

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-LD5-41SL-LW-UNV-L930-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 (P33520)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 4SNLED-LD5-41SL-LW-UNV-L930-CD1-U  
Description: 4FT LINEAR SNLED LED FIXTURE  
WIDE FROSTED LENS  
Light Source: -  
Ballast/Driver: -

**Summary**

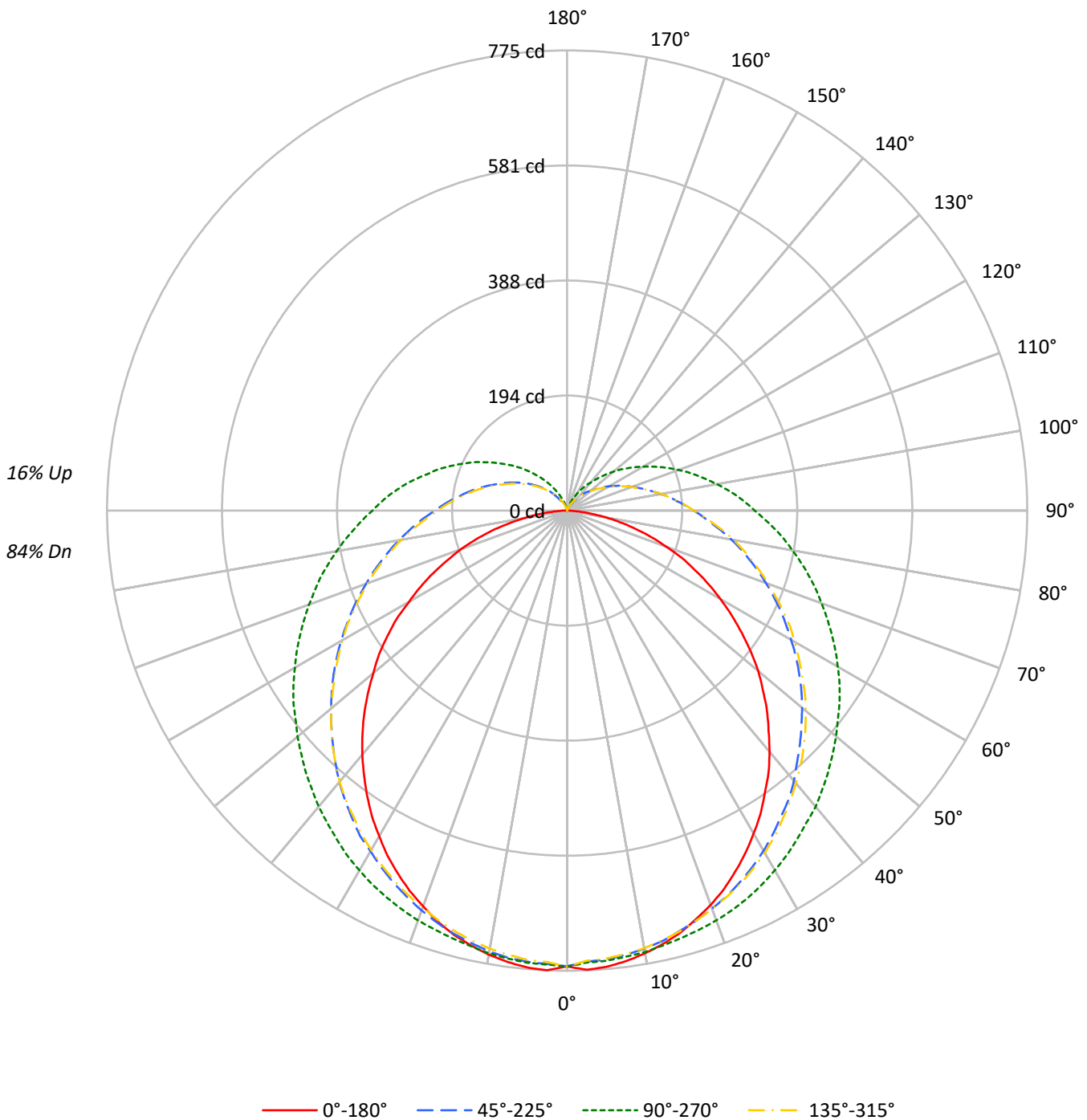
Lumens per Lamp: N/A  
Luminaire Lumens: 3335.0 lumens  
Efficiency: N/A  
Efficacy: 95.3 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.36 / 1.44  
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')  
CIE Type: Semi-Direct

Input Watts (W): 35  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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





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

RF	20									20									20									20									20									
RC	80									70									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0																
RCR																																														
0	115	115	115	115	111	111	111	111	102	102	102	94	94	94	87	87	87	84																												
1	102	96	91	86	98	92	87	83	85	81	77	78	75	72	72	70	67	64																												
2	92	82	74	68	87	79	72	66	73	67	62	67	62	58	62	58	54	51																												
3	83	71	62	55	79	69	60	54	63	56	51	58	52	48	54	49	45	42																												
4	76	63	53	46	72	60	52	45	56	48	42	51	45	40	47	42	38	35																												
5	69	56	46	39	66	54	45	38	50	42	36	46	39	34	42	37	33	30																												
6	64	50	41	34	61	48	39	33	45	37	31	41	35	30	38	33	28	26																												
7	59	45	36	30	56	43	35	29	40	33	28	38	31	26	35	29	25	23																												
8	55	41	32	26	52	40	31	26	37	30	24	34	28	23	32	26	22	20																												
9	51	37	29	23	49	36	28	23	34	27	22	32	25	21	30	24	20	18																												
10	48	34	26	21	46	33	26	21	31	24	20	29	23	19	27	22	18	16																												

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

	0°	90°	180°	270°
0°	6203	6203	6203	6203
5°	6236	5978	6249	6004
10°	6178	5808	6198	5827
15°	6106	5662	6134	5669
20°	6011	5556	6031	5556
25°	5893	5462	5928	5456
30°	5759	5365	5804	5365
35°	5605	5275	5668	5282
40°	5452	5222	5518	5222
45°	5276	5167	5357	5174
50°	5093	5134	5162	5148
55°	4838	5139	4990	5162
60°	4569	5155	4718	5187
65°	4267	5207	4455	5259
70°	3840	5303	4141	5378
75°	3350	5476	3669	5582
80°	2593	5732	2945	5865
85°	1551	6144	1933	6314



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	72.7	2.2
10°-20°	209.0	6.3
20°-30°	320.4	9.6
30°-40°	395.3	11.9
40°-50°	428.9	12.9
50°-60°	422.7	12.7
60°-70°	382.2	11.5
70°-80°	318.4	9.5
80°-90°	246.6	7.4
90°-100°	187.0	5.6
100°-110°	138.4	4.1
110°-120°	96.3	2.9
120°-130°	61.4	1.8
130°-140°	34.5	1.0
140°-150°	15.7	0.5
150°-160°	4.9	0.1
160°-170°	0.6	0.0
170°-180°	0.0	0.0
0°-30°	602.1	18.1
0°-40°	997.4	29.9
0°-60°	1849.0	55.4
0°-90°	2796.2	83.8
90°-120°	421.7	12.6
90°-150°	533.3	16.0
90°-180°	539.0	16.2
0°-180°	3335.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	768	768	768	768	768	
5°	771	761	772	764	771	73
15°	736	745	739	746	736	207
25°	670	720	674	719	670	309
35°	581	675	587	676	581	364
45°	476	622	483	623	476	367
55°	359	560	370	563	359	321
65°	238	492	249	496	238	236
75°	120	421	131	429	120	127
85°	23	351	28	360	23	27
90°	1	316	2	328	1	1
95°	1	287	1	300	1	1
105°	1	228	1	241	1	1
115°	1	173	1	189	1	1
125°	1	125	1	138	1	1
135°	1	81	1	96	1	1
145°	1	47	1	58	1	1
155°	1	19	1	27	1	0
165°	1	3	1	5	1	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-41SL-LW-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	767.6	767.6	767.6	767.6	767.6	767.6	767.6	767.6	767.6	767.6	767.6
2.5°	774.1	774.1	773.3	771.7	772.5	774.9	773.3	769.2	766.8	760.3	762.0
5°	770.9	770.9	770.0	768.4	769.2	772.5	770.9	767.6	764.4	758.7	761.1
7.5°	765.2	765.2	764.4	762.8	764.4	767.6	766.0	762.8	760.3	754.7	757.1
10°	757.1	757.9	757.1	754.7	757.9	761.1	760.3	756.3	753.9	749.0	751.4
12.5°	747.4	748.2	747.4	746.6	748.2	753.0	751.4	748.2	746.6	742.5	744.9
15°	736.0	736.8	735.2	735.2	736.8	741.7	741.7	738.5	736.8	732.8	737.7
17.5°	721.5	722.3	721.5	721.5	723.1	727.9	728.8	727.1	725.5	723.9	728.8
20°	706.9	706.1	706.1	705.3	708.5	715.8	715.0	715.0	713.4	713.4	719.0
22.5°	689.9	689.9	689.1	689.1	693.1	699.6	699.6	701.2	699.6	702.8	707.7
25°	670.5	671.3	670.5	672.1	675.3	682.6	683.4	685.8	686.6	689.9	695.6
27.5°	650.2	651.0	650.2	651.8	657.5	663.2	667.2	670.5	671.3	676.1	683.4
30°	628.3	628.3	629.2	630.8	637.3	646.2	649.4	653.4	653.4	661.5	668.8
32.5°	605.7	605.7	605.7	608.9	616.2	626.7	630.8	635.6	637.3	645.4	653.4
35°	580.6	581.4	581.4	583.8	593.5	604.1	609.7	615.4	618.6	628.3	636.4
37.5°	557.1	558.7	556.3	559.5	573.3	582.2	588.7	594.3	600.0	613.0	619.4
40°	530.4	532.0	531.2	537.7	549.0	560.3	567.6	573.3	581.4	594.3	601.6
42.5°	502.0	503.6	505.3	512.6	524.7	536.0	544.9	552.2	561.9	573.3	585.4
45°	476.1	476.1	478.5	487.5	500.4	512.6	523.1	531.2	542.5	554.7	566.8
47.5°	447.0	447.8	451.0	461.5	475.3	489.9	499.6	510.1	522.3	535.2	549.0
50°	420.2	420.2	425.1	436.4	449.4	465.6	476.1	488.3	501.2	516.6	530.4
52.5°	389.5	391.1	398.4	408.9	425.9	440.5	452.6	465.6	481.0	497.2	512.6
55°	358.7	361.9	367.6	382.2	400.0	413.8	428.3	444.5	459.1	476.9	494.7
57.5°	328.7	331.2	340.1	354.7	373.3	390.3	405.7	421.1	438.9	456.7	475.3
60°	298.0	301.2	311.7	326.3	346.6	364.4	382.2	398.4	417.0	435.6	455.1
62.5°	268.8	271.3	283.4	300.4	320.7	340.1	357.9	377.3	397.6	415.4	434.8
65°	238.1	242.1	255.9	271.3	294.7	314.2	334.4	355.5	376.5	396.0	414.6
67.5°	209.7	212.1	226.7	244.5	268.0	289.9	310.9	333.6	355.5	375.7	394.3
70°	176.5	184.6	199.2	217.8	242.9	265.6	288.3	311.7	335.2	356.3	374.1
72.5°	149.0	155.5	171.7	191.9	216.2	242.9	266.4	291.5	315.0	336.8	355.5
75°	119.8	126.3	144.9	167.6	192.7	221.1	245.3	271.3	295.5	317.4	336.8
77.5°	91.5	99.6	119.8	143.3	170.9	200.0	225.1	251.0	276.1	299.6	319.0
80°	65.6	74.5	96.4	123.1	149.8	178.9	206.5	232.4	257.5	281.0	301.2
82.5°	42.1	51.8	75.3	102.0	130.4	159.5	187.9	213.8	238.9	262.4	283.4
85°	22.7	33.2	57.5	84.2	112.6	141.7	170.0	197.6	221.9	243.7	266.4
87.5°	6.5	19.4	42.9	69.6	98.8	125.5	153.0	180.6	204.9	228.3	248.6
90°	0.8	11.3	32.4	57.5	85.8	111.7	139.3	165.2	189.5	213.0	233.2
92.5°	0.8	7.3	25.1	47.8	73.7	100.4	127.9	153.0	175.7	199.2	219.4
95°	0.8	5.7	20.2	40.5	64.8	89.9	115.8	140.1	163.6	185.4	205.7
97.5°	0.8	4.0	16.2	34.8	56.7	80.2	105.3	129.6	152.2	173.3	191.9
100°	0.8	3.2	13.0	30.0	49.4	72.1	94.7	118.2	140.1	160.3	179.8
102.5°	0.8	2.4	11.3	25.1	43.7	64.0	85.8	107.7	128.7	148.2	167.6
105°	0.8	2.4	9.7	21.9	38.9	57.5	77.7	98.8	118.2	136.8	154.7
107.5°	0.8	1.6	8.1	18.6	34.0	51.8	70.4	90.7	108.5	126.3	143.3
110°	0.8	1.6	6.5	17.0	30.0	46.2	64.0	82.6	99.6	116.6	132.8



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CATALOG NUMBER: 4SNLED-LD5-41SL-LW-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	0.8	1.6	5.7	14.6	25.9	41.3	57.5	74.5	90.7	107.7	122.3
115°	0.8	1.6	4.9	13.0	24.3	35.6	51.8	67.2	83.4	98.8	112.6
117.5°	0.8	1.6	4.0	10.5	21.1	32.4	45.3	60.7	75.3	89.9	102.8
120°	0.8	1.6	3.2	9.7	18.6	29.2	40.5	54.3	68.0	81.8	95.5
122.5°	0.8	0.8	3.2	8.1	16.2	25.9	37.2	47.8	60.7	73.7	85.8
125°	0.8	0.8	3.2	7.3	13.8	23.5	33.2	42.9	54.3	65.6	76.1
127.5°	0.8	0.8	2.4	5.7	12.1	20.2	29.2	39.7	47.8	58.3	68.8
130°	0.8	0.8	2.4	4.9	10.5	17.0	25.9	34.8	44.5	51.8	60.7
132.5°	0.8	0.8	2.4	4.0	8.1	13.8	21.9	30.0	38.9	47.0	54.3
135°	0.8	0.8	1.6	3.2	6.5	11.3	17.8	25.1	34.0	42.1	49.4
137.5°	0.8	0.8	1.6	3.2	4.9	9.7	13.8	20.2	28.3	35.6	42.9
140°	0.8	0.8	1.6	2.4	4.0	7.3	11.3	16.2	22.7	29.2	37.2
142.5°	0.8	0.8	0.8	2.4	3.2	5.7	8.9	13.0	17.8	23.5	30.0
145°	0.8	0.8	0.8	2.4	3.2	4.0	7.3	10.5	13.8	17.8	23.5
147.5°	0.8	0.8	0.8	1.6	2.4	3.2	5.7	8.1	10.5	13.8	17.0
150°	0.8	0.8	0.8	1.6	2.4	3.2	4.0	5.7	8.1	11.3	13.8
152.5°	0.8	0.8	0.8	1.6	1.6	2.4	3.2	4.0	5.7	8.1	9.7
155°	0.8	0.8	0.8	0.8	1.6	2.4	3.2	3.2	4.0	5.7	7.3
157.5°	0.8	0.8	0.8	0.8	1.6	1.6	2.4	2.4	3.2	3.2	4.9
160°	0.8	0.8	0.8	0.8	0.8	1.6	1.6	2.4	2.4	2.4	2.4
162.5°	0.8	0.8	0.8	0.8	0.8	0.8	1.6	1.6	1.6	2.4	2.4
165°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.6	1.6	1.6
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°	767.6	767.6	767.6	767.6	767.6	767.6	767.6	767.6	767.6	767.6	767.6
2.5°	762.0	762.8	765.2	765.2	763.6	763.6	762.8	762.0	762.8	764.4	764.4
5°	760.3	761.1	763.6	764.4	762.8	762.0	762.0	761.1	762.0	763.6	763.6
7.5°	757.1	757.9	760.3	761.1	759.5	759.5	758.7	757.9	759.5	760.3	760.3
10°	752.2	753.0	756.3	757.1	756.3	755.5	755.5	754.7	755.5	757.1	757.1
12.5°	745.8	747.4	751.4	751.4	751.4	750.6	750.6	749.8	750.6	752.2	751.4
15°	738.5	741.7	744.9	746.6	746.6	746.6	745.8	744.9	746.6	747.4	746.6
17.5°	730.4	734.4	739.3	740.9	740.9	741.7	740.9	740.1	741.7	741.7	740.9
20°	722.3	726.3	731.2	732.8	734.4	735.2	735.2	734.4	735.2	736.0	735.2
22.5°	711.7	716.6	722.3	724.7	726.3	727.9	727.9	727.9	728.8	729.6	727.9
25°	700.4	706.1	712.6	715.0	718.2	719.0	719.8	719.8	720.7	721.5	719.0
27.5°	688.3	694.7	701.2	705.3	707.7	709.3	709.3	710.1	710.9	711.7	709.3
30°	673.7	683.4	689.1	692.3	695.6	698.0	698.8	699.6	700.4	701.2	698.8
32.5°	660.7	668.8	676.1	680.2	684.2	687.5	688.3	688.3	689.9	689.9	687.5
35°	645.4	655.1	662.4	666.4	671.3	673.7	675.3	675.3	676.9	676.9	674.5
37.5°	630.0	639.7	647.8	652.6	658.3	661.5	662.4	662.4	664.0	664.0	660.7
40°	613.8	624.3	633.2	638.9	643.7	647.8	648.6	651.0	651.0	650.2	647.0
42.5°	597.6	607.3	617.0	623.5	630.0	634.0	635.6	636.4	636.4	635.6	633.2
45°	579.8	591.1	600.0	608.1	614.6	618.6	621.1	621.9	621.9	620.2	617.8
47.5°	562.8	574.1	583.0	591.9	598.4	603.2	605.7	606.5	605.7	604.9	602.4
50°	544.9	557.9	566.8	575.7	582.2	586.2	590.3	591.1	590.3	589.5	584.6
52.5°	526.3	540.1	549.8	558.7	566.0	570.9	574.1	574.9	574.9	573.3	570.0
55°	507.7	519.8	532.0	541.7	549.8	554.7	558.7	560.3	558.7	557.1	553.0
57.5°	490.7	502.0	514.2	524.7	532.8	539.3	542.5	544.1	542.5	540.1	536.0
60°	470.5	482.6	496.4	506.1	515.0	521.5	523.1	526.3	524.7	522.3	518.2
62.5°	451.0	465.6	477.7	489.9	497.2	504.5	507.7	509.3	507.7	505.3	501.2
65°	430.8	447.0	459.1	471.3	479.4	486.6	490.7	491.5	489.9	487.5	483.4
67.5°	412.1	427.5	440.5	453.4	460.7	468.0	472.1	473.7	472.1	468.8	464.8
70°	393.5	408.9	424.3	434.0	442.9	451.0	453.4	455.9	454.3	451.0	446.2
72.5°	374.9	391.1	406.5	416.2	425.9	433.2	436.4	438.9	437.3	434.0	428.3
75°	355.5	372.5	387.9	398.4	408.1	415.4	418.6	421.1	419.4	416.2	409.7
77.5°	337.7	354.7	369.2	380.6	390.3	396.8	402.4	403.2	401.6	398.4	391.9
80°	319.0	336.0	351.4	362.8	372.5	379.0	383.0	385.4	383.8	380.6	374.1
82.5°	302.8	318.2	333.6	344.9	354.7	362.8	366.0	368.4	367.6	362.8	357.9
85°	285.0	302.8	315.0	327.1	336.8	344.9	347.4	350.6	349.8	345.8	339.3
87.5°	267.2	285.0	299.6	311.7	320.7	327.1	331.2	332.8	332.0	327.9	320.7
90°	252.6	268.8	283.4	296.4	303.6	310.9	315.0	315.8	315.8	310.9	305.3
92.5°	238.9	254.3	268.8	281.0	289.9	296.4	299.6	301.2	300.4	296.4	289.9
95°	223.5	240.5	254.3	266.4	275.3	281.8	285.0	286.6	285.8	281.8	275.3
97.5°	210.5	225.9	239.7	251.0	259.9	266.4	269.6	271.3	271.3	267.2	260.7
100°	197.6	213.0	225.9	237.2	245.3	251.8	255.1	255.9	255.1	251.8	245.3
102.5°	184.6	199.2	212.1	222.7	231.6	237.2	240.5	241.3	241.3	237.2	230.8
105°	171.7	186.2	198.4	209.7	217.0	222.7	225.1	227.5	226.7	223.5	217.0
107.5°	159.5	174.1	185.4	196.0	203.2	208.9	211.3	213.8	213.0	209.7	203.2
110°	148.2	161.9	172.5	183.0	189.5	195.1	199.2	200.0	198.4	195.1	189.5





TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-41SL-LW-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	137.7	149.8	160.3	170.0	177.3	181.4	184.6	186.2	184.6	181.4	177.3
115°	126.3	138.5	149.0	157.9	164.4	169.2	171.7	173.3	171.7	168.4	164.4
117.5°	115.8	127.1	137.7	146.6	152.2	156.3	158.7	160.3	158.7	156.3	152.2
120°	106.9	116.6	126.3	134.4	140.9	144.1	146.6	148.2	147.4	144.1	140.1
122.5°	96.4	106.9	115.8	123.9	129.6	132.8	134.4	136.0	135.2	132.8	128.7
125°	87.5	96.4	105.3	112.6	118.2	121.5	123.1	124.7	123.9	121.5	116.6
127.5°	77.7	87.5	94.7	102.0	106.1	110.9	111.7	113.4	112.6	110.1	106.1
130°	70.4	77.7	85.0	91.5	96.4	99.6	101.2	102.0	100.4	98.8	94.7
132.5°	61.5	69.6	76.1	81.8	85.0	88.3	89.9	90.7	90.7	88.3	85.0
135°	55.1	60.7	66.4	72.1	75.3	78.5	80.2	81.0	80.2	78.5	75.3
137.5°	49.4	54.3	58.3	63.2	67.2	68.8	70.4	70.4	69.6	68.8	66.4
140°	42.9	48.6	52.6	55.9	59.1	59.9	61.5	61.5	60.7	59.9	58.3
142.5°	36.4	41.3	45.3	49.4	51.8	53.4	54.3	55.1	54.3	53.4	51.0
145°	29.2	34.8	38.9	41.3	44.5	45.3	46.2	47.0	46.2	45.3	42.9
147.5°	22.7	27.5	31.6	34.8	37.2	38.1	38.9	39.7	38.9	37.2	36.4
150°	16.2	20.2	25.1	28.3	30.0	31.6	31.6	31.6	32.4	30.8	29.2
152.5°	13.0	14.6	17.8	21.1	23.5	24.3	25.1	25.1	24.3	24.3	22.7
155°	8.9	10.5	13.0	15.4	17.8	18.6	19.4	19.4	18.6	18.6	17.8
157.5°	5.7	7.3	8.9	10.5	13.0	13.8	14.6	14.6	14.6	13.8	13.0
160°	3.2	4.0	4.9	6.5	8.1	8.9	9.7	9.7	9.7	9.7	8.9
162.5°	2.4	2.4	2.4	3.2	4.0	4.9	5.7	5.7	5.7	5.7	4.9
165°	1.6	1.6	1.6	1.6	1.6	2.4	3.2	3.2	3.2	3.2	3.2
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-LD5-41SL-LW-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	767.6	767.6	767.6	767.6	767.6	767.6	767.6	767.6	767.6	767.6	767.6
2.5°	763.6	763.6	764.4	762.8	757.9	758.7	758.7	762.0	763.6	764.4	768.4
5°	762.0	762.0	763.6	761.1	757.1	757.1	757.1	760.3	761.1	762.8	766.0
7.5°	759.5	759.5	760.3	757.9	753.0	753.0	752.2	755.5	757.1	757.9	761.1
10°	755.5	755.5	756.3	753.9	748.2	748.2	747.4	749.8	750.6	752.2	754.7
12.5°	749.8	749.8	749.8	747.4	741.7	740.9	740.1	742.5	742.5	743.3	745.8
15°	744.9	743.3	743.3	740.9	735.2	733.6	732.0	732.8	734.4	733.6	735.2
17.5°	739.3	737.7	736.0	733.6	726.3	723.9	722.3	723.1	722.3	721.5	723.1
20°	732.8	730.4	729.6	725.5	718.2	714.2	710.9	709.3	710.1	707.7	708.5
22.5°	725.5	722.3	720.7	715.8	708.5	703.7	699.6	696.4	695.6	692.3	693.1
25°	716.6	712.6	710.1	706.1	698.0	692.3	687.5	682.6	680.2	676.1	675.3
27.5°	706.1	702.0	698.8	694.7	686.6	679.4	673.7	667.2	664.0	659.1	656.7
30°	695.6	690.7	685.8	682.6	673.7	665.6	656.7	651.0	646.2	640.5	636.4
32.5°	682.6	677.7	672.9	668.0	659.9	650.2	642.9	634.0	628.3	621.9	617.0
35°	669.6	663.2	658.3	651.8	644.5	633.2	624.3	615.4	608.1	600.8	595.1
37.5°	655.1	650.2	642.9	637.3	628.3	617.0	607.3	596.0	589.5	579.8	572.5
40°	641.3	635.6	628.3	621.1	612.2	599.2	588.7	575.7	568.4	557.1	549.8
42.5°	627.5	619.4	612.2	604.1	594.3	582.2	569.2	556.3	546.6	536.0	525.5
45°	612.2	603.2	594.3	585.4	575.7	563.6	549.8	536.0	523.9	514.2	501.2
47.5°	596.0	587.1	576.5	566.8	556.3	544.1	529.6	515.0	502.0	490.7	476.9
50°	579.8	570.9	559.5	549.0	536.8	524.7	509.3	492.3	478.5	464.0	451.8
52.5°	562.8	553.9	543.3	529.6	516.6	504.5	488.3	470.5	455.1	442.9	427.5
55°	545.8	536.8	524.7	510.9	498.0	482.6	467.2	449.4	432.4	417.8	402.4
57.5°	527.9	519.8	506.1	494.7	478.5	462.4	446.2	429.2	410.5	393.5	375.7
60°	510.1	501.2	488.3	474.5	458.3	442.1	425.1	406.5	387.0	368.4	352.2
62.5°	493.9	482.6	470.5	455.9	438.9	423.5	404.1	383.8	364.4	344.9	325.5
65°	475.3	463.2	451.8	437.3	419.4	401.6	382.2	361.9	340.9	319.8	300.4
67.5°	456.7	444.5	432.4	417.8	399.2	380.6	360.3	340.1	316.6	296.4	273.7
70°	438.1	428.3	413.0	397.6	380.6	360.3	340.1	318.2	293.9	272.1	248.6
72.5°	419.4	409.7	394.3	378.1	361.9	340.9	319.0	297.2	274.5	249.4	224.3
75°	401.6	389.5	375.7	360.3	343.3	321.5	299.6	276.9	250.2	226.7	200.8
77.5°	384.6	373.3	359.5	342.5	323.9	302.8	280.2	256.7	230.0	204.9	176.5
80°	366.0	354.7	340.9	323.9	305.3	285.0	260.7	236.4	210.5	183.0	153.8
82.5°	348.2	337.7	322.3	306.9	286.6	266.4	242.1	217.8	190.3	163.6	135.2
85°	329.6	319.0	304.5	288.3	268.8	247.0	224.3	200.0	172.5	144.9	116.6
87.5°	313.4	301.2	286.6	270.4	251.0	230.0	208.1	182.2	155.5	128.7	99.6
90°	296.4	285.0	270.4	254.3	234.8	213.8	191.1	166.8	140.9	113.4	85.8
92.5°	281.8	269.6	255.9	239.7	220.2	200.0	177.3	153.0	127.9	101.2	74.5
95°	267.2	255.1	242.1	225.9	206.5	186.2	163.6	140.1	115.8	89.9	64.8
97.5°	251.0	240.5	227.5	212.1	192.7	173.3	151.4	128.7	105.3	80.2	56.7
100°	238.1	225.9	213.8	197.6	179.8	161.1	139.3	117.4	94.7	71.3	49.4
102.5°	223.5	212.1	200.0	184.6	166.8	148.2	127.9	106.9	85.8	64.0	42.9
105°	209.7	199.2	186.2	171.7	154.7	136.8	117.4	98.0	77.7	56.7	38.1
107.5°	196.0	185.4	173.3	159.5	143.3	125.5	107.7	88.3	69.6	51.0	34.0
110°	182.2	172.5	161.1	147.4	132.0	115.8	98.8	81.0	62.3	45.3	30.0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-41SL-LW-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	170.0	160.3	149.0	136.0	121.5	106.1	89.9	72.9	55.9	40.5	25.9
115°	157.9	149.0	137.7	126.3	111.7	97.2	81.8	65.6	50.2	36.4	22.7
117.5°	145.8	136.8	126.3	115.0	102.0	88.3	73.7	58.3	45.3	32.4	20.2
120°	133.6	125.5	115.8	105.3	93.9	80.2	65.6	52.6	40.5	28.3	17.8
122.5°	122.3	115.0	106.1	96.4	84.2	71.3	59.1	47.8	36.4	25.1	14.6
125°	111.7	104.5	96.4	86.6	75.3	64.0	53.4	42.9	31.6	21.9	12.1
127.5°	101.2	93.9	85.8	76.9	68.0	57.5	47.8	38.1	28.3	19.4	10.5
130°	90.7	84.2	76.9	69.6	60.7	51.0	42.9	33.2	24.3	15.4	8.9
132.5°	80.2	75.3	68.8	61.5	53.4	46.2	37.2	29.2	21.1	13.8	8.1
135°	71.3	66.4	60.7	54.3	47.8	40.5	32.4	25.1	17.8	11.3	6.5
137.5°	63.2	59.1	53.4	47.8	42.1	34.8	28.3	21.1	14.6	9.7	4.9
140°	55.9	51.8	47.0	41.3	36.4	30.0	23.5	17.0	13.0	8.1	4.0
142.5°	48.6	44.5	40.5	35.6	30.8	25.1	19.4	14.6	10.5	6.5	4.0
145°	41.3	38.1	34.0	30.0	25.1	20.2	16.2	12.1	8.1	4.9	3.2
147.5°	34.0	31.6	27.5	24.3	20.2	16.2	13.0	9.7	6.5	4.0	2.4
150°	27.5	25.1	21.9	18.6	16.2	13.0	10.5	7.3	4.9	4.0	2.4
152.5°	21.1	19.4	17.0	15.4	13.0	9.7	7.3	5.7	4.0	3.2	1.6
155°	17.0	15.4	13.8	11.3	9.7	7.3	5.7	4.0	3.2	2.4	1.6
157.5°	12.1	11.3	9.7	8.1	6.5	4.9	4.0	4.0	2.4	1.6	0.8
160°	8.1	7.3	6.5	4.9	4.0	4.0	3.2	2.4	1.6	1.6	0.8
162.5°	4.9	4.0	4.0	4.0	3.2	3.2	2.4	1.6	1.6	0.8	0.8
165°	3.2	3.2	3.2	2.4	2.4	2.4	1.6	0.8	0.8	0.8	0.8
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-LD5-41SL-LW-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	767.6	767.6	767.6	767.6	767.6	767.6	767.6	767.6	767.6	767.6	767.6
2.5°	768.4	766.0	769.2	774.9	775.7	774.9	773.3	775.7	779.0	778.1	772.5
5°	766.8	763.6	766.8	772.5	772.5	771.7	770.9	773.3	776.5	775.7	770.9
7.5°	762.0	758.7	762.0	766.8	767.6	766.0	766.0	768.4	771.7	770.9	766.8
10°	755.5	752.2	753.9	759.5	761.1	759.5	759.5	762.0	766.0	765.2	760.3
12.5°	745.8	743.3	744.9	749.8	751.4	750.6	749.8	753.0	757.1	757.1	752.2
15°	735.2	732.0	733.6	739.3	740.1	738.5	739.3	741.7	746.6	746.6	742.5
17.5°	723.1	719.0	721.5	725.5	726.3	726.3	726.3	729.6	735.2	734.4	731.2
20°	709.3	703.7	705.3	709.3	710.9	710.9	710.9	716.6	720.7	720.7	717.4
22.5°	693.1	689.1	689.1	693.1	695.6	694.7	694.7	699.6	705.3	704.5	704.5
25°	674.5	671.3	669.6	674.5	675.3	676.1	677.7	682.6	689.1	689.1	689.9
27.5°	655.1	651.8	651.0	655.1	655.9	656.7	658.3	664.0	670.5	671.3	672.9
30°	636.4	631.6	630.0	633.2	634.8	635.6	635.6	644.5	650.2	652.6	655.9
32.5°	614.6	609.7	605.7	611.3	612.2	613.8	614.6	623.5	630.0	634.0	638.9
35°	592.7	584.6	583.0	587.1	588.7	589.5	591.1	600.8	609.7	613.0	619.4
37.5°	568.4	562.8	557.9	561.9	563.6	564.4	569.2	578.1	587.1	591.9	598.4
40°	545.8	538.5	534.4	536.8	538.5	539.3	544.9	554.7	565.2	570.9	579.0
42.5°	520.7	510.9	507.7	510.1	510.9	513.4	518.2	531.2	541.7	549.8	556.3
45°	495.6	488.3	481.0	483.4	484.2	485.8	493.1	506.9	518.2	527.9	535.2
47.5°	469.6	460.7	453.4	455.1	458.3	459.1	467.2	483.4	493.9	504.5	514.2
50°	443.7	431.6	425.9	425.9	427.5	431.6	442.1	458.3	469.6	481.8	492.3
52.5°	417.0	405.7	399.2	400.0	401.6	406.5	416.2	432.4	445.3	458.3	471.3
55°	390.3	378.1	371.7	370.0	371.7	378.1	389.5	406.5	419.4	434.8	448.6
57.5°	363.6	349.0	343.3	340.9	342.5	350.6	361.9	379.8	396.0	410.5	426.7
60°	334.4	323.1	313.4	307.7	311.7	322.3	334.4	353.0	370.0	386.2	404.1
62.5°	309.3	294.7	284.2	278.5	282.6	291.5	308.5	326.3	344.9	363.6	381.4
65°	281.0	266.4	254.3	248.6	252.6	263.2	280.2	299.6	319.8	338.5	359.5
67.5°	253.4	238.1	223.5	217.8	222.7	234.0	252.6	274.5	296.4	315.8	338.5
70°	226.7	209.7	194.3	190.3	193.5	208.9	226.7	248.6	271.3	293.9	317.4
72.5°	202.4	181.4	165.2	160.3	164.4	181.4	201.6	224.3	248.6	272.9	298.0
75°	174.1	154.7	136.8	131.2	136.0	151.4	176.5	200.8	226.7	252.6	276.1
77.5°	151.4	128.7	110.1	101.2	109.3	128.7	153.0	178.9	205.7	232.4	259.1
80°	127.9	104.5	84.2	74.5	83.4	104.5	128.7	157.1	187.0	213.8	238.1
82.5°	106.9	81.8	60.7	50.2	59.9	83.4	110.1	138.5	167.6	194.3	222.7
85°	87.5	61.5	39.7	28.3	42.1	63.2	91.5	120.6	150.6	178.1	205.7
87.5°	71.3	46.2	24.3	12.1	25.9	49.4	76.1	105.3	135.2	162.8	188.7
90°	58.3	33.2	13.0	1.6	15.4	37.2	63.2	91.5	119.8	148.2	174.1
92.5°	47.8	25.1	7.3	0.8	9.7	30.0	54.3	81.0	108.5	136.0	161.1
95°	39.7	19.4	4.9	0.8	7.3	23.5	46.2	72.1	98.0	124.7	149.8
97.5°	34.0	16.2	4.0	0.8	5.7	20.2	39.7	64.0	89.1	114.2	138.5
100°	29.2	13.0	3.2	0.8	4.9	17.0	34.8	56.7	80.2	104.5	127.9
102.5°	25.1	10.5	2.4	0.8	4.0	14.6	30.8	51.0	72.1	95.5	118.2
105°	21.9	8.9	2.4	0.8	3.2	13.0	27.5	45.3	66.4	87.5	109.3
107.5°	18.6	7.3	1.6	0.8	2.4	10.5	24.3	41.3	59.9	80.2	100.4
110°	16.2	6.5	1.6	0.8	2.4	9.7	21.1	37.2	54.3	72.9	92.3



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-41SL-LW-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	13.8	4.9	1.6	0.8	1.6	8.1	18.6	33.2	49.4	66.4	85.0
115°	12.1	4.0	0.8	0.8	1.6	7.3	17.0	30.0	44.5	60.7	77.7
117.5°	9.7	3.2	0.8	0.8	0.8	5.7	14.6	26.7	40.5	55.9	71.3
120°	8.1	3.2	0.8	0.8	0.8	4.9	13.0	23.5	36.4	50.2	64.8
122.5°	7.3	2.4	0.8	0.8	0.8	4.0	11.3	21.1	32.4	45.3	59.1
125°	6.5	2.4	0.8	0.8	0.8	3.2	9.7	18.6	29.2	40.5	53.4
127.5°	4.9	2.4	0.8	0.8	0.8	2.4	8.9	16.2	25.9	36.4	47.8
130°	4.0	1.6	0.8	0.8	0.8	2.4	7.3	14.6	22.7	32.4	42.9
132.5°	3.2	1.6	0.8	0.8	0.8	1.6	5.7	11.3	19.4	28.3	38.1
135°	3.2	1.6	0.8	0.8	0.8	1.6	4.0	9.7	16.2	24.3	32.4
137.5°	3.2	0.8	0.8	0.8	0.8	1.6	3.2	7.3	13.0	19.4	26.7
140°	2.4	0.8	0.8	0.8	0.8	0.8	2.4	5.7	10.5	16.2	22.7
142.5°	2.4	0.8	0.8	0.8	0.8	0.8	2.4	4.0	8.1	13.0	17.8
145°	1.6	0.8	0.8	0.8	0.8	0.8	1.6	3.2	6.5	9.7	14.6
147.5°	1.6	0.8	0.8	0.8	0.8	0.8	1.6	2.4	4.9	8.1	11.3
150°	1.6	0.8	0.8	0.8	0.8	0.8	1.6	2.4	3.2	5.7	8.9
152.5°	0.8	0.8	0.8	0.8	0.8	0.8	1.6	1.6	2.4	4.0	5.7
155°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.6	2.4	3.2	4.0
157.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.6	1.6	2.4	3.2
160°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.6	1.6	2.4
162.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.6	1.6
165°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
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-LD5-41SL-LW-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	767.6	767.6	767.6	767.6	767.6	767.6	767.6	767.6	767.6	767.6	767.6
2.5°	770.0	764.4	766.0	765.2	766.8	769.2	769.2	768.4	768.4	766.8	765.2
5°	768.4	762.8	765.2	764.4	766.0	768.4	768.4	767.6	767.6	765.2	764.4
7.5°	763.6	759.5	761.1	761.1	762.8	765.2	765.2	764.4	764.4	762.0	761.1
10°	758.7	753.9	756.3	756.3	757.9	761.1	761.1	760.3	760.3	757.9	757.1
12.5°	750.6	745.8	749.8	750.6	752.2	755.5	754.7	754.7	754.7	752.2	751.4
15°	740.9	737.7	741.7	742.5	744.9	749.0	749.0	749.0	749.0	746.6	745.8
17.5°	730.4	727.9	732.0	733.6	736.8	740.9	740.9	741.7	742.5	740.9	740.1
20°	718.2	716.6	720.7	723.9	728.8	732.8	734.4	735.2	736.8	735.2	734.4
22.5°	704.5	704.5	710.1	713.4	719.0	723.1	725.5	727.9	729.6	727.9	727.1
25°	689.1	691.5	697.2	702.8	709.3	713.4	715.8	719.0	720.7	719.8	719.0
27.5°	674.5	677.7	685.0	690.7	696.4	702.8	705.3	709.3	710.9	710.9	710.1
30°	657.5	662.4	670.5	676.9	684.2	690.7	693.9	698.0	700.4	698.8	699.6
32.5°	641.3	649.4	655.9	663.2	671.3	677.7	681.8	686.6	689.1	688.3	689.1
35°	623.5	631.6	640.5	647.8	657.5	664.0	669.6	673.7	676.9	676.1	676.1
37.5°	604.1	614.6	623.5	633.2	642.1	649.4	655.1	659.9	663.2	663.2	663.2
40°	585.4	596.8	605.7	617.0	628.3	634.8	641.3	646.2	649.4	650.2	651.0
42.5°	565.2	577.3	587.9	600.0	611.3	619.4	626.7	632.4	635.6	637.3	636.4
45°	546.6	557.9	570.0	583.8	594.3	602.4	611.3	617.8	621.1	621.9	622.7
47.5°	525.5	538.5	552.2	566.0	576.5	587.1	595.1	601.6	604.9	607.3	607.3
50°	505.3	519.0	534.4	549.0	560.3	570.9	579.0	586.2	590.3	591.9	592.7
52.5°	486.6	499.6	515.8	530.4	541.7	552.2	562.8	570.9	574.9	576.5	576.5
55°	464.0	480.2	498.0	511.7	523.9	536.0	546.6	554.7	558.7	561.1	562.8
57.5°	442.9	459.9	478.5	493.1	507.7	519.0	528.8	539.3	542.5	545.8	546.6
60°	422.7	439.7	457.5	473.7	488.3	500.4	511.7	520.7	526.3	527.9	529.6
62.5°	401.6	419.4	438.1	454.3	469.6	484.2	494.7	502.8	509.3	511.7	513.4
65°	381.4	400.0	418.6	435.6	451.8	466.4	476.9	485.0	491.5	495.6	496.4
67.5°	359.5	379.8	399.2	417.0	433.2	448.6	459.1	467.2	473.7	478.5	479.4
70°	339.3	360.3	379.8	399.2	415.4	430.8	442.1	450.2	457.5	460.7	462.4
72.5°	319.8	341.7	361.9	381.4	397.6	413.0	425.1	433.2	440.5	444.5	445.3
75°	301.2	323.1	344.9	363.6	380.6	396.0	408.1	417.0	423.5	427.5	429.2
77.5°	282.6	305.3	327.1	345.8	363.6	379.0	389.5	400.0	406.5	411.3	411.3
80°	264.0	287.5	310.1	328.7	346.6	360.3	372.5	383.0	389.5	394.3	394.3
82.5°	247.8	270.4	292.3	310.9	328.7	344.1	356.3	366.0	373.3	376.5	377.3
85°	229.2	254.3	274.5	294.7	311.7	326.3	338.5	349.0	355.5	358.7	360.3
87.5°	213.8	238.1	259.9	277.7	294.7	309.3	323.1	332.0	338.5	342.5	344.1
90°	199.2	222.7	244.5	262.4	280.2	293.9	306.9	315.8	323.1	326.3	327.9
92.5°	186.2	209.7	230.8	248.6	265.6	281.0	293.1	302.0	308.5	311.7	314.2
95°	174.1	196.8	217.0	236.4	252.6	266.4	279.4	288.3	295.5	298.0	300.4
97.5°	161.9	183.8	204.1	222.7	239.7	252.6	264.8	273.7	279.4	283.4	285.8
100°	151.4	172.5	191.9	209.7	225.9	238.1	251.0	259.1	264.8	268.0	271.3
102.5°	140.1	161.1	179.8	196.8	213.8	225.1	237.2	245.3	250.2	255.9	255.9
105°	130.4	149.8	168.4	184.6	199.2	213.0	223.5	231.6	237.2	241.3	241.3
107.5°	119.8	139.3	157.1	174.1	187.9	200.8	210.5	217.8	224.3	226.7	229.2
110°	111.7	128.7	146.6	162.8	175.7	187.9	197.6	205.7	211.3	213.8	215.4



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-41SL-LW-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	102.0	119.8	136.0	151.4	164.4	175.7	185.4	191.9	197.6	200.8	201.6
115°	93.9	110.9	125.5	140.1	153.8	163.6	172.5	178.9	184.6	187.0	188.7
117.5°	86.6	102.0	116.6	128.7	141.7	152.2	161.1	166.8	171.7	174.9	176.5
120°	79.4	93.9	106.9	119.0	131.2	140.9	149.0	154.7	160.3	162.8	162.8
122.5°	72.1	85.8	98.0	109.3	120.6	129.6	138.5	143.3	148.2	150.6	150.6
125°	65.6	78.5	89.9	100.4	110.9	119.0	126.3	132.0	136.8	138.5	138.5
127.5°	59.1	71.3	81.8	91.5	100.4	108.5	115.8	121.5	125.5	127.1	127.1
130°	53.4	64.0	73.7	83.4	92.3	98.8	106.1	110.9	113.4	115.8	116.6
132.5°	47.8	57.5	66.4	74.5	83.4	89.9	95.5	100.4	102.8	105.3	106.1
135°	42.1	51.0	59.1	67.2	74.5	81.0	85.8	89.9	93.1	94.7	95.5
137.5°	35.6	45.3	52.6	59.1	67.2	72.1	77.7	80.2	83.4	85.0	85.0
140°	30.0	37.2	45.3	51.8	58.3	63.2	68.0	72.1	74.5	75.3	75.3
142.5°	24.3	30.8	37.2	45.3	51.0	55.1	59.9	63.2	64.8	65.6	66.4
145°	19.4	24.3	30.0	37.2	43.7	48.6	51.0	54.3	55.9	56.7	57.5
147.5°	14.6	19.4	24.3	29.2	35.6	40.5	42.9	46.2	47.8	48.6	48.6
150°	11.3	14.6	17.8	22.7	27.5	33.2	36.4	38.9	39.7	40.5	40.5
152.5°	8.1	11.3	13.8	17.0	20.2	25.1	30.0	31.6	32.4	33.2	33.2
155°	5.7	8.1	9.7	12.1	14.6	18.6	22.7	25.1	25.9	26.7	26.7
157.5°	4.0	5.7	6.5	8.9	10.5	12.1	15.4	19.4	20.2	20.2	20.2
160°	2.4	3.2	4.0	5.7	6.5	8.1	9.7	12.1	14.6	14.6	14.6
162.5°	1.6	2.4	2.4	3.2	3.2	4.9	5.7	6.5	8.9	9.7	9.7
165°	0.8	1.6	1.6	1.6	1.6	1.6	2.4	2.4	4.0	4.9	4.9
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-LD5-41SL-LW-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	767.6	767.6	767.6	767.6	767.6	767.6	767.6	767.6	767.6	767.6	767.6
2.5°	766.0	767.6	766.8	766.8	766.8	768.4	766.8	759.5	761.1	762.8	764.4
5°	765.2	766.0	766.0	765.2	765.2	766.8	765.2	757.9	759.5	761.1	762.0
7.5°	762.0	762.8	762.8	762.8	762.0	763.6	761.1	754.7	754.7	756.3	757.1
10°	757.9	759.5	758.7	757.9	757.9	757.9	756.3	749.0	749.0	749.8	750.6
12.5°	753.0	753.0	753.0	752.2	751.4	751.4	749.8	742.5	741.7	743.3	742.5
15°	746.6	748.2	746.6	745.8	744.1	744.1	741.7	734.4	732.8	733.6	732.8
17.5°	740.9	741.7	740.1	738.5	736.8	736.0	733.6	725.5	723.1	723.9	722.3
20°	735.2	735.2	733.6	732.0	729.6	727.1	723.9	715.8	711.7	711.7	708.5
22.5°	727.9	727.9	726.3	723.9	721.5	718.2	715.0	706.9	700.4	698.8	696.4
25°	719.8	719.0	718.2	715.8	710.9	707.7	704.5	695.6	688.3	685.0	681.0
27.5°	710.1	710.1	707.7	705.3	700.4	696.4	692.3	684.2	674.5	670.5	664.8
30°	699.6	699.6	697.2	693.9	689.1	684.2	679.4	669.6	659.9	654.3	647.8
32.5°	689.1	688.3	685.8	682.6	677.7	670.5	666.4	656.7	645.4	638.9	630.0
35°	676.1	675.3	672.9	668.8	662.4	656.7	650.2	641.3	628.3	620.2	610.5
37.5°	663.2	662.4	660.7	655.1	648.6	642.1	634.0	625.1	613.0	602.4	592.7
40°	650.2	649.4	646.2	642.1	634.0	625.9	617.8	608.9	596.0	583.8	573.3
42.5°	636.4	635.6	631.6	626.7	617.8	609.7	600.0	590.3	577.3	562.8	552.2
45°	622.7	621.1	617.0	611.3	601.6	592.7	583.0	571.7	558.7	544.9	531.2
47.5°	608.1	605.7	601.6	593.5	585.4	575.7	564.4	552.2	539.3	523.9	509.3
50°	591.9	590.3	585.4	578.1	568.4	558.7	545.8	533.6	518.2	503.6	485.8
52.5°	576.5	573.3	569.2	561.1	551.4	540.9	527.1	512.6	497.2	483.4	464.8
55°	560.3	558.7	553.0	546.6	534.4	522.3	509.3	493.9	476.9	460.7	442.9
57.5°	544.9	541.7	536.8	527.9	517.4	505.3	491.5	475.3	456.7	439.7	420.2
60°	529.6	524.7	519.0	510.9	499.6	486.6	472.1	455.1	436.4	417.8	397.6
62.5°	512.6	508.5	502.0	493.9	482.6	468.8	453.4	435.6	417.8	398.4	376.5
65°	495.6	491.5	485.0	476.9	465.6	450.2	434.0	416.2	396.0	377.3	353.8
67.5°	478.5	474.5	467.2	458.3	447.0	432.4	415.4	396.8	376.5	356.3	332.0
70°	461.5	456.7	450.2	440.5	429.2	413.8	396.8	377.3	357.1	335.2	310.9
72.5°	444.5	440.5	432.4	423.5	411.3	396.0	379.0	359.5	338.5	315.8	291.5
75°	427.5	422.7	417.0	406.5	393.5	379.0	361.1	341.7	319.0	297.2	272.1
77.5°	410.5	406.5	399.2	388.7	376.5	361.1	343.3	323.9	301.2	278.5	251.8
80°	393.5	388.7	383.0	373.3	359.5	344.1	325.5	306.1	283.4	259.9	233.2
82.5°	376.5	371.7	365.2	355.5	342.5	327.1	309.3	288.3	265.6	241.3	216.2
85°	359.5	355.5	348.2	338.5	324.7	309.3	291.5	272.9	248.6	224.3	199.2
87.5°	342.5	338.5	331.2	321.5	308.5	293.1	275.3	255.9	232.4	209.7	182.2
90°	326.3	323.1	315.8	306.1	293.1	277.7	261.5	240.5	217.8	195.1	169.2
92.5°	311.7	308.5	302.0	292.3	281.0	264.0	247.8	227.5	204.9	181.4	156.3
95°	298.8	294.7	288.3	279.4	265.6	251.0	234.8	214.6	192.7	169.2	144.9
97.5°	284.2	280.2	273.7	264.0	252.6	237.2	221.1	201.6	179.8	157.9	133.6
100°	269.6	265.6	258.3	250.2	238.9	223.5	208.1	188.7	168.4	147.4	123.9
102.5°	255.1	251.0	244.5	236.4	225.1	211.3	196.0	177.3	157.1	136.0	114.2
105°	241.3	237.2	230.8	222.7	212.1	198.4	182.2	166.0	146.6	126.3	105.3
107.5°	227.5	223.5	217.8	209.7	199.2	186.2	170.9	153.8	136.0	116.6	96.4
110°	213.8	210.5	204.1	196.8	186.2	173.3	159.5	143.3	125.5	107.7	88.3





TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-41SL-LW-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	200.8	197.6	191.1	183.0	174.1	161.9	148.2	132.8	115.8	98.8	80.2
115°	187.9	183.8	178.1	170.9	161.9	150.6	137.7	123.9	106.9	90.7	73.7
117.5°	174.9	171.7	166.0	158.7	150.6	139.3	127.1	114.2	98.0	82.6	67.2
120°	161.9	159.5	153.8	147.4	139.3	128.7	117.4	104.5	89.9	75.3	60.7
122.5°	149.8	147.4	141.7	136.0	127.9	118.2	107.7	95.5	82.6	68.8	55.9
125°	138.5	135.2	130.4	124.7	117.4	108.5	98.0	86.6	74.5	62.3	50.2
127.5°	126.3	123.9	120.6	114.2	106.9	98.8	89.1	79.4	68.0	56.7	45.3
130°	116.6	113.4	109.3	104.5	98.0	89.9	81.0	71.3	61.5	51.0	39.7
132.5°	105.3	102.0	98.8	93.9	88.3	81.0	72.9	64.0	55.1	45.3	35.6
135°	94.7	92.3	89.1	84.2	78.5	72.9	64.8	56.7	48.6	39.7	31.6
137.5°	85.0	82.6	79.4	76.1	70.4	64.8	57.5	50.2	42.9	34.8	27.5
140°	75.3	73.7	70.4	67.2	62.3	56.7	50.2	43.7	37.2	30.0	23.5
142.5°	65.6	64.0	61.5	58.3	54.3	49.4	43.7	38.1	31.6	25.9	20.2
145°	56.7	55.9	53.4	50.2	47.0	42.1	37.2	32.4	26.7	21.9	16.2
147.5°	47.8	47.0	45.3	42.9	39.7	35.6	31.6	26.7	22.7	17.8	13.0
150°	39.7	38.9	38.1	34.8	33.2	29.2	25.9	21.9	18.6	13.8	10.5
152.5°	32.4	32.4	30.8	28.3	26.7	23.5	21.1	17.8	14.6	11.3	8.1
155°	25.9	25.1	24.3	22.7	21.1	18.6	16.2	13.8	11.3	8.1	5.7
157.5°	20.2	19.4	18.6	17.0	15.4	14.6	12.1	9.7	7.3	5.7	4.0
160°	14.6	13.8	13.0	12.1	11.3	9.7	8.1	6.5	4.9	3.2	2.4
162.5°	9.7	8.9	8.9	8.1	7.3	5.7	4.9	4.0	3.2	2.4	1.6
165°	4.9	4.9	4.0	4.0	3.2	2.4	2.4	2.4	1.6	1.6	0.8
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-LD5-41SL-LW-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	767.6	767.6	767.6	767.6	767.6	767.6	767.6
2.5°	763.6	763.6	766.8	766.0	763.6	768.4	774.1
5°	761.1	761.1	763.6	763.6	761.1	766.0	770.9
7.5°	757.1	756.3	758.7	758.7	755.5	759.5	765.2
10°	749.8	749.0	751.4	751.4	748.2	752.2	757.1
12.5°	741.7	740.1	742.5	741.7	738.5	742.5	747.4
15°	731.2	730.4	732.0	730.4	727.1	731.2	736.0
17.5°	720.7	718.2	719.0	719.0	713.4	717.4	721.5
20°	706.9	703.7	704.5	703.7	699.6	702.0	706.9
22.5°	693.1	688.3	688.3	687.5	682.6	685.8	689.9
25°	676.1	670.5	670.5	669.6	664.0	666.4	670.5
27.5°	659.1	653.4	651.0	650.2	644.5	644.5	650.2
30°	641.3	633.2	631.6	629.2	623.5	623.5	628.3
32.5°	624.3	613.0	609.7	606.5	600.8	600.0	605.7
35°	601.6	592.7	587.1	583.8	577.3	575.7	580.6
37.5°	583.0	571.7	563.6	559.5	553.0	550.6	557.1
40°	562.8	550.6	540.1	537.7	527.9	524.7	530.4
42.5°	540.1	527.1	516.6	511.7	504.5	501.2	502.0
45°	517.4	503.6	492.3	485.8	478.5	472.9	476.1
47.5°	493.9	481.8	468.0	458.3	449.4	445.3	447.0
50°	470.5	455.9	442.9	432.4	421.9	417.0	420.2
52.5°	447.0	431.6	417.0	405.7	393.5	388.7	389.5
55°	424.3	408.1	391.1	379.0	367.6	360.3	358.7
57.5°	401.6	383.8	366.0	352.2	337.7	331.2	328.7
60°	377.3	358.7	340.1	323.9	308.5	301.2	298.0
62.5°	354.7	334.4	313.4	296.4	281.0	271.3	268.8
65°	332.8	309.3	288.3	268.8	251.8	241.3	238.1
67.5°	309.3	285.0	262.4	241.3	225.1	211.3	209.7
70°	287.5	261.5	236.4	214.6	196.8	183.0	176.5
72.5°	265.6	238.9	213.0	189.5	166.8	153.8	149.0
75°	244.5	217.0	189.5	165.2	140.1	124.7	119.8
77.5°	225.1	196.8	167.6	140.9	117.4	98.0	91.5
80°	206.5	177.3	146.6	119.0	93.9	72.9	65.6
82.5°	187.0	159.5	127.9	98.8	72.9	51.0	42.1
85°	170.0	142.5	110.9	81.8	55.9	32.4	22.7
87.5°	156.3	126.3	98.0	68.8	42.1	18.6	6.5
90°	142.5	113.4	85.0	56.7	31.6	10.5	0.8
92.5°	130.4	102.8	74.5	48.6	24.3	7.3	0.8
95°	119.0	92.3	65.6	40.5	19.4	4.9	0.8
97.5°	108.5	83.4	58.3	34.8	16.2	4.0	0.8
100°	99.6	75.3	51.8	30.8	13.8	3.2	0.8
102.5°	90.7	68.0	46.2	26.7	12.1	2.4	0.8
105°	83.4	61.5	41.3	24.3	10.5	2.4	0.8
107.5°	76.1	55.9	37.2	21.1	8.9	1.6	0.8
110°	68.8	51.0	33.2	18.6	8.1	1.6	0.8



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-41SL-LW-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	63.2	46.2	30.0	17.0	6.5	1.6	0.8
115°	57.5	41.3	26.7	14.6	5.7	0.8	0.8
117.5°	51.8	37.2	23.5	13.0	4.9	0.8	0.8
120°	47.0	33.2	21.1	11.3	4.0	0.8	0.8
122.5°	42.1	30.0	18.6	9.7	3.2	0.8	0.8
125°	38.1	26.7	16.2	8.1	2.4	0.8	0.8
127.5°	34.0	23.5	14.6	7.3	2.4	0.8	0.8
130°	30.0	21.1	12.1	5.7	1.6	0.8	0.8
132.5°	26.7	17.8	10.5	4.9	1.6	0.8	0.8
135°	23.5	15.4	8.9	3.2	1.6	0.8	0.8
137.5°	20.2	13.0	7.3	2.4	0.8	0.8	0.8
140°	17.0	11.3	5.7	2.4	0.8	0.8	0.8
142.5°	14.6	8.9	4.0	1.6	0.8	0.8	0.8
145°	11.3	7.3	3.2	1.6	0.8	0.8	0.8
147.5°	8.9	5.7	2.4	1.6	0.8	0.8	0.8
150°	6.5	4.0	2.4	0.8	0.8	0.8	0.8
152.5°	4.9	3.2	1.6	0.8	0.8	0.8	0.8
155°	3.2	2.4	1.6	0.8	0.8	0.8	0.8
157.5°	2.4	1.6	0.8	0.8	0.8	0.8	0.8
160°	1.6	0.8	0.8	0.8	0.8	0.8	0.8
162.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8
165°	0.8	0.8	0.8	0.8	0.8	0.8	0.8
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)