

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: P249302

Luminaire Tested: **LSR8B100D010 EC8B100827 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249302
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: LSR8B100D010 EC8B100827 8LBDW0GPH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 2700 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10115.0 lumens
Efficiency: N/A
Efficacy: 95.2 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

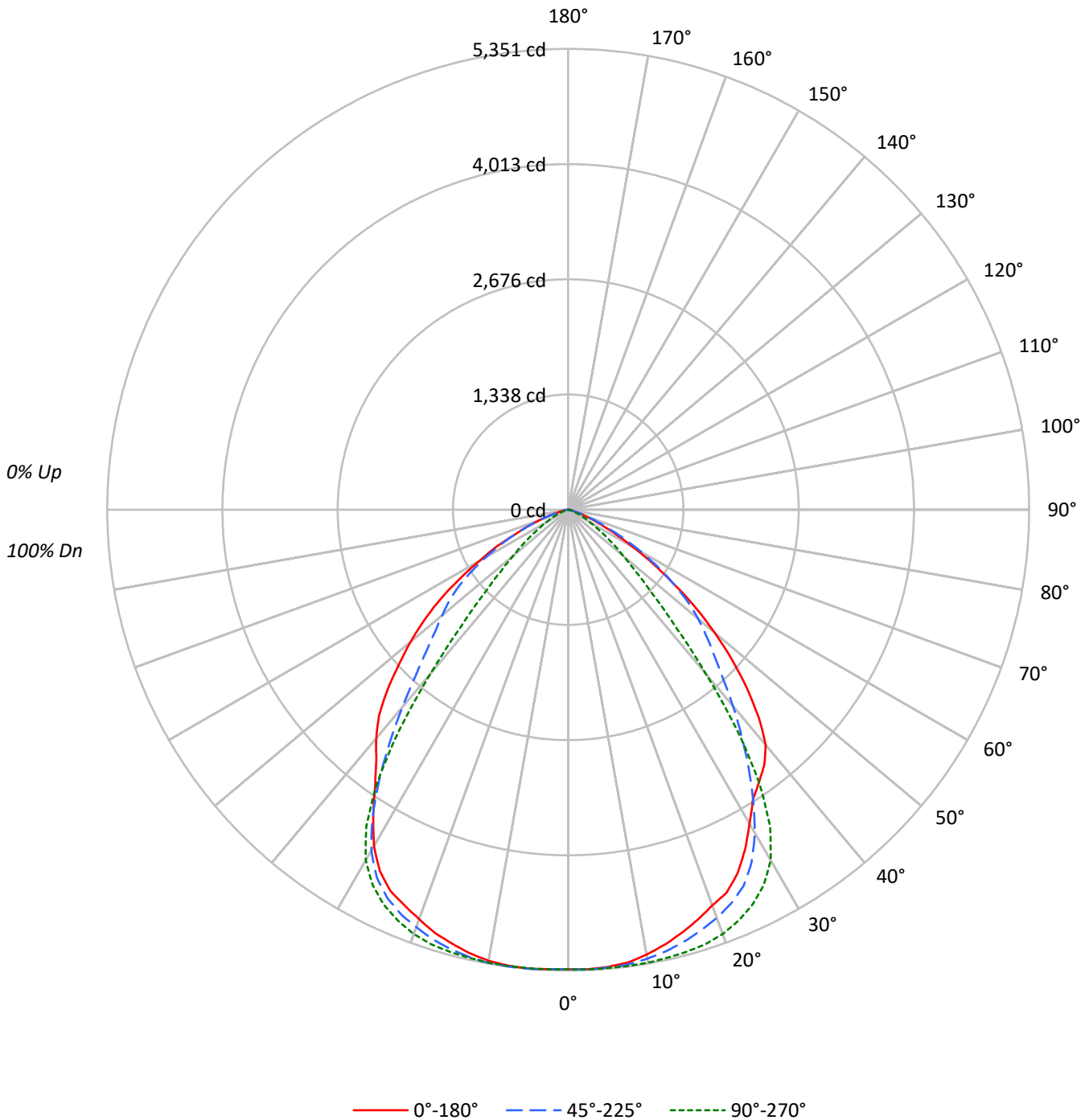
Input Watts (W): 106.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	164570	164570	164570
5°	164933	165375	165555
10°	164238	167197	166480
15°	162417	169645	166443
20°	160467	172028	166013
25°	158386	172227	166184
30°	149840	167384	160551
35°	145367	145472	146986
40°	143566	100091	139532
45°	127923	60089	129672
50°	106370	39990	114612
55°	79777	27569	97179
60°	54062	18372	73323
65°	32608	11915	50375
70°	18077	6455	30988
75°	8197	2728	16037
80°	7121	3054	11187
85°	8102	4033	11145



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	509.3	5.0
10°-20°	1479.2	14.6
20°-30°	2245.1	22.2
30°-40°	2358.0	23.3
40°-50°	1767.9	17.5
50°-60°	1134.3	11.2
60°-70°	485.2	4.8
70°-80°	114.6	1.1
80°-90°	21.3	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°	4233.6	41.9
0°-40°	6591.6	65.2
0°-60°	9493.8	93.9
0°-90°	10115.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10115.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	5337	5337	5337	5337	5337	
5°	5328	5337	5343	5351	5348	506
15°	5088	5194	5314	5280	5214	1435
25°	4655	4818	5062	4970	4884	2127
35°	3862	3647	3864	3819	3905	2424
45°	2933	2398	1378	2329	2974	2247
55°	1484	1484	513	1547	1808	1346
65°	447	527	163	679	690	477
75°	69	80	23	138	135	100
85°	23	14	11	23	32	24
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°	5336.9	5336.9	5336.9	5336.9	5336.9	5336.9	5336.9	5336.9	5336.9	5336.9	5336.9
2.5°	5339.7	5345.5	5342.6	5342.6	5339.7	5342.6	5342.6	5348.4	5348.4	5342.6	5339.7
5°	5328.3	5334.0	5334.0	5328.3	5328.3	5342.6	5334.0	5339.7	5339.7	5336.9	5336.9
7.5°	5302.5	5302.5	5314.0	5305.4	5305.4	5314.0	5311.1	5316.8	5322.6	5325.4	5325.4
10°	5245.2	5250.9	5253.8	5253.8	5256.7	5265.2	5271.0	5282.5	5288.2	5293.9	5296.8
12.5°	5173.6	5182.2	5185.0	5182.2	5190.8	5202.2	5216.6	5230.9	5239.5	5250.9	5259.6
15°	5087.6	5087.6	5093.4	5102.0	5107.7	5124.9	5139.2	5156.4	5179.3	5193.7	5208.0
17.5°	4993.1	4998.9	5007.4	5007.4	5018.9	5047.5	5056.1	5081.9	5107.7	5122.0	5150.7
20°	4890.0	4895.7	4904.3	4910.1	4924.4	4947.3	4964.5	4987.4	5016.1	5041.8	5070.4
22.5°	4809.8	4798.3	4804.0	4809.8	4824.1	4844.2	4864.2	4892.8	4921.5	4947.3	4976.0
25°	4655.1	4657.9	4666.6	4672.2	4689.5	4706.7	4729.6	4763.9	4789.7	4818.4	4849.9
27.5°	4446.0	4448.9	4463.2	4463.2	4477.5	4506.1	4520.4	4549.1	4583.5	4612.1	4649.4
30°	4208.2	4213.9	4213.9	4225.4	4233.9	4248.3	4262.6	4291.3	4308.5	4334.3	4385.8
32.5°	3990.5	3996.2	3993.3	3990.5	3981.9	3979.0	3976.1	3981.9	3987.6	3996.2	4016.2
35°	3861.6	3847.2	3835.8	3815.8	3792.8	3764.2	3738.4	3704.0	3672.5	3646.7	3618.1
37.5°	3738.4	3735.5	3718.3	3689.7	3643.8	3592.3	3532.2	3457.7	3383.1	3303.0	3225.6
40°	3566.5	3557.9	3543.6	3503.5	3451.9	3388.9	3308.7	3217.0	3096.7	2973.5	2847.5
42.5°	3274.3	3277.2	3260.0	3228.5	3179.8	3119.6	3036.5	2936.3	2807.4	2661.3	2498.0
45°	2933.4	2933.4	2927.7	2901.9	2867.5	2818.8	2755.8	2672.7	2546.7	2397.7	2223.0
47.5°	2578.2	2581.1	2572.4	2566.8	2552.4	2520.9	2475.1	2412.1	2323.3	2180.0	2005.2
50°	2217.3	2217.3	2231.6	2228.7	2228.7	2217.3	2197.2	2159.9	2082.6	1968.0	1804.8
52.5°	1856.3	1862.0	1870.7	1882.1	1896.4	1919.3	1896.4	1879.2	1830.5	1741.7	1601.4
55°	1483.9	1489.6	1503.9	1524.0	1541.2	1564.1	1569.8	1569.8	1544.0	1483.9	1377.9
57.5°	1165.9	1157.3	1168.8	1186.0	1208.9	1231.8	1249.0	1269.0	1266.2	1226.1	1140.1
60°	876.6	879.5	888.0	905.3	922.4	942.5	965.4	982.6	991.2	971.1	916.7
62.5°	638.8	638.8	650.3	667.4	676.1	704.7	719.0	727.6	736.2	733.3	699.0
65°	446.9	452.6	458.3	467.0	475.5	492.7	501.3	518.5	524.2	527.1	501.3
67.5°	315.1	306.5	312.3	317.9	326.6	338.1	355.2	355.2	363.8	363.8	346.6
70°	200.5	200.5	203.4	212.0	217.7	220.6	226.3	232.0	240.6	237.8	237.8
72.5°	134.6	131.8	134.6	137.5	140.4	148.9	148.9	151.8	157.6	160.4	148.9
75°	68.8	71.6	77.3	74.5	83.1	77.3	80.2	88.8	85.9	80.2	80.2
77.5°	57.3	57.3	57.3	54.5	60.1	60.1	57.3	63.0	60.1	60.1	57.3
80°	40.1	43.0	40.1	37.2	40.1	37.2	37.2	37.2	37.2	37.2	34.3
82.5°	31.5	25.8	28.7	25.8	28.7	28.7	25.8	22.9	22.9	25.8	22.9
85°	22.9	17.2	20.0	20.0	17.2	17.2	17.2	17.2	17.2	14.3	14.3
87.5°	14.3	8.6	8.6	8.6	11.4	11.4	11.4	8.6	11.4	11.4	5.7
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°	5336.9	5336.9	5336.9	5336.9	5336.9	5336.9	5336.9	5336.9	5336.9	5336.9	5336.9
2.5°	5345.5	5342.6	5348.4	5345.5	5345.5	5342.6	5345.5	5342.6	5348.4	5336.9	5339.7
5°	5345.5	5339.7	5342.6	5345.5	5348.4	5342.6	5342.6	5342.6	5348.4	5342.6	5345.5
7.5°	5334.0	5331.1	5339.7	5345.5	5342.6	5339.7	5345.5	5342.6	5348.4	5345.5	5351.2
10°	5311.1	5314.0	5319.7	5328.3	5331.1	5334.0	5339.7	5339.7	5348.4	5336.9	5342.6
12.5°	5276.7	5288.2	5302.5	5308.2	5319.7	5319.7	5325.4	5328.3	5334.0	5331.1	5339.7
15°	5233.8	5248.1	5265.2	5279.6	5293.9	5302.5	5311.1	5314.0	5322.6	5314.0	5316.8
17.5°	5182.2	5199.3	5225.1	5242.3	5265.2	5273.9	5285.3	5291.0	5299.7	5293.9	5296.8
20°	5110.5	5130.7	5159.3	5185.0	5199.3	5219.4	5233.8	5242.3	5248.1	5242.3	5245.2
22.5°	5010.3	5039.0	5076.2	5096.2	5124.9	5142.1	5145.0	5165.0	5179.3	5165.0	5170.7
25°	4892.8	4921.5	4950.2	4993.1	5018.9	5039.0	5059.0	5061.9	5076.2	5073.3	5070.4
27.5°	4698.0	4735.3	4784.0	4818.4	4852.7	4884.3	4907.2	4912.9	4927.2	4921.5	4924.4
30°	4431.6	4471.8	4517.6	4572.0	4620.7	4652.2	4680.9	4700.9	4715.2	4706.7	4703.8
32.5°	4053.5	4093.6	4142.3	4196.7	4254.1	4299.8	4334.3	4360.0	4377.2	4371.5	4357.2
35°	3621.0	3632.4	3663.9	3706.9	3755.6	3804.3	3835.8	3864.4	3884.5	3890.2	3890.2
37.5°	3176.9	3139.7	3116.8	3116.8	3145.4	3165.4	3194.1	3211.3	3242.8	3254.2	3262.9
40°	2747.2	2661.3	2581.1	2520.9	2480.8	2478.0	2478.0	2486.5	2515.2	2552.4	2586.8
42.5°	2363.4	2225.8	2102.7	1990.9	1910.8	1864.9	1844.9	1847.7	1870.7	1905.0	1962.3
45°	2056.8	1885.0	1730.3	1595.6	1486.8	1415.1	1380.8	1377.9	1395.1	1435.2	1498.3
47.5°	1819.1	1635.7	1461.0	1306.3	1188.9	1111.5	1071.4	1060.0	1071.4	1108.6	1183.1
50°	1621.4	1432.4	1251.9	1091.4	965.4	885.2	847.9	833.6	847.9	879.5	953.9
52.5°	1438.0	1243.3	1074.3	919.6	784.9	716.1	676.1	667.4	676.1	713.3	773.5
55°	1226.1	1060.0	893.8	739.1	621.7	552.9	521.4	512.8	521.4	555.8	618.8
57.5°	1017.0	873.7	727.6	587.2	487.0	426.8	398.2	386.7	406.8	429.7	504.2
60°	822.1	707.6	584.4	461.2	378.2	323.7	300.8	297.9	303.6	332.3	383.8
62.5°	644.6	550.0	452.6	352.4	283.6	260.7	232.0	229.2	234.9	252.1	292.2
65°	464.1	403.9	329.4	257.8	203.4	171.9	160.4	163.3	169.0	180.5	217.7
67.5°	323.7	280.7	229.2	180.5	140.4	126.0	114.6	111.7	114.6	134.6	154.7
70°	217.7	191.9	154.7	137.5	97.4	77.3	80.2	71.6	83.1	83.1	100.2
72.5°	143.2	126.0	103.1	80.2	68.8	54.5	54.5	51.6	57.3	60.1	74.5
75°	74.5	57.3	57.3	40.1	28.7	14.3	25.8	22.9	20.0	22.9	28.7
77.5°	51.6	43.0	40.1	31.5	28.7	22.9	22.9	22.9	22.9	25.8	28.7
80°	31.5	31.5	22.9	20.0	17.2	14.3	17.2	17.2	17.2	17.2	20.0
82.5°	20.0	17.2	17.2	14.3	14.3	11.4	11.4	11.4	11.4	11.4	17.2
85°	17.2	11.4	11.4	8.6	11.4	20.0	8.6	11.4	11.4	11.4	8.6
87.5°	5.7	8.6	8.6	8.6	5.7	2.9	5.7	8.6	8.6	14.3	11.4
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°	5336.9	5336.9	5336.9	5336.9	5336.9	5336.9	5336.9	5336.9	5336.9	5336.9	5336.9
2.5°	5345.5	5348.4	5348.4	5345.5	5345.5	5339.7	5351.2	5342.6	5345.5	5356.9	5348.4
5°	5351.2	5354.0	5354.0	5351.2	5351.2	5351.2	5354.0	5354.0	5351.2	5348.4	5354.0
7.5°	5362.7	5359.8	5359.8	5354.0	5354.0	5348.4	5354.0	5345.5	5351.2	5345.5	5354.0
10°	5348.4	5351.2	5348.4	5345.5	5345.5	5342.6	5342.6	5334.0	5336.9	5328.3	5334.0
12.5°	5339.7	5336.9	5336.9	5331.1	5325.4	5319.7	5316.8	5308.2	5308.2	5288.2	5296.8
15°	5316.8	5319.7	5311.1	5299.7	5293.9	5279.6	5273.9	5262.4	5250.9	5236.6	5239.5
17.5°	5296.8	5288.2	5276.7	5265.2	5242.3	5230.9	5219.4	5202.2	5196.5	5179.3	5173.6
20°	5236.6	5230.9	5216.6	5196.5	5182.2	5156.4	5145.0	5127.8	5113.4	5096.2	5087.6
22.5°	5159.3	5153.5	5136.3	5116.3	5093.4	5081.9	5070.4	5039.0	5024.6	5007.4	5004.6
25°	5061.9	5053.3	5036.1	5013.2	5001.7	4970.2	4958.7	4935.8	4930.1	4912.9	4910.1
27.5°	4912.9	4901.4	4881.4	4852.7	4832.7	4812.6	4801.2	4784.0	4778.3	4761.1	4758.2
30°	4689.5	4675.1	4635.0	4623.6	4589.2	4569.1	4569.1	4546.2	4549.1	4537.7	4537.7
32.5°	4337.1	4314.2	4282.7	4259.7	4236.8	4225.4	4225.4	4216.8	4222.5	4222.5	4228.3
35°	3870.2	3838.7	3821.4	3807.1	3807.1	3818.6	3853.0	3861.6	3878.8	3893.1	3904.6
37.5°	3271.4	3268.6	3288.7	3305.8	3348.8	3397.5	3457.7	3509.2	3557.9	3592.3	3626.7
40°	2624.0	2695.7	2752.9	2833.2	2899.0	2993.6	3102.4	3191.2	3274.3	3334.5	3397.5
42.5°	2048.2	2139.9	2260.2	2377.7	2495.1	2624.0	2767.3	2890.5	2999.3	3082.4	3148.3
45°	1595.6	1721.6	1867.8	2016.7	2168.6	2329.0	2478.0	2604.0	2718.6	2804.5	2870.4
47.5°	1286.2	1423.7	1589.9	1753.2	1925.1	2094.1	2260.2	2369.1	2463.6	2532.4	2592.6
50°	1062.8	1208.9	1383.7	1569.8	1741.7	1910.8	2054.0	2159.9	2237.3	2297.5	2334.7
52.5°	888.0	1042.7	1229.0	1415.1	1587.0	1741.7	1870.7	1950.9	2013.9	2056.8	2091.2
55°	733.3	882.3	1057.1	1231.8	1400.8	1546.9	1652.9	1713.1	1761.7	1787.5	1807.6
57.5°	598.7	736.2	896.6	1057.1	1203.2	1323.5	1406.6	1466.7	1489.6	1509.7	1506.8
60°	469.8	598.7	744.8	882.3	1008.4	1105.7	1165.9	1200.3	1217.5	1226.1	1220.3
62.5°	369.5	487.0	598.7	719.0	810.7	893.8	951.1	951.1	959.7	962.5	971.1
65°	275.0	363.8	461.2	550.0	624.5	678.9	710.5	719.0	730.5	727.6	721.9
67.5°	203.4	269.3	340.9	406.8	458.3	492.7	515.6	535.7	532.9	527.1	524.2
70°	140.4	183.4	246.4	286.5	323.7	358.1	363.8	366.7	369.5	372.4	366.7
72.5°	97.4	128.9	163.3	197.7	220.6	234.9	249.3	252.1	252.1	252.1	249.3
75°	48.7	65.9	97.4	111.7	131.8	137.5	148.9	148.9	157.6	146.1	143.2
77.5°	43.0	51.6	68.8	80.2	88.8	97.4	100.2	108.9	106.0	100.2	103.1
80°	25.8	31.5	43.0	48.7	60.1	63.0	65.9	68.8	65.9	68.8	68.8
82.5°	20.0	22.9	28.7	28.7	37.2	37.2	40.1	40.1	43.0	43.0	43.0
85°	11.4	20.0	17.2	34.3	22.9	22.9	28.7	34.3	28.7	28.7	34.3
87.5°	11.4	11.4	8.6	11.4	11.4	11.4	14.3	17.2	17.2	20.0	17.2
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: P249302

CATALOG NUMBER: LSR8B100D010 EC8B100827 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	5336.9	5336.9	5336.9	5336.9
2.5°	5345.5	5351.2	5342.6	5339.7
5°	5354.0	5354.0	5348.4	5348.4
7.5°	5354.0	5354.0	5345.5	5339.7
10°	5331.1	5331.1	5322.6	5316.8
12.5°	5288.2	5288.2	5285.3	5276.7
15°	5233.8	5233.8	5222.3	5213.7
17.5°	5159.3	5165.0	5150.7	5150.7
20°	5079.1	5076.2	5064.8	5059.0
22.5°	4996.0	4990.3	4987.4	4970.2
25°	4907.2	4901.4	4892.8	4884.3
27.5°	4755.4	4752.5	4743.9	4732.5
30°	4523.3	4520.4	4509.0	4509.0
32.5°	4222.5	4219.6	4208.2	4211.1
35°	3910.3	3921.7	3916.0	3904.6
37.5°	3649.6	3658.2	3663.9	3658.2
40°	3431.9	3457.7	3460.5	3466.3
42.5°	3199.9	3234.2	3245.7	3251.4
45°	2921.9	2953.5	2979.3	2973.5
47.5°	2638.3	2661.3	2684.2	2667.0
50°	2366.2	2380.5	2389.1	2389.1
52.5°	2108.4	2108.4	2105.5	2108.4
55°	1813.3	1813.3	1801.9	1807.6
57.5°	1503.9	1509.7	1501.1	1486.8
60°	1217.5	1203.2	1197.4	1188.9
62.5°	948.2	948.2	928.2	953.9
65°	710.5	701.8	693.2	690.4
67.5°	515.6	512.8	504.2	501.3
70°	363.8	352.4	349.5	343.7
72.5°	243.5	243.5	237.8	237.8
75°	148.9	134.6	131.8	134.6
77.5°	103.1	100.2	100.2	97.4
80°	68.8	65.9	71.6	63.0
82.5°	43.0	45.8	43.0	45.8
85°	28.7	34.3	31.5	31.5
87.5°	17.2	17.2	17.2	17.2
90°	0.0	0.0	0.0	0.0

(END OF REPORT)