

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: PORTFOLIO

Report Number: P248534

Luminaire Tested: **LSR8B70D010 EC8B70930 8LBDW0WH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P248534  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13956)  
Test Lab: INNOVATION CENTER-P1  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LSR8B70D010 EC8B70930 8LBDW0WH  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
97 CRI 3000 CCT WITH WHEAT TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6351.6 lumens  
Efficiency: N/A  
Efficacy: 83.7 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.33 / 1.2  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

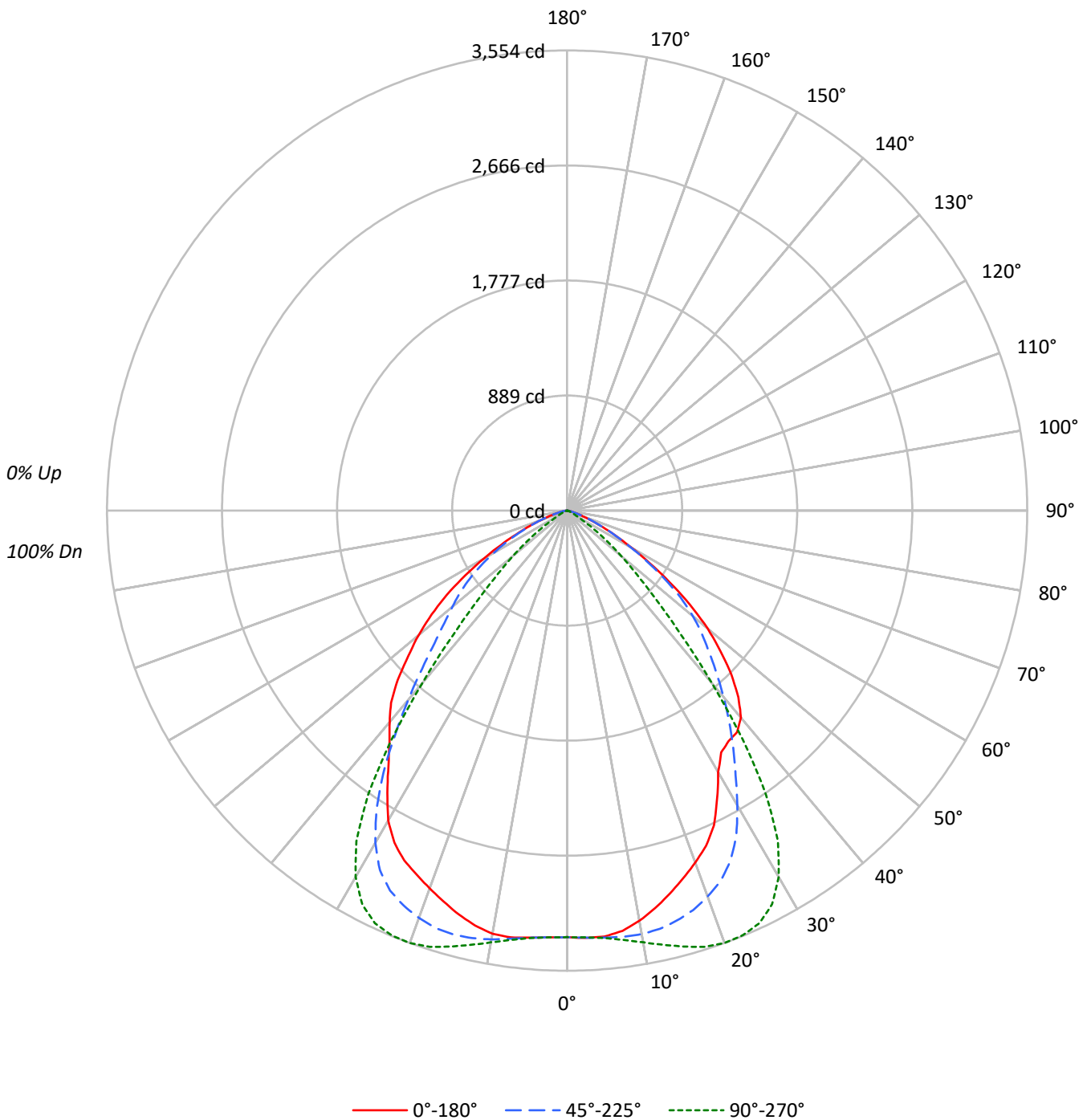
Input Watts (W): 75.9  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	102	109	106	103	100	102	99	97	98	96	94	94	93	92	90
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79
3	97	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62
5	84	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45
8	68	56	49	44	67	56	48	43	54	48	43	53	47	43	52	47	43	41
9	64	52	45	40	63	51	44	40	50	44	39	49	44	39	48	43	39	38
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34

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

	0°	90°	180°
0°	Luminaire represents a point source (luminous area is zero).		
5°	No luminance values can be calculated.		
10°			
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	316.9	5.0
10°-20°	938.7	14.8
20°-30°	1432.1	22.5
30°-40°	1494.4	23.5
40°-50°	1122.5	17.7
50°-60°	690.6	10.9
60°-70°	281.1	4.4
70°-80°	66.2	1.0
80°-90°	9.1	0.1
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°	2687.7	42.3
0°-40°	4182.0	65.8
0°-60°	5995.2	94.4
0°-90°	6351.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6351.6	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	3295	3295	3295	3295	3295	
5°	3302	3311	3314	3311	3311	312
15°	3062	3278	3486	3390	3230	863
25°	2683	2984	3515	3237	2980	1220
35°	2174	2235	2678	2475	2405	1373
45°	1794	1553	969	1446	1850	1369
55°	969	920	254	920	1135	871
65°	303	306	38	411	436	316
75°	52	52	7	93	96	63
85°	5	5	2	12	16	7
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	3295.0	3295.0	3295.0	3295.0	3295.0	3295.0	3295.0	3295.0	3295.0	3295.0	3295.0
2.5°	3303.7	3298.5	3303.7	3303.7	3305.5	3302.0	3303.7	3305.5	3302.0	3302.0	3302.0
5°	3302.0	3298.5	3302.0	3300.2	3303.7	3303.7	3307.3	3307.3	3310.8	3310.8	3316.0
7.5°	3274.0	3267.0	3274.0	3279.3	3282.7	3289.8	3298.5	3305.5	3312.4	3319.5	3328.2
10°	3216.3	3216.3	3221.5	3232.1	3242.5	3254.7	3270.5	3288.0	3305.5	3321.2	3337.0
12.5°	3144.6	3139.4	3149.8	3163.8	3179.6	3198.8	3223.3	3249.6	3277.5	3309.0	3333.5
15°	3062.3	3057.1	3069.4	3083.3	3102.6	3130.6	3160.3	3195.3	3235.5	3277.5	3317.7
17.5°	2978.4	2976.7	2988.9	3008.2	3023.9	3053.6	3092.2	3134.1	3179.6	3235.5	3288.0
20°	2892.7	2891.1	2903.3	2919.0	2939.9	2968.0	3006.4	3055.4	3109.5	3172.5	3233.7
22.5°	2803.5	2805.3	2815.7	2833.3	2850.8	2880.5	2920.7	2969.8	3029.2	3097.3	3165.6
25°	2682.9	2674.1	2688.2	2705.6	2735.4	2759.8	2798.4	2850.8	2912.0	2983.7	3064.1
27.5°	2508.0	2506.2	2518.4	2534.2	2560.5	2590.2	2632.1	2686.4	2751.0	2829.7	2908.4
30°	2333.0	2336.6	2341.9	2357.6	2375.1	2404.8	2446.8	2492.2	2553.4	2628.6	2712.6
32.5°	2214.1	2214.1	2221.1	2231.7	2243.9	2259.6	2289.4	2322.6	2369.8	2422.3	2483.5
35°	2174.0	2166.9	2174.0	2175.6	2177.4	2180.9	2186.2	2196.7	2212.4	2235.2	2257.9
37.5°	2156.5	2151.2	2151.2	2144.2	2135.4	2125.0	2111.0	2095.3	2077.8	2055.0	2037.5
40°	2088.2	2084.7	2081.2	2074.3	2055.0	2034.1	2011.3	1974.5	1934.3	1878.3	1822.4
42.5°	1957.0	1953.6	1951.8	1937.9	1920.3	1895.8	1869.6	1831.2	1780.4	1708.7	1628.3
45°	1794.4	1787.4	1782.2	1769.9	1757.6	1736.7	1712.2	1677.2	1626.5	1553.0	1456.9
47.5°	1605.5	1602.0	1600.2	1595.1	1582.9	1570.5	1554.8	1526.8	1481.3	1411.3	1311.7
50°	1414.9	1407.9	1411.3	1409.7	1404.4	1395.6	1385.1	1365.9	1331.0	1268.0	1177.0
52.5°	1196.2	1196.2	1194.5	1199.8	1201.5	1199.8	1201.5	1180.5	1150.8	1103.5	1026.6
55°	968.9	968.9	974.1	981.2	988.2	990.0	988.2	979.4	958.5	919.9	851.7
57.5°	755.6	752.1	762.5	773.0	780.0	787.1	781.8	774.7	762.5	731.0	678.5
60°	575.4	575.4	582.4	589.4	596.4	603.4	601.6	599.8	589.4	568.3	526.4
62.5°	423.2	425.0	425.0	430.2	437.2	444.3	449.4	444.3	439.0	425.0	396.9
65°	302.6	300.8	302.6	307.8	313.1	320.0	323.5	321.8	316.6	306.0	285.1
67.5°	202.9	201.1	208.1	209.9	213.3	220.4	218.6	220.4	218.6	209.9	192.4
70°	133.0	129.4	133.0	131.2	136.4	138.2	141.7	143.4	141.7	136.4	131.2
72.5°	82.2	80.5	82.2	84.0	85.8	87.4	90.9	90.9	89.2	85.8	78.7
75°	52.5	47.2	49.0	45.5	49.0	49.0	52.5	54.3	52.5	52.5	49.0
77.5°	31.5	31.5	31.5	31.5	31.5	31.5	31.5	33.3	35.0	31.5	29.7
80°	15.7	15.7	17.5	17.5	17.5	19.3	17.5	17.5	17.5	19.3	14.0
82.5°	12.2	10.5	10.5	10.5	12.2	10.5	10.5	10.5	10.5	10.5	10.5
85°	5.3	7.0	5.3	3.5	5.3	5.3	7.0	5.3	5.3	5.3	7.0
87.5°	1.8	1.8	0.0	0.0	0.0	1.8	0.0	1.8	1.8	3.5	0.0
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):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	3295.0	3295.0	3295.0	3295.0	3295.0	3295.0	3295.0	3295.0	3295.0	3295.0	3295.0
2.5°	3303.7	3300.2	3300.2	3298.5	3302.0	3298.5	3300.2	3298.5	3298.5	3302.0	3298.5
5°	3316.0	3317.7	3314.2	3312.4	3317.7	3317.7	3317.7	3314.2	3314.2	3316.0	3314.2
7.5°	3333.5	3337.0	3338.7	3340.5	3343.9	3345.7	3345.7	3343.9	3342.3	3347.5	3340.5
10°	3352.7	3358.0	3368.5	3373.8	3382.4	3382.4	3386.0	3386.0	3382.4	3386.0	3384.2
12.5°	3345.7	3377.2	3394.7	3406.9	3419.2	3429.7	3433.2	3435.0	3433.2	3440.1	3433.2
15°	3358.0	3384.2	3412.2	3433.2	3455.9	3468.1	3471.6	3485.6	3489.1	3490.9	3480.4
17.5°	3338.7	3386.0	3415.7	3447.2	3480.4	3503.1	3524.1	3532.8	3534.6	3538.1	3524.1
20°	3295.0	3347.5	3392.9	3438.4	3476.9	3511.9	3529.4	3553.8	3546.8	3560.9	3541.6
22.5°	3235.5	3295.0	3352.7	3412.2	3452.5	3494.4	3531.2	3548.5	3557.4	3557.4	3536.3
25°	3141.0	3211.1	3274.0	3335.2	3396.4	3447.2	3489.1	3515.3	3520.6	3518.8	3494.4
27.5°	2994.2	3069.4	3142.8	3212.8	3288.0	3347.5	3396.4	3427.9	3436.6	3436.6	3410.4
30°	2791.3	2871.8	2943.5	3027.4	3104.4	3170.9	3239.0	3267.0	3282.7	3282.7	3253.0
32.5°	2549.9	2618.2	2684.6	2766.9	2850.8	2925.9	2990.7	3029.2	3048.4	3046.7	3020.4
35°	2287.6	2320.8	2371.6	2432.8	2508.0	2578.0	2640.9	2677.6	2710.8	2709.1	2684.6
37.5°	2025.2	2016.6	2021.8	2044.5	2091.7	2140.7	2189.6	2224.6	2252.6	2264.9	2259.6
40°	1768.2	1722.8	1678.9	1663.2	1666.7	1684.2	1710.4	1736.7	1768.2	1784.0	1790.9
42.5°	1537.3	1460.3	1383.4	1325.7	1292.4	1282.0	1294.2	1302.9	1322.2	1344.9	1367.7
45°	1351.9	1248.8	1147.3	1058.1	1002.2	968.9	961.9	968.9	979.4	1002.2	1031.9
47.5°	1199.8	1079.1	965.4	865.7	783.5	739.9	727.5	724.1	734.6	755.6	795.8
50°	1065.1	944.4	818.6	703.1	617.3	568.3	551.0	543.9	556.1	571.9	608.6
52.5°	918.2	799.3	669.8	557.9	468.7	418.0	398.7	388.3	395.3	416.2	453.0
55°	759.0	648.8	531.7	416.2	330.6	283.4	260.5	253.6	260.5	283.4	320.0
57.5°	599.8	507.1	409.3	300.8	223.9	176.7	153.9	147.0	166.1	174.9	213.3
60°	468.7	393.6	309.6	220.4	153.9	117.1	94.5	89.2	98.0	113.7	145.2
62.5°	351.5	304.4	237.9	157.4	113.7	75.2	63.0	57.7	63.0	75.2	99.7
65°	255.4	218.6	166.1	115.5	76.9	55.9	41.9	38.5	43.7	52.5	73.4
67.5°	174.9	147.0	115.5	80.5	52.5	35.0	29.7	29.7	31.5	38.5	54.3
70°	113.7	96.2	73.4	52.5	35.0	26.2	22.8	19.3	22.8	28.0	36.8
72.5°	71.7	61.2	47.2	36.8	26.2	19.3	15.7	14.0	17.5	21.0	28.0
75°	43.7	33.3	24.4	19.3	14.0	14.0	14.0	7.0	8.7	14.0	17.5
77.5°	26.2	22.8	19.3	15.7	12.2	7.0	7.0	7.0	8.7	10.5	15.7
80°	14.0	12.2	8.7	8.7	7.0	5.3	7.0	5.3	3.5	8.7	10.5
82.5°	8.7	7.0	7.0	7.0	8.7	3.5	5.3	3.5	5.3	7.0	5.3
85°	5.3	5.3	5.3	3.5	8.7	3.5	3.5	1.8	1.8	3.5	3.5
87.5°	0.0	1.8	1.8	0.0	1.8	0.0	1.8	1.8	1.8	1.8	1.8
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):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	3295.0	3295.0	3295.0	3295.0	3295.0	3295.0	3295.0	3295.0	3295.0	3295.0	3295.0
2.5°	3300.2	3298.5	3300.2	3298.5	3298.5	3298.5	3300.2	3300.2	3298.5	3298.5	3302.0
5°	3314.2	3314.2	3314.2	3312.4	3310.8	3310.8	3314.2	3314.2	3309.0	3314.2	3314.2
7.5°	3343.9	3338.7	3343.9	3337.0	3333.5	3335.2	3337.0	3333.5	3329.9	3331.7	3331.7
10°	3382.4	3377.2	3377.2	3372.0	3366.7	3363.2	3359.7	3351.0	3342.3	3340.5	3333.5
12.5°	3427.9	3419.2	3413.9	3403.5	3394.7	3382.4	3372.0	3358.0	3340.5	3328.2	3316.0
15°	3473.4	3459.4	3447.2	3429.7	3410.4	3389.5	3366.7	3343.9	3316.0	3291.5	3270.5
17.5°	3510.1	3490.9	3468.1	3440.1	3412.2	3380.7	3347.5	3314.2	3274.0	3242.5	3218.1
20°	3522.3	3494.4	3464.7	3427.9	3391.1	3347.5	3305.5	3261.8	3216.3	3183.1	3155.1
22.5°	3506.6	3473.4	3436.6	3398.2	3349.2	3302.0	3253.0	3202.2	3162.1	3116.6	3090.4
25°	3462.9	3422.6	3382.4	3337.0	3289.8	3237.3	3184.9	3132.4	3083.3	3058.9	3025.7
27.5°	3373.8	3329.9	3286.2	3239.0	3184.9	3132.4	3078.2	3027.4	2985.4	2952.2	2933.0
30°	3216.3	3165.6	3114.8	3064.1	3016.9	2962.7	2912.0	2870.0	2828.1	2801.8	2782.5
32.5°	2974.9	2929.5	2878.7	2829.7	2786.0	2740.6	2698.6	2661.9	2632.1	2614.6	2600.6
35°	2649.6	2604.2	2565.7	2530.8	2494.0	2474.7	2448.5	2427.5	2415.3	2408.2	2406.6
37.5°	2240.3	2214.1	2201.9	2194.9	2187.9	2182.7	2186.2	2194.9	2201.9	2214.1	2228.1
40°	1803.1	1825.9	1832.9	1857.4	1880.1	1909.8	1943.0	1981.6	2013.0	2053.2	2081.2
42.5°	1404.4	1446.4	1495.3	1547.8	1603.8	1658.0	1724.4	1785.6	1841.6	1892.4	1936.1
45°	1079.1	1143.8	1217.3	1292.4	1367.7	1446.4	1526.8	1602.0	1668.5	1722.8	1768.2
47.5°	841.2	912.9	1007.4	1100.1	1191.1	1283.8	1372.9	1451.6	1507.5	1560.1	1600.2
50°	666.3	748.5	851.7	958.5	1058.1	1156.0	1250.5	1323.9	1380.0	1421.9	1451.6
52.5°	515.9	613.9	718.8	830.8	937.4	1044.1	1131.5	1199.8	1245.2	1282.0	1304.7
55°	384.7	480.9	592.9	708.4	816.8	919.9	1002.2	1061.6	1101.8	1122.8	1135.0
57.5°	278.1	365.6	477.4	592.9	690.9	788.7	855.2	909.5	932.2	944.4	949.7
60°	202.9	283.4	383.0	482.7	575.4	654.1	711.8	748.5	766.1	773.0	771.2
62.5°	148.6	218.6	304.4	388.3	463.4	528.2	573.6	598.2	606.9	610.4	605.1
65°	113.7	167.9	241.4	306.0	363.8	411.0	444.3	459.9	465.2	463.4	459.9
67.5°	84.0	125.9	180.1	229.1	271.1	307.8	325.3	339.3	342.8	337.5	332.3
70°	59.5	92.7	131.2	164.5	195.8	216.9	236.1	237.9	237.9	236.1	232.6
72.5°	41.9	64.7	89.2	112.0	131.2	147.0	153.9	159.2	157.4	155.6	152.1
75°	28.0	40.2	64.7	70.0	87.4	92.7	99.7	99.7	101.5	96.2	96.2
77.5°	17.5	28.0	38.5	45.5	52.5	59.5	63.0	63.0	64.7	63.0	63.0
80°	10.5	17.5	21.0	31.5	31.5	36.8	38.5	40.2	36.8	41.9	36.8
82.5°	7.0	10.5	15.7	15.7	19.3	22.8	22.8	24.4	24.4	22.8	22.8
85°	5.3	7.0	8.7	10.5	10.5	12.2	10.5	10.5	12.2	14.0	12.2
87.5°	1.8	3.5	1.8	3.5	3.5	7.0	5.3	5.3	5.3	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: P248534

CATALOG NUMBER: LSR8B70D010 EC8B70930 8LBDW0WH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	3295.0	3295.0	3295.0	3295.0
2.5°	3298.5	3300.2	3298.5	3298.5
5°	3314.2	3312.4	3314.2	3310.8
7.5°	3326.5	3326.5	3324.8	3324.8
10°	3326.5	3319.5	3319.5	3319.5
12.5°	3300.2	3291.5	3286.2	3282.7
15°	3254.7	3239.0	3232.1	3230.3
17.5°	3195.3	3181.3	3172.5	3167.3
20°	3127.1	3113.1	3102.6	3104.4
22.5°	3067.6	3051.9	3044.9	3041.4
25°	3008.2	2988.9	2983.7	2980.2
27.5°	2912.0	2901.5	2896.2	2891.1
30°	2765.1	2759.8	2751.0	2763.3
32.5°	2595.5	2586.7	2579.6	2584.9
35°	2408.2	2403.1	2408.2	2404.8
37.5°	2237.0	2242.1	2249.2	2252.6
40°	2102.2	2121.5	2128.4	2131.9
42.5°	1967.6	1990.3	2004.2	2013.0
45°	1801.4	1824.1	1839.9	1850.4
47.5°	1630.0	1649.2	1665.0	1663.2
50°	1474.3	1484.9	1491.8	1498.9
52.5°	1317.0	1317.0	1318.6	1318.6
55°	1138.6	1135.0	1133.3	1135.0
57.5°	942.6	939.2	937.4	932.2
60°	764.3	753.8	746.8	746.8
62.5°	598.2	585.8	580.7	578.9
65°	449.4	447.7	437.2	435.5
67.5°	325.3	318.3	311.3	313.1
70°	229.1	218.6	218.6	215.1
72.5°	148.6	143.4	141.7	141.7
75°	92.7	92.7	89.2	96.2
77.5°	61.2	61.2	59.5	61.2
80°	36.8	36.8	36.8	35.0
82.5°	22.8	24.4	22.8	22.8
85°	12.2	14.0	10.5	15.7
87.5°	7.0	8.7	7.0	8.7
90°	0.0	0.0	0.0	0.0

(END OF REPORT)