

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: P248359

Luminaire Tested: **LSR8B150D010 EC8B150840 8LBDW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P248359
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: LSR8B150D010 EC8B150840 8LBDWOLI
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 4000 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16952.0 lumens
Efficiency: N/A
Efficacy: 107.0 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.33 / 1.2
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

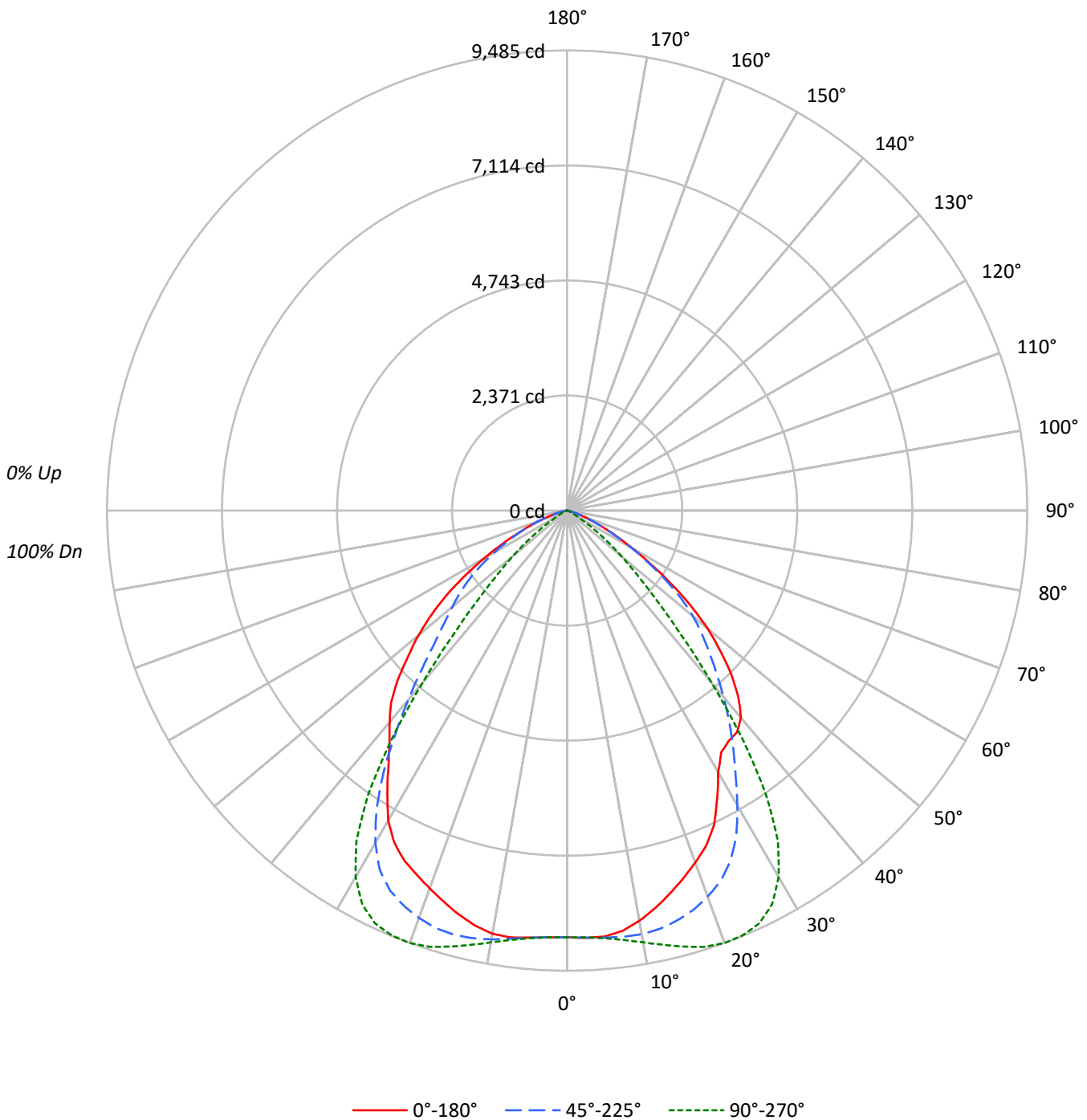
Input Watts (W): 158.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	271178	271178	271178
5°	272792	273805	273514
10°	268785	282964	277409
15°	260925	296987	275230
20°	253354	311253	271888
25°	243626	319224	270624
30°	221716	310473	262603
35°	218412	269024	241608
40°	224351	186581	229045
45°	208853	112769	215368
50°	181155	69642	191906
55°	139022	36386	162865
60°	94711	14678	122920
65°	58919	7493	84800
70°	31980	4634	51769
75°	16680	2216	30596
80°	7458	2486	16568
85°	4953	1663	14860



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	845.7	5.0
10°-20°	2505.3	14.8
20°-30°	3822.1	22.5
30°-40°	3988.5	23.5
40°-50°	2995.9	17.7
50°-60°	1843.3	10.9
60°-70°	750.2	4.4
70°-80°	176.7	1.0
80°-90°	24.3	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°	7173.2	42.3
0°-40°	11161.6	65.8
0°-60°	16000.8	94.4
0°-90°	16952.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16952.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	8794	8794	8794	8794	8794	
5°	8813	8836	8846	8836	8836	834
15°	8173	8748	9303	9046	8621	2302
25°	7160	7963	9382	8640	7954	3255
35°	5802	5966	7146	6605	6418	3663
45°	4789	4145	2586	3860	4939	3654
55°	2586	2455	677	2455	3029	2324
65°	808	817	103	1097	1162	842
75°	140	140	19	247	257	169
85°	14	14	5	33	42	20
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°	8794.1	8794.1	8794.1	8794.1	8794.1	8794.1	8794.1	8794.1	8794.1	8794.1	8794.1
2.5°	8817.5	8803.5	8817.5	8817.5	8822.2	8812.8	8817.5	8822.2	8812.8	8812.8	8812.8
5°	8812.8	8803.5	8812.8	8808.1	8817.5	8817.5	8826.9	8826.9	8836.1	8836.1	8850.2
7.5°	8738.1	8719.5	8738.1	8752.2	8761.4	8780.2	8803.5	8822.2	8840.8	8859.5	8882.8
10°	8584.1	8584.1	8598.1	8626.1	8654.1	8686.7	8728.8	8775.5	8822.2	8864.1	8906.1
12.5°	8392.8	8378.7	8406.7	8444.0	8486.1	8537.5	8602.8	8672.8	8747.5	8831.4	8896.9
15°	8173.3	8159.3	8192.0	8229.3	8280.7	8355.4	8434.8	8528.1	8635.5	8747.5	8854.9
17.5°	7949.3	7944.6	7977.2	8028.6	8070.7	8149.9	8252.7	8364.7	8486.1	8635.5	8775.5
20°	7720.6	7715.9	7748.6	7790.6	7846.6	7921.3	8024.0	8154.6	8299.3	8467.4	8630.8
22.5°	7482.5	7487.2	7515.1	7561.8	7608.6	7687.8	7795.2	7926.0	8084.6	8266.7	8448.7
25°	7160.4	7137.1	7174.4	7221.1	7300.4	7365.7	7468.5	7608.6	7771.9	7963.3	8178.0
27.5°	6693.6	6688.9	6721.7	6763.6	6833.6	6913.0	7025.0	7169.8	7342.4	7552.5	7762.5
30°	6226.8	6236.2	6250.2	6292.2	6338.9	6418.2	6530.3	6651.7	6815.0	7015.7	7239.8
32.5°	5909.4	5909.4	5928.1	5956.1	5988.8	6030.8	6110.2	6198.8	6324.9	6464.9	6628.3
35°	5802.0	5783.4	5802.0	5806.7	5811.4	5820.8	5834.7	5862.8	5904.7	5965.5	6026.1
37.5°	5755.4	5741.4	5741.4	5722.8	5699.4	5671.4	5634.0	5592.0	5545.4	5484.6	5438.0
40°	5573.4	5564.0	5554.7	5536.0	5484.6	5428.7	5367.9	5269.9	5162.6	5013.2	4863.9
42.5°	5223.3	5214.0	5209.3	5171.9	5125.2	5059.9	4989.9	4887.2	4751.9	4560.4	4345.7
45°	4789.2	4770.5	4756.5	4723.9	4691.1	4635.1	4569.8	4476.4	4341.0	4145.0	3888.3
47.5°	4285.1	4275.7	4271.0	4257.1	4224.4	4191.6	4149.7	4075.0	3953.6	3766.9	3500.9
50°	3776.2	3757.6	3766.9	3762.3	3748.3	3725.0	3696.9	3645.6	3552.2	3384.1	3141.4
52.5°	3192.7	3192.7	3188.2	3202.1	3206.8	3202.1	3206.8	3150.8	3071.4	2945.3	2740.0
55°	2585.9	2585.9	2600.0	2618.7	2637.3	2642.0	2637.3	2614.0	2557.9	2455.2	2273.2
57.5°	2016.4	2007.2	2035.2	2063.2	2081.9	2100.5	2086.5	2067.8	2035.2	1951.1	1811.1
60°	1535.7	1535.7	1554.3	1573.1	1591.7	1610.4	1605.7	1601.0	1573.1	1517.0	1405.1
62.5°	1129.6	1134.3	1134.3	1148.3	1166.9	1185.6	1199.6	1185.6	1171.6	1134.3	1059.6
65°	807.5	802.8	807.5	821.5	835.6	854.2	863.6	858.9	844.8	816.9	760.9
67.5°	541.5	536.8	555.4	560.1	569.5	588.2	583.5	588.2	583.5	560.1	513.5
70°	354.7	345.4	354.7	350.1	364.1	368.8	378.0	382.7	378.0	364.1	350.1
72.5°	219.4	214.7	219.4	224.1	228.8	233.3	242.7	242.7	238.0	228.8	210.0
75°	140.0	126.0	130.7	121.4	130.7	130.7	140.0	144.7	140.0	140.0	130.7
77.5°	84.1	84.1	84.1	84.1	84.1	84.1	84.1	88.7	93.3	84.1	79.4
80°	42.0	42.0	46.7	46.7	46.7	51.4	46.7	46.7	46.7	51.4	37.3
82.5°	32.7	28.0	28.0	28.0	32.7	28.0	28.0	28.0	28.0	28.0	28.0
85°	14.0	18.6	14.0	9.4	14.0	14.0	18.6	14.0	14.0	14.0	18.6
87.5°	4.7	4.7	0.0	0.0	0.0	4.7	0.0	4.7	4.7	9.4	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°	8794.1	8794.1	8794.1	8794.1	8794.1	8794.1	8794.1	8794.1	8794.1	8794.1	8794.1
2.5°	8817.5	8808.1	8808.1	8803.5	8812.8	8803.5	8808.1	8803.5	8803.5	8812.8	8803.5
5°	8850.2	8854.9	8845.5	8840.8	8854.9	8854.9	8854.9	8845.5	8845.5	8850.2	8845.5
7.5°	8896.9	8906.1	8910.8	8915.5	8924.9	8929.6	8929.6	8924.9	8920.2	8934.2	8915.5
10°	8948.2	8962.2	8990.2	9004.2	9027.6	9027.6	9036.9	9036.9	9027.6	9036.9	9032.2
12.5°	8929.6	9013.5	9060.2	9092.9	9125.5	9153.5	9162.9	9167.6	9162.9	9181.6	9162.9
15°	8962.2	9032.2	9106.9	9162.9	9223.5	9256.2	9265.6	9302.9	9312.3	9317.0	9289.0
17.5°	8910.8	9036.9	9116.2	9200.2	9289.0	9349.6	9405.6	9429.0	9433.7	9442.9	9405.6
20°	8794.1	8934.2	9055.5	9176.9	9279.6	9372.9	9419.6	9485.0	9466.4	9503.7	9452.3
22.5°	8635.5	8794.1	8948.2	9106.9	9214.3	9326.3	9424.3	9470.9	9494.3	9494.3	9438.3
25°	8383.4	8570.1	8738.1	8901.5	9064.9	9200.2	9312.3	9382.3	9396.3	9391.7	9326.3
27.5°	7991.3	8192.0	8388.1	8574.8	8775.5	8934.2	9064.9	9148.8	9172.3	9172.3	9102.2
30°	7449.8	7664.5	7855.9	8079.9	8285.4	8462.8	8644.8	8719.5	8761.4	8761.4	8682.2
32.5°	6805.6	6987.7	7165.1	7384.5	7608.6	7809.2	7981.9	8084.6	8136.0	8131.3	8061.3
35°	6105.5	6194.1	6329.6	6492.9	6693.6	6880.3	7048.3	7146.5	7235.1	7230.4	7165.1
37.5°	5405.3	5382.0	5396.0	5456.7	5582.6	5713.4	5844.1	5937.5	6012.1	6044.9	6030.8
40°	4719.2	4597.8	4481.1	4439.1	4448.4	4495.1	4565.1	4635.1	4719.2	4761.2	4779.8
42.5°	4103.0	3897.6	3692.2	3538.2	3449.5	3421.5	3454.2	3477.5	3528.9	3589.5	3650.3
45°	3608.2	3332.9	3062.1	2824.0	2674.7	2585.9	2567.3	2585.9	2614.0	2674.7	2754.0
47.5°	3202.1	2880.0	2576.7	2310.5	2091.1	1974.5	1941.9	1932.5	1960.5	2016.4	2123.8
50°	2842.7	2520.6	2184.6	1876.4	1647.8	1517.0	1470.4	1451.7	1484.3	1526.4	1624.3
52.5°	2450.6	2133.2	1787.8	1489.0	1251.0	1115.6	1064.2	1036.3	1054.9	1111.0	1209.0
55°	2025.8	1731.7	1419.0	1111.0	882.2	756.2	695.4	676.8	695.4	756.2	854.2
57.5°	1601.0	1353.7	1092.2	802.8	597.5	471.5	410.7	392.1	443.5	466.8	569.5
60°	1251.0	1050.3	826.2	588.2	410.7	312.7	252.1	238.0	261.4	303.4	387.4
62.5°	938.3	812.2	634.8	420.1	303.4	200.7	168.0	154.1	168.0	200.7	266.1
65°	681.5	583.5	443.5	308.0	205.4	149.4	112.0	102.7	116.7	140.0	196.1
67.5°	466.8	392.1	308.0	214.7	140.0	93.3	79.4	79.4	84.1	102.7	144.7
70°	303.4	256.8	196.1	140.0	93.3	70.0	60.6	51.4	60.6	74.7	98.0
72.5°	191.4	163.3	126.0	98.0	70.0	51.4	42.0	37.3	46.7	56.0	74.7
75°	116.7	88.7	65.3	51.4	37.3	37.3	37.3	18.6	23.3	37.3	46.7
77.5°	70.0	60.6	51.4	42.0	32.7	18.6	18.6	18.6	23.3	28.0	42.0
80°	37.3	32.7	23.3	23.3	18.6	14.0	18.6	14.0	9.4	23.3	28.0
82.5°	23.3	18.6	18.6	18.6	23.3	9.4	14.0	9.4	14.0	18.6	14.0
85°	14.0	14.0	14.0	9.4	23.3	9.4	9.4	4.7	4.7	9.4	9.4
87.5°	0.0	4.7	4.7	0.0	4.7	0.0	4.7	4.7	4.7	4.7	4.7
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°	8794.1	8794.1	8794.1	8794.1	8794.1	8794.1	8794.1	8794.1	8794.1	8794.1	8794.1
2.5°	8808.1	8803.5	8808.1	8803.5	8803.5	8803.5	8808.1	8808.1	8803.5	8803.5	8812.8
5°	8845.5	8845.5	8845.5	8840.8	8836.1	8836.1	8845.5	8845.5	8831.4	8845.5	8845.5
7.5°	8924.9	8910.8	8924.9	8906.1	8896.9	8901.5	8906.1	8896.9	8887.5	8892.2	8892.2
10°	9027.6	9013.5	9013.5	8999.6	8985.5	8976.2	8966.9	8943.5	8920.2	8915.5	8896.9
12.5°	9148.8	9125.5	9111.6	9083.5	9060.2	9027.6	8999.6	8962.2	8915.5	8882.8	8850.2
15°	9270.3	9232.9	9200.2	9153.5	9102.2	9046.2	8985.5	8924.9	8850.2	8784.8	8728.8
17.5°	9368.3	9317.0	9256.2	9181.6	9106.9	9022.9	8934.2	8845.5	8738.1	8654.1	8588.7
20°	9400.9	9326.3	9247.0	9148.8	9050.9	8934.2	8822.2	8705.5	8584.1	8495.4	8420.7
22.5°	9359.0	9270.3	9172.3	9069.6	8938.8	8812.8	8682.2	8546.7	8439.4	8318.1	8248.0
25°	9242.3	9134.9	9027.6	8906.1	8780.2	8640.1	8500.1	8360.1	8229.3	8164.0	8075.4
27.5°	9004.2	8887.5	8770.8	8644.8	8500.1	8360.1	8215.4	8079.9	7968.0	7879.2	7828.0
30°	8584.1	8448.7	8313.4	8178.0	8051.9	7907.2	7771.9	7659.8	7547.8	7477.8	7426.5
32.5°	7939.9	7818.6	7683.3	7552.5	7435.9	7314.5	7202.4	7104.4	7025.0	6978.3	6941.0
35°	7071.8	6950.4	6847.7	6754.4	6656.3	6605.0	6535.0	6478.9	6446.2	6427.6	6422.9
37.5°	5979.4	5909.4	5876.7	5858.1	5839.4	5825.5	5834.7	5858.1	5876.7	5909.4	5946.8
40°	4812.5	4873.2	4891.9	4957.2	5017.9	5097.2	5186.0	5288.7	5372.6	5480.0	5554.7
42.5°	3748.3	3860.3	3991.0	4131.0	4280.4	4425.1	4602.5	4765.8	4915.2	5050.5	5167.2
45°	2880.0	3052.7	3248.8	3449.5	3650.3	3860.3	4075.0	4275.7	4453.1	4597.8	4719.2
47.5°	2245.2	2436.6	2688.7	2936.1	3178.8	3426.2	3664.2	3874.2	4023.6	4163.7	4271.0
50°	1778.4	1997.8	2273.2	2557.9	2824.0	3085.4	3337.4	3533.5	3682.9	3795.0	3874.2
52.5°	1377.0	1638.4	1918.4	2217.2	2502.0	2786.7	3020.0	3202.1	3323.5	3421.5	3482.1
55°	1026.9	1283.6	1582.4	1890.5	2179.9	2455.2	2674.7	2833.4	2940.8	2996.7	3029.4
57.5°	742.2	975.6	1274.3	1582.4	1843.8	2105.2	2282.6	2427.3	2487.9	2520.6	2534.6
60°	541.5	756.2	1022.2	1288.3	1535.7	1745.8	1899.8	1997.8	2044.5	2063.2	2058.5
62.5°	396.8	583.5	812.2	1036.3	1236.9	1409.6	1531.0	1596.4	1619.8	1629.0	1615.1
65°	303.4	448.1	644.2	816.9	970.9	1096.9	1185.6	1227.7	1241.6	1236.9	1227.7
67.5°	224.1	336.1	480.8	611.5	723.5	821.5	868.2	905.6	914.9	900.9	886.9
70°	158.8	247.4	350.1	438.8	522.8	578.8	630.1	634.8	634.8	630.1	620.9
72.5°	112.0	172.7	238.0	298.8	350.1	392.1	410.7	424.8	420.1	415.4	406.1
75°	74.7	107.4	172.7	186.7	233.3	247.4	266.1	266.1	270.7	256.8	256.8
77.5°	46.7	74.7	102.7	121.4	140.0	158.8	168.0	168.0	172.7	168.0	168.0
80°	28.0	46.7	56.0	84.1	84.1	98.0	102.7	107.4	98.0	112.0	98.0
82.5°	18.6	28.0	42.0	42.0	51.4	60.6	60.6	65.3	65.3	60.6	60.6
85°	14.0	18.6	23.3	28.0	28.0	32.7	28.0	28.0	32.7	37.3	32.7
87.5°	4.7	9.4	4.7	9.4	9.4	18.6	14.0	14.0	14.0	18.6	18.6
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: P248359

CATALOG NUMBER: LSR8B150D010 EC8B150840 8LBDWOLI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	8794.1	8794.1	8794.1	8794.1
2.5°	8803.5	8808.1	8803.5	8803.5
5°	8845.5	8840.8	8845.5	8836.1
7.5°	8878.2	8878.2	8873.5	8873.5
10°	8878.2	8859.5	8859.5	8859.5
12.5°	8808.1	8784.8	8770.8	8761.4
15°	8686.7	8644.8	8626.1	8621.4
17.5°	8528.1	8490.7	8467.4	8453.4
20°	8346.0	8308.7	8280.7	8285.4
22.5°	8187.3	8145.4	8126.6	8117.3
25°	8028.6	7977.2	7963.3	7953.9
27.5°	7771.9	7743.9	7729.9	7715.9
30°	7379.8	7365.7	7342.4	7375.1
32.5°	6927.0	6903.6	6885.0	6899.1
35°	6427.6	6413.5	6427.6	6418.2
37.5°	5970.2	5984.1	6002.8	6012.1
40°	5610.7	5662.0	5680.8	5690.0
42.5°	5251.3	5312.0	5349.3	5372.6
45°	4807.8	4868.5	4910.5	4938.6
47.5°	4350.4	4401.8	4443.7	4439.1
50°	3935.0	3963.0	3981.6	4000.3
52.5°	3514.8	3514.8	3519.5	3519.5
55°	3038.8	3029.4	3024.7	3029.4
57.5°	2515.9	2506.6	2502.0	2487.9
60°	2039.9	2011.9	1993.1	1993.1
62.5°	1596.4	1563.7	1549.8	1545.1
65°	1199.6	1194.9	1166.9	1162.2
67.5°	868.2	849.5	830.9	835.6
70°	611.5	583.5	583.5	574.2
72.5°	396.8	382.7	378.0	378.0
75°	247.4	247.4	238.0	256.8
77.5°	163.3	163.3	158.8	163.3
80°	98.0	98.0	98.0	93.3
82.5°	60.6	65.3	60.6	60.6
85°	32.7	37.3	28.0	42.0
87.5°	18.6	23.3	18.6	23.3
90°	0.0	0.0	0.0	0.0

(END OF REPORT)