

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: P249474

Luminaire Tested: **LSR8B120D010 EC8B120935 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249474
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 EC8B120935 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 3500 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9436.0 lumens
Efficiency: N/A
Efficacy: 79.8 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

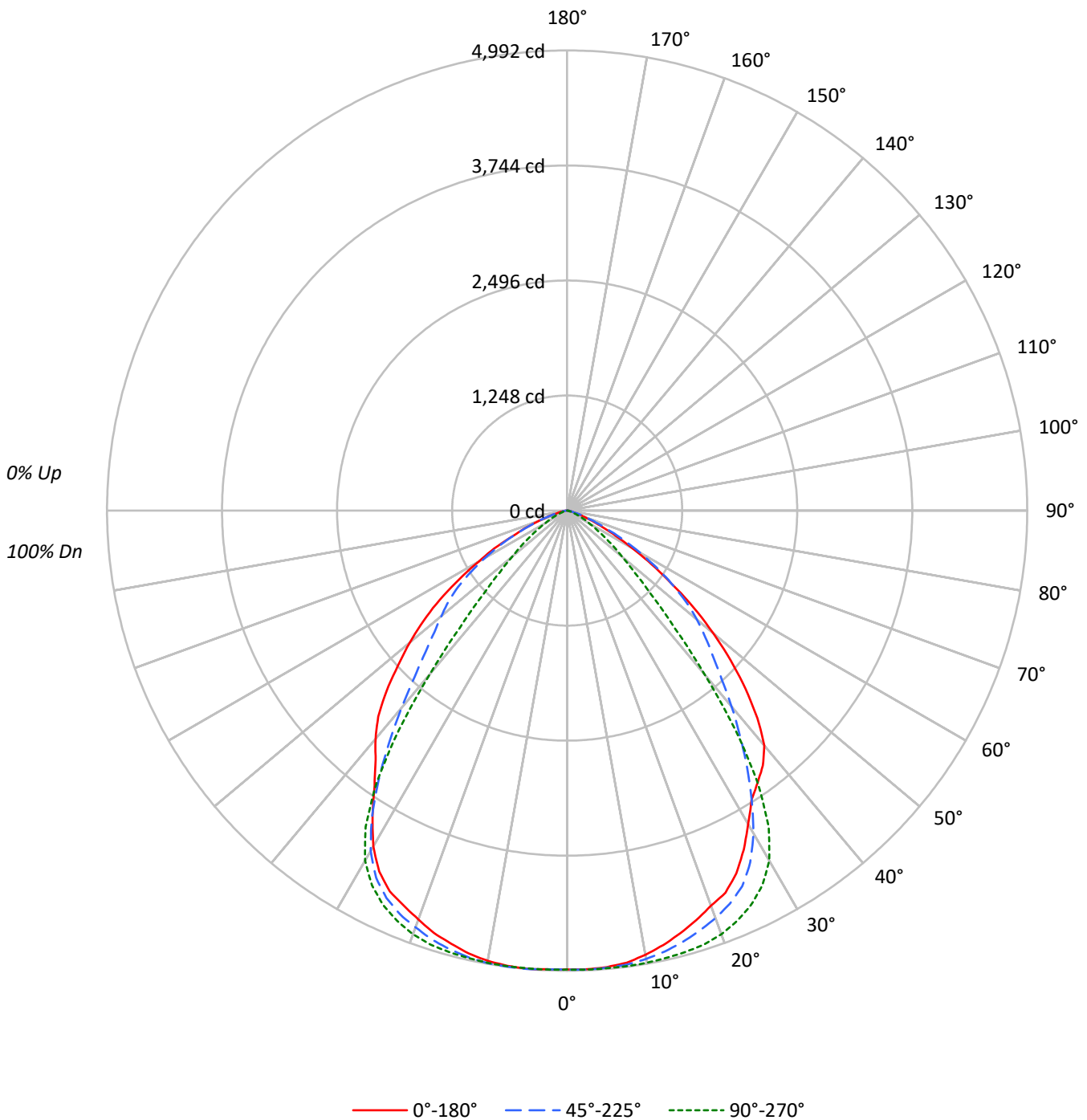
Input Watts (W): 118.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	153522	153522	153522
5°	153860	154275	154439
10°	153213	155975	155304
15°	151515	158254	155269
20°	149697	160480	154869
25°	147753	160665	155027
30°	139781	156146	149772
35°	135609	135707	137119
40°	133929	93373	130165
45°	119336	56055	120967
50°	99227	37308	106922
55°	74422	25719	90653
60°	50430	17139	68401
65°	30419	11120	46989
70°	16869	6023	28914
75°	7637	2550	14964
80°	6641	2841	10442
85°	7571	3786	10402



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	475.1	5.0
10°-20°	1379.9	14.6
20°-30°	2094.4	22.2
30°-40°	2199.7	23.3
40°-50°	1649.2	17.5
50°-60°	1058.2	11.2
60°-70°	452.7	4.8
70°-80°	106.9	1.1
80°-90°	19.9	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°	3949.4	41.9
0°-40°	6149.1	65.2
0°-60°	8856.5	93.9
0°-90°	9436.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9436.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4979	4979	4979	4979	4979	
5°	4971	4979	4984	4992	4989	472
15°	4746	4845	4957	4925	4864	1339
25°	4343	4495	4722	4637	4556	1984
35°	3602	3402	3605	3562	3642	2261
45°	2736	2237	1285	2173	2774	2096
55°	1384	1384	478	1443	1686	1256
65°	417	492	152	633	644	445
75°	64	75	21	128	126	93
85°	21	13	11	21	29	23
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°	4978.6	4978.6	4978.6	4978.6	4978.6	4978.6	4978.6	4978.6	4978.6	4978.6	4978.6
2.5°	4981.3	4986.7	4984.0	4984.0	4981.3	4984.0	4984.0	4989.3	4989.3	4984.0	4981.3
5°	4970.6	4975.9	4975.9	4970.6	4970.6	4984.0	4975.9	4981.3	4981.3	4978.6	4978.6
7.5°	4946.6	4946.6	4957.2	4949.3	4949.3	4957.2	4954.6	4959.9	4965.3	4968.0	4968.0
10°	4893.1	4898.5	4901.1	4901.1	4903.8	4911.8	4917.2	4927.9	4933.2	4938.5	4941.2
12.5°	4826.3	4834.3	4837.0	4834.3	4842.3	4853.0	4866.4	4879.8	4887.8	4898.5	4906.5
15°	4746.1	4746.1	4751.5	4759.5	4764.9	4780.9	4794.2	4810.2	4831.6	4845.0	4858.4
17.5°	4658.0	4663.3	4671.3	4671.3	4682.0	4708.7	4716.7	4740.8	4764.9	4778.2	4804.9
20°	4561.8	4567.1	4575.1	4580.5	4593.8	4615.2	4631.2	4652.6	4679.3	4703.4	4730.1
22.5°	4486.9	4476.2	4481.5	4486.9	4500.3	4519.0	4537.7	4564.4	4591.1	4615.2	4641.9
25°	4342.6	4345.3	4353.3	4358.6	4374.7	4390.7	4412.1	4444.1	4468.2	4494.9	4524.3
27.5°	4147.5	4150.2	4163.6	4163.6	4176.9	4203.6	4217.0	4243.7	4275.8	4302.5	4337.3
30°	3925.7	3931.0	3931.0	3941.8	3949.7	3963.1	3976.5	4003.2	4019.2	4043.3	4091.4
32.5°	3722.6	3727.9	3725.3	3722.6	3714.6	3711.9	3709.2	3714.6	3720.0	3727.9	3746.6
35°	3602.4	3589.0	3578.3	3559.6	3538.2	3511.5	3487.4	3455.4	3426.0	3401.9	3375.2
37.5°	3487.4	3484.8	3468.7	3442.0	3399.2	3351.2	3295.1	3225.6	3156.0	3081.2	3009.1
40°	3327.1	3319.1	3305.7	3268.3	3220.2	3161.4	3086.6	3001.1	2888.8	2773.9	2656.3
42.5°	3054.5	3057.2	3041.2	3011.7	2966.4	2910.2	2832.7	2739.2	2618.9	2482.6	2330.3
45°	2736.5	2736.5	2731.1	2707.1	2675.0	2629.6	2570.8	2493.3	2375.8	2236.7	2073.7
47.5°	2405.1	2407.8	2399.8	2394.5	2381.1	2351.7	2308.9	2250.2	2167.3	2033.7	1870.6
50°	2068.4	2068.4	2081.8	2079.1	2079.1	2068.4	2049.7	2014.9	1942.8	1835.9	1683.6
52.5°	1731.7	1737.0	1745.1	1755.7	1769.1	1790.5	1769.1	1753.1	1707.6	1624.8	1493.9
55°	1384.3	1389.6	1403.0	1421.7	1437.8	1459.1	1464.4	1464.4	1440.4	1384.3	1285.4
57.5°	1087.7	1079.6	1090.4	1106.4	1127.8	1149.1	1165.2	1183.9	1181.2	1143.8	1063.6
60°	817.7	820.4	828.4	844.5	860.5	879.2	900.6	916.6	924.7	906.0	855.2
62.5°	596.0	596.0	606.6	622.6	630.7	657.4	670.8	678.8	686.8	684.1	652.1
65°	416.9	422.2	427.6	435.6	443.6	459.6	467.7	483.7	489.0	491.7	467.7
67.5°	294.0	285.9	291.3	296.6	304.6	315.4	331.4	331.4	339.4	339.4	323.3
70°	187.1	187.1	189.8	197.7	203.1	205.8	211.1	216.4	224.5	221.8	221.8
72.5°	125.6	122.9	125.6	128.3	131.0	139.0	139.0	141.6	147.0	149.7	139.0
75°	64.1	66.8	72.1	69.5	77.5	72.1	74.8	82.8	80.2	74.8	74.8
77.5°	53.4	53.4	53.4	50.8	56.1	56.1	53.4	58.8	56.1	56.1	53.4
80°	37.4	40.1	37.4	34.7	37.4	34.7	34.7	34.7	34.7	34.7	32.0
82.5°	29.4	24.1	26.7	24.1	26.7	26.7	24.1	21.4	21.4	24.1	21.4
85°	21.4	16.0	18.7	18.7	16.0	16.0	16.0	16.0	16.0	13.3	13.3
87.5°	13.3	8.0	8.0	8.0	10.7	10.7	10.7	8.0	10.7	10.7	5.4
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: P249474

CATALOG NUMBER: LSR8B120D010 EC8B120935 8LBDW0B

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	4978.6	4978.6	4978.6	4978.6	4978.6	4978.6	4978.6	4978.6	4978.6	4978.6	4978.6
2.5°	4986.7	4984.0	4989.3	4986.7	4986.7	4984.0	4986.7	4984.0	4989.3	4978.6	4981.3
5°	4986.7	4981.3	4984.0	4986.7	4989.3	4984.0	4984.0	4984.0	4989.3	4984.0	4986.7
7.5°	4975.9	4973.3	4981.3	4986.7	4984.0	4981.3	4986.7	4984.0	4989.3	4986.7	4992.0
10°	4954.6	4957.2	4962.6	4970.6	4973.3	4975.9	4981.3	4981.3	4989.3	4978.6	4984.0
12.5°	4922.5	4933.2	4946.6	4951.9	4962.6	4962.6	4968.0	4970.6	4975.9	4973.3	4981.3
15°	4882.4	4895.8	4911.8	4925.2	4938.5	4946.6	4954.6	4957.2	4965.3	4957.2	4959.9
17.5°	4834.3	4850.3	4874.4	4890.4	4911.8	4919.8	4930.5	4935.9	4943.9	4938.5	4941.2
20°	4767.5	4786.2	4812.9	4837.0	4850.3	4869.0	4882.4	4890.4	4895.8	4890.4	4893.1
22.5°	4674.0	4700.7	4735.4	4754.1	4780.9	4796.9	4799.6	4818.3	4831.6	4818.3	4823.6
25°	4564.4	4591.1	4617.9	4658.0	4682.0	4700.7	4719.4	4722.1	4735.4	4732.8	4730.1
27.5°	4382.7	4417.5	4462.8	4494.9	4527.0	4556.4	4577.8	4583.1	4596.5	4591.1	4593.8
30°	4134.1	4171.6	4214.4	4265.1	4310.5	4339.9	4366.6	4385.3	4398.7	4390.7	4388.0
32.5°	3781.4	3818.8	3864.3	3915.0	3968.5	4011.2	4043.3	4067.4	4083.4	4078.0	4064.7
35°	3377.9	3388.6	3418.0	3458.1	3503.5	3548.9	3578.3	3605.0	3623.7	3629.1	3629.1
37.5°	2963.7	2928.9	2907.6	2907.6	2934.2	2952.9	2979.7	2995.7	3025.1	3035.8	3043.8
40°	2562.8	2482.6	2407.8	2351.7	2314.3	2311.6	2311.6	2319.6	2346.3	2381.1	2413.2
42.5°	2204.7	2076.4	1961.5	1857.3	1782.5	1739.7	1721.0	1723.7	1745.1	1777.1	1830.6
45°	1918.8	1758.4	1614.1	1488.5	1387.0	1320.1	1288.1	1285.4	1301.4	1338.8	1397.7
47.5°	1697.0	1525.9	1362.9	1218.6	1109.1	1036.9	999.5	988.8	999.5	1034.2	1103.7
50°	1512.6	1336.2	1167.8	1018.2	900.6	825.8	791.0	777.7	791.0	820.4	889.9
52.5°	1341.5	1159.8	1002.1	857.8	732.2	668.1	630.7	622.6	630.7	665.4	721.6
55°	1143.8	988.8	833.8	689.5	579.9	515.8	486.4	478.4	486.4	518.5	577.2
57.5°	948.7	815.1	678.8	547.8	454.3	398.2	371.5	360.7	379.5	400.8	470.3
60°	766.9	660.1	545.1	430.3	352.8	302.0	280.6	277.9	283.3	310.0	358.1
62.5°	601.3	513.1	422.2	328.7	264.6	243.2	216.4	213.8	219.1	235.1	272.6
65°	432.9	376.8	307.3	240.5	189.8	160.3	149.7	152.4	157.7	168.4	203.1
67.5°	302.0	261.9	213.8	168.4	131.0	117.6	106.9	104.2	106.9	125.6	144.3
70°	203.1	179.0	144.3	128.3	90.9	72.1	74.8	66.8	77.5	77.5	93.5
72.5°	133.6	117.6	96.2	74.8	64.1	50.8	50.8	48.1	53.4	56.1	69.5
75°	69.5	53.4	53.4	37.4	26.7	13.3	24.1	21.4	18.7	21.4	26.7
77.5°	48.1	40.1	37.4	29.4	26.7	21.4	21.4	21.4	21.4	24.1	26.7
80°	29.4	29.4	21.4	18.7	16.0	13.3	16.0	16.0	16.0	16.0	18.7
82.5°	18.7	16.0	16.0	13.3	13.3	10.7	10.7	10.7	10.7	10.7	16.0
85°	16.0	10.7	10.7	8.0	10.7	18.7	8.0	10.7	10.7	10.7	8.0
87.5°	5.4	8.0	8.0	8.0	5.4	2.7	5.4	8.0	8.0	13.3	10.7
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: P249474

CATALOG NUMBER: LSR8B120D010 EC8B120935 8LBDW0B

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	4978.6	4978.6	4978.6	4978.6	4978.6	4978.6	4978.6	4978.6	4978.6	4978.6	4978.6
2.5°	4986.7	4989.3	4989.3	4986.7	4986.7	4981.3	4992.0	4984.0	4986.7	4997.3	4989.3
5°	4992.0	4994.6	4994.6	4992.0	4992.0	4992.0	4994.6	4994.6	4992.0	4989.3	4994.6
7.5°	5002.7	5000.0	5000.0	4994.6	4994.6	4989.3	4994.6	4986.7	4992.0	4986.7	4994.6
10°	4989.3	4992.0	4989.3	4986.7	4986.7	4984.0	4984.0	4975.9	4978.6	4970.6	4975.9
12.5°	4981.3	4978.6	4978.6	4973.3	4968.0	4962.6	4959.9	4951.9	4951.9	4933.2	4941.2
15°	4959.9	4962.6	4954.6	4943.9	4938.5	4925.2	4919.8	4909.1	4898.5	4885.1	4887.8
17.5°	4941.2	4933.2	4922.5	4911.8	4890.4	4879.8	4869.0	4853.0	4847.6	4831.6	4826.3
20°	4885.1	4879.8	4866.4	4847.6	4834.3	4810.2	4799.6	4783.6	4770.2	4754.1	4746.1
22.5°	4812.9	4807.6	4791.5	4772.8	4751.5	4740.8	4730.1	4700.7	4687.3	4671.3	4668.6
25°	4722.1	4714.1	4698.0	4676.7	4665.9	4636.6	4625.8	4604.5	4599.2	4583.1	4580.5
27.5°	4583.1	4572.4	4553.7	4527.0	4508.3	4489.6	4478.9	4462.8	4457.5	4441.5	4438.8
30°	4374.7	4361.3	4323.9	4313.2	4281.1	4262.4	4262.4	4241.0	4243.7	4233.1	4233.1
32.5°	4046.0	4024.6	3995.2	3973.8	3952.4	3941.8	3941.8	3933.7	3939.1	3939.1	3944.4
35°	3610.4	3581.0	3564.9	3551.6	3551.6	3562.2	3594.3	3602.4	3618.4	3631.7	3642.5
37.5°	3051.8	3049.2	3067.9	3083.9	3124.0	3169.4	3225.6	3273.7	3319.1	3351.2	3383.2
40°	2447.9	2514.7	2568.1	2643.0	2704.4	2792.6	2894.2	2977.0	3054.5	3110.7	3169.4
42.5°	1910.7	1996.2	2108.5	2218.0	2327.6	2447.9	2581.5	2696.4	2798.0	2875.5	2936.9
45°	1488.5	1606.1	1742.4	1881.4	2023.0	2172.7	2311.6	2429.2	2536.1	2616.3	2677.7
47.5°	1199.9	1328.2	1483.1	1635.5	1795.8	1953.5	2108.5	2210.1	2298.2	2362.4	2418.5
50°	991.4	1127.8	1290.8	1464.4	1624.8	1782.5	1916.1	2014.9	2087.1	2143.2	2178.0
52.5°	828.4	972.7	1146.5	1320.1	1480.5	1624.8	1745.1	1819.9	1878.7	1918.8	1950.8
55°	684.1	823.1	986.1	1149.1	1306.8	1443.1	1541.9	1598.1	1643.5	1667.5	1686.2
57.5°	558.5	686.8	836.5	986.1	1122.4	1234.7	1312.2	1368.3	1389.6	1408.3	1405.7
60°	438.3	558.5	694.8	823.1	940.7	1031.5	1087.7	1119.7	1135.7	1143.8	1138.4
62.5°	344.7	454.3	558.5	670.8	756.3	833.8	887.3	887.3	895.2	897.9	906.0
65°	256.5	339.4	430.3	513.1	582.5	633.4	662.8	670.8	681.5	678.8	673.4
67.5°	189.8	251.2	318.0	379.5	427.6	459.6	481.0	499.8	497.1	491.7	489.0
70°	131.0	171.1	229.8	267.2	302.0	334.1	339.4	342.0	344.7	347.4	342.0
72.5°	90.9	120.2	152.4	184.4	205.8	219.1	232.5	235.1	235.1	235.1	232.5
75°	45.4	61.5	90.9	104.2	122.9	128.3	139.0	139.0	147.0	136.3	133.6
77.5°	40.1	48.1	64.1	74.8	82.8	90.9	93.5	101.5	98.9	93.5	96.2
80°	24.1	29.4	40.1	45.4	56.1	58.8	61.5	64.1	61.5	64.1	64.1
82.5°	18.7	21.4	26.7	26.7	34.7	34.7	37.4	37.4	40.1	40.1	40.1
85°	10.7	18.7	16.0	32.0	21.4	21.4	26.7	32.0	26.7	26.7	32.0
87.5°	10.7	10.7	8.0	10.7	10.7	10.7	13.3	16.0	16.0	18.7	16.0
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: P249474

CATALOG NUMBER: LSR8B120D010 EC8B120935 8LBDW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	4978.6	4978.6	4978.6	4978.6
2.5°	4986.7	4992.0	4984.0	4981.3
5°	4994.6	4994.6	4989.3	4989.3
7.5°	4994.6	4994.6	4986.7	4981.3
10°	4973.3	4973.3	4965.3	4959.9
12.5°	4933.2	4933.2	4930.5	4922.5
15°	4882.4	4882.4	4871.7	4863.7
17.5°	4812.9	4818.3	4804.9	4804.9
20°	4738.1	4735.4	4724.8	4719.4
22.5°	4660.6	4655.3	4652.6	4636.6
25°	4577.8	4572.4	4564.4	4556.4
27.5°	4436.2	4433.5	4425.4	4414.8
30°	4219.7	4217.0	4206.3	4206.3
32.5°	3939.1	3936.4	3925.7	3928.4
35°	3647.8	3658.5	3653.1	3642.5
37.5°	3404.6	3412.6	3418.0	3412.6
40°	3201.5	3225.6	3228.2	3233.6
42.5°	2985.1	3017.1	3027.8	3033.1
45°	2725.8	2755.2	2779.3	2773.9
47.5°	2461.2	2482.6	2504.0	2488.0
50°	2207.4	2220.7	2228.8	2228.8
52.5°	1966.9	1966.9	1964.2	1966.9
55°	1691.6	1691.6	1680.9	1686.2
57.5°	1403.0	1408.3	1400.3	1387.0
60°	1135.7	1122.4	1117.0	1109.1
62.5°	884.6	884.6	865.9	889.9
65°	662.8	654.7	646.7	644.0
67.5°	481.0	478.4	470.3	467.7
70°	339.4	328.7	326.0	320.7
72.5°	227.2	227.2	221.8	221.8
75°	139.0	125.6	122.9	125.6
77.5°	96.2	93.5	93.5	90.9
80°	64.1	61.5	66.8	58.8
82.5°	40.1	42.8	40.1	42.8
85°	26.7	32.0	29.4	29.4
87.5°	16.0	16.0	16.0	16.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)