

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: P249191

Luminaire Tested: **LSR8B70D010 EC8B70827 8LBDW0WMH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249191
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 8LBDW0WMH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 2700 CCT WITH WARM HAZE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7123.0 lumens
Efficiency: N/A
Efficacy: 93.8 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

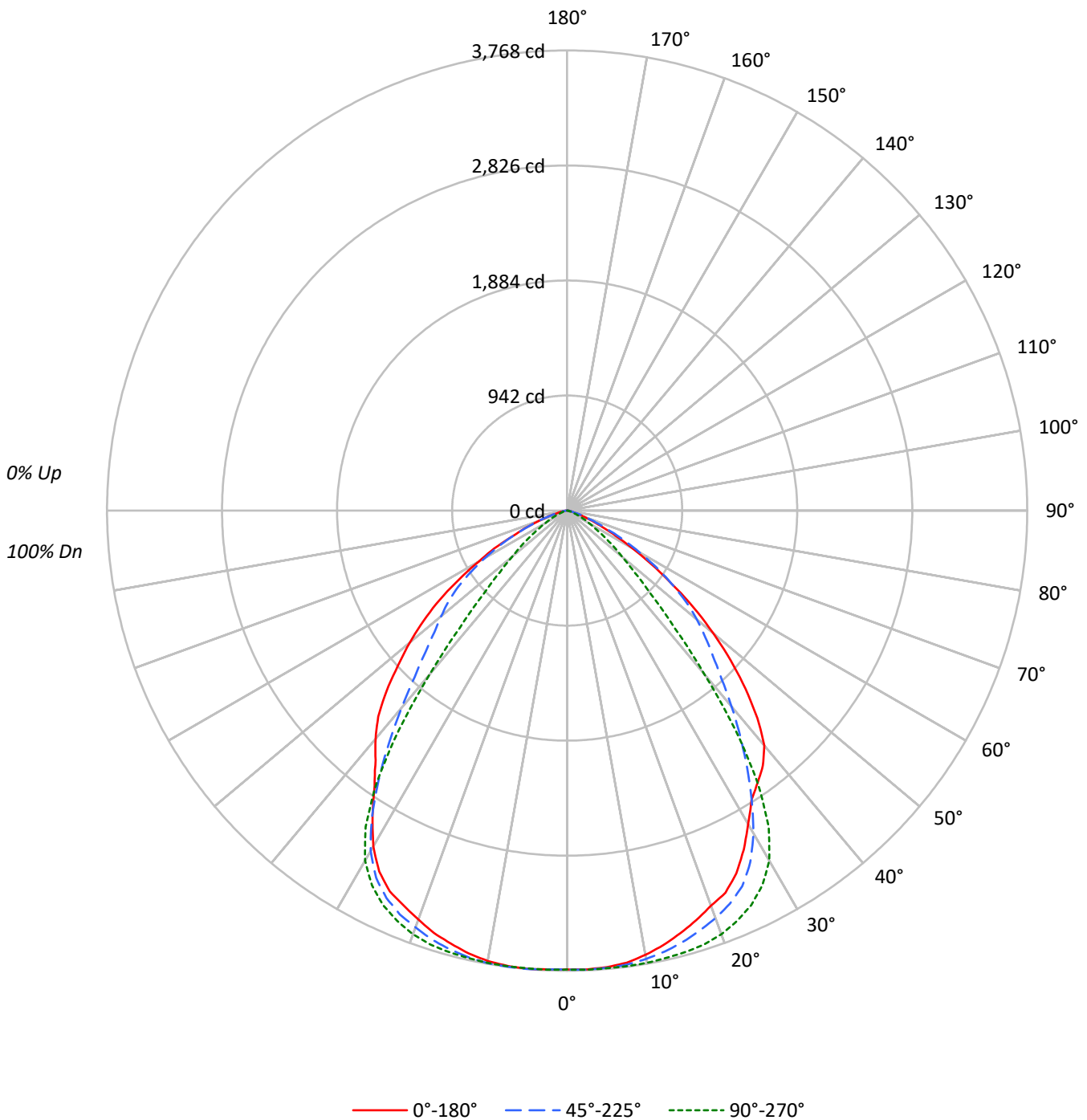
Input Watts (W): 75.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	115889	115889	115889
5°	116146	116459	116582
10°	115657	117743	117235
15°	114374	119463	117209
20°	113003	121141	116908
25°	111534	121282	117026
30°	105517	117872	113058
35°	102366	102441	103506
40°	101098	70485	98260
45°	90083	42314	91318
50°	74905	28160	80709
55°	56181	19413	68433
60°	38071	12939	51632
65°	22962	8391	35468
70°	12731	4544	21828
75°	5766	1918	11295
80°	5008	2149	7885
85°	5696	2830	7855



TEST NUMBER: P249191

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	358.7	5.0
10°-20°	1041.6	14.6
20°-30°	1581.0	22.2
30°-40°	1660.5	23.3
40°-50°	1244.9	17.5
50°-60°	798.8	11.2
60°-70°	341.7	4.8
70°-80°	80.7	1.1
80°-90°	15.0	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°	2981.3	41.9
0°-40°	4641.8	65.2
0°-60°	6685.5	93.9
0°-90°	7123.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7123.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3758	3758	3758	3758	3758	
5°	3752	3758	3762	3768	3766	356
15°	3583	3657	3742	3718	3672	1011
25°	3278	3393	3565	3500	3440	1498
35°	2719	2568	2721	2689	2750	1707
45°	2066	1688	970	1640	2094	1582
55°	1045	1045	361	1089	1273	948
65°	315	371	115	478	486	336
75°	48	56	16	97	95	70
85°	16	10	8	16	22	17
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°	3758.2	3758.2	3758.2	3758.2	3758.2	3758.2	3758.2	3758.2	3758.2	3758.2	3758.2
2.5°	3760.3	3764.3	3762.3	3762.3	3760.3	3762.3	3762.3	3766.3	3766.3	3762.3	3760.3
5°	3752.2	3756.2	3756.2	3752.2	3752.2	3762.3	3756.2	3760.3	3760.3	3758.2	3758.2
7.5°	3734.0	3734.0	3742.1	3736.1	3736.1	3742.1	3740.1	3744.1	3748.2	3750.2	3750.2
10°	3693.7	3697.7	3699.7	3699.7	3701.8	3707.8	3711.8	3719.9	3723.9	3728.0	3730.0
12.5°	3643.3	3649.3	3651.3	3649.3	3655.4	3663.4	3673.5	3683.6	3689.7	3697.7	3703.8
15°	3582.7	3582.7	3586.8	3592.8	3596.9	3609.0	3619.0	3631.1	3647.3	3657.4	3667.5
17.5°	3516.2	3520.2	3526.2	3526.2	3534.3	3554.5	3560.5	3578.7	3596.9	3606.9	3627.1
20°	3443.6	3447.6	3453.6	3457.7	3467.7	3483.9	3496.0	3512.1	3532.3	3550.5	3570.6
22.5°	3387.0	3379.0	3383.0	3387.0	3397.2	3411.3	3425.4	3445.5	3465.7	3483.9	3504.1
25°	3278.1	3280.1	3286.2	3290.2	3302.3	3314.4	3330.6	3354.8	3372.9	3393.1	3415.3
27.5°	3130.9	3132.9	3143.0	3143.0	3153.0	3173.2	3183.3	3203.5	3227.7	3247.9	3274.1
30°	2963.4	2967.4	2967.4	2975.5	2981.6	2991.7	3001.7	3021.9	3034.0	3052.2	3088.5
32.5°	2810.1	2814.1	2812.1	2810.1	2804.1	2802.0	2800.0	2804.1	2808.1	2814.1	2828.2
35°	2719.3	2709.2	2701.2	2687.1	2670.9	2650.7	2632.6	2608.4	2586.2	2568.0	2547.9
37.5°	2632.6	2630.6	2618.5	2598.3	2566.0	2529.7	2487.4	2434.9	2382.4	2326.0	2271.5
40°	2511.5	2505.5	2495.4	2467.2	2430.8	2386.5	2330.0	2265.4	2180.7	2094.0	2005.2
42.5°	2305.8	2307.8	2295.7	2273.5	2239.2	2196.8	2138.3	2067.7	1977.0	1874.1	1759.1
45°	2065.7	2065.7	2061.7	2043.5	2019.3	1985.0	1940.6	1882.2	1793.4	1688.5	1565.4
47.5°	1815.6	1817.6	1811.5	1807.5	1797.4	1775.2	1743.0	1698.6	1636.0	1535.2	1412.1
50°	1561.4	1561.4	1571.5	1569.5	1569.5	1561.4	1547.3	1521.0	1466.6	1385.9	1270.9
52.5°	1307.2	1311.3	1317.3	1325.4	1335.4	1351.6	1335.4	1323.3	1289.0	1226.5	1127.7
55°	1045.0	1049.0	1059.1	1073.2	1085.3	1101.5	1105.5	1105.5	1087.3	1045.0	970.3
57.5°	821.1	815.0	823.1	835.2	851.3	867.5	879.5	893.7	891.6	863.4	802.9
60°	617.3	619.3	625.3	637.5	649.6	663.7	679.8	691.9	698.0	683.9	645.5
62.5°	449.9	449.9	457.9	470.0	476.1	496.3	506.3	512.4	518.4	516.4	492.2
65°	314.7	318.7	322.8	328.8	334.9	347.0	353.0	365.1	369.2	371.2	353.0
67.5°	221.9	215.9	219.9	223.9	230.0	238.1	250.2	250.2	256.2	256.2	244.1
70°	141.2	141.2	143.2	149.3	153.3	155.3	159.4	163.4	169.5	167.4	167.4
72.5°	94.8	92.8	94.8	96.8	98.9	104.9	104.9	106.9	111.0	113.0	104.9
75°	48.4	50.4	54.4	52.5	58.5	54.4	56.5	62.5	60.5	56.5	56.5
77.5°	40.3	40.3	40.3	38.4	42.4	42.4	40.3	44.4	42.4	42.4	40.3
80°	28.2	30.3	28.2	26.2	28.2	26.2	26.2	26.2	26.2	26.2	24.2
82.5°	22.2	18.2	20.2	18.2	20.2	20.2	18.2	16.1	16.1	18.2	16.1
85°	16.1	12.1	14.1	14.1	12.1	12.1	12.1	12.1	12.1	10.1	10.1
87.5°	10.1	6.1	6.1	6.1	8.0	8.0	8.0	6.1	8.0	8.0	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: P249191

CATALOG NUMBER: LSR8B70D010 EC8B70827 8LBDW0WMH

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	3758.2	3758.2	3758.2	3758.2	3758.2	3758.2	3758.2	3758.2	3758.2	3758.2	3758.2
2.5°	3764.3	3762.3	3766.3	3764.3	3764.3	3762.3	3764.3	3762.3	3766.3	3758.2	3760.3
5°	3764.3	3760.3	3762.3	3764.3	3766.3	3762.3	3762.3	3762.3	3766.3	3762.3	3764.3
7.5°	3756.2	3754.2	3760.3	3764.3	3762.3	3760.3	3764.3	3762.3	3766.3	3764.3	3768.3
10°	3740.1	3742.1	3746.1	3752.2	3754.2	3756.2	3760.3	3760.3	3766.3	3758.2	3762.3
12.5°	3715.9	3723.9	3734.0	3738.0	3746.1	3746.1	3750.2	3752.2	3756.2	3754.2	3760.3
15°	3685.6	3695.7	3707.8	3717.9	3728.0	3734.0	3740.1	3742.1	3748.2	3742.1	3744.1
17.5°	3649.3	3661.4	3679.6	3691.6	3707.8	3713.9	3721.9	3726.0	3732.0	3728.0	3730.0
20°	3598.9	3613.0	3633.2	3651.3	3661.4	3675.5	3685.6	3691.6	3695.7	3691.6	3693.7
22.5°	3528.3	3548.5	3574.7	3588.8	3609.0	3621.1	3623.1	3637.2	3647.3	3637.2	3641.3
25°	3445.5	3465.7	3485.9	3516.2	3534.3	3548.5	3562.6	3564.6	3574.7	3572.6	3570.6
27.5°	3308.4	3334.6	3368.9	3393.1	3417.3	3439.5	3455.7	3459.7	3469.8	3465.7	3467.7
30°	3120.7	3149.0	3181.3	3219.6	3253.9	3276.1	3296.3	3310.4	3320.5	3314.4	3312.4
32.5°	2854.5	2882.7	2917.0	2955.3	2995.7	3028.0	3052.2	3070.4	3082.4	3078.4	3068.3
35°	2549.9	2557.9	2580.2	2610.4	2644.7	2679.0	2701.2	2721.3	2735.4	2739.5	2739.5
37.5°	2237.2	2211.0	2194.8	2194.8	2215.0	2229.1	2249.3	2261.4	2283.6	2291.6	2297.7
40°	1934.6	1874.1	1817.6	1775.2	1747.0	1745.0	1745.0	1751.0	1771.2	1797.4	1821.6
42.5°	1664.3	1567.4	1480.7	1402.0	1345.6	1313.3	1299.2	1301.2	1317.3	1341.5	1381.8
45°	1448.4	1327.4	1218.5	1123.6	1047.0	996.5	972.3	970.3	982.4	1010.7	1055.1
47.5°	1281.0	1151.9	1028.8	919.9	837.2	782.7	754.5	746.4	754.5	780.7	833.2
50°	1141.8	1008.7	881.6	768.6	679.8	623.4	597.1	587.0	597.1	619.3	671.7
52.5°	1012.7	875.5	756.5	647.6	552.7	504.3	476.1	470.0	476.1	502.3	544.7
55°	863.4	746.4	629.4	520.5	437.8	389.4	367.1	361.1	367.1	391.4	435.8
57.5°	716.2	615.3	512.4	413.5	343.0	300.6	280.4	272.3	286.4	302.6	355.0
60°	578.9	498.3	411.5	324.8	266.3	227.9	211.8	209.8	213.8	234.0	270.3
62.5°	453.9	387.3	318.7	248.1	199.7	183.6	163.4	161.4	165.4	177.5	205.8
65°	326.8	284.5	232.0	181.5	143.2	121.0	113.0	115.0	119.0	127.1	153.3
67.5°	227.9	197.7	161.4	127.1	98.9	88.8	80.7	78.7	80.7	94.8	108.9
70°	153.3	135.1	108.9	96.8	68.6	54.4	56.5	50.4	58.5	58.5	70.6
72.5°	100.8	88.8	72.6	56.5	48.4	38.4	38.4	36.3	40.3	42.4	52.5
75°	52.5	40.3	40.3	28.2	20.2	10.1	18.2	16.1	14.1	16.1	20.2
77.5°	36.3	30.3	28.2	22.2	20.2	16.1	16.1	16.1	16.1	18.2	20.2
80°	22.2	22.2	16.1	14.1	12.1	10.1	12.1	12.1	12.1	12.1	14.1
82.5°	14.1	12.1	12.1	10.1	10.1	8.0	8.0	8.0	8.0	8.0	12.1
85°	12.1	8.0	8.0	6.1	8.0	14.1	6.1	8.0	8.0	8.0	6.1
87.5°	4.0	6.1	6.1	6.1	4.0	2.0	4.0	6.1	6.1	10.1	8.0
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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CATALOG NUMBER: LSR8B70D010 EC8B70827 8LBDW0WMH

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	3758.2	3758.2	3758.2	3758.2	3758.2	3758.2	3758.2	3758.2	3758.2	3758.2	3758.2
2.5°	3764.3	3766.3	3766.3	3764.3	3764.3	3760.3	3768.3	3762.3	3764.3	3772.4	3766.3
5°	3768.3	3770.3	3770.3	3768.3	3768.3	3768.3	3770.3	3770.3	3768.3	3766.3	3770.3
7.5°	3776.4	3774.4	3774.4	3770.3	3770.3	3766.3	3770.3	3764.3	3768.3	3764.3	3770.3
10°	3766.3	3768.3	3766.3	3764.3	3764.3	3762.3	3762.3	3756.2	3758.2	3752.2	3756.2
12.5°	3760.3	3758.2	3758.2	3754.2	3750.2	3746.1	3744.1	3738.0	3738.0	3723.9	3730.0
15°	3744.1	3746.1	3740.1	3732.0	3728.0	3717.9	3713.9	3705.8	3697.7	3687.6	3689.7
17.5°	3730.0	3723.9	3715.9	3707.8	3691.6	3683.6	3675.5	3663.4	3659.4	3647.3	3643.3
20°	3687.6	3683.6	3673.5	3659.4	3649.3	3631.1	3623.1	3611.0	3600.9	3588.8	3582.7
22.5°	3633.2	3629.1	3617.0	3602.9	3586.8	3578.7	3570.6	3548.5	3538.3	3526.2	3524.2
25°	3564.6	3558.5	3546.4	3530.3	3522.2	3500.0	3491.9	3475.8	3471.8	3459.7	3457.7
27.5°	3459.7	3451.6	3437.5	3417.3	3403.2	3389.1	3381.0	3368.9	3364.9	3352.7	3350.8
30°	3302.3	3292.2	3264.0	3255.9	3231.7	3217.6	3217.6	3201.5	3203.5	3195.4	3195.4
32.5°	3054.2	3038.1	3015.9	2999.7	2983.6	2975.5	2975.5	2969.5	2973.5	2973.5	2977.6
35°	2725.4	2703.2	2691.1	2681.0	2681.0	2689.0	2713.3	2719.3	2731.4	2741.5	2749.6
37.5°	2303.7	2301.8	2315.9	2328.0	2358.2	2392.5	2434.9	2471.2	2505.5	2529.7	2553.9
40°	1847.8	1898.3	1938.6	1995.1	2041.5	2108.1	2184.7	2247.3	2305.8	2348.2	2392.5
42.5°	1442.4	1506.9	1591.7	1674.3	1757.1	1847.8	1948.7	2035.5	2112.1	2170.6	2217.0
45°	1123.6	1212.4	1315.3	1420.2	1527.1	1640.1	1745.0	1833.7	1914.4	1974.9	2021.3
47.5°	905.8	1002.6	1119.6	1234.6	1355.6	1474.6	1591.7	1668.3	1734.9	1783.3	1825.7
50°	748.4	851.3	974.4	1105.5	1226.5	1345.6	1446.4	1521.0	1575.5	1617.9	1644.1
52.5°	625.3	734.3	865.4	996.5	1117.6	1226.5	1317.3	1373.8	1418.2	1448.4	1472.6
55°	516.4	621.3	744.4	867.5	986.5	1089.3	1164.0	1206.4	1240.6	1258.8	1272.9
57.5°	421.6	518.4	631.4	744.4	847.3	932.0	990.5	1032.9	1049.0	1063.1	1061.1
60°	330.9	421.6	524.5	621.3	710.1	778.7	821.1	845.2	857.3	863.4	859.4
62.5°	260.2	343.0	421.6	506.3	570.9	629.4	669.8	669.8	675.8	677.8	683.9
65°	193.6	256.2	324.8	387.3	439.8	478.1	500.3	506.3	514.4	512.4	508.4
67.5°	143.2	189.6	240.0	286.4	322.8	347.0	363.1	377.3	375.2	371.2	369.2
70°	98.9	129.1	173.5	201.7	227.9	252.2	256.2	258.2	260.2	262.3	258.2
72.5°	68.6	90.8	115.0	139.2	155.3	165.4	175.5	177.5	177.5	177.5	175.5
75°	34.3	46.4	68.6	78.7	92.8	96.8	104.9	104.9	111.0	102.9	100.8
77.5°	30.3	36.3	48.4	56.5	62.5	68.6	70.6	76.7	74.6	70.6	72.6
80°	18.2	22.2	30.3	34.3	42.4	44.4	46.4	48.4	46.4	48.4	48.4
82.5°	14.1	16.1	20.2	20.2	26.2	26.2	28.2	28.2	30.3	30.3	30.3
85°	8.0	14.1	12.1	24.2	16.1	16.1	20.2	24.2	20.2	20.2	24.2
87.5°	8.0	8.0	6.1	8.0	8.0	8.0	10.1	12.1	12.1	14.1	12.1
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: P249191

CATALOG NUMBER: LSR8B70D010 EC8B70827 8LBDW0WMH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3758.2	3758.2	3758.2	3758.2
2.5°	3764.3	3768.3	3762.3	3760.3
5°	3770.3	3770.3	3766.3	3766.3
7.5°	3770.3	3770.3	3764.3	3760.3
10°	3754.2	3754.2	3748.2	3744.1
12.5°	3723.9	3723.9	3721.9	3715.9
15°	3685.6	3685.6	3677.5	3671.5
17.5°	3633.2	3637.2	3627.1	3627.1
20°	3576.7	3574.7	3566.6	3562.6
22.5°	3518.2	3514.1	3512.1	3500.0
25°	3455.7	3451.6	3445.5	3439.5
27.5°	3348.7	3346.7	3340.6	3332.6
30°	3185.3	3183.3	3175.2	3175.2
32.5°	2973.5	2971.5	2963.4	2965.5
35°	2753.6	2761.7	2757.7	2749.6
37.5°	2570.0	2576.1	2580.2	2576.1
40°	2416.7	2434.9	2436.9	2441.0
42.5°	2253.3	2277.5	2285.6	2289.6
45°	2057.6	2079.8	2098.0	2094.0
47.5°	1857.9	1874.1	1890.2	1878.1
50°	1666.3	1676.4	1682.4	1682.4
52.5°	1484.8	1484.8	1482.7	1484.8
55°	1276.9	1276.9	1268.9	1272.9
57.5°	1059.1	1063.1	1057.0	1047.0
60°	857.3	847.3	843.2	837.2
62.5°	667.7	667.7	653.6	671.7
65°	500.3	494.2	488.2	486.1
67.5°	363.1	361.1	355.0	353.0
70°	256.2	248.1	246.1	242.1
72.5°	171.5	171.5	167.4	167.4
75°	104.9	94.8	92.8	94.8
77.5°	72.6	70.6	70.6	68.6
80°	48.4	46.4	50.4	44.4
82.5°	30.3	32.3	30.3	32.3
85°	20.2	24.2	22.2	22.2
87.5°	12.1	12.1	12.1	12.1
90°	0.0	0.0	0.0	0.0

(END OF REPORT)