

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: P249392

Luminaire Tested: **LSR8B100D010 EC8B1009727 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249392
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 EC8B1009727 8LBDW0GPH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 2700 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7507.0 lumens
Efficiency: N/A
Efficacy: 70.6 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

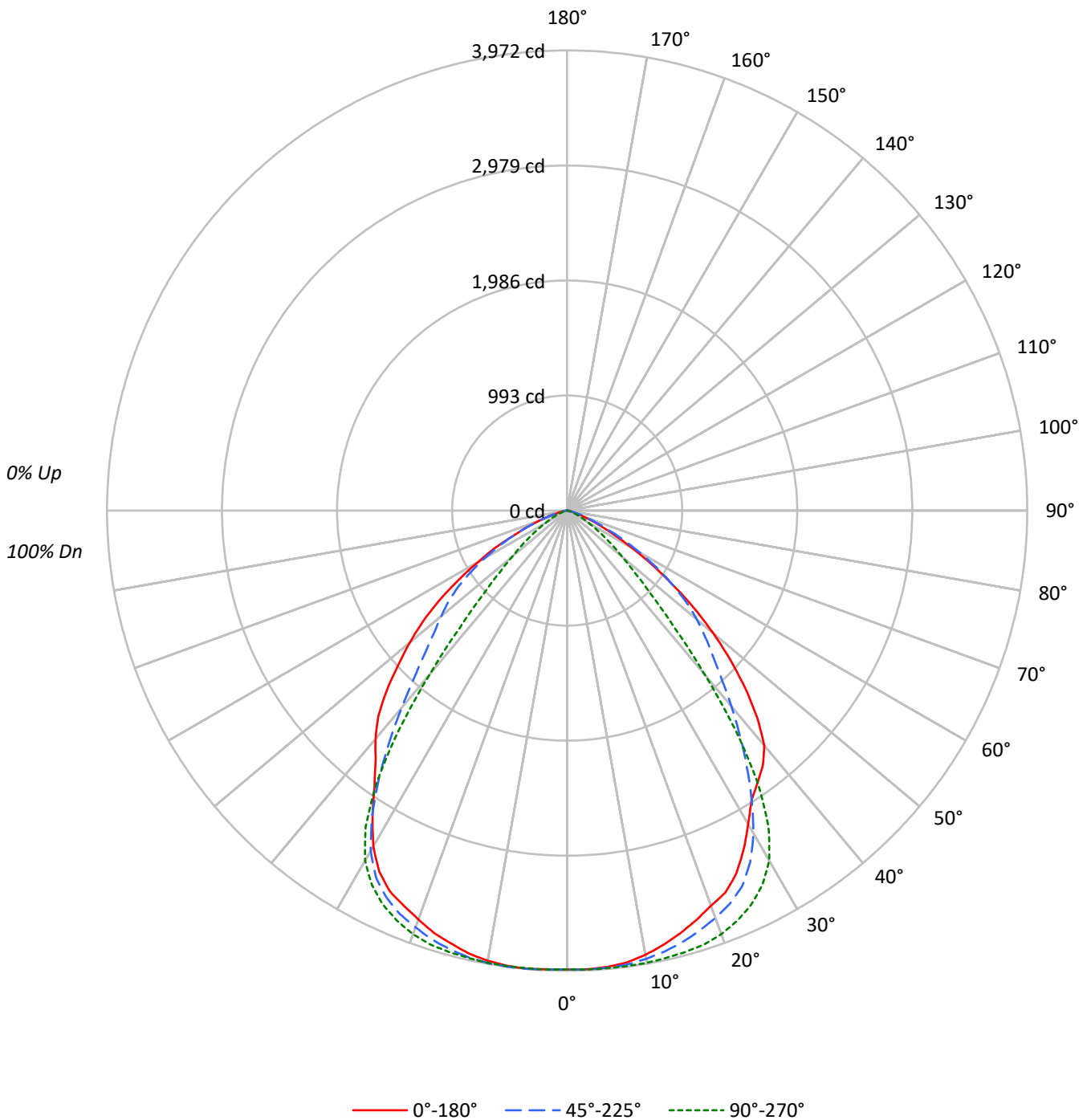
Input Watts (W): 106.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				
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	100
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90	90	90	90
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79	79	79	79
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70	70	70	70
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62	62	62	62
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55	55	55	55
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50	50	50	50
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45	45	45	45
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41	41	41	41
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37	37	37	37
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34	34	34	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°	378.0	5.0
10°-20°	1097.8	14.6
20°-30°	1666.2	22.2
30°-40°	1750.0	23.3
40°-50°	1312.1	17.5
50°-60°	841.8	11.2
60°-70°	360.1	4.8
70°-80°	85.1	1.1
80°-90°	15.8	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°	3142.0	41.9
0°-40°	4892.1	65.2
0°-60°	7046.0	93.9
0°-90°	7507.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7507.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3961	3961	3961	3961	3961	
5°	3954	3961	3965	3972	3969	376
15°	3776	3855	3944	3918	3869	1065
25°	3455	3576	3757	3689	3625	1578
35°	2866	2706	2868	2834	2898	1799
45°	2177	1780	1023	1728	2207	1667
55°	1101	1101	381	1148	1342	999
65°	332	391	121	504	512	354
75°	51	60	17	102	100	74
85°	17	11	8	17	23	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°	3960.8	3960.8	3960.8	3960.8	3960.8	3960.8	3960.8	3960.8	3960.8	3960.8	3960.8
2.5°	3963.0	3967.2	3965.1	3965.1	3963.0	3965.1	3965.1	3969.4	3969.4	3965.1	3963.0
5°	3954.4	3958.7	3958.7	3954.4	3954.4	3965.1	3958.7	3963.0	3963.0	3960.8	3960.8
7.5°	3935.3	3935.3	3943.8	3937.5	3937.5	3943.8	3941.7	3946.0	3950.2	3952.4	3952.4
10°	3892.8	3897.1	3899.2	3899.2	3901.3	3907.7	3911.9	3920.5	3924.7	3929.0	3931.1
12.5°	3839.7	3846.0	3848.2	3846.0	3852.4	3860.9	3871.6	3882.2	3888.6	3897.1	3903.5
15°	3775.9	3775.9	3780.1	3786.5	3790.8	3803.5	3814.1	3826.9	3843.9	3854.6	3865.2
17.5°	3705.7	3710.0	3716.3	3716.3	3724.9	3746.1	3752.5	3771.6	3790.8	3801.4	3822.7
20°	3629.2	3633.4	3639.8	3644.1	3654.7	3671.7	3684.5	3701.5	3722.7	3741.9	3763.1
22.5°	3569.6	3561.2	3565.4	3569.6	3580.3	3595.2	3610.1	3631.3	3652.6	3671.7	3693.0
25°	3454.8	3457.0	3463.4	3467.6	3480.4	3493.1	3510.1	3535.6	3554.8	3576.0	3599.4
27.5°	3299.7	3301.8	3312.4	3312.4	3323.0	3344.3	3354.9	3376.2	3401.7	3422.9	3450.6
30°	3123.2	3127.4	3127.4	3135.9	3142.3	3153.0	3163.6	3184.8	3197.6	3216.7	3255.0
32.5°	2961.6	2965.8	2963.7	2961.6	2955.2	2953.1	2951.0	2955.2	2959.5	2965.8	2980.7
35°	2865.9	2855.3	2846.8	2831.9	2814.9	2793.6	2774.5	2749.0	2725.6	2706.5	2685.2
37.5°	2774.5	2772.4	2759.6	2738.3	2704.3	2666.1	2621.5	2566.2	2510.9	2451.3	2394.0
40°	2646.9	2640.5	2629.9	2600.2	2561.9	2515.1	2455.6	2387.6	2298.2	2206.8	2113.3
42.5°	2430.1	2432.2	2419.5	2396.0	2359.9	2315.3	2253.6	2179.2	2083.6	1975.1	1853.9
45°	2177.1	2177.1	2172.8	2153.7	2128.2	2092.0	2045.3	1983.6	1890.1	1779.5	1649.8
47.5°	1913.4	1915.6	1909.2	1905.0	1894.3	1870.9	1836.9	1790.2	1724.2	1617.9	1488.2
50°	1645.6	1645.6	1656.2	1654.1	1654.1	1645.6	1630.7	1603.0	1545.7	1460.6	1339.4
52.5°	1377.7	1381.9	1388.3	1396.8	1407.4	1424.4	1407.4	1394.7	1358.5	1292.6	1188.5
55°	1101.3	1105.6	1116.2	1131.0	1143.8	1160.9	1165.1	1165.1	1145.9	1101.3	1022.6
57.5°	865.3	858.9	867.5	880.2	897.2	914.2	927.0	941.8	939.7	910.0	846.2
60°	650.6	652.7	659.1	671.9	684.6	699.5	716.5	729.2	735.6	720.8	680.3
62.5°	474.1	474.1	482.6	495.3	501.7	523.0	533.6	540.0	546.4	544.2	518.8
65°	331.7	335.9	340.2	346.6	352.9	365.7	372.1	384.8	389.1	391.2	372.1
67.5°	233.9	227.5	231.8	236.0	242.4	250.9	263.6	263.6	270.0	270.0	257.2
70°	148.8	148.8	151.0	157.3	161.6	163.7	168.0	172.2	178.6	176.5	176.5
72.5°	99.9	97.8	99.9	102.1	104.2	110.5	110.5	112.7	116.9	119.1	110.5
75°	51.0	53.2	57.4	55.3	61.6	57.4	59.5	65.9	63.8	59.5	59.5
77.5°	42.5	42.5	42.5	40.4	44.6	44.6	42.5	46.8	44.6	44.6	42.5
80°	29.8	31.9	29.8	27.6	29.8	27.6	27.6	27.6	27.6	27.6	25.5
82.5°	23.4	19.1	21.3	19.1	21.3	21.3	19.1	17.0	17.0	19.1	17.0
85°	17.0	12.7	14.9	14.9	12.7	12.7	12.7	12.7	12.7	10.6	10.6
87.5°	10.6	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



TEST NUMBER: P249392

CATALOG NUMBER: LSR8B100D010 EC8B1009727 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	3960.8	3960.8	3960.8	3960.8	3960.8	3960.8	3960.8	3960.8	3960.8	3960.8	3960.8
2.5°	3967.2	3965.1	3969.4	3967.2	3967.2	3965.1	3967.2	3965.1	3969.4	3960.8	3963.0
5°	3967.2	3963.0	3965.1	3967.2	3969.4	3965.1	3965.1	3965.1	3969.4	3965.1	3967.2
7.5°	3958.7	3956.6	3963.0	3967.2	3965.1	3963.0	3967.2	3965.1	3969.4	3967.2	3971.5
10°	3941.7	3943.8	3948.1	3954.4	3956.6	3958.7	3963.0	3963.0	3969.4	3960.8	3965.1
12.5°	3916.2	3924.7	3935.3	3939.6	3948.1	3948.1	3952.4	3954.4	3958.7	3956.6	3963.0
15°	3884.3	3894.9	3907.7	3918.3	3929.0	3935.3	3941.7	3943.8	3950.2	3943.8	3946.0
17.5°	3846.0	3858.8	3877.9	3890.7	3907.7	3914.1	3922.6	3926.8	3933.2	3929.0	3931.1
20°	3792.9	3807.8	3829.0	3848.2	3858.8	3873.7	3884.3	3890.7	3894.9	3890.7	3892.8
22.5°	3718.5	3739.7	3767.4	3782.3	3803.5	3816.3	3818.4	3833.3	3843.9	3833.3	3837.5
25°	3631.3	3652.6	3673.8	3705.7	3724.9	3739.7	3754.6	3756.8	3767.4	3765.2	3763.1
27.5°	3486.7	3514.4	3550.5	3576.0	3601.5	3624.9	3642.0	3646.2	3656.8	3652.6	3654.7
30°	3289.0	3318.8	3352.8	3393.2	3429.3	3452.7	3474.0	3488.9	3499.5	3493.1	3491.0
32.5°	3008.4	3038.1	3074.3	3114.7	3157.2	3191.2	3216.7	3235.9	3248.6	3244.4	3233.7
35°	2687.4	2695.8	2719.3	2751.1	2787.2	2823.4	2846.8	2868.0	2882.9	2887.2	2887.2
37.5°	2357.8	2330.2	2313.2	2313.2	2334.4	2349.3	2370.6	2383.3	2406.7	2415.2	2421.6
40°	2038.9	1975.1	1915.6	1870.9	1841.2	1839.1	1839.1	1845.4	1866.7	1894.3	1919.8
42.5°	1754.0	1651.9	1560.5	1477.6	1418.1	1384.1	1369.2	1371.3	1388.3	1413.8	1456.3
45°	1526.5	1399.0	1284.1	1184.2	1103.4	1050.3	1024.8	1022.6	1035.4	1065.1	1112.0
47.5°	1350.1	1214.0	1084.3	969.5	882.3	824.9	795.1	786.7	795.1	822.8	878.1
50°	1203.4	1063.1	929.1	810.0	716.5	657.0	629.3	618.7	629.3	652.7	708.0
52.5°	1067.3	922.7	797.3	682.5	582.5	531.5	501.7	495.3	501.7	529.4	574.1
55°	910.0	786.7	663.3	548.5	461.4	410.3	386.9	380.6	386.9	412.5	459.2
57.5°	754.8	648.4	540.0	435.8	361.4	316.8	295.5	287.0	301.9	318.9	374.2
60°	610.2	525.2	433.7	342.3	280.7	240.2	223.2	221.1	225.4	246.6	284.9
62.5°	478.4	408.2	335.9	261.5	210.5	193.5	172.2	170.1	174.3	187.1	216.9
65°	344.4	299.8	244.5	191.3	151.0	127.6	119.1	121.2	125.4	134.0	161.6
67.5°	240.2	208.3	170.1	134.0	104.2	93.5	85.1	82.9	85.1	99.9	114.8
70°	161.6	142.4	114.8	102.1	72.3	57.4	59.5	53.2	61.6	61.6	74.4
72.5°	106.3	93.5	76.5	59.5	51.0	40.4	40.4	38.3	42.5	44.6	55.3
75°	55.3	42.5	42.5	29.8	21.3	10.6	19.1	17.0	14.9	17.0	21.3
77.5°	38.3	31.9	29.8	23.4	21.3	17.0	17.0	17.0	17.0	19.1	21.3
80°	23.4	23.4	17.0	14.9	12.7	10.6	12.7	12.7	12.7	12.7	14.9
82.5°	14.9	12.7	12.7	10.6	10.6	8.5	8.5	8.5	8.5	8.5	12.7
85°	12.7	8.5	8.5	6.4	8.5	14.9	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	10.6	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°	3960.8	3960.8	3960.8	3960.8	3960.8	3960.8	3960.8	3960.8	3960.8	3960.8	3960.8
2.5°	3967.2	3969.4	3969.4	3967.2	3967.2	3963.0	3971.5	3965.1	3967.2	3975.7	3969.4
5°	3971.5	3973.6	3973.6	3971.5	3971.5	3971.5	3973.6	3973.6	3971.5	3969.4	3973.6
7.5°	3980.0	3977.9	3977.9	3973.6	3973.6	3969.4	3973.6	3967.2	3971.5	3967.2	3973.6
10°	3969.4	3971.5	3969.4	3967.2	3967.2	3965.1	3965.1	3958.7	3960.8	3954.4	3958.7
12.5°	3963.0	3960.8	3960.8	3956.6	3952.4	3948.1	3946.0	3939.6	3939.6	3924.7	3931.1
15°	3946.0	3948.1	3941.7	3933.2	3929.0	3918.3	3914.1	3905.5	3897.1	3886.4	3888.6
17.5°	3931.1	3924.7	3916.2	3907.7	3890.7	3882.2	3873.7	3860.9	3856.6	3843.9	3839.7
20°	3886.4	3882.2	3871.6	3856.6	3846.0	3826.9	3818.4	3805.7	3795.0	3782.3	3775.9
22.5°	3829.0	3824.8	3812.0	3797.1	3780.1	3771.6	3763.1	3739.7	3729.1	3716.3	3714.2
25°	3756.8	3750.4	3737.6	3720.6	3712.1	3688.7	3680.2	3663.2	3659.0	3646.2	3644.1
27.5°	3646.2	3637.7	3622.8	3601.5	3586.7	3571.8	3563.3	3550.5	3546.3	3533.5	3531.4
30°	3480.4	3469.7	3440.0	3431.5	3405.9	3391.1	3391.1	3374.0	3376.2	3367.7	3367.7
32.5°	3218.9	3201.9	3178.4	3161.4	3144.4	3135.9	3135.9	3129.5	3133.8	3133.8	3138.1
35°	2872.3	2848.9	2836.1	2825.5	2825.5	2834.0	2859.6	2865.9	2878.7	2889.3	2897.8
37.5°	2427.9	2425.9	2440.7	2453.5	2485.4	2521.5	2566.2	2604.4	2640.5	2666.1	2691.6
40°	1947.5	2000.6	2043.1	2102.7	2151.5	2221.7	2302.5	2368.4	2430.1	2474.8	2521.5
42.5°	1520.1	1588.2	1677.5	1764.6	1851.8	1947.5	2053.8	2145.2	2226.0	2287.6	2336.5
45°	1184.2	1277.7	1386.2	1496.8	1609.4	1728.5	1839.1	1932.6	2017.6	2081.4	2130.3
47.5°	954.6	1056.7	1179.9	1301.2	1428.7	1554.1	1677.5	1758.3	1828.4	1879.4	1924.1
50°	788.7	897.2	1026.9	1165.1	1292.6	1418.1	1524.4	1603.0	1660.5	1705.1	1732.7
52.5°	659.1	773.9	912.1	1050.3	1177.8	1292.6	1388.3	1447.9	1494.6	1526.5	1552.0
55°	544.2	654.8	784.5	914.2	1039.6	1148.1	1226.7	1271.4	1307.5	1326.6	1341.5
57.5°	444.4	546.4	665.5	784.5	892.9	982.3	1043.9	1088.5	1105.6	1120.4	1118.3
60°	348.7	444.4	552.8	654.8	748.4	820.6	865.3	890.8	903.6	910.0	905.7
62.5°	274.3	361.4	444.4	533.6	601.7	663.3	705.9	705.9	712.2	714.4	720.8
65°	204.1	270.0	342.3	408.2	463.5	503.9	527.3	533.6	542.2	540.0	535.8
67.5°	151.0	199.9	253.0	301.9	340.2	365.7	382.7	397.6	395.5	391.2	389.1
70°	104.2	136.1	182.9	212.6	240.2	265.8	270.0	272.1	274.3	276.4	272.1
72.5°	72.3	95.7	121.2	146.7	163.7	174.3	185.0	187.1	187.1	187.1	185.0
75°	36.2	48.9	72.3	82.9	97.8	102.1	110.5	110.5	116.9	108.4	106.3
77.5°	31.9	38.3	51.0	59.5	65.9	72.3	74.4	80.8	78.7	74.4	76.5
80°	19.1	23.4	31.9	36.2	44.6	46.8	48.9	51.0	48.9	51.0	51.0
82.5°	14.9	17.0	21.3	21.3	27.6	27.6	29.8	29.8	31.9	31.9	31.9
85°	8.5	14.9	12.7	25.5	17.0	17.0	21.3	25.5	21.3	21.3	25.5
87.5°	8.5	8.5	6.4	8.5	8.5	8.5	10.6	12.7	12.7	14.9	12.7
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: P249392

CATALOG NUMBER: LSR8B100D010 EC8B1009727 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3960.8	3960.8	3960.8	3960.8
2.5°	3967.2	3971.5	3965.1	3963.0
5°	3973.6	3973.6	3969.4	3969.4
7.5°	3973.6	3973.6	3967.2	3963.0
10°	3956.6	3956.6	3950.2	3946.0
12.5°	3924.7	3924.7	3922.6	3916.2
15°	3884.3	3884.3	3875.8	3869.4
17.5°	3829.0	3833.3	3822.7	3822.7
20°	3769.5	3767.4	3758.9	3754.6
22.5°	3707.9	3703.6	3701.5	3688.7
25°	3642.0	3637.7	3631.3	3624.9
27.5°	3529.3	3527.1	3520.7	3512.3
30°	3357.0	3354.9	3346.4	3346.4
32.5°	3133.8	3131.7	3123.2	3125.3
35°	2902.1	2910.6	2906.3	2897.8
37.5°	2708.6	2715.0	2719.3	2715.0
40°	2547.0	2566.2	2568.3	2572.6
42.5°	2374.8	2400.3	2408.8	2413.1
45°	2168.6	2192.0	2211.1	2206.8
47.5°	1958.1	1975.1	1992.1	1979.4
50°	1756.1	1766.7	1773.1	1773.1
52.5°	1564.8	1564.8	1562.7	1564.8
55°	1345.8	1345.8	1337.3	1341.5
57.5°	1116.2	1120.4	1114.0	1103.4
60°	903.6	892.9	888.7	882.3
62.5°	703.7	703.7	688.9	708.0
65°	527.3	520.9	514.5	512.4
67.5°	382.7	380.6	374.2	372.1
70°	270.0	261.5	259.4	255.1
72.5°	180.7	180.7	176.5	176.5
75°	110.5	99.9	97.8	99.9
77.5°	76.5	74.4	74.4	72.3
80°	51.0	48.9	53.2	46.8
82.5°	31.9	34.0	31.9	34.0
85°	21.3	25.5	23.4	23.4
87.5°	12.7	12.7	12.7	12.7
90°	0.0	0.0	0.0	0.0

(END OF REPORT)