

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: P249299

Luminaire Tested: **LSR8B70D010 EC8B70827 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249299
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 EC8B70827 8LBDW0GPH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 2700 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6999.0 lumens
Efficiency: N/A
Efficacy: 92.2 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

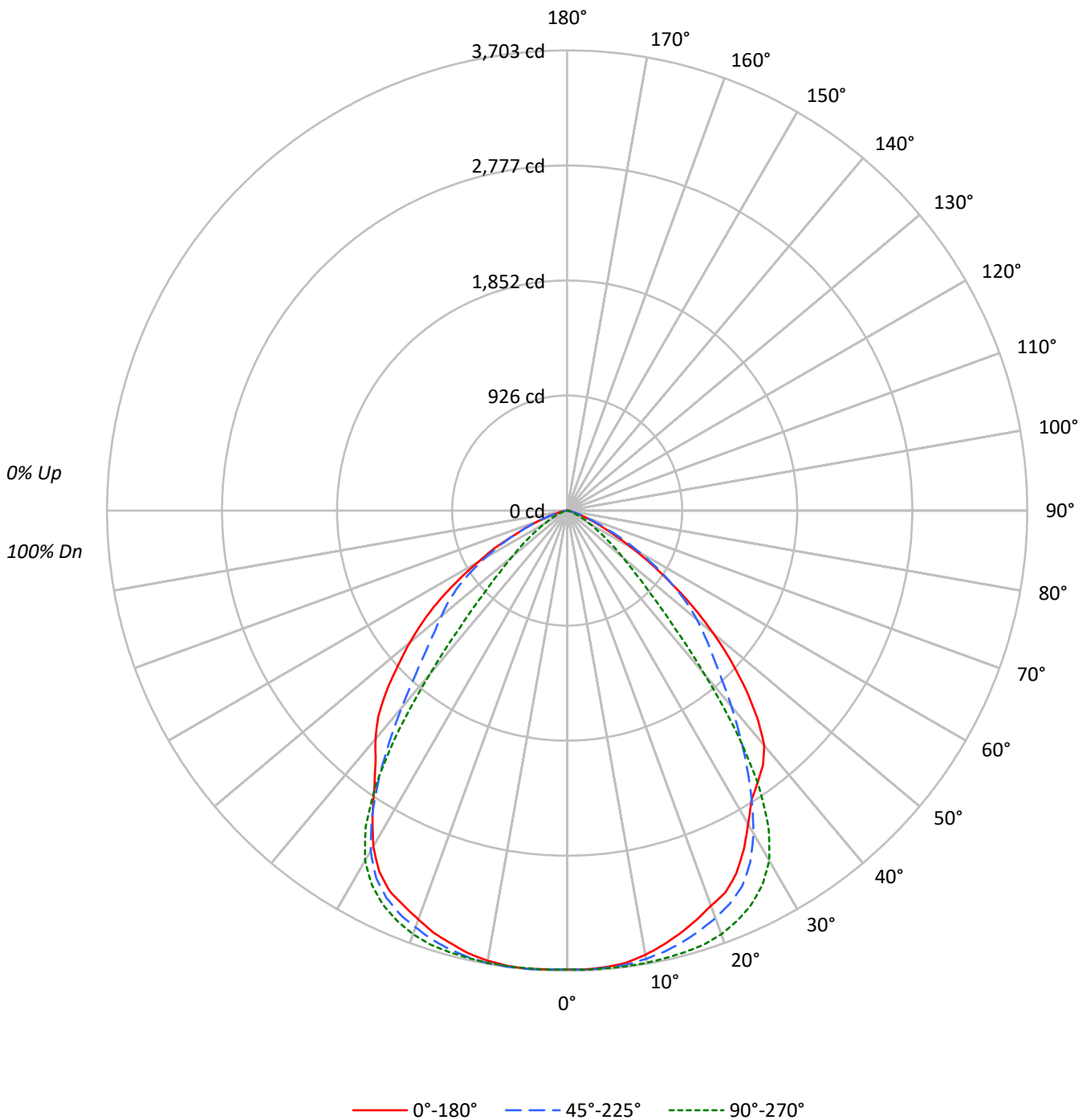
Input Watts (W): 75.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P249299

CATALOG NUMBER: LSR8B70D010 EC8B70827 8LBDW0GPH

Luminous Intensity Polar Plot





TEST NUMBER: P249299

CATALOG NUMBER: LSR8B70D010 EC8B70827 8LBDW0GPH

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	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90					90			
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79					79			
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70					70			
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62					62			
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55					55			
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50					50			
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45					45			
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41					41			
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37					37			
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34					34			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	113872	113872	113872
5°	114122	114431	114555
10°	113644	115692	115194
15°	112382	117385	115169
20°	111034	119034	114873
25°	109592	119169	114988
30°	103680	115822	111093
35°	100585	100661	101703
40°	99339	69257	96549
45°	88518	41577	89726
50°	73600	27671	79309
55°	55202	19075	67239
60°	37411	12711	50732
65°	22561	8245	34855
70°	12514	4472	21440
75°	5671	1894	11104
80°	4919	2113	7742
85°	5626	2795	7713



TEST NUMBER: P249299

CATALOG NUMBER: LSR8B70D010 EC8B70827 8LBDW0GPH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	352.4	5.0
10°-20°	1023.5	14.6
20°-30°	1553.5	22.2
30°-40°	1631.6	23.3
40°-50°	1223.3	17.5
50°-60°	784.9	11.2
60°-70°	335.8	4.8
70°-80°	79.3	1.1
80°-90°	14.8	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°	2929.4	41.9
0°-40°	4561.0	65.2
0°-60°	6569.2	93.9
0°-90°	6999.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6999.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3693	3693	3693	3693	3693	
5°	3687	3693	3697	3703	3701	350
15°	3520	3594	3677	3653	3608	993
25°	3221	3334	3502	3439	3380	1472
35°	2672	2523	2674	2642	2702	1677
45°	2030	1659	953	1612	2058	1554
55°	1027	1027	355	1070	1251	931
65°	309	365	113	470	478	330
75°	48	56	16	95	93	69
85°	16	10	8	16	22	17
90°	0	0	0	0	0	



TEST NUMBER: P249299

CATALOG NUMBER: LSR8B70D010 EC8B70827 8LBDW0GPH

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	3692.8	3692.8	3692.8	3692.8	3692.8	3692.8	3692.8	3692.8	3692.8	3692.8	3692.8
2.5°	3694.8	3698.8	3696.8	3696.8	3694.8	3696.8	3696.8	3700.8	3700.8	3696.8	3694.8
5°	3686.8	3690.8	3690.8	3686.8	3686.8	3696.8	3690.8	3694.8	3694.8	3692.8	3692.8
7.5°	3669.0	3669.0	3677.0	3671.0	3671.0	3677.0	3675.0	3678.9	3682.9	3684.9	3684.9
10°	3629.4	3633.3	3635.3	3635.3	3637.3	3643.2	3647.2	3655.2	3659.1	3663.1	3665.1
12.5°	3579.9	3585.8	3587.8	3585.8	3591.7	3599.6	3609.6	3619.5	3625.4	3633.3	3639.3
15°	3520.3	3520.3	3524.3	3530.3	3534.3	3546.1	3556.0	3567.9	3583.8	3593.7	3603.6
17.5°	3455.0	3458.9	3464.9	3464.9	3472.8	3492.6	3498.6	3516.4	3534.3	3544.2	3564.0
20°	3383.6	3387.5	3393.5	3397.5	3407.4	3423.2	3435.1	3451.0	3470.8	3488.7	3508.5
22.5°	3328.1	3320.2	3324.1	3328.1	3338.0	3351.9	3365.8	3385.6	3405.4	3423.2	3443.1
25°	3221.0	3223.0	3229.0	3232.9	3244.9	3256.7	3272.6	3296.4	3314.2	3334.0	3355.8
27.5°	3076.4	3078.4	3088.2	3088.2	3098.1	3118.0	3127.9	3147.7	3171.5	3191.3	3217.1
30°	2911.8	2915.8	2915.8	2923.7	2929.6	2939.6	2949.5	2969.3	2981.2	2999.1	3034.7
32.5°	2761.2	2765.1	2763.1	2761.2	2755.2	2753.3	2751.3	2755.2	2759.2	2765.1	2779.0
35°	2672.0	2662.1	2654.2	2640.3	2624.4	2604.6	2586.7	2563.0	2541.2	2523.3	2503.5
37.5°	2586.7	2584.8	2572.9	2553.0	2521.3	2485.7	2444.1	2392.5	2340.9	2285.5	2232.0
40°	2467.8	2461.9	2452.0	2424.2	2388.5	2344.9	2289.4	2226.0	2142.7	2057.5	1970.3
42.5°	2265.6	2267.6	2255.7	2233.9	2200.2	2158.6	2101.1	2031.8	1942.6	1841.4	1728.5
45°	2029.8	2029.8	2025.8	2007.9	1984.2	1950.5	1906.9	1849.4	1762.2	1659.1	1538.2
47.5°	1784.0	1785.9	1780.0	1776.1	1766.1	1744.3	1712.6	1669.0	1607.6	1508.4	1387.5
50°	1534.2	1534.2	1544.1	1542.1	1542.1	1534.2	1520.4	1494.6	1441.1	1361.8	1248.8
52.5°	1284.4	1288.4	1294.4	1302.3	1312.2	1328.1	1312.2	1300.3	1266.6	1205.2	1108.1
55°	1026.8	1030.7	1040.6	1054.5	1066.4	1082.3	1086.2	1086.2	1068.4	1026.8	953.4
57.5°	806.8	800.8	808.8	820.6	836.5	852.4	864.2	878.1	876.1	848.4	788.9
60°	606.6	608.5	614.5	626.4	638.3	652.1	668.0	679.9	685.9	672.0	634.3
62.5°	442.0	442.0	449.9	461.8	467.8	487.6	497.5	503.5	509.4	507.4	483.7
65°	309.2	313.2	317.1	323.1	329.0	340.9	346.9	358.8	362.7	364.7	346.9
67.5°	218.1	212.1	216.1	220.0	226.0	233.9	245.8	245.8	251.7	251.7	239.8
70°	138.8	138.8	140.7	146.7	150.6	152.6	156.6	160.5	166.5	164.5	164.5
72.5°	93.2	91.2	93.2	95.2	97.1	103.1	103.1	105.1	109.0	111.0	103.1
75°	47.6	49.6	53.5	51.6	57.5	53.5	55.5	61.5	59.5	55.5	55.5
77.5°	39.6	39.6	39.6	37.7	41.6	41.6	39.6	43.6	41.6	41.6	39.6
80°	27.7	29.7	27.7	25.8	27.7	25.8	25.8	25.8	25.8	25.8	23.8
82.5°	21.8	17.8	19.8	17.8	19.8	19.8	17.8	15.9	15.9	17.8	15.9
85°	15.9	11.9	13.9	13.9	11.9	11.9	11.9	11.9	11.9	9.9	9.9
87.5°	9.9	6.0	6.0	6.0	7.9	7.9	7.9	6.0	7.9	7.9	4.0
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: P249299

CATALOG NUMBER: LSR8B70D010 EC8B70827 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	3692.8	3692.8	3692.8	3692.8	3692.8	3692.8	3692.8	3692.8	3692.8	3692.8	3692.8
2.5°	3698.8	3696.8	3700.8	3698.8	3698.8	3696.8	3698.8	3696.8	3700.8	3692.8	3694.8
5°	3698.8	3694.8	3696.8	3698.8	3700.8	3696.8	3696.8	3696.8	3700.8	3696.8	3698.8
7.5°	3690.8	3688.8	3694.8	3698.8	3696.8	3694.8	3698.8	3696.8	3700.8	3698.8	3702.7
10°	3675.0	3677.0	3680.9	3686.8	3688.8	3690.8	3694.8	3694.8	3700.8	3692.8	3696.8
12.5°	3651.2	3659.1	3669.0	3673.0	3680.9	3680.9	3684.9	3686.8	3690.8	3688.8	3694.8
15°	3621.5	3631.4	3643.2	3653.2	3663.1	3669.0	3675.0	3677.0	3682.9	3677.0	3678.9
17.5°	3585.8	3597.7	3615.5	3627.4	3643.2	3649.2	3657.1	3661.1	3667.1	3663.1	3665.1
20°	3536.2	3550.1	3569.9	3587.8	3597.7	3611.5	3621.5	3627.4	3631.4	3627.4	3629.4
22.5°	3466.8	3486.7	3512.4	3526.3	3546.1	3558.0	3560.0	3573.9	3583.8	3573.9	3577.9
25°	3385.6	3405.4	3425.2	3455.0	3472.8	3486.7	3500.6	3502.5	3512.4	3510.4	3508.5
27.5°	3250.8	3276.6	3310.2	3334.0	3357.8	3379.6	3395.5	3399.4	3409.4	3405.4	3407.4
30°	3066.4	3094.2	3125.9	3163.6	3197.3	3219.1	3238.9	3252.8	3262.7	3256.7	3254.7
32.5°	2804.8	2832.5	2866.3	2903.9	2943.6	2975.2	2999.1	3016.9	3028.8	3024.8	3014.9
35°	2505.5	2513.4	2535.2	2565.0	2598.6	2632.3	2654.2	2674.0	2687.8	2691.8	2691.8
37.5°	2198.3	2172.5	2156.6	2156.6	2176.4	2190.3	2210.1	2222.0	2243.8	2251.8	2257.7
40°	1900.9	1841.4	1785.9	1744.3	1716.6	1714.6	1714.6	1720.5	1740.4	1766.1	1789.9
42.5°	1635.3	1540.1	1454.9	1377.6	1322.1	1290.4	1276.5	1278.5	1294.4	1318.2	1357.8
45°	1423.2	1304.3	1197.2	1104.1	1028.8	979.2	955.4	953.4	965.3	993.1	1036.7
47.5°	1258.7	1131.8	1010.9	903.9	822.6	769.1	741.3	733.4	741.3	767.1	818.6
50°	1121.9	991.1	866.2	755.2	668.0	612.5	586.7	576.8	586.7	608.5	660.0
52.5°	995.0	860.3	743.3	636.3	543.1	495.5	467.8	461.8	467.8	493.5	535.2
55°	848.4	733.4	618.4	511.4	430.2	382.6	360.8	354.8	360.8	384.6	428.2
57.5°	703.7	604.6	503.5	406.3	337.0	295.3	275.5	267.6	281.5	297.3	348.9
60°	568.9	489.6	404.4	319.1	261.7	224.0	208.1	206.1	210.1	229.9	265.6
62.5°	446.0	380.6	313.2	243.8	196.2	180.4	160.5	158.6	162.5	174.4	202.2
65°	321.1	279.5	228.0	178.4	140.7	118.9	111.0	113.0	116.9	124.9	150.6
67.5°	224.0	194.2	158.6	124.9	97.1	87.2	79.3	77.3	79.3	93.2	107.0
70°	150.6	132.8	107.0	95.2	67.4	53.5	55.5	49.6	57.5	57.5	69.4
72.5°	99.1	87.2	71.3	55.5	47.6	37.7	37.7	35.7	39.6	41.6	51.6
75°	51.6	39.6	39.6	27.7	19.8	9.9	17.8	15.9	13.9	15.9	19.8
77.5°	35.7	29.7	27.7	21.8	19.8	15.9	15.9	15.9	15.9	17.8	19.8
80°	21.8	21.8	15.9	13.9	11.9	9.9	11.9	11.9	11.9	11.9	13.9
82.5°	13.9	11.9	11.9	9.9	9.9	7.9	7.9	7.9	7.9	7.9	11.9
85°	11.9	7.9	7.9	6.0	7.9	13.9	6.0	7.9	7.9	7.9	6.0
87.5°	4.0	6.0	6.0	6.0	4.0	2.0	4.0	6.0	6.0	9.9	7.9
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: P249299

CATALOG NUMBER: LSR8B70D010 EC8B70827 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	3692.8	3692.8	3692.8	3692.8	3692.8	3692.8	3692.8	3692.8	3692.8	3692.8	3692.8
2.5°	3698.8	3700.8	3700.8	3698.8	3698.8	3694.8	3702.7	3696.8	3698.8	3706.7	3700.8
5°	3702.7	3704.7	3704.7	3702.7	3702.7	3702.7	3704.7	3704.7	3702.7	3700.8	3704.7
7.5°	3710.7	3708.7	3708.7	3704.7	3704.7	3700.8	3704.7	3698.8	3702.7	3698.8	3704.7
10°	3700.8	3702.7	3700.8	3698.8	3698.8	3696.8	3696.8	3690.8	3692.8	3686.8	3690.8
12.5°	3694.8	3692.8	3692.8	3688.8	3684.9	3680.9	3678.9	3673.0	3673.0	3659.1	3665.1
15°	3678.9	3680.9	3675.0	3667.1	3663.1	3653.2	3649.2	3641.3	3633.3	3623.5	3625.4
17.5°	3665.1	3659.1	3651.2	3643.2	3627.4	3619.5	3611.5	3599.6	3595.7	3583.8	3579.9
20°	3623.5	3619.5	3609.6	3595.7	3585.8	3567.9	3560.0	3548.1	3538.2	3526.3	3520.3
22.5°	3569.9	3565.9	3554.0	3540.2	3524.3	3516.4	3508.5	3486.7	3476.7	3464.9	3462.9
25°	3502.5	3496.6	3484.7	3468.8	3460.9	3439.1	3431.1	3415.3	3411.4	3399.4	3397.5
27.5°	3399.4	3391.5	3377.7	3357.8	3343.9	3330.1	3322.2	3310.2	3306.3	3294.4	3292.4
30°	3244.9	3234.9	3207.2	3199.3	3175.5	3161.6	3161.6	3145.7	3147.7	3139.8	3139.8
32.5°	3001.0	2985.2	2963.4	2947.5	2931.6	2923.7	2923.7	2917.8	2921.7	2921.7	2925.7
35°	2677.9	2656.2	2644.2	2634.3	2634.3	2642.2	2666.0	2672.0	2683.9	2693.8	2701.7
37.5°	2263.6	2261.7	2275.6	2287.4	2317.2	2350.9	2392.5	2428.2	2461.9	2485.7	2509.4
40°	1815.7	1865.2	1904.9	1960.4	2005.9	2071.4	2146.7	2208.1	2265.6	2307.3	2350.9
42.5°	1417.2	1480.7	1564.0	1645.2	1726.5	1815.7	1914.8	2000.0	2075.4	2132.8	2178.4
45°	1104.1	1191.3	1292.4	1395.5	1500.5	1611.5	1714.6	1801.8	1881.1	1940.6	1986.2
47.5°	890.0	985.2	1100.1	1213.1	1332.0	1449.0	1564.0	1639.3	1704.7	1752.2	1793.9
50°	735.4	836.5	957.4	1086.2	1205.2	1322.1	1421.2	1494.6	1548.1	1589.7	1615.5
52.5°	614.5	721.5	850.4	979.2	1098.1	1205.2	1294.4	1349.9	1393.5	1423.2	1447.0
55°	507.4	610.5	731.4	852.4	969.3	1070.4	1143.7	1185.4	1219.0	1236.9	1250.7
57.5°	414.3	509.4	620.4	731.4	832.5	915.8	973.3	1014.9	1030.7	1044.6	1042.6
60°	325.1	414.3	515.4	610.5	697.7	765.1	806.8	830.5	842.4	848.4	844.4
62.5°	255.7	337.0	414.3	497.5	561.0	618.4	658.1	658.1	664.0	666.0	672.0
65°	190.3	251.7	319.1	380.6	432.1	469.8	491.6	497.5	505.5	503.5	499.5
67.5°	140.7	186.3	235.9	281.5	317.1	340.9	356.8	370.7	368.7	364.7	362.7
70°	97.1	126.9	170.5	198.2	224.0	247.8	251.7	253.7	255.7	257.7	253.7
72.5°	67.4	89.2	113.0	136.8	152.6	162.5	172.5	174.4	174.4	174.4	172.5
75°	33.7	45.6	67.4	77.3	91.2	95.2	103.1	103.1	109.0	101.1	99.1
77.5°	29.7	35.7	47.6	55.5	61.5	67.4	69.4	75.3	73.3	69.4	71.3
80°	17.8	21.8	29.7	33.7	41.6	43.6	45.6	47.6	45.6	47.6	47.6
82.5°	13.9	15.9	19.8	19.8	25.8	25.8	27.7	27.7	29.7	29.7	29.7
85°	7.9	13.9	11.9	23.8	15.9	15.9	19.8	23.8	19.8	19.8	23.8
87.5°	7.9	7.9	6.0	7.9	7.9	7.9	9.9	11.9	11.9	13.9	11.9
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: P249299

CATALOG NUMBER: LSR8B70D010 EC8B70827 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3692.8	3692.8	3692.8	3692.8
2.5°	3698.8	3702.7	3696.8	3694.8
5°	3704.7	3704.7	3700.8	3700.8
7.5°	3704.7	3704.7	3698.8	3694.8
10°	3688.8	3688.8	3682.9	3678.9
12.5°	3659.1	3659.1	3657.1	3651.2
15°	3621.5	3621.5	3613.5	3607.6
17.5°	3569.9	3573.9	3564.0	3564.0
20°	3514.4	3512.4	3504.5	3500.6
22.5°	3456.9	3453.0	3451.0	3439.1
25°	3395.5	3391.5	3385.6	3379.6
27.5°	3290.4	3288.5	3282.5	3274.6
30°	3129.9	3127.9	3120.0	3120.0
32.5°	2921.7	2919.8	2911.8	2913.8
35°	2705.7	2713.6	2709.6	2701.7
37.5°	2525.3	2531.3	2535.2	2531.3
40°	2374.7	2392.5	2394.5	2398.5
42.5°	2214.1	2237.9	2245.8	2249.8
45°	2021.8	2043.6	2061.5	2057.5
47.5°	1825.6	1841.4	1857.3	1845.4
50°	1637.3	1647.2	1653.2	1653.2
52.5°	1458.9	1458.9	1456.9	1458.9
55°	1254.7	1254.7	1246.8	1250.7
57.5°	1040.6	1044.6	1038.6	1028.8
60°	842.4	832.5	828.5	822.6
62.5°	656.1	656.1	642.2	660.0
65°	491.6	485.6	479.7	477.7
67.5°	356.8	354.8	348.9	346.9
70°	251.7	243.8	241.8	237.8
72.5°	168.5	168.5	164.5	164.5
75°	103.1	93.2	91.2	93.2
77.5°	71.3	69.4	69.4	67.4
80°	47.6	45.6	49.6	43.6
82.5°	29.7	31.7	29.7	31.7
85°	19.8	23.8	21.8	21.8
87.5°	11.9	11.9	11.9	11.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)