

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-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: 2SNLED-LD5-23SL-LW-UNV-L930-CD1-U
Description: 2FT LINEAR SNLED LED FIXTURE
WIDE FROSTED LENS
Light Source: -
Ballast/Driver: -

Summary

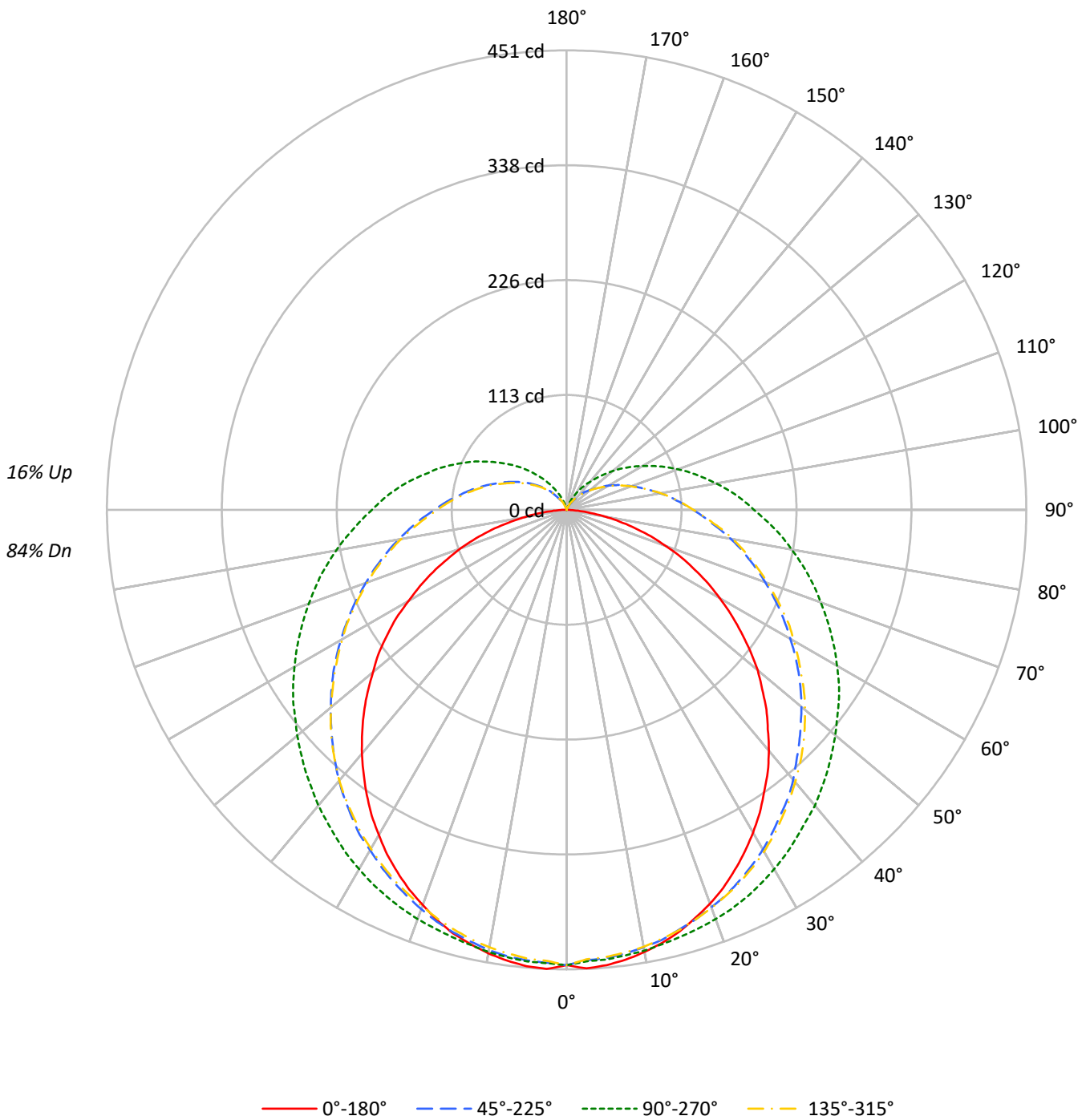
Lumens per Lamp: N/A
Luminaire Lumens: 1941.0 lumens
Efficiency: N/A
Efficacy: 92.4 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.36 / 1.44
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 2' x H: 0.12')
CIE Type: Semi-Direct

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



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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	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°	7221	7221	7221	7221
5°	7238	6959	7255	6988
10°	7152	6760	7175	6782
15°	7050	6592	7081	6598
20°	6918	6467	6942	6467
25°	6761	6359	6803	6351
30°	6587	6246	6638	6246
35°	6387	6140	6459	6148
40°	6188	6079	6265	6079
45°	5961	6014	6051	6023
50°	5724	5976	5801	5993
55°	5401	5982	5572	6008
60°	5058	6000	5224	6037
65°	4674	6062	4880	6121
70°	4142	6172	4464	6260
75°	3529	6375	3863	6497
80°	2625	6672	2982	6827
85°	1428	7154	1785	7350



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.3	2.2
10°-20°	121.6	6.3
20°-30°	186.5	9.6
30°-40°	230.1	11.9
40°-50°	249.6	12.9
50°-60°	246.0	12.7
60°-70°	222.4	11.5
70°-80°	185.3	9.5
80°-90°	143.5	7.4
90°-100°	108.9	5.6
100°-110°	80.5	4.1
110°-120°	56.0	2.9
120°-130°	35.8	1.8
130°-140°	20.1	1.0
140°-150°	9.2	0.5
150°-160°	2.8	0.1
160°-170°	0.4	0.0
170°-180°	0.0	0.0
0°-30°	350.4	18.1
0°-40°	580.5	29.9
0°-60°	1076.1	55.4
0°-90°	1627.4	83.8
90°-120°	245.4	12.6
90°-150°	310.4	16.0
90°-180°	314.0	16.2
0°-180°	1941.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	447	447	447	447	447	
5°	449	443	450	445	449	43
15°	428	434	430	434	428	121
25°	390	419	393	418	390	180
35°	338	393	342	394	338	212
45°	277	362	281	362	277	213
55°	209	326	215	328	209	187
65°	139	286	145	289	139	137
75°	70	245	76	250	70	74
85°	13	204	16	210	13	16
90°	0	184	1	191	0	1
95°	0	167	0	175	0	0
105°	0	132	0	140	0	1
115°	0	101	0	110	0	0
125°	0	73	0	81	0	0
135°	0	47	0	56	0	0
145°	0	27	0	34	0	0
155°	0	11	0	16	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-L930-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	446.8	446.8	446.8	446.8	446.8	446.8	446.8	446.8	446.8	446.8	446.8
2.5°	450.5	450.5	450.1	449.1	449.6	451.0	450.1	447.7	446.3	442.5	443.5
5°	448.6	448.6	448.2	447.2	447.7	449.6	448.6	446.8	444.9	441.6	443.0
7.5°	445.3	445.3	444.9	443.9	444.9	446.8	445.8	443.9	442.5	439.2	440.6
10°	440.6	441.1	440.6	439.2	441.1	443.0	442.5	440.2	438.7	435.9	437.3
12.5°	435.0	435.5	435.0	434.5	435.5	438.3	437.3	435.5	434.5	432.2	433.6
15°	428.4	428.9	427.9	427.9	428.9	431.7	431.7	429.8	428.9	426.5	429.3
17.5°	419.9	420.4	419.9	419.9	420.8	423.7	424.1	423.2	422.3	421.3	424.1
20°	411.4	410.9	410.9	410.5	412.4	416.6	416.1	416.1	415.2	415.2	418.5
22.5°	401.5	401.5	401.0	401.0	403.4	407.2	407.2	408.1	407.2	409.1	411.9
25°	390.2	390.7	390.2	391.2	393.0	397.3	397.7	399.2	399.6	401.5	404.8
27.5°	378.4	378.9	378.4	379.4	382.7	386.0	388.3	390.2	390.7	393.5	397.7
30°	365.7	365.7	366.2	367.1	370.9	376.1	378.0	380.3	380.3	385.0	389.3
32.5°	352.5	352.5	352.5	354.4	358.6	364.8	367.1	369.9	370.9	375.6	380.3
35°	337.9	338.4	338.4	339.8	345.4	351.6	354.9	358.2	360.0	365.7	370.4
37.5°	324.2	325.2	323.8	325.6	333.7	338.8	342.6	345.9	349.2	356.7	360.5
40°	308.7	309.6	309.2	312.9	319.5	326.1	330.4	333.7	338.4	345.9	350.2
42.5°	292.2	293.1	294.1	298.3	305.4	312.0	317.2	321.4	327.1	333.7	340.7
45°	277.1	277.1	278.5	283.7	291.2	298.3	304.4	309.2	315.7	322.8	329.9
47.5°	260.1	260.6	262.5	268.6	276.6	285.1	290.8	296.9	304.0	311.5	319.5
50°	244.6	244.6	247.4	254.0	261.6	271.0	277.1	284.2	291.7	300.7	308.7
52.5°	226.7	227.6	231.9	238.0	247.9	256.4	263.4	271.0	279.9	289.4	298.3
55°	208.8	210.7	214.0	222.4	232.8	240.8	249.3	258.7	267.2	277.6	287.9
57.5°	191.3	192.7	197.9	206.4	217.3	227.2	236.1	245.1	255.4	265.8	276.6
60°	173.4	175.3	181.4	189.9	201.7	212.1	222.4	231.9	242.7	253.5	264.9
62.5°	156.5	157.9	164.9	174.8	186.6	197.9	208.3	219.6	231.4	241.8	253.1
65°	138.6	140.9	148.9	157.9	171.5	182.9	194.6	206.9	219.1	230.4	241.3
67.5°	122.1	123.5	132.0	142.3	156.0	168.7	181.0	194.2	206.9	218.7	229.5
70°	102.7	107.4	115.9	126.8	141.4	154.6	167.8	181.4	195.1	207.4	217.7
72.5°	86.7	90.5	99.9	111.7	125.8	141.4	155.0	169.7	183.3	196.0	206.9
75°	69.7	73.5	84.4	97.6	112.2	128.7	142.8	157.9	172.0	184.7	196.0
77.5°	53.3	58.0	69.7	83.4	99.4	116.4	131.0	146.1	160.7	174.4	185.7
80°	38.2	43.4	56.1	71.6	87.2	104.2	120.2	135.3	149.9	163.5	175.3
82.5°	24.5	30.2	43.8	59.4	75.9	92.8	109.3	124.4	139.0	152.7	164.9
85°	13.2	19.3	33.5	49.0	65.5	82.5	99.0	115.0	129.1	141.9	155.0
87.5°	3.8	11.3	25.0	40.5	57.5	73.0	89.1	105.1	119.2	132.9	144.7
90°	0.5	6.6	18.9	33.5	50.0	65.0	81.1	96.1	110.3	123.9	135.7
92.5°	0.5	4.2	14.6	27.8	42.9	58.4	74.5	89.1	102.3	115.9	127.7
95°	0.5	3.3	11.8	23.6	37.7	52.3	67.4	81.5	95.2	107.9	119.7
97.5°	0.5	2.4	9.4	20.3	33.0	46.7	61.3	75.4	88.6	100.9	111.7
100°	0.5	1.9	7.5	17.4	28.7	41.9	55.1	68.8	81.5	93.3	104.6
102.5°	0.5	1.4	6.6	14.6	25.4	37.2	50.0	62.7	74.9	86.2	97.6
105°	0.5	1.4	5.7	12.7	22.6	33.5	45.2	57.5	68.8	79.6	90.0
107.5°	0.5	0.9	4.7	10.8	19.8	30.2	41.0	52.8	63.1	73.5	83.4
110°	0.5	0.9	3.8	9.9	17.4	26.9	37.2	48.1	58.0	67.9	77.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	0.5	0.9	3.3	8.5	15.1	24.0	33.5	43.4	52.8	62.7	71.2
115°	0.5	0.9	2.8	7.5	14.1	20.7	30.2	39.1	48.5	57.5	65.5
117.5°	0.5	0.9	2.4	6.1	12.3	18.9	26.4	35.3	43.8	52.3	59.9
120°	0.5	0.9	1.9	5.7	10.8	17.0	23.6	31.6	39.6	47.6	55.6
122.5°	0.5	0.5	1.9	4.7	9.4	15.1	21.7	27.8	35.3	42.9	50.0
125°	0.5	0.5	1.9	4.2	8.0	13.7	19.3	25.0	31.6	38.2	44.3
127.5°	0.5	0.5	1.4	3.3	7.1	11.8	17.0	23.1	27.8	33.9	40.1
130°	0.5	0.5	1.4	2.8	6.1	9.9	15.1	20.3	25.9	30.2	35.3
132.5°	0.5	0.5	1.4	2.4	4.7	8.0	12.7	17.4	22.6	27.3	31.6
135°	0.5	0.5	0.9	1.9	3.8	6.6	10.4	14.6	19.8	24.5	28.7
137.5°	0.5	0.5	0.9	1.9	2.8	5.7	8.0	11.8	16.5	20.7	25.0
140°	0.5	0.5	0.9	1.4	2.4	4.2	6.6	9.4	13.2	17.0	21.7
142.5°	0.5	0.5	0.5	1.4	1.9	3.3	5.2	7.5	10.4	13.7	17.4
145°	0.5	0.5	0.5	1.4	1.9	2.4	4.2	6.1	8.0	10.4	13.7
147.5°	0.5	0.5	0.5	0.9	1.4	1.9	3.3	4.7	6.1	8.0	9.9
150°	0.5	0.5	0.5	0.9	1.4	1.9	2.4	3.3	4.7	6.6	8.0
152.5°	0.5	0.5	0.5	0.9	0.9	1.4	1.9	2.4	3.3	4.7	5.7
155°	0.5	0.5	0.5	0.5	0.9	1.4	1.9	1.9	2.4	3.3	4.2
157.5°	0.5	0.5	0.5	0.5	0.9	0.9	1.4	1.4	1.9	1.9	2.8
160°	0.5	0.5	0.5	0.5	0.5	0.9	0.9	1.4	1.4	1.4	1.4
162.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.9	0.9	0.9	1.4	1.4
165°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.9	0.9	0.9
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



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	446.8	446.8	446.8	446.8	446.8	446.8	446.8	446.8	446.8	446.8	446.8
2.5°	443.5	443.9	445.3	445.3	444.4	444.4	443.9	443.5	443.9	444.9	444.9
5°	442.5	443.0	444.4	444.9	443.9	443.5	443.5	443.0	443.5	444.4	444.4
7.5°	440.6	441.1	442.5	443.0	442.0	442.0	441.6	441.1	442.0	442.5	442.5
10°	437.8	438.3	440.2	440.6	440.2	439.7	439.7	439.2	439.7	440.6	440.6
12.5°	434.0	435.0	437.3	437.3	437.3	436.9	436.9	436.4	436.9	437.8	437.3
15°	429.8	431.7	433.6	434.5	434.5	434.5	434.0	433.6	434.5	435.0	434.5
17.5°	425.1	427.4	430.3	431.2	431.2	431.7	431.2	430.7	431.7	431.7	431.2
20°	420.4	422.7	425.6	426.5	427.4	427.9	427.9	427.4	427.9	428.4	427.9
22.5°	414.2	417.1	420.4	421.8	422.7	423.7	423.7	423.7	424.1	424.6	423.7
25°	407.6	410.9	414.7	416.1	418.0	418.5	419.0	419.0	419.4	419.9	418.5
27.5°	400.6	404.3	408.1	410.5	411.9	412.8	412.8	413.3	413.8	414.2	412.8
30°	392.1	397.7	401.0	402.9	404.8	406.2	406.7	407.2	407.6	408.1	406.7
32.5°	384.6	389.3	393.5	395.9	398.2	400.1	400.6	400.6	401.5	401.5	400.1
35°	375.6	381.3	385.5	387.9	390.7	392.1	393.0	393.0	394.0	394.0	392.6
37.5°	366.6	372.3	377.0	379.8	383.1	385.0	385.5	385.5	386.4	386.4	384.6
40°	357.2	363.3	368.5	371.8	374.7	377.0	377.5	378.9	378.9	378.4	376.5
42.5°	347.8	353.5	359.1	362.9	366.6	369.0	369.9	370.4	370.4	369.9	368.5
45°	337.4	344.0	349.2	353.9	357.7	360.0	361.5	361.9	361.9	361.0	359.6
47.5°	327.5	334.1	339.3	344.5	348.3	351.1	352.5	353.0	352.5	352.0	350.6
50°	317.2	324.7	329.9	335.1	338.8	341.2	343.6	344.0	343.6	343.1	340.3
52.5°	306.3	314.3	320.0	325.2	329.4	332.2	334.1	334.6	334.6	333.7	331.8
55°	295.5	302.6	309.6	315.3	320.0	322.8	325.2	326.1	325.2	324.2	321.9
57.5°	285.6	292.2	299.3	305.4	310.1	313.9	315.7	316.7	315.7	314.3	312.0
60°	273.8	280.9	288.9	294.5	299.7	303.5	304.4	306.3	305.4	304.0	301.6
62.5°	262.5	271.0	278.0	285.1	289.4	293.6	295.5	296.4	295.5	294.1	291.7
65°	250.7	260.1	267.2	274.3	279.0	283.2	285.6	286.1	285.1	283.7	281.3
67.5°	239.9	248.8	256.4	263.9	268.2	272.4	274.7	275.7	274.7	272.9	270.5
70°	229.0	238.0	246.9	252.6	257.8	262.5	263.9	265.3	264.4	262.5	259.7
72.5°	218.2	227.6	236.6	242.2	247.9	252.1	254.0	255.4	254.5	252.6	249.3
75°	206.9	216.8	225.7	231.9	237.5	241.8	243.6	245.1	244.1	242.2	238.5
77.5°	196.5	206.4	214.9	221.5	227.2	230.9	234.2	234.7	233.7	231.9	228.1
80°	185.7	195.6	204.5	211.1	216.8	220.6	222.9	224.3	223.4	221.5	217.7
82.5°	176.3	185.2	194.2	200.8	206.4	211.1	213.0	214.4	214.0	211.1	208.3
85°	165.9	176.3	183.3	190.4	196.0	200.8	202.2	204.1	203.6	201.2	197.5
87.5°	155.5	165.9	174.4	181.4	186.6	190.4	192.7	193.7	193.2	190.9	186.6
90°	147.0	156.5	164.9	172.5	176.7	181.0	183.3	183.8	183.8	181.0	177.7
92.5°	139.0	148.0	156.5	163.5	168.7	172.5	174.4	175.3	174.8	172.5	168.7
95°	130.1	140.0	148.0	155.0	160.2	164.0	165.9	166.8	166.4	164.0	160.2
97.5°	122.5	131.5	139.5	146.1	151.3	155.0	156.9	157.9	157.9	155.5	151.7
100°	115.0	123.9	131.5	138.1	142.8	146.6	148.4	148.9	148.4	146.6	142.8
102.5°	107.4	115.9	123.5	129.6	134.8	138.1	140.0	140.4	140.4	138.1	134.3
105°	99.9	108.4	115.5	122.1	126.3	129.6	131.0	132.4	132.0	130.1	126.3
107.5°	92.8	101.3	107.9	114.0	118.3	121.6	123.0	124.4	123.9	122.1	118.3
110°	86.2	94.3	100.4	106.5	110.3	113.6	115.9	116.4	115.5	113.6	110.3



TEST NUMBER: P#

CATALOG NUMBER: 2SNLED-LD5-23SL-LW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	80.1	87.2	93.3	99.0	103.2	105.6	107.4	108.4	107.4	105.6	103.2
115°	73.5	80.6	86.7	91.9	95.7	98.5	99.9	100.9	99.9	98.0	95.7
117.5°	67.4	74.0	80.1	85.3	88.6	91.0	92.4	93.3	92.4	91.0	88.6
120°	62.2	67.9	73.5	78.2	82.0	83.9	85.3	86.2	85.8	83.9	81.5
122.5°	56.1	62.2	67.4	72.1	75.4	77.3	78.2	79.2	78.7	77.3	74.9
125°	50.9	56.1	61.3	65.5	68.8	70.7	71.6	72.6	72.1	70.7	67.9
127.5°	45.2	50.9	55.1	59.4	61.7	64.6	65.0	66.0	65.5	64.1	61.7
130°	41.0	45.2	49.5	53.3	56.1	58.0	58.9	59.4	58.4	57.5	55.1
132.5°	35.8	40.5	44.3	47.6	49.5	51.4	52.3	52.8	52.8	51.4	49.5
135°	32.0	35.3	38.6	41.9	43.8	45.7	46.7	47.1	46.7	45.7	43.8
137.5°	28.7	31.6	33.9	36.8	39.1	40.1	41.0	41.0	40.5	40.1	38.6
140°	25.0	28.3	30.6	32.5	34.4	34.9	35.8	35.8	35.3	34.9	33.9
142.5°	21.2	24.0	26.4	28.7	30.2	31.1	31.6	32.0	31.6	31.1	29.7
145°	17.0	20.3	22.6	24.0	25.9	26.4	26.9	27.3	26.9	26.4	25.0
147.5°	13.2	16.0	18.4	20.3	21.7	22.1	22.6	23.1	22.6	21.7	21.2
150°	9.4	11.8	14.6	16.5	17.4	18.4	18.4	18.4	18.9	17.9	17.0
152.5°	7.5	8.5	10.4	12.3	13.7	14.1	14.6	14.6	14.1	14.1	13.2
155°	5.2	6.1	7.5	9.0	10.4	10.8	11.3	11.3	10.8	10.8	10.4
157.5°	3.3	4.2	5.2	6.1	7.5	8.0	8.5	8.5	8.5	8.0	7.5
160°	1.9	2.4	2.8	3.8	4.7	5.2	5.7	5.7	5.7	5.7	5.2
162.5°	1.4	1.4	1.4	1.9	2.4	2.8	3.3	3.3	3.3	3.3	2.8
165°	0.9	0.9	0.9	0.9	0.9	1.4	1.9	1.9	1.9	1.9	1.9
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: 2SNLED-LD5-23SL-LW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	446.8	446.8	446.8	446.8	446.8	446.8	446.8	446.8	446.8	446.8	446.8
2.5°	444.4	444.4	444.9	443.9	441.1	441.6	441.6	443.5	444.4	444.9	447.2
5°	443.5	443.5	444.4	443.0	440.6	440.6	440.6	442.5	443.0	443.9	445.8
7.5°	442.0	442.0	442.5	441.1	438.3	438.3	437.8	439.7	440.6	441.1	443.0
10°	439.7	439.7	440.2	438.7	435.5	435.5	435.0	436.4	436.9	437.8	439.2
12.5°	436.4	436.4	436.4	435.0	431.7	431.2	430.7	432.2	432.2	432.6	434.0
15°	433.6	432.6	432.6	431.2	427.9	427.0	426.0	426.5	427.4	427.0	427.9
17.5°	430.3	429.3	428.4	427.0	422.7	421.3	420.4	420.8	420.4	419.9	420.8
20°	426.5	425.1	424.6	422.3	418.0	415.7	413.8	412.8	413.3	411.9	412.4
22.5°	422.3	420.4	419.4	416.6	412.4	409.5	407.2	405.3	404.8	402.9	403.4
25°	417.1	414.7	413.3	410.9	406.2	402.9	400.1	397.3	395.9	393.5	393.0
27.5°	410.9	408.6	406.7	404.3	399.6	395.4	392.1	388.3	386.4	383.6	382.2
30°	404.8	402.0	399.2	397.3	392.1	387.4	382.2	378.9	376.1	372.8	370.4
32.5°	397.3	394.5	391.6	388.8	384.1	378.4	374.2	369.0	365.7	361.9	359.1
35°	389.7	386.0	383.1	379.4	375.1	368.5	363.3	358.2	353.9	349.7	346.4
37.5°	381.3	378.4	374.2	370.9	365.7	359.1	353.5	346.9	343.1	337.4	333.2
40°	373.2	369.9	365.7	361.5	356.3	348.7	342.6	335.1	330.8	324.2	320.0
42.5°	365.2	360.5	356.3	351.6	345.9	338.8	331.3	323.8	318.1	312.0	305.9
45°	356.3	351.1	345.9	340.7	335.1	328.0	320.0	312.0	304.9	299.3	291.7
47.5°	346.9	341.7	335.5	329.9	323.8	316.7	308.2	299.7	292.2	285.6	277.6
50°	337.4	332.2	325.6	319.5	312.5	305.4	296.4	286.5	278.5	270.0	263.0
52.5°	327.5	322.3	316.2	308.2	300.7	293.6	284.2	273.8	264.9	257.8	248.8
55°	317.6	312.5	305.4	297.4	289.8	280.9	271.9	261.6	251.7	243.2	234.2
57.5°	307.3	302.6	294.5	287.9	278.5	269.1	259.7	249.8	238.9	229.0	218.7
60°	296.9	291.7	284.2	276.2	266.7	257.3	247.4	236.6	225.3	214.4	205.0
62.5°	287.5	280.9	273.8	265.3	255.4	246.5	235.2	223.4	212.1	200.8	189.4
65°	276.6	269.6	263.0	254.5	244.1	233.7	222.4	210.7	198.4	186.2	174.8
67.5°	265.8	258.7	251.7	243.2	232.3	221.5	209.7	197.9	184.3	172.5	159.3
70°	255.0	249.3	240.3	231.4	221.5	209.7	197.9	185.2	171.1	158.3	144.7
72.5°	244.1	238.5	229.5	220.1	210.7	198.4	185.7	173.0	159.8	145.2	130.5
75°	233.7	226.7	218.7	209.7	199.8	187.1	174.4	161.2	145.6	132.0	116.9
77.5°	223.9	217.3	209.2	199.3	188.5	176.3	163.1	149.4	133.8	119.2	102.7
80°	213.0	206.4	198.4	188.5	177.7	165.9	151.7	137.6	122.5	106.5	89.5
82.5°	202.6	196.5	187.6	178.6	166.8	155.0	140.9	126.8	110.7	95.2	78.7
85°	191.8	185.7	177.2	167.8	156.5	143.7	130.5	116.4	100.4	84.4	67.9
87.5°	182.4	175.3	166.8	157.4	146.1	133.8	121.1	106.0	90.5	74.9	58.0
90°	172.5	165.9	157.4	148.0	136.7	124.4	111.2	97.1	82.0	66.0	50.0
92.5°	164.0	156.9	148.9	139.5	128.2	116.4	103.2	89.1	74.5	58.9	43.4
95°	155.5	148.4	140.9	131.5	120.2	108.4	95.2	81.5	67.4	52.3	37.7
97.5°	146.1	140.0	132.4	123.5	112.2	100.9	88.1	74.9	61.3	46.7	33.0
100°	138.6	131.5	124.4	115.0	104.6	93.8	81.1	68.3	55.1	41.5	28.7
102.5°	130.1	123.5	116.4	107.4	97.1	86.2	74.5	62.2	50.0	37.2	25.0
105°	122.1	115.9	108.4	99.9	90.0	79.6	68.3	57.0	45.2	33.0	22.1
107.5°	114.0	107.9	100.9	92.8	83.4	73.0	62.7	51.4	40.5	29.7	19.8
110°	106.0	100.4	93.8	85.8	76.8	67.4	57.5	47.1	36.3	26.4	17.4



TEST NUMBER: P#

CATALOG NUMBER: 2SNLED-LD5-23SL-LW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	99.0	93.3	86.7	79.2	70.7	61.7	52.3	42.4	32.5	23.6	15.1
115°	91.9	86.7	80.1	73.5	65.0	56.6	47.6	38.2	29.2	21.2	13.2
117.5°	84.8	79.6	73.5	66.9	59.4	51.4	42.9	33.9	26.4	18.9	11.8
120°	77.8	73.0	67.4	61.3	54.7	46.7	38.2	30.6	23.6	16.5	10.4
122.5°	71.2	66.9	61.7	56.1	49.0	41.5	34.4	27.8	21.2	14.6	8.5
125°	65.0	60.8	56.1	50.4	43.8	37.2	31.1	25.0	18.4	12.7	7.1
127.5°	58.9	54.7	50.0	44.8	39.6	33.5	27.8	22.1	16.5	11.3	6.1
130°	52.8	49.0	44.8	40.5	35.3	29.7	25.0	19.3	14.1	9.0	5.2
132.5°	46.7	43.8	40.1	35.8	31.1	26.9	21.7	17.0	12.3	8.0	4.7
135°	41.5	38.6	35.3	31.6	27.8	23.6	18.9	14.6	10.4	6.6	3.8
137.5°	36.8	34.4	31.1	27.8	24.5	20.3	16.5	12.3	8.5	5.7	2.8
140°	32.5	30.2	27.3	24.0	21.2	17.4	13.7	9.9	7.5	4.7	2.4
142.5°	28.3	25.9	23.6	20.7	17.9	14.6	11.3	8.5	6.1	3.8	2.4
145°	24.0	22.1	19.8	17.4	14.6	11.8	9.4	7.1	4.7	2.8	1.9
147.5°	19.8	18.4	16.0	14.1	11.8	9.4	7.5	5.7	3.8	2.4	1.4
150°	16.0	14.6	12.7	10.8	9.4	7.5	6.1	4.2	2.8	2.4	1.4
152.5°	12.3	11.3	9.9	9.0	7.5	5.7	4.2	3.3	2.4	1.9	0.9
155°	9.9	9.0	8.0	6.6	5.7	4.2	3.3	2.4	1.9	1.4	0.9
157.5°	7.1	6.6	5.7	4.7	3.8	2.8	2.4	2.4	1.4	0.9	0.5
160°	4.7	4.2	3.8	2.8	2.4	2.4	1.9	1.4	0.9	0.9	0.5
162.5°	2.8	2.4	2.4	2.4	1.9	1.9	1.4	0.9	0.9	0.5	0.5
165°	1.9	1.9	1.9	1.4	1.4	1.4	0.9	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-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	446.8	446.8	446.8	446.8	446.8	446.8	446.8	446.8	446.8	446.8	446.8
2.5°	447.2	445.8	447.7	451.0	451.5	451.0	450.1	451.5	453.4	452.9	449.6
5°	446.3	444.4	446.3	449.6	449.6	449.1	448.6	450.1	451.9	451.5	448.6
7.5°	443.5	441.6	443.5	446.3	446.8	445.8	445.8	447.2	449.1	448.6	446.3
10°	439.7	437.8	438.7	442.0	443.0	442.0	442.0	443.5	445.8	445.3	442.5
12.5°	434.0	432.6	433.6	436.4	437.3	436.9	436.4	438.3	440.6	440.6	437.8
15°	427.9	426.0	427.0	430.3	430.7	429.8	430.3	431.7	434.5	434.5	432.2
17.5°	420.8	418.5	419.9	422.3	422.7	422.7	422.7	424.6	427.9	427.4	425.6
20°	412.8	409.5	410.5	412.8	413.8	413.8	413.8	417.1	419.4	419.4	417.5
22.5°	403.4	401.0	401.0	403.4	404.8	404.3	404.3	407.2	410.5	410.0	410.0
25°	392.6	390.7	389.7	392.6	393.0	393.5	394.5	397.3	401.0	401.0	401.5
27.5°	381.3	379.4	378.9	381.3	381.7	382.2	383.1	386.4	390.2	390.7	391.6
30°	370.4	367.6	366.6	368.5	369.5	369.9	369.9	375.1	378.4	379.8	381.7
32.5°	357.7	354.9	352.5	355.8	356.3	357.2	357.7	362.9	366.6	369.0	371.8
35°	345.0	340.3	339.3	341.7	342.6	343.1	344.0	349.7	354.9	356.7	360.5
37.5°	330.8	327.5	324.7	327.1	328.0	328.5	331.3	336.5	341.7	344.5	348.3
40°	317.6	313.4	311.0	312.5	313.4	313.9	317.2	322.8	328.9	332.2	337.0
42.5°	303.0	297.4	295.5	296.9	297.4	298.8	301.6	309.2	315.3	320.0	323.8
45°	288.4	284.2	279.9	281.3	281.8	282.8	287.0	295.0	301.6	307.3	311.5
47.5°	273.3	268.2	263.9	264.9	266.7	267.2	271.9	281.3	287.5	293.6	299.3
50°	258.3	251.2	247.9	247.9	248.8	251.2	257.3	266.7	273.3	280.4	286.5
52.5°	242.7	236.1	232.3	232.8	233.7	236.6	242.2	251.7	259.2	266.7	274.3
55°	227.2	220.1	216.3	215.4	216.3	220.1	226.7	236.6	244.1	253.1	261.1
57.5°	211.6	203.1	199.8	198.4	199.3	204.1	210.7	221.0	230.4	238.9	248.4
60°	194.6	188.0	182.4	179.1	181.4	187.6	194.6	205.5	215.4	224.8	235.2
62.5°	180.0	171.5	165.4	162.1	164.5	169.7	179.6	189.9	200.8	211.6	222.0
65°	163.5	155.0	148.0	144.7	147.0	153.2	163.1	174.4	186.2	197.0	209.2
67.5°	147.5	138.6	130.1	126.8	129.6	136.2	147.0	159.8	172.5	183.8	197.0
70°	132.0	122.1	113.1	110.7	112.6	121.6	132.0	144.7	157.9	171.1	184.7
72.5°	117.8	105.6	96.1	93.3	95.7	105.6	117.3	130.5	144.7	158.8	173.4
75°	101.3	90.0	79.6	76.3	79.2	88.1	102.7	116.9	132.0	147.0	160.7
77.5°	88.1	74.9	64.1	58.9	63.6	74.9	89.1	104.2	119.7	135.3	150.8
80°	74.5	60.8	49.0	43.4	48.5	60.8	74.9	91.4	108.9	124.4	138.6
82.5°	62.2	47.6	35.3	29.2	34.9	48.5	64.1	80.6	97.6	113.1	129.6
85°	50.9	35.8	23.1	16.5	24.5	36.8	53.3	70.2	87.7	103.7	119.7
87.5°	41.5	26.9	14.1	7.1	15.1	28.7	44.3	61.3	78.7	94.7	109.8
90°	33.9	19.3	7.5	0.9	9.0	21.7	36.8	53.3	69.7	86.2	101.3
92.5°	27.8	14.6	4.2	0.5	5.7	17.4	31.6	47.1	63.1	79.2	93.8
95°	23.1	11.3	2.8	0.5	4.2	13.7	26.9	41.9	57.0	72.6	87.2
97.5°	19.8	9.4	2.4	0.5	3.3	11.8	23.1	37.2	51.8	66.4	80.6
100°	17.0	7.5	1.9	0.5	2.8	9.9	20.3	33.0	46.7	60.8	74.5
102.5°	14.6	6.1	1.4	0.5	2.4	8.5	17.9	29.7	41.9	55.6	68.8
105°	12.7	5.2	1.4	0.5	1.9	7.5	16.0	26.4	38.6	50.9	63.6
107.5°	10.8	4.2	0.9	0.5	1.4	6.1	14.1	24.0	34.9	46.7	58.4
110°	9.4	3.8	0.9	0.5	1.4	5.7	12.3	21.7	31.6	42.4	53.7



TEST NUMBER: P#

CATALOG NUMBER: 2SNLED-LD5-23SL-LW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	8.0	2.8	0.9	0.5	0.9	4.7	10.8	19.3	28.7	38.6	49.5
115°	7.1	2.4	0.5	0.5	0.9	4.2	9.9	17.4	25.9	35.3	45.2
117.5°	5.7	1.9	0.5	0.5	0.5	3.3	8.5	15.6	23.6	32.5	41.5
120°	4.7	1.9	0.5	0.5	0.5	2.8	7.5	13.7	21.2	29.2	37.7
122.5°	4.2	1.4	0.5	0.5	0.5	2.4	6.6	12.3	18.9	26.4	34.4
125°	3.8	1.4	0.5	0.5	0.5	1.9	5.7	10.8	17.0	23.6	31.1
127.5°	2.8	1.4	0.5	0.5	0.5	1.4	5.2	9.4	15.1	21.2	27.8
130°	2.4	0.9	0.5	0.5	0.5	1.4	4.2	8.5	13.2	18.9	25.0
132.5°	1.9	0.9	0.5	0.5	0.5	0.9	3.3	6.6	11.3	16.5	22.1
135°	1.9	0.9	0.5	0.5	0.5	0.9	2.4	5.7	9.4	14.1	18.9
137.5°	1.9	0.5	0.5	0.5	0.5	0.9	1.9	4.2	7.5	11.3	15.6
140°	1.4	0.5	0.5	0.5	0.5	0.5	1.4	3.3	6.1	9.4	13.2
142.5°	1.4	0.5	0.5	0.5	0.5	0.5	1.4	2.4	4.7	7.5	10.4
145°	0.9	0.5	0.5	0.5	0.5	0.5	0.9	1.9	3.8	5.7	8.5
147.5°	0.9	0.5	0.5	0.5	0.5	0.5	0.9	1.4	2.8	4.7	6.6
150°	0.9	0.5	0.5	0.5	0.5	0.5	0.9	1.4	1.9	3.3	5.2
152.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.9	0.9	1.4	2.4	3.3
155°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.9	1.4	1.9	2.4
157.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.9	0.9	1.4	1.9
160°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.9	0.9	1.4
162.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.9	0.9
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-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	446.8	446.8	446.8	446.8	446.8	446.8	446.8	446.8	446.8	446.8	446.8
2.5°	448.2	444.9	445.8	445.3	446.3	447.7	447.7	447.2	447.2	446.3	445.3
5°	447.2	443.9	445.3	444.9	445.8	447.2	447.2	446.8	446.8	445.3	444.9
7.5°	444.4	442.0	443.0	443.0	443.9	445.3	445.3	444.9	444.9	443.5	443.0
10°	441.6	438.7	440.2	440.2	441.1	443.0	443.0	442.5	442.5	441.1	440.6
12.5°	436.9	434.0	436.4	436.9	437.8	439.7	439.2	439.2	439.2	437.8	437.3
15°	431.2	429.3	431.7	432.2	433.6	435.9	435.9	435.9	435.9	434.5	434.0
17.5°	425.1	423.7	426.0	427.0	428.9	431.2	431.2	431.7	432.2	431.2	430.7
20°	418.0	417.1	419.4	421.3	424.1	426.5	427.4	427.9	428.9	427.9	427.4
22.5°	410.0	410.0	413.3	415.2	418.5	420.8	422.3	423.7	424.6	423.7	423.2
25°	401.0	402.5	405.8	409.1	412.8	415.2	416.6	418.5	419.4	419.0	418.5
27.5°	392.6	394.5	398.7	402.0	405.3	409.1	410.5	412.8	413.8	413.8	413.3
30°	382.7	385.5	390.2	394.0	398.2	402.0	403.9	406.2	407.6	406.7	407.2
32.5°	373.2	378.0	381.7	386.0	390.7	394.5	396.8	399.6	401.0	400.6	401.0
35°	362.9	367.6	372.8	377.0	382.7	386.4	389.7	392.1	394.0	393.5	393.5
37.5°	351.6	357.7	362.9	368.5	373.7	378.0	381.3	384.1	386.0	386.0	386.0
40°	340.7	347.3	352.5	359.1	365.7	369.5	373.2	376.1	378.0	378.4	378.9
42.5°	328.9	336.0	342.1	349.2	355.8	360.5	364.8	368.1	369.9	370.9	370.4
45°	318.1	324.7	331.8	339.8	345.9	350.6	355.8	359.6	361.5	361.9	362.4
47.5°	305.9	313.4	321.4	329.4	335.5	341.7	346.4	350.2	352.0	353.5	353.5
50°	294.1	302.1	311.0	319.5	326.1	332.2	337.0	341.2	343.6	344.5	345.0
52.5°	283.2	290.8	300.2	308.7	315.3	321.4	327.5	332.2	334.6	335.5	335.5
55°	270.0	279.5	289.8	297.8	304.9	312.0	318.1	322.8	325.2	326.6	327.5
57.5°	257.8	267.7	278.5	287.0	295.5	302.1	307.7	313.9	315.7	317.6	318.1
60°	246.0	255.9	266.3	275.7	284.2	291.2	297.8	303.0	306.3	307.3	308.2
62.5°	233.7	244.1	255.0	264.4	273.3	281.8	287.9	292.7	296.4	297.8	298.8
65°	222.0	232.8	243.6	253.5	263.0	271.4	277.6	282.3	286.1	288.4	288.9
67.5°	209.2	221.0	232.3	242.7	252.1	261.1	267.2	271.9	275.7	278.5	279.0
70°	197.5	209.7	221.0	232.3	241.8	250.7	257.3	262.0	266.3	268.2	269.1
72.5°	186.2	198.9	210.7	222.0	231.4	240.3	247.4	252.1	256.4	258.7	259.2
75°	175.3	188.0	200.8	211.6	221.5	230.4	237.5	242.7	246.5	248.8	249.8
77.5°	164.5	177.7	190.4	201.2	211.6	220.6	226.7	232.8	236.6	239.4	239.4
80°	153.6	167.3	180.5	191.3	201.7	209.7	216.8	222.9	226.7	229.5	229.5
82.5°	144.2	157.4	170.1	181.0	191.3	200.3	207.4	213.0	217.3	219.1	219.6
85°	133.4	148.0	159.8	171.5	181.4	189.9	197.0	203.1	206.9	208.8	209.7
87.5°	124.4	138.6	151.3	161.6	171.5	180.0	188.0	193.2	197.0	199.3	200.3
90°	115.9	129.6	142.3	152.7	163.1	171.1	178.6	183.8	188.0	189.9	190.9
92.5°	108.4	122.1	134.3	144.7	154.6	163.5	170.6	175.8	179.6	181.4	182.9
95°	101.3	114.5	126.3	137.6	147.0	155.0	162.6	167.8	172.0	173.4	174.8
97.5°	94.3	107.0	118.8	129.6	139.5	147.0	154.1	159.3	162.6	164.9	166.4
100°	88.1	100.4	111.7	122.1	131.5	138.6	146.1	150.8	154.1	156.0	157.9
102.5°	81.5	93.8	104.6	114.5	124.4	131.0	138.1	142.8	145.6	148.9	148.9
105°	75.9	87.2	98.0	107.4	115.9	123.9	130.1	134.8	138.1	140.4	140.4
107.5°	69.7	81.1	91.4	101.3	109.3	116.9	122.5	126.8	130.5	132.0	133.4
110°	65.0	74.9	85.3	94.7	102.3	109.3	115.0	119.7	123.0	124.4	125.4



TEST NUMBER: P#

CATALOG NUMBER: 2SNLED-LD5-23SL-LW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	59.4	69.7	79.2	88.1	95.7	102.3	107.9	111.7	115.0	116.9	117.3
115°	54.7	64.6	73.0	81.5	89.5	95.2	100.4	104.2	107.4	108.9	109.8
117.5°	50.4	59.4	67.9	74.9	82.5	88.6	93.8	97.1	99.9	101.8	102.7
120°	46.2	54.7	62.2	69.3	76.3	82.0	86.7	90.0	93.3	94.7	94.7
122.5°	41.9	50.0	57.0	63.6	70.2	75.4	80.6	83.4	86.2	87.7	87.7
125°	38.2	45.7	52.3	58.4	64.6	69.3	73.5	76.8	79.6	80.6	80.6
127.5°	34.4	41.5	47.6	53.3	58.4	63.1	67.4	70.7	73.0	74.0	74.0
130°	31.1	37.2	42.9	48.5	53.7	57.5	61.7	64.6	66.0	67.4	67.9
132.5°	27.8	33.5	38.6	43.4	48.5	52.3	55.6	58.4	59.9	61.3	61.7
135°	24.5	29.7	34.4	39.1	43.4	47.1	50.0	52.3	54.2	55.1	55.6
137.5°	20.7	26.4	30.6	34.4	39.1	41.9	45.2	46.7	48.5	49.5	49.5
140°	17.4	21.7	26.4	30.2	33.9	36.8	39.6	41.9	43.4	43.8	43.8
142.5°	14.1	17.9	21.7	26.4	29.7	32.0	34.9	36.8	37.7	38.2	38.6
145°	11.3	14.1	17.4	21.7	25.4	28.3	29.7	31.6	32.5	33.0	33.5
147.5°	8.5	11.3	14.1	17.0	20.7	23.6	25.0	26.9	27.8	28.3	28.3
150°	6.6	8.5	10.4	13.2	16.0	19.3	21.2	22.6	23.1	23.6	23.6
152.5°	4.7	6.6	8.0	9.9	11.8	14.6	17.4	18.4	18.9	19.3	19.3
155°	3.3	4.7	5.7	7.1	8.5	10.8	13.2	14.6	15.1	15.6	15.6
157.5°	2.4	3.3	3.8	5.2	6.1	7.1	9.0	11.3	11.8	11.8	11.8
160°	1.4	1.9	2.4	3.3	3.8	4.7	5.7	7.1	8.5	8.5	8.5
162.5°	0.9	1.4	1.4	1.9	1.9	2.8	3.3	3.8	5.2	5.7	5.7
165°	0.5	0.9	0.9	0.9	0.9	0.9	1.4	1.4	2.4	2.8	2.8
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: 2SNLED-LD5-23SL-LW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	446.8	446.8	446.8	446.8	446.8	446.8	446.8	446.8	446.8	446.8	446.8
2.5°	445.8	446.8	446.3	446.3	446.3	447.2	446.3	442.0	443.0	443.9	444.9
5°	445.3	445.8	445.8	445.3	445.3	446.3	445.3	441.1	442.0	443.0	443.5
7.5°	443.5	443.9	443.9	443.9	443.5	444.4	443.0	439.2	439.2	440.2	440.6
10°	441.1	442.0	441.6	441.1	441.1	441.1	440.2	435.9	435.9	436.4	436.9
12.5°	438.3	438.3	438.3	437.8	437.3	437.3	436.4	432.2	431.7	432.6	432.2
15°	434.5	435.5	434.5	434.0	433.1	433.1	431.7	427.4	426.5	427.0	426.5
17.5°	431.2	431.7	430.7	429.8	428.9	428.4	427.0	422.3	420.8	421.3	420.4
20°	427.9	427.9	427.0	426.0	424.6	423.2	421.3	416.6	414.2	414.2	412.4
22.5°	423.7	423.7	422.7	421.3	419.9	418.0	416.1	411.4	407.6	406.7	405.3
25°	419.0	418.5	418.0	416.6	413.8	411.9	410.0	404.8	400.6	398.7	396.3
27.5°	413.3	413.3	411.9	410.5	407.6	405.3	402.9	398.2	392.6	390.2	386.9
30°	407.2	407.2	405.8	403.9	401.0	398.2	395.4	389.7	384.1	380.8	377.0
32.5°	401.0	400.6	399.2	397.3	394.5	390.2	387.9	382.2	375.6	371.8	366.6
35°	393.5	393.0	391.6	389.3	385.5	382.2	378.4	373.2	365.7	361.0	355.3
37.5°	386.0	385.5	384.6	381.3	377.5	373.7	369.0	363.8	356.7	350.6	345.0
40°	378.4	378.0	376.1	373.7	369.0	364.3	359.6	354.4	346.9	339.8	333.7
42.5°	370.4	369.9	367.6	364.8	359.6	354.9	349.2	343.6	336.0	327.5	321.4
45°	362.4	361.5	359.1	355.8	350.2	345.0	339.3	332.7	325.2	317.2	309.2
47.5°	353.9	352.5	350.2	345.4	340.7	335.1	328.5	321.4	313.9	304.9	296.4
50°	344.5	343.6	340.7	336.5	330.8	325.2	317.6	310.6	301.6	293.1	282.8
52.5°	335.5	333.7	331.3	326.6	320.9	314.8	306.8	298.3	289.4	281.3	270.5
55°	326.1	325.2	321.9	318.1	311.0	304.0	296.4	287.5	277.6	268.2	257.8
57.5°	317.2	315.3	312.5	307.3	301.1	294.1	286.1	276.6	265.8	255.9	244.6
60°	308.2	305.4	302.1	297.4	290.8	283.2	274.7	264.9	254.0	243.2	231.4
62.5°	298.3	296.0	292.2	287.5	280.9	272.9	263.9	253.5	243.2	231.9	219.1
65°	288.4	286.1	282.3	277.6	271.0	262.0	252.6	242.2	230.4	219.6	205.9
67.5°	278.5	276.2	271.9	266.7	260.1	251.7	241.8	230.9	219.1	207.4	193.2
70°	268.6	265.8	262.0	256.4	249.8	240.8	230.9	219.6	207.8	195.1	181.0
72.5°	258.7	256.4	251.7	246.5	239.4	230.4	220.6	209.2	197.0	183.8	169.7
75°	248.8	246.0	242.7	236.6	229.0	220.6	210.2	198.9	185.7	173.0	158.3
77.5°	238.9	236.6	232.3	226.2	219.1	210.2	199.8	188.5	175.3	162.1	146.6
80°	229.0	226.2	222.9	217.3	209.2	200.3	189.4	178.1	164.9	151.3	135.7
82.5°	219.1	216.3	212.5	206.9	199.3	190.4	180.0	167.8	154.6	140.4	125.8
85°	209.2	206.9	202.6	197.0	189.0	180.0	169.7	158.8	144.7	130.5	115.9
87.5°	199.3	197.0	192.7	187.1	179.6	170.6	160.2	148.9	135.3	122.1	106.0
90°	189.9	188.0	183.8	178.1	170.6	161.6	152.2	140.0	126.8	113.6	98.5
92.5°	181.4	179.6	175.8	170.1	163.5	153.6	144.2	132.4	119.2	105.6	91.0
95°	173.9	171.5	167.8	162.6	154.6	146.1	136.7	124.9	112.2	98.5	84.4
97.5°	165.4	163.1	159.3	153.6	147.0	138.1	128.7	117.3	104.6	91.9	77.8
100°	156.9	154.6	150.3	145.6	139.0	130.1	121.1	109.8	98.0	85.8	72.1
102.5°	148.4	146.1	142.3	137.6	131.0	123.0	114.0	103.2	91.4	79.2	66.4
105°	140.4	138.1	134.3	129.6	123.5	115.5	106.0	96.6	85.3	73.5	61.3
107.5°	132.4	130.1	126.8	122.1	115.9	108.4	99.4	89.5	79.2	67.9	56.1
110°	124.4	122.5	118.8	114.5	108.4	100.9	92.8	83.4	73.0	62.7	51.4



TEST NUMBER: P#

CATALOG NUMBER: 2SNLED-LD5-23SL-LW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	116.9	115.0	111.2	106.5	101.3	94.3	86.2	77.3	67.4	57.5	46.7
115°	109.3	107.0	103.7	99.4	94.3	87.7	80.1	72.1	62.2	52.8	42.9
117.5°	101.8	99.9	96.6	92.4	87.7	81.1	74.0	66.4	57.0	48.1	39.1
120°	94.3	92.8	89.5	85.8	81.1	74.9	68.3	60.8	52.3	43.8	35.3
122.5°	87.2	85.8	82.5	79.2	74.5	68.8	62.7	55.6	48.1	40.1	32.5
125°	80.6	78.7	75.9	72.6	68.3	63.1	57.0	50.4	43.4	36.3	29.2
127.5°	73.5	72.1	70.2	66.4	62.2	57.5	51.8	46.2	39.6	33.0	26.4
130°	67.9	66.0	63.6	60.8	57.0	52.3	47.1	41.5	35.8	29.7	23.1
132.5°	61.3	59.4	57.5	54.7	51.4	47.1	42.4	37.2	32.0	26.4	20.7
135°	55.1	53.7	51.8	49.0	45.7	42.4	37.7	33.0	28.3	23.1	18.4
137.5°	49.5	48.1	46.2	44.3	41.0	37.7	33.5	29.2	25.0	20.3	16.0
140°	43.8	42.9	41.0	39.1	36.3	33.0	29.2	25.4	21.7	17.4	13.7
142.5°	38.2	37.2	35.8	33.9	31.6	28.7	25.4	22.1	18.4	15.1	11.8
145°	33.0	32.5	31.1	29.2	27.3	24.5	21.7	18.9	15.6	12.7	9.4
147.5°	27.8	27.3	26.4	25.0	23.1	20.7	18.4	15.6	13.2	10.4	7.5
150°	23.1	22.6	22.1	20.3	19.3	17.0	15.1	12.7	10.8	8.0	6.1
152.5°	18.9	18.9	17.9	16.5	15.6	13.7	12.3	10.4	8.5	6.6	4.7
155°	15.1	14.6	14.1	13.2	12.3	10.8	9.4	8.0	6.6	4.7	3.3
157.5°	11.8	11.3	10.8	9.9	9.0	8.5	7.1	5.7	4.2	3.3	2.4
160°	8.5	8.0	7.5	7.1	6.6	5.7	4.7	3.8	2.8	1.9	1.4
162.5°	5.7	5.2	5.2	4.7	4.2	3.3	2.8	2.4	1.9	1.4	0.9
165°	2.8	2.8	2.4	2.4	1.9	1.4	1.4	1.4	0.9	0.9	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-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	446.8	446.8	446.8	446.8	446.8	446.8	446.8
2.5°	444.4	444.4	446.3	445.8	444.4	447.2	450.5
5°	443.0	443.0	444.4	444.4	443.0	445.8	448.6
7.5°	440.6	440.2	441.6	441.6	439.7	442.0	445.3
10°	436.4	435.9	437.3	437.3	435.5	437.8	440.6
12.5°	431.7	430.7	432.2	431.7	429.8	432.2	435.0
15°	425.6	425.1	426.0	425.1	423.2	425.6	428.4
17.5°	419.4	418.0	418.5	418.5	415.2	417.5	419.9
20°	411.4	409.5	410.0	409.5	407.2	408.6	411.4
22.5°	403.4	400.6	400.6	400.1	397.3	399.2	401.5
25°	393.5	390.2	390.2	389.7	386.4	387.9	390.2
27.5°	383.6	380.3	378.9	378.4	375.1	375.1	378.4
30°	373.2	368.5	367.6	366.2	362.9	362.9	365.7
32.5°	363.3	356.7	354.9	353.0	349.7	349.2	352.5
35°	350.2	345.0	341.7	339.8	336.0	335.1	337.9
37.5°	339.3	332.7	328.0	325.6	321.9	320.5	324.2
40°	327.5	320.5	314.3	312.9	307.3	305.4	308.7
42.5°	314.3	306.8	300.7	297.8	293.6	291.7	292.2
45°	301.1	293.1	286.5	282.8	278.5	275.2	277.1
47.5°	287.5	280.4	272.4	266.7	261.6	259.2	260.1
50°	273.8	265.3	257.8	251.7	245.5	242.7	244.6
52.5°	260.1	251.2	242.7	236.1	229.0	226.2	226.7
55°	246.9	237.5	227.6	220.6	214.0	209.7	208.8
57.5°	233.7	223.4	213.0	205.0	196.5	192.7	191.3
60°	219.6	208.8	197.9	188.5	179.6	175.3	173.4
62.5°	206.4	194.6	182.4	172.5	163.5	157.9	156.5
65°	193.7	180.0	167.8	156.5	146.6	140.4	138.6
67.5°	180.0	165.9	152.7	140.4	131.0	123.0	122.1
70°	167.3	152.2	137.6	124.9	114.5	106.5	102.7
72.5°	154.6	139.0	123.9	110.3	97.1	89.5	86.7
75°	142.3	126.3	110.3	96.1	81.5	72.6	69.7
77.5°	131.0	114.5	97.6	82.0	68.3	57.0	53.3
80°	120.2	103.2	85.3	69.3	54.7	42.4	38.2
82.5°	108.9	92.8	74.5	57.5	42.4	29.7	24.5
85°	99.0	82.9	64.6	47.6	32.5	18.9	13.2
87.5°	91.0	73.5	57.0	40.1	24.5	10.8	3.8
90°	82.9	66.0	49.5	33.0	18.4	6.1	0.5
92.5°	75.9	59.9	43.4	28.3	14.1	4.2	0.5
95°	69.3	53.7	38.2	23.6	11.3	2.8	0.5
97.5°	63.1	48.5	33.9	20.3	9.4	2.4	0.5
100°	58.0	43.8	30.2	17.9	8.0	1.9	0.5
102.5°	52.8	39.6	26.9	15.6	7.1	1.4	0.5
105°	48.5	35.8	24.0	14.1	6.1	1.4	0.5
107.5°	44.3	32.5	21.7	12.3	5.2	0.9	0.5
110°	40.1	29.7	19.3	10.8	4.7	0.9	0.5



TEST NUMBER: P#

CATALOG NUMBER: 2SNLED-LD5-23SL-LW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	36.8	26.9	17.4	9.9	3.8	0.9	0.5
115°	33.5	24.0	15.6	8.5	3.3	0.5	0.5
117.5°	30.2	21.7	13.7	7.5	2.8	0.5	0.5
120°	27.3	19.3	12.3	6.6	2.4	0.5	0.5
122.5°	24.5	17.4	10.8	5.7	1.9	0.5	0.5
125°	22.1	15.6	9.4	4.7	1.4	0.5	0.5
127.5°	19.8	13.7	8.5	4.2	1.4	0.5	0.5
130°	17.4	12.3	7.1	3.3	0.9	0.5	0.5
132.5°	15.6	10.4	6.1	2.8	0.9	0.5	0.5
135°	13.7	9.0	5.2	1.9	0.9	0.5	0.5
137.5°	11.8	7.5	4.2	1.4	0.5	0.5	0.5
140°	9.9	6.6	3.3	1.4	0.5	0.5	0.5
142.5°	8.5	5.2	2.4	0.9	0.5	0.5	0.5
145°	6.6	4.2	1.9	0.9	0.5	0.5	0.5
147.5°	5.2	3.3	1.4	0.9	0.5	0.5	0.5
150°	3.8	2.4	1.4	0.5	0.5	0.5	0.5
152.5°	2.8	1.9	0.9	0.5	0.5	0.5	0.5
155°	1.9	1.4	0.9	0.5	0.5	0.5	0.5
157.5°	1.4	0.9	0.5	0.5	0.5	0.5	0.5
160°	0.9	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)