

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: P249583

Luminaire Tested: **LSR8B150D010 EC8B150935 8LBDW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249583
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 EC8B150935 8LBDW0MW
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 3500 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13884.0 lumens
Efficiency: N/A
Efficacy: 87.6 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

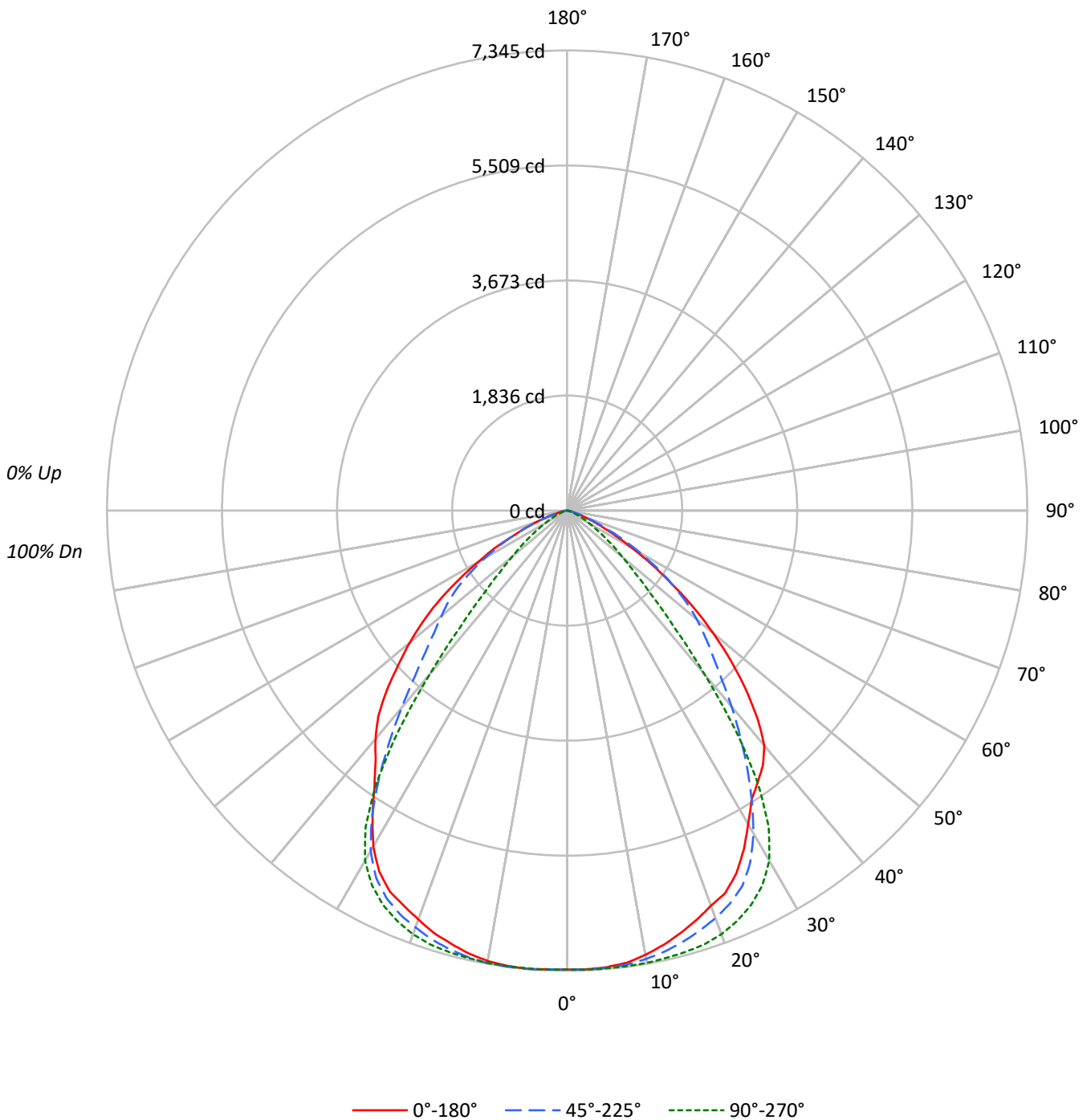
Input Watts (W): 158.5
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	225891	225891	225891
5°	226386	226999	227240
10°	225434	229498	228515
15°	222936	232854	228462
20°	220260	236129	227873
25°	217400	236400	228104
30°	205675	229752	220373
35°	199533	199680	201754
40°	197059	137387	191524
45°	175592	82478	177991
50°	146005	54890	157322
55°	109501	37843	133388
60°	74205	25218	100637
65°	44757	16359	69142
70°	24821	8863	42537
75°	11247	3753	22018
80°	9767	4191	15361
85°	11145	5555	15320



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	699.1	5.0
10°-20°	2030.3	14.6
20°-30°	3081.6	22.2
30°-40°	3236.6	23.3
40°-50°	2426.6	17.5
50°-60°	1557.0	11.2
60°-70°	666.0	4.8
70°-80°	157.4	1.1
80°-90°	29.3	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°	5811.1	41.9
0°-40°	9047.7	65.2
0°-60°	13031.3	93.9
0°-90°	13884.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13884.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	7326	7326	7326	7326	7326	
5°	7314	7326	7333	7345	7341	695
15°	6983	7129	7294	7247	7156	1970
25°	6390	6614	6948	6822	6704	2919
35°	5300	5006	5304	5241	5360	3327
45°	4026	3291	1891	3197	4082	3084
55°	2037	2037	704	2123	2481	1848
65°	613	724	224	932	948	655
75°	94	110	32	189	185	137
85°	32	20	16	32	43	33
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°	7325.5	7325.5	7325.5	7325.5	7325.5	7325.5	7325.5	7325.5	7325.5	7325.5	7325.5
2.5°	7329.4	7337.3	7333.4	7333.4	7329.4	7333.4	7333.4	7341.2	7341.2	7333.4	7329.4
5°	7313.6	7321.5	7321.5	7313.6	7313.6	7333.4	7321.5	7329.4	7329.4	7325.5	7325.5
7.5°	7278.3	7278.3	7294.0	7282.3	7282.3	7294.0	7290.1	7298.0	7305.8	7309.8	7309.8
10°	7199.6	7207.5	7211.5	7211.5	7215.4	7227.1	7235.0	7250.8	7258.6	7266.5	7270.4
12.5°	7101.4	7113.1	7117.1	7113.1	7125.0	7140.6	7160.4	7180.0	7191.8	7207.5	7219.3
15°	6983.3	6983.3	6991.2	7003.1	7011.0	7034.5	7054.2	7077.7	7109.2	7128.9	7148.5
17.5°	6853.6	6861.5	6873.3	6873.3	6889.1	6928.3	6940.1	6975.5	7011.0	7030.6	7069.9
20°	6712.1	6719.9	6731.7	6739.6	6759.3	6790.7	6814.3	6845.8	6885.1	6920.5	6959.8
22.5°	6602.0	6586.3	6594.1	6602.0	6621.7	6649.2	6676.7	6716.0	6755.3	6790.7	6830.1
25°	6389.6	6393.6	6405.4	6413.2	6436.9	6460.4	6491.9	6539.0	6574.4	6613.8	6657.0
27.5°	6102.6	6106.6	6126.2	6126.2	6145.8	6185.2	6204.8	6244.1	6291.4	6330.6	6381.8
30°	5776.3	5784.1	5784.1	5799.8	5811.6	5831.3	5850.9	5890.3	5913.9	5949.3	6020.1
32.5°	5477.4	5485.2	5481.3	5477.4	5465.6	5461.7	5457.7	5465.6	5473.5	5485.2	5512.7
35°	5300.5	5280.8	5265.1	5237.6	5206.1	5166.8	5131.4	5084.2	5040.9	5005.5	4966.3
37.5°	5131.4	5127.4	5103.8	5064.5	5001.6	4930.9	4848.3	4746.0	4643.8	4533.7	4427.6
40°	4895.4	4883.6	4864.0	4809.0	4738.1	4651.6	4541.6	4415.7	4250.5	4081.5	3908.5
42.5°	4494.3	4498.3	4474.7	4431.4	4364.6	4282.0	4168.0	4030.4	3853.5	3652.9	3428.8
45°	4026.5	4026.5	4018.6	3983.2	3936.0	3869.2	3782.7	3668.7	3495.7	3291.1	3051.3
47.5°	3538.9	3542.8	3531.0	3523.2	3503.5	3460.3	3397.3	3310.8	3188.9	2992.3	2752.4
50°	3043.5	3043.5	3063.1	3059.2	3059.2	3043.5	3015.9	2964.8	2858.6	2701.3	2477.3
52.5°	2548.0	2555.9	2567.7	2583.4	2603.0	2634.5	2603.0	2579.4	2512.6	2390.7	2198.1
55°	2036.8	2044.7	2064.3	2091.8	2115.5	2147.0	2154.8	2154.8	2119.4	2036.8	1891.3
57.5°	1600.4	1588.6	1604.3	1627.9	1659.4	1690.8	1714.4	1741.9	1738.0	1682.9	1565.0
60°	1203.2	1207.2	1218.9	1242.6	1266.1	1293.7	1325.1	1348.7	1360.5	1333.0	1258.3
62.5°	876.9	876.9	892.6	916.1	928.0	967.3	986.9	998.8	1010.5	1006.6	959.4
65°	613.4	621.2	629.1	641.0	652.7	676.3	688.1	711.7	719.6	723.5	688.1
67.5°	432.6	420.7	428.6	436.4	448.3	464.0	487.6	487.6	499.3	499.3	475.8
70°	275.3	275.3	279.2	290.9	298.8	302.8	310.7	318.5	330.3	326.4	326.4
72.5°	184.8	180.9	184.8	188.8	192.7	204.5	204.5	208.4	216.3	220.2	204.5
75°	94.4	98.3	106.1	102.3	114.0	106.1	110.1	121.9	118.0	110.1	110.1
77.5°	78.6	78.6	78.6	74.8	82.6	82.6	78.6	86.5	82.6	82.6	78.6
80°	55.0	59.0	55.0	51.1	55.0	51.1	51.1	51.1	51.1	51.1	47.1
82.5°	43.3	35.4	39.3	35.4	39.3	39.3	35.4	31.5	31.5	35.4	31.5
85°	31.5	23.6	27.5	27.5	23.6	23.6	23.6	23.6	23.6	19.6	19.6
87.5°	19.6	11.8	11.8	11.8	15.7	15.7	15.7	11.8	15.7	15.7	7.9
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°	7325.5	7325.5	7325.5	7325.5	7325.5	7325.5	7325.5	7325.5	7325.5	7325.5	7325.5
2.5°	7337.3	7333.4	7341.2	7337.3	7337.3	7333.4	7337.3	7333.4	7341.2	7325.5	7329.4
5°	7337.3	7329.4	7333.4	7337.3	7341.2	7333.4	7333.4	7333.4	7341.2	7333.4	7337.3
7.5°	7321.5	7317.6	7329.4	7337.3	7333.4	7329.4	7337.3	7333.4	7341.2	7337.3	7345.1
10°	7290.1	7294.0	7301.9	7313.6	7317.6	7321.5	7329.4	7329.4	7341.2	7325.5	7333.4
12.5°	7242.9	7258.6	7278.3	7286.1	7301.9	7301.9	7309.8	7313.6	7321.5	7317.6	7329.4
15°	7183.9	7203.6	7227.1	7246.9	7266.5	7278.3	7290.1	7294.0	7305.8	7294.0	7298.0
17.5°	7113.1	7136.7	7172.1	7195.7	7227.1	7239.0	7254.7	7262.5	7274.4	7266.5	7270.4
20°	7014.8	7042.4	7081.7	7117.1	7136.7	7164.2	7183.9	7195.7	7203.6	7195.7	7199.6
22.5°	6877.2	6916.6	6967.7	6995.2	7034.5	7058.1	7062.0	7089.6	7109.2	7089.6	7097.4
25°	6716.0	6755.3	6794.7	6853.6	6889.1	6916.6	6944.1	6948.0	6967.7	6963.7	6959.8
27.5°	6448.6	6499.8	6566.6	6613.8	6660.9	6704.2	6735.7	6743.5	6763.2	6755.3	6759.3
30°	6082.9	6138.0	6200.9	6275.6	6342.5	6385.7	6425.0	6452.5	6472.2	6460.4	6456.5
32.5°	5563.9	5619.0	5685.8	5760.5	5839.2	5902.0	5949.3	5984.7	6008.2	6000.3	5980.7
35°	4970.2	4985.9	5029.2	5088.2	5154.9	5221.8	5265.1	5304.4	5331.9	5339.8	5339.8
37.5°	4360.7	4309.6	4278.2	4278.2	4317.4	4344.9	4384.3	4407.8	4451.1	4466.8	4478.7
40°	3770.8	3652.9	3542.8	3460.3	3405.2	3401.3	3401.3	3413.0	3452.4	3503.5	3550.7
42.5°	3244.0	3055.2	2886.2	2732.8	2622.7	2559.8	2532.3	2536.2	2567.7	2614.8	2693.5
45°	2823.2	2587.3	2375.0	2190.2	2040.7	1942.4	1895.3	1891.3	1914.9	1969.9	2056.5
47.5°	2496.9	2245.2	2005.3	1793.0	1631.8	1525.6	1470.6	1454.9	1470.6	1521.7	1624.0
50°	2225.6	1966.1	1718.3	1498.1	1325.1	1215.1	1163.9	1144.2	1163.9	1207.2	1309.3
52.5°	1973.9	1706.5	1474.5	1262.2	1077.4	983.0	928.0	916.1	928.0	979.1	1061.7
55°	1682.9	1454.9	1226.8	1014.5	853.3	758.9	715.6	703.9	715.6	762.9	849.4
57.5°	1395.9	1199.3	998.8	806.1	668.5	585.8	546.6	530.8	558.3	589.8	692.1
60°	1128.5	971.3	802.1	633.1	519.1	444.3	412.8	408.9	416.8	456.1	526.9
62.5°	884.8	755.0	621.2	483.7	389.3	357.8	318.5	314.6	322.4	346.0	401.1
65°	637.0	554.5	452.2	353.9	279.2	235.9	220.2	224.2	232.0	247.7	298.8
67.5°	444.3	385.3	314.6	247.7	192.7	173.0	157.3	153.4	157.3	184.8	212.3
70°	298.8	263.4	212.3	188.8	133.7	106.1	110.1	98.3	114.0	114.0	137.6
72.5°	196.6	173.0	141.5	110.1	94.4	74.8	74.8	70.8	78.6	82.6	102.3
75°	102.3	78.6	78.6	55.0	39.3	19.6	35.4	31.5	27.5	31.5	39.3
77.5°	70.8	59.0	55.0	43.3	39.3	31.5	31.5	31.5	31.5	35.4	39.3
80°	43.3	43.3	31.5	27.5	23.6	19.6	23.6	23.6	23.6	23.6	27.5
82.5°	27.5	23.6	23.6	19.6	19.6	15.7	15.7	15.7	15.7	15.7	23.6
85°	23.6	15.7	15.7	11.8	15.7	27.5	11.8	15.7	15.7	15.7	11.8
87.5°	7.9	11.8	11.8	11.8	7.9	3.9	7.9	11.8	11.8	19.6	15.7
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°	7325.5	7325.5	7325.5	7325.5	7325.5	7325.5	7325.5	7325.5	7325.5	7325.5	7325.5
2.5°	7337.3	7341.2	7341.2	7337.3	7337.3	7329.4	7345.1	7333.4	7337.3	7353.0	7341.2
5°	7345.1	7349.0	7349.0	7345.1	7345.1	7345.1	7349.0	7349.0	7345.1	7341.2	7349.0
7.5°	7360.9	7356.9	7356.9	7349.0	7349.0	7341.2	7349.0	7337.3	7345.1	7337.3	7349.0
10°	7341.2	7345.1	7341.2	7337.3	7337.3	7333.4	7333.4	7321.5	7325.5	7313.6	7321.5
12.5°	7329.4	7325.5	7325.5	7317.6	7309.8	7301.9	7298.0	7286.1	7286.1	7258.6	7270.4
15°	7298.0	7301.9	7290.1	7274.4	7266.5	7246.9	7239.0	7223.2	7207.5	7187.9	7191.8
17.5°	7270.4	7258.6	7242.9	7227.1	7195.7	7180.0	7164.2	7140.6	7132.8	7109.2	7101.4
20°	7187.9	7180.0	7160.4	7132.8	7113.1	7077.7	7062.0	7038.5	7018.7	6995.2	6983.3
22.5°	7081.7	7073.8	7050.2	7022.7	6991.2	6975.5	6959.8	6916.6	6896.8	6873.3	6869.3
25°	6948.0	6936.2	6912.6	6881.2	6865.4	6822.2	6806.4	6774.9	6767.2	6743.5	6739.6
27.5°	6743.5	6727.8	6700.3	6660.9	6633.4	6605.9	6590.2	6566.6	6558.8	6535.1	6531.2
30°	6436.9	6417.1	6362.1	6346.4	6299.2	6271.7	6271.7	6240.2	6244.1	6228.5	6228.5
32.5°	5953.2	5921.7	5878.4	5847.0	5815.5	5799.8	5799.8	5788.0	5795.9	5795.9	5803.8
35°	5312.2	5269.0	5245.4	5225.7	5225.7	5241.4	5288.7	5300.5	5324.1	5343.7	5359.5
37.5°	4490.4	4486.5	4514.1	4537.6	4596.6	4663.5	4746.0	4816.8	4883.6	4930.9	4978.0
40°	3601.8	3700.1	3778.7	3888.9	3979.2	4109.0	4258.4	4380.3	4494.3	4577.0	4663.5
42.5°	2811.4	2937.3	3102.4	3263.6	3424.9	3601.8	3798.4	3967.5	4116.9	4230.9	4321.4
45°	2190.2	2363.2	2563.8	2768.2	2976.6	3196.8	3401.3	3574.3	3731.6	3849.5	3940.0
47.5°	1765.5	1954.3	2182.3	2406.4	2642.4	2874.3	3102.4	3251.9	3381.6	3475.9	3558.6
50°	1458.8	1659.4	1899.2	2154.8	2390.7	2622.7	2819.3	2964.8	3071.0	3153.5	3204.6
52.5°	1218.9	1431.2	1686.9	1942.4	2178.3	2390.7	2567.7	2677.8	2764.3	2823.2	2870.4
55°	1006.6	1211.1	1451.0	1690.8	1922.8	2123.3	2268.8	2351.4	2418.2	2453.6	2481.1
57.5°	821.8	1010.5	1230.7	1451.0	1651.5	1816.7	1930.7	2013.2	2044.7	2072.2	2068.3
60°	644.9	821.8	1022.3	1211.1	1384.1	1517.7	1600.4	1647.5	1671.1	1682.9	1675.0
62.5°	507.2	668.5	821.8	986.9	1112.8	1226.8	1305.5	1305.5	1317.2	1321.2	1333.0
65°	377.4	499.3	633.1	755.0	857.2	931.9	975.2	986.9	1002.7	998.8	990.9
67.5°	279.2	369.6	467.9	558.3	629.1	676.3	707.7	735.3	731.4	723.5	719.6
70°	192.7	251.7	338.2	393.2	444.3	491.5	499.3	503.3	507.2	511.2	503.3
72.5°	133.7	176.9	224.2	271.3	302.8	322.4	342.1	346.0	346.0	346.0	342.1
75°	66.9	90.4	133.7	153.4	180.9	188.8	204.5	204.5	216.3	200.5	196.6
77.5°	59.0	70.8	94.4	110.1	121.9	133.7	137.6	149.4	145.5	137.6	141.5
80°	35.4	43.3	59.0	66.9	82.6	86.5	90.4	94.4	90.4	94.4	94.4
82.5°	27.5	31.5	39.3	39.3	51.1	51.1	55.0	55.0	59.0	59.0	59.0
85°	15.7	27.5	23.6	47.1	31.5	31.5	39.3	47.1	39.3	39.3	47.1
87.5°	15.7	15.7	11.8	15.7	15.7	15.7	19.6	23.6	23.6	27.5	23.6
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: P249583

CATALOG NUMBER: LSR8B150D010 EC8B150935 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	7325.5	7325.5	7325.5	7325.5
2.5°	7337.3	7345.1	7333.4	7329.4
5°	7349.0	7349.0	7341.2	7341.2
7.5°	7349.0	7349.0	7337.3	7329.4
10°	7317.6	7317.6	7305.8	7298.0
12.5°	7258.6	7258.6	7254.7	7242.9
15°	7183.9	7183.9	7168.2	7156.4
17.5°	7081.7	7089.6	7069.9	7069.9
20°	6971.6	6967.7	6952.0	6944.1
22.5°	6857.6	6849.7	6845.8	6822.2
25°	6735.7	6727.8	6716.0	6704.2
27.5°	6527.3	6523.4	6511.5	6495.8
30°	6208.7	6204.8	6189.1	6189.1
32.5°	5795.9	5792.0	5776.3	5780.2
35°	5367.3	5383.0	5375.2	5359.5
37.5°	5009.5	5021.3	5029.2	5021.3
40°	4710.6	4746.0	4750.0	4757.9
42.5°	4392.2	4439.3	4455.1	4462.9
45°	4010.7	4054.0	4089.4	4081.5
47.5°	3621.4	3652.9	3684.3	3660.8
50°	3247.9	3267.5	3279.4	3279.4
52.5°	2894.0	2894.0	2890.1	2894.0
55°	2489.0	2489.0	2473.3	2481.1
57.5°	2064.3	2072.2	2060.4	2040.7
60°	1671.1	1651.5	1643.6	1631.8
62.5°	1301.6	1301.6	1274.0	1309.3
65°	975.2	963.4	951.5	947.6
67.5°	707.7	703.9	692.1	688.1
70°	499.3	483.7	479.7	471.8
72.5°	334.2	334.2	326.4	326.4
75°	204.5	184.8	180.9	184.8
77.5°	141.5	137.6	137.6	133.7
80°	94.4	90.4	98.3	86.5
82.5°	59.0	62.9	59.0	62.9
85°	39.3	47.1	43.3	43.3
87.5°	23.6	23.6	23.6	23.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)