

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-LD5-54SL-RM-UNV-L940-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 (P33524)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4SNLED-LD5-54SL-RM-UNV-L940-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
METALIC FINISH REFLECTOR
Light Source: -
Ballast/Driver: -

Summary

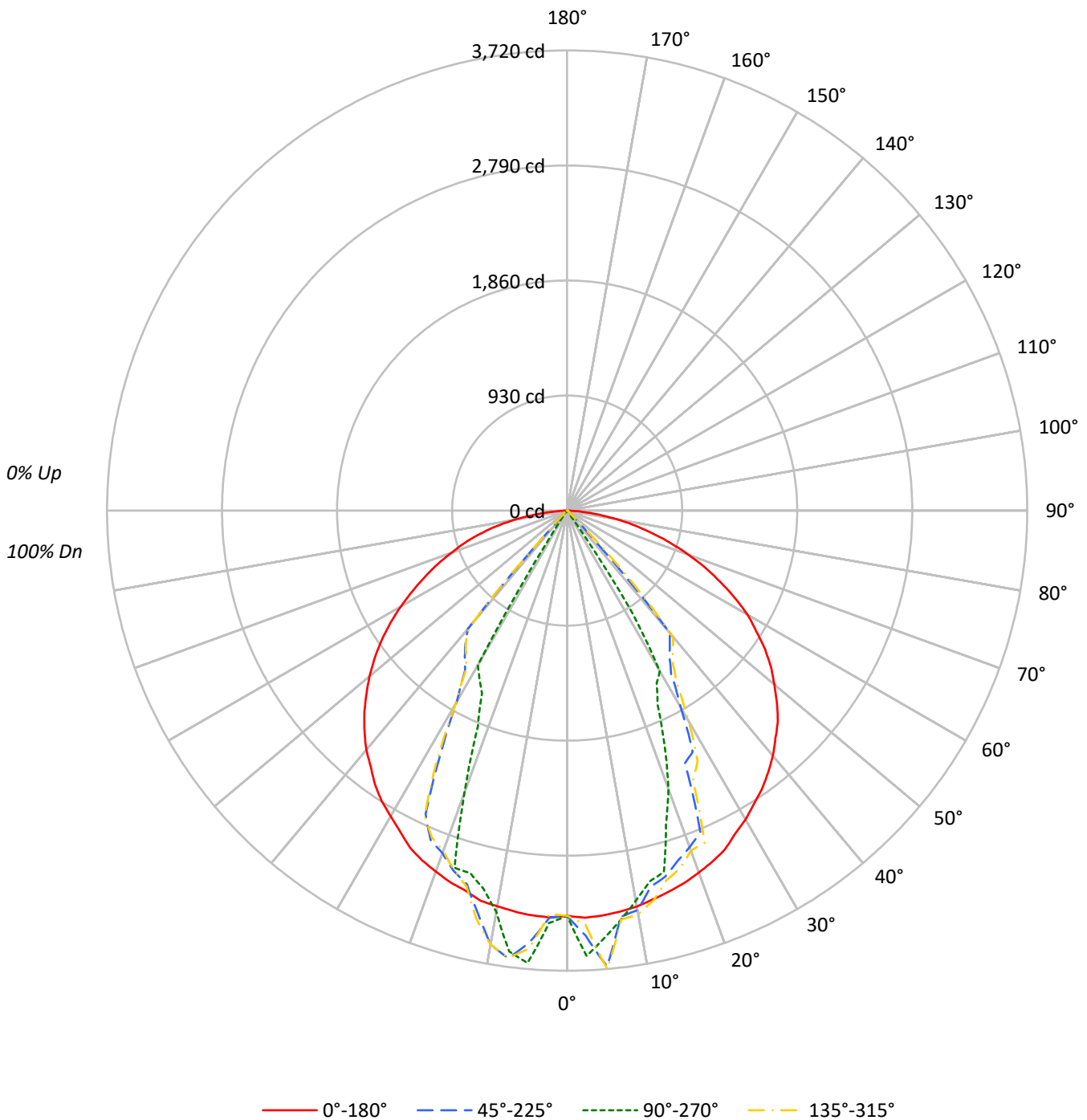
Lumens per Lamp: N/A
Luminaire Lumens: 4657.9 lumens
Efficiency: N/A
Efficacy: 113.6 lumens/watt
Spacing Criteria (0/90/45): 1.3 / 0.81 / 0.97
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 41
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#
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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	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																																				
1	112	108	105	103	109	106	103	101	102	100	98	98	96	95	95	93	92	90																																				
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81																																				
3	98	90	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72																																				
4	91	82	75	70	89	81	74	69	78	73	69	76	72	68	74	70	67	65																																				
5	85	75	68	63	84	74	68	63	72	66	62	71	65	61	69	64	61	59																																				
6	80	69	62	57	79	69	62	57	67	61	56	65	60	56	64	59	55	54																																				
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49																																				
8	71	60	53	48	70	59	52	48	58	52	47	57	51	47	56	51	47	45																																				
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42																																				
10	63	52	45	41	62	52	45	41	51	45	41	50	44	41	49	44	40	39																																				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	26473	26473	26473	26473
5°	26581	27227	26572	28833
10°	26517	24637	26500	25348
15°	26445	22996	26379	23055
20°	26475	18113	26400	18336
25°	26551	13108	26422	12369
30°	26430	11498	26151	11053
35°	26509	253	26119	307
40°	26599	55	25963	55
45°	26693	32	25691	24
50°	26489	25	25275	25
55°	26333	18	24716	18
60°	25836	20	23817	20
65°	24490	31	22745	21
70°	22719	34	21629	34
75°	20096	38	20426	38
80°	16322	43	17255	43
85°	9605	51	9804	51



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	328.7	7.1
10°-20°	896.5	19.2
20°-30°	1140.7	24.5
30°-40°	963.6	20.7
40°-50°	630.0	13.5
50°-60°	396.9	8.5
60°-70°	211.3	4.5
70°-80°	77.0	1.7
80°-90°	13.2	0.3
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°	2365.9	50.8
0°-40°	3329.5	71.5
0°-60°	4356.4	93.5
0°-90°	4657.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4657.9	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	3276	3276	3276	3276	3276	
5°	3286	3467	3285	3671	3286	312
15°	3187	3025	3180	3033	3187	901
25°	3021	1727	3006	1630	3021	1389
35°	2746	32	2706	39	2746	1718
45°	2409	4	2318	3	2409	1852
55°	1952	2	1833	2	1952	1740
65°	1367	3	1269	2	1367	1353
75°	719	3	730	3	719	763
85°	141	3	144	3	141	178
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°
0°	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9
2.5°	3294.5	3296.5	3297.5	3299.4	3302.4	3303.4	3305.3	3303.4	3303.4	3303.4	3303.4
5°	3285.7	3289.6	3292.6	3296.5	3303.4	3304.4	3312.2	3313.2	3317.1	3325.0	3330.9
7.5°	3270.9	3274.9	3280.8	3290.6	3300.4	3311.2	3325.0	3339.8	3360.4	3380.1	3404.6
10°	3249.3	3254.2	3261.1	3270.0	3318.1	3325.0	3355.5	3397.8	3409.6	3471.5	3517.7
12.5°	3217.8	3234.6	3252.3	3260.1	3306.3	3379.1	3481.3	3460.7	3438.1	3640.6	3637.7
15°	3187.4	3210.0	3201.1	3265.0	3307.3	3434.1	3390.9	3483.3	3652.4	3611.1	3613.1
17.5°	3154.9	3159.8	3209.0	3262.1	3337.8	3402.7	3455.8	3582.6	3616.0	3619.0	3582.6
20°	3113.6	3137.2	3209.0	3257.2	3385.0	3415.5	3530.5	3595.4	3581.6	3548.2	3486.2
22.5°	3071.4	3143.1	3215.9	3283.7	3373.2	3454.8	3511.8	3542.3	3470.5	3338.8	3268.0
25°	3021.2	3063.5	3158.9	3258.2	3370.2	3417.4	3450.9	3401.7	3308.3	3190.3	3071.4
27.5°	2943.5	3011.4	3133.3	3245.4	3346.6	3403.7	3349.6	3231.6	3081.2	3003.5	2949.4
30°	2883.6	2972.1	3072.3	3180.5	3285.7	3319.1	3181.5	3046.8	2943.5	2865.9	2854.1
32.5°	2810.8	2936.7	3032.0	3135.3	3223.7	3179.5	3045.8	2871.8	2786.2	2756.8	2768.5
35°	2745.9	2841.3	2966.2	3067.4	3131.3	3032.0	2820.7	2712.5	2671.2	2687.9	2666.3
37.5°	2668.3	2794.1	2909.1	2996.6	2975.0	2825.6	2646.6	2577.8	2582.7	2569.0	2527.7
40°	2587.6	2707.6	2827.5	2910.1	2834.4	2606.3	2487.4	2472.6	2475.6	2431.3	2372.3
42.5°	2493.3	2602.4	2722.3	2797.1	2633.9	2455.9	2375.3	2377.3	2351.7	2289.8	2258.3
45°	2408.7	2509.0	2633.9	2640.7	2440.2	2291.7	2268.1	2242.6	2185.5	2164.9	2141.3
47.5°	2300.6	2411.7	2514.9	2477.5	2250.4	2158.0	2140.3	2084.3	2055.8	2040.0	2020.4
50°	2185.5	2297.6	2392.0	2285.8	2071.5	2049.9	1991.9	1947.6	1928.0	1911.2	1893.5
52.5°	2076.4	2168.8	2265.2	2082.3	1933.9	1913.2	1847.3	1821.8	1802.1	1783.4	1779.5
55°	1952.5	2034.1	2100.0	1888.6	1802.1	1753.9	1706.7	1689.1	1670.4	1661.5	1676.3
57.5°	1811.9	1904.4	1894.5	1697.9	1659.6	1589.8	1572.1	1560.3	1546.5	1552.4	1429.5
60°	1685.1	1755.9	1707.7	1558.3	1493.4	1446.2	1430.5	1422.6	1430.5	1310.5	1152.3
62.5°	1528.8	1608.4	1511.1	1395.1	1326.3	1303.7	1289.9	1300.7	1185.7	1053.9	1015.6
65°	1366.6	1453.1	1309.6	1220.1	1176.8	1157.2	1156.2	1064.8	951.7	900.6	900.6
67.5°	1210.3	1299.7	1114.9	1040.2	1023.5	1025.4	968.4	829.8	798.3	763.9	664.6
70°	1044.1	1122.8	921.2	876.0	866.2	859.3	720.6	683.3	645.9	554.5	546.6
72.5°	878.9	917.3	740.3	729.5	727.5	604.6	577.1	513.2	469.9	459.1	454.2
75°	718.7	706.9	585.0	594.8	501.4	458.1	413.9	376.5	370.6	366.7	91.4
77.5°	567.3	508.3	461.1	401.1	358.8	304.8	295.9	290.0	190.7	68.8	56.0
80°	412.9	329.4	306.7	260.5	222.2	213.3	218.3	66.9	53.1	44.2	38.3
82.5°	262.5	210.4	172.1	150.4	146.5	63.9	47.2	38.3	33.4	28.5	23.6
85°	140.6	93.4	86.5	72.8	43.3	29.5	24.6	18.7	15.7	12.8	11.8
87.5°	44.2	37.4	30.5	24.6	14.7	9.8	7.9	6.9	5.9	4.9	4.9
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):

	11°	12°	13°	14°	15°	16°	17°	18°	19°	20°	25°
0°	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9
2.5°	3301.4	3303.4	3302.4	3305.3	3305.3	3309.3	3312.2	3315.2	3321.1	3324.0	3346.6
5°	3343.7	3348.6	3363.4	3377.1	3393.8	3398.7	3427.3	3434.1	3467.6	3471.5	3581.6
7.5°	3438.1	3456.8	3492.1	3527.5	3562.9	3585.5	3624.9	3649.5	3676.0	3699.6	3787.1
10°	3552.1	3583.6	3618.0	3653.4	3674.0	3717.3	3740.9	3744.8	3737.9	3699.6	3558.0
12.5°	3664.2	3695.7	3680.9	3687.8	3712.4	3635.7	3646.5	3591.4	3629.8	3440.0	3299.4
15°	3648.5	3646.5	3610.1	3492.1	3511.8	3365.3	3306.3	3261.1	3297.5	3277.8	3256.2
17.5°	3601.3	3511.8	3448.9	3307.3	3247.3	3206.1	3207.0	3208.0	3190.3	3209.0	3153.9
20°	3401.7	3301.4	3208.0	3157.9	3140.2	3110.7	3125.4	3110.7	3111.7	3117.6	3033.0
22.5°	3136.2	3105.8	3051.7	3067.4	3061.5	3088.1	3068.4	3037.9	3047.8	3003.5	2939.6
25°	3029.1	2993.7	2991.7	2997.6	2988.8	2977.0	2959.3	2913.1	2910.1	2896.4	2866.9
27.5°	2920.9	2922.9	2928.8	2911.1	2879.6	2856.0	2829.5	2806.9	2815.7	2800.0	2759.7
30°	2846.2	2845.2	2809.8	2794.1	2736.1	2737.1	2730.2	2716.4	2707.6	2708.6	2683.0
32.5°	2740.0	2709.6	2669.3	2649.6	2644.7	2627.0	2613.2	2616.2	2623.0	2598.5	2625.0
35°	2630.9	2568.0	2562.1	2545.4	2529.6	2517.8	2522.8	2503.1	2502.1	2499.2	2282.9
37.5°	2484.4	2453.9	2451.0	2433.3	2422.5	2419.5	2400.9	2403.8	2412.6	2428.4	1946.6
40°	2363.5	2336.0	2329.1	2328.1	2304.5	2302.5	2307.5	2326.1	2338.9	2240.6	1855.2
42.5°	2233.7	2235.7	2214.1	2200.3	2203.2	2212.1	2235.7	2170.8	1880.8	1792.3	1695.9
45°	2122.6	2112.8	2101.0	2097.1	2122.6	2104.9	1845.4	1702.8	1668.4	1664.5	1394.1
47.5°	2006.6	2003.7	1998.7	2001.7	1856.2	1654.6	1595.7	1577.0	1582.9	1578.9	1197.5
50°	1889.6	1893.5	1893.5	1653.7	1518.0	1484.6	1489.5	1506.2	1402.0	1308.6	1115.9
52.5°	1788.3	1757.9	1506.2	1419.7	1389.2	1403.9	1368.5	1237.8	1143.4	1088.3	1032.3
55°	1600.6	1376.4	1320.4	1306.6	1317.4	1186.7	1106.0	1021.5	996.9	991.0	958.6
57.5°	1259.4	1214.2	1219.1	1164.0	1039.2	965.5	933.0	921.2	910.4	902.5	78.7
60°	1113.9	1126.7	1031.3	913.3	863.2	853.4	845.5	834.7	832.7	819.0	50.1
62.5°	1019.5	896.6	814.0	784.6	772.8	769.8	755.1	750.1	637.1	87.5	37.4
65°	768.8	718.7	703.0	696.1	683.3	683.3	567.3	89.5	72.8	62.9	33.4
67.5°	627.2	623.3	615.5	606.6	412.9	86.5	75.7	65.9	57.0	50.1	29.5
70°	530.9	528.9	481.7	88.5	73.7	64.9	57.0	51.1	47.2	42.3	26.5
72.5°	435.5	88.5	74.7	64.9	56.0	51.1	46.2	41.3	37.4	34.4	21.6
75°	67.8	60.0	53.1	48.2	44.2	39.3	35.4	32.4	31.5	27.5	14.7
77.5°	49.2	42.3	38.3	34.4	30.5	27.5	23.6	20.6	18.7	15.7	10.8
80°	34.4	30.5	27.5	22.6	19.7	16.7	14.7	12.8	11.8	9.8	4.9
82.5°	19.7	16.7	14.7	11.8	10.8	8.8	7.9	6.9	6.9	4.9	4.9
85°	8.8	8.8	6.9	5.9	4.9	4.9	4.9	3.9	3.9	2.9	2.9
87.5°	3.9	3.9	3.9	3.9	3.9	2.9	2.9	2.9	2.9	2.9	2.0
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):

	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°
0°	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9
2.5°	3378.1	3390.9	3415.5	3441.0	3412.5	3514.8	3506.9	3541.3	3560.0	3568.8	3589.5
5°	3678.9	3736.0	3754.6	3698.6	3666.2	3632.7	3557.0	3500.0	3506.9	3488.2	3420.4
7.5°	3673.0	3551.1	3386.9	3312.2	3306.3	3297.5	3321.1	3334.8	3336.8	3335.8	3333.9
10°	3362.4	3299.4	3288.6	3278.8	3282.7	3246.4	3229.6	3182.5	3208.0	3194.3	3199.2
12.5°	3268.0	3253.2	3195.2	3114.6	3162.8	3126.4	3105.8	3119.5	3103.8	3089.1	3084.1
15°	3211.9	3116.6	3084.1	3064.5	3050.7	3042.8	3049.7	3034.0	3029.1	3026.1	3033.0
17.5°	3095.9	3057.6	3022.2	2970.1	2971.1	2968.1	2987.8	3017.3	3019.3	2867.8	2731.2
20°	3004.5	2973.0	2927.8	2895.4	2939.6	2861.0	2557.2	2412.6	2390.0	2390.0	2394.0
22.5°	2931.8	2861.9	2864.9	2813.8	2399.9	2315.3	2317.3	2326.1	2285.8	2148.2	2133.4
25°	2832.5	2821.6	2606.3	2252.4	2255.3	2189.5	2088.2	1945.7	1791.3	1791.3	1765.7
27.5°	2757.7	2528.7	2214.1	2199.3	1978.1	1838.5	1752.0	1621.2	1603.5	1586.8	1588.8
30°	2693.8	2139.3	2147.2	1838.5	1675.3	1559.3	1552.4	1530.8	1519.9	1517.0	1506.2
32.5°	2129.5	2083.3	1797.2	1565.2	1501.3	1482.6	1473.7	1449.2	1448.2	1429.5	1299.7
35°	1996.8	1828.7	1504.2	1441.3	1422.6	1404.9	1390.2	933.0	110.1	44.2	38.3
37.5°	1845.4	1527.8	1391.2	1362.6	1344.9	994.0	99.3	34.4	24.6	17.7	15.7
40°	1564.2	1364.6	1321.4	1289.9	531.9	34.4	21.6	16.7	9.8	8.8	7.9
42.5°	1319.4	1286.0	1239.8	377.5	39.3	16.7	10.8	7.9	6.9	6.9	5.9
45°	1234.8	1205.3	499.4	37.4	24.6	7.9	6.9	6.9	5.9	3.9	3.9
47.5°	1156.2	1017.6	45.2	23.6	15.7	6.9	5.9	3.9	3.9	3.9	2.9
50°	1072.6	56.0	31.5	17.7	9.8	3.9	3.9	3.9	3.9	2.9	2.9
52.5°	200.6	39.3	25.6	15.7	4.9	3.9	3.9	3.9	2.9	2.9	2.9
55°	47.2	31.5	23.6	13.8	3.9	3.9	3.9	2.9	2.9	2.9	2.0
57.5°	35.4	23.6	18.7	12.8	3.9	2.9	2.9	2.9	2.9	2.9	2.0
60°	29.5	16.7	14.7	11.8	2.9	2.9	2.9	2.9	2.9	2.9	2.0
62.5°	20.6	13.8	10.8	8.8	2.9	2.9	2.9	2.9	2.9	2.9	2.9
65°	16.7	10.8	8.8	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
67.5°	14.7	8.8	5.9	2.0	2.9	2.9	2.9	2.9	2.9	2.9	2.9
70°	11.8	2.9	2.9	2.0	2.9	2.9	2.9	2.9	2.9	2.9	2.9
72.5°	9.8	2.9	2.0	2.0	2.9	2.9	2.9	2.9	2.9	2.9	2.9
75°	9.8	4.9	2.0	2.0	2.9	2.9	3.9	3.9	2.9	2.9	2.9
77.5°	6.9	4.9	2.0	2.0	2.9	2.9	3.9	3.9	2.9	2.9	2.9
80°	3.9	4.9	2.0	2.9	2.9	5.9	6.9	3.9	2.9	2.9	2.9
82.5°	3.9	4.9	5.9	5.9	2.9	4.9	5.9	4.9	3.9	2.9	2.9
85°	3.9	2.9	3.9	4.9	2.9	4.9	4.9	3.9	3.9	2.9	2.9
87.5°	2.0	2.9	2.9	3.9	3.9	3.9	4.9	3.9	3.9	3.9	2.9
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-LD5-54SL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	85°	90°	95°	100°	105°	110°	115°	120°	125°	130°	135°
0°	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9
2.5°	3599.3	3603.2	3541.3	3519.7	3538.4	3534.4	3517.7	3455.8	3448.9	3407.6	3347.6
5°	3440.0	3466.6	3434.1	3490.2	3463.6	3490.2	3570.8	3608.2	3669.1	3706.5	3720.2
7.5°	3328.9	3334.8	3334.8	3339.8	3344.7	3345.7	3339.8	3335.8	3319.1	3298.5	3335.8
10°	3194.3	3201.1	3212.9	3211.0	3210.0	3230.6	3235.5	3277.8	3275.9	3283.7	3312.2
12.5°	3124.4	3071.4	3119.5	3106.8	3124.4	3096.9	3148.0	3139.2	3142.1	3165.7	3226.7
15°	3008.4	3025.2	3036.9	3036.9	3043.8	3037.9	3032.0	3072.3	3096.9	3097.9	3094.0
17.5°	2785.3	2658.4	2788.2	2754.8	3021.2	3028.1	3005.5	2986.8	2986.8	3001.6	3033.0
20°	2391.0	2394.0	2395.0	2407.7	2423.5	2422.5	2423.5	2810.8	2994.7	2952.4	2923.9
22.5°	2096.1	2059.7	2127.5	2122.6	2207.2	2300.6	2390.0	2381.2	2387.1	2660.4	2906.2
25°	1680.2	1727.4	1689.1	1705.8	1801.1	1912.2	1981.0	2161.0	2356.6	2342.8	2406.7
27.5°	1581.9	1569.1	1586.8	1586.8	1599.6	1614.3	1652.7	1753.9	1928.0	2110.8	2283.9
30°	1488.5	1499.3	1501.3	1519.0	1528.8	1538.6	1544.5	1582.9	1622.2	1749.0	1962.4
32.5°	1117.8	980.2	1289.9	1373.5	1444.2	1461.0	1472.8	1488.5	1517.0	1535.7	1642.8
35°	32.4	32.4	34.4	39.3	50.1	338.2	1287.9	1419.7	1438.3	1461.9	1481.6
37.5°	15.7	11.8	13.8	14.7	17.7	24.6	35.4	110.1	1226.0	1386.2	1407.9
40°	6.9	6.9	6.9	6.9	7.9	9.8	14.7	24.6	37.4	986.1	1330.2
42.5°	5.9	5.9	5.9	5.9	5.9	5.9	6.9	8.8	17.7	42.3	698.0
45°	3.9	3.9	2.9	3.9	3.9	4.9	5.9	5.9	7.9	26.5	48.2
47.5°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	4.9	5.9	17.7	25.6
50°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	13.8	17.7
52.5°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	5.9	15.7
55°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.9	2.9	3.9	13.8
57.5°	2.0	2.0	2.0	2.0	2.0	2.9	2.0	2.0	2.9	2.9	12.8
60°	2.0	2.0	2.0	2.0	2.0	2.9	2.9	2.9	2.9	2.9	11.8
62.5°	2.9	2.9	2.0	2.9	2.0	2.0	2.9	2.9	2.9	2.9	7.9
65°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.0	2.9
67.5°	2.9	2.9	2.9	2.9	2.0	2.9	2.0	2.9	2.9	2.0	2.0
70°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.0	2.0	2.0	2.0
72.5°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.0	2.0	2.0	2.0
75°	2.9	2.9	2.9	2.9	2.9	2.9	3.9	3.9	2.0	2.0	2.0
77.5°	2.9	2.9	2.9	2.9	2.9	2.9	4.9	5.9	4.9	4.9	2.0
80°	2.9	2.9	2.9	2.9	2.9	2.9	4.9	4.9	4.9	4.9	6.9
82.5°	2.9	2.9	2.9	2.9	2.9	2.9	3.9	3.9	3.9	3.9	4.9
85°	2.9	2.9	2.9	2.9	2.9	2.9	3.9	3.9	3.9	2.9	3.9
87.5°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	3.9	2.9	2.9	2.9
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-LD5-54SL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	140°	145°	150°	155°	160°	161°	162°	163°	164°	165°	166°
0°	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9
2.5°	3352.5	3319.1	3308.3	3285.7	3283.7	3285.7	3280.8	3273.9	3277.8	3270.9	3265.0
5°	3728.1	3638.6	3580.6	3503.0	3395.8	3372.2	3366.3	3332.9	3321.1	3317.1	3301.4
7.5°	3424.3	3587.5	3685.8	3719.3	3593.4	3563.9	3529.5	3502.0	3475.4	3425.3	3394.8
10°	3289.6	3297.5	3391.9	3502.0	3680.9	3705.5	3724.2	3664.2	3647.5	3519.7	3492.1
12.5°	3258.2	3259.1	3270.0	3336.8	3477.4	3493.1	3559.0	3594.4	3637.7	3662.2	3642.6
15°	3114.6	3194.3	3253.2	3259.1	3271.9	3299.4	3319.1	3442.0	3494.1	3633.7	3625.9
17.5°	3047.8	3073.3	3158.9	3228.7	3216.9	3207.0	3222.8	3239.5	3289.6	3429.2	3427.3
20°	2936.7	3018.3	3064.5	3137.2	3203.1	3206.1	3188.4	3178.5	3158.9	3181.5	3202.1
22.5°	2889.5	2902.3	2988.8	3039.9	3114.6	3141.2	3145.1	3146.1	3135.3	3123.5	3117.6
25°	2884.6	2844.3	2888.5	2952.4	3007.5	3036.0	3068.4	3079.2	3075.3	3075.3	3069.4
27.5°	2360.5	2831.5	2807.9	2850.2	2917.0	2936.7	2953.4	2986.8	3007.5	3022.2	3029.1
30°	2248.5	2333.0	2745.0	2750.9	2818.7	2816.7	2835.4	2862.9	2889.5	2923.9	2932.7
32.5°	1988.9	2196.4	2512.9	2651.6	2722.3	2729.2	2739.1	2746.9	2771.5	2809.8	2843.3
35°	1593.7	2000.7	2153.1	2604.4	2617.1	2630.9	2636.8	2655.5	2663.4	2679.1	2708.6
37.5°	1442.3	1653.7	2065.6	2252.4	2496.2	2508.0	2539.5	2547.3	2560.1	2572.9	2595.5
40°	1354.8	1412.8	1719.5	2011.5	2398.9	2406.7	2417.6	2437.2	2438.2	2453.0	2473.6
42.5°	1285.0	1322.3	1411.8	1921.1	2330.1	2329.1	2303.5	2316.3	2322.2	2337.9	2366.4
45°	1026.4	1240.7	1297.8	1569.1	1855.2	1988.9	2245.5	2203.2	2202.3	2208.2	2238.6
47.5°	52.1	1167.0	1207.3	1294.8	1752.0	1756.9	1790.3	2071.5	2114.8	2101.0	2103.9
50°	35.4	80.6	1124.7	1165.0	1510.1	1632.0	1656.6	1669.4	1831.6	2012.5	1983.0
52.5°	27.5	46.2	689.2	1081.5	1227.0	1316.4	1474.7	1565.2	1575.0	1647.8	1894.5
55°	24.6	35.4	74.7	997.9	1043.1	1062.8	1155.2	1313.5	1441.3	1479.6	1482.6
57.5°	21.6	32.4	51.1	451.3	948.7	952.7	968.4	1023.5	1138.5	1243.7	1362.6
60°	19.7	28.5	40.3	77.7	862.2	872.1	875.0	889.8	903.5	975.3	1111.9
62.5°	11.8	22.6	35.4	56.0	682.3	783.6	782.6	792.4	805.2	813.1	840.6
65°	9.8	17.7	30.5	47.2	83.6	104.2	633.1	703.9	711.8	722.6	727.5
67.5°	8.8	15.7	22.6	37.4	62.9	71.8	82.6	102.2	558.4	629.2	639.0
70°	7.9	10.8	18.7	31.5	51.1	55.1	61.9	70.8	83.6	103.2	505.3
72.5°	4.9	7.9	12.8	22.6	39.3	44.2	48.2	54.1	60.0	71.8	82.6
75°	2.0	5.9	10.8	16.7	30.5	33.4	36.4	40.3	45.2	53.1	59.0
77.5°	2.0	4.9	8.8	11.8	19.7	22.6	26.5	29.5	33.4	37.4	43.3
80°	6.9	3.9	5.9	8.8	13.8	14.7	16.7	18.7	21.6	24.6	28.5
82.5°	4.9	5.9	6.9	5.9	6.9	8.8	9.8	11.8	12.8	14.7	15.7
85°	3.9	3.9	4.9	4.9	4.9	4.9	4.9	4.9	5.9	6.9	8.8
87.5°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	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-LD5-54SL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	167°	168°	169°	170°	171°	172°	173°	174°	175°	176°	177°
0°	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9
2.5°	3265.0	3263.1	3257.2	3257.2	3256.2	3260.1	3263.1	3266.0	3265.0	3270.9	3265.0
5°	3289.6	3284.7	3275.9	3268.0	3265.0	3267.0	3264.1	3267.0	3263.1	3268.0	3259.1
7.5°	3357.5	3340.7	3306.3	3292.6	3274.9	3273.9	3265.0	3263.1	3257.2	3257.2	3246.4
10°	3477.4	3396.8	3386.9	3345.7	3330.9	3259.1	3274.9	3248.3	3245.4	3232.6	3227.7
12.5°	3575.7	3512.8	3494.1	3457.7	3416.4	3270.9	3303.4	3246.4	3243.4	3217.8	3191.3
15°	3577.7	3614.1	3562.9	3462.7	3453.8	3353.5	3287.7	3268.0	3242.4	3165.7	3178.5
17.5°	3462.7	3546.2	3570.8	3549.2	3486.2	3418.4	3326.0	3286.7	3210.0	3175.6	3152.0
20°	3275.9	3360.4	3465.6	3472.5	3511.8	3463.6	3342.7	3278.8	3186.4	3126.4	3106.8
22.5°	3127.4	3189.3	3310.3	3366.3	3414.5	3431.2	3354.5	3260.1	3145.1	3087.1	3075.3
25°	3048.7	3062.5	3098.9	3164.8	3270.9	3347.6	3358.4	3258.2	3198.2	3071.4	3004.5
27.5°	3020.2	3008.4	2993.7	3027.1	3106.8	3200.2	3262.1	3278.8	3129.4	3008.4	2941.6
30°	2947.5	2954.4	2931.8	2920.0	2972.1	3068.4	3178.5	3206.1	3091.0	2966.2	2889.5
32.5°	2858.0	2869.8	2873.7	2853.1	2842.3	2909.1	3028.1	3094.0	3088.1	2906.2	2820.7
35°	2745.9	2779.4	2788.2	2789.2	2771.5	2760.7	2829.5	2966.2	3018.3	2878.7	2754.8
37.5°	2628.0	2637.8	2686.0	2698.7	2698.7	2666.3	2717.4	2826.6	2899.3	2816.7	2674.2
40°	2480.5	2511.9	2557.2	2579.8	2602.4	2605.3	2576.8	2653.5	2773.5	2752.8	2598.5
42.5°	2373.3	2394.0	2421.5	2452.0	2498.2	2510.0	2480.5	2494.3	2619.1	2673.2	2500.1
45°	2248.5	2276.0	2283.9	2317.3	2365.5	2399.9	2398.9	2370.4	2470.7	2537.5	2428.4
47.5°	2120.7	2147.2	2161.0	2177.7	2213.1	2257.3	2281.9	2269.1	2288.8	2419.5	2333.0
50°	1988.9	2003.7	2031.2	2049.9	2073.5	2099.0	2158.0	2169.8	2142.3	2246.5	2227.8
52.5°	1864.1	1869.0	1887.6	1906.3	1937.8	1956.5	2003.7	2039.1	2037.1	2067.6	2110.8
55°	1766.7	1745.1	1749.0	1763.8	1784.4	1812.9	1839.5	1894.5	1913.2	1919.1	1987.9
57.5°	1380.3	1602.5	1622.2	1621.2	1645.8	1658.6	1683.2	1719.5	1786.4	1771.6	1848.3
60°	1254.5	1279.1	1464.9	1486.5	1495.4	1507.2	1536.7	1570.1	1619.2	1650.7	1684.1
62.5°	956.6	1106.0	1162.1	1326.3	1351.8	1358.7	1378.4	1394.1	1445.2	1517.0	1503.2
65°	740.3	804.2	975.3	1042.1	1181.7	1199.4	1227.0	1243.7	1258.4	1341.0	1344.9
67.5°	640.0	649.9	696.1	824.9	913.3	1050.0	1066.7	1081.5	1104.1	1163.1	1199.4
70°	546.6	558.4	571.2	582.0	697.1	787.5	914.3	919.2	934.0	973.3	1055.9
72.5°	103.2	467.0	474.9	481.7	494.5	554.5	675.4	773.7	779.6	798.3	874.0
75°	69.8	81.6	112.1	385.4	398.2	402.1	422.8	545.6	636.1	640.0	673.5
77.5°	50.1	56.0	67.8	80.6	205.5	308.7	313.6	336.2	429.6	497.5	503.4
80°	34.4	38.3	45.2	51.1	62.9	82.6	228.1	235.0	246.8	340.2	357.9
82.5°	19.7	22.6	26.5	32.4	37.4	47.2	61.0	78.7	160.3	171.1	227.1
85°	9.8	10.8	12.8	15.7	18.7	22.6	30.5	37.4	51.1	92.4	95.4
87.5°	4.9	4.9	4.9	4.9	7.9	8.8	10.8	13.8	17.7	26.5	34.4
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-LD5-54SL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	178°	179°	180°	181°	182°	183°	184°	185°	186°	187°	188°
0°	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9
2.5°	3266.0	3279.8	3291.6	3294.5	3294.5	3296.5	3299.4	3301.4	3303.4	3305.3	3303.4
5°	3260.1	3274.9	3284.7	3287.7	3287.7	3293.6	3298.5	3304.4	3307.3	3307.3	3305.3
7.5°	3245.4	3256.2	3269.0	3276.8	3277.8	3287.7	3296.5	3295.5	3299.4	3301.4	3306.3
10°	3225.7	3225.7	3247.3	3253.2	3258.2	3269.0	3271.9	3277.8	3291.6	3293.6	3306.3
12.5°	3215.9	3206.1	3231.6	3234.6	3251.3	3237.5	3255.2	3261.1	3247.3	3266.0	3241.4
15°	3171.6	3183.4	3179.5	3188.4	3217.8	3202.1	3250.3	3234.6	3270.0	3227.7	3302.4
17.5°	3135.3	3133.3	3149.0	3156.9	3162.8	3196.2	3209.0	3226.7	3240.5	3228.7	3258.2
20°	3108.7	3093.0	3104.8	3113.6	3134.3	3159.8	3167.7	3141.2	3187.4	3266.0	3284.7
22.5°	3058.6	3047.8	3061.5	3061.5	3093.0	3089.1	3118.6	3101.8	3145.1	3236.5	3331.9
25°	2990.7	2991.7	3006.5	3024.2	3030.1	3074.3	3090.0	3111.7	3165.7	3274.9	3332.9
27.5°	2921.9	2916.0	2924.9	2961.2	2991.7	3024.2	3029.1	3102.8	3176.6	3251.3	3302.4
30°	2853.1	2847.2	2853.1	2879.6	2916.0	2937.7	2991.7	3090.0	3158.9	3210.0	3258.2
32.5°	2779.4	2773.5	2787.2	2806.9	2870.8	2873.7	2980.9	3073.3	3127.4	3164.8	3155.9
35°	2700.7	2692.8	2705.6	2736.1	2795.1	2816.7	2928.8	2997.6	3058.6	3076.3	3035.0
37.5°	2606.3	2592.6	2608.3	2650.6	2712.5	2775.4	2868.8	2948.5	2980.9	2933.7	2884.6
40°	2508.0	2498.2	2525.7	2547.3	2620.1	2707.6	2814.8	2870.8	2850.2	2796.1	2742.0
42.5°	2420.5	2399.9	2424.4	2465.7	2548.3	2647.6	2734.1	2765.6	2716.4	2636.8	2573.9
45°	2313.4	2288.8	2318.3	2373.3	2461.8	2574.9	2642.7	2631.9	2548.3	2479.5	2393.0
47.5°	2201.3	2171.8	2201.3	2267.1	2366.4	2486.4	2535.5	2486.4	2381.2	2294.7	2224.9
50°	2091.2	2056.7	2085.3	2184.6	2281.9	2374.3	2373.3	2278.0	2215.0	2120.7	2059.7
52.5°	1982.0	1932.9	1961.4	2069.5	2166.9	2272.1	2194.4	2105.9	2030.2	1947.6	1928.0
55°	1847.3	1794.2	1832.6	1989.9	2064.6	2126.6	2002.7	1925.0	1850.3	1809.0	1784.4
57.5°	1719.5	1661.5	1694.9	1880.8	1935.8	1951.6	1837.5	1727.4	1683.2	1669.4	1634.0
60°	1587.8	1521.9	1553.4	1767.7	1806.0	1742.1	1630.1	1544.5	1535.7	1508.2	1480.6
62.5°	1461.9	1389.2	1408.9	1627.1	1644.8	1528.8	1425.6	1403.0	1381.3	1353.8	1339.0
65°	1317.4	1241.7	1269.2	1477.7	1461.0	1311.5	1253.5	1248.6	1220.1	1197.5	1219.1
67.5°	1184.7	1095.2	1133.6	1314.5	1238.8	1116.9	1093.3	1081.5	1058.9	1071.6	844.5
70°	1039.2	941.9	994.0	1138.5	1026.4	945.8	936.9	919.2	920.2	731.5	616.4
72.5°	877.0	792.4	868.1	945.8	812.1	788.5	775.7	773.7	624.3	507.3	478.8
75°	734.4	648.9	730.5	760.0	646.9	631.2	630.2	521.1	410.0	391.3	382.4
77.5°	573.2	507.3	585.0	540.7	496.5	478.8	429.6	322.5	308.7	295.9	111.1
80°	386.4	391.3	436.5	372.6	353.9	301.8	237.9	228.1	196.6	78.7	61.9
82.5°	235.0	294.9	278.2	233.0	228.1	164.2	150.4	76.7	57.0	45.2	39.3
85°	121.9	149.4	143.5	126.8	94.4	84.6	47.2	36.4	29.5	22.6	18.7
87.5°	41.3	55.1	53.1	42.3	32.4	25.6	16.7	13.8	9.8	7.9	6.9
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-LD5-54SL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	189°	190°	191°	192°	193°	194°	195°	196°	197°	198°	199°
0°	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9
2.5°	3301.4	3301.4	3299.4	3301.4	3302.4	3300.4	3300.4	3302.4	3303.4	3304.4	3309.3
5°	3306.3	3308.3	3311.2	3317.1	3318.1	3329.9	3334.8	3337.8	3340.7	3341.7	3334.8
7.5°	3317.1	3324.0	3329.9	3328.9	3322.1	3303.4	3297.5	3292.6	3301.4	3324.0	3350.6
10°	3327.0	3295.5	3236.5	3317.1	3292.6	3315.2	3382.0	3396.8	3442.0	3505.9	3524.6
12.5°	3259.1	3345.7	3364.3	3273.9	3441.0	3379.1	3452.8	3517.7	3536.4	3601.3	3562.0
15°	3331.9	3374.2	3402.7	3493.1	3483.3	3536.4	3557.0	3544.3	3547.2	3563.9	3608.2
17.5°	3330.9	3415.5	3434.1	3495.1	3536.4	3537.4	3531.5	3525.6	3541.3	3554.1	3527.5
20°	3387.9	3415.5	3451.8	3476.4	3484.3	3494.1	3512.8	3498.0	3468.6	3440.0	3428.2
22.5°	3359.4	3421.4	3452.8	3456.8	3451.8	3421.4	3393.8	3352.5	3338.8	3324.0	3328.9
25°	3365.3	3393.8	3389.9	3374.2	3353.5	3296.5	3282.7	3265.0	3238.5	3174.6	3116.6
27.5°	3323.0	3308.3	3290.6	3252.3	3214.9	3184.4	3150.0	3093.0	3045.8	2977.0	2951.4
30°	3252.3	3193.3	3150.0	3127.4	3091.0	3039.9	2987.8	2918.0	2858.0	2844.3	2831.5
32.5°	3116.6	3058.6	3023.2	2968.1	2906.2	2845.2	2785.3	2757.7	2745.0	2746.9	2735.1
35°	2978.0	2926.8	2873.7	2791.2	2745.0	2684.0	2662.4	2656.5	2644.7	2631.9	2618.1
37.5°	2830.5	2770.5	2690.9	2641.7	2595.5	2570.9	2560.1	2551.3	2530.6	2508.0	2492.3
40°	2687.9	2579.8	2535.5	2487.4	2473.6	2462.8	2447.1	2425.4	2396.9	2393.0	2386.1
42.5°	2497.2	2419.5	2381.2	2371.4	2354.6	2336.0	2322.2	2298.6	2286.8	2294.7	2300.6
45°	2316.3	2277.0	2264.2	2252.4	2220.9	2194.4	2185.5	2177.7	2187.5	2230.8	2127.5
47.5°	2169.8	2154.1	2138.4	2118.7	2089.2	2069.5	2078.4	2086.2	2095.1	1777.5	1622.2
50°	2043.0	2021.4	1996.8	1975.1	1957.5	1955.5	2001.7	1863.1	1560.3	1552.4	1395.1
52.5°	1904.4	1871.9	1857.2	1844.4	1852.3	1881.7	1557.3	1445.2	1386.2	1204.4	1123.7
55°	1754.9	1726.4	1726.4	1738.2	1695.9	1374.4	1357.7	1173.9	1062.8	1031.3	1018.5
57.5°	1605.5	1602.5	1619.2	1480.6	1247.6	1196.5	1005.8	965.5	947.8	943.8	923.2
60°	1468.8	1496.4	1252.5	1152.3	1001.8	903.5	876.0	871.1	852.4	845.5	826.8
62.5°	1359.7	1127.7	1050.0	857.3	807.2	794.4	779.6	772.8	756.0	667.6	195.6
65°	982.2	928.1	753.1	720.6	716.7	698.0	692.1	622.3	146.5	98.3	83.6
67.5°	741.3	657.7	635.1	629.2	610.5	573.2	170.1	97.3	83.6	72.8	63.9
70°	569.2	554.5	537.8	524.0	154.4	96.3	83.6	70.8	61.0	54.1	49.2
72.5°	466.0	456.2	265.5	101.3	82.6	69.8	61.9	54.1	47.2	43.3	39.3
75°	364.7	101.3	83.6	69.8	60.0	51.1	45.2	40.3	36.4	33.4	30.5
77.5°	82.6	66.9	57.0	48.2	43.3	38.3	34.4	29.5	26.5	23.6	19.7
80°	51.1	44.2	37.4	34.4	29.5	24.6	21.6	19.7	15.7	14.7	12.8
82.5°	33.4	26.5	23.6	19.7	15.7	14.7	12.8	9.8	8.8	7.9	6.9
85°	14.7	12.8	10.8	8.8	6.9	5.9	4.9	3.9	3.9	3.9	3.9
87.5°	4.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.0	2.0
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-LD5-54SL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	200°	205°	210°	215°	220°	225°	230°	235°	240°	245°	250°
0°	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9
2.5°	3311.2	3328.9	3345.7	3340.7	3323.0	3295.5	3287.7	3276.8	3284.7	3301.4	3308.3
5°	3334.8	3325.0	3360.4	3412.5	3497.1	3504.9	3563.9	3577.7	3624.9	3654.4	3653.4
7.5°	3368.3	3507.9	3565.9	3628.8	3657.3	3650.4	3659.3	3652.4	3641.6	3636.7	3630.8
10°	3538.4	3644.5	3666.2	3666.2	3621.9	3562.0	3536.4	3492.1	3403.7	3405.6	3390.9
12.5°	3637.7	3675.0	3623.9	3580.6	3402.7	3333.9	3259.1	3223.7	3203.1	3171.6	3183.4
15°	3585.5	3532.5	3502.0	3362.4	3253.2	3129.4	3131.3	3109.7	3087.1	3089.1	3074.3
17.5°	3508.9	3466.6	3250.3	3153.9	3100.9	3052.7	3043.8	3015.3	3000.6	2995.7	2994.7
20°	3403.7	3251.3	3090.0	3066.4	3002.5	2947.5	2938.6	2947.5	2992.7	2912.1	2638.8
22.5°	3280.8	3061.5	3014.3	2947.5	2904.2	2882.6	2936.7	2690.9	2319.2	2364.5	2316.3
25°	3072.3	2977.0	2896.4	2845.2	2840.3	2707.6	2256.3	2209.1	1970.2	1842.4	1698.9
27.5°	2920.0	2878.7	2794.1	2785.3	2721.4	2214.1	1979.1	1719.5	1624.2	1609.4	1578.0
30°	2827.5	2768.5	2717.4	2494.3	2171.8	1782.4	1587.8	1551.4	1534.7	1517.0	1489.5
32.5°	2716.4	2660.4	2685.0	2097.1	1731.3	1534.7	1495.4	1468.8	1438.3	1426.5	1327.3
35°	2603.4	2577.8	2098.0	1762.8	1488.5	1441.3	1411.8	1384.3	1101.1	266.4	90.4
37.5°	2482.5	2476.6	1885.7	1462.9	1394.1	1349.9	1266.3	261.5	61.9	42.3	31.5
40°	2388.1	1886.7	1490.5	1371.5	1315.5	1245.7	175.0	43.3	27.5	16.7	10.8
42.5°	2325.1	1696.9	1334.1	1286.9	1165.0	128.8	44.2	18.7	10.8	8.8	6.9
45°	1792.3	1340.0	1246.6	1197.5	147.5	44.2	25.6	8.8	6.9	5.9	3.9
47.5°	1653.7	1217.1	1162.1	261.5	49.2	23.6	17.7	5.9	3.9	3.9	3.9
50°	1252.5	1124.7	925.1	63.9	31.5	16.7	12.8	3.9	3.9	3.9	2.9
52.5°	1098.2	1038.2	99.3	42.3	24.6	12.8	7.9	2.9	2.9	2.9	2.9
55°	1003.8	658.7	59.0	32.4	20.6	11.8	4.9	2.9	2.9	2.9	2.0
57.5°	918.3	88.5	43.3	27.5	18.7	10.8	2.9	2.9	2.9	2.9	2.0
60°	778.7	63.9	35.4	24.6	17.7	9.8	2.9	2.9	2.9	2.9	2.9
62.5°	101.3	50.1	30.5	21.6	12.8	7.9	2.0	2.9	2.9	2.9	2.9
65°	73.7	39.3	27.5	14.7	7.9	2.9	2.0	2.9	2.9	2.9	2.9
67.5°	57.0	32.4	20.6	12.8	6.9	2.0	2.0	2.9	2.9	2.9	2.9
70°	45.2	27.5	16.7	10.8	5.9	2.0	2.0	2.9	2.9	2.9	2.9
72.5°	35.4	19.7	11.8	5.9	3.9	2.0	2.0	2.9	2.9	2.9	2.9
75°	26.5	15.7	8.8	4.9	2.0	2.0	2.0	2.9	2.9	2.9	2.9
77.5°	17.7	9.8	6.9	3.9	3.9	3.9	4.9	4.9	2.9	2.9	2.9
80°	11.8	6.9	4.9	4.9	4.9	3.9	4.9	4.9	2.9	4.9	2.9
82.5°	5.9	4.9	4.9	3.9	3.9	2.9	3.9	3.9	3.9	3.9	2.9
85°	3.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	3.9	3.9	2.9
87.5°	2.0	2.0	2.0	2.0	2.9	2.9	2.9	2.9	3.9	3.9	2.9
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-LD5-54SL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	255°	260°	265°	270°	275°	280°	285°	290°	295°	300°	305°
0°	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9
2.5°	3299.4	3302.4	3294.5	3336.8	3315.2	3317.1	3326.0	3303.4	3308.3	3292.6	3281.8
5°	3657.3	3663.2	3669.1	3671.1	3675.0	3679.9	3674.0	3671.1	3665.2	3645.5	3624.9
7.5°	3601.3	3594.4	3591.4	3595.4	3602.3	3605.2	3600.3	3607.2	3632.7	3643.6	3650.4
10°	3306.3	3274.9	3296.5	3293.6	3269.0	3351.6	3328.9	3341.7	3350.6	3441.0	3496.1
12.5°	3165.7	3185.4	3148.0	3129.4	3153.9	3170.7	3187.4	3152.0	3201.1	3178.5	3251.3
15°	3047.8	3036.0	3032.0	3033.0	3028.1	3051.7	3057.6	3065.5	3072.3	3102.8	3114.6
17.5°	2994.7	3014.3	3022.2	3028.1	3018.3	3007.5	2996.6	2980.9	2985.8	2978.0	3000.6
20°	2454.9	2389.1	2385.1	2423.5	2381.2	2404.8	2461.8	2843.3	2830.5	2978.9	2928.8
22.5°	2048.9	1986.9	1933.9	1887.6	1953.5	1981.0	2087.2	2207.2	2401.8	2371.4	2582.7
25°	1673.3	1650.7	1636.9	1630.1	1635.0	1633.0	1656.6	1712.6	1801.1	2009.6	2278.9
27.5°	1565.2	1554.4	1549.4	1533.7	1545.5	1541.6	1560.3	1572.1	1598.6	1619.2	1706.7
30°	1479.6	1466.9	1458.0	1441.3	1453.1	1454.1	1460.0	1490.5	1501.3	1519.0	1546.5
32.5°	540.7	318.5	298.9	284.1	310.7	405.1	710.8	1242.7	1417.7	1431.5	1462.9
35°	53.1	44.2	39.3	39.3	40.3	44.2	59.0	155.3	284.1	1098.2	1374.4
37.5°	20.6	17.7	14.7	13.8	14.7	16.7	22.6	29.5	40.3	83.6	372.6
40°	8.8	7.9	6.9	6.9	6.9	6.9	7.9	9.8	14.7	27.5	43.3
42.5°	5.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	6.9	8.8	17.7
45°	3.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	3.9	4.9	7.9
47.5°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	3.9
50°	2.9	2.9	2.9	2.9	2.0	2.9	2.0	2.9	2.9	2.9	2.9
52.5°	2.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.9	2.9
55°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.9
57.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
60°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
62.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.9	2.9	2.0
65°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.9	2.0
67.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
70°	2.9	2.9	2.0	2.9	2.0	2.0	2.9	2.9	2.9	2.0	2.0
72.5°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	5.9	5.9	3.9
75°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	4.9	5.9	4.9
77.5°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	4.9	4.9	4.9
80°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	3.9	3.9	3.9
82.5°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	3.9	3.9	3.9
85°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
87.5°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
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-LD5-54SL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	310°	315°	320°	325°	330°	335°	340°	341°	342°	343°	344°
0°	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9
2.5°	3263.1	3262.1	3282.7	3298.5	3292.6	3298.5	3305.3	3306.3	3308.3	3300.4	3297.5
5°	3585.5	3555.1	3496.1	3453.8	3404.6	3315.2	3270.9	3275.9	3276.8	3273.9	3277.8
7.5°	3647.5	3644.5	3623.9	3615.0	3581.6	3517.7	3415.5	3397.8	3354.5	3327.0	3304.4
10°	3492.1	3562.9	3581.6	3613.1	3632.7	3620.9	3534.4	3521.6	3494.1	3462.7	3469.5
12.5°	3324.0	3382.0	3385.0	3556.1	3594.4	3598.3	3564.9	3582.6	3586.5	3515.7	3474.5
15°	3117.6	3145.1	3203.1	3362.4	3478.4	3551.1	3572.8	3582.6	3534.4	3531.5	3514.8
17.5°	3027.1	3044.8	3071.4	3160.8	3336.8	3444.0	3535.4	3528.5	3547.2	3533.4	3491.2
20°	2913.1	2927.8	2975.0	3020.2	3106.8	3249.3	3420.4	3433.2	3457.7	3454.8	3466.6
22.5°	2911.1	2859.0	2866.9	2902.3	2992.7	3120.5	3302.4	3344.7	3360.4	3371.2	3384.0
25°	2309.4	2723.3	2799.0	2821.6	2880.6	2955.3	3169.7	3185.4	3214.9	3263.1	3298.5
27.5°	2000.7	2281.9	2584.7	2742.0	2779.4	2841.3	2969.1	2992.7	3093.0	3104.8	3159.8
30°	1578.9	1796.2	2248.5	2627.0	2688.9	2732.2	2822.6	2869.8	2913.1	2960.3	3018.3
32.5°	1485.5	1519.9	1770.7	2173.7	2655.5	2623.0	2689.9	2718.4	2765.6	2806.9	2849.2
35°	1400.0	1423.6	1476.7	1780.5	2162.9	2533.6	2578.8	2597.5	2624.0	2655.5	2686.0
37.5°	1310.5	1345.9	1382.3	1463.9	2000.7	2462.8	2461.8	2483.4	2499.2	2525.7	2551.3
40°	237.9	1235.8	1294.8	1347.9	1551.4	1964.3	2351.7	2361.5	2372.3	2389.1	2415.6
42.5°	38.3	206.5	1213.2	1264.3	1322.3	1758.9	2301.6	2261.2	2254.4	2266.2	2289.8
45°	19.7	50.1	243.8	1180.8	1232.9	1403.0	1881.7	2191.4	2184.6	2161.9	2166.9
47.5°	14.7	31.5	60.0	408.0	1154.2	1204.4	1736.2	1717.6	1848.3	2099.0	2060.7
50°	12.8	21.6	35.4	83.6	1019.5	1109.0	1337.1	1562.2	1631.0	1639.9	1940.7
52.5°	11.8	14.7	25.6	54.1	214.3	1025.4	1087.4	1166.0	1282.0	1530.8	1524.9
55°	10.8	13.8	21.6	36.4	74.7	924.2	988.1	1002.8	1027.4	1146.4	1303.7
57.5°	5.9	12.8	20.6	31.5	56.0	169.1	896.6	908.4	928.1	933.0	989.0
60°	2.9	11.8	18.7	27.5	41.3	78.7	806.2	819.9	831.7	833.7	851.4
62.5°	2.0	10.8	15.7	25.6	34.4	56.0	190.7	389.3	740.3	740.3	761.0
65°	2.0	7.9	9.8	16.7	31.5	46.2	80.6	93.4	181.9	447.3	667.6
67.5°	2.0	2.9	8.8	13.8	23.6	35.4	59.0	68.8	82.6	94.4	175.0
70°	2.0	2.0	7.9	8.8	14.7	26.5	42.3	48.2	56.0	63.9	73.7
72.5°	2.0	2.0	6.9	6.9	9.8	17.7	32.4	35.4	40.3	45.2	52.1
75°	4.9	3.9	5.9	5.9	6.9	13.8	24.6	27.5	29.5	33.4	38.3
77.5°	4.9	4.9	4.9	4.9	4.9	8.8	15.7	17.7	20.6	22.6	26.5
80°	3.9	3.9	3.9	4.9	4.9	5.9	9.8	10.8	11.8	14.7	15.7
82.5°	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	5.9	6.9	8.8
85°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	3.9	3.9	3.9	3.9
87.5°	2.9	2.9	2.9	2.0	2.0	2.9	2.9	2.9	2.9	2.9	2.9
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-LD5-54SL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	345°	346°	347°	348°	349°	350°	351°	352°	353°	354°	355°
0°	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9
2.5°	3296.5	3290.6	3285.7	3288.6	3279.8	3275.9	3278.8	3279.8	3281.8	3286.7	3287.7
5°	3287.7	3285.7	3294.5	3299.4	3297.5	3299.4	3299.4	3295.5	3289.6	3293.6	3284.7
7.5°	3281.8	3269.0	3259.1	3261.1	3251.3	3263.1	3273.9	3289.6	3294.5	3294.5	3284.7
10°	3383.0	3369.3	3314.2	3276.8	3252.3	3230.6	3281.8	3229.6	3254.2	3160.8	3268.0
12.5°	3466.6	3485.3	3460.7	3358.4	3340.7	3275.9	3313.2	3249.3	3230.6	3123.5	3157.9
15°	3500.0	3464.6	3456.8	3428.2	3389.9	3371.2	3270.9	3260.1	3229.6	3241.4	3196.2
17.5°	3470.5	3488.2	3464.6	3445.9	3406.6	3362.4	3302.4	3249.3	3207.0	3112.7	3192.3
20°	3442.0	3465.6	3394.8	3406.6	3410.5	3359.4	3328.0	3283.7	3230.6	3142.1	3073.3
22.5°	3394.8	3378.1	3384.0	3366.3	3351.6	3358.4	3315.2	3284.7	3195.2	3154.9	3061.5
25°	3318.1	3312.2	3328.0	3326.0	3290.6	3278.8	3257.2	3224.7	3189.3	3124.4	3047.8
27.5°	3193.3	3223.7	3251.3	3264.1	3245.4	3213.9	3202.1	3183.4	3158.9	3093.0	3036.0
30°	3061.5	3095.9	3127.4	3154.9	3171.6	3157.9	3147.1	3136.2	3098.9	3055.6	2991.7
32.5°	2911.1	2956.3	2999.6	3033.0	3069.4	3080.2	3072.3	3063.5	3032.0	2992.7	2941.6
35°	2737.1	2799.0	2861.9	2921.9	2937.7	2963.2	2988.8	2974.0	2957.3	2918.0	2870.8
37.5°	2589.6	2633.9	2679.1	2754.8	2809.8	2842.3	2887.5	2893.4	2864.9	2846.2	2784.3
40°	2437.2	2477.5	2543.4	2587.6	2663.4	2700.7	2748.9	2770.5	2763.6	2752.8	2698.7
42.5°	2317.3	2336.9	2380.2	2419.5	2494.3	2570.9	2613.2	2636.8	2661.4	2652.5	2625.0
45°	2189.5	2207.2	2221.9	2256.3	2329.1	2396.9	2449.0	2484.4	2528.7	2549.3	2515.9
47.5°	2062.6	2067.6	2085.3	2113.8	2157.0	2209.1	2296.6	2349.7	2391.0	2431.3	2409.7
50°	1965.3	1947.6	1950.6	1968.3	2003.7	2054.8	2117.7	2192.4	2239.6	2288.8	2293.7
52.5°	1717.6	1861.1	1826.7	1836.5	1855.2	1879.8	1945.7	2019.4	2077.4	2119.7	2161.9
55°	1441.3	1469.8	1746.1	1706.7	1718.5	1740.2	1770.7	1844.4	1900.4	1959.4	2018.4
57.5°	1117.8	1330.2	1341.0	1596.6	1590.7	1592.7	1618.3	1660.5	1716.6	1790.3	1840.5
60°	869.1	958.6	1132.6	1221.1	1445.2	1453.1	1467.8	1492.4	1540.6	1610.4	1690.0
62.5°	766.9	778.7	840.6	973.3	1118.8	1294.8	1326.3	1330.2	1351.8	1421.6	1514.1
65°	673.5	681.3	700.0	713.8	835.7	1005.8	1157.2	1181.7	1195.5	1236.8	1315.5
67.5°	464.0	586.9	603.7	613.5	625.3	703.9	891.7	1016.6	1032.3	1068.7	1137.5
70°	89.5	185.8	508.3	519.1	525.0	542.7	573.2	771.8	876.0	910.4	941.9
72.5°	61.0	71.8	86.5	204.5	432.6	442.4	449.3	474.9	650.8	751.1	767.8
75°	44.2	49.2	58.0	71.8	88.5	288.1	356.9	369.7	382.4	528.0	612.5
77.5°	31.5	35.4	39.3	46.2	54.1	69.8	100.3	276.3	289.0	295.9	417.8
80°	17.7	21.6	26.5	30.5	34.4	39.3	51.1	63.9	142.6	208.4	219.2
82.5°	9.8	11.8	13.8	16.7	18.7	23.6	28.5	34.4	45.2	66.9	141.6
85°	4.9	4.9	4.9	6.9	7.9	10.8	12.8	14.7	20.6	28.5	39.3
87.5°	2.9	2.9	3.9	3.9	3.9	4.9	4.9	4.9	5.9	8.8	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



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-54SL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	356°	357°	358°	359°	360°
0°	3275.9	3275.9	3275.9	3275.9	3275.9
2.5°	3288.6	3285.7	3285.7	3297.5	3294.5
5°	3282.7	3279.8	3278.8	3291.6	3285.7
7.5°	3277.8	3267.0	3264.1	3275.9	3270.9
10°	3258.2	3250.3	3255.2	3251.3	3249.3
12.5°	3224.7	3219.8	3199.2	3201.1	3217.8
15°	3164.8	3184.4	3149.0	3180.5	3187.4
17.5°	3054.6	3098.9	3133.3	3152.0	3154.9
20°	3103.8	3118.6	3100.9	3101.8	3113.6
22.5°	3039.9	3046.8	3051.7	3045.8	3071.4
25°	2937.7	2911.1	2968.1	2979.9	3021.2
27.5°	2906.2	2884.6	2911.1	2909.1	2943.5
30°	2880.6	2810.8	2822.6	2841.3	2883.6
32.5°	2844.3	2734.1	2722.3	2763.6	2810.8
35°	2780.3	2676.1	2648.6	2675.1	2745.9
37.5°	2726.3	2595.5	2540.5	2575.9	2668.3
40°	2645.7	2532.6	2447.1	2478.5	2587.6
42.5°	2549.3	2478.5	2346.8	2368.4	2493.3
45°	2452.0	2389.1	2249.4	2260.3	2408.7
47.5°	2352.7	2294.7	2148.2	2150.1	2300.6
50°	2255.3	2178.7	2057.7	2023.3	2185.5
52.5°	2128.5	2057.7	1966.3	1910.3	2076.4
55°	2008.6	1928.9	1862.1	1775.6	1952.5
57.5°	1891.6	1803.1	1757.9	1646.8	1811.9
60°	1731.3	1689.1	1622.2	1516.0	1685.1
62.5°	1567.1	1553.4	1485.5	1375.4	1528.8
65°	1375.4	1407.9	1338.1	1243.7	1366.6
67.5°	1194.5	1252.5	1175.8	1117.8	1210.3
70°	1001.8	1068.7	1025.4	1004.8	1044.1
72.5°	812.1	877.0	880.9	866.2	878.9
75°	627.2	699.0	738.3	715.7	718.7
77.5°	475.8	510.3	553.5	571.2	567.3
80°	294.0	353.9	389.3	425.7	412.9
82.5°	148.5	198.6	241.9	281.2	262.5
85°	61.9	79.6	111.1	146.5	140.6
87.5°	18.7	31.5	33.4	47.2	44.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)