

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-L935-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-L935-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
CLEAR LENSED
Light Source: -
Ballast/Driver: -

Summary

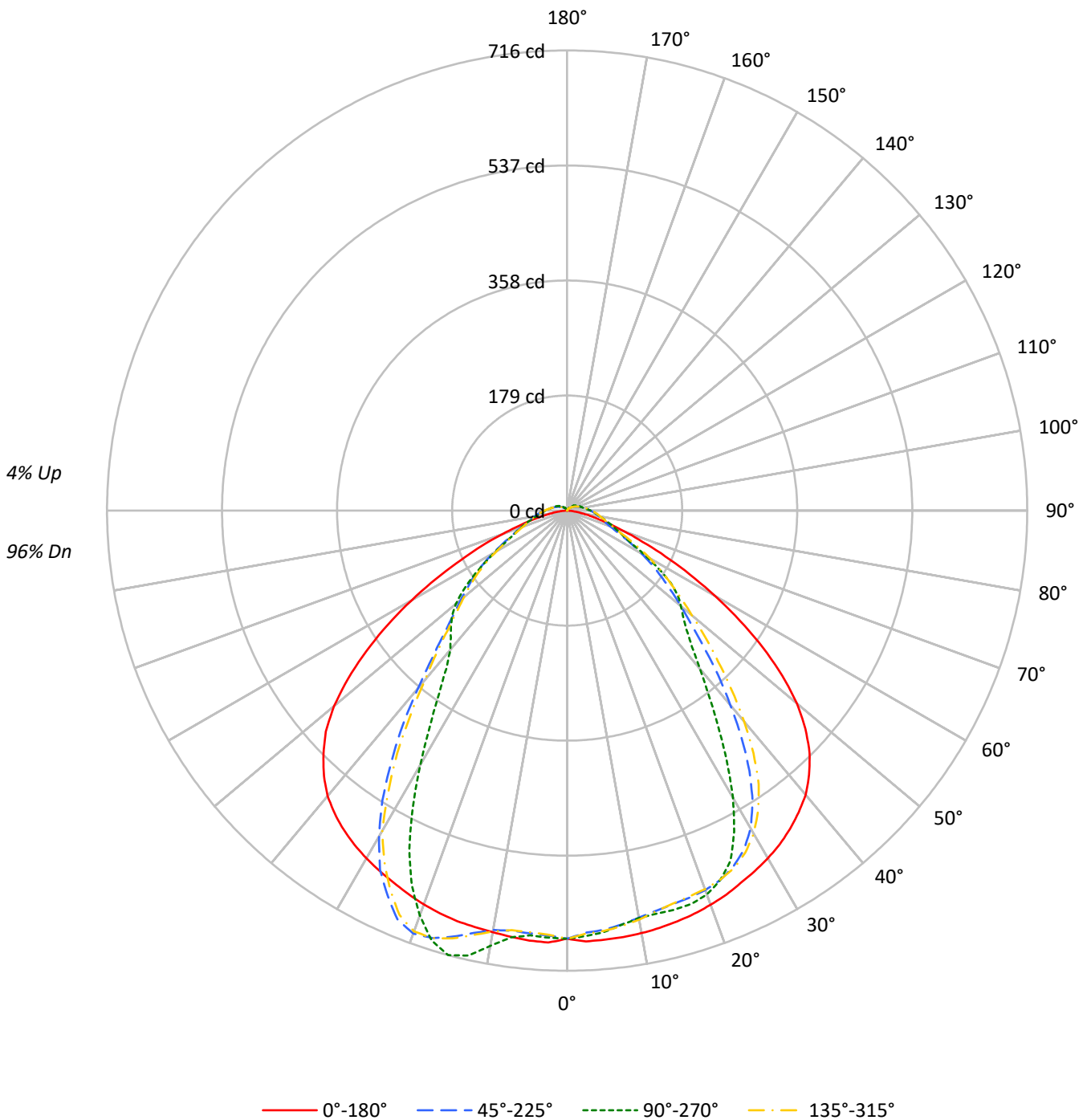
Lumens per Lamp: N/A
Luminaire Lumens: 1588.0 lumens
Efficiency: N/A
Efficacy: 122.2 lumens/watt
Spacing Criteria (0/90/45): 1.4 / 1.12 / 1.19
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

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#
CATALOG NUMBER: 4SNLED-LD5-18SL-LC-UNV-L935-CD1-U

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°	5383	5383	5383	5383
5°	5423	5169	5433	5210
10°	5447	4955	5436	5291
15°	5490	4889	5487	5443
20°	5550	4810	5544	5071
25°	5618	4564	5615	4409
30°	5724	3956	5727	3504
35°	5836	3198	5853	2707
40°	5935	2575	5960	2269
45°	5914	2181	5944	2124
50°	5659	2008	5738	1964
55°	5021	1805	5147	1641
60°	4072	1382	4288	1267
65°	3027	1057	3262	1002
70°	2058	912	2322	872
75°	1348	823	1569	779
80°	870	767	1020	706
85°	444	766	588	699



TEST NUMBER: P#

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.3	4.0
10°-20°	188.3	11.9
20°-30°	286.2	18.0
30°-40°	307.0	19.3
40°-50°	266.5	16.8
50°-60°	197.5	12.4
60°-70°	113.2	7.1
70°-80°	62.7	3.9
80°-90°	38.2	2.4
90°-100°	24.8	1.6
100°-110°	16.6	1.0
110°-120°	11.2	0.7
120°-130°	6.9	0.4
130°-140°	3.6	0.2
140°-150°	1.6	0.1
150°-160°	0.5	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	537.7	33.9
0°-40°	844.8	53.2
0°-60°	1308.7	82.4
0°-90°	1522.7	95.9
90°-120°	52.6	3.3
90°-150°	64.8	4.1
90°-180°	65.0	4.1
0°-180°	1588.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	666	666	666	666	666	
5°	670	658	672	663	670	64
15°	662	643	661	716	662	187
25°	639	601	639	581	639	296
35°	604	409	606	346	604	378
45°	534	262	536	256	534	409
55°	372	197	382	179	372	330
65°	169	100	182	95	169	170
75°	48	63	56	60	48	55
85°	6	44	9	40	6	9
90°	0	36	1	34	0	0
95°	0	30	0	29	0	0
105°	0	22	0	21	0	0
115°	0	18	0	16	0	0
125°	0	14	0	11	0	0
135°	0	9	0	7	0	0
145°	0	5	1	4	0	0
155°	1	2	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-L935-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	666.1	666.1	666.1	666.1	666.1	666.1	666.1	666.1	666.1	666.1	666.1
2.5°	670.9	669.2	668.5	667.2	668.2	672.3	669.6	665.1	665.4	657.5	661.7
5°	670.3	668.2	667.2	665.8	666.5	670.3	667.5	663.0	662.7	654.8	658.6
7.5°	669.2	667.2	665.4	664.4	664.7	667.8	664.4	659.2	658.2	649.6	653.1
10°	667.5	666.1	663.7	662.0	661.7	665.1	659.6	654.4	652.0	643.1	646.5
12.5°	665.1	663.0	660.6	657.5	657.2	659.2	654.8	647.5	645.1	637.9	641.7
15°	661.7	659.2	656.5	653.1	651.3	652.7	647.2	640.7	640.3	634.1	639.3
17.5°	657.9	654.4	651.3	646.5	644.1	645.1	640.7	634.8	635.5	631.7	637.6
20°	652.7	648.9	644.1	639.3	635.8	637.6	634.5	630.0	631.0	628.3	633.4
22.5°	646.9	641.7	635.8	630.3	627.6	630.0	627.6	623.8	624.1	622.4	625.5
25°	639.3	633.4	626.6	619.7	618.3	620.0	618.6	615.5	614.2	611.4	612.8
27.5°	632.4	625.9	617.3	610.0	607.6	611.1	608.0	602.8	599.0	595.2	592.5
30°	624.5	616.6	606.9	598.7	596.6	598.0	593.5	585.6	575.6	570.8	563.2
32.5°	615.9	605.6	593.5	584.2	582.9	581.8	573.6	562.2	546.7	537.1	525.4
35°	604.5	593.2	578.7	567.4	565.3	559.5	546.0	530.9	510.9	494.4	474.5
37.5°	591.8	578.4	563.2	548.1	542.3	530.6	511.6	495.8	465.5	445.6	421.5
40°	577.4	561.2	542.6	524.4	514.7	495.8	474.1	450.7	421.5	394.7	374.4
42.5°	557.4	540.2	518.2	497.9	481.4	456.2	430.8	397.7	370.9	348.2	327.6
45°	533.7	513.0	487.6	463.1	442.1	412.2	382.3	349.2	326.9	300.4	286.3
47.5°	503.0	480.7	453.5	426.3	398.8	365.7	334.4	302.8	280.4	261.5	251.2
50°	466.9	446.3	416.3	384.0	353.7	319.3	288.0	264.2	242.6	230.9	223.0
52.5°	422.2	402.9	372.3	337.2	307.9	274.2	245.7	226.4	210.9	202.3	199.6
55°	372.3	355.4	325.1	292.5	262.5	231.6	209.9	193.0	183.0	177.9	178.2
57.5°	319.0	305.9	277.3	248.1	219.9	196.5	176.9	163.4	155.9	155.5	156.6
60°	265.6	256.0	231.2	206.1	181.3	162.4	148.0	138.7	133.8	134.2	133.8
62.5°	214.7	205.8	187.9	167.2	147.6	134.9	121.8	118.0	113.9	113.5	113.5
65°	168.9	162.1	147.6	132.8	118.0	109.8	103.2	98.7	95.7	95.0	95.3
67.5°	127.0	124.2	114.2	104.3	95.0	89.8	84.3	83.3	80.9	80.9	81.5
70°	94.6	92.6	87.1	81.2	77.4	74.0	71.2	71.2	70.9	70.5	72.3
72.5°	68.5	68.8	67.1	62.6	62.3	61.6	60.9	61.9	62.3	63.3	65.4
75°	48.2	49.2	49.2	48.5	49.9	51.6	52.6	54.4	56.4	57.8	60.2
77.5°	34.1	34.1	35.8	37.8	40.6	43.7	46.4	48.9	51.6	53.3	55.4
80°	22.0	23.1	25.8	29.6	33.4	37.5	41.3	44.4	47.1	49.9	51.3
82.5°	13.1	14.8	18.2	23.1	27.9	33.0	36.8	40.6	43.7	46.4	47.5
85°	6.5	8.9	13.1	18.2	23.4	28.9	33.7	37.2	40.6	43.0	44.4
87.5°	2.1	4.8	9.3	14.1	19.6	25.1	30.3	34.1	37.2	39.2	40.6
90°	0.0	2.4	6.5	11.7	16.9	22.4	27.2	31.3	34.4	36.1	37.2
92.5°	0.0	1.4	5.2	9.6	14.5	20.0	24.8	28.6	31.3	33.0	33.7
95°	0.3	1.0	3.8	7.9	12.7	17.9	22.4	25.8	28.6	30.3	30.6
97.5°	0.3	0.7	3.1	6.5	11.0	15.8	20.3	23.7	25.8	27.5	27.9
100°	0.3	0.7	2.4	5.8	9.6	14.1	18.2	21.3	23.7	25.1	25.5
102.5°	0.3	0.3	2.1	4.8	8.6	12.4	16.2	19.3	21.3	22.7	23.4
105°	0.3	0.3	1.7	4.1	7.6	11.0	14.5	17.5	19.3	20.6	21.3
107.5°	0.3	0.3	1.4	3.4	6.5	9.6	13.1	15.5	17.5	18.9	19.6
110°	0.3	0.3	1.0	3.1	5.5	8.6	11.4	13.8	15.8	17.2	17.9



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-18SL-LC-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	0.3	0.3	1.0	2.8	4.8	7.6	10.0	12.4	14.1	15.5	16.5
115°	0.3	0.3	1.0	2.4	4.5	6.5	8.9	11.0	12.7	14.1	15.1
117.5°	0.3	0.3	1.0	2.1	3.8	5.8	7.9	10.0	11.4	12.7	13.8
120°	0.3	0.3	0.7	1.7	3.4	5.2	6.9	8.6	10.3	11.7	12.7
122.5°	0.3	0.3	0.7	1.7	2.8	4.5	6.2	7.6	9.3	10.3	11.4
125°	0.3	0.3	0.7	1.4	2.4	4.1	5.5	6.9	7.9	9.3	10.3
127.5°	0.3	0.3	0.7	1.4	2.1	3.4	4.8	6.2	7.2	8.3	8.9
130°	0.3	0.3	0.7	1.0	1.7	2.8	4.1	5.2	6.5	7.2	7.9
132.5°	0.3	0.3	0.3	1.0	1.4	2.1	3.1	4.5	5.5	6.5	6.9
135°	0.3	0.3	0.3	0.7	1.4	1.7	2.4	3.4	4.5	5.5	6.2
137.5°	0.3	0.3	0.3	0.7	1.0	1.7	2.1	2.8	3.8	4.5	5.5
140°	0.3	0.3	0.3	0.7	1.0	1.4	1.7	2.4	3.1	3.8	4.5
142.5°	0.3	0.3	0.3	0.7	0.7	1.0	1.4	2.1	2.4	3.1	3.8
145°	0.3	0.3	0.3	0.7	0.7	1.0	1.4	1.7	2.1	2.4	3.1
147.5°	0.3	0.3	0.3	0.7	0.7	0.7	1.0	1.4	1.7	2.1	2.4
150°	0.7	0.7	0.7	0.7	0.7	0.7	1.0	1.0	1.4	1.7	2.1
152.5°	0.7	0.7	0.7	0.7	0.7	0.7	1.0	1.0	1.0	1.4	1.7
155°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.0	1.0	1.4	1.4
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-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	666.1	666.1	666.1	666.1	666.1	666.1	666.1	666.1	666.1	666.1	666.1
2.5°	660.3	661.0	665.1	664.7	664.1	663.4	663.4	662.7	663.4	665.1	664.4
5°	656.8	657.9	661.0	660.6	659.9	659.6	659.2	658.2	658.9	661.3	660.6
7.5°	650.6	651.7	654.4	653.1	652.0	652.7	651.0	650.0	651.3	653.7	653.4
10°	644.1	644.8	648.2	647.5	645.8	646.2	644.4	643.8	645.5	646.9	647.2
12.5°	639.6	642.0	645.1	644.8	644.4	644.8	643.1	642.4	643.4	644.8	644.4
15°	638.6	641.7	645.1	645.1	645.5	645.8	644.1	643.1	644.1	645.1	644.8
17.5°	637.6	641.4	644.4	644.1	644.4	645.1	642.4	641.7	643.1	644.4	643.8
20°	634.1	637.6	639.6	638.9	638.9	639.3	635.8	635.8	637.9	638.9	639.3
22.5°	624.5	628.6	628.6	626.9	626.9	625.5	624.5	622.4	624.8	626.6	627.9
25°	610.0	611.8	609.7	605.9	603.8	602.1	597.3	601.4	601.4	606.6	608.3
27.5°	589.7	586.0	580.1	572.2	570.5	565.0	561.9	562.9	564.6	571.8	577.4
30°	556.4	545.0	535.0	531.6	524.0	518.5	513.0	515.8	518.9	523.0	534.3
32.5°	512.3	501.3	485.1	479.3	471.4	464.5	458.0	462.1	467.6	470.3	482.7
35°	461.7	448.7	433.9	423.9	415.6	411.9	403.6	409.4	415.3	417.4	428.0
37.5°	408.1	394.7	381.6	373.0	365.1	362.7	357.1	361.3	365.7	368.8	377.8
40°	357.1	344.8	334.8	328.9	323.4	321.4	319.3	321.0	324.5	326.9	333.8
42.5°	313.5	303.5	296.6	293.2	289.4	286.6	287.0	287.6	289.4	294.5	297.6
45°	275.3	269.4	264.9	264.2	261.8	261.5	261.2	262.5	263.6	266.7	269.1
47.5°	244.6	242.2	241.2	242.6	243.6	242.2	242.9	244.6	246.7	246.7	246.4
50°	220.6	221.2	222.6	225.7	227.8	228.5	229.2	231.2	231.6	232.2	231.2
52.5°	200.9	201.6	205.4	210.2	212.6	213.7	215.0	217.1	217.1	217.8	216.4
55°	181.0	182.0	185.8	190.6	192.7	194.1	195.4	196.8	197.8	199.2	198.2
57.5°	159.0	162.1	164.5	165.8	167.2	168.3	169.3	169.6	171.7	172.0	173.8
60°	135.6	136.3	138.7	138.3	137.3	140.0	138.7	141.1	143.5	146.6	146.9
62.5°	113.2	113.5	115.3	114.6	116.0	115.6	116.6	116.6	118.4	119.7	121.5
65°	95.7	96.0	97.4	97.4	97.0	98.1	99.1	99.8	99.8	100.8	102.2
67.5°	82.6	83.6	85.0	85.7	86.4	86.4	87.4	87.7	88.4	88.8	89.5
70°	73.6	75.0	76.4	77.1	77.4	78.1	78.4	78.4	79.1	79.5	80.2
72.5°	67.1	68.5	69.5	69.5	70.2	70.5	70.5	70.9	71.2	71.9	72.6
75°	61.6	62.6	63.3	63.0	63.0	63.0	63.3	63.3	64.0	64.7	65.4
77.5°	56.4	57.5	57.5	56.8	56.8	56.8	56.8	57.1	57.5	58.1	58.8
80°	52.6	52.6	52.3	52.3	51.6	51.3	51.3	51.6	51.6	52.3	53.3
82.5°	48.5	48.5	48.2	47.8	47.5	47.1	47.1	47.5	47.8	48.2	48.9
85°	44.7	44.7	44.0	44.0	43.7	43.7	43.7	43.7	44.0	44.4	45.1
87.5°	40.9	40.6	40.3	39.9	39.9	39.9	39.9	39.9	40.3	40.9	41.3
90°	37.2	36.8	36.5	36.5	36.1	36.1	36.5	36.5	36.8	37.2	37.5
92.5°	33.7	33.4	33.0	33.0	32.7	32.7	33.0	32.7	33.4	33.4	33.7
95°	30.6	30.3	29.9	29.9	29.9	29.9	29.9	29.9	30.3	30.3	30.6
97.5°	27.9	27.5	27.2	27.2	27.5	27.2	27.5	27.5	27.5	27.9	28.2
100°	25.5	25.1	25.1	25.5	25.1	25.1	25.5	25.5	25.5	25.5	25.8
102.5°	23.4	23.4	23.4	23.4	23.4	23.4	23.7	23.7	23.7	23.7	24.1
105°	21.3	21.7	21.7	21.7	22.0	22.0	22.0	22.4	22.4	22.4	22.4
107.5°	20.0	20.3	20.3	20.6	20.6	21.0	21.0	21.0	21.0	21.3	21.3
110°	18.6	18.9	19.3	19.6	19.6	20.0	20.0	20.0	20.0	20.0	20.0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-18SL-LC-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	17.2	17.5	17.9	18.6	18.9	18.9	18.9	18.9	19.3	19.3	18.9
115°	15.8	16.5	16.9	17.5	17.9	17.9	18.2	18.2	18.2	18.2	17.9
117.5°	14.5	15.5	15.8	16.5	16.9	16.9	17.2	17.2	17.2	17.2	16.9
120°	13.4	14.1	14.8	15.1	15.5	15.8	15.8	16.2	16.2	16.2	15.8
122.5°	12.4	13.1	13.8	14.1	14.5	14.8	14.8	14.8	14.8	14.8	14.8
125°	11.0	11.7	12.4	12.7	13.1	13.4	13.4	13.8	13.8	13.8	13.4
127.5°	10.0	10.7	11.0	11.7	12.0	12.0	12.4	12.4	12.4	12.4	12.0
130°	8.6	9.3	10.0	10.3	10.7	10.7	11.0	11.0	11.0	11.0	11.0
132.5°	7.6	8.3	8.6	9.3	9.3	9.6	9.6	10.0	10.0	10.0	9.6
135°	6.9	7.2	7.6	8.3	8.3	8.6	8.6	8.6	8.6	8.6	8.6
137.5°	6.2	6.5	6.9	7.2	7.2	7.6	7.6	7.6	7.6	7.9	7.6
140°	5.2	5.8	6.2	6.2	6.5	6.5	6.5	6.9	6.9	6.9	6.5
142.5°	4.5	4.8	5.2	5.5	5.8	5.8	5.8	5.8	6.2	5.8	5.8
145°	3.4	4.1	4.5	4.8	5.2	5.2	5.2	5.2	5.2	5.2	5.2
147.5°	2.8	3.1	3.8	4.1	4.1	4.5	4.5	4.5	4.5	4.5	4.5
150°	2.4	2.4	3.1	3.4	3.8	3.8	3.8	3.8	3.8	3.8	3.8
152.5°	1.7	2.1	2.4	2.8	3.1	3.1	3.1	3.1	3.1	3.1	3.1
155°	1.7	1.7	2.1	2.1	2.4	2.4	2.4	2.4	2.8	2.4	2.4
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-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	666.1	666.1	666.1	666.1	666.1	666.1	666.1	666.1	666.1	666.1	666.1
2.5°	663.4	663.0	664.4	663.0	656.1	658.9	657.9	661.7	662.0	663.0	666.5
5°	659.9	659.9	661.7	660.3	653.7	656.5	656.1	659.9	660.6	661.3	665.1
7.5°	653.1	653.4	655.8	654.8	647.9	652.0	651.7	656.1	657.5	658.9	662.3
10°	646.5	646.2	648.9	647.9	641.4	646.2	645.8	650.3	652.4	654.8	658.9
12.5°	643.1	642.0	643.1	642.0	634.8	638.6	638.9	644.1	646.5	649.6	654.4
15°	643.1	641.4	641.4	639.3	631.0	633.4	633.8	637.2	640.3	643.4	649.3
17.5°	642.4	640.7	640.3	638.6	629.7	629.7	629.3	631.7	633.4	636.5	642.7
20°	638.6	637.9	637.6	636.5	628.3	626.9	626.2	626.2	627.2	628.3	634.5
22.5°	628.6	629.3	630.0	630.7	624.1	621.7	622.1	621.4	620.4	620.4	625.5
25°	610.0	613.5	616.2	619.3	615.5	613.8	615.9	614.9	613.1	611.8	616.2
27.5°	580.5	587.7	593.5	601.1	601.4	600.1	605.6	604.9	604.5	602.5	605.9
30°	539.5	550.9	558.8	569.8	579.1	580.5	589.7	591.1	592.5	591.5	594.9
32.5°	490.0	505.4	518.9	536.1	545.0	552.9	566.0	571.5	577.0	578.7	582.5
35°	435.9	453.5	469.3	488.2	502.3	519.6	535.4	543.6	556.0	560.8	566.3
37.5°	384.7	401.2	416.7	435.6	458.3	476.2	495.8	514.4	531.2	538.1	546.4
40°	339.3	352.7	367.5	384.0	404.6	428.0	449.4	475.2	495.1	508.9	520.9
42.5°	304.8	311.4	324.1	338.9	355.4	379.2	400.8	429.7	453.8	473.4	493.4
45°	274.2	277.3	286.6	294.5	311.4	332.4	355.4	383.6	408.8	433.9	458.0
47.5°	248.1	251.9	256.3	261.2	273.2	290.7	310.7	336.2	361.3	390.5	418.0
50°	230.5	231.6	232.2	234.3	241.5	253.6	269.8	291.4	315.5	346.8	376.1
52.5°	215.0	215.0	213.0	211.9	214.7	222.3	231.6	247.0	271.8	300.7	331.7
55°	198.5	195.4	194.7	191.3	192.0	195.4	199.9	211.9	232.2	257.0	287.0
57.5°	175.5	174.1	174.1	172.7	170.0	171.7	172.7	181.3	195.8	217.1	243.3
60°	149.0	148.3	150.0	150.4	148.0	149.0	148.6	153.8	164.1	181.3	203.0
62.5°	122.5	125.6	125.9	127.3	125.9	125.6	127.3	131.8	136.9	150.0	166.9
65°	102.9	104.6	104.9	106.7	106.0	106.0	107.4	110.8	113.9	122.8	135.9
67.5°	90.1	89.5	89.8	90.8	89.8	89.5	90.5	92.6	95.0	100.5	109.8
70°	80.2	79.5	79.5	79.5	78.1	77.1	77.4	78.1	79.1	82.2	88.1
72.5°	72.6	72.6	71.6	70.5	69.5	68.8	68.1	67.4	67.1	68.1	71.2
75°	65.7	66.1	65.7	64.7	63.3	61.9	60.6	59.2	57.5	56.8	57.1
77.5°	59.5	59.9	60.2	59.9	58.5	56.8	54.7	52.6	50.2	47.8	46.4
80°	54.0	54.7	55.1	54.7	53.7	52.3	49.9	47.5	44.0	40.9	37.5
82.5°	49.2	50.2	50.6	50.6	49.9	48.5	45.8	43.0	39.2	35.1	30.6
85°	45.4	46.1	46.8	46.8	46.4	45.1	42.3	39.2	35.4	30.6	25.8
87.5°	41.6	42.0	42.7	43.4	42.7	41.3	38.9	35.4	31.7	26.8	21.3
90°	37.8	38.2	38.9	39.6	39.2	37.8	35.8	32.7	28.6	23.4	17.9
92.5°	34.1	34.8	35.1	35.4	35.8	34.8	33.0	29.9	25.8	20.6	15.5
95°	31.3	31.3	32.0	32.3	32.7	31.7	30.3	27.2	23.4	18.6	13.4
97.5°	28.6	28.6	29.2	29.2	29.6	28.9	27.5	24.8	21.0	16.5	11.4
100°	25.8	26.1	26.5	26.8	26.8	26.5	25.1	22.4	18.9	14.8	10.0
102.5°	24.1	24.1	24.4	24.4	24.8	24.1	22.7	20.3	16.9	13.1	8.6
105°	22.4	22.4	22.7	22.7	22.4	21.7	20.3	18.2	15.1	11.4	7.6
107.5°	21.0	21.0	21.0	21.0	20.6	20.0	18.6	16.2	13.4	10.3	6.9
110°	20.0	19.6	19.6	19.3	18.9	17.9	16.5	14.5	12.0	8.9	5.8



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-18SL-LC-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	18.9	18.6	18.2	17.9	17.2	16.2	14.8	13.1	10.7	7.9	5.2
115°	17.9	17.5	17.2	16.5	15.8	14.8	13.4	11.7	9.3	6.9	4.5
117.5°	16.9	16.5	15.8	15.1	14.5	13.4	12.0	10.3	8.3	6.2	4.1
120°	15.5	15.1	14.8	14.1	13.4	12.0	10.7	9.3	7.2	5.5	3.4
122.5°	14.5	14.1	13.4	13.1	12.0	11.0	9.6	8.3	6.5	4.8	3.1
125°	13.1	12.7	12.4	11.7	11.0	9.6	8.6	7.2	5.8	4.1	2.4
127.5°	12.0	11.7	11.0	10.3	9.6	8.6	7.6	6.5	5.2	3.4	2.4
130°	10.7	10.3	10.0	9.3	8.6	7.6	6.9	5.5	4.5	3.1	2.1
132.5°	9.3	9.3	8.9	8.3	7.6	6.9	5.8	4.8	3.8	2.8	1.7
135°	8.6	8.3	7.9	7.2	6.9	5.8	5.2	4.1	3.1	2.4	1.4
137.5°	7.6	7.2	6.9	6.5	5.8	5.2	4.5	3.4	2.8	2.1	1.4
140°	6.5	6.2	6.2	5.5	5.2	4.5	3.8	3.1	2.4	1.7	1.0
142.5°	5.8	5.5	5.2	4.8	4.5	3.8	3.1	2.4	2.1	1.4	1.0
145°	5.2	4.8	4.5	4.1	3.8	3.1	2.8	2.1	1.7	1.4	1.0
147.5°	4.1	4.1	3.8	3.4	3.1	2.8	2.4	2.1	1.4	1.0	0.7
150°	3.4	3.4	3.1	2.8	2.8	2.4	2.1	1.7	1.4	1.0	0.7
152.5°	3.1	2.8	2.8	2.4	2.4	2.1	1.7	1.4	1.0	1.0	0.7
155°	2.4	2.4	2.4	2.1	2.1	1.7	1.4	1.4	1.0	0.7	0.7
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-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	666.1	666.1	666.1	666.1	666.1	666.1	666.1	666.1	666.1	666.1	666.1
2.5°	667.2	663.0	666.5	672.7	672.0	671.3	670.6	672.0	676.4	674.0	670.3
5°	666.1	662.0	665.8	671.6	671.3	670.3	669.6	670.9	675.4	673.0	668.9
7.5°	664.1	660.3	663.0	668.9	668.9	668.2	667.5	668.9	673.0	670.9	666.8
10°	660.6	657.9	660.6	666.1	666.5	665.1	664.4	666.1	670.3	669.2	665.8
12.5°	657.9	655.1	658.2	663.7	664.1	662.7	661.7	663.7	669.2	669.9	668.9
15°	654.1	651.7	655.5	661.3	661.3	660.3	660.3	663.0	670.6	673.7	675.4
17.5°	648.6	646.9	651.3	657.2	657.5	656.8	657.2	662.7	672.7	680.2	685.0
20°	641.7	641.0	645.8	652.0	653.1	653.4	655.1	663.4	677.1	687.5	692.3
22.5°	633.4	633.8	639.3	645.8	647.2	648.2	651.7	663.4	680.6	691.6	693.7
25°	624.1	625.2	631.0	638.9	640.7	642.7	648.6	663.7	681.6	688.8	685.4
27.5°	614.2	616.2	623.8	632.1	634.1	637.6	645.1	661.7	676.8	677.1	664.4
30°	603.8	606.3	615.2	624.8	628.3	631.7	641.0	656.8	665.1	654.1	631.7
32.5°	592.1	595.6	604.5	616.2	620.4	624.8	634.1	647.5	644.4	620.7	588.7
35°	577.4	582.2	592.5	606.3	610.0	615.9	622.4	625.5	611.8	578.0	541.9
37.5°	559.1	566.3	578.4	594.2	598.3	602.1	603.8	595.2	567.7	531.2	493.7
40°	538.1	549.1	562.2	579.8	583.9	583.9	577.7	559.5	524.7	476.9	435.3
42.5°	512.7	526.1	542.6	560.2	564.3	559.5	544.7	512.7	473.1	419.8	375.7
45°	481.7	499.6	518.2	536.4	538.5	527.8	501.3	460.7	411.9	362.3	320.3
47.5°	444.9	468.3	488.6	509.2	506.5	488.6	453.1	407.0	355.4	308.6	274.9
50°	403.6	431.1	453.8	473.4	467.6	442.8	401.2	353.0	301.8	261.8	234.0
52.5°	359.6	391.2	413.9	429.7	421.8	392.2	346.5	300.4	258.4	221.9	203.3
55°	313.8	345.8	369.2	381.6	371.3	339.3	294.2	252.2	212.6	188.9	177.9
57.5°	269.4	299.3	321.4	331.3	318.3	286.3	244.6	209.2	180.6	160.7	155.2
60°	226.7	251.2	272.2	279.7	265.6	236.0	200.3	172.0	151.0	137.3	134.5
62.5°	187.2	207.1	223.6	229.5	215.7	192.7	161.7	140.7	125.9	119.0	115.6
65°	154.5	166.2	183.0	182.0	173.8	152.4	129.7	114.9	105.3	100.8	98.7
67.5°	121.5	132.1	142.8	144.2	133.8	119.0	104.3	93.6	88.4	86.0	85.0
70°	93.9	101.8	108.4	106.7	101.2	91.9	82.6	76.7	74.7	73.6	73.6
72.5°	72.9	77.1	80.2	78.1	74.7	69.8	65.4	63.0	63.3	64.0	64.7
75°	56.4	57.5	58.1	56.1	55.4	52.3	52.0	52.3	54.4	56.4	57.5
77.5°	43.4	42.0	40.9	38.9	39.2	38.9	40.6	43.4	46.4	49.5	52.3
80°	33.4	30.3	27.9	25.8	26.8	28.6	32.0	36.1	40.3	43.7	47.1
82.5°	25.8	21.3	17.9	15.8	17.9	20.6	25.1	30.3	35.1	38.9	42.7
85°	20.0	14.8	10.7	8.6	10.7	14.8	19.6	25.5	30.6	34.8	38.5
87.5°	15.5	10.7	5.8	3.4	5.8	10.3	15.8	21.3	26.5	31.3	35.1
90°	12.4	7.2	2.8	0.7	3.1	7.2	12.4	17.9	23.1	28.2	32.0
92.5°	10.0	5.2	1.4	0.0	1.7	5.5	10.3	15.5	20.6	25.5	29.2
95°	8.3	4.1	1.0	0.0	1.4	4.1	8.3	13.4	18.2	23.1	26.1
97.5°	6.9	3.1	0.7	0.0	0.7	3.4	6.9	11.4	16.2	20.6	23.7
100°	5.8	2.8	0.7	0.0	0.7	2.8	5.8	10.0	14.1	18.2	21.3
102.5°	4.8	2.1	0.3	0.3	0.3	2.1	5.2	8.6	12.4	16.2	19.3
105°	4.5	1.7	0.3	0.3	0.3	1.7	4.5	7.6	11.0	14.5	17.2
107.5°	3.8	1.4	0.3	0.3	0.3	1.4	3.8	6.5	10.0	13.1	15.5
110°	3.1	1.4	0.3	0.3	0.3	1.4	3.1	5.8	8.6	11.4	13.8



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-18SL-LC-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	2.8	1.0	0.3	0.3	0.3	1.0	2.8	5.2	7.6	10.3	12.4
115°	2.4	1.0	0.3	0.3	0.3	1.0	2.4	4.5	6.5	8.9	11.0
117.5°	2.1	1.0	0.3	0.3	0.3	0.7	2.1	3.8	5.8	7.9	10.0
120°	1.7	0.7	0.3	0.3	0.3	0.7	1.7	3.4	5.2	6.9	8.6
122.5°	1.7	0.7	0.3	0.3	0.3	0.7	1.4	2.8	4.5	5.8	7.6
125°	1.4	0.7	0.3	0.3	0.3	0.3	1.4	2.4	3.8	5.2	6.5
127.5°	1.4	0.7	0.3	0.3	0.3	0.3	1.0	2.1	3.1	4.5	5.8
130°	1.0	0.7	0.3	0.3	0.3	0.3	0.7	1.7	2.8	3.8	4.8
132.5°	1.0	0.7	0.3	0.3	0.3	0.3	0.7	1.4	2.1	3.1	4.1
135°	1.0	0.3	0.3	0.3	0.3	0.3	0.3	1.0	1.7	2.4	3.1
137.5°	0.7	0.3	0.3	0.3	0.3	0.3	0.3	0.7	1.4	1.7	2.8
140°	0.7	0.3	0.3	0.3	0.3	0.3	0.3	0.7	1.0	1.4	2.1
142.5°	0.7	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.7	1.0	1.7
145°	0.7	0.3	0.3	0.7	0.7	0.3	0.3	0.7	0.7	1.0	1.4
147.5°	0.7	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.7	0.7	1.0
150°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.0
152.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
155°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
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-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	666.1	666.1	666.1	666.1	666.1	666.1	666.1	666.1	666.1	666.1	666.1
2.5°	669.6	661.7	665.8	664.4	665.8	669.2	668.9	667.8	668.5	666.8	665.1
5°	668.2	660.3	664.4	662.7	664.4	667.8	667.2	666.1	667.2	665.1	663.4
7.5°	666.5	659.2	664.1	663.7	666.8	671.3	671.6	671.6	674.0	670.9	669.6
10°	666.5	662.7	669.2	671.6	679.5	685.4	686.1	687.5	691.6	690.9	687.5
12.5°	673.7	673.0	682.6	688.5	695.7	704.0	708.4	709.8	712.6	710.5	709.1
15°	683.0	686.4	697.1	703.6	711.5	717.7	718.8	719.5	721.5	718.4	716.0
17.5°	695.4	697.4	706.0	708.8	714.0	715.0	713.6	710.2	710.2	703.3	701.2
20°	701.2	700.2	703.6	699.2	697.1	690.9	685.0	678.5	678.2	670.9	670.3
22.5°	696.1	689.2	682.0	670.9	666.1	657.2	649.3	645.5	643.1	633.8	631.4
25°	677.8	661.0	650.3	637.2	625.5	615.2	607.6	599.7	592.1	584.6	581.1
27.5°	646.2	630.3	613.1	594.9	578.7	562.9	550.2	542.3	535.0	525.1	519.9
30°	607.3	585.3	566.3	548.8	522.3	503.0	492.4	476.5	471.0	466.6	456.9
32.5°	561.5	535.0	509.2	485.5	458.3	440.4	426.3	414.6	411.2	399.5	396.7
35°	510.9	476.2	447.0	423.6	403.9	382.3	370.6	362.7	355.8	347.9	346.5
37.5°	451.4	420.1	387.1	366.4	351.0	332.4	323.4	317.9	314.8	309.0	307.9
40°	391.6	360.2	337.5	316.9	307.3	297.3	290.7	288.3	287.0	284.9	282.8
42.5°	337.2	309.7	293.5	279.7	275.6	270.8	269.1	270.4	269.1	268.4	268.0
45°	291.1	270.1	258.7	254.6	253.6	252.2	253.6	256.0	256.3	255.6	255.6
47.5°	249.1	239.1	234.3	235.0	236.7	237.8	240.2	243.3	243.9	242.2	242.9
50°	221.6	215.7	214.7	217.5	221.2	222.6	225.4	227.8	227.4	226.7	226.1
52.5°	195.8	194.1	196.8	199.6	203.7	204.4	205.4	206.4	206.1	204.7	204.0
55°	174.1	175.5	177.9	178.9	182.0	181.7	182.0	182.0	180.6	180.0	178.9
57.5°	154.5	154.8	156.2	156.6	158.3	157.6	157.2	156.6	154.5	154.1	153.1
60°	134.5	133.8	136.9	134.5	135.9	134.5	134.2	132.5	130.4	130.1	129.4
62.5°	115.6	114.2	116.3	115.3	116.0	114.6	113.9	111.8	110.1	109.8	109.4
65°	98.7	98.1	100.1	99.8	100.5	98.7	98.1	96.7	95.3	95.0	94.6
67.5°	84.6	86.4	87.4	87.4	88.1	87.7	86.0	85.7	85.3	84.0	84.0
70°	74.3	75.4	77.4	77.8	77.4	78.1	76.7	76.4	76.0	75.4	75.0
72.5°	66.1	67.4	69.5	69.8	69.5	69.5	68.8	68.5	68.5	67.4	67.4
75°	59.5	61.2	63.0	63.0	63.0	62.3	61.6	61.6	60.9	60.6	59.9
77.5°	54.0	56.1	57.5	57.1	56.8	56.1	56.1	55.1	54.0	54.0	53.3
80°	49.9	51.3	52.3	52.0	51.6	50.6	50.2	49.2	48.5	47.5	47.5
82.5°	45.4	47.1	47.8	47.5	46.8	45.8	45.4	44.7	44.0	43.7	43.0
85°	41.6	43.4	43.7	43.0	42.3	41.6	41.3	40.9	40.6	39.9	39.9
87.5°	37.8	39.6	39.6	39.2	38.5	38.2	37.8	37.5	37.2	36.8	36.5
90°	34.8	36.1	36.1	35.8	35.4	35.1	34.8	34.4	34.1	33.7	33.7
92.5°	31.7	33.0	33.0	32.7	32.3	32.0	32.0	31.7	31.3	31.0	30.6
95°	28.9	30.3	30.3	30.3	29.9	29.6	29.6	29.2	28.9	28.9	28.6
97.5°	26.1	27.5	27.5	27.5	27.2	26.8	26.8	26.5	26.5	26.5	26.1
100°	23.7	24.8	25.1	25.1	24.8	24.8	24.8	24.4	24.4	24.4	24.1
102.5°	21.3	22.4	23.1	23.1	23.1	22.7	22.7	22.7	22.7	22.7	22.4
105°	19.3	20.3	21.0	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3
107.5°	17.5	18.6	19.3	19.6	20.0	20.0	20.3	20.3	20.3	20.3	20.3
110°	15.8	16.9	17.9	18.2	18.6	18.9	18.9	19.3	18.9	18.9	18.9



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-18SL-LC-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	14.1	15.5	16.2	16.9	17.2	17.5	17.9	17.9	17.9	17.9	17.9
115°	12.7	14.1	14.8	15.5	16.2	16.5	16.5	16.9	16.9	16.9	16.5
117.5°	11.4	12.7	13.4	14.1	14.5	15.1	15.5	15.5	15.5	15.5	15.1
120°	10.3	11.4	12.0	12.7	13.4	13.8	14.1	14.1	14.1	14.1	14.1
122.5°	8.9	10.0	11.0	11.7	12.0	12.4	12.7	12.7	12.7	12.7	12.7
125°	7.9	8.9	9.6	10.3	10.7	11.4	11.4	11.4	11.4	11.4	11.4
127.5°	6.9	7.9	8.6	9.3	9.6	10.0	10.3	10.3	10.3	10.3	10.3
130°	5.8	6.9	7.6	8.3	8.6	8.9	8.9	9.3	9.3	9.3	9.3
132.5°	5.2	5.8	6.5	7.2	7.6	7.9	7.9	8.3	8.3	8.3	8.3
135°	4.1	5.2	5.5	6.2	6.5	6.9	6.9	7.2	7.2	7.2	7.2
137.5°	3.4	4.1	4.8	5.5	5.8	5.8	6.2	6.2	6.5	6.5	6.5
140°	2.8	3.1	4.1	4.5	4.8	5.2	5.5	5.5	5.5	5.5	5.5
142.5°	2.1	2.8	3.1	3.8	4.1	4.5	4.8	4.8	4.8	4.8	4.8
145°	1.7	2.1	2.4	3.1	3.4	3.8	4.1	4.1	4.1	4.1	4.1
147.5°	1.4	1.7	2.1	2.4	2.8	3.1	3.4	3.4	3.4	3.4	3.4
150°	1.0	1.4	1.7	1.7	2.1	2.4	2.8	3.1	3.1	3.1	3.1
152.5°	1.0	1.0	1.4	1.4	1.7	2.1	2.4	2.4	2.4	2.4	2.4
155°	0.7	1.0	1.0	1.0	1.4	1.4	1.7	2.1	2.1	2.1	2.1
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-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	666.1	666.1	666.1	666.1	666.1	666.1	666.1	666.1	666.1	666.1	666.1
2.5°	666.1	667.5	666.8	665.8	665.4	667.2	665.4	657.5	660.6	661.0	663.4
5°	665.1	666.1	665.4	664.7	663.7	665.8	663.7	655.5	658.6	658.9	661.3
7.5°	672.0	672.3	672.3	670.6	667.8	668.9	666.1	656.8	658.6	658.6	660.3
10°	689.2	689.9	690.9	686.4	683.0	680.2	676.4	665.1	664.7	662.0	662.0
12.5°	711.5	709.8	708.1	706.0	703.3	699.8	694.3	680.9	676.4	672.0	667.5
15°	718.1	717.4	717.0	716.0	714.3	713.3	709.1	695.7	689.2	683.7	675.8
17.5°	700.9	702.3	706.7	707.1	709.1	713.3	712.6	703.3	697.4	695.0	685.4
20°	669.9	670.3	675.8	678.2	687.1	694.0	699.2	698.1	696.7	699.5	692.3
22.5°	632.8	635.2	641.0	644.8	653.4	661.3	669.6	674.0	681.3	692.6	691.2
25°	582.2	585.3	593.5	599.7	611.8	623.8	634.8	642.7	651.3	673.0	680.2
27.5°	521.6	526.4	537.1	543.3	560.2	572.5	588.4	603.8	615.9	640.7	655.5
30°	458.0	462.1	473.4	482.0	496.5	513.4	533.3	555.3	575.3	600.4	619.0
32.5°	398.4	402.9	412.2	419.8	435.9	450.0	472.1	499.3	517.8	552.6	577.4
35°	346.5	350.6	357.1	363.7	377.1	391.6	410.5	437.0	460.7	496.8	528.2
37.5°	310.0	310.7	314.5	318.3	328.2	339.3	354.1	377.4	399.5	438.3	472.8
40°	283.9	283.9	285.9	287.0	291.4	298.0	307.3	325.5	343.7	373.3	415.3
42.5°	267.7	267.0	267.0	267.3	267.0	270.1	275.6	284.2	300.4	324.8	357.5
45°	255.6	254.3	253.2	250.8	249.5	249.5	249.8	252.9	262.2	278.0	304.5
47.5°	242.2	241.9	240.2	237.4	235.0	233.3	230.5	229.5	232.2	241.2	259.1
50°	226.7	225.0	223.3	221.2	218.5	216.8	211.6	211.9	209.5	213.7	223.0
52.5°	204.0	202.7	202.0	200.3	199.2	198.5	194.4	190.3	189.2	189.9	193.4
55°	178.9	179.6	176.9	178.2	177.9	174.8	173.1	170.0	168.9	168.6	170.3
57.5°	152.8	153.5	151.7	153.1	153.1	151.4	150.4	150.4	148.0	145.9	148.3
60°	129.0	127.7	128.7	130.4	130.4	129.4	128.7	128.7	127.0	126.3	128.0
62.5°	109.8	108.4	109.4	111.1	111.5	110.8	110.1	110.1	108.0	108.0	109.4
65°	95.0	95.3	95.0	96.3	96.3	96.7	96.0	95.3	92.9	93.9	93.6
67.5°	84.3	84.0	84.0	85.3	85.0	85.7	85.0	84.0	82.2	80.9	80.5
70°	75.4	75.0	75.0	75.7	76.0	76.0	75.7	75.0	72.6	71.2	70.2
72.5°	67.4	67.1	67.4	67.8	68.1	68.5	68.1	67.4	65.4	63.7	61.9
75°	60.2	59.9	60.9	60.9	61.2	61.2	61.6	61.2	59.5	57.5	55.4
77.5°	53.0	53.3	54.4	54.7	55.4	55.7	56.1	56.1	54.4	52.6	49.9
80°	47.1	47.8	48.5	48.9	49.5	50.6	50.9	51.3	49.9	48.2	45.1
82.5°	43.0	43.4	44.0	44.4	45.4	45.8	46.1	46.8	46.1	44.4	40.9
85°	39.6	39.9	40.6	40.6	41.3	42.0	42.3	42.7	42.3	40.6	37.2
87.5°	36.5	36.8	37.2	37.5	37.8	38.2	38.5	38.9	38.5	36.8	33.7
90°	33.7	33.7	34.1	34.1	34.4	34.8	35.4	35.4	35.1	33.7	30.6
92.5°	30.6	31.0	31.0	31.3	31.7	32.0	32.3	32.3	32.0	30.6	27.9
95°	28.6	28.6	28.9	28.9	29.2	29.2	29.6	29.6	29.2	27.9	25.1
97.5°	26.1	26.1	26.1	26.1	26.5	26.5	26.8	26.8	26.5	25.1	22.7
100°	24.1	24.1	24.1	24.1	24.1	24.4	24.4	24.4	24.1	22.7	20.3
102.5°	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	21.7	20.6	18.2
105°	21.3	21.3	21.3	21.0	21.0	21.0	20.6	20.6	19.6	18.6	16.5
107.5°	20.0	20.0	20.0	19.6	19.6	19.3	18.9	18.9	17.9	16.9	14.8
110°	18.9	18.9	18.9	18.6	18.2	17.9	17.5	17.2	16.2	14.8	13.1



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-18SL-LC-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	17.9	17.9	17.5	17.5	17.2	16.9	16.2	15.8	14.8	13.4	11.7
115°	16.5	16.5	16.5	16.2	15.8	15.5	15.1	14.5	13.4	12.0	10.3
117.5°	15.1	15.1	15.1	14.8	14.5	14.1	13.8	13.1	12.0	10.7	9.3
120°	13.8	13.8	13.8	13.4	13.1	12.7	12.4	11.7	10.7	9.6	7.9
122.5°	12.7	12.7	12.4	12.0	11.7	11.4	11.0	10.3	9.6	8.3	6.9
125°	11.4	11.4	11.0	11.0	10.7	10.3	10.0	9.3	8.3	7.2	6.2
127.5°	10.3	10.0	10.0	10.0	9.6	9.3	8.6	8.3	7.2	6.2	5.2
130°	8.9	8.9	8.9	8.6	8.6	8.3	7.6	6.9	6.2	5.5	4.5
132.5°	7.9	7.9	7.9	7.9	7.6	7.2	6.5	6.2	5.5	4.5	3.8
135°	7.2	7.2	6.9	6.9	6.5	6.2	5.8	5.2	4.5	3.8	3.1
137.5°	6.2	6.2	6.2	5.8	5.8	5.5	4.8	4.5	4.1	3.4	2.8
140°	5.5	5.5	5.2	5.2	4.8	4.8	4.5	3.8	3.4	2.8	2.4
142.5°	4.8	4.8	4.5	4.5	4.1	4.1	3.8	3.4	2.8	2.4	1.7
145°	4.1	4.1	3.8	3.8	3.8	3.4	3.1	2.8	2.4	2.1	1.7
147.5°	3.4	3.4	3.4	3.1	3.1	2.8	2.8	2.4	2.1	1.7	1.4
150°	3.1	3.1	2.8	2.8	2.8	2.4	2.1	2.1	1.7	1.4	1.0
152.5°	2.4	2.4	2.4	2.4	2.1	2.1	1.7	1.7	1.4	1.0	1.0
155°	2.1	2.1	2.1	1.7	1.7	1.7	1.4	1.4	1.0	1.0	0.7
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-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	666.1	666.1	666.1	666.1	666.1	666.1	666.1
2.5°	662.3	662.0	665.1	664.7	660.6	666.8	670.9
5°	660.6	660.3	663.0	663.7	659.2	665.8	670.3
7.5°	659.2	658.9	662.0	663.0	658.6	664.4	669.2
10°	659.6	657.9	660.6	661.3	657.2	663.4	667.5
12.5°	662.0	657.9	658.9	658.9	655.1	660.6	665.1
15°	667.8	659.2	657.9	656.8	652.0	657.2	661.7
17.5°	674.4	662.7	657.9	654.4	648.6	653.1	657.9
20°	680.9	666.5	658.6	653.1	645.1	649.3	652.7
22.5°	684.0	669.9	659.2	651.0	641.0	643.1	646.9
25°	679.9	668.5	657.9	647.9	635.8	636.2	639.3
27.5°	664.7	661.7	654.8	644.8	631.7	630.0	632.4
30°	638.9	647.5	647.9	640.7	626.9	623.5	624.5
32.5°	602.8	622.1	633.4	632.1	620.0	615.2	615.9
35°	561.2	585.3	610.0	618.3	609.7	605.9	604.5
37.5°	511.3	543.6	576.7	597.0	595.6	593.2	591.8
40°	456.2	495.1	534.3	566.7	576.7	576.7	577.4
42.5°	397.4	442.8	485.8	526.8	550.2	555.3	557.4
45°	340.6	386.4	433.2	480.3	511.6	527.8	533.7
47.5°	289.0	335.1	379.5	431.1	472.8	493.7	503.0
50°	245.0	279.4	326.2	377.4	422.9	448.7	466.9
52.5°	208.5	235.3	276.3	324.1	369.9	405.3	422.2
55°	177.9	196.1	230.9	272.2	315.9	352.7	372.3
57.5°	152.1	166.5	190.3	224.7	261.5	298.0	319.0
60°	129.4	139.3	155.5	182.7	214.0	245.3	265.6
62.5°	109.8	116.3	127.0	146.9	171.3	195.8	214.7
65°	94.6	97.4	103.2	115.6	134.2	152.8	168.9
67.5°	79.8	81.5	86.0	93.6	102.9	116.3	127.0
70°	68.8	68.8	69.2	73.6	78.4	87.1	94.6
72.5°	59.9	58.8	56.8	57.8	58.8	63.7	68.5
75°	52.6	50.2	46.8	45.4	44.7	45.4	48.2
77.5°	46.4	43.0	38.9	35.4	32.7	31.7	34.1
80°	41.3	37.2	32.3	27.9	23.4	21.0	22.0
82.5°	37.2	32.0	26.8	21.7	16.5	13.1	13.1
85°	32.7	27.9	22.4	16.9	11.7	7.2	6.5
87.5°	29.6	24.4	18.6	13.4	8.3	3.8	2.1
90°	26.5	21.3	15.8	10.7	5.8	1.7	0.0
92.5°	23.7	18.9	13.8	8.6	4.1	1.0	0.0
95°	21.3	16.9	11.7	7.2	3.4	0.7	0.3
97.5°	18.9	14.8	10.3	5.8	2.4	0.7	0.3
100°	17.2	13.1	8.9	4.8	2.1	0.3	0.3
102.5°	15.1	11.7	7.6	4.1	1.7	0.3	0.3
105°	13.4	10.3	6.5	3.4	1.4	0.3	0.3
107.5°	12.0	8.9	5.8	3.1	1.4	0.3	0.3
110°	10.7	7.9	5.2	2.8	1.0	0.3	0.3



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-18SL-LC-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	9.6	6.9	4.5	2.4	0.7	0.3	0.3
115°	8.3	6.2	3.8	2.1	0.7	0.3	0.3
117.5°	7.2	5.2	3.4	1.7	0.7	0.3	0.3
120°	6.2	4.5	2.8	1.4	0.3	0.3	0.3
122.5°	5.5	3.8	2.4	1.4	0.3	0.3	0.3
125°	4.8	3.4	2.1	1.0	0.3	0.3	0.3
127.5°	4.1	2.8	1.7	0.7	0.3	0.3	0.3
130°	3.4	2.4	1.4	0.7	0.3	0.3	0.3
132.5°	2.8	2.1	1.4	0.7	0.3	0.3	0.3
135°	2.4	1.7	1.0	0.7	0.3	0.3	0.3
137.5°	2.1	1.4	0.7	0.7	0.7	0.3	0.3
140°	1.7	1.0	0.7	0.7	0.7	0.7	0.3
142.5°	1.4	1.0	0.7	0.7	0.7	0.7	0.3
145°	1.0	0.7	0.7	0.7	0.7	0.7	0.3
147.5°	1.0	0.7	0.7	0.7	0.7	0.7	0.3
150°	0.7	0.7	0.7	0.7	0.7	0.7	0.7
152.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7
155°	0.7	0.7	0.7	0.7	0.7	0.7	0.7
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)