

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: P249392

Luminaire Tested: **LSR8B100D010 EC8B100927 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249392
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 EC8B100927 8LBDW0GPH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 2700 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8445.4 lumens
Efficiency: N/A
Efficacy: 79.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

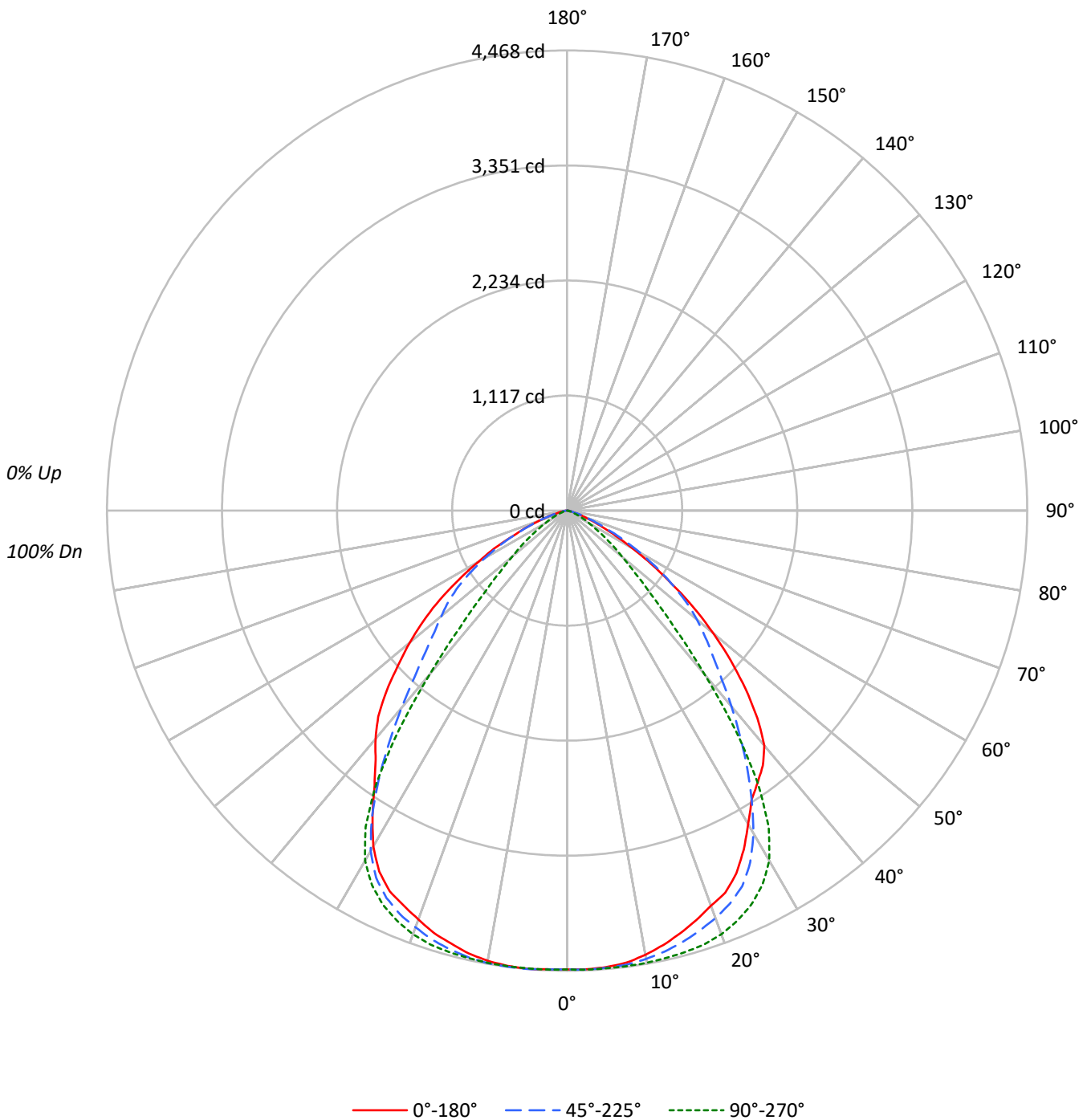
Input Watts (W): 106.3
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	Luminaire represents a point source (luminous area is zero).		
5°	No luminance values can be calculated.		
10°			
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	425.3	5.0
10°-20°	1235.0	14.6
20°-30°	1874.5	22.2
30°-40°	1968.8	23.3
40°-50°	1476.1	17.5
50°-60°	947.1	11.2
60°-70°	405.2	4.8
70°-80°	95.7	1.1
80°-90°	17.8	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°	3534.8	41.9
0°-40°	5503.6	65.2
0°-60°	7926.7	93.9
0°-90°	8445.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8445.4	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4456	4456	4456	4456	4456	
5°	4449	4456	4461	4468	4466	423
15°	4248	4336	4437	4408	4353	1198
25°	3887	4023	4226	4150	4078	1776
35°	3224	3045	3226	3188	3260	2024
45°	2449	2002	1150	1945	2483	1876
55°	1239	1239	428	1292	1509	1124
65°	373	440	136	567	576	398
75°	57	67	19	115	112	84
85°	19	12	10	19	26	20
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°	4455.9	4455.9	4455.9	4455.9	4455.9	4455.9	4455.9	4455.9	4455.9	4455.9	4455.9
2.5°	4458.4	4463.1	4460.7	4460.7	4458.4	4460.7	4460.7	4465.6	4465.6	4460.7	4458.4
5°	4448.7	4453.5	4453.5	4448.7	4448.7	4460.7	4453.5	4458.4	4458.4	4455.9	4455.9
7.5°	4427.2	4427.2	4436.8	4429.7	4429.7	4436.8	4434.4	4439.2	4444.0	4446.4	4446.4
10°	4379.4	4384.2	4386.6	4386.6	4389.0	4396.2	4400.9	4410.6	4415.3	4420.1	4422.5
12.5°	4319.7	4326.8	4329.2	4326.8	4334.0	4343.5	4355.6	4367.5	4374.7	4384.2	4391.4
15°	4247.9	4247.9	4252.6	4259.8	4264.7	4278.9	4290.9	4305.3	4324.4	4336.4	4348.3
17.5°	4168.9	4173.8	4180.8	4180.8	4190.5	4214.4	4221.6	4243.0	4264.7	4276.6	4300.5
20°	4082.8	4087.6	4094.8	4099.6	4111.5	4130.7	4145.1	4164.2	4188.0	4209.6	4233.5
22.5°	4015.8	4006.4	4011.1	4015.8	4027.8	4044.6	4061.4	4085.2	4109.2	4130.7	4154.6
25°	3886.6	3889.1	3896.3	3901.0	3915.4	3929.7	3948.9	3977.6	3999.2	4023.0	4049.3
27.5°	3712.2	3714.5	3726.4	3726.4	3738.4	3762.3	3774.3	3798.2	3826.9	3850.8	3881.9
30°	3513.6	3518.3	3518.3	3527.9	3535.1	3547.1	3559.0	3582.9	3597.3	3618.8	3661.9
32.5°	3331.8	3336.5	3334.2	3331.8	3324.6	3322.2	3319.9	3324.6	3329.4	3336.5	3353.3
35°	3224.1	3212.2	3202.6	3185.9	3166.8	3142.8	3121.3	3092.6	3066.3	3044.8	3020.8
37.5°	3121.3	3119.0	3104.5	3080.6	3042.3	2999.4	2949.2	2887.0	2824.8	2757.7	2693.2
40°	2977.8	2970.6	2958.6	2925.2	2882.1	2829.5	2762.5	2686.0	2585.5	2482.6	2377.5
42.5°	2733.9	2736.2	2721.9	2695.5	2654.9	2604.7	2535.3	2451.6	2344.0	2222.0	2085.6
45°	2449.2	2449.2	2444.4	2422.9	2394.2	2353.5	2301.0	2231.5	2126.4	2001.9	1856.0
47.5°	2152.6	2155.0	2147.8	2143.1	2131.1	2104.8	2066.5	2014.0	1939.7	1820.1	1674.2
50°	1851.3	1851.3	1863.2	1860.9	1860.9	1851.3	1834.5	1803.4	1738.9	1643.2	1506.8
52.5°	1549.9	1554.6	1561.8	1571.4	1583.3	1602.4	1583.3	1569.0	1528.3	1454.2	1337.1
55°	1239.0	1243.8	1255.7	1272.4	1286.8	1306.0	1310.7	1310.7	1289.1	1239.0	1150.4
57.5°	973.5	966.3	975.9	990.2	1009.4	1028.5	1042.9	1059.5	1057.2	1023.8	952.0
60°	731.9	734.3	741.5	755.9	770.2	786.9	806.1	820.4	827.6	810.9	765.3
62.5°	533.4	533.4	542.9	557.2	564.4	588.4	600.3	607.5	614.7	612.2	583.6
65°	373.2	377.9	382.7	389.9	397.0	411.4	418.6	432.9	437.7	440.1	418.6
67.5°	263.1	255.9	260.8	265.5	272.7	282.3	296.6	296.6	303.8	303.8	289.3
70°	167.4	167.4	169.9	177.0	181.8	184.2	189.0	193.7	200.9	198.6	198.6
72.5°	112.4	110.0	112.4	114.9	117.2	124.3	124.3	126.8	131.5	134.0	124.3
75°	57.4	59.8	64.6	62.2	69.3	64.6	66.9	74.1	71.8	66.9	66.9
77.5°	47.8	47.8	47.8	45.4	50.2	50.2	47.8	52.6	50.2	50.2	47.8
80°	33.5	35.9	33.5	31.0	33.5	31.0	31.0	31.0	31.0	31.0	28.7
82.5°	26.3	21.5	24.0	21.5	24.0	24.0	21.5	19.1	19.1	21.5	19.1
85°	19.1	14.3	16.8	16.8	14.3	14.3	14.3	14.3	14.3	11.9	11.9
87.5°	11.9	7.2	7.2	7.2	9.6	9.6	9.6	7.2	9.6	9.6	4.8
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°	4455.9	4455.9	4455.9	4455.9	4455.9	4455.9	4455.9	4455.9	4455.9	4455.9	4455.9
2.5°	4463.1	4460.7	4465.6	4463.1	4463.1	4460.7	4463.1	4460.7	4465.6	4455.9	4458.4
5°	4463.1	4458.4	4460.7	4463.1	4465.6	4460.7	4460.7	4460.7	4465.6	4460.7	4463.1
7.5°	4453.5	4451.2	4458.4	4463.1	4460.7	4458.4	4463.1	4460.7	4465.6	4463.1	4467.9
10°	4434.4	4436.8	4441.6	4448.7	4451.2	4453.5	4458.4	4458.4	4465.6	4455.9	4460.7
12.5°	4405.7	4415.3	4427.2	4432.0	4441.6	4441.6	4446.4	4448.7	4453.5	4451.2	4458.4
15°	4369.8	4381.8	4396.2	4408.1	4420.1	4427.2	4434.4	4436.8	4444.0	4436.8	4439.2
17.5°	4326.8	4341.2	4362.6	4377.0	4396.2	4403.4	4412.9	4417.7	4424.8	4420.1	4422.5
20°	4267.0	4283.8	4307.6	4329.2	4341.2	4357.9	4369.8	4377.0	4381.8	4377.0	4379.4
22.5°	4183.3	4207.2	4238.3	4255.1	4278.9	4293.3	4295.7	4312.5	4324.4	4312.5	4317.2
25°	4085.2	4109.2	4133.0	4168.9	4190.5	4207.2	4223.9	4226.4	4238.3	4235.8	4233.5
27.5°	3922.5	3953.7	3994.3	4023.0	4051.7	4078.0	4097.2	4102.0	4113.9	4109.2	4111.5
30°	3700.1	3733.6	3771.9	3817.4	3858.0	3884.3	3908.2	3925.0	3936.9	3929.7	3927.4
32.5°	3384.4	3417.9	3458.6	3504.0	3551.8	3590.1	3618.8	3640.4	3654.7	3650.0	3637.9
35°	3023.3	3032.8	3059.2	3095.0	3135.6	3176.3	3202.6	3226.5	3243.3	3248.1	3248.1
37.5°	2652.5	2621.5	2602.4	2602.4	2626.2	2643.0	2666.9	2681.2	2707.5	2717.1	2724.3
40°	2293.8	2222.0	2155.0	2104.8	2071.4	2069.0	2069.0	2076.1	2100.0	2131.1	2159.8
42.5°	1973.2	1858.4	1755.6	1662.3	1595.4	1557.1	1540.4	1542.7	1561.8	1590.5	1638.3
45°	1717.3	1573.9	1444.6	1332.2	1241.3	1181.6	1152.9	1150.4	1164.8	1198.2	1251.0
47.5°	1518.9	1365.8	1219.8	1090.7	992.6	928.0	894.5	885.0	894.5	925.6	987.9
50°	1353.8	1196.0	1045.2	911.2	806.1	739.1	708.0	696.0	708.0	734.3	796.5
52.5°	1200.7	1038.0	897.0	767.8	655.3	597.9	564.4	557.2	564.4	595.6	645.9
55°	1023.8	885.0	746.2	617.1	519.1	461.6	435.3	428.2	435.3	464.1	516.6
57.5°	849.2	729.4	607.5	490.3	406.6	356.4	332.4	322.9	339.6	358.8	421.0
60°	686.5	590.8	487.9	385.1	315.8	270.2	251.1	248.7	253.6	277.4	320.5
62.5°	538.2	459.2	377.9	294.2	236.8	217.7	193.7	191.4	196.1	210.5	244.0
65°	387.4	337.3	275.1	215.2	169.9	143.5	134.0	136.4	141.1	150.8	181.8
67.5°	270.2	234.3	191.4	150.8	117.2	105.2	95.7	93.3	95.7	112.4	129.2
70°	181.8	160.2	129.2	114.9	81.3	64.6	66.9	59.8	69.3	69.3	83.7
72.5°	119.6	105.2	86.1	66.9	57.4	45.4	45.4	43.1	47.8	50.2	62.2
75°	62.2	47.8	47.8	33.5	24.0	11.9	21.5	19.1	16.8	19.1	24.0
77.5°	43.1	35.9	33.5	26.3	24.0	19.1	19.1	19.1	19.1	21.5	24.0
80°	26.3	26.3	19.1	16.8	14.3	11.9	14.3	14.3	14.3	14.3	16.8
82.5°	16.8	14.3	14.3	11.9	11.9	9.6	9.6	9.6	9.6	9.6	14.3
85°	14.3	9.6	9.6	7.2	9.6	16.8	7.2	9.6	9.6	9.6	7.2
87.5°	4.8	7.2	7.2	7.2	4.8	2.4	4.8	7.2	7.2	11.9	9.6
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°	4455.9	4455.9	4455.9	4455.9	4455.9	4455.9	4455.9	4455.9	4455.9	4455.9	4455.9
2.5°	4463.1	4465.6	4465.6	4463.1	4463.1	4458.4	4467.9	4460.7	4463.1	4472.7	4465.6
5°	4467.9	4470.3	4470.3	4467.9	4467.9	4467.9	4470.3	4470.3	4467.9	4465.6	4470.3
7.5°	4477.5	4475.1	4475.1	4470.3	4470.3	4465.6	4470.3	4463.1	4467.9	4463.1	4470.3
10°	4465.6	4467.9	4465.6	4463.1	4463.1	4460.7	4460.7	4453.5	4455.9	4448.7	4453.5
12.5°	4458.4	4455.9	4455.9	4451.2	4446.4	4441.6	4439.2	4432.0	4432.0	4415.3	4422.5
15°	4439.2	4441.6	4434.4	4424.8	4420.1	4408.1	4403.4	4393.7	4384.2	4372.2	4374.7
17.5°	4422.5	4415.3	4405.7	4396.2	4377.0	4367.5	4357.9	4343.5	4338.7	4324.4	4319.7
20°	4372.2	4367.5	4355.6	4338.7	4326.8	4305.3	4295.7	4281.4	4269.4	4255.1	4247.9
22.5°	4307.6	4302.9	4288.5	4271.7	4252.6	4243.0	4233.5	4207.2	4195.2	4180.8	4178.5
25°	4226.4	4219.2	4204.8	4185.7	4176.1	4149.8	4140.2	4121.1	4116.4	4102.0	4099.6
27.5°	4102.0	4092.4	4075.6	4051.7	4035.0	4018.3	4008.7	3994.3	3989.6	3975.2	3972.8
30°	3915.4	3903.4	3870.0	3860.4	3831.6	3815.0	3815.0	3795.8	3798.2	3788.7	3788.7
32.5°	3621.3	3602.1	3575.7	3556.6	3537.4	3527.9	3527.9	3520.7	3525.5	3525.5	3530.4
35°	3231.3	3205.0	3190.6	3178.7	3178.7	3188.2	3217.0	3224.1	3238.5	3250.5	3260.0
37.5°	2731.4	2729.1	2745.8	2760.2	2796.1	2836.7	2887.0	2930.0	2970.6	2999.4	3028.0
40°	2190.9	2250.7	2298.5	2365.5	2420.4	2499.4	2590.3	2664.5	2733.9	2784.2	2836.7
42.5°	1710.1	1786.7	1887.2	1985.2	2083.3	2190.9	2310.5	2413.4	2504.2	2573.5	2628.6
45°	1332.2	1437.4	1559.5	1683.9	1810.6	1944.6	2069.0	2174.2	2269.8	2341.6	2396.6
47.5°	1073.9	1188.8	1327.4	1463.9	1607.3	1748.4	1887.2	1978.1	2057.0	2114.3	2164.6
50°	887.3	1009.4	1155.3	1310.7	1454.2	1595.4	1715.0	1803.4	1868.1	1918.2	1949.3
52.5°	741.5	870.6	1026.1	1181.6	1325.0	1454.2	1561.8	1628.9	1681.4	1717.3	1746.0
55°	612.2	736.6	882.6	1028.5	1169.6	1291.6	1380.0	1430.3	1470.9	1492.4	1509.2
57.5°	500.0	614.7	748.7	882.6	1004.5	1105.1	1174.4	1224.6	1243.8	1260.4	1258.1
60°	392.3	500.0	621.9	736.6	842.0	923.2	973.5	1002.2	1016.6	1023.8	1018.9
62.5°	308.6	406.6	500.0	600.3	676.9	746.2	794.1	794.1	801.2	803.7	810.9
65°	229.6	303.8	385.1	459.2	521.4	566.9	593.2	600.3	610.0	607.5	602.8
67.5°	169.9	224.9	284.6	339.6	382.7	411.4	430.5	447.3	444.9	440.1	437.7
70°	117.2	153.1	205.8	239.2	270.2	299.0	303.8	306.1	308.6	311.0	306.1
72.5°	81.3	107.7	136.4	165.0	184.2	196.1	208.1	210.5	210.5	210.5	208.1
75°	40.7	55.0	81.3	93.3	110.0	114.9	124.3	124.3	131.5	122.0	119.6
77.5°	35.9	43.1	57.4	66.9	74.1	81.3	83.7	90.9	88.5	83.7	86.1
80°	21.5	26.3	35.9	40.7	50.2	52.6	55.0	57.4	55.0	57.4	57.4
82.5°	16.8	19.1	24.0	24.0	31.0	31.0	33.5	33.5	35.9	35.9	35.9
85°	9.6	16.8	14.3	28.7	19.1	19.1	24.0	28.7	24.0	24.0	28.7
87.5°	9.6	9.6	7.2	9.6	9.6	9.6	11.9	14.3	14.3	16.8	14.3
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: P249392

CATALOG NUMBER: LSR8B100D010 EC8B100927 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	4455.9	4455.9	4455.9	4455.9
2.5°	4463.1	4467.9	4460.7	4458.4
5°	4470.3	4470.3	4465.6	4465.6
7.5°	4470.3	4470.3	4463.1	4458.4
10°	4451.2	4451.2	4444.0	4439.2
12.5°	4415.3	4415.3	4412.9	4405.7
15°	4369.8	4369.8	4360.3	4353.1
17.5°	4307.6	4312.5	4300.5	4300.5
20°	4240.7	4238.3	4228.8	4223.9
22.5°	4171.4	4166.6	4164.2	4149.8
25°	4097.2	4092.4	4085.2	4078.0
27.5°	3970.5	3968.0	3960.8	3951.3
30°	3776.6	3774.3	3764.7	3764.7
32.5°	3525.5	3523.2	3513.6	3516.0
35°	3264.9	3274.4	3269.6	3260.0
37.5°	3047.2	3054.4	3059.2	3054.4
40°	2865.4	2887.0	2889.3	2894.2
42.5°	2671.6	2700.3	2709.9	2714.7
45°	2439.7	2466.0	2487.5	2482.6
47.5°	2202.9	2222.0	2241.1	2226.8
50°	1975.6	1987.5	1994.7	1994.7
52.5°	1760.4	1760.4	1758.0	1760.4
55°	1514.0	1514.0	1504.5	1509.2
57.5°	1255.7	1260.4	1253.2	1241.3
60°	1016.6	1004.5	999.8	992.6
62.5°	791.7	791.7	775.0	796.5
65°	593.2	586.0	578.8	576.4
67.5°	430.5	428.2	421.0	418.6
70°	303.8	294.2	291.8	287.0
72.5°	203.3	203.3	198.6	198.6
75°	124.3	112.4	110.0	112.4
77.5°	86.1	83.7	83.7	81.3
80°	57.4	55.0	59.8	52.6
82.5°	35.9	38.2	35.9	38.2
85°	24.0	28.7	26.3	26.3
87.5°	14.3	14.3	14.3	14.3
90°	0.0	0.0	0.0	0.0

(END OF REPORT)