

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: P249102

Luminaire Tested: **LSR8B80D010 EC8B80835 8LBDW0H**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249102  
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: LSR8B80D010 EC8B80835 8LBDW0H  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
80 CRI 3500 CCT WITH SEMI-SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8488.0 lumens  
Efficiency: N/A  
Efficacy: 114.1 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

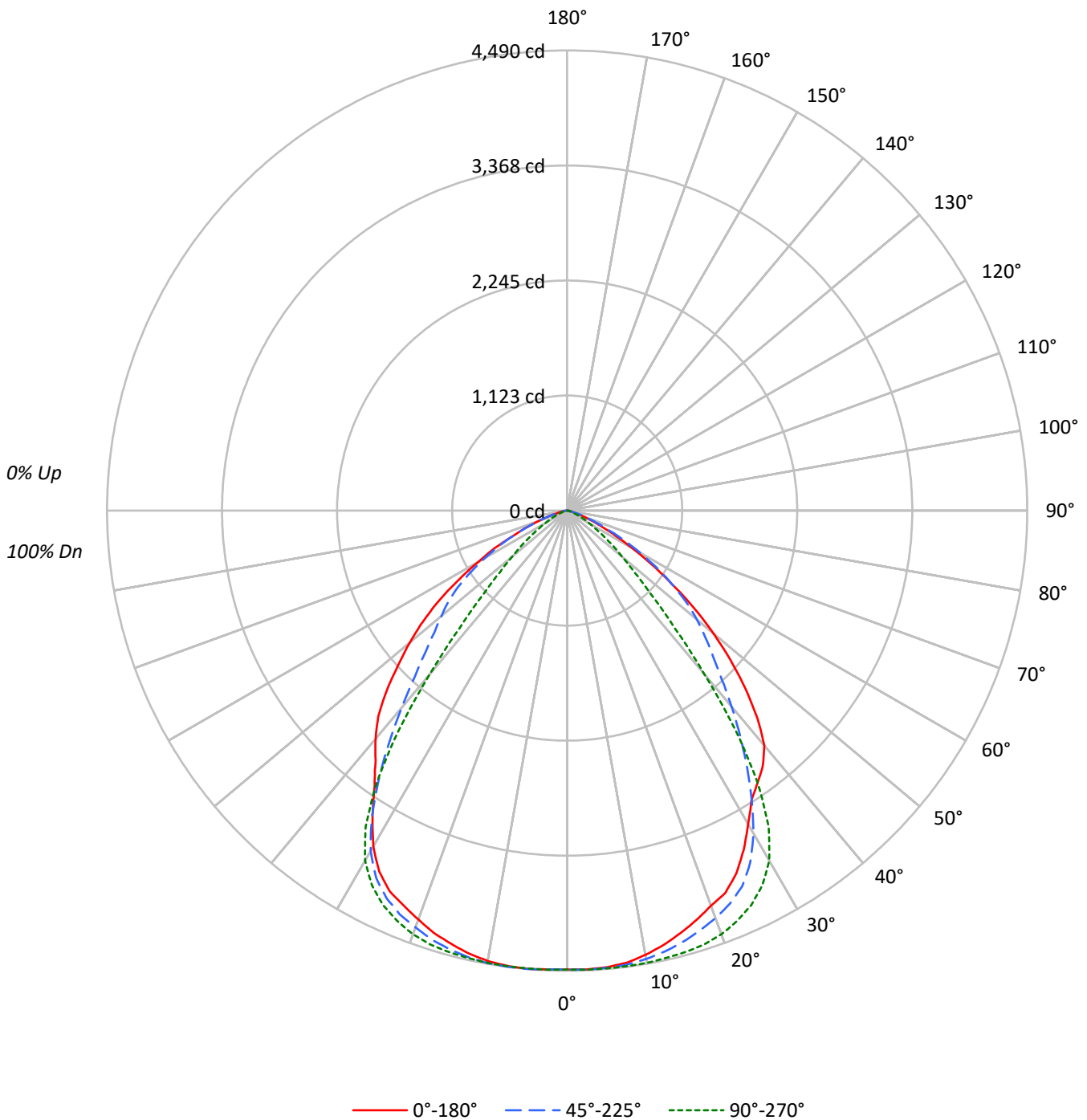
Input Watts (W): 74.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	138097	138097	138097
5°	138402	138777	138925
10°	137820	140303	139702
15°	136294	142356	139671
20°	134658	144358	139311
25°	132908	144524	139451
30°	125738	140461	134725
35°	121986	122073	123341
40°	120472	83994	117087
45°	107348	50425	108814
50°	89258	33557	96181
55°	66944	23134	81545
60°	45366	15418	61525
65°	27362	9996	42269
70°	15174	5419	26011
75°	6875	2288	13463
80°	5967	2557	9394
85°	6793	3397	9376



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	427.4	5.0
10°-20°	1241.2	14.6
20°-30°	1884.0	22.2
30°-40°	1978.7	23.3
40°-50°	1483.5	17.5
50°-60°	951.9	11.2
60°-70°	407.2	4.8
70°-80°	96.2	1.1
80°-90°	17.9	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°	3552.6	41.9
0°-40°	5531.3	65.2
0°-60°	7966.7	93.9
0°-90°	8488.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8488.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	4478	4478	4478	4478	4478	
5°	4471	4478	4483	4490	4488	425
15°	4269	4358	4459	4430	4375	1204
25°	3906	4043	4248	4171	4099	1785
35°	3240	3060	3243	3204	3276	2034
45°	2462	2012	1156	1954	2495	1885
55°	1245	1245	430	1298	1517	1129
65°	375	442	137	570	579	400
75°	58	67	19	115	113	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°	4478.4	4478.4	4478.4	4478.4	4478.4	4478.4	4478.4	4478.4	4478.4	4478.4	4478.4
2.5°	4480.8	4485.7	4483.3	4483.3	4480.8	4483.3	4483.3	4488.1	4488.1	4483.3	4480.8
5°	4471.2	4476.0	4476.0	4471.2	4471.2	4483.3	4476.0	4480.8	4480.8	4478.4	4478.4
7.5°	4449.6	4449.6	4459.2	4452.0	4452.0	4459.2	4456.8	4461.6	4466.4	4468.8	4468.8
10°	4401.5	4406.3	4408.7	4408.7	4411.1	4418.3	4423.1	4432.8	4437.6	4442.4	4444.8
12.5°	4341.4	4348.6	4351.0	4348.6	4355.9	4365.4	4377.5	4389.5	4396.7	4406.3	4413.6
15°	4269.3	4269.3	4274.1	4281.3	4286.2	4300.6	4312.6	4327.0	4346.2	4358.3	4370.3
17.5°	4190.0	4194.8	4202.0	4202.0	4211.6	4235.6	4242.9	4264.5	4286.2	4298.2	4322.2
20°	4103.5	4108.2	4115.5	4120.3	4132.3	4151.5	4165.9	4185.2	4209.2	4230.9	4254.9
22.5°	4036.1	4026.5	4031.3	4036.1	4048.2	4065.0	4081.8	4105.8	4129.9	4151.5	4175.6
25°	3906.3	3908.7	3915.9	3920.7	3935.2	3949.6	3968.8	3997.6	4019.3	4043.3	4069.8
27.5°	3730.8	3733.3	3745.3	3745.3	3757.3	3781.3	3793.3	3817.4	3846.2	3870.2	3901.5
30°	3531.3	3536.1	3536.1	3545.7	3552.9	3565.0	3577.0	3601.0	3615.4	3637.1	3680.4
32.5°	3348.6	3353.4	3351.0	3348.6	3341.4	3339.0	3336.6	3341.4	3346.2	3353.4	3370.2
35°	3240.5	3228.4	3218.8	3202.0	3182.8	3158.7	3137.1	3108.2	3081.8	3060.1	3036.1
37.5°	3137.1	3134.7	3120.2	3096.2	3057.7	3014.5	2964.0	2901.5	2839.0	2771.7	2706.8
40°	2992.8	2985.6	2973.6	2940.0	2896.7	2843.8	2776.5	2699.6	2598.6	2495.2	2389.5
42.5°	2747.6	2750.0	2735.6	2709.2	2668.3	2617.8	2548.1	2464.0	2355.8	2233.2	2096.2
45°	2461.6	2461.6	2456.8	2435.1	2406.3	2365.4	2312.5	2242.8	2137.1	2012.0	1865.4
47.5°	2163.5	2165.9	2158.7	2153.9	2141.8	2115.4	2077.0	2024.1	1949.6	1829.3	1682.7
50°	1860.6	1860.6	1872.6	1870.2	1870.2	1860.6	1843.8	1812.5	1747.6	1651.5	1514.5
52.5°	1557.7	1562.5	1569.8	1579.4	1591.4	1610.6	1591.4	1576.9	1536.1	1461.5	1343.8
55°	1245.2	1250.0	1262.0	1278.8	1293.3	1312.5	1317.3	1317.3	1295.7	1245.2	1156.3
57.5°	978.4	971.2	980.8	995.2	1014.5	1033.7	1048.1	1064.9	1062.5	1028.9	956.8
60°	735.6	738.0	745.2	759.6	774.1	790.9	810.1	824.5	831.8	814.9	769.2
62.5°	536.1	536.1	545.7	560.1	567.3	591.4	603.4	610.6	617.8	615.4	586.5
65°	375.0	379.8	384.6	391.9	399.0	413.4	420.7	435.1	439.9	442.3	420.7
67.5°	264.5	257.2	262.0	266.8	274.0	283.7	298.1	298.1	305.3	305.3	290.9
70°	168.3	168.3	170.7	177.9	182.7	185.1	189.9	194.7	201.9	199.5	199.5
72.5°	113.0	110.6	113.0	115.4	117.8	125.0	125.0	127.4	132.2	134.6	125.0
75°	57.7	60.1	64.9	62.5	69.7	64.9	67.3	74.5	72.1	67.3	67.3
77.5°	48.1	48.1	48.1	45.7	50.5	50.5	48.1	52.9	50.5	50.5	48.1
80°	33.6	36.1	33.6	31.2	33.6	31.2	31.2	31.2	31.2	31.2	28.8
82.5°	26.5	21.6	24.1	21.6	24.1	24.1	21.6	19.2	19.2	21.6	19.2
85°	19.2	14.4	16.8	16.8	14.4	14.4	14.4	14.4	14.4	12.0	12.0
87.5°	12.0	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°	4478.4	4478.4	4478.4	4478.4	4478.4	4478.4	4478.4	4478.4	4478.4	4478.4	4478.4
2.5°	4485.7	4483.3	4488.1	4485.7	4485.7	4483.3	4485.7	4483.3	4488.1	4478.4	4480.8
5°	4485.7	4480.8	4483.3	4485.7	4488.1	4483.3	4483.3	4483.3	4488.1	4483.3	4485.7
7.5°	4476.0	4473.6	4480.8	4485.7	4483.3	4480.8	4485.7	4483.3	4488.1	4485.7	4490.4
10°	4456.8	4459.2	4464.0	4471.2	4473.6	4476.0	4480.8	4480.8	4488.1	4478.4	4483.3
12.5°	4428.0	4437.6	4449.6	4454.4	4464.0	4464.0	4468.8	4471.2	4476.0	4473.6	4480.8
15°	4391.9	4403.9	4418.3	4430.4	4442.4	4449.6	4456.8	4459.2	4466.4	4459.2	4461.6
17.5°	4348.6	4363.0	4384.7	4399.1	4418.3	4425.6	4435.1	4440.0	4447.2	4442.4	4444.8
20°	4288.5	4305.4	4329.4	4351.0	4363.0	4379.9	4391.9	4399.1	4403.9	4399.1	4401.5
22.5°	4204.4	4228.5	4259.7	4276.5	4300.6	4315.0	4317.4	4334.2	4346.2	4334.2	4339.0
25°	4105.8	4129.9	4153.9	4190.0	4211.6	4228.5	4245.3	4247.7	4259.7	4257.3	4254.9
27.5°	3942.4	3973.6	4014.5	4043.3	4072.2	4098.6	4117.9	4122.6	4134.7	4129.9	4132.3
30°	3718.8	3752.5	3791.0	3836.6	3877.5	3903.9	3927.9	3944.8	3956.8	3949.6	3947.2
32.5°	3401.5	3435.2	3476.0	3521.7	3569.8	3608.2	3637.1	3658.7	3673.1	3668.3	3656.3
35°	3038.5	3048.1	3074.6	3110.7	3151.5	3192.4	3218.8	3242.8	3259.6	3264.5	3264.5
37.5°	2665.9	2634.7	2615.5	2615.5	2639.5	2656.3	2680.3	2694.7	2721.2	2730.8	2738.0
40°	2305.3	2233.2	2165.9	2115.4	2081.8	2079.4	2079.4	2086.6	2110.6	2141.8	2170.7
42.5°	1983.2	1867.8	1764.5	1670.7	1603.4	1564.9	1548.1	1550.5	1569.8	1598.6	1646.6
45°	1726.0	1581.8	1452.0	1339.0	1247.6	1187.5	1158.7	1156.3	1170.7	1204.3	1257.3
47.5°	1526.5	1372.6	1226.0	1096.2	997.6	932.7	899.1	889.5	899.1	930.3	992.8
50°	1360.6	1202.0	1050.5	915.9	810.1	742.8	711.5	699.5	711.5	738.0	800.5
52.5°	1206.7	1043.3	901.5	771.6	658.7	601.0	567.3	560.1	567.3	598.5	649.1
55°	1028.9	889.5	750.0	620.2	521.7	464.0	437.5	430.3	437.5	466.4	519.3
57.5°	853.4	733.2	610.6	492.8	408.7	358.2	334.2	324.5	341.3	360.6	423.1
60°	689.9	593.8	490.4	387.0	317.3	271.6	252.4	250.0	254.8	278.9	322.1
62.5°	540.9	461.6	379.8	295.7	238.0	218.7	194.7	192.3	197.1	211.5	245.2
65°	389.4	339.0	276.5	216.3	170.7	144.2	134.6	137.0	141.8	151.5	182.7
67.5°	271.6	235.6	192.3	151.5	117.8	105.8	96.2	93.8	96.2	113.0	129.8
70°	182.7	161.0	129.8	115.4	81.8	64.9	67.3	60.1	69.7	69.7	84.1
72.5°	120.2	105.8	86.5	67.3	57.7	45.7	45.7	43.3	48.1	50.5	62.5
75°	62.5	48.1	48.1	33.6	24.1	12.0	21.6	19.2	16.8	19.2	24.1
77.5°	43.3	36.1	33.6	26.5	24.1	19.2	19.2	19.2	19.2	21.6	24.1
80°	26.5	26.5	19.2	16.8	14.4	12.0	14.4	14.4	14.4	14.4	16.8
82.5°	16.8	14.4	14.4	12.0	12.0	9.6	9.6	9.6	9.6	9.6	14.4
85°	14.4	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	12.0	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°	4478.4	4478.4	4478.4	4478.4	4478.4	4478.4	4478.4	4478.4	4478.4	4478.4	4478.4
2.5°	4485.7	4488.1	4488.1	4485.7	4485.7	4480.8	4490.4	4483.3	4485.7	4495.3	4488.1
5°	4490.4	4492.8	4492.8	4490.4	4490.4	4490.4	4492.8	4492.8	4490.4	4488.1	4492.8
7.5°	4500.1	4497.7	4497.7	4492.8	4492.8	4488.1	4492.8	4485.7	4490.4	4485.7	4492.8
10°	4488.1	4490.4	4488.1	4485.7	4485.7	4483.3	4483.3	4476.0	4478.4	4471.2	4476.0
12.5°	4480.8	4478.4	4478.4	4473.6	4468.8	4464.0	4461.6	4454.4	4454.4	4437.6	4444.8
15°	4461.6	4464.0	4456.8	4447.2	4442.4	4430.4	4425.6	4415.9	4406.3	4394.3	4396.7
17.5°	4444.8	4437.6	4428.0	4418.3	4399.1	4389.5	4379.9	4365.4	4360.6	4346.2	4341.4
20°	4394.3	4389.5	4377.5	4360.6	4348.6	4327.0	4317.4	4303.0	4290.9	4276.5	4269.3
22.5°	4329.4	4324.6	4310.2	4293.3	4274.1	4264.5	4254.9	4228.5	4216.4	4202.0	4199.6
25°	4247.7	4240.5	4226.0	4206.8	4197.2	4170.8	4161.1	4141.9	4137.1	4122.6	4120.3
27.5°	4122.6	4113.1	4096.2	4072.2	4055.3	4038.5	4028.9	4014.5	4009.7	3995.2	3992.9
30°	3935.2	3923.1	3889.5	3879.9	3851.0	3834.2	3834.2	3815.0	3817.4	3807.8	3807.8
32.5°	3639.5	3620.3	3593.8	3574.6	3555.3	3545.7	3545.7	3538.5	3543.3	3543.3	3548.2
35°	3247.6	3221.2	3206.8	3194.8	3194.8	3204.4	3233.2	3240.5	3254.9	3266.9	3276.5
37.5°	2745.2	2742.9	2759.7	2774.1	2810.1	2851.0	2901.5	2944.8	2985.6	3014.5	3043.3
40°	2202.0	2262.1	2310.1	2377.5	2432.7	2512.1	2603.4	2677.9	2747.6	2798.1	2851.0
42.5°	1718.8	1795.7	1896.7	1995.2	2093.8	2202.0	2322.2	2425.5	2516.9	2586.6	2641.9
45°	1339.0	1444.7	1567.4	1692.3	1819.7	1954.4	2079.4	2185.1	2281.3	2353.4	2408.7
47.5°	1079.3	1194.7	1334.1	1471.2	1615.4	1757.2	1896.7	1988.0	2067.3	2125.0	2175.5
50°	891.8	1014.5	1161.1	1317.3	1461.5	1603.4	1723.6	1812.5	1877.4	1927.9	1959.2
52.5°	745.2	875.0	1031.3	1187.5	1331.7	1461.5	1569.8	1637.1	1689.9	1726.0	1754.8
55°	615.4	740.4	887.1	1033.7	1175.5	1298.1	1387.0	1437.5	1478.4	1500.0	1516.8
57.5°	502.4	617.8	752.4	887.1	1009.6	1110.6	1180.3	1230.8	1250.0	1266.8	1264.4
60°	394.3	502.4	625.0	740.4	846.2	927.9	978.4	1007.2	1021.6	1028.9	1024.0
62.5°	310.1	408.7	502.4	603.4	680.3	750.0	798.1	798.1	805.3	807.7	814.9
65°	230.7	305.3	387.0	461.6	524.0	569.7	596.2	603.4	613.0	610.6	605.8
67.5°	170.7	226.0	286.0	341.3	384.6	413.4	432.7	449.6	447.1	442.3	439.9
70°	117.8	153.9	206.7	240.4	271.6	300.5	305.3	307.7	310.1	312.5	307.7
72.5°	81.8	108.2	137.0	165.9	185.1	197.1	209.2	211.5	211.5	211.5	209.2
75°	40.9	55.3	81.8	93.8	110.6	115.4	125.0	125.0	132.2	122.6	120.2
77.5°	36.1	43.3	57.7	67.3	74.5	81.8	84.1	91.3	88.9	84.1	86.5
80°	21.6	26.5	36.1	40.9	50.5	52.9	55.3	57.7	55.3	57.7	57.7
82.5°	16.8	19.2	24.1	24.1	31.2	31.2	33.6	33.6	36.1	36.1	36.1
85°	9.6	16.8	14.4	28.8	19.2	19.2	24.1	28.8	24.1	24.1	28.8
87.5°	9.6	9.6	7.2	9.6	9.6	9.6	12.0	14.4	14.4	16.8	14.4
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: P249102

CATALOG NUMBER: LSR8B80D010 EC8B80835 8LBDW0H

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	4478.4	4478.4	4478.4	4478.4
2.5°	4485.7	4490.4	4483.3	4480.8
5°	4492.8	4492.8	4488.1	4488.1
7.5°	4492.8	4492.8	4485.7	4480.8
10°	4473.6	4473.6	4466.4	4461.6
12.5°	4437.6	4437.6	4435.1	4428.0
15°	4391.9	4391.9	4382.3	4375.1
17.5°	4329.4	4334.2	4322.2	4322.2
20°	4262.1	4259.7	4250.1	4245.3
22.5°	4192.4	4187.6	4185.2	4170.8
25°	4117.9	4113.1	4105.8	4098.6
27.5°	3990.5	3988.1	3980.8	3971.2
30°	3795.7	3793.3	3783.7	3783.7
32.5°	3543.3	3540.9	3531.3	3533.7
35°	3281.3	3290.9	3286.1	3276.5
37.5°	3062.5	3069.8	3074.6	3069.8
40°	2879.8	2901.5	2903.9	2908.7
42.5°	2685.2	2714.0	2723.6	2728.4
45°	2451.9	2478.4	2500.1	2495.2
47.5°	2214.0	2233.2	2252.4	2238.0
50°	1985.6	1997.6	2004.9	2004.9
52.5°	1769.3	1769.3	1766.9	1769.3
55°	1521.7	1521.7	1512.1	1516.8
57.5°	1262.0	1266.8	1259.6	1247.6
60°	1021.6	1009.6	1004.8	997.6
62.5°	795.7	795.7	778.9	800.5
65°	596.2	589.0	581.7	579.3
67.5°	432.7	430.3	423.1	420.7
70°	305.3	295.7	293.3	288.5
72.5°	204.3	204.3	199.5	199.5
75°	125.0	113.0	110.6	113.0
77.5°	86.5	84.1	84.1	81.8
80°	57.7	55.3	60.1	52.9
82.5°	36.1	38.5	36.1	38.5
85°	24.1	28.8	26.5	26.5
87.5°	14.4	14.4	14.4	14.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)