

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: P249115

Luminaire Tested: **LSR8B150D010 EC8B150840 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249115
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 EC8B150840 8LBDW0H
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 4000 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16358.0 lumens
Efficiency: N/A
Efficacy: 103.2 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

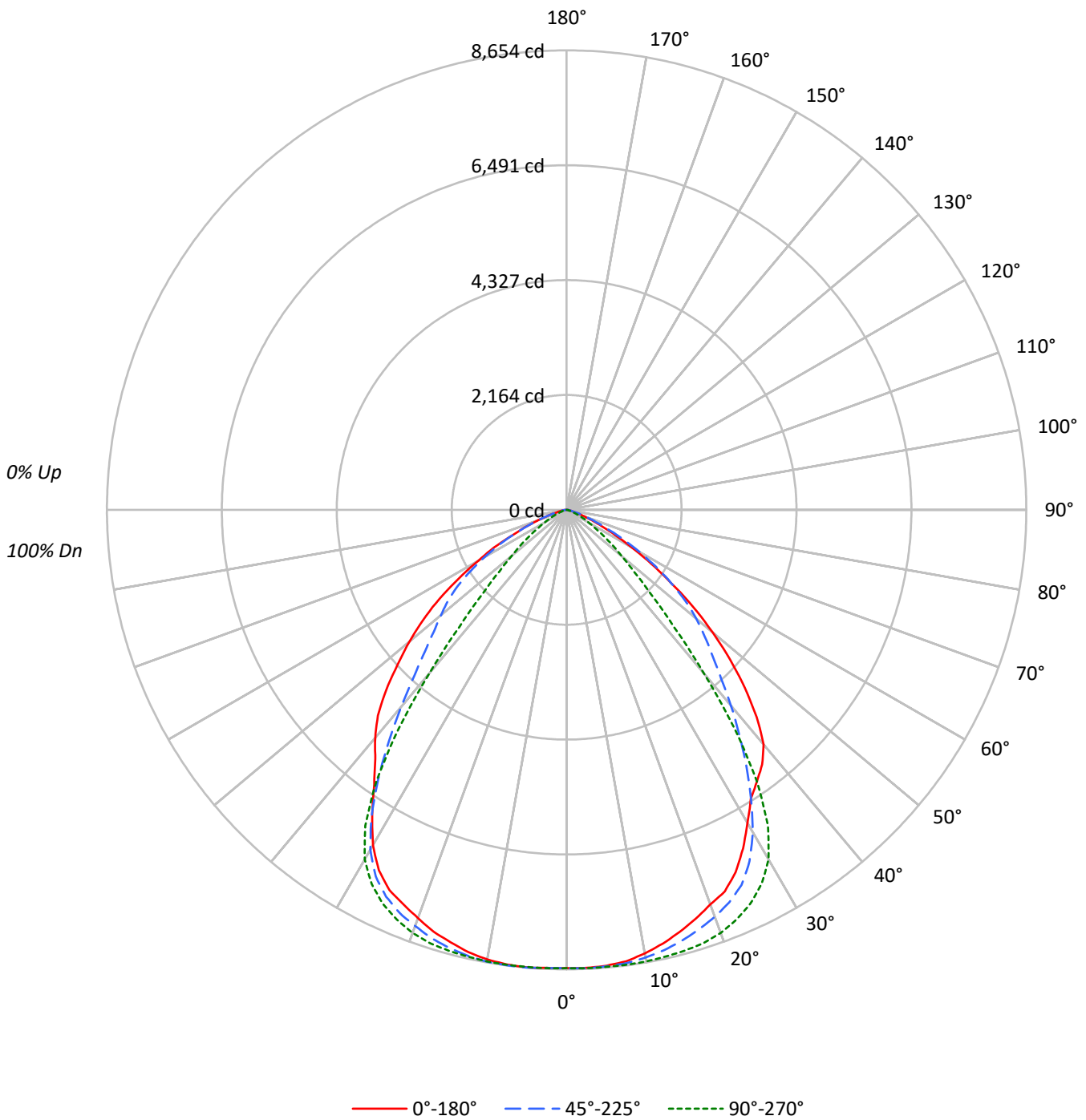
Input Watts (W): 158.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	266142	266142	266142
5°	266728	267447	267734
10°	265604	270392	269233
15°	262662	274346	269171
20°	259510	278205	268479
25°	256140	278525	268753
30°	242321	270693	259644
35°	235088	235257	237704
40°	232177	161869	225652
45°	206877	97174	209708
50°	172021	64672	185352
55°	129011	44584	157156
60°	87427	29714	118572
65°	52739	19270	81458
70°	29239	10440	50120
75°	13249	4420	25949
80°	11507	4937	18095
85°	13126	6545	18044



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	823.7	5.0
10°-20°	2392.1	14.6
20°-30°	3630.8	22.2
30°-40°	3813.4	23.3
40°-50°	2859.0	17.5
50°-60°	1834.4	11.2
60°-70°	784.7	4.8
70°-80°	185.4	1.1
80°-90°	34.5	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°	6846.6	41.9
0°-40°	10659.9	65.2
0°-60°	15353.4	93.9
0°-90°	16358.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16358.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	8631	8631	8631	8631	8631	
5°	8617	8631	8640	8654	8649	819
15°	8228	8399	8594	8538	8432	2321
25°	7528	7792	8186	8038	7899	3439
35°	6245	5898	6250	6175	6314	3919
45°	4744	3878	2228	3766	4809	3633
55°	2400	2400	829	2502	2923	2177
65°	723	852	264	1098	1116	772
75°	111	130	37	222	218	162
85°	37	23	18	37	51	39
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°	8630.8	8630.8	8630.8	8630.8	8630.8	8630.8	8630.8	8630.8	8630.8	8630.8	8630.8
2.5°	8635.4	8644.7	8640.1	8640.1	8635.4	8640.1	8640.1	8649.4	8649.4	8640.1	8635.4
5°	8616.9	8626.2	8626.2	8616.9	8616.9	8640.1	8626.2	8635.4	8635.4	8630.8	8630.8
7.5°	8575.3	8575.3	8593.7	8579.9	8579.9	8593.7	8589.1	8598.4	8607.7	8612.3	8612.3
10°	8482.5	8491.8	8496.5	8496.5	8501.1	8515.0	8524.2	8542.8	8552.0	8561.3	8566.0
12.5°	8366.8	8380.6	8385.3	8380.6	8394.6	8413.0	8436.3	8459.4	8473.3	8491.8	8505.8
15°	8227.7	8227.7	8237.0	8250.9	8260.2	8288.0	8311.1	8338.9	8376.0	8399.2	8422.3
17.5°	8074.9	8084.2	8098.0	8098.0	8116.6	8162.9	8176.8	8218.5	8260.2	8283.4	8329.7
20°	7908.2	7917.3	7931.3	7940.6	7963.7	8000.8	8028.5	8065.6	8112.0	8153.7	8199.9
22.5°	7778.4	7759.9	7769.1	7778.4	7801.6	7834.0	7866.4	7912.7	7959.1	8000.8	8047.1
25°	7528.2	7532.8	7546.8	7556.0	7583.8	7611.6	7648.7	7704.2	7745.9	7792.3	7843.2
27.5°	7190.0	7194.7	7217.8	7217.8	7240.9	7287.3	7310.4	7356.8	7412.5	7458.7	7519.0
30°	6805.5	6814.7	6814.7	6833.3	6847.2	6870.4	6893.5	6939.9	6967.6	7009.4	7092.8
32.5°	6453.5	6462.6	6458.0	6453.5	6439.5	6434.9	6430.2	6439.5	6448.8	6462.6	6495.1
35°	6245.0	6221.8	6203.3	6170.9	6133.8	6087.4	6045.7	5990.2	5939.2	5897.5	5851.2
37.5°	6045.7	6041.1	6013.3	5966.9	5892.8	5809.5	5712.2	5591.7	5471.2	5341.6	5216.5
40°	5767.8	5753.8	5730.7	5665.9	5582.4	5480.5	5350.8	5202.6	5008.0	4808.8	4605.0
42.5°	5295.2	5299.8	5272.1	5221.1	5142.4	5045.0	4910.7	4748.6	4540.1	4303.8	4039.8
45°	4743.9	4743.9	4734.6	4692.9	4637.4	4558.6	4456.7	4322.4	4118.6	3877.6	3595.0
47.5°	4169.5	4174.1	4160.2	4151.0	4127.7	4076.8	4002.7	3900.8	3757.2	3525.5	3242.9
50°	3585.8	3585.8	3608.9	3604.3	3604.3	3585.8	3553.4	3493.1	3368.0	3182.7	2918.7
52.5°	3002.0	3011.3	3025.2	3043.7	3066.8	3103.9	3066.8	3039.1	2960.3	2816.7	2589.7
55°	2399.7	2409.0	2432.2	2464.6	2492.5	2529.5	2538.7	2538.7	2497.0	2399.7	2228.3
57.5°	1885.6	1871.6	1890.2	1918.0	1955.0	1992.1	2019.9	2052.3	2047.7	1982.8	1843.8
60°	1417.6	1422.3	1436.1	1464.0	1491.8	1524.2	1561.2	1589.0	1603.0	1570.5	1482.5
62.5°	1033.1	1033.1	1051.6	1079.4	1093.3	1139.7	1162.8	1176.7	1190.6	1185.9	1130.4
65°	722.8	731.9	741.2	755.2	769.0	796.8	810.7	838.5	847.8	852.4	810.7
67.5°	509.6	495.7	505.0	514.2	528.1	546.7	574.5	574.5	588.3	588.3	560.5
70°	324.3	324.3	329.0	342.8	352.1	356.7	366.0	375.2	389.2	384.5	384.5
72.5°	217.8	213.1	217.8	222.4	227.0	240.9	240.9	245.5	254.8	259.5	240.9
75°	111.2	115.8	125.0	120.5	134.3	125.0	129.7	143.6	139.0	129.7	129.7
77.5°	92.6	92.6	92.6	88.1	97.3	97.3	92.6	101.9	97.3	97.3	92.6
80°	64.8	69.5	64.8	60.2	64.8	60.2	60.2	60.2	60.2	60.2	55.5
82.5°	51.0	41.7	46.4	41.7	46.4	46.4	41.7	37.1	37.1	41.7	37.1
85°	37.1	27.8	32.4	32.4	27.8	27.8	27.8	27.8	27.8	23.1	23.1
87.5°	23.1	13.9	13.9	13.9	18.5	18.5	18.5	13.9	18.5	18.5	9.3
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°	8630.8	8630.8	8630.8	8630.8	8630.8	8630.8	8630.8	8630.8	8630.8	8630.8	8630.8
2.5°	8644.7	8640.1	8649.4	8644.7	8644.7	8640.1	8644.7	8640.1	8649.4	8630.8	8635.4
5°	8644.7	8635.4	8640.1	8644.7	8649.4	8640.1	8640.1	8640.1	8649.4	8640.1	8644.7
7.5°	8626.2	8621.5	8635.4	8644.7	8640.1	8635.4	8644.7	8640.1	8649.4	8644.7	8653.9
10°	8589.1	8593.7	8603.0	8616.9	8621.5	8626.2	8635.4	8635.4	8649.4	8630.8	8640.1
12.5°	8533.5	8552.0	8575.3	8584.4	8603.0	8603.0	8612.3	8616.9	8626.2	8621.5	8635.4
15°	8464.1	8487.2	8515.0	8538.2	8561.3	8575.3	8589.1	8593.7	8607.7	8593.7	8598.4
17.5°	8380.6	8408.4	8450.1	8477.9	8515.0	8528.9	8547.4	8556.7	8570.6	8561.3	8566.0
20°	8264.8	8297.3	8343.6	8385.3	8408.4	8440.8	8464.1	8477.9	8487.2	8477.9	8482.5
22.5°	8102.7	8149.0	8209.2	8241.7	8288.0	8315.8	8320.4	8352.9	8376.0	8352.9	8362.1
25°	7912.7	7959.1	8005.4	8074.9	8116.6	8149.0	8181.5	8186.1	8209.2	8204.6	8199.9
27.5°	7597.7	7658.0	7736.7	7792.3	7847.9	7898.9	7935.9	7945.1	7968.3	7959.1	7963.7
30°	7166.8	7231.8	7305.9	7393.9	7472.6	7523.5	7569.9	7602.3	7625.5	7611.6	7607.0
32.5°	6555.4	6620.2	6699.0	6787.0	6879.7	6953.7	7009.4	7051.1	7078.8	7069.6	7046.4
35°	5855.8	5874.3	5925.3	5994.8	6073.5	6152.3	6203.3	6249.5	6282.0	6291.3	6291.3
37.5°	5137.7	5077.5	5040.5	5040.5	5086.7	5119.2	5165.5	5193.3	5244.3	5262.8	5276.7
40°	4442.8	4303.8	4174.1	4076.8	4012.0	4007.4	4007.4	4021.2	4067.5	4127.7	4183.4
42.5°	3822.0	3599.6	3400.4	3219.8	3090.1	3015.9	2983.5	2988.2	3025.2	3080.8	3173.4
45°	3326.3	3048.4	2798.2	2580.4	2404.4	2288.5	2233.0	2228.3	2256.1	2321.0	2423.0
47.5°	2941.8	2645.3	2362.7	2112.5	1922.6	1797.5	1732.6	1714.2	1732.6	1792.8	1913.3
50°	2622.1	2316.4	2024.5	1765.1	1561.2	1431.6	1371.3	1348.1	1371.3	1422.3	1542.7
52.5°	2325.6	2010.6	1737.3	1487.1	1269.4	1158.2	1093.3	1079.4	1093.3	1153.5	1250.9
55°	1982.8	1714.2	1445.4	1195.2	1005.4	894.1	843.1	829.3	843.1	898.8	1000.7
57.5°	1644.7	1413.0	1176.7	949.7	787.6	690.2	644.0	625.4	657.8	694.9	815.4
60°	1329.6	1144.3	945.0	745.9	611.6	523.5	486.4	481.8	491.1	537.4	620.7
62.5°	1042.4	889.5	731.9	569.8	458.6	421.6	375.2	370.7	379.9	407.6	472.6
65°	750.5	653.3	532.8	416.9	329.0	277.9	259.5	264.1	273.3	291.9	352.1
67.5°	523.5	454.0	370.7	291.9	227.0	203.8	185.3	180.7	185.3	217.8	250.2
70°	352.1	310.4	250.2	222.4	157.6	125.0	129.7	115.8	134.3	134.3	162.1
72.5°	231.6	203.8	166.7	129.7	111.2	88.1	88.1	83.4	92.6	97.3	120.5
75°	120.5	92.6	92.6	64.8	46.4	23.1	41.7	37.1	32.4	37.1	46.4
77.5°	83.4	69.5	64.8	51.0	46.4	37.1	37.1	37.1	37.1	41.7	46.4
80°	51.0	51.0	37.1	32.4	27.8	23.1	27.8	27.8	27.8	27.8	32.4
82.5°	32.4	27.8	27.8	23.1	23.1	18.5	18.5	18.5	18.5	18.5	27.8
85°	27.8	18.5	18.5	13.9	18.5	32.4	13.9	18.5	18.5	18.5	13.9
87.5°	9.3	13.9	13.9	13.9	9.3	4.6	9.3	13.9	13.9	23.1	18.5
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°	8630.8	8630.8	8630.8	8630.8	8630.8	8630.8	8630.8	8630.8	8630.8	8630.8	8630.8
2.5°	8644.7	8649.4	8649.4	8644.7	8644.7	8635.4	8653.9	8640.1	8644.7	8663.2	8649.4
5°	8653.9	8658.6	8658.6	8653.9	8653.9	8653.9	8658.6	8658.6	8653.9	8649.4	8658.6
7.5°	8672.5	8667.9	8667.9	8658.6	8658.6	8649.4	8658.6	8644.7	8653.9	8644.7	8658.6
10°	8649.4	8653.9	8649.4	8644.7	8644.7	8640.1	8640.1	8626.2	8630.8	8616.9	8626.2
12.5°	8635.4	8630.8	8630.8	8621.5	8612.3	8603.0	8598.4	8584.4	8584.4	8552.0	8566.0
15°	8598.4	8603.0	8589.1	8570.6	8561.3	8538.2	8528.9	8510.3	8491.8	8468.7	8473.3
17.5°	8566.0	8552.0	8533.5	8515.0	8477.9	8459.4	8440.8	8413.0	8403.8	8376.0	8366.8
20°	8468.7	8459.4	8436.3	8403.8	8380.6	8338.9	8320.4	8292.7	8269.4	8241.7	8227.7
22.5°	8343.6	8334.3	8306.5	8274.1	8237.0	8218.5	8199.9	8149.0	8125.8	8098.0	8093.4
25°	8186.1	8172.2	8144.4	8107.3	8088.7	8037.8	8019.2	7982.2	7973.0	7945.1	7940.6
27.5°	7945.1	7926.6	7894.2	7847.9	7815.4	7783.0	7764.5	7736.7	7727.5	7699.6	7695.0
30°	7583.8	7560.6	7495.8	7477.3	7421.6	7389.2	7389.2	7352.1	7356.8	7338.3	7338.3
32.5°	7014.0	6976.9	6925.9	6888.9	6851.8	6833.3	6833.3	6819.4	6828.7	6828.7	6838.0
35°	6258.8	6207.9	6180.1	6156.9	6156.9	6175.4	6231.1	6245.0	6272.8	6295.9	6314.5
37.5°	5290.5	5286.0	5318.4	5346.2	5415.7	5494.5	5591.7	5675.2	5753.8	5809.5	5865.0
40°	4243.6	4359.4	4452.1	4581.8	4688.3	4841.2	5017.2	5160.9	5295.2	5392.6	5494.5
42.5°	3312.4	3460.6	3655.3	3845.1	4035.1	4243.6	4475.3	4674.5	4850.5	4984.8	5091.4
45°	2580.4	2784.2	3020.6	3261.5	3507.0	3766.5	4007.4	4211.2	4396.5	4535.5	4642.0
47.5°	2080.1	2302.5	2571.1	2835.3	3113.2	3386.5	3655.3	3831.3	3984.1	4095.3	4192.7
50°	1718.7	1955.0	2237.6	2538.7	2816.7	3090.1	3321.7	3493.1	3618.2	3715.5	3775.7
52.5°	1436.1	1686.3	1987.5	2288.5	2566.5	2816.7	3025.2	3154.9	3256.8	3326.3	3381.9
55°	1185.9	1426.9	1709.5	1992.1	2265.4	2501.7	2673.0	2770.4	2849.1	2890.8	2923.2
57.5°	968.3	1190.6	1450.0	1709.5	1945.8	2140.4	2274.7	2372.0	2409.0	2441.5	2436.8
60°	759.8	968.3	1204.5	1426.9	1630.7	1788.2	1885.6	1941.1	1968.9	1982.8	1973.5
62.5°	597.6	787.6	968.3	1162.8	1311.1	1445.4	1538.1	1538.1	1552.0	1556.6	1570.5
65°	444.7	588.3	745.9	889.5	1009.9	1098.0	1149.0	1162.8	1181.4	1176.7	1167.5
67.5°	329.0	435.5	551.3	657.8	741.2	796.8	833.8	866.4	861.7	852.4	847.8
70°	227.0	296.5	398.4	463.3	523.5	579.1	588.3	593.0	597.6	602.3	593.0
72.5°	157.6	208.5	264.1	319.7	356.7	379.9	403.1	407.6	407.6	407.6	403.1
75°	78.8	106.6	157.6	180.7	213.1	222.4	240.9	240.9	254.8	236.2	231.6
77.5°	69.5	83.4	111.2	129.7	143.6	157.6	162.1	176.0	171.4	162.1	166.7
80°	41.7	51.0	69.5	78.8	97.3	101.9	106.6	111.2	106.6	111.2	111.2
82.5°	32.4	37.1	46.4	46.4	60.2	60.2	64.8	64.8	69.5	69.5	69.5
85°	18.5	32.4	27.8	55.5	37.1	37.1	46.4	55.5	46.4	46.4	55.5
87.5°	18.5	18.5	13.9	18.5	18.5	18.5	23.1	27.8	27.8	32.4	27.8
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: P249115

CATALOG NUMBER: LSR8B150D010 EC8B150840 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	8630.8	8630.8	8630.8	8630.8
2.5°	8644.7	8653.9	8640.1	8635.4
5°	8658.6	8658.6	8649.4	8649.4
7.5°	8658.6	8658.6	8644.7	8635.4
10°	8621.5	8621.5	8607.7	8598.4
12.5°	8552.0	8552.0	8547.4	8533.5
15°	8464.1	8464.1	8445.5	8431.6
17.5°	8343.6	8352.9	8329.7	8329.7
20°	8213.9	8209.2	8190.8	8181.5
22.5°	8079.6	8070.3	8065.6	8037.8
25°	7935.9	7926.6	7912.7	7898.9
27.5°	7690.4	7685.8	7671.8	7653.3
30°	7315.1	7310.4	7292.0	7292.0
32.5°	6828.7	6824.0	6805.5	6810.2
35°	6323.7	6342.3	6333.0	6314.5
37.5°	5902.1	5916.0	5925.3	5916.0
40°	5550.0	5591.7	5596.4	5605.7
42.5°	5174.8	5230.4	5248.9	5258.1
45°	4725.4	4776.4	4818.1	4808.8
47.5°	4266.7	4303.8	4340.9	4313.1
50°	3826.7	3849.8	3863.7	3863.7
52.5°	3409.7	3409.7	3405.1	3409.7
55°	2932.5	2932.5	2914.0	2923.2
57.5°	2432.2	2441.5	2427.5	2404.4
60°	1968.9	1945.8	1936.5	1922.6
62.5°	1533.5	1533.5	1501.1	1542.7
65°	1149.0	1135.0	1121.1	1116.4
67.5°	833.8	829.3	815.4	810.7
70°	588.3	569.8	565.2	555.9
72.5°	393.8	393.8	384.5	384.5
75°	240.9	217.8	213.1	217.8
77.5°	166.7	162.1	162.1	157.6
80°	111.2	106.6	115.8	101.9
82.5°	69.5	74.1	69.5	74.1
85°	46.4	55.5	51.0	51.0
87.5°	27.8	27.8	27.8	27.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)