

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: P249399

Luminaire Tested: **LSR8B80D010 EC8B80930 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249399
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: LSR8B80D010 EC8B80930 8LBDW0GPH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 3000 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6851.5 lumens
Efficiency: N/A
Efficacy: 92.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

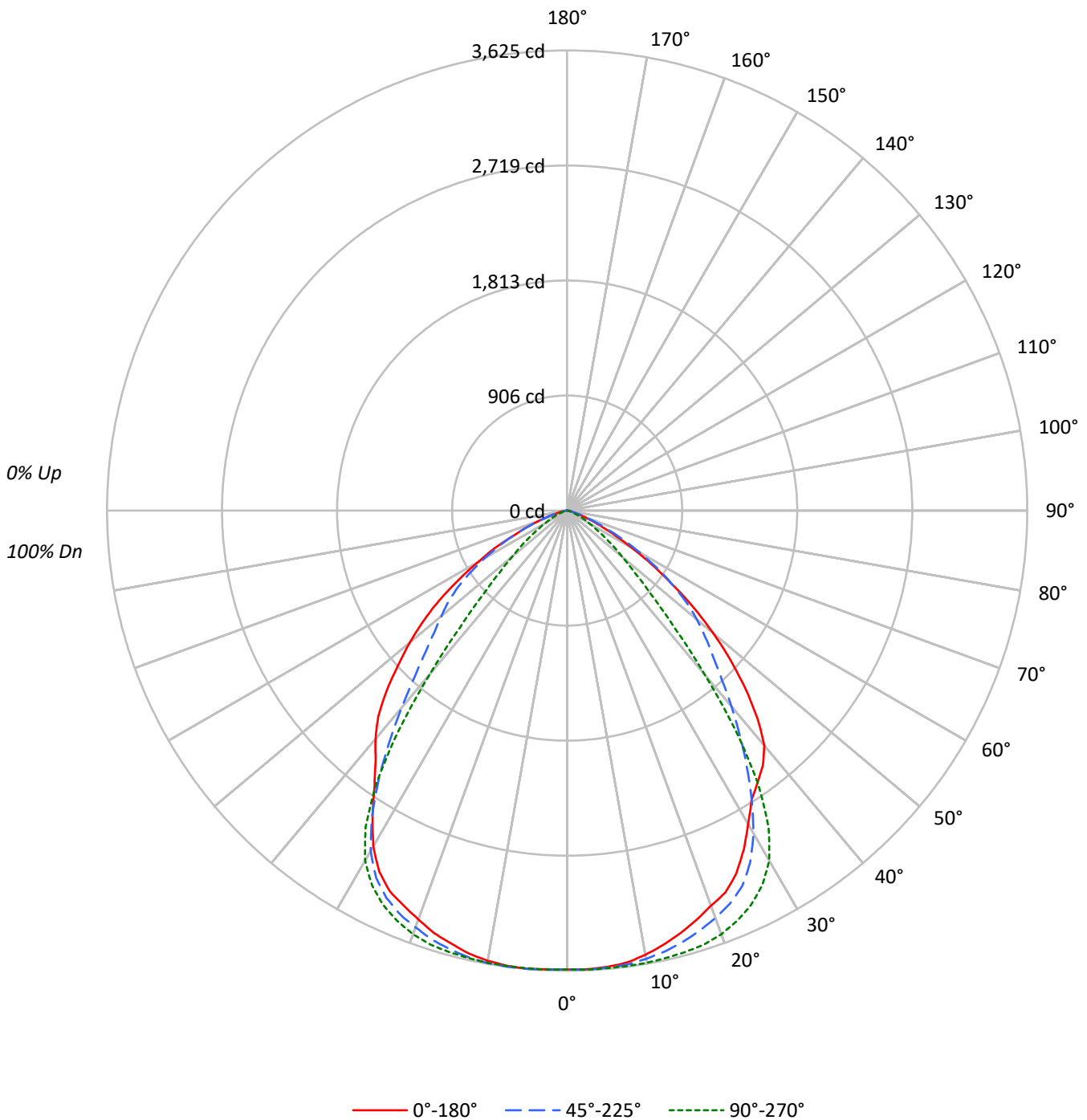
Input Watts (W): 74.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	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°	345.0	5.0
10°-20°	1001.9	14.6
20°-30°	1520.7	22.2
30°-40°	1597.2	23.3
40°-50°	1197.5	17.5
50°-60°	768.3	11.2
60°-70°	328.7	4.8
70°-80°	77.6	1.1
80°-90°	14.4	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°	2867.7	41.9
0°-40°	4464.9	65.2
0°-60°	6430.8	93.9
0°-90°	6851.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6851.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3615	3615	3615	3615	3615	
5°	3609	3615	3619	3625	3623	343
15°	3446	3518	3600	3576	3532	972
25°	3153	3264	3429	3367	3308	1441
35°	2616	2470	2618	2587	2645	1642
45°	1987	1624	933	1578	2014	1522
55°	1005	1005	347	1048	1224	912
65°	303	357	111	460	468	323
75°	46	54	16	93	91	68
85°	16	10	8	16	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°	3615.0	3615.0	3615.0	3615.0	3615.0	3615.0	3615.0	3615.0	3615.0	3615.0	3615.0
2.5°	3616.9	3620.8	3618.9	3618.9	3616.9	3618.9	3618.9	3622.8	3622.8	3618.9	3616.9
5°	3609.2	3613.1	3613.1	3609.2	3609.2	3618.9	3613.1	3616.9	3616.9	3615.0	3615.0
7.5°	3591.8	3591.8	3599.5	3593.7	3593.7	3599.5	3597.5	3601.4	3605.4	3607.3	3607.3
10°	3552.9	3556.8	3558.7	3558.7	3560.7	3566.5	3570.4	3578.1	3582.0	3585.9	3587.9
12.5°	3504.5	3510.2	3512.2	3510.2	3516.0	3523.8	3533.5	3543.3	3549.1	3556.8	3562.7
15°	3446.2	3446.2	3450.1	3455.9	3459.9	3471.4	3481.2	3492.7	3508.3	3518.0	3527.7
17.5°	3382.2	3386.1	3391.8	3391.8	3399.7	3419.0	3424.9	3442.4	3459.9	3469.5	3488.9
20°	3312.3	3316.1	3322.0	3325.9	3335.6	3351.1	3362.8	3378.2	3397.8	3415.1	3434.5
22.5°	3258.0	3250.2	3254.0	3258.0	3267.7	3281.3	3294.8	3314.2	3333.6	3351.1	3370.5
25°	3153.1	3155.2	3161.0	3164.8	3176.5	3188.1	3203.7	3226.9	3244.4	3263.8	3285.1
27.5°	3011.6	3013.5	3023.2	3023.2	3032.9	3052.3	3062.0	3081.4	3104.7	3124.1	3149.3
30°	2850.5	2854.4	2854.4	2862.1	2868.0	2877.6	2887.4	2906.8	2918.4	2935.9	2970.8
32.5°	2703.1	2706.9	2705.0	2703.1	2697.2	2695.2	2693.3	2697.2	2701.0	2706.9	2720.4
35°	2615.7	2606.0	2598.3	2584.7	2569.1	2549.7	2532.2	2509.0	2487.6	2470.1	2450.7
37.5°	2532.2	2530.3	2518.7	2499.3	2468.2	2433.4	2392.6	2342.1	2291.7	2237.3	2184.9
40°	2415.9	2410.0	2400.3	2373.2	2338.2	2295.5	2241.2	2179.1	2097.6	2014.2	1928.8
42.5°	2217.9	2219.8	2208.3	2186.8	2153.9	2113.1	2056.8	1989.0	1901.7	1802.7	1692.0
45°	1987.0	1987.0	1983.2	1965.7	1942.4	1909.4	1866.7	1810.4	1725.1	1624.1	1505.7
47.5°	1746.4	1748.3	1742.5	1738.7	1728.9	1707.6	1676.6	1633.9	1573.7	1476.7	1358.3
50°	1501.9	1501.9	1511.6	1509.7	1509.7	1501.9	1488.4	1463.0	1410.7	1333.1	1222.5
52.5°	1257.4	1261.2	1267.1	1274.9	1284.6	1300.0	1284.6	1272.9	1239.9	1179.7	1084.7
55°	1005.1	1009.0	1018.8	1032.3	1044.0	1059.5	1063.4	1063.4	1045.9	1005.1	933.3
57.5°	789.7	783.9	791.8	803.3	818.9	834.4	846.0	859.6	857.7	830.5	772.3
60°	593.8	595.7	601.5	613.2	624.8	638.4	653.9	665.5	671.4	657.8	620.9
62.5°	432.7	432.7	440.4	452.1	457.9	477.3	487.1	492.9	498.6	496.7	473.5
65°	302.7	306.6	310.5	316.3	322.1	333.7	339.6	351.2	355.1	357.0	339.6
67.5°	213.4	207.6	211.5	215.3	221.2	229.0	240.7	240.7	246.4	246.4	234.7
70°	135.9	135.9	137.8	143.6	147.5	149.4	153.4	157.2	163.0	161.1	161.1
72.5°	91.2	89.2	91.2	93.2	95.1	100.9	100.9	102.8	106.7	108.6	100.9
75°	46.5	48.5	52.4	50.4	56.3	52.4	54.4	60.2	58.2	54.4	54.4
77.5°	38.8	38.8	38.8	36.9	40.7	40.7	38.8	42.7	40.7	40.7	38.8
80°	27.1	29.1	27.1	25.2	27.1	25.2	25.2	25.2	25.2	25.2	23.3
82.5°	21.4	17.5	19.4	17.5	19.4	19.4	17.5	15.5	15.5	17.5	15.5
85°	15.5	11.7	13.6	13.6	11.7	11.7	11.7	11.7	11.7	9.6	9.6
87.5°	9.6	5.8	5.8	5.8	7.7	7.7	7.7	5.8	7.7	7.7	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



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	3615.0	3615.0	3615.0	3615.0	3615.0	3615.0	3615.0	3615.0	3615.0	3615.0	3615.0
2.5°	3620.8	3618.9	3622.8	3620.8	3620.8	3618.9	3620.8	3618.9	3622.8	3615.0	3616.9
5°	3620.8	3616.9	3618.9	3620.8	3622.8	3618.9	3618.9	3618.9	3622.8	3618.9	3620.8
7.5°	3613.1	3611.1	3616.9	3620.8	3618.9	3616.9	3620.8	3618.9	3622.8	3620.8	3624.8
10°	3597.5	3599.5	3603.3	3609.2	3611.1	3613.1	3616.9	3616.9	3622.8	3615.0	3618.9
12.5°	3574.3	3582.0	3591.8	3595.6	3603.3	3603.3	3607.3	3609.2	3613.1	3611.1	3616.9
15°	3545.2	3554.8	3566.5	3576.2	3585.9	3591.8	3597.5	3599.5	3605.4	3599.5	3601.4
17.5°	3510.2	3521.8	3539.3	3551.0	3566.5	3572.3	3580.0	3583.9	3589.8	3585.9	3587.9
20°	3461.8	3475.3	3494.7	3512.2	3521.8	3535.4	3545.2	3551.0	3554.8	3551.0	3552.9
22.5°	3393.8	3413.2	3438.4	3452.0	3471.4	3483.1	3485.0	3498.6	3508.3	3498.6	3502.5
25°	3314.2	3333.6	3353.0	3382.2	3399.7	3413.2	3426.8	3428.8	3438.4	3436.5	3434.5
27.5°	3182.3	3207.5	3240.5	3263.8	3287.1	3308.4	3324.0	3327.8	3337.6	3333.6	3335.6
30°	3001.8	3029.1	3060.1	3096.9	3129.9	3151.2	3170.6	3184.2	3194.0	3188.1	3186.2
32.5°	2745.7	2772.9	2805.9	2842.7	2881.5	2912.6	2935.9	2953.4	2964.9	2961.1	2951.4
35°	2452.7	2460.5	2481.8	2510.9	2543.9	2576.8	2598.3	2617.6	2631.2	2635.1	2635.1
37.5°	2152.0	2126.8	2111.2	2111.2	2130.6	2144.1	2163.5	2175.2	2196.6	2204.3	2210.2
40°	1860.9	1802.7	1748.3	1707.6	1680.4	1678.5	1678.5	1684.3	1703.7	1728.9	1752.2
42.5°	1600.9	1507.7	1424.2	1348.6	1294.3	1263.3	1249.7	1251.6	1267.1	1290.4	1329.2
45°	1393.2	1276.8	1172.0	1080.9	1007.1	958.6	935.3	933.3	945.0	972.1	1014.8
47.5°	1232.2	1108.0	989.6	884.8	805.3	752.9	725.7	718.0	725.7	751.0	801.4
50°	1098.2	970.2	847.9	739.3	653.9	599.6	574.4	564.6	574.4	595.7	646.1
52.5°	974.0	842.1	727.6	622.8	531.7	485.1	457.9	452.1	457.9	483.2	524.0
55°	830.5	718.0	605.5	500.6	421.0	374.5	353.1	347.4	353.1	376.4	419.1
57.5°	688.9	591.8	492.9	397.7	329.9	289.1	269.7	262.0	275.5	291.0	341.6
60°	556.9	479.3	395.8	312.4	256.1	219.3	203.7	201.8	205.7	225.1	260.0
62.5°	436.6	372.6	306.6	238.7	192.1	176.6	157.2	155.3	159.1	170.7	198.0
65°	314.3	273.6	223.2	174.7	137.8	116.5	108.6	110.6	114.5	122.3	147.5
67.5°	219.3	190.1	155.3	122.3	95.1	85.4	77.6	75.7	77.6	91.2	104.8
70°	147.5	130.0	104.8	93.2	66.0	52.4	54.4	48.5	56.3	56.3	67.9
72.5°	97.0	85.4	69.8	54.4	46.5	36.9	36.9	35.0	38.8	40.7	50.4
75°	50.4	38.8	38.8	27.1	19.4	9.6	17.5	15.5	13.6	15.5	19.4
77.5°	35.0	29.1	27.1	21.4	19.4	15.5	15.5	15.5	15.5	17.5	19.4
80°	21.4	21.4	15.5	13.6	11.7	9.6	11.7	11.7	11.7	11.7	13.6
82.5°	13.6	11.7	11.7	9.6	9.6	7.7	7.7	7.7	7.7	7.7	11.7
85°	11.7	7.7	7.7	5.8	7.7	13.6	5.8	7.7	7.7	7.7	5.8
87.5°	3.9	5.8	5.8	5.8	3.9	1.9	3.9	5.8	5.8	9.6	7.7
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	3615.0	3615.0	3615.0	3615.0	3615.0	3615.0	3615.0	3615.0	3615.0	3615.0	3615.0
2.5°	3620.8	3622.8	3622.8	3620.8	3620.8	3616.9	3624.8	3618.9	3620.8	3628.6	3622.8
5°	3624.8	3626.7	3626.7	3624.8	3624.8	3624.8	3626.7	3626.7	3624.8	3622.8	3626.7
7.5°	3632.5	3630.6	3630.6	3626.7	3626.7	3622.8	3626.7	3620.8	3624.8	3620.8	3626.7
10°	3622.8	3624.8	3622.8	3620.8	3620.8	3618.9	3618.9	3613.1	3615.0	3609.2	3613.1
12.5°	3616.9	3615.0	3615.0	3611.1	3607.3	3603.3	3601.4	3595.6	3595.6	3582.0	3587.9
15°	3601.4	3603.3	3597.5	3589.8	3585.9	3576.2	3572.3	3564.6	3556.8	3547.1	3549.1
17.5°	3587.9	3582.0	3574.3	3566.5	3551.0	3543.3	3535.4	3523.8	3519.9	3508.3	3504.5
20°	3547.1	3543.3	3533.5	3519.9	3510.2	3492.7	3485.0	3473.4	3463.7	3452.0	3446.2
22.5°	3494.7	3490.8	3479.1	3465.6	3450.1	3442.4	3434.5	3413.2	3403.5	3391.8	3389.9
25°	3428.8	3422.9	3411.3	3395.7	3388.0	3366.7	3358.9	3343.4	3339.5	3327.8	3325.9
27.5°	3327.8	3320.1	3306.5	3287.1	3273.5	3259.9	3252.1	3240.5	3236.7	3225.0	3223.1
30°	3176.5	3166.7	3139.6	3131.8	3108.5	3095.0	3095.0	3079.5	3081.4	3073.7	3073.7
32.5°	2937.8	2922.3	2900.9	2885.5	2869.9	2862.1	2862.1	2856.3	2860.2	2860.2	2864.0
35°	2621.5	2600.2	2588.5	2578.9	2578.9	2586.6	2609.9	2615.7	2627.4	2637.0	2644.8
37.5°	2216.0	2214.1	2227.7	2239.3	2268.3	2301.4	2342.1	2377.1	2410.0	2433.4	2456.6
40°	1777.5	1826.0	1864.8	1919.2	1963.7	2027.8	2101.4	2161.6	2217.9	2258.7	2301.4
42.5°	1387.3	1449.5	1531.1	1610.5	1690.1	1777.5	1874.4	1957.9	2031.6	2087.9	2132.5
45°	1080.9	1166.2	1265.2	1366.1	1469.0	1577.6	1678.5	1763.9	1841.5	1899.6	1944.3
47.5°	871.2	964.4	1076.9	1187.6	1303.9	1418.4	1531.1	1604.7	1668.7	1715.4	1756.2
50°	719.9	818.9	937.3	1063.4	1179.7	1294.3	1391.3	1463.0	1515.5	1556.2	1581.4
52.5°	601.5	706.3	832.5	958.6	1074.9	1179.7	1267.1	1321.4	1364.1	1393.2	1416.5
55°	496.7	597.7	716.0	834.4	948.8	1047.8	1119.7	1160.3	1193.3	1210.8	1224.4
57.5°	405.6	498.6	607.4	716.0	815.0	896.5	952.7	993.5	1009.0	1022.6	1020.7
60°	318.3	405.6	504.6	597.7	683.0	748.9	789.7	813.1	824.7	830.5	826.6
62.5°	250.3	329.9	405.6	487.1	549.2	605.5	644.2	644.2	650.1	652.0	657.8
65°	186.3	246.4	312.4	372.6	423.0	459.8	481.2	487.1	494.8	492.9	489.0
67.5°	137.8	182.4	230.9	275.5	310.5	333.7	349.3	362.9	361.0	357.0	355.1
70°	95.1	124.2	166.9	194.0	219.3	242.6	246.4	248.4	250.3	252.2	248.4
72.5°	66.0	87.3	110.6	133.8	149.4	159.1	168.8	170.7	170.7	170.7	168.8
75°	33.0	44.6	66.0	75.7	89.2	93.2	100.9	100.9	106.7	99.0	97.0
77.5°	29.1	35.0	46.5	54.4	60.2	66.0	67.9	73.8	71.7	67.9	69.8
80°	17.5	21.4	29.1	33.0	40.7	42.7	44.6	46.5	44.6	46.5	46.5
82.5°	13.6	15.5	19.4	19.4	25.2	25.2	27.1	27.1	29.1	29.1	29.1
85°	7.7	13.6	11.7	23.3	15.5	15.5	19.4	23.3	19.4	19.4	23.3
87.5°	7.7	7.7	5.8	7.7	7.7	7.7	9.6	11.7	11.7	13.6	11.7
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: P249399

CATALOG NUMBER: LSR8B80D010 EC8B80930 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3615.0	3615.0	3615.0	3615.0
2.5°	3620.8	3624.8	3618.9	3616.9
5°	3626.7	3626.7	3622.8	3622.8
7.5°	3626.7	3626.7	3620.8	3616.9
10°	3611.1	3611.1	3605.4	3601.4
12.5°	3582.0	3582.0	3580.0	3574.3
15°	3545.2	3545.2	3537.4	3531.6
17.5°	3494.7	3498.6	3488.9	3488.9
20°	3440.3	3438.4	3430.7	3426.8
22.5°	3384.1	3380.3	3378.2	3366.7
25°	3324.0	3320.1	3314.2	3308.4
27.5°	3221.1	3219.2	3213.3	3205.6
30°	3063.9	3062.0	3054.3	3054.3
32.5°	2860.2	2858.2	2850.5	2852.5
35°	2648.7	2656.4	2652.5	2644.8
37.5°	2472.1	2478.0	2481.8	2478.0
40°	2324.6	2342.1	2344.0	2347.9
42.5°	2167.5	2190.8	2198.5	2202.3
45°	1979.2	2000.5	2018.0	2014.2
47.5°	1787.1	1802.7	1818.1	1806.5
50°	1602.8	1612.4	1618.3	1618.3
52.5°	1428.2	1428.2	1426.2	1428.2
55°	1228.3	1228.3	1220.5	1224.4
57.5°	1018.8	1022.6	1016.7	1007.1
60°	824.7	815.0	811.0	805.3
62.5°	642.3	642.3	628.8	646.1
65°	481.2	475.4	469.6	467.6
67.5°	349.3	347.4	341.6	339.6
70°	246.4	238.7	236.8	232.8
72.5°	164.9	164.9	161.1	161.1
75°	100.9	91.2	89.2	91.2
77.5°	69.8	67.9	67.9	66.0
80°	46.5	44.6	48.5	42.7
82.5°	29.1	31.1	29.1	31.1
85°	19.4	23.3	21.4	21.4
87.5°	11.7	11.7	11.7	11.7
90°	0.0	0.0	0.0	0.0

(END OF REPORT)