

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: P249340

Luminaire Tested: **LSR8B150D010 EC8B150850 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249340
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: LSR8B150D010 EC8B150850 8LBDW0GPH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 5000 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16303.0 lumens
Efficiency: N/A
Efficacy: 102.9 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

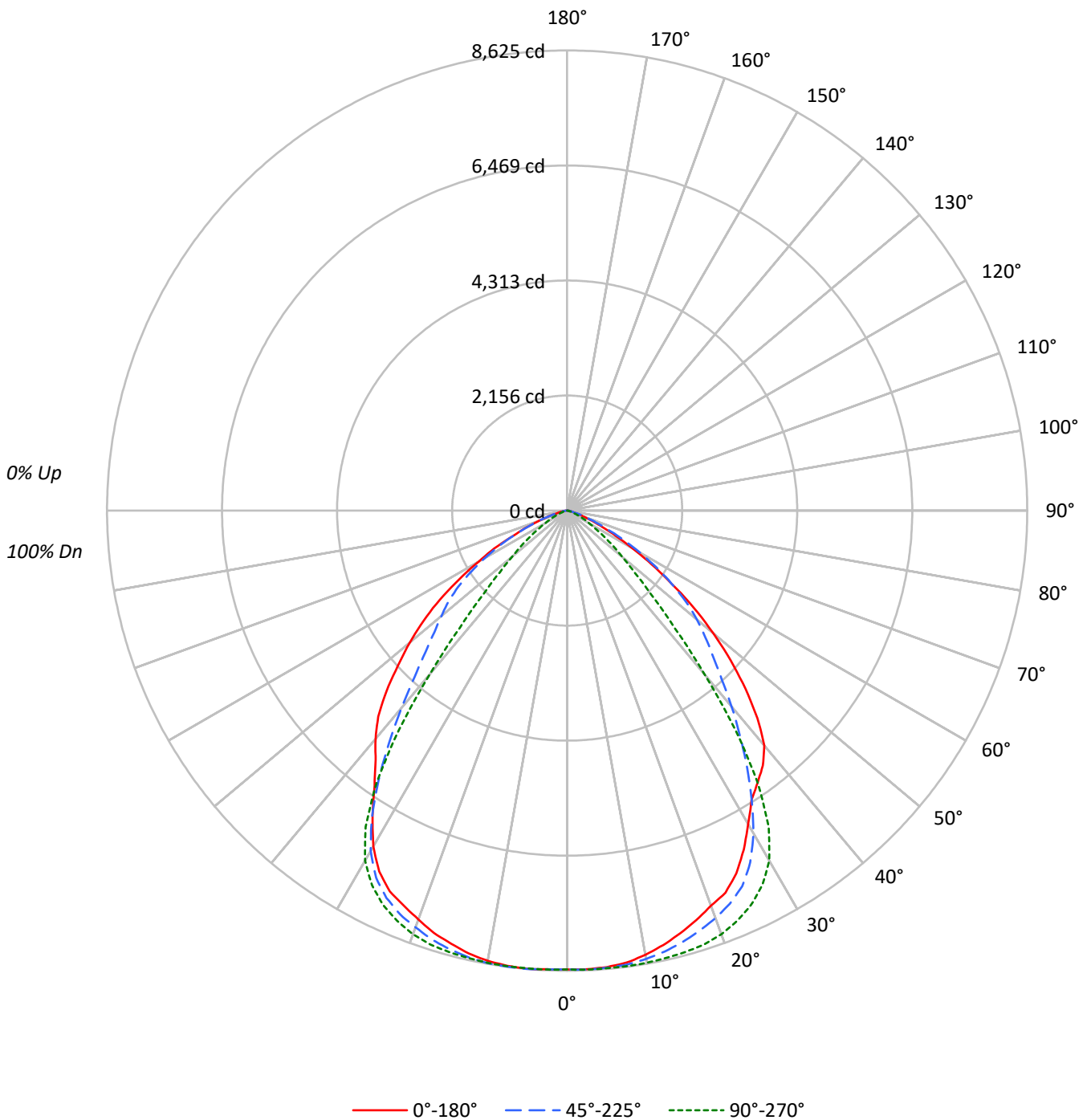
Input Watts (W): 158.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P249340

CATALOG NUMBER: LSR8B150D010 EC8B150850 8LBDW0GPH

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°	265248	265248	265248
5°	265831	266546	266834
10°	264712	269484	268328
15°	261778	273424	268268
20°	258637	277270	267576
25°	255279	277589	267848
30°	241510	269785	258768
35°	234297	234467	236906
40°	231396	161326	224891
45°	206184	96852	209001
50°	171440	64456	184729
55°	128581	44434	156629
60°	87137	29609	118177
65°	52557	19204	81188
70°	29140	10413	49948
75°	13201	4396	25854
80°	11472	4919	18042
85°	13055	6510	17973



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CATALOG NUMBER: LSR8B150D010 EC8B150850 8LBDW0GPH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	820.9	5.0
10°-20°	2384.1	14.6
20°-30°	3618.6	22.2
30°-40°	3800.6	23.3
40°-50°	2849.4	17.5
50°-60°	1828.2	11.2
60°-70°	782.1	4.8
70°-80°	184.8	1.1
80°-90°	34.4	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°	6823.5	41.9
0°-40°	10624.1	65.2
0°-60°	15301.8	93.9
0°-90°	16303.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16303.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	8602	8602	8602	8602	8602	
5°	8588	8602	8611	8625	8620	816
15°	8200	8371	8565	8510	8403	2313
25°	7503	7766	8159	8011	7872	3428
35°	6224	5878	6228	6155	6293	3906
45°	4728	3864	2221	3754	4793	3621
55°	2392	2392	826	2493	2913	2169
65°	720	850	263	1094	1113	769
75°	111	129	37	222	217	161
85°	37	23	18	37	51	39
90°	0	0	0	0	0	



TEST NUMBER: P249340

CATALOG NUMBER: LSR8B150D010 EC8B150850 8LBDW0GPH

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	8601.8	8601.8	8601.8	8601.8	8601.8	8601.8	8601.8	8601.8	8601.8	8601.8	8601.8
2.5°	8606.4	8615.7	8611.0	8611.0	8606.4	8611.0	8611.0	8620.3	8620.3	8611.0	8606.4
5°	8587.9	8597.2	8597.2	8587.9	8587.9	8611.0	8597.2	8606.4	8606.4	8601.8	8601.8
7.5°	8546.4	8546.4	8564.8	8551.1	8551.1	8564.8	8560.2	8569.5	8578.7	8583.4	8583.4
10°	8454.0	8463.3	8467.9	8467.9	8472.5	8486.3	8495.6	8514.1	8523.3	8532.5	8537.2
12.5°	8338.7	8352.4	8357.1	8352.4	8366.3	8384.8	8407.9	8431.0	8444.9	8463.3	8477.2
15°	8200.0	8200.0	8209.3	8223.2	8232.5	8260.1	8283.2	8310.9	8347.8	8371.0	8394.0
17.5°	8047.8	8057.0	8070.8	8070.8	8089.3	8135.4	8149.3	8190.9	8232.5	8255.5	8301.7
20°	7881.6	7890.7	7904.6	7913.9	7936.9	7973.9	8001.5	8038.5	8084.7	8126.3	8172.4
22.5°	7752.2	7733.8	7743.0	7752.2	7775.4	7807.7	7840.0	7886.1	7932.3	7973.9	8020.1
25°	7502.9	7507.5	7521.4	7530.6	7558.3	7586.0	7623.0	7678.3	7719.9	7766.1	7816.8
27.5°	7165.9	7170.5	7193.6	7193.6	7216.6	7262.8	7285.9	7332.1	7387.5	7433.6	7493.7
30°	6782.7	6791.8	6791.8	6810.3	6824.1	6847.3	6870.3	6916.5	6944.2	6985.8	7068.9
32.5°	6431.8	6440.9	6436.3	6431.8	6417.9	6413.2	6408.6	6417.9	6427.1	6440.9	6473.2
35°	6224.0	6200.8	6182.4	6150.1	6113.2	6067.0	6025.4	5970.0	5919.2	5877.6	5831.5
37.5°	6025.4	6020.8	5993.1	5946.9	5873.0	5790.0	5693.0	5572.9	5452.8	5323.6	5199.0
40°	5748.4	5734.5	5711.4	5646.8	5563.7	5462.1	5332.9	5185.1	4991.1	4792.6	4589.5
42.5°	5277.4	5282.0	5254.3	5203.5	5125.1	5028.1	4894.2	4732.6	4524.9	4289.3	4026.2
45°	4728.0	4728.0	4718.7	4677.2	4621.8	4543.3	4441.7	4307.8	4104.7	3864.5	3582.9
47.5°	4155.4	4160.1	4146.2	4137.0	4113.9	4063.1	3989.3	3887.7	3744.5	3513.6	3232.0
50°	3573.7	3573.7	3596.8	3592.1	3592.1	3573.7	3541.4	3481.3	3356.7	3172.0	2908.9
52.5°	2991.9	3001.2	3015.1	3033.5	3056.5	3093.5	3056.5	3028.9	2950.3	2807.2	2581.0
55°	2391.7	2400.9	2424.0	2456.3	2484.1	2521.0	2530.2	2530.2	2488.6	2391.7	2220.9
57.5°	1879.2	1865.3	1883.9	1911.5	1948.5	1985.4	2013.1	2045.4	2040.8	1976.2	1837.6
60°	1412.9	1417.5	1431.3	1459.1	1486.7	1519.1	1556.0	1583.7	1597.6	1565.3	1477.5
62.5°	1029.7	1029.7	1048.1	1075.7	1089.6	1135.8	1158.9	1172.8	1186.6	1181.9	1126.6
65°	720.3	729.5	738.7	752.6	766.4	794.1	808.0	835.7	844.9	849.6	808.0
67.5°	507.9	494.0	503.3	512.5	526.3	544.9	572.6	572.6	586.3	586.3	558.7
70°	323.2	323.2	327.9	341.6	350.9	355.5	364.8	373.9	387.8	383.2	383.2
72.5°	217.0	212.4	217.0	221.7	226.3	240.1	240.1	244.7	254.0	258.6	240.1
75°	110.8	115.5	124.6	120.1	133.9	124.6	129.2	143.1	138.5	129.2	129.2
77.5°	92.3	92.3	92.3	87.8	96.9	96.9	92.3	101.6	96.9	96.9	92.3
80°	64.6	69.3	64.6	60.0	64.6	60.0	60.0	60.0	60.0	60.0	55.4
82.5°	50.8	41.6	46.2	41.6	46.2	46.2	41.6	36.9	36.9	41.6	36.9
85°	36.9	27.7	32.3	32.3	27.7	27.7	27.7	27.7	27.7	23.0	23.0
87.5°	23.0	13.9	13.9	13.9	18.4	18.4	18.4	13.9	18.4	18.4	9.3
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: P249340

CATALOG NUMBER: LSR8B150D010 EC8B150850 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	8601.8	8601.8	8601.8	8601.8	8601.8	8601.8	8601.8	8601.8	8601.8	8601.8	8601.8
2.5°	8615.7	8611.0	8620.3	8615.7	8615.7	8611.0	8615.7	8611.0	8620.3	8601.8	8606.4
5°	8615.7	8606.4	8611.0	8615.7	8620.3	8611.0	8611.0	8611.0	8620.3	8611.0	8615.7
7.5°	8597.2	8592.5	8606.4	8615.7	8611.0	8606.4	8615.7	8611.0	8620.3	8615.7	8624.8
10°	8560.2	8564.8	8574.1	8587.9	8592.5	8597.2	8606.4	8606.4	8620.3	8601.8	8611.0
12.5°	8504.9	8523.3	8546.4	8555.6	8574.1	8574.1	8583.4	8587.9	8597.2	8592.5	8606.4
15°	8435.6	8458.6	8486.3	8509.5	8532.5	8546.4	8560.2	8564.8	8578.7	8564.8	8569.5
17.5°	8352.4	8380.1	8421.7	8449.4	8486.3	8500.2	8518.6	8527.9	8541.8	8532.5	8537.2
20°	8237.0	8269.4	8315.5	8357.1	8380.1	8412.4	8435.6	8449.4	8458.6	8449.4	8454.0
22.5°	8075.4	8121.6	8181.6	8213.9	8260.1	8287.8	8292.5	8324.8	8347.8	8324.8	8334.0
25°	7886.1	7932.3	7978.5	8047.8	8089.3	8121.6	8154.0	8158.6	8181.6	8177.0	8172.4
27.5°	7572.1	7632.2	7710.6	7766.1	7821.5	7872.3	7909.2	7918.4	7941.6	7932.3	7936.9
30°	7142.7	7207.4	7281.3	7369.0	7447.5	7498.2	7544.5	7576.8	7599.8	7586.0	7581.4
32.5°	6533.3	6597.9	6676.5	6764.1	6856.5	6930.3	6985.8	7027.4	7055.0	7045.8	7022.7
35°	5836.2	5854.6	5905.4	5974.7	6053.1	6131.6	6182.4	6228.5	6260.8	6270.1	6270.1
37.5°	5120.5	5060.5	5023.5	5023.5	5069.6	5101.9	5148.1	5175.8	5226.7	5245.1	5259.0
40°	4427.8	4289.3	4160.1	4063.1	3998.5	3993.9	3993.9	4007.7	4053.9	4113.9	4169.3
42.5°	3809.2	3587.5	3389.0	3208.9	3079.7	3005.8	2973.5	2978.1	3015.1	3070.4	3162.7
45°	3315.1	3038.1	2788.8	2571.8	2396.3	2280.8	2225.5	2220.9	2248.5	2313.2	2414.8
47.5°	2931.9	2636.4	2354.7	2105.4	1916.2	1791.4	1726.8	1708.4	1726.8	1786.8	1906.9
50°	2613.3	2308.6	2017.7	1759.1	1556.0	1426.8	1366.7	1343.6	1366.7	1417.5	1537.5
52.5°	2317.8	2003.8	1731.5	1482.1	1265.1	1154.3	1089.6	1075.7	1089.6	1149.6	1246.7
55°	1976.2	1708.4	1440.5	1191.2	1002.0	891.1	840.3	826.5	840.3	895.8	997.3
57.5°	1639.1	1408.2	1172.8	946.5	784.9	687.9	641.8	623.3	655.6	692.5	812.6
60°	1325.1	1140.5	941.9	743.4	609.5	521.7	484.8	480.1	489.4	535.6	618.7
62.5°	1038.9	886.5	729.5	567.9	457.1	420.2	373.9	369.4	378.6	406.3	471.0
65°	748.0	651.1	531.0	415.5	327.9	277.0	258.6	263.2	272.4	290.9	350.9
67.5°	521.7	452.5	369.4	290.9	226.3	203.1	184.7	180.1	184.7	217.0	249.3
70°	350.9	309.3	249.3	221.7	157.0	124.6	129.2	115.5	133.9	133.9	161.6
72.5°	230.8	203.1	166.2	129.2	110.8	87.8	87.8	83.1	92.3	96.9	120.1
75°	120.1	92.3	92.3	64.6	46.2	23.0	41.6	36.9	32.3	36.9	46.2
77.5°	83.1	69.3	64.6	50.8	46.2	36.9	36.9	36.9	36.9	41.6	46.2
80°	50.8	50.8	36.9	32.3	27.7	23.0	27.7	27.7	27.7	27.7	32.3
82.5°	32.3	27.7	27.7	23.0	23.0	18.4	18.4	18.4	18.4	18.4	27.7
85°	27.7	18.4	18.4	13.9	18.4	32.3	13.9	18.4	18.4	18.4	13.9
87.5°	9.3	13.9	13.9	13.9	9.3	4.6	9.3	13.9	13.9	23.0	18.4
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: P249340

CATALOG NUMBER: LSR8B150D010 EC8B150850 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	8601.8	8601.8	8601.8	8601.8	8601.8	8601.8	8601.8	8601.8	8601.8	8601.8	8601.8
2.5°	8615.7	8620.3	8620.3	8615.7	8615.7	8606.4	8624.8	8611.0	8615.7	8634.1	8620.3
5°	8624.8	8629.5	8629.5	8624.8	8624.8	8624.8	8629.5	8629.5	8624.8	8620.3	8629.5
7.5°	8643.4	8638.7	8638.7	8629.5	8629.5	8620.3	8629.5	8615.7	8624.8	8615.7	8629.5
10°	8620.3	8624.8	8620.3	8615.7	8615.7	8611.0	8611.0	8597.2	8601.8	8587.9	8597.2
12.5°	8606.4	8601.8	8601.8	8592.5	8583.4	8574.1	8569.5	8555.6	8555.6	8523.3	8537.2
15°	8569.5	8574.1	8560.2	8541.8	8532.5	8509.5	8500.2	8481.7	8463.3	8440.2	8444.9
17.5°	8537.2	8523.3	8504.9	8486.3	8449.4	8431.0	8412.4	8384.8	8375.5	8347.8	8338.7
20°	8440.2	8431.0	8407.9	8375.5	8352.4	8310.9	8292.5	8264.8	8241.6	8213.9	8200.0
22.5°	8315.5	8306.2	8278.6	8246.3	8209.3	8190.9	8172.4	8121.6	8098.5	8070.8	8066.2
25°	8158.6	8144.7	8117.0	8080.1	8061.5	8010.8	7992.3	7955.3	7946.2	7918.4	7913.9
27.5°	7918.4	7900.0	7867.7	7821.5	7789.2	7756.8	7738.4	7710.6	7701.5	7673.7	7669.2
30°	7558.3	7535.2	7470.6	7452.2	7396.7	7364.4	7364.4	7327.4	7332.1	7313.6	7313.6
32.5°	6990.4	6953.5	6902.6	6865.7	6828.8	6810.3	6810.3	6796.4	6805.7	6805.7	6815.0
35°	6237.8	6187.1	6159.3	6136.2	6136.2	6154.6	6210.1	6224.0	6251.7	6274.7	6293.3
37.5°	5272.8	5268.2	5300.5	5328.2	5397.5	5476.0	5572.9	5656.1	5734.5	5790.0	5845.3
40°	4229.3	4344.8	4437.1	4566.4	4672.5	4824.9	5000.4	5143.5	5277.4	5374.4	5476.0
42.5°	3301.2	3449.0	3643.0	3832.2	4021.6	4229.3	4460.2	4658.7	4834.2	4968.1	5074.3
45°	2571.8	2774.9	3010.4	3250.5	3495.2	3753.8	3993.9	4197.0	4381.7	4520.2	4626.4
47.5°	2073.1	2294.7	2562.5	2825.7	3102.7	3375.1	3643.0	3818.4	3970.7	4081.6	4178.6
50°	1712.9	1948.5	2230.1	2530.2	2807.2	3079.7	3310.5	3481.3	3606.0	3703.0	3763.0
52.5°	1431.3	1680.6	1980.8	2280.8	2557.9	2807.2	3015.1	3144.3	3245.9	3315.1	3370.5
55°	1181.9	1422.1	1703.8	1985.4	2257.8	2493.2	2664.1	2761.1	2839.5	2881.1	2913.4
57.5°	965.0	1186.6	1445.2	1703.8	1939.2	2133.2	2267.1	2364.0	2400.9	2433.2	2428.6
60°	757.3	965.0	1200.5	1422.1	1625.3	1782.2	1879.2	1934.6	1962.3	1976.2	1966.9
62.5°	595.6	784.9	965.0	1158.9	1306.7	1440.5	1533.0	1533.0	1546.7	1551.4	1565.3
65°	443.2	586.3	743.4	886.5	1006.5	1094.3	1145.1	1158.9	1177.4	1172.8	1163.5
67.5°	327.9	434.0	549.4	655.6	738.7	794.1	831.0	863.5	858.8	849.6	844.9
70°	226.3	295.5	397.1	461.7	521.7	577.2	586.3	591.0	595.6	600.2	591.0
72.5°	157.0	207.8	263.2	318.6	355.5	378.6	401.7	406.3	406.3	406.3	401.7
75°	78.5	106.2	157.0	180.1	212.4	221.7	240.1	240.1	254.0	235.4	230.8
77.5°	69.3	83.1	110.8	129.2	143.1	157.0	161.6	175.4	170.8	161.6	166.2
80°	41.6	50.8	69.3	78.5	96.9	101.6	106.2	110.8	106.2	110.8	110.8
82.5°	32.3	36.9	46.2	46.2	60.0	60.0	64.6	64.6	69.3	69.3	69.3
85°	18.4	32.3	27.7	55.4	36.9	36.9	46.2	55.4	46.2	46.2	55.4
87.5°	18.4	18.4	13.9	18.4	18.4	18.4	23.0	27.7	27.7	32.3	27.7
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: P249340

CATALOG NUMBER: LSR8B150D010 EC8B150850 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	8601.8	8601.8	8601.8	8601.8
2.5°	8615.7	8624.8	8611.0	8606.4
5°	8629.5	8629.5	8620.3	8620.3
7.5°	8629.5	8629.5	8615.7	8606.4
10°	8592.5	8592.5	8578.7	8569.5
12.5°	8523.3	8523.3	8518.6	8504.9
15°	8435.6	8435.6	8417.1	8403.3
17.5°	8315.5	8324.8	8301.7	8301.7
20°	8186.3	8181.6	8163.2	8154.0
22.5°	8052.4	8043.1	8038.5	8010.8
25°	7909.2	7900.0	7886.1	7872.3
27.5°	7664.5	7659.9	7646.0	7627.6
30°	7290.5	7285.9	7267.4	7267.4
32.5°	6805.7	6801.1	6782.7	6787.3
35°	6302.4	6320.9	6311.7	6293.3
37.5°	5882.3	5896.2	5905.4	5896.2
40°	5531.4	5572.9	5577.6	5586.8
42.5°	5157.4	5212.8	5231.3	5240.4
45°	4709.5	4760.3	4801.9	4792.6
47.5°	4252.4	4289.3	4326.3	4298.6
50°	3813.8	3836.8	3850.7	3850.7
52.5°	3398.3	3398.3	3393.6	3398.3
55°	2922.7	2922.7	2904.2	2913.4
57.5°	2424.0	2433.2	2419.4	2396.3
60°	1962.3	1939.2	1929.9	1916.2
62.5°	1528.3	1528.3	1496.0	1537.5
65°	1145.1	1131.2	1117.3	1112.7
67.5°	831.0	826.5	812.6	808.0
70°	586.3	567.9	563.3	554.0
72.5°	392.5	392.5	383.2	383.2
75°	240.1	217.0	212.4	217.0
77.5°	166.2	161.6	161.6	157.0
80°	110.8	106.2	115.5	101.6
82.5°	69.3	73.9	69.3	73.9
85°	46.2	55.4	50.8	50.8
87.5°	27.7	27.7	27.7	27.7
90°	0.0	0.0	0.0	0.0

(END OF REPORT)