

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: P249329

Luminaire Tested: **LSR8B100D010 EC8B100840 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249329
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: LSR8B100D010 EC8B100840 8LBDW0GPH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 4000 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10711.0 lumens
Efficiency: N/A
Efficacy: 100.8 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

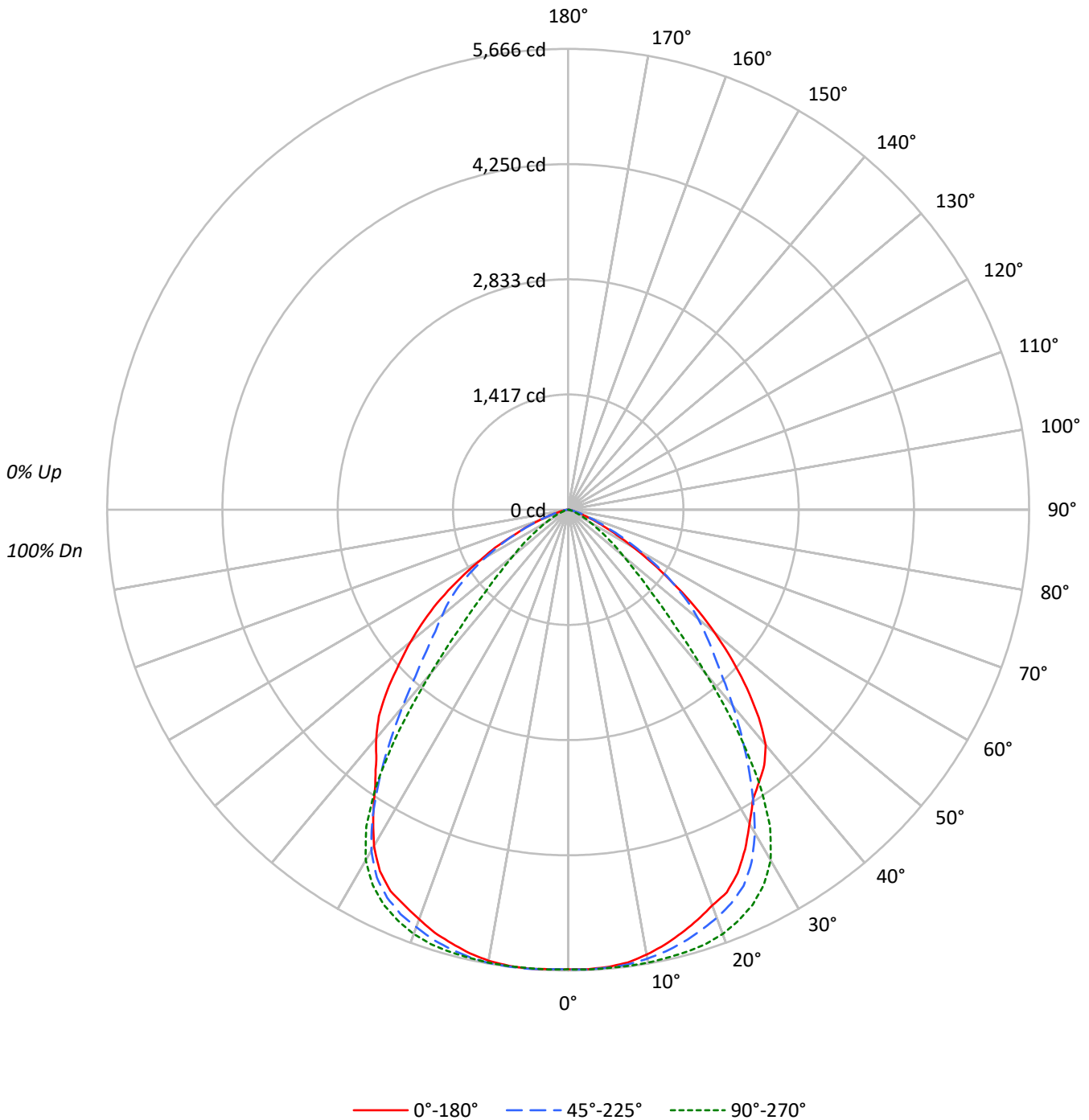
Input Watts (W): 106.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	174265	174265	174265
5°	174649	175120	175309
10°	173916	177051	176290
15°	171988	179640	176250
20°	169924	182164	175795
25°	167718	182376	175976
30°	158671	177247	170011
35°	153931	154044	155644
40°	152027	105989	147752
45°	135463	63630	137312
50°	112635	42346	121366
55°	84475	29192	102905
60°	57245	19458	77640
65°	34534	12616	53337
70°	19150	6843	32818
75°	8674	2895	16990
80°	7547	3232	11845
85°	8598	4281	11817



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	539.3	5.0
10°-20°	1566.3	14.6
20°-30°	2377.4	22.2
30°-40°	2497.0	23.3
40°-50°	1872.0	17.5
50°-60°	1201.1	11.2
60°-70°	513.8	4.8
70°-80°	121.4	1.1
80°-90°	22.6	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°	4483.0	41.9
0°-40°	6980.0	65.2
0°-60°	10053.2	93.9
0°-90°	10711.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10711.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	5651	5651	5651	5651	5651	
5°	5642	5651	5657	5666	5664	536
15°	5387	5500	5627	5591	5521	1520
25°	4929	5102	5360	5263	5172	2252
35°	4089	3862	4092	4044	4135	2566
45°	3106	2539	1459	2466	3149	2379
55°	1571	1571	543	1638	1914	1425
65°	473	558	173	719	731	505
75°	73	85	24	146	143	106
85°	24	15	12	24	33	26
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°	5651.3	5651.3	5651.3	5651.3	5651.3	5651.3	5651.3	5651.3	5651.3	5651.3	5651.3
2.5°	5654.4	5660.5	5657.4	5657.4	5654.4	5657.4	5657.4	5663.5	5663.5	5657.4	5654.4
5°	5642.2	5648.3	5648.3	5642.2	5642.2	5657.4	5648.3	5654.4	5654.4	5651.3	5651.3
7.5°	5615.0	5615.0	5627.1	5618.0	5618.0	5627.1	5624.0	5630.1	5636.2	5639.2	5639.2
10°	5554.3	5560.3	5563.4	5563.4	5566.4	5575.5	5581.6	5593.7	5599.7	5605.8	5608.9
12.5°	5478.5	5487.5	5490.6	5487.5	5496.7	5508.8	5524.0	5539.1	5548.2	5560.3	5569.5
15°	5387.4	5387.4	5393.5	5402.6	5408.7	5426.9	5442.0	5460.2	5484.5	5499.7	5514.8
17.5°	5287.3	5293.4	5302.5	5302.5	5314.7	5344.9	5354.1	5381.4	5408.7	5423.8	5454.2
20°	5178.2	5184.2	5193.3	5199.4	5214.5	5238.8	5257.0	5281.3	5311.6	5338.9	5369.2
22.5°	5093.2	5081.1	5087.1	5093.2	5108.4	5129.6	5150.8	5181.1	5211.5	5238.8	5269.2
25°	4929.4	4932.4	4941.5	4947.5	4965.8	4984.0	5008.3	5044.6	5071.9	5102.3	5135.6
27.5°	4707.9	4711.0	4726.1	4726.1	4741.3	4771.6	4786.8	4817.1	4853.6	4883.9	4923.3
30°	4456.2	4462.2	4462.2	4474.4	4483.4	4498.6	4513.8	4544.1	4562.3	4589.6	4644.3
32.5°	4225.6	4231.7	4228.6	4225.6	4216.5	4213.5	4210.4	4216.5	4222.6	4231.7	4252.9
35°	4089.1	4073.9	4061.8	4040.6	4016.3	3986.0	3958.7	3922.3	3888.9	3861.6	3831.3
37.5°	3958.7	3955.6	3937.4	3907.1	3858.5	3804.0	3740.3	3661.4	3582.5	3497.6	3415.7
40°	3776.7	3767.5	3752.4	3709.9	3655.3	3588.6	3503.7	3406.6	3279.1	3148.7	3015.3
42.5°	3467.2	3470.3	3452.1	3418.7	3367.2	3303.4	3215.5	3109.3	2972.8	2818.1	2645.2
45°	3106.3	3106.3	3100.2	3072.9	3036.5	2984.9	2918.2	2830.2	2696.8	2539.0	2353.9
47.5°	2730.1	2733.1	2724.0	2718.0	2702.8	2669.5	2620.9	2554.2	2460.2	2308.4	2123.4
50°	2347.9	2347.9	2363.1	2360.0	2360.0	2347.9	2326.7	2287.2	2205.3	2084.0	1911.1
52.5°	1965.7	1971.8	1980.9	1993.0	2008.1	2032.4	2008.1	1989.9	1938.4	1844.3	1695.7
55°	1571.3	1577.4	1592.5	1613.8	1632.0	1656.3	1662.3	1662.3	1635.0	1571.3	1459.1
57.5°	1234.6	1225.5	1237.7	1255.9	1280.1	1304.4	1322.6	1343.8	1340.8	1298.3	1207.3
60°	928.2	931.3	940.3	958.6	976.8	998.0	1022.3	1040.5	1049.6	1028.4	970.7
62.5°	676.5	676.5	688.6	706.8	715.9	746.2	761.4	770.5	779.6	776.5	740.2
65°	473.3	479.3	485.4	494.5	503.5	521.7	530.8	549.0	555.1	558.2	530.8
67.5°	333.7	324.6	330.7	336.7	345.8	358.0	376.2	376.2	385.2	385.2	367.0
70°	212.4	212.4	215.4	224.5	230.5	233.6	239.7	245.7	254.8	251.8	251.8
72.5°	142.6	139.5	142.6	145.6	148.7	157.7	157.7	160.8	166.9	169.9	157.7
75°	72.8	75.9	81.9	78.9	88.0	81.9	84.9	94.0	91.0	84.9	84.9
77.5°	60.6	60.6	60.6	57.7	63.7	63.7	60.6	66.7	63.7	63.7	60.6
80°	42.5	45.5	42.5	39.4	42.5	39.4	39.4	39.4	39.4	39.4	36.4
82.5°	33.4	27.3	30.4	27.3	30.4	30.4	27.3	24.3	24.3	27.3	24.3
85°	24.3	18.2	21.2	21.2	18.2	18.2	18.2	18.2	18.2	15.1	15.1
87.5°	15.1	9.1	9.1	9.1	12.1	12.1	12.1	9.1	12.1	12.1	6.1
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°	5651.3	5651.3	5651.3	5651.3	5651.3	5651.3	5651.3	5651.3	5651.3	5651.3	5651.3
2.5°	5660.5	5657.4	5663.5	5660.5	5660.5	5657.4	5660.5	5657.4	5663.5	5651.3	5654.4
5°	5660.5	5654.4	5657.4	5660.5	5663.5	5657.4	5657.4	5657.4	5663.5	5657.4	5660.5
7.5°	5648.3	5645.2	5654.4	5660.5	5657.4	5654.4	5660.5	5657.4	5663.5	5660.5	5666.5
10°	5624.0	5627.1	5633.1	5642.2	5645.2	5648.3	5654.4	5654.4	5663.5	5651.3	5657.4
12.5°	5587.6	5599.7	5615.0	5621.0	5633.1	5633.1	5639.2	5642.2	5648.3	5645.2	5654.4
15°	5542.2	5557.3	5575.5	5590.7	5605.8	5615.0	5624.0	5627.1	5636.2	5627.1	5630.1
17.5°	5487.5	5505.7	5533.0	5551.2	5575.5	5584.6	5596.7	5602.8	5611.9	5605.8	5608.9
20°	5411.7	5433.0	5463.3	5490.6	5505.7	5526.9	5542.2	5551.2	5557.3	5551.2	5554.3
22.5°	5305.5	5335.9	5375.3	5396.5	5426.9	5445.1	5448.1	5469.3	5484.5	5469.3	5475.4
25°	5181.1	5211.5	5241.8	5287.3	5314.7	5335.9	5357.1	5360.2	5375.3	5372.3	5369.2
27.5°	4974.9	5014.3	5065.9	5102.3	5138.7	5172.1	5196.3	5202.4	5217.6	5211.5	5214.5
30°	4692.7	4735.3	4783.8	4841.4	4893.0	4926.3	4956.7	4977.9	4993.0	4984.0	4980.9
32.5°	4292.4	4334.8	4386.4	4444.0	4504.7	4553.2	4589.6	4616.9	4635.1	4629.0	4613.9
35°	3834.3	3846.4	3879.8	3925.3	3976.8	4028.4	4061.8	4092.1	4113.3	4119.4	4119.4
37.5°	3364.1	3324.7	3300.4	3300.4	3330.7	3352.0	3382.3	3400.5	3433.9	3446.0	3455.1
40°	2909.1	2818.1	2733.1	2669.5	2627.0	2624.0	2624.0	2633.0	2663.4	2702.8	2739.2
42.5°	2502.6	2357.0	2226.6	2108.3	2023.3	1974.8	1953.6	1956.6	1980.9	2017.3	2077.9
45°	2178.0	1996.0	1832.2	1689.6	1574.4	1498.5	1462.1	1459.1	1477.3	1519.7	1586.5
47.5°	1926.3	1732.1	1547.0	1383.2	1258.9	1177.0	1134.5	1122.4	1134.5	1173.9	1252.8
50°	1716.9	1516.8	1325.6	1155.7	1022.3	937.4	897.9	882.7	897.9	931.3	1010.1
52.5°	1522.8	1316.5	1137.6	973.7	831.2	758.3	715.9	706.8	715.9	755.3	819.1
55°	1298.3	1122.4	946.4	782.6	658.3	585.5	552.1	543.0	552.1	588.5	655.2
57.5°	1076.9	925.2	770.5	621.8	515.7	452.0	421.7	409.5	430.7	455.0	533.9
60°	870.6	749.3	618.8	488.4	400.4	342.8	318.5	315.5	321.5	351.9	406.5
62.5°	682.6	582.4	479.3	373.1	300.3	276.0	245.7	242.7	248.7	266.9	309.4
65°	491.4	427.8	348.9	273.0	215.4	182.0	169.9	172.9	179.0	191.1	230.5
67.5°	342.8	297.3	242.7	191.1	148.7	133.5	121.4	118.3	121.4	142.6	163.8
70°	230.5	203.2	163.8	145.6	103.2	81.9	84.9	75.9	88.0	88.0	106.1
72.5°	151.6	133.5	109.2	84.9	72.8	57.7	57.7	54.6	60.6	63.7	78.9
75°	78.9	60.6	60.6	42.5	30.4	15.1	27.3	24.3	21.2	24.3	30.4
77.5°	54.6	45.5	42.5	33.4	30.4	24.3	24.3	24.3	24.3	27.3	30.4
80°	33.4	33.4	24.3	21.2	18.2	15.1	18.2	18.2	18.2	18.2	21.2
82.5°	21.2	18.2	18.2	15.1	15.1	12.1	12.1	12.1	12.1	12.1	18.2
85°	18.2	12.1	12.1	9.1	12.1	21.2	9.1	12.1	12.1	12.1	9.1
87.5°	6.1	9.1	9.1	9.1	6.1	3.0	6.1	9.1	9.1	15.1	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



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	5651.3	5651.3	5651.3	5651.3	5651.3	5651.3	5651.3	5651.3	5651.3	5651.3	5651.3
2.5°	5660.5	5663.5	5663.5	5660.5	5660.5	5654.4	5666.5	5657.4	5660.5	5672.6	5663.5
5°	5666.5	5669.5	5669.5	5666.5	5666.5	5666.5	5669.5	5669.5	5666.5	5663.5	5669.5
7.5°	5678.6	5675.6	5675.6	5669.5	5669.5	5663.5	5669.5	5660.5	5666.5	5660.5	5669.5
10°	5663.5	5666.5	5663.5	5660.5	5660.5	5657.4	5657.4	5648.3	5651.3	5642.2	5648.3
12.5°	5654.4	5651.3	5651.3	5645.2	5639.2	5633.1	5630.1	5621.0	5621.0	5599.7	5608.9
15°	5630.1	5633.1	5624.0	5611.9	5605.8	5590.7	5584.6	5572.4	5560.3	5545.2	5548.2
17.5°	5608.9	5599.7	5587.6	5575.5	5551.2	5539.1	5526.9	5508.8	5502.7	5484.5	5478.5
20°	5545.2	5539.1	5524.0	5502.7	5487.5	5460.2	5448.1	5429.9	5414.7	5396.5	5387.4
22.5°	5463.3	5457.2	5439.0	5417.8	5393.5	5381.4	5369.2	5335.9	5320.7	5302.5	5299.4
25°	5360.2	5351.0	5332.8	5308.6	5296.4	5263.1	5250.9	5226.6	5220.6	5202.4	5199.4
27.5°	5202.4	5190.3	5169.0	5138.7	5117.4	5096.2	5084.1	5065.9	5059.8	5041.6	5038.6
30°	4965.8	4950.6	4908.1	4896.0	4859.6	4838.4	4838.4	4814.1	4817.1	4805.0	4805.0
32.5°	4592.7	4568.4	4535.0	4510.7	4486.5	4474.4	4474.4	4465.2	4471.3	4471.3	4477.4
35°	4098.2	4064.9	4046.6	4031.5	4031.5	4043.6	4080.0	4089.1	4107.3	4122.5	4134.6
37.5°	3464.2	3461.2	3482.4	3500.6	3546.1	3597.7	3661.4	3716.0	3767.5	3804.0	3840.3
40°	2778.6	2854.5	2915.1	3000.1	3069.8	3170.0	3285.2	3379.3	3467.2	3531.0	3597.7
42.5°	2168.9	2266.0	2393.4	2517.8	2642.1	2778.6	2930.4	3060.8	3176.0	3264.0	3333.8
45°	1689.6	1823.1	1977.8	2135.6	2296.3	2466.2	2624.0	2757.4	2878.8	2969.8	3039.5
47.5°	1362.0	1507.6	1683.5	1856.5	2038.5	2217.4	2393.4	2508.7	2608.7	2681.6	2745.3
50°	1125.4	1280.1	1465.2	1662.3	1844.3	2023.3	2175.0	2287.2	2369.2	2432.8	2472.3
52.5°	940.3	1104.2	1301.4	1498.5	1680.5	1844.3	1980.9	2065.8	2132.5	2178.0	2214.4
55°	776.5	934.3	1119.4	1304.4	1483.4	1638.0	1750.3	1814.0	1865.5	1892.9	1914.1
57.5°	634.0	779.6	949.5	1119.4	1274.1	1401.5	1489.5	1553.1	1577.4	1598.6	1595.6
60°	497.5	634.0	788.7	934.3	1067.8	1170.9	1234.6	1271.0	1289.2	1298.3	1292.2
62.5°	391.3	515.7	634.0	761.4	858.5	946.4	1007.1	1007.1	1016.2	1019.2	1028.4
65°	291.2	385.2	488.4	582.4	661.3	718.9	752.3	761.4	773.6	770.5	764.4
67.5°	215.4	285.2	361.0	430.7	485.4	521.7	546.0	567.3	564.2	558.2	555.1
70°	148.7	194.2	260.9	303.4	342.8	379.2	385.2	388.3	391.3	394.4	388.3
72.5°	103.2	136.5	172.9	209.3	233.6	248.7	263.9	266.9	266.9	266.9	263.9
75°	51.6	69.8	103.2	118.3	139.5	145.6	157.7	157.7	166.9	154.7	151.6
77.5°	45.5	54.6	72.8	84.9	94.0	103.2	106.1	115.3	112.2	106.1	109.2
80°	27.3	33.4	45.5	51.6	63.7	66.7	69.8	72.8	69.8	72.8	72.8
82.5°	21.2	24.3	30.4	30.4	39.4	39.4	42.5	42.5	45.5	45.5	45.5
85°	12.1	21.2	18.2	36.4	24.3	24.3	30.4	36.4	30.4	30.4	36.4
87.5°	12.1	12.1	9.1	12.1	12.1	12.1	15.1	18.2	18.2	21.2	18.2
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: P249329

CATALOG NUMBER: LSR8B100D010 EC8B100840 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	5651.3	5651.3	5651.3	5651.3
2.5°	5660.5	5666.5	5657.4	5654.4
5°	5669.5	5669.5	5663.5	5663.5
7.5°	5669.5	5669.5	5660.5	5654.4
10°	5645.2	5645.2	5636.2	5630.1
12.5°	5599.7	5599.7	5596.7	5587.6
15°	5542.2	5542.2	5530.0	5520.9
17.5°	5463.3	5469.3	5454.2	5454.2
20°	5378.3	5375.3	5363.2	5357.1
22.5°	5290.4	5284.3	5281.3	5263.1
25°	5196.3	5190.3	5181.1	5172.1
27.5°	5035.6	5032.5	5023.4	5011.3
30°	4789.8	4786.8	4774.7	4774.7
32.5°	4471.3	4468.3	4456.2	4459.2
35°	4140.7	4152.8	4146.7	4134.6
37.5°	3864.6	3873.7	3879.8	3873.7
40°	3634.1	3661.4	3664.4	3670.5
42.5°	3388.4	3424.8	3436.9	3443.0
45°	3094.1	3127.5	3154.8	3148.7
47.5°	2793.8	2818.1	2842.3	2824.1
50°	2505.7	2520.8	2529.9	2529.9
52.5°	2232.7	2232.7	2229.6	2232.7
55°	1920.2	1920.2	1908.1	1914.1
57.5°	1592.5	1598.6	1589.5	1574.4
60°	1289.2	1274.1	1268.0	1258.9
62.5°	1004.1	1004.1	982.9	1010.1
65°	752.3	743.2	734.1	731.0
67.5°	546.0	543.0	533.9	530.8
70°	385.2	373.1	370.1	364.0
72.5°	257.9	257.9	251.8	251.8
75°	157.7	142.6	139.5	142.6
77.5°	109.2	106.1	106.1	103.2
80°	72.8	69.8	75.9	66.7
82.5°	45.5	48.5	45.5	48.5
85°	30.4	36.4	33.4	33.4
87.5°	18.2	18.2	18.2	18.2
90°	0.0	0.0	0.0	0.0

(END OF REPORT)