

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-LD5-50SL-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-LD5-50SL-LW-UNV-L930-CD1-U  
Description: 4FT LINEAR SNLED LED FIXTURE  
WIDE FROSTED LENS  
Light Source: -  
Ballast/Driver: -

**Summary**

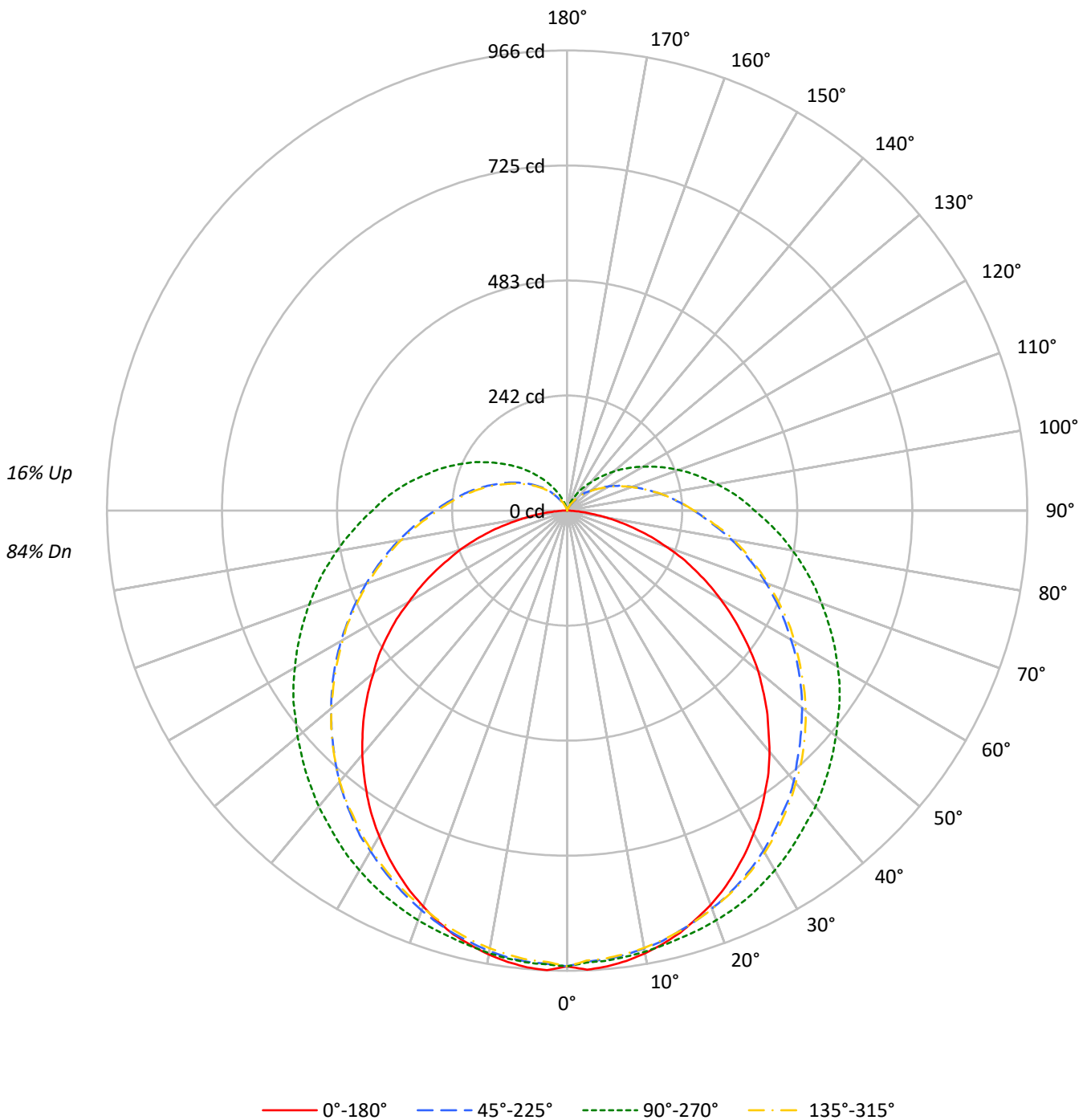
Lumens per Lamp: N/A  
Luminaire Lumens: 4156.0 lumens  
Efficiency: N/A  
Efficacy: 90.3 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.36 / 1.44  
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')  
CIE Type: Semi-Direct

Input Watts (W): 46  
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	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°	7730	7730	7730	7730
5°	7771	7449	7787	7482
10°	7700	7238	7724	7261
15°	7610	7056	7644	7064
20°	7490	6924	7516	6924
25°	7343	6807	7387	6799
30°	7177	6686	7233	6686
35°	6985	6574	7063	6582
40°	6794	6508	6877	6508
45°	6575	6440	6676	6448
50°	6347	6398	6434	6416
55°	6029	6405	6219	6432
60°	5693	6424	5878	6463
65°	5317	6489	5552	6553
70°	4787	6608	5159	6702
75°	4175	6823	4572	6955
80°	3230	7144	3668	7309
85°	1933	7657	2412	7869



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	90.6	2.2
10°-20°	260.4	6.3
20°-30°	399.3	9.6
30°-40°	492.6	11.9
40°-50°	534.4	12.9
50°-60°	526.8	12.7
60°-70°	476.3	11.5
70°-80°	396.8	9.5
80°-90°	307.3	7.4
90°-100°	233.1	5.6
100°-110°	172.5	4.1
110°-120°	120.0	2.9
120°-130°	76.5	1.8
130°-140°	42.9	1.0
140°-150°	19.6	0.5
150°-160°	6.1	0.1
160°-170°	0.8	0.0
170°-180°	0.0	0.0
0°-30°	750.4	18.1
0°-40°	1243.0	29.9
0°-60°	2304.2	55.4
0°-90°	3484.5	83.8
90°-120°	525.5	12.6
90°-150°	664.6	16.0
90°-180°	671.0	16.1
0°-180°	4156.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	957	957	957	957	957	
5°	961	948	963	953	961	91
15°	917	928	921	929	917	258
25°	836	897	840	896	836	385
35°	724	842	732	843	724	453
45°	593	775	602	776	593	457
55°	447	698	461	701	447	400
65°	297	612	310	619	297	294
75°	149	525	164	535	149	158
85°	28	437	35	449	28	34
90°	1	394	2	409	1	2
95°	1	357	1	374	1	1
105°	1	284	1	301	1	1
115°	1	216	1	235	1	1
125°	1	155	1	172	1	1
135°	1	101	1	119	1	1
145°	1	58	1	72	1	1
155°	1	24	1	33	1	0
165°	1	4	1	6	1	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-50SL-LW-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	956.6	956.6	956.6	956.6	956.6	956.6	956.6	956.6	956.6	956.6	956.6
2.5°	964.7	964.7	963.7	961.6	962.6	965.7	963.7	958.6	955.6	947.5	949.5
5°	960.6	960.6	959.6	957.6	958.6	962.6	960.6	956.6	952.6	945.5	948.5
7.5°	953.6	953.6	952.6	950.5	952.6	956.6	954.6	950.5	947.5	940.4	943.5
10°	943.5	944.5	943.5	940.4	944.5	948.5	947.5	942.5	939.4	933.4	936.4
12.5°	931.4	932.4	931.4	930.4	932.4	938.4	936.4	932.4	930.4	925.3	928.3
15°	917.2	918.2	916.2	916.2	918.2	924.3	924.3	920.3	918.2	913.2	919.3
17.5°	899.1	900.1	899.1	899.1	901.1	907.1	908.2	906.1	904.1	902.1	908.2
20°	880.9	879.9	879.9	878.9	882.9	892.0	891.0	891.0	889.0	889.0	896.0
22.5°	859.7	859.7	858.7	858.7	863.8	871.8	871.8	873.8	871.8	875.9	881.9
25°	835.5	836.5	835.5	837.5	841.6	850.6	851.6	854.7	855.7	859.7	866.8
27.5°	810.3	811.3	810.3	812.3	819.4	826.4	831.5	835.5	836.5	842.6	851.6
30°	783.0	783.0	784.0	786.1	794.1	805.2	809.3	814.3	814.3	824.4	833.5
32.5°	754.8	754.8	754.8	758.8	767.9	781.0	786.1	792.1	794.1	804.2	814.3
35°	723.5	724.5	724.5	727.5	739.6	752.8	759.8	766.9	770.9	783.0	793.1
37.5°	694.2	696.3	693.2	697.3	714.4	725.5	733.6	740.7	747.7	763.9	771.9
40°	660.9	663.0	661.9	670.0	684.1	698.3	707.4	714.4	724.5	740.7	749.7
42.5°	625.6	627.6	629.7	638.7	653.9	668.0	679.1	688.2	700.3	714.4	729.6
45°	593.3	593.3	596.4	607.5	623.6	638.7	651.9	661.9	676.1	691.2	706.3
47.5°	557.0	558.0	562.0	575.2	592.3	610.5	622.6	635.7	650.8	667.0	684.1
50°	523.7	523.7	529.8	543.9	560.0	580.2	593.3	608.5	624.6	643.8	660.9
52.5°	485.4	487.4	496.5	509.6	530.8	548.9	564.1	580.2	599.4	619.6	638.7
55°	447.0	451.0	458.1	476.3	498.5	515.6	533.8	554.0	572.1	594.3	616.5
57.5°	409.7	412.7	423.8	442.0	465.2	486.4	505.5	524.7	546.9	569.1	592.3
60°	371.3	375.4	388.5	406.7	431.9	454.1	476.3	496.5	519.7	542.9	567.1
62.5°	335.0	338.0	353.2	374.4	399.6	423.8	446.0	470.2	495.4	517.6	541.9
65°	296.7	301.7	318.9	338.0	367.3	391.5	416.7	443.0	469.2	493.4	516.6
67.5°	261.3	264.4	282.5	304.7	334.0	361.2	387.5	415.7	443.0	468.2	491.4
70°	220.0	230.1	248.2	271.4	302.7	331.0	359.2	388.5	417.8	444.0	466.2
72.5°	185.7	193.7	213.9	239.1	269.4	302.7	332.0	363.3	392.5	419.8	443.0
75°	149.3	157.4	180.6	208.9	240.2	275.5	305.7	338.0	368.3	395.6	419.8
77.5°	114.0	124.1	149.3	178.6	212.9	249.2	280.5	312.8	344.1	373.4	397.6
80°	81.7	92.8	120.1	153.4	186.7	223.0	257.3	289.6	320.9	350.1	375.4
82.5°	52.5	64.6	93.8	127.1	162.5	198.8	234.1	266.4	297.7	326.9	353.2
85°	28.3	41.4	71.6	104.9	140.3	176.6	211.9	246.2	276.5	303.7	332.0
87.5°	8.1	24.2	53.5	86.8	123.1	156.4	190.7	225.0	255.3	284.6	309.8
90°	1.0	14.1	40.4	71.6	107.0	139.3	173.6	205.8	236.1	265.4	290.6
92.5°	1.0	9.1	31.3	59.5	91.8	125.1	159.4	190.7	219.0	248.2	273.5
95°	1.0	7.1	25.2	50.5	80.7	112.0	144.3	174.6	203.8	231.1	256.3
97.5°	1.0	5.0	20.2	43.4	70.6	99.9	131.2	161.4	189.7	215.9	239.1
100°	1.0	4.0	16.1	37.3	61.6	89.8	118.1	147.3	174.6	199.8	224.0
102.5°	1.0	3.0	14.1	31.3	54.5	79.7	107.0	134.2	160.4	184.7	208.9
105°	1.0	3.0	12.1	27.2	48.4	71.6	96.9	123.1	147.3	170.5	192.7
107.5°	1.0	2.0	10.1	23.2	42.4	64.6	87.8	113.0	135.2	157.4	178.6
110°	1.0	2.0	8.1	21.2	37.3	57.5	79.7	102.9	124.1	145.3	165.5



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-50SL-LW-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1.0	2.0	7.1	18.2	32.3	51.5	71.6	92.8	113.0	134.2	152.4
115°	1.0	2.0	6.1	16.1	30.3	44.4	64.6	83.8	103.9	123.1	140.3
117.5°	1.0	2.0	5.0	13.1	26.2	40.4	56.5	75.7	93.8	112.0	128.2
120°	1.0	2.0	4.0	12.1	23.2	36.3	50.5	67.6	84.8	101.9	119.1
122.5°	1.0	1.0	4.0	10.1	20.2	32.3	46.4	59.5	75.7	91.8	107.0
125°	1.0	1.0	4.0	9.1	17.2	29.3	41.4	53.5	67.6	81.7	94.9
127.5°	1.0	1.0	3.0	7.1	15.1	25.2	36.3	49.4	59.5	72.7	85.8
130°	1.0	1.0	3.0	6.1	13.1	21.2	32.3	43.4	55.5	64.6	75.7
132.5°	1.0	1.0	3.0	5.0	10.1	17.2	27.2	37.3	48.4	58.5	67.6
135°	1.0	1.0	2.0	4.0	8.1	14.1	22.2	31.3	42.4	52.5	61.6
137.5°	1.0	1.0	2.0	4.0	6.1	12.1	17.2	25.2	35.3	44.4	53.5
140°	1.0	1.0	2.0	3.0	5.0	9.1	14.1	20.2	28.3	36.3	46.4
142.5°	1.0	1.0	1.0	3.0	4.0	7.1	11.1	16.1	22.2	29.3	37.3
145°	1.0	1.0	1.0	3.0	4.0	5.0	9.1	13.1	17.2	22.2	29.3
147.5°	1.0	1.0	1.0	2.0	3.0	4.0	7.1	10.1	13.1	17.2	21.2
150°	1.0	1.0	1.0	2.0	3.0	4.0	5.0	7.1	10.1	14.1	17.2
152.5°	1.0	1.0	1.0	2.0	2.0	3.0	4.0	5.0	7.1	10.1	12.1
155°	1.0	1.0	1.0	1.0	2.0	3.0	4.0	4.0	5.0	7.1	9.1
157.5°	1.0	1.0	1.0	1.0	2.0	2.0	3.0	3.0	4.0	4.0	6.1
160°	1.0	1.0	1.0	1.0	1.0	2.0	2.0	3.0	3.0	3.0	3.0
162.5°	1.0	1.0	1.0	1.0	1.0	1.0	2.0	2.0	2.0	3.0	3.0
165°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	2.0	2.0
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°	956.6	956.6	956.6	956.6	956.6	956.6	956.6	956.6	956.6	956.6	956.6
2.5°	949.5	950.5	953.6	953.6	951.5	951.5	950.5	949.5	950.5	952.6	952.6
5°	947.5	948.5	951.5	952.6	950.5	949.5	949.5	948.5	949.5	951.5	951.5
7.5°	943.5	944.5	947.5	948.5	946.5	946.5	945.5	944.5	946.5	947.5	947.5
10°	937.4	938.4	942.5	943.5	942.5	941.5	941.5	940.4	941.5	943.5	943.5
12.5°	929.3	931.4	936.4	936.4	936.4	935.4	935.4	934.4	935.4	937.4	936.4
15°	920.3	924.3	928.3	930.4	930.4	930.4	929.3	928.3	930.4	931.4	930.4
17.5°	910.2	915.2	921.3	923.3	923.3	924.3	923.3	922.3	924.3	924.3	923.3
20°	900.1	905.1	911.2	913.2	915.2	916.2	916.2	915.2	916.2	917.2	916.2
22.5°	887.0	893.0	900.1	903.1	905.1	907.1	907.1	907.1	908.2	909.2	907.1
25°	872.8	879.9	888.0	891.0	895.0	896.0	897.1	897.1	898.1	899.1	896.0
27.5°	857.7	865.8	873.8	878.9	881.9	883.9	883.9	884.9	886.0	887.0	883.9
30°	839.5	851.6	858.7	862.7	866.8	869.8	870.8	871.8	872.8	873.8	870.8
32.5°	823.4	833.5	842.6	847.6	852.7	856.7	857.7	857.7	859.7	859.7	856.7
35°	804.2	816.3	825.4	830.5	836.5	839.5	841.6	841.6	843.6	843.6	840.5
37.5°	785.0	797.2	807.2	813.3	820.4	824.4	825.4	825.4	827.4	827.4	823.4
40°	764.9	778.0	789.1	796.1	802.2	807.2	808.3	811.3	811.3	810.3	806.2
42.5°	744.7	756.8	768.9	777.0	785.0	790.1	792.1	793.1	793.1	792.1	789.1
45°	722.5	736.6	747.7	757.8	765.9	770.9	773.9	775.0	775.0	772.9	769.9
47.5°	701.3	715.4	726.5	737.6	745.7	751.7	754.8	755.8	754.8	753.8	750.7
50°	679.1	695.2	706.3	717.4	725.5	730.6	735.6	736.6	735.6	734.6	728.5
52.5°	655.9	673.0	685.2	696.3	705.3	711.4	715.4	716.4	716.4	714.4	710.4
55°	632.7	647.8	663.0	675.1	685.2	691.2	696.3	698.3	696.3	694.2	689.2
57.5°	611.5	625.6	640.8	653.9	664.0	672.0	676.1	678.1	676.1	673.0	668.0
60°	586.3	601.4	618.6	630.7	641.8	649.8	651.9	655.9	653.9	650.8	645.8
62.5°	562.0	580.2	595.3	610.5	619.6	628.6	632.7	634.7	632.7	629.7	624.6
65°	536.8	557.0	572.1	587.3	597.4	606.4	611.5	612.5	610.5	607.5	602.4
67.5°	513.6	532.8	548.9	565.1	574.2	583.2	588.3	590.3	588.3	584.2	579.2
70°	490.4	509.6	528.7	540.9	552.0	562.0	565.1	568.1	566.1	562.0	556.0
72.5°	467.2	487.4	506.5	518.7	530.8	539.8	543.9	546.9	544.9	540.9	533.8
75°	443.0	464.2	483.3	496.5	508.6	517.6	521.7	524.7	522.7	518.7	510.6
77.5°	420.8	442.0	460.1	474.3	486.4	494.4	501.5	502.5	500.5	496.5	488.4
80°	397.6	418.8	437.9	452.1	464.2	472.2	477.3	480.3	478.3	474.3	466.2
82.5°	377.4	396.6	415.7	429.9	442.0	452.1	456.1	459.1	458.1	452.1	446.0
85°	355.2	377.4	392.5	407.7	419.8	429.9	432.9	436.9	435.9	430.9	422.8
87.5°	333.0	355.2	373.4	388.5	399.6	407.7	412.7	414.7	413.7	408.7	399.6
90°	314.8	335.0	353.2	369.3	378.4	387.5	392.5	393.5	393.5	387.5	380.4
92.5°	297.7	316.8	335.0	350.1	361.2	369.3	373.4	375.4	374.4	369.3	361.2
95°	278.5	299.7	316.8	332.0	343.1	351.2	355.2	357.2	356.2	351.2	343.1
97.5°	262.4	281.5	298.7	312.8	323.9	332.0	336.0	338.0	338.0	333.0	324.9
100°	246.2	265.4	281.5	295.7	305.7	313.8	317.9	318.9	317.9	313.8	305.7
102.5°	230.1	248.2	264.4	277.5	288.6	295.7	299.7	300.7	300.7	295.7	287.6
105°	213.9	232.1	247.2	261.3	270.4	277.5	280.5	283.5	282.5	278.5	270.4
107.5°	198.8	216.9	231.1	244.2	253.3	260.3	263.4	266.4	265.4	261.3	253.3
110°	184.7	201.8	214.9	228.0	236.1	243.2	248.2	249.2	247.2	243.2	236.1





TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-50SL-LW-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	171.5	186.7	199.8	211.9	221.0	226.0	230.1	232.1	230.1	226.0	221.0
115°	157.4	172.5	185.7	196.8	204.8	210.9	213.9	215.9	213.9	209.9	204.8
117.5°	144.3	158.4	171.5	182.6	189.7	194.7	197.8	199.8	197.8	194.7	189.7
120°	133.2	145.3	157.4	167.5	175.6	179.6	182.6	184.7	183.6	179.6	174.6
122.5°	120.1	133.2	144.3	154.4	161.4	165.5	167.5	169.5	168.5	165.5	160.4
125°	109.0	120.1	131.2	140.3	147.3	151.4	153.4	155.4	154.4	151.4	145.3
127.5°	96.9	109.0	118.1	127.1	132.2	138.2	139.3	141.3	140.3	137.2	132.2
130°	87.8	96.9	106.0	114.0	120.1	124.1	126.1	127.1	125.1	123.1	118.1
132.5°	76.7	86.8	94.9	101.9	106.0	110.0	112.0	113.0	113.0	110.0	106.0
135°	68.6	75.7	82.7	89.8	93.8	97.9	99.9	100.9	99.9	97.9	93.8
137.5°	61.6	67.6	72.7	78.7	83.8	85.8	87.8	87.8	86.8	85.8	82.7
140°	53.5	60.5	65.6	69.6	73.7	74.7	76.7	76.7	75.7	74.7	72.7
142.5°	45.4	51.5	56.5	61.6	64.6	66.6	67.6	68.6	67.6	66.6	63.6
145°	36.3	43.4	48.4	51.5	55.5	56.5	57.5	58.5	57.5	56.5	53.5
147.5°	28.3	34.3	39.4	43.4	46.4	47.4	48.4	49.4	48.4	46.4	45.4
150°	20.2	25.2	31.3	35.3	37.3	39.4	39.4	39.4	40.4	38.3	36.3
152.5°	16.1	18.2	22.2	26.2	29.3	30.3	31.3	31.3	30.3	30.3	28.3
155°	11.1	13.1	16.1	19.2	22.2	23.2	24.2	24.2	23.2	23.2	22.2
157.5°	7.1	9.1	11.1	13.1	16.1	17.2	18.2	18.2	18.2	17.2	16.1
160°	4.0	5.0	6.1	8.1	10.1	11.1	12.1	12.1	12.1	12.1	11.1
162.5°	3.0	3.0	3.0	4.0	5.0	6.1	7.1	7.1	7.1	7.1	6.1
165°	2.0	2.0	2.0	2.0	2.0	3.0	4.0	4.0	4.0	4.0	4.0
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-LD5-50SL-LW-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	956.6	956.6	956.6	956.6	956.6	956.6	956.6	956.6	956.6	956.6	956.6
2.5°	951.5	951.5	952.6	950.5	944.5	945.5	945.5	949.5	951.5	952.6	957.6
5°	949.5	949.5	951.5	948.5	943.5	943.5	943.5	947.5	948.5	950.5	954.6
7.5°	946.5	946.5	947.5	944.5	938.4	938.4	937.4	941.5	943.5	944.5	948.5
10°	941.5	941.5	942.5	939.4	932.4	932.4	931.4	934.4	935.4	937.4	940.4
12.5°	934.4	934.4	934.4	931.4	924.3	923.3	922.3	925.3	925.3	926.3	929.3
15°	928.3	926.3	926.3	923.3	916.2	914.2	912.2	913.2	915.2	914.2	916.2
17.5°	921.3	919.3	917.2	914.2	905.1	902.1	900.1	901.1	900.1	899.1	901.1
20°	913.2	910.2	909.2	904.1	895.0	890.0	886.0	883.9	884.9	881.9	882.9
22.5°	904.1	900.1	898.1	892.0	882.9	876.9	871.8	867.8	866.8	862.7	863.8
25°	893.0	888.0	884.9	879.9	869.8	862.7	856.7	850.6	847.6	842.6	841.6
27.5°	879.9	874.9	870.8	865.8	855.7	846.6	839.5	831.5	827.4	821.4	818.3
30°	866.8	860.7	854.7	850.6	839.5	829.4	818.3	811.3	805.2	798.2	793.1
32.5°	850.6	844.6	838.5	832.5	822.4	810.3	801.2	790.1	783.0	775.0	768.9
35°	834.5	826.4	820.4	812.3	803.2	789.1	778.0	766.9	757.8	748.7	741.7
37.5°	816.3	810.3	801.2	794.1	783.0	768.9	756.8	742.7	734.6	722.5	713.4
40°	799.2	792.1	783.0	773.9	762.8	746.7	733.6	717.4	708.4	694.2	685.2
42.5°	782.0	771.9	762.8	752.8	740.7	725.5	709.4	693.2	681.1	668.0	654.9
45°	762.8	751.7	740.7	729.6	717.4	702.3	685.2	668.0	652.9	640.8	624.6
47.5°	742.7	731.6	718.5	706.3	693.2	678.1	659.9	641.8	625.6	611.5	594.3
50°	722.5	711.4	697.3	684.1	669.0	653.9	634.7	613.5	596.4	578.2	563.1
52.5°	701.3	690.2	677.1	659.9	643.8	628.6	608.5	586.3	567.1	552.0	532.8
55°	680.1	669.0	653.9	636.7	620.6	601.4	582.2	560.0	538.8	520.7	501.5
57.5°	657.9	647.8	630.7	616.5	596.4	576.2	556.0	534.8	511.6	490.4	468.2
60°	635.7	624.6	608.5	591.3	571.1	550.9	529.8	506.5	482.3	459.1	438.9
62.5°	615.5	601.4	586.3	568.1	546.9	527.7	503.5	478.3	454.1	429.9	405.6
65°	592.3	577.2	563.1	544.9	522.7	500.5	476.3	451.0	424.8	398.6	374.4
67.5°	569.1	554.0	538.8	520.7	497.5	474.3	449.0	423.8	396.6	366.3	339.0
70°	545.9	533.8	514.6	495.4	474.3	449.0	423.8	396.6	366.3	339.0	309.8
72.5°	522.7	510.6	491.4	471.2	451.0	424.8	397.6	370.3	342.1	310.8	279.5
75°	500.5	485.4	468.2	449.0	427.8	400.6	373.4	345.1	311.8	282.5	250.2
77.5°	479.3	465.2	448.0	426.8	403.6	377.4	349.1	319.9	286.6	255.3	220.0
80°	456.1	442.0	424.8	403.6	380.4	355.2	324.9	294.6	262.4	228.0	191.7
82.5°	433.9	420.8	401.6	382.4	357.2	332.0	301.7	271.4	237.1	203.8	168.5
85°	410.7	397.6	379.4	359.2	335.0	307.8	279.5	249.2	214.9	180.6	145.3
87.5°	390.5	375.4	357.2	337.0	312.8	286.6	259.3	227.0	193.7	160.4	124.1
90°	369.3	355.2	337.0	316.8	292.6	266.4	238.1	207.9	175.6	141.3	107.0
92.5°	351.2	336.0	318.9	298.7	274.5	249.2	221.0	190.7	159.4	126.1	92.8
95°	333.0	317.9	301.7	281.5	257.3	232.1	203.8	174.6	144.3	112.0	80.7
97.5°	312.8	299.7	283.5	264.4	240.2	215.9	188.7	160.4	131.2	99.9	70.6
100°	296.7	281.5	266.4	246.2	224.0	200.8	173.6	146.3	118.1	88.8	61.6
102.5°	278.5	264.4	249.2	230.1	207.9	184.7	159.4	133.2	107.0	79.7	53.5
105°	261.3	248.2	232.1	213.9	192.7	170.5	146.3	122.1	96.9	70.6	47.4
107.5°	244.2	231.1	215.9	198.8	178.6	156.4	134.2	110.0	86.8	63.6	42.4
110°	227.0	214.9	200.8	183.6	164.5	144.3	123.1	100.9	77.7	56.5	37.3



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-50SL-LW-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	211.9	199.8	185.7	169.5	151.4	132.2	112.0	90.8	69.6	50.5	32.3
115°	196.8	185.7	171.5	157.4	139.3	121.1	101.9	81.7	62.6	45.4	28.3
117.5°	181.6	170.5	157.4	143.3	127.1	110.0	91.8	72.7	56.5	40.4	25.2
120°	166.5	156.4	144.3	131.2	117.1	99.9	81.7	65.6	50.5	35.3	22.2
122.5°	152.4	143.3	132.2	120.1	104.9	88.8	73.7	59.5	45.4	31.3	18.2
125°	139.3	130.2	120.1	108.0	93.8	79.7	66.6	53.5	39.4	27.2	15.1
127.5°	126.1	117.1	107.0	95.9	84.8	71.6	59.5	47.4	35.3	24.2	13.1
130°	113.0	104.9	95.9	86.8	75.7	63.6	53.5	41.4	30.3	19.2	11.1
132.5°	99.9	93.8	85.8	76.7	66.6	57.5	46.4	36.3	26.2	17.2	10.1
135°	88.8	82.7	75.7	67.6	59.5	50.5	40.4	31.3	22.2	14.1	8.1
137.5°	78.7	73.7	66.6	59.5	52.5	43.4	35.3	26.2	18.2	12.1	6.1
140°	69.6	64.6	58.5	51.5	45.4	37.3	29.3	21.2	16.1	10.1	5.0
142.5°	60.5	55.5	50.5	44.4	38.3	31.3	24.2	18.2	13.1	8.1	5.0
145°	51.5	47.4	42.4	37.3	31.3	25.2	20.2	15.1	10.1	6.1	4.0
147.5°	42.4	39.4	34.3	30.3	25.2	20.2	16.1	12.1	8.1	5.0	3.0
150°	34.3	31.3	27.2	23.2	20.2	16.1	13.1	9.1	6.1	5.0	3.0
152.5°	26.2	24.2	21.2	19.2	16.1	12.1	9.1	7.1	5.0	4.0	2.0
155°	21.2	19.2	17.2	14.1	12.1	9.1	7.1	5.0	4.0	3.0	2.0
157.5°	15.1	14.1	12.1	10.1	8.1	6.1	5.0	5.0	3.0	2.0	1.0
160°	10.1	9.1	8.1	6.1	5.0	5.0	4.0	3.0	2.0	2.0	1.0
162.5°	6.1	5.0	5.0	5.0	4.0	4.0	3.0	2.0	2.0	1.0	1.0
165°	4.0	4.0	4.0	3.0	3.0	3.0	2.0	1.0	1.0	1.0	1.0
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-LD5-50SL-LW-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	956.6	956.6	956.6	956.6	956.6	956.6	956.6	956.6	956.6	956.6	956.6
2.5°	957.6	954.6	958.6	965.7	966.7	965.7	963.7	966.7	970.7	969.7	962.6
5°	955.6	951.5	955.6	962.6	962.6	961.6	960.6	963.7	967.7	966.7	960.6
7.5°	949.5	945.5	949.5	955.6	956.6	954.6	954.6	957.6	961.6	960.6	955.6
10°	941.5	937.4	939.4	946.5	948.5	946.5	946.5	949.5	954.6	953.6	947.5
12.5°	929.3	926.3	928.3	934.4	936.4	935.4	934.4	938.4	943.5	943.5	937.4
15°	916.2	912.2	914.2	921.3	922.3	920.3	921.3	924.3	930.4	930.4	925.3
17.5°	901.1	896.0	899.1	904.1	905.1	905.1	905.1	909.2	916.2	915.2	911.2
20°	883.9	876.9	878.9	883.9	886.0	886.0	886.0	893.0	898.1	898.1	894.0
22.5°	863.8	858.7	858.7	863.8	866.8	865.8	865.8	871.8	878.9	877.9	877.9
25°	840.5	836.5	834.5	840.5	841.6	842.6	844.6	850.6	858.7	858.7	859.7
27.5°	816.3	812.3	811.3	816.3	817.3	818.3	820.4	827.4	835.5	836.5	838.5
30°	793.1	787.1	785.0	789.1	791.1	792.1	792.1	803.2	810.3	813.3	817.3
32.5°	765.9	759.8	754.8	761.8	762.8	764.9	765.9	777.0	785.0	790.1	796.1
35°	738.6	728.5	726.5	731.6	733.6	734.6	736.6	748.7	759.8	763.9	771.9
37.5°	708.4	701.3	695.2	700.3	702.3	703.3	709.4	720.5	731.6	737.6	745.7
40°	680.1	671.0	666.0	669.0	671.0	672.0	679.1	691.2	704.3	711.4	721.5
42.5°	648.8	636.7	632.7	635.7	636.7	639.7	645.8	661.9	675.1	685.2	693.2
45°	617.5	608.5	599.4	602.4	603.4	605.4	614.5	631.7	645.8	657.9	667.0
47.5°	585.3	574.2	565.1	567.1	571.1	572.1	582.2	602.4	615.5	628.6	640.8
50°	553.0	537.8	530.8	530.8	532.8	537.8	550.9	571.1	585.3	600.4	613.5
52.5°	519.7	505.5	497.5	498.5	500.5	506.5	518.7	538.8	555.0	571.1	587.3
55°	486.4	471.2	463.2	461.1	463.2	471.2	485.4	506.5	522.7	541.9	559.0
57.5°	453.1	434.9	427.8	424.8	426.8	436.9	451.0	473.2	493.4	511.6	531.8
60°	416.7	402.6	390.5	383.4	388.5	401.6	416.7	440.0	461.1	481.3	503.5
62.5°	385.5	367.3	354.2	347.1	352.2	363.3	384.5	406.7	429.9	453.1	475.3
65°	350.1	332.0	316.8	309.8	314.8	327.9	349.1	373.4	398.6	421.8	448.0
67.5°	315.8	296.7	278.5	271.4	277.5	291.6	314.8	342.1	369.3	393.5	421.8
70°	282.5	261.3	242.2	237.1	241.2	260.3	282.5	309.8	338.0	366.3	395.6
72.5°	252.3	226.0	205.8	199.8	204.8	226.0	251.3	279.5	309.8	340.1	371.3
75°	216.9	192.7	170.5	163.5	169.5	188.7	220.0	250.2	282.5	314.8	344.1
77.5°	188.7	160.4	137.2	126.1	136.2	160.4	190.7	223.0	256.3	289.6	322.9
80°	159.4	130.2	104.9	92.8	103.9	130.2	160.4	195.8	233.1	266.4	296.7
82.5°	133.2	101.9	75.7	62.6	74.7	103.9	137.2	172.5	208.9	242.2	277.5
85°	109.0	76.7	49.4	35.3	52.5	78.7	114.0	150.3	187.7	222.0	256.3
87.5°	88.8	57.5	30.3	15.1	32.3	61.6	94.9	131.2	168.5	202.8	235.1
90°	72.7	41.4	16.1	2.0	19.2	46.4	78.7	114.0	149.3	184.7	216.9
92.5°	59.5	31.3	9.1	1.0	12.1	37.3	67.6	100.9	135.2	169.5	200.8
95°	49.4	24.2	6.1	1.0	9.1	29.3	57.5	89.8	122.1	155.4	186.7
97.5°	42.4	20.2	5.0	1.0	7.1	25.2	49.4	79.7	111.0	142.3	172.5
100°	36.3	16.1	4.0	1.0	6.1	21.2	43.4	70.6	99.9	130.2	159.4
102.5°	31.3	13.1	3.0	1.0	5.0	18.2	38.3	63.6	89.8	119.1	147.3
105°	27.2	11.1	3.0	1.0	4.0	16.1	34.3	56.5	82.7	109.0	136.2
107.5°	23.2	9.1	2.0	1.0	3.0	13.1	30.3	51.5	74.7	99.9	125.1
110°	20.2	8.1	2.0	1.0	3.0	12.1	26.2	46.4	67.6	90.8	115.0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-50SL-LW-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	17.2	6.1	2.0	1.0	2.0	10.1	23.2	41.4	61.6	82.7	106.0
115°	15.1	5.0	1.0	1.0	2.0	9.1	21.2	37.3	55.5	75.7	96.9
117.5°	12.1	4.0	1.0	1.0	1.0	7.1	18.2	33.3	50.5	69.6	88.8
120°	10.1	4.0	1.0	1.0	1.0	6.1	16.1	29.3	45.4	62.6	80.7
122.5°	9.1	3.0	1.0	1.0	1.0	5.0	14.1	26.2	40.4	56.5	73.7
125°	8.1	3.0	1.0	1.0	1.0	4.0	12.1	23.2	36.3	50.5	66.6
127.5°	6.1	3.0	1.0	1.0	1.0	3.0	11.1	20.2	32.3	45.4	59.5
130°	5.0	2.0	1.0	1.0	1.0	3.0	9.1	18.2	28.3	40.4	53.5
132.5°	4.0	2.0	1.0	1.0	1.0	2.0	7.1	14.1	24.2	35.3	47.4
135°	4.0	2.0	1.0	1.0	1.0	2.0	5.0	12.1	20.2	30.3	40.4
137.5°	4.0	1.0	1.0	1.0	1.0	2.0	4.0	9.1	16.1	24.2	33.3
140°	3.0	1.0	1.0	1.0	1.0	1.0	3.0	7.1	13.1	20.2	28.3
142.5°	3.0	1.0	1.0	1.0	1.0	1.0	3.0	5.0	10.1	16.1	22.2
145°	2.0	1.0	1.0	1.0	1.0	1.0	2.0	4.0	8.1	12.1	18.2
147.5°	2.0	1.0	1.0	1.0	1.0	1.0	2.0	3.0	6.1	10.1	14.1
150°	2.0	1.0	1.0	1.0	1.0	1.0	2.0	3.0	4.0	7.1	11.1
152.5°	1.0	1.0	1.0	1.0	1.0	1.0	2.0	2.0	3.0	5.0	7.1
155°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	3.0	4.0	5.0
157.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	2.0	3.0	4.0
160°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	2.0	3.0
162.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	2.0
165°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
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-LD5-50SL-LW-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	956.6	956.6	956.6	956.6	956.6	956.6	956.6	956.6	956.6	956.6	956.6
2.5°	959.6	952.6	954.6	953.6	955.6	958.6	958.6	957.6	957.6	955.6	953.6
5°	957.6	950.5	953.6	952.6	954.6	957.6	957.6	956.6	956.6	953.6	952.6
7.5°	951.5	946.5	948.5	948.5	950.5	953.6	953.6	952.6	952.6	949.5	948.5
10°	945.5	939.4	942.5	942.5	944.5	948.5	948.5	947.5	947.5	944.5	943.5
12.5°	935.4	929.3	934.4	935.4	937.4	941.5	940.4	940.4	940.4	937.4	936.4
15°	923.3	919.3	924.3	925.3	928.3	933.4	933.4	933.4	933.4	930.4	929.3
17.5°	910.2	907.1	912.2	914.2	918.2	923.3	923.3	924.3	925.3	923.3	922.3
20°	895.0	893.0	898.1	902.1	908.2	913.2	915.2	916.2	918.2	916.2	915.2
22.5°	877.9	877.9	884.9	889.0	896.0	901.1	904.1	907.1	909.2	907.1	906.1
25°	858.7	861.7	868.8	875.9	883.9	889.0	892.0	896.0	898.1	897.1	896.0
27.5°	840.5	844.6	853.7	860.7	867.8	875.9	878.9	883.9	886.0	886.0	884.9
30°	819.4	825.4	835.5	843.6	852.7	860.7	864.8	869.8	872.8	870.8	871.8
32.5°	799.2	809.3	817.3	826.4	836.5	844.6	849.6	855.7	858.7	857.7	858.7
35°	777.0	787.1	798.2	807.2	819.4	827.4	834.5	839.5	843.6	842.6	842.6
37.5°	752.8	765.9	777.0	789.1	800.2	809.3	816.3	822.4	826.4	826.4	826.4
40°	729.6	743.7	754.8	768.9	783.0	791.1	799.2	805.2	809.3	810.3	811.3
42.5°	704.3	719.5	732.6	747.7	761.8	771.9	781.0	788.1	792.1	794.1	793.1
45°	681.1	695.2	710.4	727.5	740.7	750.7	761.8	769.9	773.9	775.0	776.0
47.5°	654.9	671.0	688.2	705.3	718.5	731.6	741.7	749.7	753.8	756.8	756.8
50°	629.7	646.8	666.0	684.1	698.3	711.4	721.5	730.6	735.6	737.6	738.6
52.5°	606.4	622.6	642.8	660.9	675.1	688.2	701.3	711.4	716.4	718.5	718.5
55°	578.2	598.4	620.6	637.7	652.9	668.0	681.1	691.2	696.3	699.3	701.3
57.5°	552.0	573.1	596.4	614.5	632.7	646.8	658.9	672.0	676.1	680.1	681.1
60°	526.7	547.9	570.1	590.3	608.5	623.6	637.7	648.8	655.9	657.9	659.9
62.5°	500.5	522.7	545.9	566.1	585.3	603.4	616.5	626.6	634.7	637.7	639.7
65°	475.3	498.5	521.7	542.9	563.1	581.2	594.3	604.4	612.5	617.5	618.6
67.5°	448.0	473.2	497.5	519.7	539.8	559.0	572.1	582.2	590.3	596.4	597.4
70°	422.8	449.0	473.2	497.5	517.6	536.8	550.9	561.0	570.1	574.2	576.2
72.5°	398.6	425.8	451.0	475.3	495.4	514.6	529.8	539.8	548.9	554.0	555.0
75°	375.4	402.6	429.9	453.1	474.3	493.4	508.6	519.7	527.7	532.8	534.8
77.5°	352.2	380.4	407.7	430.9	453.1	472.2	485.4	498.5	506.5	512.6	512.6
80°	329.0	358.2	386.5	409.7	431.9	449.0	464.2	477.3	485.4	491.4	491.4
82.5°	308.8	337.0	364.3	387.5	409.7	428.9	444.0	456.1	465.2	469.2	470.2
85°	285.6	316.8	342.1	367.3	388.5	406.7	421.8	434.9	443.0	447.0	449.0
87.5°	266.4	296.7	323.9	346.1	367.3	385.5	402.6	413.7	421.8	426.8	428.9
90°	248.2	277.5	304.7	326.9	349.1	366.3	382.4	393.5	402.6	406.7	408.7
92.5°	232.1	261.3	287.6	309.8	331.0	350.1	365.3	376.4	384.5	388.5	391.5
95°	216.9	245.2	270.4	294.6	314.8	332.0	348.1	359.2	368.3	371.3	374.4
97.5°	201.8	229.1	254.3	277.5	298.7	314.8	330.0	341.1	348.1	353.2	356.2
100°	188.7	214.9	239.1	261.3	281.5	296.7	312.8	322.9	330.0	334.0	338.0
102.5°	174.6	200.8	224.0	245.2	266.4	280.5	295.7	305.7	311.8	318.9	318.9
105°	162.5	186.7	209.9	230.1	248.2	265.4	278.5	288.6	295.7	300.7	300.7
107.5°	149.3	173.6	195.8	216.9	234.1	250.2	262.4	271.4	279.5	282.5	285.6
110°	139.3	160.4	182.6	202.8	219.0	234.1	246.2	256.3	263.4	266.4	268.4



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-50SL-LW-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	127.1	149.3	169.5	188.7	204.8	219.0	231.1	239.1	246.2	250.2	251.3
115°	117.1	138.2	156.4	174.6	191.7	203.8	214.9	223.0	230.1	233.1	235.1
117.5°	108.0	127.1	145.3	160.4	176.6	189.7	200.8	207.9	213.9	218.0	220.0
120°	98.9	117.1	133.2	148.3	163.5	175.6	185.7	192.7	199.8	202.8	202.8
122.5°	89.8	107.0	122.1	136.2	150.3	161.4	172.5	178.6	184.7	187.7	187.7
125°	81.7	97.9	112.0	125.1	138.2	148.3	157.4	164.5	170.5	172.5	172.5
127.5°	73.7	88.8	101.9	114.0	125.1	135.2	144.3	151.4	156.4	158.4	158.4
130°	66.6	79.7	91.8	103.9	115.0	123.1	132.2	138.2	141.3	144.3	145.3
132.5°	59.5	71.6	82.7	92.8	103.9	112.0	119.1	125.1	128.2	131.2	132.2
135°	52.5	63.6	73.7	83.8	92.8	100.9	107.0	112.0	116.0	118.1	119.1
137.5°	44.4	56.5	65.6	73.7	83.8	89.8	96.9	99.9	103.9	106.0	106.0
140°	37.3	46.4	56.5	64.6	72.7	78.7	84.8	89.8	92.8	93.8	93.8
142.5°	30.3	38.3	46.4	56.5	63.6	68.6	74.7	78.7	80.7	81.7	82.7
145°	24.2	30.3	37.3	46.4	54.5	60.5	63.6	67.6	69.6	70.6	71.6
147.5°	18.2	24.2	30.3	36.3	44.4	50.5	53.5	57.5	59.5	60.5	60.5
150°	14.1	18.2	22.2	28.3	34.3	41.4	45.4	48.4	49.4	50.5	50.5
152.5°	10.1	14.1	17.2	21.2	25.2	31.3	37.3	39.4	40.4	41.4	41.4
155°	7.1	10.1	12.1	15.1	18.2	23.2	28.3	31.3	32.3	33.3	33.3
157.5°	5.0	7.1	8.1	11.1	13.1	15.1	19.2	24.2	25.2	25.2	25.2
160°	3.0	4.0	5.0	7.1	8.1	10.1	12.1	15.1	18.2	18.2	18.2
162.5°	2.0	3.0	3.0	4.0	4.0	6.1	7.1	8.1	11.1	12.1	12.1
165°	1.0	2.0	2.0	2.0	2.0	2.0	3.0	3.0	5.0	6.1	6.1
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-LD5-50SL-LW-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	956.6	956.6	956.6	956.6	956.6	956.6	956.6	956.6	956.6	956.6	956.6
2.5°	954.6	956.6	955.6	955.6	955.6	957.6	955.6	946.5	948.5	950.5	952.6
5°	953.6	954.6	954.6	953.6	953.6	955.6	953.6	944.5	946.5	948.5	949.5
7.5°	949.5	950.5	950.5	950.5	949.5	951.5	948.5	940.4	940.4	942.5	943.5
10°	944.5	946.5	945.5	944.5	944.5	944.5	942.5	933.4	933.4	934.4	935.4
12.5°	938.4	938.4	938.4	937.4	936.4	936.4	934.4	925.3	924.3	926.3	925.3
15°	930.4	932.4	930.4	929.3	927.3	927.3	924.3	915.2	913.2	914.2	913.2
17.5°	923.3	924.3	922.3	920.3	918.2	917.2	914.2	904.1	901.1	902.1	900.1
20°	916.2	916.2	914.2	912.2	909.2	906.1	902.1	892.0	887.0	887.0	882.9
22.5°	907.1	907.1	905.1	902.1	899.1	895.0	891.0	880.9	872.8	870.8	867.8
25°	897.1	896.0	895.0	892.0	886.0	881.9	877.9	866.8	857.7	853.7	848.6
27.5°	884.9	884.9	881.9	878.9	872.8	867.8	862.7	852.7	840.5	835.5	828.4
30°	871.8	871.8	868.8	864.8	858.7	852.7	846.6	834.5	822.4	815.3	807.2
32.5°	858.7	857.7	854.7	850.6	844.6	835.5	830.5	818.3	804.2	796.1	785.0
35°	842.6	841.6	838.5	833.5	825.4	818.3	810.3	799.2	783.0	772.9	760.8
37.5°	826.4	825.4	823.4	816.3	808.3	800.2	790.1	779.0	763.9	750.7	738.6
40°	810.3	809.3	805.2	800.2	790.1	780.0	769.9	758.8	742.7	727.5	714.4
42.5°	793.1	792.1	787.1	781.0	769.9	759.8	747.7	735.6	719.5	701.3	688.2
45°	776.0	773.9	768.9	761.8	749.7	738.6	726.5	712.4	696.3	679.1	661.9
47.5°	757.8	754.8	749.7	739.6	729.6	717.4	703.3	688.2	672.0	652.9	634.7
50°	737.6	735.6	729.6	720.5	708.4	696.3	680.1	665.0	645.8	627.6	605.4
52.5°	718.5	714.4	709.4	699.3	687.2	674.1	656.9	638.7	619.6	602.4	579.2
55°	698.3	696.3	689.2	681.1	666.0	650.8	634.7	615.5	594.3	574.2	552.0
57.5°	679.1	675.1	669.0	657.9	644.8	629.7	612.5	592.3	569.1	547.9	523.7
60°	659.9	653.9	646.8	636.7	622.6	606.4	588.3	567.1	543.9	520.7	495.4
62.5°	638.7	633.7	625.6	615.5	601.4	584.2	565.1	542.9	520.7	496.5	469.2
65°	617.5	612.5	604.4	594.3	580.2	561.0	540.9	518.7	493.4	470.2	441.0
67.5°	596.4	591.3	582.2	571.1	557.0	538.8	517.6	494.4	469.2	444.0	413.7
70°	575.2	569.1	561.0	548.9	534.8	515.6	494.4	470.2	445.0	417.8	387.5
72.5°	554.0	548.9	538.8	527.7	512.6	493.4	472.2	448.0	421.8	393.5	363.3
75°	532.8	526.7	519.7	506.5	490.4	472.2	450.0	425.8	397.6	370.3	339.0
77.5°	511.6	506.5	497.5	484.3	469.2	450.0	427.8	403.6	375.4	347.1	313.8
80°	490.4	484.3	477.3	465.2	448.0	428.9	405.6	381.4	353.2	323.9	290.6
82.5°	469.2	463.2	455.1	443.0	426.8	407.7	385.5	359.2	331.0	300.7	269.4
85°	448.0	443.0	433.9	421.8	404.6	385.5	363.3	340.1	309.8	279.5	248.2
87.5°	426.8	421.8	412.7	400.6	384.5	365.3	343.1	318.9	289.6	261.3	227.0
90°	406.7	402.6	393.5	381.4	365.3	346.1	325.9	299.7	271.4	243.2	210.9
92.5°	388.5	384.5	376.4	364.3	350.1	329.0	308.8	283.5	255.3	226.0	194.7
95°	372.3	367.3	359.2	348.1	331.0	312.8	292.6	267.4	240.2	210.9	180.6
97.5°	354.2	349.1	341.1	329.0	314.8	295.7	275.5	251.3	224.0	196.8	166.5
100°	336.0	331.0	321.9	311.8	297.7	278.5	259.3	235.1	209.9	183.6	154.4
102.5°	317.9	312.8	304.7	294.6	280.5	263.4	244.2	221.0	195.8	169.5	142.3
105°	300.7	295.7	287.6	277.5	264.4	247.2	227.0	206.9	182.6	157.4	131.2
107.5°	283.5	278.5	271.4	261.3	248.2	232.1	212.9	191.7	169.5	145.3	120.1
110°	266.4	262.4	254.3	245.2	232.1	215.9	198.8	178.6	156.4	134.2	110.0





TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-50SL-LW-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	250.2	246.2	238.1	228.0	216.9	201.8	184.7	165.5	144.3	123.1	99.9
115°	234.1	229.1	222.0	212.9	201.8	187.7	171.5	154.4	133.2	113.0	91.8
117.5°	218.0	213.9	206.9	197.8	187.7	173.6	158.4	142.3	122.1	102.9	83.8
120°	201.8	198.8	191.7	183.6	173.6	160.4	146.3	130.2	112.0	93.8	75.7
122.5°	186.7	183.6	176.6	169.5	159.4	147.3	134.2	119.1	102.9	85.8	69.6
125°	172.5	168.5	162.5	155.4	146.3	135.2	122.1	108.0	92.8	77.7	62.6
127.5°	157.4	154.4	150.3	142.3	133.2	123.1	111.0	98.9	84.8	70.6	56.5
130°	145.3	141.3	136.2	130.2	122.1	112.0	100.9	88.8	76.7	63.6	49.4
132.5°	131.2	127.1	123.1	117.1	110.0	100.9	90.8	79.7	68.6	56.5	44.4
135°	118.1	115.0	111.0	104.9	97.9	90.8	80.7	70.6	60.5	49.4	39.4
137.5°	106.0	102.9	98.9	94.9	87.8	80.7	71.6	62.6	53.5	43.4	34.3
140°	93.8	91.8	87.8	83.8	77.7	70.6	62.6	54.5	46.4	37.3	29.3
142.5°	81.7	79.7	76.7	72.7	67.6	61.6	54.5	47.4	39.4	32.3	25.2
145°	70.6	69.6	66.6	62.6	58.5	52.5	46.4	40.4	33.3	27.2	20.2
147.5°	59.5	58.5	56.5	53.5	49.4	44.4	39.4	33.3	28.3	22.2	16.1
150°	49.4	48.4	47.4	43.4	41.4	36.3	32.3	27.2	23.2	17.2	13.1
152.5°	40.4	40.4	38.3	35.3	33.3	29.3	26.2	22.2	18.2	14.1	10.1
155°	32.3	31.3	30.3	28.3	26.2	23.2	20.2	17.2	14.1	10.1	7.1
157.5°	25.2	24.2	23.2	21.2	19.2	18.2	15.1	12.1	9.1	7.1	5.0
160°	18.2	17.2	16.1	15.1	14.1	12.1	10.1	8.1	6.1	4.0	3.0
162.5°	12.1	11.1	11.1	10.1	9.1	7.1	6.1	5.0	4.0	3.0	2.0
165°	6.1	6.1	5.0	5.0	4.0	3.0	3.0	3.0	2.0	2.0	1.0
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-LD5-50SL-LW-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	956.6	956.6	956.6	956.6	956.6	956.6	956.6
2.5°	951.5	951.5	955.6	954.6	951.5	957.6	964.7
5°	948.5	948.5	951.5	951.5	948.5	954.6	960.6
7.5°	943.5	942.5	945.5	945.5	941.5	946.5	953.6
10°	934.4	933.4	936.4	936.4	932.4	937.4	943.5
12.5°	924.3	922.3	925.3	924.3	920.3	925.3	931.4
15°	911.2	910.2	912.2	910.2	906.1	911.2	917.2
17.5°	898.1	895.0	896.0	896.0	889.0	894.0	899.1
20°	880.9	876.9	877.9	876.9	871.8	874.9	880.9
22.5°	863.8	857.7	857.7	856.7	850.6	854.7	859.7
25°	842.6	835.5	835.5	834.5	827.4	830.5	835.5
27.5°	821.4	814.3	811.3	810.3	803.2	803.2	810.3
30°	799.2	789.1	787.1	784.0	777.0	777.0	783.0
32.5°	778.0	763.9	759.8	755.8	748.7	747.7	754.8
35°	749.7	738.6	731.6	727.5	719.5	717.4	723.5
37.5°	726.5	712.4	702.3	697.3	689.2	686.2	694.2
40°	701.3	686.2	673.0	670.0	657.9	653.9	660.9
42.5°	673.0	656.9	643.8	637.7	628.6	624.6	625.6
45°	644.8	627.6	613.5	605.4	596.4	589.3	593.3
47.5°	615.5	600.4	583.2	571.1	560.0	555.0	557.0
50°	586.3	568.1	552.0	538.8	525.7	519.7	523.7
52.5°	557.0	537.8	519.7	505.5	490.4	484.3	485.4
55°	528.7	508.6	487.4	472.2	458.1	449.0	447.0
57.5°	500.5	478.3	456.1	438.9	420.8	412.7	409.7
60°	470.2	447.0	423.8	403.6	384.5	375.4	371.3
62.5°	442.0	416.7	390.5	369.3	350.1	338.0	335.0
65°	414.7	385.5	359.2	335.0	313.8	300.7	296.7
67.5°	385.5	355.2	326.9	300.7	280.5	263.4	261.3
70°	358.2	325.9	294.6	267.4	245.2	228.0	220.0
72.5°	331.0	297.7	265.4	236.1	207.9	191.7	185.7
75°	304.7	270.4	236.1	205.8	174.6	155.4	149.3
77.5°	280.5	245.2	208.9	175.6	146.3	122.1	114.0
80°	257.3	221.0	182.6	148.3	117.1	90.8	81.7
82.5°	233.1	198.8	159.4	123.1	90.8	63.6	52.5
85°	211.9	177.6	138.2	101.9	69.6	40.4	28.3
87.5°	194.7	157.4	122.1	85.8	52.5	23.2	8.1
90°	177.6	141.3	106.0	70.6	39.4	13.1	1.0
92.5°	162.5	128.2	92.8	60.5	30.3	9.1	1.0
95°	148.3	115.0	81.7	50.5	24.2	6.1	1.0
97.5°	135.2	103.9	72.7	43.4	20.2	5.0	1.0
100°	124.1	93.8	64.6	38.3	17.2	4.0	1.0
102.5°	113.0	84.8	57.5	33.3	15.1	3.0	1.0
105°	103.9	76.7	51.5	30.3	13.1	3.0	1.0
107.5°	94.9	69.6	46.4	26.2	11.1	2.0	1.0
110°	85.8	63.6	41.4	23.2	10.1	2.0	1.0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-50SL-LW-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	78.7	57.5	37.3	21.2	8.1	2.0	1.0
115°	71.6	51.5	33.3	18.2	7.1	1.0	1.0
117.5°	64.6	46.4	29.3	16.1	6.1	1.0	1.0
120°	58.5	41.4	26.2	14.1	5.0	1.0	1.0
122.5°	52.5	37.3	23.2	12.1	4.0	1.0	1.0
125°	47.4	33.3	20.2	10.1	3.0	1.0	1.0
127.5°	42.4	29.3	18.2	9.1	3.0	1.0	1.0
130°	37.3	26.2	15.1	7.1	2.0	1.0	1.0
132.5°	33.3	22.2	13.1	6.1	2.0	1.0	1.0
135°	29.3	19.2	11.1	4.0	2.0	1.0	1.0
137.5°	25.2	16.1	9.1	3.0	1.0	1.0	1.0
140°	21.2	14.1	7.1	3.0	1.0	1.0	1.0
142.5°	18.2	11.1	5.0	2.0	1.0	1.0	1.0
145°	14.1	9.1	4.0	2.0	1.0	1.0	1.0
147.5°	11.1	7.1	3.0	2.0	1.0	1.0	1.0
150°	8.1	5.0	3.0	1.0	1.0	1.0	1.0
152.5°	6.1	4.0	2.0	1.0	1.0	1.0	1.0
155°	4.0	3.0	2.0	1.0	1.0	1.0	1.0
157.5°	3.0	2.0	1.0	1.0	1.0	1.0	1.0
160°	2.0	1.0	1.0	1.0	1.0	1.0	1.0
162.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0
165°	1.0	1.0	1.0	1.0	1.0	1.0	1.0
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)