

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: P249200

Luminaire Tested: **LSR8B70D010 EC8B70830 8LBDW0WMH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249200  
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 EC8B70830 8LBDW0WMH  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
80 CRI 3000 CCT WITH WARM HAZE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7302.0 lumens  
Efficiency: N/A  
Efficacy: 96.2 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

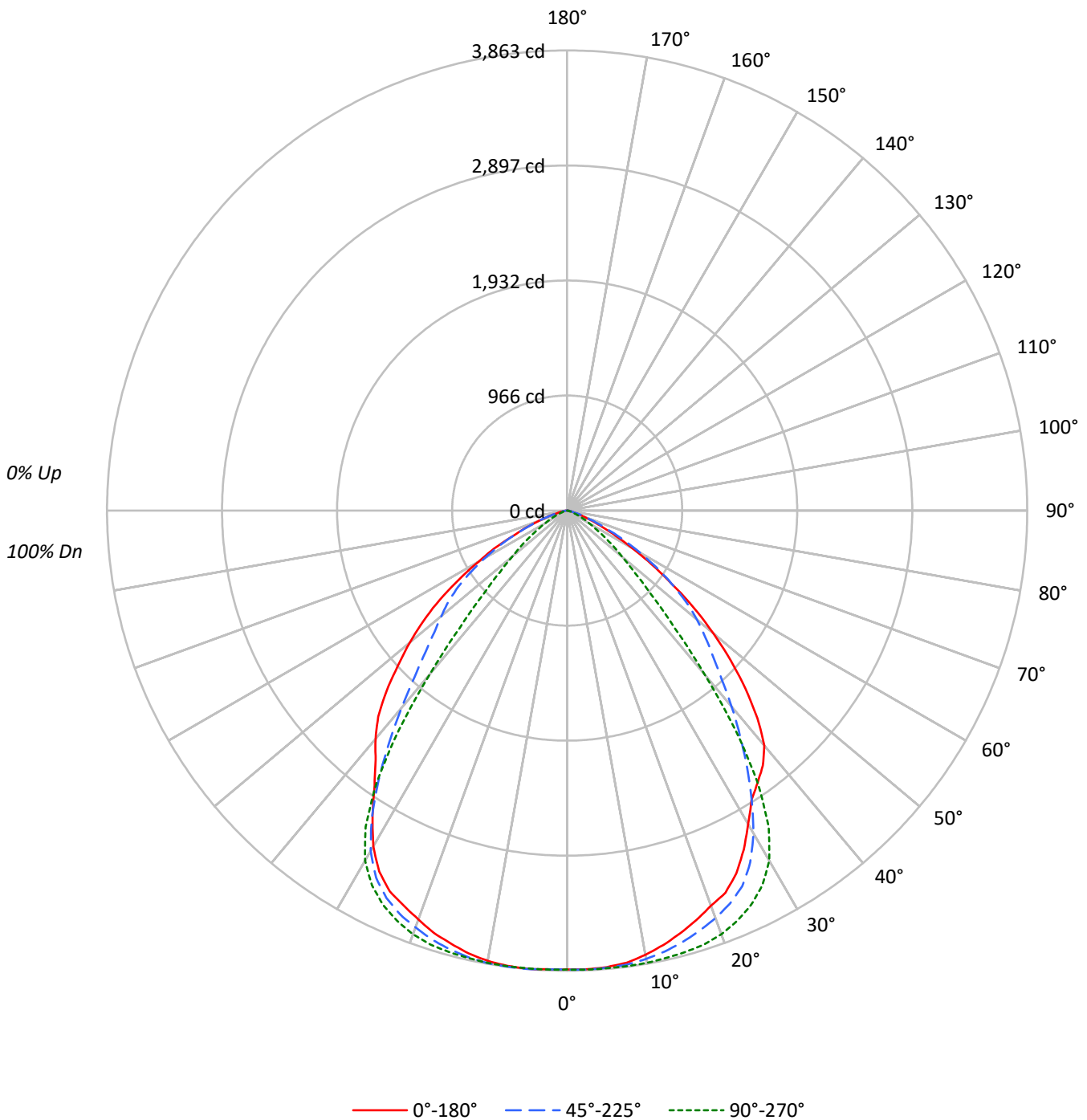
Input Watts (W): 75.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P249200

CATALOG NUMBER: LSR8B70D010 EC8B70830 8LBDW0WMH

### Luminous Intensity Polar Plot





TEST NUMBER: P249200

CATALOG NUMBER: LSR8B70D010 EC8B70830 8LBDW0WMH

**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°	118803	118803	118803
5°	119065	119384	119514
10°	118563	120702	120182
15°	117248	122464	120156
20°	115841	124186	119845
25°	114338	124331	119969
30°	108170	120835	115900
35°	104941	105016	106108
40°	103642	72256	100727
45°	92347	43378	93611
50°	76785	28870	82739
55°	57589	19902	70153
60°	39026	13266	52927
65°	23538	8603	36366
70°	13055	4661	22369
75°	5909	1966	11581
80°	5132	2202	8080
85°	5838	2901	8067



TEST NUMBER: P249200

CATALOG NUMBER: LSR8B70D010 EC8B70830 8LBDW0WMH

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	367.7	5.0
10°-20°	1067.8	14.6
20°-30°	1620.7	22.2
30°-40°	1702.2	23.3
40°-50°	1276.2	17.5
50°-60°	818.9	11.2
60°-70°	350.3	4.8
70°-80°	82.8	1.1
80°-90°	15.4	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°	3056.2	41.9
0°-40°	4758.5	65.2
0°-60°	6853.6	93.9
0°-90°	7302.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7302.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	3853	3853	3853	3853	3853	
5°	3846	3853	3857	3863	3861	365
15°	3673	3749	3836	3811	3764	1036
25°	3360	3478	3654	3588	3526	1535
35°	2788	2632	2790	2757	2819	1750
45°	2118	1731	995	1681	2147	1622
55°	1071	1071	370	1117	1305	972
65°	323	380	118	490	498	344
75°	50	58	16	99	97	72
85°	16	10	8	16	23	17
90°	0	0	0	0	0	



TEST NUMBER: P249200

CATALOG NUMBER: LSR8B70D010 EC8B70830 8LBDW0WMH

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	3852.7	3852.7	3852.7	3852.7	3852.7	3852.7	3852.7	3852.7	3852.7	3852.7	3852.7
2.5°	3854.8	3858.9	3856.8	3856.8	3854.8	3856.8	3856.8	3861.0	3861.0	3856.8	3854.8
5°	3846.5	3850.6	3850.6	3846.5	3846.5	3856.8	3850.6	3854.8	3854.8	3852.7	3852.7
7.5°	3827.9	3827.9	3836.1	3830.0	3830.0	3836.1	3834.1	3838.2	3842.4	3844.4	3844.4
10°	3786.5	3790.6	3792.7	3792.7	3794.8	3801.0	3805.1	3813.4	3817.5	3821.7	3823.7
12.5°	3734.8	3741.0	3743.1	3741.0	3747.2	3755.5	3765.8	3776.2	3782.4	3790.6	3796.9
15°	3672.7	3672.7	3676.9	3683.1	3687.3	3699.7	3710.0	3722.4	3738.9	3749.3	3759.6
17.5°	3604.5	3608.7	3614.9	3614.9	3623.2	3643.8	3650.0	3668.6	3687.3	3697.6	3718.3
20°	3530.1	3534.2	3540.4	3544.6	3554.9	3571.4	3583.8	3600.4	3621.1	3639.7	3660.3
22.5°	3472.2	3463.9	3468.0	3472.2	3482.5	3497.0	3511.5	3532.1	3552.8	3571.4	3592.1
25°	3360.5	3362.6	3368.8	3372.9	3385.3	3397.7	3414.3	3439.1	3457.7	3478.4	3501.1
27.5°	3209.5	3211.6	3221.9	3221.9	3232.3	3253.0	3263.3	3284.0	3308.8	3329.5	3356.4
30°	3037.9	3042.0	3042.0	3050.3	3056.5	3066.9	3077.2	3097.9	3110.3	3128.9	3166.1
32.5°	2880.7	2884.8	2882.8	2880.7	2874.5	2872.4	2870.4	2874.5	2878.7	2884.8	2899.3
35°	2787.7	2777.3	2769.1	2754.6	2738.0	2717.4	2698.7	2673.9	2651.2	2632.5	2611.9
37.5°	2698.7	2696.7	2684.3	2663.6	2630.5	2593.3	2549.9	2496.1	2442.3	2384.4	2328.6
40°	2574.7	2568.4	2558.1	2529.2	2491.9	2446.4	2388.5	2322.4	2235.5	2146.6	2055.6
42.5°	2363.7	2365.8	2353.4	2330.6	2295.5	2252.0	2192.1	2119.7	2026.7	1921.2	1803.3
45°	2117.6	2117.6	2113.5	2094.9	2070.1	2034.9	1989.4	1929.5	1838.5	1730.9	1604.7
47.5°	1861.2	1863.3	1857.0	1852.9	1842.6	1819.8	1786.8	1741.3	1677.2	1573.7	1447.6
50°	1600.6	1600.6	1611.0	1608.9	1608.9	1600.6	1586.2	1559.3	1503.4	1420.7	1302.9
52.5°	1340.1	1344.2	1350.4	1358.7	1369.0	1385.5	1369.0	1356.6	1321.4	1257.3	1156.0
55°	1071.2	1075.4	1085.7	1100.2	1112.6	1129.2	1133.3	1133.3	1114.6	1071.2	994.7
57.5°	841.7	835.5	843.8	856.2	872.7	889.3	901.7	916.1	914.0	885.1	823.1
60°	632.8	634.9	641.1	653.5	665.9	680.4	696.9	709.3	715.5	701.1	661.8
62.5°	461.2	461.2	469.4	481.8	488.0	508.7	519.1	525.3	531.5	529.4	504.6
65°	322.6	326.7	330.9	337.1	343.3	355.7	361.9	374.3	378.4	380.5	361.9
67.5°	227.5	221.3	225.4	229.5	235.7	244.0	256.4	256.4	262.6	262.6	250.2
70°	144.8	144.8	146.8	153.0	157.2	159.2	163.4	167.5	173.7	171.6	171.6
72.5°	97.2	95.1	97.2	99.3	101.4	107.5	107.5	109.6	113.7	115.8	107.5
75°	49.6	51.7	55.8	53.8	60.0	55.8	57.9	64.1	62.0	57.9	57.9
77.5°	41.3	41.3	41.3	39.3	43.4	43.4	41.3	45.5	43.4	43.4	41.3
80°	28.9	31.0	28.9	26.9	28.9	26.9	26.9	26.9	26.9	26.9	24.8
82.5°	22.8	18.6	20.7	18.6	20.7	20.7	18.6	16.5	16.5	18.6	16.5
85°	16.5	12.4	14.5	14.5	12.4	12.4	12.4	12.4	12.4	10.3	10.3
87.5°	10.3	6.2	6.2	6.2	8.2	8.2	8.2	6.2	8.2	8.2	4.1
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: P249200

CATALOG NUMBER: LSR8B70D010 EC8B70830 8LBDW0WMH

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	3852.7	3852.7	3852.7	3852.7	3852.7	3852.7	3852.7	3852.7	3852.7	3852.7	3852.7
2.5°	3858.9	3856.8	3861.0	3858.9	3858.9	3856.8	3858.9	3856.8	3861.0	3852.7	3854.8
5°	3858.9	3854.8	3856.8	3858.9	3861.0	3856.8	3856.8	3856.8	3861.0	3856.8	3858.9
7.5°	3850.6	3848.5	3854.8	3858.9	3856.8	3854.8	3858.9	3856.8	3861.0	3858.9	3863.0
10°	3834.1	3836.1	3840.3	3846.5	3848.5	3850.6	3854.8	3854.8	3861.0	3852.7	3856.8
12.5°	3809.3	3817.5	3827.9	3832.0	3840.3	3840.3	3844.4	3846.5	3850.6	3848.5	3854.8
15°	3778.2	3788.6	3801.0	3811.3	3821.7	3827.9	3834.1	3836.1	3842.4	3836.1	3838.2
17.5°	3741.0	3753.4	3772.0	3784.4	3801.0	3807.2	3815.4	3819.6	3825.8	3821.7	3823.7
20°	3689.3	3703.8	3724.5	3743.1	3753.4	3767.9	3778.2	3784.4	3788.6	3784.4	3786.5
22.5°	3616.9	3637.6	3664.5	3679.0	3699.7	3712.1	3714.1	3728.6	3738.9	3728.6	3732.8
25°	3532.1	3552.8	3573.5	3604.5	3623.2	3637.6	3652.1	3654.2	3664.5	3662.4	3660.3
27.5°	3391.5	3418.4	3453.5	3478.4	3503.2	3526.0	3542.5	3546.6	3557.0	3552.8	3554.9
30°	3199.2	3228.2	3261.3	3300.5	3335.7	3358.4	3379.1	3393.6	3403.9	3397.7	3395.7
32.5°	2926.2	2955.2	2990.3	3029.6	3071.0	3104.0	3128.9	3147.5	3159.9	3155.8	3145.4
35°	2614.0	2622.2	2645.0	2676.0	2711.1	2746.3	2769.1	2789.7	2804.2	2808.3	2808.3
37.5°	2293.4	2266.6	2250.0	2250.0	2270.7	2285.1	2305.8	2318.2	2341.0	2349.2	2355.5
40°	1983.2	1921.2	1863.3	1819.8	1790.9	1788.8	1788.8	1795.0	1815.7	1842.6	1867.4
42.5°	1706.1	1606.8	1517.9	1437.3	1379.4	1346.3	1331.8	1333.9	1350.4	1375.2	1416.6
45°	1484.8	1360.8	1249.1	1151.9	1073.3	1021.6	996.8	994.7	1007.1	1036.0	1081.6
47.5°	1313.2	1180.8	1054.7	943.0	858.2	802.4	773.4	765.2	773.4	800.3	854.1
50°	1170.5	1034.0	903.7	787.9	696.9	639.0	612.1	601.8	612.1	634.9	688.6
52.5°	1038.1	897.5	775.5	663.8	566.6	517.0	488.0	481.8	488.0	514.9	558.4
55°	885.1	765.2	645.2	533.5	448.8	399.1	376.4	370.2	376.4	401.2	446.7
57.5°	734.2	630.7	525.3	423.9	351.6	308.1	287.5	279.2	293.6	310.2	364.0
60°	593.5	510.8	421.9	333.0	273.0	233.7	217.1	215.1	219.2	239.9	277.1
62.5°	465.3	397.1	326.7	254.4	204.7	188.2	167.5	165.5	169.6	182.0	211.0
65°	335.0	291.6	237.8	186.1	146.8	124.1	115.8	117.9	122.0	130.3	157.2
67.5°	233.7	202.7	165.5	130.3	101.4	91.0	82.7	80.7	82.7	97.2	111.7
70°	157.2	138.5	111.7	99.3	70.3	55.8	57.9	51.7	60.0	60.0	72.4
72.5°	103.4	91.0	74.4	57.9	49.6	39.3	39.3	37.2	41.3	43.4	53.8
75°	53.8	41.3	41.3	28.9	20.7	10.3	18.6	16.5	14.5	16.5	20.7
77.5°	37.2	31.0	28.9	22.8	20.7	16.5	16.5	16.5	16.5	18.6	20.7
80°	22.8	22.8	16.5	14.5	12.4	10.3	12.4	12.4	12.4	12.4	14.5
82.5°	14.5	12.4	12.4	10.3	10.3	8.2	8.2	8.2	8.2	8.2	12.4
85°	12.4	8.2	8.2	6.2	8.2	14.5	6.2	8.2	8.2	8.2	6.2
87.5°	4.1	6.2	6.2	6.2	4.1	2.1	4.1	6.2	6.2	10.3	8.2
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: P249200

CATALOG NUMBER: LSR8B70D010 EC8B70830 8LBDW0WMH

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	3852.7	3852.7	3852.7	3852.7	3852.7	3852.7	3852.7	3852.7	3852.7	3852.7	3852.7
2.5°	3858.9	3861.0	3861.0	3858.9	3858.9	3854.8	3863.0	3856.8	3858.9	3867.2	3861.0
5°	3863.0	3865.1	3865.1	3863.0	3863.0	3863.0	3865.1	3865.1	3863.0	3861.0	3865.1
7.5°	3871.3	3869.2	3869.2	3865.1	3865.1	3861.0	3865.1	3858.9	3863.0	3858.9	3865.1
10°	3861.0	3863.0	3861.0	3858.9	3858.9	3856.8	3856.8	3850.6	3852.7	3846.5	3850.6
12.5°	3854.8	3852.7	3852.7	3848.5	3844.4	3840.3	3838.2	3832.0	3832.0	3817.5	3823.7
15°	3838.2	3840.3	3834.1	3825.8	3821.7	3811.3	3807.2	3798.9	3790.6	3780.3	3782.4
17.5°	3823.7	3817.5	3809.3	3801.0	3784.4	3776.2	3767.9	3755.5	3751.3	3738.9	3734.8
20°	3780.3	3776.2	3765.8	3751.3	3741.0	3722.4	3714.1	3701.7	3691.4	3679.0	3672.7
22.5°	3724.5	3720.3	3707.9	3693.4	3676.9	3668.6	3660.3	3637.6	3627.3	3614.9	3612.8
25°	3654.2	3647.9	3635.6	3619.0	3610.7	3588.0	3579.7	3563.1	3559.0	3546.6	3544.6
27.5°	3546.6	3538.3	3523.9	3503.2	3488.7	3474.2	3466.0	3453.5	3449.4	3437.0	3435.0
30°	3385.3	3375.0	3346.0	3337.8	3312.9	3298.5	3298.5	3281.9	3284.0	3275.7	3275.7
32.5°	3131.0	3114.4	3091.6	3075.1	3058.6	3050.3	3050.3	3044.1	3048.2	3048.2	3052.4
35°	2793.9	2771.1	2758.7	2748.4	2748.4	2756.6	2781.5	2787.7	2800.1	2810.4	2818.7
37.5°	2361.6	2359.6	2374.1	2386.5	2417.5	2452.7	2496.1	2533.3	2568.4	2593.3	2618.1
40°	1894.3	1946.0	1987.3	2045.3	2092.8	2161.1	2239.6	2303.7	2363.7	2407.2	2452.7
42.5°	1478.6	1544.8	1631.7	1716.4	1801.2	1894.3	1997.7	2086.6	2165.2	2225.2	2272.7
45°	1151.9	1242.9	1348.4	1455.9	1565.5	1681.3	1788.8	1879.8	1962.5	2024.6	2072.1
47.5°	928.5	1027.8	1147.7	1265.6	1389.7	1511.7	1631.7	1710.2	1778.5	1828.1	1871.6
50°	767.2	872.7	998.9	1133.3	1257.3	1379.4	1482.7	1559.3	1615.1	1658.5	1685.4
52.5°	641.1	752.7	887.2	1021.6	1145.6	1257.3	1350.4	1408.3	1453.8	1484.8	1509.6
55°	529.4	637.0	763.1	889.3	1011.3	1116.7	1193.2	1236.7	1271.8	1290.4	1304.9
57.5°	432.2	531.5	647.3	763.1	868.6	955.4	1015.4	1058.8	1075.4	1089.8	1087.8
60°	339.2	432.2	537.7	637.0	727.9	798.2	841.7	866.5	878.9	885.1	881.0
62.5°	266.8	351.6	432.2	519.1	585.2	645.2	686.6	686.6	692.8	694.8	701.1
65°	198.5	262.6	333.0	397.1	450.8	490.1	512.9	519.1	527.4	525.3	521.1
67.5°	146.8	194.4	246.1	293.6	330.9	355.7	372.2	386.7	384.7	380.5	378.4
70°	101.4	132.4	177.9	206.8	233.7	258.5	262.6	264.7	266.8	268.8	264.7
72.5°	70.3	93.1	117.9	142.7	159.2	169.6	179.9	182.0	182.0	182.0	179.9
75°	35.2	47.6	70.3	80.7	95.1	99.3	107.5	107.5	113.7	105.5	103.4
77.5°	31.0	37.2	49.6	57.9	64.1	70.3	72.4	78.6	76.5	72.4	74.4
80°	18.6	22.8	31.0	35.2	43.4	45.5	47.6	49.6	47.6	49.6	49.6
82.5°	14.5	16.5	20.7	20.7	26.9	26.9	28.9	28.9	31.0	31.0	31.0
85°	8.2	14.5	12.4	24.8	16.5	16.5	20.7	24.8	20.7	20.7	24.8
87.5°	8.2	8.2	6.2	8.2	8.2	8.2	10.3	12.4	12.4	14.5	12.4
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: P249200

CATALOG NUMBER: LSR8B70D010 EC8B70830 8LBDW0WMH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	3852.7	3852.7	3852.7	3852.7
2.5°	3858.9	3863.0	3856.8	3854.8
5°	3865.1	3865.1	3861.0	3861.0
7.5°	3865.1	3865.1	3858.9	3854.8
10°	3848.5	3848.5	3842.4	3838.2
12.5°	3817.5	3817.5	3815.4	3809.3
15°	3778.2	3778.2	3769.9	3763.8
17.5°	3724.5	3728.6	3718.3	3718.3
20°	3666.6	3664.5	3656.2	3652.1
22.5°	3606.6	3602.5	3600.4	3588.0
25°	3542.5	3538.3	3532.1	3526.0
27.5°	3432.9	3430.8	3424.6	3416.3
30°	3265.4	3263.3	3255.0	3255.0
32.5°	3048.2	3046.2	3037.9	3040.0
35°	2822.8	2831.1	2827.0	2818.7
37.5°	2634.6	2640.8	2645.0	2640.8
40°	2477.5	2496.1	2498.2	2502.3
42.5°	2310.0	2334.8	2343.1	2347.2
45°	2109.3	2132.1	2150.7	2146.6
47.5°	1904.6	1921.2	1937.7	1925.3
50°	1708.2	1718.5	1724.7	1724.7
52.5°	1522.1	1522.1	1520.0	1522.1
55°	1309.0	1309.0	1300.8	1304.9
57.5°	1085.7	1089.8	1083.6	1073.3
60°	878.9	868.6	864.4	858.2
62.5°	684.5	684.5	670.1	688.6
65°	512.9	506.7	500.4	498.4
67.5°	372.2	370.2	364.0	361.9
70°	262.6	254.4	252.3	248.1
72.5°	175.8	175.8	171.6	171.6
75°	107.5	97.2	95.1	97.2
77.5°	74.4	72.4	72.4	70.3
80°	49.6	47.6	51.7	45.5
82.5°	31.0	33.1	31.0	33.1
85°	20.7	24.8	22.8	22.8
87.5°	12.4	12.4	12.4	12.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)