

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-L940-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P#
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (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-L940-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
NARROW LENS
Light Source: -
Ballast/Driver: -

Summary

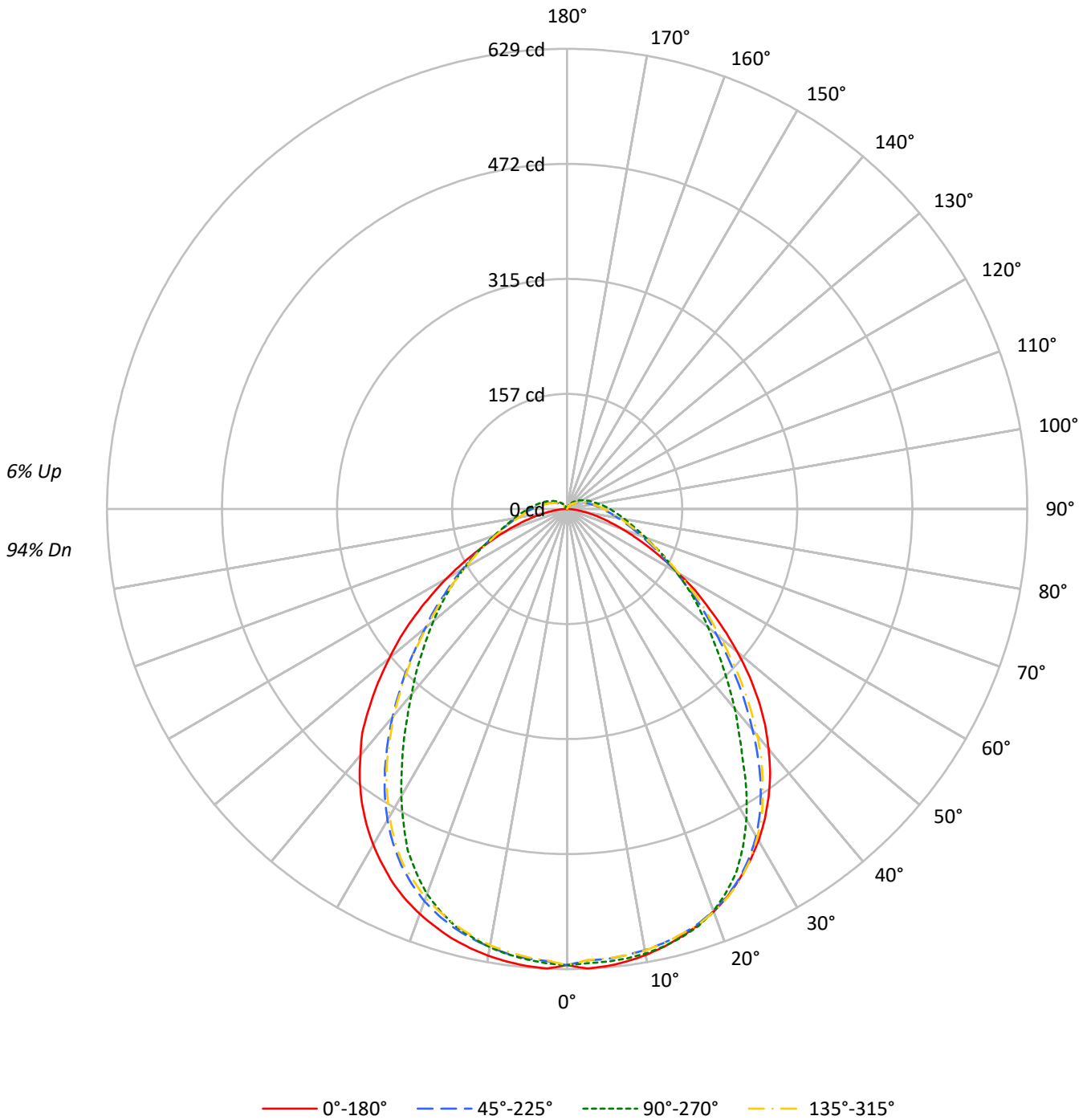
Lumens per Lamp: N/A
Luminaire Lumens: 1578.0 lumens
Efficiency: N/A
Efficacy: 121.4 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.14 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

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



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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	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°	5039	5039	5039	5039
5°	5075	4878	5075	4857
10°	5052	4749	5060	4682
15°	5019	4607	5043	4487
20°	4981	4425	5010	4238
25°	4901	4154	4956	3909
30°	4797	3756	4860	3477
35°	4636	3268	4725	3043
40°	4404	2859	4520	2652
45°	4097	2485	4230	2342
50°	3679	2184	3841	2073
55°	3183	1928	3414	1831
60°	2677	1693	2919	1595
65°	2193	1497	2416	1388
70°	1747	1328	1956	1228
75°	1370	1226	1543	1129
80°	988	1184	1166	1081
85°	608	1190	820	1094



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.1	3.7
10°-20°	169.5	10.7
20°-30°	251.2	15.9
30°-40°	279.1	17.7
40°-50°	253.0	16.0
50°-60°	196.0	12.4
60°-70°	133.1	8.4
70°-80°	84.7	5.4
80°-90°	54.1	3.4
90°-100°	36.5	2.3
100°-110°	25.0	1.6
110°-120°	16.7	1.1
120°-130°	10.4	0.7
130°-140°	5.7	0.4
140°-150°	2.7	0.2
150°-160°	1.0	0.1
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	479.8	30.4
0°-40°	758.9	48.1
0°-60°	1208.0	76.6
0°-90°	1479.9	93.8
90°-120°	78.2	5.0
90°-150°	97.0	6.1
90°-180°	98.0	6.2
0°-180°	1578.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	624	624	624	624	624	
5°	627	621	627	618	627	60
15°	605	606	608	590	605	171
25°	558	547	564	515	558	257
35°	480	418	489	390	480	300
45°	370	299	382	282	370	284
55°	236	210	253	200	236	212
65°	122	141	135	131	122	123
75°	49	94	55	87	49	53
85°	9	68	12	62	9	11
90°	0	59	1	54	0	1
95°	0	50	0	47	0	0
105°	0	37	0	35	0	0
115°	0	28	0	26	0	0
125°	0	21	0	18	0	0
135°	0	14	0	12	0	0
145°	0	9	0	6	0	0
155°	0	5	0	2	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-L940-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	623.5	623.5	623.5	623.5	623.5	623.5	623.5	623.5	623.5	623.5	623.5
2.5°	628.7	628.0	627.3	626.3	627.3	630.1	628.3	624.6	623.9	617.7	620.4
5°	627.3	626.3	625.6	624.6	625.9	629.4	627.6	624.2	623.2	617.4	620.4
7.5°	623.9	623.2	622.2	622.2	623.5	627.0	625.6	621.8	621.1	615.3	618.7
10°	619.1	618.7	618.0	618.0	619.4	623.5	621.8	618.4	617.7	612.2	616.0
12.5°	612.9	613.2	612.2	612.2	614.3	618.4	617.0	613.2	612.6	607.8	611.5
15°	605.0	605.4	604.7	605.0	607.1	611.9	610.2	606.7	606.0	602.3	605.4
17.5°	596.1	596.4	596.4	596.1	598.5	603.3	601.9	598.8	597.8	594.7	598.5
20°	585.8	585.8	585.8	585.8	588.6	593.4	591.6	589.2	587.2	584.8	587.9
22.5°	573.1	572.8	573.1	574.1	576.9	580.7	579.6	576.9	573.8	572.4	574.8
25°	557.7	558.7	559.1	560.1	563.5	566.6	565.6	562.8	558.0	557.0	557.7
27.5°	541.6	542.2	543.3	542.9	547.7	550.8	548.8	546.4	539.5	538.5	537.8
30°	523.4	524.4	525.1	524.8	528.5	532.0	529.9	526.8	517.6	516.9	511.4
32.5°	502.8	503.8	504.5	504.5	510.0	511.4	507.6	503.1	493.2	490.8	486.0
35°	480.2	481.2	481.5	481.5	487.0	486.7	481.9	475.7	464.7	461.6	453.4
37.5°	455.8	456.5	456.8	458.9	461.3	459.2	453.1	445.2	437.0	428.4	419.5
40°	428.4	429.4	430.1	431.5	433.9	431.5	422.5	412.9	404.0	394.4	385.5
42.5°	400.3	403.3	402.7	402.3	403.7	397.2	390.3	379.3	370.4	360.5	351.6
45°	369.7	369.4	371.1	371.8	371.4	366.0	356.4	346.4	337.5	327.2	319.7
47.5°	337.5	337.1	338.5	339.2	337.1	331.3	323.8	312.5	304.9	296.0	290.2
50°	303.5	303.5	305.6	303.5	302.5	296.7	290.5	279.2	273.4	265.5	262.0
52.5°	269.6	272.7	270.6	269.9	268.9	263.1	258.3	249.0	244.2	240.8	236.7
55°	236.0	239.4	238.0	237.0	236.7	231.9	227.4	220.5	217.4	215.0	212.6
57.5°	207.5	207.2	206.5	205.4	205.8	202.0	197.6	193.8	192.4	191.4	192.1
60°	174.6	177.3	176.3	176.6	177.0	176.3	172.5	170.1	170.5	170.8	171.8
62.5°	147.5	149.9	151.6	150.2	150.9	151.9	149.9	149.2	150.6	151.9	153.3
65°	122.4	124.8	126.6	126.2	128.3	130.3	130.0	130.7	133.8	135.5	137.2
67.5°	99.8	102.2	104.6	105.0	108.0	111.1	112.5	114.9	118.3	120.7	122.8
70°	80.3	82.3	85.1	86.8	90.9	95.0	97.4	102.2	104.3	107.7	109.1
72.5°	62.8	64.5	68.3	72.4	75.8	80.9	85.7	89.9	92.9	96.7	98.4
75°	49.0	49.7	53.8	58.6	63.5	69.3	74.4	78.9	83.0	86.8	89.5
77.5°	36.0	37.0	40.8	47.3	52.8	59.0	64.8	69.6	74.1	77.9	81.6
80°	25.0	27.1	31.2	37.7	43.9	50.8	56.2	61.7	66.5	70.3	74.1
82.5°	16.1	17.8	23.7	30.2	36.7	43.6	49.4	54.9	60.0	64.1	67.6
85°	8.9	11.3	17.1	24.0	30.5	37.4	43.6	49.0	54.2	58.0	61.4
87.5°	3.4	6.9	12.3	18.9	25.4	31.9	38.4	43.6	48.7	52.8	55.9
90°	0.0	4.1	9.3	15.8	22.3	28.8	35.0	40.5	45.3	49.0	52.5
92.5°	0.3	2.7	7.2	12.7	18.9	25.0	30.9	36.4	41.2	44.9	48.0
95°	0.3	2.1	5.8	11.0	16.5	22.3	27.8	32.9	37.4	41.2	44.2
97.5°	0.3	1.4	4.8	9.6	14.4	20.2	25.4	30.2	34.3	38.1	40.5
100°	0.3	1.4	4.1	8.2	13.0	18.2	23.0	27.8	31.6	34.6	37.4
102.5°	0.3	1.0	3.4	7.2	11.7	16.1	20.9	25.4	28.8	31.9	34.6
105°	0.3	1.0	3.1	6.2	10.3	14.7	18.9	23.0	26.8	29.5	31.9
107.5°	0.3	0.7	2.7	5.1	8.9	13.4	17.5	20.9	24.4	27.1	29.5
110°	0.3	0.7	2.4	4.8	7.9	12.0	15.8	19.2	22.3	25.0	27.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	0.3	0.7	2.1	4.5	7.2	10.6	14.4	17.5	20.6	23.0	25.0
115°	0.3	0.7	2.1	4.1	6.5	9.3	12.7	16.1	18.5	21.3	23.0
117.5°	0.3	0.7	1.7	3.4	6.2	8.6	11.7	14.4	17.1	19.5	21.3
120°	0.3	0.7	1.7	3.1	5.5	7.9	10.3	13.0	15.8	17.5	19.2
122.5°	0.3	0.7	1.4	3.1	4.8	7.2	9.3	11.7	14.1	16.1	17.8
125°	0.3	0.7	1.4	2.7	4.5	6.5	8.6	10.3	12.7	14.4	16.1
127.5°	0.3	0.7	1.4	2.4	4.1	5.8	7.9	9.6	11.3	13.0	14.4
130°	0.3	0.7	1.0	2.1	3.8	5.1	6.9	8.9	10.3	11.7	13.0
132.5°	0.3	0.7	1.0	2.1	3.1	4.5	6.2	7.9	9.3	10.6	11.7
135°	0.3	0.7	1.0	1.7	2.7	4.1	5.1	6.9	8.2	9.6	10.6
137.5°	0.3	0.7	1.0	1.7	2.4	3.4	4.5	5.8	7.2	8.2	9.6
140°	0.3	0.7	1.0	1.4	2.1	3.1	4.1	4.8	6.2	7.2	8.2
142.5°	0.3	0.7	1.0	1.4	2.1	2.7	3.4	4.1	5.1	6.2	7.2
145°	0.3	0.7	1.0	1.4	1.7	2.4	3.1	3.8	4.1	5.1	5.8
147.5°	0.3	0.7	1.0	1.4	1.4	2.1	2.7	3.1	3.8	4.1	4.8
150°	0.3	0.7	1.0	1.0	1.4	1.7	2.4	2.7	3.1	3.8	4.1
152.5°	0.3	0.7	1.0	1.0	1.4	1.7	2.1	2.4	2.7	3.1	3.4
155°	0.3	0.7	1.0	1.0	1.0	1.4	1.7	2.1	2.4	2.7	3.1
157.5°	0.7	0.7	0.7	1.0	1.0	1.4	1.4	1.7	2.1	2.1	2.4
160°	0.7	0.7	0.7	1.0	1.0	1.0	1.4	1.4	1.7	1.7	2.1
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



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	623.5	623.5	623.5	623.5	623.5	623.5	623.5	623.5	623.5	623.5	623.5
2.5°	619.8	620.8	623.9	623.9	623.2	622.5	622.5	621.5	622.2	623.5	622.8
5°	619.8	620.8	623.9	623.9	623.2	622.5	622.2	621.1	622.2	623.5	622.8
7.5°	617.7	619.1	622.2	622.2	621.5	621.1	620.4	619.8	620.8	622.2	621.5
10°	615.0	616.3	619.4	619.4	618.7	618.7	617.7	617.0	618.4	619.4	619.1
12.5°	610.8	612.6	615.3	615.0	614.3	614.6	613.6	612.2	613.6	614.6	615.0
15°	605.0	607.1	609.8	609.1	608.1	608.8	607.1	606.0	607.1	609.1	608.8
17.5°	597.5	598.8	600.9	600.9	599.9	599.2	598.5	597.5	598.2	599.5	599.9
20°	586.8	588.6	589.6	588.6	588.2	587.2	585.8	584.8	586.1	588.2	588.6
22.5°	572.8	573.1	575.5	573.1	571.4	571.1	569.7	567.6	569.7	571.4	571.7
25°	555.3	557.0	556.0	551.9	551.9	549.1	548.4	547.4	547.7	550.8	552.2
27.5°	533.0	533.7	530.9	527.5	524.4	522.7	520.3	520.6	520.6	524.8	526.1
30°	508.6	504.9	502.5	497.0	494.6	490.5	489.8	489.8	489.1	491.1	497.3
32.5°	479.5	474.3	470.6	465.4	461.3	457.2	455.1	456.2	455.8	461.0	463.0
35°	447.6	444.5	436.6	430.1	427.7	421.5	421.5	418.4	420.5	426.3	428.7
37.5°	414.0	409.2	402.7	395.5	393.7	388.9	387.2	385.5	390.0	391.0	393.4
40°	379.7	375.2	369.0	362.2	362.2	356.4	356.4	356.4	356.7	358.8	363.2
42.5°	347.1	342.3	336.8	332.0	331.3	326.9	326.9	326.5	327.2	328.9	333.0
45°	315.5	311.8	305.9	303.5	303.9	299.1	300.1	299.1	300.4	302.2	303.5
47.5°	286.4	284.0	281.6	278.2	277.1	276.8	275.1	273.7	276.1	276.1	278.2
50°	259.3	257.9	256.5	254.5	254.8	253.5	251.4	251.4	253.1	253.5	254.8
52.5°	235.6	233.9	232.2	232.5	232.9	232.2	231.2	230.1	231.2	231.9	233.6
55°	212.0	210.6	212.3	211.6	212.3	211.6	210.9	210.2	212.0	210.9	212.6
57.5°	190.7	192.1	192.8	191.4	192.4	191.7	192.1	191.0	192.4	193.1	192.8
60°	171.1	173.2	172.2	172.5	173.9	173.2	171.8	172.9	174.2	174.6	174.2
62.5°	153.3	155.7	156.7	156.1	156.4	155.7	156.7	155.4	157.1	157.8	156.7
65°	137.2	139.9	140.6	140.6	140.6	139.9	141.0	141.3	142.0	142.0	141.3
67.5°	123.5	125.9	126.6	127.2	126.6	125.9	125.9	126.2	127.6	128.3	127.6
70°	111.1	113.5	113.9	113.9	114.2	114.9	113.5	114.2	115.2	115.6	115.2
72.5°	100.5	102.9	103.6	103.2	103.6	103.9	103.9	103.2	104.3	105.0	105.0
75°	91.9	93.3	94.0	94.0	94.3	94.7	94.7	94.3	95.0	95.3	95.7
77.5°	84.0	85.1	86.1	86.1	86.4	86.1	86.8	86.8	87.1	87.5	87.8
80°	76.1	77.5	78.2	78.5	79.2	79.6	79.6	79.6	79.9	80.3	80.3
82.5°	70.0	71.0	72.0	73.1	73.1	73.4	73.4	73.4	73.7	73.7	74.1
85°	63.8	65.2	66.2	66.9	67.2	67.6	67.6	67.9	67.9	67.9	68.3
87.5°	58.3	60.0	60.7	61.4	61.7	62.4	62.4	62.4	62.8	62.8	62.8
90°	54.5	56.2	56.9	57.6	58.0	58.3	58.3	58.6	58.6	59.0	59.0
92.5°	50.1	51.8	53.2	53.2	53.5	54.2	53.8	53.8	54.2	54.5	54.5
95°	46.6	48.0	49.0	49.4	49.7	49.7	49.7	50.1	49.7	50.1	50.1
97.5°	42.5	43.9	44.9	45.6	46.0	46.0	46.0	46.3	46.0	46.3	46.3
100°	39.1	40.5	41.5	41.8	42.5	42.5	42.5	42.5	42.5	42.5	42.9
102.5°	36.4	37.7	38.4	38.8	39.1	39.4	39.4	39.4	39.4	39.8	39.8
105°	33.6	35.0	35.7	36.0	36.4	36.7	36.7	36.7	37.0	37.0	36.7
107.5°	31.2	32.2	32.9	33.6	34.0	34.0	34.3	34.3	34.3	34.3	34.3
110°	28.8	29.8	30.9	31.6	31.6	31.9	31.9	32.2	32.2	31.9	32.2



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-18SL-LN-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	26.4	27.8	28.5	29.2	29.5	29.8	29.8	29.8	29.8	29.8	29.8
115°	24.4	25.7	26.4	27.1	27.4	27.8	27.8	27.8	27.8	27.8	27.8
117.5°	22.6	24.0	24.7	25.0	25.4	25.7	26.1	26.1	26.1	26.1	25.7
120°	20.9	22.0	22.6	23.3	23.7	24.0	24.0	24.0	24.0	24.0	24.0
122.5°	19.2	20.2	20.9	21.6	22.0	22.3	22.3	22.3	22.3	22.3	22.3
125°	17.5	18.5	19.2	19.9	20.2	20.6	20.6	20.6	20.6	20.6	20.6
127.5°	15.8	16.8	17.8	18.2	18.5	18.9	18.9	18.9	19.2	18.9	18.9
130°	14.1	15.1	16.1	16.5	16.8	17.1	17.5	17.5	17.5	17.5	17.1
132.5°	12.7	13.7	14.4	14.7	15.4	15.4	15.8	15.8	15.8	15.8	15.4
135°	11.7	12.3	13.0	13.4	14.1	14.1	14.1	14.4	14.4	14.1	13.7
137.5°	10.3	11.0	11.7	12.0	12.3	12.7	12.7	13.0	12.7	12.7	12.7
140°	9.6	9.9	10.6	11.0	11.3	11.3	11.3	11.7	11.7	11.3	11.3
142.5°	8.2	8.9	9.6	9.9	10.3	10.3	10.3	10.3	10.3	10.3	10.3
145°	6.9	7.9	8.2	8.9	8.9	9.3	9.3	9.3	9.3	9.3	8.9
147.5°	5.8	6.5	7.5	7.9	7.9	8.2	8.2	8.2	8.2	8.2	7.9
150°	4.5	5.1	6.2	6.9	6.9	7.2	7.2	7.2	7.2	6.9	6.9
152.5°	3.8	4.5	4.8	5.5	5.8	5.8	5.8	6.2	5.8	5.8	5.8
155°	3.4	3.8	4.1	4.5	4.8	5.1	5.1	5.1	5.1	4.8	4.8
157.5°	2.7	3.1	3.4	3.8	4.1	4.5	4.5	4.5	4.5	4.5	4.1
160°	2.1	2.4	2.7	2.7	3.1	3.4	3.8	3.4	3.4	3.4	3.4
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-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	623.5	623.5	623.5	623.5	623.5	623.5	623.5	623.5	623.5	623.5	623.5
2.5°	622.2	621.8	622.8	621.1	616.0	617.4	616.7	619.8	620.4	621.1	624.2
5°	622.2	621.8	622.5	621.1	615.6	616.7	616.0	619.1	619.8	620.1	623.2
7.5°	620.8	620.4	621.5	619.8	613.9	615.3	614.3	617.4	617.7	618.0	620.8
10°	618.0	617.7	618.4	617.0	611.2	612.6	611.2	614.3	614.3	615.0	617.0
12.5°	613.9	613.2	614.6	612.9	606.4	608.1	607.4	609.5	609.8	610.2	612.2
15°	608.1	607.4	608.4	607.4	601.6	601.9	600.9	604.0	604.3	603.6	605.7
17.5°	599.5	598.8	600.9	600.2	594.4	595.8	595.4	596.1	597.1	595.4	598.2
20°	588.9	589.6	590.3	590.6	586.1	586.1	585.8	587.2	588.2	586.8	588.9
22.5°	573.1	574.8	576.9	577.6	574.5	574.1	576.2	575.5	576.5	575.9	577.2
25°	553.2	556.7	558.7	560.8	559.1	559.7	562.8	563.5	563.5	563.2	564.5
27.5°	528.5	533.0	536.8	541.2	539.5	540.9	546.0	546.7	548.1	546.7	549.5
30°	499.0	503.1	510.4	516.9	517.6	519.6	526.8	527.5	531.3	529.9	530.9
32.5°	469.5	471.6	479.8	486.3	490.5	495.6	503.5	504.9	510.0	511.0	511.0
35°	432.5	438.3	445.9	455.1	460.3	465.8	476.4	478.5	486.0	488.4	491.1
37.5°	401.3	406.8	411.6	421.2	430.4	436.6	445.2	450.3	458.2	462.7	466.1
40°	368.0	372.5	377.6	387.2	395.1	404.4	412.9	419.1	429.1	434.2	438.7
42.5°	336.5	339.9	345.4	352.2	360.5	370.8	379.0	386.2	396.8	404.0	409.2
45°	308.3	310.4	315.2	320.3	327.5	338.2	346.1	355.3	363.9	371.4	377.6
47.5°	281.9	284.7	287.1	290.5	297.0	303.5	312.8	321.7	330.3	338.5	344.7
50°	257.6	257.6	261.3	263.7	268.2	274.0	281.2	287.4	298.0	303.9	311.8
52.5°	233.9	235.3	237.3	238.7	242.1	245.9	251.7	256.9	265.8	271.3	278.8
55°	213.0	214.4	215.4	216.1	218.1	222.6	224.7	228.8	234.9	239.4	245.9
57.5°	193.1	193.8	194.8	195.2	195.5	198.2	200.0	201.0	207.2	211.6	217.1
60°	174.9	174.9	175.9	175.6	175.3	176.6	176.3	177.3	181.1	183.8	186.2
62.5°	157.8	157.8	158.1	157.4	157.1	157.1	155.7	156.7	157.8	158.1	159.8
65°	142.0	143.7	142.3	142.7	140.6	139.9	139.2	137.2	136.8	135.5	136.2
67.5°	127.9	129.3	127.9	127.9	126.2	124.8	123.1	119.7	118.7	115.9	115.2
70°	116.6	115.6	116.3	115.2	113.2	111.5	109.1	106.3	102.9	99.5	97.1
72.5°	105.6	105.6	105.0	103.9	102.9	99.5	96.7	93.6	89.5	85.1	81.6
75°	95.0	95.3	95.3	94.3	92.6	89.5	86.4	82.0	77.5	72.4	67.9
77.5°	87.5	87.5	87.5	85.7	84.0	81.3	77.5	72.7	67.9	61.7	56.6
80°	80.3	79.9	79.9	77.9	76.1	73.1	69.3	64.5	59.3	52.8	47.0
82.5°	74.4	74.1	73.4	71.7	69.3	66.2	62.4	57.3	51.8	46.0	38.8
85°	68.3	67.9	67.2	65.5	63.1	60.4	56.2	51.1	45.6	39.1	32.2
87.5°	62.8	62.4	61.4	60.4	57.6	54.5	50.4	45.6	39.8	33.6	26.8
90°	59.0	58.3	57.6	56.2	53.8	50.4	46.3	41.2	35.3	29.2	22.3
92.5°	54.5	54.2	53.2	51.8	49.7	46.3	42.2	37.4	31.6	25.7	19.2
95°	50.1	49.7	49.0	47.7	45.6	42.5	38.8	34.0	28.5	22.6	16.8
97.5°	46.0	46.0	44.9	43.9	41.5	39.1	35.3	30.9	25.7	20.6	15.1
100°	42.5	42.5	41.5	40.1	38.4	36.0	32.2	28.1	23.3	18.5	13.0
102.5°	39.4	39.1	38.4	37.0	35.3	32.9	29.5	25.7	21.3	16.5	11.7
105°	36.7	36.4	35.7	34.3	32.9	30.2	27.4	23.7	19.2	14.7	10.3
107.5°	34.0	33.6	33.3	31.9	30.2	27.8	25.0	21.3	17.5	13.4	9.3
110°	31.6	31.2	30.5	29.2	27.4	25.4	22.6	19.5	15.8	12.0	8.2



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-18SL-LN-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	29.5	29.2	28.5	27.1	25.7	23.3	20.9	17.5	14.4	11.0	7.2
115°	27.4	27.1	26.4	25.0	23.3	21.3	18.9	16.1	12.7	9.6	6.5
117.5°	25.4	25.0	24.4	23.3	21.6	19.5	17.1	14.4	11.3	8.9	5.8
120°	23.7	23.0	22.3	21.3	19.5	17.8	15.4	13.0	10.3	7.9	5.1
122.5°	22.0	21.3	20.6	19.5	17.8	16.1	13.7	11.7	9.6	7.2	4.8
125°	19.9	19.5	18.9	17.8	16.1	14.4	12.7	10.6	8.6	6.5	4.1
127.5°	18.2	17.8	17.1	15.8	14.4	13.0	11.3	9.6	7.5	5.5	3.8
130°	16.8	16.1	15.4	14.4	13.4	12.0	10.3	8.6	6.9	4.8	3.4
132.5°	15.1	14.4	13.7	13.0	12.0	10.6	9.3	7.5	6.2	4.5	3.1
135°	13.7	13.0	12.3	11.7	10.6	9.6	8.2	6.9	5.5	4.1	2.7
137.5°	12.0	11.7	11.3	10.6	9.6	8.6	7.5	5.8	4.8	3.8	2.4
140°	11.0	10.6	10.3	9.3	8.6	7.5	6.5	5.1	4.1	3.1	2.1
142.5°	9.9	9.6	8.9	8.2	7.5	6.9	5.5	4.8	3.8	2.7	2.1
145°	8.6	8.2	7.9	7.2	6.5	5.5	4.8	4.1	3.4	2.4	1.7
147.5°	7.9	7.5	6.9	6.2	5.5	4.8	4.5	3.8	2.7	2.1	1.4
150°	6.5	6.2	5.8	5.1	4.8	4.5	3.8	3.1	2.4	1.7	1.4
152.5°	5.5	5.1	4.8	4.8	4.1	3.8	3.1	2.7	2.1	1.7	1.0
155°	4.8	4.8	4.5	4.1	3.4	3.1	2.7	2.1	1.7	1.4	1.0
157.5°	4.1	3.8	3.4	3.4	3.1	2.7	2.1	1.7	1.4	1.4	1.0
160°	3.4	3.1	3.1	2.7	2.4	2.1	1.7	1.7	1.4	1.0	1.0
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-LN-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	623.5	623.5	623.5	623.5	623.5	623.5	623.5	623.5	623.5	623.5	623.5
2.5°	624.6	620.8	624.2	628.7	628.7	628.0	627.3	628.7	632.1	630.7	626.6
5°	623.5	619.8	622.8	627.3	627.3	626.3	625.6	626.6	630.4	628.7	624.9
7.5°	621.5	618.0	620.1	624.2	624.2	623.2	622.5	623.9	627.0	625.2	621.1
10°	617.7	613.9	616.3	620.1	619.8	619.1	618.0	619.8	622.5	620.1	615.3
12.5°	612.9	609.1	611.2	614.6	614.3	612.9	612.2	613.2	615.6	614.3	609.1
15°	606.4	602.6	604.3	607.8	606.7	605.7	604.3	604.7	607.8	605.4	599.9
17.5°	598.5	594.4	595.8	598.8	597.8	596.8	595.1	595.4	598.8	595.4	589.6
20°	588.9	584.4	585.5	589.2	587.5	585.8	584.1	584.1	587.5	583.7	577.2
22.5°	578.6	574.1	574.8	577.6	576.2	573.1	571.4	572.4	574.1	569.3	562.5
25°	565.9	560.1	561.1	563.9	562.8	558.7	557.0	557.7	557.0	553.2	546.0
27.5°	551.2	545.0	545.7	547.4	546.0	542.2	540.2	540.5	539.2	534.4	526.1
30°	532.6	529.6	529.2	530.2	528.2	524.4	522.0	521.3	521.0	514.1	504.2
32.5°	513.8	511.0	509.3	510.7	508.3	504.5	500.4	500.4	497.0	490.5	481.9
35°	494.6	490.1	488.4	489.4	486.7	481.9	478.5	476.7	471.6	463.4	454.1
37.5°	469.9	466.8	464.7	465.8	462.7	459.2	452.7	451.0	445.5	434.2	422.5
40°	443.1	440.7	438.7	439.7	436.3	431.1	425.3	422.5	416.4	403.7	394.4
42.5°	414.3	413.3	410.9	414.7	407.8	402.7	396.8	392.4	386.2	372.5	361.8
45°	383.8	386.2	380.7	381.7	377.3	372.8	366.6	360.1	354.0	340.9	328.9
47.5°	351.6	353.3	349.5	350.2	345.4	341.3	335.8	327.5	320.7	309.4	298.7
50°	318.3	317.6	317.6	316.9	313.1	308.0	302.5	295.0	288.1	277.8	268.9
52.5°	283.0	284.3	285.0	286.7	281.9	278.8	270.3	263.7	258.6	248.0	240.4
55°	249.0	253.8	252.4	253.1	247.6	245.2	238.4	233.2	225.7	219.5	214.7
57.5°	218.1	219.2	219.8	220.9	218.5	213.7	208.2	204.1	198.2	193.1	189.7
60°	188.3	188.3	188.6	190.4	188.0	183.8	179.7	176.6	172.5	169.4	167.4
62.5°	160.2	162.6	162.9	161.5	158.5	156.4	153.7	151.9	149.2	148.2	147.5
65°	134.1	134.1	134.1	134.8	133.1	131.7	130.0	129.6	130.7	129.3	130.0
67.5°	112.2	111.1	110.4	110.8	110.1	109.4	109.1	110.1	112.2	112.2	113.9
70°	93.3	91.2	89.9	89.9	89.9	90.2	91.2	93.3	96.7	98.1	100.5
72.5°	77.9	73.4	71.3	71.3	71.7	73.1	76.1	79.9	83.0	85.7	88.8
75°	63.1	58.6	55.6	55.2	55.9	58.0	62.4	65.9	71.0	74.8	78.5
77.5°	51.1	45.6	41.8	41.5	42.5	45.6	51.1	55.6	61.4	65.5	69.6
80°	40.8	34.6	31.6	29.5	31.2	35.0	41.2	46.6	52.1	57.6	62.8
82.5°	32.6	26.8	22.0	19.9	22.0	27.1	32.9	39.4	44.9	50.8	55.9
85°	25.7	19.5	14.1	12.0	14.4	19.9	26.4	32.9	39.1	44.9	50.1
87.5°	20.2	14.1	8.6	5.8	8.9	14.7	20.9	27.4	34.0	39.8	44.9
90°	15.8	9.9	4.8	0.7	5.1	10.6	16.8	23.0	29.5	35.3	40.5
92.5°	13.4	7.5	2.7	0.0	3.1	7.9	13.7	19.9	25.7	31.6	36.7
95°	11.3	6.2	2.1	0.0	2.1	6.2	11.3	16.8	22.6	28.5	33.6
97.5°	9.6	4.8	1.4	0.0	1.4	4.8	9.3	14.7	19.9	25.4	30.2
100°	8.2	4.1	1.0	0.0	1.0	3.8	7.9	12.7	17.8	23.0	27.4
102.5°	7.2	3.4	0.7	0.0	0.7	3.1	6.5	11.0	15.4	20.2	24.7
105°	6.2	2.7	0.7	0.0	0.3	2.4	5.5	9.6	13.7	18.2	22.3
107.5°	5.5	2.4	0.7	0.0	0.3	2.1	4.8	8.2	12.3	16.1	19.9
110°	4.8	2.1	0.7	0.0	0.3	1.4	4.1	7.2	10.6	14.4	18.2



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-18SL-LN-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	4.1	1.7	0.3	0.0	0.0	1.0	3.4	6.2	9.3	13.0	16.1
115°	3.8	1.7	0.3	0.0	0.0	0.7	2.7	5.5	8.2	11.7	14.4
117.5°	3.4	1.4	0.3	0.0	0.3	0.7	2.4	4.8	7.2	9.9	13.0
120°	3.1	1.4	0.3	0.0	0.3	0.3	1.7	4.1	6.2	8.9	11.3
122.5°	2.7	1.4	0.3	0.0	0.3	0.3	1.4	3.4	5.5	7.9	9.9
125°	2.4	1.0	0.7	0.3	0.3	0.3	1.0	2.7	4.8	6.5	8.9
127.5°	2.4	1.0	0.7	0.3	0.3	0.3	0.7	2.4	3.8	5.8	7.9
130°	2.1	1.0	0.7	0.3	0.3	0.3	0.3	1.7	3.4	4.8	6.5
132.5°	1.7	1.0	0.7	0.3	0.3	0.3	0.3	1.0	2.4	4.1	5.5
135°	1.7	1.0	0.7	0.3	0.3	0.3	0.3	0.7	1.7	3.1	4.5
137.5°	1.4	0.7	0.7	0.3	0.3	0.3	0.3	0.3	1.4	2.4	3.4
140°	1.4	0.7	0.7	0.3	0.3	0.3	0.3	0.3	1.0	1.7	2.7
142.5°	1.0	0.7	0.7	0.3	0.3	0.3	0.3	0.3	0.7	1.4	2.1
145°	1.0	0.7	0.7	0.3	0.3	0.3	0.3	0.3	0.3	0.7	1.4
147.5°	1.0	1.0	0.7	0.3	0.3	0.3	0.3	0.3	0.3	0.7	1.0
150°	1.0	0.7	0.7	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.7
152.5°	1.0	0.7	0.7	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.7
155°	1.0	0.7	0.7	0.3	0.3	0.3	0.3	0.3	0.3	0.7	0.7
157.5°	1.0	0.7	0.7	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.7
160°	1.0	0.7	0.7	0.3	0.7	0.3	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-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	623.5	623.5	623.5	623.5	623.5	623.5	623.5	623.5	623.5	623.5	623.5
2.5°	625.2	618.7	622.2	621.1	622.5	625.2	624.9	624.2	624.2	623.2	621.8
5°	623.2	617.0	620.1	618.4	620.1	622.5	622.2	621.1	621.8	620.1	618.4
7.5°	619.1	613.6	616.3	615.0	616.3	618.7	617.7	617.4	618.0	615.3	614.3
10°	614.3	608.1	611.2	609.5	611.2	612.9	612.2	610.8	612.2	609.5	608.4
12.5°	606.7	601.6	603.6	603.0	604.0	605.7	604.3	603.3	604.0	601.6	599.5
15°	598.5	593.4	595.1	594.0	594.7	596.8	594.4	594.0	593.4	591.0	590.3
17.5°	587.9	583.1	584.8	583.1	584.1	583.4	583.1	581.3	581.3	578.6	576.5
20°	574.8	570.7	569.7	568.3	569.7	568.3	566.3	564.9	564.5	561.8	560.1
22.5°	559.7	554.9	555.6	551.9	552.2	550.1	546.7	545.3	544.0	540.9	538.5
25°	541.6	536.8	533.3	530.9	527.8	527.5	523.0	519.6	519.3	515.5	515.2
27.5°	521.0	515.5	512.8	506.9	503.1	500.1	496.3	492.9	491.1	487.0	484.3
30°	497.3	491.1	484.3	480.2	474.3	471.9	465.4	461.3	459.9	455.5	453.4
32.5°	470.6	464.0	458.6	450.7	444.2	440.7	434.2	430.1	428.4	423.6	420.8
35°	441.4	434.2	427.7	420.1	415.0	409.2	401.3	397.2	393.4	391.7	389.6
37.5°	410.9	403.0	395.5	387.9	383.4	376.6	369.7	367.0	362.5	360.8	358.8
40°	379.3	371.4	364.2	357.0	351.9	345.7	339.5	338.5	333.7	332.0	330.6
42.5°	348.1	339.9	331.7	326.5	322.7	316.6	312.5	311.4	307.3	306.3	306.3
45°	320.0	309.7	302.8	298.4	295.3	290.2	286.7	286.0	282.6	281.9	281.9
47.5°	289.8	280.2	275.1	272.3	269.6	265.8	263.7	263.7	260.3	259.6	259.3
50°	261.7	252.8	249.0	246.3	245.9	243.2	241.5	240.8	240.8	238.4	238.7
52.5°	234.9	230.5	227.4	225.7	223.6	221.9	220.5	220.5	219.5	217.8	218.5
55°	210.2	205.1	205.4	204.1	203.0	202.0	202.4	200.3	200.0	198.6	199.6
57.5°	185.6	185.6	184.9	183.8	182.1	182.8	182.8	182.8	181.1	180.1	181.1
60°	164.6	165.7	163.9	165.0	164.3	164.6	163.9	163.9	162.9	162.6	162.9
62.5°	146.1	147.8	147.1	148.5	147.8	148.2	148.9	147.5	146.8	146.1	146.8
65°	129.6	131.7	131.4	132.4	132.7	133.1	133.4	132.7	132.0	131.4	131.0
67.5°	115.2	117.3	118.7	119.0	119.4	120.4	120.0	119.4	118.7	117.6	117.3
70°	102.2	105.0	106.7	107.4	108.7	108.0	108.0	107.7	107.0	106.0	105.6
72.5°	91.2	94.3	96.0	96.7	98.1	98.1	97.7	97.4	96.7	95.7	95.3
75°	81.6	84.4	86.8	88.1	89.2	89.2	88.8	88.5	87.8	87.1	86.8
77.5°	74.1	76.5	78.5	80.3	80.9	81.3	80.9	80.3	80.3	79.9	79.6
80°	66.5	69.3	71.3	73.1	74.1	74.1	73.7	74.1	73.4	73.1	72.7
82.5°	60.0	63.1	65.5	67.2	67.9	68.3	67.9	68.3	67.6	67.6	67.6
85°	54.2	57.3	60.0	61.4	62.4	62.8	62.8	62.8	62.4	62.4	62.4
87.5°	49.4	52.5	55.2	56.6	57.6	58.0	58.0	58.3	57.6	57.6	57.6
90°	44.9	48.0	50.8	52.1	53.2	53.8	53.8	54.2	53.8	53.5	53.5
92.5°	40.8	44.2	47.0	48.4	49.4	50.4	50.4	50.8	50.1	50.1	50.1
95°	37.4	40.8	43.2	44.9	46.0	46.6	47.0	47.0	46.6	46.6	46.6
97.5°	34.3	37.4	39.8	41.5	42.5	42.9	43.2	43.6	43.2	43.2	43.2
100°	31.2	34.3	36.7	38.1	39.4	39.8	40.1	40.5	40.5	40.1	40.1
102.5°	28.5	31.6	33.6	35.3	36.4	37.0	37.4	37.4	37.4	37.4	37.4
105°	25.7	28.8	30.9	32.6	33.6	34.3	34.6	35.0	35.0	34.6	34.6
107.5°	23.3	26.1	28.5	29.8	31.2	31.9	32.2	32.2	32.6	32.2	32.2
110°	20.9	24.0	26.1	27.4	28.8	29.5	29.8	30.2	30.2	30.2	30.2



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-18SL-LN-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	19.2	21.6	23.7	25.0	26.4	27.1	27.4	27.8	28.1	27.8	27.8
115°	17.1	19.5	21.6	23.0	24.0	24.7	25.4	25.7	25.7	26.1	25.7
117.5°	15.4	17.5	19.5	20.9	22.0	23.0	23.3	23.7	24.0	23.7	23.7
120°	13.7	15.8	17.5	18.9	19.9	20.9	21.3	21.6	22.0	21.6	21.6
122.5°	12.3	14.1	15.8	17.1	18.2	18.9	19.5	19.5	19.9	19.9	19.9
125°	11.0	12.7	14.1	15.4	16.5	17.1	17.5	17.8	17.8	18.2	18.2
127.5°	9.6	11.0	12.7	13.7	14.7	15.4	15.8	16.1	16.1	16.5	16.5
130°	8.2	9.6	11.0	12.0	13.0	13.7	14.1	14.4	14.7	14.7	14.7
132.5°	7.2	8.6	9.6	10.6	11.3	12.0	12.7	13.0	13.0	13.0	13.0
135°	5.8	7.2	8.2	9.3	9.9	10.6	11.0	11.7	11.7	11.7	11.7
137.5°	4.8	6.2	7.2	7.9	8.6	9.3	9.6	9.9	10.3	10.3	10.3
140°	3.8	4.8	5.8	6.9	7.5	7.9	8.6	8.6	8.9	8.9	8.9
142.5°	2.7	3.8	4.5	5.5	6.2	6.9	7.2	7.5	7.5	7.5	7.5
145°	2.1	2.7	3.4	4.1	5.1	5.5	5.8	6.2	6.5	6.5	6.5
147.5°	1.4	2.1	2.4	3.1	3.8	4.5	4.8	5.1	5.5	5.5	5.5
150°	1.0	1.4	2.1	2.4	2.7	3.4	4.1	4.1	4.5	4.5	4.1
152.5°	0.7	1.0	1.4	1.7	2.1	2.4	3.1	3.1	3.4	3.4	3.4
155°	0.7	0.7	0.7	1.0	1.4	1.7	2.1	2.4	2.4	2.4	2.4
157.5°	0.7	0.7	0.7	0.7	0.7	1.0	1.4	1.7	1.7	1.7	1.7
160°	0.7	0.7	0.3	0.3	0.7	0.7	0.7	0.7	1.0	1.0	1.0
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-LN-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	623.5	623.5	623.5	623.5	623.5	623.5	623.5	623.5	623.5	623.5	623.5
2.5°	622.8	623.5	623.5	622.8	622.5	623.9	622.2	615.6	617.7	618.4	620.4
5°	619.8	620.4	620.4	620.4	619.8	621.1	619.4	612.9	615.3	616.3	617.7
7.5°	615.3	615.6	616.3	616.0	615.3	617.4	615.6	609.1	610.8	612.6	614.3
10°	609.5	609.5	609.8	610.5	609.8	611.5	609.8	604.0	605.7	606.7	608.8
12.5°	601.6	602.3	602.6	602.3	601.9	603.3	602.6	597.1	597.8	599.9	601.9
15°	591.0	591.0	592.7	592.0	592.0	593.4	594.0	587.9	588.9	592.0	594.0
17.5°	577.9	578.3	579.6	580.3	580.0	582.4	582.7	577.9	577.6	581.3	583.4
20°	561.1	561.8	563.5	564.9	564.9	567.6	568.7	565.6	565.9	570.0	570.7
22.5°	540.5	540.5	543.6	545.7	547.4	549.1	552.2	549.5	549.5	554.9	558.0
25°	515.2	517.6	518.6	522.7	525.1	529.9	532.6	533.0	533.3	538.5	540.5
27.5°	487.0	487.7	490.8	495.6	498.3	502.8	508.0	509.0	510.7	517.6	520.6
30°	455.1	457.2	458.6	465.4	469.2	475.0	481.5	483.9	485.3	494.6	498.3
32.5°	422.5	423.2	429.1	432.8	437.3	443.5	451.0	455.5	458.2	467.8	473.3
35°	390.0	391.3	396.1	400.9	405.4	411.6	419.5	425.6	430.4	439.0	446.2
37.5°	360.1	363.6	364.6	369.4	372.8	379.0	384.5	393.4	398.2	407.1	416.4
40°	333.4	334.4	335.1	339.9	342.3	348.1	356.0	361.8	368.4	374.9	385.9
42.5°	307.0	307.7	308.7	311.4	314.2	318.3	324.1	329.9	336.8	346.4	353.6
45°	282.6	283.3	284.0	285.7	288.1	291.9	295.6	299.8	306.6	314.9	322.4
47.5°	260.0	261.3	261.3	261.7	263.4	266.5	269.2	274.4	278.2	282.6	291.2
50°	238.4	239.4	239.7	239.7	240.8	242.8	243.5	246.9	250.4	254.5	260.7
52.5°	218.1	218.1	217.8	219.2	219.2	220.5	220.9	222.9	225.3	229.8	232.5
55°	198.9	198.9	200.0	199.3	199.3	200.0	199.6	200.0	202.0	204.8	207.2
57.5°	180.4	180.1	181.1	180.4	180.1	180.7	181.4	180.1	180.4	183.2	183.2
60°	161.9	162.2	163.3	162.6	162.6	162.6	161.9	161.2	160.5	162.2	162.9
62.5°	147.1	146.1	147.1	146.1	146.8	146.5	145.8	144.4	144.7	144.1	143.4
65°	131.7	131.7	132.0	131.0	131.7	131.7	130.7	130.3	128.3	127.6	125.9
67.5°	118.3	118.3	118.7	118.0	118.0	118.3	117.3	116.3	114.2	113.2	110.8
70°	106.7	106.7	106.7	106.3	106.3	106.3	105.6	104.3	102.2	100.5	97.4
72.5°	96.0	96.4	96.0	96.0	97.1	96.0	95.0	93.6	91.9	88.5	85.7
75°	87.5	87.8	87.5	87.5	87.5	87.1	86.8	84.7	82.7	79.9	75.8
77.5°	79.9	79.9	80.3	79.9	79.9	79.6	78.5	76.8	74.4	72.0	67.2
80°	72.7	73.1	73.4	73.7	73.1	72.7	71.7	70.3	67.2	64.5	59.7
82.5°	67.6	67.2	67.6	67.9	67.2	66.9	65.9	64.1	61.7	58.0	53.2
85°	62.4	62.1	62.1	62.4	62.1	61.4	60.4	58.6	56.2	52.5	47.7
87.5°	57.3	57.6	58.0	57.6	57.3	56.6	55.6	53.8	51.1	48.0	42.9
90°	53.5	53.5	53.5	53.5	53.2	52.5	51.4	49.4	47.0	43.2	38.8
92.5°	50.1	50.1	50.1	50.1	49.7	48.7	47.7	46.0	43.2	39.4	35.3
95°	46.6	47.0	46.6	46.6	46.0	45.6	43.9	42.2	39.8	36.0	31.6
97.5°	42.9	43.2	42.9	42.9	42.5	41.8	40.8	38.8	36.4	32.9	28.8
100°	40.1	40.1	39.8	39.8	39.4	38.8	37.4	35.7	33.3	29.8	25.7
102.5°	37.0	37.4	37.0	37.0	36.4	35.7	34.6	32.9	30.5	27.1	23.3
105°	34.6	34.6	34.3	34.3	33.6	32.9	31.9	29.8	27.8	24.7	20.9
107.5°	32.2	32.2	31.9	31.9	31.2	30.5	29.2	27.4	25.4	22.3	18.9
110°	29.8	29.8	29.8	29.5	28.8	27.8	26.8	25.0	23.0	20.2	16.8



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-18SL-LN-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	28.1	27.8	27.4	27.1	26.4	25.7	24.4	22.6	20.6	18.2	15.1
115°	25.7	25.7	25.4	25.0	24.4	23.3	22.3	20.9	18.9	16.1	13.4
117.5°	23.7	23.7	23.3	23.0	22.3	21.3	20.2	18.9	16.8	14.4	12.0
120°	21.6	21.6	21.3	20.9	20.2	19.2	18.5	16.8	15.1	12.7	10.6
122.5°	19.9	19.5	19.5	18.9	18.5	17.5	16.5	15.1	13.4	11.3	9.3
125°	17.8	17.8	17.5	17.1	16.8	15.8	14.7	13.4	11.7	9.9	8.2
127.5°	16.1	16.1	15.8	15.4	15.1	14.1	13.0	12.0	10.3	8.6	6.9
130°	14.4	14.4	14.1	13.7	13.4	12.3	11.7	10.3	8.9	7.5	5.8
132.5°	13.0	13.0	12.7	12.3	11.7	11.0	10.3	8.9	7.9	6.5	5.1
135°	11.7	11.3	11.3	11.0	10.3	9.6	8.9	7.9	6.5	5.5	4.1
137.5°	10.3	9.9	9.6	9.3	8.9	8.2	7.5	6.9	5.8	4.5	3.4
140°	8.9	8.6	8.6	8.2	7.5	7.2	6.5	5.5	4.8	3.8	2.7
142.5°	7.5	7.5	7.2	6.9	6.5	6.2	5.5	4.8	3.8	3.1	2.1
145°	6.5	6.2	6.2	5.8	5.5	4.8	4.5	3.8	3.1	2.4	1.7
147.5°	5.1	5.1	5.1	4.8	4.5	4.1	3.8	3.1	2.4	1.7	1.0
150°	4.1	4.1	4.1	3.8	3.4	3.1	2.7	2.4	1.7	1.0	0.7
152.5°	3.4	3.4	3.1	3.1	2.7	2.4	2.1	1.7	1.0	0.7	0.7
155°	2.4	2.4	2.4	2.1	2.1	1.7	1.4	1.0	0.7	0.7	0.7
157.5°	1.7	1.7	1.7	1.4	1.4	1.0	1.0	0.7	0.7	0.7	0.7
160°	1.0	1.0	1.0	1.0	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-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	623.5	623.5	623.5	623.5	623.5	623.5	623.5
2.5°	619.4	619.1	621.8	621.8	618.7	623.5	628.7
5°	617.4	617.0	619.8	619.8	617.0	621.8	627.3
7.5°	613.2	613.6	616.3	617.0	613.6	618.0	623.9
10°	608.8	608.4	611.5	612.2	609.5	613.6	619.1
12.5°	601.6	601.6	604.7	605.7	603.0	607.8	612.9
15°	594.0	594.0	596.1	597.8	595.4	599.9	605.0
17.5°	584.4	584.1	586.1	588.2	585.8	590.6	596.1
20°	572.1	572.1	574.5	576.9	575.2	579.6	585.8
22.5°	559.1	557.7	561.8	563.5	562.5	566.9	573.1
25°	542.6	542.2	546.4	548.8	547.4	552.2	557.7
27.5°	524.8	524.4	528.5	531.6	530.9	535.4	541.6
30°	503.1	504.9	508.6	513.8	512.1	516.9	523.4
32.5°	480.5	482.2	486.7	492.2	492.5	496.3	502.8
35°	453.4	457.9	461.0	468.2	469.5	473.3	480.2
37.5°	424.9	430.1	436.6	442.1	444.8	447.9	455.8
40°	393.1	400.6	407.8	414.3	417.7	420.8	428.4
42.5°	364.2	370.1	376.9	383.4	389.6	392.4	400.3
45°	331.7	338.5	344.7	352.6	358.8	361.8	369.7
47.5°	299.8	306.6	314.9	320.3	326.9	329.9	337.5
50°	269.2	275.4	282.3	288.8	294.3	297.0	303.5
52.5°	239.1	245.6	252.1	256.2	262.0	264.1	269.6
55°	212.3	216.8	222.6	225.0	230.8	232.2	236.0
57.5°	186.6	189.7	191.7	195.8	200.0	203.0	207.5
60°	163.3	164.6	166.0	168.4	171.8	172.9	174.6
62.5°	142.3	142.0	144.7	145.4	145.8	149.2	147.5
65°	123.8	124.2	121.8	120.7	122.1	123.1	122.4
67.5°	108.4	106.3	104.3	101.9	99.8	100.8	99.8
70°	93.3	91.6	88.1	84.7	83.3	81.3	80.3
72.5°	81.3	77.2	73.7	69.3	66.9	64.5	62.8
75°	72.0	66.2	61.4	56.6	53.2	49.7	49.0
77.5°	62.4	56.9	51.4	46.3	41.2	37.4	36.0
80°	54.9	49.7	43.2	37.0	31.6	26.8	25.0
82.5°	48.0	42.5	36.0	29.5	23.3	18.2	16.1
85°	42.2	36.4	29.8	23.3	17.1	11.7	8.9
87.5°	37.7	31.2	24.7	18.5	12.0	6.5	3.4
90°	33.6	27.4	21.3	14.7	8.6	3.4	0.0
92.5°	29.8	24.0	17.8	12.0	6.5	2.1	0.3
95°	26.4	21.3	15.1	9.6	4.8	1.4	0.3
97.5°	23.7	18.5	13.0	7.9	3.8	1.0	0.3
100°	21.3	16.1	11.3	6.5	3.1	0.7	0.3
102.5°	18.9	14.4	9.6	5.5	2.4	0.3	0.3
105°	16.8	12.7	8.2	4.8	2.1	0.3	0.3
107.5°	15.1	11.3	7.2	4.1	1.4	0.3	0.3
110°	13.4	9.6	6.2	3.4	1.0	0.3	0.3



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-18SL-LN-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	12.0	8.6	5.5	2.7	0.7	0.3	0.3
115°	10.6	7.5	4.8	2.4	0.7	0.3	0.3
117.5°	9.3	6.5	4.1	1.7	0.3	0.3	0.3
120°	8.2	5.8	3.4	1.4	0.3	0.3	0.3
122.5°	7.2	4.8	2.7	1.0	0.3	0.3	0.3
125°	6.2	4.1	2.4	0.7	0.3	0.3	0.3
127.5°	5.1	3.4	1.7	0.7	0.3	0.3	0.3
130°	4.5	2.7	1.4	0.3	0.3	0.3	0.3
132.5°	3.8	2.1	1.0	0.3	0.3	0.3	0.3
135°	3.1	1.7	0.7	0.3	0.3	0.3	0.3
137.5°	2.4	1.4	0.7	0.3	0.3	0.3	0.3
140°	1.7	1.0	0.3	0.3	0.3	0.3	0.3
142.5°	1.4	0.7	0.3	0.3	0.3	0.3	0.3
145°	1.0	0.7	0.3	0.3	0.3	0.3	0.3
147.5°	0.7	0.7	0.7	0.7	0.3	0.3	0.3
150°	0.7	0.7	0.3	0.3	0.7	0.3	0.3
152.5°	0.7	0.3	0.3	0.3	0.7	0.3	0.3
155°	0.7	0.7	0.7	0.7	0.7	0.7	0.3
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)