

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: P249556

Luminaire Tested: **LSR8B150D010 EC8B150850 8LBDW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249556
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 8LBDW0MW
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 5000 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16491.0 lumens
Efficiency: N/A
Efficacy: 104.0 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

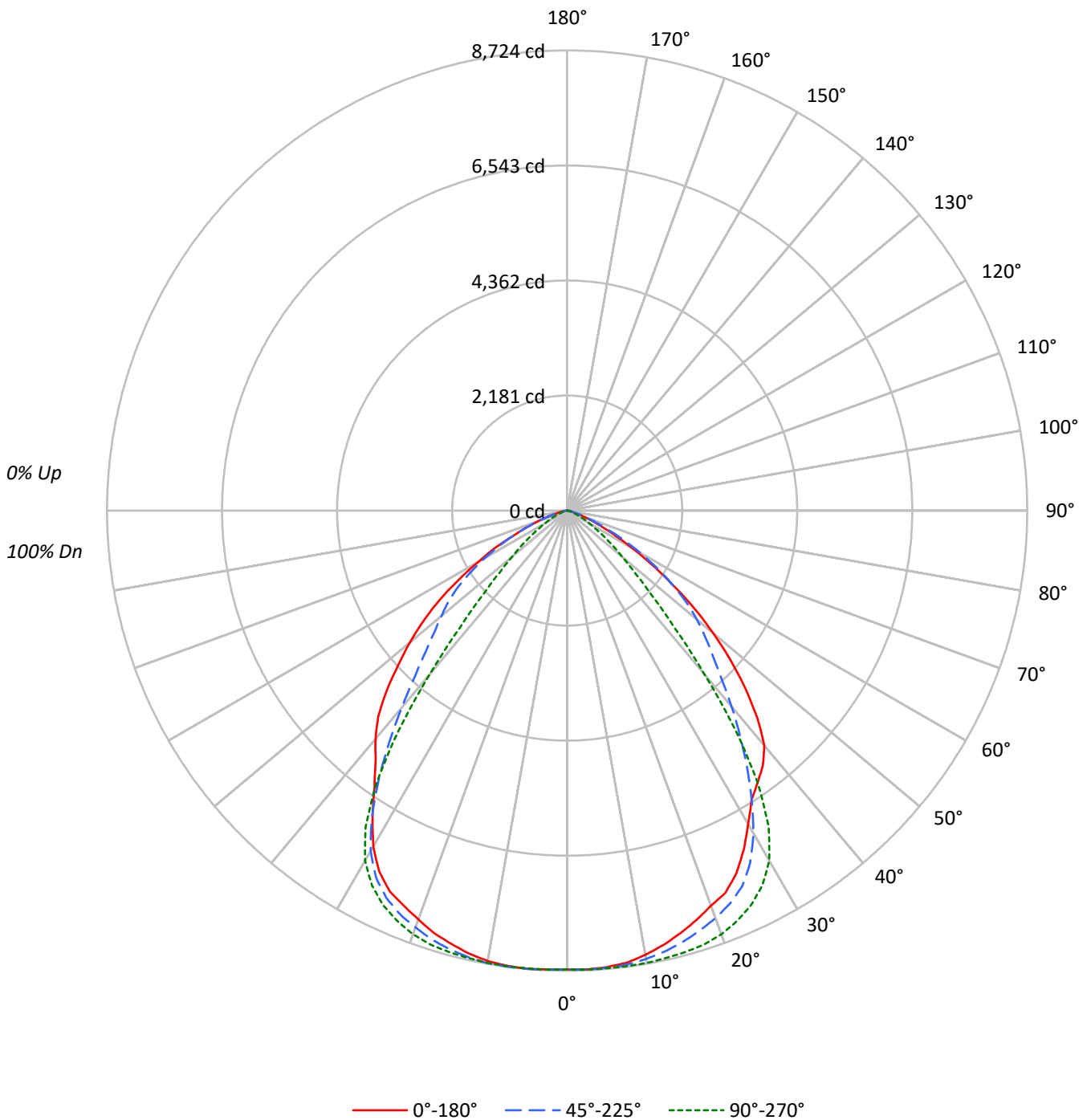
Input Watts (W): 158.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	268307	268307	268307
5°	268895	269620	269911
10°	267765	272593	271422
15°	264798	276578	271361
20°	261620	280466	270661
25°	258223	280791	270937
30°	244294	272893	261752
35°	237000	237170	239635
40°	234065	163185	227483
45°	208561	97968	211413
50°	173417	65200	186859
55°	130065	44950	158435
60°	88143	29954	119540
65°	53162	19431	82122
70°	29473	10531	50525
75°	13356	4456	26152
80°	11614	4972	18237
85°	13232	6581	18186



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	830.4	5.0
10°-20°	2411.6	14.6
20°-30°	3660.3	22.2
30°-40°	3844.4	23.3
40°-50°	2882.3	17.5
50°-60°	1849.3	11.2
60°-70°	791.1	4.8
70°-80°	186.9	1.1
80°-90°	34.8	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°	6902.2	41.9
0°-40°	10746.6	65.2
0°-60°	15478.2	93.9
0°-90°	16491.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16491.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	8701	8701	8701	8701	8701	
5°	8687	8701	8710	8724	8720	825
15°	8295	8468	8664	8608	8500	2340
25°	7589	7856	8253	8103	7963	3467
35°	6296	5945	6300	6226	6366	3951
45°	4782	3909	2246	3797	4848	3663
55°	2419	2419	836	2522	2947	2194
65°	729	859	266	1107	1126	778
75°	112	131	37	224	220	163
85°	37	23	19	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°	8701.0	8701.0	8701.0	8701.0	8701.0	8701.0	8701.0	8701.0	8701.0	8701.0	8701.0
2.5°	8705.7	8715.0	8710.3	8710.3	8705.7	8710.3	8710.3	8719.7	8719.7	8710.3	8705.7
5°	8686.9	8696.3	8696.3	8686.9	8686.9	8710.3	8696.3	8705.7	8705.7	8701.0	8701.0
7.5°	8645.0	8645.0	8663.6	8649.7	8649.7	8663.6	8658.9	8668.3	8677.7	8682.3	8682.3
10°	8551.5	8560.9	8565.6	8565.6	8570.2	8584.2	8593.6	8612.3	8621.6	8630.9	8635.6
12.5°	8434.8	8448.8	8453.5	8448.8	8462.8	8481.4	8504.9	8528.2	8542.2	8560.9	8574.9
15°	8294.6	8294.6	8304.0	8318.0	8327.4	8355.4	8378.7	8406.7	8444.1	8467.5	8490.8
17.5°	8140.6	8149.9	8163.9	8163.9	8182.6	8229.2	8243.3	8285.3	8327.4	8350.7	8397.5
20°	7972.5	7981.7	7995.8	8005.1	8028.5	8065.8	8093.8	8131.2	8177.9	8220.0	8266.6
22.5°	7841.6	7823.0	7832.2	7841.6	7865.0	7897.7	7930.4	7977.0	8023.8	8065.8	8112.6
25°	7589.4	7594.1	7608.1	7617.4	7645.5	7673.5	7710.9	7766.9	7808.9	7855.7	7907.0
27.5°	7248.5	7253.2	7276.5	7276.5	7299.8	7346.6	7369.9	7416.6	7472.7	7519.3	7580.1
30°	6860.9	6870.1	6870.1	6888.9	6902.8	6926.2	6949.6	6996.3	7024.3	7066.3	7150.5
32.5°	6505.9	6515.2	6510.5	6505.9	6491.9	6487.2	6482.5	6491.9	6501.2	6515.2	6547.9
35°	6295.8	6272.4	6253.7	6221.0	6183.7	6136.9	6094.9	6038.9	5987.5	5945.4	5898.8
37.5°	6094.9	6090.2	6062.2	6015.5	5940.7	5856.7	5758.7	5637.2	5515.7	5385.0	5258.9
40°	5814.7	5800.6	5777.3	5711.9	5627.8	5525.1	5394.4	5244.9	5048.7	4847.9	4642.4
42.5°	5338.2	5342.9	5314.9	5263.5	5184.2	5086.0	4950.6	4787.2	4577.0	4338.8	4072.6
45°	4782.5	4782.5	4773.1	4731.1	4675.1	4595.7	4492.9	4357.5	4152.0	3909.1	3624.2
47.5°	4203.4	4208.0	4194.0	4184.7	4161.3	4110.0	4035.3	3932.5	3787.7	3554.1	3269.3
50°	3614.9	3614.9	3638.3	3633.6	3633.6	3614.9	3582.3	3521.5	3395.4	3208.6	2942.4
52.5°	3026.4	3035.8	3049.8	3068.5	3091.8	3129.1	3091.8	3063.8	2984.4	2839.6	2610.8
55°	2419.3	2428.6	2451.9	2484.6	2512.7	2550.1	2559.4	2559.4	2517.3	2419.3	2246.5
57.5°	1900.9	1886.8	1905.6	1933.6	1970.9	2008.3	2036.3	2069.0	2064.3	1998.9	1858.8
60°	1429.2	1433.8	1447.8	1475.9	1503.9	1536.6	1573.9	1601.9	1616.0	1583.3	1494.5
62.5°	1041.5	1041.5	1060.2	1088.2	1102.2	1148.9	1172.3	1186.3	1200.3	1195.6	1139.6
65°	728.6	737.9	747.3	761.3	775.3	803.3	817.3	845.3	854.7	859.4	817.3
67.5°	513.8	499.7	509.1	518.4	532.4	551.2	579.2	579.2	593.1	593.1	565.1
70°	326.9	326.9	331.6	345.6	354.9	359.6	369.0	378.3	392.3	387.6	387.6
72.5°	219.5	214.8	219.5	224.2	228.9	242.8	242.8	247.5	256.9	261.6	242.8
75°	112.1	116.8	126.1	121.5	135.4	126.1	130.7	144.8	140.1	130.7	130.7
77.5°	93.4	93.4	93.4	88.8	98.1	98.1	93.4	102.7	98.1	98.1	93.4
80°	65.4	70.1	65.4	60.7	65.4	60.7	60.7	60.7	60.7	60.7	56.0
82.5°	51.4	42.1	46.7	42.1	46.7	46.7	42.1	37.4	37.4	42.1	37.4
85°	37.4	28.0	32.7	32.7	28.0	28.0	28.0	28.0	28.0	23.3	23.3
87.5°	23.3	14.1	14.1	14.1	18.6	18.6	18.6	14.1	18.6	18.6	9.4
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°	8701.0	8701.0	8701.0	8701.0	8701.0	8701.0	8701.0	8701.0	8701.0	8701.0	8701.0
2.5°	8715.0	8710.3	8719.7	8715.0	8715.0	8710.3	8715.0	8710.3	8719.7	8701.0	8705.7
5°	8715.0	8705.7	8710.3	8715.0	8719.7	8710.3	8710.3	8710.3	8719.7	8710.3	8715.0
7.5°	8696.3	8691.6	8705.7	8715.0	8710.3	8705.7	8715.0	8710.3	8719.7	8715.0	8724.3
10°	8658.9	8663.6	8673.0	8686.9	8691.6	8696.3	8705.7	8705.7	8719.7	8701.0	8710.3
12.5°	8602.9	8621.6	8645.0	8654.2	8673.0	8673.0	8682.3	8686.9	8696.3	8691.6	8705.7
15°	8532.9	8556.2	8584.2	8607.6	8630.9	8645.0	8658.9	8663.6	8677.7	8663.6	8668.3
17.5°	8448.8	8476.8	8518.8	8546.8	8584.2	8598.2	8616.9	8626.2	8640.3	8630.9	8635.6
20°	8332.0	8364.8	8411.4	8453.5	8476.8	8509.4	8532.9	8546.8	8556.2	8546.8	8551.5
22.5°	8168.6	8215.3	8276.0	8308.7	8355.4	8383.4	8388.1	8420.8	8444.1	8420.8	8430.1
25°	7977.0	8023.8	8070.5	8140.6	8182.6	8215.3	8248.0	8252.7	8276.0	8271.3	8266.6
27.5°	7659.5	7720.2	7799.6	7855.7	7911.7	7963.1	8000.5	8009.7	8033.1	8023.8	8028.5
30°	7225.1	7290.6	7365.3	7454.0	7533.4	7584.7	7631.5	7664.1	7687.5	7673.5	7668.8
32.5°	6608.7	6674.0	6753.5	6842.1	6935.6	7010.2	7066.3	7108.4	7136.4	7127.0	7103.7
35°	5903.5	5922.1	5973.5	6043.6	6122.9	6202.3	6253.7	6300.3	6333.0	6342.4	6342.4
37.5°	5179.5	5118.8	5081.5	5081.5	5128.1	5160.8	5207.5	5235.5	5286.9	5305.6	5319.6
40°	4478.9	4338.8	4208.0	4110.0	4044.6	4039.9	4039.9	4053.9	4100.6	4161.3	4217.4
42.5°	3853.1	3628.9	3428.1	3245.9	3115.2	3040.5	3007.8	3012.5	3049.8	3105.8	3199.2
45°	3353.4	3073.2	2820.9	2601.4	2423.9	2307.2	2251.2	2246.5	2274.5	2339.8	2442.7
47.5°	2965.7	2666.8	2381.9	2129.7	1938.3	1812.1	1746.7	1728.1	1746.7	1807.4	1928.9
50°	2643.5	2335.3	2041.0	1779.4	1573.9	1443.2	1382.4	1359.1	1382.4	1433.8	1555.2
52.5°	2344.5	2026.9	1751.4	1499.2	1279.7	1167.6	1102.2	1088.2	1102.2	1162.9	1261.1
55°	1998.9	1728.1	1457.2	1204.9	1013.5	901.4	850.0	836.1	850.0	906.1	1008.8
57.5°	1658.0	1424.5	1186.3	957.4	794.0	695.8	649.2	630.5	663.2	700.5	822.0
60°	1340.4	1153.6	952.7	751.9	616.5	527.7	490.4	485.7	495.1	541.8	625.8
62.5°	1050.9	896.7	737.9	574.5	462.4	425.0	378.3	373.7	382.9	410.9	476.4
65°	756.6	658.6	537.1	420.3	331.6	280.2	261.6	266.3	275.5	294.3	354.9
67.5°	527.7	457.7	373.7	294.3	228.9	205.5	186.8	182.2	186.8	219.5	252.2
70°	354.9	312.9	252.2	224.2	158.8	126.1	130.7	116.8	135.4	135.4	163.4
72.5°	233.5	205.5	168.1	130.7	112.1	88.8	88.8	84.1	93.4	98.1	121.5
75°	121.5	93.4	93.4	65.4	46.7	23.3	42.1	37.4	32.7	37.4	46.7
77.5°	84.1	70.1	65.4	51.4	46.7	37.4	37.4	37.4	37.4	42.1	46.7
80°	51.4	51.4	37.4	32.7	28.0	23.3	28.0	28.0	28.0	28.0	32.7
82.5°	32.7	28.0	28.0	23.3	23.3	18.6	18.6	18.6	18.6	18.6	28.0
85°	28.0	18.6	18.6	14.1	18.6	32.7	14.1	18.6	18.6	18.6	14.1
87.5°	9.4	14.1	14.1	14.1	9.4	4.7	9.4	14.1	14.1	23.3	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



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	8701.0	8701.0	8701.0	8701.0	8701.0	8701.0	8701.0	8701.0	8701.0	8701.0	8701.0
2.5°	8715.0	8719.7	8719.7	8715.0	8715.0	8705.7	8724.3	8710.3	8715.0	8733.7	8719.7
5°	8724.3	8729.0	8729.0	8724.3	8724.3	8724.3	8729.0	8729.0	8724.3	8719.7	8729.0
7.5°	8743.0	8738.3	8738.3	8729.0	8729.0	8719.7	8729.0	8715.0	8724.3	8715.0	8729.0
10°	8719.7	8724.3	8719.7	8715.0	8715.0	8710.3	8710.3	8696.3	8701.0	8686.9	8696.3
12.5°	8705.7	8701.0	8701.0	8691.6	8682.3	8673.0	8668.3	8654.2	8654.2	8621.6	8635.6
15°	8668.3	8673.0	8658.9	8640.3	8630.9	8607.6	8598.2	8579.5	8560.9	8537.6	8542.2
17.5°	8635.6	8621.6	8602.9	8584.2	8546.8	8528.2	8509.4	8481.4	8472.1	8444.1	8434.8
20°	8537.6	8528.2	8504.9	8472.1	8448.8	8406.7	8388.1	8360.1	8336.7	8308.7	8294.6
22.5°	8411.4	8402.0	8374.0	8341.3	8304.0	8285.3	8266.6	8215.3	8191.9	8163.9	8159.2
25°	8252.7	8238.6	8210.6	8173.2	8154.5	8103.2	8084.5	8047.1	8037.8	8009.7	8005.1
27.5°	8009.7	7991.1	7958.4	7911.7	7879.0	7846.3	7827.7	7799.6	7790.3	7762.2	7757.6
30°	7645.5	7622.1	7556.7	7538.1	7482.0	7449.3	7449.3	7411.9	7416.6	7398.0	7398.0
32.5°	7071.0	7033.7	6982.2	6944.9	6907.5	6888.9	6888.9	6874.8	6884.2	6884.2	6893.6
35°	6309.7	6258.4	6230.3	6207.0	6207.0	6225.6	6281.7	6295.8	6323.8	6347.1	6365.8
37.5°	5333.6	5329.0	5361.7	5389.7	5459.7	5539.1	5637.2	5721.3	5800.6	5856.7	5912.7
40°	4278.1	4394.9	4488.3	4619.1	4726.4	4880.6	5058.0	5202.8	5338.2	5436.4	5539.1
42.5°	3339.3	3488.8	3685.0	3876.4	4067.9	4278.1	4511.7	4712.5	4889.9	5025.4	5132.8
45°	2601.4	2806.9	3045.2	3288.0	3535.5	3797.1	4039.9	4245.4	4432.3	4572.4	4679.8
47.5°	2097.0	2321.2	2592.0	2858.3	3138.5	3414.0	3685.0	3862.5	4016.5	4128.6	4226.8
50°	1732.7	1970.9	2255.8	2559.4	2839.6	3115.2	3348.7	3521.5	3647.6	3745.7	3806.4
52.5°	1447.8	1700.0	2003.6	2307.2	2587.4	2839.6	3049.8	3180.6	3283.3	3353.4	3409.4
55°	1195.6	1438.5	1723.4	2008.3	2283.8	2522.0	2694.8	2792.9	2872.3	2914.3	2947.0
57.5°	976.2	1200.3	1461.8	1723.4	1961.6	2157.8	2293.2	2391.3	2428.6	2461.3	2456.6
60°	766.0	976.2	1214.3	1438.5	1644.0	1802.7	1900.9	1956.9	1984.9	1998.9	1989.6
62.5°	602.5	794.0	976.2	1172.3	1321.7	1457.2	1550.6	1550.6	1564.6	1569.3	1583.3
65°	448.3	593.1	751.9	896.7	1018.1	1106.9	1158.3	1172.3	1191.0	1186.3	1176.9
67.5°	331.6	439.1	555.7	663.2	747.3	803.3	840.6	873.4	868.7	859.4	854.7
70°	228.9	298.9	401.7	467.1	527.7	583.8	593.1	597.8	602.5	607.2	597.8
72.5°	158.8	210.2	266.3	322.3	359.6	382.9	406.4	410.9	410.9	410.9	406.4
75°	79.4	107.4	158.8	182.2	214.8	224.2	242.8	242.8	256.9	238.2	233.5
77.5°	70.1	84.1	112.1	130.7	144.8	158.8	163.4	177.5	172.8	163.4	168.1
80°	42.1	51.4	70.1	79.4	98.1	102.7	107.4	112.1	107.4	112.1	112.1
82.5°	32.7	37.4	46.7	46.7	60.7	60.7	65.4	65.4	70.1	70.1	70.1
85°	18.6	32.7	28.0	56.0	37.4	37.4	46.7	56.0	46.7	46.7	56.0
87.5°	18.6	18.6	14.1	18.6	18.6	18.6	23.3	28.0	28.0	32.7	28.0
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: P249556

CATALOG NUMBER: LSR8B150D010 EC8B150850 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	8701.0	8701.0	8701.0	8701.0
2.5°	8715.0	8724.3	8710.3	8705.7
5°	8729.0	8729.0	8719.7	8719.7
7.5°	8729.0	8729.0	8715.0	8705.7
10°	8691.6	8691.6	8677.7	8668.3
12.5°	8621.6	8621.6	8616.9	8602.9
15°	8532.9	8532.9	8514.1	8500.2
17.5°	8411.4	8420.8	8397.5	8397.5
20°	8280.7	8276.0	8257.3	8248.0
22.5°	8145.2	8135.9	8131.2	8103.2
25°	8000.5	7991.1	7977.0	7963.1
27.5°	7752.9	7748.2	7734.2	7715.6
30°	7374.6	7369.9	7351.2	7351.2
32.5°	6884.2	6879.5	6860.9	6865.6
35°	6375.1	6393.8	6384.5	6365.8
37.5°	5950.1	5964.1	5973.5	5964.1
40°	5595.1	5637.2	5641.9	5651.2
42.5°	5216.9	5272.9	5291.6	5300.9
45°	4763.8	4815.2	4857.3	4847.9
47.5°	4301.4	4338.8	4376.1	4348.1
50°	3857.8	3881.1	3895.1	3895.1
52.5°	3437.5	3437.5	3432.8	3437.5
55°	2956.4	2956.4	2937.7	2947.0
57.5°	2451.9	2461.3	2447.3	2423.9
60°	1984.9	1961.6	1952.2	1938.3
62.5°	1545.9	1545.9	1513.3	1555.2
65°	1158.3	1144.3	1130.2	1125.5
67.5°	840.6	836.1	822.0	817.3
70°	593.1	574.5	569.8	560.4
72.5°	397.0	397.0	387.6	387.6
75°	242.8	219.5	214.8	219.5
77.5°	168.1	163.4	163.4	158.8
80°	112.1	107.4	116.8	102.7
82.5°	70.1	74.7	70.1	74.7
85°	46.7	56.0	51.4	51.4
87.5°	28.0	28.0	28.0	28.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)