

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: P249156

Luminaire Tested: **LSR8B80D010 EC8B80940 8LBDW0H**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249156  
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 EC8B80940 8LBDW0H  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
90 CRI 4000 CCT WITH SEMI-SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7560.0 lumens  
Efficiency: N/A  
Efficacy: 101.6 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

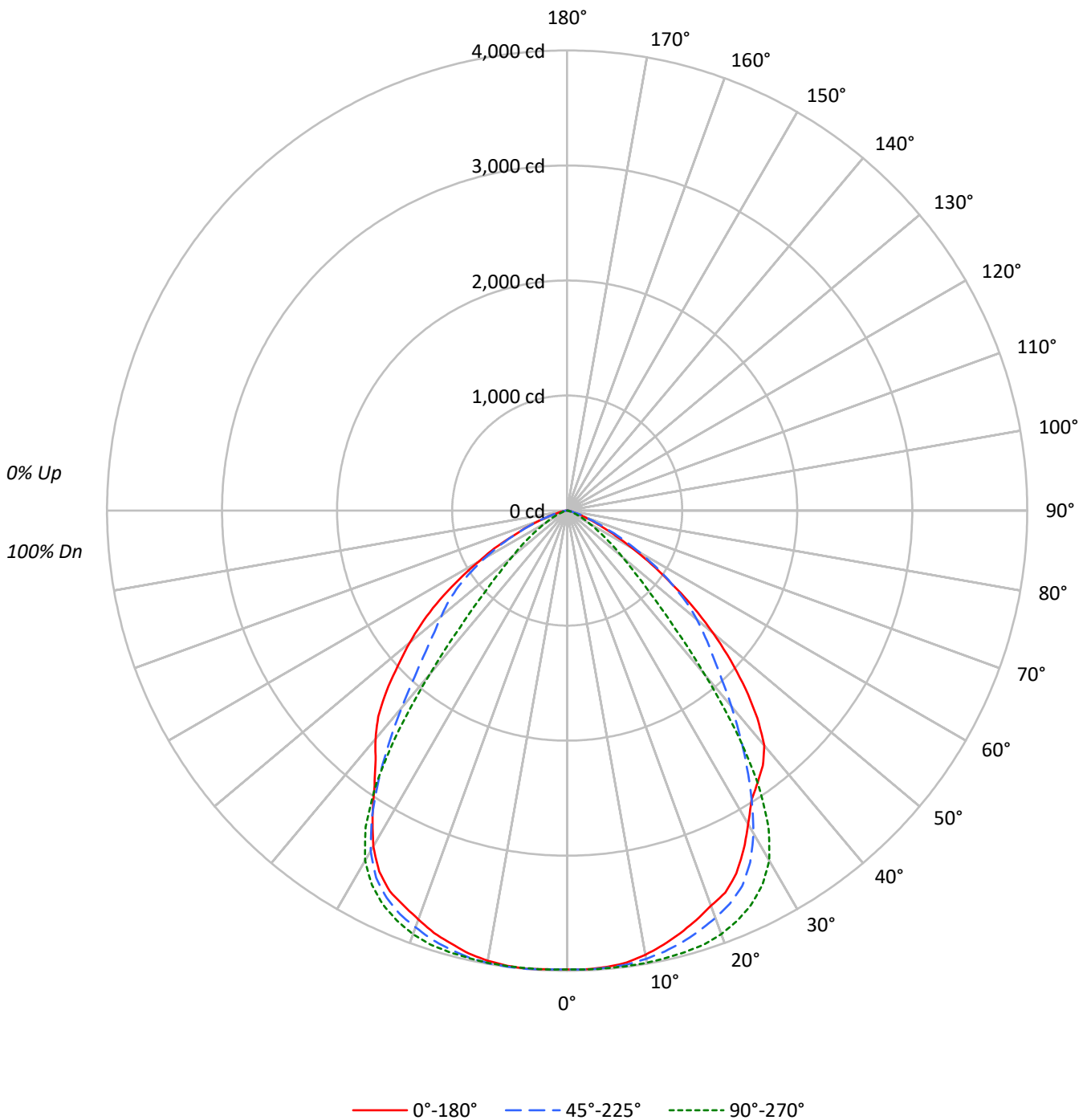
Input Watts (W): 74.4  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	123000	123000	123000
5°	123272	123603	123736
10°	122752	124966	124428
15°	121391	126793	124402
20°	119933	128574	124078
25°	118377	128723	124205
30°	111990	125104	119995
35°	108649	108728	109857
40°	107301	74808	104286
45°	95613	44913	96917
50°	79501	29892	85665
55°	59627	20607	72632
60°	40408	13734	54802
65°	24370	8909	37650
70°	13515	4824	23162
75°	6124	2037	11986
80°	5327	2273	8364
85°	6050	3007	8350



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	380.7	5.0
10°-20°	1105.5	14.6
20°-30°	1678.0	22.2
30°-40°	1762.4	23.3
40°-50°	1321.3	17.5
50°-60°	847.8	11.2
60°-70°	362.7	4.8
70°-80°	85.7	1.1
80°-90°	15.9	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°	3164.2	41.9
0°-40°	4926.6	65.2
0°-60°	7095.7	93.9
0°-90°	7560.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7560.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	3989	3989	3989	3989	3989	
5°	3982	3989	3993	4000	3997	378
15°	3802	3882	3972	3946	3897	1073
25°	3479	3601	3783	3715	3650	1589
35°	2886	2726	2888	2854	2918	1811
45°	2192	1792	1030	1741	2222	1679
55°	1109	1109	383	1156	1351	1006
65°	334	394	122	507	516	357
75°	51	60	17	103	101	75
85°	17	11	8	17	24	18
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°	3988.8	3988.8	3988.8	3988.8	3988.8	3988.8	3988.8	3988.8	3988.8	3988.8	3988.8
2.5°	3991.0	3995.2	3993.1	3993.1	3991.0	3993.1	3993.1	3997.4	3997.4	3993.1	3991.0
5°	3982.4	3986.7	3986.7	3982.4	3982.4	3993.1	3986.7	3991.0	3991.0	3988.8	3988.8
7.5°	3963.1	3963.1	3971.7	3965.3	3965.3	3971.7	3969.5	3973.8	3978.1	3980.3	3980.3
10°	3920.3	3924.6	3926.7	3926.7	3928.9	3935.3	3939.6	3948.2	3952.4	3956.7	3958.8
12.5°	3866.8	3873.2	3875.3	3873.2	3879.6	3888.2	3898.9	3909.6	3916.0	3924.6	3931.0
15°	3802.5	3802.5	3806.8	3813.3	3817.5	3830.4	3841.1	3853.9	3871.0	3881.8	3892.5
17.5°	3731.9	3736.2	3742.6	3742.6	3751.2	3772.5	3779.0	3798.3	3817.5	3828.2	3849.7
20°	3654.8	3659.1	3665.5	3669.8	3680.5	3697.6	3710.5	3727.6	3749.0	3768.3	3789.7
22.5°	3594.8	3586.3	3590.5	3594.8	3605.6	3620.6	3635.5	3656.9	3678.4	3697.6	3719.1
25°	3479.2	3481.4	3487.8	3492.1	3504.9	3517.8	3534.9	3560.6	3579.9	3601.3	3624.8
27.5°	3322.9	3325.1	3335.8	3335.8	3346.5	3367.9	3378.6	3400.0	3425.7	3447.1	3475.0
30°	3145.2	3149.5	3149.5	3158.1	3164.5	3175.2	3185.9	3207.3	3220.2	3239.4	3278.0
32.5°	2982.5	2986.8	2984.6	2982.5	2976.1	2973.9	2971.8	2976.1	2980.4	2986.8	3001.8
35°	2886.2	2875.4	2866.9	2851.9	2834.8	2813.4	2794.1	2768.4	2744.8	2725.6	2704.2
37.5°	2794.1	2791.9	2779.1	2757.7	2723.4	2684.9	2640.0	2584.3	2528.6	2468.6	2410.9
40°	2665.6	2659.2	2648.5	2618.5	2580.0	2532.9	2472.9	2404.4	2314.5	2222.4	2128.2
42.5°	2447.2	2449.4	2436.5	2413.0	2376.6	2331.6	2269.5	2194.6	2098.3	1989.0	1867.0
45°	2192.5	2192.5	2188.2	2168.9	2143.2	2106.8	2059.7	1997.6	1903.4	1792.1	1661.4
47.5°	1927.0	1929.1	1922.7	1918.4	1907.7	1884.2	1849.9	1802.8	1736.4	1629.3	1498.7
50°	1657.2	1657.2	1667.9	1665.7	1665.7	1657.2	1642.2	1614.4	1556.6	1470.9	1348.9
52.5°	1387.4	1391.7	1398.1	1406.7	1417.4	1434.5	1417.4	1404.5	1368.1	1301.7	1196.9
55°	1109.1	1113.4	1124.0	1139.0	1151.9	1169.0	1173.3	1173.3	1154.0	1109.1	1029.9
57.5°	871.4	865.0	873.6	886.4	903.5	920.7	933.5	948.5	946.3	916.4	852.2
60°	655.2	657.3	663.7	676.6	689.4	704.4	721.5	734.4	740.8	725.8	685.1
62.5°	477.5	477.5	486.0	498.8	505.3	526.7	537.4	543.8	550.2	548.1	522.4
65°	334.0	338.3	342.6	349.0	355.4	368.2	374.7	387.5	391.8	394.0	374.7
67.5°	235.5	229.1	233.4	237.6	244.1	252.7	265.5	265.5	271.9	271.9	259.1
70°	149.9	149.9	152.0	158.4	162.7	164.9	169.2	173.4	179.8	177.7	177.7
72.5°	100.6	98.5	100.6	102.8	104.9	111.3	111.3	113.5	117.8	119.9	111.3
75°	51.4	53.5	57.8	55.7	62.1	57.8	59.9	66.4	64.2	59.9	59.9
77.5°	42.8	42.8	42.8	40.7	44.9	44.9	42.8	47.1	44.9	44.9	42.8
80°	30.0	32.1	30.0	27.8	30.0	27.8	27.8	27.8	27.8	27.8	25.7
82.5°	23.6	19.3	21.4	19.3	21.4	21.4	19.3	17.1	17.1	19.3	17.1
85°	17.1	12.8	15.0	15.0	12.8	12.8	12.8	12.8	12.8	10.7	10.7
87.5°	10.7	6.4	6.4	6.4	8.5	8.5	8.5	6.4	8.5	8.5	4.3
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):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	3988.8	3988.8	3988.8	3988.8	3988.8	3988.8	3988.8	3988.8	3988.8	3988.8	3988.8
2.5°	3995.2	3993.1	3997.4	3995.2	3995.2	3993.1	3995.2	3993.1	3997.4	3988.8	3991.0
5°	3995.2	3991.0	3993.1	3995.2	3997.4	3993.1	3993.1	3993.1	3997.4	3993.1	3995.2
7.5°	3986.7	3984.5	3991.0	3995.2	3993.1	3991.0	3995.2	3993.1	3997.4	3995.2	3999.5
10°	3969.5	3971.7	3976.0	3982.4	3984.5	3986.7	3991.0	3991.0	3997.4	3988.8	3993.1
12.5°	3943.9	3952.4	3963.1	3967.4	3976.0	3976.0	3980.3	3982.4	3986.7	3984.5	3991.0
15°	3911.7	3922.4	3935.3	3946.0	3956.7	3963.1	3969.5	3971.7	3978.1	3971.7	3973.8
17.5°	3873.2	3886.0	3905.3	3918.1	3935.3	3941.7	3950.2	3954.5	3961.0	3956.7	3958.8
20°	3819.6	3834.7	3856.1	3875.3	3886.0	3901.0	3911.7	3918.1	3922.4	3918.1	3920.3
22.5°	3744.7	3766.2	3794.0	3809.0	3830.4	3843.2	3845.4	3860.3	3871.0	3860.3	3864.6
25°	3656.9	3678.4	3699.8	3731.9	3751.2	3766.2	3781.1	3783.3	3794.0	3791.8	3789.7
27.5°	3511.3	3539.2	3575.6	3601.3	3627.0	3650.5	3667.7	3671.9	3682.6	3678.4	3680.5
30°	3312.2	3342.2	3376.5	3417.1	3453.6	3477.1	3498.5	3513.5	3524.2	3517.8	3515.6
32.5°	3029.6	3059.6	3096.0	3136.7	3179.5	3213.7	3239.4	3258.7	3271.6	3267.3	3256.6
35°	2706.3	2714.9	2738.4	2770.6	2806.9	2843.3	2866.9	2888.3	2903.3	2907.6	2907.6
37.5°	2374.5	2346.6	2329.5	2329.5	2350.9	2365.9	2387.3	2400.1	2423.7	2432.2	2438.7
40°	2053.3	1989.0	1929.1	1884.2	1854.2	1852.0	1852.0	1858.4	1879.9	1907.7	1933.4
42.5°	1766.4	1663.6	1571.5	1488.0	1428.1	1393.8	1378.9	1381.0	1398.1	1423.8	1466.6
45°	1537.3	1408.8	1293.2	1192.6	1111.2	1057.7	1032.0	1029.9	1042.7	1072.7	1119.8
47.5°	1359.6	1222.5	1091.9	976.3	888.6	830.7	800.8	792.2	800.8	828.6	884.3
50°	1211.8	1070.6	935.7	815.7	721.5	661.6	633.7	623.1	633.7	657.3	713.0
52.5°	1074.8	929.2	802.9	687.3	586.6	535.3	505.3	498.8	505.3	533.1	578.1
55°	916.4	792.2	668.0	552.4	464.6	413.2	389.7	383.3	389.7	415.4	462.5
57.5°	760.1	653.0	543.8	438.9	364.0	319.0	297.6	289.0	304.0	321.1	376.8
60°	614.5	528.9	436.8	344.7	282.6	241.9	224.8	222.7	226.9	248.4	286.9
62.5°	481.8	411.1	338.3	263.4	212.0	194.8	173.4	171.3	175.6	188.4	218.4
65°	346.9	301.9	246.2	192.7	152.0	128.5	119.9	122.1	126.3	134.9	162.7
67.5°	241.9	209.8	171.3	134.9	104.9	94.2	85.7	83.5	85.7	100.6	115.6
70°	162.7	143.4	115.6	102.8	72.8	57.8	59.9	53.5	62.1	62.1	74.9
72.5°	107.0	94.2	77.1	59.9	51.4	40.7	40.7	38.6	42.8	44.9	55.7
75°	55.7	42.8	42.8	30.0	21.4	10.7	19.3	17.1	15.0	17.1	21.4
77.5°	38.6	32.1	30.0	23.6	21.4	17.1	17.1	17.1	17.1	19.3	21.4
80°	23.6	23.6	17.1	15.0	12.8	10.7	12.8	12.8	12.8	12.8	15.0
82.5°	15.0	12.8	12.8	10.7	10.7	8.5	8.5	8.5	8.5	8.5	12.8
85°	12.8	8.5	8.5	6.4	8.5	15.0	6.4	8.5	8.5	8.5	6.4
87.5°	4.3	6.4	6.4	6.4	4.3	2.1	4.3	6.4	6.4	10.7	8.5
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):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	3988.8	3988.8	3988.8	3988.8	3988.8	3988.8	3988.8	3988.8	3988.8	3988.8	3988.8
2.5°	3995.2	3997.4	3997.4	3995.2	3995.2	3991.0	3999.5	3993.1	3995.2	4003.8	3997.4
5°	3999.5	4001.6	4001.6	3999.5	3999.5	3999.5	4001.6	4001.6	3999.5	3997.4	4001.6
7.5°	4008.1	4005.9	4005.9	4001.6	4001.6	3997.4	4001.6	3995.2	3999.5	3995.2	4001.6
10°	3997.4	3999.5	3997.4	3995.2	3995.2	3993.1	3993.1	3986.7	3988.8	3982.4	3986.7
12.5°	3991.0	3988.8	3988.8	3984.5	3980.3	3976.0	3973.8	3967.4	3967.4	3952.4	3958.8
15°	3973.8	3976.0	3969.5	3961.0	3956.7	3946.0	3941.7	3933.1	3924.6	3913.9	3916.0
17.5°	3958.8	3952.4	3943.9	3935.3	3918.1	3909.6	3901.0	3888.2	3883.9	3871.0	3866.8
20°	3913.9	3909.6	3898.9	3883.9	3873.2	3853.9	3845.4	3832.5	3821.8	3809.0	3802.5
22.5°	3856.1	3851.8	3838.9	3823.9	3806.8	3798.3	3789.7	3766.2	3755.4	3742.6	3740.4
25°	3783.3	3776.8	3764.0	3746.9	3738.3	3714.8	3706.2	3689.0	3684.8	3671.9	3669.8
27.5°	3671.9	3663.4	3648.4	3627.0	3612.0	3597.0	3588.5	3575.6	3571.3	3558.4	3556.3
30°	3504.9	3494.2	3464.2	3455.7	3430.0	3415.0	3415.0	3397.9	3400.0	3391.5	3391.5
32.5°	3241.6	3224.5	3200.9	3183.8	3166.6	3158.1	3158.1	3151.6	3155.9	3155.9	3160.2
35°	2892.6	2869.1	2856.2	2845.5	2845.5	2854.0	2879.7	2886.2	2899.0	2909.7	2918.3
37.5°	2445.1	2443.0	2458.0	2470.8	2502.9	2539.3	2584.3	2622.8	2659.2	2684.9	2710.6
40°	1961.2	2014.8	2057.6	2117.5	2166.7	2237.4	2318.8	2385.1	2447.2	2492.2	2539.3
42.5°	1530.8	1599.4	1689.3	1777.1	1864.9	1961.2	2068.3	2160.3	2241.7	2303.8	2353.0
45°	1192.6	1286.8	1396.0	1507.3	1620.8	1740.7	1852.0	1946.2	2031.9	2096.1	2145.4
47.5°	961.3	1064.1	1188.3	1310.3	1438.8	1565.1	1689.3	1770.7	1841.3	1892.7	1937.7
50°	794.3	903.5	1034.1	1173.3	1301.7	1428.1	1535.1	1614.4	1672.2	1717.1	1745.0
52.5°	663.7	779.3	918.5	1057.7	1186.1	1301.7	1398.1	1458.1	1505.2	1537.3	1563.0
55°	548.1	659.5	790.1	920.7	1047.0	1156.2	1235.4	1280.4	1316.7	1336.0	1351.0
57.5°	447.5	550.2	670.2	790.1	899.2	989.2	1051.3	1096.2	1113.4	1128.3	1126.2
60°	351.2	447.5	556.7	659.5	753.7	826.4	871.4	897.1	909.9	916.4	912.1
62.5°	276.2	364.0	447.5	537.4	605.9	668.0	710.9	710.9	717.3	719.4	725.8
65°	205.5	271.9	344.7	411.1	466.7	507.4	531.0	537.4	546.0	543.8	539.5
67.5°	152.0	201.3	254.8	304.0	342.6	368.2	385.4	400.4	398.3	394.0	391.8
70°	104.9	137.0	184.1	214.1	241.9	267.7	271.9	274.0	276.2	278.3	274.0
72.5°	72.8	96.3	122.1	147.7	164.9	175.6	186.3	188.4	188.4	188.4	186.3
75°	36.4	49.2	72.8	83.5	98.5	102.8	111.3	111.3	117.8	109.2	107.0
77.5°	32.1	38.6	51.4	59.9	66.4	72.8	74.9	81.4	79.2	74.9	77.1
80°	19.3	23.6	32.1	36.4	44.9	47.1	49.2	51.4	49.2	51.4	51.4
82.5°	15.0	17.1	21.4	21.4	27.8	27.8	30.0	30.0	32.1	32.1	32.1
85°	8.5	15.0	12.8	25.7	17.1	17.1	21.4	25.7	21.4	21.4	25.7
87.5°	8.5	8.5	6.4	8.5	8.5	8.5	10.7	12.8	12.8	15.0	12.8
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: P249156

CATALOG NUMBER: LSR8B80D010 EC8B80940 8LBDW0H

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	3988.8	3988.8	3988.8	3988.8
2.5°	3995.2	3999.5	3993.1	3991.0
5°	4001.6	4001.6	3997.4	3997.4
7.5°	4001.6	4001.6	3995.2	3991.0
10°	3984.5	3984.5	3978.1	3973.8
12.5°	3952.4	3952.4	3950.2	3943.9
15°	3911.7	3911.7	3903.2	3896.8
17.5°	3856.1	3860.3	3849.7	3849.7
20°	3796.1	3794.0	3785.4	3781.1
22.5°	3734.0	3729.7	3727.6	3714.8
25°	3667.7	3663.4	3656.9	3650.5
27.5°	3554.2	3552.0	3545.6	3537.1
30°	3380.7	3378.6	3370.0	3370.0
32.5°	3155.9	3153.8	3145.2	3147.4
35°	2922.5	2931.1	2926.8	2918.3
37.5°	2727.7	2734.2	2738.4	2734.2
40°	2565.0	2584.3	2586.4	2590.7
42.5°	2391.6	2417.3	2425.8	2430.1
45°	2183.9	2207.4	2226.7	2222.4
47.5°	1971.9	1989.0	2006.2	1993.3
50°	1768.5	1779.2	1785.7	1785.7
52.5°	1575.8	1575.8	1573.7	1575.8
55°	1355.3	1355.3	1346.7	1351.0
57.5°	1124.0	1128.3	1121.9	1111.2
60°	909.9	899.2	895.0	888.6
62.5°	708.7	708.7	693.7	713.0
65°	531.0	524.6	518.1	516.0
67.5°	385.4	383.3	376.8	374.7
70°	271.9	263.4	261.2	256.9
72.5°	182.0	182.0	177.7	177.7
75°	111.3	100.6	98.5	100.6
77.5°	77.1	74.9	74.9	72.8
80°	51.4	49.2	53.5	47.1
82.5°	32.1	34.3	32.1	34.3
85°	21.4	25.7	23.6	23.6
87.5°	12.8	12.8	12.8	12.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)