

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: P248518

Luminaire Tested: **LSR8B90D010 EC8B90950 8LBDW0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P248518
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: LSR8B90D010 EC8B90950 8LBDW0WH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 5000 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8884.0 lumens
Efficiency: N/A
Efficacy: 103.2 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

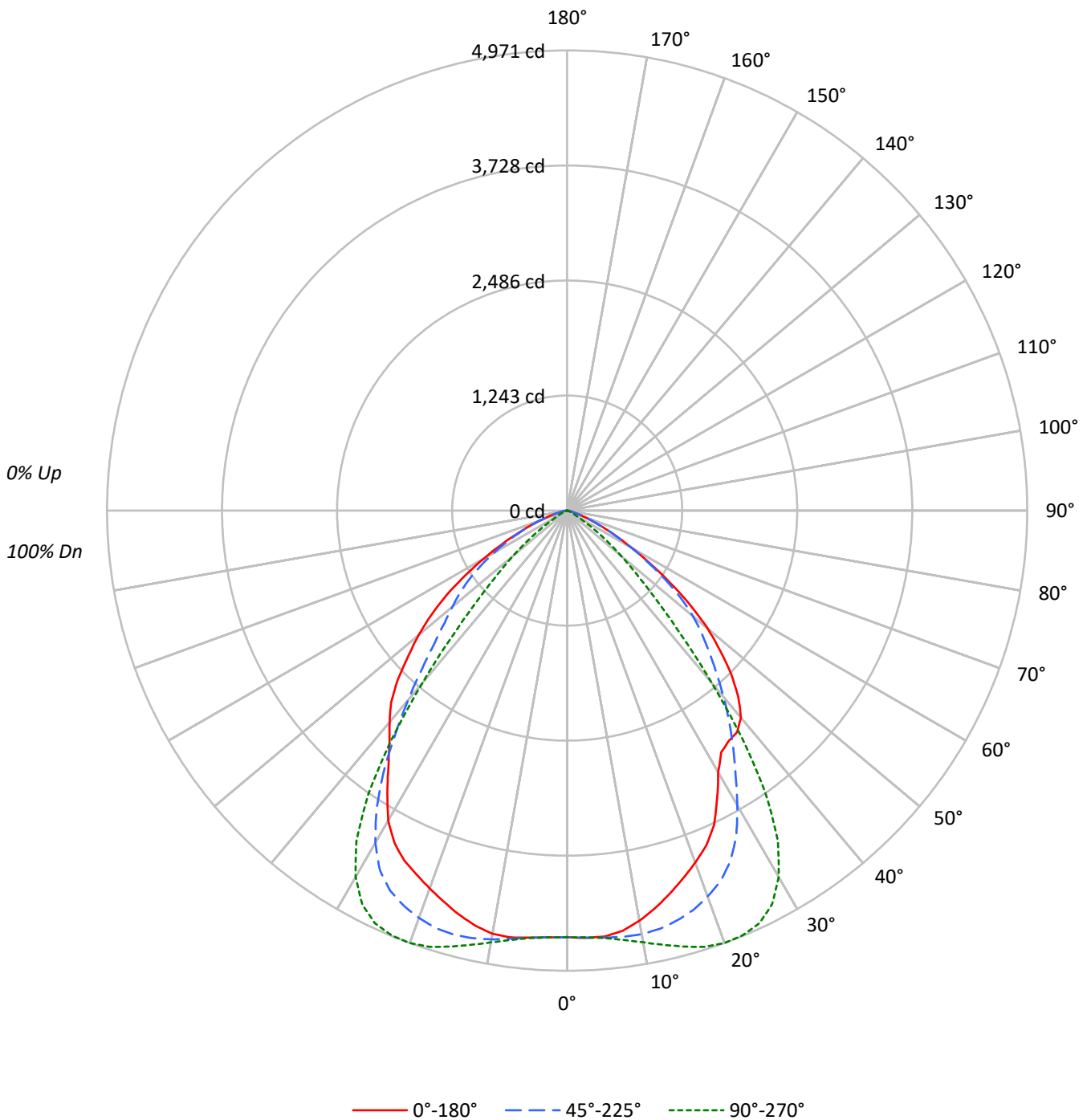
Input Watts (W): 86.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	142115	142115	142115
5°	142962	143491	143339
10°	140860	148294	145382
15°	136744	155643	144239
20°	132774	163118	142487
25°	127675	167297	141826
30°	116195	162708	137623
35°	114465	140985	126620
40°	117574	97781	120033
45°	109455	59099	112869
50°	94938	36498	100570
55°	72858	19069	85352
60°	49634	7691	64417
65°	30879	3926	44443
70°	16761	2425	27129
75°	8745	1168	16037
80°	3907	1314	8684
85°	2618	885	7784



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	443.2	5.0
10°-20°	1313.0	14.8
20°-30°	2003.1	22.5
30°-40°	2090.2	23.5
40°-50°	1570.0	17.7
50°-60°	966.0	10.9
60°-70°	393.1	4.4
70°-80°	92.6	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°	3759.2	42.3
0°-40°	5849.5	65.8
0°-60°	8385.5	94.4
0°-90°	8884.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8884.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4609	4609	4609	4609	4609	
5°	4618	4631	4636	4631	4631	437
15°	4283	4584	4875	4741	4518	1207
25°	3752	4173	4917	4528	4168	1706
35°	3041	3126	3745	3462	3364	1920
45°	2510	2172	1355	2023	2588	1915
55°	1355	1287	355	1287	1588	1218
65°	423	428	54	575	609	441
75°	73	73	10	130	135	88
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°	4608.7	4608.7	4608.7	4608.7	4608.7	4608.7	4608.7	4608.7	4608.7	4608.7	4608.7
2.5°	4621.0	4613.6	4621.0	4621.0	4623.4	4618.5	4621.0	4623.4	4618.5	4618.5	4618.5
5°	4618.5	4613.6	4618.5	4616.1	4621.0	4621.0	4625.9	4625.9	4630.7	4630.7	4638.1
7.5°	4579.4	4569.6	4579.4	4586.7	4591.6	4601.4	4613.6	4623.4	4633.2	4643.0	4655.2
10°	4498.6	4498.6	4506.0	4520.7	4535.3	4552.4	4574.5	4598.9	4623.4	4645.4	4667.4
12.5°	4398.4	4391.0	4405.7	4425.2	4447.3	4474.2	4508.4	4545.1	4584.3	4628.3	4662.6
15°	4283.4	4276.0	4293.1	4312.7	4339.7	4378.8	4420.4	4469.3	4525.6	4584.3	4640.5
17.5°	4166.0	4163.5	4180.6	4207.6	4229.6	4271.1	4325.0	4383.6	4447.3	4525.6	4598.9
20°	4046.1	4043.7	4060.8	4082.8	4112.1	4151.3	4205.1	4273.6	4349.4	4437.5	4523.1
22.5°	3921.3	3923.8	3938.4	3962.9	3987.4	4028.9	4085.2	4153.7	4236.9	4332.3	4427.7
25°	3752.5	3740.3	3759.9	3784.4	3825.9	3860.2	3914.0	3987.4	4073.0	4173.3	4285.8
27.5°	3507.9	3505.4	3522.6	3544.6	3581.3	3622.9	3681.6	3757.4	3847.9	3958.0	4068.1
30°	3263.3	3268.2	3275.5	3297.6	3322.0	3363.6	3422.3	3485.9	3571.5	3676.7	3794.1
32.5°	3096.9	3096.9	3106.7	3121.4	3138.5	3160.6	3202.2	3248.6	3314.7	3388.1	3473.7
35°	3040.7	3030.9	3040.7	3043.1	3045.6	3050.5	3057.8	3072.5	3094.5	3126.3	3158.1
37.5°	3016.2	3008.9	3008.9	2999.1	2986.9	2972.2	2952.6	2930.6	2906.2	2874.3	2849.9
40°	2920.8	2915.9	2911.0	2901.3	2874.3	2845.0	2813.2	2761.8	2705.5	2627.2	2549.0
42.5°	2737.4	2732.5	2730.0	2710.4	2686.0	2651.7	2615.0	2561.2	2490.3	2390.0	2277.4
45°	2509.9	2500.1	2492.7	2475.6	2458.5	2429.1	2394.9	2345.9	2275.0	2172.3	2037.7
47.5°	2245.7	2240.8	2238.3	2231.0	2213.9	2196.7	2174.7	2135.6	2072.0	1974.1	1834.7
50°	1979.0	1969.2	1974.1	1971.7	1964.3	1952.1	1937.4	1910.5	1861.6	1773.5	1646.3
52.5°	1673.2	1673.2	1670.8	1678.1	1680.6	1678.1	1680.6	1651.2	1609.6	1543.6	1435.9
55°	1355.2	1355.2	1362.6	1372.4	1382.1	1384.6	1382.1	1369.9	1340.5	1286.7	1191.3
57.5°	1056.8	1051.9	1066.6	1081.2	1091.0	1100.8	1093.4	1083.7	1066.6	1022.5	949.1
60°	804.8	804.8	814.6	824.4	834.1	844.0	841.5	839.1	824.4	795.0	736.3
62.5°	592.0	594.4	594.4	601.8	611.5	621.4	628.7	621.4	614.0	594.4	555.3
65°	423.2	420.7	423.2	430.5	437.9	447.7	452.6	450.1	442.8	428.1	398.8
67.5°	283.8	281.3	291.1	293.5	298.4	308.3	305.8	308.3	305.8	293.5	269.1
70°	185.9	181.0	185.9	183.5	190.8	193.3	198.1	200.6	198.1	190.8	183.5
72.5°	115.0	112.5	115.0	117.4	119.9	122.3	127.2	127.2	124.7	119.9	110.1
75°	73.4	66.0	68.5	63.6	68.5	68.5	73.4	75.8	73.4	73.4	68.5
77.5°	44.1	44.1	44.1	44.1	44.1	44.1	44.1	46.5	48.9	44.1	41.6
80°	22.0	22.0	24.5	24.5	24.5	26.9	24.5	24.5	24.5	26.9	19.6
82.5°	17.1	14.7	14.7	14.7	17.1	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



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	4608.7	4608.7	4608.7	4608.7	4608.7	4608.7	4608.7	4608.7	4608.7	4608.7	4608.7
2.5°	4621.0	4616.1	4616.1	4613.6	4618.5	4613.6	4616.1	4613.6	4613.6	4618.5	4613.6
5°	4638.1	4640.5	4635.6	4633.2	4640.5	4640.5	4640.5	4635.6	4635.6	4638.1	4635.6
7.5°	4662.6	4667.4	4669.9	4672.3	4677.2	4679.7	4679.7	4677.2	4674.8	4682.1	4672.3
10°	4689.5	4696.8	4711.5	4718.8	4731.0	4731.0	4736.0	4736.0	4731.0	4736.0	4733.5
12.5°	4679.7	4723.7	4748.2	4765.3	4782.4	4797.1	4802.0	4804.4	4802.0	4811.8	4802.0
15°	4696.8	4733.5	4772.6	4802.0	4833.8	4850.9	4855.8	4875.4	4880.3	4882.7	4868.1
17.5°	4669.9	4736.0	4777.5	4821.6	4868.1	4899.8	4929.2	4941.4	4943.9	4948.7	4929.2
20°	4608.7	4682.1	4745.7	4809.3	4863.2	4912.1	4936.5	4970.8	4961.0	4980.6	4953.7
22.5°	4525.6	4608.7	4689.5	4772.6	4828.9	4887.6	4939.0	4963.4	4975.7	4975.7	4946.3
25°	4393.5	4491.3	4579.4	4665.0	4750.6	4821.6	4880.3	4917.0	4924.3	4921.9	4887.6
27.5°	4188.0	4293.1	4395.9	4493.8	4598.9	4682.1	4750.6	4794.6	4806.9	4806.9	4770.2
30°	3904.2	4016.7	4117.1	4234.4	4342.1	4435.1	4530.5	4569.6	4591.6	4591.6	4550.0
32.5°	3566.6	3662.0	3755.0	3870.0	3987.4	4092.6	4183.1	4236.9	4263.8	4261.4	4224.7
35°	3199.7	3246.2	3317.1	3402.7	3507.9	3605.8	3693.8	3745.2	3791.7	3789.2	3755.0
37.5°	2832.7	2820.5	2827.9	2859.7	2925.7	2994.2	3062.7	3111.7	3150.7	3167.9	3160.6
40°	2473.2	2409.5	2348.4	2326.4	2331.3	2355.7	2392.4	2429.1	2473.2	2495.2	2505.0
42.5°	2150.3	2042.6	1935.0	1854.3	1807.8	1793.1	1810.2	1822.4	1849.4	1881.1	1913.0
45°	1891.0	1746.6	1604.7	1480.0	1401.7	1355.2	1345.4	1355.2	1369.9	1401.7	1443.3
47.5°	1678.1	1509.3	1350.3	1210.9	1095.9	1034.8	1017.7	1012.8	1027.4	1056.8	1113.0
50°	1489.7	1321.0	1144.9	983.4	863.5	795.0	770.6	760.8	777.9	799.9	851.3
52.5°	1284.3	1117.9	936.9	780.3	655.6	584.7	557.7	543.1	552.8	582.2	633.6
55°	1061.7	907.5	743.6	582.2	462.3	396.3	364.5	354.7	364.5	396.3	447.7
57.5°	839.1	709.4	572.4	420.7	313.1	247.1	215.2	205.5	232.4	244.6	298.4
60°	655.6	550.4	433.0	308.3	215.2	163.9	132.1	124.7	137.0	159.0	203.0
62.5°	491.7	425.6	332.7	220.1	159.0	105.2	88.0	80.7	88.0	105.2	139.5
65°	357.2	305.8	232.4	161.4	107.6	78.3	58.7	53.8	61.2	73.4	102.8
67.5°	244.6	205.5	161.4	112.5	73.4	48.9	41.6	41.6	44.1	53.8	75.8
70°	159.0	134.6	102.8	73.4	48.9	36.7	31.8	26.9	31.8	39.1	51.4
72.5°	100.3	85.6	66.0	51.4	36.7	26.9	22.0	19.6	24.5	29.3	39.1
75°	61.2	46.5	34.2	26.9	19.6	19.6	19.6	9.8	12.2	19.6	24.5
77.5°	36.7	31.8	26.9	22.0	17.1	9.8	9.8	9.8	12.2	14.7	22.0
80°	19.6	17.1	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



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	4608.7	4608.7	4608.7	4608.7	4608.7	4608.7	4608.7	4608.7	4608.7	4608.7	4608.7
2.5°	4616.1	4613.6	4616.1	4613.6	4613.6	4613.6	4616.1	4616.1	4613.6	4613.6	4618.5
5°	4635.6	4635.6	4635.6	4633.2	4630.7	4630.7	4635.6	4635.6	4628.3	4635.6	4635.6
7.5°	4677.2	4669.9	4677.2	4667.4	4662.6	4665.0	4667.4	4662.6	4657.7	4660.1	4660.1
10°	4731.0	4723.7	4723.7	4716.4	4709.0	4704.1	4699.3	4687.0	4674.8	4672.3	4662.6
12.5°	4794.6	4782.4	4775.1	4760.4	4748.2	4731.0	4716.4	4696.8	4672.3	4655.2	4638.1
15°	4858.2	4838.7	4821.6	4797.1	4770.2	4740.8	4709.0	4677.2	4638.1	4603.9	4574.5
17.5°	4909.6	4882.7	4850.9	4811.8	4772.6	4728.6	4682.1	4635.6	4579.4	4535.3	4501.1
20°	4926.7	4887.6	4846.0	4794.6	4743.3	4682.1	4623.4	4562.3	4498.6	4452.2	4413.0
22.5°	4904.8	4858.2	4806.9	4753.1	4684.5	4618.5	4550.0	4479.1	4422.8	4359.2	4322.5
25°	4843.6	4787.3	4731.0	4667.4	4601.4	4528.0	4454.6	4381.3	4312.7	4278.5	4232.0
27.5°	4718.8	4657.7	4596.5	4530.5	4454.6	4381.3	4305.4	4234.4	4175.8	4129.3	4102.4
30°	4498.6	4427.7	4356.8	4285.8	4219.8	4143.9	4073.0	4014.3	3955.6	3918.9	3892.0
32.5°	4161.0	4097.5	4026.5	3958.0	3896.9	3833.3	3774.6	3723.2	3681.6	3657.1	3637.5
35°	3706.1	3642.5	3588.6	3539.7	3488.3	3461.5	3424.8	3395.4	3378.3	3368.5	3366.0
37.5°	3133.6	3096.9	3079.8	3070.1	3060.2	3052.9	3057.8	3070.1	3079.8	3096.9	3116.5
40°	2522.1	2553.9	2563.7	2597.9	2629.7	2671.3	2717.8	2771.6	2815.6	2871.9	2911.0
42.5°	1964.3	2023.1	2091.5	2164.9	2243.2	2319.0	2412.0	2497.6	2575.9	2646.8	2708.0
45°	1509.3	1599.8	1702.6	1807.8	1913.0	2023.1	2135.6	2240.8	2333.7	2409.5	2473.2
47.5°	1176.6	1277.0	1409.1	1538.7	1665.9	1795.5	1920.3	2030.4	2108.7	2182.0	2238.3
50°	932.0	1047.0	1191.3	1340.5	1480.0	1616.9	1749.0	1851.8	1930.1	1988.8	2030.4
52.5°	721.6	858.6	1005.4	1162.0	1311.2	1460.4	1582.7	1678.1	1741.7	1793.1	1824.9
55°	538.2	672.7	829.3	990.7	1142.4	1286.7	1401.7	1484.9	1541.2	1570.5	1587.6
57.5°	388.9	511.3	667.8	829.3	966.3	1103.3	1196.2	1272.1	1303.8	1321.0	1328.3
60°	283.8	396.3	535.7	675.2	804.8	914.9	995.6	1047.0	1071.5	1081.2	1078.8
62.5°	207.9	305.8	425.6	543.1	648.2	738.7	802.4	836.6	848.9	853.7	846.4
65°	159.0	234.8	337.6	428.1	508.8	574.9	621.4	643.4	650.7	648.2	643.4
67.5°	117.4	176.2	252.0	320.5	379.2	430.5	455.0	474.6	479.4	472.1	464.8
70°	83.2	129.6	183.5	230.0	274.0	303.3	330.2	332.7	332.7	330.2	325.4
72.5°	58.7	90.5	124.7	156.6	183.5	205.5	215.2	222.6	220.1	217.7	212.8
75°	39.1	56.3	90.5	97.9	122.3	129.6	139.5	139.5	141.9	134.6	134.6
77.5°	24.5	39.1	53.8	63.6	73.4	83.2	88.0	88.0	90.5	88.0	88.0
80°	14.7	24.5	29.3	44.1	44.1	51.4	53.8	56.3	51.4	58.7	51.4
82.5°	9.8	14.7	22.0	22.0	26.9	31.8	31.8	34.2	34.2	31.8	31.8
85°	7.4	9.8	12.2	14.7	14.7	17.1	14.7	14.7	17.1	19.6	17.1
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: P248518

CATALOG NUMBER: LSR8B90D010 EC8B90950 8LBDW0WH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	4608.7	4608.7	4608.7	4608.7
2.5°	4613.6	4616.1	4613.6	4613.6
5°	4635.6	4633.2	4635.6	4630.7
7.5°	4652.8	4652.8	4650.3	4650.3
10°	4652.8	4643.0	4643.0	4643.0
12.5°	4616.1	4603.9	4596.5	4591.6
15°	4552.4	4530.5	4520.7	4518.2
17.5°	4469.3	4449.7	4437.5	4430.2
20°	4373.9	4354.3	4339.7	4342.1
22.5°	4290.7	4268.7	4258.9	4254.0
25°	4207.6	4180.6	4173.3	4168.4
27.5°	4073.0	4058.3	4051.0	4043.7
30°	3867.5	3860.2	3847.9	3865.1
32.5°	3630.2	3618.0	3608.2	3615.6
35°	3368.5	3361.1	3368.5	3363.6
37.5°	3128.8	3136.1	3145.9	3150.7
40°	2940.4	2967.3	2977.1	2981.9
42.5°	2752.0	2783.8	2803.4	2815.6
45°	2519.6	2551.4	2573.4	2588.2
47.5°	2279.9	2306.8	2328.8	2326.4
50°	2062.2	2076.9	2086.6	2096.4
52.5°	1842.0	1842.0	1844.5	1844.5
55°	1592.5	1587.6	1585.2	1587.6
57.5°	1318.5	1313.7	1311.2	1303.8
60°	1069.0	1054.4	1044.5	1044.5
62.5°	836.6	819.5	812.2	809.7
65°	628.7	626.2	611.5	609.1
67.5°	455.0	445.2	435.4	437.9
70°	320.5	305.8	305.8	300.9
72.5°	207.9	200.6	198.1	198.1
75°	129.6	129.6	124.7	134.6
77.5°	85.6	85.6	83.2	85.6
80°	51.4	51.4	51.4	48.9
82.5°	31.8	34.2	31.8	31.8
85°	17.1	19.6	14.7	22.0
87.5°	9.8	12.2	9.8	12.2
90°	0.0	0.0	0.0	0.0

(END OF REPORT)