

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: P248454

Luminaire Tested: **LSR8B80D010 EC8B80835 8LBDW0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P248454
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 8LBDW0WH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3500 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8554.0 lumens
Efficiency: N/A
Efficacy: 115.0 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

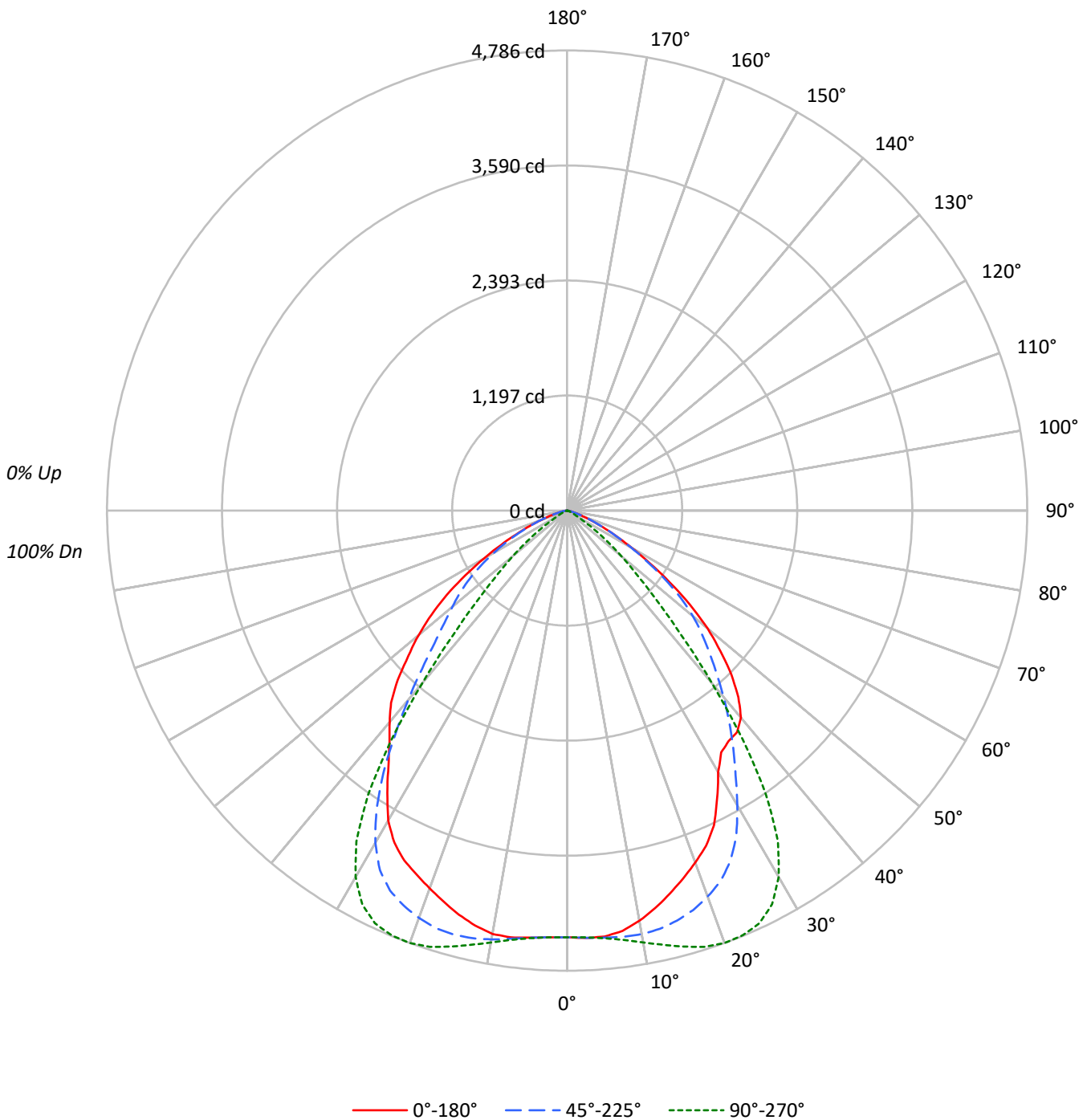
Input Watts (W): 74.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P248454

CATALOG NUMBER: LSR8B80D010 EC8B80835 8LBDW0WH

Luminous Intensity Polar Plot





TEST NUMBER: P248454

CATALOG NUMBER: LSR8B80D010 EC8B80835 8LBDW0WH

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°	136836	136836	136836
5°	137653	138161	138015
10°	135628	142783	139980
15°	131665	149861	138883
20°	127842	157057	137194
25°	122933	161080	136559
30°	111880	156666	132510
35°	110211	135749	121914
40°	113206	94150	115577
45°	105386	56906	108674
50°	91412	35140	96838
55°	70153	18360	82180
60°	47790	7407	62024
65°	29733	3780	42794
70°	16139	2335	26119
75°	8423	1120	15441
80°	3765	1261	8364
85°	2512	849	7501



TEST NUMBER: P248454

CATALOG NUMBER: LSR8B80D010 EC8B80835 8LBDW0WH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	426.7	5.0
10°-20°	1264.2	14.8
20°-30°	1928.7	22.5
30°-40°	2012.6	23.5
40°-50°	1511.7	17.7
50°-60°	930.1	10.9
60°-70°	378.5	4.4
70°-80°	89.2	1.0
80°-90°	12.3	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°	3619.6	42.3
0°-40°	5632.2	65.8
0°-60°	8074.0	94.4
0°-90°	8554.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8554.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4438	4438	4438	4438	4438	
5°	4447	4459	4463	4459	4459	421
15°	4124	4414	4694	4565	4350	1162
25°	3613	4018	4734	4360	4014	1643
35°	2928	3010	3606	3333	3239	1849
45°	2417	2092	1305	1948	2492	1844
55°	1305	1239	342	1239	1529	1173
65°	408	412	52	554	586	425
75°	71	71	9	125	130	85
85°	7	7	2	16	21	10
90°	0	0	0	0	0	



TEST NUMBER: P248454

CATALOG NUMBER: LSR8B80D010 EC8B80835 8LBDW0WH

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	4437.5	4437.5	4437.5	4437.5	4437.5	4437.5	4437.5	4437.5	4437.5	4437.5	4437.5
2.5°	4449.3	4442.2	4449.3	4449.3	4451.7	4447.0	4449.3	4451.7	4447.0	4447.0	4447.0
5°	4447.0	4442.2	4447.0	4444.6	4449.3	4449.3	4454.1	4454.1	4458.7	4458.7	4465.8
7.5°	4409.3	4399.9	4409.3	4416.4	4421.0	4430.5	4442.2	4451.7	4461.1	4470.5	4482.3
10°	4331.5	4331.5	4338.6	4352.7	4366.9	4383.3	4404.5	4428.1	4451.7	4472.8	4494.1
12.5°	4235.0	4227.9	4242.0	4260.9	4282.1	4308.0	4341.0	4376.3	4414.0	4456.4	4489.4
15°	4124.3	4117.2	4133.7	4152.5	4178.5	4216.1	4256.2	4303.3	4357.5	4414.0	4468.2
17.5°	4011.2	4008.8	4025.3	4051.3	4072.5	4112.5	4164.3	4220.8	4282.1	4357.5	4428.1
20°	3895.8	3893.5	3909.9	3931.2	3959.4	3997.1	4048.9	4114.8	4187.9	4272.7	4355.1
22.5°	3775.7	3778.0	3792.1	3815.7	3839.3	3879.3	3933.5	3999.4	4079.5	4171.4	4263.2
25°	3613.1	3601.4	3620.2	3643.8	3683.8	3716.8	3768.6	3839.3	3921.7	4018.3	4126.6
27.5°	3377.6	3375.2	3391.8	3412.9	3448.3	3488.3	3544.8	3617.9	3705.0	3811.0	3917.0
30°	3142.1	3146.8	3153.9	3175.1	3198.6	3238.6	3295.2	3356.4	3438.9	3540.1	3653.2
32.5°	2981.9	2981.9	2991.3	3005.5	3021.9	3043.2	3083.2	3127.9	3191.6	3262.2	3344.6
35°	2927.7	2918.3	2927.7	2930.1	2932.4	2937.2	2944.2	2958.4	2979.5	3010.2	3040.8
37.5°	2904.2	2897.1	2897.1	2887.7	2875.9	2861.8	2842.9	2821.7	2798.2	2767.6	2744.0
40°	2812.3	2807.6	2802.9	2793.5	2767.6	2739.3	2708.7	2659.2	2605.0	2529.7	2454.3
42.5°	2635.7	2631.0	2628.6	2609.8	2586.2	2553.2	2517.9	2466.1	2397.8	2301.2	2192.9
45°	2416.6	2407.2	2400.2	2383.7	2367.1	2338.9	2305.9	2258.8	2190.5	2091.6	1962.0
47.5°	2162.2	2157.5	2155.2	2148.1	2131.6	2115.1	2094.0	2056.3	1995.0	1900.8	1766.5
50°	1905.5	1896.1	1900.8	1898.5	1891.4	1879.6	1865.4	1839.6	1792.4	1707.6	1585.2
52.5°	1611.1	1611.1	1608.7	1615.8	1618.1	1615.8	1618.1	1589.9	1549.8	1486.2	1382.6
55°	1304.9	1304.9	1311.9	1321.4	1330.8	1333.1	1330.8	1319.0	1290.7	1238.9	1147.1
57.5°	1017.5	1012.8	1026.9	1041.1	1050.5	1059.9	1052.8	1043.4	1026.9	984.5	913.9
60°	774.9	774.9	784.3	793.8	803.2	812.6	810.3	807.9	793.8	765.5	709.0
62.5°	570.0	572.3	572.3	579.4	588.8	598.3	605.3	598.3	591.2	572.3	534.7
65°	407.5	405.1	407.5	414.5	421.6	431.0	435.8	433.4	426.3	412.2	383.9
67.5°	273.2	270.9	280.3	282.6	287.4	296.8	294.4	296.8	294.4	282.6	259.1
70°	179.0	174.3	179.0	176.6	183.7	186.1	190.8	193.1	190.8	183.7	176.6
72.5°	110.7	108.3	110.7	113.1	115.4	117.7	122.5	122.5	120.1	115.4	106.0
75°	70.7	63.6	65.9	61.3	65.9	65.9	70.7	73.0	70.7	70.7	65.9
77.5°	42.4	42.4	42.4	42.4	42.4	42.4	42.4	44.8	47.1	42.4	40.1
80°	21.2	21.2	23.6	23.6	23.6	25.9	23.6	23.6	23.6	25.9	18.8
82.5°	16.5	14.1	14.1	14.1	16.5	14.1	14.1	14.1	14.1	14.1	14.1
85°	7.1	9.4	7.1	4.7	7.1	7.1	9.4	7.1	7.1	7.1	9.4
87.5°	2.4	2.4	0.0	0.0	0.0	2.4	0.0	2.4	2.4	4.7	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: P248454

CATALOG NUMBER: LSR8B80D010 EC8B80835 8LBDW0WH

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	4437.5	4437.5	4437.5	4437.5	4437.5	4437.5	4437.5	4437.5	4437.5	4437.5	4437.5
2.5°	4449.3	4444.6	4444.6	4442.2	4447.0	4442.2	4444.6	4442.2	4442.2	4447.0	4442.2
5°	4465.8	4468.2	4463.4	4461.1	4468.2	4468.2	4468.2	4463.4	4463.4	4465.8	4463.4
7.5°	4489.4	4494.1	4496.4	4498.8	4503.5	4505.9	4505.9	4503.5	4501.1	4508.2	4498.8
10°	4515.3	4522.3	4536.5	4543.6	4555.3	4555.3	4560.0	4560.0	4555.3	4560.0	4557.7
12.5°	4505.9	4548.2	4571.8	4588.3	4604.8	4618.9	4623.6	4626.0	4623.6	4633.1	4623.6
15°	4522.3	4557.7	4595.4	4623.6	4654.2	4670.7	4675.4	4694.3	4699.0	4701.4	4687.2
17.5°	4496.4	4560.0	4600.0	4642.5	4687.2	4717.8	4746.1	4757.9	4760.3	4764.9	4746.1
20°	4437.5	4508.2	4569.4	4630.7	4682.5	4729.6	4753.2	4786.1	4776.7	4795.6	4769.6
22.5°	4357.5	4437.5	4515.3	4595.4	4649.5	4706.1	4755.5	4779.0	4790.9	4790.9	4762.6
25°	4230.3	4324.5	4409.3	4491.7	4574.2	4642.5	4699.0	4734.3	4741.4	4739.0	4706.1
27.5°	4032.4	4133.7	4232.6	4326.9	4428.1	4508.2	4574.2	4616.5	4628.3	4628.3	4593.0
30°	3759.2	3867.5	3964.1	4077.1	4180.8	4270.3	4362.2	4399.9	4421.0	4421.0	4381.0
32.5°	3434.1	3526.0	3615.5	3726.2	3839.3	3940.5	4027.7	4079.5	4105.4	4103.1	4067.7
35°	3080.8	3125.6	3193.9	3276.3	3377.6	3471.8	3556.6	3606.1	3650.8	3648.5	3615.5
37.5°	2727.5	2715.7	2722.8	2753.4	2817.0	2883.0	2948.9	2996.1	3033.7	3050.2	3043.2
40°	2381.3	2320.0	2261.1	2240.0	2244.7	2268.2	2303.6	2338.9	2381.3	2402.5	2411.9
42.5°	2070.4	1966.8	1863.1	1785.4	1740.6	1726.5	1743.0	1754.7	1780.7	1811.3	1841.9
45°	1820.7	1681.8	1545.1	1425.0	1349.6	1304.9	1295.5	1304.9	1319.0	1349.6	1389.7
47.5°	1615.8	1453.3	1300.2	1165.9	1055.2	996.3	979.9	975.1	989.3	1017.5	1071.7
50°	1434.4	1271.9	1102.3	946.8	831.5	765.5	742.0	732.5	749.0	770.2	819.6
52.5°	1236.6	1076.4	902.1	751.4	631.2	563.0	537.0	522.9	532.3	560.6	610.0
55°	1022.2	873.8	716.0	560.6	445.2	381.6	350.9	341.5	350.9	381.6	431.0
57.5°	807.9	683.1	551.1	405.1	301.5	237.9	207.2	197.9	223.8	235.5	287.4
60°	631.2	530.0	416.9	296.8	207.2	157.8	127.2	120.1	131.9	153.1	195.5
62.5°	473.4	409.8	320.3	212.0	153.1	101.3	84.8	77.7	84.8	101.3	134.3
65°	343.9	294.4	223.8	155.4	103.6	75.4	56.5	51.8	58.9	70.7	99.0
67.5°	235.5	197.9	155.4	108.3	70.7	47.1	40.1	40.1	42.4	51.8	73.0
70°	153.1	129.6	99.0	70.7	47.1	35.3	30.6	25.9	30.6	37.7	49.4
72.5°	96.6	82.4	63.6	49.4	35.3	25.9	21.2	18.8	23.6	28.2	37.7
75°	58.9	44.8	33.0	25.9	18.8	18.8	18.8	9.4	11.8	18.8	23.6
77.5°	35.3	30.6	25.9	21.2	16.5	9.4	9.4	9.4	11.8	14.1	21.2
80°	18.8	16.5	11.8	11.8	9.4	7.1	9.4	7.1	4.7	11.8	14.1
82.5°	11.8	9.4	9.4	9.4	11.8	4.7	7.1	4.7	7.1	9.4	7.1
85°	7.1	7.1	7.1	4.7	11.8	4.7	4.7	2.4	2.4	4.7	4.7
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



TEST NUMBER: P248454

CATALOG NUMBER: LSR8B80D010 EC8B80835 8LBDW0WH

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	4437.5	4437.5	4437.5	4437.5	4437.5	4437.5	4437.5	4437.5	4437.5	4437.5	4437.5
2.5°	4444.6	4442.2	4444.6	4442.2	4442.2	4442.2	4444.6	4444.6	4442.2	4442.2	4447.0
5°	4463.4	4463.4	4463.4	4461.1	4458.7	4458.7	4463.4	4463.4	4456.4	4463.4	4463.4
7.5°	4503.5	4496.4	4503.5	4494.1	4489.4	4491.7	4494.1	4489.4	4484.7	4487.0	4487.0
10°	4555.3	4548.2	4548.2	4541.2	4534.1	4529.4	4524.7	4512.9	4501.1	4498.8	4489.4
12.5°	4616.5	4604.8	4597.7	4583.6	4571.8	4555.3	4541.2	4522.3	4498.8	4482.3	4465.8
15°	4677.8	4658.9	4642.5	4618.9	4593.0	4564.7	4534.1	4503.5	4465.8	4432.8	4404.5
17.5°	4727.2	4701.4	4670.7	4633.1	4595.4	4553.0	4508.2	4463.4	4409.3	4366.9	4333.9
20°	4743.7	4706.1	4666.0	4616.5	4567.1	4508.2	4451.7	4392.8	4331.5	4286.8	4249.1
22.5°	4722.6	4677.8	4628.3	4576.5	4510.5	4447.0	4381.0	4312.7	4258.5	4197.3	4162.0
25°	4663.7	4609.5	4555.3	4494.1	4430.5	4359.8	4289.2	4218.5	4152.5	4119.6	4074.8
27.5°	4543.6	4484.7	4425.8	4362.2	4289.2	4218.5	4145.5	4077.1	4020.7	3975.9	3950.0
30°	4331.5	4263.2	4194.9	4126.6	4063.0	3990.0	3921.7	3865.2	3808.6	3773.3	3747.4
32.5°	4006.5	3945.3	3877.0	3811.0	3752.1	3690.9	3634.3	3584.9	3544.8	3521.3	3502.4
35°	3568.4	3507.2	3455.3	3408.3	3358.8	3332.9	3297.5	3269.2	3252.8	3243.4	3241.0
37.5°	3017.2	2981.9	2965.4	2956.0	2946.6	2939.5	2944.2	2956.0	2965.4	2981.9	3000.7
40°	2428.4	2459.0	2468.4	2501.4	2532.0	2572.1	2616.9	2668.7	2711.0	2765.2	2802.9
42.5°	1891.4	1947.9	2013.8	2084.5	2159.9	2232.9	2322.4	2404.8	2480.2	2548.5	2607.4
45°	1453.3	1540.4	1639.4	1740.6	1841.9	1947.9	2056.3	2157.5	2247.0	2320.0	2381.3
47.5°	1132.9	1229.5	1356.7	1481.6	1604.0	1728.9	1849.0	1954.9	2030.3	2101.0	2155.2
50°	897.4	1008.1	1147.1	1290.7	1425.0	1556.9	1684.1	1783.0	1858.4	1914.9	1954.9
52.5°	694.8	826.7	968.1	1118.8	1262.5	1406.2	1523.9	1615.8	1677.0	1726.5	1757.1
55°	518.2	647.7	798.5	953.9	1100.0	1238.9	1349.6	1429.7	1483.9	1512.2	1528.6
57.5°	374.5	492.3	643.0	798.5	930.4	1062.3	1151.8	1224.8	1255.4	1271.9	1279.0
60°	273.2	381.6	515.8	650.1	774.9	880.9	958.7	1008.1	1031.7	1041.1	1038.7
62.5°	200.2	294.4	409.8	522.9	624.2	711.3	772.6	805.5	817.3	822.0	815.0
65°	153.1	226.1	325.0	412.2	489.9	553.5	598.3	619.5	626.5	624.2	619.5
67.5°	113.1	169.6	242.6	308.6	365.1	414.5	438.1	457.0	461.6	454.6	447.5
70°	80.1	124.8	176.6	221.4	263.8	292.1	318.0	320.3	320.3	318.0	313.3
72.5°	56.5	87.1	120.1	150.8	176.6	197.9	207.2	214.3	212.0	209.6	204.9
75°	37.7	54.2	87.1	94.2	117.7	124.8	134.3	134.3	136.6	129.6	129.6
77.5°	23.6	37.7	51.8	61.3	70.7	80.1	84.8	84.8	87.1	84.8	84.8
80°	14.1	23.6	28.2	42.4	42.4	49.4	51.8	54.2	49.4	56.5	49.4
82.5°	9.4	14.1	21.2	21.2	25.9	30.6	30.6	33.0	33.0	30.6	30.6
85°	7.1	9.4	11.8	14.1	14.1	16.5	14.1	14.1	16.5	18.8	16.5
87.5°	2.4	4.7	2.4	4.7	4.7	9.4	7.1	7.1	7.1	9.4	9.4
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: P248454

CATALOG NUMBER: LSR8B80D010 EC8B80835 8LBDW0WH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	4437.5	4437.5	4437.5	4437.5
2.5°	4442.2	4444.6	4442.2	4442.2
5°	4463.4	4461.1	4463.4	4458.7
7.5°	4479.9	4479.9	4477.6	4477.6
10°	4479.9	4470.5	4470.5	4470.5
12.5°	4444.6	4432.8	4425.8	4421.0
15°	4383.3	4362.2	4352.7	4350.4
17.5°	4303.3	4284.4	4272.7	4265.6
20°	4211.4	4192.6	4178.5	4180.8
22.5°	4131.3	4110.2	4100.7	4096.0
25°	4051.3	4025.3	4018.3	4013.6
27.5°	3921.7	3907.6	3900.5	3893.5
30°	3723.9	3716.8	3705.0	3721.5
32.5°	3495.4	3483.6	3474.2	3481.3
35°	3243.4	3236.3	3243.4	3238.6
37.5°	3012.6	3019.6	3029.0	3033.7
40°	2831.2	2857.1	2866.5	2871.2
42.5°	2649.8	2680.4	2699.3	2711.0
45°	2426.0	2456.6	2477.8	2492.0
47.5°	2195.2	2221.1	2242.3	2240.0
50°	1985.6	1999.7	2009.1	2018.6
52.5°	1773.6	1773.6	1775.9	1775.9
55°	1533.4	1528.6	1526.3	1528.6
57.5°	1269.5	1264.9	1262.5	1255.4
60°	1029.3	1015.2	1005.7	1005.7
62.5°	805.5	789.0	782.0	779.6
65°	605.3	603.0	588.8	586.5
67.5°	438.1	428.7	419.3	421.6
70°	308.6	294.4	294.4	289.7
72.5°	200.2	193.1	190.8	190.8
75°	124.8	124.8	120.1	129.6
77.5°	82.4	82.4	80.1	82.4
80°	49.4	49.4	49.4	47.1
82.5°	30.6	33.0	30.6	30.6
85°	16.5	18.8	14.1	21.2
87.5°	9.4	11.8	9.4	11.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)