

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: P249311

Luminaire Tested: **LSR8B100D010 EC8B100830 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249311
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: LSR8B100D010 EC8B100830 8LBDW0GPH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3000 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10368.0 lumens
Efficiency: N/A
Efficacy: 97.5 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

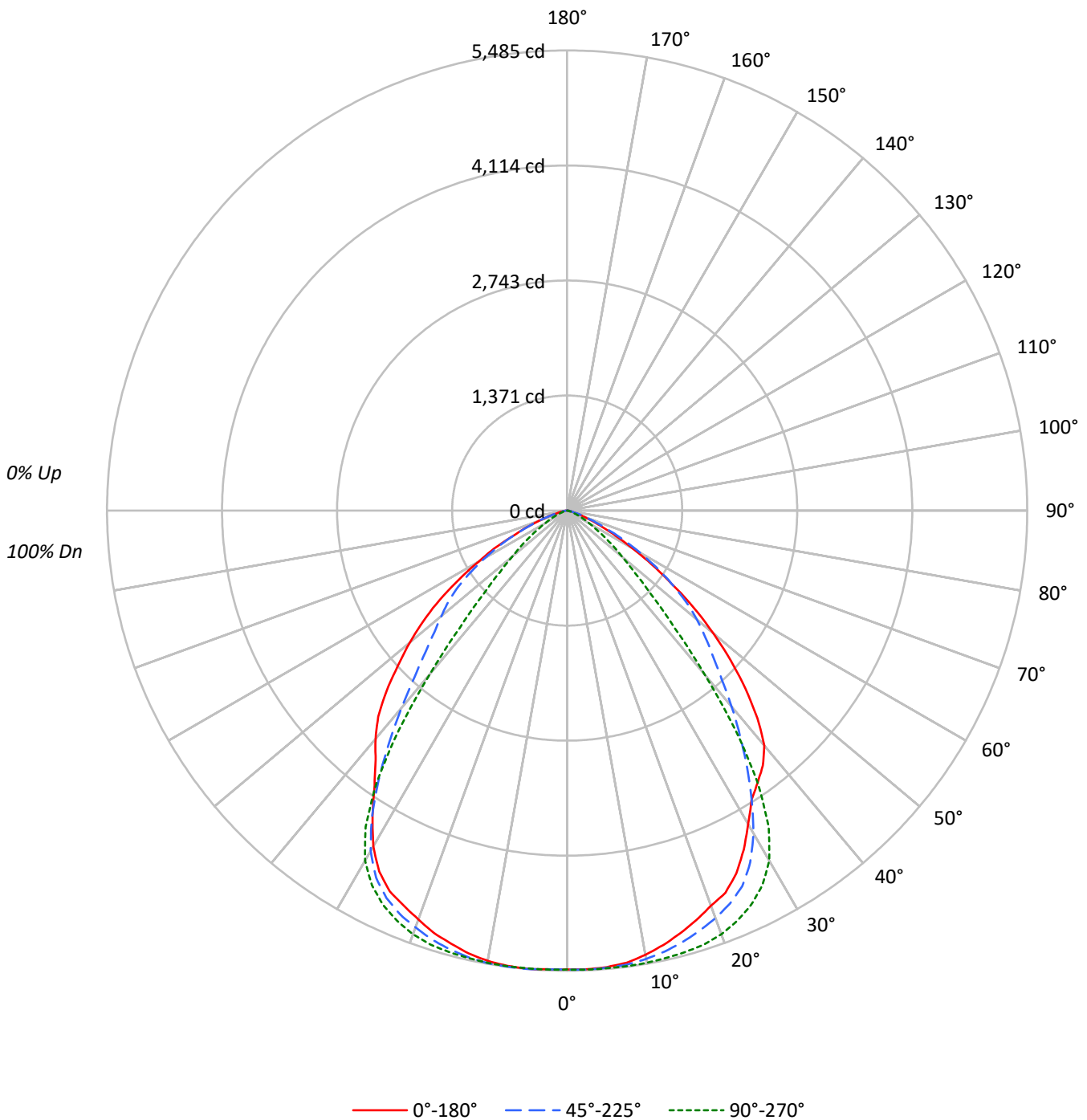
Input Watts (W): 106.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P249311

CATALOG NUMBER: LSR8B100D010 EC8B100830 8LBDW0GPH

Luminous Intensity Polar Plot





TEST NUMBER: P249311

CATALOG NUMBER: LSR8B100D010 EC8B100830 8LBDW0GPH

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°	168687	168687	168687
5°	169056	169514	169693
10°	168346	171380	170644
15°	166481	173887	170606
20°	164480	176330	170167
25°	162346	176534	170338
30°	153590	171571	164567
35°	149003	149112	150660
40°	147156	102595	143022
45°	131124	61594	132916
50°	109028	40993	117481
55°	81771	28257	99609
60°	55413	18835	75154
65°	33425	12214	51630
70°	18537	6618	31763
75°	8400	2800	16442
80°	7299	3125	11472
85°	8314	4140	11428



TEST NUMBER: P249311

CATALOG NUMBER: LSR8B100D010 EC8B100830 8LBDW0GPH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	522.1	5.0
10°-20°	1516.2	14.6
20°-30°	2301.2	22.2
30°-40°	2417.0	23.3
40°-50°	1812.1	17.5
50°-60°	1162.7	11.2
60°-70°	497.4	4.8
70°-80°	117.5	1.1
80°-90°	21.9	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°	4339.5	41.9
0°-40°	6756.5	65.2
0°-60°	9731.3	93.9
0°-90°	10368.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10368.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	5470	5470	5470	5470	5470	
5°	5462	5470	5476	5485	5482	519
15°	5215	5324	5447	5412	5344	1471
25°	4772	4939	5188	5094	5006	2180
35°	3958	3738	3961	3914	4002	2484
45°	3007	2458	1412	2387	3048	2303
55°	1521	1521	526	1586	1853	1380
65°	458	540	167	696	708	489
75°	70	82	24	141	138	103
85°	24	15	12	24	32	25
90°	0	0	0	0	0	



TEST NUMBER: P249311

CATALOG NUMBER: LSR8B100D010 EC8B100830 8LBDW0GPH

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	5470.4	5470.4	5470.4	5470.4	5470.4	5470.4	5470.4	5470.4	5470.4	5470.4	5470.4
2.5°	5473.3	5479.2	5476.3	5476.3	5473.3	5476.3	5476.3	5482.1	5482.1	5476.3	5473.3
5°	5461.5	5467.4	5467.4	5461.5	5461.5	5476.3	5467.4	5473.3	5473.3	5470.4	5470.4
7.5°	5435.2	5435.2	5446.9	5438.1	5438.1	5446.9	5443.9	5449.8	5455.7	5458.6	5458.6
10°	5376.4	5382.3	5385.2	5385.2	5388.2	5396.9	5402.8	5414.6	5420.4	5426.3	5429.3
12.5°	5303.0	5311.8	5314.7	5311.8	5320.6	5332.3	5347.1	5361.7	5370.6	5382.3	5391.1
15°	5214.9	5214.9	5220.8	5229.6	5235.5	5253.1	5267.8	5285.4	5308.8	5323.6	5338.2
17.5°	5118.0	5123.9	5132.7	5132.7	5144.5	5173.8	5182.6	5209.1	5235.5	5250.1	5279.5
20°	5012.3	5018.2	5027.0	5032.9	5047.5	5071.0	5088.6	5112.1	5141.5	5168.0	5197.3
22.5°	4930.1	4918.4	4924.2	4930.1	4944.8	4965.3	4985.9	5015.2	5044.6	5071.0	5100.4
25°	4771.5	4774.5	4783.3	4789.1	4806.8	4824.4	4847.9	4883.1	4909.5	4938.9	4971.2
27.5°	4557.2	4560.1	4574.8	4574.8	4589.4	4618.8	4633.5	4662.9	4698.1	4727.5	4765.7
30°	4313.5	4319.3	4319.3	4331.1	4339.8	4354.6	4369.2	4398.6	4416.2	4442.7	4495.5
32.5°	4090.3	4096.1	4093.2	4090.3	4081.5	4078.5	4075.6	4081.5	4087.4	4096.1	4116.7
35°	3958.2	3943.5	3931.8	3911.2	3887.7	3858.3	3831.9	3796.7	3764.4	3737.9	3708.6
37.5°	3831.9	3828.9	3811.3	3782.0	3735.0	3682.2	3620.5	3544.1	3467.8	3385.6	3306.3
40°	3655.7	3646.9	3632.2	3591.1	3538.3	3473.7	3391.5	3297.5	3174.1	3047.9	2918.7
42.5°	3356.2	3359.1	3341.5	3309.2	3259.3	3197.6	3112.5	3009.7	2877.6	2727.8	2560.5
45°	3006.8	3006.8	3000.9	2974.5	2939.3	2889.3	2824.7	2739.6	2610.4	2457.7	2278.6
47.5°	2642.7	2645.6	2636.8	2631.0	2616.2	2584.0	2537.0	2472.4	2381.4	2234.5	2055.4
50°	2272.7	2272.7	2287.4	2284.4	2284.4	2272.7	2252.2	2214.0	2134.7	2017.2	1849.9
52.5°	1902.7	1908.6	1917.5	1929.2	1943.8	1967.3	1943.8	1926.2	1876.3	1785.3	1641.4
55°	1521.0	1526.9	1541.6	1562.1	1579.8	1603.3	1609.1	1609.1	1582.6	1521.0	1412.4
57.5°	1195.1	1186.3	1198.0	1215.7	1239.1	1262.6	1280.2	1300.8	1297.8	1256.7	1168.7
60°	898.5	901.5	910.2	927.9	945.5	966.1	989.5	1007.2	1016.0	995.4	939.6
62.5°	654.8	654.8	666.5	684.1	693.0	722.3	737.0	745.8	754.6	751.7	716.5
65°	458.1	463.9	469.8	478.6	487.4	505.0	513.9	531.5	537.3	540.3	513.9
67.5°	323.0	314.2	320.1	325.9	334.7	346.5	364.1	364.1	372.9	372.9	355.3
70°	205.6	205.6	208.5	217.3	223.2	226.1	232.0	237.8	246.7	243.7	243.7
72.5°	138.0	135.1	138.0	141.0	143.9	152.7	152.7	155.6	161.5	164.5	152.7
75°	70.5	73.4	79.2	76.4	85.1	79.2	82.2	91.0	88.1	82.2	82.2
77.5°	58.7	58.7	58.7	55.8	61.6	61.6	58.7	64.6	61.6	61.6	58.7
80°	41.1	44.0	41.1	38.2	41.1	38.2	38.2	38.2	38.2	38.2	35.2
82.5°	32.3	26.4	29.4	26.4	29.4	29.4	26.4	23.5	23.5	26.4	23.5
85°	23.5	17.6	20.5	20.5	17.6	17.6	17.6	17.6	17.6	14.7	14.7
87.5°	14.7	8.8	8.8	8.8	11.7	11.7	11.7	8.8	11.7	11.7	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



TEST NUMBER: P249311

CATALOG NUMBER: LSR8B100D010 EC8B100830 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	5470.4	5470.4	5470.4	5470.4	5470.4	5470.4	5470.4	5470.4	5470.4	5470.4	5470.4
2.5°	5479.2	5476.3	5482.1	5479.2	5479.2	5476.3	5479.2	5476.3	5482.1	5470.4	5473.3
5°	5479.2	5473.3	5476.3	5479.2	5482.1	5476.3	5476.3	5476.3	5482.1	5476.3	5479.2
7.5°	5467.4	5464.5	5473.3	5479.2	5476.3	5473.3	5479.2	5476.3	5482.1	5479.2	5485.0
10°	5443.9	5446.9	5452.8	5461.5	5464.5	5467.4	5473.3	5473.3	5482.1	5470.4	5476.3
12.5°	5408.7	5420.4	5435.2	5441.0	5452.8	5452.8	5458.6	5461.5	5467.4	5464.5	5473.3
15°	5364.7	5379.3	5396.9	5411.7	5426.3	5435.2	5443.9	5446.9	5455.7	5446.9	5449.8
17.5°	5311.8	5329.4	5355.8	5373.4	5396.9	5405.8	5417.5	5423.4	5432.2	5426.3	5429.3
20°	5238.4	5259.0	5288.3	5314.7	5329.4	5349.9	5364.7	5373.4	5379.3	5373.4	5376.4
22.5°	5135.6	5165.0	5203.2	5223.7	5253.1	5270.7	5273.6	5294.2	5308.8	5294.2	5300.1
25°	5015.2	5044.6	5074.0	5118.0	5144.5	5165.0	5185.6	5188.5	5203.2	5200.2	5197.3
27.5°	4815.5	4853.8	4903.6	4938.9	4974.1	5006.4	5029.9	5035.8	5050.5	5044.6	5047.5
30°	4542.5	4583.6	4630.6	4686.4	4736.3	4768.6	4797.9	4818.5	4833.2	4824.4	4821.4
32.5°	4154.9	4196.0	4245.9	4301.7	4360.5	4407.4	4442.7	4469.1	4486.7	4480.8	4466.2
35°	3711.5	3723.3	3755.6	3799.6	3849.5	3899.4	3931.8	3961.1	3981.6	3987.5	3987.5
37.5°	3256.4	3218.2	3194.7	3194.7	3224.1	3244.6	3274.0	3291.6	3323.9	3335.6	3344.5
40°	2815.9	2727.8	2645.6	2584.0	2542.9	2539.9	2539.9	2548.7	2578.1	2616.2	2651.5
42.5°	2422.5	2281.5	2155.3	2040.7	1958.5	1911.6	1891.0	1894.0	1917.5	1952.7	2011.4
45°	2108.3	1932.1	1773.5	1635.5	1523.9	1450.5	1415.3	1412.4	1430.0	1471.1	1535.7
47.5°	1864.6	1676.6	1497.5	1338.9	1218.6	1139.3	1098.2	1086.5	1098.2	1136.3	1212.7
50°	1662.0	1468.2	1283.2	1118.7	989.5	907.4	869.1	854.5	869.1	901.5	977.8
52.5°	1474.0	1274.4	1101.1	942.6	804.5	734.1	693.0	684.1	693.0	731.1	792.8
55°	1256.7	1086.5	916.1	757.6	637.2	566.7	534.4	525.6	534.4	569.7	634.3
57.5°	1042.4	895.6	745.8	601.9	499.2	437.5	408.2	396.4	416.9	440.4	516.8
60°	842.7	725.3	599.0	472.8	387.6	331.8	308.3	305.4	311.2	340.6	393.4
62.5°	660.7	563.8	463.9	361.2	290.7	267.2	237.8	234.9	240.8	258.4	299.5
65°	475.7	414.1	337.7	264.3	208.5	176.2	164.5	167.4	173.2	185.0	223.2
67.5°	331.8	287.7	234.9	185.0	143.9	129.2	117.5	114.5	117.5	138.0	158.6
70°	223.2	196.7	158.6	141.0	99.9	79.2	82.2	73.4	85.1	85.1	102.7
72.5°	146.8	129.2	105.7	82.2	70.5	55.8	55.8	52.9	58.7	61.6	76.4
75°	76.4	58.7	58.7	41.1	29.4	14.7	26.4	23.5	20.5	23.5	29.4
77.5°	52.9	44.0	41.1	32.3	29.4	23.5	23.5	23.5	23.5	26.4	29.4
80°	32.3	32.3	23.5	20.5	17.6	14.7	17.6	17.6	17.6	17.6	20.5
82.5°	20.5	17.6	17.6	14.7	14.7	11.7	11.7	11.7	11.7	11.7	17.6
85°	17.6	11.7	11.7	8.8	11.7	20.5	8.8	11.7	11.7	11.7	8.8
87.5°	5.9	8.8	8.8	8.8	5.9	2.9	5.9	8.8	8.8	14.7	11.7
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: P249311

CATALOG NUMBER: LSR8B100D010 EC8B100830 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	5470.4	5470.4	5470.4	5470.4	5470.4	5470.4	5470.4	5470.4	5470.4	5470.4	5470.4
2.5°	5479.2	5482.1	5482.1	5479.2	5479.2	5473.3	5485.0	5476.3	5479.2	5490.9	5482.1
5°	5485.0	5488.0	5488.0	5485.0	5485.0	5485.0	5488.0	5488.0	5485.0	5482.1	5488.0
7.5°	5496.8	5493.9	5493.9	5488.0	5488.0	5482.1	5488.0	5479.2	5485.0	5479.2	5488.0
10°	5482.1	5485.0	5482.1	5479.2	5479.2	5476.3	5476.3	5467.4	5470.4	5461.5	5467.4
12.5°	5473.3	5470.4	5470.4	5464.5	5458.6	5452.8	5449.8	5441.0	5441.0	5420.4	5429.3
15°	5449.8	5452.8	5443.9	5432.2	5426.3	5411.7	5405.8	5394.0	5382.3	5367.6	5370.6
17.5°	5429.3	5420.4	5408.7	5396.9	5373.4	5361.7	5349.9	5332.3	5326.5	5308.8	5303.0
20°	5367.6	5361.7	5347.1	5326.5	5311.8	5285.4	5273.6	5256.0	5241.3	5223.7	5214.9
22.5°	5288.3	5282.4	5264.8	5244.3	5220.8	5209.1	5197.3	5165.0	5150.3	5132.7	5129.7
25°	5188.5	5179.7	5162.1	5138.6	5126.8	5094.5	5082.7	5059.3	5053.4	5035.8	5032.9
27.5°	5035.8	5024.0	5003.5	4974.1	4953.6	4933.0	4921.3	4903.6	4897.8	4880.1	4877.3
30°	4806.8	4792.1	4751.0	4739.2	4704.0	4683.4	4683.4	4659.9	4662.9	4651.2	4651.2
32.5°	4445.6	4422.1	4389.8	4366.3	4342.8	4331.1	4331.1	4322.2	4328.1	4328.1	4334.0
35°	3967.0	3934.7	3917.0	3902.4	3902.4	3914.1	3949.4	3958.2	3975.8	3990.5	4002.2
37.5°	3353.2	3350.4	3370.9	3388.5	3432.6	3482.5	3544.1	3597.0	3646.9	3682.2	3717.4
40°	2689.7	2763.1	2821.8	2904.1	2971.5	3068.4	3180.0	3271.1	3356.2	3417.9	3482.5
42.5°	2099.4	2193.4	2316.8	2437.1	2557.5	2689.7	2836.5	2962.8	3074.3	3159.5	3227.0
45°	1635.5	1764.7	1914.5	2067.2	2222.8	2387.3	2539.9	2669.1	2786.6	2874.7	2942.2
47.5°	1318.4	1459.4	1629.6	1797.0	1973.2	2146.4	2316.8	2428.4	2525.2	2595.7	2657.4
50°	1089.3	1239.1	1418.3	1609.1	1785.3	1958.5	2105.3	2214.0	2293.3	2354.9	2393.1
52.5°	910.2	1068.8	1259.7	1450.5	1626.7	1785.3	1917.5	1999.6	2064.2	2108.3	2143.5
55°	751.7	904.4	1083.5	1262.6	1435.9	1585.6	1694.2	1755.9	1805.8	1832.2	1852.8
57.5°	613.7	754.6	919.1	1083.5	1233.3	1356.6	1441.8	1503.4	1526.9	1547.4	1544.5
60°	481.6	613.7	763.4	904.4	1033.6	1133.4	1195.1	1230.3	1247.9	1256.7	1250.9
62.5°	378.8	499.2	613.7	737.0	831.0	916.1	974.9	974.9	983.7	986.6	995.4
65°	281.9	372.9	472.8	563.8	640.1	695.9	728.2	737.0	748.8	745.8	740.0
67.5°	208.5	276.0	349.4	416.9	469.8	505.0	528.5	549.1	546.2	540.3	537.3
70°	143.9	188.0	252.5	293.6	331.8	367.1	372.9	375.8	378.8	381.7	375.8
72.5°	99.9	132.1	167.4	202.6	226.1	240.8	255.5	258.4	258.4	258.4	255.5
75°	49.9	67.5	99.9	114.5	135.1	141.0	152.7	152.7	161.5	149.7	146.8
77.5°	44.0	52.9	70.5	82.2	91.0	99.9	102.7	111.6	108.6	102.7	105.7
80°	26.4	32.3	44.0	49.9	61.6	64.6	67.5	70.5	67.5	70.5	70.5
82.5°	20.5	23.5	29.4	29.4	38.2	38.2	41.1	41.1	44.0	44.0	44.0
85°	11.7	20.5	17.6	35.2	23.5	23.5	29.4	35.2	29.4	29.4	35.2
87.5°	11.7	11.7	8.8	11.7	11.7	11.7	14.7	17.6	17.6	20.5	17.6
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: P249311

CATALOG NUMBER: LSR8B100D010 EC8B100830 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	5470.4	5470.4	5470.4	5470.4
2.5°	5479.2	5485.0	5476.3	5473.3
5°	5488.0	5488.0	5482.1	5482.1
7.5°	5488.0	5488.0	5479.2	5473.3
10°	5464.5	5464.5	5455.7	5449.8
12.5°	5420.4	5420.4	5417.5	5408.7
15°	5364.7	5364.7	5352.9	5344.1
17.5°	5288.3	5294.2	5279.5	5279.5
20°	5206.1	5203.2	5191.4	5185.6
22.5°	5121.0	5115.1	5112.1	5094.5
25°	5029.9	5024.0	5015.2	5006.4
27.5°	4874.3	4871.4	4862.5	4850.8
30°	4636.4	4633.5	4621.8	4621.8
32.5°	4328.1	4325.2	4313.5	4316.4
35°	4008.1	4019.8	4013.9	4002.2
37.5°	3740.9	3749.7	3755.6	3749.7
40°	3517.7	3544.1	3547.1	3553.0
42.5°	3279.9	3315.1	3326.9	3332.7
45°	2995.0	3027.3	3053.8	3047.9
47.5°	2704.3	2727.8	2751.3	2733.7
50°	2425.4	2440.1	2448.9	2448.9
52.5°	2161.2	2161.2	2158.2	2161.2
55°	1858.7	1858.7	1847.0	1852.8
57.5°	1541.6	1547.4	1538.6	1523.9
60°	1247.9	1233.3	1227.4	1218.6
62.5°	971.9	971.9	951.4	977.8
65°	728.2	719.4	710.6	707.6
67.5°	528.5	525.6	516.8	513.9
70°	372.9	361.2	358.2	352.3
72.5°	249.6	249.6	243.7	243.7
75°	152.7	138.0	135.1	138.0
77.5°	105.7	102.7	102.7	99.9
80°	70.5	67.5	73.4	64.6
82.5°	44.0	47.0	44.0	47.0
85°	29.4	35.2	32.3	32.3
87.5°	17.6	17.6	17.6	17.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)