

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: P249381

Luminaire Tested: **LSR8B80D010 EC8B80950 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249381
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 8LBDW0GPH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 5000 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7651.0 lumens
Efficiency: N/A
Efficacy: 102.8 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

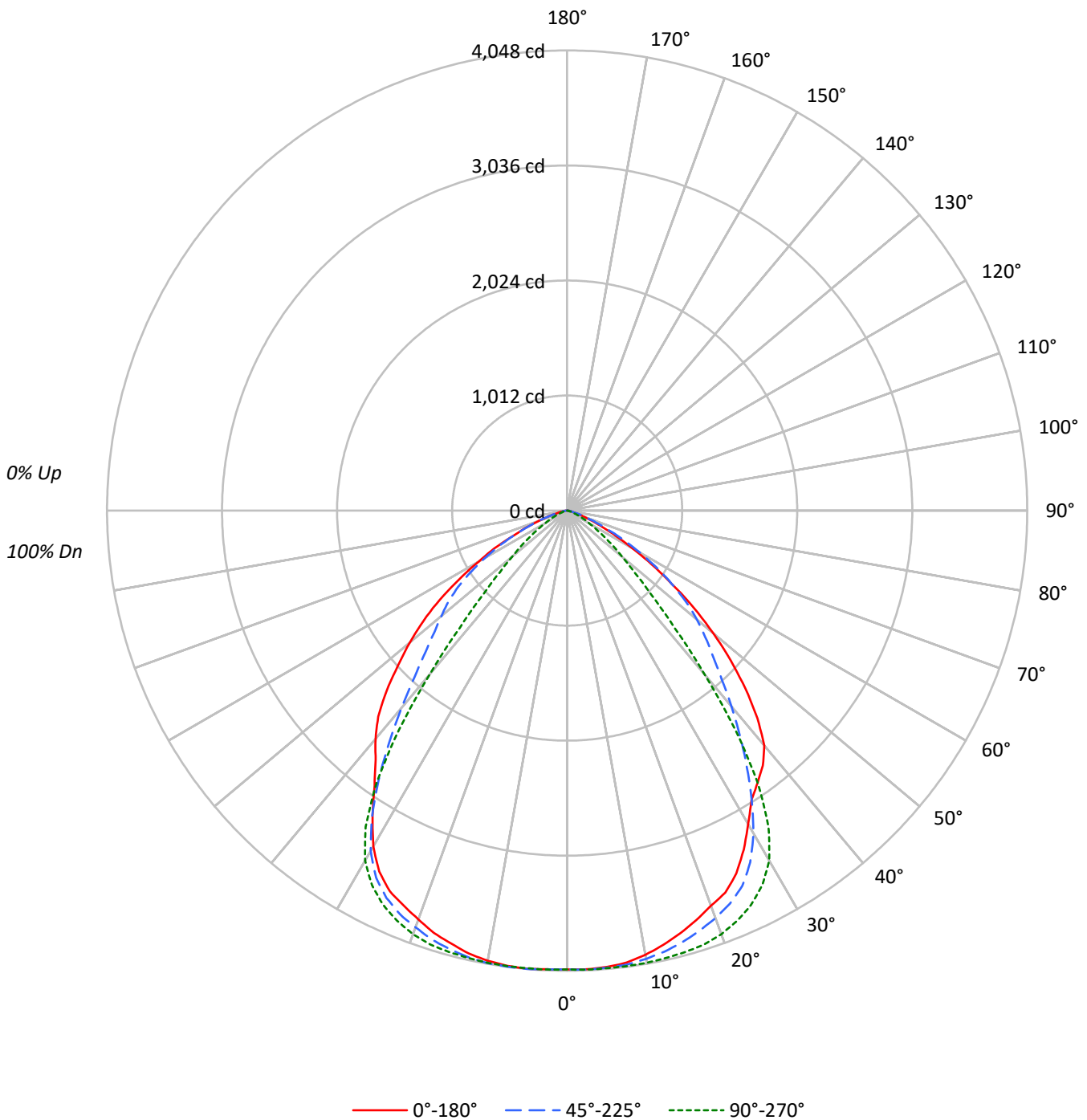
Input Watts (W): 74.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	124480	124480	124480
5°	124754	125092	125225
10°	124230	126469	125928
15°	122854	128319	125899
20°	121377	130123	125571
25°	119802	130272	125702
30°	113340	126610	121440
35°	109955	110034	111178
40°	108593	75710	105542
45°	96760	45449	98086
50°	80460	30252	86696
55°	60342	20854	73508
60°	40895	13895	55462
65°	24662	9011	38102
70°	13677	4887	23441
75°	6195	2061	12129
80°	5381	2309	8471
85°	6121	3043	8456



TEST NUMBER: P249381

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	385.3	5.0
10°-20°	1118.8	14.6
20°-30°	1698.2	22.2
30°-40°	1783.6	23.3
40°-50°	1337.2	17.5
50°-60°	858.0	11.2
60°-70°	367.0	4.8
70°-80°	86.7	1.1
80°-90°	16.1	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°	3202.3	41.9
0°-40°	4985.9	65.2
0°-60°	7181.1	93.9
0°-90°	7651.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7651.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4037	4037	4037	4037	4037	
5°	4030	4037	4041	4048	4046	383
15°	3848	3928	4020	3994	3944	1085
25°	3521	3645	3829	3760	3694	1609
35°	2921	2758	2923	2888	2953	1833
45°	2219	1814	1042	1762	2249	1699
55°	1122	1122	388	1170	1367	1018
65°	338	399	124	514	522	361
75°	52	61	17	104	102	76
85°	17	11	9	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°	4036.8	4036.8	4036.8	4036.8	4036.8	4036.8	4036.8	4036.8	4036.8	4036.8	4036.8
2.5°	4039.0	4043.3	4041.2	4041.2	4039.0	4041.2	4041.2	4045.5	4045.5	4041.2	4039.0
5°	4030.3	4034.6	4034.6	4030.3	4030.3	4041.2	4034.6	4039.0	4039.0	4036.8	4036.8
7.5°	4010.8	4010.8	4019.5	4013.0	4013.0	4019.5	4017.3	4021.7	4026.0	4028.2	4028.2
10°	3967.5	3971.8	3974.0	3974.0	3976.2	3982.6	3987.0	3995.7	4000.0	4004.3	4006.5
12.5°	3913.3	3919.8	3922.0	3919.8	3926.3	3935.0	3945.8	3956.7	3963.2	3971.8	3978.3
15°	3848.3	3848.3	3852.6	3859.2	3863.5	3876.5	3887.3	3900.3	3917.6	3928.5	3939.3
17.5°	3776.8	3781.2	3787.6	3787.6	3796.3	3818.0	3824.5	3844.0	3863.5	3874.3	3896.0
20°	3698.8	3703.1	3709.6	3714.0	3724.8	3742.1	3755.1	3772.5	3794.1	3813.7	3835.3
22.5°	3638.1	3629.5	3633.8	3638.1	3649.0	3664.1	3679.3	3700.9	3722.6	3742.1	3763.8
25°	3521.1	3523.3	3529.8	3534.1	3547.1	3560.1	3577.5	3603.4	3623.0	3644.6	3668.4
27.5°	3362.9	3365.1	3375.9	3375.9	3386.8	3408.4	3419.3	3440.9	3467.0	3488.6	3516.8
30°	3183.1	3187.4	3187.4	3196.1	3202.6	3213.4	3224.2	3245.9	3258.9	3278.4	3317.5
32.5°	3018.4	3022.7	3020.5	3018.4	3011.9	3009.7	3007.6	3011.9	3016.3	3022.7	3037.9
35°	2920.9	2910.1	2901.4	2886.3	2868.9	2847.2	2827.7	2801.7	2777.9	2758.4	2736.7
37.5°	2827.7	2825.5	2812.6	2790.9	2756.2	2717.2	2671.7	2615.4	2559.0	2498.4	2439.9
40°	2697.7	2691.2	2680.4	2650.1	2611.0	2563.4	2502.7	2433.4	2342.3	2249.2	2153.8
42.5°	2476.7	2478.9	2465.9	2442.0	2405.2	2359.7	2296.8	2221.0	2123.5	2013.0	1889.5
45°	2218.8	2218.8	2214.5	2195.0	2169.0	2132.2	2084.5	2021.7	1926.3	1813.6	1681.4
47.5°	1950.1	1952.3	1945.8	1941.5	1930.6	1906.8	1872.2	1824.5	1757.3	1648.9	1516.8
50°	1677.2	1677.2	1688.0	1685.8	1685.8	1677.2	1662.0	1633.8	1575.3	1488.6	1365.1
52.5°	1404.1	1408.5	1415.0	1423.6	1434.4	1451.8	1434.4	1421.4	1384.6	1317.4	1211.3
55°	1122.4	1126.8	1137.6	1152.7	1165.8	1183.1	1187.4	1187.4	1167.9	1122.4	1042.2
57.5°	881.9	875.4	884.1	897.1	914.4	931.8	944.7	959.9	957.7	927.4	862.4
60°	663.1	665.2	671.7	684.7	697.7	712.9	730.2	743.2	749.7	734.6	693.4
62.5°	483.2	483.2	491.9	504.8	511.4	533.1	543.9	550.4	556.9	554.7	528.7
65°	338.0	342.3	346.7	353.2	359.7	372.7	379.2	392.2	396.5	398.7	379.2
67.5°	238.4	231.9	236.2	240.5	247.0	255.7	268.7	268.7	275.2	275.2	262.2
70°	151.7	151.7	153.9	160.3	164.7	166.9	171.2	175.5	182.0	179.8	179.8
72.5°	101.8	99.7	101.8	104.0	106.2	112.7	112.7	114.8	119.2	121.4	112.7
75°	52.0	54.2	58.5	56.4	62.8	58.5	60.7	67.2	65.0	60.7	60.7
77.5°	43.3	43.3	43.3	41.2	45.5	45.5	43.3	47.7	45.5	45.5	43.3
80°	30.3	32.5	30.3	28.2	30.3	28.2	28.2	28.2	28.2	28.2	26.0
82.5°	23.9	19.5	21.7	19.5	21.7	21.7	19.5	17.3	17.3	19.5	17.3
85°	17.3	13.0	15.2	15.2	13.0	13.0	13.0	13.0	13.0	10.8	10.8
87.5°	10.8	6.5	6.5	6.5	8.6	8.6	8.6	6.5	8.6	8.6	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: P249381

CATALOG NUMBER: LSR8B80D010 EC8B80950 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	4036.8	4036.8	4036.8	4036.8	4036.8	4036.8	4036.8	4036.8	4036.8	4036.8	4036.8
2.5°	4043.3	4041.2	4045.5	4043.3	4043.3	4041.2	4043.3	4041.2	4045.5	4036.8	4039.0
5°	4043.3	4039.0	4041.2	4043.3	4045.5	4041.2	4041.2	4041.2	4045.5	4041.2	4043.3
7.5°	4034.6	4032.5	4039.0	4043.3	4041.2	4039.0	4043.3	4041.2	4045.5	4043.3	4047.6
10°	4017.3	4019.5	4023.8	4030.3	4032.5	4034.6	4039.0	4039.0	4045.5	4036.8	4041.2
12.5°	3991.3	4000.0	4010.8	4015.1	4023.8	4023.8	4028.2	4030.3	4034.6	4032.5	4039.0
15°	3958.8	3969.6	3982.6	3993.5	4004.3	4010.8	4017.3	4019.5	4026.0	4019.5	4021.7
17.5°	3919.8	3932.8	3952.3	3965.3	3982.6	3989.2	3997.8	4002.1	4008.7	4004.3	4006.5
20°	3865.6	3880.8	3902.5	3922.0	3932.8	3948.0	3958.8	3965.3	3969.6	3965.3	3967.5
22.5°	3789.8	3811.5	3839.6	3854.8	3876.5	3889.5	3891.7	3906.8	3917.6	3906.8	3911.2
25°	3700.9	3722.6	3744.3	3776.8	3796.3	3811.5	3826.6	3828.8	3839.6	3837.5	3835.3
27.5°	3553.6	3581.8	3618.6	3644.6	3670.6	3694.5	3711.8	3716.1	3727.0	3722.6	3724.8
30°	3352.1	3382.5	3417.1	3458.3	3495.1	3518.9	3540.6	3555.8	3566.6	3560.1	3557.9
32.5°	3066.1	3096.4	3133.3	3174.4	3217.8	3252.4	3278.4	3297.9	3310.9	3306.6	3295.8
35°	2738.9	2747.6	2771.4	2803.9	2840.7	2877.6	2901.4	2923.0	2938.2	2942.6	2942.6
37.5°	2403.0	2374.9	2357.5	2357.5	2379.2	2394.3	2416.0	2429.0	2452.9	2461.5	2468.0
40°	2078.0	2013.0	1952.3	1906.8	1876.5	1874.3	1874.3	1880.8	1902.5	1930.6	1956.7
42.5°	1787.6	1683.6	1590.5	1506.0	1445.3	1410.6	1395.5	1397.6	1415.0	1441.0	1484.3
45°	1555.8	1425.8	1308.8	1206.9	1124.6	1070.4	1044.4	1042.2	1055.2	1085.6	1133.3
47.5°	1376.0	1237.3	1105.1	988.1	899.3	840.7	810.4	801.8	810.4	838.6	894.9
50°	1226.4	1083.4	946.9	825.6	730.2	669.6	641.4	630.6	641.4	665.2	721.5
52.5°	1087.7	940.4	812.6	695.6	593.7	541.7	511.4	504.8	511.4	539.5	585.1
55°	927.4	801.8	676.0	559.0	470.2	418.2	394.4	387.9	394.4	420.4	468.1
57.5°	769.3	660.9	550.4	444.2	368.4	322.8	301.2	292.5	307.7	325.0	381.4
60°	621.9	535.2	442.0	348.9	286.0	244.8	227.5	225.3	229.7	251.4	290.3
62.5°	487.6	416.0	342.3	266.5	214.5	197.2	175.5	173.4	177.7	190.7	221.0
65°	351.0	305.5	249.2	195.0	153.9	130.0	121.4	123.5	127.8	136.5	164.7
67.5°	244.8	212.3	173.4	136.5	106.2	95.3	86.7	84.5	86.7	101.8	117.0
70°	164.7	145.2	117.0	104.0	73.7	58.5	60.7	54.2	62.8	62.8	75.8
72.5°	108.3	95.3	78.0	60.7	52.0	41.2	41.2	39.0	43.3	45.5	56.4
75°	56.4	43.3	43.3	30.3	21.7	10.8	19.5	17.3	15.2	17.3	21.7
77.5°	39.0	32.5	30.3	23.9	21.7	17.3	17.3	17.3	17.3	19.5	21.7
80°	23.9	23.9	17.3	15.2	13.0	10.8	13.0	13.0	13.0	13.0	15.2
82.5°	15.2	13.0	13.0	10.8	10.8	8.6	8.6	8.6	8.6	8.6	13.0
85°	13.0	8.6	8.6	6.5	8.6	15.2	6.5	8.6	8.6	8.6	6.5
87.5°	4.3	6.5	6.5	6.5	4.3	2.2	4.3	6.5	6.5	10.8	8.6
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°	4036.8	4036.8	4036.8	4036.8	4036.8	4036.8	4036.8	4036.8	4036.8	4036.8	4036.8
2.5°	4043.3	4045.5	4045.5	4043.3	4043.3	4039.0	4047.6	4041.2	4043.3	4052.0	4045.5
5°	4047.6	4049.8	4049.8	4047.6	4047.6	4047.6	4049.8	4049.8	4047.6	4045.5	4049.8
7.5°	4056.3	4054.2	4054.2	4049.8	4049.8	4045.5	4049.8	4043.3	4047.6	4043.3	4049.8
10°	4045.5	4047.6	4045.5	4043.3	4043.3	4041.2	4041.2	4034.6	4036.8	4030.3	4034.6
12.5°	4039.0	4036.8	4036.8	4032.5	4028.2	4023.8	4021.7	4015.1	4015.1	4000.0	4006.5
15°	4021.7	4023.8	4017.3	4008.7	4004.3	3993.5	3989.2	3980.5	3971.8	3961.0	3963.2
17.5°	4006.5	4000.0	3991.3	3982.6	3965.3	3956.7	3948.0	3935.0	3930.6	3917.6	3913.3
20°	3961.0	3956.7	3945.8	3930.6	3919.8	3900.3	3891.7	3878.7	3867.8	3854.8	3848.3
22.5°	3902.5	3898.1	3885.1	3870.0	3852.6	3844.0	3835.3	3811.5	3800.6	3787.6	3785.5
25°	3828.8	3822.3	3809.3	3792.0	3783.3	3759.5	3750.8	3733.4	3729.1	3716.1	3714.0
27.5°	3716.1	3707.5	3692.3	3670.6	3655.5	3640.3	3631.6	3618.6	3614.3	3601.3	3599.1
30°	3547.1	3536.3	3505.9	3497.3	3471.3	3456.1	3456.1	3438.8	3440.9	3432.3	3432.3
32.5°	3280.6	3263.3	3239.4	3222.1	3204.7	3196.1	3196.1	3189.6	3193.9	3193.9	3198.3
35°	2927.4	2903.6	2890.5	2879.7	2879.7	2888.4	2914.4	2920.9	2933.9	2944.7	2953.4
37.5°	2474.5	2472.4	2487.5	2500.5	2533.0	2569.9	2615.4	2654.4	2691.2	2717.2	2743.2
40°	1984.8	2039.0	2082.3	2143.0	2192.8	2264.3	2346.7	2413.9	2476.7	2522.2	2569.9
42.5°	1549.3	1618.6	1709.7	1798.5	1887.3	1984.8	2093.2	2186.3	2268.7	2331.5	2381.4
45°	1206.9	1302.3	1412.8	1525.5	1640.3	1761.7	1874.3	1969.7	2056.3	2121.3	2171.2
47.5°	972.9	1076.9	1202.6	1326.1	1456.1	1583.9	1709.7	1792.0	1863.5	1915.5	1961.0
50°	803.9	914.4	1046.6	1187.4	1317.4	1445.3	1553.6	1633.8	1692.3	1737.8	1766.0
52.5°	671.7	788.7	929.6	1070.4	1200.4	1317.4	1415.0	1475.6	1523.3	1555.8	1581.8
55°	554.7	667.4	799.6	931.8	1059.6	1170.1	1250.2	1295.8	1332.6	1352.1	1367.3
57.5°	452.9	556.9	678.2	799.6	910.1	1001.1	1063.9	1109.4	1126.8	1141.9	1139.8
60°	355.4	452.9	563.4	667.4	762.7	836.4	881.9	907.9	920.9	927.4	923.1
62.5°	279.5	368.4	452.9	543.9	613.2	676.0	719.4	719.4	725.9	728.1	734.6
65°	208.0	275.2	348.9	416.0	472.3	513.5	537.4	543.9	552.6	550.4	546.0
67.5°	153.9	203.7	257.8	307.7	346.7	372.7	390.0	405.2	403.0	398.7	396.5
70°	106.2	138.7	186.4	216.7	244.8	270.9	275.2	277.3	279.5	281.7	277.3
72.5°	73.7	97.5	123.5	149.5	166.9	177.7	188.5	190.7	190.7	190.7	188.5
75°	36.8	49.8	73.7	84.5	99.7	104.0	112.7	112.7	119.2	110.5	108.3
77.5°	32.5	39.0	52.0	60.7	67.2	73.7	75.8	82.3	80.2	75.8	78.0
80°	19.5	23.9	32.5	36.8	45.5	47.7	49.8	52.0	49.8	52.0	52.0
82.5°	15.2	17.3	21.7	21.7	28.2	28.2	30.3	30.3	32.5	32.5	32.5
85°	8.6	15.2	13.0	26.0	17.3	17.3	21.7	26.0	21.7	21.7	26.0
87.5°	8.6	8.6	6.5	8.6	8.6	8.6	10.8	13.0	13.0	15.2	13.0
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: P249381

CATALOG NUMBER: LSR8B80D010 EC8B80950 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	4036.8	4036.8	4036.8	4036.8
2.5°	4043.3	4047.6	4041.2	4039.0
5°	4049.8	4049.8	4045.5	4045.5
7.5°	4049.8	4049.8	4043.3	4039.0
10°	4032.5	4032.5	4026.0	4021.7
12.5°	4000.0	4000.0	3997.8	3991.3
15°	3958.8	3958.8	3950.1	3943.7
17.5°	3902.5	3906.8	3896.0	3896.0
20°	3841.8	3839.6	3831.0	3826.6
22.5°	3779.0	3774.6	3772.5	3759.5
25°	3711.8	3707.5	3700.9	3694.5
27.5°	3597.0	3594.8	3588.3	3579.6
30°	3421.4	3419.3	3410.6	3410.6
32.5°	3193.9	3191.7	3183.1	3185.3
35°	2957.7	2966.4	2962.1	2953.4
37.5°	2760.5	2767.1	2771.4	2767.1
40°	2595.9	2615.4	2617.6	2621.9
42.5°	2420.4	2446.4	2455.0	2459.3
45°	2210.2	2234.0	2253.5	2249.2
47.5°	1995.6	2013.0	2030.3	2017.3
50°	1789.8	1800.6	1807.2	1807.2
52.5°	1594.8	1594.8	1592.6	1594.8
55°	1371.6	1371.6	1363.0	1367.3
57.5°	1137.6	1141.9	1135.4	1124.6
60°	920.9	910.1	905.7	899.3
62.5°	717.2	717.2	702.1	721.5
65°	537.4	530.9	524.4	522.2
67.5°	390.0	387.9	381.4	379.2
70°	275.2	266.5	264.4	260.0
72.5°	184.2	184.2	179.8	179.8
75°	112.7	101.8	99.7	101.8
77.5°	78.0	75.8	75.8	73.7
80°	52.0	49.8	54.2	47.7
82.5°	32.5	34.7	32.5	34.7
85°	21.7	26.0	23.9	23.9
87.5°	13.0	13.0	13.0	13.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)