

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: P249438

Luminaire Tested: **LSR8B120D010 EC8B120840 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249438
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: LSR8B120D010 EC8B120840 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 4000 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10992.0 lumens
Efficiency: N/A
Efficacy: 92.9 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

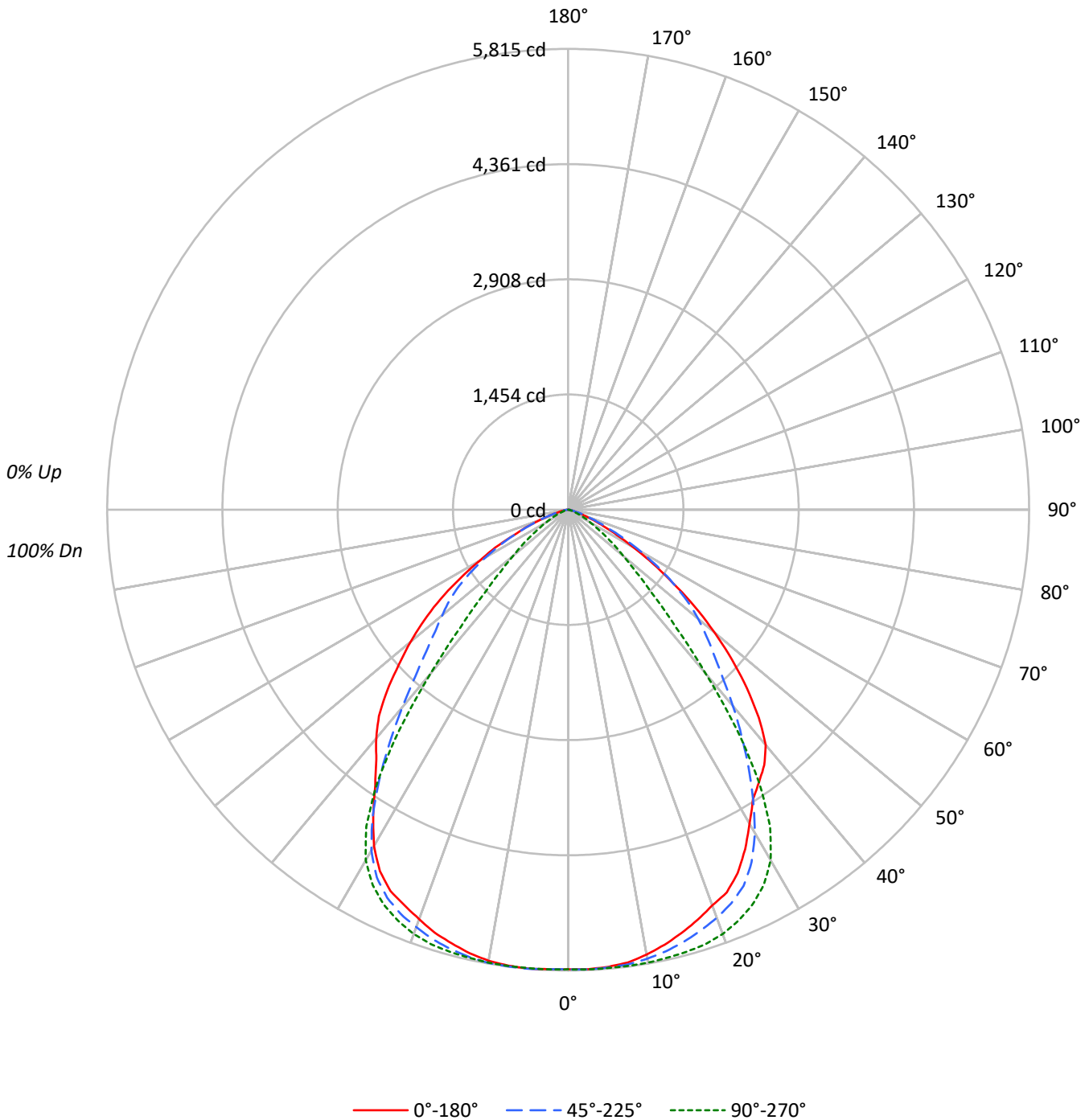
Input Watts (W): 118.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	178838	178838	178838
5°	179230	179713	179908
10°	178478	181694	180915
15°	176499	184352	180876
20°	174381	186942	180409
25°	172118	187160	180593
30°	162833	181897	174469
35°	157970	158087	159728
40°	156012	108770	151629
45°	139017	65300	140914
50°	115590	43459	124552
55°	86690	29961	105604
60°	58749	19963	79675
65°	35439	12951	54738
70°	19646	7014	33675
75°	8900	2967	17431
80°	7742	3321	12164
85°	8810	4387	12136



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	553.5	5.0
10°-20°	1607.4	14.6
20°-30°	2439.7	22.2
30°-40°	2562.5	23.3
40°-50°	1921.2	17.5
50°-60°	1232.7	11.2
60°-70°	527.3	4.8
70°-80°	124.6	1.1
80°-90°	23.2	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°	4600.6	41.9
0°-40°	7163.1	65.2
0°-60°	10316.9	93.9
0°-90°	10992.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10992.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	5800	5800	5800	5800	5800	
5°	5790	5800	5806	5815	5812	550
15°	5529	5644	5775	5737	5666	1559
25°	5059	5236	5501	5401	5308	2311
35°	4196	3963	4200	4150	4243	2634
45°	3188	2606	1497	2531	3231	2441
55°	1612	1612	557	1681	1964	1463
65°	486	573	178	738	750	518
75°	75	87	25	149	146	109
85°	25	16	12	25	34	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°	5799.6	5799.6	5799.6	5799.6	5799.6	5799.6	5799.6	5799.6	5799.6	5799.6	5799.6
2.5°	5802.7	5809.0	5805.8	5805.8	5802.7	5805.8	5805.8	5812.1	5812.1	5805.8	5802.7
5°	5790.2	5796.5	5796.5	5790.2	5790.2	5805.8	5796.5	5802.7	5802.7	5799.6	5799.6
7.5°	5762.3	5762.3	5774.7	5765.4	5765.4	5774.7	5771.6	5777.8	5784.1	5787.2	5787.2
10°	5700.0	5706.2	5709.3	5709.3	5712.5	5721.7	5728.0	5740.5	5746.7	5752.9	5756.0
12.5°	5622.2	5631.5	5634.6	5631.5	5640.9	5653.3	5668.9	5684.4	5693.8	5706.2	5715.6
15°	5528.7	5528.7	5535.0	5544.3	5550.6	5569.3	5584.8	5603.5	5628.4	5644.0	5659.5
17.5°	5426.1	5432.3	5441.6	5441.6	5454.1	5485.2	5494.5	5522.6	5550.6	5566.1	5597.3
20°	5314.0	5320.2	5329.5	5335.8	5351.3	5376.2	5394.9	5419.8	5451.0	5479.0	5510.1
22.5°	5226.8	5214.4	5220.5	5226.8	5242.4	5264.2	5286.0	5317.1	5348.2	5376.2	5407.4
25°	5058.7	5061.8	5071.2	5077.3	5096.1	5114.7	5139.6	5177.0	5205.0	5236.2	5270.4
27.5°	4831.5	4834.6	4850.1	4850.1	4865.7	4896.8	4912.4	4943.5	4980.9	5012.0	5052.5
30°	4573.1	4579.3	4579.3	4591.7	4601.0	4616.7	4632.2	4663.3	4682.0	4710.0	4766.1
32.5°	4336.5	4342.7	4339.5	4336.5	4327.1	4324.0	4320.9	4327.1	4333.4	4342.7	4364.5
35°	4196.4	4180.8	4168.4	4146.6	4121.7	4090.5	4062.5	4025.2	3990.9	3962.9	3931.8
37.5°	4062.5	4059.4	4040.7	4009.6	3959.8	3903.8	3838.4	3757.4	3676.5	3589.3	3505.3
40°	3875.7	3866.4	3850.8	3807.3	3751.2	3682.7	3595.6	3496.0	3365.2	3231.3	3094.4
42.5°	3558.2	3561.3	3542.6	3508.4	3455.5	3390.1	3299.8	3190.9	3050.8	2892.0	2714.6
45°	3187.8	3187.8	3181.5	3153.5	3116.2	3063.2	2994.7	2904.5	2767.5	2605.6	2415.7
47.5°	2801.7	2804.9	2795.5	2789.3	2773.7	2739.5	2689.7	2621.2	2524.7	2369.0	2179.1
50°	2409.5	2409.5	2425.1	2421.9	2421.9	2409.5	2387.7	2347.2	2263.2	2138.7	1961.3
52.5°	2017.2	2023.5	2032.9	2045.3	2060.8	2085.7	2060.8	2042.1	1989.2	1892.7	1740.2
55°	1612.5	1618.8	1634.3	1656.1	1674.8	1699.8	1705.9	1705.9	1677.9	1612.5	1497.4
57.5°	1267.0	1257.7	1270.2	1288.8	1313.7	1338.6	1357.3	1379.1	1376.0	1332.4	1239.0
60°	952.6	955.7	965.0	983.7	1002.4	1024.2	1049.1	1067.8	1077.1	1055.3	996.2
62.5°	694.2	694.2	706.6	725.3	734.7	765.8	781.4	790.7	800.0	796.9	759.6
65°	485.7	491.8	498.1	507.5	516.7	535.4	544.8	563.4	569.7	572.8	544.8
67.5°	342.5	333.1	339.3	345.5	354.9	367.4	386.0	386.0	395.3	395.3	376.7
70°	217.9	217.9	221.0	230.3	236.6	239.7	246.0	252.1	261.5	258.4	258.4
72.5°	146.3	143.2	146.3	149.4	152.6	161.9	161.9	165.0	171.2	174.4	161.9
75°	74.7	77.8	84.0	81.0	90.3	84.0	87.1	96.5	93.4	87.1	87.1
77.5°	62.2	62.2	62.2	59.2	65.4	65.4	62.2	68.5	65.4	65.4	62.2
80°	43.6	46.7	43.6	40.4	43.6	40.4	40.4	40.4	40.4	40.4	37.3
82.5°	34.3	28.0	31.2	28.0	31.2	31.2	28.0	24.9	24.9	28.0	24.9
85°	24.9	18.7	21.8	21.8	18.7	18.7	18.7	18.7	18.7	15.5	15.5
87.5°	15.5	9.4	9.4	9.4	12.4	12.4	12.4	9.4	12.4	12.4	6.2
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°	5799.6	5799.6	5799.6	5799.6	5799.6	5799.6	5799.6	5799.6	5799.6	5799.6	5799.6
2.5°	5809.0	5805.8	5812.1	5809.0	5809.0	5805.8	5809.0	5805.8	5812.1	5799.6	5802.7
5°	5809.0	5802.7	5805.8	5809.0	5812.1	5805.8	5805.8	5805.8	5812.1	5805.8	5809.0
7.5°	5796.5	5793.4	5802.7	5809.0	5805.8	5802.7	5809.0	5805.8	5812.1	5809.0	5815.1
10°	5771.6	5774.7	5780.9	5790.2	5793.4	5796.5	5802.7	5802.7	5812.1	5799.6	5805.8
12.5°	5734.2	5746.7	5762.3	5768.4	5780.9	5780.9	5787.2	5790.2	5796.5	5793.4	5802.7
15°	5687.5	5703.1	5721.7	5737.4	5752.9	5762.3	5771.6	5774.7	5784.1	5774.7	5777.8
17.5°	5631.5	5650.1	5678.2	5696.8	5721.7	5731.1	5743.5	5749.8	5759.1	5752.9	5756.0
20°	5553.6	5575.5	5606.6	5634.6	5650.1	5671.9	5687.5	5696.8	5703.1	5696.8	5700.0
22.5°	5444.7	5475.9	5516.3	5538.1	5569.3	5587.9	5591.0	5612.8	5628.4	5612.8	5619.1
25°	5317.1	5348.2	5379.4	5426.1	5454.1	5475.9	5497.7	5500.8	5516.3	5513.2	5510.1
27.5°	5105.4	5145.9	5198.8	5236.2	5273.5	5307.8	5332.7	5338.8	5354.5	5348.2	5351.3
30°	4815.8	4859.5	4909.3	4968.4	5021.4	5055.6	5086.7	5108.5	5124.0	5114.7	5111.6
32.5°	4405.0	4448.5	4501.5	4560.6	4622.9	4672.6	4710.0	4738.1	4756.7	4750.5	4735.0
35°	3934.9	3947.3	3981.6	4028.3	4081.2	4134.1	4168.4	4199.5	4221.3	4227.5	4227.5
37.5°	3452.4	3411.9	3387.0	3387.0	3418.1	3439.9	3471.0	3489.7	3524.0	3536.4	3545.8
40°	2985.4	2892.0	2804.9	2739.5	2695.9	2692.8	2692.8	2702.1	2733.2	2773.7	2811.1
42.5°	2568.3	2418.8	2285.0	2163.6	2076.4	2026.6	2004.8	2007.9	2032.9	2070.2	2132.4
45°	2235.2	2048.4	1880.3	1734.0	1615.7	1537.8	1500.5	1497.4	1516.0	1559.6	1628.2
47.5°	1976.8	1777.5	1587.6	1419.5	1291.9	1207.8	1164.3	1151.9	1164.3	1204.7	1285.7
50°	1762.0	1556.6	1360.4	1186.1	1049.1	962.0	921.4	905.9	921.4	955.7	1036.6
52.5°	1562.7	1351.0	1167.4	999.3	853.0	778.2	734.7	725.3	734.7	775.1	840.5
55°	1332.4	1151.9	971.3	803.1	675.6	600.8	566.6	557.3	566.6	604.0	672.4
57.5°	1105.2	949.5	790.7	638.2	529.2	463.8	432.7	420.2	442.0	466.9	547.9
60°	893.4	768.9	635.0	501.2	410.9	351.8	326.9	323.7	330.0	361.1	417.1
62.5°	700.5	597.7	491.8	382.9	308.2	283.3	252.1	249.1	255.3	273.9	317.6
65°	504.3	439.0	358.0	280.2	221.0	186.8	174.4	177.5	183.6	196.1	236.6
67.5°	351.8	305.1	249.1	196.1	152.6	137.0	124.5	121.4	124.5	146.3	168.1
70°	236.6	208.6	168.1	149.4	105.9	84.0	87.1	77.8	90.3	90.3	108.9
72.5°	155.6	137.0	112.0	87.1	74.7	59.2	59.2	56.1	62.2	65.4	81.0
75°	81.0	62.2	62.2	43.6	31.2	15.5	28.0	24.9	21.8	24.9	31.2
77.5°	56.1	46.7	43.6	34.3	31.2	24.9	24.9	24.9	24.9	28.0	31.2
80°	34.3	34.3	24.9	21.8	18.7	15.5	18.7	18.7	18.7	18.7	21.8
82.5°	21.8	18.7	18.7	15.5	15.5	12.4	12.4	12.4	12.4	12.4	18.7
85°	18.7	12.4	12.4	9.4	12.4	21.8	9.4	12.4	12.4	12.4	9.4
87.5°	6.2	9.4	9.4	9.4	6.2	3.1	6.2	9.4	9.4	15.5	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



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	5799.6	5799.6	5799.6	5799.6	5799.6	5799.6	5799.6	5799.6	5799.6	5799.6	5799.6
2.5°	5809.0	5812.1	5812.1	5809.0	5809.0	5802.7	5815.1	5805.8	5809.0	5821.4	5812.1
5°	5815.1	5818.3	5818.3	5815.1	5815.1	5815.1	5818.3	5818.3	5815.1	5812.1	5818.3
7.5°	5827.6	5824.5	5824.5	5818.3	5818.3	5812.1	5818.3	5809.0	5815.1	5809.0	5818.3
10°	5812.1	5815.1	5812.1	5809.0	5809.0	5805.8	5805.8	5796.5	5799.6	5790.2	5796.5
12.5°	5802.7	5799.6	5799.6	5793.4	5787.2	5780.9	5777.8	5768.4	5768.4	5746.7	5756.0
15°	5777.8	5780.9	5771.6	5759.1	5752.9	5737.4	5731.1	5718.6	5706.2	5690.7	5693.8
17.5°	5756.0	5746.7	5734.2	5721.7	5696.8	5684.4	5671.9	5653.3	5647.0	5628.4	5622.2
20°	5690.7	5684.4	5668.9	5647.0	5631.5	5603.5	5591.0	5572.4	5556.8	5538.1	5528.7
22.5°	5606.6	5600.3	5581.7	5559.9	5535.0	5522.6	5510.1	5475.9	5460.3	5441.6	5438.5
25°	5500.8	5491.4	5472.7	5447.8	5435.3	5401.1	5388.7	5363.7	5357.6	5338.8	5335.8
27.5°	5338.8	5326.4	5304.6	5273.5	5251.7	5229.9	5217.5	5198.8	5192.6	5173.9	5170.8
30°	5096.1	5080.5	5036.9	5024.5	4987.1	4965.3	4965.3	4940.4	4943.5	4931.1	4931.1
32.5°	4713.2	4688.3	4654.0	4629.1	4604.2	4591.7	4591.7	4582.4	4588.6	4588.6	4594.9
35°	4205.7	4171.5	4152.8	4137.2	4137.2	4149.7	4187.1	4196.4	4215.1	4230.6	4243.1
37.5°	3555.1	3552.0	3573.8	3592.5	3639.2	3692.1	3757.4	3813.5	3866.4	3903.8	3941.1
40°	2851.5	2929.4	2991.6	3078.8	3150.4	3253.1	3371.4	3467.9	3558.2	3623.6	3692.1
42.5°	2225.8	2325.4	2456.2	2583.8	2711.5	2851.5	3007.2	3141.1	3259.4	3349.6	3421.2
45°	1734.0	1870.9	2029.7	2191.6	2356.6	2530.9	2692.8	2829.8	2954.3	3047.7	3119.3
47.5°	1397.7	1547.2	1727.7	1905.2	2092.0	2275.6	2456.2	2574.5	2677.2	2751.9	2817.3
50°	1154.9	1313.7	1503.6	1705.9	1892.7	2076.4	2232.0	2347.2	2431.3	2496.7	2537.1
52.5°	965.0	1133.1	1335.5	1537.8	1724.6	1892.7	2032.9	2120.0	2188.5	2235.2	2272.5
55°	796.9	958.8	1148.7	1338.6	1522.3	1681.0	1796.2	1861.6	1914.5	1942.5	1964.3
57.5°	650.7	800.0	974.4	1148.7	1307.5	1438.3	1528.5	1593.9	1618.8	1640.6	1637.5
60°	510.6	650.7	809.4	958.8	1095.8	1201.6	1267.0	1304.4	1323.0	1332.4	1326.1
62.5°	401.6	529.2	650.7	781.4	881.0	971.3	1033.6	1033.6	1042.9	1046.0	1055.3
65°	298.8	395.3	501.2	597.7	678.6	737.8	772.1	781.4	793.9	790.7	784.5
67.5°	221.0	292.6	370.4	442.0	498.1	535.4	560.3	582.2	579.1	572.8	569.7
70°	152.6	199.3	267.7	311.3	351.8	389.2	395.3	398.5	401.6	404.7	398.5
72.5°	105.9	140.1	177.5	214.8	239.7	255.3	270.9	273.9	273.9	273.9	270.9
75°	52.9	71.6	105.9	121.4	143.2	149.4	161.9	161.9	171.2	158.7	155.6
77.5°	46.7	56.1	74.7	87.1	96.5	105.9	108.9	118.3	115.2	108.9	112.0
80°	28.0	34.3	46.7	52.9	65.4	68.5	71.6	74.7	71.6	74.7	74.7
82.5°	21.8	24.9	31.2	31.2	40.4	40.4	43.6	43.6	46.7	46.7	46.7
85°	12.4	21.8	18.7	37.3	24.9	24.9	31.2	37.3	31.2	31.2	37.3
87.5°	12.4	12.4	9.4	12.4	12.4	12.4	15.5	18.7	18.7	21.8	18.7
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: P249438

CATALOG NUMBER: LSR8B120D010 EC8B120840 8LBDW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	5799.6	5799.6	5799.6	5799.6
2.5°	5809.0	5815.1	5805.8	5802.7
5°	5818.3	5818.3	5812.1	5812.1
7.5°	5818.3	5818.3	5809.0	5802.7
10°	5793.4	5793.4	5784.1	5777.8
12.5°	5746.7	5746.7	5743.5	5734.2
15°	5687.5	5687.5	5675.1	5665.8
17.5°	5606.6	5612.8	5597.3	5597.3
20°	5519.4	5516.3	5503.9	5497.7
22.5°	5429.2	5422.9	5419.8	5401.1
25°	5332.7	5326.4	5317.1	5307.8
27.5°	5167.7	5164.6	5155.2	5142.8
30°	4915.5	4912.4	4899.9	4899.9
32.5°	4588.6	4585.5	4573.1	4576.2
35°	4249.3	4261.8	4255.5	4243.1
37.5°	3966.0	3975.4	3981.6	3975.4
40°	3729.4	3757.4	3760.6	3766.8
42.5°	3477.3	3514.6	3527.1	3533.3
45°	3175.3	3209.5	3237.6	3231.3
47.5°	2867.1	2892.0	2916.9	2898.2
50°	2571.4	2586.9	2596.3	2596.3
52.5°	2291.2	2291.2	2288.1	2291.2
55°	1970.5	1970.5	1958.1	1964.3
57.5°	1634.3	1640.6	1631.2	1615.7
60°	1323.0	1307.5	1301.2	1291.9
62.5°	1030.4	1030.4	1008.7	1036.6
65°	772.1	762.7	753.3	750.2
67.5°	560.3	557.3	547.9	544.8
70°	395.3	382.9	379.8	373.5
72.5°	264.6	264.6	258.4	258.4
75°	161.9	146.3	143.2	146.3
77.5°	112.0	108.9	108.9	105.9
80°	74.7	71.6	77.8	68.5
82.5°	46.7	49.8	46.7	49.8
85°	31.2	37.3	34.3	34.3
87.5°	18.7	18.7	18.7	18.7
90°	0.0	0.0	0.0	0.0

(END OF REPORT)