

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: P249376

Luminaire Tested: **LSR8B150D010 EC8B150940 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249376
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: LSR8B150D010 EC8B150940 8LBDW0GPH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 4000 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14336.0 lumens
Efficiency: N/A
Efficacy: 90.4 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

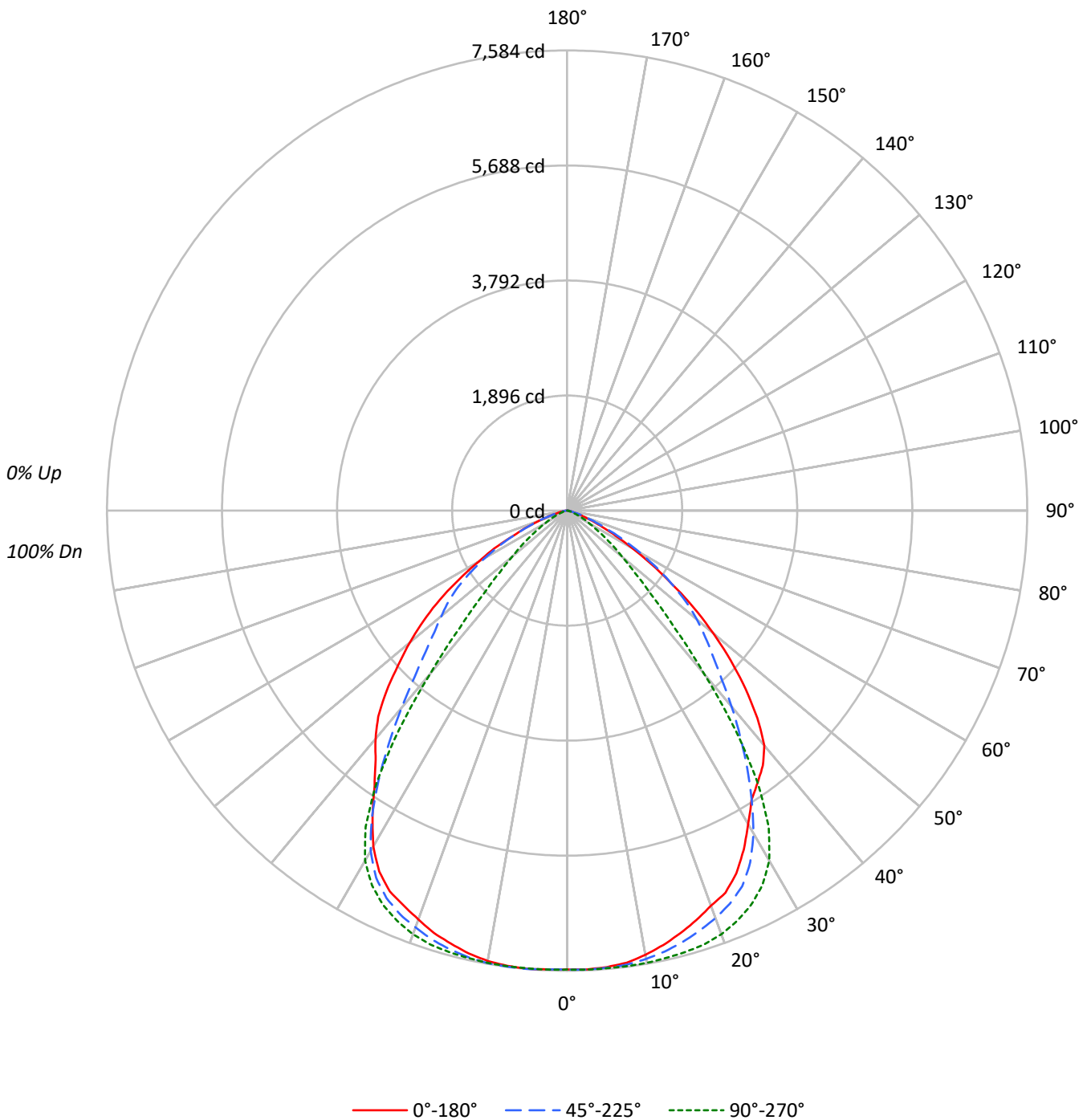
Input Watts (W): 158.5
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	233246	233246	233246
5°	233756	234388	234638
10°	232774	236969	235952
15°	230195	240436	235900
20°	227430	243815	235292
25°	224477	244096	235532
30°	212369	237233	227548
35°	206030	206177	208323
40°	203476	141859	197760
45°	181305	85164	183786
50°	150754	56680	162441
55°	113066	39074	137732
60°	76622	26038	103918
65°	46216	16891	71389
70°	25623	9151	43926
75°	11616	3872	22732
80°	10087	4315	15858
85°	11499	5732	15815



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	721.9	5.0
10°-20°	2096.4	14.6
20°-30°	3182.0	22.2
30°-40°	3342.0	23.3
40°-50°	2505.6	17.5
50°-60°	1607.7	11.2
60°-70°	687.7	4.8
70°-80°	162.5	1.1
80°-90°	30.2	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°	6000.3	41.9
0°-40°	9342.3	65.2
0°-60°	13455.6	93.9
0°-90°	14336.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	14336.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	7564	7564	7564	7564	7564	
5°	7552	7564	7572	7584	7580	717
15°	7211	7361	7532	7483	7389	2034
25°	6598	6829	7174	7044	6922	3014
35°	5473	5168	5477	5412	5534	3435
45°	4158	3398	1953	3301	4214	3184
55°	2103	2103	727	2192	2562	1908
65°	633	747	232	962	978	676
75°	98	114	32	195	191	142
85°	32	20	16	32	45	34
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°	7564.0	7564.0	7564.0	7564.0	7564.0	7564.0	7564.0	7564.0	7564.0	7564.0	7564.0
2.5°	7568.0	7576.2	7572.1	7572.1	7568.0	7572.1	7572.1	7580.2	7580.2	7572.1	7568.0
5°	7551.7	7559.9	7559.9	7551.7	7551.7	7572.1	7559.9	7568.0	7568.0	7564.0	7564.0
7.5°	7515.3	7515.3	7531.5	7519.3	7519.3	7531.5	7527.4	7535.5	7543.7	7547.8	7547.8
10°	7434.0	7442.2	7446.2	7446.2	7450.3	7462.4	7470.6	7486.9	7494.9	7503.1	7507.1
12.5°	7332.6	7344.7	7348.8	7344.7	7356.9	7373.1	7393.5	7413.7	7426.0	7442.2	7454.4
15°	7210.7	7210.7	7218.8	7231.1	7239.2	7263.5	7283.8	7308.1	7340.6	7361.0	7381.3
17.5°	7076.8	7084.9	7097.0	7097.0	7113.3	7153.9	7166.1	7202.6	7239.2	7259.5	7300.1
20°	6930.6	6938.7	6950.9	6959.0	6979.3	7011.8	7036.1	7068.6	7109.3	7145.8	7186.3
22.5°	6816.9	6800.7	6808.7	6816.9	6837.3	6865.7	6894.1	6934.6	6975.2	7011.8	7052.4
25°	6597.6	6601.7	6613.9	6622.0	6646.4	6670.8	6703.2	6751.9	6788.5	6829.1	6873.7
27.5°	6301.3	6305.4	6325.6	6325.6	6345.9	6386.5	6406.8	6447.4	6496.2	6536.7	6589.6
30°	5964.3	5972.4	5972.4	5988.7	6000.8	6021.1	6041.4	6082.0	6106.4	6142.9	6216.1
32.5°	5655.8	5663.8	5659.7	5655.8	5643.5	5639.5	5635.4	5643.5	5651.7	5663.8	5692.2
35°	5473.1	5452.7	5436.5	5408.1	5375.6	5335.0	5298.4	5249.7	5205.0	5168.5	5127.9
37.5°	5298.4	5294.3	5270.0	5229.4	5164.4	5091.4	5006.1	4900.5	4794.9	4681.3	4571.7
40°	5054.8	5042.6	5022.3	4965.5	4892.4	4803.1	4689.4	4559.5	4388.9	4214.4	4035.8
42.5°	4640.7	4644.7	4620.4	4575.7	4506.7	4421.4	4303.7	4161.6	3978.9	3771.8	3540.4
45°	4157.5	4157.5	4149.4	4112.8	4064.2	3995.1	3905.8	3788.1	3609.5	3398.3	3150.6
47.5°	3654.1	3658.1	3645.9	3637.9	3617.5	3572.9	3507.9	3418.6	3292.8	3089.7	2842.0
50°	3142.5	3142.5	3162.8	3158.7	3158.7	3142.5	3114.1	3061.3	2951.7	2789.3	2557.9
52.5°	2630.9	2639.1	2651.3	2667.5	2687.8	2720.2	2687.8	2663.4	2594.4	2468.5	2269.6
55°	2103.1	2111.3	2131.5	2159.9	2184.4	2216.9	2224.9	2224.9	2188.4	2103.1	1952.9
57.5°	1652.5	1640.3	1656.6	1680.9	1713.4	1745.9	1770.2	1798.6	1794.6	1737.7	1615.9
60°	1242.4	1246.5	1258.6	1283.0	1307.4	1335.8	1368.3	1392.6	1404.8	1376.4	1299.2
62.5°	905.4	905.4	921.6	946.0	958.2	998.8	1019.1	1031.3	1043.4	1039.3	990.7
65°	633.4	641.5	649.6	661.8	674.0	698.3	710.5	734.8	743.0	747.1	710.5
67.5°	446.6	434.4	442.6	450.6	462.8	479.1	503.5	503.5	515.6	515.6	491.3
70°	284.2	284.2	288.3	300.4	308.6	312.6	320.8	328.8	341.0	337.0	337.0
72.5°	190.8	186.8	190.8	194.9	199.0	211.1	211.1	215.2	223.3	227.4	211.1
75°	97.5	101.5	109.6	105.6	117.7	109.6	113.7	125.9	121.8	113.7	113.7
77.5°	81.2	81.2	81.2	77.2	85.2	85.2	81.2	89.3	85.2	85.2	81.2
80°	56.8	60.9	56.8	52.8	56.8	52.8	52.8	52.8	52.8	52.8	48.7
82.5°	44.7	36.6	40.6	36.6	40.6	40.6	36.6	32.5	32.5	36.6	32.5
85°	32.5	24.3	28.4	28.4	24.3	24.3	24.3	24.3	24.3	20.3	20.3
87.5°	20.3	12.2	12.2	12.2	16.2	16.2	16.2	12.2	16.2	16.2	8.1
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°	7564.0	7564.0	7564.0	7564.0	7564.0	7564.0	7564.0	7564.0	7564.0	7564.0	7564.0
2.5°	7576.2	7572.1	7580.2	7576.2	7576.2	7572.1	7576.2	7572.1	7580.2	7564.0	7568.0
5°	7576.2	7568.0	7572.1	7576.2	7580.2	7572.1	7572.1	7572.1	7580.2	7572.1	7576.2
7.5°	7559.9	7555.8	7568.0	7576.2	7572.1	7568.0	7576.2	7572.1	7580.2	7576.2	7584.2
10°	7527.4	7531.5	7539.6	7551.7	7555.8	7559.9	7568.0	7568.0	7580.2	7564.0	7572.1
12.5°	7478.7	7494.9	7515.3	7523.3	7539.6	7539.6	7547.8	7551.7	7559.9	7555.8	7568.0
15°	7417.8	7438.1	7462.4	7482.8	7503.1	7515.3	7527.4	7531.5	7543.7	7531.5	7535.5
17.5°	7344.7	7369.0	7405.6	7429.9	7462.4	7474.6	7490.8	7499.0	7511.2	7503.1	7507.1
20°	7243.2	7271.7	7312.2	7348.8	7369.0	7397.5	7417.8	7429.9	7438.1	7429.9	7434.0
22.5°	7101.1	7141.7	7194.5	7222.9	7263.5	7287.9	7292.0	7320.4	7340.6	7320.4	7328.5
25°	6934.6	6975.2	7015.9	7076.8	7113.3	7141.7	7170.2	7174.2	7194.5	7190.4	7186.3
27.5°	6658.5	6711.4	6780.3	6829.1	6877.8	6922.5	6955.0	6963.0	6983.4	6975.2	6979.3
30°	6280.9	6337.8	6402.8	6479.9	6549.0	6593.6	6634.2	6662.6	6682.9	6670.8	6666.7
32.5°	5745.1	5801.9	5870.9	5948.0	6029.3	6094.2	6142.9	6179.5	6203.8	6195.7	6175.4
35°	5132.0	5148.2	5192.9	5253.8	5322.8	5391.8	5436.5	5477.0	5505.4	5513.6	5513.6
37.5°	4502.7	4449.9	4417.4	4417.4	4458.0	4486.4	4527.0	4551.3	4596.1	4612.2	4624.5
40°	3893.6	3771.8	3658.1	3572.9	3516.1	3512.0	3512.0	3524.1	3564.8	3617.5	3666.3
42.5°	3349.6	3154.7	2980.1	2821.8	2708.1	2643.1	2614.7	2618.8	2651.3	2700.0	2781.1
45°	2915.2	2671.6	2452.3	2261.5	2107.2	2005.7	1957.0	1952.9	1977.2	2034.1	2123.5
47.5°	2578.2	2318.3	2070.6	1851.4	1685.0	1575.3	1518.5	1502.3	1518.5	1571.2	1676.8
50°	2298.0	2030.1	1774.3	1546.9	1368.3	1254.6	1201.8	1181.5	1201.8	1246.5	1352.0
52.5°	2038.1	1762.1	1522.5	1303.3	1112.5	1015.0	958.2	946.0	958.2	1010.9	1096.3
55°	1737.7	1502.3	1266.7	1047.5	881.1	783.6	738.9	726.8	738.9	787.7	877.0
57.5°	1441.4	1238.3	1031.3	832.3	690.2	604.9	564.4	548.1	576.5	609.0	714.6
60°	1165.2	1002.9	828.2	653.7	536.0	458.8	426.3	422.2	430.4	471.0	544.0
62.5°	913.6	779.6	641.5	499.4	401.9	369.5	328.8	324.9	332.9	357.2	414.2
65°	657.8	572.5	466.9	365.4	288.3	243.6	227.4	231.5	239.5	255.8	308.6
67.5°	458.8	397.9	324.9	255.8	199.0	178.6	162.4	158.4	162.4	190.8	219.3
70°	308.6	272.0	219.3	194.9	138.1	109.6	113.7	101.5	117.7	117.7	142.1
72.5°	203.0	178.6	146.1	113.7	97.5	77.2	77.2	73.1	81.2	85.2	105.6
75°	105.6	81.2	81.2	56.8	40.6	20.3	36.6	32.5	28.4	32.5	40.6
77.5°	73.1	60.9	56.8	44.7	40.6	32.5	32.5	32.5	32.5	36.6	40.6
80°	44.7	44.7	32.5	28.4	24.3	20.3	24.3	24.3	24.3	24.3	28.4
82.5°	28.4	24.3	24.3	20.3	20.3	16.2	16.2	16.2	16.2	16.2	24.3
85°	24.3	16.2	16.2	12.2	16.2	28.4	12.2	16.2	16.2	16.2	12.2
87.5°	8.1	12.2	12.2	12.2	8.1	4.1	8.1	12.2	12.2	20.3	16.2
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°	7564.0	7564.0	7564.0	7564.0	7564.0	7564.0	7564.0	7564.0	7564.0	7564.0	7564.0
2.5°	7576.2	7580.2	7580.2	7576.2	7576.2	7568.0	7584.2	7572.1	7576.2	7592.4	7580.2
5°	7584.2	7588.3	7588.3	7584.2	7584.2	7584.2	7588.3	7588.3	7584.2	7580.2	7588.3
7.5°	7600.5	7596.4	7596.4	7588.3	7588.3	7580.2	7588.3	7576.2	7584.2	7576.2	7588.3
10°	7580.2	7584.2	7580.2	7576.2	7576.2	7572.1	7572.1	7559.9	7564.0	7551.7	7559.9
12.5°	7568.0	7564.0	7564.0	7555.8	7547.8	7539.6	7535.5	7523.3	7523.3	7494.9	7507.1
15°	7535.5	7539.6	7527.4	7511.2	7503.1	7482.8	7474.6	7458.4	7442.2	7421.9	7426.0
17.5°	7507.1	7494.9	7478.7	7462.4	7429.9	7413.7	7397.5	7373.1	7365.0	7340.6	7332.6
20°	7421.9	7413.7	7393.5	7365.0	7344.7	7308.1	7292.0	7267.6	7247.2	7222.9	7210.7
22.5°	7312.2	7304.1	7279.7	7251.3	7218.8	7202.6	7186.3	7141.7	7121.4	7097.0	7093.0
25°	7174.2	7162.0	7137.7	7105.2	7088.9	7044.3	7028.0	6995.5	6987.5	6963.0	6959.0
27.5°	6963.0	6946.8	6918.4	6877.8	6849.4	6821.0	6804.8	6780.3	6772.3	6747.8	6743.9
30°	6646.4	6626.0	6569.2	6553.0	6504.3	6475.8	6475.8	6443.4	6447.4	6431.2	6431.2
32.5°	6147.0	6114.5	6069.8	6037.3	6004.9	5988.7	5988.7	5976.4	5984.6	5984.6	5992.7
35°	5485.2	5440.6	5416.1	5395.9	5395.9	5412.1	5460.8	5473.1	5497.4	5517.7	5534.0
37.5°	4636.6	4632.6	4661.0	4685.4	4746.3	4815.3	4900.5	4973.7	5042.6	5091.4	5140.1
40°	3719.0	3820.6	3901.7	4015.5	4108.8	4242.8	4397.1	4522.9	4640.7	4726.0	4815.3
42.5°	2902.9	3032.9	3203.4	3369.9	3536.3	3719.0	3922.1	4096.6	4250.9	4368.7	4462.0
45°	2261.5	2440.1	2647.2	2858.3	3073.5	3300.9	3512.0	3690.6	3853.1	3974.9	4068.2
47.5°	1823.0	2017.9	2253.3	2484.8	2728.4	2967.9	3203.4	3357.7	3491.6	3589.1	3674.4
50°	1506.3	1713.4	1961.1	2224.9	2468.5	2708.1	2911.1	3061.3	3171.0	3256.2	3309.0
52.5°	1258.6	1477.8	1741.8	2005.7	2249.3	2468.5	2651.3	2764.9	2854.3	2915.2	2963.8
55°	1039.3	1250.5	1498.2	1745.9	1985.4	2192.4	2342.6	2428.0	2496.9	2533.5	2561.9
57.5°	848.6	1043.4	1270.8	1498.2	1705.2	1875.8	1993.5	2078.8	2111.3	2139.7	2135.6
60°	665.9	848.6	1055.6	1250.5	1429.2	1567.2	1652.5	1701.2	1725.5	1737.7	1729.6
62.5°	523.7	690.2	848.6	1019.1	1149.0	1266.7	1348.0	1348.0	1360.1	1364.2	1376.4
65°	389.7	515.6	653.7	779.6	885.1	962.2	1006.9	1019.1	1035.4	1031.3	1023.1
67.5°	288.3	381.7	483.1	576.5	649.6	698.3	730.8	759.3	755.2	747.1	743.0
70°	199.0	259.9	349.2	406.0	458.8	507.5	515.6	519.7	523.7	527.8	519.7
72.5°	138.1	182.7	231.5	280.2	312.6	332.9	353.3	357.2	357.2	357.2	353.3
75°	69.0	93.4	138.1	158.4	186.8	194.9	211.1	211.1	223.3	207.0	203.0
77.5°	60.9	73.1	97.5	113.7	125.9	138.1	142.1	154.3	150.2	142.1	146.1
80°	36.6	44.7	60.9	69.0	85.2	89.3	93.4	97.5	93.4	97.5	97.5
82.5°	28.4	32.5	40.6	40.6	52.8	52.8	56.8	56.8	60.9	60.9	60.9
85°	16.2	28.4	24.3	48.7	32.5	32.5	40.6	48.7	40.6	40.6	48.7
87.5°	16.2	16.2	12.2	16.2	16.2	16.2	20.3	24.3	24.3	28.4	24.3
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: P249376

CATALOG NUMBER: LSR8B150D010 EC8B150940 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	7564.0	7564.0	7564.0	7564.0
2.5°	7576.2	7584.2	7572.1	7568.0
5°	7588.3	7588.3	7580.2	7580.2
7.5°	7588.3	7588.3	7576.2	7568.0
10°	7555.8	7555.8	7543.7	7535.5
12.5°	7494.9	7494.9	7490.8	7478.7
15°	7417.8	7417.8	7401.5	7389.4
17.5°	7312.2	7320.4	7300.1	7300.1
20°	7198.6	7194.5	7178.3	7170.2
22.5°	7080.8	7072.7	7068.6	7044.3
25°	6955.0	6946.8	6934.6	6922.5
27.5°	6739.8	6735.7	6723.5	6707.3
30°	6410.9	6406.8	6390.6	6390.6
32.5°	5984.6	5980.5	5964.3	5968.4
35°	5542.0	5558.3	5550.2	5534.0
37.5°	5172.5	5184.8	5192.9	5184.8
40°	4864.0	4900.5	4904.6	4912.8
42.5°	4535.2	4583.8	4600.1	4608.2
45°	4141.3	4186.0	4222.5	4214.4
47.5°	3739.3	3771.8	3804.3	3779.9
50°	3353.7	3373.9	3386.1	3386.1
52.5°	2988.3	2988.3	2984.2	2988.3
55°	2570.0	2570.0	2553.8	2561.9
57.5°	2131.5	2139.7	2127.5	2107.2
60°	1725.5	1705.2	1697.1	1685.0
62.5°	1343.9	1343.9	1315.5	1352.0
65°	1006.9	994.7	982.5	978.4
67.5°	730.8	726.8	714.6	710.5
70°	515.6	499.4	495.3	487.2
72.5°	345.1	345.1	337.0	337.0
75°	211.1	190.8	186.8	190.8
77.5°	146.1	142.1	142.1	138.1
80°	97.5	93.4	101.5	89.3
82.5°	60.9	65.0	60.9	65.0
85°	40.6	48.7	44.7	44.7
87.5°	24.3	24.3	24.3	24.3
90°	0.0	0.0	0.0	0.0

(END OF REPORT)