

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-LD5-80HL-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-LD5-80HL-RW-UNV-L950-CD1-U  
Description: 4FT LINEAR SNLED LED FIXTURE  
WHITE REFLECTOR  
Light Source: -  
Ballast/Driver: -

**Summary**

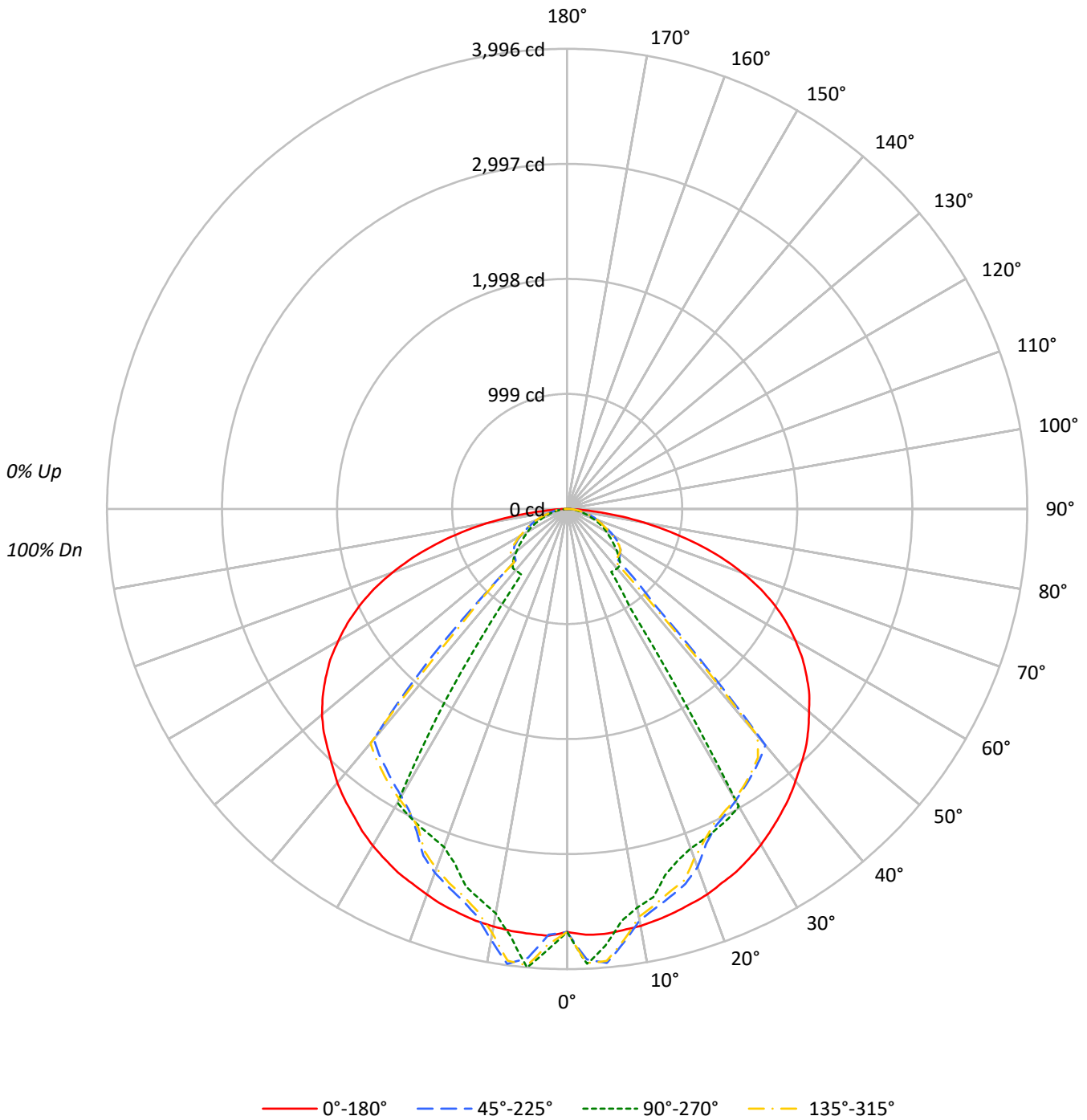
Lumens per Lamp: N/A  
Luminaire Lumens: 7355.0 lumens  
Efficiency: N/A  
Efficacy: 93.1 lumens/watt  
Spacing Criteria (0/90/45): 1.36 / 1.16 / 1.2  
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')  
CIE Type: Direct

Input Watts (W): 79  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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-LD5-80HL-RW-UNV-L950-CD1-U

### Luminous Intensity Polar Plot





TEST NUMBER: P#

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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	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				
2	102	94	88	83	99	93	87	82	89	85	81	86	82	79	83	80	77					75				
3	94	84	77	72	91	83	76	71	80	74	70	77	73	69	75	71	67					65				
4	87	76	68	62	85	75	67	62	72	66	61	70	65	60	68	63	59					57				
5	81	69	61	55	79	68	60	55	66	59	54	64	58	53	62	57	53					51				
6	75	63	55	49	73	62	54	49	60	53	48	59	53	48	57	52	47					46				
7	70	58	50	44	68	57	49	44	55	48	43	54	48	43	53	47	43					41				
8	66	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39					37				
9	62	49	41	36	60	48	41	36	47	41	36	46	40	36	45	40	36					34				
10	58	46	38	33	57	45	38	33	44	38	33	43	37	33	42	37	33					31				

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

	0°	90°	180°	270°
0°	29681	29681	29681	29681
5°	29972	29905	29958	31385
10°	30001	27037	30042	27452
15°	30068	25015	30137	25809
20°	30286	23726	30286	23638
25°	30548	23272	30592	23055
30°	30857	22862	30935	22591
35°	31217	5207	31281	5431
40°	31716	5415	31907	5591
45°	32477	5385	32589	5580
50°	33234	4869	33684	5001
55°	34258	4323	34531	4384
60°	35124	3841	35203	3891
65°	35746	3353	35654	3299
70°	35235	2702	35126	2604
75°	32712	2079	32947	1992
80°	26549	1477	27616	1352
85°	14374	885	15180	678



TEST NUMBER: P#

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	361.4	4.9
10°-20°	993.6	13.5
20°-30°	1471.7	20.0
30°-40°	1482.9	20.2
40°-50°	1158.3	15.7
50°-60°	894.7	12.2
60°-70°	600.7	8.2
70°-80°	306.4	4.2
80°-90°	85.2	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°	2826.7	38.4
0°-40°	4309.5	58.6
0°-60°	6362.6	86.5
0°-90°	7355.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7355.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	3673	3673	3673	3673	3673	
5°	3705	3808	3703	3996	3705	352
15°	3624	3291	3632	3395	3624	1025
25°	3476	3067	3481	3038	3476	1603
35°	3234	667	3240	695	3234	2026
45°	2931	648	2941	672	2931	2260
55°	2540	471	2560	478	2540	2269
65°	1995	316	1990	311	1995	1962
75°	1170	160	1178	153	1170	1223
85°	210	50	222	39	210	289
90°	0	0	0	0	0	



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-80HL-RW-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	25°
0°	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9
2.5°	3701.5	3715.0	3725.1	3731.8	3735.2	3735.2	3736.9	3738.5	3760.4	3770.5	3777.3
5°	3704.9	3718.3	3738.5	3765.5	3789.0	3809.2	3826.1	3849.6	3873.2	3898.5	3906.9
7.5°	3689.7	3706.6	3747.0	3795.8	3841.2	3873.2	3895.1	3910.2	3922.0	3923.7	3932.1
10°	3676.3	3706.6	3762.1	3826.1	3883.3	3922.0	3922.0	3913.6	3925.4	3879.9	3834.5
12.5°	3652.7	3686.4	3762.1	3846.3	3900.1	3915.3	3908.6	3874.9	3805.9	3750.3	3725.1
15°	3624.1	3669.5	3763.8	3858.1	3903.5	3908.6	3844.6	3758.7	3706.6	3672.9	3630.8
17.5°	3592.1	3652.7	3765.5	3859.7	3876.6	3853.0	3731.8	3677.9	3624.1	3545.0	3487.7
20°	3561.8	3620.7	3752.0	3836.2	3846.3	3740.2	3646.0	3588.7	3497.8	3428.8	3403.6
22.5°	3514.7	3583.7	3740.2	3804.2	3765.5	3642.6	3551.7	3460.8	3378.3	3358.1	3327.8
25°	3476.0	3548.3	3713.3	3765.5	3662.8	3553.4	3447.3	3341.3	3302.6	3274.0	3247.0
27.5°	3423.8	3513.0	3677.9	3694.8	3553.4	3457.4	3302.6	3255.4	3220.1	3188.1	3176.3
30°	3366.5	3476.0	3629.1	3597.2	3462.5	3321.1	3206.6	3162.9	3137.6	3104.0	3090.5
32.5°	3300.9	3420.4	3575.3	3484.4	3364.9	3188.1	3114.1	3080.4	3046.7	3021.5	2937.3
35°	3233.6	3371.6	3511.3	3376.6	3247.0	3087.1	3021.5	2991.2	2959.2	2866.6	2779.1
37.5°	3164.5	3317.7	3433.9	3260.5	3090.5	2982.8	2927.2	2893.5	2821.2	2703.3	2659.6
40°	3085.4	3252.1	3334.6	3141.0	2954.1	2876.7	2824.5	2790.9	2627.6	2575.4	2561.9
42.5°	3006.3	3188.1	3213.4	3024.8	2841.4	2763.9	2720.2	2609.1	2498.0	2471.0	2476.1
45°	2930.6	3119.1	3080.4	2859.9	2723.5	2659.6	2585.5	2432.3	2373.4	2386.9	2390.2
47.5°	2839.7	3036.6	2940.7	2694.9	2602.3	2538.4	2373.4	2280.8	2272.4	2290.9	2301.0
50°	2742.0	2944.0	2792.5	2545.1	2471.0	2395.3	2208.5	2161.3	2171.4	2189.9	2201.7
52.5°	2651.2	2839.7	2639.4	2405.4	2341.4	2168.1	2041.8	2050.2	2067.1	2088.9	2095.7
55°	2540.1	2713.4	2476.1	2264.0	2203.4	1976.2	1918.9	1939.1	1956.0	1974.5	1987.9
57.5°	2423.9	2568.7	2282.5	2105.8	2008.1	1806.1	1811.2	1824.7	1836.4	1858.3	767.6
60°	2290.9	2403.7	2070.4	1959.3	1765.8	1671.5	1676.5	1700.1	1711.9	956.1	528.5
62.5°	2152.9	2211.8	1878.5	1792.7	1543.6	1536.8	1560.4	1570.5	1068.9	505.0	494.9
65°	1994.7	1982.9	1690.0	1553.7	1392.1	1398.8	1424.0	1373.5	473.0	473.0	469.6
67.5°	1819.6	1748.9	1506.5	1286.0	1245.6	1260.8	1287.7	449.4	437.7	441.0	429.2
70°	1619.3	1520.0	1316.3	1089.1	1102.5	1117.7	434.3	407.4	402.3	393.9	370.3
72.5°	1407.2	1270.9	1077.3	946.0	954.4	599.2	380.4	367.0	350.1	333.3	308.0
75°	1169.9	993.1	791.1	791.1	802.9	341.7	331.6	309.7	291.2	269.3	254.2
77.5°	917.4	764.2	614.4	638.0	311.4	286.2	267.6	244.1	228.9	215.5	207.0
80°	671.6	533.6	462.9	414.1	242.4	217.1	198.6	185.2	178.4	170.0	159.9
82.5°	441.0	321.5	321.5	195.3	170.0	149.8	144.8	134.7	127.9	122.9	117.8
85°	210.4	186.8	141.4	119.5	106.0	95.9	92.6	87.5	87.5	85.8	84.2
87.5°	77.4	84.2	62.3	60.6	57.2	55.5	57.2	57.2	58.9	57.2	55.5
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°	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9
2.5°	3794.1	3807.6	3817.7	3834.5	3856.4	3874.9	3891.7	3915.3	3952.3	3962.4	3970.8
5°	3906.9	3911.9	3923.7	3937.2	3940.5	3949.0	3947.3	3957.4	3962.4	3974.2	3949.0
7.5°	3913.6	3886.7	3854.7	3826.1	3805.9	3787.4	3775.6	3794.1	3804.2	3812.6	3787.4
10°	3772.2	3740.2	3721.7	3704.9	3684.7	3656.1	3617.3	3625.8	3622.4	3622.4	3614.0
12.5°	3683.0	3637.5	3590.4	3548.3	3529.8	3528.1	3529.8	3548.3	3548.3	3546.7	3536.6
15°	3543.3	3499.5	3476.0	3465.9	3465.9	3460.8	3460.8	3481.0	3476.0	3476.0	3470.9
17.5°	3450.7	3420.4	3403.6	3391.8	3386.7	3395.2	3405.3	3413.7	3415.4	3408.6	3381.7
20°	3375.0	3346.3	3326.1	3329.5	3327.8	3332.9	3337.9	3309.3	3274.0	3226.8	3204.9
22.5°	3295.8	3274.0	3258.8	3258.8	3238.6	3206.6	3159.5	3149.4	3144.4	3122.5	3104.0
25°	3220.1	3194.8	3173.0	3105.6	3063.6	3068.6	3060.2	3043.4	3041.7	3040.0	3046.7
27.5°	3144.4	3078.7	2994.5	2984.4	2967.6	2965.9	2976.0	2984.4	2984.4	2991.2	2999.6
30°	2987.8	2912.1	2896.9	2878.4	2885.1	2908.7	2913.7	2925.5	2928.9	2940.7	2947.4
32.5°	2844.7	2811.1	2797.6	2806.0	2827.9	2848.1	2859.9	2864.9	2873.3	2883.4	2891.9
35°	2728.6	2718.5	2730.3	2748.8	2770.7	2787.5	2797.6	2807.7	2816.1	2824.5	2831.3
37.5°	2642.7	2649.5	2666.3	2689.9	2711.7	2725.2	2733.6	2745.4	2757.2	2767.3	2726.9
40°	2561.9	2578.8	2597.3	2622.5	2641.1	2654.5	2662.9	2678.1	2577.1	1166.5	639.6
42.5°	2491.2	2509.8	2523.2	2543.4	2563.6	2573.7	2499.7	1116.0	631.2	627.9	636.3
45°	2405.4	2420.5	2442.4	2457.6	2476.1	1626.0	621.1	627.9	617.8	624.5	627.9
47.5°	2317.9	2341.4	2353.2	2245.5	668.3	617.8	611.0	617.8	611.0	619.4	614.4
50°	2218.6	2247.2	1599.1	604.3	599.2	595.9	602.6	599.2	604.3	611.0	597.6
52.5°	2117.6	1311.3	585.8	582.4	585.8	582.4	594.2	585.8	587.5	580.7	563.9
55°	717.1	567.3	562.2	560.5	570.6	570.6	570.6	557.2	548.7	531.9	520.1
57.5°	548.7	548.7	547.1	548.7	545.4	542.0	526.9	515.1	503.3	479.7	473.0
60°	520.1	520.1	520.1	520.1	505.0	498.2	474.7	464.6	444.4	432.6	425.9
62.5°	496.6	493.2	478.0	473.0	456.2	437.7	424.2	414.1	393.9	387.2	382.1
65°	462.9	451.1	432.6	412.4	404.0	383.8	377.1	361.9	351.8	346.8	343.4
67.5°	407.4	390.5	375.4	361.9	346.8	340.0	331.6	319.8	313.1	309.7	306.4
70°	348.4	336.7	321.5	313.1	303.0	297.9	286.2	282.8	277.7	272.7	267.6
72.5°	291.2	284.5	277.7	266.0	262.6	259.2	247.4	240.7	234.0	227.2	223.9
75°	244.1	239.0	235.7	225.6	220.5	210.4	202.0	196.9	191.9	186.8	183.5
77.5°	200.3	196.9	186.8	180.1	176.7	168.3	165.0	166.6	163.3	156.5	153.2
80°	156.5	153.2	144.8	144.8	141.4	138.0	134.7	131.3	127.9	122.9	119.5
82.5°	119.5	116.1	112.8	109.4	106.0	104.4	102.7	99.3	95.9	92.6	90.9
85°	84.2	82.5	80.8	79.1	77.4	75.7	74.1	70.7	67.3	65.6	64.0
87.5°	57.2	55.5	53.9	52.2	50.5	48.8	47.1	45.4	42.1	40.4	38.7
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°	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9
2.5°	3970.8	3979.3	3970.8	3952.3	3940.5	3935.5	3945.6	3945.6	3952.3	3960.7	3962.4
5°	3908.6	3888.4	3864.8	3841.2	3829.4	3822.7	3804.2	3807.6	3812.6	3816.0	3819.3
7.5°	3753.7	3726.8	3694.8	3664.5	3652.7	3642.6	3620.7	3620.7	3620.7	3622.4	3632.5
10°	3595.5	3583.7	3570.2	3550.0	3534.9	3529.8	3511.3	3516.4	3513.0	3518.0	3529.8
12.5°	3521.4	3507.9	3496.2	3476.0	3459.1	3452.4	3444.0	3449.0	3447.3	3455.8	3465.9
15°	3454.1	3447.3	3433.9	3418.7	3403.6	3390.1	3359.8	3349.7	3343.0	3334.6	3346.3
17.5°	3343.0	3295.8	3263.9	3240.3	3223.5	3211.7	3203.3	3203.3	3208.3	3213.4	3223.5
20°	3191.5	3178.0	3162.9	3137.6	3120.8	3114.1	3109.0	3109.0	3117.4	3124.2	3142.7
22.5°	3087.1	3085.4	3080.4	3068.6	3060.2	3060.2	3061.9	3065.2	3077.0	3087.1	3105.6
25°	3038.3	3045.0	3041.7	3034.9	3029.9	3031.6	3028.2	3031.6	3043.4	3053.5	3068.6
27.5°	2999.6	3009.7	3006.3	2996.2	2987.8	2991.2	2996.2	2992.9	3003.0	3014.7	3026.5
30°	2947.4	2949.1	2955.8	2944.0	2940.7	2945.7	2947.4	2950.8	2960.9	2969.3	2979.4
32.5°	2888.5	2902.0	2900.3	2888.5	2888.5	2893.5	2895.2	2782.4	2572.0	2215.2	2117.6
35°	2831.3	2846.4	2821.2	2378.5	1646.2	878.7	678.4	654.8	659.8	663.2	666.6
37.5°	2094.0	993.1	632.9	638.0	643.0	648.1	653.1	658.2	663.2	668.3	669.9
40°	629.5	627.9	632.9	639.6	644.7	648.1	654.8	659.8	664.9	669.9	671.6
42.5°	622.8	626.2	631.2	638.0	644.7	651.4	656.5	663.2	666.6	669.9	671.6
45°	619.4	626.2	632.9	638.0	643.0	646.4	649.7	651.4	649.7	649.7	653.1
47.5°	614.4	621.1	622.8	621.1	622.8	621.1	621.1	621.1	616.1	614.4	614.4
50°	595.9	595.9	592.5	585.8	584.1	582.4	579.0	577.4	570.6	568.9	568.9
52.5°	557.2	555.5	550.4	542.0	538.6	535.3	533.6	531.9	525.2	521.8	523.5
55°	511.7	508.3	503.3	493.2	491.5	488.1	486.5	484.8	478.0	481.4	476.4
57.5°	469.6	462.9	456.2	454.5	447.8	446.1	444.4	442.7	437.7	439.3	436.0
60°	419.1	417.5	414.1	407.4	407.4	405.7	405.7	402.3	398.9	397.3	397.3
62.5°	382.1	377.1	373.7	373.7	368.6	368.6	368.6	365.3	361.9	363.6	361.9
65°	341.7	340.0	338.3	335.0	335.0	333.3	333.3	329.9	324.9	326.6	323.2
67.5°	308.0	304.7	301.3	299.6	292.9	289.5	287.8	286.2	279.4	281.1	277.7
70°	266.0	260.9	257.5	254.2	249.1	245.8	245.8	242.4	237.3	239.0	235.7
72.5°	222.2	218.8	215.5	213.8	208.7	207.0	205.4	203.7	198.6	200.3	198.6
75°	185.2	185.2	183.5	181.8	176.7	171.7	168.3	166.6	163.3	165.0	161.6
77.5°	153.2	149.8	146.4	146.4	141.4	138.0	134.7	134.7	134.7	133.0	131.3
80°	119.5	116.1	116.1	114.5	111.1	107.7	106.0	106.0	104.4	104.4	102.7
82.5°	90.9	87.5	85.8	85.8	82.5	80.8	79.1	77.4	77.4	77.4	75.7
85°	64.0	60.6	58.9	58.9	55.5	53.9	53.9	52.2	52.2	50.5	50.5
87.5°	38.7	37.0	35.3	35.3	32.0	30.3	30.3	30.3	28.6	28.6	26.9
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-LD5-80HL-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°	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9
2.5°	3962.4	3962.4	3950.6	3954.0	3949.0	3955.7	3947.3	3947.3	3957.4	3957.4	3964.1
5°	3821.0	3812.6	3810.9	3807.6	3790.7	3797.5	3789.0	3780.6	3792.4	3792.4	3807.6
7.5°	3627.4	3612.3	3619.0	3608.9	3598.8	3583.7	3588.7	3582.0	3590.4	3602.2	3617.3
10°	3528.1	3514.7	3523.1	3513.0	3518.0	3496.2	3497.8	3499.5	3507.9	3511.3	3524.8
12.5°	3464.2	3460.8	3457.4	3454.1	3457.4	3445.7	3438.9	3440.6	3444.0	3445.7	3455.8
15°	3329.5	3307.6	3314.4	3290.8	3292.5	3294.2	3280.7	3294.2	3292.5	3314.4	3334.6
17.5°	3220.1	3220.1	3208.3	3198.2	3191.5	3189.8	3179.7	3186.4	3179.7	3193.2	3198.2
20°	3144.4	3142.7	3141.0	3135.9	3119.1	3120.8	3125.8	3110.7	3109.0	3107.3	3117.4
22.5°	3109.0	3110.7	3104.0	3104.0	3088.8	3092.2	3093.9	3077.0	3078.7	3073.7	3078.7
25°	3072.0	3075.3	3066.9	3066.9	3063.6	3061.9	3053.5	3056.8	3046.7	3038.3	3046.7
27.5°	3028.2	3034.9	3028.2	3031.6	3024.8	3021.5	3016.4	3013.1	3003.0	3001.3	3006.3
30°	2987.8	2991.2	2989.5	2981.1	2979.4	2969.3	2974.3	2964.2	2954.1	2955.8	2959.2
32.5°	1531.8	1462.8	1127.8	1018.4	1008.3	1045.3	1238.9	1508.2	1954.3	2386.9	2698.3
35°	668.3	668.3	668.3	666.6	666.6	664.9	663.2	661.5	659.8	658.2	656.5
37.5°	671.6	671.6	671.6	671.6	669.9	668.3	668.3	664.9	663.2	661.5	659.8
40°	673.3	675.0	675.0	675.0	673.3	673.3	671.6	668.3	666.6	663.2	659.8
42.5°	671.6	673.3	673.3	671.6	671.6	669.9	669.9	668.3	666.6	664.9	663.2
45°	649.7	651.4	648.1	648.1	646.4	646.4	646.4	646.4	646.4	648.1	648.1
47.5°	611.0	611.0	609.3	607.7	607.7	606.0	607.7	606.0	609.3	611.0	614.4
50°	565.6	565.6	562.2	560.5	560.5	560.5	560.5	562.2	563.9	567.3	570.6
52.5°	518.4	518.4	516.8	515.1	513.4	513.4	518.4	516.8	518.4	520.1	525.2
55°	473.0	474.7	471.3	471.3	469.6	469.6	469.6	471.3	473.0	474.7	479.7
57.5°	434.3	434.3	430.9	430.9	430.9	429.2	434.3	430.9	432.6	434.3	437.7
60°	395.6	393.9	393.9	392.2	392.2	392.2	395.6	393.9	393.9	395.6	398.9
62.5°	360.2	360.2	358.5	358.5	356.9	356.9	360.2	358.5	358.5	360.2	361.9
65°	319.8	319.8	318.1	316.5	321.5	316.5	321.5	318.1	321.5	323.2	326.6
67.5°	274.4	274.4	274.4	272.7	272.7	276.1	277.7	274.4	276.1	279.4	281.1
70°	234.0	234.0	232.3	232.3	232.3	235.7	237.3	234.0	235.7	237.3	240.7
72.5°	198.6	195.3	195.3	193.6	196.9	196.9	198.6	196.9	198.6	198.6	202.0
75°	163.3	159.9	159.9	159.9	163.3	161.6	163.3	161.6	163.3	163.3	165.0
77.5°	131.3	129.6	127.9	127.9	131.3	131.3	131.3	129.6	131.3	133.0	134.7
80°	102.7	101.0	99.3	99.3	102.7	102.7	102.7	104.4	102.7	104.4	106.0
82.5°	75.7	74.1	72.4	75.7	75.7	75.7	75.7	77.4	75.7	77.4	79.1
85°	50.5	48.8	47.1	50.5	50.5	50.5	50.5	52.2	50.5	52.2	53.9
87.5°	26.9	25.2	25.2	26.9	26.9	26.9	28.6	28.6	28.6	30.3	30.3
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-LD5-80HL-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°	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9
2.5°	3974.2	3979.3	3977.6	3967.5	3957.4	3945.6	3937.2	3938.9	3955.7	3960.7	3945.6
5°	3807.6	3839.5	3839.5	3861.4	3849.6	3839.5	3846.3	3883.3	3901.8	3930.4	3940.5
7.5°	3635.9	3651.0	3649.3	3671.2	3667.8	3667.8	3672.9	3721.7	3745.3	3768.8	3775.6
10°	3539.9	3555.1	3553.4	3555.1	3550.0	3538.2	3538.2	3560.1	3580.3	3592.1	3595.5
12.5°	3470.9	3479.3	3477.6	3477.6	3474.3	3464.2	3462.5	3481.0	3502.9	3518.0	3519.7
15°	3368.2	3391.8	3396.8	3418.7	3413.7	3400.2	3403.6	3418.7	3432.2	3445.7	3440.6
17.5°	3215.0	3226.8	3228.5	3236.9	3233.6	3233.6	3253.8	3309.3	3346.3	3378.3	3381.7
20°	3127.5	3135.9	3132.6	3151.1	3142.7	3141.0	3146.0	3169.6	3186.4	3201.6	3228.5
22.5°	3085.4	3092.2	3087.1	3088.8	3073.7	3060.2	3056.8	3075.3	3093.9	3114.1	3114.1
25°	3050.1	3055.1	3053.5	3050.1	3038.3	3019.8	3016.4	3019.8	3026.5	3028.2	3016.4
27.5°	3008.0	3011.4	3011.4	3013.1	2997.9	2981.1	2977.7	2974.3	2981.1	2979.4	2960.9
30°	2964.2	2959.2	2960.9	2962.6	2949.1	2933.9	2927.2	2925.5	2932.3	2930.6	2912.1
32.5°	2859.9	2898.6	2902.0	2905.3	2893.5	2880.1	2873.3	2868.3	2871.7	2870.0	2853.1
35°	654.8	666.6	816.4	1848.2	2509.8	2779.1	2807.7	2801.0	2802.6	2802.6	2789.2
37.5°	656.5	654.8	653.1	648.1	643.0	639.6	1105.9	2358.3	2731.9	2733.6	2721.8
40°	656.5	654.8	653.1	649.7	643.0	638.0	629.5	622.8	638.0	1403.8	2568.7
42.5°	659.8	656.5	653.1	649.7	643.0	636.3	629.5	621.1	626.2	622.8	614.4
45°	649.7	648.1	648.1	646.4	643.0	636.3	627.9	617.8	612.7	617.8	609.3
47.5°	617.8	619.4	624.5	626.2	626.2	627.9	622.8	616.1	607.7	612.7	602.6
50°	574.0	577.4	579.0	587.5	590.8	597.6	599.2	599.2	597.6	604.3	597.6
52.5°	526.9	530.2	538.6	542.0	545.4	555.5	558.8	563.9	567.3	577.4	584.1
55°	481.4	483.1	486.5	493.2	498.2	506.7	511.7	516.8	525.2	530.2	550.4
57.5°	439.3	441.0	447.8	449.4	452.8	459.5	464.6	471.3	478.0	481.4	505.0
60°	398.9	400.6	405.7	407.4	409.0	415.8	420.8	425.9	430.9	434.3	451.1
62.5°	363.6	363.6	368.6	368.6	370.3	375.4	378.7	382.1	387.2	388.8	397.3
65°	328.2	329.9	333.3	333.3	335.0	338.3	340.0	341.7	346.8	346.8	353.5
67.5°	284.5	286.2	291.2	294.6	296.3	303.0	304.7	306.4	309.7	311.4	314.8
70°	242.4	244.1	249.1	250.8	252.5	257.5	260.9	266.0	271.0	276.1	279.4
72.5°	203.7	205.4	210.4	210.4	215.5	217.1	220.5	222.2	227.2	230.6	235.7
75°	166.6	168.3	173.4	173.4	178.4	180.1	181.8	183.5	186.8	190.2	193.6
77.5°	136.3	136.3	143.1	146.4	149.8	149.8	151.5	151.5	151.5	153.2	156.5
80°	107.7	107.7	112.8	116.1	119.5	119.5	121.2	122.9	124.6	124.6	126.2
82.5°	80.8	80.8	85.8	87.5	90.9	90.9	90.9	92.6	94.3	92.6	95.9
85°	55.5	55.5	58.9	60.6	64.0	64.0	64.0	65.6	67.3	65.6	67.3
87.5°	32.0	33.7	35.3	37.0	38.7	40.4	40.4	40.4	42.1	42.1	43.8
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-LD5-80HL-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°	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9
2.5°	3928.8	3908.6	3906.9	3883.3	3876.6	3878.3	3859.7	3853.0	3822.7	3816.0	3784.0
5°	3943.9	3954.0	3949.0	3947.3	3952.3	3949.0	3935.5	3928.8	3923.7	3910.2	3883.3
7.5°	3777.3	3784.0	3789.0	3810.9	3829.4	3861.4	3895.1	3917.0	3933.8	3937.2	3915.3
10°	3607.3	3639.2	3661.1	3694.8	3721.7	3740.2	3760.4	3778.9	3827.8	3876.6	3905.2
12.5°	3519.7	3528.1	3526.5	3545.0	3563.5	3612.3	3659.4	3686.4	3723.4	3745.3	3797.5
15°	3445.7	3447.3	3452.4	3465.9	3476.0	3492.8	3514.7	3555.1	3629.1	3662.8	3691.4
17.5°	3378.3	3378.3	3381.7	3393.5	3406.9	3422.1	3435.6	3452.4	3489.4	3545.0	3615.7
20°	3270.6	3317.7	3322.8	3321.1	3327.8	3356.4	3359.8	3390.1	3408.6	3430.5	3499.5
22.5°	3110.7	3139.3	3179.7	3242.0	3265.5	3279.0	3289.1	3302.6	3331.2	3356.4	3385.1
25°	3023.2	3041.7	3053.5	3072.0	3120.8	3199.9	3215.0	3230.2	3248.7	3267.2	3302.6
27.5°	2945.7	2944.0	2952.5	2969.3	2982.8	3024.8	3098.9	3157.8	3161.2	3188.1	3218.4
30°	2890.2	2880.1	2868.3	2864.9	2883.4	2905.3	2927.2	3019.8	3083.8	3097.2	3129.2
32.5°	2838.0	2821.2	2804.3	2790.9	2779.1	2797.6	2811.1	2851.5	2933.9	3011.4	3028.2
35°	2774.0	2757.2	2737.0	2721.8	2703.3	2701.7	2700.0	2738.7	2765.6	2858.2	2939.0
37.5°	2708.4	2689.9	2673.0	2656.2	2637.7	2624.2	2615.8	2625.9	2651.2	2691.6	2826.2
40°	2639.4	2617.5	2600.7	2587.2	2561.9	2551.8	2535.0	2528.3	2530.0	2565.3	2636.0
42.5°	1577.2	2514.8	2523.2	2508.1	2486.2	2472.7	2454.2	2445.8	2429.0	2445.8	2486.2
45°	607.7	614.4	1839.8	2430.6	2403.7	2386.9	2370.0	2361.6	2343.1	2329.6	2366.7
47.5°	595.9	602.6	589.1	834.9	2294.3	2299.3	2279.1	2270.7	2252.2	2242.1	2232.0
50°	587.5	592.5	582.4	585.8	574.0	2102.4	2186.6	2176.5	2156.3	2144.5	2124.3
52.5°	579.0	579.0	572.3	563.9	560.5	562.2	1769.1	2080.5	2057.0	2045.2	2018.2
55°	552.1	555.5	562.2	548.7	545.4	543.7	538.6	1685.0	1947.5	1934.1	1910.5
57.5°	511.7	518.4	537.0	533.6	533.6	520.1	516.8	516.8	1563.8	1821.3	1797.7
60°	464.6	471.3	491.5	498.2	503.3	499.9	496.6	494.9	488.1	1647.9	1678.2
62.5°	415.8	422.5	429.2	451.1	457.8	466.3	476.4	471.3	464.6	464.6	1552.0
65°	363.6	373.7	377.1	397.3	405.7	420.8	429.2	441.0	437.7	436.0	444.4
67.5°	318.1	329.9	331.6	340.0	355.2	361.9	372.0	393.9	404.0	407.4	410.7
70°	279.4	286.2	291.2	294.6	304.7	306.4	324.9	340.0	355.2	372.0	377.1
72.5°	240.7	245.8	255.9	252.5	255.9	262.6	272.7	282.8	297.9	321.5	336.7
75°	196.9	200.3	207.0	210.4	217.1	222.2	228.9	237.3	250.8	262.6	282.8
77.5°	158.2	159.9	165.0	166.6	173.4	178.4	190.2	195.3	203.7	212.1	223.9
80°	127.9	127.9	129.6	129.6	134.7	139.7	148.1	153.2	163.3	170.0	170.0
82.5°	97.6	97.6	102.7	102.7	106.0	106.0	111.1	111.1	116.1	119.5	122.9
85°	69.0	70.7	74.1	72.4	75.7	74.1	77.4	80.8	82.5	80.8	79.1
87.5°	45.4	45.4	48.8	47.1	48.8	48.8	52.2	52.2	53.9	53.9	52.2
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-LD5-80HL-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°	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9
2.5°	3772.2	3747.0	3731.8	3713.3	3708.2	3703.2	3709.9	3709.9	3699.8	3691.4	3676.3
5°	3859.7	3832.8	3804.2	3773.9	3745.3	3715.0	3703.2	3701.5	3683.0	3672.9	3667.8
7.5°	3905.2	3891.7	3859.7	3817.7	3773.9	3720.0	3696.5	3683.0	3664.5	3661.1	3661.1
10°	3910.2	3895.1	3878.3	3848.0	3797.5	3726.8	3681.3	3654.4	3637.5	3649.3	3671.2
12.5°	3861.4	3890.0	3874.9	3854.7	3814.3	3728.4	3662.8	3622.4	3617.3	3647.6	3704.9
15°	3736.9	3821.0	3863.1	3842.9	3810.9	3725.1	3632.5	3585.4	3585.4	3647.6	3721.7
17.5°	3642.6	3708.2	3810.9	3827.8	3790.7	3718.3	3603.9	3548.3	3563.5	3654.4	3733.5
20°	3565.2	3605.6	3704.9	3799.1	3763.8	3703.2	3561.8	3504.6	3534.9	3644.3	3750.3
22.5°	3444.0	3524.8	3585.4	3725.1	3736.9	3674.6	3519.7	3450.7	3511.3	3644.3	3741.9
25°	3326.1	3423.8	3487.7	3624.1	3696.5	3639.2	3481.0	3393.5	3486.1	3639.2	3735.2
27.5°	3243.7	3289.1	3405.3	3502.9	3635.9	3592.1	3428.8	3331.2	3454.1	3612.3	3696.5
30°	3156.1	3186.4	3300.9	3393.5	3555.1	3538.2	3375.0	3262.2	3413.7	3587.1	3595.5
32.5°	3060.2	3093.9	3152.8	3287.4	3442.3	3487.7	3314.4	3193.2	3369.9	3548.3	3477.6
35°	2962.6	2987.8	3034.9	3179.7	3311.0	3412.0	3240.3	3114.1	3339.6	3489.4	3364.9
37.5°	2864.9	2891.9	2932.3	3053.5	3173.0	3341.3	3176.3	3034.9	3284.1	3385.1	3247.0
40°	2772.3	2787.5	2829.6	2905.3	3058.5	3268.9	3104.0	2952.5	3226.8	3252.1	3087.1
42.5°	2602.3	2678.1	2716.8	2777.4	2928.9	3169.6	3019.8	2864.9	3162.9	3119.1	2927.2
45°	2418.9	2583.8	2600.7	2661.3	2814.4	3063.6	2940.7	2779.1	3102.3	3004.6	2775.7
47.5°	2269.0	2388.6	2486.2	2536.7	2678.1	2939.0	2866.6	2706.7	3011.4	2859.9	2627.6
50°	2136.1	2200.0	2376.8	2413.8	2514.8	2789.2	2779.1	2622.5	2885.1	2678.1	2482.8
52.5°	2006.5	2051.9	2211.8	2290.9	2373.4	2627.6	2674.7	2540.1	2747.1	2496.3	2336.4
55°	1893.7	1908.8	1996.4	2163.0	2237.1	2464.3	2560.3	2444.1	2572.0	2322.9	2195.0
57.5°	1777.5	1764.1	1828.0	2041.8	2095.7	2297.7	2439.1	2346.5	2430.6	2146.2	2048.5
60°	1656.3	1637.8	1664.8	1806.1	1945.9	2132.7	2296.0	2238.8	2258.9	1971.1	1885.3
62.5°	1530.1	1511.6	1503.2	1592.4	1799.4	1962.7	2151.2	2119.2	2048.5	1811.2	1683.3
65°	1398.8	1380.3	1366.8	1402.2	1637.8	1742.2	1989.6	1981.2	1817.9	1642.9	1417.3
67.5°	425.9	1255.7	1227.1	1225.4	1380.3	1541.9	1814.6	1801.1	1585.6	1462.8	1220.4
70°	383.8	1018.4	1082.3	1067.2	1134.5	1338.2	1614.3	1604.2	1360.1	1173.2	1079.0
72.5°	351.8	360.2	956.1	939.3	954.4	1137.9	1405.5	1378.6	1153.0	925.8	932.5
75°	301.3	316.5	329.9	792.8	772.6	942.6	1178.3	1136.2	951.0	764.2	779.4
77.5°	245.8	264.3	274.4	577.4	624.5	671.6	940.9	885.4	654.8	611.0	291.2
80°	183.5	198.6	215.5	230.6	474.7	469.6	698.6	643.0	456.2	380.4	227.2
82.5°	134.7	139.7	149.8	166.6	188.5	314.8	449.4	395.6	316.5	173.4	156.5
85°	84.2	90.9	95.9	101.0	114.5	188.5	222.2	176.7	133.0	106.0	99.3
87.5°	53.9	53.9	52.2	53.9	55.5	67.3	75.7	72.4	57.2	53.9	53.9
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-LD5-80HL-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°	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9
2.5°	3659.4	3635.9	3635.9	3629.1	3634.2	3634.2	3632.5	3634.2	3646.0	3652.7	3664.5
5°	3657.7	3651.0	3666.2	3684.7	3706.6	3733.5	3740.2	3763.8	3785.7	3814.3	3844.6
7.5°	3679.6	3703.2	3731.8	3762.1	3805.9	3837.9	3866.5	3895.1	3915.3	3942.2	3959.1
10°	3711.6	3758.7	3807.6	3846.3	3893.4	3920.3	3938.9	3942.2	3913.6	3868.2	3831.1
12.5°	3757.1	3812.6	3858.1	3895.1	3917.0	3906.9	3853.0	3797.5	3765.5	3718.3	3652.7
15°	3795.8	3846.3	3893.4	3878.3	3819.3	3763.8	3721.7	3656.1	3592.1	3548.3	3519.7
17.5°	3812.6	3861.4	3844.6	3765.5	3709.9	3646.0	3560.1	3509.6	3467.5	3433.9	3417.0
20°	3822.7	3814.3	3723.4	3666.2	3558.4	3499.5	3444.0	3396.8	3364.9	3348.0	3344.7
22.5°	3795.8	3693.1	3615.7	3513.0	3433.9	3385.1	3341.3	3302.6	3280.7	3267.2	3258.8
25°	3706.6	3587.1	3472.6	3391.8	3324.5	3282.4	3248.7	3216.7	3189.8	3183.1	3166.2
27.5°	3582.0	3484.4	3332.9	3270.6	3211.7	3191.5	3154.5	3122.5	3098.9	3078.7	3024.8
30°	3479.3	3324.5	3215.0	3157.8	3122.5	3098.9	3056.8	3023.2	2982.8	2908.7	2878.4
32.5°	3353.1	3199.9	3095.5	3063.6	3019.8	2999.6	2952.5	2878.4	2816.1	2785.8	2784.1
35°	3189.8	3063.6	2987.8	2959.2	2923.8	2890.2	2792.5	2725.2	2694.9	2698.3	2723.5
37.5°	3053.5	2940.7	2891.9	2851.5	2811.1	2725.2	2642.7	2610.8	2619.2	2636.0	2647.8
40°	2915.4	2829.6	2774.0	2742.0	2651.2	2567.0	2523.2	2535.0	2550.2	2561.9	2577.1
42.5°	2780.8	2720.2	2664.6	2602.3	2477.8	2432.3	2442.4	2457.6	2471.0	2487.9	2503.0
45°	2652.8	2599.0	2535.0	2393.6	2331.3	2343.1	2358.3	2370.0	2390.2	2402.0	2417.2
47.5°	2531.6	2474.4	2361.6	2237.1	2230.3	2253.9	2267.4	2282.5	2297.7	2267.4	1250.7
50°	2395.3	2336.4	2164.7	2117.6	2132.7	2154.6	2171.4	2186.6	1947.5	774.3	595.9
52.5°	2260.6	2110.8	2001.4	2014.9	2030.0	2055.3	2067.1	1535.1	611.0	582.4	584.1
55°	2110.8	1918.9	1886.9	1903.8	1917.2	1942.5	1287.7	563.9	560.5	558.8	572.3
57.5°	1875.2	1759.0	1772.5	1789.3	1802.8	1272.6	548.7	545.4	547.1	548.7	550.4
60°	1664.8	1639.5	1654.7	1669.8	1181.7	530.2	520.1	521.8	528.5	523.5	510.0
62.5°	1498.1	1518.3	1533.5	1343.3	503.3	498.2	503.3	498.2	486.5	478.0	461.2
65°	1370.2	1390.4	1402.2	473.0	471.3	478.0	473.0	456.2	437.7	414.1	409.0
67.5°	1235.5	1255.7	449.4	437.7	444.4	436.0	415.8	395.6	382.1	361.9	353.5
70°	1095.8	469.6	407.4	405.7	393.9	380.4	358.5	338.3	321.5	313.1	304.7
72.5°	791.1	372.0	367.0	353.5	333.3	314.8	296.3	284.5	276.1	271.0	266.0
75°	329.9	323.2	308.0	284.5	264.3	255.9	242.4	234.0	230.6	220.5	217.1
77.5°	276.1	262.6	240.7	223.9	212.1	207.0	196.9	186.8	181.8	180.1	173.4
80°	212.1	193.6	183.5	175.1	171.7	159.9	148.1	143.1	139.7	138.0	133.0
82.5°	144.8	138.0	131.3	119.5	119.5	114.5	109.4	106.0	102.7	102.7	99.3
85°	94.3	89.2	87.5	82.5	82.5	79.1	77.4	75.7	74.1	72.4	70.7
87.5°	53.9	53.9	55.5	53.9	53.9	52.2	50.5	48.8	47.1	47.1	43.8
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-LD5-80HL-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°	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9
2.5°	3679.6	3696.5	3699.8	3757.1	3789.0	3787.4	3777.3	3807.6	3789.0	3778.9	3789.0
5°	3874.9	3895.1	3911.9	3974.2	3996.1	4006.2	4004.5	4021.3	4007.9	3996.1	3996.1
7.5°	3970.8	3977.6	3984.3	3969.2	3959.1	3942.2	3917.0	3879.9	3861.4	3841.2	3816.0
10°	3812.6	3790.7	3799.1	3768.8	3743.6	3725.1	3701.5	3671.2	3646.0	3627.4	3598.8
12.5°	3619.0	3617.3	3620.7	3625.8	3600.5	3585.4	3566.9	3545.0	3526.5	3506.3	3482.7
15°	3501.2	3502.9	3516.4	3511.3	3502.9	3494.5	3474.3	3467.5	3450.7	3428.8	3415.4
17.5°	3417.0	3425.5	3438.9	3432.2	3418.7	3410.3	3395.2	3380.0	3364.9	3348.0	3327.8
20°	3343.0	3351.4	3359.8	3351.4	3326.1	3314.4	3294.2	3247.0	3213.4	3179.7	3149.4
22.5°	3262.2	3267.2	3260.5	3233.6	3169.6	3139.3	3115.7	3102.3	3073.7	3055.1	3036.6
25°	3161.2	3132.6	3088.8	3058.5	3033.3	3019.8	3009.7	3008.0	3004.6	3001.3	2992.9
27.5°	2996.2	2986.1	2962.6	2950.8	2952.5	2957.5	2959.2	2964.2	2959.2	2952.5	2945.7
30°	2873.3	2878.4	2880.1	2883.4	2891.9	2896.9	2898.6	2905.3	2902.0	2896.9	2893.5
32.5°	2795.9	2807.7	2814.4	2824.5	2829.6	2838.0	2838.0	2848.1	2838.0	2836.3	2832.9
35°	2731.9	2742.0	2745.4	2760.6	2765.6	2774.0	2774.0	2782.4	2774.0	2688.2	2122.6
37.5°	2668.0	2678.1	2684.8	2698.3	2700.0	2705.0	2496.3	1826.3	1178.3	912.3	696.9
40°	2592.2	2604.0	2610.8	2615.8	1838.1	1166.5	802.9	653.1	653.1	658.2	663.2
42.5°	2511.4	2519.9	1755.7	1021.7	636.3	634.6	639.6	644.7	649.7	656.5	663.2
45°	1974.5	996.5	632.9	617.8	622.8	629.5	636.3	643.0	651.4	658.2	661.5
47.5°	648.1	607.7	616.1	609.3	617.8	626.2	632.9	639.6	641.3	643.0	641.3
50°	599.2	599.2	604.3	604.3	611.0	614.4	614.4	614.4	607.7	606.0	600.9
52.5°	579.0	592.5	585.8	589.1	585.8	580.7	575.7	570.6	560.5	557.2	550.4
55°	568.9	574.0	557.2	552.1	545.4	531.9	525.2	518.4	510.0	506.7	498.2
57.5°	545.4	533.6	515.1	506.7	494.9	481.4	474.7	469.6	461.2	457.8	452.8
60°	501.6	478.0	466.3	456.2	442.7	430.9	425.9	422.5	415.8	414.1	409.0
62.5°	447.8	427.6	417.5	404.0	393.9	387.2	382.1	380.4	373.7	373.7	370.3
65°	388.8	378.7	370.3	356.9	351.8	345.1	343.4	341.7	338.3	336.7	333.3
67.5°	341.7	335.0	323.2	316.5	313.1	308.0	304.7	301.3	294.6	291.2	286.2
70°	299.6	294.6	282.8	277.7	271.0	262.6	257.5	254.2	249.1	245.8	240.7
72.5°	259.2	244.1	235.7	230.6	225.6	217.1	215.5	212.1	207.0	205.4	200.3
75°	208.7	196.9	191.9	188.5	183.5	178.4	178.4	178.4	173.4	171.7	170.0
77.5°	166.6	159.9	156.5	153.2	151.5	148.1	143.1	141.4	136.3	136.3	134.7
80°	127.9	124.6	121.2	119.5	117.8	114.5	111.1	109.4	104.4	104.4	102.7
82.5°	94.3	92.6	90.9	89.2	87.5	85.8	80.8	79.1	75.7	75.7	74.1
85°	67.3	65.6	62.3	60.6	60.6	58.9	53.9	52.2	48.8	48.8	48.8
87.5°	42.1	40.4	38.7	37.0	35.3	33.7	30.3	28.6	28.6	25.2	23.6
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-LD5-80HL-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°	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9
2.5°	3768.8	3797.5	3794.1	3814.3	3819.3	3829.4	3832.8	3834.5	3809.2	3829.4	3831.1
5°	3991.0	3996.1	3999.5	4007.9	4016.3	4018.0	4009.6	3999.5	4002.8	3996.1	3979.3
7.5°	3812.6	3787.4	3782.3	3775.6	3772.2	3768.8	3753.7	3767.2	3752.0	3745.3	3721.7
10°	3593.8	3570.2	3568.5	3568.5	3573.6	3571.9	3568.5	3561.8	3575.3	3566.9	3561.8
12.5°	3479.3	3470.9	3476.0	3472.6	3486.1	3489.4	3486.1	3486.1	3482.7	3476.0	3479.3
15°	3410.3	3403.6	3408.6	3403.6	3413.7	3415.4	3406.9	3412.0	3403.6	3395.2	3391.8
17.5°	3319.4	3304.3	3292.5	3275.6	3277.3	3274.0	3263.9	3263.9	3255.4	3233.6	3235.2
20°	3144.4	3129.2	3122.5	3122.5	3130.9	3134.3	3132.6	3135.9	3127.5	3124.2	3110.7
22.5°	3034.9	3033.3	3036.6	3045.0	3058.5	3077.0	3078.7	3078.7	3078.7	3077.0	3060.2
25°	2996.2	2996.2	2999.6	3011.4	3021.5	3034.9	3038.3	3041.7	3038.3	3038.3	3023.2
27.5°	2952.5	2949.1	2955.8	2967.6	2979.4	2989.5	2997.9	2999.6	2994.5	2994.5	2999.6
30°	2898.6	2896.9	2905.3	2917.1	2927.2	2937.3	2945.7	2952.5	2945.7	2945.7	2940.7
32.5°	2843.0	2843.0	2846.4	2775.7	2573.7	2317.9	2322.9	2174.8	2072.1	1942.5	2114.2
35°	1774.2	1291.1	1109.3	939.3	819.8	742.3	740.6	715.4	703.6	695.2	693.5
37.5°	669.9	673.3	680.0	683.4	688.5	691.8	693.5	693.5	693.5	693.5	691.8
40°	668.3	675.0	680.0	685.1	690.1	693.5	693.5	695.2	696.9	696.9	696.9
42.5°	669.9	676.7	683.4	688.5	691.8	693.5	695.2	696.9	696.9	696.9	696.9
45°	668.3	671.6	671.6	673.3	673.3	673.3	675.0	675.0	673.3	671.6	675.0
47.5°	643.0	643.0	638.0	636.3	634.6	631.2	632.9	631.2	629.5	627.9	631.2
50°	599.2	592.5	589.1	585.8	584.1	580.7	582.4	580.7	579.0	575.7	580.7
52.5°	547.1	545.4	538.6	535.3	533.6	535.3	531.9	530.2	528.5	526.9	528.5
55°	496.6	489.8	488.1	484.8	483.1	484.8	483.1	481.4	479.7	478.0	479.7
57.5°	451.1	446.1	444.4	441.0	441.0	441.0	441.0	439.3	437.7	436.0	437.7
60°	407.4	404.0	402.3	402.3	400.6	400.6	400.6	398.9	397.3	397.3	398.9
62.5°	370.3	370.3	365.3	363.6	363.6	365.3	363.6	361.9	360.2	358.5	361.9
65°	331.6	324.9	323.2	319.8	316.5	318.1	316.5	314.8	313.1	311.4	314.8
67.5°	284.5	282.8	276.1	272.7	271.0	272.7	271.0	269.3	267.6	266.0	269.3
70°	239.0	239.0	232.3	230.6	228.9	228.9	227.2	227.2	225.6	223.9	227.2
72.5°	198.6	198.6	196.9	193.6	191.9	190.2	188.5	186.8	186.8	188.5	188.5
75°	165.0	161.6	154.9	156.5	154.9	153.2	153.2	151.5	149.8	153.2	151.5
77.5°	129.6	127.9	122.9	124.6	122.9	121.2	121.2	119.5	117.8	119.5	119.5
80°	97.6	97.6	95.9	94.3	94.3	92.6	90.9	90.9	89.2	90.9	90.9
82.5°	70.7	70.7	69.0	67.3	65.6	65.6	64.0	64.0	64.0	64.0	64.0
85°	45.4	43.8	43.8	40.4	40.4	40.4	38.7	38.7	38.7	38.7	38.7
87.5°	21.9	21.9	20.2	20.2	18.5	16.8	16.8	15.1	15.1	16.8	16.8
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-LD5-80HL-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°	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9
2.5°	3800.8	3822.7	3804.2	3812.6	3814.3	3842.9	3841.2	3848.0	3836.2	3822.7	3804.2
5°	3994.4	3984.3	3970.8	4002.8	3986.0	4006.2	4012.9	4026.4	4026.4	4024.7	4009.6
7.5°	3747.0	3725.1	3741.9	3753.7	3758.7	3745.3	3772.2	3802.5	3827.8	3842.9	3844.6
10°	3553.4	3560.1	3558.4	3563.5	3575.3	3573.6	3590.4	3607.3	3614.0	3624.1	3627.4
12.5°	3462.5	3460.8	3464.2	3476.0	3482.7	3481.0	3497.8	3507.9	3511.3	3513.0	3511.3
15°	3390.1	3378.3	3386.7	3388.4	3393.5	3393.5	3413.7	3428.8	3435.6	3438.9	3435.6
17.5°	3253.8	3225.1	3252.1	3252.1	3270.6	3267.2	3299.2	3324.5	3337.9	3348.0	3348.0
20°	3119.1	3105.6	3115.7	3112.4	3125.8	3124.2	3144.4	3161.2	3173.0	3181.4	3191.5
22.5°	3065.2	3068.6	3053.5	3055.1	3055.1	3053.5	3063.6	3072.0	3075.3	3080.4	3077.0
25°	3029.9	3033.3	3028.2	3019.8	3016.4	3019.8	3024.8	3034.9	3036.6	3033.3	3021.5
27.5°	2994.5	2984.4	2992.9	2977.7	2974.3	2981.1	2987.8	2989.5	2991.2	2991.2	2981.1
30°	2940.7	2932.3	2940.7	2933.9	2927.2	2933.9	2939.0	2939.0	2942.4	2944.0	2932.3
32.5°	2055.3	2072.1	2344.8	2509.8	2742.0	2859.9	2881.8	2881.8	2885.1	2885.1	2875.0
35°	700.2	701.9	759.2	823.1	959.5	1127.8	1348.3	1462.8	1849.9	2312.8	2760.6
37.5°	691.8	690.1	688.5	686.8	685.1	683.4	680.0	678.4	688.5	816.4	1107.6
40°	695.2	693.5	690.1	688.5	686.8	683.4	681.7	678.4	675.0	671.6	668.3
42.5°	695.2	693.5	691.8	690.1	688.5	686.8	683.4	680.0	676.7	671.6	666.6
45°	671.6	671.6	673.3	673.3	675.0	675.0	675.0	673.3	673.3	671.6	664.9
47.5°	627.9	627.9	632.9	632.9	636.3	639.6	639.6	643.0	648.1	651.4	653.1
50°	577.4	577.4	582.4	584.1	587.5	592.5	597.6	599.2	604.3	611.0	617.8
52.5°	526.9	526.9	531.9	531.9	535.3	540.3	545.4	547.1	553.8	560.5	568.9
55°	479.7	479.7	483.1	484.8	486.5	489.8	494.9	494.9	501.6	506.7	515.1
57.5°	437.7	441.0	441.0	441.0	442.7	446.1	449.4	449.4	454.5	459.5	466.3
60°	397.3	400.6	400.6	400.6	402.3	404.0	407.4	407.4	410.7	414.1	420.8
62.5°	360.2	363.6	363.6	365.3	365.3	367.0	370.3	368.6	372.0	373.7	378.7
65°	313.1	316.5	318.1	319.8	321.5	324.9	329.9	328.2	333.3	336.7	341.7
67.5°	267.6	271.0	271.0	272.7	274.4	277.7	281.1	281.1	286.2	289.5	296.3
70°	225.6	228.9	228.9	230.6	232.3	235.7	239.0	237.3	242.4	245.8	250.8
72.5°	186.8	190.2	190.2	191.9	191.9	195.3	198.6	202.0	202.0	205.4	208.7
75°	151.5	153.2	154.9	154.9	156.5	158.2	161.6	165.0	166.6	168.3	171.7
77.5°	119.5	121.2	122.9	122.9	124.6	126.2	127.9	134.7	138.0	139.7	139.7
80°	90.9	92.6	92.6	92.6	94.3	95.9	99.3	99.3	106.0	106.0	107.7
82.5°	64.0	65.6	65.6	65.6	67.3	70.7	72.4	74.1	77.4	79.1	79.1
85°	38.7	40.4	40.4	40.4	42.1	43.8	47.1	48.8	50.5	50.5	52.2
87.5°	15.1	16.8	18.5	18.5	20.2	21.9	23.6	25.2	26.9	26.9	28.6
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-LD5-80HL-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°	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9
2.5°	3784.0	3795.8	3784.0	3790.7	3799.1	3784.0	3748.6	3735.2	3730.1	3709.9	3696.5
5°	3994.4	3994.4	3989.4	4002.8	4001.1	3977.6	3940.5	3923.7	3906.9	3885.0	3868.2
7.5°	3844.6	3858.1	3866.5	3918.7	3952.3	3955.7	3979.3	3984.3	3991.0	3984.3	3974.2
10°	3629.1	3624.1	3647.6	3696.5	3725.1	3740.2	3785.7	3807.6	3826.1	3863.1	3901.8
12.5°	3507.9	3514.7	3524.8	3560.1	3587.1	3580.3	3598.8	3614.0	3635.9	3672.9	3728.4
15°	3427.1	3433.9	3444.0	3470.9	3487.7	3479.3	3489.4	3499.5	3514.7	3533.2	3566.9
17.5°	3339.6	3351.4	3363.2	3391.8	3406.9	3405.3	3413.7	3417.0	3422.1	3433.9	3457.4
20°	3203.3	3240.3	3263.9	3302.6	3324.5	3321.1	3336.2	3341.3	3348.0	3359.8	3369.9
22.5°	3078.7	3088.8	3100.6	3142.7	3179.7	3225.1	3235.2	3248.7	3265.5	3277.3	3287.4
25°	3008.0	3001.3	3006.3	3034.9	3055.1	3058.5	3073.7	3117.4	3162.9	3183.1	3206.6
27.5°	2965.9	2959.2	2957.5	2971.0	2974.3	2965.9	2962.6	2976.0	3009.7	3043.4	3114.1
30°	2920.5	2912.1	2905.3	2917.1	2922.2	2910.4	2888.5	2876.7	2896.9	2905.3	2933.9
32.5°	2866.6	2858.2	2854.8	2861.6	2864.9	2854.8	2831.3	2817.8	2814.4	2807.7	2814.4
35°	2806.0	2797.6	2792.5	2794.2	2801.0	2792.5	2772.3	2755.5	2747.1	2728.6	2715.1
37.5°	1445.9	2048.5	2659.6	2723.5	2730.3	2728.6	2708.4	2689.9	2681.5	2659.6	2652.8
40°	661.5	739.0	1109.3	1449.3	2090.6	2656.2	2637.7	2619.2	2604.0	2597.3	2572.0
42.5°	659.8	661.5	663.2	654.8	811.3	1382.0	2040.1	2546.8	2536.7	2519.9	2501.3
45°	659.8	651.4	658.2	648.1	651.4	649.7	809.7	1306.2	2324.6	2429.0	2420.5
47.5°	653.1	648.1	654.8	646.4	636.3	641.3	634.6	643.0	1003.2	1701.8	2331.3
50°	622.8	626.2	638.0	636.3	627.9	634.6	622.8	632.9	624.5	685.1	1319.7
52.5°	577.4	584.1	595.9	606.0	609.3	617.8	614.4	617.8	611.0	612.7	614.4
55°	523.5	531.9	542.0	557.2	563.9	577.4	587.5	592.5	600.9	599.2	585.8
57.5°	473.0	481.4	489.8	505.0	520.1	526.9	545.4	555.5	577.4	572.3	568.9
60°	425.9	432.6	441.0	444.4	462.9	474.7	491.5	501.6	530.2	537.0	547.1
62.5°	383.8	387.2	393.9	398.9	410.7	422.5	430.9	447.8	462.9	484.8	499.9
65°	345.1	348.4	353.5	356.9	358.5	375.4	380.4	398.9	404.0	427.6	441.0
67.5°	301.3	308.0	314.8	318.1	321.5	331.6	335.0	343.4	355.2	365.3	382.1
70°	255.9	260.9	267.6	272.7	279.4	286.2	296.3	301.3	309.7	316.5	329.9
72.5°	213.8	218.8	222.2	227.2	232.3	237.3	245.8	257.5	264.3	276.1	279.4
75°	173.4	178.4	181.8	185.2	190.2	193.6	196.9	208.7	215.5	225.6	235.7
77.5°	143.1	143.1	146.4	156.5	154.9	154.9	158.2	165.0	170.0	176.7	186.8
80°	111.1	112.8	114.5	122.9	124.6	126.2	124.6	129.6	134.7	136.3	143.1
82.5°	82.5	84.2	84.2	89.2	94.3	94.3	94.3	95.9	101.0	102.7	106.0
85°	55.5	57.2	58.9	60.6	64.0	65.6	67.3	67.3	70.7	72.4	74.1
87.5°	30.3	33.7	35.3	37.0	38.7	40.4	42.1	43.8	45.4	47.1	48.8
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-LD5-80HL-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°	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9	3672.9
2.5°	3691.4	3683.0	3677.9	3664.5	3661.1	3639.2	3642.6	3639.2	3639.2	3644.3	3661.1
5°	3849.6	3809.2	3799.1	3770.5	3747.0	3706.6	3681.3	3667.8	3647.6	3639.2	3651.0
7.5°	3957.4	3927.1	3901.8	3876.6	3842.9	3795.8	3760.4	3720.0	3686.4	3654.4	3646.0
10°	3938.9	3972.5	3972.5	3957.4	3925.4	3878.3	3836.2	3785.7	3726.8	3676.3	3646.0
12.5°	3782.3	3841.2	3888.4	3923.7	3955.7	3923.7	3881.6	3841.2	3775.6	3701.5	3646.0
15°	3610.6	3671.2	3730.1	3804.2	3881.6	3913.6	3911.9	3864.8	3805.9	3728.4	3651.0
17.5°	3489.4	3531.5	3563.5	3644.3	3738.5	3821.0	3876.6	3879.9	3822.7	3753.7	3652.7
20°	3398.5	3428.8	3455.8	3501.2	3583.7	3684.7	3787.4	3844.6	3834.5	3758.7	3657.7
22.5°	3316.0	3337.9	3359.8	3393.5	3459.1	3524.8	3644.3	3762.1	3812.6	3750.3	3652.7
25°	3233.6	3257.1	3274.0	3297.5	3349.7	3403.6	3487.7	3634.2	3747.0	3743.6	3642.6
27.5°	3135.9	3167.9	3188.1	3220.1	3255.4	3295.8	3353.1	3491.1	3652.7	3709.9	3615.7
30°	3018.1	3065.2	3095.5	3130.9	3161.2	3196.5	3242.0	3326.1	3526.5	3644.3	3587.1
32.5°	2848.1	2932.3	2999.6	3033.3	3066.9	3097.2	3137.6	3208.3	3371.6	3555.1	3555.1
35°	2726.9	2765.6	2826.2	2923.8	2965.9	2996.2	3033.3	3088.8	3193.2	3449.0	3502.9
37.5°	2632.6	2647.8	2678.1	2774.0	2853.1	2902.0	2939.0	2974.3	3077.0	3304.3	3435.6
40°	2561.9	2556.9	2553.5	2599.0	2711.7	2789.2	2831.3	2866.6	2945.7	3130.9	3346.3
42.5°	2479.5	2474.4	2457.6	2469.4	2524.9	2654.5	2718.5	2757.2	2822.8	2949.1	3248.7
45°	2393.6	2385.2	2378.5	2366.7	2386.9	2459.3	2590.6	2647.8	2684.8	2797.6	3125.8
47.5°	2306.1	2294.3	2285.9	2275.8	2264.0	2297.7	2422.2	2524.9	2588.9	2659.6	2977.7
50°	2181.5	2196.7	2186.6	2174.8	2164.7	2158.0	2210.1	2378.5	2457.6	2514.8	2797.6
52.5°	1028.5	1999.7	2083.9	2072.1	2058.6	2046.9	2058.6	2186.6	2329.6	2375.1	2580.5
55°	585.8	890.5	1853.3	1959.3	1947.5	1930.7	1920.6	1964.4	2178.2	2238.8	2381.8
57.5°	563.9	565.6	818.1	1765.8	1831.4	1816.2	1804.5	1814.6	1996.4	2099.0	2208.5
60°	545.4	545.4	545.4	781.0	1688.3	1693.4	1678.2	1661.4	1740.5	1942.5	2033.4
62.5°	505.0	515.1	520.1	520.1	770.9	1563.8	1548.6	1543.6	1546.9	1754.0	1858.3
65°	452.8	476.4	486.5	493.2	493.2	809.7	1415.6	1407.2	1395.4	1474.5	1681.6
67.5°	395.6	419.1	441.0	454.5	456.2	471.3	845.0	1267.5	1250.7	1252.4	1493.1
70°	336.7	356.9	380.4	400.6	419.1	427.6	441.0	1052.0	1107.6	1084.0	1279.3
72.5°	291.2	299.6	316.5	336.7	358.5	378.7	390.5	419.1	961.1	935.9	972.9
75°	242.4	249.1	260.9	274.4	291.2	314.8	335.0	355.2	510.0	784.4	779.4
77.5°	188.5	200.3	213.8	222.2	230.6	247.4	274.4	294.6	314.8	530.2	624.5
80°	144.8	153.2	159.9	168.3	178.4	190.2	200.3	223.9	247.4	266.0	478.0
82.5°	107.7	112.8	117.8	121.2	124.6	131.3	149.8	158.2	173.4	190.2	225.6
85°	75.7	79.1	82.5	84.2	85.8	87.5	94.3	95.9	111.1	114.5	136.3
87.5°	48.8	50.5	53.9	55.5	55.5	57.2	58.9	58.9	58.9	55.5	67.3
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-LD5-80HL-RW-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (continued):**

	357.5°	360°
0°	3672.9	3672.9
2.5°	3674.6	3701.5
5°	3669.5	3704.9
7.5°	3656.1	3689.7
10°	3635.9	3676.3
12.5°	3614.0	3652.7
15°	3595.5	3624.1
17.5°	3575.3	3592.1
20°	3548.3	3561.8
22.5°	3521.4	3514.7
25°	3491.1	3476.0
27.5°	3452.4	3423.8
30°	3417.0	3366.5
32.5°	3383.4	3300.9
35°	3337.9	3233.6
37.5°	3290.8	3164.5
40°	3235.2	3085.4
42.5°	3176.3	3006.3
45°	3102.3	2930.6
47.5°	3036.6	2839.7
50°	2945.7	2742.0
52.5°	2834.6	2651.2
55°	2703.3	2540.1
57.5°	2561.9	2423.9
60°	2410.4	2290.9
62.5°	2227.0	2152.9
65°	2011.5	1994.7
67.5°	1730.4	1819.6
70°	1419.0	1619.3
72.5°	1186.7	1407.2
75°	972.9	1169.9
77.5°	770.9	917.4
80°	481.4	671.6
82.5°	323.2	441.0
85°	195.3	210.4
87.5°	75.7	77.4
90°	0.0	0.0

(END OF REPORT)