

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: P249339

Luminaire Tested: **LSR8B120D010 EC8B120850 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249339
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 EC8B120850 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: 12380.0 lumens
Efficiency: N/A
Efficacy: 104.6 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

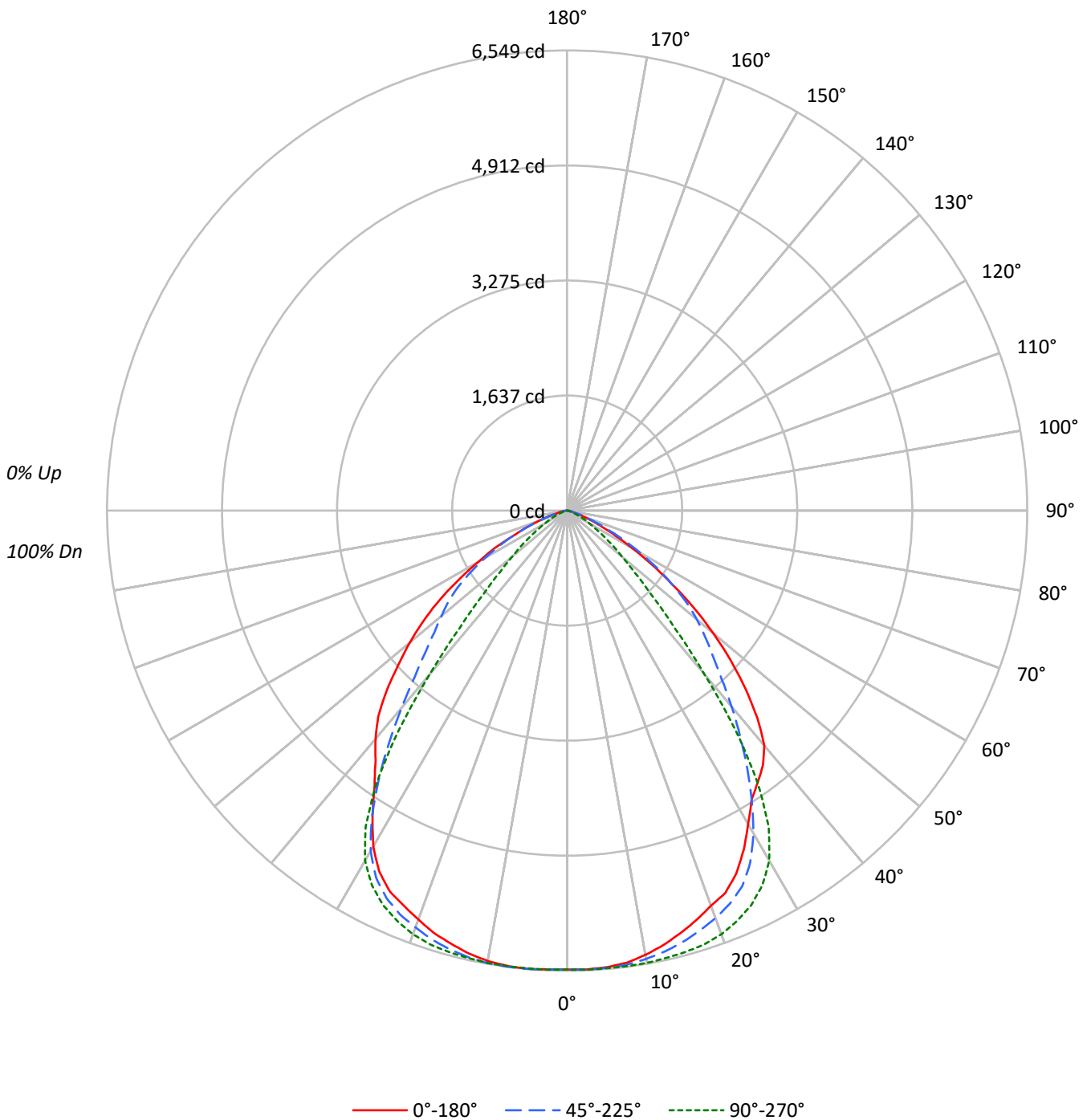
Input Watts (W): 118.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P249339

CATALOG NUMBER: LSR8B120D010 EC8B120850 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°	201420	201420	201420
5°	201864	202409	202626
10°	201014	204637	203760
15°	198788	207631	203714
20°	196400	210550	203189
25°	193852	210793	203396
30°	183392	204867	196503
35°	177918	178049	179898
40°	175713	122505	170777
45°	156570	73547	158711
50°	130189	48947	140277
55°	97642	33741	118937
60°	66169	22486	89740
65°	39912	14586	61648
70°	22125	7907	37930
75°	10032	3348	19635
80°	8719	3729	13691
85°	9942	4953	13657



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	623.4	5.0
10°-20°	1810.4	14.6
20°-30°	2747.8	22.2
30°-40°	2886.0	23.3
40°-50°	2163.8	17.5
50°-60°	1388.3	11.2
60°-70°	593.9	4.8
70°-80°	140.3	1.1
80°-90°	26.1	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°	5181.6	41.9
0°-40°	8067.6	65.2
0°-60°	11619.7	93.9
0°-90°	12380.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12380.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	6532	6532	6532	6532	6532	
5°	6521	6532	6539	6549	6546	619
15°	6227	6357	6504	6462	6381	1756
25°	5698	5897	6195	6083	5978	2603
35°	4726	4463	4730	4674	4779	2966
45°	3590	2935	1686	2850	3639	2750
55°	1816	1816	628	1893	2212	1647
65°	547	645	200	831	845	584
75°	84	98	28	168	165	123
85°	28	18	14	28	39	30
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°	6531.9	6531.9	6531.9	6531.9	6531.9	6531.9	6531.9	6531.9	6531.9	6531.9	6531.9
2.5°	6535.4	6542.5	6539.0	6539.0	6535.4	6539.0	6539.0	6546.0	6546.0	6539.0	6535.4
5°	6521.4	6528.4	6528.4	6521.4	6521.4	6539.0	6528.4	6535.4	6535.4	6531.9	6531.9
7.5°	6489.9	6489.9	6503.9	6493.4	6493.4	6503.9	6500.4	6507.4	6514.4	6517.9	6517.9
10°	6419.7	6426.8	6430.3	6430.3	6433.8	6444.3	6451.3	6465.4	6472.3	6479.3	6482.9
12.5°	6332.1	6342.6	6346.1	6342.6	6353.1	6367.1	6384.7	6402.2	6412.8	6426.8	6437.3
15°	6226.9	6226.9	6233.9	6244.4	6251.5	6272.5	6290.0	6311.0	6339.1	6356.7	6374.2
17.5°	6111.2	6118.3	6128.7	6128.7	6142.8	6177.8	6188.3	6219.9	6251.5	6269.0	6304.1
20°	5985.0	5992.0	6002.5	6009.6	6027.1	6055.1	6076.1	6104.2	6139.3	6170.8	6205.8
22.5°	5886.8	5872.8	5879.8	5886.8	5904.4	5928.9	5953.5	5988.5	6023.5	6055.1	6090.2
25°	5697.5	5701.0	5711.5	5718.5	5739.6	5760.6	5788.6	5830.7	5862.3	5897.3	5935.9
27.5°	5441.5	5445.1	5462.6	5462.6	5480.1	5515.2	5532.7	5567.7	5609.9	5644.9	5690.5
30°	5150.5	5157.5	5157.5	5171.6	5182.0	5199.6	5217.1	5252.2	5273.2	5304.8	5367.9
32.5°	4884.1	4891.0	4887.5	4884.1	4873.5	4870.0	4866.5	4873.5	4880.6	4891.0	4915.6
35°	4726.3	4708.7	4694.7	4670.2	4642.2	4607.1	4575.5	4533.5	4494.9	4463.3	4428.3
37.5°	4575.5	4572.0	4551.0	4515.9	4459.8	4396.7	4323.1	4231.9	4140.7	4042.6	3947.9
40°	4365.1	4354.6	4337.1	4288.0	4224.9	4147.8	4049.6	3937.4	3790.1	3639.4	3485.1
42.5°	4007.5	4011.0	3990.0	3951.4	3891.8	3818.2	3716.5	3593.8	3436.0	3257.2	3057.4
45°	3590.3	3590.3	3583.3	3551.7	3509.7	3450.0	3372.9	3271.2	3117.0	2934.6	2720.7
47.5°	3155.5	3159.0	3148.5	3141.5	3123.9	3085.4	3029.3	2952.2	2843.5	2668.1	2454.3
50°	2713.8	2713.8	2731.3	2727.8	2727.8	2713.8	2689.2	2643.6	2549.0	2408.7	2208.9
52.5°	2272.0	2279.0	2289.5	2303.5	2321.0	2349.1	2321.0	2300.0	2240.4	2131.7	1959.9
55°	1816.2	1823.2	1840.7	1865.2	1886.3	1914.4	1921.3	1921.3	1889.8	1816.2	1686.5
57.5°	1427.0	1416.5	1430.5	1451.6	1479.6	1507.7	1528.7	1553.2	1549.7	1500.6	1395.5
60°	1072.9	1076.4	1086.9	1108.0	1129.0	1153.5	1181.6	1202.6	1213.1	1188.6	1122.0
62.5°	781.9	781.9	795.9	816.9	827.4	862.5	880.0	890.6	901.0	897.5	855.5
65°	547.0	553.9	561.0	571.5	582.0	603.0	613.6	634.6	641.6	645.1	613.6
67.5°	385.7	375.2	382.2	389.1	399.7	413.8	434.8	434.8	445.2	445.2	424.2
70°	245.4	245.4	249.0	259.4	266.5	270.0	277.0	284.0	294.5	291.0	291.0
72.5°	164.8	161.3	164.8	168.3	171.8	182.3	182.3	185.8	192.9	196.4	182.3
75°	84.2	87.7	94.6	91.2	101.7	94.6	98.1	108.7	105.2	98.1	98.1
77.5°	70.1	70.1	70.1	66.7	73.6	73.6	70.1	77.1	73.6	73.6	70.1
80°	49.1	52.6	49.1	45.6	49.1	45.6	45.6	45.6	45.6	45.6	42.0
82.5°	38.6	31.6	35.1	31.6	35.1	35.1	31.6	28.1	28.1	31.6	28.1
85°	28.1	21.0	24.5	24.5	21.0	21.0	21.0	21.0	21.0	17.5	17.5
87.5°	17.5	10.6	10.6	10.6	14.0	14.0	14.0	10.6	14.0	14.0	7.0
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: P249339

CATALOG NUMBER: LSR8B120D010 EC8B120850 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	6531.9	6531.9	6531.9	6531.9	6531.9	6531.9	6531.9	6531.9	6531.9	6531.9	6531.9
2.5°	6542.5	6539.0	6546.0	6542.5	6542.5	6539.0	6542.5	6539.0	6546.0	6531.9	6535.4
5°	6542.5	6535.4	6539.0	6542.5	6546.0	6539.0	6539.0	6539.0	6546.0	6539.0	6542.5
7.5°	6528.4	6524.9	6535.4	6542.5	6539.0	6535.4	6542.5	6539.0	6546.0	6542.5	6549.4
10°	6500.4	6503.9	6510.9	6521.4	6524.9	6528.4	6535.4	6535.4	6546.0	6531.9	6539.0
12.5°	6458.3	6472.3	6489.9	6496.8	6510.9	6510.9	6517.9	6521.4	6528.4	6524.9	6535.4
15°	6405.7	6423.2	6444.3	6461.8	6479.3	6489.9	6500.4	6503.9	6514.4	6503.9	6507.4
17.5°	6342.6	6363.6	6395.2	6416.2	6444.3	6454.8	6468.8	6475.8	6486.4	6479.3	6482.9
20°	6254.9	6279.5	6314.5	6346.1	6363.6	6388.1	6405.7	6416.2	6423.2	6416.2	6419.7
22.5°	6132.2	6167.3	6212.9	6237.4	6272.5	6293.5	6297.0	6321.6	6339.1	6321.6	6328.6
25°	5988.5	6023.5	6058.6	6111.2	6142.8	6167.3	6191.9	6195.4	6212.9	6209.4	6205.8
27.5°	5750.0	5795.7	5855.2	5897.3	5939.4	5978.0	6006.0	6013.0	6030.6	6023.5	6027.1
30°	5424.0	5473.1	5529.2	5595.8	5655.4	5693.9	5729.0	5753.6	5771.1	5760.6	5757.1
32.5°	4961.2	5010.3	5069.9	5136.5	5206.7	5262.7	5304.8	5336.4	5357.4	5350.4	5332.9
35°	4431.8	4445.8	4484.4	4537.0	4596.5	4656.1	4694.7	4729.8	4754.3	4761.3	4761.3
37.5°	3888.3	3842.8	3814.7	3814.7	3849.7	3874.3	3909.3	3930.4	3969.0	3983.0	3993.5
40°	3362.4	3257.2	3159.0	3085.4	3036.3	3032.8	3032.8	3043.3	3078.4	3123.9	3166.1
42.5°	2892.6	2724.2	2573.5	2436.8	2338.6	2282.5	2258.0	2261.5	2289.5	2331.6	2401.7
45°	2517.4	2307.1	2117.7	1952.9	1819.7	1732.0	1690.0	1686.5	1707.5	1756.5	1833.7
47.5°	2226.4	2002.0	1788.1	1598.8	1455.1	1360.4	1311.3	1297.3	1311.3	1356.8	1448.0
50°	1984.5	1753.1	1532.2	1335.8	1181.6	1083.4	1037.8	1020.3	1037.8	1076.4	1167.5
52.5°	1760.1	1521.7	1314.8	1125.5	960.7	876.5	827.4	816.9	827.4	873.0	946.7
55°	1500.6	1297.3	1093.9	904.6	760.9	676.7	638.1	627.6	638.1	680.2	757.3
57.5°	1244.7	1069.4	890.6	718.7	596.1	522.4	487.4	473.3	497.8	525.9	617.1
60°	1006.2	866.0	715.2	564.5	462.8	396.2	368.1	364.6	371.6	406.7	469.8
62.5°	788.9	673.2	553.9	431.3	347.1	319.1	284.0	280.5	287.5	308.5	357.7
65°	568.0	494.4	403.2	315.5	249.0	210.4	196.4	199.9	206.8	220.9	266.5
67.5°	396.2	343.6	280.5	220.9	171.8	154.3	140.3	136.7	140.3	164.8	189.3
70°	266.5	234.9	189.3	168.3	119.2	94.6	98.1	87.7	101.7	101.7	122.7
72.5°	175.3	154.3	126.2	98.1	84.2	66.7	66.7	63.1	70.1	73.6	91.2
75°	91.2	70.1	70.1	49.1	35.1	17.5	31.6	28.1	24.5	28.1	35.1
77.5°	63.1	52.6	49.1	38.6	35.1	28.1	28.1	28.1	28.1	31.6	35.1
80°	38.6	38.6	28.1	24.5	21.0	17.5	21.0	21.0	21.0	21.0	24.5
82.5°	24.5	21.0	21.0	17.5	17.5	14.0	14.0	14.0	14.0	14.0	21.0
85°	21.0	14.0	14.0	10.6	14.0	24.5	10.6	14.0	14.0	14.0	10.6
87.5°	7.0	10.6	10.6	10.6	7.0	3.5	7.0	10.6	10.6	17.5	14.0
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: P249339

CATALOG NUMBER: LSR8B120D010 EC8B120850 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	6531.9	6531.9	6531.9	6531.9	6531.9	6531.9	6531.9	6531.9	6531.9	6531.9	6531.9
2.5°	6542.5	6546.0	6546.0	6542.5	6542.5	6535.4	6549.4	6539.0	6542.5	6556.5	6546.0
5°	6549.4	6553.0	6553.0	6549.4	6549.4	6549.4	6553.0	6553.0	6549.4	6546.0	6553.0
7.5°	6563.5	6560.0	6560.0	6553.0	6553.0	6546.0	6553.0	6542.5	6549.4	6542.5	6553.0
10°	6546.0	6549.4	6546.0	6542.5	6542.5	6539.0	6539.0	6528.4	6531.9	6521.4	6528.4
12.5°	6535.4	6531.9	6531.9	6524.9	6517.9	6510.9	6507.4	6496.8	6496.8	6472.3	6482.9
15°	6507.4	6510.9	6500.4	6486.4	6479.3	6461.8	6454.8	6440.7	6426.8	6409.3	6412.8
17.5°	6482.9	6472.3	6458.3	6444.3	6416.2	6402.2	6388.1	6367.1	6360.1	6339.1	6332.1
20°	6409.3	6402.2	6384.7	6360.1	6342.6	6311.0	6297.0	6276.0	6258.4	6237.4	6226.9
22.5°	6314.5	6307.5	6286.5	6262.0	6233.9	6219.9	6205.8	6167.3	6149.7	6128.7	6125.2
25°	6195.4	6184.8	6163.8	6135.8	6121.7	6083.2	6069.1	6041.0	6034.1	6013.0	6009.6
27.5°	6013.0	5999.0	5974.5	5939.4	5914.8	5890.3	5876.3	5855.2	5848.3	5827.2	5823.7
30°	5739.6	5722.0	5672.9	5658.9	5616.8	5592.3	5592.3	5564.2	5567.7	5553.8	5553.8
32.5°	5308.3	5280.3	5241.7	5213.6	5185.6	5171.6	5171.6	5161.0	5168.0	5168.0	5175.1
35°	4736.8	4698.3	4677.2	4659.7	4659.7	4673.6	4715.8	4726.3	4747.3	4764.8	4778.9
37.5°	4004.0	4000.5	4025.1	4046.1	4098.7	4158.3	4231.9	4295.1	4354.6	4396.7	4438.8
40°	3211.6	3299.3	3369.4	3467.6	3548.2	3663.9	3797.1	3905.8	4007.5	4081.2	4158.3
42.5°	2506.9	2619.1	2766.4	2910.1	3053.9	3211.6	3387.0	3537.7	3670.9	3772.6	3853.2
45°	1952.9	2107.2	2286.0	2468.3	2654.2	2850.5	3032.8	3187.1	3327.3	3432.5	3513.2
47.5°	1574.2	1742.6	1945.9	2145.8	2356.1	2563.0	2766.4	2899.6	3015.2	3099.4	3173.1
50°	1300.7	1479.6	1693.5	1921.3	2131.7	2338.6	2513.9	2643.6	2738.3	2811.9	2857.5
52.5°	1086.9	1276.2	1504.1	1732.0	1942.4	2131.7	2289.5	2387.7	2464.8	2517.4	2559.4
55°	897.5	1079.9	1293.8	1507.7	1714.5	1893.3	2023.0	2096.7	2156.2	2187.8	2212.3
57.5°	732.8	901.0	1097.4	1293.8	1472.6	1619.9	1721.5	1795.1	1823.2	1847.7	1844.2
60°	575.0	732.8	911.6	1079.9	1234.2	1353.3	1427.0	1469.1	1490.1	1500.6	1493.6
62.5°	452.3	596.1	732.8	880.0	992.2	1093.9	1164.1	1164.1	1174.5	1178.1	1188.6
65°	336.6	445.2	564.5	673.2	764.3	831.0	869.6	880.0	894.1	890.6	883.5
67.5°	249.0	329.6	417.2	497.8	561.0	603.0	631.1	655.7	652.2	645.1	641.6
70°	171.8	224.4	301.5	350.6	396.2	438.3	445.2	448.8	452.3	455.8	448.8
72.5°	119.2	157.8	199.9	241.9	270.0	287.5	305.1	308.5	308.5	308.5	305.1
75°	59.6	80.6	119.2	136.7	161.3	168.3	182.3	182.3	192.9	178.8	175.3
77.5°	52.6	63.1	84.2	98.1	108.7	119.2	122.7	133.2	129.7	122.7	126.2
80°	31.6	38.6	52.6	59.6	73.6	77.1	80.6	84.2	80.6	84.2	84.2
82.5°	24.5	28.1	35.1	35.1	45.6	45.6	49.1	49.1	52.6	52.6	52.6
85°	14.0	24.5	21.0	42.0	28.1	28.1	35.1	42.0	35.1	35.1	42.0
87.5°	14.0	14.0	10.6	14.0	14.0	14.0	17.5	21.0	21.0	24.5	21.0
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: P249339

CATALOG NUMBER: LSR8B120D010 EC8B120850 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	6531.9	6531.9	6531.9	6531.9
2.5°	6542.5	6549.4	6539.0	6535.4
5°	6553.0	6553.0	6546.0	6546.0
7.5°	6553.0	6553.0	6542.5	6535.4
10°	6524.9	6524.9	6514.4	6507.4
12.5°	6472.3	6472.3	6468.8	6458.3
15°	6405.7	6405.7	6391.7	6381.2
17.5°	6314.5	6321.6	6304.1	6304.1
20°	6216.4	6212.9	6198.9	6191.9
22.5°	6114.7	6107.7	6104.2	6083.2
25°	6006.0	5999.0	5988.5	5978.0
27.5°	5820.2	5816.7	5806.2	5792.2
30°	5536.2	5532.7	5518.7	5518.7
32.5°	5168.0	5164.5	5150.5	5154.1
35°	4785.9	4799.9	4792.9	4778.9
37.5°	4466.8	4477.4	4484.4	4477.4
40°	4200.3	4231.9	4235.4	4242.5
42.5°	3916.4	3958.4	3972.5	3979.4
45°	3576.2	3614.8	3646.4	3639.4
47.5°	3229.1	3257.2	3285.2	3264.2
50°	2896.1	2913.6	2924.1	2924.1
52.5°	2580.5	2580.5	2577.0	2580.5
55°	2219.4	2219.4	2205.4	2212.3
57.5°	1840.7	1847.7	1837.2	1819.7
60°	1490.1	1472.6	1465.5	1455.1
62.5°	1160.6	1160.6	1136.0	1167.5
65°	869.6	859.0	848.5	844.9
67.5°	631.1	627.6	617.1	613.6
70°	445.2	431.3	427.7	420.7
72.5°	298.0	298.0	291.0	291.0
75°	182.3	164.8	161.3	164.8
77.5°	126.2	122.7	122.7	119.2
80°	84.2	80.6	87.7	77.1
82.5°	52.6	56.1	52.6	56.1
85°	35.1	42.0	38.6	38.6
87.5°	21.0	21.0	21.0	21.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)