

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-LD5-37SL-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-LD5-37SL-LW-UNV-L930-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
WIDE FROSTED LENS
Light Source: -
Ballast/Driver: -

Summary

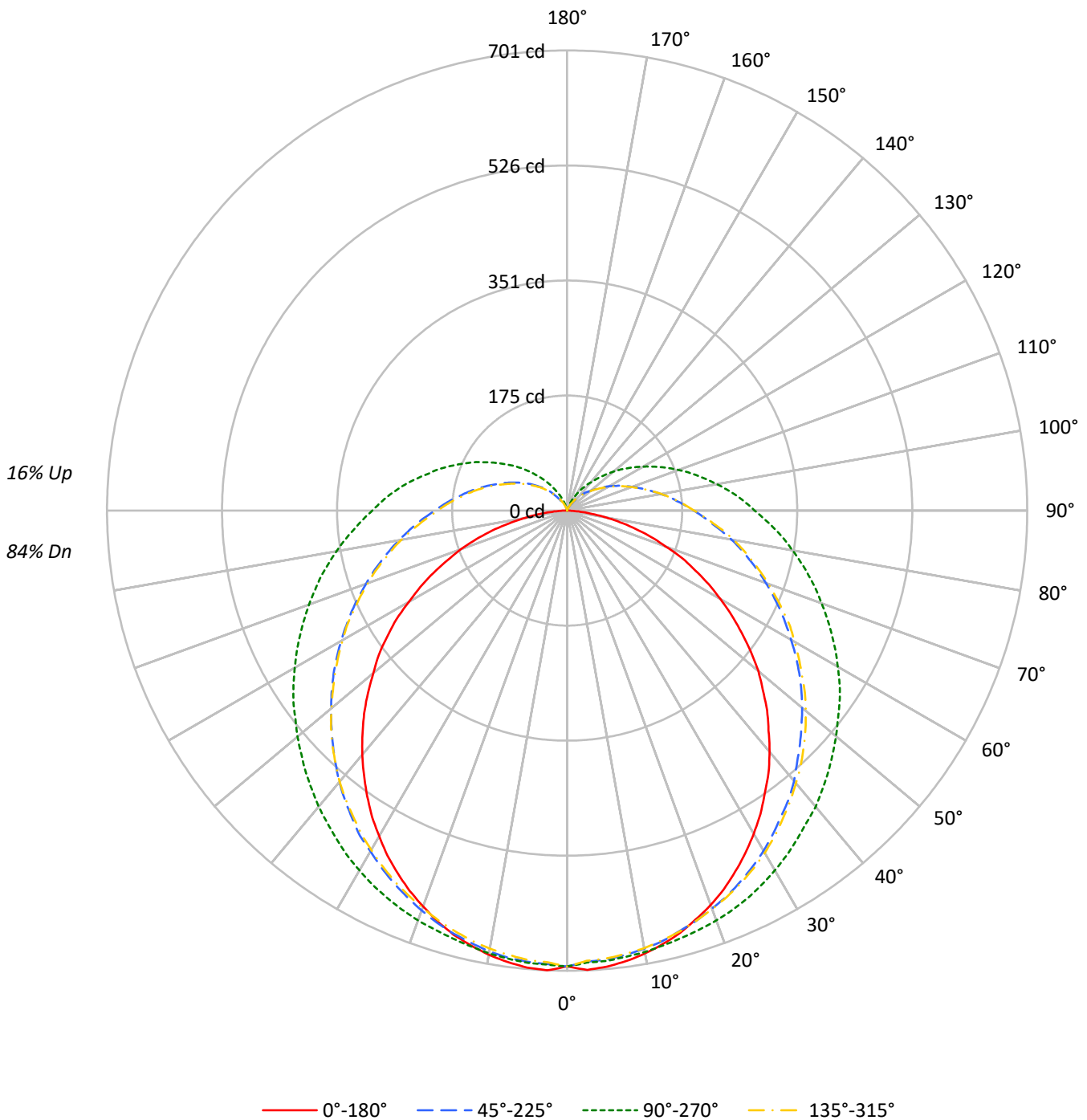
Lumens per Lamp: N/A
Luminaire Lumens: 3017.0 lumens
Efficiency: N/A
Efficacy: 97.3 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.36 / 1.44
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Semi-Direct

Input Watts (W): 31
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-LD5-37SL-LW-UNV-L930-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-37SL-LW-UNV-L930-CD1-U

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	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°	5611	5611	5611	5611
5°	5642	5408	5653	5431
10°	5589	5254	5607	5271
15°	5525	5123	5549	5128
20°	5438	5027	5456	5027
25°	5330	4941	5363	4936
30°	5210	4854	5250	4854
35°	5070	4772	5127	4778
40°	4932	4724	4993	4724
45°	4773	4675	4846	4681
50°	4608	4644	4670	4657
55°	4377	4649	4515	4669
60°	4134	4663	4268	4692
65°	3860	4710	4030	4757
70°	3475	4797	3745	4865
75°	3031	4953	3319	5048
80°	2344	5186	2664	5305
85°	1401	5559	1749	5713



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-37SL-LW-UNV-L930-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.8	2.2
10°-20°	189.1	6.3
20°-30°	289.9	9.6
30°-40°	357.6	11.9
40°-50°	388.0	12.9
50°-60°	382.4	12.7
60°-70°	345.7	11.5
70°-80°	288.0	9.5
80°-90°	223.1	7.4
90°-100°	169.2	5.6
100°-110°	125.2	4.2
110°-120°	87.1	2.9
120°-130°	55.6	1.8
130°-140°	31.2	1.0
140°-150°	14.2	0.5
150°-160°	4.4	0.1
160°-170°	0.6	0.0
170°-180°	0.0	0.0
0°-30°	544.7	18.1
0°-40°	902.3	29.9
0°-60°	1672.7	55.4
0°-90°	2529.6	83.8
90°-120°	381.5	12.6
90°-150°	482.5	16.0
90°-180°	487.0	16.1
0°-180°	3017.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	694	694	694	694	694	
5°	697	689	699	692	697	66
15°	666	674	669	675	666	188
25°	606	651	610	650	606	279
35°	525	611	531	612	525	329
45°	431	563	437	563	431	332
55°	324	507	335	509	324	290
65°	215	445	225	449	215	213
75°	108	381	119	388	108	115
85°	20	317	26	326	20	25
90°	1	286	2	297	1	1
95°	1	259	1	272	1	1
105°	1	206	1	218	1	1
115°	1	157	1	171	1	1
125°	1	113	1	125	1	1
135°	1	73	1	86	1	1
145°	1	42	1	52	1	0
155°	1	18	1	24	1	0
165°	1	3	1	4	1	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-37SL-LW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	694.4	694.4	694.4	694.4	694.4	694.4	694.4	694.4	694.4	694.4	694.4
2.5°	700.3	700.3	699.6	698.1	698.8	701.0	699.6	695.9	693.7	687.8	689.3
5°	697.4	697.4	696.6	695.2	695.9	698.8	697.4	694.4	691.5	686.4	688.6
7.5°	692.2	692.2	691.5	690.0	691.5	694.4	693.0	690.0	687.8	682.7	684.9
10°	684.9	685.6	684.9	682.7	685.6	688.6	687.8	684.2	682.0	677.6	679.8
12.5°	676.1	676.8	676.1	675.4	676.8	681.2	679.8	676.8	675.4	671.7	673.9
15°	665.9	666.6	665.1	665.1	666.6	671.0	671.0	668.1	666.6	662.9	667.3
17.5°	652.7	653.4	652.7	652.7	654.1	658.5	659.3	657.8	656.3	654.9	659.3
20°	639.5	638.8	638.8	638.0	641.0	647.5	646.8	646.8	645.3	645.3	650.5
22.5°	624.1	624.1	623.4	623.4	627.0	632.9	632.9	634.4	632.9	635.8	640.2
25°	606.5	607.3	606.5	608.0	610.9	617.5	618.2	620.4	621.2	624.1	629.2
27.5°	588.2	588.9	588.2	589.7	594.8	599.9	603.6	606.5	607.3	611.7	618.2
30°	568.4	568.4	569.2	570.6	576.5	584.5	587.5	591.1	591.1	598.5	605.1
32.5°	547.9	547.9	547.9	550.9	557.4	567.0	570.6	575.0	576.5	583.8	591.1
35°	525.2	525.9	525.9	528.1	536.9	546.5	551.6	556.7	559.6	568.4	575.8
37.5°	504.0	505.4	503.2	506.2	518.6	526.7	532.5	537.7	542.8	554.5	560.4
40°	479.8	481.3	480.5	486.4	496.6	506.9	513.5	518.6	525.9	537.7	544.3
42.5°	454.2	455.6	457.1	463.7	474.7	484.9	493.0	499.6	508.4	518.6	529.6
45°	430.7	430.7	432.9	441.0	452.7	463.7	473.2	480.5	490.8	501.8	512.8
47.5°	404.3	405.1	408.0	417.5	430.0	443.2	452.0	461.5	472.5	484.2	496.6
50°	380.2	380.2	384.6	394.8	406.5	421.2	430.7	441.7	453.4	467.3	479.8
52.5°	352.3	353.8	360.4	369.9	385.3	398.5	409.5	421.2	435.1	449.8	463.7
55°	324.5	327.4	332.6	345.7	361.9	374.3	387.5	402.2	415.3	431.5	447.6
57.5°	297.4	299.6	307.7	320.8	337.7	353.1	367.0	380.9	397.0	413.1	430.0
60°	269.6	272.5	282.0	295.2	313.5	329.6	345.7	360.4	377.2	394.1	411.7
62.5°	243.2	245.4	256.4	271.8	290.1	307.7	323.8	341.4	359.7	375.8	393.4
65°	215.4	219.0	231.5	245.4	266.6	284.2	302.5	321.6	340.6	358.2	375.0
67.5°	189.7	191.9	205.1	221.2	242.5	262.2	281.3	301.8	321.6	339.9	356.7
70°	159.7	167.0	180.2	197.0	219.8	240.3	260.8	282.0	303.3	322.3	338.4
72.5°	134.8	140.6	155.3	173.6	195.6	219.8	241.0	263.7	284.9	304.7	321.6
75°	108.4	114.3	131.1	151.6	174.3	200.0	222.0	245.4	267.4	287.1	304.7
77.5°	82.8	90.1	108.4	129.7	154.6	180.9	203.6	227.1	249.8	271.0	288.6
80°	59.3	67.4	87.2	111.3	135.5	161.9	186.8	210.2	232.9	254.2	272.5
82.5°	38.1	46.9	68.1	92.3	117.9	144.3	169.9	193.4	216.1	237.3	256.4
85°	20.5	30.0	52.0	76.2	101.8	128.2	153.8	178.7	200.7	220.5	241.0
87.5°	5.9	17.6	38.8	63.0	89.4	113.5	138.4	163.4	185.3	206.6	224.9
90°	0.7	10.3	29.3	52.0	77.6	101.1	126.0	149.4	171.4	192.7	211.0
92.5°	0.7	6.6	22.7	43.2	66.7	90.8	115.7	138.4	159.0	180.2	198.5
95°	0.7	5.1	18.3	36.6	58.6	81.3	104.7	126.7	148.0	167.7	186.1
97.5°	0.7	3.7	14.7	31.5	51.3	72.5	95.2	117.2	137.7	156.8	173.6
100°	0.7	2.9	11.7	27.1	44.7	65.2	85.7	106.9	126.7	145.0	162.6
102.5°	0.7	2.2	10.3	22.7	39.6	57.9	77.6	97.4	116.5	134.1	151.6
105°	0.7	2.2	8.8	19.8	35.2	52.0	70.3	89.4	106.9	123.8	139.9
107.5°	0.7	1.5	7.3	16.8	30.8	46.9	63.7	82.0	98.2	114.3	129.7
110°	0.7	1.5	5.9	15.4	27.1	41.8	57.9	74.7	90.1	105.5	120.1



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-37SL-LW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	0.7	1.5	5.1	13.2	23.4	37.4	52.0	67.4	82.0	97.4	110.6
115°	0.7	1.5	4.4	11.7	22.0	32.2	46.9	60.8	75.4	89.4	101.8
117.5°	0.7	1.5	3.7	9.5	19.0	29.3	41.0	54.9	68.1	81.3	93.0
120°	0.7	1.5	2.9	8.8	16.8	26.4	36.6	49.1	61.5	74.0	86.4
122.5°	0.7	0.7	2.9	7.3	14.7	23.4	33.7	43.2	54.9	66.7	77.6
125°	0.7	0.7	2.9	6.6	12.5	21.2	30.0	38.8	49.1	59.3	68.9
127.5°	0.7	0.7	2.2	5.1	11.0	18.3	26.4	35.9	43.2	52.7	62.3
130°	0.7	0.7	2.2	4.4	9.5	15.4	23.4	31.5	40.3	46.9	54.9
132.5°	0.7	0.7	2.2	3.7	7.3	12.5	19.8	27.1	35.2	42.5	49.1
135°	0.7	0.7	1.5	2.9	5.9	10.3	16.1	22.7	30.8	38.1	44.7
137.5°	0.7	0.7	1.5	2.9	4.4	8.8	12.5	18.3	25.6	32.2	38.8
140°	0.7	0.7	1.5	2.2	3.7	6.6	10.3	14.7	20.5	26.4	33.7
142.5°	0.7	0.7	0.7	2.2	2.9	5.1	8.1	11.7	16.1	21.2	27.1
145°	0.7	0.7	0.7	2.2	2.9	3.7	6.6	9.5	12.5	16.1	21.2
147.5°	0.7	0.7	0.7	1.5	2.2	2.9	5.1	7.3	9.5	12.5	15.4
150°	0.7	0.7	0.7	1.5	2.2	2.9	3.7	5.1	7.3	10.3	12.5
152.5°	0.7	0.7	0.7	1.5	1.5	2.2	2.9	3.7	5.1	7.3	8.8
155°	0.7	0.7	0.7	0.7	1.5	2.2	2.9	2.9	3.7	5.1	6.6
157.5°	0.7	0.7	0.7	0.7	1.5	1.5	2.2	2.2	2.9	2.9	4.4
160°	0.7	0.7	0.7	0.7	0.7	1.5	1.5	2.2	2.2	2.2	2.2
162.5°	0.7	0.7	0.7	0.7	0.7	0.7	1.5	1.5	1.5	2.2	2.2
165°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.5	1.5	1.5
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-LD5-37SL-LW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	694.4	694.4	694.4	694.4	694.4	694.4	694.4	694.4	694.4	694.4	694.4
2.5°	689.3	690.0	692.2	692.2	690.8	690.8	690.0	689.3	690.0	691.5	691.5
5°	687.8	688.6	690.8	691.5	690.0	689.3	689.3	688.6	689.3	690.8	690.8
7.5°	684.9	685.6	687.8	688.6	687.1	687.1	686.4	685.6	687.1	687.8	687.8
10°	680.5	681.2	684.2	684.9	684.2	683.4	683.4	682.7	683.4	684.9	684.9
12.5°	674.6	676.1	679.8	679.8	679.8	679.0	679.0	678.3	679.0	680.5	679.8
15°	668.1	671.0	673.9	675.4	675.4	675.4	674.6	673.9	675.4	676.1	675.4
17.5°	660.7	664.4	668.8	670.3	670.3	671.0	670.3	669.5	671.0	671.0	670.3
20°	653.4	657.1	661.5	662.9	664.4	665.1	665.1	664.4	665.1	665.9	665.1
22.5°	643.9	648.3	653.4	655.6	657.1	658.5	658.5	658.5	659.3	660.0	658.5
25°	633.6	638.8	644.6	646.8	649.7	650.5	651.2	651.2	651.9	652.7	650.5
27.5°	622.6	628.5	634.4	638.0	640.2	641.7	641.7	642.4	643.1	643.9	641.7
30°	609.5	618.2	623.4	626.3	629.2	631.4	632.2	632.9	633.6	634.4	632.2
32.5°	597.7	605.1	611.7	615.3	619.0	621.9	622.6	622.6	624.1	624.1	621.9
35°	583.8	592.6	599.2	602.9	607.3	609.5	610.9	610.9	612.4	612.4	610.2
37.5°	569.9	578.7	586.0	590.4	595.5	598.5	599.2	599.2	600.7	600.7	597.7
40°	555.2	564.8	572.8	578.0	582.3	586.0	586.7	588.9	588.9	588.2	585.3
42.5°	540.6	549.4	558.2	564.0	569.9	573.6	575.0	575.8	575.8	575.0	572.8
45°	524.5	534.7	542.8	550.1	556.0	559.6	561.8	562.6	562.6	561.1	558.9
47.5°	509.1	519.4	527.4	535.5	541.3	545.7	547.9	548.7	547.9	547.2	545.0
50°	493.0	504.7	512.8	520.8	526.7	530.3	534.0	534.7	534.0	533.3	528.9
52.5°	476.1	488.6	497.4	505.4	512.0	516.4	519.4	520.1	520.1	518.6	515.7
55°	459.3	470.3	481.3	490.1	497.4	501.8	505.4	506.9	505.4	504.0	500.3
57.5°	443.9	454.2	465.1	474.7	482.0	487.9	490.8	492.3	490.8	488.6	484.9
60°	425.6	436.6	449.0	457.8	465.9	471.7	473.2	476.1	474.7	472.5	468.8
62.5°	408.0	421.2	432.2	443.2	449.8	456.4	459.3	460.8	459.3	457.1	453.4
65°	389.7	404.3	415.3	426.3	433.6	440.2	443.9	444.6	443.2	441.0	437.3
67.5°	372.9	386.8	398.5	410.2	416.8	423.4	427.1	428.5	427.1	424.1	420.5
70°	356.0	369.9	383.8	392.6	400.7	408.0	410.2	412.4	410.9	408.0	403.6
72.5°	339.2	353.8	367.7	376.5	385.3	391.9	394.8	397.0	395.6	392.6	387.5
75°	321.6	337.0	350.9	360.4	369.2	375.8	378.7	380.9	379.4	376.5	370.7
77.5°	305.5	320.8	334.0	344.3	353.1	358.9	364.1	364.8	363.3	360.4	354.5
80°	288.6	304.0	317.9	328.2	337.0	342.8	346.5	348.7	347.2	344.3	338.4
82.5°	274.0	287.9	301.8	312.1	320.8	328.2	331.1	333.3	332.6	328.2	323.8
85°	257.8	274.0	284.9	295.9	304.7	312.1	314.2	317.2	316.4	312.8	306.9
87.5°	241.7	257.8	271.0	282.0	290.1	295.9	299.6	301.1	300.3	296.7	290.1
90°	228.5	243.2	256.4	268.1	274.7	281.3	284.9	285.7	285.7	281.3	276.2
92.5°	216.1	230.0	243.2	254.2	262.2	268.1	271.0	272.5	271.8	268.1	262.2
95°	202.2	217.6	230.0	241.0	249.1	254.9	257.8	259.3	258.6	254.9	249.1
97.5°	190.5	204.4	216.8	227.1	235.1	241.0	243.9	245.4	245.4	241.7	235.9
100°	178.7	192.7	204.4	214.6	222.0	227.8	230.7	231.5	230.7	227.8	222.0
102.5°	167.0	180.2	191.9	201.4	209.5	214.6	217.6	218.3	218.3	214.6	208.8
105°	155.3	168.5	179.5	189.7	196.3	201.4	203.6	205.8	205.1	202.2	196.3
107.5°	144.3	157.5	167.7	177.3	183.9	189.0	191.2	193.4	192.7	189.7	183.9
110°	134.1	146.5	156.0	165.5	171.4	176.5	180.2	180.9	179.5	176.5	171.4



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-37SL-LW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	124.5	135.5	145.0	153.8	160.4	164.1	167.0	168.5	167.0	164.1	160.4
115°	114.3	125.3	134.8	142.8	148.7	153.1	155.3	156.8	155.3	152.4	148.7
117.5°	104.7	115.0	124.5	132.6	137.7	141.4	143.6	145.0	143.6	141.4	137.7
120°	96.7	105.5	114.3	121.6	127.5	130.4	132.6	134.1	133.3	130.4	126.7
122.5°	87.2	96.7	104.7	112.1	117.2	120.1	121.6	123.1	122.3	120.1	116.5
125°	79.1	87.2	95.2	101.8	106.9	109.9	111.3	112.8	112.1	109.9	105.5
127.5°	70.3	79.1	85.7	92.3	96.0	100.4	101.1	102.6	101.8	99.6	96.0
130°	63.7	70.3	76.9	82.8	87.2	90.1	91.6	92.3	90.8	89.4	85.7
132.5°	55.7	63.0	68.9	74.0	76.9	79.8	81.3	82.0	82.0	79.8	76.9
135°	49.8	54.9	60.1	65.2	68.1	71.1	72.5	73.3	72.5	71.1	68.1
137.5°	44.7	49.1	52.7	57.1	60.8	62.3	63.7	63.7	63.0	62.3	60.1
140°	38.8	44.0	47.6	50.5	53.5	54.2	55.7	55.7	54.9	54.2	52.7
142.5°	33.0	37.4	41.0	44.7	46.9	48.3	49.1	49.8	49.1	48.3	46.1
145°	26.4	31.5	35.2	37.4	40.3	41.0	41.8	42.5	41.8	41.0	38.8
147.5°	20.5	24.9	28.6	31.5	33.7	34.4	35.2	35.9	35.2	33.7	33.0
150°	14.7	18.3	22.7	25.6	27.1	28.6	28.6	28.6	29.3	27.8	26.4
152.5°	11.7	13.2	16.1	19.0	21.2	22.0	22.7	22.7	22.0	22.0	20.5
155°	8.1	9.5	11.7	13.9	16.1	16.8	17.6	17.6	16.8	16.8	16.1
157.5°	5.1	6.6	8.1	9.5	11.7	12.5	13.2	13.2	13.2	12.5	11.7
160°	2.9	3.7	4.4	5.9	7.3	8.1	8.8	8.8	8.8	8.8	8.1
162.5°	2.2	2.2	2.2	2.9	3.7	4.4	5.1	5.1	5.1	5.1	4.4
165°	1.5	1.5	1.5	1.5	1.5	2.2	2.9	2.9	2.9	2.9	2.9
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-LD5-37SL-LW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	694.4	694.4	694.4	694.4	694.4	694.4	694.4	694.4	694.4	694.4	694.4
2.5°	690.8	690.8	691.5	690.0	685.6	686.4	686.4	689.3	690.8	691.5	695.2
5°	689.3	689.3	690.8	688.6	684.9	684.9	684.9	687.8	688.6	690.0	693.0
7.5°	687.1	687.1	687.8	685.6	681.2	681.2	680.5	683.4	684.9	685.6	688.6
10°	683.4	683.4	684.2	682.0	676.8	676.8	676.1	678.3	679.0	680.5	682.7
12.5°	678.3	678.3	678.3	676.1	671.0	670.3	669.5	671.7	671.7	672.4	674.6
15°	673.9	672.4	672.4	670.3	665.1	663.7	662.2	662.9	664.4	663.7	665.1
17.5°	668.8	667.3	665.9	663.7	657.1	654.9	653.4	654.1	653.4	652.7	654.1
20°	662.9	660.7	660.0	656.3	649.7	646.1	643.1	641.7	642.4	640.2	641.0
22.5°	656.3	653.4	651.9	647.5	641.0	636.6	632.9	630.0	629.2	626.3	627.0
25°	648.3	644.6	642.4	638.8	631.4	626.3	621.9	617.5	615.3	611.7	610.9
27.5°	638.8	635.1	632.2	628.5	621.2	614.6	609.5	603.6	600.7	596.3	594.1
30°	629.2	624.8	620.4	617.5	609.5	602.1	594.1	588.9	584.5	579.4	575.8
32.5°	617.5	613.1	608.7	604.3	597.0	588.2	581.6	573.6	568.4	562.6	558.2
35°	605.8	599.9	595.5	589.7	583.1	572.8	564.8	556.7	550.1	543.5	538.4
37.5°	592.6	588.2	581.6	576.5	568.4	558.2	549.4	539.1	533.3	524.5	517.9
40°	580.2	575.0	568.4	561.8	553.8	542.1	532.5	520.8	514.2	504.0	497.4
42.5°	567.7	560.4	553.8	546.5	537.7	526.7	515.0	503.2	494.4	484.9	475.4
45°	553.8	545.7	537.7	529.6	520.8	509.8	497.4	484.9	473.9	465.1	453.4
47.5°	539.1	531.1	521.6	512.8	503.2	492.3	479.1	465.9	454.2	443.9	431.5
50°	524.5	516.4	506.2	496.6	485.7	474.7	460.8	445.4	432.9	419.7	408.7
52.5°	509.1	501.0	491.5	479.1	467.3	456.4	441.7	425.6	411.7	400.7	386.8
55°	493.7	485.7	474.7	462.2	450.5	436.6	422.7	406.5	391.2	378.0	364.1
57.5°	477.6	470.3	457.8	447.6	432.9	418.3	403.6	388.2	371.4	356.0	339.9
60°	461.5	453.4	441.7	429.3	414.6	400.0	384.6	367.7	350.1	333.3	318.6
62.5°	446.8	436.6	425.6	412.4	397.0	383.1	365.5	347.2	329.6	312.1	294.5
65°	430.0	419.0	408.7	395.6	379.4	363.3	345.7	327.4	308.4	289.3	271.8
67.5°	413.1	402.2	391.2	378.0	361.1	344.3	326.0	307.7	286.4	268.1	247.6
70°	396.3	387.5	373.6	359.7	344.3	326.0	307.7	287.9	265.9	246.1	224.9
72.5°	379.4	370.7	356.7	342.1	327.4	308.4	288.6	268.8	248.3	225.6	202.9
75°	363.3	352.3	339.9	326.0	310.6	290.8	271.0	250.5	226.3	205.1	181.7
77.5°	347.9	337.7	325.2	309.9	293.0	274.0	253.5	232.2	208.0	185.3	159.7
80°	331.1	320.8	308.4	293.0	276.2	257.8	235.9	213.9	190.5	165.5	139.2
82.5°	315.0	305.5	291.5	277.6	259.3	241.0	219.0	197.0	172.1	148.0	122.3
85°	298.1	288.6	275.4	260.8	243.2	223.4	202.9	180.9	156.0	131.1	105.5
87.5°	283.5	272.5	259.3	244.7	227.1	208.0	188.3	164.8	140.6	116.5	90.1
90°	268.1	257.8	244.7	230.0	212.4	193.4	172.9	150.9	127.5	102.6	77.6
92.5°	254.9	243.9	231.5	216.8	199.2	180.9	160.4	138.4	115.7	91.6	67.4
95°	241.7	230.7	219.0	204.4	186.8	168.5	148.0	126.7	104.7	81.3	58.6
97.5°	227.1	217.6	205.8	191.9	174.3	156.8	137.0	116.5	95.2	72.5	51.3
100°	215.4	204.4	193.4	178.7	162.6	145.8	126.0	106.2	85.7	64.5	44.7
102.5°	202.2	191.9	180.9	167.0	150.9	134.1	115.7	96.7	77.6	57.9	38.8
105°	189.7	180.2	168.5	155.3	139.9	123.8	106.2	88.6	70.3	51.3	34.4
107.5°	177.3	167.7	156.8	144.3	129.7	113.5	97.4	79.8	63.0	46.1	30.8
110°	164.8	156.0	145.8	133.3	119.4	104.7	89.4	73.3	56.4	41.0	27.1



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-37SL-LW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	153.8	145.0	134.8	123.1	109.9	96.0	81.3	65.9	50.5	36.6	23.4
115°	142.8	134.8	124.5	114.3	101.1	87.9	74.0	59.3	45.4	33.0	20.5
117.5°	131.9	123.8	114.3	104.0	92.3	79.8	66.7	52.7	41.0	29.3	18.3
120°	120.9	113.5	104.7	95.2	85.0	72.5	59.3	47.6	36.6	25.6	16.1
122.5°	110.6	104.0	96.0	87.2	76.2	64.5	53.5	43.2	33.0	22.7	13.2
125°	101.1	94.5	87.2	78.4	68.1	57.9	48.3	38.8	28.6	19.8	11.0
127.5°	91.6	85.0	77.6	69.6	61.5	52.0	43.2	34.4	25.6	17.6	9.5
130°	82.0	76.2	69.6	63.0	54.9	46.1	38.8	30.0	22.0	13.9	8.1
132.5°	72.5	68.1	62.3	55.7	48.3	41.8	33.7	26.4	19.0	12.5	7.3
135°	64.5	60.1	54.9	49.1	43.2	36.6	29.3	22.7	16.1	10.3	5.9
137.5°	57.1	53.5	48.3	43.2	38.1	31.5	25.6	19.0	13.2	8.8	4.4
140°	50.5	46.9	42.5	37.4	33.0	27.1	21.2	15.4	11.7	7.3	3.7
142.5°	44.0	40.3	36.6	32.2	27.8	22.7	17.6	13.2	9.5	5.9	3.7
145°	37.4	34.4	30.8	27.1	22.7	18.3	14.7	11.0	7.3	4.4	2.9
147.5°	30.8	28.6	24.9	22.0	18.3	14.7	11.7	8.8	5.9	3.7	2.2
150°	24.9	22.7	19.8	16.8	14.7	11.7	9.5	6.6	4.4	3.7	2.2
152.5°	19.0	17.6	15.4	13.9	11.7	8.8	6.6	5.1	3.7	2.9	1.5
155°	15.4	13.9	12.5	10.3	8.8	6.6	5.1	3.7	2.9	2.2	1.5
157.5°	11.0	10.3	8.8	7.3	5.9	4.4	3.7	3.7	2.2	1.5	0.7
160°	7.3	6.6	5.9	4.4	3.7	3.7	2.9	2.2	1.5	1.5	0.7
162.5°	4.4	3.7	3.7	3.7	2.9	2.9	2.2	1.5	1.5	0.7	0.7
165°	2.9	2.9	2.9	2.2	2.2	2.2	1.5	0.7	0.7	0.7	0.7
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-LD5-37SL-LW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	694.4	694.4	694.4	694.4	694.4	694.4	694.4	694.4	694.4	694.4	694.4
2.5°	695.2	693.0	695.9	701.0	701.8	701.0	699.6	701.8	704.7	703.9	698.8
5°	693.7	690.8	693.7	698.8	698.8	698.1	697.4	699.6	702.5	701.8	697.4
7.5°	689.3	686.4	689.3	693.7	694.4	693.0	693.0	695.2	698.1	697.4	693.7
10°	683.4	680.5	682.0	687.1	688.6	687.1	687.1	689.3	693.0	692.2	687.8
12.5°	674.6	672.4	673.9	678.3	679.8	679.0	678.3	681.2	684.9	684.9	680.5
15°	665.1	662.2	663.7	668.8	669.5	668.1	668.8	671.0	675.4	675.4	671.7
17.5°	654.1	650.5	652.7	656.3	657.1	657.1	657.1	660.0	665.1	664.4	661.5
20°	641.7	636.6	638.0	641.7	643.1	643.1	643.1	648.3	651.9	651.9	649.0
22.5°	627.0	623.4	623.4	627.0	629.2	628.5	628.5	632.9	638.0	637.3	637.3
25°	610.2	607.3	605.8	610.2	610.9	611.7	613.1	617.5	623.4	623.4	624.1
27.5°	592.6	589.7	588.9	592.6	593.3	594.1	595.5	600.7	606.5	607.3	608.7
30°	575.8	571.4	569.9	572.8	574.3	575.0	575.0	583.1	588.2	590.4	593.3
32.5°	556.0	551.6	547.9	553.0	553.8	555.2	556.0	564.0	569.9	573.6	578.0
35°	536.2	528.9	527.4	531.1	532.5	533.3	534.7	543.5	551.6	554.5	560.4
37.5°	514.2	509.1	504.7	508.4	509.8	510.6	515.0	523.0	531.1	535.5	541.3
40°	493.7	487.1	483.5	485.7	487.1	487.9	493.0	501.8	511.3	516.4	523.7
42.5°	471.0	462.2	459.3	461.5	462.2	464.4	468.8	480.5	490.1	497.4	503.2
45°	448.3	441.7	435.1	437.3	438.0	439.5	446.1	458.6	468.8	477.6	484.2
47.5°	424.9	416.8	410.2	411.7	414.6	415.3	422.7	437.3	446.8	456.4	465.1
50°	401.4	390.4	385.3	385.3	386.8	390.4	400.0	414.6	424.9	435.8	445.4
52.5°	377.2	367.0	361.1	361.9	363.3	367.7	376.5	391.2	402.9	414.6	426.3
55°	353.1	342.1	336.2	334.8	336.2	342.1	352.3	367.7	379.4	393.4	405.8
57.5°	328.9	315.7	310.6	308.4	309.9	317.2	327.4	343.5	358.2	371.4	386.0
60°	302.5	292.3	283.5	278.4	282.0	291.5	302.5	319.4	334.8	349.4	365.5
62.5°	279.8	266.6	257.1	252.0	255.6	263.7	279.1	295.2	312.1	328.9	345.0
65°	254.2	241.0	230.0	224.9	228.5	238.1	253.5	271.0	289.3	306.2	325.2
67.5°	229.3	215.4	202.2	197.0	201.4	211.7	228.5	248.3	268.1	285.7	306.2
70°	205.1	189.7	175.8	172.1	175.1	189.0	205.1	224.9	245.4	265.9	287.1
72.5°	183.1	164.1	149.4	145.0	148.7	164.1	182.4	202.9	224.9	246.9	269.6
75°	157.5	139.9	123.8	118.7	123.1	137.0	159.7	181.7	205.1	228.5	249.8
77.5°	137.0	116.5	99.6	91.6	98.9	116.5	138.4	161.9	186.1	210.2	234.4
80°	115.7	94.5	76.2	67.4	75.4	94.5	116.5	142.1	169.2	193.4	215.4
82.5°	96.7	74.0	54.9	45.4	54.2	75.4	99.6	125.3	151.6	175.8	201.4
85°	79.1	55.7	35.9	25.6	38.1	57.1	82.8	109.1	136.2	161.2	186.1
87.5°	64.5	41.8	22.0	11.0	23.4	44.7	68.9	95.2	122.3	147.2	170.7
90°	52.7	30.0	11.7	1.5	13.9	33.7	57.1	82.8	108.4	134.1	157.5
92.5°	43.2	22.7	6.6	0.7	8.8	27.1	49.1	73.3	98.2	123.1	145.8
95°	35.9	17.6	4.4	0.7	6.6	21.2	41.8	65.2	88.6	112.8	135.5
97.5°	30.8	14.7	3.7	0.7	5.1	18.3	35.9	57.9	80.6	103.3	125.3
100°	26.4	11.7	2.9	0.7	4.4	15.4	31.5	51.3	72.5	94.5	115.7
102.5°	22.7	9.5	2.2	0.7	3.7	13.2	27.8	46.1	65.2	86.4	106.9
105°	19.8	8.1	2.2	0.7	2.9	11.7	24.9	41.0	60.1	79.1	98.9
107.5°	16.8	6.6	1.5	0.7	2.2	9.5	22.0	37.4	54.2	72.5	90.8
110°	14.7	5.9	1.5	0.7	2.2	8.8	19.0	33.7	49.1	65.9	83.5



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-37SL-LW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	12.5	4.4	1.5	0.7	1.5	7.3	16.8	30.0	44.7	60.1	76.9
115°	11.0	3.7	0.7	0.7	1.5	6.6	15.4	27.1	40.3	54.9	70.3
117.5°	8.8	2.9	0.7	0.7	0.7	5.1	13.2	24.2	36.6	50.5	64.5
120°	7.3	2.9	0.7	0.7	0.7	4.4	11.7	21.2	33.0	45.4	58.6
122.5°	6.6	2.2	0.7	0.7	0.7	3.7	10.3	19.0	29.3	41.0	53.5
125°	5.9	2.2	0.7	0.7	0.7	2.9	8.8	16.8	26.4	36.6	48.3
127.5°	4.4	2.2	0.7	0.7	0.7	2.2	8.1	14.7	23.4	33.0	43.2
130°	3.7	1.5	0.7	0.7	0.7	2.2	6.6	13.2	20.5	29.3	38.8
132.5°	2.9	1.5	0.7	0.7	0.7	1.5	5.1	10.3	17.6	25.6	34.4
135°	2.9	1.5	0.7	0.7	0.7	1.5	3.7	8.8	14.7	22.0	29.3
137.5°	2.9	0.7	0.7	0.7	0.7	1.5	2.9	6.6	11.7	17.6	24.2
140°	2.2	0.7	0.7	0.7	0.7	0.7	2.2	5.1	9.5	14.7	20.5
142.5°	2.2	0.7	0.7	0.7	0.7	0.7	2.2	3.7	7.3	11.7	16.1
145°	1.5	0.7	0.7	0.7	0.7	0.7	1.5	2.9	5.9	8.8	13.2
147.5°	1.5	0.7	0.7	0.7	0.7	0.7	1.5	2.2	4.4	7.3	10.3
150°	1.5	0.7	0.7	0.7	0.7	0.7	1.5	2.2	2.9	5.1	8.1
152.5°	0.7	0.7	0.7	0.7	0.7	0.7	1.5	1.5	2.2	3.7	5.1
155°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.5	2.2	2.9	3.7
157.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.5	1.5	2.2	2.9
160°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.5	1.5	2.2
162.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.5	1.5
165°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
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-LD5-37SL-LW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	694.4	694.4	694.4	694.4	694.4	694.4	694.4	694.4	694.4	694.4	694.4
2.5°	696.6	691.5	693.0	692.2	693.7	695.9	695.9	695.2	695.2	693.7	692.2
5°	695.2	690.0	692.2	691.5	693.0	695.2	695.2	694.4	694.4	692.2	691.5
7.5°	690.8	687.1	688.6	688.6	690.0	692.2	692.2	691.5	691.5	689.3	688.6
10°	686.4	682.0	684.2	684.2	685.6	688.6	688.6	687.8	687.8	685.6	684.9
12.5°	679.0	674.6	678.3	679.0	680.5	683.4	682.7	682.7	682.7	680.5	679.8
15°	670.3	667.3	671.0	671.7	673.9	677.6	677.6	677.6	677.6	675.4	674.6
17.5°	660.7	658.5	662.2	663.7	666.6	670.3	670.3	671.0	671.7	670.3	669.5
20°	649.7	648.3	651.9	654.9	659.3	662.9	664.4	665.1	666.6	665.1	664.4
22.5°	637.3	637.3	642.4	645.3	650.5	654.1	656.3	658.5	660.0	658.5	657.8
25°	623.4	625.6	630.7	635.8	641.7	645.3	647.5	650.5	651.9	651.2	650.5
27.5°	610.2	613.1	619.7	624.8	630.0	635.8	638.0	641.7	643.1	643.1	642.4
30°	594.8	599.2	606.5	612.4	619.0	624.8	627.8	631.4	633.6	632.2	632.9
32.5°	580.2	587.5	593.3	599.9	607.3	613.1	616.8	621.2	623.4	622.6	623.4
35°	564.0	571.4	579.4	586.0	594.8	600.7	605.8	609.5	612.4	611.7	611.7
37.5°	546.5	556.0	564.0	572.8	580.9	587.5	592.6	597.0	599.9	599.9	599.9
40°	529.6	539.9	547.9	558.2	568.4	574.3	580.2	584.5	587.5	588.2	588.9
42.5°	511.3	522.3	531.8	542.8	553.0	560.4	567.0	572.1	575.0	576.5	575.8
45°	494.4	504.7	515.7	528.1	537.7	545.0	553.0	558.9	561.8	562.6	563.3
47.5°	475.4	487.1	499.6	512.0	521.6	531.1	538.4	544.3	547.2	549.4	549.4
50°	457.1	469.5	483.5	496.6	506.9	516.4	523.7	530.3	534.0	535.5	536.2
52.5°	440.2	452.0	466.6	479.8	490.1	499.6	509.1	516.4	520.1	521.6	521.6
55°	419.7	434.4	450.5	462.9	473.9	484.9	494.4	501.8	505.4	507.6	509.1
57.5°	400.7	416.1	432.9	446.1	459.3	469.5	478.3	487.9	490.8	493.7	494.4
60°	382.4	397.8	413.9	428.5	441.7	452.7	462.9	471.0	476.1	477.6	479.1
62.5°	363.3	379.4	396.3	410.9	424.9	438.0	447.6	454.9	460.8	462.9	464.4
65°	345.0	361.9	378.7	394.1	408.7	421.9	431.5	438.8	444.6	448.3	449.0
67.5°	325.2	343.5	361.1	377.2	391.9	405.8	415.3	422.7	428.5	432.9	433.6
70°	306.9	326.0	343.5	361.1	375.8	389.7	400.0	407.3	413.9	416.8	418.3
72.5°	289.3	309.1	327.4	345.0	359.7	373.6	384.6	391.9	398.5	402.2	402.9
75°	272.5	292.3	312.1	328.9	344.3	358.2	369.2	377.2	383.1	386.8	388.2
77.5°	255.6	276.2	295.9	312.8	328.9	342.8	352.3	361.9	367.7	372.1	372.1
80°	238.8	260.0	280.6	297.4	313.5	326.0	337.0	346.5	352.3	356.7	356.7
82.5°	224.1	244.7	264.4	281.3	297.4	311.3	322.3	331.1	337.7	340.6	341.4
85°	207.3	230.0	248.3	266.6	282.0	295.2	306.2	315.7	321.6	324.5	326.0
87.5°	193.4	215.4	235.1	251.3	266.6	279.8	292.3	300.3	306.2	309.9	311.3
90°	180.2	201.4	221.2	237.3	253.5	265.9	277.6	285.7	292.3	295.2	296.7
92.5°	168.5	189.7	208.8	224.9	240.3	254.2	265.2	273.2	279.1	282.0	284.2
95°	157.5	178.0	196.3	213.9	228.5	241.0	252.7	260.8	267.4	269.6	271.8
97.5°	146.5	166.3	184.6	201.4	216.8	228.5	239.5	247.6	252.7	256.4	258.6
100°	137.0	156.0	173.6	189.7	204.4	215.4	227.1	234.4	239.5	242.5	245.4
102.5°	126.7	145.8	162.6	178.0	193.4	203.6	214.6	222.0	226.3	231.5	231.5
105°	117.9	135.5	152.4	167.0	180.2	192.7	202.2	209.5	214.6	218.3	218.3
107.5°	108.4	126.0	142.1	157.5	169.9	181.7	190.5	197.0	202.9	205.1	207.3
110°	101.1	116.5	132.6	147.2	159.0	169.9	178.7	186.1	191.2	193.4	194.8



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-37SL-LW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	92.3	108.4	123.1	137.0	148.7	159.0	167.7	173.6	178.7	181.7	182.4
115°	85.0	100.4	113.5	126.7	139.2	148.0	156.0	161.9	167.0	169.2	170.7
117.5°	78.4	92.3	105.5	116.5	128.2	137.7	145.8	150.9	155.3	158.2	159.7
120°	71.8	85.0	96.7	107.7	118.7	127.5	134.8	139.9	145.0	147.2	147.2
122.5°	65.2	77.6	88.6	98.9	109.1	117.2	125.3	129.7	134.1	136.2	136.2
125°	59.3	71.1	81.3	90.8	100.4	107.7	114.3	119.4	123.8	125.3	125.3
127.5°	53.5	64.5	74.0	82.8	90.8	98.2	104.7	109.9	113.5	115.0	115.0
130°	48.3	57.9	66.7	75.4	83.5	89.4	96.0	100.4	102.6	104.7	105.5
132.5°	43.2	52.0	60.1	67.4	75.4	81.3	86.4	90.8	93.0	95.2	96.0
135°	38.1	46.1	53.5	60.8	67.4	73.3	77.6	81.3	84.2	85.7	86.4
137.5°	32.2	41.0	47.6	53.5	60.8	65.2	70.3	72.5	75.4	76.9	76.9
140°	27.1	33.7	41.0	46.9	52.7	57.1	61.5	65.2	67.4	68.1	68.1
142.5°	22.0	27.8	33.7	41.0	46.1	49.8	54.2	57.1	58.6	59.3	60.1
145°	17.6	22.0	27.1	33.7	39.6	44.0	46.1	49.1	50.5	51.3	52.0
147.5°	13.2	17.6	22.0	26.4	32.2	36.6	38.8	41.8	43.2	44.0	44.0
150°	10.3	13.2	16.1	20.5	24.9	30.0	33.0	35.2	35.9	36.6	36.6
152.5°	7.3	10.3	12.5	15.4	18.3	22.7	27.1	28.6	29.3	30.0	30.0
155°	5.1	7.3	8.8	11.0	13.2	16.8	20.5	22.7	23.4	24.2	24.2
157.5°	3.7	5.1	5.9	8.1	9.5	11.0	13.9	17.6	18.3	18.3	18.3
160°	2.2	2.9	3.7	5.1	5.9	7.3	8.8	11.0	13.2	13.2	13.2
162.5°	1.5	2.2	2.2	2.9	2.9	4.4	5.1	5.9	8.1	8.8	8.8
165°	0.7	1.5	1.5	1.5	1.5	1.5	2.2	2.2	3.7	4.4	4.4
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-LD5-37SL-LW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	694.4	694.4	694.4	694.4	694.4	694.4	694.4	694.4	694.4	694.4	694.4
2.5°	693.0	694.4	693.7	693.7	693.7	695.2	693.7	687.1	688.6	690.0	691.5
5°	692.2	693.0	693.0	692.2	692.2	693.7	692.2	685.6	687.1	688.6	689.3
7.5°	689.3	690.0	690.0	690.0	689.3	690.8	688.6	682.7	682.7	684.2	684.9
10°	685.6	687.1	686.4	685.6	685.6	685.6	684.2	677.6	677.6	678.3	679.0
12.5°	681.2	681.2	681.2	680.5	679.8	679.8	678.3	671.7	671.0	672.4	671.7
15°	675.4	676.8	675.4	674.6	673.2	673.2	671.0	664.4	662.9	663.7	662.9
17.5°	670.3	671.0	669.5	668.1	666.6	665.9	663.7	656.3	654.1	654.9	653.4
20°	665.1	665.1	663.7	662.2	660.0	657.8	654.9	647.5	643.9	643.9	641.0
22.5°	658.5	658.5	657.1	654.9	652.7	649.7	646.8	639.5	633.6	632.2	630.0
25°	651.2	650.5	649.7	647.5	643.1	640.2	637.3	629.2	622.6	619.7	616.0
27.5°	642.4	642.4	640.2	638.0	633.6	630.0	626.3	619.0	610.2	606.5	601.4
30°	632.9	632.9	630.7	627.8	623.4	619.0	614.6	605.8	597.0	591.9	586.0
32.5°	623.4	622.6	620.4	617.5	613.1	606.5	602.9	594.1	583.8	578.0	569.9
35°	611.7	610.9	608.7	605.1	599.2	594.1	588.2	580.2	568.4	561.1	552.3
37.5°	599.9	599.2	597.7	592.6	586.7	580.9	573.6	565.5	554.5	545.0	536.2
40°	588.2	587.5	584.5	580.9	573.6	566.2	558.9	550.9	539.1	528.1	518.6
42.5°	575.8	575.0	571.4	567.0	558.9	551.6	542.8	534.0	522.3	509.1	499.6
45°	563.3	561.8	558.2	553.0	544.3	536.2	527.4	517.2	505.4	493.0	480.5
47.5°	550.1	547.9	544.3	536.9	529.6	520.8	510.6	499.6	487.9	473.9	460.8
50°	535.5	534.0	529.6	523.0	514.2	505.4	493.7	482.7	468.8	455.6	439.5
52.5°	521.6	518.6	515.0	507.6	498.8	489.3	476.9	463.7	449.8	437.3	420.5
55°	506.9	505.4	500.3	494.4	483.5	472.5	460.8	446.8	431.5	416.8	400.7
57.5°	493.0	490.1	485.7	477.6	468.1	457.1	444.6	430.0	413.1	397.8	380.2
60°	479.1	474.7	469.5	462.2	452.0	440.2	427.1	411.7	394.8	378.0	359.7
62.5°	463.7	460.0	454.2	446.8	436.6	424.1	410.2	394.1	378.0	360.4	340.6
65°	448.3	444.6	438.8	431.5	421.2	407.3	392.6	376.5	358.2	341.4	320.1
67.5°	432.9	429.3	422.7	414.6	404.3	391.2	375.8	358.9	340.6	322.3	300.3
70°	417.5	413.1	407.3	398.5	388.2	374.3	358.9	341.4	323.0	303.3	281.3
72.5°	402.2	398.5	391.2	383.1	372.1	358.2	342.8	325.2	306.2	285.7	263.7
75°	386.8	382.4	377.2	367.7	356.0	342.8	326.7	309.1	288.6	268.8	246.1
77.5°	371.4	367.7	361.1	351.6	340.6	326.7	310.6	293.0	272.5	252.0	227.8
80°	356.0	351.6	346.5	337.7	325.2	311.3	294.5	276.9	256.4	235.1	211.0
82.5°	340.6	336.2	330.4	321.6	309.9	295.9	279.8	260.8	240.3	218.3	195.6
85°	325.2	321.6	315.0	306.2	293.7	279.8	263.7	246.9	224.9	202.9	180.2
87.5°	309.9	306.2	299.6	290.8	279.1	265.2	249.1	231.5	210.2	189.7	164.8
90°	295.2	292.3	285.7	276.9	265.2	251.3	236.6	217.6	197.0	176.5	153.1
92.5°	282.0	279.1	273.2	264.4	254.2	238.8	224.1	205.8	185.3	164.1	141.4
95°	270.3	266.6	260.8	252.7	240.3	227.1	212.4	194.1	174.3	153.1	131.1
97.5°	257.1	253.5	247.6	238.8	228.5	214.6	200.0	182.4	162.6	142.8	120.9
100°	243.9	240.3	233.7	226.3	216.1	202.2	188.3	170.7	152.4	133.3	112.1
102.5°	230.7	227.1	221.2	213.9	203.6	191.2	177.3	160.4	142.1	123.1	103.3
105°	218.3	214.6	208.8	201.4	191.9	179.5	164.8	150.2	132.6	114.3	95.2
107.5°	205.8	202.2	197.0	189.7	180.2	168.5	154.6	139.2	123.1	105.5	87.2
110°	193.4	190.5	184.6	178.0	168.5	156.8	144.3	129.7	113.5	97.4	79.8



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-37SL-LW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	181.7	178.7	172.9	165.5	157.5	146.5	134.1	120.1	104.7	89.4	72.5
115°	169.9	166.3	161.2	154.6	146.5	136.2	124.5	112.1	96.7	82.0	66.7
117.5°	158.2	155.3	150.2	143.6	136.2	126.0	115.0	103.3	88.6	74.7	60.8
120°	146.5	144.3	139.2	133.3	126.0	116.5	106.2	94.5	81.3	68.1	54.9
122.5°	135.5	133.3	128.2	123.1	115.7	106.9	97.4	86.4	74.7	62.3	50.5
125°	125.3	122.3	117.9	112.8	106.2	98.2	88.6	78.4	67.4	56.4	45.4
127.5°	114.3	112.1	109.1	103.3	96.7	89.4	80.6	71.8	61.5	51.3	41.0
130°	105.5	102.6	98.9	94.5	88.6	81.3	73.3	64.5	55.7	46.1	35.9
132.5°	95.2	92.3	89.4	85.0	79.8	73.3	65.9	57.9	49.8	41.0	32.2
135°	85.7	83.5	80.6	76.2	71.1	65.9	58.6	51.3	44.0	35.9	28.6
137.5°	76.9	74.7	71.8	68.9	63.7	58.6	52.0	45.4	38.8	31.5	24.9
140°	68.1	66.7	63.7	60.8	56.4	51.3	45.4	39.6	33.7	27.1	21.2
142.5°	59.3	57.9	55.7	52.7	49.1	44.7	39.6	34.4	28.6	23.4	18.3
145°	51.3	50.5	48.3	45.4	42.5	38.1	33.7	29.3	24.2	19.8	14.7
147.5°	43.2	42.5	41.0	38.8	35.9	32.2	28.6	24.2	20.5	16.1	11.7
150°	35.9	35.2	34.4	31.5	30.0	26.4	23.4	19.8	16.8	12.5	9.5
152.5°	29.3	29.3	27.8	25.6	24.2	21.2	19.0	16.1	13.2	10.3	7.3
155°	23.4	22.7	22.0	20.5	19.0	16.8	14.7	12.5	10.3	7.3	5.1
157.5°	18.3	17.6	16.8	15.4	13.9	13.2	11.0	8.8	6.6	5.1	3.7
160°	13.2	12.5	11.7	11.0	10.3	8.8	7.3	5.9	4.4	2.9	2.2
162.5°	8.8	8.1	8.1	7.3	6.6	5.1	4.4	3.7	2.9	2.2	1.5
165°	4.4	4.4	3.7	3.7	2.9	2.2	2.2	2.2	1.5	1.5	0.7
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-LD5-37SL-LW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	694.4	694.4	694.4	694.4	694.4	694.4	694.4
2.5°	690.8	690.8	693.7	693.0	690.8	695.2	700.3
5°	688.6	688.6	690.8	690.8	688.6	693.0	697.4
7.5°	684.9	684.2	686.4	686.4	683.4	687.1	692.2
10°	678.3	677.6	679.8	679.8	676.8	680.5	684.9
12.5°	671.0	669.5	671.7	671.0	668.1	671.7	676.1
15°	661.5	660.7	662.2	660.7	657.8	661.5	665.9
17.5°	651.9	649.7	650.5	650.5	645.3	649.0	652.7
20°	639.5	636.6	637.3	636.6	632.9	635.1	639.5
22.5°	627.0	622.6	622.6	621.9	617.5	620.4	624.1
25°	611.7	606.5	606.5	605.8	600.7	602.9	606.5
27.5°	596.3	591.1	588.9	588.2	583.1	583.1	588.2
30°	580.2	572.8	571.4	569.2	564.0	564.0	568.4
32.5°	564.8	554.5	551.6	548.7	543.5	542.8	547.9
35°	544.3	536.2	531.1	528.1	522.3	520.8	525.2
37.5°	527.4	517.2	509.8	506.2	500.3	498.1	504.0
40°	509.1	498.1	488.6	486.4	477.6	474.7	479.8
42.5°	488.6	476.9	467.3	462.9	456.4	453.4	454.2
45°	468.1	455.6	445.4	439.5	432.9	427.8	430.7
47.5°	446.8	435.8	423.4	414.6	406.5	402.9	404.3
50°	425.6	412.4	400.7	391.2	381.6	377.2	380.2
52.5°	404.3	390.4	377.2	367.0	356.0	351.6	352.3
55°	383.8	369.2	353.8	342.8	332.6	326.0	324.5
57.5°	363.3	347.2	331.1	318.6	305.5	299.6	297.4
60°	341.4	324.5	307.7	293.0	279.1	272.5	269.6
62.5°	320.8	302.5	283.5	268.1	254.2	245.4	243.2
65°	301.1	279.8	260.8	243.2	227.8	218.3	215.4
67.5°	279.8	257.8	237.3	218.3	203.6	191.2	189.7
70°	260.0	236.6	213.9	194.1	178.0	165.5	159.7
72.5°	240.3	216.1	192.7	171.4	150.9	139.2	134.8
75°	221.2	196.3	171.4	149.4	126.7	112.8	108.4
77.5°	203.6	178.0	151.6	127.5	106.2	88.6	82.8
80°	186.8	160.4	132.6	107.7	85.0	65.9	59.3
82.5°	169.2	144.3	115.7	89.4	65.9	46.1	38.1
85°	153.8	128.9	100.4	74.0	50.5	29.3	20.5
87.5°	141.4	114.3	88.6	62.3	38.1	16.8	5.9
90°	128.9	102.6	76.9	51.3	28.6	9.5	0.7
92.5°	117.9	93.0	67.4	44.0	22.0	6.6	0.7
95°	107.7	83.5	59.3	36.6	17.6	4.4	0.7
97.5°	98.2	75.4	52.7	31.5	14.7	3.7	0.7
100°	90.1	68.1	46.9	27.8	12.5	2.9	0.7
102.5°	82.0	61.5	41.8	24.2	11.0	2.2	0.7
105°	75.4	55.7	37.4	22.0	9.5	2.2	0.7
107.5°	68.9	50.5	33.7	19.0	8.1	1.5	0.7
110°	62.3	46.1	30.0	16.8	7.3	1.5	0.7



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-37SL-LW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	57.1	41.8	27.1	15.4	5.9	1.5	0.7
115°	52.0	37.4	24.2	13.2	5.1	0.7	0.7
117.5°	46.9	33.7	21.2	11.7	4.4	0.7	0.7
120°	42.5	30.0	19.0	10.3	3.7	0.7	0.7
122.5°	38.1	27.1	16.8	8.8	2.9	0.7	0.7
125°	34.4	24.2	14.7	7.3	2.2	0.7	0.7
127.5°	30.8	21.2	13.2	6.6	2.2	0.7	0.7
130°	27.1	19.0	11.0	5.1	1.5	0.7	0.7
132.5°	24.2	16.1	9.5	4.4	1.5	0.7	0.7
135°	21.2	13.9	8.1	2.9	1.5	0.7	0.7
137.5°	18.3	11.7	6.6	2.2	0.7	0.7	0.7
140°	15.4	10.3	5.1	2.2	0.7	0.7	0.7
142.5°	13.2	8.1	3.7	1.5	0.7	0.7	0.7
145°	10.3	6.6	2.9	1.5	0.7	0.7	0.7
147.5°	8.1	5.1	2.2	1.5	0.7	0.7	0.7
150°	5.9	3.7	2.2	0.7	0.7	0.7	0.7
152.5°	4.4	2.9	1.5	0.7	0.7	0.7	0.7
155°	2.9	2.2	1.5	0.7	0.7	0.7	0.7
157.5°	2.2	1.5	0.7	0.7	0.7	0.7	0.7
160°	1.5	0.7	0.7	0.7	0.7	0.7	0.7
162.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7
165°	0.7	0.7	0.7	0.7	0.7	0.7	0.7
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)