

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: P249385

Luminaire Tested: **LSR8B150D010 EC8B150950 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249385
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 EC8B150950 8LBDW0GPH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 5000 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14842.0 lumens
Efficiency: N/A
Efficacy: 93.6 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

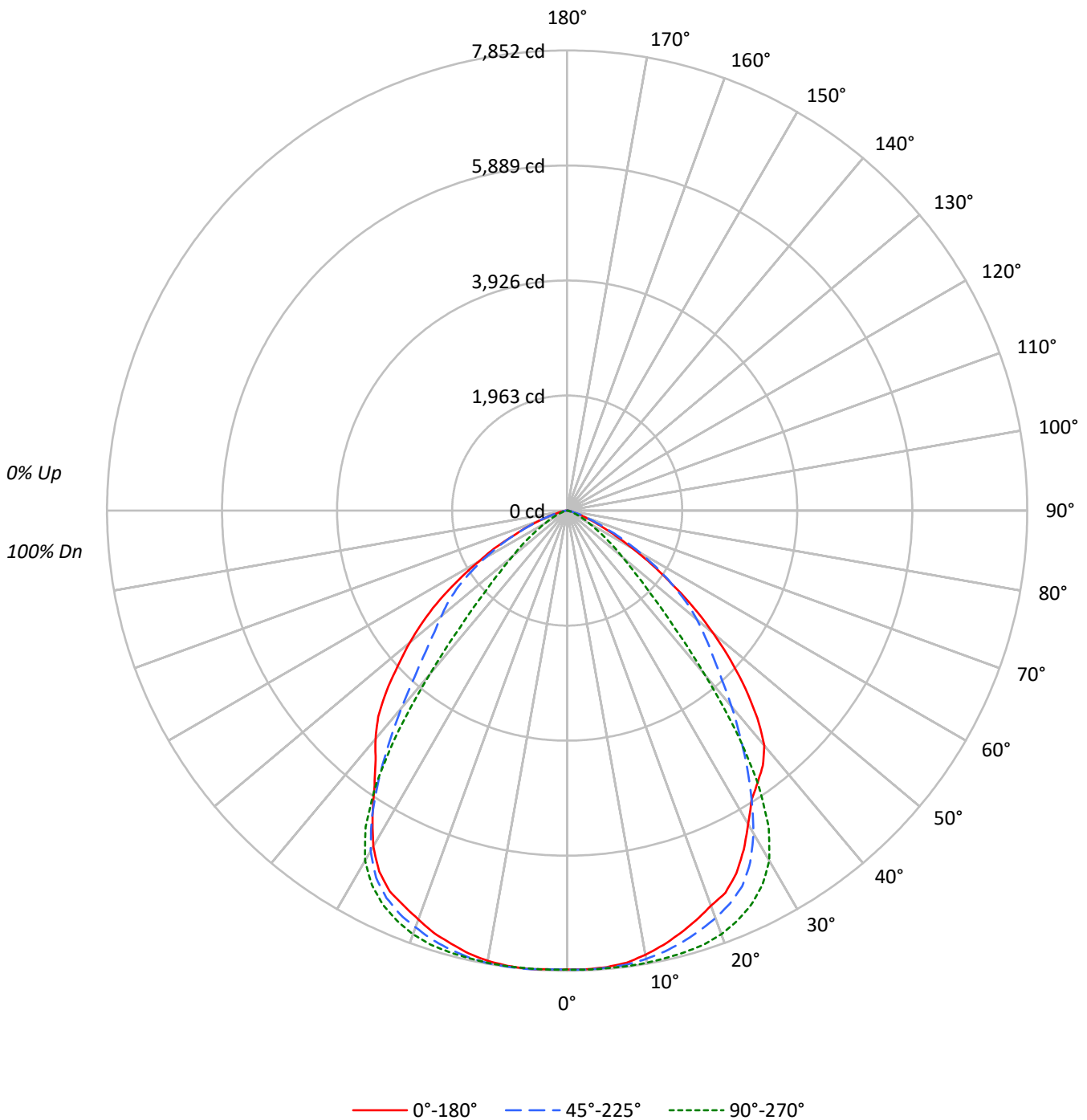
Input Watts (W): 158.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P249385

CATALOG NUMBER: LSR8B150D010 EC8B150950 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°	241476	241476	241476
5°	242008	242662	242922
10°	240990	245333	244281
15°	238320	248922	244226
20°	235460	252422	243595
25°	232402	252711	243844
30°	219864	245608	235581
35°	213300	213458	215675
40°	210657	146867	204740
45°	187707	88169	190271
50°	156079	58680	168178
55°	117055	40456	142592
60°	79323	26957	107582
65°	47850	17482	73913
70°	26534	9476	45476
75°	12021	4003	23543
80°	10442	4475	16426
85°	11888	5944	16381



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CATALOG NUMBER: LSR8B150D010 EC8B150950 8LBDW0GPH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	747.4	5.0
10°-20°	2170.4	14.6
20°-30°	3294.3	22.2
30°-40°	3460.0	23.3
40°-50°	2594.1	17.5
50°-60°	1664.4	11.2
60°-70°	712.0	4.8
70°-80°	168.2	1.1
80°-90°	31.3	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°	6212.0	41.9
0°-40°	9672.0	65.2
0°-60°	13930.5	93.9
0°-90°	14842.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	14842.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	7831	7831	7831	7831	7831	
5°	7818	7831	7839	7852	7848	743
15°	7465	7621	7797	7747	7650	2106
25°	6830	7070	7427	7293	7167	3120
35°	5666	5351	5670	5603	5729	3556
45°	4304	3518	2022	3417	4363	3296
55°	2177	2177	752	2270	2652	1975
65°	656	773	240	996	1013	700
75°	101	118	34	202	198	147
85°	34	21	17	34	46	35
90°	0	0	0	0	0	



TEST NUMBER: P249385

CATALOG NUMBER: LSR8B150D010 EC8B150950 8LBDW0GPH

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	7830.9	7830.9	7830.9	7830.9	7830.9	7830.9	7830.9	7830.9	7830.9	7830.9	7830.9
2.5°	7835.1	7843.6	7839.4	7839.4	7835.1	7839.4	7839.4	7847.8	7847.8	7839.4	7835.1
5°	7818.3	7826.7	7826.7	7818.3	7818.3	7839.4	7826.7	7835.1	7835.1	7830.9	7830.9
7.5°	7780.5	7780.5	7797.3	7784.7	7784.7	7797.3	7793.1	7801.5	7809.9	7814.2	7814.2
10°	7696.4	7704.8	7709.1	7709.1	7713.3	7725.8	7734.3	7751.1	7759.5	7767.9	7772.1
12.5°	7591.4	7603.9	7608.2	7603.9	7616.6	7633.4	7654.4	7675.4	7688.1	7704.8	7717.5
15°	7465.2	7465.2	7473.6	7486.3	7494.7	7519.9	7540.9	7566.1	7599.7	7620.8	7641.8
17.5°	7326.6	7335.0	7347.5	7347.5	7364.4	7406.4	7419.0	7456.9	7494.7	7515.7	7557.8
20°	7175.3	7183.6	7196.2	7204.7	7225.7	7259.3	7284.5	7318.1	7360.2	7398.0	7440.0
22.5°	7057.5	7040.7	7049.1	7057.5	7078.6	7108.0	7137.4	7179.4	7221.4	7259.3	7301.4
25°	6830.5	6834.7	6847.4	6855.7	6881.0	6906.2	6939.8	6990.2	7028.1	7070.1	7116.3
27.5°	6523.7	6527.9	6548.9	6548.9	6569.9	6611.9	6632.9	6675.0	6725.5	6767.5	6822.2
30°	6174.8	6183.2	6183.2	6200.0	6212.6	6233.7	6254.6	6296.7	6321.9	6359.8	6435.5
32.5°	5855.4	5863.7	5859.5	5855.4	5842.7	5838.5	5834.3	5842.7	5851.2	5863.7	5893.1
35°	5666.2	5645.2	5628.4	5599.0	5565.3	5523.3	5485.4	5435.0	5388.7	5350.9	5308.9
37.5°	5485.4	5481.2	5456.0	5413.9	5346.7	5271.1	5182.8	5073.5	4964.2	4846.5	4733.1
40°	5233.2	5220.6	5199.6	5140.8	5065.1	4972.6	4855.0	4720.4	4543.8	4363.1	4178.2
42.5°	4804.5	4808.7	4783.5	4737.2	4665.8	4577.5	4455.6	4308.5	4119.4	3904.9	3665.4
45°	4304.3	4304.3	4295.9	4258.0	4207.6	4136.1	4043.7	3921.8	3736.9	3518.2	3261.8
47.5°	3783.0	3787.3	3774.6	3766.3	3745.2	3699.0	3631.8	3539.3	3409.0	3198.8	2942.3
50°	3253.5	3253.5	3274.5	3270.2	3270.2	3253.5	3224.1	3169.3	3055.9	2887.7	2648.2
52.5°	2723.8	2732.2	2744.9	2761.6	2782.6	2816.3	2782.6	2757.4	2685.9	2555.6	2349.7
55°	2177.3	2185.8	2206.8	2236.2	2261.5	2295.1	2303.4	2303.4	2265.6	2177.3	2021.8
57.5°	1710.8	1698.2	1715.0	1740.2	1773.9	1807.5	1832.7	1862.1	1857.9	1799.1	1673.0
60°	1286.2	1290.5	1303.0	1328.3	1353.5	1382.9	1416.6	1441.8	1454.4	1425.0	1345.1
62.5°	937.4	937.4	954.1	979.3	992.0	1034.1	1055.0	1067.7	1080.2	1076.0	1025.6
65°	655.8	664.1	672.5	685.2	697.7	722.9	735.6	760.8	769.2	773.4	735.6
67.5°	462.4	449.8	458.2	466.5	479.2	496.0	521.2	521.2	533.8	533.8	508.6
70°	294.3	294.3	298.5	311.0	319.5	323.7	332.1	340.4	353.1	348.9	348.9
72.5°	197.6	193.4	197.6	201.8	206.0	218.6	218.6	222.8	231.2	235.4	218.6
75°	100.9	105.1	113.4	109.3	121.9	113.4	117.7	130.3	126.1	117.7	117.7
77.5°	84.0	84.0	84.0	79.9	88.2	88.2	84.0	92.5	88.2	88.2	84.0
80°	58.8	63.0	58.8	54.6	58.8	54.6	54.6	54.6	54.6	54.6	50.4
82.5°	46.3	37.8	42.1	37.8	42.1	42.1	37.8	33.6	33.6	37.8	33.6
85°	33.6	25.2	29.4	29.4	25.2	25.2	25.2	25.2	25.2	21.0	21.0
87.5°	21.0	12.6	12.6	12.6	16.8	16.8	16.8	12.6	16.8	16.8	8.4
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: P249385

CATALOG NUMBER: LSR8B150D010 EC8B150950 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	7830.9	7830.9	7830.9	7830.9	7830.9	7830.9	7830.9	7830.9	7830.9	7830.9	7830.9
2.5°	7843.6	7839.4	7847.8	7843.6	7843.6	7839.4	7843.6	7839.4	7847.8	7830.9	7835.1
5°	7843.6	7835.1	7839.4	7843.6	7847.8	7839.4	7839.4	7839.4	7847.8	7839.4	7843.6
7.5°	7826.7	7822.5	7835.1	7843.6	7839.4	7835.1	7843.6	7839.4	7847.8	7843.6	7851.9
10°	7793.1	7797.3	7805.7	7818.3	7822.5	7826.7	7835.1	7835.1	7847.8	7830.9	7839.4
12.5°	7742.7	7759.5	7780.5	7788.9	7805.7	7805.7	7814.2	7818.3	7826.7	7822.5	7835.1
15°	7679.6	7700.6	7725.8	7746.9	7767.9	7780.5	7793.1	7797.3	7809.9	7797.3	7801.5
17.5°	7603.9	7629.1	7667.0	7692.2	7725.8	7738.5	7755.2	7763.7	7776.3	7767.9	7772.1
20°	7498.8	7528.3	7570.3	7608.2	7629.1	7658.6	7679.6	7692.2	7700.6	7692.2	7696.4
22.5°	7351.8	7393.8	7448.4	7477.8	7519.9	7545.1	7549.3	7578.7	7599.7	7578.7	7587.2
25°	7179.4	7221.4	7263.5	7326.6	7364.4	7393.8	7423.2	7427.4	7448.4	7444.2	7440.0
27.5°	6893.6	6948.3	7019.6	7070.1	7120.5	7166.8	7200.5	7208.8	7229.9	7221.4	7225.7
30°	6502.6	6561.5	6628.8	6708.6	6780.1	6826.3	6868.4	6897.8	6918.8	6906.2	6902.0
32.5°	5947.8	6006.7	6078.2	6158.0	6242.1	6309.3	6359.8	6397.6	6422.8	6414.4	6393.4
35°	5313.1	5329.9	5376.2	5439.2	5510.6	5582.1	5628.4	5670.4	5699.8	5708.2	5708.2
37.5°	4661.6	4607.0	4573.3	4573.3	4615.3	4644.7	4686.8	4712.0	4758.3	4775.0	4787.7
40°	4031.0	3904.9	3787.3	3699.0	3640.2	3636.0	3636.0	3648.5	3690.6	3745.2	3795.7
42.5°	3467.8	3266.0	3085.3	2921.4	2803.7	2736.4	2707.0	2711.2	2744.9	2795.3	2879.3
45°	3018.0	2765.9	2538.9	2341.3	2181.6	2076.4	2026.1	2021.8	2047.0	2105.9	2198.4
47.5°	2669.2	2400.1	2143.7	1916.7	1744.4	1630.9	1572.1	1555.3	1572.1	1626.7	1736.0
50°	2379.1	2101.7	1836.9	1601.5	1416.6	1298.9	1244.2	1223.2	1244.2	1290.5	1399.7
52.5°	2110.1	1824.3	1576.3	1349.3	1151.7	1050.8	992.0	979.3	992.0	1046.6	1135.0
55°	1799.1	1555.3	1311.4	1084.5	912.2	811.3	765.0	752.5	765.0	815.5	908.0
57.5°	1492.3	1282.0	1067.7	861.7	714.6	626.3	584.3	567.4	596.8	630.5	739.8
60°	1206.3	1038.3	857.5	676.8	554.9	475.0	441.3	437.1	445.5	487.6	563.2
62.5°	945.8	807.1	664.1	517.0	416.1	382.5	340.4	336.3	344.7	369.9	428.8
65°	681.0	592.7	483.4	378.3	298.5	252.2	235.4	239.6	248.0	264.8	319.5
67.5°	475.0	411.9	336.3	264.8	206.0	184.9	168.2	163.9	168.2	197.6	227.0
70°	319.5	281.6	227.0	201.8	143.0	113.4	117.7	105.1	121.9	121.9	147.1
72.5°	210.1	184.9	151.3	117.7	100.9	79.9	79.9	75.7	84.0	88.2	109.3
75°	109.3	84.0	84.0	58.8	42.1	21.0	37.8	33.6	29.4	33.6	42.1
77.5°	75.7	63.0	58.8	46.3	42.1	33.6	33.6	33.6	33.6	37.8	42.1
80°	46.3	46.3	33.6	29.4	25.2	21.0	25.2	25.2	25.2	25.2	29.4
82.5°	29.4	25.2	25.2	21.0	21.0	16.8	16.8	16.8	16.8	16.8	25.2
85°	25.2	16.8	16.8	12.6	16.8	29.4	12.6	16.8	16.8	16.8	12.6
87.5°	8.4	12.6	12.6	12.6	8.4	4.2	8.4	12.6	12.6	21.0	16.8
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: P249385

CATALOG NUMBER: LSR8B150D010 EC8B150950 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	7830.9	7830.9	7830.9	7830.9	7830.9	7830.9	7830.9	7830.9	7830.9	7830.9	7830.9
2.5°	7843.6	7847.8	7847.8	7843.6	7843.6	7835.1	7851.9	7839.4	7843.6	7860.3	7847.8
5°	7851.9	7856.1	7856.1	7851.9	7851.9	7851.9	7856.1	7856.1	7851.9	7847.8	7856.1
7.5°	7868.8	7864.6	7864.6	7856.1	7856.1	7847.8	7856.1	7843.6	7851.9	7843.6	7856.1
10°	7847.8	7851.9	7847.8	7843.6	7843.6	7839.4	7839.4	7826.7	7830.9	7818.3	7826.7
12.5°	7835.1	7830.9	7830.9	7822.5	7814.2	7805.7	7801.5	7788.9	7788.9	7759.5	7772.1
15°	7801.5	7805.7	7793.1	7776.3	7767.9	7746.9	7738.5	7721.6	7704.8	7683.9	7688.1
17.5°	7772.1	7759.5	7742.7	7725.8	7692.2	7675.4	7658.6	7633.4	7624.9	7599.7	7591.4
20°	7683.9	7675.4	7654.4	7624.9	7603.9	7566.1	7549.3	7524.1	7503.0	7477.8	7465.2
22.5°	7570.3	7561.9	7536.7	7507.3	7473.6	7456.9	7440.0	7393.8	7372.7	7347.5	7343.3
25°	7427.4	7414.8	7389.6	7356.0	7339.1	7292.9	7276.1	7242.4	7234.1	7208.8	7204.7
27.5°	7208.8	7192.0	7162.6	7120.5	7091.1	7061.7	7044.9	7019.6	7011.3	6986.0	6981.9
30°	6881.0	6859.9	6801.1	6784.3	6733.8	6704.4	6704.4	6670.8	6675.0	6658.2	6658.2
32.5°	6364.0	6330.3	6284.1	6250.4	6216.8	6200.0	6200.0	6187.4	6195.8	6195.8	6204.2
35°	5678.8	5632.6	5607.3	5586.3	5586.3	5603.1	5653.6	5666.2	5691.4	5712.4	5729.3
37.5°	4800.2	4796.1	4825.5	4850.7	4913.8	4985.3	5073.5	5149.2	5220.6	5271.1	5321.5
40°	3850.3	3955.4	4039.5	4157.2	4253.8	4392.5	4552.3	4682.6	4804.5	4892.8	4985.3
42.5°	3005.4	3139.9	3316.5	3488.8	3661.2	3850.3	4060.5	4241.2	4401.0	4522.8	4619.5
45°	2341.3	2526.2	2740.7	2959.2	3182.0	3417.4	3636.0	3820.9	3989.1	4115.1	4211.8
47.5°	1887.3	2089.1	2332.9	2572.5	2824.7	3072.7	3316.5	3476.2	3614.9	3715.8	3804.1
50°	1559.4	1773.9	2030.3	2303.4	2555.6	2803.7	3013.8	3169.3	3282.9	3371.1	3425.7
52.5°	1303.0	1530.0	1803.3	2076.4	2328.6	2555.6	2744.9	2862.5	2955.0	3018.0	3068.4
55°	1076.0	1294.7	1551.1	1807.5	2055.5	2269.8	2425.3	2513.7	2585.0	2622.9	2652.3
57.5°	878.5	1080.2	1315.7	1551.1	1765.4	1942.0	2063.9	2152.1	2185.8	2215.2	2211.0
60°	689.4	878.5	1092.9	1294.7	1479.6	1622.5	1710.8	1761.2	1786.4	1799.1	1790.6
62.5°	542.2	714.6	878.5	1055.0	1189.6	1311.4	1395.6	1395.6	1408.1	1412.3	1425.0
65°	403.5	533.8	676.8	807.1	916.3	996.2	1042.5	1055.0	1071.9	1067.7	1059.3
67.5°	298.5	395.1	500.2	596.8	672.5	722.9	756.6	786.1	781.9	773.4	769.2
70°	206.0	269.1	361.5	420.3	475.0	525.5	533.8	538.0	542.2	546.4	538.0
72.5°	143.0	189.1	239.6	290.0	323.7	344.7	365.7	369.9	369.9	369.9	365.7
75°	71.5	96.7	143.0	163.9	193.4	201.8	218.6	218.6	231.2	214.3	210.1
77.5°	63.0	75.7	100.9	117.7	130.3	143.0	147.1	159.7	155.5	147.1	151.3
80°	37.8	46.3	63.0	71.5	88.2	92.5	96.7	100.9	96.7	100.9	100.9
82.5°	29.4	33.6	42.1	42.1	54.6	54.6	58.8	58.8	63.0	63.0	63.0
85°	16.8	29.4	25.2	50.4	33.6	33.6	42.1	50.4	42.1	42.1	50.4
87.5°	16.8	16.8	12.6	16.8	16.8	16.8	21.0	25.2	25.2	29.4	25.2
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: P249385

CATALOG NUMBER: LSR8B150D010 EC8B150950 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	7830.9	7830.9	7830.9	7830.9
2.5°	7843.6	7851.9	7839.4	7835.1
5°	7856.1	7856.1	7847.8	7847.8
7.5°	7856.1	7856.1	7843.6	7835.1
10°	7822.5	7822.5	7809.9	7801.5
12.5°	7759.5	7759.5	7755.2	7742.7
15°	7679.6	7679.6	7662.8	7650.2
17.5°	7570.3	7578.7	7557.8	7557.8
20°	7452.6	7448.4	7431.7	7423.2
22.5°	7330.8	7322.3	7318.1	7292.9
25°	7200.5	7192.0	7179.4	7166.8
27.5°	6977.7	6973.5	6960.8	6944.1
30°	6637.1	6632.9	6616.2	6616.2
32.5°	6195.8	6191.6	6174.8	6179.0
35°	5737.6	5754.5	5746.0	5729.3
37.5°	5355.1	5367.8	5376.2	5367.8
40°	5035.7	5073.5	5077.7	5086.2
42.5°	4695.2	4745.6	4762.5	4770.8
45°	4287.4	4333.7	4371.6	4363.1
47.5°	3871.3	3904.9	3938.6	3913.4
50°	3472.0	3493.0	3505.7	3505.7
52.5°	3093.7	3093.7	3089.5	3093.7
55°	2660.7	2660.7	2644.0	2652.3
57.5°	2206.8	2215.2	2202.5	2181.6
60°	1786.4	1765.4	1757.0	1744.4
62.5°	1391.4	1391.4	1361.9	1399.7
65°	1042.5	1029.8	1017.2	1013.0
67.5°	756.6	752.5	739.8	735.6
70°	533.8	517.0	512.8	504.4
72.5°	357.3	357.3	348.9	348.9
75°	218.6	197.6	193.4	197.6
77.5°	151.3	147.1	147.1	143.0
80°	100.9	96.7	105.1	92.5
82.5°	63.0	67.3	63.0	67.3
85°	42.1	50.4	46.3	46.3
87.5°	25.2	25.2	25.2	25.2
90°	0.0	0.0	0.0	0.0

(END OF REPORT)