

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: P250206

Luminaire Tested: **LSR8B100D010 EC8B100827 8LBSW0WH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P250206  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13955)  
Test Lab: INNOVATION CENTER-P1  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LSR8B100D010 EC8B100827 8LBSW0WH  
Description: PORTFOLIO 8 INCH SINGLE 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: 10402.0 lumens  
Efficiency: N/A  
Efficacy: 97.9 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.28 / 1.15  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

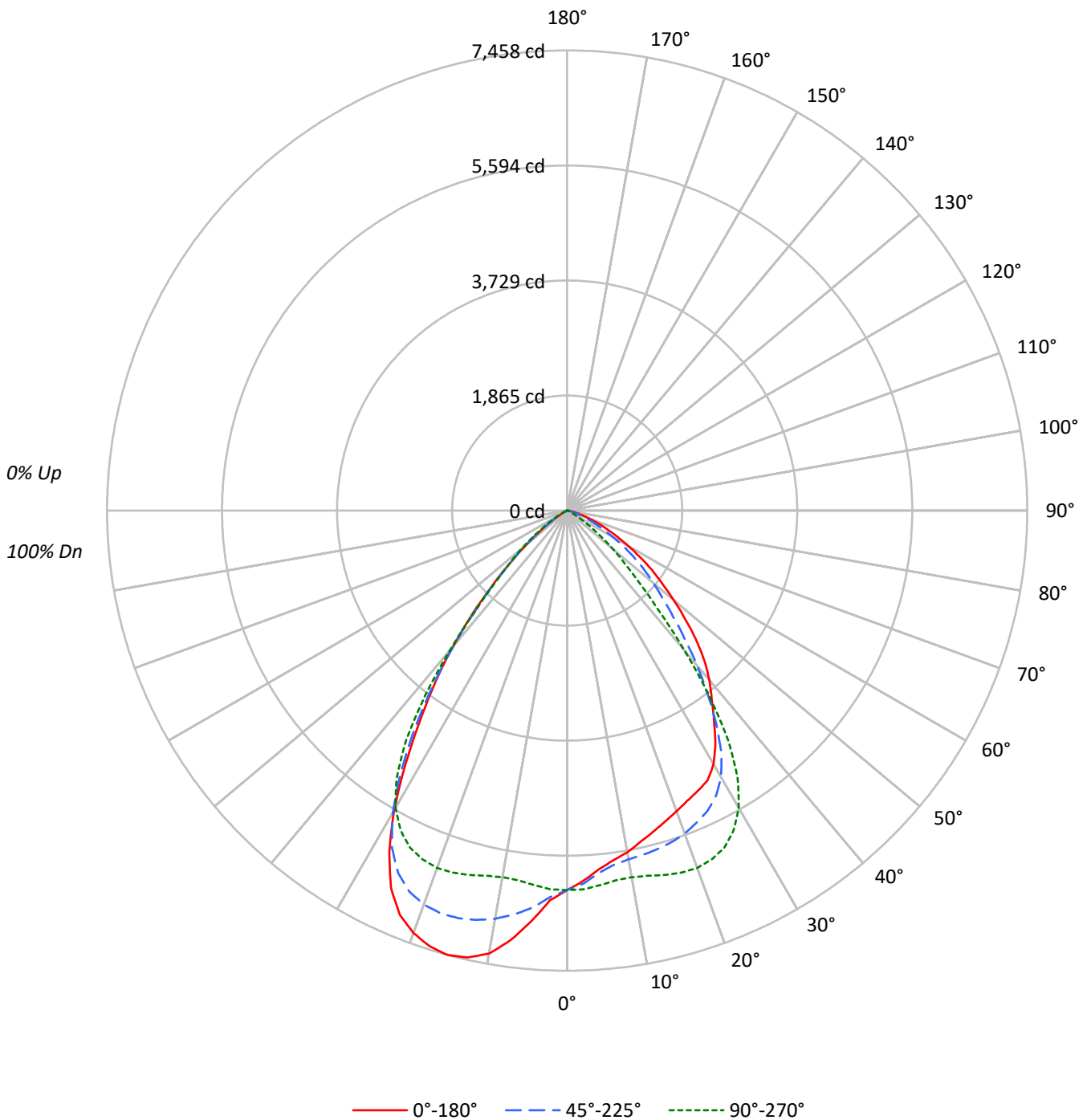
Input Watts (W): 106.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	109	106	103	110	107	104	102	103	100	98	99	97	96	95	94	93	91					91			
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82					82			
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73					73			
4	92	83	76	71	90	81	75	70	79	74	70	77	72	69	75	71	68	66					66			
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	69	65	61	60					60			
6	80	70	63	57	79	69	62	57	67	61	57	66	60	56	64	60	56	54					54			
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49					49			
8	71	60	53	48	70	59	52	48	58	52	47	57	51	47	56	51	47	45					45			
9	67	55	48	44	66	55	48	44	54	48	43	53	47	43	52	47	43	42					42			
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	43	40	38					38			

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

	0°	90°	180°
0°	189665	189665	189665
5°	180695	188610	206764
10°	176033	188902	228230
15°	172042	195162	238106
20°	170147	202215	238997
25°	170546	205070	229714
30°	168965	198030	199768
35°	156129	171383	156344
40°	144274	118822	115931
45°	128473	71698	74074
50°	108097	46193	41919
55°	89932	25338	19161
60°	70196	10990	6025
65°	51798	5458	2933
70°	36019	3372	1289
75°	21922	691	0
80°	15822	1030	0
85°	10154	991	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	591.3	5.7
10°-20°	1769.7	17.0
20°-30°	2710.1	26.1
30°-40°	2656.8	25.5
40°-50°	1599.9	15.4
50°-60°	736.4	7.1
60°-70°	258.7	2.5
70°-80°	67.7	0.7
80°-90°	11.5	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°	5071.0	48.8
0°-40°	7727.8	74.3
0°-60°	10064.1	96.8
0°-90°	10402.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10402.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	6151	6151	6151	6151	6151	
5°	5838	5892	6093	6458	6680	551
15°	5389	5679	6113	6838	7458	1523
25°	5012	5375	6027	6481	6752	2309
35°	4148	4205	4553	4291	4153	2598
45°	2946	2426	1644	1656	1699	2259
55°	1673	1325	471	371	356	1493
65°	710	491	75	37	40	723
75°	184	106	6	0	0	223
85°	29	14	3	0	0	40
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°	6150.7	6150.7	6150.7	6150.7	6150.7	6150.7	6150.7	6150.7	6150.7	6150.7	6150.7
2.5°	6007.0	6012.8	6012.8	6012.8	6024.3	6027.2	6024.3	6027.2	6032.9	6053.0	6061.6
5°	5837.5	5828.8	5834.6	5831.7	5846.1	5854.7	5848.9	5857.6	5877.7	5892.1	5906.4
7.5°	5716.8	5716.8	5716.8	5722.5	5731.1	5748.4	5745.5	5751.2	5771.3	5791.4	5811.5
10°	5621.9	5619.1	5619.1	5633.4	5644.9	5665.0	5670.8	5688.0	5713.8	5739.7	5762.7
12.5°	5498.3	5501.2	5515.6	5530.0	5555.8	5587.4	5604.6	5627.7	5667.9	5711.0	5736.9
15°	5389.1	5391.9	5403.5	5432.1	5463.9	5501.2	5538.5	5575.9	5624.7	5679.4	5725.4
17.5°	5282.7	5285.6	5294.2	5325.9	5366.1	5415.0	5458.1	5506.9	5570.2	5633.4	5690.9
20°	5185.0	5182.2	5196.5	5225.2	5277.1	5323.0	5366.1	5423.6	5492.6	5570.2	5636.2
22.5°	5090.1	5090.1	5104.6	5133.3	5179.3	5225.2	5271.3	5331.6	5400.6	5475.3	5552.9
25°	5012.5	5009.7	5029.8	5044.2	5078.7	5124.7	5173.5	5222.4	5291.4	5374.8	5449.4
27.5°	4929.2	4926.4	4929.2	4946.5	4978.1	5012.5	5049.9	5093.1	5150.6	5219.6	5291.4
30°	4745.3	4748.1	4748.1	4762.5	4779.8	4817.1	4837.2	4880.4	4932.1	4989.6	5052.9
32.5°	4472.2	4475.1	4475.1	4480.9	4495.2	4512.5	4529.7	4561.3	4601.5	4650.4	4707.9
35°	4147.5	4147.5	4144.5	4147.5	4156.1	4156.1	4170.4	4156.1	4176.2	4205.0	4248.0
37.5°	3848.5	3842.7	3837.1	3831.3	3822.6	3808.3	3788.2	3753.7	3745.0	3733.5	3736.4
40°	3584.1	3581.3	3564.0	3549.6	3520.8	3486.4	3437.5	3377.2	3328.4	3270.9	3222.0
42.5°	3291.0	3288.0	3273.7	3247.8	3216.2	3164.5	3086.9	3006.5	2908.7	2822.5	2733.4
45°	2946.0	2954.6	2934.5	2905.8	2868.4	2819.5	2733.4	2635.6	2537.8	2425.8	2313.7
47.5°	2586.7	2583.9	2569.6	2552.3	2520.7	2471.8	2414.3	2308.0	2204.5	2101.1	1986.1
50°	2253.3	2241.9	2236.1	2218.9	2198.8	2158.6	2098.1	2011.9	1919.9	1822.2	1715.9
52.5°	1937.2	1937.2	1922.8	1911.3	1894.0	1862.5	1810.8	1741.8	1664.2	1572.1	1460.1
55°	1672.8	1667.0	1652.7	1638.3	1621.0	1600.9	1555.0	1497.5	1414.1	1325.0	1227.3
57.5°	1391.1	1388.2	1382.5	1365.2	1356.6	1336.5	1284.8	1227.3	1155.5	1077.9	997.3
60°	1138.2	1126.7	1115.1	1103.7	1089.3	1069.2	1034.7	985.8	925.5	856.5	776.1
62.5°	911.2	928.3	893.9	893.9	865.2	847.9	816.3	787.5	724.3	661.1	592.1
65°	709.9	709.9	695.5	684.0	666.8	646.6	615.1	586.3	540.3	491.4	442.6
67.5°	543.3	540.3	526.0	514.5	500.1	488.6	465.6	431.1	396.7	356.4	316.1
70°	399.5	396.7	393.7	373.6	362.1	347.8	330.5	307.6	281.7	252.9	215.5
72.5°	287.4	287.4	278.8	270.2	258.7	247.1	230.0	215.5	192.6	172.5	146.6
75°	184.0	181.1	181.1	166.7	166.7	149.4	137.9	129.3	117.8	106.4	83.4
77.5°	132.3	129.3	126.5	120.7	115.0	109.2	100.6	89.1	80.4	69.0	60.3
80°	89.1	83.4	80.4	80.4	71.8	69.0	71.8	54.7	51.7	43.1	37.4
82.5°	54.7	54.7	51.7	51.7	48.9	46.0	37.4	37.4	34.5	31.6	25.9
85°	28.7	37.4	25.9	28.7	25.9	28.7	25.9	20.1	17.3	14.3	14.3
87.5°	17.3	11.5	11.5	17.3	14.3	11.5	11.5	11.5	8.6	5.8	5.8
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°	6150.7	6150.7	6150.7	6150.7	6150.7	6150.7	6150.7	6150.7	6150.7	6150.7	6150.7
2.5°	6056.0	6076.1	6073.1	6099.0	6107.7	6127.8	6127.8	6142.1	6150.7	6170.8	6188.1
5°	5912.2	5943.8	5952.4	5984.0	6009.9	6041.5	6061.6	6093.2	6122.0	6165.2	6205.4
7.5°	5823.1	5848.9	5866.2	5903.6	5932.3	5966.8	6001.3	6044.4	6084.6	6136.4	6193.9
10°	5780.0	5814.5	5840.3	5877.7	5912.2	5949.6	5984.0	6032.9	6078.9	6145.0	6208.2
12.5°	5768.5	5808.7	5840.3	5892.1	5926.5	5966.8	6007.0	6061.6	6110.5	6179.5	6251.4
15°	5768.5	5823.1	5866.2	5923.7	5963.9	6015.6	6058.8	6113.3	6168.0	6239.8	6308.8
17.5°	5757.0	5823.1	5877.7	5943.8	5995.5	6047.3	6101.9	6153.7	6211.1	6280.1	6357.6
20°	5711.0	5794.4	5860.4	5938.0	5992.7	6050.2	6104.8	6162.2	6222.7	6294.5	6360.6
22.5°	5630.5	5728.3	5803.0	5886.3	5949.6	6007.0	6061.6	6119.1	6185.3	6254.2	6323.2
25°	5524.2	5616.1	5696.7	5782.8	5846.1	5909.3	5961.1	6027.2	6087.6	6153.7	6208.2
27.5°	5363.2	5460.9	5538.5	5627.7	5685.1	5745.5	5788.6	5843.3	5900.7	5955.3	5998.5
30°	5121.8	5210.9	5291.4	5371.8	5429.3	5472.5	5518.4	5561.6	5599.0	5636.2	5673.6
32.5°	4768.2	4848.8	4926.4	5001.0	5047.1	5084.5	5118.9	5144.8	5164.9	5185.0	5187.9
35°	4282.6	4348.6	4397.5	4463.6	4506.8	4541.2	4541.2	4552.7	4549.8	4541.2	4532.6
37.5°	3739.3	3765.1	3785.2	3811.2	3814.0	3814.0	3796.8	3782.4	3759.5	3753.7	3736.4
40°	3173.1	3138.6	3112.7	3078.3	3058.1	3015.0	2977.7	2951.8	2914.4	2908.7	2902.9
42.5°	2635.6	2555.1	2483.3	2423.0	2354.0	2293.6	2239.0	2198.8	2170.0	2167.1	2170.0
45°	2198.8	2106.8	2000.4	1917.1	1839.5	1764.7	1692.9	1644.1	1618.2	1612.4	1618.2
47.5°	1868.3	1761.9	1658.4	1563.5	1480.2	1396.8	1325.0	1258.9	1227.3	1218.6	1215.8
50°	1606.7	1497.5	1388.2	1290.5	1198.5	1115.1	1026.0	962.9	922.7	908.2	896.7
52.5°	1350.9	1253.2	1141.0	1040.5	948.4	850.7	758.8	686.9	646.6	629.5	617.9
55°	1126.7	1029.0	925.5	827.8	730.1	632.3	540.3	471.3	428.3	408.1	393.7
57.5°	899.6	807.7	718.6	620.9	540.3	445.5	353.5	293.2	255.8	232.8	221.3
60°	695.5	623.7	546.1	465.6	388.0	310.4	235.7	178.2	149.4	132.3	117.8
62.5°	526.0	465.6	413.8	344.9	284.5	218.4	161.0	115.0	89.1	74.8	69.0
65°	379.4	333.4	287.4	244.3	201.2	152.4	109.2	74.8	51.7	43.1	40.2
67.5°	270.2	232.8	198.3	169.5	137.9	109.2	77.6	51.7	40.2	34.5	31.6
70°	189.6	161.0	137.9	112.2	91.9	71.8	60.3	37.4	23.0	25.9	20.1
72.5°	126.5	106.4	94.9	77.6	63.2	51.7	37.4	25.9	25.9	20.1	17.3
75°	69.0	63.2	48.9	37.4	31.6	28.7	11.5	5.8	2.8	8.6	2.8
77.5°	48.9	43.1	37.4	31.6	25.9	20.1	11.5	11.5	8.6	11.5	5.8
80°	31.6	25.9	23.0	23.0	14.3	8.6	5.8	5.8	8.6	2.8	2.8
82.5°	20.1	17.3	14.3	14.3	14.3	8.6	8.6	8.6	8.6	5.8	5.8
85°	11.5	8.6	5.8	5.8	2.8	5.8	0.0	2.8	2.8	0.0	0.0
87.5°	5.8	2.8	2.8	2.8	2.8	0.0	0.0	2.8	0.0	2.8	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):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	6150.7	6150.7	6150.7	6150.7	6150.7	6150.7	6150.7	6150.7	6150.7	6150.7	6150.7
2.5°	6199.6	6211.1	6225.5	6237.0	6262.9	6268.6	6280.1	6291.6	6300.3	6308.8	6311.7
5°	6239.8	6283.0	6323.2	6366.3	6420.9	6458.3	6501.4	6538.8	6576.1	6607.7	6630.7
7.5°	6251.4	6317.4	6377.9	6452.5	6533.0	6602.1	6673.9	6745.7	6820.4	6877.9	6926.8
10°	6274.4	6354.8	6432.4	6521.5	6625.0	6716.9	6806.0	6900.9	6995.8	7076.2	7148.1
12.5°	6314.6	6403.7	6487.1	6584.8	6691.1	6794.5	6892.3	6998.6	7099.3	7188.4	7268.8
15°	6380.7	6464.0	6544.6	6636.5	6742.8	6837.7	6935.4	7038.8	7139.5	7231.4	7306.2
17.5°	6423.8	6501.4	6581.8	6665.2	6754.3	6840.6	6932.5	7024.5	7116.4	7199.8	7268.8
20°	6423.8	6498.5	6558.9	6633.6	6716.9	6791.7	6866.5	6946.9	7027.4	7096.3	7162.5
22.5°	6372.1	6443.9	6489.9	6547.4	6619.2	6682.5	6722.7	6811.8	6872.1	6932.5	6981.3
25°	6251.4	6303.1	6340.5	6380.7	6438.2	6481.3	6515.8	6567.5	6627.8	6650.9	6685.3
27.5°	6032.9	6070.3	6090.4	6099.0	6127.8	6150.7	6156.5	6179.5	6205.4	6211.1	6225.5
30°	5688.0	5690.9	5682.2	5679.4	5665.0	5647.8	5644.9	5642.0	5630.5	5619.1	5621.9
32.5°	5167.7	5153.4	5118.9	5081.6	5044.2	5004.0	4980.9	4952.2	4934.9	4917.8	4897.7
35°	4495.2	4460.8	4411.9	4365.9	4322.8	4291.1	4239.4	4222.1	4205.0	4181.9	4176.2
37.5°	3704.8	3684.7	3638.7	3604.2	3581.3	3566.9	3540.9	3523.8	3523.8	3515.2	3509.4
40°	2888.5	2882.8	2865.6	2874.2	2862.7	2868.4	2865.6	2859.8	2874.2	2874.2	2880.0
42.5°	2167.1	2170.0	2178.7	2184.4	2201.6	2204.5	2218.9	2218.9	2227.5	2236.1	2241.9
45°	1612.4	1624.0	1624.0	1635.4	1652.7	1655.5	1661.2	1664.2	1669.9	1684.3	1690.0
47.5°	1210.0	1212.8	1212.8	1215.8	1221.5	1227.3	1224.4	1227.3	1235.9	1230.1	1235.9
50°	893.9	896.7	888.1	879.5	888.1	888.1	885.3	876.6	885.3	873.8	879.5
52.5°	609.4	606.4	597.8	600.7	594.9	592.1	592.1	586.3	586.3	586.3	574.8
55°	385.2	385.2	379.4	379.4	376.6	370.8	367.9	365.0	362.1	359.3	359.3
57.5°	215.5	218.4	209.9	206.9	209.9	206.9	201.2	201.2	201.2	192.6	198.3
60°	117.8	115.0	112.2	109.2	106.4	109.2	109.2	103.5	103.5	103.5	106.4
62.5°	63.2	63.2	60.3	60.3	57.5	57.5	63.2	54.7	57.5	54.7	57.5
65°	34.5	43.1	31.6	31.6	40.2	37.4	34.5	34.5	37.4	31.6	34.5
67.5°	37.4	25.9	23.0	25.9	23.0	23.0	23.0	28.7	25.9	20.1	25.9
70°	17.3	20.1	20.1	14.3	23.0	11.5	20.1	11.5	17.3	14.3	17.3
72.5°	17.3	17.3	17.3	11.5	17.3	11.5	14.3	14.3	11.5	11.5	17.3
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	5.8	5.8	2.8	2.8	2.8	2.8	5.8	5.8	5.8	0.0	2.8
80°	5.8	5.8	0.0	2.8	0.0	0.0	2.8	0.0	2.8	0.0	5.8
82.5°	2.8	5.8	2.8	2.8	5.8	5.8	5.8	2.8	2.8	2.8	2.8
85°	0.0	2.8	0.0	0.0	0.0	0.0	5.8	0.0	0.0	0.0	2.8
87.5°	0.0	2.8	0.0	0.0	0.0	0.0	2.8	2.8	0.0	0.0	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





TEST NUMBER: P250206

CATALOG NUMBER: LSR8B100D010 EC8B100827 8LBSW0WH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	6150.7	6150.7	6150.7	6150.7
2.5°	6314.6	6317.4	6323.2	6320.4
5°	6648.0	6671.0	6682.5	6679.7
7.5°	6961.2	7001.6	7024.5	7024.5
10°	7202.7	7248.7	7283.1	7288.9
12.5°	7332.0	7383.8	7429.8	7418.2
15°	7369.4	7421.2	7467.1	7458.5
17.5°	7326.3	7378.0	7412.6	7406.8
20°	7208.5	7251.5	7286.1	7283.1
22.5°	7024.5	7061.9	7090.6	7087.7
25°	6714.1	6740.0	6762.9	6751.5
27.5°	6237.0	6245.6	6259.9	6242.8
30°	5601.8	5607.5	5613.3	5610.4
32.5°	4889.0	4886.1	4880.4	4874.6
35°	4167.6	4167.6	4170.4	4153.2
37.5°	3512.2	3509.4	3518.0	3509.4
40°	2885.7	2882.8	2894.3	2880.0
42.5°	2250.5	2259.1	2262.0	2262.0
45°	1692.9	1695.8	1698.6	1698.6
47.5°	1235.9	1238.8	1253.2	1235.9
50°	873.8	876.6	879.5	873.8
52.5°	577.7	580.6	577.7	569.0
55°	353.5	356.4	356.4	356.4
57.5°	189.6	192.6	192.6	189.6
60°	103.5	100.6	103.5	97.7
62.5°	54.7	60.3	57.5	51.7
65°	34.5	34.5	34.5	40.2
67.5°	28.7	23.0	25.9	20.1
70°	17.3	20.1	20.1	14.3
72.5°	14.3	14.3	14.3	17.3
75°	0.0	0.0	0.0	0.0
77.5°	5.8	5.8	5.8	2.8
80°	2.8	0.0	2.8	0.0
82.5°	2.8	2.8	5.8	2.8
85°	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)