

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: P248530

Luminaire Tested: **LSR8B150D010 EC8B150927 8LBDW0WH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P248530  
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: LSR8B150D010 EC8B150927 8LBDW0WH  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
97 CRI 2700 CCT WITH WHEAT TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12998.3 lumens  
Efficiency: N/A  
Efficacy: 82.0 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.33 / 1.2  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

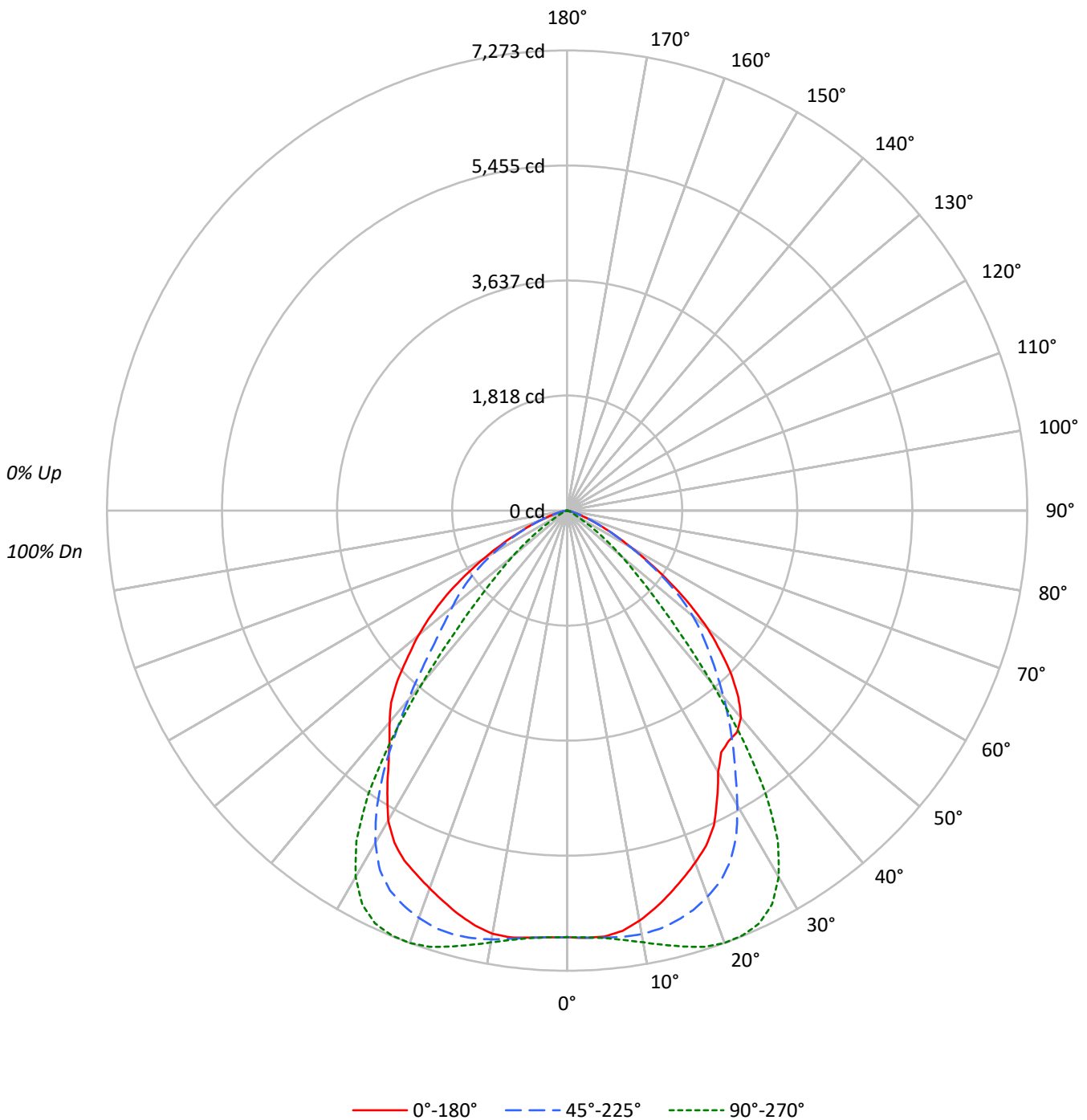
Input Watts (W): 158.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0			
RCR																								
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100						
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	92	90						
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79						
3	97	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70						
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62						
5	84	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56						
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50						
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45						
8	68	56	49	44	67	56	48	43	54	48	43	53	47	43	52	47	43	41						
9	64	52	45	40	63	51	44	40	50	44	39	49	44	39	48	43	39	38						
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34						

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

	0°	90°	180°
0°	Luminaire represents a point source (luminous area is zero).		
5°	No luminance values can be calculated.		
10°			
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	648.5	5.0
10°-20°	1921.0	14.8
20°-30°	2930.7	22.5
30°-40°	3058.2	23.5
40°-50°	2297.1	17.7
50°-60°	1413.4	10.9
60°-70°	575.2	4.4
70°-80°	135.5	1.0
80°-90°	18.7	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°	5500.2	42.3
0°-40°	8558.4	65.8
0°-60°	12268.9	94.4
0°-90°	12998.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12998.3	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	6743	6743	6743	6743	6743	
5°	6757	6775	6782	6775	6775	639
15°	6267	6707	7133	6936	6611	1765
25°	5490	6106	7194	6625	6099	2496
35°	4449	4574	5480	5064	4921	2809
45°	3672	3178	1983	2960	3787	2802
55°	1983	1883	519	1883	2323	1782
65°	619	626	79	841	891	646
75°	107	107	14	190	197	129
85°	11	11	4	25	32	15
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°	6743.0	6743.0	6743.0	6743.0	6743.0	6743.0	6743.0	6743.0	6743.0	6743.0	6743.0
2.5°	6761.0	6750.2	6761.0	6761.0	6764.6	6757.4	6761.0	6764.6	6757.4	6757.4	6757.4
5°	6757.4	6750.2	6757.4	6753.8	6761.0	6761.0	6768.1	6768.1	6775.3	6775.3	6786.0
7.5°	6700.2	6685.9	6700.2	6710.8	6717.9	6732.3	6750.2	6764.6	6778.8	6793.2	6811.1
10°	6582.0	6582.0	6592.7	6614.2	6635.7	6660.7	6693.0	6728.7	6764.6	6796.7	6829.0
12.5°	6435.3	6424.5	6446.0	6474.6	6506.9	6546.3	6596.3	6650.0	6707.2	6771.7	6821.9
15°	6267.0	6256.2	6281.3	6310.0	6349.4	6406.7	6467.5	6539.1	6621.4	6707.2	6789.6
17.5°	6095.2	6091.7	6116.7	6156.1	6188.3	6249.2	6327.9	6413.7	6506.9	6621.4	6728.7
20°	5919.9	5916.4	5941.3	5973.6	6016.5	6073.8	6152.5	6252.8	6363.7	6492.6	6617.8
22.5°	5737.3	5740.9	5762.4	5798.1	5834.0	5894.8	5977.1	6077.4	6199.0	6338.6	6478.2
25°	5490.3	5472.4	5501.1	5536.9	5597.8	5647.8	5726.6	5834.0	5959.2	6106.0	6270.6
27.5°	5132.5	5128.9	5154.0	5186.1	5239.8	5300.7	5386.6	5497.5	5630.0	5791.0	5952.0
30°	4774.5	4781.7	4792.5	4824.7	4860.4	4921.3	5007.2	5100.3	5225.5	5379.4	5551.2
32.5°	4531.2	4531.2	4545.4	4566.9	4592.0	4624.2	4685.1	4753.0	4849.8	4957.1	5082.3
35°	4448.8	4434.5	4448.8	4452.4	4456.0	4463.2	4473.9	4495.4	4527.6	4574.1	4620.6
37.5°	4413.0	4402.3	4402.3	4388.1	4370.1	4348.7	4320.0	4287.8	4252.0	4205.5	4169.7
40°	4273.5	4266.3	4259.1	4244.8	4205.5	4162.5	4115.9	4040.8	3958.5	3843.9	3729.5
42.5°	4005.1	3997.9	3994.3	3965.6	3929.8	3879.8	3826.1	3747.4	3643.5	3496.8	3332.1
45°	3672.2	3657.8	3647.1	3622.2	3597.0	3554.1	3503.9	3432.4	3328.5	3178.2	2981.4
47.5°	3285.7	3278.5	3274.9	3264.2	3239.1	3214.0	3181.8	3124.6	3031.5	2888.3	2684.4
50°	2895.5	2881.2	2888.3	2884.8	2874.0	2856.2	2834.7	2795.3	2723.6	2594.8	2408.7
52.5°	2448.1	2448.1	2444.6	2455.3	2458.8	2455.3	2458.8	2415.9	2355.1	2258.4	2100.9
55°	1982.8	1982.8	1993.6	2007.9	2022.2	2025.8	2022.2	2004.3	1961.3	1882.6	1743.0
57.5°	1546.1	1539.0	1560.5	1582.0	1596.4	1610.6	1599.9	1585.6	1560.5	1496.0	1388.7
60°	1177.5	1177.5	1191.8	1206.2	1220.4	1234.8	1231.2	1227.6	1206.2	1163.1	1077.3
62.5°	866.1	869.7	869.7	880.4	894.7	909.1	919.8	909.1	898.3	869.7	812.5
65°	619.2	615.6	619.2	629.9	640.7	655.0	662.2	658.6	647.8	626.3	583.4
67.5°	415.2	411.6	425.9	429.5	436.6	451.0	447.4	451.0	447.4	429.5	393.8
70°	272.0	264.8	272.0	268.4	279.2	282.8	289.9	293.5	289.9	279.2	268.4
72.5°	168.2	164.6	168.2	171.8	175.4	178.9	186.1	186.1	182.5	175.4	161.1
75°	107.3	96.6	100.2	93.0	100.2	100.2	107.3	110.9	107.3	107.3	100.2
77.5°	64.5	64.5	64.5	64.5	64.5	64.5	64.5	68.1	71.6	64.5	60.9
80°	32.2	32.2	35.8	35.8	35.8	39.4	35.8	35.8	35.8	39.4	28.7
82.5°	25.1	21.5	21.5	21.5	25.1	21.5	21.5	21.5	21.5	21.5	21.5
85°	10.8	14.3	10.8	7.2	10.8	10.8	14.3	10.8	10.8	10.8	14.3
87.5°	3.6	3.6	0.0	0.0	0.0	3.6	0.0	3.6	3.6	7.2	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°	6743.0	6743.0	6743.0	6743.0	6743.0	6743.0	6743.0	6743.0	6743.0	6743.0	6743.0
2.5°	6761.0	6753.8	6753.8	6750.2	6757.4	6750.2	6753.8	6750.2	6750.2	6757.4	6750.2
5°	6786.0	6789.6	6782.4	6778.8	6789.6	6789.6	6789.6	6782.4	6782.4	6786.0	6782.4
7.5°	6821.9	6829.0	6832.6	6836.2	6843.3	6846.9	6846.9	6843.3	6839.7	6850.5	6836.2
10°	6861.2	6872.0	6893.4	6904.1	6922.0	6922.0	6929.2	6929.2	6922.0	6929.2	6925.6
12.5°	6846.9	6911.2	6947.1	6972.1	6997.2	7018.6	7025.8	7029.4	7025.8	7040.1	7025.8
15°	6872.0	6925.6	6982.9	7025.8	7072.3	7097.4	7104.6	7133.2	7140.4	7144.0	7122.5
17.5°	6832.6	6929.2	6990.0	7054.4	7122.5	7169.0	7211.9	7229.8	7233.4	7240.5	7211.9
20°	6743.0	6850.5	6943.5	7036.5	7115.3	7186.8	7222.7	7272.8	7258.5	7287.2	7247.7
22.5°	6621.4	6743.0	6861.2	6982.9	7065.2	7151.2	7226.3	7262.0	7280.0	7280.0	7237.0
25°	6428.1	6571.4	6700.2	6825.4	6950.7	7054.4	7140.4	7194.0	7204.8	7201.2	7151.2
27.5°	6127.4	6281.3	6431.7	6574.8	6728.7	6850.5	6950.7	7015.0	7032.9	7032.9	6979.3
30°	5712.3	5876.9	6023.7	6195.4	6353.0	6489.0	6628.6	6685.9	6717.9	6717.9	6657.2
32.5°	5218.3	5357.9	5493.9	5662.1	5834.0	5987.9	6120.3	6199.0	6238.5	6234.9	6181.2
35°	4681.5	4749.5	4853.4	4978.6	5132.5	5275.6	5404.5	5479.7	5547.6	5544.0	5493.9
37.5°	4144.6	4126.7	4137.5	4184.0	4280.6	4380.9	4481.1	4552.7	4609.9	4635.0	4624.2
40°	3618.6	3525.4	3436.0	3403.8	3410.9	3446.7	3500.4	3554.1	3618.6	3650.7	3665.0
42.5°	3146.1	2988.6	2831.1	2712.9	2645.0	2623.5	2648.6	2666.4	2705.8	2752.3	2798.9
45°	2766.7	2555.5	2347.9	2165.4	2050.9	1982.8	1968.5	1982.8	2004.3	2050.9	2111.7
47.5°	2455.3	2208.3	1975.7	1771.6	1603.5	1514.0	1488.9	1481.7	1503.2	1546.1	1628.4
50°	2179.7	1932.8	1675.0	1438.8	1263.5	1163.1	1127.5	1113.1	1138.2	1170.3	1245.5
52.5°	1879.0	1635.6	1370.8	1141.8	959.2	855.4	816.1	794.6	808.9	851.8	927.0
55°	1553.3	1327.8	1088.0	851.8	676.5	579.8	533.2	519.0	533.2	579.8	655.0
57.5°	1227.6	1037.9	837.4	615.6	458.1	361.5	314.9	300.6	340.1	358.0	436.6
60°	959.2	805.4	633.5	451.0	314.9	239.7	193.3	182.5	200.5	232.6	297.0
62.5°	719.4	622.8	486.8	322.1	232.6	153.9	128.8	118.1	128.8	153.9	204.1
65°	522.6	447.4	340.1	236.1	157.5	114.5	86.0	78.8	89.6	107.3	150.4
67.5°	358.0	300.6	236.1	164.6	107.3	71.6	60.9	60.9	64.5	78.8	110.9
70°	232.6	196.9	150.4	107.3	71.6	53.7	46.5	39.4	46.5	57.3	75.1
72.5°	146.8	125.2	96.6	75.1	53.7	39.4	32.2	28.7	35.8	42.9	57.3
75°	89.6	68.1	50.1	39.4	28.7	28.7	28.7	14.3	17.9	28.7	35.8
77.5°	53.7	46.5	39.4	32.2	25.1	14.3	14.3	14.3	17.9	21.5	32.2
80°	28.7	25.1	17.9	17.9	14.3	10.8	14.3	10.8	7.2	17.9	21.5
82.5°	17.9	14.3	14.3	14.3	17.9	7.2	10.8	7.2	10.8	14.3	10.8
85°	10.8	10.8	10.8	7.2	17.9	7.2	7.2	3.6	3.6	7.2	7.2
87.5°	0.0	3.6	3.6	0.0	3.6	0.0	3.6	3.6	3.6	3.6	3.6
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°	6743.0	6743.0	6743.0	6743.0	6743.0	6743.0	6743.0	6743.0	6743.0	6743.0	6743.0
2.5°	6753.8	6750.2	6753.8	6750.2	6750.2	6750.2	6753.8	6753.8	6750.2	6750.2	6757.4
5°	6782.4	6782.4	6782.4	6778.8	6775.3	6775.3	6782.4	6782.4	6771.7	6782.4	6782.4
7.5°	6843.3	6832.6	6843.3	6829.0	6821.9	6825.4	6829.0	6821.9	6814.7	6818.3	6818.3
10°	6922.0	6911.2	6911.2	6900.5	6889.8	6882.6	6875.6	6857.6	6839.7	6836.2	6821.9
12.5°	7015.0	6997.2	6986.5	6965.0	6947.1	6922.0	6900.5	6872.0	6836.2	6811.1	6786.0
15°	7108.1	7079.5	7054.4	7018.6	6979.3	6936.3	6889.8	6843.3	6786.0	6735.9	6693.0
17.5°	7183.2	7144.0	7097.4	7040.1	6982.9	6918.4	6850.5	6782.4	6700.2	6635.7	6585.5
20°	7208.3	7151.2	7090.3	7015.0	6939.9	6850.5	6764.6	6675.1	6582.0	6514.0	6456.7
22.5°	7176.2	7108.1	7032.9	6954.3	6854.0	6757.4	6657.2	6553.3	6471.0	6378.0	6324.3
25°	7086.7	7004.4	6922.0	6829.0	6732.3	6625.0	6517.6	6410.2	6310.0	6259.8	6191.9
27.5°	6904.1	6814.7	6725.1	6628.6	6517.6	6410.2	6299.3	6195.4	6109.7	6041.6	6002.2
30°	6582.0	6478.2	6374.5	6270.6	6174.0	6063.0	5959.2	5873.3	5787.4	5733.7	5694.4
32.5°	6088.0	5995.0	5891.3	5791.0	5701.6	5608.5	5522.6	5447.5	5386.6	5350.7	5322.2
35°	5422.4	5329.3	5250.6	5179.0	5103.8	5064.5	5010.8	4967.8	4942.8	4928.5	4924.9
37.5°	4584.8	4531.2	4506.1	4491.8	4477.5	4466.8	4473.9	4491.8	4506.1	4531.2	4559.7
40°	3690.1	3736.6	3751.0	3801.0	3847.5	3908.4	3976.4	4055.2	4119.5	4201.9	4259.1
42.5°	2874.0	2960.0	3060.1	3167.5	3282.1	3393.0	3529.0	3654.2	3768.8	3872.6	3962.0
45°	2208.3	2340.7	2491.1	2645.0	2798.9	2960.0	3124.6	3278.5	3414.5	3525.4	3618.6
47.5°	1721.6	1868.3	2061.6	2251.4	2437.4	2627.1	2809.6	2970.7	3085.2	3192.5	3274.9
50°	1363.6	1531.9	1743.0	1961.3	2165.4	2365.8	2559.0	2709.5	2824.0	2909.8	2970.7
52.5°	1055.8	1256.3	1471.0	1700.1	1918.5	2136.7	2315.7	2455.3	2548.4	2623.5	2670.0
55°	787.4	984.3	1213.3	1449.6	1671.4	1882.6	2050.9	2172.6	2254.8	2297.8	2322.9
57.5°	569.0	748.0	977.1	1213.3	1413.7	1614.1	1750.2	1861.2	1907.7	1932.8	1943.4
60°	415.2	579.8	783.8	987.9	1177.5	1338.6	1456.8	1531.9	1567.7	1582.0	1578.4
62.5°	304.2	447.4	622.8	794.6	948.5	1080.9	1173.9	1224.0	1242.0	1249.1	1238.4
65°	232.6	343.6	493.9	626.3	744.5	841.0	909.1	941.4	952.1	948.5	941.4
67.5°	171.8	257.7	368.7	468.9	554.7	629.9	665.8	694.4	701.4	690.8	680.1
70°	121.7	189.7	268.4	336.5	400.8	443.8	483.2	486.8	486.8	483.2	476.1
72.5°	86.0	132.4	182.5	229.0	268.4	300.6	314.9	325.7	322.1	318.5	311.4
75°	57.3	82.4	132.4	143.2	178.9	189.7	204.1	204.1	207.6	196.9	196.9
77.5°	35.8	57.3	78.8	93.0	107.3	121.7	128.8	128.8	132.4	128.8	128.8
80°	21.5	35.8	42.9	64.5	64.5	75.1	78.8	82.4	75.1	86.0	75.1
82.5°	14.3	21.5	32.2	32.2	39.4	46.5	46.5	50.1	50.1	46.5	46.5
85°	10.8	14.3	17.9	21.5	21.5	25.1	21.5	21.5	25.1	28.7	25.1
87.5°	3.6	7.2	3.6	7.2	7.2	14.3	10.8	10.8	10.8	14.3	14.3
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: P248530

CATALOG NUMBER: LSR8B150D010 EC8B150927 8LBDW0WH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	6743.0	6743.0	6743.0	6743.0
2.5°	6750.2	6753.8	6750.2	6750.2
5°	6782.4	6778.8	6782.4	6775.3
7.5°	6807.5	6807.5	6803.9	6803.9
10°	6807.5	6793.2	6793.2	6793.2
12.5°	6753.8	6735.9	6725.1	6717.9
15°	6660.7	6628.6	6614.2	6610.6
17.5°	6539.1	6510.5	6492.6	6481.8
20°	6399.4	6370.9	6349.4	6353.0
22.5°	6277.7	6245.6	6231.3	6224.1
25°	6156.1	6116.7	6106.0	6098.8
27.5°	5959.2	5937.8	5927.1	5916.4
30°	5658.6	5647.8	5630.0	5655.0
32.5°	5311.5	5293.5	5279.2	5290.0
35°	4928.5	4917.7	4928.5	4921.3
37.5°	4577.7	4588.4	4602.8	4609.9
40°	4302.1	4341.5	4355.8	4362.9
42.5°	4026.5	4073.1	4101.6	4119.5
45°	3686.5	3733.0	3765.3	3786.8
47.5°	3335.7	3375.1	3407.3	3403.8
50°	3017.2	3038.7	3052.9	3067.3
52.5°	2695.0	2695.0	2698.6	2698.6
55°	2330.0	2322.9	2319.3	2322.9
57.5°	1929.2	1922.1	1918.5	1907.7
60°	1564.1	1542.6	1528.3	1528.3
62.5°	1224.0	1199.0	1188.3	1184.7
65°	919.8	916.2	894.7	891.1
67.5°	665.8	651.4	637.1	640.7
70°	468.9	447.4	447.4	440.2
72.5°	304.2	293.5	289.9	289.9
75°	189.7	189.7	182.5	196.9
77.5°	125.2	125.2	121.7	125.2
80°	75.1	75.1	75.1	71.6
82.5°	46.5	50.1	46.5	46.5
85°	25.1	28.7	21.5	32.2
87.5°	14.3	17.9	14.3	17.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)