

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: P249410

Luminaire Tested: **LSR8B100D010 EC8B100827 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249410
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 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 2700 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9157.0 lumens
Efficiency: N/A
Efficacy: 86.1 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

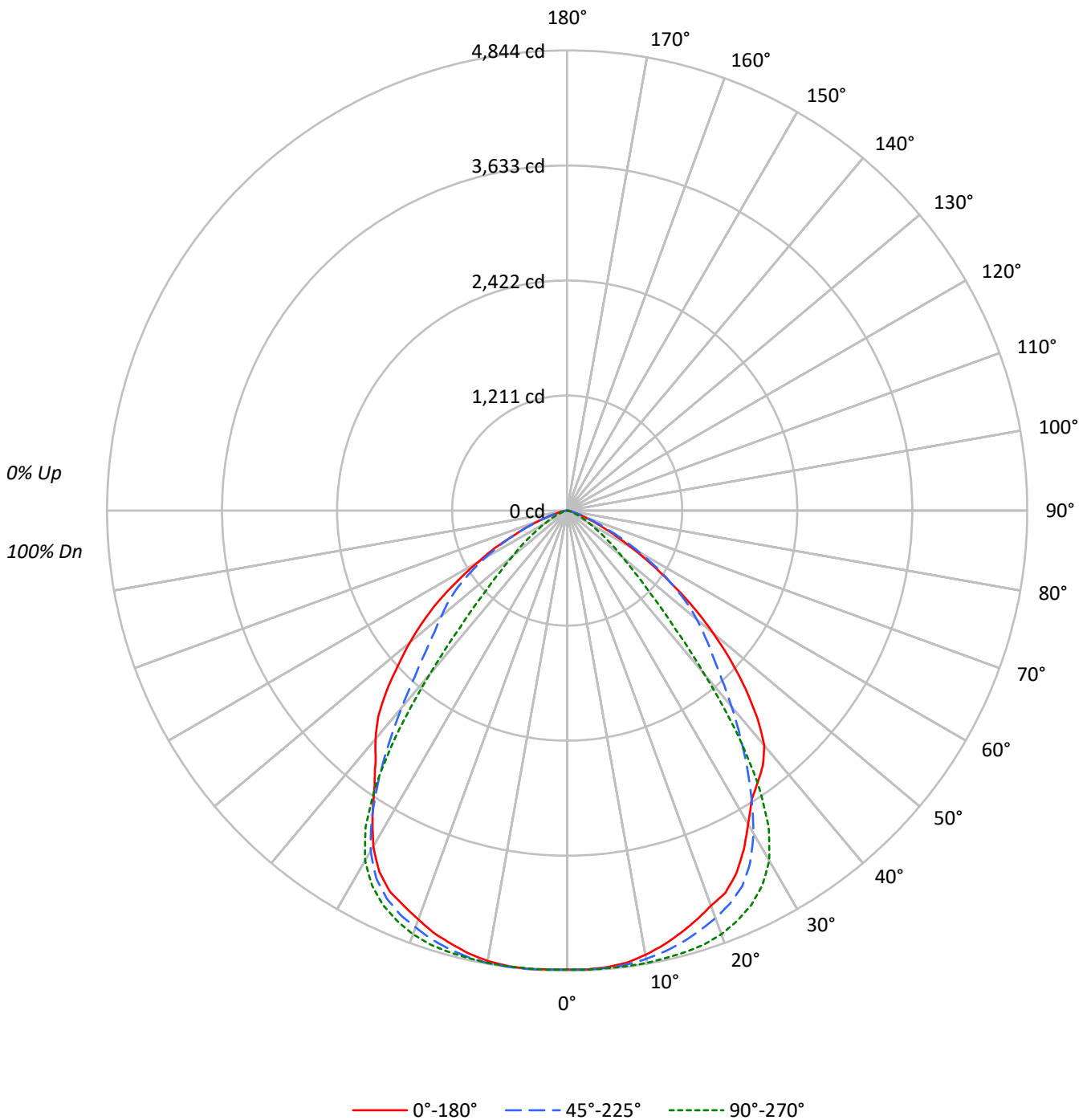
Input Watts (W): 106.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	52	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°	148983	148983	148983
5°	149310	149713	149874
10°	148682	151362	150714
15°	147036	153577	150679
20°	145270	155735	150291
25°	143384	155915	150444
30°	135651	151531	145343
35°	131600	131694	133065
40°	129968	90612	126317
45°	115808	54398	117391
50°	96296	36205	103760
55°	72218	24956	87975
60°	48943	16633	66378
65°	29522	10784	45603
70°	16364	5851	28058
75°	7411	2466	14523
80°	6446	2752	10122
85°	7324	3644	10119



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	461.1	5.0
10°-20°	1339.1	14.6
20°-30°	2032.5	22.2
30°-40°	2134.7	23.3
40°-50°	1600.4	17.5
50°-60°	1026.9	11.2
60°-70°	439.3	4.8
70°-80°	103.8	1.1
80°-90°	19.3	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°	3832.6	41.9
0°-40°	5967.3	65.2
0°-60°	8594.6	93.9
0°-90°	9157.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9157.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4831	4831	4831	4831	4831	
5°	4824	4831	4837	4844	4842	458
15°	4606	4702	4811	4780	4720	1299
25°	4214	4362	4582	4500	4422	1925
35°	3496	3301	3498	3457	3535	2194
45°	2656	2171	1247	2108	2692	2034
55°	1343	1343	464	1400	1636	1219
65°	405	477	148	615	625	432
75°	62	73	21	124	122	91
85°	21	13	10	21	29	22
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°	4831.4	4831.4	4831.4	4831.4	4831.4	4831.4	4831.4	4831.4	4831.4	4831.4	4831.4
2.5°	4834.0	4839.2	4836.6	4836.6	4834.0	4836.6	4836.6	4841.8	4841.8	4836.6	4834.0
5°	4823.6	4828.8	4828.8	4823.6	4823.6	4836.6	4828.8	4834.0	4834.0	4831.4	4831.4
7.5°	4800.3	4800.3	4810.7	4802.9	4802.9	4810.7	4808.1	4813.3	4818.5	4821.1	4821.1
10°	4748.4	4753.6	4756.2	4756.2	4758.8	4766.6	4771.8	4782.2	4787.3	4792.5	4795.1
12.5°	4683.6	4691.4	4694.0	4691.4	4699.2	4709.5	4722.5	4735.5	4743.3	4753.6	4761.4
15°	4605.8	4605.8	4611.0	4618.8	4624.0	4639.5	4652.5	4668.0	4688.8	4701.8	4714.7
17.5°	4520.2	4525.4	4533.2	4533.2	4543.6	4569.5	4577.3	4600.6	4624.0	4636.9	4662.9
20°	4426.9	4432.0	4439.8	4445.0	4458.0	4478.7	4494.3	4515.0	4541.0	4564.3	4590.2
22.5°	4354.2	4343.9	4349.0	4354.2	4367.2	4385.4	4403.5	4429.4	4455.4	4478.7	4504.7
25°	4214.2	4216.8	4224.6	4229.7	4245.3	4260.9	4281.6	4312.7	4336.1	4362.0	4390.5
27.5°	4024.9	4027.5	4040.4	4040.4	4053.4	4079.3	4092.3	4118.2	4149.4	4175.3	4209.0
30°	3809.7	3814.8	3814.8	3825.2	3832.9	3846.0	3858.9	3884.9	3900.4	3923.8	3970.5
32.5°	3612.6	3617.7	3615.1	3612.6	3604.8	3602.2	3599.6	3604.8	3610.0	3617.7	3635.9
35°	3495.9	3482.9	3472.5	3454.4	3433.6	3407.7	3384.3	3353.2	3324.7	3301.3	3275.4
37.5°	3384.3	3381.7	3366.2	3340.2	3298.7	3252.1	3197.6	3130.2	3062.7	2990.1	2920.1
40°	3228.7	3220.9	3208.0	3171.7	3125.0	3067.9	2995.3	2912.3	2803.4	2691.9	2577.8
42.5°	2964.2	2966.8	2951.2	2922.7	2878.6	2824.1	2748.9	2658.2	2541.5	2409.2	2261.4
45°	2655.6	2655.6	2650.4	2627.0	2596.0	2551.9	2494.8	2419.6	2305.5	2170.6	2012.4
47.5°	2334.0	2336.6	2328.8	2323.7	2310.7	2282.2	2240.7	2183.6	2103.2	1973.5	1815.3
50°	2007.3	2007.3	2020.2	2017.6	2017.6	2007.3	1989.1	1955.4	1885.4	1781.6	1633.8
52.5°	1680.5	1685.7	1693.5	1703.8	1716.8	1737.5	1716.8	1701.2	1657.1	1576.7	1449.7
55°	1343.3	1348.5	1361.5	1379.6	1395.3	1416.0	1421.1	1421.1	1397.8	1343.3	1247.4
57.5°	1055.5	1047.7	1058.1	1073.7	1094.4	1115.2	1130.7	1148.9	1146.3	1110.0	1032.2
60°	793.6	796.2	803.9	819.5	835.1	853.2	874.0	889.5	897.3	879.2	829.9
62.5°	578.3	578.3	588.7	604.2	612.0	638.0	650.9	658.7	666.5	663.9	632.8
65°	404.6	409.7	414.9	422.7	430.5	446.0	453.8	469.4	474.6	477.2	453.8
67.5°	285.3	277.5	282.7	287.8	295.6	306.0	321.6	321.6	329.3	329.3	313.8
70°	181.5	181.5	184.1	191.9	197.1	199.7	204.9	210.0	217.8	215.2	215.2
72.5°	121.9	119.3	121.9	124.5	127.1	134.8	134.8	137.4	142.6	145.2	134.8
75°	62.2	64.9	70.0	67.5	75.2	70.0	72.6	80.4	77.8	72.6	72.6
77.5°	51.8	51.8	51.8	49.3	54.4	54.4	51.8	57.0	54.4	54.4	51.8
80°	36.3	38.9	36.3	33.7	36.3	33.7	33.7	33.7	33.7	33.7	31.1
82.5°	28.6	23.4	26.0	23.4	26.0	26.0	23.4	20.7	20.7	23.4	20.7
85°	20.7	15.5	18.1	18.1	15.5	15.5	15.5	15.5	15.5	12.9	12.9
87.5°	12.9	7.8	7.8	7.8	10.3	10.3	10.3	7.8	10.3	10.3	5.2
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°	4831.4	4831.4	4831.4	4831.4	4831.4	4831.4	4831.4	4831.4	4831.4	4831.4	4831.4
2.5°	4839.2	4836.6	4841.8	4839.2	4839.2	4836.6	4839.2	4836.6	4841.8	4831.4	4834.0
5°	4839.2	4834.0	4836.6	4839.2	4841.8	4836.6	4836.6	4836.6	4841.8	4836.6	4839.2
7.5°	4828.8	4826.2	4834.0	4839.2	4836.6	4834.0	4839.2	4836.6	4841.8	4839.2	4844.4
10°	4808.1	4810.7	4815.9	4823.6	4826.2	4828.8	4834.0	4834.0	4841.8	4831.4	4836.6
12.5°	4777.0	4787.3	4800.3	4805.5	4815.9	4815.9	4821.1	4823.6	4828.8	4826.2	4834.0
15°	4738.1	4751.0	4766.6	4779.6	4792.5	4800.3	4808.1	4810.7	4818.5	4810.7	4813.3
17.5°	4691.4	4706.9	4730.3	4745.8	4766.6	4774.4	4784.7	4789.9	4797.7	4792.5	4795.1
20°	4626.5	4644.7	4670.6	4694.0	4706.9	4725.1	4738.1	4745.8	4751.0	4745.8	4748.4
22.5°	4535.8	4561.7	4595.4	4613.6	4639.5	4655.1	4657.7	4675.8	4688.8	4675.8	4681.0
25°	4429.4	4455.4	4481.3	4520.2	4543.6	4561.7	4579.9	4582.5	4595.4	4592.8	4590.2
27.5°	4253.1	4286.8	4330.9	4362.0	4393.1	4421.7	4442.4	4447.6	4460.6	4455.4	4458.0
30°	4011.9	4048.2	4089.7	4139.0	4183.1	4211.6	4237.5	4255.7	4268.6	4260.9	4258.3
32.5°	3669.6	3705.9	3750.0	3799.3	3851.2	3892.6	3923.8	3947.1	3962.6	3957.4	3944.5
35°	3278.0	3288.4	3316.9	3355.8	3399.9	3444.0	3472.5	3498.4	3516.6	3521.8	3521.8
37.5°	2876.0	2842.3	2821.6	2821.6	2847.5	2865.6	2891.6	2907.1	2935.7	2946.0	2953.8
40°	2487.0	2409.2	2336.6	2282.2	2245.9	2243.3	2243.3	2251.0	2277.0	2310.7	2341.8
42.5°	2139.5	2015.0	1903.5	1802.4	1729.8	1688.3	1670.1	1672.7	1693.5	1724.6	1776.4
45°	1862.0	1706.4	1566.4	1444.5	1345.9	1281.1	1250.0	1247.4	1262.9	1299.2	1356.4
47.5°	1646.8	1480.8	1322.6	1182.6	1076.3	1006.2	969.9	959.6	969.9	1003.6	1071.1
50°	1467.8	1296.7	1133.3	988.1	874.0	801.4	767.6	754.7	767.6	796.2	863.6
52.5°	1301.8	1125.5	972.5	832.5	710.6	648.3	612.0	604.2	612.0	645.7	700.2
55°	1110.0	959.6	809.1	669.1	562.8	500.5	472.0	464.2	472.0	503.1	560.2
57.5°	920.7	791.0	658.7	531.6	440.9	386.4	360.5	350.1	368.2	389.0	456.4
60°	744.3	640.6	529.0	417.5	342.3	293.0	272.3	269.7	274.9	300.8	347.5
62.5°	583.5	497.9	409.7	319.0	256.7	236.0	210.0	207.5	212.6	228.2	264.5
65°	420.1	365.7	298.2	233.4	184.1	155.6	145.2	147.8	153.0	163.4	197.1
67.5°	293.0	254.1	207.5	163.4	127.1	114.1	103.7	101.1	103.7	121.9	140.0
70°	197.1	173.7	140.0	124.5	88.2	70.0	72.6	64.9	75.2	75.2	90.7
72.5°	129.6	114.1	93.3	72.6	62.2	49.3	49.3	46.7	51.8	54.4	67.5
75°	67.5	51.8	51.8	36.3	26.0	12.9	23.4	20.7	18.1	20.7	26.0
77.5°	46.7	38.9	36.3	28.6	26.0	20.7	20.7	20.7	20.7	23.4	26.0
80°	28.6	28.6	20.7	18.1	15.5	12.9	15.5	15.5	15.5	15.5	18.1
82.5°	18.1	15.5	15.5	12.9	12.9	10.3	10.3	10.3	10.3	10.3	15.5
85°	15.5	10.3	10.3	7.8	10.3	18.1	7.8	10.3	10.3	10.3	7.8
87.5°	5.2	7.8	7.8	7.8	5.2	2.6	5.2	7.8	7.8	12.9	10.3
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°	4831.4	4831.4	4831.4	4831.4	4831.4	4831.4	4831.4	4831.4	4831.4	4831.4	4831.4
2.5°	4839.2	4841.8	4841.8	4839.2	4839.2	4834.0	4844.4	4836.6	4839.2	4849.6	4841.8
5°	4844.4	4847.0	4847.0	4844.4	4844.4	4844.4	4847.0	4847.0	4844.4	4841.8	4847.0
7.5°	4854.8	4852.2	4852.2	4847.0	4847.0	4841.8	4847.0	4839.2	4844.4	4839.2	4847.0
10°	4841.8	4844.4	4841.8	4839.2	4839.2	4836.6	4836.6	4828.8	4831.4	4823.6	4828.8
12.5°	4834.0	4831.4	4831.4	4826.2	4821.1	4815.9	4813.3	4805.5	4805.5	4787.3	4795.1
15°	4813.3	4815.9	4808.1	4797.7	4792.5	4779.6	4774.4	4764.0	4753.6	4740.7	4743.3
17.5°	4795.1	4787.3	4777.0	4766.6	4745.8	4735.5	4725.1	4709.5	4704.3	4688.8	4683.6
20°	4740.7	4735.5	4722.5	4704.3	4691.4	4668.0	4657.7	4642.1	4629.1	4613.6	4605.8
22.5°	4670.6	4665.4	4649.9	4631.7	4611.0	4600.6	4590.2	4561.7	4548.7	4533.2	4530.6
25°	4582.5	4574.7	4559.1	4538.4	4528.0	4499.5	4489.1	4468.3	4463.2	4447.6	4445.0
27.5°	4447.6	4437.2	4419.1	4393.1	4375.0	4356.8	4346.5	4330.9	4325.7	4310.1	4307.6
30°	4245.3	4232.3	4196.0	4185.7	4154.5	4136.4	4136.4	4115.6	4118.2	4107.9	4107.9
32.5°	3926.4	3905.6	3877.0	3856.3	3835.5	3825.2	3825.2	3817.4	3822.6	3822.6	3827.8
35°	3503.6	3475.1	3459.5	3446.6	3446.6	3456.9	3488.1	3495.9	3511.4	3524.4	3534.8
37.5°	2961.6	2959.0	2977.2	2992.7	3031.6	3075.7	3130.2	3176.9	3220.9	3252.1	3283.2
40°	2375.5	2440.4	2492.2	2564.9	2624.4	2710.0	2808.6	2889.0	2964.2	3018.7	3075.7
42.5°	1854.2	1937.2	2046.2	2152.5	2258.8	2375.5	2505.2	2616.7	2715.2	2790.4	2850.1
45°	1444.5	1558.6	1690.9	1825.7	1963.2	2108.4	2243.3	2357.4	2461.1	2538.9	2598.6
47.5°	1164.4	1288.9	1439.3	1587.1	1742.7	1895.7	2046.2	2144.7	2230.3	2292.5	2347.0
50°	962.1	1094.4	1252.6	1421.1	1576.7	1729.8	1859.4	1955.4	2025.4	2079.9	2113.6
52.5°	803.9	944.0	1112.6	1281.1	1436.7	1576.7	1693.5	1766.1	1823.1	1862.0	1893.1
55°	663.9	798.8	957.0	1115.2	1268.2	1400.4	1496.3	1550.8	1594.9	1618.2	1636.4
57.5°	542.0	666.5	811.7	957.0	1089.2	1198.2	1273.4	1327.8	1348.5	1366.7	1364.1
60°	425.3	542.0	674.3	798.8	912.9	1001.0	1055.5	1086.6	1102.2	1110.0	1104.8
62.5°	334.5	440.9	542.0	650.9	733.9	809.1	861.0	861.0	868.8	871.4	879.2
65°	248.9	329.3	417.5	497.9	565.3	614.6	643.2	650.9	661.3	658.7	653.5
67.5°	184.1	243.8	308.6	368.2	414.9	446.0	466.8	485.0	482.4	477.2	474.6
70°	127.1	166.0	223.0	259.3	293.0	324.2	329.3	331.9	334.5	337.1	331.9
72.5°	88.2	116.7	147.8	178.9	199.7	212.6	225.6	228.2	228.2	228.2	225.6
75°	44.1	59.6	88.2	101.1	119.3	124.5	134.8	134.8	142.6	132.2	129.6
77.5°	38.9	46.7	62.2	72.6	80.4	88.2	90.7	98.5	95.9	90.7	93.3
80°	23.4	28.6	38.9	44.1	54.4	57.0	59.6	62.2	59.6	62.2	62.2
82.5°	18.1	20.7	26.0	26.0	33.7	33.7	36.3	36.3	38.9	38.9	38.9
85°	10.3	18.1	15.5	31.1	20.7	20.7	26.0	31.1	26.0	26.0	31.1
87.5°	10.3	10.3	7.8	10.3	10.3	10.3	12.9	15.5	15.5	18.1	15.5
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: P249410

CATALOG NUMBER: LSR8B100D010 EC8B100827 8LBDW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	4831.4	4831.4	4831.4	4831.4
2.5°	4839.2	4844.4	4836.6	4834.0
5°	4847.0	4847.0	4841.8	4841.8
7.5°	4847.0	4847.0	4839.2	4834.0
10°	4826.2	4826.2	4818.5	4813.3
12.5°	4787.3	4787.3	4784.7	4777.0
15°	4738.1	4738.1	4727.7	4719.9
17.5°	4670.6	4675.8	4662.9	4662.9
20°	4598.0	4595.4	4585.1	4579.9
22.5°	4522.8	4517.6	4515.0	4499.5
25°	4442.4	4437.2	4429.4	4421.7
27.5°	4305.0	4302.4	4294.6	4284.2
30°	4094.9	4092.3	4081.9	4081.9
32.5°	3822.6	3820.0	3809.7	3812.3
35°	3539.9	3550.3	3545.1	3534.8
37.5°	3303.9	3311.7	3316.9	3311.7
40°	3106.8	3130.2	3132.8	3138.0
42.5°	2896.8	2927.9	2938.3	2943.4
45°	2645.2	2673.7	2697.1	2691.9
47.5°	2388.5	2409.2	2430.0	2414.4
50°	2142.1	2155.1	2162.9	2162.9
52.5°	1908.7	1908.7	1906.1	1908.7
55°	1641.6	1641.6	1631.2	1636.4
57.5°	1361.5	1366.7	1358.9	1345.9
60°	1102.2	1089.2	1084.0	1076.3
62.5°	858.4	858.4	840.3	863.6
65°	643.2	635.4	627.6	625.0
67.5°	466.8	464.2	456.4	453.8
70°	329.3	319.0	316.4	311.2
72.5°	220.4	220.4	215.2	215.2
75°	134.8	121.9	119.3	121.9
77.5°	93.3	90.7	90.7	88.2
80°	62.2	59.6	64.9	57.0
82.5°	38.9	41.5	38.9	41.5
85°	26.0	31.1	28.6	28.6
87.5°	15.5	15.5	15.5	15.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)