

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: **2SNLED-LD5-23SL-LW-UNV-L950-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: 2SNLED-LD5-23SL-LW-UNV-L950-CD1-U
Description: 2FT LINEAR SNLED LED FIXTURE
WIDE FROSTED LENS
Light Source: -
Ballast/Driver: -

Summary

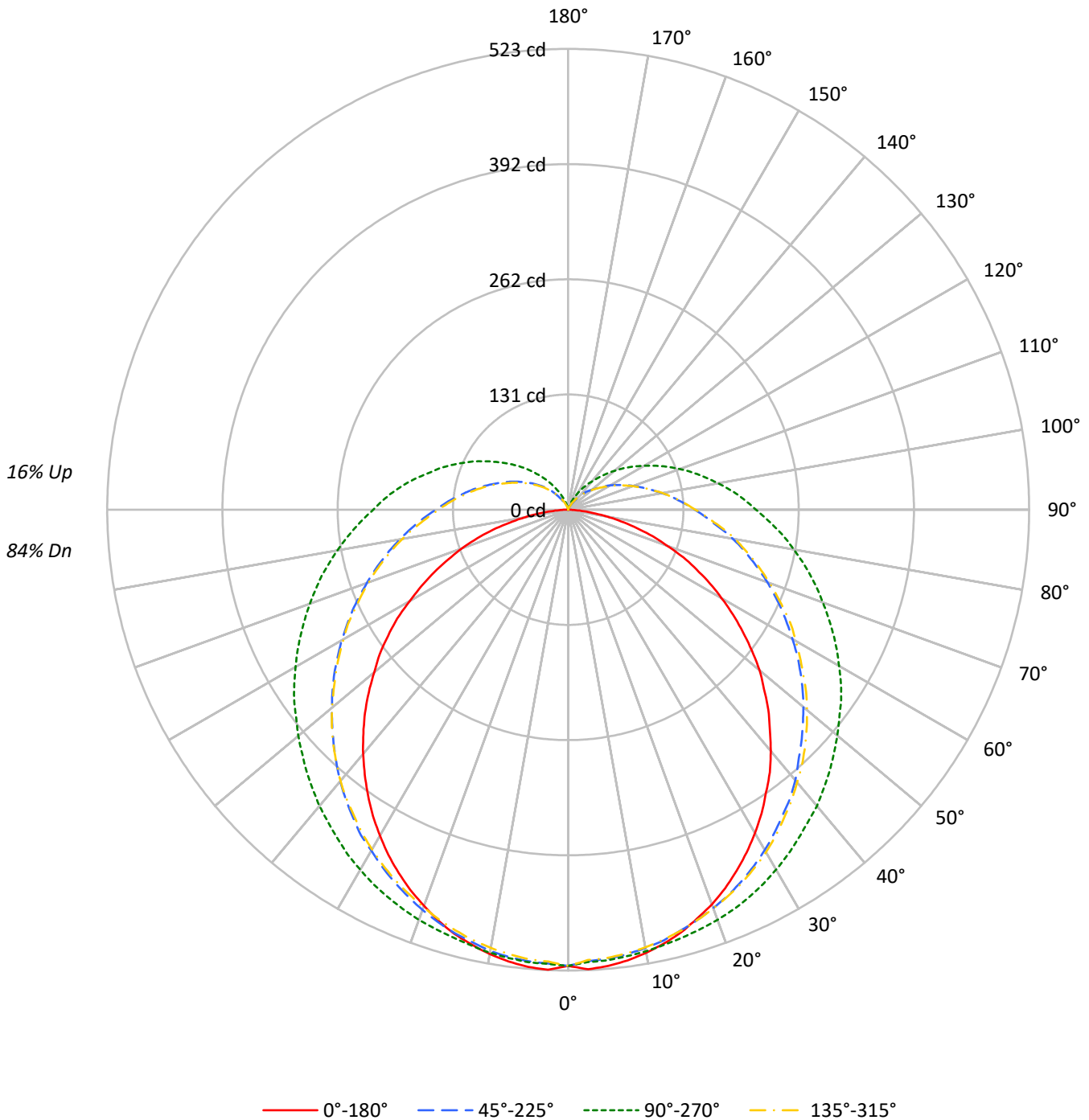
Lumens per Lamp: N/A
Luminaire Lumens: 2249.0 lumens
Efficiency: N/A
Efficacy: 107.1 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.36 / 1.44
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 2' x H: 0.12')
CIE Type: Semi-Direct

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: 25 FT



TEST NUMBER: P#
CATALOG NUMBER: 2SNLED-LD5-23SL-LW-UNV-L950-CD1-U

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	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°	8367	8367	8367	8367
5°	8387	8063	8405	8097
10°	8288	7833	8314	7859
15°	8169	7638	8204	7646
20°	8017	7495	8043	7495
25°	7834	7367	7882	7359
30°	7632	7237	7691	7237
35°	7401	7115	7484	7124
40°	7171	7043	7257	7043
45°	6908	6970	7013	6978
50°	6632	6925	6721	6944
55°	6258	6932	6454	6961
60°	5860	6952	6052	6995
65°	5412	7024	5652	7091
70°	4799	7151	5174	7253
75°	4091	7384	4481	7527
80°	3037	7731	3450	7910
85°	1655	8286	2066	8517



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.0	2.2
10°-20°	140.9	6.3
20°-30°	216.1	9.6
30°-40°	266.6	11.9
40°-50°	289.2	12.9
50°-60°	285.1	12.7
60°-70°	257.7	11.5
70°-80°	214.7	9.5
80°-90°	166.3	7.4
90°-100°	126.1	5.6
100°-110°	93.3	4.1
110°-120°	64.9	2.9
120°-130°	41.4	1.8
130°-140°	23.2	1.0
140°-150°	10.6	0.5
150°-160°	3.3	0.1
160°-170°	0.4	0.0
170°-180°	0.0	0.0
0°-30°	406.1	18.1
0°-40°	672.6	29.9
0°-60°	1246.9	55.4
0°-90°	1885.6	83.8
90°-120°	284.4	12.6
90°-150°	359.6	16.0
90°-180°	363.0	16.1
0°-180°	2249.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	518	518	518	518	518	
5°	520	513	521	516	520	49
15°	496	502	498	503	496	140
25°	452	485	455	485	452	208
35°	392	455	396	456	392	245
45°	321	419	326	420	321	247
55°	242	378	250	380	242	216
65°	160	332	168	335	160	159
75°	81	284	88	289	81	86
85°	15	236	19	243	15	18
90°	0	213	1	221	0	1
95°	0	193	0	203	0	0
105°	0	153	0	163	0	1
115°	0	117	0	127	0	0
125°	0	84	0	93	0	0
135°	0	55	0	64	0	0
145°	0	32	0	39	0	0
155°	0	13	0	18	0	0
165°	0	2	0	3	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P#

CATALOG NUMBER: 2SNLED-LD5-23SL-LW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	517.7	517.7	517.7	517.7	517.7	517.7	517.7	517.7	517.7	517.7	517.7
2.5°	522.0	522.0	521.5	520.4	520.9	522.6	521.5	518.7	517.1	512.7	513.8
5°	519.8	519.8	519.3	518.2	518.7	520.9	519.8	517.7	515.5	511.6	513.3
7.5°	516.0	516.0	515.5	514.4	515.5	517.7	516.6	514.4	512.7	508.9	510.6
10°	510.6	511.1	510.6	508.9	511.1	513.3	512.7	510.0	508.4	505.1	506.7
12.5°	504.0	504.5	504.0	503.5	504.5	507.8	506.7	504.5	503.5	500.7	502.4
15°	496.4	496.9	495.8	495.8	496.9	500.2	500.2	498.0	496.9	494.2	497.5
17.5°	486.5	487.1	486.5	486.5	487.6	490.9	491.4	490.4	489.3	488.2	491.4
20°	476.7	476.2	476.2	475.6	477.8	482.7	482.2	482.2	481.1	481.1	484.9
22.5°	465.2	465.2	464.7	464.7	467.4	471.8	471.8	472.9	471.8	474.0	477.2
25°	452.1	452.7	452.1	453.2	455.4	460.3	460.9	462.5	463.0	465.2	469.1
27.5°	438.5	439.0	438.5	439.6	443.4	447.2	449.9	452.1	452.7	456.0	460.9
30°	423.7	423.7	424.3	425.4	429.7	435.7	437.9	440.7	440.7	446.1	451.0
32.5°	408.4	408.4	408.4	410.6	415.5	422.6	425.4	428.6	429.7	435.2	440.7
35°	391.5	392.1	392.1	393.7	400.3	407.4	411.2	415.0	417.2	423.7	429.2
37.5°	375.7	376.8	375.1	377.3	386.6	392.6	397.0	400.8	404.6	413.4	417.7
40°	357.7	358.8	358.2	362.6	370.2	377.9	382.8	386.6	392.1	400.8	405.7
42.5°	338.5	339.6	340.7	345.6	353.8	361.5	367.5	372.4	379.0	386.6	394.8
45°	321.1	321.1	322.7	328.7	337.5	345.6	352.7	358.2	365.9	374.0	382.2
47.5°	301.4	302.0	304.1	311.2	320.5	330.4	336.9	344.0	352.2	360.9	370.2
50°	283.4	283.4	286.7	294.3	303.1	314.0	321.1	329.3	338.0	348.4	357.7
52.5°	262.6	263.7	268.7	275.8	287.2	297.1	305.2	314.0	324.4	335.3	345.6
55°	241.9	244.1	247.9	257.7	269.7	279.0	288.9	299.8	309.6	321.6	333.6
57.5°	221.7	223.3	229.3	239.2	251.7	263.2	273.6	283.9	296.0	308.0	320.5
60°	200.9	203.1	210.2	220.1	233.7	245.7	257.7	268.7	281.2	293.8	306.9
62.5°	181.3	182.9	191.1	202.6	216.2	229.3	241.4	254.5	268.1	280.1	293.2
65°	160.5	163.3	172.6	182.9	198.8	211.9	225.5	239.7	253.9	267.0	279.6
67.5°	141.4	143.1	152.9	164.9	180.7	195.5	209.7	225.0	239.7	253.4	265.9
70°	119.0	124.5	134.3	146.9	163.8	179.1	194.4	210.2	226.1	240.3	252.3
72.5°	100.5	104.8	115.8	129.4	145.8	163.8	179.6	196.6	212.4	227.2	239.7
75°	80.8	85.2	97.7	113.0	130.0	149.1	165.5	182.9	199.3	214.1	227.2
77.5°	61.7	67.2	80.8	96.7	115.2	134.9	151.8	169.3	186.2	202.0	215.1
80°	44.2	50.2	65.0	83.0	101.0	120.7	139.2	156.7	173.6	189.5	203.1
82.5°	28.4	34.9	50.8	68.8	87.9	107.6	126.7	144.2	161.1	176.9	191.1
85°	15.3	22.4	38.8	56.8	75.9	95.6	114.7	133.2	149.6	164.4	179.6
87.5°	4.4	13.1	28.9	47.0	66.6	84.6	103.2	121.8	138.2	154.0	167.6
90°	0.5	7.6	21.8	38.8	57.9	75.4	93.9	111.4	127.8	143.6	157.3
92.5°	0.5	4.9	16.9	32.2	49.7	67.7	86.3	103.2	118.5	134.3	148.0
95°	0.5	3.8	13.7	27.3	43.7	60.6	78.1	94.5	110.3	125.0	138.7
97.5°	0.5	2.7	10.9	23.5	38.2	54.1	71.0	87.4	102.7	116.9	129.4
100°	0.5	2.2	8.7	20.2	33.3	48.6	63.9	79.7	94.5	108.1	121.2
102.5°	0.5	1.6	7.6	16.9	29.5	43.1	57.9	72.6	86.8	99.9	113.0
105°	0.5	1.6	6.6	14.7	26.2	38.8	52.4	66.6	79.7	92.3	104.3
107.5°	0.5	1.1	5.5	12.6	22.9	34.9	47.5	61.2	73.2	85.2	96.7
110°	0.5	1.1	4.4	11.5	20.2	31.1	43.1	55.7	67.2	78.6	89.6



TEST NUMBER: P#

CATALOG NUMBER: 2SNLED-LD5-23SL-LW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	0.5	1.1	3.8	9.8	17.5	27.8	38.8	50.2	61.2	72.6	82.5
115°	0.5	1.1	3.3	8.7	16.4	24.0	34.9	45.3	56.2	66.6	75.9
117.5°	0.5	1.1	2.7	7.1	14.2	21.8	30.6	41.0	50.8	60.6	69.3
120°	0.5	1.1	2.2	6.6	12.6	19.7	27.3	36.6	45.9	55.2	64.4
122.5°	0.5	0.5	2.2	5.5	10.9	17.5	25.1	32.2	41.0	49.7	57.9
125°	0.5	0.5	2.2	4.9	9.3	15.8	22.4	28.9	36.6	44.2	51.3
127.5°	0.5	0.5	1.6	3.8	8.2	13.7	19.7	26.8	32.2	39.3	46.4
130°	0.5	0.5	1.6	3.3	7.1	11.5	17.5	23.5	30.0	34.9	41.0
132.5°	0.5	0.5	1.6	2.7	5.5	9.3	14.7	20.2	26.2	31.7	36.6
135°	0.5	0.5	1.1	2.2	4.4	7.6	12.0	16.9	22.9	28.4	33.3
137.5°	0.5	0.5	1.1	2.2	3.3	6.6	9.3	13.7	19.1	24.0	28.9
140°	0.5	0.5	1.1	1.6	2.7	4.9	7.6	10.9	15.3	19.7	25.1
142.5°	0.5	0.5	0.5	1.6	2.2	3.8	6.0	8.7	12.0	15.8	20.2
145°	0.5	0.5	0.5	1.6	2.2	2.7	4.9	7.1	9.3	12.0	15.8
147.5°	0.5	0.5	0.5	1.1	1.6	2.2	3.8	5.5	7.1	9.3	11.5
150°	0.5	0.5	0.5	1.1	1.6	2.2	2.7	3.8	5.5	7.6	9.3
152.5°	0.5	0.5	0.5	1.1	1.1	1.6	2.2	2.7	3.8	5.5	6.6
155°	0.5	0.5	0.5	0.5	1.1	1.6	2.2	2.2	2.7	3.8	4.9
157.5°	0.5	0.5	0.5	0.5	1.1	1.1	1.6	1.6	2.2	2.2	3.3
160°	0.5	0.5	0.5	0.5	0.5	1.1	1.1	1.6	1.6	1.6	1.6
162.5°	0.5	0.5	0.5	0.5	0.5	0.5	1.1	1.1	1.1	1.6	1.6
165°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.1	1.1	1.1
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°	517.7	517.7	517.7	517.7	517.7	517.7	517.7	517.7	517.7	517.7	517.7
2.5°	513.8	514.4	516.0	516.0	514.9	514.9	514.4	513.8	514.4	515.5	515.5
5°	512.7	513.3	514.9	515.5	514.4	513.8	513.8	513.3	513.8	514.9	514.9
7.5°	510.6	511.1	512.7	513.3	512.2	512.2	511.6	511.1	512.2	512.7	512.7
10°	507.3	507.8	510.0	510.6	510.0	509.5	509.5	508.9	509.5	510.6	510.6
12.5°	502.9	504.0	506.7	506.7	506.7	506.2	506.2	505.6	506.2	507.3	506.7
15°	498.0	500.2	502.4	503.5	503.5	503.5	502.9	502.4	503.5	504.0	503.5
17.5°	492.5	495.3	498.5	499.6	499.6	500.2	499.6	499.1	500.2	500.2	499.6
20°	487.1	489.8	493.1	494.2	495.3	495.8	495.8	495.3	495.8	496.4	495.8
22.5°	480.0	483.3	487.1	488.7	489.8	490.9	490.9	490.9	491.4	492.0	490.9
25°	472.3	476.2	480.5	482.2	484.3	484.9	485.4	485.4	486.0	486.5	484.9
27.5°	464.1	468.5	472.9	475.6	477.2	478.3	478.3	478.9	479.4	480.0	478.3
30°	454.3	460.9	464.7	466.9	469.1	470.7	471.2	471.8	472.3	472.9	471.2
32.5°	445.6	451.0	456.0	458.7	461.4	463.6	464.1	464.1	465.2	465.2	463.6
35°	435.2	441.8	446.7	449.4	452.7	454.3	455.4	455.4	456.5	456.5	454.9
37.5°	424.8	431.4	436.8	440.1	443.9	446.1	446.7	446.7	447.8	447.8	445.6
40°	413.9	421.0	427.0	430.8	434.1	436.8	437.4	439.0	439.0	438.5	436.3
42.5°	403.0	409.5	416.1	420.5	424.8	427.6	428.6	429.2	429.2	428.6	427.0
45°	391.0	398.6	404.6	410.1	414.5	417.2	418.8	419.4	419.4	418.3	416.6
47.5°	379.5	387.1	393.2	399.2	403.5	406.8	408.4	409.0	408.4	407.9	406.3
50°	367.5	376.2	382.2	388.2	392.6	395.3	398.1	398.6	398.1	397.5	394.2
52.5°	354.9	364.2	370.8	376.8	381.7	385.0	387.1	387.7	387.7	386.6	384.4
55°	342.4	350.6	358.8	365.3	370.8	374.0	376.8	377.9	376.8	375.7	373.0
57.5°	330.9	338.5	346.7	353.8	359.3	363.7	365.9	366.9	365.9	364.2	361.5
60°	317.3	325.4	334.7	341.3	347.3	351.7	352.7	354.9	353.8	352.2	349.5
62.5°	304.1	314.0	322.2	330.4	335.3	340.2	342.4	343.5	342.4	340.7	338.0
65°	290.5	301.4	309.6	317.8	323.3	328.2	330.9	331.5	330.4	328.7	326.0
67.5°	277.9	288.3	297.1	305.8	310.7	315.6	318.3	319.4	318.3	316.2	313.4
70°	265.4	275.8	286.1	292.7	298.7	304.1	305.8	307.4	306.3	304.1	300.9
72.5°	252.8	263.7	274.1	280.7	287.2	292.1	294.3	296.0	294.9	292.7	288.9
75°	239.7	251.2	261.6	268.7	275.2	280.1	282.3	283.9	282.9	280.7	276.3
77.5°	227.7	239.2	249.0	256.6	263.2	267.6	271.4	271.9	270.8	268.7	264.3
80°	215.1	226.6	237.0	244.6	251.2	255.6	258.3	259.9	258.8	256.6	252.3
82.5°	204.2	214.6	225.0	232.6	239.2	244.6	246.8	248.5	247.9	244.6	241.4
85°	192.2	204.2	212.4	220.6	227.2	232.6	234.3	236.4	235.9	233.2	228.8
87.5°	180.2	192.2	202.0	210.2	216.2	220.6	223.3	224.4	223.9	221.1	216.2
90°	170.4	181.3	191.1	199.9	204.8	209.7	212.4	213.0	213.0	209.7	205.9
92.5°	161.1	171.5	181.3	189.5	195.5	199.9	202.0	203.1	202.6	199.9	195.5
95°	150.7	162.2	171.5	179.6	185.7	190.0	192.2	193.3	192.8	190.0	185.7
97.5°	142.0	152.3	161.6	169.3	175.3	179.6	181.8	182.9	182.9	180.2	175.8
100°	133.2	143.6	152.3	160.0	165.5	169.8	172.0	172.6	172.0	169.8	165.5
102.5°	124.5	134.3	143.1	150.2	156.2	160.0	162.2	162.7	162.7	160.0	155.6
105°	115.8	125.6	133.8	141.4	146.3	150.2	151.8	153.4	152.9	150.7	146.3
107.5°	107.6	117.4	125.0	132.1	137.1	140.9	142.5	144.2	143.6	141.4	137.1
110°	99.9	109.2	116.3	123.4	127.8	131.6	134.3	134.9	133.8	131.6	127.8



TEST NUMBER: P#

CATALOG NUMBER: 2SNLED-LD5-23SL-LW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	92.8	101.0	108.1	114.7	119.6	122.3	124.5	125.6	124.5	122.3	119.6
115°	85.2	93.4	100.5	106.5	110.8	114.1	115.8	116.9	115.8	113.6	110.8
117.5°	78.1	85.7	92.8	98.8	102.7	105.4	107.0	108.1	107.0	105.4	102.7
120°	72.1	78.6	85.2	90.6	95.0	97.2	98.8	99.9	99.4	97.2	94.5
122.5°	65.0	72.1	78.1	83.5	87.4	89.6	90.6	91.7	91.2	89.6	86.8
125°	59.0	65.0	71.0	75.9	79.7	81.9	83.0	84.1	83.5	81.9	78.6
127.5°	52.4	59.0	63.9	68.8	71.5	74.8	75.4	76.4	75.9	74.3	71.5
130°	47.5	52.4	57.3	61.7	65.0	67.2	68.3	68.8	67.7	66.6	63.9
132.5°	41.5	47.0	51.3	55.2	57.3	59.5	60.6	61.2	61.2	59.5	57.3
135°	37.1	41.0	44.8	48.6	50.8	53.0	54.1	54.6	54.1	53.0	50.8
137.5°	33.3	36.6	39.3	42.6	45.3	46.4	47.5	47.5	47.0	46.4	44.8
140°	28.9	32.8	35.5	37.7	39.9	40.4	41.5	41.5	41.0	40.4	39.3
142.5°	24.6	27.8	30.6	33.3	34.9	36.0	36.6	37.1	36.6	36.0	34.4
145°	19.7	23.5	26.2	27.8	30.0	30.6	31.1	31.7	31.1	30.6	28.9
147.5°	15.3	18.6	21.3	23.5	25.1	25.7	26.2	26.8	26.2	25.1	24.6
150°	10.9	13.7	16.9	19.1	20.2	21.3	21.3	21.3	21.8	20.7	19.7
152.5°	8.7	9.8	12.0	14.2	15.8	16.4	16.9	16.9	16.4	16.4	15.3
155°	6.0	7.1	8.7	10.4	12.0	12.6	13.1	13.1	12.6	12.6	12.0
157.5°	3.8	4.9	6.0	7.1	8.7	9.3	9.8	9.8	9.8	9.3	8.7
160°	2.2	2.7	3.3	4.4	5.5	6.0	6.6	6.6	6.6	6.6	6.0
162.5°	1.6	1.6	1.6	2.2	2.7	3.3	3.8	3.8	3.8	3.8	3.3
165°	1.1	1.1	1.1	1.1	1.1	1.6	2.2	2.2	2.2	2.2	2.2
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: 2SNLED-LD5-23SL-LW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	517.7	517.7	517.7	517.7	517.7	517.7	517.7	517.7	517.7	517.7	517.7
2.5°	514.9	514.9	515.5	514.4	511.1	511.6	511.6	513.8	514.9	515.5	518.2
5°	513.8	513.8	514.9	513.3	510.6	510.6	510.6	512.7	513.3	514.4	516.6
7.5°	512.2	512.2	512.7	511.1	507.8	507.8	507.3	509.5	510.6	511.1	513.3
10°	509.5	509.5	510.0	508.4	504.5	504.5	504.0	505.6	506.2	507.3	508.9
12.5°	505.6	505.6	505.6	504.0	500.2	499.6	499.1	500.7	500.7	501.3	502.9
15°	502.4	501.3	501.3	499.6	495.8	494.7	493.6	494.2	495.3	494.7	495.8
17.5°	498.5	497.5	496.4	494.7	489.8	488.2	487.1	487.6	487.1	486.5	487.6
20°	494.2	492.5	492.0	489.3	484.3	481.6	479.4	478.3	478.9	477.2	477.8
22.5°	489.3	487.1	486.0	482.7	477.8	474.5	471.8	469.6	469.1	466.9	467.4
25°	483.3	480.5	478.9	476.2	470.7	466.9	463.6	460.3	458.7	456.0	455.4
27.5°	476.2	473.4	471.2	468.5	463.0	458.1	454.3	449.9	447.8	444.5	442.8
30°	469.1	465.8	462.5	460.3	454.3	448.9	442.8	439.0	435.7	431.9	429.2
32.5°	460.3	457.0	453.8	450.5	445.0	438.5	433.6	427.6	423.7	419.4	416.1
35°	451.6	447.2	443.9	439.6	434.7	427.0	421.0	415.0	410.1	405.2	401.3
37.5°	441.8	438.5	433.6	429.7	423.7	416.1	409.5	401.9	397.5	391.0	386.1
40°	432.5	428.6	423.7	418.8	412.8	404.1	397.0	388.2	383.3	375.7	370.8
42.5°	423.2	417.7	412.8	407.4	400.8	392.6	383.9	375.1	368.6	361.5	354.4
45°	412.8	406.8	400.8	394.8	388.2	380.0	370.8	361.5	353.3	346.7	338.0
47.5°	401.9	395.9	388.8	382.2	375.1	366.9	357.1	347.3	338.5	330.9	321.6
50°	391.0	385.0	377.3	370.2	362.0	353.8	343.5	332.0	322.7	312.9	304.7
52.5°	379.5	373.5	366.4	357.1	348.4	340.2	329.3	317.3	306.9	298.7	288.3
55°	368.0	362.0	353.8	344.6	335.8	325.4	315.1	303.1	291.6	281.8	271.4
57.5°	356.0	350.6	341.3	333.6	322.7	311.8	300.9	289.4	276.8	265.4	253.4
60°	344.0	338.0	329.3	320.0	309.1	298.1	286.7	274.1	261.0	248.5	237.5
62.5°	333.1	325.4	317.3	307.4	296.0	285.6	272.5	258.8	245.7	232.6	219.5
65°	320.5	312.3	304.7	294.9	282.9	270.8	257.7	244.1	229.9	215.7	202.6
67.5°	308.0	299.8	291.6	281.8	269.2	256.6	243.0	229.3	213.5	199.9	184.6
70°	295.4	288.9	278.5	268.1	256.6	243.0	229.3	214.6	198.2	183.5	167.6
72.5°	282.9	276.3	265.9	255.0	244.1	229.9	215.1	200.4	185.1	168.2	151.3
75°	270.8	262.6	253.4	243.0	231.5	216.8	202.0	186.7	168.7	152.9	135.4
77.5°	259.4	251.7	242.4	231.0	218.4	204.2	188.9	173.1	155.1	138.2	119.0
80°	246.8	239.2	229.9	218.4	205.9	192.2	175.8	159.4	142.0	123.4	103.7
82.5°	234.8	227.7	217.3	207.0	193.3	179.6	163.3	146.9	128.3	110.3	91.2
85°	222.2	215.1	205.3	194.4	181.3	166.5	151.3	134.9	116.3	97.7	78.6
87.5°	211.3	203.1	193.3	182.4	169.3	155.1	140.3	122.9	104.8	86.8	67.2
90°	199.9	192.2	182.4	171.5	158.4	144.2	128.9	112.5	95.0	76.4	57.9
92.5°	190.0	181.8	172.6	161.6	148.5	134.9	119.6	103.2	86.3	68.3	50.2
95°	180.2	172.0	163.3	152.3	139.2	125.6	110.3	94.5	78.1	60.6	43.7
97.5°	169.3	162.2	153.4	143.1	130.0	116.9	102.1	86.8	71.0	54.1	38.2
100°	160.5	152.3	144.2	133.2	121.2	108.7	93.9	79.2	63.9	48.1	33.3
102.5°	150.7	143.1	134.9	124.5	112.5	99.9	86.3	72.1	57.9	43.1	28.9
105°	141.4	134.3	125.6	115.8	104.3	92.3	79.2	66.1	52.4	38.2	25.7
107.5°	132.1	125.0	116.9	107.6	96.7	84.6	72.6	59.5	47.0	34.4	22.9
110°	122.9	116.3	108.7	99.4	89.0	78.1	66.6	54.6	42.0	30.6	20.2



TEST NUMBER: P#

CATALOG NUMBER: 2SNLED-LD5-23SL-LW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	114.7	108.1	100.5	91.7	81.9	71.5	60.6	49.1	37.7	27.3	17.5
115°	106.5	100.5	92.8	85.2	75.4	65.5	55.2	44.2	33.9	24.6	15.3
117.5°	98.3	92.3	85.2	77.5	68.8	59.5	49.7	39.3	30.6	21.8	13.7
120°	90.1	84.6	78.1	71.0	63.3	54.1	44.2	35.5	27.3	19.1	12.0
122.5°	82.5	77.5	71.5	65.0	56.8	48.1	39.9	32.2	24.6	16.9	9.8
125°	75.4	70.4	65.0	58.4	50.8	43.1	36.0	28.9	21.3	14.7	8.2
127.5°	68.3	63.3	57.9	51.9	45.9	38.8	32.2	25.7	19.1	13.1	7.1
130°	61.2	56.8	51.9	47.0	41.0	34.4	28.9	22.4	16.4	10.4	6.0
132.5°	54.1	50.8	46.4	41.5	36.0	31.1	25.1	19.7	14.2	9.3	5.5
135°	48.1	44.8	41.0	36.6	32.2	27.3	21.8	16.9	12.0	7.6	4.4
137.5°	42.6	39.9	36.0	32.2	28.4	23.5	19.1	14.2	9.8	6.6	3.3
140°	37.7	34.9	31.7	27.8	24.6	20.2	15.8	11.5	8.7	5.5	2.7
142.5°	32.8	30.0	27.3	24.0	20.7	16.9	13.1	9.8	7.1	4.4	2.7
145°	27.8	25.7	22.9	20.2	16.9	13.7	10.9	8.2	5.5	3.3	2.2
147.5°	22.9	21.3	18.6	16.4	13.7	10.9	8.7	6.6	4.4	2.7	1.6
150°	18.6	16.9	14.7	12.6	10.9	8.7	7.1	4.9	3.3	2.7	1.6
152.5°	14.2	13.1	11.5	10.4	8.7	6.6	4.9	3.8	2.7	2.2	1.1
155°	11.5	10.4	9.3	7.6	6.6	4.9	3.8	2.7	2.2	1.6	1.1
157.5°	8.2	7.6	6.6	5.5	4.4	3.3	2.7	2.7	1.6	1.1	0.5
160°	5.5	4.9	4.4	3.3	2.7	2.7	2.2	1.6	1.1	1.1	0.5
162.5°	3.3	2.7	2.7	2.7	2.2	2.2	1.6	1.1	1.1	0.5	0.5
165°	2.2	2.2	2.2	1.6	1.6	1.6	1.1	0.5	0.5	0.5	0.5
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: 2SNLED-LD5-23SL-LW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	517.7	517.7	517.7	517.7	517.7	517.7	517.7	517.7	517.7	517.7	517.7
2.5°	518.2	516.6	518.7	522.6	523.1	522.6	521.5	523.1	525.3	524.8	520.9
5°	517.1	514.9	517.1	520.9	520.9	520.4	519.8	521.5	523.7	523.1	519.8
7.5°	513.8	511.6	513.8	517.1	517.7	516.6	516.6	518.2	520.4	519.8	517.1
10°	509.5	507.3	508.4	512.2	513.3	512.2	512.2	513.8	516.6	516.0	512.7
12.5°	502.9	501.3	502.4	505.6	506.7	506.2	505.6	507.8	510.6	510.6	507.3
15°	495.8	493.6	494.7	498.5	499.1	498.0	498.5	500.2	503.5	503.5	500.7
17.5°	487.6	484.9	486.5	489.3	489.8	489.8	489.8	492.0	495.8	495.3	493.1
20°	478.3	474.5	475.6	478.3	479.4	479.4	479.4	483.3	486.0	486.0	483.8
22.5°	467.4	464.7	464.7	467.4	469.1	468.5	468.5	471.8	475.6	475.1	475.1
25°	454.9	452.7	451.6	454.9	455.4	456.0	457.0	460.3	464.7	464.7	465.2
27.5°	441.8	439.6	439.0	441.8	442.3	442.8	443.9	447.8	452.1	452.7	453.8
30°	429.2	425.9	424.8	427.0	428.1	428.6	428.6	434.7	438.5	440.1	442.3
32.5°	414.5	411.2	408.4	412.3	412.8	413.9	414.5	420.5	424.8	427.6	430.8
35°	399.7	394.2	393.2	395.9	397.0	397.5	398.6	405.2	411.2	413.4	417.7
37.5°	383.3	379.5	376.2	379.0	380.0	380.6	383.9	389.9	395.9	399.2	403.5
40°	368.0	363.1	360.4	362.0	363.1	363.7	367.5	374.0	381.1	385.0	390.4
42.5°	351.1	344.6	342.4	344.0	344.6	346.2	349.5	358.2	365.3	370.8	375.1
45°	334.2	329.3	324.4	326.0	326.5	327.6	332.5	341.8	349.5	356.0	360.9
47.5°	316.7	310.7	305.8	306.9	309.1	309.6	315.1	326.0	333.1	340.2	346.7
50°	299.2	291.0	287.2	287.2	288.3	291.0	298.1	309.1	316.7	324.9	332.0
52.5°	281.2	273.6	269.2	269.7	270.8	274.1	280.7	291.6	300.3	309.1	317.8
55°	263.2	255.0	250.6	249.5	250.6	255.0	262.6	274.1	282.9	293.2	302.5
57.5°	245.2	235.3	231.5	229.9	231.0	236.4	244.1	256.1	267.0	276.8	287.8
60°	225.5	217.9	211.3	207.5	210.2	217.3	225.5	238.1	249.5	260.5	272.5
62.5°	208.6	198.8	191.7	187.8	190.6	196.6	208.0	220.1	232.6	245.2	257.2
65°	189.5	179.6	171.5	167.6	170.4	177.5	188.9	202.0	215.7	228.2	242.4
67.5°	170.9	160.5	150.7	146.9	150.2	157.8	170.4	185.1	199.9	213.0	228.2
70°	152.9	141.4	131.1	128.3	130.5	140.9	152.9	167.6	182.9	198.2	214.1
72.5°	136.5	122.3	111.4	108.1	110.8	122.3	136.0	151.3	167.6	184.0	200.9
75°	117.4	104.3	92.3	88.5	91.7	102.1	119.0	135.4	152.9	170.4	186.2
77.5°	102.1	86.8	74.3	68.3	73.7	86.8	103.2	120.7	138.7	156.7	174.7
80°	86.3	70.4	56.8	50.2	56.2	70.4	86.8	105.9	126.1	144.2	160.5
82.5°	72.1	55.2	41.0	33.9	40.4	56.2	74.3	93.4	113.0	131.1	150.2
85°	59.0	41.5	26.8	19.1	28.4	42.6	61.7	81.4	101.6	120.1	138.7
87.5°	48.1	31.1	16.4	8.2	17.5	33.3	51.3	71.0	91.2	109.8	127.2
90°	39.3	22.4	8.7	1.1	10.4	25.1	42.6	61.7	80.8	99.9	117.4
92.5°	32.2	16.9	4.9	0.5	6.6	20.2	36.6	54.6	73.2	91.7	108.7
95°	26.8	13.1	3.3	0.5	4.9	15.8	31.1	48.6	66.1	84.1	101.0
97.5°	22.9	10.9	2.7	0.5	3.8	13.7	26.8	43.1	60.1	77.0	93.4
100°	19.7	8.7	2.2	0.5	3.3	11.5	23.5	38.2	54.1	70.4	86.3
102.5°	16.9	7.1	1.6	0.5	2.7	9.8	20.7	34.4	48.6	64.4	79.7
105°	14.7	6.0	1.6	0.5	2.2	8.7	18.6	30.6	44.8	59.0	73.7
107.5°	12.6	4.9	1.1	0.5	1.6	7.1	16.4	27.8	40.4	54.1	67.7
110°	10.9	4.4	1.1	0.5	1.6	6.6	14.2	25.1	36.6	49.1	62.2



TEST NUMBER: P#

CATALOG NUMBER: 2SNLED-LD5-23SL-LW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	9.3	3.3	1.1	0.5	1.1	5.5	12.6	22.4	33.3	44.8	57.3
115°	8.2	2.7	0.5	0.5	1.1	4.9	11.5	20.2	30.0	41.0	52.4
117.5°	6.6	2.2	0.5	0.5	0.5	3.8	9.8	18.0	27.3	37.7	48.1
120°	5.5	2.2	0.5	0.5	0.5	3.3	8.7	15.8	24.6	33.9	43.7
122.5°	4.9	1.6	0.5	0.5	0.5	2.7	7.6	14.2	21.8	30.6	39.9
125°	4.4	1.6	0.5	0.5	0.5	2.2	6.6	12.6	19.7	27.3	36.0
127.5°	3.3	1.6	0.5	0.5	0.5	1.6	6.0	10.9	17.5	24.6	32.2
130°	2.7	1.1	0.5	0.5	0.5	1.6	4.9	9.8	15.3	21.8	28.9
132.5°	2.2	1.1	0.5	0.5	0.5	1.1	3.8	7.6	13.1	19.1	25.7
135°	2.2	1.1	0.5	0.5	0.5	1.1	2.7	6.6	10.9	16.4	21.8
137.5°	2.2	0.5	0.5	0.5	0.5	1.1	2.2	4.9	8.7	13.1	18.0
140°	1.6	0.5	0.5	0.5	0.5	0.5	1.6	3.8	7.1	10.9	15.3
142.5°	1.6	0.5	0.5	0.5	0.5	0.5	1.6	2.7	5.5	8.7	12.0
145°	1.1	0.5	0.5	0.5	0.5	0.5	1.1	2.2	4.4	6.6	9.8
147.5°	1.1	0.5	0.5	0.5	0.5	0.5	1.1	1.6	3.3	5.5	7.6
150°	1.1	0.5	0.5	0.5	0.5	0.5	1.1	1.6	2.2	3.8	6.0
152.5°	0.5	0.5	0.5	0.5	0.5	0.5	1.1	1.1	1.6	2.7	3.8
155°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.1	1.6	2.2	2.7
157.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.1	1.1	1.6	2.2
160°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.1	1.1	1.6
162.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.1	1.1
165°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
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: 2SNLED-LD5-23SL-LW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	517.7	517.7	517.7	517.7	517.7	517.7	517.7	517.7	517.7	517.7	517.7
2.5°	519.3	515.5	516.6	516.0	517.1	518.7	518.7	518.2	518.2	517.1	516.0
5°	518.2	514.4	516.0	515.5	516.6	518.2	518.2	517.7	517.7	516.0	515.5
7.5°	514.9	512.2	513.3	513.3	514.4	516.0	516.0	515.5	515.5	513.8	513.3
10°	511.6	508.4	510.0	510.0	511.1	513.3	513.3	512.7	512.7	511.1	510.6
12.5°	506.2	502.9	505.6	506.2	507.3	509.5	508.9	508.9	508.9	507.3	506.7
15°	499.6	497.5	500.2	500.7	502.4	505.1	505.1	505.1	505.1	503.5	502.9
17.5°	492.5	490.9	493.6	494.7	496.9	499.6	499.6	500.2	500.7	499.6	499.1
20°	484.3	483.3	486.0	488.2	491.4	494.2	495.3	495.8	496.9	495.8	495.3
22.5°	475.1	475.1	478.9	481.1	484.9	487.6	489.3	490.9	492.0	490.9	490.4
25°	464.7	466.3	470.1	474.0	478.3	481.1	482.7	484.9	486.0	485.4	484.9
27.5°	454.9	457.0	462.0	465.8	469.6	474.0	475.6	478.3	479.4	479.4	478.9
30°	443.4	446.7	452.1	456.5	461.4	465.8	468.0	470.7	472.3	471.2	471.8
32.5°	432.5	437.9	442.3	447.2	452.7	457.0	459.8	463.0	464.7	464.1	464.7
35°	420.5	425.9	431.9	436.8	443.4	447.8	451.6	454.3	456.5	456.0	456.0
37.5°	407.4	414.5	420.5	427.0	433.0	437.9	441.8	445.0	447.2	447.2	447.2
40°	394.8	402.4	408.4	416.1	423.7	428.1	432.5	435.7	437.9	438.5	439.0
42.5°	381.1	389.3	396.4	404.6	412.3	417.7	422.6	426.5	428.6	429.7	429.2
45°	368.6	376.2	384.4	393.7	400.8	406.3	412.3	416.6	418.8	419.4	419.9
47.5°	354.4	363.1	372.4	381.7	388.8	395.9	401.3	405.7	407.9	409.5	409.5
50°	340.7	350.0	360.4	370.2	377.9	385.0	390.4	395.3	398.1	399.2	399.7
52.5°	328.2	336.9	347.8	357.7	365.3	372.4	379.5	385.0	387.7	388.8	388.8
55°	312.9	323.8	335.8	345.1	353.3	361.5	368.6	374.0	376.8	378.4	379.5
57.5°	298.7	310.2	322.7	332.5	342.4	350.0	356.6	363.7	365.9	368.0	368.6
60°	285.0	296.5	308.5	319.4	329.3	337.5	345.1	351.1	354.9	356.0	357.1
62.5°	270.8	282.9	295.4	306.3	316.7	326.5	333.6	339.1	343.5	345.1	346.2
65°	257.2	269.7	282.3	293.8	304.7	314.5	321.6	327.1	331.5	334.2	334.7
67.5°	242.4	256.1	269.2	281.2	292.1	302.5	309.6	315.1	319.4	322.7	323.3
70°	228.8	243.0	256.1	269.2	280.1	290.5	298.1	303.6	308.5	310.7	311.8
72.5°	215.7	230.4	244.1	257.2	268.1	278.5	286.7	292.1	297.1	299.8	300.3
75°	203.1	217.9	232.6	245.2	256.6	267.0	275.2	281.2	285.6	288.3	289.4
77.5°	190.6	205.9	220.6	233.2	245.2	255.6	262.6	269.7	274.1	277.4	277.4
80°	178.0	193.8	209.1	221.7	233.7	243.0	251.2	258.3	262.6	265.9	265.9
82.5°	167.1	182.4	197.1	209.7	221.7	232.1	240.3	246.8	251.7	253.9	254.5
85°	154.5	171.5	185.1	198.8	210.2	220.1	228.2	235.3	239.7	241.9	243.0
87.5°	144.2	160.5	175.3	187.3	198.8	208.6	217.9	223.9	228.2	231.0	232.1
90°	134.3	150.2	164.9	176.9	188.9	198.2	207.0	213.0	217.9	220.1	221.1
92.5°	125.6	141.4	155.6	167.6	179.1	189.5	197.7	203.7	208.0	210.2	211.9
95°	117.4	132.7	146.3	159.4	170.4	179.6	188.4	194.4	199.3	200.9	202.6
97.5°	109.2	124.0	137.6	150.2	161.6	170.4	178.6	184.6	188.4	191.1	192.8
100°	102.1	116.3	129.4	141.4	152.3	160.5	169.3	174.7	178.6	180.7	182.9
102.5°	94.5	108.7	121.2	132.7	144.2	151.8	160.0	165.5	168.7	172.6	172.6
105°	87.9	101.0	113.6	124.5	134.3	143.6	150.7	156.2	160.0	162.7	162.7
107.5°	80.8	93.9	105.9	117.4	126.7	135.4	142.0	146.9	151.3	152.9	154.5
110°	75.4	86.8	98.8	109.8	118.5	126.7	133.2	138.7	142.5	144.2	145.2



TEST NUMBER: P#

CATALOG NUMBER: 2SNLED-LD5-23SL-LW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	68.8	80.8	91.7	102.1	110.8	118.5	125.0	129.4	133.2	135.4	136.0
115°	63.3	74.8	84.6	94.5	103.7	110.3	116.3	120.7	124.5	126.1	127.2
117.5°	58.4	68.8	78.6	86.8	95.6	102.7	108.7	112.5	115.8	117.9	119.0
120°	53.5	63.3	72.1	80.3	88.5	95.0	100.5	104.3	108.1	109.8	109.8
122.5°	48.6	57.9	66.1	73.7	81.4	87.4	93.4	96.7	99.9	101.6	101.6
125°	44.2	53.0	60.6	67.7	74.8	80.3	85.2	89.0	92.3	93.4	93.4
127.5°	39.9	48.1	55.2	61.7	67.7	73.2	78.1	81.9	84.6	85.7	85.7
130°	36.0	43.1	49.7	56.2	62.2	66.6	71.5	74.8	76.4	78.1	78.6
132.5°	32.2	38.8	44.8	50.2	56.2	60.6	64.4	67.7	69.3	71.0	71.5
135°	28.4	34.4	39.9	45.3	50.2	54.6	57.9	60.6	62.8	63.9	64.4
137.5°	24.0	30.6	35.5	39.9	45.3	48.6	52.4	54.1	56.2	57.3	57.3
140°	20.2	25.1	30.6	34.9	39.3	42.6	45.9	48.6	50.2	50.8	50.8
142.5°	16.4	20.7	25.1	30.6	34.4	37.1	40.4	42.6	43.7	44.2	44.8
145°	13.1	16.4	20.2	25.1	29.5	32.8	34.4	36.6	37.7	38.2	38.8
147.5°	9.8	13.1	16.4	19.7	24.0	27.3	28.9	31.1	32.2	32.8	32.8
150°	7.6	9.8	12.0	15.3	18.6	22.4	24.6	26.2	26.8	27.3	27.3
152.5°	5.5	7.6	9.3	11.5	13.7	16.9	20.2	21.3	21.8	22.4	22.4
155°	3.8	5.5	6.6	8.2	9.8	12.6	15.3	16.9	17.5	18.0	18.0
157.5°	2.7	3.8	4.4	6.0	7.1	8.2	10.4	13.1	13.7	13.7	13.7
160°	1.6	2.2	2.7	3.8	4.4	5.5	6.6	8.2	9.8	9.8	9.8
162.5°	1.1	1.6	1.6	2.2	2.2	3.3	3.8	4.4	6.0	6.6	6.6
165°	0.5	1.1	1.1	1.1	1.1	1.1	1.6	1.6	2.7	3.3	3.3
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: 2SNLED-LD5-23SL-LW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	517.7	517.7	517.7	517.7	517.7	517.7	517.7	517.7	517.7	517.7	517.7
2.5°	516.6	517.7	517.1	517.1	517.1	518.2	517.1	512.2	513.3	514.4	515.5
5°	516.0	516.6	516.6	516.0	516.0	517.1	516.0	511.1	512.2	513.3	513.8
7.5°	513.8	514.4	514.4	514.4	513.8	514.9	513.3	508.9	508.9	510.0	510.6
10°	511.1	512.2	511.6	511.1	511.1	511.1	510.0	505.1	505.1	505.6	506.2
12.5°	507.8	507.8	507.8	507.3	506.7	506.7	505.6	500.7	500.2	501.3	500.7
15°	503.5	504.5	503.5	502.9	501.8	501.8	500.2	495.3	494.2	494.7	494.2
17.5°	499.6	500.2	499.1	498.0	496.9	496.4	494.7	489.3	487.6	488.2	487.1
20°	495.8	495.8	494.7	493.6	492.0	490.4	488.2	482.7	480.0	480.0	477.8
22.5°	490.9	490.9	489.8	488.2	486.5	484.3	482.2	476.7	472.3	471.2	469.6
25°	485.4	484.9	484.3	482.7	479.4	477.2	475.1	469.1	464.1	462.0	459.2
27.5°	478.9	478.9	477.2	475.6	472.3	469.6	466.9	461.4	454.9	452.1	448.3
30°	471.8	471.8	470.1	468.0	464.7	461.4	458.1	451.6	445.0	441.2	436.8
32.5°	464.7	464.1	462.5	460.3	457.0	452.1	449.4	442.8	435.2	430.8	424.8
35°	456.0	455.4	453.8	451.0	446.7	442.8	438.5	432.5	423.7	418.3	411.7
37.5°	447.2	446.7	445.6	441.8	437.4	433.0	427.6	421.5	413.4	406.3	399.7
40°	438.5	437.9	435.7	433.0	427.6	422.1	416.6	410.6	401.9	393.7	386.6
42.5°	429.2	428.6	425.9	422.6	416.6	411.2	404.6	398.1	389.3	379.5	372.4
45°	419.9	418.8	416.1	412.3	405.7	399.7	393.2	385.5	376.8	367.5	358.2
47.5°	410.1	408.4	405.7	400.3	394.8	388.2	380.6	372.4	363.7	353.3	343.5
50°	399.2	398.1	394.8	389.9	383.3	376.8	368.0	359.8	349.5	339.6	327.6
52.5°	388.8	386.6	383.9	378.4	371.9	364.8	355.5	345.6	335.3	326.0	313.4
55°	377.9	376.8	373.0	368.6	360.4	352.2	343.5	333.1	321.6	310.7	298.7
57.5°	367.5	365.3	362.0	356.0	348.9	340.7	331.5	320.5	308.0	296.5	283.4
60°	357.1	353.8	350.0	344.6	336.9	328.2	318.3	306.9	294.3	281.8	268.1
62.5°	345.6	342.9	338.5	333.1	325.4	316.2	305.8	293.8	281.8	268.7	253.9
65°	334.2	331.5	327.1	321.6	314.0	303.6	292.7	280.7	267.0	254.5	238.6
67.5°	322.7	320.0	315.1	309.1	301.4	291.6	280.1	267.6	253.9	240.3	223.9
70°	311.2	308.0	303.6	297.1	289.4	279.0	267.6	254.5	240.8	226.1	209.7
72.5°	299.8	297.1	291.6	285.6	277.4	267.0	255.6	242.4	228.2	213.0	196.6
75°	288.3	285.0	281.2	274.1	265.4	255.6	243.5	230.4	215.1	200.4	183.5
77.5°	276.8	274.1	269.2	262.1	253.9	243.5	231.5	218.4	203.1	187.8	169.8
80°	265.4	262.1	258.3	251.7	242.4	232.1	219.5	206.4	191.1	175.3	157.3
82.5°	253.9	250.6	246.3	239.7	231.0	220.6	208.6	194.4	179.1	162.7	145.8
85°	242.4	239.7	234.8	228.2	219.0	208.6	196.6	184.0	167.6	151.3	134.3
87.5°	231.0	228.2	223.3	216.8	208.0	197.7	185.7	172.6	156.7	141.4	122.9
90°	220.1	217.9	213.0	206.4	197.7	187.3	176.4	162.2	146.9	131.6	114.1
92.5°	210.2	208.0	203.7	197.1	189.5	178.0	167.1	153.4	138.2	122.3	105.4
95°	201.5	198.8	194.4	188.4	179.1	169.3	158.4	144.7	130.0	114.1	97.7
97.5°	191.7	188.9	184.6	178.0	170.4	160.0	149.1	136.0	121.2	106.5	90.1
100°	181.8	179.1	174.2	168.7	161.1	150.7	140.3	127.2	113.6	99.4	83.5
102.5°	172.0	169.3	164.9	159.4	151.8	142.5	132.1	119.6	105.9	91.7	77.0
105°	162.7	160.0	155.6	150.2	143.1	133.8	122.9	111.9	98.8	85.2	71.0
107.5°	153.4	150.7	146.9	141.4	134.3	125.6	115.2	103.7	91.7	78.6	65.0
110°	144.2	142.0	137.6	132.7	125.6	116.9	107.6	96.7	84.6	72.6	59.5



TEST NUMBER: P#

CATALOG NUMBER: 2SNLED-LD5-23SL-LW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	135.4	133.2	128.9	123.4	117.4	109.2	99.9	89.6	78.1	66.6	54.1
115°	126.7	124.0	120.1	115.2	109.2	101.6	92.8	83.5	72.1	61.2	49.7
117.5°	117.9	115.8	111.9	107.0	101.6	93.9	85.7	77.0	66.1	55.7	45.3
120°	109.2	107.6	103.7	99.4	93.9	86.8	79.2	70.4	60.6	50.8	41.0
122.5°	101.0	99.4	95.6	91.7	86.3	79.7	72.6	64.4	55.7	46.4	37.7
125°	93.4	91.2	87.9	84.1	79.2	73.2	66.1	58.4	50.2	42.0	33.9
127.5°	85.2	83.5	81.4	77.0	72.1	66.6	60.1	53.5	45.9	38.2	30.6
130°	78.6	76.4	73.7	70.4	66.1	60.6	54.6	48.1	41.5	34.4	26.8
132.5°	71.0	68.8	66.6	63.3	59.5	54.6	49.1	43.1	37.1	30.6	24.0
135°	63.9	62.2	60.1	56.8	53.0	49.1	43.7	38.2	32.8	26.8	21.3
137.5°	57.3	55.7	53.5	51.3	47.5	43.7	38.8	33.9	28.9	23.5	18.6
140°	50.8	49.7	47.5	45.3	42.0	38.2	33.9	29.5	25.1	20.2	15.8
142.5°	44.2	43.1	41.5	39.3	36.6	33.3	29.5	25.7	21.3	17.5	13.7
145°	38.2	37.7	36.0	33.9	31.7	28.4	25.1	21.8	18.0	14.7	10.9
147.5°	32.2	31.7	30.6	28.9	26.8	24.0	21.3	18.0	15.3	12.0	8.7
150°	26.8	26.2	25.7	23.5	22.4	19.7	17.5	14.7	12.6	9.3	7.1
152.5°	21.8	21.8	20.7	19.1	18.0	15.8	14.2	12.0	9.8	7.6	5.5
155°	17.5	16.9	16.4	15.3	14.2	12.6	10.9	9.3	7.6	5.5	3.8
157.5°	13.7	13.1	12.6	11.5	10.4	9.8	8.2	6.6	4.9	3.8	2.7
160°	9.8	9.3	8.7	8.2	7.6	6.6	5.5	4.4	3.3	2.2	1.6
162.5°	6.6	6.0	6.0	5.5	4.9	3.8	3.3	2.7	2.2	1.6	1.1
165°	3.3	3.3	2.7	2.7	2.2	1.6	1.6	1.6	1.1	1.1	0.5
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: 2SNLED-LD5-23SL-LW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	517.7	517.7	517.7	517.7	517.7	517.7	517.7
2.5°	514.9	514.9	517.1	516.6	514.9	518.2	522.0
5°	513.3	513.3	514.9	514.9	513.3	516.6	519.8
7.5°	510.6	510.0	511.6	511.6	509.5	512.2	516.0
10°	505.6	505.1	506.7	506.7	504.5	507.3	510.6
12.5°	500.2	499.1	500.7	500.2	498.0	500.7	504.0
15°	493.1	492.5	493.6	492.5	490.4	493.1	496.4
17.5°	486.0	484.3	484.9	484.9	481.1	483.8	486.5
20°	476.7	474.5	475.1	474.5	471.8	473.4	476.7
22.5°	467.4	464.1	464.1	463.6	460.3	462.5	465.2
25°	456.0	452.1	452.1	451.6	447.8	449.4	452.1
27.5°	444.5	440.7	439.0	438.5	434.7	434.7	438.5
30°	432.5	427.0	425.9	424.3	420.5	420.5	423.7
32.5°	421.0	413.4	411.2	409.0	405.2	404.6	408.4
35°	405.7	399.7	395.9	393.7	389.3	388.2	391.5
37.5°	393.2	385.5	380.0	377.3	373.0	371.3	375.7
40°	379.5	371.3	364.2	362.6	356.0	353.8	357.7
42.5°	364.2	355.5	348.4	345.1	340.2	338.0	338.5
45°	348.9	339.6	332.0	327.6	322.7	318.9	321.1
47.5°	333.1	324.9	315.6	309.1	303.1	300.3	301.4
50°	317.3	307.4	298.7	291.6	284.5	281.2	283.4
52.5°	301.4	291.0	281.2	273.6	265.4	262.1	262.6
55°	286.1	275.2	263.7	255.6	247.9	243.0	241.9
57.5°	270.8	258.8	246.8	237.5	227.7	223.3	221.7
60°	254.5	241.9	229.3	218.4	208.0	203.1	200.9
62.5°	239.2	225.5	211.3	199.9	189.5	182.9	181.3
65°	224.4	208.6	194.4	181.3	169.8	162.7	160.5
67.5°	208.6	192.2	176.9	162.7	151.8	142.5	141.4
70°	193.8	176.4	159.4	144.7	132.7	123.4	119.0
72.5°	179.1	161.1	143.6	127.8	112.5	103.7	100.5
75°	164.9	146.3	127.8	111.4	94.5	84.1	80.8
77.5°	151.8	132.7	113.0	95.0	79.2	66.1	61.7
80°	139.2	119.6	98.8	80.3	63.3	49.1	44.2
82.5°	126.1	107.6	86.3	66.6	49.1	34.4	28.4
85°	114.7	96.1	74.8	55.2	37.7	21.8	15.3
87.5°	105.4	85.2	66.1	46.4	28.4	12.6	4.4
90°	96.1	76.4	57.3	38.2	21.3	7.1	0.5
92.5°	87.9	69.3	50.2	32.8	16.4	4.9	0.5
95°	80.3	62.2	44.2	27.3	13.1	3.3	0.5
97.5°	73.2	56.2	39.3	23.5	10.9	2.7	0.5
100°	67.2	50.8	34.9	20.7	9.3	2.2	0.5
102.5°	61.2	45.9	31.1	18.0	8.2	1.6	0.5
105°	56.2	41.5	27.8	16.4	7.1	1.6	0.5
107.5°	51.3	37.7	25.1	14.2	6.0	1.1	0.5
110°	46.4	34.4	22.4	12.6	5.5	1.1	0.5



TEST NUMBER: P#

CATALOG NUMBER: 2SNLED-LD5-23SL-LW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	42.6	31.1	20.2	11.5	4.4	1.1	0.5
115°	38.8	27.8	18.0	9.8	3.8	0.5	0.5
117.5°	34.9	25.1	15.8	8.7	3.3	0.5	0.5
120°	31.7	22.4	14.2	7.6	2.7	0.5	0.5
122.5°	28.4	20.2	12.6	6.6	2.2	0.5	0.5
125°	25.7	18.0	10.9	5.5	1.6	0.5	0.5
127.5°	22.9	15.8	9.8	4.9	1.6	0.5	0.5
130°	20.2	14.2	8.2	3.8	1.1	0.5	0.5
132.5°	18.0	12.0	7.1	3.3	1.1	0.5	0.5
135°	15.8	10.4	6.0	2.2	1.1	0.5	0.5
137.5°	13.7	8.7	4.9	1.6	0.5	0.5	0.5
140°	11.5	7.6	3.8	1.6	0.5	0.5	0.5
142.5°	9.8	6.0	2.7	1.1	0.5	0.5	0.5
145°	7.6	4.9	2.2	1.1	0.5	0.5	0.5
147.5°	6.0	3.8	1.6	1.1	0.5	0.5	0.5
150°	4.4	2.7	1.6	0.5	0.5	0.5	0.5
152.5°	3.3	2.2	1.1	0.5	0.5	0.5	0.5
155°	2.2	1.6	1.1	0.5	0.5	0.5	0.5
157.5°	1.6	1.1	0.5	0.5	0.5	0.5	0.5
160°	1.1	0.5	0.5	0.5	0.5	0.5	0.5
162.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5
165°	0.5	0.5	0.5	0.5	0.5	0.5	0.5
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)