

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: P249509

Luminaire Tested: **LSR8B100D010 EC8B100930 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249509
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 EC8B100930 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 3000 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8060.0 lumens
Efficiency: N/A
Efficacy: 75.8 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

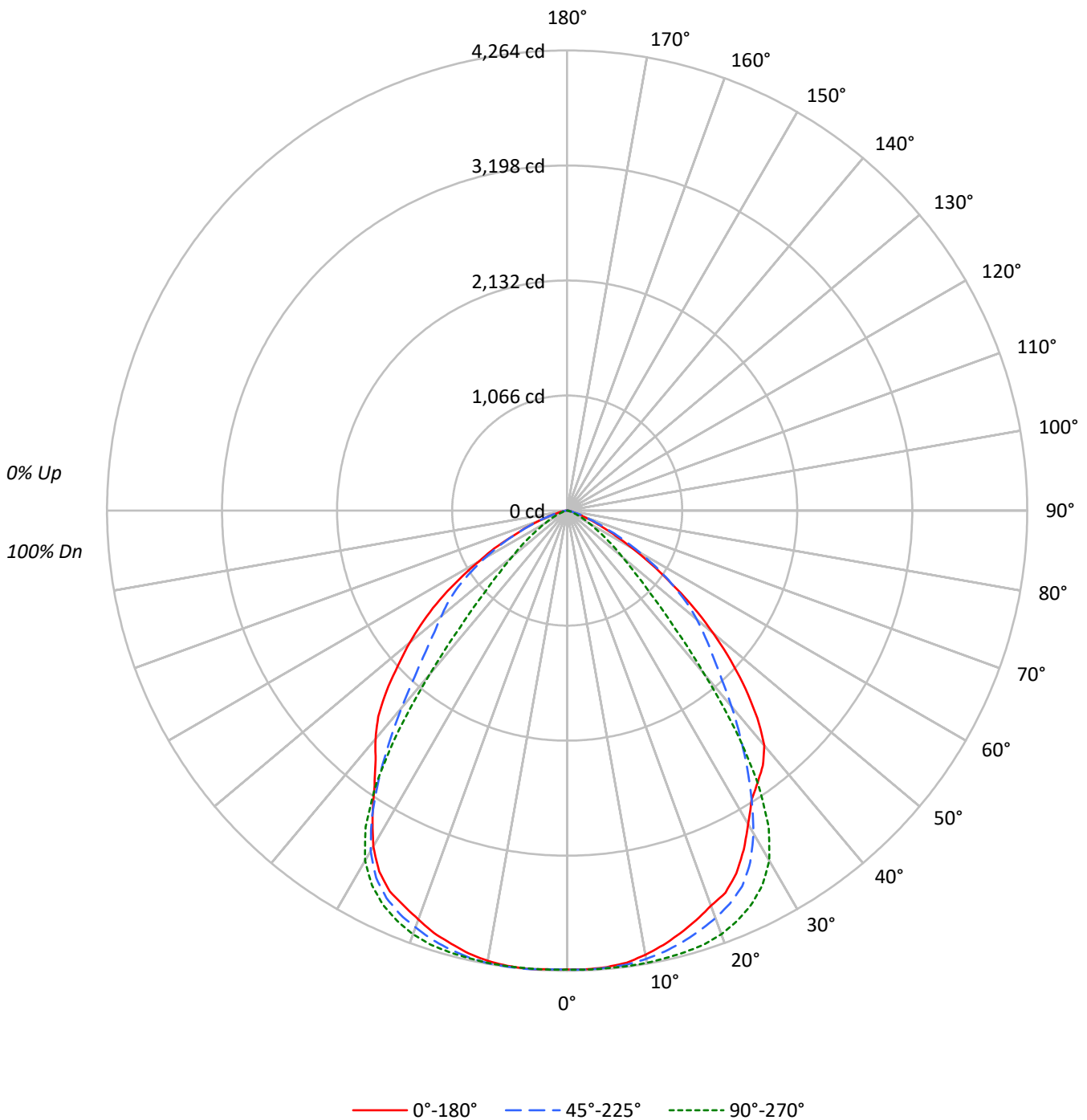
Input Watts (W): 106.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	405.9	5.0
10°-20°	1178.6	14.6
20°-30°	1789.0	22.2
30°-40°	1878.9	23.3
40°-50°	1408.7	17.5
50°-60°	903.9	11.2
60°-70°	386.7	4.8
70°-80°	91.3	1.1
80°-90°	17.0	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°	3373.5	41.9
0°-40°	5252.4	65.2
0°-60°	7565.0	93.9
0°-90°	8060.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8060.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4253	4253	4253	4253	4253	
5°	4246	4253	4257	4264	4262	403
15°	4054	4138	4234	4207	4154	1143
25°	3709	3839	4034	3960	3892	1695
35°	3077	2906	3079	3043	3111	1931
45°	2338	1910	1098	1856	2370	1790
55°	1182	1182	409	1233	1440	1073
65°	356	420	130	541	550	380
75°	55	64	18	110	107	80
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°	4252.6	4252.6	4252.6	4252.6	4252.6	4252.6	4252.6	4252.6	4252.6	4252.6	4252.6
2.5°	4254.9	4259.5	4257.2	4257.2	4254.9	4257.2	4257.2	4261.8	4261.8	4257.2	4254.9
5°	4245.8	4250.3	4250.3	4245.8	4245.8	4257.2	4250.3	4254.9	4254.9	4252.6	4252.6
7.5°	4225.3	4225.3	4234.4	4227.5	4227.5	4234.4	4232.1	4236.6	4241.2	4243.5	4243.5
10°	4179.5	4184.1	4186.4	4186.4	4188.7	4195.6	4200.2	4209.2	4213.8	4218.3	4220.7
12.5°	4122.5	4129.3	4131.7	4129.3	4136.3	4145.3	4156.8	4168.2	4175.1	4184.1	4191.0
15°	4054.0	4054.0	4058.6	4065.4	4070.0	4083.7	4095.1	4108.8	4127.1	4138.5	4149.9
17.5°	3978.7	3983.2	3990.1	3990.1	3999.3	4022.0	4028.9	4049.5	4070.0	4081.4	4104.3
20°	3896.6	3901.1	3907.9	3912.5	3923.9	3942.2	3955.9	3974.2	3996.9	4017.6	4040.3
22.5°	3832.6	3823.5	3828.0	3832.6	3844.0	3860.1	3876.0	3898.7	3921.6	3942.2	3965.0
25°	3709.3	3711.6	3718.5	3723.1	3736.7	3750.4	3768.7	3796.0	3816.7	3839.4	3864.5
27.5°	3542.7	3545.1	3556.4	3556.4	3567.8	3590.7	3602.0	3624.9	3652.3	3675.1	3704.8
30°	3353.2	3357.7	3357.7	3366.9	3373.8	3385.2	3396.6	3419.5	3433.2	3453.7	3494.8
32.5°	3179.8	3184.3	3182.1	3179.8	3172.9	3170.6	3168.3	3172.9	3177.5	3184.3	3200.2
35°	3077.0	3065.6	3056.5	3040.5	3022.3	2999.5	2978.8	2951.5	2926.4	2905.9	2883.0
37.5°	2978.8	2976.6	2962.9	2940.0	2903.5	2862.5	2814.6	2755.2	2695.8	2631.9	2570.3
40°	2842.0	2835.0	2823.7	2791.7	2750.6	2700.4	2636.5	2563.4	2467.5	2369.5	2269.0
42.5°	2609.1	2611.4	2597.7	2572.6	2533.8	2485.8	2419.6	2339.8	2237.1	2120.6	1990.4
45°	2337.5	2337.5	2332.9	2312.3	2284.9	2246.1	2195.9	2129.8	2029.3	1910.5	1771.3
47.5°	2054.3	2056.7	2049.9	2045.3	2033.8	2008.7	1972.3	1922.1	1851.2	1737.1	1597.9
50°	1766.8	1766.8	1778.2	1775.9	1775.9	1766.8	1750.8	1721.1	1659.5	1568.2	1438.1
52.5°	1479.2	1483.8	1490.6	1499.7	1511.1	1529.4	1511.1	1497.4	1458.6	1387.8	1276.0
55°	1182.4	1187.0	1198.3	1214.4	1228.1	1246.3	1250.9	1250.9	1230.3	1182.4	1097.9
57.5°	929.1	922.2	931.3	945.0	963.3	981.5	995.2	1011.3	1008.9	977.0	908.5
60°	698.5	700.7	707.6	721.4	735.0	751.0	769.2	782.9	789.9	773.8	730.4
62.5°	509.0	509.0	518.1	531.8	538.8	561.5	572.9	579.8	586.6	584.4	556.9
65°	356.1	360.6	365.2	372.1	378.9	392.6	399.4	413.2	417.7	420.0	399.4
67.5°	251.1	244.3	248.9	253.3	260.2	269.4	283.1	283.1	289.9	289.9	276.2
70°	159.7	159.7	162.1	168.9	173.5	175.8	180.4	184.9	191.7	189.4	189.4
72.5°	107.3	105.0	107.3	109.6	111.9	118.7	118.7	121.0	125.6	127.8	118.7
75°	54.8	57.1	61.7	59.4	66.1	61.7	63.9	70.7	68.5	63.9	63.9
77.5°	45.6	45.6	45.6	43.4	47.9	47.9	45.6	50.2	47.9	47.9	45.6
80°	31.9	34.2	31.9	29.7	31.9	29.7	29.7	29.7	29.7	29.7	27.4
82.5°	25.1	20.5	22.9	20.5	22.9	22.9	20.5	18.3	18.3	20.5	18.3
85°	18.3	13.7	15.9	15.9	13.7	13.7	13.7	13.7	13.7	11.4	11.4
87.5°	11.4	6.8	6.8	6.8	9.1	9.1	9.1	6.8	9.1	9.1	4.6
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	4252.6	4252.6	4252.6	4252.6	4252.6	4252.6	4252.6	4252.6	4252.6	4252.6	4252.6
2.5°	4259.5	4257.2	4261.8	4259.5	4259.5	4257.2	4259.5	4257.2	4261.8	4252.6	4254.9
5°	4259.5	4254.9	4257.2	4259.5	4261.8	4257.2	4257.2	4257.2	4261.8	4257.2	4259.5
7.5°	4250.3	4248.0	4254.9	4259.5	4257.2	4254.9	4259.5	4257.2	4261.8	4259.5	4264.1
10°	4232.1	4234.4	4238.9	4245.8	4248.0	4250.3	4254.9	4254.9	4261.8	4252.6	4257.2
12.5°	4204.6	4213.8	4225.3	4229.8	4238.9	4238.9	4243.5	4245.8	4250.3	4248.0	4254.9
15°	4170.5	4181.9	4195.6	4207.0	4218.3	4225.3	4232.1	4234.4	4241.2	4234.4	4236.6
17.5°	4129.3	4143.0	4163.6	4177.3	4195.6	4202.4	4211.5	4216.1	4222.9	4218.3	4220.7
20°	4072.3	4088.3	4111.0	4131.7	4143.0	4159.0	4170.5	4177.3	4181.9	4177.3	4179.5
22.5°	3992.4	4015.2	4044.9	4060.8	4083.7	4097.4	4099.7	4115.6	4127.1	4115.6	4120.2
25°	3898.7	3921.6	3944.5	3978.7	3999.3	4015.2	4031.2	4033.5	4044.9	4042.6	4040.3
27.5°	3743.6	3773.3	3812.1	3839.4	3866.8	3892.0	3910.3	3914.8	3926.2	3921.6	3923.9
30°	3531.3	3563.3	3599.8	3643.1	3681.9	3707.0	3729.9	3745.8	3757.3	3750.4	3748.2
32.5°	3229.9	3261.9	3300.8	3344.1	3389.8	3426.2	3453.7	3474.2	3487.9	3483.4	3472.0
35°	2885.3	2894.4	2919.5	2953.8	2992.5	3031.4	3056.5	3079.3	3095.3	3099.9	3099.9
37.5°	2531.4	2501.8	2483.6	2483.6	2506.3	2522.4	2545.2	2558.9	2584.0	2593.1	2599.9
40°	2189.1	2120.6	2056.7	2008.7	1976.8	1974.5	1974.5	1981.4	2004.2	2033.8	2061.3
42.5°	1883.2	1773.6	1675.4	1586.4	1522.5	1486.0	1470.1	1472.3	1490.6	1517.9	1563.6
45°	1638.9	1502.0	1378.7	1271.4	1184.7	1127.6	1100.3	1097.9	1111.7	1143.6	1193.9
47.5°	1449.5	1303.4	1164.2	1040.8	947.4	885.7	853.8	844.6	853.8	883.3	942.8
50°	1292.0	1141.4	997.6	869.7	769.2	705.3	675.6	664.3	675.6	700.7	760.2
52.5°	1145.9	990.6	856.0	732.7	625.4	570.7	538.8	531.8	538.8	568.3	616.3
55°	977.0	844.6	712.2	588.9	495.4	440.6	415.4	408.6	415.4	442.9	493.0
57.5°	810.4	696.3	579.8	467.9	388.1	340.1	317.4	308.2	324.1	342.4	401.8
60°	655.1	563.9	465.7	367.5	301.3	257.9	239.7	237.4	241.9	264.8	305.8
62.5°	513.6	438.3	360.6	280.8	226.0	207.7	184.9	182.6	187.2	200.9	232.8
65°	369.8	321.8	262.5	205.5	162.1	137.0	127.8	130.1	134.6	143.8	173.5
67.5°	257.9	223.6	182.6	143.8	111.9	100.4	91.4	89.0	91.4	107.3	123.3
70°	173.5	152.9	123.3	109.6	77.7	61.7	63.9	57.1	66.1	66.1	79.8
72.5°	114.1	100.4	82.2	63.9	54.8	43.4	43.4	41.1	45.6	47.9	59.4
75°	59.4	45.6	45.6	31.9	22.9	11.4	20.5	18.3	15.9	18.3	22.9
77.5°	41.1	34.2	31.9	25.1	22.9	18.3	18.3	18.3	18.3	20.5	22.9
80°	25.1	25.1	18.3	15.9	13.7	11.4	13.7	13.7	13.7	13.7	15.9
82.5°	15.9	13.7	13.7	11.4	11.4	9.1	9.1	9.1	9.1	9.1	13.7
85°	13.7	9.1	9.1	6.8	9.1	15.9	6.8	9.1	9.1	9.1	6.8
87.5°	4.6	6.8	6.8	6.8	4.6	2.2	4.6	6.8	6.8	11.4	9.1
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°	4252.6	4252.6	4252.6	4252.6	4252.6	4252.6	4252.6	4252.6	4252.6	4252.6	4252.6
2.5°	4259.5	4261.8	4261.8	4259.5	4259.5	4254.9	4264.1	4257.2	4259.5	4268.5	4261.8
5°	4264.1	4266.3	4266.3	4264.1	4264.1	4264.1	4266.3	4266.3	4264.1	4261.8	4266.3
7.5°	4273.1	4270.9	4270.9	4266.3	4266.3	4261.8	4266.3	4259.5	4264.1	4259.5	4266.3
10°	4261.8	4264.1	4261.8	4259.5	4259.5	4257.2	4257.2	4250.3	4252.6	4245.8	4250.3
12.5°	4254.9	4252.6	4252.6	4248.0	4243.5	4238.9	4236.6	4229.8	4229.8	4213.8	4220.7
15°	4236.6	4238.9	4232.1	4222.9	4218.3	4207.0	4202.4	4193.2	4184.1	4172.7	4175.1
17.5°	4220.7	4213.8	4204.6	4195.6	4177.3	4168.2	4159.0	4145.3	4140.7	4127.1	4122.5
20°	4172.7	4168.2	4156.8	4140.7	4129.3	4108.8	4099.7	4086.0	4074.5	4060.8	4054.0
22.5°	4111.0	4106.4	4092.8	4076.9	4058.6	4049.5	4040.3	4015.2	4003.8	3990.1	3987.8
25°	4033.5	4026.6	4013.0	3994.7	3985.5	3960.5	3951.3	3933.0	3928.5	3914.8	3912.5
27.5°	3914.8	3905.7	3889.6	3866.8	3850.9	3834.8	3825.7	3812.1	3807.5	3793.8	3791.6
30°	3736.7	3725.3	3693.4	3684.3	3656.8	3640.9	3640.9	3622.6	3624.9	3615.8	3615.8
32.5°	3455.9	3437.7	3412.5	3394.3	3376.0	3366.9	3366.9	3360.1	3364.7	3364.7	3369.3
35°	3083.9	3058.8	3045.1	3033.7	3033.7	3042.7	3070.2	3077.0	3090.7	3102.1	3111.3
37.5°	2606.8	2604.5	2620.6	2634.2	2668.4	2707.2	2755.2	2796.3	2835.0	2862.5	2889.8
40°	2090.9	2147.9	2193.7	2257.6	2310.0	2385.4	2472.1	2542.9	2609.1	2657.0	2707.2
42.5°	1632.1	1705.2	1801.0	1894.6	1988.2	2090.9	2205.1	2303.2	2390.0	2456.1	2508.7
45°	1271.4	1371.9	1488.4	1607.0	1728.0	1855.8	1974.5	2075.0	2166.2	2234.7	2287.3
47.5°	1024.9	1134.5	1266.8	1397.0	1534.0	1668.6	1801.0	1887.8	1963.1	2017.9	2065.9
50°	846.8	963.3	1102.5	1250.9	1387.8	1522.5	1636.7	1721.1	1782.7	1830.7	1860.4
52.5°	707.6	830.9	979.3	1127.6	1264.6	1387.8	1490.6	1554.5	1604.7	1638.9	1666.4
55°	584.4	703.1	842.3	981.5	1116.2	1232.7	1317.1	1365.0	1403.8	1424.3	1440.4
57.5°	477.1	586.6	714.5	842.3	958.7	1054.6	1120.8	1168.8	1187.0	1202.9	1200.7
60°	374.4	477.1	593.5	703.1	803.5	881.1	929.1	956.4	970.1	977.0	972.4
62.5°	294.5	388.1	477.1	572.9	646.0	712.2	757.9	757.9	764.6	767.0	773.8
65°	219.2	289.9	367.5	438.3	497.6	541.0	566.1	572.9	582.1	579.8	575.2
67.5°	162.1	214.6	271.6	324.1	365.2	392.6	410.8	426.9	424.6	420.0	417.7
70°	111.9	146.1	196.3	228.2	257.9	285.4	289.9	292.1	294.5	296.7	292.1
72.5°	77.7	102.7	130.1	157.5	175.8	187.2	198.6	200.9	200.9	200.9	198.6
75°	38.8	52.5	77.7	89.0	105.0	109.6	118.7	118.7	125.6	116.4	114.1
77.5°	34.2	41.1	54.8	63.9	70.7	77.7	79.8	86.8	84.4	79.8	82.2
80°	20.5	25.1	34.2	38.8	47.9	50.2	52.5	54.8	52.5	54.8	54.8
82.5°	15.9	18.3	22.9	22.9	29.7	29.7	31.9	31.9	34.2	34.2	34.2
85°	9.1	15.9	13.7	27.4	18.3	18.3	22.9	27.4	22.9	22.9	27.4
87.5°	9.1	9.1	6.8	9.1	9.1	9.1	11.4	13.7	13.7	15.9	13.7
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: P249509

CATALOG NUMBER: LSR8B100D010 EC8B100930 8LBDW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	4252.6	4252.6	4252.6	4252.6
2.5°	4259.5	4264.1	4257.2	4254.9
5°	4266.3	4266.3	4261.8	4261.8
7.5°	4266.3	4266.3	4259.5	4254.9
10°	4248.0	4248.0	4241.2	4236.6
12.5°	4213.8	4213.8	4211.5	4204.6
15°	4170.5	4170.5	4161.3	4154.4
17.5°	4111.0	4115.6	4104.3	4104.3
20°	4047.1	4044.9	4035.8	4031.2
22.5°	3981.0	3976.4	3974.2	3960.5
25°	3910.3	3905.7	3898.7	3892.0
27.5°	3789.2	3787.0	3780.1	3770.9
30°	3604.4	3602.0	3592.9	3592.9
32.5°	3364.7	3362.3	3353.2	3355.6
35°	3115.8	3125.0	3120.4	3111.3
37.5°	2908.1	2914.9	2919.5	2914.9
40°	2734.7	2755.2	2757.4	2762.0
42.5°	2549.7	2577.2	2586.3	2590.9
45°	2328.3	2353.4	2373.9	2369.5
47.5°	2102.3	2120.6	2138.9	2125.2
50°	1885.5	1896.8	1903.8	1903.8
52.5°	1680.0	1680.0	1677.8	1680.0
55°	1445.0	1445.0	1435.8	1440.4
57.5°	1198.3	1202.9	1196.1	1184.7
60°	970.1	958.7	954.2	947.4
62.5°	755.6	755.6	739.6	760.2
65°	566.1	559.3	552.4	550.1
67.5°	410.8	408.6	401.8	399.4
70°	289.9	280.8	278.5	273.9
72.5°	194.0	194.0	189.4	189.4
75°	118.7	107.3	105.0	107.3
77.5°	82.2	79.8	79.8	77.7
80°	54.8	52.5	57.1	50.2
82.5°	34.2	36.5	34.2	36.5
85°	22.9	27.4	25.1	25.1
87.5°	13.7	13.7	13.7	13.7
90°	0.0	0.0	0.0	0.0

(END OF REPORT)