

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: P249473

Luminaire Tested: **LSR8B100D010 EC8B100935 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249473
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 EC8B100935 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: 8324.0 lumens
Efficiency: N/A
Efficacy: 78.3 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

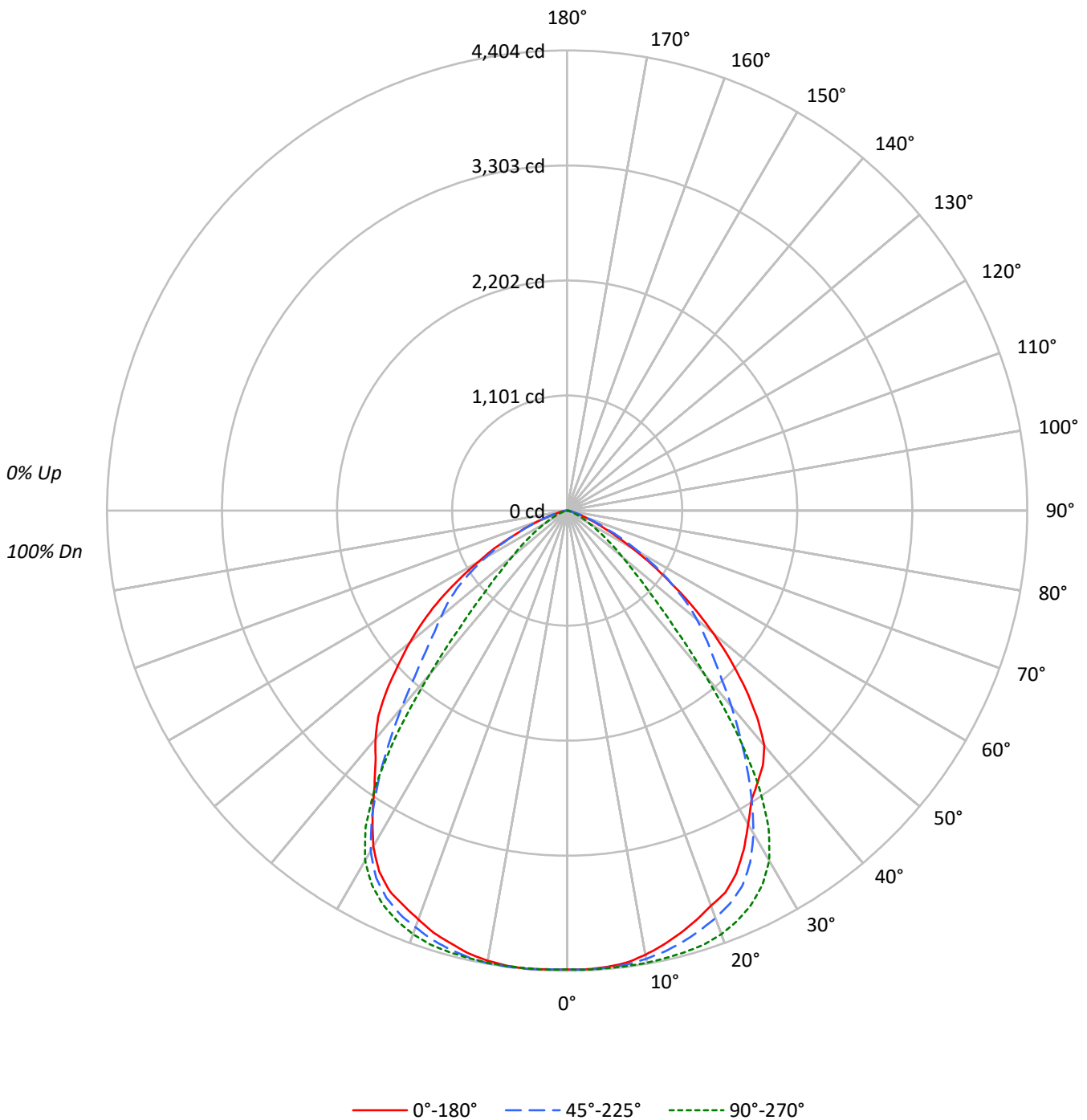
Input Watts (W): 106.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	135430	135430	135430
5°	135728	136093	136241
10°	135158	137594	137003
15°	133660	139604	136974
20°	132055	141569	136620
25°	130340	141731	136757
30°	123310	137748	132122
35°	119629	119716	120958
40°	118145	82368	114824
45°	105272	49448	106712
50°	87536	32909	94319
55°	65648	22687	79970
60°	44491	15122	60340
65°	26837	9806	41451
70°	14876	5319	25506
75°	6743	2252	13201
80°	5860	2504	9216
85°	6687	3326	9199



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	419.1	5.0
10°-20°	1217.3	14.6
20°-30°	1847.6	22.2
30°-40°	1940.5	23.3
40°-50°	1454.9	17.5
50°-60°	933.5	11.2
60°-70°	399.3	4.8
70°-80°	94.3	1.1
80°-90°	17.6	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°	3484.0	41.9
0°-40°	5424.5	65.2
0°-60°	7812.8	93.9
0°-90°	8324.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8324.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4392	4392	4392	4392	4392	
5°	4385	4392	4397	4404	4401	417
15°	4187	4274	4373	4345	4291	1181
25°	3831	3965	4166	4090	4019	1750
35°	3178	3001	3180	3142	3213	1994
45°	2414	1973	1134	1917	2447	1849
55°	1221	1221	422	1273	1488	1108
65°	368	434	134	559	568	393
75°	57	66	19	113	111	82
85°	19	12	9	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°	4391.9	4391.9	4391.9	4391.9	4391.9	4391.9	4391.9	4391.9	4391.9	4391.9	4391.9
2.5°	4394.3	4399.0	4396.6	4396.6	4394.3	4396.6	4396.6	4401.4	4401.4	4396.6	4394.3
5°	4384.8	4389.5	4389.5	4384.8	4384.8	4396.6	4389.5	4394.3	4394.3	4391.9	4391.9
7.5°	4363.6	4363.6	4373.0	4366.0	4366.0	4373.0	4370.7	4375.4	4380.1	4382.5	4382.5
10°	4316.5	4321.2	4323.6	4323.6	4325.9	4333.0	4337.7	4347.1	4351.8	4356.5	4358.9
12.5°	4257.6	4264.6	4267.0	4264.6	4271.7	4281.1	4292.9	4304.7	4311.8	4321.2	4328.3
15°	4186.8	4186.8	4191.5	4198.6	4203.3	4217.5	4229.2	4243.4	4262.2	4274.1	4285.8
17.5°	4109.0	4113.8	4120.8	4120.8	4130.3	4153.8	4160.9	4182.1	4203.3	4215.1	4238.7
20°	4024.2	4028.9	4035.9	4040.7	4052.4	4071.3	4085.4	4104.3	4127.9	4149.1	4172.7
22.5°	3958.1	3948.7	3953.4	3958.1	3970.0	3986.5	4003.0	4026.5	4050.1	4071.3	4094.9
25°	3830.8	3833.2	3840.3	3845.0	3859.1	3873.3	3892.1	3920.4	3941.6	3965.2	3991.1
27.5°	3658.8	3661.1	3672.9	3672.9	3684.7	3708.3	3720.0	3743.6	3771.9	3795.5	3826.2
30°	3463.1	3467.8	3467.8	3477.2	3484.3	3496.1	3507.9	3531.5	3545.6	3566.8	3609.3
32.5°	3283.9	3288.6	3286.2	3283.9	3276.8	3274.5	3272.1	3276.8	3281.6	3288.6	3305.1
35°	3177.9	3166.0	3156.6	3140.1	3121.3	3097.7	3076.5	3048.2	3022.2	3001.0	2977.5
37.5°	3076.5	3074.1	3060.0	3036.4	2998.6	2956.2	2906.7	2845.4	2784.1	2718.1	2654.5
40°	2935.0	2927.9	2916.2	2883.2	2840.7	2788.8	2722.9	2647.4	2548.4	2447.0	2343.3
42.5°	2694.5	2696.9	2682.8	2656.8	2616.8	2567.2	2498.9	2416.4	2310.3	2190.0	2055.7
45°	2414.0	2414.0	2409.3	2388.1	2359.8	2319.7	2267.9	2199.5	2095.8	1973.2	1829.4
47.5°	2121.7	2124.1	2117.0	2112.3	2100.5	2074.6	2036.8	1985.0	1911.9	1794.0	1650.2
50°	1824.7	1824.7	1836.4	1834.1	1834.1	1824.7	1808.2	1777.5	1713.9	1619.6	1485.2
52.5°	1527.6	1532.3	1539.4	1548.8	1560.6	1579.5	1560.6	1546.5	1506.4	1433.3	1317.8
55°	1221.1	1225.9	1237.6	1254.1	1268.3	1287.2	1291.9	1291.9	1270.6	1221.1	1133.9
57.5°	959.5	952.4	961.9	976.0	994.9	1013.7	1027.8	1044.3	1042.0	1009.0	938.3
60°	721.4	723.7	730.8	745.0	759.1	775.6	794.5	808.6	815.7	799.2	754.4
62.5°	525.7	525.7	535.1	549.3	556.4	579.9	591.7	598.8	605.8	603.5	575.2
65°	367.8	372.5	377.2	384.3	391.3	405.5	412.5	426.7	431.4	433.8	412.5
67.5°	259.3	252.2	257.0	261.7	268.7	278.2	292.3	292.3	299.4	299.4	285.2
70°	165.0	165.0	167.4	174.4	179.2	181.5	186.3	190.9	198.0	195.7	195.7
72.5°	110.8	108.4	110.8	113.2	115.5	122.6	122.6	124.9	129.7	132.0	122.6
75°	56.6	59.0	63.6	61.3	68.4	63.6	66.0	73.1	70.7	66.0	66.0
77.5°	47.1	47.1	47.1	44.8	49.5	49.5	47.1	51.9	49.5	49.5	47.1
80°	33.0	35.4	33.0	30.6	33.0	30.6	30.6	30.6	30.6	30.6	28.3
82.5°	26.0	21.2	23.6	21.2	23.6	23.6	21.2	18.9	18.9	21.2	18.9
85°	18.9	14.1	16.5	16.5	14.1	14.1	14.1	14.1	14.1	11.8	11.8
87.5°	11.8	7.1	7.1	7.1	9.4	9.4	9.4	7.1	9.4	9.4	4.7
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: P249473

CATALOG NUMBER: LSR8B100D010 EC8B100935 8LBDW0B

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	4391.9	4391.9	4391.9	4391.9	4391.9	4391.9	4391.9	4391.9	4391.9	4391.9	4391.9
2.5°	4399.0	4396.6	4401.4	4399.0	4399.0	4396.6	4399.0	4396.6	4401.4	4391.9	4394.3
5°	4399.0	4394.3	4396.6	4399.0	4401.4	4396.6	4396.6	4396.6	4401.4	4396.6	4399.0
7.5°	4389.5	4387.2	4394.3	4399.0	4396.6	4394.3	4399.0	4396.6	4401.4	4399.0	4403.7
10°	4370.7	4373.0	4377.8	4384.8	4387.2	4389.5	4394.3	4394.3	4401.4	4391.9	4396.6
12.5°	4342.4	4351.8	4363.6	4368.3	4377.8	4377.8	4382.5	4384.8	4389.5	4387.2	4394.3
15°	4307.1	4318.8	4333.0	4344.8	4356.5	4363.6	4370.7	4373.0	4380.1	4373.0	4375.4
17.5°	4264.6	4278.7	4300.0	4314.1	4333.0	4340.0	4349.5	4354.2	4361.3	4356.5	4358.9
20°	4205.6	4222.2	4245.7	4267.0	4278.7	4295.2	4307.1	4314.1	4318.8	4314.1	4316.5
22.5°	4123.2	4146.8	4177.4	4193.9	4217.5	4231.6	4234.0	4250.5	4262.2	4250.5	4255.2
25°	4026.5	4050.1	4073.7	4109.0	4130.3	4146.8	4163.3	4165.6	4177.4	4175.0	4172.7
27.5°	3866.2	3896.9	3936.9	3965.2	3993.5	4019.4	4038.3	4043.0	4054.8	4050.1	4052.4
30°	3646.9	3680.0	3717.7	3762.5	3802.6	3828.5	3852.1	3868.6	3880.3	3873.3	3870.9
32.5°	3335.8	3368.8	3408.9	3453.6	3500.8	3538.5	3566.8	3588.0	3602.2	3597.4	3585.7
35°	2979.8	2989.2	3015.2	3050.6	3090.6	3130.7	3156.6	3180.2	3196.7	3201.4	3201.4
37.5°	2614.4	2583.8	2564.9	2564.9	2588.5	2605.0	2628.5	2642.7	2668.6	2678.0	2685.1
40°	2260.8	2190.0	2124.1	2074.6	2041.6	2039.2	2039.2	2046.2	2069.8	2100.5	2128.8
42.5°	1944.9	1831.7	1730.4	1638.4	1572.4	1534.7	1518.2	1520.6	1539.4	1567.7	1614.8
45°	1692.6	1551.2	1423.9	1313.1	1223.5	1164.6	1136.3	1133.9	1148.1	1181.1	1233.0
47.5°	1497.0	1346.1	1202.3	1075.0	978.4	914.7	881.7	872.3	881.7	912.3	973.6
50°	1334.3	1178.7	1030.2	898.2	794.5	728.5	697.8	686.0	697.8	723.7	785.0
52.5°	1183.4	1023.1	884.0	756.7	645.9	589.3	556.4	549.3	556.4	587.0	636.5
55°	1009.0	872.3	735.5	608.2	511.6	455.0	429.0	422.0	429.0	457.4	509.2
57.5°	836.9	719.0	598.8	483.3	400.8	351.2	327.7	318.2	334.7	353.6	414.9
60°	676.6	582.3	480.9	379.6	311.2	266.4	247.5	245.2	249.9	273.5	315.9
62.5°	530.4	452.6	372.5	290.0	233.4	214.5	190.9	188.6	193.3	207.4	240.5
65°	381.9	332.4	271.1	212.2	167.4	141.4	132.0	134.4	139.1	148.5	179.2
67.5°	266.4	231.0	188.6	148.5	115.5	103.7	94.3	91.9	94.3	110.8	127.3
70°	179.2	157.9	127.3	113.2	80.2	63.6	66.0	59.0	68.4	68.4	82.5
72.5°	117.8	103.7	84.9	66.0	56.6	44.8	44.8	42.5	47.1	49.5	61.3
75°	61.3	47.1	47.1	33.0	23.6	11.8	21.2	18.9	16.5	18.9	23.6
77.5°	42.5	35.4	33.0	26.0	23.6	18.9	18.9	18.9	18.9	21.2	23.6
80°	26.0	26.0	18.9	16.5	14.1	11.8	14.1	14.1	14.1	14.1	16.5
82.5°	16.5	14.1	14.1	11.8	11.8	9.4	9.4	9.4	9.4	9.4	14.1
85°	14.1	9.4	9.4	7.1	9.4	16.5	7.1	9.4	9.4	9.4	7.1
87.5°	4.7	7.1	7.1	7.1	4.7	2.4	4.7	7.1	7.1	11.8	9.4
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: P249473

CATALOG NUMBER: LSR8B100D010 EC8B100935 8LBDW0B

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	4391.9	4391.9	4391.9	4391.9	4391.9	4391.9	4391.9	4391.9	4391.9	4391.9	4391.9
2.5°	4399.0	4401.4	4401.4	4399.0	4399.0	4394.3	4403.7	4396.6	4399.0	4408.4	4401.4
5°	4403.7	4406.0	4406.0	4403.7	4403.7	4403.7	4406.0	4406.0	4403.7	4401.4	4406.0
7.5°	4413.1	4410.8	4410.8	4406.0	4406.0	4401.4	4406.0	4399.0	4403.7	4399.0	4406.0
10°	4401.4	4403.7	4401.4	4399.0	4399.0	4396.6	4396.6	4389.5	4391.9	4384.8	4389.5
12.5°	4394.3	4391.9	4391.9	4387.2	4382.5	4377.8	4375.4	4368.3	4368.3	4351.8	4358.9
15°	4375.4	4377.8	4370.7	4361.3	4356.5	4344.8	4340.0	4330.6	4321.2	4309.4	4311.8
17.5°	4358.9	4351.8	4342.4	4333.0	4314.1	4304.7	4295.2	4281.1	4276.4	4262.2	4257.6
20°	4309.4	4304.7	4292.9	4276.4	4264.6	4243.4	4234.0	4219.8	4208.0	4193.9	4186.8
22.5°	4245.7	4241.0	4226.9	4210.4	4191.5	4182.1	4172.7	4146.8	4134.9	4120.8	4118.4
25°	4165.6	4158.5	4144.4	4125.5	4116.1	4090.2	4080.7	4061.8	4057.2	4043.0	4040.7
27.5°	4043.0	4033.6	4017.1	3993.5	3977.0	3960.5	3951.1	3936.9	3932.2	3918.0	3915.7
30°	3859.1	3847.3	3814.3	3804.9	3776.6	3760.1	3760.1	3741.2	3743.6	3734.2	3734.2
32.5°	3569.2	3550.3	3524.4	3505.5	3486.6	3477.2	3477.2	3470.1	3474.9	3474.9	3479.6
35°	3184.9	3159.0	3144.8	3133.0	3133.0	3142.4	3170.8	3177.9	3192.0	3203.8	3213.2
37.5°	2692.2	2689.9	2706.4	2720.5	2755.9	2795.9	2845.4	2887.9	2927.9	2956.2	2984.5
40°	2159.4	2218.4	2265.5	2331.5	2385.7	2463.5	2553.1	2626.2	2694.5	2744.1	2795.9
42.5°	1685.5	1761.0	1860.0	1956.7	2053.3	2159.4	2277.3	2378.7	2468.2	2536.6	2590.8
45°	1313.1	1416.8	1537.1	1659.6	1784.6	1916.6	2039.2	2142.9	2237.2	2307.9	2362.2
47.5°	1058.5	1171.7	1308.4	1442.8	1584.2	1723.3	1860.0	1949.6	2027.4	2084.0	2133.5
50°	874.6	994.9	1138.7	1291.9	1433.3	1572.4	1690.3	1777.5	1841.2	1890.7	1921.3
52.5°	730.8	858.1	1011.4	1164.6	1306.0	1433.3	1539.4	1605.4	1657.3	1692.6	1720.9
55°	603.5	726.1	869.9	1013.7	1152.8	1273.0	1360.2	1409.8	1449.8	1471.0	1487.5
57.5°	492.7	605.8	737.9	869.9	990.1	1089.2	1157.5	1207.0	1225.9	1242.4	1240.0
60°	386.6	492.7	612.9	726.1	829.8	909.9	959.5	987.8	1001.9	1009.0	1004.3
62.5°	304.1	400.8	492.7	591.7	667.2	735.5	782.7	782.7	789.7	792.1	799.2
65°	226.3	299.4	379.6	452.6	513.9	558.7	584.7	591.7	601.2	598.8	594.1
67.5°	167.4	221.6	280.5	334.7	377.2	405.5	424.3	440.9	438.5	433.8	431.4
70°	115.5	150.9	202.8	235.7	266.4	294.7	299.4	301.7	304.1	306.5	301.7
72.5°	80.2	106.1	134.4	162.7	181.5	193.3	205.1	207.4	207.4	207.4	205.1
75°	40.1	54.2	80.2	91.9	108.4	113.2	122.6	122.6	129.7	120.2	117.8
77.5°	35.4	42.5	56.6	66.0	73.1	80.2	82.5	89.6	87.2	82.5	84.9
80°	21.2	26.0	35.4	40.1	49.5	51.9	54.2	56.6	54.2	56.6	56.6
82.5°	16.5	18.9	23.6	23.6	30.6	30.6	33.0	33.0	35.4	35.4	35.4
85°	9.4	16.5	14.1	28.3	18.9	18.9	23.6	28.3	23.6	23.6	28.3
87.5°	9.4	9.4	7.1	9.4	9.4	9.4	11.8	14.1	14.1	16.5	14.1
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: P249473

CATALOG NUMBER: LSR8B100D010 EC8B100935 8LBDW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	4391.9	4391.9	4391.9	4391.9
2.5°	4399.0	4403.7	4396.6	4394.3
5°	4406.0	4406.0	4401.4	4401.4
7.5°	4406.0	4406.0	4399.0	4394.3
10°	4387.2	4387.2	4380.1	4375.4
12.5°	4351.8	4351.8	4349.5	4342.4
15°	4307.1	4307.1	4297.6	4290.6
17.5°	4245.7	4250.5	4238.7	4238.7
20°	4179.7	4177.4	4168.0	4163.3
22.5°	4111.4	4106.7	4104.3	4090.2
25°	4038.3	4033.6	4026.5	4019.4
27.5°	3913.4	3911.0	3903.9	3894.5
30°	3722.4	3720.0	3710.6	3710.6
32.5°	3474.9	3472.5	3463.1	3465.5
35°	3217.9	3227.3	3222.6	3213.2
37.5°	3003.4	3010.5	3015.2	3010.5
40°	2824.2	2845.4	2847.8	2852.5
42.5°	2633.3	2661.5	2671.0	2675.7
45°	2404.6	2430.5	2451.7	2447.0
47.5°	2171.2	2190.0	2208.9	2194.8
50°	1947.3	1959.0	1966.1	1966.1
52.5°	1735.1	1735.1	1732.7	1735.1
55°	1492.3	1492.3	1482.8	1487.5
57.5°	1237.6	1242.4	1235.3	1223.5
60°	1001.9	990.1	985.4	978.4
62.5°	780.3	780.3	763.8	785.0
65°	584.7	577.6	570.5	568.1
67.5°	424.3	422.0	414.9	412.5
70°	299.4	290.0	287.6	282.9
72.5°	200.4	200.4	195.7	195.7
75°	122.6	110.8	108.4	110.8
77.5°	84.9	82.5	82.5	80.2
80°	56.6	54.2	59.0	51.9
82.5°	35.4	37.7	35.4	37.7
85°	23.6	28.3	26.0	26.0
87.5°	14.1	14.1	14.1	14.1
90°	0.0	0.0	0.0	0.0

(END OF REPORT)