

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: P248346

Luminaire Tested: **LSR8B80D010 EC8B80835 8LBDW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P248346
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 EC8B80835 8LBDW0LI
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3500 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8796.0 lumens
Efficiency: N/A
Efficacy: 118.2 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

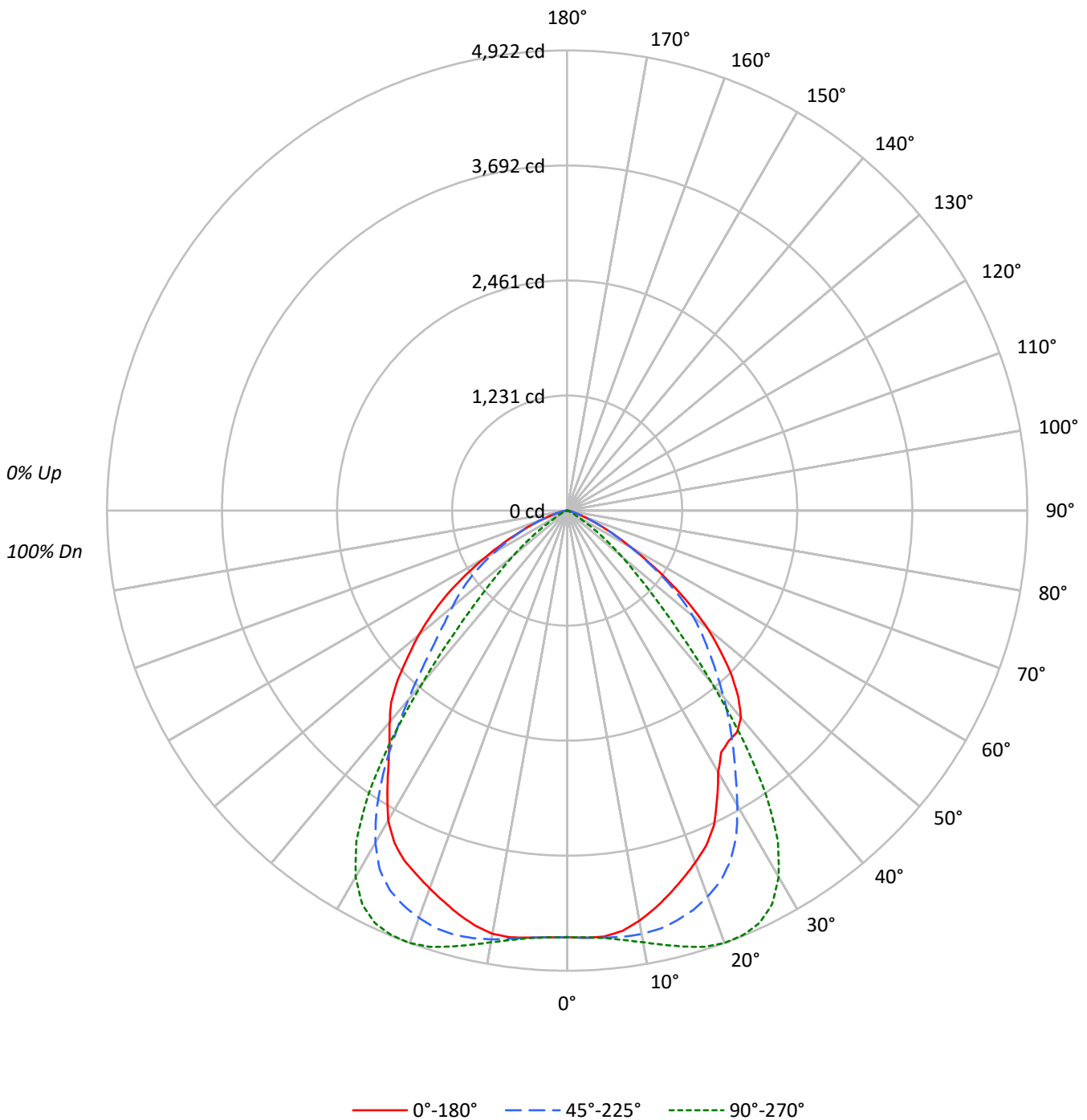
Input Watts (W): 74.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	140709	140709	140709
5°	141547	142070	141921
10°	139467	146822	143941
15°	135390	154101	142809
20°	131458	161501	141076
25°	126413	165640	140421
30°	115042	161099	136260
35°	113328	139588	125366
40°	116410	96815	118846
45°	108369	58515	111748
50°	93998	36133	99577
55°	72137	18881	84508
60°	49141	7617	63782
65°	30572	3889	44005
70°	16598	2407	26858
75°	8662	1156	15870
80°	3871	1296	8595
85°	2583	849	7713



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	438.8	5.0
10°-20°	1300.0	14.8
20°-30°	1983.2	22.5
30°-40°	2069.5	23.5
40°-50°	1554.5	17.7
50°-60°	956.4	10.9
60°-70°	389.2	4.4
70°-80°	91.7	1.0
80°-90°	12.6	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°	3722.0	42.3
0°-40°	5791.5	65.8
0°-60°	8302.4	94.4
0°-90°	8796.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8796.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4563	4563	4563	4563	4563	
5°	4573	4585	4590	4585	4585	433
15°	4241	4539	4827	4694	4473	1195
25°	3715	4132	4868	4483	4127	1689
35°	3010	3095	3708	3427	3330	1901
45°	2485	2151	1342	2003	2562	1896
55°	1342	1274	351	1274	1572	1206
65°	419	424	53	569	603	437
75°	73	73	10	128	133	87
85°	7	7	2	17	22	10
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°	4563.1	4563.1	4563.1	4563.1	4563.1	4563.1	4563.1	4563.1	4563.1	4563.1	4563.1
2.5°	4575.2	4567.9	4575.2	4575.2	4577.6	4572.8	4575.2	4577.6	4572.8	4572.8	4572.8
5°	4572.8	4567.9	4572.8	4570.3	4575.2	4575.2	4580.1	4580.1	4584.9	4584.9	4592.2
7.5°	4534.0	4524.4	4534.0	4541.3	4546.1	4555.8	4567.9	4577.6	4587.3	4597.0	4609.1
10°	4454.1	4454.1	4461.4	4475.9	4490.4	4507.3	4529.2	4553.4	4577.6	4599.4	4621.2
12.5°	4354.8	4347.5	4362.0	4381.4	4403.2	4429.9	4463.8	4500.1	4538.9	4582.4	4616.4
15°	4241.0	4233.7	4250.6	4270.0	4296.7	4335.4	4376.6	4425.0	4480.7	4538.9	4594.6
17.5°	4124.7	4122.3	4139.2	4165.9	4187.7	4228.8	4282.1	4340.2	4403.2	4480.7	4553.4
20°	4006.0	4003.6	4020.6	4042.4	4071.4	4110.2	4163.4	4231.2	4306.3	4393.6	4478.3
22.5°	3882.5	3884.9	3899.4	3923.7	3947.9	3989.0	4044.7	4112.6	4194.9	4289.4	4383.8
25°	3715.4	3703.3	3722.6	3746.9	3788.0	3821.9	3875.2	3947.9	4032.7	4132.0	4243.4
27.5°	3473.2	3470.7	3487.7	3509.5	3545.8	3587.0	3645.1	3720.2	3809.8	3918.8	4027.8
30°	3230.9	3235.8	3243.1	3264.9	3289.1	3330.3	3388.4	3451.4	3536.1	3640.3	3756.5
32.5°	3066.3	3066.3	3076.0	3090.5	3107.4	3129.3	3170.4	3216.4	3281.9	3354.5	3439.3
35°	3010.5	3000.9	3010.5	3013.0	3015.4	3020.3	3027.5	3042.1	3063.8	3095.4	3126.8
37.5°	2986.4	2979.1	2979.1	2969.4	2957.3	2942.8	2923.4	2901.6	2877.4	2845.9	2821.7
40°	2891.9	2887.0	2882.2	2872.5	2845.9	2816.8	2785.3	2734.4	2678.7	2601.2	2523.8
42.5°	2710.3	2705.4	2703.0	2683.6	2659.4	2625.5	2589.1	2535.9	2465.6	2366.3	2254.9
45°	2485.0	2475.3	2468.1	2451.1	2434.1	2405.1	2371.2	2322.7	2252.5	2150.8	2017.5
47.5°	2223.4	2218.6	2216.1	2208.9	2192.0	2174.9	2153.2	2114.4	2051.4	1954.5	1816.5
50°	1959.4	1949.7	1954.5	1952.2	1944.9	1932.8	1918.2	1891.6	1843.1	1756.0	1630.0
52.5°	1656.6	1656.6	1654.3	1661.5	1663.9	1661.5	1663.9	1634.9	1593.7	1528.3	1421.7
55°	1341.8	1341.8	1349.1	1358.8	1368.4	1370.9	1368.4	1356.3	1327.2	1274.0	1179.5
57.5°	1046.3	1041.5	1056.0	1070.5	1080.2	1089.9	1082.6	1073.0	1056.0	1012.4	939.7
60°	796.8	796.8	806.5	816.2	825.9	835.6	833.2	830.7	816.2	787.1	729.0
62.5°	586.1	588.5	588.5	595.8	605.5	615.2	622.4	615.2	607.9	588.5	549.8
65°	419.0	416.6	419.0	426.3	433.6	443.2	448.1	445.7	438.4	423.8	394.8
67.5°	281.0	278.5	288.2	290.6	295.5	305.2	302.8	305.2	302.8	290.6	266.4
70°	184.1	179.2	184.1	181.6	188.9	191.4	196.2	198.6	196.2	188.9	181.6
72.5°	113.8	111.4	113.8	116.3	118.7	121.1	125.9	125.9	123.5	118.7	109.0
75°	72.7	65.4	67.8	63.0	67.8	67.8	72.7	75.1	72.7	72.7	67.8
77.5°	43.6	43.6	43.6	43.6	43.6	43.6	43.6	46.0	48.4	43.6	41.2
80°	21.8	21.8	24.2	24.2	24.2	26.7	24.2	24.2	24.2	26.7	19.4
82.5°	16.9	14.5	14.5	14.5	16.9	14.5	14.5	14.5	14.5	14.5	14.5
85°	7.3	9.7	7.3	4.9	7.3	7.3	9.7	7.3	7.3	7.3	9.7
87.5°	2.4	2.4	0.0	0.0	0.0	2.4	0.0	2.4	2.4	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



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	4563.1	4563.1	4563.1	4563.1	4563.1	4563.1	4563.1	4563.1	4563.1	4563.1	4563.1
2.5°	4575.2	4570.3	4570.3	4567.9	4572.8	4567.9	4570.3	4567.9	4567.9	4572.8	4567.9
5°	4592.2	4594.6	4589.7	4587.3	4594.6	4594.6	4594.6	4589.7	4589.7	4592.2	4589.7
7.5°	4616.4	4621.2	4623.6	4626.1	4630.9	4633.3	4633.3	4630.9	4628.5	4635.8	4626.1
10°	4643.0	4650.3	4664.8	4672.1	4684.2	4684.2	4689.0	4689.0	4684.2	4689.0	4686.6
12.5°	4633.3	4676.9	4701.1	4718.1	4735.0	4749.6	4754.4	4756.8	4754.4	4764.1	4754.4
15°	4650.3	4686.6	4725.4	4754.4	4785.9	4802.8	4807.7	4827.1	4831.9	4834.4	4819.8
17.5°	4623.6	4689.0	4730.2	4773.8	4819.8	4851.3	4880.3	4892.5	4894.9	4899.7	4880.3
20°	4563.1	4635.8	4698.7	4761.7	4815.0	4863.4	4887.6	4921.5	4911.9	4931.3	4904.6
22.5°	4480.7	4563.1	4643.0	4725.4	4781.1	4839.2	4890.1	4914.2	4926.4	4926.4	4897.3
25°	4349.9	4446.8	4534.0	4618.8	4703.6	4773.8	4831.9	4868.3	4875.5	4873.1	4839.2
27.5°	4146.5	4250.6	4352.4	4449.3	4553.4	4635.8	4703.6	4747.1	4759.3	4759.3	4722.9
30°	3865.5	3976.9	4076.3	4192.5	4299.1	4391.1	4485.6	4524.4	4546.1	4546.1	4505.0
32.5°	3531.3	3625.8	3717.8	3831.6	3947.9	4052.0	4141.6	4194.9	4221.6	4219.2	4182.8
35°	3168.0	3214.0	3284.3	3369.0	3473.2	3570.0	3657.2	3708.1	3754.1	3751.7	3717.8
37.5°	2804.7	2792.6	2799.9	2831.3	2896.7	2964.6	3032.4	3080.8	3119.5	3136.5	3129.3
40°	2448.7	2385.7	2325.1	2303.4	2308.2	2332.4	2368.7	2405.1	2448.7	2470.5	2480.1
42.5°	2129.0	2022.4	1915.8	1835.9	1789.9	1775.3	1792.3	1804.4	1831.0	1862.5	1894.0
45°	1872.2	1729.3	1588.8	1465.3	1387.8	1341.8	1332.1	1341.8	1356.3	1387.8	1429.0
47.5°	1661.5	1494.4	1337.0	1198.9	1085.0	1024.5	1007.6	1002.7	1017.2	1046.3	1102.0
50°	1475.0	1307.9	1133.5	973.6	855.0	787.1	762.9	753.2	770.2	792.0	842.8
52.5°	1271.5	1106.9	927.6	772.6	649.1	578.9	552.2	537.7	547.4	576.4	627.3
55°	1051.1	898.5	736.3	576.4	457.7	392.4	360.9	351.2	360.9	392.4	443.2
57.5°	830.7	702.4	566.7	416.6	310.0	244.6	213.1	203.4	230.1	242.2	295.5
60°	649.1	545.0	428.7	305.2	213.1	162.3	130.8	123.5	135.7	157.4	201.0
62.5°	486.8	421.4	329.4	218.0	157.4	104.1	87.2	79.9	87.2	104.1	138.1
65°	353.6	302.8	230.1	159.8	106.6	77.5	58.1	53.3	60.6	72.7	101.8
67.5°	242.2	203.4	159.8	111.4	72.7	48.4	41.2	41.2	43.6	53.3	75.1
70°	157.4	133.2	101.8	72.7	48.4	36.3	31.5	26.7	31.5	38.8	50.8
72.5°	99.3	84.7	65.4	50.8	36.3	26.7	21.8	19.4	24.2	29.0	38.8
75°	60.6	46.0	33.9	26.7	19.4	19.4	19.4	9.7	12.1	19.4	24.2
77.5°	36.3	31.5	26.7	21.8	16.9	9.7	9.7	9.7	12.1	14.5	21.8
80°	19.4	16.9	12.1	12.1	9.7	7.3	9.7	7.3	4.9	12.1	14.5
82.5°	12.1	9.7	9.7	9.7	12.1	4.9	7.3	4.9	7.3	9.7	7.3
85°	7.3	7.3	7.3	4.9	12.1	4.9	4.9	2.4	2.4	4.9	4.9
87.5°	0.0	2.4	2.4	0.0	2.4	0.0	2.4	2.4	2.4	2.4	2.4
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	4563.1	4563.1	4563.1	4563.1	4563.1	4563.1	4563.1	4563.1	4563.1	4563.1	4563.1
2.5°	4570.3	4567.9	4570.3	4567.9	4567.9	4567.9	4570.3	4570.3	4567.9	4567.9	4572.8
5°	4589.7	4589.7	4589.7	4587.3	4584.9	4584.9	4589.7	4589.7	4582.4	4589.7	4589.7
7.5°	4630.9	4623.6	4630.9	4621.2	4616.4	4618.8	4621.2	4616.4	4611.5	4614.0	4614.0
10°	4684.2	4676.9	4676.9	4669.7	4662.4	4657.5	4652.7	4640.6	4628.5	4626.1	4616.4
12.5°	4747.1	4735.0	4727.8	4713.2	4701.1	4684.2	4669.7	4650.3	4626.1	4609.1	4592.2
15°	4810.1	4790.7	4773.8	4749.6	4722.9	4693.8	4662.4	4630.9	4592.2	4558.3	4529.2
17.5°	4861.0	4834.4	4802.8	4764.1	4725.4	4681.8	4635.8	4589.7	4534.0	4490.4	4456.5
20°	4877.9	4839.2	4798.0	4747.1	4696.3	4635.8	4577.6	4517.1	4454.1	4408.1	4369.3
22.5°	4856.2	4810.1	4759.3	4706.0	4638.1	4572.8	4505.0	4434.7	4379.0	4316.0	4279.7
25°	4795.6	4739.9	4684.2	4621.2	4555.8	4483.2	4410.5	4337.9	4270.0	4236.1	4190.1
27.5°	4672.1	4611.5	4551.0	4485.6	4410.5	4337.9	4262.8	4192.5	4134.4	4088.4	4061.7
30°	4454.1	4383.8	4313.6	4243.4	4178.0	4102.9	4032.7	3974.5	3916.4	3880.1	3853.4
32.5°	4119.8	4056.9	3986.7	3918.8	3858.3	3795.3	3737.2	3686.3	3645.1	3620.9	3601.5
35°	3669.4	3606.4	3553.1	3504.7	3453.8	3427.2	3390.8	3361.7	3344.8	3335.1	3332.7
37.5°	3102.6	3066.3	3049.3	3039.6	3029.9	3022.7	3027.5	3039.6	3049.3	3066.3	3085.6
40°	2497.1	2528.6	2538.3	2572.2	2603.7	2644.8	2690.9	2744.2	2787.7	2843.4	2882.2
42.5°	1944.9	2003.0	2070.8	2143.5	2221.0	2296.1	2388.1	2472.9	2550.4	2620.6	2681.2
45°	1494.4	1584.0	1685.7	1789.9	1894.0	2003.0	2114.4	2218.6	2310.6	2385.7	2448.7
47.5°	1165.0	1264.3	1395.1	1523.5	1649.4	1777.8	1901.3	2010.3	2087.8	2160.4	2216.1
50°	922.8	1036.6	1179.5	1327.2	1465.3	1600.9	1731.7	1833.5	1911.0	1969.1	2010.3
52.5°	714.5	850.1	995.4	1150.5	1298.2	1446.0	1567.0	1661.5	1724.5	1775.3	1806.8
55°	532.8	666.1	821.1	980.9	1131.1	1274.0	1387.8	1470.2	1525.9	1554.9	1571.9
57.5°	385.1	506.2	661.2	821.1	956.7	1092.3	1184.4	1259.5	1290.9	1307.9	1315.2
60°	281.0	392.4	530.4	668.5	796.8	905.8	985.8	1036.6	1060.9	1070.5	1068.1
62.5°	205.9	302.8	421.4	537.7	641.8	731.4	794.4	828.3	840.5	845.3	838.0
65°	157.4	232.5	334.2	423.8	503.8	569.2	615.2	637.0	644.2	641.8	637.0
67.5°	116.3	174.4	249.5	317.3	375.4	426.3	450.5	469.9	474.7	467.5	460.2
70°	82.4	128.4	181.6	227.7	271.2	300.3	327.0	329.4	329.4	327.0	322.2
72.5°	58.1	89.6	123.5	155.0	181.6	203.4	213.1	220.4	218.0	215.5	210.7
75°	38.8	55.7	89.6	96.9	121.1	128.4	138.1	138.1	140.5	133.2	133.2
77.5°	24.2	38.8	53.3	63.0	72.7	82.4	87.2	87.2	89.6	87.2	87.2
80°	14.5	24.2	29.0	43.6	43.6	50.8	53.3	55.7	50.8	58.1	50.8
82.5°	9.7	14.5	21.8	21.8	26.7	31.5	31.5	33.9	33.9	31.5	31.5
85°	7.3	9.7	12.1	14.5	14.5	16.9	14.5	14.5	16.9	19.4	16.9
87.5°	2.4	4.9	2.4	4.9	4.9	9.7	7.3	7.3	7.3	9.7	9.7
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: P248346

CATALOG NUMBER: LSR8B80D010 EC8B80835 8LBDW0LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	4563.1	4563.1	4563.1	4563.1
2.5°	4567.9	4570.3	4567.9	4567.9
5°	4589.7	4587.3	4589.7	4584.9
7.5°	4606.7	4606.7	4604.2	4604.2
10°	4606.7	4597.0	4597.0	4597.0
12.5°	4570.3	4558.3	4551.0	4546.1
15°	4507.3	4485.6	4475.9	4473.4
17.5°	4425.0	4405.7	4393.6	4386.3
20°	4330.6	4311.2	4296.7	4299.1
22.5°	4248.2	4226.4	4216.7	4211.9
25°	4165.9	4139.2	4132.0	4127.1
27.5°	4032.7	4018.1	4010.8	4003.6
30°	3829.2	3821.9	3809.8	3826.8
32.5°	3594.3	3582.1	3572.5	3579.8
35°	3335.1	3327.8	3335.1	3330.3
37.5°	3097.8	3105.0	3114.7	3119.5
40°	2911.3	2937.9	2947.6	2952.4
42.5°	2724.8	2756.3	2775.6	2787.7
45°	2494.7	2526.1	2547.9	2562.5
47.5°	2257.3	2284.0	2305.7	2303.4
50°	2041.8	2056.3	2066.0	2075.7
52.5°	1823.8	1823.8	1826.2	1826.2
55°	1576.7	1571.9	1569.5	1571.9
57.5°	1305.4	1300.6	1298.2	1290.9
60°	1058.4	1043.9	1034.2	1034.2
62.5°	828.3	811.4	804.1	801.7
65°	622.4	620.0	605.5	603.1
67.5°	450.5	440.8	431.1	433.6
70°	317.3	302.8	302.8	297.9
72.5°	205.9	198.6	196.2	196.2
75°	128.4	128.4	123.5	133.2
77.5°	84.7	84.7	82.4	84.7
80°	50.8	50.8	50.8	48.4
82.5°	31.5	33.9	31.5	31.5
85°	16.9	19.4	14.5	21.8
87.5°	9.7	12.1	9.7	12.1
90°	0.0	0.0	0.0	0.0

(END OF REPORT)