

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-LD5-27SL-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-LD5-27SL-LW-UNV-L930-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
WIDE FROSTED LENS
Light Source: -
Ballast/Driver: -

Summary

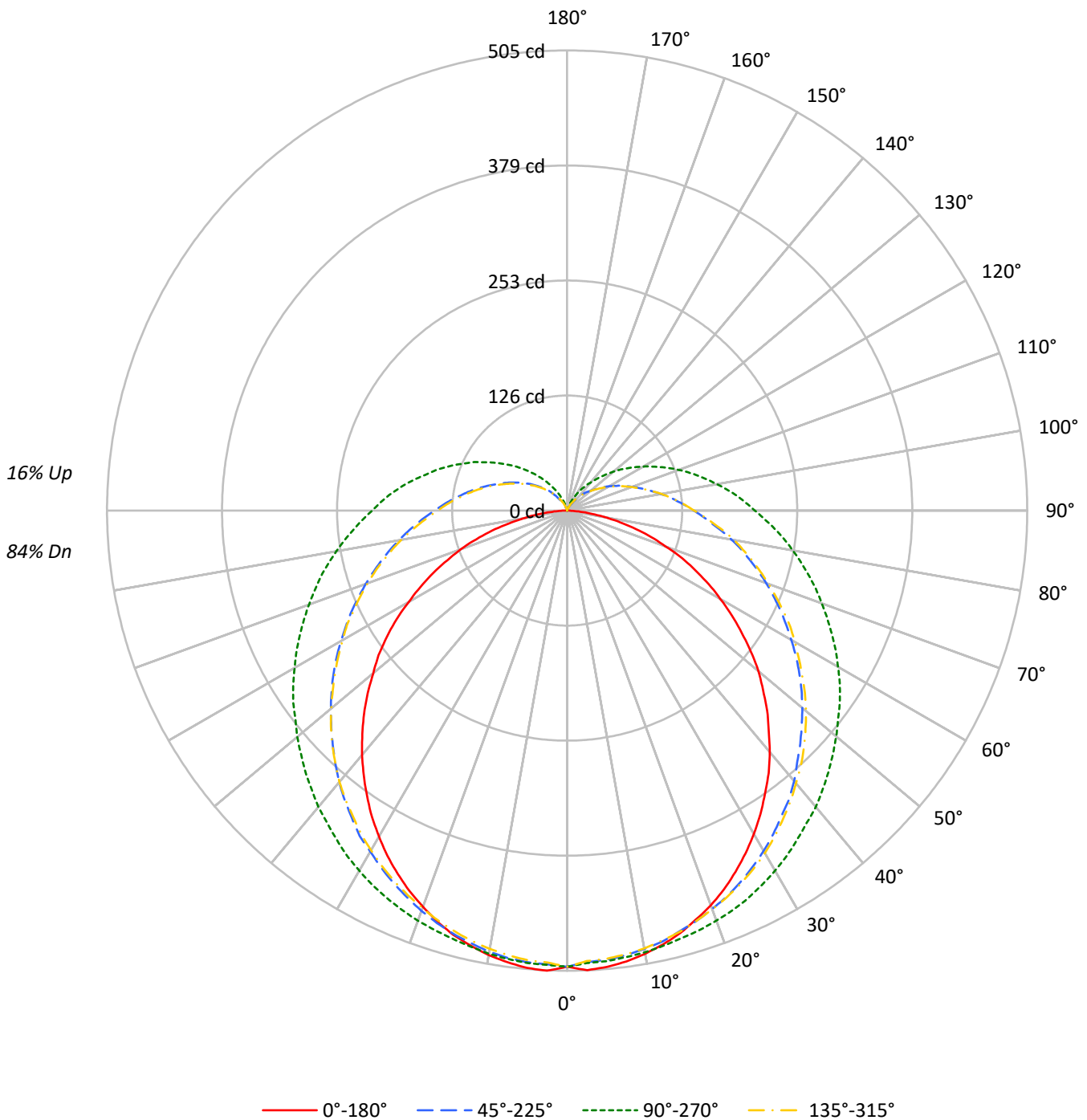
Lumens per Lamp: N/A
Luminaire Lumens: 2175.0 lumens
Efficiency: N/A
Efficacy: 103.6 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.36 / 1.44
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Semi-Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	4045	4045	4045	4045
5°	4067	3899	4076	3915
10°	4030	3788	4042	3800
15°	3982	3693	4000	3697
20°	3920	3624	3933	3624
25°	3843	3563	3866	3558
30°	3756	3499	3785	3499
35°	3655	3440	3696	3444
40°	3556	3406	3599	3406
45°	3441	3370	3494	3374
50°	3322	3348	3367	3358
55°	3155	3351	3254	3366
60°	2979	3362	3077	3383
65°	2783	3395	2905	3429
70°	2504	3458	2700	3507
75°	2187	3571	2391	3640
80°	1692	3739	1921	3825
85°	1011	4008	1264	4118



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.4	2.2
10°-20°	136.3	6.3
20°-30°	209.0	9.6
30°-40°	257.8	11.9
40°-50°	279.7	12.9
50°-60°	275.7	12.7
60°-70°	249.2	11.5
70°-80°	207.6	9.5
80°-90°	160.8	7.4
90°-100°	122.0	5.6
100°-110°	90.3	4.2
110°-120°	62.8	2.9
120°-130°	40.1	1.8
130°-140°	22.5	1.0
140°-150°	10.3	0.5
150°-160°	3.2	0.1
160°-170°	0.4	0.0
170°-180°	0.0	0.0
0°-30°	392.7	18.1
0°-40°	650.5	29.9
0°-60°	1205.9	55.4
0°-90°	1823.6	83.8
90°-120°	275.0	12.6
90°-150°	347.8	16.0
90°-180°	351.0	16.1
0°-180°	2175.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	501	501	501	501	501	
5°	503	496	504	498	503	48
15°	480	486	482	486	480	135
25°	437	470	440	469	437	201
35°	379	440	383	441	379	237
45°	310	406	315	406	310	239
55°	234	365	241	367	234	209
65°	155	320	162	324	155	154
75°	78	275	86	280	78	83
85°	15	229	18	235	15	18
90°	0	206	1	214	0	1
95°	0	187	0	196	0	0
105°	0	148	0	157	0	1
115°	0	113	0	123	0	0
125°	0	81	0	90	0	0
135°	0	53	0	62	0	0
145°	0	31	0	38	0	0
155°	0	13	0	17	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: 4SNLED-LD5-27SL-LW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	500.6	500.6	500.6	500.6	500.6	500.6	500.6	500.6	500.6	500.6	500.6
2.5°	504.8	504.8	504.3	503.3	503.8	505.4	504.3	501.7	500.1	495.9	496.9
5°	502.7	502.7	502.2	501.1	501.7	503.8	502.7	500.6	498.5	494.8	496.4
7.5°	499.0	499.0	498.5	497.5	498.5	500.6	499.6	497.5	495.9	492.2	493.8
10°	493.8	494.3	493.8	492.2	494.3	496.4	495.9	493.2	491.6	488.5	490.1
12.5°	487.4	487.9	487.4	486.9	487.9	491.1	490.1	487.9	486.9	484.3	485.8
15°	480.0	480.6	479.5	479.5	480.6	483.7	483.7	481.6	480.6	477.9	481.1
17.5°	470.5	471.0	470.5	470.5	471.6	474.7	475.3	474.2	473.2	472.1	475.3
20°	461.0	460.5	460.5	460.0	462.1	466.8	466.3	466.3	465.2	465.2	468.9
22.5°	449.9	449.9	449.4	449.4	452.0	456.3	456.3	457.3	456.3	458.4	461.5
25°	437.3	437.8	437.3	438.3	440.4	445.2	445.7	447.3	447.8	449.9	453.6
27.5°	424.0	424.6	424.0	425.1	428.8	432.5	435.1	437.3	437.8	440.9	445.7
30°	409.8	409.8	410.3	411.4	415.6	421.4	423.5	426.2	426.2	431.4	436.2
32.5°	395.0	395.0	395.0	397.1	401.9	408.7	411.4	414.5	415.6	420.9	426.2
35°	378.6	379.2	379.2	380.7	387.1	393.9	397.6	401.3	403.5	409.8	415.1
37.5°	363.3	364.4	362.8	364.9	373.9	379.7	383.9	387.6	391.3	399.8	404.0
40°	345.9	346.9	346.4	350.6	358.0	365.4	370.2	373.9	379.2	387.6	392.4
42.5°	327.4	328.5	329.5	334.3	342.2	349.6	355.4	360.2	366.5	373.9	381.8
45°	310.5	310.5	312.1	317.9	326.4	334.3	341.1	346.4	353.8	361.7	369.7
47.5°	291.5	292.0	294.1	301.0	310.0	319.5	325.8	332.7	340.6	349.1	358.0
50°	274.1	274.1	277.2	284.6	293.1	303.6	310.5	318.4	326.9	336.9	345.9
52.5°	254.0	255.1	259.8	266.7	277.8	287.3	295.2	303.6	313.7	324.2	334.3
55°	233.9	236.1	239.7	249.3	260.9	269.8	279.4	289.9	299.4	311.0	322.7
57.5°	214.4	216.0	221.8	231.3	243.4	254.5	264.6	274.6	286.2	297.8	310.0
60°	194.3	196.4	203.3	212.8	226.0	237.6	249.3	259.8	272.0	284.1	296.8
62.5°	175.3	176.9	184.8	195.9	209.1	221.8	233.4	246.1	259.3	270.9	283.6
65°	155.3	157.9	166.9	176.9	192.2	204.9	218.1	231.8	245.6	258.2	270.4
67.5°	136.8	138.4	147.9	159.5	174.8	189.1	202.8	217.6	231.8	245.0	257.2
70°	115.1	120.4	129.9	142.1	158.4	173.2	188.0	203.3	218.6	232.4	244.0
72.5°	97.2	101.4	112.0	125.2	141.0	158.4	173.7	190.1	205.4	219.7	231.8
75°	78.2	82.4	94.5	109.3	125.7	144.2	160.0	176.9	192.7	207.0	219.7
77.5°	59.7	65.0	78.2	93.5	111.4	130.4	146.8	163.7	180.1	195.4	208.1
80°	42.8	48.6	62.8	80.3	97.7	116.7	134.7	151.6	167.9	183.2	196.4
82.5°	27.5	33.8	49.1	66.5	85.0	104.0	122.5	139.4	155.8	171.1	184.8
85°	14.8	21.7	37.5	54.9	73.4	92.4	110.9	128.9	144.7	159.0	173.7
87.5°	4.2	12.7	28.0	45.4	64.4	81.9	99.8	117.8	133.6	148.9	162.1
90°	0.5	7.4	21.1	37.5	56.0	72.9	90.8	107.7	123.6	138.9	152.1
92.5°	0.5	4.8	16.4	31.2	48.1	65.5	83.4	99.8	114.6	129.9	143.1
95°	0.5	3.7	13.2	26.4	42.2	58.6	75.5	91.4	106.7	120.9	134.1
97.5°	0.5	2.6	10.6	22.7	37.0	52.3	68.7	84.5	99.3	113.0	125.2
100°	0.5	2.1	8.4	19.5	32.2	47.0	61.8	77.1	91.4	104.6	117.2
102.5°	0.5	1.6	7.4	16.4	28.5	41.7	56.0	70.2	84.0	96.6	109.3
105°	0.5	1.6	6.3	14.3	25.3	37.5	50.7	64.4	77.1	89.2	100.9
107.5°	0.5	1.1	5.3	12.1	22.2	33.8	45.9	59.1	70.8	82.4	93.5
110°	0.5	1.1	4.2	11.1	19.5	30.1	41.7	53.9	65.0	76.0	86.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	0.5	1.1	3.7	9.5	16.9	26.9	37.5	48.6	59.1	70.2	79.7
115°	0.5	1.1	3.2	8.4	15.8	23.2	33.8	43.8	54.4	64.4	73.4
117.5°	0.5	1.1	2.6	6.9	13.7	21.1	29.6	39.6	49.1	58.6	67.1
120°	0.5	1.1	2.1	6.3	12.1	19.0	26.4	35.4	44.4	53.3	62.3
122.5°	0.5	0.5	2.1	5.3	10.6	16.9	24.3	31.2	39.6	48.1	56.0
125°	0.5	0.5	2.1	4.8	9.0	15.3	21.7	28.0	35.4	42.8	49.6
127.5°	0.5	0.5	1.6	3.7	7.9	13.2	19.0	25.9	31.2	38.0	44.9
130°	0.5	0.5	1.6	3.2	6.9	11.1	16.9	22.7	29.0	33.8	39.6
132.5°	0.5	0.5	1.6	2.6	5.3	9.0	14.3	19.5	25.3	30.6	35.4
135°	0.5	0.5	1.1	2.1	4.2	7.4	11.6	16.4	22.2	27.5	32.2
137.5°	0.5	0.5	1.1	2.1	3.2	6.3	9.0	13.2	18.5	23.2	28.0
140°	0.5	0.5	1.1	1.6	2.6	4.8	7.4	10.6	14.8	19.0	24.3
142.5°	0.5	0.5	0.5	1.6	2.1	3.7	5.8	8.4	11.6	15.3	19.5
145°	0.5	0.5	0.5	1.6	2.1	2.6	4.8	6.9	9.0	11.6	15.3
147.5°	0.5	0.5	0.5	1.1	1.6	2.1	3.7	5.3	6.9	9.0	11.1
150°	0.5	0.5	0.5	1.1	1.6	2.1	2.6	3.7	5.3	7.4	9.0
152.5°	0.5	0.5	0.5	1.1	1.1	1.6	2.1	2.6	3.7	5.3	6.3
155°	0.5	0.5	0.5	0.5	1.1	1.6	2.1	2.1	2.6	3.7	4.8
157.5°	0.5	0.5	0.5	0.5	1.1	1.1	1.6	1.6	2.1	2.1	3.2
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°	500.6	500.6	500.6	500.6	500.6	500.6	500.6	500.6	500.6	500.6	500.6
2.5°	496.9	497.5	499.0	499.0	498.0	498.0	497.5	496.9	497.5	498.5	498.5
5°	495.9	496.4	498.0	498.5	497.5	496.9	496.9	496.4	496.9	498.0	498.0
7.5°	493.8	494.3	495.9	496.4	495.3	495.3	494.8	494.3	495.3	495.9	495.9
10°	490.6	491.1	493.2	493.8	493.2	492.7	492.7	492.2	492.7	493.8	493.8
12.5°	486.4	487.4	490.1	490.1	490.1	489.5	489.5	489.0	489.5	490.6	490.1
15°	481.6	483.7	485.8	486.9	486.9	486.9	486.4	485.8	486.9	487.4	486.9
17.5°	476.3	479.0	482.1	483.2	483.2	483.7	483.2	482.7	483.7	483.7	483.2
20°	471.0	473.7	476.9	477.9	479.0	479.5	479.5	479.0	479.5	480.0	479.5
22.5°	464.2	467.4	471.0	472.6	473.7	474.7	474.7	474.7	475.3	475.8	474.7
25°	456.8	460.5	464.7	466.3	468.4	468.9	469.5	469.5	470.0	470.5	468.9
27.5°	448.9	453.1	457.3	460.0	461.5	462.6	462.6	463.1	463.7	464.2	462.6
30°	439.4	445.7	449.4	451.5	453.6	455.2	455.7	456.3	456.8	457.3	455.7
32.5°	430.9	436.2	440.9	443.6	446.2	448.3	448.9	448.9	449.9	449.9	448.3
35°	420.9	427.2	432.0	434.6	437.8	439.4	440.4	440.4	441.5	441.5	439.9
37.5°	410.8	417.2	422.5	425.6	429.3	431.4	432.0	432.0	433.0	433.0	430.9
40°	400.3	407.2	413.0	416.7	419.8	422.5	423.0	424.6	424.6	424.0	421.9
42.5°	389.7	396.1	402.4	406.6	410.8	413.5	414.5	415.1	415.1	414.5	413.0
45°	378.1	385.5	391.3	396.6	400.8	403.5	405.0	405.6	405.6	404.5	402.9
47.5°	367.0	374.4	380.2	386.0	390.3	393.4	395.0	395.5	395.0	394.5	392.9
50°	355.4	363.8	369.7	375.5	379.7	382.3	385.0	385.5	385.0	384.4	381.3
52.5°	343.3	352.2	358.6	364.4	369.1	372.3	374.4	374.9	374.9	373.9	371.8
55°	331.1	339.0	346.9	353.3	358.6	361.7	364.4	365.4	364.4	363.3	360.7
57.5°	320.0	327.4	335.3	342.2	347.5	351.7	353.8	354.9	353.8	352.2	349.6
60°	306.8	314.7	323.7	330.1	335.9	340.1	341.1	343.3	342.2	340.6	338.0
62.5°	294.1	303.6	311.6	319.5	324.2	329.0	331.1	332.2	331.1	329.5	326.9
65°	280.9	291.5	299.4	307.3	312.6	317.4	320.0	320.5	319.5	317.9	315.3
67.5°	268.8	278.8	287.3	295.7	300.5	305.2	307.9	308.9	307.9	305.8	303.1
70°	256.6	266.7	276.7	283.1	288.9	294.1	295.7	297.3	296.3	294.1	291.0
72.5°	244.5	255.1	265.1	271.4	277.8	282.5	284.6	286.2	285.2	283.1	279.4
75°	231.8	242.9	253.0	259.8	266.2	270.9	273.0	274.6	273.5	271.4	267.2
77.5°	220.2	231.3	240.8	248.2	254.5	258.8	262.5	263.0	261.9	259.8	255.6
80°	208.1	219.2	229.2	236.6	242.9	247.1	249.8	251.4	250.3	248.2	244.0
82.5°	197.5	207.5	217.6	225.0	231.3	236.6	238.7	240.3	239.7	236.6	233.4
85°	185.9	197.5	205.4	213.3	219.7	225.0	226.5	228.7	228.1	225.5	221.3
87.5°	174.3	185.9	195.4	203.3	209.1	213.3	216.0	217.0	216.5	213.9	209.1
90°	164.8	175.3	184.8	193.3	198.0	202.8	205.4	206.0	206.0	202.8	199.1
92.5°	155.8	165.8	175.3	183.2	189.1	193.3	195.4	196.4	195.9	193.3	189.1
95°	145.8	156.8	165.8	173.7	179.5	183.8	185.9	186.9	186.4	183.8	179.5
97.5°	137.3	147.3	156.3	163.7	169.5	173.7	175.9	176.9	176.9	174.3	170.0
100°	128.9	138.9	147.3	154.7	160.0	164.2	166.3	166.9	166.3	164.2	160.0
102.5°	120.4	129.9	138.4	145.2	151.0	154.7	156.8	157.4	157.4	154.7	150.5
105°	112.0	121.5	129.4	136.8	141.5	145.2	146.8	148.4	147.9	145.8	141.5
107.5°	104.0	113.5	120.9	127.8	132.5	136.2	137.8	139.4	138.9	136.8	132.5
110°	96.6	105.6	112.5	119.3	123.6	127.3	129.9	130.4	129.4	127.3	123.6



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-27SL-LW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	89.8	97.7	104.6	110.9	115.6	118.3	120.4	121.5	120.4	118.3	115.6
115°	82.4	90.3	97.2	103.0	107.2	110.4	112.0	113.0	112.0	109.8	107.2
117.5°	75.5	82.9	89.8	95.6	99.3	101.9	103.5	104.6	103.5	101.9	99.3
120°	69.7	76.0	82.4	87.7	91.9	94.0	95.6	96.6	96.1	94.0	91.4
122.5°	62.8	69.7	75.5	80.8	84.5	86.6	87.7	88.7	88.2	86.6	84.0
125°	57.0	62.8	68.7	73.4	77.1	79.2	80.3	81.3	80.8	79.2	76.0
127.5°	50.7	57.0	61.8	66.5	69.2	72.3	72.9	73.9	73.4	71.8	69.2
130°	45.9	50.7	55.4	59.7	62.8	65.0	66.0	66.5	65.5	64.4	61.8
132.5°	40.1	45.4	49.6	53.3	55.4	57.6	58.6	59.1	59.1	57.6	55.4
135°	35.9	39.6	43.3	47.0	49.1	51.2	52.3	52.8	52.3	51.2	49.1
137.5°	32.2	35.4	38.0	41.2	43.8	44.9	45.9	45.9	45.4	44.9	43.3
140°	28.0	31.7	34.3	36.4	38.5	39.1	40.1	40.1	39.6	39.1	38.0
142.5°	23.8	26.9	29.6	32.2	33.8	34.9	35.4	35.9	35.4	34.9	33.3
145°	19.0	22.7	25.3	26.9	29.0	29.6	30.1	30.6	30.1	29.6	28.0
147.5°	14.8	18.0	20.6	22.7	24.3	24.8	25.3	25.9	25.3	24.3	23.8
150°	10.6	13.2	16.4	18.5	19.5	20.6	20.6	20.6	21.1	20.1	19.0
152.5°	8.4	9.5	11.6	13.7	15.3	15.8	16.4	16.4	15.8	15.8	14.8
155°	5.8	6.9	8.4	10.0	11.6	12.1	12.7	12.7	12.1	12.1	11.6
157.5°	3.7	4.8	5.8	6.9	8.4	9.0	9.5	9.5	9.5	9.0	8.4
160°	2.1	2.6	3.2	4.2	5.3	5.8	6.3	6.3	6.3	6.3	5.8
162.5°	1.6	1.6	1.6	2.1	2.6	3.2	3.7	3.7	3.7	3.7	3.2
165°	1.1	1.1	1.1	1.1	1.1	1.6	2.1	2.1	2.1	2.1	2.1
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



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-27SL-LW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	500.6	500.6	500.6	500.6	500.6	500.6	500.6	500.6	500.6	500.6	500.6
2.5°	498.0	498.0	498.5	497.5	494.3	494.8	494.8	496.9	498.0	498.5	501.1
5°	496.9	496.9	498.0	496.4	493.8	493.8	493.8	495.9	496.4	497.5	499.6
7.5°	495.3	495.3	495.9	494.3	491.1	491.1	490.6	492.7	493.8	494.3	496.4
10°	492.7	492.7	493.2	491.6	487.9	487.9	487.4	489.0	489.5	490.6	492.2
12.5°	489.0	489.0	489.0	487.4	483.7	483.2	482.7	484.3	484.3	484.8	486.4
15°	485.8	484.8	484.8	483.2	479.5	478.4	477.4	477.9	479.0	478.4	479.5
17.5°	482.1	481.1	480.0	478.4	473.7	472.1	471.0	471.6	471.0	470.5	471.6
20°	477.9	476.3	475.8	473.2	468.4	465.8	463.7	462.6	463.1	461.5	462.1
22.5°	473.2	471.0	470.0	466.8	462.1	458.9	456.3	454.2	453.6	451.5	452.0
25°	467.4	464.7	463.1	460.5	455.2	451.5	448.3	445.2	443.6	440.9	440.4
27.5°	460.5	457.8	455.7	453.1	447.8	443.1	439.4	435.1	433.0	429.9	428.3
30°	453.6	450.5	447.3	445.2	439.4	434.1	428.3	424.6	421.4	417.7	415.1
32.5°	445.2	442.0	438.8	435.7	430.4	424.0	419.3	413.5	409.8	405.6	402.4
35°	436.7	432.5	429.3	425.1	420.4	413.0	407.2	401.3	396.6	391.8	388.1
37.5°	427.2	424.0	419.3	415.6	409.8	402.4	396.1	388.7	384.4	378.1	373.4
40°	418.2	414.5	409.8	405.0	399.2	390.8	383.9	375.5	370.7	363.3	358.6
42.5°	409.3	404.0	399.2	393.9	387.6	379.7	371.2	362.8	356.5	349.6	342.7
45°	399.2	393.4	387.6	381.8	375.5	367.5	358.6	349.6	341.7	335.3	326.9
47.5°	388.7	382.9	376.0	369.7	362.8	354.9	345.4	335.9	327.4	320.0	311.0
50°	378.1	372.3	364.9	358.0	350.1	342.2	332.2	321.1	312.1	302.6	294.7
52.5°	367.0	361.2	354.3	345.4	336.9	329.0	318.4	306.8	296.8	288.9	278.8
55°	355.9	350.1	342.2	333.2	324.8	314.7	304.7	293.1	282.0	272.5	262.5
57.5°	344.3	339.0	330.1	322.7	312.1	301.5	291.0	279.9	267.7	256.6	245.0
60°	332.7	326.9	318.4	309.5	298.9	288.3	277.2	265.1	252.4	240.3	229.7
62.5°	322.1	314.7	306.8	297.3	286.2	276.2	263.5	250.3	237.6	225.0	212.3
65°	310.0	302.1	294.7	285.2	273.5	261.9	249.3	236.1	222.3	208.6	195.9
67.5°	297.8	289.9	282.0	272.5	260.3	248.2	235.0	221.8	206.5	193.3	178.5
70°	285.7	279.4	269.3	259.3	248.2	235.0	221.8	207.5	191.7	177.4	162.1
72.5°	273.5	267.2	257.2	246.6	236.1	222.3	208.1	193.8	179.0	162.6	146.3
75°	261.9	254.0	245.0	235.0	223.9	209.6	195.4	180.6	163.2	147.9	131.0
77.5°	250.8	243.4	234.5	223.4	211.2	197.5	182.7	167.4	150.0	133.6	115.1
80°	238.7	231.3	222.3	211.2	199.1	185.9	170.0	154.2	137.3	119.3	100.3
82.5°	227.1	220.2	210.2	200.1	186.9	173.7	157.9	142.1	124.1	106.7	88.2
85°	214.9	208.1	198.6	188.0	175.3	161.1	146.3	130.4	112.5	94.5	76.0
87.5°	204.4	196.4	186.9	176.4	163.7	150.0	135.7	118.8	101.4	84.0	65.0
90°	193.3	185.9	176.4	165.8	153.1	139.4	124.6	108.8	91.9	73.9	56.0
92.5°	183.8	175.9	166.9	156.3	143.6	130.4	115.6	99.8	83.4	66.0	48.6
95°	174.3	166.3	157.9	147.3	134.7	121.5	106.7	91.4	75.5	58.6	42.2
97.5°	163.7	156.8	148.4	138.4	125.7	113.0	98.8	84.0	68.7	52.3	37.0
100°	155.3	147.3	139.4	128.9	117.2	105.1	90.8	76.6	61.8	46.5	32.2
102.5°	145.8	138.4	130.4	120.4	108.8	96.6	83.4	69.7	56.0	41.7	28.0
105°	136.8	129.9	121.5	112.0	100.9	89.2	76.6	63.9	50.7	37.0	24.8
107.5°	127.8	120.9	113.0	104.0	93.5	81.9	70.2	57.6	45.4	33.3	22.2
110°	118.8	112.5	105.1	96.1	86.1	75.5	64.4	52.8	40.7	29.6	19.5



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-27SL-LW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	110.9	104.6	97.2	88.7	79.2	69.2	58.6	47.5	36.4	26.4	16.9
115°	103.0	97.2	89.8	82.4	72.9	63.4	53.3	42.8	32.7	23.8	14.8
117.5°	95.1	89.2	82.4	75.0	66.5	57.6	48.1	38.0	29.6	21.1	13.2
120°	87.1	81.9	75.5	68.7	61.3	52.3	42.8	34.3	26.4	18.5	11.6
122.5°	79.7	75.0	69.2	62.8	54.9	46.5	38.5	31.2	23.8	16.4	9.5
125°	72.9	68.1	62.8	56.5	49.1	41.7	34.9	28.0	20.6	14.3	7.9
127.5°	66.0	61.3	56.0	50.2	44.4	37.5	31.2	24.8	18.5	12.7	6.9
130°	59.1	54.9	50.2	45.4	39.6	33.3	28.0	21.7	15.8	10.0	5.8
132.5°	52.3	49.1	44.9	40.1	34.9	30.1	24.3	19.0	13.7	9.0	5.3
135°	46.5	43.3	39.6	35.4	31.2	26.4	21.1	16.4	11.6	7.4	4.2
137.5°	41.2	38.5	34.9	31.2	27.5	22.7	18.5	13.7	9.5	6.3	3.2
140°	36.4	33.8	30.6	26.9	23.8	19.5	15.3	11.1	8.4	5.3	2.6
142.5°	31.7	29.0	26.4	23.2	20.1	16.4	12.7	9.5	6.9	4.2	2.6
145°	26.9	24.8	22.2	19.5	16.4	13.2	10.6	7.9	5.3	3.2	2.1
147.5°	22.2	20.6	18.0	15.8	13.2	10.6	8.4	6.3	4.2	2.6	1.6
150°	18.0	16.4	14.3	12.1	10.6	8.4	6.9	4.8	3.2	2.6	1.6
152.5°	13.7	12.7	11.1	10.0	8.4	6.3	4.8	3.7	2.6	2.1	1.1
155°	11.1	10.0	9.0	7.4	6.3	4.8	3.7	2.6	2.1	1.6	1.1
157.5°	7.9	7.4	6.3	5.3	4.2	3.2	2.6	2.6	1.6	1.1	0.5
160°	5.3	4.8	4.2	3.2	2.6	2.6	2.1	1.6	1.1	1.1	0.5
162.5°	3.2	2.6	2.6	2.6	2.1	2.1	1.6	1.1	1.1	0.5	0.5
165°	2.1	2.1	2.1	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: 4SNLED-LD5-27SL-LW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	500.6	500.6	500.6	500.6	500.6	500.6	500.6	500.6	500.6	500.6	500.6
2.5°	501.1	499.6	501.7	505.4	505.9	505.4	504.3	505.9	508.0	507.5	503.8
5°	500.1	498.0	500.1	503.8	503.8	503.3	502.7	504.3	506.4	505.9	502.7
7.5°	496.9	494.8	496.9	500.1	500.6	499.6	499.6	501.1	503.3	502.7	500.1
10°	492.7	490.6	491.6	495.3	496.4	495.3	495.3	496.9	499.6	499.0	495.9
12.5°	486.4	484.8	485.8	489.0	490.1	489.5	489.0	491.1	493.8	493.8	490.6
15°	479.5	477.4	478.4	482.1	482.7	481.6	482.1	483.7	486.9	486.9	484.3
17.5°	471.6	468.9	470.5	473.2	473.7	473.7	473.7	475.8	479.5	479.0	476.9
20°	462.6	458.9	460.0	462.6	463.7	463.7	463.7	467.4	470.0	470.0	467.9
22.5°	452.0	449.4	449.4	452.0	453.6	453.1	453.1	456.3	460.0	459.4	459.4
25°	439.9	437.8	436.7	439.9	440.4	440.9	442.0	445.2	449.4	449.4	449.9
27.5°	427.2	425.1	424.6	427.2	427.7	428.3	429.3	433.0	437.3	437.8	438.8
30°	415.1	411.9	410.8	413.0	414.0	414.5	414.5	420.4	424.0	425.6	427.7
32.5°	400.8	397.6	395.0	398.7	399.2	400.3	400.8	406.6	410.8	413.5	416.7
35°	386.6	381.3	380.2	382.9	383.9	384.4	385.5	391.8	397.6	399.8	404.0
37.5°	370.7	367.0	363.8	366.5	367.5	368.1	371.2	377.1	382.9	386.0	390.3
40°	355.9	351.2	348.5	350.1	351.2	351.7	355.4	361.7	368.6	372.3	377.6
42.5°	339.6	333.2	331.1	332.7	333.2	334.8	338.0	346.4	353.3	358.6	362.8
45°	323.2	318.4	313.7	315.3	315.8	316.8	321.6	330.6	338.0	344.3	349.1
47.5°	306.3	300.5	295.7	296.8	298.9	299.4	304.7	315.3	322.1	329.0	335.3
50°	289.4	281.5	277.8	277.8	278.8	281.5	288.3	298.9	306.3	314.2	321.1
52.5°	272.0	264.6	260.3	260.9	261.9	265.1	271.4	282.0	290.4	298.9	307.3
55°	254.5	246.6	242.4	241.3	242.4	246.6	254.0	265.1	273.5	283.6	292.6
57.5°	237.1	227.6	223.9	222.3	223.4	228.7	236.1	247.7	258.2	267.7	278.3
60°	218.1	210.7	204.4	200.7	203.3	210.2	218.1	230.2	241.3	251.9	263.5
62.5°	201.7	192.2	185.4	181.7	184.3	190.1	201.2	212.8	225.0	237.1	248.7
65°	183.2	173.7	165.8	162.1	164.8	171.6	182.7	195.4	208.6	220.7	234.5
67.5°	165.3	155.3	145.8	142.1	145.2	152.6	164.8	179.0	193.3	206.0	220.7
70°	147.9	136.8	126.7	124.1	126.2	136.2	147.9	162.1	176.9	191.7	207.0
72.5°	132.0	118.3	107.7	104.6	107.2	118.3	131.5	146.3	162.1	178.0	194.3
75°	113.5	100.9	89.2	85.5	88.7	98.8	115.1	131.0	147.9	164.8	180.1
77.5°	98.8	84.0	71.8	66.0	71.3	84.0	99.8	116.7	134.1	151.6	169.0
80°	83.4	68.1	54.9	48.6	54.4	68.1	84.0	102.4	122.0	139.4	155.3
82.5°	69.7	53.3	39.6	32.7	39.1	54.4	71.8	90.3	109.3	126.7	145.2
85°	57.0	40.1	25.9	18.5	27.5	41.2	59.7	78.7	98.2	116.2	134.1
87.5°	46.5	30.1	15.8	7.9	16.9	32.2	49.6	68.7	88.2	106.1	123.0
90°	38.0	21.7	8.4	1.1	10.0	24.3	41.2	59.7	78.2	96.6	113.5
92.5°	31.2	16.4	4.8	0.5	6.3	19.5	35.4	52.8	70.8	88.7	105.1
95°	25.9	12.7	3.2	0.5	4.8	15.3	30.1	47.0	63.9	81.3	97.7
97.5°	22.2	10.6	2.6	0.5	3.7	13.2	25.9	41.7	58.1	74.5	90.3
100°	19.0	8.4	2.1	0.5	3.2	11.1	22.7	37.0	52.3	68.1	83.4
102.5°	16.4	6.9	1.6	0.5	2.6	9.5	20.1	33.3	47.0	62.3	77.1
105°	14.3	5.8	1.6	0.5	2.1	8.4	18.0	29.6	43.3	57.0	71.3
107.5°	12.1	4.8	1.1	0.5	1.6	6.9	15.8	26.9	39.1	52.3	65.5
110°	10.6	4.2	1.1	0.5	1.6	6.3	13.7	24.3	35.4	47.5	60.2



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-27SL-LW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	9.0	3.2	1.1	0.5	1.1	5.3	12.1	21.7	32.2	43.3	55.4
115°	7.9	2.6	0.5	0.5	1.1	4.8	11.1	19.5	29.0	39.6	50.7
117.5°	6.3	2.1	0.5	0.5	0.5	3.7	9.5	17.4	26.4	36.4	46.5
120°	5.3	2.1	0.5	0.5	0.5	3.2	8.4	15.3	23.8	32.7	42.2
122.5°	4.8	1.6	0.5	0.5	0.5	2.6	7.4	13.7	21.1	29.6	38.5
125°	4.2	1.6	0.5	0.5	0.5	2.1	6.3	12.1	19.0	26.4	34.9
127.5°	3.2	1.6	0.5	0.5	0.5	1.6	5.8	10.6	16.9	23.8	31.2
130°	2.6	1.1	0.5	0.5	0.5	1.6	4.8	9.5	14.8	21.1	28.0
132.5°	2.1	1.1	0.5	0.5	0.5	1.1	3.7	7.4	12.7	18.5	24.8
135°	2.1	1.1	0.5	0.5	0.5	1.1	2.6	6.3	10.6	15.8	21.1
137.5°	2.1	0.5	0.5	0.5	0.5	1.1	2.1	4.8	8.4	12.7	17.4
140°	1.6	0.5	0.5	0.5	0.5	0.5	1.6	3.7	6.9	10.6	14.8
142.5°	1.6	0.5	0.5	0.5	0.5	0.5	1.6	2.6	5.3	8.4	11.6
145°	1.1	0.5	0.5	0.5	0.5	0.5	1.1	2.1	4.2	6.3	9.5
147.5°	1.1	0.5	0.5	0.5	0.5	0.5	1.1	1.6	3.2	5.3	7.4
150°	1.1	0.5	0.5	0.5	0.5	0.5	1.1	1.6	2.1	3.7	5.8
152.5°	0.5	0.5	0.5	0.5	0.5	0.5	1.1	1.1	1.6	2.6	3.7
155°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.1	1.6	2.1	2.6
157.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.1	1.1	1.6	2.1
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: 4SNLED-LD5-27SL-LW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	500.6	500.6	500.6	500.6	500.6	500.6	500.6	500.6	500.6	500.6	500.6
2.5°	502.2	498.5	499.6	499.0	500.1	501.7	501.7	501.1	501.1	500.1	499.0
5°	501.1	497.5	499.0	498.5	499.6	501.1	501.1	500.6	500.6	499.0	498.5
7.5°	498.0	495.3	496.4	496.4	497.5	499.0	499.0	498.5	498.5	496.9	496.4
10°	494.8	491.6	493.2	493.2	494.3	496.4	496.4	495.9	495.9	494.3	493.8
12.5°	489.5	486.4	489.0	489.5	490.6	492.7	492.2	492.2	492.2	490.6	490.1
15°	483.2	481.1	483.7	484.3	485.8	488.5	488.5	488.5	488.5	486.9	486.4
17.5°	476.3	474.7	477.4	478.4	480.6	483.2	483.2	483.7	484.3	483.2	482.7
20°	468.4	467.4	470.0	472.1	475.3	477.9	479.0	479.5	480.6	479.5	479.0
22.5°	459.4	459.4	463.1	465.2	468.9	471.6	473.2	474.7	475.8	474.7	474.2
25°	449.4	451.0	454.7	458.4	462.6	465.2	466.8	468.9	470.0	469.5	468.9
27.5°	439.9	442.0	446.8	450.5	454.2	458.4	460.0	462.6	463.7	463.7	463.1
30°	428.8	432.0	437.3	441.5	446.2	450.5	452.6	455.2	456.8	455.7	456.3
32.5°	418.2	423.5	427.7	432.5	437.8	442.0	444.6	447.8	449.4	448.9	449.4
35°	406.6	411.9	417.7	422.5	428.8	433.0	436.7	439.4	441.5	440.9	440.9
37.5°	393.9	400.8	406.6	413.0	418.8	423.5	427.2	430.4	432.5	432.5	432.5
40°	381.8	389.2	395.0	402.4	409.8	414.0	418.2	421.4	423.5	424.0	424.6
42.5°	368.6	376.5	383.4	391.3	398.7	404.0	408.7	412.4	414.5	415.6	415.1
45°	356.5	363.8	371.8	380.7	387.6	392.9	398.7	402.9	405.0	405.6	406.1
47.5°	342.7	351.2	360.2	369.1	376.0	382.9	388.1	392.4	394.5	396.1	396.1
50°	329.5	338.5	348.5	358.0	365.4	372.3	377.6	382.3	385.0	386.0	386.6
52.5°	317.4	325.8	336.4	345.9	353.3	360.2	367.0	372.3	374.9	376.0	376.0
55°	302.6	313.2	324.8	333.7	341.7	349.6	356.5	361.7	364.4	366.0	367.0
57.5°	288.9	300.0	312.1	321.6	331.1	338.5	344.8	351.7	353.8	355.9	356.5
60°	275.7	286.7	298.4	308.9	318.4	326.4	333.7	339.6	343.3	344.3	345.4
62.5°	261.9	273.5	285.7	296.3	306.3	315.8	322.7	327.9	332.2	333.7	334.8
65°	248.7	260.9	273.0	284.1	294.7	304.2	311.0	316.3	320.5	323.2	323.7
67.5°	234.5	247.7	260.3	272.0	282.5	292.6	299.4	304.7	308.9	312.1	312.6
70°	221.3	235.0	247.7	260.3	270.9	280.9	288.3	293.6	298.4	300.5	301.5
72.5°	208.6	222.9	236.1	248.7	259.3	269.3	277.2	282.5	287.3	289.9	290.4
75°	196.4	210.7	225.0	237.1	248.2	258.2	266.2	272.0	276.2	278.8	279.9
77.5°	184.3	199.1	213.3	225.5	237.1	247.1	254.0	260.9	265.1	268.3	268.3
80°	172.2	187.5	202.3	214.4	226.0	235.0	242.9	249.8	254.0	257.2	257.2
82.5°	161.6	176.4	190.6	202.8	214.4	224.4	232.4	238.7	243.4	245.6	246.1
85°	149.4	165.8	179.0	192.2	203.3	212.8	220.7	227.6	231.8	233.9	235.0
87.5°	139.4	155.3	169.5	181.1	192.2	201.7	210.7	216.5	220.7	223.4	224.4
90°	129.9	145.2	159.5	171.1	182.7	191.7	200.1	206.0	210.7	212.8	213.9
92.5°	121.5	136.8	150.5	162.1	173.2	183.2	191.2	197.0	201.2	203.3	204.9
95°	113.5	128.3	141.5	154.2	164.8	173.7	182.2	188.0	192.7	194.3	195.9
97.5°	105.6	119.9	133.1	145.2	156.3	164.8	172.7	178.5	182.2	184.8	186.4
100°	98.8	112.5	125.2	136.8	147.3	155.3	163.7	169.0	172.7	174.8	176.9
102.5°	91.4	105.1	117.2	128.3	139.4	146.8	154.7	160.0	163.2	166.9	166.9
105°	85.0	97.7	109.8	120.4	129.9	138.9	145.8	151.0	154.7	157.4	157.4
107.5°	78.2	90.8	102.4	113.5	122.5	131.0	137.3	142.1	146.3	147.9	149.4
110°	72.9	84.0	95.6	106.1	114.6	122.5	128.9	134.1	137.8	139.4	140.5



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-27SL-LW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	66.5	78.2	88.7	98.8	107.2	114.6	120.9	125.2	128.9	131.0	131.5
115°	61.3	72.3	81.9	91.4	100.3	106.7	112.5	116.7	120.4	122.0	123.0
117.5°	56.5	66.5	76.0	84.0	92.4	99.3	105.1	108.8	112.0	114.1	115.1
120°	51.8	61.3	69.7	77.6	85.5	91.9	97.2	100.9	104.6	106.1	106.1
122.5°	47.0	56.0	63.9	71.3	78.7	84.5	90.3	93.5	96.6	98.2	98.2
125°	42.8	51.2	58.6	65.5	72.3	77.6	82.4	86.1	89.2	90.3	90.3
127.5°	38.5	46.5	53.3	59.7	65.5	70.8	75.5	79.2	81.9	82.9	82.9
130°	34.9	41.7	48.1	54.4	60.2	64.4	69.2	72.3	73.9	75.5	76.0
132.5°	31.2	37.5	43.3	48.6	54.4	58.6	62.3	65.5	67.1	68.7	69.2
135°	27.5	33.3	38.5	43.8	48.6	52.8	56.0	58.6	60.7	61.8	62.3
137.5°	23.2	29.6	34.3	38.5	43.8	47.0	50.7	52.3	54.4	55.4	55.4
140°	19.5	24.3	29.6	33.8	38.0	41.2	44.4	47.0	48.6	49.1	49.1
142.5°	15.8	20.1	24.3	29.6	33.3	35.9	39.1	41.2	42.2	42.8	43.3
145°	12.7	15.8	19.5	24.3	28.5	31.7	33.3	35.4	36.4	37.0	37.5
147.5°	9.5	12.7	15.8	19.0	23.2	26.4	28.0	30.1	31.2	31.7	31.7
150°	7.4	9.5	11.6	14.8	18.0	21.7	23.8	25.3	25.9	26.4	26.4
152.5°	5.3	7.4	9.0	11.1	13.2	16.4	19.5	20.6	21.1	21.7	21.7
155°	3.7	5.3	6.3	7.9	9.5	12.1	14.8	16.4	16.9	17.4	17.4
157.5°	2.6	3.7	4.2	5.8	6.9	7.9	10.0	12.7	13.2	13.2	13.2
160°	1.6	2.1	2.6	3.7	4.2	5.3	6.3	7.9	9.5	9.5	9.5
162.5°	1.1	1.6	1.6	2.1	2.1	3.2	3.7	4.2	5.8	6.3	6.3
165°	0.5	1.1	1.1	1.1	1.1	1.1	1.6	1.6	2.6	3.2	3.2
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-27SL-LW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	500.6	500.6	500.6	500.6	500.6	500.6	500.6	500.6	500.6	500.6	500.6
2.5°	499.6	500.6	500.1	500.1	500.1	501.1	500.1	495.3	496.4	497.5	498.5
5°	499.0	499.6	499.6	499.0	499.0	500.1	499.0	494.3	495.3	496.4	496.9
7.5°	496.9	497.5	497.5	497.5	496.9	498.0	496.4	492.2	492.2	493.2	493.8
10°	494.3	495.3	494.8	494.3	494.3	494.3	493.2	488.5	488.5	489.0	489.5
12.5°	491.1	491.1	491.1	490.6	490.1	490.1	489.0	484.3	483.7	484.8	484.3
15°	486.9	487.9	486.9	486.4	485.3	485.3	483.7	479.0	477.9	478.4	477.9
17.5°	483.2	483.7	482.7	481.6	480.6	480.0	478.4	473.2	471.6	472.1	471.0
20°	479.5	479.5	478.4	477.4	475.8	474.2	472.1	466.8	464.2	464.2	462.1
22.5°	474.7	474.7	473.7	472.1	470.5	468.4	466.3	461.0	456.8	455.7	454.2
25°	469.5	468.9	468.4	466.8	463.7	461.5	459.4	453.6	448.9	446.8	444.1
27.5°	463.1	463.1	461.5	460.0	456.8	454.2	451.5	446.2	439.9	437.3	433.6
30°	456.3	456.3	454.7	452.6	449.4	446.2	443.1	436.7	430.4	426.7	422.5
32.5°	449.4	448.9	447.3	445.2	442.0	437.3	434.6	428.3	420.9	416.7	410.8
35°	440.9	440.4	438.8	436.2	432.0	428.3	424.0	418.2	409.8	404.5	398.2
37.5°	432.5	432.0	430.9	427.2	423.0	418.8	413.5	407.7	399.8	392.9	386.6
40°	424.0	423.5	421.4	418.8	413.5	408.2	402.9	397.1	388.7	380.7	373.9
42.5°	415.1	414.5	411.9	408.7	402.9	397.6	391.3	385.0	376.5	367.0	360.2
45°	406.1	405.0	402.4	398.7	392.4	386.6	380.2	372.8	364.4	355.4	346.4
47.5°	396.6	395.0	392.4	387.1	381.8	375.5	368.1	360.2	351.7	341.7	332.2
50°	386.0	385.0	381.8	377.1	370.7	364.4	355.9	348.0	338.0	328.5	316.8
52.5°	376.0	373.9	371.2	366.0	359.6	352.8	343.8	334.3	324.2	315.3	303.1
55°	365.4	364.4	360.7	356.5	348.5	340.6	332.2	322.1	311.0	300.5	288.9
57.5°	355.4	353.3	350.1	344.3	337.4	329.5	320.5	310.0	297.8	286.7	274.1
60°	345.4	342.2	338.5	333.2	325.8	317.4	307.9	296.8	284.6	272.5	259.3
62.5°	334.3	331.6	327.4	322.1	314.7	305.8	295.7	284.1	272.5	259.8	245.6
65°	323.2	320.5	316.3	311.0	303.6	293.6	283.1	271.4	258.2	246.1	230.8
67.5°	312.1	309.5	304.7	298.9	291.5	282.0	270.9	258.8	245.6	232.4	216.5
70°	301.0	297.8	293.6	287.3	279.9	269.8	258.8	246.1	232.9	218.6	202.8
72.5°	289.9	287.3	282.0	276.2	268.3	258.2	247.1	234.5	220.7	206.0	190.1
75°	278.8	275.7	272.0	265.1	256.6	247.1	235.5	222.9	208.1	193.8	177.4
77.5°	267.7	265.1	260.3	253.5	245.6	235.5	223.9	211.2	196.4	181.7	164.2
80°	256.6	253.5	249.8	243.4	234.5	224.4	212.3	199.6	184.8	169.5	152.1
82.5°	245.6	242.4	238.2	231.8	223.4	213.3	201.7	188.0	173.2	157.4	141.0
85°	234.5	231.8	227.1	220.7	211.8	201.7	190.1	178.0	162.1	146.3	129.9
87.5°	223.4	220.7	216.0	209.6	201.2	191.2	179.5	166.9	151.6	136.8	118.8
90°	212.8	210.7	206.0	199.6	191.2	181.1	170.6	156.8	142.1	127.3	110.4
92.5°	203.3	201.2	197.0	190.6	183.2	172.2	161.6	148.4	133.6	118.3	101.9
95°	194.9	192.2	188.0	182.2	173.2	163.7	153.1	139.9	125.7	110.4	94.5
97.5°	185.4	182.7	178.5	172.2	164.8	154.7	144.2	131.5	117.2	103.0	87.1
100°	175.9	173.2	168.5	163.2	155.8	145.8	135.7	123.0	109.8	96.1	80.8
102.5°	166.3	163.7	159.5	154.2	146.8	137.8	127.8	115.6	102.4	88.7	74.5
105°	157.4	154.7	150.5	145.2	138.4	129.4	118.8	108.3	95.6	82.4	68.7
107.5°	148.4	145.8	142.1	136.8	129.9	121.5	111.4	100.3	88.7	76.0	62.8
110°	139.4	137.3	133.1	128.3	121.5	113.0	104.0	93.5	81.9	70.2	57.6



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-27SL-LW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	131.0	128.9	124.6	119.3	113.5	105.6	96.6	86.6	75.5	64.4	52.3
115°	122.5	119.9	116.2	111.4	105.6	98.2	89.8	80.8	69.7	59.1	48.1
117.5°	114.1	112.0	108.3	103.5	98.2	90.8	82.9	74.5	63.9	53.9	43.8
120°	105.6	104.0	100.3	96.1	90.8	84.0	76.6	68.1	58.6	49.1	39.6
122.5°	97.7	96.1	92.4	88.7	83.4	77.1	70.2	62.3	53.9	44.9	36.4
125°	90.3	88.2	85.0	81.3	76.6	70.8	63.9	56.5	48.6	40.7	32.7
127.5°	82.4	80.8	78.7	74.5	69.7	64.4	58.1	51.8	44.4	37.0	29.6
130°	76.0	73.9	71.3	68.1	63.9	58.6	52.8	46.5	40.1	33.3	25.9
132.5°	68.7	66.5	64.4	61.3	57.6	52.8	47.5	41.7	35.9	29.6	23.2
135°	61.8	60.2	58.1	54.9	51.2	47.5	42.2	37.0	31.7	25.9	20.6
137.5°	55.4	53.9	51.8	49.6	45.9	42.2	37.5	32.7	28.0	22.7	18.0
140°	49.1	48.1	45.9	43.8	40.7	37.0	32.7	28.5	24.3	19.5	15.3
142.5°	42.8	41.7	40.1	38.0	35.4	32.2	28.5	24.8	20.6	16.9	13.2
145°	37.0	36.4	34.9	32.7	30.6	27.5	24.3	21.1	17.4	14.3	10.6
147.5°	31.2	30.6	29.6	28.0	25.9	23.2	20.6	17.4	14.8	11.6	8.4
150°	25.9	25.3	24.8	22.7	21.7	19.0	16.9	14.3	12.1	9.0	6.9
152.5°	21.1	21.1	20.1	18.5	17.4	15.3	13.7	11.6	9.5	7.4	5.3
155°	16.9	16.4	15.8	14.8	13.7	12.1	10.6	9.0	7.4	5.3	3.7
157.5°	13.2	12.7	12.1	11.1	10.0	9.5	7.9	6.3	4.8	3.7	2.6
160°	9.5	9.0	8.4	7.9	7.4	6.3	5.3	4.2	3.2	2.1	1.6
162.5°	6.3	5.8	5.8	5.3	4.8	3.7	3.2	2.6	2.1	1.6	1.1
165°	3.2	3.2	2.6	2.6	2.1	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: 4SNLED-LD5-27SL-LW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	500.6	500.6	500.6	500.6	500.6	500.6	500.6
2.5°	498.0	498.0	500.1	499.6	498.0	501.1	504.8
5°	496.4	496.4	498.0	498.0	496.4	499.6	502.7
7.5°	493.8	493.2	494.8	494.8	492.7	495.3	499.0
10°	489.0	488.5	490.1	490.1	487.9	490.6	493.8
12.5°	483.7	482.7	484.3	483.7	481.6	484.3	487.4
15°	476.9	476.3	477.4	476.3	474.2	476.9	480.0
17.5°	470.0	468.4	468.9	468.9	465.2	467.9	470.5
20°	461.0	458.9	459.4	458.9	456.3	457.8	461.0
22.5°	452.0	448.9	448.9	448.3	445.2	447.3	449.9
25°	440.9	437.3	437.3	436.7	433.0	434.6	437.3
27.5°	429.9	426.2	424.6	424.0	420.4	420.4	424.0
30°	418.2	413.0	411.9	410.3	406.6	406.6	409.8
32.5°	407.2	399.8	397.6	395.5	391.8	391.3	395.0
35°	392.4	386.6	382.9	380.7	376.5	375.5	378.6
37.5°	380.2	372.8	367.5	364.9	360.7	359.1	363.3
40°	367.0	359.1	352.2	350.6	344.3	342.2	345.9
42.5°	352.2	343.8	336.9	333.7	329.0	326.9	327.4
45°	337.4	328.5	321.1	316.8	312.1	308.4	310.5
47.5°	322.1	314.2	305.2	298.9	293.1	290.4	291.5
50°	306.8	297.3	288.9	282.0	275.1	272.0	274.1
52.5°	291.5	281.5	272.0	264.6	256.6	253.5	254.0
55°	276.7	266.2	255.1	247.1	239.7	235.0	233.9
57.5°	261.9	250.3	238.7	229.7	220.2	216.0	214.4
60°	246.1	233.9	221.8	211.2	201.2	196.4	194.3
62.5°	231.3	218.1	204.4	193.3	183.2	176.9	175.3
65°	217.0	201.7	188.0	175.3	164.2	157.4	155.3
67.5°	201.7	185.9	171.1	157.4	146.8	137.8	136.8
70°	187.5	170.6	154.2	139.9	128.3	119.3	115.1
72.5°	173.2	155.8	138.9	123.6	108.8	100.3	97.2
75°	159.5	141.5	123.6	107.7	91.4	81.3	78.2
77.5°	146.8	128.3	109.3	91.9	76.6	63.9	59.7
80°	134.7	115.6	95.6	77.6	61.3	47.5	42.8
82.5°	122.0	104.0	83.4	64.4	47.5	33.3	27.5
85°	110.9	92.9	72.3	53.3	36.4	21.1	14.8
87.5°	101.9	82.4	63.9	44.9	27.5	12.1	4.2
90°	92.9	73.9	55.4	37.0	20.6	6.9	0.5
92.5°	85.0	67.1	48.6	31.7	15.8	4.8	0.5
95°	77.6	60.2	42.8	26.4	12.7	3.2	0.5
97.5°	70.8	54.4	38.0	22.7	10.6	2.6	0.5
100°	65.0	49.1	33.8	20.1	9.0	2.1	0.5
102.5°	59.1	44.4	30.1	17.4	7.9	1.6	0.5
105°	54.4	40.1	26.9	15.8	6.9	1.6	0.5
107.5°	49.6	36.4	24.3	13.7	5.8	1.1	0.5
110°	44.9	33.3	21.7	12.1	5.3	1.1	0.5



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-27SL-LW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	41.2	30.1	19.5	11.1	4.2	1.1	0.5
115°	37.5	26.9	17.4	9.5	3.7	0.5	0.5
117.5°	33.8	24.3	15.3	8.4	3.2	0.5	0.5
120°	30.6	21.7	13.7	7.4	2.6	0.5	0.5
122.5°	27.5	19.5	12.1	6.3	2.1	0.5	0.5
125°	24.8	17.4	10.6	5.3	1.6	0.5	0.5
127.5°	22.2	15.3	9.5	4.8	1.6	0.5	0.5
130°	19.5	13.7	7.9	3.7	1.1	0.5	0.5
132.5°	17.4	11.6	6.9	3.2	1.1	0.5	0.5
135°	15.3	10.0	5.8	2.1	1.1	0.5	0.5
137.5°	13.2	8.4	4.8	1.6	0.5	0.5	0.5
140°	11.1	7.4	3.7	1.6	0.5	0.5	0.5
142.5°	9.5	5.8	2.6	1.1	0.5	0.5	0.5
145°	7.4	4.8	2.1	1.1	0.5	0.5	0.5
147.5°	5.8	3.7	1.6	1.1	0.5	0.5	0.5
150°	4.2	2.6	1.6	0.5	0.5	0.5	0.5
152.5°	3.2	2.1	1.1	0.5	0.5	0.5	0.5
155°	2.1	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)