

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: P249448

Luminaire Tested: **LSR8B150D010 EC8B150850 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249448
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 EC8B150850 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 5000 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14759.0 lumens
Efficiency: N/A
Efficacy: 93.1 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

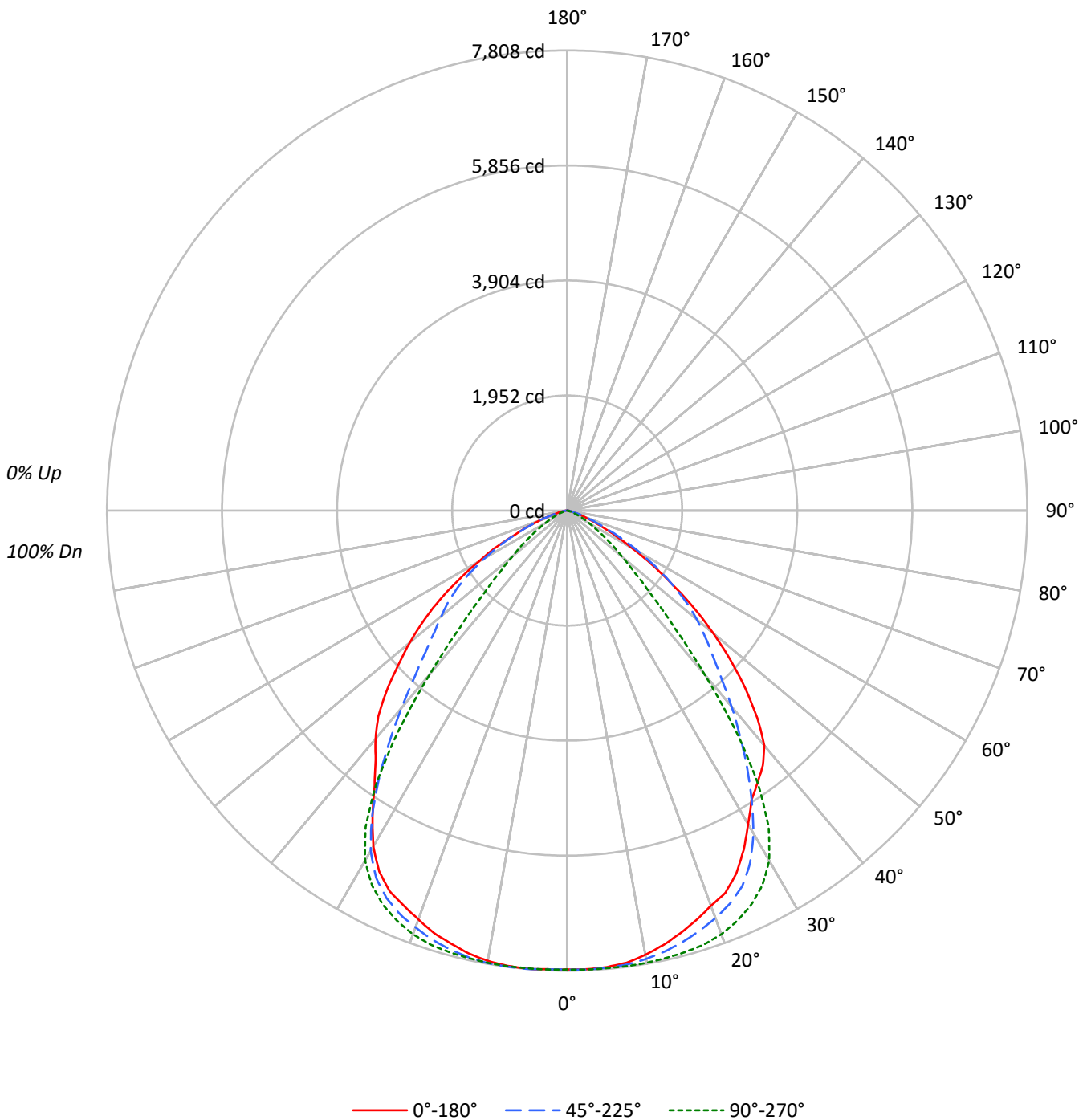
Input Watts (W): 158.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	240125	240125	240125
5°	240656	241303	241563
10°	239643	243961	242915
15°	236985	247530	242859
20°	234141	251011	242233
25°	231102	251299	242480
30°	218636	244234	234264
35°	212106	212261	214466
40°	209482	146045	203592
45°	186656	87676	189207
50°	155206	58354	167238
55°	116404	40224	141796
60°	78885	26809	106984
65°	47580	17388	73498
70°	26381	9422	45224
75°	11950	3979	23411
80°	10388	4457	16320
85°	11817	5909	16275



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	743.2	5.0
10°-20°	2158.3	14.6
20°-30°	3275.9	22.2
30°-40°	3440.6	23.3
40°-50°	2579.6	17.5
50°-60°	1655.1	11.2
60°-70°	708.0	4.8
70°-80°	167.3	1.1
80°-90°	31.1	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°	6177.3	41.9
0°-40°	9617.9	65.2
0°-60°	13852.6	93.9
0°-90°	14759.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	14759.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	7787	7787	7787	7787	7787	
5°	7775	7787	7796	7808	7804	738
15°	7423	7578	7754	7704	7607	2094
25°	6792	7031	7386	7252	7127	3103
35°	5634	5321	5639	5572	5697	3536
45°	4280	3498	2010	3398	4339	3278
55°	2165	2165	748	2257	2638	1964
65°	652	769	238	991	1007	696
75°	100	117	33	201	196	146
85°	33	21	17	33	46	35
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°	7787.1	7787.1	7787.1	7787.1	7787.1	7787.1	7787.1	7787.1	7787.1	7787.1	7787.1
2.5°	7791.3	7799.7	7795.5	7795.5	7791.3	7795.5	7795.5	7803.9	7803.9	7795.5	7791.3
5°	7774.6	7782.9	7782.9	7774.6	7774.6	7795.5	7782.9	7791.3	7791.3	7787.1	7787.1
7.5°	7737.0	7737.0	7753.7	7741.2	7741.2	7753.7	7749.5	7757.9	7766.3	7770.5	7770.5
10°	7653.4	7661.7	7665.9	7665.9	7670.1	7682.6	7691.0	7707.8	7716.1	7724.4	7728.6
12.5°	7548.9	7561.4	7565.6	7561.4	7574.0	7590.7	7611.6	7632.5	7645.1	7661.7	7674.3
15°	7423.4	7423.4	7431.8	7444.4	7452.8	7477.9	7498.7	7523.8	7557.2	7578.2	7599.1
17.5°	7285.6	7294.0	7306.4	7306.4	7323.2	7364.9	7377.5	7415.2	7452.8	7473.7	7515.5
20°	7135.1	7143.4	7156.0	7164.4	7185.2	7218.7	7243.8	7277.2	7319.0	7356.7	7398.4
22.5°	7018.0	7001.4	7009.6	7018.0	7039.0	7068.2	7097.5	7139.2	7181.1	7218.7	7260.5
25°	6792.3	6796.5	6809.1	6817.4	6842.5	6867.6	6901.0	6951.1	6988.8	7030.6	7076.5
27.5°	6487.2	6491.4	6512.3	6512.3	6533.1	6575.0	6595.8	6637.7	6687.9	6729.6	6784.0
30°	6140.3	6148.6	6148.6	6165.4	6177.8	6198.8	6219.7	6261.5	6286.6	6324.2	6399.5
32.5°	5822.6	5830.9	5826.7	5822.6	5810.1	5805.9	5801.7	5810.1	5818.4	5830.9	5860.2
35°	5634.5	5613.6	5596.9	5567.7	5534.2	5492.4	5454.8	5404.6	5358.6	5321.0	5279.2
37.5°	5454.8	5450.6	5425.5	5383.7	5316.8	5241.6	5153.9	5045.1	4936.4	4819.4	4706.6
40°	5204.0	5191.4	5170.5	5112.0	5036.8	4944.8	4827.8	4694.0	4518.4	4338.7	4154.8
42.5°	4777.6	4781.8	4756.7	4710.7	4639.7	4551.9	4430.7	4284.4	4096.3	3883.1	3644.9
45°	4280.2	4280.2	4271.8	4234.2	4184.1	4113.0	4021.1	3899.9	3716.0	3498.5	3243.6
47.5°	3761.9	3766.1	3753.5	3745.2	3724.3	3678.3	3611.4	3519.5	3389.9	3180.9	2925.9
50°	3235.3	3235.3	3256.1	3251.9	3251.9	3235.3	3206.0	3151.6	3038.8	2871.6	2633.4
52.5°	2708.6	2716.9	2729.5	2746.2	2767.1	2800.5	2767.1	2742.0	2670.9	2541.3	2336.6
55°	2165.2	2173.6	2194.4	2223.7	2248.8	2282.3	2290.6	2290.6	2252.9	2165.2	2010.5
57.5°	1701.2	1688.7	1705.4	1730.5	1763.9	1797.4	1822.4	1851.7	1847.5	1789.0	1663.6
60°	1279.1	1283.2	1295.7	1320.9	1345.9	1375.2	1408.6	1433.7	1446.3	1417.0	1337.6
62.5°	932.1	932.1	948.8	973.9	986.4	1028.3	1049.1	1061.7	1074.2	1070.0	1019.9
65°	652.1	660.4	668.8	681.4	693.8	718.9	731.5	756.5	764.9	769.1	731.5
67.5°	459.8	447.2	455.6	463.9	476.5	493.3	518.3	518.3	530.8	530.8	505.8
70°	292.6	292.6	296.8	309.3	317.7	321.9	330.2	338.5	351.1	346.9	346.9
72.5°	196.5	192.3	196.5	200.7	204.9	217.3	217.3	221.5	229.9	234.1	217.3
75°	100.3	104.5	112.8	108.7	121.2	112.8	117.0	129.6	125.4	117.0	117.0
77.5°	83.6	83.6	83.6	79.5	87.8	87.8	83.6	91.9	87.8	87.8	83.6
80°	58.5	62.7	58.5	54.3	58.5	54.3	54.3	54.3	54.3	54.3	50.1
82.5°	46.0	37.6	41.8	37.6	41.8	41.8	37.6	33.4	33.4	37.6	33.4
85°	33.4	25.1	29.3	29.3	25.1	25.1	25.1	25.1	25.1	20.9	20.9
87.5°	20.9	12.6	12.6	12.6	16.7	16.7	16.7	12.6	16.7	16.7	8.4
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°	7787.1	7787.1	7787.1	7787.1	7787.1	7787.1	7787.1	7787.1	7787.1	7787.1	7787.1
2.5°	7799.7	7795.5	7803.9	7799.7	7799.7	7795.5	7799.7	7795.5	7803.9	7787.1	7791.3
5°	7799.7	7791.3	7795.5	7799.7	7803.9	7795.5	7795.5	7795.5	7803.9	7795.5	7799.7
7.5°	7782.9	7778.8	7791.3	7799.7	7795.5	7791.3	7799.7	7795.5	7803.9	7799.7	7808.0
10°	7749.5	7753.7	7762.1	7774.6	7778.8	7782.9	7791.3	7791.3	7803.9	7787.1	7795.5
12.5°	7699.4	7716.1	7737.0	7745.3	7762.1	7762.1	7770.5	7774.6	7782.9	7778.8	7791.3
15°	7636.7	7657.6	7682.6	7703.6	7724.4	7737.0	7749.5	7753.7	7766.3	7753.7	7757.9
17.5°	7561.4	7586.5	7624.1	7649.2	7682.6	7695.2	7711.9	7720.3	7732.8	7724.4	7728.6
20°	7456.9	7486.2	7528.0	7565.6	7586.5	7615.7	7636.7	7649.2	7657.6	7649.2	7653.4
22.5°	7310.6	7352.5	7406.8	7436.0	7477.9	7502.9	7507.1	7536.4	7557.2	7536.4	7544.7
25°	7139.2	7181.1	7222.9	7285.6	7323.2	7352.5	7381.7	7385.9	7406.8	7402.6	7398.4
27.5°	6855.0	6909.4	6980.4	7030.6	7080.7	7126.7	7160.2	7168.5	7189.4	7181.1	7185.2
30°	6466.3	6524.9	6591.7	6671.1	6742.2	6788.1	6829.9	6859.2	6880.1	6867.6	6863.4
32.5°	5914.6	5973.1	6044.2	6123.5	6207.2	6274.0	6324.2	6361.8	6386.9	6378.5	6357.6
35°	5283.4	5300.1	5346.1	5408.8	5479.8	5550.9	5596.9	5638.6	5667.9	5676.3	5676.3
37.5°	4635.5	4581.2	4547.8	4547.8	4589.5	4618.8	4660.6	4685.6	4731.7	4748.3	4760.9
40°	4008.5	3883.1	3766.1	3678.3	3619.8	3615.6	3615.6	3628.1	3669.9	3724.3	3774.5
42.5°	3448.4	3247.8	3068.1	2905.0	2788.0	2721.1	2691.9	2696.1	2729.5	2779.6	2863.2
45°	3001.2	2750.4	2524.7	2328.2	2169.4	2064.8	2014.7	2010.5	2035.6	2094.1	2186.1
47.5°	2654.2	2386.7	2131.7	1906.0	1734.7	1621.8	1563.3	1546.6	1563.3	1617.6	1726.3
50°	2365.8	2090.0	1826.6	1592.5	1408.6	1291.6	1237.2	1216.4	1237.2	1283.2	1391.9
52.5°	2098.3	1814.1	1567.5	1341.7	1145.3	1044.9	986.4	973.9	986.4	1040.8	1128.6
55°	1789.0	1546.6	1304.1	1078.4	907.1	806.7	760.7	748.2	760.7	810.9	902.9
57.5°	1483.9	1274.9	1061.7	856.9	710.6	622.8	581.0	564.3	593.5	626.9	735.7
60°	1199.6	1032.5	852.7	673.0	551.8	472.3	438.9	434.7	443.1	484.9	560.1
62.5°	940.5	802.6	660.4	514.1	413.8	380.4	338.5	334.4	342.7	367.8	426.4
65°	677.2	589.4	480.7	376.2	296.8	250.8	234.1	238.3	246.6	263.4	317.7
67.5°	472.3	409.6	334.4	263.4	204.9	183.9	167.2	163.0	167.2	196.5	225.7
70°	317.7	280.0	225.7	200.7	142.2	112.8	117.0	104.5	121.2	121.2	146.3
72.5°	209.0	183.9	150.4	117.0	100.3	79.5	79.5	75.3	83.6	87.8	108.7
75°	108.7	83.6	83.6	58.5	41.8	20.9	37.6	33.4	29.3	33.4	41.8
77.5°	75.3	62.7	58.5	46.0	41.8	33.4	33.4	33.4	33.4	37.6	41.8
80°	46.0	46.0	33.4	29.3	25.1	20.9	25.1	25.1	25.1	25.1	29.3
82.5°	29.3	25.1	25.1	20.9	20.9	16.7	16.7	16.7	16.7	16.7	25.1
85°	25.1	16.7	16.7	12.6	16.7	29.3	12.6	16.7	16.7	16.7	12.6
87.5°	8.4	12.6	12.6	12.6	8.4	4.2	8.4	12.6	12.6	20.9	16.7
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°	7787.1	7787.1	7787.1	7787.1	7787.1	7787.1	7787.1	7787.1	7787.1	7787.1	7787.1
2.5°	7799.7	7803.9	7803.9	7799.7	7799.7	7791.3	7808.0	7795.5	7799.7	7816.4	7803.9
5°	7808.0	7812.2	7812.2	7808.0	7808.0	7808.0	7812.2	7812.2	7808.0	7803.9	7812.2
7.5°	7824.8	7820.6	7820.6	7812.2	7812.2	7803.9	7812.2	7799.7	7808.0	7799.7	7812.2
10°	7803.9	7808.0	7803.9	7799.7	7799.7	7795.5	7795.5	7782.9	7787.1	7774.6	7782.9
12.5°	7791.3	7787.1	7787.1	7778.8	7770.5	7762.1	7757.9	7745.3	7745.3	7716.1	7728.6
15°	7757.9	7762.1	7749.5	7732.8	7724.4	7703.6	7695.2	7678.4	7661.7	7640.9	7645.1
17.5°	7728.6	7716.1	7699.4	7682.6	7649.2	7632.5	7615.7	7590.7	7582.3	7557.2	7548.9
20°	7640.9	7632.5	7611.6	7582.3	7561.4	7523.8	7507.1	7482.0	7461.1	7436.0	7423.4
22.5°	7528.0	7519.6	7494.5	7465.3	7431.8	7415.2	7398.4	7352.5	7331.5	7306.4	7302.3
25°	7385.9	7373.3	7348.3	7314.8	7298.1	7252.1	7235.4	7201.9	7193.6	7168.5	7164.4
27.5°	7168.5	7151.8	7122.6	7080.7	7051.5	7022.2	7005.5	6980.4	6972.1	6946.9	6942.9
30°	6842.5	6821.6	6763.1	6746.4	6696.2	6666.9	6666.9	6633.5	6637.7	6621.0	6621.0
32.5°	6328.4	6294.9	6248.9	6215.5	6182.0	6165.4	6165.4	6152.8	6161.2	6161.2	6169.6
35°	5647.0	5601.1	5575.9	5555.1	5555.1	5571.8	5622.0	5634.5	5659.6	5680.5	5697.2
37.5°	4773.4	4769.3	4798.6	4823.6	4886.3	4957.4	5045.1	5120.4	5191.4	5241.6	5291.7
40°	3828.8	3933.3	4016.9	4134.0	4230.0	4368.0	4526.8	4656.4	4777.6	4865.4	4957.4
42.5°	2988.6	3122.4	3298.0	3469.3	3640.7	3828.8	4037.8	4217.5	4376.4	4497.6	4593.7
45°	2328.2	2512.1	2725.3	2942.7	3164.2	3398.3	3615.6	3799.5	3966.7	4092.1	4188.3
47.5°	1876.8	2077.4	2319.8	2558.1	2808.9	3055.5	3298.0	3456.8	3594.7	3695.0	3782.9
50°	1550.7	1763.9	2018.9	2290.6	2541.3	2788.0	2997.0	3151.6	3264.5	3352.3	3406.6
52.5°	1295.7	1521.4	1793.2	2064.8	2315.6	2541.3	2729.5	2846.5	2938.5	3001.2	3051.3
55°	1070.0	1287.4	1542.4	1797.4	2044.0	2257.1	2411.8	2499.6	2570.6	2608.2	2637.5
57.5°	873.6	1074.2	1308.3	1542.4	1755.6	1931.2	2052.4	2140.1	2173.6	2202.8	2198.6
60°	685.5	873.6	1086.8	1287.4	1471.3	1613.4	1701.2	1751.4	1776.4	1789.0	1780.6
62.5°	539.2	710.6	873.6	1049.1	1182.9	1304.1	1387.8	1387.8	1400.3	1404.4	1417.0
65°	401.2	530.8	673.0	802.6	911.2	990.6	1036.7	1049.1	1065.9	1061.7	1053.3
67.5°	296.8	392.9	497.4	593.5	668.8	718.9	752.3	781.7	777.5	769.1	764.9
70°	204.9	267.6	359.5	418.0	472.3	522.5	530.8	535.0	539.2	543.4	535.0
72.5°	142.2	188.1	238.3	288.4	321.9	342.7	363.7	367.8	367.8	367.8	363.7
75°	71.1	96.1	142.2	163.0	192.3	200.7	217.3	217.3	229.9	213.1	209.0
77.5°	62.7	75.3	100.3	117.0	129.6	142.2	146.3	158.8	154.6	146.3	150.4
80°	37.6	46.0	62.7	71.1	87.8	91.9	96.1	100.3	96.1	100.3	100.3
82.5°	29.3	33.4	41.8	41.8	54.3	54.3	58.5	58.5	62.7	62.7	62.7
85°	16.7	29.3	25.1	50.1	33.4	33.4	41.8	50.1	41.8	41.8	50.1
87.5°	16.7	16.7	12.6	16.7	16.7	16.7	20.9	25.1	25.1	29.3	25.1
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: P249448

CATALOG NUMBER: LSR8B150D010 EC8B150850 8LBDW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	7787.1	7787.1	7787.1	7787.1
2.5°	7799.7	7808.0	7795.5	7791.3
5°	7812.2	7812.2	7803.9	7803.9
7.5°	7812.2	7812.2	7799.7	7791.3
10°	7778.8	7778.8	7766.3	7757.9
12.5°	7716.1	7716.1	7711.9	7699.4
15°	7636.7	7636.7	7619.9	7607.4
17.5°	7528.0	7536.4	7515.5	7515.5
20°	7411.0	7406.8	7390.1	7381.7
22.5°	7289.8	7281.4	7277.2	7252.1
25°	7160.2	7151.8	7139.2	7126.7
27.5°	6938.7	6934.5	6921.9	6905.2
30°	6600.0	6595.8	6579.2	6579.2
32.5°	6161.2	6157.0	6140.3	6144.5
35°	5705.5	5722.3	5713.9	5697.2
37.5°	5325.2	5337.7	5346.1	5337.7
40°	5007.5	5045.1	5049.3	5057.7
42.5°	4669.0	4719.1	4735.9	4744.1
45°	4263.4	4309.5	4347.1	4338.7
47.5°	3849.6	3883.1	3916.5	3891.5
50°	3452.6	3473.5	3486.1	3486.1
52.5°	3076.4	3076.4	3072.2	3076.4
55°	2645.9	2645.9	2629.2	2637.5
57.5°	2194.4	2202.8	2190.2	2169.4
60°	1776.4	1755.6	1747.2	1734.7
62.5°	1383.6	1383.6	1354.3	1391.9
65°	1036.7	1024.1	1011.5	1007.3
67.5°	752.3	748.2	735.7	731.5
70°	530.8	514.1	509.9	501.6
72.5°	355.3	355.3	346.9	346.9
75°	217.3	196.5	192.3	196.5
77.5°	150.4	146.3	146.3	142.2
80°	100.3	96.1	104.5	91.9
82.5°	62.7	66.9	62.7	66.9
85°	41.8	50.1	46.0	46.0
87.5°	25.1	25.1	25.1	25.1
90°	0.0	0.0	0.0	0.0

(END OF REPORT)