

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: METALUX

Report Number: P1213040

Luminaire Tested: 4SNLED-LD5-30SL-LN-UNV-L930-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213040
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33519)
Test Lab: INNOVATIONS CENTER-P3
Issue Date: 3/29/2018
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4SNLED-LD5-30SL-LN-UNV-L930-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
NARROW LENS
Light Source: -
Ballast/Driver: -

Summary

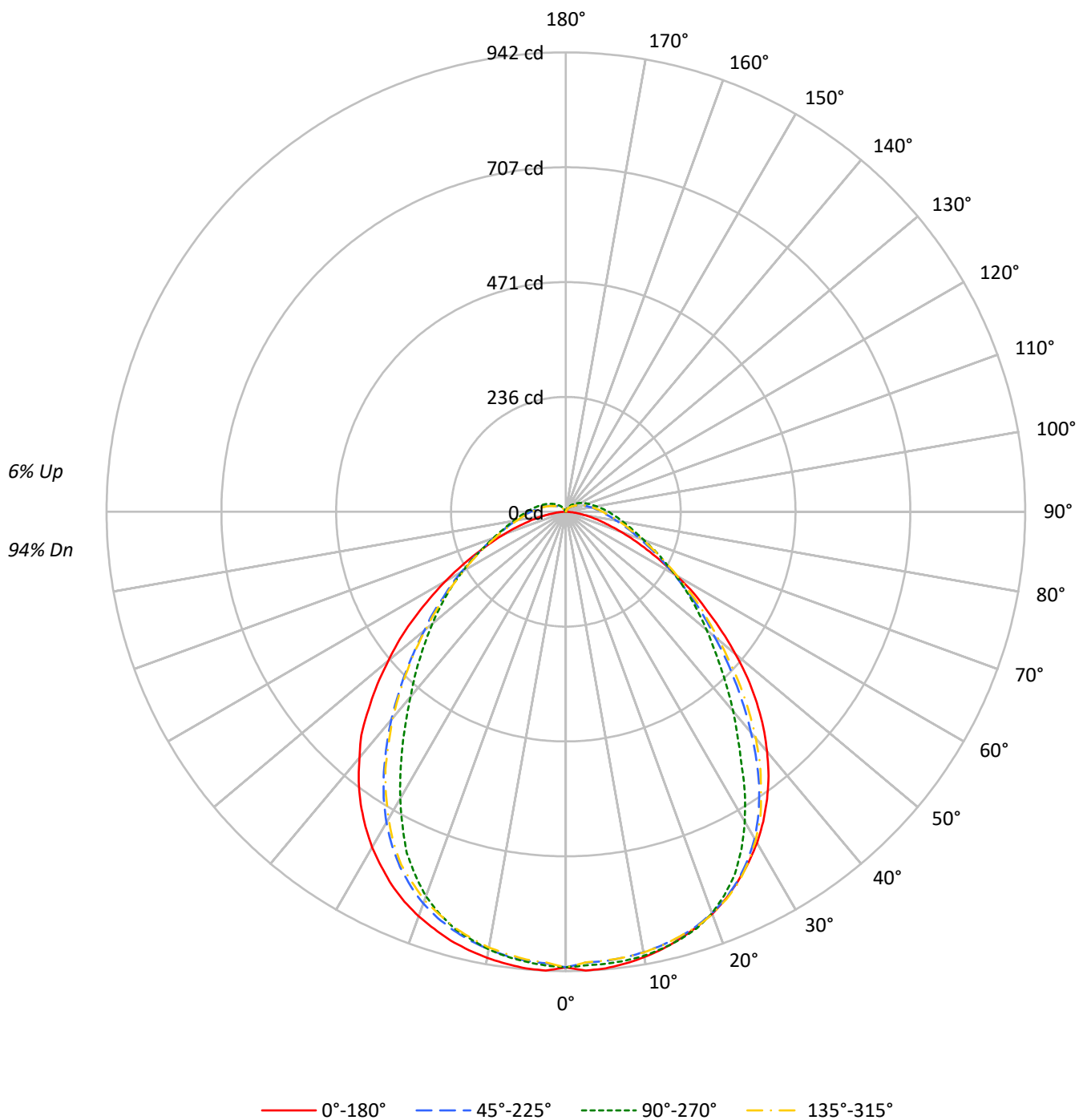
Lumens per Lamp: N/A
Luminaire Lumens: 2364.0 lumens
Efficiency: N/A
Efficacy: 112.6 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.14 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 21
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: 24 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
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°	7548	7548	7548	7548
5°	7603	7308	7603	7276
10°	7568	7114	7581	7015
15°	7520	6901	7554	6722
20°	7462	6629	7506	6349
25°	7343	6222	7424	5856
30°	7187	5627	7281	5210
35°	6944	4897	7078	4560
40°	6597	4283	6771	3973
45°	6138	3723	6338	3510
50°	5511	3271	5755	3106
55°	4768	2889	5114	2742
60°	4009	2537	4373	2391
65°	3287	2243	3618	2080
70°	2615	1990	2929	1841
75°	2055	1838	2312	1691
80°	1482	1773	1747	1620
85°	915	1782	1230	1639

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 180°

Vertical Angle: 45°

Luminance: 6338 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.6	3.7
10°-20°	253.9	10.7
20°-30°	376.3	15.9
30°-40°	418.1	17.7
40°-50°	379.0	16.0
50°-60°	293.7	12.4
60°-70°	199.4	8.4
70°-80°	126.9	5.4
80°-90°	81.1	3.4
90°-100°	54.7	2.3
100°-110°	37.5	1.6
110°-120°	25.0	1.1
120°-130°	15.5	0.7
130°-140°	8.6	0.4
140°-150°	4.0	0.2
150°-160°	1.5	0.1
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	718.8	30.4
0°-40°	1137.0	48.1
0°-60°	1809.7	76.6
0°-90°	2217.1	93.8
90°-120°	117.1	5.0
90°-150°	145.3	6.1
90°-180°	147.0	6.2
0°-180°	2364.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	934	934	934	934	934	
5°	940	930	940	926	940	89
15°	906	908	910	884	906	256
25°	836	820	845	772	836	385
35°	719	627	733	584	719	449
45°	554	448	572	422	554	425
55°	354	315	379	299	354	318
65°	183	212	202	196	183	184
75°	74	141	83	130	74	79
85°	13	102	18	94	13	16
90°	0	88	1	80	0	1
95°	0	75	0	70	0	0
105°	0	55	0	52	0	1
115°	0	42	0	38	0	0
125°	0	31	0	27	0	0
135°	0	22	0	18	0	0
145°	0	14	0	10	0	0
155°	0	8	0	4	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	934.1	934.1	934.1	934.1	934.1	934.1	934.1	934.1	934.1	934.1	934.1
2.5°	941.8	940.8	939.8	938.2	939.8	943.9	941.3	935.7	934.6	925.4	929.5
5°	939.8	938.2	937.2	935.7	937.7	942.9	940.3	935.1	933.6	924.9	929.5
7.5°	934.6	933.6	932.1	932.1	934.1	939.3	937.2	931.5	930.5	921.8	926.9
10°	927.4	926.9	925.9	925.9	927.9	934.1	931.5	926.4	925.4	917.2	922.8
12.5°	918.2	918.7	917.2	917.2	920.2	926.4	924.4	918.7	917.7	910.5	916.1
15°	906.4	906.9	905.9	906.4	909.5	916.6	914.1	908.9	907.9	902.3	906.9
17.5°	893.0	893.5	893.5	893.0	896.6	903.8	901.7	897.1	895.6	891.0	896.6
20°	877.6	877.6	877.6	877.6	881.7	888.9	886.3	882.7	879.7	876.1	880.7
22.5°	858.6	858.1	858.6	860.1	864.2	869.9	868.3	864.2	859.6	857.6	861.2
25°	835.5	837.0	837.5	839.1	844.2	848.8	847.3	843.2	836.0	834.4	835.5
27.5°	811.3	812.3	813.9	813.4	820.6	825.2	822.1	818.5	808.2	806.7	805.7
30°	784.1	785.6	786.7	786.1	791.8	796.9	793.8	789.2	775.3	774.3	766.1
32.5°	753.3	754.8	755.8	755.8	764.0	766.1	760.4	753.8	738.9	735.3	728.1
35°	719.3	720.9	721.4	721.4	729.6	729.1	721.9	712.7	696.2	691.6	679.3
37.5°	682.9	683.9	684.4	687.5	691.1	688.0	678.7	666.9	654.6	641.8	628.4
40°	641.8	643.3	644.3	646.4	650.0	646.4	633.0	618.6	605.3	590.9	577.5
42.5°	599.6	604.2	603.2	602.7	604.8	595.0	584.7	568.3	554.9	540.0	526.7
45°	553.9	553.4	555.9	557.0	556.5	548.2	533.9	519.0	505.6	490.2	478.9
47.5°	505.6	505.1	507.1	508.2	505.1	496.3	485.0	468.1	456.8	443.4	434.7
50°	454.7	454.7	457.8	454.7	453.2	444.4	435.2	418.2	409.5	397.7	392.6
52.5°	403.9	408.5	405.4	404.4	402.8	394.1	386.9	373.0	365.8	360.7	354.5
55°	353.5	358.6	356.6	355.0	354.5	347.3	340.7	330.4	325.8	322.2	318.6
57.5°	310.9	310.3	309.3	307.8	308.3	302.6	296.0	290.3	288.3	286.7	287.7
60°	261.5	265.6	264.1	264.6	265.1	264.1	258.4	254.9	255.4	255.9	257.4
62.5°	220.9	224.5	227.1	225.1	226.1	227.6	224.5	223.5	225.6	227.6	229.7
65°	183.4	187.0	189.6	189.1	192.2	195.2	194.7	195.8	200.4	203.0	205.5
67.5°	149.5	153.1	156.7	157.2	161.9	166.5	168.5	172.1	177.3	180.9	183.9
70°	120.2	123.3	127.4	130.0	136.2	142.3	145.9	153.1	156.2	161.3	163.4
72.5°	94.0	96.6	102.2	108.4	113.6	121.3	128.5	134.6	139.2	144.9	147.5
75°	73.5	74.5	80.7	87.9	95.1	103.8	111.5	118.2	124.3	130.0	134.1
77.5°	54.0	55.5	61.1	70.9	79.1	88.4	97.1	104.3	111.0	116.6	122.3
80°	37.5	40.6	46.8	56.5	65.8	76.0	84.3	92.5	99.7	105.3	111.0
82.5°	24.1	26.7	35.5	45.2	55.0	65.3	74.0	82.2	89.9	96.1	101.2
85°	13.4	17.0	25.7	36.0	45.7	56.0	65.3	73.5	81.2	86.8	92.0
87.5°	5.1	10.3	18.5	28.3	38.0	47.8	57.5	65.3	73.0	79.1	83.8
90°	0.0	6.2	13.9	23.6	33.4	43.2	52.4	60.6	67.8	73.5	78.6
92.5°	0.5	4.1	10.8	19.0	28.3	37.5	46.2	54.5	61.7	67.3	71.9
95°	0.5	3.1	8.7	16.4	24.7	33.4	41.6	49.3	56.0	61.7	66.3
97.5°	0.5	2.1	7.2	14.4	21.6	30.3	38.0	45.2	51.4	57.0	60.6
100°	0.5	2.1	6.2	12.3	19.5	27.2	34.4	41.6	47.3	51.9	56.0
102.5°	0.5	1.5	5.1	10.8	17.5	24.1	31.3	38.0	43.2	47.8	51.9
105°	0.5	1.5	4.6	9.2	15.4	22.1	28.3	34.4	40.1	44.2	47.8
107.5°	0.5	1.0	4.1	7.7	13.4	20.0	26.2	31.3	36.5	40.6	44.2
110°	0.5	1.0	3.6	7.2	11.8	18.0	23.6	28.8	33.4	37.5	40.6

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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	0.5	1.0	3.1	6.7	10.8	15.9	21.6	26.2	30.8	34.4	37.5
115°	0.5	1.0	3.1	6.2	9.8	13.9	19.0	24.1	27.7	31.9	34.4
117.5°	0.5	1.0	2.6	5.1	9.2	12.8	17.5	21.6	25.7	29.3	31.9
120°	0.5	1.0	2.6	4.6	8.2	11.8	15.4	19.5	23.6	26.2	28.8
122.5°	0.5	1.0	2.1	4.6	7.2	10.8	13.9	17.5	21.1	24.1	26.7
125°	0.5	1.0	2.1	4.1	6.7	9.8	12.8	15.4	19.0	21.6	24.1
127.5°	0.5	1.0	2.1	3.6	6.2	8.7	11.8	14.4	17.0	19.5	21.6
130°	0.5	1.0	1.5	3.1	5.7	7.7	10.3	13.4	15.4	17.5	19.5
132.5°	0.5	1.0	1.5	3.1	4.6	6.7	9.2	11.8	13.9	15.9	17.5
135°	0.5	1.0	1.5	2.6	4.1	6.2	7.7	10.3	12.3	14.4	15.9
137.5°	0.5	1.0	1.5	2.6	3.6	5.1	6.7	8.7	10.8	12.3	14.4
140°	0.5	1.0	1.5	2.1	3.1	4.6	6.2	7.2	9.2	10.8	12.3
142.5°	0.5	1.0	1.5	2.1	3.1	4.1	5.1	6.2	7.7	9.2	10.8
145°	0.5	1.0	1.5	2.1	2.6	3.6	4.6	5.7	6.2	7.7	8.7
147.5°	0.5	1.0	1.5	2.1	2.1	3.1	4.1	4.6	5.7	6.2	7.2
150°	0.5	1.0	1.5	1.5	2.1	2.6	3.6	4.1	4.6	5.7	6.2
152.5°	0.5	1.0	1.5	1.5	2.1	2.6	3.1	3.6	4.1	4.6	5.1
155°	0.5	1.0	1.5	1.5	1.5	2.1	2.6	3.1	3.6	4.1	4.6
157.5°	1.0	1.0	1.0	1.5	1.5	2.1	2.1	2.6	3.1	3.1	3.6
160°	1.0	1.0	1.0	1.5	1.5	1.5	2.1	2.1	2.6	2.6	3.1
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°	934.1	934.1	934.1	934.1	934.1	934.1	934.1	934.1	934.1	934.1	934.1
2.5°	928.5	930.0	934.6	934.6	933.6	932.6	932.6	931.0	932.1	934.1	933.1
5°	928.5	930.0	934.6	934.6	933.6	932.6	932.1	930.5	932.1	934.1	933.1
7.5°	925.4	927.4	932.1	932.1	931.0	930.5	929.5	928.5	930.0	932.1	931.0
10°	921.3	923.3	927.9	927.9	926.9	926.9	925.4	924.4	926.4	927.9	927.4
12.5°	915.1	917.7	921.8	921.3	920.2	920.8	919.2	917.2	919.2	920.8	921.3
15°	906.4	909.5	913.6	912.5	911.0	912.0	909.5	907.9	909.5	912.5	912.0
17.5°	895.1	897.1	900.2	900.2	898.7	897.6	896.6	895.1	896.1	898.1	898.7
20°	879.1	881.7	883.2	881.7	881.2	879.7	877.6	876.1	878.1	881.2	881.7
22.5°	858.1	858.6	862.2	858.6	856.0	855.5	853.4	850.4	853.4	856.0	856.5
25°	831.9	834.4	832.9	826.7	826.7	822.6	821.6	820.0	820.6	825.2	827.2
27.5°	798.5	799.5	795.4	790.2	785.6	783.1	779.5	780.0	780.0	786.1	788.2
30°	762.0	756.3	752.7	744.5	740.9	734.8	733.7	733.7	732.7	735.8	745.0
32.5°	718.3	710.6	705.0	697.2	691.1	684.9	681.8	683.4	682.9	690.6	693.6
35°	670.5	665.9	654.1	644.3	640.7	631.5	631.5	626.9	629.9	638.7	642.3
37.5°	620.2	613.0	603.2	592.4	589.9	582.7	580.1	577.5	584.2	585.7	589.3
40°	568.8	562.1	552.9	542.6	542.6	533.9	533.9	533.9	534.4	537.5	544.1
42.5°	520.0	512.8	504.6	497.4	496.3	489.7	489.7	489.2	490.2	492.7	498.9
45°	472.7	467.1	458.3	454.7	455.2	448.0	449.6	448.0	450.1	452.7	454.7
47.5°	429.0	425.4	421.8	416.7	415.2	414.6	412.1	410.0	413.6	413.6	416.7
50°	388.4	386.4	384.3	381.3	381.8	379.7	376.6	376.6	379.2	379.7	381.8
52.5°	353.0	350.4	347.9	348.4	348.9	347.9	346.3	344.8	346.3	347.3	349.9
55°	317.5	315.5	318.1	317.0	318.1	317.0	316.0	315.0	317.5	316.0	318.6
57.5°	285.7	287.7	288.8	286.7	288.3	287.2	287.7	286.2	288.3	289.3	288.8
60°	256.4	259.5	257.9	258.4	260.5	259.5	257.4	259.0	261.0	261.5	261.0
62.5°	229.7	233.3	234.8	233.8	234.3	233.3	234.8	232.8	235.3	236.4	234.8
65°	205.5	209.6	210.7	210.7	210.7	209.6	211.2	211.7	212.7	212.7	211.7
67.5°	185.0	188.6	189.6	190.6	189.6	188.6	188.6	189.1	191.1	192.2	191.1
70°	166.5	170.1	170.6	170.6	171.1	172.1	170.1	171.1	172.6	173.2	172.6
72.5°	150.5	154.1	155.2	154.7	155.2	155.7	155.7	154.7	156.2	157.2	157.2
75°	137.7	139.8	140.8	140.8	141.3	141.8	141.8	141.3	142.3	142.8	143.4
77.5°	125.9	127.4	129.0	129.0	129.5	129.0	130.0	130.0	130.5	131.0	131.5
80°	114.1	116.1	117.1	117.7	118.7	119.2	119.2	119.2	119.7	120.2	120.2
82.5°	104.8	106.4	107.9	109.4	109.4	110.0	110.0	110.0	110.5	110.5	111.0
85°	95.6	97.6	99.2	100.2	100.7	101.2	101.2	101.7	101.7	101.7	102.2
87.5°	87.3	89.9	90.9	92.0	92.5	93.5	93.5	93.5	94.0	94.0	94.0
90°	81.7	84.3	85.3	86.3	86.8	87.3	87.3	87.9	87.9	88.4	88.4
92.5°	75.0	77.6	79.6	79.6	80.2	81.2	80.7	80.7	81.2	81.7	81.7
95°	69.9	71.9	73.5	74.0	74.5	74.5	74.5	75.0	74.5	75.0	75.0
97.5°	63.7	65.8	67.3	68.3	68.9	68.9	68.9	69.4	68.9	69.4	69.4
100°	58.6	60.6	62.2	62.7	63.7	63.7	63.7	63.7	63.7	63.7	64.2
102.5°	54.5	56.5	57.5	58.1	58.6	59.1	59.1	59.1	59.1	59.6	59.6
105°	50.4	52.4	53.4	54.0	54.5	55.0	55.0	55.0	55.5	55.5	55.0
107.5°	46.8	48.3	49.3	50.4	50.9	50.9	51.4	51.4	51.4	51.4	51.4
110°	43.2	44.7	46.2	47.3	47.3	47.8	47.8	48.3	48.3	47.8	48.3

TEST NUMBER: P1213040

CATALOG NUMBER: 4SNLED-LD5-30SL-LN-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	39.6	41.6	42.6	43.7	44.2	44.7	44.7	44.7	44.7	44.7	44.7
115°	36.5	38.5	39.6	40.6	41.1	41.6	41.6	41.6	41.6	41.6	41.6
117.5°	33.9	36.0	37.0	37.5	38.0	38.5	39.0	39.0	39.0	39.0	38.5
120°	31.3	32.9	33.9	34.9	35.5	36.0	36.0	36.0	36.0	36.0	36.0
122.5°	28.8	30.3	31.3	32.4	32.9	33.4	33.4	33.4	33.4	33.4	33.4
125°	26.2	27.7	28.8	29.8	30.3	30.8	30.8	30.8	30.8	30.8	30.8
127.5°	23.6	25.2	26.7	27.2	27.7	28.3	28.3	28.3	28.8	28.3	28.3
130°	21.1	22.6	24.1	24.7	25.2	25.7	26.2	26.2	26.2	26.2	25.7
132.5°	19.0	20.6	21.6	22.1	23.1	23.1	23.6	23.6	23.6	23.6	23.1
135°	17.5	18.5	19.5	20.0	21.1	21.1	21.1	21.6	21.6	21.1	20.6
137.5°	15.4	16.4	17.5	18.0	18.5	19.0	19.0	19.5	19.0	19.0	19.0
140°	14.4	14.9	15.9	16.4	17.0	17.0	17.0	17.5	17.5	17.0	17.0
142.5°	12.3	13.4	14.4	14.9	15.4	15.4	15.4	15.4	15.4	15.4	15.4
145°	10.3	11.8	12.3	13.4	13.4	13.9	13.9	13.9	13.9	13.9	13.4
147.5°	8.7	9.8	11.3	11.8	11.8	12.3	12.3	12.3	12.3	12.3	11.8
150°	6.7	7.7	9.2	10.3	10.3	10.8	10.8	10.8	10.8	10.3	10.3
152.5°	5.7	6.7	7.2	8.2	8.7	8.7	8.7	9.2	8.7	8.7	8.7
155°	5.1	5.7	6.2	6.7	7.2	7.7	7.7	7.7	7.7	7.2	7.2
157.5°	4.1	4.6	5.1	5.7	6.2	6.7	6.7	6.7	6.7	6.7	6.2
160°	3.1	3.6	4.1	4.1	4.6	5.1	5.7	5.1	5.1	5.1	5.1
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: P1213040

CATALOG NUMBER: 4SNLED-LD5-30SL-LN-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	934.1	934.1	934.1	934.1	934.1	934.1	934.1	934.1	934.1	934.1	934.1
2.5°	932.1	931.5	933.1	930.5	922.8	924.9	923.8	928.5	929.5	930.5	935.1
5°	932.1	931.5	932.6	930.5	922.3	923.8	922.8	927.4	928.5	929.0	933.6
7.5°	930.0	929.5	931.0	928.5	919.7	921.8	920.2	924.9	925.4	925.9	930.0
10°	925.9	925.4	926.4	924.4	915.6	917.7	915.6	920.2	920.2	921.3	924.4
12.5°	919.7	918.7	920.8	918.2	908.4	911.0	910.0	913.0	913.6	914.1	917.2
15°	911.0	910.0	911.5	910.0	901.2	901.7	900.2	904.8	905.3	904.3	907.4
17.5°	898.1	897.1	900.2	899.2	890.4	892.5	892.0	893.0	894.6	892.0	896.1
20°	882.2	883.2	884.3	884.8	878.1	878.1	877.6	879.7	881.2	879.1	882.2
22.5°	858.6	861.2	864.2	865.3	860.6	860.1	863.2	862.2	863.7	862.7	864.8
25°	828.8	833.9	837.0	840.1	837.5	838.5	843.2	844.2	844.2	843.7	845.7
27.5°	791.8	798.5	804.1	810.8	808.2	810.3	818.0	819.0	821.1	819.0	823.1
30°	747.6	753.8	764.6	774.3	775.3	778.4	789.2	790.2	795.9	793.8	795.4
32.5°	703.4	706.5	718.8	728.6	734.8	742.5	754.3	756.3	764.0	765.6	765.6
35°	647.9	656.7	668.0	681.8	689.5	697.8	713.7	716.8	728.1	731.7	735.8
37.5°	601.2	609.4	616.6	631.0	644.8	654.1	666.9	674.6	686.5	693.1	698.3
40°	551.3	558.0	565.7	580.1	591.9	605.8	618.6	627.9	642.8	650.5	657.2
42.5°	504.1	509.2	517.4	527.7	540.0	555.4	567.8	578.6	594.5	605.3	613.0
45°	461.9	465.0	472.2	479.9	490.7	506.6	518.4	532.3	545.2	556.5	565.7
47.5°	422.4	426.5	430.1	435.2	445.0	454.7	468.6	482.0	494.8	507.1	516.4
50°	385.9	385.9	391.5	395.1	401.8	410.5	421.3	430.6	446.5	455.2	467.1
52.5°	350.4	352.5	355.6	357.6	362.8	368.4	377.1	384.8	398.2	406.4	417.7
55°	319.1	321.1	322.7	323.7	326.8	333.5	336.5	342.7	352.0	358.6	368.4
57.5°	289.3	290.3	291.8	292.4	292.9	297.0	299.6	301.1	310.3	317.0	325.2
60°	262.0	262.0	263.6	263.1	262.6	264.6	264.1	265.6	271.3	275.4	279.0
62.5°	236.4	236.4	236.9	235.8	235.3	235.3	233.3	234.8	236.4	236.9	239.4
65°	212.7	215.3	213.2	213.7	210.7	209.6	208.6	205.5	205.0	203.0	204.0
67.5°	191.7	193.7	191.7	191.7	189.1	187.0	184.5	179.3	177.8	173.7	172.6
70°	174.7	173.2	174.2	172.6	169.6	167.0	163.4	159.3	154.1	149.0	145.4
72.5°	158.3	158.3	157.2	155.7	154.1	149.0	144.9	140.3	134.1	127.4	122.3
75°	142.3	142.8	142.8	141.3	138.7	134.1	129.5	122.8	116.1	108.4	101.7
77.5°	131.0	131.0	131.0	128.5	125.9	121.8	116.1	108.9	101.7	92.5	84.8
80°	120.2	119.7	119.7	116.6	114.1	109.4	103.8	96.6	88.9	79.1	70.4
82.5°	111.5	111.0	110.0	107.4	103.8	99.2	93.5	85.8	77.6	68.9	58.1
85°	102.2	101.7	100.7	98.1	94.5	90.4	84.3	76.6	68.3	58.6	48.3
87.5°	94.0	93.5	92.0	90.4	86.3	81.7	75.5	68.3	59.6	50.4	40.1
90°	88.4	87.3	86.3	84.3	80.7	75.5	69.4	61.7	52.9	43.7	33.4
92.5°	81.7	81.2	79.6	77.6	74.5	69.4	63.2	56.0	47.3	38.5	28.8
95°	75.0	74.5	73.5	71.4	68.3	63.7	58.1	50.9	42.6	33.9	25.2
97.5°	68.9	68.9	67.3	65.8	62.2	58.6	52.9	46.2	38.5	30.8	22.6
100°	63.7	63.7	62.2	60.1	57.5	54.0	48.3	42.1	34.9	27.7	19.5
102.5°	59.1	58.6	57.5	55.5	52.9	49.3	44.2	38.5	31.9	24.7	17.5
105°	55.0	54.5	53.4	51.4	49.3	45.2	41.1	35.5	28.8	22.1	15.4
107.5°	50.9	50.4	49.8	47.8	45.2	41.6	37.5	31.9	26.2	20.0	13.9
110°	47.3	46.8	45.7	43.7	41.1	38.0	33.9	29.3	23.6	18.0	12.3

TEST NUMBER: P1213040

CATALOG NUMBER: 4SNLED-LD5-30SL-LN-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	44.2	43.7	42.6	40.6	38.5	34.9	31.3	26.2	21.6	16.4	10.8
115°	41.1	40.6	39.6	37.5	34.9	31.9	28.3	24.1	19.0	14.4	9.8
117.5°	38.0	37.5	36.5	34.9	32.4	29.3	25.7	21.6	17.0	13.4	8.7
120°	35.5	34.4	33.4	31.9	29.3	26.7	23.1	19.5	15.4	11.8	7.7
122.5°	32.9	31.9	30.8	29.3	26.7	24.1	20.6	17.5	14.4	10.8	7.2
125°	29.8	29.3	28.3	26.7	24.1	21.6	19.0	15.9	12.8	9.8	6.2
127.5°	27.2	26.7	25.7	23.6	21.6	19.5	17.0	14.4	11.3	8.2	5.7
130°	25.2	24.1	23.1	21.6	20.0	18.0	15.4	12.8	10.3	7.2	5.1
132.5°	22.6	21.6	20.6	19.5	18.0	15.9	13.9	11.3	9.2	6.7	4.6
135°	20.6	19.5	18.5	17.5	15.9	14.4	12.3	10.3	8.2	6.2	4.1
137.5°	18.0	17.5	17.0	15.9	14.4	12.8	11.3	8.7	7.2	5.7	3.6
140°	16.4	15.9	15.4	13.9	12.8	11.3	9.8	7.7	6.2	4.6	3.1
142.5°	14.9	14.4	13.4	12.3	11.3	10.3	8.2	7.2	5.7	4.1	3.1
145°	12.8	12.3	11.8	10.8	9.8	8.2	7.2	6.2	5.1	3.6	2.6
147.5°	11.8	11.3	10.3	9.2	8.2	7.2	6.7	5.7	4.1	3.1	2.1
150°	9.8	9.2	8.7	7.7	7.2	6.7	5.7	4.6	3.6	2.6	2.1
152.5°	8.2	7.7	7.2	7.2	6.2	5.7	4.6	4.1	3.1	2.6	1.5
155°	7.2	7.2	6.7	6.2	5.1	4.6	4.1	3.1	2.6	2.1	1.5
157.5°	6.2	5.7	5.1	5.1	4.6	4.1	3.1	2.6	2.1	2.1	1.5
160°	5.1	4.6	4.6	4.1	3.6	3.1	2.6	2.6	2.1	1.5	1.5
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: P1213040

CATALOG NUMBER: 4SNLED-LD5-30SL-LN-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	934.1	934.1	934.1	934.1	934.1	934.1	934.1	934.1	934.1	934.1	934.1
2.5°	935.7	930.0	935.1	941.8	941.8	940.8	939.8	941.8	947.0	944.9	938.7
5°	934.1	928.5	933.1	939.8	939.8	938.2	937.2	938.7	944.4	941.8	936.2
7.5°	931.0	925.9	929.0	935.1	935.1	933.6	932.6	934.6	939.3	936.7	930.5
10°	925.4	919.7	923.3	929.0	928.5	927.4	925.9	928.5	932.6	929.0	921.8
12.5°	918.2	912.5	915.6	920.8	920.2	918.2	917.2	918.7	922.3	920.2	912.5
15°	908.4	902.8	905.3	910.5	908.9	907.4	905.3	905.9	910.5	906.9	898.7
17.5°	896.6	890.4	892.5	897.1	895.6	894.0	891.5	892.0	897.1	892.0	883.2
20°	882.2	875.5	877.1	882.7	880.2	877.6	875.0	875.0	880.2	874.5	864.8
22.5°	866.8	860.1	861.2	865.3	863.2	858.6	856.0	857.6	860.1	852.9	842.7
25°	847.8	839.1	840.6	844.7	843.2	837.0	834.4	835.5	834.4	828.8	818.0
27.5°	825.7	816.5	817.5	820.0	818.0	812.3	809.3	809.8	807.7	800.5	788.2
30°	798.0	793.3	792.8	794.4	791.3	785.6	782.0	781.0	780.5	770.2	755.3
32.5°	769.7	765.6	763.0	765.1	761.5	755.8	749.7	749.7	744.5	734.8	721.9
35°	740.9	734.2	731.7	733.2	729.1	721.9	716.8	714.2	706.5	694.2	680.3
37.5°	703.9	699.3	696.2	697.8	693.1	688.0	678.2	675.7	667.4	650.5	633.0
40°	663.8	660.3	657.2	658.7	653.6	645.9	637.1	633.0	623.8	604.8	590.9
42.5°	620.7	619.1	615.6	621.2	610.9	603.2	594.5	587.8	578.6	558.0	542.1
45°	575.0	578.6	570.3	571.9	565.2	558.5	549.3	539.5	530.3	510.7	492.7
47.5°	526.7	529.2	523.6	524.6	517.4	511.2	503.0	490.7	480.4	463.5	447.5
50°	476.8	475.8	475.8	474.8	469.1	461.4	453.2	441.9	431.6	416.2	402.8
52.5°	423.9	426.0	427.0	429.5	422.4	417.7	404.9	395.1	387.4	371.5	360.2
55°	373.0	380.2	378.2	379.2	371.0	367.4	357.1	349.4	338.1	328.8	321.6
57.5°	326.8	328.3	329.4	330.9	327.3	320.1	311.9	305.7	297.0	289.3	284.1
60°	282.1	282.1	282.6	285.2	281.6	275.4	269.2	264.6	258.4	253.8	250.7
62.5°	240.0	243.5	244.1	242.0	237.4	234.3	230.2	227.6	223.5	222.0	220.9
65°	200.9	200.9	200.9	201.9	199.4	197.3	194.7	194.2	195.8	193.7	194.7
67.5°	168.0	166.5	165.4	166.0	164.9	163.9	163.4	164.9	168.0	168.0	170.6
70°	139.8	136.7	134.6	134.6	134.6	135.1	136.7	139.8	144.9	147.0	150.5
72.5°	116.6	110.0	106.9	106.9	107.4	109.4	114.1	119.7	124.3	128.5	133.1
75°	94.5	87.9	83.2	82.7	83.8	86.8	93.5	98.7	106.4	112.0	117.7
77.5°	76.6	68.3	62.7	62.2	63.7	68.3	76.6	83.2	92.0	98.1	104.3
80°	61.1	51.9	47.3	44.2	46.8	52.4	61.7	69.9	78.1	86.3	94.0
82.5°	48.8	40.1	32.9	29.8	32.9	40.6	49.3	59.1	67.3	76.0	83.8
85°	38.5	29.3	21.1	18.0	21.6	29.8	39.6	49.3	58.6	67.3	75.0
87.5°	30.3	21.1	12.8	8.7	13.4	22.1	31.3	41.1	50.9	59.6	67.3
90°	23.6	14.9	7.2	1.0	7.7	15.9	25.2	34.4	44.2	52.9	60.6
92.5°	20.0	11.3	4.1	0.0	4.6	11.8	20.6	29.8	38.5	47.3	55.0
95°	17.0	9.2	3.1	0.0	3.1	9.2	17.0	25.2	33.9	42.6	50.4
97.5°	14.4	7.2	2.1	0.0	2.1	7.2	13.9	22.1	29.8	38.0	45.2
100°	12.3	6.2	1.5	0.0	1.5	5.7	11.8	19.0	26.7	34.4	41.1
102.5°	10.8	5.1	1.0	0.0	1.0	4.6	9.8	16.4	23.1	30.3	37.0
105°	9.2	4.1	1.0	0.0	0.5	3.6	8.2	14.4	20.6	27.2	33.4
107.5°	8.2	3.6	1.0	0.0	0.5	3.1	7.2	12.3	18.5	24.1	29.8
110°	7.2	3.1	1.0	0.0	0.5	2.1	6.2	10.8	15.9	21.6	27.2

TEST NUMBER: P1213040

CATALOG NUMBER: 4SNLED-LD5-30SL-LN-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	6.2	2.6	0.5	0.0	0.0	1.5	5.1	9.2	13.9	19.5	24.1
115°	5.7	2.6	0.5	0.0	0.0	1.0	4.1	8.2	12.3	17.5	21.6
117.5°	5.1	2.1	0.5	0.0	0.5	1.0	3.6	7.2	10.8	14.9	19.5
120°	4.6	2.1	0.5	0.0	0.5	0.5	2.6	6.2	9.2	13.4	17.0
122.5°	4.1	2.1	0.5	0.0	0.5	0.5	2.1	5.1	8.2	11.8	14.9
125°	3.6	1.5	1.0	0.5	0.5	0.5	1.5	4.1	7.2	9.8	13.4
127.5°	3.6	1.5	1.0	0.5	0.5	0.5	1.0	3.6	5.7	8.7	11.8
130°	3.1	1.5	1.0	0.5	0.5	0.5	0.5	2.6	5.1	7.2	9.8
132.5°	2.6	1.5	1.0	0.5	0.5	0.5	0.5	1.5	3.6	6.2	8.2
135°	2.6	1.5	1.0	0.5	0.5	0.5	0.5	1.0	2.6	4.6	6.7
137.5°	2.1	1.0	1.0	0.5	0.5	0.5	0.5	0.5	2.1	3.6	5.1
140°	2.1	1.0	1.0	0.5	0.5	0.5	0.5	0.5	1.5	2.6	4.1
142.5°	1.5	1.0	1.0	0.5	0.5	0.5	0.5	0.5	1.0	2.1	3.1
145°	1.5	1.0	1.0	0.5	0.5	0.5	0.5	0.5	0.5	1.0	2.1
147.5°	1.5	1.5	1.0	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.5
150°	1.5	1.0	1.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0
152.5°	1.5	1.0	1.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0
155°	1.5	1.0	1.0	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0
157.5°	1.5	1.0	1.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0
160°	1.5	1.0	1.0	0.5	1.0	0.5	1.0	1.0	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: P1213040

CATALOG NUMBER: 4SNLED-LD5-30SL-LN-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	934.1	934.1	934.1	934.1	934.1	934.1	934.1	934.1	934.1	934.1	934.1
2.5°	936.7	926.9	932.1	930.5	932.6	936.7	936.2	935.1	935.1	933.6	931.5
5°	933.6	924.4	929.0	926.4	929.0	932.6	932.1	930.5	931.5	929.0	926.4
7.5°	927.4	919.2	923.3	921.3	923.3	926.9	925.4	924.9	925.9	921.8	920.2
10°	920.2	911.0	915.6	913.0	915.6	918.2	917.2	915.1	917.2	913.0	911.5
12.5°	908.9	901.2	904.3	903.3	904.8	907.4	905.3	903.8	904.8	901.2	898.1
15°	896.6	888.9	891.5	889.9	891.0	894.0	890.4	889.9	888.9	885.3	884.3
17.5°	880.7	873.5	876.1	873.5	875.0	874.0	873.5	870.9	870.9	866.8	863.7
20°	861.2	855.0	853.4	851.4	853.4	851.4	848.3	846.3	845.7	841.6	839.1
22.5°	838.5	831.4	832.4	826.7	827.2	824.2	819.0	817.0	814.9	810.3	806.7
25°	811.3	804.1	799.0	795.4	790.8	790.2	783.6	778.4	777.9	772.3	771.7
27.5°	780.5	772.3	768.2	759.4	753.8	749.1	743.5	738.4	735.8	729.6	725.5
30°	745.0	735.8	725.5	719.3	710.6	707.0	697.2	691.1	689.0	682.3	679.3
32.5°	705.0	695.2	687.0	675.2	665.4	660.3	650.5	644.3	641.8	634.6	630.5
35°	661.3	650.5	640.7	629.4	621.7	613.0	601.2	595.0	589.3	586.8	583.7
37.5°	615.6	603.7	592.4	581.1	574.4	564.2	553.9	549.8	543.1	540.5	537.5
40°	568.3	556.5	545.7	534.9	527.2	517.9	508.7	507.1	499.9	497.4	495.3
42.5°	521.5	509.2	496.9	489.2	483.5	474.3	468.1	466.5	460.4	458.8	458.8
45°	479.4	464.0	453.7	447.0	442.4	434.7	429.5	428.5	423.4	422.4	422.4
47.5°	434.2	419.8	412.1	408.0	403.9	398.2	395.1	395.1	390.0	389.0	388.4
50°	392.0	378.7	373.0	368.9	368.4	364.3	361.7	360.7	360.7	357.1	357.6
52.5°	352.0	345.3	340.7	338.1	335.0	332.4	330.4	330.4	328.8	326.3	327.3
55°	315.0	307.3	307.8	305.7	304.2	302.6	303.2	300.1	299.6	297.5	299.0
57.5°	278.0	278.0	276.9	275.4	272.8	273.9	273.9	273.9	271.3	269.8	271.3
60°	246.6	248.2	245.6	247.1	246.1	246.6	245.6	245.6	244.1	243.5	244.1
62.5°	218.9	221.5	220.4	222.5	221.5	222.0	223.0	220.9	219.9	218.9	219.9
65°	194.2	197.3	196.8	198.3	198.8	199.4	199.9	198.8	197.8	196.8	196.3
67.5°	172.6	175.7	177.8	178.3	178.8	180.3	179.8	178.8	177.8	176.2	175.7
70°	153.1	157.2	159.8	160.8	162.9	161.9	161.9	161.3	160.3	158.8	158.3
72.5°	136.7	141.3	143.9	144.9	147.0	147.0	146.4	145.9	144.9	143.4	142.8
75°	122.3	126.4	130.0	132.1	133.6	133.6	133.1	132.6	131.5	130.5	130.0
77.5°	111.0	114.6	117.7	120.2	121.3	121.8	121.3	120.2	120.2	119.7	119.2
80°	99.7	103.8	106.9	109.4	111.0	111.0	110.5	111.0	110.0	109.4	108.9
82.5°	89.9	94.5	98.1	100.7	101.7	102.2	101.7	102.2	101.2	101.2	101.2
85°	81.2	85.8	89.9	92.0	93.5	94.0	94.0	94.0	93.5	93.5	93.5
87.5°	74.0	78.6	82.7	84.8	86.3	86.8	86.8	87.3	86.3	86.3	86.3
90°	67.3	71.9	76.0	78.1	79.6	80.7	80.7	81.2	80.7	80.2	80.2
92.5°	61.1	66.3	70.4	72.4	74.0	75.5	75.5	76.0	75.0	75.0	75.0
95°	56.0	61.1	64.7	67.3	68.9	69.9	70.4	70.4	69.9	69.9	69.9
97.5°	51.4	56.0	59.6	62.2	63.7	64.2	64.7	65.3	64.7	64.7	64.7
100°	46.8	51.4	55.0	57.0	59.1	59.6	60.1	60.6	60.6	60.1	60.1
102.5°	42.6	47.3	50.4	52.9	54.5	55.5	56.0	56.0	56.0	56.0	56.0
105°	38.5	43.2	46.2	48.8	50.4	51.4	51.9	52.4	52.4	51.9	51.9
107.5°	34.9	39.0	42.6	44.7	46.8	47.8	48.3	48.3	48.8	48.3	48.3
110°	31.3	36.0	39.0	41.1	43.2	44.2	44.7	45.2	45.2	45.2	45.2

TEST NUMBER: P1213040

CATALOG NUMBER: 4SNLED-LD5-30SL-LN-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	28.8	32.4	35.5	37.5	39.6	40.6	41.1	41.6	42.1	41.6	41.6
115°	25.7	29.3	32.4	34.4	36.0	37.0	38.0	38.5	38.5	39.0	38.5
117.5°	23.1	26.2	29.3	31.3	32.9	34.4	34.9	35.5	36.0	35.5	35.5
120°	20.6	23.6	26.2	28.3	29.8	31.3	31.9	32.4	32.9	32.4	32.4
122.5°	18.5	21.1	23.6	25.7	27.2	28.3	29.3	29.3	29.8	29.8	29.8
125°	16.4	19.0	21.1	23.1	24.7	25.7	26.2	26.7	26.7	27.2	27.2
127.5°	14.4	16.4	19.0	20.6	22.1	23.1	23.6	24.1	24.1	24.7	24.7
130°	12.3	14.4	16.4	18.0	19.5	20.6	21.1	21.6	22.1	22.1	22.1
132.5°	10.8	12.8	14.4	15.9	17.0	18.0	19.0	19.5	19.5	19.5	19.5
135°	8.7	10.8	12.3	13.9	14.9	15.9	16.4	17.5	17.5	17.5	17.5
137.5°	7.2	9.2	10.8	11.8	12.8	13.9	14.4	14.9	15.4	15.4	15.4
140°	5.7	7.2	8.7	10.3	11.3	11.8	12.8	12.8	13.4	13.4	13.4
142.5°	4.1	5.7	6.7	8.2	9.2	10.3	10.8	11.3	11.3	11.3	11.3
145°	3.1	4.1	5.1	6.2	7.7	8.2	8.7	9.2	9.8	9.8	9.8
147.5°	2.1	3.1	3.6	4.6	5.7	6.7	7.2	7.7	8.2	8.2	8.2
150°	1.5	2.1	3.1	3.6	4.1	5.1	6.2	6.2	6.7	6.7	6.2
152.5°	1.0	1.5	2.1	2.6	3.1	3.6	4.6	4.6	5.1	5.1	5.1
155°	1.0	1.0	1.0	1.5	2.1	2.6	3.1	3.6	3.6	3.6	3.6
157.5°	1.0	1.0	1.0	1.0	1.0	1.5	2.1	2.6	2.6	2.6	2.6
160°	1.0	1.0	0.5	0.5	1.0	1.0	1.0	1.0	1.5	1.5	1.5
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: P1213040

CATALOG NUMBER: 4SNLED-LD5-30SL-LN-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	934.1	934.1	934.1	934.1	934.1	934.1	934.1	934.1	934.1	934.1	934.1
2.5°	933.1	934.1	934.1	933.1	932.6	934.6	932.1	922.3	925.4	926.4	929.5
5°	928.5	929.5	929.5	929.5	928.5	930.5	927.9	918.2	921.8	923.3	925.4
7.5°	921.8	922.3	923.3	922.8	921.8	924.9	922.3	912.5	915.1	917.7	920.2
10°	913.0	913.0	913.6	914.6	913.6	916.1	913.6	904.8	907.4	908.9	912.0
12.5°	901.2	902.3	902.8	902.3	901.7	903.8	902.8	894.6	895.6	898.7	901.7
15°	885.3	885.3	887.9	886.8	886.8	888.9	889.9	880.7	882.2	886.8	889.9
17.5°	865.8	866.3	868.3	869.4	868.9	872.5	873.0	865.8	865.3	870.9	874.0
20°	840.6	841.6	844.2	846.3	846.3	850.4	851.9	847.3	847.8	854.0	855.0
22.5°	809.8	809.8	814.4	817.5	820.0	822.6	827.2	823.1	823.1	831.4	836.0
25°	771.7	775.3	776.9	783.1	786.7	793.8	798.0	798.5	799.0	806.7	809.8
27.5°	729.6	730.6	735.3	742.5	746.6	753.3	761.0	762.5	765.1	775.3	780.0
30°	681.8	684.9	687.0	697.2	702.9	711.6	721.4	725.0	727.0	740.9	746.6
32.5°	633.0	634.0	642.8	648.4	655.1	664.4	675.7	682.3	686.5	700.8	709.1
35°	584.2	586.3	593.5	600.6	607.3	616.6	628.4	637.6	644.8	657.7	668.5
37.5°	539.5	544.6	546.2	553.4	558.5	567.8	576.0	589.3	596.5	609.9	623.8
40°	499.4	501.0	502.0	509.2	512.8	521.5	533.3	542.1	551.8	561.6	578.0
42.5°	459.9	460.9	462.4	466.5	470.7	476.8	485.6	494.3	504.6	519.0	529.7
45°	423.4	424.4	425.4	428.0	431.6	437.3	442.9	449.1	459.4	471.7	483.0
47.5°	389.5	391.5	391.5	392.0	394.6	399.2	403.3	411.1	416.7	423.4	436.2
50°	357.1	358.6	359.2	359.2	360.7	363.8	364.8	369.9	375.1	381.3	390.5
52.5°	326.8	326.8	326.3	328.3	328.3	330.4	330.9	334.0	337.6	344.3	348.4
55°	298.0	298.0	299.6	298.5	298.5	299.6	299.0	299.6	302.6	306.7	310.3
57.5°	270.3	269.8	271.3	270.3	269.8	270.8	271.8	269.8	270.3	274.4	274.4
60°	242.5	243.0	244.6	243.5	243.5	243.5	242.5	241.5	240.5	243.0	244.1
62.5°	220.4	218.9	220.4	218.9	219.9	219.4	218.4	216.3	216.8	215.8	214.8
65°	197.3	197.3	197.8	196.3	197.3	197.3	195.8	195.2	192.2	191.1	188.6
67.5°	177.3	177.3	177.8	176.8	176.8	177.3	175.7	174.2	171.1	169.6	166.0
70°	159.8	159.8	159.8	159.3	159.3	159.3	158.3	156.2	153.1	150.5	145.9
72.5°	143.9	144.4	143.9	143.9	145.4	143.9	142.3	140.3	137.7	132.6	128.5
75°	131.0	131.5	131.0	131.0	131.0	130.5	130.0	126.9	123.8	119.7	113.6
77.5°	119.7	119.7	120.2	119.7	119.7	119.2	117.7	115.1	111.5	107.9	100.7
80°	108.9	109.4	110.0	110.5	109.4	108.9	107.4	105.3	100.7	96.6	89.4
82.5°	101.2	100.7	101.2	101.7	100.7	100.2	98.7	96.1	92.5	86.8	79.6
85°	93.5	93.0	93.0	93.5	93.0	92.0	90.4	87.9	84.3	78.6	71.4
87.5°	85.8	86.3	86.8	86.3	85.8	84.8	83.2	80.7	76.6	71.9	64.2
90°	80.2	80.2	80.2	80.2	79.6	78.6	77.1	74.0	70.4	64.7	58.1
92.5°	75.0	75.0	75.0	75.0	74.5	73.0	71.4	68.9	64.7	59.1	52.9
95°	69.9	70.4	69.9	69.9	68.9	68.3	65.8	63.2	59.6	54.0	47.3
97.5°	64.2	64.7	64.2	64.2	63.7	62.7	61.1	58.1	54.5	49.3	43.2
100°	60.1	60.1	59.6	59.6	59.1	58.1	56.0	53.4	49.8	44.7	38.5
102.5°	55.5	56.0	55.5	55.5	54.5	53.4	51.9	49.3	45.7	40.6	34.9
105°	51.9	51.9	51.4	51.4	50.4	49.3	47.8	44.7	41.6	37.0	31.3
107.5°	48.3	48.3	47.8	47.8	46.8	45.7	43.7	41.1	38.0	33.4	28.3
110°	44.7	44.7	44.7	44.2	43.2	41.6	40.1	37.5	34.4	30.3	25.2

TEST NUMBER: P1213040

CATALOG NUMBER: 4SNLED-LD5-30SL-LN-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	42.1	41.6	41.1	40.6	39.6	38.5	36.5	33.9	30.8	27.2	22.6
115°	38.5	38.5	38.0	37.5	36.5	34.9	33.4	31.3	28.3	24.1	20.0
117.5°	35.5	35.5	34.9	34.4	33.4	31.9	30.3	28.3	25.2	21.6	18.0
120°	32.4	32.4	31.9	31.3	30.3	28.8	27.7	25.2	22.6	19.0	15.9
122.5°	29.8	29.3	29.3	28.3	27.7	26.2	24.7	22.6	20.0	17.0	13.9
125°	26.7	26.7	26.2	25.7	25.2	23.6	22.1	20.0	17.5	14.9	12.3
127.5°	24.1	24.1	23.6	23.1	22.6	21.1	19.5	18.0	15.4	12.8	10.3
130°	21.6	21.6	21.1	20.6	20.0	18.5	17.5	15.4	13.4	11.3	8.7
132.5°	19.5	19.5	19.0	18.5	17.5	16.4	15.4	13.4	11.8	9.8	7.7
135°	17.5	17.0	17.0	16.4	15.4	14.4	13.4	11.8	9.8	8.2	6.2
137.5°	15.4	14.9	14.4	13.9	13.4	12.3	11.3	10.3	8.7	6.7	5.1
140°	13.4	12.8	12.8	12.3	11.3	10.8	9.8	8.2	7.2	5.7	4.1
142.5°	11.3	11.3	10.8	10.3	9.8	9.2	8.2	7.2	5.7	4.6	3.1
145°	9.8	9.2	9.2	8.7	8.2	7.2	6.7	5.7	4.6	3.6	2.6
147.5°	7.7	7.7	7.7	7.2	6.7	6.2	5.7	4.6	3.6	2.6	1.5
150°	6.2	6.2	6.2	5.7	5.1	4.6	4.1	3.6	2.6	1.5	1.0
152.5°	5.1	5.1	4.6	4.6	4.1	3.6	3.1	2.6	1.5	1.0	1.0
155°	3.6	3.6	3.6	3.1	3.1	2.6	2.1	1.5	1.0	1.0	1.0
157.5°	2.6	2.6	2.6	2.1	2.1	1.5	1.5	1.0	1.0	1.0	1.0
160°	1.5	1.5	1.5	1.5	1.0	1.0	1.0	1.0	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: P1213040

CATALOG NUMBER: 4SNLED-LD5-30SL-LN-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	934.1	934.1	934.1	934.1	934.1	934.1	934.1
2.5°	927.9	927.4	931.5	931.5	926.9	934.1	941.8
5°	924.9	924.4	928.5	928.5	924.4	931.5	939.8
7.5°	918.7	919.2	923.3	924.4	919.2	925.9	934.6
10°	912.0	911.5	916.1	917.2	913.0	919.2	927.4
12.5°	901.2	901.2	905.9	907.4	903.3	910.5	918.2
15°	889.9	889.9	893.0	895.6	892.0	898.7	906.4
17.5°	875.5	875.0	878.1	881.2	877.6	884.8	893.0
20°	857.0	857.0	860.6	864.2	861.7	868.3	877.6
22.5°	837.5	835.5	841.6	844.2	842.7	849.3	858.6
25°	812.9	812.3	818.5	822.1	820.0	827.2	835.5
27.5°	786.1	785.6	791.8	796.4	795.4	802.1	811.3
30°	753.8	756.3	762.0	769.7	767.1	774.3	784.1
32.5°	719.9	722.4	729.1	737.3	737.8	743.5	753.3
35°	679.3	685.9	690.6	701.4	703.4	709.1	719.3
37.5°	636.6	644.3	654.1	662.3	666.4	671.0	682.9
40°	588.8	600.1	610.9	620.7	625.8	630.5	641.8
42.5°	545.7	554.4	564.7	574.4	583.7	587.8	599.6
45°	496.9	507.1	516.4	528.2	537.5	542.1	553.9
47.5°	449.1	459.4	471.7	479.9	489.7	494.3	505.6
50°	403.3	412.6	422.9	432.6	440.9	445.0	454.7
52.5°	358.1	367.9	377.7	383.8	392.6	395.6	403.9
55°	318.1	324.7	333.5	337.1	345.8	347.9	353.5
57.5°	279.5	284.1	287.2	293.4	299.6	304.2	310.9
60°	244.6	246.6	248.7	252.3	257.4	259.0	261.5
62.5°	213.2	212.7	216.8	217.9	218.4	223.5	220.9
65°	185.5	186.0	182.4	180.9	182.9	184.5	183.4
67.5°	162.4	159.3	156.2	152.6	149.5	151.1	149.5
70°	139.8	137.2	132.1	126.9	124.9	121.8	120.2
72.5°	121.8	115.6	110.5	103.8	100.2	96.6	94.0
75°	107.9	99.2	92.0	84.8	79.6	74.5	73.5
77.5°	93.5	85.3	77.1	69.4	61.7	56.0	54.0
80°	82.2	74.5	64.7	55.5	47.3	40.1	37.5
82.5°	71.9	63.7	54.0	44.2	34.9	27.2	24.1
85°	63.2	54.5	44.7	34.9	25.7	17.5	13.4
87.5°	56.5	46.8	37.0	27.7	18.0	9.8	5.1
90°	50.4	41.1	31.9	22.1	12.8	5.1	0.0
92.5°	44.7	36.0	26.7	18.0	9.8	3.1	0.5
95°	39.6	31.9	22.6	14.4	7.2	2.1	0.5
97.5°	35.5	27.7	19.5	11.8	5.7	1.5	0.5
100°	31.9	24.1	17.0	9.8	4.6	1.0	0.5
102.5°	28.3	21.6	14.4	8.2	3.6	0.5	0.5
105°	25.2	19.0	12.3	7.2	3.1	0.5	0.5
107.5°	22.6	17.0	10.8	6.2	2.1	0.5	0.5
110°	20.0	14.4	9.2	5.1	1.5	0.5	0.5



TEST NUMBER: P1213040

CATALOG NUMBER: 4SNLED-LD5-30SL-LN-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	18.0	12.8	8.2	4.1	1.0	0.5	0.5
115°	15.9	11.3	7.2	3.6	1.0	0.5	0.5
117.5°	13.9	9.8	6.2	2.6	0.5	0.5	0.5
120°	12.3	8.7	5.1	2.1	0.5	0.5	0.5
122.5°	10.8	7.2	4.1	1.5	0.5	0.5	0.5
125°	9.2	6.2	3.6	1.0	0.5	0.5	0.5
127.5°	7.7	5.1	2.6	1.0	0.5	0.5	0.5
130°	6.7	4.1	2.1	0.5	0.5	0.5	0.5
132.5°	5.7	3.1	1.5	0.5	0.5	0.5	0.5
135°	4.6	2.6	1.0	0.5	0.5	0.5	0.5
137.5°	3.6	2.1	1.0	0.5	0.5	0.5	0.5
140°	2.6	1.5	0.5	0.5	0.5	0.5	0.5
142.5°	2.1	1.0	0.5	0.5	0.5	0.5	0.5
145°	1.5	1.0	0.5	0.5	0.5	0.5	0.5
147.5°	1.0	1.0	1.0	1.0	0.5	0.5	0.5
150°	1.0	1.0	0.5	0.5	1.0	0.5	0.5
152.5°	1.0	0.5	0.5	0.5	1.0	0.5	0.5
155°	1.0	1.0	1.0	1.0	1.0	1.0	0.5
157.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0
160°	1.0	1.0	1.0	1.0	1.0	1.0	1.0
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)