

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: P248439

Luminaire Tested: **LSR8B120D010 EC8B120827 8LBDW0WH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P248439  
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 EC8B120827 8LBDW0WH  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
80 CRI 2700 CCT WITH WHEAT TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11821.0 lumens  
Efficiency: N/A  
Efficacy: 99.9 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

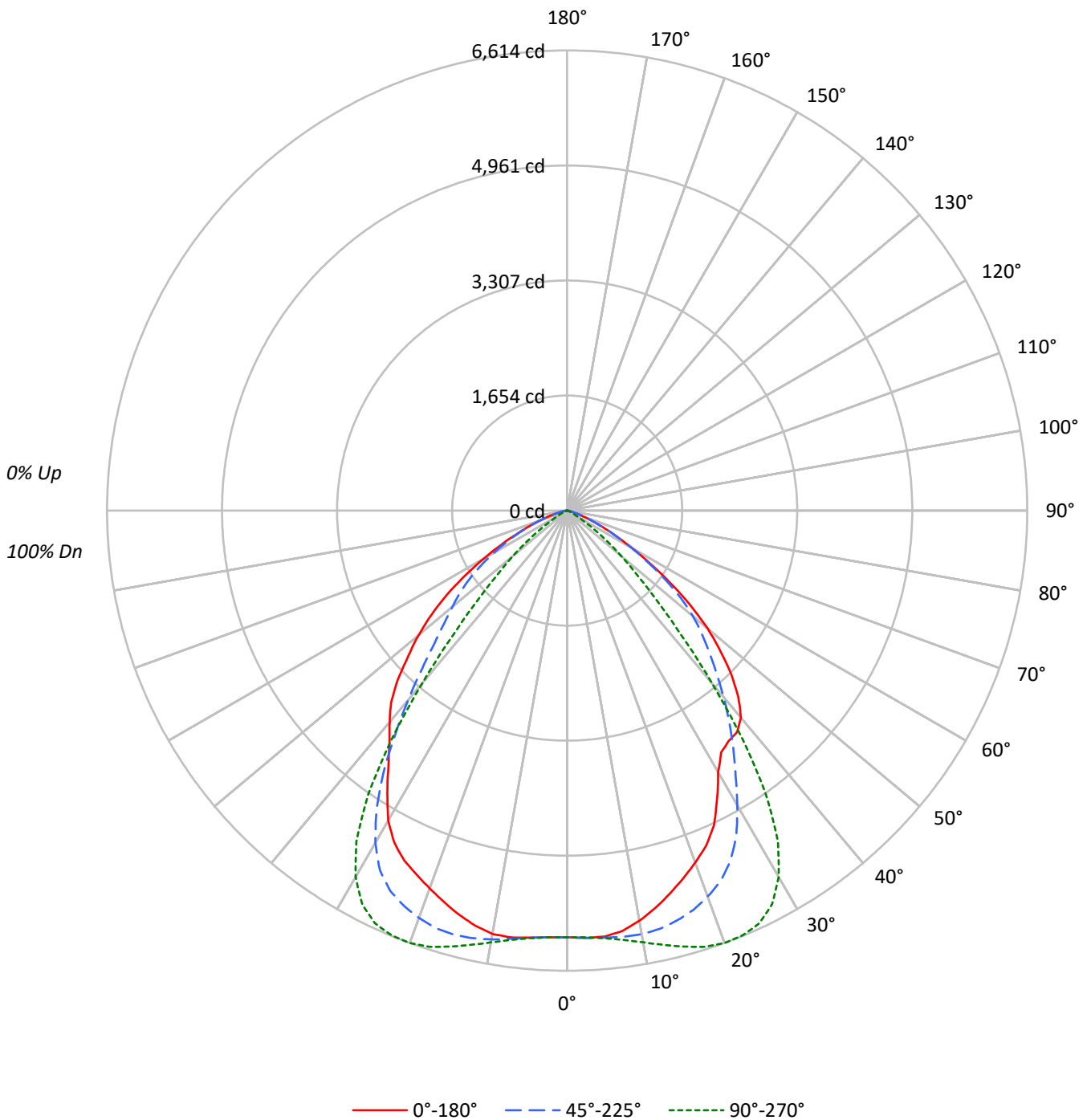
Input Watts (W): 118.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	189098	189098	189098
5°	190225	190931	190727
10°	187431	197316	193446
15°	181951	207095	191925
20°	176668	217044	189594
25°	169886	222603	188715
30°	154608	216499	183118
35°	152305	187596	168480
40°	156443	130109	159720
45°	145637	78636	150181
50°	126327	48563	133820
55°	96943	25375	113571
60°	66045	10238	85719
65°	41087	5224	59138
70°	22305	3228	36100
75°	11628	1549	21326
80°	5203	1740	11560
85°	3467	1168	10367



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	589.7	5.0
10°-20°	1747.0	14.8
20°-30°	2665.3	22.5
30°-40°	2781.2	23.5
40°-50°	2089.1	17.7
50°-60°	1285.4	10.9
60°-70°	523.1	4.4
70°-80°	123.2	1.0
80°-90°	17.0	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°	5002.0	42.3
0°-40°	7783.3	65.8
0°-60°	11157.7	94.4
0°-90°	11821.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11821.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	6132	6132	6132	6132	6132	
5°	6145	6162	6168	6162	6162	581
15°	5700	6100	6487	6308	6012	1606
25°	4993	5553	6542	6025	5546	2270
35°	4046	4160	4983	4606	4476	2555
45°	3340	2890	1803	2692	3444	2548
55°	1803	1712	472	1712	2112	1621
65°	563	570	72	765	810	587
75°	98	98	13	172	179	118
85°	10	10	3	23	29	14
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°	6132.3	6132.3	6132.3	6132.3	6132.3	6132.3	6132.3	6132.3	6132.3	6132.3	6132.3
2.5°	6148.6	6138.8	6148.6	6148.6	6151.9	6145.4	6148.6	6151.9	6145.4	6145.4	6145.4
5°	6145.4	6138.8	6145.4	6142.1	6148.6	6148.6	6155.2	6155.2	6161.6	6161.6	6171.4
7.5°	6093.3	6080.3	6093.3	6103.1	6109.5	6122.6	6138.8	6151.9	6164.9	6178.0	6194.2
10°	5985.9	5985.9	5995.6	6015.2	6034.7	6057.5	6086.8	6119.3	6151.9	6181.1	6210.4
12.5°	5852.4	5842.7	5862.2	5888.2	5917.5	5953.4	5998.9	6047.7	6099.8	6158.4	6204.0
15°	5699.5	5689.7	5712.4	5738.5	5774.3	5826.4	5881.8	5946.8	6021.7	6099.8	6174.7
17.5°	5543.2	5539.9	5562.7	5598.5	5627.9	5683.1	5754.8	5832.9	5917.5	6021.7	6119.3
20°	5383.7	5380.5	5403.3	5432.6	5471.6	5523.7	5595.3	5686.4	5787.3	5904.5	6018.4
22.5°	5217.7	5221.0	5240.5	5273.0	5305.6	5360.9	5435.8	5526.9	5637.6	5764.5	5891.5
25°	4993.1	4976.8	5002.9	5035.5	5090.7	5136.3	5208.0	5305.6	5419.5	5553.0	5702.7
27.5°	4667.6	4664.3	4687.2	4716.4	4765.2	4820.6	4898.7	4999.6	5120.0	5266.5	5413.0
30°	4342.1	4348.6	4358.4	4387.7	4420.2	4475.6	4553.7	4638.4	4752.3	4892.2	5048.4
32.5°	4120.8	4120.8	4133.8	4153.3	4176.1	4205.4	4260.8	4322.6	4410.5	4508.1	4622.0
35°	4045.9	4032.9	4045.9	4049.2	4052.4	4059.0	4068.7	4088.3	4117.5	4159.9	4202.2
37.5°	4013.4	4003.6	4003.6	3990.6	3974.3	3954.8	3928.7	3899.4	3866.9	3824.6	3792.1
40°	3886.4	3879.9	3873.4	3860.4	3824.6	3785.5	3743.2	3674.8	3600.0	3495.8	3391.7
42.5°	3642.3	3635.8	3632.5	3606.5	3573.9	3528.4	3479.5	3407.9	3313.6	3180.1	3030.4
45°	3339.6	3326.6	3316.8	3294.1	3271.2	3232.2	3186.6	3121.5	3027.1	2890.4	2711.4
47.5°	2988.1	2981.5	2978.3	2968.6	2945.8	2922.9	2893.7	2841.6	2756.9	2626.7	2441.2
50°	2633.3	2620.3	2626.7	2623.5	2613.7	2597.5	2577.9	2542.1	2477.0	2359.8	2190.6
52.5°	2226.4	2226.4	2223.2	2232.9	2236.2	2232.9	2236.2	2197.1	2141.8	2053.9	1910.7
55°	1803.2	1803.2	1813.0	1826.1	1839.1	1842.3	1839.1	1822.8	1783.7	1712.1	1585.1
57.5°	1406.1	1399.7	1419.2	1438.7	1451.7	1464.7	1454.9	1441.9	1419.2	1360.6	1262.9
60°	1070.9	1070.9	1083.9	1096.9	1109.9	1123.0	1119.7	1116.4	1096.9	1057.8	979.8
62.5°	787.7	790.9	790.9	800.7	813.7	826.8	836.5	826.8	817.0	790.9	738.9
65°	563.1	559.8	563.1	572.9	582.7	595.7	602.2	598.9	589.1	569.6	530.6
67.5°	377.6	374.3	387.3	390.6	397.1	410.2	406.9	410.2	406.9	390.6	358.1
70°	247.4	240.8	247.4	244.1	253.9	257.2	263.6	266.9	263.6	253.9	244.1
72.5°	153.0	149.7	153.0	156.3	159.5	162.7	169.2	169.2	166.0	159.5	146.5
75°	97.6	87.8	91.1	84.7	91.1	91.1	97.6	100.9	97.6	97.6	91.1
77.5°	58.6	58.6	58.6	58.6	58.6	58.6	58.6	61.9	65.1	58.6	55.4
80°	29.3	29.3	32.6	32.6	32.6	35.8	32.6	32.6	32.6	35.8	26.0
82.5°	22.8	19.5	19.5	19.5	22.8	19.5	19.5	19.5	19.5	19.5	19.5
85°	9.8	13.0	9.8	6.5	9.8	9.8	13.0	9.8	9.8	9.8	13.0
87.5°	3.3	3.3	0.0	0.0	0.0	3.3	0.0	3.3	3.3	6.5	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°	6132.3	6132.3	6132.3	6132.3	6132.3	6132.3	6132.3	6132.3	6132.3	6132.3	6132.3
2.5°	6148.6	6142.1	6142.1	6138.8	6145.4	6138.8	6142.1	6138.8	6138.8	6145.4	6138.8
5°	6171.4	6174.7	6168.2	6164.9	6174.7	6174.7	6174.7	6168.2	6168.2	6171.4	6168.2
7.5°	6204.0	6210.4	6213.7	6217.0	6223.5	6226.8	6226.8	6223.5	6220.2	6230.0	6217.0
10°	6239.8	6249.6	6269.1	6278.9	6295.1	6295.1	6301.6	6301.6	6295.1	6301.6	6298.4
12.5°	6226.8	6285.3	6317.9	6340.7	6363.4	6383.0	6389.5	6392.8	6389.5	6402.5	6389.5
15°	6249.6	6298.4	6350.5	6389.5	6431.8	6454.6	6461.1	6487.1	6493.7	6496.9	6477.4
17.5°	6213.7	6301.6	6356.9	6415.5	6477.4	6519.7	6558.7	6575.1	6578.3	6584.8	6558.7
20°	6132.3	6230.0	6314.6	6399.3	6470.9	6536.0	6568.5	6614.1	6601.1	6627.1	6591.3
22.5°	6021.7	6132.3	6239.8	6350.5	6425.3	6503.5	6571.8	6604.3	6620.6	6620.6	6581.5
25°	5845.9	5976.1	6093.3	6207.2	6321.2	6415.5	6493.7	6542.5	6552.3	6549.0	6503.5
27.5°	5572.5	5712.4	5849.2	5979.4	6119.3	6230.0	6321.2	6379.7	6396.0	6396.0	6347.2
30°	5194.9	5344.6	5478.1	5634.3	5777.6	5901.3	6028.2	6080.3	6109.5	6109.5	6054.3
32.5°	4745.7	4872.7	4996.4	5149.4	5305.6	5445.6	5566.0	5637.6	5673.4	5670.1	5621.3
35°	4257.5	4319.3	4413.8	4527.7	4667.6	4797.8	4915.0	4983.4	5045.2	5041.9	4996.4
37.5°	3769.2	3753.0	3762.8	3805.1	3892.9	3984.1	4075.2	4140.3	4192.4	4215.2	4205.4
40°	3290.8	3206.1	3124.7	3095.5	3102.0	3134.5	3183.4	3232.2	3290.8	3320.1	3333.1
42.5°	2861.1	2717.9	2574.6	2467.3	2405.4	2385.9	2408.7	2424.9	2460.7	2503.0	2545.4
45°	2516.1	2324.1	2135.2	1969.3	1865.1	1803.2	1790.2	1803.2	1822.8	1865.1	1920.4
47.5°	2232.9	2008.3	1796.8	1611.2	1458.2	1376.9	1354.1	1347.6	1367.1	1406.1	1481.0
50°	1982.3	1757.7	1523.3	1308.5	1149.0	1057.8	1025.3	1012.3	1035.0	1064.4	1132.7
52.5°	1708.8	1487.5	1246.7	1038.3	872.3	778.0	742.1	722.6	735.6	774.7	843.0
55°	1412.6	1207.6	989.5	774.7	615.2	527.3	485.0	472.0	485.0	527.3	595.7
57.5°	1116.4	943.9	761.6	559.8	416.6	328.8	286.4	273.4	309.3	325.5	397.1
60°	872.3	732.4	576.1	410.2	286.4	218.1	175.8	166.0	182.3	211.5	270.2
62.5°	654.3	566.3	442.7	292.9	211.5	139.9	117.2	107.4	117.2	139.9	185.6
65°	475.2	406.9	309.3	214.8	143.2	104.2	78.1	71.6	81.4	97.6	136.7
67.5°	325.5	273.4	214.8	149.7	97.6	65.1	55.4	55.4	58.6	71.6	100.9
70°	211.5	179.0	136.7	97.6	65.1	48.8	42.3	35.8	42.3	52.1	68.3
72.5°	133.5	113.9	87.8	68.3	48.8	35.8	29.3	26.0	32.6	39.0	52.1
75°	81.4	61.9	45.6	35.8	26.0	26.0	26.0	13.0	16.2	26.0	32.6
77.5°	48.8	42.3	35.8	29.3	22.8	13.0	13.0	13.0	16.2	19.5	29.3
80°	26.0	22.8	16.2	16.2	13.0	9.8	13.0	9.8	6.5	16.2	19.5
82.5°	16.2	13.0	13.0	13.0	16.2	6.5	9.8	6.5	9.8	13.0	9.8
85°	9.8	9.8	9.8	6.5	16.2	6.5	6.5	3.3	3.3	6.5	6.5
87.5°	0.0	3.3	3.3	0.0	3.3	0.0	3.3	3.3	3.3	3.3	3.3
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°	6132.3	6132.3	6132.3	6132.3	6132.3	6132.3	6132.3	6132.3	6132.3	6132.3	6132.3
2.5°	6142.1	6138.8	6142.1	6138.8	6138.8	6138.8	6142.1	6142.1	6138.8	6138.8	6145.4
5°	6168.2	6168.2	6168.2	6164.9	6161.6	6161.6	6168.2	6168.2	6158.4	6168.2	6168.2
7.5°	6223.5	6213.7	6223.5	6210.4	6204.0	6207.2	6210.4	6204.0	6197.5	6200.7	6200.7
10°	6295.1	6285.3	6285.3	6275.6	6265.8	6259.3	6252.8	6236.5	6220.2	6217.0	6204.0
12.5°	6379.7	6363.4	6353.7	6334.1	6317.9	6295.1	6275.6	6249.6	6217.0	6194.2	6171.4
15°	6464.4	6438.3	6415.5	6383.0	6347.2	6308.1	6265.8	6223.5	6171.4	6125.9	6086.8
17.5°	6532.7	6496.9	6454.6	6402.5	6350.5	6291.8	6230.0	6168.2	6093.3	6034.7	5989.1
20°	6555.5	6503.5	6448.1	6379.7	6311.4	6230.0	6151.9	6070.5	5985.9	5924.0	5872.0
22.5°	6526.2	6464.4	6396.0	6324.4	6233.2	6145.4	6054.3	5959.8	5884.9	5800.4	5751.5
25°	6444.8	6370.0	6295.1	6210.4	6122.6	6025.0	5927.3	5829.7	5738.5	5692.9	5631.1
27.5°	6278.9	6197.5	6116.1	6028.2	5927.3	5829.7	5728.8	5634.3	5556.3	5494.4	5458.6
30°	5985.9	5891.5	5797.1	5702.7	5614.8	5513.9	5419.5	5341.4	5263.2	5214.4	5178.7
32.5°	5536.7	5452.1	5357.7	5266.5	5185.2	5100.5	5022.4	4954.1	4898.7	4866.1	4840.1
35°	4931.3	4846.6	4775.0	4710.0	4641.5	4605.8	4557.0	4517.9	4495.1	4482.1	4478.8
37.5°	4169.6	4120.8	4098.0	4085.0	4071.9	4062.2	4068.7	4085.0	4098.0	4120.8	4146.8
40°	3355.9	3398.2	3411.2	3456.8	3499.1	3554.4	3616.3	3687.9	3746.4	3821.3	3873.4
42.5°	2613.7	2691.9	2783.0	2880.6	2984.8	3085.7	3209.4	3323.3	3427.5	3521.8	3603.2
45°	2008.3	2128.7	2265.5	2405.4	2545.4	2691.9	2841.6	2981.5	3105.2	3206.1	3290.8
47.5°	1565.6	1699.1	1874.9	2047.4	2216.6	2389.1	2555.1	2701.6	2805.8	2903.4	2978.3
50°	1240.1	1393.1	1585.1	1783.7	1969.3	2151.5	2327.3	2464.0	2568.2	2646.3	2701.6
52.5°	960.2	1142.5	1337.8	1546.1	1744.7	1943.2	2105.9	2232.9	2317.5	2385.9	2428.2
55°	716.1	895.1	1103.5	1318.3	1520.1	1712.1	1865.1	1975.8	2050.7	2089.7	2112.5
57.5°	517.5	680.3	888.6	1103.5	1285.7	1468.0	1591.7	1692.6	1734.9	1757.7	1767.5
60°	377.6	527.3	712.8	898.4	1070.9	1217.4	1324.8	1393.1	1425.7	1438.7	1435.4
62.5°	276.7	406.9	566.3	722.6	862.5	983.0	1067.6	1113.2	1129.5	1136.0	1126.2
65°	211.5	312.4	449.2	569.6	677.0	764.9	826.8	856.1	865.8	862.5	856.1
67.5°	156.3	234.4	335.3	426.4	504.5	572.9	605.4	631.5	637.9	628.2	618.4
70°	110.7	172.5	244.1	306.0	364.5	403.6	439.4	442.7	442.7	439.4	432.9
72.5°	78.1	120.4	166.0	208.3	244.1	273.4	286.4	296.2	292.9	289.7	283.2
75°	52.1	74.9	120.4	130.2	162.7	172.5	185.6	185.6	188.8	179.0	179.0
77.5°	32.6	52.1	71.6	84.7	97.6	110.7	117.2	117.2	120.4	117.2	117.2
80°	19.5	32.6	39.0	58.6	58.6	68.3	71.6	74.9	68.3	78.1	68.3
82.5°	13.0	19.5	29.3	29.3	35.8	42.3	42.3	45.6	45.6	42.3	42.3
85°	9.8	13.0	16.2	19.5	19.5	22.8	19.5	19.5	22.8	26.0	22.8
87.5°	3.3	6.5	3.3	6.5	6.5	13.0	9.8	9.8	9.8	13.0	13.0
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: P248439

CATALOG NUMBER: LSR8B120D010 EC8B120827 8LBDW0WH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	6132.3	6132.3	6132.3	6132.3
2.5°	6138.8	6142.1	6138.8	6138.8
5°	6168.2	6164.9	6168.2	6161.6
7.5°	6190.9	6190.9	6187.7	6187.7
10°	6190.9	6178.0	6178.0	6178.0
12.5°	6142.1	6125.9	6116.1	6109.5
15°	6057.5	6028.2	6015.2	6011.9
17.5°	5946.8	5920.8	5904.5	5894.7
20°	5819.9	5793.8	5774.3	5777.6
22.5°	5709.2	5679.9	5666.9	5660.4
25°	5598.5	5562.7	5553.0	5546.5
27.5°	5419.5	5400.0	5390.2	5380.5
30°	5146.1	5136.3	5120.0	5142.8
32.5°	4830.4	4814.1	4801.1	4810.9
35°	4482.1	4472.3	4482.1	4475.6
37.5°	4163.1	4172.8	4185.9	4192.4
40°	3912.5	3948.3	3961.3	3967.8
42.5°	3661.9	3704.1	3730.2	3746.4
45°	3352.6	3394.9	3424.2	3443.8
47.5°	3033.6	3069.5	3098.7	3095.5
50°	2744.0	2763.5	2776.5	2789.5
52.5°	2451.0	2451.0	2454.2	2454.2
55°	2119.0	2112.5	2109.2	2112.5
57.5°	1754.4	1747.9	1744.7	1734.9
60°	1422.4	1402.9	1389.9	1389.9
62.5°	1113.2	1090.4	1080.7	1077.4
65°	836.5	833.2	813.7	810.5
67.5°	605.4	592.4	579.4	582.7
70°	426.4	406.9	406.9	400.4
72.5°	276.7	266.9	263.6	263.6
75°	172.5	172.5	166.0	179.0
77.5°	113.9	113.9	110.7	113.9
80°	68.3	68.3	68.3	65.1
82.5°	42.3	45.6	42.3	42.3
85°	22.8	26.0	19.5	29.3
87.5°	13.0	16.2	13.0	16.2
90°	0.0	0.0	0.0	0.0

(END OF REPORT)