

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: P249401

Luminaire Tested: **LSR8B100D010 EC8B1009730 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249401
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 EC8B1009730 8LBDW0GPH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 3000 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7942.0 lumens
Efficiency: N/A
Efficacy: 74.7 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

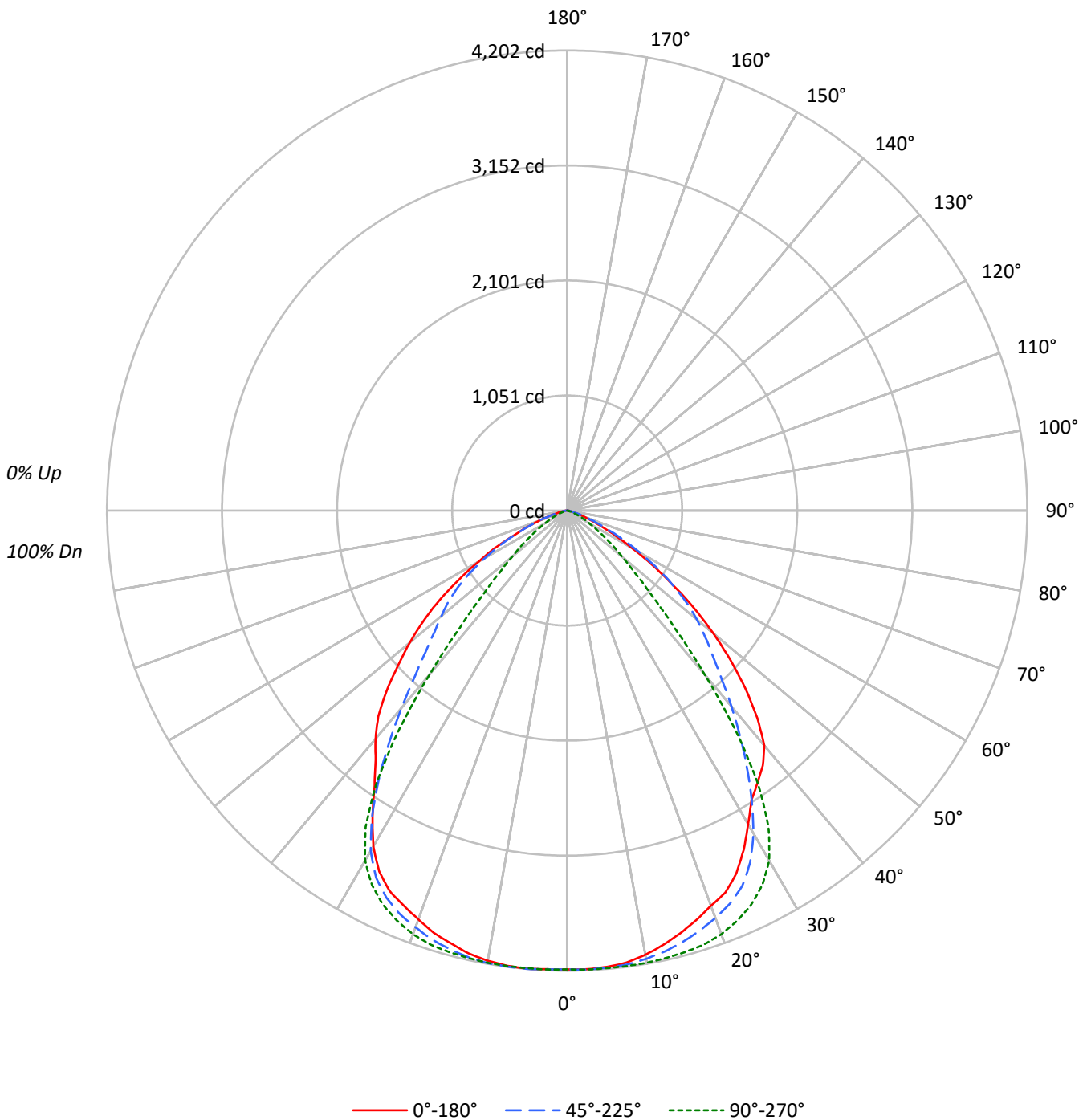
Input Watts (W): 106.3
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	399.9	5.0
10°-20°	1161.4	14.6
20°-30°	1762.8	22.2
30°-40°	1851.4	23.3
40°-50°	1388.1	17.5
50°-60°	890.6	11.2
60°-70°	381.0	4.8
70°-80°	90.0	1.1
80°-90°	16.8	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°	3324.1	41.9
0°-40°	5175.5	65.2
0°-60°	7454.3	93.9
0°-90°	7942.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7942.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4190	4190	4190	4190	4190	
5°	4184	4190	4195	4202	4199	397
15°	3995	4078	4172	4145	4094	1127
25°	3655	3783	3974	3902	3835	1670
35°	3032	2863	3034	2998	3066	1903
45°	2303	1883	1082	1829	2335	1764
55°	1165	1165	403	1215	1419	1057
65°	351	414	128	533	542	375
75°	54	63	18	108	106	79
85°	18	11	9	18	25	19
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°	4190.4	4190.4	4190.4	4190.4	4190.4	4190.4	4190.4	4190.4	4190.4	4190.4	4190.4
2.5°	4192.6	4197.1	4194.9	4194.9	4192.6	4194.9	4194.9	4199.4	4199.4	4194.9	4192.6
5°	4183.6	4188.1	4188.1	4183.6	4183.6	4194.9	4188.1	4192.6	4192.6	4190.4	4190.4
7.5°	4163.4	4163.4	4172.4	4165.6	4165.6	4172.4	4170.1	4174.6	4179.1	4181.4	4181.4
10°	4118.4	4122.9	4125.1	4125.1	4127.4	4134.1	4138.6	4147.6	4152.1	4156.6	4158.9
12.5°	4062.2	4068.9	4071.1	4068.9	4075.7	4084.6	4095.9	4107.1	4113.9	4122.9	4129.7
15°	3994.6	3994.6	3999.2	4005.9	4010.4	4023.9	4035.2	4048.6	4066.6	4077.9	4089.1
17.5°	3920.5	3925.0	3931.7	3931.7	3940.7	3963.2	3969.9	3990.2	4010.4	4021.7	4044.2
20°	3839.5	3844.0	3850.7	3855.2	3866.5	3884.5	3898.0	3915.9	3938.5	3958.7	3981.2
22.5°	3776.5	3767.5	3772.0	3776.5	3787.8	3803.5	3819.2	3841.7	3864.2	3884.5	3907.0
25°	3655.0	3657.3	3664.0	3668.5	3682.0	3695.5	3713.5	3740.5	3760.7	3783.3	3808.0
27.5°	3490.9	3493.1	3504.3	3504.3	3515.6	3538.1	3549.3	3571.8	3598.8	3621.3	3650.6
30°	3304.2	3308.6	3308.6	3317.7	3324.4	3335.7	3346.9	3369.4	3382.9	3403.1	3443.6
32.5°	3133.2	3137.7	3135.4	3133.2	3126.5	3124.2	3121.9	3126.5	3131.0	3137.7	3153.4
35°	3032.0	3020.7	3011.8	2996.0	2978.0	2955.5	2935.3	2908.3	2883.5	2863.3	2840.8
37.5°	2935.3	2933.0	2919.5	2897.0	2861.0	2820.6	2773.4	2714.9	2656.3	2593.4	2532.7
40°	2800.3	2793.6	2782.3	2750.8	2710.3	2660.9	2597.9	2525.9	2431.4	2334.7	2235.8
42.5°	2570.9	2573.1	2559.7	2534.9	2496.7	2449.4	2384.2	2305.5	2204.3	2089.5	1961.4
45°	2303.2	2303.2	2298.7	2278.5	2251.5	2213.3	2163.8	2098.6	1999.6	1882.6	1745.4
47.5°	2024.3	2026.6	2019.8	2015.3	2004.1	1979.4	1943.4	1893.9	1824.2	1711.7	1574.5
50°	1740.9	1740.9	1752.2	1749.9	1749.9	1740.9	1725.2	1695.9	1635.2	1545.2	1417.1
52.5°	1457.5	1462.0	1468.8	1477.8	1489.0	1507.0	1489.0	1475.5	1437.3	1367.5	1257.3
55°	1165.1	1169.6	1180.8	1196.6	1210.1	1228.1	1232.6	1232.6	1212.3	1165.1	1081.9
57.5°	915.5	908.7	917.7	931.2	949.2	967.2	980.7	996.4	994.2	962.7	895.2
60°	688.3	690.5	697.2	710.8	724.3	740.0	758.0	771.5	778.3	762.5	719.8
62.5°	501.6	501.6	510.6	524.1	530.8	553.3	564.6	571.3	578.0	575.8	548.8
65°	350.9	355.4	359.9	366.6	373.4	386.8	393.6	407.1	411.6	413.9	393.6
67.5°	247.4	240.7	245.2	249.6	256.4	265.4	278.9	278.9	285.6	285.6	272.2
70°	157.5	157.5	159.7	166.4	170.9	173.2	177.7	182.2	188.9	186.7	186.7
72.5°	105.7	103.5	105.7	108.0	110.2	117.0	117.0	119.2	123.7	126.0	117.0
75°	54.0	56.2	60.7	58.5	65.2	60.7	63.0	69.7	67.5	63.0	63.0
77.5°	45.0	45.0	45.0	42.8	47.2	47.2	45.0	49.5	47.2	47.2	45.0
80°	31.5	33.7	31.5	29.2	31.5	29.2	29.2	29.2	29.2	29.2	27.0
82.5°	24.8	20.3	22.5	20.3	22.5	22.5	20.3	18.0	18.0	20.3	18.0
85°	18.0	13.5	15.7	15.7	13.5	13.5	13.5	13.5	13.5	11.2	11.2
87.5°	11.2	6.8	6.8	6.8	9.0	9.0	9.0	6.8	9.0	9.0	4.5
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°	4190.4	4190.4	4190.4	4190.4	4190.4	4190.4	4190.4	4190.4	4190.4	4190.4	4190.4
2.5°	4197.1	4194.9	4199.4	4197.1	4197.1	4194.9	4197.1	4194.9	4199.4	4190.4	4192.6
5°	4197.1	4192.6	4194.9	4197.1	4199.4	4194.9	4194.9	4194.9	4199.4	4194.9	4197.1
7.5°	4188.1	4185.8	4192.6	4197.1	4194.9	4192.6	4197.1	4194.9	4199.4	4197.1	4201.6
10°	4170.1	4172.4	4176.9	4183.6	4185.8	4188.1	4192.6	4192.6	4199.4	4190.4	4194.9
12.5°	4143.1	4152.1	4163.4	4167.8	4176.9	4176.9	4181.4	4183.6	4188.1	4185.8	4192.6
15°	4109.4	4120.6	4134.1	4145.4	4156.6	4163.4	4170.1	4172.4	4179.1	4172.4	4174.6
17.5°	4068.9	4082.4	4102.6	4116.1	4134.1	4140.9	4149.9	4154.4	4161.1	4156.6	4158.9
20°	4012.6	4028.4	4050.9	4071.1	4082.4	4098.1	4109.4	4116.1	4120.6	4116.1	4118.4
22.5°	3933.9	3956.5	3985.7	4001.4	4023.9	4037.4	4039.7	4055.4	4066.6	4055.4	4059.9
25°	3841.7	3864.2	3886.7	3920.5	3940.7	3956.5	3972.2	3974.4	3985.7	3983.4	3981.2
27.5°	3688.8	3718.0	3756.2	3783.3	3810.2	3835.0	3853.0	3857.4	3868.7	3864.2	3866.5
30°	3479.6	3511.1	3547.1	3589.8	3628.1	3652.8	3675.3	3691.0	3702.2	3695.5	3693.3
32.5°	3182.7	3214.2	3252.4	3295.1	3340.2	3376.1	3403.1	3423.4	3436.9	3432.4	3421.1
35°	2843.1	2852.1	2876.8	2910.6	2948.8	2987.0	3011.8	3034.2	3050.0	3054.5	3054.5
37.5°	2494.4	2465.2	2447.2	2447.2	2469.7	2485.4	2507.9	2521.4	2546.2	2555.1	2561.9
40°	2157.0	2089.5	2026.6	1979.4	1947.9	1945.6	1945.6	1952.3	1974.8	2004.1	2031.1
42.5°	1855.6	1747.7	1651.0	1563.2	1500.3	1464.3	1448.5	1450.8	1468.8	1495.8	1540.7
45°	1615.0	1480.0	1358.6	1252.8	1167.4	1111.1	1084.1	1081.9	1095.4	1126.9	1176.4
47.5°	1428.3	1284.3	1147.1	1025.6	933.5	872.7	841.2	832.2	841.2	870.4	928.9
50°	1273.1	1124.7	982.9	857.0	758.0	695.0	665.8	654.5	665.8	690.5	749.0
52.5°	1129.1	976.2	843.5	722.0	616.3	562.3	530.8	524.1	530.8	560.0	607.3
55°	962.7	832.2	701.8	580.3	488.1	434.1	409.4	402.6	409.4	436.4	485.9
57.5°	798.5	686.0	571.3	461.1	382.4	335.1	312.7	303.6	319.4	337.4	395.9
60°	645.5	555.6	458.8	362.1	296.9	254.2	236.2	233.9	238.4	260.9	301.4
62.5°	506.1	431.9	355.4	276.7	222.7	204.7	182.2	180.0	184.4	197.9	229.4
65°	364.4	317.2	258.7	202.4	159.7	134.9	126.0	128.2	132.7	141.7	170.9
67.5°	254.2	220.4	180.0	141.7	110.2	99.0	90.0	87.7	90.0	105.7	121.5
70°	170.9	150.7	121.5	108.0	76.5	60.7	63.0	56.2	65.2	65.2	78.7
72.5°	112.4	99.0	81.0	63.0	54.0	42.8	42.8	40.5	45.0	47.2	58.5
75°	58.5	45.0	45.0	31.5	22.5	11.2	20.3	18.0	15.7	18.0	22.5
77.5°	40.5	33.7	31.5	24.8	22.5	18.0	18.0	18.0	18.0	20.3	22.5
80°	24.8	24.8	18.0	15.7	13.5	11.2	13.5	13.5	13.5	13.5	15.7
82.5°	15.7	13.5	13.5	11.2	11.2	9.0	9.0	9.0	9.0	9.0	13.5
85°	13.5	9.0	9.0	6.8	9.0	15.7	6.8	9.0	9.0	9.0	6.8
87.5°	4.5	6.8	6.8	6.8	4.5	2.3	4.5	6.8	6.8	11.2	9.0
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°	4190.4	4190.4	4190.4	4190.4	4190.4	4190.4	4190.4	4190.4	4190.4	4190.4	4190.4
2.5°	4197.1	4199.4	4199.4	4197.1	4197.1	4192.6	4201.6	4194.9	4197.1	4206.1	4199.4
5°	4201.6	4203.8	4203.8	4201.6	4201.6	4201.6	4203.8	4203.8	4201.6	4199.4	4203.8
7.5°	4210.6	4208.4	4208.4	4203.8	4203.8	4199.4	4203.8	4197.1	4201.6	4197.1	4203.8
10°	4199.4	4201.6	4199.4	4197.1	4197.1	4194.9	4194.9	4188.1	4190.4	4183.6	4188.1
12.5°	4192.6	4190.4	4190.4	4185.8	4181.4	4176.9	4174.6	4167.8	4167.8	4152.1	4158.9
15°	4174.6	4176.9	4170.1	4161.1	4156.6	4145.4	4140.9	4131.9	4122.9	4111.7	4113.9
17.5°	4158.9	4152.1	4143.1	4134.1	4116.1	4107.1	4098.1	4084.6	4080.1	4066.6	4062.2
20°	4111.7	4107.1	4095.9	4080.1	4068.9	4048.6	4039.7	4026.2	4014.9	4001.4	3994.6
22.5°	4050.9	4046.4	4032.9	4017.2	3999.2	3990.2	3981.2	3956.5	3945.2	3931.7	3929.4
25°	3974.4	3967.7	3954.2	3936.2	3927.2	3902.5	3893.4	3875.4	3871.0	3857.4	3855.2
27.5°	3857.4	3848.5	3832.7	3810.2	3794.5	3778.7	3769.8	3756.2	3751.8	3738.2	3736.0
30°	3682.0	3670.8	3639.3	3630.3	3603.3	3587.6	3587.6	3569.6	3571.8	3562.8	3562.8
32.5°	3405.4	3387.4	3362.6	3344.6	3326.6	3317.7	3317.7	3310.9	3315.4	3315.4	3319.9
35°	3038.7	3014.0	3000.5	2989.3	2989.3	2998.2	3025.3	3032.0	3045.5	3056.7	3065.8
37.5°	2568.6	2566.4	2582.2	2595.6	2629.4	2667.6	2714.9	2755.4	2793.6	2820.6	2847.5
40°	2060.3	2116.6	2161.5	2224.5	2276.2	2350.5	2435.9	2505.7	2570.9	2618.2	2667.6
42.5°	1608.2	1680.2	1774.7	1866.9	1959.1	2060.3	2172.8	2269.5	2355.0	2420.2	2471.9
45°	1252.8	1351.8	1466.5	1583.5	1702.7	1828.7	1945.6	2044.6	2134.6	2202.0	2253.8
47.5°	1009.9	1117.9	1248.3	1376.6	1511.5	1644.2	1774.7	1860.1	1934.3	1988.3	2035.6
50°	834.5	949.2	1086.4	1232.6	1367.5	1500.3	1612.7	1695.9	1756.7	1803.9	1833.1
52.5°	697.2	818.7	964.9	1111.1	1246.1	1367.5	1468.8	1531.8	1581.2	1615.0	1641.9
55°	575.8	692.8	830.0	967.2	1099.9	1214.6	1297.8	1345.1	1383.3	1403.5	1419.3
57.5°	470.1	578.0	704.0	830.0	944.7	1039.2	1104.4	1151.6	1169.6	1185.4	1183.1
60°	368.9	470.1	584.8	692.8	791.7	868.2	915.5	942.4	955.9	962.7	958.2
62.5°	290.1	382.4	470.1	564.6	636.5	701.8	746.8	746.8	753.5	755.7	762.5
65°	215.9	285.6	362.1	431.9	490.3	533.1	557.8	564.6	573.6	571.3	566.8
67.5°	159.7	211.4	267.6	319.4	359.9	386.8	404.8	420.6	418.4	413.9	411.6
70°	110.2	144.0	193.4	224.9	254.2	281.2	285.6	287.9	290.1	292.4	287.9
72.5°	76.5	101.2	128.2	155.2	173.2	184.4	195.7	197.9	197.9	197.9	195.7
75°	38.2	51.7	76.5	87.7	103.5	108.0	117.0	117.0	123.7	114.7	112.4
77.5°	33.7	40.5	54.0	63.0	69.7	76.5	78.7	85.5	83.2	78.7	81.0
80°	20.3	24.8	33.7	38.2	47.2	49.5	51.7	54.0	51.7	54.0	54.0
82.5°	15.7	18.0	22.5	22.5	29.2	29.2	31.5	31.5	33.7	33.7	33.7
85°	9.0	15.7	13.5	27.0	18.0	18.0	22.5	27.0	22.5	22.5	27.0
87.5°	9.0	9.0	6.8	9.0	9.0	9.0	11.2	13.5	13.5	15.7	13.5
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: P249401

CATALOG NUMBER: LSR8B100D010 EC8B1009730 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	4190.4	4190.4	4190.4	4190.4
2.5°	4197.1	4201.6	4194.9	4192.6
5°	4203.8	4203.8	4199.4	4199.4
7.5°	4203.8	4203.8	4197.1	4192.6
10°	4185.8	4185.8	4179.1	4174.6
12.5°	4152.1	4152.1	4149.9	4143.1
15°	4109.4	4109.4	4100.4	4093.7
17.5°	4050.9	4055.4	4044.2	4044.2
20°	3987.9	3985.7	3976.7	3972.2
22.5°	3922.7	3918.2	3915.9	3902.5
25°	3853.0	3848.5	3841.7	3835.0
27.5°	3733.8	3731.5	3724.8	3715.8
30°	3551.6	3549.3	3540.3	3540.3
32.5°	3315.4	3313.1	3304.2	3306.4
35°	3070.2	3079.2	3074.7	3065.8
37.5°	2865.5	2872.3	2876.8	2872.3
40°	2694.6	2714.9	2717.1	2721.6
42.5°	2512.4	2539.4	2548.4	2552.9
45°	2294.2	2319.0	2339.2	2334.7
47.5°	2071.5	2089.5	2107.5	2094.0
50°	1857.9	1869.1	1875.9	1875.9
52.5°	1655.5	1655.5	1653.2	1655.5
55°	1423.8	1423.8	1414.8	1419.3
57.5°	1180.8	1185.4	1178.6	1167.4
60°	955.9	944.7	940.2	933.5
62.5°	744.5	744.5	728.8	749.0
65°	557.8	551.1	544.3	542.0
67.5°	404.8	402.6	395.9	393.6
70°	285.6	276.7	274.4	269.9
72.5°	191.2	191.2	186.7	186.7
75°	117.0	105.7	103.5	105.7
77.5°	81.0	78.7	78.7	76.5
80°	54.0	51.7	56.2	49.5
82.5°	33.7	36.0	33.7	36.0
85°	22.5	27.0	24.8	24.8
87.5°	13.5	13.5	13.5	13.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)