

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: P249366

Luminaire Tested: **LSR8B120D010 EC8B120935 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249366
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13957)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B120D010 EC8B120935 8LBDW0GPH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 3500 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10423.0 lumens
Efficiency: N/A
Efficacy: 88.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

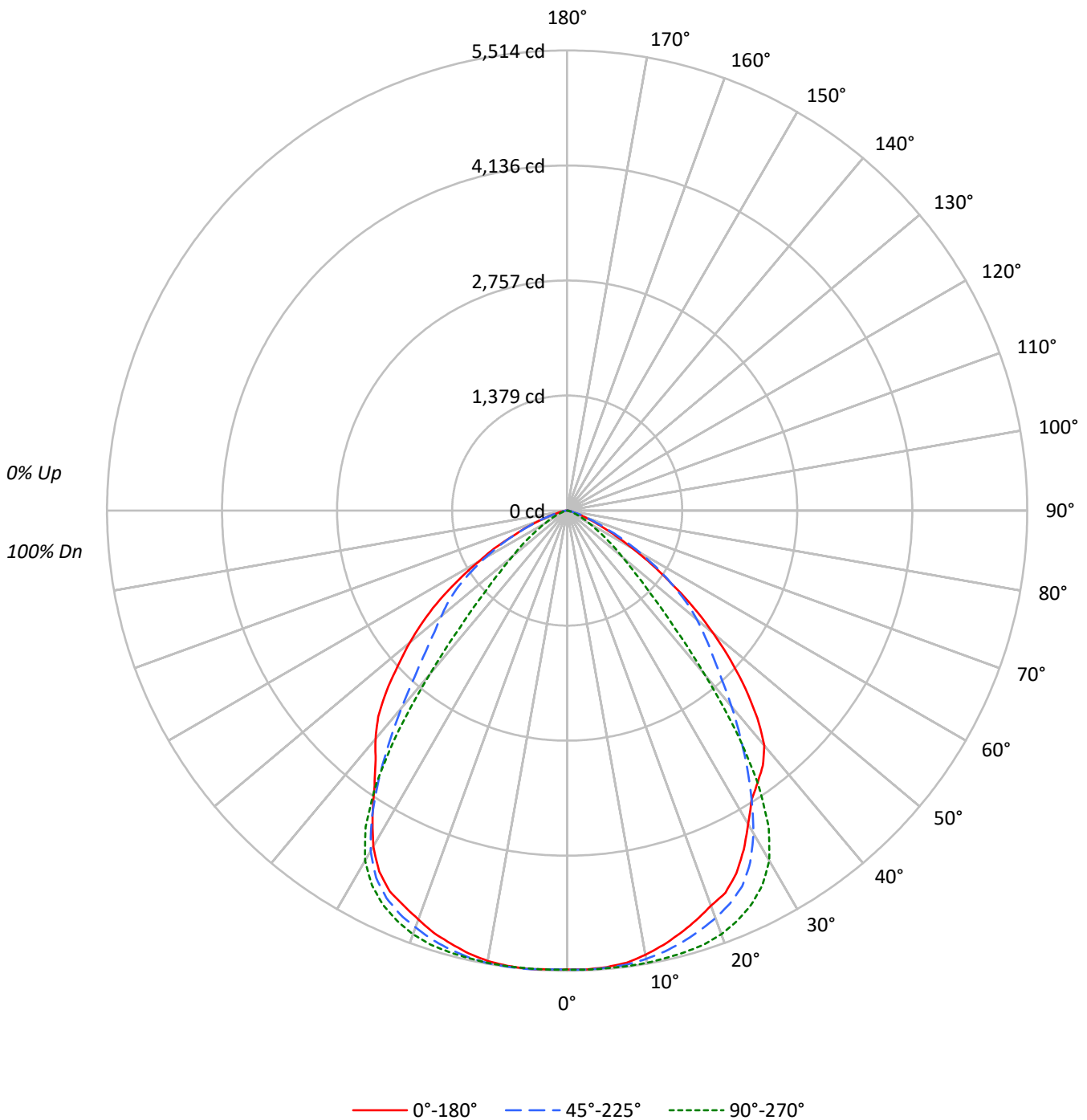
Input Watts (W): 118.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	91	90					90			
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79					79			
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70					70			
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62					62			
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55					55			
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50					50			
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45					45			
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41					41			
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37					37			
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34					34			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	169581	169581	169581
5°	169954	170412	170594
10°	169238	172288	171549
15°	167362	174810	171512
20°	165353	177265	171070
25°	163207	177470	171243
30°	154405	172482	165439
35°	149794	149903	151461
40°	147937	103139	143779
45°	131817	61921	133623
50°	109608	41209	118104
55°	82207	28408	100136
60°	55709	18933	75555
65°	33600	12280	51907
70°	18627	6654	31934
75°	8447	2812	16525
80°	7334	3143	11525
85°	8350	4175	11499



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	524.8	5.0
10°-20°	1524.2	14.6
20°-30°	2313.5	22.2
30°-40°	2429.8	23.3
40°-50°	1821.7	17.5
50°-60°	1168.9	11.2
60°-70°	500.0	4.8
70°-80°	118.1	1.1
80°-90°	22.0	0.2
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°	4362.5	41.9
0°-40°	6792.3	65.2
0°-60°	9782.9	93.9
0°-90°	10423.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10423.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	5499	5499	5499	5499	5499	
5°	5490	5499	5505	5514	5511	522
15°	5242	5352	5476	5440	5372	1479
25°	4797	4965	5216	5122	5033	2191
35°	3979	3758	3982	3935	4024	2497
45°	3023	2471	1420	2400	3064	2315
55°	1529	1529	528	1594	1863	1387
65°	460	543	168	700	711	492
75°	71	83	24	142	139	103
85°	24	15	12	24	32	25
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°	5499.4	5499.4	5499.4	5499.4	5499.4	5499.4	5499.4	5499.4	5499.4	5499.4	5499.4
2.5°	5502.3	5508.3	5505.3	5505.3	5502.3	5505.3	5505.3	5511.2	5511.2	5505.3	5502.3
5°	5490.5	5496.4	5496.4	5490.5	5490.5	5505.3	5496.4	5502.3	5502.3	5499.4	5499.4
7.5°	5464.0	5464.0	5475.8	5466.9	5466.9	5475.8	5472.8	5478.7	5484.6	5487.6	5487.6
10°	5404.9	5410.8	5413.8	5413.8	5416.7	5425.6	5431.5	5443.3	5449.2	5455.1	5458.1
12.5°	5331.2	5340.0	5342.9	5340.0	5348.9	5360.6	5375.4	5390.2	5399.1	5410.8	5419.7
15°	5242.5	5242.5	5248.5	5257.3	5263.3	5281.0	5295.7	5313.4	5337.0	5351.8	5366.6
17.5°	5145.2	5151.1	5159.9	5159.9	5171.8	5201.2	5210.1	5236.7	5263.3	5278.0	5307.5
20°	5038.9	5044.8	5053.7	5059.6	5074.3	5097.9	5115.6	5139.3	5168.8	5195.4	5224.8
22.5°	4956.2	4944.4	4950.3	4956.2	4971.0	4991.7	5012.3	5041.8	5071.4	5097.9	5127.5
25°	4796.8	4799.8	4808.7	4814.5	4832.3	4850.0	4873.6	4909.0	4935.6	4965.1	4997.5
27.5°	4581.4	4584.3	4599.1	4599.1	4613.8	4643.3	4658.1	4687.6	4723.1	4752.5	4791.0
30°	4336.4	4342.2	4342.2	4354.1	4362.9	4377.7	4392.4	4422.0	4439.6	4466.2	4519.4
32.5°	4112.0	4117.9	4114.9	4112.0	4103.1	4100.2	4097.2	4103.1	4109.1	4117.9	4138.5
35°	3979.2	3964.4	3952.6	3932.0	3908.3	3878.8	3852.2	3816.8	3784.3	3757.7	3728.3
37.5°	3852.2	3849.3	3831.6	3802.0	3754.8	3701.7	3639.7	3562.9	3486.2	3403.5	3323.9
40°	3675.1	3666.2	3651.5	3610.2	3557.0	3492.1	3409.5	3315.0	3191.0	3064.1	2934.2
42.5°	3374.0	3377.0	3359.3	3326.8	3276.6	3214.6	3129.0	3025.7	2892.9	2742.3	2574.1
45°	3022.7	3022.7	3016.8	2990.2	2954.9	2904.7	2839.7	2754.1	2624.3	2470.7	2290.6
47.5°	2656.7	2659.7	2650.8	2644.9	2630.1	2597.7	2550.4	2485.5	2394.0	2246.4	2066.3
50°	2284.8	2284.8	2299.5	2296.6	2296.6	2284.8	2264.1	2225.7	2146.0	2028.0	1859.7
52.5°	1912.8	1918.7	1927.6	1939.4	1954.1	1977.8	1954.1	1936.4	1886.2	1794.7	1650.1
55°	1529.1	1535.0	1549.7	1570.4	1588.2	1611.8	1617.6	1617.6	1591.0	1529.1	1419.9
57.5°	1201.4	1192.6	1204.4	1222.1	1245.7	1269.3	1287.0	1307.7	1304.7	1263.4	1174.9
60°	903.3	906.2	915.1	932.8	950.5	971.2	994.8	1012.5	1021.4	1000.7	944.6
62.5°	658.3	658.3	670.1	687.8	696.6	726.2	740.9	749.8	758.6	755.7	720.3
65°	460.5	466.4	472.3	481.2	490.0	507.7	516.6	534.3	540.2	543.2	516.6
67.5°	324.7	315.9	321.8	327.6	336.5	348.4	366.1	366.1	374.9	374.9	357.2
70°	206.6	206.6	209.6	218.4	224.3	227.3	233.2	239.1	248.0	245.0	245.0
72.5°	138.7	135.8	138.7	141.7	144.7	153.5	153.5	156.4	162.4	165.3	153.5
75°	70.9	73.8	79.7	76.8	85.6	79.7	82.6	91.5	88.6	82.6	82.6
77.5°	59.0	59.0	59.0	56.1	62.0	62.0	59.0	64.9	62.0	62.0	59.0
80°	41.3	44.3	41.3	38.4	41.3	38.4	38.4	38.4	38.4	38.4	35.4
82.5°	32.5	26.6	29.5	26.6	29.5	29.5	26.6	23.6	23.6	26.6	23.6
85°	23.6	17.7	20.7	20.7	17.7	17.7	17.7	17.7	17.7	14.7	14.7
87.5°	14.7	8.9	8.9	8.9	11.8	11.8	11.8	8.9	11.8	11.8	5.9
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°	5499.4	5499.4	5499.4	5499.4	5499.4	5499.4	5499.4	5499.4	5499.4	5499.4	5499.4
2.5°	5508.3	5505.3	5511.2	5508.3	5508.3	5505.3	5508.3	5505.3	5511.2	5499.4	5502.3
5°	5508.3	5502.3	5505.3	5508.3	5511.2	5505.3	5505.3	5505.3	5511.2	5505.3	5508.3
7.5°	5496.4	5493.5	5502.3	5508.3	5505.3	5502.3	5508.3	5505.3	5511.2	5508.3	5514.1
10°	5472.8	5475.8	5481.7	5490.5	5493.5	5496.4	5502.3	5502.3	5511.2	5499.4	5505.3
12.5°	5437.4	5449.2	5464.0	5469.8	5481.7	5481.7	5487.6	5490.5	5496.4	5493.5	5502.3
15°	5393.1	5407.9	5425.6	5440.4	5455.1	5464.0	5472.8	5475.8	5484.6	5475.8	5478.7
17.5°	5340.0	5357.7	5384.2	5401.9	5425.6	5434.4	5446.2	5452.1	5461.0	5455.1	5458.1
20°	5266.2	5286.9	5316.4	5342.9	5357.7	5378.3	5393.1	5401.9	5407.9	5401.9	5404.9
22.5°	5162.9	5192.4	5230.8	5251.4	5281.0	5298.7	5301.6	5322.3	5337.0	5322.3	5328.2
25°	5041.8	5071.4	5100.9	5145.2	5171.8	5192.4	5213.1	5216.0	5230.8	5227.8	5224.8
27.5°	4841.1	4879.5	4929.6	4965.1	5000.5	5033.0	5056.6	5062.5	5077.3	5071.4	5074.3
30°	4566.6	4607.9	4655.2	4711.2	4761.4	4793.9	4823.4	4844.1	4858.8	4850.0	4847.0
32.5°	4177.0	4218.3	4268.5	4324.5	4383.6	4430.8	4466.2	4492.8	4510.5	4504.6	4489.8
35°	3731.2	3743.0	3775.5	3819.8	3869.9	3920.1	3952.6	3982.1	4002.7	4008.7	4008.7
37.5°	3273.7	3235.3	3211.7	3211.7	3241.2	3261.8	3291.4	3309.1	3341.6	3353.3	3362.2
40°	2830.8	2742.3	2659.7	2597.7	2556.4	2553.4	2553.4	2562.2	2591.8	2630.1	2665.6
42.5°	2435.3	2293.6	2166.7	2051.6	1968.9	1921.7	1901.0	1904.0	1927.6	1963.0	2022.0
45°	2119.5	1942.4	1783.0	1644.2	1532.0	1458.2	1422.8	1419.9	1437.6	1478.9	1543.9
47.5°	1874.5	1685.5	1505.5	1346.0	1225.1	1145.3	1104.0	1092.2	1104.0	1142.4	1219.1
50°	1670.8	1476.0	1290.0	1124.7	994.8	912.2	873.7	859.0	873.7	906.2	983.0
52.5°	1481.8	1281.1	1107.0	947.6	808.8	738.0	696.6	687.8	696.6	735.0	797.0
55°	1263.4	1092.2	921.0	761.6	640.6	569.7	537.2	528.4	537.2	572.7	637.6
57.5°	1048.0	900.3	749.8	605.1	501.8	439.8	410.3	398.5	419.1	442.8	519.5
60°	847.2	729.1	602.2	475.3	389.7	333.6	309.9	307.0	312.9	342.4	395.5
62.5°	664.2	566.8	466.4	363.1	292.2	268.6	239.1	236.2	242.0	259.7	301.1
65°	478.2	416.2	339.5	265.7	209.6	177.1	165.3	168.3	174.1	186.0	224.3
67.5°	333.6	289.3	236.2	186.0	144.7	129.9	118.1	115.1	118.1	138.7	159.4
70°	224.3	197.8	159.4	141.7	100.4	79.7	82.6	73.8	85.6	85.6	103.3
72.5°	147.6	129.9	106.2	82.6	70.9	56.1	56.1	53.2	59.0	62.0	76.8
75°	76.8	59.0	59.0	41.3	29.5	14.7	26.6	23.6	20.7	23.6	29.5
77.5°	53.2	44.3	41.3	32.5	29.5	23.6	23.6	23.6	23.6	26.6	29.5
80°	32.5	32.5	23.6	20.7	17.7	14.7	17.7	17.7	17.7	17.7	20.7
82.5°	20.7	17.7	17.7	14.7	14.7	11.8	11.8	11.8	11.8	11.8	17.7
85°	17.7	11.8	11.8	8.9	11.8	20.7	8.9	11.8	11.8	11.8	8.9
87.5°	5.9	8.9	8.9	8.9	5.9	3.0	5.9	8.9	8.9	14.7	11.8
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°	5499.4	5499.4	5499.4	5499.4	5499.4	5499.4	5499.4	5499.4	5499.4	5499.4	5499.4
2.5°	5508.3	5511.2	5511.2	5508.3	5508.3	5502.3	5514.1	5505.3	5508.3	5520.0	5511.2
5°	5514.1	5517.1	5517.1	5514.1	5514.1	5514.1	5517.1	5517.1	5514.1	5511.2	5517.1
7.5°	5526.0	5523.0	5523.0	5517.1	5517.1	5511.2	5517.1	5508.3	5514.1	5508.3	5517.1
10°	5511.2	5514.1	5511.2	5508.3	5508.3	5505.3	5505.3	5496.4	5499.4	5490.5	5496.4
12.5°	5502.3	5499.4	5499.4	5493.5	5487.6	5481.7	5478.7	5469.8	5469.8	5449.2	5458.1
15°	5478.7	5481.7	5472.8	5461.0	5455.1	5440.4	5434.4	5422.6	5410.8	5396.1	5399.1
17.5°	5458.1	5449.2	5437.4	5425.6	5401.9	5390.2	5378.3	5360.6	5354.7	5337.0	5331.2
20°	5396.1	5390.2	5375.4	5354.7	5340.0	5313.4	5301.6	5283.9	5269.1	5251.4	5242.5
22.5°	5316.4	5310.4	5292.7	5272.1	5248.5	5236.7	5224.8	5192.4	5177.6	5159.9	5156.9
25°	5216.0	5207.1	5189.4	5165.8	5154.0	5121.6	5109.7	5086.1	5080.2	5062.5	5059.6
27.5°	5062.5	5050.7	5030.0	5000.5	4979.8	4959.2	4947.4	4929.6	4923.8	4906.0	4903.1
30°	4832.3	4817.5	4776.2	4764.4	4728.9	4708.3	4708.3	4684.6	4687.6	4675.8	4675.8
32.5°	4469.2	4445.6	4413.1	4389.5	4365.8	4354.1	4354.1	4345.2	4351.1	4351.1	4357.0
35°	3988.0	3955.6	3937.8	3923.1	3923.1	3934.8	3970.3	3979.2	3996.9	4011.6	4023.5
37.5°	3371.0	3368.1	3388.8	3406.5	3450.8	3501.0	3562.9	3616.1	3666.2	3701.7	3737.1
40°	2703.9	2777.7	2836.8	2919.5	2987.3	3084.7	3196.9	3288.4	3374.0	3436.0	3501.0
42.5°	2110.6	2205.1	2329.1	2450.1	2571.1	2703.9	2851.6	2978.5	3090.6	3176.2	3244.1
45°	1644.2	1774.1	1924.7	2078.1	2234.6	2399.9	2553.4	2683.3	2801.4	2889.9	2957.8
47.5°	1325.4	1467.1	1638.3	1806.6	1983.7	2157.8	2329.1	2441.2	2538.6	2609.5	2671.5
50°	1095.1	1245.7	1425.8	1617.6	1794.7	1968.9	2116.5	2225.7	2305.4	2367.4	2405.8
52.5°	915.1	1074.5	1266.4	1458.2	1635.3	1794.7	1927.6	2010.3	2075.2	2119.5	2154.9
55°	755.7	909.2	1089.3	1269.3	1443.5	1594.0	1703.2	1765.3	1815.4	1842.0	1862.6
57.5°	617.0	758.6	923.9	1089.3	1239.8	1363.8	1449.4	1511.4	1535.0	1555.7	1552.7
60°	484.1	617.0	767.5	909.2	1039.1	1139.4	1201.4	1236.8	1254.5	1263.4	1257.5
62.5°	380.8	501.8	617.0	740.9	835.4	921.0	980.1	980.1	988.9	991.8	1000.7
65°	283.4	374.9	475.3	566.8	643.5	699.6	732.1	740.9	752.8	749.8	743.9
67.5°	209.6	277.5	351.2	419.1	472.3	507.7	531.3	552.0	549.1	543.2	540.2
70°	144.7	188.9	253.9	295.2	333.6	369.0	374.9	377.8	380.8	383.7	377.8
72.5°	100.4	132.8	168.3	203.7	227.3	242.0	256.8	259.7	259.7	259.7	256.8
75°	50.2	67.9	100.4	115.1	135.8	141.7	153.5	153.5	162.4	150.5	147.6
77.5°	44.3	53.2	70.9	82.6	91.5	100.4	103.3	112.2	109.2	103.3	106.2
80°	26.6	32.5	44.3	50.2	62.0	64.9	67.9	70.9	67.9	70.9	70.9
82.5°	20.7	23.6	29.5	29.5	38.4	38.4	41.3	41.3	44.3	44.3	44.3
85°	11.8	20.7	17.7	35.4	23.6	23.6	29.5	35.4	29.5	29.5	35.4
87.5°	11.8	11.8	8.9	11.8	11.8	11.8	14.7	17.7	17.7	20.7	17.7
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: P249366

CATALOG NUMBER: LSR8B120D010 EC8B120935 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	5499.4	5499.4	5499.4	5499.4
2.5°	5508.3	5514.1	5505.3	5502.3
5°	5517.1	5517.1	5511.2	5511.2
7.5°	5517.1	5517.1	5508.3	5502.3
10°	5493.5	5493.5	5484.6	5478.7
12.5°	5449.2	5449.2	5446.2	5437.4
15°	5393.1	5393.1	5381.3	5372.5
17.5°	5316.4	5322.3	5307.5	5307.5
20°	5233.7	5230.8	5219.0	5213.1
22.5°	5148.1	5142.2	5139.3	5121.6
25°	5056.6	5050.7	5041.8	5033.0
27.5°	4900.2	4897.2	4888.3	4876.6
30°	4661.0	4658.1	4646.3	4646.3
32.5°	4351.1	4348.1	4336.4	4339.3
35°	4029.3	4041.2	4035.2	4023.5
37.5°	3760.7	3769.6	3775.5	3769.6
40°	3536.4	3562.9	3565.9	3571.8
42.5°	3297.3	3332.7	3344.5	3350.4
45°	3010.9	3043.4	3070.0	3064.1
47.5°	2718.7	2742.3	2765.9	2748.2
50°	2438.3	2453.0	2461.9	2461.9
52.5°	2172.6	2172.6	2169.7	2172.6
55°	1868.5	1868.5	1856.8	1862.6
57.5°	1549.7	1555.7	1546.8	1532.0
60°	1254.5	1239.8	1233.9	1225.1
62.5°	977.1	977.1	956.4	983.0
65°	732.1	723.2	714.3	711.4
67.5°	531.3	528.4	519.5	516.6
70°	374.9	363.1	360.1	354.2
72.5°	250.9	250.9	245.0	245.0
75°	153.5	138.7	135.8	138.7
77.5°	106.2	103.3	103.3	100.4
80°	70.9	67.9	73.8	64.9
82.5°	44.3	47.2	44.3	47.2
85°	29.5	35.4	32.5	32.5
87.5°	17.7	17.7	17.7	17.7
90°	0.0	0.0	0.0	0.0

(END OF REPORT)