538.1	543.6	544.7	544.7
35°	461.0	467.2	475.3	485.1	490.6	496.5	507.8	510.0	518.0	520.6	523.5
37.5°	427.7	433.6	438.7	448.9	458.8	465.4	474.5	480.0	488.4	493.2	496.8
40°	392.3	397.0	402.5	412.7	421.2	431.0	440.2	446.7	457.3	462.8	467.6
42.5°	358.6	362.3	368.1	375.5	384.2	395.2	404.0	411.6	423.0	430.7	436.1
45°	328.7	330.9	336.0	341.5	349.1	360.5	368.9	378.7	387.9	395.9	402.5
47.5°	300.5	303.4	306.0	309.6	316.6	323.5	333.4	342.9	352.1	360.8	367.4
50°	274.6	274.6	278.6	281.1	285.9	292.1	299.8	306.4	317.7	323.9	332.3
52.5°	249.3	250.8	253.0	254.4	258.1	262.1	268.3	273.8	283.3	289.2	297.2
55°	227.0	228.5	229.6	230.3	232.5	237.3	239.5	243.8	250.4	255.2	262.1
57.5°	205.8	206.6	207.7	208.0	208.4	211.3	213.1	214.2	220.8	225.6	231.4
60°	186.4	186.4	187.5	187.2	186.8	188.3	187.9	189.0	193.0	196.0	198.5
62.5°	168.2	168.2	168.5	167.8	167.4	167.4	166.0	167.1	168.2	168.5	170.4
65°	151.4	153.2	151.7	152.1	149.9	149.2	148.4	146.2	145.9	144.4	145.1
67.5°	136.4	137.8	136.4	136.4	134.5	133.1	131.2	127.6	126.5	123.6	122.8
70°	124.3	123.2	123.9	122.8	120.6	118.8	116.3	113.3	109.7	106.0	103.5
72.5°	112.6	112.6	111.9	110.8	109.7	106.0	103.1	99.8	95.4	90.7	87.0
75°	101.3	101.6	101.6	100.5	98.7	95.4	92.1	87.4	82.6	77.1	72.4
77.5°	93.2	93.2	93.2	91.4	89.6	86.6	82.6	77.5	72.4	65.8	60.3
80°	85.5	85.2	85.2	83.0	81.2	77.9	73.8	68.7	63.2	56.3	50.1
82.5°	79.3	79.0	78.2	76.4	73.8	70.6	66.5	61.1	55.2	49.0	41.3
85°	72.8	72.4	71.7	69.8	67.3	64.3	60.0	54.5	48.6	41.7	34.4
87.5°	66.9	66.5	65.4	64.3	61.4	58.1	53.7	48.6	42.4	35.8	28.5
90°	62.9	62.1	61.4	60.0	57.4	53.7	49.4	43.9	37.7	31.1	23.8
92.5°	58.1	57.8	56.7	55.2	53.0	49.4	45.0	39.8	33.6	27.4	20.5
95°	53.4	53.0	52.3	50.8	48.6	45.3	41.3	36.2	30.3	24.1	17.9
97.5°	49.0	49.0	47.9	46.8	44.2	41.7	37.7	32.9	27.4	21.9	16.1
100°	45.3	45.3	44.2	42.8	40.9	38.4	34.4	30.0	24.9	19.7	13.9
102.5°	42.0	41.7	40.9	39.5	37.7	35.1	31.4	27.4	22.7	17.5	12.4
105°	39.1	38.8	38.0	36.6	35.1	32.2	29.2	25.2	20.5	15.7	11.0
107.5°	36.2	35.8	35.5	34.0	32.2	29.6	26.7	22.7	18.6	14.3	9.9
110°	33.6	33.3	32.5	31.1	29.2	27.1	24.1	20.8	16.8	12.8	8.8



TEST NUMBER: P#

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

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	31.4	31.1	30.3	28.9	27.4	24.9	22.3	18.6	15.4	11.7	7.7
115°	29.2	28.9	28.1	26.7	24.9	22.7	20.1	17.2	13.5	10.2	6.9
117.5°	27.1	26.7	26.0	24.9	23.0	20.8	18.3	15.4	12.1	9.5	6.2
120°	25.2	24.5	23.8	22.7	20.8	19.0	16.5	13.9	11.0	8.4	5.5
122.5°	23.4	22.7	21.9	20.8	19.0	17.2	14.6	12.4	10.2	7.7	5.1
125°	21.2	20.8	20.1	19.0	17.2	15.4	13.5	11.3	9.1	6.9	4.4
127.5°	19.4	19.0	18.3	16.8	15.4	13.9	12.1	10.2	8.0	5.8	4.0
130°	17.9	17.2	16.5	15.4	14.3	12.8	11.0	9.1	7.3	5.1	3.7
132.5°	16.1	15.4	14.6	13.9	12.8	11.3	9.9	8.0	6.6	4.8	3.3
135°	14.6	13.9	13.2	12.4	11.3	10.2	8.8	7.3	5.8	4.4	2.9
137.5°	12.8	12.4	12.1	11.3	10.2	9.1	8.0	6.2	5.1	4.0	2.6
140°	11.7	11.3	11.0	9.9	9.1	8.0	6.9	5.5	4.4	3.3	2.2
142.5°	10.6	10.2	9.5	8.8	8.0	7.3	5.8	5.1	4.0	2.9	2.2
145°	9.1	8.8	8.4	7.7	6.9	5.8	5.1	4.4	3.7	2.6	1.8
147.5°	8.4	8.0	7.3	6.6	5.8	5.1	4.8	4.0	2.9	2.2	1.5
150°	6.9	6.6	6.2	5.5	5.1	4.8	4.0	3.3	2.6	1.8	1.5
152.5°	5.8	5.5	5.1	5.1	4.4	4.0	3.3	2.9	2.2	1.8	1.1
155°	5.1	5.1	4.8	4.4	3.7	3.3	2.9	2.2	1.8	1.5	1.1
157.5°	4.4	4.0	3.7	3.7	3.3	2.9	2.2	1.8	1.5	1.5	1.1
160°	3.7	3.3	3.3	2.9	2.6	2.2	1.8	1.8	1.5	1.1	1.1
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-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	664.6	664.6	664.6	664.6	664.6	664.6	664.6	664.6	664.6	664.6	664.6
2.5°	665.7	661.7	665.4	670.1	670.1	669.4	668.6	670.1	673.8	672.3	667.9
5°	664.6	660.6	663.9	668.6	668.6	667.6	666.8	667.9	671.9	670.1	666.1
7.5°	662.4	658.8	661.0	665.4	665.4	664.3	663.5	665.0	668.3	666.5	662.1
10°	658.4	654.4	657.0	661.0	660.6	659.9	658.8	660.6	663.5	661.0	655.9
12.5°	653.3	649.3	651.5	655.1	654.8	653.3	652.6	653.7	656.2	654.8	649.3
15°	646.3	642.3	644.2	647.8	646.7	645.6	644.2	644.5	647.8	645.3	639.4
17.5°	637.9	633.6	635.0	638.3	637.2	636.1	634.3	634.7	638.3	634.7	628.4
20°	627.7	623.0	624.0	628.1	626.2	624.4	622.6	622.6	626.2	622.2	615.3
22.5°	616.7	612.0	612.7	615.6	614.2	610.9	609.1	610.2	612.0	606.9	599.6
25°	603.2	597.0	598.1	601.0	599.9	595.5	593.7	594.4	593.7	589.7	582.0
27.5°	587.5	580.9	581.6	583.5	582.0	578.0	575.8	576.2	574.7	569.6	560.8
30°	567.7	564.5	564.1	565.2	563.0	559.0	556.4	555.7	555.3	548.0	537.4
32.5°	547.6	544.7	542.9	544.4	541.8	537.8	533.4	533.4	529.7	522.8	513.6
35°	527.2	522.4	520.6	521.7	518.8	513.6	510.0	508.2	502.7	493.9	484.0
37.5°	500.8	497.6	495.4	496.5	493.2	489.5	482.6	480.7	474.9	462.8	450.4
40°	472.3	469.8	467.6	468.7	465.0	459.5	453.3	450.4	443.8	430.3	420.4
42.5°	441.6	440.5	438.0	442.0	434.7	429.2	423.0	418.2	411.6	397.0	385.7
45°	409.1	411.6	405.8	406.9	402.1	397.4	390.8	383.9	377.3	363.4	350.6
47.5°	374.7	376.5	372.5	373.3	368.1	363.8	357.9	349.1	341.8	329.8	318.4
50°	339.3	338.5	338.5	337.8	333.8	328.3	322.4	314.4	307.1	296.1	286.6
52.5°	301.6	303.1	303.8	305.6	300.5	297.2	288.1	281.1	275.6	264.3	256.3
55°	265.4	270.5	269.1	269.8	264.0	261.4	254.1	248.6	240.6	234.0	228.9
57.5°	232.5	233.6	234.3	235.4	232.9	227.8	221.9	217.5	211.3	205.8	202.2
60°	200.7	200.7	201.1	202.9	200.3	196.0	191.6	188.3	183.9	180.6	178.4
62.5°	170.7	173.3	173.7	172.2	168.9	166.7	163.8	162.0	159.0	157.9	157.2
65°	142.9	142.9	142.9	143.7	141.8	140.4	138.6	138.2	139.3	137.8	138.6
67.5°	119.5	118.4	117.7	118.1	117.4	116.6	116.3	117.4	119.5	119.5	121.4
70°	99.4	97.2	95.8	95.8	95.8	96.1	97.2	99.4	103.1	104.6	107.1
72.5°	83.0	78.2	76.0	76.0	76.4	77.9	81.2	85.2	88.5	91.4	94.7
75°	67.3	62.5	59.2	58.9	59.6	61.8	66.5	70.2	75.7	79.7	83.7
77.5°	54.5	48.6	44.6	44.2	45.3	48.6	54.5	59.2	65.4	69.8	74.2
80°	43.5	36.9	33.6	31.4	33.3	37.3	43.9	49.7	55.6	61.4	66.9
82.5°	34.7	28.5	23.4	21.2	23.4	28.9	35.1	42.0	47.9	54.1	59.6
85°	27.4	20.8	15.0	12.8	15.4	21.2	28.1	35.1	41.7	47.9	53.4
87.5°	21.6	15.0	9.1	6.2	9.5	15.7	22.3	29.2	36.2	42.4	47.9
90°	16.8	10.6	5.1	0.7	5.5	11.3	17.9	24.5	31.4	37.7	43.1
92.5°	14.3	8.0	2.9	0.0	3.3	8.4	14.6	21.2	27.4	33.6	39.1
95°	12.1	6.6	2.2	0.0	2.2	6.6	12.1	17.9	24.1	30.3	35.8
97.5°	10.2	5.1	1.5	0.0	1.5	5.1	9.9	15.7	21.2	27.1	32.2
100°	8.8	4.4	1.1	0.0	1.1	4.0	8.4	13.5	19.0	24.5	29.2
102.5°	7.7	3.7	0.7	0.0	0.7	3.3	6.9	11.7	16.5	21.6	26.3
105°	6.6	2.9	0.7	0.0	0.4	2.6	5.8	10.2	14.6	19.4	23.8
107.5°	5.8	2.6	0.7	0.0	0.4	2.2	5.1	8.8	13.2	17.2	21.2
110°	5.1	2.2	0.7	0.0	0.4	1.5	4.4	7.7	11.3	15.4	19.4



TEST NUMBER: P#

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

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	4.4	1.8	0.4	0.0	0.0	1.1	3.7	6.6	9.9	13.9	17.2
115°	4.0	1.8	0.4	0.0	0.0	0.7	2.9	5.8	8.8	12.4	15.4
117.5°	3.7	1.5	0.4	0.0	0.4	0.7	2.6	5.1	7.7	10.6	13.9
120°	3.3	1.5	0.4	0.0	0.4	0.4	1.8	4.4	6.6	9.5	12.1
122.5°	2.9	1.5	0.4	0.0	0.4	0.4	1.5	3.7	5.8	8.4	10.6
125°	2.6	1.1	0.7	0.4	0.4	0.4	1.1	2.9	5.1	6.9	9.5
127.5°	2.6	1.1	0.7	0.4	0.4	0.4	0.7	2.6	4.0	6.2	8.4
130°	2.2	1.1	0.7	0.4	0.4	0.4	0.4	1.8	3.7	5.1	6.9
132.5°	1.8	1.1	0.7	0.4	0.4	0.4	0.4	1.1	2.6	4.4	5.8
135°	1.8	1.1	0.7	0.4	0.4	0.4	0.4	0.7	1.8	3.3	4.8
137.5°	1.5	0.7	0.7	0.4	0.4	0.4	0.4	0.4	1.5	2.6	3.7
140°	1.5	0.7	0.7	0.4	0.4	0.4	0.4	0.4	1.1	1.8	2.9
142.5°	1.1	0.7	0.7	0.4	0.4	0.4	0.4	0.4	0.7	1.5	2.2
145°	1.1	0.7	0.7	0.4	0.4	0.4	0.4	0.4	0.4	0.7	1.5
147.5°	1.1	1.1	0.7	0.4	0.4	0.4	0.4	0.4	0.4	0.7	1.1
150°	1.1	0.7	0.7	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.7
152.5°	1.1	0.7	0.7	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.7
155°	1.1	0.7	0.7	0.4	0.4	0.4	0.4	0.4	0.4	0.7	0.7
157.5°	1.1	0.7	0.7	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.7
160°	1.1	0.7	0.7	0.4	0.7	0.4	0.7	0.7	0.7	0.7	0.7
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-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	664.6	664.6	664.6	664.6	664.6	664.6	664.6	664.6	664.6	664.6	664.6
2.5°	666.5	659.5	663.2	662.1	663.5	666.5	666.1	665.4	665.4	664.3	662.8
5°	664.3	657.7	661.0	659.1	661.0	663.5	663.2	662.1	662.8	661.0	659.1
7.5°	659.9	654.0	657.0	655.5	657.0	659.5	658.4	658.0	658.8	655.9	654.8
10°	654.8	648.2	651.5	649.6	651.5	653.3	652.6	651.1	652.6	649.6	648.5
12.5°	646.7	641.2	643.4	642.7	643.8	645.6	644.2	643.1	643.8	641.2	639.0
15°	637.9	632.5	634.3	633.2	633.9	636.1	633.6	633.2	632.5	629.9	629.2
17.5°	626.6	621.5	623.3	621.5	622.6	621.9	621.5	619.7	619.7	616.7	614.5
20°	612.7	608.3	607.2	605.8	607.2	605.8	603.6	602.1	601.7	598.8	597.0
22.5°	596.6	591.5	592.2	588.2	588.6	586.4	582.7	581.3	579.8	576.5	574.0
25°	577.3	572.1	568.5	565.9	562.6	562.3	557.5	553.9	553.5	549.5	549.1
27.5°	555.3	549.5	546.5	540.3	536.3	533.0	529.0	525.3	523.5	519.1	516.2
30°	530.1	523.5	516.2	511.8	505.6	503.0	496.1	491.7	490.2	485.5	483.3
32.5°	501.6	494.6	488.8	480.4	473.4	469.8	462.8	458.4	456.6	451.5	448.6
35°	470.5	462.8	455.9	447.8	442.4	436.1	427.7	423.3	419.3	417.5	415.3
37.5°	438.0	429.6	421.5	413.5	408.7	401.4	394.1	391.2	386.4	384.6	382.4
40°	404.3	395.9	388.2	380.6	375.1	368.5	361.9	360.8	355.7	353.9	352.4
42.5°	371.1	362.3	353.5	348.0	344.0	337.4	333.0	331.9	327.6	326.5	326.5
45°	341.1	330.1	322.8	318.1	314.8	309.3	305.6	304.9	301.2	300.5	300.5
47.5°	308.9	298.7	293.2	290.3	287.3	283.3	281.1	281.1	277.5	276.7	276.4
50°	278.9	269.4	265.4	262.5	262.1	259.2	257.4	256.6	256.6	254.1	254.4
52.5°	250.4	245.7	242.4	240.6	238.4	236.5	235.1	235.1	234.0	232.1	232.9
55°	224.1	218.6	219.0	217.5	216.4	215.3	215.7	213.5	213.1	211.7	212.8
57.5°	197.8	197.8	197.0	196.0	194.1	194.9	194.9	194.9	193.0	191.9	193.0
60°	175.5	176.6	174.7	175.8	175.1	175.5	174.7	174.7	173.7	173.3	173.7
62.5°	155.7	157.6	156.8	158.3	157.6	157.9	158.7	157.2	156.5	155.7	156.5
65°	138.2	140.4	140.0	141.1	141.5	141.8	142.2	141.5	140.7	140.0	139.7
67.5°	122.8	125.0	126.5	126.9	127.2	128.3	128.0	127.2	126.5	125.4	125.0
70°	108.9	111.9	113.7	114.4	115.9	115.2	115.2	114.8	114.1	113.0	112.6
72.5°	97.2	100.5	102.4	103.1	104.6	104.6	104.2	103.8	103.1	102.0	101.6
75°	87.0	89.9	92.5	94.0	95.1	95.1	94.7	94.3	93.6	92.9	92.5
77.5°	79.0	81.5	83.7	85.5	86.3	86.6	86.3	85.5	85.5	85.2	84.8
80°	70.9	73.8	76.0	77.9	79.0	79.0	78.6	79.0	78.2	77.9	77.5
82.5°	64.0	67.3	69.8	71.7	72.4	72.8	72.4	72.8	72.0	72.0	72.0
85°	57.8	61.1	64.0	65.4	66.5	66.9	66.9	66.9	66.5	66.5	66.5
87.5°	52.6	55.9	58.9	60.3	61.4	61.8	61.8	62.1	61.4	61.4	61.4
90°	47.9	51.2	54.1	55.6	56.7	57.4	57.4	57.8	57.4	57.0	57.0
92.5°	43.5	47.2	50.1	51.5	52.6	53.7	53.7	54.1	53.4	53.4	53.4
95°	39.8	43.5	46.1	47.9	49.0	49.7	50.1	50.1	49.7	49.7	49.7
97.5°	36.6	39.8	42.4	44.2	45.3	45.7	46.1	46.4	46.1	46.1	46.1
100°	33.3	36.6	39.1	40.6	42.0	42.4	42.8	43.1	43.1	42.8	42.8
102.5°	30.3	33.6	35.8	37.7	38.8	39.5	39.8	39.8	39.8	39.8	39.8
105°	27.4	30.7	32.9	34.7	35.8	36.6	36.9	37.3	37.3	36.9	36.9
107.5°	24.9	27.8	30.3	31.8	33.3	34.0	34.4	34.4	34.7	34.4	34.4
110°	22.3	25.6	27.8	29.2	30.7	31.4	31.8	32.2	32.2	32.2	32.2



TEST NUMBER: P#

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

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	20.5	23.0	25.2	26.7	28.1	28.9	29.2	29.6	30.0	29.6	29.6
115°	18.3	20.8	23.0	24.5	25.6	26.3	27.1	27.4	27.4	27.8	27.4
117.5°	16.5	18.6	20.8	22.3	23.4	24.5	24.9	25.2	25.6	25.2	25.2
120°	14.6	16.8	18.6	20.1	21.2	22.3	22.7	23.0	23.4	23.0	23.0
122.5°	13.2	15.0	16.8	18.3	19.4	20.1	20.8	20.8	21.2	21.2	21.2
125°	11.7	13.5	15.0	16.5	17.5	18.3	18.6	19.0	19.0	19.4	19.4
127.5°	10.2	11.7	13.5	14.6	15.7	16.5	16.8	17.2	17.2	17.5	17.5
130°	8.8	10.2	11.7	12.8	13.9	14.6	15.0	15.4	15.7	15.7	15.7
132.5°	7.7	9.1	10.2	11.3	12.1	12.8	13.5	13.9	13.9	13.9	13.9
135°	6.2	7.7	8.8	9.9	10.6	11.3	11.7	12.4	12.4	12.4	12.4
137.5°	5.1	6.6	7.7	8.4	9.1	9.9	10.2	10.6	11.0	11.0	11.0
140°	4.0	5.1	6.2	7.3	8.0	8.4	9.1	9.1	9.5	9.5	9.5
142.5°	2.9	4.0	4.8	5.8	6.6	7.3	7.7	8.0	8.0	8.0	8.0
145°	2.2	2.9	3.7	4.4	5.5	5.8	6.2	6.6	6.9	6.9	6.9
147.5°	1.5	2.2	2.6	3.3	4.0	4.8	5.1	5.5	5.8	5.8	5.8
150°	1.1	1.5	2.2	2.6	2.9	3.7	4.4	4.4	4.8	4.8	4.4
152.5°	0.7	1.1	1.5	1.8	2.2	2.6	3.3	3.3	3.7	3.7	3.7
155°	0.7	0.7	0.7	1.1	1.5	1.8	2.2	2.6	2.6	2.6	2.6
157.5°	0.7	0.7	0.7	0.7	0.7	1.1	1.5	1.8	1.8	1.8	1.8
160°	0.7	0.7	0.4	0.4	0.7	0.7	0.7	0.7	1.1	1.1	1.1
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-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	664.6	664.6	664.6	664.6	664.6	664.6	664.6	664.6	664.6	664.6	664.6
2.5°	663.9	664.6	664.6	663.9	663.5	665.0	663.2	656.2	658.4	659.1	661.3
5°	660.6	661.3	661.3	661.3	660.6	662.1	660.2	653.3	655.9	657.0	658.4
7.5°	655.9	656.2	657.0	656.6	655.9	658.0	656.2	649.3	651.1	652.9	654.8
10°	649.6	649.6	650.0	650.7	650.0	651.8	650.0	643.8	645.6	646.7	648.9
12.5°	641.2	642.0	642.3	642.0	641.6	643.1	642.3	636.5	637.2	639.4	641.6
15°	629.9	629.9	631.7	631.0	631.0	632.5	633.2	626.6	627.7	631.0	633.2
17.5°	616.0	616.4	617.8	618.6	618.2	620.8	621.1	616.0	615.6	619.7	621.9
20°	598.1	598.8	600.7	602.1	602.1	605.0	606.1	602.8	603.2	607.6	608.3
22.5°	576.2	576.2	579.4	581.6	583.5	585.3	588.6	585.7	585.7	591.5	594.8
25°	549.1	551.7	552.8	557.1	559.7	564.8	567.7	568.1	568.5	574.0	576.2
27.5°	519.1	519.9	523.1	528.3	531.2	535.9	541.4	542.5	544.4	551.7	555.0
30°	485.1	487.3	488.8	496.1	500.1	506.3	513.3	515.8	517.3	527.2	531.2
32.5°	450.4	451.1	457.3	461.4	466.1	472.7	480.7	485.5	488.4	498.7	504.5
35°	415.7	417.1	422.2	427.4	432.1	438.7	447.1	453.7	458.8	467.9	475.6
37.5°	383.9	387.5	388.6	393.7	397.4	404.0	409.8	419.3	424.4	433.9	443.8
40°	355.3	356.4	357.2	362.3	364.9	371.1	379.5	385.7	392.6	399.6	411.3
42.5°	327.2	327.9	329.0	331.9	334.9	339.3	345.5	351.7	359.0	369.2	376.9
45°	301.2	302.0	302.7	304.5	307.1	311.1	315.1	319.5	326.8	335.6	343.6
47.5°	277.1	278.6	278.6	278.9	280.8	284.1	287.0	292.5	296.5	301.2	310.4
50°	254.1	255.2	255.5	255.5	256.6	258.8	259.6	263.2	266.9	271.3	277.8
52.5°	232.5	232.5	232.1	233.6	233.6	235.1	235.4	237.6	240.2	244.9	247.9
55°	212.0	212.0	213.1	212.4	212.4	213.1	212.8	213.1	215.3	218.3	220.8
57.5°	192.3	191.9	193.0	192.3	191.9	192.7	193.4	191.9	192.3	195.2	195.2
60°	172.6	172.9	174.0	173.3	173.3	173.3	172.6	171.8	171.1	172.9	173.7
62.5°	156.8	155.7	156.8	155.7	156.5	156.1	155.4	153.9	154.3	153.5	152.8
65°	140.4	140.4	140.7	139.7	140.4	140.4	139.3	138.9	136.7	136.0	134.2
67.5°	126.1	126.1	126.5	125.8	125.8	126.1	125.0	123.9	121.7	120.6	118.1
70°	113.7	113.7	113.7	113.3	113.3	113.3	112.6	111.1	108.9	107.1	103.8
72.5°	102.4	102.7	102.4	102.4	103.5	102.4	101.3	99.8	98.0	94.3	91.4
75°	93.2	93.6	93.2	93.2	93.2	92.9	92.5	90.3	88.1	85.2	80.8
77.5°	85.2	85.2	85.5	85.2	85.2	84.8	83.7	81.9	79.3	76.8	71.7
80°	77.5	77.9	78.2	78.6	77.9	77.5	76.4	74.9	71.7	68.7	63.6
82.5°	72.0	71.7	72.0	72.4	71.7	71.3	70.2	68.4	65.8	61.8	56.7
85°	66.5	66.2	66.2	66.5	66.2	65.4	64.3	62.5	60.0	55.9	50.8
87.5°	61.1	61.4	61.8	61.4	61.1	60.3	59.2	57.4	54.5	51.2	45.7
90°	57.0	57.0	57.0	57.0	56.7	55.9	54.8	52.6	50.1	46.1	41.3
92.5°	53.4	53.4	53.4	53.4	53.0	51.9	50.8	49.0	46.1	42.0	37.7
95°	49.7	50.1	49.7	49.7	49.0	48.6	46.8	45.0	42.4	38.4	33.6
97.5°	45.7	46.1	45.7	45.7	45.3	44.6	43.5	41.3	38.8	35.1	30.7
100°	42.8	42.8	42.4	42.4	42.0	41.3	39.8	38.0	35.5	31.8	27.4
102.5°	39.5	39.8	39.5	39.5	38.8	38.0	36.9	35.1	32.5	28.9	24.9
105°	36.9	36.9	36.6	36.6	35.8	35.1	34.0	31.8	29.6	26.3	22.3
107.5°	34.4	34.4	34.0	34.0	33.3	32.5	31.1	29.2	27.1	23.8	20.1
110°	31.8	31.8	31.8	31.4	30.7	29.6	28.5	26.7	24.5	21.6	17.9



TEST NUMBER: P#

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

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	30.0	29.6	29.2	28.9	28.1	27.4	26.0	24.1	21.9	19.4	16.1
115°	27.4	27.4	27.1	26.7	26.0	24.9	23.8	22.3	20.1	17.2	14.3
117.5°	25.2	25.2	24.9	24.5	23.8	22.7	21.6	20.1	17.9	15.4	12.8
120°	23.0	23.0	22.7	22.3	21.6	20.5	19.7	17.9	16.1	13.5	11.3
122.5°	21.2	20.8	20.8	20.1	19.7	18.6	17.5	16.1	14.3	12.1	9.9
125°	19.0	19.0	18.6	18.3	17.9	16.8	15.7	14.3	12.4	10.6	8.8
127.5°	17.2	17.2	16.8	16.5	16.1	15.0	13.9	12.8	11.0	9.1	7.3
130°	15.4	15.4	15.0	14.6	14.3	13.2	12.4	11.0	9.5	8.0	6.2
132.5°	13.9	13.9	13.5	13.2	12.4	11.7	11.0	9.5	8.4	6.9	5.5
135°	12.4	12.1	12.1	11.7	11.0	10.2	9.5	8.4	6.9	5.8	4.4
137.5°	11.0	10.6	10.2	9.9	9.5	8.8	8.0	7.3	6.2	4.8	3.7
140°	9.5	9.1	9.1	8.8	8.0	7.7	6.9	5.8	5.1	4.0	2.9
142.5°	8.0	8.0	7.7	7.3	6.9	6.6	5.8	5.1	4.0	3.3	2.2
145°	6.9	6.6	6.6	6.2	5.8	5.1	4.8	4.0	3.3	2.6	1.8
147.5°	5.5	5.5	5.5	5.1	4.8	4.4	4.0	3.3	2.6	1.8	1.1
150°	4.4	4.4	4.4	4.0	3.7	3.3	2.9	2.6	1.8	1.1	0.7
152.5°	3.7	3.7	3.3	3.3	2.9	2.6	2.2	1.8	1.1	0.7	0.7
155°	2.6	2.6	2.6	2.2	2.2	1.8	1.5	1.1	0.7	0.7	0.7
157.5°	1.8	1.8	1.8	1.5	1.5	1.1	1.1	0.7	0.7	0.7	0.7
160°	1.1	1.1	1.1	1.1	0.7	0.7	0.7	0.7	0.7	0.7	0.7
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-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	664.6	664.6	664.6	664.6	664.6	664.6	664.6
2.5°	660.2	659.9	662.8	662.8	659.5	664.6	670.1
5°	658.0	657.7	660.6	660.6	657.7	662.8	668.6
7.5°	653.7	654.0	657.0	657.7	654.0	658.8	665.0
10°	648.9	648.5	651.8	652.6	649.6	654.0	659.9
12.5°	641.2	641.2	644.5	645.6	642.7	647.8	653.3
15°	633.2	633.2	635.4	637.2	634.7	639.4	644.9
17.5°	623.0	622.6	624.8	627.0	624.4	629.5	635.4
20°	609.8	609.8	612.4	614.9	613.1	617.8	624.4
22.5°	595.9	594.4	598.8	600.7	599.6	604.3	610.9
25°	578.4	578.0	582.4	584.9	583.5	588.6	594.4
27.5°	559.3	559.0	563.4	566.7	565.9	570.7	577.3
30°	536.3	538.1	542.2	547.6	545.8	550.9	557.9
32.5°	512.2	514.0	518.8	524.6	525.0	529.0	535.9
35°	483.3	488.1	491.3	499.0	500.5	504.5	511.8
37.5°	453.0	458.4	465.4	471.2	474.2	477.5	485.9
40°	419.0	427.0	434.7	441.6	445.3	448.6	456.6
42.5°	388.2	394.5	401.8	408.7	415.3	418.2	426.6
45°	353.5	360.8	367.4	375.8	382.4	385.7	394.1
47.5°	319.5	326.8	335.6	341.5	348.4	351.7	359.7
50°	287.0	293.6	300.9	307.8	313.7	316.6	323.5
52.5°	254.8	261.8	268.7	273.1	279.3	281.5	287.3
55°	226.3	231.0	237.3	239.8	246.0	247.5	251.5
57.5°	198.9	202.2	204.4	208.7	213.1	216.4	221.2
60°	174.0	175.5	176.9	179.5	183.2	184.3	186.1
62.5°	151.7	151.4	154.3	155.0	155.4	159.0	157.2
65°	132.0	132.3	129.8	128.7	130.1	131.2	130.5
67.5°	115.5	113.3	111.1	108.6	106.4	107.5	106.4
70°	99.4	97.6	94.0	90.3	88.8	86.6	85.5
72.5°	86.6	82.3	78.6	73.8	71.3	68.7	66.9
75°	76.8	70.6	65.4	60.3	56.7	53.0	52.3
77.5°	66.5	60.7	54.8	49.4	43.9	39.8	38.4
80°	58.5	53.0	46.1	39.5	33.6	28.5	26.7
82.5°	51.2	45.3	38.4	31.4	24.9	19.4	17.2
85°	45.0	38.8	31.8	24.9	18.3	12.4	9.5
87.5°	40.2	33.3	26.3	19.7	12.8	6.9	3.7
90°	35.8	29.2	22.7	15.7	9.1	3.7	0.0
92.5°	31.8	25.6	19.0	12.8	6.9	2.2	0.4
95°	28.1	22.7	16.1	10.2	5.1	1.5	0.4
97.5°	25.2	19.7	13.9	8.4	4.0	1.1	0.4
100°	22.7	17.2	12.1	6.9	3.3	0.7	0.4
102.5°	20.1	15.4	10.2	5.8	2.6	0.4	0.4
105°	17.9	13.5	8.8	5.1	2.2	0.4	0.4
107.5°	16.1	12.1	7.7	4.4	1.5	0.4	0.4
110°	14.3	10.2	6.6	3.7	1.1	0.4	0.4



TEST NUMBER: P#

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

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	12.8	9.1	5.8	2.9	0.7	0.4	0.4
115°	11.3	8.0	5.1	2.6	0.7	0.4	0.4
117.5°	9.9	6.9	4.4	1.8	0.4	0.4	0.4
120°	8.8	6.2	3.7	1.5	0.4	0.4	0.4
122.5°	7.7	5.1	2.9	1.1	0.4	0.4	0.4
125°	6.6	4.4	2.6	0.7	0.4	0.4	0.4
127.5°	5.5	3.7	1.8	0.7	0.4	0.4	0.4
130°	4.8	2.9	1.5	0.4	0.4	0.4	0.4
132.5°	4.0	2.2	1.1	0.4	0.4	0.4	0.4
135°	3.3	1.8	0.7	0.4	0.4	0.4	0.4
137.5°	2.6	1.5	0.7	0.4	0.4	0.4	0.4
140°	1.8	1.1	0.4	0.4	0.4	0.4	0.4
142.5°	1.5	0.7	0.4	0.4	0.4	0.4	0.4
145°	1.1	0.7	0.4	0.4	0.4	0.4	0.4
147.5°	0.7	0.7	0.7	0.7	0.4	0.4	0.4
150°	0.7	0.7	0.4	0.4	0.7	0.4	0.4
152.5°	0.7	0.4	0.4	0.4	0.7	0.4	0.4
155°	0.7	0.7	0.7	0.7	0.7	0.7	0.4
157.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7
160°	0.7	0.7	0.7	0.7	0.7	0.7	0.7
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)