

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: P248365

Luminaire Tested: **LSR8B90D010 EC8B90850 8LBDW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P248365
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 EC8B90850 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: 10035.0 lumens
Efficiency: N/A
Efficacy: 116.6 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

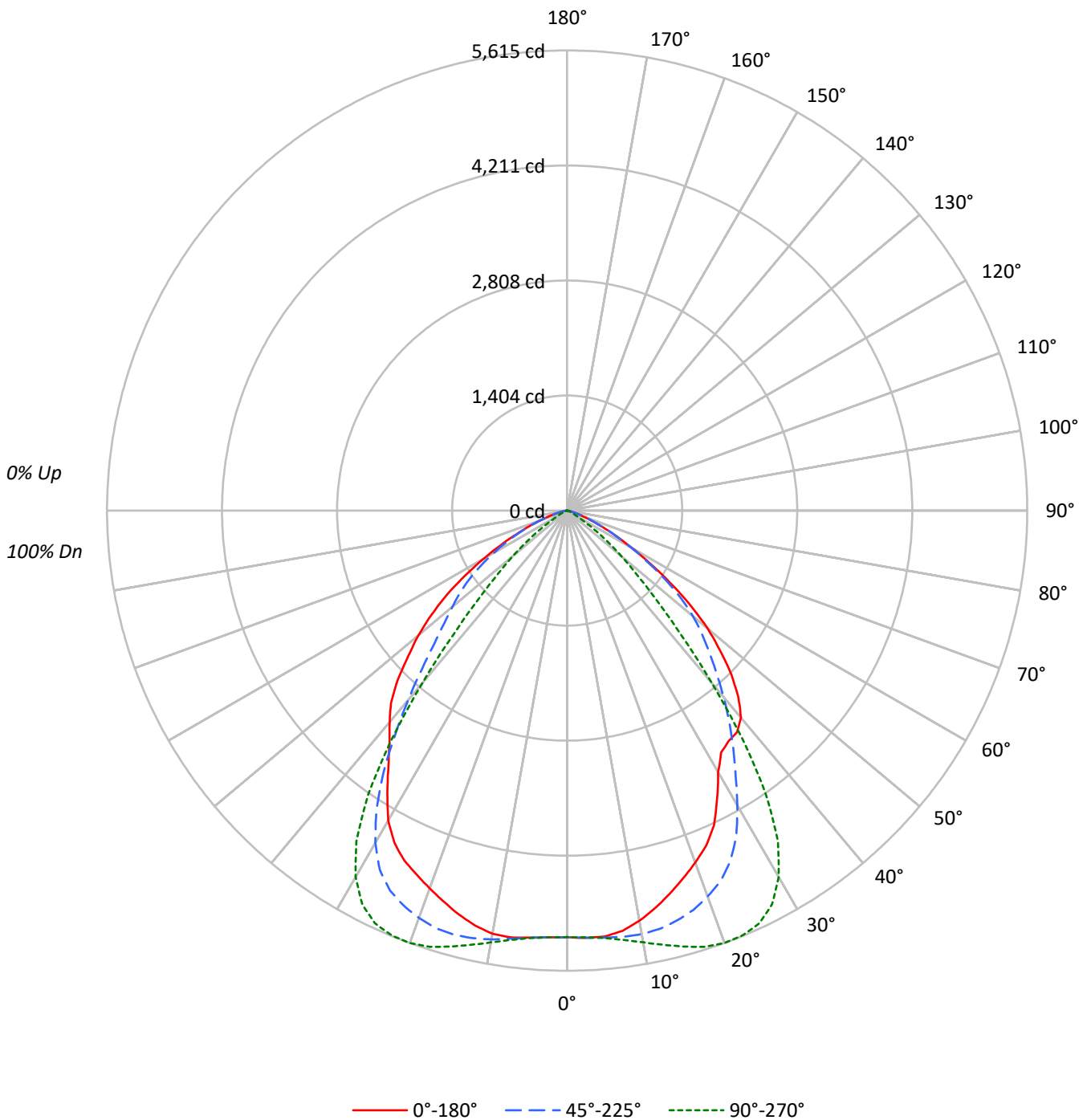
Input Watts (W): 86.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	160528	160528	160528
5°	161484	162082	161912
10°	159112	167504	164216
15°	154458	175806	162928
20°	149976	184251	160949
25°	144218	188970	160203
30°	131250	183791	155452
35°	129293	159254	143025
40°	132810	110449	135587
45°	123632	66757	127491
50°	107238	41223	113604
55°	82298	21542	96410
60°	56067	8690	72768
65°	34877	4436	50200
70°	18933	2741	30645
75°	9877	1311	18110
80°	4422	1474	9802
85°	2937	991	8810



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	500.6	5.0
10°-20°	1483.1	14.8
20°-30°	2262.6	22.5
30°-40°	2361.0	23.5
40°-50°	1773.4	17.7
50°-60°	1091.2	10.9
60°-70°	444.1	4.4
70°-80°	104.6	1.0
80°-90°	14.4	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°	4246.3	42.3
0°-40°	6607.3	65.8
0°-60°	9471.9	94.4
0°-90°	10035.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10035.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	5206	5206	5206	5206	5206	
5°	5217	5231	5236	5231	5231	494
15°	4838	5178	5507	5355	5104	1363
25°	4239	4714	5554	5115	4708	1927
35°	3435	3531	4230	3910	3799	2169
45°	2835	2454	1531	2285	2924	2163
55°	1531	1453	401	1453	1793	1376
65°	478	484	61	649	688	499
75°	83	83	11	146	152	100
85°	8	8	3	19	25	12
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°	5205.8	5205.8	5205.8	5205.8	5205.8	5205.8	5205.8	5205.8	5205.8	5205.8	5205.8
2.5°	5219.7	5211.3	5219.7	5219.7	5222.4	5216.9	5219.7	5222.4	5216.9	5216.9	5216.9
5°	5216.9	5211.3	5216.9	5214.1	5219.7	5219.7	5225.2	5225.2	5230.7	5230.7	5239.0
7.5°	5172.7	5161.7	5172.7	5181.0	5186.5	5197.6	5211.3	5222.4	5233.5	5244.5	5258.3
10°	5081.5	5081.5	5089.8	5106.3	5122.9	5142.3	5167.1	5194.8	5222.4	5247.2	5272.1
12.5°	4968.2	4959.9	4976.5	4998.6	5023.5	5053.9	5092.6	5134.0	5178.2	5227.9	5266.7
15°	4838.3	4830.0	4849.4	4871.5	4901.9	4946.1	4993.1	5048.3	5111.9	5178.2	5241.8
17.5°	4705.7	4702.9	4722.3	4752.7	4777.6	4824.5	4885.3	4951.6	5023.5	5111.9	5194.8
20°	4570.3	4567.6	4586.9	4611.8	4644.9	4689.1	4749.9	4827.3	4912.9	5012.4	5109.1
22.5°	4429.4	4432.1	4448.7	4476.4	4504.0	4550.9	4614.5	4691.9	4785.8	4893.6	5001.3
25°	4238.7	4224.9	4247.0	4274.7	4321.6	4360.3	4421.1	4504.0	4600.7	4714.0	4841.1
27.5°	3962.4	3959.6	3979.0	4003.8	4045.3	4092.3	4158.6	4244.2	4346.5	4470.8	4595.1
30°	3686.1	3691.6	3699.9	3724.8	3752.4	3799.4	3865.7	3937.6	4034.2	4153.0	4285.7
32.5°	3498.2	3498.2	3509.3	3525.8	3545.2	3570.0	3617.0	3669.5	3744.1	3827.0	3923.7
35°	3434.6	3423.6	3434.6	3437.4	3440.2	3445.7	3453.9	3470.6	3495.4	3531.4	3567.3
37.5°	3407.0	3398.7	3398.7	3387.7	3373.8	3357.3	3335.2	3310.3	3282.7	3246.7	3219.1
40°	3299.3	3293.7	3288.2	3277.1	3246.7	3213.6	3177.6	3119.6	3056.1	2967.6	2879.3
42.5°	3092.0	3086.5	3083.7	3061.6	3034.0	2995.3	2953.8	2893.1	2812.9	2699.6	2572.5
45°	2835.0	2824.0	2815.7	2796.4	2777.0	2743.8	2705.2	2649.9	2569.7	2453.7	2301.7
47.5°	2536.6	2531.1	2528.3	2520.0	2500.7	2481.3	2456.5	2412.3	2340.4	2229.9	2072.4
50°	2235.4	2224.4	2229.9	2227.2	2218.8	2205.0	2188.4	2158.1	2102.8	2003.3	1859.6
52.5°	1890.0	1890.0	1887.3	1895.5	1898.3	1895.5	1898.3	1865.2	1818.2	1743.5	1622.0
55°	1530.8	1530.8	1539.1	1550.2	1561.2	1564.0	1561.2	1547.4	1514.2	1453.4	1345.7
57.5°	1193.7	1188.2	1204.8	1221.3	1232.4	1243.4	1235.1	1224.1	1204.8	1155.0	1072.1
60°	909.1	909.1	920.1	931.2	942.2	953.3	950.5	947.8	931.2	898.0	831.7
62.5°	668.7	671.4	671.4	679.8	690.8	701.9	710.1	701.9	693.5	671.4	627.2
65°	478.0	475.2	478.0	486.3	494.6	505.7	511.2	508.4	500.1	483.6	450.4
67.5°	320.5	317.8	328.8	331.6	337.1	348.2	345.4	348.2	345.4	331.6	304.0
70°	210.0	204.5	210.0	207.2	215.5	218.3	223.8	226.6	223.8	215.5	207.2
72.5°	129.9	127.1	129.9	132.7	135.4	138.1	143.7	143.7	140.9	135.4	124.3
75°	82.9	74.6	77.3	71.9	77.3	77.3	82.9	85.7	82.9	82.9	77.3
77.5°	49.8	49.8	49.8	49.8	49.8	49.8	49.8	52.5	55.2	49.8	47.0
80°	24.9	24.9	27.7	27.7	27.7	30.4	27.7	27.7	27.7	30.4	22.1
82.5°	19.3	16.6	16.6	16.6	19.3	16.6	16.6	16.6	16.6	16.6	16.6
85°	8.3	11.0	8.3	5.5	8.3	8.3	11.0	8.3	8.3	8.3	11.0
87.5°	2.8	2.8	0.0	0.0	0.0	2.8	0.0	2.8	2.8	5.5	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°	5205.8	5205.8	5205.8	5205.8	5205.8	5205.8	5205.8	5205.8	5205.8	5205.8	5205.8
2.5°	5219.7	5214.1	5214.1	5211.3	5216.9	5211.3	5214.1	5211.3	5211.3	5216.9	5211.3
5°	5239.0	5241.8	5236.2	5233.5	5241.8	5241.8	5241.8	5236.2	5236.2	5239.0	5236.2
7.5°	5266.7	5272.1	5274.9	5277.7	5283.2	5286.0	5286.0	5283.2	5280.4	5288.8	5277.7
10°	5297.0	5305.3	5321.9	5330.2	5344.0	5344.0	5349.5	5349.5	5344.0	5349.5	5346.8
12.5°	5286.0	5335.7	5363.3	5382.7	5402.0	5418.6	5424.1	5426.9	5424.1	5435.2	5424.1
15°	5305.3	5346.8	5391.0	5424.1	5460.0	5479.4	5484.9	5507.0	5512.6	5515.3	5498.8
17.5°	5274.9	5349.5	5396.5	5446.2	5498.8	5534.7	5567.8	5581.6	5584.4	5589.9	5567.8
20°	5205.8	5288.8	5360.6	5432.4	5493.2	5548.5	5576.1	5614.8	5603.8	5625.9	5595.4
22.5°	5111.9	5205.8	5297.0	5391.0	5454.5	5520.9	5578.9	5606.5	5620.3	5620.3	5587.1
25°	4962.7	5073.2	5172.7	5269.4	5366.1	5446.2	5512.6	5554.0	5562.3	5559.5	5520.9
27.5°	4730.6	4849.4	4965.4	5076.0	5194.8	5288.8	5366.1	5415.8	5429.7	5429.7	5388.2
30°	4410.0	4537.1	4650.5	4783.0	4904.7	5009.7	5117.4	5161.7	5186.5	5186.5	5139.5
32.5°	4028.7	4136.5	4241.5	4371.4	4504.0	4622.8	4725.0	4785.8	4816.2	4813.5	4772.0
35°	3614.3	3666.7	3746.9	3843.6	3962.4	4072.9	4172.4	4230.5	4282.9	4280.1	4241.5
37.5°	3199.7	3185.9	3194.3	3230.2	3304.7	3382.1	3459.5	3514.8	3558.9	3578.4	3570.0
40°	2793.6	2721.7	2652.6	2627.8	2633.3	2660.9	2702.4	2743.8	2793.6	2818.5	2829.5
42.5°	2428.8	2307.3	2185.6	2094.5	2042.0	2025.4	2044.7	2058.5	2089.0	2124.9	2160.8
45°	2135.9	1972.9	1812.6	1671.7	1583.3	1530.8	1519.7	1530.8	1547.4	1583.3	1630.3
47.5°	1895.5	1704.9	1525.3	1367.8	1237.9	1168.8	1149.5	1144.0	1160.5	1193.7	1257.2
50°	1682.8	1492.1	1293.2	1110.8	975.4	898.0	870.4	859.3	878.7	903.5	961.6
52.5°	1450.7	1262.8	1058.3	881.4	740.5	660.4	630.0	613.4	624.5	657.6	715.7
55°	1199.2	1025.1	840.0	657.6	522.2	447.6	411.7	400.7	411.7	447.6	505.7
57.5°	947.8	801.3	646.6	475.2	353.7	279.1	243.1	232.1	262.5	276.3	337.1
60°	740.5	621.7	489.1	348.2	243.1	185.1	149.2	140.9	154.8	179.6	229.3
62.5°	555.4	480.8	375.8	248.7	179.6	118.8	99.5	91.2	99.5	118.8	157.5
65°	403.4	345.4	262.5	182.3	121.6	88.4	66.3	60.8	69.1	82.9	116.1
67.5°	276.3	232.1	182.3	127.1	82.9	55.2	47.0	47.0	49.8	60.8	85.7
70°	179.6	152.0	116.1	82.9	55.2	41.4	35.9	30.4	35.9	44.2	58.0
72.5°	113.3	96.7	74.6	58.0	41.4	30.4	24.9	22.1	27.7	33.1	44.2
75°	69.1	52.5	38.7	30.4	22.1	22.1	22.1	11.0	13.8	22.1	27.7
77.5°	41.4	35.9	30.4	24.9	19.3	11.0	11.0	11.0	13.8	16.6	24.9
80°	22.1	19.3	13.8	13.8	11.0	8.3	11.0	8.3	5.5	13.8	16.6
82.5°	13.8	11.0	11.0	11.0	13.8	5.5	8.3	5.5	8.3	11.0	8.3
85°	8.3	8.3	8.3	5.5	13.8	5.5	5.5	2.8	2.8	5.5	5.5
87.5°	0.0	2.8	2.8	0.0	2.8	0.0	2.8	2.8	2.8	2.8	2.8
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°	5205.8	5205.8	5205.8	5205.8	5205.8	5205.8	5205.8	5205.8	5205.8	5205.8	5205.8
2.5°	5214.1	5211.3	5214.1	5211.3	5211.3	5211.3	5214.1	5214.1	5211.3	5211.3	5216.9
5°	5236.2	5236.2	5236.2	5233.5	5230.7	5230.7	5236.2	5236.2	5227.9	5236.2	5236.2
7.5°	5283.2	5274.9	5283.2	5272.1	5266.7	5269.4	5272.1	5266.7	5261.1	5263.9	5263.9
10°	5344.0	5335.7	5335.7	5327.4	5319.1	5313.6	5308.1	5294.2	5280.4	5277.7	5266.7
12.5°	5415.8	5402.0	5393.8	5377.1	5363.3	5344.0	5327.4	5305.3	5277.7	5258.3	5239.0
15°	5487.7	5465.6	5446.2	5418.6	5388.2	5355.0	5319.1	5283.2	5239.0	5200.3	5167.1
17.5°	5545.7	5515.3	5479.4	5435.2	5391.0	5341.2	5288.8	5236.2	5172.7	5122.9	5084.2
20°	5565.0	5520.9	5473.9	5415.8	5357.8	5288.8	5222.4	5153.3	5081.5	5029.0	4984.8
22.5°	5540.2	5487.7	5429.7	5368.9	5291.5	5216.9	5139.5	5059.4	4995.8	4924.0	4882.6
25°	5471.1	5407.6	5344.0	5272.1	5197.6	5114.7	5031.8	4948.9	4871.5	4832.8	4780.3
27.5°	5330.2	5261.1	5192.0	5117.4	5031.8	4948.9	4863.2	4783.0	4716.8	4664.2	4633.9
30°	5081.5	5001.3	4921.2	4841.1	4766.5	4680.8	4600.7	4534.4	4468.0	4426.6	4396.2
32.5°	4700.1	4628.3	4548.2	4470.8	4401.8	4329.9	4263.6	4205.6	4158.6	4130.9	4108.8
35°	4186.2	4114.4	4053.6	3998.3	3940.3	3909.9	3868.5	3835.3	3815.9	3804.9	3802.1
37.5°	3539.6	3498.2	3478.8	3467.8	3456.7	3448.5	3453.9	3467.8	3478.8	3498.2	3520.3
40°	2848.8	2884.7	2895.8	2934.5	2970.4	3017.4	3069.9	3130.7	3180.4	3244.0	3288.2
42.5°	2218.8	2285.2	2362.5	2445.4	2533.8	2619.5	2724.5	2821.2	2909.6	2989.7	3058.8
45°	1704.9	1807.1	1923.2	2042.0	2160.8	2285.2	2412.3	2531.1	2636.1	2721.7	2793.6
47.5°	1329.1	1442.4	1591.6	1738.1	1881.7	2028.2	2169.1	2293.4	2381.8	2464.7	2528.3
50°	1052.8	1182.6	1345.7	1514.2	1671.7	1826.4	1975.6	2091.7	2180.2	2246.5	2293.4
52.5°	815.1	969.9	1135.7	1312.5	1481.1	1649.6	1787.8	1895.5	1967.4	2025.4	2061.3
55°	607.9	759.9	936.7	1119.1	1290.4	1453.4	1583.3	1677.3	1740.8	1774.0	1793.3
57.5°	439.3	577.5	754.3	936.7	1091.4	1246.2	1351.2	1436.9	1472.8	1492.1	1500.4
60°	320.5	447.6	605.1	762.6	909.1	1033.4	1124.6	1182.6	1210.3	1221.3	1218.5
62.5°	234.9	345.4	480.8	613.4	732.2	834.4	906.3	945.0	958.9	964.3	956.1
65°	179.6	265.2	381.3	483.6	574.8	649.3	701.9	726.7	735.0	732.2	726.7
67.5°	132.7	199.0	284.6	362.0	428.3	486.3	514.0	536.1	541.6	533.3	525.0
70°	94.0	146.4	207.2	259.8	309.5	342.6	373.0	375.8	375.8	373.0	367.5
72.5°	66.3	102.2	140.9	176.9	207.2	232.1	243.1	251.4	248.7	245.9	240.4
75°	44.2	63.6	102.2	110.5	138.1	146.4	157.5	157.5	160.2	152.0	152.0
77.5°	27.7	44.2	60.8	71.9	82.9	94.0	99.5	99.5	102.2	99.5	99.5
80°	16.6	27.7	33.1	49.8	49.8	58.0	60.8	63.6	58.0	66.3	58.0
82.5°	11.0	16.6	24.9	24.9	30.4	35.9	35.9	38.7	38.7	35.9	35.9
85°	8.3	11.0	13.8	16.6	16.6	19.3	16.6	16.6	19.3	22.1	19.3
87.5°	2.8	5.5	2.8	5.5	5.5	11.0	8.3	8.3	8.3	11.0	11.0
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: P248365

CATALOG NUMBER: LSR8B90D010 EC8B90850 8LBDW0LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	5205.8	5205.8	5205.8	5205.8
2.5°	5211.3	5214.1	5211.3	5211.3
5°	5236.2	5233.5	5236.2	5230.7
7.5°	5255.6	5255.6	5252.8	5252.8
10°	5255.6	5244.5	5244.5	5244.5
12.5°	5214.1	5200.3	5192.0	5186.5
15°	5142.3	5117.4	5106.3	5103.6
17.5°	5048.3	5026.2	5012.4	5004.1
20°	4940.6	4918.5	4901.9	4904.7
22.5°	4846.6	4821.8	4810.7	4805.1
25°	4752.7	4722.3	4714.0	4708.5
27.5°	4600.7	4584.1	4575.8	4567.6
30°	4368.6	4360.3	4346.5	4365.8
32.5°	4100.6	4086.7	4075.7	4084.0
35°	3804.9	3796.6	3804.9	3799.4
37.5°	3534.1	3542.4	3553.5	3558.9
40°	3321.4	3351.7	3362.8	3368.3
42.5°	3108.6	3144.5	3166.6	3180.4
45°	2846.1	2882.0	2906.8	2923.5
47.5°	2575.3	2605.7	2630.5	2627.8
50°	2329.4	2345.9	2357.0	2368.1
52.5°	2080.6	2080.6	2083.4	2083.4
55°	1798.8	1793.3	1790.5	1793.3
57.5°	1489.3	1483.8	1481.1	1472.8
60°	1207.5	1191.0	1179.9	1179.9
62.5°	945.0	925.7	917.4	914.6
65°	710.1	707.3	690.8	688.0
67.5°	514.0	502.9	491.9	494.6
70°	362.0	345.4	345.4	339.9
72.5°	234.9	226.6	223.8	223.8
75°	146.4	146.4	140.9	152.0
77.5°	96.7	96.7	94.0	96.7
80°	58.0	58.0	58.0	55.2
82.5°	35.9	38.7	35.9	35.9
85°	19.3	22.1	16.6	24.9
87.5°	11.0	13.8	11.0	13.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)