

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: P249312

Luminaire Tested: **LSR8B120D010 EC8B120830 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249312
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: LSR8B120D010 EC8B120830 8LBDW0GPH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3000 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11753.0 lumens
Efficiency: N/A
Efficacy: 99.3 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

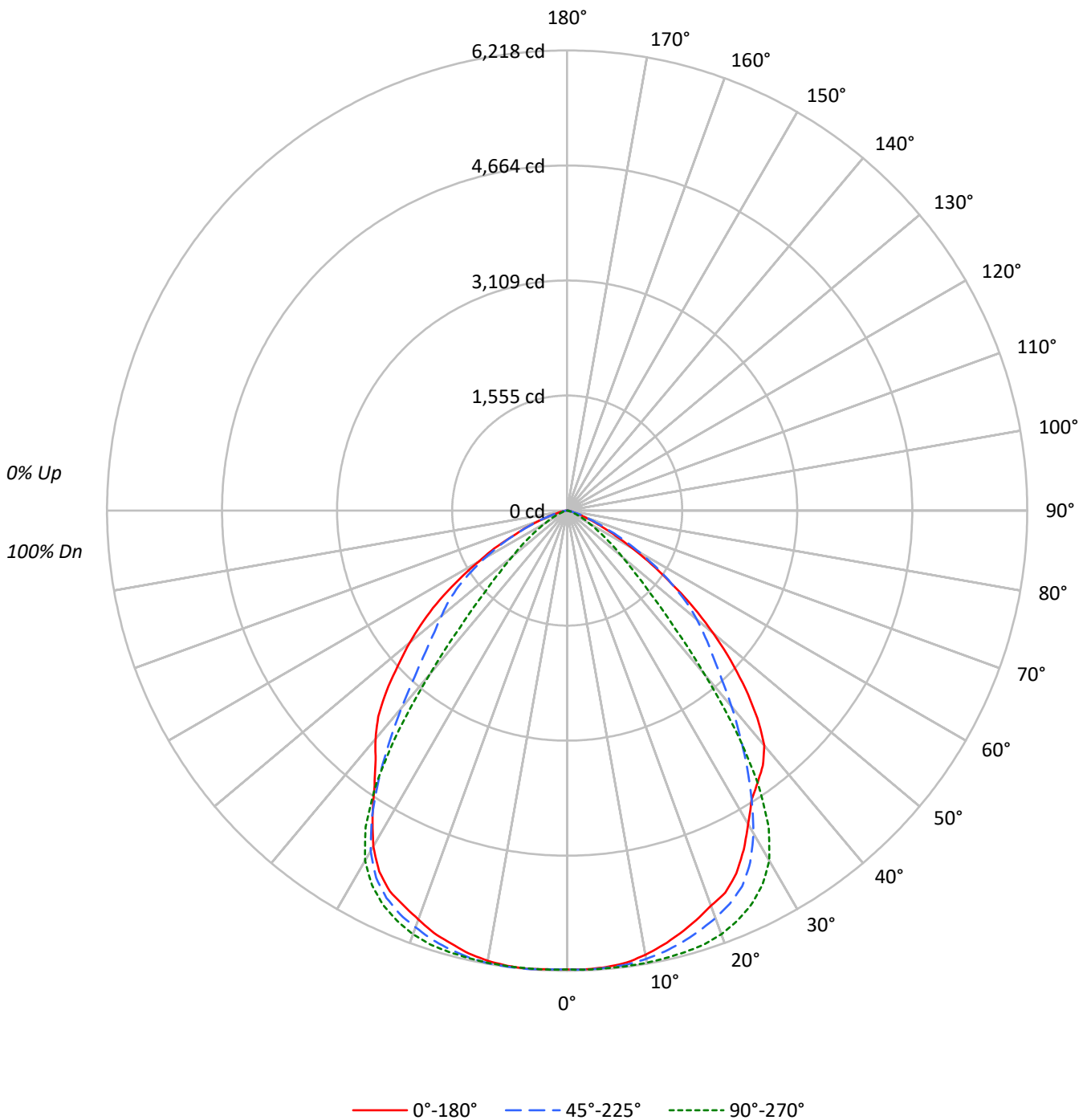
Input Watts (W): 118.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	191219	191219	191219
5°	191640	192157	192364
10°	190834	194275	193439
15°	188719	197115	193396
20°	186453	199885	192898
25°	184033	200116	193094
30°	174106	194491	186551
35°	168906	169030	170788
40°	166816	116302	162127
45°	148642	69818	150670
50°	123592	46466	133172
55°	92696	32031	112915
60°	62814	21345	85195
65°	37891	13849	58532
70°	21007	7501	36010
75°	9519	3169	18646
80°	8275	3552	12999
85°	9411	4706	12949



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	591.8	5.0
10°-20°	1718.7	14.6
20°-30°	2608.7	22.2
30°-40°	2739.9	23.3
40°-50°	2054.2	17.5
50°-60°	1318.0	11.2
60°-70°	563.8	4.8
70°-80°	133.2	1.1
80°-90°	24.8	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°	4919.2	41.9
0°-40°	7659.0	65.2
0°-60°	11031.2	93.9
0°-90°	11753.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11753.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	6201	6201	6201	6201	6201	
5°	6191	6201	6208	6218	6214	588
15°	5912	6035	6174	6135	6058	1667
25°	5409	5599	5882	5775	5675	2471
35°	4487	4237	4490	4437	4537	2816
45°	3408	2786	1601	2706	3455	2610
55°	1724	1724	596	1797	2100	1564
65°	519	612	190	789	802	554
75°	80	93	27	160	156	116
85°	27	17	13	27	37	28
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°	6201.1	6201.1	6201.1	6201.1	6201.1	6201.1	6201.1	6201.1	6201.1	6201.1	6201.1
2.5°	6204.5	6211.1	6207.8	6207.8	6204.5	6207.8	6207.8	6214.5	6214.5	6207.8	6204.5
5°	6191.1	6197.8	6197.8	6191.1	6191.1	6207.8	6197.8	6204.5	6204.5	6201.1	6201.1
7.5°	6161.2	6161.2	6174.5	6164.5	6164.5	6174.5	6171.1	6177.8	6184.5	6187.8	6187.8
10°	6094.6	6101.3	6104.6	6104.6	6107.9	6117.9	6124.6	6137.9	6144.5	6151.2	6154.5
12.5°	6011.4	6021.4	6024.7	6021.4	6031.4	6044.7	6061.4	6078.0	6088.0	6101.3	6111.3
15°	5911.5	5911.5	5918.2	5928.2	5934.9	5954.8	5971.4	5991.4	6018.0	6034.7	6051.3
17.5°	5801.7	5808.4	5818.3	5818.3	5831.7	5864.9	5874.9	5904.9	5934.9	5951.5	5984.8
20°	5681.9	5688.5	5698.5	5705.2	5721.8	5748.4	5768.4	5795.0	5828.3	5858.3	5891.5
22.5°	5588.7	5575.4	5582.0	5588.7	5605.3	5628.6	5651.9	5685.2	5718.5	5748.4	5781.8
25°	5408.9	5412.2	5422.3	5428.9	5448.9	5468.8	5495.5	5535.4	5565.4	5598.7	5635.2
27.5°	5166.0	5169.3	5185.9	5185.9	5202.5	5235.8	5252.4	5285.8	5325.7	5359.0	5402.3
30°	4889.7	4896.3	4896.3	4909.6	4919.6	4936.3	4952.9	4986.2	5006.2	5036.1	5096.1
32.5°	4636.7	4643.3	4640.0	4636.7	4626.7	4623.4	4620.0	4626.7	4633.4	4643.3	4666.6
35°	4486.9	4470.3	4457.0	4433.7	4407.0	4373.7	4343.8	4303.9	4267.2	4237.2	4204.0
37.5°	4343.8	4340.4	4320.5	4287.2	4233.9	4174.0	4104.2	4017.6	3931.0	3837.8	3748.0
40°	4144.1	4134.1	4117.4	4070.8	4010.9	3937.7	3844.5	3738.0	3598.1	3455.0	3308.6
42.5°	3804.5	3807.9	3787.9	3751.3	3694.7	3624.8	3528.3	3411.8	3262.0	3092.2	2902.5
45°	3408.5	3408.5	3401.8	3371.8	3331.9	3275.3	3202.1	3105.6	2959.1	2786.0	2582.9
47.5°	2995.7	2999.0	2989.0	2982.4	2965.7	2929.2	2875.9	2802.7	2699.5	2533.0	2330.0
50°	2576.3	2576.3	2593.0	2589.6	2589.6	2576.3	2553.0	2509.7	2419.9	2286.7	2097.0
52.5°	2156.9	2163.6	2173.6	2186.9	2203.5	2230.1	2203.5	2183.5	2126.9	2023.7	1860.7
55°	1724.2	1730.9	1747.5	1770.8	1790.8	1817.4	1824.0	1824.0	1794.1	1724.2	1601.0
57.5°	1354.7	1344.7	1358.1	1378.0	1404.7	1431.3	1451.3	1474.6	1471.2	1424.6	1324.8
60°	1018.5	1021.9	1031.8	1051.9	1071.8	1095.1	1121.7	1141.7	1151.7	1128.4	1065.1
62.5°	742.3	742.3	755.6	775.5	785.5	818.8	835.5	845.5	855.4	852.1	812.2
65°	519.3	525.9	532.6	542.6	552.5	572.5	582.5	602.4	609.1	612.5	582.5
67.5°	366.2	356.2	362.8	369.4	379.5	392.8	412.8	412.8	422.7	422.7	402.7
70°	233.0	233.0	236.4	246.3	253.0	256.3	263.0	269.6	279.6	276.3	276.3
72.5°	156.5	153.1	156.5	159.8	163.1	173.1	173.1	176.4	183.1	186.4	173.1
75°	79.9	83.2	89.8	86.6	96.5	89.8	93.2	103.2	99.9	93.2	93.2
77.5°	66.5	66.5	66.5	63.3	69.9	69.9	66.5	73.2	69.9	69.9	66.5
80°	46.6	49.9	46.6	43.2	46.6	43.2	43.2	43.2	43.2	43.2	39.9
82.5°	36.6	30.0	33.3	30.0	33.3	33.3	30.0	26.6	26.6	30.0	26.6
85°	26.6	20.0	23.3	23.3	20.0	20.0	20.0	20.0	20.0	16.6	16.6
87.5°	16.6	10.0	10.0	10.0	13.3	13.3	13.3	10.0	13.3	13.3	6.7
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°	6201.1	6201.1	6201.1	6201.1	6201.1	6201.1	6201.1	6201.1	6201.1	6201.1	6201.1
2.5°	6211.1	6207.8	6214.5	6211.1	6211.1	6207.8	6211.1	6207.8	6214.5	6201.1	6204.5
5°	6211.1	6204.5	6207.8	6211.1	6214.5	6207.8	6207.8	6207.8	6214.5	6207.8	6211.1
7.5°	6197.8	6194.4	6204.5	6211.1	6207.8	6204.5	6211.1	6207.8	6214.5	6211.1	6217.7
10°	6171.1	6174.5	6181.2	6191.1	6194.4	6197.8	6204.5	6204.5	6214.5	6201.1	6207.8
12.5°	6131.2	6144.5	6161.2	6167.8	6181.2	6181.2	6187.8	6191.1	6197.8	6194.4	6204.5
15°	6081.3	6097.9	6117.9	6134.6	6151.2	6161.2	6171.1	6174.5	6184.5	6174.5	6177.8
17.5°	6021.4	6041.3	6071.3	6091.2	6117.9	6127.9	6141.2	6147.8	6157.9	6151.2	6154.5
20°	5938.1	5961.5	5994.7	6024.7	6041.3	6064.6	6081.3	6091.2	6097.9	6091.2	6094.6
22.5°	5821.7	5855.0	5898.2	5921.5	5954.8	5974.8	5978.1	6001.4	6018.0	6001.4	6008.1
25°	5685.2	5718.5	5751.8	5801.7	5831.7	5855.0	5878.3	5881.6	5898.2	5894.9	5891.5
27.5°	5458.8	5502.2	5558.7	5598.7	5638.6	5675.2	5701.9	5708.5	5725.2	5718.5	5721.8
30°	5149.3	5195.9	5249.2	5312.4	5369.0	5405.6	5438.9	5462.2	5478.8	5468.8	5465.5
32.5°	4709.9	4756.5	4813.1	4876.3	4943.0	4996.1	5036.1	5066.1	5086.1	5079.4	5062.8
35°	4207.3	4220.6	4257.3	4307.2	4363.7	4420.3	4457.0	4490.2	4513.5	4520.2	4520.2
37.5°	3691.4	3648.1	3621.5	3621.5	3654.7	3678.0	3711.4	3731.3	3768.0	3781.2	3791.2
40°	3192.1	3092.2	2999.0	2929.2	2882.6	2879.2	2879.2	2889.2	2922.5	2965.7	3005.7
42.5°	2746.1	2586.3	2443.2	2313.4	2220.2	2166.9	2143.6	2147.0	2173.6	2213.5	2280.0
45°	2389.9	2190.2	2010.5	1854.0	1727.5	1644.3	1604.4	1601.0	1621.0	1667.6	1740.9
47.5°	2113.7	1900.6	1697.6	1517.8	1381.4	1291.5	1244.9	1231.6	1244.9	1288.1	1374.7
50°	1884.0	1664.3	1454.6	1268.2	1121.7	1028.6	985.2	968.6	985.2	1021.9	1108.4
52.5°	1670.9	1444.6	1248.2	1068.5	912.0	832.1	785.5	775.5	785.5	828.8	898.7
55°	1424.6	1231.6	1038.5	858.8	722.3	642.4	605.8	595.8	605.8	645.8	719.0
57.5°	1181.7	1015.2	845.5	682.3	565.9	495.9	462.7	449.3	472.6	499.3	585.8
60°	955.3	822.2	679.0	535.9	439.4	376.1	349.5	346.1	352.8	386.1	446.0
62.5°	749.0	639.1	525.9	409.4	329.5	302.9	269.6	266.3	272.9	292.9	339.5
65°	539.2	469.4	382.8	299.6	236.4	199.7	186.4	189.8	196.4	209.7	253.0
67.5°	376.1	326.2	266.3	209.7	163.1	146.4	133.2	129.8	133.2	156.5	179.7
70°	253.0	223.0	179.7	159.8	113.2	89.8	93.2	83.2	96.5	96.5	116.5
72.5°	166.4	146.4	119.8	93.2	79.9	63.3	63.3	59.9	66.5	69.9	86.6
75°	86.6	66.5	66.5	46.6	33.3	16.6	30.0	26.6	23.3	26.6	33.3
77.5°	59.9	49.9	46.6	36.6	33.3	26.6	26.6	26.6	26.6	30.0	33.3
80°	36.6	36.6	26.6	23.3	20.0	16.6	20.0	20.0	20.0	20.0	23.3
82.5°	23.3	20.0	20.0	16.6	16.6	13.3	13.3	13.3	13.3	13.3	20.0
85°	20.0	13.3	13.3	10.0	13.3	23.3	10.0	13.3	13.3	13.3	10.0
87.5°	6.7	10.0	10.0	10.0	6.7	3.3	6.7	10.0	10.0	16.6	13.3
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°	6201.1	6201.1	6201.1	6201.1	6201.1	6201.1	6201.1	6201.1	6201.1	6201.1	6201.1
2.5°	6211.1	6214.5	6214.5	6211.1	6211.1	6204.5	6217.7	6207.8	6211.1	6224.4	6214.5
5°	6217.7	6221.1	6221.1	6217.7	6217.7	6217.7	6221.1	6221.1	6217.7	6214.5	6221.1
7.5°	6231.1	6227.7	6227.7	6221.1	6221.1	6214.5	6221.1	6211.1	6217.7	6211.1	6221.1
10°	6214.5	6217.7	6214.5	6211.1	6211.1	6207.8	6207.8	6197.8	6201.1	6191.1	6197.8
12.5°	6204.5	6201.1	6201.1	6194.4	6187.8	6181.2	6177.8	6167.8	6167.8	6144.5	6154.5
15°	6177.8	6181.2	6171.1	6157.9	6151.2	6134.6	6127.9	6114.5	6101.3	6084.6	6088.0
17.5°	6154.5	6144.5	6131.2	6117.9	6091.2	6078.0	6064.6	6044.7	6038.0	6018.0	6011.4
20°	6084.6	6078.0	6061.4	6038.0	6021.4	5991.4	5978.1	5958.2	5941.5	5921.5	5911.5
22.5°	5994.7	5988.1	5968.1	5944.8	5918.2	5904.9	5891.5	5855.0	5838.3	5818.3	5815.0
25°	5881.6	5871.6	5851.6	5825.0	5811.6	5775.1	5761.7	5735.1	5728.5	5708.5	5705.2
27.5°	5708.5	5695.2	5671.9	5638.6	5615.3	5592.0	5578.7	5558.7	5552.1	5532.0	5528.8
30°	5448.9	5432.2	5385.6	5372.3	5332.3	5309.1	5309.1	5282.4	5285.8	5272.5	5272.5
32.5°	5039.5	5012.8	4976.2	4949.6	4922.9	4909.6	4909.6	4899.6	4906.3	4906.3	4913.0
35°	4496.9	4460.3	4440.3	4423.7	4423.7	4436.9	4476.9	4486.9	4506.9	4523.5	4536.9
37.5°	3801.2	3797.9	3821.2	3841.2	3891.1	3947.7	4017.6	4077.5	4134.1	4174.0	4213.9
40°	3049.0	3132.2	3198.7	3292.0	3368.5	3478.3	3604.8	3708.0	3804.5	3874.5	3947.7
42.5°	2379.9	2486.4	2626.3	2762.7	2899.2	3049.0	3215.4	3358.5	3485.0	3581.5	3658.1
45°	1854.0	2000.4	2170.3	2343.3	2519.7	2706.2	2879.2	3025.7	3158.8	3258.7	3335.2
47.5°	1494.5	1654.3	1847.3	2037.1	2236.8	2433.2	2626.3	2752.7	2862.5	2942.4	3012.4
50°	1234.9	1404.7	1607.7	1824.0	2023.7	2220.2	2386.6	2509.7	2599.6	2669.5	2712.8
52.5°	1031.8	1211.6	1428.0	1644.3	1844.0	2023.7	2173.6	2266.8	2340.0	2389.9	2429.8
55°	852.1	1025.2	1228.3	1431.3	1627.7	1797.4	1920.5	1990.5	2047.0	2077.0	2100.3
57.5°	695.7	855.4	1041.8	1228.3	1398.0	1537.8	1634.3	1704.2	1730.9	1754.2	1750.8
60°	545.9	695.7	865.4	1025.2	1171.7	1284.8	1354.7	1394.7	1414.6	1424.6	1418.0
62.5°	429.4	565.9	695.7	835.5	942.0	1038.5	1105.1	1105.1	1115.1	1118.4	1128.4
65°	319.5	422.7	535.9	639.1	725.6	788.9	825.5	835.5	848.8	845.5	838.8
67.5°	236.4	312.9	396.1	472.6	532.6	572.5	599.1	622.5	619.1	612.5	609.1
70°	163.1	213.1	286.3	332.9	376.1	416.1	422.7	426.0	429.4	432.7	426.0
72.5°	113.2	149.8	189.8	229.7	256.3	272.9	289.6	292.9	292.9	292.9	289.6
75°	56.6	76.6	113.2	129.8	153.1	159.8	173.1	173.1	183.1	169.7	166.4
77.5°	49.9	59.9	79.9	93.2	103.2	113.2	116.5	126.5	123.1	116.5	119.8
80°	30.0	36.6	49.9	56.6	69.9	73.2	76.6	79.9	76.6	79.9	79.9
82.5°	23.3	26.6	33.3	33.3	43.2	43.2	46.6	46.6	49.9	49.9	49.9
85°	13.3	23.3	20.0	39.9	26.6	26.6	33.3	39.9	33.3	33.3	39.9
87.5°	13.3	13.3	10.0	13.3	13.3	13.3	16.6	20.0	20.0	23.3	20.0
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: P249312

CATALOG NUMBER: LSR8B120D010 EC8B120830 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	6201.1	6201.1	6201.1	6201.1
2.5°	6211.1	6217.7	6207.8	6204.5
5°	6221.1	6221.1	6214.5	6214.5
7.5°	6221.1	6221.1	6211.1	6204.5
10°	6194.4	6194.4	6184.5	6177.8
12.5°	6144.5	6144.5	6141.2	6131.2
15°	6081.3	6081.3	6068.0	6058.0
17.5°	5994.7	6001.4	5984.8	5984.8
20°	5901.6	5898.2	5884.9	5878.3
22.5°	5805.0	5798.4	5795.0	5775.1
25°	5701.9	5695.2	5685.2	5675.2
27.5°	5525.4	5522.1	5512.1	5498.8
30°	5255.8	5252.4	5239.2	5239.2
32.5°	4906.3	4903.0	4889.7	4893.0
35°	4543.5	4556.8	4550.1	4536.9
37.5°	4240.6	4250.6	4257.3	4250.6
40°	3987.6	4017.6	4020.9	4027.6
42.5°	3718.0	3757.9	3771.3	3777.9
45°	3395.1	3431.8	3461.7	3455.0
47.5°	3065.6	3092.2	3118.8	3098.9
50°	2749.4	2766.0	2776.0	2776.0
52.5°	2449.9	2449.9	2446.5	2449.9
55°	2107.0	2107.0	2093.7	2100.3
57.5°	1747.5	1754.2	1744.1	1727.5
60°	1414.6	1398.0	1391.3	1381.4
62.5°	1101.8	1101.8	1078.5	1108.4
65°	825.5	815.5	805.5	802.2
67.5°	599.1	595.8	585.8	582.5
70°	422.7	409.4	406.1	399.4
72.5°	282.9	282.9	276.3	276.3
75°	173.1	156.5	153.1	156.5
77.5°	119.8	116.5	116.5	113.2
80°	79.9	76.6	83.2	73.2
82.5°	49.9	53.3	49.9	53.3
85°	33.3	39.9	36.6	36.6
87.5°	20.0	20.0	20.0	20.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)