

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: P249425

Luminaire Tested: **LSR8B70D010 EC8B70835 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249425
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13957)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B70D010 EC8B70835 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3500 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6754.0 lumens
Efficiency: N/A
Efficacy: 89.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

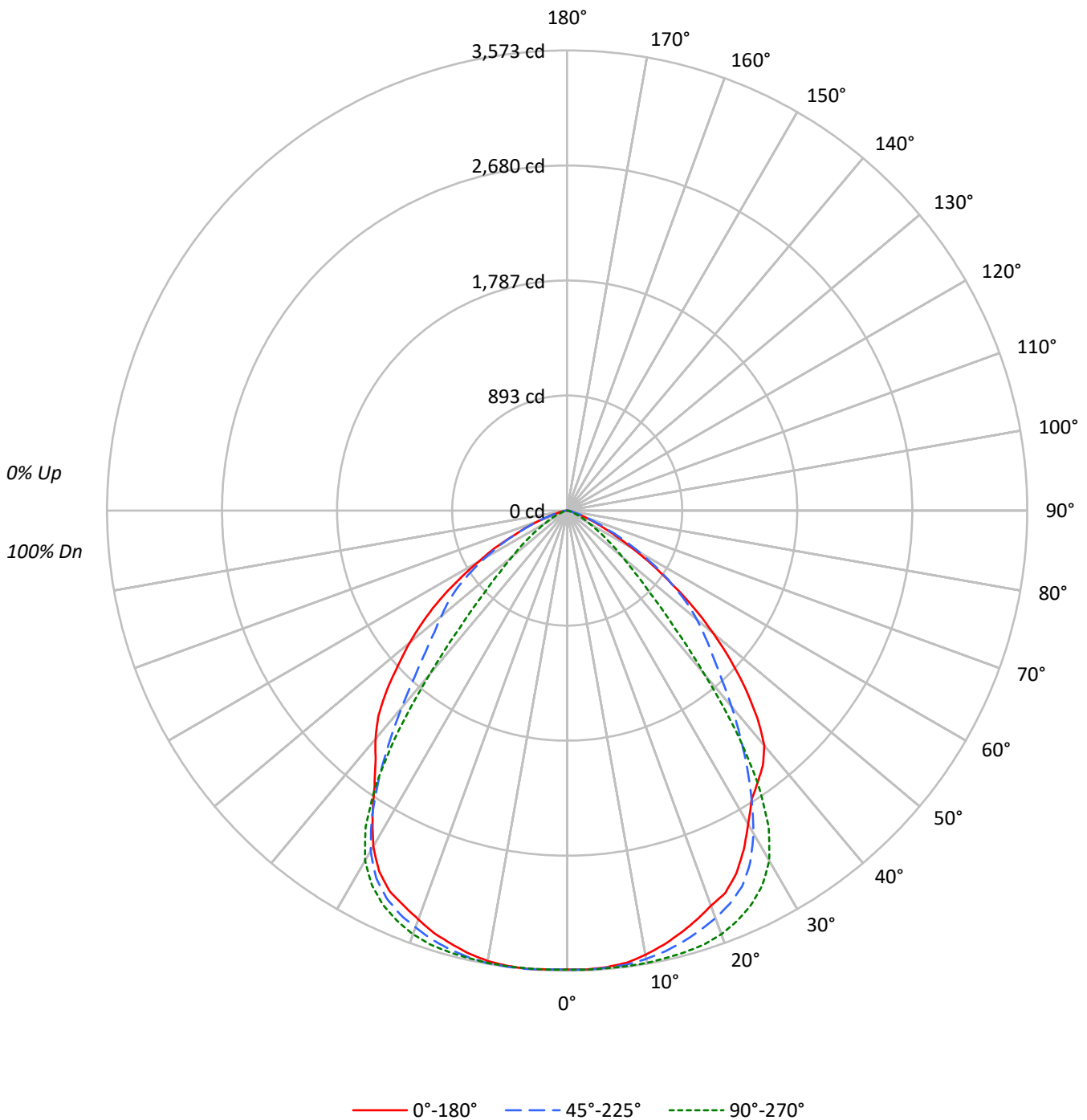
Input Watts (W): 75.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	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	91	90
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	109885	109885	109885
5°	110129	110426	110543
10°	109664	111643	111164
15°	108449	113273	111137
20°	107149	114867	110850
25°	105757	114998	110963
30°	100051	111766	107205
35°	97066	97137	98146
40°	95861	66834	93168
45°	85417	40125	86586
50°	71024	26702	76531
55°	53267	18408	64890
60°	36097	12267	48956
65°	21773	7960	33637
70°	12072	4310	20692
75°	5469	1823	10711
80°	4759	2042	7476
85°	5413	2689	7465



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	340.1	5.0
10°-20°	987.7	14.6
20°-30°	1499.1	22.2
30°-40°	1574.5	23.3
40°-50°	1180.5	17.5
50°-60°	757.4	11.2
60°-70°	324.0	4.8
70°-80°	76.5	1.1
80°-90°	14.2	0.2
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°	2826.8	41.9
0°-40°	4401.3	65.2
0°-60°	6339.2	93.9
0°-90°	6754.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6754.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3564	3564	3564	3564	3564	
5°	3558	3564	3567	3573	3571	338
15°	3397	3468	3548	3525	3481	958
25°	3108	3217	3380	3319	3261	1420
35°	2578	2435	2580	2550	2607	1618
45°	1959	1601	920	1555	1986	1500
55°	991	991	342	1033	1207	899
65°	298	352	109	453	461	319
75°	46	54	15	92	90	67
85°	15	10	8	15	21	16
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°	3563.5	3563.5	3563.5	3563.5	3563.5	3563.5	3563.5	3563.5	3563.5	3563.5	3563.5
2.5°	3565.5	3569.3	3567.4	3567.4	3565.5	3567.4	3567.4	3571.2	3571.2	3567.4	3565.5
5°	3557.8	3561.6	3561.6	3557.8	3557.8	3567.4	3561.6	3565.5	3565.5	3563.5	3563.5
7.5°	3540.6	3540.6	3548.2	3542.5	3542.5	3548.2	3546.3	3550.2	3554.0	3555.9	3555.9
10°	3502.3	3506.2	3508.1	3508.1	3510.0	3515.7	3519.5	3527.2	3531.0	3534.9	3536.8
12.5°	3454.5	3460.2	3462.2	3460.2	3466.0	3473.6	3483.2	3492.8	3498.5	3506.2	3511.9
15°	3397.1	3397.1	3400.9	3406.7	3410.5	3422.0	3431.6	3443.0	3458.3	3467.9	3477.5
17.5°	3334.0	3337.9	3343.6	3343.6	3351.2	3370.3	3376.1	3393.3	3410.5	3420.1	3439.2
20°	3265.2	3269.0	3274.7	3278.6	3288.1	3303.4	3314.9	3330.2	3349.3	3366.5	3385.6
22.5°	3211.6	3204.0	3207.7	3211.6	3221.2	3234.6	3247.9	3267.0	3286.2	3303.4	3322.6
25°	3108.3	3110.2	3116.0	3119.8	3131.3	3142.7	3158.0	3181.0	3198.2	3217.3	3238.4
27.5°	2968.7	2970.6	2980.1	2980.1	2989.7	3008.8	3018.4	3037.5	3060.5	3079.6	3104.5
30°	2809.9	2813.7	2813.7	2821.4	2827.1	2836.7	2846.2	2865.4	2876.8	2894.1	2928.5
32.5°	2664.5	2668.3	2666.4	2664.5	2658.8	2656.9	2655.0	2658.8	2662.6	2668.3	2681.7
35°	2578.5	2568.9	2561.3	2547.9	2532.6	2513.4	2496.2	2473.3	2452.2	2435.0	2415.9
37.5°	2496.2	2494.3	2482.8	2463.7	2433.1	2398.7	2358.5	2308.8	2259.0	2205.5	2153.8
40°	2381.4	2375.7	2366.1	2339.4	2304.9	2262.8	2209.3	2148.1	2067.7	1985.5	1901.3
42.5°	2186.3	2188.2	2176.8	2155.7	2123.2	2083.0	2027.6	1960.6	1874.6	1777.0	1668.0
45°	1958.7	1958.7	1954.9	1937.7	1914.7	1882.2	1840.1	1784.6	1700.5	1601.0	1484.3
47.5°	1721.5	1723.4	1717.7	1713.9	1704.3	1683.3	1652.7	1610.6	1551.3	1455.6	1338.9
50°	1480.5	1480.5	1490.1	1488.2	1488.2	1480.5	1467.1	1442.2	1390.6	1314.1	1205.1
52.5°	1239.5	1243.3	1249.1	1256.7	1266.3	1281.6	1266.3	1254.8	1222.3	1163.0	1069.3
55°	990.8	994.7	1004.2	1017.6	1029.1	1044.4	1048.2	1048.2	1031.0	990.8	920.1
57.5°	778.5	772.8	780.4	791.9	807.2	822.5	834.0	847.4	845.5	818.7	761.3
60°	585.3	587.2	592.9	604.5	615.9	629.3	644.6	656.1	661.8	648.5	612.1
62.5°	426.6	426.6	434.2	445.7	451.4	470.6	480.1	485.9	491.6	489.7	466.7
65°	298.4	302.2	306.0	311.8	317.5	329.0	334.7	346.2	350.0	352.0	334.7
67.5°	210.4	204.7	208.5	212.3	218.1	225.7	237.2	237.2	242.9	242.9	231.4
70°	133.9	133.9	135.8	141.5	145.4	147.3	151.1	154.9	160.7	158.8	158.8
72.5°	89.9	88.0	89.9	91.8	93.7	99.5	99.5	101.4	105.2	107.1	99.5
75°	45.9	47.8	51.6	49.8	55.5	51.6	53.5	59.3	57.4	53.5	53.5
77.5°	38.2	38.2	38.2	36.4	40.2	40.2	38.2	42.1	40.2	40.2	38.2
80°	26.8	28.7	26.8	24.9	26.8	24.9	24.9	24.9	24.9	24.9	22.9
82.5°	21.1	17.2	19.1	17.2	19.1	19.1	17.2	15.3	15.3	17.2	15.3
85°	15.3	11.5	13.4	13.4	11.5	11.5	11.5	11.5	11.5	9.5	9.5
87.5°	9.5	5.8	5.8	5.8	7.6	7.6	7.6	5.8	7.6	7.6	3.8
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	3563.5	3563.5	3563.5	3563.5	3563.5	3563.5	3563.5	3563.5	3563.5	3563.5	3563.5
2.5°	3569.3	3567.4	3571.2	3569.3	3569.3	3567.4	3569.3	3567.4	3571.2	3563.5	3565.5
5°	3569.3	3565.5	3567.4	3569.3	3571.2	3567.4	3567.4	3567.4	3571.2	3567.4	3569.3
7.5°	3561.6	3559.7	3565.5	3569.3	3567.4	3565.5	3569.3	3567.4	3571.2	3569.3	3573.1
10°	3546.3	3548.2	3552.1	3557.8	3559.7	3561.6	3565.5	3565.5	3571.2	3563.5	3567.4
12.5°	3523.4	3531.0	3540.6	3544.4	3552.1	3552.1	3555.9	3557.8	3561.6	3559.7	3565.5
15°	3494.7	3504.2	3515.7	3525.3	3534.9	3540.6	3546.3	3548.2	3554.0	3548.2	3550.2
17.5°	3460.2	3471.7	3488.9	3500.4	3515.7	3521.5	3529.1	3532.9	3538.7	3534.9	3536.8
20°	3412.4	3425.8	3444.9	3462.2	3471.7	3485.1	3494.7	3500.4	3504.2	3500.4	3502.3
22.5°	3345.5	3364.6	3389.5	3402.9	3422.0	3433.5	3435.4	3448.8	3458.3	3448.8	3452.6
25°	3267.0	3286.2	3305.3	3334.0	3351.2	3364.6	3378.0	3379.9	3389.5	3387.6	3385.6
27.5°	3137.0	3161.9	3194.4	3217.3	3240.3	3261.3	3276.6	3280.4	3290.0	3286.2	3288.1
30°	2959.1	2985.9	3016.5	3052.8	3085.4	3106.4	3125.5	3138.9	3148.4	3142.7	3140.8
32.5°	2706.6	2733.4	2765.9	2802.2	2840.5	2871.1	2894.1	2911.3	2922.8	2918.9	2909.4
35°	2417.8	2425.4	2446.5	2475.2	2507.7	2540.2	2561.3	2580.4	2593.7	2597.6	2597.6
37.5°	2121.3	2096.5	2081.1	2081.1	2100.2	2113.6	2132.8	2144.2	2165.3	2172.9	2178.7
40°	1834.4	1777.0	1723.4	1683.3	1656.5	1654.6	1654.6	1660.3	1679.4	1704.3	1727.3
42.5°	1578.1	1486.2	1404.0	1329.4	1275.9	1245.2	1231.9	1233.8	1249.1	1272.0	1310.3
45°	1373.4	1258.6	1155.3	1065.4	992.7	944.9	922.0	920.1	931.5	958.3	1000.4
47.5°	1214.6	1092.2	975.5	872.2	793.8	742.2	715.4	707.8	715.4	740.2	790.0
50°	1082.6	956.4	835.9	728.8	644.6	591.1	566.2	556.6	566.2	587.2	636.9
52.5°	960.2	830.1	717.3	614.0	524.1	478.2	451.4	445.7	451.4	476.3	516.5
55°	818.7	707.8	596.8	493.5	415.1	369.2	348.1	342.4	348.1	371.1	413.2
57.5°	679.1	583.4	485.9	392.1	325.2	285.0	265.9	258.2	271.6	286.9	336.7
60°	549.0	472.5	390.2	308.0	252.5	216.1	200.8	198.9	202.8	221.9	256.3
62.5°	430.4	367.3	302.2	235.3	189.4	174.1	154.9	153.0	156.8	168.3	195.1
65°	309.9	269.7	220.0	172.1	135.8	114.8	107.1	109.1	112.8	120.5	145.4
67.5°	216.1	187.4	153.0	120.5	93.7	84.2	76.5	74.6	76.5	89.9	103.3
70°	145.4	128.1	103.3	91.8	65.1	51.6	53.5	47.8	55.5	55.5	66.9
72.5°	95.6	84.2	68.8	53.5	45.9	36.4	36.4	34.4	38.2	40.2	49.8
75°	49.8	38.2	38.2	26.8	19.1	9.5	17.2	15.3	13.4	15.3	19.1
77.5°	34.4	28.7	26.8	21.1	19.1	15.3	15.3	15.3	15.3	17.2	19.1
80°	21.1	21.1	15.3	13.4	11.5	9.5	11.5	11.5	11.5	11.5	13.4
82.5°	13.4	11.5	11.5	9.5	9.5	7.6	7.6	7.6	7.6	7.6	11.5
85°	11.5	7.6	7.6	5.8	7.6	13.4	5.8	7.6	7.6	7.6	5.8
87.5°	3.8	5.8	5.8	5.8	3.8	1.9	3.8	5.8	5.8	9.5	7.6
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°	3563.5	3563.5	3563.5	3563.5	3563.5	3563.5	3563.5	3563.5	3563.5	3563.5	3563.5
2.5°	3569.3	3571.2	3571.2	3569.3	3569.3	3565.5	3573.1	3567.4	3569.3	3576.9	3571.2
5°	3573.1	3575.0	3575.0	3573.1	3573.1	3573.1	3575.0	3575.0	3573.1	3571.2	3575.0
7.5°	3580.8	3578.8	3578.8	3575.0	3575.0	3571.2	3575.0	3569.3	3573.1	3569.3	3575.0
10°	3571.2	3573.1	3571.2	3569.3	3569.3	3567.4	3567.4	3561.6	3563.5	3557.8	3561.6
12.5°	3565.5	3563.5	3563.5	3559.7	3555.9	3552.1	3550.2	3544.4	3544.4	3531.0	3536.8
15°	3550.2	3552.1	3546.3	3538.7	3534.9	3525.3	3521.5	3513.8	3506.2	3496.6	3498.5
17.5°	3536.8	3531.0	3523.4	3515.7	3500.4	3492.8	3485.1	3473.6	3469.8	3458.3	3454.5
20°	3496.6	3492.8	3483.2	3469.8	3460.2	3443.0	3435.4	3423.9	3414.3	3402.9	3397.1
22.5°	3444.9	3441.1	3429.6	3416.3	3400.9	3393.3	3385.6	3364.6	3355.0	3343.6	3341.7
25°	3379.9	3374.2	3362.7	3347.4	3339.7	3318.7	3311.0	3295.7	3291.9	3280.4	3278.6
27.5°	3280.4	3272.8	3259.4	3240.3	3226.9	3213.5	3205.9	3194.4	3190.6	3179.1	3177.2
30°	3131.3	3121.7	3094.9	3087.3	3064.3	3050.9	3050.9	3035.6	3037.5	3029.9	3029.9
32.5°	2896.0	2880.7	2859.6	2844.3	2829.0	2821.4	2821.4	2815.6	2819.5	2819.5	2823.3
35°	2584.2	2563.2	2551.7	2542.1	2542.1	2549.7	2572.7	2578.5	2589.9	2599.5	2607.2
37.5°	2184.4	2182.5	2195.9	2207.4	2236.1	2268.6	2308.8	2343.2	2375.7	2398.7	2421.6
40°	1752.1	1800.0	1838.2	1891.8	1935.7	1998.9	2071.6	2130.9	2186.3	2226.5	2268.6
42.5°	1367.6	1428.9	1509.2	1587.6	1666.1	1752.1	1847.8	1930.0	2002.7	2058.2	2102.2
45°	1065.4	1149.6	1247.2	1346.6	1448.0	1555.1	1654.6	1738.7	1815.3	1872.6	1916.6
47.5°	858.8	950.7	1061.6	1170.6	1285.4	1398.2	1509.2	1581.9	1645.0	1690.9	1731.1
50°	709.6	807.2	923.9	1048.2	1163.0	1275.9	1371.5	1442.2	1493.9	1534.1	1558.9
52.5°	592.9	696.2	820.6	944.9	1059.7	1163.0	1249.1	1302.6	1344.7	1373.4	1396.3
55°	489.7	589.2	705.8	822.5	935.4	1032.9	1103.7	1143.9	1176.4	1193.6	1207.0
57.5°	399.8	491.6	598.7	705.8	803.4	883.7	939.2	979.4	994.7	1008.0	1006.1
60°	313.7	399.8	497.3	589.2	673.3	738.3	778.5	801.5	812.9	818.7	814.8
62.5°	246.7	325.2	399.8	480.1	541.3	596.8	635.1	635.1	640.8	642.7	648.5
65°	183.6	242.9	308.0	367.3	417.0	453.3	474.4	480.1	487.8	485.9	482.0
67.5°	135.8	179.8	227.6	271.6	306.0	329.0	344.3	357.7	355.8	352.0	350.0
70°	93.7	122.4	164.5	191.3	216.1	239.1	242.9	244.8	246.7	248.7	244.8
72.5°	65.1	86.1	109.1	132.0	147.3	156.8	166.4	168.3	168.3	168.3	166.4
75°	32.5	44.0	65.1	74.6	88.0	91.8	99.5	99.5	105.2	97.5	95.6
77.5°	28.7	34.4	45.9	53.5	59.3	65.1	66.9	72.7	70.8	66.9	68.8
80°	17.2	21.1	28.7	32.5	40.2	42.1	44.0	45.9	44.0	45.9	45.9
82.5°	13.4	15.3	19.1	19.1	24.9	24.9	26.8	26.8	28.7	28.7	28.7
85°	7.6	13.4	11.5	22.9	15.3	15.3	19.1	22.9	19.1	19.1	22.9
87.5°	7.6	7.6	5.8	7.6	7.6	7.6	9.5	11.5	11.5	13.4	11.5
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: P249425

CATALOG NUMBER: LSR8B70D010 EC8B70835 8LBDW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3563.5	3563.5	3563.5	3563.5
2.5°	3569.3	3573.1	3567.4	3565.5
5°	3575.0	3575.0	3571.2	3571.2
7.5°	3575.0	3575.0	3569.3	3565.5
10°	3559.7	3559.7	3554.0	3550.2
12.5°	3531.0	3531.0	3529.1	3523.4
15°	3494.7	3494.7	3487.0	3481.3
17.5°	3444.9	3448.8	3439.2	3439.2
20°	3391.4	3389.5	3381.9	3378.0
22.5°	3335.9	3332.1	3330.2	3318.7
25°	3276.6	3272.8	3267.0	3261.3
27.5°	3175.3	3173.3	3167.6	3160.0
30°	3020.3	3018.4	3010.8	3010.8
32.5°	2819.5	2817.5	2809.9	2811.8
35°	2611.0	2618.6	2614.8	2607.2
37.5°	2436.9	2442.7	2446.5	2442.7
40°	2291.5	2308.8	2310.7	2314.5
42.5°	2136.6	2159.5	2167.2	2171.0
45°	1951.0	1972.1	1989.3	1985.5
47.5°	1761.7	1777.0	1792.3	1780.8
50°	1580.0	1589.5	1595.3	1595.3
52.5°	1407.8	1407.8	1405.9	1407.8
55°	1210.8	1210.8	1203.2	1207.0
57.5°	1004.2	1008.0	1002.3	992.7
60°	812.9	803.4	799.5	793.8
62.5°	633.2	633.2	619.8	636.9
65°	474.4	468.6	462.9	461.0
67.5°	344.3	342.4	336.7	334.7
70°	242.9	235.3	233.4	229.5
72.5°	162.6	162.6	158.8	158.8
75°	99.5	89.9	88.0	89.9
77.5°	68.8	66.9	66.9	65.1
80°	45.9	44.0	47.8	42.1
82.5°	28.7	30.6	28.7	30.6
85°	19.1	22.9	21.1	21.1
87.5°	11.5	11.5	11.5	11.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)