

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: P250281

Luminaire Tested: **LSR8B80D010 EC8B809730 8LBSW0WH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P250281  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13955)  
Test Lab: INNOVATION CENTER-P1  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LSR8B80D010 EC8B809730 8LBSW0WH  
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
97 CRI 3000 CCT WITH WHEAT TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6285.0 lumens  
Efficiency: N/A  
Efficacy: 84.5 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.28 / 1.15  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

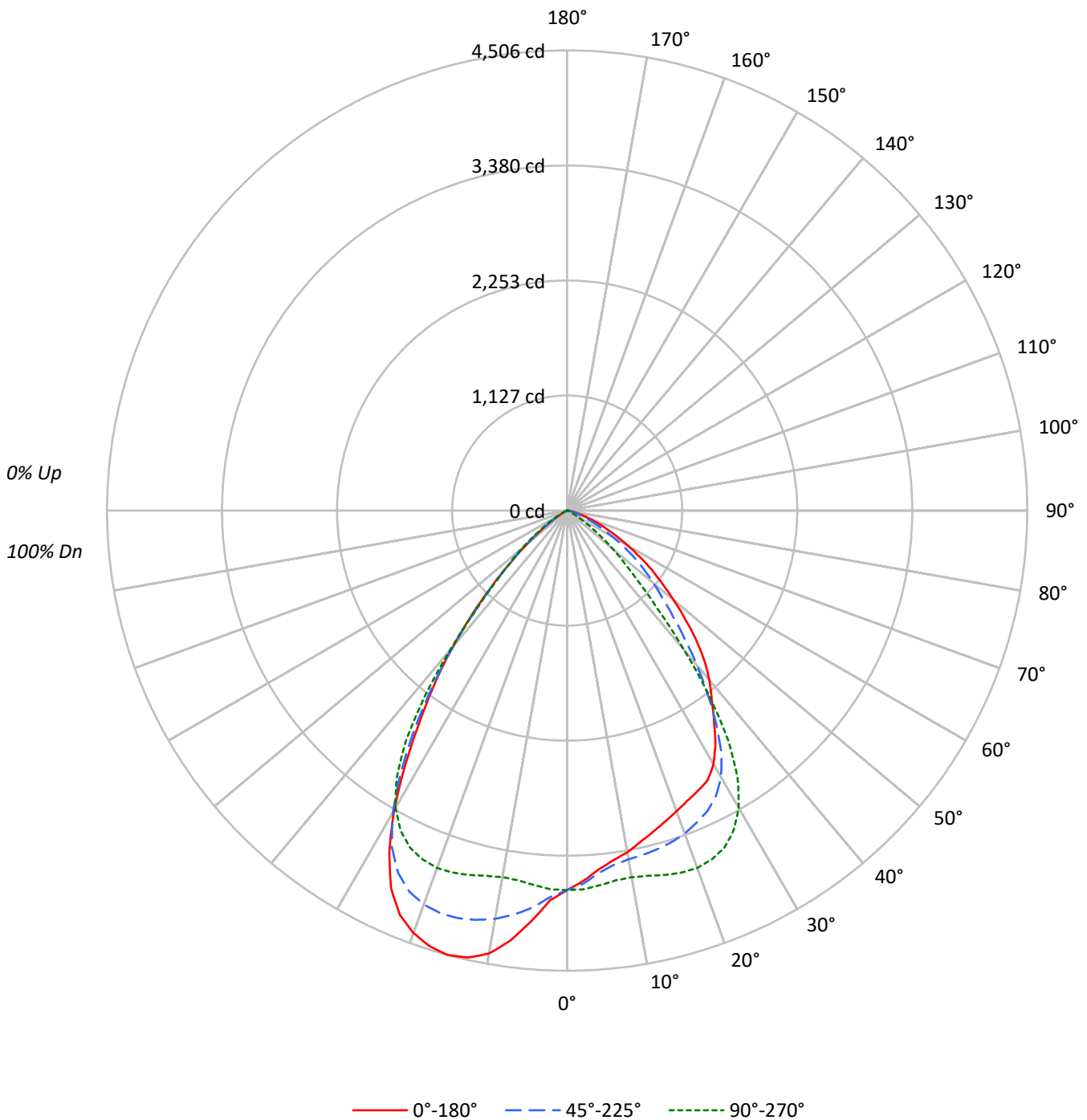
Input Watts (W): 74.4  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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			
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100
1	112	109	106	103	110	107	104	102	103	100	98	99	97	96	95	94	93	91	91	91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82	82	82
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73	73	73
4	92	83	76	71	90	81	75	70	79	74	70	77	72	69	75	71	68	66	66	66
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	69	65	61	60	60	60
6	80	70	63	57	79	69	62	57	67	61	57	66	60	56	64	60	56	54	54	54
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49	49	49
8	71	60	53	48	70	59	52	48	58	52	47	57	51	47	56	51	47	45	45	45
9	67	55	48	44	66	55	48	44	54	48	43	53	47	43	52	47	43	42	42	42
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	43	40	38	38	38

**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°	357.3	5.7
10°-20°	1069.3	17.0
20°-30°	1637.5	26.1
30°-40°	1605.3	25.5
40°-50°	966.7	15.4
50°-60°	444.9	7.1
60°-70°	156.3	2.5
70°-80°	40.9	0.7
80°-90°	7.0	0.1
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°	3064.0	48.8
0°-40°	4669.2	74.3
0°-60°	6080.9	96.8
0°-90°	6285.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6285.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	3716	3716	3716	3716	3716	
5°	3527	3560	3682	3902	4036	333
15°	3256	3432	3694	4131	4506	920
25°	3029	3248	3642	3916	4079	1395
35°	2506	2541	2751	2593	2509	1569
45°	1780	1466	993	1000	1026	1365
55°	1011	801	285	224	215	902
65°	429	297	45	23	24	437
75°	111	64	4	0	0	135
85°	17	9	2	0	0	24
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°	3716.3	3716.3	3716.3	3716.3	3716.3	3716.3	3716.3	3716.3	3716.3	3716.3	3716.3
2.5°	3629.5	3633.0	3633.0	3633.0	3639.9	3641.7	3639.9	3641.7	3645.1	3657.3	3662.5
5°	3527.1	3521.8	3525.3	3523.6	3532.3	3537.5	3534.0	3539.2	3551.4	3560.1	3568.7
7.5°	3454.1	3454.1	3454.1	3457.6	3462.8	3473.2	3471.5	3474.9	3487.1	3499.2	3511.4
10°	3396.8	3395.1	3395.1	3403.8	3410.7	3422.8	3426.3	3436.8	3452.4	3468.0	3481.9
12.5°	3322.1	3323.9	3332.6	3341.3	3356.9	3375.9	3386.4	3400.3	3424.6	3450.6	3466.3
15°	3256.1	3257.9	3264.9	3282.2	3301.3	3323.9	3346.4	3369.0	3398.5	3431.6	3459.4
17.5°	3191.9	3193.6	3198.8	3218.0	3242.3	3271.8	3297.8	3327.3	3365.6	3403.8	3438.5
20°	3132.8	3131.1	3139.8	3157.1	3188.5	3216.2	3242.3	3277.0	3318.7	3365.6	3405.5
22.5°	3075.5	3075.5	3084.2	3101.6	3129.4	3157.1	3184.9	3221.4	3263.1	3308.3	3355.1
25°	3028.6	3026.9	3039.1	3047.8	3068.6	3096.4	3125.9	3155.4	3197.1	3247.5	3292.6
27.5°	2978.3	2976.6	2978.3	2988.7	3007.8	3028.6	3051.2	3077.3	3112.0	3153.7	3197.1
30°	2867.1	2868.9	2868.9	2877.6	2888.0	2910.5	2922.7	2948.8	2980.0	3014.8	3053.0
32.5°	2702.2	2703.9	2703.9	2707.4	2716.0	2726.5	2736.9	2756.0	2780.3	2809.8	2844.6
35°	2506.0	2506.0	2504.2	2506.0	2511.2	2511.2	2519.8	2511.2	2523.3	2540.7	2566.7
37.5°	2325.3	2321.8	2318.4	2314.9	2309.7	2301.0	2288.9	2268.0	2262.8	2255.8	2257.6
40°	2165.6	2163.9	2153.4	2144.7	2127.3	2106.5	2077.0	2040.5	2011.0	1976.3	1946.8
42.5°	1988.4	1986.7	1978.0	1962.3	1943.3	1912.0	1865.1	1816.5	1757.5	1705.4	1651.6
45°	1780.0	1785.2	1773.1	1755.7	1733.1	1703.6	1651.6	1592.4	1533.4	1465.7	1397.9
47.5°	1562.9	1561.2	1552.6	1542.1	1523.0	1493.5	1458.8	1394.5	1332.0	1269.5	1200.0
50°	1361.5	1354.6	1351.0	1340.7	1328.5	1304.2	1267.7	1215.6	1160.1	1101.0	1036.8
52.5°	1170.5	1170.5	1161.8	1154.8	1144.4	1125.3	1094.1	1052.4	1005.5	949.9	882.2
55°	1010.7	1007.2	998.6	989.9	979.4	967.3	939.5	904.8	854.4	800.6	741.5
57.5°	840.5	838.8	835.3	824.9	819.7	807.5	776.3	741.5	698.1	651.3	602.6
60°	687.7	680.8	673.8	666.8	658.2	646.0	625.2	595.6	559.2	517.5	468.9
62.5°	550.5	560.9	540.1	540.1	522.7	512.3	493.2	475.8	437.6	399.4	357.8
65°	429.0	429.0	420.2	413.3	402.9	390.7	371.6	354.3	326.5	296.9	267.4
67.5°	328.2	326.5	317.8	310.9	302.1	295.2	281.3	260.5	239.7	215.4	191.0
70°	241.4	239.7	237.9	225.7	218.8	210.2	199.7	185.8	170.2	152.8	130.2
72.5°	173.6	173.6	168.5	163.3	156.3	149.3	139.0	130.2	116.4	104.2	88.6
75°	111.2	109.4	109.4	100.7	100.7	90.3	83.3	78.1	71.2	64.3	50.4
77.5°	79.9	78.1	76.4	72.9	69.5	66.0	60.8	53.8	48.6	41.7	36.5
80°	53.8	50.4	48.6	48.6	43.4	41.7	43.4	33.0	31.2	26.0	22.6
82.5°	33.0	33.0	31.2	31.2	29.5	27.8	22.6	22.6	20.9	19.1	15.7
85°	17.4	22.6	15.7	17.4	15.7	17.4	15.7	12.2	10.4	8.6	8.6
87.5°	10.4	6.9	6.9	10.4	8.6	6.9	6.9	6.9	5.2	3.5	3.5
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°	3716.3	3716.3	3716.3	3716.3	3716.3	3716.3	3716.3	3716.3	3716.3	3716.3	3716.3
2.5°	3659.1	3671.2	3669.4	3685.1	3690.3	3702.5	3702.5	3711.1	3716.3	3728.5	3738.9
5°	3572.2	3591.3	3596.5	3615.6	3631.3	3650.4	3662.5	3681.6	3699.0	3725.1	3749.4
7.5°	3518.4	3534.0	3544.4	3567.0	3584.4	3605.2	3626.1	3652.1	3676.4	3707.7	3742.4
10°	3492.3	3513.2	3528.8	3551.4	3572.2	3594.8	3615.6	3645.1	3672.9	3712.9	3751.1
12.5°	3485.4	3509.7	3528.8	3560.1	3580.9	3605.2	3629.5	3662.5	3692.0	3733.7	3777.2
15°	3485.4	3518.4	3544.4	3579.2	3603.5	3634.7	3660.8	3693.7	3726.8	3770.2	3811.8
17.5°	3478.4	3518.4	3551.4	3591.3	3622.6	3653.9	3686.8	3718.1	3752.8	3794.5	3841.4
20°	3450.6	3501.0	3540.9	3587.8	3620.8	3655.6	3688.6	3723.3	3759.8	3803.2	3843.1
22.5°	3402.0	3461.1	3506.3	3556.6	3594.8	3629.5	3662.5	3697.2	3737.2	3778.9	3820.6
25°	3337.8	3393.3	3442.0	3494.0	3532.3	3570.4	3601.8	3641.7	3678.2	3718.1	3751.1
27.5°	3240.5	3299.5	3346.4	3400.3	3435.0	3471.5	3497.5	3530.6	3565.3	3598.2	3624.3
30°	3094.7	3148.5	3197.1	3245.7	3280.4	3306.5	3334.3	3360.4	3382.9	3405.5	3428.1
32.5°	2881.0	2929.7	2976.6	3021.7	3049.5	3072.1	3092.9	3108.5	3120.7	3132.8	3134.6
35°	2587.6	2627.5	2657.0	2697.0	2723.0	2743.8	2743.8	2750.8	2749.1	2743.8	2738.6
37.5°	2259.4	2274.9	2287.1	2302.7	2304.5	2304.5	2294.1	2285.4	2271.5	2268.0	2257.6
40°	1917.2	1896.4	1880.7	1859.9	1847.8	1821.7	1799.2	1783.5	1760.9	1757.5	1754.0
42.5°	1592.4	1543.8	1500.4	1464.0	1422.3	1385.8	1352.8	1328.5	1311.2	1309.4	1311.2
45°	1328.5	1272.9	1208.7	1158.3	1111.4	1066.3	1022.9	993.4	977.7	974.2	977.7
47.5°	1128.8	1064.6	1002.0	944.7	894.4	844.0	800.6	760.6	741.5	736.3	734.6
50°	970.8	904.8	838.8	779.7	724.2	673.8	619.9	581.8	557.5	548.8	541.8
52.5°	816.2	757.2	689.4	628.7	573.1	514.0	458.5	415.0	390.7	380.3	373.3
55°	680.8	621.7	559.2	500.1	441.1	382.1	326.5	284.8	258.8	246.6	237.9
57.5°	543.5	488.0	434.2	375.1	326.5	269.2	213.6	177.1	154.5	140.7	133.7
60°	420.2	376.8	330.0	281.3	234.5	187.6	142.4	107.6	90.3	79.9	71.2
62.5°	317.8	281.3	250.0	208.4	171.9	132.0	97.3	69.5	53.8	45.2	41.7
65°	229.2	201.4	173.6	147.6	121.6	92.1	66.0	45.2	31.2	26.0	24.3
67.5°	163.3	140.7	119.8	102.4	83.3	66.0	46.9	31.2	24.3	20.9	19.1
70°	114.6	97.3	83.3	67.8	55.5	43.4	36.5	22.6	13.9	15.7	12.2
72.5°	76.4	64.3	57.3	46.9	38.2	31.2	22.6	15.7	15.7	12.2	10.4
75°	41.7	38.2	29.5	22.6	19.1	17.4	6.9	3.5	1.7	5.2	1.7
77.5°	29.5	26.0	22.6	19.1	15.7	12.2	6.9	6.9	5.2	6.9	3.5
80°	19.1	15.7	13.9	13.9	8.6	5.2	3.5	3.5	5.2	1.7	1.7
82.5°	12.2	10.4	8.6	8.6	8.6	5.2	5.2	5.2	5.2	3.5	3.5
85°	6.9	5.2	3.5	3.5	1.7	3.5	0.0	1.7	1.7	0.0	0.0
87.5°	3.5	1.7	1.7	1.7	1.7	0.0	0.0	1.7	0.0	1.7	0.0
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°	3716.3	3716.3	3716.3	3716.3	3716.3	3716.3	3716.3	3716.3	3716.3	3716.3	3716.3
2.5°	3745.9	3752.8	3761.5	3768.4	3784.1	3787.5	3794.5	3801.5	3806.7	3811.8	3813.6
5°	3770.2	3796.2	3820.6	3846.6	3879.6	3902.2	3928.2	3950.8	3973.4	3992.5	4006.3
7.5°	3777.2	3817.0	3853.6	3898.7	3947.3	3989.0	4032.4	4075.8	4121.0	4155.7	4185.2
10°	3791.0	3839.6	3886.5	3940.4	4002.9	4058.4	4112.3	4169.6	4226.9	4275.5	4319.0
12.5°	3815.3	3869.2	3919.6	3978.6	4042.9	4105.3	4164.4	4228.6	4289.5	4343.3	4391.9
15°	3855.3	3905.6	3954.3	4009.8	4074.1	4131.4	4190.5	4252.9	4313.8	4369.3	4414.5
17.5°	3881.3	3928.2	3976.8	4027.2	4081.0	4133.1	4188.7	4244.3	4299.8	4350.2	4391.9
20°	3881.3	3926.5	3962.9	4008.1	4058.4	4103.6	4148.8	4197.4	4246.0	4287.7	4327.6
22.5°	3850.1	3893.5	3921.3	3956.0	3999.4	4037.6	4061.9	4115.8	4152.2	4188.7	4218.2
25°	3777.2	3808.4	3831.0	3855.3	3890.0	3916.0	3936.9	3968.2	4004.6	4018.6	4039.4
27.5°	3645.1	3667.7	3679.9	3685.1	3702.5	3716.3	3719.8	3733.7	3749.4	3752.8	3761.5
30°	3436.8	3438.5	3433.3	3431.6	3422.8	3412.5	3410.7	3409.0	3402.0	3395.1	3396.8
32.5°	3122.4	3113.8	3092.9	3070.4	3047.8	3023.5	3009.5	2992.2	2981.7	2971.4	2959.2
35°	2716.0	2695.2	2665.7	2637.9	2611.9	2592.7	2561.5	2551.1	2540.7	2526.8	2523.3
37.5°	2238.5	2226.3	2198.5	2177.7	2163.9	2155.1	2139.5	2129.1	2129.1	2123.9	2120.4
40°	1745.3	1741.8	1731.4	1736.6	1729.7	1733.1	1731.4	1727.9	1736.6	1736.6	1740.1
42.5°	1309.4	1311.2	1316.4	1319.8	1330.2	1332.0	1340.7	1340.7	1345.9	1351.0	1354.6
45°	974.2	981.2	981.2	988.1	998.6	1000.3	1003.7	1005.5	1008.9	1017.7	1021.1
47.5°	731.1	732.8	732.8	734.6	738.0	741.5	739.8	741.5	746.8	743.3	746.8
50°	540.1	541.8	536.6	531.4	536.6	536.6	534.9	529.7	534.9	528.0	531.4
52.5°	368.2	366.4	361.2	363.0	359.5	357.8	357.8	354.3	354.3	354.3	347.3
55°	232.7	232.7	229.2	229.2	227.5	224.0	222.3	220.5	218.8	217.1	217.1
57.5°	130.2	132.0	126.8	125.0	126.8	125.0	121.6	121.6	121.6	116.4	119.8
60°	71.2	69.5	67.8	66.0	64.3	66.0	66.0	62.5	62.5	62.5	64.3
62.5°	38.2	38.2	36.5	36.5	34.7	34.7	38.2	33.0	34.7	33.0	34.7
65°	20.9	26.0	19.1	19.1	24.3	22.6	20.9	20.9	22.6	19.1	20.9
67.5°	22.6	15.7	13.9	15.7	13.9	13.9	13.9	17.4	15.7	12.2	15.7
70°	10.4	12.2	12.2	8.6	13.9	6.9	12.2	6.9	10.4	8.6	10.4
72.5°	10.4	10.4	10.4	6.9	10.4	6.9	8.6	8.6	6.9	6.9	10.4
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	3.5	3.5	1.7	1.7	1.7	1.7	3.5	3.5	3.5	0.0	1.7
80°	3.5	3.5	0.0	1.7	0.0	0.0	1.7	0.0	1.7	0.0	3.5
82.5°	1.7	3.5	1.7	1.7	3.5	3.5	3.5	1.7	1.7	1.7	1.7
85°	0.0	1.7	0.0	0.0	0.0	0.0	3.5	0.0	0.0	0.0	1.7
87.5°	0.0	1.7	0.0	0.0	0.0	0.0	1.7	1.7	0.0	0.0	0.0
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: P250281

CATALOG NUMBER: LSR8B80D010 EC8B809730 8LBSW0WH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	3716.3	3716.3	3716.3	3716.3
2.5°	3815.3	3817.0	3820.6	3818.8
5°	4016.8	4030.7	4037.6	4035.9
7.5°	4206.0	4230.4	4244.3	4244.3
10°	4351.9	4379.7	4400.5	4404.0
12.5°	4430.1	4461.4	4489.2	4482.2
15°	4452.7	4484.0	4511.7	4506.5
17.5°	4426.6	4457.9	4478.7	4475.2
20°	4355.4	4381.5	4402.3	4400.5
22.5°	4244.3	4266.9	4284.2	4282.5
25°	4056.7	4072.4	4086.2	4079.3
27.5°	3768.4	3773.7	3782.3	3771.9
30°	3384.7	3388.1	3391.6	3389.9
32.5°	2954.0	2952.2	2948.8	2945.3
35°	2518.1	2518.1	2519.8	2509.4
37.5°	2122.1	2120.4	2125.6	2120.4
40°	1743.5	1741.8	1748.8	1740.1
42.5°	1359.8	1365.0	1366.7	1366.7
45°	1022.9	1024.6	1026.3	1026.3
47.5°	746.8	748.5	757.2	746.8
50°	528.0	529.7	531.4	528.0
52.5°	349.0	350.8	349.0	343.8
55°	213.6	215.4	215.4	215.4
57.5°	114.6	116.4	116.4	114.6
60°	62.5	60.8	62.5	59.0
62.5°	33.0	36.5	34.7	31.2
65°	20.9	20.9	20.9	24.3
67.5°	17.4	13.9	15.7	12.2
70°	10.4	12.2	12.2	8.6
72.5°	8.6	8.6	8.6	10.4
75°	0.0	0.0	0.0	0.0
77.5°	3.5	3.5	3.5	1.7
80°	1.7	0.0	1.7	0.0
82.5°	1.7	1.7	3.5	1.7
85°	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)