

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: P248364

Luminaire Tested: **LSR8B80D010 EC8B80850 8LBDW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P248364
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13956)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B80D010 EC8B80850 8LBDW0LI
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 5000 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8910.0 lumens
Efficiency: N/A
Efficacy: 119.8 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.33 / 1.2
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

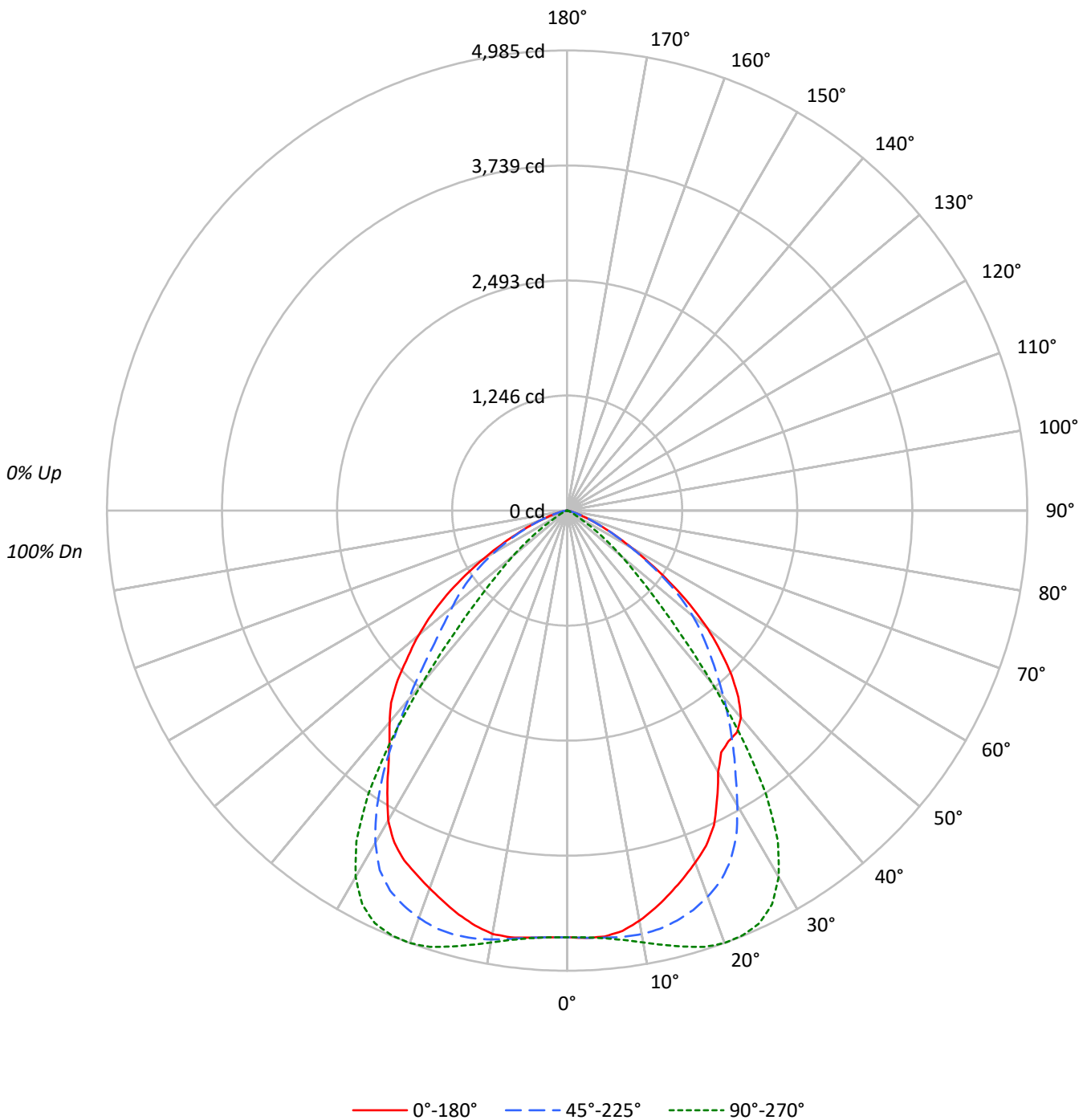
Input Watts (W): 74.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	92	90
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79
3	97	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62
5	84	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45
8	68	56	49	44	67	56	48	43	54	48	43	53	47	43	52	47	43	41
9	64	52	45	40	63	51	44	40	50	44	39	49	44	39	48	43	39	38
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	142532	142532	142532
5°	143379	143912	143760
10°	141274	148726	145808
15°	137143	156096	144661
20°	133165	163594	142904
25°	128050	167786	142241
30°	116534	163186	138026
35°	114800	141399	126989
40°	117920	98067	120387
45°	109773	59274	113196
50°	95216	36603	100868
55°	73073	19123	85604
60°	49782	7715	64608
65°	30966	3940	44574
70°	16815	2434	27210
75°	8769	1168	16072
80°	3925	1314	8701
85°	2618	885	7819



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	444.5	5.0
10°-20°	1316.8	14.8
20°-30°	2008.9	22.5
30°-40°	2096.3	23.5
40°-50°	1574.6	17.7
50°-60°	968.8	10.9
60°-70°	394.3	4.4
70°-80°	92.9	1.0
80°-90°	12.8	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°	3770.2	42.3
0°-40°	5866.6	65.8
0°-60°	8410.0	94.4
0°-90°	8910.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8910.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4622	4622	4622	4622	4622	
5°	4632	4644	4649	4644	4644	438
15°	4296	4598	4890	4755	4531	1210
25°	3764	4186	4931	4541	4181	1711
35°	3050	3136	3756	3472	3373	1926
45°	2517	2179	1359	2029	2596	1921
55°	1359	1290	356	1290	1592	1222
65°	424	429	54	576	611	443
75°	74	74	10	130	135	89
85°	7	7	2	17	22	10
90°	0	0	0	0	0	



TEST NUMBER: P248364

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	4622.2	4622.2	4622.2	4622.2	4622.2	4622.2	4622.2	4622.2	4622.2	4622.2	4622.2
2.5°	4634.5	4627.1	4634.5	4634.5	4637.0	4632.0	4634.5	4637.0	4632.0	4632.0	4632.0
5°	4632.0	4627.1	4632.0	4629.6	4634.5	4634.5	4639.4	4639.4	4644.3	4644.3	4651.7
7.5°	4592.8	4583.0	4592.8	4600.2	4605.0	4614.9	4627.1	4637.0	4646.7	4656.6	4668.8
10°	4511.8	4511.8	4519.2	4533.9	4548.6	4565.8	4587.9	4612.4	4637.0	4659.0	4681.1
12.5°	4411.2	4403.9	4418.6	4438.2	4460.3	4487.3	4521.6	4558.4	4597.7	4641.8	4676.2
15°	4295.9	4288.5	4305.7	4325.3	4352.4	4391.6	4433.3	4482.4	4538.8	4597.7	4654.1
17.5°	4178.1	4175.7	4192.9	4219.9	4242.0	4283.6	4337.6	4396.5	4460.3	4538.8	4612.4
20°	4058.0	4055.5	4072.7	4094.8	4124.2	4163.4	4217.4	4286.1	4362.1	4450.5	4536.3
22.5°	3932.8	3935.3	3950.0	3974.5	3999.1	4040.7	4097.2	4165.9	4249.3	4345.0	4440.7
25°	3763.5	3751.3	3770.9	3795.4	3837.1	3871.4	3925.5	3999.1	4084.9	4185.5	4298.4
27.5°	3518.2	3515.7	3532.9	3555.0	3591.8	3633.5	3692.4	3768.4	3859.2	3969.6	4080.0
30°	3272.8	3277.7	3285.1	3307.2	3331.7	3373.4	3432.3	3496.1	3582.0	3687.5	3805.2
32.5°	3106.0	3106.0	3115.8	3130.5	3147.7	3169.8	3211.5	3258.1	3324.4	3398.0	3483.8
35°	3049.6	3039.8	3049.6	3052.0	3054.5	3059.4	3066.7	3081.5	3103.5	3135.5	3167.3
37.5°	3025.1	3017.7	3017.7	3007.9	2995.6	2980.9	2961.3	2939.2	2914.7	2882.7	2858.2
40°	2929.4	2924.5	2919.5	2909.8	2882.7	2853.3	2821.4	2769.9	2713.5	2634.9	2556.5
42.5°	2745.4	2740.5	2738.0	2718.4	2693.8	2659.5	2622.7	2568.7	2497.6	2397.0	2284.1
45°	2517.2	2507.4	2500.0	2482.9	2465.6	2436.2	2401.9	2352.8	2281.7	2178.6	2043.7
47.5°	2252.2	2247.3	2244.9	2237.5	2220.4	2203.1	2181.1	2141.8	2078.0	1979.9	1840.1
50°	1984.8	1975.0	1979.9	1977.5	1970.1	1957.8	1943.1	1916.1	1867.0	1778.7	1651.1
52.5°	1678.1	1678.1	1675.7	1683.0	1685.5	1683.0	1685.5	1656.1	1614.3	1548.1	1440.1
55°	1359.2	1359.2	1366.5	1376.4	1386.2	1388.6	1386.2	1373.9	1344.5	1290.5	1194.8
57.5°	1059.8	1055.0	1069.7	1084.4	1094.2	1104.0	1096.6	1086.9	1069.7	1025.5	951.9
60°	807.2	807.2	817.0	826.8	836.6	846.4	844.0	841.5	826.8	797.3	738.5
62.5°	593.7	596.2	596.2	603.5	613.3	623.2	630.5	623.2	615.8	596.2	556.9
65°	424.4	422.0	424.4	431.8	439.2	449.0	453.9	451.4	444.0	429.3	399.9
67.5°	284.6	282.1	291.9	294.4	299.3	309.2	306.7	309.2	306.7	294.4	269.9
70°	186.5	181.5	186.5	184.0	191.4	193.8	198.7	201.2	198.7	191.4	184.0
72.5°	115.3	112.9	115.3	117.8	120.2	122.6	127.6	127.6	125.1	120.2	110.4
75°	73.6	66.2	68.7	63.8	68.7	68.7	73.6	76.1	73.6	73.6	68.7
77.5°	44.2	44.2	44.2	44.2	44.2	44.2	44.2	46.6	49.0	44.2	41.7
80°	22.1	22.1	24.6	24.6	24.6	27.0	24.6	24.6	24.6	27.0	19.6
82.5°	17.2	14.7	14.7	14.7	17.2	14.7	14.7	14.7	14.7	14.7	14.7
85°	7.4	9.8	7.4	4.9	7.4	7.4	9.8	7.4	7.4	7.4	9.8
87.5°	2.5	2.5	0.0	0.0	0.0	2.5	0.0	2.5	2.5	4.9	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: P248364

CATALOG NUMBER: LSR8B80D010 EC8B80850 8LBDW0LI

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	4622.2	4622.2	4622.2	4622.2	4622.2	4622.2	4622.2	4622.2	4622.2	4622.2	4622.2
2.5°	4634.5	4629.6	4629.6	4627.1	4632.0	4627.1	4629.6	4627.1	4627.1	4632.0	4627.1
5°	4651.7	4654.1	4649.2	4646.7	4654.1	4654.1	4654.1	4649.2	4649.2	4651.7	4649.2
7.5°	4676.2	4681.1	4683.5	4686.0	4690.9	4693.4	4693.4	4690.9	4688.5	4695.8	4686.0
10°	4703.2	4710.6	4725.3	4732.6	4744.9	4744.9	4749.8	4749.8	4744.9	4749.8	4747.4
12.5°	4693.4	4737.5	4762.1	4779.2	4796.4	4811.1	4816.0	4818.5	4816.0	4825.9	4816.0
15°	4710.6	4747.4	4786.6	4816.0	4847.9	4865.1	4870.0	4889.6	4894.6	4897.0	4882.3
17.5°	4683.5	4749.8	4791.5	4835.7	4882.3	4914.2	4943.6	4955.9	4958.4	4963.2	4943.6
20°	4622.2	4695.8	4759.6	4823.4	4877.4	4926.4	4951.0	4985.3	4975.5	4995.2	4968.2
22.5°	4538.8	4622.2	4703.2	4786.6	4843.0	4901.9	4953.4	4977.9	4990.2	4990.2	4960.8
25°	4406.3	4504.5	4592.8	4678.6	4764.5	4835.7	4894.6	4931.4	4938.7	4936.3	4901.9
27.5°	4200.2	4305.7	4408.8	4506.9	4612.4	4695.8	4764.5	4808.7	4821.0	4821.0	4784.2
30°	3915.6	4028.5	4129.1	4246.8	4354.8	4448.0	4543.7	4583.0	4605.0	4605.0	4563.4
32.5°	3577.1	3672.7	3766.0	3881.3	3999.1	4104.5	4195.3	4249.3	4276.3	4273.8	4237.0
35°	3209.1	3255.7	3326.8	3412.7	3518.2	3616.3	3704.6	3756.2	3802.8	3800.3	3766.0
37.5°	2841.0	2828.8	2836.2	2868.0	2934.2	3003.0	3071.7	3120.8	3160.0	3177.2	3169.8
40°	2480.4	2416.6	2355.3	2333.2	2338.1	2362.6	2399.4	2436.2	2480.4	2502.5	2512.3
42.5°	2156.5	2048.6	1940.6	1859.7	1813.1	1798.3	1815.5	1827.8	1854.8	1886.6	1918.6
45°	1896.5	1751.8	1609.4	1484.3	1405.8	1359.2	1349.4	1359.2	1373.9	1405.8	1447.5
47.5°	1683.0	1513.7	1354.3	1214.4	1099.1	1037.8	1020.6	1015.7	1030.4	1059.8	1116.3
50°	1494.1	1324.8	1148.2	986.2	866.1	797.3	772.8	763.0	780.2	802.3	853.8
52.5°	1288.0	1121.2	939.7	782.6	657.5	586.4	559.4	544.7	554.4	583.9	635.4
55°	1064.8	910.2	745.8	583.9	463.7	397.5	365.5	355.7	365.5	397.5	449.0
57.5°	841.5	711.5	574.1	422.0	314.0	247.8	215.9	206.1	233.1	245.3	299.3
60°	657.5	552.0	434.3	309.2	215.9	164.4	132.5	125.1	137.4	159.4	203.6
62.5°	493.2	426.9	333.7	220.8	159.4	105.5	88.3	81.0	88.3	105.5	139.9
65°	358.2	306.7	233.1	161.9	107.9	78.5	58.9	54.0	61.4	73.6	103.1
67.5°	245.3	206.1	161.9	112.9	73.6	49.0	41.7	41.7	44.2	54.0	76.1
70°	159.4	134.9	103.1	73.6	49.0	36.8	31.9	27.0	31.9	39.3	51.5
72.5°	100.6	85.8	66.2	51.5	36.8	27.0	22.1	19.6	24.6	29.4	39.3
75°	61.4	46.6	34.3	27.0	19.6	19.6	19.6	9.8	12.2	19.6	24.6
77.5°	36.8	31.9	27.0	22.1	17.2	9.8	9.8	9.8	12.2	14.7	22.1
80°	19.6	17.2	12.2	12.2	9.8	7.4	9.8	7.4	4.9	12.2	14.7
82.5°	12.2	9.8	9.8	9.8	12.2	4.9	7.4	4.9	7.4	9.8	7.4
85°	7.4	7.4	7.4	4.9	12.2	4.9	4.9	2.5	2.5	4.9	4.9
87.5°	0.0	2.5	2.5	0.0	2.5	0.0	2.5	2.5	2.5	2.5	2.5
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: P248364

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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	4622.2	4622.2	4622.2	4622.2	4622.2	4622.2	4622.2	4622.2	4622.2	4622.2	4622.2
2.5°	4629.6	4627.1	4629.6	4627.1	4627.1	4627.1	4629.6	4629.6	4627.1	4627.1	4632.0
5°	4649.2	4649.2	4649.2	4646.7	4644.3	4644.3	4649.2	4649.2	4641.8	4649.2	4649.2
7.5°	4690.9	4683.5	4690.9	4681.1	4676.2	4678.6	4681.1	4676.2	4671.3	4673.8	4673.8
10°	4744.9	4737.5	4737.5	4730.2	4722.8	4717.9	4713.0	4700.7	4688.5	4686.0	4676.2
12.5°	4808.7	4796.4	4789.1	4774.3	4762.1	4744.9	4730.2	4710.6	4686.0	4668.8	4651.7
15°	4872.5	4852.8	4835.7	4811.1	4784.2	4754.7	4722.8	4690.9	4651.7	4617.3	4587.9
17.5°	4924.0	4897.0	4865.1	4825.9	4786.6	4742.4	4695.8	4649.2	4592.8	4548.6	4514.3
20°	4941.1	4901.9	4860.2	4808.7	4757.1	4695.8	4637.0	4575.6	4511.8	4465.2	4426.0
22.5°	4919.1	4872.5	4821.0	4767.0	4698.3	4632.0	4563.4	4492.2	4435.7	4372.0	4335.2
25°	4857.8	4801.3	4744.9	4681.1	4614.9	4541.3	4467.7	4394.1	4325.3	4291.0	4244.4
27.5°	4732.6	4671.3	4609.9	4543.7	4467.7	4394.1	4318.0	4246.8	4188.0	4141.3	4114.4
30°	4511.8	4440.7	4369.5	4298.4	4232.1	4156.1	4084.9	4026.0	3967.1	3930.3	3903.4
32.5°	4173.2	4109.5	4038.3	3969.6	3908.3	3844.5	3785.6	3734.1	3692.4	3667.8	3648.2
35°	3716.9	3653.1	3599.1	3550.1	3498.5	3471.6	3434.8	3405.3	3388.1	3378.4	3375.9
37.5°	3142.8	3106.0	3088.8	3079.0	3069.2	3061.9	3066.7	3079.0	3088.8	3106.0	3125.6
40°	2529.5	2561.3	2571.2	2605.5	2637.4	2679.1	2725.8	2779.7	2823.9	2880.3	2919.5
42.5°	1970.1	2029.0	2097.7	2171.3	2249.8	2325.8	2419.1	2504.9	2583.4	2654.6	2715.9
45°	1513.7	1604.5	1707.6	1813.1	1918.6	2029.0	2141.8	2247.3	2340.5	2416.6	2480.4
47.5°	1180.1	1280.7	1413.2	1543.2	1670.8	1800.8	1925.9	2036.3	2114.8	2188.4	2244.9
50°	934.7	1050.1	1194.8	1344.5	1484.3	1621.7	1754.2	1857.2	1935.8	1994.6	2036.3
52.5°	723.7	861.1	1008.3	1165.4	1315.0	1464.7	1587.3	1683.0	1746.8	1798.3	1830.2
55°	539.7	674.7	831.7	993.6	1145.7	1290.5	1405.8	1489.2	1545.7	1575.1	1592.3
57.5°	390.1	512.8	669.8	831.7	969.1	1106.5	1199.7	1275.8	1307.7	1324.8	1332.2
60°	284.6	397.5	537.3	677.1	807.2	917.6	998.6	1050.1	1074.6	1084.4	1081.9
62.5°	208.5	306.7	426.9	544.7	650.1	740.9	804.7	839.1	851.4	856.2	848.9
65°	159.4	235.5	338.6	429.3	510.3	576.5	623.2	645.3	652.6	650.1	645.3
67.5°	117.8	176.7	252.7	321.4	380.3	431.8	456.4	476.0	480.8	473.5	466.1
70°	83.4	130.0	184.0	230.6	274.8	304.2	331.2	333.7	333.7	331.2	326.3
72.5°	58.9	90.8	125.1	157.0	184.0	206.1	215.9	223.3	220.8	218.3	213.5
75°	39.3	56.4	90.8	98.1	122.6	130.0	139.9	139.9	142.3	134.9	134.9
77.5°	24.6	39.3	54.0	63.8	73.6	83.4	88.3	88.3	90.8	88.3	88.3
80°	14.7	24.6	29.4	44.2	44.2	51.5	54.0	56.4	51.5	58.9	51.5
82.5°	9.8	14.7	22.1	22.1	27.0	31.9	31.9	34.3	34.3	31.9	31.9
85°	7.4	9.8	12.2	14.7	14.7	17.2	14.7	14.7	17.2	19.6	17.2
87.5°	2.5	4.9	2.5	4.9	4.9	9.8	7.4	7.4	7.4	9.8	9.8
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: P248364

CATALOG NUMBER: LSR8B80D010 EC8B80850 8LBDW0LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	4622.2	4622.2	4622.2	4622.2
2.5°	4627.1	4629.6	4627.1	4627.1
5°	4649.2	4646.7	4649.2	4644.3
7.5°	4666.4	4666.4	4663.9	4663.9
10°	4666.4	4656.6	4656.6	4656.6
12.5°	4629.6	4617.3	4609.9	4605.0
15°	4565.8	4543.7	4533.9	4531.4
17.5°	4482.4	4462.8	4450.5	4443.1
20°	4386.7	4367.1	4352.4	4354.8
22.5°	4303.3	4281.2	4271.4	4266.5
25°	4219.9	4192.9	4185.5	4180.6
27.5°	4084.9	4070.2	4062.8	4055.5
30°	3878.8	3871.4	3859.2	3876.4
32.5°	3640.9	3628.6	3618.8	3626.2
35°	3378.4	3371.0	3378.4	3373.4
37.5°	3137.9	3145.3	3155.1	3160.0
40°	2949.0	2976.0	2985.8	2990.7
42.5°	2760.1	2792.0	2811.6	2823.9
45°	2527.0	2558.9	2581.0	2595.7
47.5°	2286.6	2313.6	2335.6	2333.2
50°	2068.2	2082.9	2092.7	2102.6
52.5°	1847.4	1847.4	1849.9	1849.9
55°	1597.2	1592.3	1589.8	1592.3
57.5°	1322.4	1317.5	1315.0	1307.7
60°	1072.1	1057.4	1047.6	1047.6
62.5°	839.1	821.9	814.6	812.1
65°	630.5	628.0	613.3	610.9
67.5°	456.4	446.5	436.7	439.2
70°	321.4	306.7	306.7	301.8
72.5°	208.5	201.2	198.7	198.7
75°	130.0	130.0	125.1	134.9
77.5°	85.8	85.8	83.4	85.8
80°	51.5	51.5	51.5	49.0
82.5°	31.9	34.3	31.9	31.9
85°	17.2	19.6	14.7	22.1
87.5°	9.8	12.2	9.8	12.2
90°	0.0	0.0	0.0	0.0

(END OF REPORT)