

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: P248475

Luminaire Tested: **LSR8B120D010 EC8B120850 8LBDW0WH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P248475  
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: LSR8B120D010 EC8B120850 8LBDW0WH  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
80 CRI 5000 CCT WITH WHEAT TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12763.0 lumens  
Efficiency: N/A  
Efficacy: 107.9 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

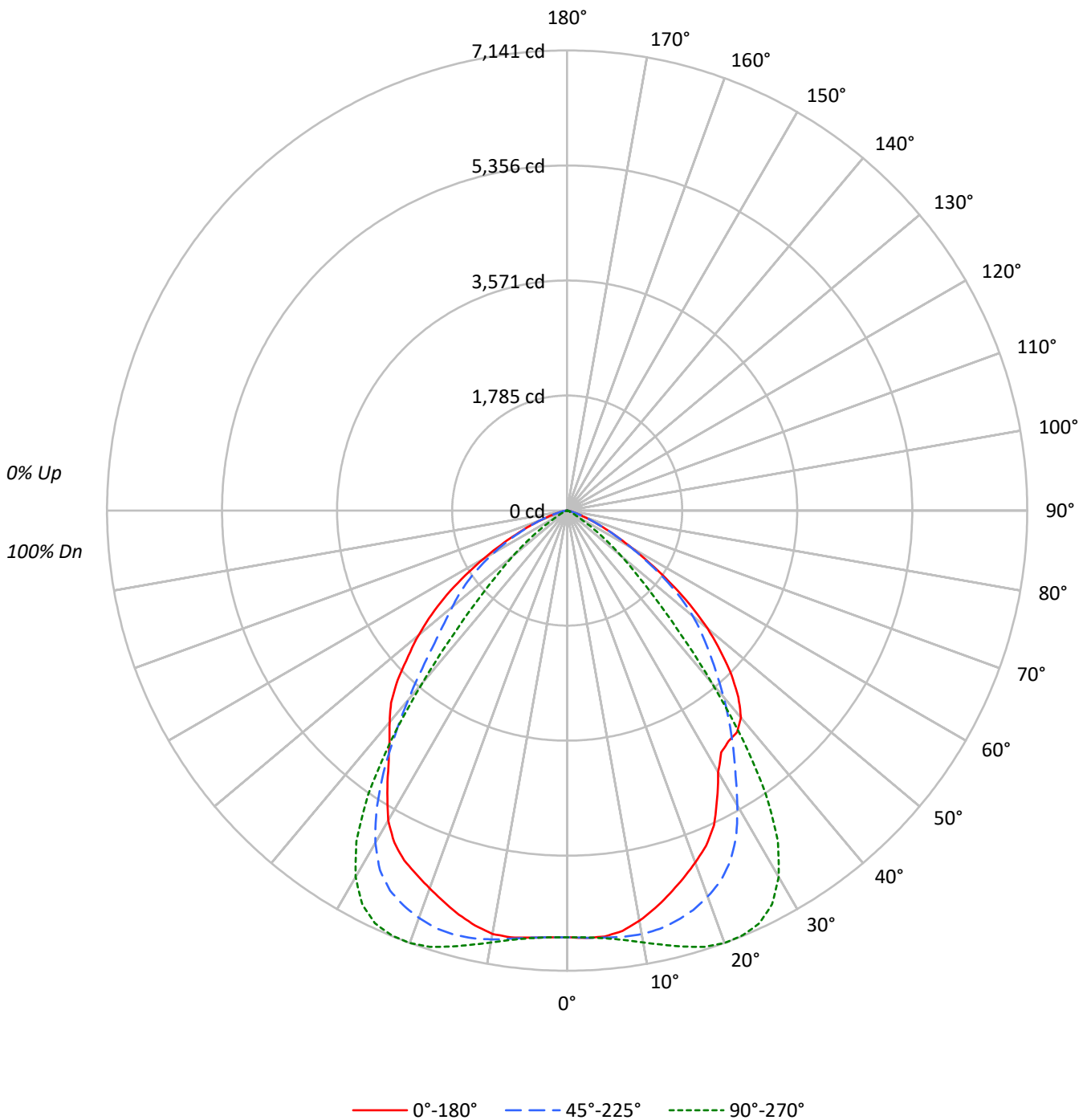
Input Watts (W): 118.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	204167	204167	204167
5°	205384	206145	205925
10°	202366	213041	208861
15°	196448	223600	207219
20°	190749	234337	204702
25°	183424	240339	203750
30°	166928	233751	197713
35°	164441	202545	181904
40°	168914	140474	172448
45°	157241	84903	162147
50°	136391	52429	144484
55°	104668	27397	122619
60°	71306	11052	92546
65°	44363	5640	63844
70°	24082	3489	38976
75°	12558	1668	23030
80°	5612	1882	12484
85°	3750	1238	11180



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	636.7	5.0
10°-20°	1886.2	14.8
20°-30°	2877.6	22.5
30°-40°	3002.9	23.5
40°-50°	2255.5	17.7
50°-60°	1387.8	10.9
60°-70°	564.8	4.4
70°-80°	133.1	1.0
80°-90°	18.3	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°	5400.6	42.3
0°-40°	8403.5	65.8
0°-60°	12046.8	94.4
0°-90°	12763.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12763.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	6621	6621	6621	6621	6621	
5°	6635	6653	6660	6653	6653	628
15°	6154	6586	7004	6811	6491	1733
25°	5391	5996	7064	6505	5988	2451
35°	4368	4491	5380	4973	4832	2758
45°	3606	3121	1947	2906	3718	2751
55°	1947	1848	510	1848	2281	1750
65°	608	615	77	826	875	634
75°	105	105	14	186	193	127
85°	11	11	4	25	32	15
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°	6621.0	6621.0	6621.0	6621.0	6621.0	6621.0	6621.0	6621.0	6621.0	6621.0	6621.0
2.5°	6638.6	6628.0	6638.6	6638.6	6642.1	6635.1	6638.6	6642.1	6635.1	6635.1	6635.1
5°	6635.1	6628.0	6635.1	6631.6	6638.6	6638.6	6645.7	6645.7	6652.6	6652.6	6663.2
7.5°	6578.9	6564.8	6578.9	6589.4	6596.4	6610.5	6628.0	6642.1	6656.2	6670.3	6687.8
10°	6462.9	6462.9	6473.4	6494.5	6515.6	6540.2	6571.8	6607.0	6642.1	6673.7	6705.4
12.5°	6318.8	6308.2	6329.3	6357.4	6389.1	6427.8	6477.0	6529.7	6585.9	6649.1	6698.4
15°	6153.6	6143.1	6167.7	6195.8	6234.5	6290.7	6350.5	6420.7	6501.6	6585.9	6666.7
17.5°	5984.9	5981.4	6006.0	6044.7	6076.3	6136.0	6213.4	6297.7	6389.1	6501.6	6607.0
20°	5812.8	5809.2	5833.8	5865.5	5907.6	5963.9	6041.2	6139.5	6248.5	6375.1	6498.0
22.5°	5633.5	5637.0	5658.1	5693.2	5728.4	5788.1	5868.9	5967.4	6086.8	6223.9	6361.0
25°	5391.0	5373.4	5401.6	5436.7	5496.4	5545.6	5623.0	5728.4	5851.4	5995.5	6157.2
27.5°	5039.5	5036.0	5060.7	5092.3	5145.0	5204.7	5289.1	5398.0	5528.1	5686.2	5844.3
30°	4688.1	4695.2	4705.7	4737.4	4772.5	4832.2	4916.6	5008.0	5131.0	5282.0	5450.8
32.5°	4449.1	4449.1	4463.2	4484.3	4508.9	4540.5	4600.3	4667.0	4762.0	4867.4	4990.4
35°	4368.3	4354.3	4368.3	4371.8	4375.4	4382.4	4392.9	4414.1	4445.6	4491.4	4537.0
37.5°	4333.2	4322.6	4322.6	4308.6	4291.0	4269.9	4241.8	4210.2	4175.1	4129.3	4094.3
40°	4196.2	4189.1	4182.1	4168.0	4129.3	4087.2	4041.5	3967.7	3886.8	3774.4	3662.0
42.5°	3932.6	3925.5	3922.0	3893.9	3858.7	3809.5	3756.8	3679.5	3577.6	3433.5	3271.8
45°	3605.7	3591.6	3581.1	3556.6	3531.9	3489.7	3440.6	3370.2	3268.3	3120.8	2927.5
47.5°	3226.2	3219.1	3215.6	3205.1	3180.5	3155.8	3124.3	3068.0	2976.6	2836.0	2635.8
50°	2843.1	2829.1	2836.0	2832.6	2822.0	2804.5	2783.3	2744.7	2674.4	2547.9	2365.2
52.5°	2403.8	2403.8	2400.3	2410.8	2414.3	2410.8	2414.3	2372.2	2312.5	2217.5	2062.9
55°	1946.9	1946.9	1957.5	1971.6	1985.6	1989.1	1985.6	1968.1	1925.8	1848.5	1711.5
57.5°	1518.2	1511.2	1532.3	1553.3	1567.4	1581.4	1570.9	1556.9	1532.3	1469.0	1363.5
60°	1156.2	1156.2	1170.2	1184.3	1198.4	1212.5	1208.9	1205.4	1184.3	1142.1	1057.9
62.5°	850.4	854.0	854.0	864.5	878.6	892.7	903.2	892.7	882.1	854.0	797.7
65°	608.0	604.4	608.0	618.5	629.1	643.1	650.2	646.6	636.1	615.0	572.9
67.5°	407.7	404.2	418.2	421.7	428.7	442.8	439.3	442.8	439.3	421.7	386.6
70°	267.1	260.0	267.1	263.6	274.1	277.7	284.6	288.2	284.6	274.1	263.6
72.5°	165.2	161.7	165.2	168.7	172.2	175.7	182.7	182.7	179.2	172.2	158.1
75°	105.4	94.8	98.4	91.4	98.4	98.4	105.4	108.9	105.4	105.4	98.4
77.5°	63.3	63.3	63.3	63.3	63.3	63.3	63.3	66.8	70.3	63.3	59.8
80°	31.6	31.6	35.2	35.2	35.2	38.7	35.2	35.2	35.2	38.7	28.1
82.5°	24.6	21.1	21.1	21.1	24.6	21.1	21.1	21.1	21.1	21.1	21.1
85°	10.6	14.0	10.6	7.1	10.6	10.6	14.0	10.6	10.6	10.6	14.0
87.5°	3.5	3.5	0.0	0.0	0.0	3.5	0.0	3.5	3.5	7.1	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



TEST NUMBER: P248475

CATALOG NUMBER: LSR8B120D010 EC8B120850 8LBDW0WH

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	6621.0	6621.0	6621.0	6621.0	6621.0	6621.0	6621.0	6621.0	6621.0	6621.0	6621.0
2.5°	6638.6	6631.6	6631.6	6628.0	6635.1	6628.0	6631.6	6628.0	6628.0	6635.1	6628.0
5°	6663.2	6666.7	6659.7	6656.2	6666.7	6666.7	6666.7	6659.7	6659.7	6663.2	6659.7
7.5°	6698.4	6705.4	6708.9	6712.4	6719.5	6723.0	6723.0	6719.5	6715.9	6726.5	6712.4
10°	6737.0	6747.6	6768.6	6779.2	6796.8	6796.8	6803.8	6803.8	6796.8	6803.8	6800.3
12.5°	6723.0	6786.2	6821.4	6845.9	6870.5	6891.6	6898.7	6902.2	6898.7	6912.8	6898.7
15°	6747.6	6800.3	6856.5	6898.7	6944.3	6968.9	6976.0	7004.1	7011.1	7014.7	6993.6
17.5°	6708.9	6803.8	6863.5	6926.8	6993.6	7039.2	7081.4	7099.0	7102.5	7109.5	7081.4
20°	6621.0	6726.5	6817.8	6909.2	6986.5	7056.8	7092.0	7141.1	7127.1	7155.2	7116.6
22.5°	6501.6	6621.0	6737.0	6856.5	6937.4	7021.7	7095.5	7130.6	7148.2	7148.2	7106.0
25°	6311.8	6452.4	6578.9	6701.8	6824.9	6926.8	7011.1	7063.8	7074.4	7070.9	7021.7
27.5°	6016.6	6167.7	6315.3	6455.9	6607.0	6726.5	6824.9	6888.1	6905.7	6905.7	6853.0
30°	5608.9	5770.5	5914.7	6083.3	6238.0	6371.5	6508.6	6564.8	6596.4	6596.4	6536.7
32.5°	5123.9	5261.0	5394.5	5559.7	5728.4	5879.5	6009.5	6086.8	6125.5	6122.0	6069.3
35°	4596.8	4663.5	4765.5	4888.5	5039.5	5180.1	5306.6	5380.5	5447.2	5443.7	5394.5
37.5°	4069.6	4052.0	4062.6	4108.3	4203.1	4301.6	4400.0	4470.3	4526.4	4551.1	4540.5
40°	3553.0	3461.6	3373.7	3342.2	3349.2	3384.3	3437.0	3489.7	3553.0	3584.7	3598.7
42.5°	3089.1	2934.5	2779.8	2663.9	2597.1	2576.0	2600.6	2618.1	2656.8	2702.5	2748.2
45°	2716.6	2509.3	2305.4	2126.2	2013.7	1946.9	1932.9	1946.9	1968.1	2013.7	2073.5
47.5°	2410.8	2168.3	1939.9	1739.6	1574.4	1486.6	1462.0	1455.0	1476.0	1518.2	1599.0
50°	2140.2	1897.7	1644.7	1412.7	1240.6	1142.1	1107.0	1092.9	1117.5	1149.2	1223.0
52.5°	1845.0	1606.0	1346.0	1121.1	941.9	840.0	801.3	780.2	794.2	836.4	910.2
55°	1525.2	1303.8	1068.3	836.4	664.2	569.3	523.6	509.6	523.6	569.3	643.1
57.5°	1205.4	1019.2	822.3	604.4	449.8	355.0	309.2	295.2	333.9	351.4	428.7
60°	941.9	790.8	622.1	442.8	309.2	235.4	189.8	179.2	196.8	228.4	291.7
62.5°	706.4	611.5	477.9	316.3	228.4	151.1	126.5	116.0	126.5	151.1	200.4
65°	513.1	439.3	333.9	231.9	154.6	112.5	84.4	77.3	87.9	105.4	147.6
67.5°	351.4	295.2	231.9	161.7	105.4	70.3	59.8	59.8	63.3	77.3	108.9
70°	228.4	193.3	147.6	105.4	70.3	52.7	45.7	38.7	45.7	56.2	73.8
72.5°	144.1	123.0	94.8	73.8	52.7	38.7	31.6	28.1	35.2	42.1	56.2
75°	87.9	66.8	49.2	38.7	28.1	28.1	28.1	14.0	17.5	28.1	35.2
77.5°	52.7	45.7	38.7	31.6	24.6	14.0	14.0	14.0	17.5	21.1	31.6
80°	28.1	24.6	17.5	17.5	14.0	10.6	14.0	10.6	7.1	17.5	21.1
82.5°	17.5	14.0	14.0	14.0	17.5	7.1	10.6	7.1	10.6	14.0	10.6
85°	10.6	10.6	10.6	7.1	17.5	7.1	7.1	3.5	3.5	7.1	7.1
87.5°	0.0	3.5	3.5	0.0	3.5	0.0	3.5	3.5	3.5	3.5	3.5
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: P248475

CATALOG NUMBER: LSR8B120D010 EC8B120850 8LBDW0WH

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	6621.0	6621.0	6621.0	6621.0	6621.0	6621.0	6621.0	6621.0	6621.0	6621.0	6621.0
2.5°	6631.6	6628.0	6631.6	6628.0	6628.0	6628.0	6631.6	6631.6	6628.0	6628.0	6635.1
5°	6659.7	6659.7	6659.7	6656.2	6652.6	6652.6	6659.7	6659.7	6649.1	6659.7	6659.7
7.5°	6719.5	6708.9	6719.5	6705.4	6698.4	6701.8	6705.4	6698.4	6691.3	6694.9	6694.9
10°	6796.8	6786.2	6786.2	6775.7	6765.1	6758.1	6751.1	6733.5	6715.9	6712.4	6698.4
12.5°	6888.1	6870.5	6860.0	6838.9	6821.4	6796.8	6775.7	6747.6	6712.4	6687.8	6663.2
15°	6979.5	6951.4	6926.8	6891.6	6853.0	6810.8	6765.1	6719.5	6663.2	6614.0	6571.8
17.5°	7053.3	7014.7	6968.9	6912.8	6856.5	6793.2	6726.5	6659.7	6578.9	6515.6	6466.4
20°	7077.9	7021.7	6961.9	6888.1	6814.3	6726.5	6642.1	6554.3	6462.9	6396.1	6339.9
22.5°	7046.3	6979.5	6905.7	6828.4	6729.9	6635.1	6536.7	6434.7	6353.9	6262.6	6209.9
25°	6958.4	6877.6	6796.8	6705.4	6610.5	6505.1	6399.7	6294.2	6195.8	6146.6	6079.9
27.5°	6779.2	6691.3	6603.5	6508.6	6399.7	6294.2	6185.3	6083.3	5999.0	5932.2	5893.6
30°	6462.9	6361.0	6259.1	6157.2	6062.2	5953.3	5851.4	5767.0	5682.7	5630.0	5591.3
32.5°	5977.9	5886.5	5784.7	5686.2	5598.4	5507.0	5422.6	5348.9	5289.1	5253.9	5225.8
35°	5324.3	5232.9	5155.5	5085.3	5011.4	4972.8	4920.1	4877.9	4853.3	4839.3	4835.7
37.5°	4501.9	4449.1	4424.5	4410.5	4396.4	4385.9	4392.9	4410.5	4424.5	4449.1	4477.3
40°	3623.3	3668.9	3683.0	3732.2	3777.9	3837.7	3904.5	3981.8	4045.0	4125.8	4182.1
42.5°	2822.0	2906.4	3004.8	3110.2	3222.7	3331.6	3465.1	3588.1	3700.6	3802.5	3890.4
45°	2168.3	2298.3	2446.0	2597.1	2748.2	2906.4	3068.0	3219.1	3352.7	3461.6	3553.0
47.5°	1690.4	1834.5	2024.3	2210.6	2393.3	2579.5	2758.7	2916.9	3029.4	3134.8	3215.6
50°	1339.0	1504.1	1711.5	1925.8	2126.2	2322.9	2512.7	2660.4	2772.8	2857.2	2916.9
52.5°	1036.7	1233.5	1444.4	1669.3	1883.7	2098.1	2273.8	2410.8	2502.2	2576.0	2621.7
55°	773.1	966.4	1191.4	1423.3	1641.2	1848.5	2013.7	2133.2	2214.1	2256.2	2280.8
57.5°	558.8	734.5	959.4	1191.4	1388.1	1585.0	1718.5	1827.5	1873.1	1897.7	1908.3
60°	407.7	569.3	769.6	970.0	1156.2	1314.4	1430.4	1504.1	1539.3	1553.3	1549.8
62.5°	298.7	439.3	611.5	780.2	931.3	1061.3	1152.7	1201.9	1219.5	1226.5	1216.0
65°	228.4	337.3	485.0	615.0	731.0	825.9	892.7	924.3	934.8	931.3	924.3
67.5°	168.7	253.1	362.0	460.4	544.7	618.5	653.7	681.8	688.8	678.3	667.7
70°	119.5	186.3	263.6	330.4	393.6	435.8	474.4	477.9	477.9	474.4	467.4
72.5°	84.4	130.0	179.2	224.9	263.6	295.2	309.2	319.8	316.3	312.7	305.8
75°	56.2	80.8	130.0	140.6	175.7	186.3	200.4	200.4	203.8	193.3	193.3
77.5°	35.2	56.2	77.3	91.4	105.4	119.5	126.5	126.5	130.0	126.5	126.5
80°	21.1	35.2	42.1	63.3	63.3	73.8	77.3	80.8	73.8	84.4	73.8
82.5°	14.0	21.1	31.6	31.6	38.7	45.7	45.7	49.2	49.2	45.7	45.7
85°	10.6	14.0	17.5	21.1	21.1	24.6	21.1	21.1	24.6	28.1	24.6
87.5°	3.5	7.1	3.5	7.1	7.1	14.0	10.6	10.6	10.6	14.0	14.0
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: P248475

CATALOG NUMBER: LSR8B120D010 EC8B120850 8LBDW0WH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	6621.0	6621.0	6621.0	6621.0
2.5°	6628.0	6631.6	6628.0	6628.0
5°	6659.7	6656.2	6659.7	6652.6
7.5°	6684.3	6684.3	6680.8	6680.8
10°	6684.3	6670.3	6670.3	6670.3
12.5°	6631.6	6614.0	6603.5	6596.4
15°	6540.2	6508.6	6494.5	6491.0
17.5°	6420.7	6392.6	6375.1	6364.5
20°	6283.7	6255.5	6234.5	6238.0
22.5°	6164.1	6132.6	6118.5	6111.4
25°	6044.7	6006.0	5995.5	5988.4
27.5°	5851.4	5830.3	5819.7	5809.2
30°	5556.2	5545.6	5528.1	5552.7
32.5°	5215.3	5197.7	5183.7	5194.2
35°	4839.3	4828.7	4839.3	4832.2
37.5°	4494.9	4505.4	4519.5	4526.4
40°	4224.3	4262.9	4277.0	4284.0
42.5°	3953.7	3999.3	4027.4	4045.0
45°	3619.8	3665.4	3697.1	3718.2
47.5°	3275.4	3314.1	3345.6	3342.2
50°	2962.6	2983.7	2997.7	3011.8
52.5°	2646.3	2646.3	2649.8	2649.8
55°	2287.9	2280.8	2277.3	2280.8
57.5°	1894.2	1887.2	1883.7	1873.1
60°	1535.8	1514.7	1500.6	1500.6
62.5°	1201.9	1177.3	1166.8	1163.3
65°	903.2	899.6	878.6	875.0
67.5°	653.7	639.6	625.6	629.1
70°	460.4	439.3	439.3	432.3
72.5°	298.7	288.2	284.6	284.6
75°	186.3	186.3	179.2	193.3
77.5°	123.0	123.0	119.5	123.0
80°	73.8	73.8	73.8	70.3
82.5°	45.7	49.2	45.7	45.7
85°	24.6	28.1	21.1	31.6
87.5°	14.0	17.5	14.0	17.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)