

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-LD5-18SL-RW-UNV-L950-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P#  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33525)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 4SNLED-LD5-18SL-RW-UNV-L950-CD1-U  
Description: 4FT LINEAR SNLED LED FIXTURE  
WHITE REFLECTOR  
Light Source: -  
Ballast/Driver: -

**Summary**

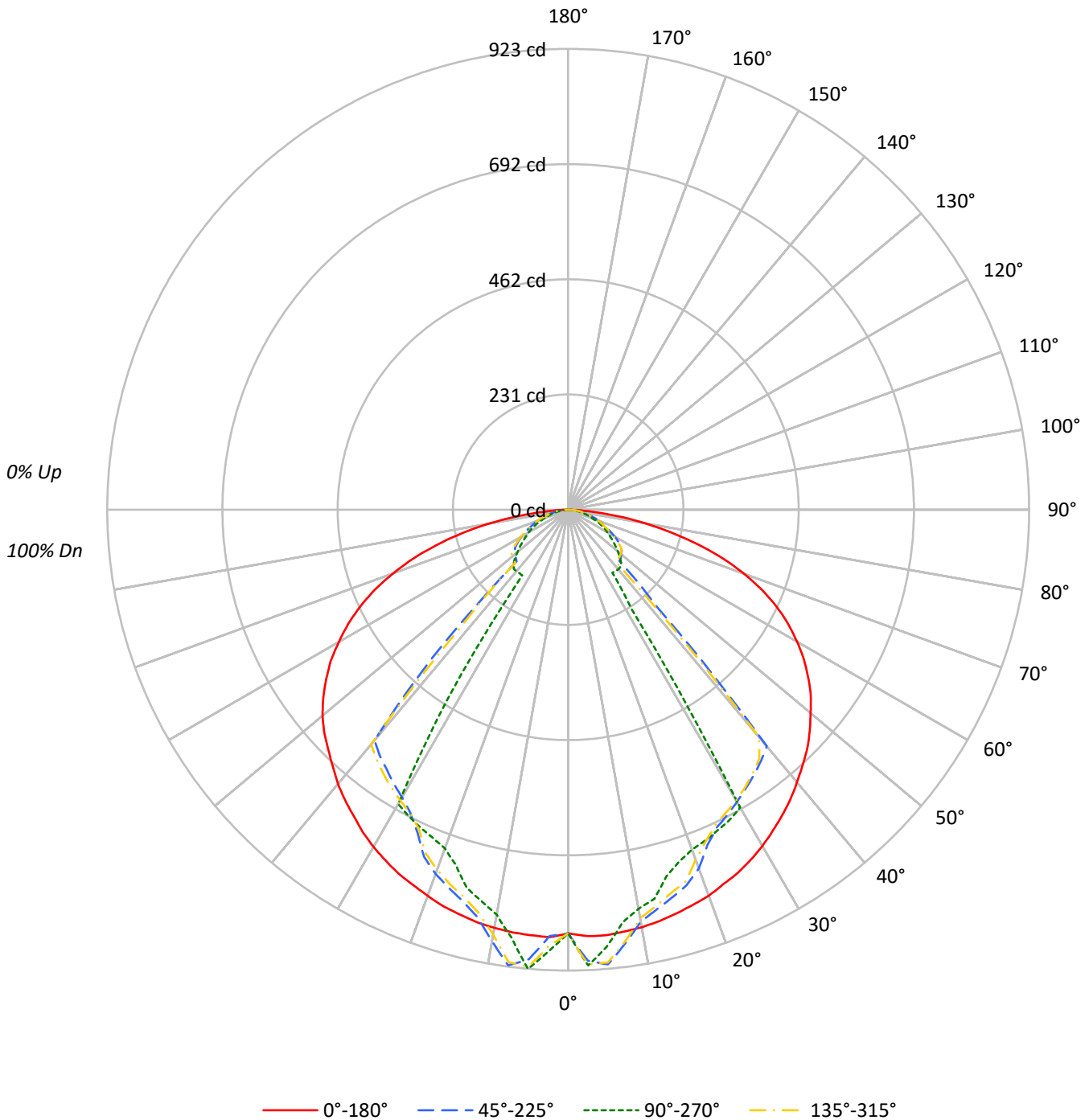
Lumens per Lamp: N/A  
Luminaire Lumens: 1699.0 lumens  
Efficiency: N/A  
Efficacy: 130.7 lumens/watt  
Spacing Criteria (0/90/45): 1.36 / 1.16 / 1.2  
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')  
CIE Type: Direct

Input Watts (W): 13  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P#  
CATALOG NUMBER: 4SNLED-LD5-18SL-RW-UNV-L950-CD1-U

### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20					20					20					20					20	
RC	80					70					50					30					10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	110	106	102	99	108	104	101	98	100	97	94	96	94	92	92	91	89	87				87
2	102	94	88	83	99	93	87	82	89	85	81	86	82	79	83	80	77	75				75
3	94	84	77	72	91	83	76	71	80	74	70	77	73	69	75	71	67	65				65
4	87	76	68	62	85	75	67	62	72	66	61	70	65	60	68	63	59	57				57
5	81	69	61	55	79	68	60	55	66	59	54	64	58	53	62	57	53	51				51
6	75	63	55	49	73	62	54	49	60	53	48	59	53	48	57	52	47	46				46
7	70	58	50	44	68	57	49	44	55	48	43	54	48	43	53	47	43	41				41
8	66	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39	37				37
9	62	49	41	36	60	48	41	36	47	41	36	46	40	36	45	40	36	34				34
10	58	46	38	33	57	45	38	33	44	38	33	43	37	33	42	37	33	31				31

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
0°	6856	6856	6856	6856
5°	6923	6908	6920	7250
10°	6930	6246	6940	6341
15°	6946	5779	6962	5962
20°	6996	5481	6996	5460
25°	7056	5376	7067	5325
30°	7128	5281	7146	5219
35°	7211	1203	7226	1255
40°	7326	1251	7370	1292
45°	7502	1244	7528	1289
50°	7677	1125	7781	1155
55°	7914	999	7976	1013
60°	8114	887	8132	899
65°	8258	774	8236	762
70°	8140	625	8114	601
75°	7555	480	7611	460
80°	6131	341	6380	312
85°	3320	205	3505	156



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	83.5	4.9
10°-20°	229.5	13.5
20°-30°	340.0	20.0
30°-40°	342.5	20.2
40°-50°	267.6	15.7
50°-60°	206.7	12.2
60°-70°	138.8	8.2
70°-80°	70.8	4.2
80°-90°	19.7	1.2
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	653.0	38.4
0°-40°	995.5	58.6
0°-60°	1469.8	86.5
0°-90°	1699.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1699.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	848	848	848	848	848	
5°	856	880	855	923	856	81
15°	837	760	839	784	837	237
25°	803	708	804	702	803	370
35°	747	154	748	161	747	468
45°	677	150	679	155	677	522
55°	587	109	591	110	587	524
65°	461	73	460	72	461	453
75°	270	37	272	35	270	283
85°	49	12	51	9	49	67
90°	0	0	0	0	0	



TEST NUMBER: P#

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**CANDELA DISTRIBUTION (FULL):**

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	25°
0°	848.4	848.4	848.4	848.4	848.4	848.4	848.4	848.4	848.4	848.4	848.4
2.5°	855.0	858.2	860.5	862.0	862.8	862.8	863.2	863.6	868.7	871.0	872.5
5°	855.8	858.9	863.6	869.8	875.3	879.9	883.8	889.3	894.7	900.5	902.5
7.5°	852.3	856.2	865.5	876.8	887.3	894.7	899.8	903.3	906.0	906.4	908.3
10°	849.2	856.2	869.0	883.8	897.0	906.0	906.0	904.0	906.8	896.3	885.8
12.5°	843.8	851.5	869.0	888.5	900.9	904.4	902.9	895.1	879.2	866.3	860.5
15°	837.2	847.7	869.4	891.2	901.7	902.9	888.1	868.3	856.2	848.4	838.7
17.5°	829.8	843.8	869.8	891.6	895.5	890.0	862.0	849.6	837.2	818.9	805.7
20°	822.8	836.4	866.7	886.2	888.5	864.0	842.2	829.0	808.0	792.1	786.2
22.5°	811.9	827.8	864.0	878.8	869.8	841.4	820.4	799.4	780.4	775.7	768.7
25°	802.9	819.7	857.8	869.8	846.1	820.8	796.3	771.8	762.9	756.3	750.1
27.5°	790.9	811.5	849.6	853.5	820.8	798.7	762.9	752.0	743.8	736.5	733.7
30°	777.7	802.9	838.3	830.9	799.8	767.2	740.7	730.6	724.8	717.0	713.9
32.5°	762.5	790.1	825.9	804.9	777.3	736.5	719.3	711.6	703.8	698.0	678.5
35°	747.0	778.8	811.1	780.0	750.1	713.1	698.0	691.0	683.6	662.2	642.0
37.5°	731.0	766.4	793.2	753.2	713.9	689.0	676.2	668.4	651.7	624.5	614.4
40°	712.7	751.2	770.3	725.6	682.4	664.5	652.5	644.7	607.0	594.9	591.8
42.5°	694.5	736.5	742.3	698.7	656.4	638.5	628.4	602.7	577.0	570.8	572.0
45°	677.0	720.5	711.6	660.6	629.1	614.4	597.2	561.9	548.3	551.4	552.1
47.5°	656.0	701.5	679.3	622.5	601.1	586.4	548.3	526.9	524.9	529.2	531.5
50°	633.4	680.1	645.1	587.9	570.8	553.3	510.2	499.3	501.6	505.9	508.6
52.5°	612.4	656.0	609.7	555.6	540.9	500.8	471.7	473.6	477.5	482.5	484.1
55°	586.8	626.8	572.0	523.0	509.0	456.5	443.3	447.9	451.8	456.1	459.2
57.5°	559.9	593.4	527.3	486.4	463.9	417.2	418.4	421.5	424.2	429.3	177.3
60°	529.2	555.3	478.3	452.6	407.9	386.1	387.3	392.7	395.4	220.9	122.1
62.5°	497.3	510.9	433.9	414.1	356.6	355.0	360.4	362.8	246.9	116.7	114.3
65°	460.8	458.0	390.4	358.9	321.6	323.1	329.0	317.3	109.3	109.3	108.5
67.5°	420.3	404.0	348.0	297.1	287.7	291.2	297.5	103.8	101.1	101.9	99.2
70°	374.1	351.1	304.1	251.6	254.7	258.2	100.3	94.1	92.9	91.0	85.5
72.5°	325.1	293.6	248.9	218.5	220.5	138.4	87.9	84.8	80.9	77.0	71.2
75°	270.2	229.4	182.8	182.8	185.5	78.9	76.6	71.5	67.3	62.2	58.7
77.5°	211.9	176.5	141.9	147.4	71.9	66.1	61.8	56.4	52.9	49.8	47.8
80°	155.1	123.3	106.9	95.7	56.0	50.2	45.9	42.8	41.2	39.3	36.9
82.5°	101.9	74.3	74.3	45.1	39.3	34.6	33.4	31.1	29.6	28.4	27.2
85°	48.6	43.2	32.7	27.6	24.5	22.2	21.4	20.2	20.2	19.8	19.4
87.5°	17.9	19.4	14.4	14.0	13.2	12.8	13.2	13.2	13.6	13.2	12.8
90°	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):**

	27.5°	30°	32.5°	35°	37.5°	40°	42.5°	45°	47.5°	50°	52.5°
0°	848.4	848.4	848.4	848.4	848.4	848.4	848.4	848.4	848.4	848.4	848.4
2.5°	876.4	879.5	881.9	885.8	890.8	895.1	899.0	904.4	913.0	915.3	917.3
5°	902.5	903.7	906.4	909.5	910.3	912.2	911.8	914.1	915.3	918.0	912.2
7.5°	904.0	897.8	890.4	883.8	879.2	874.9	872.2	876.4	878.8	880.7	874.9
10°	871.4	864.0	859.7	855.8	851.2	844.5	835.6	837.5	836.8	836.8	834.8
12.5°	850.8	840.3	829.4	819.7	815.4	815.0	815.4	819.7	819.7	819.3	816.9
15°	818.5	808.4	802.9	800.6	800.6	799.4	799.4	804.1	802.9	802.9	801.8
17.5°	797.1	790.1	786.2	783.5	782.3	784.3	786.6	788.6	788.9	787.4	781.2
20°	779.6	773.0	768.3	769.1	768.7	769.9	771.1	764.4	756.3	745.4	740.3
22.5°	761.3	756.3	752.8	752.8	748.1	740.7	729.8	727.5	726.3	721.3	717.0
25°	743.8	738.0	733.0	717.4	707.7	708.8	706.9	703.0	702.6	702.2	703.8
27.5°	726.3	711.2	691.7	689.4	685.5	685.1	687.5	689.4	689.4	691.0	692.9
30°	690.2	672.7	669.2	664.9	666.5	671.9	673.1	675.8	676.6	679.3	680.8
32.5°	657.1	649.4	646.2	648.2	653.2	657.9	660.6	661.8	663.7	666.1	668.0
35°	630.3	628.0	630.7	635.0	640.0	643.9	646.2	648.6	650.5	652.5	654.0
37.5°	610.5	612.0	615.9	621.4	626.4	629.5	631.5	634.2	636.9	639.2	629.9
40°	591.8	595.7	600.0	605.8	610.1	613.2	615.1	618.6	595.3	269.5	147.8
42.5°	575.5	579.8	582.9	587.5	592.2	594.5	577.4	257.8	145.8	145.0	147.0
45°	555.6	559.1	564.2	567.7	572.0	375.6	143.5	145.0	142.7	144.3	145.0
47.5°	535.4	540.9	543.6	518.7	154.4	142.7	141.1	142.7	141.1	143.1	141.9
50°	512.5	519.1	369.4	139.6	138.4	137.6	139.2	138.4	139.6	141.1	138.0
52.5°	489.2	302.9	135.3	134.5	135.3	134.5	137.3	135.3	135.7	134.1	130.3
55°	165.6	131.0	129.9	129.5	131.8	131.8	131.8	128.7	126.8	122.9	120.1
57.5°	126.8	126.8	126.4	126.8	126.0	125.2	121.7	119.0	116.3	110.8	109.3
60°	120.1	120.1	120.1	120.1	116.7	115.1	109.7	107.3	102.7	99.9	98.4
62.5°	114.7	113.9	110.4	109.3	105.4	101.1	98.0	95.7	91.0	89.4	88.3
65°	106.9	104.2	99.9	95.3	93.3	88.7	87.1	83.6	81.3	80.1	79.3
67.5°	94.1	90.2	86.7	83.6	80.1	78.5	76.6	73.9	72.3	71.5	70.8
70°	80.5	77.8	74.3	72.3	70.0	68.8	66.1	65.3	64.2	63.0	61.8
72.5°	67.3	65.7	64.2	61.4	60.7	59.9	57.2	55.6	54.0	52.5	51.7
75°	56.4	55.2	54.4	52.1	50.9	48.6	46.7	45.5	44.3	43.2	42.4
77.5°	46.3	45.5	43.2	41.6	40.8	38.9	38.1	38.5	37.7	36.2	35.4
80°	36.2	35.4	33.4	33.4	32.7	31.9	31.1	30.3	29.6	28.4	27.6
82.5°	27.6	26.8	26.1	25.3	24.5	24.1	23.7	22.9	22.2	21.4	21.0
85°	19.4	19.1	18.7	18.3	17.9	17.5	17.1	16.3	15.6	15.2	14.8
87.5°	13.2	12.8	12.4	12.1	11.7	11.3	10.9	10.5	9.7	9.3	8.9
90°	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°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
0°	848.4	848.4	848.4	848.4	848.4	848.4	848.4	848.4	848.4	848.4	848.4
2.5°	917.3	919.2	917.3	913.0	910.3	909.1	911.4	911.4	913.0	914.9	915.3
5°	902.9	898.2	892.8	887.3	884.6	883.0	878.8	879.5	880.7	881.5	882.3
7.5°	867.1	860.9	853.5	846.5	843.8	841.4	836.4	836.4	836.4	836.8	839.1
10°	830.6	827.8	824.7	820.1	816.6	815.4	811.1	812.3	811.5	812.7	815.4
12.5°	813.4	810.3	807.6	802.9	799.1	797.5	795.6	796.7	796.3	798.3	800.6
15°	797.9	796.3	793.2	789.7	786.2	783.1	776.1	773.8	772.2	770.3	773.0
17.5°	772.2	761.3	754.0	748.5	744.6	741.9	740.0	740.0	741.1	742.3	744.6
20°	737.2	734.1	730.6	724.8	720.9	719.3	718.2	718.2	720.1	721.7	726.0
22.5°	713.1	712.7	711.6	708.8	706.9	706.9	707.3	708.1	710.8	713.1	717.4
25°	701.8	703.4	702.6	701.1	699.9	700.3	699.5	700.3	703.0	705.3	708.8
27.5°	692.9	695.2	694.5	692.1	690.2	691.0	692.1	691.3	693.7	696.4	699.1
30°	680.8	681.2	682.8	680.1	679.3	680.5	680.8	681.6	684.0	685.9	688.2
32.5°	667.2	670.4	670.0	667.2	667.2	668.4	668.8	642.7	594.1	511.7	489.2
35°	654.0	657.5	651.7	549.4	380.3	203.0	156.7	151.3	152.4	153.2	154.8
37.5°	483.7	229.4	146.2	147.4	148.5	149.7	150.9	152.0	153.2	154.4	154.8
40°	145.4	145.0	146.2	147.8	148.9	149.7	151.3	152.4	153.6	154.8	155.1
42.5°	143.9	144.6	145.8	147.4	148.9	150.5	151.6	153.2	154.0	154.8	155.1
45°	143.1	144.6	146.2	147.4	148.5	149.3	150.1	150.5	150.1	150.1	150.9
47.5°	141.9	143.5	143.9	143.5	143.9	143.5	143.5	143.5	142.3	141.9	141.9
50°	137.6	137.6	136.9	135.3	134.9	134.5	133.8	133.4	131.8	131.4	131.4
52.5°	128.7	128.3	127.1	125.2	124.4	123.6	123.3	122.9	121.3	120.5	120.9
55°	118.2	117.4	116.3	113.9	113.5	112.8	112.4	112.0	110.4	111.2	110.0
57.5°	108.5	106.9	105.4	105.0	103.4	103.0	102.7	102.3	101.1	101.5	100.7
60°	96.8	96.4	95.7	94.1	94.1	93.7	93.7	92.9	92.2	91.8	91.8
62.5°	88.3	87.1	86.3	86.3	85.2	85.2	85.2	84.4	83.6	84.0	83.6
65°	78.9	78.5	78.2	77.4	77.4	77.0	77.0	76.2	75.0	75.4	74.7
67.5°	71.2	70.4	69.6	69.2	67.7	66.9	66.5	66.1	64.5	64.9	64.2
70°	61.4	60.3	59.5	58.7	57.5	56.8	56.8	56.0	54.8	55.2	54.4
72.5°	51.3	50.5	49.8	49.4	48.2	47.8	47.4	47.0	45.9	46.3	45.9
75°	42.8	42.8	42.4	42.0	40.8	39.7	38.9	38.5	37.7	38.1	37.3
77.5°	35.4	34.6	33.8	33.8	32.7	31.9	31.1	31.1	31.1	30.7	30.3
80°	27.6	26.8	26.8	26.4	25.7	24.9	24.5	24.5	24.1	24.1	23.7
82.5°	21.0	20.2	19.8	19.8	19.1	18.7	18.3	17.9	17.9	17.9	17.5
85°	14.8	14.0	13.6	13.6	12.8	12.4	12.4	12.1	12.1	11.7	11.7
87.5°	8.9	8.6	8.2	8.2	7.4	7.0	7.0	7.0	6.6	6.6	6.2
90°	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-LD5-18SL-RW-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	82.5°	85°	87.5°	90°	92.5°	95°	97.5°	100°	102.5°	105°	107.5°
0°	848.4	848.4	848.4	848.4	848.4	848.4	848.4	848.4	848.4	848.4	848.4
2.5°	915.3	915.3	912.6	913.4	912.2	913.8	911.8	911.8	914.1	914.1	915.7
5°	882.7	880.7	880.3	879.5	875.7	877.2	875.3	873.3	876.0	876.0	879.5
7.5°	837.9	834.4	836.0	833.7	831.3	827.8	829.0	827.4	829.4	832.1	835.6
10°	815.0	811.9	813.8	811.5	812.7	807.6	808.0	808.4	810.3	811.1	814.2
12.5°	800.2	799.4	798.7	797.9	798.7	795.9	794.4	794.8	795.6	795.9	798.3
15°	769.1	764.1	765.6	760.2	760.6	760.9	757.8	760.9	760.6	765.6	770.3
17.5°	743.8	743.8	741.1	738.8	737.2	736.8	734.5	736.1	734.5	737.6	738.8
20°	726.3	726.0	725.6	724.4	720.5	720.9	722.1	718.6	718.2	717.8	720.1
22.5°	718.2	718.6	717.0	717.0	713.5	714.3	714.7	710.8	711.2	710.0	711.2
25°	709.6	710.4	708.5	708.5	707.7	707.3	705.3	706.1	703.8	701.8	703.8
27.5°	699.5	701.1	699.5	700.3	698.7	698.0	696.8	696.0	693.7	693.3	694.5
30°	690.2	691.0	690.6	688.6	688.2	685.9	687.1	684.7	682.4	682.8	683.6
32.5°	353.8	337.9	260.5	235.2	232.9	241.5	286.2	348.4	451.4	551.4	623.3
35°	154.4	154.4	154.4	154.0	154.0	153.6	153.2	152.8	152.4	152.0	151.6
37.5°	155.1	155.1	155.1	155.1	154.8	154.4	154.4	153.6	153.2	152.8	152.4
40°	155.5	155.9	155.9	155.9	155.5	155.5	155.1	154.4	154.0	153.2	152.4
42.5°	155.1	155.5	155.5	155.1	155.1	154.8	154.8	154.4	154.0	153.6	153.2
45°	150.1	150.5	149.7	149.7	149.3	149.3	149.3	149.3	149.3	149.7	149.7
47.5°	141.1	141.1	140.8	140.4	140.4	140.0	140.4	140.0	140.8	141.1	141.9
50°	130.6	130.6	129.9	129.5	129.5	129.5	129.5	129.9	130.3	131.0	131.8
52.5°	119.8	119.8	119.4	119.0	118.6	118.6	119.8	119.4	119.8	120.1	121.3
55°	109.3	109.7	108.9	108.9	108.5	108.5	108.5	108.9	109.3	109.7	110.8
57.5°	100.3	100.3	99.5	99.5	99.5	99.2	100.3	99.5	99.9	100.3	101.1
60°	91.4	91.0	91.0	90.6	90.6	90.6	91.4	91.0	91.0	91.4	92.2
62.5°	83.2	83.2	82.8	82.8	82.4	82.4	83.2	82.8	82.8	83.2	83.6
65°	73.9	73.9	73.5	73.1	74.3	73.1	74.3	73.5	74.3	74.7	75.4
67.5°	63.4	63.4	63.4	63.0	63.0	63.8	64.2	63.4	63.8	64.5	64.9
70°	54.0	54.0	53.7	53.7	53.7	54.4	54.8	54.0	54.4	54.8	55.6
72.5°	45.9	45.1	45.1	44.7	45.5	45.5	45.9	45.5	45.9	45.9	46.7
75°	37.7	36.9	36.9	36.9	37.7	37.3	37.7	37.3	37.7	37.7	38.1
77.5°	30.3	29.9	29.6	29.6	30.3	30.3	30.3	29.9	30.3	30.7	31.1
80°	23.7	23.3	22.9	22.9	23.7	23.7	23.7	24.1	23.7	24.1	24.5
82.5°	17.5	17.1	16.7	17.5	17.5	17.5	17.5	17.9	17.5	17.9	18.3
85°	11.7	11.3	10.9	11.7	11.7	11.7	11.7	12.1	11.7	12.1	12.4
87.5°	6.2	5.8	5.8	6.2	6.2	6.2	6.6	6.6	6.6	7.0	7.0
90°	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-LD5-18SL-RW-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	110°	112.5°	115°	117.5°	120°	122.5°	125°	127.5°	130°	132.5°	135°
0°	848.4	848.4	848.4	848.4	848.4	848.4	848.4	848.4	848.4	848.4	848.4
2.5°	918.0	919.2	918.8	916.5	914.1	911.4	909.5	909.9	913.8	914.9	911.4
5°	879.5	886.9	886.9	892.0	889.3	886.9	888.5	897.0	901.3	907.9	910.3
7.5°	839.9	843.4	843.0	848.0	847.3	847.3	848.4	859.7	865.2	870.6	872.2
10°	817.7	821.2	820.8	821.2	820.1	817.3	817.3	822.4	827.1	829.8	830.6
12.5°	801.8	803.7	803.3	803.3	802.6	800.2	799.8	804.1	809.2	812.7	813.1
15°	778.1	783.5	784.7	789.7	788.6	785.4	786.2	789.7	792.8	795.9	794.8
17.5°	742.7	745.4	745.8	747.7	747.0	747.0	751.6	764.4	773.0	780.4	781.2
20°	722.5	724.4	723.6	727.9	726.0	725.6	726.7	732.2	736.1	739.6	745.8
22.5°	712.7	714.3	713.1	713.5	710.0	706.9	706.1	710.4	714.7	719.3	719.3
25°	704.6	705.7	705.3	704.6	701.8	697.6	696.8	697.6	699.1	699.5	696.8
27.5°	694.8	695.6	695.6	696.0	692.5	688.6	687.8	687.1	688.6	688.2	684.0
30°	684.7	683.6	684.0	684.3	681.2	677.7	676.2	675.8	677.3	677.0	672.7
32.5°	660.6	669.6	670.4	671.1	668.4	665.3	663.7	662.6	663.4	663.0	659.1
35°	151.3	154.0	188.6	426.9	579.8	642.0	648.6	647.0	647.4	647.4	644.3
37.5°	151.6	151.3	150.9	149.7	148.5	147.8	255.5	544.8	631.1	631.5	628.7
40°	151.6	151.3	150.9	150.1	148.5	147.4	145.4	143.9	147.4	324.3	593.4
42.5°	152.4	151.6	150.9	150.1	148.5	147.0	145.4	143.5	144.6	143.9	141.9
45°	150.1	149.7	149.7	149.3	148.5	147.0	145.0	142.7	141.5	142.7	140.8
47.5°	142.7	143.1	144.3	144.6	144.6	145.0	143.9	142.3	140.4	141.5	139.2
50°	132.6	133.4	133.8	135.7	136.5	138.0	138.4	138.4	138.0	139.6	138.0
52.5°	121.7	122.5	124.4	125.2	126.0	128.3	129.1	130.3	131.0	133.4	134.9
55°	111.2	111.6	112.4	113.9	115.1	117.0	118.2	119.4	121.3	122.5	127.1
57.5°	101.5	101.9	103.4	103.8	104.6	106.2	107.3	108.9	110.4	111.2	116.7
60°	92.2	92.5	93.7	94.1	94.5	96.0	97.2	98.4	99.5	100.3	104.2
62.5°	84.0	84.0	85.2	85.2	85.5	86.7	87.5	88.3	89.4	89.8	91.8
65°	75.8	76.2	77.0	77.0	77.4	78.2	78.5	78.9	80.1	80.1	81.7
67.5°	65.7	66.1	67.3	68.0	68.4	70.0	70.4	70.8	71.5	71.9	72.7
70°	56.0	56.4	57.5	57.9	58.3	59.5	60.3	61.4	62.6	63.8	64.5
72.5°	47.0	47.4	48.6	48.6	49.8	50.2	50.9	51.3	52.5	53.3	54.4
75°	38.5	38.9	40.0	40.0	41.2	41.6	42.0	42.4	43.2	43.9	44.7
77.5°	31.5	31.5	33.1	33.8	34.6	34.6	35.0	35.0	35.0	35.4	36.2
80°	24.9	24.9	26.1	26.8	27.6	27.6	28.0	28.4	28.8	28.8	29.2
82.5°	18.7	18.7	19.8	20.2	21.0	21.0	21.0	21.4	21.8	21.4	22.2
85°	12.8	12.8	13.6	14.0	14.8	14.8	14.8	15.2	15.6	15.2	15.6
87.5°	7.4	7.8	8.2	8.6	8.9	9.3	9.3	9.3	9.7	9.7	10.1
90°	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-LD5-18SL-RW-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	137.5°	140°	142.5°	145°	147.5°	150°	152.5°	155°	157.5°	160°	162.5°
0°	848.4	848.4	848.4	848.4	848.4	848.4	848.4	848.4	848.4	848.4	848.4
2.5°	907.5	902.9	902.5	897.0	895.5	895.9	891.6	890.0	883.0	881.5	874.1
5°	911.0	913.4	912.2	911.8	913.0	912.2	909.1	907.5	906.4	903.3	897.0
7.5°	872.5	874.1	875.3	880.3	884.6	892.0	899.8	904.8	908.7	909.5	904.4
10°	833.3	840.7	845.7	853.5	859.7	864.0	868.7	872.9	884.2	895.5	902.1
12.5°	813.1	815.0	814.6	818.9	823.2	834.4	845.3	851.5	860.1	865.2	877.2
15°	795.9	796.3	797.5	800.6	802.9	806.8	811.9	821.2	838.3	846.1	852.7
17.5°	780.4	780.4	781.2	783.9	787.0	790.5	793.6	797.5	806.1	818.9	835.2
20°	755.5	766.4	767.6	767.2	768.7	775.3	776.1	783.1	787.4	792.4	808.4
22.5°	718.6	725.2	734.5	748.9	754.3	757.4	759.8	762.9	769.5	775.3	781.9
25°	698.3	702.6	705.3	709.6	720.9	739.2	742.7	746.2	750.5	754.7	762.9
27.5°	680.5	680.1	682.0	685.9	689.0	698.7	715.8	729.5	730.2	736.5	743.5
30°	667.6	665.3	662.6	661.8	666.1	671.1	676.2	697.6	712.3	715.5	722.8
32.5°	655.6	651.7	647.8	644.7	642.0	646.2	649.4	658.7	677.7	695.6	699.5
35°	640.8	636.9	632.2	628.7	624.5	624.1	623.7	632.6	638.9	660.2	678.9
37.5°	625.6	621.4	617.5	613.6	609.3	606.2	604.2	606.6	612.4	621.7	652.9
40°	609.7	604.6	600.7	597.6	591.8	589.5	585.6	584.0	584.4	592.6	608.9
42.5°	364.3	580.9	582.9	579.4	574.3	571.2	566.9	565.0	561.1	565.0	574.3
45°	140.4	141.9	425.0	561.5	555.3	551.4	547.5	545.5	541.3	538.1	546.7
47.5°	137.6	139.2	136.1	192.9	530.0	531.1	526.5	524.5	520.3	517.9	515.6
50°	135.7	136.9	134.5	135.3	132.6	485.7	505.1	502.8	498.1	495.4	490.7
52.5°	133.8	133.8	132.2	130.3	129.5	129.9	408.7	480.6	475.2	472.4	466.2
55°	127.5	128.3	129.9	126.8	126.0	125.6	124.4	389.2	449.9	446.8	441.3
57.5°	118.2	119.8	124.0	123.3	123.3	120.1	119.4	119.4	361.2	420.7	415.3
60°	107.3	108.9	113.5	115.1	116.3	115.5	114.7	114.3	112.8	380.7	387.7
62.5°	96.0	97.6	99.2	104.2	105.8	107.7	110.0	108.9	107.3	107.3	358.5
65°	84.0	86.3	87.1	91.8	93.7	97.2	99.2	101.9	101.1	100.7	102.7
67.5°	73.5	76.2	76.6	78.5	82.0	83.6	85.9	91.0	93.3	94.1	94.9
70°	64.5	66.1	67.3	68.0	70.4	70.8	75.0	78.5	82.0	85.9	87.1
72.5°	55.6	56.8	59.1	58.3	59.1	60.7	63.0	65.3	68.8	74.3	77.8
75°	45.5	46.3	47.8	48.6	50.2	51.3	52.9	54.8	57.9	60.7	65.3
77.5°	36.6	36.9	38.1	38.5	40.0	41.2	43.9	45.1	47.0	49.0	51.7
80°	29.6	29.6	29.9	29.9	31.1	32.3	34.2	35.4	37.7	39.3	39.3
82.5°	22.6	22.6	23.7	23.7	24.5	24.5	25.7	25.7	26.8	27.6	28.4
85°	15.9	16.3	17.1	16.7	17.5	17.1	17.9	18.7	19.1	18.7	18.3
87.5°	10.5	10.5	11.3	10.9	11.3	11.3	12.1	12.1	12.4	12.4	12.1
90°	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-LD5-18SL-RW-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	165°	167.5°	170°	172.5°	175°	177.5°	180°	182.5°	185°	187.5°	190°
0°	848.4	848.4	848.4	848.4	848.4	848.4	848.4	848.4	848.4	848.4	848.4
2.5°	871.4	865.5	862.0	857.8	856.6	855.4	857.0	857.0	854.7	852.7	849.2
5°	891.6	885.4	878.8	871.8	865.2	858.2	855.4	855.0	850.8	848.4	847.3
7.5°	902.1	899.0	891.6	881.9	871.8	859.3	853.9	850.8	846.5	845.7	845.7
10°	903.3	899.8	895.9	888.9	877.2	860.9	850.4	844.2	840.3	843.0	848.0
12.5°	892.0	898.6	895.1	890.4	881.1	861.3	846.1	836.8	835.6	842.6	855.8
15°	863.2	882.7	892.4	887.7	880.3	860.5	839.1	828.2	828.2	842.6	859.7
17.5°	841.4	856.6	880.3	884.2	875.7	858.9	832.5	819.7	823.2	844.2	862.4
20°	823.6	832.9	855.8	877.6	869.4	855.4	822.8	809.6	816.6	841.8	866.3
22.5°	795.6	814.2	828.2	860.5	863.2	848.8	813.1	797.1	811.1	841.8	864.4
25°	768.3	790.9	805.7	837.2	853.9	840.7	804.1	783.9	805.3	840.7	862.8
27.5°	749.3	759.8	786.6	809.2	839.9	829.8	792.1	769.5	797.9	834.4	853.9
30°	729.1	736.1	762.5	783.9	821.2	817.3	779.6	753.6	788.6	828.6	830.6
32.5°	706.9	714.7	728.3	759.4	795.2	805.7	765.6	737.6	778.4	819.7	803.3
35°	684.3	690.2	701.1	734.5	764.8	788.2	748.5	719.3	771.4	806.1	777.3
37.5°	661.8	668.0	677.3	705.3	733.0	771.8	733.7	701.1	758.6	781.9	750.1
40°	640.4	643.9	653.6	671.1	706.5	755.1	717.0	682.0	745.4	751.2	713.1
42.5°	601.1	618.6	627.6	641.6	676.6	732.2	697.6	661.8	730.6	720.5	676.2
45°	558.8	596.9	600.7	614.7	650.1	707.7	679.3	642.0	716.6	694.1	641.2
47.5°	524.1	551.8	574.3	586.0	618.6	678.9	662.2	625.2	695.6	660.6	607.0
50°	493.4	508.2	549.0	557.6	580.9	644.3	642.0	605.8	666.5	618.6	573.5
52.5°	463.5	474.0	510.9	529.2	548.3	607.0	617.9	586.8	634.6	576.6	539.7
55°	437.4	440.9	461.2	499.7	516.8	569.3	591.4	564.6	594.1	536.6	507.0
57.5°	410.6	407.5	422.3	471.7	484.1	530.8	563.4	542.0	561.5	495.8	473.2
60°	382.6	378.3	384.6	417.2	449.5	492.7	530.4	517.1	521.8	455.3	435.5
62.5°	353.5	349.2	347.2	367.8	415.7	453.4	496.9	489.5	473.2	418.4	388.8
65°	323.1	318.8	315.7	323.9	378.3	402.4	459.6	457.7	419.9	379.5	327.4
67.5°	98.4	290.1	283.5	283.1	318.8	356.2	419.2	416.1	366.3	337.9	281.9
70°	88.7	235.2	250.0	246.5	262.1	309.1	372.9	370.6	314.2	271.0	249.2
72.5°	81.3	83.2	220.9	217.0	220.5	262.9	324.7	318.5	266.4	213.9	215.4
75°	69.6	73.1	76.2	183.1	178.5	217.7	272.2	262.5	219.7	176.5	180.0
77.5°	56.8	61.0	63.4	133.4	144.3	155.1	217.4	204.5	151.3	141.1	67.3
80°	42.4	45.9	49.8	53.3	109.7	108.5	161.4	148.5	105.4	87.9	52.5
82.5°	31.1	32.3	34.6	38.5	43.5	72.7	103.8	91.4	73.1	40.0	36.2
85°	19.4	21.0	22.2	23.3	26.4	43.5	51.3	40.8	30.7	24.5	22.9
87.5°	12.4	12.4	12.1	12.4	12.8	15.6	17.5	16.7	13.2	12.4	12.4
90°	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-LD5-18SL-RW-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	192.5°	195°	197.5°	200°	202.5°	205°	207.5°	210°	212.5°	215°	217.5°
0°	848.4	848.4	848.4	848.4	848.4	848.4	848.4	848.4	848.4	848.4	848.4
2.5°	845.3	839.9	839.9	838.3	839.5	839.5	839.1	839.5	842.2	843.8	846.5
5°	844.9	843.4	846.9	851.2	856.2	862.4	864.0	869.4	874.5	881.1	888.1
7.5°	850.0	855.4	862.0	869.0	879.2	886.5	893.2	899.8	904.4	910.7	914.5
10°	857.4	868.3	879.5	888.5	899.4	905.6	909.9	910.7	904.0	893.5	885.0
12.5°	867.9	880.7	891.2	899.8	904.8	902.5	890.0	877.2	869.8	858.9	843.8
15°	876.8	888.5	899.4	895.9	882.3	869.4	859.7	844.5	829.8	819.7	813.1
17.5°	880.7	892.0	888.1	869.8	857.0	842.2	822.4	810.7	801.0	793.2	789.3
20°	883.0	881.1	860.1	846.9	822.0	808.4	795.6	784.7	777.3	773.4	772.6
22.5°	876.8	853.1	835.2	811.5	793.2	781.9	771.8	762.9	757.8	754.7	752.8
25°	856.2	828.6	802.2	783.5	767.9	758.2	750.5	743.1	736.8	735.3	731.4
27.5°	827.4	804.9	769.9	755.5	741.9	737.2	728.7	721.3	715.8	711.2	698.7
30°	803.7	767.9	742.7	729.5	721.3	715.8	706.1	698.3	689.0	671.9	664.9
32.5°	774.6	739.2	715.1	707.7	697.6	692.9	682.0	664.9	650.5	643.5	643.1
35°	736.8	707.7	690.2	683.6	675.4	667.6	645.1	629.5	622.5	623.3	629.1
37.5°	705.3	679.3	668.0	658.7	649.4	629.5	610.5	603.1	605.0	608.9	611.6
40°	673.5	653.6	640.8	633.4	612.4	593.0	582.9	585.6	589.1	591.8	595.3
42.5°	642.4	628.4	615.5	601.1	572.4	561.9	564.2	567.7	570.8	574.7	578.2
45°	612.8	600.4	585.6	552.9	538.5	541.3	544.8	547.5	552.1	554.9	558.4
47.5°	584.8	571.6	545.5	516.8	515.2	520.6	523.8	527.3	530.8	523.8	288.9
50°	553.3	539.7	500.0	489.2	492.7	497.7	501.6	505.1	449.9	178.9	137.6
52.5°	522.2	487.6	462.3	465.4	468.9	474.8	477.5	354.6	141.1	134.5	134.9
55°	487.6	443.3	435.9	439.8	442.9	448.7	297.5	130.3	129.5	129.1	132.2
57.5°	433.2	406.3	409.4	413.3	416.4	294.0	126.8	126.0	126.4	126.8	127.1
60°	384.6	378.7	382.2	385.7	273.0	122.5	120.1	120.5	122.1	120.9	117.8
62.5°	346.1	350.7	354.2	310.3	116.3	115.1	116.3	115.1	112.4	110.4	106.5
65°	316.5	321.2	323.9	109.3	108.9	110.4	109.3	105.4	101.1	95.7	94.5
67.5°	285.4	290.1	103.8	101.1	102.7	100.7	96.0	91.4	88.3	83.6	81.7
70°	253.1	108.5	94.1	93.7	91.0	87.9	82.8	78.2	74.3	72.3	70.4
72.5°	182.8	85.9	84.8	81.7	77.0	72.7	68.4	65.7	63.8	62.6	61.4
75°	76.2	74.7	71.2	65.7	61.0	59.1	56.0	54.0	53.3	50.9	50.2
77.5°	63.8	60.7	55.6	51.7	49.0	47.8	45.5	43.2	42.0	41.6	40.0
80°	49.0	44.7	42.4	40.4	39.7	36.9	34.2	33.1	32.3	31.9	30.7
82.5°	33.4	31.9	30.3	27.6	27.6	26.4	25.3	24.5	23.7	23.7	22.9
85°	21.8	20.6	20.2	19.1	19.1	18.3	17.9	17.5	17.1	16.7	16.3
87.5°	12.4	12.4	12.8	12.4	12.4	12.1	11.7	11.3	10.9	10.9	10.1
90°	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-LD5-18SL-RW-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	220°	222.5°	225°	227.5°	230°	232.5°	235°	237.5°	240°	242.5°	245°
0°	848.4	848.4	848.4	848.4	848.4	848.4	848.4	848.4	848.4	848.4	848.4
2.5°	850.0	853.9	854.7	867.9	875.3	874.9	872.5	879.5	875.3	872.9	875.3
5°	895.1	899.8	903.7	918.0	923.1	925.4	925.0	928.9	925.8	923.1	923.1
7.5°	917.3	918.8	920.4	916.9	914.5	910.7	904.8	896.3	892.0	887.3	881.5
10°	880.7	875.7	877.6	870.6	864.8	860.5	855.0	848.0	842.2	837.9	831.3
12.5°	836.0	835.6	836.4	837.5	831.7	828.2	823.9	818.9	814.6	809.9	804.5
15°	808.8	809.2	812.3	811.1	809.2	807.2	802.6	801.0	797.1	792.1	788.9
17.5°	789.3	791.3	794.4	792.8	789.7	787.8	784.3	780.8	777.3	773.4	768.7
20°	772.2	774.2	776.1	774.2	768.3	765.6	760.9	750.1	742.3	734.5	727.5
22.5°	753.6	754.7	753.2	747.0	732.2	725.2	719.7	716.6	710.0	705.7	701.5
25°	730.2	723.6	713.5	706.5	700.7	697.6	695.2	694.8	694.1	693.3	691.3
27.5°	692.1	689.8	684.3	681.6	682.0	683.2	683.6	684.7	683.6	682.0	680.5
30°	663.7	664.9	665.3	666.1	668.0	669.2	669.6	671.1	670.4	669.2	668.4
32.5°	645.9	648.6	650.1	652.5	653.6	655.6	655.6	657.9	655.6	655.2	654.4
35°	631.1	633.4	634.2	637.7	638.9	640.8	640.8	642.7	640.8	621.0	490.3
37.5°	616.3	618.6	620.2	623.3	623.7	624.9	576.6	421.9	272.2	210.7	161.0
40°	598.8	601.5	603.1	604.2	424.6	269.5	185.5	150.9	150.9	152.0	153.2
42.5°	580.1	582.1	405.6	236.0	147.0	146.6	147.8	148.9	150.1	151.6	153.2
45°	456.1	230.2	146.2	142.7	143.9	145.4	147.0	148.5	150.5	152.0	152.8
47.5°	149.7	140.4	142.3	140.8	142.7	144.6	146.2	147.8	148.1	148.5	148.1
50°	138.4	138.4	139.6	139.6	141.1	141.9	141.9	141.9	140.4	140.0	138.8
52.5°	133.8	136.9	135.3	136.1	135.3	134.1	133.0	131.8	129.5	128.7	127.1
55°	131.4	132.6	128.7	127.5	126.0	122.9	121.3	119.8	117.8	117.0	115.1
57.5°	126.0	123.3	119.0	117.0	114.3	111.2	109.7	108.5	106.5	105.8	104.6
60°	115.9	110.4	107.7	105.4	102.3	99.5	98.4	97.6	96.0	95.7	94.5
62.5°	103.4	98.8	96.4	93.3	91.0	89.4	88.3	87.9	86.3	86.3	85.5
65°	89.8	87.5	85.5	82.4	81.3	79.7	79.3	78.9	78.2	77.8	77.0
67.5°	78.9	77.4	74.7	73.1	72.3	71.2	70.4	69.6	68.0	67.3	66.1
70°	69.2	68.0	65.3	64.2	62.6	60.7	59.5	58.7	57.5	56.8	55.6
72.5°	59.9	56.4	54.4	53.3	52.1	50.2	49.8	49.0	47.8	47.4	46.3
75°	48.2	45.5	44.3	43.5	42.4	41.2	41.2	41.2	40.0	39.7	39.3
77.5°	38.5	36.9	36.2	35.4	35.0	34.2	33.1	32.7	31.5	31.5	31.1
80°	29.6	28.8	28.0	27.6	27.2	26.4	25.7	25.3	24.1	24.1	23.7
82.5°	21.8	21.4	21.0	20.6	20.2	19.8	18.7	18.3	17.5	17.5	17.1
85°	15.6	15.2	14.4	14.0	14.0	13.6	12.4	12.1	11.3	11.3	11.3
87.5°	9.7	9.3	8.9	8.6	8.2	7.8	7.0	6.6	6.6	5.8	5.4
90°	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-LD5-18SL-RW-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	247.5°	250°	252.5°	255°	257.5°	260°	262.5°	265°	267.5°	270°	272.5°
0°	848.4	848.4	848.4	848.4	848.4	848.4	848.4	848.4	848.4	848.4	848.4
2.5°	870.6	877.2	876.4	881.1	882.3	884.6	885.4	885.8	879.9	884.6	885.0
5°	921.9	923.1	923.9	925.8	927.8	928.1	926.2	923.9	924.6	923.1	919.2
7.5°	880.7	874.9	873.7	872.2	871.4	870.6	867.1	870.2	866.7	865.2	859.7
10°	830.2	824.7	824.3	824.3	825.5	825.1	824.3	822.8	825.9	823.9	822.8
12.5°	803.7	801.8	802.9	802.2	805.3	806.1	805.3	805.3	804.5	802.9	803.7
15°	787.8	786.2	787.4	786.2	788.6	788.9	787.0	788.2	786.2	784.3	783.5
17.5°	766.8	763.3	760.6	756.7	757.1	756.3	754.0	754.0	752.0	747.0	747.3
20°	726.3	722.8	721.3	721.3	723.2	724.0	723.6	724.4	722.5	721.7	718.6
22.5°	701.1	700.7	701.5	703.4	706.5	710.8	711.2	711.2	711.2	710.8	706.9
25°	692.1	692.1	692.9	695.6	698.0	701.1	701.8	702.6	701.8	701.8	698.3
27.5°	682.0	681.2	682.8	685.5	688.2	690.6	692.5	692.9	691.7	691.7	692.9
30°	669.6	669.2	671.1	673.9	676.2	678.5	680.5	682.0	680.5	680.5	679.3
32.5°	656.7	656.7	657.5	641.2	594.5	535.4	536.6	502.4	478.7	448.7	488.4
35°	409.8	298.2	256.2	217.0	189.4	171.5	171.1	165.3	162.5	160.6	160.2
37.5°	154.8	155.5	157.1	157.9	159.0	159.8	160.2	160.2	160.2	160.2	159.8
40°	154.4	155.9	157.1	158.3	159.4	160.2	160.2	160.6	161.0	161.0	161.0
42.5°	154.8	156.3	157.9	159.0	159.8	160.2	160.6	161.0	161.0	161.0	161.0
45°	154.4	155.1	155.1	155.5	155.5	155.5	155.9	155.9	155.5	155.1	155.9
47.5°	148.5	148.5	147.4	147.0	146.6	145.8	146.2	145.8	145.4	145.0	145.8
50°	138.4	136.9	136.1	135.3	134.9	134.1	134.5	134.1	133.8	133.0	134.1
52.5°	126.4	126.0	124.4	123.6	123.3	123.6	122.9	122.5	122.1	121.7	122.1
55°	114.7	113.2	112.8	112.0	111.6	112.0	111.6	111.2	110.8	110.4	110.8
57.5°	104.2	103.0	102.7	101.9	101.9	101.9	101.9	101.5	101.1	100.7	101.1
60°	94.1	93.3	92.9	92.9	92.5	92.5	92.5	92.2	91.8	91.8	92.2
62.5°	85.5	85.5	84.4	84.0	84.0	84.4	84.0	83.6	83.2	82.8	83.6
65°	76.6	75.0	74.7	73.9	73.1	73.5	73.1	72.7	72.3	71.9	72.7
67.5°	65.7	65.3	63.8	63.0	62.6	63.0	62.6	62.2	61.8	61.4	62.2
70°	55.2	55.2	53.7	53.3	52.9	52.9	52.5	52.5	52.1	51.7	52.5
72.5°	45.9	45.9	45.5	44.7	44.3	43.9	43.5	43.2	43.2	43.5	43.5
75°	38.1	37.3	35.8	36.2	35.8	35.4	35.4	35.0	34.6	35.4	35.0
77.5°	29.9	29.6	28.4	28.8	28.4	28.0	28.0	27.6	27.2	27.6	27.6
80°	22.6	22.6	22.2	21.8	21.8	21.4	21.0	21.0	20.6	21.0	21.0
82.5°	16.3	16.3	15.9	15.6	15.2	15.2	14.8	14.8	14.8	14.8	14.8
85°	10.5	10.1	10.1	9.3	9.3	9.3	8.9	8.9	8.9	8.9	8.9
87.5°	5.1	5.1	4.7	4.7	4.3	3.9	3.9	3.5	3.5	3.9	3.9
90°	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-LD5-18SL-RW-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	275°	277.5°	280°	282.5°	285°	287.5°	290°	292.5°	295°	297.5°	300°
0°	848.4	848.4	848.4	848.4	848.4	848.4	848.4	848.4	848.4	848.4	848.4
2.5°	878.0	883.0	878.8	880.7	881.1	887.7	887.3	888.9	886.2	883.0	878.8
5°	922.7	920.4	917.3	924.6	920.8	925.4	927.0	930.1	930.1	929.7	926.2
7.5°	865.5	860.5	864.4	867.1	868.3	865.2	871.4	878.4	884.2	887.7	888.1
10°	820.8	822.4	822.0	823.2	825.9	825.5	829.4	833.3	834.8	837.2	837.9
12.5°	799.8	799.4	800.2	802.9	804.5	804.1	808.0	810.3	811.1	811.5	811.1
15°	783.1	780.4	782.3	782.7	783.9	783.9	788.6	792.1	793.6	794.4	793.6
17.5°	751.6	745.0	751.2	751.2	755.5	754.7	762.1	767.9	771.1	773.4	773.4
20°	720.5	717.4	719.7	719.0	722.1	721.7	726.3	730.2	733.0	734.9	737.2
22.5°	708.1	708.8	705.3	705.7	705.7	705.3	707.7	709.6	710.4	711.6	710.8
25°	699.9	700.7	699.5	697.6	696.8	697.6	698.7	701.1	701.5	700.7	698.0
27.5°	691.7	689.4	691.3	687.8	687.1	688.6	690.2	690.6	691.0	691.0	688.6
30°	679.3	677.3	679.3	677.7	676.2	677.7	678.9	678.9	679.7	680.1	677.3
32.5°	474.8	478.7	541.6	579.8	633.4	660.6	665.7	665.7	666.5	666.5	664.1
35°	161.8	162.1	175.4	190.1	221.6	260.5	311.5	337.9	427.3	534.3	637.7
37.5°	159.8	159.4	159.0	158.6	158.3	157.9	157.1	156.7	159.0	188.6	255.9
40°	160.6	160.2	159.4	159.0	158.6	157.9	157.5	156.7	155.9	155.1	154.4
42.5°	160.6	160.2	159.8	159.4	159.0	158.6	157.9	157.1	156.3	155.1	154.0
45°	155.1	155.1	155.5	155.5	155.9	155.9	155.9	155.5	155.5	155.1	153.6
47.5°	145.0	145.0	146.2	146.2	147.0	147.8	147.8	148.5	149.7	150.5	150.9
50°	133.4	133.4	134.5	134.9	135.7	136.9	138.0	138.4	139.6	141.1	142.7
52.5°	121.7	121.7	122.9	122.9	123.6	124.8	126.0	126.4	127.9	129.5	131.4
55°	110.8	110.8	111.6	112.0	112.4	113.2	114.3	114.3	115.9	117.0	119.0
57.5°	101.1	101.9	101.9	101.9	102.3	103.0	103.8	103.8	105.0	106.2	107.7
60°	91.8	92.5	92.5	92.5	92.9	93.3	94.1	94.1	94.9	95.7	97.2
62.5°	83.2	84.0	84.0	84.4	84.4	84.8	85.5	85.2	85.9	86.3	87.5
65°	72.3	73.1	73.5	73.9	74.3	75.0	76.2	75.8	77.0	77.8	78.9
67.5°	61.8	62.6	62.6	63.0	63.4	64.2	64.9	64.9	66.1	66.9	68.4
70°	52.1	52.9	52.9	53.3	53.7	54.4	55.2	54.8	56.0	56.8	57.9
72.5°	43.2	43.9	43.9	44.3	44.3	45.1	45.9	46.7	46.7	47.4	48.2
75°	35.0	35.4	35.8	35.8	36.2	36.6	37.3	38.1	38.5	38.9	39.7
77.5°	27.6	28.0	28.4	28.4	28.8	29.2	29.6	31.1	31.9	32.3	32.3
80°	21.0	21.4	21.4	21.4	21.8	22.2	22.9	22.9	24.5	24.5	24.9
82.5°	14.8	15.2	15.2	15.2	15.6	16.3	16.7	17.1	17.9	18.3	18.3
85°	8.9	9.3	9.3	9.3	9.7	10.1	10.9	11.3	11.7	11.7	12.1
87.5°	3.5	3.9	4.3	4.3	4.7	5.1	5.4	5.8	6.2	6.2	6.6
90°	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-LD5-18SL-RW-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	302.5°	305°	307.5°	310°	312.5°	315°	317.5°	320°	322.5°	325°	327.5°
0°	848.4	848.4	848.4	848.4	848.4	848.4	848.4	848.4	848.4	848.4	848.4
2.5°	874.1	876.8	874.1	875.7	877.6	874.1	865.9	862.8	861.7	857.0	853.9
5°	922.7	922.7	921.5	924.6	924.3	918.8	910.3	906.4	902.5	897.4	893.5
7.5°	888.1	891.2	893.2	905.2	913.0	913.8	919.2	920.4	921.9	920.4	918.0
10°	838.3	837.2	842.6	853.9	860.5	864.0	874.5	879.5	883.8	892.4	901.3
12.5°	810.3	811.9	814.2	822.4	828.6	827.1	831.3	834.8	839.9	848.4	861.3
15°	791.7	793.2	795.6	801.8	805.7	803.7	806.1	808.4	811.9	816.2	823.9
17.5°	771.4	774.2	776.9	783.5	787.0	786.6	788.6	789.3	790.5	793.2	798.7
20°	740.0	748.5	754.0	762.9	767.9	767.2	770.7	771.8	773.4	776.1	778.4
22.5°	711.2	713.5	716.2	726.0	734.5	745.0	747.3	750.5	754.3	757.1	759.4
25°	694.8	693.3	694.5	701.1	705.7	706.5	710.0	720.1	730.6	735.3	740.7
27.5°	685.1	683.6	683.2	686.3	687.1	685.1	684.3	687.5	695.2	703.0	719.3
30°	674.6	672.7	671.1	673.9	675.0	672.3	667.2	664.5	669.2	671.1	677.7
32.5°	662.2	660.2	659.5	661.0	661.8	659.5	654.0	650.9	650.1	648.6	650.1
35°	648.2	646.2	645.1	645.5	647.0	645.1	640.4	636.5	634.6	630.3	627.2
37.5°	334.0	473.2	614.4	629.1	630.7	630.3	625.6	621.4	619.4	614.4	612.8
40°	152.8	170.7	256.2	334.8	482.9	613.6	609.3	605.0	601.5	600.0	594.1
42.5°	152.4	152.8	153.2	151.3	187.4	319.2	471.3	588.3	586.0	582.1	577.8
45°	152.4	150.5	152.0	149.7	150.5	150.1	187.0	301.7	537.0	561.1	559.1
47.5°	150.9	149.7	151.3	149.3	147.0	148.1	146.6	148.5	231.7	393.1	538.5
50°	143.9	144.6	147.4	147.0	145.0	146.6	143.9	146.2	144.3	158.3	304.8
52.5°	133.4	134.9	137.6	140.0	140.8	142.7	141.9	142.7	141.1	141.5	141.9
55°	120.9	122.9	125.2	128.7	130.3	133.4	135.7	136.9	138.8	138.4	135.3
57.5°	109.3	111.2	113.2	116.7	120.1	121.7	126.0	128.3	133.4	132.2	131.4
60°	98.4	99.9	101.9	102.7	106.9	109.7	113.5	115.9	122.5	124.0	126.4
62.5°	88.7	89.4	91.0	92.2	94.9	97.6	99.5	103.4	106.9	112.0	115.5
65°	79.7	80.5	81.7	82.4	82.8	86.7	87.9	92.2	93.3	98.8	101.9
67.5°	69.6	71.2	72.7	73.5	74.3	76.6	77.4	79.3	82.0	84.4	88.3
70°	59.1	60.3	61.8	63.0	64.5	66.1	68.4	69.6	71.5	73.1	76.2
72.5°	49.4	50.5	51.3	52.5	53.7	54.8	56.8	59.5	61.0	63.8	64.5
75°	40.0	41.2	42.0	42.8	43.9	44.7	45.5	48.2	49.8	52.1	54.4
77.5°	33.1	33.1	33.8	36.2	35.8	35.8	36.6	38.1	39.3	40.8	43.2
80°	25.7	26.1	26.4	28.4	28.8	29.2	28.8	29.9	31.1	31.5	33.1
82.5°	19.1	19.4	19.4	20.6	21.8	21.8	21.8	22.2	23.3	23.7	24.5
85°	12.8	13.2	13.6	14.0	14.8	15.2	15.6	15.6	16.3	16.7	17.1
87.5°	7.0	7.8	8.2	8.6	8.9	9.3	9.7	10.1	10.5	10.9	11.3
90°	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-LD5-18SL-RW-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	330°	332.5°	335°	337.5°	340°	342.5°	345°	347.5°	350°	352.5°	355°
0°	848.4	848.4	848.4	848.4	848.4	848.4	848.4	848.4	848.4	848.4	848.4
2.5°	852.7	850.8	849.6	846.5	845.7	840.7	841.4	840.7	840.7	841.8	845.7
5°	889.3	879.9	877.6	871.0	865.5	856.2	850.4	847.3	842.6	840.7	843.4
7.5°	914.1	907.2	901.3	895.5	887.7	876.8	868.7	859.3	851.5	844.2	842.2
10°	909.9	917.6	917.6	914.1	906.8	895.9	886.2	874.5	860.9	849.2	842.2
12.5°	873.7	887.3	898.2	906.4	913.8	906.4	896.7	887.3	872.2	855.0	842.2
15°	834.1	848.0	861.7	878.8	896.7	904.0	903.7	892.8	879.2	861.3	843.4
17.5°	806.1	815.8	823.2	841.8	863.6	882.7	895.5	896.3	883.0	867.1	843.8
20°	785.1	792.1	798.3	808.8	827.8	851.2	874.9	888.1	885.8	868.3	844.9
22.5°	766.0	771.1	776.1	783.9	799.1	814.2	841.8	869.0	880.7	866.3	843.8
25°	747.0	752.4	756.3	761.7	773.8	786.2	805.7	839.5	865.5	864.8	841.4
27.5°	724.4	731.8	736.5	743.8	752.0	761.3	774.6	806.4	843.8	857.0	835.2
30°	697.2	708.1	715.1	723.2	730.2	738.4	748.9	768.3	814.6	841.8	828.6
32.5°	657.9	677.3	692.9	700.7	708.5	715.5	724.8	741.1	778.8	821.2	821.2
35°	629.9	638.9	652.9	675.4	685.1	692.1	700.7	713.5	737.6	796.7	809.2
37.5°	608.1	611.6	618.6	640.8	659.1	670.4	678.9	687.1	710.8	763.3	793.6
40°	591.8	590.6	589.9	600.4	626.4	644.3	654.0	662.2	680.5	723.2	773.0
42.5°	572.8	571.6	567.7	570.4	583.3	613.2	628.0	636.9	652.1	681.2	750.5
45°	552.9	551.0	549.4	546.7	551.4	568.1	598.4	611.6	620.2	646.2	722.1
47.5°	532.7	530.0	528.0	525.7	523.0	530.8	559.5	583.3	598.0	614.4	687.8
50°	503.9	507.4	505.1	502.4	500.0	498.5	510.5	549.4	567.7	580.9	646.2
52.5°	237.6	461.9	481.4	478.7	475.5	472.8	475.5	505.1	538.1	548.6	596.1
55°	135.3	205.7	428.1	452.6	449.9	446.0	443.7	453.8	503.2	517.1	550.2
57.5°	130.3	130.6	189.0	407.9	423.1	419.6	416.8	419.2	461.2	484.9	510.2
60°	126.0	126.0	126.0	180.4	390.0	391.2	387.7	383.8	402.1	448.7	469.7
62.5°	116.7	119.0	120.1	120.1	178.1	361.2	357.7	356.6	357.3	405.2	429.3
65°	104.6	110.0	112.4	113.9	113.9	187.0	327.0	325.1	322.3	340.6	388.4
67.5°	91.4	96.8	101.9	105.0	105.4	108.9	195.2	292.8	288.9	289.3	344.9
70°	77.8	82.4	87.9	92.5	96.8	98.8	101.9	243.0	255.9	250.4	295.5
72.5°	67.3	69.2	73.1	77.8	82.8	87.5	90.2	96.8	222.0	216.2	224.7
75°	56.0	57.5	60.3	63.4	67.3	72.7	77.4	82.0	117.8	181.2	180.0
77.5°	43.5	46.3	49.4	51.3	53.3	57.2	63.4	68.0	72.7	122.5	144.3
80°	33.4	35.4	36.9	38.9	41.2	43.9	46.3	51.7	57.2	61.4	110.4
82.5°	24.9	26.1	27.2	28.0	28.8	30.3	34.6	36.6	40.0	43.9	52.1
85°	17.5	18.3	19.1	19.4	19.8	20.2	21.8	22.2	25.7	26.4	31.5
87.5°	11.3	11.7	12.4	12.8	12.8	13.2	13.6	13.6	13.6	12.8	15.6
90°	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-LD5-18SL-RW-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	357.5°	360°
0°	848.4	848.4
2.5°	848.8	855.0
5°	847.7	855.8
7.5°	844.5	852.3
10°	839.9	849.2
12.5°	834.8	843.8
15°	830.6	837.2
17.5°	825.9	829.8
20°	819.7	822.8
22.5°	813.4	811.9
25°	806.4	802.9
27.5°	797.5	790.9
30°	789.3	777.7
32.5°	781.6	762.5
35°	771.1	747.0
37.5°	760.2	731.0
40°	747.3	712.7
42.5°	733.7	694.5
45°	716.6	677.0
47.5°	701.5	656.0
50°	680.5	633.4
52.5°	654.8	612.4
55°	624.5	586.8
57.5°	591.8	559.9
60°	556.8	529.2
62.5°	514.4	497.3
65°	464.7	460.8
67.5°	399.7	420.3
70°	327.8	374.1
72.5°	274.1	325.1
75°	224.7	270.2
77.5°	178.1	211.9
80°	111.2	155.1
82.5°	74.7	101.9
85°	45.1	48.6
87.5°	17.5	17.9
90°	0.0	0.0

(END OF REPORT)