

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: P249088

Luminaire Tested: **LSR8B150D010 EC8B150827 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249088
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 EC8B150827 8LBDW0H
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 2700 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15447.0 lumens
Efficiency: N/A
Efficacy: 97.5 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

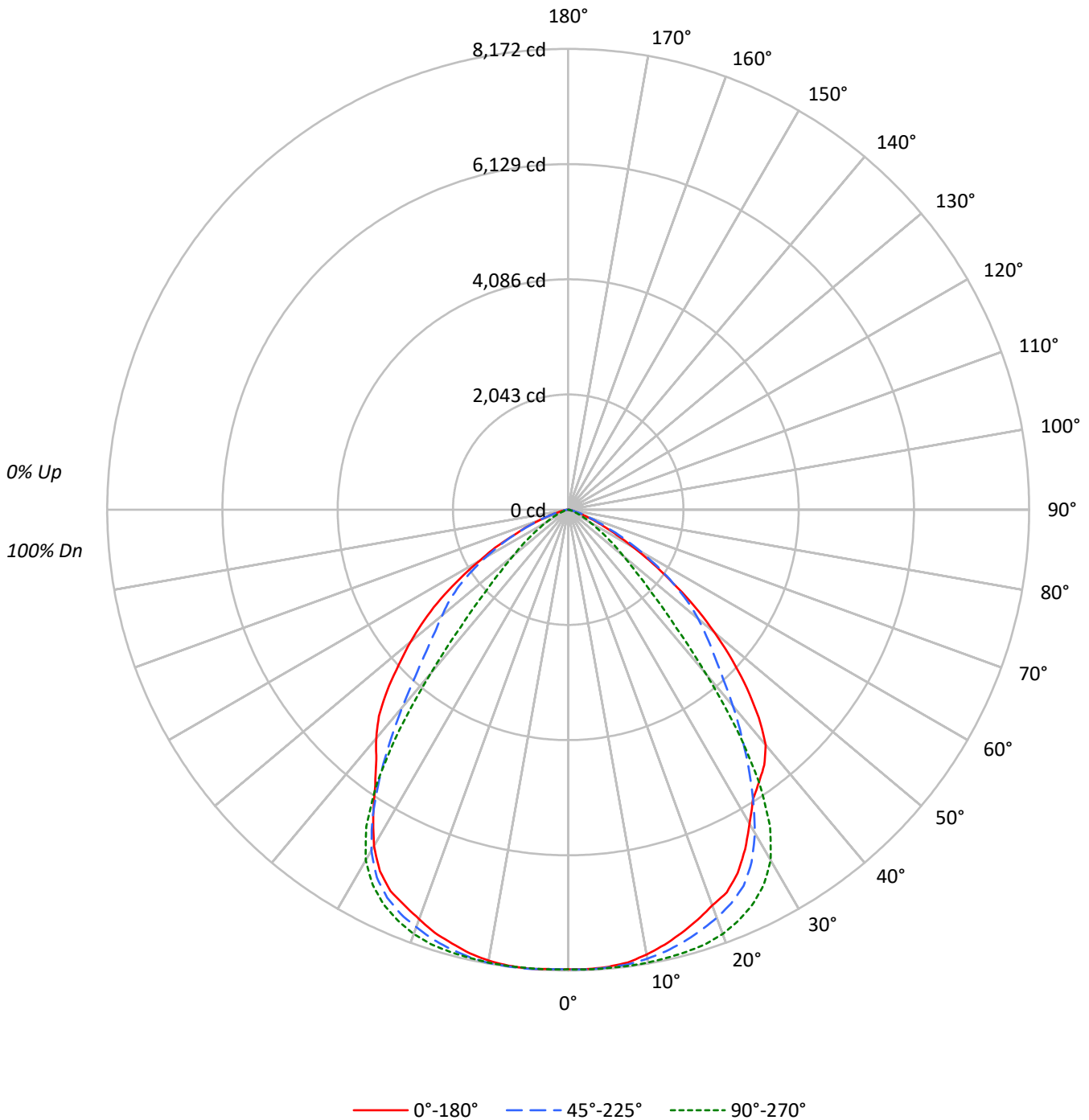
Input Watts (W): 158.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	251319	251319	251319
5°	251874	252551	252824
10°	250812	255334	254238
15°	248034	259067	254183
20°	245055	262710	253525
25°	241874	263013	253786
30°	228827	255617	245184
35°	221995	222157	224465
40°	219247	152852	213084
45°	195356	91762	198029
50°	162441	61074	175034
55°	121829	42101	148403
60°	82561	28055	111973
65°	49799	18197	76927
70°	27607	9863	47325
75°	12510	4170	24496
80°	10868	4653	17083
85°	12383	6192	17053



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	777.8	5.0
10°-20°	2258.9	14.6
20°-30°	3428.6	22.2
30°-40°	3601.0	23.3
40°-50°	2699.8	17.5
50°-60°	1732.3	11.2
60°-70°	741.0	4.8
70°-80°	175.1	1.1
80°-90°	32.6	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°	6465.3	41.9
0°-40°	10066.3	65.2
0°-60°	14498.3	93.9
0°-90°	15447.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15447.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	8150	8150	8150	8150	8150	
5°	8137	8150	8159	8172	8168	773
15°	7770	7932	8115	8063	7962	2191
25°	7109	7358	7730	7590	7459	3248
35°	5897	5569	5902	5832	5963	3701
45°	4480	3662	2104	3557	4541	3431
55°	2266	2266	783	2362	2760	2056
65°	682	805	249	1037	1054	729
75°	105	122	35	210	206	153
85°	35	22	18	35	48	37
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°	8150.1	8150.1	8150.1	8150.1	8150.1	8150.1	8150.1	8150.1	8150.1	8150.1	8150.1
2.5°	8154.5	8163.3	8158.9	8158.9	8154.5	8158.9	8158.9	8167.7	8167.7	8158.9	8154.5
5°	8137.0	8145.8	8145.8	8137.0	8137.0	8158.9	8145.8	8154.5	8154.5	8150.1	8150.1
7.5°	8097.7	8097.7	8115.1	8102.1	8102.1	8115.1	8110.8	8119.5	8128.3	8132.7	8132.7
10°	8010.1	8018.9	8023.3	8023.3	8027.7	8040.7	8049.5	8067.1	8075.7	8084.5	8088.9
12.5°	7900.8	7913.9	7918.3	7913.9	7927.1	7944.5	7966.5	7988.3	8001.5	8018.9	8032.1
15°	7769.5	7769.5	7778.3	7791.4	7800.2	7826.4	7848.3	7874.5	7909.5	7931.5	7953.3
17.5°	7625.2	7634.0	7647.0	7647.0	7664.6	7708.3	7721.4	7760.8	7800.2	7822.1	7865.8
20°	7467.7	7476.4	7489.6	7498.4	7520.2	7555.2	7581.4	7616.4	7660.2	7699.6	7743.3
22.5°	7345.2	7327.7	7336.4	7345.2	7367.1	7397.7	7428.3	7472.0	7515.8	7555.2	7599.0
25°	7108.9	7113.3	7126.5	7135.2	7161.5	7187.7	7222.7	7275.2	7314.6	7358.3	7406.4
27.5°	6789.6	6794.0	6815.9	6815.9	6837.7	6881.5	6903.3	6947.1	6999.6	7043.3	7100.3
30°	6426.5	6435.2	6435.2	6452.8	6465.8	6487.8	6509.6	6553.4	6579.6	6619.0	6697.8
32.5°	6094.1	6102.7	6098.3	6094.1	6080.9	6076.5	6072.1	6080.9	6089.7	6102.7	6133.3
35°	5897.2	5875.3	5857.8	5827.2	5792.2	5748.4	5709.0	5656.6	5608.4	5569.0	5525.3
37.5°	5709.0	5704.6	5678.4	5634.6	5564.6	5485.9	5394.1	5280.3	5166.5	5044.1	4926.0
40°	5446.6	5433.4	5411.6	5350.3	5271.5	5175.3	5052.9	4912.8	4729.1	4541.0	4348.5
42.5°	5000.3	5004.7	4978.5	4930.3	4856.0	4764.1	4637.2	4484.1	4287.3	4064.1	3814.8
45°	4479.7	4479.7	4471.0	4431.6	4379.1	4304.7	4208.5	4081.7	3889.2	3661.6	3394.8
47.5°	3937.3	3941.6	3928.5	3919.8	3897.9	3849.8	3779.8	3683.6	3547.9	3329.1	3062.3
50°	3386.1	3386.1	3407.9	3403.5	3403.5	3386.1	3355.5	3298.5	3180.5	3005.4	2756.1
52.5°	2834.8	2843.6	2856.8	2874.2	2896.0	2931.1	2896.0	2869.8	2795.4	2659.8	2445.5
55°	2266.1	2274.9	2296.7	2327.3	2353.7	2388.7	2397.3	2397.3	2357.9	2266.1	2104.2
57.5°	1780.6	1767.4	1784.9	1811.2	1846.2	1881.2	1907.4	1938.0	1933.6	1872.4	1741.2
60°	1338.7	1343.1	1356.1	1382.5	1408.7	1439.3	1474.3	1500.5	1513.7	1483.1	1399.9
62.5°	975.6	975.6	993.0	1019.3	1032.4	1076.2	1098.0	1111.2	1124.3	1119.9	1067.4
65°	682.5	691.2	700.0	713.1	726.2	752.4	765.6	791.8	800.6	805.0	765.6
67.5°	481.3	468.1	476.9	485.5	498.7	516.3	542.5	542.5	555.6	555.6	529.3
70°	306.2	306.2	310.6	323.7	332.5	336.9	345.6	354.3	367.5	363.1	363.1
72.5°	205.6	201.2	205.6	210.0	214.4	227.5	227.5	231.9	240.6	245.0	227.5
75°	105.0	109.4	118.1	113.8	126.8	118.1	122.5	135.6	131.2	122.5	122.5
77.5°	87.5	87.5	87.5	83.2	91.8	91.8	87.5	96.2	91.8	91.8	87.5
80°	61.2	65.6	61.2	56.8	61.2	56.8	56.8	56.8	56.8	56.8	52.5
82.5°	48.2	39.4	43.8	39.4	43.8	43.8	39.4	35.0	35.0	39.4	35.0
85°	35.0	26.2	30.6	30.6	26.2	26.2	26.2	26.2	26.2	21.8	21.8
87.5°	21.8	13.2	13.2	13.2	17.5	17.5	17.5	13.2	17.5	17.5	8.8
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°	8150.1	8150.1	8150.1	8150.1	8150.1	8150.1	8150.1	8150.1	8150.1	8150.1	8150.1
2.5°	8163.3	8158.9	8167.7	8163.3	8163.3	8158.9	8163.3	8158.9	8167.7	8150.1	8154.5
5°	8163.3	8154.5	8158.9	8163.3	8167.7	8158.9	8158.9	8158.9	8167.7	8158.9	8163.3
7.5°	8145.8	8141.4	8154.5	8163.3	8158.9	8154.5	8163.3	8158.9	8167.7	8163.3	8172.0
10°	8110.8	8115.1	8123.9	8137.0	8141.4	8145.8	8154.5	8154.5	8167.7	8150.1	8158.9
12.5°	8058.3	8075.7	8097.7	8106.4	8123.9	8123.9	8132.7	8137.0	8145.8	8141.4	8154.5
15°	7992.7	8014.5	8040.7	8062.7	8084.5	8097.7	8110.8	8115.1	8128.3	8115.1	8119.5
17.5°	7913.9	7940.1	7979.5	8005.7	8040.7	8053.9	8071.4	8080.1	8093.3	8084.5	8088.9
20°	7804.5	7835.2	7878.9	7918.3	7940.1	7970.7	7992.7	8005.7	8014.5	8005.7	8010.1
22.5°	7651.4	7695.2	7752.0	7782.7	7826.4	7852.7	7857.1	7887.7	7909.5	7887.7	7896.4
25°	7472.0	7515.8	7559.6	7625.2	7664.6	7695.2	7725.8	7730.2	7752.0	7747.7	7743.3
27.5°	7174.6	7231.5	7305.8	7358.3	7410.8	7459.0	7494.0	7502.6	7524.6	7515.8	7520.2
30°	6767.7	6829.0	6899.0	6982.1	7056.5	7104.5	7148.3	7178.9	7200.8	7187.7	7183.3
32.5°	6190.3	6251.5	6325.9	6409.0	6496.5	6566.4	6619.0	6658.4	6684.6	6675.8	6654.0
35°	5529.7	5547.2	5595.3	5661.0	5735.3	5809.6	5857.8	5901.5	5932.1	5940.9	5940.9
37.5°	4851.6	4794.8	4759.8	4759.8	4803.4	4834.1	4877.8	4904.1	4952.2	4969.7	4982.8
40°	4195.3	4064.1	3941.6	3849.8	3788.6	3784.2	3784.2	3797.2	3841.0	3897.9	3950.4
42.5°	3609.2	3399.1	3211.1	3040.4	2918.0	2848.0	2817.4	2821.8	2856.8	2909.2	2996.7
45°	3141.1	2878.6	2642.4	2436.7	2270.5	2161.1	2108.6	2104.2	2130.5	2191.7	2288.0
47.5°	2778.0	2498.0	2231.1	1994.9	1815.6	1697.4	1636.2	1618.7	1636.2	1693.0	1806.8
50°	2476.1	2187.4	1911.8	1666.8	1474.3	1351.8	1294.9	1273.1	1294.9	1343.1	1456.7
52.5°	2196.1	1898.6	1640.5	1404.3	1198.7	1093.7	1032.4	1019.3	1032.4	1089.3	1181.2
55°	1872.4	1618.7	1364.9	1128.7	949.4	844.4	796.2	783.1	796.2	848.7	945.0
57.5°	1553.1	1334.3	1111.2	896.8	743.7	651.8	608.1	590.6	621.2	656.2	770.0
60°	1255.5	1080.6	892.4	704.3	577.5	494.3	459.3	454.9	463.7	507.5	586.2
62.5°	984.4	840.0	691.2	538.1	433.1	398.1	354.3	350.0	358.7	384.9	446.3
65°	708.7	616.9	503.1	393.7	310.6	262.5	245.0	249.4	258.1	275.6	332.5
67.5°	494.3	428.7	350.0	275.6	214.4	192.5	175.0	170.6	175.0	205.6	236.2
70°	332.5	293.1	236.2	210.0	148.8	118.1	122.5	109.4	126.8	126.8	153.1
72.5°	218.7	192.5	157.5	122.5	105.0	83.2	83.2	78.8	87.5	91.8	113.8
75°	113.8	87.5	87.5	61.2	43.8	21.8	39.4	35.0	30.6	35.0	43.8
77.5°	78.8	65.6	61.2	48.2	43.8	35.0	35.0	35.0	35.0	39.4	43.8
80°	48.2	48.2	35.0	30.6	26.2	21.8	26.2	26.2	26.2	26.2	30.6
82.5°	30.6	26.2	26.2	21.8	21.8	17.5	17.5	17.5	17.5	17.5	26.2
85°	26.2	17.5	17.5	13.2	17.5	30.6	13.2	17.5	17.5	17.5	13.2
87.5°	8.8	13.2	13.2	13.2	8.8	4.4	8.8	13.2	13.2	21.8	17.5
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°	8150.1	8150.1	8150.1	8150.1	8150.1	8150.1	8150.1	8150.1	8150.1	8150.1	8150.1
2.5°	8163.3	8167.7	8167.7	8163.3	8163.3	8154.5	8172.0	8158.9	8163.3	8180.8	8167.7
5°	8172.0	8176.4	8176.4	8172.0	8172.0	8172.0	8176.4	8176.4	8172.0	8167.7	8176.4
7.5°	8189.5	8185.1	8185.1	8176.4	8176.4	8167.7	8176.4	8163.3	8172.0	8163.3	8176.4
10°	8167.7	8172.0	8167.7	8163.3	8163.3	8158.9	8158.9	8145.8	8150.1	8137.0	8145.8
12.5°	8154.5	8150.1	8150.1	8141.4	8132.7	8123.9	8119.5	8106.4	8106.4	8075.7	8088.9
15°	8119.5	8123.9	8110.8	8093.3	8084.5	8062.7	8053.9	8036.4	8018.9	7997.1	8001.5
17.5°	8088.9	8075.7	8058.3	8040.7	8005.7	7988.3	7970.7	7944.5	7935.7	7909.5	7900.8
20°	7997.1	7988.3	7966.5	7935.7	7913.9	7874.5	7857.1	7830.8	7808.9	7782.7	7769.5
22.5°	7878.9	7870.1	7843.9	7813.3	7778.3	7760.8	7743.3	7695.2	7673.3	7647.0	7642.7
25°	7730.2	7717.0	7690.8	7655.8	7638.3	7590.2	7572.6	7537.6	7529.0	7502.6	7498.4
27.5°	7502.6	7485.2	7454.6	7410.8	7380.2	7349.6	7332.1	7305.8	7297.1	7270.8	7266.5
30°	7161.5	7139.6	7078.3	7060.9	7008.3	6977.7	6977.7	6942.7	6947.1	6929.6	6929.6
32.5°	6623.4	6588.4	6540.2	6505.2	6470.2	6452.8	6452.8	6439.6	6448.4	6448.4	6457.1
35°	5910.3	5862.2	5835.9	5814.0	5814.0	5831.5	5884.0	5897.2	5923.4	5945.3	5962.8
37.5°	4995.9	4991.6	5022.2	5048.5	5114.1	5188.5	5280.3	5359.1	5433.4	5485.9	5538.4
40°	4007.3	4116.7	4204.1	4326.7	4427.2	4571.6	4737.8	4873.5	5000.3	5092.2	5188.5
42.5°	3127.9	3267.9	3451.7	3631.0	3810.4	4007.3	4226.1	4414.1	4580.4	4707.2	4807.8
45°	2436.7	2629.2	2852.4	3079.8	3311.7	3556.7	3784.2	3976.6	4151.7	4282.9	4383.5
47.5°	1964.2	2174.3	2427.9	2677.4	2939.8	3197.9	3451.7	3617.9	3762.2	3867.2	3959.2
50°	1623.0	1846.2	2113.0	2397.3	2659.8	2918.0	3136.7	3298.5	3416.7	3508.5	3565.4
52.5°	1356.1	1592.4	1876.8	2161.1	2423.6	2659.8	2856.8	2979.2	3075.4	3141.1	3193.5
55°	1119.9	1347.5	1614.3	1881.2	2139.3	2362.3	2524.2	2616.1	2690.4	2729.8	2760.4
57.5°	914.4	1124.3	1369.3	1614.3	1837.4	2021.2	2148.0	2239.9	2274.9	2305.5	2301.1
60°	717.5	914.4	1137.4	1347.5	1539.9	1688.6	1780.6	1833.0	1859.2	1872.4	1863.6
62.5°	564.3	743.7	914.4	1098.0	1238.1	1364.9	1452.5	1452.5	1465.5	1469.9	1483.1
65°	419.9	555.6	704.3	840.0	953.6	1036.8	1085.0	1098.0	1115.6	1111.2	1102.4
67.5°	310.6	411.3	520.6	621.2	700.0	752.4	787.4	818.1	813.7	805.0	800.6
70°	214.4	280.0	376.3	437.5	494.3	546.9	555.6	559.9	564.3	568.7	559.9
72.5°	148.8	196.9	249.4	301.9	336.9	358.7	380.6	384.9	384.9	384.9	380.6
75°	74.4	100.6	148.8	170.6	201.2	210.0	227.5	227.5	240.6	223.1	218.7
77.5°	65.6	78.8	105.0	122.5	135.6	148.8	153.1	166.2	161.8	153.1	157.5
80°	39.4	48.2	65.6	74.4	91.8	96.2	100.6	105.0	100.6	105.0	105.0
82.5°	30.6	35.0	43.8	43.8	56.8	56.8	61.2	61.2	65.6	65.6	65.6
85°	17.5	30.6	26.2	52.5	35.0	35.0	43.8	52.5	43.8	43.8	52.5
87.5°	17.5	17.5	13.2	17.5	17.5	17.5	21.8	26.2	26.2	30.6	26.2
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: P249088

CATALOG NUMBER: LSR8B150D010 EC8B150827 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	8150.1	8150.1	8150.1	8150.1
2.5°	8163.3	8172.0	8158.9	8154.5
5°	8176.4	8176.4	8167.7	8167.7
7.5°	8176.4	8176.4	8163.3	8154.5
10°	8141.4	8141.4	8128.3	8119.5
12.5°	8075.7	8075.7	8071.4	8058.3
15°	7992.7	7992.7	7975.1	7962.1
17.5°	7878.9	7887.7	7865.8	7865.8
20°	7756.4	7752.0	7734.6	7725.8
22.5°	7629.6	7620.8	7616.4	7590.2
25°	7494.0	7485.2	7472.0	7459.0
27.5°	7262.1	7257.7	7244.6	7227.1
30°	6907.7	6903.3	6885.9	6885.9
32.5°	6448.4	6444.0	6426.5	6430.9
35°	5971.5	5989.1	5980.3	5962.8
37.5°	5573.4	5586.6	5595.3	5586.6
40°	5240.9	5280.3	5284.7	5293.5
42.5°	4886.6	4939.1	4956.6	4965.3
45°	4462.2	4510.4	4549.8	4541.0
47.5°	4029.1	4064.1	4099.1	4072.9
50°	3613.6	3635.4	3648.6	3648.6
52.5°	3219.8	3219.8	3215.5	3219.8
55°	2769.2	2769.2	2751.8	2760.4
57.5°	2296.7	2305.5	2292.3	2270.5
60°	1859.2	1837.4	1828.6	1815.6
62.5°	1448.1	1448.1	1417.5	1456.7
65°	1085.0	1071.8	1058.7	1054.3
67.5°	787.4	783.1	770.0	765.6
70°	555.6	538.1	533.7	524.9
72.5°	371.9	371.9	363.1	363.1
75°	227.5	205.6	201.2	205.6
77.5°	157.5	153.1	153.1	148.8
80°	105.0	100.6	109.4	96.2
82.5°	65.6	70.0	65.6	70.0
85°	43.8	52.5	48.2	48.2
87.5°	26.2	26.2	26.2	26.2
90°	0.0	0.0	0.0	0.0

(END OF REPORT)