

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: P248502

Luminaire Tested: **LSR8B120D010 EC8B120935 8LBDW0WH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P248502  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13956)  
Test Lab: INNOVATION CENTER-P1  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LSR8B120D010 EC8B120935 8LBDW0WH  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
90 CRI 3500 CCT WITH WHEAT TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10746.0 lumens  
Efficiency: N/A  
Efficacy: 90.8 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.33 / 1.2  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

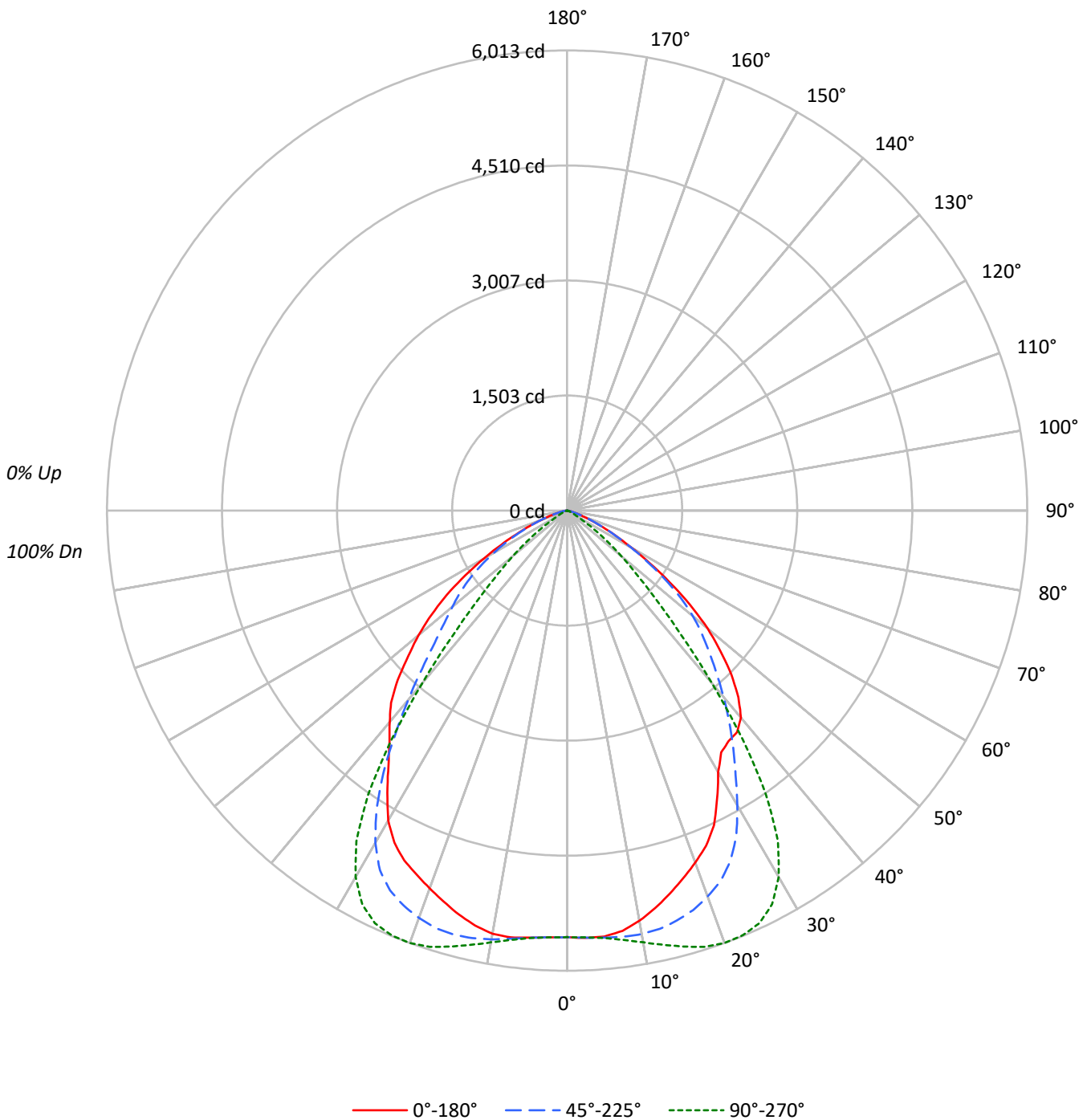
Input Watts (W): 118.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	92	90					90			
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79					79			
3	97	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70					70			
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62					62			
5	84	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56					56			
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50					50			
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45					45			
8	68	56	49	44	67	56	48	43	54	48	43	53	47	43	52	47	43	41					41			
9	64	52	45	40	63	51	44	40	50	44	39	49	44	39	48	43	39	38					38			
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34					34			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	171900	171900	171900
5°	172925	173566	173383
10°	170384	179374	175851
15°	165402	188263	174472
20°	160601	197305	172353
25°	154435	202358	171553
30°	140547	196813	166465
35°	138455	170536	153159
40°	142217	118274	145192
45°	132393	71484	136523
50°	114837	44145	121649
55°	88126	23064	103244
60°	60038	9306	77923
65°	37351	4750	53761
70°	20277	2939	32818
75°	10580	1406	19396
80°	4724	1580	10513
85°	3149	1061	9411



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	536.1	5.0
10°-20°	1588.2	14.8
20°-30°	2422.9	22.5
30°-40°	2528.3	23.5
40°-50°	1899.1	17.7
50°-60°	1168.5	10.9
60°-70°	475.5	4.4
70°-80°	112.0	1.0
80°-90°	15.4	0.1
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°	4547.1	42.3
0°-40°	7075.4	65.8
0°-60°	10143.0	94.4
0°-90°	10746.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10746.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	5575	5575	5575	5575	5575	
5°	5586	5601	5607	5601	5601	529
15°	5181	5545	5897	5734	5465	1460
25°	4539	5048	5948	5477	5042	2064
35°	3678	3782	4530	4187	4069	2322
45°	3036	2628	1639	2447	3131	2316
55°	1639	1556	429	1556	1920	1473
65°	512	518	65	695	737	534
75°	89	89	12	157	163	107
85°	9	9	3	21	27	12
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°	5574.6	5574.6	5574.6	5574.6	5574.6	5574.6	5574.6	5574.6	5574.6	5574.6	5574.6
2.5°	5589.5	5580.6	5589.5	5589.5	5592.5	5586.5	5589.5	5592.5	5586.5	5586.5	5586.5
5°	5586.5	5580.6	5586.5	5583.6	5589.5	5589.5	5595.4	5595.4	5601.3	5601.3	5610.2
7.5°	5539.2	5527.4	5539.2	5548.1	5553.9	5565.8	5580.6	5592.5	5604.3	5616.1	5630.9
10°	5441.5	5441.5	5450.4	5468.1	5485.9	5506.6	5533.2	5562.8	5592.5	5619.0	5645.7
12.5°	5320.2	5311.3	5329.1	5352.7	5379.4	5412.0	5453.4	5497.8	5545.1	5598.3	5639.8
15°	5181.1	5172.2	5192.9	5216.6	5249.2	5296.6	5346.9	5406.0	5474.1	5545.1	5613.2
17.5°	5039.1	5036.1	5056.8	5089.4	5116.1	5166.3	5231.5	5302.4	5379.4	5474.1	5562.8
20°	4894.1	4891.2	4911.9	4938.5	4974.0	5021.4	5086.4	5169.3	5261.0	5367.6	5471.1
22.5°	4743.2	4746.2	4763.9	4793.5	4823.1	4873.4	4941.4	5024.3	5124.9	5240.3	5355.7
25°	4539.0	4524.3	4547.9	4577.5	4627.8	4669.2	4734.4	4823.1	4926.7	5048.0	5184.1
27.5°	4243.1	4240.2	4260.9	4287.5	4331.9	4382.2	4453.2	4545.0	4654.4	4787.6	4920.7
30°	3947.2	3953.2	3962.1	3988.7	4018.2	4068.6	4139.6	4216.5	4320.1	4447.3	4589.3
32.5°	3746.0	3746.0	3757.9	3775.6	3796.3	3823.0	3873.3	3929.5	4009.4	4098.2	4201.7
35°	3678.0	3666.2	3678.0	3680.9	3683.9	3689.8	3698.7	3716.5	3743.1	3781.6	3820.0
37.5°	3648.4	3639.5	3639.5	3627.7	3612.9	3595.1	3571.5	3544.8	3515.3	3476.8	3447.2
40°	3533.0	3527.1	3521.1	3509.3	3476.8	3441.3	3402.8	3340.6	3272.6	3177.9	3083.3
42.5°	3311.1	3305.2	3302.2	3278.5	3248.9	3207.5	3163.1	3098.0	3012.2	2890.9	2754.8
45°	3035.9	3024.0	3015.2	2994.5	2973.7	2938.2	2896.8	2837.6	2751.8	2627.6	2464.8
47.5°	2716.3	2710.4	2707.4	2698.6	2677.9	2657.1	2630.5	2583.2	2506.2	2387.9	2219.2
50°	2393.8	2382.0	2387.9	2385.0	2376.0	2361.3	2343.5	2311.0	2251.7	2145.2	1991.4
52.5°	2023.9	2023.9	2021.0	2029.8	2032.8	2029.8	2032.8	1997.3	1947.0	1867.1	1736.9
55°	1639.2	1639.2	1648.1	1660.0	1671.8	1674.8	1671.8	1657.0	1621.5	1556.4	1441.0
57.5°	1278.2	1272.4	1290.1	1307.8	1319.7	1331.5	1322.6	1310.8	1290.1	1236.8	1148.1
60°	973.5	973.5	985.3	997.2	1009.0	1020.9	1017.9	1014.9	997.2	961.6	890.7
62.5°	716.0	719.0	719.0	727.9	739.7	751.6	760.4	751.6	742.7	719.0	671.7
65°	511.9	508.9	511.9	520.8	529.7	541.5	547.4	544.5	535.5	517.8	482.3
67.5°	343.3	340.3	352.1	355.1	361.0	372.9	369.9	372.9	369.9	355.1	325.5
70°	224.9	218.9	224.9	221.9	230.8	233.8	239.6	242.6	239.6	230.8	221.9
72.5°	139.1	136.1	139.1	142.0	145.0	147.9	153.9	153.9	150.9	145.0	133.1
75°	88.8	79.9	82.8	77.0	82.8	82.8	88.8	91.7	88.8	88.8	82.8
77.5°	53.3	53.3	53.3	53.3	53.3	53.3	53.3	56.3	59.2	53.3	50.3
80°	26.6	26.6	29.6	29.6	29.6	32.6	29.6	29.6	29.6	32.6	23.7
82.5°	20.7	17.7	17.7	17.7	20.7	17.7	17.7	17.7	17.7	17.7	17.7
85°	8.9	11.8	8.9	5.9	8.9	8.9	11.8	8.9	8.9	8.9	11.8
87.5°	3.0	3.0	0.0	0.0	0.0	3.0	0.0	3.0	3.0	5.9	0.0
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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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	5574.6	5574.6	5574.6	5574.6	5574.6	5574.6	5574.6	5574.6	5574.6	5574.6	5574.6
2.5°	5589.5	5583.6	5583.6	5580.6	5586.5	5580.6	5583.6	5580.6	5580.6	5586.5	5580.6
5°	5610.2	5613.2	5607.2	5604.3	5613.2	5613.2	5613.2	5607.2	5607.2	5610.2	5607.2
7.5°	5639.8	5645.7	5648.6	5651.6	5657.5	5660.5	5660.5	5657.5	5654.6	5663.5	5651.6
10°	5672.3	5681.2	5699.0	5707.9	5722.6	5722.6	5728.6	5728.6	5722.6	5728.6	5725.6
12.5°	5660.5	5713.7	5743.3	5764.0	5784.8	5802.5	5808.4	5811.4	5808.4	5820.3	5808.4
15°	5681.2	5725.6	5772.9	5808.4	5846.9	5867.6	5873.5	5897.2	5903.1	5906.1	5888.4
17.5°	5648.6	5728.6	5778.8	5832.1	5888.4	5926.8	5962.3	5977.1	5980.1	5986.0	5962.3
20°	5574.6	5663.5	5740.4	5817.3	5882.4	5941.6	5971.2	6012.6	6000.8	6024.5	5991.9
22.5°	5474.1	5574.6	5672.3	5772.9	5841.0	5912.0	5974.2	6003.7	6018.5	6018.5	5983.0
25°	5314.3	5432.7	5539.2	5642.7	5746.3	5832.1	5903.1	5947.5	5956.4	5953.4	5912.0
27.5°	5065.7	5192.9	5317.3	5435.6	5562.8	5663.5	5746.3	5799.5	5814.4	5814.4	5770.0
30°	4722.5	4858.6	4979.9	5121.9	5252.2	5364.6	5480.0	5527.4	5553.9	5553.9	5503.7
32.5°	4314.1	4429.6	4542.0	4681.1	4823.1	4950.3	5059.8	5124.9	5157.5	5154.5	5110.1
35°	3870.3	3926.5	4012.4	4115.9	4243.1	4361.5	4468.0	4530.2	4586.4	4583.4	4542.0
37.5°	3426.4	3411.7	3420.6	3459.0	3538.9	3621.8	3704.6	3763.8	3811.1	3831.9	3823.0
40°	2991.5	2914.6	2840.6	2814.0	2819.9	2849.5	2893.9	2938.2	2991.5	3018.2	3030.0
42.5°	2600.9	2470.7	2340.5	2242.9	2186.7	2168.9	2189.6	2204.4	2237.0	2275.4	2313.9
45°	2287.3	2112.7	1941.1	1790.2	1695.5	1639.2	1627.4	1639.2	1657.0	1695.5	1745.8
47.5°	2029.8	1825.7	1633.4	1464.7	1325.6	1251.7	1231.0	1225.0	1242.8	1278.2	1346.3
50°	1802.0	1597.8	1384.8	1189.5	1044.5	961.6	932.1	920.2	940.9	967.6	1029.7
52.5°	1553.4	1352.2	1133.3	943.9	793.0	707.2	674.6	656.9	668.7	704.2	766.4
55°	1284.2	1097.7	899.5	704.2	559.2	479.4	440.9	429.0	440.9	479.4	541.5
57.5°	1014.9	858.1	692.4	508.9	378.7	298.9	260.4	248.6	281.1	295.9	361.0
60°	793.0	665.8	523.7	372.9	260.4	198.2	159.8	150.9	165.7	192.3	245.6
62.5°	594.8	514.8	402.4	266.3	192.3	127.2	106.5	97.7	106.5	127.2	168.7
65°	432.0	369.9	281.1	195.3	130.2	94.7	71.0	65.1	74.0	88.8	124.3
67.5°	295.9	248.6	195.3	136.1	88.8	59.2	50.3	50.3	53.3	65.1	91.7
70°	192.3	162.8	124.3	88.8	59.2	44.4	38.4	32.6	38.4	47.3	62.1
72.5°	121.3	103.5	79.9	62.1	44.4	32.6	26.6	23.7	29.6	35.5	47.3
75°	74.0	56.3	41.4	32.6	23.7	23.7	23.7	11.8	14.8	23.7	29.6
77.5°	44.4	38.4	32.6	26.6	20.7	11.8	11.8	11.8	14.8	17.7	26.6
80°	23.7	20.7	14.8	14.8	11.8	8.9	11.8	8.9	5.9	14.8	17.7
82.5°	14.8	11.8	11.8	11.8	14.8	5.9	8.9	5.9	8.9	11.8	8.9
85°	8.9	8.9	8.9	5.9	14.8	5.9	5.9	3.0	3.0	5.9	5.9
87.5°	0.0	3.0	3.0	0.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0
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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**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	5574.6	5574.6	5574.6	5574.6	5574.6	5574.6	5574.6	5574.6	5574.6	5574.6	5574.6
2.5°	5583.6	5580.6	5583.6	5580.6	5580.6	5580.6	5583.6	5583.6	5580.6	5580.6	5586.5
5°	5607.2	5607.2	5607.2	5604.3	5601.3	5601.3	5607.2	5607.2	5598.3	5607.2	5607.2
7.5°	5657.5	5648.6	5657.5	5645.7	5639.8	5642.7	5645.7	5639.8	5633.9	5636.8	5636.8
10°	5722.6	5713.7	5713.7	5704.9	5696.0	5690.1	5684.2	5669.3	5654.6	5651.6	5639.8
12.5°	5799.5	5784.8	5775.9	5758.1	5743.3	5722.6	5704.9	5681.2	5651.6	5630.9	5610.2
15°	5876.5	5852.8	5832.1	5802.5	5770.0	5734.4	5696.0	5657.5	5610.2	5568.8	5533.2
17.5°	5938.6	5906.1	5867.6	5820.3	5772.9	5719.7	5663.5	5607.2	5539.2	5485.9	5444.5
20°	5959.3	5912.0	5861.7	5799.5	5737.4	5663.5	5592.5	5518.5	5441.5	5385.3	5338.0
22.5°	5932.7	5876.5	5814.4	5749.3	5666.4	5586.5	5503.7	5417.8	5349.8	5272.9	5228.5
25°	5858.7	5790.7	5722.6	5645.7	5565.8	5477.0	5388.3	5299.5	5216.6	5175.2	5119.0
27.5°	5707.9	5633.9	5559.9	5480.0	5388.3	5299.5	5207.8	5121.9	5051.0	4994.7	4962.2
30°	5441.5	5355.7	5269.9	5184.1	5104.2	5012.5	4926.7	4855.6	4784.6	4740.2	4707.7
32.5°	5033.2	4956.3	4870.5	4787.6	4713.7	4636.7	4565.7	4503.5	4453.2	4423.6	4399.9
35°	4482.8	4405.9	4340.8	4281.6	4219.4	4186.9	4142.6	4107.0	4086.3	4074.5	4071.5
37.5°	3790.4	3746.0	3725.3	3713.5	3701.6	3692.8	3698.7	3713.5	3725.3	3746.0	3769.7
40°	3050.7	3089.1	3101.0	3142.4	3180.9	3231.2	3287.4	3352.5	3405.7	3473.8	3521.1
42.5°	2376.0	2447.1	2529.9	2618.7	2713.4	2805.1	2917.5	3021.1	3115.8	3201.6	3275.6
45°	1825.7	1935.1	2059.4	2186.7	2313.9	2447.1	2583.2	2710.4	2822.8	2914.6	2991.5
47.5°	1423.3	1544.6	1704.4	1861.2	2015.1	2171.9	2322.8	2455.9	2550.6	2639.4	2707.4
50°	1127.4	1266.4	1441.0	1621.5	1790.2	1955.8	2115.6	2239.9	2334.6	2405.7	2455.9
52.5°	872.9	1038.6	1216.1	1405.5	1586.0	1766.5	1914.4	2029.8	2106.8	2168.9	2207.4
55°	651.0	813.7	1003.1	1198.4	1381.8	1556.4	1695.5	1796.1	1864.2	1899.7	1920.4
57.5°	470.5	618.4	807.8	1003.1	1168.8	1334.5	1446.9	1538.7	1577.1	1597.8	1606.7
60°	343.3	479.4	648.0	816.7	973.5	1106.6	1204.3	1266.4	1296.0	1307.8	1304.9
62.5°	251.5	369.9	514.8	656.9	784.1	893.6	970.5	1011.9	1026.8	1032.7	1023.8
65°	192.3	284.0	408.3	517.8	615.5	695.3	751.6	778.2	787.1	784.1	778.2
67.5°	142.0	213.1	304.8	387.6	458.7	520.8	550.4	574.1	579.9	571.1	562.2
70°	100.6	156.8	221.9	278.2	331.4	366.9	399.4	402.4	402.4	399.4	393.6
72.5°	71.0	109.5	150.9	189.4	221.9	248.6	260.4	269.3	266.3	263.3	257.5
75°	47.3	68.1	109.5	118.4	147.9	156.8	168.7	168.7	171.6	162.8	162.8
77.5°	29.6	47.3	65.1	77.0	88.8	100.6	106.5	106.5	109.5	106.5	106.5
80°	17.7	29.6	35.5	53.3	53.3	62.1	65.1	68.1	62.1	71.0	62.1
82.5°	11.8	17.7	26.6	26.6	32.6	38.4	38.4	41.4	41.4	38.4	38.4
85°	8.9	11.8	14.8	17.7	17.7	20.7	17.7	17.7	20.7	23.7	20.7
87.5°	3.0	5.9	3.0	5.9	5.9	11.8	8.9	8.9	8.9	11.8	11.8
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: P248502

CATALOG NUMBER: LSR8B120D010 EC8B120935 8LBDW0WH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	5574.6	5574.6	5574.6	5574.6
2.5°	5580.6	5583.6	5580.6	5580.6
5°	5607.2	5604.3	5607.2	5601.3
7.5°	5627.9	5627.9	5625.0	5625.0
10°	5627.9	5616.1	5616.1	5616.1
12.5°	5583.6	5568.8	5559.9	5553.9
15°	5506.6	5480.0	5468.1	5465.2
17.5°	5406.0	5382.3	5367.6	5358.7
20°	5290.6	5266.9	5249.2	5252.2
22.5°	5190.0	5163.4	5151.5	5145.6
25°	5089.4	5056.8	5048.0	5042.1
27.5°	4926.7	4908.9	4900.0	4891.2
30°	4678.1	4669.2	4654.4	4675.1
32.5°	4391.1	4376.3	4364.5	4373.4
35°	4074.5	4065.6	4074.5	4068.6
37.5°	3784.5	3793.4	3805.2	3811.1
40°	3556.7	3589.2	3601.1	3606.9
42.5°	3328.8	3367.3	3391.0	3405.7
45°	3047.7	3086.2	3112.8	3130.6
47.5°	2757.7	2790.3	2816.9	2814.0
50°	2494.4	2512.2	2524.0	2535.8
52.5°	2228.1	2228.1	2231.0	2231.0
55°	1926.3	1920.4	1917.4	1920.4
57.5°	1594.8	1589.0	1586.0	1577.1
60°	1293.1	1275.3	1263.5	1263.5
62.5°	1011.9	991.2	982.4	979.4
65°	760.4	757.5	739.7	736.8
67.5°	550.4	538.5	526.7	529.7
70°	387.6	369.9	369.9	364.0
72.5°	251.5	242.6	239.6	239.6
75°	156.8	156.8	150.9	162.8
77.5°	103.5	103.5	100.6	103.5
80°	62.1	62.1	62.1	59.2
82.5°	38.4	41.4	38.4	38.4
85°	20.7	23.7	17.7	26.6
87.5°	11.8	14.8	11.8	14.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)