

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: P249773

Luminaire Tested: **LSR8B120D010 EC8B1209727 8LBSW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249773
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13955)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B120D010 EC8B1209727 8LBSW0LI
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 2700 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9076.0 lumens
Efficiency: N/A
Efficacy: 76.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.28 / 1.15
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

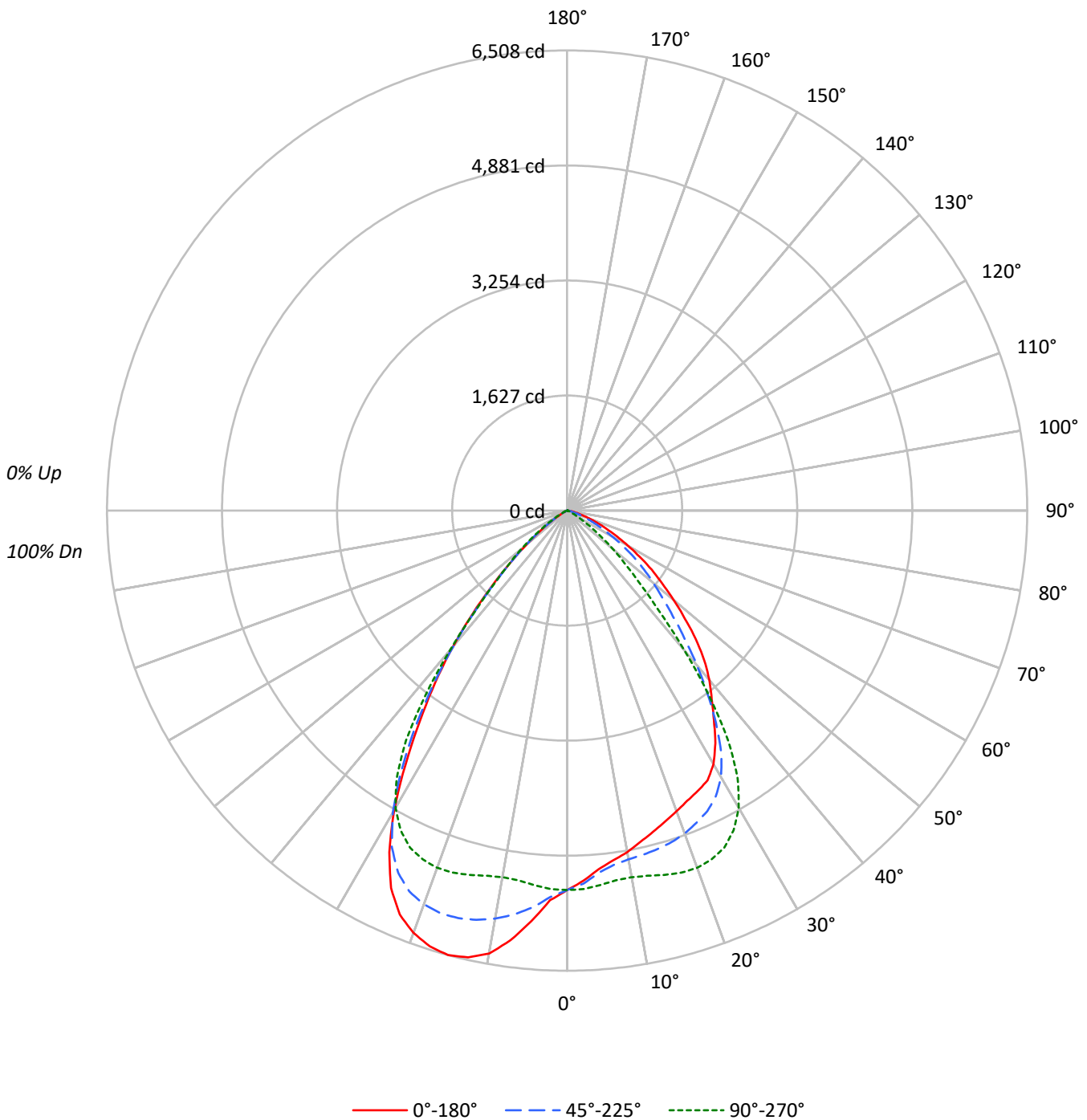
Input Watts (W): 118.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0			
RCR																								
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100			
1	112	109	106	103	110	107	104	102	103	100	98	99	97	96	95	94	93	91	91	91	91			
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82	82	82	82			
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73	73	73	73			
4	92	83	76	71	90	81	75	70	79	74	70	77	72	69	75	71	68	66	66	66	66			
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	69	65	61	60	60	60	60			
6	80	70	63	57	79	69	62	57	67	61	57	66	60	56	64	60	56	54	54	54	54			
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49	49	49	49			
8	71	60	53	48	70	59	52	48	58	52	47	57	51	47	56	51	47	45	45	45	45			
9	67	55	48	44	66	55	48	44	54	48	43	53	47	43	52	47	43	42	42	42	42			
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	43	40	38	38	38	38			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	Luminaire represents a point source (luminous area is zero).		
5°	No luminance values can be calculated.		
10°			
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	515.9	5.7
10°-20°	1544.1	17.0
20°-30°	2364.6	26.1
30°-40°	2318.1	25.5
40°-50°	1396.0	15.4
50°-60°	642.5	7.1
60°-70°	225.7	2.5
70°-80°	59.0	0.7
80°-90°	10.1	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°	4424.6	48.8
0°-40°	6742.7	74.3
0°-60°	8781.2	96.8
0°-90°	9076.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9076.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	5367	5367	5367	5367	5367	
5°	5093	5141	5316	5635	5828	481
15°	4702	4955	5334	5966	6508	1328
25°	4374	4690	5259	5655	5891	2014
35°	3619	3669	3972	3744	3624	2266
45°	2570	2117	1434	1444	1482	1971
55°	1460	1156	411	324	311	1302
65°	619	429	65	33	35	631
75°	160	93	5	0	0	195
85°	25	12	2	0	0	34
90°	0	0	0	0	0	



TEST NUMBER: P249773

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	5366.7	5366.7	5366.7	5366.7	5366.7	5366.7	5366.7	5366.7	5366.7	5366.7	5366.7
2.5°	5241.2	5246.3	5246.3	5246.3	5256.3	5258.9	5256.3	5258.9	5263.8	5281.4	5288.9
5°	5093.3	5085.8	5090.8	5088.3	5100.9	5108.4	5103.3	5110.9	5128.4	5141.0	5153.5
7.5°	4988.0	4988.0	4988.0	4993.0	5000.5	5015.6	5013.1	5018.1	5035.6	5053.2	5070.7
10°	4905.3	4902.8	4902.8	4915.3	4925.3	4942.8	4947.9	4963.0	4985.5	5008.1	5028.1
12.5°	4797.4	4800.0	4812.5	4825.0	4847.6	4875.1	4890.2	4910.3	4945.4	4983.0	5005.6
15°	4702.1	4704.6	4714.7	4739.7	4767.3	4800.0	4832.5	4865.1	4907.7	4955.4	4995.6
17.5°	4609.3	4611.8	4619.3	4647.0	4682.1	4724.7	4762.3	4804.9	4860.1	4915.3	4965.4
20°	4524.1	4521.6	4534.1	4559.1	4604.4	4644.4	4682.1	4732.3	4792.4	4860.1	4917.7
22.5°	4441.3	4441.3	4453.9	4478.9	4519.1	4559.1	4599.3	4651.9	4712.1	4777.4	4845.1
25°	4373.6	4371.1	4388.6	4401.2	4431.3	4471.4	4514.0	4556.7	4616.8	4689.6	4754.8
27.5°	4300.9	4298.4	4300.9	4316.0	4343.5	4373.6	4406.2	4443.8	4494.0	4554.2	4616.8
30°	4140.4	4142.8	4142.8	4155.4	4170.5	4203.0	4220.6	4258.3	4303.4	4353.5	4408.8
32.5°	3902.1	3904.6	3904.6	3909.7	3922.2	3937.2	3952.3	3979.9	4015.0	4057.6	4107.8
35°	3618.8	3618.8	3616.2	3618.8	3626.3	3626.3	3638.8	3626.3	3643.9	3669.0	3706.5
37.5°	3357.9	3352.9	3347.9	3342.9	3335.3	3322.8	3305.3	3275.2	3267.6	3257.6	3260.1
40°	3127.2	3124.8	3109.7	3097.1	3072.0	3042.0	2999.3	2946.7	2904.1	2853.9	2811.3
42.5°	2871.5	2868.9	2856.4	2833.8	2806.2	2761.1	2693.4	2623.2	2537.9	2462.7	2385.0
45°	2570.5	2578.0	2560.4	2535.4	2502.7	2460.1	2385.0	2299.6	2214.3	2116.6	2018.7
47.5°	2257.0	2254.5	2242.0	2226.9	2199.4	2156.7	2106.6	2013.8	1923.5	1833.2	1732.9
50°	1966.1	1956.1	1951.0	1936.0	1918.5	1883.4	1830.7	1755.4	1675.2	1589.9	1497.1
52.5°	1690.3	1690.3	1677.7	1667.7	1652.6	1625.0	1579.9	1519.7	1452.0	1371.7	1274.0
55°	1459.6	1454.5	1442.0	1429.4	1414.4	1396.8	1356.8	1306.6	1233.8	1156.1	1070.8
57.5°	1213.8	1211.2	1206.3	1191.2	1183.7	1166.1	1121.0	1070.8	1008.2	940.5	870.2
60°	993.1	983.1	973.0	963.0	950.5	932.9	902.8	860.2	807.5	747.3	677.1
62.5°	795.0	810.0	780.0	780.0	754.9	739.8	712.2	687.2	631.9	576.8	516.6
65°	619.4	619.4	606.8	596.8	581.8	564.2	536.7	511.6	471.4	428.8	386.2
67.5°	474.0	471.4	458.9	448.9	436.3	426.3	406.3	376.1	346.1	311.0	275.8
70°	348.6	346.1	343.5	326.0	316.0	303.5	288.4	268.4	245.8	220.7	188.1
72.5°	250.7	250.7	243.3	235.8	225.7	215.6	200.7	188.1	168.0	150.5	127.9
75°	160.5	158.0	158.0	145.4	145.4	130.4	120.4	112.8	102.8	92.8	72.8
77.5°	115.4	112.8	110.3	105.3	100.3	95.3	87.7	77.7	70.2	60.2	52.6
80°	77.7	72.8	70.2	70.2	62.7	60.2	62.7	47.7	45.1	37.6	32.6
82.5°	47.7	47.7	45.1	45.1	42.6	40.2	32.6	32.6	30.1	27.6	22.6
85°	25.1	32.6	22.6	25.1	22.6	25.1	22.6	17.5	15.1	12.5	12.5
87.5°	15.1	10.0	10.0	15.1	12.5	10.0	10.0	10.0	7.5	5.1	5.1
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°	5366.7	5366.7	5366.7	5366.7	5366.7	5366.7	5366.7	5366.7	5366.7	5366.7	5366.7
2.5°	5284.0	5301.5	5298.9	5321.5	5329.1	5346.6	5346.6	5359.1	5366.7	5384.2	5399.3
5°	5158.6	5186.1	5193.7	5221.2	5243.8	5271.4	5288.9	5316.5	5341.6	5379.3	5414.3
7.5°	5080.8	5103.3	5118.4	5151.0	5176.1	5206.1	5236.3	5273.9	5309.0	5354.2	5404.3
10°	5043.2	5073.3	5095.8	5128.4	5158.6	5191.2	5221.2	5263.8	5304.0	5361.7	5416.8
12.5°	5033.1	5068.2	5095.8	5141.0	5171.1	5206.1	5241.2	5288.9	5331.6	5391.7	5454.5
15°	5033.1	5080.8	5118.4	5168.6	5203.7	5248.8	5286.5	5334.0	5381.7	5444.4	5504.6
17.5°	5023.1	5080.8	5128.4	5186.1	5231.2	5276.4	5324.0	5369.2	5419.3	5479.6	5547.2
20°	4983.0	5055.8	5113.3	5181.1	5228.8	5278.9	5326.6	5376.7	5429.4	5492.1	5549.8
22.5°	4912.8	4998.0	5063.3	5136.0	5191.2	5241.2	5288.9	5339.1	5396.8	5457.0	5517.2
25°	4820.0	4900.2	4970.5	5045.6	5100.9	5156.0	5201.2	5258.9	5311.5	5369.2	5416.8
27.5°	4679.5	4764.8	4832.5	4910.3	4960.4	5013.1	5050.7	5098.4	5148.5	5196.1	5233.8
30°	4468.9	4546.7	4616.8	4687.0	4737.2	4774.9	4814.9	4852.6	4885.2	4917.7	4950.4
32.5°	4160.4	4230.7	4298.4	4363.5	4403.7	4436.3	4466.3	4489.0	4506.5	4524.1	4526.5
35°	3736.7	3794.3	3836.9	3894.6	3932.3	3962.3	3962.3	3972.3	3969.8	3962.3	3954.8
37.5°	3262.7	3285.2	3302.7	3325.3	3327.8	3327.8	3312.8	3300.2	3280.2	3275.2	3260.1
40°	2768.6	2738.5	2715.9	2685.9	2668.3	2630.6	2598.1	2575.5	2542.9	2537.9	2532.9
42.5°	2299.6	2229.4	2166.8	2114.1	2053.9	2001.2	1953.6	1918.5	1893.4	1890.8	1893.4
45°	1918.5	1838.2	1745.4	1672.7	1605.0	1539.8	1477.1	1434.5	1411.9	1406.8	1411.9
47.5°	1630.1	1537.3	1447.0	1364.2	1291.5	1218.8	1156.1	1098.4	1070.8	1063.3	1060.8
50°	1401.9	1306.6	1211.2	1126.0	1045.8	973.0	895.3	840.1	805.0	792.4	782.4
52.5°	1178.7	1093.4	995.6	907.8	827.5	742.3	662.1	599.3	564.2	549.2	539.1
55°	983.1	897.8	807.5	722.3	637.0	551.7	471.4	411.2	373.7	356.1	343.5
57.5°	784.9	704.7	627.0	541.7	471.4	388.7	308.4	255.8	223.2	203.1	193.1
60°	606.8	544.2	476.5	406.3	338.6	270.9	205.6	155.5	130.4	115.4	102.8
62.5°	458.9	406.3	361.1	300.9	248.3	190.5	140.5	100.3	77.7	65.2	60.2
65°	331.0	290.9	250.7	213.2	175.6	133.0	95.3	65.2	45.1	37.6	35.1
67.5°	235.8	203.1	173.0	147.9	120.4	95.3	67.7	45.1	35.1	30.1	27.6
70°	165.5	140.5	120.4	97.9	80.2	62.7	52.6	32.6	20.0	22.6	17.5
72.5°	110.3	92.8	82.8	67.7	55.1	45.1	32.6	22.6	22.6	17.5	15.1
75°	60.2	55.1	42.6	32.6	27.6	25.1	10.0	5.1	2.5	7.5	2.5
77.5°	42.6	37.6	32.6	27.6	22.6	17.5	10.0	10.0	7.5	10.0	5.1
80°	27.6	22.6	20.0	20.0	12.5	7.5	5.1	5.1	7.5	2.5	2.5
82.5°	17.5	15.1	12.5	12.5	12.5	7.5	7.5	7.5	7.5	5.1	5.1
85°	10.0	7.5	5.1	5.1	2.5	5.1	0.0	2.5	2.5	0.0	0.0
87.5°	5.1	2.5	2.5	2.5	2.5	0.0	0.0	2.5	0.0	2.5	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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	5366.7	5366.7	5366.7	5366.7	5366.7	5366.7	5366.7	5366.7	5366.7	5366.7	5366.7
2.5°	5409.3	5419.3	5431.9	5441.9	5464.5	5469.5	5479.6	5489.6	5497.1	5504.6	5507.1
5°	5444.4	5482.1	5517.2	5554.7	5602.4	5635.0	5672.6	5705.2	5737.8	5765.4	5785.4
7.5°	5454.5	5512.1	5564.8	5630.0	5700.2	5760.5	5823.1	5885.8	5951.0	6001.2	6043.8
10°	5474.5	5544.7	5612.4	5690.2	5780.5	5860.7	5938.4	6021.2	6104.0	6174.2	6236.9
12.5°	5509.6	5587.3	5660.1	5745.4	5838.2	5928.4	6013.7	6106.5	6194.3	6272.0	6342.2
15°	5567.3	5640.0	5710.3	5790.5	5883.3	5966.1	6051.3	6141.6	6229.4	6309.6	6374.8
17.5°	5604.9	5672.6	5742.8	5815.6	5893.3	5968.6	6048.8	6129.1	6209.3	6282.0	6342.2
20°	5604.9	5670.1	5722.8	5788.0	5860.7	5925.9	5991.2	6061.3	6131.5	6191.7	6249.4
22.5°	5559.8	5622.4	5662.6	5712.8	5775.4	5830.6	5865.7	5943.5	5996.1	6048.8	6091.4
25°	5454.5	5499.6	5532.2	5567.3	5617.5	5655.1	5685.2	5730.3	5783.0	5803.1	5833.1
27.5°	5263.8	5296.5	5314.0	5321.5	5346.6	5366.7	5371.7	5391.7	5414.3	5419.3	5431.9
30°	4963.0	4965.4	4957.9	4955.4	4942.8	4927.9	4925.3	4922.8	4912.8	4902.8	4905.3
32.5°	4509.0	4496.5	4466.3	4433.8	4401.2	4366.1	4346.0	4320.9	4305.8	4290.9	4273.3
35°	3922.2	3892.1	3849.5	3809.3	3771.8	3744.1	3699.0	3683.9	3669.0	3648.8	3643.9
37.5°	3232.5	3215.0	3174.8	3144.8	3124.8	3112.2	3089.6	3074.6	3074.6	3067.1	3062.0
40°	2520.3	2515.3	2500.3	2507.8	2497.8	2502.7	2500.3	2495.2	2507.8	2507.8	2512.9
42.5°	1890.8	1893.4	1901.0	1905.9	1921.0	1923.5	1936.0	1936.0	1943.6	1951.0	1956.1
45°	1406.8	1416.9	1416.9	1427.0	1442.0	1444.5	1449.5	1452.0	1457.0	1469.6	1474.5
47.5°	1055.8	1058.2	1058.2	1060.8	1065.8	1070.8	1068.4	1070.8	1078.4	1073.3	1078.4
50°	780.0	782.4	774.9	767.4	774.9	774.9	772.4	764.9	772.4	762.4	767.4
52.5°	531.7	529.1	521.6	524.2	519.1	516.6	516.6	511.6	511.6	511.6	501.6
55°	336.1	336.1	331.0	331.0	328.6	323.5	321.0	318.4	316.0	313.5	313.5
57.5°	188.1	190.5	183.1	180.5	183.1	180.5	175.6	175.6	175.6	168.0	173.0
60°	102.8	100.3	97.9	95.3	92.8	95.3	95.3	90.3	90.3	90.3	92.8
62.5°	55.1	55.1	52.6	52.6	50.2	50.2	55.1	47.7	50.2	47.7	50.2
65°	30.1	37.6	27.6	27.6	35.1	32.6	30.1	30.1	32.6	27.6	30.1
67.5°	32.6	22.6	20.0	22.6	20.0	20.0	20.0	25.1	22.6	17.5	22.6
70°	15.1	17.5	17.5	12.5	20.0	10.0	17.5	10.0	15.1	12.5	15.1
72.5°	15.1	15.1	15.1	10.0	15.1	10.0	12.5	12.5	10.0	10.0	15.1
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	5.1	5.1	2.5	2.5	2.5	2.5	5.1	5.1	5.1	0.0	2.5
80°	5.1	5.1	0.0	2.5	0.0	0.0	2.5	0.0	2.5	0.0	5.1
82.5°	2.5	5.1	2.5	2.5	5.1	5.1	5.1	2.5	2.5	2.5	2.5
85°	0.0	2.5	0.0	0.0	0.0	0.0	5.1	0.0	0.0	0.0	2.5
87.5°	0.0	2.5	0.0	0.0	0.0	0.0	2.5	2.5	0.0	0.0	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: P249773

CATALOG NUMBER: LSR8B120D010 EC8B1209727 8LBSW0LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	5366.7	5366.7	5366.7	5366.7
2.5°	5509.6	5512.1	5517.2	5514.7
5°	5800.5	5820.6	5830.6	5828.2
7.5°	6073.8	6109.0	6129.1	6129.1
10°	6284.5	6324.7	6354.7	6359.8
12.5°	6397.3	6442.5	6482.7	6472.6
15°	6430.0	6475.2	6515.2	6507.7
17.5°	6392.4	6437.5	6467.6	6462.6
20°	6289.6	6327.1	6357.3	6354.7
22.5°	6129.1	6161.7	6186.8	6184.2
25°	5858.2	5880.8	5900.8	5890.8
27.5°	5441.9	5449.4	5461.9	5447.0
30°	4887.7	4892.7	4897.7	4895.2
32.5°	4265.8	4263.2	4258.3	4253.2
35°	3636.3	3636.3	3638.8	3623.7
37.5°	3064.5	3062.0	3069.5	3062.0
40°	2517.8	2515.3	2525.3	2512.9
42.5°	1963.6	1971.1	1973.6	1973.6
45°	1477.1	1479.6	1482.1	1482.1
47.5°	1078.4	1080.8	1093.4	1078.4
50°	762.4	764.9	767.4	762.4
52.5°	504.0	506.6	504.0	496.5
55°	308.4	311.0	311.0	311.0
57.5°	165.5	168.0	168.0	165.5
60°	90.3	87.7	90.3	85.3
62.5°	47.7	52.6	50.2	45.1
65°	30.1	30.1	30.1	35.1
67.5°	25.1	20.0	22.6	17.5
70°	15.1	17.5	17.5	12.5
72.5°	12.5	12.5	12.5	15.1
75°	0.0	0.0	0.0	0.0
77.5°	5.1	5.1	5.1	2.5
80°	2.5	0.0	2.5	0.0
82.5°	2.5	2.5	5.1	2.5
85°	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)