

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: P248421

Luminaire Tested: **LSR8B120D010 EC8B1209727 8LBDW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P248421
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: LSR8B120D010 EC8B1209727 8LBDW0LI
Description: PORTFOLIO 8 INCH DOUBLE 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: 9022.0 lumens
Efficiency: N/A
Efficacy: 76.3 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.33 / 1.2
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

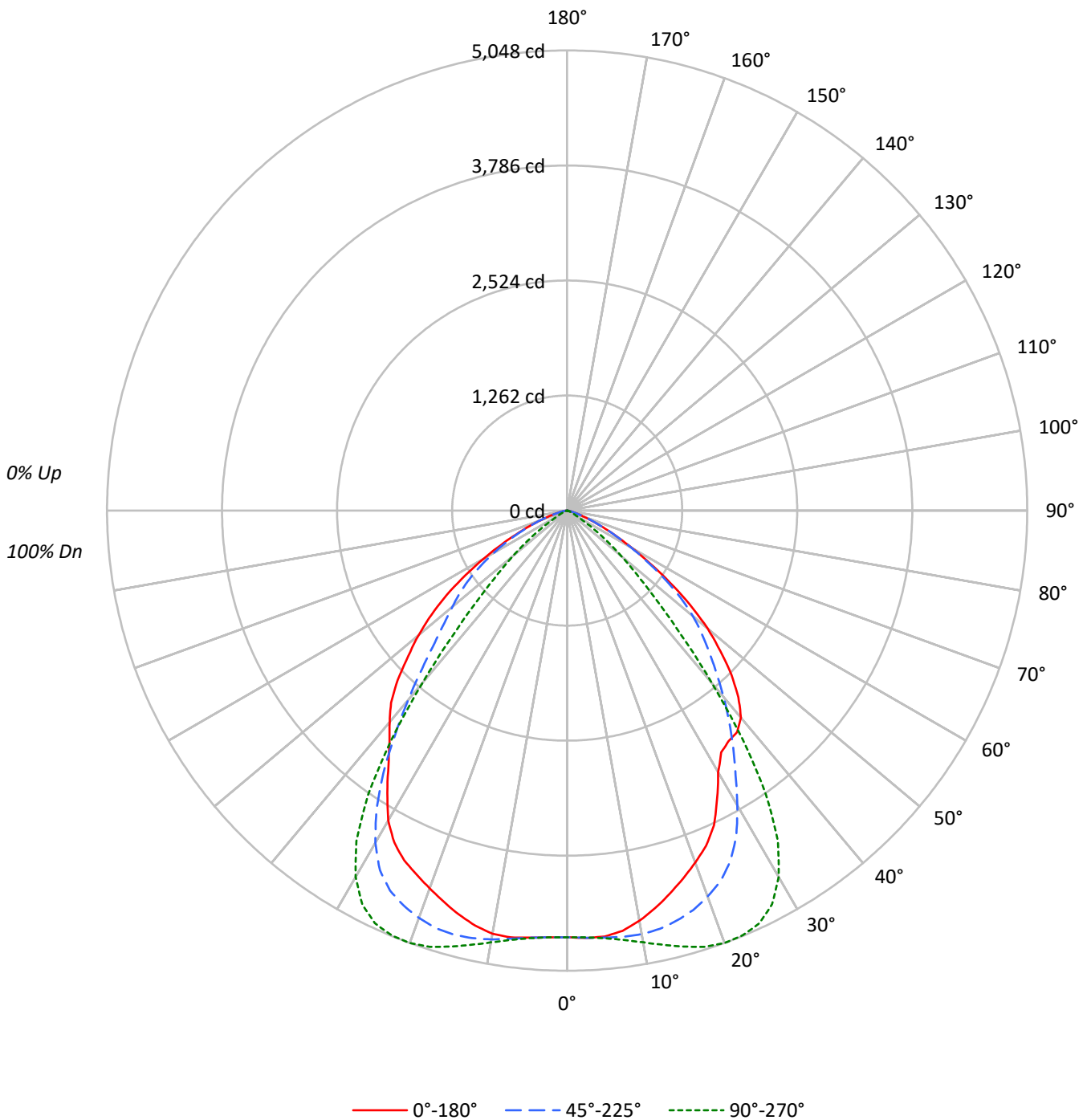
Input Watts (W): 118.3
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	92	90	90	90	90			
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79	79	79	79			
3	97	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70	70	70	70			
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62	62	62	62			
5	84	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56	56	56	56			
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50	50	50	50			
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45	45	45	45			
8	68	56	49	44	67	56	48	43	54	48	43	53	47	43	52	47	43	41	41	41	41			
9	64	52	45	40	63	51	44	40	50	44	39	49	44	39	48	43	39	38	38	38	38			
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34	34	34	34			

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°	450.1	5.0
10°-20°	1333.4	14.8
20°-30°	2034.2	22.5
30°-40°	2122.7	23.5
40°-50°	1594.4	17.7
50°-60°	981.0	10.9
60°-70°	399.2	4.4
70°-80°	94.1	1.0
80°-90°	13.0	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°	3817.6	42.3
0°-40°	5940.3	65.8
0°-60°	8515.8	94.4
0°-90°	9022.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9022.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4680	4680	4680	4680	4680	
5°	4690	4703	4708	4703	4703	444
15°	4350	4656	4951	4814	4588	1225
25°	3811	4238	4993	4598	4233	1732
35°	3088	3175	3803	3515	3416	1950
45°	2549	2206	1376	2054	2628	1945
55°	1376	1307	360	1307	1612	1237
65°	430	435	55	584	619	448
75°	74	74	10	132	137	90
85°	8	8	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°	4680.3	4680.3	4680.3	4680.3	4680.3	4680.3	4680.3	4680.3	4680.3	4680.3	4680.3
2.5°	4692.8	4685.3	4692.8	4692.8	4695.2	4690.3	4692.8	4695.2	4690.3	4690.3	4690.3
5°	4690.3	4685.3	4690.3	4687.8	4692.8	4692.8	4697.7	4697.7	4702.7	4702.7	4710.1
7.5°	4650.5	4640.6	4650.5	4658.0	4662.9	4672.9	4685.3	4695.2	4705.2	4715.1	4727.5
10°	4568.5	4568.5	4576.0	4590.9	4605.8	4623.2	4645.5	4670.4	4695.2	4717.6	4739.9
12.5°	4466.7	4459.2	4474.1	4494.0	4516.4	4543.7	4578.5	4615.7	4655.5	4700.2	4735.0
15°	4349.9	4342.4	4359.8	4379.7	4407.1	4446.8	4489.1	4538.7	4595.9	4655.5	4712.6
17.5°	4230.7	4228.2	4245.6	4272.9	4295.3	4337.5	4392.2	4451.7	4516.4	4595.9	4670.4
20°	4109.0	4106.5	4123.9	4146.2	4176.0	4215.8	4270.4	4340.0	4417.0	4506.4	4593.4
22.5°	3982.2	3984.7	3999.6	4024.5	4049.3	4091.5	4148.7	4218.3	4302.7	4399.6	4496.5
25°	3810.8	3798.4	3818.3	3843.2	3885.3	3920.1	3974.8	4049.3	4136.3	4238.1	4352.4
27.5°	3562.4	3559.9	3577.3	3599.7	3636.9	3679.2	3738.8	3815.8	3907.7	4019.5	4131.3
30°	3314.0	3318.9	3326.4	3348.8	3373.6	3415.8	3475.5	3540.1	3627.0	3733.8	3853.1
32.5°	3145.0	3145.0	3155.0	3169.9	3187.3	3209.7	3251.9	3299.1	3366.2	3440.7	3527.6
35°	3087.9	3078.0	3087.9	3090.4	3092.9	3097.9	3105.3	3120.2	3142.5	3174.9	3207.2
37.5°	3063.1	3055.6	3055.6	3045.7	3033.3	3018.4	2998.5	2976.1	2951.3	2919.0	2894.2
40°	2966.2	2961.2	2956.2	2946.3	2919.0	2889.2	2856.9	2804.7	2747.6	2668.1	2588.6
42.5°	2779.9	2774.9	2772.4	2752.5	2727.7	2692.9	2655.7	2601.0	2529.0	2427.1	2312.8
45°	2548.9	2538.9	2531.5	2514.1	2496.6	2466.9	2432.1	2382.4	2310.3	2206.0	2069.4
47.5°	2280.5	2275.6	2273.1	2265.7	2248.3	2230.8	2208.5	2168.8	2104.1	2004.8	1863.2
50°	2009.7	1999.8	2004.8	2002.3	1994.9	1982.5	1967.5	1940.2	1890.5	1801.1	1671.9
52.5°	1699.2	1699.2	1696.8	1704.2	1706.7	1704.2	1706.7	1676.9	1634.6	1567.5	1458.2
55°	1376.2	1376.2	1383.7	1393.7	1403.6	1406.1	1403.6	1391.2	1361.4	1306.7	1209.8
57.5°	1073.2	1068.2	1083.1	1098.0	1108.0	1117.9	1110.4	1100.5	1083.1	1038.4	963.9
60°	817.3	817.3	827.2	837.2	847.1	857.1	854.6	852.1	837.2	807.4	747.8
62.5°	601.2	603.7	603.7	611.1	621.0	631.0	638.4	631.0	623.5	603.7	563.9
65°	429.8	427.3	429.8	437.2	444.7	454.6	459.6	457.1	449.6	434.7	405.0
67.5°	288.2	285.7	295.6	298.1	303.1	313.0	310.6	313.0	310.6	298.1	273.3
70°	188.8	183.8	188.8	186.3	193.8	196.3	201.2	203.7	201.2	193.8	186.3
72.5°	116.8	114.3	116.8	119.3	121.8	124.2	129.2	129.2	126.7	121.8	111.8
75°	74.5	67.0	69.5	64.6	69.5	69.5	74.5	77.0	74.5	74.5	69.5
77.5°	44.7	44.7	44.7	44.7	44.7	44.7	44.7	47.2	49.7	44.7	42.2
80°	22.4	22.4	24.9	24.9	24.9	27.4	24.9	24.9	24.9	27.4	19.9
82.5°	17.4	14.9	14.9	14.9	17.4	14.9	14.9	14.9	14.9	14.9	14.9
85°	7.5	9.9	7.5	5.0	7.5	7.5	9.9	7.5	7.5	7.5	9.9
87.5°	2.5	2.5	0.0	0.0	0.0	2.5	0.0	2.5	2.5	5.0	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



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	4680.3	4680.3	4680.3	4680.3	4680.3	4680.3	4680.3	4680.3	4680.3	4680.3	4680.3
2.5°	4692.8	4687.8	4687.8	4685.3	4690.3	4685.3	4687.8	4685.3	4685.3	4690.3	4685.3
5°	4710.1	4712.6	4707.6	4705.2	4712.6	4712.6	4712.6	4707.6	4707.6	4710.1	4707.6
7.5°	4735.0	4739.9	4742.4	4744.9	4749.9	4752.4	4752.4	4749.9	4747.4	4754.9	4744.9
10°	4762.3	4769.8	4784.7	4792.1	4804.5	4804.5	4809.5	4809.5	4804.5	4809.5	4807.0
12.5°	4752.4	4797.1	4821.9	4839.3	4856.7	4871.6	4876.6	4879.1	4876.6	4886.5	4876.6
15°	4769.8	4807.0	4846.8	4876.6	4908.8	4926.2	4931.2	4951.1	4956.1	4958.6	4943.7
17.5°	4742.4	4809.5	4851.7	4896.4	4943.7	4976.0	5005.7	5018.2	5020.7	5025.6	5005.7
20°	4680.3	4754.9	4819.4	4884.0	4938.7	4988.4	5013.2	5048.0	5038.1	5058.0	5030.6
22.5°	4595.9	4680.3	4762.3	4846.8	4903.9	4963.6	5015.7	5040.5	5053.0	5053.0	5023.1
25°	4461.7	4561.1	4650.5	4737.4	4824.4	4896.4	4956.1	4993.3	5000.8	4998.3	4963.6
27.5°	4253.0	4359.8	4464.2	4563.6	4670.4	4754.9	4824.4	4869.1	4881.6	4881.6	4844.3
30°	3964.9	4079.1	4181.0	4300.2	4409.6	4504.0	4600.8	4640.6	4662.9	4662.9	4620.7
32.5°	3622.0	3718.9	3813.3	3930.1	4049.3	4156.1	4248.1	4302.7	4330.0	4327.6	4290.3
35°	3249.4	3296.6	3368.7	3455.6	3562.4	3661.8	3751.2	3803.4	3850.6	3848.1	3813.3
37.5°	2876.7	2864.3	2871.8	2904.1	2971.1	3040.7	3110.3	3160.0	3199.7	3217.1	3209.7
40°	2511.6	2447.0	2384.9	2362.5	2367.5	2392.3	2429.6	2466.9	2511.6	2534.0	2543.9
42.5°	2183.7	2074.4	1965.0	1883.1	1835.8	1820.9	1838.3	1850.7	1878.1	1910.4	1942.7
45°	1920.3	1773.8	1629.7	1503.0	1423.5	1376.2	1366.3	1376.2	1391.2	1423.5	1465.7
47.5°	1704.2	1532.8	1371.3	1229.7	1112.9	1050.9	1033.5	1028.5	1043.4	1073.2	1130.3
50°	1512.9	1341.5	1162.6	998.6	877.0	807.4	782.6	772.6	790.0	812.3	864.5
52.5°	1304.2	1135.3	951.5	792.5	665.8	593.8	566.4	551.5	561.4	591.3	643.4
55°	1078.2	921.6	755.2	591.3	469.5	402.5	370.1	360.2	370.1	402.5	454.6
57.5°	852.1	720.4	581.3	427.3	318.0	250.9	218.6	208.7	236.0	248.4	303.1
60°	665.8	559.0	439.7	313.0	218.6	166.4	134.2	126.7	139.1	161.4	206.2
62.5°	499.4	432.2	337.8	223.6	161.4	106.8	89.4	82.0	89.4	106.8	141.6
65°	362.7	310.6	236.0	163.9	109.3	79.5	59.6	54.6	62.1	74.5	104.4
67.5°	248.4	208.7	163.9	114.3	74.5	49.7	42.2	42.2	44.7	54.6	77.0
70°	161.4	136.6	104.4	74.5	49.7	37.3	32.3	27.4	32.3	39.8	52.2
72.5°	101.9	86.9	67.0	52.2	37.3	27.4	22.4	19.9	24.9	29.8	39.8
75°	62.1	47.2	34.8	27.4	19.9	19.9	19.9	9.9	12.4	19.9	24.9
77.5°	37.3	32.3	27.4	22.4	17.4	9.9	9.9	9.9	12.4	14.9	22.4
80°	19.9	17.4	12.4	12.4	9.9	7.5	9.9	7.5	5.0	12.4	14.9
82.5°	12.4	9.9	9.9	9.9	12.4	5.0	7.5	5.0	7.5	9.9	7.5
85°	7.5	7.5	7.5	5.0	12.4	5.0	5.0	2.5	2.5	5.0	5.0
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°	4680.3	4680.3	4680.3	4680.3	4680.3	4680.3	4680.3	4680.3	4680.3	4680.3	4680.3
2.5°	4687.8	4685.3	4687.8	4685.3	4685.3	4685.3	4687.8	4687.8	4685.3	4685.3	4690.3
5°	4707.6	4707.6	4707.6	4705.2	4702.7	4702.7	4707.6	4707.6	4700.2	4707.6	4707.6
7.5°	4749.9	4742.4	4749.9	4739.9	4735.0	4737.4	4739.9	4735.0	4730.0	4732.5	4732.5
10°	4804.5	4797.1	4797.1	4789.6	4782.2	4777.2	4772.3	4759.8	4747.4	4744.9	4735.0
12.5°	4869.1	4856.7	4849.3	4834.3	4821.9	4804.5	4789.6	4769.8	4744.9	4727.5	4710.1
15°	4933.7	4913.8	4896.4	4871.6	4844.3	4814.4	4782.2	4749.9	4710.1	4675.4	4645.5
17.5°	4985.9	4958.6	4926.2	4886.5	4846.8	4802.0	4754.9	4707.6	4650.5	4605.8	4571.0
20°	5003.2	4963.6	4921.3	4869.1	4816.9	4754.9	4695.2	4633.1	4568.5	4521.3	4481.6
22.5°	4980.9	4933.7	4881.6	4826.9	4757.3	4690.3	4620.7	4548.6	4491.5	4426.9	4389.7
25°	4918.8	4861.7	4804.5	4739.9	4672.9	4598.4	4523.8	4449.3	4379.7	4344.9	4297.8
27.5°	4792.1	4730.0	4667.9	4600.8	4523.8	4449.3	4372.3	4300.2	4240.6	4193.4	4166.1
30°	4568.5	4496.5	4424.4	4352.4	4285.3	4208.3	4136.3	4076.6	4017.0	3979.7	3952.4
32.5°	4225.7	4161.1	4089.1	4019.5	3957.4	3892.8	3833.2	3781.0	3738.8	3713.9	3694.1
35°	3763.6	3699.0	3644.4	3594.7	3542.5	3515.2	3478.0	3448.1	3430.7	3420.8	3418.3
37.5°	3182.3	3145.0	3127.7	3117.7	3107.8	3100.4	3105.3	3117.7	3127.7	3145.0	3164.9
40°	2561.3	2593.5	2603.5	2638.3	2670.5	2712.8	2760.0	2814.7	2859.3	2916.5	2956.2
42.5°	1994.9	2054.5	2124.0	2198.5	2278.1	2355.1	2449.5	2536.4	2615.9	2687.9	2750.1
45°	1532.8	1624.7	1729.0	1835.8	1942.7	2054.5	2168.8	2275.6	2370.0	2447.0	2511.6
47.5°	1194.9	1296.8	1430.9	1562.6	1691.8	1823.4	1950.1	2061.9	2141.4	2215.9	2273.1
50°	946.5	1063.3	1209.8	1361.4	1503.0	1642.1	1776.2	1880.6	1960.1	2019.7	2061.9
52.5°	732.8	872.0	1021.0	1180.0	1331.6	1483.1	1607.3	1704.2	1768.8	1820.9	1853.2
55°	546.5	683.2	842.2	1006.1	1160.2	1306.7	1423.5	1508.0	1565.1	1594.9	1612.3
57.5°	395.0	519.2	678.2	842.2	981.3	1120.4	1214.8	1291.8	1324.1	1341.5	1348.9
60°	288.2	402.5	544.0	685.7	817.3	929.1	1011.1	1063.3	1088.1	1098.0	1095.5
62.5°	211.2	310.6	432.2	551.5	658.3	750.2	814.8	849.6	862.1	867.0	859.6
65°	161.4	238.5	342.8	434.7	516.7	583.8	631.0	653.4	660.8	658.3	653.4
67.5°	119.3	178.9	255.9	325.4	385.1	437.2	462.1	482.0	486.9	479.5	472.0
70°	84.5	131.7	186.3	233.5	278.2	308.1	335.4	337.8	337.8	335.4	330.4
72.5°	59.6	91.9	126.7	159.0	186.3	208.7	218.6	226.1	223.6	221.1	216.2
75°	39.8	57.1	91.9	99.4	124.2	131.7	141.6	141.6	144.1	136.6	136.6
77.5°	24.9	39.8	54.6	64.6	74.5	84.5	89.4	89.4	91.9	89.4	89.4
80°	14.9	24.9	29.8	44.7	44.7	52.2	54.6	57.1	52.2	59.6	52.2
82.5°	9.9	14.9	22.4	22.4	27.4	32.3	32.3	34.8	34.8	32.3	32.3
85°	7.5	9.9	12.4	14.9	14.9	17.4	14.9	14.9	17.4	19.9	17.4
87.5°	2.5	5.0	2.5	5.0	5.0	9.9	7.5	7.5	7.5	9.9	9.9
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: P248421

CATALOG NUMBER: LSR8B120D010 EC8B1209727 8LBDW0LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	4680.3	4680.3	4680.3	4680.3
2.5°	4685.3	4687.8	4685.3	4685.3
5°	4707.6	4705.2	4707.6	4702.7
7.5°	4725.0	4725.0	4722.5	4722.5
10°	4725.0	4715.1	4715.1	4715.1
12.5°	4687.8	4675.4	4667.9	4662.9
15°	4623.2	4600.8	4590.9	4588.4
17.5°	4538.7	4518.8	4506.4	4499.0
20°	4441.8	4422.0	4407.1	4409.6
22.5°	4357.3	4335.0	4325.1	4320.1
25°	4272.9	4245.6	4238.1	4233.2
27.5°	4136.3	4121.4	4113.9	4106.5
30°	3927.6	3920.1	3907.7	3925.1
32.5°	3686.6	3674.2	3664.3	3671.7
35°	3420.8	3413.3	3420.8	3415.8
37.5°	3177.4	3184.8	3194.8	3199.7
40°	2986.1	3013.4	3023.3	3028.3
42.5°	2794.8	2827.1	2846.9	2859.3
45°	2558.8	2591.0	2613.4	2628.4
47.5°	2315.3	2342.7	2365.0	2362.5
50°	2094.2	2109.1	2119.0	2129.0
52.5°	1870.6	1870.6	1873.1	1873.1
55°	1617.3	1612.3	1609.8	1612.3
57.5°	1339.0	1334.1	1331.6	1324.1
60°	1085.6	1070.7	1060.8	1060.8
62.5°	849.6	832.2	824.8	822.3
65°	638.4	635.9	621.0	618.6
67.5°	462.1	452.1	442.2	444.7
70°	325.4	310.6	310.6	305.6
72.5°	211.2	203.7	201.2	201.2
75°	131.7	131.7	126.7	136.6
77.5°	86.9	86.9	84.5	86.9
80°	52.2	52.2	52.2	49.7
82.5°	32.3	34.8	32.3	32.3
85°	17.4	19.9	14.9	22.4
87.5°	9.9	12.4	9.9	12.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)