

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: P249597

Luminaire Tested: **LSR8B80D010 EC8B80950 8LBDW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249597
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 EC8B80950 8LBDW0MW
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 5000 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7739.0 lumens
Efficiency: N/A
Efficacy: 104.0 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

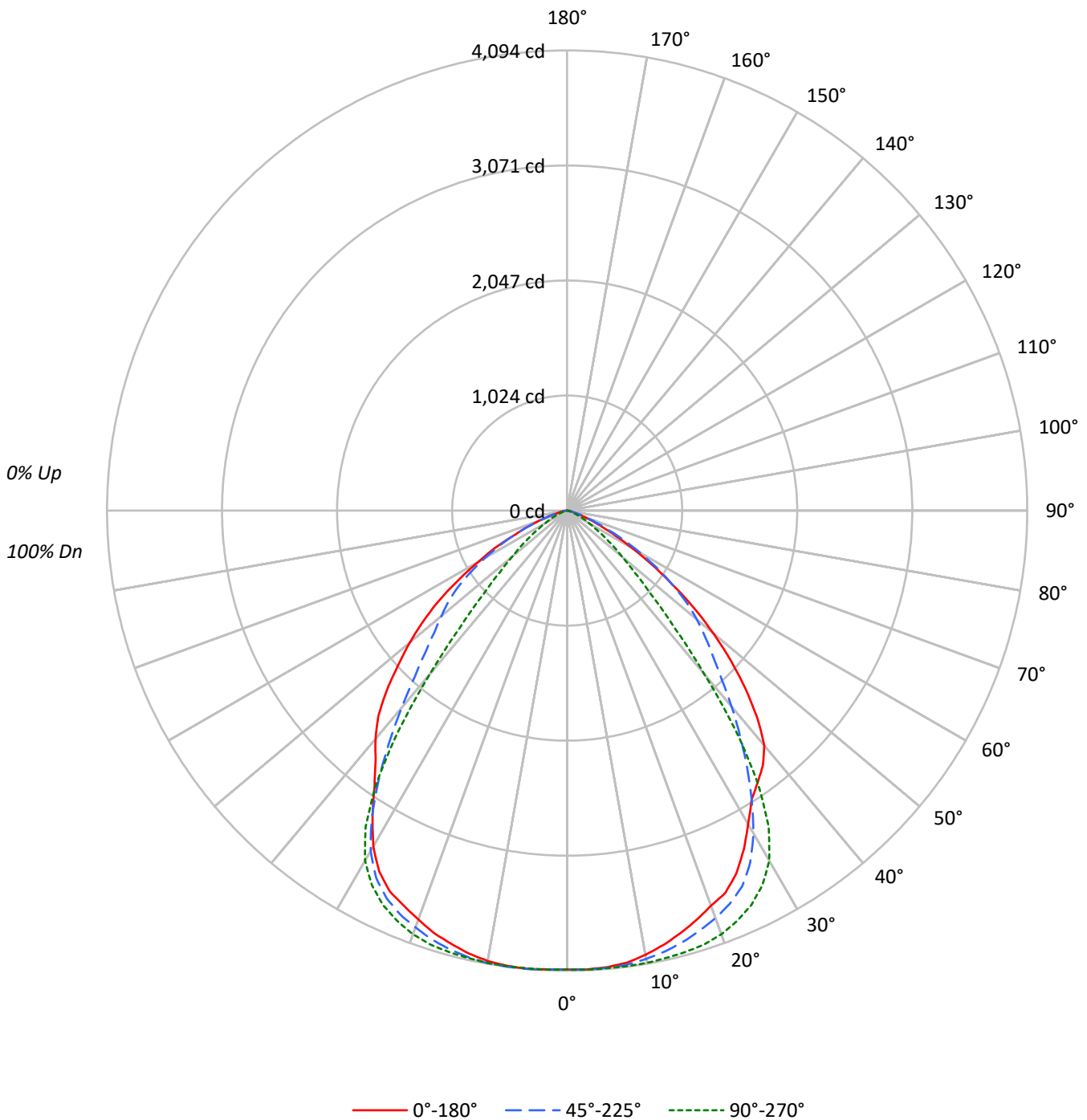
Input Watts (W): 74.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	125911	125911	125911
5°	126191	126528	126664
10°	125658	127922	127374
15°	124265	129794	127345
20°	122775	131619	127018
25°	121180	131772	127148
30°	114643	128067	122836
35°	111220	111303	112458
40°	109841	76579	106757
45°	97876	45973	99211
50°	81381	30597	87689
55°	61035	21091	74352
60°	41364	14055	56097
65°	24947	9121	38540
70°	13830	4941	23712
75°	6267	2085	12272
80°	5452	2326	8559
85°	6192	3078	8527



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	389.7	5.0
10°-20°	1131.7	14.6
20°-30°	1717.7	22.2
30°-40°	1804.1	23.3
40°-50°	1352.6	17.5
50°-60°	867.9	11.2
60°-70°	371.3	4.8
70°-80°	87.7	1.1
80°-90°	16.3	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°	3239.1	41.9
0°-40°	5043.2	65.2
0°-60°	7263.7	93.9
0°-90°	7739.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7739.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4083	4083	4083	4083	4083	
5°	4077	4083	4088	4094	4092	387
15°	3892	3974	4066	4039	3989	1098
25°	3562	3687	3873	3803	3737	1627
35°	2954	2790	2957	2922	2987	1854
45°	2244	1834	1054	1782	2275	1719
55°	1135	1135	392	1184	1383	1030
65°	342	403	125	519	528	365
75°	53	61	18	105	103	77
85°	18	11	9	18	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°	4083.2	4083.2	4083.2	4083.2	4083.2	4083.2	4083.2	4083.2	4083.2	4083.2	4083.2
2.5°	4085.4	4089.8	4087.6	4087.6	4085.4	4087.6	4087.6	4092.0	4092.0	4087.6	4085.4
5°	4076.7	4081.1	4081.1	4076.7	4076.7	4087.6	4081.1	4085.4	4085.4	4083.2	4083.2
7.5°	4057.0	4057.0	4065.7	4059.2	4059.2	4065.7	4063.5	4067.9	4072.3	4074.5	4074.5
10°	4013.1	4017.5	4019.7	4019.7	4021.9	4028.4	4032.8	4041.6	4046.0	4050.4	4052.6
12.5°	3958.3	3964.9	3967.1	3964.9	3971.5	3980.2	3991.2	4002.2	4008.8	4017.5	4024.1
15°	3892.5	3892.5	3896.9	3903.5	3907.9	3921.1	3932.0	3945.2	3962.7	3973.7	3984.6
17.5°	3820.3	3824.6	3831.2	3831.2	3840.0	3861.9	3868.5	3888.2	3907.9	3918.9	3940.8
20°	3741.4	3745.7	3752.3	3756.7	3767.6	3785.2	3798.3	3815.9	3837.8	3857.5	3879.4
22.5°	3680.0	3671.2	3675.6	3680.0	3691.0	3706.3	3721.6	3743.5	3765.4	3785.2	3807.1
25°	3561.6	3563.8	3570.4	3574.7	3587.9	3601.1	3618.6	3644.9	3664.6	3686.6	3710.6
27.5°	3401.6	3403.8	3414.8	3414.8	3425.7	3447.6	3458.6	3480.5	3506.8	3528.7	3557.3
30°	3219.7	3224.1	3224.1	3232.9	3239.4	3250.4	3261.3	3283.3	3296.4	3316.1	3355.6
32.5°	3053.1	3057.5	3055.3	3053.1	3046.5	3044.4	3042.2	3046.5	3050.9	3057.5	3072.8
35°	2954.5	2943.5	2934.8	2919.4	2901.9	2880.0	2860.2	2834.0	2809.8	2790.1	2768.2
37.5°	2860.2	2858.0	2844.9	2823.0	2787.9	2748.5	2702.5	2645.5	2588.5	2527.1	2467.9
40°	2728.7	2722.1	2711.2	2680.5	2641.1	2592.8	2531.5	2461.4	2369.3	2275.0	2178.6
42.5°	2505.2	2507.4	2494.2	2470.1	2432.9	2386.8	2323.3	2246.6	2147.9	2036.1	1911.2
45°	2244.4	2244.4	2240.0	2220.2	2194.0	2156.7	2108.5	2044.9	1948.5	1834.5	1700.8
47.5°	1972.6	1974.8	1968.2	1963.8	1952.8	1928.8	1893.7	1845.5	1777.5	1667.9	1534.2
50°	1696.4	1696.4	1707.4	1705.2	1705.2	1696.4	1681.1	1652.6	1593.4	1505.7	1380.8
52.5°	1420.3	1424.7	1431.2	1440.0	1450.9	1468.5	1450.9	1437.8	1400.5	1332.6	1225.2
55°	1135.3	1139.7	1150.7	1166.0	1179.2	1196.7	1201.1	1201.1	1181.3	1135.3	1054.2
57.5°	892.1	885.5	894.3	907.4	924.9	942.5	955.6	971.0	968.8	938.1	872.3
60°	670.7	672.9	679.4	692.6	705.8	721.1	738.6	751.8	758.4	743.0	701.4
62.5°	488.8	488.8	497.5	510.7	517.3	539.2	550.1	556.7	563.3	561.1	534.8
65°	341.9	346.3	350.7	357.3	363.8	377.0	383.6	396.7	401.1	403.3	383.6
67.5°	241.1	234.5	238.9	243.3	249.9	258.7	271.8	271.8	278.3	278.3	265.2
70°	153.4	153.4	155.6	162.2	166.6	168.8	173.2	177.5	184.1	181.9	181.9
72.5°	103.0	100.8	103.0	105.2	107.4	114.0	114.0	116.2	120.6	122.8	114.0
75°	52.6	54.8	59.2	57.0	63.6	59.2	61.4	67.9	65.7	61.4	61.4
77.5°	43.8	43.8	43.8	41.7	46.0	46.0	43.8	48.2	46.0	46.0	43.8
80°	30.7	32.9	30.7	28.5	30.7	28.5	28.5	28.5	28.5	28.5	26.3
82.5°	24.1	19.7	21.9	19.7	21.9	21.9	19.7	17.5	17.5	19.7	17.5
85°	17.5	13.1	15.3	15.3	13.1	13.1	13.1	13.1	13.1	10.9	10.9
87.5°	10.9	6.6	6.6	6.6	8.7	8.7	8.7	6.6	8.7	8.7	4.4
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°	4083.2	4083.2	4083.2	4083.2	4083.2	4083.2	4083.2	4083.2	4083.2	4083.2	4083.2
2.5°	4089.8	4087.6	4092.0	4089.8	4089.8	4087.6	4089.8	4087.6	4092.0	4083.2	4085.4
5°	4089.8	4085.4	4087.6	4089.8	4092.0	4087.6	4087.6	4087.6	4092.0	4087.6	4089.8
7.5°	4081.1	4078.9	4085.4	4089.8	4087.6	4085.4	4089.8	4087.6	4092.0	4089.8	4094.2
10°	4063.5	4065.7	4070.1	4076.7	4078.9	4081.1	4085.4	4085.4	4092.0	4083.2	4087.6
12.5°	4037.2	4046.0	4057.0	4061.3	4070.1	4070.1	4074.5	4076.7	4081.1	4078.9	4085.4
15°	4004.4	4015.3	4028.4	4039.4	4050.4	4057.0	4063.5	4065.7	4072.3	4065.7	4067.9
17.5°	3964.9	3978.0	3997.8	4010.9	4028.4	4035.0	4043.8	4048.2	4054.8	4050.4	4052.6
20°	3910.1	3925.5	3947.4	3967.1	3978.0	3993.4	4004.4	4010.9	4015.3	4010.9	4013.1
22.5°	3833.4	3855.3	3883.8	3899.1	3921.1	3934.2	3936.4	3951.8	3962.7	3951.8	3956.1
25°	3743.5	3765.4	3787.4	3820.3	3840.0	3855.3	3870.7	3872.9	3883.8	3881.6	3879.4
27.5°	3594.5	3623.0	3660.2	3686.6	3712.8	3737.0	3754.5	3758.8	3769.8	3765.4	3767.6
30°	3390.6	3421.4	3456.4	3498.1	3535.3	3559.4	3581.3	3596.7	3607.6	3601.1	3598.9
32.5°	3101.4	3132.0	3169.3	3210.9	3254.8	3289.8	3316.1	3335.9	3349.0	3344.6	3333.7
35°	2770.4	2779.2	2803.3	2836.2	2873.4	2910.7	2934.8	2956.7	2972.0	2976.4	2976.4
37.5°	2430.7	2402.2	2384.7	2384.7	2406.5	2421.9	2443.8	2457.0	2481.1	2489.8	2496.4
40°	2101.9	2036.1	1974.8	1928.8	1898.1	1895.9	1895.9	1902.4	1924.4	1952.8	1979.2
42.5°	1808.2	1703.0	1608.8	1523.3	1461.9	1426.8	1411.5	1413.7	1431.2	1457.5	1501.3
45°	1573.7	1442.2	1323.8	1220.8	1137.5	1082.7	1056.4	1054.2	1067.4	1098.1	1146.3
47.5°	1391.8	1251.5	1117.8	999.4	909.6	850.4	819.7	811.0	819.7	848.2	905.2
50°	1240.5	1095.9	957.8	835.1	738.6	677.3	648.7	637.8	648.7	672.9	729.8
52.5°	1100.3	951.2	821.9	703.6	600.5	547.9	517.3	510.7	517.3	545.7	591.8
55°	938.1	811.0	683.8	565.5	475.6	423.0	398.9	392.3	398.9	425.2	473.4
57.5°	778.1	668.5	556.7	449.3	372.6	326.5	304.7	295.9	311.2	328.7	385.8
60°	629.0	541.4	447.1	352.9	289.3	247.7	230.1	227.9	232.3	254.3	293.7
62.5°	493.2	420.8	346.3	269.6	217.0	199.4	177.5	175.4	179.7	192.9	223.6
65°	355.1	309.1	252.1	197.2	155.6	131.5	122.8	125.0	129.3	138.1	166.6
67.5°	247.7	214.8	175.4	138.1	107.4	96.4	87.7	85.5	87.7	103.0	118.4
70°	166.6	146.8	118.4	105.2	74.5	59.2	61.4	54.8	63.6	63.6	76.7
72.5°	109.6	96.4	78.9	61.4	52.6	41.7	41.7	39.5	43.8	46.0	57.0
75°	57.0	43.8	43.8	30.7	21.9	10.9	19.7	17.5	15.3	17.5	21.9
77.5°	39.5	32.9	30.7	24.1	21.9	17.5	17.5	17.5	17.5	19.7	21.9
80°	24.1	24.1	17.5	15.3	13.1	10.9	13.1	13.1	13.1	13.1	15.3
82.5°	15.3	13.1	13.1	10.9	10.9	8.7	8.7	8.7	8.7	8.7	13.1
85°	13.1	8.7	8.7	6.6	8.7	15.3	6.6	8.7	8.7	8.7	6.6
87.5°	4.4	6.6	6.6	6.6	4.4	2.2	4.4	6.6	6.6	10.9	8.7
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°	4083.2	4083.2	4083.2	4083.2	4083.2	4083.2	4083.2	4083.2	4083.2	4083.2	4083.2
2.5°	4089.8	4092.0	4092.0	4089.8	4089.8	4085.4	4094.2	4087.6	4089.8	4098.6	4092.0
5°	4094.2	4096.4	4096.4	4094.2	4094.2	4094.2	4096.4	4096.4	4094.2	4092.0	4096.4
7.5°	4103.0	4100.8	4100.8	4096.4	4096.4	4092.0	4096.4	4089.8	4094.2	4089.8	4096.4
10°	4092.0	4094.2	4092.0	4089.8	4089.8	4087.6	4087.6	4081.1	4083.2	4076.7	4081.1
12.5°	4085.4	4083.2	4083.2	4078.9	4074.5	4070.1	4067.9	4061.3	4061.3	4046.0	4052.6
15°	4067.9	4070.1	4063.5	4054.8	4050.4	4039.4	4035.0	4026.2	4017.5	4006.6	4008.8
17.5°	4052.6	4046.0	4037.2	4028.4	4010.9	4002.2	3993.4	3980.2	3975.8	3962.7	3958.3
20°	4006.6	4002.2	3991.2	3975.8	3964.9	3945.2	3936.4	3923.3	3912.3	3899.1	3892.5
22.5°	3947.4	3943.0	3929.8	3914.5	3896.9	3888.2	3879.4	3855.3	3844.3	3831.2	3829.0
25°	3872.9	3866.3	3853.1	3835.6	3826.8	3802.7	3793.9	3776.4	3772.0	3758.8	3756.7
27.5°	3758.8	3750.1	3734.8	3712.8	3697.5	3682.2	3673.4	3660.2	3655.9	3642.7	3640.5
30°	3587.9	3576.9	3546.3	3537.5	3511.2	3495.9	3495.9	3478.3	3480.5	3471.8	3471.8
32.5°	3318.3	3300.8	3276.7	3259.1	3241.6	3232.9	3232.9	3226.3	3230.7	3230.7	3235.1
35°	2961.1	2937.0	2923.8	2912.9	2912.9	2921.6	2947.9	2954.5	2967.7	2978.6	2987.4
37.5°	2503.0	2500.8	2516.2	2529.3	2562.2	2599.4	2645.5	2684.9	2722.1	2748.5	2774.8
40°	2007.7	2062.5	2106.3	2167.7	2218.0	2290.4	2373.7	2441.6	2505.2	2551.2	2599.4
42.5°	1567.1	1637.2	1729.3	1819.1	1909.0	2007.7	2117.3	2211.5	2294.8	2358.3	2408.7
45°	1220.8	1317.2	1429.0	1543.0	1659.2	1781.9	1895.9	1992.3	2080.0	2145.7	2196.2
47.5°	984.1	1089.3	1216.4	1341.4	1472.9	1602.2	1729.3	1812.6	1884.9	1937.5	1983.6
50°	813.1	924.9	1058.6	1201.1	1332.6	1461.9	1571.5	1652.6	1711.8	1757.8	1786.3
52.5°	679.4	797.8	940.3	1082.7	1214.2	1332.6	1431.2	1492.6	1540.8	1573.7	1600.0
55°	561.1	675.1	808.8	942.5	1071.8	1183.5	1264.6	1310.7	1347.9	1367.6	1383.0
57.5°	458.1	563.3	686.0	808.8	920.5	1012.6	1076.2	1122.2	1139.7	1155.1	1152.9
60°	359.5	458.1	569.9	675.1	771.5	846.0	892.1	918.3	931.5	938.1	933.7
62.5°	282.7	372.6	458.1	550.1	620.3	683.8	727.7	727.7	734.2	736.4	743.0
65°	210.4	278.3	352.9	420.8	477.8	519.4	543.6	550.1	558.9	556.7	552.3
67.5°	155.6	206.0	260.8	311.2	350.7	377.0	394.5	409.9	407.7	403.3	401.1
70°	107.4	140.3	188.5	219.2	247.7	274.0	278.3	280.5	282.7	284.9	280.5
72.5°	74.5	98.6	125.0	151.2	168.8	179.7	190.7	192.9	192.9	192.9	190.7
75°	37.3	50.4	74.5	85.5	100.8	105.2	114.0	114.0	120.6	111.8	109.6
77.5°	32.9	39.5	52.6	61.4	67.9	74.5	76.7	83.3	81.1	76.7	78.9
80°	19.7	24.1	32.9	37.3	46.0	48.2	50.4	52.6	50.4	52.6	52.6
82.5°	15.3	17.5	21.9	21.9	28.5	28.5	30.7	30.7	32.9	32.9	32.9
85°	8.7	15.3	13.1	26.3	17.5	17.5	21.9	26.3	21.9	21.9	26.3
87.5°	8.7	8.7	6.6	8.7	8.7	8.7	10.9	13.1	13.1	15.3	13.1
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: P249597

CATALOG NUMBER: LSR8B80D010 EC8B80950 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	4083.2	4083.2	4083.2	4083.2
2.5°	4089.8	4094.2	4087.6	4085.4
5°	4096.4	4096.4	4092.0	4092.0
7.5°	4096.4	4096.4	4089.8	4085.4
10°	4078.9	4078.9	4072.3	4067.9
12.5°	4046.0	4046.0	4043.8	4037.2
15°	4004.4	4004.4	3995.6	3989.0
17.5°	3947.4	3951.8	3940.8	3940.8
20°	3886.0	3883.8	3875.1	3870.7
22.5°	3822.5	3818.1	3815.9	3802.7
25°	3754.5	3750.1	3743.5	3737.0
27.5°	3638.3	3636.1	3629.5	3620.8
30°	3460.8	3458.6	3449.8	3449.8
32.5°	3230.7	3228.5	3219.7	3221.9
35°	2991.7	3000.5	2996.1	2987.4
37.5°	2792.3	2798.9	2803.3	2798.9
40°	2625.7	2645.5	2647.7	2652.1
42.5°	2448.2	2474.5	2483.3	2487.6
45°	2235.6	2259.7	2279.4	2275.0
47.5°	2018.6	2036.1	2053.7	2040.5
50°	1810.4	1821.3	1827.9	1827.9
52.5°	1613.2	1613.2	1611.0	1613.2
55°	1387.4	1387.4	1378.6	1383.0
57.5°	1150.7	1155.1	1148.5	1137.5
60°	931.5	920.5	916.1	909.6
62.5°	725.5	725.5	710.2	729.8
65°	543.6	537.0	530.4	528.2
67.5°	394.5	392.3	385.8	383.6
70°	278.3	269.6	267.4	263.0
72.5°	186.3	186.3	181.9	181.9
75°	114.0	103.0	100.8	103.0
77.5°	78.9	76.7	76.7	74.5
80°	52.6	50.4	54.8	48.2
82.5°	32.9	35.1	32.9	35.1
85°	21.9	26.3	24.1	24.1
87.5°	13.1	13.1	13.1	13.1
90°	0.0	0.0	0.0	0.0

(END OF REPORT)